

Edgemont

Community Services District

SEWER SYSTEM MANAGEMENT PLAN UPDATE

WDID: 8SS011502



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District Engineer

MAY 2016
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- C. Master Sewer Evaluation Plan September 2008
- D. Prioritization of ECSD CIP Project Implementation, March 25, 2010
- E. Project Status Summary, May 23, 2013
- F. Amendment to On Call, Manhole & Lateral Inspection and Emergency Response Services Contract between Montgomery Plumbing Inc. and Edgemont Community Services District Dated August 2022
- G. Sewer Maintenance & Sewer Line Cleaning Services For Edgemont Community Services District Dated October 2015
- H. Sanitary Sewer Overflow Report
- I. ECSD Ordinance & Resolution
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- J. Sanitary Sewer System Design & Construction Manual
- K. Unified Sanitary Sewer Spill Response Plan
- L. State Water Resources Control Board Enrollee Guide to the SSO Database Sanitary Sewer Overflow Reduction Program, August 2013
- M. November 2021 FOG Postcard Mailing
- N. ECSD Lateral Letter to Home Owners, January 2022

LIST OF ACRONYMS

APWA	American Public Works Association
ASCE	American Society of Civil Engineers
BACWA	Bay Area Clean Water Agencies
BMP	Best Management Practice
CASA	California Association of Sanitation Agencies
CCTV	Closed-Circuit Television
CIP	Capital Improvement Program
CIWQS	California Integrated Water Quality System
CMMS	Computerized Maintenance Management System
CMOM	Capacity, Management, Operations, and Management
CPC	California Plumbing Code
CSUS	California State University Sacramento
CVCWA	Central Valley Clean Water Association
CWEA	California Water Environmental Association
EMA	Enhanced Maintenance Area
FOG	Fats, Oils, and Grease
FSE	Food Service Establishments
GRD	Grease Removal Device
I/I	Infiltration and Inflow
LRO	Legally Responsible Official
MOP	Manual of Practice
MRP	Monitoring and Reporting Program effective 9/9/13
MS4	Municipal Separate Storm Sewer System
NACWA	National Association of Clean Water Agencies
NASSCO	National Association of Sewer Service Companies
NGO	Non-Government Organization
NOI	Notice of Intent
NOV	Notice of Violation
O&M	Operations & Maintenance
OERP	Overflow Emergency Response Plan

OES	Office of Emergency Services, State of California
PAP	Pipeline Assessment & Certification Program
PLSD	Private Sewer Lateral Discharge
PM	Preventative Maintenance
POTW	Publicly Owned Treatment Works
QA/QC	Quality Assurance/Quality Control
R/R	Rehabilitation or Repair/Replacement
RWQCB	Regional Water Quality Control Board
SECAP	System Evaluation and Capacity Assurance Plan
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSS WDR	Statewide General WDR for Sanitary Sewer Systems
SWRCB	State Water Resources Control Board
UPC	Uniform Plumbing Code
USEPA	United States Environmental Protection Agency
WDR	Waste Discharge Requirements
WWTP	Waste Water Treatment Plant

GLOSSARY OF TERMS

Collection System – Generic term for any system of pipes or sewer lines used to convey wastewater to a treatment facility.

Enrollee – A public entity that owns or operates a sanitary sewer system and has submitted a complete and approved application for coverage under the Statewide General Wastewater Discharge Requirements for Sanitary Sewer System (WQONO 2006-0003-DWQ)

Lateral (also called Service Lateral) – A segment of pipe that connects a home or building to a sewer main, which may be located beneath a street or easement. The responsibility for maintaining a lateral can be solely that of the Enrollee or the private property owner; or it can be shared between two or more parties. Local communities dictate lateral responsibility and the basis for a shared arrangement, if it applies. See Lower Lateral and Upper Lateral definitions.

Lower Lateral – That portion of a lateral usually from the property line or easement line to the sewer main. Enrollees may or may not be responsible for maintenance of this portion of the lateral. If not, the lower lateral is owned and maintained by the property it serves.

Miles of Gravity Sewer – Amount of gravity sewer lines/pipes in an Enrollee’s sanitary sewer system, expressed in miles.

Miles of Publicly-Owned Laterals – Amount of laterals in an Enrollee’s sanitary sewer system that the Enrollee is responsible for maintaining, expressed in miles.

Miles of Pressure Sewer (Miles of Force Main) – Amount of pressurized sewer lines/pipes in an Enrollee’s sanitary sewer system, expressed in miles or portions thereof.

Miles of Private Laterals – Amount of private laterals tributary to an Enrollee’s sanitary sewer system that private property owners are responsible for maintaining, expressed in miles or portions thereof.

NGO – Non-governmental organization

Percent Reached Surface Water – Volume of sewage discharged from a sanitary sewer system or private lateral or collection system estimated to have reached surface water divided by the total volume of sewage discharged.

Percent Recovered – Volume of sewage discharged that was disposed of properly, divided by the total volume of sewage discharged.

Private Lateral – Privately owned sewer service lateral.

Private Lateral Sewage Discharge (PLSD) – Sewage discharges caused by blockages or other problems within privately owned laterals, collection system or other private sewer assets that are tributary to the reporting Enrollee’s sanitary sewer system. Reports of these events may be

submitted by Enrollees on a voluntary basis, but are not the Enrollee's responsibility unless caused by issues in the main line or because of other Enrollee activity. This type of sewage discharge is the responsibility of the private lateral, private asset, or collection system owner.

Sanitary Sewer Overflow (SSO) – Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

- i. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
- ii. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
- iii. Wastewater backups into buildings and on private property caused by blockages or flow conditions within the publicly-owned portion of a sanitary sewer system.

Sanitary Sewer System – Any system pipes, pump stations, sewer lines, or other conveyances, upstream of a WWTP head works and which is comprised of more than one mile of pipes and sewer lines, used to collect and convey wastewater to a publicly owned treatment facility.

Service Lateral – See Lateral.

Spill – General term referring to any sewage discharge (i.e. SSO or private lateral sewage discharge resulting from a failure in a sanitary sewer system or privately owned lateral or collection system).

SSO Category 1 – All discharges of sewage resulting from a failure in an Enrollee's sanitary sewer system that resulted in a discharge to a drainage channel and/or surface water.

SSO Category 2 – All discharges of sewage resulting from a failure in an Enrollee's sanitary sewer system of a volume equal to or greater than 1,000 gallons that did not reach surface water.

SSO Category 3 – All discharges of sewage resulting from a failure in an Enrollee's sanitary sewer system of a volume less than 1,000 gallons that did not reach surface water.

SSO Database – Online reporting system developed, hosted, and maintained by the SWRCB for compliance with the Monitoring and Reporting Program contained in SSS WDR.

Storm Drain – For the purposes of complying with the SSS WDR, any pipe that is part of a Municipal Separate Storm Sewer System (MS4) used for collecting or conveying storm water.

Total # of SSOs per 100 miles of Sewer per Year – Broad metric used to compare the relative performance of Enrollees and their sanitary sewer systems. This metric expresses the number of SSOs for which the reporting Enrollee is responsible, for every 100 miles of pipe or sewer lines in an Enrollee's sanitary sewer system. Due to the large variation in facility specific characteristics, this metric should only be viewed as a rough comparison of the operation and maintenance performance of Enrollees and their sanitary sewer systems. For systems smaller than 100 miles, this metric tends to skew the result as the miles of pipe get smaller. This metric is calculated as described below:

$$\text{Total \# of SSOs per year} = \frac{(\text{Total \# of SSOs} \times 100)}{(\text{Years}) \times (\text{Miles of Pressure Sewer} + \text{Miles of Gravity Sewer} + \text{Miles of Public Laterals})}$$

Total Volume of SSOs Reached Surface Water per 100 miles of Sewer – Broad metric used to compare the relative performance of Enrollees and their sanitary sewer systems. This metric expresses the volume of SSOs, for which the reporting Enrollee is responsible, that reached surface water for every 100 miles of pipe or sewer lines in an Enrollee’s sanitary sewer system. Because sewage discharges that reach surface water pose a greater threat to public health and the environment, this metric reflects some accounting of the threat posed by SSOs. Due to the large variation in facility specific characteristics, this metric should only be viewed as a rough comparison of the operation and maintenance performance of Enrollees and their sanitary sewer systems. For systems smaller than 100 miles, this metric tends to skew the results as the miles of pipe get smaller. This metric is calculated as described below:

$$\text{Total Annual Volume of SSOs Reaching Surface Waters} = \frac{(\text{Total volume of SSOs reaching Surface Waters} \times 100)}{((\text{Years}) \times (\text{Miles of Pressure Sewer} + \text{Miles of Gravity Sewer} + \text{Miles of Public Laterals}))}$$

Total Volume Reached Surface Water – Amount of sewage discharged from a sanitary sewer system, private lateral, or collection system estimated to have reached surface water.

Total Volume Recovered – Amount of sewage discharged that was captured and disposed of properly.

Upper Lateral – Portion of a lateral usually from the building foundation to the property line or easement line where it connects to the Lower Lateral. Enrollees may not own and maintain this portion of a Lateral since responsibility usually lies with the owner of the property that the lateral serves.

WDID – Waste Discharge Identification number assigned as a unique identifier by the SWRCB to each Enrollee for regulatory recordkeeping and data management purposes.



Cal OES
GOVERNOR'S OFFICE
OF EMERGENCY SERVICES

FACT SHEET



Reporting Sewage Releases

December 2018

REPORTING SEWAGE RELEASES:

In the past, there have been occurrences where untreated sewage was released into drinking water sources and was not properly reported to the California Governor's Office of Emergency Services (Cal OES). Proper and timely notification is imperative to allow government agencies and downstream users to take prompt action to protect public health and safety, the environment, and drinking water supplies. The purpose of this Fact Sheet is to help clarify the reporting requirements for sewage releases in California, under California Water Code §13271, *et seq.* and California Health and Safety Code §5411, *et seq.*

State Law requires that an unauthorized discharge of sewage [as defined in 23 California Code of Regulations (CCR) 2250 (b)] into or onto state waters must be reported to Cal OES. Upon such notification, Cal OES will then immediately notify the appropriate **Regional Water Quality Control Board (RWQCB)**, the **local public health department**, and **local office of environmental health**. These offices are responsible for determining appropriate public and environmental safety measures.

Report Sewage Releases to:

California Governor's Office of Emergency Services
Warning Center
(800) 852-7550

The **Reportable Quantity** for sewage spills is **1000 gallons or more**, as established in regulation [Title 23, California Code of Regulations, Section 2250 (a)]

Please note that the Regional Water Quality Control Boards and Local Health Departments may have additional reporting requirements – please contact them to see what requirements apply to you!

ARE THERE ANY EXCEPTIONS?

Notification of an unauthorized discharge of sewage or hazardous substances, under section 13271 (b) of the California Water Code, is not required if the discharge is in compliance with waste discharge requirements.

PENALTIES FOR NOT REPORTING:

Any person who fails to provide the proper notifications is guilty of a misdemeanor and may be punished by a fine of not more than \$20,000 dollars or imprisonment for not more than 1 year or both, per section 13271 (c) of the California Water Code. Additional penalties can be administered under Health and Safety Code §5411, *et seq.*

ADDITIONAL INFORMATION:

Further information on reporting requirements can be located on the Cal OES Website at www.caloes.ca.gov in the *California Hazardous Material Spill/Release Notification Guidance* booklet. Please call the Cal OES Hazardous Materials Section at **(916) 845-8788** to answer any further questions.

SPILL REPORTING FACT SHEET

WHEN A SPILL OCCURS YOU MUST FOLLOW THE MANDATORY PROCEDURES IN THE TABLE BELOW:

What is a spill? A spill is any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into surface waters or drainage channels that is not permitted or authorized by a regulatory agency. (A spill includes an unauthorized discharge to land that poses a public health threat.) Be on the safe side, **REPORT IT!**

Required Communication	Agency to Contact (all are required)	Time Requirements	Contact Method
1. Notification	Office of Emergency Services (OES)	As soon as possible, but no later than 2 hours after becoming aware of the unauthorized discharge.	Telephone – (800) 852-7550 (obtain a control number from OES)
1. Notification	Local Health Department (LHD)	As soon as possible, but no later than 2 hours after becoming aware of the unauthorized discharge.	Telephone (call city or county Environmental Health Department) Fill in your local health Department Phone #s 951-955-8980 _____ () - _____ _____ () - _____
1. Notification	Regional Water Board	As soon as possible, but no later than 2 hours after becoming aware of the unauthorized discharge.	Telephone Santa Ana Regional (951) 782-4130 Fax (951) 781-6288
2. Certification	Regional Water Board	As soon as possible, but no later than 24 hours after becoming aware of the unauthorized discharge	Telephone – (951) 782-4130 (be prepared to provide detail information ¹)
3. Reporting	Regional Water Board	Within 5 Business days, submit written report	Mail or Hand Delivery

Notice! As the state transitions from the COVID-19 emergency, please contact your local Water Board to arrange necessary file reviews. ✕

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Report a Spill

If you are reporting an emergency, call **911** or the local emergency response agency.

Then contact the Governor's Office of Emergency Services, State Warning Center at **1-800-852-7550** or **1-916-845-8911**

To report a spill directly to the Santa Ana Regional Board, please contact us:

Telephone:

Main number: **951-782-4130**

Fax: **951-781-6288**






Email:

spillreportR8@waterboards.ca.gov

You may also use the [Cal/EPA Environmental Complaint Form](#)

(Page last updated 5/14/21)

Statewide Campaigns

-  EPA Water Sense
-  Report an Environmental Concern
-  Save Our Water
-  Flex Alert
-  Register to Vote

INTRODUCTION

This introductory section provides background information on the purpose and organization of this Sewer System Management Plan (SSMP) and provides a brief overview of Edgemont Community Services District's (District) service area and sewer system. This version of the SSMP was developed in April 2016, and updated and recertified in November 2022 by ECSD's Board of Directors.

The Edgemont Community Services District (ECSD) is an independent special district governed by an independent five-member Board of Directors elected at large by the residents. ECSD was found in 1957 and provides wastewater services. The boundaries of ECSD includes portions of the cities Moreno Valley and Riverside, and encompasses approximately 1500 acres of which ECSD provides sewerage service to about 666 acres; serving a population of 8,293 per the 2020 census. The District is responsible for the collection and conveyance of the wastewater from its service area. Treatment of the wastewater is performed by the City of Riverside per agreement with ECSD.

SSMP REQUIREMENT BACKGROUND:

The California State Water Resources Control Board ("SWRCB") promulgated a waste discharge requirement ("WDR") permit on May 2, 2006 to regulate sanitary sewer systems. This permit is known as SWRCB Order No. 2006-0003, Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Appendix A). The SWRCB action mandates the development of a system specific Sewer System Management Plan (SSMP) and reporting of Sanitary Sewer Overflows (SSOs) using an electronic monitoring system. On July 30, 2013, Attachment A to the Order was promulgated and became effective on September 9, 2013 and is known as Attachment A, SWRCB Order No. WQO 2013-0058-EXEC, (Appendix B) amending the Monitoring and Reporting Program for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (together these documents constitute the "SSS WDR").

This permit, among other things, requires local public sewer collection system agencies, referred to as "Enrollees," to develop a Sewer System Management Plan ("SSMP"). SSMPs must be self-audited at least every two (2) years and updated every five (5) years from the original adoption date

by the Enrollee’s governing board. The original SSMP must have been approved by the governing board of the Enrollee at a public meeting and adopted.

The five-year SSMP update must also be approved and certified as do all significant updates to the SSMP. The SSMP, all references in the document, and the adoption documents by the governing board must be available on the agency website or submitted to the SWRCB upon adoption or recertification. Enrollees do not need to send their SSMP to the State or Regional Water Boards for review or approval, but must make it publicly available, and upload an electronic copy to the SSO database or provide a link to the Enrollees’ website where the SSMP is posted.

The goal of the WDR’s is to provide a consistent statewide approach for reducing Sanitary Sewer Overflows (SSO’s). The WDR requires feasible steps to control the released volume of wastewater and prevent untreated wastewater from entering storm drains, creeks, etc. The WDR also stipulates (in the event of a spill or no spills) online reporting to the SWRCB on a regular basis¹. The responsible party shall be the Legally Responsible Official (LRO). The Sewer System Management Plan (SSMP) development plan and schedule were approved in October 2007 by the Edgemont Community Service District Board of Directors and self-certified by the LRO. The District’s Engineer, Albert A. Webb Associates, has been contracted to update the SSMP dated April, 2011 for the District. The last recertification was approved on May 26, 2016 with the next recertification planned for November 11, 2022.

DOCUMENT ORGANIZATION:

This SSMP is intended to meet the SSMP requirements of the WDR. The SSMP includes eleven elements, as listed below. Each of these elements forms a section of this document.

- 1.Goal
- 2.Organization
- 3.Legal Authority
- 4.Operation and Maintenance Program
- 5.Design and Performance Provisions
- 6.Overflow Emergency Response Plan (“OERP”)
- 7.Fats, Oils, and Grease (FOG) Control Program

¹ Website - <https://ciwqs.waterboards.ca.gov/ciwqs/index.jsp>

8. System Evaluation and Capacity Assurance Plan (“SECAP”)
9. Monitoring, Measurement, and Modifications Program
10. SSMP Program Audits
11. Communication Program

The eleven elements listed above are organized into sub-sections. The first sub-section of each element outlines the requirements referred to in the State Water Resources Control Board (SWRCB) Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (**Appendix A**). The subsequent sub-sections of each element discuss the District’s compliance with those requirements. Support information for elements is also included in the appendix as applicable.

The District’s Sewer System Management Plan “Development Plan and Schedule” is shown in Table 1.

DISTRICT SERVICE AREA AND SEWER SYSTEM:

Edgemont Community Services District is located within a portion of the City of Riverside and a portion of the City of Moreno Valley (**Figures 1-1 and 1-2**) and encompasses approximately 1,500 acres. Edgemont Community Services District has nearly 17 miles of gravity sewer pipelines within its service area. There are no District sewer pump stations within its sewerage system to be maintained. A map of the District sewerage system [Plate 1] is included in a pocket at the end of this report.

ECSD is capable of providing sewerage service to the community at the present time, though there are areas in need of improvements as discussed in the “Master Sewer System Evaluation Plan”, September 2008 (**Appendix C**). The sewer system currently serves an estimated population of less than 8,293 per the 2020 census.

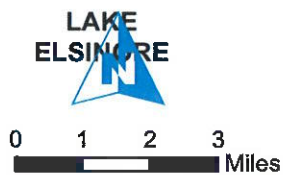
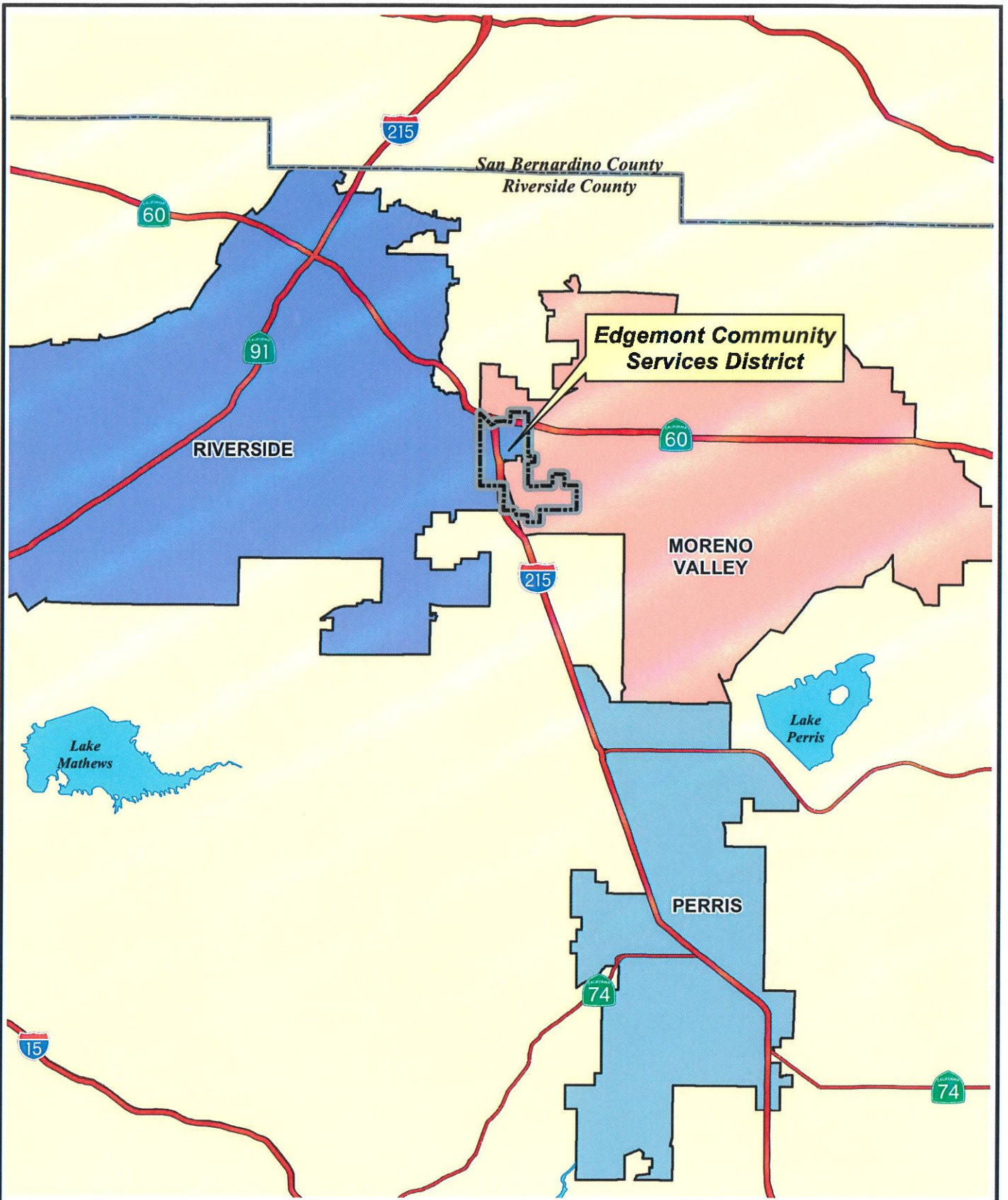
The District has an active Capital Improvement Program exhibited by their letters of March 25, 2010 (Appendix D) and May 23, 2013, June 21, 2019, and October 24, 2022 (Appendix E). Since the preparation of the Master Sewer System Evaluation Plan in September 2008 the District has replaced about 10,500 feet of sewer lines.

Table 1
Edgemont Community Services District
Sewer System Management Plan
Development Plan and Schedule

Main Task	Completion Date	Responsible Party
Application for Permit Coverage	June 27, 2007	Edgemont Community Services District
SSMP Development Plan and Schedule	October 25, 2007	Albert A. Webb Associates
Section 1 – Goals Section 2 - Organization	May 2, 2008	Albert A. Webb Associates
Section 3 – Legal Authority Section 4 – O&M Program Section 5 – Design/Performance Section 6 – O/E Response Section 7 – FOG Control	November 2, 2009	Legal Counsel Albert A. Webb Associates
Section 8 – System Eval & CAP Section 9 – Monitor/Measure Section 10 – Program Audits Section 11 – Communication	May 2, 2010	Albert A. Webb Associates
Final SSMP	May 26, 2011	Albert A. Webb Associates
Update SSMP*	May 26, 2016	Albert A. Webb Associates
Recertify SSMP*	May 26, 2016	Edgemont Community Services District
Program Audit SSMP	May 2018 May 2020	Albert A. Webb Associates
Update SSMP*	November 2022	Albert A. Webb Associates
Recertify SSMP*	November 2022	Edgemont Community Services District

*Required every five (5) calendar years pursuant to Section D.14 of State Water Resources Control Board Order No. 2006-003-DWQ.

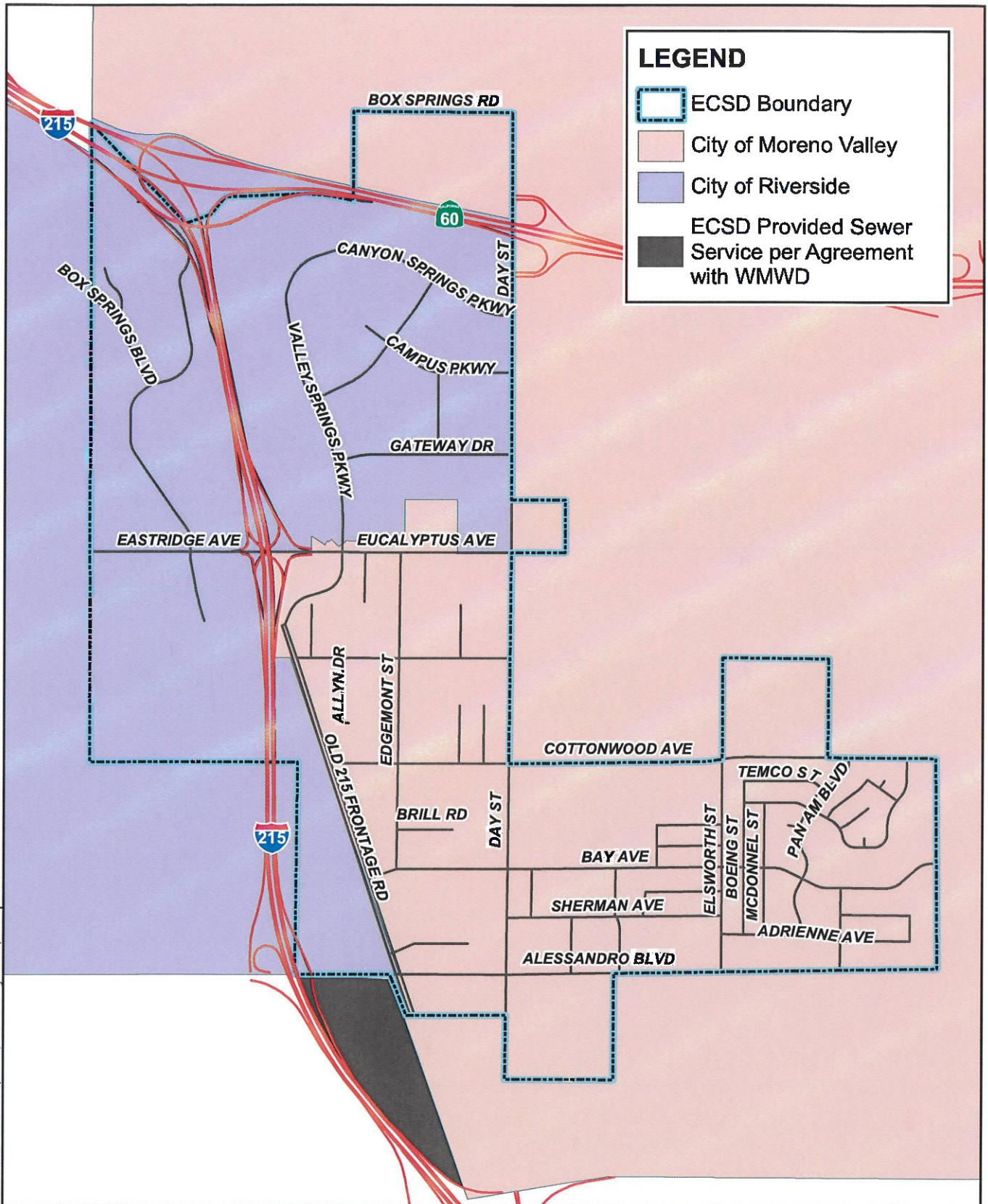
The District does not own a wastewater treatment plant. The sewage generated within the District is conveyed to the City of Riverside Regional Water Control Plant (RWQCP) via two existing connections: 1) Located at the Canyon Springs Shopping Center near the north boundary of ECSD, south of I-60 Freeway west of Day Street, and 2) on Cottonwood Avenue west of the I-215 Freeway. The metering facility at Cottonwood Avenue measures the wastewater flow generated within the majority of the District's service area. The wastewater generated within Canyon Springs Shopping Center is based upon metered water usage in this area of the District.



Canyon Lake

FIGURE 1-1

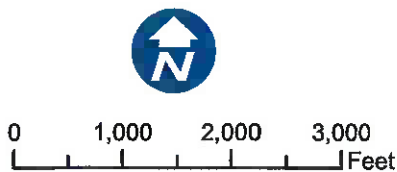
Regional Location Map



G:\2007\07-0012\GIS\Boundary.mxd; Map created 03 Nov 2022

Source: Riverside Co. GIS, 2016

Figure 1-2 - ECSD Boundary Map
Edgemont Community Services District



ELEMENT 1: GOALS

1.1 REGULATORY REQUIREMENTS FOR GOALS

The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSO's, as well as mitigate any SSOs that do occur.

1.2 DISCUSSION OF GOALS

Edgemont Community Service District's (ECSD) goal is to prevent Sanitary Sewer Overflows (SSOs) by maintaining existing collection facilities to provide capacity to convey peak flows. If a spill does occur, actions in accordance with guidelines set forth by the State Water Resources Control Board Monitoring and Reporting Program, shall be utilized to report and respond to the spill. (ECSD's contract plumber Montgomery Plumbing Inc., will provide Emergency Response service) (Appendix F). ECSD's contract cleaner, Houston & Harris Pipe Cleaning Specialists, Inc. shall have responsibility for responding to the spills in accordance with ECSD's agreement (**Appendix G**).

In support of the regulatory requirements, the District has developed the following goals for the operation and maintenance of its sewer system:

1. Minimize the frequency of SSOs
2. Appropriately mitigate the impacts caused by SSOs
3. Provide notifications and reports to all required regulatory agencies in a timely manner
4. Effectively manage, operate, maintain, and improve the collection system
5. Provide education and outreach to the general public to increase awareness of the sanitary sewer system, its function, and operation

ELEMENT 2: ORGANIZATION

The Organization element of the SSMP identifies District staff responsible for implementing this SSMP, responding to SSO events, and meeting the SSO reporting requirements. This element also includes the designation of the Authorized Representative to meet the SWRCB requirements for completing and certifying spill reports.

2.1 REGULATORY REQUIREMENT FOR ORGANIZATION ELEMENT

The requirements of the Organization element of the SSMP are set forth in the Statewide General Waste Discharge Requirements for Wastewater Collection Agencies (State Water Resources Control Board Order No. 2006-003-DWQ) (Appendix A) and are summarized below.

The collection system agency's SSMP must identify:

- (a) The name of the responsible or authorized representative as described in Section J of the Order (SSS WDR).*
- (b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and*
- (c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (Cal OES)).*

2.2 ELEMENT 2 SUPPORTING INFORMATION

Names and telephone numbers are listed in order of notifications.

Jessica L Pfalmer, District Manager*
(951) 784-2632

Mark L. Montgomery, Contract Plumber
Reporting to the District Manager
(951) 924-4697

* Officially recognized as the General Manager of the District on April 28, 2016

Larry Houston, Houston & Harris
Contract Sewer Cleaning Firm
Reporting to the District Manager
(909) 422-8990

Sam I. Gershon, District Engineer
(951) 686-1070

2.3 ORGANIZATION DISCUSSION

A. Organization

This section discusses the organization of District staff, the authorized representative to the SWRCB, and key staff responsible for implementing the SSMP. The organization chart for the management, operation, and maintenance of the District's wastewater collection system is shown in Figure 2-1 herein. The names and phone numbers of staff filling these positions are included in Figure 2-1.

Board of Directors – Approves budgets, master plans, strategy and retains consultant and contractors.

District Manager – Handles the day to day operations of the District including financial matters. Prepares annual budgets and pay request for submittal to the Board of Directors, the manager is the legally responsible official on behalf of the District. She prepares and submits the District's No-spill Reports, which are maintained at the District's office.

Legal Counsel – Prepares all legal documents for the Board of Directors review and approval. Provides legal counsel to the Board of Directors and District Manager.

District Engineer – Attends Board Meetings, provides dig alert services, prepares and updates master plans and responsible for updating SSMP, and determines sewer and lighting charges and puts these charges on the county rolls, prepares plans and specifications and provides construction inspection services.

Inspector – Inspects rehabilitation and construction projects and oversee cleaning of the District sewerage system by private contractors.

Houston & Harris – Provides annual and periodic cleaning of the District's sewerage system, provides 24 hour on-call emergency cleaning and maintenance, and provides video inspection services of the sewerage system as directed by the District Engineer.

Montgomery Plumbing Inc. – Provides on-call manhole and lateral inspection and emergency services.

B. Authorized Representative

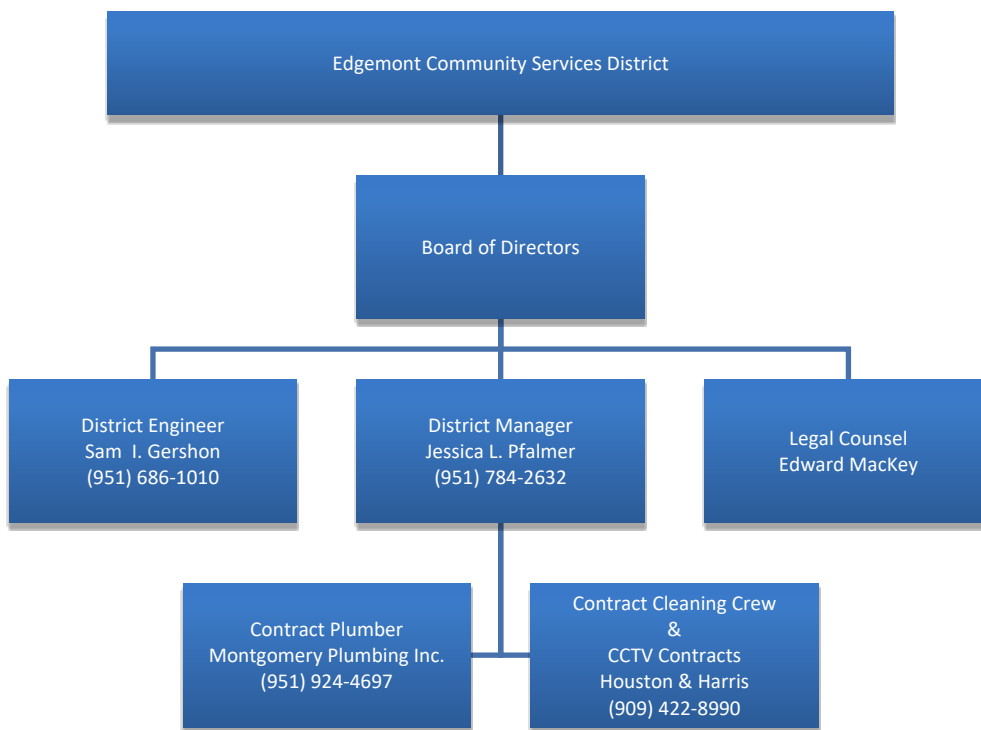
The District’s authorized representative in all wastewater collection system matters is Jessica L. Pfalmer, District Manager, [(951) 784-2632] who is authorized to certify electronic spill reports submitted to the SWRCB.

The District Engineer [(951) 686-1070] is authorized to act in the absence of the District Manager to submit SSO reports to the appropriate government agencies.

C. Responsibility for SSMP Implementation

The District Engineer is responsible for implementing and maintaining all elements of the SSMP. (Table 2-1)

Figure 2-1 Organizational Chart and Responsibilities



2.4 SSO REPORTING CHAIN OF COMMUNICATION

The District Manager is responsible for overseeing and managing the reporting process. When the District Engineer receives a detailed spill report from an inspector or field crew the SSO will be categorized and a report drafted. The draft report will be reviewed with consideration given to the spills volume, cause, response procedures, and cleanup procedures. A spill report is contained in **Appendix H**. After evaluations are made, the final conclusions will be reported on the California Integrated Water Quality System (CIWQS) website.†

In an emergency, all affected agencies (listed below) will be notified by telephone as a first response. See also Element 6: Overflow Emergency Response Plan.

California Office of Emergency Services
Phone: 800-852-7550

California Regional Water Quality Control Board
Phone: 951-782-4130

Riverside County Environmental Health
Ms. Bonnie Birking
Phone: 951-955-8980

City of Moreno Valley
Mr. Hoang Nguyen or Ms. Rey Beimer
Phone: 951-413-3120 951-413-9497

Riverside County Flood Control & WCD
Mr. David Garcia or Mr. David Ortega
Phone: 951-955-1330 951-955-4390

Contact information required in the Organization Element is also required in the Overflow Emergency Response Plan (OERP) Element. To eliminate the potential for conflicting information in the SSMP, a list of names and telephone numbers is listed on Figure 2-1

† Website - <https://ciwqs.waterboards.ca.gov/ciwqs/index.jsp>

Table 2-1 Enrollee Contacts Responsible for SSMP

SSMP Element	Responsible Party (Position)	Responsible Party (Name)	Phone Number	Email Address
Introduction	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
1 – Goals	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
2 – Organization	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
3 – Legal Authority	Legal Counsel	Edward Mackey	(951) 347-4636	edwmakey@gmail.com
4 – O&M Program	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
5 – Design & Performance Provisions	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
6 – Overflow Emergency Response Program	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
7 – FOG Control Program	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
8 – SEACAP	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
9 – Monitoring Measurement, and Program Modifications	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
10 – SSMP Program Audits	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
11 – Communication	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
Change Log	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com
Appendices	District Engineer	San Gershon	(951) 686-1070	Sam.gershon@webbassociates.com

ELEMENT 3: LEGAL AUTHORITY

The Legal Authority element of the SSMP identifies the District's legal authority to regulate design and construction of, usage of, and discharges to its sanitary sewer system.

3.1 REGULATORY REQUIREMENTS FOR LEGAL AUTHORITY ELEMENT

The requirements for the Legal Authority element of the SSMP are set forth in the Statewide General Waste Discharge Requirements for Wastewater Collection Agencies (State Water Resources Control Board Order No. 2006-003-DWQ), summarized below.

Each enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:

- a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);*
- b) Require that sewers and connections be properly designed and constructed;*
- c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;*
- d) Limit the discharge of fats oils, and grease and other debris that may cause blockages; and,*
- e) Enforce any violations of its sewer ordinances.*

3.2 ELEMENT 3 SUPPORTING INFORMATION

Supporting information for Element 3 is included in Appendix I. Discussions of the ordinances and resolutions contained in Appendix I is included in Section 3.3 below. Appendix I includes copies of the District Ordinances, resolutions and policies pertaining to its sanitary sewer system and its pretreatment program. A map of the District's service area (Plate 1) is included in an envelope at the end of the report.

3.3 LEGAL AUTHORITY DISCUSSION

A. Background

The District is regulated by the provisions of several state and federal laws, including: Federal Water Pollution Control Act, commonly known as the Clean Water Act (33 USC Section 1251 et seq); California Porter-Cologne Water Quality Act (California Water Code Section 13000 et seq); California Health & Safety Code (Sections 25100 to 25250); Resource Conservation and Recovery Act of 1976 (42 USC Section 6901 et seq); and California Government Code (Sections 54739 to 54740). These laws grant the District authority to regulate or prohibit, by the addition of ordinance(s), the discharge of any waste, directly or indirectly, to the District's wastewater system facilities. Said provisions also grant the District authority to establish limits, conditions, and prohibitions on certain discharges to its system; to establish flow rates; to require the development of compliance schedules for the installation of equipment systems and materials by users; and to take all action necessary to enforce its authority.

The District was organized on March 25, 1957 in accordance with the State of California Community Services District Law (Government Code Section 6100 et seq), and is responsible for providing certain public services within its service area, including wastewater collection and treatment. A map of the District's service area is shown in Figure 1-2. The District routinely constructs new facilities, maintains them, and replaces them as needed in order to maintain adequate, safe, and uninterrupted wastewater collection and treatment services for its service area. Related District ordinances and resolutions are listed and described below, and copies are included in Appendix I herein.

Wastewater treatment service is provided by the City of Riverside pursuant to agreements between the District and the City.

B. Compliance Documents and Descriptions

The following documents, which have been adopted by the District's Board of Directors (Board), collectively provide the District's legal authority, as required by the WDR. Each document is followed by a brief description of its provisions.

- Edgemont Community Services District Ordinance No. 277
Ordinance No. 277 was adopted by the Board on November 12, 2015 confirming the District and property owners' responsibilities to clean and maintain sewer lateral from structures on their property to the main sewer line.
- Edgemont Community Services District Sewer Lateral Policy
The Sewer Lateral Policy was adopted by the Board on January 28, 2016 and sets forth the policy for the design, construction permit requirements and maintenance of sanitary sewer laterals.
- Edgemont Community Services District Ordinance No. 278
Ordinance No. 278 was approved by the Board on January 28, 2016 adopting regulations relating to the discharge of wastes into the public sewer system.
- Edgemont Community Services District Ordinance No. 279
Ordinance No. 279 was adopted by the Board on February 25, 2016 and establishes regulations relating to sewer connections and permits.
- Edgemont Community Services District Ordinance No. 280
Ordinance No. 280 was adopted by the Board in February 25, 2016 and sets forth the provisions of the District's pretreatment program, which regulates the discharge of non-domestic wastes into the District's collection system. Ordinance No. 280 also includes enforcement provisions that are implemented in the event of a violation of said pretreatment program provisions.

Ordinance No. 280 sets forth the District's authority and procedures for: preventing illicit discharges into its sanitary sewer system; ensuring access for District maintenance, inspection, and repair of District facilities; limiting the discharge of fats, oils, grease, and other debris that may cause blockages; and enforcing any violation of its sewer system provisions.

District Resolution No. 291 augments Ordinance No. 280 by establishing maximum concentration levels of industrial wastewater and conventional pollutants.

The requirements of WDR Section D.13 (iii) (b) are satisfied by District Ordinance No. 283 by which the District established regulations for the use and construction of public sewerage facilities within its service area. The Design and Construction Manual will be adopted by the Board.

C. Legal Authority Checklist

Table 3-1 Edgemont Community Services District Legal Authority Checklist

Requirements	Enrollee Code Reference
Public Sewers	
Ability to prevent illicit discharges into the wastewater collection system	Ordinance No. 278, Section 335
Ability to require that sewers and connections be properly designed and constructed	Sewer Lateral Policy
Laterals	
Ensure access for maintenance, inspection, or repairs for portions of the service lateral owned or maintained by the Enrollee	Ordinance No. 277 & Sewer Lateral Policy
FOG Source Control	
Ability to limit the discharge of FOG and other debris that may cause blockages	Ordinance No. 278, Section 255, 275 & 335 & Sewer Lateral Policy
Enforcement	
Ability to enforce any violation of the Enrollee's sewer ordinances	Ordinance No. 278, Section IV. Enforcement, Ordinance No. 280
Other Possible Code Sections (Referenced but not required by the SSS WDR)	
Public Sewers	
Ability to require proper installation, testing, and inspection of new and rehabilitated sewers	Ordinance No. 283
Laterals	
Provide clear delineation of Enrollee responsibility (e.g., mains and lower laterals) and policies (e.g., courtesy cleaning, repair cleanout installation)	Ordinance No. 277 & Sewer Lateral Policy
Ability to control I/I from private service laterals	Ordinance No. 278 & Sewer Lateral Policy
Define lateral ownership and maintenance responsibility	Ordinance No. 277 & Sewer Lateral Policy

Table 3-1 (continued)

Prohibit vandalism (tampering)	California Penal Code Section 374.2 (dumping in manholes) Section 370 (creating a public nuisance)
Ability to deal effectively with private lateral problems (e.g., force property owner to correct failed/plugged private building sewer)	Ordinance No. 277 & Sewer Lateral Policy
Satellite Collection Systems	
Ability to control I/I from satellite collection systems, if any	Not Applicable
FOG Source Control	
Requirements for the installation of GRDs	Ordinance No. 278, Section 255
Ability to set design standard for GRDs	Ordinance No. 278, Sections 260 & 265
Ability to set maintenance requirements for GRDs	Ordinance No. 278, Section 270
Ability to require application of BMPs	Ordinance No. 278 Page 3
Ability to require record keeping and reporting of GRD maintenance and repair	Ordinance No. 278, Section 230
Authority to inspect grease producing facilities	Ordinance No. 278, Section 215
Enforcement	
Prescribed prohibited actions (e.g., illicit connections, discharges)	Ordinance No. 278, Section 335
Provide notice of alleged violations to sewer user	Ordinance No. 278, Section 420

D. Wastewater Treatment

All wastewater produced within the District’s service area is treated at the Riverside Regional Water Quality Control Plant (RRWQCP), which is operated and maintained by the City of Riverside Public Works Department. The District currently collects and conveys approximately 0.5 MGD of wastewater to the RRWQCP (based on daily average delivery during 2014-2015), where it is treated to tertiary standards before being discharged to the Santa Ana River.

ELEMENT 4: OPERATIONS AND MAINTENANCE PROGRAM

The Operation and Maintenance Program element of the SSMP identifies the District's routine operation and maintenance procedures and rehabilitation and replacement provisions for its sanitary sewer system.

4.1 REGULATORY REQUIREMENT FOR OPERATIONS AND MAINTENANCE PROGRAM ELEMENT

The requirements for the Operation and Maintenance Program element of the SSMP are set forth in the Statewide General Waste Discharge Requirements for Wastewater Collection Agencies (State Water Resources Control Board Order No. 2006-0003-DWQ) and are summarized below.

The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

- a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;*
- b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;*
- c) Develop rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;*
- d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and*
- e) Provide equipment and replacement part inventories, including identification of critical replacement parts.*

4.2 ELEMENT 4 SUPPORTING INFORMATION

Supporting information for Element 4 is included in Plate 1 and Appendices C and D. Plate 1 is a map of the District's sewer system. Appendix C is the "Master Sewer System Evaluation Plan" dated September 2008, and "Sewer System Capacity Evaluation based on the City of Moreno Valley General Plan 2040" dated April 27, 2022. Appendix D is a letter report titled "Prioritization of ECSD CIP Projects Implementation Plan" dated March 25, 2010, and October 24, 2022 update to the March 25, 2010 prioritization..

4.3 DISCUSSION OF OPERATIONS AND MAINTENANCE PROGRAM

Operation and maintenance activities in the Edgemont Community Services District (ECSD) are performed regularly and are enabled through technology. The ECSD maintains a detailed database containing information on all aspects of the sewer system. Each manhole and line segment, etc. is designated as an asset and assigned an identification number (asset ID). This information is used to aid the contract cleaning company in their efforts to clean the entire sewer system every 12 months, and selected lines every 6 months.

In addition to regular cleaning, ECSD maintains up-to-date maps and a rehabilitation and replacement plan.

- 1) **Sewer System Maps** – The District Engineer, Albert A. Webb Associates, maintains a current GIS atlas map of all District facilities with as-built drawings linked into the system from scanned drawings. The engineer uses this system to provide dig alert services such as utility notifications and field locations of sewer facilities within the District. A current District Atlas map (Plate 1) is included in the pocket at the back of this report.

- 2) **Preventive Operation, and Maintenance, and Repair** – Operational budgets are maintained for contract cleaning, sewer line maintenance/replacement, manhole replacement, emergency sewer overflow response, and Riverside's Public Works Department industrial waste inspection, testing, and treatment.

Houston & Harris's staff, under contract with the District, performs a variety of operations and maintenance activities to ensure the reliable performance of the collection system. All of the

District's sewer lines are annually cleaned of roots, debris, grease, etc. Houston & Harris has also highlighted the problem areas (termed "hotspots"), on the District map (Plate 2), that require frequent cleaning due to the accumulation of Fats, Oils, and Grease (FOG). The hot spots are scheduled with Houston & Harris for routine cleaning every six months depending upon the severity of the problem. Sewer cleaning is performed by using high pressure hydro-jetting equipment, specialized root cutter, and other equipment. As cleaning is performed, the contract staff also perform visual inspections of manholes to check for evidence of surcharge, vandalism, structural damage, and other conditions of concern. ECSD's goal is to clean the entire system every 12 months and "hotspots" every 6 months.

Collection System cleaning is accomplished through a contract with Houston & Harris. After a section has been cleaned, their crew completes a cleaning record which includes the following information:

- Date and time of cleaning
- Method of cleaning
- Names of collections workers
- Location and cause of any blockages
- Recommendations of necessary further actions

Upon completion of the day's activities, all cleaning information is returned to the office of the District Engineer, Albert A. Webb Associates.

3) Rehabilitation and Replacement Plan – ECSD's Rehabilitation and Replacement Plan is centered on several processes including regular closed circuit television (CCTV) inspections. ECSD has retained Houston & Harris to perform CCTV inspections and rate pipes according to the NASSCO Pipeline Assessment and Certification Program (PACP). This standard provides consistency and uniformity in the sewer line inspections and increases confidence in resulting data. It provides a mechanism whereby sewer lines are rated. Sewer lines are rated on a scale of 1 to 5 per PACP standards:

- **Grade 1 – Acceptable structural condition**
- **Grade 2 – Minimal collapse risk**

- **Grade 3 – Collapse unlikely in near future**
- **Grade 4 – Collapse likely in foreseeable future**
- **Grade 5 – Collapsed or collapse imminent**

When a deficiency is identified, the District Engineer or his designee determines an appropriate remedy. They investigate the problem, determine the urgency, and identify actions to resolve the issue. If the problem is designated an emergency, necessary resources and personnel are procured in a timely manner. If it is not an emergency, the pipeline repair/replacement is scheduled within the next fiscal year in conjunction with other projects. The District Engineer or his designee attends the monthly Board of Directors meeting and keeps the District Manager and the Board of Directors informed of the need to repair and replace pipelines.

Funding of rehabilitation and replacement projects is another integral part of the Rehabilitation and Replacement Plan. While budget amounts change from year to year based on the planned capital improvement for the fiscal year, the Capital Improvement Program (CIP) budget contains funds for miscellaneous sewer repairs and capital improvements or rehabilitation and replacement.

- 4) **Training** - No Training is scheduled for District employees because the majority of the system is cleaned and maintained by an outside contractor.
- 5) **Equipment and Replacement** – The District neither has equipment nor parts in inventory since the sewerage system is entirely a gravity sewerage system; there is no need for replacement parts inventory. The District relies upon their on call construction contractors (Merlin Johnson and CP Contractors) to provide the necessary replacement for the exiting sewerage system facilities if emergency repairs are necessary.

ELEMENT 5: DESIGN AND PERFORMANCE PROVISIONS

The Design and Performance Provisions element of the SSMP sets forth the District's standards for designing, constructing, rehabilitating, repairing, inspecting, and testing sanitary sewer system facilities within the District's sanitary sewer system.

5.1 REGULATORY REQUIREMENT FOR DESIGN AND PERFORMANCE PROVISION ELEMENT

The requirements for the Design and Performance Provisions element of the SSMP are set forth in the Statewide General Waste Discharge Requirements for Wastewater Collection Agencies (State Water Resources Control Board Order No. 2006-003-DWQ) and are summarized below.

Each Enrollee shall develop and implement design and performance provisions which include the following:

- a. *Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer system; and*
- b. *Procedures and standards for inspecting and testing the installation of new sewer, pumps, and other appurtenances and for rehabilitation and repair projects.*

5.2 ELEMENT 5 SUPPORTING INFORMATION

Supporting information for Element 5 is included in Appendices I and J herein. Appendix I includes a copy of Ordinance No. 292 of the Board of Directors of the Edgemont Community Services District adopting (May 26, 2016) the Sanitary Sewer System Design and Construction Manual. This manual was recently updated and was adopted by ECSD's Board of Directors on November 10, 2022. Appendix J includes a copy of the updated document titled, Edgemont

5.3 DISCUSSIONS OF DESIGN AND PERFORMANCE PROVISION

1) **Design and Construction Standards –**

The District's Design and Construction Manual was prepared in order to standardize the design of, the materials for, and the construction and inspection procedures for sewer facilities within the District's service area. The standards contained in the Design and Construction Manual ensure that the sewer facilities constructed or rehabilitated within the District are complete, operate correctly, and are in compliance with government regulations and good wastewater engineering practices.

The Design and Construction Manual includes design criteria for sewer system facilities, sewer system construction procedures, District-approved manufactured materials, procedures for construction drawing preparation and approval, technical specifications, and standard drawings.

2) **Inspection and Testing Procedures –**

Procedures for constructing sewer facilities are set forth in the Design and Construction Manual. These procedures include the District's requirements pertaining to inspection and testing of sewer system facilities. Said procedures are also applied to rehabilitation and repair projects within the District's sewer system.

ELEMENT 6: OVERFLOW EMERGENCY RESPONSE PLAN

The Overflow Emergency Response Plan element of the SSMP identifies measures implemented by the District to protect public health and the environment in the event of an occurring or impending SSO.

6.1 REGULATORY REQUIREMENTS FOR OVERFLOW EMERGENCY RESPONSE PLAN ELEMENT

The requirements for the Overflow Emergency Response Plan element of the SSMP are set forth in the Statewide General Waste Discharge Requirements for Wastewater Collection Agencies (State Water Resources Control Board Order No. 2006-0003-DWQ) and summarized below.

Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner.*
- b) A program to ensure an appropriate response to all overflows.*
- c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potential affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSO's shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification.*
- d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained.*
- e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and*

- f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.*

6.2 ELEMENT 6 SUPPORTING INFORMATION

Supporting information for Element 6 is included in Appendix K herein, which includes a copy of the document, Unified Sanitary Sewer Spill Response Procedure, dated July 15, 2013, prepared by Riverside County Flood Control and Water Conservation District. Also included in Appendix K is a letter dated March 11, 2016 to the California Regional Water Quality Control Board – Santa Ana Region from ECSD updating ECSD’s contact roster.

6.3 DISCUSSIONS OF OVERFLOW EMERGENCY RESPONSE PLAN

1) Proper Notification Procedure – In the event an overflow is observed, the District should be contacted at (951) 653-5120. The District Representative should obtain all relevant information available regarding the overflow including:

- a. Time and date that the call was received.
- b. Specific location of overflow such as manhole location with regard to the nearest cross streets.
- c. Description of overflow.
- d. Approximate time that the spill was observed.
- e. Reporters name and contact information.
- f. Any other relevant information that would help a field crew deal with the spill.

After the preliminary report is received a contract cleaning crew will be notified and alerted to a possible overflow. The District plumbing contractor (Montgomery Plumbing) will be dispatched via cell phone (951-924-4697) to the affected area to determine if the spill is indeed a sewer overflow inside the public right of way. The Montgomery Plumbing crew

will have the responsibility of determining if the event is actually a SSO. If the spill is indeed an SSO, affected agencies will be notified as soon as possible by telephone while the Contract Cleaner is dispatched to the area.

- 2) **Appropriate Response Procedure** – The contract cleaning crew (Houston & Harris) should be dispatched via cell phone (909)422-8990 or in an after-hours emergency (909)721-1756. Personnel should receive the same information initially received by the District Representative so they may assess the severity of the spill and take necessary precautions. If necessary, an additional contract cleaning crew will be called and dispatched to the affected area.
- 3) **Notifications of Regulatory Agencies** – In the event of a SSO, a report will be filed per the State Water Resources Control Board “Enrollees Guide to the SSO Database Sanitary Sewer Overflow Reduction Program”, last updated August 2013. (Appendix L)
- 4) **Procedures to Ensure Staff are Aware and Trained in the Overflow Emergency Response Plan** – The District Staff and the Contract cleaning crew Field Supervisor will be provided a copy of the SSMP for use in Overflow Emergencies.
- 5) **Emergency Operations Procedures/Procedures for Containing SSOs** - It is the duty of the first responder to a SSO to protect the health and safety of the public by mitigating the impact of the overflow to the greatest extent possible.
 - a) Upon arrival the District crew should do the following.
 - i. Safeguard the immediate area with warning signs and direct the public away from the SSO.
 - ii. Determine the cause of the overflow, e.g. sewer line blockage or sewer line break.
 - iii. Identify and request assistance or additional resources to correct the overflow or to assist in the determination of its cause to minimize the impact of the overflow.
 - iv. Determine if private property is affected by the spill. If so the crew should notify the Riverside County Department of Environmental Health (951) 955-8980.

- v. Call the Contract Cleaning crew for assistance in stopping the spill (909) 442-8990 or cell phone (909) 721-1756.
 - vi. The Contract Cleaning Crew should take immediate steps to stop the overflow, e.g. relieve pipeline blockage or repair pipe.
- b) Initial Measures for Containment**
- i. Determine the immediate destination of the overflow, e.g. storm drain, street curb gutter, body of water, creek bed, etc;
 - ii. Identify and request the necessary materials and equipment to contain or isolate the overflow, if not readily available.
 - iii. Take immediate steps to contain the overflow, e.g. block or bag storm drains, recover through vacuum truck, divert into downstream manholes.
- c) Sampling and Lab Tests**
- i. Samples should be taken 500 feet upstream of the spill and 1000 feet downstream.
 - ii. Ask the lab to test for total coliform.
 - iii. If unacceptable levels are observed, continue composite sampling until coliform levels are within permitted limits or are similar upstream and downstream results are observed.
- d) Additional Measures**
- i. In instances where larger spills occur or a line is broken and cannot be immediately repaired, sewage pumps or vacor trucks may be required to divert the flow.
 - ii. Continuous or periodic monitoring of the bypass pump system operation shall be implemented as required.
 - iii. Regulatory agency issues shall be addressed in conjunction with emergency repairs.

e) Cleanup

- i. Where practical, the area is to be thoroughly flushed and cleaned of any sewage or wash-down water. Solids and debris are to be flushed, swept, raked, picked up, and transported for proper disposal.
- ii. The overflow site is to be secured to prevent contact by member of the public until the site has been thoroughly cleaned. Posting may be required depending on the longevity of the activity.
- iii. Where appropriate, the overflow site is to be disinfected and deodorized.
- iv. Where sewage has resulted in ponding, the pond should be pumped dry and the residual deposited in accordance with applicable regulations and policies.

f) Report Procedure

See State Water Resources Control Board “Monitoring and Reporting Program No. 2006-0003-DWQ – Statewide General Waste Discharge Requirements for Sanitary Sewer Systems” in **Appendix A** and State Water Resources Control Board “Enrollee’s Guide to the SSO Database Sanitary Sewer Overflow Reduction Program” August 2013 in Appendix L.

ELEMENT 7: FATS, OILS, AND GREASE PROGRAM

The Fats, Oils, and Grease (FOG) Control Program element of the SSMP sets forth a program for reducing and preventing FOG waste discharges to the District's sanitary sewer system.

7.1 REGULATORY REQUIREMENT FOR FOG CONTROL PROGRAM ELEMENT

The requirements for the FOG Control Program element of the SSMP are set forth in the Statewide General Waste Discharge Requirements for Wastewater Collection Agencies (State Water Resources Control Board Order No. 2006-0003-DWQ) and are summarized below.

Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- a) *An implantation plan and schedule for a public education outreach program that promotes proper disposal of FOG;*
- b) *A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;*
- c) *The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;*
- d) *Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;*
- e) *Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;*

- f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and*
- g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each identified in (f) above.*

7.2 ELEMENT 7 SUPPORTING INFORMATION

Fats, oils and grease (FOG) can build up in the District's sanitary sewer system, however as a result of the District's annual and semi-annual cleaning has prevented SSOs within the District service area. The District has determined that the major FOG contributors within its service area are from selected residential neighborhoods and food service establishments (FSEs). The District is also aware of certain "hot spots" within its sewer system that tend to accumulate more FOG buildup and tree roots which are more susceptible to blockages than others areas, and these hot spots are depicted on the District's Sewer System Map (Plate 2) which is included in a pocket at the end of this report.

In order to protect the health and welfare of the community and the general public, to maintain compliance with local and regional waste discharge requirements, and to maintain its wastewater collection system in operable condition, the District regulates the types of substances, such as FOG, that may be discharged to its wastewater collection system. Regulations pertaining to FOG are summarized herein and are set forth in the following two ordinances.

7.3 PROVISIONS OF THE FOG CONTROL PROGRAM

The District has determined it benefits from a FOG source control program and has implemented various policies and practices in an attempt to limit FOG disturbances to the sewer system. The District's program is administered by the City of Riverside's Environmental Compliance Section.

A. Public Education

The City of Riverside Environmental Compliance Section educates District business owners while conducting inspections of restaurants. The City of Riverside conducts inspections at all restaurants

within the District on a regular basis. During these inspections, they check drains, grease interceptors, waste oil containers, records, etc. to verify compliance with local ordinances. These activities provide an opportunity to educate business owners about FOG and its effect on the sewer system.

Throughout all of the Environment Compliance Section's interactions, a variety of promotional items are available for distribution. The District annually sends a mailer (Appendix N) to each entity connected to the sewer system requesting that they stop disposing of fats, oils, or grease and paper towels into the sanitary sewer system in order to prevent a sanitary sewer overflow.

B. FOG Disposal

As mentioned above, the Environmental Compliance Inspectors visit restaurants, kitchens, and other known FOG producing facilities on a regular basis to verify compliance with the District's Ordinance. During these visits, facility records including waste oil disposal and grease interceptor maintenance are checked to ensure proper disposal of FOG. In addition, the inspectors provide education and offer educational materials that inform how to properly dispose of FOG.

C. Legal Authority

The District has established legal authority to prohibit discharges of FOG to the sanitary sewer system. This is accomplished through District Ordinance No. 278, primarily Section 335 PROHIBITED WASTE DISCHARGES which explicitly prohibits grease and other viscous materials from entering the sewer system. In addition to this prohibition, Section 275 RESTAURANTS requires users to separate FOG to the maximum extent practicable for off-site disposal. This section also requires restaurants to seek a determination from the District on whether or not a grease interceptor must be installed. Finally, Section 270 INTERCEPTOR MAINTENANCE requires users to properly maintain their interceptors utilizing the 25% rule and establishing other standards to the regular interceptor cleaning process.

D. Requirements for Grease Removal Devices

As mentioned in the previous section, Section 275 of Districts Ordinance No. 278 mandates that restaurants shall not "discharge wastewater from such restaurant to the POTW without first receiving a written determination from District Engineer, and complying with such determination, of the POTW interceptor requirements." This determination is made as users complete and submit a discharge survey that defines the probable impact the restaurant will impose on the sewer system.

Interceptors are to be sized and designed in accordance with the Uniform Plumbing Code with a minimum size of 750 gallons. Additional interceptor requirements including accessibility, tee, and sample box requirements are found in Section 260 INTERCEPTOR REQUIREMENTS.

In addition to sizing and installation requirements, the District Ordinance No. 278 gives requirements for interceptor maintenance. Section 270 INTERCEPTOR MAINTENANCE requires that interceptors are properly maintained at all times. An interceptor is not considered to be properly maintained, if for any reason the interceptor is not in good working condition or if the operational fluid capacity has been reduced by more than twenty-five percent by the accumulation of floating material, sediment, oil or grease, or other liquid that have limited or no solubility in water. This section prohibits the use of “enzymes, proteins, or other materials that emulsify, suspend, or dissolve oil and grease.” It also requires that when cleaned, “the entire contents of the interceptor from all chambers and sample box shall be removed.”

Section 230 RECORD KEEPING requires users to “keep records of waste hauling, reclamations, wastewater pretreatment, monitoring device recording charts and calibration reports, effluent flow, and sample analysis data, on the site...” Records must be kept onsite for minimum of three years.

E. Authority to Inspection

Ordinance No. 278 Section 215 INSPECTION provides the authority to inspect businesses in order to ascertain if requirements are being met. This section requires users to provide access and have personnel available who are knowledgeable of all facility processes. The City of Riverside Environmental Compliance Section administers the inspection program on behalf of the District. EC is comprised of six EC inspectors (I and II), two Senior EC Inspectors and an EC Supervisor. This diligent staff is sufficient to inspect and enforce the FOG section of the ordinance.

F. FOG Problem Areas and Maintenance Schedule

Several areas throughout the District have been identified as being subject to FOG and tree root blockages. These areas are identified in Plate 2. To help prevent sewer line blockages in these areas, Houston & Harris, under contract with the District cleans these lines at least every 6 months. This enhanced cleaning schedule helps to keep these sewer sections properly maintained.

G. Source Control for Problem Areas

As detailed in this element, the Districts multi-faceted source control program consists of inspections, public education and other activities. When problems in commercial/retail areas are identified, the District authorizes the City of Riverside inspection staff to increase efforts in these areas in an attempt to locate specific causes of the problem.

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ELEMENT 8: SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The System Evaluation and Capacity Assurance Plan element of the SSMP provides hydraulic evaluation of the District's sanitary sewer system and determines the actions needed to establish a capital improvement plan (CIP) that will address any identified hydraulic deficiencies.

8.1 REGULATORY REQUIREMENT FOR SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN ELEMENT

The requirements for the System Evaluation and Capacity Assurance Plan element of the SSMP are set forth in the Statewide General Waste Discharge Requirements for Wastewater Collection Agencies (State Water Resources Control Board Order No. 2006-0003-DWQ) and are summarized below.

The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- a) Evaluation: Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;*
- b) Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria;*
- c) Capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternative analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.*

- d) *Schedule: The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a) – (c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14 (Appendix A).*

8.2 ELEMENT 8 SUPPORTING INFORMATION

Supporting information of Element 8 is included in Appendices C, D and E. Appendix C includes a copy of the September 2008 Master Sewer Evaluation Plan, and the April 27, 2022 Sewer System Capacity Evaluation based on the City of Moreno Valley General Plan 2040.. Appendix D includes a copy of a letter to the Board of Directors titled “Prioritization of ECSD CIP Projects Implementation Plan” March 25, 2010. Appendix E includes a copy of a letter, dated May 23, 2013, to the ECSD Board of Directors titled “Project Status Summary of March 25, 2010 Prioritization of ECSD CIP Project and Implementation Plan”; June 23, 2016 Project Status Summary of District System Videos; March 20, 2018 Proposed Installation of SSO Monitoring at Canyon Springs Plaza and 4-Barrels Manholes; November 6, 2018 Video Inspection of Sewer Service Laterals; June 21, 2019 Sewer Mains and Lateral Repair and Replacement Project Prioritization..

8.3 DISCUSSION OF SYSTEM EVALUATION AND CAPACITY

- 1) **Evaluation** – A hydraulic evaluation was performed and is contained in the Master Sewer System Evaluation Plan dated September, 2008 (Appendix C). Estimated peak flows are generated using land use areas and then assigned to evaluate tributary areas. The areas are evaluated using as-built sewer information and hydraulic deficiencies are identified. Only one SSOs has occurred as a result of a sewer plug being placed in a manhole by an unknown party. The City of Moreno Valley adopted their 2040 General Plan, which changed some of the land use within the District’s boundaries. Using the updated land use per the City’s 2040 General Plan, the District’s wastewater generation factors were applied resulting in a lower overall wastewater generational (Appendix C-2, April 27, 2022 Sewer System Capacity Evaluation based on the City of Moreno Valley General Plan 2040).

- 2) In anticipation of potential operational and maintenance concerns, the District videotaped all existing 6-inch diameter sewer lines in May of 2008. Site visits with a District representative were performed at hot spot areas and improvements have been identified.

Recommendations for replacements and rehabilitation of facilities are discussed in Section 8 of the Master Plan (Appendix C). A total project cost estimate has been prepared and various improvements have been prioritized by the District Engineer.

To update the Capital Improvement Program the District had the Canyon Springs Plaza area of the District sewer system videoed in 2015. In 2016 the balance of the District sewer system was videoed. Webb Associates revised the CIP for submittal to the Board of Directors for review and approval based upon the review of the current videos (Appendix E-2, June 23, 2016 District Wide Sewer videos). Additionally, the District performed the video inspection of all the service laterals within the District's service area (Appendix E-4, November 6, 2018 Video Inspection of Sewer Service Laterals). As a result of this video inspection, the CIP was further revised to include laterals replacements (Appendix E-5, June 21, 2019 Sewer Mains and Laterals Repair and Replacement Project Prioritization). In January 2022 the District sent a letter to selected property owners suggesting they retain a licensed plumber to clear their lateral if they were encountering any problems in their lateral (Appendix N).

- 3) **Design Criteria** – Design Criteria is established in Section 3 of the Master Sewer System Evaluation Plan. Domestic, Commercial, Industrial, and Miscellaneous Land Use sewage have been analyzed. Dry Weather, Infiltration, Wet Weather Flow, and various factors have been determined as part of the evaluation. Maximum D/d and minimum slope criteria are explained in Section 3 as well.
- 4) **Capacity Enhancement Measures** – Measures to enhance sewer collection and treatment capacity are outlined in Section 8 of the Master Plan which considers updated General Land Use Plans and ultimate build out. Projects are budgeted to enhance the system's capacity and replace damaged facilities.
- 5) **Schedule** – At the request of the District during the February 25, 2010 Board meeting, Albert A. Webb Associates reviewed the proposed Capital Improvement Projects (CIP) summarized in the September 2008 Master Sewer System Evaluation Plan (Master Plan) in order to prioritize them for construction. (See Figure 8-1, Appendix C, for locations.) Two projects identified in the Master Plan and subsequently constructed are therefore not included.

- Day Street Sewer Replacement (Completed July, 2009)
- Canyon Springs Offset Joint Replacement (Completed July, 2009)

The following criteria were utilized to prioritize these projects:

- May 2008 sewer inspection videos for pipes that are most distressed
- Project locations as projects farther downstream tend to have more tributary services areas
- Potential City of Moreno Valley's Capital Projects⁽¹⁾
- March 3, 2010 meeting with ECSD staff member for maintenance input

During the March 3, 2010 meeting, ECSD staff member discussed other sewer lines which were neither videoed⁽¹⁾ nor included in the Master Plan, though based on his assessment⁽²⁾, required replacement. The potential replacement projects designated as Additional Projects (see Figure 8-1 of Appendix C, for locations) which were as follows:

- Replacement of 1,000 feet of existing 8-inch diameter VCP sewer line with new 8-inch diameter VCP sewer line along Dracaea Avenue between Edgemont Street and Gina Avenue due to root growth in the sewer line.
- Replacement of 700 feet of existing 8-inch diameter VCP sewer line with new 8-inch diameter VCP sewer line along Barbara Street south of Eucalyptus Avenue due to root growth in the sewer line.
- Replacement of 700 feet of existing 8-inch diameter VCP sewer line with new 8-inch diameter VCP sewer line along Edgemont Street north of Dracaea Avenue due to root growth in sewer line. Additionally at this location, low pressure cleaning is utilized for this portion of the sewer line during routine cleaning as one of the properties is situated such that high pressure cleaning causes back flow into the service lateral.

As previously indicated, the May 2008 video inspection was performed on the District's existing 6-inch diameter sewer lines. Houston & Harris completed in March of 2016, their video inspection of the entire Districts sewerage system which Webb Associates is currently evaluating.

⁽¹⁾ City's capital projects per map provided in January 15, 2009 E-mail from Mr. Abraham Folk of City of Moreno Valley. Review of City's Capital projects shows no City project interfering with District's projects at this time. Developer's projects were not evaluated as there are currently no requests for connection at this point.

⁽¹⁾ The May 2008 sewer video inspection primarily focused on 6-inch diameter sewer mains.

⁽²⁾ Assessment based on field observations during routine maintenance and cleaning.

An implementation plan was prepared to consolidate the prioritized projects into years. The consolidation criterion was based on maintaining a replacement length of approximately 2,000 feet, at a cost of approximately \$500,000 to \$700,000, per year, beginning in year 2010.

In addition to the proposed capital projects, various improvements were identified such as manhole replacements, sewer line point repair, and sewer lateral replacement which were summarized in Table 9-4 of the Master Plan (Appendix C) and designated as the “Maintenance Improvement Programs”. For planning purposes, the cost and implementation of these maintenance improvements have been evenly distributed throughout each year resulting in a cost of \$110,000 per year.

Several projects have been completed since the inception of the District’s Capital Improvements Program. Table 8-1 summarizes the remaining prioritized projects based on the criteria previously discussed. Table 8-2 summarizes the costs for the remaining additional maintenance projects. Table 8-3 summarizes the remaining consolidated project implementation plan, which includes the projects and maintenance improvements listed in the Master Plan. The consolidated project implementation plan does not include the additional projects.

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Table 8-1: Prioritization of Remaining Capital Improvement Projects

Priority No.	Project No ⁽¹⁾	Location	Construction Cost ⁽²⁾	Project Cost ⁽³⁾
1	CA-2	Cottonwood Ave.	\$320,000	\$450,000
2	CA-1	Cottonwood Ave.	\$540,000	\$760,000
13	NS-1	Nolze Pl.	\$200,000	\$280,000
14	BE-1	Bertie Ave.	\$160,000	\$220,000
Total per Master Plan⁽⁴⁾:			\$1,220,000	\$1,710,000
Current Total⁽⁴⁾:			\$1,790,000	\$2,500,000

⁽¹⁾ Project designations per Table 9-4 of September, 2008 ECSD master Sewer System Evaluation. With the exception of Cottonwood Avenue and various miscellaneous repairs, the projects consist of the upsizing from 6-inch diameter to 8-inch diameter.

⁽²⁾ The Engineering News Record (E.N.R.) Construction Cost Index for the Los Angeles Areas for July 2008 was utilized as per the September, 2008 ECSD Master Sewer Evaluation: 9335.69.

⁽³⁾ Project cost is 1.4 times construction cost rounded up to nearest \$10,000.

⁽⁴⁾ The Engineering News Record (E.N.R.) Construction Cost Index for the Los Angeles Areas for December 2022 was utilized: 13,664.79.

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Table 8-2: Remaining Additional Maintenance Projects

Item No.	Location	Diameter	Quantity	Unit	Unit Cost¹	Construction Cost	Project Cost²
1	Dracaea Ave.	8-inch	1000	LF	\$294	\$294,000	\$410,000
Current Total :						\$294,000	\$410,000

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Table 8-3: Remaining Consolidated Project Implementation Plan

Year	Location	Project Cost²	Improvement Cost	Total Phase Cost	Reason
TBD	Cottonwood Ave.	\$1,210,000	N/A	\$1,210,000	Capacity development ³
2023	Nolze St. Bertie Ave.	\$500,000	\$110,000	\$610,000	Minor cracks, roots etc.
Total per Master Plan:		\$1,710,000	\$110,000	\$1,820,000	
Current Total¹:		\$2,500,000	\$160,000	\$2,600,000	

¹ The Engineering News Record (E.N.R.) Construction Cost Index for the Los Angeles Areas for December 2022 was utilized: 13,664.79.

² Project cost is 1.4 times construction cost rounded up to nearest \$10,000.

³ Schedule to be determined (TBD) for Project No. CA-1 and CA-2, ECSD 2008 Master Sewer Plan, pending proposed Scottish Village Condo Development, 194 units, northeast corner of Cottonwood Avenue and Elsworth Street.

ELEMENT 9: MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

The Monitoring, Measurement, and Program Modifications element of the SSMP identifies measures implemented by the District for monitoring the implementation of, and measuring the effectiveness of, the SSMP.

9.1 REGULATORY REQUIREMENT FOR MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS ELEMENT

The Enrollee shall:

- a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;*
- b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;*
- c) Assess the success of the preventative maintenance program.*
- d) Update program elements as appropriate, based on monitoring or performance evaluations; and*
- e) Identify and illustrate SSO trends, including: frequency, location, and volume.*

9.2 ELEMENT 9 SUPPORTING INFORMATION

There is no supporting information for Element 9.

9.3 DISCUSSION OF MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

- 1) The District maintains record drawings, GIS data, Sewer Master Plan updates, sewer line videotape, cleaning logs, and other relevant information at the office of the District Engineer.
- 2) The District Engineer shall have the responsibility to monitor the implementation of the SSMP and report to the Board of Directors the plan's effectiveness.

- 3) The preventative maintenance program consists of regular scheduled cleaning which has prevented any SSOs except in two incidences in the past 10 years. That first incident of a SSO was caused by an unknown party installing a sewer plug in a manhole on Farragut Avenue.
- 4) The District Engineer shall update the program elements and have the plan self certified by the Board of Directors every 5 years in accordance with the WDRs.
- 5) On October 1, 2014 a sewer spill of 2700 gallons occurred on Farragut Avenue in Moreno Valley, Calif. This is the first spill that occurred, in the last 10 years from the District's sewer system. The cause of the spill was the result of a sewer plug being installed in a manhole by an unknown party.
- 6) On April 13, 2021 a second spill, estimated at 146 gallons, occurred at the intersection of Alessandro Blvd. and Elsworth Street in Moreno Valley. The cause of the spill was the result of grease buildup most likely from house hold drains.
- 7) As a result of the April 13, 2021 spill, the District sent out to all of its customers a FOG mailer. In addition, the District has undertaken mid-year sewer line cleaning programs at potential areas where FOG will accumulate.

ELEMENT 10: SSMP PROGRAM AUDITS

The SSMP Program Audits element of the SSMP identifies the District's procedures for conducting periodic internal audits of its SSMP.

10.1 REGULATORY REQUIREMENT FOR SSMP PROGRAM AUDITS ELEMENT

The requirements for the SSMP Program Audits element of the SSMP are set forth in the Statewide General Waste Discharge Requirements for Wastewater Collection Agencies (State Water Resource Control Board Order No. 2006-0003-DWQ) (Appendix A) and are summarized below.

As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in his subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

10.2 ELEMENT 10 SUPPORTING INFORMATION

There is no supporting information for Element 10.

10.3 SSMP PROGRAM AUDITS DISCUSSION

The District will conduct an internal audit of its SSMP every two years. The audit will include, but may not be limited to, the following;

- An evaluation of the overall effectiveness of the SSMP, including reference to any specific SSMP elements that may need revision;
- Additional discussion of individual SSMP elements that may need revision, if any;
- A description of any significant changes to the SSMP;

- A description of any significant changes to the supporting information contained in the SSMP appendices;
- A description of any improvements or additions to the District's sewer system within the past two years; and
- Deficiencies of the SSMP, if any and strategies proposed to correct said deficiencies.

A report summarizing the audit will be kept on file at the District.

ELEMENT 11: SSMP COMMUNICATION PROGRAM

The Communication Program element of the SSMP sets forth the District's communication strategies pertaining to the SSMP.

11.1 REGULATORY REQUIREMENTS FOR COMMUNICATION PROGRAM ELEMENT

The enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

11.2 ELEMENT 11 SUPPORTING INFORMATION

There is no supporting information for Element 11.

11.3 DISCUSSION OF COMMUNICATION PROGRAM

The District made this updated SSMP available to the public and invited comments at its Board of Directors meeting at 7:00 p.m. on May 26, 2016 thereby allowing for public input. This updated SSMP was adopted by the Board of Directors on May 26, 2016.

The District established a website in March 2016¹, the SSMP was approved by the Board of Directors on May 26, 2016, the SSMP as well as the District's contact information and regular Board of Directors meeting schedule will be placed on the District's website.

¹ Edgemontcsd.specialdistrict.org

APPENDIX A

**State Water Resources Control
Board Order No. 2066-003**

**STATE WATER RESOURCES CONTROL BOARD
ORDER NO. 2006-0003**

**STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS
FOR
SANITARY SEWER SYSTEMS**

The State Water Resources Control Board, hereinafter referred to as "State Water Board", finds that:

1. All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer systems greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility in the State of California are required to comply with the terms of this Order. Such entities are hereinafter referred to as "Enrollees".
2. Sanitary sewer overflows (SSOs) are overflows from sanitary sewer systems of domestic wastewater, as well as industrial and commercial wastewater, depending on the pattern of land uses in the area served by the sanitary sewer system. SSOs often contain high levels of suspended solids, pathogenic organisms, toxic pollutants, nutrients, oxygen-demanding organic compounds, oil and grease and other pollutants. SSOs may cause a public nuisance, particularly when raw untreated wastewater is discharged to areas with high public exposure, such as streets or surface waters used for drinking, fishing, or body contact recreation. SSOs may pollute surface or ground waters, threaten public health, adversely affect aquatic life, and impair the recreational use and aesthetic enjoyment of surface waters.
3. Sanitary sewer systems experience periodic failures resulting in discharges that may affect waters of the state. There are many factors (including factors related to geology, design, construction methods and materials, age of the system, population growth, and system operation and maintenance), which affect the likelihood of an SSO. A proactive approach that requires Enrollees to ensure a system-wide operation, maintenance, and management plan is in place will reduce the number and frequency of SSOs within the state. This approach will in turn decrease the risk to human health and the environment caused by SSOs.
4. Major causes of SSOs include: grease blockages, root blockages, sewer line flood damage, manhole structure failures, vandalism, pump station mechanical failures, power outages, excessive storm or ground water inflow/infiltration, debris blockages, sanitary sewer system age and construction material failures, lack of proper operation and maintenance, insufficient capacity and contractor-caused damages. Many SSOs are preventable with adequate and appropriate facilities, source control measures and operation and maintenance of the sanitary sewer system.

SEWER SYSTEM MANAGEMENT PLANS

5. To facilitate proper funding and management of sanitary sewer systems, each Enrollee must develop and implement a system-specific Sewer System Management Plan (SSMP). To be effective, SSMPs must include provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. Additionally, an SSMP must contain a spill response plan that establishes standard procedures for immediate response to an SSO in a manner designed to minimize water quality impacts and potential nuisance conditions.
6. Many local public agencies in California have already developed SSMPs and implemented measures to reduce SSOs. These entities can build upon their existing efforts to establish a comprehensive SSMP consistent with this Order. Others, however, still require technical assistance and, in some cases, funding to improve sanitary sewer system operation and maintenance in order to reduce SSOs.
7. SSMP certification by technically qualified and experienced persons can provide a useful and cost-effective means for ensuring that SSMPs are developed and implemented appropriately.
8. It is the State Water Board's intent to gather additional information on the causes and sources of SSOs to augment existing information and to determine the full extent of SSOs and consequent public health and/or environmental impacts occurring in the State.
9. Both uniform SSO reporting and a centralized statewide electronic database are needed to collect information to allow the State Water Board and Regional Water Quality Control Boards (Regional Water Boards) to effectively analyze the extent of SSOs statewide and their potential impacts on beneficial uses and public health. The monitoring and reporting program required by this Order and the attached **Monitoring and Reporting Program No. 2006-0003**, are necessary to assure compliance with these waste discharge requirements (WDRs).
10. Information regarding SSOs must be provided to Regional Water Boards and other regulatory agencies in a timely manner and be made available to the public in a complete, concise, and timely fashion.
11. Some Regional Water Boards have issued WDRs or WDRs that serve as National Pollution Discharge Elimination System (NPDES) permits to sanitary sewer system owners/operators within their jurisdictions. This Order establishes minimum requirements to prevent SSOs. Although it is the State Water Board's intent that this Order be the primary regulatory mechanism for sanitary sewer systems statewide, Regional Water Boards may issue more stringent or more

prescriptive WDRs for sanitary sewer systems. Upon issuance or reissuance of a Regional Water Board's WDRs for a system subject to this Order, the Regional Water Board shall coordinate its requirements with stated requirements within this Order, to identify requirements that are more stringent, to remove requirements that are less stringent than this Order, and to provide consistency in reporting.

REGULATORY CONSIDERATIONS

12. California Water Code section 13263 provides that the State Water Board may prescribe general WDRs for a category of discharges if the State Water Board finds or determines that:

- The discharges are produced by the same or similar operations;
- The discharges involve the same or similar types of waste;
- The discharges require the same or similar treatment standards; and
- The discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

This Order establishes requirements for a class of operations, facilities, and discharges that are similar throughout the state.

13. The issuance of general WDRs to the Enrollees will:

- a) Reduce the administrative burden of issuing individual WDRs to each Enrollee;
- b) Provide for a unified statewide approach for the reporting and database tracking of SSOs;
- c) Establish consistent and uniform requirements for SSMP development and implementation;
- d) Provide statewide consistency in reporting; and
- e) Facilitate consistent enforcement for violations.

14. The beneficial uses of surface waters that can be impaired by SSOs include, but are not limited to, aquatic life, drinking water supply, body contact and non-contact recreation, and aesthetics. The beneficial uses of ground water that can be impaired include, but are not limited to, drinking water and agricultural supply. Surface and ground waters throughout the state support these uses to varying degrees.

15. The implementation of requirements set forth in this Order will ensure the reasonable protection of past, present, and probable future beneficial uses of water and the prevention of nuisance. The requirements implement the water quality control plans (Basin Plans) for each region and take into account the environmental characteristics of hydrographic units within the state. Additionally, the State Water Board has considered water quality conditions that could reasonably be achieved through the coordinated control of all factors that affect

water quality in the area, costs associated with compliance with these requirements, the need for developing housing within California, and the need to develop and use recycled water.

16. The Federal Clean Water Act largely prohibits any discharge of pollutants from a point source to waters of the United States except as authorized under an NPDES permit. In general, any point source discharge of sewage effluent to waters of the United States must comply with technology-based, secondary treatment standards, at a minimum, and any more stringent requirements necessary to meet applicable water quality standards and other requirements. Hence, the unpermitted discharge of wastewater from a sanitary sewer system to waters of the United States is illegal under the Clean Water Act. In addition, many Basin Plans adopted by the Regional Water Boards contain discharge prohibitions that apply to the discharge of untreated or partially treated wastewater. Finally, the California Water Code generally prohibits the discharge of waste to land prior to the filing of any required report of waste discharge and the subsequent issuance of either WDRs or a waiver of WDRs.
17. California Water Code section 13263 requires a water board to, after any necessary hearing, prescribe requirements as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. The requirements shall, among other things, take into consideration the need to prevent nuisance.
18. California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
 - a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.
19. This Order is consistent with State Water Board Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Waters in California) in that the Order imposes conditions to prevent impacts to water quality, does not allow the degradation of water quality, will not unreasonably affect beneficial uses of water, and will not result in water quality less than prescribed in State Water Board or Regional Water Board plans and policies.
20. The action to adopt this General Order is exempt from the California Environmental Quality Act (Public Resources Code §21000 et seq.) because it is an action taken by a regulatory agency to assure the protection of the environment and the regulatory process involves procedures for protection of the environment. (Cal. Code Regs., tit. 14, §15308). In addition, the action to adopt

this Order is exempt from CEQA pursuant to Cal.Code Regs., title 14, §15301 to the extent that it applies to existing sanitary sewer collection systems that constitute "existing facilities" as that term is used in Section 15301, and §15302, to the extent that it results in the repair or replacement of existing systems involving negligible or no expansion of capacity.

21. The Fact Sheet, which is incorporated by reference in the Order, contains supplemental information that was also considered in establishing these requirements.
22. The State Water Board has notified all affected public agencies and all known interested persons of the intent to prescribe general WDRs that require Enrollees to develop SSMPs and to report all SSOs.
23. The State Water Board conducted a public hearing on February 8, 2006, to receive oral and written comments on the draft order. The State Water Board received and considered, at its May 2, 2006, meeting, additional public comments on substantial changes made to the proposed general WDRs following the February 8, 2006, public hearing. The State Water Board has considered all comments pertaining to the proposed general WDRs.

IT IS HEREBY ORDERED, that pursuant to California Water Code section 13263, the Enrollees, their agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted hereunder, shall comply with the following:

A. DEFINITIONS

1. **Sanitary sewer overflow (SSO)** - Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:
 - (i) Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
 - (ii) Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
 - (iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.
2. **Sanitary sewer system** – Any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant headworks used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not considered to be SSOs.

For purposes of this Order, sanitary sewer systems include only those systems owned by public agencies that are comprised of more than one mile of pipes or sewer lines.

3. **Enrollee** - A federal or state agency, municipality, county, district, and other public entity that owns or operates a sanitary sewer system, as defined in the general WDRs, and that has submitted a complete and approved application for coverage under this Order.
4. **SSO Reporting System** – Online spill reporting system that is hosted, controlled, and maintained by the State Water Board. The web address for this site is <http://ciwqs.waterboards.ca.gov>. This online database is maintained on a secure site and is controlled by unique usernames and passwords.
5. **Untreated or partially treated wastewater** – Any volume of waste discharged from the sanitary sewer system upstream of a wastewater treatment plant headworks.
6. **Satellite collection system** – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.
7. **Nuisance** - California Water Code section 13050, subdivision (m), defines nuisance as anything which meets all of the following requirements:
 - a. Is injurious to health, or is indecent or offensive to the senses, or an obstruction to the free use of property, so as to interfere with the comfortable enjoyment of life or property.
 - b. Affects at the same time an entire community or neighborhood, or any considerable number of persons, although the extent of the annoyance or damage inflicted upon individuals may be unequal.
 - c. Occurs during, or as a result of, the treatment or disposal of wastes.

B. APPLICATION REQUIREMENTS

1. **Deadlines for Application** – All public agencies that currently own or operate sanitary sewer systems within the State of California must apply for coverage under the general WDRs within six (6) months of the date of adoption of the general WDRs. Additionally, public agencies that acquire or assume responsibility for operating sanitary sewer systems after the date of adoption of this Order must apply for coverage under the general WDRs at least three (3) months prior to operation of those facilities.
2. **Applications under the general WDRs** – In order to apply for coverage pursuant to the general WDRs, a legally authorized representative for each agency must submit a complete application package. Within sixty (60) days of adoption of the general WDRs, State Water Board staff will send specific instructions on how to

apply for coverage under the general WDRs to all known public agencies that own sanitary sewer systems. Agencies that do not receive notice may obtain applications and instructions online on the Water Board's website.

3. Coverage under the general WDRs – Permit coverage will be in effect once a complete application package has been submitted and approved by the State Water Board's Division of Water Quality.

C. PROHIBITIONS

1. Any SSO that results in a discharge of untreated or partially treated wastewater to waters of the United States is prohibited.
2. Any SSO that results in a discharge of untreated or partially treated wastewater that creates a nuisance as defined in California Water Code Section 13050(m) is prohibited.

D. PROVISIONS

1. The Enrollee must comply with all conditions of this Order. Any noncompliance with this Order constitutes a violation of the California Water Code and is grounds for enforcement action.
2. It is the intent of the State Water Board that sanitary sewer systems be regulated in a manner consistent with the general WDRs. Nothing in the general WDRs shall be:
 - (i) Interpreted or applied in a manner inconsistent with the Federal Clean Water Act, or supersede a more specific or more stringent state or federal requirement in an existing permit, regulation, or administrative/judicial order or Consent Decree;
 - (ii) Interpreted or applied to authorize an SSO that is illegal under either the Clean Water Act, an applicable Basin Plan prohibition or water quality standard, or the California Water Code;
 - (iii) Interpreted or applied to prohibit a Regional Water Board from issuing an individual NPDES permit or WDR, superseding this general WDR, for a sanitary sewer system, authorized under the Clean Water Act or California Water Code; or
 - (iv) Interpreted or applied to supersede any more specific or more stringent WDRs or enforcement order issued by a Regional Water Board.
3. The Enrollee shall take all feasible steps to eliminate SSOs. In the event that an SSO does occur, the Enrollee shall take all feasible steps to contain and mitigate the impacts of an SSO.
4. In the event of an SSO, the Enrollee shall take all feasible steps to prevent untreated or partially treated wastewater from discharging from storm drains into

flood control channels or waters of the United States by blocking the storm drainage system and by removing the wastewater from the storm drains.

5. All SSOs must be reported in accordance with Section G of the general WDRs.
6. In any enforcement action, the State and/or Regional Water Boards will consider the appropriate factors under the duly adopted State Water Board Enforcement Policy. And, consistent with the Enforcement Policy, the State and/or Regional Water Boards must consider the Enrollee's efforts to contain, control, and mitigate SSOs when considering the California Water Code Section 13327 factors. In assessing these factors, the State and/or Regional Water Boards will also consider whether:
 - (i) The Enrollee has complied with the requirements of this Order, including requirements for reporting and developing and implementing a SSMP;
 - (ii) The Enrollee can identify the cause or likely cause of the discharge event;
 - (iii) There were no feasible alternatives to the discharge, such as temporary storage or retention of untreated wastewater, reduction of inflow and infiltration, use of adequate backup equipment, collecting and hauling of untreated wastewater to a treatment facility, or an increase in the capacity of the system as necessary to contain the design storm event identified in the SSMP. It is inappropriate to consider the lack of feasible alternatives, if the Enrollee does not implement a periodic or continuing process to identify and correct problems.
 - (iv) The discharge was exceptional, unintentional, temporary, and caused by factors beyond the reasonable control of the Enrollee;
 - (v) The discharge could have been prevented by the exercise of reasonable control described in a certified SSMP for:
 - Proper management, operation and maintenance;
 - Adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs (e.g., adequately enlarging treatment or collection facilities to accommodate growth, infiltration and inflow (I/I), etc.);
 - Preventive maintenance (including cleaning and fats, oils, and grease (FOG) control);
 - Installation of adequate backup equipment; and
 - Inflow and infiltration prevention and control to the extent practicable.
 - (vi) The sanitary sewer system design capacity is appropriate to reasonably prevent SSOs.

(vii) The Enrollee took all reasonable steps to stop and mitigate the impact of the discharge as soon as possible.

7. When a sanitary sewer overflow occurs, the Enrollee shall take all feasible steps and necessary remedial actions to 1) control or limit the volume of untreated or partially treated wastewater discharged, 2) terminate the discharge, and 3) recover as much of the wastewater discharged as possible for proper disposal, including any wash down water.

The Enrollee shall implement all remedial actions to the extent they may be applicable to the discharge and not inconsistent with an emergency response plan, including the following:

- (i) Interception and rerouting of untreated or partially treated wastewater flows around the wastewater line failure;
 - (ii) Vacuum truck recovery of sanitary sewer overflows and wash down water;
 - (iii) Cleanup of debris at the overflow site;
 - (iv) System modifications to prevent another SSO at the same location;
 - (v) Adequate sampling to determine the nature and impact of the release; and
 - (vi) Adequate public notification to protect the public from exposure to the SSO.
8. The Enrollee shall properly, manage, operate, and maintain all parts of the sanitary sewer system owned or operated by the Enrollee, and shall ensure that the system operators (including employees, contractors, or other agents) are adequately trained and possess adequate knowledge, skills, and abilities.
 9. The Enrollee shall allocate adequate resources for the operation, maintenance, and repair of its sanitary sewer system, by establishing a proper rate structure, accounting mechanisms, and auditing procedures to ensure an adequate measure of revenues and expenditures. These procedures must be in compliance with applicable laws and regulations and comply with generally acceptable accounting practices.
 10. The Enrollee shall provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events. Capacity shall meet or exceed the design criteria as defined in the Enrollee's System Evaluation and Capacity Assurance Plan for all parts of the sanitary sewer system owned or operated by the Enrollee.
 11. The Enrollee shall develop and implement a written Sewer System Management Plan (SSMP) and make it available to the State and/or Regional Water Board upon request. A copy of this document must be publicly available at the Enrollee's office and/or available on the Internet. This SSMP must be approved by the Enrollee's governing board at a public meeting.

12. In accordance with the California Business and Professions Code sections 6735, 7835, and 7835.1, all engineering and geologic evaluations and judgments shall be performed by or under the direction of registered professionals competent and proficient in the fields pertinent to the required activities. Specific elements of the SSMP that require professional evaluation and judgments shall be prepared by or under the direction of appropriately qualified professionals, and shall bear the professional(s)' signature and stamp.
13. The mandatory elements of the SSMP are specified below. However, if the Enrollee believes that any element of this section is not appropriate or applicable to the Enrollee's sanitary sewer system, the SSMP program does not need to address that element. The Enrollee must justify why that element is not applicable. The SSMP must be approved by the deadlines listed in the SSMP Time Schedule below.

Sewer System Management Plan (SSMP)

- (i) **Goal:** The goal of the SSMP is to provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system. This will help reduce and prevent SSOs, as well as mitigate any SSOs that do occur.
- (ii) **Organization:** The SSMP must identify:
 - (a) The name of the responsible or authorized representative as described in Section J of this Order.
 - (b) The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
 - (c) The chain of communication for reporting SSOs, from receipt of a complaint or other information, including the person responsible for reporting SSOs to the State and Regional Water Board and other agencies if applicable (such as County Health Officer, County Environmental Health Agency, Regional Water Board, and/or State Office of Emergency Services (OES)).
- (iii) **Legal Authority:** Each Enrollee must demonstrate, through sanitary sewer system use ordinances, service agreements, or other legally binding procedures, that it possesses the necessary legal authority to:
 - (a) Prevent illicit discharges into its sanitary sewer system (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc.);

- (b) Require that sewers and connections be properly designed and constructed;
 - (c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;
 - (d) Limit the discharge of fats, oils, and grease and other debris that may cause blockages, and
 - (e) Enforce any violation of its sewer ordinances.
- (iv) **Operation and Maintenance Program.** The SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:
- (a) Maintain an up-to-date map of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities;
 - (b) Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
 - (c) Develop a rehabilitation and replacement plan to identify and prioritize system deficiencies and implement short-term and long-term rehabilitation actions to address each deficiency. The program should include regular visual and TV inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
 - (d) Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and

- (e) Provide equipment and replacement part inventories, including identification of critical replacement parts.

(v) **Design and Performance Provisions:**

- (a) Design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances; and for the rehabilitation and repair of existing sanitary sewer systems; and
- (b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

(vi) **Overflow Emergency Response Plan** - Each Enrollee shall develop and implement an overflow emergency response plan that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- (a) Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner;
- (b) A program to ensure an appropriate response to all overflows;
- (c) Procedures to ensure prompt notification to appropriate regulatory agencies and other potentially affected entities (e.g. health agencies, Regional Water Boards, water suppliers, etc.) of all SSOs that potentially affect public health or reach the waters of the State in accordance with the MRP. All SSOs shall be reported in accordance with this MRP, the California Water Code, other State Law, and other applicable Regional Water Board WDRs or NPDES permit requirements. The SSMP should identify the officials who will receive immediate notification;
- (d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;
- (e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and
- (f) A program to ensure that all reasonable steps are taken to contain and prevent the discharge of untreated and partially treated wastewater to waters of the United States and to minimize or correct any adverse impact on the environment resulting from the SSOs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

(vii) **FOG Control Program:** Each Enrollee shall evaluate its service area to determine whether a FOG control program is needed. If an Enrollee determines that a FOG program is not needed, the Enrollee must provide justification for why it is not needed. If FOG is found to be a problem, the Enrollee must prepare and implement a FOG source control program to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:

- (a) An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- (b) A plan and schedule for the disposal of FOG generated within the sanitary sewer system service area. This may include a list of acceptable disposal facilities and/or additional facilities needed to adequately dispose of FOG generated within a sanitary sewer system service area;
- (c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- (d) Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, BMP requirements, record keeping and reporting requirements;
- (e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- (f) An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- (g) Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (f) above.

(viii) **System Evaluation and Capacity Assurance Plan:** The Enrollee shall prepare and implement a capital improvement plan (CIP) that will provide hydraulic capacity of key sanitary sewer system elements for dry weather peak flow conditions, as well as the appropriate design storm or wet weather event. At a minimum, the plan must include:

- (a) **Evaluation:** Actions needed to evaluate those portions of the sanitary sewer system that are experiencing or contributing to an SSO discharge caused by hydraulic deficiency. The evaluation must provide estimates of peak flows (including flows from SSOs

that escape from the system) associated with conditions similar to those causing overflow events, estimates of the capacity of key system components, hydraulic deficiencies (including components of the system with limiting capacity) and the major sources that contribute to the peak flows associated with overflow events;

- (b) **Design Criteria:** Where design criteria do not exist or are deficient, undertake the evaluation identified in (a) above to establish appropriate design criteria; and
 - (c) **Capacity Enhancement Measures:** The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
 - (d) **Schedule:** The Enrollee shall develop a schedule of completion dates for all portions of the capital improvement program developed in (a)-(c) above. This schedule shall be reviewed and updated consistent with the SSMP review and update requirements as described in Section D. 14.
- (ix) **Monitoring, Measurement, and Program Modifications:** The Enrollee shall:
- (a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;
 - (b) Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP;
 - (c) Assess the success of the preventative maintenance program;
 - (d) Update program elements, as appropriate, based on monitoring or performance evaluations; and
 - (e) Identify and illustrate SSO trends, including: frequency, location, and volume.
- (x) **SSMP Program Audits** - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the

Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them.

- (xi) **Communication Program** – The Enrollee shall communicate on a regular basis with the public on the development, implementation, and performance of its SSMP. The communication system shall provide the public the opportunity to provide input to the Enrollee as the program is developed and implemented.

The Enrollee shall also create a plan of communication with systems that are tributary and/or satellite to the Enrollee's sanitary sewer system.

14. Both the SSMP and the Enrollee's program to implement the SSMP must be certified by the Enrollee to be in compliance with the requirements set forth above and must be presented to the Enrollee's governing board for approval at a public meeting. The Enrollee shall certify that the SSMP, and subparts thereof, are in compliance with the general WDRs within the time frames identified in the time schedule provided in subsection D.15, below.

In order to complete this certification, the Enrollee's authorized representative must complete the certification portion in the Online SSO Database Questionnaire by checking the appropriate milestone box, printing and signing the automated form, and sending the form to:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
P.O. Box 100
Sacramento, CA 95812

The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing board of the Enrollee is required in accordance with D.14 when significant updates to the SSMP are made. To complete the re-certification process, the Enrollee shall enter the data in the Online SSO Database and mail the form to the State Water Board, as described above.

15. The Enrollee shall comply with these requirements according to the following schedule. This time schedule does not supersede existing requirements or time schedules associated with other permits or regulatory requirements.

Sewer System Management Plan Time Schedule

<u>Task and Associated Section</u>	Completion Date			
	Population > 100,000	Population between 100,000 and 10,000	Population between 10,000 and 2,500	Population < 2,500
Application for Permit Coverage Section C	6 months after WDRs Adoption			
Reporting Program Section G	6 months after WDRs Adoption ¹			
SSMP Development Plan and Schedule No specific Section	9 months after WDRs Adoption ²	12 months after WDRs Adoption ²	15 months after WDRs Adoption ²	18 months after WDRs Adoption ²
Goals and Organization Structure Section D 13 (i) & (ii)	12 months after WDRs Adoption ²		18 months after WDRs Adoption ²	
Overflow Emergency Response Program Section D 13 (vi)	24 months after WDRs Adoption ²	30 months after WDRs Adoption ²	36 months after WDRs Adoption ²	39 months after WDRs Adoption ²
Legal Authority Section D 13 (iii)				
Operation and Maintenance Program Section D 13 (iv)				
Grease Control Program Section D 13 (vii)	36 months after WDRs Adoption	39 months after WDRs Adoption	48 months after WDRs Adoption	51 months after WDRs Adoption
Design and Performance Section D 13 (v)				
System Evaluation and Capacity Assurance Plan Section D 13 (viii)				
Final SSMP, incorporating all of the SSMP requirements Section D 13				

1. In the event that by July 1, 2006 the Executive Director is able to execute a memorandum of agreement (MOA) with the California Water Environment Association (CWEA) or discharger representatives outlining a strategy and time schedule for CWEA or another entity to provide statewide training on the adopted monitoring program, SSO database electronic reporting, and SSMP development, consistent with this Order, then the schedule of Reporting Program Section G shall be replaced with the following schedule:

Reporting Program Section G	
Regional Boards 4, 8, and 9	8 months after WDRs Adoption
Regional Boards 1, 2, and 3	12 months after WDRs Adoption
Regional Boards 5, 6, and 7	16 months after WDRs Adoption

If this MOU is not executed by July 1, 2006, the reporting program time schedule will remain six (6) months for all regions and agency size categories.

2. In the event that the Executive Director executes the MOA identified in note 1 by July 1, 2006, then the deadline for this task shall be extended by six (6) months. The time schedule identified in the MOA must be consistent with the extended time schedule provided by this note. If the MOA is not executed by July 1, 2006, the six (6) month time extension will not be granted.

E. WDRs and SSMP AVAILABILITY

1. A copy of the general WDRs and the certified SSMP shall be maintained at appropriate locations (such as the Enrollee's offices, facilities, and/or Internet homepage) and shall be available to sanitary sewer system operating and maintenance personnel at all times.

F. ENTRY AND INSPECTION

1. The Enrollee shall allow the State or Regional Water Boards or their authorized representative, upon presentation of credentials and other documents as may be required by law, to:
 - a. Enter upon the Enrollee's premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order;

- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
- d. Sample or monitor at reasonable times, for the purposes of assuring compliance with this Order or as otherwise authorized by the California Water Code, any substances or parameters at any location.

G. GENERAL MONITORING AND REPORTING REQUIREMENTS

1. The Enrollee shall furnish to the State or Regional Water Board, within a reasonable time, any information that the State or Regional Water Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Enrollee shall also furnish to the Executive Director of the State Water Board or Executive Officer of the applicable Regional Water Board, upon request, copies of records required to be kept by this Order.
2. The Enrollee shall comply with the attached Monitoring and Reporting Program No. 2006-0003 and future revisions thereto, as specified by the Executive Director. Monitoring results shall be reported at the intervals specified in Monitoring and Reporting Program No. 2006-0003. Unless superseded by a specific enforcement Order for a specific Enrollee, these reporting requirements are intended to replace other mandatory routine written reports associated with SSOs.
3. All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within 30 days of receiving an account and prior to recording spills into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding a Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.
4. Pursuant to Health and Safety Code section 5411.5, any person who, without regard to intent or negligence, causes or permits any untreated wastewater or other waste to be discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State, as soon as that person has knowledge of the discharge, shall immediately notify the local health officer of the discharge. Discharges of untreated or partially treated wastewater to storm drains and drainage channels, whether man-made or natural or concrete-lined, shall be reported as required above.

Any SSO greater than 1,000 gallons discharged in or on any waters of the State, or discharged in or deposited where it is, or probably will be, discharged in or on any surface waters of the State shall also be reported to the Office of Emergency Services pursuant to California Water Code section 13271.

H. CHANGE IN OWNERSHIP

1. This Order is not transferable to any person or party, except after notice to the Executive Director. The Enrollee shall submit this notice in writing at least 30 days in advance of any proposed transfer. The notice must include a written agreement between the existing and new Enrollee containing a specific date for the transfer of this Order's responsibility and coverage between the existing Enrollee and the new Enrollee. This agreement shall include an acknowledgement that the existing Enrollee is liable for violations up to the transfer date and that the new Enrollee is liable from the transfer date forward.

I. INCOMPLETE REPORTS

1. If an Enrollee becomes aware that it failed to submit any relevant facts in any report required under this Order, the Enrollee shall promptly submit such facts or information by formally amending the report in the Online SSO Database.

J. REPORT DECLARATION

1. All applications, reports, or information shall be signed and certified as follows:
 - (i) All reports required by this Order and other information required by the State or Regional Water Board shall be signed and certified by a person designated, for a municipality, state, federal or other public agency, as either a principal executive officer or ranking elected official, or by a duly authorized representative of that person, as described in paragraph (ii) of this provision. (For purposes of electronic reporting, an electronic signature and accompanying certification, which is in compliance with the Online SSO database procedures, meet this certification requirement.)
 - (ii) An individual is a duly authorized representative only if:
 - (a) The authorization is made in writing by a person described in paragraph (i) of this provision; and
 - (b) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity.

K. CIVIL MONETARY REMEDIES FOR DISCHARGE VIOLATIONS

1. The California Water Code provides various enforcement options, including civil monetary remedies, for violations of this Order.
2. The California Water Code also provides that any person failing or refusing to furnish technical or monitoring program reports, as required under this Order, or

falsifying any information provided in the technical or monitoring reports is subject to civil monetary penalties.

L. SEVERABILITY

1. The provisions of this Order are severable, and if any provision of this Order, or the application of any provision of this Order to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this Order, shall not be affected thereby.
2. This order does not convey any property rights of any sort or any exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, nor protect the Enrollee from liability under federal, state or local laws, nor create a vested right for the Enrollee to continue the waste discharge.

CERTIFICATION

The undersigned Clerk to the State Water Board does hereby certify that the foregoing is a full, true, and correct copy of general WDRs duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 2, 2006.

AYE: Tam M. Doduc
Gerald D. Secundy

NO: Arthur G. Baggett

ABSENT: None

ABSTAIN: None



Song Her
Clerk to the Board

APPENDIX B

State Water Resources Control Board Order No. 2013-0058-EXEC

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).
2. Water Code section 13193 *et seq.* requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.
3. Water Code section 13271, *et seq.* requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.
4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems"¹ (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.
5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.
6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.
7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information² to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

¹ Available for download at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

² Cal OES Hazardous Materials Spill Reports available Online at:

[http://w3.calema.ca.gov/operational/mal haz.nsf/\\$defaultview](http://w3.calema.ca.gov/operational/mal haz.nsf/$defaultview) and <http://w3.calema.ca.gov/operational/mal haz.nsf>

and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to re-designing the CIWQS³ Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program⁴ objectives, assess compliance, and enforce the requirements of the SSS WDRs.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on September 9, 2013.

Date

8/6/13


Thomas Howard
Executive Director

³ California Integrated Water Quality System (CIWQS) publicly available at <http://www.waterboards.ca.gov/ciwqs/publicreports.shtml>

⁴ Statewide Sanitary Sewer Overflow Reduction Program information is available at: http://www.waterboards.ca.gov/water_issues/programs/ssso/

ATTACHMENT A

**STATE WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC**

**AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS**

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to \$5,000 a day per violation pursuant to Water Code section 13350; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of <u>any volume</u> resulting from an enrollee's sanitary sewer system failure or flow condition that: <ul style="list-style-type: none"> • Reach surface water and/or reach a drainage channel tributary to a surface water; or • Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of <u>1,000 gallons or greater</u> resulting from an enrollee's sanitary sewer system failure or flow condition that <u>do not</u> reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems <u>within a privately owned sewer lateral</u> connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be <u>voluntarily</u> reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	<ul style="list-style-type: none"> • Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number. 	Call Cal OES at: (800) 852-7550
REPORTING (see section C of MRP)	<ul style="list-style-type: none"> • Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: Update and certify every 12 months. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING (see section D of MRP)	<ul style="list-style-type: none"> • Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. 	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING (see section E of MRP)	<ul style="list-style-type: none"> • SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate SSO Volume. 	Self-maintained records shall be available during inspections or upon request.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
 - i. Name of person notifying Cal OES and direct return phone number.
 - ii. Estimated SSO volume discharged (gallons).
 - iii. If ongoing, estimated SSO discharge rate (gallons per minute).
 - iv. SSO Incident Description:
 - a. Brief narrative.
 - b. On-scene point of contact for additional information (name and cell phone number).
 - c. Date and time enrollee became aware of the SSO.
 - d. Name of sanitary sewer system agency causing the SSO.
 - e. SSO cause (if known).
 - v. Indication of whether the SSO has been contained.
 - vi. Indication of whether surface water is impacted.
 - vii. Name of surface water impacted by the SSO, if applicable.
 - viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
 - ix. Any other known SSO impacts.
 - x. SSO incident location (address, city, state, and zip code).
3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.
3. **SSO Categories**
 - i. **Category 1** – Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that:
 - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
 - b. Reach a MS4 and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
 - ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee's sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.
 - iii. **Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**
 - i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:
 - a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.
 - b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

- ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. **“No Spill” Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a “No Spill” certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, “No Spill” certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a “No Spill” certification statement for that month.
- iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

- i. **Causes and Circumstances of the SSO:**
 - a. Complete and detailed explanation of how and when the SSO was discovered.
 - b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
 - c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
 - d. Detailed description of the cause(s) of the SSO.
 - e. Copies of original field crew records used to document the SSO.
 - f. Historical maintenance records for the failure location.
- ii. **Enrollee’s Response to SSO:**
 - a. Chronological narrative description of all actions taken by enrollee to terminate the spill.
 - b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

- c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. **Water Quality Monitoring:**

- a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- b. Detailed location map illustrating all water quality sampling points.

6. **PLSDs**

Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

- i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.
- ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWQS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWQS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- a. **Draft Category 1 SSOs:** At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:
1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
 2. SSO Location Name.
 3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
 4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
 5. Whether or not the SSO reached a municipal separate storm drain system.
 6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
 7. Estimate of the SSO volume, inclusive of all discharge point(s).
 8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
 9. Estimate of the SSO volume recovered (if applicable).
 10. Number of SSO appearance point(s).
 11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
 12. SSO start date and time.
 13. Date and time the enrollee was notified of, or self-discovered, the SSO.
 14. Estimated operator arrival time.
 15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
 16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- b. **Certified Category 1 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :
1. Description of SSO destination(s).
 2. SSO end date and time.
 3. SSO causes (mainline blockage, roots, etc.).
 4. SSO failure point (main, lateral, etc.).
 5. Whether or not the spill was associated with a storm event.
 6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
 7. Description of spill response activities.
 8. Spill response completion date.
 9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
 11. Whether or not health warnings were posted as a result of the SSO.
 12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
 13. Name of surface water(s) impacted.
 14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
 15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
 16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
 17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. **Draft Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. **Certified Category 2 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. **Certified Category 3 SSOs**: At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-5, and 17 in section 8.i.b above for Certified Category 1 SSO.
- ii. **Reporting SSOs to Other Regulatory Agencies**
- These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.
- iii. **Collection System Questionnaire**
- The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.
- iv. **SSMP Availability**
- The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

- a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
 - i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

- a. Date, time, and method of notification.
 - b. Date and time the complainant or informant first noticed the SSO.
 - c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
 - d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
 - e. Final resolution of the complaint.
- ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.
 - iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.
3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
 4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:
 - i. Supervisory Control and Data Acquisition (SCADA) systems
 - ii. Alarm system(s)
 - iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

7/30/13
Date


Jeanine Townsend
Clerk to the Board

APPENDIX C

Master Sewer Evaluation Plan September 2008

**EDGEMONT COMMUNITY SERVICES DISTRICT
RIVERSIDE COUNTY, CALIFORNIA**

**MASTER SEWER SYSTEM
EVALUATION PLAN**

September, 2008

Prepared by:
ALBERT A. WEBB ASSOCIATES
3788 McCray Street
Riverside, CA 92506

EDGEMONT COMMUNITY SERVICES DISTRICT
RIVERSIDE COUNTY, CALIFORNIA

MASTER SEWER SYSTEM
EVALUATION PLAN

September, 2008



Prepared by:
ALBERT A. WEBB ASSOCIATES
3788 McCray Street
Riverside, CA 92506

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SECTION 1 - INTRODUCTION

The following document is an update of the November 9, 1995 Proposed Improvements to the Sewer Collection System for the Edgemont Community Services District (District). The District is a 2.35 square mile community services district located within the easterly portion of the City of Riverside and the westerly portion of the City of Moreno Valley (**Figure 1-1**).

During the late 1980's and early 1990's, Albert A. Webb Associates conducted a study to review the District's wastewater collection and conveyance system capacity. This study was necessitated by the City of Moreno Valley March 1989 General Land Use Plan which consisted of higher density uses than what the sewer system was originally constructed for in the late 1950's. The study area focused primarily on the southeast portion of the District because the portion northwest of Eucalyptus Avenue and Old Interstate 215 was relatively new and was sized based on more recent land use general plans at the time. As a result of this study, the District implemented the November 9, 1995 Edgemont Community Services District Proposed Improvements to The Sewer Collection System Report (1995 ECSD Sewer Report), which provided the District with a planning document for improvements to their wastewater collection and conveyance system. Since 1995, the District has implemented various improvements to their system, such as the Old I-215, Alessandro Boulevard and Day Street sewer line replacements and these projects have been constructed and in service for several years now. It is noted that the majority of the proposed improvements identified in the 1995 ECSD Sewer Report have been implemented, though various improvements have not been made.

The City of Moreno Valley recently updated their General Land Use Plan which was adopted by the City on July 11, 2006. Subsequently, the City is in the process of updating its zoning atlas to be consistent with the recently adopted General Land Use Plan. The updated land use data for some portions of the District's service area is found to be different from the data utilized in the 1995 ECSD Sewer Report. Subsequent updates to the City's zoning atlas further differentiate the land use designation. One zoning atlas update in particular is the City's proposed redevelopment within the area served by the Box Springs Mutual Water Company which is within the District's boundary (**Figure 1-2**). The zoning atlas within the area was updated and would potentially impact the District's wastewater generation, line sizing and treatment plant capacity requirements.

With the land use changes being adopted by the City of Moreno Valley, the District has authorized Albert A. Webb Associates to review how these changes affect the District's existing and ultimate collection systems. Webb Associates has utilized the City of Moreno Valley's G.I.S. data base for current City zoning in concurrence with the latest land use designations.

EDGEMONT COMMUNITY SERVICES DISTRICT

REGIONAL LOCATION MAP

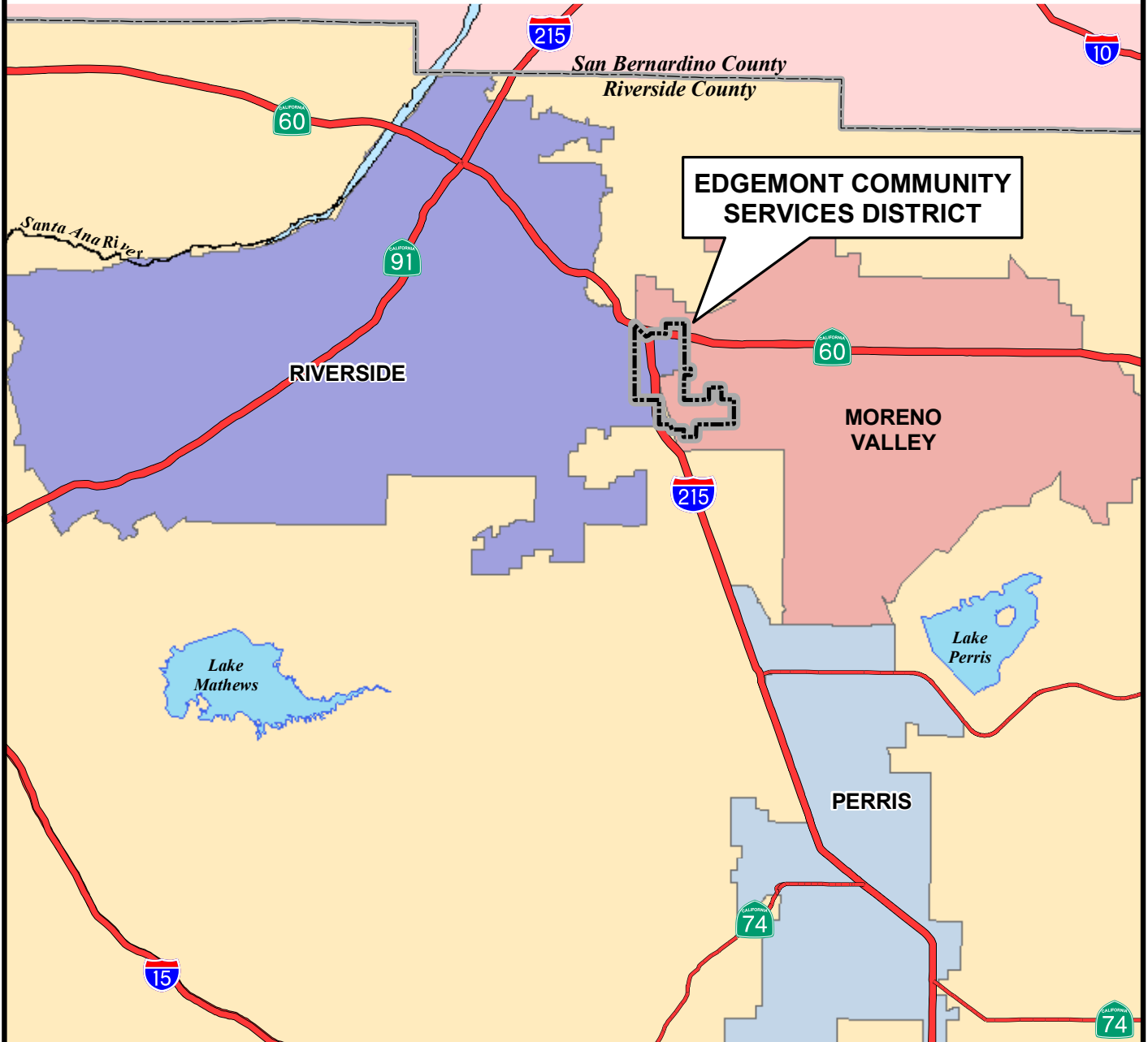
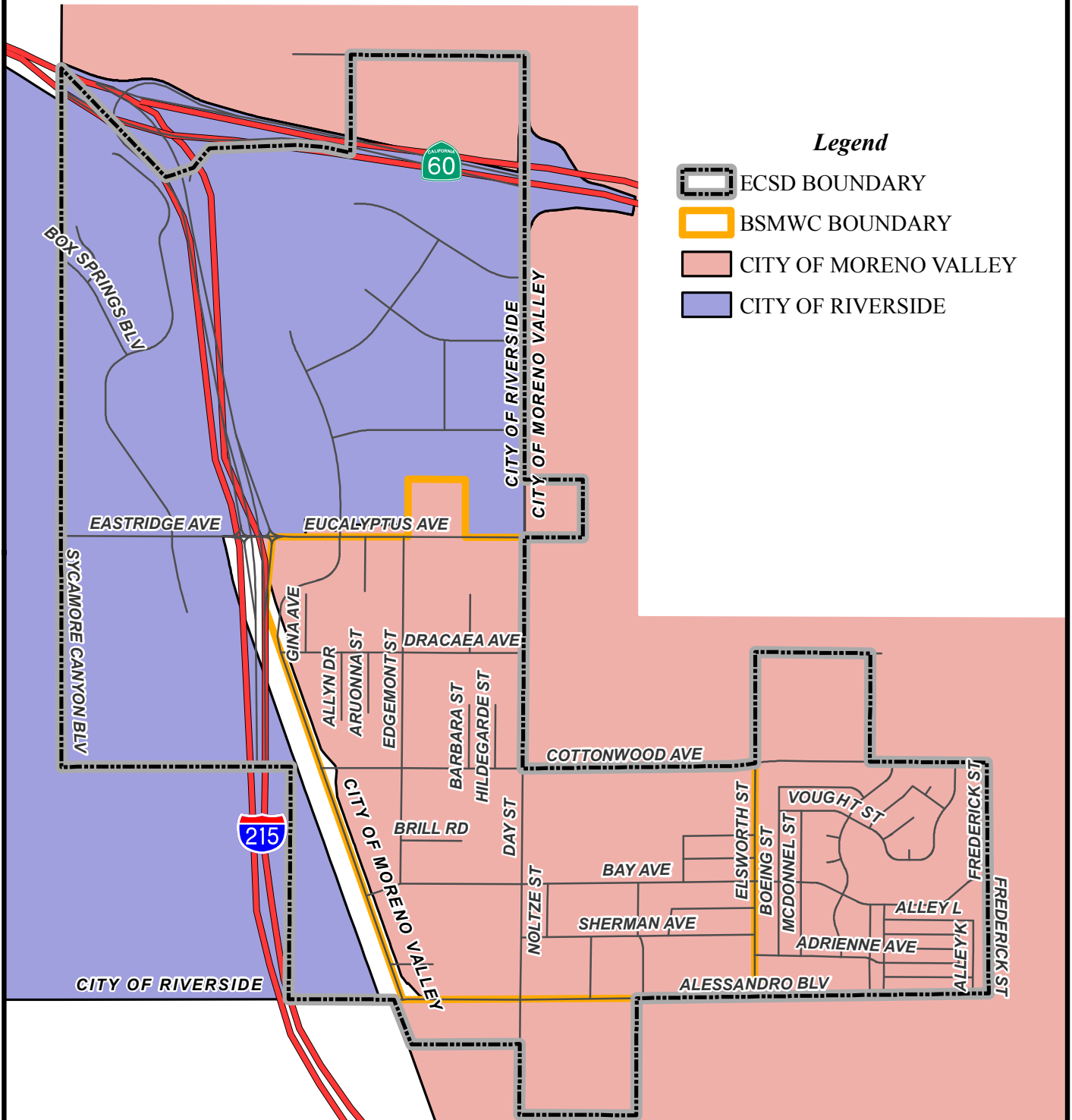


FIGURE 1-1

 Not to Scale



EDGEMONT COMMUNITY SERVICES DISTRICT BOUNDARY MAP



Legend





-  ECSD BOUNDARY
-  BSMWC BOUNDARY
-  CITY OF MORENO VALLEY
-  CITY OF RIVERSIDE

FIGURE 1-2



Not to Scale

The objective of this study is to update the District's 1995 ECSD Sewer Report, evaluate the District's existing wastewater collection system to convey existing and projected sewage flows, and evaluate possible increased wastewater contributions due to the City of Moreno Valley's planned redevelopment of the area served by the Box Springs Mutual Water Company. If portions of the system are found to be inadequate, the necessary improvements and related costs will be determined and the District will be provided with criteria to schedule implementation of such improvements.

SCOPE OF WORK

In order to accomplish the objectives of this report, the scope of the study includes the following:

1. Research and data collection
2. Review of existing and projected study area characteristics
3. Sewer System Management Plan (SSMP)
4. Development of design criteria and basis of cost estimates
5. Evaluation of existing facilities
6. Determination of projected wastewater flows
7. Hydraulic analysis of existing system
8. Hydraulic analysis of design year system
9. Development of capital improvements required and estimated costs associated therewith

SECTION 2 - EXISTING AND PROJECTED STUDY AREA CHARACTERISTICS

The purpose of this section is to provide background information on the area and population characteristics of Edgemont Community Services District (District).

STUDY AREA BOUNDARIES AND COMPOSITION

Edgemont Community Services District is located within a portion of the City of Riverside and a portion of the City of Moreno Valley (**Figures 1-1 and 1-2**) and encompasses approximately 1,500 acres of land.

EXISTING LAND USE ANALYSIS

Figure 2-1 provides an aerial view of the District. Dense residential developments are generally located within the center and eastern portions of the District's service area. The areas to the north and western portions are occupied by industrial warehouses. Sewer within these areas is serviced by facilities owned by the City of Riverside. The undeveloped area in the northern portion of the District and south of the I-60 Freeway is planned for commercial development; however, wastewater generated within the undeveloped area will be serviced by the City of Riverside.

PROJECTED LAND USE ANALYSIS

Figure 2-2, which is based on the July 2006 City of Moreno Valley General Plan, depicts the different land uses for ultimate buildout conditions within the District. As discussed in Section 1, the City of Moreno Valley is in the process of updating their Zoning Atlas Map. To determine projected ultimate buildout flows based on more current data, the land use within the District's boundaries will be based on the City of Moreno Valley's September 2007 zoning atlas map (**Figure 2-3**). It is noted that ultimate buildout conditions yield ultimate wastewater flows, which will be discussed in later sections. **Table 2-1** tabulates the projected land uses based the City's September 2007 zoning atlas map within the District's service area.

EDGEMONT COMMUNITY SERVICES DISTRICT

AERIAL VIEW MAP

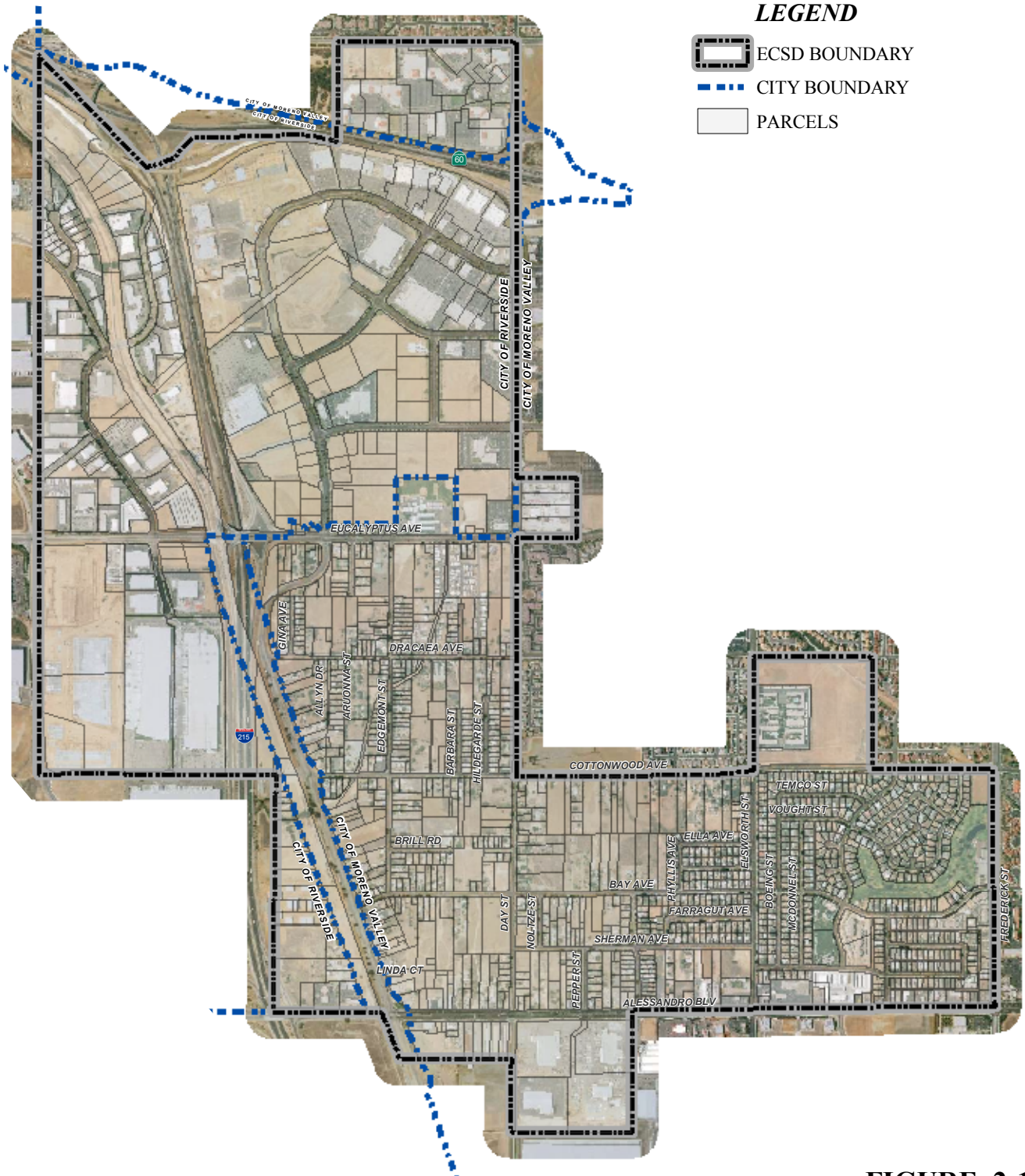
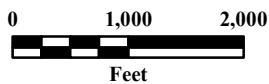


FIGURE 2-1



Source: Riverside County 2007
AirPhoto USA 2007



ALBERT A.
WEBB
ASSOCIATES

EDGEMONT COMMUNITY SERVICES DISTRICT

LAND USE MAP*
JULY 2006

LEGEND

-  ECSD BOUNDARY
- LANDUSE JULY, 2006**
-  Residential: Max. 5 du/ac
-  Residential: Max. 10 du/ac
-  Residential: Max. 20 du/ac
-  Residential/Office
-  Office
-  Commercial
-  Business Park/Light Industrial
-  Public
-  Open Space
-  CITY OF RIVERSIDE
-  CITY BOUNDARY
-  PARCELS

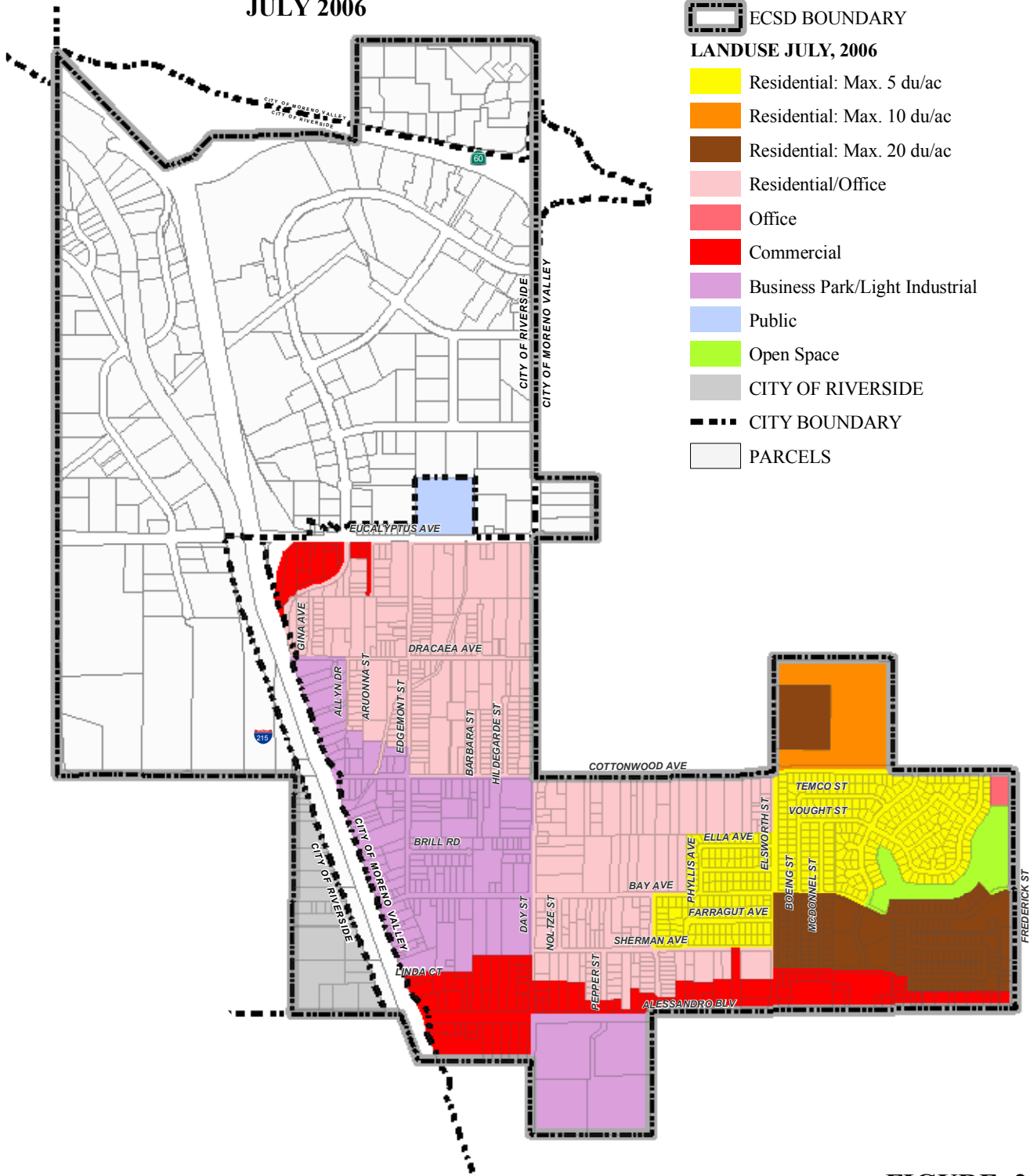
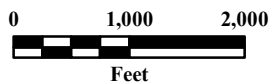


FIGURE 2-2



Source: Riverside County 2007












* FROM CITY OF MORENO VALLEY
GIS - GENERAL PLAN LAND USE,
JULY 2006

ALBERT A.
WEBB
ASSOCIATES

EDGEMONT COMMUNITY SERVICES DISTRICT

ZONING MAP*
SEPTEMBER 2007

LEGEND

-  ECSD BOUNDARY
- MORENO VALLEY - ZONING**
-  RESIDENTIAL: MAX 5 DU/AC
-  RESIDENTIAL: MAX 10 DU/AC
-  RESIDENTIAL: MAX 15 DU/AC
-  RESIDENTIAL: MAX 20 DU/AC
-  OFFICE COMMERCIAL
-  COMMERCIAL
-  BUSINESS PARK / INDUSTRIAL
-  PUBLIC
-  OPEN SPACE
-  CITY BOUNDARY
-  PARCELS

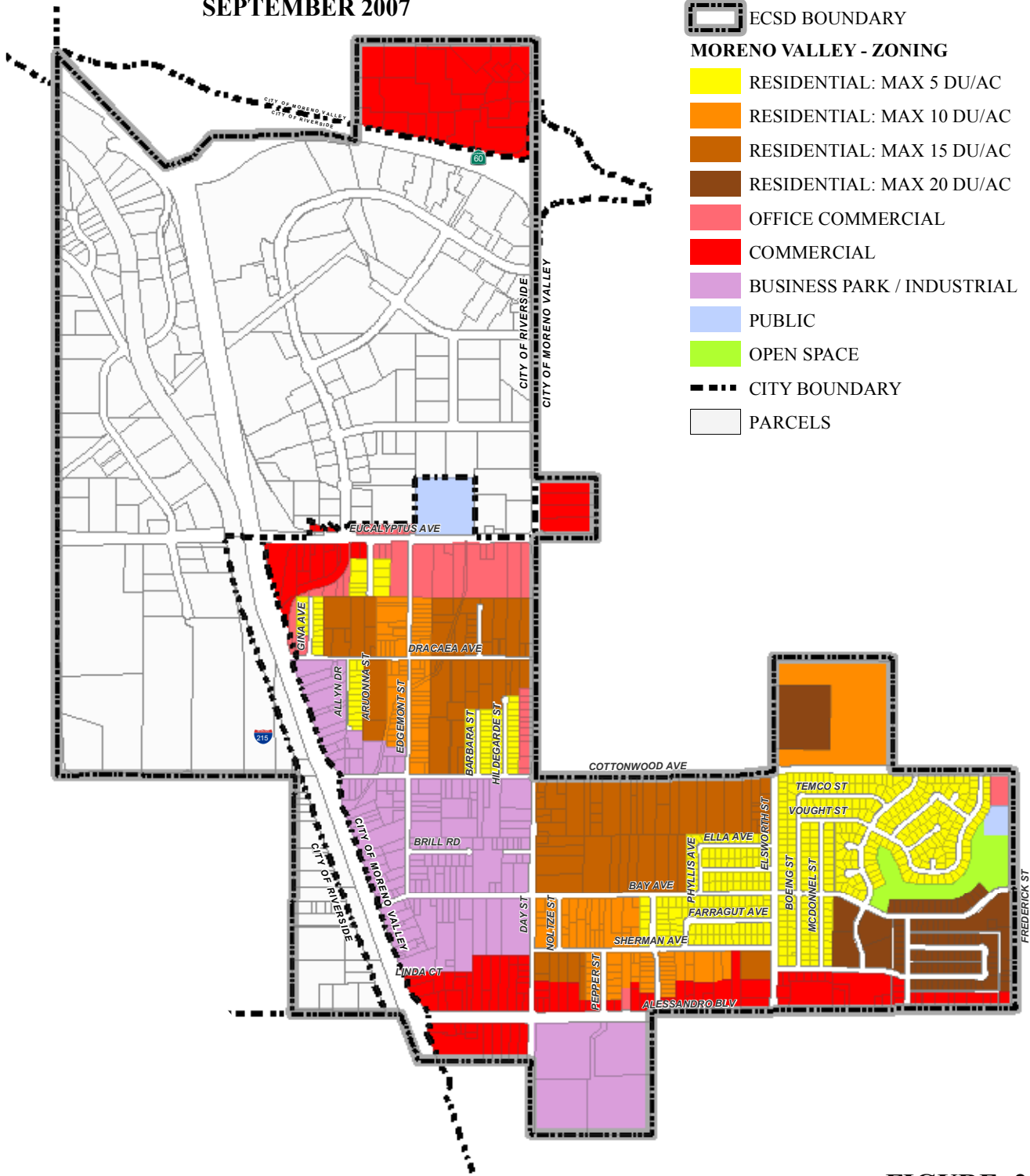
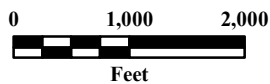


FIGURE 2-3



Source: Riverside County 2007

* FROM CITY OF MORENO VALLEY
GIS - ZONING LAYER, SEPT. 2007

ALBERT A.
WEBB
ASSOCIATES

Table 2-1: Edgemont Community Services District Land Use Summary based on September 2007 Zoning Map

Land Use Characteristics	City of Moreno Valley Area (Acres)	City of Riverside Area (Acres)
Residential		
Residential: Max 5 DU/AC	103.4	
Residential: Max 10 DU/AC	72.8	
Residential: Max 15 DU/AC	118.1	
Residential: Max 20 DU/AC	42.5	
Commercial & Industrial		
Office Commercial	30.16	
Commercial	108.7	32.9 ⁽¹⁾
Business Park/ Industrial	133.5	
Open Space		
Public	11.5	
Open Space	12.9	
Totals:	633.56	32.9

⁽¹⁾ It is noted that the land use within City of Riverside Area (west of I-215, north of Alessandro Boulevard and south of Cottonwood Avenue) is serviced by ECSD sewerlines. However, ECSD is credited for this sewer service at 20,000 gpd.

SECTION 3 - ANALYSIS CRITERIA

This section discusses the following criteria used to evaluate the District's wastewater system:

- Wastewater Generation
- Facility Design

It should be noted that the following criteria incorporated the November 1995 ECSD Sewer Collection System Plan (1995 ECSD Sewer Plan). In addition, a review of flow and equivalent dwelling units (EDU) data from the 2007-2008 ECSD Fiscal Year Sewer Charges Report and the 2006 ECSD monthly treatment services invoices (**Appendix A**) was conducted to further evaluate and develop generation factors.

WASTEWATER GENERATION

Domestic Wastewater

The domestic wastewater generation factor utilized in the November 1995 ECSD Sewer Plan in terms of equivalent dwelling units was 280 gallons per day per equivalent dwelling unit (gpd/EDU). A review of District data for current sewer service accounts and current flow data was conducted to further evaluate and develop generation factors. This flow data was obtained from the flow metering facility readings (**Plate 1**) prior to sewer entering the City of Riverside Water Quality Control Plant (WQCP). Based on the 2007-2008 ECSD Fiscal Year Sewer Charges Report and the 2006 ECSD monthly treatment services invoices (**Appendix A and F**), the calculated ECSD wastewater generation factor per equivalent dwelling unit was approximately 240 gpd/EDU. For the purposes of this report, domestic wastewater generation factor of 240 gpd/EDU for single family (5 to 10 DU/AC) and 160 gpd/EDU for high density residential (15 to 20 DU/AC) will be utilized to determine wastewater treatment capacity. For pipeline design purposes, the original generation factors of 280 gpd/EDU for single family and 160 gpd/EDU for high density residential will be utilized.

Commercial/Industrial Wastewater

Per the November 1995 ECSD Sewer Plan, the Commercial/Industrial wastewater generation factor was 2000 gpd/AC. To further evaluate and develop these types of generation factors, an analysis of several commercial and industrial areas within the District was conducted, particularly in the southern and western regions of the District. The generation factors within these areas ranged from 400 gpd/AC to as high as 900 gpd/AC. This calculation was based on the 2007-2008 Fiscal Year Sewer Charges Report of all existing commercial and industrial areas within ECSD (**Appendix A and F**). Due to the wide range of generation data, a generation factor of 1000 gpd/AC will be utilized in this report for wastewater treatment capacity. For pipeline design purposes, the original generation factor of 2000 gpd/EDU will be utilized.

Miscellaneous Land Use Sewage

Miscellaneous land use areas discussed in this section include areas for public use and open spaces. The public use area within the District is the Edgemont Elementary School. According to the 2007-2008 Fiscal Year Sewer Charges, this area is generating approximately 525 gpd/AC of wastewater. For planning purposes, a generation factor of 1000 gpd/AC will be used as its standard for public use areas.

Due to the minimal open spaces (such as golf courses) within the District, the wastewater generated by these open spaces are considered to be negligible.

Dry Weather Flow

Dry weather sewage flows generated within the study area include domestic, commercial, and industrial wastes. As the majority of the sewers constructed in the study area will lie above the groundwater table, infiltration during dry weather periods has been assumed to be negligible.

Infiltration/Inflow

In order to design pipeline improvements, it is necessary to establish values for the peak flows, which also entails an allowance for infiltration/inflow. For this report, the infiltration/inflow allowance for wastewater generated within the District is assumed to be similar to that adopted by other local sewer districts such as Jurupa Community Services District. Jurupa Community Services District utilizes an infiltration/inflow allowance of 160 gpd/AC for existing developed areas and 50 gpd/AC for current and future development areas.

Wet Weather Flow

Wet weather flow are included in the design of the system in order to determine the maximum hydraulic loading on pipelines and various appurtenances, though dry weather infiltration is considered to be negligible. Wet weather infiltration in addition to direct storm inflow is added to the dry weather flows to obtain the total wet weather flow. Direct storm inflow is distinguished from wet weather infiltration by the rapidity with which inflow begins and ends after a period of rainfall. Infiltration, on the other hand, may persist for an extended period after the cessation of rainfall.

For this study, it is assumed that the domestic, commercial and industrial wastewater generation factors include a wet weather flow component.

Waste Water Generation Factor

Table 3-1 summarizes the wastewater generation factors as well as infiltration and inflow to be utilized for evaluating the District's overall wastewater system.

Table 3-1: Summary of Wastewater Generation Factors

Land Use	Wastewater Generation Factor
Residential Wastewater (low density: 5 to 10 edu/acre)	280 gpd/edu (pipeline design purposes)
Residential Wastewater (low density: 5 to 10 edu/acre)	240 gpd/edu (treatment capacity purposes)
Residential Wastewater (high density: 15 to 20 edu/acre)	160 gpd/edu (both pipeline design and treatment)
Commercial/Industrial	2,000 gpd/acre (pipeline design purposes)
Commercial/Industrial	1,000 gpd/acre (treatment capacity purposes)
Public Uses	1,000 gpd/acre (both pipeline design and treatment)
Open Space	Not applicable
Infiltration/Inflow	160 gpd/acre (existing development areas)
Infiltration/Inflow	50 gpd/acre (current and future development areas)

Wastewater Peak Factors

The flow used for the design capacity for sewers and sewage lift stations is the “computed peak flow,” or facility “design flow,” which is determined on the basis of projected land use area, the unit wastewater generation factor assigned to the particular land use designation and a peak factor to account for the diurnal flow rate variations.

The District uses the following wastewater peak flow equation to obtain peak flows.

$$Q_{PK} = 2.5 Q_{ADF}^{(0.91)}, \text{ where}$$

Q_{PK} = peak flow, in mgd
 Q_{ADF} = average daily flow, in mgd

FACILITY DESIGN

Transport Facilities

Collection sewers in this report are considered to be pipes less than 10 inches in diameter. These pipes should be designed to be one-half full under peak flow conditions. Collection sewers are typically designed to flow one-half full for maintenance purposes and since collection pipelines serve smaller areas, they can experience high peak factors. Collection sewer diameters are determined using Manning’s equation and a roughness coefficient (n) of 0.013.

Trunk and Interceptor Sewers

Generally, trunk sewers are considered to be pipes 10 inches and larger in diameter. There may be sewer mains less than 10-inch diameter that will be evaluated as a trunk sewer. The capacity to be provided in each section of a trunk sewer is based on the peak rate of flow calculated for the area tributary to that section. For each area this rate is the summation of peak domestic, commercial,

and industrial rates plus storm water inflow which is known as the “peak wet weather flow” or “design flow.”

A summary of design criteria for gravity flow sewer pipelines is as follows:

Trunk sewer lines are typically designed to carry wastewater at a minimum velocity of 2 ft/sec when flowing with a maximum depth to diameter ratio (D/d) of 0.75, and are sized to carry peak flows without surcharge. A roughness coefficient (n) of 0.013 is used for new pipe sizing. A safety factor should be included in the design of all gravity flow pipelines to account for the variability of the initial approximation of flow and partial clogging of the sewer. The method of accounting for the inherent variables is to limit the depth of flow. **Table 3-2** shows the design depth of flow ratio.

Table 3-2: Maximum Depth of Flow to Pipeline Diameter Rates

Pipe Diameter (In Inches)	Ratio of Depth of Sewage Flow to Diameter of Sewer
8	0.50±
10 and greater	0.75±

Low velocities in the sewers causes deposition of solids and results in accumulation of hydrogen sulfide, minimum slopes should be set to maintain a flow velocity of not less than 2 feet per second during maximum flows. **Table 3-3** provides a list of the minimum allowable slopes.

Table 3-3: Minimum Pipeline Slope Criteria

Pipe Diameter (In Inches)	Minimum Slope (Feet/100 Feet)
8	0.40
10	0.32
12	0.24
15	0.16
18	0.14
21	0.12
24	0.10
27	0.08
30 and larger	0.07

Whenever possible, the pipelines should be designed to flow by gravity. Sewage pump stations should be installed only when existing topography prevents gravity flow and when excessive trench depths are encountered.

Manholes should be located at all junctions, all changes in grade, all changes in direction, and all changes in pipe size. Where the distance between manholes required for the foregoing reasons exceeds 350 feet, good judgment should be used in placing intermediate manholes at points of probable sewer intersections, or lacking other criteria, at approximately equal intervals. In general, the maximum of 350 feet should be observed.

Manhole diameters are determined based upon pipeline diameters as shown in **Table 3-4**.

Table 3-4: Minimum Manhole Diameter Summary

Largest Pipe Diameter	Minimum Manhole Diameter
8" – 12"	48"
15" – 30"	60"

Vitrified clay pipe (VCP) material, unless otherwise indicated, is assumed to be used in future construction for purposes of comparative cost evaluation. However, final recommendation of any specific sewer pipe material will be made at the time of final design.

In addition to the above mentioned manhole design criteria, the following design considerations should be taken into account.

- Manholes will be constructed of precast reinforced concrete riser and top sections in compliance with ASTM C478. Additionally, there may exist the possibility of using watertight manhole covers.
- Manholes in pipelines where excessive hydrogen sulfide may be encountered should be lined with PVC lining to minimize chemical deterioration. Manhole bases should be lined with PVC lining or a special protective coating.
- All manholes deeper than 25 feet, plus or minus, may require safety platforms installed.
- Where future sewerlines will likely be connected into the trunk sewer manholes, an appropriately sized stub will need to be installed.

Initially, some of the new trunk sewers or interceptors may not have sufficient velocity (greater than 2 fps) to prevent deposition of solids. These lines may require special preventive maintenance or other control procedures for the first few years to minimize the formation of hydrogen sulfide gases, which could damage the sewer system.

In general, large trunk and interceptor sewers should be designed for long-term requirements. Gravity flow pipelines should be designed with the latest pipe materials, providing rubber or plastic ring joints to assure permanent water tightness. Final recommendation of any specific sewer pipe material, however, will be made at the time of final design.

Inverted Siphons

The purpose of an inverted siphon is to carry the flow under an obstruction such as a stream or depressed highway and to regain as much elevation as possible after the obstruction has been passed. Self-cleaning velocities (2 to 3 fps) should be obtained at least once a day, even during the early years of operation. To ensure adequate minimum velocities, it may be necessary to use multiple diameter pipelines. Flow in these lines can be regulated by control structures such as overflow weirs. Inverted siphons may require cleaning more often than gravity sewers.

A conservative Hazen-Williams roughness coefficient (C) of 100 (equivalent to Manning's n of between 0.014 and 0.018) should be used to calculate head loss. Material that would be considered for siphons include VCP and lined ductile iron pipe. Final selection of pipe materials would be made during the detailed design phase.

Wastewater Treatment Plants

The primary considerations in the design of a wastewater treatment plant are the required capacity and the degree of treatment. Plant capacity is usually expressed in terms of average dry weather flow. Degree of treatment is based on requirements established in the waste discharge permit issued by the California Regional Water Quality Control Board. Plants are designed with sufficient capacity to handle peak organic, as well as peak hydraulic loads and are planned for enlargement to handle future increases.

The District does not own a wastewater treatment plant. The sewage generated within the District is currently conveyed to the City of Riverside WQCP by existing connection and metering facilities located at the Canyon Springs Shopping Center near the north boundary of ECSD, south of I-60 Freeway and on Cottonwood Avenue at the west boundary of ECSD, east of I-215 Freeway (**Plate 1**). These two (2) metering facilities provide for measurement of wastewater generated within the District for billing purposes.

SECTION 4 - EXISTING FACILITIES

Edgemont Community Services District has nearly 17 miles of sewer pipelines within their jurisdiction (**Plate 1**). With the exception of sewer improvements on Cottonwood Avenue and Alessandro Boulevard and recent developments, the majority of the District consists of sewers that are at least 20 years old. The sewer systems are generally capable of providing service to the community at the present time, though there are areas in need of improvements as will be discussed in this section.

TRUNK/INTERCEPTOR SYSTEM

Review of the November 1995 ECSD Sewer Plan indicated the District has identified the following trunk lines within the system:

1. Alessandro Trunk Sewer
2. I-215 Trunk Sewer
3. Cottonwood Trunk Sewer

Alessandro Trunk Sewer

The Alessandro Trunk Sewer (**Figure 4-1**) begins at Courage Street as a 10-inch diameter line, increases to a 12-inch diameter line as it continues west along Alessandro Boulevard to Old Frontage Road (I-215 Freeway). Additionally, an 8-inch diameter line in Alessandro Boulevard parallels the 12-inch diameter line and will connect to the 12-inch diameter line at Day Street. Due to limited capacity of the 8-inch diameter line, the District constructed an additional 8-inch line, approximately 500 feet west of Elsworth Street to connect to the 12-inch diameter line to relieve 8-inch diameter sewer.

I-215 Trunk Sewer

The I-215 Trunk Sewer (**Figure 4-1**) begins at Alessandro Boulevard as a 12-inch diameter line and increases to a 15-inch diameter for approximately 800 feet south of Cottonwood Avenue where the line parallels the existing flood control channel and continues to connect to the Cottonwood Trunk Sewer on Cottonwood Avenue.









Cottonwood Trunk Sewer

The Cottonwood Trunk Sewer (**Figure 4-1**) begins at Elsworth Street as an 8-inch diameter line, traverses west on Cottonwood Avenue and connects to the City of Riverside wastewater line. The 8-inch diameter line increases to a 12-inch diameter line at Edgemont Street and then increases to an 18-inch diameter line where it connects to the I-215 Trunk Sewer. The 18-inch diameter line traverses westerly where the pipeline crosses a 5' x 5' box owned by Riverside County Flood Control via an 18-inch diameter D.I.P. sewer siphon system. The pipeline continues westerly across the Old

EDGEMONT COMMUNITY SERVICES DISTRICT

TRUNK SEWER SYSTEM

LEGEND

-  ECSD BOUNDARY
-  PARCELS
-  CITY BOUNDARY
-  ALESSANDRO TRUNK SEWER
-  COTTONWOOD TRUNK SEWER
-  OLD 215 TRUNK SEWER
-  MISCELLANEOUS TRUNK SEWER
-  METERING FACILITY FOR CONNECTION TO CITY OF RIVERSIDE

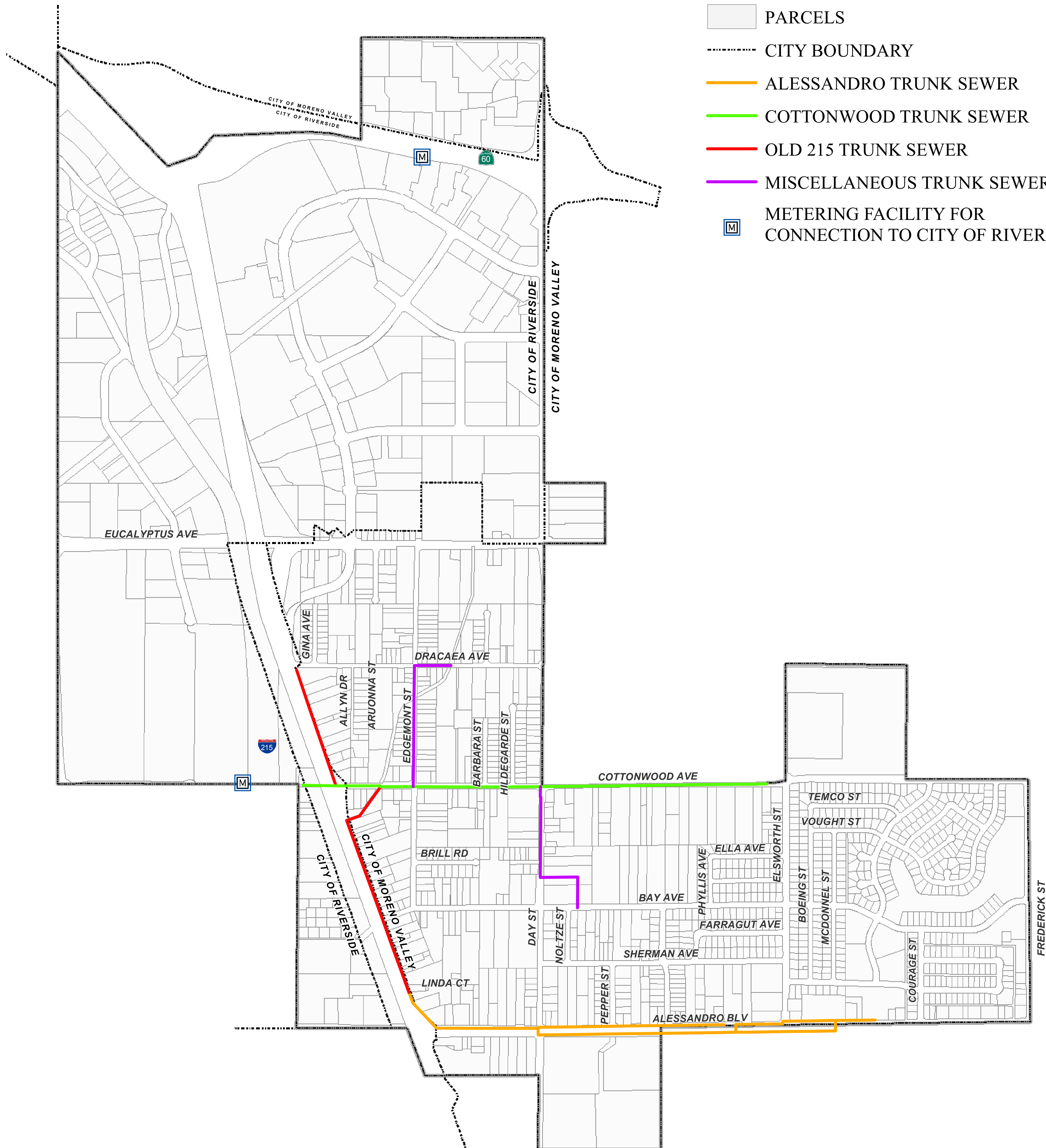
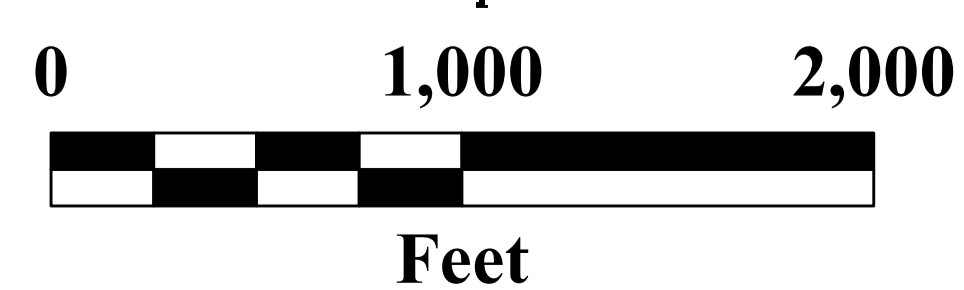


FIGURE 4-1



Interstate 215 to outlet to a manhole prior to crossing the I-215 Freeway. At this point, a 4-barrel pipeline system crosses the I-215 Freeway to the City of Riverside metering station. Miscellaneous trunk sewerlines will also be considered in Section 7, as flow input locations (concentration points) are diverted to these pipe reaches (**Figure 4-1**).

COLLECTION SYSTEM

Collection pipes are those having a diameter of 8 inches or less. The District has over 13.5 miles of pipeline which are categorized as such.

Many of the older collection pipes have been constructed at grades less than the current minimum standards. At low flows, velocities may not be high enough to prevent deposition of solids and potentially increasing operations and maintenance of the system. An additional concern to sewerlines at less than minimum grades is the potential for surcharging during peak flows.

There are sewer collection pipes within the District's system that have sustained damage by ingrown tree roots. There are also pipes that contain grease deposits in certain areas. An example would be the 6-inch diameter sewerline along Day Street which was observed to have ingrown roots and has experienced surcharging.

SECTION 5 - PROJECTED WASTEWATER FLOWS

TRIBUTARY SEWAGE FLOW AREAS

The tributary sewage flow areas are based on the following criteria as used in the 1995 ECSD Sewer Plan. In undeveloped areas of the District, tributary sewage flow areas are based upon Riverside County Flood Control District's topographical maps. Therefore, in the undeveloped areas, the wastewater was assumed to flow based on the natural drainage patterns of the existing topography. In the developed areas of the District, the tributary sewage flow areas are based on the layout of the existing collection system.

The tributary sewage flow areas (**Figure 5-1**) are divided into the previously determined nineteen (19) areas in addition to three (3) newly developed areas. Each of these areas has a concentration point to which all flows within the area converge. The three (3) newly developed areas incorporated into this study area are located in the northern and central region of the District (**Figure 5-1**) and will be designated as Tributary Area Q₁₇, Q₁₈ and Q₁₉. Tributary Area Q₁₇ is the Edgemont Elementary School, Tributary Area Q₁₈ is a newly developed commercial area and Tributary Area Q₁₉ is the Canyon Springs Shopping Center.

TOTAL DESIGN FLOWS

Appropriate wastewater generation factors (developed in Section 3) were applied to calculate projected flows for each land use (detailed in Section 2) for each tributary sewage area within the District. For residential land use, the total number of equivalent dwelling units (EDU's) per tributary area was determined prior to applying generation factors. The details of each tributary area are summarized in spreadsheet format in **Appendix B**. Each row within this spreadsheet represents a tributary sewage flow area. Each sewage flow area is broken up into the corresponding land use designations. The areas are multiplied with the corresponding wastewater generation factors to obtain the average daily flows. The flows are summarized at the end of each row to totalize the flow generated in that tributary area. The summation of the total flows from each tributary area was conducted to determine the total design flow for the entire District.

The projected average daily flows are used in the following sections of this report to determine: (1) the capacity of the existing system to convey future growth within the sewer service areas; (2) the diameters and locations of pipelines necessary to convey the projected "buildout" wastewater flows; and (3) the wastewater treatment capacity for "buildout" conditions.

Table 5-1 and **Table 5-2** summarize the projected buildout average daily flows within the District for pipeline design and wastewater treatment capacity respectively. The total projected average daily flow for pipeline design for the District is approximately 1.42 mgd and will be utilized in the hydraulic analysis for the design of a trunk sewer system to convey the ultimate flow conditions. The projected average daily flow for treatment capacity for the District is approximately 1.05 mgd and will be utilized to determine ultimate wastewater treatment capacity.

EDGEMONT COMMUNITY SERVICES DISTRICT

TRIBUTARY SEWAGE FLOW AREAS

LEGEND

-  ECSD BOUNDARY
-  BSMWC BOUNDARY
- MORENO VALLEY - ZONING**
-  RESIDENTIAL: MAX 5 DU/AC
-  RESIDENTIAL: MAX 10 DU/AC
-  RESIDENTIAL: MAX 15 DU/AC
-  RESIDENTIAL: MAX 20 DU/AC
-  OFFICE COMMERCIAL
-  COMMERCIAL
-  BUSINESS PARK / INDUSTRIAL
-  PUBLIC
-  SCHOOL
-  OPEN SPACE
-  TRIBUTARY AREAS
-  PARCELS
-  CITY BOUNDARY
-  CONCENTRATION POINT

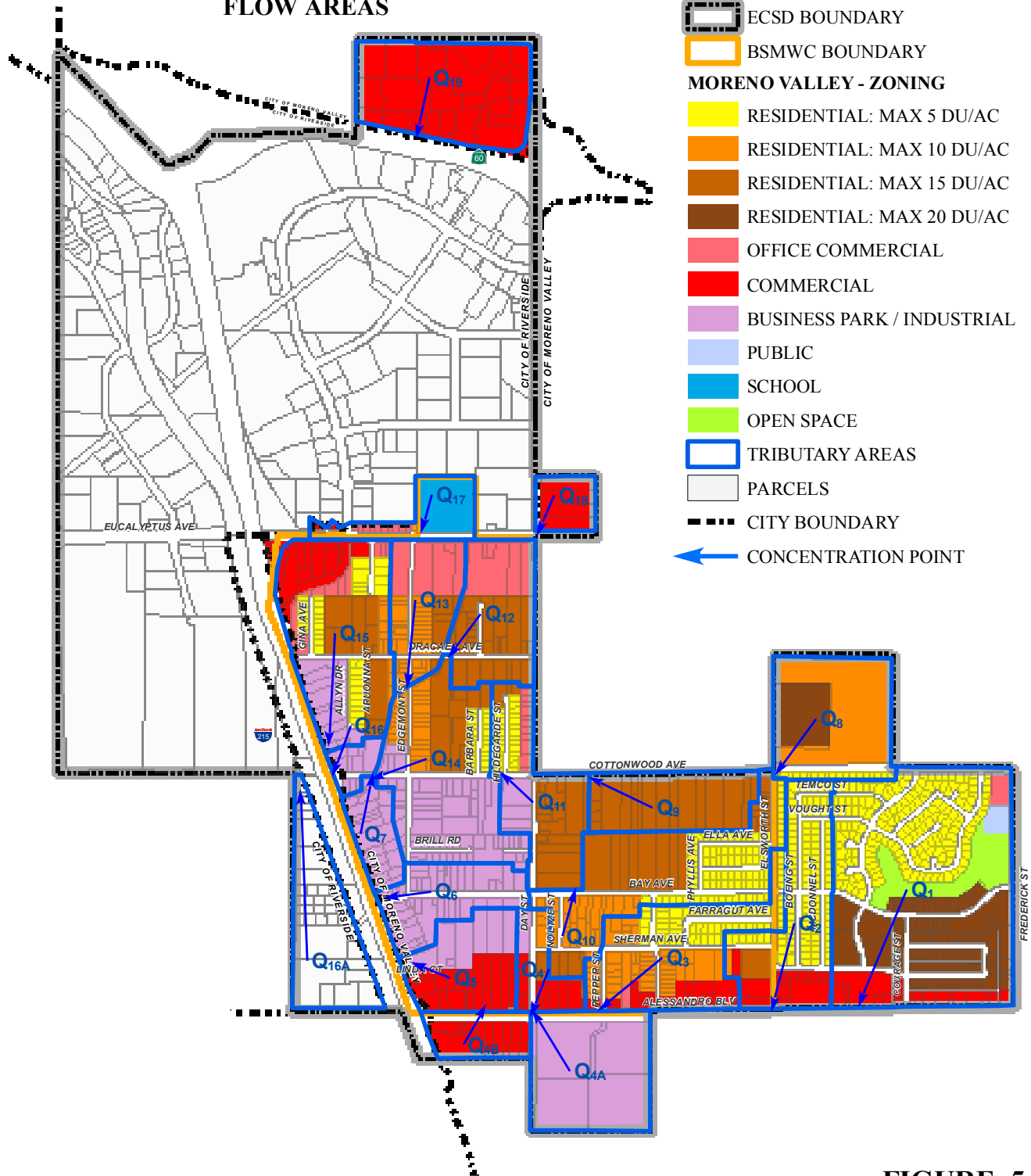
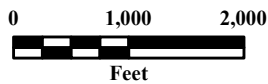


FIGURE 5-1



Source: Riverside County 2007

* FROM CITY OF MORENO VALLEY GIS - ZONING LAYER

ALBERT A.
WEBB
ASSOCIATES

Table 5-1: Projected “Buildout” Average Daily Flows For Ultimate Trunk Sewer Design

Tributary Sewage Flow Area	Commercial/Industrial Average Daily Flow (gpd) ⁽¹⁾	Residential Average Daily Flow (gpd) ⁽²⁾	Public/Open space Average Daily Flow (gpd)	Total Average Daily Flow (gpd)
Q ₁	23,000	149,820	2,000	174,820
Q ₂	17,200	35,820	0	53,020
Q ₃	16,800	62,860	0	79,660
Q ₄	14,800	8,320	0	23,120
Q _{4A}	73,800	0	0	73,800
Q _{4B}	20,600	0	0	20,600
Q ₅	52,600	0	0	52,600
Q ₆	24,800	0	0	42,800
Q ₇	24,800	0	0	24,800
Q ₈	0	106,160	0	106,160
Q ₉	0	63,600	0	63,600
Q ₁₀	0	103,900	0	103,900
Q ₁₁	16,400	47,820	0	64,220
Q ₁₂	20,800	45,360	0	66,160
Q ₁₃	16,200	33,400	0	49,600
Q ₁₄	56,800	53,900	0	110,700
Q ₁₅	51,200	57,080	0	108,280
Q ₁₆	9,600	0	0	9,600
Q _{16A}	65,800	0	0	65,800
Q ₁₇	4,520	0	9,500	14,020
Q ₁₈	17,000	0	0	17,000
Q ₁₉	94,000	0	0	94,000
Total	638,720	768,040	11,500	1,418,260

⁽¹⁾ Commercial and industrial wastewater generation of 2000 gpd/acre was utilized based on factors set forth in Section 3.

⁽²⁾ A wastewater generation factor for residential dwelling units of 280 gpd/EDU for low density and 160 gpd/EDU for high density was utilized for projecting flows for ultimate trunk sewer design.

Table 5-2: Projected “Buildout” Average Daily Flows for Wastewater Treatment Capacity

Tributary Sewage Flow Area	Commercial/Industrial Average Daily Flow (gpd) ⁽¹⁾	Residential Average Daily Flow (gpd) ⁽²⁾	Public/Open space Average Daily Flow (gpd)	Total Average Daily Flow (gpd)
Q ₁	11,500	143,320	2,000	156,820
Q ₂	8,600	31,560	0	40,160
Q ₃	8,400	53,880	0	62,280
Q ₄	7,400	7,680	0	15,080
Q _{4A}	36,900	0	0	36,900
Q _{4B}	10,300	0	0	10,300
Q ₅	26,300	0	0	26,300
Q ₆	21,400	0	0	21,400
Q ₇	12,400	0	0	12,400
Q ₈	0	95,520	0	95,520
Q ₉	0	63,600	0	63,600
Q ₁₀	0	96,600	0	96,600
Q ₁₁	8,200	46,920	0	55,120
Q ₁₂	10,400	45,360	0	55,760
Q ₁₃	8,100	30,000	0	38,100
Q ₁₄	28,400	50,040	0	78,440
Q ₁₅	25,600	53,760	0	79,360
Q ₁₆	4,800	0	0	4,800
Q _{16A}	32,900	0	0	32,900
Q ₁₇	2,260	0	9,500	11,760
Q ₁₈	8,500	0	0	8,500
Q ₁₉	47,000	0	0	47,000
Total	319,360	718,240	11,500	1,049,100

⁽¹⁾ Commercial and industrial wastewater generation of 1000 gpd/acre was utilized based on factors set forth in Section 3.

⁽²⁾ A wastewater generation factor for residential dwelling units of 240 gpd/EDU for low density and 160 gpd/EDU for high density was utilized for projecting flows for ultimate trunk sewer design.

As a result of applying the City of Moreno Valley’s September 2007 updated atlas map (**Figure 2-3**), the District’s total projected “buildout” average daily flow increased by approximately 176,000 gpd when compared to estimates based on November 1995 ECSD Sewer Report. The majority of this increase was based on a significant rezoning of commercial land use to high density residential within District service area. **Table 5-3** below summarizes results detailed in **Appendix C**.

Table 5-3: Projected “Buildout” Average Daily Flows for Wastewater Treatment Capacity

November 1995 ECSD Sewer Report Average Daily Flow (gpd)	September 2007 Zoning Atlas Map “Adjusted” Average Daily Flow (gpd)	Average Daily Flow Increase (gpd)
872,780 ⁽¹⁾	1,049,100	176,320

⁽¹⁾ Based on Table 2: Projected Ultimate Wastewater Flow, of the ECSD Proposed Improvements to the Sewer Collection System. Table was updated for the additional tributary areas (Q₁₇, Q₁₈ and Q₁₉) and flows were adjusted applying commercial generation factor of 1,000 gpd/AC and residential generation factor of 240 gpd/EDU.

SECTION 6 - EXISTING SYSTEM ANALYSIS

SEWER VIDEO INSPECTION

With the exception of a few recent sewer improvements, the majority of the existing ECSD sewer system is 20 - 50 years old. Some of the existing pipes were constructed at sizes less than the current minimum standards. In anticipation for potential operational and maintenance concerns and to determine the current physical standing of these older sewerlines, the District videotaped all existing 6-inch diameter sewerlines within the District with the exception of the sewerline on Pan-Am Boulevard (as this is serving only one property). **Table 6-1** and corresponding **Figure 6-1** summarizes this video inspection.














Table 6-1: ECSD Sewer Videotape Inspection

Street Name	Approximate Quantity (linear feet)	Location
Allyn Drive	700	From Dracaea Avenue to south end of Allyn Drive
Barbara Street	1,200	From Cottonwood Avenue to north end of Barbara Street and from Dracaea Avenue to north end of Barbara Street
Hildegard Street	900	From Cottonwood Avenue to north end of Hildegard Street
Brill Road	1,250	From Edgemont Street to east end of Brill Road
Edgemont Street	1,270	From Cottonwood Avenue to Bay Avenue
Bay Avenue	1,700	From Day Street to Old I-215 Road and sewer adjacent to Bay Avenue
Linda Court	1,560	From Old I-215 Road to east end of Linda Court and sewer adjacent to Linda Court
Nolze Street	1,000	From Day Street to Pepper Street, including portion of sewer on Sherman Avenue and Bay Avenue
Grant Street	1,110	From Alessandro Boulevard to Sherman Avenue
Sherman Avenue	1,000	From Elsworth Street to Farragut Avenue
Bertie Avenue	800	From Phyllis Avenue to Elsworth Street
Arvonna Street	750	From Dracaea Avenue to south and Arvonna Street
Lancaster Lane	1,000	From Eucalyptus Avenue to Dracaea Avenue and approximately 100 ft. of sewer east of Lancaster Lane on Dracaea Avenue
Day Street	1,000	From Alessandro Boulevard to Bay Avenue

EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER VIDEO INSPECTION

LEGEND

-  ECSD BOUNDARY
-  PARCELS
-  CITY BOUNDARY
-  SEWER LINE
-  SEWER - ABANDONED
-  CITY OF RIVERSIDE SEWER
-  MANHOLE
-  DROP MANHOLE
-  CLEAN OUT
-  LIFT STATION
-  METERING STATION
-  CITY OF RIVERSIDE MANHOLE
-  ECSD MAY 2008 SEWER VIDEO INSPECTION

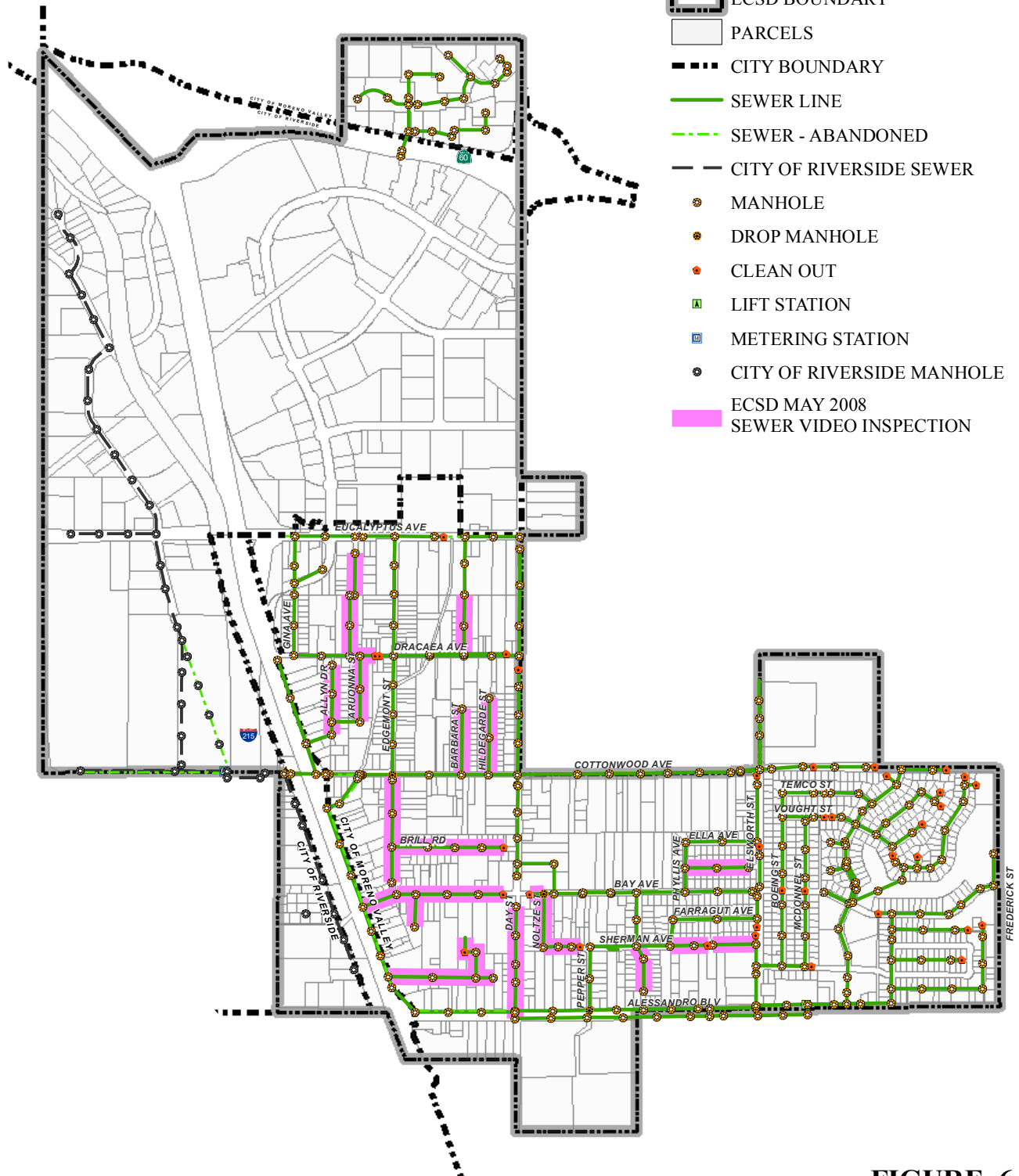
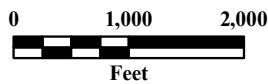


FIGURE 6-1



The observations made per review of District's sewer video inspection included cracks, offset joints at main line and laterals, tree root in growth, sag, grease build-up, etc. As a result of these observations, various improvements are recommended such as miscellaneous point repairs, sewerline replacement and sewer lateral replacements. At certain locations the majority of the existing sewerline does not require repair, though portions do; therefore, only the repair locations require remedy. These locations would constitute miscellaneous point repairs and internal rehabilitation/replacement without having to replace entire sewer line. For other sewerlines, the repair locations were close together and would be more economical to replace the entire section of sewer affected. **Figure 6-2** shows all necessary sewer replacements and miscellaneous maintenance improvements per District videotape review. Cost for these improvements is included in the proposed "Design" sewer system.

FIELD VISIT WITH DISTRICT REPRESENTATIVE

In addition to the sewer video inspection, a field visit was conducted with the District Representative on October 29, 2007 to further review the physical conditions of the existing sewer system.

Cottonwood Sewer Siphon System

The District currently utilizes an 18-inch diameter ductile iron pipe (D.I.P.) sewer siphon to convey wastewater flows under an existing 5' x 5' concrete box culvert on Cottonwood Avenue, east of Old Interstate 215 (**Figure 6-1**). It is our understanding that the County of Riverside Flood Control owned the 5' x 5' concrete box culvert, although is currently not in service and has been abandoned. Although the siphon is adequately sized to convey ultimate flows, it is recommended that the sewer siphon be replaced with standard gravity system to minimize maintenance and clean up issues. It is noted, prior to the replacement of the siphon system, a written confirmation is required from the County of Riverside Flood Control confirming the abandonment of the 5' x 5' concrete box culvert as this structure would require demolition. Cost for this improvement is included in the proposed "Design" Sewer System.

8-Inch Diameter Canyon Springs Shopping Center Sewer

Canyon Springs Shopping Center is located at the north boundary of ECSD, north of the 60 Freeway (**Figure 6-1**). Currently wastewater flows generated within this area are conveyed across the 60 Freeway to the City of Riverside metering station located in the rear parking area of the shopping center south of the 60 Freeway. Sewer videos show that the joint is offset near the manhole south of the 60 Freeway. This offset was also identified during the October 2007 field visit with the District representative. Photos taken on July 4, 2008 by the District Representative show significant joint offset and build-up (**Appendix I**). It is recommended that this offset joint be repaired and the cost for this improvement is included in the proposed "Design" Sewer System.

Manhole Improvements















During the October 2007 field visit with the District representative, it was observed that multiple manholes, cleanouts, and concrete aprons require repairs such as raised to match the surrounding

grade. It is recommended that the District implement a program to rehabilitate/replace manholes. Cost for this program is included in the proposed “Design” Sewer System.

EDGEMONT COMMUNITY SERVICES DISTRICT

EXISTING SEWER IMPROVEMENTS

LEGEND

-  ECSD BOUNDARY
-  PARCELS
-  CITY BOUNDARY
-  SEWER LINE
-  SEWER - ABANDONED
-  CITY OF RIVERSIDE SEWER
-  MANHOLE
-  DROP MANHOLE
-  CLEAN OUT
-  LIFT STATION
-  METERING STATION
-  CITY OF RIVERSIDE MANHOLE
-  ECSD MAY 2008 SEWER VIDEO INSPECTION
-  SEWER REPLACEMENT PER SEWER VIDEO INSPECTION
- #L = No. OF SERVICE LATERAL REPLACEMENT
- #P = No. OF POINT REPAIRS

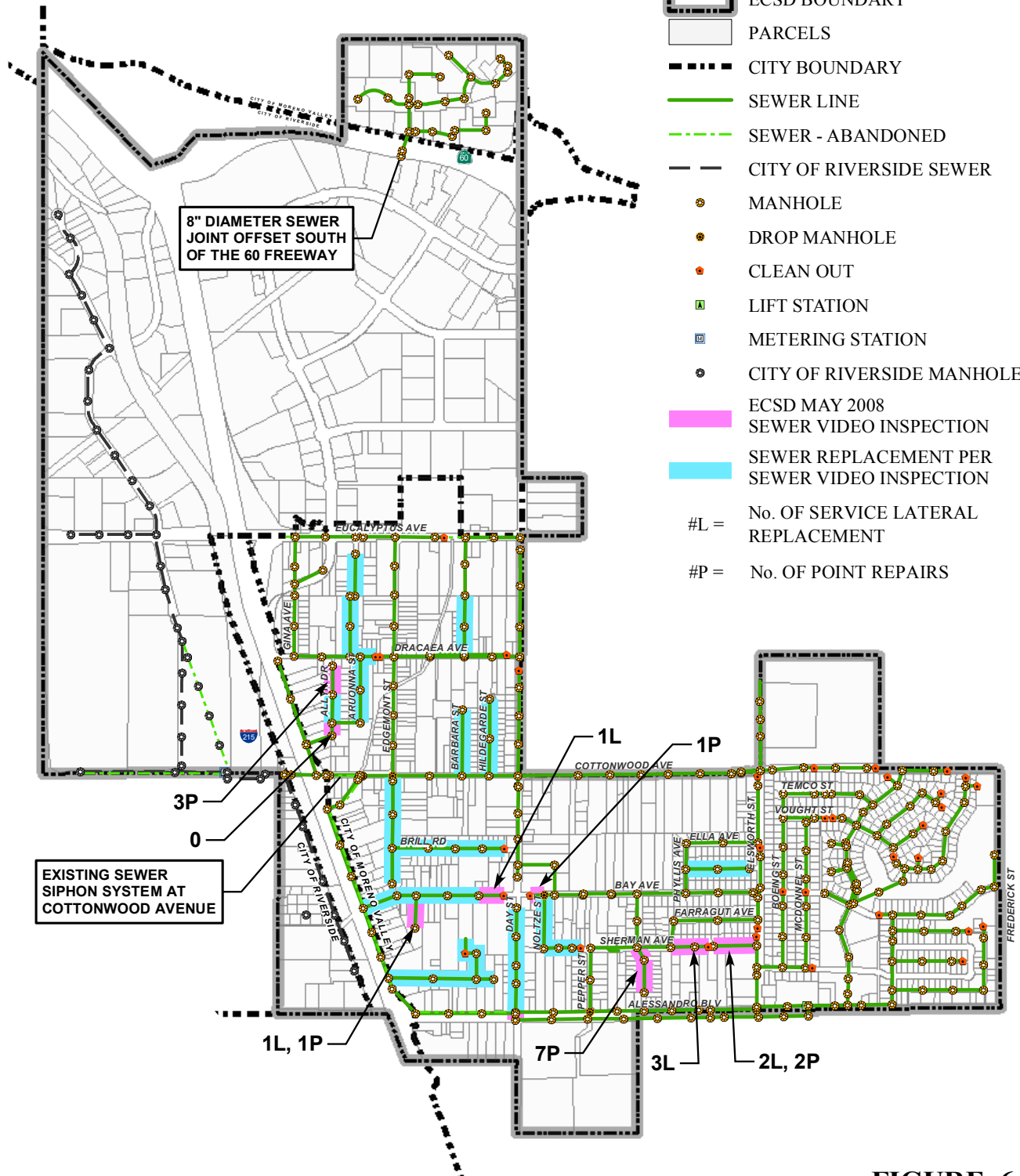
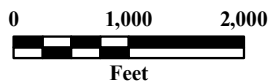


FIGURE 6-2



SECTION 7 - HYDRAULIC ANALYSIS

HYDRAULIC ANALYSIS

Based on tributary drainage areas discussed in previous sections and pipeline layouts, hydraulic analysis was performed to determine the adequacy of the existing trunk sewer lines to convey wastewater for the ultimate buildout conditions.

To analyze the existing ECSD system, it was necessary to identify the size of the pipes and slopes. This information, obtained from the District's Atlas Map records, was analyzed using Mannings equation for gravity flow in pipes to determine the pipe capacity. Based on the layout of the existing sewer pipelines within the District, reaches were established at various points within each tributary sewage flow area to denote major wastewater concentration points. The tributary sewage flow areas were developed in Section 5 while the locations of these concentration points corresponded to existing manhole locations within the District's trunk systems.

The flow data at these concentration points were based on wastewater generation values tabulated in **Table 3-1**. The peaking factors as well as wet weather infiltration rates were applied to the flow data to determine the adequacy of each pipeline to convey the ultimate wastewater flows.

INPUT DATA

A spreadsheet was utilized to perform the hydraulic analysis. Much of the inputted data utilized in this spreadsheet were derived from the criteria and standards discussed in Section 3.

Pipe Design Criteria

Evaluation of system performance is subjective and is based on several factors such as flow generation characteristics, peaking factors, infiltration rates, and pipe characteristics. Pipe characteristics such as slope, length and roughness of the pipe can greatly affect the analysis. Some referenced points are evaluated to determine if the design is within reasonable tolerance of the standards established.

Wastewater Concentration Points and Reaches

A flow concentration point is required for each tributary flow area. The concentration points were obtained from the November 1995 ECSD Sewer Plan and are utilized in this report. Wastewater flows generated by each tributary area are diverted to the corresponding concentration point. At each concentration point, the corresponding pipe reach was analyzed for pipe capacity.

The pipe capacity calculations are based on pipe slope, Manning's "n" value and D/d ratio. Minimum pipe diameters and slopes are utilized at each reach to determine the maximum flow capacity.

The identifying prefixes corresponding to each reach utilized in the analysis corresponds to the Trunk Sewer System as described in Section 4 (**Figure 4-1**). In addition to these Trunk Sewer Systems, the hydraulic analysis also analyzed lines which convey tributary flows to the corresponding trunk sewers. These prefixes were utilized in the model to identify the trunk system in which it is a part of:

Prefix	Trunk System
A	Alessandro Trunk Sewer System (Figure 7-2)
I	I-215 Trunk Sewer System (North and South) (Figure 7-3)
C	Cottonwood Trunk Sewer System (Figure 7-4)
M	Miscellaneous Sewer lines (Figure 7-4)

Flow Data

Once the trunk systems and reaches were established and entered into the hydraulic analysis, the flow data was entered. The flow data was determined by reviewing the tributary drainage areas to determine the contributing tributary areas that correspond to each reach concentration point of a specific drainage area.

Flow input designations are shown in **Figure 7-1** as the wastewater collection point. As previously discussed, flow input is based on wastewater generation factors developed in Section 3 while quantities are based on the values tabulated in **Appendix B** and **Appendix C**.

The following summarizes the tributary areas along with the designated Trunk Systems (**Figure 5-1**):

Trunk System	Tributary Flow Areas
Alessandro Trunk System	$Q_1 - Q_4, Q_{4A}, Q_{4B}$
I-215 Trunk System (South)	$Q_1 - Q_4, Q_{4A}, Q_{4B}, Q_5 - Q_7$
I-215 Trunk System (North)	Q_{15}
Cottonwood Trunk System	$Q_1 - Q_4, Q_{4A}, Q_{4B}, Q_5 - Q_{16}, Q_{16A}, Q_{17}, Q_{18}$
Miscellaneous (M1)	Q_{10}
Miscellaneous (M2)	Q_{12}
Miscellaneous (M3)	Q_{12}, Q_{13}










Peaking Factor

It is important to consider diurnal flow rate variations and these variations can be accounted for by introducing a peaking factor. The peaking factor is calculated by utilizing the peaking factor equation discussed in Section 3. The peak flow value will be utilized to evaluate the sewerline capacity (refer to **Appendix D** for a detailed breakdown of peak flow values).

EDGEMONT COMMUNITY SERVICES DISTRICT

TRUNK SEWER SYSTEM

LEGEND

-  ECSD BOUNDARY
-  TRIBUTARY AREAS
-  PARCELS
-  CITY BOUNDARY
-  CONCENTRATION POINT
-  ALESSANDRO TRUNK SEWER
-  COTTONWOOD TRUNK SEWER
-  OLD 215 TRUNK SEWER
-  MISCELLANEOUS TRUNK SEWER

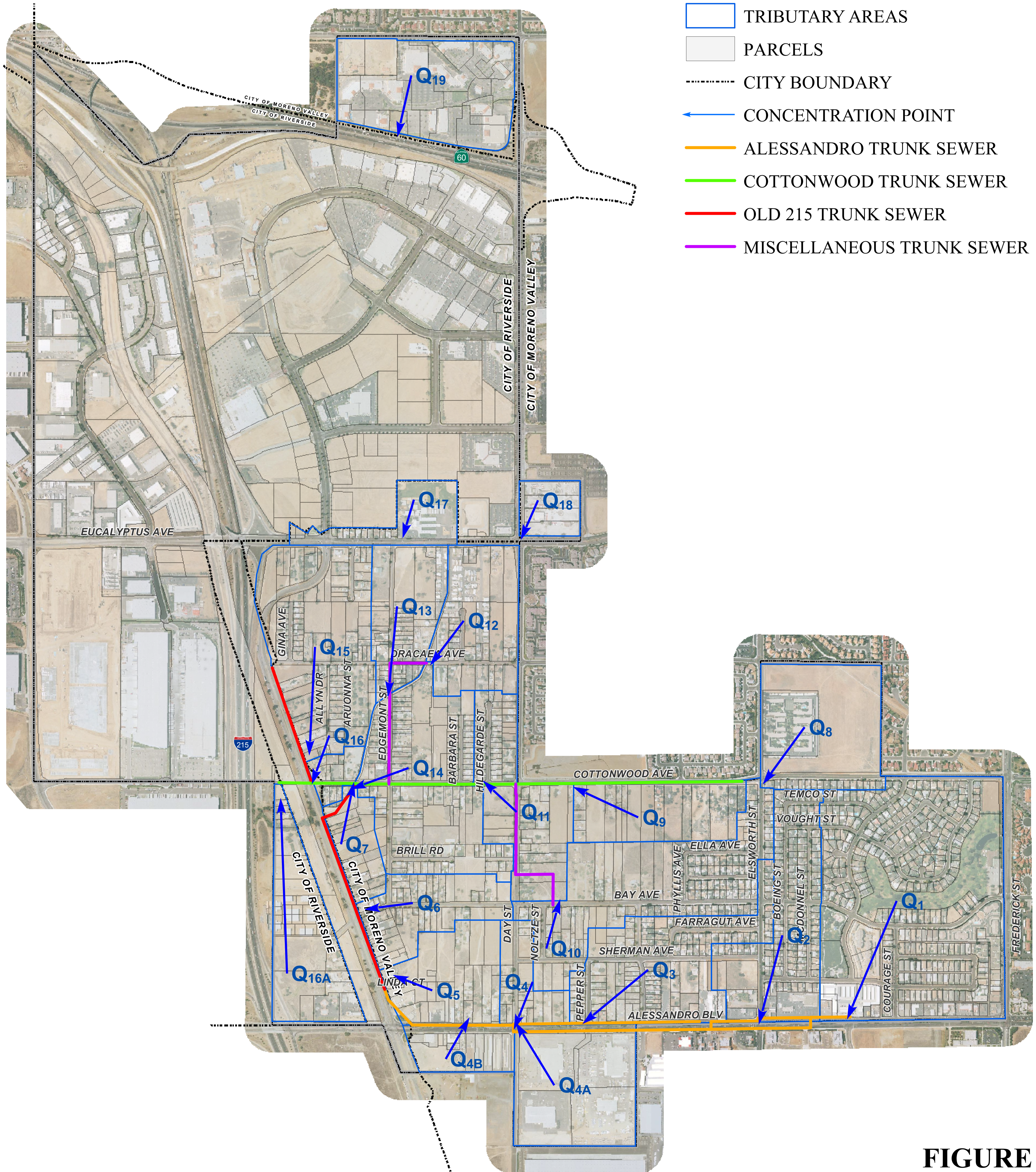
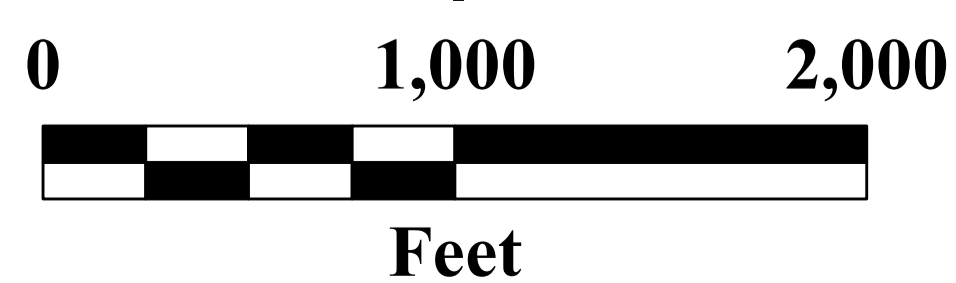
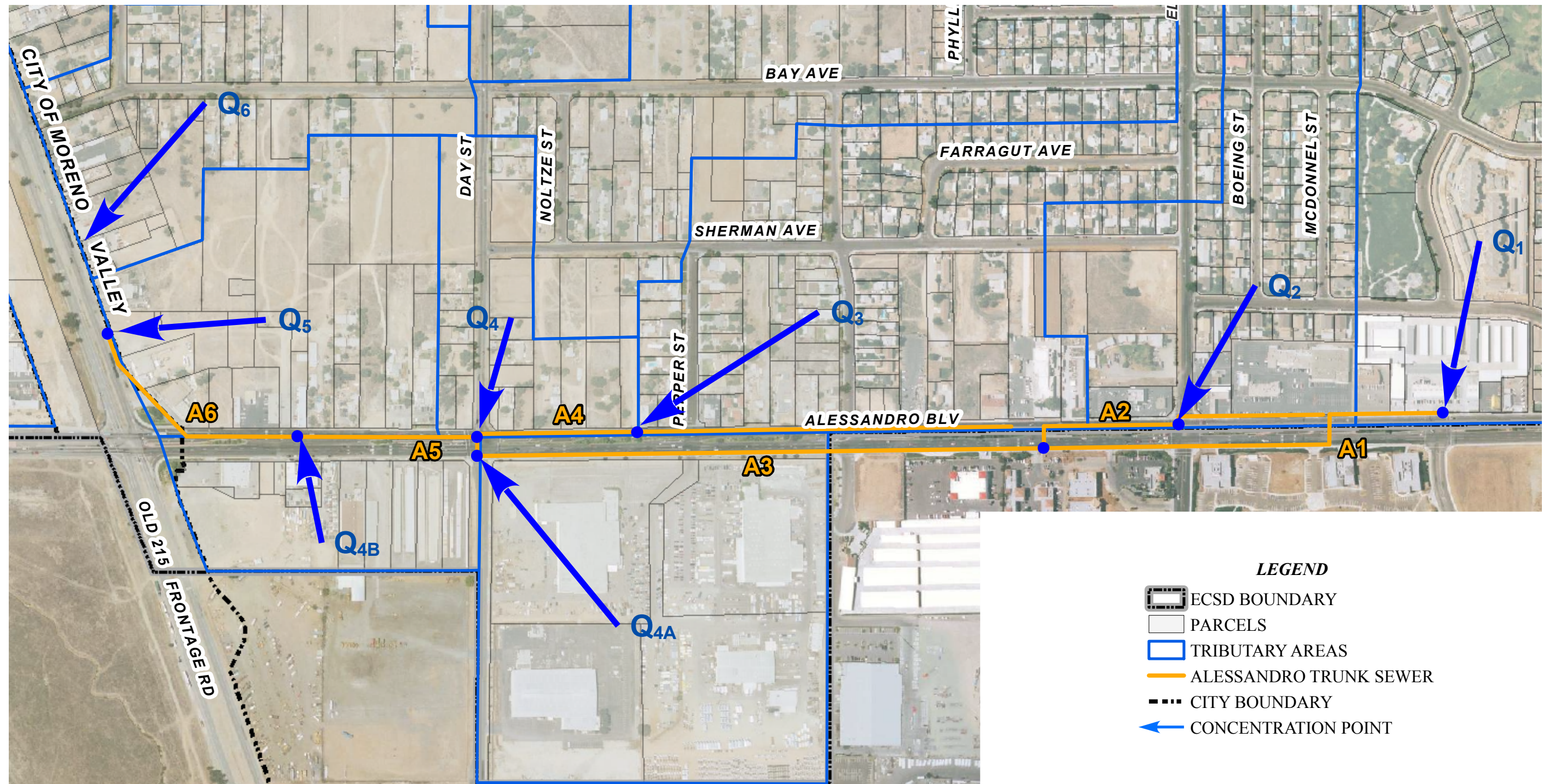


FIGURE 7-1



EDGEMONT COMMUNITY SERVICES DISTRICT

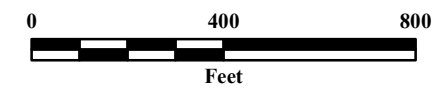
ALESSANDRO TRUNK SEWERS



LEGEND

- ECSD BOUNDARY
- PARCELS
- TRIBUTARY AREAS
- ALESSANDRO TRUNK SEWER
- CITY BOUNDARY
- CONCENTRATION POINT

FIGURE 7-2



Source: Riverside County 2007

Map revised October 9, 2007. G:\2006\06-0352\Gis\Trunk-Alessandro_8x11.mxd



EDGEMONT COMMUNITY SERVICES DISTRICT

OLD 215 TRUNK SEWERS

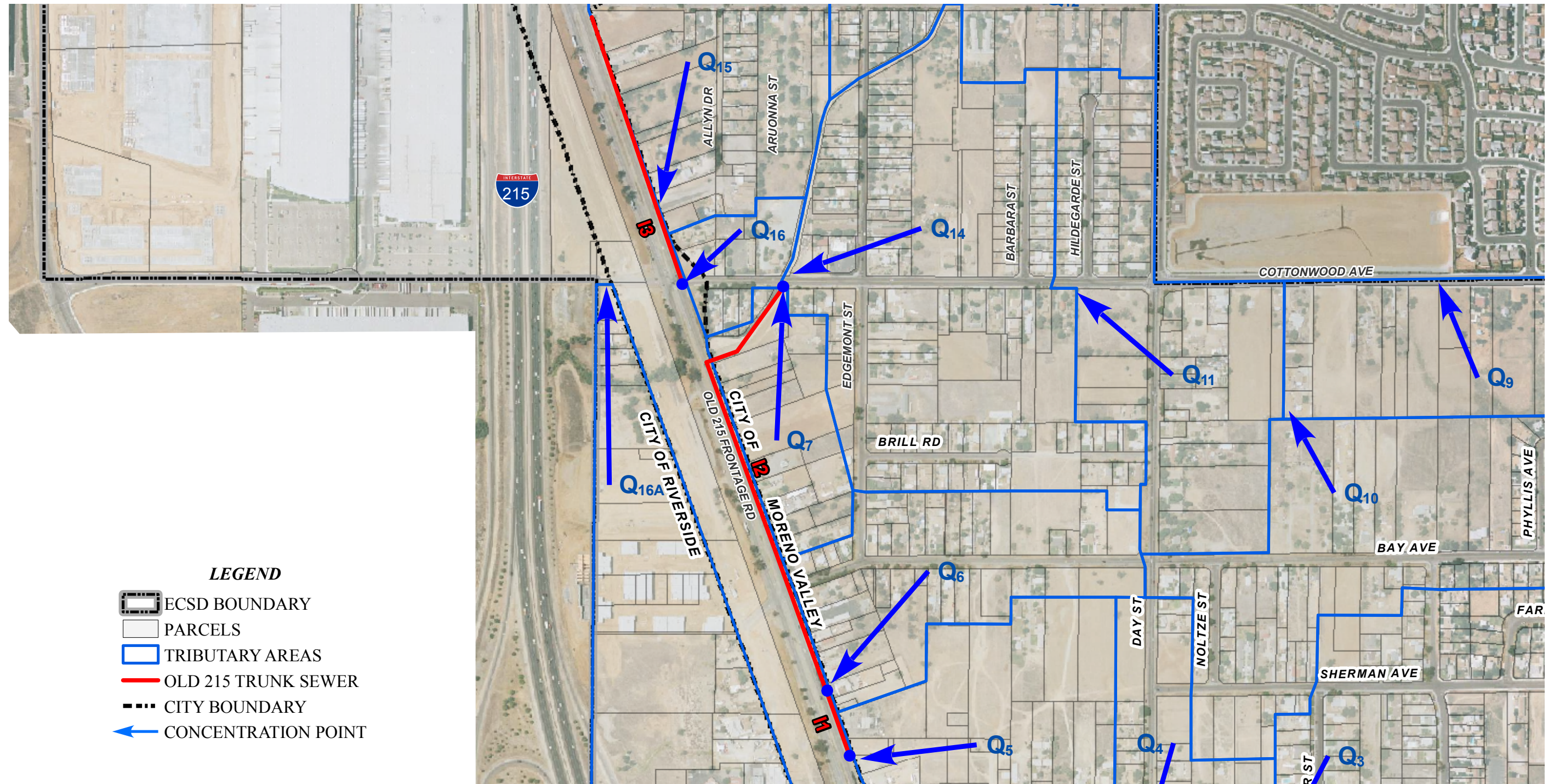
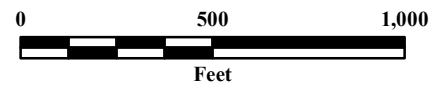


FIGURE 7-3



EDGEMONT COMMUNITY SERVICES DISTRICT

COTTONWOOD TRUNK SEWERS

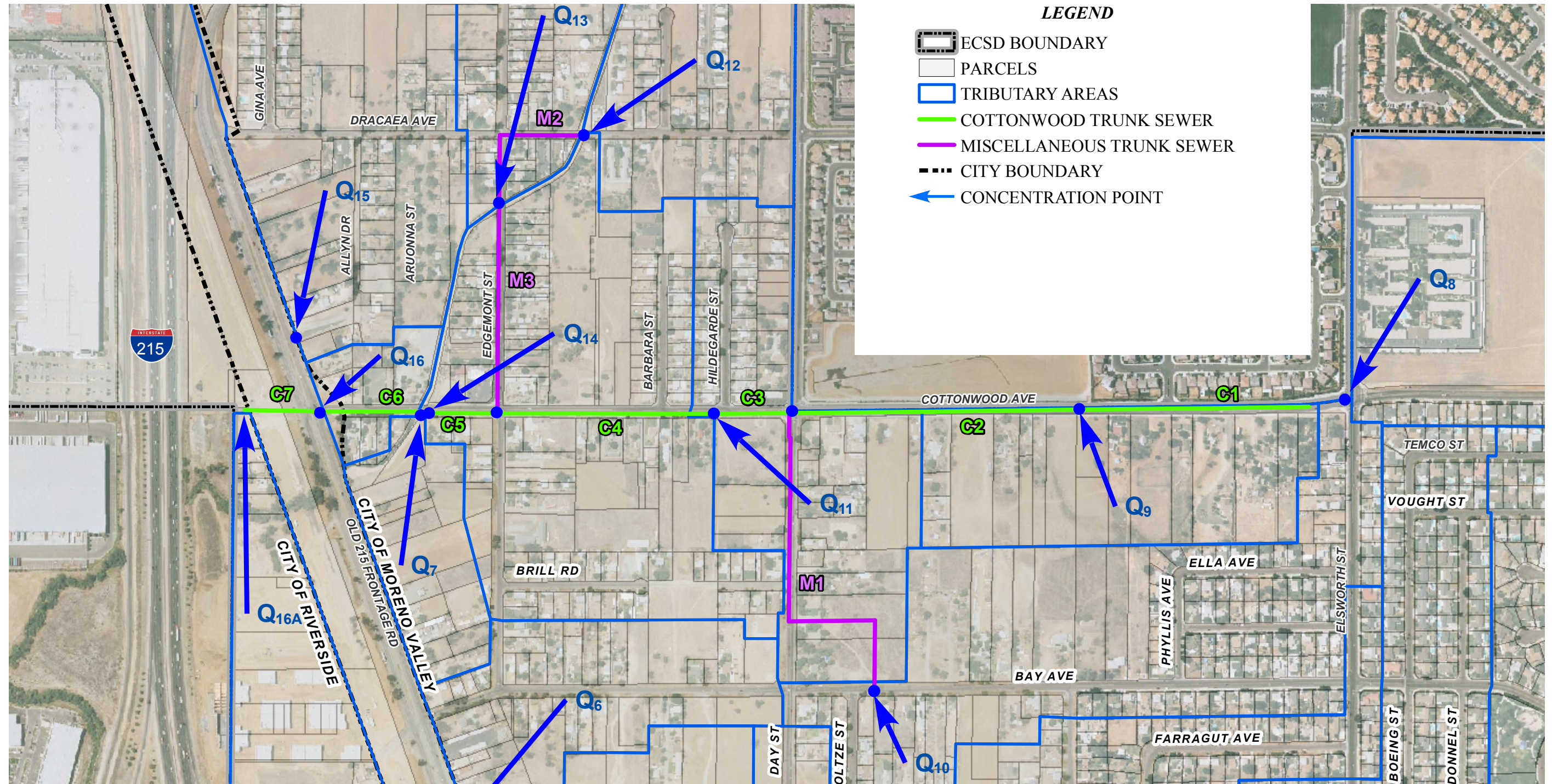
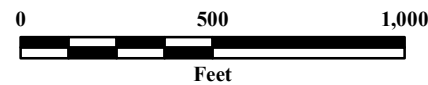


FIGURE 7-4



ANALYSIS RESULTS

Table 7-1 summarizes the results obtained from the hydraulic analysis (refer to **Appendix G** for a detailed breakdown of this table).

Table 7-1: Summary of Results from Hydraulic Analysis

Reach	Average Daily Flow (MGD)	Peak Daily Flow (MGD)	Maximum Flow Capacity (MGD)
A1	0.175	0.511	1.327
A2	0.053	0.173	0.157
A3	0.215	0.617	1.327
A4	0.080	0.250	0.247
A5	0.404	1.097	1.327
A6	0.425	1.148	1.259
I1	0.478	1.276	1.259
I2	0.520	1.380	1.513
I3	0.108	0.331	1.087
C1	0.106	0.325	0.247
C2	0.170	0.498	0.247
C3	0.274	0.769	0.247
C4	0.338	0.931	0.251
C5	0.454	1.218	1.704
C6	1.110	2.748	2.766
C7	1.227	3.013	3.092
M1	0.104	0.318	0.271
M3	0.116	0.351	0.285

As previously stated, the criteria outlined in Section 3 was used to determine the peak daily flow for ultimate buildout conditions in comparison to the existing systems maximum flow capacity at each critical reach. Wastewater flow exceeding the capacity of the existing pipe would be considered as potentially deficient and therefore, would need further evaluation to determine if replacement is recommended. An example of this type of deficiency can be observed in Reach C1 as shown in **Table 7-1**. This reach is an 8-inch diameter pipe and has a maximum flow capacity of 0.247 MGD based on a specified slope, roughness factor and D/d. The amount of flow that this pipe is required to convey is 0.325 MGD based on buildout conditions. This value is “above” the allowable pipe capacity by 0.078 MGD and can be defined as a hydraulic deficiency. **Table 7-2** outlines all the hydraulic deficiencies observed within the District's system requiring further evaluation.

Table 7-2: Potential Hydraulic Deficiencies

Reach	Pipe Diameter (in)	Slope (%)	Average Daily Flow (MGD)	Peak Daily Flow (MGD)	Maximum Flow Capacity (MGD)	Actual D/d ⁽¹⁾
A2	8	0.00160	0.053	0.173	0.157	0.54
A4	8	0.00400	0.080	0.250	0.247	0.52
I1	12	0.00360	0.478	1.276	1.259	0.76
C1	8	0.00400	0.106	0.325	0.247	0.61
C2	8	0.00400	0.170	0.489	0.247	0.80
C3	8	0.00400	0.247	0.796	0.247	>1
C4	8	0.00410	0.338	0.931	0.251	>1
M1	8	0.00480	0.104	0.318	0.271	0.56
M3	8	0.00530	0.116	0.361	0.285	0.57

As shown in **Table 7-2**, there is a close proximity between the existing pipe capacities and the ultimate peak wastewater flows for the majority of reaches. If the D/d ratio is increased the pipe capacity is also increased. For the purposes of this evaluation, if the D/d ratio is adjusted to 0.60 for 8-inch and 0.80 for 10-inch and greater diameter pipe, the number of hydraulically deficient reaches was reduced. **Table 7-3** summarizes the adjusted list of pipe reaches that are now deficient under this criterion.

Table 7-3: Hydraulic Deficiencies

Reach	Pipe Diameter (in)	Slope (%)	Average Daily Flow (MGD)	Peak Daily Flow (MGD)	Maximum Flow Capacity (MGD)	Actual D/d ⁽¹⁾
C1	8	0.00400	0.106	0.325	0.247	0.61
C2	8	0.00400	0.170	0.498	0.247	0.80
C3	8	0.00400	0.247	0.769	0.247	>1
C4	8	0.00400	0.338	0.931	0.251	>1

Summary

A review of the locations of hydraulically deficient pipes was conducted (**Figure 7-5**). The pipes that fall under the Hydraulic Deficiencies definition are 8-inch diameter pipe and are located on Cottonwood Avenue.











It should be noted that the existing ECSD Collection system was analyzed with current wastewater flows generated within the ECSD boundary using data from the 2007-2008 ECSD Fiscal Year Sewer Charges Report to identify any current hydraulically deficient reaches. **Table 7-4** below summarizes the results of this analysis and shows that reaches C3 and C4 are currently hydraulically deficient; and should be prioritized over other replacement lines.

⁽¹⁾ Actual D/d represents the actual D/d ratio necessary to convey peak daily flow through the reach.

EDGEMONT COMMUNITY SERVICES DISTRICT

HYDRAULICALLY DEFICIENT REACHES OF TRUNK SEWERS

LEGEND

-  ECSD BOUNDARY
-  PARCELS
-  TRIBUTARY AREAS
-  ALESSANDRO TRUNK SEWER
-  COTTONWOOD TRUNK SEWER
-  OLD 215 TRUNK SEWER
-  MISCELLANEOUS TRUNK SEWER
-  Hydraulically Deficient Reaches
-  CITY BOUNDARY
-  CONCENTRATION POINT

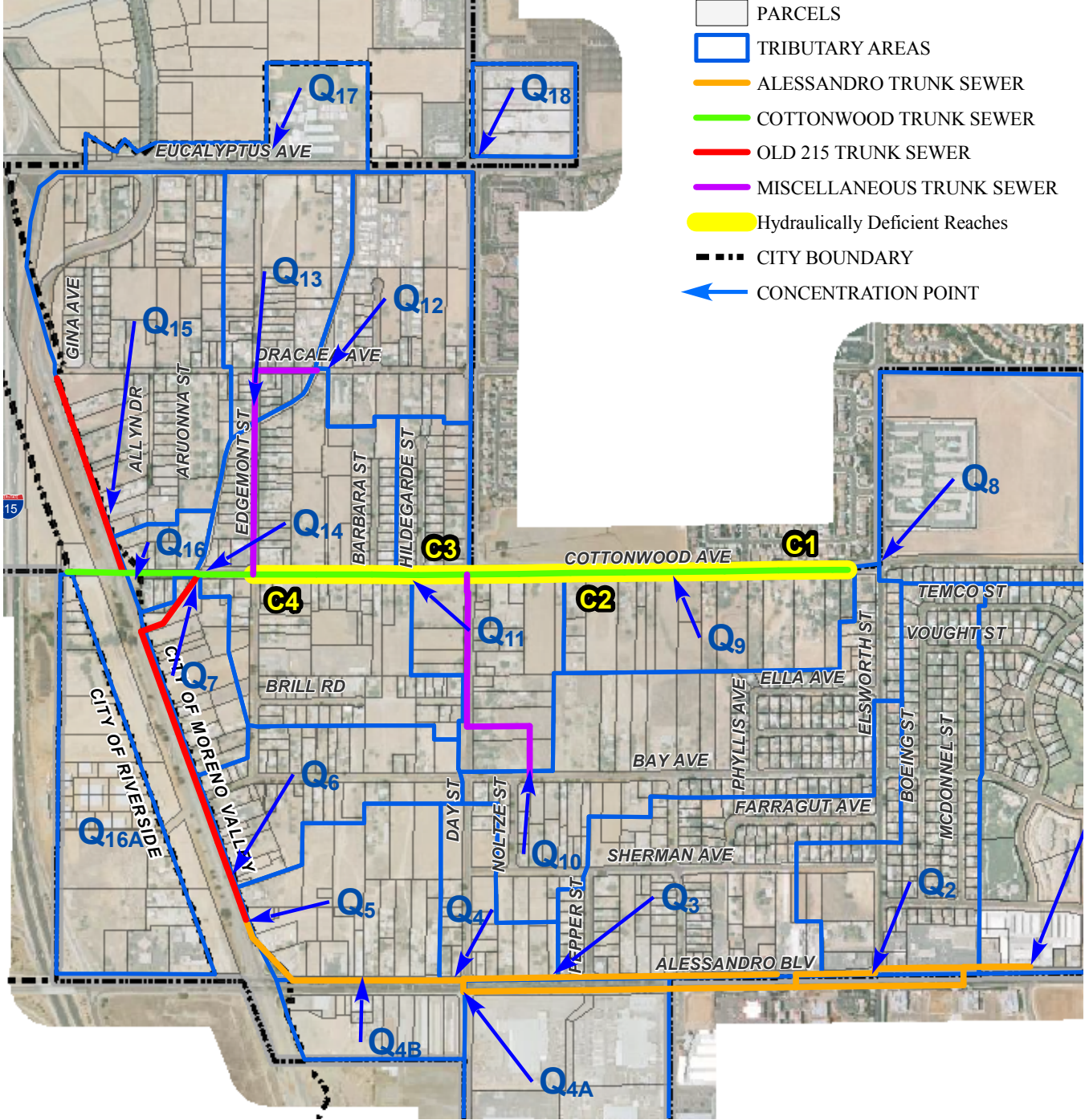
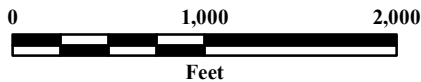


FIGURE 7-5



Source: Riverside County 2007
AirPhoto USA 2007

ALBERT A.
WEBB
ASSOCIATES

Table 7-4: Hydraulically Deficient Reaches Based on Current Wastewater Flows

Reach	Pipe Diameter (in)	Slope (%)	Current Existing Flow (MGD)	Peak Daily Flow (MGD)	Maximum Flow Capacity (MGD)	Actual D/d
C3	8	0.00400	0.105	0.322	0.247	0.59
C4	8	0.00400	0.127	0.382	0.251	0.66

SECTION 8 - PROPOSED SYSTEM IMPROVEMENT

As a result of the ultimate wastewater flows on the existing trunk sewer system, various sewers required replacement, relief or rerouting to provide for adequate flow conveyance and minimize hydraulic deficiencies as described in Section 7 of this report.

In addition to evaluating the pipelines based on hydraulic analysis, the pipelines were also evaluated based on the sewer video inspection to assess any physical damage. The damaged pipelines shall require replacement, even if the corresponding pipe reaches are hydraulically sufficient, and will be incorporated into the required improvements to the District's Sewer System.

GRAVITY SYSTEM EVALUATION

Pipe reaches falling under the definition of "Hydraulic Deficiency" can either be replaced with a larger diameter pipe, relieved or rerouted in order to convey ultimate wastewater flow as detailed herein.

The District's Existing Trunk System consists of mostly vitrified clay pipe (V.C.P.) with some exceptions. It is assumed that the replaced, relieved and rerouted sewers will be V.C.P. as well. The hydraulically deficient pipe reaches defined in Section 7 (**Figure 7-5**) shall be identified and in accordance to their respective street names. **Table 8-1** summarizes the hydraulically deficient pipe reaches required to convey ultimate wastewater flows (see **Appendix H** for detailed proposed system analysis).

Table 8-1: Proposed Improvements to Existing ESCD Sewer System per Hydraulic Analysis

Street Name	Location	Project Type
Cottonwood Avenue	From Elsworth Street to Day Street	Existing 8" dia. sewer to be replaced with 10" dia. sewer due to ultimate buildout flows
Cottonwood Avenue	From Elsworth Street to Edgemont Street	Existing 8" dia. sewer to be replaced with 12" dia. sewer due to ultimate buildout flows

Replacement of Sewers

This method requires the replacement of the existing sewer pipe with a "new" sewer pipe of larger diameter to provide for adequate flow conveyance. For planning purposes, it is

assumed that the “new” sewer pipe will have the same slope and flowline elevations as the existing sewer pipe to be replaced.

Relief Sewers

This method requires an additional sewer pipe such as a parallel system to “relieve” an existing sewer main of its hydraulic deficiencies. The relief sewer may discharge back into the same trunk line downstream at a point where there are no hydraulic deficiencies or discharge into another trunk line with sufficient capacity for additional flows.

Rerouting of Sewers

This method requires the abandonment of portions of the existing sewer with hydraulic deficiencies and rerouting the trunk line along a new alignment. This may also include upgrading the sewer pipe to a larger diameter pipe.

DISTRICT VIDEO

As discussed in Section 6 of this report, the District has videotaped various sewer lines within the District that may need replacement. Such lines include the District’s 6-inch diameter sewer lines, 8-inch diameter Canyon Springs Shopping Center pipeline, and the 8-inch diameter Arvonna Street Pipeline. Observations made in the videotape review included cracks, separated joints, sag, grease build-up and damages caused by tree root in growth. **Table 8-2** and corresponding **Figure 6-2** summarizes the pipelines requiring replacement based on these observations.

Table 8-2: Proposed Improvements to Existing ECSD Sewer System per Video and Field Visit

Street Name	Approx. Quantity (linear feet)	Location	Project Type
Allyn Drive	400	From Dracaea Avenue to south end of Allyn Drive	Existing 6" dia. sewer to be replaced with 8" dia. sewer due to excessive damage observed in videotape.
Barbara Street	1,325	From Cottonwood Avenue to north end of Barbara Street and from Dracaea Avenue to north end of Barbara Street	Existing 6" dia. sewer to be replaced with 8" dia. sewer due to excessive damage observed in videotape.
Hildegarde Street	900	From Cottonwood Avenue to north end of Hildegrade Street	Existing 6" dia. sewer to be replaced with 8" dia. sewer due to excessive damage observed in videotape.
Brill Road	1,250	From Edgemont Street to east end of Brill Road	Existing 6" dia. sewer to be replaced with 8" dia. sewer due to excessive damage observed in videotape.
Edgemont Street	1,250	From Cottonwood Avenue to Bay Avenue	Existing 6" dia. sewer to be replaced with 8" dia. sewer due to excessive damage observed in videotape.
Bay Avenue	1,250	From Day Street to Old I-215 Road and sewer adjacent to Bay Avenue	Existing 6" dia. sewer to be replaced with 8" dia. sewer due to excessive damage observed in videotape.
Linda Court	1,550	From Old I-215 Road to east end of Linda Court and sewer adjacent to Linda Court	Existing 6" dia. sewer to be replaced with 8" dia. sewer due to excessive damage observed in videotape.
Nolze Street	1,000	From Day Street to Pepper Street, including portion of sewer on Sherman Avenue and Bay Avenue	Existing 6" dia. sewer to be replaced with 8" dia. sewer due to excessive damage observed in videotape.
Bertie Avenue	800	From Phyllis Avenue to Elsworth Street	Existing 6" dia. sewer to be replaced with 8" dia. sewer due to excessive damage observed in videotape.
Arvonna Street	800	From Dracaea Avenue to south and Arvonna Street	Existing 8" dia sewer to be replaced due to excessive damage observed in videotape.
Lancaster Lane	1,200	From Eucalyptus Avenue to Dracaea Avenue and approximately 100 ft. of sewer east of Lancaster Lane on Dracaea Avenue	Existing 8" dia sewer to be replaced due to excessive damage observed in videotape.
Day Street	1,000	From Alessandro Boulevard to Bay Avenue	Existing 6" dia sewer to be replaced with 8" dia sewer due to excessive damage observed in videotape.

GRAVITY SYSTEM IMPROVEMENT LOCATIONS

The following **Table 8-3** summarizes the locations of improvements (**Figure 8-1**) from the observations made in the hydraulic analysis and video inspection.


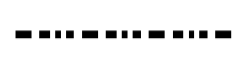











Table 8-3: Summary of ECSD Gravity Sewer System Improvements

Project No.	Project Location	Project Type	Proposed Pipe Replacement (feet)	Proposed Sewer Main Sizes
CA-1 & CA-2	Cottonwood Ave.	Sewer Replacement	3,800	10 and 12-inch
ES-1	Edgemont St.	Sewer Replacement	1,250	8-inch
BS-1	Barbara St.	Sewer Replacement	1,325	8-inch
LL-1	Lancaster Ln.	Sewer Replacement	1,200	8-inch
BA-1	Bay Ave.	Sewer Replacement	1,250	8-inch
AS-1	Arvonna St.	Sewer Replacement	800	8-inch
DS-1	Day St.	Sewer Replacement	1,000	8-inch
AD-1	Allyn Dr.	Sewer Replacement	400	8-inch
HS-1	Hildegard St.	Sewer Replacement	900	8-inch
BR-1	Brill Rd.	Sewer Replacement	1,250	8-inch
LC-1	Linda Ct.	Sewer Replacement	1,550	8-inch
NS-1	Nolze St.	Sewer Replacement	1,000	8-inch
BE-1	Bertie Ave.	Sewer Replacement	800	8-inch

EDGEMONT COMMUNITY SERVICES DISTRICT

PROPOSED ECSD SEWER CAPITAL IMPROVEMENT PROJECTS

LEGEND

-  ECSD BOUNDARY
-  CITY BOUNDARY
-  PARCELS
-  PROPOSED SEWER REPLACEMENT PROJECT
-  MANHOLE
-  DROP MANHOLE
-  CLEAN OUT
-  LIFT STATION
-  METERING STATION
-  CITY OF RIVERSIDE MANHOLE
-  SEWER LINE
-  SEWER - ABANDONED
-  CITY OF RIVERSIDE SEWER

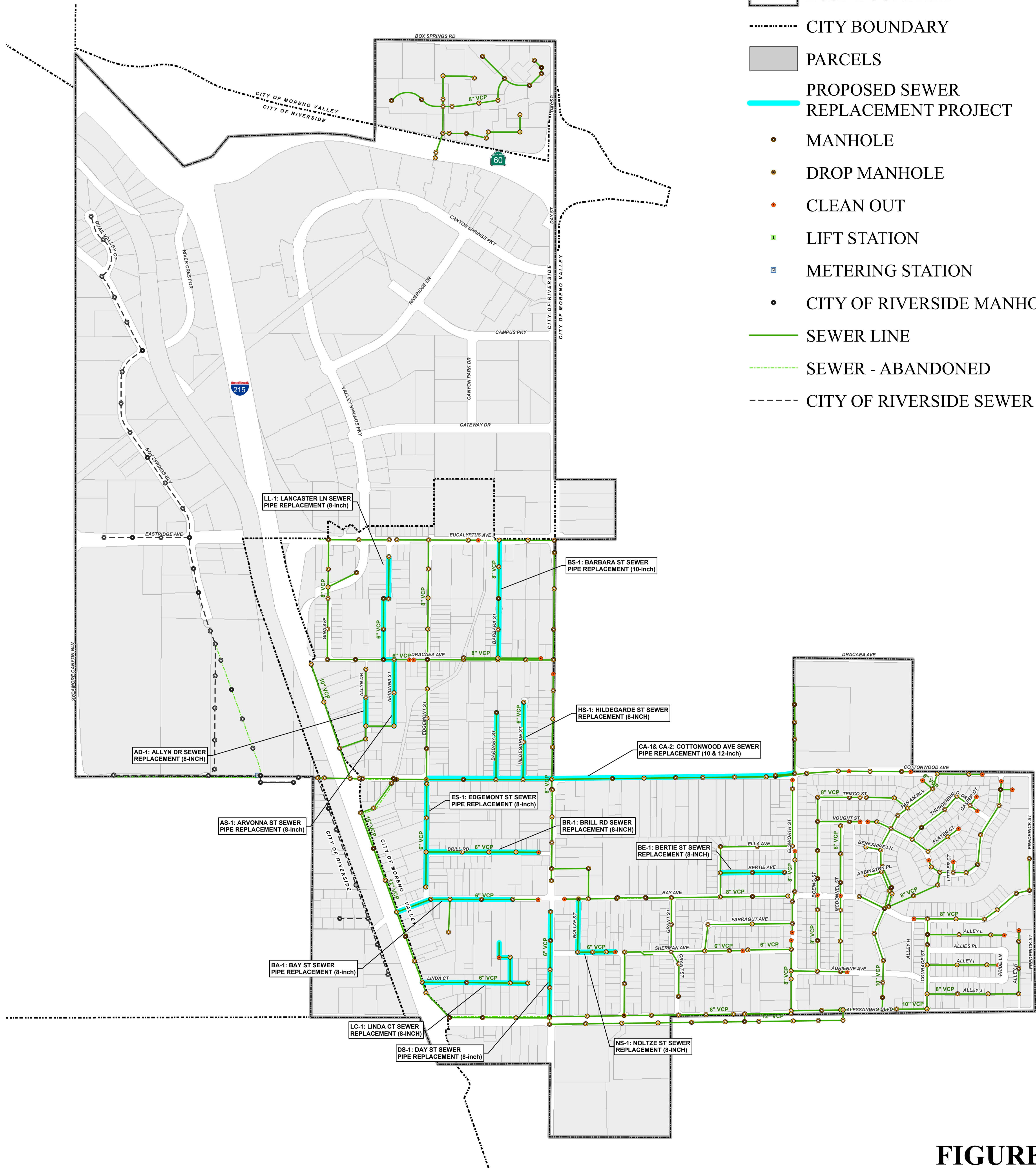
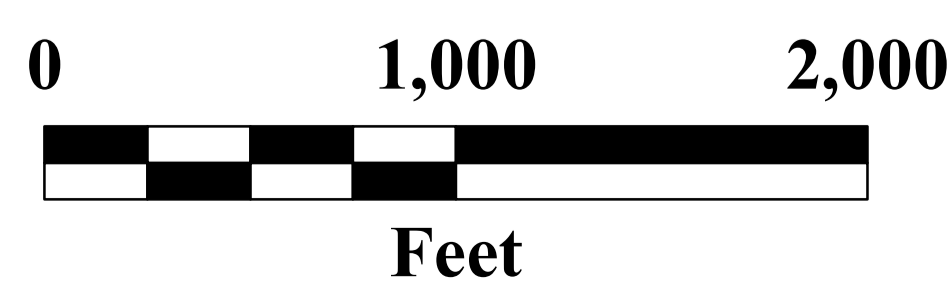


FIGURE 8-1



Based on the overall system, the number of pipes which need to be replaced is relatively low. The total length of pipe needing replacement is 16,525 L.F. or about 17% of the total pipes within the ECSD system.

MAINTENANCE IMPROVEMENTS

The majority of the pipelines observed in the video inspection would require replacements. However, at certain locations, sewer replacement can be avoided if miscellaneous improvements to the existing sewerline are performed. Therefore, maintenance improvement programs should be developed to replace/rehabilitate existing ECSD facilities. These improvements include rehabilitating approximately 10 to 20 manholes, approximately 14-20 point repairs to existing gravity sewer system and replacing approximately 7-10 sewer service laterals.

TREATMENT SYSTEM EVALUATION AND PLANNING

Wastewater generated by the District is ultimately conveyed to the City of Riverside WQCP for treatment. The District's wastewater enters the City of Riverside's collection system at two locations: (1) the metering facility at Cottonwood Avenue and (2) the metering facility for the Canyon Springs Shopping Center south of the 60-Freeway.

The projected ultimate "buildout" wastewater flow to the City of Riverside WQCP is approximately 1.05 MGD for dry weather average daily flow (**Table 5-2**). ECSD currently owns 0.89 MGD of treatment capacity from the City of Riverside. Therefore, ECSD does not presently have rights for the projected ultimate treatment plant capacity of 1.05 MGD. Rights for an additional 0.16 MGD of treatment plant capacity is required from the City of Riverside to accommodate the projected "buildout" average daily flow.

SECTION 9 - COST ANALYSIS

COST ESTIMATION

Proper and consistent cost estimation is essential in determining the feasibility of a proposed project. Construction costs for all plans are based upon preliminary layouts of proposed facilities. For estimating purposes, the prices of comparative work were obtained from a variety of available sources of current information such as recent project bid data, literature, publications, telephone and personal contacts with manufacturers and suppliers of equipment. It should be noted that the unit prices applied to sewer pipelines in the estimates take into account the costs of A.C. pavement removal, disposal, replacement, and cap where these lines occur in paved roads and clearing, grubbing and 12-foot wide access road, construction costs where these lines occur outside of paved streets.

In reviewing the cost estimates presented herein for the proposed projects, it is essential to realize that changes in estimates during final design will alter the totals to some degree. Furthermore, future changes in the cost of material, labor, and equipment certainly will cause comparable changes in the cost summarized herein. Some of the specific cost estimating factors are discussed in the following subsections. The cost data presented are comprised of two primary components: (1) estimated construction costs, and (2) estimated project costs (incidental costs).

Estimated Construction Costs

The basic estimated construction costs apply to preliminary design and layout of major facilities required for the proposed facilities. In such layouts, detailed construction drawings and specifications are not required. Instead, reasonably close approximations of the size, location, route and cost of the various facilities were developed in sufficient detail to permit cost estimates to be made. Estimated construction costs were based upon what one might expect of a "low bid" price to construct the required improvements.

Construction Contingencies

A contingency allowance is made for uncertainties associated with preliminary design. Such factors as differences in final lengths and exact topography associated with the pipelines, unknown underground substructures, and changes made during construction, are a few of the many items which may increase contract costs and for which some allowance must be made in preliminary design estimates.

Cost Index and Price Escalation

Construction costs can be expected to undergo long-term changes in keeping with corresponding changes in the national economy. The best available barometer of these changes is the Engineering News-Record Construction Cost Index (ENR-CCI), which is

computed from prices of construction materials and labor. For purposes of this report, cost data are based on an ENR-CCI Los Angeles. By reference to the ENR-CCI at any future date, the estimated construction costs included herein can be adjusted to match the current costs at that future date. This allows the estimated costs to be updated to the time when actual construction is undertaken.

Engineering Costs

The cost of engineering services for major construction projects may include special investigations, pre-design reports, surveys, foundation explorations, location of interfering utilities, detailed design, preparation of contract drawings and specifications, construction inspection, materials testing, and final inspection of the completed work. Depending on the size and type of the project, the total engineering costs may range from 7 to 20 percent of the contract cost. The lower percentage applies to large projects and to those which do not require a large amount of preliminary investigation. The higher percentage applies to smaller projects or to those which require a relatively large amount of preliminary work.

Legal and Administrative Costs

Legal costs would include items such as assistance in R-O-W acquisition, specification review, construction contract review and approval, coordination during construction, etc. Administrative costs would be those associated with contract administration, progress payments to the Contractor, change orders, notice of completion, etc. Finally, it should be noted that assessment engineering and financing costs are not included in these costs. Assessment engineering and financing costs are those associated with securing funds to pay for the proposed improvements and determination of equitable method(s) of sharing the costs (i.e., costs to benefits). Environmental documentation includes those basic services necessary to obtain environmental clearance to perform the construction. However, extensive environmental services such as those that would be necessary for an environmental impact report and/or environmental impact statement are not included.

PROPOSED CAPITAL IMPROVEMENT PROJECTS

The components used to develop unit construction costs for the trunk sewerlines include pipeline material and installation costs, manhole costs, and asphalt concrete removal, disposal, and replacement costs. Construction costs were determined by reviewing historical bids of similar projects. Road reconstruction was assumed to be 25 feet wide with 4 inches of AC pavement over 8 inches of Class II base. The average depth of the pipe was assumed to be 10-feet and would require Class B-2 bedding. It was assumed nine, 5-ft diameter manholes would be installed for each project. These costs were then updated to correlate with recent bid results that are about 25 percent higher than the “generic bid” results. Not included in the unit cost estimates are extraordinary construction items such as bore casings, dewatering, rock removal, etc. A summary of these estimated unit costs are as shown in **Table 9-1**.

Table 9-1: Estimated Unit Cost of Trunk Sewer Pipelines

Sewer Line Dia. (in.)	Construction Cost	Project Cost ⁽¹⁾
8	\$200.00	\$280.00
10	\$215.00	\$300.00
12	\$245.00	\$345.00
15	\$260.00	\$365.00
18	\$290.00	\$405.00

The unit costs shown in **Table 9-1** were applied to the proposed capital improvement projects shown in **Table 8-3** to develop project cost estimates as summarized in **Table 9-2**. The total estimated project cost for gravity flow pipelines is \$4,760,000. **Plate 2** shows the project locations.

Table 9-2: Cost Analysis for Proposed Capital Improvement Projects

Item	Quantity	Unit	Unit Price	Total Cost
CA-1: 10" Dia. Cottonwood Sewer Replacement	2,500	LF	\$215	\$537,500
CA-2: 12" Dia. Cottonwood Sewer Replacement	1,300	LF	\$245	\$318,500
ES-1: 8" Dia Edgemont Sewer Replacement	1,250	LF	\$200	\$250,000
BS-1: 8" Dia Barbara Sewer Replacement	1,325	LF	\$200	\$265,000
LL-1: 8" Dia Lancaster Sewer Replacement	1,200	LF	\$200	\$240,000
BA-1: 8" Dia. Bay Sewer Replacement	1,250	LF	\$200	\$250,000
AS-1: 8" Dia. Arvonna Sewer Replacement	800	LF	\$200	\$160,000
DS-1: 8" Dia. Day Sewer Replacement	1,000	LF	\$200	\$200,000
AD-1: 8" Dia. Allyn Sewer Replacement	400	LF	\$200	\$80,000
HS-1: 8" Dia. Hildegard Sewer Replacement	900	LF	\$200	\$180,000
BR-1: 8" Dia. Brill Sewer Replacement	1,250	LF	\$200	\$250,000
LC-1: 8" Dia. Linda Sewer Replacement	1,550	LF	\$200	\$310,000
NS-1: 8" Dia. Nolze Sewer Replacement	1,000	LF	\$200	\$200,000
BE-1: 8" Dia. Bertie Sewer Replacement	800	LF	\$200	\$160,000
Total Estimated Construction Cost				\$3,401,000
Total Estimated Project Cost				\$4,760,000 ⁽²⁾

⁽¹⁾ Project cost is 1.4 times construction cost rounded up to nearest \$5. Project cost includes: construction cost, construction contingencies, design engineering including plans and specifications; design and construction surveying and mapping; geotechnical evaluation and report; engineering contract administration; field inspection and basic environmental documentation. Costs are based on Engineering News Record (E.N.R.). The Engineering News Record Construction Cost Index for the Los Angeles Areas for July 2008 was utilized. This value is 9,335.69. Escalation, financing, interest during construction, legal, land, R.O.W. agent, and environmental impact report costs are not included in construction costs. Additionally, not included in the unit cost estimates are extraordinary construction items such as bore casings, dewatering, rock removal etc.

⁽²⁾ Project cost is 1.4 times construction cost rounded up to nearest \$10,000. Project cost, includes: construction cost, construction contingencies, design engineering including plans and specifications; design and construction surveying and mapping; geotechnical evaluation and report; engineering contract administration; field inspection and basic environmental documentation.

RECOMMENDED SEWER SYSTEM REHABILITATION/REPLACEMENT PROJECTS

Section 6 outlined recommended rehabilitation/replacement projects that the District should consider due to conditions that create operation and maintenance problems. These conditions include existing sewer siphon system at Cottonwood Avenue and offset joint at Canyon Springs Shopping Center. A summary of these recommended sewer system rehabilitation/replacement projects and estimated project cost are shown in **Table 9-3**.

Table 9-3: Recommended Sewer System Rehabilitation/Replacement Projects

Project	Quantity	Unit	Unit Price	Total
Recommended Sewer System Replacement				
18" Dia. Cottonwood Siphon Replacement	100	LF	\$600	\$60,000
8" Dia. Canyon Springs Shopping Center Sewer Replacement	1	LS	\$40,000	\$40,000
Total Estimated Construction Cost				\$100,000
Total Estimated Project Cost				\$140,000 ⁽¹⁾

MAINTENANCE IMPROVEMENT PROGRAM

As previously discussed in Section 8, there are various maintenance improvements within the District boundary that are recommended. The improvements were categorized into three (3) programs: 1) manhole replacement program, 2) sewer line point repair program and 3) sewer service lateral replacement program. The estimated construction and project cost for these programs is approximated to be \$200,000 for the manhole replacement program, \$150,000 for the sewerline point repair program and \$36,000 for the sewer service lateral replacement program. It is noted that this is a lump sum estimate utilized for planning purposes only and may vary on a case by case basis.

CITY OF RIVERSIDE WATER QUALITY CONTROL PLANT CAPACITY PURCHASE

The purchase of treatment plant capacity at the City of Riverside WQCP is assumed to reflect the current costs to construct a wastewater treatment plant. Presently, due to the increasing costs of solids treatment and disposal, and due to the amount of treatment capacity being constructed, typical unit project cost is approximately \$12/gallon/day. The District currently owns 0.89 mgd of treatment capacity at the City of Riverside's facility. As discussed in Section 8 of this report, the District would be required to obtain an additional 0.16 mgd of treatment capacity from the City of Riverside. Applying the unit cost factor as

⁽¹⁾ Project is 1.4 times the construction cost rounded to the nearest \$1,000. Project cost includes: construction cost, construction contingencies, design engineering including plans and specifications; design and construction surveying and mapping; geotechnical evaluation and report; engineering contract administration; field inspection and basic environmental documentation. Costs are based on Engineering New Record (E.N.R.).



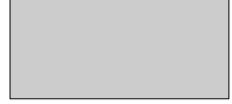












listed above to this capacity increase results in an estimated projected treatment cost of \$1,920,000.

A summary of the estimated project costs for the ECSD Sewer System Improvements are shown in **Table 9-4** with corresponding **Figure 9-1** (see **Plate 2** for full size). As shown in **Table 9-4**, the total project cost estimate of the updated sewer system improvements is approximately \$7,360,000.

EDGEMONT COMMUNITY SERVICES DISTRICT

PROPOSED ECSD SEWER IMPROVEMENT

LEGEND

-  ECSD BOUNDARY
-  CITY BOUNDARY
-  PARCELS
-  CAPITAL IMPROVEMENT PROJECTS
-  RECOMMENDED SEWER IMPROVEMENTS
-  RECOMMENDED POINT REPAIRS AND SEWER LATERAL REPLACEMENT
-  MANHOLE
-  DROP MANHOLE
-  CLEAN OUT
-  LIFT STATION
-  METERING STATION
-  CITY OF RIVERSIDE MANHOLE
-  SEWER LINE
-  SEWER - ABANDONED
-  CITY OF RIVERSIDE SEWER
- $\#L =$ No. OF SERVICE LATERAL REPLACEMENTS
- $\#P =$ No. OF POINT REPAIRS

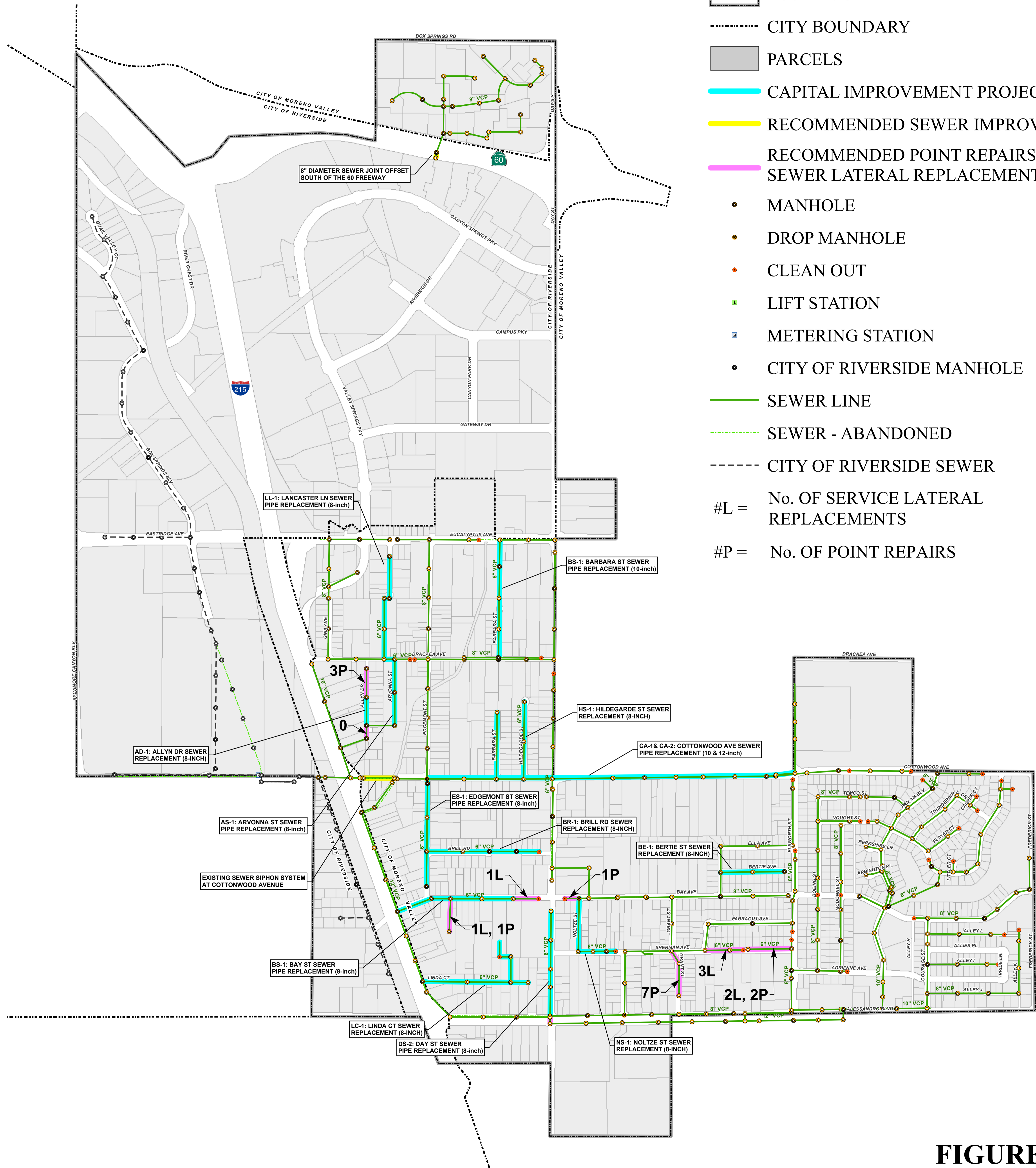


FIGURE 9-1

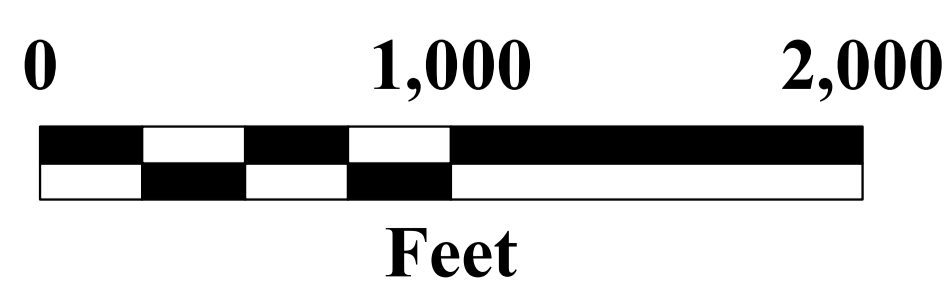


Table 9-4: Edgemont Community Services District Design System Improvements

Item No.	Location	Sewer Replacement Line Size	Quantity	Unit	Unit Cost	Total Cost
Capital Improvement Projects						
Required Upsizing						
CA-1	Cottonwood	10-inch	2500	LF	\$215	\$537,500
CA-2	Cottonwood	12-inch	1300	LF	\$245	\$318,500
ES-1	Edgemont	8-inch	1250	LF	\$200	\$250,000
BS-1	Barbara	8-inch	1325	LF	\$200	\$265,000
LL-1	Lancaster	8-inch	1200	LF	\$200	\$240,000
BA-1	Bay	8-inch	1250	LF	\$200	\$250,000
AS-1	Arvonna	8-inch	800	LF	\$200	\$160,000
DS-1	Day	8-inch	1000	LF	\$200	\$200,000
AD-1	Allyn	8-inch	400	LF	\$200	\$80,000
HS-1	Hildegarde	8-inch	900	LF	\$200	\$180,000
BR-1	Brill	8-inch	1250	LF	\$200	\$250,000
LC-1	Linda	8-inch	1550	LF	\$200	\$310,000
NS-1	Nolze	8-inch	1000	LF	\$200	\$200,000
BE-1	Bertie	8-inch	800	LF	\$200	\$160,000
Total Construction Cost:						\$3,401,000
Total Project Cost:						\$4,761,400
Additional Treatment Cost ⁽¹⁾						\$1,920,000
Total Cost:						\$6,681,400
Recommended Sewer System Replacement						
18-inch Siphon Sysytem Replacement	Cottonwood	18-inch	100	LF	\$600	\$60,000
8-inch Offset Joint Replacement	Canyon Springs	8-inch	1	LS	\$40,000	\$40,000
Total Construction Cost:						\$100,000
Total Project Cost:						\$140,000
Maintenance Improvement Programs						
Manhole Replacement	n/a	n/a	20	EA	\$10,000	\$200,000
Sewerline Point Repair	n/a	n/a	20	EA	\$7,500	\$150,000
Sewer Lateral Replacement	n/a	n/a	10	EA	\$3,600	\$36,000
Total Construction Cost:						\$386,000
Total Project Cost:						\$540,400
Total Construction Cost:						\$3,887,000
Total Project Cost⁽²⁾:						\$5,440,000
Additional Treatment Cost⁽¹⁾:						\$1,920,000
Total Cost:						\$7,360,000

⁽¹⁾ District currently owns 0.89 MGD of treatment capacity at the City of Riverside WQCP. The projected wastewater generated based on ultimate buildout flows is 1.05 MGD. The District would be required to purchase an additional 0.16 MGD at the City of Riverside WQCP. The cost for additional treatment plant capacity is \$12 per gallon per day.

⁽²⁾ Project cost is 1.4 times construction cost rounded up to nearest \$10,000. Project cost includes: construction cost, construction contingencies, design engineering including plans and specifications; design and construction surveying and mapping; geotechnical evaluation and report; engineering contract administration; field inspection and basic environmental documentation. Costs are based on Engineering News Record (E.N.R.). The Engineering News Record Construction Cost Index for the Los Angeles Areas for July 2008 was utilized. This value is 9335.69. Escalation, financing, interest during construction, legal, land, R.O.W. agent, and environmental impact report costs are not included in construction costs. Additionally, not included in the unit cost estimates are extraordinary construction items such as bore casings, dewatering, rock removal etc.

SECTION 10 - SEWER SYSTEM MANAGEMENT PLAN (SSMP)

In November 2004, the State Water Resources Control Board (SWRCB) adopted Resolution 2004-80, requiring staff to develop a regulatory means for reducing sanitary sewage overflows (SSO's) as California's wastewater collection system infrastructure begins to age. Treatment plants, including pretreatment programs, have been regulated for some time; however, collection systems were yet to be regulated.

The SWRCB adopted the statewide General Waste Discharge Requirement (GWDR) on May 2, 2006 requiring that all federal and state agencies, municipalities, counties, districts, and other public entities that own or operate sanitary sewer system greater than one mile in length that collect and/or convey untreated or partially treated wastewater to a publicly owned treatment facility to prepare a Sewer System Management Plan (SSMP).

An SSMP is a document that, required by all agencies, describes the activities that each agency uses to manage their wastewater collection system effectively to minimize the number and impact of SSO's. The required elements of an SSMP include:

1. Collection system management goals
2. Organization of personnel, including the chain of command and communications
3. Legal authority for permitting flows into the system, inflow/infiltration control as well as for new and rehabilitated sewers
4. Operations and maintenance activities to maintain the wastewater collection system
5. Design and performance provisions
6. Overflow emergency response plan
7. Fats, oils, and grease (FOG) control program
8. System evaluation and capacity assurance program
9. Monitoring, measurement, and modifications plan for SSMP program effectiveness
10. Periodic internal SSMP audits
11. SSMP communication program

The District is currently in the process of self-certifying each section of the SSMP. Following the deadlines developed by the SWRCB, the SSMP shall be completed by August 2, 2009.

Appendix A
Summary of 2006 ECSD Treatment Services Invoices

Edgemont Community Services District
Appendix A
Summary of City of Riverside WQCP Wastewater Treatment Invoices to the District ⁽¹⁾

Month	Monthly Total (mg)	Daily Minimum (mg)	Daily Maximum (mg)	Daily Average (mg)
Jan-06	16.54	0.45	0.61	0.54
Feb-06	15.25	n/a	n/a	0.52
Mar-06	15.87	n/a	n/a	0.52
Apr-06	15.86	0.42	0.61	0.54
May-06	17.81	0.50	0.71	0.58
Jun-06	17.79	0.46	0.66	0.60
Jul-06	19.18	0.55	0.76	0.63
Aug-06	19.28	0.48	0.74	0.63
Sep-06	18.76	0.60	0.72	0.64
Oct-06	18.23	0.57	0.71	0.60
Nov-06	16.47	0.47	0.66	0.56
Dec-06	16.24	0.44	0.67	0.53
Daily Average (mg)=				0.574166667
Daily Average (gpd)=				574,000

*Total Sewer EDU's per the ECSD Fiscal Year Sewer Charges Report = **2357**

$$\frac{574,000 \text{ gpd}}{2,357 \text{ EDU}} \approx 240 \text{ gpd/EDU}$$

(1) Data provided by ECSD Monthly Billing from the City of Riverside WQCP for wastewater treatment services.

Appendix B
Projected “Design” Ultimate Wastewater Flows
Based on City of Moreno Valley September 2007 Zoning Land Use Map

Edgemont Community Services District
Appendix B
Projected "Design" Ultimate Wastewater Flows
Based on City of Moreno Valley September 2007 Zoning Land Use Map

Tributary Drainage Area	City of Moreno Valley Land Use Designations (Acre)									Total Acres (AC)	Average Daily Flow per Designated Land Use (gpd)								Projected Average Daily Flow (gpd)		
	Commercial	Office Commercial	Business Park/Industrial	Residential			Public	Open Space ⁶	Commercial ¹		Office Commercial ¹	Business Park/Industrial ¹	Residential			Public ⁶	Open Space ⁷				
				R-5	R-10	R-15	R-20														
Q ₁	9.8	1.7		32.5			32.6	2	12.9	91.5	19,600	3,400		45,500			104,320	2,000	0	174,820	
Q ₂	8.6			20.5	0.4	2.5				32	17,200			28,700	1,120	6,000				53,020	
Q ₃	7.9	0.5		12.3	16.3					37	15,800	1,000		17,220	45,640					79,660	
Q ₄	5.9		1.5		1.6	1.6				10.6	11,800		3,000		4,480	3,840				23,120	
Q _{4A}			36.9							36.9			73,800							73,800	
Q _{4B}	10.3									10.3	20,600									20,600	
Q ₅	13.9		12.4							26.3	27,800		24,800							52,600	
Q ₆			21.4							21.4			42,800							42,800	
Q ₇			12.4							12.4			24,800							24,800	
Q ₈				3.2	25		9.9			38.1				4,480	70,000		31,680			106,160	
Q ₉						26.5				26.5						63,600				63,600	
Q ₁₀				16.5	10	22				48.5				23,100	28,000	52,800				103,900	
Q ₁₁		3.3	4.9	4.5		17.3				30		6,600	9,800	6,300		41,520				64,220	
Q ₁₂		10.4				18.9				29.3		20,800				45,360				66,160	
Q ₁₃		8.1			8.5	4				20.6		16,200			23,800	9,600				49,600	
Q ₁₄			28.4	4.1	7.6	11.2				51.3			56,800	5,740	21,280	26,880				110,700	
Q ₁₅	10.4	4.4	10.8	9.8	3.4	14.1				52.9	20,800	8,800	21,600	13,720	9,520	33,840				108,280	
Q ₁₆			4.8							4.8			9,600							9,600	
Q _{16A}	32.9									32.9	65,800									65,800	
Q ₁₇	0.5	1.76						9.5		11.76	1,000	3,520						9,500		14,020	
Q ₁₈	8.5									8.5	17,000									17,000	
TOTAL	633.56	108.7	30.16	133.5	103.4	72.8	118.1	42.5	11.5	12.9	633.56	217,400	60,320	267,000	144,760	203,840	283,440	136,000	11,500	0	1,324,260

¹ Based upon 2,000 gpd/AC

² Based upon R-5 = 5 DU/AC x 280 gpd/DU = 1,400 gpd/AC

³ Based upon R-10 = 10 DU/AC x 280 gpd/DU = 2,800 gpd/AC

⁴ Based upon R-15 = 15 DU/AC x 160 gpd/DU = 2,400 gpd/AC

⁵ Based upon R-20 = 20 DU/AC x 160 gpd/DU = 3,200 gpd/AC

⁶ Based upon 1000 gpd/AC.

⁷ Assumed to generate negligible wastewater flow.

Appendix C
Projected Ultimate Wastewater Flows for Treatment Plant Capacity
Based on City of Moreno Valley September 2007 Zoning and Land Use Map

Edgemont Community Services District
Appendix C
Projected "Adjusted" Ultimate Wastewater Flows
Based on City of Moreno Valley September 2007 Zoning Land Use Map

Tributary Drainage Area	City of Moreno Valley Land Use Designations (Acre)										Total Acres (AC)	Average Daily Flows per Designated Land Use (gpd)								Projected Average Daily Flow (gpd)		
	Residential											Residential										
	Commercial	Office Commercial	Business Park/Industrial	R-5	R-10	R-15	R-20	Public	Open Space ⁶	Commercial ¹		Office Commercial ¹	Business Park/Industrial ¹	R-5 ²	R-10 ³	R-15 ⁴	R-20 ⁵	Public ⁶	Open Space ⁷			
Q ₁	9.8	1.7		32.5			32.6	2	12.9	91.5	9,800	1,700		39,000			104,320	2,000		156,820		
Q ₂	8.6			20.5	0.4	2.5				32	8,600			24,600	960	6,000				40,160		
Q ₃	7.9	0.5		12.3	16.3					37	7,900	500		14,760	39,120					62,280		
Q ₄	5.9		1.5		1.6	1.6				10.6	5,900		1,500		3,840	3,840				15,080		
Q _{4A}			36.9							36.9			36,900							36,900		
Q _{4B}	10.3									10.3	10,300									10,300		
Q ₅	13.9		12.4							26.3	13,900		12,400							26,300		
Q ₆			21.4							21.4			21,400							21,400		
Q ₇			12.4							12.4			12,400							12,400		
Q ₈				3.2	25		9.9			38.1				3,840	60,000		31,680			95,520		
Q ₉						26.5				26.5						63,600				63,600		
Q ₁₀				16.5	10	22				48.5				19,800	24,000	52,800				96,600		
Q ₁₁		3.3	4.9	4.5		17.3				30		3,300	4,900	5,400		41,520				55,120		
Q ₁₂		10.4				18.9				29.3		10,400				45,360				55,760		
Q ₁₃		8.1			8.5	4				20.6		8,100			20,400	9,600				38,100		
Q ₁₄			28.4	4.1	7.6	11.2				51.3			28,400	4,920	18,240	26,880				78,440		
Q ₁₅	10.4	4.4	10.8	9.8	3.4	14.1				52.9	10,400	4,400	10,800	11,760	8,160	33,840				79,360		
Q ₁₆			4.8							4.8			4,800							4,800		
Q _{16A}	32.9									32.9	32,900									32,900		
Q ₁₇	0.5	1.76						9.5		11.76	500	1,760					9,500			11,760		
Q ₁₈	8.5									8.5	8,500									8,500		
Q ₁₉	47									47	47,000									47,000		
TOTAL		155.7	30.16	133.5	103.4	72.8	118.1	42.5	11.5	12.9	680.56	155,700	30,160	133,500	124,080	174,720	283,440	136,000	11,500	0	1,049,100	
TOTAL AC.	680.56																					

¹ Based upon 1,000 gpd/AC
² Based upon R-5 = 5 DU/AC x 240 gpd/DU = 1,200 gpd/AC
³ Based upon R-10 = 10 DU/AC x 240 gpd/DU = 2,400 gpd/AC
⁴ Based upon R-15 = 15 DU/AC x 160 gpd/DU = 2,400 gpd/AC
⁵ Based upon R-20 = 20 DU/AC x 160 gpd/DU = 3,200 gpd/AC
⁶ Based upon 1000 gpd/AC.
⁷ Assumed to generate negligible wastewater flow.

Appendix D
Projected “Design Buildout” Peak and Wet Weather Flows
Based on City of Moreno Valley September 2007 Zoning and Land Use Map

Edgemont Community Services District
Appendix D
Projected "Design" Peak and Wet Weather Flows
Based on City of Moreno Valley September 2007 Zoning Land Use Map

Tributary Drainage Area	Acres(AC)	Commercial/Industrial Average Daily Flow (gpd)	Residential Average Daily Flow (gpd)	Public/Open space Average Daily Flow (gpd)	Total Average Daily Flow (gpd)	Peak Dry Weather Flow (gpd)	Wet Weather Infiltration (gpd)	Peak Wet Weather Flow (gpd)
Q ₁	91.5	23,000	149,820	2,000	174,820	-	14,640	-
Q ₂	32	17,200	35,820	0	53,020	-	5,120	-
Q ₃	37	16,800	62,860	0	79,660	-	5,920	-
Q ₄	10.6	14,800	8,320	0	23,120	-	1,696	-
Q _{4A}	36.9	73,800		0	73,800	-	5,904	-
Q _{4B}	10.3	20,600		0	20,600	-	1,648	-
Q ₅	26.3	52,600		0	52,600	-	4,208	-
Q ₆	21.4	42,800		0	42,800	-	3,424	-
Q ₇	12.4	24,800		0	24,800	-	1,984	-
Q ₈	38.1	0	106,160	0	106,160	-	6,096	-
Q ₉	26.5	0	63,600	0	63,600	-	4,240	-
Q ₁₀	48.5	0	103,900	0	103,900	-	7,760	-
Q ₁₁	30	16,400	47,820	0	64,220	-	4,800	-
Q ₁₂	29.3	20,800	45,360	0	66,160	-	4,688	-
Q ₁₃	20.6	16,200	33,400	0	49,600	-	3,296	-
Q ₁₄	51.3	56,800	53,900	0	110,700	-	8,208	-
Q ₁₅	52.9	51,200	57,080	0	108,280	-	8,464	-
Q ₁₆	4.8	9,600		0	9,600	-	768	-
Q _{16A}	32.9	65,800		0	65,800	-	5,264	-
Q ₁₇	11.76	4,520		9,500	14,020	-	1,882	-
Q ₁₈	8.5	17,000		0	17,000	-	1,360	-
Total	633.56	544,720	768,040	11,500	1,324,260	3,228,016	101,370	3,329,386

Appendix E
Hydraulic Analysis

Edgemont Community Services District
Appendix E
Hydraulic Analysis

Reach	Tributary Areas Contributing Flows	Average Daily Flow (MGD)	Peak Daily Flow (MGD)	Peak Wet Weather Flow (MGD)	Pipe Diameter (in)	D/d ⁽¹⁾	K'	Slope	Maximum Flow Capacity (MGD)
A1	Q ₁	0.209	0.601	0.616	12	0.75	0.42200	0.00400	1.327
A2	Q ₂	0.043	0.143	0.148	8	0.50	0.23200	0.00160	0.157
A3	Q ₁ , Q ₂	0.252	0.714	0.733	12	0.75	0.42200	0.00400	1.327
A4	Q ₃	0.062	0.200	0.206	8	0.50	0.23200	0.00400	0.247
A5	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A}	0.368	1.007	1.041	12	0.75	0.42200	0.00400	1.327
A6	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A} , Q _{4b}	0.379	1.033	1.068	12	0.75	0.42200	0.00360	1.259
I1	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A} , Q _{4b} , Q ₅	0.405	1.098	1.137	12	0.75	0.42200	0.00360	1.259
I2	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A} , Q _{4b} , Q ₅ , Q ₆	0.426	1.151	1.193	12	0.75	0.42200	0.00520	1.513
I3	Q ₁₅	0.096	0.297	0.306	10	0.75	0.42200	0.00710	1.087
C1	Q ₈	0.111	0.339	0.345	8	0.50	0.23200	0.00400	0.247
C2	Q ₈ , Q ₉	0.207	0.596	0.606	8	0.50	0.23200	0.00400	0.247
C3	Q ₈ , Q ₉ , Q ₁₀	0.330	0.911	0.929	8	0.50	0.23200	0.00400	0.247
C4	Q ₈ , Q ₉ , Q ₁₀ , Q ₁₁	0.406	1.100	1.123	8	0.50	0.23200	0.00410	0.251
C5	Q ₈ , Q ₉ , Q ₁₀ , Q ₁₁ , Q ₁₂ , Q ₁₃	0.527	1.396	1.427	12	0.75	0.42200	0.00660	1.704
C6	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A} , Q _{4b} , Q ₅ , Q ₆ , Q ₇ , Q ₈ , Q ₉ , Q ₁₀ , Q ₁₁ , Q ₁₂ , Q ₁₃ , Q ₁₄	1.058	2.631	2.714	18	0.75	0.42200	0.00200	2.766
C7	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A} , Q _{4b} , Q ₅ , Q ₆ , Q ₇ , Q ₈ , Q ₉ , Q ₁₀ , Q ₁₁ , Q ₁₂ , Q ₁₃ , Q ₁₄ , Q ₁₅ , Q ₁₆	1.159	2.859	2.951	18	0.75	0.42200	0.00250	3.092
M1	Q ₁₀	0.123	0.371	0.379	8	0.50	0.23200	0.00480	0.271
M2	Q ₁₂	0.078	0.247	0.251	8	0.50	0.23200	0.00400	0.247
M3	Q ₁₂ , Q ₁₃	0.121	0.367	0.375	8	0.50	0.23200	0.00530	0.285

(1) D/d shall be 0.75 for pipes and 10-inches or greater in diameter and 0.50 for pipes 8-inches or less in diameter

Appendix F
Existing Generation Factors

**ECSD Master Sewer Plan,
Existing Generation Factors per September 2007 Zoning Land**

1EDU = 240GPD, per Appendix A

Residential: Max 5DU/AC

$$558.00 \text{ EDU} \times 240\text{gpd}/1\text{EDU} = 133,920 \text{ gpd}/103.90 \text{ AC}$$
$$\Rightarrow 1,290 \text{ gpd}/\text{AC}$$

Residential: Max 10DU/AC

$$160.69 \text{ EDU} \times 240\text{gpd}/1\text{EDU} = 38,565.6\text{gpd}/72.72\text{AC}$$
$$\Rightarrow 530\text{gpd}/\text{AC}$$

Residential: Max 15DU/AC

$$149.00 \text{ EDU} \times 240\text{gpd}/1\text{EDU} = 35,760\text{gpd}/118.04\text{AC}$$
$$\Rightarrow 300\text{gpd}/\text{AC}$$

Residential: Max 20DU/AC

$$350.00\text{EDU} \times 240\text{gpd}/1\text{EDU} = 132,000\text{gpd}/42.5\text{AC}$$
$$\Rightarrow 3,100\text{gpd}/\text{AC}$$

Office Commercial

$$56.00\text{EDU} \times 240\text{gpd}/1\text{EDU} = 13,440\text{gpd}/32.84\text{AC}$$
$$\Rightarrow 410\text{gpd}/\text{AC}$$

Commercial

$$284.29\text{EDU} \times 240\text{gpd}/1\text{EDU} = 68,229.6/310\text{AC}$$
$$\Rightarrow 220\text{gpd}/\text{AC}$$

Business Park/Industrial

$$185.07\text{EDU} \times 240\text{gpd}/1\text{EDU} = 44,416.8/132.90\text{AC}$$
$$\Rightarrow 335\text{gpd}/\text{AC}$$

Public

$$21.83\text{EDU} \times 240\text{gpd}/1\text{EDU} = 5,239.2/11.50\text{AC}$$
$$\Rightarrow 455\text{gpd}/\text{AC}$$

W.O. No. 2006-0352

By: J.N. 10-23-07

Checked by: S.Y. 9-23-08

Appendix G
Hydraulic Analysis Based on Current Wastewater Flows

Edgemont Community Services District
Appendix G
Hydraulic Analysis for Current Wastewater Flows

Reach	Tributary Areas Contributing Flows	Average Daily Flow (MGD)	Peak Daily Flow (MGD)	Peak Wet Weather Flow (MGD)	Pipe Diameter (in)	D/d	K'	Slope	Maximum Flow Capacity (MGD)
A1	Q ₁	0.176	0.515	0.530	12	0.75	0.42200	0.00400	1.327
A2	Q ₂	0.042	0.141	0.146	8	0.50	0.23200	0.00160	0.157
A3	Q ₁ , Q ₂	0.219	0.627	0.647	12	0.75	0.42200	0.00400	1.327
A4	Q ₃	0.034	0.116	0.122	8	0.50	0.23200	0.00400	0.247
A5	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A}	0.262	0.739	0.773	12	0.75	0.42200	0.00400	1.327
A6	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A} , Q _{4b}	0.265	0.746	0.781	12	0.75	0.42200	0.00360	1.259
I1	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A} , Q _{4b} , Q ₅	0.273	0.768	0.807	12	0.75	0.42200	0.00360	1.259
I2	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A} , Q _{4b} , Q ₅ , Q ₆	0.284	0.795	0.838	12	0.75	0.42200	0.00520	1.513
I3	Q ₁₅	0.026	0.091	0.100	10	0.75	0.42200	0.00710	1.087
C1	Q ₈	0.059	0.189	0.195	8	0.50	0.23200	0.00400	0.247
C2	Q ₈ , Q ₉	0.064	0.204	0.214	8	0.50	0.23200	0.00400	0.247
C3	Q ₈ , Q ₉ , Q ₁₀	0.105	0.322	0.340	8	0.50	0.23200	0.00400	0.247
C4	Q ₈ , Q ₉ , Q ₁₀ , Q ₁₁	0.127	0.382	0.404	8	0.50	0.23200	0.00410	0.251
C5	Q ₈ , Q ₉ , Q ₁₀ , Q ₁₁ , Q ₁₂ , Q ₁₃	0.171	0.501	0.532	12	0.75	0.42200	0.00660	1.704
C6	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A} , Q _{4b} , Q ₅ , Q ₆ , Q ₇ , Q ₈ , Q ₉ , Q ₁₀ , Q ₁₁ , Q ₁₂ , Q ₁₃ , Q ₁₄	0.502	1.336	1.419	18	0.75	0.42200	0.00200	2.766
C7	Q ₁ , Q ₂ , Q ₃ , Q ₄ , Q _{4A} , Q _{4b} , Q ₅ , Q ₆ , Q ₇ , Q ₈ , Q ₉ , Q ₁₀ , Q ₁₁ , Q ₁₂ , Q ₁₃ , Q ₁₄ , Q ₁₅ , Q ₁₆	0.534	1.413	1.505	18	0.75	0.42200	0.00250	3.092
M1	Q ₁₀	0.042	0.138	0.146	8	0.50	0.23200	0.00480	0.271
M2	Q ₁₂	0.025	0.089	0.093	8	0.50	0.23200	0.00400	0.247
M3	Q ₁₂ , Q ₁₃	0.044	0.146	0.154	8	0.50	0.23200	0.00530	0.285

Appendix H
Proposed Sewer System Analysis

Edgemont Community Services District
Appendix H
Proposed Sewer System Analysis

Reach	Tributary Areas Contributing Flows	Average Daily Flow (MGD)	Peak Daily Flow (MGD)	Peak Wet Weather Flow (MGD)	Pipe Diameter (in)	D/d	K'	Slope	Flow Capacity (MGD)
C1	Q ₈	0.175	0.511	0.526	10	0.75	0.23200	0.00400	0.816
C2	Q ₈ , Q ₉	0.228	0.651	0.670	10	0.75	0.23200	0.00400	0.816
C3	Q ₈ , Q ₉ , Q ₁₀	0.308	0.855	0.881	12	0.75	0.23200	0.00400	1.327
C4	Q ₈ , Q ₉ , Q ₁₀ , Q ₁₁	0.331	0.913	0.940	12	0.75	0.23200	0.00410	1.343

Appendix I
July 4, 2008 Photos of Canyon Springs 8" Dia. Pipe taken by District Representative



Photo #1: Canyon Springs - Joint Offset



Photo #2: Canyon Springs - Joint Offset

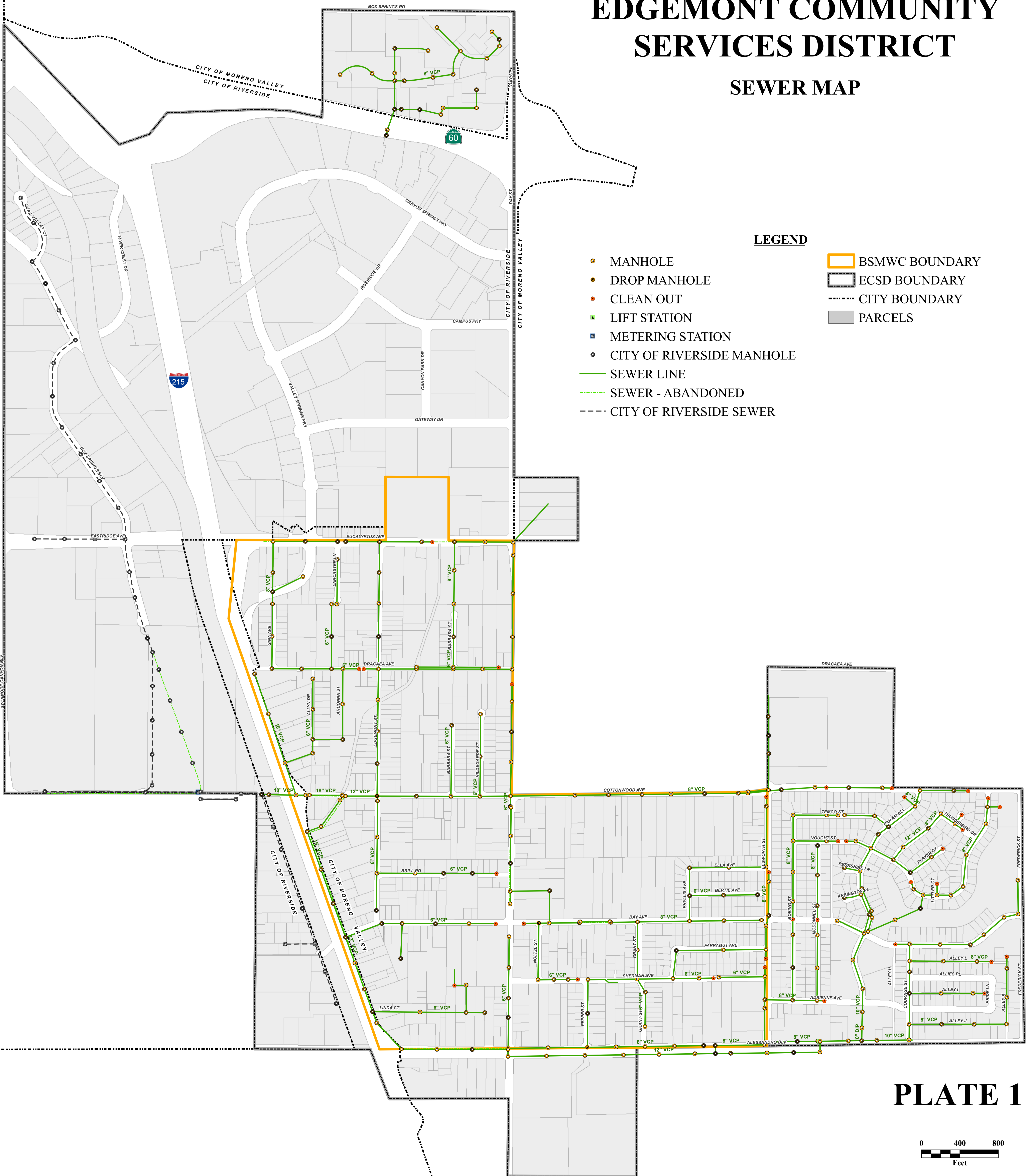
Photo #3: Canyon Springs - Joint Offset



Photo #3: Canyon Springs - Joint Offset

EDGEMONT COMMUNITY SERVICES DISTRICT

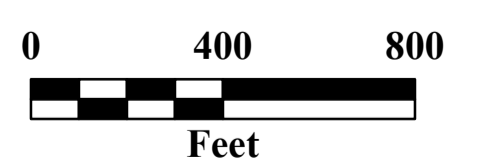
SEWER MAP



LEGEND

- MANHOLE
- DROP MANHOLE
- CLEAN OUT
- LIFT STATION
- METERING STATION
- CITY OF RIVERSIDE MANHOLE
- SEWER LINE
- SEWER - ABANDONED
- CITY OF RIVERSIDE SEWER
- BSMWC BOUNDARY
- ECSD BOUNDARY
- CITY BOUNDARY
- PARCELS











PLATE 1



EDGEMONT COMMUNITY SERVICES DISTRICT

PROPOSED ECSD SEWER IMPROVEMENTS

LEGEND

-  ECSD BOUNDARY
-  CITY BOUNDARY
-  PARCELS
-  PROPOSED 6" SEWER REPLACEMENT PROJECT
-  PROPOSED SEWER REPLACEMENT PROJECT
-  MANHOLE
-  DROP MANHOLE
-  CLEAN OUT
-  LIFT STATION
-  METERING STATION
-  CITY OF RIVERSIDE MANHOLE
-  SEWER LINE
-  SEWER - ABANDONED
-  CITY OF RIVERSIDE SEWER

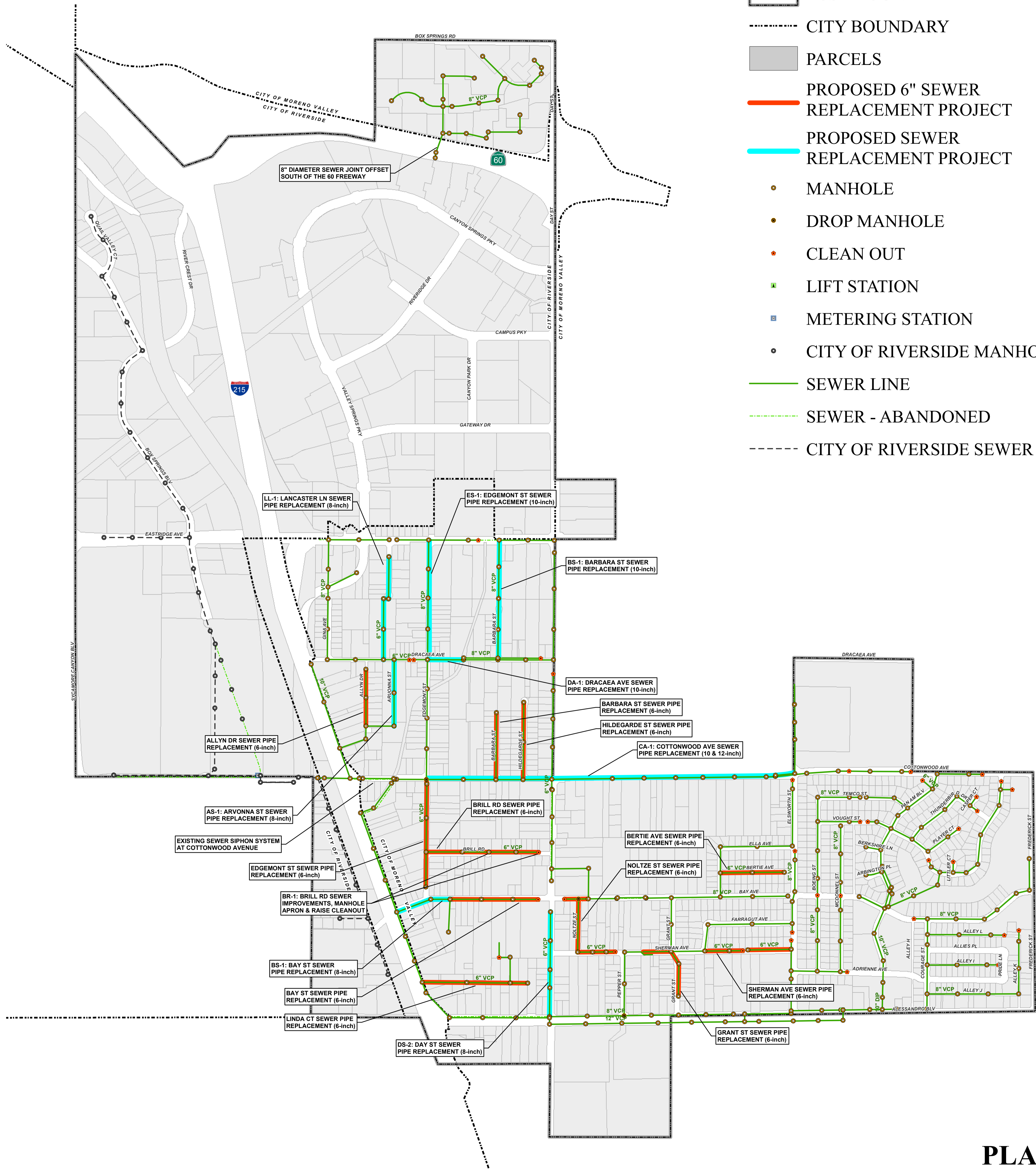
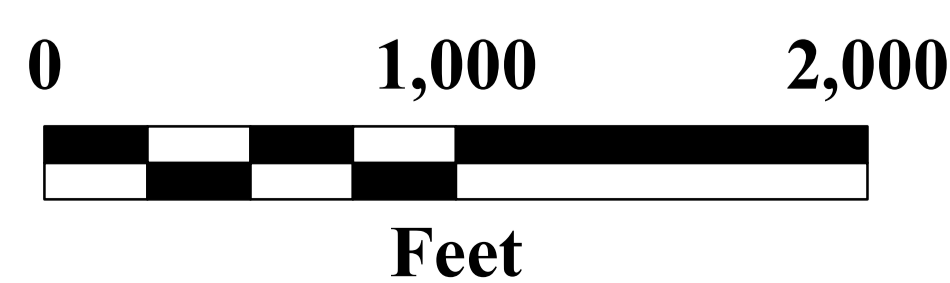


PLATE 2



Source: Riverside County 2007

Map revised March 18, 2008. G:\2006\06-0352\Gis\Sewer_Prop_ECSD_36x30_Plate.mxd

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April 27, 2022

Ms. Jessica Pfalmer
General Manager
EDGEMONT COMMUNITY SERVICES DISTRICT
P.O. Box 5436
Riverside, CA 92517

RE: ECSD Sewer System Capacity Evaluation based
on the City of Moreno Valley General Plan 2040

Dear Ms. Pfalmer:

The City of Moreno Valley has adopted their General Plan 2040¹ and has incorporated their proposed 2040 land use planning into their land use map. This evaluation will review how the City of Moreno Valley's land planning changes affect ECSD's current and planned wastewater collection system and projected ultimate wastewater generation.

The Edgemont Community Services District's (ECSD) September 2008 Master Sewer System Evaluation Plan (Master Sewer Plan) was developed utilizing the City of Moreno Valley's 2008 General Plan Land Use and Zoning Maps incorporating the City's ultimate buildout condition within ECSD's service area to estimate the ultimate wastewater generation. As development occurs within ECSD's service area, the potential wastewater generation from these projects are evaluated in conjunction with ECSD's sewer system capacity and availability to serve these projects. The City of Moreno Valley periodically updates their land use and zoning maps. Therefore, as part of ECSD's sewer availability review process, proposed development projects are compared with the City's current land use along with ECSD's 2008 Master Sewer Plan to determine potential changes in land use that may affect ECSD's planned wastewater generation.

Based upon the newly adopted City of Moreno Valley Land Use Map (General Plan 2040), WEBB calculated the anticipated wastewater generation and compared it with the wastewater generation projection per ECSD's 2008 Master Sewer Plan. The following wastewater generation factors that were used in the 2008 Master Sewer Plan are provided in **Table 1**.

¹ City of Moreno Valley General Plan 2040, Adopted June 15, 2021

Table 1
Summary of ECSD’s Wastewater Generation Factors
per 2008 Master Sewer Plan

Land Use	Wastewater Generation Factor
Residential Wastewater (low density: 5 to 10 EDU/acre)	280 gpd/EDU (pipeline design purpose)
Residential Wastewater (low density: 5 to 10 EDU/acre)	240 gpd/EDU (treatment capacity purposes)
Residential Wastewater (high density: 15 to 20 EDU/acre)	160 gpd/EDU (both pipeline design and treatment)
Commercial/Industrial	2,000 gpd/acre (pipeline design purposes)
Commercial/Industrial	1,000 gpd/acre (treatment capacity purposes)
Public Uses	1,000 gpd/acre (both pipeline design and treatment)
Open Space	Not applicable

The above wastewater generation factors shown in **Table 1** ranges from 160 gpd/EDU² to 280 gpd/EDU depending on the residential density. Non-residential wastewater generation factors are based on gallons per acre with factors varying based on type land use.

To maintain consistency with the 2008 Master Sewer Plan, ECSD’s service area have been divided into nineteen (19) tributary subareas. Subarea Q16A was included in the 2008 Master Sewer Plan; however, it is not included in this evaluation since Q16A is within the City of Riverside service area. Summarized in **Table 2** are ECSD’s estimated ultimate wastewater generation for pipeline and treatment capacity based on 2008 City of Moreno Valley Land Use Designations. Refer to **Figure 1** for the tributary areas delineation with Moreno Valley’s 2008 land use designations overlay.

² gpd/EDU – Gallons per Day/Equivalent Dwelling Unit

Table 2³
Ultimate Wastewater Generation Based on Moreno Valley 2008 Land Use

Tributary Drainage Area	Project Average Daily Flow Pipeline Capacity (gpd)	Project Average Daily Flow Treatment Capacity (gpd)
Q1	174,611	156,675
Q2	53,082	40,175
Q3	79,703	62,326
Q4	23,181	15,091
Q4A	73,730	36,865
Q4B	20,654	10,327
Q5	52,534	26,267
Q6	42,768	21,384
Q7	24,728	12,364
Q8	106,091	95,452
Q9	63,665	63,665
Q10	104,393	97,036
Q11	64,294	55,216
Q12	66,259	55,795
Q13	49,357	37,874
Q14	110,771	78,515
Q15	108,231	79,320
Q16	9,592	4,796
Q17	14,066	11,804
Q18	16,922	8,461
Q19	97,186	48,593
TOTAL	1,356,000*	1,018,000*

* Rounded to nearest 1,000.

³ Refer to Attachments 1A and 1B for detailed breakdown.

Detailed flow monitoring of ECSD’s sewer system was performed during October 28, 2016 to November 3, 2016 for ECSD’s February 23, 2017 Salinity Study Report. One of the results developed from the Salinity Study provided for an average wastewater generation factor of 184 gpd/EDU. The Salinity Study’s wastewater generation factor has a closer correlation to the lower range wastewater generation factors from the 2008 Master Sewer Plan. Therefore, for the purposes of this evaluation to provide for a more accurate wastewater generation and to maintain consistency with the ECSD’s 2008 Master Sewer Plan, the lower range wastewater generation factors will be utilized as summarized in **Table 3**.

Table 3
Summary of ECSD’s Wastewater Generation Factors
For Evaluation of Moreno Valley General Plan 2040

Land Use	Wastewater Generation Factor
Residential Wastewater (low density: 3 to 10 EDU/acre)	240 gpd/EDU
Residential Wastewater (high density: 15 to 30 EDU/acre)	160 gpd/EDU
Commercial/Industrial	1,000 gpd/acre
Public Uses	1,000 gpd/acre
Open Space	Not applicable

The following **Table 4** summarizes ECSD’s estimated ultimate wastewater generation based on the currently adopted City of Moreno Valley 2040 General Plan. Refer to **Figure 2** for the tributary areas delineation with 2040 General Plan land use designation overlay.

Table 4⁴
Ultimate Wastewater Generation Based on Moreno Valley 2040 General Plan⁵

Tributary Drainage Area	Projected Average daily Flow (gpd)
Q1	154,787
Q2	52,412
Q3	37,171
Q4	10,212
Q4A	36,380
Q4B	10,327
Q5	26,267
Q6	21,379
Q7	12,362
Q8	95,445
Q9	26,527
Q10	48,116
Q11	27,893
Q12	29,281
Q13	35,482
Q14	48,328
Q15	42,222
Q16	4,328
Q17	11,853
Q18	8,460
Q19	47,030
TOTAL	786,000*

* Rounded to nearest 1,000.

⁴ Refer to Attachment 2 for a detailed breakdown.

⁵ The currently adopted 2021 Land Use Map is based on the adopted General Plan 2040.

EDGEMONT COMMUNITY SERVICES DISTRICT

2040 TRIBUTARY SEWAGE FLOW AREAS

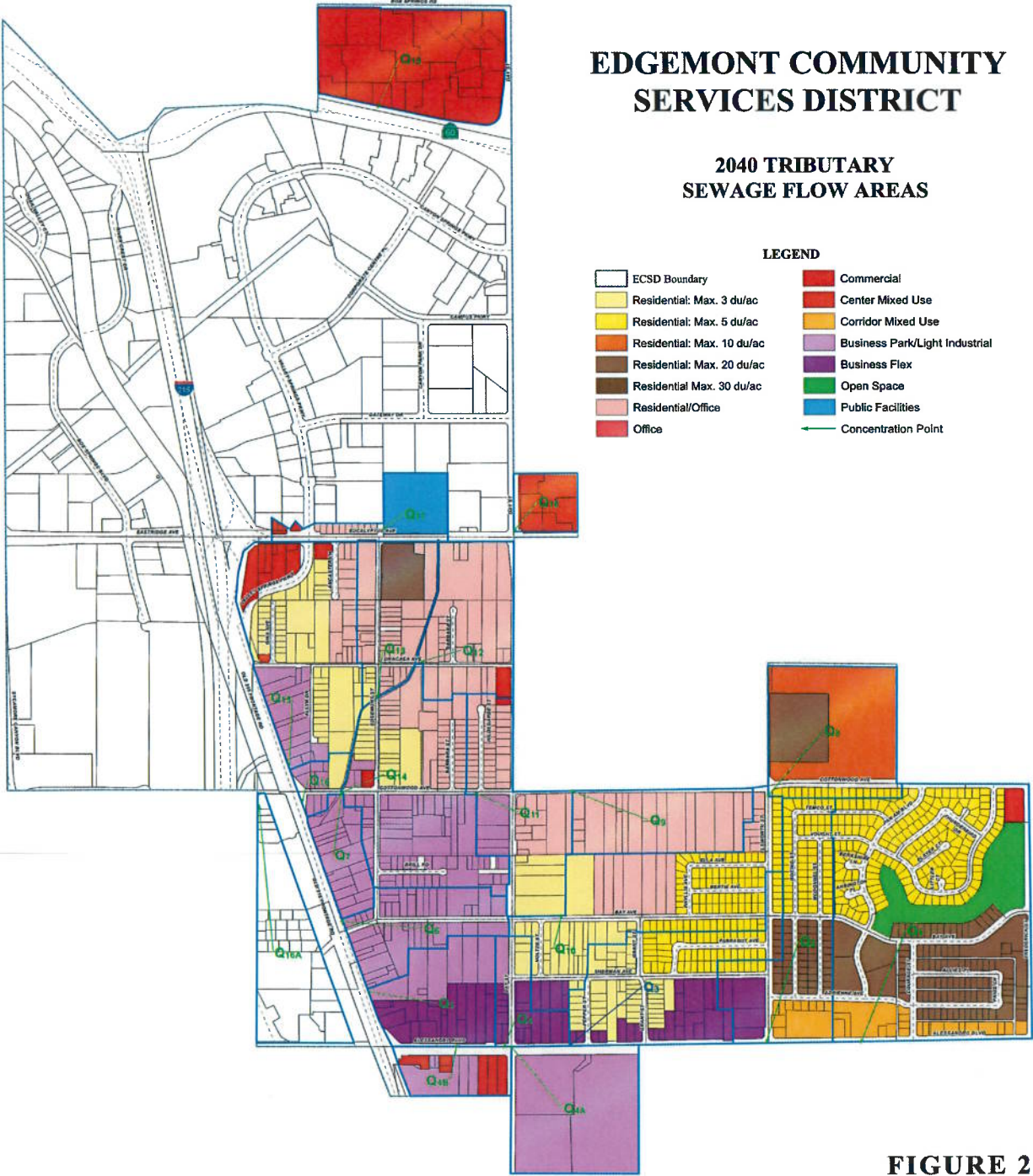
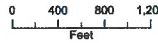


FIGURE 2

Edgemont Community Services District and Alton A. Webb Associates (EWSA) Associates warrant no warranty or legal responsibility as to the accuracy of the information portrayed on this map. Any and all information appearing on this map is a compilation of data received from other sources and is subject to update and modification. The District, Webb Associates and other sources should be consulted for the most current information. This map shall not be reproduced or distributed in any manner.



1 inch = 400 feet



* FROM CITY OF MORENO VALLEY GIS - PROPOSED GENERAL PLAN LAND USE MAP LCC-4

Map revised April 20, 2023. L:\CADD\GIS\DTM\EDGEMONT\GIP\U_2040_Trib_Areas.mxd

We estimate that the projected ultimate wastewater generation from 2008 to 2040 land use will decrease from 1,018,000 gpd (1,356,000 gpd for pipeline capacity) to 786,000 gpd. After reviewing the City’s 2008 and 2040 land use maps, we have concluded that the reduction in wastewater flow is attributed to:

- Conversion of purely residential areas to shared residential/office land use.
- Conversion of some maximum of twenty dwelling units per acre to more business and commercial land uses.
- Conversion of a sizeable portion of residential/office land use to residential areas with lower density of a maximum of three (3) dwelling units per acre.
- The most significant impact to the wastewater generation reduction is the conversion of all residential areas with a maximum of thirty dwelling units per acre to other land uses such as business flex and corridor mixed use spaces.

Table 5 provides a summary of the projected average daily flow under ultimate conditions based on the City’s 2008 and 2040 land use criteria.

Table 5
Ultimate Project Wastewater Generation based on
2008 and 2040 Land Use Designations

Land Use Designation (Year)	Projected Average Daily Flow (gpd)
2008	1,018,000 (1.02 MGD)
2040	786,000 (0.79 MGD)

FINDINGS

The projected ultimate wastewater generation within ECSD’s service area is estimated to decrease from the 2008 Master Sewer Plan estimates based upon applying the City of Moreno Valley’s General Plan 2040 from 1,018,000 gpd (1,356,000 gpd for pipeline capacity) to 786,000 gpd respectively. The projected ultimate wastewater flow for subarea Q2 for the 2008 Master Sewer Plan was projected to be 53,082 gpd (pipeline capacity) and 40,175 gpd (treatment capacity). The projected ultimate wastewater flow for subarea Q2 based on the City’s 2040 General Plan is 52,412 gpd. The ultimate wastewater flows for all other subareas are projected to be lower when applying the City’s 2040 General Plan land use. Therefore, ECSD’s current and planned collection system infrastructure are not adversely affected. With the exception of

Ms. Jessica Pfalmer
General Manager
EDGEMONT COMMUNITY SERVICES DISTRICT
April 26, 2022
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the proposed Cottonwood Trunk Sewer Upsizing⁶, upsizing of the ECSD's sewerlines will not be required.

ECSD currently has 0.89 MGD of wastewater treatment capacity rights in the City of Riverside Regional Reclamation Plant. Based upon the above analysis it does not appear at this time that ECSD will need to acquire any significant wastewater treatment capacity in the future based upon the City of Moreno Valley General Plan 2040.

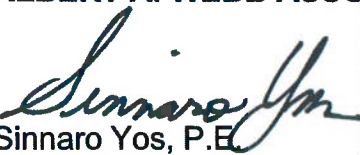
RECOMMENDATIONS

Further evaluation and flow monitoring is recommended to further refine sewer generation rates within ECSD's service area.

Upon receipt of the request for availability for the proposed Scottish Village Condominium (Figure 3), WEBB recommends reevaluation of the project's wastewater generation to confirm if the proposed Cottonwood Trunk Sewer upsizing is required.

Sincerely,

ALBERT A. WEBB ASSOCIATES



Sinnaro Yos, P.E.
Senior Engineer



Sam I. Gershon, R.C.E.
Senior Vice President

Enclosures

- Attachment 1A – Wastewater Generation Projection for Pipeline Capacity, Moreno Valley 2008 Land Use
- Attachment 1B – Wastewater Generation Projection for Treatment Capacity, Moreno Valley 2008 Land Use
- Attachment 2 – Wastewater Generation Projection, Moreno Valley 2040 Land Use

⁶ Project Nos. CA-1 and CA-2, ECSD 2008 Master Sewer Plan, pending proposed Scottish Village Condo Development, 194 Units, northeast corners of Cottonwood Avenue and Elsworth Street.



EDGEMONT COMMUNITY SERVICES DISTRICT

FIGURE 3

Attachment 1A
Edgemont Community Services District
Wastewater Generation Projection
2008 Collection System Capacity Analysis
Moreno Valley 2008 Land Use

Tributary Drainage Area	City of Moreno Valley Land Use Designations (Acre)												Average Daily Flows per Designated Land Use (gpd)							Projected Average Daily Flow (gpd)		
	Business						Residential						Business								Public/Open	
	Commercial	Office Commercial	Business Park/Industrial	R-5	R-10	R-15	R-20	Public	Open Space ⁶	Public/Open	Total Acres (AC)	Commercial ¹	Office Commercial ¹	Business Park/Industrial ¹	R-5 ²	R-10 ³	R-15 ⁴	R-20 ⁵	Public ⁶		Open Space ⁷	
Q ₁	9.8	1.7		32.5	0.4	2.5	32.6	2.0	12.9	91.4	19,530	3,342		45,497			104,250	1,992	0	174,611		
Q ₂	8.6			20.5	16.3	0.001	0.003			32.0	17,264			28,736	1,187	5,885	10			53,082		
Q ₃	7.9	0.5		12.3	1.6					37.0	15,706	1,070		17,265	45,660	2				79,703		
Q ₄	5.9		1.5			1.6				10.6	11,898		3,040		4,346	3,898				23,181		
Q _{4A}			36.9							36.9			73,730							73,730		
Q _{4B}	10.3									10.3	20,654									20,654		
Q ₅	13.9		12.4							26.3	27,794		24,740								52,534	
Q ₆			21.4							21.4			42,768								42,768	
Q ₇			12.4							12.4			24,728								24,728	
Q ₈				3.2	25.0		9.9			38.1				4,494	69,978		31,619				106,091	
Q ₉						26.5				26.5				23,625	27,877	63,665					63,665	
Q ₁₀				16.9	10.0					48.9						52,891					104,383	
Q ₁₁		3.3	4.9	4.5		17.3				30.0	6,528	9,824		6,314		41,628					64,294	
Q ₁₂		10.5				18.9				29.4	20,928					45,331					66,259	
Q ₁₃			8.1			4.0				20.5		16,200			23,677	9,480					49,357	
Q ₁₄			28.4	4.1	7.6	11.2				51.3		56,790		5,733	21,294	26,954					110,771	
Q ₁₅	10.4	4.4	10.8	9.8	3.4	14.1				52.9	20,800	8,796	21,562	13,731	9,596	33,746					108,231	
Q ₁₆			4.8							4.8			9,592								9,592	
Q ₁₇	0.5	1.8						9.5		11.8	1,018	3,506						9,542			14,066	
Q ₁₈	8.5									8.5	16,922										16,922	
Q ₁₈	48.6									48.6	97,186										97,186	
TOTAL	124.4	30.2	133.4	103.9	72.7	118.1	42.5	11.5	12.9	648.6	248,772	60,370	266,774	145,396	203,613	283,481	135,878	11,534	0	0	1,356,000	

¹ Based upon 2,000 gpd/AC
² Based upon R-5 = 5 DU/AC x 280 gpm/DU = 1,400 gpd/AC
³ Based upon R-10 = 10 DU/AC x 280 gpm/DU = 2,800 gpd/AC
⁴ Based upon R-15 = 15 DU/AC x 160 gpm/DU = 2,400 gpd/AC
⁵ Based upon R-20 = 20 DU/AC x 160 gpm/DU = 3,200 gpd/AC
⁶ Based upon 1000 gpd/AC
⁷ Assumed to generate negligible wastewater flow.

Attachment 1B
Edgemont Community Services District
Wastewater Generation Projection
2008 Treatment Capacity Analysis
Moreno Valley 2008 Land Use

Tributary Drainage Area	City of Moreno Valley Land Use Designations (Acre)										Total Acres (AC)	Average Daily Flows per Designated Land Use (gpd)						Projected Average Daily Flow (gpd)			
	Business					Residential						Business			Residential						
	Commercial	Office Commercial	Business Park/Industrial	R-5	R-10	R-15	R-20	Public	Open Space ⁶	Public/Open		Commercial ¹	Office Commercial ¹	Business Park/Industrial ¹	R-5 ²	R-10 ³	R-15 ⁴		R-20 ⁵	Public ⁶	Open Space ⁷
Q ₁	9.8	1.7		32.5	0.4		32.6	2.0	12.9		91.4	9,765	1,671		38,998			104,250	1,992	0	156,675
Q ₂	8.6			20.5	0.4	2.5	0.003			32.0	32.0	8,632			24,631	1,018	5,885	10			40,175
Q ₃	7.8	0.5		12.3	16.3	0.001				37.0	37.0	7,853	535		14,798	39,137	2				62,326
Q ₄	5.9				1.6	1.6				10.6	10.6	5,949		1,520		3,725	3,898				15,091
Q _{4A}										36.9	36.9	36,865									36,865
Q _{4B}	10.3									10.3	10,327										10,327
Q ₅	13.9									26.3	13,897			12,370							26,267
Q ₆										21.4	21,384			21,384							21,384
Q ₇										12.4	12,364			12,364							12,364
Q ₈				3.2	25.0		9.9			38.1	38,100			3,852	59,981		31,619				95,452
Q ₉						26.5				26.5	26,500						63,665				63,665
Q ₁₀				16.9	10.0	22.0				48.9	48,900			20,250	23,894		52,891				97,036
Q ₁₁				4.5		17.3				30.0	30,000		3,264	5,412		41,628					55,216
Q ₁₂						18.9				29.4	29,400		10,464			45,331					55,795
Q ₁₃					8.5	4.0				20.5	20,500		8,100		20,294	9,480					37,874
Q ₁₄				4.1	7.6	11.2				51.3	51,300			28,395	4,914	18,252	26,954				78,515
Q ₁₅				10.4	4.4	3.4	14.1			52.9	52,900		10,400	4,398	11,770	8,225	33,746				79,320
Q ₁₆										4.8	4,800		4,796								4,796
Q ₁₇				0.5	1.8					11.8	11,800		1,753						9,542		11,804
Q ₁₈				8.5				9.5		8.5	8,461										8,461
Q ₁₉				48.6						48.6	48,593			48,593							48,593
TOTAL	124.4	30.2	133.4	103.9	72.7	118.1	42.5	11.5	12.9	649.6	124,386	30,185	133,387	124,625	174,526	283,481	135,878	11,534	0	1,016,000	

¹ Based upon 1,000 gpd/AC
² Based upon R-5 = 5 DU/AC x 240 gpm/DU = 1,200 gpd/AC
³ Based upon R-10 = 10 DU/AC x 240 gpm/DU = 2,400 gpd/AC
⁴ Based upon R-15 = 15 DU/AC x 160 gpm/DU = 2,400 gpd/AC
⁵ Based upon R-20 = 20 DU/AC x 160 gpm/DU = 3,200 gpd/AC
⁶ Based upon 1000 gpd/AC
⁷ Assumed to generate negligible wastewater flow.

Attachment 2
Edgemont Community Services District
Wastewater Generation Projection
Moreno Valley 2040 Land Use

Tributary Drainage Area	City of Moreno Valley Land Use Designations (Acre)												Average Daily Flows per Designated Land Use (gpd)						Projected Average Daily Flow (gpd)						
	Business						Residential						Business							Public/Open					
	Commercial	Residential/Office	Corridor Mixed Use	Center Mixed Use	Business Flex	Business Park/Industrial	R-3	R-5	R-10	R-20	Public	Open Space	Commercial ¹	Residential/Office ¹	Corridor Mixed Use ¹	Center Mixed Use ¹	Business Flex ¹	Business Park/Industrial ¹		R-3 ³	R-5 ³	R-10 ⁴	R-20 ⁵	Public ⁶	Open Space ⁶
Q ₁	1.7		9.8				32.5	12.4	8.1	32.6	14.9	91.5	1,670	9,787	6,043					39,007	14,912	104,323		0	154,787
Q ₂			5.5		6.0		12.4		8.1		32.1	32.1		5,482	6,043				14,912	14,912	25,974				52,412
Q ₃					11.2		14.5	10.3	1.0		37.0	37.0			11,227				10,429	12,347	3,168				37,171
Q ₄					7.6	1.5	1.6				10.6	10.6			7,575	1,520			1,117						10,212
Q _{4A}					36.4						36.4	36.4			36,380										36,380
Q _{4B}	4.2				6.2						10.3	10.3	4,164		6,163										10,327
Q ₅					13.9	12.4					26.3	26.3			13,897	12,370									26,267
Q ₆						21.4					21.4	21.4				21,379									21,379
Q ₇						12.4					12.4	12.4				12,362									12,362
Q ₈							3.2	25.0	9.9		38.1	38.1								3,852	59,974	31,619			95,445
Q ₉		26.5									26.5	26.5		26,527											26,527
Q ₁₀		14.8			2.8		14.6	16.6			49.9	49.9		14,839	2,832				10,502	19,943					48,116
Q ₁₁	0.3	17.2				4.9	7.6				30.0	30.0	258	17,228					5,494						27,893
Q ₁₂	1.1	28.2									29.3	29.3	1,123	28,158											29,281
Q ₁₃		15.8					1.2		5.9		22.9	22.9		15,814					862		18,806				35,482
Q ₁₄	0.5	13.9				27.3	9.2				50.9	50.9	535	13,918					6,609						48,328
Q ₁₆	6.9	6.9				10.7	24.5				49.1	49.1	6,884	6,941					17,655						42,222
Q ₁₆						3.1	1.7				4.8	4.8							1,200						4,328
Q ₁₇	0.6	1.7									11.9	11.9	631	1,717									9,505		11,853
Q ₁₈											8.5	8.5													8,460
Q ₁₉	47.0										47.0	47.0	47,030												47,030
TOTAL	62.3	125.1	15.3	8.5	84.1	93.7	74.8	75.1	25.0	57.5	14.9	645.7	62,295	125,142	15,269	8,460	84,117	93,680	53,868	90,061	59,974	183,991	9,505	0	766,000

¹ Based upon 1,000 gpd/AC

² Based upon R-3 = 3 DU/AC x 240 gpm/DU = 720 gpd/AC

³ Based upon R-5 = 6 DU/AC x 240 gpm/DU = 1,200 gpd/AC

⁴ Based upon R-10 = 10 DU/AC x 240 gpm/DU = 2,400 gpd/AC

⁵ Based upon R-20 = 20 DU/AC x 160 gpm/DU = 3,200 gpd/AC

⁶ Based upon 1000 gpd/AC

⁷ Assumed to generate negligible wastewater flow.

APPENDIX D

Prioritization of ECSD CIP Project Implementation, March 25, 2010 and Memorandum of October 24, 2022

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A L B E R T A . **W E B B** A S S O C I A T E S

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WWW.WEBBASSOCIATES.COM

W.O. No.: 2006-0352
File No.: 1224.0176

March 25, 2010

Board of Directors
EDGEMONT COMMUNITY SERVICES DISTRICT
Post Office Box 867
Riverside, California 92502

Re: Prioritization of ECSD CIP Projects
 Implementation Plan

Dear Board Members:

At the request of the District during the February 25, 2010 Board meeting, Albert A. Webb Associates reviewed the proposed Capital Improvement Projects (CIP) summarized in the September 2008 Master Sewer System Evaluation Plan (Master Plan) in order to prioritize them for construction (See Figure 1 for location). Two projects identified in the Master Plan and subsequently constructed are therefore not included.

- Day Street Sewer Replacement (Completed July, 2009)
- Canyon Springs Offset Joint Replacement (Completed July, 2009)

The following criteria were utilized to prioritize these projects:

- May 2008 sewer inspection videos for pipes that are most distressed
- Project locations as projects farther downstream tend to have more tributary services areas
- Potential City of Moreno Valley's Capital Projects⁽¹⁾
- March 3, 2010 meeting with Mr. Joe Teague for maintenance input

⁽¹⁾ City's capital projects per map provided in January 15, 2009 E-mail from Mr. Abraham Folk of City of Moreno Valley. Review of City's Capital projects shows no City project interfering with District's projects at this time. Developer's projects were not evaluated as there are currently no requests for connection at this point.

During our March 3, 2010 meeting, Mr. Teague discussed other sewer lines which were neither videoed⁽¹⁾ nor included in the Master Plan, though based on his assessment⁽²⁾, requires replacement. The potential replacement projects designated as Additional Projects (see Figure 1 for locations) are as follows:

- Replacement of 1,000 feet of existing 8-inch diameter V.C.P. sewerline with new 8-inch diameter V.C.P. sewerline along Dracaea Avenue between Edgemont Street and Gina Avenue due to root growth in the sewerline.
- Replacement of 700 feet of existing 8-inch diameter V.C.P. sewerline with new 8-inch diameter V.C.P. sewerline along Barbara Street south of Eucalyptus Avenue due to root growth in the sewerline.
- Replacement of 700 feet of existing 8-inch diameter V.C.P. sewerline with new 8-inch diameter V.C.P. sewerline along Edgemont Street north of Dracaea Avenue due to root growth in sewerline. Additionally at this location, low pressure cleaning is utilized for this portion of the sewer line during routine cleaning as one of the properties is situated such that high pressure cleaning causes back flow into the service lateral.

As previously indicated, the May 2008 video inspection was performed for the District's existing 6-inch diameter sewerlines. Therefore, it is recommended that video inspection for the above three locations be performed to review current conditions. Regarding the service lateral backflow concern on Edgemont Street, further evaluation is recommended to determine a solution.

An implementation plan was prepared to consolidate the prioritized projects into years. The consolidation criterion was based on maintaining a replacement length of approximately 2,000 feet at a cost of approximately \$500,000 to \$700,000 per year. This method of consolidation resulted 6 years, beginning year 2010.

In addition to the proposed capital projects, various improvements were identified such as manhole replacements, sewerline point repair and sewer lateral replacement which were summarized in Table 9-4 of the Master Plan and designated as the Maintenance Improvement Program. For planning purposes, the cost and implementation of these improvements have been evenly distributed throughout each year resulting in a cost of \$110,000 per year.

Table 1 summarizes the prioritized projects based on the criteria previously discussed. Table 2 summarizes the costs for the additional projects. Table 3 summarizes the projects implementation plan, which includes the projects and maintenance improvements listed in the Master Plan. The projects implementation plan does not include the additional projects.

⁽¹⁾ The May 2008 sewer video inspection primarily focused on 6-inch diameter sewer mains.

⁽²⁾ Assessment based on field observations during routine maintenance and cleaning.

Table 1: Prioritization of Capital Improvement Projects

Priority No.	Project No ⁽¹⁾	Location	Construction Cost ⁽²⁾	Project Cost ⁽³⁾
1	CA-2	Cottonwood St	\$320,000	\$450,000
2	CA-1	Cottonwood St	\$540,000	\$760,000
3	18-inch Siphon	Cottonwood St.	\$60,000	\$80,000
4	AS-1	Arvonna St.	\$160,000	\$220,000
5	LL-1	Lancaster Ln.	\$240,000	\$340,000
6	BS-1	Barbara St.	\$270,000	\$380,000
7	BA-1	Bay Ave.	\$250,000	\$350,000
8	BR-1	Brill Rd.	\$250,000	\$350,000
9	LC-1	Linda Ct.	\$310,000	\$430,000
10	HS-1	Hildegarde St.	\$180,000	\$250,000
11	ES-1	Edgemont St.	\$250,000	\$350,000
12	AD-1	Allyn Dr.	\$80,000	\$110,000
13	NS-1	Nolze Pl.	\$200,000	\$280,000
14	BE-1	Bertie Ave.	\$160,000	\$220,000
Total per Master Plan :			\$3,270,000	\$4,570,000
Current Total⁽⁴⁾:			\$3,420,000	\$4,780,000

Table 2: Additional Projects

Item No.	Location	Diameter	Quantity	Unit	Unit Cost ⁽⁴⁾	Construction Cost	Project Cost ⁽³⁾
1	Dracaea Ave.	8-inch	1000	LF	\$210	\$210,000	\$290,000
2	Barbara St.	8-inch	700	LF	\$210	\$150,000	\$210,000
3	Edgemont St.	8-inch	700	LF	\$210	\$150,000	\$210,000
Current Total :						\$510,000	\$710,000

⁽¹⁾ Project designations per Table 9-4 of September, 2008 ECSD master Sewer System Evaluation. With the exception of Cottonwood Avenue and various miscellaneous repairs, the projects consist of the upsizing from 6-inch diameter to 8-inch diameter.

⁽²⁾ The Engineering New Record (E.N.R.) Construction Cost Index for the Los Angeles Areas for July 2008 was utilized as per the September, 2008 ECSD Master Sewer Evaluation: 9335.69.

⁽³⁾ Project cost is 1.4 times construction cost rounded up to nearest \$10,000.

⁽⁴⁾ The Engineering New Record (E.N.R.) Construction Cost Index for the Los Angeles Areas for January 2010 was utilized: 9761.94.

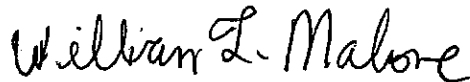
Table 3: Consolidated Project Implementation Plan

Year ⁽¹⁾	Location	Project Cost	Improvement Cost	Total Phase Cost	Reason
2010	Cottonwood St.	\$1,290,000	N/A	\$1,290,000	Capacity Development
2011	Arvonna St. Lancaster Ln.	\$560,000	\$110,000	\$670,000	Roots in joints, cracks, etc.
2012	Barbara St. Bay Ave.	\$730,000	\$110,000	\$840,000	Multiple cracks
2013	Brill Rd. Linda Ct.	\$780,000	\$110,000	\$890,000	Deposits due to higher water level etc.
2014	Hildegrade St. Edgemont St.	\$600,000	\$110,000	\$710,000	Roots, deposits due to higher water level etc.
2015	Allyn Dr. Nolze St. Bertie Ave.	\$610,000	\$110,000	\$720,000	Minor cracks, roots etc.
Total per Master Plan:		\$4,570,000	\$550,000	\$5,120,000	
Current Total⁽²⁾:		\$4,780,000	\$580,000	\$5,350,000	

Should you have any questions or comments, please do not hesitate to call me at our office.

Sincerely,

ALBERT A. WEBB ASSOCIATES



William T. Malone, P. E.
 Vice President

Enclosures

cc: Jessica Pfalmer, ECSD
 Joe Teague, ECSD
 Edward Mackey, Law Offices of Edward Mackey
 Sam Gershon, Webb Associates

⁽¹⁾ See Figure 1 for project color code phase designation.

⁽²⁾ The Engineering News Record (E.N.R.) Construction Cost Index for the Los Angeles Areas for January 2010 was utilized: 9761.94.

EDGEMONT COMMUNITY SERVICES DISTRICT

PROPOSED SEWER PROJECT IMPLEMENTATION PLAN

LEGEND

- | | | |
|---------------------|-----------------------------|-----------------------------------|
| CIP | ● MANHOLE | 6" VCP EXISTING SEWER LINE & SIZE |
| YEAR 2010 | ● DROP MANHOLE | --- SEWER - ABANDONED |
| YEAR 2011 | ● CLEAN OUT | --- CITY OF RIVERSIDE SEWER |
| YEAR 2012 | ▲ LIFT STATION | ▭ ECSD BOUNDARY |
| YEAR 2013 | ▭ METERING STATION | ▭ CITY BOUNDARY |
| YEAR 2014 | ● CITY OF RIVERSIDE MANHOLE | ▭ PARCELS |
| YEAR 2015 | | |
| ADDITIONAL PROJECTS | | |

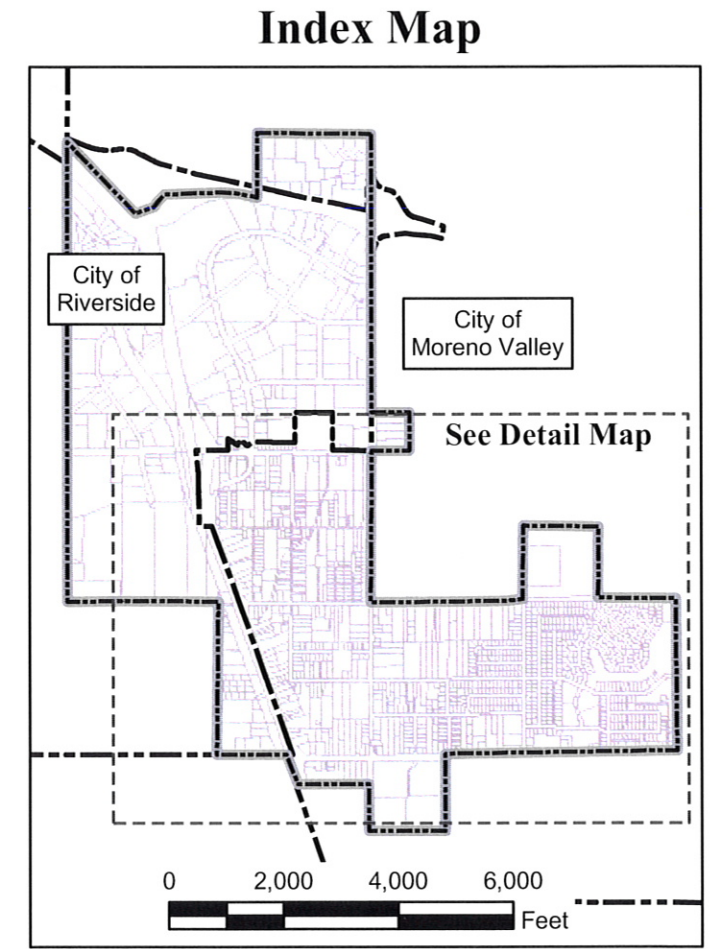
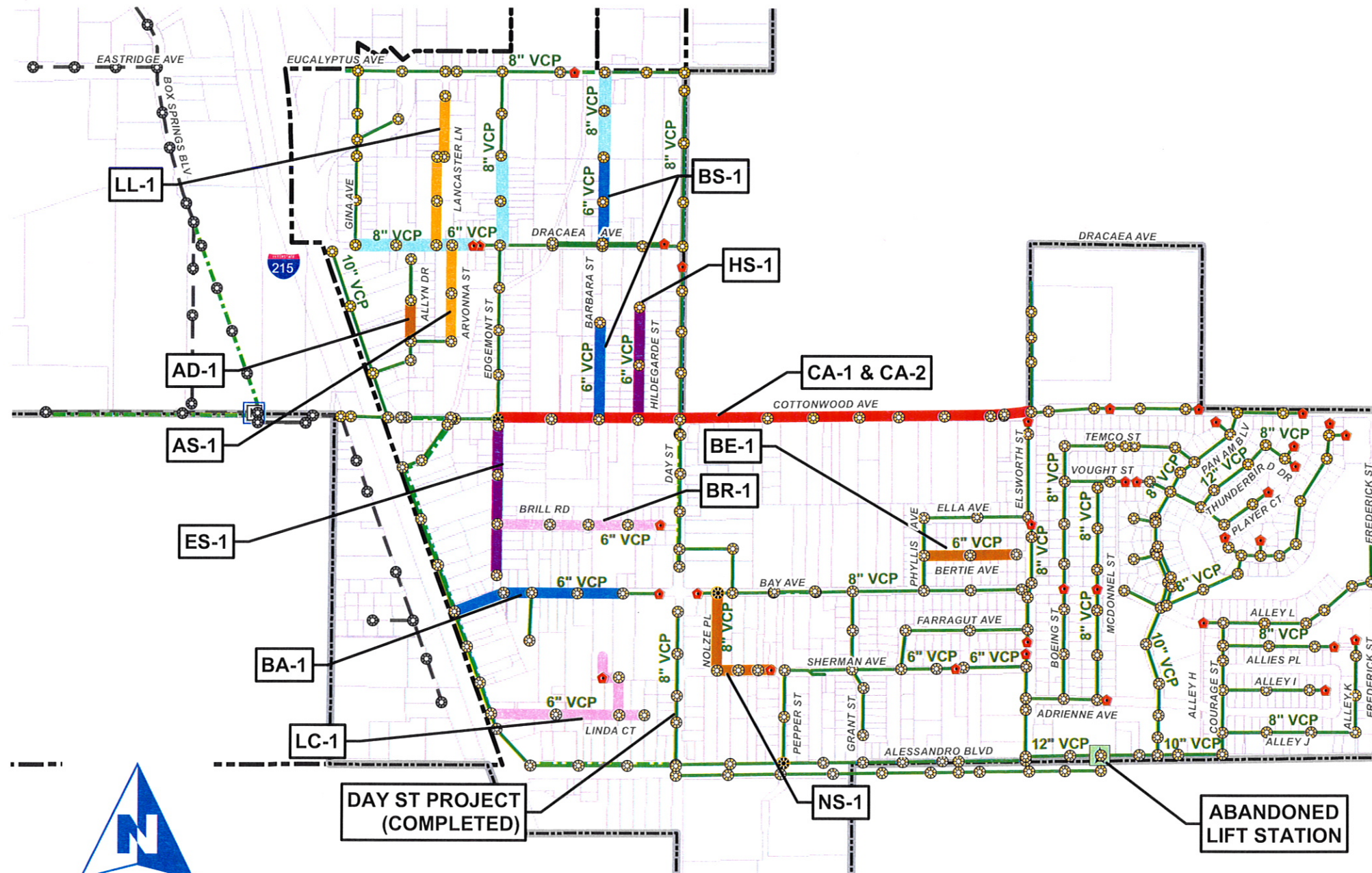


FIGURE 1



Memorandum

W.O. No.: 1963-0120A

To: Sam Gershon, RCE, Senior Vice President

From: Sinnaro Yos, PE, Senior Engineer

Date: October 24, 2022

Re: Edgemont Community Services District
Project Status Summary of March 25, 2010 Project Prioritization
of the District's CIP Projects and Implementation Plan

The March 25th, 2010 Prioritization of ECSD CIP Projects and Implementation Plan (March 2010 Implementation Plan) was established to provide the District with the planning and a program to implement and manage the sewer system replacement. The 2011, 2012, and 2013 Phase Projects were completed in 2014. With 2014 and 2015 phases remaining, the District undertook the District wide mainline video inspection (2016) and as a result, reevaluated components of subsequent phases. Previously known as 2014 Phase, FY 16-17 Sewerline Replacement was completed in October 2017. Additionally, the District developed and implemented the District's spill monitoring program which was completed in August 2018.

The District also undertook the District wide lateral video inspection (2018) which resulted in combining the remaining mainline replacement project (2015 Phase) with lateral replacement projects and reprioritizing as Priorities I, II, and III. Priority I, FY 18-19 Sewer Mainline and Lateral Replacement Project was completed in March 2021. Priority 2 Sewer Mainline and Lateral Replacement Project has completed design, CEQA process, and Moreno Valley's plan approval process and the anticipated schedule for construction in early 2023. The current project status is summarized in the following Table 1.

Table 1: Implementation Plan Status Summary

Phase	Project Description	Status	Figure
2011	Arvonna St, Lancaster Ln	Completed 2011	Figure 1
2012	Barbara St, Bay Ave, Edgemont St, Cottonwood Siphon	Completed 2012	Figure 2
2013	Dracaea Ave, Brill Rd, Linda Ct, Farragut Ave, Barbara St	Completed 2014	Figure 3
FY 16-17	Edgemont St, Sherman Ave	Completed 2017	Figure 4
N/A	Spill Monitoring Implementation Program	Completed 2018	Figure 5
Priority I	Eucalyptus Ave, Old 215 Frontage Rd, Alessandro Blvd, Allyn Dr, Pepper St, Elsworth St, McDonnel Ave, Pan Am Blvd, Courage St, Alley L, Alley K, Alley J, Alley I	Completed 2021	Figure 6
Priority II	Gina Ave, Dracaea Ave, Brill Rd, Nolze Pl, Sherman Ave, Grant St, Farragut Ave, Phyllis Ave, Ella Ave, Bertie Ave, Elsworth St	Construction 2023	Figure 7
Priority III	Dracaea Ave, Cottonwood Ave, Day St, Bay Ave, Boeing St, McDonnel Ave, Berkshire Ln, Pan Am Blvd, Vought St, Player Ct, Littler Ct, Temco St,	Planning 2024 to 2025	Figure 8

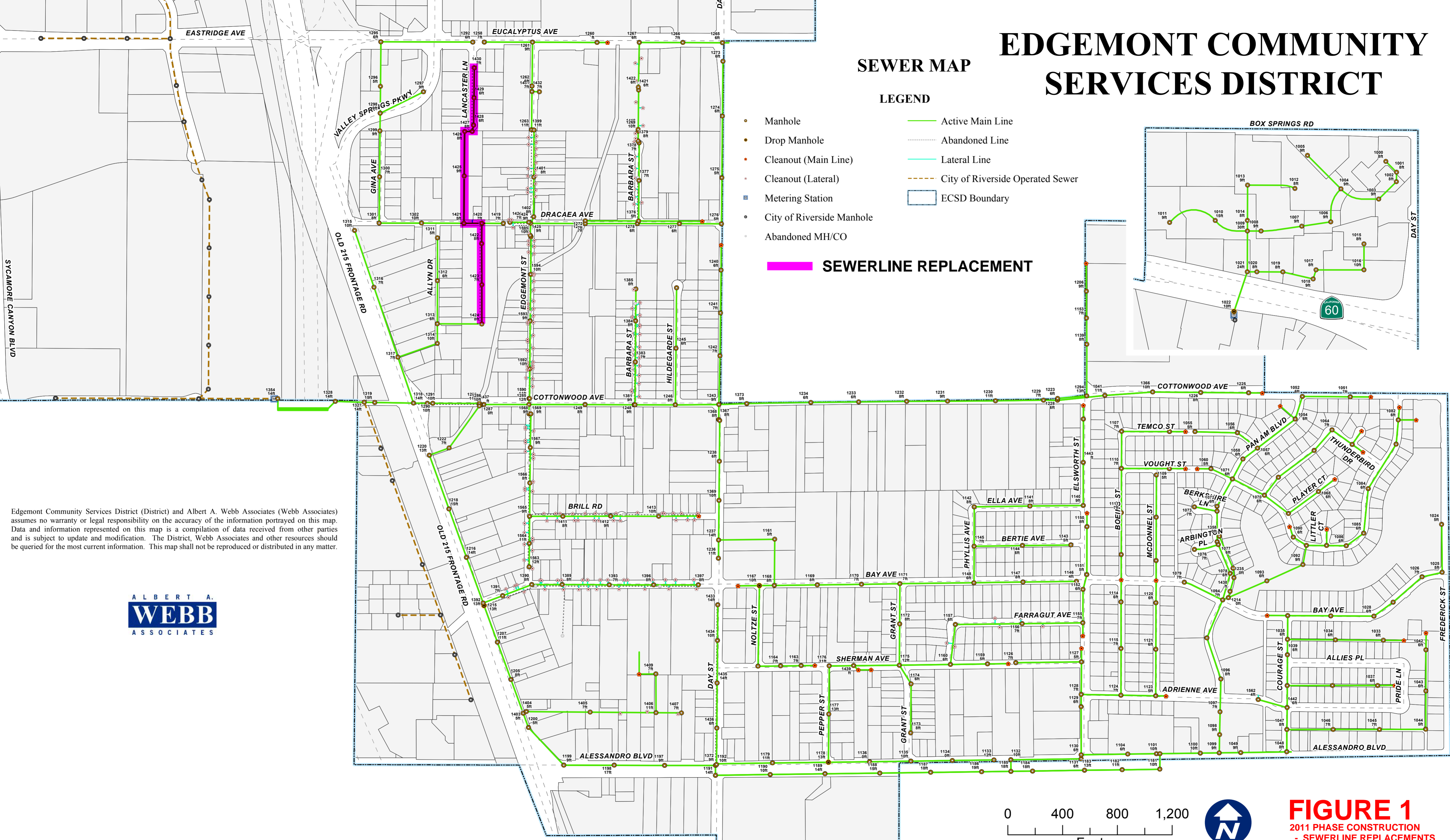
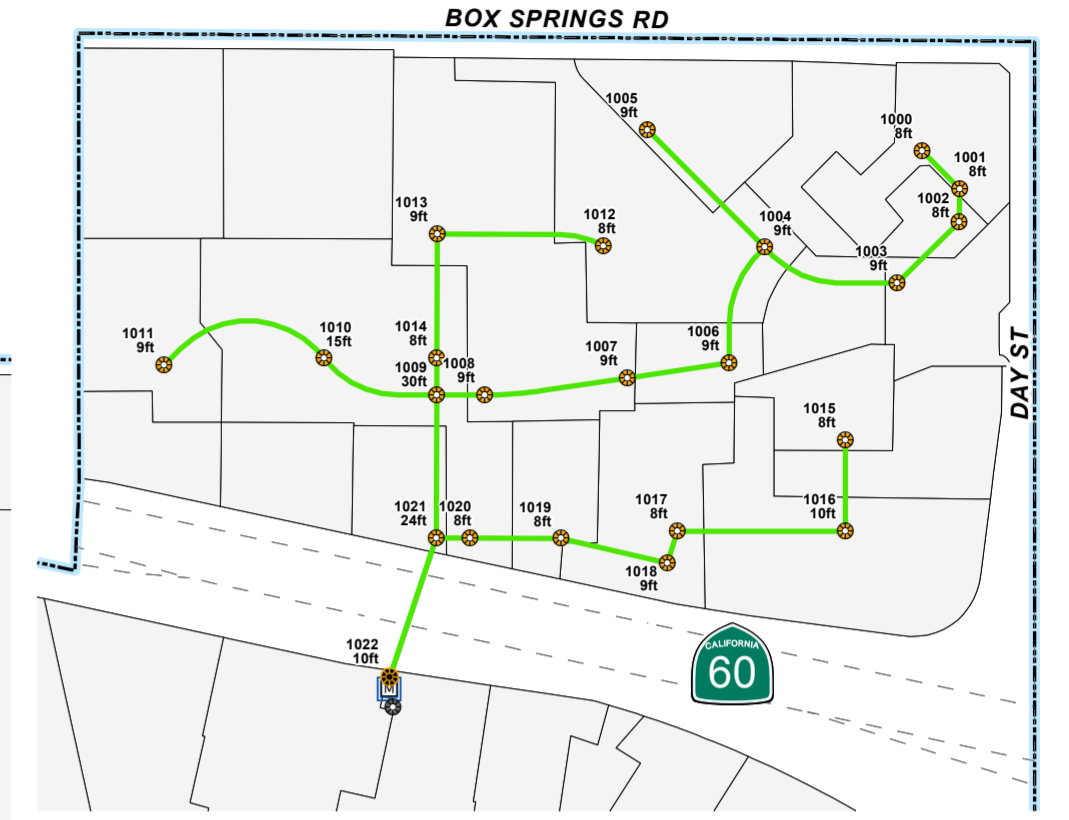
EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

- Manhole
- Drop Manhole
- Cleanout (Main Line)
- Cleanout (Lateral)
- Metering Station
- City of Riverside Manhole
- Abandoned MH/CO
- Active Main Line
- Abandoned Line
- Lateral Line
- - - City of Riverside Operated Sewer
- ECSD Boundary

SEWERLINE REPLACEMENT



Edgemont Community Services District (District) and Albert A. Webb Associates (Webb Associates) assumes no warranty or legal responsibility on the accuracy of the information portrayed on this map. Data and information represented on this map is a compilation of data received from other parties and is subject to update and modification. The District, Webb Associates and other resources should be queried for the most current information. This map shall not be reproduced or distributed in any matter.

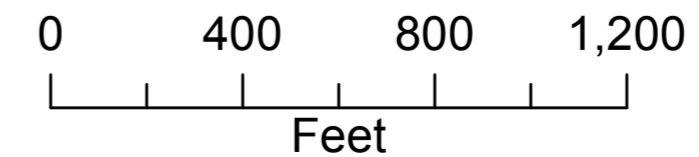


FIGURE 1
2011 PHASE CONSTRUCTION
- SEWERLINE REPLACEMENTS

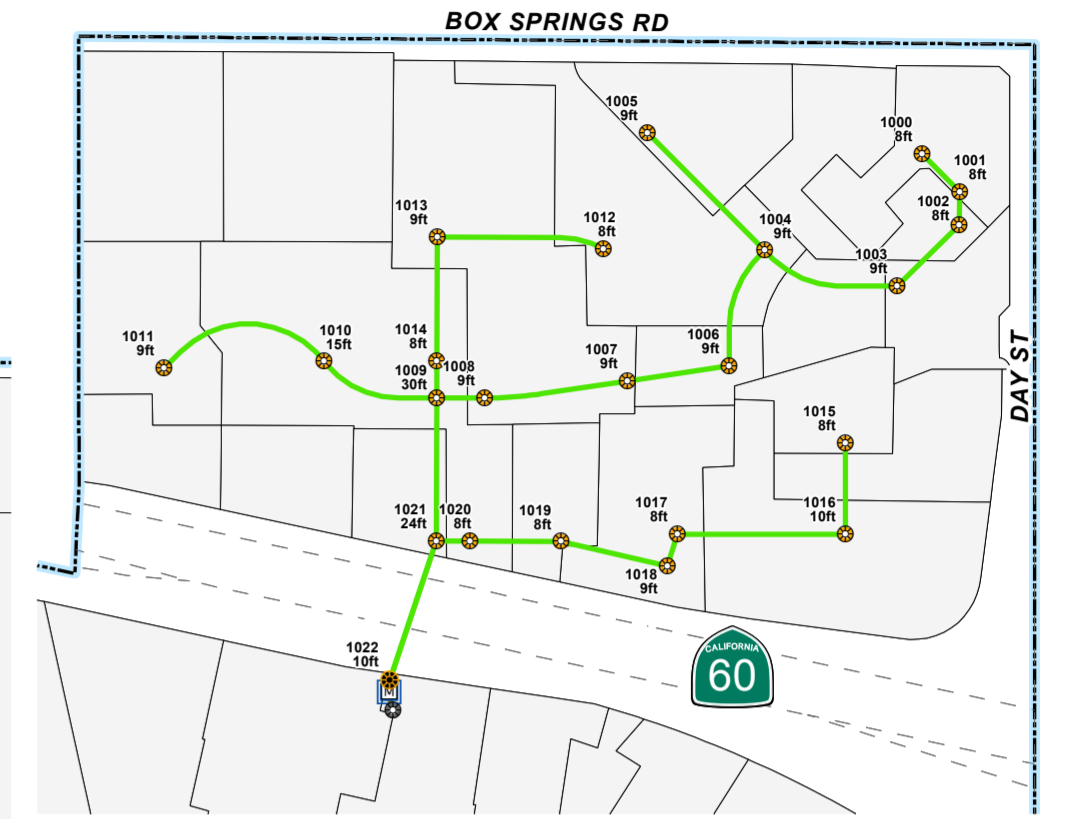
EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

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SEWERLINE REPLACEMENT



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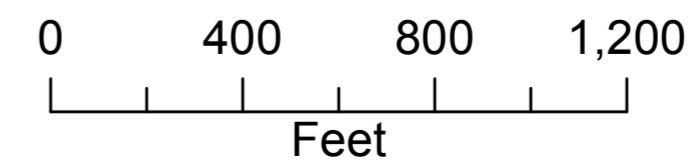
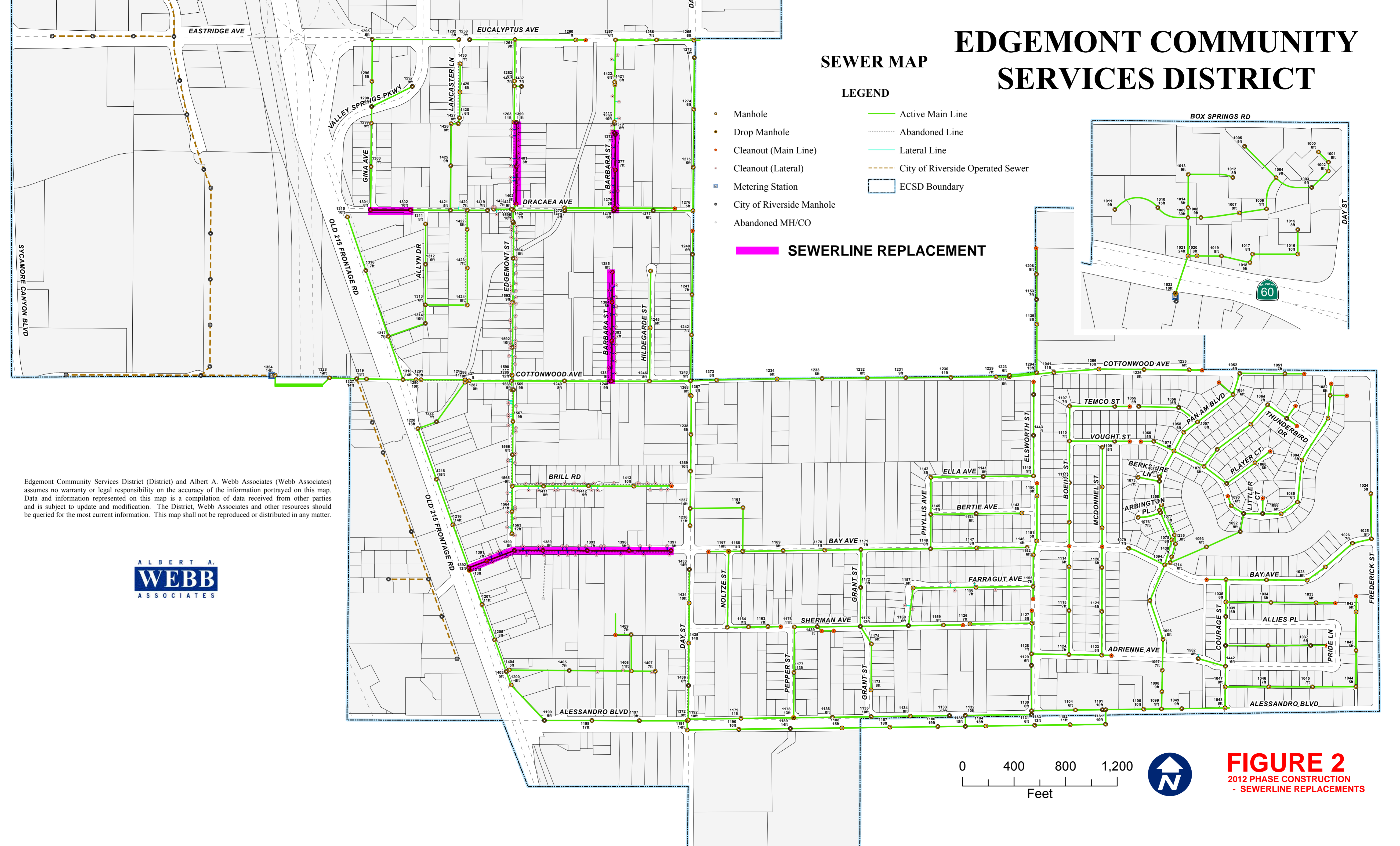


FIGURE 2
2012 PHASE CONSTRUCTION
- SEWERLINE REPLACEMENTS



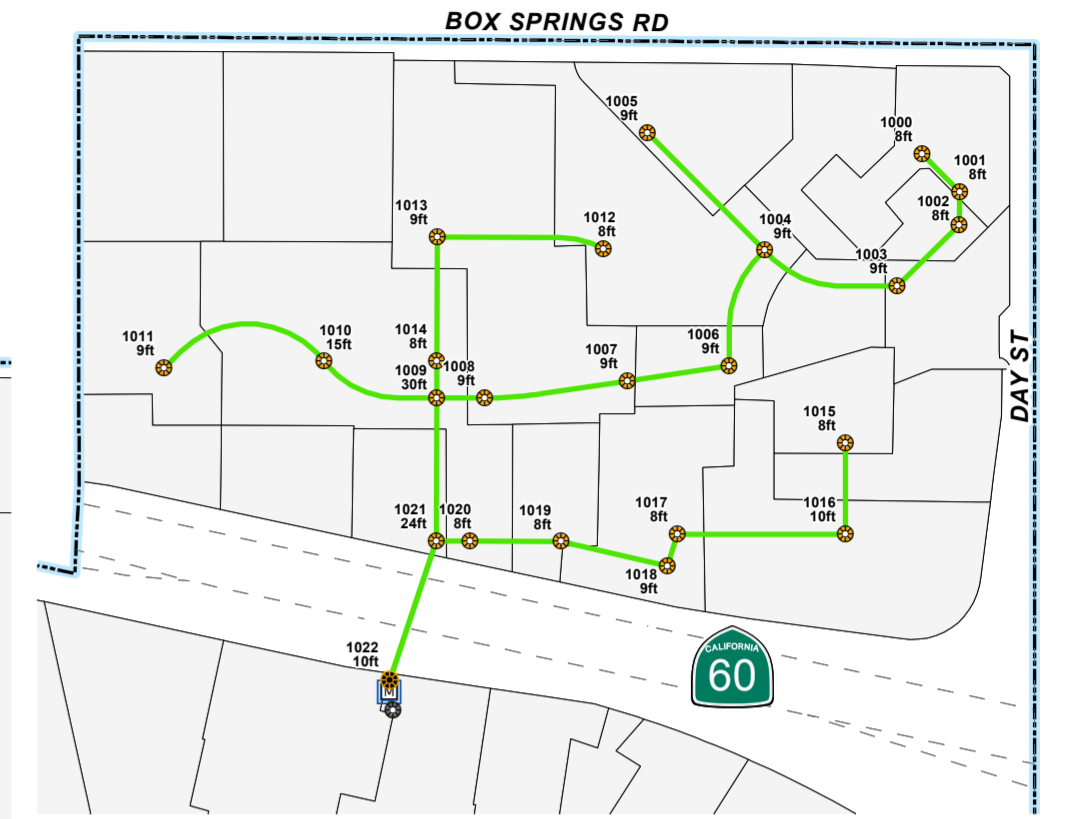
EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

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SEWERLINE REPLACEMENT



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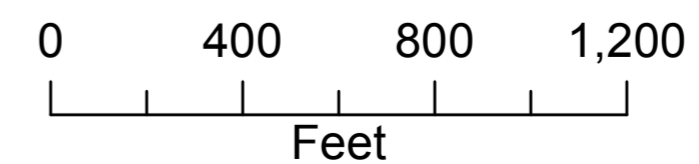
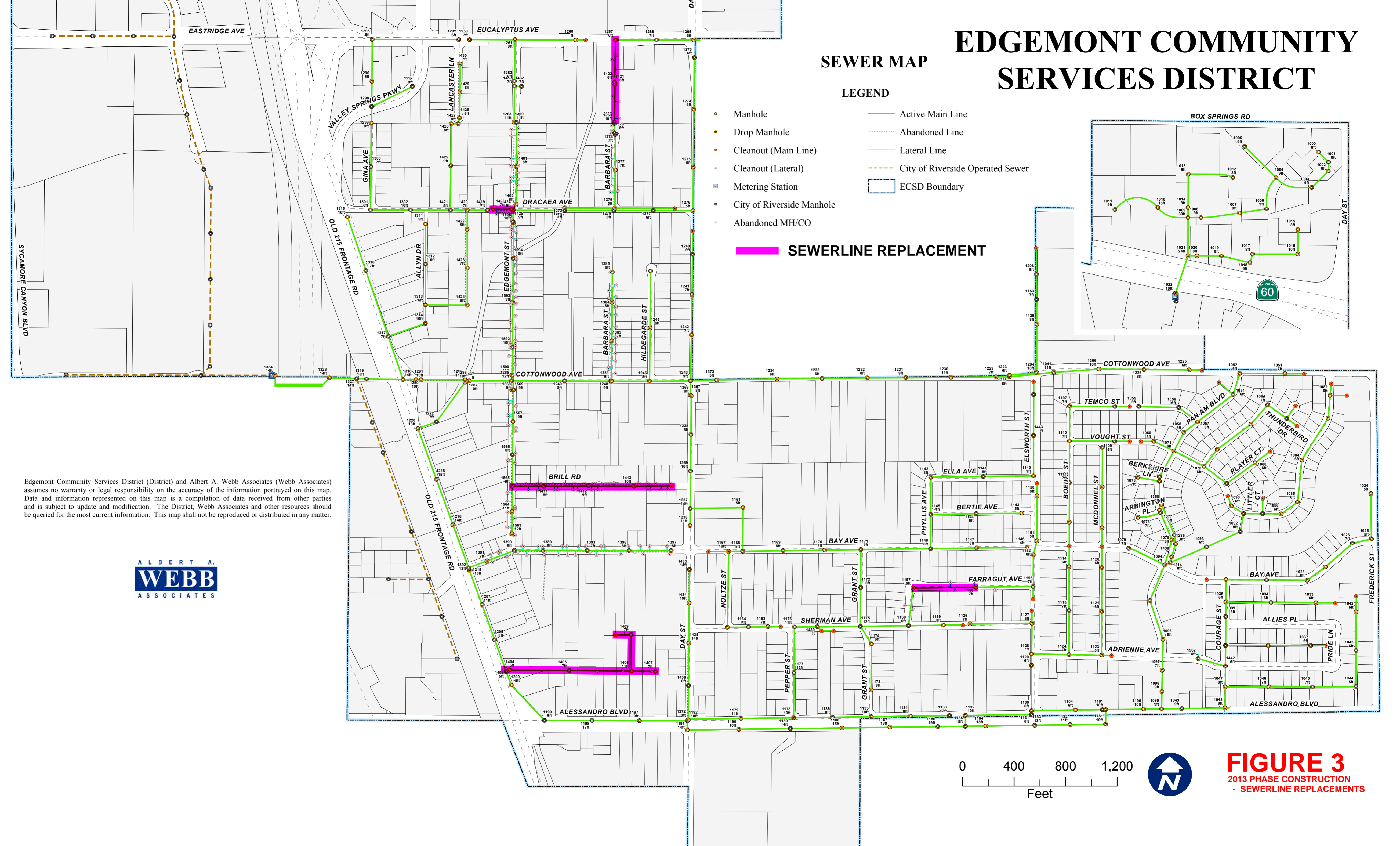


FIGURE 3
2013 PHASE CONSTRUCTION
- SEWERLINE REPLACEMENTS



EDGEMONT COMMUNITY SERVICES DISTRICT

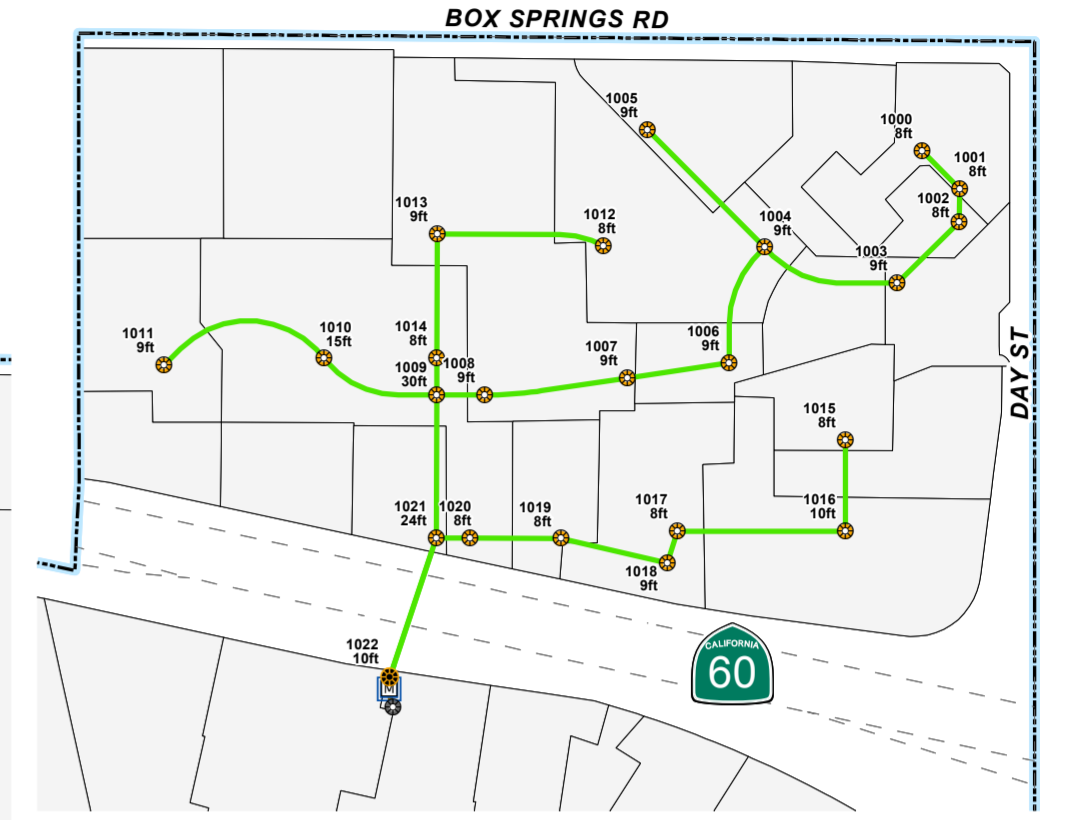
SEWER MAP

LEGEND

- Manhole
- Drop Manhole
- Cleanout (Main Line)
- Cleanout (Lateral)
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SEWERLINE REPLACEMENT

SEWERLINE POINT REPAIRS



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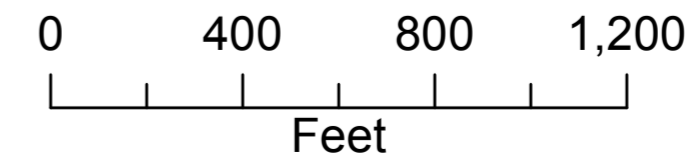
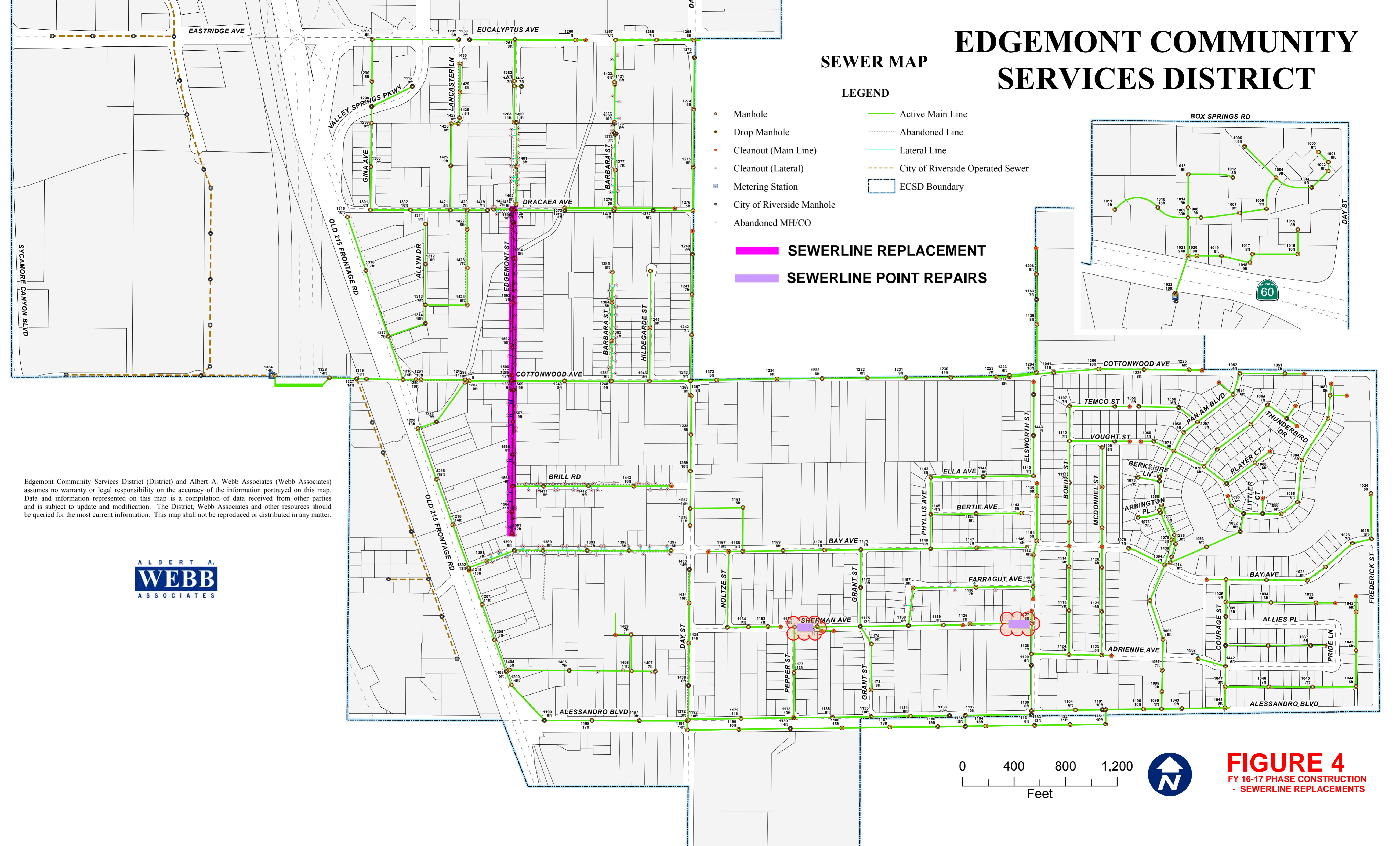


FIGURE 4
FY 16-17 PHASE CONSTRUCTION
- SEWERLINE REPLACEMENTS



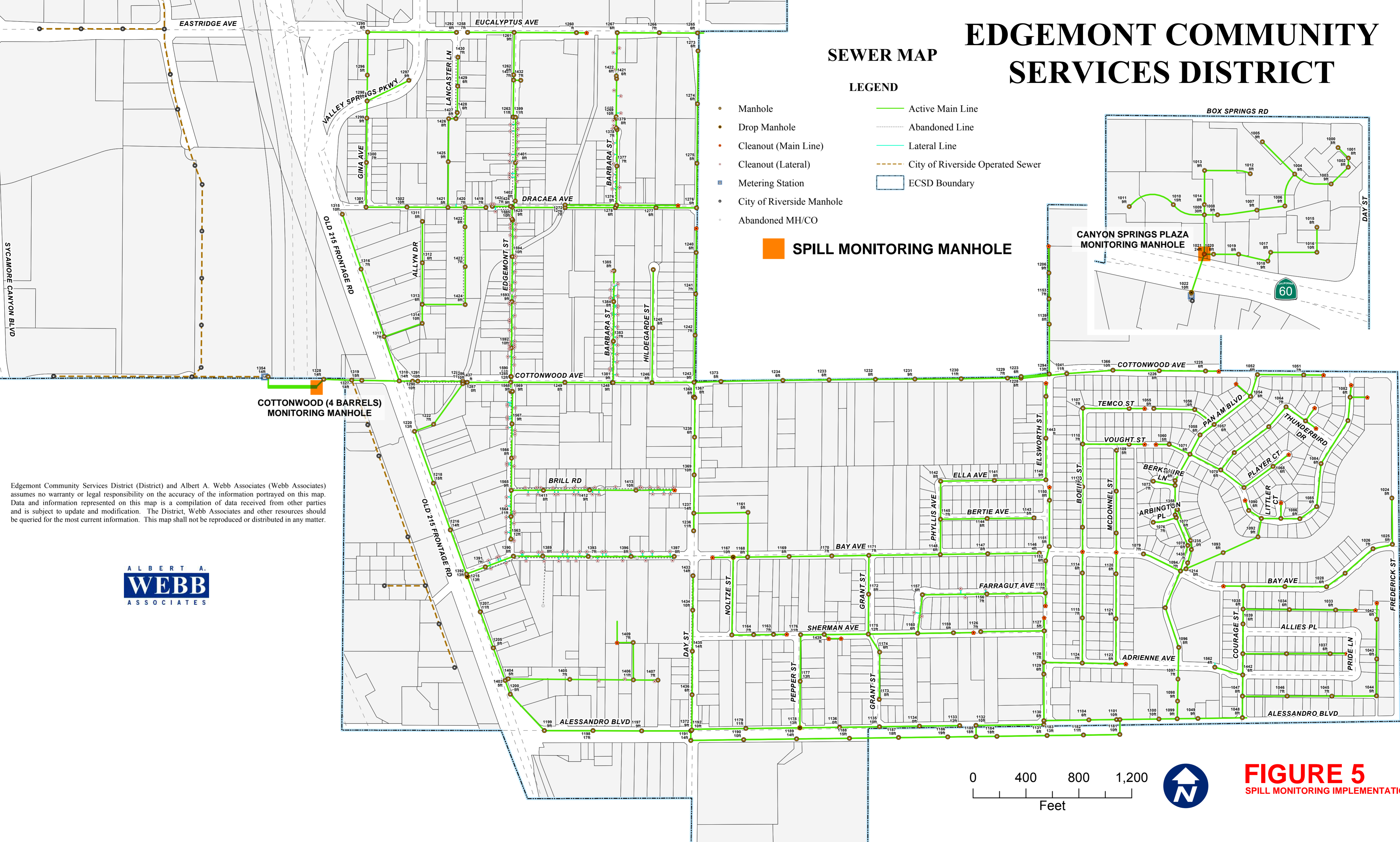
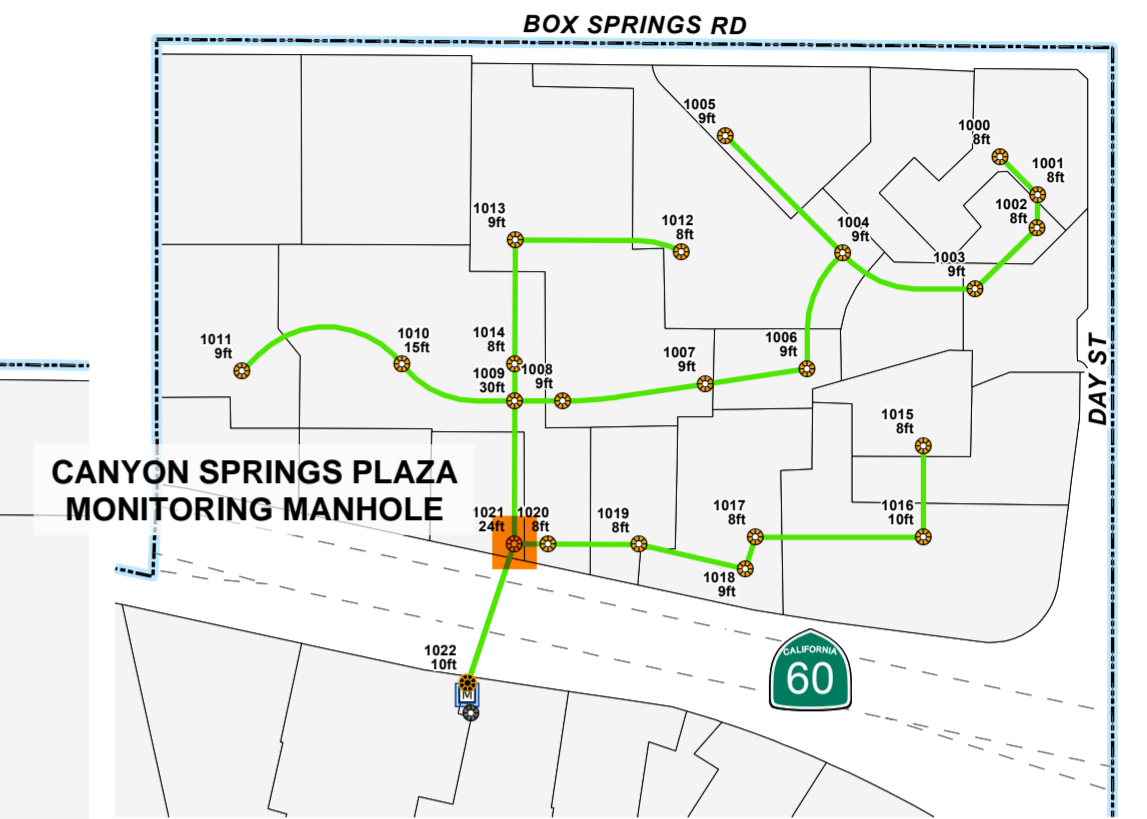
EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

- Manhole
- Drop Manhole
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SPILL MONITORING MANHOLE



COTTONWOOD (4 BARRELS) MONITORING MANHOLE

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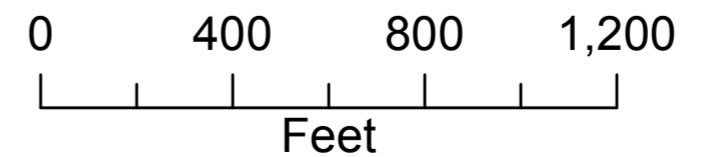


FIGURE 5
SPILL MONITORING IMPLEMENTATION

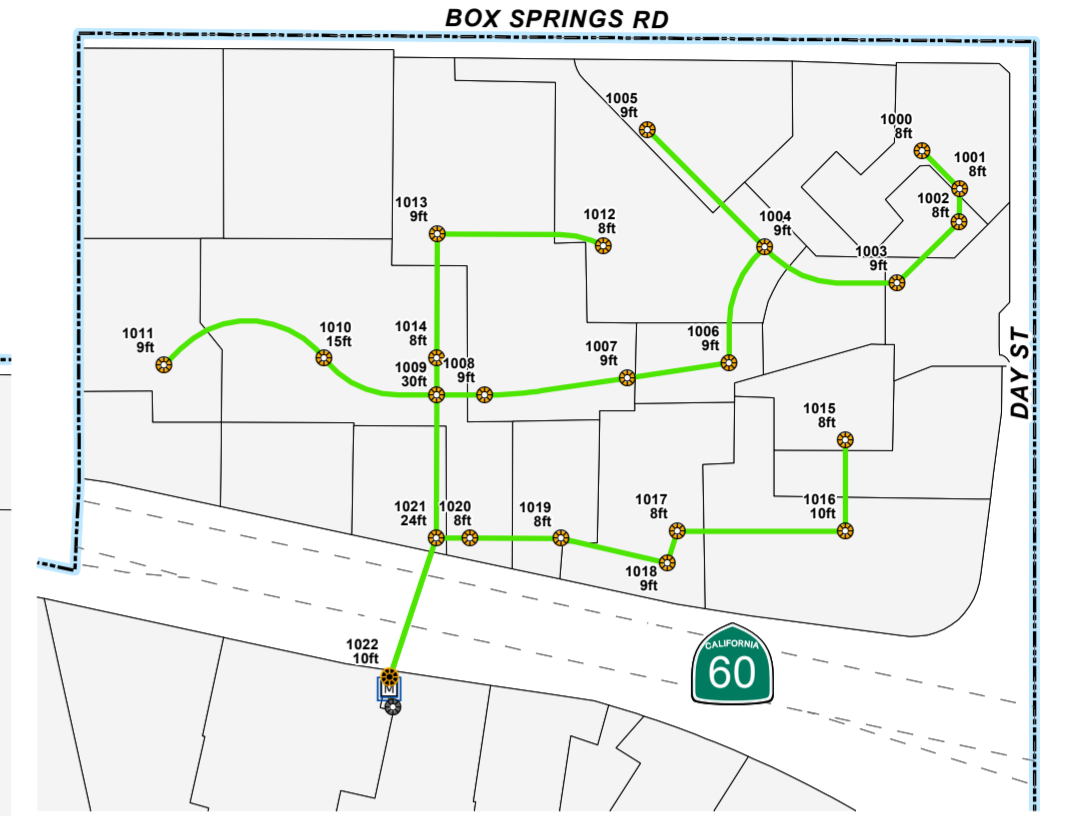
EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

- Manhole
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- SEWERLINE REPLACEMENT
- SEWERLINE POINT REPAIRS
- LATERAL - ROOTS
- LATERAL - OFFSET JOINT
- LATERAL - DAMAGED PIPE



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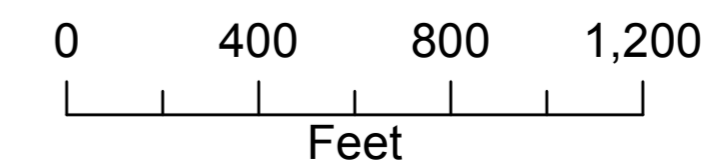


FIGURE 6
 PRIORITY I CONSTRUCTION
 - SEWERLINE REPLACEMENTS
 - MAINLINE POINT REPAIRS
 - LATERAL REPLACEMENTS

EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

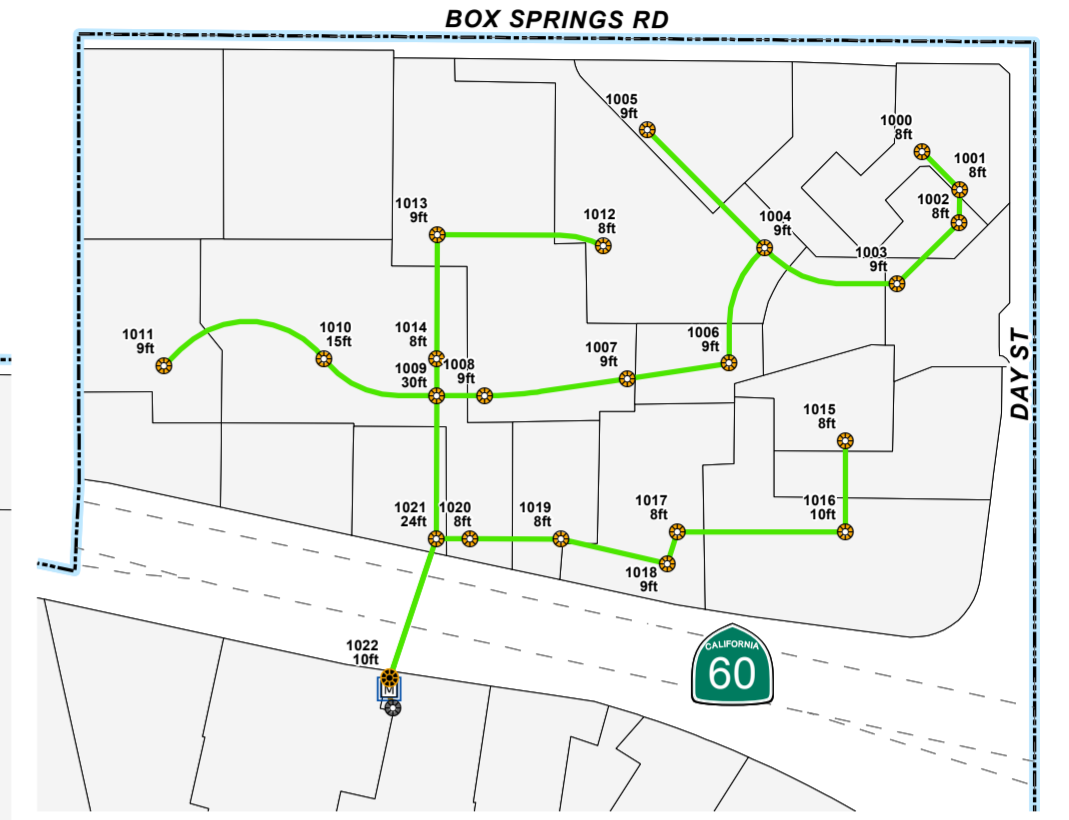
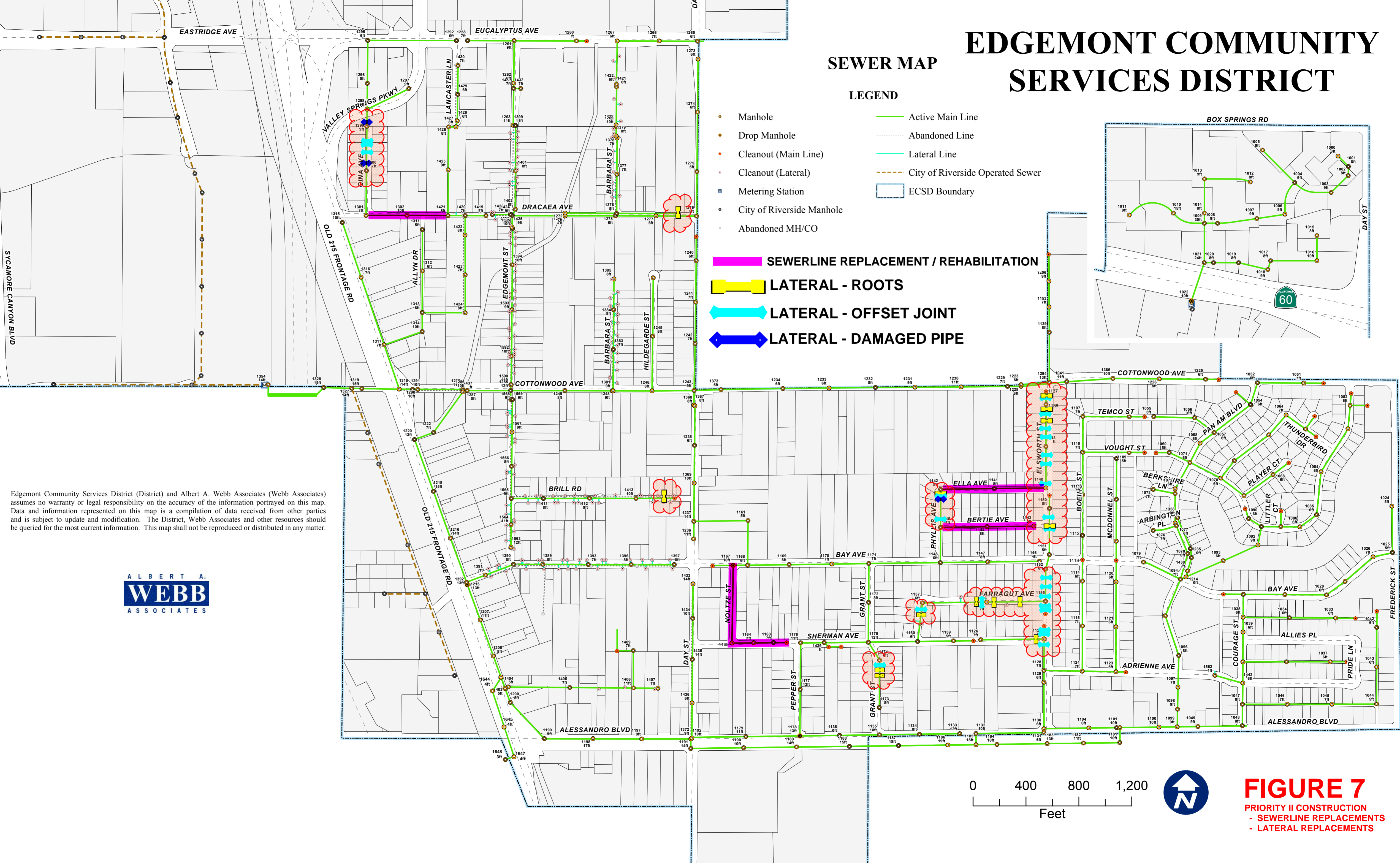
- Manhole
- Drop Manhole
- Cleanout (Main Line)
- Cleanout (Lateral)
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- Abandoned Line
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- ECSD Boundary

SEWERLINE REPLACEMENT / REHABILITATION

LATERAL - ROOTS

LATERAL - OFFSET JOINT

LATERAL - DAMAGED PIPE



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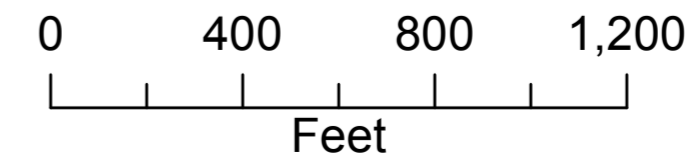


FIGURE 7
 PRIORITY II CONSTRUCTION
 - SEWERLINE REPLACEMENTS
 - LATERAL REPLACEMENTS

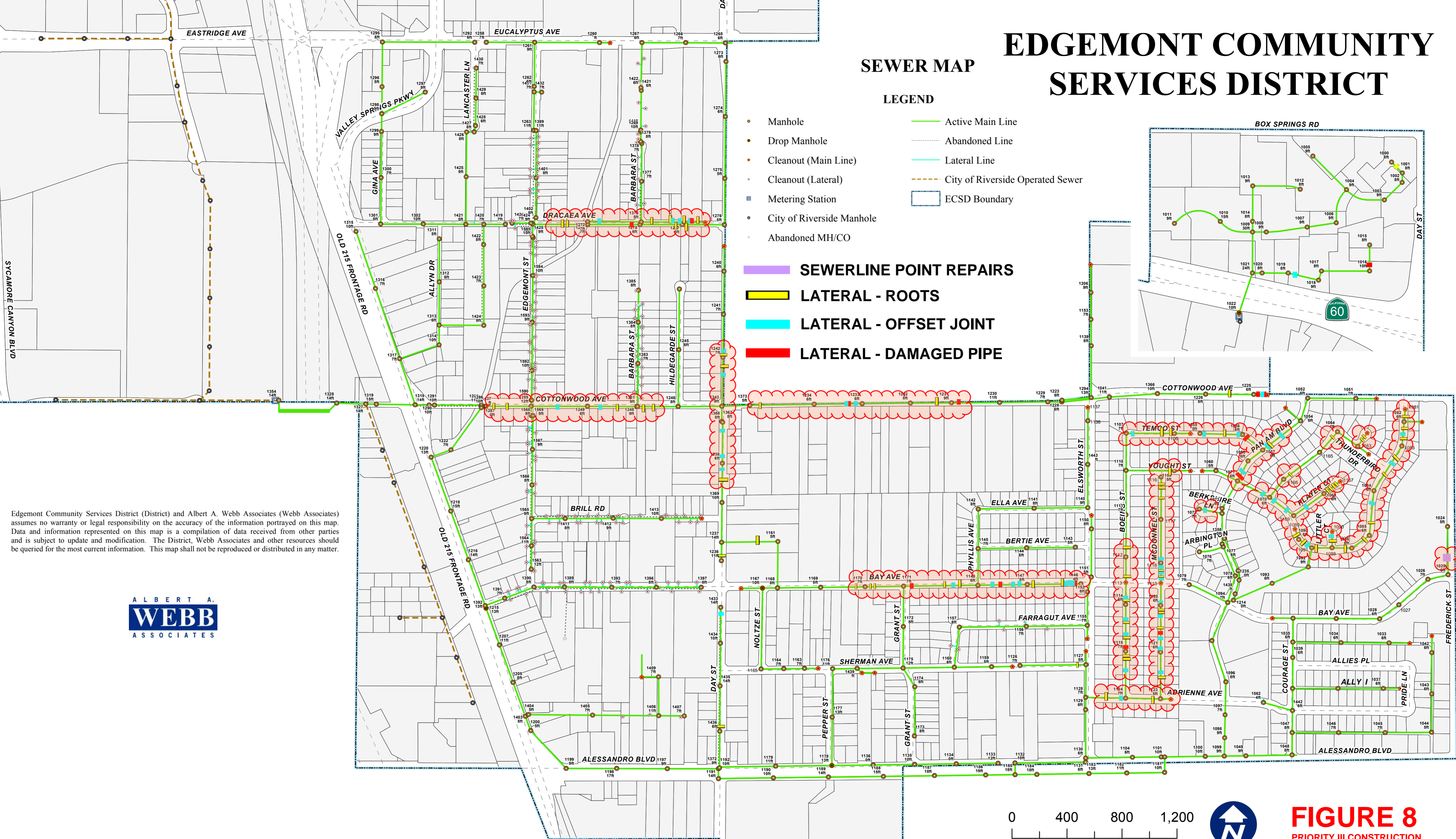
EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

- Manhole
- Drop Manhole
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- SEWERLINE POINT REPAIRS
- LATERAL - ROOTS
- LATERAL - OFFSET JOINT
- LATERAL - DAMAGED PIPE



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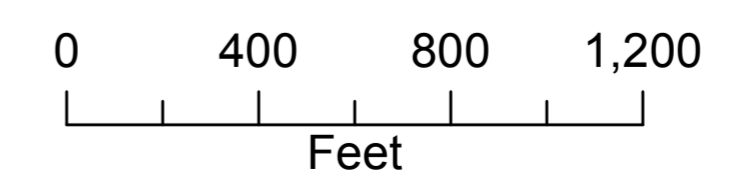


FIGURE 8
 PRIORITY III CONSTRUCTION
 - LATERAL REPLACEMENTS
 - FREDERICK ST SIPHON

APPENDIX E

Project Status Summary May 23, 2013 and Subsequent Correspondence

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Corporate Headquarters

3788 McCray Street | Riverside, CA 92506 | T: 951.686.1070 | F: 951.788.1256

Desert Region

36-951 Cook Street #103 | Palm Desert, CA 92211 | T: 760.568.5005 | F: 760.568.3443

W.O. No.: 1963-0120

File No.: 1224.0007

May 23, 2013

Board of Directors
EDGEMONT COMMUNITY SERVICES DISTRICT
 Post Office Box 867
 Riverside, California 92502

Re: Project Status Summary of March 25th, 2010 Prioritization
 of ECSD CIP Projects and Implementation Plan

Dear Board Members:

The March 25th, 2010 Prioritization of ECSD CIP Projects and Implementation Plan (March 2010 Implementation Plan) was established to provide the District with the planning and a program to implement and manage the sewer system replacement. Currently, the 2011 and 2012 Phase Projects have been completed.

The total project budget of \$6,060,000 was established per the Implementation Plan. As indicated, the 2011 and 2012 Phases are completed. It is noted that the 2012 Phase includes the Additional Project, Item 3 "Edgemont St" (refer the tables in the March 2010 Implementation Plan for details). Table 1 summarizes the current actual project cost, current budget remaining status, and estimated budget status.

Table 1: Implementation Plan Budget Status Summary

Year	Location	Actual Phase Cost	Estimated Phase Cost
2011	Arvonna St /Lancaster Ln	\$458,190	\$670,000
2012	Barbara St / Bay Ave	\$975,006	\$1,050,000
Total Costs To Date		\$1,415,196	\$1,720,000
Total Implementation Plan Budget		\$6,060,000	
Remaining Budget		\$4,644,804	\$4,340,000

As shown on the Table 1, the remaining budget is within the original estimated budget. Additionally, the completion of the projects, with exception to the 2010 Phase “Cottonwood Ave” which is currently on hold as its need is tied to development, have been completed as planned in the March 2010 Implementation Plan. See Figure 1 for overall and completed phases.

As the next phase of the March 2010 Implementation Plan is scheduled this year 2013, Webb Associates met with Mr. Joe Teague to review the proposed streets for this year, and discuss any additional sewerlines which may need replacement or repair based on recent maintenance efforts. A sewerline video should be performed to determine the sewerline condition. Mr. Teague requested for the following streets to be added:

- Dracaea Avenue – Tree Roots
- Farragut Avenue – Tree Roots
- Easement off of Vought Street – Tree Roots
- Eucalyptus Avenue at Old 215 Frontage Road – Cannot Find Manhole Frame & Cover

As a result of this meeting we recommend initiating the planning and design of the implementation phase, 2013 Phase Sewerline Replacement “Brill Rd and Linda Ct”, including repair and replacement locations as indicated by Mr. Joe Teague (including video inspection) and Additional Project, Item 2 “Barbara St”. See Figure 2 for the recommended 2013 Phase Sewerline Replacement, Additional Project Item 2, and other locations. The project budget for the 2013 Phase is as summarized in Table 2.

Table 2: 2013 Phase Sewerline Replacement

Project	Actual Phase Cost
Phase 2013 Brill Rd and Linda Ct	\$890,000
Additional Project Item 2 “Barbara St”	\$210,000
Total 2013 Phase Project Cost	\$1,100,000
Current Remaining Budget	\$4,644,804
Remaining Implementation Budget	\$3,544,804

Should you have any questions or comments, please do not hesitate to call me at our office.

Sincerely,

ALBERT A. WEBB ASSOCIATES

William T. Malone, PE/PMP
Vice President

Enclosures

- Figure 1 Overall and Completed Sewer Project Implementation Plan Map
- Figure 2 Phase 2013 Proposed Sewer Project Implementation Plan Map
- March 25th, 2010 Prioritization of ECSD CIP Projects and Implementation Plan

cc: Jessica Pfalmer, ECSD
Joe Teague, ECSD
Edward Mackey, Law Offices of Edward Mackey
Sam Gershon, Webb Associates

EDGEMONT COMMUNITY SERVICES DISTRICT

PROPOSED SEWER PROJECT IMPLEMENTATION PLAN

LEGEND

CIP	MANHOLE	6" VCP EXISTING SEWER LINE & SIZE
YEAR 2010	DROP MANHOLE	SEWER - ABANDONED
YEAR 2011	CLEAN OUT	CITY OF RIVERSIDE SEWER
YEAR 2012	LIFT STATION	ECSD BOUNDARY
YEAR 2013	METERING STATION	CITY BOUNDARY
YEAR 2014	CITY OF RIVERSIDE MANHOLE	PARCELS
YEAR 2015		
ADDITIONAL PROJECTS		
COMPLETED PROJECT		

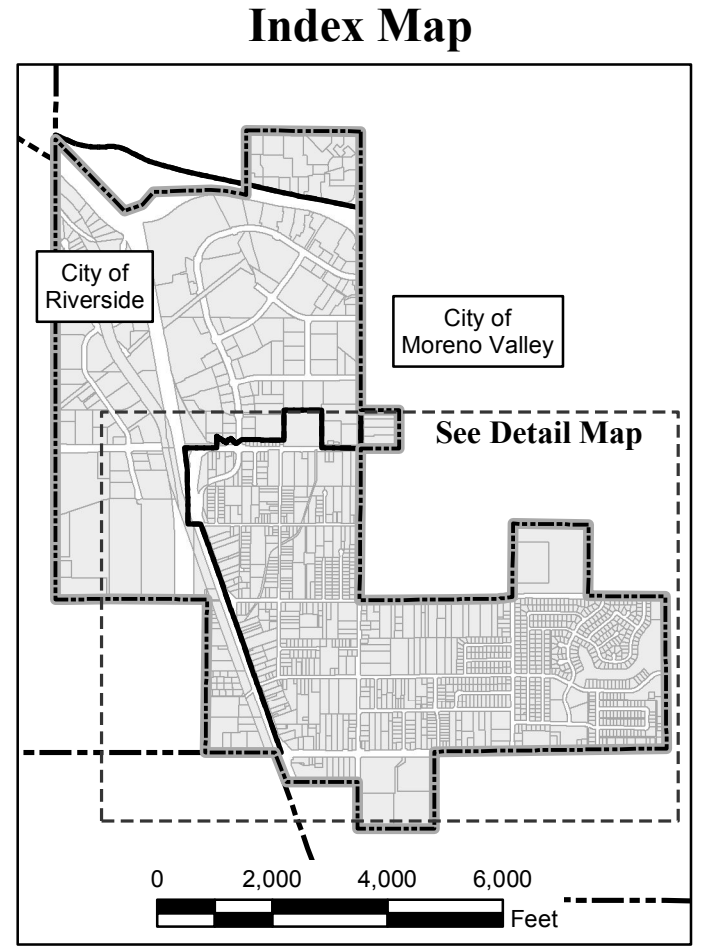
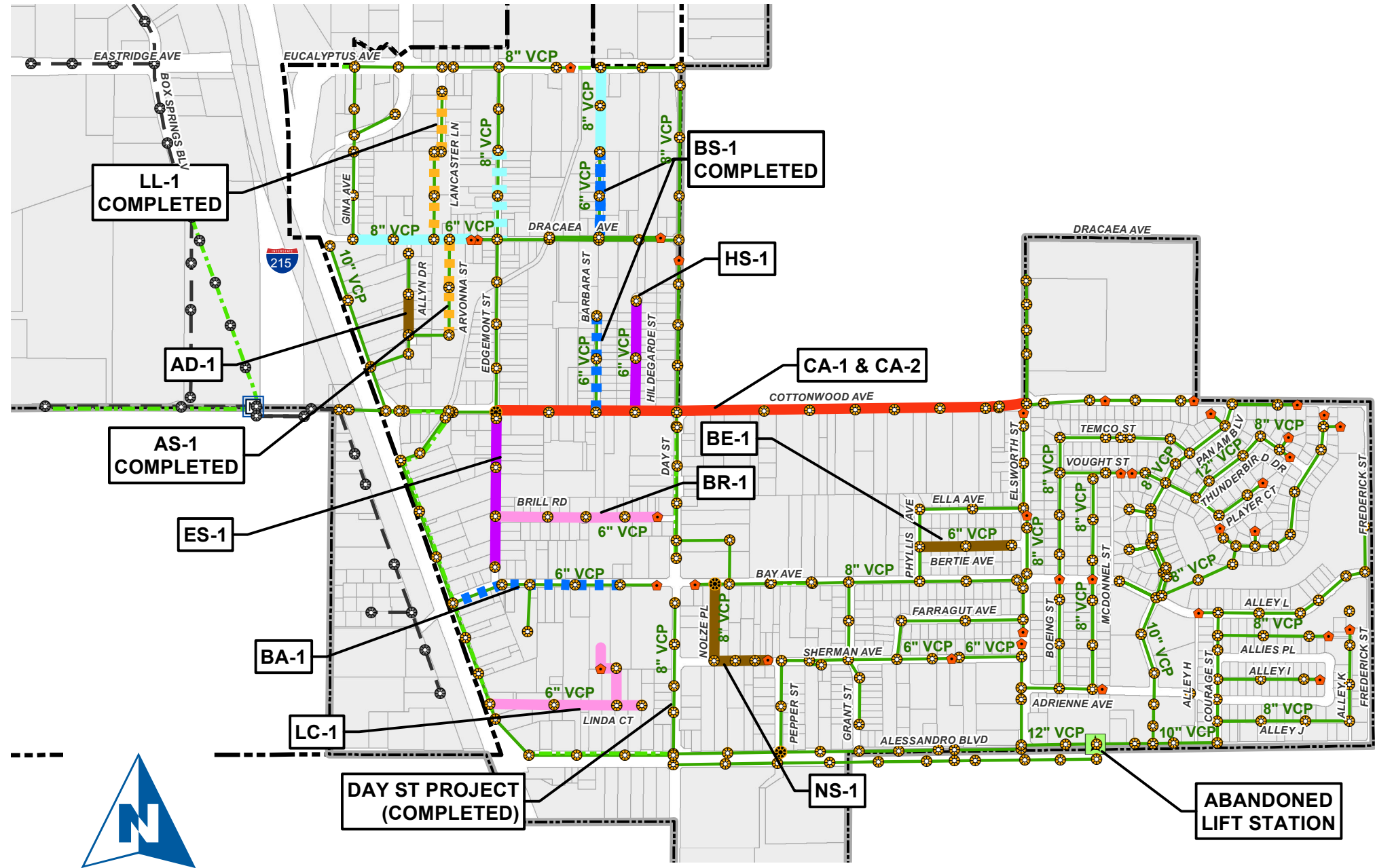


FIGURE 1
Overall / Completed

Source: Riverside County 2009

Map created May 23, 2013. G:\2006\06-0352\Gis\OverallCompleted_11x17.mxd

EDGEMONT COMMUNITY SERVICES DISTRICT

PROPOSED SEWER PROJECT IMPLEMENTATION PLAN

LEGEND									
	YEAR 2013		DROP MANHOLE		METERING STATION		6" VCP EXISTING SEWER LINE & SIZE		ECSD BOUNDARY
	ADDITIONAL (PENDING VIDEO INSPECTION)		CLEAN OUT		CITY OF RIVERSIDE MANHOLE		SEWER - ABANDONED		CITY BOUNDARY
	MANHOLE		LIFT STATION				CITY OF RIVERSIDE SEWER		PARCELS

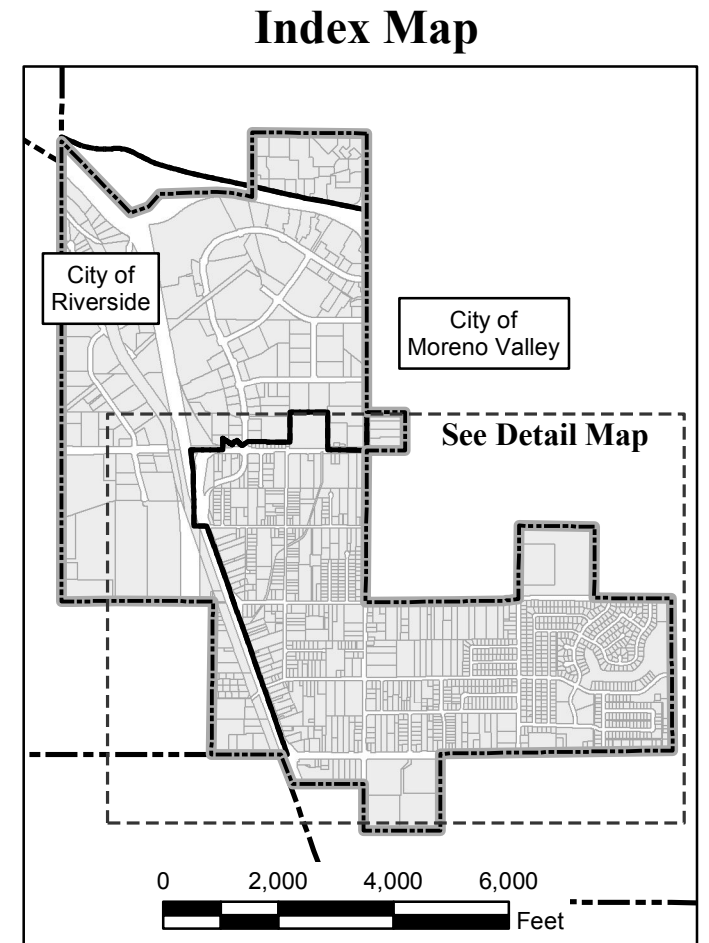
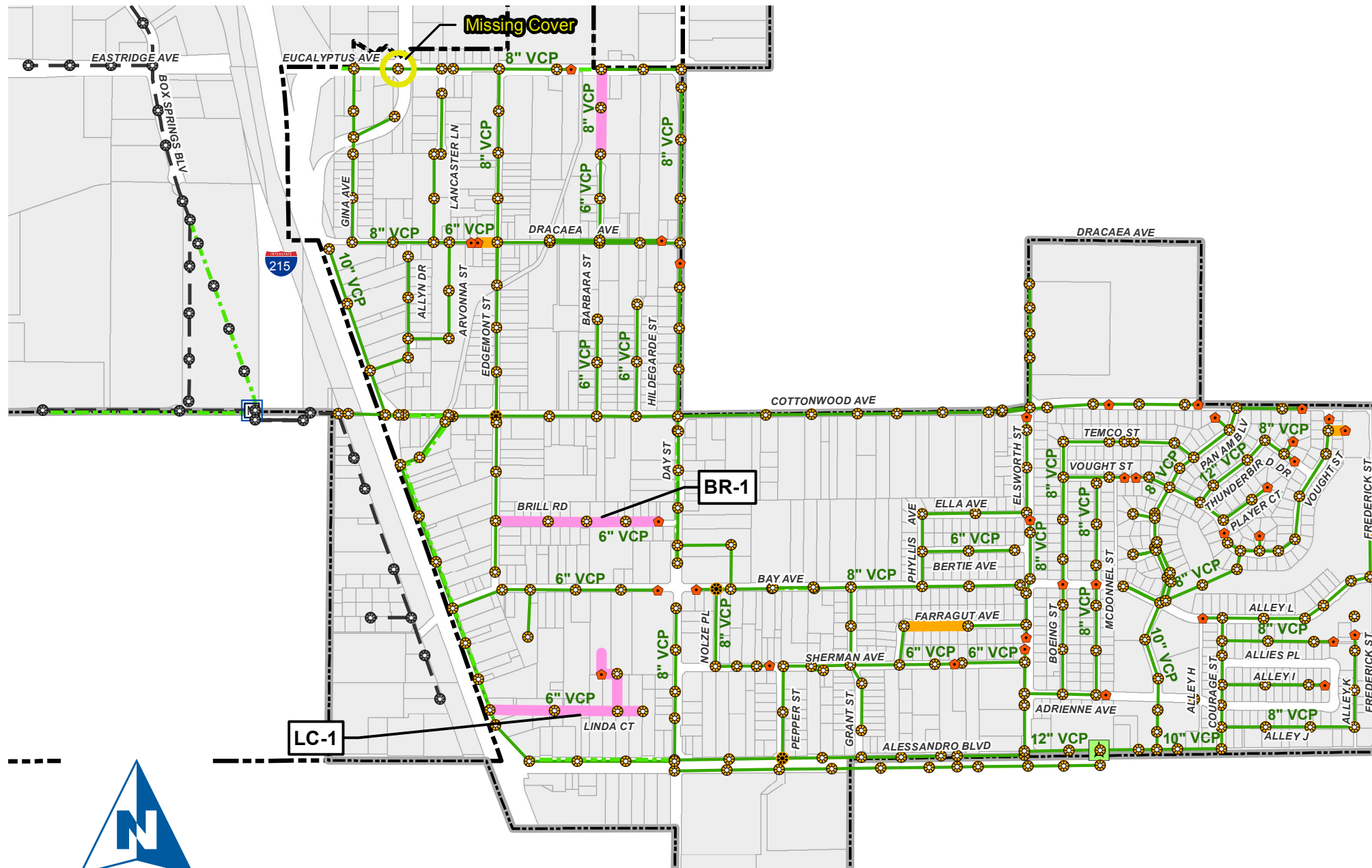


FIGURE 2
Proposed 2013



Source: Riverside County 2009

Map revised March 15, 2010. G:\2006\06-0352\Gis\Sewer_CIP_ECSD_11x17.mxd

Corporate Headquarters

3788 McCray Street
 Riverside, CA 92506
 951.686.1070

Palm Desert Office

41-990 Cook St., Bldg. I - #801B
 Palm Desert, CA 92211
 951.686.1070

Murrieta Office

41391 Kalmia Street #320
 Murrieta, CA 92562
 951.686.1070

June 23, 2016

Board of Directors

EDGEMONT COMMUNITY SERVICES DISTRICT

Post Office Box 5436
 Riverside, California 92517

Re: Project Status Summary of District System Wide Sewer Videos

Dear Board Members:

During April and May of 2015 the District's entire sewer system in Canyon Springs Plaza (north of State Route 60) was video inspected. During February and March of 2016, combined with the annual sewer system cleaning, the District's entire sewer system south of Eucalyptus Avenue was video inspected.

Canyon Springs Plaza

The review of the Canyon Springs Plaza sewer videos revealed various issues with the sewer mains such as cracking, sags, and joint separations, though the sewer main crossing of SR-60 Freeway requires attention. The video for this reach shows significant sags along the pipe and also some cracks. We recommend further investigation and evaluation to better understand the condition of this facility in order to provide the appropriate solution.

2016 District Wide Sewer Video Inspection South of Eucalyptus

As a result of the sewer main conditions observed in the Canyon Springs sewer system, the Sewer Main Inspection Program was implemented in February 2016 to provide video inspection of the District's entire system south of Eucalyptus Avenue and was completed in March 2016. Approximately 84,000 feet of sewer main, size ranging from 6-inch to 18-inch diameter, was videoed. The 2016 video inspection was reviewed and showed varying degree of root intrusion, broken and cracked pipes.

The following Table 1 summarizes the major review criteria provided by the video company (Houston and Harris).

Table 1: Review Criteria

Criteria	Severity	
	Least	Most
Obstructions (Roots, Grease, Other)	M1	M5
Damage (Cracks, Broken, Offsets)	S1	S5

For repair consideration the pipes with the most severe conditions (M4 to M5 or S4 to S5) were considered. The magnitude of the repair depended on the quantity of conditions. For example, if a broken pipe was found with S5 criteria and the surrounding pipe was fine, this would be a point repair. If there were several minor cracks (S1 to S3) surrounding this large crack, the entire section (manhole to manhole) would be replaced. Based on the severity of the obstruction and/or the breakage, the proposed repairs were prioritized into three categories.

- Priority 1 Sewer Repair – Most severe damage and should be repaired this year.
- Priority 2 Sewer Repair – Medium severity and should be repaired next year.
- Priority 3 Sewer Repair – Low to medium in severity, though repairs are warranted. Some sections require planning and design.

Figure 1 depicts the locations of the recommended repairs and replacement (R&R) and the following Table 2 summarizes the R&R details.

Table 2: R&R Priority

Priority	Location	Size	Length	Description
1A	Sherman Ave.	8-inch	10-feet	Repair large pipe breakage
1B	Sherman Ave.	8-inch	10-feet	Repair large hole in pipe
2A ¹	Noltze St.	6-inch	10-feet	Repair large pipe breakage
2B	Alessandro Blvd.	8-inch	10-feet	Repair large pipe breakage
2C	Alessandro Blvd.	8-inch	10-feet	Repair large offset joint
2D	Alessandro Blvd.	8-inch	10-feet	Repair large offset joint
2E	Elsworth St.	8-inch	40-feet	Repair large pipe breakage
2F	Pan Am Blvd.	8-inch	10-feet	Repair large pipe breakage
3A	Old 215 Frontage Rd.	10-inch	10-feet	Repair large pipe breakage
3B	Eucalyptus Ave.	8-inch	5-feet	Replace cleanout and repair pipe breakage
3C	Edgemont St.	8-inch	1,400 feet	Due to multiple and severe cracks and breakage, replace and upsize entire reach between Dracaea Ave to Cottonwood Ave to 10-inch diameter and add two manholes
3D ¹	Edgemont St.	6-inch	900-feet	Repair and replace due to multiple cracks, breakages, root intrusion
3E ¹	Hildegade St.	6-inch	10-feet	Repair large pipe breakage
3F	McDonnel St.	8-inch	10-feet	Repair large joint offset
3G	Frederick St.	8-inch	100-feet	Properly reconstruct siphon and add two (2) manholes
3H	Alley "K"	8-inch	10-feet	Repair large pipe break and replace with factory wye
3I	Canyon Springs, SR-60 Freeway Crossing	8-inch	300-feet	Replace pipe due to severe sags in cased crossing

¹ These sections are within the District's Master Sewer Plan Improvements.

These videos show the District's sewer mains in varying conditions necessitating re-evaluation of replacement prioritization to the District's Master Sewer Plan (MSP) sewer main improvements program. Therefore, the MSP Improvements were combined with the recommended R&R projects for efficient implementation of these projects. Figure 1 depicts the locations of the MSP Improvements and the following Table 3 summarizes the recommended combined project schedules. Table 4 summarizes the costs the combined projects.

Table 3: Summary of Combined Project Schedule

MSP Projects	R&R	Schedule
ES-1	1A, 1B, and 3C	This year (2016)
NS-1 and AD-1	2E, 2F, 2B, 2C, 2D, and 3I	Following Year (2017)
BE-1 and HS-1	3A, 3B, 3F, 3H and 3G	Third Year (2018)
CA-1 and CA-2	None	On Hold ²

Table 4: Summary of Project Costs

Implementation Schedule	MSP Projects	R&R	Total
This Year (2016)	\$ 420,000	\$462,000	\$ 882,000
Next Year (2017)	\$ 650,000	\$347,760	\$ 997,760
Third Year (2018)	\$ 420,000	\$ 71,400	\$ 491,400
CA-1 and CA-2 (On Hold)	\$1,270,000	None	\$1,270,000

Table 5 summarizes the MSP budget status combined with the proposed R&R improvements.

Table 5: Budget Status Summary

MSP Budget	\$ 5,350,000
Completed MSP Projects (Actual Costs)	\$ 2,275,000
Remaining MSP Budget	\$3,075,000
MSP's CA-1 and CA-2 (On Hold)	\$1,270,000
Remaining MSP Projects (ES-1, HS-1, AD-1, BE-1, NS-1)	\$1,490,000
R&R Projects	\$ 881,160
Additional Budget Required	(\$ 570,000)³

² Pending status of Tract 32215 (condo development), northeast corner of Cottonwood Ave. and Elsworth St.

³ Rounded to the nearest \$10,000.

Board of Directors
EDGEMONT COMMUNITY SERVICES DISTRICT
June 23, 2016
Page 4 of 4

Should you have any questions or comments, please do not hesitate to call me at our office.

Sincerely,

ALBERT A. WEBB ASSOCIATES

William T. Malone, PE/PMP
Vice President

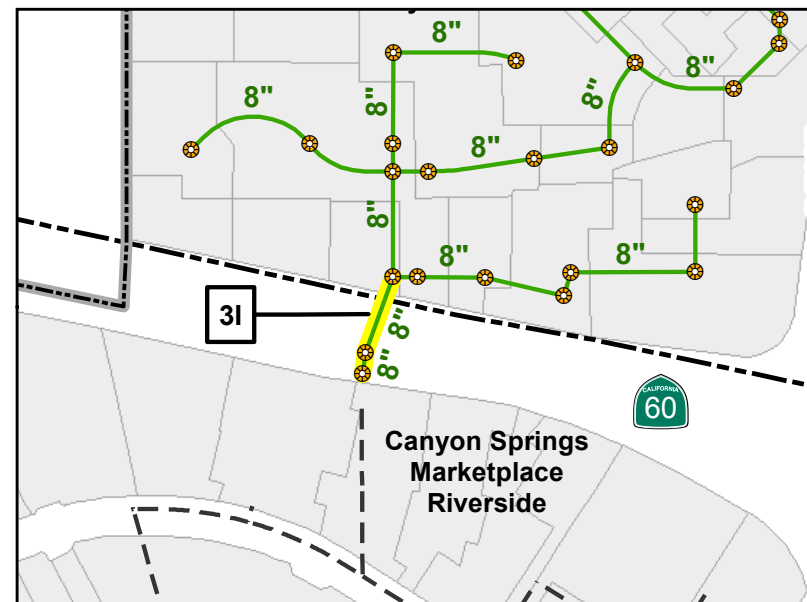
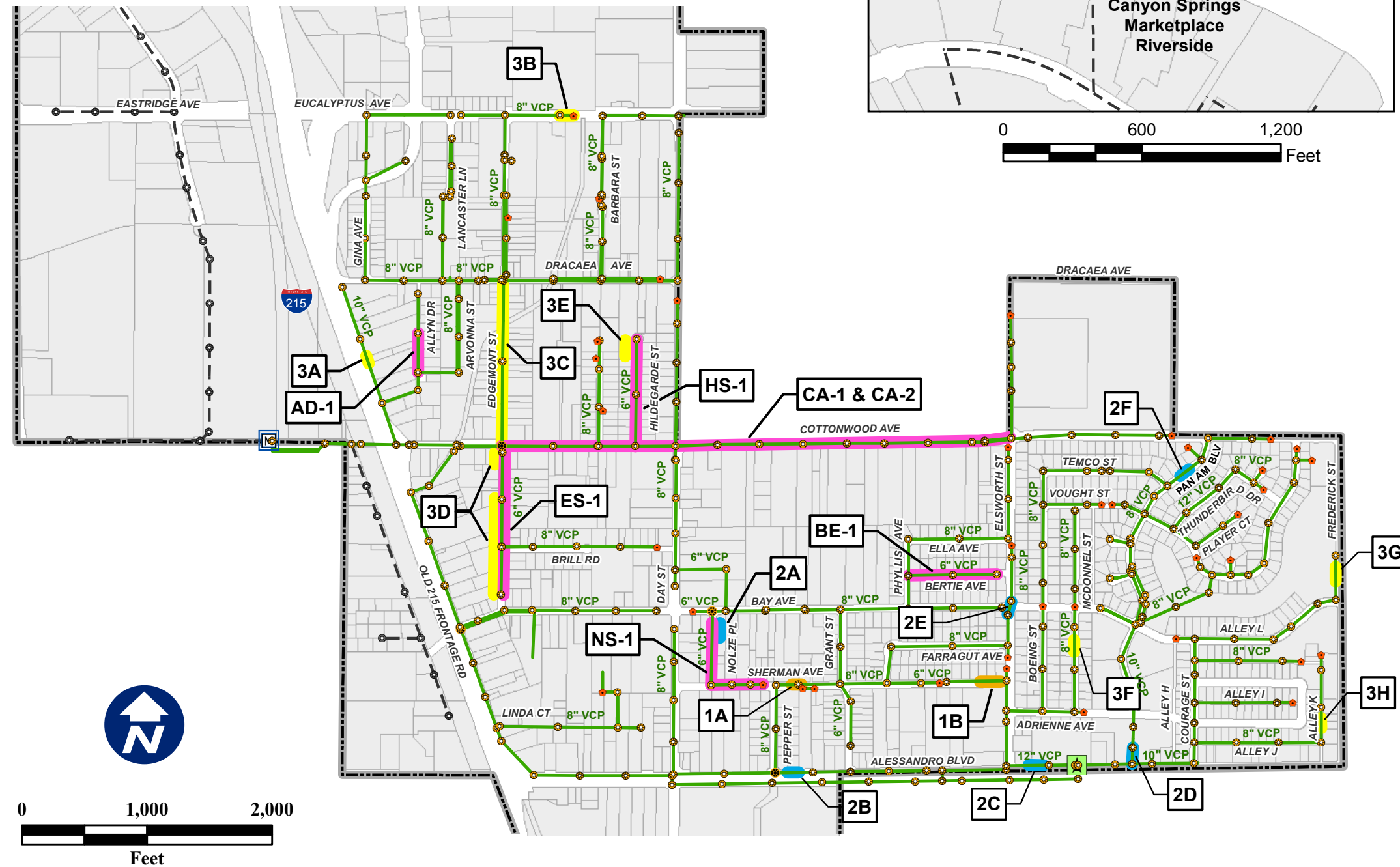
Enclosures

Figure 1 Proposed Repair Prioritization and Master Sewer Plan Improvements

cc: Jessica Pfalmer, ECSD
Edward Mackey, Law Offices of Edward Mackey
Sam I. Gershon, Webb Associates

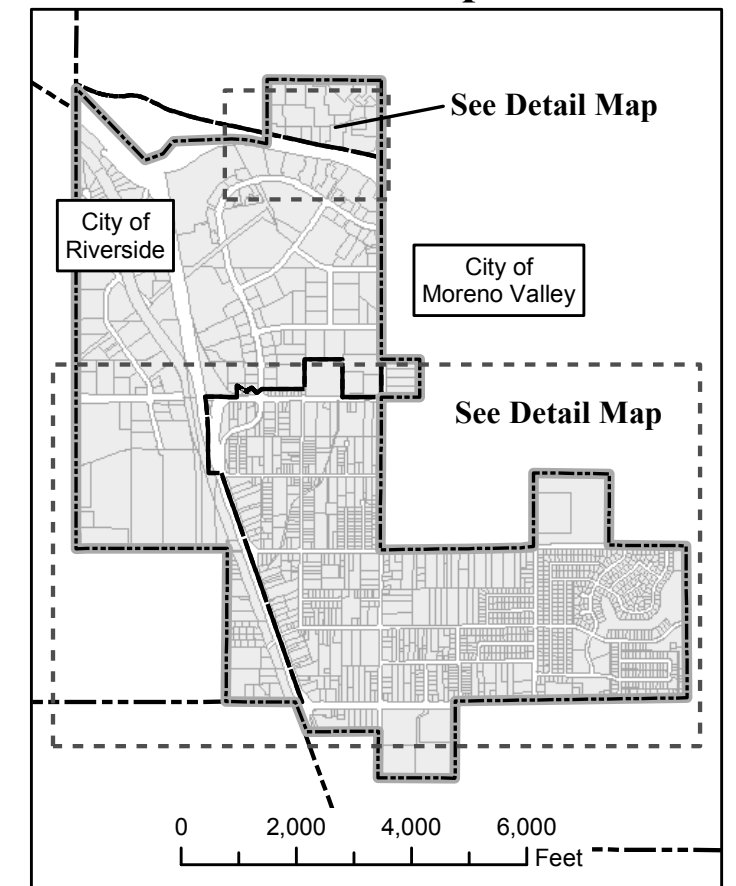
LEGEND

- MANHOLE
- DROP MANHOLE
- CLEAN OUT
- CITY OF RIVERSIDE MANHOLE
- METERING STATION
- ▲ LIFT STATION
- 8" VCP EXISTING SEWER LINE & SIZE
- CITY OF RIVERSIDE SEWER
- PRIORITY 1 SEWER REPAIR & REPLACEMENT
- PRIORITY 2 SEWER REPAIR & REPLACEMENT
- PRIORITY 3 SEWER REPAIR & REPLACEMENT
- MSP SEWERLINE IMPROVEMENTS
- ▭ ECSD BOUNDARY
- ▭ CITY BOUNDARY
- ▭ PARCELS



**EDGEMONT COMMUNITY SERVICES DISTRICT
PROPOSED SEWER PROJECT IMPLEMENTATION PLAN**

Index Map



**FIGURE 1
Proposed Repair
Prioritization and Master
Sewer Plan Improvements**





Memorandum

To: Jessica Pfalmer, General Manager, ECSD
 From: Sinnaro Yos, P.E.
 Cc: Board of Directors
 Date: March 20, 2018
 Re: ECSD, Canyon Spring Plaza 8-inch Dia. Sewer Crossing State Route 60 and Four Barrels Crossing Interstate 215 at Cottonwood Ave., Installation of Mission Communications M83 SSO Manhole Monitoring System and Installation of Water Tight Manhole Covers and Reaction Spill Time

Pursuant to District request, Webb Associates obtained the cost proposal for the furnishing and installation of the Mission Communications M83 SSO Manhole Monitoring System at the following District facilities.

- A. Upstream Manhole, Canyon Springs Plaza north of State Route 60 (**Figure 1**)
- B. Upstream Junction Box, Cottonwood Avenue east of Interstate-215 (**Figure 2**)

The following provides an overview of what the proposed system entails (**Attachment A**):

- Mission Communication Sewer Overflow Alarm and Tracking System
- Installed inside sewer manholes with two (2) floats for level
- The low float typically sets at the shelf
- The high float typically sets 18" to 24" above the low float
- Automated call and alert system per District preference
- Alarm calls require acknowledgement and can setup up to 13 call rollovers
- Communications with cellular radio network
- Web based user interface
- Cellular antenna to be housed in buried utility box next to manhole
- Five-year Guarantee on equipment and battery
- Installation is proposed by equipment supplier, Southland Water Technologies
- Longer cable required for the Canyon Springs Manhole due to depth
- Equipment, materials, installation and training
- Initial one-time account setup
- One-year Monitoring

In conjunction with the manhole monitoring system, the reaction spill time is critical in case of a full manhole blockage. For the Canyon Springs Plaza, if a full blockage at the manhole upstream of State Route 60 crossing were to occur, the reaction spill time is be based on Manhole 1011. Refer to **Figure 1** for reference. **Table 1** summarizes the reaction spill times for Canyon Springs Plaza. The cost for this option is \$2,500 plus \$227 per year for annual monitoring. Refer to **Attachment B** for cost breakdown.

TABLE 1
Reaction Spill Time Based on SSO at West Manhole No. 1011

Flow Condition	Average Daily Flow (2016)	Peak Flow (2016)	Average Daily Flow (Ultimate)	Peak Flow (Ultimate)
Flow (gpm)	50	90	96	172
Reaction Spill Time (minutes)	186	103	97	54

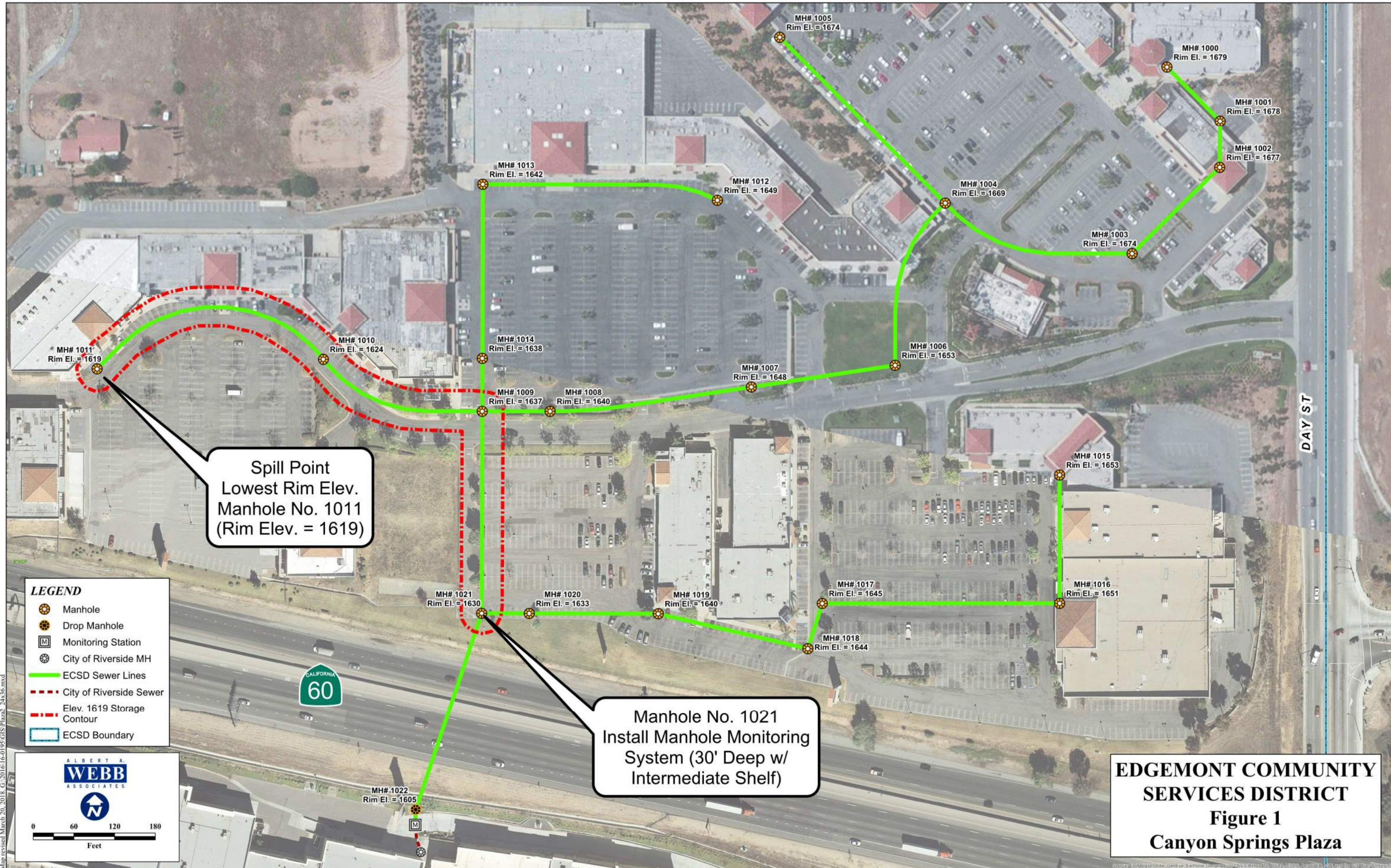
The reaction spill time for the Interstate-215 4-Barrels crossing was discussed in the February 22, 2018 memo which also proposed to add one light weight water tight manhole cover (**Figure 3**) at the 4-Barrels junction box and two cast iron water tight manhole covers (**Figure 4**) at Manholes 1325 and 1326 along the City of Riverside sewer main (unpaved) west of Old 216 Frontage Road to prolong the reaction spill time for this area. The reaction spill time is based on Manholes 1290 and 1291. Refer to **Figure 2** for the locations of the proposed water tight covers. **Table 2** summarizes the reaction spill times. The cost for this option is \$2,500 plus \$227 per year for annual monitoring and \$15,000 for manhole modifications. Refer to **Attachment B** for cost breakdown.

TABLE 2
Reaction Spill Time (minutes) Junction Box Upstream of Four Barrels Crossing I-215

Flow Condition	Average Daily Flow (2016)	Peak Flow (2016)	Average Daily Flow (Ultimate)	Peak Flow (Ultimate)
Reaction Spill Time with Non-Water Tight Covers	151	97	48	20
Reaction Spill Time with Three Water Tight Covers	208	135	67	27

The District's on-call maintenance contractor, Houston and Harris response time ranges between 1 to 2.5 hours depending on traffic conditions. Night hours would have the shorter response time whereas day hours will be longer. Their on-call operator is available 24-hour a day for seven days a week:

Larry Houston (909) 721-1756
 Brad Houston..... (909) 721-2708
 Steve Doutos (909) 721-1043



Spill Point
 Lowest Rim Elev.
 Manhole No. 1011
 (Rim Elev. = 1619)

Manhole No. 1021
 Install Manhole Monitoring
 System (30' Deep w/
 Intermediate Shelf)

- LEGEND**
- Manhole
 - Drop Manhole
 - Monitoring Station
 - ECSD Sewer Lines
 - City of Riverside Sewer
 - Elev. 1619 Storage Contour
 - ECSD Boundary

ALBERT A. WEBB ASSOCIATES

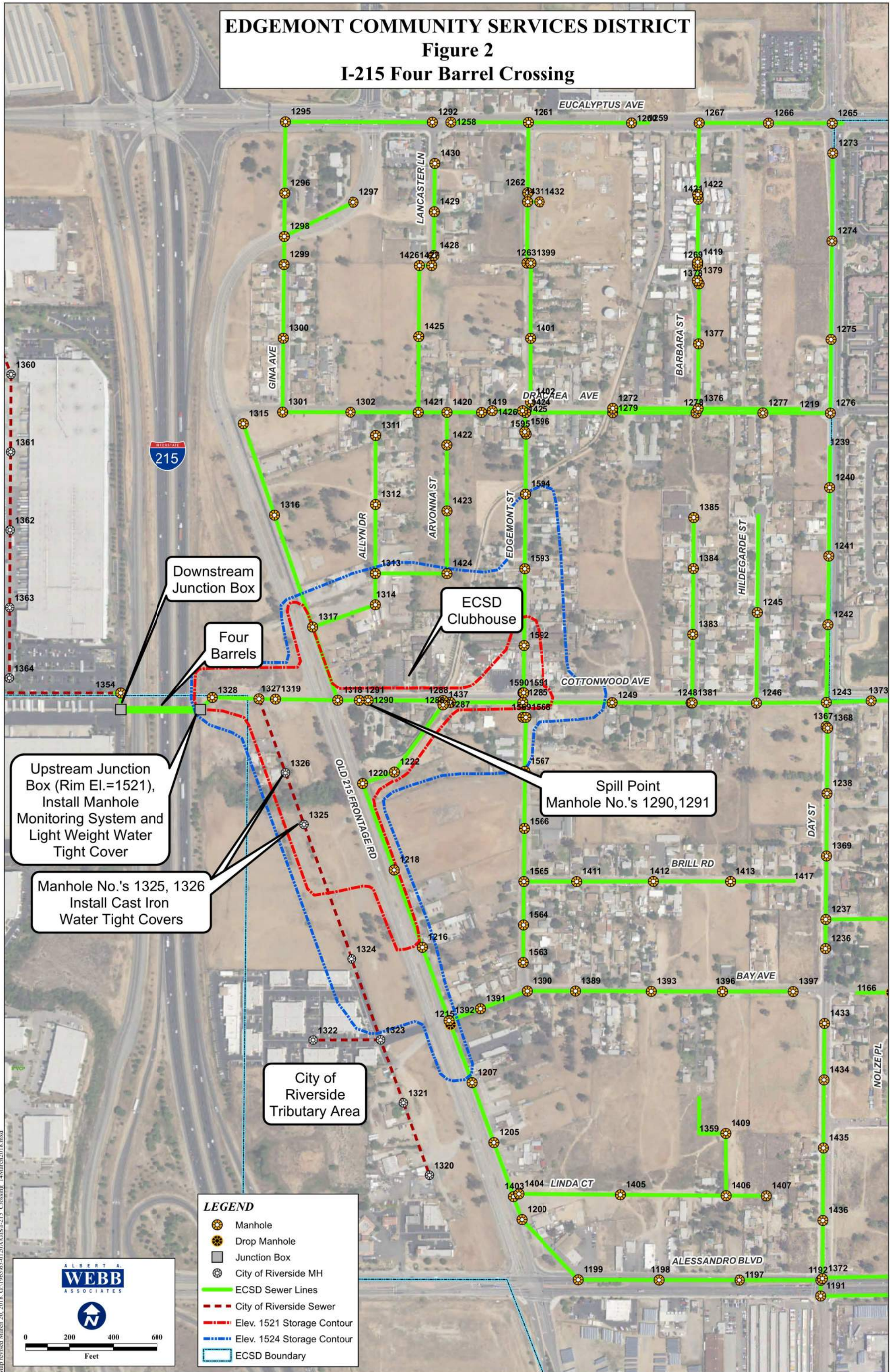
0 60 120 180
 Feet

EDGEMONT COMMUNITY SERVICES DISTRICT
Figure 1
Canyon Springs Plaza

Map revised March 20, 2018. G:\2016\16-0195\GIS\Plaza2_24x36.mxd

EDGEMONT COMMUNITY SERVICES DISTRICT

Figure 2 I-215 Four Barrel Crossing



Downstream Junction Box

Four Barrels

ECSD Clubhouse

Upstream Junction Box (Rim El.=1521),
Install Manhole Monitoring System and Light Weight Water Tight Cover

Spill Point
Manhole No.'s 1290,1291

Manhole No.'s 1325, 1326
Install Cast Iron Water Tight Covers

City of Riverside
Tributary Area

LEGEND

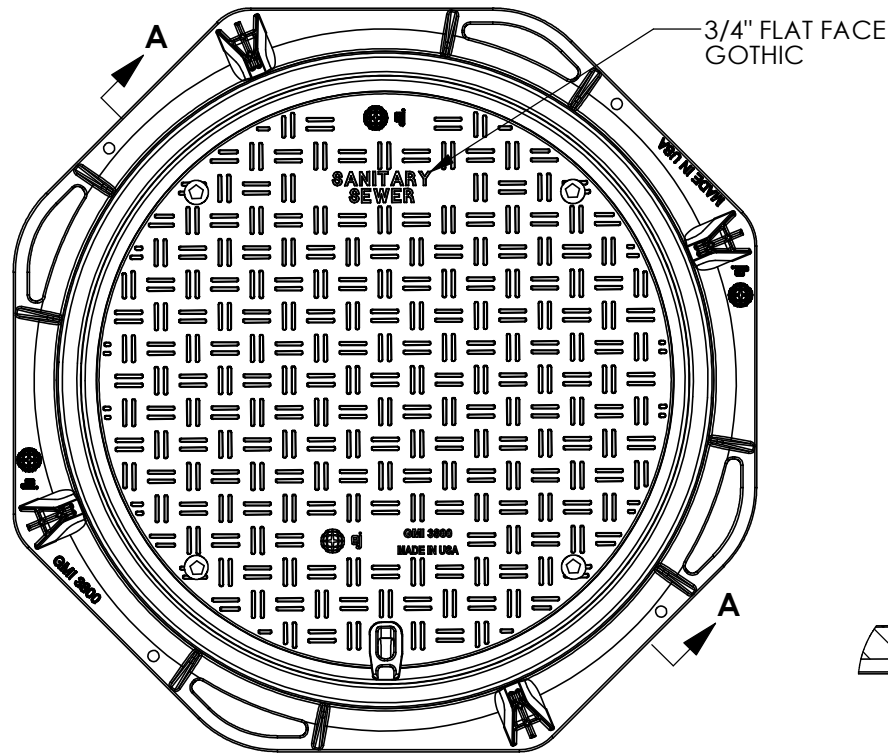
- Manhole
- Drop Manhole
- Junction Box
- City of Riverside MH
- ECSD Sewer Lines
- City of Riverside Sewer
- Elev. 1521 Storage Contour
- Elev. 1524 Storage Contour
- ECSD Boundary

ALBERT A. WEBB ASSOCIATES, INC.

0 200 400 600 Feet

Map revised March 20, 2018. G:\1963\63-01\20A\GIS\I-215 Crossing_14March2018.mxd

3800 Series Cover and Frame Assembly



NOTE: ASSEMBLY IS WATER RESISTANT

Product Number

COM380151A01

Design Features

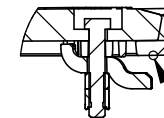
- Materials
Fiber Reinforced Polymer
- Design Load
Heavy Duty
- Open Area
n/a
- Coating
Undipped
- √ Designates Machined Surface

Weight

- Frame - 45 lbs.
- Cover - 75 lbs.

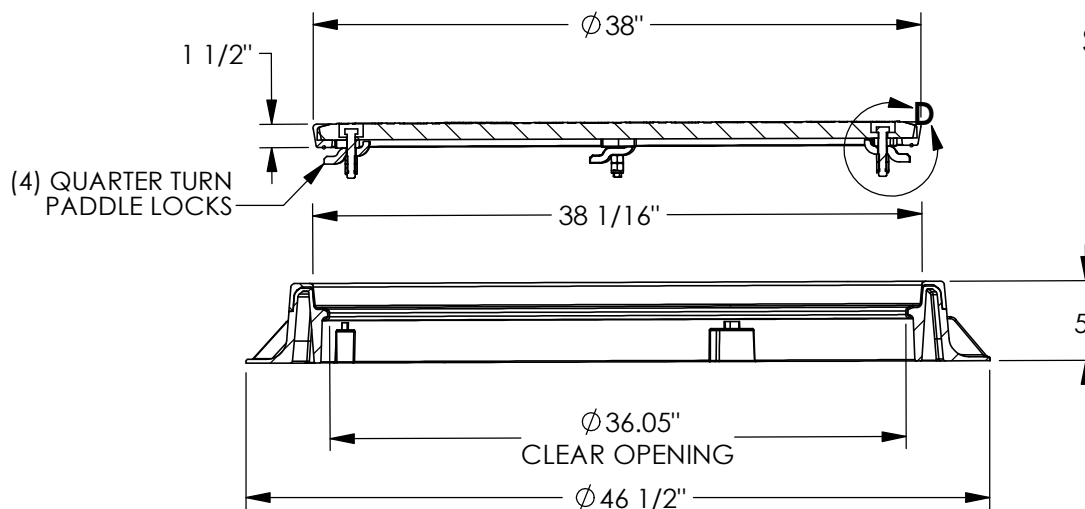
Certification

- H20
- AASHTO M306
- Country of Origin: USA



SECONDARY O-RING
1/4" DIA.

**DETAIL D
SCALE 1 : 6**



SECTION A-A

FIGURE 3A

Drawing Revision

- 9/16/2015 Designer: MAH
- 9/21/2015 Revised By: MAH

Disclaimer

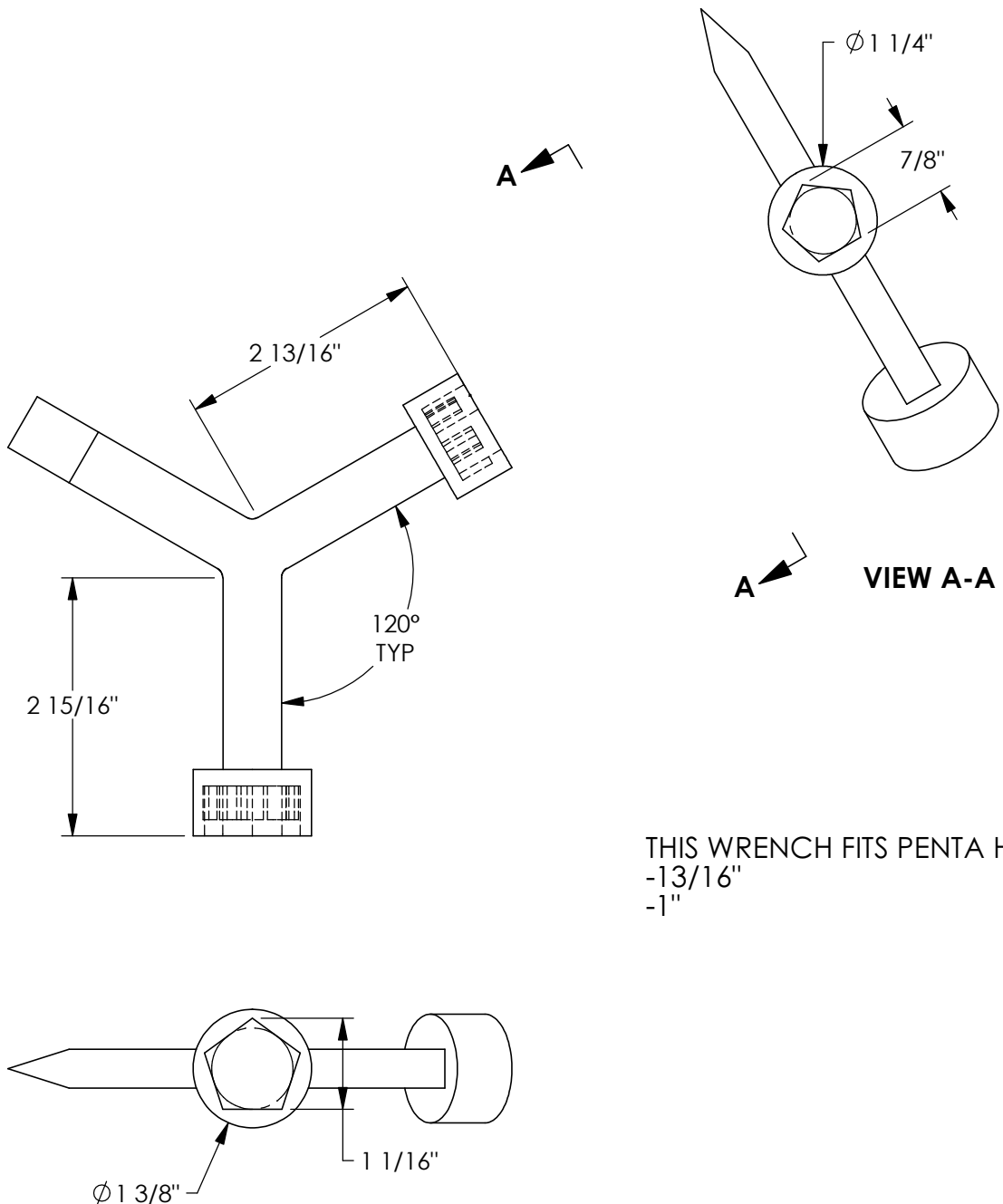
Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

CONFIDENTIAL: This drawing is the property of EJ Group, Inc. and embodies confidential information, registered marks, patents, trade secret information, and/or know how that is the property of EJ Group, Inc. Copyright © 2013 EJ Group, Inc. All rights reserved.

Contact

800 626 4653
ejco.com

WRENCH, Y HANDLE 13/16" AND 1" PENTA BOLT



THIS WRENCH FITS PENTA HEAD BOLTS
 -13/16"
 -1"

Product Number

COMKH00003

Design Features

- Materials
- Design Load
- Open Area
n/a
- Coating
- √ Designates Machined Surface

Certification

-
-
- Country of Origin: USA

FIGURE 3B

Drawing Revision

01/28/2016 Designer: MAH
 Revised By:

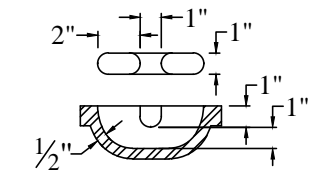
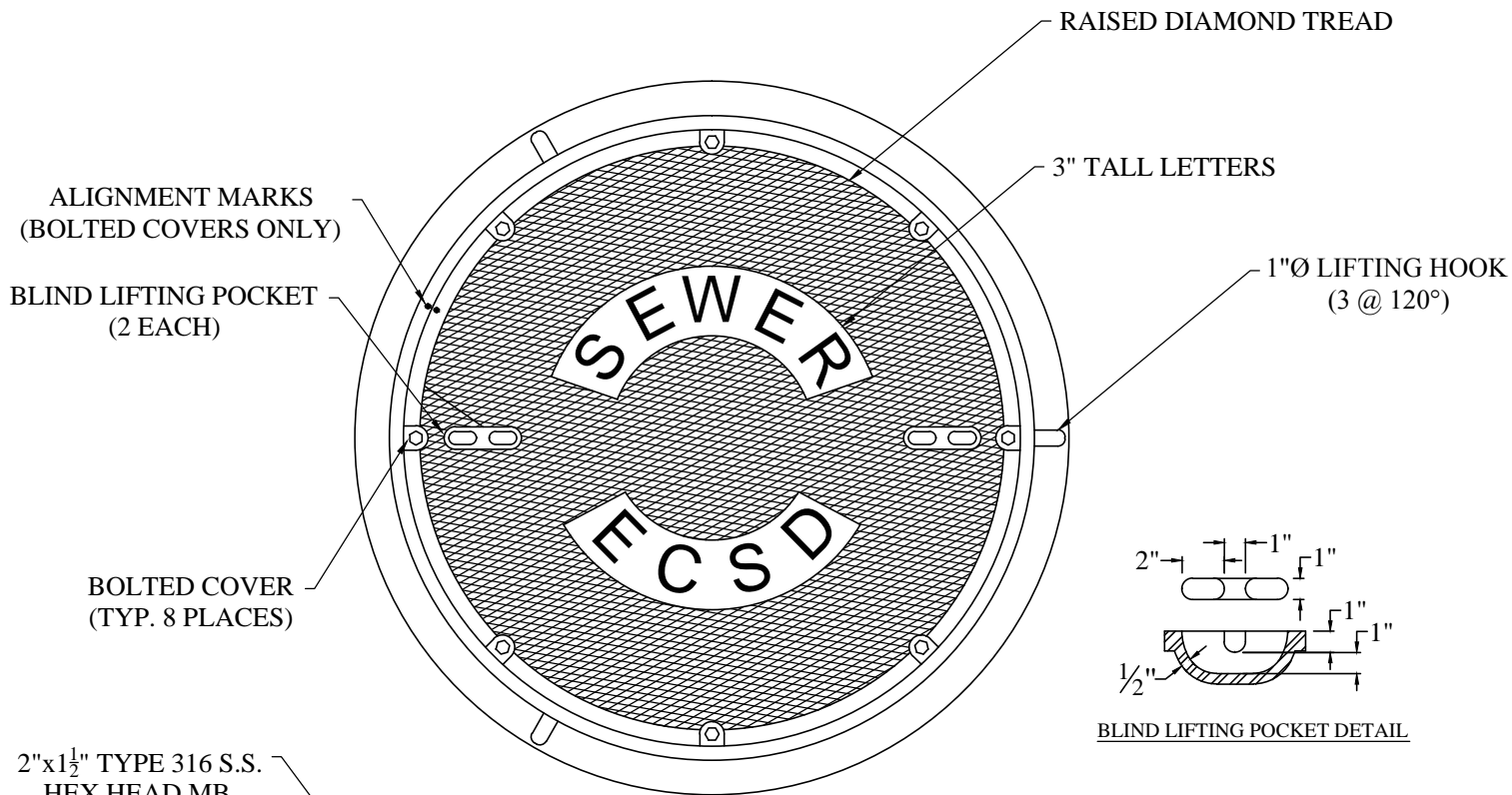
Disclaimer

Weights (lbs/kg), dimensions (inches/mm) and drawings provided for your guidance. We reserve the right to modify specifications without prior notice.

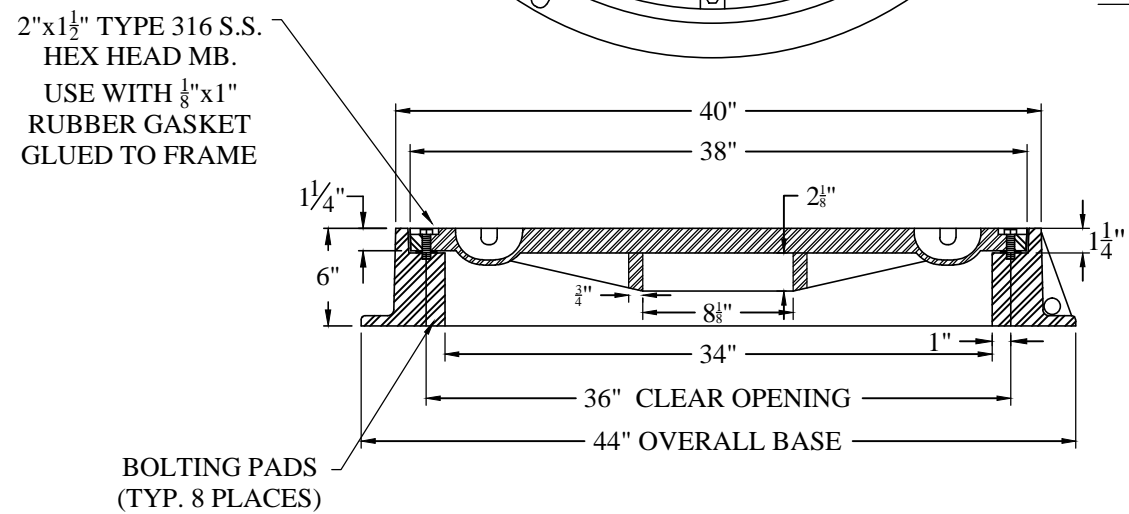
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Contact

800 626 4653
 ejco.com



BLIND LIFTING POCKET DETAIL



General Notes

MODEL NUMBER
A-1251-B-6

MATERIAL
CAST IRON
ASTM A-48 CL35B

WEIGHT
(APPROXIMATE 690
LBS./SET)
COVER: 325 LBS.
FRAME: 365 LBS.

COATING/FINISH
WATER BASED
ASPHALT EMULSION
BLACK PAINT

LOADING
TRAFFIC(H20)

DESCRIPTION
36"Ø MH RING &
COVER
BOLTED &
WATERTIGHT

Firm Name and Address

Project Name and Address

Drawn By: Sam Fatemi
Project _____ Sheet _____
Date 3/19/2018
Scale _____
Catalog: A-2

ALHAMBRA FOUNDRY CO., LTD.
1147 SOUTH MERIDIAN AVENUE • BOX 469 • ALHAMBRA, CA 91803-0469

FIGURE 4

Attachment A

**Southland Water Technologies LLC
Proposal for Mission Communications M83 SSO
Manhole Monitoring System at Two Locations**

Southland Water Technologies LLC

2588 El Camino Real
Suite F-510
Carlsbad, CA 92008
United States

Voice: 760-230-5231
Fax: 760-431-7397



QUOTATION

Quote Number: 031218-11MC
Quote Date: Mar 11, 2018
Page: 1

UPS Ground

Quoted To:
Edgemont Community Services District P.O. Box 5436 Riverside, CA 92517

Edgemont Community Services District P.O. Box 5436 Riverside, CA 92517
--

Customer ID	Good Thru	Payment Terms	Sales Rep
Edgemont CSD	4/10/18	Net 30 Days	KB

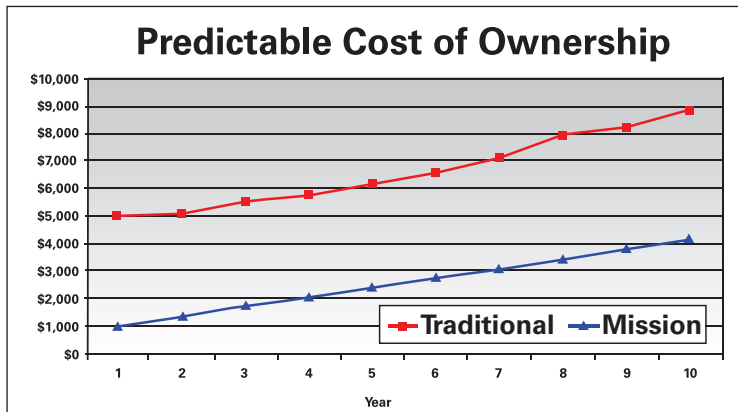
Quantity	Item	Description	Unit Price	Amount
1.00	M83	Mission Communications M83 SSO monitoring device, includes two float switches with twenty feet of cable. mounting plate, antenna/cable	1,495.00	1,495.00
1.00	M83	Mission Communications M83 SSO monitoring device, includes two float switches with forty feet of cable. mounting plate, antenna/cable	1,649.00	1,649.00
2.00	SPMM-12	Mission Communications Manhole Monitor 12 month service package	227.40	454.80
2.00	Labor	Labor to install Manhole Monitors in sewer manhole, includes in-ground valve box to hide antennas. Includes all materials, supplies, labor, travel and fuel	525.00	1,050.00
1.00	SW550	New Account Setup Fee	250.00	250.00
			Subtotal	4,898.80
			Sales Tax	275.10
			Freight	70.00
			TOTAL	5,243.90

Managed SCADA

What is Included?

You may wonder exactly what is included in the annual service fee purchased with a field RTU (Remote Terminal Unit, RTU). What are the actual ongoing costs of the Mission system? Are there any hidden fees? Do I have to buy cellular service to make the RTU work? What about excess messages – are there charges for excessive alarm notifications? Are there any software licenses I have to purchase? How many people can use the system? How long do you keep RTU data? What happens if my RTU is damaged? What about security?

Here's the bottom line: the Mission annual service fee includes everything your utility needs to run your Mission unit in a secure fashion with no risk of hidden fees. This includes all cellular service, the servers that manage and archive the data, web portals, reports, and alarm functions. Mission offers a few optional functions ("Tank and Well" controller software, "OPC Data Transfer", expanded I/O) at additional cost, but the majority of our customers simply buy the RTU and the annual service. You then use your existing computers, smart phones, or tablets to access the SCADA system via the secure web logins.



Guaranteed Price Stability

One of Mission's unique business pledges is that the annual service fee is guaranteed never to increase more than the rate of inflation – we like to call it "Predictable Cost of Ownership." Mission has guaranteed this, in writing¹, to all our customers since we were founded in 1999. To date we have not increased the annual service fee. We just keep on finding ways to provide better service more efficiently. To the best of our knowledge, none of our competitors have put a similar pledge in writing.

¹ See Business Performance Guarantee on Back Panel

² Battery and solar powered devices operate in low power/awake on exception mode

Executive Summary:

Cellular Services

- Cellular Airtime; No Overages
- Direct relationships with AT&T, Verizon, Sprint, and Rogers; managed by Mission
- Always connected Secure Socket Connections for Responsive Alarming²

Alarm Notifications

- Via Phone, Fax, Email, Web, Pagers, or Text Messages; No Toll Charges
- Sophisticated Call Out Destination and Schedule Options
- Alarms can be Acknowledged via all methods but Fax and Pager; Toll Free Number for Alarm Acknowledgement
- Callouts Recorded and Available for review from Web Portal
- Numerous Nuisance Alarm Reduction Features

The User Interface and System

- Desktop Web Portal for Full Screen Computers
- "Mobi" Web Portal optimized for Smartphones and Tablets (123mc.mobi)
- Customizable Overview Map shows all your Units at a Glance
- Over 50 reports, Data Views, Charts and Graphs optimized for the Sensors and features of the RTU
- All Historical Data available for Comparative Analysis or Download to a spreadsheet
- Powerful Analytical Tools like Supergraph
- Real Time Viewer – Desktop Application for a customizable HMI-like view of Real-Time Units (M800 Model)
- All systems managed, hosted and enhanced by Mission

Options and Advanced Features

- Optional Tank and Well Control System
- Optional real-time OPC link for customers with traditional SCADA HMI
- Expansion Boards and Service Plan for additional Data requirements beyond the built-in I/O

Security

- Data from RTU to Servers is encrypted by Mission and sent by carrier over Private Networks
- RTUs cannot be accessed from the Public Internet
- Web Pages accessed via SSL V4, 1024 bit key encryption
- Logins require credentials; SuperAdmin can maintain access control list
- Best practices enforced for Networks, Routers, Firewalls, Malware Protection and Physical Access

Support and Warranty

- Toll-Free, No-Cost Technical Support
- One Year No Questions Parts Warranty
- Replacement Costs Guaranteed not to exceed \$250 for Main Board or Radio
- Technological Obsolescence Guarantee
- Complimentary Training and Webinars

Software as a Service (SaaS)

Mission combines Software as a Service (SaaS) with purpose-built hardware to provide a highly reliable and cost effective “turn key” system. The SaaS business model allows you to get more features with less effort at a substantially lower cost than can be achieved in-house. This business model is ideal for applications that are repeatable, like collection system monitoring and smaller water systems. According to CIO Magazine, utilities are the third largest users of SaaS behind Technology and Financial Service providers³.



Mission operates its SCADA service from a carrier grade computer co-location center located near Atlanta, Georgia.

The engineers of Mission design the electronics and author the software, so we are in full control. Since the data is presented over the web, enhancements are provided system wide with no effort on your part. By combining standardized field hardware, national cellular data networks, and full-featured SCADA software into a single solution we are able to provide.

You have enough to deal with when managing your water/waste water system. Let Mission manage the monitoring and SCADA system for you.

The Alternative to Managed SCADA

Before Mission, the only way water utilities could harness the benefits of automation via SCADA was to build their own proprietary system. This required going through the specification and bid process and then managing the engineering, construction, and debugging phases of a new technology. This is a time consuming and expensive proposition. Once the system is running, IT staff is generally required as well as software support agreements.

In-plant processes, like treatment plants and water manufacturing, best served by traditional client/ server SCADA systems can accept data from the Mission system via an optional OPC link. This eliminates the complexities of maintaining a utility-wide communications network for the remote assets associated with a collection system.

Included with the Mission Annual Service Fee:

On Boarding – With a few simple forms Mission staff sets up your web portal, labels the inputs to your RTUs, and configures the call-out list. For installers, our technicians are available to discuss best installation practices and help test inputs before the unit is put into production. With a little training you can adjust virtually all system parameters from the web portal. With a smartphone all of the conveniences of the web portal are available at the job site. Free training webinars are held weekly to quickly acclimate new users.

Support – A big part of the Mission value proposition is technical support. You can talk directly with our technicians or use the ticket section of the web portal. Mission maintains a team of technicians for live telephone tech support from 8am to 6pm eastern. After hours support is always available on a responsive callback basis for emergencies, and at no extra charge.

Current Status – Following log on, the Main Map page displays all your units on a local, customizable map. Drilling into an icon displays additional information such as levels, pressures, or flows. Color codes are used to reflect alarm states, faults, or items of interest. Animated icons show pump running status for real time units.

Alarm Reporting – The Mission system has unparalleled alarm reporting functions. The system can dispatch over 40 phone calls per minute; and is scaled as our installed base increases. From the site you can set up your “address book” of alarm recipients and your “alarm call out” schedule. This even includes Mission’s exclusive call recording feature that allows you to playback recordings of alarm call-outs, eliminating any questions regarding received alarms. The system has dozens of nuisance alarm reduction features that eliminate annoying alarms. Alarm notification outcomes are logged. Complex time-of-day/day-of-week scheduling and conditional alarm rules can be setup by Mission Technical Support staff.

Mobile Device Website – Mission provides a special website optimized for smartphones and tablet computers (123mc.mobi.) The “mobi” web site allows you to check current status and respond to alarms while on-the-go. Installation and testing is easier and faster with .Mobi at the job site!

Cellular Data – All cellular charges for data used by your RTUs are included in the annual fee. Mission buys airtime in bulk and aggregates it across thousands of RTUs. There are no separate overage charges or early termination fees. Mission has designed its RTUs to send and receive data very efficiently. In the rare case that we notice a run-away sensor, our technical support team will assist you in resolving the issue so that you get useful data. Mission understands water and wastewater applications and we know how much data pump stations, wells, tanks, and instruments require. With over 11,000 fielded units, we are the largest purchaser of cellular data airtime in the water/waste water industry.

Mission monitors the connection status of field units. Technicians are alerted when we see a general reduction of the

³ CIO Magazine, The Truth about Software as a Service (SaaS) May 2007

“online” units in your area. Since Mission is in control of all aspects of the system we can quickly identify the problem and address it internally, get the cellular carrier involved, or assist you with the resolution of a local issue.

Ready-Made Reports and Data Folders –

- Alarm, Alert, and Dispatch Logs with easy access to Call Recordings
- Pump Info: Runtime, Starts, Alarms, Daily, Monthly, Variance (tabular data and in a variety of chart types)
- Digital Data
- Analog Data (tabular and various chart styles)
- Flow Data
- Rainfall from National Weather Service or local Tipping Bucket (tabular data, charts, and integrated with other reports like pump runtime)
- Specialty Reports- SSO/ CSO (Sanitary Sewer Overflow/Combined Sewer Overflow), SDWA (Safe Drinking Water Act), Chlorine etc.
- Engineering Reports: Capacity Estimator, Volumetric Calculations
- Weekly Management Reports for overall System Performance
- Disabled Inputs Reports
- Site Access Reports: electronic keys
- Web Site Access: By User and IP Address
- Unit Health: Check In History, Cellular Connection History, Voltage Reports, Solar Data

RealTime Viewer – This software allows you to watch streaming data from real time units in a control room type of environment. View pumps starts and stops within seconds of occurrence and see graphs of levels, pressures, or other instrument values updated in real-time. This software is a desktop application, not a web page, but is launched from the web portal.

Commands – Models M110 and M800 feature three output relays that can be controlled from the web portal with the appropriate password. Use these to manually command pumps or open and close valves. Real time units can be automated via digital intertie- where a change of a digital input at one location begets a relay change at another. Or, use the optional Tank and Well solution to automatically close relays based on an analog value at another location. An optional analog output board is available for setting remote variable values, or with real time units mirroring one analog value to another location.

Continuous Enhancements – Unlike traditional SCADA software that is installed and maintained locally, Mission’s SaaS system is continuously maintained and enhanced at our central servers. The enhancements and new features developed by the engineers of Mission are immediately available to you at no extra charge. Each year Mission develops dozens of new

Security:

Remote Terminal Connectivity

Mission adopts multiple measures to ensure that data is protected at every step – from RTU to end-user. The Mission RTU is purpose-built; it functions for a specific set of tasks, understands very limited protocols, and operates without Windows or Linux and their vulnerabilities. The RTU cannot accept an outside connection from an unknown device; the IP address is assigned within a private range. From the RTU to the carrier, Mission encrypts the over-the-air data using two algorithms, one at the application layer and the other at the wireless carrier level. Once the encrypted data reaches the cell towers it is forwarded to the Mission servers over encrypted private networks (VPNs).

Servers

The Mission servers are located in a high security server facility that requires biometric scans for entry. Access is limited to a small number of Mission personnel. The facility is engineered to withstand a direct F-4 tornado strike. The site has multiple electric utility interconnects encased in concrete from the substation to the site, 7.2 MW of constant flywheel uninterruptible power supplies, and 72 hours of backup generation capacity. Redundant cooling and fire suppression systems are also in operation. Connections to the internet backbone consists of four OC-4 fiber feeds, redundant internal networks, and a 24 hour network operations center. These levels of redundancy and security are expensive but reasonable when shared by hundreds of customers.

Web Access

Once the data is delivered to our servers, it is made available to you via 1024-bit Secure Socket Layer (SSL) protocol. All activities are logged and monitored. Repeated failed logins are blacklisted by IP address. Access from outside of US and Canada is automatically flagged.

Defense in Depth Security Strategy

The defense in depth security strategy involves layering security measures into the system. Firewalls are configured to minimize entry points and require high levels of validation; VPNs are used to secure the constant connections. Antivirus and antispam tools are used to block malware. The overall system is monitored from several perspectives so Mission engineers know of any anomaly immediately. Mission follows industry standard best practices with configuration and maintenance on all tools and sub-systems.

Practical Issues

Internal threats and shared, stolen, or casual passwords account for many security breaches today. Employing best practices within your organization can reduce security threats. Mission offers four levels of user rights – view only, user, administrator, and super-administrator. It is recommended to assign a super-administrator to maintain credentials for all of your users. The general rule holds that passwords should be changed every six months.

Comparison of Alternatives

Cellular communications reduce the risk of interception at the RTU because the complex modulations and the spread spectrum nature of GSM and CDMA technologies. With private radio and wireless Ethernet based SCADA systems, the customer must commonly implement encryption on their own. Many private radio based systems are unencrypted and point-to-point wireless. Ethernet WPA/WEP key standards are notoriously easy to circumvent. The beauty of the Mission managed service is that security issues are outsourced to the cellular provider and the professionals at Mission, leaving you to focus on what you do best.

features, some big, some small, all with a focus on the water and wastewater industry. Your investment with Mission grows in value over time!

Software and Database Maintenance – The Mission engineering team maintains, archives, and optimizes the system continuously. Terabytes of data are stored on high-speed Storage Array Networks. With a staff of engineers, Mission maintains a more responsive and reliable system for you.

Hybrid Systems – Our Optional OPC Data Link is used to synchronize RTU Data on our servers with your traditional SCADA-HMI server(s). This allows your operators to look at

one system while still getting the advantages of managed and low cost RTU connections. OPC security is assured via credentials and an optional VPN.

Low Risk Field Hardware – After the one year hardware warranty runs out, Mission provides a low cost replacement parts commitment. Simply stated, the main circuit boards or radios will not exceed \$250. In addition, we offer a technological obsolescence guarantee that eliminates your risk of an orphaned technology. These are some of the ways we have maintained an attrition rate of less than 1% per year.

Business Performance Guarantee:

Service Price Stability Guarantee

For as long as the customer chooses to use the Mission service the annual price will not increase from the initial term price by more than the amount equal to the annual compounded inflation rate as determined by the US Bureau of Labor as measured year-to-year from the start of the initial service term for the unit or as measured year-to-year from the mutually agreed annual service renewal date. This date must be mutually agreed upon by Mission and the customer.

Replacement Hardware Price Stability Guarantee

Replacement components for the originally purchased M-800 series unit will be no higher than \$250 for the radio module and \$250 for the unit's main printed circuit board (PCB). Replacement components for the M-110 series units will be no higher than \$250 for the main PCB and \$250 for the radio module. Replacement costs for the M-80 will be no higher than \$450 for the entire M-80 electronic assembly. Due to conformal coating of the M-80 unit there will be no sub-assembly replacements.

Technology Guarantee

Mission guarantees to the customer that the radio telemetry technology will be available for use by the customer as long as the customer wishes to utilize the service of Mission. If the original installed radio telemetry technology becomes unavailable or unusable for any customer unit, then Mission will at its sole expense, provide to the customer hardware for the customer to swap out and replace the non-performing unit's radio telemetry module hardware. The new radio module technology will be equal to or better than the original radio

telemetry technology. Such equivalency is to be approved by the customer and such approval is not to be unreasonably withheld by the customer. If Mission cannot make such equivalent radio telemetry technology available to the customer within 120 days of the original radio telemetry cessation, then Mission may be required by the customer to refund any prepaid service fees paid by the customer, minus any used service fees while the radio telemetry performed to the above standard for Service Performance, plus the sum of \$500.

Obsolescence Guarantee

From time-to-time Mission intends to introduce hardware and service improvements to existing hardware models and to introduce new hardware/service offerings. Customers utilizing the managed service offerings of Mission (standard monitoring service) may wish to upgrade previously installed equipment to the newest model offering. Customers may trade in and/or upgrade equipment for a price equal to the new model price minus the current trade in value for the existing field equipment. The trade in value is defined as being 100% of the original purchase price in the first year (from date of purchase), 80% of purchase price in the second year, 60% in the third year, 40% in the fourth year, 20% in the fifth year and no trade in value thereafter. Additionally, if the new equipment has a higher annual service fee associated with it, the new fee will be applied to the customer's annual service at the time of field commissioning going forward. All the above are part of, and included in, the Mission annual service fee. Whether you use the M-80, M-110, or M-800 all the Mission SCADA services are included.

Mission is simply a better way to perform SCADA.



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**MANHOLE MONITORING SYSTEM
INSTALLATION PHOTOS**



**MANHOLE MONITORING SYSTEM
INSTALLATION PHOTOS**

Attachment B

Cost Breakdown

Cost Breakdown

TABLE A
Canyon Springs Plaza Manhole Monitoring System

Item	Cost
Materials and Installation	\$2,174.00
Account Setup, Tax, Freight	\$297.55
Total	\$2,471.55

TABLE B
4-Barrels Manhole Monitoring System and Water Tight Manholes

Item	Cost
Materials and Installation	\$2,020.00
Account Setup, Tax, Freight	\$297.55
Subtotal – Monitor System	\$2,317.55
4 Barrels One (1) Light Weight Water Tight Cover	\$5,000.00
City of Riverside Two (2) Cast Iron Water Tight Cover Unpaved	\$10,000.00
Subtotal – Water Tight Covers	\$15,000.00
Total	\$17,317.55

**February 21, 2018 Canyon Springs Plaza
60 Freeway Crossing Pipe Found to be Radius Not Offset Joint**



Memorandum

To: Jessica Pfalmer, General Manager, ECSD

From: Sinnaro Yos, P.E.

Cc: Board of Directors

Date: February 21, 2018

Re: Edgemont Community Services District, January 26, 2018 CCTV Investigation of the Canyon Spring Plaza 8-inch Diameter Sewer Crossing State Route 60

Pursuant to District authorization, Houston & Harris performed the video inspections of the subject sewerline, as described in the December 14, 2017 memorandum, in the early morning hours between 3 AM and 7 AM on Friday January 26, 2018 (**Figure 1** and **2**). The first part of this inspection, Houston & Harris deployed the video camera into Manhole 1021 (north) to observe the line's in-service flow conditions. Grease buildup was initially observed above the flow though the camera lost traction at 34-feet due to significant debris buildup (**Figure 3**) leading the technician to abandon the in-service inspection efforts.

The second part of this inspection occurred once sewer plugs were installed to stop flow and the line cleaned. The camera was then deployed into Manhole 1021 (north) under no-flow conditions in order to ascertain the condition of the line. The sag and vertical inflections observed corresponded with the findings identified in the December 14, 2017 memorandum as summarized in Table 1 and **Figure 2**. With the exception of slightly pulled joints at 234-feet and 255-feet, there were no cracks, broken pipe, joint offsets or any other issues observed in this January 26, 2018 inspection. The maximum depth of flow of 5-inches (65-percent cross sectional area) as observed by the water mark on the pipe walls, is located 36-feet from Manhole 1021 (**Figure 1**).

Table 1 Evaluation and Observations

LOCATION	WATER LEVEL MARK	COMMENTS
0' to 27'	5%	Start inspection at Manhole 1021, water mark suggest normal flows
27'	20%	Downward vertical inflection, start of sag
30'	50%	Sag in pipe, also approximate start of casing
36'	65%	Sag in pipe
40'	50%	Sag in pipe
46'	15%	End of pipe sag
50' to 245'	5% to 20%	Water mark suggests normal flows; approximate end of casing at 213', slight joint burring at 234'
246' to 282'	5%	Downward vertical inflections at each pipe joint at 6' intervals; slight joint pull at 255', last joint before Manhole 1022 at 286'
292'	N/A	End inspection at Manhole 1022, drop pipe

Webb performed a field survey locating Manholes 1021 (north) and 1022 (south) and the distance between these two manholes based on the field survey is 289-feet. The profile on **Figure 2** estimated 288-feet between the manholes; therefore, is a relatively accurate depiction of the existing configuration. Webb researched the right-of-way to confirm location of the District's sewer facilities within the State Route 60 (SR-60) crossing. The current sewerline and steel casing, the current and previous State Highway right-of-way and available sewer easements were plotted (**Figure 4**).

The following summarizes our findings based on the field data collected and research performed:

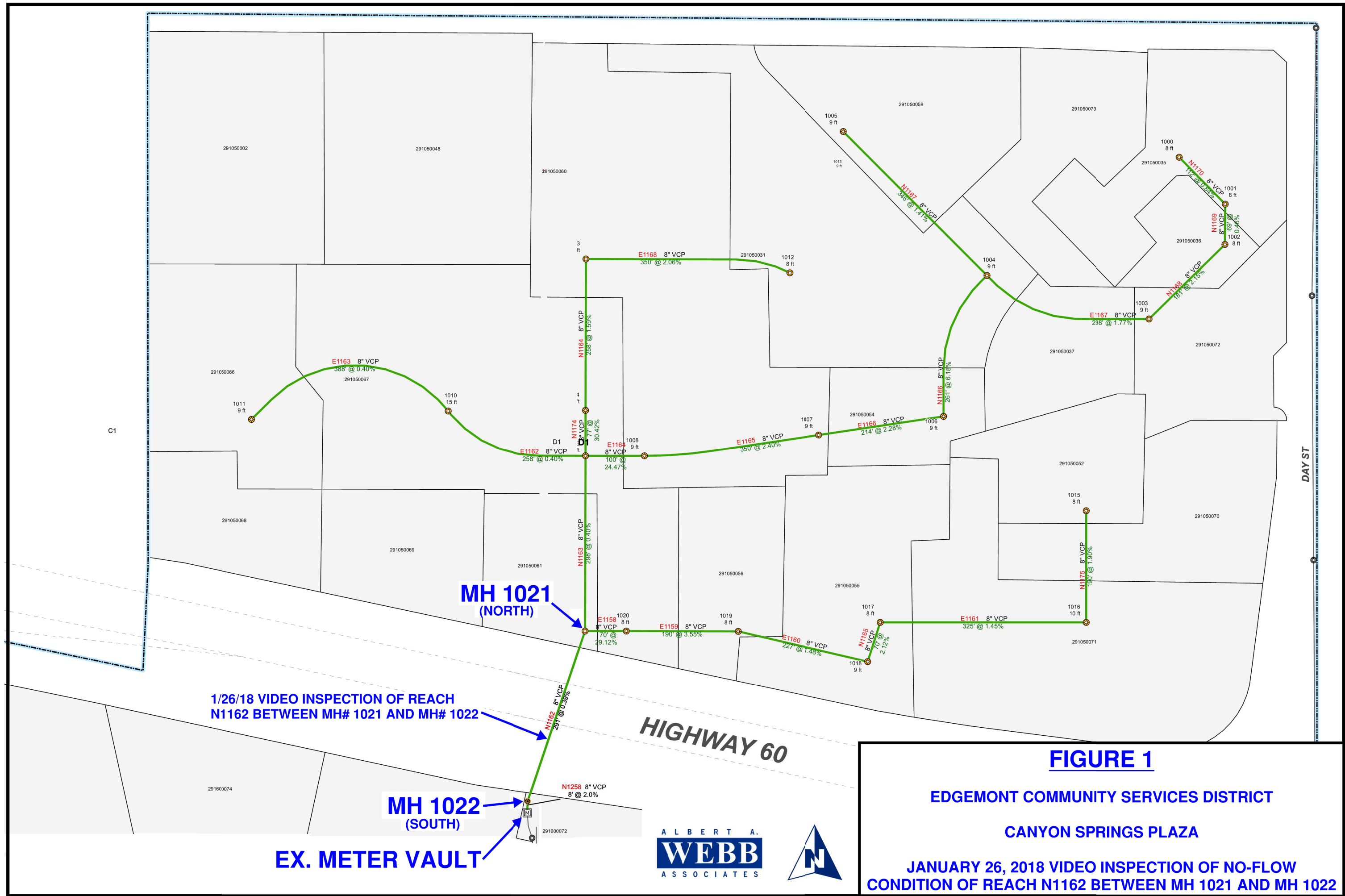
- Two (2) independent video inspections spanning three (3) years confirm minimal changes to the sewerline.
- Field survey and video inspection corresponds to the profile sketch confirming accuracy of the sewer line's current configuration.
- The existing steel casing pipe is located between the previous State Highway right-of-way (1963).
- Dedicated sewer easements on the north and south side of the crossing extend to the previous 1963 right-of-way.

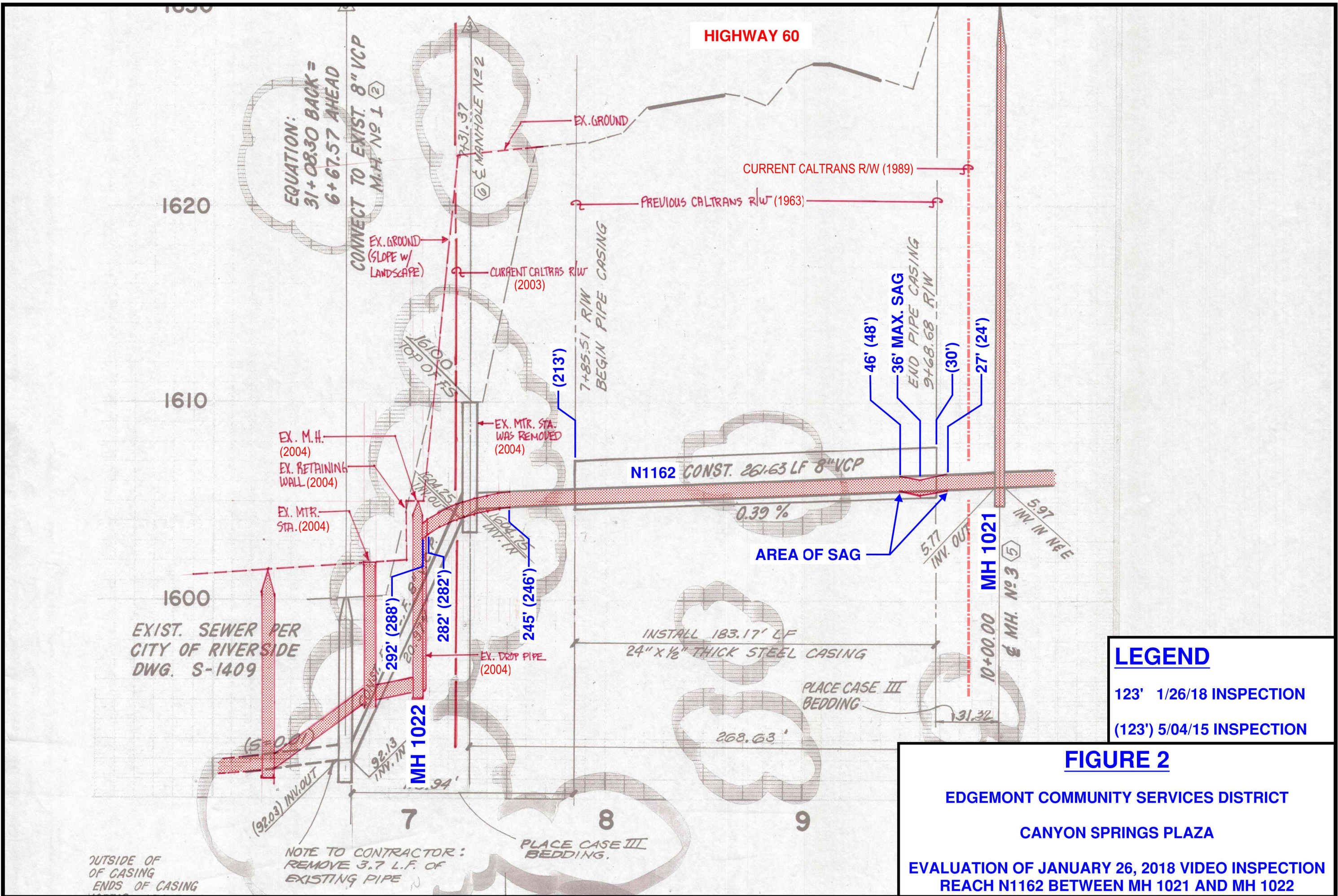
The existing 8-inch diameter sewerline crossing SR-60 appears to be in stable condition and the facility's configuration is accurately depicted, Webb recommends the following:

- No excavation or repair is recommended at the sag location at this time.
- An industrial waste sewer inspection is required to verify the source of the grease in the line.
- Coordinate with the City of Riverside Industrial Waste Department to inspect the place of business discharging the grease and perform dye check of the plumbing system to verify separation.
- Perform cleaning of the sewerline crossing SR-60 two times per year to minimize debris buildup in the sag.
- Install manhole monitoring system at an upstream manhole to provide the District with early notification of potential spill event (**Figures 5 and 6**)
 - Mission Communication Sewer Overflow Alarm and Tracking System
 - Installed inside sewer manholes with two floats
 - 5-year guarantee on equipment and battery
 - Automated call and alert system per District preference with cellular radio network
 - Installation by District's Contractor or Equipment Supplier
 - Initial Cost:
 - Equipment Purchase: \$1,500.00
 - One Time Setup Fee: \$250.00
 - Annual Service Fee: \$227.40

Two other alternatives are available as follows:

- Alternative 1 consists of lining the interior of the sewerline with an epoxy fiber reinforced liner system for 300-feet. The cost for this alternative ranges between \$30,000 to \$50,000:
- Alternative 2 consists of replacing up to 300-feet of existing sewerline with new piping. The cost for this alternative ranges between \$100,000 to \$150,000:





LEGEND	
123'	1/26/18 INSPECTION
(123')	5/04/15 INSPECTION

FIGURE 2
 EDGEMONT COMMUNITY SERVICES DISTRICT
 CANYON SPRINGS PLAZA
 EVALUATION OF JANUARY 26, 2018 VIDEO INSPECTION
 REACH N1162 BETWEEN MH 1021 AND MH 1022

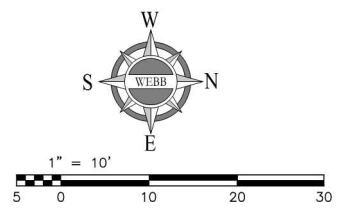
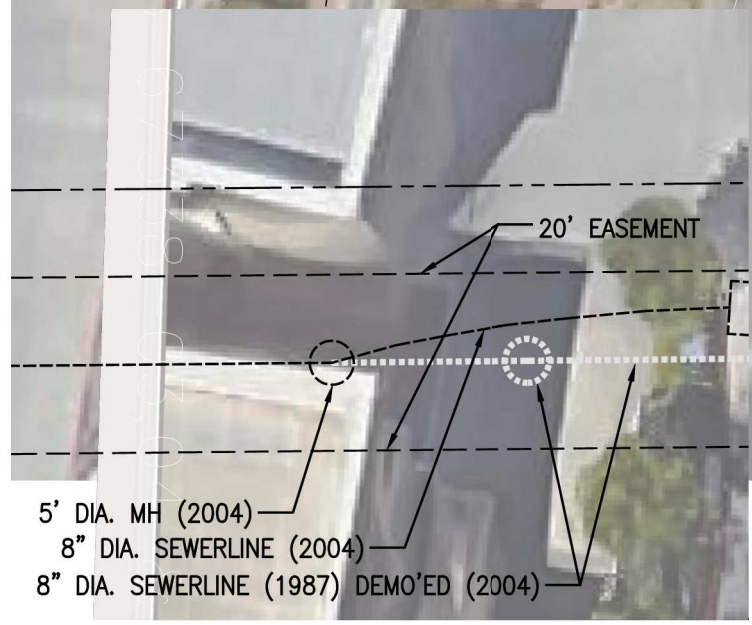
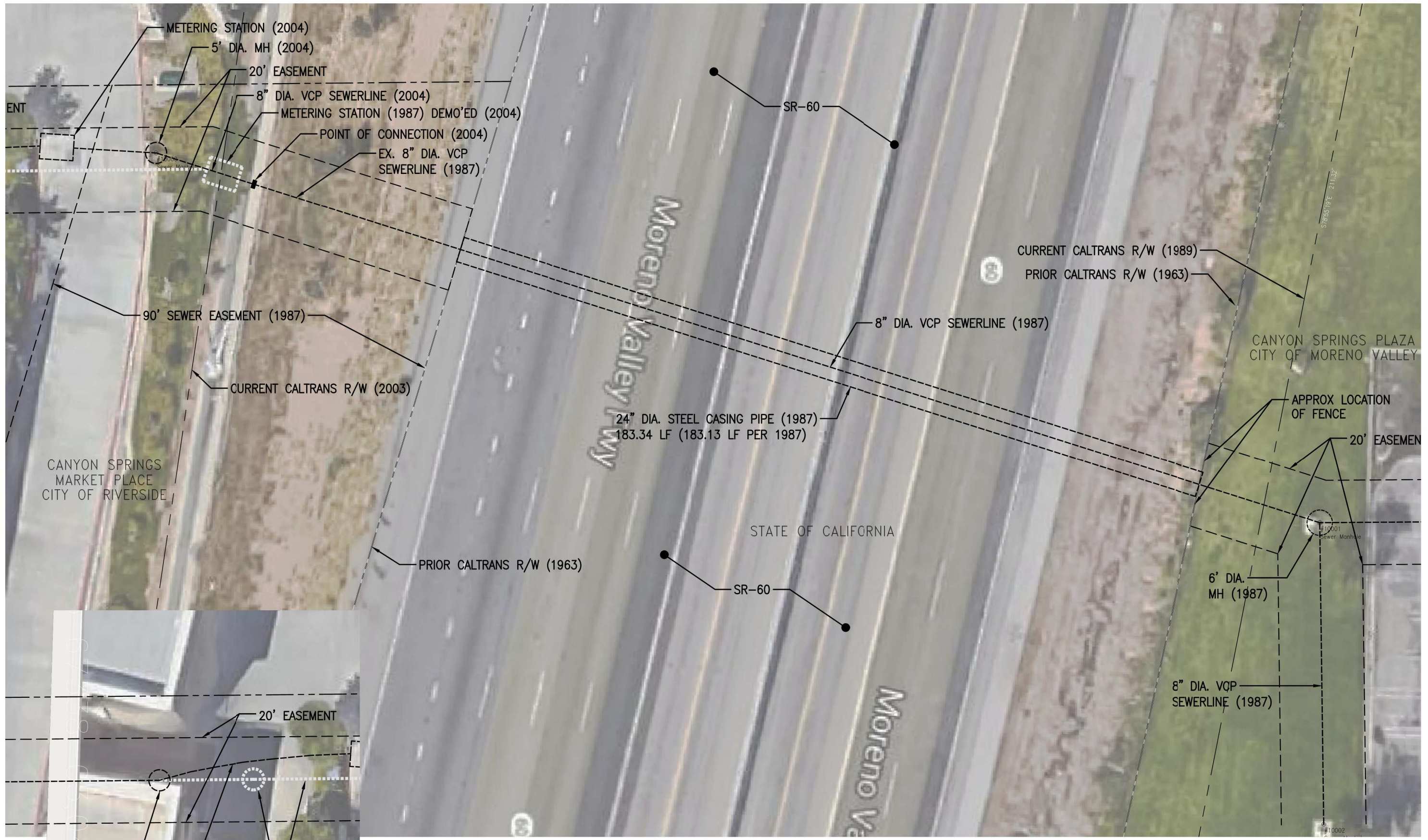


GREASE IN MANHOLE
FLOW CHANNEL



GREASE IN SEWERLINE

**FIGURE 3 - OBSERVED GREASE INSIDE SEWER
EDGEMONT COMMUNITY SERVICES DISTRICT
CANYON SPRINGS PLAZA**



EDGEMONT COMMUNITY SERVICES DISTRICT
 CANYON SPRINGS PLAZA
 EXISTING 8" DIAMETER SEWERLINE CROSSING SR-60

FIGURE 4
 16-195

Sewer Overflow Alarm and Tracking System

Avoid spills and high level conditions with early notifications

Track Manhole Surcharges and Overflows

Floats tipped by surcharges and high levels signal Mission servers to initiate notifications via phone, email, text message, fax and pager. Secure web portals display the date, time and duration of the events.

Simple to Install and Maintain

The Manhole Monitor is battery operated with quick connecting antenna and float terminations for fast and easy installation. The cellular device installs in the chimney of the manhole using a versatile mounting bracket. The bracket allows the waterproof device to swivel upward during maintenance for convenient and easy removal. The unique in-ground antenna installs adjacent to the manhole. Installation can be completed with common tools and does not require manhole cover modifications or entry into the manhole. An optional “under-the-lid” mounting bracket is available for OEM lid applications.

Waterproof, Self-Contained and Safe in Sewers

The rugged, all-metal enclosure is robust and serviceable. It features a replaceable battery and isolated termination and electronic cavities. The intrinsically safe device meets requirements for use in sewer system hazardous environments and is designed and tested to IP68 specifications.

User Friendly

Startup is simple with a 16 character LCD that validates proper operation and displays optional advanced configuration settings. The user accessible pushbutton switch allows navigation through the display. Alternate languages can be selected.

Reliable Communications

The advanced Manhole Monitor features fourth generation (4G) radios for reliable data transmissions. The device features fully acknowledged data payloads - unlike SMS messages. There are no radios to program, cellular contracts to set up or software programs to buy.

Managed Service – The Complete Package

The service includes all communications, data storage, alarm call outs, reports and technical support. Alarm conditions are recorded and reported in real-time while device health status is transmitted daily. All data and reports can be accessed from any web-enabled device, and the data is archived forever. No engineering or programming is required.

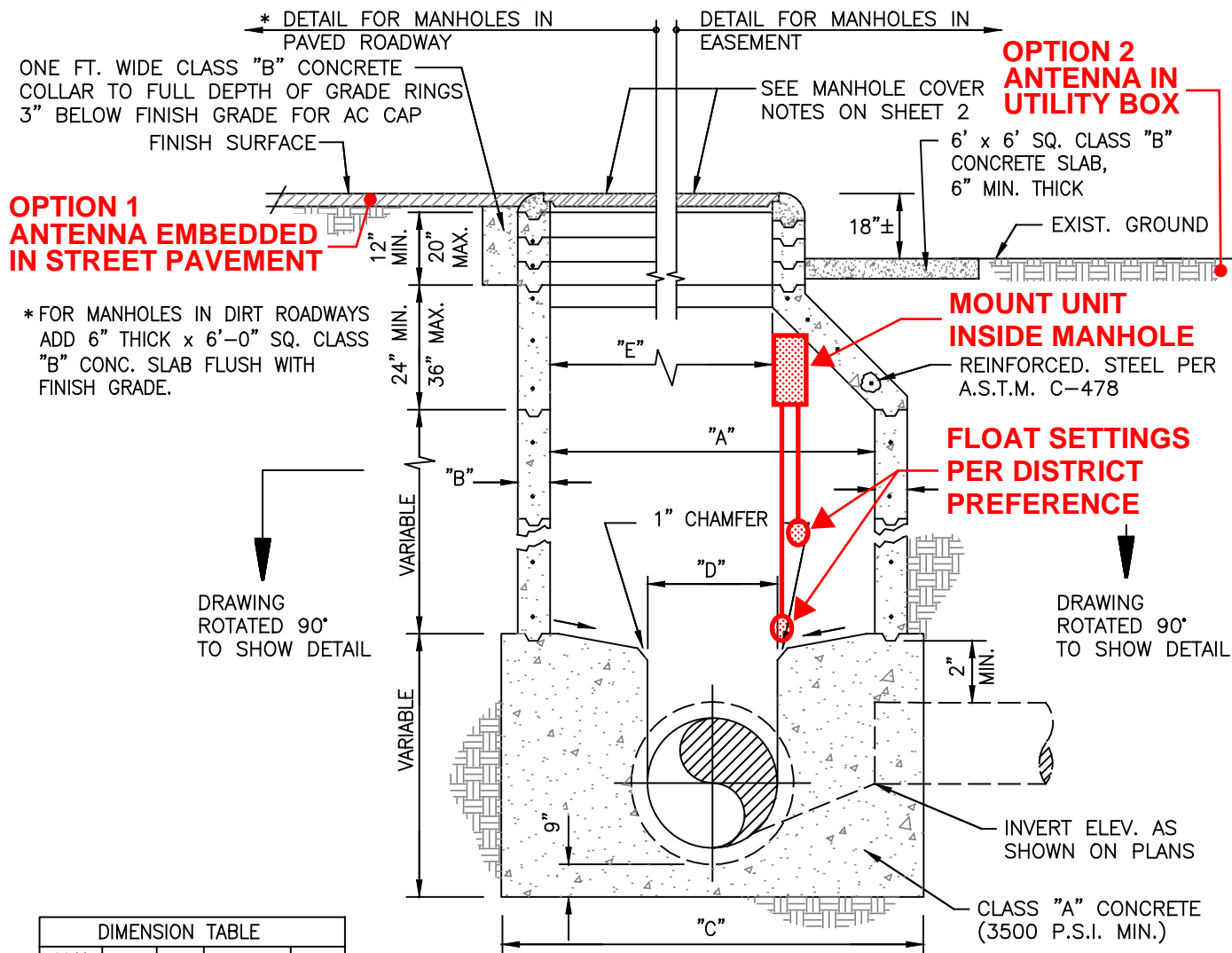
Long Operating Life

The ultra-efficient circuitry draws minimal power from the field replaceable battery. This makes the low-power device capable of routine daily transmissions for over five years.

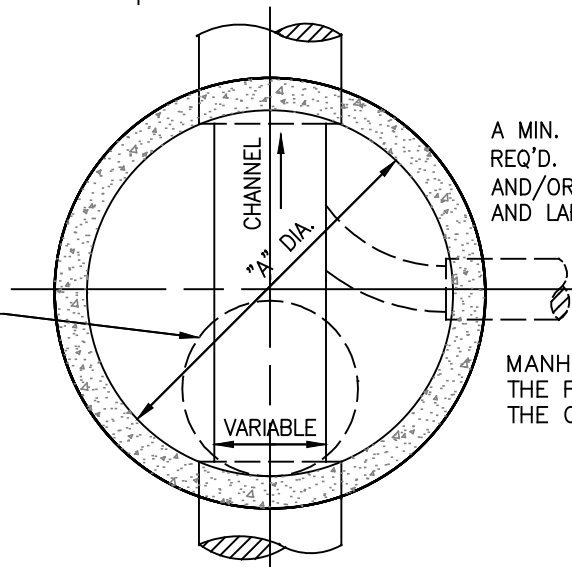


- **Receive Alarms and Data on Surcharges and Overflows**
- **Fully Managed Service Includes Communications, Alarm Call Outs and Web Portals**
- **4G Radio for Reliable Data Transmission**
- **Rugged, All-Metal, Waterproof Enclosure**
- **LCD Simplifies Startup and Optional Advanced Settings**
- **High Capacity, 5 Year, Field Replaceable Battery**

FRAME & COVER SETTING CONDITIONS



DIMENSION TABLE				
M.H. DIA.	A	B	C	E
4'	48"	6"	5'-6"	30"
5'	60"	6"	6'-6"	30"



A MIN. INSIDE DIA. OF 60" SHALL BE REQ'D. FOR PIPELINES DEEPER THAN 15' AND/OR FOR SEWER DIAMETERS 15 INCH AND LARGER

ALL MANHOLE TOPS SHALL BE INSTALLED WITH MANHOLE COVER LOCATED OPPOSITE THE DOWNSTREAM SIDE, EXCEPT AS OTHERWISE NOTED.

FIGURE 6

EDGMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
DATE: MAY, 2016

PRECAST CONCRETE MANHOLE

DRAWING NO. **S-7**

REV. APPROVED BY: *William L. Malone*
P.E. 47569

ALBERT A. WEBB ASSOCIATES
CONSULTING ENGINEERS
RIVERSIDE CALIFORNIA

SHEET 1 OF 2
W.O. 16-0026

**February 22, 2018 Review of Spill Reaction Time at
4 Barrels / Cottonwood System**



Memorandum

To: Jessica Pfalmer, General Manager, ECSD
 From: Sinnaro Yos, P.E.
 Cc: Board of Directors
 Date: February 22, 2018
 Re: Edgemont Community Services District, Junction Structure and Four Barrels Crossing Interstate 215 along Cottonwood Ave, Reaction Spill Time Evaluation

Based on our review of the Canyon Springs Plaza sewerline crossing State Route 60, we have similar concerns to the District's sewerline crossing Interstate 215 (also known as four barrels) along Cottonwood Avenue. This sewerline is crossing a major highway and is the main conveyance of the District's entire tributary area (except for Canyon Springs Plaza). Refer to attached **Figure 1** for details and locations.

In case of a complete blockage at the upstream junction structure of the four barrels and due to the size of the tributary area, it is important to understand the reaction time prior to a potential SSO. The potential SSO location typically is the manhole with the lowest rim elevation. In this case, it is the upstream junction structure of the four barrels with a rim elevation of 1521-feet. As all other upstream manholes have greater rim elevations, the SSO would occur at the junction structure manhole as the sewage backs up and fill the upstream sewerlines and manholes. The time it takes to fill the sewer facilities and prior to potential SSO would be considered the reaction spill time. The sewer flow rates, which dictate reaction spill time, were based on our review of the following:

- 2016 Flow Monitoring Data
- District's Sewer Master Plan Report
- New Projects: 112 Unit Apartments; The Quarter Project; Freeway Business Center
- Projected Ultimate flows

Figure 1 shows the approximate storage area as depicted in the dashed-red line. The following Table 1 summarizes the reaction spill times based on the various flow conditions.

**Table 1 Reaction Spill Time Based on SSO at Upstream Junction Structure
 (Rim Elevation 1521-feet)**

Flow Conditions	Average Daily Flow (2016)	Peak Flow (2016)	Average Daily Flow (Ultimate)	Peak Flow (Ultimate)
Reaction Spill Time (minutes)	151	97	48	20

Installation of a manhole monitoring system is recommended for the upstream junction structure of the four barrels. This is the same system presented on the Canyon Springs Plaza Memorandum with similar applicable costs.

We reviewed the option of installing lockable, water-tight frame and cover (preferable light weight to promote inspection) at the four barrel upstream junction structure to extend the reaction spill time. This would place the potential SSO location at a manhole with the next lowest rim elevation of 1524-feet along Cottonwood Avenue just west of the District's Clubhouse (MH 1290). **Figure 1** shows the approximate storage area when a water-tight cover is used as depicted in the dashed-blue line. The following Table 2 summarizes the reaction spill times based on the various flow conditions with water-tight manhole cover option.

**Table 2 Reaction Spill Time Based on SSO at Clubhouse Manhole
(Rim Elevation 1524-feet)**

Flow Conditions	Average Daily Flow (2016)	Peak Flow (2016)	Average Daily Flow (Ultimate)	Peak Flow (Ultimate)
Reaction Spill Time (minutes)	208	135	67	27

Placement of a manhole monitoring system would be at the Clubhouse manhole (MH 1290). The antenna may be embedded within the asphalt pavement of Cottonwood Avenue.

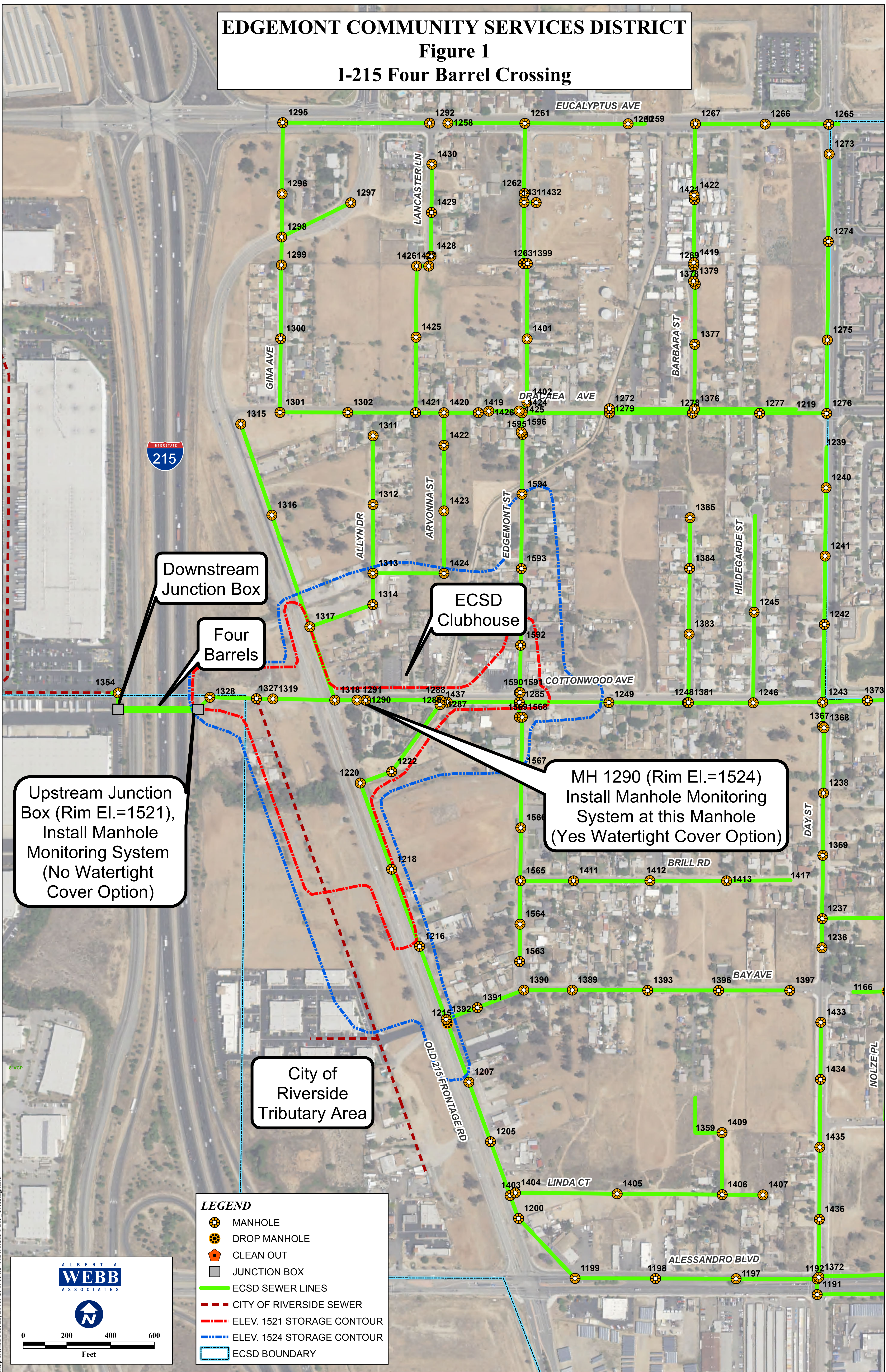
Both flow scenarios take into account City of Riverside's tributary area wedged between Old 215 Frontage Road and Interstate 215 north of Alessandro Boulevard and south of Cottonwood Avenue.

Installing water-tight manhole covers could increase reaction spill time by as much as 30-percent though would require some effort to open the lockable covers for inspection. As a minimum, Webb recommends installation of the manhole monitoring system at the upstream junction structure in order to provide the District with an early alert system for SSO mitigation.

EDGEMONT COMMUNITY SERVICES DISTRICT

Figure 1

I-215 Four Barrel Crossing



Downstream Junction Box

Four Barrels

ECSD Clubhouse

**Upstream Junction Box (Rim El.=1521),
Install Manhole Monitoring System
(No Watertight Cover Option)**

**MH 1290 (Rim El.=1524)
Install Manhole Monitoring System at this Manhole
(Yes Watertight Cover Option)**

City of Riverside Tributary Area

- LEGEND**
- MANHOLE
 - DROP MANHOLE
 - CLEAN OUT
 - JUNCTION BOX
 - ECSD SEWER LINES
 - CITY OF RIVERSIDE SEWER
 - ELEV. 1521 STORAGE CONTOUR
 - ELEV. 1524 STORAGE CONTOUR
 - ECSD BOUNDARY

ALBERT A. WEBB ASSOCIATES

0 200 400 600 Feet

Map created Feb. 22, 2018. C:\1963\63-0120A\CIS\1-215_Crossing.mxd



To: Jessica Pfalmer, General Manager, ECSD
 From: Sinnaro Yos, P.E
 CC: Board of Directors
 Date: November 6, 2018
 Re: ECSD CCTV Inspection of Sewer Service Laterals Phases 1, 2 and 3 Summary

Pursuant to Edgemont Community Services District (District) authorization, the District's Phase 1 sewer service laterals inspection was conducted to ascertain the conditions of 241 laterals within high priority areas of the District's service area. The video inspections were reviewed and results summarized in Webb's December 14, 2017 Memorandum to the District. As a result of the findings, the District authorized the video inspection of the remainder of the sewer laterals (1,030) within the District's service area (Phases 2 and 3). Refer to **Figure 1** for the overall inspection map.

Houston & Harris mobilized on May 21, 2018 and completed the work on August 10, 2018. Upon Webb's review of the data, the actual laterals inspected were less than what was proposed and the charges were reduced accordingly. For the District wide lateral inspection (Phase 1, 2 and 3), there were 1,205 laterals inspected. The following criteria were observed during review of the inspection videos.

- Root intrusion;
- Grease build-up;
- Blockage by debris;
- Rusty pipe lining;
- Pipe sag;
- Joint offset;
- Damaged pipe.

The laterals meeting the criteria are separated into two categories. **Table 1** summarizes the laterals recommended for maintenance/repair. **Table 2** summarizes the laterals recommended for replacement/repair.

Table 1 – Summary of Issues Recommended for Maintenance/Repair

Inspection Phases	Roots	Grease Build-Up	Blockage by Debris	Maintenance /Repair
Phase 1	30 (11%)	8 (3%)	14 (5%)	52 (20%)
Phase 2 and 3	122 (12%)	17 (2%)	62 (6%)	201 (20%)
District Wide	152 (12%)	25 (2%)	76 (6%)	253 (20%)

The Phase 2 and 3 maintain/repair issues have similar percentages to Phase 1; therefore, is generally consistent with system age and usage throughout the District.

Table 2 – Summary of Issues Recommended for Replacement/Repair

Inspection Phases	Rusty Pipe Lining	Pipe Sag	Joint Offset	Damaged Pipe	Replacement /Repair
Phase 1	2 (1%)	2 (1%)	20 (8%)	8 (3%)	32 (12%)
Phase 2 and 3	3 (0.3%)	41 (4%)	121 (12%)	24 (2%)	189 (18%)
District Wide	5 (0.4%)	43 (3%)	141 (11%)	32 (2%)	221 (17%)

The Phase 2 and 3 replacement/repair issues, on a percentage basis are slightly higher than Phase 1. Refer to **Appendix A** and **B** for a detailed summary of the data.

The costs for maintenance, cleanouts, repairs, and replacements are subject to a wide range of conditions and parameters therefore we have estimated construction cost ranges. Factors affecting the construction cost include depth, curb & gutter, sidewalk, utilities, backfill, paving and restoration as well as traffic control conditions can vary.

The 253 laterals in summarized in **Table 1** may require maintenance or repair as the full extent of the lateral is not known due to the obstructions by roots, grease and debris hampering full lateral inspection. Maintenance and repair measures include added cleanout, cleaning, root removal, and possible lateral replacement including paving.

Unit Cost per Lateral Range: \$6,000 to \$12,000
 Construction Cost Range for 253 Laterals: \$1,500,000 to \$3,000,000

The 221 laterals summarized in **Table 2** require replacement. Replacement and repair measures include added cleanout, lateral replacement, sidewalk, curb & gutter, utilities, backfill, paving and traffic control.

Unit Cost per Lateral Range: \$8,000 to \$17,000
 Construction Cost Range for 221 Laterals: \$1,800,000 to \$3,800,000

Based on these findings in the District wide lateral video inspection, Webb recommends that the District make the necessary repairs to the sewer laterals. The District may consider developing a phased replacement and repair program prioritizing the most critical sewer laterals over the next two to three years depending upon available funds:





1. Damaged Pipe and Root Intrusion
2. Pipe Sag, Offset, Joint
3. Grease build-up, Blockage by Debris and Rusty Pipe

Figures

EDGEMONT COMMUNITY SERVICES DISTRICT

PHASE 2 and 3 SEWER LATERAL INSPECTION VIDEO

LEGEND

-  ECSD Boundary
-  ECSD Sewer Lines
-  Phase 1 Lateral Inspections
-  Phase 2 & 3 Lateral Inspections

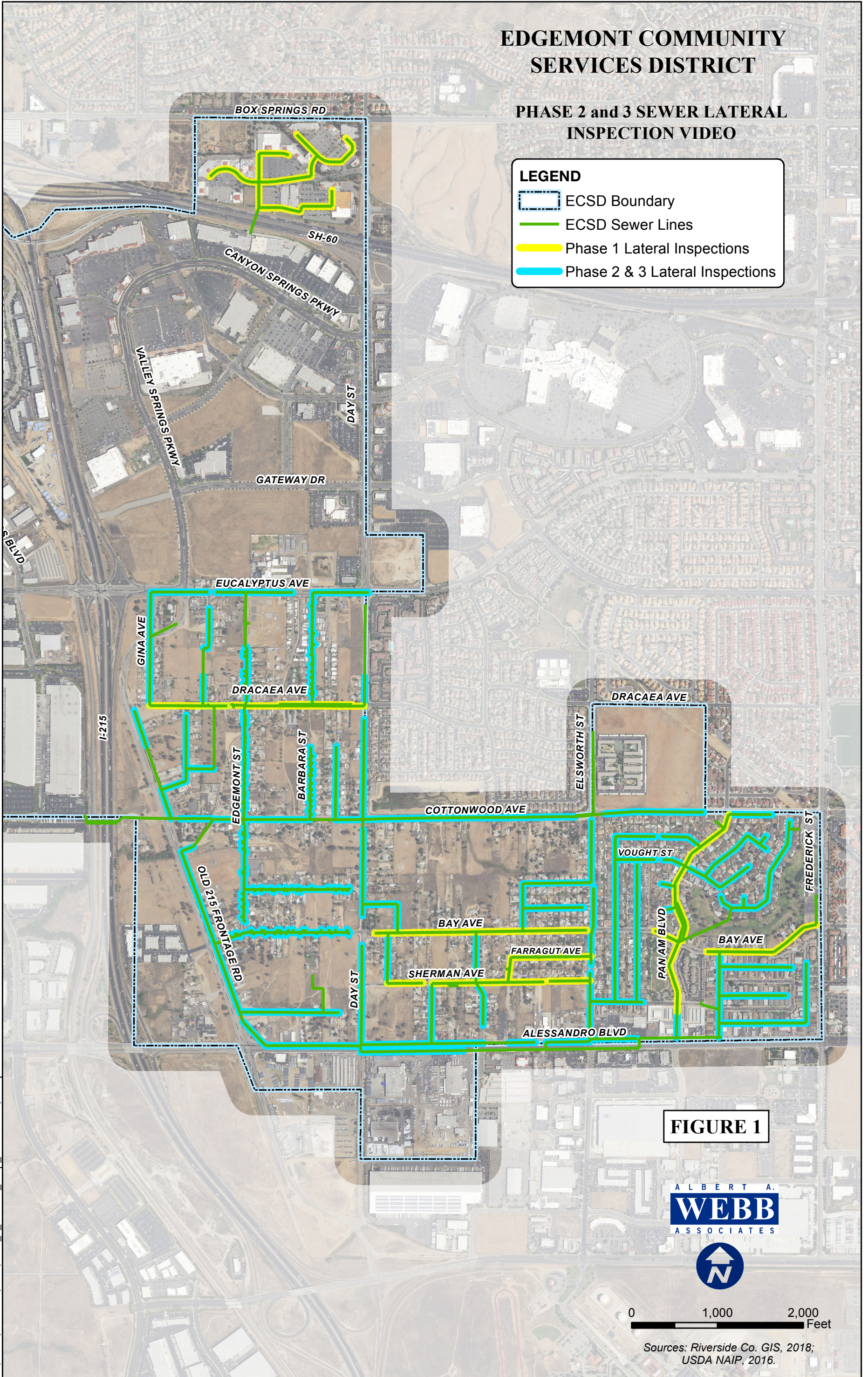


FIGURE 1

ALBERT A.
WEBB
ASSOCIATES



0 1,000 2,000 Feet

Sources: Riverside Co. GIS, 2018;
USDA NAIP, 2016.

Appendices

Appendix A – Summary of Issues Recommended for Maintenance/Repair

Street	Roots	Grease Build-Up	Blockage by Debris	Maintenance/Repair
Adrienne Ave	2 (25%)	0 (0%)	1 (13%)	3 (38%)
Alessandro Blvd	8 (15%)	2 (4%)	7 (13%)	17 (31%)
Alley "I"	1 (4%)	0 (0%)	0 (0%)	1 (4%)
Alley "J"	1 (3%)	1 (3%)	1 (3%)	3 (8%)
Alley "K"	5 (14%)	0 (0%)	1 (3%)	6 (17%)
Alley "L"	1 (3%)	0 (0%)	0 (0%)	1 (3%)
Allyn Dr	2 (14%)	1 (7%)	1 (7%)	4 (29%)
Arbington Pl	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Arvonna St	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Barbara St	2 (5%)	0 (0%)	2 (5%)	4 (10%)
Bay Ave	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Bay Ave (Ph 1)	10 (13%)	2 (3%)	2 (3%)	14 (19%)
Berkshire Ln	0 (0%)	0 (0%)	1 (17%)	1 (17%)
Bertie Ave	7 (32%)	0 (0%)	2 (9%)	9 (41%)
Boeing St	7 (15%)	0 (0%)	0 (0%)	7 (15%)
Brill Rd	1 (4%)	0 (0%)	0 (0%)	1 (4%)
Canyon Springs (Ph 1)	1 (4%)	3 (12%)	2 (8%)	6 (24%)
Casper St	2 (40%)	0 (0%)	0 (0%)	2 (40%)
Cottonwood Ave	8 (11%)	1 (1%)	4 (5%)	13 (18%)
Courage St	1 (8%)	0 (0%)	0 (0%)	1 (8%)
Day St	6 (13%)	0 (0%)	4 (9%)	10 (22%)
Dracaea Ave (Ph 1)	11 (21%)	1 (2%)	3 (6%)	15 (29%)
Edgemont St	0 (0%)	0 (0%)	2 (3%)	2 (3%)
Ella Ave	9 (39%)	0 (0%)	1 (4%)	10 (43%)
Elsworth St	5 (12%)	2 (5%)	5 (12%)	12 (29%)
Eucalyptus Ave	3 (9%)	0 (0%)	6 (18%)	9 (27%)
Farragut Ave (Ph 1)	4 (13%)	2 (7%)	3 (10%)	9 (30%)

Appendix A (cont.) – Summary of Issues Recommended for Maintenance/Repair

Street	Roots	Grease Build-Up	Blockage by Debris	Maintenance/ Repair
Frederick St	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Gina Ave	1 (4%)	0 (0%)	7 (26%)	8 (30%)
Grant St	6 (25%)	0 (0%)	1 (4%)	7 (29%)
Hildegarde St	3 (10%)	0 (0%)	1 (3%)	4 (14%)
Landcaster Ln	2 (14%)	0 (0%)	0 (0%)	2 (14%)
Linda Ct (Easement)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Littler Ct	1 (17%)	0 (0%)	3 (50%)	4 (67%)
McDonnel St	10 (24%)	0 (0%)	1 (2%)	11 (26%)
Noltze St	1 (11%)	0 (0%)	1 (11%)	2 (22%)
Old 215 Frontage Rd	2 (6%)	0 (0%)	4 (13%)	6 (19%)
Pan Am Blvd (Ph 1)	2 (6%)	0 (0%)	0 (0%)	2 (6%)
Pepper St	3 (20%)	2 (13%)	0 (0%)	5 (33%)
Phyllis Ave	1 (7%)	3 (20%)	0 (0%)	4 (27%)
Player Ct	4 (27%)	0 (0%)	1 (7%)	5 (33%)
Sherman Ave (Ph 1)	2 (5%)	0 (0%)	4 (10%)	6 (15%)
Temco St	3 (13%)	0 (0%)	0 (0%)	3 (13%)
Thunderbird Dr	2 (9%)	2 (9%)	0 (0%)	4 (17%)
Vought St	12 (19%)	3 (5%)	5 (8%)	20 (32%)
Phase 1	30 (11%)	8 (3%)	14 (5%)	52 (20%)
Phase 2 and 3	122 (12%)	17 (2%)	62 (6%)	201 (20%)
District Wide	152 (12%)	25 (2%)	76 (6%)	253 (20%)

Appendix B – Summary of Issues Recommended for Replacement/Repair

Street	Rusty Pipe Lining	Pipe Sag	Joint Offset	Damaged Pipe	Replacement /Repair
Adrienne Ave	0 (0%)	1 (13%)	1 (13%)	0 (0%)	2 (25%)
Alessandro	1 (2%)	5 (9%)	7 (13%)	2 (4%)	15 (27%)
Alley "I"	0 (0%)	0 (0%)	1 (4%)	0 (0%)	1 (4%)
Alley "J"	0 (0%)	0 (0%)	2 (5%)	0 (0%)	2 (5%)
Alley "K"	0 (0%)	1 (3%)	2 (6%)	0 (0%)	3 (9%)
Alley "L"	0 (0%)	1 (3%)	2 (7%)	0 (0%)	3 (10%)
Allyn Dr	0 (0%)	2 (14%)	0 (0%)	0 (0%)	2 (14%)
Arbington Pl	0 (0%)	1 (17%)	0 (0%)	0 (0%)	1 (17%)
Arvonna St	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Barbara St	0 (0%)	1 (3%)	1 (3%)	0 (0%)	2 (5%)
Bay Ave	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Bay Ave (Ph 1)	0 (0%)	1 (1%)	10 (13%)	3 (4%)	14 (18%)
Berkshire Ln	0 (0%)	0 (0%)	1 (17%)	0 (0%)	1 (17%)
Bertie Ave	0 (0%)	0 (0%)	6 (27%)	0 (0%)	6 (27%)
Boeing St	0 (0%)	0 (0%)	4 (9%)	1 (2%)	5 (11%)
Brill Rd	0 (0%)	0 (0%)	1 (4%)	0 (0%)	1 (4%)
Canyon Springs (Ph 1)	0 (0%)	0 (0%)	1 (4%)	1 (4%)	2 (8%)
Casper St	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Cottonwood Ave	0 (0%)	5 (7%)	6 (8%)	5 (7%)	16 (22%)
Courage St	0 (0%)	0 (0%)	2 (15%)	0 (0%)	2 (15%)
Day St	0 (0%)	0 (0%)	8 (18%)	0 (0%)	8 (18%)
Dracaea Ave (Ph 1)	1 (2%)	1 (2%)	4 (8%)	2 (4%)	8 (16%)
Edgemont St	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Ella Ave	0 (0%)	0 (0%)	2 (9%)	2 (9%)	4 (17%)
Elsworth St	1 (2%)	7 (17%)	19 (45%)	0 (0%)	27 (64%)
Eucalyptus Ave	1 (3%)	2 (6%)	7 (21%)	2 (6%)	12 (36%)
Farragut Ave (Ph 1)	0 (0%)	0 (0%)	2 (7%)	0 (0%)	2 (7%)

Appendix B (cont.) – Summary of Issues Recommended for Replacement/Repair

Street	Rusty Pipe Lining	Pipe Sag	Joint Offset	Damaged Pipe	Replacement /Repair
Frederick St	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Gina Ave	0 (0%)	1 (4%)	4 (15%)	2 (7%)	7 (26%)
Grant St	0 (0%)	3 (13%)	1 (4%)	1 (4%)	5 (21%)
Hildegard St	0 (0%)	1 (3%)	8 (28%)	0 (0%)	9 (31%)
Landcaster Ln	0 (0%)	0 (0%)	1 (7%)	0 (0%)	1 (7%)
Linda Ct (Easement)	0 (0%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Littler Ct	0 (0%)	0 (0%)	1 (17%)	0 (0%)	1 (17%)
McDonnel St	0 (0%)	0 (0%)	9 (21%)	1 (2%)	10 (24%)
Noltze St	0 (0%)	0 (0%)	2 (22%)	1 (11%)	3 (33%)
Old 215 Frontage Rd	0 (0%)	1 (3%)	8 (26%)	2 (6%)	11 (35%)
Pan Am Blvd (Ph 1)	1 (3%)	0 (0%)	3 (8%)	1 (3%)	5 (14%)
Pepper St	0 (0%)	0 (0%)	2 (13%)	3 (20%)	5 (33%)
Phyllis Ave	0 (0%)	0 (0%)	2 (13%)	1 (7%)	3 (20%)
Player Ct	0 (0%)	1 (7%)	1 (7%)	0 (0%)	2 (13%)
Sherman Ave (Ph 1)	0 (0%)	0 (0%)	0 (0%)	1 (2%)	1 (2%)
Temco St	0 (0%)	1 (4%)	3 (13%)	1 (4%)	5 (21%)
Thunderbird Dr	0 (0%)	1 (4%)	0 (0%)	0 (0%)	1 (4%)
Vought St	0 (0%)	6 (10%)	7 (11%)	0 (0%)	13 (21%)
Phase 1	2 (1%)	2 (1%)	20 (8%)	8 (3%)	32 (12%)
Phase 2 and 3	3 (0.3%)	41 (4%)	121 (12%)	24 (2%)	189 (18%)
District Wide	5 (0.4%)	43 (3%)	141 (11%)	32 (2%)	221 (17%)



To: Jessica Pfalmer, General Manager, ECSD
 From: Sinnaro Yos, P.E
 Date: June 21, 2019
 Re: ECSD Sewer Mains and Laterals Repair and Replacement Project Prioritization

Pursuant to Edgemont Community Services District authorization, Webb evaluated the findings summarized in the November 6, 2018 memorandum for the District wide video inspection of sewer laterals (**Table 1**) in order to prioritize the implementation of replacement of the laterals of concern.

Table 1 – District Wide Video Inspection Results Summary

Observed Issues	No. of Issues on Laterals
Roots	152
Grease Build-Up	25
Blockage by Debris	76
Rusty Pipe Lining	5
Pipe Sag	43
Joint Offset	141
Damaged Pipe	32
Total	474

Replacement of the laterals with more severe issues are recommended as summarized in the following **Table 2**.

Table 2 – Crucial Lateral Issues

Observed Issues	No. of Issues on Laterals
Roots	152
Joint Offset	141
Damaged Pipe	32
Total	325

Some of the observed issues were within the same laterals therefore were combined which amounted to 29 laterals with multiple issues and would be deducted from the total number of issues on laterals. Further due to the amount and proximity of laterals to be replaced within certain main sewerline reaches, it would be more efficient to replace the entire sewerline along with associated laterals. Therefore the laterals within these reaches would be converted to main sewerline replacement projects. Two such reaches were identified to be converted: 400-feet along Pepper Street; and 700-feet along Ella Street. The 2010 District's CIP main sewerline replacement program was implemented and the following are the remaining CIP replacement projects: 400-feet along Allyn Drive; 700-feet along Bertie Avenue; 600-feet along Dracaea

Avenue; 900-foot Hildegard Street; 600-foot along Nolze Street; and 500-foot along Sherman Avenue. The associated 44 laterals within these reaches (Converted and CIP Projects) would be deducted from the total number of issues on laterals. The following **Table 3** summarizes the total lateral replacement.

Table 3 – Total Lateral Replacement

Observed Issues	No. of Issues on Laterals
Total Issues	325
Combined Issues	(29)
In Mainline Replacements	(44)
Total Lateral Replacement	252

Various main sewerline point repairs were identified during the 2016 District wide mainline video inspection. Critical point repairs were incorporated and addressed with the recent sewerline replacement project, though there are nine (9) remaining.

Due to the multiple lateral and main sewerline replacements as well as point repairs, the projects were integrated and prioritized to better manage and implement. The prioritization and grouping of these projects were based on the following criteria: damaged laterals were high priority; laterals with roots and joint issues with next priority; laterals along major streets such as Alessandro Boulevard were higher priority; all point repairs should be high priority; mainline replacements should be grouped close to the majority of the lateral replacements. Refer to **Figure 1** which delineates all the main sewerline and lateral replacement projects as well as all point repairs. The following summarize the proposed grouping and prioritization along with preliminary costs.

Priority I (Figure 2)

64 Laterals	\$	960,000
Main Line Replacement Allyn	\$	160,000
Main Line Replacement Hildegard	\$	360,000
Main Line Replacement Pepper (conversion)	\$	160,000
9 Point Repairs	\$	90,000
Total Priority I	\$	1,730,000

Priority II (Figure 3)

49 Laterals	\$	735,000
Main Line Replacement Bertie	\$	280,000
Main Line Replacement Dracaea	\$	240,000
Main Line Replacement Ella (conversion)	\$	280,000
Main Line Replacement Nolze	\$	240,000
Main Line Replacement Sherman	\$	200,000
Total Priority II	\$	1,975,000

Priority III (Figure 4)

139 Laterals	\$	2,085,000
Frederick Street Siphon	\$	50,000
Total Phase III	\$	2,135,000

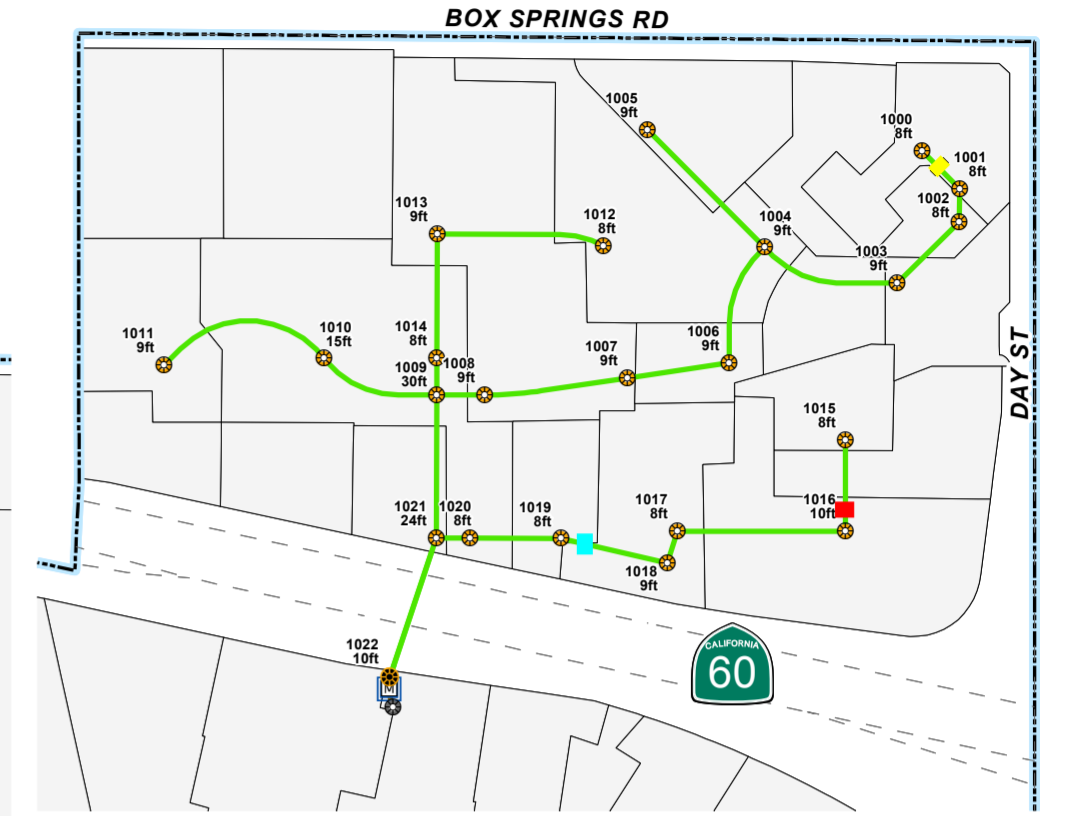
EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

- Manhole
- Drop Manhole
- Cleanout (Main Line)
- Cleanout (Lateral)
- Metering Station
- City of Riverside Manhole
- Abandoned MH/CO
- Active Main Line
- Abandoned Line
- Lateral Line
- - - City of Riverside Operated Sewer
- ECSD Boundary

- SEWERLINE REPLACEMENT
- SEWERLINE POINT REPAIRS
- LATERAL - ROOTS
- LATERAL - OFFSET JOINT
- LATERAL - DAMAGED PIPE



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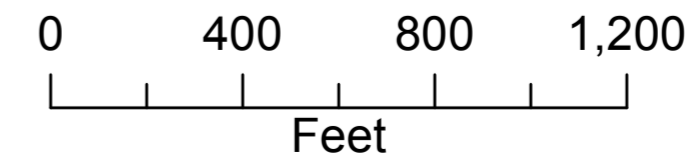


FIGURE 1

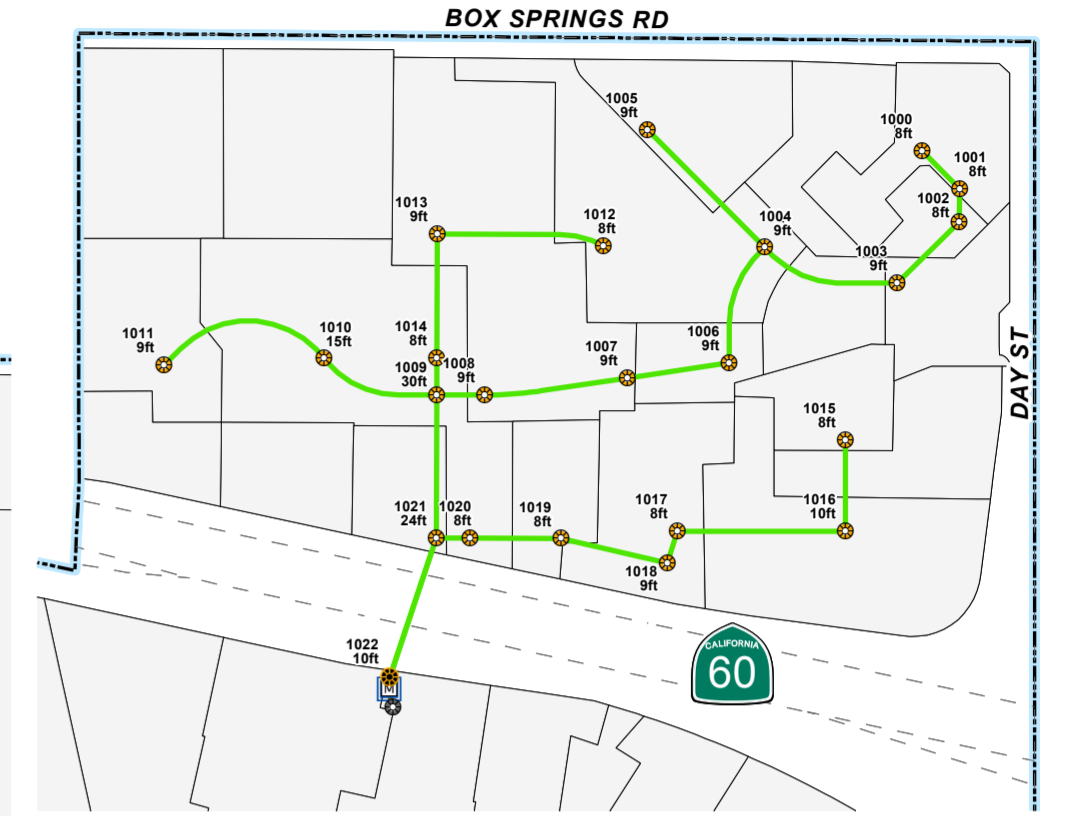
- ALL CONSTRUCTION PRIORITIES
- SEWERLINE REPLACEMENTS
- MAINLINE POINT REPAIRS
- LATERAL REPLACEMENTS

EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

- Manhole
 - Drop Manhole
 - Cleanout (Main Line)
 - Cleanout (Lateral)
 - Metering Station
 - City of Riverside Manhole
 - Abandoned MH/CO
 - Active Main Line
 - Abandoned Line
 - Lateral Line
 - - - City of Riverside Operated Sewer
 - ECSD Boundary
-
- SEWERLINE REPLACEMENT
 - SEWERLINE POINT REPAIRS
 - LATERAL - ROOTS
 - LATERAL - OFFSET JOINT
 - LATERAL - DAMAGED PIPE



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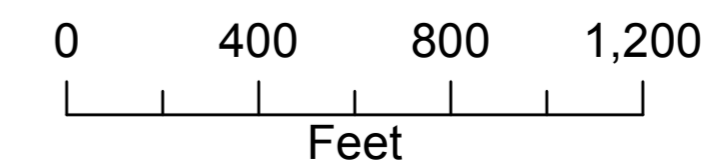


FIGURE 2
 PRIORITY I CONSTRUCTION
 - SEWERLINE REPLACEMENTS
 - MAINLINE POINT REPAIRS
 - LATERAL REPLACEMENTS

EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

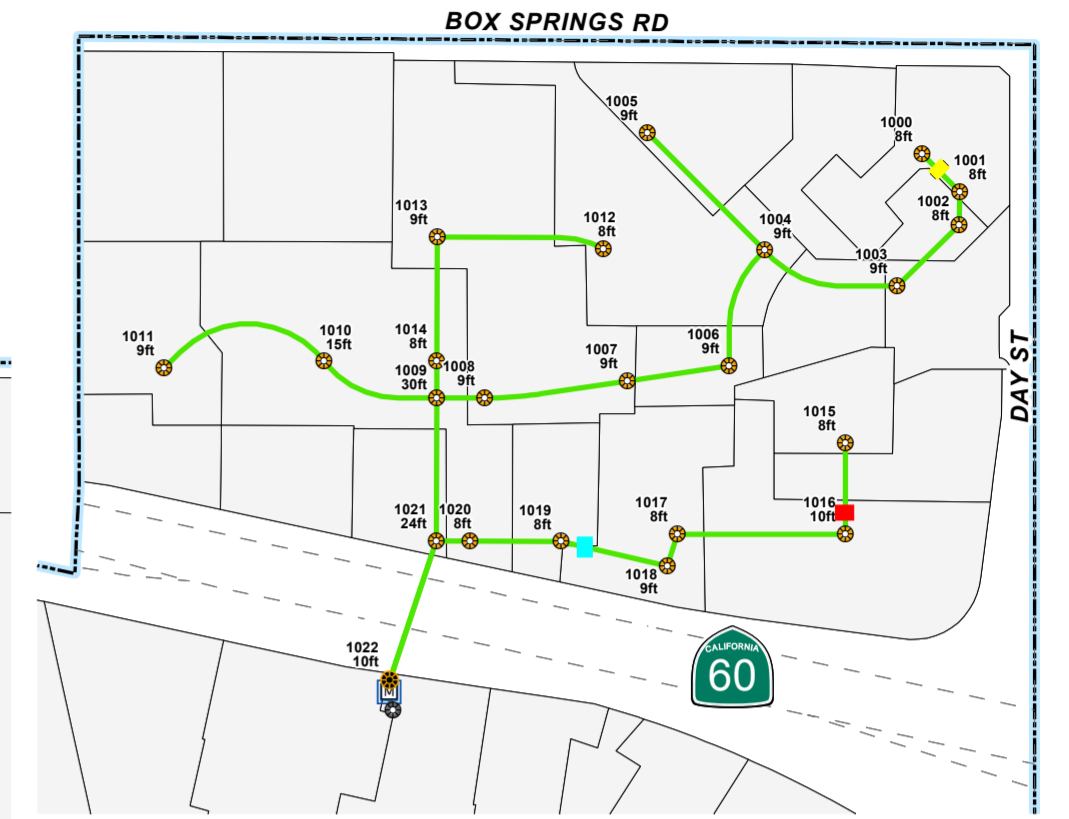
- Manhole
- Drop Manhole
- Cleanout (Main Line)
- Cleanout (Lateral)
- Metering Station
- City of Riverside Manhole
- Abandoned MH/CO
- Active Main Line
- Abandoned Line
- Lateral Line
- - - City of Riverside Operated Sewer
- ECSD Boundary

SEWERLINE REPLACEMENT

LATERAL - ROOTS

LATERAL - OFFSET JOINT

LATERAL - DAMAGED PIPE



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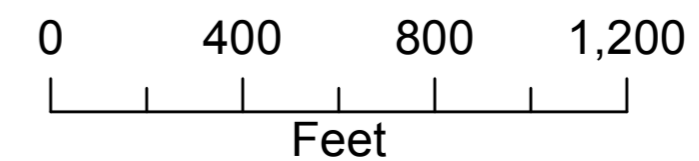


FIGURE 3
PRIORITY II CONSTRUCTION
- SEWERLINE REPLACEMENTS
- LATERAL REPLACEMENTS

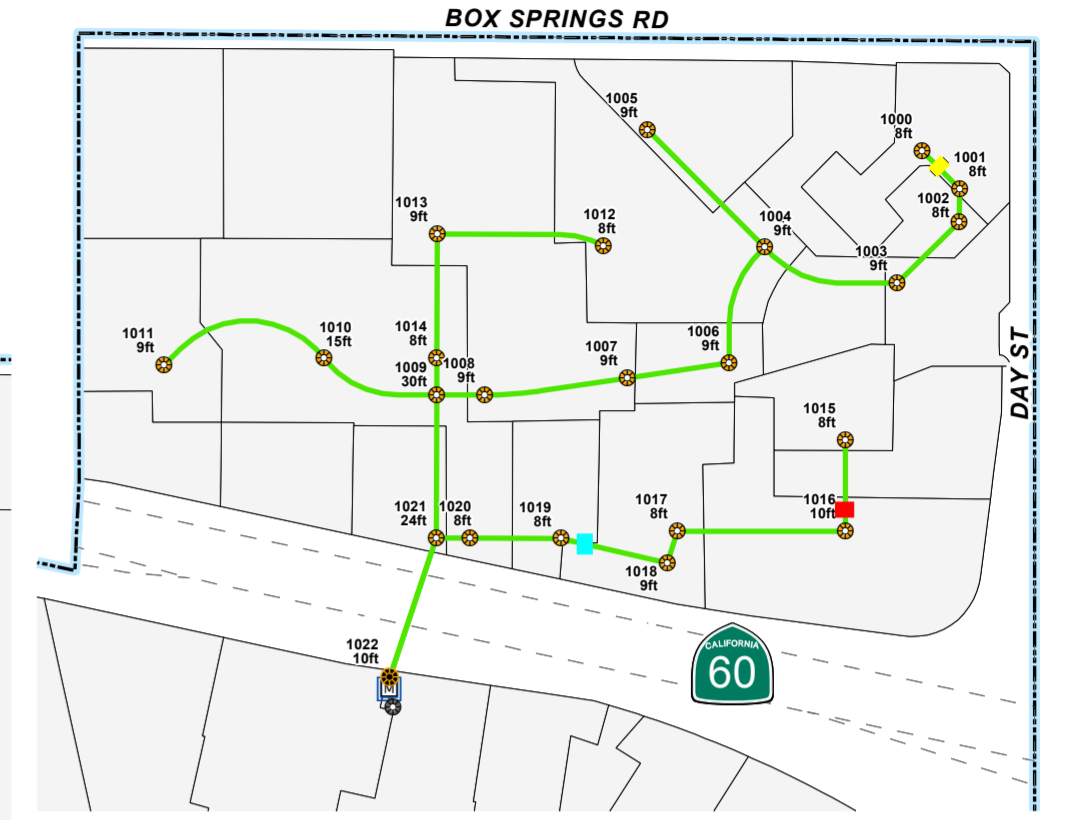
EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

- Manhole
- Drop Manhole
- Cleanout (Main Line)
- Cleanout (Lateral)
- Metering Station
- City of Riverside Manhole
- Abandoned MH/CO
- Active Main Line
- Abandoned Line
- Lateral Line
- - - City of Riverside Operated Sewer
- ECSD Boundary

- SEWERLINE POINT REPAIRS
- LATERAL - ROOTS
- LATERAL - OFFSET JOINT
- LATERAL - DAMAGED PIPE



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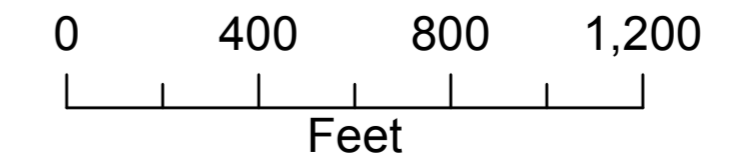


FIGURE 4
 PRIORITY III CONSTRUCTION
 - LATERAL REPLACEMENTS
 - FREDERICK ST SIPHON

APPENDIX F

Amendment to On Call, Manhole & Lateral Inspection and Emergency Response Services Contract Between Montgomery Plumbing Inc. and Edgemont Community Services District Dated August 2022

AMENDMENT TO ON CALL, MANHOLE AND LATERAL INSPECTION
AND EMERGENCY RESPONSE SERVICE CONTRACT
BETWEEN MONTGOMERY PLUMBING INC. AND
EDGEMONT COMMUNITY SERVICES DISTRICT
DATED AUGUST 2022

1. PARTIES.

1.1 The parties to this Amendment are EDGEMONT COMMUNITY SERVICES DISTRICT, a political subdivision of the State of California, hereinafter referred to as "District," and MONTGOMERY PLUMBING INC., a California corporation, hereinafter referred to as "Contractor."

2. RECITALS.

2.1 The parties entered into an agreement in June 2015, in which Contractor agreed to furnish plumbing services to the District. The purpose of this amendment is to increase the compensation of Contractor.

3. TERM OF AGREEMENT

3.1 This amendment shall be effective on August 1, 2022. All the terms and conditions of the original contract shall remain in full force and effect except that the compensation to Contractor shall be increased as herein after set forth.

3.2 The Contractor's employees shall be paid its prevailing wages when working for the District as set forth on Exhibit 1, attached hereto and incorporated herein by reference.

4. COMPENSATION.

4.1 The District shall pay to Contractor as compensation One Thousand Eight Hundred Dollars (\$1,800) per month commencing August 1, 2022 plus the prevailing hourly rate (Exhibit 1) of Contractor for any hours in excess of the 3 hours per week described above, performed by Contractor in carrying out the above described services.

4.2 Contractor shall bill District at the end of each month reflecting the services performed during that month and the charges therefor.

IN WITNESS WHEREOF, each of the parties hereto have caused this Amendment to be executed by its duly authorized officers.

Dated: August 1, 2022

DISTRICT:

EDGEMONT COMMUNITY SERVICES DISTRICT

By: Michael Addie
Michael Addie President

By: Jessica Pfalmer
Jessica Pfalmer Secretary

CONTRACTOR:

MONTGOMERY PLUMBING, INC.

By: Mark L. Montgomery
Mark L. Montgomery President

By: [Signature]
Secretary

Exhibit 1

Prevailing Wages for Montgomery Plumbing Inc.:

Monday through Friday from 8:00 a.m. to 5:00 p.m. (normal hours) are \$140.00.

Other than normal hours Monday through Friday are \$185.00.

Saturday and Sunday are \$225.00.

Holidays are \$350.00.

**ON CALL, MANHOLE AND LATERAL INSPECTION
AND EMERGENCY RESPONSE SERVICE CONTRACT
BETWEEN MONTGOMERY PLUMBING INC. AND
EDGEMONT COMMUNITY SERVICES DISTRICT
DATED MARCH 2015**

1. PARTIES.

1.1 This Agreement is between the EDGEMONT COMMUNITY SERVICES DISTRICT, a political subdivision of the State of California, hereinafter referred to as ADistrict@, and MONTGOMERY PLUMBING INC., a California corporation, hereinafter referred to as AContractor@.

2. RECITALS.

2.1 Contractor is a California corporation duly organized and licensed in 2002 by the State of California as a Plumber (C-36), license number 702097.

2.2 Contractor has its principal office and place of

business at 28625 Maranda Court Moreno Valley, California 92555 and is licensed to do business in the City of Moreno Valley.

2.3 Prior to incorporation Contractor=s CEO, Mark L. Montgomery, provided plumbing service and repair in the Moreno Valley, California area commencing in 1995.

2.4 Contractor has the equipment and facilities for doing the work described herein.

2.5 The purpose of this Agreement is to state the terms and conditions under which the Contractor will furnish the services described herein with reference to the sanitary sewer system, hereinafter referred to as ASystem@, owned and operated by the District.

2.6 The District has a separate contractor, Houston Harris, which performs major maintenance and cleaning services for the District. The District has an on call agreement with a separate contractor to provide construction and repair services. Contractor services as set forth below are distinctively different and relate primarily to contact and communication with individual property owners and emergency clean out of that portion of the laterals between the street property line and the main sewer line.

3. TERM OF AGREEMENT

The term of this Contract shall commence on the 1st day of March, 2015, and shall continue in full force and effect for a period of one year except that either party on 30 days written notice to the other may cancel this contract at any time. If this contract is not cancelled as hereinabove set forth, this contract shall be automatically renewed thereafter for annual periods from year to year. The amount of compensation for additional terms of this Contract shall remain the same unless changed by written agreement of the parties.

4. SERVICES TO BE PERFORMED.

Contractor agrees to do and perform the following services:

- (a) Respond to emergency telephone calls 24 hours per day, seven days a week from residents and businesses within the District relating to their sewage system.

(b) Provide a one hour response time. Travel to the scene of the emergency and ascertain the extent of the problem which has caused the emergency. In the event the problem involves the District=s main line, notify the District=s Manager and the District=s main line emergency contractor (currently Houston Harris) and request their help in resolving the emergency. In the event the problem, (blockage of a sewer line) is between the main line and a property line Clean Out, Contractor shall clear the line between the property line Clean Out and the main line. In the event the problem causing the emergency is within the boundaries of the private property or the private property does not have a property line Clean Out, notify the occupant that the occupant must obtain the services of a plumber (other than Contractor) to resolve the emergency.

(c) In the event the emergency is to be resolved by the occupant of the private property continue to inspect the property until the problem is resolved.

(d) Provide a report to the District of the emergency services, including information on sewer spills as required by the State waste discharge requirements.

(e) Perform a weekly check (not to exceed 3 hours per week) of the District=s manholes as directed by the District=s Manager.

5. MATERIALS AND EQUIPMENT TO BE FURNISHED BY CONTRACTOR.

Contractor will provide all sewer maintenance, cleaning, and safety equipment as may be necessary to perform the services required hereunder.

6. Omitted

7. EMPLOYEES OF CONTRACTOR.

All sewer mains and laterals services provided herein shall be performed

by qualified, efficient and experienced employees in strict accordance with the recognized best practices and in accordance with the standards and special instructions issued by the District. All employees furnished by Contractor will be employees of Contractor and will at all times be subject to the direct supervision and control of Contractor. Contractor shall have the sole responsibility of paying the salaries, taxes (including but not limited to federal social security taxes and federal and California unemployment taxes), and all other expenses relating to each such employee of the Contractor.

The Contractor=s employees shall be paid its prevailing wages when working for the District as set forth on Exhibit 1, attached hereto and incorporated herein by reference.

8. Omitted

9. COMPENSATION.

9.1 The District shall pay to Contractor as compensation One Thousand Five Hundred Dollars (\$1,500) per month commencing April 1, 2015 plus the prevailing hourly rate (Exhibit 1) of Contractor for any hours in excess of the 3 hours per week described above, performed by Contractor in carrying out the above described services.

9.2 Contractor shall bill District at the end of each month reflecting the services performed during that month and the charges therefor.

10. Omitted.

11. Omitted

12. INSURANCE

12.1 *General:* Promptly, upon execution of the contract and prior to commencement of any work, Contractor shall furnish the District certificates of insurance covering all policies providing the insurance required hereunder. Said certificates shall be signed on behalf of the insurer by an authorized representative thereof and his signature shall be notarized.

12.2 *Copies of Policies:* Contractor agrees, upon written request, to furnish District with copies of all required policies, certified by an

authorized representative of the insurer. All insurance issued under the provisions of this section shall be issued in a form and by insurance organizations approved by the District, prior to commencement of performance hereunder.

12.3 *Time for Compliance:* The Contractor shall not commence work under this Contract until he has provided evidence satisfactory to the District that he has secured all insurance required under this section

12.4 *Minimum Requirements:* Contractor shall, at his expense, procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. Such insurance shall meet at least the following minimum levels of coverage:

12.5 District shall be named as an additional insured.

12.6: *Minimum Limits of Insurance:* Contractor shall maintain limits no less than:

- (a) *General Liability:* \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
- (b) *Automobile Liability:* \$1,000,000 per accident for bodily injury and property damage.
- (c) *Workers' Compensation and Employer's Liability:* Workers' compensation limits as required by the Labor Code of the State of California. Employers Liability limits of \$1,000,000 per accident for bodily injury or disease.

13. Omitted.

14. CONTRACTOR=S LIABILITY

14.1 Contractor and its assigns hereby release District from any and all liability for personal injury or property damage arising out of

the performance of this Agreement and agree to hold District free, clear and harmless from any and all liabilities, claims or demands, including attorney fees, whatsoever for personal injury or property damage arising out of such performance. In addition, Contractor agrees to defend and pay all actual costs of the defense of any lawsuit filed against the District arising out of performance of this Contract.

IN WITNESS WHEREOF, each of the parties hereto have caused this Contract to be executed by its duly authorized officers.

Dated: March 1, 2015

DISTRICT:

EDGEMONT COMMUNITY SERVICES DISTRICT

By: Michael Addie
Michael Addie President

By: Jessica Pfalmer
Jessica Pfalmer Secretary

CONTRACTOR:

MONTGOMERY PLUMBING, INC.

By: Mark L. Montgomery
Mark L. Montgomery President

By: [Signature]
Secretary

Exhibit 1

Prevailing Wages for Montgomery Plumbing Inc.:

Monday through Friday from 7:30 a.m. to 4:30 p.m. (normal hours) are \$93.86.

Other than normal hours Monday through Saturday are \$126.21 (time and one half).

Saturday, Sunday and Holidays are \$158.56 (double time).

After normal hours and Saturday, Sunday and Holidays there is a two hour minimum.

APPENDIX G

Sewer Maintenance & Sewer Line Cleaning Services for Edgemont Community Services District Dated October, 2015 with Updated Exhibits

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Exhibit 1 – Compensation/Pricing

CLEANING

Maintenance cleaning during normal working hours: \$0.40/LF

Emergency Call-out during normal business hours – One (1) Man Crew

Estimated Travel to Site:	.5 Hr. @ \$175.00/Hour	
Estimated Travel from Site:	.5 Hr. @ \$225.00/Hour	
Four (4) Hour Minimum	\$290.00/Hour plus Travel	
Estimated Four (4) Hour Minimum		\$1,360.00
After Four (4) Hour Minimum up to Eight (8) Hours	\$290.00/Hour	

Emergency Call-out after normal business hours – One (1) Man Crew

Estimated Travel to Site:	.5 Hr. @ \$225.00/Hour	
Estimated Travel from Site:	.5 Hr. @ \$225.00/Hour	
Four (4) Hour Minimum	\$363.00/Hour plus Travel	
Estimated Four (4) Hour Minimum		\$1,677.00
After Four (4) Hour Minimum up to Eight (8) Hours	\$363.00/Hour	

Debris Disposal:

0 up to 2 Cubic Yards	\$375.00
Above 2 – 4 Cubic Yards	\$550.00
Above 4-6 Cubic Yards	\$725.00
Above 6 yards	\$187.50/Cubic Yard



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CCTV Inspection

During normal business hours

One (1) Man Crew

Estimated Travel to Site: .5 Hr. @ \$145.00/Hour
Estimated Travel from Site: .5 Hr. @ \$195.00/Hour
Four (4) Hour Minimum \$270.00/Hour plus Travel
Estimated Four (4) Hour Minimum \$1,250.00
After Four (4) Hour Minimum up to Eight (8) Hours \$270.00/Hour


Emergency Call-out during normal business hours – One (1) Man Crew

Estimated Travel to Site: .5 Hr. @ \$145.00/Hour
Estimated Travel from Site: .5 Hr. @ \$195.00/Hour
Four (4) Hour Minimum \$270.00/Hour plus Travel
Estimated Four (4) Hour Minimum \$1,250.00
After Four (4) Hour Minimum up to Eight (8) Hours \$270.00/Hour

Emergency Call-out after normal business hours – One (1) Man Crew

Estimated Travel to Site: .5 Hr. @ \$195.00/Hour
Estimated Travel from Site: .5 Hr. @ \$195.00/Hour
Four (4) Hour Minimum \$338.00/Hour plus Travel
Estimated Four (4) Hour Minimum \$1,547.00
After Four (4) Hour Minimum up to Eight (8) Hours \$338.00/Hour

This exhibit shall be attached to the Contract dated October 8, 2015, between Edgemont Community Services District and Houston & Harris and incorporated therein by reference.


Edgemont Community Services District

10/27/22
Date


Houston & Harris

11/2/22
Date



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Exhibit 2 – Response Plan

Sewer overflow emergencies occurring Monday – Friday 7:00AM – 4:30PM

1. Emergency call received by either Field Operations or Field Supervisor:

If field personnel are not called and the call comes to dispatch, the Operations Manager or Field Supervisor will be notified immediately.

2. Crew Member (s) with appropriate equipment will be dispatched to the emergency overflow location.

3. Supervisor and/or Lead Operator evaluates the situation at location.

During the evaluation the first individual onsite has 3 duties:

- a. Determine the cause of overflow emergency
- b. Determine the “Plan of Action”
- c. Determine what resources are needed to remedy situation

4. Initiate “Plan of Action”

As needed, call for additional help, appropriate vehicles and equipment, proper notification to the appropriate agencies as well as any other corrective actions required by the situation.

5. Clear Blockage

6. Clean-up of Overflow

Clean-up of site requires 3 steps:

- a. Thorough cleansing of site
- b. Disinfecting of site
- c. Determination of size of spill

7. Written Report from Responding Personnel

Written report must contain the following information regarding the spill:



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- a. Size, address, time, date and who has been notified
- b. Identify pipe type, size and type of blockage (grease, roots, etc.)
- c. Written report must contain an itemization of total expenses incurred and personnel time responding to the emergency

8. Supervisor initiates “Reporting” to Regional Board

Supervisor will consult with the appropriate County or Regional board to meet all legal reporting and posting requirements.

Sewer overflow emergencies occurring Monday – Friday 4:30PM – 7:00AM, all Holidays, Saturday & Sunday through Monday 7:29AM

1. Emergency call received by standby individual after hours:

Caller will call the office and be instructed on procedure to notify the standby person or will have a direct contact number:

2. Standby individual notified

Standby individual is available for contact and informed on the proper procedure and policies when addressing an emergency call.

3. Standby individual evaluates the situation at location.

During the evaluation the first individual onsite has 3 duties:

- d. Determine the cause of overflow emergency
- e. Determine the “Plan of Action”
- f. Determine what resources are needed to remedy situation

4. Initiate “Plan of Action”

As needed, call for additional help, appropriate vehicles and equipment, proper notification to the appropriate agencies as well as any other corrective actions required by the situation.



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5. Clear Blockage

6. Clean-up of Overflow

Clean-up of site requires 3 steps:

1. Thorough cleansing of site

- i. Provide containment of spill area from further contamination by using straw waddles and sand bags if necessary
- ii. Collect all solids and liquid material from the spill & return to sewage system or dispose at Treatment Plant

2. Disinfecting of site

- i. Utilizing the jet truck, wash down the spill area with 125 ppm chlorinated water (mix one gallon of 12% hydro-chlorine per 1000 gallons of water)

3. Determination of size of spill

7. Written Report from Responding Personnel

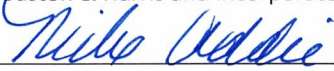
Written report must contain the following information regarding the spill:

- 1. Size, address, time, date and who has been notified
- 2. Identify pipe type, size and type of blockage (grease, roots, etc.)
- 3. Written report must contain an itemization of total expenses incurred and personnel time responding to the emergency

8. Supervisor initiates "Reporting" to Regional Board

Supervisor will consult with the appropriate County or Regional board to meet all legal reporting and posting requirements.

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Exhibit 3

Equipment including Safety & Traffic Control

Video Inspection Units

-1999 Ford E350 Vin# 1FTSE34F7XHA28660	-2017 Ford E450 Vin# 1FDXE4FS0HDC51262
-2005 Ford E450 Vin# 1FDXE45S75HB08752	-2019 Ford E450 Vin# 1FDXE4FS1KDC53237
-2009 Ford E450 Vin# 1FDWE45P69DA17458	-2021 Ford E450 Vin# 1FDXE4FN6DC07500
-2012 Ford F450 Vin# 1FDUF4GT1CEB67381	-2021 Ford E450 Vin#1FDXE4FN6MDC19727
-2014 Ford E450 Vin# 1FDXE4FS4EDB16829	

Camera Equipment

Cameras

Trakstar - ID# C7B 10086	Envirosight – ID# 5613916
Trakstar - ID# C1C 20097	Envirosight – ID# 5610779
Trakstar - ID# C1CA 20022	Trakstar - ID# TRKS 0119
Trakstar - ID# C7B 10301	Envirosight - ID# PTP70II 5810267
Trakstar - ID# C7B 10430	Envirosight - ID# RCX 90 5610779
Trakstar - ID# C7BD 10318	Trakstar - ID# TRKS 0119



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Exhibit 3

Trakstar - ID# TRKS 0144

Trakstar - ID# TRKS 0252

Subsite - ID# D1H 10087

RST - ID# D2A 10341

RST - ID# DZA 10016

RST - ID# D6F 10104

Subsite - ID# PRTK 0031

Subsite - ID# PRTK 0037

Subsite - ID# PRTK 0067

Envirosight – ID# 5550106

Envirosight – ID# 5600772

Envirosight – ID# 5603888

RST - ID# 163-9212

Envirosight – ID# 5360116

Subsite – ID# STDX 002

Subsite – ID# SDTX 0012

Subsite – ID# D1E 10233

Trakstar – ID# TRKS 0251

Subsite - ID# PNTN 0010

Dedicated Potable Water Line Camera Trakstar - ID# C7B 10338

transporter and cable reel

Cable Reels; 1500'

Tractors

- RST mainline tractors equipped with both wheel and track options
- Envirosight RoverX crawlers
- Large line tires and wheel extensions are also stocked on every Vehicle
- Large line steerable tractor, with adjustable height scissor lifts (18" – 10")
- Medium line steerable tractor (8" – 18")
- Small line Steerable Tractor (4" – 6")



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Equipment

Float Boats

High grade aluminum boats, both Flat Bottom and Tri-Hull designed for large line, high flows, and poor access inspections.

Skid Setup

All skids, additional reels, and rope to accommodate runs exceeding 1000 LF

Combination Cleaning Units; positive placement vacuum rates at 3,500 CFM with 8" vacuum system, debris tanks from 9 - 15 Yards capacity, 1000 gallons of fresh water

2014 Vactor 2100 Series
Vin# 1FVHG3CY7EHFV4315

2016 Vactor Series Recycler
Vin# 1NKZL7OXXGJ134778

2014 Vactor 2100 Series
Vin# 1FVHG3CY2EHFM1343

2020 Vactor Series Recycler
Vin# 1NKZL7OXXGJ134778

2016 Vactor Ramjet Jetter
Vin# 1FVAG5CY6GHGZ3996

2021 Vactor 2100 Series
Vin# 1FVAG3FE6MHMR2579

Cleaning Equipment Accessories

Hose Reel from 600' to 800' of 1" High Pressure Hose

Maintenance & Heavy cleaning nozzles with both 15- & 30-degree spray patterns

Specialized Chain Flails with both small & large chains

Wart Hog (8" - 15") with larger skids available on request

O'Brien Root Saw with 6" up to 18" blades (Cork screw & 3 blade)



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Exhibit 3

Keg Storm Drain Nozzle

Keg Turbo 150 Chain Flail 8" – 48"

Enz Venturi 300 GPM Nozzle

Safety Equipment

Two Gas monitors (capable of metering all hazardous gases contained in the pipe)

Rae Systems – ID Qrae3

Rae Systems – ID Qrae3

Tripod – with Mainline and Retractable winches

Harness

Air blower

All operators trained and certified in CPR/First Aid and confined space Entry

All operators have a complete safety bag containing hard hat, safety glasses, eye wash, back brace, gloves, Tyvek suit, face shield, rain gear, safety vest, ear plugs

IIPP – 2020 Version (SB 198 CAL-OSHA)

Radio Communication

If conditions require a Confined Space Entry and the atmosphere is determined hazardous, SCBA's are used by dedicated trained Confined Space Entry personnel.



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Exhibit 3

Traffic Control

Certified Temporary Traffic Control

Certified Traffic Control Subcontractor; when required

Traffic Advisory Beacons

Caltrans Approved Trailer Arrow Board - Two

Cones & Signs, Stop & Slow Paddle

Miscellaneous Units

2011 Hino Water Truck
Vin# 5PVNV8JG7B4S50249

2018 Silverado Chase/Utility Vehicle
Vin# 3GCPCPEC0JG350727

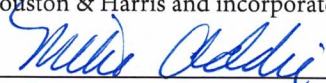
2013 – Pacific Tek Power Vac
SN #3141501

2018 Silverado Chase/Utility Vehicle
Vin# 1GCRCPEC4JZ320428

2014 Dodge Ram – Chase/Utility Vehicle
Vin# 1C6RR6GTXES324575

2019 Silverado Chase/Utility Vehicle
Vin# 3GCUYEED8KG210993

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APPENDIX H

Sanitary Sewer Overflow Report

SANITARY SEWER OVERFLOW REPORT

Fill out as completely as possible.

Name of Person Completing This Report:

Date:

Map attached showing location? Yes No

Incident Street Address/Site:

City:

County:

Zip Code:

Cause of SSO Occurred In:

Lateral Main Line

Weather at Time of SSO:

Dry Rain

Line Segment Structure ID:

to

SSO DETAILS

Date of SSO:

Time Reported:

Crew Arrival Time:

Date SSO Stopped:

Time SSO Stopped:

SSO Duration:

SSO Rate (Gal/Min):

Estimated SSO Volume Recovered (Gal):

Estimated SSO Volume (Gal):

How was Volume Calculated?

Cleanup Methods Used:

Amount Flushed (Gal):

Amount Flush Water Recovered (Gal):

Final SSO Destination:

Receiving Waters Affected? Yes No

Evidence of Fish Kill? Yes No

Visual observations:

Estimated Volume Discharged to Receiving Waters (Gal):

Area Barricaded/Closed: Yes No

Location:

Describe:

Signs Posted? Yes No

Neighbors Notified? Yes No

Picture/Video Taken? Yes No

Describe:

Sample(s) Collected? Yes No

By Who?

When?

Sample Location(s): ___ Ft. Upstream

___ Ft. Downstream

at Discharge Point

Conditions That May Influence Sample Results:

Storm Drain Discharges

Stream Discharges

Runoff Containing Animal Waste

Other

Sample Results:

Fecal Coliform: _____

D O: _____

Ammonia/Nitrogen: _____

APPENDIX I

ECSD Ordinance & Resolution

EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER LATERAL POLICY

Approved 1/28/16

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EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER LATERAL POLICY

DATE: December 10, 2015

SUBJECT: Policy for the Design, Construction, Permitting and Maintenance of Sewer Laterals

PURPOSE:

The purpose of the sewer lateral policy is to:

- Provide guidelines for the design, construction, permit requirements, and maintenance of sanitary sewer laterals.
- Protect public health, safety, and the environment by reducing number and severity of sanitary sewer backups and overflows.
- Minimize inconveniences to residents and business.
- Reduce cost of services to customers.
- Improve sewer system performance.
- Reduce inflow and infiltration of storm water into the wastewater collection system.
- Comply with the Federal Clean Water Act.
- Comply with Requirements of California Regional Water Quality Control Board No. 8.
- Comply with Edgemont Community Services District Sewer System Management Plan.
- Be in conformance with ECSD's Ordinance No. 277. "An Ordinance Of Edgemont Community Services District Of Riverside California Confirming District And Property Owners' Responsibilities To Maintain Sewer Line From Structures on Their Property to the Mail Sewer Line."

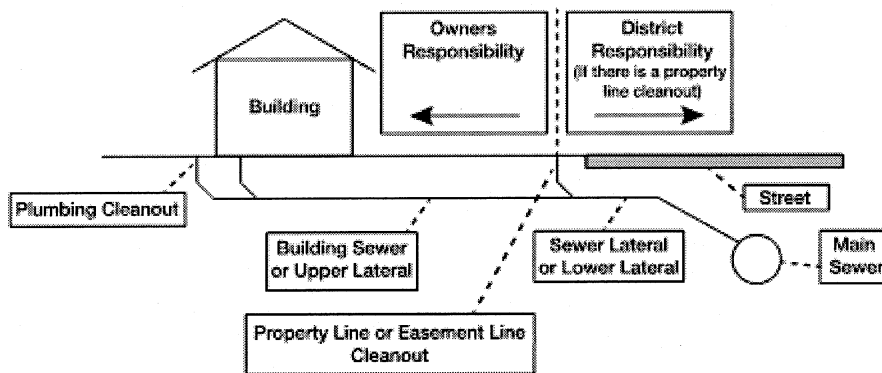
SCOPE:

This policy shall apply to all sewer laterals to the maximum extent practicable. (Please review the graphical depiction of a sewer lateral on Page 3).

DEFINITIONS:

- **Building Sewer:** All plumbing and fixtures located within private property. Building sewers and portions of sewer laterals within private property are under the City of Moreno Valley's purview and shall comply with the Building Department requirement including but not limited to the building and plumbing codes. Contact the City of Moreno Valley Building Department for permitting and inspection requirements.
- **Sewer Lateral:** The segment of pipe, appurtenances and fixtures that connects a home or building sewer to the Edgemont Community Services District (District) sewer main. The portion of the sewer lateral within the public right-of-way or a District easement shall be subject to the District's review, permitting and inspection and shall comply with the policies and requirements set forth herein. The responsibility for maintaining a lateral, from the property line or easement line to the District's sewer main, can be solely that of the District or private property owner. Edgemont Community Services District dictates lateral responsibility and the basis for a shared arrangement, if it applies to a lateral.
- **Upper Lateral:** Portion of a lateral (usually from the building foundation to the property line or easement) that the private property owner is responsible for maintaining.

- Lower Lateral: Portion of a lateral (from the property line or easement line to the sewer main) that the District is responsible for maintaining if there is a sewer cleanout at the property line. If there is no sewer cleanout, it is the property owner's responsibility to maintain the lower lateral to the District's sewer main.
- Sewer Cleanout: A sewer cleanout is a point of access where the sewer lateral can be serviced. According to the District's Standard Drawing No. S-8 (attached) it should be a wye, a minimum 4 inches diameter with a tight-fitting steel cap over it. Two cleanouts are typically installed at each house or building. One is located just outside of the building (plumbing cleanout), and one is located at the property line or easement (property line cleanout).



Chronic Sewer Lateral Problem: Sewer laterals with chronic problem are those that have:

- a) at least three blockages on record over two year period
- b) major structural issues (pipe defects, collapse or break)
- c) major root intrusion

A. Design and Construction Criteria

1. *Size and Number of Sewer Laterals:* Minimum diameter of a sewer lateral shall be 4 inches for single family and duplexes and 6 inches for multi-family, commercial, and industrial properties. Every building with plumbing fixtures shall be separately and independently connected to the public sewer, except where one building stands in the rear of another; and when two or more buildings on the same property are under one ownership and the property is not sub dividable. The property may then be served by a single adequately sized connection to the public sewer. The address of each property must be indicated on the plans.

Developers of subdivisions, multi-family dwellings, commercial and industrial properties shall pay a fee to the District to prepare a sewer availability letter. The sewer availability letter report shall include the following:

- Estimate of sewer generation from the new development.
- Sewer capacity analysis of the existing pipe within the study area.
- Sewer capacity impact of the additional flow from the new development, upon the sewerage system downstream of the proposed connection.
- Sizing of new pipe for the required new capacity within the study area, if applicable.

The Developer or Owner is required to have a Registered Civil Engineer prepare the plans for review and approval by the District.

2. *Sewer Lateral Pipe Type:* The pipe shall be Vitrified Clay Pipe or as required by District's Standards.
3. *Sewer Service Availability:* If a property does not have an existing sewer service and there is no sewer main within the immediate vicinity of the property to serve the property,

the sewer main at minimum must be extended for the maximum full frontage of the property plus 10 feet. The sewer main must end with a clean out or a manhole at the direction of the District Engineer. Sewer laterals must run perpendicular to the proposed main. The sewer laterals shall not be connected to a clean out or manhole at the main line.

4. *Connection to Main Sewer:* See attached District Standard Drawing No. S-5 or latest.
5. *Sewer Lateral Cleanout:* See attached District Standard Drawing No. S-8 or latest.
6. *Minimum Depth:* A sewer lateral in the street that is less than 4 feet deep (from flow line) must be capped with concrete per District Standard S-5 or latest.
7. *Marking the Curb:* Where the sewer lateral crosses the curblines, the applicant's contractor shall stamp or etch the letter "S" for sewer on the face of the curb if one exists.
8. *Root Control (Optional):* Root barrier may be wrapped around pipe joints, and strapped to the pipe to prevent root intrusion into the lateral.
9. *Existing Improvements:* Prior to proceeding, obtain a permit from the City of Moreno Valley to do work in the street and sidewalk. Prior to removal of existing improvements, they shall be saw cut. Sidewalk shall be replaced from Joint to Joint. Curb and gutter removal shall be a minimum of seven and one half (7 ½) feet and joined to existing curb and gutter through dowels. However, the remaining portion of the curb to the nearest

joint shall not be less than five (5) feet. Cross-gutter shall be replaced from joint to joint and doweled to existing improvements.

10. *Metallic Identification Tape:* A 6-inch metallic identification tape labeled "Sewer" shall be installed 12" above the sewer lateral between the subgrade and the structural section of the surface improvements from the property line or easement to the main sewer. Contractor shall also install a 10 gauge (AWG), single-strand, insulated copper wire with cross-linked polyethylene (XLPE) insulation, specifically manufactured for direct burial applications, along all non-metallic sanitary sewer lines (including laterals).
11. *Fats, Oils, and Grease:* Development or renovation projects containing food establishments shall comply with the District's Ordinance No. 278. These establishments shall install grease interceptors as per requirements of the Plumbing Code and City of Moreno Valley's Building and Safety Department or the District's requirements, whichever is most restrictive.
12. *Interceptors:* Interceptors shall be used to filter out wastewater non-cooking oils, flammable waste, sand, plaster, lint, hair, and ground glass. Non-cooking oil, flammable waste, sand, plaster, lint, hair, and ground glass interceptors shall be provided when, in the opinion of the District Engineer, they are necessary for proper handling of liquid wastes containing unacceptable solid or liquid waste in excessive amounts. Interceptors are required in commercial buildings, primarily to accumulate and recover objectionable substances from wastewater. The Developer or Owner representative is required to fill out the District's Industrial Waste Survey Form for the subject property.

Each interceptor must be located to provide easy access for maintenance and for removing the accumulated matter. Interceptors must be maintained in efficient operating condition by periodically removing the accumulated waste. Detailed drawings must be submitted to the District and City of Moreno Valley for approval. When interceptors are required, waste not requiring separation must not be discharged through an interceptor.

Gasoline, Oil, and Sand Interceptor: Interceptors must be provided to prevent the introduction of gasoline, grease, oil or sand into the sewer system as follows:

- Any place where motor vehicles are repaired and floor drainage is provided.
- Any place where motor vehicles are washed.
- Public storage garages where floor drainage is provided.
- Any place where oil, gasoline or other volatile liquids can be discharged into the sewer system.
- Plants where parts are washed to remove oil or greasy substances.

Meat Processing Interceptors: Where an establishment slaughters, prepares or processes meat, the waste from the floors must pass through a specially designed floor drain before entering the grease interceptor.

Laundry Interceptors: Lint interceptors must be installed on the sewer laterals from commercial laundries or multi-family laundries. The lint interceptor should have a removable ½ inch mesh screen metal basket or a similar device to collect solids such as lint, string, and buttons.

Other Trap Requirements: Bottling plants are required to discharge their process wastes through an interceptor that is designed to separate broken glass and other solids from liquid waste. Establishments that generate hair in large quantities are required to use interceptors similar to those used in commercial laundries or swimming pools. Animal hospitals and dog grooming establishments are required to install hair strainers (interceptors) on sewer lines from bathtubs or other receptacles where animals are bathed. Dental and Orthopedic sinks where plaster, wax or other objectionable substances will be discharged into the sewer system, require the installation of an interceptor trap in the sewer line.

Dilution or Neutralizing Tanks: Corrosive liquids such as chemicals, acids, or strong alkalis, must pass through an approved dilution or neutralizing tank before discharging into the regular sanitary system.

Industrial Waste Permit: Industrial Waste Permit may be required from the District for certain sewer discharges that are regulated through the EPA.

13. *Sump Pump:* For properties lower than the sewer main, sump pumps shall be installed in accordance with the Uniform Plumbing Code. A private manhole within the private property shall be installed at the end of the pressure line. To minimize turbulence, it is necessary to align the crown of the force main outlet with the crown of the sewer lateral at the receiving manhole. The invert of the manhole should be sloped smoothly between force main and sewer lateral inverts. The Property Owner is fully responsible for all costs associated with installation, operation, and maintenance.

B. Encroachment Permit

1. *Encroachment Permit Requirements:* An encroachment permit from the City of Moreno Valley will be required for any work within the public right-of-way or a City easement. The project Developer or Owner needs to contact the City of Moreno Valley to determine the encroachment permit requirement.

2. *Fees and Licenses:* Work will be subject to the following fees in accordance with the current District Fee Schedule (where applicable).

- Availability and/or Connection Fees
- Plan Check Fee
- Inspection Fee
- New Sewer Connection Fees (includes properties with previously abandoned laterals as per Section D.1)
- Field investigation costs (includes CCTV of sewer and/or storm drain, dye testing smoke testing etc.
- Sewer Service Agreement without Annexation
- FOG Permit
- The Developer or Owner is to Contact the City of Moreno Valley to pay for any applicable City fees, licenses, and permits that the City may require to undertake this project

3. *Pre-Construction:* Contractor must call the District to set up a pre-construction meeting 48-hours prior to the start of the work. The applicant shall note that any item of work that has not been inspected and approved by the District's inspector is subject to removal at

applicant's expense. The Contractor will also need to coordinate with the City of Moreno Valley inspector.

4. *Permit Release and Deposit Refund:* Deposit will be released after the following items are completed:

- a. Project is inspected at each stage of construction by the District.
- b. Final inspection is performed by the District Inspector.
- c. Permit is "Signed Off" by the District Inspector.
- d. A verified record plot plan showing location of the sewer lateral in relation to the centerline of downstream manhole is submitted.

C. Sewer Lateral Maintenance

1. *Maintenance Responsibility:* The property owner is responsible for maintaining, cleaning and servicing the sewer lateral from the house or building to the sewer cleanout. In the absence of a sewer cleanout at the property line, the property owner is responsible for maintaining the sewer laterals to the public sewer. This includes the portion of the lateral on private property and the portion in the public right-of-way or easement.

Sewer Lateral Failure or Stoppage: Whenever failure or blockage of a sewer lateral occurs, the District will respond to check the sewer main to verify that it is open and flowing. If the sewer main is found to be clear, the District representative will check the sewer lateral from the cleanout at the property line (if one exists) to determine if it is blocked or not.

If the lateral is blocked between the cleanout, located at the property or easement line, and the public sewer, the District will clean out the lateral from the cleanout to the sewer main. If there is no cleanout at the property line, it is the property owner's responsibility to call a licensed plumbing contractor to correct the problem.

The District will provide further assistance if the following occurs:

- a. Property owner obtained the services of a licensed plumber and the licensed plumber certifies in writing that they cannot clear the stoppage using proper tools, and;
- b. The stoppage has occurred between a property line cleanout and the public sewer main, and;
- c. The property has a "Wye" type property line cleanout and the property owner has located and uncovered the property line cleanout, or a qualified plumber has installed a new "Wye" type property line cleanout.

And the blockage has still not been cleared.

Then the District may provide additional assistance to investigate, if resources are available, to clear blockage in the lateral. If it is found that the obstruction is in the private lateral, then the District may seek reimbursement of incurred costs.

The District may issue a notice of correction to the property owners with Chronic Sewer Lateral Problems. In such cases the property owners are required to submit an action plan to the District Engineer. Failure to comply to the notice may result in further action against the property owner including but not limited to administrative citation by the District.

3. *Root Intrusion:* Root intrusion into a private sewer lateral is typically a symptom of a defect in the sewer lateral. If the roots entered at a joint or connection of a sewer lateral, the property owner is responsible to repair or correct the situation.

The property owner is responsible for maintaining the laterals including regular cleaning, root treating or replacing the lateral, if necessary.

4. *Root Intrusion from Lateral into Main Line:* the District is responsible to notify property owners in writing when they find roots from a sewer lateral protruding into the sewer main line. The property owner is then responsible to remedy the situation.

5. *Sewer Lateral Overflow:* Where sewage from a private sewer lateral overflows into the street, the property owner must immediately notify the District of the spill by calling the District 24 hour hot line (phone number (951) 784-2632 or fax (951) 784-2411*¹) and is responsible for immediate cleaning of the spill within the street. In instances where the sewage could reach or enter a storm drain structure or when the property owner has not mobilized to clean the street, the District's on call contractors will attempt to prevent storm water pollution and protect public health. If the District calls upon its on-call contractors to secure, mitigate, clear the blockage, and clean and sanitize the area, the cost of abatement and administration may be billed to the property owner.

A sewer overflow is a violation of Sections 5411 and 5412 of the State Health and Safety Code and the Clean Water Act if the overflow reaches surface or state waters(storm drains). Sections 5411 and 5412 of the Health and Safety Code require the District to notify and

*¹ The District's email address is jessicaecsd@yahoo.com

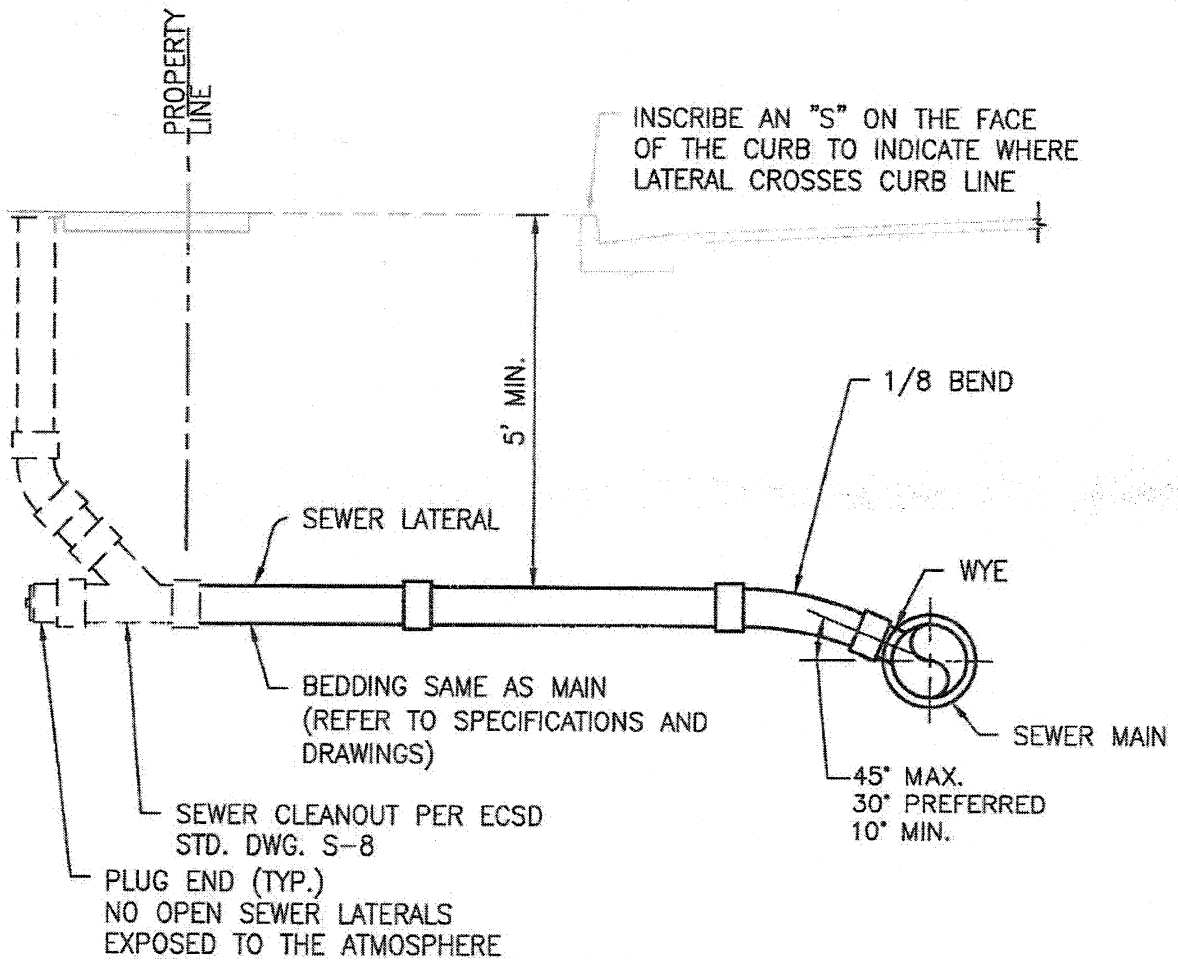
report to the Riverside County Department of Environmental Health any violation of the Code. The responsible party is required to reimburse the District, its contractors, and the County Department of Environmental Health all costs incurred to mitigate the threat of contamination and to protect the health and safety of the public. Furthermore, any violation of Section 301 of the Clean Water Act is subject to a civil penalty, not to exceed \$25,000 per day for each violation and is subject to criminal penalties of \$2,500 to \$25,000 per day of the violation.

D. Miscellaneous

1. *Abandonment of Sewer Lateral*

When demolishing a structure or when a sewer lateral is realigned to a new connection point to the public sewer main, the existing sewer lateral shall be abandoned by cutting, plugging, sealing at the sewer main and repair the public sewer pipe in addition to cutting, plugging and sealing the sewer lateral at the property line or easement line.

Permits shall be obtained from the District and the City of Moreno Valley to abandon the lateral.



NOTES:

1. 4" PIPE FOR SINGLE DWELLINGS, 6" MIN. FOR ALL OTHER LATERALS.
2. LATERAL LOCATIONS SHALL BE MEASURED AT RIGHT ANGLES TO STREET CENTERLINE FROM THE CENTERLINE OF THE NEAREST DOWNSTREAM MANHOLE COVER.
3. WHENEVER DEPTH OF COVER OVER LATERAL IS LESS THAN 4'-0", SPECIAL BEDDING OR CONCRETE CRADLE SHALL BE USED.
4. CONTRACTOR SHALL REFERENCE EACH LATERAL IN THE FIELD WITH A SURFACE MARKER. MARKER SHALL BE METAL STAKE PLACED AT TIME OF BACKFILLING. MARKER SHALL BE VERTICAL AND CUT OFF 6" ABOVE GRADE.
5. SEWER LATERALS FOR ALL LOTS WHICH HAVE PAD ELEVATIONS AT OR BELOW STREET GRADE SHALL BE CONSTRUCTED AT 2% SLOPE. IN NO CASE SHALL ANY SEWER LATERAL BE CONSTRUCTED AT LESS THAN 2% SLOPE UNLESS OTHERWISE SHOWN ON PLANS.
6. SEWER PLUGS TO BE INSTALLED INTO LATERAL STUB-OUTS AND INFLATED WHILE MAKING HOUSE CONNECTIONS TO THE SEWER MAIN. CONNECTIONS TO BE MADE WITH DISTRICT INSPECTOR PRESENT.
7. A MANHOLE PER DISTRICT STANDARD DRAWING NO. S-7 SHALL BE PROVIDED AT THE STREET RIGHT-OF-WAY LINE FOR ALL LATERALS 6" IN DIAMETER AND LARGER UNLESS A WASTEWATER FLOW MONITORING STATION IS PROVIDED OR UNLESS OTHERWISE APPROVED IN WRITING BY THE DISTRICT.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE

DATE: JUNE, 2015

APPROVED BY:

R.C.E. 47569

TYPICAL SEWER LATERAL

ALBERT A. WEBB ASSOCIATES
CONSULTING ENGINEERS

RIVERSIDE

CALIFORNIA

DRAWING NO.

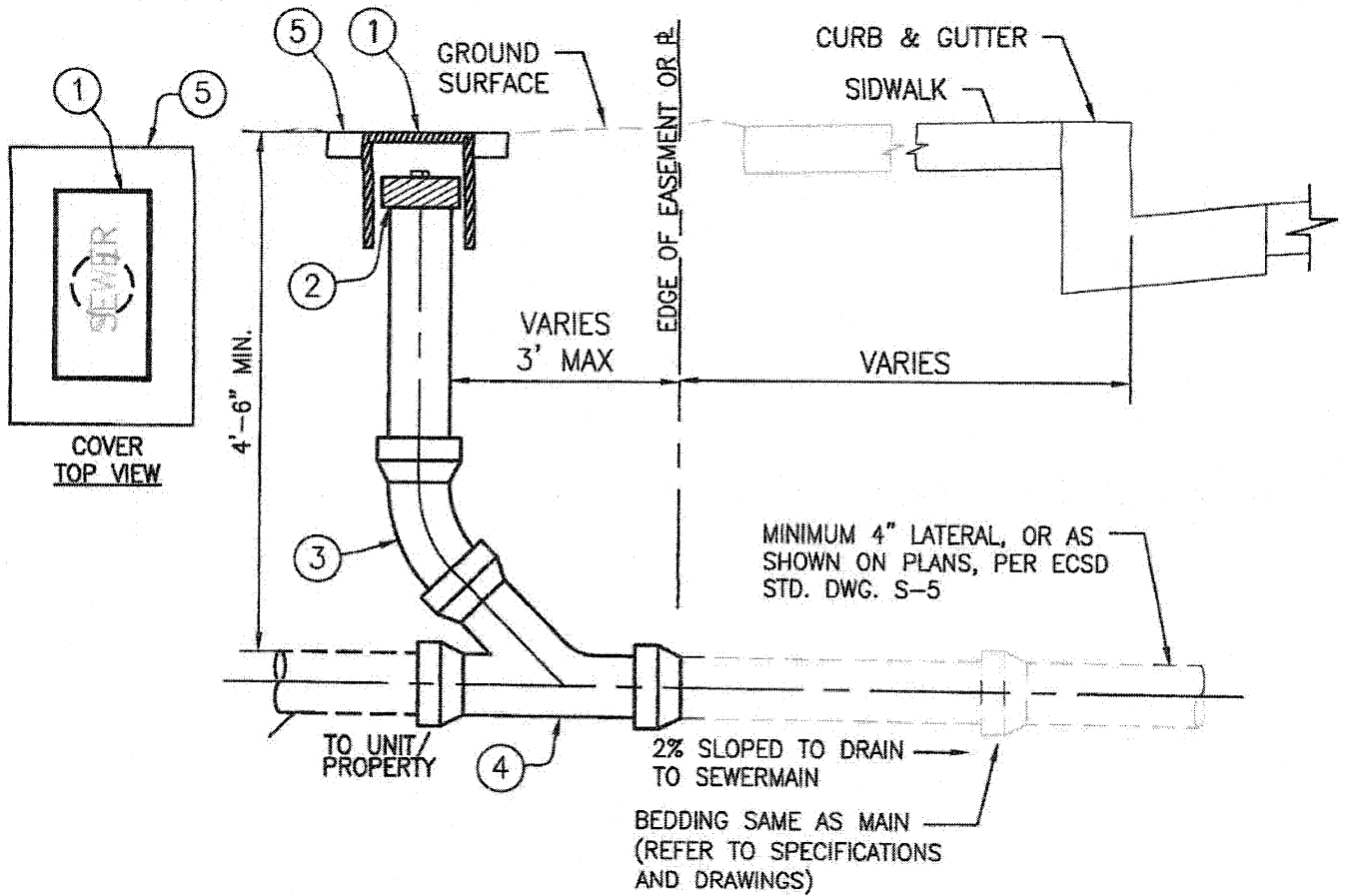
S-5

SHEET 1 OF 1

W.O. 63-120

REV.

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ON-SITE CLEANOUT

MATERIALS LIST	
①	1'x2' CONCRETE BOX WITH CONCRETE LID.
②	THREADED CAP WITH SQUARE NUT.
③	MINIMUM 3-1/2" SEWER PIPE PER UNIFORM PLUMBING CODE.
④	WYE PER UNIFORM PLUMBING CODE.
⑤	24"x36"x6" CONCRETE PAD, CLASS "A" CONCRETE

NOTES:

1. PLACE CLEANOUT A MAX. OF 3' BEHIND PROPERTY LINE OR EDGE OF EASEMENT.
2. LID MUST BE CAST IRON FOR LOCATING PURPOSES, MARKED "SEWER".
3. CLEANOUT SHALL BE FIELD VERIFIED BY DISTRICT INSPECTOR.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE	SEWER LATERAL CLEANOUT	DRAWING NO. S-8
DATE: JUNE, 2015		SHEET 1 OF 1
APPROVED BY: 	ALBERT A. WEBB ASSOCIATES CONSULTING ENGINEERS	W.O. 63-120
R.C.E. 47569	RIVERSIDE CALIFORNIA	

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ORDINANCE NO. 277

AN ORDINANCE OF EDMONT COMMUNITY SERVICES DISTRICT OF RIVERSIDE COUNTY CALIFORNIA CONFIRMING DISTRICT AND PROPERTY OWNERS' RESPONSIBILITIES TO CLEAN AND MAINTAIN SEWER LATERAL FROM STRUCTURES ON THEIR PROPERTY TO THE MAIN SEWER LINE

Whereas, it is in the interest of both the District and the property owner that the sewer lateral from structures on private or government owned property to the District's main sewer line be open and clear of all foreign matter, and

Whereas, a sewer Clean Out is a point of access where the sewer lateral can be serviced, and

Whereas, for sewer laterals with installed Clean Outs at the property line or easement, it is the District's responsibility to clean and maintain the sewer lateral from the Clean Out to the mainline and the responsibility of the private property owner to clean and maintain the Lateral from the structures on private property to the Clean Out, and

Whereas, the property line cleanout allows access to the District maintained section of the lateral pipe in order to clear blockages from the property line to the main line, if at the time of connection of the existing lateral to the mainline sewer or at any time thereafter, the property owner or contractor did not install a Clean Out at the property line or easement, it is the property owner's responsibility to install one, and

Whereas, in the absence of a Clean Out at the property line or easement it is the responsibility of the private property owner to clean and maintain the Sewer Lateral in its entirety, that is to keep it open all the way to the District's Main Line sewer, and

Whereas, this policy, although long standing, has not previously been reduced to

writing and incorporated into an Ordinance,

NOW, THEREFORE BE IT RESOLVED by the Board of Directors of the EDGEMONT COMMUNITY SERVICES DISTRICT in regular session assembled on November 12, 2015, that:

1. In the absence of a Clean Out, at the property line or easement, it is the responsibility of the private or government property owner to clean and maintain the Lateral in its entirety, that is, to keep it open all the way to the Main Line.
2. Where a Clean Out exists, at the property line or easement, it is the responsibility of the District to clean and maintain the sewer line from the property line Clean Out to the Main Line sewer and the responsibility of the private property owner to clean and maintain the sewer line from the structures on private property to the property line Clean Out.
3. The Board of Directors of Edgemont Community Services District shall from time to time adopt policies and procedures and provide information to property owners consistent with this Ordinance.

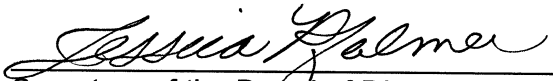
The President of the Board of Directors is directed to sign and the Secretary is directed to attest this Ordinance.

ADOPTED BY THE BOARD OF DIRECTORS OF THE EDGEMONT COMMUNITY SERVICES DISTRICT, and signed by the President and attested by the Secretary on 12th day of November 2015.



Mike Addie
President of the Board of Directors
EDGEMONT COMMUNITY SERVICES DISTRICT

ATTEST:



Secretary of the Board of Directors
EDGEMONT COMMUNITY SERVICES DISTRICT

STATE OF CALIFORNIA)
) ss.
COUNTY OF RIVERSIDE)

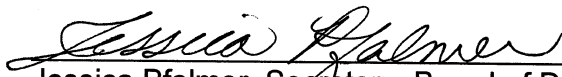
I, Jessica Pfalmer, the duly appointed, qualified and acting Secretary of the Board of Directors of EDGEMONT COMMUNITY SERVICES DISTRICT, do hereby certify that the foregoing Ordinance was duly adopted by said Board of Directors at a regular meeting held on November 12, 2015, by the following vote:

AYES: 5

NOES: 0

ABSENT: 0

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the day of
November 2015.



Jessica Pfalmer, Secretary, Board of Directors
EDGEMONT COMMUNITY SERVICES DISTRICT

Ordinance No. 278

AN ORDINANCE OF EDGEMONT COMMUNITY SERVICES DISTRICT

RELATING TO THE

DISCHARGE OF WASTES INTO THE PUBLIC SEWER SYSTEM

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Ordinance No. 278

AN ORDINANCE OF EDGEMONT COMMUNITY SERVICES DISTRICT

RELATING TO THE

DISCHARGE OF WASTES INTO THE PUBLIC SEWER SYSTEM

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I. Preamble - Definitions

Section 110 Purpose--Implementation of Regional Board Resolution.

The sewer system of Edgemont Community Services District (ECSD) through agreements with the City of Riverside discharges sewage into the City of Riverside sewer system. The City of Riverside's Regional Water Quality Control Plant discharges treated effluent into permeable soil structures and surface waters of the State, in particular the Santa Ana River. The chemical nature of this effluent affects the quality of water flowing in the receiving stream as well as the quality of underground waters in the vicinity.

The California Regional Water Quality Control Board, Santa Ana Region, hereinafter called the "Regional Board" has established discharge limitations for the chemical content of sewage effluent discharged by the City of Riverside, hereinafter called the "City". These limitations are set forth from time to time in duly enacted resolutions and orders of the Regional Board.

In order to conform to such sewage effluent discharge limitations and requirements, the District must regulate the discharge of waste into its sewerage system which eventually flows into the City of Riverside's publicly owned treatment works (POTW).

A. This Ordinance shall provide for the regulation of wastewater discharge in accordance with the federal government's objectives of general pretreatment regulations as stated in Section 403.2 of Title 40 of the Code of Federal Regulations (CFR) which are for the following purposes:

1. To prevent the introduction of pollutants into the District's sewerage system which will interfere with the operation of the City's POTW, including interference with its use or disposal of municipal biosolids;

2. To prevent the introduction of pollutants into the POTW which will pass through the treatment works, inadequately treated, to the receiving waters or otherwise be incompatible with such works;

3. To improve opportunities to recycle and reclaim municipal and industrial

wastewater and biosolids;

4. To enable the City to comply with its NPDES Permit conditions, biosolids use and disposal requirements, and any other federal or state laws to which the POTW is subjected;

5. To protect and preserve the health and safety of the citizens and personnel of the City and the District.

B. This Ordinance shall apply to all users of the District's Sewerage System. This Ordinance authorizes:

1. The issuance of Industrial User Permits;

2. Monitoring, compliance, and enforcement activities;

3. Administrative review procedures;

4. Industrial waste plan check review services;

5. User reporting requirements;

6. The establishment of fees; and

7. The equitable distribution of costs resulting from the program established herein.

Section 120 Definitions.

Unless the context specifically indicates otherwise, the meaning of the terms used in this Ordinance shall be as follows:

1. **Analytical Methods** means the sample analysis techniques prescribed in 40 CFR Part 136. Where 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the EPA determines that Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods, approved by the District, or any other applicable sampling and analytical procedures, including procedures suggested by the District, City or other parties as approved by the EPA.

2. **Authorized Representative** means:

A. A responsible corporate officer, if the user is a corporation, of the level of president, secretary, treasurer, or vice president in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation;

B. A general partner, managing member or proprietor if the user is a partnership, limited liability company or sole proprietorship respectively;

C. If the user is a federal, state, or local government facility: a director, highest appointed official, employee designated to oversee the operation and performance of the activities of the government facility, or his or her designee.

D. A duly Authorized Representative of the individual designated in paragraph A., B. or C. If the person is a manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental law and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

3. **Best Management Practices (BMPs)** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in Section 335 of this Ordinance. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage. POTWs may develop BMPs, which shall be considered local limits and Pretreatment Standards for the purposes of this Ordinance.

4. **Biochemical Oxygen Demand (BOD)** means the quantity of oxygen, expressed in mg/L, required to biologically oxidize material in a waste sample measured under standard laboratory methods of five days at twenty degrees Centigrade.

5. **Bypass** means the intentional diversion of waste streams from any point of a user's pretreatment facility.

6. **Categorical Industrial User** means all industrial users subject to National Categorical Pretreatment Standards promulgated by the EPA in accordance with Sections 307

(b) and (c) of the Clean Water Act (33 U.S.C. Sec.1317 et seq.), and as listed by the EPA under the appropriate subpart of 40 CFR Chapter I, Subchapter N.

7. **Certification Statement** means the following text from 40 CFR Part 403.6(a)(2)(ii):

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”

8. **Chemical Oxygen Demand (COD)** means the quantity of oxygen, expressed in mg/L required to chemically oxidize material in a waste sample or wastewater sample, under specific conditions of an oxidizing agent, temperature, and time.

9. **Attorney** means the District’s Legal Counsel or an authorized representative, or agent appointed by the District.

10. **Class I User** means an industrial user with an annual average industrial wastewater discharge of twenty-five thousand gallons or more per day; a Significant Industrial User; and a Categorical Industrial User which has a federally regulated process wastestream discharge.

11. **Class II User** means an industrial user with an annual average industrial wastewater discharge between ten thousand and twenty-four thousand nine hundred ninety-nine gallons per day.

12. **Class III User** means an industrial user with an annual average industrial wastewater discharge between one and nine thousand nine hundred ninety-nine gallons per day

where the industrial discharge has a reasonable potential for adversely affecting the POTW's operation or violating any pretreatment standard, prohibition, or requirement of this Ordinance.

13. **Class IV User** means any industrial or Categorical Industrial User that has a manufacturing or production process or procedure that generates wastewater and/or waste and that wastewater and/or waste is not discharged to the POTW due to the user's reclamation, recycling, segregation, and/or off-site site disposal of the wastewater and/or waste; or a user subject to categorical pretreatment standards under 40 CFR Part 403.6 and 40 CFR Chapter I, subchapter N and that never discharges more than 100 gallons per day of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) and has:

- 1) consistently complied with all applicable categorical Pretreatment Standards and Requirements;
- 2) has submitted a certification statement required by 40 CFR Part 403.12(q) together with any additional information necessary to support the certification statement; and
- 3) has never discharged any untreated concentrated wastewater.

14. **Class V User** means an industrial user that has a temporary need to discharge wastewater to the POTW. The temporary period shall be from one to one hundred eighty days.

15. **Class VI User** means an industrial user that hauls wastewater by truck or other means from septic tanks, cesspools, seepage pits, and private disposal systems.

16. **Collection Agency** means Edgemont Community Services District which has an interjurisdictional agreement with the City addressing that agency's sewage collection and discharge to the City for transmission, treatment, and disposal.

17. **Collection System** means all pipes, sewers and conveyance systems conveying wastewater, owned and maintained by the District, but not including sewer lateral line connections.

18. **Combined Wastestream Formula** means the formula, as outlined in the general pretreatment regulations of the Clean Water Act, 40 CFR 403.6(e), for determining wastewater discharge limitations for Categorical Industrial Users whose effluent is a mixture of regulated, unregulated, and dilution wastewater as defined in the formula.

19. **Community Services District** means the Edgemont Community Services District, which has contracts with the City for sewer service.

20. **Compliance Schedule** means a time schedule enforceable under this Ordinance containing increments of progress, i.e. milestones, in the form of dates. These milestones shall be for the commencement and/or completion of major events leading to the construction and operation of additional pretreatment facilities or the implementation of policies, procedures or operational management techniques required for the user to comply with all applicable federal, state or local environmental regulations which may directly or indirectly affect the quality of the user's wastewater effluent.

21. **Composite Sample** means a series of grab samples of equal volume taken at a predetermined time or flow rate for a predetermined period of time, which are combined into one sample.

22. **Confined Space**, pursuant to California Code of Regulations, Title 8, Section 5157, subsection b, means a space that:

A. Is large enough and so configured that a person can bodily enter and perform assigned work;

B. Has limited or restricted means for entry or exit (for example, tanks vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and

C. Is not designed for continuous occupancy by a person.

23. **Conventional Pollutants** means BOD, COD, total suspended solids, pH, fecal coliform, oil and grease, total nitrogen and such additional pollutants as are now or may be in the future specified and controlled in the City's NPDES permit for its POTW where said POTW has been designed and used to reduce or remove such pollutants.

24. **Cooling Water** means all water used solely for the purpose of cooling a manufacturing process, equipment, or product.

25. **De Minimus User** means any user whose industrial wastewater discharge is less than one hundred gallons per day and is not regulated by a federal categorical pretreatment standard or Industrial User Group Permit.

26. **Dilution** means the increase in use of process water or any other means to dilute a wastestream as a partial or complete substitute for adequate treatment to achieve discharge requirements.

27. **District Engineer** means the Registered Civil Engineer designated by the Board of Directors of ECSD. As the District Engineer or an authorized representative, deputy, or agent appointed by the District Engineer.

28. **Domestic Septic Wastes** means all domestic wastes contained in septic tanks, cesspools, seepage pits, holding tanks and private disposal systems.

29. **Domestic Wastewater** means wastewater from private residences and wastewater from other premises resulting from the use of water for personal washing, sanitary purposes or the discharge of human excrement and related matter. Domestic wastewater when analyzed by standard methods shall contain no more than two hundred fifty-nine mg/L of total suspended solids, two hundred twenty-eight mg/L of BOD and four hundred fifty-five mg/L of COD.

30. **Effluent** means treated wastewater flowing from treatment facilities, a POTW, or a user's pretreatment equipment.

31. **Emergency** means facts or circumstances that the District reasonably determines create an imminent threat of harm to public health or safety, the environment or the City's POTW.

32. **EPA** means the United States Environmental Protection Agency.

33. **Federal Categorical Pretreatment Standard** means the National Pretreatment Standards, established by the EPA, specifying quantities or concentrations of pollutants or pollutant properties which may be discharged or introduced into the POTW by existing or new industrial users in specific industrial categories established as separate regulations under the appropriate subpart of 40 CFR Chapter I, Subchapter N.

34. **Good Faith** means the user's honest intention to remedy noncompliance together with actions that support the intention without the use of enforcement actions by the District. Examples of these intentions are improved housekeeping practices or the installation of pretreatment equipment to reduce or eliminate pollutants.

35. **Grab Sample** means an individual sample collected over a period of time not exceeding fifteen minutes.

36. **Gravity Separation Interceptor** means an approved wastewater detention

device, equipment or appurtenance and is designed to remove floatable and settleable material by means of gravity and the solubility of the waste in water from industrial wastewater prior to discharge to the POTW and may include but not be limited to grease interceptors, hydromechanical grease interceptors, grease traps, and sand/oil interceptors.

37. **Hazardous Substance** means any substance capable of creating imminent endangerment to health or the environment.

38. **Heating Water** means all water used solely for the heating of a manufacturing process, equipment, or product.

39. **Industrial User** means all persons, entities, public or private, industrial, commercial, governmental, or institutional which discharge or cause to be discharged, industrial wastewater and waterborne waste into the POTW, or stores waste or wastewater on site for treatment and/or subsequent disposal, and includes Mobile Pressure Washers and Liquid Waste Haulers.

40. **Industrial User Permit** means a permit, issued by the District Engineer, regulating the terms and conditions under which an Industrial User may discharge any non-domestic waste to the POTW.

41. **Industrial Wastewater** means all water containing wastes of the community, excluding domestic wastewater, and includes all wastewater from any producing, manufacturing, processing, institutional, governmental, commercial, restaurant, service, agricultural or other operation. Industrial wastewater may also include cooling tower and boiler blowdown water, potable water treatment wastewater and chemical toilet wastewater if the wastewater contains levels of pollutants above the wastewater discharge limitations established by this Ordinance. Any wastewater that is hauled by truck, rail or other means, and discharged into the sewerage system, shall be considered industrial wastewater, regardless of the original source.

42. **Infectious Waste** means all disease-containing wastes that normally cause, or significantly contribute to the cause of increased morbidity or mortality of human beings.

43. **Interference** means any discharge from a user which, alone or in conjunction with a discharge or discharges from other sources both: inhibits or disrupts the POTW,

treatment processes or operations, or sludge processes, use or disposal; and which is a cause of a violation of any requirement of the City's NPDES permit including an increase in the magnitude or duration of violation) or of the prevention of biosolids use or disposal in compliance with Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly known as the Resource Conservation and Recovery Act (RCRA)), and state regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA, the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection Research and Sanctuaries Act, and any amendments to these Acts or regulations.

44. **Ion Exchange Water Softener** means a water conditioning apparatus that is designed to remove hardness or other impurities from a user's potable water supply through chemical, not physical means.

45. **Liquid Waste Hauler** means any person engaged in the truck hauling of liquid wastes from septic tanks, seepage pits, cesspools, or any other private disposal system.

46. **Local Limits** means specific prohibitions, Best Management Practices or pollutant limitations or pollutant parameters which are developed by the District in accordance with 40 CFR 403.5(c).

47. **Lower Explosive Limit (LEL)** means the minimum concentration of combustible gas or vapor in the air that will ignite if an ignition source is present.

48. **Mass Emission Rate** means the rate of pollutant discharge in pounds per day to the POTW.

49. **May** means permissive.

50. **mg/L** means milligrams per liter.

51. **Milestone** means a time-based increment of progress in a compliance schedule, not to exceed nine months. Milestones may be set for construction, operations, repairs, the creation of policies and procedures, or other aspects of pretreatment and discharge.

52. **Mobile Pressure Washer** means non-residential user of mobile pressure washing equipment to wash or rinse motor vehicles, machinery, buildings, windows, paved areas, sidewalks, parking lots, and outdoor eating areas, etc.

53. **Monitoring/Production Information Order (MPIO)** means an Administrative Order requiring an industrial user to determine the concentration or mass emission of pollutants in its industrial wastewater discharge, for each day in a fourteen consecutive calendar day period that industrial wastewater is discharged to the POTW, and to provide that data and wastewater discharge flow data for that period.

54. **Monthly Average** means the average of daily measurements over a calendar month as calculated by adding all the daily measurements taken during the calendar month and dividing that sum by the sum of the number of daily measurements taken in the calendar month.

55. **New Source** means any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307 (c) of the Federal Clean Water Act, which will be applicable to such source if such standards are thereafter promulgated in accordance with that Section, provided that:

A. The building, structure, facility or installation is constructed at a site at which no other source is located; or

B. The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

C. The production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant and the extent to which the new facility is engaged in the same general type of activity as the existing source may be considered.

56. **NPDES Permit** means the then effective National Pollutant Discharge Elimination System Permit issued by the California Regional Water Quality Control Board establishing the Waste Discharge and Producer/User Reclamation Requirements for the Riverside Regional Water Quality Control Plant.

57. **NSIU** means a Non-Significant Industrial User that does not require a Class I-VI Industrial User Permit or is not considered a restaurant.

58. **Non-Significant Categorical Industrial User** means a user subject to

categorical pretreatment standards under 40 CFR Part 403.6 and 40 CFR Chapter I, subchapter N and that never discharges more than 100 gallons per day of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) and has: 1) consistently complied with all applicable categorical Pretreatment Standards and Requirements; 2) has submitted a certification statement required by 40 CFR Part 403.12(q) together with any additional information necessary to support the certification statement; and 3) has never discharged any untreated concentrated wastewater.

59. **Oil and Grease** means any of the following in part or in combination:

A. Petroleum derived products, e.g., oils, fuels, lubricants, solvents, cutting oils;

B. Vegetable derived products, e.g., oils, shortenings, water soluble cutting oils; or

C. Animal derived products, e.g., fats, greases, oils, lard

60. **Pass Through** means any discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, causes a violation of any requirement of the NPDES Permit, including an increase in the magnitude or duration of a violation.

61. **Permit-Required Confined Space** pursuant to California Code of Regulations, Title 8, Section 5157, subsection b means a confined space that has one or more of the following characteristics:

A. Contains or has the potential to contain a hazardous atmosphere;

B. Contains a material that has the potential for engulfing an entrant;

C. Has an internal configuration such that an entrant could be trapped or and tapers to a smaller cross-section; or

D. Contains any other recognized serious safety or health hazard.

62 **Person** means any individual, firm, company, association, society, general or limited partnership, limited liability company, trust, corporation, governmental agency or group, and includes the plural as well as the singular.

63. **Pollutant** means conventional pollutants, domestic wastewater, hazardous substances, infectious waste, slug discharges, dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive

materials, medical waste, heat, rock, sand, cellar dirt and industrial, municipal, and agricultural waste.

64. **Pollutant Exceedance Fee** means a fee in addition to the sewer service charge, which is charged on those users whose wastewater discharge pollutants exceed permitted pollutant levels for COD or total suspended solids.

65. **Publicly Owned Treatment Works or POTW** means a wastewater treatment plant, e.g., the Riverside Regional Water Quality Control Plant (RRWQCP). This definition includes the collection system, within the City of Riverside and the District, which is the sewers, pipes and other conveyances of wastewater to a treatment plant, except for private sewer lateral connections. It also includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes.

66. **Pretreatment** means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of the pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into the POTW. The reduction or alteration may be obtained by physical, chemical or biological processes, process changes or by any other means, except dilution.

67. **Pretreatment Waste** means waste removed by pretreatment.

68. **Qualified Professional** means a person qualified by education, training, or experience to evaluate and assess pollutant discharges and violations of this Ordinance.

69. **RCRA** means the Resource Conservation and Recovery Act and its Regulations as contained in 40 CFR Part 260-266 and 270.

70. **Restaurant** means all retail establishments selling prepared foods and drinks for consumption on or off the premises; including lunch counters and refreshment stands. Retail establishments, lunch counters, and drinking places selling prepared food and drink as a subordinate service incidental to their primary operations, and institutional facilities (e.g. schools, hospitals, jails, prisons, and juvenile halls), which serve food on the premises shall also be considered restaurants.

71. **Shall** mean mandatory.

72. **Self-monitoring** means wastewater samples taken by a user or the user's

contracted laboratory, consultant, engineer, or similar entity.

73. **Sewer Lateral Line** means the wastewater collection pipe extending from the premises where the wastewater is generated to the premises' property line.

74. **Significant Industrial User (SIU)** means all Categorical Industrial Users and any user which discharges one or more of the following:

A. Industrial wastewater at an average rate of at least twenty-five thousand gallons per day (gpd) to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater);

B. A process wastestream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the City's POTW; or

C. Wastewater that the District Engineer requires to be controlled by a Class I Industrial User Permit

75. **Significant Noncompliance** means any violation meeting one or more of the following criteria:

A. Chronic violations of wastewater discharge limits, defined as those in which sixty-six percent or more of all of the measurements for the same pollutant parameter during a six consecutive month period exceed by any magnitude a numeric pretreatment standard or requirement, including instantaneous limits;

B. Technical Review Criteria (TRC) violations, which are defined as those in which thirty-three percent or more of all of the measurements taken during a consecutive six month period equal or exceed the product of the numeric pretreatment standard, local limit, or requirement, including instantaneous limits, multiplied by the applicable TRC (TRC=1.4 for BOD, COD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);

C. Any other violation of a numeric pretreatment standard or requirement (including narrative standards and Best Management Practices) determined by the District to cause, in whole or in part: POTW damage, interference, or pass through; danger to POTW personnel; or the public health, safety and welfare;

D. Any discharge of a pollutant posing imminent danger to human health or welfare, or to the environment, or resulting in the District or its representatives exercise of its

emergency authority to stop or prevent such a discharge;

E. Failure to meet, within ninety days after the scheduled date, a compliance schedule Milestone;

F. Failure to provide, within forty-five days of the scheduled date, any required reports such as baseline monitoring reports, compliance reports, and self-monitoring reports;

G. Failure to pay, within thirty days, all application, permit, or enforcement fees;

H. Failure to accurately report non-compliance; or

I. Any other violation(s), which may include failure to implement required Best Management Practices, which the District believes will adversely affect the District's pretreatment program.

76. **Single Pass Cooling Water** means water that is used solely for the purpose of cooling and is used only once before being discharged.

77. **Single Pass Heating Water** means water that is used solely for the purpose of heating and is used only once before being discharged.

78. **Slug Discharge** means any discharge of wastewater of a non-routine, episodic nature including but not limited to an accidental spill, or a non-customary batch discharge which could damage, interfere with, or pass through the POTW or otherwise violate this Ordinance, local limits, permit conditions, or other regulations.

79. **Storm Drain** means a system of open channels, lined and unlined channels, surface channels, impound basins, ground water recharge basins, storm water holding ponds, underground pipes, curb and gutter, cross gutters, storm water pump and lift stations, parking lots, paved areas, streets, and natural water courses used to collect and direct storm water to a receiving body of water or aquifer recharge basins.

80. **Storm Water** means water flowing or discharged as a result of rain, snow, or other precipitation.

81. **Temporary User** means any user granted temporary permission under a Class V Industrial User Permit to discharge unpolluted water or wastewater to the sewer system.

82. **Total Suspended Solids** means the total amount of residue retained by laboratory filtration and dried at 103-105 degrees C.

83. **Total Toxic Organics (TTO)** means the sum of all quantifiable values greater than 0.01 mg/L of the regulated toxic organic compounds which are found in the user's industrial wastewater discharge.

84. **Unpolluted Water** means cooling and heating water, single pass cooling and heating water, air conditioning condensate, ice melt, condensate, landscape irrigation, crop irrigation, rain water, and other water not containing any pollutant, or water whose discharge would not otherwise violate any receiving water quality standards.

85. **Upset** means an exceptional incident which causes temporary and unintentional non-compliance with the discharge limitations or prohibitions applicable to a user or the POTW.

86. **User** means any person, public or private, residential, industrial, commercial, governmental, or institutional which discharges or causes to be discharged wastewater or waterborne waste to the POTW or storm drain.

87. **Waste** means any discarded solid, semi-solid, liquid, or gaseous material.

II. General Provisions

Section 200 Administration.

A. **Rules.** The District Engineer may adopt rules consistent with this Ordinance for the administration of the wastewater system. Those rules may include, but shall not be limited to, discharge limitations, pretreatment requirements, standards for wastewater, sewer connections, and implementation of Federal Water Pollution Control and Clean Water Act standards.

B. **General Powers of the District Engineer.** Except as otherwise provided herein, the District Engineer shall execute the provisions of this Ordinance. The District Engineer may delegate powers or duties to persons acting in the beneficial interest or employ of the City, but shall remain responsible. In addition to the authority to prevent or eliminate discharges through enforcement of discharge limitations and prohibitions, the District Engineer shall have the following authorities:

1. Protect the health or welfare of the community. The District Engineer, after informal notice to the affected user, may immediately and effectively stop or prevent any

discharge of pollutants to the POTW, by any means available, including physical disconnection from the wastewater collection system, whenever the discharge reasonably appears to present an imminent danger to the health or welfare of the community;

2. Protect the environment or the POTW. The District Engineer, after written order to the user, may stop or prevent any discharge of pollutants to the POTW, by any means available, including physical disconnection from the wastewater system, whenever such discharge presents or may present an imminent and substantial danger to the environment or threatens to damage or interfere with the operation of the POTW; and

3. The discharges referred to in subdivisions 1 and 2 above may be stopped or prevented without regard to the compliance of the user with other provisions of this Ordinance.

C. Specific Powers of the District Engineer. The District Engineer may take any of the following actions to prevent the actual or threatened discharge of polluted wastewater to the POTW:

1. Stop or prevent the discharge of such wastewater;

2. Require the user to demonstrate that process modifications will reduce or eliminate the pollutant or substance so that the discharge will not violate this Ordinance;

3. Require treatment to reduce or eliminate the pollutants so that the discharge will not violate this Ordinance;

4. Require the user to pay Industrial User Permit fees, inspection fees and any additional cost or expense incurred by the District by excess pollutant loads discharged to the POTW, or imposed fines, penalties or legal expenses, and attorneys' fees;

5. Obtain timely and factual reports from the person responsible for such discharge; and

6. Take any other action to achieve the purposes of this Ordinance

Section 205 Notice.

Notices and orders under this Ordinance shall be deemed served if given to user as follows:

A. Correctly addressed, postage pre-paid and deposited in the United States mail, or

personally delivered; or

B. To user or user's authorized representative at user's address as listed in user's permit, or application for a permit, or user's facility that is subject of the notice or order; and

C. Shall be deemed received on the date personally delivered or on the third day after deposit in the United States mail as provided in this Section

Section 210 Confidentiality.

Information submitted by the user to the District pursuant to this Ordinance may be claimed as confidential by the user. Any such claim must be asserted at the time of submission by placing the words "Confidential Business Information" on each page containing such information. If no claim is made at the time of submission, the District may make the information available to the public without further notice. Sample data obtained by either the user or the District shall not be considered confidential. Production-related information used to calculate mass-based discharge limitations or required to develop an Industrial User Permit shall not be considered confidential information. Confidential information may be made available, upon request, to governmental agencies for enforcement or judicial purposes related to this Ordinance, the NPDES Permit or the pretreatment program, and as required by state or federal law. In the event of a conflict between this section and the Public Records Act or Freedom of Information Act, those acts shall prevail.

Section 215 Inspection.

A. The District Engineer may inspect any user facilities to ascertain whether the requirements of this Ordinance are being met. Persons on the premises shall allow the District Engineer ready access at all reasonable times to all parts of the premises for the purpose of inspection, photography or electronic image recording, sampling, and records examination of any facility, equipment (including monitoring and pollution control equipment), practices or operations regulated or required by an Industrial User Permit or other control document, Riverside Municipal Code Chapter 14.12, or the City's NPDES Permits.

B. The user shall ensure that there is always a person on site, during normal business hours, that has knowledge of the user's processes and activities to accompany the District Engineer during the inspection.

C. The user shall provide immediate access when the District Engineer believes an emergency exists, regardless of the hour of the day.

D All pretreatment equipment shall be immediately accessible at all times for inspection. At no time shall any material, debris, obstacles or obstructions be placed in such a manner that will prevent immediate access to the pretreatment equipment.

E. No person shall interfere with, delay, resist or refuse entrance to the District Engineer when attempting to inspect any facility involved with a discharge into the District's collection system.

F. The user shall make all necessary arrangements with the user's security personnel so that, upon presentation of suitable identification, personnel from the District or the City will be permitted to enter, without delay, for the purpose of performing their specific responsibilities.

G. The user shall make all records required to be kept under the provisions of this Ordinance available for copying by the District Engineer.

Section 220 Inspection Warrants.

If the District Engineer is refused inspection access to a building, structure, or property, or any part thereof, the District Engineer may obtain an inspection warrant pursuant to Code of Civil Procedure section 1822.50 et seq. No warrant is required in the event of an emergency threatening the public health or safety or the District's POTW.

Section 225 Monitoring.

A. At the direction of the District Engineer, any user discharging wastewater into the POTW may be required to install sampling station(s) or measuring device(s) to measure the quality and quantity of wastewater discharged or to obtain samples. Measuring devices may include, but are not limited to: flow meters and recorders, pH meters and recorders, electrical

conductivity meters and recorders, process water meters, and automatic wastewater samplers.

B. The sampling station and/or measuring device shall be provided by the user in compliance with this Ordinance and all applicable building, plumbing, and construction codes. the District may require that the measuring devices have a security closure that can be locked with a District lock. Construction shall be completed within a reasonable time as required in written notification from the District Engineer.

C. The District Engineer may temporarily install upon the user's property devices to conduct wastewater sampling, compliance monitoring or metering operations.

D. No user shall interfere with, delay, resist, or refuse entrance to authorized District personnel or contractors installing wastewater monitoring equipment on the user's property. Any permanent or temporary obstruction prohibiting direct access to the sampling station or measuring device shall be immediately removed by the user or property owner at the written or verbal request of the District Engineer and shall not be replaced.

E. The sampling station or measuring devices shall be maintained for continuous sampling or metering. The measuring devices shall be calibrated as often as necessary to ensure accurate measurements according to manufacturer's specifications. All maintenance and calibration work shall be performed at the user's expense.

F. All users that self-monitor shall have all samples collected and analyzed according to 40 CFR 403.12(b)(5).

G. All user sampling and analysis must comply with 40 CFR part 403.12(b)(5). The laboratory must be certified by the State of California, Department of Health Services as being competent to perform the pollutant analyses requested, shall perform all laboratory analyses and must be acceptable to the District Engineer. All samples must have the following information:

1. The date, exact place, method, and time of sampling and the names of the person or persons taking the samples;
2. The dates the analyses were performed;
3. Who performed the analyses;
4. The analytical techniques/methods used;

5. The results of such analyses;
6. A copy of the laboratory sample analysis sheet; and
7. The user's completed monitoring report form.

H. All users required to install and maintain measuring devices shall immediately report the failure of such devices. The immediate notification shall be by telephone call, telefax transmission, electronic report, personal visit, or a hand-delivered notification to the District's Office. Within five calendar days after discovery of the failure, the user shall submit a written report to the District Engineer documenting the dates, times, and cause of the failure, and the corrective actions taken.

I. Any wastewater samples taken from a user's approved or designated sampling location shall be considered representative of the wastewater discharged to the POTW. For users that have interceptors, but no approved or designated sampling location, the last chamber of the interceptor shall be the designated sampling location.

J. All users required to self-monitor shall report to the District Engineer pollutant violations from any required wastewater sample within twenty-four hours of becoming aware of the violation. The reporting may be by telephone call, telefax transmission, electronic report or a personal visit to the District's Office. The violation report shall contain the date and time of the sample, the daily discharge flow for the sample, possible explanations for the violation, and the date scheduled for the required resample. Failure to report pollutant violations as stated is a violation of this Ordinance and may subject the user to enforcement actions.

K. All users required to take daily twenty-four hour readings of their wastewater effluent flow shall notify the District Engineer of exceedance of its permitted flow within twenty-four hours of discovering the exceedance by telephone call, telefax transmission, electronic report, personal visit, or a hand delivered notification, to the District's Office or file a monthly report indicating the days of the month when the permitted flow was exceeded and the reason for the exceedance. The monthly report shall be submitted to the District's Office by the fifth business day following the end of the preceding month. The flow exceedance notice shall have the total flow, date of the violation, the reason for the flow exceedance, and the name of the person reporting the flow exceedance. Failure to report such flow exceedance is

unlawful and may subject the user to enforcement actions.

L. All users with a discovered pollutant violation shall resample their wastewater discharge for that pollutant. This mandatory resampling is independent of any other wastewater sampling requirement. User shall submit the laboratory results from the resamples, all required forms and a written explanation detailing the cause(s) and correction action(s) of the violation to the District Engineer no later than forty-five calendar days after the user discovers or becomes aware of the violation. Failure to submit the laboratory results and all required documents within the forty-five-day requirement shall result in Significant Noncompliance for the user and the issuance of a Notice of Violation to the user.

M. All users whose wastewater discharge is monitored by the District shall be responsible for all resampling requirements contained in subsection L of this Section when a pollutant violation is detected. The District shall notify the user of the resampling requirements by a telephone call, telefax transmission, or personal visit within seventy-two hours of confirming a pollutant violation.

N. All users which desire to conduct their own wastewater sampling shall submit a written plan describing the equipment used, equipment cleaning methodology, employee training, sample preservation methods, and chain of custody procedures. The user's wastewater sampling plan must be approved by the District Engineer prior to the implementation of the plan. Any sample taken by a user without an approved plan or from an unapproved laboratory shall not be valid and may subject the user to enforcement actions.

O. All users are required to submit all monitoring results including non-permit required samples according to 40 CFR 403.12(g) sampled at the appropriate sample point within fifteen calendar days of receiving the sample or monitoring results.

P. All permitted users that take more than one grab sample in a single calendar day to demonstrate compliance with oil and grease shall also comply with the following conditions:

1. A minimum of four grab samples separated by a minimum of two hours each shall be taken in a single calendar day;

2. Each individual oil and grease grab sample shall be analyzed separately and the

analytical results from each sample shall be averaged;

3. No single oil and grease grab sample shall exceed the user's permitted limit by more than forty percent; and

4. The average result from all individual oil and grease grab samples taken in a single calendar day shall not exceed the user's permitted limit.

Section 230 Record Keeping.

All users shall keep records of waste hauling, reclamations, wastewater pretreatment, monitoring device recording charts and calibration reports, effluent flow, sample analysis data, and, at the discretion of the District Engineer, BMP effectiveness, on the site of the wastewater generation. All these records are subject to inspection and copy by the District Engineer. All records must be kept on the site of the wastewater generation for a minimum period of three years. The record retention period may be extended beyond three years in the event criminal or civil action is taken or an extensive user history is required. Records required by company or corporate policy to be kept off-site shall be telefaxed or submitted electronically to the District's Office within seventy-two hours of the records request. Failure to submit the records as required is a violation of this Ordinance and may result in enforcement actions.

Section 235 Flow Measurement.

Any industrial user who discharges twenty-five thousand gallons per day or more of industrial wastewater, or as required by the District Engineer, shall install a continuous monitoring flow meter capable of measuring the industrial user's entire industrial wastewater discharged to the POTW. The user shall record and log the flow on a daily basis. The flow meter shall conform to standards issued by the District Engineer. The user shall report the flow meter type and size to the District Engineer before installation. The flow meter shall be equipped with a non-resetting flow totalizer and a paper chart recorder that records the time, day, date and volume of discharge. All flow meters shall be calibrated as often as necessary to ensure accuracy of the actual flow discharged, within plus or minus five percent. All flow meter installations shall have the flow meter size, type, totalizer units, and flow multipliers

posted in a conspicuous place near the flow meter recorder

Section 240 Infectious Waste Disposal.

A. No user that generates liquid infectious waste other than domestic wastewater shall discharge to the POTW without first obtaining written permission from the District Engineer.

Such a user shall submit a written request to the District Engineer that shall include:

1. The source and volume of the infectious waste;
2. The procedures and equipment used for waste disinfection; and
3. Employee training procedures for the legal disposal of infectious waste.

B. If the District Engineer believes that the waste would not be completely disinfected, the District Engineer shall issue a written denial to the user and state the reasons for the denial. This denial shall be issued within thirty days from receipt of the written request.

C. If the District Engineer believes that complete disinfection of the waste can be achieved prior to discharge of the waste to the POTW, then a conditional approval may be granted for the disposal of the waste. A letter of approval shall be sent to the user within thirty days of receipt of the written request.

D. If the user is granted permission for disposal, the user:

1. Shall completely disinfect the liquid waste prior to discharge to the POTW as outlined in the approval letter;
2. Shall not dispose of solid infectious waste to the POTW, including hypodermic needles, syringes, instruments, utensils or other paper and plastic items of a disposable nature, or any portions of the human or animal anatomy whether whole, part, or ground; and
3. Shall be subject to periodic inspections to verify that all disinfection methods, procedures, and practices are being performed.

Section 245 Water Softeners.

A. No user shall install, replace, enlarge, or use any regenerative-type water softener unless the apparatus complies with the following conditions:

1. The apparatus is a self-generating water softener;
2. The brine solutions generated during the backwash cycles of the water softener shall be segregated from the fresh water rinses for disposal to a legal brine disposal site;

3. The backwash equipment shall be equipped with an electrical conductivity controlled discharge valve that controls the wastewater discharge to the POTW. This valve shall be calibrated to control and prevent any discharge of wastewater that exceeds the maximum total dissolved solids concentration established by resolution; and

4. The user shall maintain the electrical conductivity controlled discharge valve in proper operating conditions at all times. In the event of a valve failure, the user shall immediately cease the regeneration discharge and immediately notify the District Engineer of the failure by telephone call, telefax transmission, electronic report, personal visit, or a hand delivered notification, to the District's Office. Within five calendar days after discovery of the failure, the user shall submit a written report to the District Engineer documenting the dates, times, and cause of the failure, and the corrective actions taken.

B. Pursuant to California Health and Safety Code Sections 116775-116795, no residential water softening or conditioning appliance may be installed except in the following circumstances:

1. The regeneration is performed at a nonresidential facility separate from the location of the residence where such appliance is used; or

2. The regeneration discharges to the waste disposal system of the residence where such appliance is used and the following conditions are satisfied:

- a. The appliance activates regeneration by demand control;

- b. An appliance installed on or after January 1, 2000, shall be certified by a third party rating organization using industry standards to have a salt efficiency rating of no less than three thousand three hundred fifty grains of hardness removed per pound of salt used in generation. An appliance installed on or after January 1, 2002, shall be certified by a third party rating organization using industry standards to have a salt efficiency rating of no less than four thousand grains of hardness removed per pound of salt used in generation;

- c. The installation of the appliance is accompanied by the simultaneous installation of

the following softened or conditioned water conservation devices on all fixtures using softened or conditioned water, unless such devices are already in place or are prohibited by local and state plumbing and building standards or unless such devices will adversely restrict the normal operation of such fixtures:

- i. Faucet flow restrictors.
- ii. Shower head restrictors.
- iii. Toilet reservoir dams.
- iv. A piping system installed so that untreated (unsoftened or unconditioned) supply water is carried to hose bibs and sill cocks which serve water to the outside of the house, except that bypass valves may be installed on homes with slab foundations constructed prior to the date of installation; or condominiums constructed prior to the date of installation; or otherwise where a piping system is physically inhibited.

C. The certification required under Subsection B of this Section shall be provided by the new user of the appliance and shall be completed by a contractor having a valid Class C-55 water conditioning contractor's license or Class C-36 plumbing contractor's license and filed with the City of Moreno's Building and Safety Division. The certification form shall contain all of the following information:

1. Name and address of homeowner;
2. Manufacturer of the water softening or conditioning appliance, model number of the appliance, pounds of salt used per regeneration, and salt efficiency rating at the time of certification;
3. Manufacturer of the water-saving devices installed, model number, and number installed; and
4. Name, address, and the specialty contractor's license number of the C-55 and C-36 licensee making the certification.

D. Any person installing or operating a water conditioning apparatus of any kind shall make such apparatus accessible to the District Engineer for inspection at reasonable times.

E. Notwithstanding Subdivision 2 of Subsection B. of this Section, the District may limit the availability, or prohibit the installation, of residential water softening or conditioning

appliances that discharge to the POTW if District Engineer makes all of the following findings:

1. The District is not in compliance with the terms of its agreements with the City of Riverside NPDES permit;
2. Limiting the availability or installation of the appliances is the only available means of achieving compliance with waste discharge requirements issued by the Regional Board; and
3. All nonresidential sources are limited to the volumes and concentrations of saline discharges to the POTW to the extent technologically and economically feasible.

F. Notwithstanding Subdivision 2 of Subsection B of this Section, the District may limit the availability, or prohibit the installation, of residential water softening or conditioning appliances that discharge to the POTW if District Engineer makes all of the following findings:

1. The POTW is not in compliance with water reclamation requirements, or a master reclamation permit, issued by the California Regional Water Quality Control Board pursuant to Article 4 (commencing with § 13520) of Chapter 7 of Division 7 of the Water Code;
2. Limiting the availability or prohibiting the installation of the appliances is the only available means of achieving compliance with the water reclamation requirements or the master reclamation permit issued by the Regional Board; and
3. All nonresidential sources are limited to the volumes and concentrations of saline discharges to the POTW to the extent technologically and economically feasible

Section 250 Drain Screen Requirements.

Any user that has floor drains, floor sinks, drains, mop sinks, can washes or any other drain designed to convey wastewater to the sewer system, shall have a screen in place in said drains capable of excluding all particles greater than three-eighths of an inch in any dimension.

Section 255 Gravity Separation Interceptor.

No user that operates or maintains a facility for the servicing or repair of roadway machinery, industrial transportation equipment, motor vehicles, public or private transportation vehicles, and any other facility as required by the District Engineer, shall discharge wastewater to the POTW without a gravity separation interceptor ("interceptor") that complies

with all of the requirements of Sections 255 through 270. Domestic wastewater shall not be allowed to pass through the interceptor. The District Engineer shall determine the interceptor's operational fluid capacity. The interceptor shall have a minimum operational fluid capacity of not less than one hundred gallons, and shall be designed to retain any material that will float or any material that will settle and shall meet all the requirements of Section 260 of this Ordinance.

Section 260 Interceptor Requirements.

A. The interceptor shall be watertight, structurally sound, durable, and shall have a minimum of two chambers, excluding sample box if so equipped, with a separate ring and cover for each chamber. The sample box, if the interceptor is so equipped, shall also have a separate ring and cover. All rings shall be affixed to the interceptor to insure a gas and watertight seal.

B. Each interceptor cover shall expose and provide access to each chamber's inlet tee, outlet tee, and/or mid-wall tee.

C. All interceptor chambers shall be immediately accessible at all times for inspection, sampling, cleaning, and maintenance. The user shall provide a separate ring and cover for each separate interceptor chamber, including sample box and any additional covers to insure adequate cleaning and inspection capabilities. All rings shall be affixed to the interceptor to insure a gas and watertight seal. At no time shall any material, debris, obstacles or other obstructions be placed in such a manner that will prevent immediate access to the interceptor.

D. Any interceptor legally and properly installed before the effective date of this Ordinance shall be acceptable as an alternative to the interceptor requirements of this Ordinance providing that the interceptor shall be effective in removing floatable and settleable material and shall be immediately accessible for inspection, sampling, cleaning, and maintenance.

E. All drains and openings connected to an approved gravity separation interceptor shall be equipped with screens or devices which will exclude from the wastewater discharge all material and particles with a cubic dimension greater than three-eighths of an inch in any dimension.

F. All gravity separation interceptors shall be equipped with an influent tee extending no more than six inches below the operating fluid level of the interceptor. The interceptor shall also have tees extending to within twelve inches of the bottom at the exit side of each chamber in the interceptor, including the final chamber. In a case where a manufacturer's engineered interceptor design is contrary to this requirement, the District Engineer shall review the design and either approve or deny an exemption to this requirement.

G. All interceptors shall be equipped with a sample box or sample wye as determined by the District Engineer.

H. No user shall install or use any elbows or tees in any interceptor sample box.

I. No user shall install any interceptor, sample box, or sample wye in a confined space or a permit-required confined space.

J. At all times, all drain lines leading to the interceptor shall be kept free of any debris or material that may cause a drain line blockage.

K. If the District Engineer finds, either by engineering knowledge or by observation, that an interceptor is incapable of adequately retaining floatable and settleable material in the wastewater flow, is structurally inadequate, or is undersized for the facility, the District Engineer may reject such interceptor and declare that the interceptor does not meet the requirements of this Section. The user shall thereupon be required to, modify or repair the interceptor, or install an adequate interceptor, acceptable to the District Engineer at the user's expense.

Section 265 Standard Interceptor Designs.

The District Engineer shall maintain a file, available to the public, of suitable interceptor designs. This file shall be for informational purposes only and is not an endorsement of any kind. Installation of an interceptor of a design shown in this file, or of any design meeting the size requirements set forth in this Ordinance, shall not subject the District to any liability for the adequacy of the interceptor under actual conditions of use. The user and property owner shall not be relieved of the responsibility for keeping floatable and settleable material out of the POTW.)

Section 270 Interceptor Maintenance.

A. Any person who owns or operates an interceptor shall properly maintain it at all times. The interceptor shall be cleaned as often as necessary to ensure that sediment and floating materials do not accumulate to impair the efficiency of the interceptor and odors do not cause a public nuisance. An interceptor is not considered to be properly maintained, if for any reason the interceptor is not in good working condition or if the operational fluid capacity has been reduced by more than twenty-five percent by the accumulation of floating material, sediment, oil or grease, or other liquids that have limited or no solubility in water.

B. The use of chemicals, enzymes, proteins or other materials to emulsify, suspend, or dissolve oil and grease is prohibited. If a user is found using any of these materials, the materials may be confiscated without restitution to the user and the user may be subject to enforcement actions.

C. No user shall use any microbiological product in a grease interceptor that was not specifically designed to use such microbiological agents to metabolize fats, oils, and greases. If a user is found using any of these materials, the materials may be confiscated without restitution to the user and the user may be subject to enforcement actions.

D. When an interceptor is cleaned, the entire contents of the interceptor from all chambers and sample box shall be removed. The removed sediment, solids, liquid and floating material shall not be reintroduced or decanted into the interceptor, sample box, sewer cleanout, other interceptor or other unlawful opening of a collection system or private sewer systems and shall be lawfully disposed of other than to the private sewer systems, POTW or storm drain, and shall not be reintroduced into the interceptor or discharged into another interceptor at another location not designed and permitted to accept such waste. The City of Riverside grease wastewater receiving station is an authorized disposal site at the City of Riverside treatment plant for disposal of grease interceptor wastewater from authorized companies.

E. If the interceptor is not maintained adequately, then the interceptor shall be resized and the user shall install one that is effective in accomplishing the intended purpose, or the

District may require a mandatory pumping schedule for the interceptor. Failure to pump the interceptor as required is a violation of this Ordinance and may subject the user to enforcement action.

F. The owner and lessee, sub-lessee, proprietor, operator and superintendent of any facility, required to install an interceptor or use an existing interceptor are individually and severally liable for any failure to properly maintain such interceptor.

Section 275 Restaurants.

A. No person who owns, operates, or maintains a restaurant (restaurant user) shall discharge wastewater from such restaurant to the POTW without first receiving a written determination from District Engineer, and complying with such determination, of the POTW interceptor requirements. Restaurant users shall complete and submit a Wastewater Discharge Survey Form and conditional waiver to the District Engineer for review of interceptor requirements. Within ten business days of receipt of the Wastewater Discharge Survey Form, District Engineer shall notify such restaurant user of District Engineer's determination whether an interceptor is required prior to discharge into the POTW. It is unlawful for any restaurant user notified by the District Engineer as needing an interceptor to discharge restaurant wastewater into the POTW without use of a grease interceptor.

B. The District Engineer shall calculate the size of the interceptor in accordance with the Uniform Plumbing Code, Appendix H until January 1, 2008, and Chapter 10, Table 10-3 thereafter, as adopted by the City of Moreno Valley, provided that any restaurant determined to require an interceptor of more than one hundred gallons and less than seven hundred fifty gallons shall install a minimum seven hundred fifty gallon interceptor. The District Engineer's determination shall consider the type of restaurant, the condition of the collection system serving the restaurant, and the possible adverse effects caused by the restaurant's wastewater discharge.

C. Any restaurant user required to install an interceptor shall direct all wastewater and waste from floor drains, floor sinks, sinks, waste container wash racks, dishwashers, mop sinks, utility sinks and garbage grinders through an approved interceptor complying with this

Ordinance. The user shall keep all domestic wastewater from restrooms, showers, drinking fountains, and condensate, soda machines, bar sinks, (i.e., ice melt, air conditioning condensate) separate from the restaurant wastewater until the restaurant wastewater has passed through all interceptors, pretreatment equipment, devices, or monitoring stations.

D. All restaurant users shall separate, to the maximum extent practicable, all fats, oils, and greases from the restaurant wastewater for off-site disposal. Each restaurant user shall store these separated wastes in accordance with all applicable laws, rules, policies and regulations, including the Riverside County Department of Environmental Health and this Ordinance.

E. All floor sinks, floor drains, and drains shall be equipped with screens or devices that shall exclude from the wastewater discharged all particles larger than three eighths of an inch in any dimension.

F. Any restaurant user required to install an interceptor shall maintain the interceptor in accordance with Section 270.

Section 280 Prohibited Restaurant Surface Discharges.

A. No restaurant user shall discharge any wastewater to a storm drain, service dock areas, parking lot, or ground. All wastewater generated by restaurants, including trash enclosure wash/rinse water and drive through wash/rinse water, shall be disposed of to sewer through an approved gravity separation interceptor, or a sample station connected to sewer, or hauled off-site and disposed of at a legal disposal site.

B. If a restaurant has a blocked sewer lateral or a failed sewage pumping device which causes the discharge of the wastewater to the storm drain, service dock areas, parking lot, drive through areas, or ground, the restaurant user shall immediately cease all activities causing that discharge and immediately contact a plumber to have the discharges collected and if necessary have laterals cleared, televised and repaired. Failure to comply with this requirement shall be considered a violation of this Ordinance and shall subject the restaurant user to enforcement actions. If the District determines that public safety requires immediate action and

the restaurant owner is unable to or unwilling to arrange for a pumping company and plumber, the District may in its discretion contact a pumping company and plumber to mitigate the violation and charge the restaurant user for all associated costs.

Section 285 Conditional Waivers.

Notwithstanding Section 275 Subsection B, the District Engineer may conditionally waive the interceptor requirements for any restaurant user determined in the District Engineer's discretion not to pose adverse effects on the POTW. The District Engineer may revoke such conditional waiver and require the installation of an appropriately sized grease interceptor for the following reasons:

- A. Changes in menu;
- B. Falsification of information submitted in the District's wastewater discharge survey form;
- C. Changes in operating hours;
- D. Changes in maximum seating capacity;
- E. Changes in maximum meals served per peak hour;
- F. Changes in equipment used;
- G. Changes in the nature of the wastewater discharged as determined by random and scheduled wastewater sampling and analyses; or
- H. Any overflows caused by the restaurant user's wastewater discharge.

Section 290 Wastewater Discharge Survey.

The District Engineer may require a non-residential user that has a sewer connection to the POTW to complete a Wastewater Discharge Survey. The purpose of the survey is to gather information to determine if an Industrial User Permit or other control document is necessary and to provide current information about the user. Failure to complete and return a required survey may subject the user to enforcement actions.

Section 295 Liquid Waste Haulers.

It is unlawful for any Liquid Waste Hauler to discharge waste into the District's sewerage system.

Section 300

Section 305 Use of or Damage to the District's Equipment or Facilities.

A. No person shall use, enter, break, damage, destroy, uncover, deface or tamper with any temporary or permanent structure, equipment, or appurtenance which is part of the POTW without prior written approval by the District Engineer.

B. Any person who discharges or causes the discharge of any wastewater or pollutant which detrimentally effects the POTW, sludge, or causes any other damage, including subjecting the District to any fines or penalties, shall be liable to the District for all damages and costs incurred by the District, including administrative expenses. The District shall calculate its administrative expenses as ninety percent of the cost of repairs and personnel time expended by the District to remedy such damages and costs. All charges shall be payable to the District within thirty days of invoicing by the District.

Section 310 Spill Notification.

All users shall notify the District immediately upon occurrence of an accidental discharge of substances prohibited by Sections 280, 335, 375, and 400 of this Ordinance (a "spill") or any slug discharges that may enter the POTW or storm drain, storm water channel, or natural water course. The District shall be notified by telephone at (951) 784-2632. The notification shall include the date, time and location of the discharge, type of waste, including concentration and volume, and corrective actions taken. This notification does not relieve the user from any other reporting requirements of any other laws. Within five calendar days following a spill or slug discharge, the user shall submit a detailed written report to the District including:

- A. A description and cause of the event, and the impact on the user's compliance status;
- B. The location, type, concentration, and volume of the spill or slug discharge;
- C. The duration of the event including exact dates and time of noncompliance, and if noncompliance continues, the time by which compliance is reasonably expected to be achieved;
- D. The description of the remediation or cleanup methods and disposal; and
- E. All steps taken or to be taken to reduce, eliminate, and prevent recurrence of such upset, slug load, accidental, negligent, or intentional spill or other conditions of noncompliance.

Section 315

A. No person shall discharge or cause to be discharged onto the ground, into any permeable sump, pit, or well, storm drain, surface, pipe or waterway leading to a storm drain, whether currently carrying water or not, any pollutant or wastewater which could:

- 1. Impair the useful function of the storm drain;
- 2. Cause undue storm drain maintenance expense to the District or other public agency;
- 3. Create a public nuisance or public hazard;
- 4. Pollute natural surface or subsurface waters; or
- 5. Violate any regulation, order, or requirement of the Regional Board, including

NPDES Non-Point Source (Storm Water) Permit requirements.

B. Any person violating Subsection A of this Section shall be liable to the District for all damages and costs incurred by the District, including administrative expenses and fines. The District shall calculate its administrative expenses as ninety percent of the cost of repairs and personnel time expended by the District to remedy such damages and costs. All charges shall be payable to the District within thirty days of invoicing by the District.

C. Any person who has violated Subsection A of this Section shall submit a written report of the incident within five business days to the District Engineer. The written report shall include a description of the circumstances causing the discharge, the quantity and qualities of the pollutant(s) discharged the methods of cleanup and disposal, and the corrective measures taken to prevent a reoccurrence.

D. Any user discharging wastewater to the storm drain shall employ effective BMPs to prevent or reduce the discharge of pollutants to the storm drain. The District may require documentation on the effectiveness of BMPs implemented to reduce the discharge of pollutants to the storm drain.

Section 320 Point of Discharge Limitation.

No person shall discharge any wastewater directly into a manhole or other opening in a collection system other than through an approved building sewer connection without prior written permission from the District Engineer. This prohibition shall not apply to authorized District contractors carrying out their duties.

Section 325 Time Limits.

Any time limit provided in any written notice or any provision of this Ordinance may be extended only by a written directive of the District Engineer and upon a showing of good cause from the user.

III. Industrial Waste

Section 330 Separation of Domestic and Industrial Waste.

Any user who discharges industrial wastewater to the POTW shall keep domestic wastewater separate from all industrial wastewater until the industrial wastewater has passed through all required pretreatment equipment or devices, or the user's industrial wastewater sample point(s). For existing Categorical Industrial Users which cannot separate the domestic wastes from the industrial wastes prior to a permitted sampling point, the combined waste stream formula shall be applied to determine applicable discharge limitations.

Section 335 Prohibited Waste Discharges.

Except as provided herein, no person or user shall discharge or cause to be discharged any of the following to the POTW:

A. Any earth, sand, rocks, ashes, cinders, spent lime, stone, stone cutting dust, carbon fines, ion-exchange resin fines, gravel, plaster, concrete, glass, metal filings, metal or plastic objects, garbage, grease, viscera, paunch manure, bones, hair, hides, or fleshings, whole blood, feathers, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastic, tar, asphalt residues, residues from refining or processing fuel or lubrication oil and similar substances, or solid, semi-solid or viscous material in quantities or volume which may obstruct, either partially or completely, the flow of sewage in the collection system or any object which may cause the blockage, either partially or completely, of a sewer or sewage lift pump, or interfere with the normal operation of the POTW.

B. Any compound which will produce noxious odors in the sewer or wastewater treatment facilities.

C. Any portions of human or animal anatomy whether whole, part, or ground.

D. Any solids, liquids, gases, devices, or explosives which by their very nature or quantity are or may be, sufficient either alone or by interaction with other substances or sewage to cause fire or explosion hazards, exceed ten percent of the LEL at the point of discharge or in the collection system, or in any other way create imminent danger to the District's

wastewater personnel, contractor, or POTW, the environment or public health.

E. Any wastewater or material with a closed cup flash point of less than one hundred forty degrees Fahrenheit or sixty degrees Celsius using the test methods specified in 40 CFR 261.21.

F. Any overflow from a septic tank, facility wastewater holding tank, cesspool or seepage pit, or any liquid or sludge pumped from a septic tank, facility wastewater holding tank, cesspool or seepage pit, except as permitted by the District Engineer.

G. Any discharge from the wastewater holding tank of a recreational vehicle, trailer, bus and other vehicle, except as may be permitted by the District Engineer.

H. Any storm water, groundwater, street drainage, subsurface drainage, yard drainage or runoff from any field, roof, yard, driveway or street. The District Engineer may approve, on a temporary basis, the discharge of such water only when no reasonable alternative method of discharge is available.

I. Any substance or heat in amounts that will inhibit biological activity in the District's POTW resulting in interference or which will cause the temperature of the sewage in any public sewer to be higher than one hundred forty degrees Fahrenheit.

J. Any radioactive waste in excess of federal, state or county regulations.

K. Any material or quantity of material that will cause:

1. Damage to any part of the POTW;
2. Abnormal maintenance of the POTW;
3. An increase in the operational costs of the POTW;
4. A nuisance or menace to public health;
5. Interference or pass through in the treatment plant, its treatment processes, operations, sludge processes, use or disposal; or
6. A violation of the NPDES permit.

L. Any quantities of herbicides, algaecides, or pesticides that could cause interference or pass-through at the treatment plant or interfere with the City of Riverside's biosolids reclamation or pose any danger to POTW employees.

M. Any petroleum oil, non-biodegradable cutting oil, or mineral oil derived products

exceeding the District's local limits.

N. Any material or quantity of material(s) which may cause abnormal sulfide generation.

O. Any water or wastewater used to artificially raise the industrial user's discharge rate or added for the purpose of diluting wastes that would otherwise exceed applicable permitted discharge limitations.

P. Any wastewater having a corrosive property capable of causing damage to the POTW, equipment, or structures, or harm to POTW personnel. However, in no case shall wastewater be discharged to the District's POTW with a pH below 5.0, or greater than 11.5, or which changes the City of Riverside treatment plant influent pH to above 8.0 or below 6.5.

Q. Any substance that will cause discoloration of the POTW's effluent.

R. Any unpolluted water, including cooling water, heating water, storm water, subsurface water, single pass cooling water, and single pass heating water. The District Engineer may approve, on a temporary basis, the discharge of such water only when no reasonable alternative method of discharge is available. The user shall pay all applicable user charges and fees.

S. Any substance which may cause the POTW's effluent or any other product such as residues, sludge, or scums to be unsuitable for reclamation or reuse or which will interfere with any of the reclamation processes. This includes any material which will cause the sludge at the POTW to violate sludge use or disposal regulations developed under the Federal Clean Water Act, 33 USCA, Section 1251 et seq., or any regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, 42 USCA, Section 6901, et seq.; Clean Air Act, 42 USCA, Section 7401, et seq.; Toxic Substance Control Act, 15 USCA, Section 2601, et seq., or any other applicable state regulations.

T. Any hazardous substance which violates the objectives of the General Pretreatment Regulations (40 CFR 403), this Ordinance, or any statute, rule, regulation or chapter of any public agency having jurisdiction over the discharge.

U. Any material in excess of the quantities established by resolution.

V. Any discharge from a material processing tank or vessel. These shall include, but not be limited to, all wash tanks, chemical conversion tanks, acid and alkali tanks, lubricating tanks, condensate water from dry cleaning equipment, fruit and vegetable wash and treatment tanks, and any other tank or vessel containing a material which would not meet the pollutant discharge limitations.

W. Any radiator fluid or coolant, cutting oil, water soluble cutting oil, or water-based solvent.

X. Any photo processing waste from developing or fixing solutions not in compliance with local limits or Industrial User Group Permits.

Y. Any pharmaceutical waste except those liquids containing only saline solutions, lactate, nutrients such as glucose (e.g. D5W), vitamins, and added salts such as potassium and/or other electrolytes.

Z. Any chemicals or materials that will cause excessive foaming in the POTW.

Section 340 Swimming Pool Discharge Requirements.

Discharges from swimming pools, wading pools, spas, whirlpools, therapeutic pools and landscape ponds shall be discharged as follows:

1. Surface discharge and/or storm drain only if in compliance with the rules and regulation of the municipality having jurisdiction of the discharge site (this may require a permit).

2. Sanitary sewer if discharge to surface or storm drain violates the rules or regulations of the relevant jurisdiction set forth in paragraph 1 above, but only after obtaining written permission from the District. Permission may be granted by the District Engineer if the discharge will not cause a hydraulic overload condition in the area's sewer lines: or

3. Pumped out and hauled off to a legal treatment and/or disposal site if the water is found to have hazardous levels of chemicals, elements, or materials or cannot be discharged in accordance with paragraph 1 or 2 above..

Section 345 Limitation on Wastewater Strength.

No person shall discharge industrial wastewater to the POTW unless the wastewater conforms to this Ordinance. Discharge limitations shall be revised and adopted by resolution of ECSD's Board of Directors as necessary to ensure the District's effluent to the City of Riverside is in compliance with the City of Riverside's NPDES Permit. For Categorical Industrial Users, the District may exercise one or more of the following options:

A. Where a categorical pretreatment standard is expressed in terms of either the mass or the concentration of a pollutant in wastewater, the District Engineer may impose equivalent concentration or mass limits in accordance with 40 CFR 403.6(c);

B. When wastewater subject to a categorical pretreatment standard is mixed with wastewater not regulated by the same standard, the District Engineer shall impose an alternate limit using the combined wastestream formula; and

C. A variance from a categorical pretreatment standard may be issued if the user can prove, pursuant to the procedural and substantive provisions in 40 CFR 403.13, that factors relating to its discharge are fundamentally different from the factors considered by the EPA when developing the categorical pretreatment standard.

Section 350 Local Limits.

A. The District Engineer shall develop and implement specific prohibitions, pollutant limitations, pollutant parameters and Best Management Practices (BMPs) ("local limits"). These local limits are necessary to assure compliance with the City of Riverside's NPDES permit, including preventing pass through, interference, or impacts to biosolids reclamation or reuse. These local limits may be continually developed as necessary and adopted by resolution after public notice to affected persons or users.

B. The local limits may be allocated among industrial user classes or individual users as uniform concentration limits, or as the ratio of the total mass per user, or as a selected industry reduction, or by such other method considering factors such as persistence of the pollutant, equity, treatment feasibility, economic feasibility, and economics of scale, pollution prevention and waste minimization measures, anticipated growth and enforcement feasibility.

C. User-specific allocations at current loadings may be created for public health facilities which provide a lifesaving service or procedure, so long as the pollutant discharged would not contribute to pass-through, interference or other violation of the City of Riverside's NPDES permit.

D. Pollutant allocations may be granted to Class III or Class V users on a case-by-case basis based upon the District's excess allocated treatment capacity in the City of Riverside's POTW for the pollutant requested. These limits shall be based upon the pounds of pollutant(s) discharged and the impacts on the treatment capabilities of the POTW. If the permit is issued for more than one year, a pollutant review will take place annually to determine the POTW's excess treatment capacity for those permitted pollutants. A review may be conducted at any time if the District Engineer finds that the permittee's wastewater discharge has adversely affected the POTW, has caused the District's allocated capacity in the City of Riverside to reject the pollutants, or has caused interference, pass through, or violations of the POTW's NPDES permit.

E. When categorical pretreatment standards are expressed only in terms of pollutant concentrations, a Categorical Industrial User may request the District to convert the concentration limits to an equivalent mass limits. To be eligible for equivalent mass limits, the Categorical Industrial User must comply with the requirements in 40 CFR Part 403.6(c)(5)(i-iv).

Section 355 De Minimus Categorization.

Any user whose industrial wastewater discharge is less than one hundred gallons per day and is not regulated by a federal categorical pretreatment standard or Industrial User Group Permit may be classified in the District Engineer's discretion as a De Minimus User and shall not be subject to permitting standards or local limits provided that such industrial wastewater discharge is not a hazardous substance, does not contribute to interference or pass through violations at the POTW or violations of the City of Riverside's NPDES permit, and does not cause detrimental effects or damage to the POTW, or cause a threat of harm to the District or City personnel, the public, or the environment. De Minimus user status shall terminate upon violation of this Section, or upon written notice to such discharger of District

Engineer's determination that such discharger no longer satisfies the criteria of this Section.

Section 360 Industrial Wastewater Pretreatment.

All users shall:

- A. Provide wastewater pretreatment, as required, to comply with this Ordinance;
- B. Achieve compliance with all applicable federal categorical pretreatment standards, as contained in 40 CFR Chapter I, Subchapter N, and local limits, whichever are more stringent, within the time limitations as specified by the federal pretreatment regulations;
- C. Pre-treat wastewater to a level acceptable to the District Engineer and provide, operate, and maintain all necessary equipment, systems, and devices at the user's expense;
- D. Provide detailed plans to the District Engineer for review and approval showing the pretreatment equipment, systems, devices and operating procedures before the beginning of any construction or installation of any equipment. The review of such plans and operating procedures shall not relieve the user from the responsibility of pre-treating wastewater to produce an effluent acceptable to the District Engineer under the provisions of this Ordinance;
- E. No user shall install pretreatment equipment, systems or devices in a confined space or a permit-required confined space.
- F. Whenever deemed necessary, the District Engineer may require users to restrict their wastewater discharge, relocate and/or consolidate points of discharge, separate domestic waste streams from industrial waste streams, and other such conditions as may be necessary to protect the POTW and determine the user's compliance with the requirements of this Ordinance; and
- G. Notify the District Engineer of any pretreatment equipment failure within twenty-four hours of discovering the failure. The notification shall be made by a telephone call, telefax transmission, electronic report, personal visit or hand delivered notification, to the District's Office. Within five calendar days after discovery of the failure, the user shall submit a written report to the District Engineer documenting the dates, times, and cause of the failure, and the corrective actions taken. Failure to provide this notification is a violation of this Ordinance and may subject the user to enforcement actions.

Section 365 Unauthorized Monitoring and Pretreatment Equipment Modifications.

No user shall knowingly falsify, tamper with, or render inaccurate any monitoring device or any pretreatment equipment or device. Such falsification, tampering, or inaccuracy shall be considered a violation of this Ordinance and shall subject the user to enforcement actions.

Section 370 Pretreatment Equipment Bypass.

A. No user shall bypass any pretreatment equipment or device unless the bypass: (i) is necessary to prevent loss of life, personal injury or severe property damage, is not necessitated by some fault of the user, and is the only feasible alternative; or (ii) does not cause local limit violations and is necessary to perform essential maintenance insuring adequate operation of the pretreatment equipment or device.

B. All users shall comply with the following bypass notification requirements:

1. Anticipated bypass: The user shall submit a written notice to the District Engineer at least ten days before the date of the scheduled bypass; or

2. Unanticipated bypass: The user shall notify the District Engineer immediately upon learning that any pretreatment equipment or device has been bypassed. The user shall submit a written report to the District Engineer within five business days after the bypass. The report shall include:

- a. A description of the bypass, the cause of the bypass, and the duration of the bypass;
- b. If the bypass was corrected; and
- c. Actions taken or proposed to reduce or prevent a reoccurrence of the bypass. (

Section 375 Prohibited Discharge of Recovered Pretreatment Waste.

No person shall discharge waste recovered from pretreatment equipment, systems, or devices into any sewer opening or any drains or other openings leading to any sewer without authorization and permits from a regulatory agency having jurisdiction over the discharge of the waste. All recovered pretreatment waste shall be disposed of in accordance with all applicable federal, state, county, and local laws and regulations

Section 380 Dilution Prohibited as a Substitute for Treatment.

A. No industrial user shall increase the use of water, or in any other manner attempt, to dilute a wastewater discharge as a partial or complete substitute for adequate treatment to achieve compliance with this Ordinance and the industrial user's permit, or to establish an artificially high flow rate for permitted mass emission rates or permitted flow amounts.

B. If an industrial user is found to be using dilution to comply with this Ordinance and/or the user's Industrial User Permit, then the District may impose mass limitations to determine compliance with wastewater discharge limitations

Section 385 Storm Water Diversion.

A. All users having outdoor areas which allow wastewater and storm water to enter a common opening also connected to the collection system shall install and maintain, at the user's expense, a storm water diversion valve in the common opening.

B. The storm water diversion valve design and use shall be reviewed and approved by the District Engineer prior to installation.

C. The valve shall allow wastewater to enter the collection system during dry weather and prevent storm water from entering during periods of inclement weather.

D. Unless permitted to do so in accordance with Subsection F. of this Section, no user shall allow wastewater and storm water to mix.

E. During periods of inclement weather, the user shall immediately suspend all outdoor wastewater generating activities and divert all storm water to a storm drain.

F. If the discharge of storm water would create a pollution threat to surface or subsurface waters, the user may make application to the District Engineer requesting that the storm water be discharged to the POTW. Approval of a storm water discharge to the POTW shall be based on:

1. Hydraulic capacity of the collection system;
2. Hydraulic capacity of the treatment plant;
3. Total volume of storm water to be discharged in a twenty-four hour period;
4. A demonstrated need to discharge storm water to the POTW to prevent surface and

subsurface water contamination; and

5. A good faith effort made by the user to prevent the pollution of storm water by industrial waste and waste generated by the user.

Section 390 Industrial User Modifications.

All permitted industrial users shall report proposed changes in their operations in writing to the District Engineer for approval thirty calendar days before those changes are implemented. For the purposes of this Section "changes" shall include any of the following:

- A. A sustained twenty percent increase or decrease in production capacity or wastewater discharge;
- B. Additions, deletions or changes to processes or equipment; or
- C. Experimentation with new processes, materials, chemicals and/or equipment that may affect the wastewater discharged

Section 395 Spill Containment System.

Spill containment systems, as may be required, shall conform to requirements established by the District Engineer. These requirements may include but are not limited to the following:

- A. No spill containment system shall allow incompatible substances to mix in the event of container failures and thereby create a hazardous or toxic substance.
- B. Spill containment systems shall consist of dikes, walls, barriers, berms, or other devices designed to contain spillage of the liquid contents of containers.
- C. Spill containment systems shall be constructed of materials that are impermeable and non-reactive to the liquids being contained.
- D. Spill containment systems shall conform to local regulations and policies as to percent containment, container type, size, outdoor covering, and the length of time spilled material may remain in the spill containment system.
- E. At no time shall a user use a spill containment system for any storage other than from a spill.
- F. All users shall keep the spill containment system free of accumulated liquid and

debris.

Section 400 Slug Discharges.

No user shall discharge or caused to be discharged any slug load of materials, chemicals, products, or waste into the POTW. Any user discharging a slug load of materials, chemicals, products or waste into the POTW to avoid sewer service charges for the treatment violates this Ordinance and may subject the user to enforcement actions. Any slug load that damages the POTW is a major violation. Slug loads that do not damage the POTW may be a minor violation.

Section 405 Facility Waste Management Plan.

All permitted industrial users shall develop and maintain a Facility Waste Management Plan (FWMP). The FWMP shall consist of the following applicable documents:

A. Toxic Organic Management Plan (TOMP) is required of all Categorical Industrial Users permitted to submit the TOMP in lieu of required pollutant monitoring.

B. Slug Discharge Prevention Control Plan (SDPCP) is required of all industrial users which have batch discharge provisions, stored chemicals or materials, or the potential for a slug discharge which, if discharged to the POTW or storm drain system, would violate this Ordinance. The SDPCP shall contain:

1. Description of discharge practices, including non-routine batch discharges;
2. Description of all stored chemicals;
3. Procedures to immediately notify the District of any slug discharge, including any discharge prohibited under Section 335;
4. Procedures to provide a written follow-up notification within five calendar days;
5. Procedures to prevent accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, plant and site run-off control, worker training, building of spill containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response; and

6. Procedures to notify the District immediately of any changes in the facilities that may affect the potential for a slug discharge.

C. Pretreatment Systems Operations and Maintenance Manual shall be submitted by all industrial users that operate and maintain pretreatment equipment.

D. Hazardous Materials and Hazardous Waste Management Plan is required of all industrial users that use, possess, or generate hazardous substances. The City of Moreno Valley Fire Department-required Business Emergency Plan may be substituted for this management plan.

E. Waste Minimization/Pollution Prevention Plan (WM/PPP) is required of any industrial user:

1. For whom the District Engineer has determined such WM/PPP is necessary to achieve a water quality objective;

2. Determined by the California State Water Quality Control Board ("State Board") to be a chronic violator, and the State Board, Regional Board, the District or the City of Riverside determines that pollution prevention (as defined in Water Code Section 13263.3(b)) could assist; and

3. That significantly contributes, or has the potential to significantly contribute, to the creation of a toxic hot spot as defined in Water Code Section 13391.5.

F. A WM/PPP shall include all of the following:

1. An analysis of the pollutants, as directed by the State Board, Regional Board, the District or the City of Riverside, that the user discharges to the POTW, the sources of the pollutants, and a comprehensive review of the processes that generate and discharge the pollutants.

2. An analysis of the effectiveness of pollution prevention, including any innovative and alternative technologies and possible adverse environmental impacts resulting from the use of those methods.

3. A detailed description of the tasks and schedules required to investigate and implement the pollution prevention techniques.

4. A statement of the discharger's pollution prevention goals and strategies, including

priorities for short-term and long-term action.

5. A description of the discharger's existing pollution prevention methods.

6. A statement that the discharger's existing and planned pollution prevention strategies do not constitute cross media pollution transfers unless clear environmental benefits of such an approach are identified, and information that supports that statement, to the satisfaction of the District.

7. Proof of compliance with the Hazardous Waste Source Reduction and Management Review Act of 1989 (Article 11.9 (commencing with Section 25244.12) of Chapter 6.5 of Division 20 of the Health and Safety Code) if the discharger is subject to that act.

8. An analysis, to the extent feasible, of the relative costs and benefits of the possible pollution prevention activities.

9. A specification of, and rationale for, the technically feasible and economically practicable pollution prevention measures selected by the discharger for implementation.

G. Any person who fails to complete a pollution prevention plan required by the District, submits a plan that does not comply with this Section, or fails to implement a plan required by the District, shall be liable to the District for any civil penalty assessed administratively by the District or by a court in accordance with this Ordinance.

H. The District shall not include a WM/PPP in any local limits or permit issued by the District.

Section 410 Categorical Pretreatment Standards.

A. The federal categorical pretreatment standards found in 40 CFR Chapter I, Subchapter N are hereby incorporated into this Ordinance by reference. It is unlawful for any Categorical Industrial User to discharge wastewater to the POTW in violation of federal categorical pretreatment standards or any limitation in this Ordinance or that user's permit. Where there is more than one limitation for a pollutant, the more stringent limitation shall prevail. Compliance with federal categorical pretreatment standards for existing sources subject to such standards or for existing sources, which hereafter become subject to such standards, shall be achieved within three years following promulgation of the standards unless a shorter

compliance time is specified in the standards or by the District Engineer. New sources shall install, have in operating condition and "start-up" all pretreatment equipment to insure compliance before beginning any discharge. New sources must meet all applicable pretreatment standards within the shortest feasible time, not to exceed ninety days.

B. The District may authorize a Categorical Industrial User to forego sampling of a pollutant regulated by a federal categorical pretreatment standard if the Industrial User has demonstrated through sampling and other technical factors that the pollutant is neither present nor expected to be present in the wastewater discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the Industrial User. This authorization is subject to the following conditions:

1. The District may authorize a waiver where a pollutant is determined to be present solely due to sanitary wastewater discharged from the facility provided that the sanitary wastewater is not regulated by an applicable categorical standard and otherwise includes no process wastewater

2. The monitoring waiver is valid only for the duration of the effective period of the Industrial User's Permit, and in no case shall exceed five years. The Industrial User must submit a new request for the waiver with each permit renewal.

3. In making a determination that a pollutant is not present, the Industrial User must provide data from a least one sampling of the facility's process wastewater prior to any treatment at the facility that is representative of all wastewater from all processes.

4. The request for a monitoring waiver must be signed by the Industrial User's authorized representative and include the certification statement, Section 120(7).

5. Non-detectable sample results may only be used as a demonstration that a pollutant is not present if the EPA approved method from 40 CFR Part 136 with the lowest minimum detection level for that pollutant was used in the analysis.

6. Any grant of the monitoring waiver by the District will be incorporated into the Industrial User's Permit. All data and information to support the District granting the waiver will be maintained for three years after the expiration of the waiver.

7. Upon approval of the waiver and incorporation into the Industrial User's Permit, the

Industrial User must certify on each report submitted with the following statement, that there has been no increase in the pollutant in its wastestream due to the activities at the Industrial User's facility:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the Pretreatment Standard for 40 CFR [specify applicable National Pretreatment Standard part(s)], I certify that, to the best of my knowledge and belief, there has been no increase in the level of [list pollutant(s)] in the wastestream due to the activities at the facility since filing the last quarterly report."

8. In the event that a waived pollutant is found to be present or is expected to be present based on changes that occur in the Industrial User's operations, the Industrial User must immediately notify the District and resume quarterly monitoring of the waived pollutant.

9. This waiver provision does not supersede certification processes and requirements established in categorical pretreatment standards, except as otherwise specified in the categorical pretreatment standard.

Section 415 Commercial/Industrial Tenant Occupancy Notification.

Pursuant to 40 CFR 403.8(f)(2)(i) all owners of multiple tenant commercial/industrial developments within the POTW service area shall submit, upon request by the District Engineer, a current list of tenants. This list shall provide the name, address, unit space designation and type of business activity for each tenant space in the development.

Section 420 Notice of Potential Problems to District Engineer.

All users shall immediately notify the District Engineer of all wastewater discharges that could adversely affect the POTW or storm drain, including any slug discharges. Wastewater discharges that may adversely affect the POTW include, but are not limited to, acids, alkalis, oils, greases, high strength organic waste, salt, hazardous substances and waste, colored wastes, and batch discharges. The notification shall be made by a telephone call, telefax transmission, electronic report, personal visit or hand delivered notification, to the District Within five calendar days after discovery of the discharge, the user shall submit a written report to the District Engineer documenting the dates, times, and cause of the failure,

and the corrective actions taken. Failure to provide this notification is a violation of this Ordinance and may be subject the user to enforcement actions.

Section 425 Written Responses and/or Reports.

All users required to provide a written report, or response to any correspondence, order, or notice from the District Engineer shall do so in accordance with the date and requirements specified in the correspondence, order, or notice. Failure to provide the written response or report by the date requested shall constitute a violation of this Ordinance and may subject the user to enforcement actions.

Section 430 Falsifying Information.

No person shall knowingly make any false statement, representation, or certification in any record, correspondence, or other document submitted or required to be maintained under this Ordinance.

Section 435 Wastewater Discharge Authorization Certificate (WDAC).

Any non-residential user desiring to discharge wastewater to the District's POTW, that does not qualify for an Industrial User Permit, Industrial User Group Permit, or De Minimus Category and whose wastewater shall not have an adverse effect on the District's POTW, may be required to obtain a WDAC from the District Engineer. WDACs shall not be issued to categorical industrial users. WDACs may be issued for indefinite time periods, subject to periodic review and reconsideration by the District Engineer.

Section 440 Industrial User Group Permits.

Certain classes of industrial users, as determined by the District Engineer, may be eligible to participate in an Industrial User Group Permit. Permittees within this designation shall share a common business identification as defined by the Federal North American Industry Classification System ("NAICS") code book. Industrial users permitted by this group permit shall abide by general permit conditions specific for that particular group being permitted. These

permit conditions shall be established by the District Engineer.

Section 445 Industrial User Permits.

A. It is unlawful for any Class I, II, III, IV, V, or VI industrial user to connect or discharge to the POTW without a valid Industrial User Permit. It is unlawful for any Class III industrial user to connect or discharge to the POTW without a valid Industrial User Permit, WDAC, or Industrial User Group Permit, as determined by the District Engineer based upon the industrial user's potential effect on the POTW. Issuance of any such permit or WDAC shall not vest any right in a user to continue connection or discharge to the POTW beyond the express terms of the permit or WDAC.

B. Plans and building permits for Class I, II, IV, V, or VI Industrial User Permits and those users designated by the District Engineer shall not be approved by the District Engineer for any sewer connection which will convey industrial wastewater to the POTW unless the user has first obtained an Industrial User Permit, or the user has received written permission from the District Engineer after agreeing in writing not to discharge industrial wastewater until an Industrial User Permit has been obtained.

C. Users required to obtain an Industrial User Permit shall complete and file with the District Engineer a permit application form provided by the District Engineer and shall pay all applicable fees within thirty days of invoicing by the District. The application form may require applicant's submission of any or all of the following:

1. Name, address, and location (if different from the site address);
2. NAICS number under the Federal North American Industry Classification System, Office of Management and Budget, 1997, as amended;
3. EPA hazardous waste generator's number;
4. Wastewater samples analyzed for specified pollutants by a State certified laboratory in accordance with the methods published by EPA in 40 CFR Part 136 and amendments thereto;
5. Time and duration of the wastewater discharges;
6. Average and maximum daily wastewater flow rates, including any seasonal

variation of all waste streams discharged;

7. A list of all environmental control permits held;
8. A written statement from the property owner or landlord, if different from the industrial user, agreeing to the industrial user's activities, manufacturing processes, and chemical and material storage;
9. Site plans, floor plans, mechanical and plumbing plans with details to show all sewers, sewer connections, pretreatment equipment, systems and devices, production areas and all areas of wastewater generation;
10. A description of operations including the nature, average rate of production, and NAICS code of the operation(s) carried out by the industrial user, and a schematic process diagram that indicates points of discharge to the POTW;
11. Flow measurement information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process waste streams and other waste streams as necessary to allow use of the combined waste stream formula;
12. Measurement of pollutants identifying the National Categorical Pretreatment Standard applicable to each regulated process, with the results of sample analyses identifying the nature and concentration (or mass where required) of regulated pollutants in the discharge from each regulated process. Both daily maximum and average concentration or daily maximum and average mass shall be reported. All analyses shall be performed in accordance with the techniques prescribed in 40 CFR Part 136;
13. Certification statement, as set forth in 40 CFR Part 403.6(a)(2)(ii), executed by an authorized representative of the industrial user and prepared by a qualified professional, indicating whether or not pretreatment standards (categorical and local) are being met on a consistent basis. If not, the industrial user shall state if additional operation and maintenance or additional pretreatment equipment is necessary to achieve compliance with pretreatment standards and requirements;
14. Best Management Practices necessary to comply with this Ordinance; and
15. Any other information as may be necessary for the District Engineer to evaluate the permit application.

D. Within forty-five days after receiving the completed application and all required supporting information, the District Engineer shall evaluate the application and information furnished by the applicant. The District Engineer shall issue the permit, if the District Engineer believes that sufficient and accurate information has been provided by the applicant in the permit application and the District Engineer finds that all of the following conditions are met:

1. The proposed discharge of the applicant is in compliance with the prohibitions and limitations of this Ordinance;

2. The proposed operation and discharge of the applicant would not interfere with the normal and efficient operation of the POTW;

3. The proposed discharge, operation or business activity of the applicant shall not result in a violation by the District as a result of its agreement with the City of Riverside pertaining to the terms and conditions of its NPDES permit or cause a pass through of any toxic materials to the environment or the POTW sludge; and

4. The applicant has paid all applicable Industrial User Permit fees.

E. The District Engineer may suspend the permit application process if the user's business will not be operational and no wastewater is planned for discharge at the conclusion of the application review process. The user must notify the District Engineer at least fourteen calendar days before starting business activities and wastewater discharge.

F. If the District Engineer determines that the proposed discharge will not be acceptable, the District Engineer shall disapprove the application and shall notify the applicant in writing, specifying the reason(s) for denial and the applicable appeals process under Section 570 APPEALS.

G. Industrial User Permits shall be subject to all provisions of this Ordinance and all other applicable regulations, charges and fees established by the ECSD's Board of Directors resolution. Permits may include one or more of the following:

1. The unit charge or schedule of user charges and fees for the wastewater discharged to the POTW as established by ordinance or resolution;

2. Schedule of penalties for noncompliance as established by resolution;

3. Limitations on the average monthly and maximum daily wastewater pollutants and mass emission rates for pollutants;
4. Limitations on the average monthly and maximum daily wastewater flow rates;
5. Requirements for the submittal of a Facility Waste Management Plan;
6. Requirements for the submittal of daily, monthly, annual and long term production rates;
7. Requirements for reporting changes and/or modifications to equipment and/or processes that affect the quantity or quality of the wastewater discharged;
8. Requirements for installation and maintenance of monitoring and sampling equipment and devices;
9. Requirements for the installation of pretreatment technology, pollution control, or construction of appropriate spill containment devices;
10. Requirements to comply with Best Management Practices and periodic written documentation that the Best Management Practices are being implemented and the effects on compliance;
11. Specifications for monitoring programs which may include: sampling location(s); frequency of sampling; pollutant violation notification and resampling requirements; number, types and standards for tests; reporting schedules; TTO monitoring; and self-monitoring standard operating procedures (SOPs);
12. Requirements for reporting flow exceedances and pollutant violations;
13. Consent to the District's entry onto the user's premises to assess compliance by inspection, photography, electronic image recording, records examination, sampling, and monitoring;
14. Compliance schedules. Compliance schedule progress reports, as required, shall be submitted every thirty days during the time the compliance schedule is in force, including a final compliance report at the conclusion of the compliance schedule. The industrial user shall state whether or not compliance was achieved for the increment of progress to be met on such a date. If progress cannot be achieved, the industrial user shall state the reasons for the delay and the steps to be taken to return to the dates originally established in the compliance

schedule;

15. Modified compliance schedules if pretreatment standards compliance cannot be met on a consistent basis. A modified compliance schedule shall provide the shortest possible time for the industrial user to provide additional pretreatment and/or operations and maintenance to achieve compliance, and may contain milestones;

16. Requirements for submission of technical or discharge reports, Baseline Monitoring Reports (BMR), compliance reports, and reports on continued compliance;

17. Requirements for submission of a Slug Discharge Plan according to 40 CFR 403.8(f)(1)(iii)(B)(6);

18. Reports on compliance with federal categorical pretreatment standards deadlines. All Categorical Industrial Users shall submit reports to the District Engineer containing the information described in this Section as required by the permit. For existing Categorical Industrial Users, the report shall be submitted within ninety days following the date for final compliance with applicable categorical pretreatment standards. For new Categorical Industrial Users, the report shall be due thirty days following the commencement of wastewater discharge into the POTW. These reports shall contain long-term production rates and actual production during the wastewater sampling periods;

19. All Significant and Categorical Industrial Users shall submit progress reports on compliance every six months. These reports shall include effluent sample analyses with the pollutant names and concentration or masses; average and maximum daily wastewater flows for all regulated processes and total flow for the reporting period; average and maximum daily production rates; and total production rate for the reporting period;

20. All required reports: BMRs, compliance reports, periodic reports on continued compliance, and sample data submittals, must be signed by an authorized representative of the user;

21. All reports required by this Section must have an accompanying certification statement by a qualified professional stating whether the pretreatment standards are or are not being met as set forth in 40 CFR Section 403.12(b)(6);

22. Requirements for maintaining and retaining all records relating to the wastewater monitoring, sample analyses, production, waste disposal, recycling, and waste minimization as specified by the District Engineer;

23. Requirements for notification of slug or accidental discharges and significant changes in volume or characteristics of the pollutants discharged;

24. Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements and this Ordinance; and

25. Other conditions as deemed appropriate by the District Engineer to ensure compliance with this Ordinance.

Section 450 Permit Duration.

Industrial User Permits shall be issued for a specified time period, not to exceed three years.

Section 455 Duty to Comply.

All users that have been issued an Industrial User Permit, Industrial User Group Permit, WDAC, or De Minimus categorization have a duty to comply with all conditions and limitations in these control documents ("control documents"). Any user failing to comply with the requirements of such user's control documents shall be subject to administrative, civil or criminal enforcement actions in accordance with this Ordinance.

Section 460 Permit Renewal.

All users shall submit a completed Industrial User Permit application, required monitoring information or production reports, and any other information required for permit renewal a minimum of ninety calendar days prior to the expiration of the existing Industrial User Permit. All users shall pay all applicable permit fees no later than thirty calendar days after invoicing by the District. If the District Engineer fails to notify a user of District Engineer's decision to issue or not issue a renewed permit prior to the expiration date of the current permit, the user's timely submission of a completed application and all other required information and

reports shall automatically extend the permit for up to thirty working days until the actual permit can be issued or denied. Any discharge of industrial wastewater to the POTW with an expired Industrial User Permit shall be a violation of this Ordinance and subject the user to enforcement action.

Section 465 Permit Modifications.

A. The District Engineer may modify the Industrial User Permit terms and conditions as follows:

1. To incorporate any new or revised federal, state, or local pretreatment standards or requirements;
2. To address significant alterations or modifications to the user's operation, processes, or wastewater volume or character since the time of the Industrial User Permit issuance;
3. For a change in the POTW that requires either a temporary or permanent reduction or elimination of the permitted discharge;
4. If the permitted wastewater discharge poses a threat to the POTW, the District or City of Riverside personnel, residents, contractors or receiving waters;
5. For violation of any term or condition of the Industrial User Permit;
6. For misrepresentations or failure to fully disclose all relevant facts in the Industrial User Permit application or in any required reporting;
7. To correct typographical or other errors in the Industrial User Permit; or
8. For other reasons as the District Engineer deems necessary.

B. The District Engineer shall notify the user of any proposed permit changes at least thirty calendar days prior to the effective date of the changes. Any modifications in the permit shall include a reasonable time schedule for compliance.

Section 470 Permit Transfer.

Each Industrial User Permit, WDAC, or Industrial User Group Permit is issued to a specific user for a specific operation for a specified time. Any assignment, transfer or sale of any permit to a new owner, new user, different premises, or different use is prohibited and is a violation of this Ordinance.

Section 475 Fees and Charges.

The District is authorized to impose fees and charges to recover the costs of its pretreatment program. These fees and charges are exclusive to this Ordinance and are separate from all other fees or costs. The amount of these fees and charges and method of implementation may be established by resolution of ECSD's Board of Directors. The District may assess fees and charges to recover the costs for:

A. Developing, implementing, and operating the District's pretreatment program and this Ordinance;

B. Monitoring, inspection, surveillance procedures and laboratory costs;

C. Reviewing plans and construction inspections;

D. Industrial User Permit application review;

E. Industrial User Permit, Industrial User Group Permit, and WDAC issuance;

F. Enforcement actions;

G. Temporary user permit issuance;

H. Exceeding conventional pollutant limitations in the Industrial User Permit or other applicable pollutant limitations. These fees shall be based on the POTW costs of operations, maintenance and treatment for the pounds of COD and Total Suspended Solids;

I. Non-residential user sewer service fees shall be assessed considering the following conditions:

1. All non-residential users that discharge any volume of wastewater to the POTW that has amounts of Chemical Oxygen Demand (COD) or Total Suspended Solids (TSS) greater than or equal to the average amounts of COD or TSS normally found in twenty-five thousand gallons of domestic sewage shall be designated "Large Industrial Users" and shall pay monthly

sewer service fees based on the industrial user sewer rates established periodically by resolution. The non-residential user will be qualified as a Large Industrial User if two or more of the qualifying criteria are met, i.e. COD, TSS, or total wastewater discharged. The Large Industrial User sewer rates shall be based upon the District's costs for providing services and treatment for the total volume of wastewater discharged and for the pounds of COD and TSS contained in the wastewater discharged.

2. All non-residential users that discharge any volume of wastewater to the POTW that has amounts of COD, TSS less than the average amounts of COD, TSS normally found in twenty-five thousand gallons of domestic sewage, shall be designated "commercial users". These commercial users shall pay monthly sewer service fees based upon the commercial sewer use rates established periodically by resolution. The commercial sewer use rates shall be based on the costs for providing services and treatment for the amounts of COD, TSS and gallons of wastewater discharged.

Section 480 Assessment of Permit Fees and Charges.

Permit fees for multi-year permits shall be payable in advance for the entire term of the permit, as invoiced by the District. If a permit is terminated prior to thirty calendar days after the date of issuance, then the District Engineer shall refund fifty percent of the original permit fee to the user, less any fees, charges or penalties owing to the District provided that no refund shall be made to a permit holder which is in violation of this Ordinance or permit at any time prior to such termination. After a permit has been issued thirty days or more, all fees for that permit are non-refundable. No permit application fee shall be refundable at any time.

Section 485 Payment of Fees, Charges and Penalties; Late Payment.

Unless otherwise specified, all fees, charges and penalties imposed pursuant to this Ordinance are due and payable within thirty calendar days after the date of the notice or invoice from the District. Users who fail to pay any required fee, charge or penalty by the due date shall pay a fifty percent surcharge in addition to the original fee, charge or penalty. The District shall give notice to a user of any permit termination associated with the unpaid

amounts and such permit will be automatically revoked on the thirtieth day after the date of such notice if the amount due is not paid in full. The District Engineer shall refer the unpaid amount to the District Manager for collection.

IV. Enforcement

Section 490 Failure to Comply.

Failure to comply with this Ordinance, or any Section, Subsection, or part of this Ordinance, is a violation of this Ordinance and may be punished by administrative, civil, and/or criminal penalties. The remedies available under this Ordinance are in addition to all other remedies available under the law.

Section 495 Enforcement Response Plan (ERP).

The District shall use an Enforcement Response Plan (ERP), as required by 40 CFR 403.8(f)(5), and adopted by resolution of ECSD Board of Directors, to guide the District in imposing progressive enforcement actions against users and persons in noncompliance with this Ordinance.

Section 500 Administrative Violations.

There is hereby established a class of violations to be known as Administrative Violations that are further subdivided into minor and major administrative violations as follows:

- A. Minor Administrative Violations include, but are not limited to, the following:
 - 1. Submission of incomplete reports or questionnaires;
 - 2. Failure to submit reports by the scheduled due date;
 - 3. Failure to respond to questionnaires;
 - 4. Missing a compliance date without proper prior notification to the District;
 - 5. Failure to conduct sampling when required;
 - 6. Failure to notify the District Engineer of a violation of a permit condition within twenty-four hours after discovery of the violation; or

7. Failure to pay all required fees, penalties and charges within thirty calendar days from the due date.

B. Major Administrative Violations include, but are not limited to, the following:

1. Failure to notify the District Engineer of a slug discharge immediately after discovery of said discharge;

2. Failure to respond, by a given date, to letters requiring responses or to administrative orders;

3. Missing a compliance date by more than thirty calendar days;

4. Falsification of documents or attempting to mislead the District officials including the District Engineer and his representatives in any manner whatsoever;

5. Failure to cooperate with District officials exercising their authority under this Ordinance, including monitoring and inspection activities;

6. A pattern of minor administrative violations;

7. Failure to provide the District with access to user's premises for the purpose of inspection, photography, electronic image recording, monitoring, or sampling;

8. Failure to produce records as required;

9. Failure to accurately report noncompliance;

10. Failure to submit required reports (self-monitoring, one hundred eighty-day baseline monitoring report, ninety-day compliance report, Compliance Schedule progress reports) or submitting such reports more than forty-five calendar days late;

11. Failure to pay charges pursuant to Section 460 of this Ordinance, permit application fees, permit renewal fees, and Civil Penalties within sixty calendar days after the due date; or

12. Failure to pay all other required fees, penalties, and charges within sixty calendar days after the due date.

C. Upon notice of appropriate mitigating circumstances and consistent with applicable federal and state laws, the District Engineer has sole discretion to treat a major administrative violation as a minor administrative violation, or a pattern of minor administrative violations with aggravating circumstances as individual major administrative violations.

Section 505

Violations of Discharge Limitations.

A. There is hereby established a class of violations to be known as discharge violations that are further subdivided into minor and major discharge violations as follows:

1. Minor discharge violations are those that, either alone or in combination with similar user discharge violations, pose, as determined by the District Engineer, no significant threat to the public health, safety or welfare, the environment, the POTW, the beneficial use of the biosolids or to any the District or City of Riverside employee or contractor.

2. Major discharge violations include, but are not limited to, the following:

a. Significant Noncompliance;

b. Discharge violations which, either alone or in combination with similar discharges pose, as determined by the District Engineer, a significant threat to the public health, welfare or safety, the environment, the safe and efficient operation of the POTW, the beneficial use of biosolids or to any POTW employee or contractor, or cause or contribute to additional treatment costs incurred by the District or a violation of the City of Riverside NPDES permit, or cause or contribute to pass-through, interference, or other known damages;

c. Discharging regulated pollutants to the POTW without a current discharge permit;

d. A pattern of minor discharge violations;

e. Failure to correct a minor discharge violation within a specific time period as directed by the District Engineer;

f. Tampering with or purposely rendering inaccurate any monitoring device, method or record required to be maintained pursuant to this Ordinance;

g. Discharge by a Liquid Waste Hauler into the POTW; or

h. Discharging wastewater without a valid Industrial User Permit after notification.

B. Upon notice of appropriate mitigating circumstances, the District Engineer has sole discretion to treat a major discharge violation as a minor discharge violation. The District Engineer also has sole discretion to treat a pattern of minor discharge violations with aggravating circumstances as individual major discharge violations.

Section 510 Unclassified Violations.

For any violation by any user or person that is not classified herein, or for the violation of any rule or regulation promulgated hereunder, the District Engineer shall have the discretion to treat such violation as a minor or major violation and to exercise enforcement authority accordingly. In exercising this enforcement authority, the District Engineer shall consider the magnitude of the violation, its duration, and its effect on receiving waters, the POTW, the POTW's biosolids, the health and safety of the District or City of Riverside employees, contractors, users, and the general public. The District Engineer shall also evaluate the user's or person's compliance history, good faith, and any other factors the District Engineer deems relevant.

Section 515 Separate Violations.

Each violation of this Ordinance may be charged as a separate violation for each day the same violation exists. Each wastewater pollutant violation is considered an individual violation for each pollutant in violation for each day in violation

Section 520 Administrative Orders.

The District Engineer may require compliance with this Ordinance and any permit or order issued under this Ordinance by issuing Administrative Orders that are enforceable in a court of law, or by directly seeking court action. The District Engineer may use Administrative Orders, either individually, sequentially, concurrently, or in any order for one or more violations as appropriate for the circumstances. Administrative Orders include, but are not limited to the following:

- A. Stop Work Order.

The District Engineer may issue a written Stop Work Order to any person engaged in doing or causing to be done new construction, tenant improvements, alterations, or additions relative to the District's pretreatment program if:

1. District permits have not been obtained;
2. Work has begun without prior written approval by the District Engineer; or

3. Violations of this Ordinance are found at the site of the new construction, tenant improvements, alterations, or additions. Any person served a Stop Work Order pursuant to this Section shall immediately stop such work until written authorization for such work is issued by the District Engineer.

B. Correction Notice.

The District Engineer may issue a correction notice for minor violations noted during an inspection of the user's facility. Extensions may be granted to a user who fails to correct minor violations required by a correction notice, upon a showing of good cause, where "good cause" means an unforeseeable and unavoidable event or series of events, over which user had no control that prevented or significantly impaired the user's ability to comply with the correction notice.

C. Written Warning.

The District Engineer may issue a written warning to notify a user of a minor violation or any violation that has not been corrected as required by a correction notice. The written warning shall state the provision(s) violated and the facts supporting the violation, and may include any proposed corrective actions or monitoring to be required.

D. Monitoring/Production Information Order (MPIO).

The District Engineer may issue an MPIO when two consecutive violations for the same pollutant are detected in the District or user samples, when a pattern of wastewater pollutant non-compliance has been detected or when inconsistent wastewater pollutant compliance had resulted in Significant Non-Compliance. The MPIO shall be used to determine if discharge compliance has been achieved or if a detected violation is consistent. The MPIO shall require the user to sample the user's wastewater discharge for the pollutant(s) in violation and record the daily effluent wastewater flow for all days within a fourteen consecutive day period that industrial wastewater is discharged to the POTW. Production information shall be required of all Categorical Industrial Users which have production based discharge limits. The user required to conduct an MPIO shall comply with all the instructions given in the MPIO.

E. Notice of Violation (NOV).

An NOV shall be issued to a user for a violation of a written warning, stop work order, Industrial User Permit, of this Ordinance, an MPIO that has resulted in Significant Non-Compliance or any other violation that has resulted in Significant Non-Compliance. The recipient shall pay an NOV fee as established by the District's resolution. The District Engineer may serve the user with a written NOV personally or by certified mail. The NOV shall state the provision(s) violated and the facts supporting the violation, and may include any proposed corrective actions or monitoring to be required. The NOV shall require the user to respond in writing to the District Engineer, within ten calendar days from the date of service of the NOV, with a written explanation of or response to the violation(s) and a plan for the satisfactory correction or prevention thereof, including specific required actions. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the NOV.

F. Violation Meeting.

A violation meeting shall be required of all users who have failed to achieve compliance after the issuance of an NOV or at the conclusion of an MPIO that has resulted in significant noncompliance. This meeting shall be for the District to draft a consent order or compliance order or for the user to propose solutions, request time extensions, draft a compliance schedule, or file an appeal. Any user for whom a violation meeting is scheduled shall pay the District a violation meeting fee in an amount as established by resolution.

G. Consent Order.

The District Engineer may, at any time after finding a violation of this Ordinance, enter into an agreement with the violating user known as a consent order. Such agreement may be a compliance schedule with milestones, other specific actions to be taken by the user to correct or prevent the noncompliance within a specified time period, payment of damages, consent order fees, penalties, or other remedies. The consent order is developed between the user and the District. A consent order has the same force and effect as any other administrative order issued pursuant to this Ordinance. Any user subject to a consent order shall pay the District a consent order fee as established by resolution.

H. Compliance Order.

1. The District Engineer may issue a compliance order for a violation of this Ordinance, the user's Industrial User Permit, or an order issued thereunder. Compliance orders shall specify the provisions violated and the facts constituting the violation(s), and direct that adequate treatment be installed and operated by a specified time period. Compliance orders may also contain such other requirements as the District Engineer deems appropriate to assure timely compliance with this Ordinance, such as installation of pretreatment technology, additional self-monitoring or management practices, adherence to a compliance schedule, submission of action plans, and appearance by the user at a specific time and place for a compliance meeting, or other measures necessary to achieve and maintain compliance. Compliance orders are developed without user comment. A user subject of a compliance order shall pay a compliance order fee as established by resolution.

2. If no public hearing on the violation has been previously conducted, the alleged violating user may either submit a written explanation or other response to the compliance order or request that the District Engineer conduct either an informal meeting or a hearing. Such submission or request shall be in writing and filed with the District Engineer no later than ten calendar days after service of the compliance order. The submission or request shall not stay the compliance order.

I. Civil Penalty Order.

A civil penalty order may be issued to assess penalties and any other costs incurred by the District in the investigation, monitoring, legal assistance, enforcement, cleanup or repair caused by the user's violation. The civil penalty order may be included with any other administrative order.

J. Cease and Desist Order.

A cease and desist order shall be issued by the District Engineer to any user or person whose violation of this Ordinance, Industrial User Permit, or any order issued under this Ordinance, poses a threat to the POTW, storm drain, personnel, environment or the public. A cease and desist order may also be issued by the District Engineer to a user who continues to discharge industrial wastewater to the District's POTW without a valid Industrial User Permit. The District Engineer may issue a cease and desist order immediately upon

discovering any such violation and direct a user or person in noncompliance to take such appropriate remedial or preventive actions as District Engineer deems are needed to eliminate a continuing or threatened violation, including stopping operations and terminating the discharge. Such cease and desist order shall include the provision violated and the facts constituting the violation. A user subject to a cease and desist order shall pay the District a cease and desist order fee as established by resolution.

K. Show Cause Order.

The District Engineer may set a hearing requiring a user to show cause why the District should not take a proposed enforcement after issuance and conclusion of a consent order, compliance order, or cease and desist order. The hearing shall be held before the enforcement action is executed. The hearing shall follow written procedures established by the District Engineer, maintained for public review in the office of the District Engineer, and provided to the user together with the hearing notice. The hearing procedures shall provide the user with notice and an opportunity to be heard, and may include the following:

1. Appearance by the user to show cause to the District Engineer why a proposed enforcement action should not be taken;
2. The hearing shall be open to the public;
3. A notice of the hearing and order shall be served on the user specifying the time and place for the hearing; the proposed enforcement action and the reasons for such action, the alleged violation and the facts supporting the violation, and a request that the user show cause why the proposed enforcement action should not be taken;
4. The District Engineer shall permit the user to respond to the notice and order, to present evidence and argument on all relevant issues, and to conduct cross-examination of any witnesses necessary for the full disclosure of the facts;
5. The District Engineer may request the attendance and testimony of witnesses and the production of evidence relevant to any matter, and may seek subpoenas from the appropriate court to compel the presence of witnesses;
6. The testimony taken shall be under oath and recorded, with a transcript prepared and provided to any person upon payment of the usual charges for such transcript;

7. The notice of the hearing and the order to show cause shall be served upon the user personally or by registered or certified mail (return receipt requested) at least fifteen calendar days prior to the hearing; except that the District Engineer may set an earlier date for the hearing at the user's request. Such notice may be served on any authorized representative of the user;

8. Upon review of the evidence, the District Engineer shall make written findings of fact and decision in the nature of an order, which shall be served upon user; and

9. The District may immediately impose an enforcement action after the hearing whether or not a duly notified user appears as noticed.

Section 525 Permit Revocation.

The District Engineer may revoke any Permit if the user violates any provision of this Ordinance or the Permit. Those violations include but are not limited to: falsification of information; denial of the right of entry when conditioned in the Permit; user's failure to re-apply for a Permit or request a required permit modification; user's failure to pay required permit fees or charges; or user's discharge in violation of this Ordinance. Validity of a Permit shall be conditioned upon industrial user's compliance with this Ordinance. The District Engineer may revoke the Permit upon a minimum notice of fifteen calendar days when the District Engineer finds that user violated any provision of this Ordinance or Permit. Within the fifteen days prior to the intended permit revocation, the District Engineer shall make a hearing available to the industrial user. All costs for Permit revocation and reissuance will be paid by the user.

Section 530 Termination of Service.

The District Engineer may immediately order a user to cease discharge of wastewater to the POTW, and may suspend wastewater disposal and treatment service to stop an actual or threatened discharge that presents or may present an imminent danger to the health or welfare of persons or to the environment, causes interference or pass-

through, causes the District to violate its agreements with the City of Riverside or to have the City violate its NPDES permit, or if the user has failed to obtain a valid Permit. If the user fails to voluntarily comply with the suspension order, the District Engineer may take such steps as deemed necessary, including severing a sewer connection, to prevent damage to the POTW, or danger to any person or the environment. All costs for terminating or reestablishing sewer service shall be paid by the user.

Section 535 Notice Publication.

The names of all significant industrial users which are found to be in significant noncompliance with this Ordinance shall be published at least annually in a newspaper(s) of general circulation that provides meaningful public notice within the City of Moreno Valley, in accordance with 40 CFR 403.8(f)(2)(vii). The names of all industrial users shall also be published whose violation of a pretreatment standard or requirement or whose discharge that the District determines has:

- A. Caused, alone or in combination with other discharges, interference or pass-through at the POTW, including endangering the health of POTW personnel or the public;
- B. Posed imminent danger to human health, welfare or to the environment or resulted in the District exercising its emergency authority to stop or prevent a harmful discharge; or
- C. Adversely affected the operation or implementation of the District's Pretreatment Program, including violation(s) of Best Management Practices.

Section 540 Civil Penalties.

A. Any user violating any provision of this Ordinance, user's permit, or administrative order shall be liable to the District for a civil penalty of not more than one thousand dollars per violation per day for as long as the violation continues, plus actual damages incurred by the District. In addition to these penalties and damages, the District Engineer may order user to pay the District's costs, including reasonable attorney's fees, court costs, and other expenses associated with the enforcement activities, including, but not limited to, sampling, monitoring, laboratory costs and inspection expenses.

B. Upon petition by the District Engineer, through the City Attorney, an award of such penalties, damages and costs shall be ordered against such user by an appropriate court in the County of Riverside. In determining the amount of such penalties, damages and costs, the court shall take into account all relevant circumstances, including but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through a user's violation, corrective actions by a user, the compliance history of the user, good faith efforts to restore compliance, threat to human health, to the environment and to the POTW, and any other factor as justice requires. The purpose of any civil penalty is to encourage compliance and remedy unquantified damage to the POTW and environment, and not to impose criminal sanctions or retribution.

C. If any user discharges wastewater to the POTW contrary to the provisions of this Ordinance, federal or state pretreatment requirements, or any order of the City or permit issued under this Ordinance, the District Engineer through the City Attorney may commence an action for appropriate legal and/or equitable relief in the appropriate court in the County of Riverside

Section 545 Criminal Penalties.

A. Any user which willfully or knowingly violates any provision of this Ordinance, or any orders or permits issued hereunder shall, upon conviction, be guilty of a misdemeanor, punishable by a fine not to exceed one thousand dollars or imprisonment for not more than six months, or both, per violation per day. This penalty shall be consistent with the Federal Clean Water Act, 33 U.S.C. 1251, et seq., and shall apply to the exclusion of any other more lenient Ordinance provision. A user shall be guilty of a separate violation for each day a violation of any provision of this Ordinance or Industrial User Permit is committed or continued by such user.

Any user that willfully or knowingly makes any false statements, representations, or certifications in any application, record, report, plan or other document filed or required to be maintained pursuant to this Ordinance or the user's Industrial User Permit, or which falsifies, tampers with, or knowingly renders inaccurate any monitoring

device or method required under this Ordinance shall, upon conviction, be guilty of a misdemeanor punishable by a fine of not more than one thousand dollars per violation per day or imprisonment for not more than six months, or both, per violation per day. This penalty shall be consistent with the Federal Clean Water Act, 33 U.S.C. 1251, et seq., and shall apply to the exclusion of any other more lenient Ordinance provision.

Section 550 Probationary Periods.

A user issued a written warning may be placed on probation for up to six months. A user issued a Notice of Violation may be placed on probation for up to twelve months. If the user commits the same violation within the probationary period, more severe enforcement may follow. Violations committed after the probationary period, will be treated as a new violation for purposes of enforcement. Repeated same violations can only be granted two probationary periods. If the same violation occurs after two consecutive probationary periods accompanying either a written warning or a notice of violation, more severe enforcement may follow.

Section 555 Remedies Nonexclusive.

The remedies in this Ordinance are non-exclusive. The District Engineer may take any, all, or any combination of these remedies against a noncompliant user. Enforcement of Ordinance violations will generally be in accordance with the District Enforcement Response Plan. The District Engineer, however, may take alternative actions against a user as circumstances warrant. The District Engineer may also take multiple enforcement actions against a user.

Section 560 Judicial Collection.

After an order making any monetary amount owing under this Ordinance has become final, or after a court in an action has entered a final judgment in favor of the District, the District Engineer through the City Attorney may initiate a civil action, if not earlier filed as a part of the judicial review, in the appropriate court to recover such amount plus prevailing interest from the date of the final order or the date of the final judgment, as the case may be. In such an

action, the validity, amount, and appropriateness of such penalty shall not be subject to review. Any user who fails to pay on a timely basis the amount of an assessment of a civil penalty as described in this Section shall be required to pay to the District, in addition to such amount and interest, the City's attorneys' fees and costs, including filing fees, process service fees for collection proceedings and a quarterly nonpayment penalty for each quarter during which such failure to pay persists. Such nonpayment penalty shall be in an amount equal to twenty percent of the aggregate amount of such person's penalties and nonpayment penalties that are unpaid as of the beginning of such quarter.

Section 565 Damage to Facilities or Interruption of Normal Operations.

When a user's discharge causes an obstruction, damage, interference, pass-through or otherwise adversely impacts the POTW, the District Engineer may assess a charge, including administrative costs attributable thereto, against the user for costs incurred by the District for extra monitoring, investigation, quantifiable damages and work required to clean, repair and resume normal operations. A ninety percent administrative fee shall be added to the direct charges. Unless appealed as provided herein, such charge shall be payable by the user within thirty calendar days of being notified of such charge and is subject to collection by civil suit or other procedures provided in this Ordinance.

Section 570 Appeals.

A. Any user affected by and dissatisfied with any decision, order, Industrial User Permit, or enforcement action under this Ordinance may file an appeal with the District Engineer requesting reconsideration. The appeal must be in writing, detail the facts supporting the user's disagreement, and submitted within ten calendar days of receiving notice of the matter to be appealed. The District Engineer shall decide the matter and issue a written decision within ten calendar days of receiving the appeal. Submitting an appeal does not automatically suspend any obligations or enforcement.

B. If the appellant is not satisfied with the District Engineer's decision, then the appellant may, within ten calendar days after receiving the District Engineer's decision, file a

written appeal with the ECSD's Board of Directors, lodging such appeal with the District's Manager along with an appeals fee of one hundred dollars. The Board of Directors will hear the appeal within thirty calendar days of filing or the next regularly scheduled meeting. The ECSD's Board of Directors will normally make a ruling on the appeal within 15 days of the hearing.

C. That the degree of protection shall be commensurate with the degree of hazard ECSD Board of Directors final ruling shall be deemed the District's final decision on the matter. No person may obtain judicial review of any decision, order, or enforcement action by the District under this Ordinance without first having exhausted his or her administrative remedies set forth in this Section.

Section 575 Alternative Enforcement Procedures.

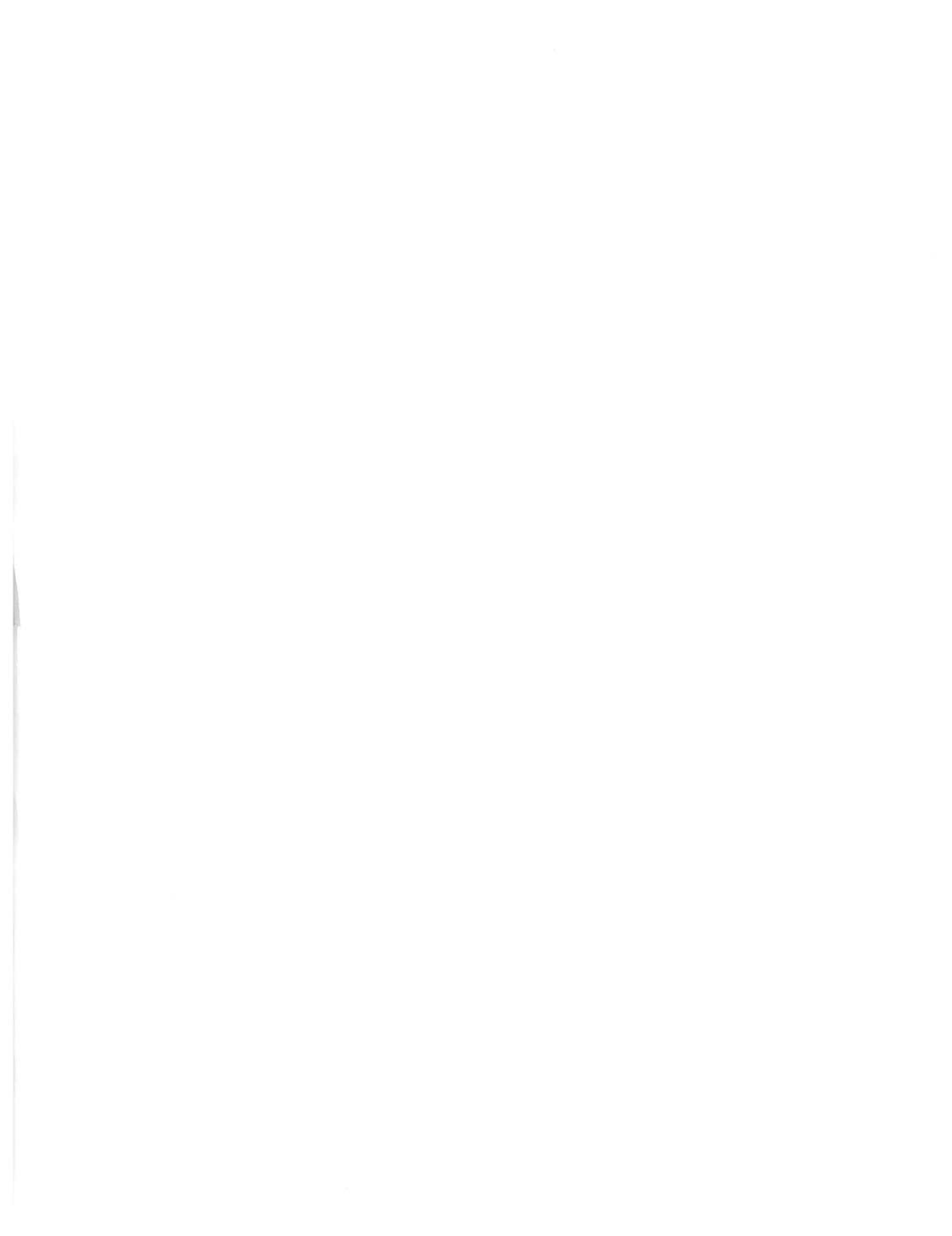
The District Engineer may also seek penalties, payments, and liens on a user's property as provided in Government Code Sections 54739 et seq.

Section 580 Invalidity.

If any provision of this Ordinance or the application thereof to any user or circumstance is held invalid, the remainder of this Ordinance and the application of such provision to other users or circumstances shall not be affected thereby.

Section 585 Interpretation - Intent.

All the provisions of this Ordinance are to be reasonably interpreted. The intent herein is to recognize that there are varying degrees of hazard to the POTW, personnel, environment and the public, and to apply the principle that the degree of protection shall be commensurate with the degree of hazard.



ORDINANCE NO. 279

An Ordinance of Edgemont Community Services District

Relating to

SEWER CONNECTIONS AND PERMITS

ORDINANCE NO. 279

An Ordinance of Edgemont Community Services District

Relating to

SEWER CONNECTIONS AND PERMITS

Sections:

- 010 Sewers required to be constructed as condition of approval of subdivisions--Costs.**
- 020 Maintenance of house sewer connections--Right of entry of inspectors.**
- 030 Connection to public sewer required.**
- 040 Renting unconnected premises.**
- 050 Connection permit required.**
- 060 Application for connection permit.**
- 070 Connection permit application for large areas developed pursuant to subdivision maps.**
- 080 Determination of cost--No charge under certain conditions.**
- 090 Cost to be computed when property not assessed or assessment not paid.**
- 100 How cost computed--Issuance and contents of permit.**
- 110 Recovery of cost upon subsequent payment of construction assessment.**
- 120 Off-site trunk lines and general plant facilities charges.**
- 130 When fees in Section 120 payable.**
- 140 Time limit for construction of connection.**
- 150 Receipt and disposition of funds.**

Section 010 Sewers required to be constructed as condition of approval of subdivisions--Costs.

Subdividers and developers required to install sewers as conditions of approval of subdivisions, records of surveys, conditional use permits, etc., shall design such sewers as specified by the District Engineer¹ or his designee and shall construct such size and capacity as required by the District Engineer; provided, that when the installation of sanitary sewers of increased size are required to serve additional areas, the cost of such increase shall be paid for by the District. The District Engineer shall determine the pro rata cost between the developer and the District, but shall not allow District participation in the construction cost of any sanitary sewer of eight-inch diameter in single-family residential developments or ten-inch diameter in other types of development. Reimbursements for oversizes shall be computed by the District Engineer on the basis of actual pipe price differentials between the sizes required and those maximums set forth in this section, plus twenty percent of this price differential.

Section 020 Maintenance of house sewer connections—Right of entry of inspectors.

All persons shall keep their house connections (sewer lateral line from the house to the sewer cleanout at the property line or if no cleanout exists, the sewer lateral line from the house to the main sewer line)) in good order at their own expense and shall be liable for damages and repairs which may result from failure to do so. A District inspector shall be admitted at all reasonable hours to all parts of any premises and structures connected to the sewerage system for the purpose of checking any facilities mentioned in this Ordinance and establishing sewer service charges as provided in the annual ordinance fixing such charges. The District shall maintain the main sewer line and, if there is a cleanout the sewer lateral from the property line to the point of connection to the mainline sewer. (See the District's Sewer Lateral Policy and Ordinance No. 277)

¹ _____ in this Ordinance where it states District Engineer it means District Engineer or his designee.

Section 030 Connection to public sewer required.

A. No one shall occupy a house or any other structure within the District or camp or live on any premises within the District, unless such house or other structure or such premises be properly connected to a public sewer whenever the property on which such house, other structure or premises is situated abuts upon a public or private street or alley or other right-of-way in which there exists a public sewer to which connection may be made; provided, however, if a house or structure is served by a satisfactorily functioning septic system, such connection to a public sewer system will not be required until the septic system for such house or other structure fails.

B. Anyone desiring to obtain a building permit for an addition to any existing house or structure shall be allowed to continue to use a properly functioning septic system.

C. Anyone desiring to obtain a building permit for a new house or structure shall connect to the public sewer system when the property on which such house or structure is situated is not more than one hundred sixty feet from the public sewer and the right-of-way admits such connection, or if the house or structure is located within an area where the use of a septic tank poses a potential contamination risk as specified by resolution of the City of Moreno Valley Council. All new houses or structures located within such area must be properly connected to the public sewer system. Even if the property on which such house or structure is situated is more than one hundred sixty feet from the public sewer and/or the right of way; it must be altered to admit such connection.

Section 040 Renting unconnected premises.

It is unlawful for anyone either as owner or agent, to rent any house or other structure or premises not connected with a sewer as required in Section 030.

Section 050 Connection permit required.

It is unlawful for any person to connect any property with any public sewer without first obtaining a connection permit from the District .

Section 060 Application for connection permit.

Any person desiring to connect any property with any public sewer shall, before making any connection thereto, make application therefor to the Edgemont Community Services District and, concurrently with the issuance of the permit, shall pay to the District any required connection charge. The application for the permit shall be in writing on a form provided by the District and shall contain a correct legal description of the land which is to be included in the permit.

Section 070 Connection permit application for large areas developed pursuant to subdivision maps.

Application for sewer connection permits to service large areas to be developed pursuant to a subdivision map, parcel map, conditional use permit or other similar proceeding shall be filed at the time the applicant initiates such proceedings. In the event no District sewer is immediately available, the applicant shall provide engineering plans for construction of necessary extensions to the nearest feasible sewer facility. Applicants for development of industrial areas and nonindustrial areas shall construct the required extension at their own cost.

Applicants who have constructed a sewer extension may apply to the District for a reimbursement contract to recover a portion of future fees paid for connections to the extension. The District may approve such a contract containing such provisions as may be approved by the District Board of Directors.

Section 080 Determination of cost--No charge under certain conditions.

The District shall consider each application for a connection permit and determine whether the public sewer is of such capacity and construction that the desired connection may be made in accordance with proper engineering and construction practices and whether the property has been assessed for connection to the sewer or the owner of the property has contributed to the cost of the construction of the sewer.

No charge or fee for the permit which is based upon benefits to the land shall be charged if the District determines that:

A. The land is a part of an assessment district upon which the cost of construction of the sewer was assessed according to benefits derived from the construction of the sewer as a local or district sewer as distinguished from an outfall sewer; or

B. The owner of the land or his predecessor in interest either constructed the sewer or contributed to the cost of its construction in an amount commensurate with the benefits to be derived from the permitted connection;

C. The desired connection is to be made to a public sewer other than a District sewer.

Section 090 Cost to be computed when property not assessed or assessment not paid.

If the District Engineer determines that the property described in the application for the permit to be connected to a District sewer has not been assessed for the cost of connection to the sewer or its owner has not paid for the construction of the sewer, as mentioned in Section 080, he shall compute the amount of the charge to be made for the permit. The amount of the charge shall be computed according to the benefit to the land and shall be computed by the District Engineer according to such method as may be adopted by him and which is in substantial compliance with the generally accepted methods of making and spreading assessments in proceedings under the Improvement Act of 1911 and similar acts, upon the basis of district assessments, as distinguished from the front foot assessments.

Section 100 How cost computed--Issuance and contents of permit.

The District Engineer shall compute the amount of connection charge by determining the number of units of benefit to the land described in the application for a connection permit, considering the width, depth, size and shape of the parcel of land and its location with reference to the sewer and by applying to the determined number of units of benefit a factor per unit as set by ordinance of the District's Board of Directors.

Upon payment of such amount, the District may issue the requested permit. The permit shall include a correct legal description of the parcel of land which may be connected with the public sewer by one or more permitted connections for the connection charge paid upon issuance of the permit.

Section 110 Recovery of cost upon subsequent payment of construction assessment.

In case any connection charge provided for in Sections 090 and 100 is paid and thereafter an assessment district is created and a public sewer is constructed and such property is assessed for such construction work, the owner of the property, on application to the District Engineer on or before two years following the creation of the assessment district, shall be entitled to have repaid to him from the District the amount paid to the District for such connection charge.

Section 120 Off-site trunk lines and general plant facilities charges.

Any person desiring a permit to connect property with a District sewer in addition to all other fees but subject to the same limitations imposed herein shall pay for off-site trunk lines and general plant facilities required for the treatment and disposal of sanitary sewage an amount as established by the District's Board of Directors by resolution.

The charges applied in this ordinance shall also apply pro rata to any alteration or addition resulting in an additional dwelling unit in a hotel or motel development.

The charges applied in this section shall also apply pro rata to any alteration or addition to any commercial, institutional or industrial development requiring a new building permit whether or not there are sewer facilities in the addition or enlargement.

Section 130 When fees in Section 120 payable.

Payment of the fees specified in Section 120 for subdivisions shall be made prior to the District's issuance of a sewer permit. Payment of the above-specified fees on other than subdivisions shall be paid at the time of the permit issuance.

Section 140 Time limit for construction of connection.

Any property owner making application for a sewer permit, as provided for in this ordinance, must make the connection from the public sewer to the property line within six months from the issuance of such permit; otherwise such permit shall, upon the expiration of such time, become null and void.

Section 150 Receipt and disposition of funds.

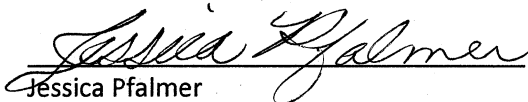
The District Manager is empowered to collect and receive the money for connection charges provided for in this ordinance, and all money so collected shall be deposited by the Manager in the appropriate District bank account.

Dated: February 25, 2016



Michael Addie
President of the Board of Directors
Of EDGEMONT COMMUNITY SERVICES DISTRICT

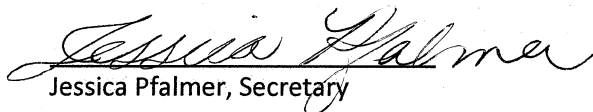
ATTEST:



Jessica Pfalmer
Secretary of the Board of Directors
of EDGEMONT COMMUNITY SERVICES
DISTRICT

CERTIFICATION

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of Ordinance No. 279, adopted by the Board of Directors of Edgemont Community Services District at its regular meeting held February 25, 2016.



Jessica Pfalmer, Secretary

Ordinance No. 280

Edgemont Community Services District

Pretreatment Program

Enforcement Response Plan

February 2016

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Introduction

Edgemont Community Services District (District) implements an approved Pretreatment Program as required by the District's Sewer System Management Plan. The program's legal authority and enforcement capabilities are codified in Ordinance No. 278 and associated resolutions dealing with fees, charges, pollutant limitations, and user permits. The primary purpose of the District's Pretreatment Program is to protect the District's collection system, the City of Riverside POTW, personnel, and contractors from harmful or detrimental wastewater discharges and accidental and negligent spills of industrial, commercial and hazardous waste. The District accomplishes these tasks by permitting, inspecting, monitoring industrial users, taking appropriate enforcement actions and data management.

The District Engineer oversees the pretreatment program. The District Legal Counsel advises on legal issues and reviews regulations and enforcement documents. Authorized representatives of the District Engineer include, but are not limited to the employees of the City of Riverside.

Enforcement actions are progressive in nature and will escalate commensurate with the violation and response from the Industrial User (IU). Assistance in the preparation of major violation civil enforcement responses is provided by the District Legal Counsel. The District is also able to refer violations for enforcement to the California Regional Water Quality Control Board, Santa Ana Region. State of California criminal enforcement responses may be taken by either: 1) the Riverside County District Attorney's office with assistance from the District and the Riverside County Department of Environmental Health; or 2) the California Regional Water Quality Control Board, Santa Ana Region using the California State Attorney General. Federal criminal enforcement responses may be taken by the United States Environmental Protection Agency, Criminal Investigation Division using the United States Department of Justice with support from the District Legal Counsel.

The District uses permitting, inspection and wastewater monitoring, to implement the requirements of the District's Pretreatment Program. The District has a permitting system for Industrial Users (IU). The various permits include Class I-VI Users, De Minimums Categorization, Wastewater Discharge Authorization Certificates (WDACs), and Group Permits. The District and/or their contractors use inspection, surveillance and monitoring activities to detect noncompliance at IU sites. Follow-up inspections are used to verify compliance with discovered violations. Inspection and monitoring activities are conducted in a scheduled and unscheduled manner. The majority of the inspections and monitoring visits are unannounced in order to provide a more realistic representation of business and production activities and wastewater discharge characteristics. The equipment used for these activities include:

- Portable automatic wastewater samplers with discrete or composite bottles
- Portable automatic wastewater samplers with pH and electrical conductivity meters that have computer data logging and data downloading capabilities
- Gas detectors
- Hand held electrical conductivity meters and pH meters
- Portable recording flow meters
- pH indicator strips
- Sulfide test kits
- Digital cameras and video cameras
- Various computers systems and software

Inspection results, complaints, sample results, correspondence, and other data collected and generated by the Pretreatment Program are managed in accordance with the District's records retention policy and by storing the data on a file server and/or manual file system. Original paper documents for Class I-VI permitted or non-permitted users, Group Permits, WDACS, De Minimus Permits, are kept in file cabinets. Pursuant to the District's procedures, the records retention period for paper records is seven years, unless otherwise

directed by civil or criminal investigations or court order. All documents, written or electronic are managed in accordance with the District's records retention policy. User blueprints, schematics, agreements, and plot plans are maintained for the life of the permit or non-permitted file.

Definitions

Unless otherwise defined herein, definitions of terms related to the Pretreatment Program, Industrial User Permits and this Enforcement Response Plan shall be those set forth in the District's Ordinance No. 278 which regulates the discharge of wastes into the District's sewerage system.

1. Administrative Order (AO) means an enforcement action authorized by Ordinance No. 278 Section 520, which directs Industrial Users to undertake corrective actions or cease specified activities to correct violations.

2. Best Management Practices (BMPs) means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in Ordinance 278 Section 335. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

3. Categorical Pretreatment Standards means those final regulations promulgated and adopted by the Federal Environmental Protection Agency (EPA) containing pollutant discharge limits and prohibitions (as outlined in 40 CFR 403.6 and 40 CFR, Chapter I, Subchapter N) for each identified Standard Industrial Classification (S.I.C.), North American International Coding System (NAICS) or subcategory.

4. Categorical Industrial User (CIU) means all industrial user categories subject to National Categorical Pretreatment Standards listed by the United States Environmental Protection Agency under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N.

5. City means the City of Riverside.

6. Code of Federal Regulations (CFR) means the codification of the general and permanent rules published in the United States Federal Register by the Executive departments and agencies of the Federal Government, including the Environmental Protection Agency.

7. Collection Agency means the District and/or the City of Riverside. The District has an interagency agreement with the City of Riverside pertaining to the collection of sewage within the District and the discharge of such collected sewage into the City's sewer system for transmission, treatment, and disposal.

8. Collection System means all wastewater conveyance systems or sewerage system owned and maintained by the District.

9. Compliance Order means a time schedule issued to an Industrial User by the District which specifies actions called milestones to be taken by the Industrial User to correct violations of the Industrial User's wastewater discharge permit or Ordinance No. 278.

10. Consent Order means a time schedule agreed upon between the District and an Industrial User that specifies corrective actions called milestones to be taken by the Industrial User to correct violations of the Industrial User's Wastewater Discharge Permit or Ordinance No. 278.

11. Control Authority means the District.

12. CIS means Customer Information System.

13. De Minimus User means any user whose industrial wastewater discharge is less than 100 gallons per day and is not regulated by a federal categorical pretreatment standard and may be classified in the District Engineer's discretion as de minimus and shall not be subject to permitting standards or local limits provided that such industrial wastewater discharge is not a hazardous substance, does not contribute to interference or pass through violations at the POTW or violations of the City's National Pollution Discharge Elimination System (NPDES) permit, and does not cause detrimental effects or damage to the District's collection system or POTW, or cause a threat of harm to the District or City personnel, the public, or the environment.

14. District Engineer means the Registered Civil Engineer designated by the Board of Directors of ECSD.

15. Discharge Requirements means the specific numerical limits, prohibitions, and reporting requirements as contained in an Industrial User Permit and Ordinance No. 278

16. District means Edgemont Community Services District (ECSD).

17. Dry Categorical User means Categorical Industrial Users which have no wastewater discharges to the District's collection system that are regulated by National Categorical Pretreatment Standards contained in 40 CFR Parts 405-471 and amendments thereto. These Industrial Users shall not be considered Significant Industrial Users as defined by 40 CFR Part 403.

18. Enforcement Compliance Schedule Agreement (ECSA) means the written agreement between the District and an industrial user that contains a compliance schedule to correct the industrial user's violations of Ordinance No. 278.

19. Enforcement Policy means the current methods as outlined in this District's Enforcement Response Plan and utilized by the District to gain compliance from Industrial Users for violations of wastewater discharge permit conditions and the methods outlined in Ordinance No. 278.

20. Facility Waste Management Plan means a written plan required by the District of all permitted Industrial Users including, as necessary: a Toxic Organic Management Plan; a Spill Prevention Control Plan; a Pretreatment System Operations and Maintenance Manual; and a Management of Hazardous Materials and Hazardous Waste Plan.

21. 40 CFR means Title 40 of the Code of Federal Regulations relating to the protection of the environment.

22. Group Permit means a control document issued to a group of Industrial Users that shall share common business identification as defined by the Federal North American Industry Classification System (NAICS) codebook. Group permits shall not be issued to Categorical Users or Dry Categorical Users.

23. Industrial User (IU) means all persons and entities, public or private, industrial, commercial, governmental, or institutional which discharge or cause to be discharged, wastewater and waterborne waste into the collection system of the District.

24. Interference means any discharge from any User which, alone or in conjunction with discharges from other sources, inhibits or disrupts the District's collection system or the City's treatment processes or operations, or sludge processes, use or disposal; and which is a cause of a violation of any requirement of the City's NPDES Permit (as per 40 CFR 403.3).

25. **IR** means Inspection Report

26. **Liquid Waste Hauler (LWH)** means any person engaged in the truck hauling of liquid wastes from gravity separation interceptors, septic tanks, seepage pits, cesspools, or any other private disposal system.

27. **May** means permissive.

28. **Major Violation** means those violations that involve this Ordinance 280, Ordinance 278, Administrative Orders, Civil/Criminal Penalties, Legal Action, Industrial User Permit Revocation, Termination of Service, or result in Significant Noncompliance.

29. **Minor Violation** means those violations that involve the issuance of correction notices or written warnings and cause no harm to the POTW or environment or endanger the public, the District or City of Riverside employees.

30. **MSD** means Material Safety Data

31. **Ordinance No. 278** means Ordinance 278 of ECSD relating to the Discharge of Wastes into the Public Sewer System as it currently exists and as hereafter amended.

32. **Pass-Through** means the discharge of pollutants through the POTW in quantities or concentrations that are a cause, in whole or in part, of a violation of any requirement of the City's NPDES Permit (pursuant to 40 CFR 403.3).

33. Person means any individual, firm, company, association, society, general or limited partnership, limited liability company, trust, corporation, governmental agency or group, and includes the plural as well as the singular.

34. Pollutant means any component or characteristic of wastewater or waterborne waste that is regulated by an effluent discharge limitation or prohibition imposed by the District, the City or other regulatory agencies.

35. Pretreatment means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to discharge of the wastewater into the District's collection system. The reduction or alteration may be accomplished by physical, chemical or biological processes, process changes, waste minimization, or other legal means designed to remove or reduce pollutants in a wastestream, but not by dilution.

36. Pretreatment Facility means any structures, equipment, devices or processes for the reduction, elimination, or alteration of pollutants and/or flow control of wastewater prior to discharge to a collection system.

37. Publicly Owned Treatment Works (POTW) means a wastewater treatment plant, e.g., the Riverside Regional Water Quality Control Plant (RRWQCP). This definition includes the collection system, within the District and the City of Riverside which includes the sewers, pipes and other conveyances of wastewater to a treatment plant, except for private sewer lateral connections. It also includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes.

38. POTW Treatment Plant means the City of Riverside Regional Water Quality Control Plant which is designated to provide treatment (including recycling and reclamation) of municipal sewage, permitted liquid waste hauler wastewater, or other wastewater authorized for delivery to the City's POTW treatment plant.

39. RMC means the Riverside Municipal Code

40. Shall mean mandatory.

41. Significant Non-Compliance (SNC) means any Industrial User with violations that meet one or more of the following criteria:

- a) Chronic violations of wastewater discharge limits, which are defined as those in which sixty-six percent or more of all of the measurements taken during a consecutive six month period exceed (by any magnitude) the a numeric pretreatment standard, local limit, or requirement, including instantaneous limits;
- b) Technical Review Criteria (TRC) violations, which are defined as those in which thirty-three percent or more of all of the measurements taken during a consecutive six month period equal or exceed the product of the numeric pretreatment standard, local limit, or requirement, including instantaneous limits, multiplied by the applicable TRC (TRC=1.4 for BOD, COD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);
- c) Any other violation of a pretreatment standard or requirement, including daily maximum, long-term average, instantaneous limit or narrative standard that the District determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public);

- d) Any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or the environment, or has resulted in the District or its representatives exercising its emergency authority to halt or prevent such a discharge;
- e) Failure to meet, within ninety days after the schedule date, a compliance schedule milestone contained in an Administrative Order or Enforcement Order for starting construction, completing construction, or attaining final compliance;
- f) Failure to provide required reports such as baseline monitoring reports, 90 day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules within forty-five days of the due date;
- g) Failure to pay, within 30 days, all applicable industrial user application, permit, and enforcement penalty fees.
- h) Failure to accurately report non-compliance;
- i) Any other violations or group of violations that the District determines will adversely affect the operation and implementation of the District's pretreatment program.

42. Significant Industrial User (SIU) means all industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR chapter I, subchapter N; any industrial user that discharges an average of 25,000 gallons per day or more of process wastewater to the District's sewerage system (excluding sanitary, noncontact cooling water and boiler blowdown wastewater); contributes a process

wastestream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the District's allocated capacity in the Regional Water Quality Control Plant; or is designated by the District as such on the basis that the industrial user has a reasonable potential for adversely affecting the District's or the City's POTW operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8).

43. Standard Operating Procedure (SOP) means an internal written procedure for the management and interpretation of the District's pretreatment program and is maintained in the District's office.

44. Spill Containment means a protection system installed by an Industrial User to prevent the commingling of incompatible materials and/or accidental discharge of prohibited and/or incompatible pollutants to the collection system or storm drain.

45. Storm Drain means a system of open channels, lined and unlined channels, surface channels, impound basins, ground water recharge basins, storm water holding ponds, underground pipes, curb and gutter, cross gutters, storm water pump and lift stations, parking lots, streets, and natural water courses used to collect and direct storm precipitation and surface runoff to a receiving body of water or underground aquifer recharge basins.

46. User means any person or entity, public or private, residential, industrial, commercial, governmental, or institutional which discharges or causes to be discharged, wastewater or water borne wastes into the District's collection system.

47. Waste means any and all discarded materials, liquid, solid, semi-solid, gaseous or radioactive.

48. Wastewater means any combination of waste and water, whether treated or untreated, discharged into or permitted to enter the District's collection system.

49. Wastewater Discharge Authorization Certificates (WDAC) are issued to any non-residential user desiring to discharge wastewater into the District's collection system, that does not qualify for an Industrial User Permit, Group Permit, or De Minimus Category and whose wastewater shall not have an adverse affect on the District meeting its Special Quality Standards and General Quality Standards¹ of its wastewater discharged into the City's POTW. WDACs shall not be issued to categorical industrial users. WDACs are issued for indefinite time periods, subject to periodic review and reconsideration by the District Engineer.

50. Waste Minimization means a written summary of practices and site-specific technical and economic information used for selecting appropriate techniques to reduce the production of wastes.

¹ Special Quality Standards and General Quality Standards as defined in "Agreement for Regional Primary and Secondary Treatment" Aug. 4, 1978, entered into by Western Municipal Water District, City of Riverside, Jurupa Community Services District and Rubidoux Community Services District.

Responsible Personnel

The District has three personnel positions that have a role in the implementation of the District's Pretreatment Program. The following is a listing and description of those positions.

1. **District Legal Counsel** provides legal guidance and assistance to the District on matters of enforcement actions, permits, and regulations.
2. **District Engineer** is the individual responsible for implementing the pretreatment program.
3. **District Manager** is the individual responsible for interacting with the District Legal Counsel, District Engineer and the District's Board of Directors.

Enforcement Responses and Responsible District Personnel

The District has codified certain enforcement responses in Ordinance No. 278 that are escalating in nature. The District Manager, District Legal Counsel and District Engineers are designated with authority to use these enforcement responses pursuant to Ordinance No. 278. Administrative Orders pursuant to Ordinance No. 278 Section 520 are issued and enforced by the District Engineer, or designee, with preparation and consultation from the District Legal Counsel. The following is a summary of the enforcement responses that all three personnel positions are authorized to perform and/or prepare as set forth in the Appendix attached hereto.

Enforcement Responses H-T described below is created with the advisement of the District Legal Counsel.

Enforcement Response

- | | |
|---|--------------------------------------|
| A. Phone Call | K. Compliance Order |
| B. Correction Notice | L. Civil Penalty Order |
| C. Written Warning | M. Cease and Desist Order |
| D. Informal Meeting | N. Show Cause Order |
| E. Senior Mitigation Meeting | O. Industrial User Permit Revocation |
| F. Stop Work Order | P. Termination of Service |
| G. Monitoring/Production Information Order (MPIO) | Q. Civil Penalties |
| H. Notice of Violation | R. Criminal Penalties |
| I. Violation Meeting | S. Probation |
| J. Consent Order | T. Publication |

Enforcement Responses and Uses

A. Phone Calls are used to quickly communicate with a user to clarify issues, provide information, and remind users of due dates. Substantive phone calls are documented with a written memo to the user's file. Substantive phone calls may include those that provide information for permits, enforcement responses, violations, complaints, and sample results.

B. Correction Notice and Extensions. A Correction Notice is given to a user to require correction of minor violations noted during an inspection of the user's facility. A compliance time extension may be granted to a user who fails to correct a minor violation required by a Correction Notice, upon showing of good cause by such user. "Good Cause" means an unforeseeable and unavoidable event or series of events, over which the user had no control and which prevented or significantly impaired the user's ability to comply with the correction notice. A copy of the Correction Notice is given to the Industrial User (IU) at the conclusion of the inspection. Extensions can be given at the compliance follow-up inspection or by letter. The Industrial User is given a copy of the extension at the conclusion of the inspection.

C. Written Warning is issued to notify a user of a minor violation and any violation that has not been corrected as required by a correction notice. The Written Warning shall state the provision(s) violated and the facts alleged to constitute the violation, and may include any proposed corrective actions or monitoring to be required. These warnings can be documented in a written inspection report at the time of the inspection. A copy is given to the Industrial User at the conclusion of the inspection. A compliance date for the violation is included on the inspection report. The compliance time can range from immediate to 30 days depending on the severity of the violation. The inspector² writing the Written Warning shall use best professional judgment in establishing compliance dates. Follow-up inspections shall be used to verify compliance on the due date stated in the inspection report. A Written Warning may also be sent to the Industrial User within 5 days after the inspection.

D. Informal Meeting is used to bring the user and the District into discussions to clarify any issue(s) related to the user's violation, permit, or conditions levied upon the user by the District. This meeting is for informational purposes only and does not carry any penalties.

E. Senior Mitigation Meeting may be used by the District Engineer or his designee or when a user has

² The inspector is a designee of the District Engineer, he maybe an employee of the District, Contractor or an employee of the City of Riverside.

been issued a Written Warning and has failed to achieve compliance. The purpose of the meeting is to discuss with the user their violation(s) and the potential consequences for not achieving compliance after the issuance of a Written Warning. This meeting provides an opportunity to educate the user about their violation(s) and affords an opportunity to present potential mitigative options to the user to achieve compliance before a Notice of Violation is issued.

F. Stop Work Order is issued to any person engaged in doing or causing to be done new construction, tenant improvements, alterations, or additions relative to the District pretreatment program if:

1. The District's permits have not been obtained; or
2. Work has begun without prior written approval by the District Engineer; or
3. Violations of this Ordinance are found at the site of the new construction, tenant improvements, alterations, or additions. Any user served a Stop Work Order pursuant to Ordinance No. 278, shall immediately stop such work until written authorization for such work is issued by the District Engineer.

G. Monitoring/Production Information Order (MPIO) is issued to a user when two consecutive violations for the same pollutant are detected in the District's wastewater discharge samples, user samples or both. The MPIO is used to determine if discharge compliance has been achieved or if a detected violation is consistent. The MPIO requires a user to sample the user's wastewater discharge for the pollutant(s) in violation and record the daily effluent wastewater flow for all days with a fourteen consecutive day period that industrial wastewater is discharged to the District's sewerage system. Production information is required of all categorical users that have production-based wastewater discharge standards. If oil and grease is a pollutant required to be tested by the MPIO, then the user shall take four grab samples for oil and grease in a twenty-four hour period on the same calendar day. Each sample shall be separated by a minimum of two hours. The four oil and grease samples shall be analyzed separately and the sample analytical results averaged for the purpose of reporting. The user shall be responsible for all costs incurred with the sampling, analysis, collection, and submittal of information.

H. Notice of Violation (NOV) is issued to a user for violation of a Written Warning, Stop Work Order, Industrial User Permit, Ordinance No. 278, an MPIO that has resulted in Significant Noncompliance (SNC), major violations, or any other violation that has resulted in SNC. When the District Engineer is made aware of the user's violation(s), the District Engineer may serve personally or by certified mail upon said user a written NOV. The NOV shall state the provision(s) violated and the facts alleged to constitute the

violation, and may include any proposed corrective actions or monitoring to be required. The NOV requires a user to respond in writing to the District Engineer, within ten calendar days from the date of receipt of the NOV, with a written explanation of or response to the violation(s) and a plan for the satisfactory correction or prevention thereof, including specific required actions. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the NOV. The user also has ten calendar days to appeal any findings made or actions required by the NOV. The NOV shall have a monetary penalty according to the following Enforcement Penalty Schedule (Table 1).

Table 1
Enforcement Penalty Schedule

User Category	NOV	Compliance Order	Consent Order	Cease and Desist Order	Violation Meeting	Show Cause Order
Class I	\$1,000	\$2,000	\$1,000	\$3,000	\$1,000	\$3,000
Class II, LWH	\$500	\$1,000	\$500	\$2,000	\$500	\$2,000
Class III, IV, V, NSIU, Restaurant, Group, De Minimus, WDAC	\$250	\$500	\$250	\$1,000	\$250	\$1,000

I. Violation Meeting is required of all users who have failed to achieve compliance after the issuance of an NOV, at the conclusion of an MPIO that has resulted in significant noncompliance, or after a pattern of violations has been discovered. This meeting shall be for the District to draft a Consent Order or Compliance Order or for the user to propose solutions, request time extensions, draft a compliance schedule, or file an appeal. The Violation Meeting shall have a monetary penalty according to the Enforcement Penalty Schedule.

J. Consent Order is a written agreement between the District and a violating user and may be issued at any time after finding a violation of Ordinance No. 278. Such agreement may be in the form of a compliance schedule with milestones, other specific actions to be taken by the user to correct or prevent the noncompliance within a specified time period, payment of damages, monetary penalties, fines, or other remedies. No milestone in the Consent Order shall exceed nine months in length. The Consent Order is developed between the user and the District personnel authorized for this activity. The minimum elements of an Enforcement Compliance Schedule Agreement (ECSA) generally are:

1. Hiring a consultant by the Industrial User to identify the problems causing the violations and submitting the consultant's report.

2. Design and submittal by the Industrial User of all pretreatment systems, equipment, facilities, and procedures to correct violations.
3. Review of the Industrial Users submittals by the District Engineer or his designee.
4. Hiring of contractors by the Industrial User.
5. Industrial User obtains all necessary permits.
6. All necessary equipment is ordered by the Industrial User and construction begins.
7. Construction is completed by the Industrial User.
8. Industrial User employees are trained by the Industrial User.
9. An MPIO is conducted by the user, if the violations were due to permit discharge violations.
10. Industrial User achieves compliance.

Written progress reports are required from the Industrial User throughout the term of the Enforcement Compliance Schedule Agreement. The minimum reporting frequency is every 30 days. A Consent Order has the same force and effect as any other Administrative Order issued pursuant to Ordinance No. 278 and shall have a monetary penalty according to the Enforcement Penalty Schedule.

K. Compliance Order shall be issued to a user that has violated or continues to violate this Ordinance and /or Ordinance 278, the user's industrial user permit, or order issued thereunder. The District may issue a Compliance Order to the user responsible for the violation(s) that shall specify the provisions violated and the facts constituting the violation(s). The Compliance Order shall direct adequate treatment facilities, devices, or other related appurtenances be installed and properly operated by qualified personnel for a specified time period. The Compliance Order is developed and written by the District Engineer or his designee without input from the industrial users. The purpose of the Compliance Order is to compel uncooperative or non-compliant IUs to achieve compliance. Compliance Orders may also contain other requirements, as deemed reasonably necessary and appropriate, to assure timely compliance with Ordinance No. 278. and correct the noncompliance. Such Compliance Order may require the installation of pretreatment technology, additional self-monitoring or management practices, compliance schedule with milestones, submission of action plans, appearance by the user at a specific time and place for a compliance meeting, or other measures necessary to achieve and maintain compliance. At no time, shall a Compliance Order contain a milestone that exceeds nine months in duration. The Compliance Order shall have a monetary penalty according to the Enforcement Penalty Schedule.

If no public hearing on the alleged violation(s) has been previously conducted, the alleged violating user may either submit a written explanation or other response to the Compliance Order or request that the District Engineer conduct either an informal meeting or a hearing. Such submission or request shall be in writing and filed with the District Engineer no later than ten calendar days after receipt of the Compliance Order. The submission or request shall not stay the Compliance Order.

L. Civil Penalty Order is issued to a user to assess penalties authorized by Sections 540 or 565 of Ordinance No. 278 and any other costs incurred by the District in the investigation, monitoring, legal assistance, enforcement, cleanup or repair caused by the user's violation. The Civil Penalty Order may be included with any other administrative order. The amounts of penalties are determined by the seriousness of the violation(s). Any user violating any provision of this Ordinance and/or Ordinance 278, permit term or condition, or administrative order shall be liable to the District for a civil penalty of not more than one thousand dollars per violation per day for as long as the violation continues, plus actual damages incurred by the District pursuant to Ordinance No. 278, Section 540(A).

M. Cease and Desist Order is issued to any user or person whose violation of this Ordinance and/or Ordinance No. 278, industrial user permit, or any order issued under Ordinance No. 278, poses a threat to the District's collection system, POTW, personnel, contractors, environment or the public. A Cease and Desist Order may also be issued to users who continue to discharge industrial wastewater to the District's sewerage system without a valid industrial user permit. A Cease and Desist Order may be issued immediately upon discovering any such violation and direct those users or persons in noncompliance to take such appropriate remedial or preventive action as may be deemed necessary to eliminate a continuing or threatened violation, including halting operations and terminating a discharge. Such Cease and Desist Order shall include the provision violated and the facts constituting the violation. A Cease and Desist Order shall have a monetary penalty according to the Enforcement Penalty Schedule.

N. Show Cause Order is a hearing requiring a user to show cause why a proposed enforcement action should not be taken by the District and shall be conducted prior to the District's imposition of such enforcement action against a user failing to achieve compliance with this Ordinance and/or Ordinance 278 or user's industrial user permit, after issuance and conclusion of a Consent Order, Compliance Order, or Cease and Desist Order. The Show Cause Hearing shall have a monetary penalty according to the Enforcement Penalty Schedule. The Show Cause Hearing shall be conducted pursuant to such written procedures as established by the District Engineer from time to time, maintained for public review in the

District's office, and provided to a user at the time of notice of such hearing. Such procedures shall provide user with notice and an opportunity to be heard, and may include the following procedures:

1. A Show Cause Order, issued by the District Engineer, shall order the violating user to appear at a Show Cause Hearing to show cause to the District Engineer why a proposed enforcement action should not be taken;
2. The Show Cause Hearing shall be public;
3. A notice of the Show Cause Hearing and the Show Cause Order shall be served on the user specifying the time and place for the public hearing; the proposed enforcement action and the reasons for such action, including any alleged violation and the facts constituting the violation, and a request that the user show cause why the proposed enforcement action should not be taken;
4. The District Engineer shall permit the alleged violating user to respond to the notice and order, to present evidence and argument on all relevant issues, and to conduct cross-examination of any witnesses necessary for the full disclosure of the facts;
5. The District Engineer may request the attendance and testimony of witnesses and the production of evidence relevant to any matter, and may seek from the appropriate court the issuance of subpoena to compel the presence of prospective witnesses;
6. The testimony taken shall be under oath and recorded, with a transcript prepared and provided to any person upon payment of the usual charges for such transcript;
7. The notice of the hearing and the order to show cause shall be served upon user personally or by registered or certified mail (return receipt requested) at least fifteen calendar days prior to the hearing; except that the District Engineer may set an earlier date for the hearing if the user requests the earlier date. Such notice may be served on any authorized representative of the user;
8. Upon review of the evidence, the District Engineer shall make written findings of fact and decision in the nature of an order, which shall be served upon user; and
9. The District may immediately impose an enforcement action after the hearing whether or not a duly notified user appears as noticed.

O. Industrial User Permit Revocation. The District Engineer may revoke any industrial user permit if the user is in violation of any provision of this Ordinance and/or Ordinance 278 or the industrial user permit. These violations include but are not limited to: falsification by user of information required by this Ordinance and/or Ordinance 278; user's denial to the District of the right of entry when conditioned in the industrial user permit; user's failure to re-apply for an industrial user permit or request a required permit modification; user's failure to pay required permit fees or charges; or user's discharges in violation of this Ordinance and/or Ordinance 278. Validity of the industrial user permit shall be conditioned upon industrial user's compliance with the provisions of this Ordinance and/or Ordinance 278. The District Engineer may revoke the industrial user permit upon a minimum notice of fifteen calendar days when the District Engineer finds that user violated any provision of this Ordinance and/or Ordinance 278 or industrial user permit. Within the fifteen days prior to the intended permit revocation, the District Engineer shall make a hearing available to the industrial user. All costs for Industrial User permit revocation and reissuance will be paid by the user.

P. Termination of Service. The District Engineer may immediately order a user to cease discharge of wastewater to the District's sewerage system, and may suspend wastewater disposal and treatment service for such user in order to stop an actual or threatened discharge which presents or may present an imminent or substantial endangerment to the health or welfare of persons or to the environment, or causes interference to the District's sewerage system, or causes the City to violate any condition of its NPDES permit, or if the user has failed to obtain a valid industrial user permit. If the user fails to comply voluntarily with the suspension order, the District Engineer shall take such steps as deemed necessary, including immediate severance of the sewer service lateral connection, to prevent or minimize damage to the POTW or collection system, or endangerment to any person or the environment. All costs for terminating service shall be paid by the user. All costs for reestablishing service shall be paid by the user.

Q. Civil Penalties

- A. Any user violating any provision of this Ordinance and/or Ordinance 278, user's permit, or Administrative Order shall be liable to the District for a civil penalty of not more than one thousand dollars per violation per day for as long as the violation continues, plus actual damages incurred by the District pursuant to Ordinance No. 278 Section 540(A). In addition to these penalties and damages, the District Manager may order user to pay the District's costs, including reasonable attorney's fees, court costs, and other expenses associated with the enforcement activities, including, but not limited to, sampling, monitoring, laboratory costs and inspection expenses.

B. The District Manager shall petition an award of such penalties, damages and costs against such user by an appropriate court in the County of Riverside. In support of such petition and as a basis to determine the amount of such penalties, damages and costs, the District Manager shall cite to the court all relevant circumstances, including but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through a user's violation, corrective actions by a user, the compliance history of the user, good faith efforts to restore compliance, threat to human health, to the environment and to the District's sewerage system, and any other factor as justice requires. The purpose of any civil penalty is to encourage compliance and remedy unquantified damage to the District's sewerage system and environment, and not to impose criminal sanctions or retribution.

C. If any user discharges wastewater into the District's collection system or contrary to the provisions of this Ordinance and/or Ordinance 278, federal or state pretreatment requirements, or any order of the District or permit issued under this Ordinance and/or Ordinance No. 278, the District may commence an action for appropriate legal and/or equitable relief in the appropriate court in the County of Riverside.

R. Criminal Penalties

A. Any user which willfully or knowingly violates any provision of this Ordinance and/or Ordinance No. 278, or any orders or permits issued hereunder shall, upon conviction, be guilty of a misdemeanor, punishable by a fine not to exceed one thousand dollars or imprisonment for not more than six months, or both, per violation per day. This penalty shall be consistent with the Federal Clean Water Act, 33 U.S.C. 1251, et seq. and amendments thereto, and shall apply to the exclusion of any other more lenient ordinance provision. A user shall be guilty of a separate violation for each day a violation of any provision of this Ordinance and/or Ordinance 278 or industrial user permit is committed or continued by such user.

B. Any user that willfully or knowingly makes any false statements, representations, or certifications in any application, record, report, plan or other document filed or required to be maintained pursuant to this Ordinance and/or Ordinance 278 or the user's industrial user permit, or which falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this Ordinance and/or Ordinance 278 shall, upon conviction, be guilty of a misdemeanor punishable by a fine of not more than one thousand dollars per violation per day or imprisonment for not more than six

months, or both, per violation per day. This penalty shall be consistent with the Federal Clean Water Act, 33 U.S.C. 1251, et seq. and amendments thereto, and shall apply to the exclusion of any other more lenient ordinance provision.

C. Any user that is discovered having committed violations of the Federal Clean Water Act, 33 U.S.C. 1251, et seq. may be referred to the United States Environmental Protection Agency – Criminal Investigations Division and the United States Department of Justice for investigation and criminal prosecution.

S. Probation. A user issued a Written Warning may be issued a maximum six-month probationary period for the violation stated in the Written Warning. All users issued a Notice of Violation may be issued a maximum twelve-month probationary period for the violation stated in the Notice of Violation. If the user commits the same violation within the probationary period, then enforcement will be escalated to the next appropriate level. If the user commits the same violation after the end of the probationary period, then the violation will be treated as a new violation for purposes of enforcement. Repeated same violations will only be granted two probationary periods. If the same violation occurs after two consecutive probationary periods for either a Written Warning or a Notice of Violation, then the enforcement actions will be escalated to the next appropriate level.

T. Publication. The names of all Significant Industrial Users which are found to be in Significant Non-compliance with this Ordinance and/or Ordinance 278 shall be published at least annually in a newspaper(s) of general circulation that provides meaningful public notice within the District, in accordance with 40 CFR 403.8(f)(2)(vii). The names of all industrial users shall also be published whose violation of a pretreatment standard or requirement or whose discharge that the District determines has:

A. Caused, alone or in combination with other discharges, interfered with the operation of the sewerage system or the City's POTW, including endangering the health of the District's personnel, contractors, City personnel or the public;

B. Posed imminent danger to human health, welfare or to the environment or resulted in the District exercising its emergency authority to stop or prevent a harmful discharge; or

C. Adversely affected the operation or implementation of the District's Pretreatment Program, including violation(s) of Best Management Practices.

All Administrative Orders, Ordinance No. 278 Section 520, are created by the District Engineer, or designee, with the advisement of the District Legal Counsel. If the user does not comply with the enforcement action, then the District Manager may issue an enforcement action for the Administrative Order that was issued.

Appeals

- A. Any user affected by and dissatisfied with any decision, order, or enforcement action, made by the District Engineer interpreting or implementing the provisions of this Ordinance and/or Ordinance 278 or industrial user permit, with the exception of a Show Cause Order, may file with the District Manager a written appeal requesting a hearing, reconsideration of such decision, order or enforcement action within ten calendar days from the receipt of the notice of such decision, order or enforcement action. The user shall state in detail the facts supporting the user's request for reconsideration. The District Manager shall render a ruling on the appeal to the user in writing within ten calendar days from receipt of the appeal. Submission of such a request in no way relieves the user of liability for any violations occurring before or after receipt of decision, order, or enforcement action, nor stays the requirements of achieving or maintaining compliance.
- B. If the District Manager's ruling on the appeal is unsatisfactory to user, then the user may, within ten calendar days after receipt of notice of the District Manager's ruling, file a written appeal with the District's Board of Directors, lodging such appeal with the District Manager along with an appeals fee of one hundred dollars. The written appeal shall be heard by the Board of Directors within thirty days from the date of filing. The District Board of Directors shall make a ruling on the appeal within forty-five days from the date of filing.
- C. The District Board of Director's final ruling shall be deemed a final decision, order or action by the District which any person adversely affected by such decision, order or action may appeal to the appropriate court in the County of Riverside. No person may obtain judicial review of any decision, order, or enforcement action by the District under this Ordinance and/or Ordinance 278 without first having exhausted his or her administrative remedies set forth in this Section. Any appeal to an appropriate court shall be filed with that court within sixty (60) days of the date that Notice of Final Decision, Order or Action by the Board of Directors is mailed to the appealing (aggrieved) party.

Inspections

The District inspectors and those of the City are required to know, implement, and enforce a wide spectrum of laws, regulations and policies. The District's pretreatment program utilizes the skills and abilities of the City to conduct inspections at the District's request. The majority of inspections are random and unannounced. Some inspections are scheduled due to the time required for the inspection or pre-arrangements necessary to insure that a knowledgeable person will be available. The categories of users or events requiring an inspection are: permitted Industrial Users, Non-Significant Industrial Users (NSIUs), restaurants, de-minimus users, group permitted users, WDACs, liquid waste haulers, complaints, sewer rate reviews, plan check, and sewer use verification. The goals of the inspections are to:

1. Protect the District's collection system from industrial waste discharges that could cause interference, Pass-Through, or interfere with the reclamation of bio-solids in the City's treatment plant;
2. Protect the District's collection systems from damage or obstructions;
3. Provide the user with regulatory updates and requirements, pollution prevention and waste minimization information.

The City's Environmental Compliance Section maintains a training manual and a variety of Standard Operating Procedures (SOPs) used to document, train and remind employees of protocols, procedures, and inspection methods. Inspection frequencies are determined by permit class, user designation, user's inspection/enforcement history, specific inspection need (e.g. permit class, sewer rate review, plan check, etc.). Table 2 lists the category of inspections, minimum inspection frequencies, and personnel authorized to conduct the inspection.

Table 2

Inspection Categories and City Personnel

Permit Class	Inspection Frequency	EC Supervisor	Senior EC Inspector	EC Inspector II	EC Inspector I
Class I	4/yr	√	√	√	
Class II	2/yr	√	√	√	*
Class III	2/yr	√	√	√	√
Class IV	2/yr	√	√	√	√
Class V	as needed	√	√	√	
Class VI, LWH	as needed	√	√	√	
NSIU	1-2/yr	√	√	√	√
Restaurant	1-4/yr	√	√	√	√
Group	1-2/yr	√	√	√	√
De Minimus	1 per 2 yr	√	√	√	√
WDAC	1 per 2yr	√	√	√	√
Complaint	as needed	√	√	√	√
Sewer Rate Review	as needed	√	√	√	√
Plan Check	as needed	√	√	√	*
Sewer Use Verification	as needed	√	√	√	√

* ECII may conduct these activities providing the requisite training has been completed and the approval of the Environmental Compliance Supervisor has been obtained.

Permits

The District has developed several means of controlling the discharge of industrial wastewater into its sewerage system. These are Industrial User Permits Classes I-VI, Group Permits, Waste Discharge Authorization Certificates, and De Minimus Categorizations. The District Engineer issues Industrial User (IU) Permits with specific requirements including, but not limited to: minimum sampling and inspection frequencies, compliance schedules, reporting requirements, specific numerical limits for listed pollutants, and specific limitations for wastewater discharge volume (daily flow). The discharge limits are derived from applicable Federal Standards and Local Limits. In the case of Federal Categorical Industrial Users whose wastestreams contain regulated, unregulated, and dilute wastestreams, the Combined Wastestream Formula (40 CFR 403.6) is used to determine fixed alternative discharge limits for end-of-pipe discharges. In cases where the Federal fixed alternative limit and the local limit for the same pollutant exist, the more stringent limit shall apply and will be written into the IU's discharge permit. In cases where the Combined Wastestream Formula is not applied, the Federal categorical limit shall apply at the end of process of the regulated wastestream. The Industrial Users are required to sample their wastewater discharges based upon the permit class. Described in Table 3 are the permit categories, user designations, and activities that require inspections.

Table 3

Permit Classes and Descriptions

Category	Duration	Description
Class I	1-2 years	Average wastewater discharge > or = 25,000gal/day, SIU, or Categorical User
Class II	1-3 years	Average wastewater discharge >10,000 and <25,000 gallons/day
Class III	1-3 years	Average wastewater discharge > 100 and <10,000 gallons/day
Class IV	1-3 years	Any user that stores hazardous substances on site or has a categorical process with no sewer discharge of categorical wastewater.
Class V	up to 180 days	Temporary User, permit shall be from I to 180 days
Class VI	1 year	Liquid Waste Hauler Permit (Not permitted by the District)
NSIU	*	Non-Significant Industrial User
Restaurant	*	All food serving establishments
Group	1-3 years	All users sharing a common NAICS identification and agreeing to general permit requirements for that specific business or commercial activity.
De Minimus	3 years	All users with less than one hundred gallons/day of wastewater discharge and are not subject to federal categorical pretreatment standards
WDAC	indefinite	Waste Discharge Authorization Certificate may be issued to any user not regulated by a Class I-VI permit, group permit, or De Minimus permit.
Complaint	n/a	Inspections required in response to complaints received: sewer, odor, or storm drain, including hazardous material spills and sanitary sewer overflows (SSOs).
Sewer Rate Review	n/a	Inspections required in response to user's request for a sewer rate review
Plan Check	n/a	Inspections required in response to new construction and Tenant improvements
Sewer Use	n/a	Inspections required to determine the correct sewer use category

* Those NSIUs and Restaurants qualified for a Group Permit will be issued a Group Permit; all others may be issued a De Minimus or WDAC control document.

The inspection is one method for determining compliance with permit conditions the District's Ordinance No. 278, applicable regulations and limitations from 40 CFR 403-471, sewer use, and plan check requirements. The inspection is also used to verify compliance after a violation has been discovered. Conducting inspections is not without limitations and guidelines.

Inspection Preparation

According to 40 CFR 403.8 and Ordinance No. 278 Section 215 and 225, the District's inspectors and the City's staff with the District's authorization, have the authority to inspect, conduct surveillance, and monitor all IUs to determine compliance with permit conditions, Ordinance No. 278, and all other applicable standards and regulations independent of information supplied by the IU. The inspector shall gain entry to the IU through the front office, guarded gate, or another pre-arranged agreed upon entry point. At no time shall an inspector enter the property of an IU without first securing the permission of a responsible IU official. The inspector shall provide proper identification from (the District or City by providing a business card and/or photo ID) to the IU when claiming to be an Inspector on behalf of the District. The IU shall allow the inspector ready access at all reasonable times to all parts of the premises. When an IU has security measures in force, the IU shall make all necessary arrangements to allow ready access of properly identified Environmental Compliance Inspectors representing the District.

Prior to inspecting a permitted IU, the Inspector shall review the IU's file to become familiar with the IU's business activities, processes, and permit conditions (including BMR³, TOMP⁴, and other periodically submitted material), any Federal categorical processes or applicable requirements, have a good knowledge of the District's waste discharge ordinance (as contained in Ordinance No. 278) and discuss any pending or anticipated enforcement actions with the District Engineer.

These activities are critical to gaining an understanding of the user's production processes, wastestreams produced, pretreatment methodology, wastewater flow, waste disposal, permit class, and monitoring requirements. The enforcement history provides the inspector with the IU's violation history and focus the inspector to historical problem areas. An understanding of the company's processes and inspection history will add a level of confidence to the inspector that is necessary to adequately complete the inspection.

The Class V permit, or temporary use, inspections are used to verify the information submitted in the permit application with the on-site equipment, conditions, and circumstances. Temporary uses may be necessary for a remediation project lasting less than six months that generates wastewater or one time discharges of large volumes of wastewater.

The District will not issue a liquid waste hauler permit.

³ BMR - Baseline Monitoring Report

⁴ TOMP - Toxic Organic Management Plan

Inspections for complaints entail a review of the site address, area sewers and storm drains, and consultation with the District Engineer and/or Inspector. Complaint inspections can be from a residential site to a large manufacturing site. Complaints can be initiated due to a spill or intentional discharge of a material or waste. The inspector must have a knowledge of chemistry and many industrial processes, materials, and chemicals in order to assess the proper response for the complaint received. Depending on the nature of the complaint, the inspector may be interfacing with ECSD, the Regional Board, Riverside County Health Department, City of Riverside, City of Moreno Valley Fire Department, Building and Safety Division, Code and Neighborhood Services Division, or Public Works Department.

Plan Check inspections require a review of the plan check file for the site address and the plan check database for any pretreatment requirements or any other specific requirements for the project. These inspections typically review the construction site with the submitted approved blue prints. Deviations from the approved submitted blue print drawings must have approval from ECSD and the City of Moreno Valley prior to implementation of the change. If any changes have been made without approval or any construction begun without permits, the inspector may issue a Stop Work Order and/or notify the City of Moreno Valley to take appropriate actions.

The sewer rate review by the District may require research into water use history, the accounts sewer rate, and any file information for the site. Some sewer rate reviews are conducted for a sewer charge adjustment due to a water leak, high landscape water usage, water used in a product, and evaporative processes.

The inspection activities performed by the District Engineer or his designee complies with the Fourth Amendment to the United States' Constitution which states: "The right of the people to be secure in their persons, houses, papers, and effects against unreasonable searches and seizures, shall not be violated, and no warrants shall issue, but upon probable cause, supported by oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized."

Access to an inspection site must always be done through the main entrance, front door, gate, guarded entrance or other prearranged and approved entry point during normal business hours. The "normal business hours" may be overlooked in the case of emergencies, evasive users, or other unusual circumstances that would warrant an inspection outside of normal business hours. Once contact is made with the user, inspector must:

- 1) Present identification and ask for the person in charge, the known contact, or the authorized representative;

- 2) Clearly explain the purpose of the visit, e.g. inspection pursuant to this Ordinance and/or Ordinance No. 278, permit inspection, bi-annual inspection, complaint or spill;
- 3) Ask for permission to begin the inspection.

The consent for inspection must be informed and voluntary. The industrial user must be clearly informed and understand the need for the inspection. The IU must also freely give consent to inspect the facility. This consent may not be obtained through trickery, deceit, coercion or threats. The absence of a denial of entry can be inferred to be the equivalent of consent.

Access Denial to an Inspector by an Industrial User

An industrial user must give verbal consent for entry prior to routine inspection and monitoring activities. As long as the inspector is allowed to enter, entry is considered voluntary and consensual, unless the inspector is expressly told to leave the industrial user's premises. Express consent is not necessary. Absence of express denial can constitute consent. If an inspector has been denied access, the following procedures are to be used, in accordance with the 1978 U.S. Supreme Court decision in Marshall v. Barlow's Inc., 436 U.S. 307 (1978):

1. The inspector is to provide proper identification.
2. The inspector is to tactfully ask the reasons for the denial without using any inflammatory words or statements. Any misunderstandings should be avoided.
3. If entry is still denied, the inspector must leave the premises and contact the District Engineer.
4. **Documentation.** The inspector must carefully write down all observations pertaining to the access denial. The minimum information in the documentation must be:
 - a. Exact name and address of the industrial user involved.
 - b. Exact name and title of person(s) approached, including initial contact with front office personnel.
 - c. Name, title, and authority of the person(s) who denied the access.
 - d. Date, time, and detailed reasons for the denial.
 - e. Physical description of the business.
 - f. Any reasonable suspicion that the denial was based on a desire to cover up regulatory or permit violations.
5. Under no circumstances shall an inspector discuss potential penalties or do anything in such a manner that may be construed or conceived as threatening.

6. If the industrial user threatens the inspector in any way, verbal or physical, the Inspector shall document the event (date, time, circumstances) and report the event to the District Engineer. If the physical threat or abuse causes any bodily harm, the City of Moreno Valley Police Department shall be requested to respond.

If an industrial user refuses to allow the inspection, then the inspector must advise the industrial user that the refusal must be reported to the District Engineer who will then contact them. Under no circumstances is the inspector to threaten any punishment or retribution for an industrial user refusing entry. In Marshall v. Barlow's Inc. 436 U.S. 307 (1978), the United States Supreme Court issued a ruling that stated no sanction may be imposed upon an owner who declines to consent to inspection but instead insists upon a warrant.

If, during the inspection, the industrial user withdraws consent for the inspection and insists that the inspector leave, then the inspector must leave and take the same actions as in the case of entry denial. All evidence, records, written notes, samples and photographs up to the time the consent was withdrawn are legal and may be retained and not surrendered to the industrial user. In the case of entry denial and withdrawn consent, the inspector must write very detailed and specific observations about the circumstances involved with the entry denial or consent withdrawal. These observations include the name of the contact, what was specifically said, and any observations about the activities surrounding the entry denial or consent withdrawal. The withdrawn consent must be reported immediately to the District Engineer.

Inspection Warrants/Search Warrants

In the event an inspector is denied access or consent is withdrawn, an Inspection Warrant may be necessary. An Inspection Warrant is a legal remedy used to conduct administrative inspections in the absence of voluntary consent. If the inspector has been refused access to a building, structure, or property, or any part thereof, and is able to demonstrate cause to believe that there may be a violation of this Ordinance or Ordinance No. 278, or that there is a need to inspect or sample the user's facilities as part of a routine inspection and sampling program of the District designed to verify compliance with this Ordinance and Ordinance 278 or any permit or order issued hereunder, or to protect the overall public health, safety and welfare of the community, then the District Engineer may seek issuance of an Inspection Warrant duly issued pursuant to the procedure set forth in Title 13 (commencing with Section 1822.50) of Part 3 of the California Code of Civil Procedure and amendments thereto. However, in the event of an emergency affecting the public health or safety, an inspection may be performed without consent or the issuance of a warrant.

In the event an inspector is denied access or consent is withdrawn and criminal violations are suspected, then the inspector gathers and documents as much information as possible prior to the denial or withdrawn consent and notifies the District Engineer of the circumstances. The District Engineer then confers with the District Manager, and the District Legal Counsel for direction. If a search warrant is believed necessary, then the District or the Riverside County District Attorney's Office may obtain the search warrant. The District Engineer will then contact the District Legal Counsel and/or the District Attorney's Office and the Riverside County Department of Environmental Health for procedures and instructions.

Elements of a Facility Inspection

When inspecting a user, there are five basic questions that must be asked to determine permit requirements and the impact of the user's discharge on the District's sewerage system. In addition to the five lead questions, many more questions are asked to clarify and expand the information obtained from the user.

The five questions are:

1. What does the industry make?
2. How does the industry make their product?
3. What wastes are generated by the production of this product?
4. How are the wastes treated prior to disposal?
5. How are the wastes disposed?

Given these five questions, a fairly comprehensive logical subset of questions can be used that will direct the inspector to a thorough examination of the industry or business.

Question #1, What does the industry make?

Subset

1. Is the company a categorical industrial user?
2. When did the company begin business?
3. What is the company's product used for?

Question #2, How does the industry make their product?

Subset

1. Does this company need a wastewater discharge permit?
2. Is the manufacturing process regulated by a categorical standard?
3. What is the production process flow?
 - a. How is the product produced from beginning to end?
 1. Describe each step or phase.
 - b. Can I explain the production processes?
4. What materials and quantities are used to make the product?
 - a. Raw materials
 - b. Hazardous materials
 - c. Chemicals
 - d. Coatings
 1. Paint, solvent or water based
 2. Powder, epoxy based
 3. Anodizing
 4. Phosphate coating
 5. Metal coloring
 6. Corrosion inhibition
5. Is spill containment or material separation necessary?
6. Are all materials and chemicals properly labeled?
7. Does the business have Material Safety Data (MSD) Sheets for all the materials and chemicals used?

Question #3, What wastes are generated by the production of this product?

Subset

1. How much of each waste is generated?
2. Are the wastes hazardous?
 - a. Is the business aware of Resource Conservation and Recovery Act (RCRA) requirements?
 - b. Is the business aware of CA Title 22 requirements?
3. Are the wastes reclaimable and recyclable?
4. Are waste minimization and pollution prevention practices and procedures in place?

5. Is the waste stored?
 - a. Is spill containment necessary?
 1. Are incompatible wastes physically separated?
 2. Is the spill containment made of materials resistant to the waste being stored?
 - b. Are the waste storage areas properly labeled?
 1. Are the wastes easily identified?
 - c. Is a spill response plan on site?
 1. Have the employees been trained?
 - d. Is there a slug load control plan?

Question #4, How are the wastes treated prior to disposal?

1. What types of pretreatment are being used?
 - a. Physical
 - b. Chemical
 - c. Biological
2. Are the wastes being treated hazardous?
3. How much pretreatment waste is generated?
4. Do the pretreatment plant operators have sufficient training?
5. Are safeguards in place in the event of a failure in the pretreatment system?
6. Do any of the pretreatment operations require spill containment and segregation?
7. Be able to describe and diagram the pretreatment process from beginning to end.
8. Is the pretreatment in harmony with the pretreatment expectations from the EPA?
 - a. Review development document for the categorical industry.
9. Does the pretreatment system result in consistent compliance with the user's wastewater discharge limitations?
10. Does the pretreatment system generate waste that requires offsite disposal?
11. Does the pretreatment system generate reclaimable and recyclable material?
12. Is the pretreatment system designed to significantly reduce or eliminated wastewater discharges to the POTW?
13. What is the condition of the pretreatment equipment?

Question #5, How are the wastes disposed?

Subset

1. Sewer, landfill, recycle, reclamation?
 - a. Sewer use fees
 - b. Sample location
 - c. Effluent monitoring equipment
 1. Flowmeter
 2. pH meter
 3. Electrical conductivity meter
 4. Explosimeters
2. Storm drain, illegal connections, buried, mid-night dumping, and clandestine disposal?
 - a. Do you have regulatory and law enforcement agency notification procedures and Standard Operation Procedures (SOPs)?
3. Are the waste disposal manifests available?
 - a. Are the manifests in order?
 - b. Correct dates
 - c. Correct waste identification
 - d. Waste origination
 - e. Waste disposal company identified
 - f. Waste disposal site identified
 - g. Does the delivered waste amount equal the waste amount that was picked up?
 - h. Are the generator's and wastehauler's EPA numbers on the manifest?

This list of questions is by no means an absolute list for all inspection questions. There are as many questions as there are different processes and industries. The point is that the use of these five basic questions can be applied to any inspection. The pretreatment program inspector must be able to answer these basic questions at any inspection conducted.

Documentation, Data Collection and Data Management

Documentation

As with all required activities, documentation of inspection activities is critical. The District Engineer or his designee uses several means to document inspections of users. These are inspection forms, written memos to the user's file, photographs, and field tests for pollutants. The inspection forms are used to document the activities of field inspection personnel. Two of these forms are the Inspection Report (IR) form for permitted companies, Non-significant Industrial User's (NSIUs) and restaurants. The permitted companies and NSIUs use the same form. The restaurant IR is the second form and requests information specific for restaurants. Both types of forms are used with the portable field database. The first page of the inspection form is used to identify the user, state inspection findings and list any violations noted during the inspection with the respective required corrective action(s) and due date(s). These forms are completed every time an inspection, visit, or meeting is performed at a permitted user, NSIU, or restaurant, Waste Discharge Authorization Certificate (WDAC) user, De Minimus user, or Group permit user. Additional forms that are used for other types of inspections are for plan check, sewer rate reviews, complaints and Customer Information System (CIS) inspections. Memos are written for the user's files as supplements to the inspection report. Phone conversations and IU personal visits are also documented in a written memo to the user's file.

Photographs are taken occasionally at a user's site to document an activity, violation, pollution equipment, and effluent monitoring equipment locations. Several means are used to obtain a photographic record. These generally include cell phones, cameras, and video cameras. Prior to any photographic record being obtained during an inspection, the user must be informed and voluntarily grant permission for the use of the photographic device. This permission is not necessary, if photograph authority is granted in either the user's industrial user permit or the District's Ordinance No. 278. Failure by a user to allow photography, as permitted or authorized, may be grounds for enforcement actions. Photographic records may be obtained from public access areas near the user's facility without the consent of the user. The photographs taken are labeled with the date and time that the photograph was taken, the IU name and address, location of the photograph, and the name of the Inspector that took the photograph.

Field tests for pollutants are obtained by a variety of means. These are: sulfide test kits, pH test strips, portable pH meters, portable electrical conductivity/TDS meters, various heavy metal test kits, and portable gas detectors. The results from these field tests are documented in the inspection reports.

Data Collection

Data is collected from inspection reports, interviews, meetings, phone conversations; electronic means (faxes and e-mails) sample data, digital pictures, videos, and complaint reports. The data can include inspecting findings, sample results from field tests and monitoring samples, photographs, field notes, and interview findings.

Data Management

All data and information gathered by the District's pretreatment program is managed by storing the data on a computer file server, word processing and spreadsheet software, and a paper file system. The majority of all activities are managed by the computer file server. This includes all inspection reports, monitoring reports, enforcement actions, complaints and IU permits. The paper file system is used to store paper forms of permits, inspection reports, monitoring results, memos, correspondence and other miscellaneous reports and billings. The word processing, spreadsheet and other software are used to create permits, flow charts, diagrams, plot plans, aerial photos, store permit information, store digital pictures, enforcement documents, correspondence, memos, and SOPs.

The Inspectors are responsible for the majority of the computer data entry into the database. The inspection reports are entered into a portable database in the field. The Inspectors download these reports to the main database to a temporary file at the end of the workday for review by the District Engineer or his designee. After the reviews are complete, the inspection reports are transferred to the main file server after the completed review.

The District uses several methods for updating the IU site inventory and tracking submission of required IU reports. The Inspectors on an annual basis research the commercial and industrial facilities with the District for new CIUs or SIUs. The District Engineer or his designee prepares a report listing the various parcels within the District and distinguishes between residential and commercial user. If new commercial facilities are discovered that are not part of the previous year listing, an Inspector is sent to the site to deliver an industrial waste survey for the company to complete and return. The survey must be completed and returned within 14 days of delivery. If the IU is identified as requiring an Industrial User Permit, then the District Engineer or his designee will initiate the Industrial User Discharge Permit Application process and track the IU's progress toward completing the permit.

The District Engineer or his designee is responsible for IU permit processing, which includes tracking of required IU submittals of notices and reports, Baseline Monitoring Reports (BMR) and 90 Day Compliance Reports, slug load control plans and permit renewal applications. The designee accesses the IU file on a quarterly basis to search for permit expiration dates. The District Engineer designee then sends out permit renewal applications to the IUs. This is done 45 days prior to the expiration of the permit.

Periodic compliance reports are submitted by the SIUs four times per year. As part of the sample analysis submittal, all IUs are required to complete a monitoring report form. This form requires: the IU to report the analytical results compared to the permit limits; the reporting of flow data for the sampling period; and the signing of a certified statement acknowledging review of the sample data and possible penalties.

As part of their permit conditions, the IUs are required to notify the District immediately in the event of slug discharges, accidental spills or negligent discharges; within 24 hours for discharge and flow violations; and 30 days prior to any changes in processes or equipment. The District Engineer or his designee is responsible for insuring that the IUs comply with their permit required reporting of these problems or changes. If violations are found during an inspection or site visit, the Inspectors shall document the violation in the field inspection report. The enforcement action taken will depend on the violation, the severity of the violation, and the history of the user.

An enforcement log is kept with compliance dates and is discussed with the District Engineer on an as needed basis. For violations with due dates, the users have until the end of the day that the correction is due to remedy the violation. A follow-up inspection is conducted the day after the due date. More frequent briefings are conducted as an enforcement action warrants.

All documents, written or electronic are managed in accordance with the District's records retention policy. In addition to the computer systems used for data management, the District uses and maintains a paper file system. All paper documents from the pretreatment program are stored in file cabinets, or three ring binders. The file cabinets are used to store paper records for NSIU, restaurants, complaints, sewer rate reviews, plan check, sewer use billings, and the various forms used by the District. The file room contains IU permit information for the current permit. All other IU permit information will be destroyed after seven years in accordance with the District's policies and procedures for records retention and destruction. All IU permit blue prints, schematics, agreements and plot plans will be kept for as long as the permit is valid and as long as the industrial user remains in business.

Response to Violations

One of the responsibilities of the District Engineer or his designee is to identify instances of noncompliance and to take appropriate enforcement action. Each inspector is trained to select an enforcement response commensurate with the violation detected as listed in the Enforcement Responses and the Responsible District Personnel Section of this Ordinance. A matrix outlining minor and major violations and the corresponding levels of enforcement actions is found in the Appendix. The District uses the following criteria in an effort to objectively evaluate and document instances of non-compliance and determine which level of enforcement action is appropriate.

- 1. Magnitude of the violation.** The severity of the enforcement action depends on the seriousness of the violation and/or harm caused to the District's sewerage system, the City's POTW, personnel, public or the environment. Minor violations are issued Correction Notices and Written Warnings; repeat discharge violations are issued a Monitoring Production Information Order (MPIO) or a Notice of Violation; repeat non-discharge Ordinance violations are issued a Notice of Violation or a Violation Meeting; and Chronic Violations are issued Consent Orders or Compliance Orders. If an IU has incurred Significant Non-Compliance, as defined, then the enforcement response may include a Notice of Violation, Compliance Order, Cease and Desist Order, Civil Penalty Order, or a Show Cause Hearing.
- 2. Duration of the violation.** The length of time a violation has existed without being corrected will also impact the level of enforcement response. Violations that are not corrected 30 days after the IU has been required to comply shall result in the commencement of escalating enforcement beginning with a Notice of Violation. Reporting violations for Class I users more than 45 days late will result in a Notice of Violation, Significant Non-Compliance (SNC), and publication. Violations that are easily and quickly corrected and are not major violations shall require minimum enforcement (e.g. correction notice or written warning). The longer a discharge violation remains uncorrected shall result in escalated enforcement actions up to and including termination of service and/or civil/criminal prosecution. The longer an ordinance violation remains uncorrected shall result in the issuance of a consent or compliance order and civil and/or criminal actions.

- 3. Effect of the violation on compliance with discharge permit.** Ordinance and discharge violation(s) could place the IU in Significant Non-Compliance (SNC) as defined in 40 CFR 403.8. If SNC is detected, an appropriate Administrative Order is issued and the SIU's name is published in the area's largest circulating newspaper on an annual basis. If the violation is serious enough, the industrial user permit could be revoked, sewer service terminated, and penalties and fines levied pursuant to this Ordinance and/or Ordinance No. 278.
- 4. Effect of the violation on the operation of the POTW and/or the collection system.** If a user's wastewater discharge affects the wastewater treatment ability of the Regional Water Quality Control Plant resulting in interference or Pass-Through, the beneficial reuse of POTW sludge, the integrity of the collection system, or threatens the safety of the District or City personnel and the public, then the user will be responsible for all damages incurred, including all penalties and fines that may be imposed on the District and/or City by regulatory agencies. The User will also be issued an Administrative Order commensurate with the violation including permit suspension or revocation, termination of service and civil and/or criminal actions.
- 5. Compliance history of the user.** The level of enforcement is also impacted by the compliance history of the user. A more severe enforcement action is warranted if the industrial user has a history of violations with ineffective corrections, repeated violations caused by negligence, and willful or negligent disregard for achieving compliance. A good compliance history achieved by the user's conscientious, expeditious, and determined efforts to achieve compliance may warrant a less strict enforcement action.
- 6. Good Faith by the User.** "Good Faith" is defined as the User's honest intention to remedy the noncompliance together with actions that give support to the intention, e.g. expenditures for pretreatment equipment or contracting of consultants to correct the noncompliance. Good Faith will not eliminate the necessity for an enforcement action to correct violation(s) but may have an effect on the severity of the enforcement action taken to achieve compliance.

The District uses a variety of enforcement methods, as described in the Section titled "Enforcement Responses and Responsible District Personnel," to solicit compliance from industrial users. The Correction Notice and Written Warning are issued to correct minor violations as defined in Ordinance No. 278 500 (A)(1-7)). In addition, the District Engineer or his designee may grant a compliance extension for the same minor violation. The Correction Notice has a compliance due date which is left to the discretion of the District Engineer or his designee, generally not to exceed fourteen calendar days. A Written Warning is

given to a user who has failed to comply with a Correction Notice or failed to achieve compliance after one extension of the correction notice, or if the violation warrants the issuance of a Written Warning as the first enforcement response. A Compliance Extension is given at the discretion of the District Engineer or his designee and shall be used only for good cause for not achieving compliance. An industrial user who simply forgot to correct or respond to the violation is not good cause.

The Written Warning is also used if any application, permit, or required report or correspondence is more than five days late. This Written Warning may be issued in a hand delivered letter by the District Engineer or his designee. If the Inspector issues a Written Warning, then the District Engineer or his designee must advise the user that a Notice of Violation may be issued if compliance is not achieved by the date specified in the Written Warning.

At no time shall a Notice of Violation for an uncorrected minor violation be issued without the approval of the District Engineer or his designee.

The general enforcement progression for observed minor violations by the District Engineer or his designee is Correction Notice, Extension, Written Warning, and Notice of Violation. At no time shall the Inspector mention the use of a Notice of Violation for a minor violation without having first issued a Written Warning.

Evaluations of Findings

All inspection reports (IRs) are submitted to the District Engineer or his designee at the end of the work day. The reports are then reviewed the following day. Questionable findings or actions are reviewed with the District Engineer or his designee for clarification. If the findings in the IR are still unclear, then a follow-up inspection will be conducted by the District Engineer or his designee to clarify the findings. A follow-up report is used to document the findings in the follow-up inspection and to randomly check the work of the Inspectors. The findings are reviewed with the user and any corrections, clarifications, or additions to inspection findings or previously instigated enforcement actions are made. Finally, a meeting is held with the District Engineer or his designee to review the findings in the follow-up inspection and recommend or require additional training, if necessary.

Wastewater Monitoring

The District Engineer or his designee conducts wastewater monitoring events for a number of reasons:

1. Required periodic monitoring at permitted Industrial Users
2. Investigations into wastewater discharge violations
3. Special studies to evaluate wastewater sources
4. Sewer service charges
5. To gather evidence in the preparation of a civil or criminal action

The following table lists the minimum sampling frequency for permitted and non-permitted users.

Table 4 Permit Sampling Frequencies

Permit Class or Category	Minimum Sampling Frequency
1	4 per year
2	2 per year
3	as needed
5	as needed
6	as needed
NSIU	as needed
Restaurant	as needed
Group	as needed
De Minimus	as needed
WDAC	as needed
Complaints	as needed

The wastewater monitoring conducted at permitted IUs enables the District to determine compliance with applicable pollutant limitations. These limitations are found in the IU's permit, the District's local limits, applicable federal categorical standards, and applicable State of California standards.

The permitted IU is responsible for all permit required monitoring and all pollutant violation resampling required, both from IU samples and District samples. All resamples are in addition to any other scheduled monitoring. An IU cannot use a subsequent compliant District sample in lieu of a required resample. If two consecutive pollutant violations are detected at an IU, then a Monitoring Information Production Order (MPIO) is issued. An MPIO requires that an IU sample their wastewater discharge for all production days within a 14 consecutive day period and measure the discharge flow every day during the 14 consecutive days that wastewater is discharged to the sewer.

Monitoring Personnel

The District representative, be it the City of Riverside Inspectors or those of a private laboratory are all trained to obtain wastewater samples from industrial users. Prior to developing a sampling plan for an IU, sampling personnel review the Standard Operating Procedures for equipment use, sampler cleaning, sample and chain-of-custody forms, and permit monitoring requirements.

Monitoring Plan

The goal of the District is to complete all required quarterly IU monitoring in the first month of each required quarter. This goal requires that sampling personnel review the IU's permit files for required pollutants, sample locations, and any special circumstances or conditions necessary to conduct a monitoring event. A monitoring calendar is created that uses an IU's geographical location as the main criteria for selecting a monitoring day. IUs that are in relatively close proximity are sampled on the same day. A secondary criterion is related to the IUs production schedule. Some IUs have seasonal or production constraints that will dictate the amount of wastewater discharged on any given day. A third criteria used is if the IU has their own monitoring event in place or scheduled for the day the District sampling team arrives, then the District's monitoring event is postponed. Samples taken by the District or his designee and the IU on the same day creates several problems. If pollutant violations are detected, then only one day is counted in violation. Repositioning of sampling equipment to accommodate two automatic wastewater samplers can result in a compromised sample or a failed monitoring event. The sampling schedule typically has five to ten calendar days left open at the end of the month to reschedule a monitoring event that failed due to equipment malfunction or same day sampling problems.

Sample Data Management

The District Engineer or his designee initially reviews the received sample data. The samples with pollutant violations are then segregated for priority treatment. Once the monitoring data is reviewed and validated, the results are entered into the file server by the District Engineer or his designee. The goal, after validation, is to enter the sample data into the file server within three business days. The IU is notified of a pollutant violation in a District sample within twenty-four hours of confirming the violation by the District Engineer or his designee. The confirmation of a violation entails reviewing the sample result for accuracy, compliance with pollutant holding times and analytical methods, and comparison of suspect violations to past IU sample history. If the result is questionable, then the laboratory is contacted to determine if the

sample analysis can be repeated. Once the violation is confirmed, the IU is notified. This is accomplished by sending a resample notification by fax or email that has the sample date, pollutant violations, and the required due date for resubmitting a resample. A detailed letter is sent by the next business day.

Sample analysis data management is conducted by the District Engineer or his designee to insure that sampling enforcement actions are justified. All sample data received from both the IU and the District is reviewed. This review is performed prior to any written response being sent to the industrial user. In order to insure that each sample is reviewed objectively, the following criteria are used:

1. **Submittal Date.** The required sample submittal date and the date the sample was submitted shall be compared. If the submitted sample is more than 45 days past the required due date, a significant noncompliance (SNC) violation has occurred (40 CFR 403.8) and a Notice of Violation is issued by the District Engineer or his designee. Prior to the 45 day past due date, the District Engineer or his designee, shall contact the IU and inquire if the sample has been taken and remind the IU of the due date.

2. **Required Information.** The sample submitted by an IU must have all the information and analyses required by the IU's discharge permit, including flow data. Failure to submit the required information may result in a SNC violation (40 CFR 403.8). A written warning is issued by the District Engineer or his designee for a first time omission of required information. If the IU has a history of not reporting all required information, an NOV is issued by the District Engineer or his designee.

3. **Review of Analytical Data.** The analytical data shall be reviewed for accuracy. The pollutant analyses are reviewed for any signs of abnormalities or inconsistencies. If an inaccuracy is detected with the sample, a review of the analytical calculations or a repeat sample is requested. If the sample's holding time for the requested constituent has expired, a resample of the IU shall be performed. Enforcement action shall be suspended temporarily if the sample results cannot be verified and resampling is performed. A memo to the user's file shall be prepared explaining the need for a resampling.

4. **File Server Entry.** After the sample has been verified as a legitimate sample, the sample information is entered into the sample data tracking module and then the results are entered into the file server within 3 days of verification by the District Engineer or his

designee. The District Engineer or his designee evaluates the sample results for violations and compare the results to permitted pollutant limitations using past sample results to determine if Chronic or Technical Review Compliance (TRC) violations exist. If a violation is detected in the sample, a six-month review is requested to check for Significant Noncompliance (SNC).

Written Notifications shall be sent to the IU after the sample data has been evaluated within five business days.

Pollutant Violation Notification, First Violation If a pollutant violation is confirmed in a District sample result and the pollutant violation is not the second consecutive violation for the same pollutant, then a resample notification fax or email is sent to the IU within twenty-four hours. A resample letter shall be sent for the first violation by U.S. mail or hand delivered. The District Engineer or his designee shall prepare the letter within three business days of confirming the violation. If the sample was an IU sample, then the IU shall notify the District within 24 hours of confirming the sample violation. This notification can be accomplished by telephone call, personal visit, fax, email, or hand delivered letter. Failure of the IU to report a confirmed pollutant violation shall be grounds for enforcement actions. All telephone calls and IU personal visits to report pollutant violations shall be documented by the District Engineer or his designee receiving the report by a written memo to the IU's file.

Resampling Requirements The IU is required to resample for violations in a District or IU sample and submit the completed results and all monitoring report forms within 30 days of becoming aware of the violation. The resampling is in addition to any other required monitoring. The IU shall not use any required permit sample as a substitute for the resample.

Resample Notifications, Second Violations, MPIO If an IU or District sample has a second consecutive violation for the same pollutant, then a Monitoring Production Information Order (MPIO) is issued. An MPIO is an Administrative Order requiring an IU to determine the mass emission or concentrations of pollutants or other conditions specified in the user's permit in their industrial wastewater discharge for all production days within a fourteen consecutive day period and submit production and flow data for each day in that period.

Notification Failures, CIUs and SIUs. If a Categorical or Significant Industrial User fails to notify the District of a pollutant violation within twenty-four hours of confirming the violation, then Significant Noncompliance shall result and a Notice of Violation (NOV) shall be issued to the CIU or SIU. The NOV shall be prepared by a District Engineer or his designee. The NOV shall be hand delivered to the CIU or SIU by a District Engineer or his designee. The resample results and all required forms shall be submitted within thirty days of the issuance of the NOV.

Notification Failures, Non –CIUs and Non-SIUs. For Industrial Users that are not Categorical or Significant Industrial Users, a Written Warning for the first time failure to report shall be issued by the District Engineer or his designee. Failure to notify the District after the issuance of a Written Warning shall result in the issuance of a Notice of Violation (NOV). Both the Written Warning and the NOV shall require a resample to be taken and the results submitted within thirty days of the enforcement notice.

Responding to Pollutant Violations During a Sampling Event. If a pollutant violation is detected in an IU's sample during a District sampling event while the inspector is at the IU's site, then the inspector shall contact the IU and review the possible cause(s) for the violation(s). The findings from this investigation shall be contained in an Inspection Report. If hazardous material is being discharged or has been discharged, then the inspector shall immediately notify the City of Riverside's collection system supervisor, City of Moreno Valley Fire Department Hazardous Materials Unit, the Riverside County Department of Environmental Health, Hazardous Materials Division, the City of Riverside Wastewater Systems Manager and the District Engineer. If the hazardous waste is being discharged in view of the inspector, then the inspector shall require that the IU immediately cease and desist all wastewater discharges that contribute to the discharge of the hazardous material to the sewer.

Spills

All spill responses within the District are governed by the District's Incident Response Procedures as contained in the District's Sewer System Management Plan (SSMP). The procedures provide guidance and instructions for responding to a wide variety of spills, including sanitary sewer overflows (SSO), industrial waste, and hazardous waste.

Complaints

The District responds to a wide variety of complaints. By the very name, this work will test interpersonal skills of the District personnel or its representative. Persons reporting complaints can be quite calm to severely agitated. The person being reported can be humble to extremely angry. Regardless of the temperament of the person, the District representative is to remain professional at all times. If the District representative receives threats, then contact is made with the District Manager and/or District Engineer. If the inspector receives physical violence, then a request is made to have the City of Moreno Valley Police Department respond. The main objective for complaints is to determine if the complaint is valid and, if so, who is responsible and what remedial actions are necessary. The investigative process for all types of complaints is based upon the following questions: What is the source of the complaint? Who is responsible? Do other regulatory agencies need notification? Is a cleanup necessary?

The three categories of complaints are sewer, storm drain, and odor. Sewer complaints normally involve a blocked lateral, illegal discharges to sewer, and accidental or negligent discharges to sewer. Complaints received involving the District's sewer lines and/or a sewer lateral are referred to the District's Contract Plumber¹. If an illegal discharge to sewer is suspected, then the incident is to be reported to the Manager or District Engineer or District Legal Counsel for a response.

Odor complaints involve a wide range of conditions from sewer odors in a building to "chemical odors." Not everyone perceives an odor in the same manner. What may be objectionable to one person may not be to another. The investigation of odor complaints requires the use of a gas detector and common sense. An inspector is not permitted to enter an area when the gas detector alarms are sounding or if the area is a confined space.

One of the most common odor complaints is a sewer odor in a building. These odors may have their basis in hydrogen sulfide, H₂S. This gas is colorless, heavier than air and extremely deadly in concentrations above 1,000 ppm in air. If the inspector discovers that hydrogen sulfide gases exist in harmful amounts, then the inspector is to leave the area immediately and immediately notify the Moreno Valley Fire Department, District Manager, and District Engineer.

¹ Montgomery Plumbing (951) 924-4697

Other odors may be caused by flammable liquids or gases. When these are encountered, the inspector must leave the area immediately and notify the City of Moreno Valley Fire Department, District Manager, and District Engineer. All potential ignition sources must be eliminated, if possible, without endangering the Inspector or the public.

APPENDIX

Escalating Enforcement Actions Matrix

Escalating Enforcement Actions Protocol

The use of the indicated enforcement responses does not limit the enforcement responses to the violation pursuant to Ordinance No. 278 Section 555 REMEDIES NONEXCLUSIVE

All pollutant and Ordinance violations that result in Significant Non-Compliance for Class I Permitted Companies, shall result in the publication of that Class I permitted company pursuant to Ordinance No. 278 Section 535 PUBLICATION NOTICE

Ordinance No. 278	Violation Occurrence			Enforcement Response Options
	First	Second	Third	
215 Inspection				A. Phone Call
A. Ready access	A,C	D	G,H	B. Stop Work Order
B. Knowledgeable person on site	C	C1,D	G,H	C. Correction Notice
C. Immediate access during an emergency	G	L	M	C1. Extensions
D. Immediate access to pretreatment equipment	C	C1,D	G,H	D. Written Warning
E. Interference, delay, refuse - no potential harm	D	G,H	T	E. Informal Meeting
E. Interference, delay, refuse - potential harm	T			F. MPIO
F. Security measures causing delays of inspections	D	G,H	T	G. Notice of Violation
G. Record copying	A,C	C1, D	G,H	H. Violation Meeting
225 Monitoring				I. Consent Order
A. Sampling/monitoring equipment required	D	G,H	J	J. Compliance Order
B. Sampling security closures	D	G,H	J	K. Civil Penalty Order
C. City sampling equipment temporary installation	A,C	C1,D	G,H	L. Cease and Desist Order
D. Monitoring equipment installation interference	D	G,H	J,T	M. Show Cause Order
E. Sampling station/measuring device maintenance	C	C1,D	G,H	N. IU Permit Revocation
F. Sample collection and analysis methodology	C	D	G,H	O. Termination of Service
G. Sampling records and information	C	D	G,H	P. Civil Penalties
H. Reporting of monitoring equipment failures	D	G,H	J	Q. Criminal Penalties
J. Sample violation reporting within 24 hrs.	D	G,H	J	R. Probation
K. Flow exceedance reporting	D	G,H	J	S. Publication
L.1. IU resampling, IU sample, no harm	C	F,G,H	G,H,I,J	T. Inspection Warrant
L.1. IU resampling, IU sample, harm	G,H,L	J	L,N,O	
L.2. Failure to submit resample within 45 days of discovery	G	H	J	
M.1. IU resampling, City sample, no harm	C	F,G,H	G,H,I,J	
M.1. IU resampling, City sample, harm	G,H,L	J	L,N,O	
N. IU self-monitoring plan requirements	C	D	G,H	
O. Reporting all non-permit required samples within 15 days	C	D	G,H	
P. O/G sample in a multiple set violates limit by more than 40%	C	F,G,H	G,H,I,J	
P. O/G average in a multiple sample set violates limit	C	F,G,H	G,H,I,J	
230 Record Keeping	C	C1,D	G	
235 Flow Measurement	C	C1,D	G	
240 Infectious Waste Disposal	C	C1,D	G	
245 Water Softening Restrictions	D	G	J	
250 Drain Screen Requirements	C	C1,D	G	
255 Gravity Separation Interceptor	D	G	J	
260 Interceptor Requirements				
A. Two chamber minimum with separate rings and covers	C	C1,D,E	G,J	
B. Access to each interceptor chamber	C	C1,D,E	G,J	
C. Immediate accessibility to all interceptor chambers	C	C1,D,E	G,J	
D. Effectiveness	C	D,E	G,J	
E. 3/8 inch particle limiting drain screens required	C	C1,D,E	G,J	
F. Tee requirements	C	C1,D,E	G,J	
G. Sample box or wye required	C	C1,D,E	G,J	
H. No elbow or tee in sample box	C	C1,D,E	G,J	
I. Installation in confined spaces prohibited	C	D,E	G,J	
J. Drain lines to interceptor kept clear	C	C1,D,E	G,J	

Ordinance No. 278	Violation Occurrence			Enforcement Response Options
	First	Second	Third	
K. Inadequate interceptor	C	D,E	G,J	A. Phone Call B. Stop Work Order C. Correction Notice C1. Extensions D. Written Warning E. Informal Meeting F. MPIO G. Notice of Violation H. Violation Meeting I. Consent Order J. Compliance Order K. Civil Penalty Order L. Cease and Desist Order M. Show Cause Order N. IU Permit Revocation O. Termination of Service P. Civil Penalties Q. Criminal Penalties R. Probation S. Publication T. Inspection Warrant
265 Standard Interceptor Designs	C	D	G	
270 Interceptor Maintenance				
A. Adequate maintenance, 25% capacity maximum	C	D,G	G,H	
B. Chemical or other materials for emulsification	C	D,G	G,H	
C. Microbiological product use prohibition	C	D,G	G,H	
D. Entire contents of interceptor pumped; Lawful disposal	C	D,G	G,H	
E. Inadequate maintenance; mandatory pumping frequency	D	G	H	
275 Restaurants				
A. Discharge authorization, survey required	C	D	G	
C. Connections to grease interceptor	C	C1,D	G	
D. Separation of FOG before discharge of wastewater to sewer	C	C1,D	G	
E. 3/8 inch particle limiting drain screens required	C	C1,D	G	
F. Grease interceptor maintenance	C	C1,D,G	G,H	
280 Prohibited Restaurant Surface Discharges				
A. Wastewater discharges to storm drain	C	C1,D	G	
B. Blocked sewer lateral or sewage lift station failure	D	G	H	
290 Wastewater Discharge Survey	C	C1,D	G	
295 Liquid Waste Haulers				
A. Permit required	D	G,H	L	
F. Load inspection and analysis	D	G,N	N	
G. Hazardous waste disposal prohibition	N,P,Q	N,P,Q	N,P,Q	
H. LWH to remain on site if load is hazardous	G,N,Q	G,N,Q	G,N,Q	
I. Completed manifest forms	D	G	N	
J. Falsifying records	G	H	N	
K. Records retention	C	C1,D	G	
L. Payment of fees	N	N	N	
M. Only domestic waste	D	G,N	N	
N. Clean vacuum tanks	D	G,N	N	
O. Prohibition against discharging Industrial Waste or mixing	G	L,N,R	L,N	
P. Waste origination	C	D	G	
Q. Rejected load legal disposal requirements	C	D	N	
R. Adjustment of rejected loads without authorization	C	D	N	
S. Rejected load disposal prohibitions	G,N,Q	G,N,Q	G,N,Q	
Z. Permit transfer prohibited	N			
300 Mobile Pressure Washers, permit required	C	D	G	
305 Use of and Damage to City Equipment or Facilities	D,G	K,L,R	P,Q	
310 Spill Notification, No Harm	D	G	H	
310 Spill Notification, Harm	G	H	L	
315 Surface Discharge Prohibitions, no harm	C,D	N,H,R	L,K	
315 Surface Discharge Prohibitions, harm	C,D,E,G	D,G,R	L,K,Q	
320 Point of Discharge Limitation	C,D	G,I	J	
330 Separation of Domestic and Industrial Waste	D	G,H,I	J	
335 Prohibited Waste Discharges, no harm	C,D,G	D,G,H	G,H,L	
335 Prohibited Waste Discharges, harm	G,K,L,R	L,N,Q	L,N,Q	
320 Point of Discharge Limitation	C,D,G	D,G,H	G,H,L	
330 Separation of Domestic and Industrial Waste	C,D	D,G,H	G,H,L	
335 Prohibited Waste Discharge	C,D,G	D,G,H	G,H,L	
340 Swimming Pool Discharge Requirements	C	D	G	
345 Limitation on Wastewater Strength, no harm	C	D	G	
345 Limitation on Wastewater Strength, harm	G,K,L,R	L,N,Q	L,N,Q	
360 Industrial Wastewater Pretreatment				
A. Pretreatment required	D,G,H	J	L,N,O,R	
B. Compliance with Federal and local pollutant limitations	D,G,H	J	L,N,O,R	

Ordinance No. 278

**Violation Occurrence Enforcement
First Second Third Response Options**

Ordinance No. 278	First	Second	Third	Enforcement Response Options
C. Pretreat wastewater recurring with no harm	D	G	V,J	A. Phone Call
C. Pretreat wastewater recurring with harm	G,H,K	L,N	K,L,O,Q	B. Stop Work Order
D. Detailed pretreatment plans prior to implementation	D	G	I,J	C. Correction Notice
E. Pretreatment equipment in confined space prohibited	D,E	G,H	I,J	C1. Extensions
G. Pretreatment equipment failure notification, no harm	D	G	H	D. Written Warning
G. Pretreatment equipment failure notification, harm	G,H,K	L	M,N,Q	E. Informal Meeting
365 Unauthorized Monitoring and Pretreatment Equipment Modifications, no harm	D	G	L	F. MPIO
365 Unauthorized Monitoring and Pretreatment Equipment Modifications, harm	D,G	G,H,J	L,M,N,Q	G. Notice of Violation
370 Pretreatment Equipment Bypass, no harm	D	G	L	H. Violation Meeting
370 Pretreatment Equipment Bypass, harm	D,G	G,H,J	L,M,N,Q	I. Consent Order
14.12.375 Prohibited Discharge of Recovered Pretreatment Waste	D,G	G,H,L	L,K,Q	J. Compliance Order
14.12.380 Dilution Prohibited as a Substitute for Treatment	D	N,R	J,L	K. Civil Penalty Order
385 Stormwater Diversion				L. Cease and Desist Order
A. Diversion valve required	C,C1	D	G,J	M. Show Cause Order
B. Diversion valve approval prior to installation	B,C	C1,D	G,J	N. IU Permit Revocation
C. Diversion valve operation	C	C1,D	G	O. Termination of Service
D. Immediate suspension of outdoor wastewater generating activities during inclement weather	D	G	H,L	P. Civil Penalties
390 Industrial User Modifications	D	G	H	Q. Criminal Penalties
395 Spill Containment System	C,D	C1,E,G,I	H,J	R. Probation
400 Slug Discharges, Harm	G,K,L,R	G,H,J,L	L,N,R	S. Publication
400 Slug Discharges, No Harm	D	G,H	H,L,N	
405 Facility Waste Management Plan	C,D	C1,E,G,I	H,J	
410 Categorical Pretreatment Standards	D,G	G,I	J,L	
415 Commercial/Industrial Tenant Occupancy Notification	C,D	C1,E,G	G,H	
420 Notice of Potential Problems, No Harm	D	E,G	G,H	
420 Notice of Potential Problems, Harm	G,K,L,R	G,H,J,L	L,M,N,Q	
425 Written Responses	C,D	C1,E,G,I	G,H,J	
430 Falsifying Information	G	H	Q	
435 Wastewater Discharge Authorization Certificate	C,E	D,E	G,H	
440 Industrial User Group Permits	C,E	D,E	G,H	
445 Industrial User Permits	C,E	D,E	G,H	
460 Permit Renewal	A,D,E	D,G	G,H,O	
470 Permit Transfer	N			
460 Fees and Charges	D	G	J	



EDGEMONT COMMUNITY SERVICES DISTRICT
ORDINANCE NO. 283

REGULATING THE USE AND CONSTRUCTION
OF
PUBLIC SEWERAGE FACILITIES

The Board of Directors of the Edgemont Community Services District, does ordain as follows:

SECTION 1.0

GENERAL PROVISIONS

1.1 – ORDINANCE IN FORCE – This ordinance shall be in full force and effect within the boundaries of the District from and after its passage and approval, as provided by law. Where pre-existing ordinances are in conflict with this ordinance, the provisions of this ordinance will apply.

1.2 – AUTHORITY – Under the provisions of the Government Code, State of California and other legal provisions, the Board of Directors may adopt ordinances for the purpose of exercise and effect of any of its powers or for the purposes for which it was formed.

1.3 – GENERAL POLICY – The general policy of the District is to acquire, maintain, and operate adequate sewerage systems within the District to serve the residents of the District and to insure the future development of the District.

1.4 – SCOPE – This is an ordinance regulating the construction and use of public sewerage facilities, the installation and connection of lateral sewers, and the discharge of wastes into the public sewer systems, and providing penalties for violation thereof, and establishing rules and regulations for sewer service within the District boundaries, County of Riverside, State of California.

1.4.01 – WORDS AND PHRASES – For the purpose of this ordinance, all words used herein in the present tense shall include the future; all words in the plural number shall include the singular number; and all words in the singular number shall include the plural number.

1.4.02 – RULING FINAL – All rulings of the District and/or Manager shall be final, unless appealed in writing to the Board within five (5) days. When appealed, the Board's ruling shall be final.

1.5 – DEFINITIONS – Unless otherwise indicated the meaning of terms used in this ordinance shall be as follows:

1.5.1 – APPLICANT – Applicant shall mean the person making application hereunder and shall be the Owner of the premises involved or his authorized agent.

1.5.02 – BOARD – Board shall mean the Board of Directors of the Edgemont Community Services District.

1.5.03 – CONTRACTOR – Contractor shall mean an individual, firm, corporation, partnership or association duly licensed by the State of California to perform the type of work to be done under a permit, contract or agreement.

1.5.04 – COST – shall mean the cost of labor, material, transportation, supervision, engineering and all other necessary overhead expense.

1.5.05 – COUNTY – County shall mean the County of Riverside, State of California.

1.5.06 – DEVELOPER – Developer means any person who improves or develops property, within the District, to the extent that sewer service is needed or required.

1.5.07 DISTRICT – District shall mean Edgemont Community Services District.

1.5.08 DISTRICT ENGINEER – District Engineer shall mean the Engineer appointed by the Board and acting for the District.

1.5.09 – DWELLING OR LIVING UNIT – Dwelling or living unit shall mean any residence, apartment, mobile home, habitation or other structure designed to be occupied by a person or family and requiring sewage disposal service.

1.5.10 – EFFLUENT – Wastewater or other liquid, partially or completely treated, flowing out of the treatment plant.

1.5.11 – FIXTURE UNIT EQUIVALENTS – The unit equivalent of plumbing fixtures shall be as indicated in Chapter 4, Table 4-1, of the Uniform Plumbing Code, et seq.

1.5.12 – GARBAGE – Garbage shall mean solid wastes from the preparation, cooking and dispensing of food and from the handling, storage and sale of produce.

1.5.13 – MANAGER – Manager shall mean the person performing the functions of Secretary-General Manager of the District.

1.5.14 – INSPECTOR – Inspector shall mean the person who shall perform the work of inspecting sewerage facilities under the jurisdiction or control of the District.

1.5.15 – ORDINANCE – Means this ordinance of the District entitled, “Regulating the Use and Construction of Public Sewerage Facilities” as adopted by the Board of Directors of the Edgemont Community Services District.

1.5.16 – OWNER – Owner shall mean the person holding the legal title to the property or the person in lawful possession of the property or any person exercising lawful dominion or control over the property.

1.5.17 – PERMIT – Permit shall mean any written authorization required pursuant to this ordinance or any other regulation of the Board.

1.5.18 – PERSON – Person means a natural person, his heirs, executors, administrators or assigns and shall also include a firm, corporation, municipal or quasi-municipal corporation or governmental agency. Singular includes plural; male includes female.

1.5.19 – PUBLIC SEWER – Public sewer shall mean a sewer lying within a public right-of-way, easement, or area specified in a special permit or agreement, that is controlled by or under the jurisdiction of the District.

1.5.20 – SEWAGE TREATMENT PLANT – Sewage treatment plant shall mean any arrangement of devices and structures used for treating sewage.

1.5.21 – SEWER – Sewer shall mean a pipe or conduit for carrying sewage.

1.5.22 – SEWERAGE WORKS FACILITIES – Sewerage works shall mean all facilities for collecting, pumping, treating and disposing of sewage.

1.5.23 – SEWER LATERAL – Sewer lateral shall mean that portion of a sewer lying within a public right-of-way or easement connecting a building sewer to the main sewer.

(See the District’s “Sewer Lateral Policy,” adopted on January 28, 2016 for detailed definitions of “sewer lateral.”)

1.5.24 – SUSPENDED SOLIDS – Suspended solids shall mean solids that either float on the surface of, or are in suspension in water, sewage or other liquids and which are removable by laboratory filtering.

1.5.25 – UNIFORM PLUMBING CODE – Uniform Plumbing Code shall be that Code as published by the International Association of Plumbing and Mechanical Officials and the latest edition published and adopted by the County of Riverside as its plumbing code.

1.5.26 – UNIFORM PLUMBING CODE DEFINITIONS – Uniform plumbing code definitions are hereby incorporated as part of the definitions of this ordinance except as specifically modified herein. The Uniform Plumbing Code is not applicable to the design, construction or maintenance of the District’s sewer system.

1.5.28 – USER – User shall mean the person or persons using sewerage facilities of the District.

1.5.29 – WATERCOURSE – Watercourse shall mean a channel in which a flow of water occurs, either continuously or intermittently.

1.6 – USE OF PUBLIC SEWERS

1.6.01 – USE OF PUBLIC SEWERS – Use of public sewers shall be as specified in this ordinance, ordinances 277 through 280 and rules and regulations adopted pursuant to these ordinances.

1.6.02 – OCCUPANCY PROHIBITED – No building, industrial facility or other structure, including mobile structure, shall be occupied until all Rules and Regulations of the District are complied with.

1.6.03 – SEWER REQUIRED – The owner of all houses, buildings or properties used for human occupancy, employment, recreation or other purposes situated within the District and abutting on any street in which there is or shall have been located a public sewer of District, is hereby required at his expense to connect said building directly with the sewers of the District in accordance with the provisions of this ordinance within thirty (30) days after date of official notice by District to do so provided that said public sewer is within one hundred (100) feet of the nearest property line.

1.7. – USE OF PRIVATE SEWAGE DISPOSAL SYSTEMS

1.7.01 – NO PUBLIC SEWER – Where a public sewer is not available under the provisions of Section 1.6.03 above, the building sewer shall be connected to a private sewage disposal system complying with the provisions of the Uniform Plumbing Code, administered by the City of Moreno Valley.

1.8 – BUILDING SEWER AND CONNECTIONS TO PUBLIC SEWERAGE FACILITIES

1.8.01 – PERMIT REQUIRED – No person shall make a connection to any public sewer without first obtaining a written permit from the District and paying all required fees and connection charges to the District. The permit application shall be supplemented by any plans, specifications, or other information considered pertinent in the judgment of the General Manager.

1.8.02 – USE OF PUBLIC SEWER – The public sewer shall not be used until the building sewer has been inspected and approved by the City of Moreno Valley.

1.8.03 – RULES AND REGULATIONS – The District may adopt rules and regulations with respect to making connections to public sewer system including, but not limited to, permit, connection and inspection fees, procedures for installation of services, notices, testing and other regulations.

1.8.04 – LOCAL REGULATIONS – The connection of the building sewer into the public sewer or sewer lateral shall conform to the requirements of the District, shall be under District jurisdiction, and shall be installed by a licensed and insured contractor.

1.8.05 – SEPARATE SEWERS – Omitted..

1.8.06 – OLD BUILDING SEWERS – Old building sewer laterals may be used in connection with new buildings only when they are found on examination and test by the District, to meet all requirements of this ordinance.

1.8.07 – BUILDING SEWER LATERAL – Whenever possible, the building sewer lateral shall be brought to the building at an elevation below the basement floor. In all buildings in which any building drain is too low to permit gravity flow to the public sewer, sanitary sewage carried by such building drain shall be lifted by an approved means at owner's expense and discharged to the building sewer lateral.

1.8.08 – ILLEGAL CONNECTIONS – No person shall make connection of roof downspouts, exterior foundation drains, areaway drains, or other sources of surface runoff or groundwater to a building sewer or building drains which in turn is connected directly or indirectly to a public sewer.

1.9 – PUBLIC SEWER CONSTRUCTION

1.9.01 – APPROVED REQUIRED – No person shall construct or extend any public sewer without first obtaining written approval from the District and paying all fees, connection charges and furnish bonds as required. This provision does not apply to contractors constructing sewers and appurtenances under contracts entered into with the District. Design and construction of public sewer systems shall be in accordance with the District Standards and with the approval of the District Engineer.

1.9.02 – LIABILITY – The District and its officers, agents and employees shall not be answerable for any liability or injury or death to any person or damage to any property arising during or growing out of the performance of any work or construction by any applicant, contractor or owner. The applicant shall save District and its officers, agents and employees harmless from any liability imposed by law upon District or its officers, agents or employees, including all costs, expenses, fees and interest incurred in defending same, or in seeking to enforce this provision. Applicant shall be solely liable for any defects in the performance of his work or any failure which may develop therein.

1.9.03 – SUBDIVISIONS – The developer or his engineer shall contact the District to determine whether or not sewer service is feasible. He will furnish tentative tract maps showing lot sizes, street layout and elevations based upon USGS datum, points of connection to the District's sewers and water mains, possible pump stations and flow data based upon the design criteria of the District. The District Engineer will review the tract map and determine whether sewer service is feasible and whether any oversizing will be required to facilitate extension of the District's system. In addition, the developer shall be subject to all subdivision policies adopted by the City of Moreno Valley.

1.9.04 – MAIN EXTENSIONS OTHER THAN SUBDIVISIONS – Main extensions to serve one or more parcels of land may be made by the owner or owners of said land. The owner or his Engineer shall follow the same procedure for main extensions as

outlined for subdivisions in Section 1.9.03 above. In lieu of this procedure the owner or owners may request the District to make the necessary investigation, prepare plans and have the work constructed. The owner shall advance all necessary funds for the investigation, plan preparation and construction prior to the District commencing any of the work described above.

1.9.05 – Omitted.

1.9.06 – PAYMENT OF COST OF OVERSIZED MAINS – In the event the District elects to install sewers of greater size than, in the opinion of the District, shall be adequate to supply any new subdivision with sewer service, the owner of the proposed subdivision shall not be required to pay more than the cost of mains which, in the opinion of the District, are adequate to supply such subdivision with sewer service. The District will pay for the additional cost of materials for oversize, but not other adjustment of the cost of installation shall be made.

1.9.07 – REFUNDS – When sewer extensions are made and paid for by an applicant and said main extension shall be of benefit to another person in the future, said applicant may enter into a refund agreement with the District. Said refund agreement shall provide for a refund payment from main service charges collected by the District for service connection to a main, paid for by new applicant. Said refund shall be computed on the basis of actual cost to the person making the original main extension per front foot benefited for which the main service charge is collected. All refund agreements shall become null and void ten years from the date first written.

1.9.08 – PLANS AND SPECIFICATIONS – The developer, his engineer or other person proposing the construction of public sewers within the District will prepare plans and specifications for construction of said facilities in accordance with the District's "Sanitary Sewer System Design and Construction Manual." Plans and specifications along with tract map indicating easements shall be submitted to the District Engineer for approval. This submittal will not relieve the developer or other persons constructing public sewerage facilities from compliance with other requirements of State and local agencies.

1.9.09 – PLAN CHECKING – The District Engineer shall review the sewer plans for compliance with its requirements and shall approve such plans after the following conditions have been met:

1. The required plan checking fee has been paid by applicant.
2. The District Engineer has certified the plans as complying with District Rules and Regulations and as being in conformance with master sewerage plans for the area.

1.9.10 – BONDING OF IMPROVEMENTS – A Faithful Performance Bond, when required, shall be furnished by the Owner to the District. The bond shall be for not less than one hundred (100) percent of the construction estimate as approved by the District

Engineer. The bond shall guarantee the completion of construction of those sewerage facilities proposed. The bond shall be accompanied by an agreement between the owner and the District. The bond and agreement shall bear the same date.

1. When Bond Required – A performance bond will be required when any one (1) of the following conditions exists:
 - a. The Owner or developer has requested a letter to be sent to the California Bureau of Real Estate for issuance of the final Public Report.
 - b. Future improvements to the sewerage system will be dependent on portions of the system for which the construction permit application has been made.
2. Form Bond and Agreement – The bond and agreement forms shall be as approved by the District.

1.9.11 – CONSTRUCTION – Developer or other person shall construct facilities in accordance with the approved plans and specifications and construction methods as set forth by the District Rules and Regulations. A five-day advanced notice to start construction is required along with approval for construction plans and specifications. Construction of public sewers or sewer laterals as defined by this ordinance shall be performed by a person or contractor duly licensed by the State of California.

1.9.12 – INSPECTIONS – All public sewer construction work shall be inspected by a representative of the District or Inspector acting for the District to insure compliance with all requirements of the District. No construction shall be covered at any point until it has been inspected. No work shall commence until the required inspection fee has been paid.

1.9.13 – SERVICE REFUSED – The District may refuse service for non-compliance with its ordinance, Rules and Regulations, or Service Agreement.

1.9.14 – ACCEPTANCE OF FACILITIES – Before the District will accept sewer and appurtenances in its maintained system, the developer or his Engineer or agency shall furnish:

1. Recorded Notice of Completion in evidence that the work has been completed and paid for in accordance with approved plans and specifications.
2. One set of reproducible as-built plans, plus one set of prints, showing exact locations, depths and descriptions of all facilities.
3. Original recorded easement documents for sewer lines not in public property or not within a tract boundary.

4. Original recorded Quitclaim Deed transferring title of facilities to the District.
5. Letter from District Engineer certifying that facilities were installed according to plans and specifications.
6. Supply operating and maintenance manuals for all mechanical equipment.

1.9.15 – EASEMENTS – Where it is necessary to cross private property to achieve construction or to provide access for future sewers serving adjacent or upstream tributary land, the following procedure shall be used in the preparation, review and processing of the easements and easement documents.

1. Developer, or owner, shall prepare easement documents with description for all sewer facilities that do not lie within public roads, are outside of recorded tracts and/or are on private property. The easements shall be delineated in the plans and the recording data shall be shown on the as-built plans. All district easements shall be of not less than twenty feet (20') in width.
2. The District Engineer shall review easement documents with descriptions as part of plan review. The developer shall have them executed, notarized and submit completed documents to the District for recording.

1.10 – USE OF PUBLIC SEWER SYSTEM

1.10.01 – USE OF SYSTEMS – The Board may adopt rules and regulations on permissible discharges to the sewer system; providing for the control of prohibited wastes; grease, oil and sand interceptors; maintenance of flow equalizing systems; swimming pool discharges; and tests. The determination of a permissible discharge may require an acceptable analysis or tests from the discharges as evidence that the discharged wastes will not adversely affect the sewer system and/or treatment facilities.

1.11 – PERMITS AND FEES

1.11.01 – PERMIT REQUIRED – No person shall uncover, make any connection with or opening into, use, alter, or disturb any public sewer or perform any work on any public sewer and lateral sewer without first obtaining a written permit from District.

1.11.02 – PERMIT PROCEDURE – The Board shall, by rules and regulations, adopt procedures for application and approval of permits regulating the use and construction of the sewer facilities. Permits shall specifically state the obligations and liability for costs of the permittee.

1.11.03 – STREET EXCAVATION PERMIT – A permit must be secured from the City of Moreno Valley, or any other agency having jurisdiction thereover, by the owners or contractors intending to excavate in a public street for the purpose of installing sewers or making lateral connections.

1.11.04 – CONNECTION PERMITS – The connection permits will not be issued until the City of Moreno Valley Excavation Permit and/or State Highway Encroachment Permit, as required, is issued. The connection permit will not be issued until the required set of prints has been submitted and all fees paid.

1.11.05 – FEE REQUIREMENTS – The Board shall adopt, by Resolution, fees for the issuance of permits and for special services, including but not limited to, inspection, construction, plan checking, preparing special studies, and may further require fees for annexations, connections and use of sewerage facilities.

SECTION 2.0

CRITERIA FOR DESIGN OF

SEWERS, SEWAGE LIFT STATIONS, AND APPURTENANCES

The necessary criteria for design of sewers, sewage lift stations and appurtenances, shall be adopted by resolution of the Board of Directors as necessity dictates and a copy of the subject resolutions as adopted shall be on file in the Office of the District and available for public inspections.

SECTION 3.0

TECHNICAL SPECIFICATIONS

The Technical specifications describing material and workmanship required in the construction of sanitary sewers and appurtenances shall be as recommended by the District Engineer and approved by the Board of Directors. Copies of technical specifications shall be on file in the District office and available for public inspection.

SECTION 4.0

STANDARD FORMS AND DOCUMENTS

Necessary forms and documents to facilitate the business and activity of the District shall be adopted by the District as necessity dictates. Copies of the forms and documents as adopted shall be on file in the office of the District and shall be available for public inspection.

SECTION 5.0

VALIDITY

This ordinance and the various parts, sections and clauses thereof are hereby declared to be severable. If any part, sentence, paragraph, section or clause is adjudged unconstitutional or invalid, the remainder of this ordinance shall not be affected thereby. The Board of Directors of the Edgemont Community Services District, State of California, hereby declares that it would have passed this ordinance and each part thereof regardless of the fact that one or more parts thereof be declared unconstitutional or invalid.

The President of the Board of Directors is directed to sign and the Secretary is directed to attest this ordinance.

ADOPTED BY THE BOARD OF DIRECTORS OF THE EDGEMONT COMMUNITY SERVICES DISTRICT, and signed by the President and attested by the Secretary on the day of April 2016.



Mike Addie

President of the Board of Directors

Edgemont Community Services District

ATTEST:



Jessica Pfalmer, Secretary of the Board of Directors
Edgemont Community Services District


STATE OF CALIFORNIA)
County of Riverside) ss.

I, Jessica Pfalmer, the duly appointed, qualified and acting Secretary of the Board of Directors of EDGEMONT COMMUNITY SERVICES DISTRICT, do hereby certify that the foregoing ordinance was duly adopted by said Board of Directors at a regular meeting held on April 28, 2016, by the following vote:

AYES: 3

NOES: 0

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my signature on the 28th day of April 2016.



Jessica Pfalmer, Secretary, Board of Directors
EDGEMONT COMMUNITY SERVICES DISTRICT

ORDINANCE NO. 290

**AN ORDINANCE OF EDMONT COMMUNITY SERVICES
DISTRICT OF RIVERSIDE COUNTY, CALIFORNIA, APPROVING
MODIFICATION OF SEWER SYSTEM MANAGEMENT PLAN**

WHEREAS, the District developed a Sewer System Management Plan ("SSMP") in May 2011 pursuant to the requirements of the Water Resources Control Board of the State of California ("SWRCB"); and

WHEREAS, the SWRCB mandates that the SSMP be updated every five years from the original adoption date by the District's Board of Directors and the District's engineer has prepared and filed with the Secretary of the Edgemont Community Services District an updated version of the SSMP; and

WHEREAS, the SWRCB requires that the approval of the modified version of the SSMP be presented to the public and discussed at a public hearing, and the Board of Directors at its meeting on April 28, 2016, adopted Ordinance No. 286 fixing the time, date and place of a public hearing on the plan as 7:00 p.m. on May 26, 2016 at the meeting place of the Board of Directors, the Edgemont Womens' Club, 21640 Cottonwood, Moreno Valley, California; and

WHEREAS, pursuant to Ordinance No. 286 of the Edgemont Community Services District the time and place of hearing thereon was published pursuant to Section 6066 of the Government Code of the State of California; and

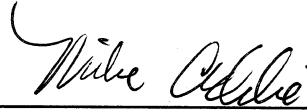
WHEREAS, after a public hearing this Board of Directors approves the modified and updated SSMP;

NOW, THEREFORE, IT IS RESOLVED by the Board of Directors of the

EDGEMONT COMMUNITY SERVICES DISTRICT as follows:

1. The updated SSMP is hereby approved and the District Engineer is directed to deliver the updated SSMP to the SWRCB and to such other state and federal agencies that may be required.

Adopted this 26th day of May 2016.

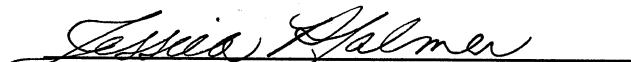


Michael D. Addie, President of
the Board of Directors of
Edgemont Community Services
District

STATE OF CALIFORNIA)
)ss.
COUNTY OF RIVERSIDE)

I, JESSICA PFALMER, the duly appointed, qualified and acting Secretary of the Board of Directors of EDGEMONT COMMUNITY SERVICES DISTRICT, DO HEREBY CERTIFY that the foregoing Ordinance was duly adopted by said Board of Directors at a regular meeting held on May 26, 2016.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Official Seal of the EDGEMONT COMMUNITY SERVICES DISTRICT on May 26, 2016.



Secretary of the Board of Directors
EDGEMONT COMMUNITY SERVICES DISTRICT

(Seal)

ORDINANCE NO. 291

AN ORDINANCE OF EDGEMONT COMMUNITY SERVICES
DISTRICT OF RIVERSIDE COUNTY, CALIFORNIA,
ESTABLISHING CURRENT RATES AND CHARGES

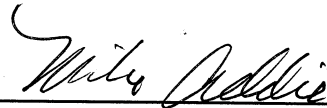
WHEREAS, the rates and charges are updated from time to time; and

WHEREAS, the District Engineer has completed a review of the existing rates and charges and recommends that they be updated in accordance with the charges and rates set forth on Exhibit A to this ordinance;

NOW, THEREFORE, IT IS RESOLVED by the Board of Directors of the EDGEMONT COMMUNITY SERVICES DISTRICT as follows:

1. The rates and charges for planning, connecting to and construction of sewer lines and laterals shall be as set forth on Exhibit A to this ordinance.,

Adopted this 26th day of May 2016.



Michael D. Addie, President of
the Board of Directors of
Edgemont Community Services
District

STATE OF CALIFORNIA)
)ss.
COUNTY OF RIVERSIDE)

I, JESSICA PFALMER, the duly appointed, qualified and acting Secretary of the Board of Directors of EDGEMONT COMMUNITY SERVICES DISTRICT, DO HEREBY

CERTIFY that the foregoing Ordinance was duly adopted by said Board of Directors at a regular meeting held on May 26, 2016.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Official Seal of the EDGEMONT COMMUNITY SERVICES DISTRICT on May 26, 2016.


Secretary of the Board of Directors
EDGEMONT COMMUNITY SERVICES DISTRICT

(Seal)

**EDGEMONT COMMUNITY SERVICES DISTRICT
Current Rates and Deposits
Effective as of May 26, 2016**

Sewer Facility Charge -1 EDU	\$3,600.00
Advance payment (deposit) against actual cost of sewer availability letter	
Plot Plan/Parcel Map/Tracts	\$3,500.00
Advance payment (deposit) against actual cost of plan checking	
Plot Plan/Parcel Map/Tracts	\$1,000.00/Sheet (\$5,000.00 Minimum)
Septic Tank Waiver	\$2,500.00
Standards Manual	\$100.00
Streetlight Annexation	\$4,000.00
Advance payment (deposit) against actual cost of inspection	
Plot Plan/Parcel Map/Tracts	TBD, Based on Scope (\$5,000.00 Minimum)

Exhibit A

RESOLUTION NO 291

A RESOLUTION OF EDGEMONT COMMUNITY
SERVICES DISTRICT ESTABLISHING MAXIMUM
CONCENTRATION LEVELS OF INDUSTRIAL WASTEWATER
AND CONVENTIONAL POLLUTANTS

WHEREAS, the National Pollutant Discharge Elimination System Permit issued to the City of Riverside requires that any agency discharging effluent into the sewage system of the City of Riverside adopt an ordinance regulating the discharge of industrial wastes; and

WHEREAS, Edgemont Community Services District has an agreement with the City of Riverside that obligates the District to deliver all of its wastewater to the City and requires the City to accept and treat all of its effluent; and

WHEREAS, the District adopted Ordinances 278 regulating the discharge of wastewater into the public sewer system; and

WHEREAS, it is a requirement of the permit issued to the City of Riverside that the District establish the maximum concentration levels of industrial wastewater and conventional pollutants in accordance with Ordinance 278; and

WHEREAS, the District Engineer has evaluated such maximum allowable concentration levels and has proposed the levels hereinafter set forth;

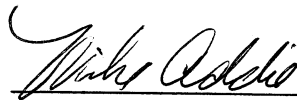
NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of Edgemont Community Services District as follows:

The following maximum concentration levels of industrial wastewater pollutants and conventional Pollutants are hereby established in accordance with Ordinance 278:

TABLE 1
INDUSTRIAL WASTEWATER POLLUTANT LIMITATIONS
 (All limits are mg/L except pH)

POLLUTANT	LIMIT	POLLUTANT	LIMIT
ARSENIC	0.18	SILVER	0.8
BORON	5.2	SODIUM	250
CADMIUM	0.15	SULFATE	250
CHLORIDE	350	ZINC	6.7
CHROMIUM	0.68		
COPPER	3.0	COD	8,000
CYANIDE	0.17	OIL/GREASE	250
FLUORIDE	12.0	TSS	2,000
LEAD	1.2	TDS	2,500
MANGANESE	1.0	TOTAL HARDNESS	2,500
MERCURY	0.001	TOTAL NITROGEN	500
NICKEL	2.3	pH	5.0-11.5

Dated: March 24, 2016



Michael Addie

President of the Board of Directors

Of EDGEMONT COMMUNITY SERVICES DISTRICT

ATTEST:



Jessica Pfalmer

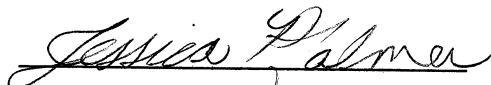
Secretary of the Board of Directors

Of EDGEMONT COMMUNITY SERVICES

DISTRICT

CERTIFICATION

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of Resolution No. 291 adopted by the Board of Directors of Edgemont Community Services District at its regular meeting held March 24, 2016



Jessica Pfalmer, Secretary

ORDINANCE NO. 292

**AN ORDINANCE OF EDGEMONT COMMUNITY SERVICES
DISTRICT OF RIVERSIDE COUNTY, CALIFORNIA,
ESTABLISHING A DESIGN AND CONSTRUCTION STANDARDS
MANUAL**

WHEREAS, it is imperative that the sewer facilities constructed for the Edgemont Community Services District are complete, correctly operating, and in compliance with government codes and good wastewater industry practices; and

WHEREAS, the protection of public health and safety is of utmost importance; and

WHEREAS, the District Engineer has prepared a Design and Construction Standards Manual for the District's sewer system in support of the above stated goals;

NOW, THEREFORE, IT IS RESOLVED by the Board of Directors of the EDGEMONT COMMUNITY SERVICES DISTRICT as follows:

The Design and Construction Standards Manual is hereby approved and all contractors, their agents and employees are ordered to comply with all the terms, directions, plans and designs stated therein.

Adopted this 26th day of May 2016.



Michael D. Addie, President of
the Board of Directors of
Edgemont Community Services
District

STATE OF CALIFORNIA)
)ss.

COUNTY OF RIVERSIDE)

I, JESSICA PFALMER, the duly appointed, qualified and acting Secretary of the Board of Directors of EDGEMONT COMMUNITY SERVICES DISTRICT, DO HEREBY CERTIFY that the foregoing Ordinance was duly adopted by said Board of Directors at a regular meeting held on May 26, 2016.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the Official Seal of the EDGEMONT COMMUNITY SERVICES DISTRICT on May 26, 2016.


Secretary of the Board of Directors
EDGEMONT COMMUNITY SERVICES DISTRICT

(Seal)

Ordinance No. 352

AN ORDINANCE OF EDGEMONT COMMUNITY SERVICES DISTRICT

RELATING TO THE

DISCHARGE OF WASTES INTO THE PUBLIC SEWER SYSTEM

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Ordinance No. 352

AN ORDINANCE OF EDMONT COMMUNITY SERVICES DISTRICT

RELATING TO THE

DISCHARGE OF WASTES INTO THE PUBLIC SEWER SYSTEM

Chapter 14.12. Section 110 Purpose--Implementation of Regional Board Resolution.

The sewer system of Edgemont Community Services District, herein after called the "District" through agreements with the City of Riverside discharges sewage into the City of Riverside sewer system. The City of Riverside's Regional Water Quality Control Plant ("POTW") discharges treated effluent into permeable soil structures and surface waters of the State, in particular the Santa Ana River. The chemical nature of this effluent affects the quality of water flowing in the receiving stream as well as the quality of underground waters in the vicinity.

The California Regional Water Quality Control Board, Santa Ana Region, hereinafter called the "Regional Board" has established discharge limitations for the chemical content of sewage effluent discharged by the City of Riverside, hereinafter called the "City". These limitations are set forth from time to time in duly enacted resolutions and orders of the Regional Board.

In order to conform to such sewage effluent discharge limitations and requirements, the District must regulate the discharge of waste into its sewerage system which eventually flows into the City of Riverside's publicly owned treatment works (POTW). To ensure that the effluent discharged by the District into the POTW of the City of Riverside, the District hereby adopts portions of Chapter 14.12 of Title 14 of the Code of Ordinances of the City of Riverside as hereinafter set forth. This ordinance supersedes and replaces Ordinance 278.

A. This Ordinance shall provide for the regulation of wastewater discharge in accordance with the federal government's objectives of general pretreatment regulations as stated in Section 403.2 of Title 40 of the Code of Federal Regulations (CFR) which are for the following purposes:

1. To prevent the introduction of pollutants into the City's POTW which will interfere with the operation of the POTW, including interference with its use or disposal of municipal biosolids;
2. To prevent the introduction of pollutants into the POTW which will pass through the treatment works, inadequately treated, to the receiving waters or otherwise be incompatible with such works;
3. To improve opportunities to recycle and reclaim municipal and industrial wastewater and biosolids;

4. To enable the City to comply with its NPDES Permit conditions, biosolids use and disposal requirements, and any other federal or state laws to which the POTW is subjected;
 5. To enable the City to control the privileges to any use of the POTW; and
 6. To protect and preserve the health and safety of the citizens and personnel of the City and the Community Services Districts.
- B. This chapter shall apply to all users of the POTW. This chapter authorizes:
1. The issuance of Industrial User Permits;
 2. Monitoring, compliance, and enforcement activities;
 3. Administrative review procedures;
 4. Industrial waste plan check review services;
 5. User reporting requirements;
 6. The establishment of fees;
 7. The equitable distribution of costs resulting from the program established herein; and
 8. To reduce or prevent the introduction of pollutants into the City storm drain system.

14.12.115 Abbreviations.

The following abbreviations, when used in this Code, shall have the designated meanings set forth herein:

- ADM - Anaerobically Digestible Material
- BOD - Biochemical Oxygen Demand
- BMP - Best Management Practice
- BMR - Baseline Monitoring Report
- CFR - *Code of Federal Regulations*
- CIU - Categorical Industrial User
- COD - Chemical Oxygen Demand
- DIU- Dental Industrial User
- FW - Food Waste, Organic or Blended Waste
- EPA - U.S. Environmental Protection Agency
- gpd - gallons per day
- IU - Industrial User
- mg/l - milligrams per liter
- MS4 - Municipal Separate Storm Sewer System
- NPDES - National Pollutant Discharge Elimination System
- NSCIU - Non-Significant Categorical Industrial User
- POTW - Publicly Owned Treatment Works
- RCRA - Resource Conservation and Recovery Act
- RWQCP - Regional Water Quality Control Plant

- SIU - Significant Industrial User
- SNC - Significant Noncompliance
- TDS - Total Dissolved Solids
- TRC - Technical Review Criteria
- TSS - Total Suspended Solids
- U.S.C. - United States Code

14.12.120 Definitions.

Unless the context specifically indicates otherwise, the meaning of the terms used in this chapter shall be as follows:

1. *Act* or "*the Act*" means the Federal Water Pollution Control Act, also known as the Clean Water Act, as amended from time to time, 33 U.S.C. Section 1251 et seq.
2. *Anaerobically Digestible Material* or *ADM* means a slurry intended for direct injection to the plant's anaerobic digesters
3. *Analytical methods* means the sample analysis techniques prescribed in 40 CFR Part 136. Where 40 CFR Part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the EPA determines that Part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed using validated analytical methods, approved by the City, or any other applicable sampling and analytical procedures, including procedures suggested by the City or other parties as approved by the EPA.
4. *Authorized or duly authorized representative of the user* means:
 - A. If the user is a corporation:
 - (1) The president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or
 - (2) The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions that govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; can ensure that the necessary systems are established or actions taken to gather complete and accurate information for individual wastewater discharge permit [or general permit {optional}] requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.
 - B. If the user is a partnership, limited liability company or sole proprietorship, the general partner, managing member or proprietor respectively;
 - C. If the user is a federal, state, or local government facility: a District Engineer or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or their designee.
 - D. The individuals designated in paragraph A., B. or C above, may designate a duly authorized representative if the authorization is in writing, the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company, and the written authorization is submitted to the District.

5. *Baseline Monitoring Report (BMR)* means a report which contains the information listed in paragraphs 40 CFR §403.12 (b)(1)-(7) to be submitted within 180 days after the effective date of a categorical Pretreatment Standard, or 180 days after the final administrative decision made upon a category determination submission under 40 CFR §403.6(a)(4), whichever is later, existing Industrial Users subject to such categorical Pretreatment Standards and currently discharging to or scheduled to discharge to a POTW shall be required to submit to the District this report. At least 90 days prior to commencement of discharge, new sources, and sources that become industrial users subsequent to the promulgation of an applicable categorical standard, shall be required to submit to the District a report which contains the information listed in paragraphs 40 CFR §403.12 (b)(1)-(5) of this section. New sources shall also be required to include in this report information on the method of pretreatment the source intends to use to meet applicable pretreatment standards.
6. *Best management practices (BMPs)* means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices for compliance with pretreatment and storm water housekeeping requirements. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage. POTWs may develop BMPs, which shall be considered local limits and pretreatment standards for the purposes of this ordinance.
7. *Biochemical Oxygen Demand (BOD)* means the quantity of oxygen, expressed in mg/L, required to biologically oxidize material in a waste sample measured under standard laboratory methods of five days at 20 degrees Centigrade, usually expressed as a concentration.
8. *Bypass* means the intentional diversion of waste streams from any point of a user's pretreatment facility.
9. *Categorical industrial user (CIU)* means all industrial users subject to National Categorical Pretreatment Standards promulgated by the EPA in accordance with Sections 307 (b) and (c) of the Clean Water Act (33 U.S.C. Sec. 1317 et seq.), and as listed by the EPA under the appropriate subpart of 40 CFR Chapter I, Subchapter N.
10. *Certification statement* means the following text from 40 CFR Part 403.6(a)(2)(ii):

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."
11. *Chemical Oxygen Demand (COD)* means the quantity of oxygen, expressed in mg/L required to chemically oxidize material in a waste sample or wastewater sample, under specific conditions of an oxidizing agent, temperature, and time.
12. *District Attorney* means the District Attorney for the District or an authorized representative, deputy, or agent appointed by the District Attorney.
13. *Class I User* means an industrial user with an annual average industrial wastewater discharge of 25,000 gallons or more per day; a significant industrial user; and/or a categorical industrial user which is regulated by a Federal Categorical Pretreatment Standard.
14. *Class II User* means an industrial user with an annual average industrial wastewater discharge between 10,000 and 24,999 gallons per day.
15. *Class III User* means an industrial user with an annual average industrial wastewater discharge between one and 9,999 gallons per day.
16. *Class IV User* means any industrial or categorical industrial user that has a manufacturing or production process or procedure that generates wastewater and/or waste and that wastewater and/or waste is not discharged to the POTW due to the user's reclamation, recycling, segregation, and/or off-site site disposal of the wastewater and/or waste; or a user subject to categorical pretreatment standards under 40 CFR Part

403.6 and 40 CFR Chapter I, subchapter N and that never discharges more than 100 gallons per day of total categorical wastewater.

17. *Class V User* means an industrial user that has a temporary need to discharge wastewater to the POTW. The temporary period shall be from one to 180 days.
18. *Class VI User* means a liquid waste hauler that transports domestic waste from septic tanks, cesspools, seepage pits, private disposal systems, Anaerobically Digestible Material (ADM) or Food or Organic Blended Waste (FW) for discharge at the RWQCP.
19. *Collection Agency* means a public agency with which the District has an interjurisdictional agreement addressing that agency's sewage collection and discharge to the District for transmission, treatment, and disposal.
20. *Collection system* means all pipes, sewers and conveyance systems conveying wastewater, owned and maintained by the District, but not including sewer lateral line connections.
21. *Combined wastestream formula* means the formula, as outlined in the general pretreatment regulations of the Clean Water Act, 40 CFR 403.6(e), for determining wastewater discharge limitations for categorical industrial users whose effluent is a mixture of regulated, unregulated, and dilution wastewater as defined in the formula.
22. *Commercial Facility* means a sewer user with a sales storefront which provides a service or product intended for the public.
23. Reserved.
24. *Compliance Flow Exceedance* means a 24-hour discharge volume that exceeds the Permitted Maximum Daily Discharge volume by greater than five percent.
25. *Compliance Order* means an administrative order directing a noncompliant user to achieve or restore compliance by a date specified in the order to correct violations of the Industrial User's wastewater discharge permit or of this Chapter.
26. *Compliance schedule* means a time schedule enforceable under this chapter containing increments of progress, i.e., milestones, in the form of dates. These milestones shall be for the commencement and/or completion of major events leading to the construction and operation of additional pretreatment facilities or the implementation of policies, procedures or operational management techniques required for the user to comply with all applicable federal, state or local environmental regulations which may directly or indirectly affect the quality of the user's wastewater effluent.
27. *Composite sample* means a series of grab samples of equal volume taken at a predetermined time or flow rate for a predetermined period of time, which are combined into one sample.
28. *Confined space*, pursuant to California Code of Regulations, Title 8, Section 5157, subsection b, means a space that:
 - A. Is large enough and so configured that a person can bodily enter and perform assigned work;
 - B. Has limited or restricted means for entry or exit (for example, tanks vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry); and
 - C. Is not designed for continuous occupancy by a person.
29. *Consent order* means a time schedule agreed upon by the District and an Industrial User that specifies corrective actions, called milestones, to be taken by the Industrial User to correct violations of the Industrial User's Wastewater Discharge Permit or this Chapter.
30. *Control authority* means the District.

31. *Conventional pollutants* means pollutants amenable to treatment at a municipal sewage treatment plant, such as BOD, COD, total suspended solids, pH, fecal coliform, oil and grease, total nitrogen and such additional pollutants the EPA defines as conventional.
32. *Corrective action* means a response, plan, action, or activity undertaken to correct a violation or deficiency.
33. *Cooling water* means all water used solely for the purpose of cooling a manufacturing process, equipment, or product.
34. *Daily Average* means the arithmetic average of all effluent samples for a pollutant collected during a calendar day.
35. *Daily maximum limit* means the maximum allowable discharge limit of a pollutant during a calendar day. Where daily maximum limits are expressed in units of mass, the daily discharge is the total mass discharged over the course of the day. Where daily maximum limits are expressed in terms of a concentration, the daily discharge is the arithmetic average measurement of the pollutant concentration derived from all measurements taken that day.
36. *De Minimis user* means any user whose industrial wastewater discharge is less than 100 gallons per day and is not regulated by a federal categorical pretreatment standard or industrial user group permit.
37. *Dental industrial user* means all industrial users subject to Dental Amalgam Effluent and BMP Standards or related requirements promulgated by the Environmental Protection Agency (EPA), and any subsequent programs or requirements imposed by a State agency.
38. *Dilution* means the increase in use of process water or any other means to dilute a wastestream as a partial or complete substitute for adequate treatment to achieve discharge requirements.
39. *Direct Discharge* means a discharge directly to surface, channel, stream or other receiving body that leads to the Waters of the United States.
40. *District Engineer* means the District Engineer or agent.
41. *Discharge Requirements* means the specific numerical limits, prohibitions, and reporting requirements as contained in an Industrial User Permit and this Chapter.
42. *Domestic septic wastes* means all domestic wastes contained in septic tanks, cesspools, seepage pits, holding tanks and private disposal systems.
43. *Domestic wastewater* (also referred to as Sanitary Wastewater) means wastewater from residences, offices, institutions or from other premises resulting from the use of water for personal washing, sanitary purposes or the discharge of human excrement and related matter.
44. *Effluent* means treated wastewater flowing from treatment facilities, a POTW, or a user's pretreatment equipment.
45. *Emergency* means facts or circumstances that District reasonably determines create an imminent threat of harm to public health or safety, the environment or the POTW.
46. *Enforcement Policy* means the current methods as outlined in the District's Enforcement Response Plan and utilized by the District to gain compliance from Industrial Users for violations of wastewater discharge permit conditions or this Chapter.
47. *Environmental Protection Agency or EPA* means the U.S. Environmental Protection Agency or, where appropriate, the Regional Water Management Division District Engineer, the Regional Administrator, or other duly authorized official of said agency.
48. *Existing source* means any source of discharge that is not a "New Source."
49. *Federal Categorical Pretreatment Standard* means the National Pretreatment Standards, established by the EPA, specifying quantities or concentrations of pollutants or pollutant properties which may be discharged or

introduced into the POTW by existing or new industrial users in specific industrial categories established as separate regulations under the appropriate subpart of 40 CFR Chapter I, Subchapter N.

50. *Fats, Oils and Greases* or *FOG* means the hydrophobic, viscous, agglomerative byproduct of food preparation that can build up in sewer lines and restrict flow, causing blockages.
51. *General Prohibitions* means the prohibition against introduction into a POTW of any pollutant(s) which cause Pass Through or Interference, as defined in 40 CFR 403.5, applicable to all users.
52. *Good faith* means the user's honest intention to remedy noncompliance together with actions that support the intention without the use of enforcement actions by the District. Examples of these intentions are improved housekeeping practices or the installation of pretreatment equipment to reduce or eliminate pollutants.
53. *Grab sample* means an individual sample collected over a period of time not exceeding 15 minutes.
54. *Gravity separation interceptor* means an approved wastewater detention device, equipment or appurtenance and is designed to remove floatable and settleable material by means of gravity and the solubility of the waste in water from industrial wastewater prior to discharge to the POTW and may include but not be limited to grease interceptors, hydromechanical grease interceptors, grease traps, and sand/oil interceptors, or clarifiers.
55. *Hazardous substance* means any substance capable of creating imminent endangerment to health or the environment.
56. *Heating water* means all water used solely for the heating of a manufacturing process, equipment, or product.
57. *Indirect discharge* or *discharge* means the introduction of pollutants into the POTW from any nondomestic source.
58. *Industrial user* means all persons, entities, public or private, industrial, commercial, governmental, or institutional which discharge or cause to be discharged, industrial wastewater and waterborne waste into the POTW, or stores waste or wastewater on site for treatment and/or subsequent disposal, and includes mobile wash businesses and liquid waste haulers.
59. *Industrial user permit* means a permit, issued by the District, regulating the terms and conditions under which an industrial user may discharge any non-domestic wastewater to the POTW.
60. *Industrial wastewater* means all non-domestic wastewater from any producing, manufacturing, processing, institutional, governmental, commercial, restaurant, service, agricultural or other operation. Industrial wastewater may also include cooling tower and boiler blowdown water, contaminated stormwater, potable water treatment wastewater and chemical toilet wastewater as determined by the District Engineer. Any wastewater that is hauled by truck, rail or other means, and discharged into the sewerage system, shall be considered industrial wastewater, regardless of the original source.
61. *Infectious waste* means all disease-containing wastes that normally cause, or significantly contribute to the cause of increased morbidity or mortality of human beings.
62. *Instantaneous limit* means the maximum concentration of a pollutant, including flow volume, allowed to be discharged at any time, determined from the analysis of any discrete or composited sample collected, independent of the industrial flow rate and the duration of the sampling event
63. *Interference* means any discharge from a user which, alone or in conjunction with a discharge or discharges from other sources both: inhibits or disrupts the POTW, treatment processes or operations, or sludge processes, use or disposal; and which is a cause of a violation of any requirement of the City's NPDES permit (including an increase in the magnitude or duration of violation) or of the prevention of biosolids use or disposal in compliance with Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly known as the Resource Conservation and Recovery Act (RCRA)), and state regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA,

the Clean Air Act, the Toxic Substances Control Act, the Marine Protection Research and Sanctuaries Act, and any amendments to these Acts or regulations.

64. *Ion exchange water softener* means a water conditioning apparatus that is designed to remove hardness or other impurities from a user's potable water supply through chemical, not physical means.
65. *Liquid waste hauler* means any person engaged in the truck hauling of liquid wastes from septic tanks, seepage pits, cesspools, other private disposal systems, FOG wastes, food wastes or blended organic wastes, or other wastes as determined by the District Engineer.
66. *Local limits* means general and specific prohibitions, best management practices or pollutant discharge limitations or pollutant parameters which are developed by the City in accordance with 40 CFR 403.5(c) and as adopted by the City Council.
67. *Lower explosive limit (LEL)* means the minimum concentration of combustible gas or vapor in the air that will ignite if an ignition source is present.
68. *Mass emission rate* means the rate of pollutant discharge in pounds per day to the POTW.
69. *May* means permissive.
70. *mg/L* means milligrams per liter.
71. *Milestone* means a time-based increment of progress in a compliance schedule, not to exceed nine months. Milestones may be set for construction, operations, repairs, the creation of policies and procedures, or other aspects of pretreatment and discharge.
72. *Mobile wash business* means nonresidential user of mobile pressure washing equipment to wash or rinse motor vehicles, machinery, buildings, windows, paved areas, sidewalks, parking lots, and outdoor eating areas, etc.
73. *Medical waste* means isolation wastes, infectious agents, human blood and blood products, pathological wastes, sharps, body parts, contaminated bedding, surgical wastes, potentially contaminated laboratory wastes, and dialysis wastes.
74. *Monitoring/Production Information Order (MPIO)* means an Administrative Order requiring an industrial user to determine the concentration or mass emission of pollutants in its industrial wastewater discharge when two consecutive violations for the same pollutant are detected. The industrial user shall sample those pollutants for each day in a 14 consecutive calendar day period that industrial wastewater is discharged to the POTW and shall provide that data and wastewater discharge flow data for that period.
75. *Monthly average* means the average of daily measurements over a calendar month as calculated by adding all the daily measurements taken during the calendar month and dividing that sum by the sum of the number of daily measurements taken in the calendar month.
76. *Monthly average Limit* means the highest allowable average of "daily discharges" over a calendar month, calculated as the sum of all "daily discharges" measured during a calendar month divided by the number of "daily discharges" measured during that month.
77. *Municipal Separate Storm Sewer System (MS4)* means a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains): (i) Owned or operated by a State, city town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to Waters of the U.S.; (ii) Designated or used for collecting or conveying storm water; (iii) Which is not a combined sewer; (iv) Which is not part of the POTW as defined at 40 CFR 122.2.

78. *New source* means

- A. Any building, structure, facility, or installation from which there is or may be a discharge of pollutants, the construction of which commenced after the publication of proposed pretreatment standards under Section 307 (c) of the Federal Clean Water Act, which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:
 - i. The building, structure, facility or installation is constructed at a site at which no other source is located; or
 - ii. The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or
 - iii. The production or wastewater generating processes of the building, structure, facility or installation are substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source may be considered.
- B. Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility, or installation meeting the criteria of subsection A above but otherwise alters, replaces, or adds to existing process or production equipment.
- C. Construction of a new source as defined under this paragraph has commenced if the owner or operator has:
 - i. Begun, or caused to begin, as part of a continuous onsite construction program
 - (a) Any placement, assembly, or installation of facilities or equipment; or
 - (b) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment.
 - ii. Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

79. *Noncontact cooling water* means water used for cooling that does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

80. *Non-Discharging Categorical Industrial User (NDCIU)* or sometimes termed *Dry Categorical User* means Categorical Industrial Users which generate categorical wastewater, but do not have discharges to the City's collection system that are regulated by the National Categorical Pretreatment Standards contained in 40 CFR Parts 405-471 and amendments thereto. These users shall not be considered Significant Industrial Users as defined by 40 CFR Part 403.

81. *NPDES permit* means the then effective National Pollutant Discharge Elimination System Permit issued by the California Regional Water Quality Control Board establishing the Waste Discharge and Producer/User Reclamation Requirements for the Riverside Regional Water Quality Control Plant.

82. *NSIU* means a non-significant industrial user that does not require a Class I-VI Industrial User Permit or other control instrument and is not considered a restaurant.

83. *Non-significant categorical industrial user* means a user subject to categorical pretreatment standards under 40 CFR Part 403.6 and 40 CFR Chapter I, subchapter N and that never discharges more than 100 gallons per day of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown

- wastewater) as measured from each individual categorical source at the facility, and has: 1) consistently complied with all applicable categorical Pretreatment Standards and Requirements; 2) has submitted a certification statement required by 40 CFR Part 403.12(q) together with any additional information necessary to support the certification statement; and 3) has never discharged any untreated concentrated wastewater.
84. *Non-Storm Water Discharges (NSWDs)* means discharges that do not originate from precipitation events, including, but not limited to, discharges of process water, air conditioner condensate, non-contact cooling water, vehicle wash water, sanitary wastes, concrete washout water, paint wash water, irrigation water, or pipe testing water.
 85. *Off-Spec Product* means a product that is contaminated or otherwise fails to meet applicable specifications per the manufacturer.
 86. *Oil and grease* means any of the following in part or in combination:
 - A. Petroleum derived products, e.g., oils, fuels, lubricants, solvents, cutting oils;
 - B. Vegetable derived products, e.g., oils, shortenings, water soluble cutting oils; or
 - C. Animal derived products, e.g., fats, greases, oils, lard
 87. *Pass through* means any discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, causes a violation of any requirement of the NPDES Permit, including an increase in the magnitude or duration of a violation.
 88. *Permit-required confined space*, pursuant to California Code of Regulations, Title 8, Section 5157, subsection b, means a confined space that has one or more of the following characteristics:
 - A. Contains or has the potential to contain a hazardous atmosphere;
 - B. Contains a material that has the potential for engulfing an entrant;
 - C. Has an internal configuration such that an entrant could be trapped or and tapers to a smaller cross-section; or
 - D. Contains any other recognized serious safety or health hazard.
 89. *Person* means any individual, firm, company, association, society, general or limited partnership, limited liability company, trust, corporation, governmental agency or group, and includes the plural as well as the singular.
 90. *pH* means a measure of the acidity or alkalinity of a solution, expressed in standard units.
 91. *Pollutant* means anything which causes the deterioration of water quality such that it impairs subsequent and/or competing uses of the water. Also means conventional pollutants, domestic wastewater, hazardous substances, infectious waste, slug discharges, dredged soil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, medical waste, plastic waste, heat, rock, sand, dirt, dust, wood product, cleaning chemicals of any kind and industrial, municipal, and agricultural waste and wastewaters. Pollutants may also include, but are not limited to, paints, oil and other automotive fluids, soil, sand, sediment, dirt, rubbish, trash, garbage, debris, refuse, waste, fecal coliform, fecal streptococcus, enterococcus, other biological materials, radiological materials, suspended solids, heavy metals, hazardous waste, chemicals, fresh concrete, yard waste from commercial landscaping operations, animal waste, materials that result from the process of constructing a building or structure, nauseous or offensive matter of any kind.
 92. *Pollutant exceedance fee* means a fee in addition to the sewer service charge, which is charged on those users whose wastewater discharge pollutants exceed permitted pollutant levels for COD, TSS or maximum daily discharge volume.

93. *Plastic Materials* means virgin and recycled plastic resin pellets, powders, flakes, powdered additives, regrind, dust, and other similar types of preproduction plastics with potential to discharge or migrate off-site.
94. *Pretreatment* means the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to, or in lieu of, discharging or otherwise introducing such pollutants into the POTW. This reduction or alteration can be obtained by physical, chemical, or biological processes; by process changes; or by other means, except by diluting the concentration of the pollutants unless allowed by an applicable pretreatment standard.
95. *Pretreatment standards* or *standards* means prohibited discharge standards, categorical pretreatment standards, and local limits.
96. *Prohibited discharge standards* or *prohibited discharges* means absolute prohibitions against the discharge of certain substances; these prohibitions appear in Section 2 and 3 of this ordinance.
97. *Pretreatment waste* means waste byproducts, such as sludge or particulates, removed by pretreatment.
98. *Publicly Owned Treatment Works* or *POTW* means a wastewater treatment plant, e.g., the Riverside Regional Water Quality Control Plant (RWQCP). This definition includes the collection system, within the City and the District, which is the sewers, pipes and other conveyances of wastewater to a treatment plant, except for private sewer lateral connections. It also includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes.
99. *Qualified professional* means a person qualified by education, training, or experience to evaluate and assess pollutant discharges and violations of this chapter.
100. *Quarterly Average* means the average of discrete measurements taken over a calendar Quarter as calculated by using all daily measurements and flows as applicable.
101. *Quarterly Average Limit* means the highest allowable quarterly average discharge of a specified pollutant, calculated from all daily measurements and flows as applicable.
102. *RCRA* means the Resource Conservation and Recovery Act and its Regulations as contained in 40 CFR Part 260-266 and 270.
103. *Regional Water Quality Control Plant (RWQCP)* means the City owned treatment works located at 5950 Acorn Street, Riverside CA 92504.
104. *Restaurant* or *Food Service Establishment (FSE)* means all retail establishments selling prepared foods and/or drinks for consumption on or off the premises; including lunch counters and refreshment stands. Retail establishments, lunch counters, and drinking places selling prepared food and/or drink as a subordinate service incidental to their primary operations, and institutional facilities (e.g., schools, hospitals, jails, prisons, and juvenile halls), which serve food on the premises shall also be considered restaurants.
105. *Sanitary Sewer Overflow* or *SSO* means a release of untreated sewage from the sanitary sewer into the environment prior to reaching sewage treatment facilities.
106. *Shall* means mandatory.
107. *Self-monitoring* means wastewater samples taken by a user or the user's contracted laboratory, consultant, engineer, or similar entity.
108. *Septic tank waste* means any sewage from holding tanks such as vessels, chemical toilets, campers, trailers and septic tanks.
109. *Sewage* means human excrement and gray water (household showers, dishwashing operations, etc.).
110. *Sewer lateral line* means the wastewater collection pipe extending from the premises where the wastewater is generated to the premises' property line or easement boundary for residences, or from the premises to the connection to the District main line for commercial or industrial facilities.

111. *Significant industrial user (SIU)*, except as provided in paragraphs C and D below, as per 40 CFR 403.8(f)(1)(iii)(B)(6) means one or more of the following:
- A. An industrial user subject to categorical pretreatment standards.
 - B. An industrial user that
 - (i) Discharges an average of at least 25,000 gallons per day (gpd) or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewater);
 - (ii) Contributes a process wastestream which makes up five percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant.
 - C. Is designated as such by the District on the basis that it has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement.
 - D. The District may determine that an industrial user subject to categorical pretreatment standards is a non-significant categorical industrial user rather than a significant industrial user on a finding that the industrial user never discharges more than 100 gallons per day (gpd) of total categorical wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater, unless specifically included in the pretreatment standard) and the following conditions are met:
 - (i) The industrial user, prior to the District's finding, has consistently complied with all applicable categorical pretreatment standards and requirements;
 - (ii) The industrial user annually submits the certification statement required in Section 6.14 B [see 40 CFR 403.12(q)], together with any additional information necessary to support the certification statement; and
 - (iii) The industrial user never discharges any untreated concentrated wastewater.
 - E. Upon a finding that a user meeting the criteria in subsection D. of this part has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the District may at any time, on its own initiative or in response to a petition received from an industrial user, and in accordance with procedures in 40 CFR 403.8(f)(6), determine that such user should not be considered a significant industrial user.
112. *Significant noncompliance (SNC)* means any violation meeting one or more of the following criteria:
- A. Chronic violations of wastewater discharge limits, defined as those in which 66 percent or more of all of the measurements for the same pollutant parameter during a six consecutive month period exceed by any magnitude a numeric pretreatment standard or requirement, including instantaneous limits;
 - B. Technical Review Criteria (TRC) violations, which are defined as those in which 33 percent or more of all of the measurements taken during a consecutive six-month period equal or exceed the product of the numeric pretreatment standard, local limit, or requirement, including instantaneous limits, multiplied by the applicable TRC (TRC=1.4 for BOD, COD, TSS, fats, oil and grease, and 1.2 for all other pollutants except pH);
 - C. Any other violation of a numeric pretreatment standard or requirement (including narrative standards and best management practices) determined by the District to cause, in whole or in part: POTW damage, interference, or pass through; danger to POTW personnel; or the public health, safety and welfare;
 - D. Any discharge of a pollutant posing imminent danger to human health or welfare, or to the environment, or resulting in the District's exercise of its emergency authority to stop or prevent such a discharge;
 - E. Failure to meet, within 90 days after the scheduled date, a compliance schedule Milestone;

- F. Failure to provide, within 30 days of the scheduled date, any required reports such as baseline monitoring reports, compliance reports, and self-monitoring reports;
 - G. Failure to pay, within 30 days of written notification, all application, permit, or enforcement fees;
 - H. Failure to accurately report non-compliance; or
 - I. Any other violation(s), which may include failure to implement required best management practices, which the District believes will adversely affect the District's pretreatment program.
113. *Single pass cooling water* means water that is used solely for the purpose of cooling and is used only once before being discharged.
 114. *Single pass heating water* means water that is used solely for the purpose of heating and is used only once before being discharged.
 115. *Slug load or slug discharge* means any discharge of wastewater of a non-routine, episodic nature including, but not limited to, an accidental spill, or a non-customary batch discharge which could damage, interfere with, or pass through the POTW or otherwise violate this chapter, local limits, permit conditions, or other regulations. *Slug load* means any discharge at a flow rate or concentration, which could cause a violation of the prohibited discharge standards or local limits as described in this ordinance or a permit.
 116. *Spill-Containment* means a protection system installed by an Industrial User to prevent the comingling of incompatible materials and/or accidental discharge of prohibited and/or incompatible pollutants to the collection system or storm drain.
 117. *Storm drain or Stormwater Conveyance System* means a storm water drain system or a system of open channels, lined and unlined channels, surface channels, impound basins, ground water recharge basins, storm water holding ponds, underground pipes, curb and gutter, inlets and outlets, cross gutters, storm water pump and lift stations, parking lots, paved areas, streets, and natural water courses used to collect and direct storm water to a receiving body of water or aquifer recharge basins.
 118. *Storm water* means water flowing or discharged as a result of rain, snow, or other precipitation.
 119. *Temporary user* means any user granted temporary permission under a Class V Industrial User Permit to discharge unpolluted water or wastewater to the sewer system.
 120. *Timeline* means the date of completion for a compliance schedule, compliance plan, corrective action, submission of report, or other response required due to a detected violation or deficiency. This can also be called a benchmark or milestone.
 121. *Total suspended solids or suspended solids* means the total suspended matter that floats on the surface or is suspended in water, wastewater, or other liquid, and that is removable retained by laboratory filtering and dried at 103—105 degrees C.
 122. *Total toxic organics (TTO)* means the sum of all quantifiable values greater than 0.01 mg/L of the regulated toxic organic compounds which are found in the user's industrial wastewater discharge.
 123. *Unpolluted water* means cooling and heating water, single pass cooling and heating water, air conditioning condensate, ice melt, condensate, landscape irrigation, crop irrigation, rain water, and other water not containing any pollutant, or water whose discharge would not otherwise violate any receiving water quality standards.
 124. *Upset* means an exceptional incident which causes temporary and unintentional non-compliance with the discharge limitations or prohibitions applicable to a user or the POTW.
 125. *User or industrial user* means any person, public or private, residential, industrial, commercial, governmental, or institutional which discharges or causes to be discharged wastewater or waterborne waste to the POTW.
 126. *Waste* means any discarded solid, semi-solid, liquid, or gaseous material.

127. *Wastewater* means liquid and water-carried industrial wastes and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated, which are contributed to the POTW or storm drain.
128. *Wastewater treatment plant* or *treatment plant* means that portion of the POTW which is designed to provide treatment of municipal sewage and industrial waste.
129. *Waters of the State* means any surface water or groundwater, including saline waters, within the boundaries of the State of California.

14.12.121—14.12.199. Reserved.

Division II. General Provisions

14.12.200 Administration.

- A. *Rules.* The District Engineer may adopt rules consistent with this chapter for the administration of the wastewater and storm drain systems. Those rules may include, but shall not be limited to, discharge limitations, pretreatment requirements, standards for wastewater, storm drain system, sewer connections, and implementation of Federal Water Pollution Control and Clean Water Act standards.
- B. *General powers of the District Engineer.* Except as otherwise provided herein, the District Engineer shall execute the provisions of this chapter. The District Engineer may delegate powers or duties to persons acting in the beneficial interest or employ of the District, but shall remain responsible. In addition to the authority to prevent or eliminate discharges through enforcement of discharge limitations and prohibitions, the District Engineer shall have the following authorities:
1. Protect the health or welfare of the community. The District Engineer, after informal notice to the affected user, may immediately and effectively stop or prevent any discharge of pollutants to the POTW, by any means available, including physical disconnection from the wastewater collection system, whenever the discharge reasonably appears to present an imminent danger to the health or welfare of the community;
 2. Protect the environment or the POTW. The District Engineer, after written order to the user, may stop or prevent any discharge of pollutants to the POTW, by any means available, including physical disconnection from the wastewater system, whenever such discharge presents or may present an imminent and substantial danger to the environment or threatens to damage or interfere with the operation of the POTW; and
 3. The discharges referred to in subdivisions 1 and 2 above may be stopped or prevented without regard to the compliance of the user with other provisions of this chapter.
- C. *Specific powers of the District Engineer.* The District Engineer may take any of the following actions to prevent the actual or threatened discharge of polluted wastewater to the POTW and District sewer system:
1. Stop or prevent the discharge of such wastewater and/or pollutants;
 2. Require the user to demonstrate that process modifications will reduce or eliminate the pollutant or substance so that the discharge will not violate this chapter;
 3. Require treatment to reduce or eliminate the pollutants so that the discharge will not violate this chapter;
 4. Require the user to pay industrial user permit fees, inspection fees and any additional cost or expense incurred by the District for the excess pollutant loads discharged to the POTW and/or District sewer or imposed fines, penalties or legal expenses, and attorneys' fees;

5. Obtain timely and factual reports from the person responsible for such discharge; and
6. Take any other action to achieve the purposes of this chapter.

14.12.205 Notice.

Notices and orders under this chapter shall be deemed served if given to user as follows:

- A. Correctly addressed, postage pre-paid and deposited in the United States mail, or personally delivered; or
- B. To user or user's authorized representative at user's address as listed in user's permit, or application for a permit, or user's facility that is subject of the notice or order; and
- C. Shall be deemed received on the date personally delivered or on the third day after deposit in the United States mail as provided in this section.

14.12.210 Confidentiality.

Information submitted by the user to the District pursuant to this chapter may be claimed as confidential by the user. Any such claim must be asserted at the time of submission by placing the words "Confidential Business Information" on each page containing such information. If no claim is made at the time of submission, the District may make the information available to the public without further notice. Sample data obtained by either the user or the District shall not be considered confidential. Production-related information used to calculate mass-based discharge limitations or required to develop an industrial user permit shall not be considered confidential information. Confidential information may be made available, upon request, to governmental agencies for enforcement or judicial purposes related to this chapter, the NPDES Permit or the pretreatment program, and as required by state or federal law. In the event of a conflict between this section and the Public Records Act or Freedom of Information Act, those acts shall prevail.

14.12.215 Inspection.

- A. The District Engineer may inspect any user facilities to ascertain whether the requirements of this chapter are being met. Persons on the premises shall allow the District Engineer ready access at all reasonable times to all parts of the premises for the purpose of inspection, photography, video or electronic image recording, sampling, and records examination of any facility, equipment (including monitoring and pollution control equipment), practices or operations regulated or required by an industrial user permit or other control document, this chapter, or the City's NPDES Storm Water Permit.
- B. The user shall ensure that there is always a person on site, during normal business hours, that has knowledge of the user's processes and activities to accompany the District Engineer during the inspection, and can respond within 15 minutes of the District Engineers arrival, or else the user shall be found in violation of unnecessarily delaying the inspection.
- C. The user shall provide immediate access when the District Engineer believes an emergency exists, regardless of the hour of the day.
- D. All pretreatment equipment shall be immediately accessible at all times for inspection. At no time shall any material, debris, obstacles or obstructions be placed in such a manner that will prevent immediate access to the pretreatment equipment.
- E. No person shall interfere with, delay, resist or refuse entrance to the District Engineer when attempting to inspect any facility involved with a discharge into the City's POTW and/or the District sewer system.
- F. The user shall make all necessary arrangements with the user's security personnel so that, upon presentation of suitable identification, personnel from the District will be permitted to enter, without delay, for the purpose of performing their specific responsibilities.

- G. The user shall make all records required to be kept under the provisions of this chapter available for copying by the District Engineer.

14.12.220 Inspection warrants.

If the District Engineer is refused inspection access to a building, structure, or property, or any part thereof, the District Engineer may obtain an inspection warrant pursuant to Code of Civil Procedure section 1822.50 et seq. No warrant is required in the event of an emergency threatening the public health or safety, the District's sewer system or the City's POTW. If the situation deems it necessary the District may obtain a criminal search warrant.

14.12.225 Monitoring.

- A. At the direction of the District Engineer, any user discharging wastewater into the POTW may be required to install sampling station(s) or measuring device(s) to measure the quality and quantity of wastewater discharged or to obtain samples. Measuring devices may include, but are not limited to: flow meters and recorders, pH meters and recorders, electrical conductivity meters and recorders, process water meters, and automatic wastewater samplers.
- B. The sampling station and/or measuring device shall be provided by the user in compliance with this chapter and all applicable building, plumbing, and construction codes. The District may require access and that the measuring devices have a security closure that can be locked with a District lock and provide a District key. Construction shall be completed within a reasonable time as required in written notification from the District Engineer.
- C. The District Engineer may temporarily install upon the user's property devices to conduct wastewater sampling, compliance monitoring or metering operations.
- D. No user shall interfere with, delay, resist, or refuse entrance to authorized District personnel installing wastewater monitoring equipment on the user's property. Any permanent or temporary obstruction prohibiting direct access to the sampling station or measuring device shall be immediately removed by the user or property owner at the written or verbal request of the District Engineer and shall not be replaced.
- E. The sampling station or measuring devices shall be maintained for continuous sampling or metering. The measuring devices shall be calibrated a minimum of once per year by an outside contractor, or as often as necessary to ensure accurate measurements according to manufacturer's specifications. All maintenance and calibration work shall be performed at the user's expense.
- F. All users that self-monitor shall have all samples collected and analyzed according to 40 CFR 403.12(b)(5).
- G. All user sampling and analysis must comply with 40 CFR part 403.12(b)(5) and 40 CFR part 136. The laboratory must be certified by the State of California, Department of Health Services as being competent to perform the pollutant analyses requested, shall perform all laboratory analyses and must be acceptable to the District Engineer. All samples must have the following information:
 - 1. The date, exact place, method, and time of sampling and the names of the person or persons taking the samples;
 - 2. The dates the analyses were performed;
 - 3. Who performed the analyses;
 - 4. The analytical techniques/methods used;
 - 5. The results of such analyses;
 - 6. A copy of the laboratory sample analysis sheet;
 - 7. Chain of custody; and
 - 8. The user's completed monitoring report form.

- H. All users required to install and maintain measuring devices shall immediately report the failure of such devices. The immediate notification shall be by telephone call, telefax transmission, electronic report, email, personal visit, or a hand-delivered notification to the District Engineer. Within five calendar days after discovery of the failure, the user shall submit a written report to the District Engineer documenting the dates, times, and cause of the failure, and the corrective actions taken.
- I. Any wastewater samples taken from a user's approved or designated sampling location shall be considered representative of the wastewater discharged to the POTW. For users that have interceptors, but no approved or designated sampling location, the last chamber of the interceptor shall be the designated sampling location. The user must collect wastewater samples using 24-hour flow-proportional composite sampling techniques, unless time-proportional composite sampling or grab sampling is deemed equally representative and authorized by the District Engineer. Where time-proportional composite sampling or grab sampling is authorized by the District, the samples must be representative of the discharge. Using protocols (including appropriate preservation) specified in 40 CFR Part 136 and appropriate EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: for cyanide, total phenols, and sulfides the samples may be composited in the laboratory or in the field; for volatile organics and oil and grease, the samples must be composited in the laboratory. Composite samples for other parameters unaffected by the compositing procedures as documented in approved EPA methodologies may be authorized by the District, as appropriate. In addition, grab samples may be required to show compliance with applicable instantaneous limits and local limits.
- J. All users required to self-monitor shall notify the District Engineer of pollutant violations from any required wastewater sample within 24 hours of becoming aware of the violation. The notification may be by telephone call, telefax transmission, electronic report, or a personal visit to the District Engineer. The violation report shall contain the date and time of the sample, the daily discharge flow for the sample, possible explanations for the violation, and the date scheduled for the required resample. Failure to report pollutant violations as stated is a violation of this chapter and may subject the user to enforcement actions.
- K. All users required to take daily 24-hour readings of their wastewater effluent flow shall notify District Engineer of exceedance of its permitted flow within 24 hours of discovering the exceedance by telephone call, telefax transmission, electronic report, personal visit, or a hand delivered notification, to the District Engineer or file a monthly report indicating the days of the month when the permitted flow was exceeded and the reason for the exceedance. The monthly report shall be submitted to the District's Engineer by the fifth business day following the end of the preceding month. The flow exceedance notice shall have the total flow, date of the violation, the reason for the flow exceedance, and the name of the person reporting the flow exceedance. Failure to report such flow exceedance is unlawful and may subject the user to enforcement actions.
- L. All users with a discovered pollutant violation shall resample their wastewater discharge for that pollutant. This mandatory resampling is independent of any other wastewater sampling requirement. User shall notify the District Engineer within 24 hours of becoming aware of the violation. User shall submit the laboratory results and all required forms from the resamples of the violation to the District Engineer no later than 30 calendar days after the user discovers or becomes aware of the violation and a written explanation detailing the cause(s) and correction action(s) of the violation to the District Engineer no later than ten calendar days after the user discovers or becomes aware of the violation. Failure to submit the laboratory results and all required documents within the 45-day requirement shall result in significant noncompliance for the user and the issuance of a notice of violation to the user.
- M. All users whose wastewater discharge is sampled by the District and themselves shall be responsible for all resampling requirements contained in subsection L of this section when a pollutant violation is detected. The City shall notify the user of the resampling requirements by a telephone call, telefax transmission, email, or personal visit within 72 hours of confirming a pollutant violation. The repeat sampling is required to be performed within 30 days of becoming aware of a violation.
- N. All users which desire to conduct their own wastewater sampling, or receive samples split from District samples, shall submit a written plan describing the equipment used, equipment cleaning methodology,

employee training, sample preservation methods, and chain of custody procedures. The user's wastewater sampling plan must be approved by the District Engineer prior to the implementation of the plan. Any sample taken by a user without an approved plan or from an unapproved laboratory shall not be valid and may subject the user to enforcement actions.

- O. All users are required to submit all monitoring results including non-permit required samples according to 40 CFR 403.12(g) sampled at the appropriate sample point within 15 calendar days of receiving the sample or monitoring results.
- P. All permitted users that take more than one grab sample in a single calendar day to demonstrate compliance with oil and grease shall also comply with the following conditions:
 - 1. A minimum of four grab samples separated by a minimum of two hours each shall be taken in a single calendar day;
 - 2. Each individual oil and grease grab sample shall be analyzed separately and the analytical results from each sample shall be averaged;
 - 3. No single oil and grease grab sample shall exceed the user's permitted limit by more than 40 percent; and
 - 4. The average result from all individual oil and grease grab samples taken in a single calendar day shall not exceed the user's permitted limit.

14.12.230 Record keeping.

All users shall keep records of waste hauling, reclamations, wastewater pretreatment, monitoring device recording charts and calibration reports, effluent flow, and sample analysis data on the site of the wastewater generation. All these records are subject to inspection and copy by the District Engineer. All records must be kept on the site of the wastewater generation for a minimum period of three years. The record retention period may be extended beyond three years in the event criminal or civil action is taken or an extensive user history is required. Records required by company or corporate policy to be kept off-site shall be telefaxed or submitted electronically to the District Engineer within 72 hours of the records request. Failure to submit the records as required is a violation of this chapter and may result in enforcement actions.

14.12.235 Flow measurement.

Any industrial user who discharges 25,000 gallons per day or more of industrial wastewater, or as required by the District Engineer, shall install a continuous monitoring flow meter capable of measuring the industrial user's entire industrial wastewater discharged to the POTW. The user shall record and log the flow on a daily basis. The flow meter shall conform to standards issued by the District Engineer. The user shall report the flow meter type and size to the District Engineer before installation. The flow meter shall be equipped with a non-resetting flow totalizer and a recorder that records the time, day, date and volume of discharge, and can generate daily summaries of instantaneous maximum and total flow for record keeping. All flow meters shall be calibrated as often as necessary to ensure accuracy of the actual flow discharged, within plus or minus five percent. Industries shall perform calibration by an independent company as frequently as is necessary, or at no less than once per year or the minimum manufacturer's recommended time interval if sooner. All flow meter installations shall have the flow meter size, type, totalizer units, and flow multipliers posted in a conspicuous place near the flow meter recorder.

14.12.240 Infectious waste disposal.

- A. No user that generates liquid infectious waste other than domestic wastewater shall discharge to the POTW without first obtaining written permission from the District Engineer. Such a user shall submit a written request to the District Engineer that shall include:
 - 1. The source and volume of the infectious waste;

2. The procedures and equipment used for waste disinfection; and
 3. Employee training procedures for the legal disposal of infectious waste.
- B. If the District Engineer believes that the waste would not be completely disinfected, the District Engineer shall issue a written denial to the user and state the reasons for the denial. This denial shall be issued within 30 days from receipt of the written request.
- C. If the District Engineer believes that complete disinfection of the waste can be achieved prior to discharge of the waste to the POTW, then a conditional approval may be granted for the disposal of the waste. A letter of approval shall be sent to the user within 30 days of receipt of the written request.
- D. If the user is granted permission for disposal, the user:
1. Shall completely disinfect the liquid waste prior to discharge to the POTW as outlined in the approval letter;
 2. Shall not dispose of solid infectious waste to the POTW, including hypodermic needles, syringes, instruments, utensils or other paper and plastic items of a disposable nature, or any portions of the human or animal anatomy whether whole, part, or ground; and
 3. Shall be subject to periodic inspections to verify that all disinfection methods, procedures, and practices are being performed.

14.12.245 Water softeners.

- A. No commercial or industrial user shall install, replace, enlarge, or use any regenerative-type water softener unless the apparatus complies with the following conditions:
1. The regeneration is performed at a nonresidential facility separate from the location of the facility where such appliance is used; or
 2. If the apparatus is a self-generating water softener, the regenerative brine solutions generated during the regeneration and backwash cycles of the water softener shall be segregated for disposal to a legal brine disposal site; and
 3. The backwash equipment shall be equipped with an electrical conductivity-controlled discharge valve that controls the wastewater discharge to the POTW. This valve shall be calibrated to control and prevent any discharge of wastewater that exceeds the maximum total dissolved solids concentration established by resolution; and
 4. The user shall maintain the electrical conductivity-controlled discharge valve in proper operating conditions at all times. In the event of a valve failure, the user shall immediately cease the regeneration discharge and immediately notify the District Engineer of the failure by telephone call, telefax transmission, electronic report, personal visit, or a hand delivered notification, to the District Engineer. Within five calendar days after discovery of the failure, the user shall submit a written report to the District Engineer documenting the dates, times, and cause of the failure, and the corrective actions taken.
- B. Pursuant to California Health and Safety Code Sections 116775-116795, no residential water softening or conditioning appliance may be installed except in the following circumstances:
1. The regeneration is performed at a nonresidential facility separate from the location of the residence where such appliance is used; or
 2. The regeneration discharges to the waste disposal system of the residence where such appliance is used and the following conditions are satisfied:
 - a. The appliance activates regeneration by demand control;

- b. An appliance installed on or after January 1, 2000, shall be certified by a third-party rating organization using industry standards to have a salt efficiency rating of no less than 3,350 grains of hardness removed per pound of salt used in generation. An appliance installed on or after January 1, 2002, shall be certified by a third-party rating organization using industry standards to have a salt efficiency rating of no less than 4,000 grains of hardness removed per pound of salt used in generation;
 - c. The installation of the appliance is accompanied by the simultaneous installation of the following softened or conditioned water conservation devices on all fixtures using softened or conditioned water, unless such devices are already in place or are prohibited by local and state plumbing and building standards or unless such devices will adversely restrict the normal operation of such fixtures:
 - i. Faucet flow restrictors.
 - ii. Shower head restrictors.
 - iii. Toilet reservoir dams.
 - iv. A piping system installed so that untreated (unsoftened or unconditioned) supply water is carried to hose bibs and sill cocks which serve water to the outside of the house, except that bypass valves may be installed on homes with slab foundations constructed prior to the date of installation; or condominiums constructed prior to the date of installation; or otherwise, where a piping system is physically inhibited.
- C. The certification required under subsection B of this section shall be provided by the new user of the appliance and shall be completed by a contractor having a valid Class C-55 water conditioning contractor's license or Class C-36 plumbing contractor's license and filed with the District. The certification form shall contain all of the following information:
 - 1. Name and address of homeowner;
 - 2. Manufacturer of the water softening or conditioning appliance, model number of the appliance, pounds of salt used per regeneration, and salt efficiency rating at the time of certification;
 - 3. Manufacturer of the water-saving devices installed, model number, and number installed; and
 - 4. Name, address, and the specialty contractor's license number of the C-55 and C-36 licensee making the certification.
- D. Any person installing or operating a water conditioning apparatus of any kind shall make such apparatus accessible to the District Engineer for inspection at reasonable times.
- E. Notwithstanding subdivision 2 of subsection B. of this section, the District may limit the availability, or prohibit the installation, of residential water softening or conditioning appliances that discharge to the POTW if District Engineer makes all of the following findings:
 - 1. The POTW is not in compliance with the terms of its NPDES permit;
 - 2. Limiting the availability or installation of the appliances is the only available means of achieving compliance with waste discharge requirements issued by the Regional Board; and
 - 3. All nonresidential sources are limited to the volumes and concentrations of saline discharges to the POTW to the extent technologically and economically feasible.
- F. Notwithstanding subdivision 2 of subsection B of this section, the District may limit the availability, or prohibit the installation, of residential water softening or conditioning appliances that discharge to the POTW if District Engineer makes all of the following findings:

1. The POTW is not in compliance with water reclamation requirements, or a master reclamation permit, issued by the California Regional Water Quality Control Board pursuant to Article 4 (commencing with §13520) of Chapter 7 of Division 7 of the Water Code;
2. Limiting the availability or prohibiting the installation of the appliances is the only available means of achieving compliance with the water reclamation requirements or the master reclamation permit issued by the regional board; and
3. All nonresidential sources are limited to the volumes and concentrations of saline discharges to the POTW to the extent technologically and economically feasible.

14.12.250 Drain screen requirements.

Any user that has floor drains, floor sinks, drains, mop sinks, or any other drain designed to convey wastewater to the sewer system, shall have a screen in place in said drains with hole sizes of three-eighths of an inch or smaller.

14.12.255 Sand/oil gravity separation interceptor.

No user that operates or maintains a facility for the servicing or repair of roadway machinery, industrial transportation equipment, motor vehicles, public or private transportation vehicles, and any other facility as required by the District Engineer, shall discharge wastewater to the POTW without a gravity separation interceptor ("interceptor") that complies with all of the requirements of this chapter pertaining to sand/oil interceptors. Domestic wastewater shall not be allowed to pass through the interceptor. The District Engineer shall determine the interceptor's operational fluid capacity. The interceptor shall have a minimum operational fluid capacity of not less than 100 gallons, and shall be designed to retain any material that will float or any material that will settle and shall meet all the requirements of this chapter. The interceptor shall be equipped with a sample box.

14.12.260 Interceptor requirements.

- A. The interceptor shall be watertight, structurally sound, durable, and shall have a minimum of two chambers, excluding sample box, with a separate ring and cover for each chamber. The sample box shall also have a separate ring and cover. All rings shall be affixed to the interceptor to ensure a gas and watertight seal.
- B. Each grease interceptor cover shall expose and provide access to each chamber's inlet tee, outlet tee, and/or mid-wall tee.
- C. All interceptor chambers shall be immediately accessible at all times for inspection, sampling, cleaning, and maintenance. The user shall provide a separate ring and cover for each separate interceptor chamber, including sample box and any additional covers to ensure adequate cleaning and inspection capabilities. All rings shall be affixed to the interceptor to ensure a gas and watertight seal. At no time shall any material, debris, obstacles or other obstructions be placed in such a manner that will prevent immediate access to the interceptor.
- D. Any interceptor legally and properly installed before the effective date of this chapter shall be acceptable as an alternative to the interceptor requirements of this chapter providing that the interceptor shall be effective in removing floatable and settleable material and shall be immediately accessible for inspection, sampling, cleaning, and maintenance.
- E. All drains and openings connected to an approved gravity separation grease interceptor shall be equipped with screens or devices which will exclude from the wastewater discharge all material and particles greater than three-eighths of an inch in any dimension.
- F. All gravity separation grease interceptors shall be equipped with an influent tee extending no more than six inches below the operating fluid level of the interceptor. The interceptor shall also have tees extending to within 12 inches of the bottom at the exit side of each chamber in the interceptor, including the final

chamber. In a case where a manufacturer's engineered interceptor design is contrary to this requirement, the District Engineer shall review the design and either approve or deny an exemption to this requirement.

- G. All interceptors shall be equipped with a sample box or sample wye as determined by the District Engineer.
- H. No user shall install or use any elbows or tees in any interceptor sample box.
- I. No user shall install any interceptor, sample box, or sample wye in a confined space or a permit-required confined space.
- J. At all times, all drain lines connecting to the interceptor shall be kept free of any debris or material that may cause a drain line blockage and periodically cleaned or maintained as needed.
- K. If the District Engineer finds, either by engineering knowledge or by observation, that an interceptor is incapable of adequately retaining floatable and settleable material in the wastewater flow, is structurally inadequate, or is undersized for the facility, the District Engineer may reject such interceptor and declare that the interceptor does not meet the requirements of this section. The user shall thereupon be required to, modify or repair the interceptor, or install an adequate interceptor, acceptable to the District Engineer at the user's expense.

14.12.265 Standard interceptor designs.

The District Engineer shall maintain a file, available to the public, of suitable interceptor designs. This file shall be for informational purposes only and is not an endorsement of any kind. Installation of an interceptor of a design shown in this file, or of any design meeting the size requirements set forth in this chapter, shall not subject the City to any liability for the adequacy of the interceptor under actual conditions of use. The user and property owner shall not be relieved of the responsibility for keeping floatable and settleable material out of the POTW.

14.12.270 Interceptor maintenance.

- A. Any person who owns or operates an interceptor shall properly maintain it at all times to ensure the continued operation of the great interceptor, as designed, and to avoid causing a surcharge or overflow. The interceptor shall be cleaned as often as necessary to ensure that sediment and floating materials do not accumulate to impair the efficiency of the interceptor and odors do not cause a public nuisance. An interceptor is not considered to be properly maintained, if for any reason the interceptor is not in good working condition or if the operational fluid capacity has been reduced by more than 25 percent by the accumulation of floating material, sediment, oil or grease, or other liquids that have limited or no solubility in water.
- B. The use of chemicals, enzymes, proteins or other materials to emulsify, suspend, or dissolve oil and grease is prohibited. If a user is found using any of these materials, the materials may be confiscated without restitution to the user and the user may be subject to enforcement actions.
- C. No user shall use any microbiological product in a grease interceptor that was not specifically designed to use such microbiological agents to metabolize fats, oils, and greases. If a user is found using any of these materials, the materials may be confiscated without restitution to the user and the user may be subject to enforcement actions.
- D. When an interceptor is cleaned, the entire contents of the interceptor from all chambers and sample box shall be removed. The removed sediment, solids, liquid and floating material shall not be reintroduced or decanted into the interceptor, sample box, sewer cleanout, other interceptor or other unlawful opening of a collection system or private sewer systems and shall be lawfully disposed of other than to the private sewer systems, POTW or storm drain, and shall not be reintroduced into the interceptor or discharged into another interceptor at another location not designed and permitted to accept such waste.
- E. If the interceptor is not maintained adequately, then the interceptor shall be resized and the user shall install one that is effective in accomplishing the intended purpose, or the District may require a mandatory

pumping schedule for the interceptor. Failure to pump the interceptor as required is a violation of this chapter and may subject the user to enforcement action.

- F. The owner and lessee, sub-lessee, proprietor, operator and superintendent of any facility, required to install an interceptor or use an existing interceptor are individually and severally liable for any failure to properly maintain such interceptor.

14.12.275 Restaurants.

- A. No person who owns, operates, or maintains a restaurant (restaurant user) shall discharge wastewater from such restaurant to the POTW without first receiving a written determination from District Engineer, and complying with such determination, of the POTW interceptor requirements. Restaurant users shall complete and submit a Wastewater Discharge Survey Form and conditional waiver to the District Engineer for review of interceptor requirements. Within ten business days of receipt of the Wastewater Discharge Survey Form, District Engineer shall notify such restaurant user of District Engineer's determination whether an interceptor is required prior to discharge into the POTW. It is unlawful for any restaurant user notified by the District Engineer as needing an interceptor to discharge restaurant wastewater into the POTW without use of a grease interceptor.
- B. The District Engineer shall calculate the size of the interceptor in accordance with the Uniform Plumbing Code, as adopted by the City, provided that any restaurant determined to require an interceptor of more than 100 gallons and less than 750 gallons shall install a minimum 750-gallon interceptor. The District Engineer's determination shall consider the type of restaurant, the condition of the collection system serving the restaurant, and the possible adverse effects caused by the restaurant's wastewater discharge. An under the sink grease trap is not allowed in the District unless the site is considered a zero-lot line business located in the downtown area of the District, meets certain requirements and also gets approved by the County.
- C. Any restaurant user required to install an interceptor shall direct all wastewater and waste from floor drains, floor sinks, sinks, waste container wash racks, dishwashers, mop sinks, utility sinks and garbage grinders through an approved interceptor complying with this chapter. The user shall keep all domestic wastewater from restrooms, showers, drinking fountains, condensate (i.e., ice melt, air conditioning condensate), soda machines and bar sinks separate from the restaurant wastewater until the restaurant wastewater has passed through all interceptors, pretreatment equipment, or sampling stations.
- D. All restaurant users shall separate, to the maximum extent practicable, all fats, oils, and greases from the restaurant wastewater for off-site disposal. Each restaurant user shall store these separated wastes in accordance with all applicable laws, rules, policies and regulations, including the Riverside County Department of Environmental Health and this chapter. If grease is stored outside in drum or bin the container should be secured from tipping over using a chain or other material and have a secure lid or cover on top. If grease is located in the trash enclosure the restaurant user shall clean-up any spills on the ground. The trash bin must remain closed.
- E. All floor sinks and floor drains shall be equipped with screens or devices that exclude all particles larger than three-eighths inch in any dimension.
- F. Any restaurant user required to install an interceptor shall maintain the interceptor in accordance with this chapter.
- G. If requested, the restaurant (new or with tenant improvements) shall install a stub-out line to interceptor or future interceptor. A new strip mall shall install interceptor(s) sized for future use as determined by the District Engineer.

14.12.280 Prohibited restaurant surface discharges.

- A. No restaurant user shall discharge any wastewater to a storm drain, service dock areas, parking lot, or to the ground. All wastewater generated by restaurants, including trash enclosure wash/rinse water and drive

through wash/rinse water, shall be contained, collected, and disposed of to sewer through a mop sink, drain, or gravity separation interceptor as approved or hauled off-site and disposed of at a legal disposal site.

- B. If a restaurant has a blocked sewer lateral or a failed sewage pumping device which causes the discharge of wastewater to the storm drain, service dock areas, parking lot, drive through areas, or to the ground, the restaurant user shall immediately cease all activities causing that discharge and immediately contact a plumber to have the discharges collected and, if necessary, have laterals cleared, televised and repaired. Failure to comply with this requirement shall be considered a violation of this chapter and shall subject the restaurant user to enforcement actions. If the District determines that public safety requires immediate action and the restaurant owner is unable to or unwilling to arrange for a pumping company and plumber, or a collections crew, the District may in its discretion contact a pumping company and plumber to mitigate the violation and charge the restaurant user for all associated costs. Any restaurant that does not have a grease interceptor but causes a lateral or sewer blockage due to grease in the line shall have to install a minimum 750-gallon size grease interceptor.

14.12.285 Conditional waivers.

Notwithstanding Section 14.12.275 subsection B, the District Engineer may conditionally waive the interceptor requirements for any restaurant user determined in the District Engineer's discretion.

1. Not to pose adverse effects on the POTW;
2. Lack of space for installation and maintenance, cannot get proper slope for plumbing from kitchen to interceptor, or
3. Restaurant can justify alternate pretreatment method to control grease. The District Engineer may revoke such conditional waiver and require the installation of an appropriately sized grease interceptor for the following reasons:
 - A. Changes in menu;
 - B. Falsification of information submitted in the District's wastewater discharge survey form;
 - C. Changes in operating hours;
 - D. Changes in maximum seating capacity;
 - E. Changes in maximum meals served per peak hour;
 - F. Changes in equipment used;
 - G. Changes in the nature of the wastewater discharged as determined by random and scheduled wastewater sampling and analyses; or
 - H. Any overflows or impairment of the proper function of the collection system or appurtenances caused by the restaurant user's wastewater discharge.

14.12.290 Wastewater discharge survey.

The District Engineer may require a nonresidential user that has a sewer connection to the POTW, District sewer to complete a Wastewater Discharge Survey. The purpose of the survey is to gather information to determine if an industrial user permit or other control document is necessary and to provide current information about the user. Failure to complete and return a required survey may subject the user to enforcement actions.

14.12.295 Liquid waste haulers.

- A. It is unlawful for any liquid waste hauler to discharge into the sewage system of Edgemont Community Services District.

14.12.300 Mobile wash businesses.

- A. No person shall engage in, conduct, or carry on any mobile wash business in the District without first demonstrating to the District Engineer proper containment and recovery of wash water and wastes and obtaining a permit from the District Engineer.
- B. It is unlawful for any mobile wash business to discharge wastewaters to the storm drain and to operate within the District without a mobile wash business certificate issued by the environmental compliance section.
- C. Users required to obtain a mobile wash business certificate shall complete and file with the District Engineer an application form provided by the District Engineer and shall pay all applicable fees within 30 days of invoicing by the District. The application form may require applicant's submission of any or all of the following:
 - 1. Name, address, and location (if different from the mailing address);
 - 2. NAICS number under the Federal North American Industry Classification System, Office of Management and Budget, 1997, as amended;
 - 3. Liquid capacity of tanks on their trailer or vehicle;
 - 4. A list of all environmental control permits held;
 - 5. A written description of operations
- D. Mobile wash businesses must demonstrate that they utilize BMPs and can recover all wash waters and cause no discharge of wash waters to the environment in order to obtain a certificate from the District. Wash waters must be disposed of legally. BMPs must be used at each wash event. Certificate must be carried with the vehicle and made available to District staff upon request.
- E. Operating a mobile wash business within the District without a certificate can result in enforcement actions, including, but not limited to, fines.
- F. Within 14 days after receiving the completed application and all required supporting information, and giving a demonstration of BMP implementation, the District Engineer shall evaluate the application and information furnished by the applicant. The District Engineer shall issue the certificate, if the District Engineer believes that sufficient and accurate information has been provided by the applicant in the application and the District Engineer finds that all of the following conditions are met:
 - 1. The proposed discharge of the applicant is in compliance with the prohibitions and limitations of this chapter;
 - 2. The proposed operation and discharge of the applicant would not cause a discharge to a storm drain or MS4;
 - 3. The proposed discharge, operation or business activity of the applicant shall not result in a violation by the City of the terms and conditions of its NPDES permit or cause a pass through of any pollutants to the environment; and
 - 4. The applicant has paid all applicable mobile wash business fees.
- G. The District Engineer may suspend or revoke the certificate at any time.
- H. If the District Engineer determines that the proposed discharge will not be acceptable, the District Engineer shall disapprove the application and shall notify the applicant in writing, specifying the reason(s) for denial.
- I. Mobile wash business certificates shall be subject to all provisions of this chapter and all other applicable regulations, charges and fees established by the District the Riverside County Board of Supervisors by resolution.

- J. *Duty to comply.* All users that have been issued a mobile wash business certificate, have a duty to comply with all conditions and limitations in this chapter and any conditions within the certificate and shall be subject to administrative, civil or criminal enforcement actions in accordance with this chapter.
- K. *Modifications.* The District Engineer may modify the certificate terms and conditions as the District Engineer deems necessary.
- L. *Certificate transfer.* Each mobile wash business certificate is issued to a specific user for a specific operation for a specified time. Any assignment, transfer or sale of any certificate to a new owner, new user, different premises, or different use is prohibited and is a violation of this chapter.
- M. *Fees and charges.* The District is authorized to impose fees and charges to recover the costs of its storm water and environmental compliance programs. These fees and charges are exclusive to this chapter and are separate from all other fees or costs.
- N. Unless otherwise specified, all fees, charges and penalties imposed pursuant to this chapter are due and payable within 30 calendar days after the date of the notice or invoice from the District. Users who fail to pay any required fee, charge or penalty by the due date shall pay a 50 percent surcharge in addition to the original fee, charge or penalty. The District shall give notice to a user of any certificate termination associated with the unpaid amounts and such certificate will be automatically revoked on the 30th day after the date of such notice if the amount due is not paid in full. The District Engineer shall refer the unpaid amount to the District for collection.
- O. All mobile wash businesses shall obtain a City of Moreno Valley business license and an authorization certificate and/or permit from the District before conducting business within the District's jurisdiction. Failure to obtain authorizations and/or a permit from the District prior to operating in the POTW service area is a violation of this chapter and may subject the user to enforcement actions including fines. The District shall mail-out a letter to any new pressure washer who has received a business license informing them of the rules and regulations for working in the City.
- P. Contaminated wash water shall not be disposed of into storm drains, gutters, or waters of the State or US. Discharges shall be recovered and disposed of at the place of business where feasible (clean-out or other device which leads to sewer).
- Q. Any mobile wash business observed doing business in the City shall have required documentation with them at all times. Mobile washers can be stopped by an inspector and asked for required documentation. If no documentation is presented, information will be recorded concerning the pressure washer company, the business where the washing is occurring, and a written warning may be issued.

14.12.305 Use of or damage to District equipment or facilities.

- A. No person shall use, enter, break, damage, destroy, uncover, deface or tamper with any temporary or permanent structure, equipment, or appurtenance which is part of the POTW and/or District sewer without prior written approval by the District Engineer.
- B. Any person who discharges or causes the discharge of any wastewater or pollutant which detrimentally effects the POTW, District sewer and/or storm drain system, sludge, or causes any other damage, including subjecting the District to any fines or penalties, shall be liable to the District for all damages and costs incurred by the District, including administrative expenses. The District shall calculate its administrative expenses as 90 percent of the cost of repairs and personnel time expended by the District to remedy such damages and costs. All charges shall be payable to the District within 30 days of invoicing by the District.

14.12.310 Spill notification.

All users shall notify the District immediately upon occurrence of an accidental discharge of substances prohibited by this chapter (a "spill") or any slug discharges that may enter the POTW, District sewer or storm drain system,

storm water channel, or natural water course. During normal business hours, M—F 7:00 a.m. to 4:30 p.m., the District shall be notified by telephone at (951) 351-6145. After 4:30 p.m. M—F, on all holidays and weekends, the District shall be notified by telephone at (951) 351-6280 or (951) 351-6140, or (951) 826-5311. The notification shall include the date, time and location of the discharge, type of waste, including concentration and volume, and corrective actions taken. This notification does not relieve the user from any other reporting requirements of any other laws. Within five calendar days following a spill or slug discharge, the user shall submit a detailed written report to the District Engineer including:

- A. A description and cause of the event, and the impact on the user's compliance status;
- B. The location, type, concentration, and volume of the spill or slug discharge;
- C. The duration of the event including exact dates and time of noncompliance, and if noncompliance continues, the time by which compliance is reasonably expected to be achieved;
- D. The description of the remediation or cleanup methods and disposal; and
- E. All steps taken or to be taken to reduce, eliminate, and prevent recurrence of such upset, slug load, accidental, negligent, or intentional spill or other conditions of noncompliance.

14.12.315 Surface and stormwater discharge prohibitions.

- A. No person shall discharge or cause to be discharged into the storm drainage system, whether currently carrying water or not, any pollutant or non-storm water.
- B. No person shall discharge or cause to be discharged to the storm drainage system or waterway, whether currently carrying water or not, any substance or pollutant which could:
 1. Impair the useful function of the storm drain system;
 2. Cause undue storm drain maintenance expense to the District or other public agency;
 3. Contain sewage;
 4. Containing pollutants that cause or threaten to cause a condition of pollution, contamination, nuisance or public hazard;
 5. Pollute natural surface or subsurface waters; or
 6. Violate any federal state or local regulation, code, permit or requirement.
- C. Any person violating subsection A or B of this section shall be liable to the District for all damages and costs incurred by the District, including administrative expenses and fines. The District shall calculate its administrative expenses as 90 percent of the cost of repairs and personnel time expended by the District to remedy such damages and costs. All charges shall be payable to the District within 30 days of invoicing by the District.
- D. Any person who has violated subsection A or B of this section shall submit a written report of the incident within five business days to the District Engineer. The written report shall include a description of the circumstances causing the discharge, the quantity and qualities of the pollutant(s) discharged the methods of cleanup and disposal, and the corrective measures taken to prevent a reoccurrence.
- E. No person or business shall allow for automatic or manual pumps to pump out sump contents to the storm drain system, street conveyance, or waterway.
- F. No chemicals, green waste, or pet waste may be discharged to the storm drain system or waterway.
- G. No person or business shall allow wash water to enter the storm drain from the following activities:
 1. Hosing or cleaning gas stations, vehicle maintenance facilities, or other related services;
 2. Hosing, cleaning, repairing, or maintaining motorized equipment or machinery;

- 3. Mobile operations such as automotive detailing, window washing, carpet and drape cleaning, pet services, power washing, etc.; or
- 4. Runoff from hosing or cleaning parking lots, streets, alleys, gutters, sidewalks, driveways, patios, plazas, work yards, and outdoor eating or drinking areas and their associated trash enclosures, etc.
- H. No person or business shall allow runoff containing pollutants associated with construction sites, activities, materials, or waste.
- I. Industrial storm water discharges and authorized non-storm water discharges regulated by a State or Regional Water Quality Control Board Permit containing hazardous substances. Should such a release occur, the facility must make notifications in accordance with 40 C.F.R. Section 110.6, 117.21, and 302.6.
- J. Plastic materials or pellets may not be deposited on the ground of a facility and may not enter a facility's storm drain conveyances, MS4 or water bodies adjacent to the facility.
- K. It is a violation of this ordinance to establish, use, maintain, or continue illicit connections to the storm drain system, or to commence or continue any illicit discharges to the storm drain system. This prohibition against illicit connections and discharges is expressly retroactive and applies to connections and discharges made in the past, regardless of whether permissible under the law or practices applicable or prevailing at the time of the connection or discharge.
- L. A violation of the provisions of this ordinance shall occur irrespective of the negligence or intent of the violator to construct, maintain, operate or utilize an illicit connection or to cause, have the potential to cause, allow or facilitate any prohibited discharge.
- M. Prohibited discharges from commercial and restaurant businesses also include any surface discharges from trash compactors, trash enclosures, grease bins, restaurant discharges to outside surfaces and debris found in trash enclosures. Good housekeeping BMP's shall be utilized to deal with prevention and clean-up of such discharges. If discharge contaminates soil the contaminated soil shall be removed. Surface discharges must be cleaned up within the time noted on the inspection report.

14.12.316 Reserved

14.12.317 Reserved

14.12.318 Reserved

14.12.319 Post construction requirements.

- A. All structural site design, source control, or treatment control BMPs shall be inspected, operated, and maintained in accordance with inspection, operation, and maintenance procedures outlined in the approved WQMP. The land owner is responsible for implementing the maintenance and ensuring the WQMP post-construction BMPs are built as planned. Maintenance responsibility of post-construction BMPs transfer from old land owner to new land owner and must be maintained to operate as designed. Additional changes to the WQMP may be required by City inspectors.
- B. Inspection, operation, and maintenance data and information of all structural site design, source control, or treatment control BMPs shall be recorded and made available to the Public Works District Engineer upon request. The Public Works District Engineer has the right to request that changes be made to the site to add, replace, and maintain BMPs. Failure to implement, or maintain BMPs, or to comply with City requirements may be subject to enforcement actions.

- C. Inspection of post construction BMPs can occur at any time. Any variations from the WQMP may be required to be changed to match the WQMP, and maintenance of the BMPs may be required if the inspection reveals any irregularities or issues.

14.12.320 Point of discharge limitation.

No person shall discharge any wastewater directly into a manhole or other opening in a collection system other than through an approved building sewer connection without prior written permission from the District Engineer. This prohibition shall not apply to authorized District personnel carrying out their duties.

14.12.325 Time limits.

Any time limit provided in any written notice or any provision of this chapter may be extended only by a written directive of the District Engineer and upon a showing of good cause from the user.

14.12.326—14.12.329. Reserved.

Division III. Industrial Waste

14.12.330 Separation of domestic and industrial waste.

Any user who discharges industrial wastewater to the POTW shall keep domestic wastewater separate from all industrial wastewater until the industrial wastewater has passed through all required pretreatment equipment or devices, or the user's industrial wastewater sample point(s). For existing categorical industrial users which cannot separate the domestic wastes from the industrial wastes prior to a permitted sampling point, the combined waste stream formula shall be applied to determine applicable discharge limitations.

14.12.335 Prohibited waste discharges.

No user shall introduce or cause to be introduced into the POTW any pollutant or wastewater which causes pass through or interference. These general prohibitions apply to all users of the POTW whether or not they are subject to categorical pretreatment standards or any other National, State, or local pretreatment standards or requirements.

Except as provided herein, no person or user shall discharge or cause to be discharged any of the following to the POTW or District sewer system:

- A. Any earth, sand, silt, rocks, ashes, cinders, spent lime, stone, stone cutting dust, carbon fines, ion-exchange resin fines, gravel, plaster, concrete, glass, metal filings, metal or plastic objects, garbage, grease, viscera, paunch manure, medical waste, bones, hair, hides, or fleshings, whole blood, feathers, straw, shavings, grass clippings, rags, spent grains, spent hops, waste paper, wood, plastic, tar, asphalt residues, residues from refining or processing fuel or lubrication oil and similar substances, other pollutant, or solid, semi-solid or viscous material in quantities or volume which may obstruct, either partially or completely, the flow of sewage in the collection system or any object which may cause the blockage, either partially or completely, of a sewer or sewage lift pump, or interfere with the normal operation of the POTW. Pollutants, substances, or wastewater prohibited by this section shall not be processed or stored in such a manner that they could be discharged to the POTW, District sewer and/or a storm drain system.
- B. Any compound which will produce noxious odors in the sewer or wastewater treatment facilities.
- C. Any portions of human or animal anatomy whether whole, part, or ground.

- D. Any solids, liquids, gases, devices, or explosives which by their very nature or quantity are or may be, sufficient either alone or by interaction with other substances or sewage to cause fire or explosion hazards, exceed ten percent of the LEL at the point of discharge or in the collection system, or cause gases, vapors, or fumes, or in any other way create imminent danger to the District's wastewater personnel or POTW, the environment or public health. Pollutants which create a fire or explosive hazards in the POTW or sewer lines, including, but not limited to, wastestreams or material with a closed cup flash point of less than 140 degrees Fahrenheit or 60 degrees Celsius using the test methods specified in 40 CFR 261.21.
- E. Any pollutant, including oxygen demanding pollutants (BOD, COD, etc.), released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW.1.
- F. Any overflow from a septic tank, facility wastewater holding tank, cesspool or seepage pit, or any liquid or sludge pumped from a septic tank, facility wastewater holding tank, recreational vehicle, cesspool or seepage pit, except as permitted by the District Engineer.
- G. Any discharge from the wastewater holding tank of a recreational vehicle, trailer, bus and other vehicle, except as may be permitted by the District Engineer.
- H. Any storm water, groundwater, street drainage, subsurface drainage, yard drainage or runoff from any field, roof, yard, driveway or street. The District Engineer may approve, on a temporary basis, the discharge of such water only when no reasonable alternative method of discharge is available.
- I. Any substance or heat in amounts that will inhibit biological activity in the City's POTW resulting in interference or which will cause the temperature of the sewage in any public sewer to be higher than 140 degrees Fahrenheit. In no case shall any substance or heat be discharged to the sewer that will raise the treatment plant's influent higher than 104 degrees Fahrenheit (40 degrees Celsius).
- J. Any radioactive waste in excess of federal, state or county regulations.
- K. Any material or quantity of material that will cause:
 1. Damage to any part of the POTW;
 2. Abnormal maintenance of the POTW;
 3. An increase in the operational costs of the POTW;
 4. A nuisance or menace to public health or pollutants which result in the presence of gases, vapors, or fumes within the POTW or District sewer system in a quantity that may cause acute worker health and safety problems;
 5. Interference or pass through in the treatment plant, its treatment processes, operations, sludge processes, use or disposal;
 6. A violation of the NPDES permit;
 7. Excessive foaming in the POTW; or,
 8. Will cause any obstruction to the flow in the POTW or District sewer system.
- L. Any quantities of herbicides, algaecides, or pesticides that could cause interference or pass-through at the treatment plant or interfere with the City's biosolids reclamation or pose any danger to District employees.
- M. Any petroleum oil, non-biodegradable cutting oil, or mineral oil derived products exceeding District's local limits or will cause interference or pass through.
- N. Any material or quantity of material(s) which may cause abnormal sulfide generation.
- O. Any water or wastewater used for the purpose of diluting wastewaters that may otherwise exceed applicable permitted discharge limitations.

- P. Any wastewater having a corrosive property capable of causing damage to the POTW, District sewer or storm drain system, equipment, or structures, or harm to POTW personnel. However, in no case shall wastewater be discharged to the City's POTW with a pH below 5.0, or greater than 11.5, or which changes treatment plant influent pH to above 8.0 or below 6.5, or which would otherwise be considered hazardous.
- Q. Any substance that will cause discoloration of the POTW's effluent.
- R. Any unauthorized unpolluted water, including cooling water, heating water, storm water, subsurface water, single pass cooling water, deionized water and single pass heating water. The District Engineer may approve the discharge of such water only when no reasonable alternative method of discharge is available. The user shall pay all applicable user charges and fees.
- S. Any substance which may cause the POTW's effluent or any other product such as residues, sludge, or scums to be unsuitable for reclamation or reuse or which will interfere with any of the reclamation processes. This includes any material which will cause the sludge at the POTW to violate sludge use or disposal regulations developed under the Federal Clean Water Act, 33 USCA, Section 1251 et seq., or any regulations affecting sludge use or disposal developed pursuant to the Solid Waste Disposal Act, 42 USCA, Section 6901, et seq.; Clean Air Act, 42 USCA, Section 7401, et seq.; Toxic Substance Control Act, 15 USCA, Section 2601, et seq., or any other applicable state regulations.
- T. Any hazardous substance which violates the objectives of the 40 CFR 403 General Pretreatment Regulations, this chapter, or any statute, rule, regulation or chapter of any public agency having jurisdiction over the discharge.
- U. Any material in excess of the quantities established by resolution.
- V. Any discharge from a material processing tank or vessel. These shall include, but not be limited to, all wash tanks, chemical conversion tanks, acid and alkali tanks, lubricating tanks, condensate water from dry cleaning equipment, fruit and vegetable wash and treatment tanks, and any other tank or vessel containing a material which would not meet the pollutant discharge limitations. Tanks must be 50 feet from the perimeter of the property if they contain any volatile or flammable chemicals.
- W. Any radiator fluid or coolant, cutting oil, water soluble cutting oil, or water-based solvent.
- X. Any photo processing waste from developing or fixing solutions not in compliance with local limits or industrial user group permits.
- Y. Any pharmaceutical waste except those liquids containing only saline solutions, lactate, nutrients such as glucose (e.g., D5W), vitamins, and added salts such as potassium and/or other electrolytes.
- Z. Any trucked or hauled pollutants, except at discharge points designated by the District Engineer in accordance with this ordinance.

14.12.340 Swimming pool discharge requirements.

Discharges from swimming pools, wading pools, spas, whirlpools, therapeutic pools and landscape ponds shall be discharged to the following locations in compliance with this chapter and under the following conditions:

1. Surface discharge and/or storm drain, requiring that the chlorine residual is less than 0.1 mg/L. Owner can infiltrate discharged pool water on own property as long as it does not negatively impact neighboring properties and does not cause pollutants to enter a street, gutter or storm drain, or cause a public safety concern or public nuisance.
2. User shall first obtain permission from the District prior to discharging any of these waters to the District's sanitary sewer. Permission may be granted by the District Engineer if the discharge will not cause a hydraulic overload condition in the area's sewer lines.

3. Pumped out and hauled off to a legal treatment and/or disposal site if the water is found to have hazardous levels of chemicals, elements, or materials.

14.12.345 Limitation on wastewater strength.

No person shall discharge industrial wastewater to the POTW unless the wastewater conforms to this chapter. Discharge limitations shall be revised and adopted by resolution of the District as necessary to ensure the POTW's compliance with the NPDES permit. For Categorical industrial users, a BMR must be conducted as per requirements of the 40 CFR 403.12(b). For categorical industrial users, the District may exercise one or more of the following options:

- A. Where a categorical pretreatment standard is expressed in terms of either the mass or the concentration of a pollutant in wastewater, the District Engineer may impose equivalent concentration or mass limits in accordance with 40 CFR 403.6(c);
- B. When wastewater subject to a categorical pretreatment standard is mixed with wastewater not regulated by the same standard, the District Engineer shall impose an alternate limit using the combined wastestream formula; and
- C. A variance from a categorical pretreatment standard may be issued if the user can prove, pursuant to the procedural and substantive provisions in 40 CFR 403.13, that factors relating to its discharge are fundamentally different from the factors considered by the EPA when developing the categorical pretreatment standard.

14.12.350 Local limits.

- A. The District Engineer shall develop and implement specific prohibitions, pollutant limitations, pollutant parameters and best management practices (BMPs) ("local limits"). These local limits are necessary to assure compliance with the City's NPDES permit, including preventing pass through, interference, or impacts to biosolids reclamation or reuse. These local limits may be continually developed as necessary and adopted by resolution after public notice to affected persons or users.
- B. The local limits may be allocated among industrial user classes or individual users as uniform concentration limits, or as the ratio of the total mass per user, or as a selected industry reduction, or by such other method considering factors such as persistence of the pollutant, equity, treatment feasibility, economic feasibility, and economics of scale, pollution prevention and waste minimization measures, anticipated growth and enforcement feasibility.
- C. User-specific allocations at current loadings may be created for public health facilities which provide a lifesaving service or procedure, so long as the pollutant discharged would not contribute to pass-through, interference or other violation of the City's NPDES permit.
- D. Pollutant allocations may be granted to Class III or Class V users on a case-by-case basis based upon the POTW's excess treatment capacity for the pollutant requested. These limits shall be based upon the pounds of pollutant(s) discharged and the impacts on the treatment capabilities of the POTW. If the permit is issued for more than one year, a pollutant review will take place annually to determine the POTW's excess treatment capacity for those permitted pollutants. A review may be conducted at any time if the District Engineer finds that the Permittee's wastewater discharge has adversely affected the POTW, has caused a rise in that pollutant of more than 20 percent, or has caused interference, pass through, or violations of the POTW's NPDES permit.
- E. When categorical pretreatment standards are expressed only in terms of pollutant concentrations, a categorical industrial user may request that the District convert the concentration limits to an equivalent mass limits. To be eligible for equivalent mass limits, the categorical industrial user must comply with the requirements in 40 CFR Part 403.6(c)(5)(i-iv).

- F. The District Engineer reserves the right to establish, by ordinance or in individual wastewater discharge permits, more stringent standards or requirements on discharges to the POTW consistent with the purpose of this ordinance.
- G. Local limits adopted by resolution of the District are pollutant limits for discharges to the POTW established to protect against pass through and interference. No person shall discharge wastewater containing pollutants in excess of the local limits adopted by District Resolution.

14.12.355 De Minimis categorization.

Any user whose industrial wastewater discharge is less than 100 gallons per day and is not regulated by a federal categorical pretreatment standard or industrial user group permit may be classified in the District Engineer's discretion as a De Minimis user and shall not be subject to permitting standards or local limits provided that such industrial wastewater discharge is not a hazardous substance, does not contribute to interference or pass through violations at the POTW or violations of the NPDES permit, and does not cause detrimental effects or damage to the POTW, or cause a threat of harm to District personnel, the public, or the environment. De Minimis user status shall terminate upon violation of this section, or upon written notice to such discharger of District Engineer's determination that such discharger no longer satisfies the criteria of this section. Industries that discharge greater than 100 gallons per day may qualify under a Wastewater Discharge Authorization Certificate (WDAC).

14.12.357 Dental industrial user.

- A. The District Engineer, or designated staff person, may inspect any dental industrial user (DIU) facility to ascertain whether the requirements of this chapter, EPA, and State agencies are being met. Persons on the premises shall allow the District Engineer ready access at all reasonable times to all parts of the premises for the purpose of inspection, photography or electronic image recording, sampling, and records examination, equipment (including monitoring and pollution control equipment).
- B. The user shall ensure that there is always a person on site, during normal business hours, that has knowledge of the user's processes and activities to accompany the District Engineer during the inspection.
- C. All pretreatment equipment shall be immediately accessible at all times for inspection. At no time shall any material, debris, obstacles or obstructions be placed in such a manner that will prevent immediate access to the pretreatment equipment.
- D. The DIU must ensure it complies with all Federal, State, and District regulations and requirements, including submission of a One-Time Certification as required by 40 CFR 441.

14.12.360 Industrial wastewater pretreatment.

The District may deny or condition new or increased contributions of pollutants, or changes in the nature of pollutants, to the POTW by industrial users where such contributions do not meet applicable pretreatment standards and requirements or where such contributions would cause the POTW to violate its NPDES permit. In addition, all users shall:

- A. Provide wastewater pretreatment, as required, to comply with this chapter;
- B. Achieve compliance with all applicable federal categorical pretreatment standards, as contained in 40 CFR Chapter I, Subchapter N, and local limits, whichever are more stringent, within the time limitations as specified by the federal pretreatment regulations;
- C. Pre-treat wastewater to a level acceptable to the District Engineer and provide, operate, and maintain all necessary equipment, systems, and devices at the user's expense;
- D. Provide detailed plans to the District Engineer for review and approval showing the pretreatment equipment, systems, devices and operating procedures before the beginning of any construction or

installation of any equipment. The review of such plans and operating procedures shall not relieve the user from the responsibility of pre-treating wastewater to produce an effluent acceptable to the District Engineer under the provisions of this chapter;

- E. No user shall install pretreatment equipment, systems or devices in a confined space or a permit-required confined space.
- F. Whenever deemed necessary, the District Engineer may require users to restrict their wastewater discharge, relocate and/or consolidate points of discharge, separate domestic waste streams from industrial waste streams, and other such conditions as may be necessary to protect the POTW and determine the user's compliance with the requirements of this chapter; and
- G. Notify the District Engineer of any pretreatment equipment failure within 24 hours of discovering the failure. The notification shall be made by a telephone call, telefax transmission, electronic report, personal visit or hand delivered notification, to the District. Within five calendar days after discovery of the failure, the user shall submit a written report to the District Engineer documenting the dates, times, and cause of the failure, and the corrective actions taken. Failure to provide this notification is a violation of this chapter and may subject the user to enforcement actions.

14.12.365 Unauthorized monitoring and pretreatment equipment modifications.

No user shall knowingly falsify, tamper with, or render inaccurate any monitoring device or any pretreatment equipment or device. Such falsification, tampering, or inaccuracy shall be considered a violation of this chapter and shall subject the user to enforcement actions.

- A. No user shall have the potential to bypass any pretreatment equipment or device unless the bypass: (i) is necessary to prevent loss of life, personal injury or severe property damage, is not necessitated by some fault of the user, and is the only feasible alternative; (ii) does not cause local limit violations and is necessary to perform essential maintenance insuring adequate operation of the pretreatment equipment or device; or (iii) the industrial user submitted notices as required, below.
- B. All users shall comply with the following bypass notification requirements:
 - 1. Anticipated bypass: The user shall submit a written notice to the District Engineer at least ten days before the date of the scheduled bypass.
 - 2. Unanticipated bypass: The user shall notify the District Engineer immediately upon learning that any pretreatment equipment or device has been bypassed. The user shall submit a written report to the District Engineer within five business days after the bypass. The report shall include:
 - a. A description of the bypass, the cause of the bypass, and the duration of the bypass;
 - b. If the bypass was corrected; and
 - c. Actions taken or proposed to reduce or prevent a reoccurrence of the bypass.
 - 3. No process water may exit the facility or enter storm drains or waters of the State.

14.12.375 Prohibited discharge of recovered pretreatment waste.

No person shall discharge waste recovered from pretreatment equipment, systems, or devices into any sewer opening or any drains or other openings leading to any sewer, storm drain, or waters of the State without authorization and permits from a regulatory agency having jurisdiction over the discharge of the waste. All recovered pretreatment waste shall be disposed of in accordance with all applicable federal, state, county, and local laws and regulations.

14.12.380 Dilution prohibited as a substitute for treatment.

- A. No industrial user shall increase the use of water, or process water, or in any other manner attempt, to dilute a wastewater discharge as a partial or complete substitute for adequate treatment to achieve compliance with this chapter and the industrial user's permit, or to establish an artificially high flow rate for permitted mass emission rates or permitted flow amounts.
- B. If an industrial user is found to be using dilution to comply with this chapter and/or the user's industrial user permit, then the District may impose mass-based limits on pollutants.

14.12.385 Industrial and commercial stormwater requirements.

- A. Any person or entity that owns or operates a commercial and/or industrial facility(s) shall comply with the provisions of this ordinance. All such facilities shall be subject to a regular program of inspection as required by this ordinance, California Water Code §§13000 et seq. (Porter-Cologne Water Quality Control Act), Title 33 U.S.C. §§1251 et seq. (Clean Water Act), any applicable state or federal regulations promulgated thereto, and any related administrative orders or permits issued in connection therewith.
- B. *NPDES permit for industrial/commercial activity.* Any industrial discharger, discharger associated with construction activity, or other discharger subject to any NPDES permit issued by the United States Environmental Protection Agency, the State Water Resources Control Board, or the Santa Ana Regional Water Quality Control Board, shall comply with all requirements of such permit. Such dischargers shall specifically comply with the following permits: the Stormwater Industrial General Permit, the Construction Activity Storm water General Permit, and the Dewatering De Minimis General Permit. Proof of compliance with said NPDES General Permits may be required in a form acceptable to the District Engineer prior to issuance of any building, or occupancy permits.
- C. Industrial facility storm water discharges are regulated pursuant to CWA section 402(p)(3)(A). The State Water Board issued a statewide general permit for industrial storm water discharges, excluding construction activities, called the National Pollutant Discharge Elimination System General Permit for Storm Water Discharges Associated with Industrial Activities, NPDES No. CAS000001 ("Industrial General Permit") with requirements for industrial sites. Industrial sites must evaluate if they need to obtain coverage under this Industrial General Permit.
- D. Industrial facilities must evaluate if they meet the criteria to obtain coverage under the Industrial General Permit and obtain coverage no later than within a week of opening for business.
- E. Industrial facilities must develop and implement Stormwater Pollution Prevention Plans (SWPPP) that include BMPs that will achieve compliance with state and local requirements. All industrial and commercial facilities must implement and maintain minimum BMPs, and any other BMPs requested by the District Engineer during a storm water and/or pretreatment inspection to help protect the MS4 and sanitary sewer system.
- F. Industrial and commercial facilities must prevent their storm water or irrigation water from running off their property and onto another property and causing a nuisance, hazard, or conveying pollutants.
- G. All industrial and commercial facilities must prevent the potential discharge of pollutants in runoff from areas of material storage, vehicle or equipment fueling, vehicle or equipment maintenance (including washing), waste handling, hazardous materials handling or storage, delivery areas or loading docks, or other outdoor work areas.
- H. In the event of a spill, any person responsible for a facility, operation, activity, or emergency response for a facility, must immediately take mitigative action to control the release and shall immediately notify the City Public Works Department and Fire Department upon occurrence of an accidental discharge of prohibited materials or wastes. The City shall be notified by telephone at (951) 826-5311. The notification shall include the date, time, and location of the discharge, if it entered a storm drain or waterway, type of waste, including concentration and volume, and corrective actions taken. This notification does not relieve the user

from any other reporting requirements of any other laws. Within five calendar days following a spill or discharge, the discharger shall submit a detailed written report to the District Engineer including:

1. A description and cause of the event;
 2. The location, type, concentration, and volume of the spill or discharge;
 3. A determination of whether the spill or discharge entered a storm drain or waterway;
 4. The duration of the event including exact dates and time of noncompliance, and if noncompliance continues, the time by which compliance is reasonably expected to be achieved;
 5. The description of the remediation or cleanup methods and disposal, and submittal of copies of any disposal receipts and manifests;
 6. All steps taken or to be taken to reduce, eliminate, and prevent recurrence of such accidental, negligent, or intentional spill or other conditions of noncompliance; and
 7. Whether the California Emergency Management Agency (CALEMA) had been notified by phone at (800) 852-7550.
- I. Surface cleaning including mopping, rinsing, washing, pressure washing, steam cleaning, and floor mat washing shall only be performed with appropriate BMPs with no discharge of any liquid, material, or waste to the MS4.
- J. The exterior of waste oil, grease, tallow, and other restaurant or food service containers and the surfaces surrounding such containers shall, at all times, be kept clean of residual oil, grease, and other substances.
- K. Trash, recyclable, and waste disposal container covers shall be closed.
- L. Equipment, parts, and materials stored outside which have potential contribute to storm water pollution shall be covered or stored in a manner in which contact with precipitation, directly or from runoff is prevented.
- M. Machinery and equipment, including motor vehicles, which are leaking significant amounts of oil or fluid must be repaired, and the leaking oil must be cleaned up appropriately.
- N. Poorly managed authorized non-storm water discharges or evidence of unauthorized non-storm water discharges, which may be illicit connections or illegal discharges to the MS4, and other violations of this chapter may result in an enforcement action against the facility and/or property owner.
- O. All industrial and commercial facilities must comply with all the requirements contained within this chapter and must correct deficiencies noted during inspections or on any enforcement or compliance documents.
- P. Stormwater may enter the sewer collection system with District Engineer approval, and in accordance with the following:
1. Users having outdoor areas which allow wastewater and storm water to enter the sanitary collection system, or for which the initial diversion of contaminated storm water would assist in the preservation of surface or subsurface water quality, may be required to install and maintain, at the user's expense, a storm water diversion system to mitigate the release of rainwater to the sanitary sewer during a storm event.
 2. The storm water diversion system design and use shall be reviewed and approved by the District Engineer prior to installation, and must comply with rainwater diversion system design requirements.
 3. The system shall be designed to allow wastewater to enter the collection system during dry weather and divert excess storm water after the first 0.1 inches of rainfall back to the MS4 during storm events.
 4. During storm events, the user shall immediately suspend all outdoor wastewater generating activities and divert all storm water to a storm drain or impound contaminated water for release to the sanitary sewer after the cessation of rainfall.

5. If the segregation of industrial wastewater and stormwater is infeasible, or if discharge of contaminated storm water would create a pollution threat to surface or subsurface waters, the user may make application to the District Engineer requesting that the storm water be considered an industrial wastewater and approved for discharge to the POTW. Approval of a storm water discharge to the POTW shall be based on:
 - a. Hydraulic capacity of the collection system;
 - b. Hydraulic capacity of the treatment plant;
 - c. A demonstrated need to discharge storm water to the POTW to prevent surface and subsurface water contamination
 - d. Dry weather urban runoff diversions must also comply with the District's guidelines on dry weather diversion BMPs.
- Q. All users must comply with this Chapter and must comply with the State Water Resources Control Board's storm water requirements. The District Engineer may require storm water protection BMPs (such as covers over hazardous waste and chemical storage areas, cleaning of exposed areas prior to an expected rain event, etc.) to mitigate the potential release of pollutants to the storm drain, and cannot have equipment outside if it causes pollutants to have potential to enter storm water.

14.12.390 Industrial user modifications.

All permitted industrial users shall report proposed changes in their operations in writing to the District Engineer for approval 30 calendar days before those changes are implemented. For the purposes of this section "changes" shall include any of the following:

- A. A sustained 20 percent increase or decrease in production capacity or wastewater discharge;
- B. Additions, deletions or changes to processes, plumbing, or equipment, or other changes which may require an update to the Wastewater Discharge Permit; or
- C. Experimentation with new processes, materials, chemicals and/or equipment that may affect the quality of wastewater discharged.
- D. For SIUs, delays of notification greater than 45 days shall result in Significant Non-Compliance.

14.12.395 Spill containment system.

Spill containment systems shall conform to requirements established by the District Engineer. These requirements may include but are not limited to the following:

- A. Spill containment systems shall provide for the separation of incompatible chemicals.
- B. Spill containment systems shall consist of dikes, walls, barriers, berms, or other devices designed to contain spillage of the restricted materials.
- C. Spill containment systems shall be constructed of materials that are impermeable and non-corrosive as applicable.
- D. Spill containment systems shall conform to local regulations and policies as to percent containment, container type, size, outdoor covering, and the length of time spilled material may remain in the spill containment system.
- E. At no time shall a user use a spill containment system for any storage other than from a spill.
- F. All users shall keep the spill containment system free of accumulated liquid and debris.
- G. There shall be no drain or plugs within the spill containment area, except as approved by the District Engineer.

- H. All users must have spill kits as appropriate.

14.12.400 Slug discharges.

- A. No user shall discharge or caused to be discharged any slug load of materials, chemicals, products, or waste into the POTW. Any user discharging a slug load of materials, chemicals, products or waste into the POTW to avoid sewer service charges or disposal costs for treatment violates this Chapter. Any slug load that damages the POTW or causes Pass Through or Interference, or causes a safety concern to sewer maintenance or treatment plant operations employees, is a major violation. Slug loads that do not damage the POTW may be a minor violation.
- B. The permittee shall have a Slug Load Control Plan, and shall revise it every permit term or more frequent if necessary, including when any process has changed on-site. A slug discharge is any discharge of a non-routine, episodic nature, including, but not limited to, an accidental spill or a non-customary batch discharge, which has reasonable potential to cause interference or pass through, or in any other way violate the POTW's regulations, local limits and/or permit conditions, or any pollutant discharge violating the specific prohibitions under 40 CFR 403.5 (b). These specific prohibitions include at a minimum the following list of pollutants:
 - 1. Pollutants which create a fire or explosion hazard in the POTW, or having a Flash Point below 140 degrees Celsius;
 - 2. Pollutants which will cause corrosive structural damage to the POTW, or having a pH less than 5 or greater than 11.5;
 - 3. Solid or viscous pollutants which will cause obstruction in the POTW;
 - 4. Any pollutant, including oxygen demanding pollutants (COD, BOD, etc.) Released in a discharge at a flow rate and/or pollutant concentration which will cause interference with the POTW;
 - 5. Concentrated, off-spec, or spent products, reagents, or wastes;
 - 6. Heat in amounts which will inhibit biological activity in the POTW resulting in interference, but in no case heat in such quantities that the temperature at the POTW exceeds 40°C (104°F);
 - 7. Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through at the POTW;
 - 8. Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; and/or,
 - 9. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
- C. The Slug Discharge Prevention and Control Plan is intended to assist the permittee in evaluating their current practice in prevention and control of slug discharges. The Slug Discharge Prevention and Control Plan shall contain, at a minimum, the following elements:
 - 1. Description of discharge practices, including non-routine batch discharges;
 - 2. Description of stored chemicals, spill kits locations, and spill containment devices;
 - 3. Procedures for immediately notifying the District Engineer of slug discharges, including any discharge which would violate a prohibition under 40 CFR Part 403, with procedures for follow-up written notification within five days;
 - 4. If necessary, procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site runoff, worker training, building of containment structures or equipment, measurements for containing toxic organic pollutants (including solvents) and/or measures and equipment for emergency response.

- D. Upon occurrence of an accidental discharge of substances prohibited by this Chapter, the permittee shall take mitigative actions to protect public safety and prevent release of restricted materials to the environment, and shall notify the City immediately. During normal business hours, the City shall be notified by telephone at (951) 351-6145. After 5:00 p.m. on Monday through Friday, or weekends and holidays, the City shall be notified by telephone at (951) 826-5311. The notification shall include the location of the discharge, date and time thereof, type of waste, including concentration and volume, and the corrective actions taken. The permittee's notification of the accidental release in accordance with this section does not relieve the Permittee from the reporting requirements of local, State, or Federal laws.
- E. Within five days following an accidental discharge, the permittee shall submit to the District, a detailed, written report. The report shall specify the following:
 - 1. Description and cause of the upset, slug or accidental discharge, and the impact on the Permittee's compliance status. The description shall also include the location of the discharge, type, concentration and volume of waste.
 - 2. Duration of noncompliance including exact dates and times of noncompliance, and if noncompliance continues, the time by which compliance is reasonably expected to occur.
 - 3. All steps taken or to be taken to reduce, eliminate, and prevent recurrence of such an upset, slug, accidental discharge, or other conditions of noncompliance.

14.12.405 Facility waste management plan.

All permitted industrial users shall develop and maintain a facility waste management plan (FWMP). The FWMP shall consist of the following applicable documents:

- A. Toxic organic management plan (TOMP) is required of all categorical industrial users in lieu of required pollutant monitoring, as provided by their Federal Category.
- B. Slug Discharge Prevention Control Plan (SDPCP) is required of all industrial users which have batch discharge provisions, stored chemicals or materials, or the potential for a slug discharge which, if discharged to the POTW or storm drain system, would violate this chapter. The SDPCP shall contain, at a minimum:
 - 1. Description of discharge practices, including non-routine batch discharges;
 - 2. Description of all stored chemicals;
 - 3. Procedures to immediately notify the District of any slug discharge, including any discharge prohibited under Section 14.12.335;
 - 4. Procedures to provide a written follow-up notification within five calendar days;
 - 5. Procedures to prevent accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, plant and site run-off control, worker training, building of spill containment structures or equipment, measures for containing toxic organic pollutants (including solvents), and/or measures and equipment for emergency response; and
 - 6. Procedures to notify the District immediately of any changes in the facilities that may affect the potential for a slug discharge.
- C. Pretreatment Systems Operations and Maintenance Manual shall be submitted by all industrial users that operate and maintain pretreatment equipment.
- D. Hazardous Materials and Hazardous Waste Management Plan is required of all industrial users that use, possess, or generate hazardous substances.
- E. Waste Minimization/Pollution Prevention Plan (WM/PPP) is required of any industrial user:

1. For whom the District Engineer has determined such WM/PPP is necessary to achieve a water quality objective;
 2. Determined by the California State Water Quality Control Board ("State Board") to be a chronic violator, and the State Board, Regional Board or the District determines that pollution prevention (as defined in Water Code Section 13263.3(b)) could assist; and
 3. That significantly contributes, or has the potential to significantly contribute, to the creation of a toxic hot spot as defined in Water Code Section 13391.5.
- F. A WM/PPP shall include all of the following:
1. An analysis of the pollutants, as directed by the State Board, Regional Board, or the District, that the user discharges to the POTW, the sources of the pollutants, and a comprehensive review of the processes that generate and discharge the pollutants.
 2. An analysis of the effectiveness of pollution prevention, including any innovative and alternative technologies and possible adverse environmental impacts resulting from the use of those methods.
 3. A detailed description of the tasks and schedules required to investigate and implement the pollution prevention techniques.
 4. A statement of the discharger's pollution prevention goals and strategies, including priorities for short-term and long-term action.
 5. A description of the discharger's existing pollution prevention methods.
 6. A statement that the discharger's existing and planned pollution prevention strategies do not constitute cross media pollution transfers unless clear environmental benefits of such an approach are identified, and information that supports that statement, to the satisfaction of District.
 7. Proof of compliance with the Hazardous Waste Source Reduction and Management Review Act of 1989 (Article 11.9 (commencing with Section 25244.12) of Chapter 6.5 of Division 20 of the Health and Safety Code) if the discharger is subject to that act.
 8. An analysis, to the extent feasible, of the relative costs and benefits of the possible pollution prevention activities.
 9. A specification of, and rationale for, the technically feasible and economically practicable pollution prevention measures selected by the discharger for implementation.
- G. Any person who fails to complete a pollution prevention plan required by the District, submits a plan that does not comply with this section, or fails to implement a plan required by the District, shall be liable to the District for any civil penalty assessed administratively by the District or by a court in accordance with this chapter.
- H. The District shall not include a WM/PPP in any local limits or permit issued by the District.

14.12.410 Categorical pretreatment standards.

- A. The federal categorical pretreatment standards found in 40 CFR Chapter I, Subchapter N are hereby incorporated into this chapter by reference. It is unlawful for any Categorical Industrial User to discharge wastewater to the POTW in violation of federal categorical pretreatment standards or any limitation in this chapter or that user's permit. Where there is more than one limitation for a pollutant, the more stringent limitation shall prevail. Compliance with federal categorical pretreatment standards for existing sources subject to such standards or for existing sources, which hereafter become subject to such standards, shall be achieved within three years following promulgation of the standards unless a shorter compliance time is specified in the standards or by the District Engineer. New sources shall install, have in operating condition

and "start-up" all pretreatment equipment to ensure compliance before beginning any discharge. New sources must meet all applicable pretreatment standards within the shortest feasible time, not to exceed 90 days.

- B. The District may authorize a categorical industrial user to forego sampling of a pollutant regulated by a federal categorical pretreatment standard if the industrial user has demonstrated through sampling and other technical factors that the pollutant is neither present nor expected to be present in the wastewater discharge, or is present only at background levels from intake water and without any increase in the pollutant due to activities of the industrial user. This authorization is subject to the following conditions:
1. The District may authorize a waiver where a pollutant is determined to be present solely due to sanitary wastewater discharged from the facility provided that the sanitary wastewater is not regulated by an applicable categorical standard and otherwise includes no process wastewater.
 2. The monitoring waiver is valid only for the duration of the effective period of the industrial user's permit, and in no case shall exceed five years. The industrial user must submit a new request for the waiver with each permit renewal.
 3. In making a determination that a pollutant is not present, the industrial user must provide data from a least one sampling of the facility's process wastewater prior to any treatment at the facility that is representative of all wastewater from all processes.
 4. The request for a monitoring waiver must be signed by the industrial user's authorized representative and include the certification statement as defined in Section 14.12.120.
 5. Non-detectable sample results may only be used as a demonstration that a pollutant is not present if the EPA approved method from 40 CFR Part 136 with the lowest minimum detection level for that pollutant was used in the analysis.
 6. Any grant of the monitoring waiver by the District will be incorporated into the industrial user's permit. All data and information to support the District granting the waiver will be maintained for three years after the expiration of the waiver.
 7. Upon approval of the waiver and incorporation into the Industrial User's Permit, the Industrial User must certify on each report submitted with the following statement, that there has been no increase in the pollutant in its wastestream due to the activities at the Industrial User's facility:

"Based on my inquiry of the person or persons directly responsible for managing compliance with the Pretreatment Standard for 40 CFR [specify applicable National Pretreatment Standard part(s)], I certify that, to the best of my knowledge and belief, there has been no increase in the level of [list pollutant(s)] in the wastestream due to the activities at the facility since filing the last quarterly report."
 8. In the event that a waived pollutant is found to be present or is expected to be present based on changes that occur in the industrial user's operations, the industrial user must immediately notify the District and resume quarterly monitoring of the waived pollutant.
 9. This waiver provision does not supersede certification processes and requirements established in categorical pretreatment standards, except as otherwise specified in the categorical pretreatment standard.
- C. Users must comply with the categorical pretreatment standards found at 40 CFR Chapter I, Subchapter N, Parts 405-471.

14.12.415 Commercial/industrial tenant occupancy notification.

Pursuant to 40 CFR 403.8(f)(2)(i) all owners of multiple tenant commercial/industrial developments within the District service area shall submit, upon request by the District Engineer, a current list of tenants. This list shall

provide the name, address, unit space designation and type of business activity for each tenant space in the development.

14.12.420 Notice of potential problems to District Engineer.

All users shall immediately notify the District Engineer of all wastewater discharges that could adversely affect the POTW, the District sewer system or storm drain collection systems, including any slug discharges. Wastewater discharges that may adversely affect the POTW, the District sewer system and/or storm drain system include, but are not limited to, acids, alkalis, oils, greases, high strength organic waste, salt, hazardous substances and waste, colored wastes, and batch discharges. The notification shall be made by a telephone call to (951) 351-6280, telefax transmission, electronic report, personal visit or hand delivered notification, to the District. Within five calendar days after discovery of the discharge, the user shall submit a written report to the District Engineer documenting the dates, times, and cause of the failure, and the corrective actions taken. Failure to provide this notification is a violation of this Chapter.

14.12.425 Written responses and/or reports.

All users required to provide a written report, or response to any correspondence, order, or notice from the District Engineer shall do so in accordance with the date and requirements specified in the correspondence, order, or notice. Failure to provide the written response or report by the date requested shall constitute a violation of this Chapter.

14.12.430 Falsifying information.

No person shall knowingly make any false statement, representation, or certification in any record, correspondence, or other document submitted or required to be maintained under this chapter.

14.12.435 Wastewater Discharge Authorization Certificate (WDAC).

Any nonresidential user desiring to discharge wastewater to the City's POTW, that may qualify for an Industrial User Permit, but is determined that its discharge does not contain pollutants at concentrations of concern, or for whom a less-complex control instrument is deemed otherwise appropriate, may be required to obtain a WDAC by the District Engineer. WDACs shall not be issued to categorical industrial users. WDACs may be issued for indefinite time periods, subject to periodic review and reconsideration by the District Engineer.

14.12.440 Industrial user group permits.

Certain classes of industrial users, as determined by the District Engineer, may be eligible to participate in an industrial user group permit. Permittees within this designation shall share a common business identification as defined by the Federal North American Industry Classification System ("NAICS") code book. Industrial users permitted by this group permit shall abide by general permit conditions specific for that particular group being permitted. These permit conditions shall be established by the District Engineer.

14.12.445 Industrial user permits.

- A. It is unlawful for any industrial user to connect or discharge to the POTW without a valid Class I, II, III, IV, V, or VI industrial user permit, WDAC, or Industrial User Group Permit, as determined by the District Engineer. Issuance of any such permit or WDAC shall not vest any right in a user to continue connection or discharge to the POTW beyond the express terms of the permit or WDAC.
- B. Plans and building permits for Class I, II, III, IV, V, or VI industrial user permits and those users designated by the District Engineer shall not be approved by the District Engineer for any sewer connection which will

convey industrial wastewater to the POTW unless the user has first obtained an industrial user permit, WDAC, or other written permission from the District Engineer.

- C. Users required to obtain an industrial user permit shall complete and file with the District Engineer a permit application form provided by the District Engineer and shall pay all applicable fees within 30 days of invoicing by the District. The application form may require applicant's submission of any or all of the following:
1. Name, address, and location (if different from the site address);
 2. Standard Industrial Codes (SIC) and NAICS numbers under the Federal North American Industry Classification System, Office of Management and Budget, 1997, as amended;
 3. EPA hazardous waste generator's number;
 4. Wastewater samples analyzed for specified pollutants by a State certified laboratory in accordance with the methods published by EPA in 40 CFR Part 136 and amendments thereto;
 5. Time and duration of the wastewater discharges;
 6. Average and maximum daily wastewater flow rates, including any seasonal variation of all waste streams discharged;
 7. A list of all environmental control permits held;
 8. A written statement from the property owner or landlord, if different from the industrial user, agreeing to the industrial user's activities, manufacturing processes, and chemical and material storage;
 9. Site plans, floor plans, mechanical and plumbing plans with details to show all sewers, sewer connections, pretreatment equipment, systems and devices, production areas and all areas of wastewater generation;
 10. A description of operations including the nature, average rate of production, and NAICS code of the operation(s) carried out by the industrial user, and a schematic process diagram that indicates points of discharge to the POTW;
 11. Flow measurement information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from regulated process waste streams and other waste streams as necessary to allow use of the combined waste stream formula;
 12. Measurement of pollutants identifying the National Categorical Pretreatment Standard applicable to each regulated process, with the results of sample analyses identifying the nature and concentration (or mass where required) of regulated pollutants in the discharge from each regulated process. Both daily maximum and average concentration or daily maximum and average mass shall be reported. All analyses shall be performed in accordance with the techniques prescribed in 40 CFR Part 136;
 13. Certification statement, as set forth in 40 CFR Part 403.6(a)(2)(ii), executed by an authorized representative of the industrial user and prepared by a qualified professional, indicating whether or not pretreatment standards (categorical and local) are being met on a consistent basis. If not, the industrial user shall state if additional operation and maintenance or additional pretreatment equipment is necessary to achieve compliance with pretreatment standards and requirements;
 14. Best management practices necessary to comply with this chapter; and
 15. Any other information as may be necessary for the District Engineer to evaluate the permit application.
- D. Within 45 days after receiving the completed application and all required supporting information, the District Engineer shall evaluate the application and information furnished by the applicant. The District Engineer shall issue the permit, if the District Engineer believes that sufficient and accurate information has been provided by the applicant in the permit application and the District Engineer finds that all of the following conditions are met:

1. The proposed discharge of the applicant is in compliance with the prohibitions and limitations of this chapter;
 2. The proposed operation and discharge of the applicant would not interfere with the normal and efficient operation of the POTW;
 3. The proposed discharge, operation or business activity of the applicant shall not result in a violation by the District of the terms and conditions of the NPDES permit or cause a pass through of any toxic materials to the environment or the POTW sludge; and
 4. The applicant has paid all applicable industrial user permit fees.
- E. The District Engineer may suspend the permit application process if the user's business will not be operational and no wastewater is planned for discharge at the conclusion of the application review process. The user must notify the District Engineer at least 14 calendar days before starting business activities and wastewater discharge.
- F. If the District Engineer determines that the proposed discharge will not be acceptable, the District Engineer shall disapprove the application and shall notify the applicant in writing, specifying the reason(s) for denial and the applicable appeals process under Section 14.12.570, Appeals.
- G. Industrial user permits shall be subject to all provisions of this Chapter and all other applicable regulations, charges and fees established by the District, the City of Riverside or the Riverside County Board of Supervisors resolution. Permits may include one or more of the following:
1. The unit charge or schedule of user charges and fees for the wastewater discharged to the POTW as established by ordinance or resolution;
 2. Schedule of penalties for noncompliance as established by resolution;
 3. Limitations on the average monthly and maximum daily wastewater pollutants and mass emission rates for pollutants;
 4. Limitations on the average monthly and maximum daily wastewater flow rates;
 5. Requirements for the submittal of a facility waste management plan;
 6. Requirements for the submittal of daily, monthly, annual and long-term production rates;
 7. Requirements for reporting changes and/or modifications to equipment and/or processes that affect the quantity or quality of the wastewater discharged;
 8. Requirements for installation and maintenance of monitoring and sampling equipment and devices;
 9. Requirements for the installation of pretreatment technology, pollution control, or construction of appropriate spill containment devices;
 10. Requirements to comply with best management practices and periodic written documentation that the best management practices are being implemented and the effects on compliance;
 11. Specifications for monitoring programs which may include: sampling location(s); frequency of sampling; pollutant violation notification and resampling requirements; number, types and standards for tests; reporting schedules; TTO monitoring; and self-monitoring standard operating procedures (SOPs);
 12. Requirements for reporting flow exceedances and pollutant violations;
 13. Consent to the District's entry onto the user's premises to assess compliance by inspection, photography, electronic image recording, records examination, sampling, and monitoring;
 14. Compliance schedules. Compliance schedule progress reports, as required, shall be submitted every 30 days during the time the compliance schedule is in force, including a final compliance report at the conclusion of the compliance schedule. The industrial user shall state whether or not compliance was

achieved for the increment of progress to be met on such a date. If progress cannot be achieved, the industrial user shall state the reasons for the delay and the steps to be taken to return to the dates originally established in the compliance schedule;

15. Modified compliance schedules if pretreatment standards compliance cannot be met on a consistent basis. A modified compliance schedule shall provide the shortest possible time for the industrial user to provide additional pretreatment and/or operations and maintenance to achieve compliance, and may contain milestones;
16. Requirements for submission of technical or discharge reports, Baseline Monitoring Reports (BMR), compliance reports, and reports on continued compliance;
17. Requirements for submission of a slug discharge plan according to 40 CFR 403.8(f)(1)(iii)(B)(6) and any subsequent updates;
18. Reports on compliance with federal categorical pretreatment standards deadlines. All categorical industrial users shall submit reports to the District Engineer containing the information described in this section as required by the permit. For existing categorical industrial users, the report shall be submitted within 90 days following the date for final compliance with applicable categorical pretreatment standards. For new categorical industrial users, the report shall be due 30 days following the commencement of wastewater discharge into the POTW. These reports shall contain long-term production rates and actual production during the wastewater sampling periods;
19. All significant and categorical industrial users shall submit progress reports on compliance every six months. These reports shall include effluent sample analyses with the pollutant names and concentration or masses; average and maximum daily wastewater flows for all regulated processes and total flow for the reporting period; average and maximum daily production rates; and total production rate for the reporting period. Significant industrial users are required to notify the District Engineer immediately of any changes at its facility affecting the potential for a slug discharge;
20. All required reports: BMRs, compliance reports, periodic reports on continued compliance, and sample data submittals, must be signed by an authorized representative of the user;
21. All reports required by this section must have an accompanying certification statement by a qualified professional stating whether the pretreatment standards are or are not being met as set forth in 40 CFR Section 403.12(b)(6);
22. Requirements for maintaining and retaining all records relating to wastewater monitoring, sample analyses, production, waste disposal, recycling, and waste minimization as specified by the District Engineer;
23. Users subject to the reporting requirements of this ordinance shall retain, and make available for inspection and copying, all records of information obtained pursuant to any monitoring activities required by this ordinance, any additional records of information obtained pursuant to monitoring activities undertaken by the user independent of such requirements, and documentation associated with best management practices as approved by the District. Records shall include the date, exact place, method, and time of sampling, and the name of the person(s) taking the samples; the dates analyses were performed; who performed the analyses; the analytical techniques or methods used; and the results of such analyses. These records shall remain available for a period of at least three years. This period shall be automatically extended for the duration of any litigation concerning the user or the District, or where the user has been specifically notified of a longer retention period by the District Engineer.
24. All wastewater samples must be representative of the industrial user's discharge and must be reported to the District when obtained at the permitted discharge sample location or outfall. Wastewater monitoring and flow measurement facilities shall be properly operated, kept clean, and maintained in good working order at all times. The failure of a user to keep its monitoring facility in good working

order shall not be grounds for the user to claim that sample results are unrepresentative of its discharge.

25. Requirements for notification of slug or accidental discharges and significant changes in volume or characteristics of the pollutants discharged;
26. Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements and this chapter; and
27. Other conditions as deemed appropriate by the District Engineer to ensure compliance with this chapter.

14.12.447 Baseline monitoring reports.

Reporting requirements for industrial users upon effective date of categorical pretreatment standard baseline report. Within 180 days after the effective date of a categorical Pretreatment Standard, or 180 days after the final administrative decision made upon a category determination submission under Federal Code 40 CFR 403.6(a)(4), whichever is later, existing Industrial Users subject to such categorical Pretreatment Standards and currently discharging to or scheduled to discharge to a POTW shall be required to submit to the Director a report which contains the information as described below. At least 90 days prior to commencement of discharge, New Sources, and sources that become Industrial Users subsequent to the promulgation of an applicable categorical Standard, shall be required to submit to the District a report which contains the information required. New sources shall also be required to include in this report information on the method of pretreatment the source intends to use to meet applicable pretreatment standards. New Sources shall give estimates of the information as requested:

1. *Identifying information.* The user shall submit the name and address of the facility including the name of the operator and owners;
2. *Permits.* The user shall submit a list of any environmental control permits held by or for the facility;
3. *Description of operations.* The user shall submit a brief description of the nature, average rate of production, and standard industrial classification of the operation(s) carried out by such industrial user. This description should include a schematic process diagram which indicates points of discharge to the POTW from the regulated processes.
4. *Flow measurement.* The user shall submit information showing the measured average daily and maximum daily flow, in gallons per day, to the POTW from each of the following:
 - (i) Regulated process streams; and
 - (ii) Other streams as necessary to allow use of the combined wastestream formula of 40 CFR 403.6(e).

The District of may allow for verifiable estimates of these flows where considerations are justified by cost or feasibility.

5. *Measurement of pollutants.*
 - (i) The user shall identify the pretreatment standards applicable to each regulated process;
 - (ii) In addition, the user shall submit the results of sampling and analysis identifying the nature and concentration (or mass, where required by the District of regulated pollutants in the discharge from each regulated process. Both daily maximum and average concentration (or mass, where required) shall be reported. The sample shall be representative of daily operations. In cases where the standard requires compliance with a best management practice or pollution prevention alternative, the user shall submit documentation as required by the District or the applicable standards to determine compliance with the standard;
 - (iii) For sampling required in support of baseline monitoring and 90-day compliance reports required, a minimum of four grab samples must be used for pH, cyanide, total phenols, oil and grease,

sulfide and volatile organic compounds for facilities for which historical sampling data do not exist; for facilities for which historical sampling data are available, the District Engineer may authorize a lower minimum. For the reports required under (40 CFR 403.12(e) and 403.12(h)), the industrial user is required to collect the number of grab samples necessary to assess and assure compliance with applicable pretreatment standards and requirements.

- (iv) Samples should be taken immediately downstream from pretreatment facilities if such exist or immediately downstream from the regulated process if no pretreatment exists. If other wastewaters are mixed with the regulated wastewater prior to pretreatment the user shall measure the flows and concentrations necessary to allow use of the combined wastestream formula in order to evaluate compliance with the applicable pretreatment standards. Where an alternate concentration or mass limit has been calculated, this adjusted limit along with supporting data shall be submitted to the District;
 - (v) Sampling and analysis shall be performed in accordance with the techniques prescribed in 40 CFR part 136 and amendments thereto. Where 40 CFR part 136 does not contain sampling or analytical techniques for the pollutant in question, or where the District Engineer determines that the part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analysis shall be performed by using validated analytical methods or any other applicable sampling and analytical procedures, including procedures suggested by the POTW or other parties, and approved by the District Engineer;
 - (vi) The District may allow the submission of a baseline report which utilizes only historical data so long as the data provides information sufficient to determine the need for industrial pretreatment measures;
 - (vii) The baseline report shall indicate the time, date and place, of sampling, and methods of analysis, and shall certify that such sampling and analysis is representative of normal work cycles and expected pollutant discharges to the POTW;
6. *Certification.* A statement, reviewed by an authorized representative of the industrial user and certified to by a qualified professional, indicating whether pretreatment standards are being met on a consistent basis, and, if not, whether additional operation and maintenance (O and M) and/or additional pretreatment is required for the industrial user to meet the pretreatment standards and requirements; and
7. *Compliance schedule.* If additional pretreatment and/or O and M will be required to meet the pretreatment standards; the shortest schedule by which the industrial user will provide such additional pretreatment and/or O and M. The completion date in this schedule shall not be later than the compliance date established for the applicable pretreatment standard.
- (i) Where the industrial user's categorical pretreatment standard has been modified by a removal allowance, the combined wastestream formula, and/or a fundamentally different factors variance at the time the user submits the report required, the information required shall pertain to the modified limits.
 - (ii) If the categorical pretreatment standard is modified by a removal allowance the combined wastestream formula, and/or a fundamentally different factors variance after the user submits the report required, any necessary amendments to the information requested shall be submitted by the user to the District within 60 days after the modified limit is approved.

14.12.450 Permit duration.

Industrial user permits shall be issued for a specified time period, not to exceed five years.

14.12.455 Duty to comply.

All users that have been issued an industrial user permit, industrial user group permit, WDAC, or De Minimis categorization have a duty to comply with all conditions and limitations in these control documents ("control documents"). Any user failing to comply with the requirements of such user's control documents shall be subject to administrative, civil or criminal enforcement actions in accordance with this chapter.

14.12.460 Permit renewal.

All users shall submit a completed industrial user permit application, required monitoring information or production reports, and any other information required for permit renewal a minimum of 90 calendar days prior to the expiration of the existing industrial user permit. All users shall pay all applicable permit fees no later than 30 calendar days after invoicing by the District. If the District Engineer fails to notify a user of District Engineer's decision to issue or not issue a renewed permit prior to the expiration date of the current permit, the user's timely submission of a completed application and all other required information and reports shall automatically administratively extend the permit. Any discharge of industrial wastewater to the POTW with an expired industrial user permit that has not met the criteria for administrative extension shall be a violation of this chapter.

14.12.465 Permit modifications.

- A. The District Engineer may modify the industrial user permit terms and conditions as follows:
 - 1. To incorporate any new or revised federal, state, or local pretreatment standards or requirements;
 - 2. To address significant alterations or modifications to the user's operation, processes, or wastewater volume or character since the time of the industrial user permit issuance;
 - 3. For a change in the POTW that requires either a temporary or permanent reduction or elimination of the permitted discharge;
 - 4. If the permitted wastewater discharge poses a threat to the POTW, District personnel, residents, or receiving waters;
 - 5. For violation of any term or condition of the industrial user permit;
 - 6. For misrepresentations or failure to fully disclose all relevant facts in the industrial user permit application or in any required reporting;
 - 7. To correct typographical or other errors in the industrial user permit;
 - 8. Revision of or a grant of variance from categorical pretreatment standards pursuant to 40 CFR 403.13; or
 - 9. For other reasons as the District Engineer deems necessary.
- B. District shall notify the user of any proposed permit changes at least 30 calendar days prior to the effective date of the changes. Any modifications in the permit shall include a reasonable time schedule for compliance.

14.12.467 Permit revocation.

The District Engineer may revoke any permit for good cause, including, but not limited to, the following reasons:

- A. Failure to notify the District Engineer of significant changes to the wastewater prior to the changed discharge;
- B. Failure to provide prior notification to the District Engineer of changed conditions;

- C. Misrepresentation or failure to fully disclose all relevant facts in the wastewater discharge permit application;
- D. Falsifying self-monitoring reports and certification statements;
- E. Tampering with monitoring equipment;
- F. Refusing to allow the District Engineer timely access to the facility premises and records;
- G. Failure to meet effluent limitations;
- H. Failure to pay fines;
- I. Failure to pay sewer charges;
- J. Failure to meet compliance schedules;
- K. Failure to complete a wastewater survey or the wastewater discharge permit application;
- L. Failure to provide advance notice of the transfer of business ownership of a permitted facility;
- M. Violation of any pretreatment standard or requirement, or any terms of the permit or this ordinance; or
- N. Other reasons as determined by the District Engineer.

Permits shall be voidable upon cessation of operations or transfer of business ownership. All permits issued to a user are void upon the issuance of a revised permit to that user.

14.12.470 Permit transfer.

Each liquid waste hauler permit, industrial user permit, WDAC, or industrial user group permit is issued to a specific user for a specific operation for a specified time. Any assignment, transfer or sale of any permit to a new owner, new user, different premises, or different use is prohibited.

14.12.475 Fees and charges.

The District is authorized to impose fees and charges to recover the costs of its pretreatment program. These fees and charges are exclusive to this chapter and are separate from all other fees or costs. The amount of these fees and charges and method of implementation may be established by resolution of the District. The District may assess fees and charges to recover the costs for:

- A. Developing, implementing, and operating the District's pretreatment program and this chapter;
- B. Monitoring, inspection, surveillance procedures and laboratory costs;
- C. Reviewing plans and construction inspections;
- D. Industrial user permit application review;
- E. Industrial user permit, industrial user group permit, and WDAC issuance;
- F. Enforcement actions;
- G. Liquid waste hauler's permit issuance;
- H. Temporary user permit issuance;
- I. Exceeding conventional pollutant limitations in the industrial user permit or other applicable pollutant limitations. These fees shall be based on the District costs of operations, maintenance and treatment for the conveyance of gallons of wastewater, pounds of COD and total suspended solids;
- J. Nonresidential user sewer service fees shall be assessed considering the following conditions:

1. In order to accurately recovery the cost of conveying and treating the facility's industrial discharge, Industrial users shall be charged special billing if commercial sewer use rates are deemed inadequate by the District Engineer. Special billing customers shall pay monthly sewer service fees based upon rates established periodically by District resolution. The industrial user sewer rates shall be based upon the District's costs for providing services and treatment for the total volume of wastewater discharged and for the pounds of COD and TSS contained in the wastewater discharged.
2. Commercial users shall pay monthly sewer service fees based upon the commercial sewer use rates established periodically by resolution. The commercial sewer use rates shall be based on the costs for providing services and treatment for the amounts of COD, TSS and gallons of wastewater discharged.

14.12.480 Assessment of permit fees and charges.

Permit fees for multi-year permits shall be payable in advance for the entire term of the permit, as invoiced by the District. If a permit is terminated within 30 calendar days of issuance, then the District Engineer shall refund 50 percent of the original permit fee, less any fees, charges or penalties owing to the District provided that no refund shall be made to a permit holder which is in violation of this chapter or any provision of their permit at any time prior to such termination. After a permit has been in effect for 30 days or more, all fees for that permit are non-refundable. No permit application fee shall be refundable at any time.

14.12.485 Payment of fees, charges and penalties; late payment.

Unless otherwise specified, all fees, charges and penalties imposed pursuant to this chapter are due and payable within 30 calendar days after the date of the notice or invoice from the District. Users who fail to pay any required fee, charge or penalty by the due date shall pay a 50 percent surcharge in addition to the original fee, charge or penalty. The District shall give notice to a user of any permit termination associated with the unpaid amounts and such permit will be automatically revoked on the 30th day after the date of such notice if the amount due is not paid in full. The District Engineer shall refer the unpaid amount to the District Manager for collection.

14.12.486—14.12.489. Reserved.

Division IV. Enforcement

14.12.490 Failure to comply.

Failure to comply with this chapter, or any section, subsection, or part of this chapter, is a violation of this chapter and may be punished by administrative, civil, and/or criminal penalties. The remedies available under this chapter are in addition to all other remedies available under the law.

14.12.495 Enforcement Response Plan (ERP).

The District shall use an Enforcement Response Plan (ERP), as required by 40 CFR 403.8(f)(5), and adopted by resolution of the District, to guide the District in imposing progressive enforcement actions against users and persons in noncompliance with this chapter.

14.12.500 Administrative violations.

There is hereby established a class of violations to be known as administrative violations that are further subdivided into minor and major administrative violations as follows:

- A. Minor administrative violations include, but are not limited to, the following:
 - 1. Submission of incomplete reports or questionnaires;
 - 2. Failure to submit reports by the scheduled due date;
 - 3. Failure to respond to questionnaires;
 - 4. Missing a compliance date without proper prior notification to the District;
 - 5. Failure to conduct sampling when required;
 - 6. Failure to notify the District Engineer of a violation of a permit condition within 24 hours after discovery of the violation; or
 - 7. Failure to pay all required fees, penalties and charges within 30 calendar days from the due date.
- B. Major administrative violations include, but are not limited to, the following:
 - 1. Failure to notify the District Engineer of a slug discharge immediately after discovery of said discharge;
 - 2. Failure to respond, by a given date, to letters requiring responses or to administrative orders;
 - 3. Missing a compliance date by more than 30 calendar days;
 - 4. Falsification of documents or attempting to mislead District officials in any manner whatsoever;
 - 5. Failure to cooperate with District officials exercising their authority under this chapter, including monitoring and inspection activities;
 - 6. A pattern of minor administrative violations;
 - 7. Failure to provide the District with access to user's premises for the purpose of inspection, photography, electronic image recording, monitoring, or sampling;
 - 8. Failure to produce records as required;
 - 9. Failure to accurately report noncompliance;
 - 10. Failure to submit required reports (self-monitoring, 180-day baseline monitoring report, 90-day compliance report, compliance schedule progress reports) or submitting such reports more than 45 calendar days late;
 - 11. Failure to pay charges pursuant to Section 14.12.460 of this chapter, permit application fees, permit renewal fees, and civil penalties within 60 calendar days after the due date; or
 - 12. Failure to pay all other required fees, penalties, and charges within 60 calendar days after the due date.
- C. Upon notice of appropriate mitigating circumstances and consistent with applicable federal and state laws, the District Engineer has sole discretion to treat a major administrative violation as a minor administrative violation, or a pattern of minor administrative violations with aggravating circumstances as individual major administrative violations.

14.12.505 Violations of discharge limitations.

- A. There is hereby established a class of violations to be known as discharge violations that are further subdivided into minor and major discharge violations as follows:
 - 1. Minor discharge violations are those that, either alone or in combination with similar user discharge violations, pose, as determined by the District Engineer, no significant threat to the public health, safety or welfare, the environment, the POTW, District sewer, or the storm drain system, the beneficial use of the biosolids or to any District employee or contractor.

2. Major discharge violations include, but are not limited to, the following:
 - a. Significant noncompliance;
 - b. Discharge violations which, either alone or in combination with similar discharges pose, as determined by the District Engineer, a significant threat to the public health, welfare or safety, the environment, the safe and efficient operation of the POTW, the beneficial use of biosolids or to any District employee or contractor, or cause or contribute to additional treatment costs incurred by the District or a violation of the NPDES permit, or cause or contribute to pass-through, interference, or other known damages;
 - c. Discharging regulated pollutants to the POTW without a current discharge permit;
 - d. A pattern of minor discharge violations;
 - e. Failure to correct a minor discharge violation within a specific time period as directed by the District Engineer;
 - f. Tampering with or purposely rendering inaccurate any monitoring device, method or record required to be maintained pursuant to this chapter;
 - g. Intentional discharge of a prohibited waste by a liquid waste hauler into the POTW; or
 - h. Discharging wastewater without a valid industrial user permit after notification.
- B. Upon notice of appropriate mitigating circumstances, the District Engineer has discretion to treat a major discharge violation as a minor discharge violation. The District Engineer also has the discretion to treat a pattern of minor discharge violations with aggravating circumstances as individual major discharge violations.

14.12.510 Unclassified violations.

For any violation by any user or person that is not classified herein, or for the violation of any rule or regulation promulgated hereunder, the District Engineer shall have the discretion to treat such a violation as a minor or major violation and to exercise enforcement authority accordingly. In exercising this enforcement authority, the District Engineer shall consider the magnitude of the violation, its duration, and its effect on receiving waters, the POTW, the POTW's biosolids, the health and safety of District employees, contractors, users, and the general public. The District Engineer shall also evaluate the user's or person's compliance history, good faith, and any other factors the District Engineer deems relevant.

14.12.515 Separate violations.

Each violation of this chapter may be charged as a separate violation for each day the same violation exists. Each wastewater pollutant violation is considered an individual violation for each pollutant in violation for each day in violation.

14.12.520 Administrative orders.

The District Engineer may require compliance with this chapter and any permit or order issued under this chapter by issuing Administrative Orders that are enforceable in a court of law, or by directly seeking court action. The District Engineer may use Administrative orders, either individually, sequentially, concurrently, or in any order for one or more violations as appropriate for the circumstances. Administrative orders include, but are not limited to the following:

- A. *Stop work order.* The District Engineer may issue a written stop work order to any person engaged in doing or causing to be done new construction, tenant improvements, alterations, or additions relative to the District's pretreatment program if:

1. District permits have not been obtained;
 2. Work has begun without prior written approval by the District Engineer; or
 3. Violations of this chapter are found at the site of the new construction, tenant improvements, alterations, or additions. Any person served a stop work order pursuant to this section shall immediately stop such work until written authorization for such work is issued by the District Engineer.
- B. *Correction notice.* The District Engineer may issue a correction notice for minor violations noted during an inspection of the user's facility. Extensions may be granted to a user who fails to correct minor violations required by a correction notice, upon a showing of good cause, where "good cause" means an unforeseeable and unavoidable event or series of events, over which user had no control that prevented or significantly impaired the user's ability to comply with the correction notice.
- C. *Written warning.* The District Engineer may issue a written warning to notify a user of a minor violation or any violation that has not been corrected as required by a correction notice. The written warning shall state the provision(s) violated and the facts supporting the violation, and may include any proposed corrective actions or monitoring to be required. Failure to come into compliance by the date noted on the written warning or accompanying inspection report shall result in a \$500.00 fine.
- D. *Monitoring/production information order (MPIO).* The District Engineer may issue an MPIO when two consecutive violations for the same pollutant are detected in District or user samples, when a pattern of wastewater pollutant non-compliance has been detected or when inconsistent wastewater pollutant compliance had resulted in Significant Non-Compliance. The MPIO shall be used to determine if discharge compliance has been achieved or if a detected violation is consistent. The MPIO shall require the user to sample the user's wastewater discharge for the pollutant(s) in violation and record the daily effluent wastewater flow for all days within a 14 consecutive day period that industrial wastewater is discharged to the POTW. Production information shall be required of all categorical industrial users which have production-based discharge limits. The user required to conduct an MPIO shall comply with all the instructions given in the MPIO.
- E. *Notice of violation (NOV).* An NOV shall be issued to a user for a violation of a written warning, stop work order, provisions of the industrial user permit or of this chapter, an MPIO that has resulted in significant non-compliance or any other violation that has resulted in significant non-compliance. NOV's issued to Class I and II Industrial User Permit holders and Liquid Waste Hauler permit holders shall be subject to a \$1,000.00 fine. All other NOV's shall be subject to a \$750.00 fine. The District Engineer may serve the user with a written NOV personally or by certified mail. The NOV shall state the provision(s) violated and the facts supporting the violation, and may include any proposed corrective actions or monitoring to be required. The NOV shall require the user to respond in writing to the District Engineer, within ten calendar days from the date of service of the NOV, with a written explanation of or response to the violation(s) and a plan for the satisfactory correction or prevention thereof, including specific required actions. Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the NOV.
- F. *Violation meeting.* A violation meeting shall be required of all users who have failed to achieve compliance after the issuance of an NOV or at the conclusion of an MPIO that has resulted in significant noncompliance. This meeting shall be for the District to draft a consent order or compliance order or for the user to propose solutions, request time extensions, draft a compliance schedule, or file an appeal. Any user for whom a violation meeting is scheduled shall be subject to a \$1,000.00 fine.
- G. *Consent Order.* The District Engineer may, at any time after finding a violation of this chapter, enter into an agreement with the violating user known as a consent order. Such agreement may be a compliance schedule with milestones, other specific actions to be taken by the user to correct or prevent the noncompliance within a specified time period, payment of damages, consent order fines, penalties, or other remedies. The consent order is developed between the user and the District. A consent order has the same force and effect as any other administrative order issued pursuant to this

chapter. Consent orders issued to Class I and II Industrial User Permit holders and Liquid Waste Hauler permit holders shall be subject to a \$1,000.00 fine. All other consent orders shall be subject to a \$750.00 fine.

H. *Compliance order.*

1. The District Engineer may issue a compliance order for a violation of this chapter, the user's industrial user permit, or an order issued thereunder. Compliance orders shall specify the provisions violated and the facts constituting the violation(s), and direct that adequate treatment be installed and operated by a specified time period. Compliance orders may also contain such other requirements as the District Engineer deems appropriate to assure timely compliance with this chapter, such as installation of pretreatment technology, additional self-monitoring or management practices, adherence to a compliance schedule, submission of action plans, and appearance by the user at a specific time and place for a compliance meeting, or other measures necessary to achieve and maintain compliance. Compliance orders are developed without user comment. Compliance orders issued to Class I and II Industrial User Permit holders and Liquid Waste Hauler permit holders shall be subject to a \$1,000.00 fine. All other compliance orders shall be subject to a \$750.00 fine.
2. If no public hearing on the violation has been previously conducted, the alleged violating user may either submit a written explanation or other response to the compliance order or request that the District Engineer conduct either an informal meeting or a hearing. Such submission or request shall be in writing and filed with the District Engineer no later than ten calendar days after service of the compliance order. The submission or request shall not stay the compliance order.

I. *Civil penalty order.* A civil penalty order may be issued to assess penalties and any other costs incurred by the District in the investigation, monitoring, legal assistance, enforcement, cleanup or repair caused by the user's violation. The civil penalty order may be included with any other administrative order.

J. *Cease and desist order.* A cease-and-desist order shall be issued by the District Engineer to any user or person whose violation of this chapter, industrial user permit, or any order issued under this chapter, poses a threat to the POTW, the District sewer system, storm drain, personnel, environment or the public. A cease-and-desist order may also be issued by the District Engineer to a user who continues to discharge industrial wastewater to the District's POTW without a valid industrial user permit. The District Engineer may issue a cease-and-desist order immediately upon discovering any such violation and direct a user or person in noncompliance to take such appropriate remedial or preventive actions as District Engineer deems are needed to eliminate a continuing or threatened violation, including stopping operations and terminating the discharge. Such cease-and-desist order shall include the provision violated and the facts constituting the violation. A user subject to a cease-and-desist order shall be subject to a \$1,000.00 fine.

K. *Show cause order.* The District Engineer may set a hearing requiring a user to show cause why the District should not take a proposed enforcement after issuance and conclusion of a consent order, compliance order, or cease and desist order. A user subject to a show cause order shall be subject to a \$1,000.00 fine. The hearing shall be held before the enforcement action is executed. The hearing shall follow written procedures established by the District Engineer, maintained for public review in the office of the District Engineer, and provided to the user together with the hearing notice. The hearing procedures shall provide the user with notice and an opportunity to be heard, and may include the following:

1. Appearance by the user to show cause to the District Engineer why a proposed enforcement action should not be taken;
2. The hearing shall be open to the public;

3. A notice of the hearing and order shall be served on the user specifying the time and place for the hearing; the proposed enforcement action and the reasons for such action, the alleged violation and the facts supporting the violation, and a request that the user show cause why the proposed enforcement action should not be taken;
4. The District Engineer shall permit the user to respond to the notice and order, to present evidence and argument on all relevant issues, and to conduct cross-examination of any witnesses necessary for the full disclosure of the facts;
5. The District Engineer may request the attendance and testimony of witnesses and the production of evidence relevant to any matter, and may seek subpoenas from the appropriate court to compel the presence of witnesses;
6. The testimony taken shall be under oath and recorded, with a transcript prepared and provided to any person upon payment of the usual charges for such transcript;
7. The notice of the hearing and the order to show cause shall be served upon the user personally or by registered or certified mail (return receipt requested) at least 15 calendar days prior to the hearing; except that the District Engineer may set an earlier date for the hearing at the user's request. Such notice may be served on any authorized representative of the user;
8. Upon review of the evidence, the District Engineer shall make written findings of fact and decision in the nature of an order, which shall be served upon user; and
9. The District may immediately impose an enforcement action after the hearing whether or not a duly notified user appears as noticed.

14.12.525 Permit revocation.

The District Engineer may revoke any permit if the user violates any provision of this chapter or the permit. Those violations include but are not limited to: falsification of information; denial of the right of entry when conditioned in the permit; user's failure to re-apply for a permit or request a required permit modification; user's failure to pay required permit fees or charges; or user's discharge in violation of this chapter. Validity of a permit shall be conditioned upon industrial user's compliance with this chapter. The District Engineer may revoke the permit upon a minimum notice of 15 calendar days when the District Engineer finds that user violated any provision of this chapter or permit. Within the 15 days prior to the intended permit revocation, the District Engineer shall make a hearing available to the industrial user. All costs for permit revocation and reissuance will be paid by the user.

14.12.530 Termination of service.

The District Engineer may immediately order a user to cease discharge of wastewater to the POTW, and may suspend wastewater disposal and treatment service to stop an actual or threatened discharge that presents or may present an imminent danger to the health or welfare of persons or to the environment, causes interference or pass-through, causes the District to violate the NPDES permit, or if the user has failed to obtain a valid permit. If the user fails to voluntarily comply with the suspension order, the District Engineer may take such steps as deemed necessary, including severing a sewer connection, to prevent damage to the POTW, or danger to any person or the environment. All costs for terminating or reestablishing sewer service shall be paid by the user.

14.12.535 Notice publication.

The names of all significant industrial users which are found to be in significant noncompliance with this chapter shall be published at least annually in a newspaper(s) of general circulation that provides meaningful public notice within the District, in accordance with 40 CFR 403.8(f)(2)(vii)(A-H), and any subsequent revisions of that section. The names of all industrial users shall also be published whose violation of a pretreatment standard or requirement or whose discharge that the District determines has:

- A. Chronic violations of wastewater discharge limits, defined here as those in which 66 percent or more of all of the measurements taken during a six-month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant parameter;
- B. Technical Review Criteria (TRC) violations, defined here as those in which 33 percent or more of all of the measurements for each pollutant parameter taken during a six-month period equal or exceed the product of the daily maximum limit or the average limit multiplied by the applicable TRC (TRC=1.4 for COD, BOD, TSS, fats, oil, and grease, and 1.2 for all other pollutants except pH);
- C. Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the control authority determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public);
- D. Any discharge of a pollutant that has caused imminent endangerment to human health, welfare or to the environment or has resulted in the POTW's exercise of its emergency authority under 40 CFR 403.8(f)(1)(vi)(B) to halt or prevent such a discharge;
- E. Failure to meet, within 90 days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance;
- F. Failure to provide, within 30 days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;
- G. Failure to accurately report noncompliance;
- H. Any other violation or group of violations which the District Engineer determines will adversely affect the operation or implementation of the local pretreatment program.

14.12.540 Civil penalties.

- A. Any user violating any provision of this chapter, user's permit, or administrative order shall be liable to the District for a civil penalty not less than \$1,000.00 per violation per day for each violation for as long as the violation continues, plus actual damages incurred by the District. In addition to these penalties and damages, the District Engineer may order user to pay the District's costs, including reasonable attorney's fees, court costs, and other expenses associated with the enforcement activities, including, but not limited to, sampling, monitoring, laboratory costs and inspection expenses.
- B. Upon petition by the District Engineer, through the District Attorney, an award of such penalties, damages and costs shall be ordered against such user by an appropriate court in the County of Riverside. In determining the amount of such penalties, damages and costs, the court shall take into account all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the magnitude and duration, any economic benefit gained through a user's violation, corrective actions by a user, the compliance history of the user, good faith efforts to restore compliance, threat to human health, to the environment, to the District, and to the POTW, and any other factor as justice requires. The purpose of any civil penalty is to encourage compliance and remedy unquantified damage to the POTW and environment, and not to impose criminal sanctions or retribution.
- C. If any user discharges wastewater to the POTW contrary to the provisions of this chapter, federal or state pretreatment requirements, or any order of the District or permit issued under this chapter, the District Engineer through the District Attorney may commence an action for appropriate legal and/or equitable relief in the appropriate court in the County of Riverside.

14.12.545 Criminal penalties.

- A. Any user which willfully or knowingly violates any provision of this chapter, or any orders or permits issued hereunder shall, upon conviction, be guilty of a misdemeanor, punishable by a fine not to exceed \$1,000.00 per day per violation, or imprisonment for not more than six months, or both, per violation per day. This penalty shall be consistent with the Federal Clean Water Act, 33 U.S.C. 1251, et seq., and shall apply to the exclusion of any other more lenient chapter provision. A user shall be guilty of a separate violation for each day a violation of any provision of this chapter or industrial user permit is committed or continued by such user.
- B. Any user that willfully or knowingly makes any false statements, representations, or certifications in any application, record, report, plan or other document filed or required to be maintained pursuant to this chapter or the user's industrial user permit, or which falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this chapter shall, upon conviction, be guilty of a misdemeanor punishable by a fine of at least \$1,000.00 per violation per day or imprisonment for not more than six months, or both, per violation per day. This penalty shall be consistent with the Federal Clean Water Act, 33 U.S.C. 1251, et seq., and shall apply to the exclusion of any other more lenient chapter provision.
- C. Any user that introduces into a sewer system or into a publicly owned treatment works any pollutant or hazardous substances that the person knew or reasonably should have known could cause personal injury or property damage.
- D. Any other violation of this Chapter may be prosecuted as a misdemeanor in accordance with Section 1.01.110 of this Code.

14.12.550 Probationary periods.

A user issued a written warning may be placed on probation for up to six months. A user issued repeated written warnings for a similar violation or a notice of violation may be placed on probation for up to 12 months. If the user commits the same violation within the probationary period, extension of the probationary period or more severe enforcement may follow. Violations committed after the probationary period, will be treated as a new violation for purposes of enforcement. Repeated same violations can only be granted two probationary periods. If the same violation occurs after two consecutive probationary periods accompanying either a written warning or a notice of violation, more severe enforcement may follow.

14.12.555 Remedies nonexclusive.

The remedies in this chapter are non-exclusive. The District Engineer may take any, all, or any combination of these remedies against a noncompliant user. Enforcement of violations of this Chapter will generally be in accordance with the District's Enforcement Response Plan. The District Engineer, however, may take alternative actions against a user as circumstances warrant. The District Engineer may also take multiple enforcement actions against a user.

14.12.560 Judicial collection.

After an order making any monetary amount owing under this chapter has become final, or after a court in an action has entered a final judgment in favor of the District, the District Engineer through the District Attorney may initiate a civil action, if not earlier filed as a part of the judicial review, in the appropriate court to recover such amount plus prevailing interest from the date of the final order or the date of the final judgment, as the case may be. In such an action, the validity, amount, and appropriateness of such penalty shall not be subject to review. Any user who fails to pay on a timely basis the amount of an assessment of a civil penalty as described in this section shall be required to pay to the District, in addition to such amount and interest, the District's attorneys' fees and costs, including filing fees, process service fees for collection proceedings and a quarterly nonpayment penalty for

each quarter during which such failure to pay persists. Such nonpayment penalty shall be in an amount equal to 20 percent of the aggregate amount of such person's penalties and nonpayment penalties that are unpaid as of the beginning of such quarter.

14.12.565 Damage to facilities or interruption of normal operations.

When a user's discharge causes an obstruction, damage, interference, pass-through or otherwise adversely impacts the District sewer system or the POTW, the District Engineer may assess a charge, including administrative costs attributable thereto, against the user for costs incurred by the District for extra monitoring, investigation, quantifiable damages and work required to clean, repair and resume normal operations. A 90 percent administrative fee shall be added to the direct charges. Unless appealed as provided herein, such charge shall be payable by the user within 30 calendar days of being notified of such charge and is subject to collection by civil suit or other procedures provided in this chapter.

14.12.570 Appeals.

- A. Any user affected by and dissatisfied with any decision, order, industrial user permit, or enforcement action under this chapter may file an appeal with the District Engineer requesting reconsideration. The appeal must be in writing, detail the facts supporting the user's disagreement, and submitted within ten calendar days of receiving notice of the matter to be appealed. The District Engineer shall decide the matter and issue a written decision within ten calendar days of receiving the appeal. Submitting an appeal does not automatically suspend any obligations or enforcement.
- B. If the appellant is not satisfied with the District Engineer's decision, then the appellant may, within ten calendar days after receiving the District Engineer's decision, file a written appeal with the District, lodging such appeal with the District Manager along with an appeals fee of \$100.00. The District Board of District Engineers will hear the appeal within 30 calendar days of filing or the next regularly scheduled meeting. The District Board of District Engineers will normally make a ruling on the appeal within 15 days of the hearing.
- C. That the degree of protection shall be commensurate with the degree of hazard the District's's final ruling shall be deemed the District's final decision on the matter. No person may obtain judicial review of any decision, order, or enforcement action by the District under this chapter without first having exhausted his or her administrative remedies set forth in this section.

14.12.575 Alternative enforcement procedures.

The District Engineer may also seek penalties, payments, and liens on a user's property as provided in Government Code Sections 54739 et seq.

14.12.580 Invalidity.

If any provision of this chapter or the application thereof to any user or circumstance is held invalid, the remainder of this chapter and the application of such provision to other users or circumstances shall not be affected thereby.

14.12.585 Interpretation—Intent.

All the provisions of this chapter are to be reasonably interpreted. The intent herein is to recognize that there are varying degrees of hazard to the District sewer system, POTW, the POTW's sludge, storm drain, personnel, environment and the public, and to apply the principle that the degree of protection shall be commensurate with the degree of hazard.

APPENDIX J

Sanitary Sewer System Design & Construction Manual November, 2022

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Edgemont

Community Services District

DESIGN AND CONSTRUCTION STANDARDS MANUAL

For

SEWERAGE FACILITIES

NOVEMBER, 2022

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A S S O C I A T E S

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Edgemont

Community Services District

DESIGN AND CONSTRUCTION STANDARDS MANUAL

The Edgemont Community Services District Design and Construction Standards Manual was prepared by:


Prepared by:



Sinnaro Yos, P.E. C68607

11/04/2022
Date

Approved by:



Sam I. Gershon, R.C.E. 14489

11/04/2022
Date

Albert A. WEBB Associates
3788 McCray Street
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FOREWORD

To: All Parties Involved with the Planning, Design and/or Construction of Sewer Pipelines within the Boundaries of the Edgemont Community Services District.

From: Jessica Pfalmer, General Manager

Subject: Edgemont Community Services District's Design and Construction Standards Manual for Sewerage Facilities

The purpose of these standard specifications is twofold. The first purpose is to ensure that sewerage facilities constructed for the Edgemont Community Services District (District) are complete, correctly operating, and in compliance with government codes and good wastewater industry practice. The protection of public health and safety is of utmost importance. The second purpose of this Standards Manual is to provide interested parties with the District's procedures, policies, and requirements to aid in the cost effective planning, design and construction of wastewater facilities within the District.

Compliance with these requirements does not waive requirements of other governing bodies or agencies. Additionally, since these are "standard" procedures and requirements, they cannot apply to all conditions. The District will review all sewerage plans and may revise or modify any details, concepts, or plans submitted.

The design and construction of District sewerage plans shall conform to these standard specifications including standard drawings incorporated herein whether the work is to be constructed by developers or others for the District. When the District elects to contract work, these standard specifications shall become a part of the contract by reference.

Since these standards and specifications are to be used by the District when they directly contract for work, the District has incorporated certain payment procedures that only apply to District contracted work. Any statement regarding how a particular item is to be paid for within these specifications and standard drawings apply specifically to District contracted work. Work contracted by developers may or may not be applicable to the aforementioned payment statements dependent upon the agreement between the developer and his private contractor.

Please contact the District if you have any questions or comments.

EDGEMONT COMMUNITY SERVICES DISTRICT


Jessica Pfalmer
General Manager

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EDGEMONT COMMUNITY SERVICES DISTRICT STANDARDS MANUAL

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SECTION I

INTRODUCTION

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I. INTRODUCTION

A. GENERAL

The Edgemont Community Services District was formed in March, 1957, as a general purpose community services district of the State of California. The boundaries of the District are shown in Appendix A of Section VII.

If sewer service is desired within the District, service can normally be provided if the following conditions are met:

1. Developer must design (or contract with the District to design), pay for the construction of, have constructed and dedicate to the District the sewer facilities in accordance with the requirements of the Edgemont Community Services District. Sewer improvements must be provided in: (1) all interior development streets; (2) all streets on the boundary of the development (in order to provide for full frontage improvements); (3) any off-site improvements required to provide sewer service to the site.
2. Developer must obtain and dedicate sewer right-of-way to the District. Facilities must be in either dedicated road right-of-way or in specially deeded easements to Edgemont Community Services District having a minimum width of 20-feet for single pipelines. Private roads must meet public street width requirements for easement dedication purposes. No structures, buildings, or other obstructions can be constructed on these easements. Fencing across District easements shall be reviewed prior to any potential approval by the District. The District's standard GRANT OF PERMANENT EASEMENT form shall be used (Appendix B of Section VII); and shall be formally accepted by District pursuant to the CERTIFICATION OF ACCEPTANCE OF GRANT OF PERMANENT EASEMENT (Appendix B of Section VII).
3. Sewerage facilities may include sewer pipelines, fittings and appurtenances, laterals, manholes and lift stations as are necessary to provide sewerage service to the development.
4. The Developer must make the necessary financial arrangements with the District to accomplish the above stated conditions.

B. DEFINITIONS

Wherever words defined herein, or pronouns used in their stead, occur in any of the contract documents, they shall have the meanings here given:

1. "District" – The word "District" shall mean the Edgemont Community Services District, Riverside County, California. The term "Agent", when used with reference to the District, shall include the District's officers, agents, consultants and employees.

2. "Board of Directors" – The "Board of Directors" is the District's governing body, publicly elected by citizens residing in the District's service area. The Board of Directors, consisting of five members, oversee the management of the District and meets the fourth and/or second Thursday of the month. In order to be eligible to serve, Board members must reside within the District boundaries and be registered to vote.
3. "General Manager" – The term "General Manager" shall mean the person designated by the Board of Directors of the Edgemont Community Services District, Riverside County, California, to have charge, supervision, and administration of the Edgemont Community Services District, Riverside County, California and shall be hereinafter call the "Manager".

The Manager may, at the Manager's option, designate a person or persons to represent them for inspecting, and reporting on the work as it progresses.

4. "District Engineer" – "District Engineer" shall mean the California Registered Professional Engineer designated by the District to provide general engineering supervision. The term "Engineer" shall mean the independently contracting professional consultant retained by the District on an ongoing basis to perform engineering services on behalf of the District and to advise the District's Board of Directors and staff on engineering matters.
5. "Contractor" – The word "Contractor" shall mean the successful bidder who is entering into a contract with the Edgemont Community Services District, Riverside County, California, or the developer, for the furnishing of the material, equipment, and/or services specified in a contract with Edgemont Community Services District, and the legal representatives of said party, or the agent appointed for said party in the execution of the contract. Said party is referred to throughout the contract documents as if of the singular number and the masculine gender. The Contractor shall hold a valid Contractor's license in accordance with the provisions of Division 3, Chapter 9 of the Business and Professions Code of the State of California, and all amendments thereto.
6. "Developer's Engineer" – "Developer's Engineer" shall mean the Registered Professional Engineer designated by Developer to design the proposed sewer system facilities in accordance with District rules, regulations and standards.
7. "Owner Property" – "Owner Property" shall mean any work site upon which the Contractor shall be required to perform under the contract including private property, property owned in-fee by the District or upon which it holds an appropriate lease, right of way, license, or encroachment permit.
8. "Developer" – The term "Developer" shall mean the person, persons, or firm having legal authority to enter into agreements with the District as related to work performed within public rights of way and Public Utility

Easements and having legal responsibility of the Engineer and Contractor retained or contracted by Developer to perform the work.

9. "Owner" – The term "Owner" shall mean the administrator of the Contract, which may be the District or Developer of the overlying project or land development.
10. "County" – "County" whenever used shall mean Riverside County, California.
11. "City" – "City" whenever used shall mean Moreno Valley, California or Riverside, California depending on the location of the project. For projects located in both cities, provide the full name of each City.
12. "Contract" – The term "Contract" shall mean the written agreement covering performance of the work including, but not limited to, the formal Contract, bonds and insurance, notice inviting bids, bidder's plan for construction, statement of experience, financial condition and references, bidding sheet, certified data sheet, special requirements, as provided in the Edgemont Community Services District's Standard Manual - (Latest Edition) and Drawings.
13. "Work" – The term "work" means that which is proposed to be constructed or done under the Contract or permit, including furnishing of all labor and materials.
14. "Availability Letter" – The "Availability Letter" is the letter the District provides to the Developer requesting sewerage service for their project.
15. "Standards Manual" – The "Standards Manual" is the District's guidelines for the planning, design, and construction of District's sewerage facilities and lighting annexation.
16. "Public Right of Way" – The District's facilities which are in the "Public Right of Way" are constructed and maintained in lands which are owned and operated by public agencies such as the cities of Moreno Valley and Riverside or the Country of Riverside. These lands include but not limited to paved streets and parkway areas.
17. "Easement" – When the construction of the District's facilities cannot be fully located on Public Right of Way and the only alternative is to construct said facilities on private property, an "Easement" must be obtained granting the District construction and maintenance rights on the property.

C. GENERAL PROCEDURE

As an option, electronic submittals are acceptable for the entirety of the submittal package. All documents must be clear, legible, properly scaled and documents not legible will be returned without review.

Procedures for the development of sewer systems are shown below. The following includes the applicable minimum requirements:

1. Developer submits two (2) copies of a project site map showing the boundaries of the area requiring sewer service and a request for a sewer "Availability Letter" from District. The appropriate fees outlined in the "Availability Letter" shall be paid to the District.
2. Board of Directors approves or denies said service.
3. Developer has sewer plans prepared by California licensed civil engineer to District specifications in accordance with applicable provisions specified in the District's Standards Manual.
4. Developer provides for dedicated right-of-way.
5. Developer's Engineer submits engineered drawings along with plan check fees to District as outlined in Section II of this manual for first (1st) plan check. Drawings must be submitted within one (1) year of the issuance of the "Availability Letter"; otherwise, an updated "Availability Letter" will be required and drawings will not be plan checked until an updated "Availability Letter" is issued.
6. Plan checking process: District reviews and approves plans. The District's approval of the plans prepared by the Developer's Engineer denotes agreement with the Plans as prepared and is not an acceptance of responsibility as to accuracy. The Developer's Engineer shall be responsible for any errors, coordination with other facilities, and interpretation of Plans. The intent is that the completed facility shall be in general conformance with the approved Plan and in accordance with the requirements of these Specifications. All revisions and changes in the plans must be approved by the Engineer. Section I, Paragraph E entitled "Revising Approved Private Development Sewerage Improvement Plans" provides the procedure that shall be followed for changes on District approved Plans.
7. Developer's Engineer submits original mylars with all approval signatures to District.
8. Drawings approved by the District will be void 24-months from the date of District's signature unless construction of the proposed sewerage improvements commences before the 24-month period. If construction does not start within the 24-month period, drawings must be re-submitted for plan checking (see above Requirement No. 6). Also, drawings will need to be re-submitted for first (1st) plan check, for drawings submitted over one (1) year from the previous plan check submittal and anytime if the tract is split into separate tracts (example: -1, -2).
9. Developer posts deposits and necessary fees with District.

10. Developer enters sewer system construction agreement with District. (Section VII, Appendix C).
11. Developer contracts with an appropriately licensed Contractor who has a Contractor's Data Sheet (Section VII, Appendix D) on file with the District.
12. Developer/contractor provides Insurance forms to District (Section VII, Appendix E).
13. Developer/contractor coordinates pre-construction conference with District (Section VII, Appendix F).
14. District issues "Notice to Proceed" (Section VII, Appendix F).
15. District inspects construction of facilities.
16. Developer's Engineer submits complete set of "As-Built" mylar drawings immediately after construction.
17. District accepts improvement facilities and issues "Notice of Final Acceptance."
18. Developer dedicates improvement facilities to District.

In the event that the District makes revisions to any of its rules, regulations or standards as described and set forth herein, all such revisions shall be incorporated and be in effect as if they were in force from the beginning of the procedure and shall therefore be adhered to and/or constructed accordingly, unless otherwise approved by the District.

D. REQUIREMENTS OF OTHER PUBLIC AGENCIES

The requirements for the design of sewerage plans and systems specified herein do not waive, nor are they intended to contradict, any requirements required by any other legal governing public agencies.

Engineers designing said plans and systems for inclusion into the District shall be knowledgeable of and shall comply with the following regulations:

1. The California Waterworks Standards, of the California Administrative Code, Title 22.
2. City of Moreno Valley
3. City of Riverside
4. Riverside County Environmental Health Department Requirements.

E. REVISING APPROVED PRIVATE DEVELOPMENT SEWERAGE IMPROVEMENT PLANS

If a revision has to be made to an approved mylar (for private development project) which has been signed by the District, the proposed revisions should be made in "red lines" on a blueprint or PDF, then it should be submitted to the District for review and approval. Once the red line is approved, the Developer's Engineer may check out the original mylar by bringing in his signed reproducible plan or electronic copy (i.e., pdf) of the original mylar prior to release of the original mylar to the Engineer so the District can hold them while the originals are checked out to him to make the revision. Optionally, the District will make another set of reproducibles, at the Developer's Engineers expense, to hold. Once the Developer's Engineer revises the originals per the approved red line plans, he should resubmit both the originals and the red lines to the District for final review and signature. Once the originals are signed for the revision, then the procedure would be the same as any newly signed mylar.

Revisions to signed plans must be made by the original Developer's Engineer.

Should revisions be requested by another engineer who is not the original Developer's Engineer, the revising engineer has two options to follow:

1. The revising engineer should contact the original Developer's Engineer and inform him about the proposed revision and get his approval in writing to make the revisions and to check out the originals; then follow the above procedures. The revising engineer is required to have a signature block signed and sealed by him for that particular revision on each revised sheet.
2. The revising engineer may process new plans showing all the existing in dashed lines and label as existing, and showing the revisions in solid lines. He must sign and seal these plans and bring them in for District review and signature.

Following the second option does not require the revising engineer to contact and have approval of the Developer's Engineer.

Checking out original plans should be done only by the Developer's Engineer; otherwise, a letter from the Developer's Engineer authorizing changes to the plans is required.

It should be noted that if plan revisions are required prior to or concurrent with the construction of the project and if these changes will require an increase in the bond amount, the revised plans will be held until a new estimate has been prepared and a new bond has been placed with the District.

SECTION II

DEVELOPMENT REQUIREMENTS

SECTION II

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II. DEVELOPMENT REQUIREMENTS

A. DEVELOPMENT PROGRAM

The program mission is to meet the sewerage and street lighting needs of development occurring within the community through a comprehensive approach to planning, design, and construction of required facilities.

The Development Requirements section of the Design and Construction Standards Manual presents a detailed description of the procedures and policies to be followed during any Developer-funded project within the District.

Procedures for development of the sewerage system are similar for Tract Map developments, Parcel Map developments, and Plot Plan developments. Most procedures and policy requirements herein have been prepared for Tract Map developments, but certain portions apply to all sewerage system development work within the District's service area.

B. ABOUT THE DEVELOPMENT REQUIREMENTS

The Development Requirements section of the Design and Construction Standards Manual is a guide for persons and/or entities associated with the establishment of new developments within the District and are applicable to developers, design engineers, construction contractors, and other parties conducting development activities within the District. The requirements will commonly refer to this group of stakeholders as "Developer".

The Development Requirements contains descriptive preambles that describe the major phases of a project. These introductory sections refer to procedures, forms, and ancillary information in appendices that the Developer will need to successfully complete a project. This section is organized into the following individual sections that mirror key phasing in the development process:

1. Pre-Design
2. Design
3. Construction
4. Close-out

This phased approach provides Developers with a sequential and logical organization of information and requirements that pertain to each phase. Through a common understanding of these requirements, the Developer and the District can work together in identifying and implementing the appropriate sewer facilities needed to support the proposed development. Another objective of these requirements is to clearly identify the responsibilities and financial obligations of the Developer in this effort.

To initiate the development application process, please include the Request for Sewer Availability as part of your first submittal to the District.

C. DISTRICT FEES AND DEPOSIT

The District applies fees to offset the public-service cost of a new development. An initial upfront deposit of funds is applied to various phases of a project. The deposit of “Advance Payment Against Actual Cost”, funds various functions such as plan-check, inspection, and other services required to implement the project. The following section provides a description of sewer facility charges and advance payment against actual cost.

1. Sewer Facilities Charges

The sewer facility charges as shown in “Current Charges and Deposits” (Appendix G of Section VII) are used by the District to pay for related infrastructure to provide sewer service to the proposed development. These charges are based upon the development’s number of “Equivalent Dwelling Units (EDUs).” An EDU is a measurement equivalent to the wastewater effluent generation of one home. The sewer facility charge, sometimes referred to as a “sewer connection charge”, is based upon the total number of EDUs calculated for the development. These charges are used to improve the District’s sewer system and to provide additional wastewater treatment capacity for the project.

2. Advance Payment Against Actual Cost (Deposit)

The “Advance Payment Against Actual Cost” is essentially a deposit that is estimated based on project requirements. It is important to note that the deposit may or may not be adequate to complete all project tasking. For example, a project might require more plan-check review because the initial plans and subsequent drafts lack details or did not address prior comments. Some examples of project tasking requiring **additional deposits include:**

- Sewer Availability Determination (availability letter)
- Grease Interceptor Waiver Request
- Plan-check
- Industrial Waste System Review
- Inspection

Items submitted to the District for review should be complete and of high quality to encourage cost-efficiency and reduce the need to collect additional funds beyond the initial deposit (as needed to complete tasking). **Unused portions of the deposit will be refunded back to the Developer. Should it be determined that the initial deposit is not adequate to complete the task, additional funds will be requested and the subject task will cease until additional funds are received.**

D. PRE-DESIGN PHASE

The Pre-design Phase of a Developer-funded project starts when the Developer approaches the District with a request for, and renders a deposit towards the actual cost of a Sewer Availability Letter; and ends prior to submitting the first plan-check for District review.

1. About the District's Design and Construction Standards Manual

Products, manufacturing techniques, construction methodologies, and District operational and design parameters are constantly evolving and improving. As such, the District's Design and Construction Standards Manual will be updated and revised periodically. It shall be the responsibility of the user of this manual to always apply the latest edition of the District's Standards Manual as can be found on the District's website (www.edgemontcsd.specialdistrict.org). **Failure to utilize the latest information contained on the website shall not be grounds for any claims against the District regarding non-compliance to current standards.**

2. Sewer Availability Letter Requests

The Developer makes the request for a Sewer Availability Letter using the "Sample Template – Availability Letter Request" (Appendix H of Section VII) and submits it to the District with the items identified on the "Requirements and Procedures for Requests of Availability Letter" (Appendix H of Section VII) along with the appropriate Advance Payment of Deposit. The District's Engineer will write the Sewer Availability Letter and submit it to the District. The District will schedule the Availability Request to be presented to the District's Board of Directors for consideration of approval at the next available meeting. Because of the State of California's Brown Act, which governs advance notification to the public of Board meeting agendas, the request may not necessarily be scheduled for the next calendared Board meeting. After approval from the Board of Directors, the District will inform the Developer of the approval.

E. DESIGN PHASE

The Design Phase begins when the Developer's Engineer submits the first plan-check with the appropriate deposit as determined by the District and ends when the District schedules the Pre-Construction meeting for the project. During this phase, the Developer's Engineer will submit design plans for the sewer facilities for the District's review and approval. The Developer will, if required by the Planning agency, initiate proceedings for street light annexation. The District may require the Developer to execute a Construction Agreement.

Only non-residential (e.g., commercial and industrial) projects will be required to undergo the District's Industrial Waste Review Process, which runs parallel to the plan-check process in the Design Phase, as detailed in this section.

1. Plan-Check Process

After the appropriate Plan-check Deposit is paid and the Developer's Engineer submits the proposed drawings for the first plan-check along with all of the items detailed on the "Plan Check Submittal Checklist" (Appendix N of Section VII), the District will follow the procedures outlined in Section III, Paragraph B entitled "Plan Check Procedural Guidelines".

When the District's Engineer is satisfied with the current plan-check submittal, the Developer's Engineer will be authorized to produce and submit Mylar drawings to the District for final review and signature by the District's General Manager.

Prior to mylars being approved and signed, the District will require that:

- Development Fees are calculated as of the date that design mylars are complete and ready for execution by the District.
- All appropriate fees and deposits be paid.
- All appropriate easements be executed using the "Grant of Permanent Easement" template (Appendix B of Section VII), and if required by the District, the execution of the Construction Agreement between the Developer and the District.

During the plan-check process it is important to note that the efficiency of the plan-check process and its timeliness is directly related to the quality of the design package submitted by the Developer's Engineer.

The deposits and fees owed by the Developer are required at the time the Mylars are signed.

The deposit for the District's inspection services, which is required for the Construction Phase of the Project, will be provided by the Developer after the Mylars are signed. The Inspection Deposit is calculated as a minimum deposit.

2. About the District's Construction Agreement

Some Developer-funded projects may require that the Developer enter into a construction agreement with the District (Appendix C of Section VII). As outlined in the sample agreement, the Developer will be required to provide the appropriate bonds securing the agreement. This determination will be made by the District on a case-by-case basis, at the discretion of the Board.

3. Proceedings for Street Lighting Annexation

The Developer's project may be required by the Planning Agency to annex into a Street Lighting District as part of a condition for approval. The District forms Lighting Districts to establish an annual levy of assessments to cover the cost of operating and maintaining street lights. The assessment amount is based on the cost of electricity that the District purchases from Southern California Edison Company (SCE) and the District's administrative costs. SCE owns the street lights. The District acts as a liaison between the property owners and SCE to collect and remit funds to pay SCE's costs of providing street lights. SCE cannot collect payment directly from the homeowners for street lights. The District's Board of Directors has adopted a policy regarding street lighting annexation (Appendix I of Section VII), which outlines the procedures and requirements for initiating annexation. To initiate the proceedings for street light annexation, the Developer must

follow the procedures detailed in the “Requirements of Developer for Street Lighting Annexation” (Appendix I of Section VII), along with the required fees.

4. Industrial Waste Review Process for Industrial, Commercial, and Non-Residential Projects

All Commercial, Industrial, and Non-Residential Developer Projects will be required by District ordinance, Federal and State regulation to undergo the District’s Industrial Waste Review process. This process runs in parallel to the plan-check process. The Developer will submit to the District a completed “Wastewater Discharge Survey” form (Appendix J of Section VII), along with the items specified on the form to begin the process. The District’s Industrial Wastewater section will review the information on the form to determine if the project will require on-site pre-treatment and to determine the sewer facility fees for the project. After determining the requirement for on-site pre-treatment, the Developer will submit plans for the on-site pre-treatment facilities to be reviewed and approved by the District’s Industrial Waste Section. Once these plans have been approved, the Industrial Waste Inspector will oversee and inspect the installation of the on-site pre-treatment facilities to their completion and the District’s approval. At the Final Close-out Phase of the project, and prior to the Final Inspection, all on-site pre-treatment facilities must be completed and approved by the District’s Industrial Waste Section.

a. Assessment of Industrial Waste (Sewage) Fees for Non-Residential

The facility fees and monthly charges are based on the estimated volume of wastewater and the quality of the wastewater discharged using the information supplied to the District by the Developer on the Wastewater Discharge Survey form.

b. Re-assessment of Industrial Waste (Sewage) Fees for Non-Residential

Under certain situations (as described in the following), the District will re-assess the annual sewer charge.

The District will also re-assess the industrial waste requirements when there is a change in ownership and/or property use. Similar to a new development, the Developer or new business will submit to the District a completed “Wastewater Discharge Survey” form (Appendix J of Section VII) along with the items specified on the form to begin the process. As described in the section above (re-assessment subsequent full occupancy), the annual sewer charge will be re-assessed and, if required, an adjustment in payment will be made.

F. CONSTRUCTION PHASE

The Construction Phase begins with the scheduling and completion of the Pre-Construction meeting and ends when: 1) all facilities have been installed per the approved plans, 2) all dwellings have been occupied, and 3) the final street cap paving is complete (for Tract Projects). For Individual and Parcel Map Projects, the end of the Construction Phase occurs when all facilities have been installed per the approved plan and final cap paving has been completed. During this phase, the Developer and key individuals such as the Project Superintendent and the Developer's Contractor along with key District personnel will attend a pre-construction meeting to be conducted by the District (see Pre-Construction Meeting procedures contained in this section). After the pre-construction meeting is complete and the District issues the Notice to Proceed, the Developer's Contractor will then install the sewer facilities per the approved plan.

Also, during the construction of the project, the District will inspect all utilities where they cross District facilities during dry-utility installation and prior to back-fill of the excavations (for subject work) to ensure that the District's facilities are undisturbed, meet specification, and no damage has occurred. The District's Inspector will be monitoring for quality assurance, all locations along the excavation that cross the District's facilities such as, air evacuation valves, sewer laterals, along with any other facilities that will be accepted by the District. The Developer shall notify the inspector five working days in advance of any work on the dry utilities in order that inspection may be provided with minimal inconvenience to the District or delay to the Contractor. Any work done around the District's facilities in the absence of the District's Inspector without permission shall be subject to rejection.

As part of the construction procedures for all sewer facilities VCP or PVC pipe is used, a video inspection of the interior of the pipeline is used to verify that the material meets the District's standards and that the installation of the sewer facilities meet the District's specifications (see procedures for Video Inspections contained in this section).

1. Pre-Construction Meeting

Pre-construction meetings are conducted for all Tracts, Parcel Map and Plot Plan projects after the District has received, signed, and approved plans prior to any work on District facilities. The District's Engineer or his designee (using the District's Pre-Construction Meeting Agenda) conducts the pre-construction meeting. The Development Supervisor, the District's Inspector, the Developer's Contractor, and the Developer's Project Superintendent must be present at the pre-construction meeting. If any of these persons cannot attend, the meeting shall be rescheduled. It is desirable to have a City representative present at the pre-construction meeting, but it is not a requirement.

2. Requirements for Pre-construction Meeting

The following requirements must be met prior scheduling a pre-construction meeting:

- a. The District's Engineer has insured that all fees have been paid, all agreements have been executed, all easements have been

recorded (and accepted by the District), and the items on the Pre-Construction Conference and Notice to Proceed checklist (Appendix F of Section VII) have been completed.

- b. A District Inspector has been assigned to the project.
- c. All necessary material submittals for the project have been reviewed and approved by the District's Engineer or his designee a minimum of five working days prior to scheduling the pre-construction meeting.
- d. The Developer has presented to the District:
 - (1) Complete cut-sheets for the first three hundred (300) feet for each crew's start location.
 - (2) Completed "Contractor's Data Sheet" (Appendix D of Section VII)
 - (3) A copy of the Contractor's safety program.
 - (4) A list of the Certified Competent Persons who will be on the project.
 - (5) A copy, from the contractor, of the certifications for each person and a Certified Competent Person for confined space entry on the job.
- e. The District's Engineer who has reviewed the information supplied by the Developer and contractor will determine if the pre-construction meeting can proceed.
- f. The District's Engineer coordinates with the attendees to set a time and date for the pre-construction meeting to be conducted.

The pre-construction meeting is conducted in accordance with the requirements found in Appendix F of Section VII, which lists pertinent discussion items. At the meeting, a copy of the pre-construction meeting agenda, along with copies of the pre-occupancy and final inspection checklist are provided to those in attendance.

After the pre-construction meeting is complete, the District, along with the District's Inspector, sets a start-work date within two (2) working days; and the Development Supervisor will sign and issue a Notice to Proceed to the Developer.

3. Video Inspection of Sewer Pipe Lines

Video inspections of sewer lines on development projects are done to ensure that the newly installed sewer lines meet the District's standards and specifications for material and installation. The video inspection is performed after the sewer lines and laterals have been installed, the streets are at final grade, and prior to the final air-test and base paving. The Contractor, using the Contractor's video inspection equipment, with the

District's Representative present, conducts the video inspection per the requirements outlined in "Sewer Pipeline Construction Specifications" (Section V). A minimum of five business days is required from the time of notification to set the video inspection date and time. A subsequent video inspection will be required if debris has been introduced into the sewer line or after required repairs have been completed. Videos are to be submitted to the District on one CD in DVD format with the completed and approved sewer system improvements for the project and an 11"x17" exhibit with all sewer manholes labeled according to the approved plans and video files will be named according to manhole numbers i.e., Manhole 10 to Manhole 11 Sewer Video dated MM-DD-20YY. The Developer is responsible for contracting directly with a qualified video inspection company and shall submit said qualifications to the District for review and approval prior to initiating the subject work. Refer to the Section V, Basic Specifications, Section C entitled "Sewer Pipeline Construction Specifications" for said qualifications. If the District did not approve the video inspection company the District has the right to reject all work performed by the unapproved video inspection company.

The District Inspector will verify that:

- a. Sewer video company performing the service is approved by the District prior to commencement. If the company is not approved by the District, then the District Inspector will not allow the company to proceed.
- b. Sewer video equipment will be checked by the District Inspector in order to approve the equipment prior to commencement. If the District Inspector deems the video equipment inadequate, then the District Inspector will not allow the company to proceed.
- c. All sewer lines, laterals and manholes have been installed per the approved plans.
- d. All lines have been cleaned to the satisfaction of the District Inspector.
- e. All manholes are accessible to the video truck and at the elevation and grade for base paving.

After the District Inspector has verified all the above items have been completed, the District Inspector will conduct the video inspection with the assistance of the Developer's video company using the video inspection check sheet. If there are no items listed for correction, the District Inspector will sign the video inspection check sheet verifying the designated sections have passed video inspection. However, if sewer line requires repairs then the contractor will be required to provide an additional sewer video after all repairs have been made. The completed and signed check sheets along with the videos and 11"x17" exhibit are given to the District's Engineer for the project file and a copy is given to the District Inspector. If there are any

items listed for correction during the video inspection the District Inspector will make sure the items have been corrected prior to occupancy release.

After the District Inspector verifies that all the items noted for correction on the Video inspection check sheet have been corrected, a follow up video inspection is requested, using the steps outlined above.

4. Use of Sewer Plugs and Bulkheads

During the construction and phasing of a project it will be necessary to use one or more sewer plugs or bulkheads to protect the District's existing sewer system from a section currently under construction. The proposed placement and location of these plugs and bulkheads will be submitted to the District for review. Prior to sewer construction commencement the District shall require that all developments install sewer plug (s) downstream of the approved tie-in point or as directed by District Engineer.

Under no circumstances are these plugs or bulkheads to be removed without permission from the District.

5. Manhole Ring Tolerance Verification Procedure

In order to ensure the manhole ring tolerance dimensions as shown on District Standard Drawing No. S-7 are adhered to, the following procedure shall be performed. Prior to installation of the manhole rings, a measurement shall be taken from the manhole inlet flow-line to the top of the manhole cone. Adding this dimension to the inlet flow-line elevation will provide a top of manhole cone elevation. This elevation shall then be subtracted from the manhole rim elevation provided on a grade stake or as shown on the plans. The resulting dimension must be within the 12" – 20" tolerance shown on the reference standards drawing. If not within tolerance, additional work on the manhole shaft must be performed until met.

G. CLOSE-OUT PHASE

The Close-out Phase of a Developer-funded project starts when: 1) all prior phases are complete, 2) all homes are occupied, 3) construction is complete on the project, 4) final street cap paving is complete, and 5) the District has received a written request from the Developer to conduct a final inspection for a Notice of Acceptance. During this phase, the Developer's Superintendent and Contractor will be working with the District's Inspector to correct any items related to the installation of the sewer and prepare the project for final inspection by the District's Engineer. Also, during this phase the District will be working with the Developer's Superintendent and Contractor to ensure that all of the items identified on the "Project Close-Out Checklist" (Appendix K of Section VII) are completed and that all outstanding financial obligations are met. Also included on the Project Close-out Checklist, in addition to the mylar plans, ECSD requires submission of three digital copies of the as-built drawings in the form of digital disks for Tracts, Plot Plans, and Parcel Maps, etc. After Board approval, the District will write a letter to the appropriate Planning Agency notifying them that the District has accepted the project. All activity and costs up to final acceptance will be calculated and a final invoice will be sent to the Developer for

payment. In cases where a credit is due, the invoice will be accompanied with a check for the remainder of those funds that were deposited towards the project.

1. Final Inspection

The Final Inspection is a much more thorough inspection of the sewerage facilities compared to the pre-occupancy inspection. The Final Inspection is normally conducted after homes are occupied or construction has been completed on the project, and final street cap paving is complete. On Individual Project and Plot Plan Projects, this inspection is conducted after all the sewerage facilities have been installed and after final street cap paving is complete. The District's Engineer, the District's Inspector, and a representative of the Developer must be present to conduct the final inspection. The procedure for this inspection is as follows:

- a. The Developer requests final close-out and acceptance for the project by sending a letter request to the District.
- b. The District's Engineer will verify that all items on the Project Close-out checklist pertaining to the tract project (payment of fees, easement documents, as-built drawings and CDs, etc.) have been completed and have been presented to the District.
- c. The District's Inspector ensures that the project is ready for final inspection. After all items are complete to the District's specifications (and the approved plan) the Inspector contacts the District's Engineer and notifies them that the project is ready for a final inspection.
- d. The District's Engineer schedules a time for the final inspection.
- e. Once the required persons have accepted the time and date of the final inspection, the District's Engineer will notify the Developer and the Inspector of the time and date of the inspection. The Tract Superintendent, the District's Inspector, and the District's Engineer (or his designee) must be present to conduct the inspection. If any of these persons cannot attend, the inspection must be rescheduled. A copy of the as-built drawings and the completed and signed copy of the Inspector's punch-list must be present at the final inspection.
- f. The District's Engineer (or his designee) conducts the Final Inspection and identifies any items for correction. The District's Inspector will ensure that any items identified during the final inspection are corrected.
- g. The District's Inspector will verify that the as-built plan on the submitted CD is accurate and incorporates any changes identified on the final walk. The District's Engineer will request that the Developer resubmit the CD if any inaccuracies are identified.

- h. After review and approval by the District's Engineer, the District schedules the project for consideration of acceptance at the next Board meeting. Upon approval by the Board, the District will send the appropriate letter to the City notifying them of the District's acceptance of the facilities.

2. Issuance of Sewer Permit

This District will issue the Sewer Permit for the project upon the completion of all required close-out items, Board acceptance, final inspection, meeting all financial obligations, and final inspections of all other agencies. The Developer shall submit the following information to assist in permit issuance (Section VII, Appendix L).

- a. Provide Project Description (No. of Units, Residential, Commercial, Industrial, Retail, Restaurant, Other)
- b. Project Address, Lot No., Tract/Parcel Map No.
- c. Project's Assessor Parcel Number
- d. Owner's Name
- e. Owner's Mailing Address
- f. Owner's Telephone Number

This information must be provided and incorporated into the sewer permit. Once the sewer permit is completed it must be signed and fully executed by the District and the District's Inspector in order for the project to be fully accepted and released.

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SECTION III

GENERAL DESIGN REQUIREMENTS

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III. GENERAL DESIGN REQUIREMENTS

A. GENERAL

The sewerage systems shall be designed in accordance with the Edgemont Community Services District's Master Plans, Rules and Regulations, Ordinances, Standards, Specifications, and Standard Drawings, under the direction of a civil engineer licensed in the State of California. Abbreviations are used in the following commentary hence we refer the reader to Section G entitled "Abbreviations" for a description of the abbreviations. All District fees and facilities charges associated with the proposed sewer system shall be paid for by the Developer.

B. PLAN CHECK PROCEDURAL GUIDELINES

1. Processing Sequence. Refer to "General Procedure" in Section I.

After an Availability Letter has been issued and prior to Developer's Engineer commencing with development design engineering, it is **recommended** that the Developer's Engineer and the Developer's Representative meets with District Engineering personnel. The following plan check procedures will be followed:

- a. Developer's Engineer submits first plan check package to District; District transmits to District's Engineer.
- b. The District's Engineer conducts plan check, makes redline changes and transmits redline plans back to Developer's Engineer. **Note: If, at second plan check, the amount of redlines is excessive, the District will request the Developer's Engineer to meet to discuss any problems or deficiencies. The Developer will also be made aware of this meeting and is welcome to attend.**
- c. Developer's Engineer makes revisions and transmits back all subsequent plan checks to the District's Engineer along with the redline copy; Item b. above is then repeated etc. **Note: Redline set must accompany revised set, or plans will be returned to the Developer's Engineer.**
- d. Once all revisions are complete to the satisfaction of the District and District's Engineer, a recommendation that Mylars be printed will be submitted. This will be in the form of a written request from the District to the Developer's Engineer.

At the time the District receives the plans from the Developer's Engineer, if the changes have not been made, the plans are returned to the Developer's Engineer with a request to complete the redline changes.

If the Developer's Engineer is adhering to the District's standards and specifications outlined in this manual, and the above is followed, it is expected that the number of plan checks should not exceed four.

Approximate timing for each plan check turn-around, between the District and the District's Engineer, is three weeks for all submittals.

Note: Any changes to the original intent of the plans (such as adding phases to a tract) may be considered as a "new" plan check.

2. Format of Plans. Sewer plans shall be formatted as follows:
 - a. All sheets shall be 24" x 36" (see Appendix M of Section VII for title block format), ink on reproducible mylar. Scale shall be 1" = 40' horizontal and 1" = 4' vertical.
 - b. Index sheet shall include an overall layout of the sewerage system at a scale that clearly delineates the following: streets, lots, manholes, and any existing facilities involved; sewer certifications, general notes, legend, estimate of quantities and a location map.
 - c. Plan and profile sheets shall include all proposed and existing utility lines, both plan view and elevation; existing ground surface and proposed street grade, existing and proposed sewer lines, with the flowline plotted in the profile, and the slope indicated between each vertical point of intersection. Sewer lines and appurtenances shall have stationing with respect to the center line street stationing.
 - d. Self-adhesive or add on labels, certifications, details, etc. are not acceptable on final plans.

3. Requirements for First Plan Check^{*}
 - a. RESIDENTIAL AND COMMERCIAL/INDUSTRIAL DEVELOPMENTS
 1. Executed Project Identification Form (Appendix N of Section VII) signed and stamped by the Registered Engineer of Record
 2. All applicable plan check attachments outlined in the Plan Check Submittal Checklist (Appendix N of Section VII) with the appropriate number of copies.

4. Subsequent Plan Checks

When the initial plan check is complete, the Developer's Engineer will be notified to pick up "red-lined" prints from the District Engineer's office at **3788 McCray**

* Incomplete submittals will not be accepted. If any of the above items are not applicable to the project, please note the reason in the transmittal letter.

Street, Riverside, California 92506. Whenever changes other than District corrections are made, these changes shall also be indicated on the check print in order to expedite the processing of the plans. Additionally, Developer shall resubmit all street plan, storm drain plan, etc., wherever revisions to these drawings occur.

5. Plan Approval

Upon approval, the original shall be submitted to the District for the signature of the General Manager or his agents.

- a. When the original has been signed by all agencies involved, send four (4) complete sets of prints along with one mylar reproducible transparency to the District office.

C. SEWERAGE PLAN CERTIFICATIONS

The following certifications shall be placed on the first sheet of the plans as appropriate:

Sewerage Certification

EDGEMONT COMMUNITY SERVICES DISTRICT

I certify that the design of the sewerage system in Tract/Plot Plan/Parcel Map No. _____ is in accordance with the sewerage system expansion plans of the Edgemont Community Services District, and that the waste disposal system is adequate at this time to treat the anticipated wastes from the proposed tract/plot plan/parcel map. This certification does not constitute a guarantee the sewerage system can transport or treat flows that exceed the District estimated flows for the specific type of land use proposed for this development.

General Manager

Date

CERTIFICATION VOID AFTER TWENTY-FOUR (24) MONTHS FROM ABOVE DATE.

Edgemont Community Services District Engineer
Recommended by:

District Engineer

Date

The following certification shall be placed on the first sheet of the plans for on-site sewerage plans:

Private Certification

The Edgemont Community Services District has reviewed the sewerage facilities within the public right-of-way for this project, said facilities are in conformance with District standards and are approved. Said approval does not include any on-site/private facilities.

Edgemont Community Services District
General Manager

Date

CERTIFICATION VOID AFTER TWENTY-FOUR (24) MONTHS FROM ABOVE DATE

D. GENERAL NOTES AND REQUIREMENTS

1. The Contractor shall notify ECSD at least two working days prior to construction.
2. Separation requirements between sewer lines horizontally (10' minimum, 5' for laterals) shall conform to the County of Riverside Health Department and the California Department of Public Health (CDPH) Requirements. The Agency's specifications that are more restrictive shall govern in all cases.
3. All construction and materials shall comply with ECSD standards and specifications. Any construction and/or materials not covered in ECSD standards shall be approved by the District prior to construction.
4. Prior to construction of the sewer lines, the Contractor shall expose the existing sewer lines where connections will occur and verify their elevation and location. Approval of ECSD of a proposed connection to an ECSD facility does not imply approval of the correctness of the elevation and/or location shown on the Developer's sewer plans.
5. Contractor shall not backfill trench until the District's Inspector has obtained as-built stationing on all structures. It shall be the Contractor's responsibility to provide accurate record drawings to the District immediately after construction.
6. Approval by ECSD implies no permission other than that within the District's jurisdiction. All permits required by law shall be acquired by the applicant or his Contractor. Requirements of ECSD shall take precedence over requirements of other agencies only where ECSD requirements are more stringent.

7. Contractor shall shore all trenches and conduct all construction and operations in accordance with CAL-OSHA requirements and have all encroachment and excavation permits prior to the start of work.
8. Pipe joints **shall not** be pulled at any angle greater than the maximum angle recommended by the pipe manufacturer.
9. The proposed work shall be subordinated to any operations ECSD may conduct, and shall be coordinated with such operations as directed by ECSD
10. A pre-job meeting shall occur prior to construction. Attendees shall include the District's Engineer, the District's Inspector, Tract Superintendent, City of Moreno Valley representative and the Contractor who will perform the work. "Cut-Sheets" shall be provided to the District prior to this meeting for its review.
11. The Contractor shall notify Underground Service Alert (U.S.A.) and have all underground utilities marked two (2) working days prior to construction, per U.S.A. requirements.
12. Contractor shall furnish and install all facilities in accordance with the District's Standard Specifications and Standard Drawings for Sanitary Sewer Facilities (latest revision). The Specifications and Standard Drawings are available from the District. Contractor shall be in possession of District's Specifications and Standard Drawings on the job site at all times.
13. All permits required by law shall be acquired by the Applicant or their Contractor. Copies of the excavation and encroachment permits will be given to ECSD prior to the pre-job.
14. All construction shall conform to current CAL-OSHA safety requirements.
15. Contractor shall designate a qualified superintendent with full authority to act on behalf of the Contractor. Said superintendent shall be on the job site at all times during construction.
16. The District's ability to provide sewerage services to this tract may depend on the developers of other tracts completing the construction of facilities. The District assumes no responsibility for the construction of the facilities, which are to be constructed by such developers.
17. If District facilities are located on land which are private (i.e., outside public rights-of-way) legal descriptions and plats (easement documents) shall be prepared in accordance with District standards by the Engineer or Land Surveyor of Record. The easement documents shall be reviewed and approved by the District prior to final acceptance of the facilities by the District.

18. The construction of the sewer main, manholes, and laterals, and a successful first air test shall be completed prior to the commencement of the waterline installation.
19. Immediately upon completion of construction of the sewer pipelines, the Developer shall hire a District approved video company to video the pipelines in DVD format (video file format to be viewable on a standard DVD player/computer and/or as approved by the District). District or District representative shall review said DVD's for potential construction defects prior to acceptance of the project. Payment for all such services shall be borne by the Developer. Final DVD submitted to the District shall be edited, if necessary, to include only accepted reaches of the pipeline.
20. Inscribe an "S" on the face of the curb to indicate where sewer laterals services cross the curb line.
21. Compaction tests for sewer facilities shall be performed by a qualified geotechnical firm and paid for by the Developer. All compaction tests shall be made in accordance with District's specifications. Soils testing results shall be given to the District Inspector on a daily basis. At the conclusion of the project, a final compaction report shall be given to the District. The report shall be signed and stamped by a registered geotechnical engineer and shall certify all compaction results met the most stringent Agency's requirements.

E. SEWER NOTES

1. The sewer line shall be installed by a Private Contractor in accordance with ECSD Standards, Plans and Specifications. The Contractor shall be approved by ECSD
2. Type of sewer pipe used shall be vitrified clay pipe, (extra strength) and shall have Type "G" joints (bell and spigot) for sizes 4-inch diameter through 42-inch diameter pipe per Section 207-8, Standard Specifications for Public Works Construction, Latest Edition.
3. Upon review and approval by ECSD an alternate material, PVC plastic sewer pipe for 8-inch to 12-inch diameter, may be utilized. PVC plastic sewer pipe shall be SDR 35, minimum wall thickness per Section 207-17 of the Standard Specifications for Public Works Construction, latest edition.
4. All work and materials shall conform to requirements of City of Moreno Valley Standards and Specifications for the Improvements of Streets and subsequent amendments.
5. Grading over sewer mains shall be done in such a manner as to prevent the ponding of water.
6. The top of all manholes located in pavement shall be raised to pavement grade (within 5 working days) after streets are paved and/or capped.

7. House connections, wyes, and laterals shall be located in the field at the direction of the subdivider.
8. The minimum class bedding for VCP sewer shall be Class "B-2" in accordance with ECSD Std. Dwg. No. S-1, Section VI.
9. The minimum class bedding for PVC plastic sewer pipe shall be Class "I" in accordance with ECSD Std. Dwg. No. S-1A, Section VI.
10. Sewer Contractor shall successfully perform two air tests. The first air test shall be completed immediately after installation, backfill and compaction of the sewerage system. The second air test shall be conducted after installation of all the other utilities and prior to paving of the streets. All air tests shall be paid for by the Developer.
11. Sewer laterals crossing existing curb and gutter shall be backfilled with a 1 sack cement, sand slurry backfill.
12. Connections to existing pipelines shall only be made with District inspector present. Test plugs shall only be removed upon direction of the District.
13. Should modification and/or reconstruction (including raising manholes to grade) of an existing manhole be required, prior to the removal of the frame of the sewer manhole, the channel of the manhole shall be completely covered with planking or other suitable material as approved by the District so as to prevent debris from entering the channel. After the manhole reconstruction has been completed, all debris shall be removed from within the manhole and the cover over the channel shall be removed.
14. Sewer plug(s) shall be installed prior to commencement of sewer construction and shall be inspected on a weekly basis by the Contractor to ensure that sewer plug(s) are in place. In addition, the location of the sewer plug(s) shall be identified on the plans by the Contractor. The location of all test plugs and their removal shall be coordinated with the District Inspector.

F. IMPROVEMENT PLAN CHECK LIST

The following is a list of District requirements regarding sewerage improvement plan preparation. The Developer's Engineer should review this list prior to each plan check submittal to ensure conformance with the District's requirements.

The District's review of Plans and Engineering data will cover only general conformity of the design with the Standards and Specifications outlined herein. The District's approval of Plans and Engineering data will not constitute a blanket approval of all dimensions, quantities, physical properties, materials, equipment, devices, or items shown, and does not relieve the Developer's Engineer from any responsibility for errors, deviations, or defects in design therefor.

General

1. Project Identification Form (Appendix N of Section VII) must be completed, signed and stamped by the California Registered Engineer of Record for every plan submittal.
2. All sheets must be 24" x 36" and have the District's standard title block. Scale is 1" = 40' horizontal and 1" = 4' vertical.
3. The first sheet of the improvement plan set is an index sheet that includes an overall layout of the sewerage system at a scale that clearly delineates the following: streets, lots, manholes and any existing facilities involved. Additionally, the first sheet must include sewer certifications, general notes, legend, estimate of quantities and a location map.
4. Plan and profile sheets must show all proposed and existing utility lines, both plan view and elevation; existing ground surface (if facilities are to be constructed prior to mass grading) and proposed street grade, existing and proposed sewer lines, with the flowline plotted in the profile, and the slope indicated between each vertical point of intersection. Sewer lines and appurtenances shall have stationing with respect to the center line street stationing. Label all pipeline centerlines with bearings and distances.
5. Self-adhesive or add on labels, certifications, details, etc. are not acceptable on final plans (mylars).
6. Construction notes with reference to District standards shall be provided on each individual plan sheet
7. Plans must be in conformance with all District standards and specifications.
8. Proposed improvements must conform to State and County health separation requirements (horizontal and vertical). In case of conflict, the most stringent requirement shall prevail.
9. Show laterals to each lot.
10. Check that minimum cover is achieved for all pipelines (plot existing & proposed ground profiles where necessary).
11. Check to make sure quantity estimates are correct.
12. Each construction note should reference a ECSD Standard.
13. Prior to District approval, a California Registered Civil Engineer's signature and stamp is required.
14. Check master plans for proper pipeline sizing

15. Easements need to be shown on the Improvement Plans and on the Final Map. Additionally, submittal of a separate easement document (description and plat) conforming to District format is required.
16. North arrow orientation shall be to the upper half of the plan sheet; and stationing shall increase left to right across the plan street.
17. Topography with contours shall be provided by field survey or aerial photography in areas where pipelines are to be constructed in existing conditions (i.e., no proposed grading).
18. Provide USA notification note on each sheet.
19. Use private on-site certification wording for private sewerage systems.
20. Plot the locations (horizontal and vertical) of all existing utilities and agency facilities.
21. Check the effects of proposed cuts/fills over existing pipelines. Provide profile over existing pipeline where requested by the District.
22. Make sure curve radii are acceptable (allowable joint pulls).
23. Check centerline lengths from record maps.
24. Vertical curves for the pipelines are not allowed.
25. Provide support for existing utilities where sewerlines cross below.
26. Check grading, street, storm drain, and erosion control plans for possible affects to District facilities.
27. Check environmental clearances.
28. Review soils report.
29. Provide profiles of "stubbed" mainlines.
30. Provide definitive match lines between sheets.
31. Field check site
32. Identify "Master Planned" improvements on plans.

Sewer Checking Criteria by Developer's Engineer

1. Make sure each lot can be served by gravity flow.
2. Check cover (7.0' minimum to top of pipe) unless otherwise approved by the District.
3. In general, sewer lines should be located per City of Moreno Valley Standard Plan No. MVSI-180A, Normal Location of Underground Utilities.
4. Stationing should be provided on all manholes.
5. Maximum manhole spacing is 350'; unless otherwise approved.
6. Manholes should be located near all BC's, EC's and PCC's. Manholes are mandatory at PRC's.
7. Make sure sewer line is deep enough to serve adjacent properties by gravity flow (3' drop out of building + (length from building to main x 2%) + 1' drop for wye).
8. Verify proper lateral size (4" diameter for single family residential, 6" diameter minimum for all other uses).
9. Manhole Fall: 0.1' on all bends 45° or greater; run "in-line" grades through manholes for grades of at least 2.5% (provide 0.1' fall on grades less than 2.5%).
10. Provide crossing elevations on plans for service laterals where they must cross storm drain facilities.
11. Whenever possible, in commercial and industrial areas, sewer laterals shall connect directly into a manhole.
12. Plot parallel storm drain profiles (dash) and make sure sewer laterals do not conflict.
13. Check street improvement plans where existing sewer lines occur for sewer lateral additions, relocations, manhole adjustments to grade, etc.
14. Check effects of proposed cuts/fills over existing pipelines.
15. Check to make sure system is set-up for future extensions and tributary drainage areas.
16. Check the effects of additional flow on downstream facilities.
17. Check manhole rim elevations from street plans.
18. For commercial and industrial developments, establish a flowline elevation of the lateral at property line.

19. Check for industrial waste provisions for all commercial and industrial projects.
20. Use as steep a slope as possible where the number of tributary dwelling units may not achieve 2 fps velocity in the pipe.
21. Check for potential lateral conflicts with other facilities. Plot unusual or critical crossings in profile.
22. Check bedding for sewer pipe depth per district standards. Prepare pipe loading calculations where required.
23. Encase the sewer for load carrying capability when top of sewer is within 3 feet of surface of street. (Ductile iron pipe as alternative).
24. Check pipeline alignment for future extensions, both vertically and horizontally.
25. Where pipe slope is at minimum, conduct a field survey to verify the location and elevation of point of connection.
26. Check the on-site system for the need of any required industrial waste clarifier, grease interceptor, or oil/sand separator.
27. Check to make sure the proposed and/or existing sewer has proper cover.
28. Curved sewers must meet the District's/manufacturer's requirements (minimum radius or maximum joint pull).
29. Backwater valves should be provided where required per Section 409 of the Uniform Plumbing Code.
30. Check that the design pipe slope (i.e., along pipe centerline) is based upon actual sewer main length and is greater than minimum.
31. When sewer is located in an easement, the manholes must be readily accessible by maintenance trucks. Bolt-down manhole covers are required when manholes occur on private property.
32. A detail or construction note should be provided for manholes the bottom of which need to be re-contoured for flow when sewer line joins existing manhole.
33. Sewer lines should be stubbed for future extension where required.
34. Manholes must be provided on the mainline where sewer laterals are 8" in diameter and larger.
35. Soffits must be matched where sewer mains of different diameters connect.

36. Rim elevations should be shown to the nearest 0.1' at all structures.
37. Make sure the street profile agrees with street plans and any revisions thereto.
38. Alternate pipe material or a protection encasement detail should be provided for VCP that will be crossed by proposed storm drains or other structures where clearance is within 18" of bottom of crossing.
39. Where possible, a minimum slope of 1% should be used on cul-de-sacs.
40. Check if plumbing fixtures are to be installed on a floor level that is lower than the next upstream manhole cover of the public sewer. If so, such drainage piping shall be protected from backflow of sewage by installing an approved type of backwater valve. Refer to Section 710 of the California Plumbing Code, Latest Addition for details. Also refer to Section IV, Sewer System Design Criteria, Paragraph I, Backwater Valves for additional requirements.

G. ABBREVIATIONS

ABAND	Abandon	FUT	Future
AH	Ahead Station	FLG	Flange or Flanged
ANSI	American National Standards Institute	G	Gas line or service
ASTM	American Society for Testing Materials	GPM	Gallons per minute
AV	Air Valve	GV	Gate Valve
AWWA	American Water Works Association	HPI	Horizontal Point of Intersection
BC	Begin Curve	MH	Manhole
BF	Blind Flange	PCC	Point of Compound Curve
BFV	Butterfly Valve	PE	Polyethylene
BK	Back Station	PRC	Point of Reverse Curve
BO	Blow Off	PROP	Proposed
BOT	Bottom	PVC	Polyvinyl Chloride
CL	Centerline	RED	Reducer
CML/CMC	Cement Mortar Lined/Cement Mortar Coated	RJ	Restrained Joint
CO	Clean Out	R/W	Right-of-way
CPLG	Coupling	S	Sewer main or house lateral
CTS	Cathodic Test Station	SD	Storm Drain
DIA	Diameter	STA	Station
DIP	Ductile Iron Pipe	ST. LT.	Street Light
DWG	Drawing	STD	Standard
EC	End Curve	SWR	Sewer
ECSD	Edgemont Community Services District	T	Telephone cable or conduit
ELEC	Electrical	UG	Underground
ESMT	Easement	VCP	Vitrified Clay Pipe
EX	Existing	VPI	Vertical Point of Intersection
FH	Fire Hydrant	W	Water main or service
FL	Flowline	WSP	Welded Steel Pipe

H. GUIDE FOR EASEMENT DRAWINGS

Maps for easements over private lands should contain sufficient information to reflect every call-out as it is recited in the description.

1. Required Information
 - a. North Arrow (orientation to upper half of plat)
 - b. Scale
 - c. Tract Numbers
 - d. Lot Numbers
 - e. Lot lines
 - f. Ownership Lines
 - g. Section Corner or Rancho Corner Data
 - h. Street R/W and Street Names
 - i. Section, Township & Range and Base & Meridian Data or Rancho Data
 - j. Call out of Easement
 - k. Parcel Numbers
 - l. Dimensions
 - m. Title Block
 - n. Drawing Number
 - o. Signature of General Manager

2. Additional Information When Bearings are Used
 - a. Basis of Bearings
 - b. T.P.O.B. (True Point of Beginning)
 - c. Bearing and Distances
 - d. Curve Data
 - e. Designated Point
 - f. Existing Easement Data

3. Right-of-Way Width Requirements for Easements are as follows: The minimum required width for all easements shall be 20 feet. Generally, all pipelines shall be installed at the centerline of the easement. When approved by the District, pipeline may be installed no less than 5 feet from either easement boundary.

4. Tract Maps

- a. Construction prior to Tract Map recordation will require acquisition of rights-of-way description. The description shall be originated by the tract engineer.
- b. Public Utility easements are not acceptable.

5. Areas Not Included in Tracts

Rights-of-way acquisition shall be completed prior to construction, and prior to Tract recordation where associated with Tract development.

6. Easements Within Subdivisions

- a. Public Streets - no separate easements are required.
- b. Private Streets or Easements across Private Lands - Easements shall be acquired by separate instrument.

7. District Acceptance of Permanent Easement

All easements offered to the District for acceptance shall be formally acknowledged by a "Certificate of Acceptance" as shown in Appendix B of Section VII.

The Certificate of Acceptance, which is required for the County Recorder of Riverside, will require the ECSD's Board of Director's authorization and be signed and notarized by the District.

I. ESTABLISHMENT OF LINE AND GRADE

The line and grade of the improvements shall be per the District approved drawings. Survey control ("staking") shall be necessary for all sewerline improvements and "cut sheets" shall be submitted to the District prior to pre-construction conference.

J. CONTRACTOR'S DATA SHEET

Owners, Developers and Developers' Engineers are advised that any contractors who intend to construct facilities for the District submit to the District a Contractor's Data Sheet before they may engage in construction. The data sheet must be submitted at least 10 working days prior to bidding on a project. A Contractor's Data Sheet is included for reference in Appendix D of Section VII.

K. CONSTRUCTION AGREEMENT

A sewer Construction Agreement must also be signed by Developer, Contractor, and District representative prior to the pre-construction meeting. A blank agreement form is included for reference in Appendix C of Section VII.

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SECTION IV

SEWER SYSTEM DESIGN CRITERIA

SECTION IV

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IV. SEWER SYSTEM DESIGN CRITERIA

A. GENERAL

Sewer system improvements proposed for inclusion into the District's service area shall be designed in accordance with the criteria set forth herein, unless otherwise approved in writing by the District.

The design shall take into consideration physical conditions known to exist at the time and place of each installation and the probable operating requirements. Where such conditions render sections of these Specifications inapplicable, alternate methods of design may be submitted to the District, and upon approval thereof, may be incorporated in the Plan.

B. LOCATIONS OF MAINS

1. Alignment:
 - a. 6-foot north or east of centerline of street
 - b. Horizontal curves are allowed on pipe sizes from 8-inch to 24-inch diameter. All curved sewers shall have a minimum radius of 288-foot, but no less than the radius recommended by the pipe manufacturer. For curved sewers with pipe size larger than 24-inch diameter, the minimum radius shall be per the 2021 Standard Specifications for the Public Works Construction, Section 306-7.4.2.4 entitled "Straight Non-Beveled Pipe on Curves" with the minimum threshold radius of 288-foot. No reverse curves allowed between manholes. Manholes shall be constructed at or near all BC's, EC's, PRC's, and PCC's.
 - c. No vertical curves allowed
2. Depth: Minimum cover over pipe should be sufficient to service adjacent property by gravity, and cover shall not be less than 7.0-foot to finish grade of street, unless otherwise approved by District. In addition, sewer mains must be sufficiently deep in subdivisions to allow water lines to be set with 4-foot min. cover without interference from sewer laterals.

C. FLOW RATE COMPUTATIONS

1. All flows shall be computed on the basis that the area served by the extension or addition is completely improved to limits imposed by its present zoning required to allow construction of the proposed development.
2. Average Daily Rates:
 - a.

<u>Residential Areas:</u>	<u>GPD/Unit</u>
Apartments	160
Single Family	240

- b. Commercial and Industrial: For initial planning, District will use 2000 gpd/gross acre to estimate average daily flows. For final sizing, investigate each installation
- c. Proposed Warehouse/Open Storage Facility: Projects proposing warehouse, open storage, and distribution usage typically generate wastewater at much lower rates. Therefore, to estimate the average daily flows for such projects, the following Table may be used.

Warehouse / Open Storage Facility Wastewater Generation

Building Area (Sq. Ft.)	Base Unit (Sq. Ft.)	EDU Per Unit (EDU/Sq. Ft.)
First 100,000	1,000	0.13
Area between 100,000-1,000,000	1,000	0.03
Remaining Area Over 1,000,000	1,000	0.02

- 3. Peak Flow Rates:
 - a. Residential Areas: $Q_{PEAK} = 2.5Q_{ADF}^{(0.91)}$
Where Q_{PEAK} & Q_{ADF} are in millions of gallons per day (mgd)
 - b. Commercial & Industrial: Investigate each installation

D. PIPE SIZING

Pipe sizing for gravity mains shall be determined as shown below:

- 1. For 8-inch diameter mains and smaller:
 - a. $n = 0.013$;
 - b. D/d (depth of water to pipeline diameter ratio) ≤ 0.50 (ie 50% \pm full)
- 2. For 10-inch diameter mains and larger:
 - a. $n = 0.013$
 - b. D/d ratio ≤ 0.75 (ie 91% \pm full)
- 3. Connection Laterals
 - a. House Connection Laterals (at 2% slope, utilizing 45° connection at main)
 - b. Connection laterals for commercial and industrial developments shall have a minimum 2% slope and utilize 45° connection at main. The

diameter of the lateral shall be calculated based on peak flow rate of 2000 gpd/gross acre of the project with minimum pipe size of 6-inch diameter. If the pipe sizing calculation requires a lateral greater than 6-inch diameter, two manholes will be required. One manhole connecting to the existing sewer main and another manhole at the project's property line.

E. MANHOLES

1. Manhole Criteria:
 - a. Manhole spacing shall not exceed 350' for all pipes; unless otherwise approved by District.
 - b. Manholes shall be located at or near all BC's, EC's, PRC's and PCC's on curved sewers.
 - c. Distance noted between manholes shall be measured to manhole centerlines.
 - d. Minimum 48-inch inside diameter manholes shall be required for sewer diameters 12-inch and less. Minimum 60-inch inside diameter manholes shall be required for pipelines deeper than 15' and/or for sewer diameters 15-inch and larger. Minimum 72-inch inside diameter manholes shall be required for pipelines 30-inch in diameter and larger.
2. Inverts:
 - a. Provide 0.1-foot fall through manholes for grades less than 2.5%. Show pipe flow line elevations at inlet and outlet of manhole. For grades greater than 2.5%, design grade may be continued through the manhole. Show pipe flow line elev(s). at centerline manhole station.
 - b. Where manhole invert is formed in field, a drop of 0.1-feet on all bends 45 degrees or greater may be required.
 - c. Unless otherwise approved by the District, junction manholes shall have the crowns (soffits) of the intersecting pipes at the same elevation where their projections intersect the manhole centerline.
 - d. Connections to existing facilities shall be verified in the field during the design stage, or provisions made to verify them prior to construction.
3. Drop manholes may be utilized only upon prior approval by the District. Drops shall not be less than 3 feet. ("Steep" slopes from the first manhole upstream are preferred to drop manholes.)

4. Manholes shall not be buried except where approved by District. Manholes shall be raised above ground level where necessary to maintain them in selected areas such as farmed areas and in waterways.
5. Use of cleanouts on sewer mains are not permitted.
6. A manhole per District Standard Drawing No. S-7 shall be provided at the street right-of-way line for all laterals 6-inch in diameter and larger unless otherwise approved in writing by the District.

F. PIPE VELOCITIES

1. Minimum
 - a. Sewer Mains: 2 - 2.5 fps
 - b. Inverted Siphons: 3 fps
2. Maximum
 - a. Sewer Mains: 10 fps

G. SLOPES

1. House Connection Laterals:

<u>Pipe dia.</u>	<u>4 (in.)</u>	<u>6 (in.)</u>
Slope	0.020	0.020
(0.010 Extreme Minimum with prior approval only)		

2. Sewer Mains:

Pipe Diameter (in.)	Minimum Slope (ft/ft)
8	0.0040
10	0.0032
12	0.0024
15	0.0016
18	0.0014
21	0.0012
24	0.0010
27	0.0008
30	0.0007

Gradients should be set to 2 figures, evenly divisible by 4, wherever possible.

H. BEDDING

1. V.C.P. (extra-strength)

The following may be used as a guide only in determining the required class of bedding based upon maximum depth over top of sewer pipe. For other conditions of trench width, or for a wide trench condition, independent analysis must be made.

Bedding Class Guideline Table

Pipe Diameter (inch)	Maximum Trench Width (inch)	Depth Over Top of Sewer Pipe⁽¹⁾ (feet) Class B-2 Bedding^{(2) (3)}
8	32	30.1 +
10	34	28.1 – 30.0
12	38	18.1 – 30.0
15	42	19.1 – 30.0
18	46	19.1 – 29.0
21	50	20.1 – 30.0
24	54	20.1 – 30.0
27	56	22.1 – 30.0

(1) Engineer shall be required to provide structural loading calculations for pipeline installations deeper than 30-feet.

(2) Refer to ECSD Std. Dwg. No. S-1

(3) Assumptions: Ordinary clay backfill @ 120 lbs./CF; F.S. = 1.5, $K\mu' = 0.1$; and Load Factors Class B-2 = 2.2

2. PVC (SDR 26 or 35)

The trench width and pipe bedding requirements shall be per ECSD Standard Drawing No. S-1A based on the proposed pipe diameter. Pipe thickness is dependent on depth cover over top of pipe. For pipes installed with less than 14-feet of cover, pipe thickness to be minimum of SDR 35. For pipes installed with greater than 14-feet but less than 25-feet of cover, pipe thickness to be minimum of SDR 26. For other conditions such as deep cover (greater than 25-feet), ground water, additional live loads beyond H2O loading, other trench conditions, wide trench conditions, independent analysis must be conducted. The following assumptions apply:

a. Minimum Live Load: H2O Traffic Loads;

b. Unit Weight of Soil 120 lbs./ft³;

- c. Embedment Stiffness (E'): 1,000 lbs./ft²;
- d. Pipe Bedding: Class "I" (Full Crushed Rock);
- e. Maximum Diametric Deflection: 7.5%;
- f. Min. Factor of Safety: 2;
- g. Conduct independent analysis for pipes 18-inch dia. and greater;
- h. Refer to AWWA M23 for additional requirements.

I. BACKWATER VALVES

Backwater valves shall be required in accordance with the Uniform Plumbing Code, Latest Edition.

The backwater valves, where required, shall be installed in accordance with the City of Moreno Valley Building and Safety Department's requirements and shall be installed at shallowest location allowing access for future inspection and maintenance. Where backflow valves are required, they shall be installed on private property by the property owner or tract developer and are to be maintained by property owner.

J. SEWAGE INJECTORS

1. In some extreme circumstances, the ability to sewer an individual lot by gravity may be uneconomical based on excessive depths of the mainline sewer. The definition of these circumstances shall be determined by the District. Should the District determine these conditions exist for a lot, and upon District approval only, an individual sewage injector may be used.
2. The injector shall be constructed to District specifications for installation on private property by the property owner or tract developer. Maintenance of the injector shall be the responsibility of the property owner.

K. LATERAL CONNECTIONS TO MAIN

1. Direct connections of 4-inch and 6-inch diameter laterals to the mainline shall only be allowed when the sewer main has a diameter less than 15-inch and the connection is made per Standard Drawing No. S-2, S-5, or S-6 and S-8. Direct lateral connections to 18-inch diameter sewer lines and larger shall be allowed at the discretion of the District and only if approved in writing by the District.
2. All mainline connections, 8-inch and larger, shall be made with the installation of a manhole.

L. INDUSTRIAL WASTE PROVISIONS

The developers of all commercial/industrial projects shall provide the District with detailed information concerning the project's expected wastewater quality and quantity. The

District will review this information and determine which of the following facilities are required.

1. Gravity Separator
2. Industrial Waste Clarifier
3. Pretreatment Facilities
4. Sewer Sampling Wye

Additionally, a separate irrigation meter and service shall be required to segregate the water quantity used for irrigational purposes so that equitable sewer user fees can be charged.

M. SEPARATION

For separation requirements and guidelines refer to the California Waterworks Standards, California Code of Regulations (CCR), Title 22, Division 4, Chapter 16, Section 64572, latest edition for establish criteria for separation of water mains from non-potable pipelines. For installations of pipelines with less separation distance than what is required by the regulations, alternatives may be proposed pursuant to CCR, Title 22, Section 64551.100. Refer to the December 14, 2017 State Water Resources Control Board Division of Drinking Water Request for Alternatives Letter. A copy of this letter is provided in Appendix O of Section VII.

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SECTION V

BASIC SPECIFICATIONS

SECTION V

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BASIC SPECIFICATIONS
SECTION A

GENERAL SPECIFICATIONS

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BASIC SPECIFICATION
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BASIC SPECIFICATIONS
SECTION A

GENERAL SPECIFICATIONS

A. REFERENCE SPECIFICATIONS

The following published reference specification shall hereby become part of these specifications.

1. State of California, Department of Transportation, "Standard Specifications", (Latest Edition).
2. The Greenbook "Standard Specifications for Public Works Construction", Latest Edition, published by Building News, Inc., 990 Park Center Drive, Suite E, Vista CA 92081. Part I of the "Standard Specifications for Public Works Construction" shall apply to work accomplished under the contract except as herein modified.

B CONTRACTOR'S SCHEDULE OF WORK

Within seven (7) days from the time the Contract is executed by all parties and at such other times as may be requested by the District, the Contractor shall submit to the District a detailed construction schedule which shall show the order in which the Contractor proposes to carry on the work, the dates at which the Contractor will start the several parts of the work, and the estimated dates of completion of the several parts. The District reserves the right to approve or alter the Schedule proposed by the Contractor, prior to the start of work.

The District may establish priorities for completion of certain parts of the work which may be necessary to provide certain services or which he may deem advisable in the interest of public safety and convenience.

The construction schedule and supplementary construction schedules submitted shall be consistent in all respects with the time requirements of the contract.

The receipt or written approval of any schedules by the Owner's Representative or the District shall not in any way relieve the Contractor of its obligations under the Contract Documents. The Contractor is fully responsible to determine and provide for any and all staffing and resources at levels which allow for good quality and timely completion of the Work. Contractor's failure to incorporate all elements of Work required for the performance of the Contract or any inaccuracy in the schedule shall not excuse the Contractor from performing all Work required for a completed Work within the specified Contract time period. If the required schedule is not received by the time the first payment under the Contract is due, Contractor shall not be paid until the schedule is received, reviewed and accepted by the Owner's Representative.

1. Schedule Contents. The schedule shall allow enough time for inclement weather. The schedule shall indicate the beginning and completion dates

of all phases of construction; critical path for all critical, sequential time related activities; and "float time" for all "slack" or "gaps" in the non-critical activities. The schedule shall clearly identify all staffing and other resources which in the Contractor's judgment are needed to complete the Work within the time specified for completion. Schedule duration shall match the Contract time. Schedules indicating early completion will be rejected.

2. Schedule Updates. Contractor shall continuously update its construction schedule. Contractor shall submit an updated and accurate construction schedule to the Owner's Representative whenever requested to do so by Owner's Representative and with each progress payment request. The Owner's Representative may withhold progress payments or other amounts due under the Contract Documents if Contractor fails to submit an updated and accurate construction schedule.

C. INSPECTION

All work and materials furnished under these specifications shall be subject to rigid District inspection and acceptance.

The Contractor shall notify the District at least two working days in advance of any work to be done, in order that inspection, including that of on-site materials, may be provided with a minimum of inconvenience to the District or delay to the Contractor. The Contractor shall perform construction only in the presence of an inspector unless written permission to work during the absence of an inspector has been granted by the District or inspector. Any work done in the absence of an inspector without permission shall be subject to rejection.

The District shall at all times have access to the work during its construction and shall be furnished with every reasonable facility for ascertaining that materials and workmanship are in accordance with the requirements of these Specifications.

When required, the Contractor shall notify the District a sufficient time in advance of manufacture or production of materials to be supplied, in order that the District may arrange for shop or plant inspection and testing. The District shall have access to all parts of the shop or plant where material subject to inspection is being manufactured.

All materials shipped prior to having satisfactorily passed such testing and inspection by the District shall not be used unless approved by the District.

The Contractor shall also furnish the District duplicate, certified copies of all factory and mill test reports when required by the District.

Work or materials failing to conform to these Specifications may be rejected at any time.

The District has made the necessary arrangements for inspection (general, geotechnical and specialties) of Contractor's work during the District's field services' regular (i.e. 7:00 a.m. to 3:30 p.m., Monday through Friday) 40 hour work week. If the Contractor works more than an 8 hour day, a 40 hour week, and/or District observed holidays, the financial

responsibility for ALL added inspection shall be the responsibility of the Contractor. The prevailing hourly rates for inspection are on file with the District. Such prevailing rates will be applied at 1-1/2 times the regular rates for periods over 8 hours a day and/or 40 hours per week and/or District observed holidays and 2 times the regular rates for periods over 12 hours in one (1) day.

D. DEFECTIVE WORKMANSHIP AND MATERIAL

The Contractor shall promptly remove from the premises all work and materials condemned by the District as failing to conform to the contract, whether incorporated or not, and the Contractor shall promptly replace and re-execute his own work in accordance with the contract and without expense to the District and shall bear the expense of making good all work of other contractors destroyed or damaged by such removal or replacement and pay for reinspection costs.

If the Contractor does not remove such condemned work or materials within a reasonable time after notice, the District may remove them and store the materials at the expense of the Contractor. If the Contractor does not pay the expenses of such removal within 10 days' time after such removal, the District may, upon thirty days' written notice, sell such materials at auction or at private sale and shall account for the net proceeds thereof after deducting all the costs and expenses that should have been borne by the Contractor.

E. SANITATION

All parts of the work shall be maintained in a neat, clean, sanitary condition. Fixed and portable toilets, which are made inaccessible to flies, shall be provided wherever needed for use of employees, and their use shall be strictly enforced. Toilets shall be kept supplied with toilet paper, sanitary hand cleanser, and shall have workable door fasteners. Toilets shall be serviced no less than once weekly and shall be present in a quantity of not less than 1 per 20 workers as required by CAL-OSHA regulation. The toilets shall be maintained in a sanitary condition at all times. Use of toilet facilities in the Work under construction shall not be permitted. Any other sanitary facilities required by CAL-OSHA shall be the responsibility of the Contractor. All waste and refuse from sanitary facilities provided by the Contractor or from any source related to Contractor's operations shall be taken care of in a sanitary manner, satisfactory to the District, and in accordance with the laws and regulations pertaining thereto. Contractor shall rigorously prohibit and prevent committing of nuisance within the work site area or upon the District's right-of-way or adjacent to private property. Contractor shall furnish all facilities and means for proper sanitation of the work, and shall protect and save harmless the District, its officers and employees from any liability resulting from improper or insufficient sanitation.

F. FIRST AID AND PROTECTIVE FACILITIES

First aid facilities and supplies shall be kept on the jobsite. Instructions in first aid shall be given, and Contractor shall provide emergency first aid treatment and supplies for his employees sufficient to comply with all legal requirements.

G. CONTRACTOR TO PROVIDE FACILITIES FOR EMPLOYEES

Contractor shall, at his own expense, provide all labor, materials, equipment, and facilities which may be required to carry out effectively the provisions of these specifications. Contractor shall receive no additional payment therefore, and all compensation to be received for such work shall be included in the prices bid on the Bidding Sheet.

H. POWER

The Contractor shall provide, at his own expense, all necessary power required for his operations under the contract. The Contractor shall provide and maintain in good order such modern power equipment and installation as shall be adequate, in the opinion of the District, to perform in a safe and satisfactory manner the work required by the Contract.

I. CLEANUP

THROUGHOUT ALL PHASES OF CONSTRUCTION, INCLUDING SUSPENSION OF WORK, AND UNTIL FINAL ACCEPTANCE OF THE PROJECT, the Contractor shall keep the premises occupied by him and the project site in a neat and clean condition, and free from unsightly accumulation of rubbish, excess construction materials, and excess excavated materials. The Contractor shall also abate dust nuisance by cleaning, sweeping, and sprinkling with water, or other means as necessary. The use of water resulting in mud on public streets will not be permitted as a substitute for sweeping or other cleaning methods.

Materials and equipment shall be removed from the site as soon as they are no longer necessary.

Care shall be taken to prevent spillage on haul routes. Any such spillage shall be removed immediately and the area cleaned.

Excess excavated material from the pipe trench shall be removed from the site immediately. Sufficient material may remain for use as backfill. Forms and form lumber shall be removed from the site as soon as practicable after stripping.

FAILURE OF THE CONTRACTOR TO COMPLY WITH THE DISTRICT'S CLEANUP ORDERS MAY RESULT IN AN ORDER TO SUSPEND WORK UNTIL THE CONDITION IS CORRECTED. No additional compensation or extension of time will be allowed as a result of such suspension.

The Contractor shall not discharge smoke, dust, or any other air contaminants into the atmosphere in such quantity as will violate the regulations of any legally constituted authority.

Upon completion of work and before the final estimate is submitted, the Contractor shall, at his own expense and cost, satisfactorily dispose of or remove from the vicinity of the work all plants, buildings, rubbish, unused materials, concrete forms, and other equipment and materials belonging to him or used under his direction during the

construction, and in the event of his failure to do so, the same may be removed and disposed of by the District at the Contractor's expense.

J. UTILITIES AND EASEMENTS

The plan portion of each sheet indicates the general location of underground utilities as shown on available records. No attempt has been made to show service connections other than those services improved as part of the contract work. The plans also indicate the location of public right-of-way lines and easements that will be acquired by the District. Easements for private development projects shall be acquired by the private developer. It shall be the Contractor's responsibility to conduct all his operations within the rights-of-way and easements as shown on these plans.

K. RELATIONSHIP WITH OTHER GOVERNMENTAL AGENCIES

Where the pipeline and structures are constructed within the rights of way under the jurisdiction of other governmental agencies, Contractor shall comply with all requirements of said agencies. Where the same subject matter is covered by the specifications of two or more agencies, the specifications more restrictive on the Contractor shall govern in all cases.

L. EXPOSURE OF UTILITIES IN ADVANCE OF WORK

It shall be the Contractor's responsibility to determine the exact location and depth of all utilities and service connections. He shall also determine the type, material, and condition of any utility which may be affected by or affect the work. The Contractor shall have all utility companies field locate all underground lines before start of construction.

In order to provide sufficient lead time to resolve unforeseen conflicts, order materials and take other appropriate measures to ensure that there is no delay in work, the CONTRACTOR SHALL POTHOLE ALL UTILITY MAINS THAT MUST BE CROSSED OR CLOSELY PARALLELED PRIOR TO ANY CONSTRUCTION. CONTRACTOR SHALL THEN IMMEDIATELY PROVIDE THE LOCATION AND DEPTH OF THE "POTHOLED" UTILITIES TO THE ENGINEER. The Contractor shall expose all service connections before excavation in the area. All cost incurred in exposing utilities shall be borne by the Contractor.

THE DISTRICT RESERVES THE RIGHT TO MAKE MINOR ADJUSTMENTS IN PIPELINE ALIGNMENT AND GRADE, ALL AT NO ADDITIONAL COST TO THE DISTRICT.

Failure of the Contractor to comply with these provisions will result in an order to suspend work until these provisions are complied with, and no additional compensation or extension of time will be allowed as a result of such suspension. Payment per bid item or spread.

M. ADVANCE NOTIFICATION OF AGENCIES

It shall be the Contractor's responsibility to determine and notify those agencies requiring advance notification for inspection or other purposes before beginning construction in

any area of concern to said Agency. A minimum of two working days advance notice shall be given to the various agencies before beginning construction in the area unless specific advance times and requirements are stated in these detailed specifications or required by the Agency.

N. CROSSING, PROTECTION AND/OR RELOCATION OF UTILITIES

1. General

Utilities for the purpose of these specifications shall be considered as including, but not limited to, and irrespective of ownership; Pipelines (including irrigation mains), conduits, transmission lines, and appurtenances of "Public Utilities" (as defined in the Public Utilities Act of the State of California) and those of private industry, business, or individuals solely for their own use or for use of their tenants; and storm drains, sanitary sewer, street lighting, traffic signal systems, duct banks, telephone cable, transmission cables, and completely buried structures.

The District has made an earnest effort to locate and indicate on the drawings all utilities which exist within the limits of the work. However, the accuracy and completeness of the utilities indicated on the drawings are not guaranteed. If utilities are shown in profile, the depth indicated is based on general practice and is not guaranteed at any specific location. No attempt has been made to show service connections on the plans. It shall be the responsibility of the Contractor to determine the exact location of all utilities and their service connections. The Contractor shall have the utility companies field locate their utilities before excavation. The Contractor shall verify with each utility company the extent to which they will field locate their utilities. Where required, field location by Contractor forces shall be included in the contract price for which such work is appurtenant thereto and no additional allowance will be made therefore. The Contractor shall make his own investigation as to the location and type of existing utilities and their appurtenances and service connections which may be affected by the contract work, and shall notify the District as to any utility located by him which has been incorrectly shown or omitted from the drawings.

2. Utilities Shown on Plans

Where utilities cross or parallel the pipeline trench but do not conflict with the permanent work to be constructed, the Contractor shall protect the utility in place unless otherwise indicated on the plans. The Contractor shall notify the utility owner at least two working days in advance of the crossing or parallel construction and will coordinate the construction schedule with the utility service requirements.

Unless otherwise provided in the specifications, full compensation for crossing or paralleling of utilities shown on the plans shall be included in the contract unit price for which such work is appurtenant thereto and no

additional allowance will be made therefore. Said various contract prices shall include all labor, materials, tools and equipment necessary or incidental to the work.

3. Special Water/Sewer Crossings

At the locations shown on the plans or if the vertical separation between the outside of the sewer pipe and the outside of existing water pipes at crossings is less than one (1) foot, and when directed by the District, the Contractor shall provide the construction required per the detail shown on the plans and per the California Department of Public Health Water/Sewer Special Construction Requirements. The special construction will be deleted at locations shown if the vertical separation of the waterline above the sewerline is 1 foot or greater.

The District hereby reserves the right to increase or decrease this item from the quantity shown on the Proposal forms without altering the unit price bid per each. Payment will be made in accordance with the unit bid price provided on the Bidding Sheet; in the event no item for said special construction work is designated on the Bidding Sheet, Contractor shall be paid under the "Extra Work" provisions of the General Conditions.

4. Relocation of Utilities by the Contractor for His Own Convenience

The temporary relocation or the alteration of any utility desired by the Contractor solely for his own convenience in the performance of the contract work, to a position or condition other than that provided for in the specifications or shown on the drawings, shall be the Contractor's own responsibility, and he shall make all arrangements with the property owners regarding such work. Any costs of such work for the Contractor's own convenience shall be absorbed in the unit prices or included in the lump sum amounts bid for the various contract items.

5. Service Connections

Compensation for service connection crossings (not shown on the Plans) shall be included in the contract price for which such work is appurtenant thereto and no additional allowance will be made therefore.

6. Utility Conflicts with Proposed Improvements

If a utility, whether shown on the plans or not, should intersect the proposed improvement at grade anywhere along the line of the improvement, the Contractor shall immediately notify the District. The Contractor may be advised to continue with the construction, leaving sufficient "gap" in his construction as determined by the District as may be necessary to accommodate resolution of the conflict, to be completed after the conflict has been resolved. In addition, the Contractor shall notify the District in writing, stating the nature of the conflict, location by schedule, sheet number, name of the street or location of easement and

the station at which the conflict occurred. The District shall, within a reasonable time, make the necessary arrangements to resolve the conflict. Completion of the gap after the resolution of conflict shall not be just cause for additional compensation. Such completion of the "gap" shall be started within three working days after the Contractor has been notified of resolution of the conflict and completed in a workmanlike manner within reasonable time thereafter. When directed or approved by the District, changes in line or grade of any structure being built may be made in order to avoid utilities. Any additional costs because of such changes will be paid for as "Extra Work".

When a utility shown on the plans conflicts with the proposed improvements, the District will arrange for the relocation or alteration of said utility or require the Contractor to do same as "Extra Work". Work required in connection with unknown utilities will be performed and paid for as specified in the following paragraphs.

7. Unknown Utilities Disclosed During Contract Work

(Not including service connection)

In the event that a utility is disclosed or installed subsequent to the award of contract, such utility not being indicated on the drawings, the alteration, relocation or proper support and protection shall be done and paid for as follows:

- (a) When said utility is found to occupy the space required to be occupied by a part of the permanent works to be constructed under the Contract, the District will arrange for the relocation or alteration of said utility, or require the Contractor to do same as "Extra Work".
- (b) When the said utility is found to lie parallel to the permanent work and within the trench prism defined by the minimum allowable trench excavation consistent with safety and the rules, orders and regulations of local, State and Federal agencies having jurisdiction; the District will arrange for the relocation, protection or alteration of said utility, or require the Contractor to do same as "Extra Work".
- (c) When said utility is more or less parallel with, and any portion of it does not lie within the trench prism specified hereinabove, the Contractor shall advise the District thereof, and in cooperation with the District of the utility, provide and place the necessary support, if any, for proper protection to ensure continuous and safe operation of the utility. All costs of such work shall be borne by the Contractor.

- (d) Utilities found to cross the excavation but not intercepting the permanent works to be constructed, then the Contractor will be required to protect the existing facility in place and construct the proposed facility under the unknown utility.

Compensation for such crossings will be at a unit price per each in accordance with the proposal therefore. The number of such crossings is estimated and the District hereby expressly reserves the right to add to the number shown or decrease from the number shown or to totally delete the item for unknown utility crossings at no change in the unit price per each. The time extension for such crossings shall be determined by the District and shall be added to the total time for completion allowed and for which no liquidated damages will be assessed.

- (e) Upon disclosing a utility in the course of excavation that was not indicated on the drawings or marked in the field, the Contractor shall protect it in place. However, he shall immediately investigate if it is abandoned. The Contractor will be compensated at the bid unit price for unknown utility crossings only for the initial crossing of abandoned lines; and only if he did protect the abandoned utility in place.

8. Responsibility of the Contractor

The Contractor shall be held responsible for all costs for the repair of any and all damage to the contract work or to any utility (whether previously known or disclosed during the work), as may be caused by his operations. Utilities not shown on the drawings to be relocated or altered by others, shall be maintained in place by the Contractor.

At the completion of the contract work, the Contractor will leave all utilities and appurtenances in a condition satisfactory to the utility owners and the District.

O. PROTECTION OF FACILITIES OTHER THAN UTILITIES

It shall be the Contractor's responsibility to protect in place or remove and replace to original condition all existing facilities. The existing natural and man-made features and elevations on the plans are shown by topography. The topography shown is not guaranteed complete. It shall be the Contractor's responsibility to familiarize himself with the conditions of proposed work and to identify by field investigation those features, whether or not shown on the plans, which require removal and replacement or protection in place. These features include, but are not limited to, fences, cross gutters, roads, sidewalks, driveways, curbs and gutters, power poles, signs, drainage structures, trees, landscaping, etc.

The Contractor shall repair all existing structures which may be damaged as a result of the work under the contract. Reconstruction shall be of the same type and material as the existing facility and shall be of equal quality or better than the original work.

Full compensation for complying with these requirements shall be considered as included in the price bid for the various items of work, and no additional compensation shall be made therefore.

P. GROUND WATER

Contractor shall investigate the possibility of ground water prior to submitting bid and shall assume all cost and liabilities incurred, should a ground water problem arise.

Q. CONSTRUCTION WATER

The Contractor shall make all arrangements to furnish all construction water, all at no cost to the District.

R. WATER SUPPLY FOR COMPACTION AND DUST CONTROL

Contractor shall furnish and apply all water necessary for compaction and dust abatement purposes.

He shall apply water to construction areas where dust conditions so warrant, as directed by the District.

The water supply and payment of fees shall be the responsibility of the Contractor.

Full compensation for complying with these requirements shall be considered as included in the price bid for the various items of work, and no additional compensation shall be made therefore.

S. TRAFFIC CONTROL

It shall be the Contractor's responsibility to maintain traffic warning signs, barricades, flagmen, and other traffic control devices as required to maintain two-way traffic, and as required by agencies having jurisdiction over the roadways in the work area. It shall be the responsibility of the Contractor to investigate with various agencies having jurisdiction over the right-of-way in work area to determine the extent of traffic control that may be required by each agency.

Also, it shall be the Contractor's responsibility to provide all traffic control devices to ensure a safe working environment for any associated project work such as survey, geotechnical and materials testing, etc., that is required.

Full compensation for compliance with those provisions shall be considered as included in the bid unit price for various items, and no other compensation shall be made therefore.

T. ACCESS TO ADJACENT PROPERTIES

Contractor shall at all times provide access to the properties in the area of work, unless otherwise approved by District. The Contractor shall be responsible for providing adequate advance notice to properties that will not have access. It shall be the

responsibility of the Contractor to provide such temporary structures in the area of work to provide reasonable access to the properties. At least one (1) lane on cross streets shall be available at all times for use of vehicles and emergency equipment.

Full compensation for compliance with these provisions shall be considered as included in the bid unit price for various items, and no other compensation shall be made therefore.

U. STAKING OF LINE AND GRADE

The District will provide offset line and grade stakes at ground level and will furnish cut sheets therefore, unless otherwise indicated in the specifications. The Contractor shall be responsible for transfer of such offset line and grade into the trench for construction of the work and for the accuracy of such transfer. Cost of such transfer will be included in the unit prices bid for the work and no extra compensation will be made to the Contractor.

The Contractor shall inform the District a reasonable time in advance (at least three working days) as to his need for additional grades and lines, in order that the same may be furnished and all necessary measurements made for record and payment with the minimum of inconvenience to the District or of delay to the Contractor.

The Contractor shall examine carefully all construction stakes and by visual inspection of stakes, string lines and headers set therefrom, interpret and confirm that the line and grade information is in accordance with the Plans. If there is an apparent error or lack of understanding as to what is meant by the staking, the Contractor shall request an interpretation of staking before proceeding with any work.

The Contractor shall preserve bench marks, survey stakes, and points set for lines, grades, or measurement of the work in their proper places until authorized by the District to remove them. In case of their destruction or removal by him or his employees or agents, they shall be replaced at the Contractor's expense.

V. PROTECTION OF SURVEY MONUMENTS

It shall be the Contractor's responsibility to protect all of the existing survey monuments. Removal of such monuments or displacement thereof shall require their resetting per the existing type of monument. The cost of resetting such monuments shall be the financial responsibility of the Contractor. Contractor is advised that resetting of monuments must be done by a registered civil engineer or licensed land surveyor. Should the Contractor anticipate removal of any survey monuments, he shall include the cost of resetting of the same in the various items of work.

W. RECORD DRAWINGS

The Contractor SHALL PROVIDE, and keep up-to-date, a complete "as-built" record set of blueline prints, which shall be corrected daily and show every change from the original Drawings and Specifications and the exact "as-built" locations, measurements, sizes, and kinds of equipment. Prints for this purpose shall be obtained from the Engineer at cost. This set of Drawings shall be kept on the work site and shall be used only as a

record set. The Engineer shall require that these drawings be presented monthly for review prior to any progress payment being made. At the completion of construction, the Contractor shall deliver said record set of prints to the District and will be required to certify the accuracy of the Record Drawings.

X. RESEEDING

Where cultivated and maintained ground covers in lawns, parkways or easements have been removed for installation of pipelines, the Contractor shall restore or replace such ground cover in kind by reseeding or resodding, after the backfill in the trench or excavation has been consolidated and the construction area graded and cleared of rocks and other objectionable material as required by these specifications. After reseeding or resodding the areas shall be covered with a suitable mulch.

Where natural vegetation has been removed for installation of pipelines, after the installation, compaction, grading and clearing has been completed, the Contractor shall reseed such areas in accordance with the Basic Specifications, Section A, Paragraph Y entitled "Erosion Control". All costs to the Contractor for restoration, replacement, reseeding or resodding shall be absorbed in his bid for the applicable unit prices per linear foot of pipe and no other compensation will be made therefore.

Y. EROSION CONTROL

1. General

The Contractor shall provide erosion control measures as defined herewith on all areas where the natural vegetation has been disturbed by the construction of the facilities. If a ground cover other than natural vegetation has been disturbed, this section does not apply and the Contractor shall replace said ground cover in kind.

2. Preparation

After the backfill has been compacted and the pipe line tested, the Contractor shall remove and dispose of rocks and debris from the area to be reseeded. No seeding shall be performed during windy weather or when the ground is too wet or in an untillable condition. The fertilizer and seed shall be spread before the straw cover material is applied. Commercial fertilizer shall not be applied until after the seed has been sown.

3. Material

Materials shall consist of the following: Seed - The seed shall consist of the following mixture: Crested wheatgrass, 47 percent; Intermediate Wheatgrass, 27 percent; Wimmera Ryegrass, 13 percent; Blando Ryegrass, 13 percent. The seed shall be spread at the rate of 100 pounds per acre and shall be applied by the use of a "Cyclone Seed Sower" or equal. Fertilizer - The fertilizer shall be Ammonium Phosphate (16-20-0) spread at the rate of 300 pounds per acre and shall be applied

by the use of a "Cyclone Seed Sower" or equal. Mulch - After the application of the seed and fertilizer, new straw (stable bedding straw shall not be used) shall be uniformly spread at the approximate rate of four tons per acre. The straw shall then be "Mulched" into the ground by use of a "wire" roller or other approved equipment.

4. Protection for Steep Slopes

In cases where the grade over the pipe line exceeds 25 percent slope the Contractor shall provide additional erosion control measures to stabilize the backfill material. The Contractor shall submit to the Engineer for his approval, special engineering details of the method to be used.

Full compensation for complying with the requirements of this section shall be included in the unit price per linear foot of pipe installed and no other compensation shall be made therefore. Bidder's attention is specifically called to the fact that the responsibility of determining the amount and the type of erosion protection shall rest with the prospective bidder.

Z. CONTRACTOR'S SUBMITTALS

Contractor shall check and verify all field measurements and shall submit with such promptness as to provide adequate time for review and cause no delay in his own Work or in that of any other contractor, subcontractor, or worker on the Work, three (3) hard copies together with one (1) electronic (pdf) copy of all shop or setting drawings, calculations, schedules, and materials list, and all other provisions required by the Contract.

Contractor shall make any corrections required by the District's Representative, and email to the District's Representative corrected copies in pdf format and furnish such other copies as may be needed for completion of the Work.

Whenever called for in these Specifications or on the Drawings, or where required by the District, the Contractor shall furnish to the Construction Manager, and District's Representative, for review an electronic submittal of good quality, color, in pdf format. The maximum total attachment file size can be no larger than 10 megabytes. If files are larger, submittals may be sent on a CD Rom to the Construction Manager and District's Representative via overnight mail or hand delivery. In the case where a good quality pdf is not available the Contractor will submit three (3) hard copies to the Construction Manager and one (1) hard copy to the District's Representative, (four copies total). Copies of all shop drawings shall be submitted, accompanied by a letter of transmittal, and shall be addressed to the District.

The letter of transmittal, shall give a list of the numbers of the drawings submitted. All drawings must be marked with the name of the project and the name of the Contractor and be numbered consecutively. All drawings must be complete in every respect.

Responses and comments to the submittals will be e-mailed in PDF format. No hard copies will be sent. The Construction Manager will respond directly to the Contractor and will copy the District's Representative.

Revisions indicated on submittals shall be considered as changes necessary to meet the requirements of the Contract Drawings and Specifications and shall not be taken as the basis of claims for extra work. Submittals that are not approved will be returned to the Contractor for corrections and re-submittal. Incomplete submittals will not be accepted.

It is considered reasonable that the Contractor shall make a complete and acceptable submittal to the District by the second submission of a submittal item. The District reserves the right to withhold monies due the Contractor to cover additional costs of review beyond the second submission.

Approval of shop drawings will be general and shall not relieve the Contractor from the responsibility for proper fitting and construction of the work, nor from furnishing the material and work required which may not be indicated in the shop drawings when approved; neither does it relieve him from responsibility for errors in shop drawings.

Example submittals include, but are not limited to the following:

1. All materials provided by the Contractor
2. All appurtenances provided by the Contractor
3. Miscellaneous
 - (a) Pothole information for utilities
 - (b) Copies of permits required to be obtained by the Contractor
 - (c) SWPPP
 - (d) Pre-Construction Video
 - (e) Schedule of construction (with key milestones provided)
 - (f) Sewer bypass plan
 - (g) Safety program

AA. RESPONSIBILITY FOR MATERIAL FURNISHED BY THE DISTRICT

The Contractor's responsibility for material furnished by the District shall begin upon the Contractor's acceptance at the point of delivery to him. All material shall be examined by the Contractor and District. The Contractor shall immediately (upon delivery) notify the District of any material the Contractor perceives to be defective in manufacture or otherwise damaged. Should the District concur that the material should not be utilized the material will be replaced by the District. Material furnished by the District in good condition and accepted by the Contractor which is later discovered to have been damaged, shall be replaced by the Contractor at his expense. The Contractor shall be responsible for the safe storage of all materials until they have been incorporated in the completed project.

BB. ERRORS OR DISCREPANCIES NOTED BY CONTRACTOR

If the Contractor, either before commencing work or in the course of the work, finds any discrepancy between these Specifications and Drawings, or between either of them and

the physical conditions at the site of the work, or finds any error or omission in any of the Drawings or in any survey, he shall promptly notify the Engineer in writing of such discrepancy, error or omission.

CC. HANDLING AND STORAGE OF MATERIALS

All materials shall be handled in such a manner as to prevent damage and, in the case of water system work, maintain sanitary conditions. All materials for use in the work shall be stored by the Contractor in such a manner as to prevent damage from exposure to the elements, admixture of foreign materials or from any other cause. The Contractor shall be entirely responsible for damage or loss by weather or other causes as to work under the Contract

DD. GEOTECHNICAL SERVICES

All construction operations should be observed by a representative of the geotechnical engineer. The presence of the geotechnical engineer's field representative will be for the purpose of providing observation and field testing and will not include any supervising or directing of the actual work of the Contractor, his employees, or agents. Neither the presence of the geotechnical engineer's field representative nor the observations and testing by the geotechnical engineer shall excuse the contractor in any way for defects discovered in his work. It is understood that the geotechnical engineer will not be responsible for job or site safety on this project, which will be the sole responsibility of the contractor. CONTRACTOR TO PROVIDE SAFE ACCESS FOR GEOTECHNICAL IN CONFORMANCE WITH OSHA STANDARDS AT NO ADDITIONAL COST TO THE DISTRICT.

Dependent upon the circumstances of each particular project, as determined by the District, geotechnical services may include full time monitoring and testing or part time, periodic monitoring and testing.

EE. EARTHWORK

1, General

Earthwork shall conform to the requirements of the agency having jurisdiction, but shall not be less than herein specified. Earthwork shall be performed in accordance with the requirements of Section 19 of the Specifications entitled: "State of California, Department of Transportation, Standard Specifications", Latest Edition, insofar as the same may apply and except as herein modified.

All excavations and embankments required to complete the work as specified herein shall be unclassified and made to the lines and grades shown upon the plans, or as staked in the field. (ALL EXCAVATION SHALL BE UNCLASSIFIED AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY PRIOR TO SUBMITTING HIS PROPOSAL TO FAMILIARIZE HIMSELF WITH THE CONDITIONS THAT HE MAY ENCOUNTER DURING CONSTRUCTION.) Excavated materials not

required for fill, embankments or backfills shall become the property of the Contractor, and shall be disposed of at his own expense.

All excavations shall be protected and supported as required for safety and in the manner set forth in the rules, orders and regulations prescribed by the Division of Industrial Safety of the State of California.

All trenches and excavations shall be backfilled overnight and on weekends and holidays. Barriers shall be placed at each end of all excavations, and at such places as may be necessary along excavations from sunset each day to sunrise of the next day until such excavation is entirely refilled. (UNLESS OTHERWISE SPECIFIED, BACKFILL SHALL BE COMPLETE AND STREETS OPEN TO TRAFFIC BY 5:00 P.M. UNLESS OTHERWISE APPROVED BY THE DISTRICT.)

No excavated material shall be deposited on private property unless written permission of the Property Owner thereof is secured by the Contractor, or specifically provided for on these plans and in these specifications. Copies of said written permission, duly signed by the Property Owners of the private property involved, shall be furnished to the District by the Contractor before any excavated material is placed outside the limits of the established right-of-way. Free access must be provided to all driveways, watergates, hydrants, etc.

Any water which may be encountered or may accumulate in the excavation shall be pumped out or otherwise removed as necessary to keep the bottom of the excavation free and clear of water during the progress of the work.

2. Clearing and Grubbing

Areas where construction is to be performed shall be cleared of all rubbish and other objectionable material of any kind, which, if left in place, would interfere with the proper performance or completion of the contemplated work, would impair its subsequent use or form obstructions therein. Trees and other landscaping, unless otherwise specifically identified on the plans for removal, shall not be destroyed, and such measures as are necessary shall be taken by the Contractor for the protection thereof. Organic material from clearing and grubbing operations will not be incorporated in excavation backfill.

It shall be the Contractor's responsibility to remove and dispose of all excess material resulting from clearing and grubbing operations at his own expense. The Contractor shall make his own arrangements for disposal sites at his own expense, at which said material may be wasted. Full compensation for clearing and grubbing shall be included in the contract unit price for which such work is appurtenant thereto, and no additional allowance will be made therefore.

3. Grading Along Pipeline

The Contractor shall perform all grading to provide a working pad along the pipeline. The pad grade shall follow the existing ground grade as nearly as possible. If unnecessary excessive overcutting occurs during this operation, the Contractor may be required to replace all such overcut material and recompact to 90%, or to do other remedial work as directed by the District, all at no cost to the District.

4. Trench Excavation

(a) General

Excavation for sewer pipe, fittings, and appurtenances shall be in open trench to the depth and in the direction necessary for the proper installation of the same as shown upon the plans or as otherwise directed by the District. Trench banks shall be kept as near vertical as is safe, and where necessary shall be properly braced and sheeted, in accordance with the provisions of the Basic Specifications, Section A, Paragraph EE.5 entitled "Trench and Excavation Shoring". The trench bottom shall be graded to provide a smooth, firm and stable foundation at every point throughout the length of the pipe. For sewer pipe, at each joint the bottom of the trench shall be recessed in such a manner as to relieve the bell or coupling of all load.

Where the excavation has been made deeper than necessary, the Contractor shall furnish crushed rock, sand, or other material approved by the District for bedding to provide uniform support under the lower third of the depth of the pipe barrel. The cost of the material and labor to place and compact to achieve a firm and stable foundation herein specified shall be included in the unit price bid for the size of pipe laid thereon.

(b) Limit of Excavation

Except with specific approval of the District's Engineer, no more than 500 feet of open trench shall be excavated in advance of laying of pipe.

(c) Tunneling

Tunneling will be permitted only where native earth is of such firmness that it will remain in its original position, without sloughing off, throughout the work of excavation and backfilling; if sloughing occurs, the roof of the tunnel shall be broken down and the trench excavated as an open trench as herein specified.

(d) Trench Widths for Sewer

The maximum allowable trench width, at the top of the pipe, is the outside diameter of the barrel plus ten (10) inches on either side of the exterior of the pipe barrel. Where the trench width at the top of the pipe is wider than ten (10) inches on either side of the exterior of the pipe barrel, the pipe shall be backfilled from the bottom of the trench to a level one-fourth (1/4) of the diameter above the center of the pipe with 3/4-inch crushed rock or as directed by the District. The cost of the labor and material to provide crushed rock encasement, if required, shall be the responsibility of the Contractor, and no additional compensation will be made therefore.

(e) Blasting

Use of explosives on the work shall be subject to approval of the District. All operations involving handling, storage and use of explosives shall be conducted with every precaution prescribed by Construction Safety Orders of Division of Industrial Safety, State of California, and by local laws and regulations. Only competent, reliable persons working under experienced supervision shall be permitted to use explosives. Contractor will be held responsible for and shall make good any damage caused by blasting or otherwise resulting from disposition or use of explosives on the work. Contractor shall obtain, at no additional cost to the District, blasting permit(s) that may be required.

5. Trench and Excavation Shoring

Pursuant to Section 6705 of the Labor Code of the State of California, in advance of any excavation pursuant to this contract, Contractor shall submit to the District for his acceptance a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer. Nothing in this provision shall be deemed to allow the use of a shoring, sloping, or protective system less effective than that required by the "Construction Safety Orders". Reference shall also be made to the rules, orders, and regulations of the Division of Industrial Safety of the State of California, latest edition, and the U.S. Department of Labor, Safety and Health Standards for Construction, latest edition.

FULL COMPENSATION FOR COMPLYING WITH THESE REQUIREMENTS SHALL BE CONSIDERED TO BE INCLUDED WITHIN THE CONTRACT UNIT OR LUMP SUM BID PRICES PAID FOR THE

VARIOUS ITEMS ON THE BIDDING SCHEDULE, AND NO ADDITIONAL ALLOWANCE WILL BE MADE THEREFORE.

6. Pipe Bedding for Sewer

(a) General

All pipe bedding shall be of the type indicated on the plans and shall be in accordance with the pipe bedding Standard Drawings included in these Specifications.

Bedding shall be crushed rock bedding per Basic Specifications, Section A, Paragraph EE.7 entitled "Crushed Rock Bedding". (COMPENSATION FOR BEDDING MATERIAL AS INDICATED ON THE PLANS SHALL BE INCLUDED IN THE CONTRACTOR'S BID FOR THE APPLICABLE UNIT PRICES PER LINEAR FOOT OF PIPE AND NO ADDITIONAL COMPENSATION WILL BE MADE THEREFORE.) Minimum compaction for all pipe bedding shall be 90% relative compaction.

(b) Unstable Material

Where material at the bottom of the trench is found to be unstable, soft, or spongy, such material shall be removed to a depth as determined by a Geotechnical Engineer retained by the District Engineer and replaced with Special Crushed Rock Bedding as specified in the Basic Specifications, Section A, Paragraph EE.7 entitled "Crushed Rock Bedding".

(c) Rock

Where rock is encountered, it shall be removed below grade, and the trench backfilled with suitable material to provide a compacted earth cushion with a thickness under the pipe of not less than 1/2-inch per inch of nominal diameter of the pipe to be installed, with a minimum allowable thickness of 6-inches. Where a special bedding class is indicated on the plans, the depth indicated on the Standard Drawing shall be increased to that stated herein, all at no additional cost to the Owner.

CONTRACTOR SHALL RECEIVE NO ADDITIONAL COMPENSATION FOR ABOVE MENTIONED WORK.

7. Crushed Rock Bedding

When specified on the plans or when groundwater is encountered in the excavation, or when soft, spongy and unstable material is encountered in the bottom of the trench, and when approved by the District, the material in the bottom of the trench shall be removed to a depth directed by the District and replaced with well graded 3/4-inch maximum crushed rock bedding as specified below. The crushed rock bedding shall be installed

and compacted as shown on the Standard Drawing attached to these Specifications, or with no standard drawing place crushed rock bedding 8" min. thickness (90% min. compaction) under bottom of pipe. The 3/4-inch maximum crushed rock material shall be approved by the District before use.

Crushed rock shall be the product of crushing rock or gravel. Fifty percent of the particles retained on a 3/8-inch sieve shall have their entire surface area composed of faces resulting from fracture due to mechanical crushing. Not over 5% shall be particles that show no faces resulting from crushing. Less than 10% of the particles that pass the 3/8-inch sieve and are retained on the No. 4 sieve shall be waterworn particles. Gravel shall not be added to crushed rock. Crushed rock shall have the following gradation:

Sieve Sizes	3/4-inch Max Crushed Rock % Passing
1"	100
3/4"	90-100
1/2"	30-60
3/8"	0-20
No. 4	0-5
No. 8	--

Crushed Rock Bedding, where ordered by the District, shall be paid for at the unit price per ton complete in place, if Bidding Sheet so indicates, otherwise total cost of crushed rock bedding shall be borne by the Contractor.

Payment for trench width for Crushed Rock Bedding shall be limited to a maximum width of three (3) outside pipe diameters or the actual width, whichever is less. Any trench excavation beyond the maximum width limit shall be filled and compacted with crushed rock per the Standard Drawing, and the COST OF THE ADDITIONAL BEDDING SHALL BE BORNE BY THE CONTRACTOR.

THE DISTRICT RESERVES THE RIGHT TO INCREASE OR DECREASE THIS ITEM WITHOUT CHANGE IN UNIT PRICE OF THIS ITEM OR ANY OTHER ITEM.

8. Trench Backfill and Compaction Requirements for Sewer

(a) Pipe Zone

After the sewer pipe has been laid and inspected as herein specified, the trench shall be backfilled from the level of the bedding shown on the Standard Drawings, to a height of one (1) foot above the top of the pipe with specially selected and carefully compacted material which shall be clean, crushed rock material

(Basic Specifications, Section A, Paragraph EE.7 entitled "Crushed Rock Bedding"), free from large stones or lumps. Backfilling shall be carried on simultaneously on each side of the pipe to assure proper protection of the pipe. Minimum compaction for all pipe zone material shall be 90% relative compaction.

(b) Procedure Above Pipe Zone

For sewer mains in public right of way, backfill above the pipe zone shall be per the City or Agency having jurisdiction. The following summarized trench backfill requirements and their corresponding City or Agency:

City of Moreno Valley: Standard Plan MVSI-132 Series

City of Riverside: Standard Drawing No. 452

For all other locations not in public right of way, from the top of the pipe zone backfill to ground surface, the material for backfill shall be crushed miscellaneous base pursuant to the City of Moreno Standard Plan MVSI-132 Series.

For laterals, the entire trench above the pipe zone shall be backfilled with slurry backfill.

(c) Compaction Above Pipe Zone

Relative compaction in all streets and easements, public and private, from the pipe zone to the bottom of base material shall be 90% (95% to within 12 inches of the bottom of the base material). The base material shall be the thickness required and compacted to 95% relative compaction.

(d) Compaction Tests

The compaction test, as required by the District, that meets the required compaction, shall be paid for directly to the testing laboratory by the District. The minimum District requirements are as follows: Compaction tests shall be made at intervals not greater than 150' and one (1) test every 1' maximum vertical increment of trench backfill. Additionally at least 50% of all service laterals shall be tested. The tests shall be made in accordance with a combination of the Sand Cone Method (ASTM D1556) and nuclear gauge testing methodology at rates (i.e. 1 sand cone method to "10" nuclear gauge tests) specified by the District and at varying depths.

It should be noted that dependent upon the circumstance of each project (e.g., quantity of earthwork involved), full time compaction testing could be required by the District.

It shall be the Contractor's responsibility to pay for all compaction tests that indicate insufficient compaction in the area where the Contractor has previously indicated that compaction was completed.

The Contractor shall provide, at his own expense, all labor and equipment necessary for all compaction test holes. Choice of location of all tests will be made by the District. The aforementioned labor and equipment shall be readily available to perform the necessary work when required. Should the Contractor not be ready to perform such work in support conducting the compaction test, and standby charges are incurred by the District for such a delay, the Contractor shall be responsible for payment of said standby charges.

It shall be the Contractor's responsibility to advise the District two working days prior to requiring compaction tests.

(e) Compaction Requirements under Agency Permit

Where the permit of a governing agency sets forth requirements for compaction more stringent than those stated herein, the Contractor shall adhere to the Agency requirements.

(f) Excess Excavated Material

The Contractor shall make the necessary arrangements for and shall remove and dispose of all excess or unsuitable material. All costs for the disposal of excess or waste material shall be borne by the Contractor.

It is the intent of these specifications that all surplus material of any kind shall be disposed of by the Contractor outside the limits of the public rights-of-way.

Excavated material shall not be deposited on private property unless written permission from the Property Owner thereof is secured by the Contractor. Copies of said written permission, duly signed by the Property Owner of the private property, shall be furnished to the District by the Contractor before such material is placed on private property.

(g) Imported Backfill Material

For work performed within the City of Moreno Valley right-of-way, ECSD's easements and other areas within the City of Moreno Valley, all trench backfill and pipe bedding material shall be imported. For all other areas (City of Riverside), all pipe bedding material shall be imported. For City of Riverside, trench backfill above the pipe zone may be native pursuant to the City of

Riverside Standard Drawing No. 452. However, whenever the excavated material is, in the opinion of the Geotechnical Engineer retained by the District Engineer, unsuitable for backfill, the Contractor shall arrange and furnish imported backfill material. Such backfill material shall comply with the requirements of pipe bedding in the Basic Specifications, Section A, Paragraph EE.6 entitled "Pipe Bedding for Sewer" herein.

Full compensation for disposing of unsuitable material, as well as for providing suitable material as herein specified, shall be paid for at unit price per ton of such material delivered and placed in accordance with backfill requirements, if Bidding Sheet so indicates, otherwise total cost of Imported Backfill Material shall be borne by the Contractor.

Contractor is hereby notified that the actual quantity of imported backfill material specified herein cannot be determined at this time. The District is anticipating a condition that may not exist; therefore, the quantities are fictitious for the purpose of comparing bids and the District reserves the right to reduce, to totally delete, or increase, the quantity of imported backfill material required without any consideration for adjustment in unit price of this item or any other item if the material is not needed or the final quantities are substantially different from those shown on the bidding schedule.

9. Structure Excavation and Backfill

Structure excavation shall include the removal of all material of whatever nature necessary for the construction of foundations and other structures in accordance with the plans.

In operating compacting equipment near structures, care shall be used to prevent the displacement of, or injury to, the structure. Backfill shall be carried up evenly on all sides in accordance with the soils engineer's recommendations.

No backfilling shall be done until concrete is thoroughly set and is safe to withstand the load.

All excavation shall be unclassified and it shall be the Contractor's responsibility prior to submitting his proposal to familiarize himself with the conditions that he may encounter during construction.

Full compensation for complying with the above requirements for structure excavation and backfill shall be considered as included in the lump sum bid for a structure, and no other compensation shall be made therefore.

10. Control of Water

The Contractor shall provide and maintain at all times during construction, ample means and devices with which to promptly remove and dispose of all water entering the excavations or other parts of the work. No concrete footings or floors shall be laid in water nor shall water be allowed to rise over them until the concrete or mortar has set at least eight hours. Water shall not be allowed to rise unequally against walls for a period of 28 days. Ground water shall not be allowed to rise around pipe installations until jointing compound in the joints has set.

The Contractor shall dispose of the water from the work in a suitable manner without damage to adjacent property. No water shall be drained into work built or under construction. Water shall be disposed of in such a manner as not to be a menace to the public health.

Dewatering for structures and pipelines shall commence when ground water is first encountered, and shall be continuous until such times as water may be allowed to rise in accordance with the provisions of this Section.

11. Payment

Payment for earthwork and for conforming to all of the provisions of these specifications, unless otherwise specified herein and itemized in the bid schedule, shall be considered to be included in the contract unit or lump sum prices paid for the various items of work wherein earthwork is required, and no additional allowance will be made therefore.

FF. SUBSTITUTIONS

1. Pursuant to Public Contract Code Section 3400(b) the District may make a finding that is described in the invitation for bids that designates certain products, things, or services by specific brand or trade name.
2. Unless specifically designated in the Contract Documents, whenever any material, process, or article is indicated or specified by grade, patent, or proprietary name or by name of manufacturer, such Specifications shall be deemed to be used for the purpose of facilitating the description of the material, process or article desired and shall be deemed to be followed by the words "or equal." Contractor may, unless otherwise stated, offer for substitution any material, process or article which shall be substantially equal or better in every respect to that so indicated or specified in the Contract Documents. However, the District may have adopted certain uniform standards for certain materials, processes and articles.
3. Contractor shall submit requests, together with substantiating data, for substitution of any "or equal" material, process or article no later than thirty-five (35) days after award of the Contract. To facilitate the construction schedule and sequencing, some requests may need to be

submitted before thirty-five (35) days after award of Contract. Provisions regarding submission of “or equal” requests shall not in any way authorize an extension of time for performance of this Contract. If a proposed “or equal” substitution request is rejected, Contractor shall be responsible for providing the specified material, process or article. The burden of proof as to the equality of any material, process or article shall rest with the Contractor. The District has the complete and sole discretion to determine if a material, process or article is an “or equal” material, process or article that may be substituted.

4. Data required to substantiate requests for substitutions of an “or equal” material, process or article data shall include a signed affidavit from the Contractor stating that, and describing how, the substituted “or equal” material, process or article is equivalent to that specified in every way except as listed on the affidavit. Substantiating data shall include any and all illustrations, specifications, and other relevant data including catalog information which describes the requested substituted “or equal” material, process or article, and substantiates that it is an “or equal” to the material, process or article. The substantiating data must also include information regarding the durability and lifecycle cost of the requested substituted “or equal” material, process or article. Failure to submit all the required substantiating data, including the signed affidavit, to the District in a timely fashion will result in the rejection of the proposed substitution.
5. The Contractor shall bear all of the District’s costs associated with the review of substitution requests.
6. The Contractor shall be responsible for all costs related to a substituted “or equal” material, process or article.
7. Contractor is directed to the Special Conditions (if any) to review any findings made pursuant to Public Contract Code section 3400.

GG. WORKERS

1. Contractor shall at all times enforce strict discipline and good order among its employees. Contractor shall not employ on the Work any unfit person or any one not skilled in the Work assigned to him or her.
2. Any person in the employ of the Contractor whom the District may deem incompetent or unfit shall be dismissed from the Work and shall not be employed on this Work except with the written approval of the District.

HH. REMOVAL OF HAZARDOUS WASTE

Should Contractor encounter material reasonably believed to be polychlorinated biphenyl (PCB) or other toxic wastes and hazardous materials which have not been rendered harmless at the Work site, the Contractor shall immediately stop work at the

affected Work site and shall report the condition to the District in writing. The District shall contract for any services required to directly remove and/or abate PCBs and other toxic wastes and hazardous materials, if required by the Work site(s), and shall not require the Contractor to subcontract for such services. The Work in the affected area shall not thereafter be resumed except by written agreement of the District and Contractor.

II. AIR POLLUTION CONTROL

Contractor shall comply with all air pollution control rules, regulations, ordinances and statutes. All containers of paint, thinner, curing compound, solvent or liquid asphalt shall be labeled to indicate that the contents fully comply with the applicable material requirements.

Without limiting the foregoing, Contractor must fully comply with all applicable laws, rules and regulations in furnishing or using equipment and/or providing services, including, but not limited to, emissions limits and permitting requirements imposed by the South Coast Air Quality Management District (SCAQMD) and/or California Air Resources Board (CARB). Although the SCAQMD and CARB limits and requirements are more broad, Contractor shall specifically be aware of their application to "portable equipment", which definition is considered by SCAQMD and CARB to include any item of equipment with a fuel-powered engine. Contractor shall indemnify District against any fines or penalties imposed by SCAQMD, CARB, or any other governmental or regulatory agency for violations of applicable laws, rules and/or regulations by Contractor, its subcontractors, or others for whom Contractor is responsible under its indemnity obligations provided for in the Conditions of the Contract.

JJ. COMPLIANCE WITH STATE STORM WATER PERMIT

1. Contractor shall be required to comply with all conditions of the State Water Resources Control Board ("State Water Board") National Pollutant Discharge Elimination System General Permit for Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activity ("Permit") for all construction activity which results in the disturbance of in excess of one acre of total land area or which is part of a larger common area of development or sale. Contractor shall be responsible for filing the Notice of Intent and for obtaining the Permit. Contractor shall be solely responsible for preparing and implementing a Storm Water Pollution Prevention Plan ("SWPPP") prior to initiating Work. In bidding on this Contract, it shall be Contractor's responsibility to evaluate the cost of procuring the Permit and preparing the SWPPP as well as complying with the SWPPP and any necessary revision to the SWPPP. Contractor shall comply with all requirements of the State Water Resources Control Board. Contractor shall include all costs of compliance with specified requirements in the Contract amount.
2. Contractor shall be responsible for procuring, implementing and complying with the provisions of the Permit and the SWPPP, including the

standard provisions, monitoring and reporting requirements as required by the Permit. Contractor shall provide copies of all reports and monitoring information to the Owner's Representative.

3. Contractor shall comply with the lawful requirements of any applicable municipality, the District, drainage district, and other local agencies regarding discharges of storm water to separate storm drain system or other watercourses under their jurisdiction, including applicable requirements in municipal storm water management programs.
4. Storm, surface, nuisance, or other waters may be encountered at various times during construction of the Work. Therefore, the Contractor, by submitting a Bid, hereby acknowledges that it has investigated the risk arising from such waters, has prepared its Bid accordingly, and assumes any and all risks and liabilities arising therefrom.
5. Failure to comply with the Permit is in violation of federal and state law. Contractor hereby agrees to indemnify and hold harmless District, its officials, officers, agents, employees and authorized volunteers from and against any and all claims, demands, losses or liabilities of any kind or nature which District, its officials, officers, agents, employees and authorized volunteers may sustain or incur for noncompliance with the Permit arising out of or in connection with the Work, except for liability resulting from the sole established negligence, willful misconduct or active negligence of the District, its officials, officers, agents, employees or authorized volunteers. District may seek damages from Contractor for delay in completing the Contract in accordance with the Contract Documents, caused by Contractor's failure to comply with the Permit.

KK. EXCESSIVE NOISE

1. The Contractor shall use only such equipment on the Work and in such state of repair so that the emission of sound therefrom is within the noise tolerance level of that equipment as established by CAL-OSHA.
2. The Contractor shall comply with the most restrictive of the following: (1) local sound control and noise level rules, regulations and ordinances and (2) the requirements contained in these Contract Documents, including hours of operation requirements. No internal combustion engine shall be operated on the Work without a muffler of the type recommended by the manufacturer. Should any muffler or other control device sustain damage or be determined to be ineffective or defective, the Contractor shall promptly remove the equipment and shall not return said equipment to the job until the device is repaired or replaced. Said noise and vibration level requirements shall apply to all equipment on the job or related to the job, including but not limited to, trucks, transit mixers or transit equipment that may or may not be owned by the Contractor.

LL. DOCUMENT RETENTION AND EXAMINATION

1. In accordance with Government Code Section 8546.7, records of both the District and the Contractor shall be subject to examination and audit by the State Auditor General for a period of three (3) years after final payment.
2. Contractor shall make available to the District any of the Contractor's other documents related to the Work immediately upon request of the District.
3. In addition to the State Auditor rights above, the District shall have the right to examine and audit all books, estimates, records, contracts, documents, bid documents, subcontracts, and other data of the Contractor (including computations and projections) related to negotiating, pricing, or performing the modification in order to evaluate the accuracy and completeness of the cost or pricing data at no additional cost to the District, for a period of four (4) years after final payment.

MM. SOILS INVESTIGATION

When a soils investigation report for the Work site is available, such report shall not be a part of the Contract Documents. Any information obtained from such report as to subsurface soil condition, or to elevations of existing grades or elevations of underlying rock, is approximate only and is not guaranteed. Contractor acknowledges that any soils investigation report (including any borings) was prepared for purposes of design only and Contractor is required to examine the site before submitting its bid and must make whatever tests it deems appropriate to determine the underground condition of the soil.

NN. STATE LICENSE BOARD NOTICE

Contractors are required by law to be licensed and regulated by the Contractors' State License Board which has jurisdiction to investigate complaints against contractors if a complaint regarding a patent act or omission is filed within four (4) years of the date of the alleged violation. A complaint regarding a latent act or omission pertaining to structural defects must be filed within ten (10) years of the date of the alleged violation. Any questions concerning a contractor may be referred to the Registrar, Contractors' State License Board, P.O. Box 26000, Sacramento, California 95826.

OO. CHANGE IN NAME AND NATURE OF CONTRACTOR'S LEGAL ENTITY

Should a change be contemplated in the name or nature of the Contractor's legal entity, the Contractor shall first notify the District in order that proper steps may be taken to have the change reflected on the Contract.

PP. PROHIBITED INTERESTS

No District official or representative who is authorized in such capacity and on behalf of the District to negotiate, supervise, make, accept, or approve, or to take part in

negotiating, supervising, making, accepting or approving any engineering, inspection, construction or material supply contract or any subcontract in connection with construction of the project, shall be or become directly or indirectly interested financially in the Contract.

QQ. PATENT FEES AND ROYALTIES

The Contractor shall include in its bid amount the patent fees or royalties on any patented article or process furnished or used in the Work. Contractor shall assume all liability and responsibility arising from the use of any patented, or allegedly patented, materials, equipment, devices or processes used in or incorporated with the Work, and shall defend, indemnify and hold harmless the District, its officials, officers, agents, employees and representatives from and against any and all liabilities, demands, claims, damages, losses, costs and expenses, of whatsoever kind or nature, arising from such use.

RR. OWNERSHIP OF DRAWING

All Contract Documents furnished by the District are District property. They are not to be used by Contractor or any subcontractor on other work nor shall Contractor claim any right to such documents. With exception of one complete set of Contract Documents, all documents shall be returned to the District on request at completion of the Work.

SS. NOTICE OF TAXABLE POSSESSORY INTEREST

In accordance with Revenue and Taxation Code Section 107.6, the Contract Documents may create a possessory interest subject to personal property taxation for which Contractor will be responsible.

TT. SUBMITTALS OF ALL SAMPLES, MATERIAL LISTS AND CERTIFICATIONS

1. Contractor shall furnish to the District's Representative for approval, prior to purchasing or commencing any Work, a log of all samples, material lists and certifications, mix designs, schedules, and other submittals, as required in the specifications. The log shall indicate whether samples will be provided in accordance with other provisions of this Contract.
2. Contractor will provide samples and submittals, together with catalogs and supporting data required by the District's Representative, to the District's Representative within a reasonable time period to provide for adequate review and avoid delays in the Work.
3. These requirements shall not authorize any extension of time for performance of this Contract. District's Representative will check and approve such samples, but only for conformance with design concept of work and for compliance with information given in the Contract Documents. Work shall be in accordance with approved samples and submittals.

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BASIC SPECIFICATIONS
SECTION B

SEWER PIPELINE MATERIALS
SPECIFICATIONS

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BASIC SPECIFICATIONS
SECTION B-SEWER PIPELINE MATERIALS SPECIFICATIONS

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BASIC SPECIFICATIONS

SECTION B

SEWER PIPELINE MATERIALS SPECIFICATIONS

A. GENERAL

Where alternate pipeline materials are allowed by the District, the Contractor shall select such materials and construction methods as will result in a satisfactory completed project. All pipe materials shall be new and unused unless otherwise specified. Materials and strength of pipe shall be as shown on the plans or as specified herein.

B. GRAVITY MAINS

1. Vitrified Clay Pipe (VCP)

(a) General

Vitrified clay pipe and fittings shall be extra strength and shall conform in every respect with the requirements of the specifications and standards of the National Clay Pipe Institute and Sections 207-8 of the "Standard Specifications for Public Works Construction", Latest Edition, for the size of pipe indicated upon the plans. Vitrified clay pipe shall be of the best quality, vitrified, homogeneous in structure, thoroughly burned throughout the entire thickness, free from cracks or other imperfections and must give a clear metallic ring when struck with a hammer.

(b) Joints

Joints in vitrified clay pipe shall be made using a factory-made mechanical compression joint, consisting of a plastic material (Polyurethane), and shall be produced by Gladding McBean, Mission Clay Products or approved equal and shall conform with the requirements of Section 208-2.3 Type "G" Joints of the "Standard Specifications for Public Works Construction", Latest Edition. Note the requirements in the General Design Requirements, Paragraph E entitled "Sewer Notes", Note No.2.

2. Ductile Iron Pipe (DIP)

Ductile iron pipe shall comply with the provisions of Section 207-9 of the "Standard Specifications for Public Works Construction", Latest Edition. All pipe/fittings shall be coated inside and outside per ANSI Standard A21.6 - (latest edition) unless otherwise noted. Ductile iron pipe shall be

compression (slip) joint, conforming with ANSI A21.11 and A21.51, latest, and have a standard thickness class (minimum CL 50) based on internal pressures and external loadings as supported by engineering calculations signed by a professional engineer registered in the State of California. All ductile iron pipe shall be provided with double polyethylene encasement for the entire length of the pipeline, per AWWA Standard C105. The minimum bedding class shall be Class "C" per the Owners specifications and standards.

Where restrained joints are required, ductile iron pipe/fittings shall be U.S. Pipe TR flex restrained joint or equal, conforming with ANSI A21.11 and A21.51, latest.

Unless otherwise specified, all ductile iron pipe shall be interior lined with 3M Scotchkote 134, fusion-bonded epoxy, 2 coats at 8 mils each for a total of 16 mils and then sealed with a bituminous coating in accordance with ANSI A21.6 or ANSI A21.51.

The weight, class or nominal thickness, and casting period shall be shown on each pipe/fitting. The manufacturer's mark, the year in which the pipe/fitting was produced and the letters "DI" or "DUCTILE" shall be cast or stamped on the pipe.

3. Polyvinyl Chloride (PVC) Plastic Pipe (4" to 12" Dia.)

PVC solid wall pipe shall meet the requirements of ASTM Designation D-3034, SDR 26 or 35. Whenever portions of the proposed sewer construction are to be installed on the radius of a curve, the minimum radius and installation of the pipe shall be in accordance with the manufacturer's recommendations.

4. Warning Tape

Warning tape shall be installed over all pipes (VCP, PVC, DIP) sewer mains placed on 3-ft below the ground along the pipeline alignment. Tape shall be green colored and a minimum of 8 mils thick and 6 inches wide. Tape shall bear a continuous, printed message every 16 to 36 inches warning of "CAUTION BURIED SEWER PIPE BELOW." Tape shall be Northtown Company, Terra Tape, or equal.

BASIC SPECIFICATIONS
SECTION C

SEWER PIPELINE CONSTRUCTION
SPECIFICATIONS

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BASIC SPECIFICATIONS
SECTION C - SEWER PIPELINE CONSTRUCTION SPECIFICATIONS

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BASIC SPECIFICATIONS
SECTION C

SEWER PIPELINE CONSTRUCTION SPECIFICATIONS

A. SEWER PIPE INSTALLATION

1. General

The Contractor shall furnish and install all sewer pipeline material required for the construction of the sewer and appurtenances as herein specified and shown on the Drawings. All pipeline material shall be installed per manufacturer's published recommendations and per the applicable published standards for the particular material being installed unless otherwise modified herein. In case of any conflict, the most stringent and highest requirement shall govern, and the Contractor shall adhere to said requirement, all at no additional cost to the District.

2. Installation of Pipelines

Pipe laying shall proceed up-grade with the spigot ends of bell-and-spigot pipe pointing in the direction of the flow. Each pipe shall be laid true to line and grade and in such manner as to form a close concentric joint with the adjoining pipe, following manufacturer's instructions for the specific jointing method being used. Any pipe which exceeds 1/2-inch from true alignment, settlement, or joint offset after laying shall be taken up and relaid at the Contractor's expense. The SAG measuring device shall be approved by the District. The SAG measuring device shall have a scale to measure the depth of flow to the invert of the pipe and shall be placed in front of the camera. The Contractor shall clean the pipe by balling.

Notwithstanding prior factory or yard inspection, the District shall have the right to reject any damaged or defective pipe found on the job which in his opinion will affect the durability of the installation, and the District may order its removal from the work.

3. Sewer Constructed on Radius

Proposed sewer construction to be installed on the radius of a curve shall be constructed in accordance with Section IV, Paragraph B.1.b.

4. Plastic Sewer System

(1) General

These provisions establish the requirements for the use of PVC plastic sewer pipe for house lateral and main line sewer construction. Use is limited to those projects which are approved in writing by the District.

Plastic pipe may only be used where indicated on plans approved by the District. Where plastic pipe is used, one type shall be used between consecutive manholes and shall include the house laterals in that system. When pipe and fittings are fabricated by the same manufacturer, Contractor will not be allowed to use fittings from other manufacturers.

Plastic pipe shall not be used for sewers serving industrial areas, or areas that, in the opinion of the District, are likely to be rezoned to industrial zones.

(2) Care & Handling

Pipe shall be stored at the jobsite in unit packages provided by the manufacturer. Caution shall be exercised to avoid compression, damage or deformation to bell ends of the pipe. If pipe is anticipated to be exposed to direct sunlight for more than 14 days, pipe must be covered with an opaque material while permitting adequate air circulation above and around the pipe to prevent excessive heat accumulation.

If pipe is strung along trench prior to installation, string only pipe to be used within a 24-hour period; all pipe is to be laid on a flat surface. The interior as well as all sealing surfaces of pipe, fittings, and other accessories shall be kept free from dirt and foreign matter. Gaskets shall be protected from excessive exposure to heat, direct sunlight, ozone, oil and grease. Solvent cement when used shall be stored in tightly sealed containers away from excessive heat.

(3) Mandrel Test of PVC Pipe

Following the placement and densification of backfill and prior to the placing of permanent pavement, all main line pipe shall be cleaned and then mandrelled to measure for obstructions (deflections, joint offsets and lateral pipe intrusions). A rigid mandrel, approved by the Engineer, with a circular cross section having a diameter of at least 95% of the specified average inside diameter, shall be pulled through the pipe by hand.

Ninety-five (95%) of the specified average inside diameter for flexible plastic pipe taken from the appropriate ASTM requirements are as follows:

Pipe Size Nominal Dia.	PVC Solid Wall (ASTM D-3034)	
	SDR 35	SDR 26
4"	3.975"	3.891"
6"	5.915"	5.793"
8"	7.920"	7.754"
10"	9.900"	9.692"
12"	11.78"	11.538"

5. Cleaning

Before final acceptance of sewer facilities or prior to putting any sewer into service, all sewer facilities shall be visually checked and all foreign objects, materials or obstructions removed from the facilities. The District shall require that the facilities be cleaned by flushing, balling, rodding or other means so that the materials may be removed from the system.

6. Measurement and Payment

Unless specifically otherwise provided for in these Specifications, full compensation for the work required for a complete installation of sewer pipeline shall be considered included in the bid unit price per linear foot of pipe, and no other compensation shall be made therefore.

Measurement for payment of pipe shall be on the basis of the horizontal linear footage constructed by the Contractor, complete in place. Measurement will exclude the space occupied by structures constructed by the Contractor. Pipe stubs of one pipe length or less installed in manholes shall be included in the price for manholes and will not be included in the measurement for pipe.

Where excavation depth breakdowns are indicated on the Bidding Sheet, the depths (sewer invert to ground surface) shall be determined by the cut sheets prepared by the survey crew.

Where the offset stake elevation varies more than 0.5 feet from the pipe centerline elevation (at the ground surface), the survey crew will take elevation shots to determine the actual cut from ground surface to invert of pipe. Using this procedure, the payment depth will be based upon average depth between 25 foot interval stations.

The District reserves the right to revise pipeline grades, and the Contractor shall trench and lay accordingly. Payment for said grade revisions shall be based upon the unit bid price for the appropriate size and depth category, and no additional compensation shall be made therefore.

7. Payments to Contractor for Completed Work

NO PARTIAL PAYMENT SHALL BE GIVEN TO THE CONTRACTOR FOR CONSTRUCTION OF THE SYSTEM UNTIL THE PORTION OF THE SYSTEM FOR WHICH THE PAYMENT IS TO BE MADE HAS BEEN TESTED AND THE ENGINEER HAS CERTIFIED THAT THE SYSTEM IS SUBSTANTIALLY COMPLETED AND READY FOR USE.

Consideration for partial payment may be given prior to the Contractor completing the permanent pavement (excluding AC Cap), provided the delay of placing the permanent paving was, in the opinion of the Engineer, due to causes beyond the control of the Contractor.

The Engineer may establish priorities for completion of certain parts of the work which may be necessary to provide certain services or which he may deem advisable in the interests of public safety and convenience.

B. MANHOLES

1. General

The manholes shall be constructed in accordance with the Standard Drawing, and at the locations shown on the plans. All concrete used in the manholes shall be Class "A" Concrete per the Basic Specifications, Section C, Paragraph E.2 entitled "Portland Cement Concrete Classification", unless otherwise indicated herein.

2. Precast Concrete Sections

Precast manhole sections shall conform to the size, shape, form and details shown on the Standard Drawing. The precast cylinder units and precast eccentric top sections shall meet the strength requirements for "Precast Reinforced Concrete Manhole Risers and Tops", ASTM C478. The Contractor shall submit shop drawings of the precast manhole Contractor proposes to use. Each manhole section shall be sealed with an approved preformed, permanently flexible gasket to form a watertight joint. Sealed joints shall conform to ASTM C-990; and shall not shrink, harden or oxidize upon aging. Precast concrete rings are to be joined and sealed with CS-102B butyl/bitumen blended sealant as manufactured

by ConSeal of New Carlisle, Ohio. Manhole sections shall be set perfectly plumb. Sections of various heights shall be used in order to bring the top of the manhole ring and cover to the elevation shown on the plans.

3. Manhole Bases

Manhole bases shall be constructed of Class "A" concrete (Basic Specifications, Section C, Paragraph E.2 entitled "Portland Cement Concrete Classification") poured against native undisturbed material and to the form and dimensions shown on the Standard Drawing. If the Contractor over-excavates beyond the vertical dimensions shown on the Standard Drawing, the depth of concrete below the invert of the pipe shall be increased to greater than the 9" minimum as required to meet undisturbed material; all at no additional cost to the District.

Concrete shall be poured to a level ring-section seating surface, with the base centered over the sewer intersection unless otherwise specified. A metal forming ring shall be used to form a level joint groove in the manhole base. The groove will receive the first precast section to form a watertight joint.

Concrete shall be allowed to reach sufficient compressive strength prior to the installation of the precast manhole sections.

Connections of plastic sewer pipe to a manhole shall be watertight. All PVC or other flexible pipes entering or leaving concrete structures, including manholes, shall have a rubber sealing gasket, as supplied by the pipe manufacturer, firmly seated perpendicular to the pipe axis, around the pipe exterior and cast into the structure as a water stop. Additional requirements may be imposed by the District for manhole connections in projects constructed in areas of high or potentially high groundwater.

Precast manhole bases WILL NOT be allowed.

4. Manhole Frames and Covers

Manhole frames and covers shall be in accordance with the Standard Drawing. All frames and covers shall be traffic strength and shall be monogrammed according to the Standard Drawings.

The elevations at which manhole frames and covers are to be set shall conform to the requirements set forth on the plans, but in all cases shall be governed by the District in the field. Manholes shall not be constructed to final grade until final paving has been completed. Where

the cover is in existing pavement or in the traveled way of the existing road shoulder, it is to be placed flush with the existing surface. Where the cover is in unpaved areas, it shall be set per the Standard Drawing.

Manhole frames shall be set at the required grade and shall be securely attached to the top precast manhole shaft unit with a grout bed and filled as shown on the Standard Drawing. After the frames are securely set in the place provided herein, covers shall be installed and all necessary cleaning and scraping of foreign materials from the frames and covers shall be accomplished to ensure a fine satisfactory fit. All costs of setting and securing manhole frame and cover sets in place as herein provided, including all necessary concrete work, shall be considered as included in applicable contract unit prices and no additional allowance will be made therefore.

5. Standard Manholes

Standard manholes shall be constructed in accordance with the Standard Drawing and at the locations shown on the plans. Materials and construction of standard manholes shall conform in all respects to the applicable provisions of these specifications.

Standard manholes shall be either four-(4)-foot, five-(5)-foot, or six-(6)-foot diameter as shown on the plans. Full compensation for a complete installation of standard manholes shall be paid for at bid unit price per each and no other compensation will be made therefore.

6. Joint Wrap in Groundwater Conditions

In conditions where groundwater exists (or where the soils report indicates it could potentially exist) external wrap all joints with an approved joint wrap impermeable to the groundwater. Joint wrap shall be a minimum of 65 mils thickness with width at least four (4) inches either side of concrete section joint. Product shall be ConWrap as manufactured by ConSeal of New Carlisle, Ohio. The external wrap shall be installed in addition to the required joint sealant per the Basic Specifications, Section C, Paragraph B.2 entitled "Precast Concrete Sections".

7. Testing of Manholes

(A) Ground Water Conditions - Infiltration Test

All manholes in areas where ground water exists over the top of the pipe shall be water tested. All pumping of ground water shall

be discontinued for at least three (3) days, after which the manhole shall be tested for infiltration. The inlet(s) and outlet of each manhole shall be plugged. Test for a minimum of thirty (30) minutes. No visible leakage shall be allowed.

(B) Vacuum Testing

All manholes shall be vacuum tested. Refer to Basic Specifications, Section C, Paragraph N entitled "Vacuum Testing of Manholes" for specific requirements.

C. SEWER LATERALS

1. General

The sewer laterals shall be constructed as shown on the Standard Drawing. Sewer laterals of the size called for on the plans shall be installed at approximately the locations shown on the plans. The exact location will be determined in the field by the District or private developer. The Contractor shall field reference each lateral connection with a surface marker. The marker shall be as specified on the Standard Drawing.

2. Materials

Sewer laterals shall be constructed of PVC or VCP material and shall meet the requirements of the Basic Specifications, Section B entitled "Basic Sewer Pipeline Materials Specifications."

3. Tees and Wyes

Tees and wyes shall be of the same material as the sewer main and the longitudinal barrel of the tee or wye shall be of the same size as the sewer main. If the lateral pipe is PVC and is to be connected to VCP tees or wyes, provide proper transition adapter and band seal couplings with stainless steel band and straps. Tees or wyes of the size called for on the plans shall be installed at approximately the locations shown on the plans. The exact location will be determined in the field by the District or private developer. A suitable plug shall be provided and installed prior to backfilling operations to ensure a watertight joint.

4. Construction

All sewer laterals shall be installed per the Standard Drawing. In no case shall any lateral be constructed at less than two percent (2%) slope unless shown on plans. The sewer lateral shall be constructed a minimum distance of five (5) feet horizontally from existing water services.

Unless otherwise approved by the District, any required saddle connections to existing mains shall be made with an approved sewer tapping machine. The Contractor shall submit to the District his proposed method for tapping, including manufacturer's tapping equipment descriptions, etc.

5. Payment

Unless otherwise specified, sewer laterals shall be paid for at the unit price per foot bid, measured in a horizontal plane along the centerline of the sewer lateral from the centerline of the main sewer to the property line. Said prices per linear foot shall be considered full compensation for furnishing all pipe and fittings, other materials, equipment and labor necessary to install the pipe; including clearing and grubbing, pavement removal and replacement, placement of bedding in the locations shown on the plans in accordance with the Standard Drawings and specifications, removal and/or replacement of existing interfering improvements; and all other work pertinent to installing the sewer lateral complete in place and for which no additional compensation shall be made therefore.

In payment for tees and wyes, compensation shall be made for each tee and wye installed at the unit price bid, excepting for tees and wyes installed for cleanouts, compensation for which shall be included in the price per cleanout. The portion of the tee or wye covered by such compensation shall be considered to be the branch portion.

D. TESTS FOR LEAKAGE IN SEWER

1. General

All the tests for exfiltration from, and infiltration into the system shall be in accordance with Section 306-1.4 of the "Standard Specifications for Public Works Construction", Latest Edition, except as modified herein. The method of testing and testing equipment shall be approved by the District.

The Contractor shall, at his own expense, furnish all materials for making the tests required under the direction of the District.

If the leakage or infiltration, as shown by the tests, exceeds the standard set forth in said section, Contractor shall, at no additional cost to the District, make the necessary repairs by methods approved by the Engineer to correct the deficiencies. All tests must be completed before the street or trench is resurfaced with permanent pavement replacement,

but after complete installation and trench compaction of all facilities within a particular section between manholes.

Full compensation for testing shall be included in the bid price of various items of work, and no other compensation shall be made therefore.

2. Air Testing

The Contractor shall test all sewers by means of the air test specified herein, unless otherwise directed by the District. The air test shall be in accordance with Section 306-1.4.4 of the Standard Specifications for Public Works Construction, Latest Edition, except as herein modified.

Air shall be introduced into the pipeline until 3-1/2 psi gauge pressure has been reached, at which time the flow of air to the pipe shall be shut off. After the temperature has stabilized the air pressure shall be permitted to drop and, when the internal pressure has reached 3.0 psi gauge, the time lapse required for the air pressure to drop to 2.0 psi gauge shall be measured. The time lapse (in seconds) required for the air pressure to decrease from 3.0 to 2.0 psi (gauge) shall not be less than that given in the following table:

Sewer Pipe Dia.	Minimum Time Lapse (Seconds)
8"	140
10"	170
12"	200
15"	260
18"	310
21"	360
24"	410
27"	460
30"	510
33"	560
36"	610

If the time lapse exceeds that shown in the table, the pipe shall be presumed to be within acceptable limits; if the time lapse is less, the Contractor shall make the necessary corrections to reduce the leakage to acceptable limits by repair methods approved by the District.

3. Water Infiltration Test

Where ground water conditions are encountered and the water level prior to any pumping or dewatering operations is above the top of the proposed

sewer pipe, then the Water Infiltration Test shall be used in lieu of the air test (Basic Specifications, Section C, Paragraph 2 entitled "Air Test"). The Water Infiltration Test shall be in accordance with Section 306-1.4.3 of the Standard Specifications for Public Works Construction, Latest Edition, except as herein modified.

The infiltration shall not exceed 0.0016 gallons per hour per foot of sewer, per inch of pipe diameter. The test shall be run for a minimum period of two (2) hours. The Contractor shall furnish all labor, materials, equipment required for the infiltration test, at no additional cost to the District.

If ground water conditions are such that the ground water level is between the flow line of the proposed sewer pipe and the top of the pipe, both the air test and the water infiltration test shall be conducted at no additional cost to the District. In such a case, the section of pipe being tested shall be deemed acceptable only if it passes both the air test and the water infiltration test.

E. CONCRETE WORK

1. General

Concrete shall be composed of portland cement, natural aggregates, and water proportioned to produce required strength and well mixed into required consistency, Type II-V for all concrete in contact with wastewater.

Portland cement concrete for manhole bases, cradles, encasements, thrust blocks and structures shall be composed of portland cement, fine aggregate, coarse aggregate and water proportioned and mixed in accordance with the requirements of Section 90 of the State of California Department of Transportation Standard Specifications, except as may be herein modified.

Concrete for manhole bases, cradles and encasements, and all other concrete structures, shall be constructed to the lines and grades and in accordance with the design shown in the details on the plans.

Prior to placing any concrete, the Contractor shall submit to the District the design mix proposed to be used. Said mix shall set forth the weights of cement, sand, coarse aggregate and the amount of water to be used. (Source of supply shall also be furnished to the District.) The proposed mix shall be approved by the District prior to placing any concrete.

2. Portland Cement Concrete Classification

Concrete Class	Compressive Strength @ 28 days (psi)	Sack of Cement/CY
"A"	3,500	6
"B"	2,500	5
"C"	2,000	4
"D"	4,000	7

The amount of free water used in concrete shall not exceed 312 pounds per cubic yard, plus 20 pounds for each required 100 pounds of cement in excess of 564 per cubic yard.

Additional cement and a modified concrete mix, as approved by Engineer, will be required for situations requiring pumping of concrete.

3. Class "B" Concrete Encasement

Class "B" concrete shall be used for unreinforced concrete encasements that may be required by unforeseen field conditions. The quantity shown on the proposal is an estimate. The District hereby reserves the right to reduce this item to a small percentage of that shown on the proposal forms, delete it or increase it, without altering the unit price bid for cubic yard of concrete.

The unit price bid for cubic yard of concrete shall include furnishing all materials, labor, and equipment to properly place the concrete as may be required, and no other compensation shall be made therefore.

4. Reinforced Concrete Encasement

At the locations shown on the plans, and in accordance with the detail shown on the plans and/or Standard Drawing, and these Basic Specifications, the Contractor shall construct reinforced concrete encasement around the sewer carrier pipe. Concrete for reinforced concrete encasement shall be Class "A". Reinforcing steel (unless otherwise indicated) shall be No. 4 bar, billet steel having minimum yield point of 60,000 psi, formed and spaced as shown on the plans or the Standard Drawing.

Payment for reinforced concrete encasement shall be at the unit price per cubic yard of concrete for the section as shown on the plans or Standard Drawing, and no other compensation will be made therefore.

F. PAVEMENT REMOVAL AND REPLACEMENT

1. General

Pavement removal and replacement for all public roads, including aggregate base and temporary paving where required, shall comply with all the requirements of the agency issuing the Encroachment Permit. In roads established under formation of a special road district, the specifications of the Encroachment Permit shall apply. Any private roads and streets, including driveways in which the surface is removed or damaged, shall be restored to the original grade and crown by the Contractor. Removed or damaged sections shall be restored with the type of improvements (or better) conforming to that which existed at the time the Contractor entered upon the work.

It shall be the responsibility of the bidder to satisfy himself as to the existing pavement sections prior to submitting his bid.

Full compensation for temporary and permanent resurfacing, including the replacement of base material as required, shall be included in the unit bid price for pavement removal and replacement per linear foot of mainline trench. Any required pavement removal and replacement for manholes, house connection laterals, or other appurtenances shall be considered included in the bid price for the various items, and no additional compensation shall be made therefore.

2. Pavement Cutting

Pavement shall be cut to a straight edge parallel to the pipe alignment prior to excavation. Method of pavement cutting shall be saw cut or as specified by the Agency having jurisdiction. Under no circumstances shall excavation be started prior to scoring of pavement. If the adjacent pavement is disturbed during the Contractor's operation, the pavement shall be recut on a straight line to remove the damaged pavement before resurfacing. Portland cement concrete pavement and sidewalk shall be saw cut. Pavement cutting shall be considered included in the bid price for pavement removal, disposal and replacement, and no additional compensation shall be made therefore.

3. Permanent Trench Pavement

The permanent trench pavement shall be in accordance with the Agency having jurisdiction. If not specifically addressed by the road agency's permit, the existing pavement shall be saw cut and the permanent trench base paving shall be constructed to be flush with existing so that the

asphalt concrete is smooth, true to grade and cross section thus providing an even driving surface without undulations. The completed base paving surface shall be provided as described herein whether an asphalt concrete cap is specified or not specified. Should an asphalt concrete cap be required, Contractor shall grind down the base paving prior to placement of A.C. cap.

4. Asphalt Concrete Cap

Where required by the agency issuing the Encroachment Permit or other agency having jurisdiction, an asphalt concrete cap shall be placed along the length of the trench. The installation of the asphalt concrete cap shall be in accordance with the specifications and policies of the agency having jurisdiction. Where the asphalt concrete cap is not specifically stated in the applicable permit or on the drawings, and when directed by the District, the minimum cap shall be a grinded 0.10-foot thick, 12-foot wide section centered over the center of the trench or the traveled way, and pulled with a "Barber Greene" or equivalent.

Full compensation for placement of asphalt concrete cap, where required, shall be included in the unit bid price per linear foot of mainline trench. Any required asphalt concrete cap for house connection laterals or other appurtenances shall be considered included in the bid price for the various items, and no additional compensation shall be made therefore.

G. CONNECTIONS TO EXISTING MANHOLES

The Contractor shall make connections to existing manholes at the location and elevation shown on the plans and as verified in the field by the Contractor. Where new flow-through channels have to be cut in the existing manhole base, they shall be cut so that the resulting section is smooth and conforms to the intended shape. Deviation from form and grade shall not be greater than 1/4 inch. The channel surface shall be smoothed with epoxy mortar. The new VCP or PVC sewer pipe shall be firmly embedded in epoxy grout where it joins the existing manhole.

Payment for connections to existing manholes shall be included in the contract price paid for the various items of work wherein connections to existing manholes are required, and no additional allowance will be made therefore.

H. TEMPORARY HANDLING OF SEWAGE

Certain work in connection with tying into existing sewers and manholes, may require the temporary handling of sewage either by temporary bypass lines, pumping, bulkheading at low flows, or other means, to be approved by the District. Sewage so diverted shall be handled in a manner such that all sewage shall be contained and

properly disposed of so as not to create a public nuisance or health hazard. No extra compensation will be allowed in connection with the temporary diversion of sewage, and all such costs shall be included in the various contract unit prices.

Should the Contractor's operation result in fine(s) from other agency jurisdictions or result in the District's need for cleanup assistance, the payment of such fines and District assistance shall be the responsibility of the Contractor.

I. STEEL CASING

Steel casing shall be butt welded of sheets conforming to ASTM Specification A283/A283M and shall be constructed at the location shown on the plans or as directed by the District. Construction may be by open trench. If the Contractor elects to install the casing pipe by jacking, the provisions of these specifications for jacked steel casing pipe shall apply. However, payment shall be at the bid unit price for steel casing.

The casing pipe shall have a steel thickness not less than 1/4 inches. It shall be the Contractor's responsibility for selecting a size of casing, at or above the minimum specified, in order that the installation may be done with a sufficient degree of accuracy. Any and all increased costs resulting from the Contractor's use of steel casing pipe with greater diameter or thickness than the minimum specified, shall be borne by the Contractor.

Carrier pipe conforming to these specifications for the designated pipe shall be installed within the casing pipe to the lines and grades shown on the plans. The carrier pipe shall be supported on either Advanced Products & Systems Casing Spacers and Insulators, PSI Pipeline Seal and Insulator Inc., Cascade Waterworks Manufacturing Co., or equal. The ends of the steel casing shall be sealed with synthetic rubber end seals with stainless steel band straps with a weep hole installed at the lower end for drainage. The annular space between the steel casings and carrier pipe shall be left empty unless grouting is specified by the Engineer or on the plans.

Measurement for payment for casing pipe, excluding carrier pipe within said casing, shall be made along the centerline of the casing pipe between the limits shown on the plans and/or staked in the field.

Payment for steel casing pipe will be at the contract unit price per linear foot for steel casing pipe placed in accordance with these plans and specifications. Payment shall be full compensation for furnishing all labor, excavation, backfill, steel casing pipe, shoring, equipment, services, transportation, sand cement, concrete, all grouting operations described herein, and other appurtenant items of labor and material required to complete the work. The carrier pipe will be paid for under the bid item for pipe.

J. JACKED STEEL CASING

The Work of this section includes furnishing and installing jacked steel casing under roadways, railroads, storm drain facilities and other major pipelines, facilities or structures; including all labor, excavation, backfill, boring, jacking, steel casing pipe, shoring, equipment, services, transportation, sand cement, concrete, grouting, and other appurtenant items of labor and materials required to complete the work. Jacked steel casings and bore installations shall be installed only by a qualified company regularly engaged in this specialty work.

Jacked steel casing shall be butt welded of sheets conforming to ASTM Specification A283/A283M and shall be constructed in accordance with the provisions of Section 306-2 of the "Standard Specifications for Public Works Construction", Latest Edition, except as herein specified or Northwest Pipe Co. Perma Lok steel casing conforming to ASTM A 36, ASTM A 515, grade 60 or ASTM A 572, grade 42.

The casing pipe shall have a steel thickness not less than 3/8 inch. The casing pipe shall be a minimum of 20 feet in length to a maximum of 40 feet in length. Any and all increased costs resulting from the Contractor's use of steel casing pipe with greater diameter or thickness than the minimum specified shall be borne solely by the Contractor.

Steel casing pipe of the minimum size and thickness specified shall be installed in place by jacking and boring methods without the use of water or air at the locations shown on the plans, and to grades required to install carrier pipe. If the bore casing is equal to or exceeds 18-inches in diameter and the length of the bore exceeds 80-feet in length, the Contractor shall bore using a track machine, unless otherwise directed by the Authority.

Voids, if developed outside the casing and within limits for boring or jacking, from any cause such as removal of rocks encountered in boring, shall be filled with lean grout forced in under pressure by insertion of a grout pipe outside of the casing. The lean grout shall consist of one part of portland cement to not more than four parts of sand by volume, placed at low pressure. Grout pressure is to be controlled so as to avoid deformation of the casing and installed product pipeline. Sand for grout to be placed outside the casing shall be of such fineness that 100% will pass a No. 8 sieve and no less than 35% will pass a No. 50 sieve.

If the Contractor is not ready to place the pipe in the casing at the time of completion of boring and jacking operations, the ends shall be bulk headed, and the approach trenches in public streets shall be backfilled, temporary surfacing placed thereon, and the affected portion of the street reopened to traffic. For short (overnight) duration, the trenches may be securely covered with armored plates to allow for uninterrupted traffic.

The Contractor shall be responsible for maintaining the specified line and grade, and preventing settlement of overlying structures, or other damage due to the boring and

jacking operations. Except as otherwise indicated in this Section of the Specifications, the Contractor shall comply with the applicable provisions of latest adopted edition of the Standard Specifications for Public Works Construction (SSPWC) together with any latest Supplement Amendment. Additionally, jacked steel casing shall be in accordance with applicable ASTM Standards.

SUBMITTALS

1. The following shall be submitted:
 - (a) Submittals for jacking or boring operation shall be in accordance with SSPWC Section 306-2.1 unless indicated otherwise.
 - (b) The Contractor's attention is directed to the provisions for "Shoring and Bracing Drawings" in Section 6705 of the California Labor Code. If such plan varies from the shoring system standards established in the Construction Safety Orders of the State of California, such alternative systems plans shall be prepared by a civil or structural engineer licensed in the State of California.
 - (c) Casing installation schedules which include schedules of excavation, pipeline installation, and backfill operations.
 - (d) Material list including diameter, thickness, and class of steel casing.
 - (e) Detailed locations and sizes of all boring or jacking and receiving pits.
 - (f) Shop drawings of casing insulators (spacers) and end seals including manufactures' catalog information.
 - (g) Permits associated with the boring or jacking operations.
 - (h) Pressure concrete mix design and bracing plans to prevent the carrier pipe from shifting or floating in accordance with SSPWC Section 306-2.3.
 - (i) Submittal approval of boring operation plan shall occur prior to excavation of boring operation.

POTHOLING OF EXISTING UTILITIES

Contractor shall be required to pothole any existing underground utilities crossing the proposed jacked steel casing installation that may potentially interfere with the installation. Refer to Special Conditions.

PERMIT PROVISIONS AND REQUIREMENTS

1. Contractor shall be responsible for obtaining any required permits other than those indicated in the Special Conditions to be obtained by the Authority. Contractor shall comply and adhere to all permit requirements at no additional cost to the Owner.
2. Where Agency permit provisions differ from the specification requirements stated herein, the highest and most stringent standard or requirement shall govern; and Contractor shall construct the installation to said higher standard at no additional cost to the Authority.

CASING SPACERS

Casing isolators/spacers shall have a minimum 14 gauge steel band and where required, 10 gauge risers. The band, risers and connecting studs shall be welded and cleaned at the factory before the application of a fluidized bed fusion bonded PVC coating of between 10-16 mils thickness. The PVC coating shall provide good resistance to acids and alkalis and excellent resistance under ASTM B117 salt spray tests. The isolators/spacers shall have a flexible PVC inner liner of 0.09 inch thickness with a durometer "A" 85-90 hardness and a minimum 58,000 volt dielectric strength. The runners shall be high pressure molded glass reinforced polymer with a minimum compressive strength of 18,000 psi per ASTM D638. The runners shall be 2.0 inch in width and a minimum of 7.0 inches long for C8G-2 models and 11" for C12G-2 models (polyethylene runners are not an acceptable alternative). The runners shall be attached to the band or riser by 3/8" welded steel studs and lock nuts which shall be recessed far below the wearing surface on the runner. The recess shall be filled with a corrosion inhibiting filler. The band section shall be bolted together with cadmium plated studs, nuts and washers. End seals shall be made of synthetic rubber. Banding straps shall be made of stainless steel.

Products of the type indicated shall be made by one of the following:

1. Casing Spacers – Pipeline Seal and Insulator Inc. Model C12G-2, Advance Products & Systems Inc. Model S/12, or approved equal.
2. End Seals – Pipeline Seal and Insulator Inc. Model S, C or W, Advance Products & Systems Inc. Model AC or AW, or approved equal.

The Contractor shall give the District a minimum of three (3) days advance notice of the start of an excavation or boring operation. All work shall be performed in the presence of the District unless the District has granted prior approval to perform such work in its absence. All welding procedures used to fabricate steel casings shall be pre-qualified under the provisions of ANSI/AWS D1.1. Welding procedures shall be required for, but not necessarily limited to, longitudinal and

girth or special welds for pipe cylinders, casing joint welds, reinforcing plates and grout coupling connections. No exterior of interior joints of the carrier pipe shall have mortar grout applied over a seam until the seam has cooled. Exterior and interior joints of the carrier pipe shall be mortar coated and lined in the field.

INSTALLATION OF STEEL CASING

JACKING HEAD: A steel jacking head shall be fitted to the lead section of the casing in such a manner that it extends around the entire outer surface of the steel casing and projects at least 18 inches beyond the driving end of the casing. The jacking head shall not protrude more than 1/2 -inch outside of the outer casing surface. The head shall be securely anchored to prevent any wobble or alignment variation during the boring or jacking operations. To minimize voids outside the casing, excavation shall be carried out entirely within the jacking head and not in advance of the head. Excavated materials shall be removed from the casing as the boring or jacking operation progresses and no accumulation of excavated materials within the casing shall be permitted.

JACKING PIT: The excavations for the boring or jacking operations shall be adequately shored to safeguard existing substructures and surface improvements and to ensure against ground movement in the vicinity of the jack supports. Heavy guide timber, structural steel, or concrete cradles of sufficient length shall be provided to assure accurate control of boring or jacking alignment. The Contractor shall provide adequate space within the excavation to permit the insertion of the lengths of casing to be bored or jacked. Timbers and structural steel sections shall be anchored to ensure action of the jacks in line with the axis of the casing. A bearing block, consisting of a timber or structural steel framework, shall be constructed between the jacks and the end of the casing to provide uniform end bearing over the perimeter of the casing and distribute the jacking pressure evenly.

CONTROL OF ALIGNMENT AND GRADE: The Contractor shall control the application of the jacking pressure and excavation of materials ahead of the casing as it advances to prevent the casing from becoming earthbound or deviating from the required line and grade. The Contractor shall restrict the excavation of the materials to the least clearance necessary to prevent binding in order to avoid loss of ground and consequent settlement or possible damage to overlying structures.

GROUTING: Not used.

INSTALLATION: The installation of the casing shall be in accordance with the SSPWC Section 306-2.1 and subject to the approval of the agency having jurisdiction over the area containing the boring or jacking operations.

In the event that due to unforeseen field conditions and impediments that impedes on the Contractor's ability to proceed with the jacking and boring of the steel casing, the Contractor shall immediately alert the District and provide data and information to assist the District in their review. The Contractor shall also alert all agencies affected such as City, flood control districts, railroad, transportation districts, etc. Depending on the issues and length of time to resolve, Contractor shall secure the site, excavations pits and trenches, and maintain all traffic control and security to ensure safe passage of traffic, pedestrians, etc.

INSTALLATION OF CARRIER PIPE

JOINTS: All joints of the carrier pipe within the casing shall be in accordance with District Standards.

INSTALLATION OF PIPE: The end seals shall be pulled on (in case of pull on type of seals) and the casing spacers shall be installed over the carrier pipe at the proper location, in accordance with the casing spacers manufacturer's instructions. Care shall be taken not to damage the carrier pipe coating or the inner coating of casing pipe while installing the carrier pipe. The position of the runners in the carrier pipe and casing shall be as indicated and shall be uniform throughout the casing length. Line and grade of the carrier pipe shall be installed as specified on the plans and deviations shall not be permitted. Contractor shall be aware that during installation, rifling (rotating) of the carrier within the casing can occur and can be a cause of line and grade discrepancies. Take necessary measures to prevent rifling. Guides may be installed as necessary to prevent rifling (rotating) of the carrier pipe during installation.

TESTING OF THE CARRIER PIPE: Testing of the carrier pipe shall be completed prior to strapping the end seals.

END SEALS: After the carrier pipe has been tested, the end seals shall be strapped by stainless steel bands in accordance with the manufacturer's instructions.

CLOSING OF PITS: After equipment and excavated materials from the boring or jacking operations have been removed from the jacking pit, the Contractor shall prepare the bottom of the jacking pit as a pipe foundation. The Contractor shall remove all loose and disturbed materials below pipe grade to undisturbed earth and re-compact the material.

Measurement for payment for casing pipe excluding carrier pipe within said casing shall be made along the centerline of the casing pipe between the limits shown on the plans and/or staked in the field.

Payment for jacked steel casing pipe will be at the contract unit price per linear foot for jacked steel casing pipe placed in accordance with these plans and specifications. Payment shall be full compensation for furnishing all labor, excavation, backfill, boring, jacking, steel casing pipe, shoring*, equipment, services, transportation, sand cement, concrete, all grouting operations described herein, and other appurtenant items of labor and material required to complete the work. The water carrier pipe will be paid for under the bid item for pipe. The ends of the casing pipe shall be closed using an end seal as manufactured by Advanced Products and Systems, Inc. or District approved equal. Brick and mortar is not acceptable.

L. VIDEO INSPECTION

Upon successful completion of the final leakage test for the sewer including manhole vacuum testing, and after base rock placement and compaction is complete, the contractor shall notify the District that the pipeline system is ready for video inspection. Said notification shall be made at least five working days in advance of the actual video inspection date. The video inspection will be made by a video inspection company approved by the District and hired by the Contractor. Video inspection shall be made in the presence of the District's Representative. Prior to the video inspection, the Contractor shall be responsible to provide the following items:

1. Clean sewer pipelines free of all dirt, rock, debris, etc.
2. Water source with an adequate amount water, pipe, hose, etc. to place enough water in the pipelines to evaluate pipeline alignment "SAGS".
3. Driveable truck access to each manhole within the system to be videoed.
4. Provide all traffic control methods required.
5. Acceptable depth gauge.

Should any of the aforementioned items not be in compliance by the time the video inspection is to occur, the Contractor shall be subject to compensating the District for all costs incurred.

Full compensation to the Contractor for complying with the above requirements shall be considered as included in the contract lump sum provided for such work and no additional allowance will be made therefore.

* Shoring shall be by steel shield from top of bore pit excavation to bottom, unless otherwise directed by Engineer.

Upon completion of the video for the subject sewerlines, the video inspection company will provide the District with the DVD (video file format to be viewable on a standard DVD player/computer and/or as approved by the District) and a written report detailing the condition of the interior of the mainline and joints. Subsequent to review of the DVD and report by the District, the District will notify the Contractor that he may then proceed with completion of the project; or the District will provide a list of corrective measures that must occur prior to acceptance.

Should remedial activities be necessary, the reconstruction methodology shall be approved by the District prior to commencement of the work. Upon completion of the remedial construction, the contractor shall once again notify the District that the sewerlines are ready for a video inspection. The District reserves the right to re-video any portions of the sewer system they determine may have been affected by the reconstruction work activities. Further, all related costs including but not limited to reconstruction materials, labor, equipment, video inspection, District and other agency inspection, and administrative costs shall be borne by the contractor.

M. VIDEO INSPECTION COMPANY REQUIREMENTS

The Sewer CCTV inspection work must be completed by a certified National Association of Sewer Service Companies (NASSCO) Pipeline Assessment Certification Program (PACP) operator(s) using established PACP coding and observations. Current certification shall be provided to the District a minimum of ten (10) days prior to the time work is performed.

CCTV inspection shall be performed by a certified NASSCO PACP certified operator; certification to be presented at the time work is performed and shall be submitted with the report.

(Closed Circuit Television Inspection - CCTV)

1. Rotating lens camera with articulating head.
2. Scanning capabilities of 360°.
3. Operative in 100% humidity conditions.
4. Lighting for the camera shall minimize reflective glare.
5. Lighting and camera quality shall be suitable to provide clear, in focus picture of the entire periphery of the pipe for all conditions.
6. Camera focal distance shall be adjustable through a range from 6" to infinity.

7. Remote reading distance (footage) counter shall be accurate to one percent (1%) over the length of the particular section being inspected. **Provide depth gauge for SAG measurement acceptable to District.**
8. The camera, television monitor, and other components of the color video system shall be capable of producing a minimum of 350 line resolution.
9. Documentation consisting of a DVD (video file format to be viewable on a standard DVD player/computer and/or as approved by the District) and a written report detailing the condition of the mainline and joints shall be submitted to the District inspector immediately following the video inspection. Each disc shall be labeled with the project or subdivision name, number and pipe run numbers it contains. Each disc shall be delivered in a plastic case.
10. All video equipment used for domestic sewer systems shall be certified for domestic sewerline inspection only.
11. The CCTV camera operator shall stop at each defect, pipe joint, and televise the entire joint with the pan and tilt feature on the head of the camera, initially, in a complete counterclockwise direction followed by a complete clockwise direction. If a defect is found, the CCTV operator will “home up” the camera prior to defining the defect and determining its size and location. The CCTV operator will also stop and record any questionable item such as a stain, crack, paint mark, shadow found or character change in a pipe being inspected. In other words, the CCTV operator must stop, record and note anything questionable no matter how minor. The Engineer, as defined by ECSD Standard Specifications, not the CCTV operator, will decide if a questionable items is a “problem event” when that Engineer reviews the video inspection.

N. VACUUM TESTING OF MANHOLES

1. General

All manholes shall be vacuum tested unless otherwise waived in writing by the District. Vacuum testing shall be performed either pre or post backfilling in accordance with the criteria stated herein. In all cases vacuum testing shall be performed prior to video inspection.

Contractor shall be solely responsible for safe access to the manholes and all necessary safety measures required for the vacuum testing.

2. Pre versus Post Backfilling Test Criteria

- (a) All manholes with depths from rim to pipe flowline less than or equal to twelve (12) feet shall be vacuum tested prior to backfilling.
- (b) All manholes with depths greater than twelve (12) feet from rim to pipe flowline shall be vacuum test post backfilling.

3. Reference Standard

Unless otherwise modified herein, vacuum testing shall be in accordance with ASTM C1244-11.

4. Manhole Preparation

- (a) Plug and seal all lift holes.
- (b) Care shall be taken to affect a seal between the vacuum base and the manhole rim. Pipe plugs shall be secured to prevent movement while the vacuum is drawn.
- (c) All pipe entering the manhole shall be temporarily plugged, taking care to securely brace the pipes and plugs to prevent them from being drawn into manhole.

5. Basic Field Testing Procedure

- (a) The test head gauge shall be placed at the top of the manhole in accordance with the manufacturer's recommendations.
- (b) A vacuum of 10 inches of mercury shall be drawn on the manhole, the valve on the vacuum line of the test head closed, and the vacuum pump shut off. The time shall be measured for the vacuum to drop to 9 inches of mercury.
- (c) The manhole shall pass if the time for the vacuum reading to drop from 10 inches of mercury to 9 inches of mercury meets or exceeds the values indicated in the table in Section C of the Basic Specifications Paragraph 6 entitled "Minimum Test Times – Standard Manholes" in Section C of the Basic Specifications.
- (d) If the manhole fails the initial test, necessary repairs shall be made in accordance with a submitted plan and method approved by the District. The manhole shall then be re-tested until a

satisfactory test is obtained. All repairs shall be the sole responsibility of the Contractor.

6. Minimum Test Times – Standard Manholes

(a). Testing Criteria

Depth of Manhole (feet)	Minimum Test Times (sec.) Based on Diameter of Manhole (feet)		
	4' dia.	5' dia.	6' dia.
Up to 8'	20 sec.	26 sec.	33 sec.
10'	25 sec.	33 sec.	41 sec.
12'	30 sec.	39 sec.	49 sec.
14'	35 sec.	46 sec.	57 sec.
16'	40 sec.	52 sec.	67 sec.
18'	45 sec.	59 sec.	73 sec.
20'	50 sec.	65 sec.	81 sec.
22'	55 sec.	72 sec.	89 sec.
24'	59 sec.	79 sec.	97 sec.
26'	64 sec.	85 sec.	105 sec.
28'	69 sec.	91 sec.	113 sec.
30'+	74 sec.	98 sec.	121 sec.

For manholes deeper than thirty (30) feet or larger than six (6) feet in diameter contact District for specific requirements.

(b) Testing Form and Certification

Submit testing form to District for approval. Include the following as a minimum:

- Date of Test
- Project Description
- General Contractor
- Agent/Company Performing Test
- Specific Location, Including Station and Manhole Number
- Detailed Test Results
- Certification Signed by Testing Company

7. Inspection and Re-Testing

The Inspector shall be notified when the testing will be performed and by whom. The inspector shall witness testing to verify procedures are being followed correctly, and must be given at least 48 hours notice.

Retesting manholes more than once may result in additional inspection fees chargeable to the Contractor.

8. Approved Vacuum Testing Companies

Vacuum testing shall be performed by Old Castle Precast of Riverside, California or other qualified testing organization approved by the District. Submit qualified testing company along with suitable documentation if alternate is proposed.

O. SEWAGE SPILL CONTAINMENT PLAN AND SEWER BYPASS/PHASING PLAN

1. General

The provisions stated herein shall apply whenever:

- (a) Existing residential/commercial sewer laterals are specified or indicated on the drawings to be disconnected from the existing sewer line and reconnected to the new line.
- (b) An existing sewer main is to be removed and replaced with a new sewer main at or near the same location.

Under either of the two cases, flows from the residential/commercial customers shall be contained and bypassed so that service is not interrupted.

2. Sewage Spill Containment Plan and Sewer Bypass Phasing Plan

The Contractor shall generate, and submit to the District at the Pre-Construction Meeting, a "Sewage Spill Containment Plan and Sewer Bypass Phasing Plan" that details the general order of construction, complete with details of where, when, and how the Contractor plans to bypass the existing sewer lateral and mainline flows. Proposed sewer bypass shall only be utilized during normal working hours, and the existing sewer shall be put back into service each day. The temporary bypass will be allowed to operate overnight only with specific written approval by the District. Requests for overnight bypass shall be detailed in the submitted plan. Unless otherwise approved by the District, residential customers may have their service interrupted for no more than 8 hours. Contractor shall provide sanitary sewer services, in accordance with the Basic Specification, Section A, Paragraph E entitled "Sanitation", to residential customers (services for each home) during construction if their service will be interrupted. Sewer service for commercial customers

along the proposed alignment shall not be interrupted by construction. Contractor shall identify all commercial customers in the plan.

3. Sewer Bypass

The Contractor shall arrange for, furnish, install and maintain all required bypass equipment, pumps, generators, piping, fittings, connections, etc. required to bypass the existing sewer flows during construction. All bypass equipment shall be installed and be made immediately operable to provide complete redundancy (primary and backup systems) to handle peak flow. Contractor shall provide for personnel to continuously monitor the bypass system.

4. Existing Sewer Flows

Refer to the Special Requirements section of the specifications for existing sewer flows. If information is not provided in Special Requirements, contact the District.

SECTION VI

STANDARD DRAWINGS

SECTION VI

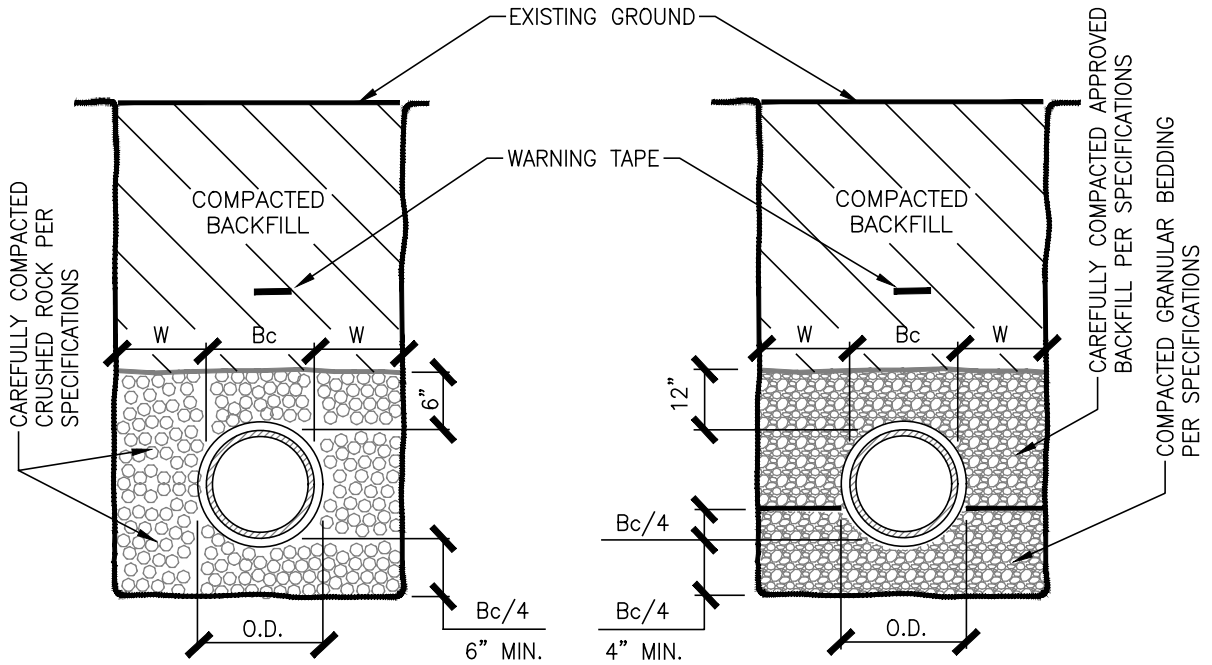
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CLASS "B-2"
ROCK ENCASEMENT

CLASS "C"
FOR DUCTILE IRON PIPE ONLY

"B-2" NOTE:

FOR INSTALLATIONS OF VCP THAT EXCEED THE LOADING CAPACITIES OF CLASS "B-2" BEDDING, THE DISTRICT MAY REQUIRE THE USE OF DIP THAT CONFORMS TO THE DISTRICT'S SPECIFICATIONS FOR SEWER PIPE.

NOTES:

1. ALL BACKFILL SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS.
2. O.D. = OUTSIDE DIAMETER OF BELL
3. Bc = OUTSIDE DIAMETER OF PIPE BARREL
4. W = 10 INCHES MAXIMUM
5. CONCRETE SHALL BE ALLOWED TO DEVELOP SUFFICIENT STRENGTH BEFORE BACKFILLING.
6. ENCASE CRUSHED ROCK WITH APPROVED FILTER FABRIC WHEN ENCOUNTERING WATER.
7. WARNING TAPE "CAUTION BURIED SEWER BELOW" BY NORTHTOWN COMPANY
8. WARNING TAPE PLACED 3' BELOW GROUND ALONG PIPELINE ALIGNMENT.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
DATE: NOVEMBER, 2022

GENERAL BEDDING DETAILS

DRAWING NO.

S-1

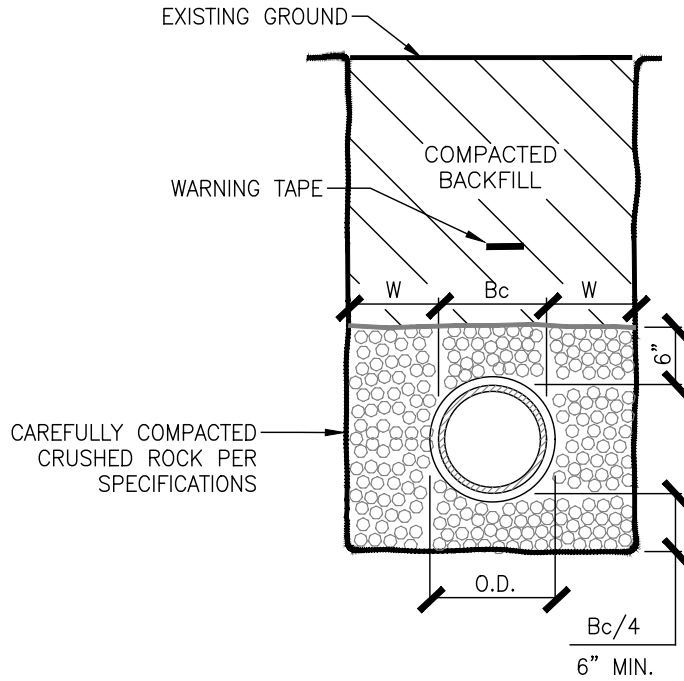
REV. APPROVED BY: *Sinnaro Yos*
Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
CONSULTING ENGINEERS

RIVERSIDE

CALIFORNIA

W.O. 21-0230



DEPTH "D"	
FOR PIPE DEPTH < 14'	"D" = 6"
FOR PIPE DEPTH > 14'	"D" = 12"

CLASS "1"

DEPTH > 14 FEET
PVC SDR 26 ONLY

NOTES:

1. ALL BACKFILL SHALL BE PLACED IN ACCORDANCE WITH THE SPECIFICATIONS.
2. O.D. = OUTSIDE DIAMETER OF BELL
3. Bc = OUTSIDE DIAMETER OF PIPE BARREL
4. WT = TRENCH WIDTH MEASURED AT TOP OF PIPE
5. W = 10 INCHES MAXIMUM
6. ENCASE CRUSHED ROCK WITH APPROVED FILTER FABRIC WHEN ENCOUNTERING GROUND WATER.
7. WARNING TAPE "CAUTION BURIED SEWER BELOW" BY NORTHTOWN COMPANY
8. WARNING TAPE PLACED 3' BELOW GROUND ALONG PIPELINE ALIGNMENT.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
DATE: NOVEMBER, 2022

**GENERAL BEDDING DETAILS
FLEXIBLE GRAVITY PIPE**

DRAWING NO.
S-1A

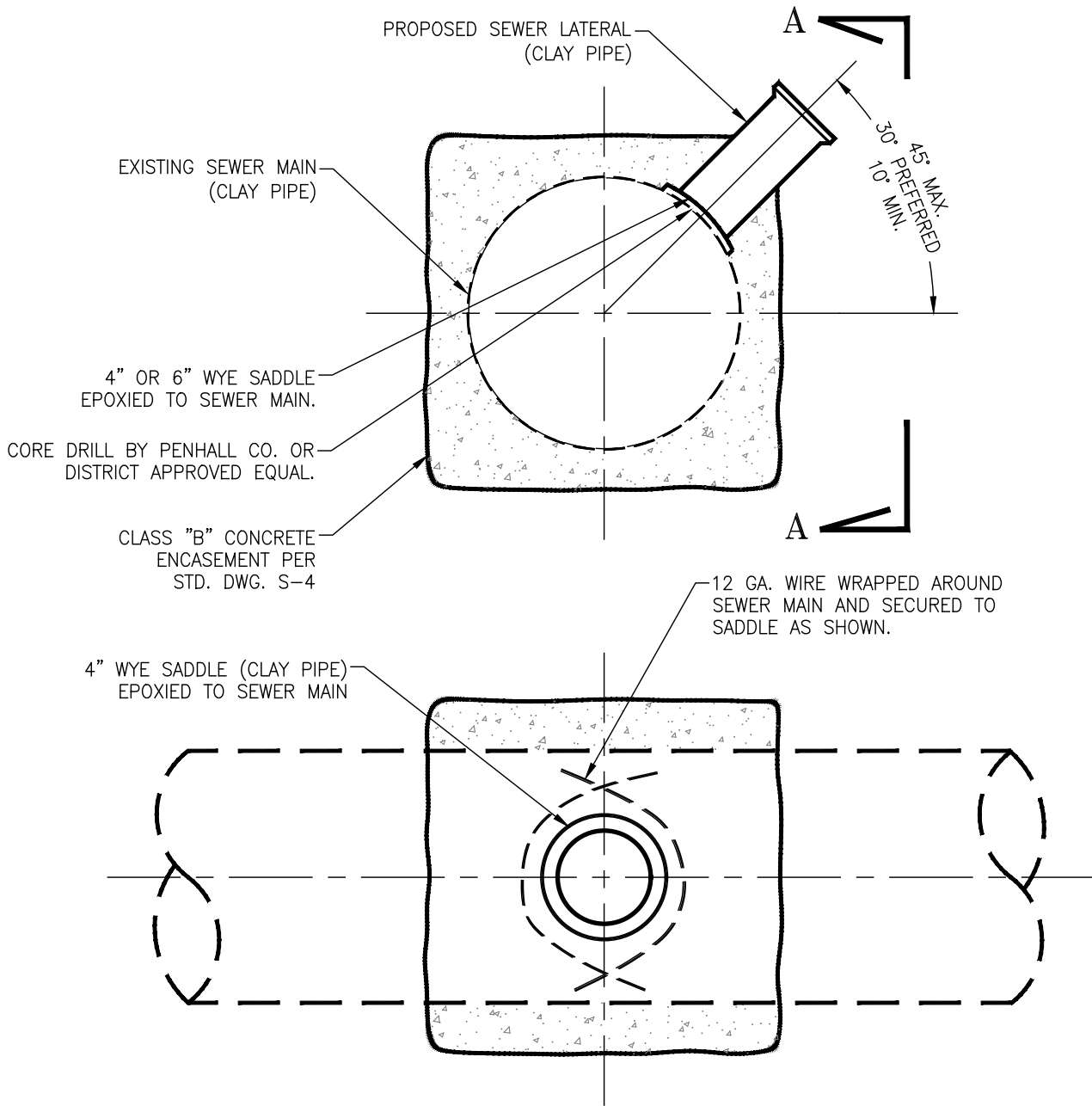
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ALBERT A. WEBB ASSOCIATES
CONSULTING ENGINEERS

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W.O. 21-0230



NOTES:

1. NO TAPPING OF EXISTING SEWER MAINS WILL BE ALLOWED WITHOUT SPECIFIC APPROVAL BY DISTRICT. IF APPROVAL IS GRANTED, WORK SHALL BE PERFORMED UNDER CONTINUOUS DISTRICT INSPECTION.
2. MAXIMUM SEWER MAIN SIZE FOR TAPPING SHALL BE 15" DIA., UNLESS OTHERWISE APPROVED BY DISTRICT.
3. TYPE AND MANUFACTURER OF EPOXY TO BE APPROVED BY DISTRICT.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
DATE: NOVEMBER, 2022

SEWER LATERAL CONNECTION TO EXISTING MAIN

DRAWING NO.

S-2

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CONSULTING ENGINEERS

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PVC SEWER LATERAL, ROTATED FOR CLARITY,
SEE NOTE 3 FOR INSTALLATION ANGLE

FERNCO FLEXIBLE TAP SADDLE

CLASS "B" CONCRETE
ENCASEMENT PER STD.
DWG. S-4

"SLIP-LOCK" CLAMPS OF
300 SERIES STAINLESS
STEEL

CORE DRILL BY
PENHALL CO. OR
DISTRICT APPROVED
EQUAL

EXISTING SEWER
FLOW

EX. VCP SEWER PIPE

NOTES:

1. NO TAPPING OF EXISTING SEWER MAINS WILL BE ALLOWED WITHOUT SPECIFIC APPROVAL BY DISTRICT. IF APPROVAL IS GRANTED, WORK SHALL BE PERFORMED UNDER CONTINUOUS DISTRICT INSPECTION.
2. MAXIMUM SEWER MAIN SIZE FOR TAPPING SHALL BE 15" DIA., UNLESS OTHERWISE APPROVED BY DISTRICT.
3. REFER TO ECSD STD. DWG NO. S-5 FOR ROTATION ANGLE OF WYE.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE

DATE: NOVEMBER, 2022

**PVC SEWER LATERAL CONNECTION
TO EXISTING VCP MAIN**

DRAWING NO.

S-2A

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Sinnaro Yos, P.E. 68607

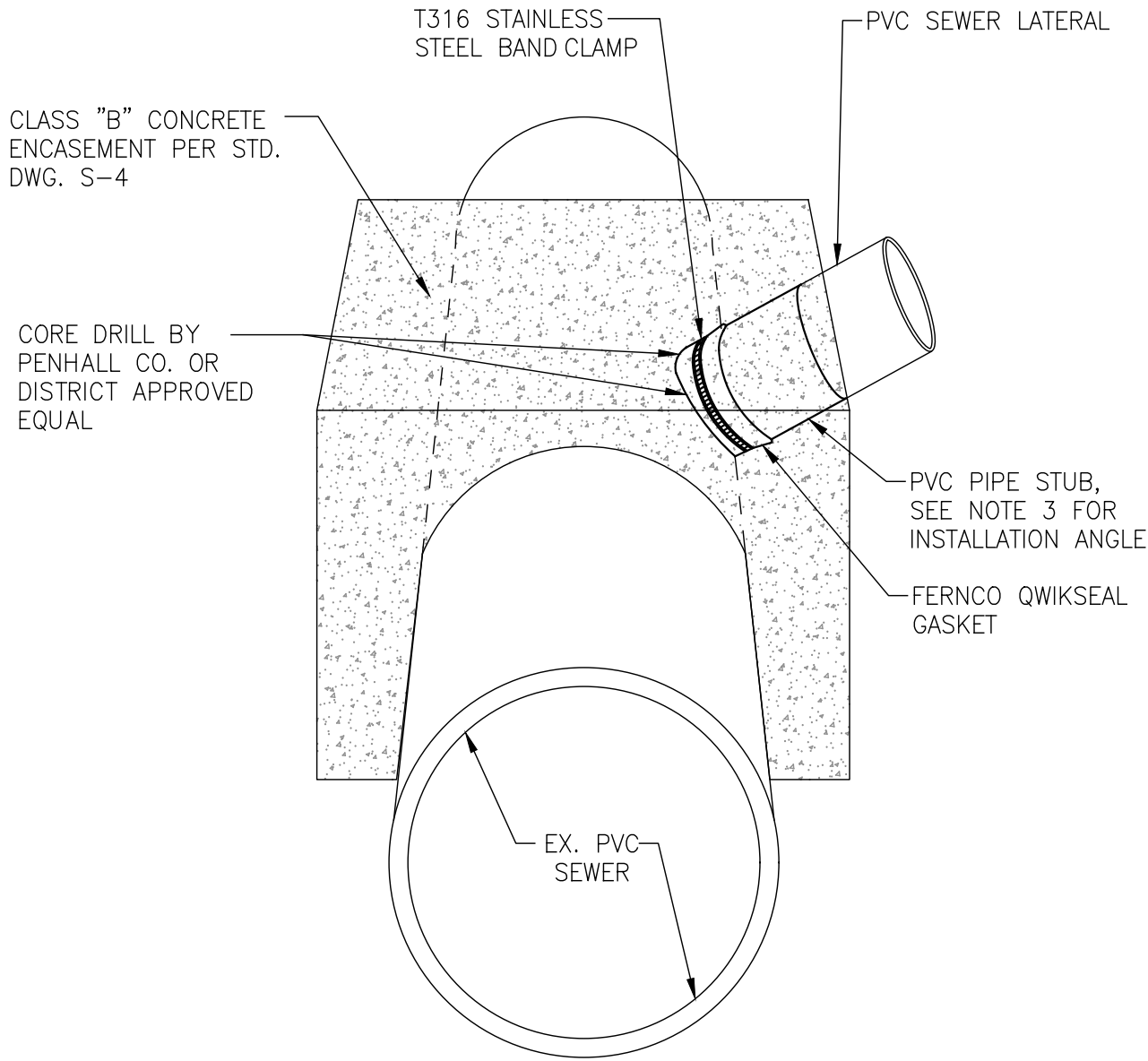
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CONSULTING ENGINEERS

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REV.



NOTES:

1. NO TAPPING OF EXISTING SEWER MAINS WILL BE ALLOWED WITHOUT SPECIFIC APPROVAL BY DISTRICT. IF APPROVAL IS GRANTED, WORK SHALL BE PERFORMED UNDER CONTINUOUS DISTRICT INSPECTION.
2. MAXIMUM SEWER MAIN SIZE FOR TAPPING SHALL BE 15" DIA., UNLESS OTHERWISE APPROVED BY DISTRICT.
3. REFER TO ECSD STD. DWG NO. S-5 FOR ROTATION ANGLE OF WYE.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
 DATE: NOVEMBER, 2022

**PVC SEWER LATERAL CONNECTION
 TO EXISTING PVC MAIN**

DRAWING NO.

S-2B

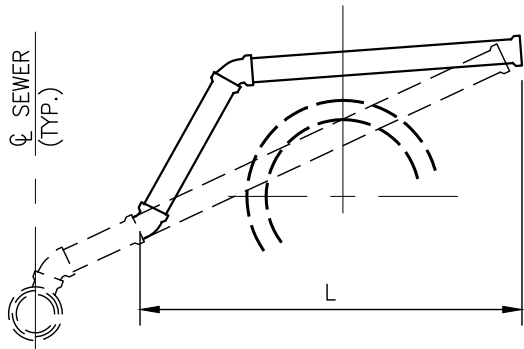
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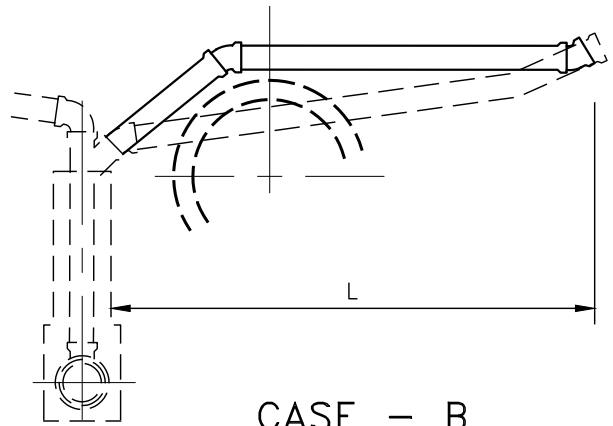
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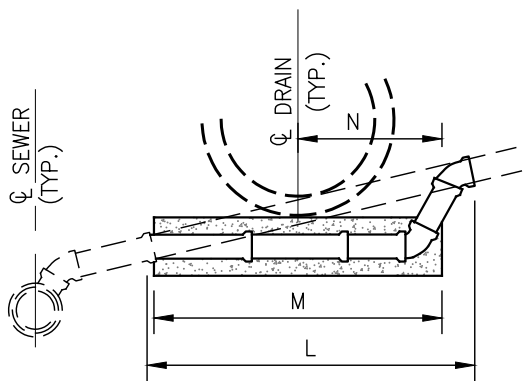
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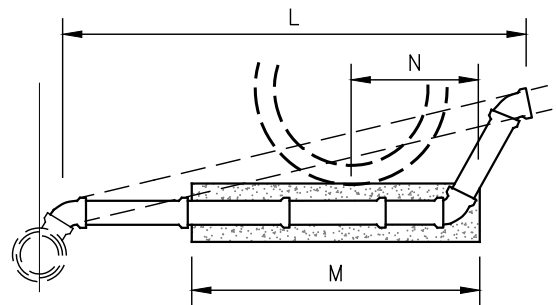
CASE - A



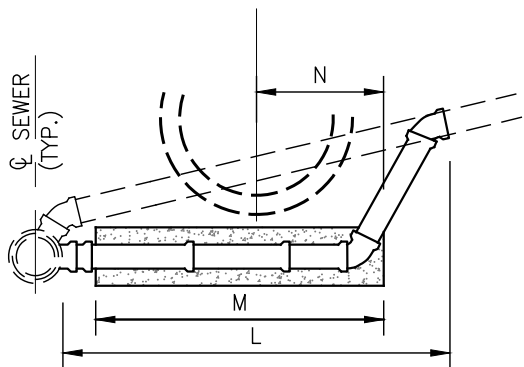
CASE - B



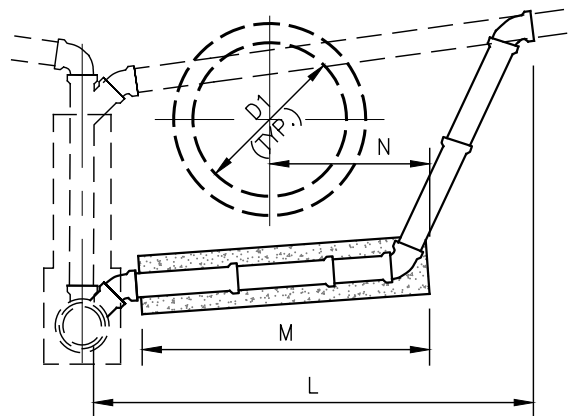
CASE - C



CASE - D

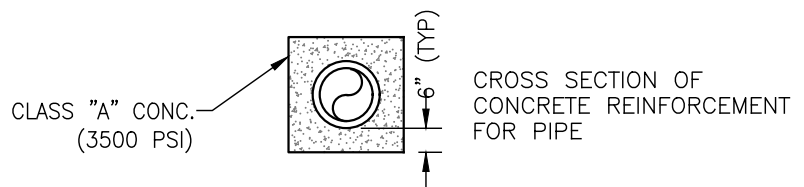


CASE - E



CASE - F

SEE SHEET 2 OF 2 FOR
NOTES AND DESCRIPTION
OF CASES



EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
DATE: NOVEMBER, 2022

REMODELING DETAILS FOR SEWER LATERALS

DRAWING NO.

S-3

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Sinnaro Yos, P.E. 68607

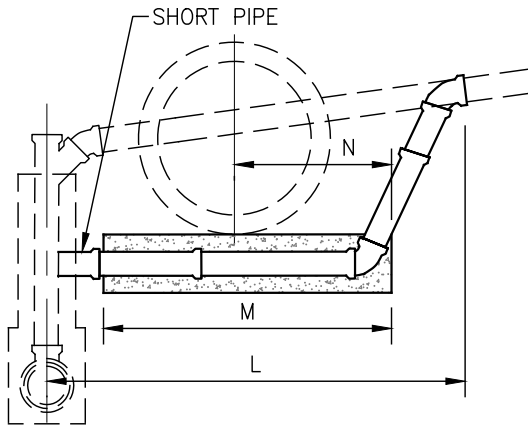
ALBERT A. WEBB ASSOCIATES
CONSULTING ENGINEERS

SHEET 1 OF 2

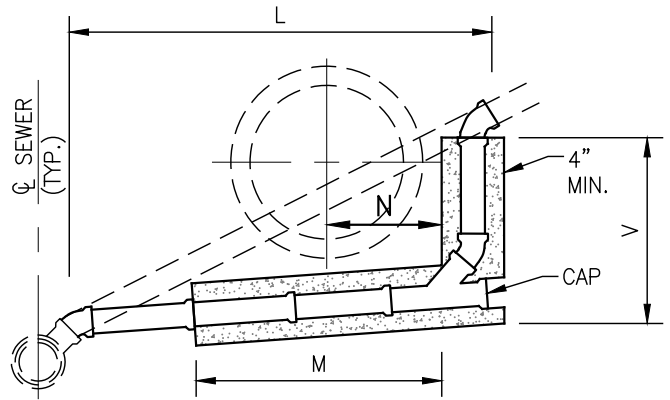
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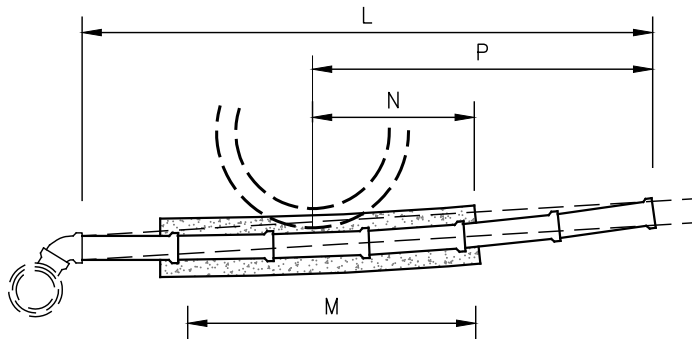
W.O. 21-0230



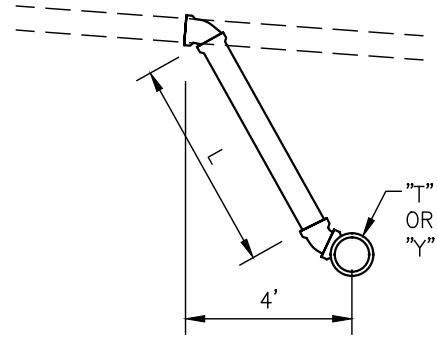
CASE - G



CASE - H



CASE - K



CASE - R

NOTES:

1. THESE DETAILS DO NOT APPLY TO CONFLICTS BETWEEN SEWER LATERALS AND WATERLINES.
2. EXISTING PIPES ARE INDICATED BY BROKEN LINES.
3. PIPES TO BE CONSTRUCTED ARE INDICATED BY SOLID LINES.
4. ALL PIPE DIAMETERS SHALL MATCH EXISTING LATERAL.
5. ALL BENDS SHALL BE 1/8 BENDS UNLESS SPECIFIED OTHERWISE.
6. CONCRETE REINFORCEMENT, CROSS SECTION SHOWN ON SHEET 1, SHALL BE USED ON ALL PIPES TO BE CONSTRUCTED UNDER STORM DRAIN, TOP PORTION WITHIN 1" OF STORM DRAIN TO BE OMITTED.
7. DIMENSIONS:
 L - IS SPECIFIED ON PLAN AS THE AVERAGE TOTAL LENGTH.
 M - (d,+ 24") LESS ENOUGH TO AVOID A FRACTION OF A FOOT.
 N - 1/2 M, EXCEPT WHERE SPECIFIED OTHERWISE ON PLAN.
 P - (CASE K) IS SPECIFIED WHERE L DOES NOT EXTEND TO THE BEND.
 V - (CASE H) IS SPECIFIED TO THE NEAREST FOOT AND IN SUMMARY IS ITEMIZED AS CONCRETE REINFORCEMENT FOR 6" PIPE.
8. NEW CONNECTION TO MAIN LINE SHALL CONFORM TO STD. DWG. S-2.

CASES:

- A. ABOVE DRAIN TO HOUSE CONNECTION-SPECIALS REQUIRED: 2 1/8 BENDS.
- B. ABOVE DRAIN TO CHIMNEY - 2 1/8 BENDS.
- C. BELOW DRAIN TO HOUSE CONNECTION-2 1/8 BENDS.
- D. BELOW DRAIN TO "Y" - 3 1/8 BENDS.
- E. BELOW DRAIN TO FLAT SADDLE - 3 1/8 BENDS, 1 SADDLE.
- F. BELOW DRAIN TO SADDLE - 3 1/8 BENDS, 1 SADDLE.
- G. BELOW DRAIN TO CHIMNEY - 2 1/8 BENDS.
- H. BELOW DRAIN TO "Y" - 3 1/8 BENDS, 1 "Y".
- K. BELOW DRAIN TO HOUSE CONNECTION, SLOPE SLIGHTLY MODIFIED.
- R. CONNECTION WITH NEW SEWER - 2 1/8 BENDS WITH "Y" - 14" 1/8 BEND WITH "T".

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
 DATE: NOVEMBER, 2022

REMODELING DETAILS FOR SEWER LATERALS

DRAWING NO.

S-3

APPROVED BY:

 Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
 CONSULTING ENGINEERS

SHEET 2 OF 2

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CALIFORNIA

W.O. 21-0230

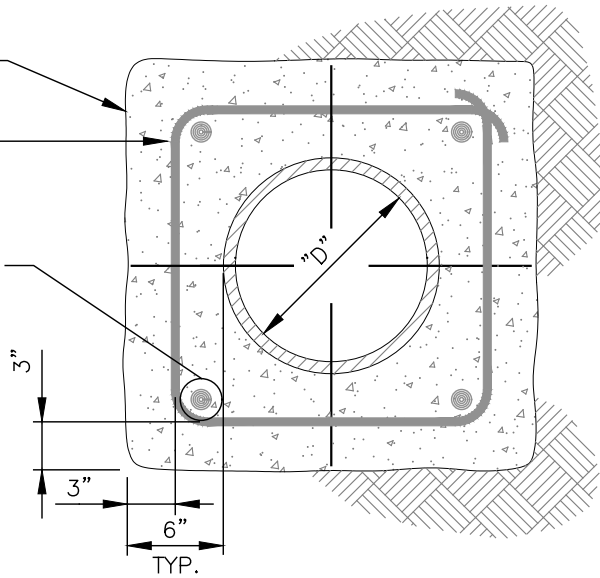
REV.

CLASS "A" CONCRETE
(3000 PSI)

NO. 4 TIE BAR
24" O.C. MAX.

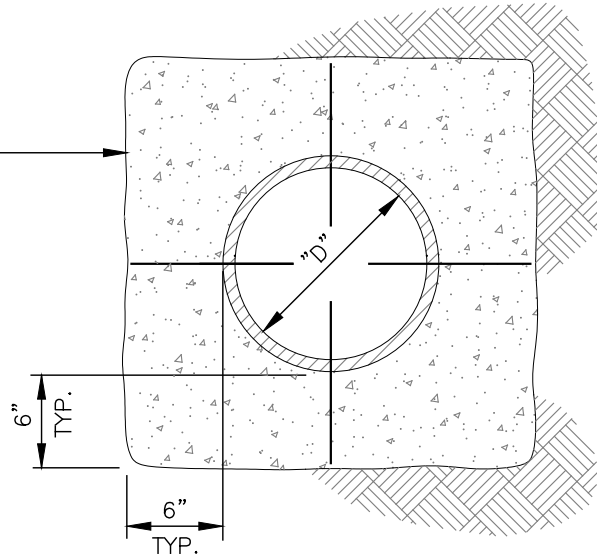
*NO. 4 BAR LONGITUDINAL
(TYP. OF 4)

*NOTE:
USE (8) NO. 4 LONGITUDINAL
BARS EQUALLY SPACED FOR
PIPES LARGER THAN 15"Ø



REINFORCED CONCRETE ENCASEMENT

CLASS "B" CONCRETE
(2500 PSI)



CLASS "B" CONCRETE ENCASEMENT

NOTES:

1. ALL REBARS SHALL BE FABRICATED AND PLACED IN POSITION PER A.C.I. SPECIFICATIONS.
2. PROVIDE FLEXIBLE JOINTS AT EACH END OF CONCRETE ENCASEMENT, WITHIN 12" FROM EACH END.
3. EXPANSION JOINTS SHALL BE CONSTRUCTED AT EVERY 50'± INTERVAL FOR THE CONCRETE ENCASEMENT: EACH JOINT SHALL COINCIDE WITH THE BELL AND SPIGOT JOINT OF THE PIPE.
4. CONTRACTOR SHALL TAKE ANY PRECAUTIONARY MEASURES NECESSARY TO PREVENT PIPE FROM FLOTATION.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE

DATE: NOVEMBER, 2022

TYPICAL CONCRETE ENCASEMENT DETAIL

DRAWING NO.

S-4

REV.

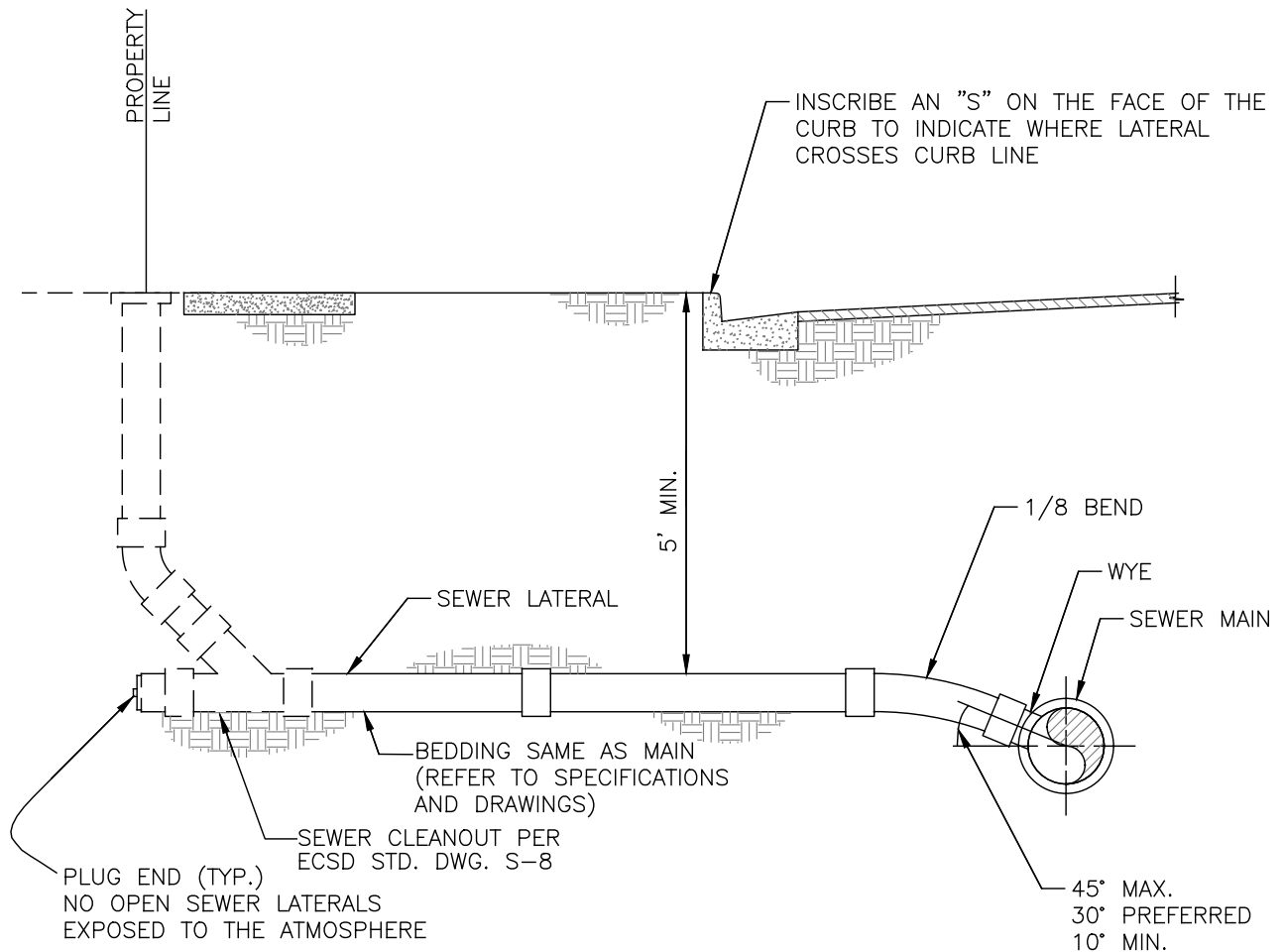
APPROVED BY:
Sinnaro Yos
Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
CONSULTING ENGINEERS

RIVERSIDE

CALIFORNIA

W.O. 21-0230



NOTES:

1. 4" PIPE FOR SINGLE DWELLINGS, 6" MIN. FOR ALL OTHER LATERALS.
2. LATERAL LOCATIONS SHALL BE MEASURED AT RIGHT ANGLES TO STREET CENTERLINE FROM THE CENTERLINE OF THE NEAREST DOWNSTREAM MANHOLE COVER.
3. WHENEVER DEPTH OF COVER OVER LATERAL IS LESS THAN 4'-0", SPECIAL BEDDING OR CONCRETE CRADLE SHALL BE USED.
4. CONTRACTOR SHALL REFERENCE EACH LATERAL IN THE FIELD WITH A SURFACE MARKER. MARKER SHALL BE METAL STAKE PLACED AT TIME OF BACKFILLING. MARKER SHALL BE VERTICAL AND CUT OFF 6" ABOVE GRADE.
5. SEWER LATERALS FOR ALL LOTS WHICH HAVE PAD ELEVATIONS AT OR BELOW STREET GRADE SHALL BE CONSTRUCTED AT 2% SLOPE. IN NO CASE SHALL ANY SEWER LATERAL BE CONSTRUCTED AT LESS THAN 2% SLOPE UNLESS OTHERWISE SHOWN ON PLANS.
6. SEWER PLUGS TO BE INSTALLED INTO LATERAL STUBOUTS AND INFLATED WHILE MAKING HOUSE CONNECTIONS TO THE SEWER MAIN. CONNECTIONS TO BE MADE WITH DISTRICT INSPECTOR PRESENT.
7. MANHOLES PER DISTRICT STANDARD DRAWING NO. S-7 SHALL BE PROVIDED AT THE STREET RIGHT-OF-WAY LINE AND THE CONNECTION TO THE SEWER MAIN FOR ALL LATERALS 6" IN DIAMETER AND LARGER.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
 DATE: NOVEMBER, 2022

TYPICAL SEWER LATERAL

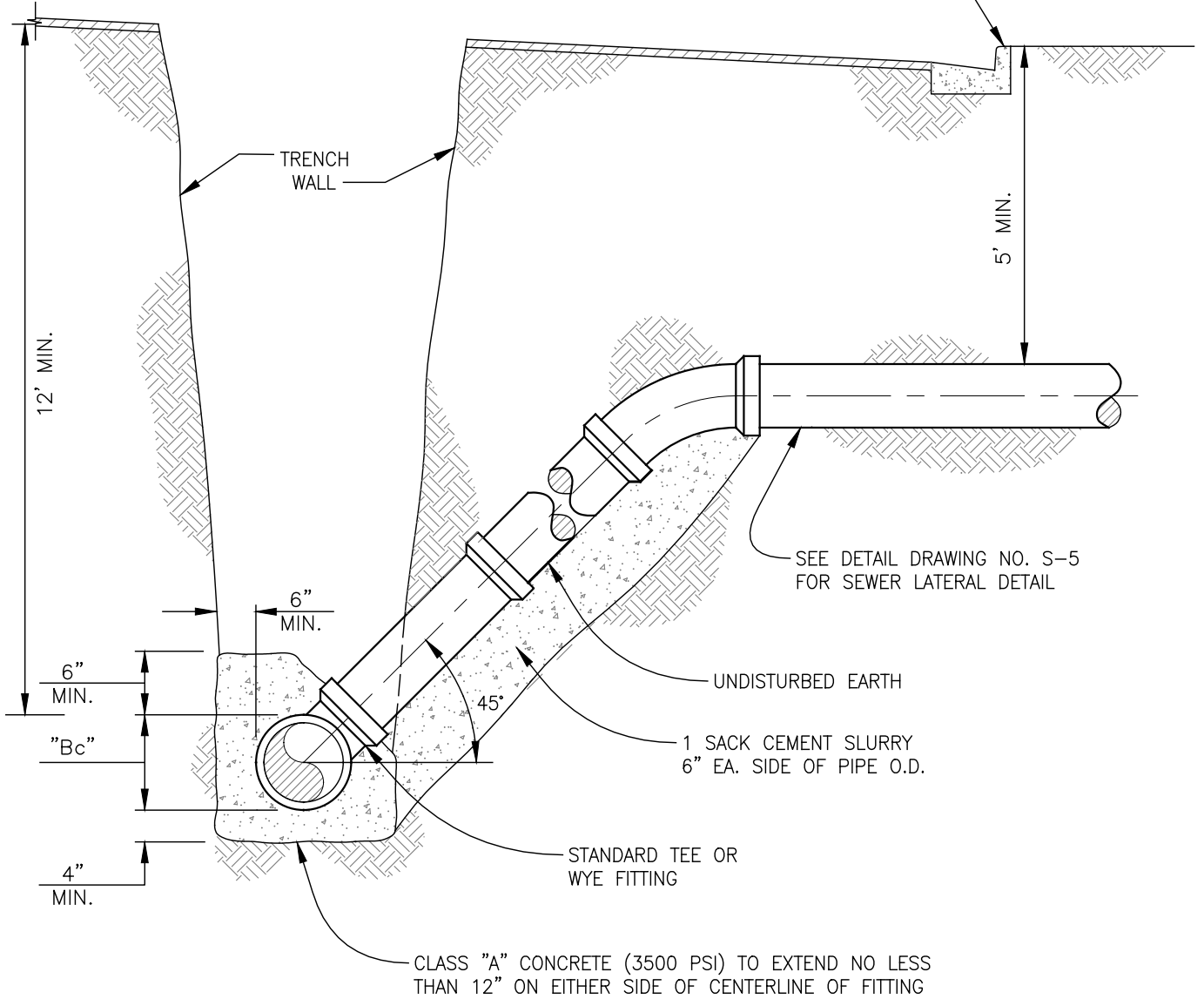
DRAWING NO.
S-5

REV. APPROVED BY:
Sinnaro Yos
 Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
 CONSULTING ENGINEERS
 RIVERSIDE CALIFORNIA

W.O. 21-0230

INSCRIBE AN "S" ON FACE OF THE CURB TO INDICATE WHERE LATERAL CROSSES CURB LINE



Bc = OUTSIDE DIAMETER OF PIPE BARREL.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
 DATE: NOVEMBER, 2022

DEEP LATERAL

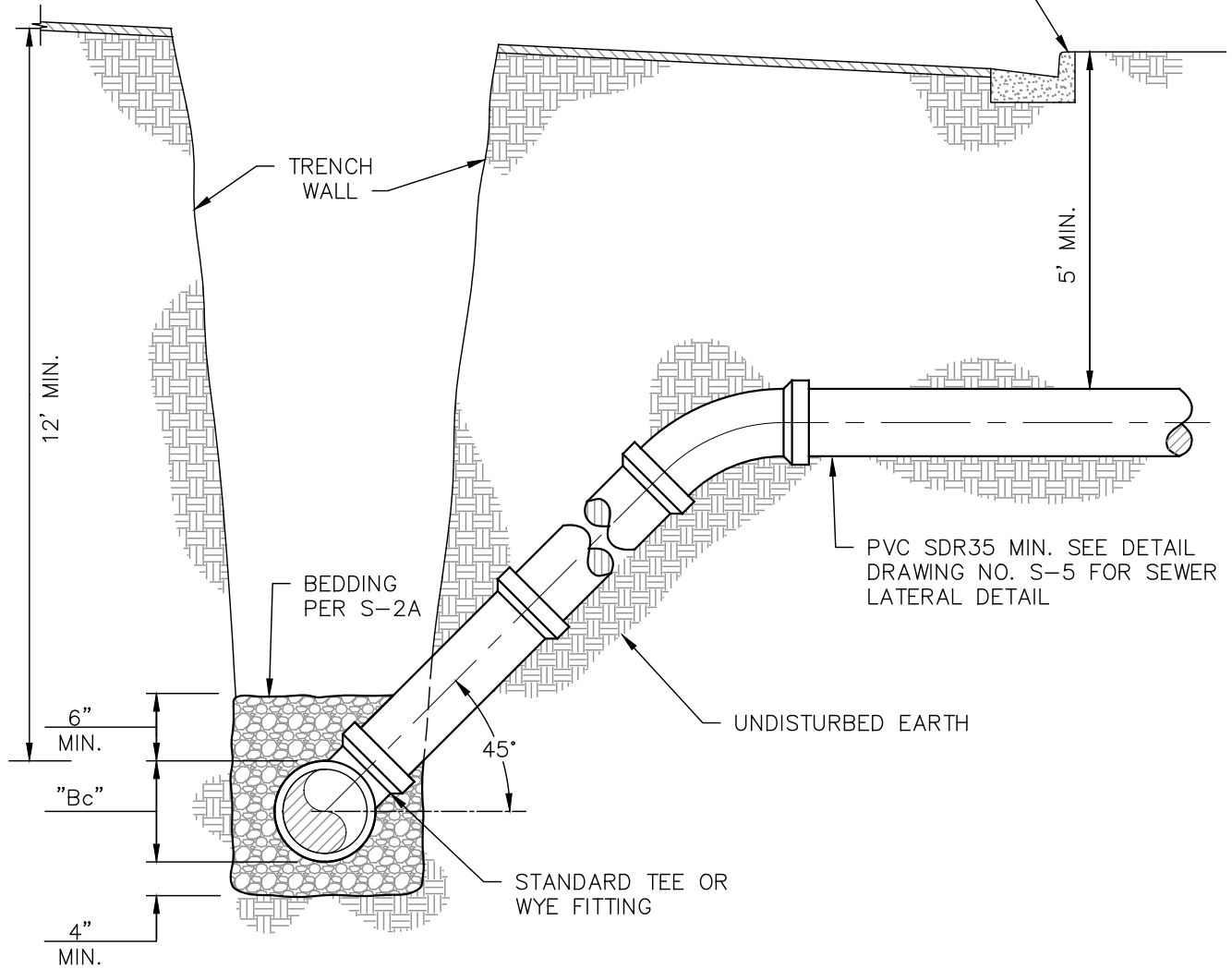
DRAWING NO.
S-6

REV. APPROVED BY: *Sinnaro Yos*
 Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
 CONSULTING ENGINEERS
 RIVERSIDE CALIFORNIA

W.O. 21-0230

INSCRIBE AN "S" ON FACE OF THE CURB TO INDICATE WHERE LATERAL CROSSES CURB LINE



Bc = OUTSIDE DIAMETER OF PIPE BARREL.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
 DATE: NOVEMBER, 2022

DEEP LATERAL FLEXIBLE GRAVITY PIPE

DRAWING NO.

S-6A

REV. APPROVED BY: *Sinnaro Yos*
 Sinnaro Yos, P.E. 68607

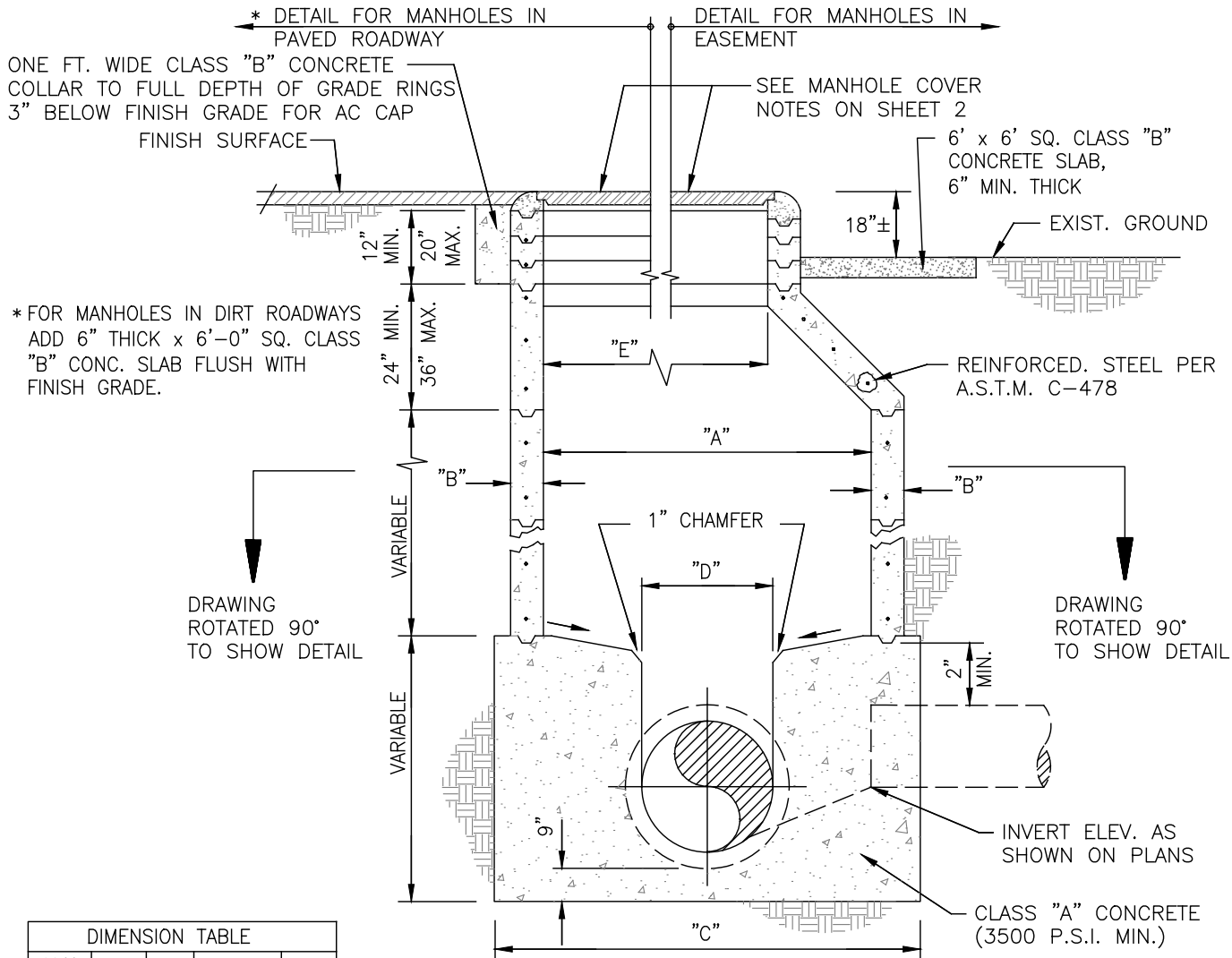
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CALIFORNIA

W.O. 21-0230

FRAME & COVER SETTING CONDITIONS

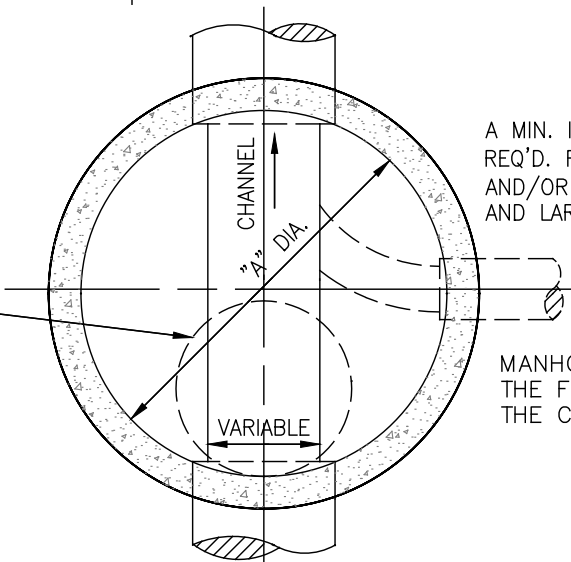


* FOR MANHOLES IN DIRT ROADWAYS ADD 6" THICK x 6'-0" SQ. CLASS "B" CONC. SLAB FLUSH WITH FINISH GRADE.

DRAWING ROTATED 90° TO SHOW DETAIL

DRAWING ROTATED 90° TO SHOW DETAIL

DIMENSION TABLE				
M.H. DIA.	A	B	C	E
4'	48"	6"	5'-6"	30"
5'	60"	6"	6'-6"	30"



A MIN. INSIDE DIA. OF 60" SHALL BE REQ'D. FOR PIPELINES DEEPER THAN 15' AND/OR FOR SEWER DIAMETERS 15 INCH AND LARGER

ALL MANHOLE TOPS SHALL BE INSTALLED WITH MANHOLE COVER LOCATED OPPOSITE THE DOWNSTREAM SIDE, EXCEPT AS OTHERWISE NOTED.

MANHOLE COVERS SHALL HAVE THE FOLLOWING WRITING ON THE CENTER OF THE COVER :
ECSD
SEWER

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
DATE: NOVEMBER, 2022

PRECAST CONCRETE MANHOLE

DRAWING NO.
S-7

REV. APPROVED BY: *Sinnaro Yos*
Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
CONSULTING ENGINEERS

RIVERSIDE

CALIFORNIA

SHEET 1 OF 2

W.O. 21-0230

NOTES:

1. ALL SECTIONS TO BE WASHED TO REMOVE ANY LOOSE MATERIAL. PRECAST MANHOLE SECTIONS AND GRADE RINGS SHALL BE SEALED WITH CS-102B BUTYL/BITUMEN BLENDED SEALANT AS MANUFACTURED BY CONSEAL OF NEW CARLISLE, OHIO OR DISTRICT APPROVED EQUAL TO FORM WATERTIGHT JOINTS.
2. CONCRETE FOR MANHOLE SECTIONS SHALL BE 3,500 P.S.I. MIN. USING TYPE V CEMENT.
3. PROVIDE REPAIR BAND COUPLING WITH ADJUSTABLE S.S. SHEAR RING JOINT IN ALL SEWER PIPES OUTSIDE OF MANHOLE BUT WITHIN 12" OF CONCRETE BASE.
4. WHEN INSTALLING REINFORCED CONCRETE GRADE RING(S) 3"-6" THE GRADE RINGS MUST BE CLEAN AND ANCHORED TO BOTH THE FRAME AND GRADE RING(S) OR CONE WITH A SUITABLE EPOXY OR OTHER METHOD AS APPROVED BY THE DISTRICT. INTERIOR OF GRADE RINGS SHALL BE SMOOTHLY MORTARED.
5. MORTAR AROUND AND UNDER FRAME SHALL BE CURED WITH A PIGMENTED CURING COMPOUND MEETING THE REQUIREMENTS OF SECTION 90-7 OF STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS, 2006 EDITION.
6. FOR PVC CONNECTIONS TO EXISTING AND NEW PRECAST REINFORCED CONCRETE MANHOLES. A HOLE SPECIFIC TO THE NEW PIPE'S O.D. DIA. SHALL BE CORED INTO THE CONCRETE MANHOLE WALL TO RECEIVE THE PIPE. A KOR-N-SEAL BOOT OR ENGINEER APPROVED EQUAL SHALL BE CLAMPED INTO THE CORED HOLE AND USED TO MAKE THE CONNECTION.
7. SHELF AND GROOVE SHALL BE FORMED MONOLITHICALLY WITH THE MANHOLE BASE. CHANNELS TO BE SMOOTH FINISH.

MANHOLE COVER NOTES:

1. MANHOLE FRAME AND COVER ALHAMBRA FDY. CO. TYPE A-1270 (24"), A-1252 (30"), A-1325 (36") OR APPROVED EQUAL. APPLICATION - IN STREETS WHERE SECURITY OR FLOODING IS NOT A DISTRICT CONCERN.
2. WHEN SPECIFIED: GMI SERIES - COMPOSITE MANHOLE COVER AND FRAME, (24") 2600, (30") 3200 AND (36") 3800 WITH FOUR (4) TITUS TWISTLIFT STAINLESS STEEL LOCKS, PER COVER. "NOTE" AFTER SETTING A COMPOSITE FRAME IN PLACE AND PRIOR TO POURING THE CONCRETE COLLAR AND/OR CONCRETE SLAB, INSTALL ONE (1) #4 REBAR SHAPED INTO A FULL CIRCLE THREE (3") INCHES LARGER IN O.D. THAN THE COMPOSITE FRAME. AFTER FORMING THE #4 REBAR CIRCLE, IT SHALL THAN BE SET TO THREE (3") INCHES BELOW THE FRAME RIM ELEVATION THEN ENCAPSULATED IN THE CONCRETE COLLAR AND/OR CONCRETE SLAB.
3. CAST "ECSO SEWER" ON ALL MANHOLE COVERS.

SPECIAL MANHOLE COVER CONDITIONS:

1. FOR MANHOLES IN EASEMENTS, UNPAVED AREAS, OR ANY AREA WHERE SECURITY IS A DISTRICT CONCERN BUT WATER INFLOW IS NOT AN ISSUE USE ALHAMBRA FDY. A-1176 OR APPROVED EQUAL.
2. FOR MANHOLES IN EASEMENTS, UNPAVED AREAS, STREET OR ANY AREA WHERE WATER INFLOW IS A POTENTIAL ISSUE AND/OR WHERE SECURITY IS A DISTRICT CONCERN USE ALHAMBRA FDY. A-1250B WITH LOCKING DEVICE OR APPROVED EQUAL.

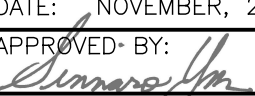
EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
 DATE: NOVEMBER, 2022

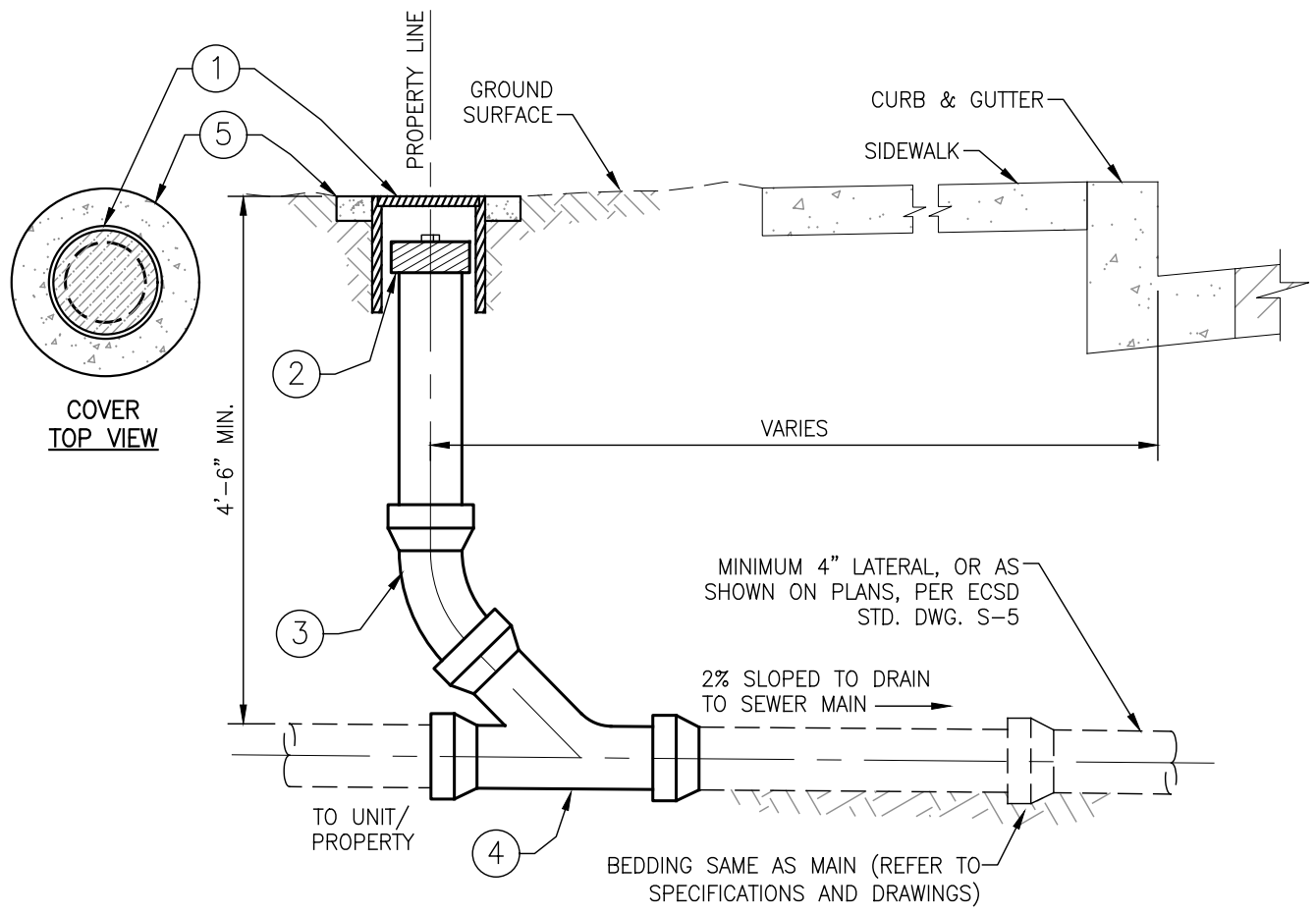
PRECAST CONCRETE MANHOLE

DRAWING NO.
S-7
 SHEET 2 OF 2
 W.O. 21-0230

REV.

APPROVED BY:

 Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
 CONSULTING ENGINEERS
 RIVERSIDE CALIFORNIA



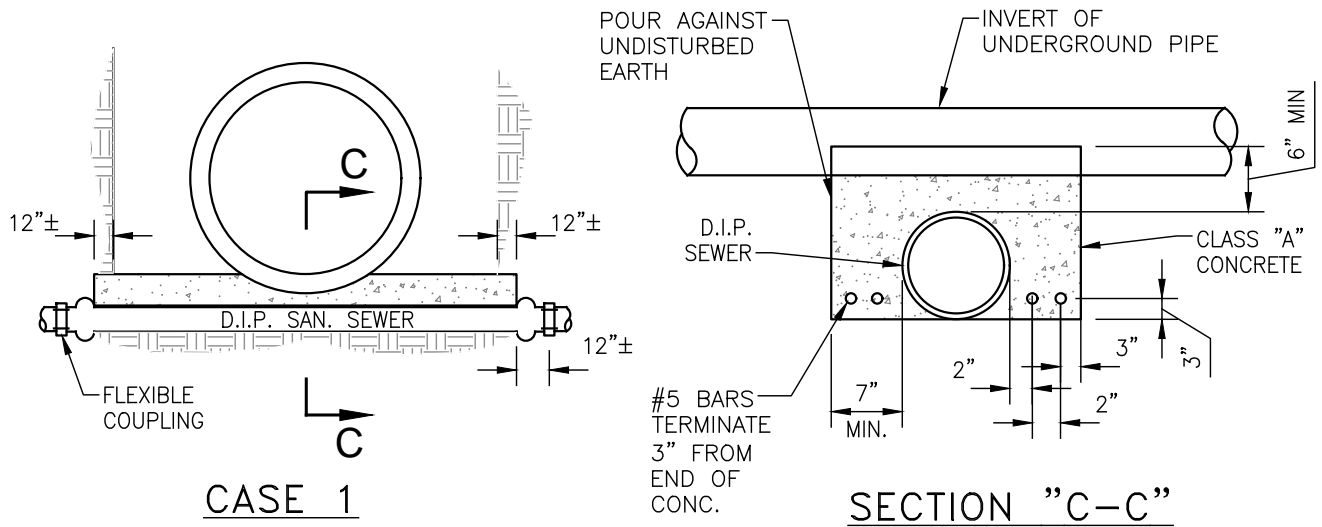
MATERIALS LIST	
①	J&R NO. V3-RT CIRCULAR BOX WITH LID INSCRIBED WITH "SEWER" (H-20 LOADING)
②	THREADED CAP WITH SQUARE NUT.
③	MINIMUM 3-1/2" SEWER PIPE PER UNIFORM PLUMBING CODE.
④	WYE PER UNIFORM PLUMBING CODE.
⑤	24" DIA. x 6" THK. CONCRETE PAD, CLASS "A" CONCRETE, FOR NON-PAVED AREAS

NOTES:

1. PLACE CLEANOUT AT PROPERTY LINE OR EDGE OF EASEMENT.
2. LID MUST BE CAST IRON FOR LOCATING PURPOSES, MARKED "SEWER".
3. CLEANOUT SHALL BE FIELD VERIFIED BY DISTRICT INSPECTOR.

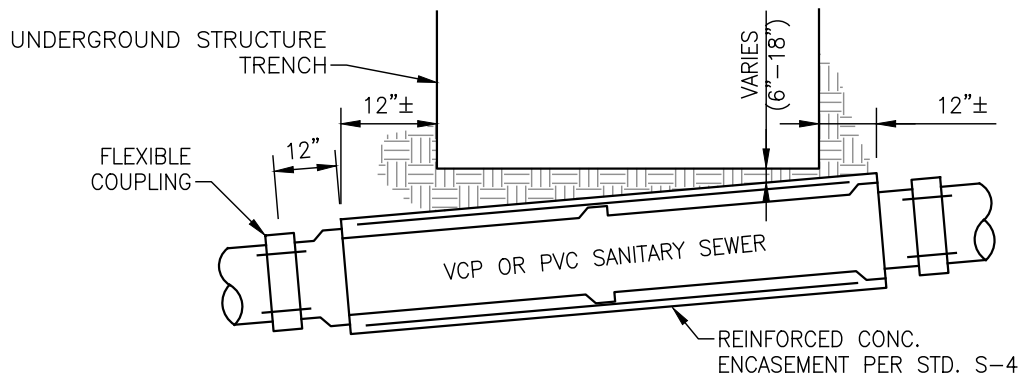
EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE	SEWER LATERAL CLEANOUT	DRAWING NO.
DATE: NOVEMBER, 2022		S-8
APPROVED BY: <i>Sinnaro Yos</i> Sinnaro Yos, P.E. 68607	ALBERT A. WEBB ASSOCIATES CONSULTING ENGINEERS RIVERSIDE CALIFORNIA	W.O. 21-0230



CASE 1 NOTES:

1. WHERE CLEARANCE BETWEEN BOTTOM OF UNDERGROUND PIPE OR STRUCTURE AND TOP OF SANITARY SEWER IS LESS THAN 6" CASE 1 APPLIES.
2. SANITARY SEWER SHALL BE DUCTILE IRON PIPE, CLASS 50 (MIN.) IN CONFORMANCE WITH DISTRICT SPECIFICATIONS.



CASE 2 NOTES:

1. WHERE CLEARANCE BETWEEN BOTTOM OF UNDERGROUND PIPE OR STRUCTURE AND TOP OF SEWER IS 6" TO 18", CASE 2 APPLIES.

GENERAL NOTES:

1. THIS STANDARD APPLIES TO LOADING PIPE PROTECTION CASES.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
 DATE: NOVEMBER, 2022

SEWER PROTECTION DETAIL

DRAWING NO.

S-9

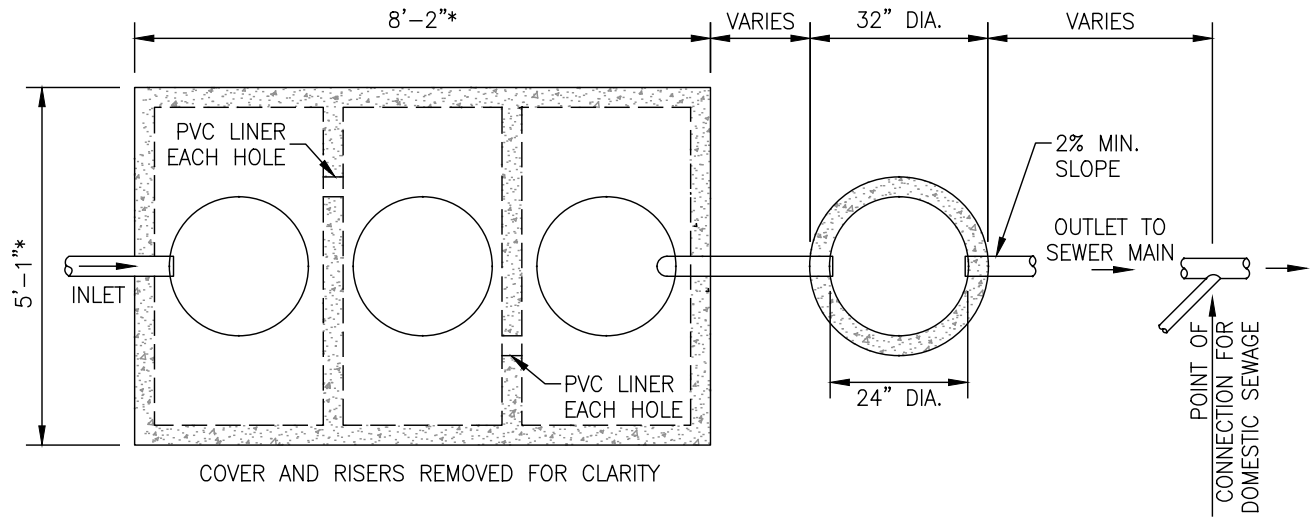
REV. APPROVED BY: *Sinnaro Yos*
 Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
 CONSULTING ENGINEERS

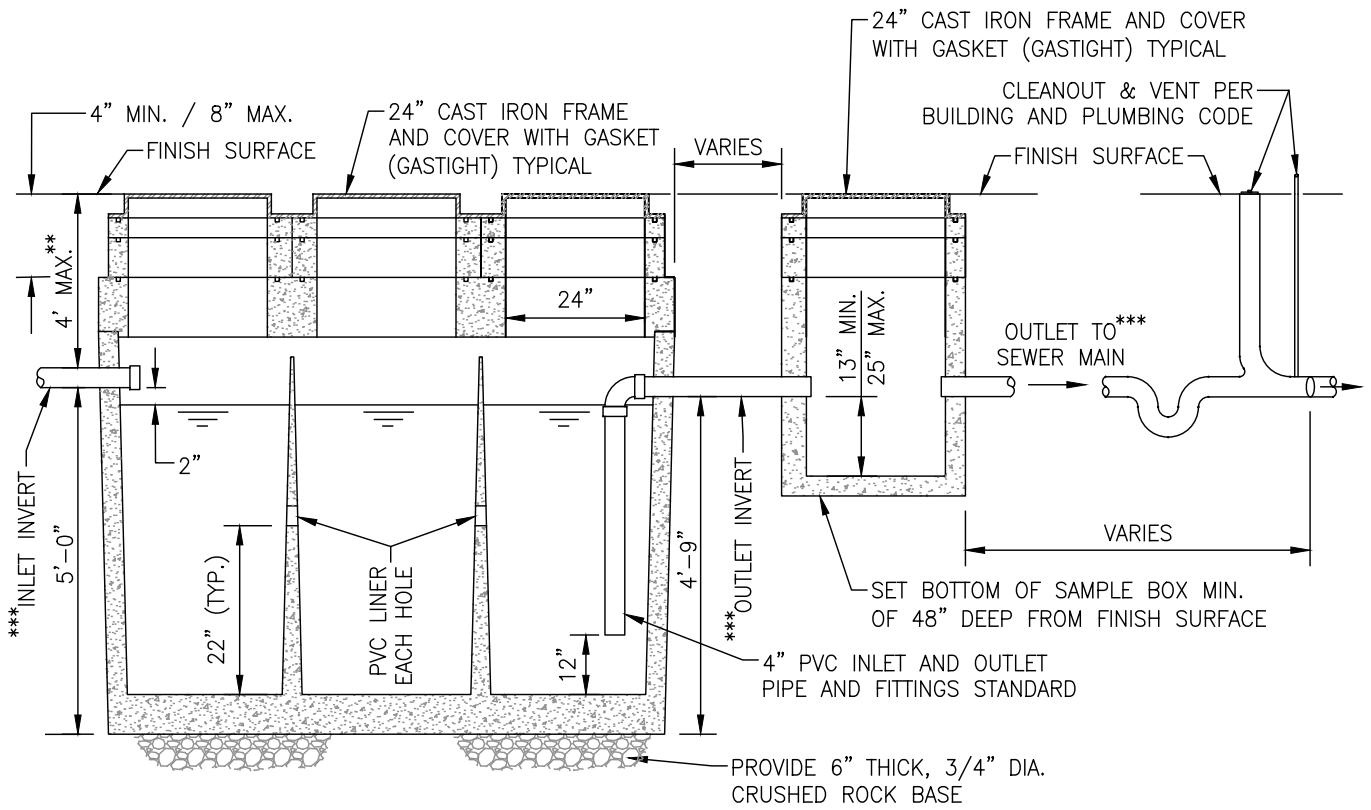
RIVERSIDE

CALIFORNIA

W.O. 21-0230



PLAN VIEW
N.T.S.



SECTION VIEW
N.T.S.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
DATE: NOVEMBER, 2022

**INDUSTRIAL WASTE CLARIFIER
THREE COMPARTMENT**

DRAWING NO.

S-10

REV. APPROVED BY: *Sinnaro Yos*
Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
CONSULTING ENGINEERS

RIVERSIDE

CALIFORNIA

SHEET 1 OF 2

W.O. 21-0230

NOTES:

1. DOMESTIC SEWAGE CONNECTION IS TO BE MADE DOWNSTREAM OF CLARIFIER'S SAMPLE BOX.
2. PRECAST CONCRETE VAULT INCLUDING TOP AND COVERS TO BE DESIGNED FOR A MIN. H-20 TRAFFIC LOADING.
3. ALL PIPE AND FITTINGS TO BE PVC.
4. MINIMUM APPROVED CAPACITY IS 750 GALLONS. A LARGER CLARIFIER MAY BE REQUIRED BASED ON INDUSTRIAL EFFLUENT QUANTITY AND QUALITY.
5. WASTE DISCHARGE APPLICANT IS RESPONSIBLE FOR THE PURCHASE, INSTALLATION, OPERATION AND MAINTENANCE OF THE CLARIFIER.
6. APPROVED SUPPLIERS FOR CLARIFIER:
 - a. PYRAMID PRECAST CO. INC., RIALTO, CA.
 - b. M.C. NOTTINGHAM CO., PASADENA, CA.
 - c. UTILITY VAULT CO., FONTANA, CA.
 - d. JENSEN PRECAST CO., FONTANA, CA.
7. LOCATION OF CLARIFIER IS SUBJECT TO APPROVAL BY DISTRICT.
8. SAMPLE BOX IS REQUIRED AND SHALL BE ACCESSIBLE TO DISTRICT PERSONNEL WITH LOCATION TO BE APPROVED BY THE DISTRICT.
9. GRADE RING JOINTS ARE TO BE SEALED WITH 1:2 MORTAR, TRIMMED TO A SMOOTH FINISH INSIDE AND OUT.
10. THE MANHOLE FRAME IS TO BE SEALED WITH AND SECURED BY A MOTOR RING.

* DIMENSIONS TYPICAL OF 1000 GALLON CAPACITY CLARIFIER.

** DIMENSION VARIES DEPENDING ON DEPTH OF EFFLUENT LINE BELOW FINISHED GRADE.


*** INVERT ELEVATION SHALL BE AS SHALLOW AS POSSIBLE, NOT DEEPER THAN 4' FROM FINISH SURFACE ELEVATION.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
 DATE: NOVEMBER, 2022

**INDUSTRIAL WASTE CLARIFIER
 THREE COMPARTMENT**

DRAWING NO.
S-10

REV. APPROVED BY: 
 Sinnaro Yos, P.E. 68607

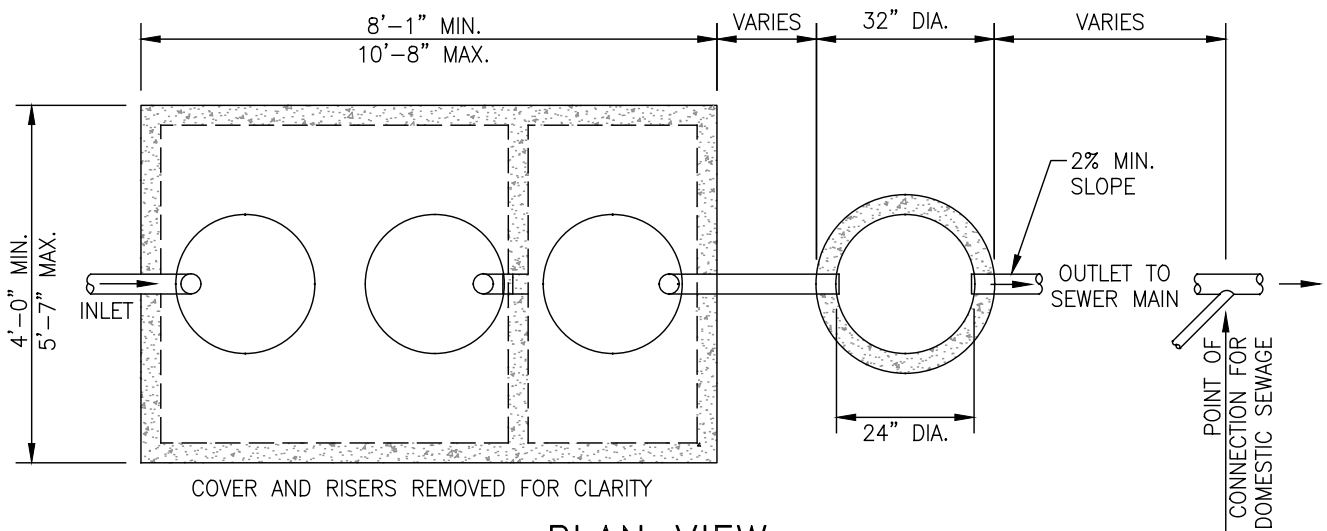
ALBERT A. WEBB ASSOCIATES
 CONSULTING ENGINEERS

RIVERSIDE

CALIFORNIA

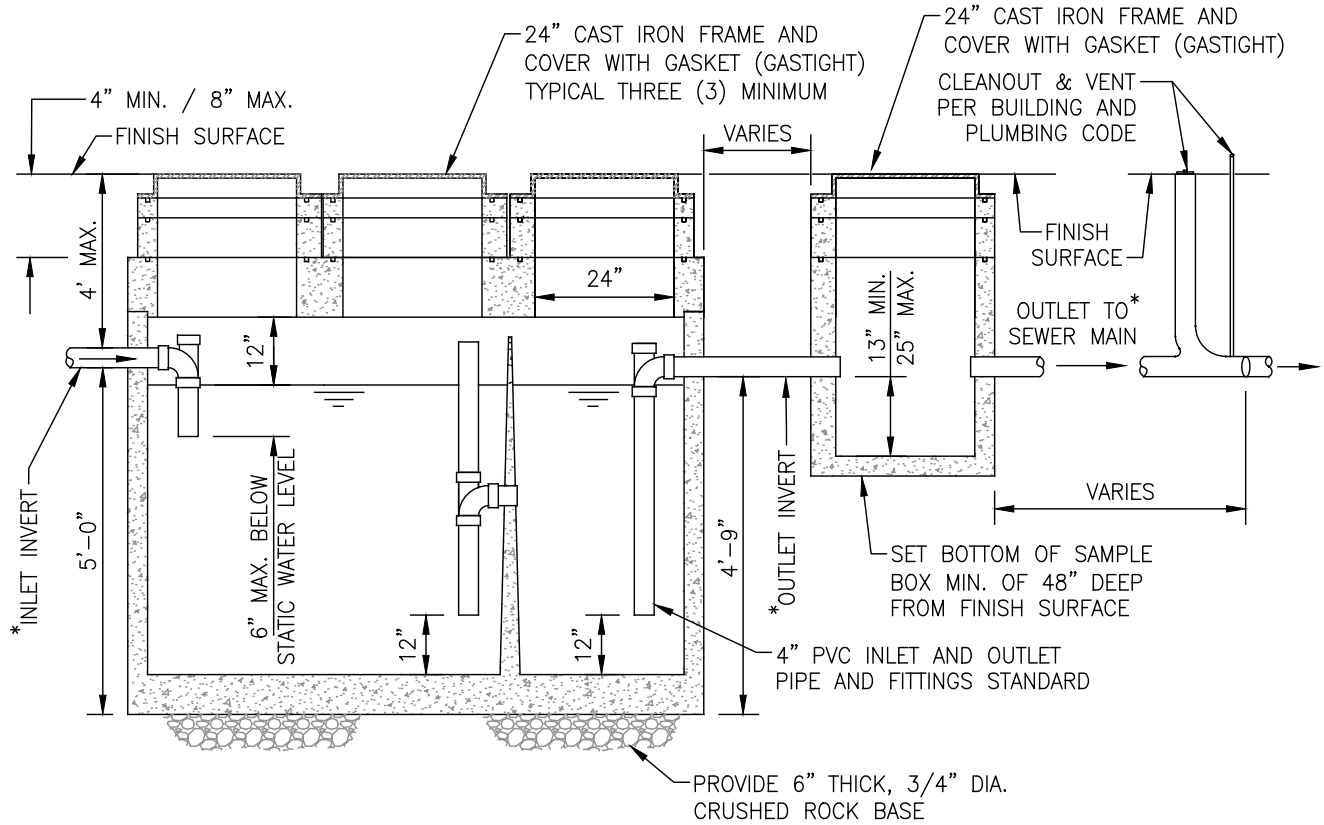
SHEET 2 OF 2

W.O. 21-0230



COVER AND RISERS REMOVED FOR CLARITY

PLAN VIEW
N.T.S.



SECTION VIEW
N.T.S.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
DATE: NOVEMBER, 2022

GRAVITY SEPARATOR
750 GAL. TO 1500 GAL.

DRAWING NO.

S-11

REV. APPROVED BY: *Sinnaro Yos*
Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
CONSULTING ENGINEERS

RIVERSIDE

CALIFORNIA

SHEET 1 OF 2

W.O. 21-0230

NOTES:

1. DOMESTIC SEWAGE CONNECTION IS TO BE MADE DOWNSTREAM OF GRAVITY SEPARATOR SAMPLE BOX.
 2. PRECAST CONCRETE VAULT INCLUDING TOP AND COVERS TO BE DESIGNED FOR A MIN. H-20 TRAFFIC LOADING. SQUARE COVERS ARE NOT ACCEPTABLE.
 3. ALL PIPE AND FITTINGS TO BE PVC.
 4. THE REQUIRED CAPACITY FOR THE GRAVITY SEPARATOR SHALL BE BASED UPON APPENDIX H OF THE UNIFORM PLUMBING CODE.
 5. WASTE DISCHARGE APPLICANT IS RESPONSIBLE FOR THE PURCHASE, INSTALLATION, OPERATION AND MAINTENANCE OF THE GRAVITY SEPARATOR.
 6. APPROVED SUPPLIERS FOR CLARIFIER:
 - a. PYRAMID PRECAST CO. INC., RIALTO, CA.
 - b. M.C. NOTTINGHAM CO., PASADENA, CA.
 - c. UTILITY VAULT CO., FONTANA, CA.
 - d. JENSEN PRECAST CO., FONTANA, CA.
 7. LOCATION OF CLARIFIER IS SUBJECT TO APPROVAL BY DISTRICT.
 8. PROVIDE LABEL INDICATING MANUFACTURER OF GRAVITY SEPARATOR AND CONFORMANCE WITH THE UNIFORM PLUMBING CODE.
 9. SAMPLE BOX IS REQUIRED AND SHALL BE ACCESSIBLE TO DISTRICT PERSONNEL WITH LOCATION TO BE APPROVED BY THE DISTRICT.
 10. GRADE RING JOINTS ARE TO BE SEALED WITH 1:2 MORTAR, TRIMMED TO A SMOOTH FINISH INSIDE AND OUT.
 11. THE MANHOLE FRAME IS TO BE SEALED WITH AND SECURED BY A MOTOR RING.
 12. FOR GREASE INTERCEPTOR STRUCTURE, MINIMUM OF 3 MANHOLES REQUIRED, ONE MANHOLE PLACED OVER EACH PIPE (INLET, MIDDLE, AND OUTLET).
- * INVERT ELEVATION SHALL BE AS SHALLOW AS POSSIBLE, NOT DEEPER THAN 4' FROM FINISH SURFACE ELEVATION.


EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
 DATE: NOVEMBER, 2022

**GRAVITY SEPARATOR
 750 GAL. TO 1500 GAL.**

DRAWING NO.

S-11

APPROVED BY:

 Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
 CONSULTING ENGINEERS

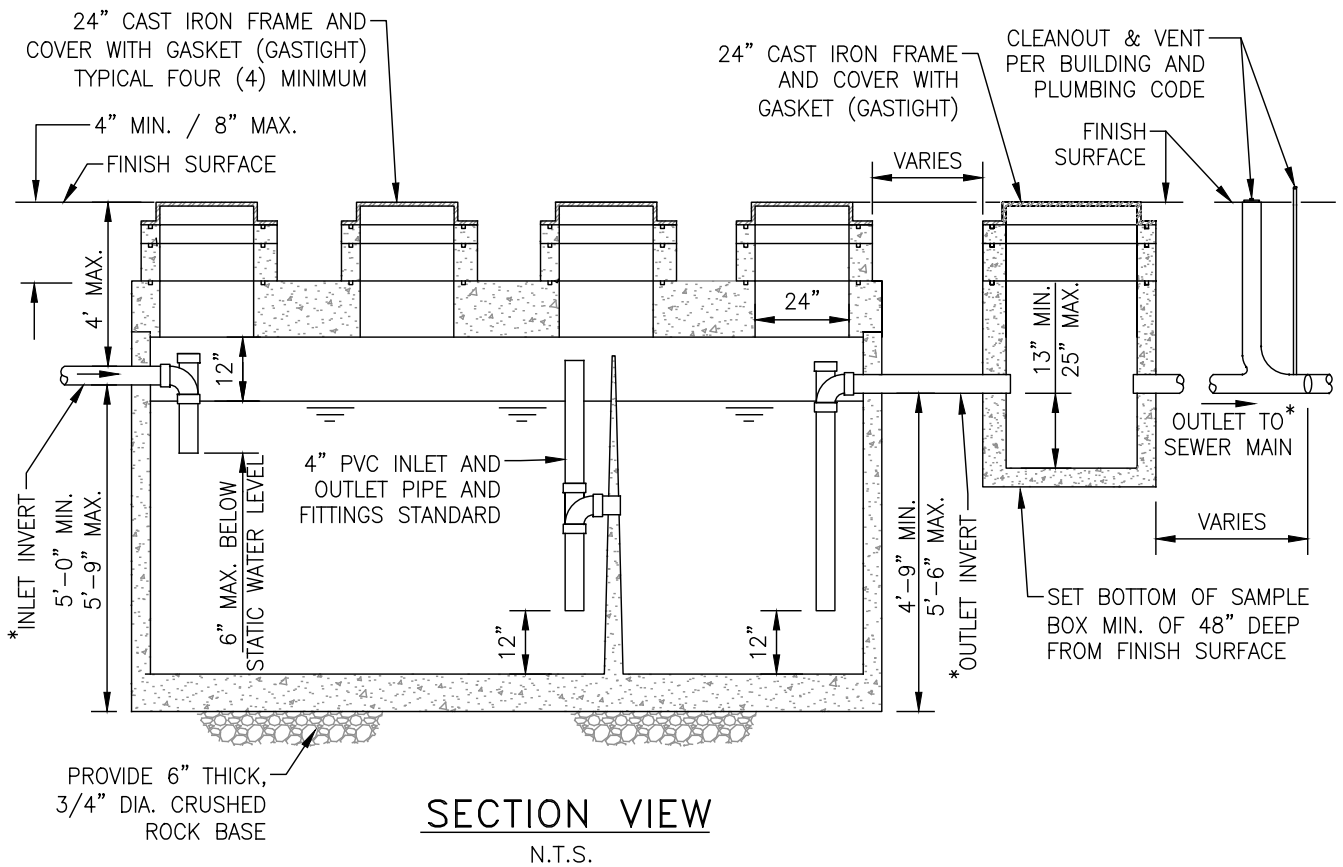
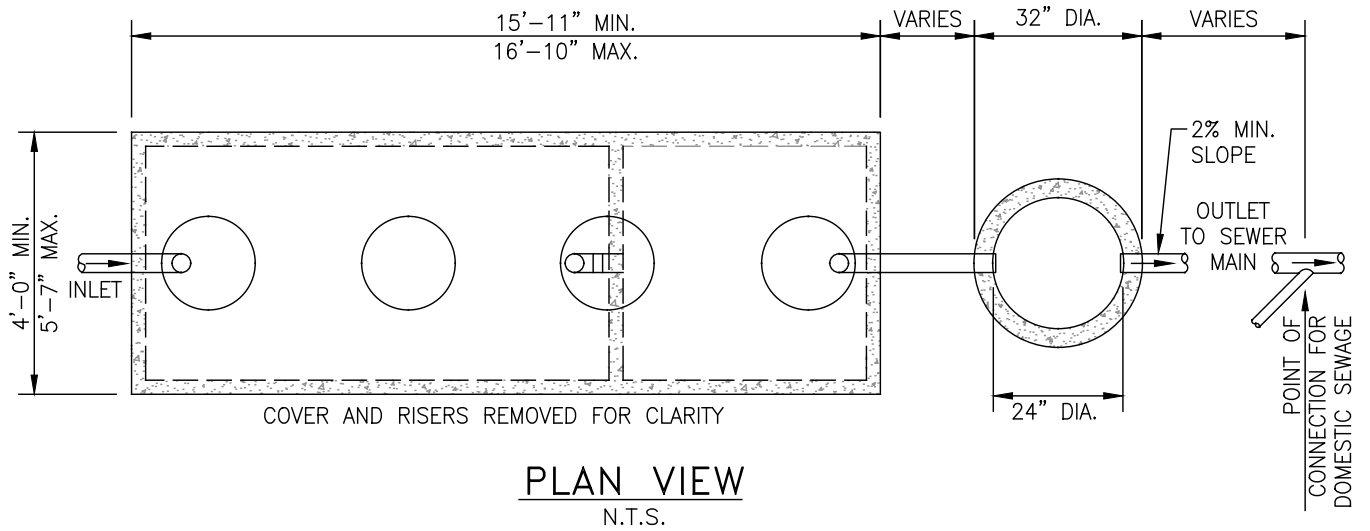
RIVERSIDE

CALIFORNIA

SHEET 2 OF 2

W.O. 21-0230

REV.



EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE
DATE: NOVEMBER, 2022

GRAVITY SEPARATOR
2000 GAL. TO 3000 GAL.

DRAWING NO.
S-12

REV. APPROVED BY: *Sinnaro Yos*
Sinnaro Yos, P.E. 68607

ALBERT A. WEBB ASSOCIATES
CONSULTING ENGINEERS

SHEET 1 OF 2

RIVERSIDE

CALIFORNIA

W.O. 21-0230

NOTES:

1. DOMESTIC SEWAGE CONNECTION IS TO BE MADE DOWNSTREAM OF GRAVITY SEPARATOR SAMPLE BOX.
2. PRECAST CONCRETE VAULT INCLUDING TOP AND COVERS TO BE DESIGNED FOR A MIN. H-20 TRAFFIC LOADING. SQUARE COVERS ARE NOT ACCEPTABLE.
3. ALL PIPE AND FITTINGS TO BE PVC.
4. THE REQUIRED CAPACITY FOR THE GRAVITY SEPARATOR SHALL BE BASED UPON APPENDIX H OF THE UNIFORM PLUMBING CODE.
5. WASTE DISCHARGE APPLICANT IS RESPONSIBLE FOR THE PURCHASE, INSTALLATION, OPERATION AND MAINTENANCE OF THE GRAVITY SEPARATOR.
6. APPROVED SUPPLIERS FOR CLARIFIER:
 - a. PYRAMID PRECAST CO. INC., RIALTO, CA.
 - b. M.C. NOTTINGHAM CO., PASADENA, CA.
 - c. UTILITY VAULT CO., FONTANA, CA.
 - d. JENSEN PRECAST CO., FONTANA, CA.
7. LOCATION OF CLARIFIER IS SUBJECT TO APPROVAL BY DISTRICT.
8. PROVIDE LABEL INDICATING MANUFACTURER OF GRAVITY SEPARATOR AND CONFORMANCE WITH THE UNIFORM PLUMBING CODE.
9. SAMPLE BOX IS REQUIRED AND SHALL BE ACCESSIBLE TO DISTRICT PERSONNEL WITH LOCATION TO BE APPROVED BY THE DISTRICT.
10. GRADE RING JOINTS ARE TO BE SEALED WITH 1:2 MORTAR, TRIMMED TO A SMOOTH FINISH INSIDE AND OUT.
11. THE MANHOLE FRAME IS TO BE SEALED WITH AND SECURED BY A MOTOR RING.
12. FOR GREASE INTERCEPTOR STRUCTURE, MINIMUM OF 4 MANHOLES REQUIRED, ONE MANHOLE PLACED OVER EACH PIPE (INLET, MIDDLE, AND OUTLET) AND AT THE CENTER OF THE FIRST CHAMBER.

* INVERT ELEVATION SHALL BE AS SHALLOW AS POSSIBLE, NOT DEEPER THAN 4' FROM FINISH SURFACE ELEVATION.

EDGEMONT COMMUNITY SERVICES DISTRICT

SCALE: NONE	GRAVITY SEPARATOR 2000 GAL. TO 3000 GAL.	DRAWING NO. S-12
DATE: NOVEMBER, 2022		SHEET 2 OF 2
APPROVED BY:  Sinnaro Yos, P.E. 68607	ALBERT A. WEBB ASSOCIATES CONSULTING ENGINEERS RIVERSIDE CALIFORNIA	W.O. 21-0230

REV.

SECTION VII

APPENDICES

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F	Pre-Construction Conference & Notice to Proceed
G	Charges and Deposits
H	Availability Letter Request
I	Street Lighting Annexation Policy & Guidelines
J	Wastewater Discharge Survey and Grease Interceptor Waiver Request
K	Project Close-Out Checklist
L	Permit for Installation of Connection to Sewer Main
M	Standard Title Block Format for 24" x 36" Design Drawing
N	Plan Check Forms and Checklist
O	December 14, 2017 Separation of Water Mains and Non-Potable Pipelines – Requests for Alternatives to the Waterworks Standards

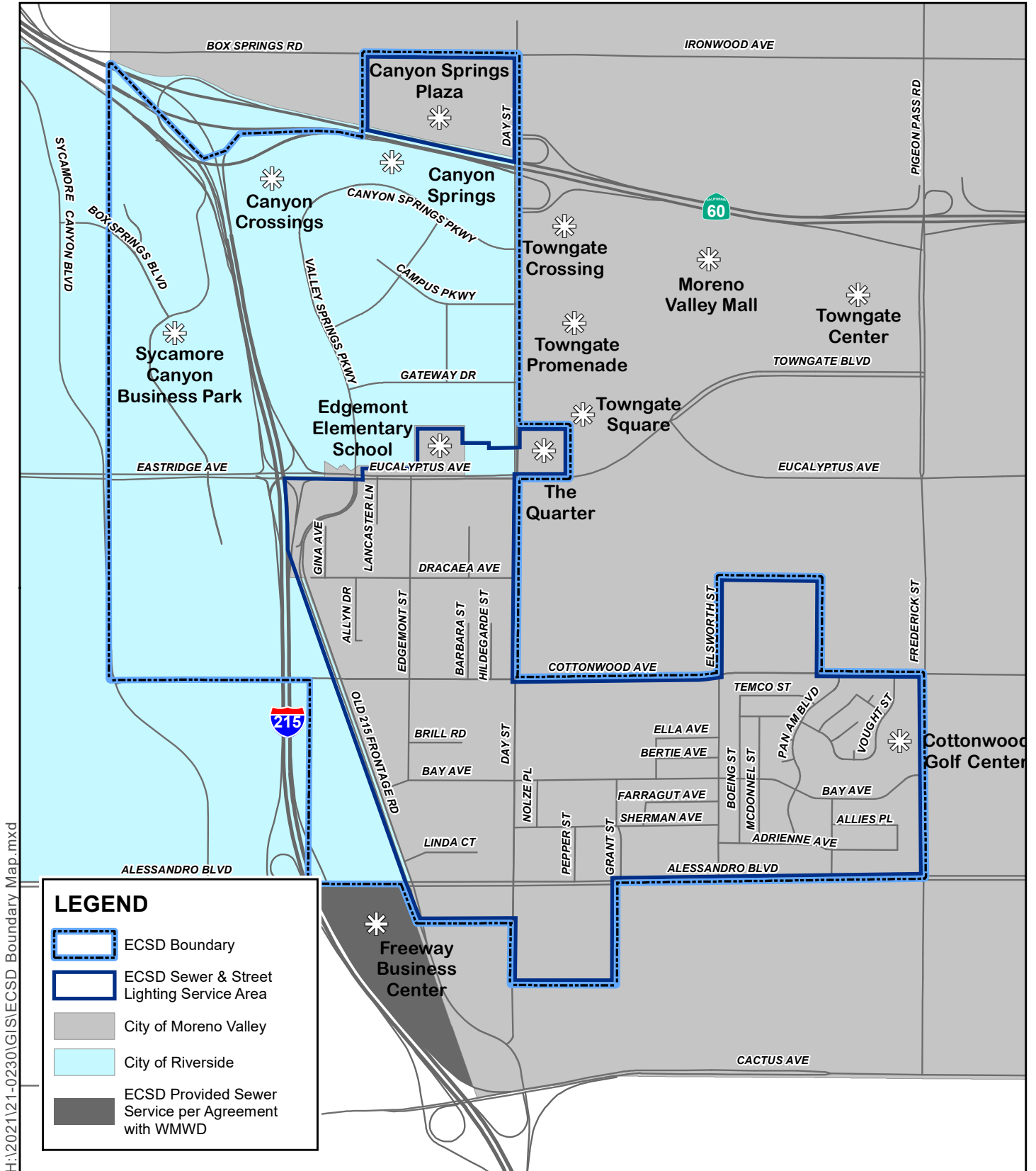
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APPENDIX A

ECSD Boundary Map

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FIGURE 1



ECSD Boundary Map



0 1,000 2,000 3,000 Feet

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APPENDIX B

Grant of Permanent Easement

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Recording requested by

When recorded mail to:

EDGEMONT COMMUNITY SERVICES DISTRICT
PO Box 5436
Riverside, CA 92517

APN

EXEMPT FROM RECORDING FEES PER GOVT. CODE §27383

NO DOCUMENTARY TRANSFER TAX PER R&T CODE §11922

GRANT OF PERMANENT EASEMENT

For valuable consideration, (enter name here) ("**Grantor**"), hereby grants to EDGEMONT COMMUNITY SERVICES DISTRICT of RIVERSIDE COUNTY, a public agency ("**Grantee**"), its successors and assigns, a permanent easement and right of way in, over, upon, under and across the lands hereinafter described to construct, reconstruct, install replace, remove, repair, alter, operate, maintain, inspect and utilize a sewer lift station, together with any easement roads and appurtenances within the right of way including, but not limited to, cable for communication purposes, and for the ingress and egress throughout the entire easement area and right of way (collectively, "**Easement Area**") in connection with the exercise of any of the foregoing rights. The property subject to this easement is located in the County of Riverside, State of California, described as follows:

See Exhibits "A" (Description) and "B" (Plat) attached hereto and made a part hereof.

It is further understood and agreed that no other easement or easements shall be granted on, under, or over said Easement Area by the Grantor to any person, firm, corporation, or other entity without the previous written consent of said Grantee.

Grantor, and his successors and assigns, shall not increase or decrease, or permit to be increased or decreased, the now existing ground elevations of said Easement Area and right of way without the prior written consent of Grantee.

Grantor, and Grantor's successors and assigns, further agree that no building, fences, walls or other structures of any kind, or trees, shall be installed, constructed, erected, placed planted or maintained in any portion of the Easement Area, and no shrubs or other plants or vegetation shall be placed, planted or maintained in the portion of Easement Area which is included within any travel way, and that no changes in the alignment of grading of any such road will be made without prior written consent of the Grantee.

The Permanent Easement, as applicable, shall include, without limitation, the right and privilege of Grantee and its employees, agents, representatives, contractors, subcontractors, and workmen to: (i) perform all activities as may be necessary to facilitate the purposes of the Permanent Easement; (ii) use, control and occupy the Easement Area (iii) have access to, ingress to, and egress from the Easement

Area; (iv) construct and utilize an access road within said Easement Area, and to use gates in all fences which now cross said Easement Area; (v) use and temporarily place and operate tools, equipment, machinery, and materials on the Easement Area, and (vi) trim, cut, remove, or clear away any trees, brush, or other vegetation or flora, including the roots thereof, located within the Easement Area. No additional fences or gates or gates shall be constructed across said Easement Area unless approved in writing by the Grantee. Grantee shall also have the right to mark the location of this easement in a manner which will not interfere with Grantor's reasonable and lawful use of said Easement Area.

The covenants contained herein shall run with the land.

Since the construction and installation of the facilities (the "**Facilities**") provided for under the terms of this Grant of Easement will require incidental entry and construction activities upon a portion of the Grantor's property adjacent to the Easement Area, the purpose of the following Grant of Temporary Easement is to provide for such incidental activities. Therefore, subject to the provisions described below, Grantor hereby grants to Grantee a temporary, non-exclusive easement over the Grantor's adjacent property (the "**Temporary Construction Easement**") described and depicted in Exhibits "C" and "D" for the purposes of enabling Grantee to construct and install the Facilities. This Temporary Construction Easement is intended to be temporary and will remain in effect until completion of the construction and installation of the Facilities, which will occur not later than _____ () days after such construction and installation commences. Following completion of such construction and installation of the Facilities, Grantee will execute, acknowledge and provide to Grantor a quitclaim deed or other release to confirm the termination of the Temporary Construction Easement only.

This Grant shall inure to the benefit of and be binding upon the Grantor and Grantee and their respective assigns, heirs and voluntary and involuntary successors in interest.

IN WITNESS WHEREOF, Grantor has executed this instrument this _____ day of _____, 20__.

GRANTOR: (Enter name of entity/person here)

By: (Enter name of authorized person)

Its: (Enter title as stated in paragraph 1)

NOTARY ACKNOWLEDGMENT

(California All-Purpose Acknowledgment)

STATE OF CALIFORNIA)

) ss.

COUNTY OF)

On _____, 20____ before me, _____, notary public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

EXHIBIT "A"

LEGAL DESCRIPTION

OF EASEMENT AREA

[INSERT LEGAL DESCRIPTION HERE]

EXHIBIT "B"

PLAT

[INSERT PLAT HERE]

EXHIBIT "C"

TEMPORARY CONSTRUCTION EASEMENT DESCRIPTION

[INSERT LEGAL DESCRIPTION HERE]

EXHIBIT "D"

PLAT OF TEMPORARY CONSTRUCTION EASEMENT

[INSERT PLAT HERE]

CERTIFICATE OF ACCEPTANCE

This is to certify that the interest in real property conveyed by that certain Grant of Easement to which this Certificate is attached from _____, to EDGEMONT COMMUNITY SERVICES DISTRICT, a public agency ("Grantee"), is hereby accepted by the undersigned officer or agent on behalf of the Grantee, pursuant to authority conferred by resolution of the Board of Directors adopted on _____, 20____, and the Grantee consents to recordation thereof.

Dated: _____, 20_____

EDGEMONT COMMUNITY SERVICES DISTRICT,

a public agency

By: _____
_____(Name)
_____(Title)

NOTARY OF ACKNOWLEDGMENT

STATE OF CALIFORNIA

COUNTY OF RIVERSIDE

On _____, 20____ before me, _____ notary public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his / her / their signature on the instrument the person or the entity upon behalf of which the person acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary Public

APPENDIX C

Construction Agreement

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CONTRACT NO. _____

CONSTRUCTION AGREEMENT
(DEVELOPER INITIATED/ CONTRACTOR INSTALLED)

1. Parties and Date

THIS AGREEMENT is made on this _____ day of _____, 20____, by and between the EDGEMONT COMMUNITY SERVICES DISTRICT OF RIVERSIDE COUNTY, a public agency of the State of California, with its principal mailing address at P.O. Box 5436, Riverside, California 92517 (hereinafter referred to as the "District") and the following Corporation or Partnership Business Individual registered in _____:

Name

Address

City State Zip Code

Telephone

(hereinafter referred to as the Developer"). Developer is represented by:

Name

Address

City State Zip Code

Telephone

2. Recitals

WHEREAS, Developer is planning a development of _____ lot(s) located in a portion of Section _____, Township _____ South, Range _____ West, San Bernardino Base and Meridian, and such development is referenced within records of the County of Riverside, State of California as:

Lot(s) _____ of Tract _____

Parcel(s) _____ of Parcel Map _____

Lot(s) _____ of _____

Assessor's Parcel No. _____

and is further identified on the map attached hereto as Exhibit "A: and incorporated herein by reference (hereinafter sometimes referred to as the "Property"); and

WHEREAS, said Property will require a water and/or sewer system (hereinafter collectively Referred to as the "System") to provide such service to the Property; and to the Property, and is willing to convey the System to the District after the construction thereof and

WHEREAS, Developer is desirous of having the District provide water and/or sewer service contingent upon the District's acceptance of such conveyance and agreement to provide water and/or sewer service to the Property on the terms and conditions set forth herein.

3. Terms

1. *Compliance with Laws and Regulations:* Developer will comply with all applicable State, federal and local laws and regulations, as well as all District rules, regulations and policies as they currently exist or as they may be amended from time to time. The District rules, regulations and policies are incorporated herein by reference.
2. *Deposit to Cover Up-Front Costs:* Developer shall deposit funds with the District sufficient to cover all necessary engineering, permit, inspection and system connection fees and costs. The amount of the deposit shall be determined by the District in its sole discretion.
3. *Licensed Engineer:* Developer shall contract for the design of the System by a licensed engineer in the State of California experienced in the design of similar systems.
4. *System Specifications:* The water and sewer System providing service to the Property shall comply with the District's specifications. Construction plans shall be approved by the District prior to the presentation thereof to contractors for bidding purposes.

5. *Licensed and Qualified Contractor:* Developer shall contract for the services of a licensed and qualified Contractor to construct the System. The contract shall be in writing, signed by Developer and the licensed contractor, and reviewed and approved by the District. The Contractor shall have a valid, current license through the State of California with either of the following specifications: (1) a specialty contractor (“C-34”) pipeline license; or (2) a General Engineering Contractor (“A”) license. The Contractor shall be experienced in the construction of domestic water supply and sewer systems, and shall be reviewed and approved by the District as a qualified Contractor before a contract is signed and actual System construction begins.
6. *Cost and Commencement of Construction:* Developer shall be solely responsible for the entire cost of the construction of the System. Construction shall not begin until the District issues a “Notice to Proceed” and the Developer, or other authorized party, completes a “Certification of Streets to Final Grade” for the streets in which System is to be constructed. The System specifications, as well as District rules, regulations and policies. District inspection is solely for the purpose of maintaining conformance of construction with all District requirements, and is not for purposes of insuring compliance by the Contractor with safety requirements. Inspection or final acceptance shall not constitute a waiver by the District of any claims against Developer and/or Contractor for any defects in the work performed hereunder.
7. *Indemnification:* Developer shall indemnify and hold harmless the District, its directors, officers, employees, agents and volunteers from any and all claims, demands, loss, damages, costs or liability, including reasonable attorneys fees, expert fees, and any other fees and costs of suit, arising from or connected with this Agreement or the construction of the System.
8. *Time for Completion:* Developer shall guarantee the completion of System construction within _____ (_____) calendar days from the time material is delivered to the jobsite.
9. *District Costs:* Developer agrees to pay all costs incurred by the District as may be necessary to complete construction of the System, including administrative costs, or to secure compliance with the provisions of this Agreement.
10. *Insurance Requirements:* Developer shall require its contractor and subcontractors to procure and maintain, for the duration of System construction, insurance against claims for the injuries to persons or damages to property which may arise from or in connection with the performance of the Contractor, its officers, agents, representatives, employees, consultants or subcontractors. Such insurance shall be issued by an insurers having A.M. Best Company ratings of no less than A:VIII and licensed to do business in California, shall be satisfactory to the District, and shall meet the following requirements:
 - A. *Coverage shall be at least as broad as the latest version of the following:*
 - i. *General Liability:* Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001).

- ii. *Automobile Liability:* Insurance Services Office Business Auto Coverage form number CA 0001, code 1 (any auto).
 - iii. *Workers' Compensation and Employers Liability:* Workers' Compensation insurance as required by the State of California and Employer's Liability Insurance.
 - iv. *Course of Construction:* Course of Construction insurance covering for all risks of loss (including earthquakes and floods if requested by Owner).
- B. *Minimum Limits of Insurance: Contractor shall maintain limits no less than:*
- i. *General Liability:* \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
 - ii. *Automobile Liability:* \$1,000,000 per accident for bodily injury and property damage.
 - iii. *Workers' Compensation and Employers Liability:* Workers' compensation limits as required by the Labor Code of the State of California. Employers Liability limits of \$1,000,000 per accident for bodily injury or disease.
 - iv. *Course of Construction:* Completed value of the project.
- C. *Course of Construction Policy Requirements:* The course of construction insurance shall provide that the District be named as loss payee. In addition, the insurer shall waive all rights of subrogation against the District.
- D. *Deductibles/Retentions:* Any deductibles or self-insured retentions must be declared to and approved by the District. Developer shall guarantee that, at the option of the District, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its directors, officers, employees, agents and volunteers; or (2) the Contractor shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.
- E. *Separation of Insureds:* No Special Limitations: All insurance required by this Agreement shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the District, its directors, officers, employees, agents and volunteers.

- F. *Insurance Endorsements:* Contractor shall provide endorsements on forms supplied by the District to add the following provisions to the insurance policies:
- i. *General Liability:* (1) the District, its directors, officers, employees, agents and volunteers and Albert A. Webb Associates, shall be covered as additional insureds with respect to the work or operations performed by or on behalf of the Contractor, including materials, parts or equipment furnished in connection with such work; and (2) the insurance coverage shall be primary insurance as respects the District, its directors, officers, employees, agents and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, its directors, officers, employees, agents and volunteers shall be excess of the Contractor's insurance and shall not be called upon to contribute with it.
 - ii. *Automobile Liability:* (1) the District, its directors, officers, employees, agents and volunteers and Albert A. Webb Associates, shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the contractor or for which the contractor is responsible; and (2) the insurance coverage shall be primary insurance as respects the district, its directors, officers, employees, agents and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, its directors, officers, employees, agents and volunteers shall not be called upon to contribute with it.
 - iii. *Workers' Compensation and Employers Liability Coverage:* the insurer shall agree to waive all rights of subrogation against the District, its directors, officers, employees, agents and volunteers and Albert A. Webb Associates, for losses paid under the terms of the insurance policy which arise from work performed by the contractor.
 - iv. *All Coverages:* Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the District, its directors, officers, employees, agents and Albert A. Webb Associates.
- G. *Verification of Coverage:* Contractor shall furnish district with original certificates of insurance and endorsements effecting coverage required by this Agreement. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf, and shall be on forms provided by the district. All certificated and endorsements must be received and approved by the

District before work commences. The District reserves the right to require complete, certified copies of all required insurance policies, at any time.

- H. *Subcontractor Requirements:* All subcontractors shall meet the requirements of this Section before commencing work. In addition, Contractor shall include all subcontractors as insureds under its policies, or shall finish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all requirements stated herein.
11. *Professional Liability Insurance:* Developer shall require its licensed engineer contracted to design the System, as well as any other architects, engineers, consultants or design professionals utilized by Developer pursuant to or in furtherance of this Agreement, to procure and maintain for a period of five (5) years following completion of the system, errors and omissions liability insurance with a limit of not less than \$1,000,000. This insurance shall name the District, its directors, officers, employees, agents and volunteers as additional and insureds with respect to work performed, and shall otherwise comply with all requirements of paragraph 10 including, but not limited to, subparagraphs 10(D), 10(E), 10(F)(iv), 10(G) and 10(H).
12. *Bonding Requirements:* Developer shall require its contractor to provide the District with the following types of bonds which shall name the District as the obligee therein:
- A. *Performance Bond:* A performance bond from an admitted corporate surety satisfactory to the district. The performance bond shall be for not less than one hundred percent (100%) of the total contract price, as referenced in Paragraph 13(E).
 - B. *Labor and Materials Payment Bond:* A labor and materials payment bond from an admitted corporate surety satisfactory to the District. The payment bond shall be for not less than one hundred percent (100%) of the total contract price, as referenced in Paragraph 13(E).
 - C. *Warranty Bond:* A warranty bond from an admitted corporate surety satisfactory to the District. This bond shall guarantee the performance of the installed System against failures of any type for one (1) year from the date of filing of a Notice of completion. The warranty bond shall be in an amount equal to at least ten percent (10%) of the total contract price, as referenced in Paragraph 13(E), and shall provide for the payment of all costs incurred by the District for the repair of such failures within the one (1) year guarantee period.
 - D. *Acceptability of Sureties:* Bonds shall be obtained from sureties with a current A.M. Best's rating no less than A:VIII, licensed to do business in California, and satisfactory to the District
13. *Final Inspection; Documents:* The District's Inspector shall complete a "Notice of Final Inspection" when all work has been completed in accordance with this Agreement and District requirements, and prior to the acceptance of the System by the District. In addition, before acceptance of the system by the District,

Developer shall furnish to the District any and all requested documents, including but not limited to, the following:

- A. *Deeds*: Easement Deeds or Grant Deeds to any rights-of-way or other real property interests necessary for roads, ingress and egress, and for System maintenance and operation.
 - B. *Declaration of Full Payment*: A Declaration by the Contractor that it has been paid in full, and that all persons employed by the Contractor or who have furnished material for the construction of the water system have been paid in full.
 - C. *Notice of Completion*: The executed Notice of Completion to be filed by the District.
 - D. *Title to System*: A Grant Deed/Bill of Sale executed by the Developer vesting title of the System and appurtenances to the District.
 - E. *Costs of Construction*: A copy of the contract between Developer and its Contractor, and any other documents requested by the District to verify the actual cost of the system.
14. *Final Inspection; Service*: District may, by written notice to Developer, terminate this agreement in whole or in part upon the breach of the terms of this Agreement by Developer, which terms shall include Developer's obligations with respect to its contractor. For example, Developer's failure to prosecute the construction of the System in a timely manner which will, according to the District, allow the System to be completed within the number of calendar days provided as the "Time for Completion" of the System, shall be grounds for termination.
15. *Termination*: District may, by written notice to Developer, terminate this Agreement in whole or in part upon the breach of the terms of this Agreement by Developer, which terms shall include Developer's obligations with respect to its contractor. For example, Developer's failure to prosecute the construction of the System in a timely manner which will, according to the District, allow the System to be completed within the number of calendar days provided as the "Time for Completion" of the System, shall be grounds for termination.
16. *Successors and Assigns*: This Agreement is binding on the assigns of the District, and on the assigns, successors and representatives of the Developer and the contractor. Developer shall not assign this Agreement without the prior written consent of the District.
17. *Attorneys Fees*: If either party commences an action, legal or otherwise, against the other party arising out of or in connection with this Agreement, the prevailing party in such action shall be entitled to have and recover from the losing party reasonable attorneys fees and costs of suit.
18. *Notices*: All notices permitted or required under this Agreement shall be given to the respective parties at the addresses listed on Page 1 of this Agreement, or at such other address as the parties may provide in writing for this purpose. Such

notice shall be deemed made when personally delivered or forty-eight (48) hours after deposit in the U.S. mail, first class postage prepaid.

- 19. Copies of Materials: District shall have the right to obtain for its records copies of all materials which may be prepared by or on behalf of the Developer and its contractor or subcontractors pursuant to or in furtherance of this Agreement. District shall not be limited in any way in its use of such materials at any time, provided that any such use not within the purposes intended by this Agreement shall be at the District's sole risk.

- 20. Entire Agreement: This agreement contains the entire agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements. This Agreement may only be modified by a writing signed by both parties.

EDGEMONT COMMUNITY SERVICES
DISTRICT OF RIVERSIDE COUNTY

DEVELOPER

Name of Developer

By: _____
Signature

By: _____
Signature

Name (Printed)

Name (Printed)

Title

Title

Date

Date

EXHIBIT "A"

Map of Property

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APPENDIX D

Contractor's Data Sheet

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CONTRACTOR'S DATA SHEET

Name of Contractor or Organization: _____
 (Corporation, Partnership, Individual)

Principal Office Address _____

Phone Number (_____) _____

Names of Officers of Organization _____
 (Name) (Title)

 (Name) (Title)

License Number(s) _____ Classification : Engineering Class "A"
 C-34 Specialty

1. How many years has your organization been in business as a general contractor under your
 1) present business name? _____; and, 2) present license(s)? _____
2. How many years experience in sewer pipeline construction work has your organization had
 (a) as a general contractor _____ (b) as a sub-contractor _____
3. List below the applicable projects your organization has completed most recently.

Project Completed			Pipe Sizes	Total Length	Type of Pipe	Contract Cost
No.	Year	For				
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						

(Use additional sheet if necessary)

4. List names and addresses of person to be contacted for information on projects listed in Item 3.

No.	Name of Owner	Name, Address & Telephone of Person to be Contacted
1		
2		
3		
4		
5		
6		
7		
8		
9		

(Use additional sheet if necessary)



5. Have you ever failed to complete any work awarded to you? If so, where, when and why?
6. Have you ever filed bankruptcy? If so, state details on separate sheet.
7. Have you ever been cited for violation of Cal-OSHA regulations? If so, state on separate sheet where, when, why, and whether a minor or major violation.
8. Have you ever had a lien against you? Have you ever had to obtain a lien against someone? If so, where, when and why?
9. Can you provide letters of recommendation from previous contractual agreements? If so, please attach letters to this form.

I hereby authorize EDGEMONT COMMUNITY SERVICES DISTRICT of Riverside County to obtain information concerning me or my organization from any source including former clients. I certify that the foregoing information obtained in this Experience Questionnaire is true and correct to the best of my knowledge.

Signature _____

Date _____

Type or print name clearly _____

APPENDIX E

Insurance Forms

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COMMERCIAL GENERAL LIABILITY ENDORSEMENT

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS

Insurer:	<i>This Endorsement Changes The Policy</i> <i>Please Read it Carefully</i>
Policy Number:	
Endorsement Number:	

POLICY TYPE: This endorsement modifies insurance provided under the following:

Commercial General Liability Coverage

SCHEDULE:

Name of Public Entity ("Additional Insured")

Name of Engineer ("Additional Insured")

If no entry appears above, the information required to complete this endorsement will be shown in the Declarations as applicable to this endorsement.

WHO IS AN INSURED is amended to include as an Additional Insured the person or organization shown in the Schedule, but only with respect to liability arising out of "your work" for that Additional Insured by or for you.

<p><i>Modifications to Policy:</i></p> <ol style="list-style-type: none">1. The Additional Insured shown in the Schedule above includes the members of its governing body, its officers, employees, agents and volunteers.2. This insurance shall be primary as respects the Additional Insured shown in the Schedule above, or if excess, shall stand in an unbroken chain of coverage excess of the Named Insured's scheduled underlying primary coverage. In either event, any other insurance maintained by the Additional Insured shown in the Schedule above shall be in excess of this insurance and shall not be called upon to contribute with it.3. This insurance shall afford coverage at least as broad as the latest version of Insurance Services Office Commercial General Liability coverage (occurrence form CG 0001).4. The insurance afforded by this policy shall not be canceled except after thirty days prior written notice by certified mail return receipt requested has been given to the Additional Insured.
--

AUTHORIZED REPRESENTATIVE:

Broker/Agent Underwriter _____

I, _____, (print/type name) warrant that I have authority to bind the above-mentioned insurance company and by my signature hereon do so bind this company to this endorsement.

Signature of Authorized Representative

Address

Phone Number

Date Signed

WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY SPECIAL ENDORSEMENT

WORKERS' COMPENSATION AND EMPLOYER'S LIABILITY SPECIAL ENDORSEMENT		SUBMIT IN DUPLICATE	
For _____ (The Owner)	ENDORSEMENT NO.	ISSUE DATE (MM/DD/YY)	
PRODUCER	POLICY INFORMATION: Insurance Company: Policy No.: Policy Period: (from) _____ (to)		
NAMED INSURED	OTHER PROVISIONS		
CLAIMS: Underwriter's representative for claims pursuant to this insurance. Name: _____ Address: _____ Telephone: _____	EMPLOYERS LIABILITY LIMITS \$ _____ (Each Accident) \$ _____ (Disease – Policy Limit) \$ _____ (Disease – Each Employee)		
In consideration of the premium charged and notwithstanding any inconsistent statement in the policy to which this endorsement is attached or any endorsement now or hereafter attached thereto, it is agreed as follows:			
<ol style="list-style-type: none"> 1. CANCELLATION NOTICE. This insurance shall not be canceled, except after thirty (30) days prior written notice, by receipted delivery, has been given to the Owner. 2. WAIVER OF SUBROGATION. This insurance company agrees to waive all rights of subrogation against the Owner, the members of its governing body, its officers, employees and volunteers for losses paid under the terms of this policy which arise from the work performed by the Named Insured for the Owner. 			
Except as stated above, nothing herein shall be held to waive, alter or extend any of the limits conditions, agreements or exclusions of the policy to which this endorsement is attached.			
ENDORSEMENT HOLDER	AUTHORIZED REPRESENTATIVE <input type="checkbox"/> Broker/Agent <input type="checkbox"/> Underwriter <input type="checkbox"/> _____		
OWNER	<p>I, _____, (print/type name) warrant that I have authority to bind the above-mentioned insurance company and by my signature hereon do so bind this company to this endorsement.</p> <p>Signature _____ (original signature required)</p> <p>Telephone: (_____) _____ Date Signed: _____</p>		

CERTIFICATE OF INSURANCE				ISSUE DATE (MM/DD/YY)		
PRODUCER		THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.				
		COMPANIES AFFORDING COVERAGE				
		Company Letter A				
INSURED		Company Letter B				
		Company Letter C				
		Company Letter D				
		Company Letter E				
COVERAGES						
THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.						
CO LTR	TYPE OF INSURANCE	POLICY NO.	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCURANCE <input type="checkbox"/> OWNER'S & CONTRACTOR'S PROT. <input type="checkbox"/> _____ <input type="checkbox"/> _____				GENERAL AGGREGATE	\$
					PRODUCTS-COMP/OP AGG.	\$
					PERSONAL & ADV. INJURY	\$
					EACH OCCURRENCE	\$
					FIRE DAMAGE (Any one fire)	\$
					MED. EXPENSE (Any one person)	\$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS <input type="checkbox"/> GARAGE LIABILITY <input type="checkbox"/> _____				COMBINED SINGLE LIMIT	\$
					BODILY INJURY (Per Person)	\$
					BODILY INJURY Per Accident	\$
					PROPERTY DAMAGE	
	EXCESS LIABILITY <input type="checkbox"/> UMBRELLA FORM <input type="checkbox"/> OTHER THAN UMBRELLA FORM				EACH OCCURRENCE	\$
					AGGREGATE	\$
	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY				STATUTORY LIMITS	
					EACH ACCIDENT	\$
					DISEASE -- POLICY LIMIT	\$
					DISEASE -- EACH EMPLOYEE	\$
THE FOLLOWING PROVISIONS APPLY:						
<ol style="list-style-type: none"> None of the above-described policies will be canceled until after 30 days' written notice has been given to the Owner at the address indicated below. The Owner, Engineer, the members of its governing body, its officers, employees, agents and volunteers are added as insured on all liability insurance policies listed above. It is agreed that any insurance or self-insurance maintained by the Owner will apply in excess of and not contribute with the insurance described above. The Owner is named as a loss payee on the property insurance described above, if any. All rights of subrogation under the property insurance policy listed above have been waived against the Owner The worker's compensation insurer named above, if any, agrees to waive all rights of subrogation against the Owner for injuries to employees of the insured resulting from work for the Owner or use of the Owner's premises or facilities. 						
CERTIFICATE HOLDER ("OWNER")		CANCELLATION SHOULD ANY OF THE ABOVE-DESCRIBED POLICIES BE CANCELED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL MAIL THIRTY (30) DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES AUTHORIZED REPRESENTATIVE				

APPENDIX F

Pre-Construction Conference & Notice to Proceed

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**DEVELOPMENT PROJECT
PRE-CONSTRUCTION CONFERENCE REQUIREMENTS**

All construction projects involving facilities that will be owned and operated by the Edgemont Community Services District shall require a pre-construction conference. A pre-construction conference shall always be held prior to issuance of a Notice to Proceed. Prior to the District scheduling a pre-construction conference, the District requires the following information:

1. Project Name _____
(Tract, P.M., P.P. #, etc.)

2. Developers Name _____
Address _____

Phone No. _____
License Type & No. _____
Contact's Name _____

3. Contractors Name _____
Address _____

Phone No. _____
License Type & No. _____
Contact's Name _____

Has the Contractor completed a Contractor's Data Sheet, including the experience portion of Appendix D of the District's Standards Manual? YES NO (Circle One)

If No, it is necessary for the Contractor to complete this form and submit it to the District prior to scheduling the pre-construction conference.

4. Subcontractors Name(s) _____
Address _____

Phone No. _____
License Type & No. _____
Name _____
Address _____

Phone No. _____
License Type & No. _____

5. Attach copies of all applicable permits (i.e. Encroachment Permits, OSHA, etc.)
6. Provide 3 sets of District Approved Plans.
7. Provide 3 sets of District Approved Submittals.
8. Provide 24-hr. emergency phone no. of the Contractor's responsible party.

Name of Contact _____

Phone No. _____

Relationship to Project (i.e., Contractor, Project Manager,
Superintendent, etc.) _____

9. Geotechnical Consultants

Name	_____
Address	_____

Phone No.	_____
Contact	_____

10. Provide all applicable information as delineated in Appendix H of the Standards Manual.

Subsequent to District review and approval of the required information, the District will contact the developer and inform him/her that a pre-construction conference may be scheduled at his/her convenience during normal District office hours.

PRE-CONSTRUCTION CONFERENCE AND NOTICE TO PROCEED

The following outlines the general requirements and the expectations of the Pre-construction Conference and Notice to Proceed and shall apply to all developer-paid sewer facility construction within the District's jurisdiction.

1. Sequence of Events: A Pre-construction Conference shall always be held prior to issuance of a Notice to Proceed. Prior to the Pre-construction Conference, the District must have the following applicable items indicated as complete and checked off:
 - a. SEWER PLANS: Drawings, complete, signed as approved by the District, and signed by the required officials of Riverside County (Health Department, Road Department, Fire Marshall, etc.).
 - b. Recorded Tract Map/Parcel Map and applicable street improvement plans and grading plans.
 - c. Applicable fees and deposits made to the District, Deposit Agreement signed, and appropriate Work Order Numbers opened and assigned.
 - d. Environmental Assessment completed.
 - e. A fully signed Construction Agreement with signatures of the Developer, Contractor, and the District's General Manager.
 - f. Agreement for PARTICIPATION/REFUND WAIVER OR AGREEMENT for participation and refund SIGNED.
 - g. Streets shall have been constructed to final subgrade and Certification signed by the Developer that streets are to final subgrade.
 - h. Easements shall be properly obtained, if required, and dedicated to the District.
 - i. Property corners shall be surveyed and set by owner/developer's surveyor to identify lot lines which will assist in proper location of mains and appurtenances.
 - j. District certification of contractor for intended size job.
 - k. A copy of tentative Bid between contractor and developer shall be submitted to the District.
 - l. Necessary permits have been obtained.
 - m. Required 100% Performance Bond and 100% Labor & Materials Bond must be posted and District approved.
 - n. Required Insurance form naming District as additionally insured must be executed and on file with the District (See Appendix E).
2. Pre-construction Conference: A pre-construction conference shall be scheduled by the District prior to issuance of Notice to Proceed and commencement of work. The Pre-construction Conference shall allow all parties to present their views and requirements, and provide a forum for satisfactory solution to all anticipated problems.

- a. Parties to be invited:
 - 1) District, District Inspector, and District Representative
 - 2) Developer (and owner if different)
 - 3) Developer's Engineer
 - 4) Contractor and Foreman
 - 5) County and/or City Construction Inspector
 - 6) Other affected agencies and utilities: (if their facilities are involved)
 - 7) Material Suppliers (If Required)

- b. Items to be Discussed:
 - 1) Review of plans and fabrication drawings. Verify main footage and location of fittings and appurtenances.
 - 2) Material deliveries, quantities, and problems
 - 3) Construction schedule
 - 4) Connection to existing facilities
 - 5) Street grading and staking. Verification for final subgrade elevations and satisfactory subgrade compaction
 - 6) Curb and gutter/berm placement
 - 7) Project phasing
 - 8) Temporary services
 - 9) Other Public Agency requirements. Check compliance with standard requirements for other public agencies.
 - 10) Plans for testing
 - 11) Clearance of other utilities
 - 12) Blasting/rock removal
 - 13) Traffic control and public convenience
 - 14) Dust control and site cleanliness
 - 15) Safety and OSHA requirements. (Contractor's responsibility)
 - 16) Review of possible field conflicts and method of solution
 - 17) As-built dimensions and drawings
 - 18) Job Security and Storage of Materials and Equipment

3. Notice to Proceed: If all the District requirements have been met and no outstanding problems exist, the District will issue a written Notice to Proceed to the Developer and Contractor with copy to District Inspector at the Pre-construction Conference.

If any requirements remain to be completed or if there is any problem with the above-listed items, such problems shall be resolved by cognizant parties. When completed to District satisfaction, a written Notice to Proceed will be issued to the Developer and Contractor.

No sewer system construction shall commence until the written Notice to Proceed is issued. After the Notice to Proceed is issued, the Developer may then finalize bid requirements with contractor or sub-contractors, sign the acceptance of bid and forward a copy of the firm BID CONTRACT to the District.

ITEMS REQUIRED PRIOR TO SCHEDULING PRE-CONSTRUCTION MEETING

- Updated Availability Letter
- Blacklines/Mylars
- Easements recorded (if applicable)
- Electronic Copy of Plans on CD
- Maps with Street Names and Addresses of Lots
- Fees Paid
- Inspector Assigned
- Contractor Data Sheet Complete
- Sewer Construction Agreement
- Material Submittals Approved
- Sewer Facility Agreement
- Cut Sheets (minimum of 300 Ft. for each start point)
- Confined Space Certification
- Safety Manual
- Copy of Certifications for Confine Space and Competent Persons

APPENDIX G

Charges and Deposits

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**Charges and Deposits⁽¹⁾
November, 2022**

Sewer Facility Charge

Connection Fee \$3,600 per Equivalent Dwelling Unit (EDU)

Sewer Availability Letter^(2,3)

Plot Plan/Parcel Map/Tracts \$4,500

Residential Dwelling Unit \$3,500

Accessory Dwelling Unit (ADU) Review^(2,4)

Accessory Dwelling Unit \$1,500

Industrial Waste and Non-Residential Improvements Review^(2,4)

Tenant Improvement Release \$1,500

Industrial Waste Review and Waiver \$3,500

Plan Checking⁽²⁾

Plot Plan/Parcel Map/Tracts \$7,000 (Minimum)

Residential Dwelling Unit \$5,000 (Minimum)

Accessory Dwelling Unit \$4,000 (Minimum)

Industrial Waste and Non-Residential \$4,000 (Minimum)

Streetlight Annexation^(2,5) \$5,000 (Minimum)

Construction Inspection⁽⁶⁾

Plot Plan/Parcel Map/Tracts \$15,000 (Minimum)

Residential Laterals and Cleanouts \$8,000 (Minimum)

Grease Interceptors and Sample Wyes \$5,000 (Minimum)

Standards Manual

Available online⁽⁷⁾: <https://edgemontcsd.specialdistrict.org/design-and-construction-standards-manual>

Notes:

(1) Contact the General Manager to confirm the latest charges and deposits amounts.

(2) These costs are advance payment deposits against the actual cost of the task performed and are required to initiate the project review process. Additional payments may be required as a result of the complexity of the project or multiple plan check resubmittals.

(3) Sewer availability letter does not include the detailed plan review of the project and a separate plan check process is required along with associated payment deposits.

(4) Depending on the complexity of the project and plans provided, a separate plan check process may be required and will be determined upon initial review of the proposed improvements.

(5) The cost for the street light annexation process should be taken into consideration.

(6) The construction inspection deposit will be determined based on the project plans and complexity of the project. Additional funds may be required. Notification will be provided before funds are depleted.

(7) The Standards Manual is available online at no cost. Please contact the General Manager to request a printed copy of the manual. Reasonable cost of printing to be paid by the requestor at the time of receipt.

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APPENDIX H

Availability Letter Request

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SAMPLE TEMPLATE - AVAILABILITY LETTER REQUEST

(Date)

EDGEMONT COMMUNITY SERVICES DISTRICT
PO Box 5436
Riverside, CA 92517

Attn: Ms. Jessica Pfalmer, General Manager

RE: Request for Sewer Availability Letter

As evidenced by this letter, I hereby request a Sewer Availability letter for (Tentative Tract, Parcel Map or Plot Plan No, include assessor's parcel No.) .

This project is part of Specific Plan (name) , City of Moreno Valley, California, located (Location of Development) .

The proposed development consists of (Number of Dwelling units if know) , on approximately (number) acres. Proposed sewer connections are to be made to existing lines located in (Point of connection to District line if known) as shown on the attached map.

As a part of this Request for Sewer Availability Letter, the following attachments are also included per the Districts request:

- One copy of the tentative map, plot plan, or vicinity map
- Deposit of (Refer to Appendix G for current charges and deposits).

Should you have any questions or require any further information, please do not hesitate to call.

Sincerely,

REQUIREMENTS AND PROCEDURES FOR REQUESTS OF AVAILABILITY LETTER

Items Needed for Availability Letters

1. Letter requesting availability with information regarding type of project.
2. Advance payment of Deposit determined by the District for processing request.
3. Tentative Tract, Parcel Map or Plot Plan or Assessor's Parcel Number and two (2) copies of a map showing area and boundaries of property requiring water and/or sewer service.
4. Proof of Property Ownership/Grant Deed or Title Report.

Procedures for Availability Letter Request

1. Developer submits a request for an Availability Letter using the Request of Availability Letter Template along with all of the items specified above to Edgemont Community Service District (District).
2. All items are transmitted to the District's Engineer.
3. The District's Engineer writes the Availability Letter transmits them to the District.
4. The District's will then schedule the request for the next available board meeting for consideration of approval by the Board.
5. **Note: Because of State of California Brown Act which governs advance notification to the public of Board meeting agendas, the request may not be scheduled for the next calendar Board meeting.**
6. After Approval of the Board of Directors the District will write the appropriate cover letter and transmit it to the Developer.

APPENDIX I

Street Lighting Annexation Policy & Guidelines

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Requirements of Developer for Street Lighting Annexation

11. Consent form for property owner to have electricity charges included on the tax bill (signed by Owner and provided to ECSD). Consent form will be provided by District Counsel.
12. District's Engineer will review street light count, lumens, and Street Improvement/Street Lighting Plans so annual maintenance cost can be determined.
13. District Engineer submits documents and recommendations to ECSD for approval.

(PLEASE PUT ON YOUR LETTERHEAD)

(Insert Date)

Edgemont Community Services District

P.O. Box 5436

Riverside, CA 92517

Attn: Jessica Pfalmer (General Manager)

RE: Street Lights along **(Insert Street Name)** in the City of Moreno Valley

Dear Ms. Pfalmer,

On behalf of **(Insert Owner's Name)**, please accept this letter as a request for the portion of our project adjacent to **(Insert Street Name)**, referenced on the Street Improvement Plan previously submitted to your office, to be placed into Edgemont Community Services District Lighting District.

Should you have any questions regarding this request, please let me know as soon as possible.

Sincerely,

(Insert Name & Title)

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SOUTHERN CALIFORNIA EDISON STREETLIGHT AUTHORIZATION

DEVELOPER/APPLICANT MUST PROVIDE THIS FORM
COMPLETED BY THE PUBLIC AUTHORITY
FOR ANY SCE-OWNED STREETLIGHT INSTALLATION, REMOVAL OR CHANGE REQUESTS
Incomplete forms will be returned and not processed

PUBLIC AUTHORITY NAME: Edgemont Community Services District

Builder/Developer Name: Phone #:

Tract/Ref # Streetlight Location

Please Check one: [] Installation [] Removal [] Change

Number of Lamp(s) Lamp Size Lamp Type

New Installations

Public Authority Responsibility for Streetlight Monthly Billing

Please Check one and fill out appropriate dates:

[] Upon Energizing
[] If Public Authority's Collection of Developer's Advanced Energy Payment,
indicate date collected. ()

Monthly Billing: [] Establish new Service Account (SA) Use existing SA #

[] Commission Date:
I agree to pay SCE and Public Authority () or no later than 36 months from first
streetlight energized whichever is earlier.

Monthly Billing: [] Establish new Service Account (SA) Use existing SA #

[] Public Authority is not responsible
[] HOA Area Name Other Entity (please define)

Public Authority Notes:

Authorized Public Authority Agent

Print name Date Signature

Phone # Title

TO BE COMPLETED BY SCE

ACTION: ENTER TRACT/REF# ON DM PROGRAM NAME FIELD.

District Planning AOR PLANNER NAME (PRINT)

DM SR # Product # (one per SLA)

FORWARD COMPLETED COPIES OF THE SLA FORM, MAP AND CSD272 CONTRACT, IF APPLICABLE TO:
'Street & Outdoor Lighting Organization' Santa Ana Bldg. D
SCE: SOLO-003 Rev 04-20-15

EXPLANATION SHEET:

Explanation

1. **BOX 1:**
 - Public Authority Name:** Fill in the name of the Government Agency
i.e.: City of Glendora
 - Builder/Developer Name:** Fill in the name of the BD if applicable
 - Phone# :** Phone# of the Builder/Developer
 - Tract/Ref # :** Use a Tract # if applicable otherwise use reference provided by government agency or default to the "Date" this document was signed by Authorized Agent (Box 5).
 - Streetlight Location :** Job Address
2. **BOX 2:**
 - Installation, Removal or Change:** Check box to indicate lamp installation, removal or change.
 - Number of Lamps, Lamp Size, Lamp Type:** Indicate all lamps, sizes and type (mult/singles) that are to be installed, removed or changed.
3. **BOX 3:**
 - Builder/Developer Advance Energy Payment Collected by:**
If applicable indicate who will be collecting this fee, SCE or the Government Agency. Collected by Government Agency, indicate date paid by the Builder/Developer.
 - Edison will not continue job until all fees are paid up front by the Builder/Developer as required by the government agency.**
 - When is the Public Authority responsible for streetlight energy charges?**
Indicate if the government agency is going to accept financial responsibility for streetlight energy and when or will the lamps be going to a private party.
4. **BOX 4:**
 - Terms of Acceptance or Special Notes (By Government Agency):**
Indicate any special conditions, terms or timeliness that must be adhered to prior to the government agency taking financial responsibility for the energy charges.
5. **BOX 5:**
 - Energy Billing:**
Check if a new billing statement account number is required. If an existing account number will be used, fill in the service account number.
 - Print the name of the Public Authority Agent:**
Enter the name of authorized person to sign streetlight authorization form. Enter date and sign authorization form also, include title and phone number.
6. **BOX 6:**
 - TO BE COMPLETED BY SCE**

Refer to your Southern California Edison Project Packet for the current version of these instructions.

APPENDIX J

Wastewater Discharge Survey and Grease Interceptor Waiver Request

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MEMORANDUM

To: Business Owner/Manager

From: Jessica Pfalmer
General Manager

Re: Wastewater Discharge Survey

Edgemont Community Services District (District) currently administers an industrial wastewater pretreatment program in accordance with federal and state regulations and the District's Pretreatment Ordinance. Implementation of this program includes completion of a Wastewater Discharge Survey by all commercial and Industrial businesses.

Many industrial facilities produce industrial wastewater discharge which could potentially harm the District's wastewater treatment plant and poses health risk to the entire community of Riverside and Moreno Valley. Please complete and return the enclosed form to the District at P.O. Box 5436 Riverside, CA 92517, email to jessica@edgemontcsd.org or FAX it to the District at (951) 787-2411 within 14 days of receiving this letter.

If you have any questions, contact Jessica Pfalmer at (951) 784-2632; or at jessica@edgemontcsd.org. Thank you for your prompt attention to this matter.



WASTEWATER DISCHARGE SURVEY

COMPANY INFORMATION

- | | |
|---------------------------|------------------|
| 1. Company Name: _____ | Date: _____ |
| 2. Site Address: _____ | Telephone: _____ |
| City, State: _____ | Zip: _____ |
| 3. Mailing Address: _____ | |
| City, State: _____ | Zip: _____ |

RESPONSIBLE PARTY

- | | |
|-----------------------------|------------------|
| 1. Responsible Party: _____ | Telephone: _____ |
| 2. Contact: _____ | Telephone: _____ |
| 3. Emergency Contact: _____ | Telephone: _____ |

EMPLOYEES

# OF EMPLOYEES ON DUTY	SHIFT (Day, Swing, Graveyard)	TIME OF SHIFT (8 a.m. – 5 p.m. Etc.)	DAYS OF WEEK (Circle)
			M T W TH F S S
			M T W TH F S S
			M T W TH F S S

This information is primarily used to determine the sewer flow generated by employees. Typically, this is 20 gallons per full time employee / day.

DESCRIPTION OF BUSINESS ACTIVITIES

Provide a brief description of all operations at this facility, including primary products or services. *(Attach additional sheet if necessary).*

SOFTWATER SYSTEM

Do you have an Ion exchange resin tank service: Yes [] No []

If yes, provide vendor's name and address: _____



All self-regenerative water softeners are illegal for use in commercial businesses in the City of Riverside, unless the regenerative brine wastewater is hauled off-site for disposal. No regenerative brine wastewater can be discharged to the sewer, storm drain, or ground.

SEWER FLOW CALCULATIONS

Appurtenance	DFU's	Quantity	Total
Drinking Fountain	0.5		
Floor Drain	2		
Floor Drain (Emergency)	0		
Drinking Fountain (Public Use)	1		
Urinal	2		
Water Closet (Employee Only Toilet)	4		
Water Closet (Public Toilet)	6		
Lavatory (Bathroom Sink)	1		
Shower	2		
Bar Sink, Break Room Sink	2		
Floor Sink (1.5" Trap)	3		
Floor Sink (2" Trap)	4		
Floor Sink (3" and 4" Trap)	6		
Food Waste Grinder	3		
Hand Sink	1		
Mop Sink	3		
Clothes Washer	2		
Dish Washer	1		
AC Condensate (1.5" Pipe - 3 Units)	3		
AC Condensate (2" Pipe - 4 Units)	4		
AC Condensate (4" Pipe - 6 Units)	6		
One-Compartment Sink (Don't Count Floor Sink)	2		
Two-Compartment Sink (Don't Count Floor Sink)	4		
Three-Compartment Sink (Don't Count Floor Sink)	6		
Total Drainage Fixture Units (DFU's)			
Total Flow ("Total" x 21 gal = Total Flow)			

Instructions: The table above can be used to calculate the estimated flow from a facility. Count the number of each type of fixture connected to the sewer and enter it in the "Quantity" column. To calculate the total of each row multiply the DFU's by the Quantity of Fixtures. Then add up the totals to provide a total drainage fixture unit (DFU) count. Then multiply the total drainage fixture unit by 21 to determine the Total Flow from the facility.

Estimated Gallons Per Day – For additional review and verification, provide water bills from similar businesses. If this business is franchised, provide the water bills of similarly sized franchised business for review and consideration. Water bills are reviewed to estimate the wastewater generated from the business.

For restaurants, complete, sign and return the attached "Schedule 1: Restaurant Wastewater Discharge Survey" as part of this survey.

For other non-residential business, sign and return the attached "Schedule 2: Non-Residential Wastewater Discharge Survey" as part of this survey.

SCHEDULE 1:
RESTAURANT WASTEWATER DISCHARGE SURVEY
MENU AND FOOD ITEMS

Attach a menu or indicate foods prepared on site and method of preparation.

RESTAURANT OPERATIONS

1. Maximum Seating Capacity: _____
Maximum Meals Served @ Peak Hour: _____
2. Percent of Single Service (i.e., disposable plates, utensils, etc.): _____%
3. a. Number of sinks, and floor drains **excluding restroom sinks and drains**:
Floor drains ____ Floor sinks ____ Mop sinks ____ Hand sinks ____

Three compartment sinks: ____
Two-compartment sinks: ____
One-compartment sinks: ____

All floor sinks and floor drains must have a mesh screen or other suitable insert with a maximum opening of 3/8".

- | | | | | |
|----|------------------------|--------|---------|----------|
| b. | Garbage Grinders | [] NO | [] YES | QTY ____ |
| c. | Hot Grills | [] NO | [] YES | QTY ____ |
| d. | Automatic Dishwasher | [] NO | [] YES | QTY ____ |
| e. | Deep Fryers | [] NO | [] YES | QTY ____ |
| f. | Broilers | [] NO | [] YES | QTY ____ |
| g. | Rotisseries | [] NO | [] YES | QTY ____ |
| h. | Oil/Grease Interceptor | [] NO | [] YES | QTY ____ |

(If yes, provide size and location.)

-
- i. Grease Disposal Method: _____
 - j. Grease Disposal Company: _____



4. Chemical usage: YES NO
- Are any chemicals or enzymes used in the washing of dishes? [] []
- Are any chemicals poured down the drains to keep them clean? [] []
- Are any chemicals, enzymes, bacteria, or emulsifiers added to the interceptor? [] []

If yes to any of the questions in 4 above, please attach a copy of the MSDS sheets for the specific product. MSDS sheets can be obtained from the chemical supplier.

5. Meat Cutting Facilities:
- a. Pounds of meat cut per day: _____
- b. Equipment cleaning procedure: _____
- c. Method of (meat scrap) disposal: _____

AUTHORIZED REPRESENTATIVE STATEMENT

Certification Statement: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name

Title

Signature

Date

Name of Document Preparer

Document Preparer Company

Phone Number of Document Preparer

E-Mail of Document Preparer



SCHEDULE 2:
NON-RESIDENTIAL WASTEWATER DISCHARGE SURVEY
DISCHARGE OF WASTES INTO THE SEWER

- ___ I will only discharge domestic wastewater into the ECSD sewer.
- ___ I anticipate discharging the following waste materials into the ECSD sewer in addition to domestic wastewater. *(Attach extra sheet if necessary).*

<u>Material to be Discharged (GPD)</u>	<u>Estimated Gallons Per Day</u>
_____	_____
_____	_____

STORAGE OF HAZARDOUS MATERIALS

Is storage of hazardous materials proposed? ___ Yes ___ No

If yes, describe all flammable liquids, solids or gases, oxidizers, corrosives, poisons and explosives that will be stored on the property, along with estimated quantities of the chemical waste to be stored. (Attach extra sheet if necessary).

<u>Name of Chemical/Flammable</u>	<u>Estimated Quantity</u>
_____	_____
_____	_____

AUTHORIZED REPRESENTATIVE STATEMENT

Certification Statement: I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

_____ Name	_____ Title
_____ Signature	_____ Date
_____ Name of Document Preparer	_____ Document Preparer Company
_____ Phone Number of Document Preparer	_____ E-Mail of Document Preparer



GREASE INTERCEPTOR WAIVER REQUEST

I, _____, representing
(Proprietor Name)

_____ at _____
(Facility Name) (Facility Address)

do hereby confirm that at no time shall any greases, fats, oils, solids, or any wastewater or material be discharged to **Edgemont Community Services District's** sewer collection system to impair the functional operations of same. If at any time non-compliance with the discharge limitations is detected, I do hereby consent to install, within ninety (90) days, an oil/grease separator of sufficient size to be acceptable to the District. The minimum size of the interceptor shall not be less than 750 gallons in capacity and shall be equipped with a monitoring station.

If deemed necessary by the District, I consent to install a monitoring station in lieu of an oil and grease interceptor for the purpose of sampling all non-domestic wastewater discharged from my facility (i.e., kitchen sinks, mop sink, floor sinks, industrial wastes, etc.).

The District's oil/grease interceptor waiver, if issued, is issued to the proprietor stated herein, and is not transferable.

Signed _____

Date _____

Approved _____

Date _____

Denied _____

Date _____

Interceptor Requirement _____ gallons

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APPENDIX K

Project Close-Out Checklist

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APPENDIX L

Permit for Installation for Connection to Sewer Main

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EDGEMONT COMMUNITY SERVICES DISTRICT

Post Office Box 5436
Riverside, CA 92517
Telephone: (951) 784-2632

Permit No.: _____

PERMIT FOR INSTALLATION OF CONNECTION TO SEWER MAIN

Permit Property Information

Provide Description (No. of Units, Residential, Commercial, Industrial, Retail, Restaurant, Other): _____

Address: _____, Moreno Valley, CA _____

Lot No.: _____ Tract/Parcel Map No.: _____

Assessors Parcel No.: _____

Owners Name: _____

Owners Address: _____

Owners City/State/Zip Code: _____

Owners Telephone No.: _____

In compliance with the applicable rules, regulations and Ordinances and in conformance with Edgemont Community Services District's Standards and Specifications, permission is granted to the above referenced owner to install:

_____ Building Sewer Connection	_____ Other (Describe Below)
_____ Street Sewer Connection	_____
_____ Sewer Main Extension	_____

The Owner and/or his agent shall be responsible for the following: providing a one year performance bond to the Edgemont Community Services District in an amount established by the District; obtaining any and all other permits from appropriate agencies that any be required for referenced construction including but not limited to building permits, encroachment permits, etc.; and providing construction of the necessary sewer facilities by a contractor duly licensed to perform such work in the City of Moreno Valley and State of California.

Permit Fee Calculation

Permit/Connection Fee	\$ _____	\$3,600.00	_____ EDUs
Inspection Deposit	\$ _____		
Other Deposits	\$ _____		
Total Fees & Deposits (this che	\$ _____	0.00	

EDGEMONT COMMUNITY SERVICES DISTRICT

Issued By: _____ Date: _____

Title: _____

This permit shall become void sixty (60) calendar days from the date of issue and shall be renewable in accordance with District provisions.

CERTIFICATE OF INSPECTION

I hereby certify that the work described in this permit has been constructed according to District Standards and Specifications and are in compliance with the provisions of Ordinance No's. 277, 278, 279, 280 and 283, and I hereby approve and accept this work for the Edgemont Community Services District. Refer to attached drawing for location of facilities.

Completion and Acceptance Date: _____ By: _____

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APPENDIX M

Standard Title Block Format for 24" x 36" Design Drawing

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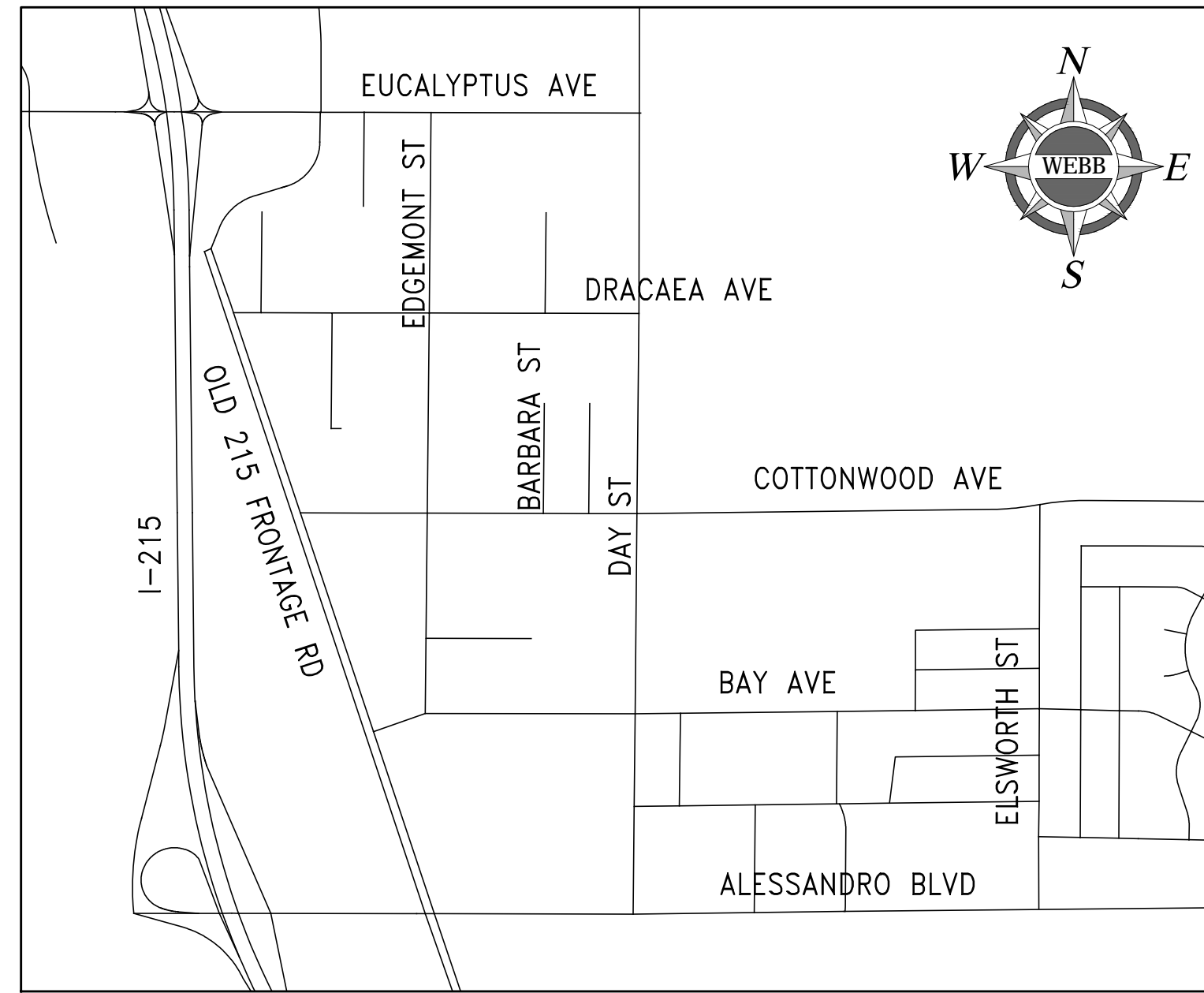
EDGEMONT COMMUNITY SERVICES DISTRICT

RIVERSIDE, CALIFORNIA

XX
XX

GENERAL NOTES

- THE CONTRACTOR SHALL NOTIFY ECSD AT LEAST TWO WORKING DAYS PRIOR TO CONSTRUCTION.
- SEPARATION REQUIREMENTS BETWEEN SEWER LINES HORIZONTALLY (10' MINIMUM, 5' FOR LATERALS) SHALL CONFORM TO THE COUNTY OF RIVERSIDE HEALTH DEPARTMENT AND THE CALIFORNIA DEPARTMENT OF PUBLIC HEALTH (CDPH) REQUIREMENTS. THE AGENCY'S SPECIFICATIONS THAT ARE MORE RESTRICTIVE SHALL GOVERN IN ALL CASES.
- ALL CONSTRUCTION AND MATERIALS SHALL COMPLY WITH ECSD STANDARDS AND SPECIFICATIONS. ANY CONSTRUCTION AND/OR MATERIALS NOT COVERED IN THE ECSD STANDARDS SHALL BE APPROVED BY THE DISTRICT PRIOR TO CONSTRUCTION.
- PRIOR TO CONSTRUCTION OF THE SEWER LINES, THE CONTRACTOR SHALL EXPOSE THE EXISTING SEWER LINES WHERE CONNECTIONS WILL OCCUR AND VERIFY THEIR ELEVATION AND LOCATION. APPROVAL OF ECSD OF A PROPOSED CONNECTION TO AN ECSD FACILITY DOES NOT IMPLY APPROVAL OF THE CORRECTNESS OF THE ELEVATION AND/OR LOCATION SHOWN ON THE DEVELOPER'S SEWER PLANS.
- CONTRACTOR SHALL NOT BACKFILL TRENCH UNTIL THE DISTRICT'S INSPECTOR HAS OBTAINED AS-BUILT STATIONING ON ALL STRUCTURES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE ACCURATE RECORD DRAWINGS TO THE DISTRICT IMMEDIATELY AFTER CONSTRUCTION.
- APPROVAL BY ECSD IMPLIES NO PERMISSION OTHER THAN THAT WITHIN THE DISTRICT'S JURISDICTION. ALL PERMITS REQUIRED BY LAW SHALL BE ACQUIRED BY THE APPLICANT OR HIS CONTRACTOR. REQUIREMENTS OF ECSD SHALL TAKE PRECEDENCE OVER REQUIREMENTS OF OTHER AGENCIES ONLY WHERE ECSD REQUIREMENTS ARE MORE STRINGENT.
- CONTRACTOR SHALL SHORE ALL TRENCHES AND CONDUCT ALL CONSTRUCTION AND OPERATIONS IN ACCORDANCE WITH CAL-OSHA REQUIREMENTS AND HAVE ALL ENCROACHMENT AND EXCAVATION PERMITS PRIOR TO START OF WORK.
- PIPE JOINTS **SHALL NOT** BE PULLED AT ANY ANGLE GREATER THAN THE MAXIMUM ANGLE RECOMMENDED BY THE PIPE MANUFACTURER.
- THE PROPOSED WORK SHALL BE SUBORDINATED TO ANY OPERATIONS ECSD MAY CONDUCT, AND SHALL BE COORDINATED WITH SUCH OPERATIONS AS DIRECTED BY ECSD.
- A PRE-JOB MEETING SHALL OCCUR PRIOR TO CONSTRUCTION. ATTENDEES SHALL INCLUDE THE DISTRICT'S ENGINEER, THE DISTRICT'S INSPECTOR, TRACT SUPERINTENDENT, CITY OF MORENO VALLEY REPRESENTATIVE AND THE CONTRACTOR WHO WILL PERFORM THE WORK. "CUT-SHEETS" SHALL BE PROVIDED TO THE DISTRICT PRIOR TO THIS MEETING FOR ITS REVIEW.
- THE CONTRACTOR SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) AND HAVE ALL UNDERGROUND UTILITIES MARKED TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, PER U.S.A. REQUIREMENTS.
- CONTRACTOR SHALL FURNISH AND INSTALL ALL FACILITIES IN ACCORDANCE WITH THE DISTRICT'S STANDARD SPECIFICATIONS AND STANDARD DRAWINGS FOR SANITARY SEWER FACILITIES (LATEST REVISION). THE SPECIFICATIONS AND STANDARD DRAWINGS ARE AVAILABLE FROM THE DISTRICT. CONTRACTOR SHALL BE IN POSSESSION OF DISTRICT'S SPECIFICATIONS AND STANDARD DRAWINGS ON THE JOB SITE AT ALL TIMES.
- ALL PERMITS REQUIRED BY LAW SHALL BE ACQUIRED BY THE APPLICANT OR THEIR CONTRACTOR. COPIES OF THE EXCAVATION AND ENCROACHMENT PERMITS WILL BE GIVEN TO ECSD PRIOR TO THE PRE-JOB.
- ALL CONSTRUCTION SHALL CONFORM TO CURRENT CAL OSHA SAFETY REQUIREMENTS.
- CONTRACTOR SHALL DESIGNATE A QUALIFIED SUPERINTENDENT WITH FULL AUTHORITY TO ACT ON BEHALF OF THE CONTRACTOR. SAID SUPERINTENDENT SHALL BE ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
- THE DISTRICT'S ABILITY TO PROVIDE SEWERAGE SERVICES TO THIS TRACT MAY DEPEND ON DEVELOPERS OF OTHER TRACTS COMPLETING THE CONSTRUCTION OF FACILITIES. THE DISTRICT ASSUMES NO RESPONSIBILITY FOR THE CONSTRUCTION OF THE FACILITIES, WHICH ARE TO BE CONSTRUCTED BY SUCH DEVELOPERS.
- IF DISTRICT FACILITIES ARE LOCATED ON LAND WHICH ARE PRIVATE (I.E. OUTSIDE PUBLIC RIGHTS-OF-WAY) LEGAL DESCRIPTIONS AND PLATS (EASEMENT DOCUMENTS) SHALL BE PREPARED IN ACCORDANCE WITH DISTRICT STANDARDS BY THE ENGINEER OR LAND SURVEYOR OF RECORD. THE EASEMENT DOCUMENTS SHALL BE REVIEWED AND APPROVED BY THE DISTRICT PRIOR TO FINAL ACCEPTANCE OF THE FACILITIES BY THE DISTRICT.
- THE CONSTRUCTION OF THE SEWER MAIN, MANHOLES, AND LATERALS, AND A SUCCESSFUL FIRST AIR TEST SHALL BE COMPLETED PRIOR TO THE COMMENCEMENT OF THE WATERLINE INSTALLATION.
- IMMEDIATELY UPON COMPLETION OF CONSTRUCTION OF SEWER PIPELINES, THE DEVELOPER SHALL HIRE A DISTRICT APPROVED VIDEO COMPANY TO VIDEO THE PIPELINES IN DVD FORMAT (VIDEO FILE FORMAT TO BE VIEWABLE ON A STANDARD DVD PLAYER/COMPUTER AND/OR AS APPROVED BY THE DISTRICT). DISTRICT OR DISTRICT REPRESENTATIVE SHALL REVIEW SAID DVD'S FOR POTENTIAL CONSTRUCTION DEFECTS PRIOR TO ACCEPTANCE OF THE PROJECT. FINAL DVD SUBMITTED TO THE DISTRICT SHALL BE EDITED, IF NECESSARY, TO INCLUDE ONLY ACCEPTED REACHES OF THE PIPELINE.
- INSCRIBE AN "S" ON THE FACE OF THE CURB TO INDICATE WHERE SEWER LATERALS SERVICES CROSS THE CURBLINE.
- COMPACTION TESTS FOR SEWER FACILITIES SHALL BE PERFORMED BY A QUALIFIED GEOTECHNICAL FIRM AND PAID FOR BY THE DEVELOPER. ALL COMPACTION TEST SHALL BE MADE IN ACCORDANCE WITH DISTRICT'S SPECIFICATIONS. SOILS TESTING RESULTS SHALL BE GIVEN TO THE DISTRICT INSPECTOR ON A DAILY BASIS. AT THE CONCLUSION OF THE PROJECT, A FINAL COMPACTION REPORT SHALL BE GIVEN TO THE DISTRICT. THE REPORT SHALL BE SIGNED AND STAMPED BY A GEOTECHNICAL ENGINEER AND SHALL CERTIFY ALL COMPACTION RESULTS MET THE MOST STRINGENT AGENCY'S REQUIREMENTS.



TOWNSHIP: 3 South, RANGE: 4 West, Section 10
THOMAS GUIDE PAGE 716 GRIDS J4 AND J5,
PAGE 717 GRIDS A4 AND A5

VICINITY MAP

N.T.S.

LEGEND

	PROPOSED SEWER MAIN & LATERAL
	PROPOSED SEWER MANHOLE
	EXISTING SEWER MANHOLE
	EXISTING WATERLINE (SIZE NOTED)
	EXISTING SEWERMAIN (SIZE NOTED)
	EXISTING STORM DRAIN (SIZE NOTED)
	EXISTING GAS (SIZE NOTED)
	EXISTING OVERHEAD ELECT/TELE/CABLE
	EXISTING FENCE
	EXISTING EDGE OF PAVEMENT
	STREET CENTER LINE
	STREET RIGHT-OF-WAY LINE
	SEWER EASEMENT
	LOT LINE
	HOUSE NUMBER
	EXISTING SURVEY MONUMENT
	EXISTING SEWER CLEANOUT
	PIPE END CAP

ABBREVIATIONS

ABAND	ABANDON	MIN	MINIMUM
AH	AHEAD STATION	PCC	POINT OF COMPOUND CURVE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	PRC	POINT OF REVERSE CURVE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS	PE	POLYETHYLENE
AV	AIR VALVE	PVC	POLYVINYL CHLORIDE
AWWA	AMERICAN WATER WORKS ASSOCIATION	PROP	PROPOSED
BC	BEGIN CURVE	RED	REDUCER
BFV	BUTTERFLY VALVE	RJ	RESTRAINED JOINT
BK	BACK STATION	R/W	RIGHT-OF-WAY
BF	BLIND FLANGE	SD	STORM DRAIN
BO	BLOW OFF	ST.LT.	STREET LIGHT
BOT	BOTTOM	STA	STATION
CL	CENTERLINE	STD	STANDARD
CTS	CATHODIC TEST STATION	S	SEWER OR HOUSE LATERAL
CO	CLEAN OUT	T	TELEPHONE CABLE OR CONDUIT
CML/CMC	CEMENT MORTAR LINED/CEMENT MORTAR COATED	UC	UNDERGROUND
CPLG	COUPLING	VCP	VITRIFIED CLAY PIPE
DIA	DIAMETER	W	WATER MAIN OR SERVICE
DIP	DUCTILE IRON PIPE	WSP	WELDED STEEL PIPE
DWG	DRAWING		
EC	END CURVE		
ECSD	EDGEMONT COMMUNITY SERVICES DISTRICT		
ELEC	ELECTRICAL		
ESMT	EASEMENT		
EX	EXISTING		
FH	FIRE HYDRANT		
FLG	FLANGE OR FLANGED		
FL	FLOWLINE		
FUT	FUTURE		
G	GAS LINE OR SERVICE		
GPM	GALLONS PER MINUTE		
GV	GATE VALVE		
HPI	HORIZONTAL POINT OF INTERSECTION		
IPS	IRON PIPE SIZE		
MH	MANHOLE		

SEWER NOTES

- THE SEWER LINE SHALL BE INSTALLED BY A PRIVATE CONTRACTOR IN ACCORDANCE WITH ECSD STANDARDS, PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE APPROVED BY ECSD.
- TYPE OF SEWER PIPE USED SHALL BE VITRIFIED CLAY PIPE (EXTRA STRENGTH) WITH TYPE "G" JOINTS (BELL AND SPIGOT) FOR SIZES 4-INCH THROUGH 42-INCH DIAMETER PIPE PER SECTION 207-8, STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- UPON REVIEW AND APPROVAL BY ECSD, AN ALTERNATE MATERIAL, PVC PLASTIC SEWER PIPE FOR 8-INCH TO 12-INCH DIAMETER, MAY BE UTILIZED. PVC PLASTIC SEWER PIPE SHALL BE SDR 35 MINIMUM WALL THICKNESS PER SECTION 207-17 OF THE STANDARD SPECIFICATION FOR PUBLIC WORKS CONSTRUCTION, LATEST EDITION.
- ALL WORK AND MATERIALS SHALL CONFORM TO REQUIREMENTS OF THE CITY OF MORENO VALLEY ROAD STANDARDS AND SPECIFICATIONS FOR THE IMPROVEMENTS OF STREETS, AND SUBSEQUENT AMENDMENTS.
- GRADING OVER SEWER MAINS SHALL BE DONE IN SUCH A MANNER AS TO PREVENT THE PONDING OF WATER.
- THE TOP OF ALL PROPOSED MANHOLES LOCATED IN PAVEMENT SHALL BE RAISED TO PAVEMENT GRADE (WITHIN 5 WORKING DAYS) AFTER STREETS ARE PAVED AND OR CAPPED.
- HOUSE CONNECTIONS, WYES, AND LATERALS SHALL BE LOCATED IN THE FIELD AT THE DIRECTION OF THE SUBDIVIDER.
- THE MINIMUM CLASS BEDDING FOR VCP SEWER SHALL BE CLASS "B-2" IN ACCORDANCE WITH ECSD STD. DWG. NO. S-1, SECTION VI.
- THE MINIMUM CLASS BEDDING FOR PVC PLASTIC SEWER PIPE SHALL BE CLASS "I" IN ACCORDANCE WITH ECSD STD. DWG. NO. S-1A, SECTION VI.
- SEWER CONTRACTOR SHALL SUCCESSFULLY PERFORM TWO AIR TESTS. THE FIRST AIR TEST SHALL BE COMPLETED IMMEDIATELY AFTER INSTALLATION, BACKFILL AND COMPACTION OF THE SEWERAGE SYSTEM. THE SECOND AIR TEST SHALL BE CONDUCTED AFTER INSTALLATION OF ALL THE OTHER UTILITIES AND PRIOR TO PAVING OF STREETS. ALL AIR TEST SHALL BE PAID FOR BY THE DEVELOPER.
- SEWER LATERALS CROSSING EXISTING CURB AND GUTTER SHALL BE BACKFILLED WITH A 1 SACK CEMENT, SAND SLURRY BACKFILL.
- CONNECTIONS TO EXISTING PIPELINES SHALL ONLY BE MADE WITH DISTRICT INSPECTOR PRESENT. TEST PLUGS SHALL ONLY BE REMOVED UPON DIRECTION OF THE DISTRICT.
- SHOULD MODIFICATION AND/OR RECONSTRUCTION (INCLUDING RAISING/LOWERING MANHOLES TO GRADE) OF AN EXISTING MANHOLE BE REQUIRED, PRIOR TO THE REMOVAL OF THE FRAME OF THE SEWER MANHOLE, THE CHANNEL OF THE MANHOLE SHALL BE COMPLETELY COVERED WITH PLANKING OR OTHER SUITABLE MATERIAL SO AS TO PREVENT DEBRIS FROM ENTERING THE CHANNEL. AFTER THE MANHOLE RECONSTRUCTION HAS BEEN COMPLETED, ALL DEBRIS SHALL BE REMOVED FROM WITHIN THE MANHOLE AND THE COVER OVER THE CHANNEL SHALL BE REMOVED.
- SEWER PLUG(S) SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF SEWER CONSTRUCTION AND SHALL BE INSPECTED ON A WEEKLY BASIS BY THE CONTRACTOR TO ENSURE THAT SEWER PLUG(S) ARE IN PLACE. IN ADDITION, THE LOCATION OF SEWER PLUG(S) SHALL BE IDENTIFIED ON THE PLANS BY THE CONTRACTOR. THE LOCATION OF ALL TEST PLUGS AND THEIR REMOVAL SHALL BE COORDINATED WITH THE DISTRICT INSPECTOR.

PRIVATE CERTIFICATION

THE EDGEMONT COMMUNITY SERVICES DISTRICT HAS REVIEWED THE SEWERAGE FACILITIES WITHIN THE PUBLIC RIGHT-OF-WAY FOR THIS PROJECT, SAID FACILITIES ARE IN CONFORMANCE WITH DISTRICT STANDARDS AND ARE APPROVED. SAID APPROVAL DOES NOT INCLUDE ANY ON-SITE/PRIVATE FACILITIES.

EDGEMONT COMMUNITY SERVICES DISTRICT _____ DATE _____
GENERAL MANAGER

CERTIFICATION VOID AFTER TWENTY-FOUR (24) MONTHS FROM THE ABOVE DATE

SEWERAGE CERTIFICATION

I CERTIFY THAT THE DESIGN OF THE SEWERAGE SYSTEM IN TRACT/PLOT PLAN/PARCEL MAP NO. _____ IS IN ACCORDANCE WITH THE SEWERAGE SYSTEM EXPANSION PLANS OF THE EDGEMONT COMMUNITY SERVICES DISTRICT, AND THAT THE WASTE DISPOSAL SYSTEM IS ADEQUATE AT THIS TIME TO TREAT THE ANTICIPATED WASTES FROM THE PROPOSED TRACT/PLOT PLAN/PARCEL MAP. THIS CERTIFICATION DOES NOT CONSTITUTE A GUARANTEE THE SEWERAGE SYSTEM CAN TRANSPORT OR TREAT FLOWS THAT EXCEED THE DISTRICT ESTIMATED FLOWS FOR THE SPECIFIC TYPE OF LAND USE PROPOSED FOR THIS DEVELOPMENT.

GENERAL MANAGER _____ DATE _____

CERTIFICATION VOID AFTER TWENTY-FOUR (24) MONTHS FROM THE ABOVE DATE.

EDGEMONT COMMUNITY SERVICES DISTRICT ENGINEER _____
RECOMMENDED BY:

DISTRICT ENGINEER _____ DATE _____

SHEET INDEX

SHEET 1	- TITLE SHEET
SHEET 2	- XXXXX STREET
SHEET 3	- XXXXX STREET
SHEET 4	- XXXXX AVENUE
SHEET 5	- XXXXX AVENUE

EDGEMONT COMMUNITY SERVICES DISTRICT

RECOMMENDED BY:

SAM I. GERSON, DISTRICT ENGINEER _____ DATE _____
R.C.E. 14489

REVIEWED BY CITY STAFF	BENCHMARK	BASIS OF BEARING		NOTE: WORK CONTAINED WITHIN THESE PLANS SHALL NOT COMMENCE UNTIL AN ENCROACHMENT PERMIT AND/OR A GRADING PERMIT HAS BEEN ISSUED. THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF THE DESIGN HEREON. IN THE EVENT OF DISCREPANCIES ARISING AFTER ECSD APPROVAL OR DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY ECSD.	CITY OF MORENO VALLEY ACCEPTED BY: _____	INSERT DEVELOPER'S ENGINEER NAME AND ADDRESS UNDER THE SUPERVISION OF: ENGINEER _____ DATE _____		EDGEMONT COMMUNITY SERVICES DISTRICT
					CITY OF MORENO VALLEY DATE: _____ BY: _____ MARK: _____ DESCRIPTION: _____ ENGINEER: _____ REVISIONS: _____ DESIGNED: XXX DRAWN: XXX CHECKED: XXX			SEWER PLANS PROJECT NAME TITLE SHEET

XX% SUBMITTAL - FOR REFERENCE ONLY

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APPENDIX N

Plan Check Forms and Checklist

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PROJECT IDENTIFICATION FORM

PROJECT TITLE: _____

For First (1st) Check Only: "All information required pursuant to Section II.B.3 of the District's Standards Manual is attached."

Name of Registered Engineer

Signature of Registered Engineer

PE No. and Expiration Date

Date

For Subsequent Plan Checks: The attached plan set(s) is/are being submitted to the Edgemont Community Services District.

I certify that the following statements are correct:

	<u>Yes</u>	<u>No</u>	<u>N/A</u>
<input type="checkbox"/> All "redlined" corrections from the previous plan check have been made or the reason they have not been made has been explained directly on the previous plan check sheets.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Changes made by the Developer's Engineer to the water and sewer plans, other than those corrections indicated by the District during plan check, have been highlighted.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/> Revisions to the reference plans (i.e. street plans, storm drain plans, grading plans, etc.) have been made. If changes have been made, the revised plans are attached.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

This Submittal is for Plan Check Number:

Name of Registered Engineer

Signature of Registered Engineer

PE No. and Expiration Date

The District plan check process and approvals on improvement plans are not a guarantee or warranty that the design is complete and without error, but that an appropriate amount of time was spent on reviewing the plans for general engineering designs commensurate with the engineering standards of the District. Pursuant to state law, the civil engineer of records is the engineer of work and bears full responsibility for his design. This is signified by State law that requires the design engineer to apply his "seal" to the plans. Please refer to the Business and Professions Code (Engineers' Act) Section 6703, Responsible Charge; Section 6735, Preparation of Plans and Other Documents, et. al.

PLAN CHECK SUBMITTAL CHECKLIST

RESIDENTIAL DEVELOPERS – TRACT MAPS/ PARCEL MAPS / PLOT PLANS		
1.	Project Identification Forms with each plan check	1 copy
2.	Water and Sewer Plans	3 copies
3.	Record Map	1 copy
4.	Street Plans	1 copy
5.	Storm Drain Plans	1 copy
6.	Grading Plans	1 copy
7.	Erosion Control Plans	1 copy
8.	Conditions of Approval of Tentative Map /Parcel Map / Plot Plan	1 copy
9.	Easement Document and Plats	2 copies
	a. Title Reports, Deeds, Etc.	1 copy
	b. Easement Boundary Closure (to 3 decimal point min.)	2 copies
	c. Coordinate List	2 copies
	d. Any Appropriate Survey Notes	1 copy
	e. Any Reference PM/RS/Etc.	1 copy
10.	Geotechnical Report	1 copy
11.	Signed Developer's Handbook Acknowledgement Form	1 original
12.	Fees Payable to Edgemont Community Services District In the Amount Established by the District	
COMMERCIAL / INDUSTRIAL DEVELOPMENT		
1.	Items Listed in above requirements	
2.	Site Plan / Plot Plan (with sewer system shown and provide private "on-site" certification)	2 copies
3.	Building Floor Plan / Plumbing Plan	1 copy
4.	Landscape Irrigation Plan	1 copy
5.	Complete District Industrial Plan	1 copy
6.	Submittal of Data Indicating Typical Waste Discharge Constituents	1 copy
7.	Total Fixture Unit Calculations (Sewer)	1 copy
8.	Grease Trap / Industrial Waste Clarifier Sizing Calculations	1 copy
9.	Number of Employees	1 copy
10.	For Restaurants: Number of Seats, Daily Meals and/or Peak Hour Meals	1 copy

NOTE: INCOMPLETE SUBMITTALS WILL NOT BE ACCEPTED.

APPENDIX O

December 14, 2017 Separation of Water Mains and Non-Potable Pipelines – Requests for Alternatives to the Waterworks Standards

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State Water Resources Control Board

Division of Drinking Water

December 14, 2017

Separation of Water Mains and Non-Potable Pipelines – Requests for Alternatives to the Waterworks Standards

Dear Public Water System Owners and Operators:

This letter supersedes prior guidance regarding the separation of water mains and non-potable pipelines, including Guidance Memo 2003-02, dated October 16, 2003. Guidance Memo 2003-02 and previous versions should be discarded.

The California Waterworks Standards (California Code of Regulations (CCR), Title 22, Division 4, Chapter 16, Section 64572) establish criteria for the separation of new water mains from non-potable pipelines. Public water systems should ensure that these distances are met, whenever feasible, for all new construction. The Division of Drinking Water (Division) recognizes that certain conditions may call for the installation of pipelines with less separation distance than what is required by the regulations. In these situations, the water system may propose an alternative pursuant to CCR, Title 22, Section 64551.100:

§64551.100. Waivers and Alternatives.

- (a) A water system that proposes to use an alternative to a requirement in this chapter shall:
- (1) Demonstrate to the State Board that the proposed alternative would provide at least the same level of protection to public health; and
 - (2) Obtain written approval from the State Board prior to implementation of the alternative.

In proposing an alternative to the Waterworks Standards, water systems should observe the following:

- The water system must accept responsibility for the adequacy of the proposed alternative. The Division may require a written statement, signed by the water system's management, certifying that the proposed alternative adequately protects public health.
- In most circumstances, the Division cannot offer technical assistance with pipeline or infrastructure design. The water system proposing an alternative must demonstrate adequate expertise on the part of its own personnel or its hired consultants.

- The water system should describe how the proposed alternative provides at least the same level of protection to public health as the minimum separation distances prescribed in the regulation.
- While exorbitant cost may present a hardship in meeting the regulatory separation requirements and can be considered, public health must be prioritized above construction costs in determining an acceptable alternative.

The Division has prepared an application checklist that may be used by water systems in proposing an alternative to the Waterworks Standards (Enclosure). The purpose of the checklist is to ensure that the Division has sufficient information to evaluate the proposal. **The water system may submit the information in a different format from the checklist, provided that the submittal provides adequate information.** The checklist may also be used to provide written certification that the proposed alternative adequately protects public health.

If you have any questions, please contact the Division office that oversees your water system.

Sincerely,

[Original signed by Darrin Polhemus]

Darrin Polhemus, P.E.
Deputy Director
Division of Drinking Water

Enclosure: Waterworks Standards Main Separation Alternative Request Example Checklist

STATE WATER RESOURCES CONTROL BOARD
Division of Drinking Water
Waterworks Standards Main Separation Alternative
Request Checklist

Water System Name/Number: [Click here to enter text.](#)

Name of Applicant: [Click here to enter text.](#)

Phone Number and Email Address: [Click here to enter text.](#)

Project Name and Location: [Click here to enter text.](#)

Attach Plans or field drawings to show the standard installation and the proposed installation for which the alternative is being requested. (e.g. vertical profile and horizontal alignment, specifications, and other exhibits, as possible)

The Waterworks Standards in the California Code of Regulations (CCR) Title 22, Chapter 16, Section 64572 provide separation criteria for new construction. When buried water mains are in close proximity to non-potable pipelines, the water mains are vulnerable to contamination that can pose a risk of waterborne disease outbreaks.

Per CCR Title 22, Chapter 16, Section 64551.100, a water system that proposes to use an alternative to a requirement in Chapter 16 shall: 1) demonstrate to the State Board that the proposed alternative would provide at least the same level of protection to public health; and 2) obtain written approval from the State Board prior to implementation of the alternative. Requests for alternatives to the Waterworks Standards must consist of information outlined in at least four of the attachments below. Information contained in Attachments A, B and E will be required for all alternative requests. Information contained in Attachments C and/or D will also be needed depending on your particular situation. Please review all the attachments and submit the information for your specific project. The information must be submitted to your local Division of Drinking Water District Office for review and approval prior to construction.

Attachment A represents the standard pipe material and construction that would be used if the standard separation criteria can be met by the utility.

Attachment B represents information on the current pipe in the ground that is being crossed by a new pipeline or being paralleled by a new pipeline.

Attachments C and D represent information on the new pipeline being installed. Attachment C is for parallel construction and Attachment D is for crossings.

Attachment E is certification language that is needed to consider the Waterworks Standard alternative application.

Please Note: The information may be submitted using this checklist or another format, but all relevant information must be provided to the Division of Drinking Water District Office for consideration. If multiple crossings or parallel pipelines in multiple locations are part of the application, please indicate in the comments field of the applicable attachment or submittal. Alternatively, the applicant can provide an attachment or separate submittal for each location.

Attachment A (All Cases)

Water System's Standard Pipe Material and Construction Details

Attach the water system's standard pipe specification and construction details to this as Exhibit 1 and describe below.

Liquid Conveyed By New Pipeline:

- Domestic Water Raw Water Recycled Water
 Sewer Force Sewer Storm Drain
 Other (describe) [Click here to enter text.](#)

Nominal Size: [Click here to enter text.](#) inches

Operating Pressure: [Click here to enter text.](#) psi or Gravity flow/atmospheric

Pipe Material: Ductile Iron Cast Iron Welded Steel
 HDPE PVC Concrete Clay
 Other describe [Click here to enter text.](#)

AWWA Material Designation Code: [Click here to enter text.](#)

Pressure Class/Thickness/Coating [Click here to enter text.](#)

Joint Type Construction: Push On Restrained Welded Joints Fused
 Other describe [Click here to enter text.](#)

Depth of Cover: [Click here to enter text.](#)

Comments:

[Click here to enter text.](#)

Attachment B (All Cases)

Existing Pipeline Material – Paralleling or Crossing the Proposed Pipe

List the condition of the existing pipeline being paralleled or crossed.

Liquid Conveyed By Existing Pipeline:

- Domestic Water Raw Water Recycled Water
 Sewer Force Sewer Storm Drain
 Other (describe) [Click here to enter text.](#)

Nominal Size: [Click here to enter text.](#) inches

Operating Pressure: [Click here to enter text.](#) psi or Gravity flow/atmospheric

Pipe Material: Ductile Iron Cast Iron Welded Steel
 HDPE PVC Concrete Clay
 Other (describe) [Click here to enter text.](#)

AWWA Material Designation Code: [Click here to enter text.](#)

Pressure Class/Thickness/Coating [Click here to enter text.](#)

Joint Type Construction: Push On Restrained Welded Joints Fused
 Other (describe) [Click here to enter text.](#)

Length of Project: [Click here to enter text.](#)

Age/Condition: [Click here to enter text.](#)

Depth of Cover: [Click here to enter text.](#)

Separation from proposed pipeline

Note: all distances are measured from the outside walls of both pipelines.

Vertical: [Click here to enter text.](#)

Horizontal: [Click here to enter text.](#)

Have there been many repairs on the existing pipeline in this area? Yes No

If yes, explain: [Click here to enter text.](#)

COMMENTS:

[Click here to enter text.](#)

Attachment C

Proposed Parallel Pipeline Material and Construction Information

Where the Waterworks Standards cannot be met, it is the responsibility of the water system proposing an alternative to demonstrate that its proposed construction will have at least the “same level of protection to public health” as the minimum separation distances prescribed in the regulations.

Intended Use of New Pipeline: Distribution Transmission Storage
 Other (describe) [Click here to enter text.](#)

Liquid Conveyed:

Domestic Water Raw Water Recycled Water
 Sewer Force Sewer Storm Drain
 Other (describe) [Click here to enter text.](#)

Nominal Size: [Click here to enter text.](#) inches Flow rate: [Click here to enter text.](#) gpm
Operating Pressure: [Click here to enter text.](#) psi or Gravity flow/atmospheric

Pipe Material: Ductile Iron Cast Iron Welded Steel
 HDPE PVC Concrete Clay
 Other describe [Click here to enter text.](#)

AWWA Material Designation Code: [Click here to enter text.](#)

Pressure Class/Thickness/Coating [Click here to enter text.](#)

Joint Type Construction: Push On Restrained Welded Joints Fused
 Other describe [Click here to enter text.](#)

Length of Project: [Click here to enter text.](#)

Depth of Cover: [Click here to enter text.](#)

Separation From Existing Non- Potable Pipeline

Note: all distances are measured from the outside walls of both pipelines.

Vertical: [Click here to enter text.](#)

Horizontal: [Click here to enter text.](#)

Is this a temporary installation? Yes No

If yes, how long will it be in place? [Click here to enter text.](#)

Can the new pipeline be installed in accordance with the Waterworks Standards? If not explain below:

[Click here to enter text.](#)

Proposed additional protective measures (*material construction methods, operational considerations, etc.*):

Attachment C

[Click here to enter text.](#)

Attach additional exhibits as necessary

Attachment D

Proposed Pipeline Crossing Material and Construction Information

Where the Waterworks Standards cannot be met, it is the responsibility of the water system proposing an alternative to demonstrate that its proposed construction will have at least the “same level of protection to public health” as the minimum separation distances prescribed in the regulations.

Intended Use of New Pipeline: Distribution Transmission Storage
 Other (describe)_[Click here to enter text.](#)

Liquid Conveyed:

Domestic Water Raw Water Recycled Water
 Sewer Force Sewer Storm Drain
 Other (describe) [Click here to enter text.](#)

Nominal Size: [Click here to enter text.](#) inches

Operating Pressure: [Click here to enter text.](#) psi or Gravity flow/atmospheric

Pipe Material: Ductile Iron Cast Iron Welded Steel
 HDPE PVC Concrete Clay
 Other describe [Click here to enter text.](#)

AWWA Material Designation Code: [Click here to enter text.](#)

Pressure Class/Thickness/Coating [Click here to enter text.](#)

Joint Type Construction: Push On Restrained Welded Joints Fused
 Other describe [Click here to enter text.](#)

Length of Project: [Click here to enter text.](#)

Depth of Cover: [Click here to enter text.](#)

Number of Crossings: [Click here to enter text.](#)

Angle of Crossings: [Click here to enter text.](#)

Description of crossing pipelines:
[Click here to enter text.](#)

Attachment D

Can the new pipeline be installed in accordance with the Waterworks Standards? If not explain below:

[Click here to enter text.](#)

Proposed additional protective measures (*material construction methods, operational considerations, etc.*):

[Click here to enter text.](#)

Attach additional exhibits as necessary

Attachment E Certification

CERTIFYING SIGNATURE:

For consultants, contractors, and developers: attach written concurrence from the governing water system and pipeline owners stating that the selected project alternative is the preferred alternative.

Attached concurrence?: YES NO N/A

I certify that the forgoing information is true and correct to the best of my ability, and that I believe this alternative would provide at least the same level of protection to public health as the minimum separation distances prescribed in the California Waterworks Standards (CCR, Title 22, Section 64572)..

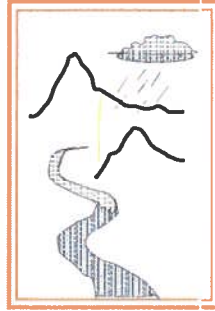
Signature

Name and Title [Click here to enter text.](#)

Date [Click here to enter a date.](#)

APPENDIX K

Unified Sanitary Sewer Spill Response Plan July 15, 2013



Unified Sanitary Sewer Spill Response Procedure

Submitted to the
SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD

(SARWQCB ORDER NO. R8-2010-0033)

July 15, 2013

BY THE RIVERSIDE COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT,
COUNTY OF RIVERSIDE, AND CITIES OF RIVERSIDE COUNTY (SANTA ANA REGION)

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Unified Sanitary Sewer Spill Response Procedure

1.0 Background

On January 29, 2010, the California Regional Water Quality Control Board – Santa Ana River Region (Regional Board) issued an area-wide Municipal Separate Storm Sewer System (MS4) National Pollutant Discharge Elimination System (NPDES) Permit (2010 MS4 Permit) to the Riverside County Flood Control and Water Conservation District (District), the County of Riverside (County), and the incorporated cities of Riverside County within the Santa Ana Region (collectively, Permittees).

The 2010 MS4 Permit requires the Permittees to control the discharge of Pollutants from the MS4s to Waters of the United States. Sewering agencies that own or operate sanitary sewer collection systems greater than one mile in length are regulated under State Water Resources Control Board Water Quality Order No. 2006-0003 and the accompanying amendment to its monitoring and reporting program (WQ 2008-0002-EXEC). This order, known as the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (Sanitary Sewer Order) serves, among other purposes, to prevent and minimize Potential Pollutants from sanitary sewer overflows (SSOs) originating from these sewer collection systems from entering surface waters. Permittees that own or operate applicable sanitary sewer collection systems are required to obtain coverage under the Sanitary Sewer Order.

The Regional Board has found that effluent from SSOs that may enter the MS4 can ultimately have a negative impact on Beneficial Uses of Receiving Waters. The Permittees have developed this Sanitary Sewer Spill Response Procedure for containing and cleaning up effluent from SSOs that have or could impact an MS4.

2.0 Purpose

Sewering agencies, including Permittees that own or operate a sanitary sewer, are required to provide notification, documentation, spill response and reporting of SSOs from their sanitary sewer collection systems pursuant to established federal and state regulations (including the Sanitary Sewer Order), and individual NPDES permits. This Sanitary Sewer Spill Response Procedure provides a mechanism to ensure effective coordination between sewerage agencies and the Permittees in the event that an SSO threatens to impact, or impacts, the MS4. This procedure will:

- ◆ Enhance communication between the Permittees, sewerage agencies and the Regional Board;
- ◆ Clarify and streamline interagency SSO response procedures; and
- ◆ Provide additional protection of Receiving Waters.

This procedure incorporates elements of the Sanitary Sewer Order requirements and spill release notification guidance published by the California Emergency Management Agency (EMA) Hazardous

Materials Unit. As these documents are updated, this procedure will be revised to conform. This procedure is intended to address occurring or impending SSOs that may enter the MS4.

3.0 SSO Response Procedure

Upon determination by a sewerage agency or Permittee, persons in charge, contractor or field crew that an SSO has occurred that may impact the MS4, the following notification, reporting, response, and sampling procedures will be implemented.

3.1 Notifications

3.1.1 Notification Requirements Applicable to Sewering Agencies:

In compliance with the Sanitary Sewer Order, the following notification requirements are applicable to sanitary sewer collection systems and other facilities owned or operated by sewerage agencies:

- ◆ For any discharges of sewage that result in a discharge to a drainage channel or surface water, the sewerage agency will as soon as possible, but not later than two (2) hours after becoming aware of the discharge, notify the EMA, the County Department of Environmental Health, and the Regional Board.
- ◆ As soon as possible, but no later than twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the sewerage agency will submit to the Regional Board a certification that the EMA and the County Department of Environmental Health have been notified of the discharge.

In compliance with the 2010 MS4 Permit, the sewerage agency with jurisdiction for the spill will provide notification immediately (within 24 hours of becoming aware of the circumstances) for all discharges that endanger human health or the environment as follows:

- ◆ By phone to the EMA at 800-852-7550 and to the Regional Board at 951-782-4130
- ◆ At a minimum:
 - Any sewage spill greater than 1,000 gallons
 - Any sewage spill that could impact water contact recreation
 - Any discharge of sewage into or on any Waters of the State (reportable to EMA¹)

In addition, the sewerage agency will notify the Highway Patrol of SSOs affecting a State Highway in accordance with EMA guidance².

1 "California Hazardous Material Spill/Release Notification Guidance." February 2012. California EMA. <http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx>

2 "California Hazardous Material Spill/Release Notification Guidance." February 2012. California EMA. <http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx>

Other spill incidents, including any unauthorized discharges that are not reportable to the EMA, are reported to the Regional Board's Executive Officer as part of the Annual Report as described in Section 3.3.

3.1.2 Notification Requirements Applicable to Permittees Not Owning or Operating a Sanitary Sewer Collection System

Should a Permittee discover an SSO or determine that sewage is entering the MS4, the Permittee shall immediately notify the appropriate sewerage agency.

1. Where the sewerage agency determines that the SSO originates from its sewer collection system or facilities, the sewerage agency will follow the notification procedures described in Section 3.1.1 and established reporting procedures. No further notification or reporting is required by the Permittee.
2. Where the sewerage agency determines that the SSO originates from a private lateral or private property, the sewerage agency will contact the property owner for clean up responsibility and will contact the Permittee with jurisdiction of the spill. For more information on private property SSOs, see Section 6.0. The Permittee with jurisdiction for the spill will provide notification immediately (within 24 hours of becoming aware of the circumstances) for all discharges that endanger human health or the environment as follows:
 - By phone to the EMA at 800-852-7550 and to the Regional Board at 951-782-4130
 - At a minimum:
 - Any sewage spill greater than 1,000 gallons
 - Any sewage spill that could impact water contact recreation
 - Any discharge of sewage into or on any Waters of the State (reportable to EMA³)
 - In addition, the Permittee with jurisdiction for the spill will notify the Highway Patrol of SSOs affecting a State Highway in accordance with EMA guidance⁴.

Should a Permittee discover discharges of sewage in an area not served by a sewerage agency, the Permittee with jurisdiction for the spill will follow the notification requirements described above for SSOs originating from a private lateral or private property.

Other spill incidents, including any unauthorized discharges that are not reportable to the EMA, are reported to the Regional Board's Executive Officer as part of the Annual Report as described in Section 3.3.

³ "California Hazardous Material Spill/Release Notification Guidance." February 2012. California EMA. <http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx>

⁴ "California Hazardous Material Spill/Release Notification Guidance." February 2012. California EMA. <http://www.calema.ca.gov/HazardousMaterials/Pages/Spill-Release-Reporting.aspx>

3.1.3 Agency Contact Information

To identify sewerage agency with jurisdiction in the spill area, **see Attachment A**. A list of the current contact phone numbers for various agencies is provided below:

CONTACT:	PHONE NUMBER:
County Department of Environmental Health / Environmental Resources Management	951-955-8980
Governor's Emergency Management Agency (EMA)	800-852-7550
Permittee Staff (whose MS4 may be affected by spill)	See Attachment C
Regional Water Quality Control Board: Santa Ana Region	951-782-4130
District NPDES Section	951-955-1200
Sewerage agency with jurisdiction in spill area	See Attachment A
California Highway Patrol (if highway affected by spill)	911

3.2 Minimum Information for Notification

Permittee staff providing notice should make reasonable attempts to reach sewerage agency contacts during and after normal working hours. In cases where sewerage agency contacts are not available, messages shall be left. The following minimum information should be conveyed by Permittee staff as appropriate:

- ◆ Identity of caller
- ◆ Location, date and time of SSO, status of the SSO (actual or threatened release)
- ◆ Quantity of sewage released (estimate of flow or volume)
- ◆ Need for public safety or traffic control measures
- ◆ Cause of the SSO, if known
- ◆ Description of immediate measures taken to contain/mitigate SSO
- ◆ Estimate of additional containment and/or clean-up options
- ◆ Determination if sewage was discharged to MS4 or areas otherwise impacting the MS4 (**Refer to Attachment A**)
- ◆ Determination if SSO reached a state highway

A copy of a sample SSO reporting form is included in **Attachment D**.

3.3 Reporting Requirements

Each agency responsible for the SSO shall file reports as required under federal and state law, including any applicable NPDES or other permits. Sewering agencies are required to report any discharges to the Department of Environmental Health immediately, per the requirements of Health and Safety Codes Section 5411.5. Permittees shall additionally follow specific reporting requirements as described in Section 4 of the Riverside County Drainage Area Management Plan for the Santa Ana Region.

The Person in Charge at the responsible sewerage agency must CC: the final SSO Report provided to the Regional Board to the affected Permittees via hard copy or electronic means.

3.4 Response Requirements

Responsible sewerage agencies will lead response to SSOs and will assume Person-in-Charge responsibilities in most cases. Person-in-Charge of spill response:

- Will take all immediate measures necessary to contain release or potential release of sewage and prevent/minimize impacts to water quality and the MS4.
- May cut locks, open manholes, or otherwise enter MS4 as necessary to contain and clean up SSOs.
- Will contact the maintenance/public works department of the appropriate Permittee as necessary, and as soon as possible, to notify them of actions within their MS4. Contact numbers are included in **Attachment C**. If necessary, Permittee staff will support spill response by providing MS4 maps or other support if available.
- Will coordinate with Permittee staff as necessary to ensure that the clean up adequately remedies impacts of the sewage released to the MS4. It should be noted that the Regional Board prefers that MS4 facilities not be sanitized with disinfectant where not immediately impacting public health (i.e. no chlorine shall be used when discharge is within 1,500 feet of a waterway).
- Will coordinate with local fire, police, and traffic departments as necessary to ensure the safety of the response effort, and to manage traffic and local residents.

3.5 Sampling/Monitoring

Monitoring may be required by the Regional Board for spills that reach surface waters. Testing of soils may also be required.

4.0 Training Requirements

Sewering Agencies and Permittee staff will ensure that training for this procedure is incorporated into appropriate training programs related to SSO response.

5.0 Detection Involving Infiltration into MS4

In the event that Permittees encounter evidence of potential sewage infiltration into the MS4 due to water quality monitoring or field observation, the Permittees will notify the relevant sewerage agency (see **Attachment A**) to coordinate a response.

6.0 Private Property SSOs

Sewerage agencies and their contractors will respond to all SSOs within their service area. If a private property is the source of an SSO, agencies and their contractors shall assist in the control and containment to ensure that the sewage does not enter the MS4. If the SSO was a result of a private lateral, the private property owner will be informed of the blockage, and will be responsible to remove the blockage. If the SSO was a result of the sewer trunk line blockage, the response crew will correct the problem.

Glossary

MS4 (Municipal Separate Storm Sewer System) - An MS4 is a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, natural drainage features or channels, modified natural channels, man-made channels, or storm drains):

- (i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, stormwater, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or designated and approved management agency under section 208 of the CWA that discharges to Waters of the U.S.;
- (ii) Designated or used for collecting or conveying stormwater;
- (iii) Which is not a combined sewer; and
- (iv) Which is not part of the POTW as defined at 40 CFR 122.2.

Receiving Waters – The Waters of the United States within the Santa Ana Region.

Region - Either the Santa Ana, Santa Margarita, or Whitewater River watershed regions of Riverside County. These regions are regulated by the Santa Ana, San Diego and Colorado River Region Regional Water Quality Control Boards, respectively.

Sanitary Sewer Overflow (SSO) - A sanitary sewer overflow is any overflow, spill, release, discharge or diversion of wastewater from a sanitary sewer system. SSOs include:

- (i) Overflows or releases of wastewater that reach Waters of the U.S.;
- (ii) Overflows or releases of wastewater that do not reach Waters of the U.S.; and
- (iii) Wastewater backups into buildings and on private property that are caused by blockages or flow conditions in a sanitary sewer, other than a building lateral. Wastewater backups into buildings caused by a blockage or other malfunction of a building lateral that is privately owned is an SSO when sewage is discharged off private property into streets, stormdrains, or Waters of the U.S.

Sanitary Sewer System - Any system of pipes, pump stations, sewer lines, or other conveyances upstream of a wastewater treatment plant headworks used to collect and convey sewage to a treatment facility. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, highlines, etc.) are considered to be part of the sanitary sewer system, and discharges into these temporary storage facilities are not SSOs.

Sewage - The waste and wastewater produced by residential and commercial establishments and discharged into sewers.

Waters of the State – Any water, surface or underground, including saline waters within the boundaries of the State.

Waters of the United States – Waters of the United States can be broadly defined as the navigable surface waters and all tributary waters to navigable surface waters. Groundwater is not considered to be Waters of the United States. See 40 CFR 122.2 for a more expansive definition.

Attachment A

Sewering Agency Contact Roster

Unified Sanitary Sewer Spill Response Procedure

Attachment A (Sewering Agency Contact Roster)

City of Beaumont/Utility Partners

Mr. Dan Friou
715 W. 4th Street
Beaumont, CA 92223
951.769.8534, After Hours: 951.531.3923
Fax: 951.769.0914
dfriou@utilitypartnersllc.com

Eastern Municipal Water District

Integrated Operations Center or
Mr. Mark Chamberlin
Post Office Box 8300
Perris, CA 92572
951.928.3777 ext. 6265 (During & After Work Hours)
Fax: 951.928.6177
chamberm@emwd.org

Elsinore Valley Municipal Water District

Mr. Dennis McBride
Post Office Box 3000
Lake Elsinore, CA 92531-3000
951.674.3146 ext. 8203, After Hours:
Fax: 951.245.5946
dmcbride@evmwd.net

Jurupa Community Services District

Mr. Steve Jaynes
11201 Harrel Street
Mira Loma, CA 91752
951.681.1482 ext.136, Cell: 951.830.1517
Fax: 951.685.1153
info@jcsd.org OR sjaynes@jcsd.us

Lee Lake Water District

Mr. Ken Codwell (Plant Super.) 951.277.1414
Mr. Jeff Pape (GM) 951.277.1414
After Hours: 951.830.3651; 760.473.4120; 760.250.9658
22646 Temescal Canyon Road
Corona, CA 91719
Fax 951.277.1419
jp@llwd.org

Rubidoux Community Services District

Mr. Dan Ballow
Post Office Box 3098
Riverside, CA 92519
951.684.7580, After Hours: 951.684.7580
Fax: 951.369.4061
dballow@rcsd.org

Western Municipal Water District

Mr. Greg Snyder
14205 Meridian Parkway
Riverside, CA 92518
951.789.5131, After Hours: 951.789.5109
Fax: 951.780.0272
gsnyder@wmwd.com

City of Corona

Department of Water and Power
Mr. Ed Lockhart 951.736.2443, After Hours: 951.736.2330
400 S. Vicentia Avenue
Corona, CA 92882
Fax: 951.735.3786
ed.lockhart@ci.corona.ca.us

Edgemont Community Services District

Mr. Joe Teague 951.653.5120, 951.233.8860 cell
After Hours: 951.656.1234 home
Post Office Box 2024
Riverside, CA 92516-2024
Sam.Gershon@webbassociates.com

City of Hemet Water/Wastewater Dept.

Mr. Ron Proze
3777 Industrial Avenue
Hemet, CA 92545
951.765.3710, Cell: 951.634.3103, Police Dispatch: 951.765.2400
Fax: 951.765.2493
rproze@cityofhemet.org

Lake Hemet Municipal Water District

Mr. Mitch Freeman (Sr. W. Operator) 951.658.3241 ext. 247
Mr. Mike Gow (Chief Engineer) 951.658.3241 ext. 238
After Hours: 951.956.4836; 951.230.5491
Post Office Box 5039
Hemet, CA 92544
Fax 951.766.7031
mfreeman@lhmwd.org

City of Riverside – Waste Water Operations Dispatch

5950 Acorn Street
Riverside, CA 92504
951.826.5311, (Call Center)
callcenter@riversideca.gov

Santa Ana Watershed Project Authority

Mr. Rich Haller
11615 Sterling Avenue
Riverside, CA 92503
951.354.4240
Fax: 951.785.7076
rhaller@sawpa.org

Yucaipa Valley Water District

Mr. John Wrobel
12770 Second Street
Yucaipa, CA 92399
909.797.5117, After Hours: 909.208.6347
Fax: 909.797.5937
jwrobel@yvwd.dst.ca.us

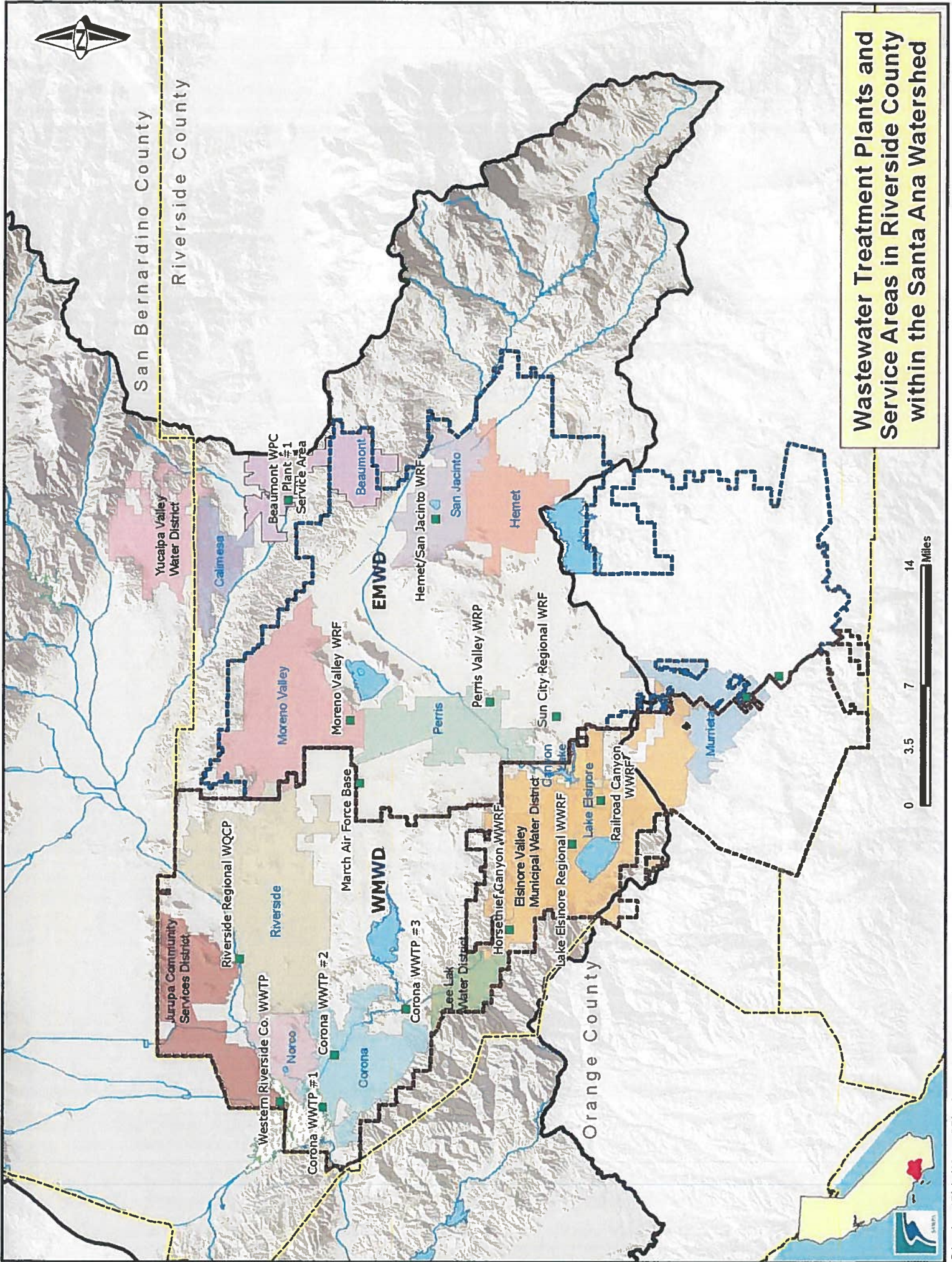
Attachment B

Wastewater Treatment Plants and Service Area



San Bernardino County
Riverside County

Wastewater Treatment Plants and Service Areas in Riverside County within the Santa Ana Watershed



Attachment C

MS4 Permittee Contact Roster

Unified Sanitary Sewer Spill Response Procedure

Attachment C (MS4 Permittee Contact Roster)

City of Beaumont

Mr. Kishen Prathivadi
550 E. 6th Street
Beaumont, CA 92223
951.769.8520, Fax: 951.676.2054
kprathivadi@urbanlogicgroup.com

City of Canyon Lake

Mr. Richard Rowe 31516 Railroad Canyon Road
Canyon Lake, CA 92587
951.244.2955, Fax: 951.246.2022
rrowe@cityofcanyonlake.com

City of Eastvale

Mr. Jon Crawford
6080 Hamner Avenue Ste., 103
Eastvale, CA 91752
951.505.1068
jcrawford@ci.eastvale.ca.us

City of Jurupa Valley

Mr. Don Allison
8304 Limonite Avenue, Suite M
Jurupa Valley, CA 92509
Dallison@jurupavalley.org

City of Menifee

Ms. Lori Wolf
29683 New Hub Drive, Suite C
Menifee, CA 92586
951.672.6777
lwolfe@cityofmenifee.us

City of Murrieta

Mr. Bill Woolsey
1 Town Center
Murrieta, CA 92562 Direct 951.461.6073,
Main (951)304-2489
Fax: 951.698.3416
wwoolsey@murrieta.org

City of Perris

Mr. Daryl Hartwill
101 N. "D" Street
Perris, CA 92570
951.657.3280, Fax: 951.943.1871, After Hours: 951.359.2987
dhartwill@cityofperris.org

Riverside County Environmental Health

Mr. John Watkins
4065 County Circle Drive Riverside, CA 92503
951.3585055, Fax: 951.358-5017
JWatkins@rivcocha.org

Riverside County Flood Control District

951-955-1200
Mr. David Ortega, Senior Engineering Technician
1995 Market Street

City of Calimesa

Mr. Bob French
908 Park Avenue
Calimesa, CA 92320
909.795.9801, Fax: 909.795.4399
bfrench@cityofcalimesa.net

City of Corona

Ms. Michelle Hindersinn
400S. Vicentia Avenue
Corona, CA 92882
951.736.2248, Fax: 951.736-2496
Michele.Hindersinn@ci.corona.ca.us
After Hours:
(951)736-2330

City of Hemet

Ms. Linda Nixon
3777 Industrial Avenue
Hemet, CA 92545
951.765.3880, Fax: 951.765.2493
lnixon@cityofhemet.org

City of Lake Elsinore

Ms. Nicole McCalmont or Mr. Ken Seumalo
130 South Main Street
Lake Elsinore, CA 92530
951.674.3124 ext. 244, Fax: 951.674.8761
nmccalmont@lake-elsinore.org OR kseumalo@lake-elsinore.org

City of Moreno Valley

Mr. Kent Wegelin
14177 Frederick Street
Moreno Valley, CA 92552-0805
951.413.3120, Fax: 951.413.3158
After Hours: Emergency Stand-by group
Cell: 951.442.5208
kentw@moval.org

City of Norco

Mr. William Thompson
1281 Fifth Street
Norco, CA 92860
951.270.5607, Fax: 951.270.5619
Emergency: 951.371.1143
bthompson@ci.norco.ca.us

City of Riverside

Mr. Kevin Street
5950 Acorn Street
Riverside, CA 92504
951.351.6140, Fax: 951.351.6267
Alternate/after Hours-
WQCP Dispatch: 951-351-6280
City Call Center: 951-826-5311
kstreet@riversideca.gov

Riverside County Executive Office

Mr. Steven Horn
4080 Lemon Street, 4th Floor
Riverside, CA 92501
951.955.1110, Fax: 951.955.1105
schorn@rceo.org

City of San Jacinto

Mr. Mike Emberton, Assistant City Manager
Mr. Dan Mudrovich, Utilities Super.
201 E. Main Street
San Jacinto, CA 92583

Riverside, CA 92501
951.955.4390, Cell: 951-961-9574 Fax:
951.788.9965

DavidJOrtega@rcflood.org

After Hours:

Mark Biloki, Maintenance Superintendent,
mbiloki@rcflood.org
951.955.1310, Cell: 951.288.5254

951.453.7381, After Hours: 951.453.5318, Pager: 951.765.8197
Fax: 951.487.7382

Memberton@sanjacintoca.us OR Dmudrovich@sanjacintoca.us

City of Temecula

Mr. Aldo Licitra

43200 Business Park Drive, Temecula, CA 92589-9033
951.308.6387, Field: 951.541.7850, Fax: 951.694.6475

Aldo.licitra@cityoftemecula.org

After Hours: Rodney Tidwell, Public Works Maint. Supervisor
951.302.4102, Field: 951.303.5497

Rodney.tidwell@cityoftemecula.org

City of Wildomar

Mr. Tim D'Zmura

23873 Clinton Keith Road, Suite 201
Wildomar, CA 92595

951.677.7751, Fax: 951.698.1463

tdzmura@cityofwildomar.org

Attachment D

Sample SSO Reporting Form

SANITARY SEWER OVERFLOW REPORT FORM

This report is: Preliminary Final Revised Final

Sanitary Sewer Overflow Sequential Tracking Number: _____

Reported to: _____
(Enter Fax #, Voicemail #, or Name of Regional Board Staff)

Date Reported: ____/____/____ (MM/DD/YY)

Time Reported: _____ (24 Hour Clock)

Reported By: _____

Phone: _____

Reporting Sewer Agency: _____

Responsible Sewer Agency: _____

Overflow Start Date: ____/____/____ (MM/DD/YY) Overflow Start Time: _____ (24 Hour Clock)

Overflow End Date: ____/____/____ (MM/DD/YY) Overflow End Time: _____ (24 Hour Clock)

Estimated Overflow Flow Rate: _____ (gallons per minute)

Total Overflow Volume: _____ (gallons)

Overflow Volume Recovered: _____ (gallons)

Overflow Volume Released to Environment: _____ (gallons)

SANITARY SEWER OVERFLOW LOCATION AND DESCRIPTION:

Street Address _____
(or Cross Streets)

City: _____ Zip Code: _____

County: Riverside

Sanitary Sewer Overflow Structure ID: _____

Overflow Cause - - Short Description (Check as applicable)

- | | | | |
|---------------------------------|------------------------------------|--|---|
| <input type="checkbox"/> Roots | <input type="checkbox"/> Grease | <input type="checkbox"/> Line Break | <input type="checkbox"/> Infiltration |
| <input type="checkbox"/> Rocks | <input type="checkbox"/> Blockage | <input type="checkbox"/> Power Failure | <input type="checkbox"/> Pump Station Failure |
| <input type="checkbox"/> Debris | <input type="checkbox"/> Vandalism | <input type="checkbox"/> Flood Damage | <input type="checkbox"/> Manhole Failure |
| <input type="checkbox"/> Other | <input type="checkbox"/> Unknown | <input type="checkbox"/> Construction | <input type="checkbox"/> Private Property |

Overflow Cause - - Detailed Description:

SANITARY SEWER OVERFLOW REPORT FORM

Sanitary Sewer Overflow Correction - - Description of all Preventative and Corrective Measures Taken or Planned:

Was there measurable precipitation during 72-hour period prior to the overflow?

Yes No

Initial and Secondary Receiving Waters:

Did the sanitary sewer overflow enter a storm drain?

Yes No

Did the sanitary sewer overflow reach surface waters other than a storm drain?

Yes No

Name or description of secondary receiving waters. (If none, state such)

If the sanitary sewer overflow did not reach surface waters, describe the final destination of sewage.

Notification:

Was the local health services agency notified?

Yes No

If the overflow was over 1,000 gallons, was the Office of Emergency Services (OES) notified?

Yes No Not applicable

Affected Area Posting:

Were signs posted to warn of contamination?

Yes No

Location of Posting (if Posted): _____

How many days were the warning signs posted?: _____

Remarks:

EDGEMONT COMMUNITY SERVICES DISTRICT

March 11, 2016

Santa Ana Regional Water Quality Control Board
3737 Main Street, Suite 500
Riverside, CA 92501-3348

Re: Unified Sanitary Sewer Spill Response Procedure, Dated July 15, 2013

To Whom It May Concern:

In reviewing the Unified Sanitary Sewer Spill Response Procedure date July 15, 2013, we find that the contact information for Edgemont Community Services District is not up to date.

The current information for Attachment A (Sewering Agency Contact Roster) should be:

Edgemont Community Services District

Ms. Jessica Pfalmer 951.653.5120, 951.203.2038 cell

After Hours: 951.787.9710

P.O. Box 5436


Riverside, CA 92517

Sam.Gershon@webbassociates.com

Please make these changes and provide the District a new updated copy of the entire Unified Sanitary Sewer Spill Response Procedure, including attachments.

If you have any questions, you can reach me at (951)784-2632 or jessicaecsd@yahoo.com.

Sincerely,


Jessica Pfalmer
Manager

APPENDIX L

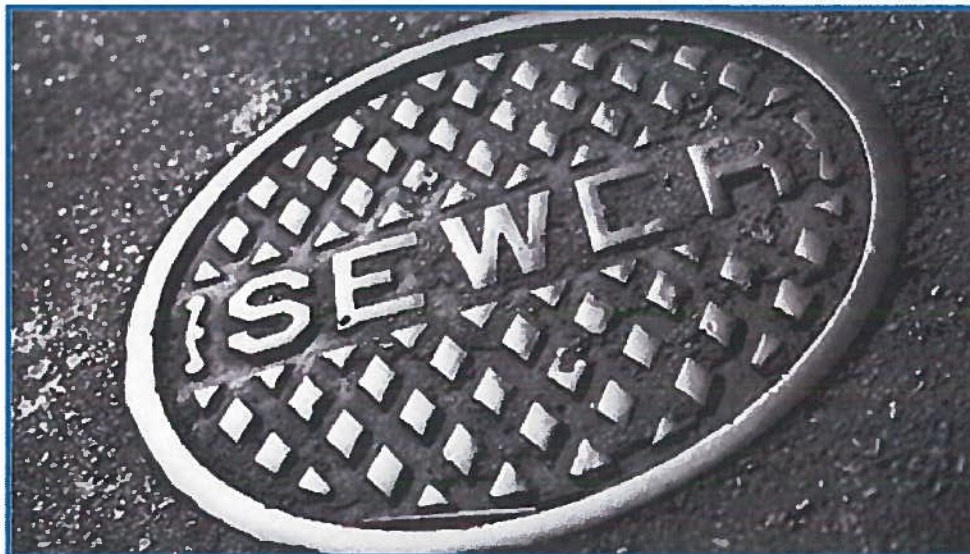
State Water Resources Control Board Enrollee Guide to the SSO Database Sanitary Sewer Overflow Reduction Program August 2013

California
Water Boards

Protecting California's Water

Enrollee's Guide to the SSO Database

Sanitary Sewer Overflow Reduction Program



State Water Resources Control Board



Last Updated August 2013

Acknowledgements

This Enrollee's Guide to the CIWQS SSO Database (SSO Database) was developed by way of a collaborative effort between stakeholders and State Water Board staff. The following agencies contributed to the development of this guide (in alphabetical order):

- Central Valley Clean Water Association
- Central Contra Costa Sanitary District
- City of Redding
- City of Vacaville
- Fairfield-Suisun Sewer District
- Orange County Sanitation District
- Sacramento Area Sewer District
- Sacramento Regional County Sanitation District
- Union Sanitary District

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1.0 GENERAL GUIDANCE

This guide was developed to assist enrollees in completing the required SSO reporting forms contained in SSO Database. The guide contains general guidance, detailed information on how to enter the SSO Database module in the California Integrated Water Quality System (CIWQS), how to complete and submit the information which is required annually and after each spill occurrence, a list of [acronyms](#), and a glossary. The format of the guide generally shows individual items from the SSO Database screens in bold brown print and then offers an explanation of how to complete that particular item. This guide was produced by stakeholders in the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, a number of people working in the wastewater industry, and the staff of the State Water Resources Control Board. This guidance document is a “living document” and, it will be updated as necessary.

To provide a consistent, statewide regulatory approach to address SSOs, the State Water Resources Control Board (State Water Board) adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Water Quality Order No. 2006-0003 (SSS WDRs), on May 2, 2006. All public agencies that own or operate a sanitary sewer system that is comprised of more than one mile of pipes or sewer lines which convey wastewater to a publicly owned treatment facility must apply for coverage under the SSS WDRs. The application or Notice of Intent (NOI) for enrollment should have been submitted to the State Water Board by November 2, 2006.

The SSS WDRs requires enrollees, among other things, to maintain compliance with the Monitoring and Reporting Program for the SSS WDRs. Enrollees use the SSO Database to comply with the reporting requirements of the SSS WDRs. The SSO Database is used to collect and store an enrollee's facility and organizational information (collection system questionnaire) and details of all SSOs which occur from an enrollee's sanitary sewer system (SSO reports). All of the information collected in the SSO Database is entered by enrollees. State Water Board staff cannot modify any information in the database except for deleting erroneous SSO reports and “no-spill” certifications on request from an enrollee with a valid explanation of why the report or certification is erroneous.

The SSO Database is accessed through the [California Integrated Water Quality System \(CIWQS\)](#), which is the State Water Board's regulatory and water quality information management system. Enrollees will automatically be assigned a CIWQS account to access the SSO Database when they register as a Legally Responsible Official or Data Submitter.

Access to the SSO Database allows enrollees to complete the collection system questionnaire, certify completion of the Sewer System Management Plan, and submit SSO reports as required by the SSS WDRs. The SSS WDRs requires enrollees to complete the collection system questionnaire within 30 calendar days of enrolling and to update it annually. The Legally Responsible Official (LRO) for each enrollee will receive their CIWQS user ID and password via email to access the SSO Database. Once the LRO has received their CIWQS user ID and password, the enrollee can register additional staff as LROs or Data Submitters (DS) for individual access to the SSO Database. Instructions for completing this registration process are available on the [CIWQS Help Center webpage](#). Electronic LRO and DS forms can be filled out at the following link on the [SSO Database home page](#): (<https://ciwqs.waterboards.ca.gov/ciwqs/newUser.jsp>).

For additional questions, call the CIWQS Help Center at:

Phone: 866-79-CIWQS (24977)

Email: ciwqs@waterboards.ca.gov

Monday through Friday (excluding State Holidays) 8:00 a.m. - 5:00 p.m.

On adoption In 2006, the SSS WDRs required enrollees to begin reporting all SSOs to the SSO Database according to the following schedule: Regions 4,8, and 9 - starting January 2, 2007; Regions 1,2, and 3 -starting May 2, 2007; and Regions 5,6, and 7 - starting September 2, 2007.

Detailed information on each SSO is submitted by enrollees in the SSO report. Enrollees are required to report all SSOs that result from a failure or flow condition in any portion of a sanitary sewer system under their ownership or management. For the purposes of reporting, SSOs fall into one of three categories: Category 1, Category 2, and Category 3. The definitions for each Category are listed in Table 1, below.

CATEGORIES	DEFINITIONS [see Section A on page 5 of SSS WDRs for SSO definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that: Reach surface water and/or reach a drainage channel tributary to a surface water; or Reach a municipal separate storm sewer system and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the municipal separate storm sewer system is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a municipal separate storm sewer system unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the SSO Database.

Table 1 – Spill Categories and Definitions

The reporting deadline for submittal of a SSO report depends on the classification of the spill as shown in Table 2. For Category 1 and 2 SSOs, the enrollee must submit an initial, draft report of the SSO as soon as possible but no later than 3 business days after becoming aware of the SSO. The final, certified report for Category 1 and 2 SSOs must be submitted within 15

calendar days of the SSO end date. For Category 3 SSOs, the enrollee must submit a final, certified report (no initial, Draft report required) within 30 calendar days after the end of the calendar month in which the SSO occurred. For instance, if the SSO occurred on February 1st, the enrollee must certify the Category 3 SSO before March 30th.

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B)	Within 2 hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.	Call Cal OES at: (800) 852-7550
REPORTING (see section C)	<p>Category 1 SSO: Submit Draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date.</p> <p>Category 2 SSO: Submit Draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date.</p> <p>Category 3 SSO: Submit Certified report within 30 calendar days of the end of month in which SSO occurred.</p> <p>"No Spill" Monthly Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month in which no SSOs occurred.</p> <p>Collection System Questionnaire: Update and Certify every 12 months.</p>	Enter data into the California Integrated Water Quality System (CIWQS) Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

Notification to Cal OES is required within two hours of becoming aware of a Category 1 SSO greater than or equal to 1,000 gallons that results or may result in a discharge to surface waters. Specifically, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number.

With the exception of enrollees in the San Diego region, Private Lateral Sewage Discharges (PLSDs) are not required to be reported, but they can be voluntarily reported to the database. The State Water Board encourages enrollees to Notify Cal OES for PLSDs greater than or equal to 1,000 gallons that result or may result in a discharge to surface waters.

No-spill Certifications are required within 30 days after the end of each calendar month if there are no SSOs during the calendar month. If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee must still file a "No Spill" certification statement for that

month.

1.1 CIWQS USER REGISTRATION

In order to be able to use the SSO Database (i.e., report SSOs, No Spill Certifications, etc.) you need to be registered in the database as a Legally Responsible Official (LRO) or a Data Submitter (DS). If you are not registered in the SSO Database and wish to be registered as a LRO or DS for your agency, follow the steps below:

1. Start by going to the CIWQS login screen at: <http://ciwqs.waterboards.ca.gov/>.



2. Click on "User Registration".
3. Select one of user responsibility.

CIWQS User Registration:

Please select one of the following:

- I am the legally responsible person for my facility or location.
- I wish to be able to submit data on behalf of my facility or location, but am not the legally responsible person.
- I am a Water Board staff person. (You will be directed to the CIWQS intranet page to complete an account request form.)

If you have questions regarding registration, please contact the California State Water Control Board at 866-79-CIWQS (24977) or your local Water Control Board.

4. A form corresponding to the user responsibility will appear. From the "Discharge Type" dropdown, select "Sanitary Sewer Overflows (SSO)."

CIWQS User Registration: Legally Responsible Official (LRO)


Discharger Type:*

Prefix:*

First Name:*

Middle Name:

- Next, enter the WDID corresponding to your sanitary sewer system. After you enter the WDID number, the form will auto populate information corresponding to your agency.



CIWQS User Registration: Legally Responsible Official (LRO)

Discharger Type:*

WDID:* ←

Enter your WDID in the field above, and click 'Validate WDID'.

- Complete the form. Note: Your account PIN can be used to reset your account if you forget your security question answers and inadvertently lock your account.
- If you are registering as Data Submitter, you can submit your form electronically.
- If you are registering as a Legally Responsible Official, you need to print, sign, and send the form to the address below:

CIWQS Registration
P.O. Box 671
Sacramento, CA 95812

- The CIWQS Help Center will send an email notification with your user name and password after the registration has been approved.

2.0 SSO DATABASE SCREENS AND REPORTS

The following sections describe how to use the SSO Database and provide a description of each screen and information required to be entered.

2.1 LOGGING IN AND CHANGING PERSONAL INFORMATION

To get you started we are going to show you how to log into the system, a view of the main menu, and how to make changes to your personal information. While these are very basic

tasks, it is one of the best beginner demonstrations to SSO Database and it will introduce you to the methods with which all information is changed in the system.

2.1.1 CIWQS LOG IN

User roles that need to review this section: All

1. Start by going to the CIWQS login screen at: <http://ciwqs.waterboards.ca.gov/>.
2. Once the page loads enter your CIWQS username into the "User ID:" field and your password into the "Password:" field.
3. Press "Login".



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Edmund G. Brown Jr.
Visit his Website

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California Integrated Water Quality System (CIWQS)

User ID:

Password:

Login User Registration SMARTS URL

Forgot your password? [Reset your password here](#)
Forgot your User ID? [Get your User ID here](#)

2.1.2 MAIN MENU

4. After you press "Login" the SSO Database main menu will appear. Depending on your access rights, you will be provided with the links to various CIWQS modules including but not limited to:
 - Submit/Review a Self-Monitoring Report (SMR)
 - Run Reports
 - View/Change My Personal Information
 - Administer System
 - SSO - Sanitary Sewer Overflows

2.1.3 CHANGING PERSONAL INFORMATION

5. Select the "View/Change My Personal Information" module hyperlink.
6. You will be taken to the Personal Information page. Here you can update your contact information, add a new facility, change your password, or request other changes.
7. Let's start with changing your password. To change your password, press the "Change Password" button.

Water Boards **CIWQS** Nav
You are logged-in as: SSO Demo . If

View Change Personal Information

User ID: SSO Demo

8. After pressing “Change Password” you will be taken to a new screen asking you to enter the new password you have selected twice.

Water Boards **CIWQS** Navigate to:
You are logged-in as: SSO Demo . If this account does not b

Choose New Password

Username: SSO Demo

New Password: Passwords must be between 7-16 characters in length, and contain at least one lowercase letter, at least one uppercase letter, and at least one digit.

Confirm New Password:

Security Question:
What was the business/company name of your first job?

9. Once you have entered your new password press “Save”.
10. After pressing “Save” you will be asked to verify that you wish to save, press “Ok”.
11. You will be returned to the personal information screen. If you scroll down a little you can view all of your contact information.

My Address:

Street Number:

Street Direction:

Street Name:

Street Type:

Suite/Apt/Mail Stop:

City:

State:

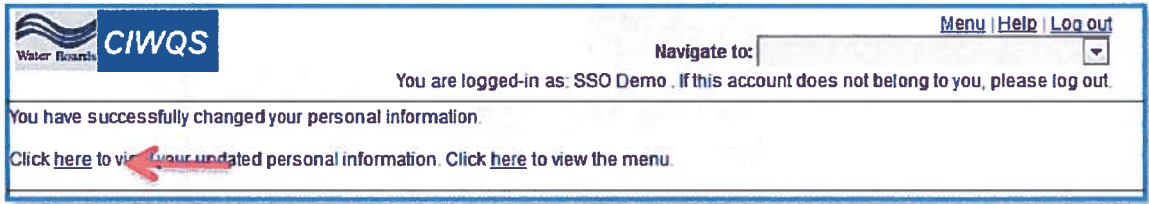
Zip Code:

My Phone Number:

My Fax Number:

My Email Address:

12. If you make any changes to your contact information, they have to be saved by pressing the “Save Changes” button at the bottom of the page.
13. After pressing “Save Changes”, you will see a screen verifying that your changes were logged. You will also be provided with two hyperlinks. Press the first “here” hyperlink to return to the personal information screen.



14. To make other changes to your account that are not available on this page, press the “Request Another Change” button near the bottom of the “view/change my personal information” page.
15. After pressing the “Request Another Change” button, your computer’s email client will launch a new email window with the CIWQS Help Center email address in the “To:” field. Describe the change you wish to have made to your account and send the email. Be sure to include your full name, agency and username.
16. We are now done with this module. Press the “Menu” hyperlink at the top right corner of the page to return to the SSO Database main menu.

2.2 SSO DATABASE MENU

As you log into the SSO Database to enter information regarding your sanitary sewer system, there will be a number of forms you will be required to complete one time, monthly, yearly or every time there is a sewer system overflow (SSO). These forms are as follows:

- Collection System Questionnaire
- Sewer System Management Plan (SSMP) Certification
- Reporting New SSO
- Modifying Existing SSO
- Generate No Spill Certification
- View SSO Incident Map - Public Collection Systems (Not Site Specific)
- View SSO Incident Map - Private Laterals (Not Site Specific)

This discharge’s guide is designed to help sewer system operators in completing the above forms in order to meet their reporting obligations under the SSS WDRs.

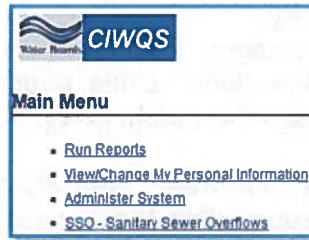
2.2.1 COLLECTION SYSTEM QUESTIONNAIRE

The Collection System Questionnaire must be completed initially at the time of enrollment before any SSO reports can be submitted. Additionally, the collection system questionnaire must be updated at least annually. **Notice that if the questionnaire is not updated at least annually, the database will prevent you from reporting SSOs and No-Spill Certifications.**

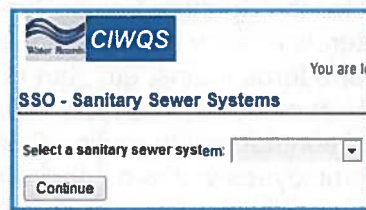
User roles that need to review this section: LRO

1. If you are not already logged into SSO Database, proceed to this URL <http://ciwqs.waterboards.ca.gov/> and login.

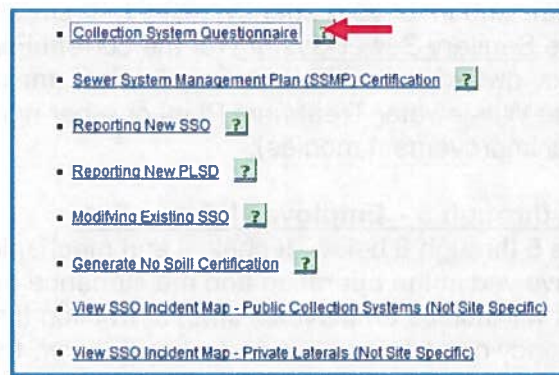
2. After logging in you will see the CIWQS main menu. Select the “SSO” hyperlink to proceed to the “SSO - Sanitary Sewer Overflows” module.



3. If you are registered as a DS or LRO for multiple enrolled sanitary sewer systems, upon entering the SSO Database you will be required to select the sanitary sewer system you wish to submit information for from the “Select a Sanitary Sewer System:” dropdown. After selecting the appropriate sanitary sewer system press the “Continue” button.



4. When a sanitary sewer system has been selected you will be taken to the main menu of the SSO Database. At the top of this menu will be the “Collection System Questionnaire” hyperlink. Select that hyperlink.



5. You will be taken to the “Collection System Questionnaire” page. This page has a series of fields that need to be filled in with current information regarding your sanitary sewer system.

2.2.2 QUESTIONS

There are thirty (30) questions to be answered to complete the SSO Questionnaire. These questions are shown below in bold brown type followed by an explanation on how to complete them. On the questionnaire, following each question is a box with a drop down or a place to

insert the answer.

1. **Sewer System Category:**

Select the appropriate category from the scroll down menu that best fits your sanitary sewer system. Note, selections include: airport, hospital, marina (i.e., pleasure craft), military, municipal, other, park, port (i.e., commerce), prison, and school.

2. **What is the population served by your agency's sewer system?**

Enter the number of people within the general population served by your agency, district, or city. Include any satellites systems that are under your jurisdiction. Use your billing information, recent [US Census](#) Data, Realtor Association, County Planning, or other official means of substantiating population estimates.

3. **What is your current annual operation and maintenance budget for sewer system facilities?**

Enter the dollar amount of your agency, district or city's annual Operation & Maintenance Budget for the Sanitary Sewer System for the current fiscal year (include portion of laterals agency owned – none/lower/upper & lower, mains, trunk sewers, lift stations, and force mains, etc., but do not include the Wastewater Treatment Plant O&M or other non- sanitary sewer system related monies). This includes all personnel contributing to routine O&M activities. Estimate the percent of time that a group of employees works on sanitary sewer system activities if they have other shared responsibilities (e.g., storm water, roads, etc.). Use rounded dollar amount with commas up to 12 digits.

4. **What is your current annual capital expenditure budget for sewer system facilities?**

Enter the dollar amount of your agency, district, or city's annual Capital Expenditure Budget for the Sanitary Sewer System for the current Fiscal year (include portion of laterals agency owned – none/lower/upper & lower, mains, trunk sewers, etc., but do not include the Wastewater Treatment Plant or other non- sanitary sewer system related capital improvement monies).

Questions 5 through 8 – Employee Information

For questions 5 through 8 below, technical and mechanical employees are all those employees involved in the operation and maintenance of your sanitary sewer system. This will include employee's time, or fraction thereof, working on the portion of laterals agency owned – none/lower/upper & lower, trunk sewers, interceptor sewers, collector sewers, pump stations, lift stations, and force mains.

If you have employees that work on your sewer system but either split their time with other sewer systems or with non-sewer related work, you can enter a decimal point representing the fraction of a full time staff member for these four questions (e.g., 0.6 persons, 2.3 persons, etc.). Professional certification information for employees is requested in questions 9 through 13.

5. **Entry Level (Less than 2 years' experience) - Number of agency employees?**

Provide the number of Entry Level technical and mechanical staff employees that have less than 2 years of sanitary sewer system work experience with your or any

other agency, district, or city.

6. **Journey Level (Greater than or equal 2 years' experience) - Number of agency employees?**

Provide the number of Journey Level technical and mechanical staff employees that have greater than 2 years of sanitary sewer system work experience with your or any other agency, district, or city. Certification or licenses of any kind are not considered important in this question; only the number of years of working experience.

7. **Supervisory Level - Number of agency employees?**

Provide number of agency, district, or city employees that supervise the technical and mechanical staff employees listed above. A supervisor is a person who supervises one or more crews of maintenance personal and is not a crew foreman. Supervisors split their time between field and office work.

8. **Managerial Level - Number of Agency Employees?**

Provide number of agency, district, or city employees that manage the supervisors, technical and mechanical staff employees listed above. A manager oversees supervisors along with providing managerial duties such as budgeting, purchasing and cost control.

Questions 9 through 13 – Employee Certification Information

For questions 9 through 13 below, use whole numbers when showing how many employees have with the various types and grades of certifications. If management and engineering staff have the certifications listed below, include them in the totals. Do not include contract employees.

9. **CWEA Grade I**

Number of certified (Grade I Collection System Maintenance) agency employees:

Enter the number of employees that possess valid, current CWEA Grade I Collection System Maintenance certification.

Number of certified (Grade I Plant Maintenance Technologist) agency employees

Enter the number of employees that possess valid, current CWEA Grade I Plant Maintenance Technologist certification.

10. **CWEA Grade II**

Number of certified (Grade II Collection System Maintenance) agency employees:

Enter the number of employees that possess valid, current CWEA Grade II Collection System Maintenance certification.

Number of certified (Grade II Electrical/Instrumentation Technologist) agency employees:

Enter the number of employees that possess valid, current CWEA Grade II Electrical/Instrumentation Technologist certification.

Number of certified (Grade II Mechanical Technologist) agency employees:
Enter the number of employees that possess valid, current CWEA Grade II Mechanical Technologist certification.

11. **CWEA Grade III**

Number of certified (Grade III Collection System Maintenance) agency employees:
Enter the number of employees that possess valid, current CWEA Grade III Collection System Maintenance certification.

Number of certified (Grade III Electrical/Instrumentation Technologist) agency employees:
Enter the number of employees that possess valid, current CWEA Grade III Electrical/Instrumentation Technologist certification.

Number of certified (Grade III Mechanical Technologist) agency employees:
Enter the number of employees that possess valid, current CWEA Grade III Mechanical Technologist certification.

12. **CWEA Grade IV**

Number of certified (Grade IV Collection System Maintenance) agency employees:
Enter the number of employees that possess valid, current CWEA Grade IV Collection System Maintenance certification.

Number of certified (Grade IV Electrical/Instrumentation Technologist) agency employees:
Enter the number of employees that possess valid, current CWEA Grade IV Electrical/Instrumentation Technologist certification.

Number of certified (Grade IV Mechanical Technologist) agency employees:
Enter the number of employees that possess valid, current CWEA Grade IV Mechanical Technologist certification.

13. **OFFICE OF WATER PROGRAMS at CALIFORNIA STATE UNIVERSITY
CERTIFICATES OF COMPLETION:**

Number of certified (Operation and Maintenance of Wastewater Collection Systems, Volume I) agency employees:
Enter the number of employees that possess a certification of completion for the Operation and Maintenance of Wastewater Collection Systems, Volume I.

Number of certified (Operation and Maintenance of Wastewater Collection Systems, Volume II) agency employees:
Enter the number of employees that possess a certification of completion for the Operation and Maintenance of Wastewater Collection Systems, Volume II.

14. Estimated Size Distribution of Assets:

Diameter of sewer pipe	Gravity Mainlines (%)	Force Mains (%)
6 inches or less	<input type="text"/>	<input type="text"/>
8 inches	<input type="text"/>	<input type="text"/>
9 - 18 inches	<input type="text"/>	<input type="text"/>
19 - 36 inches	<input type="text"/>	<input type="text"/>
> 36	<input type="text"/>	<input type="text"/>
Unknown Diameter	<input type="text"/>	<input type="text"/>
Totals	<input type="text"/>	<input type="text"/>

Enter the estimated total percentage (%) of gravity mainlines and force mains for each size category (pipe diameter) comprising the enrolled sanitary sewer system.

15. How many miles of force mains and other pressure systems?

Enter the estimated total miles of force mains in the enrolled sanitary sewer system.

16. How many miles of gravity sewers?

Enter the estimated total miles of gravity mainlines in the enrolled sanitary sewer system. Do not include public or private laterals.

17. Estimated total miles of laterals (upper and lower)?

Enter the total miles of laterals, including private laterals and both upper and lower laterals, that are connected to the enrolled sanitary sewer system. See [definitions](#) of Lateral, Lower Lateral and Upper Lateral in the Glossary.

18. Which portion of laterals is your agency responsible?

For laterals connected to the sanitary sewer system which you have jurisdiction over, enter the portion of these laterals for which your agency is responsible. Responsibility includes inspection, cleaning, maintenance and replacement or any combination thereof.

19. Estimated total miles of laterals your agency is responsible for?

Enter the estimated total miles of the laterals reported in Question 17 that your agency owns and/or is responsible for maintaining. If you have service laterals on G.I.S., use that software to determine the total miles of service laterals you maintain. If not, estimate the mileage by multiplying the number of laterals by the average half width of a street and/or easement and then convert feet to miles.

20. Number of service lateral connections?

Enter the total number of service lateral connections to your sanitary sewer system. Assuming very few parcels connected to your sanitary sewer system have more than one lateral, the total number of service lateral connections can roughly be calculated by adding up the number of parcels of land (or billing accounts) connected to your sanitary sewer system.

21. **Approximately, what percentage of your sewer system piping and number of pump stations were constructed between the years of:**

Age	Gravity Mainlines & Force Mains (%)	Pump Stations (*) 75k Gal/day & Over (number of stations)	Pump Stations (*) Under 75k Gal/day (number of stations)
2000 - Present	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
1980 - 1999	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
1960 - 1979	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
1940 - 1959	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
1920 - 1939	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
1900 - 1919	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Before 1900	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Unknown Age	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
Totals	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="0"/>

For pump stations, flow categories are the maximum flow rate occurring over a 24-hr period based on annual operating data (e.g., based on measured flow) or calculated peak flow (e.g., # EDUs x Flow/EDU x Peaking Factor). Age is date asset was originally constructed.

In the second column, enter the percent of your sanitary sewer system that was constructed during the ten year periods noted in the first column. Calculate the percentages based on as-built drawings and other available information. When entering the number of pump or lift stations you maintain, enter the year they were originally constructed or the year that they were significantly improved or re-built. To determine the capacity of the pump station use the design peak wet weather flow rate with no standby pumps running.

22. **Estimated total miles of your sewer system not accessible for maintenance?**
Enter the estimated total miles of the sanitary sewer system your agency has jurisdiction over that are not accessible for maintenance by vehicle or other means for routine maintenance.
23. **How many miles of sewer system did you clean last year (miles)?**
Enter the number of linear miles of the sanitary sewer system your agency cleaned or re-cleaned in the last complete fiscal year.
24. **How many miles of sewer system did you inspect (e.g., CCTV) last year (miles)?**
Enter the number of linear miles of the sanitary sewer system your agency visually inspected or re-inspected in the last complete fiscal year.

25. Estimated Sewer System Flow Characteristics

Average Daily Dry Weather Flow (MGD)	Peak Daily Wet Weather Flow (MGD)
<input type="text" value="0"/>	<input type="text" value="0"/>

Average Dry Weather Flow (ADWF) – ADWF consists of average daily sewage flows and groundwater infiltration (GWI) and can be determined from the average measured daily flow of the three consecutive driest months of the year or the time period as defined by the agency's ordinance, standards, or other planning documents.

Peak Daily Wet Weather Flow (PDWWF) – PDWWF consists of ADWF plus rainfall-dependent inflow and infiltration (RDI/I). Peak daily wet weather flow is the highest measured daily flow that occurs during the wet weather season period as defined by the agency's ordinance, standards, or other planning documents.

Wastewater flows can be measured (as noted above), estimated, or modeled. An example of an estimated flow would be the number of Equivalent Dwelling Units (EDUs) times an assumed or measured average flow per EDU times a wet weather peaking factor. This method is often used in the initial design of the sanitary sewer system.

26. Where does this Sanitary Sewer System Discharge to?

Where it goes?	Name	WDID
<input type="text" value="Select ..."/>	<input type="text"/>	<input type="text"/>
<input type="text" value="Select ..."/>	<input type="text"/>	<input type="text"/>
<input type="text" value="Select ..."/>	<input type="text"/>	<input type="text"/>
<input type="text" value="Select ..."/>	<input type="text"/>	<input type="text"/>

Select whether your collection sewer system discharges to a sanitary sewer system or a wastewater treatment plant. Next enter the name and WDID (if Known) of the sanitary sewer system(s) or wastewater treatment plant(s) to which your Sanitary sewer system discharges.

27. Sanitary Sewer System tributaries:

a. Are there any tributary sanitary sewer systems:

Select whether another enrolled sanitary sewer system discharges to your sanitary sewer system. If the answer is "Yes", question 26b must be answered.

b. If yes, please list below:

Tributary system owned by your agency?	Tributary Collection System Name	Tributary Collection System WDID
Yes <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
Select ... <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
Select ... <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
Select ... <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>
Select ... <input type="button" value="v"/>	<input type="text"/>	<input type="text"/>

Select whether the tributary sanitary sewer system is owned by your agency or another agency. Next enter the name and WDID (if Known) of the sanitary sewer system(s).

28. How many gravity sewer aerial or underground crossings of water bodies (i.e., gravity sewer lines crossing over or under water bodies) are located throughout the sewer system?

Enter the number of locations where a gravity sewer crosses over or under a water body (e.g., gravity sewers attached to the side of a bridge or other support). A pipeline parallel to a stream or creek should not be included unless the pipeline is conveying flow from one side of the water body to the other. A water body is any significant accumulation of water such as streams, rivers, ponds, lakes, reservoirs, wetlands, oceans or seas.

29. How many force main aerial or underground crossings of water bodies (e.g., pressurized sewer lines crossing over or under water bodies) are located throughout the sewer system?

Enter the number of locations where a force main crosses over or under a water body (e.g., force mains attached to the side of a bridge or other support). A pipeline parallel to a stream or creek should not be included unless the pipeline is conveying flow from one side of the water body to the other. A water body is any significant accumulation of water such as streams, rivers, ponds, lakes, reservoirs, wetlands, oceans or seas.

30. How many siphons used to convey sewage are located throughout the sewer system?

Enter the number of wastewater siphons located throughout the sanitary sewer system.

2.3 SSO REPORTS

When you log on to SSO Database to report a sanitary sewer overflow (SSO) on the main menu you will click on the "SSO-Sanitary Sewer Overflows" link, then select your sanitary sewer system (if your agency owns more than one), next you are going to click on the "Reporting New SSO" link.

- [Collection System Questionnaire](#) ?
Pertinent information regarding your collection system.
- [Sewer System Management Plan \(SSMP\) Certification](#) ?
Certify SSMP completion
- [Reporting New SSO](#) ? ←
Submit Individual SSO Reports.

This will bring you to Screen 1, which is where you fill in basic data about the SSO. On this screen you will enter some basic spill data and the SSO Database will then direct you to the appropriate spill data entry form (i.e., Category 1, Category 2, or Category 3). Figure 1 below is a flow chart illustrating how the categorization is determined. The volumes used by the SSO Database will be shown at the bottom of the page. **NOTE, all SSOs are required to be reported to the SSO database regardless of the SSO volume.**

You should note that the SSS WDRs defines an SSO as an overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system and it defines a sanitary sewer system as being upstream of a wastewater treatment plant head works. Therefore, discharges in a wastewater treatment plant, a reclaimed water system or even from the back of a tanker truck are not SSOs and should not be reported in the SSO Database. However, these types of sewage spills should be reported to your Regional Board per the requirements in the wastewater treatment plant NPDES permit (refer to the Monitoring and Reporting Program in your permit) and/or local Health Department.

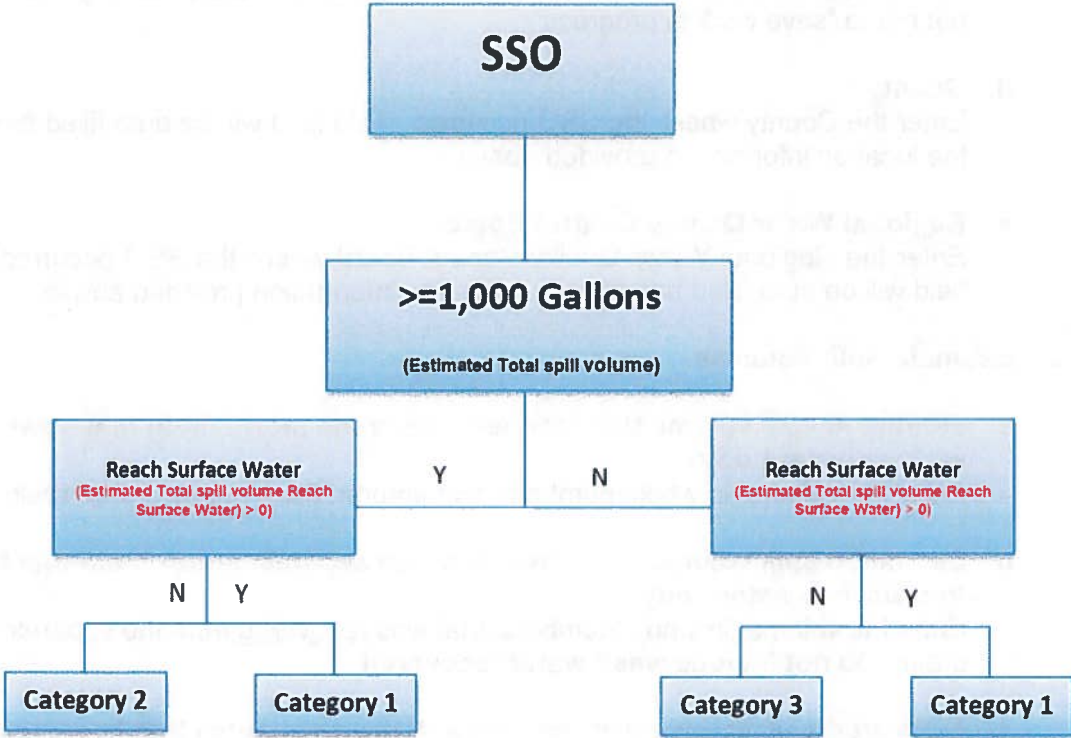


Figure 1 – SSO Categorization

2.3.1 SCREEN 1 FOR BASIC SPILL DATA

1. Physical location details

If one SSO event results in multiple appearance points in a sanitary sewer system asset, enter the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO and provide descriptions of the locations of all other discharge points associated with the SSO event.

a. Spill location name

Enter the name of the location where the SSO occurred in the "Spill Location Name" field. This entry may be a general descriptor of the SSO location (e.g., street address, intersection, or manhole number or any other identification you wish to use).

b. Latitude of spill location

Enter the latitude of the spill location. A handheld GPS unit or the "GIS Tool" link on the SSO Database spill report page in the SSO Database can be used to determine this information. This field must be completed to "submit draft" for any SSO report but not to "save work in progress".

c. Longitude of spill location

Enter the longitude of the spill location. A handheld GPS unit or the "GIS Tool" link on the SSO Database spill report page can be used to determine this information. This field must be completed to "submit draft" for any SSO report but not to "save work in progress".

d. County

Enter the County where the SSO occurred. This field will be auto filled based on the location information provided above.

e. Regional Water Quality Control Board

Enter the Regional Water Quality Control Board where the SSO occurred. This field will be auto filled based on the location information provided above.

2. Estimate Spill Volumes

a. Estimated spill volume that reached a separate storm drain that flows to a surface water body?

Enter the volume, in whole numbers, that entered the separate storm drain.

b. Estimated spill volume recovered from the separate storm drain that flows to a surface water body?

Enter the volume, in whole numbers, that was recovered from the separate storm drain. **Do not include wash water recovered.**

c. Estimated spill volume that reached a drainage channel that flows to a surface water body?

Enter the volume, in whole numbers, that was discharged to a drainage channel.

Do not include any volume that entered a separate storm drain.

d. Estimated spill volume recovered from a drainage channel that flows to a surface water body?

Enter the volume, in whole numbers, that was recovered from the drainage channel. Do not include volume recovered from the separate storm drain or wash water recovered.

e. Estimated spill volume discharged directly to a surface water body?

Enter the volume, in whole numbers, that was discharged directly to a surface water body.

f. Estimated spill volume recovered from the surface water body?

Enter the volume, in whole numbers, that was recovered from the surface water body. Refer to question 36 in section 3.0 for important notification requirements required before diverting from surface water bodies.

g. Estimated spill volume discharged to land?

Enter the volume, in whole numbers, that discharged to the land (e.g., soil, grass, curb, street, etc.)

h. Estimated spill volume recovered from the discharge to land?

Enter the volume, in whole numbers, recovered from the discharge to land. This includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location.

After entering all the required information, select "Continue" to go to the next screen. If there are any errors or missing information, the system will highlight the questions with errors on the form in red.

2.3.2 SCREEN 2 FOR CATEGORY 3 SSO

The SSO Database will direct you to the following screen based on the information you entered on Screen 1 if the spill is a Category 3 spill (i.e., the SSO was less than 1,000 gallons and did not reach surface waters). On this screen, you will enter additional data on the SSO that was not entered onto Screen 1.

Note that all of the data entered on Screen 1 was carried forward onto Screen 2. Questions 1-11 are automatically populated based on the data entered in the Estimated Spill Volumes fields on Screen 1. Questions 1-11 on Screen 2 should be reviewed for accuracy and can be over written with correct data as necessary. This step may be necessary to correct the "County" or "Regional Water Quality Control Board" fields if the spill occurs close to a boundary and/or your sanitary sewer system spans multiple counties or Regional Water Quality Control Boards.

There are 30 questions total with 22 (including the questions answered in Screen 1) that have to be answered to complete Screen 2 for a Category 3 SSO. These thirty questions are shown below with the questions carried over from Screen 1. Note that on this screen you can modify the information entered on Screen 1. Questions with one asterisk (*) are required to submit a "draft" report and questions with two asterisks (**) are required to certify the report.

1. Spill Type:

The spill type is automatically determined based on the information you entered on Screen 1. In this case, the SSO is a Category 3 SSO (i.e., a spill less than 1,000 gallons and not reaching surface waters).

2. Estimated spill volumes:*

a) Estimated spill volume that reached a separate storm drain that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

b) Estimated spill volume recovered from the separate storm drain that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

c) Estimated spill volume that reached a drainage channel that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

d) Estimated spill volume recovered from a drainage channel that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

e) Estimated spill volume discharged directly to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

f) Estimated spill volume recovered from a drainage channel or surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

g) Estimated spill volume discharged to land?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

h) Estimated spill volume recovered from the discharge to land?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

3. Did the spill discharge to a drainage channel and/or surface water?*

This question is auto populated based on the answers to the Estimated Spill Volumes on screen 1. A "Yes" will be displayed if the answer to question 2.a is greater than the answer to question 2.b, the answer to question 2.c is greater than zero, and/or the answer to question 2.e is greater than zero. A "No" will be displayed

if the answer to question 2.a equals the answer to question 2.b, the answer to question 2.c equals zero, and/or the answer to question 2.e equals zero.

4. Did the spill reach a storm drainpipe that is not part of a combined sewer system?*

This question is auto populated based on the answers to the Estimated Spill Volumes on screen 1. A "Yes" will be displayed if the answer to question 2.a is greater than zero. A "No" will be displayed if the answer to question 2.a equals zero.

5. If spill reached a separate storm drainpipe, was all of the wastewater fully captured from the separate storm drain and returned to the sanitary sewer system?*

This answer is auto populated based on the answers to the Estimated Spill Volumes. A "Yes" will be displayed if the answer to question 2.b equals the answer to question 2.a. A "No" will be displayed if the answer to question 2.b is less than the answer to question 2.a.

6. Spill location name:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

7. Latitude of spill location:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

8. Longitude of spill location:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

9. County:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

10. Regional Water Quality Control Board:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

11. Spill location description:

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

12. Number of Appearance Points:*

Enter the number of appearance points. If one SSO event results in multiple appearance points in a sewer system asset enter the number of appearance points if greater than one (1).

13. Spill appearance point:*

Select the spill appearance point from the "Spill Appearance Point:" dropdown. If you selected "other" you are required to enter a description in text box No. 14 below. The "Spill Appearance Point:" is where wastewater first surfaced on the spill site. Multiple

spill appearance points can be selected by holding the CTRL key on your keyboard.

14. Spill appearance point explanation:

If “Other” and/or multiple appearance points are selected, enter a description of the “Other” SSO appearance point not listed in the dropdown menu and/or, for multiple appearance points, enter a description including location details of each appearance point in this text field.

15. Final spill destination:**

Select the final destinations of the spill in the “Final Spill Destination” box. Multiple spill destinations can be selected by holding the CTRL key on your keyboard. If you selected “other” you are required to enter a description in the text box No 16 below. The “Final Spill Destination:” describes all areas that the wastewater flowed through and ultimately reached, which means multiple entries can be selected if necessary.

16. Explanation of final spill destination:

If the “final spill destination” is not listed in the dropdown menu and “Other” was selected, then enter a description of the final spill destination.

17. Estimated spill start date/time:*

Enter the estimated spill start date/time in a 24-hour clock format.

18. Date and time sanitary sewer system agency was notified of or discovered the spill:*

Enter when your agency was notified or discovered the spill date/time in a 24-hour clock format. The date/time has to be the same or later than the estimated spill start date/time.

19. Estimated Operator arrival date/time:*

Enter the estimated Operator arrival date/time in a 24-hour clock format. The date/time has to be the same or later than the estimated spill start date/time.

20. Estimated spill end date/time:**

Enter the estimated spill end date/time in a 24-hour clock format. The date/time has to be later than the estimated spill start date/time.

21. Spill cause:**

Select a cause for the spill from the dropdown menu. Multiple spill causes can be selected by holding the CTRL key on your keyboard. If the cause selected was “Other”, you are required to enter an explanation in text box No. 22 below.

22. Spill cause explanation:

If the “spill cause” is not listed in the dropdown menu and “Other” was selected in question 21, then enter a description of the spill cause.

23. Where did failure occur?*

Select where the failure occurred from the dropdown menu. Multiple failure locations can be selected by holding the CTRL key on your keyboard. If the cause selected is “Other”, you are required to enter an explanation in text box No. 24 below.

24. Explanation of where failure occurred:

If the “where failure occurred” is not listed in the dropdown menu and “Other” was selected in question 23, then enter a description of where failure occurred.

25. Was this spill associated with a storm event?*

Select from the drop down whether a sewer flow condition resulting from storm induced inflow and/or infiltration where contributing factors for this SSO event.

26. Diameter of sewer pipe at the point of blockage or failure (if applicable):

If applicable, enter the size in inches of the diameter of the sewer pipe where the point of blockage for the pipe or failure occurred.

27. Material of sewer pipe at the point of blockage or failure (if applicable):

If applicable, enter the material of sewer pipe where the point of blockage for the pipe or failure occurred. Abbreviations such as PVC and VCP are acceptable.

28. Estimated age of sewer asset at the point of blockage or failure (if applicable):

If applicable, enter the estimated age of the sewer asset, in whole numbers, where the point of blockage for the asset or failure occurred.

29. Explanation of volume estimation methods used:

Give an explanation of the method(s) used to estimate the volume of the spill. The agency may refer to its spill response procedures or attach a sketch, if needed. The explanation may reference estimation methods contained within your agency’s SSO response procedures.

30. SSO Contact information:*

- a. Name and Title (Contact person who can answer specific questions about this SSO)
- b. Contact Person Phone Number

2.3.3 SCREEN 2 FOR CATEGORY 2 SSO

The SSO Database will direct you to the following screen based on the information you entered on Screen 1 if the spill is a Category 2 spill (i.e., SSO was greater than 1,000 gallons and did not reach surface waters). On this screen, you will enter additional data on the SSO that was not entered onto Screen 1.

Note that all of the data entered on Screen 1 was carried forward onto Screen 2. Questions 1-11 are automatically populated based on the data entered in the Estimated Spill Volumes fields on Screen 1. Questions 1-11 on Screen 2 should be reviewed for accuracy and can be over written with correct data as necessary. This step may be necessary to correct the “County” or “Regional Water Quality Control Board” fields if the spill occurs close to a boundary and/or your sanitary sewer system spans multiple counties or Regional Water Quality Control Boards.

There are 36 questions total with 28 (including the questions answered in Screen 1) that have to be answered to complete Screen 2 for a Category 2 SSO. These thirty questions are shown below with the questions carried over from Screen 1. Note that on this screen you can modify the information entered on Screen 1. Questions with one asterisk (*) are required to submit a “draft” report and questions with two asterisks (**) are required to certify the report.

1. Spill Type:

This is automatically determined based on the information you entered on Screen 1. In this case, the SSO is a Category 2 SSO (i.e., spill is greater than 1,000 gallons and not reaching surface waters).

2. Estimated spill volumes:*

a) Estimated spill volume that reached a separate storm drain that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

b) Estimated spill volume recovered from the separate storm drain that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

c) Estimated spill volume that reached a drainage channel that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

d) Estimated spill volume recovered from a drainage channel that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

e) Estimated spill volume discharged directly to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

f) Estimated spill volume recovered from a drainage channel or surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

g) Estimated spill volume discharged to land?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

h) Estimated spill volume recovered from the discharge to land?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

3. Did the spill discharge to a drainage channel and/or surface water?*

This question is auto populated based on the answers to the Estimated Spill Volumes on Screen 1. A "Yes" will be displayed if the answer to question 2.a is greater than the answer to question 2.b, the answer to question 2.c is greater than zero, and/or the answer to question 2.e is greater than zero. A "No" will be displayed

if the answer to question 2.a equals the answer to question 2.b, the answer to question 2.c equals zero, and/or the answer to question 2.e equals zero.

4. Did the spill reach a storm drainpipe that is not part of a combined sewer system?*

This question is auto populated based on the answers to the Estimated Spill Volumes on Screen 1. A "Yes" will be displayed if the answer to question 2.a is greater than zero. A "No" will be displayed if the answer to question 2.a equals zero.

5. If spill reached a separate storm drainpipe, was all of the wastewater fully captured from the separate storm drain and returned to the sanitary sewer system? *

This answer is auto populated based on the answers to the Estimated Spill Volumes. A "Yes" will be displayed if the answer to question 2.b equals the answer to question 2.a. A "No" will be displayed if the answer to question 2.b is less than the answer to question 2.a.

6. Spill location name:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

7. Latitude of spill location:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

8. Longitude of spill location:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

9. County:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

10. Regional Water Quality Control Board:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

11. Spill location description:

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

12. Number of Appearance Points:*

Enter the number of appearance points. If one SSO event results in multiple appearance points in a sewer system asset enter the number of appearance points if greater than one (1).

13. Spill appearance point:*

Select the spill appearance point from the "Spill Appearance Point:" dropdown. If you selected "other" you are required to enter a description in text box No. 14 below. The "Spill Appearance Point:" is where wastewater first surfaced on the spill site. Multiple

spill appearance points can be selected by holding the CTRL key on your keyboard.

14. Spill appearance point explanation:*

If “Other” and/or multiple appearance points are selected, enter a description of the “Other” SSO appearance point not listed in the dropdown menu and/or, for multiple appearance points, enter a description including location details of each appearance point in this text field.

15. Final spill destination:**

Select the final destinations of the spill in the “Final Spill Destination” box. Multiple spill destinations can be chosen by holding the CTRL key on your keyboard. If you selected “other” you are required to enter a description in the text box No 16 below. The “Final Spill Destination:” describes all areas that the wastewater flowed through and ultimately reached, which means multiple entries can be selected if necessary.

16. Explanation of final spill destination:

If the “final spill destination” is not listed in the dropdown menu and “Other” was selected, then enter a description of the final spill destination

17. Estimated spill start date/time:*

Enter the estimated spill start date/time in a 24-hour clock format.

18. Date and time sanitary sewer system agency was notified of or discovered the spill:*

Enter when your agency was notified or discovered the spill date/time in a 24-hour clock format. The date/time has to be the same or later than the estimated spill start date/time.

19. Estimated Operator arrival date/time:*

Enter the estimated Operator arrival date/time in a 24-hour clock format. The date/time has to be the same or later than the estimated spill start date/time.

20. Estimated spill end date/time:**

Enter the estimated spill end date/time in a 24-hour clock format. The date/time has to be later than the estimated spill start date/time.

21. Spill cause:**

Select a cause for the spill from the dropdown menu. Multiple spill causes can be selected by holding the CTRL key on your keyboard. If the cause selected was “Other”, you are required to enter an explanation in text box No. 22 below.

22. Spill cause explanation:

If the “spill cause” is not listed in the dropdown menu and “Other” was selected in question 21, then enter a description of the spill cause.

23. Where did failure occur?*

Select where the failure occurred from the dropdown menu. Multiple failure locations can be selected by holding the CTRL key on your keyboard. If the cause selected is “Other”, you are required to enter an explanation in text box No. 24 below.

- 24. Explanation of where failure occurred:**
If the “where failure occurred” is not listed in the dropdown menu and “Other” was selected in question 23, then enter a description of where failure occurred.
- 25. Was this spill associated with a storm event?***
Select from the drop down whether a sewer flow condition resulting from storm induced inflow and/or infiltration where contributing factors for this SSO event.
- 26. Diameter of sewer pipe at the point of blockage or failure (if applicable):**
If applicable, enter the size in inches of the diameter of the sewer pipe where the point of blockage for the pipe or failure occurred.
- 27. Material of sewer pipe at the point of blockage or failure (if applicable):**
If applicable, enter the material of sewer pipe where the point of blockage for the pipe or failure occurred. Abbreviations such as PVC and VCP are acceptable.
- 28. Estimated age of sewer asset at the point of blockage or failure (if applicable):**
If applicable, enter the estimated age of the sewer asset, in whole numbers, where the point of blockage for the asset or failure occurred.
- 29. Spill response activities:***
Select the response activities from the dropdown menu that your agency completed in responding to the spill. Multiple response activities can be selected by holding the CTRL key on your keyboard. If your selection was “Other”, you are required to enter an description of the response activities in text box No. 30 below.
- 30. Explanation of spill response activities:**
If the “spill response activities” completed are not listed in the dropdown menu and “Other” was selected in question 29, enter a description of the spill response activities completed.
- 31. Spill response completion date:***
Enter the spill response completion date/time in a 24-hour clock format (i.e., when agency staff completed their cleanup work). The date/time has to be later than the estimated spill start date/time.
- 32. Spill corrective action taken:***
Select the corrective actions which were taken by your agency in response to the spill. Multiple corrective actions can be selected by holding the CTRL key on your keyboard. If your selection was “Other”, you are required to enter a description of the corrective actions taken in text box No. 33 below.
- 33. Explanation of spill corrective action taken:**
If the “spill corrective action taken” tasks completed are not listed in the dropdown menu and “Other” was selected, then enter a description of the spill corrective actions taken.
- 34. Is there an ongoing investigation:***
Select “yes” from the dropdown menu if there is an ongoing investigation of the SSO. Select “no” from the dropdown menu if the investigation of the SSO has been

completed.

35. Explanation of volume estimation methods used:

Provide a description of the method(s) used to estimate the volume of the spill. Attach your calculations and a sketch if needed. The explanation may reference estimation methods contained within your agency's SSO response procedures.

36. SSO Contact information:*

- a. Name and Title (Contact person who can answer specific questions about this SSO)
- b. Contact Person Phone Number

2.3.4 SCREEN 2 FOR CATEGORY 1 SSO

The SSO Database will direct you to the following screen based on the information you entered on Screen 1 if the spill is a Category 1 spill (i.e., the SSO reached surface waters). On this screen, you will enter additional data on the SSO that was not entered on Screen 1.

Note that all of the data entered on Screen 1 was carried forward onto Screen 2. Questions 1-11 are automatically populated based on the data entered in the Estimated Spill Volumes fields on Screen 1. Questions 1-11 on Screen 2 should be reviewed for accuracy and can be overwritten with correct data as necessary. This step may be necessary to correct the "County" or "Regional Water Quality Control Board" fields if the spill occurs close to a boundary and/or your sanitary sewer system spans multiple counties or Regional Water Quality Control Boards.

There are 47 questions total with 37 (including the questions answered in Screen 1) that have to be answered to complete Screen 2. These forty seven questions are shown below with the questions carried over from Screen 1. Note that on this screen you can modify the information entered on Screen 1. Questions with one asterisk (*) are required to submit a "draft" report and questions with two asterisks (**) are required to certify the report.

1. Spill Type:

This is automatically determined based on the information you entered on Screen 1. In this case, the SSO is a Category 1 SSO (i.e., the spill reached surface waters).

2. Estimated spill volumes:*

a) Estimated spill volume that reached a separate storm drain that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

b) Estimated spill volume recovered from the separate storm drain that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

c) Estimated spill volume that reached a drainage channel that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1

for guidance.

d) Estimated spill volume recovered from a drainage channel that flows to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

e) Estimated spill volume discharged directly to a surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

f) Estimated spill volume recovered from a drainage channel or surface water body?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

g) Estimated spill volume discharged to land?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

h) Estimated spill volume recovered from the discharge to land?

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

3. Did the spill discharge to a drainage channel and/or surface water?*

This question is auto populated based on the answers to the Estimated Spill Volumes on Screen 1. A "Yes" will be displayed if the answer to question 2.a is greater than the answer to question 2.b, the answer to question 2.c is greater than zero, and/or the answer to question 2.e is greater than zero. A "No" will be displayed if the answer to question 2.a equals the answer to question 2.b, the answer to question 2.c equals zero, and/or the answer to question 2.e equals zero.

4. Did the spill reach a storm drainpipe that is not part of a combined sewer system?*

This question is auto populated based on the answers to the Estimated Spill Volumes on Screen 1. A "Yes" will be displayed if the answer to question 2.a is greater than zero. A "No" will be displayed if the answer to question 2.a equals zero.

5. If spill reached a separate storm drainpipe, was all of the wastewater fully captured from the separate storm drain and returned to the sanitary sewer system?*

This answer is auto populated based on the answers to the Estimated Spill Volumes. A "Yes" will be displayed if the answer to question 2.b equals the answer to question 2.a. A "No" will be displayed if the answer to question 2.b is less than the answer to question 2.a.

6. Spill location name:*

The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.

- 7. Latitude of spill location:***
The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.
- 8. Longitude of spill location:***
The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.
- 9. County:***
The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.
- 10. Regional Water Quality Control Board:***
The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.
- 11. Spill location description:**
The answer to this question is carried over from Screen 1. See section 2.3.1 for guidance.
- 12. Number of Appearance Points:***
Enter the number of appearance points. If one SSO event results in multiple appearance points in a sewer system asset enter the number of appearance points if greater than one (1).
- 13. Spill appearance point:***
Select the spill appearance point from the "Spill Appearance Point:" dropdown. If you selected "other" you are required to enter a description in text box No. 14 below. The "Spill Appearance Point:" is where wastewater first surfaced on the spill site. Multiple spill appearance points can be selected by holding the CTRL key on your keyboard.
- 14. Spill appearance point explanation:***
If "Other" and/or multiple appearance points are selected, enter a description of the "Other" SSO appearance point not listed in the dropdown menu and/or, for multiple appearance points, enter a description including location details of each appearance point in this text field.
- 15. Final spill destination:****
Select the final destinations of the spill in the "Final Spill Destination" box. Multiple spill destinations can be selected by holding the CTRL key on your keyboard. If you selected "other" you are required to enter a description in text box No 16 below. The "Final Spill Destination:" describes all areas that the wastewater flowed through and ultimately reached, which means multiple entries can be selected if necessary.
- 16. Explanation of final spill destination:**
If the "final spill destination" is not listed in the dropdown menu and "Other" was selected, then enter a description of the final spill destination

- 17. Estimated spill start date/time:***
Enter the estimated spill start date/time in a 24-hour clock format.
- 18. Date and time sanitary sewer system agency was notified of or discovered spill:***
Enter when your agency was notified or discovered the spill date/time in a 24-hour clock format. The date/time has to be the same or later than the estimated spill start date/time.
- 19. Estimated Operator arrival date/time:***
Enter the estimated Operator arrival date/time in a 24-hour clock format. The date/time has to be the same or later than the estimated spill start date/time.
- 20. Estimate spill end date/time:****
Enter the estimated spill end date/time in a 24-hour clock format. The date/time has to be the later than the estimated spill start date/time.
- 21. Spill cause: ****
Select a cause for the spill from the dropdown menu. Multiple spill causes can be selected by holding the CTRL key on your keyboard. If the cause selected was "Other", you are required to enter an explanation in text box No. 22 below.
- 22. Spill cause explanation: ****
If the "spill cause" is not listed in the dropdown menu and "Other" was selected in question 21, then enter a description of the spill cause.
- 23. Where did failure occur? ****
Select where the failure occurred from the dropdown menu. Multiple failure locations can be selected by holding the CTRL key on your keyboard. If the cause selected is "Other" you are required to enter an explanation in text box No. 24 below.
- 24. Explanation of where failure occurred:**
If the "where failure occurred" is not listed in the dropdown menu and "Other" was selected in question 23, then enter a description of where the failure occurred.
- 25. Was this spill associated with a storm event? ****
Select from the drop down whether a sewer flow condition resulting from storm induced inflow and/or infiltration where contributing factors for this SSO event.
- 26. Diameter of sewer pipe at the point of blockage or failure (if applicable):**
If applicable, enter the size in inches of the diameter of the sewer pipe where the point of blockage of the pipe or failure occurred.
- 27. Material of sewer pipe at the point of blockage or failure (if applicable):**
If applicable, enter the material of sewer pipe where the point of blockage of the pipe or failure occurred. Abbreviations such as PVC and VCP are acceptable.
- 28. Estimated age of sewer asset at the point of blockage or failure (if applicable):**
If applicable, enter the estimated age of the sewer asset, in whole numbers, where the point of blockage of the asset or failure occurred.

- 29. Spill response activities:****
Select the response activities from the dropdown menu that your agency completed in responding to the spill. Multiple response activities can be selected by holding the CTRL key on your keyboard. If your selection was “Other”, you are required to enter a description of the response activities in text box No. 30 below.
- 30. Explanation of spill response activities:**
If the “spill response activities” completed are not listed in the dropdown menu and “Other” was selected, then enter a description of the spill response activities completed.
- 31. Spill response completion date:****
Enter the spill response completion date/time in a 24-hour clock format (i.e., when agency staff completed their cleanup work). The date/time has to be later than the estimated spill start date/time.
- 32. Spill corrective action taken:****
Select the corrective actions which were taken by your agency in response to the spill. Multiple corrective actions can be selected by holding the CTRL key on your keyboard. If your selection was “Other”, you are required to enter a description of the corrective actions taken in text box No. 33 below.
- 33. Explanation of spill corrective action taken:**
If the “spill corrective action taken” tasks completed are not listed in the dropdown menu and “Other” was selected, then enter a description of the spill corrective actions taken.
- 34. Is there an ongoing investigation?:****
Select “yes” from the dropdown menu if there is an ongoing investigation of the SSO. Select “no” from the dropdown menu if the investigation of the SSO has been completed.
- 35. Visual inspection results from impacted surface water:**
Describe any observations made during visual inspections of surface waters impacted by the SSO.
- 36. Health warnings posted?:****
Select whether or not health warning signs or notices were posted at or near the water bodies, beaches, and/or other areas affected by the SSO.
- 37. Did the spill result in a beach closure (If YES, answer question 38)?:****
Select whether or not the SSO resulted in a beach or aquatic recreation area closure.
- 38. Name of closed beach(es):****
Enter the names of any beaches or aquatic recreation areas closed by the SSO. Use commas to separate multiple entries.
- 39. Name of impacted surface water(s):****
Enter the names of all surface waters impacted by the SSO. Use commas to

separate multiple entries. If a receiving surface water body is un-named, enter "Un-named Tributary to "XXXXX" where XXXXX is the name of the first named (e.g., on the USGS Topo Map for the area) downstream surface water body.

40. Water quality samples analyzed for:**

Select the water quality indicators for which water quality sample results were obtained. Multiple indicators can be chosen by holding the CTRL key on your keyboard. Select "No water quality samples taken" if the SSO reached a surface water, but water quality sampling was not performed. If your selection included "Other", "Other chemical indicator(s)", or "Biological Indicator(s)", you are required to enter an explanation of the other indicators analyzed in text box No. 41 below.

41. Explanation of water quality samples analyzed for:

If "Other", "Other chemical indicator(s)", or "Biological Indicator(s)" were selected, enter an explanation of the indicators analyzed in the water quality sample(s).

42. Water quality sample results reported to:**

Select which agencies the water quality sample results were reported to. Multiple agencies can be selected by holding the CTRL key on your keyboard. Select "No water quality samples taken" if the SSO reached a surface water, but water quality sampling was not performed. If your selection includes "Other", you are required to enter the names of the other agencies reported to in text box No. 43 below.

43. Explanation of water quality samples reported to:

If "Other" was selected, then enter the names of the other agencies the water quality sample results were reported to.

44. Explanation of volume estimation methods used:**

Provide a description of the method(s) used to estimate the volume of the spill. Attach your calculations and a sketch if needed. The explanation may reference estimation methods contained within your agency's SSO response procedures.

45. Cal OES Control Number:**

For spills of 1,000 gallons or greater, enter the control number received from Cal OES when you notified them of the SSO. The control number must be entered without dashes. If multiple notifications were made to Cal OES, use the control number for the first notification. The control number can also be found on the Cal OES website at: [http://w3.calema.ca.gov/operational/mal haz.nsf/\\$defaultview](http://w3.calema.ca.gov/operational/mal haz.nsf/$defaultview). NOTE: Per section B.3 of the SSS WDRs, Monitoring and Reporting Program (MRP), information provided to Cal OES must be updated related to volume and impacts to surface water if there are significant changes to this information after your initial report.

46. Cal OES called date/time:**

Enter the date and time Cal-OES was notified in a 24-hour clock format. If multiple notifications were made to Cal-OES, use the first call time associated with the control number entered in box No. 45 above. The call date and time can be found on the Cal OES website at: [http://w3.calema.ca.gov/operational/mal haz.nsf/\\$defaultview](http://w3.calema.ca.gov/operational/mal haz.nsf/$defaultview)

47. SSO Contact information:*

- a. Name and Title (Contact person who can answer specific questions about this SSO)
- b. Contact Person Phone Number

2.4 PRIVATE LATERAL SEWER DISCHARGE (PLSD)

The MRP for the SSS WDRs requires that all Category 1, Category 2, and Category 3 SSOs from an Enrollee's sanitary sewer systems be reported to the SSO Database, however, when failures from Private Laterals result in sewage discharges and the enrollee has knowledge of it, they are not required to report those discharges to the SSO Database. The enrollee can, however, report the PLSD to the SSO Database voluntarily.

Generally, a sanitary sewer lateral is defined as the sewer line running from a connection to a sewer main line to a structure or facility connected to that sanitary sewer system. The lower lateral is usually defined as that portion of the lateral running from the point of connection to the sewer main to the property line or easement line of the parcel being served. The upper lateral is usually defined as that portion of the lateral running from the property or easement line to the structure(s) being served. Some sewer agencies do not own or maintain either portion of the lateral, some agencies own and maintain only the lower lateral, and in some cases, an agency may own and maintain both the upper and lower lateral.

There are thirty four (34) questions total with, depending on how the location information is answered, twelve to fifteen (12-15) of those questions that have to be answered to complete a PLSD report.

2.4.1 PLSD REPORT

1. **Spill Location Name:***
Enter the name of the party responsible for the spill. Do not enter private party information (i.e., name or other identifying information).
2. **Estimated spill volume?***
Enter the total estimated spill volume. This can be ascertained by questioning the property occupants regarding the spill duration and estimating the volume using standard spill volume estimation methods.
3. **Did the spill discharge to a drainage channel and/or surface water?***
This can be determined by the physical evidence at the site.
4. **Did the spill reach a storm drainpipe that is not part of a combined sewer system?***
This can be determined by the physical evidence at the site.
5. **If spill reached a separate storm drainpipe, was all of the wastewater fully captured from the separate storm drain and returned to the sanitary sewer system?***
If your agency assisted the private property owner in the cleanup of the site this can be determined. The answer may also be determined by questioning property owners.

- 6. Estimated volume of spill recovered:**
If your agency assisted the private property owner in the cleanup of the site this can be determined. The answer may also be determined by questioning the property occupants.
- 7. Estimated volume of spill that reached surface water, drainage channel, or not recovered from a separate storm drain:**
If your agency assisted the private property owner in the cleanup of the site this can be determined. The answer may also be determined by questioning the property occupants.
- 8. Latitude of spill location (only required if questions 10-14 are not answered): ***
If questions 10 – 14 are not answered, enter the latitude of the spill location. A handheld GPS unit or the “GIS Tool” link on the SSO Database spill report page can be used to determine this information. This field must be completed to “submit draft” for any SSO report but not to “save work in progress”.
- 9. Longitude of spill location(only required if questions 10-14 are not answered): ***
If questions 10 – 14 are not answered, enter the longitude of the spill location. A handheld GPS unit or the “GIS Tool” link on the SSO Database spill report page can be used to determine this information. This field must be completed to “submit draft” for any SSO report but not to “save work in progress”.
- 10. Physical Location Details (only required if questions 8 & 9 are not answered):***
If questions 8 and 9 are not answered, for questions 10 – 14, enter the street number, street name, Suite or Apt, City and zip code of the site of the PLSD.
- 15. Spill location description:**
Enter a detailed spill location description. This field is optional and allows for a detailed description of the spill site including any significant characteristics or considerations.
- 16. Spill appearance point:***
Select the spill appearance point from the “Spill Appearance Point:” dropdown. If you selected “other”, you are required to enter a description in text box No. 17 below. The “Spill Appearance Point:” is where wastewater first surfaced on the spill site. Multiple spill appearance points can be selected by holding the CTRL key on your keyboard.
- 17. Spill appearance point explanation:**
If “Other” and/or multiple appearance points are selected, enter a description of the “Other” SSO appearance point not listed in the dropdown menu and/or, for multiple appearance points, enter a description including location details of each appearance point in this text field.
- 18. Final spill destination:**
Select the final destinations of the spill in the “Final Spill Destination” field. Multiple spill locations can be selected by holding the CTRL key on your keyboard. If you selected “other”, you are required to enter a description in text box No 19 below. The

“Final Spill Destination” describes all the areas that wastewater flowed through and ultimately reached, which means multiple entries can be selected if necessary.

19. Explanation of final spill destination:

If the “final spill destination” is not listed in the dropdown menu and “Other” was selected question 18, then enter a description of the final spill destination

20. Estimated spill start date/time:*

Enter the estimated spill start date/time in a 24-hour clock format.

21. Date and time sanitary sewer system agency was notified of or discovered the spill: *

Enter the date/time, in a 24-hour clock format, when your agency was notified or discovered the spill. The date/time has to be the same or later than the estimated spill start date/time.

22. Estimated Operator arrival date/time:

Enter the estimated Operator arrival date/time in a 24-hour clock format. The date/time has to be the same or later than the estimated spill start date/time.

23. Estimated spill end date/time:

Enter the estimated spill end date/time in a 24-hour clock format. The date/time has to be the later than the estimated spill start date/time.

24. Spill cause:*

Select a cause for the spill from the dropdown menu. Multiple spill causes can be selected by holding the CTRL key on your keyboard. If the cause selected was “Other”, you are required to enter an explanation in text box No. 25 below.

25. Spill cause explanation:

If the “spill cause” is not listed in the dropdown menu and “Other” was selected in question 24, then enter a description of the spill cause.

26. PLSD Source:

Select the source of the spill from the dropdown menu. Multiple sources can be selected by holding the CTRL key on your keyboard. If the source selected is “Other”, you are required to enter an explanation in text box No. 27 below.

27. Explanation of PLSD Source:

If the “PLSD Source” is not listed in the dropdown menu and “Other” was selected in question 26, then enter a description of the PLSD Source.

28. Where did failure occur?*

Select where the failure occurred from the dropdown menu. Multiple failure locations can be selected by holding the CTRL key on your keyboard. If the location selected is “Other”, you are required to enter an explanation in text box No. 29 below.

29. Explanation of Where Failure Occurred:

If the “where failure occurred” is not listed in the dropdown menu and “Other” was selected in question 28, then enter a description of where the failure occurred.

30. Diameter of sewer pipe at the point of blockage or failure (if applicable):

If applicable, enter the lateral diameter in inches.

31. Material of sewer pipe at the point of blockage or failure (if applicable):

If applicable, enter the material type of the lateral.

32. Estimated age of sewer asset at the point of blockage or failure (if applicable):

If applicable, enter the estimated age of the sewer asset in whole numbers.

33. Spill response activities:

Select the response activities from the dropdown menu that your agency completed in responding to the spill. Multiple response activities can be selected by holding the CTRL key on your keyboard. If your selection was "Other", enter a description of the response activities in text box No. 34 below.

34. Explanation of spill response activities:

If the "spill response activities" completed are not listed in the dropdown menu and "Other" was selected in question 33, then enter a description of the spill response activities completed.

2.5 NO SPILL CERTIFICATION

The SSS WDRs require enrollees to certify on a monthly basis in the SSO Database that they have not had any overflows for months in which they do not report one or more SSOs. This is a simple process that takes about three clicks of a mouse.

When you are at the main SSO Database screen for your sanitary sewer system, click on the "Generate No Spill Certification" button and the no spill certification screen will appear. You will see three items: (1) a paragraph starting with "I certify under penalty of law that ..."; (2) drop downs and a certification button; and (3) a list of previous No Spill Certifications that your sanitary sewer system staff has submitted (see sample below).

To certify a no-spill month, use the two drop downs to select the month and year and then click on the "Certify" button and your certification will be added to the list below. You should note that in reviewing the list of previous certifications, if you find a month that had no spills and for some reason it was not reported, you can certify that month at any time.

If you have a spill that continues over two months (i.e., starts on the last day of a month but is not stopped until the next month), you should report the spill on the month that it started and, if no other spills occur in the next month in which the spill ended, then that month can be considered a no-spill month. If you have reported one or more Private Lateral Sewage Discharges in a given month but had no SSOs then, a no-spill certification is required to be submitted for that month.

3.0 FREQUENTLY ASKED QUESTIONS

1. What is a sanitary sewer overflow (SSO)?

An SSO is any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

- a. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;
- b. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States; and
- c. Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

If a release of sewage in a construction trench results from construction activity, this is not considered an SSO unless the spill escapes the construction trench.

2. What is a sanitary sewer system?

Any system of pipes, pump stations, sewer lines or other conveyances, upstream of a wastewater treatment plant head-works, used to collect and convey wastewater to the publicly owned treatment facility or another sanitary sewer system. Temporary storage and conveyance facilities (such as vaults, temporary piping, construction trenches, wet wells, impoundments, tanks, etc.) are considered to be part of the sanitary sewer system, but discharges into these temporary storage facilities are not considered to be SSOs. Other common terms for a sanitary sewer system are collection system, wastewater collection system, and sewer system (not to be confused with a storm sewer).

3. What is the purpose of Statewide General Waste Discharge Requirements for Sanitary Sewer Systems – Water Quality Order No. 2006-0003-DWQ (SSS WDRs)?

The purpose of the SSS WDRs is to uniformly regulate sanitary sewer systems throughout the State in an effort to reduce the number and volume of SSOs. The SSS WDRs requires sanitary sewer system agencies to implement sewer system management plans and electronically report all SSOs. The SSS WDRs is available for viewing on the State Water Resource Control Board's (State Water Board's) SSO program web page – www.waterboards.ca.gov/sso/index.html.

4. Who has to apply for coverage under the SSS WDRs?

All federal and state agencies, municipalities, counties, districts, and other public entities that own or operate a sanitary sewer system comprised of more than one mile of pipes or sewer lines which collects and conveys untreated wastewater to a publicly owned treatment facility in the State of California are required to apply for coverage under the SSS WDRs. If your sanitary sewer system has one mile or less of sewer pipes or lines, your agency is not required to apply for coverage under the SSS WDRs.

5. How does a sanitary sewer system agency apply for coverage under the SSS WDRs?

To apply for coverage under the SSS WDRs, an agency needs to complete and submit a Notice of Intent (available at State Water Board's SSO program web

page - http://www.waterboards.ca.gov/water_issues/programs/ssw/docs/loi.pdf) to the State Water Board at the address listed on the form. Additionally, instructions on how to complete the Notice of Intent form are available on the [SSO program web page](#).

6. Do sanitary sewer system agencies have to report all SSOs?

Yes. All SSOs from sanitary sewer systems that are covered under the SSS WDRs must be reported electronically to the State Water Board's online SSO Database through the California Integrated Water Quality System (CIWQS). This reporting is in addition to any other notification/reporting that the sanitary sewer system agency is required to do for other State agencies.

7. How do sanitary sewer system agencies report SSOs to meet the requirements of the SSS WDRs?

SSO reports are submitted electronically through the State Water Board's online SSO Database available at <http://ciwqs.waterboards.ca.gov/>.

8. Do sanitary sewer system agencies still have to report SSOs to other agencies?

Yes. Sanitary sewer system agencies must fulfill any and all other applicable SSO reporting requirements pertaining to other agencies or statutes/regulations. The reporting requirements of the SSS WDRs do not supersede or preclude, and are in addition to, reporting requirements from other agencies.

Typically, reporting to other agencies is limited to notification of Cal OES for spills to surface water of 1,000 gallons or more and notification of your local Health Department for spills meeting their threshold reporting requirements. When Cal OES is notified, they will notify all applicable agencies in your jurisdiction of the spill. You should inquire with your local agencies and Health Department staff regarding their notification and reporting requirements.

9. If a sanitary sewer system agency doesn't have any SSOs during the month, does it still have to report?

Yes. If no SSOs occurred during a calendar month, the sanitary sewer system agency must submit a "no spill" certification in the SSO Database.

10. Do sanitary sewer system agencies covered under the SSS WDRs have to report a SSO that results in sewage spilling into someone's home or onto private property?

If the SSO is caused by blockages or flow conditions within the publicly owned portion of the sanitary sewer system, then it must be reported to the SSO Database as an SSO, regardless of the specific spill appearance point.

11. What is a sewer system management plan (SSMP)?

An SSMP is a plan and schedule to properly manage, operate, and maintain all parts of the agencies sanitary sewer system. The SSS WDRs specifies the elements to be included in an SSMP.

12. Who has to implement an SSMP?

All sanitary sewer system agencies that are covered under the SSS WDRs must develop and implement an SSMP.

13. When do sanitary sewer system agencies have to implement their SSMP?

The [Statewide General WDRs for Sanitary Sewer Systems \(SSS WDRs\), WQO No. 2006-0003-DWQ](#) specifies the SSMP implementation schedule that each sanitary sewer system agency was required to follow on adoption of the SSS WDRs. If you are enrolling after adoption of the SSS WDRs, contact State Water Board SSO Reduction Program staff, and they will work out a reasonable schedule with you for development of the SSMP.

14. What if an element of the SSMP isn't applicable to an agency's sanitary sewer system?

The sanitary sewer system agency doesn't need to implement an element of the SSMP if it isn't applicable to their sanitary sewer system. However, the agency must provide an explanation in the SSMP of why that element isn't applicable to their sanitary sewer system and a statement indicating that element will be added if it becomes applicable in the future. If that element becomes applicable in the future, the agency must develop and implement that specific element.

15. Does a sanitary sewer system agency covered under the SSS WDRs have to report the status of their SSMP implementation?

Yes. Each completed phase of an agency's SSMP implementation must be certified in the SSO Database.

16. Do sanitary sewer system agencies have to pay a fee if they are covered under the SSS WDRs?

Yes. All sanitary sewer system agencies covered under the SSS WDRs must pay an annual fee according to the State Water Board's [Waste Discharge Requirement Fee Schedule](#). Once enrolled, agencies will be automatically billed each subsequent year by the State Water Board.

17. How do I remove an erroneous SSO Report or a No-Spill Certification from the database?

If an SSO or No-spill Certification needs to be removed from the database, the CIWQS Help Center needs to be contacted by email. The email should specify the event id# and include a brief explanation of why SSO report or No-Spill Certification should be removed. Valid reasons for SSO Report deletions include, but may not be limited to, duplicate reports and erroneous reports (e.g., the spill turned out to be potable water). Valid reasons for No-Spill certification removals include, but may not be limited to, erroneous No-Spill certifications (e.g., there actual was an SSO in the agencies system for the month in which the No-Spill certification was filed).

18. How often do I have to update my sanitary sewer system Questionnaire?

The Sanitary Sewer System Questionnaire is required to be updated at least every twelve months. If you do not update the Sanitary Sewer System Questionnaire within twelve months of initially filling it out or your last update, the SSO Database will not allow you to enter any reports or certifications until the questionnaire is updated.

19. How do I certify the SSMP elements in CIWQs?

Once the SSMP elements are completed the completion dates for each of the elements is required to be entered in the SSO Database by the agencies LRO.

20. How do I reset my Password?

The password can be reset manually in the SSO Database login screen (<https://ciwqs.waterboards.ca.gov/ciwqs/forgotPassword.jsp>) or by calling the CIWQS Help Center at 866-79-CIWQS (24977).

21. Why do I receive the automated email reminders?

The Email reminders are sent each month to sanitary sewer systems enrolled in the SSS WDRs with outstanding reporting issues like missed No-Spill certifications or draft reports that are overdue for certification. The outstanding items will be listed in the email reminders until the items are completed or corrected in the SSO Database.

22. How do I remove personnel (i.e., LROs and DSs) from the SSO Database?

Agencies are required to notify the State Water Board when there is a change in personnel registered in the SSO Database (e.g., an LRO retires). Request for removal of personnel registered in the SSO Database should be made in writing to the CIWQS Help Center at CIWQS@waterboards.ca.gov.

23. How do I become a Legally Responsible Official (LRO) or Data Submitter (DS) for my agency?

The forms can be downloaded from the SSO Reduction Program Website:
http://www.waterboards.ca.gov/water_issues/programs/sso/docs/lro_form.pdf
http://www.waterboards.ca.gov/water_issues/programs/sso/docs/datasubmitter_form.pdf

Agencies are encouraged to enroll multiple personnel as LROs and DSs to ensure SSO reporting and other reporting requirements of the SSS WDRs can be completed on time in the case of staff vacations, sickness, etc.

24. Can I share my username and password?

NO, that activity is considered a fraudulent activity and may be prosecuted as criminal activity.

25. Who can be contacted for additional information?

For additional information, please contact the:

CIWQS Help Center
Phone: 866-79-CIWQS (24977)
Email: ciwqs@waterboards.ca.gov
Monday through Friday (excluding State Holidays)
8:00 a.m. - 5:00 p.m.

Or

SSO Reduction Program Staff
http://www.waterboards.ca.gov/water_issues/programs/sso/index.shtml#contact

26. What INFORMAL enforcement could an Enrollee expect for not complying with the SSS WDRs?

- a. Verbal warning.
- b. Notice of Violation (NOV).
- c. Staff Enforcement Letter
 - i. Penalties of \$10,000 per day and \$10 per gallon for spills over 1,000 gallons (per Water Code 13350 or 13383).

For additional information, contact the [State Water Board Office of Enforcement](#) at 916-341-5272.

27. What FORMAL enforcement could an Enrollee be subject to for not complying with the SSS WDRs?

- a. Water Code 13267 Order:
 - i. Technical report/justified by need.
- b. Discharge To Surface Waters/Storm Drain Not Recovered:
 - i. Penalties of \$10,000 per day and \$10 per gallon for spills over 1,000 gallons (per Water Code 13350 or 13383)
- c. Violations of the SSS WDRs not associated with a discharge:

Water Code 13268 violations (\$1,000 per day for failure to):

 - i. Failure to comply with any MRP requirement, including:
 1. Failure to report and certify all SSOs.
 2. Failure to accurately reporting (i.e., intentional falsification) of any SSO.
 3. Failure to provide 2 hour notification for an SSO to surface water of 1,000 gallons or more.
 4. Failure to submit a draft SSO report within the required time line (e.g., failure to submit draft Category 2 SSO report within 3 business days).
 5. Failure to submit a certified SSO report within the required time line (e.g., failure to submit certified Category 1 SSO report within 15 business days).
 6. Failure to certify SSMP elements within the required timeframes.
 7. Failure to implement the SSMP as specified in the adopted plan.
 8. Failure to comply with any record keeping requirement.
 9. Failure to complete the questionnaire or update it every twelve months.
 10. Failure to complete an SSMP audit within required timeframes.

28. Where can I find some examples of FORMAL enforcement actions that have been taken by the State or Regional Water Boards?

- a. [Enforcement Reports.](#)
- b. [Region 3 \(Central Coast Water Board\).](#)
- c. [Region 9 \(San Diego Water Board\).](#)
- d. [Region 2 \(San Francisco Bay Area Water Board\).](#)
- e. [Region 4 \(Los Angeles Water Board\).](#)
- f. [Region 5 \(Central Valley Water Board\).](#)

29. If my agency owns multiple sanitary sewer systems of one mile or greater that are not contiguous, are we required to submit an NOI (i.e., enroll) each sanitary sewer system separately or can they all be included under one NOI?

Enrollees who own multiple sanitary sewer systems meeting enrollment requirements that are not physically connected are required to enroll each distinct sanitary sewer system separately under the SSS WDRs if they are managed as distinct assets in the form of separate sanitation districts, under separate operations and maintenance, and/or capital improvement budgets, or are otherwise managed as distinct and separate sanitary sewer systems.

30. What is the difference between a PLSD and an SSO?

The failure point determines the difference between a PLSD and an SSO. PLSDs are sewage discharges that are caused by blockages or other problems within a privately-owned lateral or other private sewer asset, regardless of actual sewage appearance point(s). SSOs are sewage discharges that are caused by blockages or other problems within the publicly-owned sanitary sewer system, regardless of actual sewage appearance point(s). For instance, if a blockage in the publicly-owned sanitary sewer system causes a back-up in a private residence (e.g., a basement, a cleanout), the overflow should be reported to the SSO Database as an SSO not a PLSD.

31. Do I have to submit my internal two-year audits to the State and Regional Water Boards?

No, unless it is requested by the State and/or Regional Water Boards. The Audit findings should be kept in your records and made available upon State and/or Regional Water Board staff request.

32. When is governing board approval required for changes to the SSMP?

The SSMP must be updated every five (5) years, and must include any significant program changes. Re-certification by the governing board of the SSMP is only required, in accordance with section D.14 of the SSS WDRs, when significant updates to the SSMP are made. Significant updates generally mean SSMP updates requiring additional monies to implement the SSMP which must be approved by the governing board.

33. Can I register multiple LROs and DSs for my sanitary sewer system?

Yes, it is encouraged to have multiple LROs and DSs. See [Section 1.1](#) for additional information.

34. Where can I access SSO data submitted by my agency?

SSO data is publicly available via the [SSO Reduction Program website](#).

- a. [Interactive SSO Report](#) - The SSO Report allows users to view summary information of the certified SSOs reported by Enrollees as well as complete certified reports submitted for specific sewage discharge locations.
- b. [Public Sewage Spill Incident Map](#) - These interactive geographic information system (GIS) maps, updated nightly, graphically display all certified sanitary sewer overflow (SSO) reports entered by enrolled sanitary sewer systems. The GIS map data includes the spill location, amount, cause, and name of the responsible or reporting agency.

- c. [SSO Data Flat Files](#) – These files contain all the raw data submitted to the SSO Database. The raw data files include draft, work in progress, and certified SSO and PLSD reports.

35. Do I have to notify other agencies if my agency intends to recover sewage from a surface water?

Yes. Based on guidance from the California Department of Fish and Wildlife (CDFW), Lake and Streambed Alteration Program, Habitat Conservation Planning Branch staff, the following notifications and permits may be required to recover water from a surface water body:

For Lake and Streambed Alteration program purposes, a formal notification to the Department will be necessary to block a creek for any purpose. If the applicant has an agreement before the spill occurs, there will likely be measures within the agreement that include a spill contingency plan outlining steps necessary to protect fish and wildlife resources.

In the event of an emergency, work can begin without entering into an agreement with the Department, however an Emergency Notification must still be sent to the Department within 14 days of beginning work. Emergencies are defined by the program as follows:

- 1) Immediate emergency work necessary to protect life or property;
- 2) Immediate emergency repairs to public service facilities necessary to maintain service as a result of a disaster in an area in which the Governor has proclaimed a state of emergency; and/or
- 3) Emergency projects undertaken, carried out, or approved by a state or local governmental agency to maintain, repair, or restore an existing highway, as defined in Vehicle Code section 360, within the existing right-of-way of the highway, that has been damaged as a result of fire, flood, storm, earthquake, land subsidence, gradual earth movement, or landslide, within one year of the damage.

The Notification forms, instructions and current fee schedule can be accessed online at <http://www.dfg.ca.gov/habcon/1600/forms.html>. The complete Notification along with all applicable fees should be sent to the regional office serving the county in which the project will take place. Regional contact information can also be accessed online at <http://www.dfg.ca.gov/regions/>. Enrollees can contact CDFW at **1-888-334-2258**.

If there are listed species, the entity may need an Incidental Take Permit (ITP) from the California Endangered Species Act (CESA) permitting program. A regional representative for the office serving the county in which a project may take place will be able to assist you in navigating the Department permits an entity may need for this type of work. You can find contact information for regional offices online at <http://www.dfg.ca.gov/regions/>.

In addition, the agencies noted below may also need to be contacted to gain approval for diverting water from waters of the U.S. and waters of the State:

State agencies:

- Coastal Commission
- Department of Conservation
- Department of Forestry
- Department of Water Resources
- Regional Water Quality Control Boards
- State Lands Commission

Federal agencies:

- NOAA Fisheries
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- U.S. Forest Service

SSO Reduction Program Staff acknowledges the efforts that some agencies take to mitigate the effects of SSOs that reach surface waters. However, staff believes that regardless of the amount of wastewater recovered from a surface water, the damage to the surface water may not be mitigated, and may be exacerbated, by recovery of the comingled sewage and receiving water. Each case is unique, and the enrollees should follow the procedures outlined in their Overflow Emergency Response Plan element of the SSMP to cleanup and mitigate the effects of their SSOs.

4.0 LIST OF ACRONYMS

BACWA	Bay Area Clean Water Agencies
BMP	Best Management Practice
CCTV	Closed-Circuit Television
CDO	Cease and Desist Order
CIP	Capital Improvements Program
CIWQS	California Integrated Water Quality System
CMMS	Computerized Maintenance Management System
CVCWA	Central Valley Clean Water Agencies
CWEA	California Water Environmental Association
CY	Calendar Year
DS	Data Submitter
DWQ	Department of Water Quality (of the State Water Resources Control Board)
ES	Executive Summary
FOG	Fats, Oils, and Grease
FSE	Food Service Establishments

FY	Fiscal Year
GIS	Geographic Information System
GSC	Grease Source Control
I/I	Infiltration and Inflow
LRO	Legally Responsible Official
MUD	Municipal Utility District
NGO	Non-Government Organization
NOV	Notice of Violation
O&M	Operations & Maintenance
PLCO	Property Line Clean-Out
PM	Preventive Maintenance
POTW	Publicly Owned Treatment Works
PVC	Polyvinyl Chloride
QA/QC	Quality Assurance/Quality Control
RWQCB	Regional Water Quality Control Board
SCADA	Supervisory Control and Data Acquisition
SECAP	System Evaluation and Capacity Assurance Plan
SOP	Standard Operating Procedure
SSMP	Sewer System Management Plan
SSO	Sanitary Sewer Overflow
SSS WDR	Waste Discharge Requirements for Sanitary Sewer Systems
SWRCB	State Water Resources Control Board
TVI	Television Inspection
USEPA	United States Environmental Protection Agency
VCP	Vitrified Clay Pipe
WDR	Waste Discharge Requirements
WDID	Waste Discharge Identification Number
WEF	Water Environment Federation
WWTP	Wastewater Treatment Plant

5.0 GLOSSARY OF TERMS

Enrollee – A public entity that owns or operates a sanitary sewer system and has submitted a complete and approved application for coverage under Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WQO No. 2006-0003-DWQ)

Event ID – A unique identifier assigned by the SSO Database to each reported SSO or private lateral sewage discharge.

Lateral (also called Service Lateral) – The segment of pipe which connects a private home, building, or development to the publicly owned sewer main. The responsibility for maintaining a lateral can be solely that of the sewerage agency or private property owner; or it can be shared between the two parties. Local communities and land ownership dictate lateral responsibility and the basis for a shared arrangement, if it applies. See Lower Lateral and Upper Lateral definitions.

Lower Lateral – That portion of a lateral usually from the property line or easement line to the sewer main. Sewer agencies may or may not be responsible for maintenance of this portion of the lateral. If not, the lower lateral is owned and maintained by the property owner of the property its serves.

Miles of Private Laterals – Amount of private laterals tributary to an Enrollee's sanitary sewer system, which private property owners are responsible for maintaining, expressed in miles.

Percent Reached Surface Water – Volume of sewage discharged from an SSO or PLSD that reached surface water divided by the total volume of the SSO or PLSD.

Percent Recovered – Volume of the SSO or PLSD that was captured and returned to the sanitary sewer system or private lateral divided by the total volume of the SSO or PLSD.

Private Lateral – Privately owned lateral.

Private Lateral Sewage Discharge (PLSD) – Sewage discharges that are caused by blockages or other problems within privately owned laterals or other private sewer system assets which are tributary to the reporting Enrollee's sanitary sewer system. Reports of these events are submitted by Enrollees on a voluntary basis but are not their responsibility. This type of sewage discharge is the responsibility of the private lateral owner.

Sanitary Sewer Overflow (SSO) – Any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system. SSOs include:

- i. Overflows or releases of untreated or partially treated wastewater that reach waters of the United States;

- ii. Overflows or releases of untreated or partially treated wastewater that do not reach waters of the United States ; and
- iii. Wastewater backups into buildings and on private property that are caused by blockages or flow conditions within the publicly owned portion of a sanitary sewer system.

Sanitary Sewer System – For the purposes of the SSS WDRs, any system of pipes, pump stations, sewer lines, or other conveyances, upstream of a wastewater treatment plant head works which is comprised of more than one mile of pipes and sewer lines, used to collect and convey wastewater to a publicly owned treatment facility.

Service Lateral – See Lateral definition.

Spill – Generic term referring to any sewage discharge (i.e., SSO or private lateral sewage discharge) resulting from a failure in a sanitary sewer system or privately owned lateral or other private sewer system asset.

SSO Category 1 – Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee’s sanitary sewer system failure or flow condition that:

- Reach surface water and/or reach a drainage channel tributary to a surface water; or
- Reach a municipal separate storm sewer system and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the municipal separate storm sewer system is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or ground water infiltration basin (e.g., infiltration pit, percolation pond).

SSO Category 2 – Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee’s sanitary sewer system failure or flow condition that do not reach a surface water or a drainage channel. Discharges that reach a municipal separate storm sewer system are considered Category 2 SSOs if the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

SSO Category 3 – All other discharges of untreated or partially treated wastewater resulting from an enrollee’s sanitary sewer system failure or flow condition. Specifically, discharges of untreated or partially treated wastewater of less than 1,000 gallons resulting from an enrollee’s sanitary sewer system failure or flow condition that do not reach a surface water or a drainage channel. Discharges of less than 1,000 gallons that reach a municipal separate storm sewer system are considered Category 3 SSOs if the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.

SSO Database – Online reporting system developed, hosted, and maintained by the State Water Resources Control Board for compliance with the Monitoring and Reporting Program contained in the Statewide General Waste Discharge Requirements for Sanitary Sewer Systems (WQO No. 2006-0003-DWQ).

Total # of SSOs per 100 miles of Sewer – Broad metric used to compare the relative performance of Enrollees and their sanitary sewer systems. This metric expresses the number of SSOs, for which the reporting Enrollee is responsible, for every 100 miles of pipe or sewer lines in an Enrollee’s sanitary sewer system. Due to the large variation in facility specific characteristics, this metric should only be viewed as a rough comparison of the operation and maintenance performance of Enrollees and their sanitary sewer systems. The metric is calculated as described below:

$$SSOs \text{ per } 100 \text{ Miles of Sewer} = \frac{\text{Total Number of SSOs}}{\text{Total Miles of Pipe} *} \times 100$$

* Miles of Pressure Sewer + Miles of Gravity Sewer + Miles of Public Laterals

Total Volume of SSOs Reached Surface Water per 100 miles of Sewer – Broad metric used to compare the relative performance of Enrollees and their sanitary sewer systems. This metric expresses the volume of SSOs, for which the reporting Enrollee is responsible, that reached surface water for every 100 miles of pipe or sewer lines in an Enrollee’s sanitary sewer system. Because sewage discharges that reach surface water pose a greater threat to public health and the environment, this metric reflects some accounting of the impact posed by an Enrollee’s SSOs. Due to the large variation in facility specific characteristics, this metric should only be viewed as a rough comparison of the operation and maintenance performance of Enrollees and their sanitary sewer systems. The metric is calculated as described below:

$$SSO \text{ Volume Reaching SW (gal)} = \frac{\text{Total SSO Volume Reachign SW}}{\text{Total Miles of Pipe} *} \times 100$$

* Miles of Pressure Sewer + Miles of Gravity Sewer + Miles of Public Laterals

Total Volume Reached Surface Water – Amount of sewage discharged from a sanitary sewer system or private lateral or other private sewer system asset that reaches a surface water.

Total Volume Recovered – Amount of sewage discharged that was captured and returned to the sanitary sewer system or private sewer system asset.

Upper Lateral – Portion of a lateral usually from the building foundation to the property line or easement line where it is connected to the Lower Lateral. Sewer agencies usually do not own and maintain this portion of a Lateral. That responsibility is usually with the owner of the property the lateral serves.

WDID – Waste Discharge Identification number which is a unique identifier assigned by the State Water Board to each Enrollee for regulatory record and data management purposes.

6.0 SPILL FORMS AND QUESTIONNAIRE EXAMPLES

6.1 QUESTIONNAIRE



SSO - Questionnaire ?

SSO Menu

Regional Water Board: Region 5S - Sacramento
 Agency: State Water Resources Control Board
 Sanitary Sewer System: Demo South CS
 WDID: 5SSO10000

Collection System Questionnaire

Save

Note: All questions are required to be answered. Enter NA or 0 for questions that do not apply.

Last updated: 2013-07-24

First updated: 2007-04-10

Collection System Questionnaire ?

1) Sanitary Sewer System Category: Municipal (Public) v

2) What is the population served by your agency's sanitary sewer system? 1,000

3) What is your current annual operation and maintenance budget for sanitary sewer system facilities? \$50,000

4) What is your current annual capital expenditure budget for sanitary sewer system facilities? \$100,000

Please identify the total number of employees (technical and mechanical) for your agency's sanitary sewer system (including pump station operations) working within the different classifications listed below.

5) Entry Level (Less than 2 years experience) Number of agency employees? 1

6) Journey Level (Greater than or equal 2 years experience) Number of agency employees? 2

7) Supervisory Level Number of agency employees? 3

8) Managerial Level Number of agency employees? 4

Please identify the total number of employees who hold CWEA Certification for Collection System Maintenance and/or Plant Maintenance-Includes Mechanical Technologist and Electrical/Instrumentation for your agency's sanitary sewer system (including pump station operations) for the various Certificates and Grades levels listed below.

9) Grade I Number of certified (Grade I Collection System Maintenance) agency employees: 1 Number of certified (Grade I Plant Maintenance Technologist) agency employees? 2

10) Grade II Number of certified (Grade II Collection System Maintenance) agency employees: 1 Number of certified (Grade II Electrical/Instrumentation Technologist) agency employees: 1 Number of certified (Grade II Mechanical Technologist) agency employees: 1

11) Grade III Number of certified (Grade III Collection System Maintenance) agency employees: 1 Number of certified (Grade III Electrical/Instrumentation Technologist) agency employees: 1 Number of certified (Grade III Mechanical Technologist) agency employees: 1

12) Grade IV Number of certified (Grade IV Collection System Maintenance) agency employees: 1 Number of certified (Grade IV Electrical/Instrumentation Technologist) agency employees: 1 Number of certified (Grade IV Mechanical Technologist) agency employees: 1

13) OFFICE OF WATER PROGRAMS at CALIFORNIA STATE UNIVERSITY'S CERTIFICATES OF COMPLETION Number of certified (Operation and Maintenance of Wastewater Collection Systems, Volume I) agency employees: 0 Number of certified (Operation and Maintenance of Wastewater Collection Systems, Volume II) agency employees: 0

14) Estimated Size Distributions of Assets (note: total % must sum to 100%)

Diameter of sewer pipe Gravity Mainlines (%) Force Mains (%)

6 inches or less	14	14
8 inches	14	14
9 - 18 inches	14	14
19 - 36 inches	14	14
> 36	14	14
Unknown Diameter	30	30
Totals	100	100

15) How many miles of forced mains and other pressure systems?

16) How many miles of gravity sewers?

17) Estimated total miles of laterals (upper and lower)?

18) Which portion of laterals is your agency responsible for?

(If the answer of question-18 is None, answer 0 (zero) for question-19)

19) Estimated total miles of laterals your agency is responsible for?

20) Number of service lateral connections?

21) Approximately, what percentage of your sewer system piping and number of pump stations were constructed between the years of: (note: total % must sum to 100%)

Age	Gravity Mainlines & Force Mains (%)	Pump Stations (*) 75k Gal/day & Over (number of stations)	Pump Stations (*) Under 75k Gal/day (number of stations)
2000 - Present	1	1	2
1980 - 1999	1	0	0
1960 - 1979	1	0	0
1940 - 1959	1	0	0
1920 - 1939	1	0	0
1900 - 1919	1	0	0
Before 1900	1	0	0
Unknown Age	93	0	0
Totals	100	1	2

(*) For pump stations, flow categories are the maximum flow rate occurring over a 24-hr period based on annual operating data (i.e., flow measurement) or calculated peak flow (e.g., # EDUs x Flow/EDU x Peaking Factor). Age is date asset was originally constructed.

22) Estimated total miles of your sewer system not accessible for maintenance?

23) How many miles of sewer system did you clean last year(miles)?

24)How many miles of sewer system did you inspect(e.g., CCTV) last year (miles)?

25) Estimated Sewer System Flow Characteristics

Average Daily Dry Weather Flow (MGD) Peak Daily Wet Weather Flow (MGD)

26) Where does this Sanitary Sewer System Discharge to?

Where it goes?	Name	WDID
WWTP same agency	Wastewater Treatment Plant	5 12345678
Select ...		
Select ...		
Select ...		

27a) Are there any tributary sanitary sewer systems?

27b) If yes, please list below:

Tributary system owned by your agency?	Tributary Collection System Name	Tributary Collection System WDID
No	Example CS	5SSO12345
Select ...		

Select ... ▾

Select ... ▾

28) How many gravity mainline aerial or under ground crossings of water bodies (i.e. gravity sewer lines crossing over water bodies) are located throughout the sewer system

29) How many force main aerial or under ground crossings of water bodies (e.g. pressurized sewer lines crossing over or under water bodies) are located throughout the sewer system?

30) How many siphons used to convey sewage are located throughout the sewer system?

Save

Note: All questions are required to be answered. Enter NA for questions that do not apply or unknown.

[Export Questionnaire History To Excel](#)

6.2 SSO CATEGORY 1



Spill - General Information [?] SSO Menu

Spill Event ID: New Regional Water Board: Region 5S - Sacramento
 Spill Location Name: Test Agency: State Water Resources Control Board
 WDID: 5SSO10000 Sanitary Sewer System: Demo South CS

General Info Spill Related Parties Attachments

Spill - General Information, Screen 2

Save Work in Progress Submit Draft Ready to Certify

You have 59:54 minutes to save your report before your session expires.

Note: Questions with ** are required to be answered for 'Save Work in Progress'.
 Questions with * are required to be answered for 'Submit Draft'.
 Questions with *** are required to be answered for 'Ready to Certify'.

Submit Draft On:

Last Updated By: SSO Demo

1 - Spill Type: Category 1

*2 - Estimate Spill Volumes

a) Estimated spill volume that reached a separate storm drain that flows to a surface water body? 0 gallons

b) Estimated spill volume recovered from the separate storm drain that flows to a surface water body? (Do not include water used for clean-up) 0 gallons

c) Estimated spill volume that reached a drainage channel that flows to a surface water body? 0 gallons

d) Estimated spill volume recovered from a drainage channel that flows to a surface water body? 0 gallons

e) Estimated spill volume discharged directly to a surface water body? 1 gallons

f) Estimated spill volume recovered from surface water body? 0 gallons

g) Estimated spill volume discharged to land? (Includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location.) 0 gallons

h) Estimated spill volume recovered from the discharge to land? (Do not include water used for clean-up) 0 gallons

Estimated Total spill volume to Reach Surface Water (a-b+c+e)	Estimated Total spill volume to Reach Land (g)	Estimated Total spill volume Recovered (b+d+f+h)	Estimated Total spill volume (a+c+e+g)
1	0	0	1

*3 - Did the spill discharge to a drainage channel and/or surface water? Yes [v]

*4 - Did the spill reach a storm drainpipe that is not part of a combined sewer system? No [v]

*5 - If spill reached a separate storm drainpipe, was all of the wastewater fully captured from the separate storm drain and returned to the sanitary sewer system? Not Applicable - Spill did not reach a separate storm drainpipe [v]

Physical Location Details

*6 - Spill location name: Test

*7 - Latitude of spill location: 38 deg. 34 min. 54.372 sec. OR 38.58177 decimal degrees [Map]

*8 - Longitude of spill location: -121 deg. 30 min. 28.512 sec. OR -121.49208 decimal degrees [Map]

*9 - County: Sacramento [v]

*10 - Regional Water Quality Control Board: Region 5S - Sacramento [v]

11 - Spill location description: (Use attachment if location description is more than 2000 characters)

Spill Details

*12 - Number Of appearance points:

*13 - Spill appearance point:

(Hold Ctrl key to Select Multiple answers from the list)

Combined Sewer D.I. (Combined CS Only) ^
Force Main v
Gravity Mainline v

*14 - Spill appearance point explanation:

(Required if spill appearance point is "Other" and/or multiple appearance points are selected)

**15 - Final spill destination:

(Hold Ctrl key to Select Multiple answers from the list)

Beach ^
Building or Structure v
Combined Storm Drain (Combined CS only) v

16 - Explanation of final spill destination:

(Required if final spill destination is "Other")

*17 - Estimated spill start date/time:

 : : Date Format: MM/DD/YYYY

*18 - Date and time sanitary sewer system agency was notified of or discovered spill:

 : : Date Format: MM/DD/YYYY

*19 - Estimated Operator arrival date/time:

 : : Date Format: MM/DD/YYYY

**20 - Estimated spill end date/time:

 : : Date Format: MM/DD/YYYY

**21 - Spill cause:

22 - Spill cause explanation:

(Required if spill Cause is "Other")

**23 - Where did failure occur?

24 - Explanation of Where Failure Occurred:

(Required if Where Failure Occurred is "Other")

**25 - Was this spill associated with a storm event?

26 - Diameter of sewer pipe at the point of blockage or failure:

 Inches

27 - Material of sewer pipe at the point of blockage or failure:

28 - Estimated age of sewer asset at the point of blockage or failure:

**29 - Spill response activities:

(Hold Ctrl key to Select Multiple answers from the list)

Cleaned-Up ^
Mitigated Effects of Spill v
Contained all or portion of spill v

30 - Explanation of spill response activities:

(Required if spill response activities is "Other", use attachment if the text is more than 1700 characters)

**31 - Spill response completion date:

 : : Date Format: MM/DD/YYYY

**32 - Spill corrective action taken:

(Hold Ctrl key to Select Multiple answers from the list)

Added sewer to preventive maintenance program ^
Adjusted schedule/method of preventive maintenance v
Enforcement action against FOG source v

33 - Explanation of spill corrective action taken:

(Required if spill corrective action is "Other")

**34a - Is there an ongoing investigation?

34b - Reason for ongoing investigation?

35 - Visual inspection results from impacted receiving water:

**36 - Health warnings posted?

**37 - Did the spill result in a beach closure (If YES, answer questions 38)?

**38 - Name of impacted beach(es) (enter NA if None):

39 - Name of impacted surface water(s) (enter Un-named Tributary to XXXXX where XXXXX is the name of first named downstream tributary if receiving surface water body is un-named):

****40 - Water quality samples analyzed for:**
(Hold Ctrl key to Select Multiple answers from the list)

41 - Explanation of water quality samples analyzed for:
(Required if water quality samples analyzed for is "Other chemical indicator(s)", "Biological indicator(s)", or "Other")

****42 - Water quality sample results reported to:**
(Hold Ctrl key to Select Multiple answers)

County Health Agency
Regional Water Quality Control Board
Other (specify below)

43 - Explanation of water quality sample results reported to:
(Required if water quality sample results reported to is "Other")

**** 44 - Explanation of volume estimation methods used:**
(Describe how you developed spill volume estimates for this spill)

Notification Details

45 - Cal OES Control Number
(Required for Category 1 - see SSO Monitoring and Reporting Program Requirements):

46 - Cal OES Called Date/Time
(Required for Category 1 - see SSO Monitoring and Reporting Program Requirements):

:00 :00 Date Format: MM/DD/YYYY

***47(a) - Name and Title (Contact person who can answer specific questions about this SSO)**

***47(b) - Contact Person Phone Number**

Save Work in Progress

Submit Draft

Ready to Certify

6.3 SSO CATEGORY 2



Spill - General Information

Spill Event ID: New Regional Water Board: Region 5S - Sacramento
 Spill Location Name: Test Agency: State Water Resources Control Board
 WDID: 5SSO10000 Sanitary Sewer System: Demo South CS

General Info Spill Related Parties Attachments

Spill - General Information, Screen 2

You have minutes to save your report before your session expires.

Note: Questions with ****** are required to be answered for 'Save Work in Progress'.
 Questions with ***** are required to be answered for 'Submit Draft'.
 Questions with ******* are required to be answered for 'Ready to Certify'.

Submit Draft On:

Last Updated By: SSO Demo

1 - Spill Type: Category 2

***2 - Estimate Spill Volumes**

a) Estimated spill volume that reached a separate storm drain that flows to a surface water body? gallons

b) Estimated spill volume recovered from the separate storm drain that flows to a surface water body? (Do not include water used for clean-up) gallons

c) Estimated spill volume that reached a drainage channel that flows to a surface water body? gallons

d) Estimated spill volume recovered from a drainage channel that flows to a surface water body? gallons

e) Estimated spill volume discharged directly to a surface water body? gallons

f) Estimated spill volume recovered from surface water body? gallons

g) Estimated spill volume discharged to land? (Includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location.) gallons

h) Estimated spill volume recovered from the discharge to land? (Do not include water used for clean-up) gallons

Estimated Total spill volume to Reach Surface Water (a-b+c+e)	Estimated Total spill volume to Reach Land (g)	Estimated Total spill volume Recovered (b+d+f+h)	Estimated Total spill volume (a+c+e+g)
<input type="text" value="0"/>	<input type="text" value="1000"/>	<input type="text" value="0"/>	<input type="text" value="1000"/>

*3 - Did the spill discharge to a drainage channel and/or surface water?

*4 - Did the spill reach a storm drainpipe that is not part of a combined sewer system?

*5 - If spill reached a separate storm drainpipe, was all of the wastewater fully captured from the separate storm drain and returned to the sanitary sewer system?

Physical Location Details

*6 - Spill location name:

*7 - Latitude of spill location: deg. min. sec. OR decimal degrees [\[Map\]](#)

*8 - Longitude of spill location: deg. min. sec. OR decimal degrees [\[Map\]](#)

*9 - County:

*10 - Regional Water Quality Control Board:

11 - Spill location description:
(Use attachment if location description is more than 2000 characters)

Spill Details

*12 - Number Of appearance points:

*13 - Spill appearance point:

(Hold Ctrl key to Select Multiple answers from the list)

Combined Sewer D.I. (Combined CS Only) ^
Force Main ^
Gravity Mainline v

*14 - Spill appearance point explanation:

(Required if spill appearance point is "Other" and/or multiple appearance points are selected)

**15 - Final spill destination:

(Hold Ctrl key to Select Multiple answers from the list)

Beach ^
Building or Structure ^
Combined Storm Drain (Combined CS only) v

16 - Explanation of final spill destination:

(Required if final spill destination is "Other")

*17 - Estimated spill start date/time:

 : : Date Format: MM/DD/YYYY

*18 - Date and time sanitary sewer system agency was notified of or discovered spill:

 : : Date Format: MM/DD/YYYY

*19 - Estimated Operator arrival date/time:

 : : Date Format: MM/DD/YYYY

**20 - Estimated spill end date/time:

 : : Date Format: MM/DD/YYYY

**21 - Spill cause:

22 - Spill cause explanation:

(Required if spill Cause is "Other")

**23 - Where did failure occur?

24 - Explanation of Where Failure Occurred:

(Required if Where Failure Occurred is "Other")

**25 - Was this spill associated with a storm event?

26 - Diameter of sewer pipe at the point of blockage or failure:

 Inches

27 - Material of sewer pipe at the point of blockage or failure:

28 - Estimated age of sewer asset at the point of blockage or failure:

**29 - Spill response activities:

(Hold Ctrl key to Select Multiple answers from the list)

Cleaned-Up ^
Mitigated Effects of Spill ^
Contained all or portion of spill v

30 - Explanation of spill response activities:

(Required if spill response activities is "Other", use attachment if the text is more than 1700 characters)

**31 - Spill response completion date:

 : : Date Format: MM/DD/YYYY

**32 - Spill corrective action taken:

(Hold Ctrl key to Select Multiple answers from the list)

Added sewer to preventive maintenance program ^
Adjusted schedule/method of preventive maintenance ^
Enforcement action against FOG source v

33 - Explanation of spill corrective action taken:

(Required if spill corrective action is "Other")

**34a - Is there an ongoing investigation?

35 - Explanation of volume estimation methods used:

(Describe how you developed spill volume estimates for this spill)

*36(a) - Name and Title (Contact person who can answer specific questions about this SSO)

*36(b) - Contact Person Phone Number

Save Work in Progress

Submit Draft

Ready to Certify

6.4 SSO CATEGORY 3

Spill - General Information
[SSO Menu](#)

Spill Event ID:	New	Regional Water Board:	Region 5S - Sacramento
Spill Location Name:	Test	Agency:	State Water Resources Control Board
WDID:	5SSO10000	Sanitary Sewer System:	Demo South CS

[General Info](#) | [Spill Related Parties](#) | [Attachments](#)
Spill - General Information, Screen 2

 You have minutes to save your report before your session expires.

Note: Questions with ** are required to be answered for 'Save Work in Progress'.
 Questions with * are required to be answered for 'Submit Draft'.
 Questions with **** are required to be answered for 'Ready to Certify'.

Submit Draft On:

 Last Updated By: [SSO Demo](#)

 1 - Spill Type:
*** 2 - Estimate Spill Volumes**

- a) Estimated spill volume that reached a separate storm drain that flows to a surface water body? gallons
- b) Estimated spill volume recovered from the separate storm drain that flows to a surface water body? (Do not include water used for clean-up) gallons
- c) Estimated spill volume that reached a drainage channel that flows to a surface water body? gallons
- d) Estimated spill volume recovered from a drainage channel that flows to a surface water body? gallons
- e) Estimated spill volume discharged directly to a surface water body? gallons
- f) Estimated spill volume recovered from surface water body? gallons
- g) Estimated spill volume discharged to land? (Includes discharges directly to land, and discharges to a storm drain system or drainage channel that flows to a storm water infiltration/retention structure, field, or other non-surface water location.) gallons
- h) Estimated spill volume recovered from the discharge to land? (Do not include water used for clean-up) gallons

Estimated Total spill volume to Reach Surface Water (a-b+c+e)	Estimated Total spill volume to Reach Land (g)	Estimated Total spill volume Recovered (b+d+f+h)	Estimated Total spill volume (a+c+e+g)
<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="1"/>

 * 3 - Did the spill discharge to a drainage channel and/or surface water?

 * 4 - Did the spill reach a storm drainpipe that is not part of a combined sewer system?

 * 5 - If spill reached a separate storm drainpipe, was all of the wastewater fully captured from the separate storm drain and returned to the sanitary sewer system?
Physical Location Details

 * 6 - Spill location name:

 * 7 - Latitude of spill location: deg. min. sec. OR decimal degrees [\[Map \]](#)

 * 8 - Longitude of spill location: deg. min. sec. OR decimal degrees [\[Map \]](#)

 * 9 - County:

 * 10 - Regional Water Quality Control Board:

 11 - Spill location description:
 (Use attachment if location description is more than 2000 characters)

Spill Details

*12 - Number Of appearance points:

*13 - Spill appearance point:

(Hold Ctrl key to Select Multiple answers from the list)

Combined Sewer D.I. (Combined CS Only) ^
Force Main v
Gravity Mainline v

*14 - Spill appearance point explanation:

(Required if spill appearance point is "Other" and/or multiple appearance points are selected)

**15 - Final spill destination:

(Hold Ctrl key to Select Multiple answers from the list)

Beach ^
Building or Structure v
Combined Storm Drain (Combined CS only) v

16 - Explanation of final spill destination:

(Required if final spill destination is "Other")

*17 - Estimated spill start date/time:

:00 :00 Date Format: MM/DD/YYYY

*18 - Date and time sanitary sewer system agency was notified of or discovered spill:

:00 :00 Date Format: MM/DD/YYYY

*19 - Estimated Operator arrival date/time:

:00 :00 Date Format: MM/DD/YYYY

**20 - Estimated spill end date/time:

:00 :00 Date Format: MM/DD/YYYY

**21 - Spill cause:

22 - Spill cause explanation:

(Required if spill Cause is "Other")

**23 - Where did failure occur?

24 - Explanation of Where Failure Occurred:

(Required if Where Failure Occurred is "Other")

**25 - Was this spill associated with a storm event?

26 - Diameter of sewer pipe at the point of blockage or failure:

 inches

27 - Material of sewer pipe at the point of blockage or failure:

28 - Estimated age of sewer asset at the point of blockage or failure:

29 - Explanation of volume estimation methods used:

(Describe how you developed spill volume estimates for this spill)

*30(a) - Name and Title (Contact person who can answer specific questions about this SSO)

*30(b) - Contact Person Phone Number

Save Work in Progress

Submit Draft

Ready to Certify

6.1 NO SPILL CERTIFICATION



SSO - No Spill Certification ? SSO Menu

Regional Water Board: Region 5S - Sacramento
Agency: State Water Resources Control Board
Sanitary Sewer System: Demo South CS
WDID: 5SSO10000

No Spill Certification:

I certify under penalty of law that no spills occurred for the month specified below. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine or imprisonment, for knowing violations. Clicking the "Certify" button below indicates my certification of this report and my understanding of the above conditions.

Month/Year Without Spills: June 2013

Certifier Name: Test

Certifier Title: Test

Executed On: 07/24/2013

Executed At: SWRCB

Certify

Previously Submitted Months with "No Spill Certification"

Table with 5 columns: Confirmation Number, No Spill Certificate for the Month of, Entered Date/Time, Certified UserID, Certified Name. Contains 30 rows of historical data.

7.0 RESOURCES

7.1 PRE-INSPECTION QUESTIONNAIRE



SEWER COLLECTION SYSTEM
PRE-INSPECTION QUESTIONNAIRE
Version 1.5

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PART 1 — DESCRIPTION

This Sewer Collection System Pre-Inspection Questionnaire (Questionnaire) includes mandatory questions specific to the requirements in the Sanitary Sewer System Waste Discharge Requirements Water Quality Order No. 2006-0003-DWQ (hereafter SSSWDR), and its accompanying Amended Monitoring Plan Order No. 2008-0002-EXEC (hereafter Amended MRP).

All of the questions in this Questionnaire must be answered by the Enrollee (one Questionnaire for each collection system only) to demonstrate how the agency is complying with the SSSWDR and the Amended MRP. All responses provided in the Questionnaire along with the documentation required to be submitted by each Enrollee (see Part 3, Section 1) will be used by the Water Boards to prioritize inspection and enforcement activities statewide for the SSSWDR.

PART 2 — INSTRUCTIONS

1. Complete all questions in the Questionnaire.
2. Save an electronic copy of the completed Pre-Inspection Questionnaire (in MS Word), and the other documentation required for your collection system (see Part 3, Section 1). Print the last page of this Questionnaire and sign it in ink. Submit the electronic copy (e.g., CD) and the original completed last page to:

State Water Resources Control Board
Office of Enforcement, Special Investigations Unit
1001 I Street, 16th Floor, Sacramento, CA 95814

PART 3 — REQUIRED INFORMATION

1 DOCUMENTATION

Please mail an electronic copy (e.g., CD) of the following documents to:

State Water Resources Control Board
Office of Enforcement, Special Investigations Unit
1001 I Street, 16th Floor, Sacramento, CA 95814

- 1.1 Sewer System Management Plan [(SSMP) [Sanitary Sewer System General Waste Discharge Requirements (SSSWDR), Sect. D.13] and any documents referenced within the SSMP. Also include documentation showing approval of the SSMP by your agency's local governing board (e.g., Board Resolution or other documentation).
- 1.2 SSMP Program Audit¹ [SSSWDR, Sect. D.13(x)], if not contained within your agency's SSMP
- 1.3 Sewer System Area Map [SSSWDR, Sect. D.13(iv)], if not contained within your agency's SSMP
- 1.4 Local Sewer Use Ordinance [SSSWDR, Sects. D.13(iii) and D.13(vi)], if not contained within your agency's SSMP
- 1.5 Evidence of Agency's SSO Field Response Documentation [SSSWDR, Amended MRP, B.5], if not contained within your agency's SSMP
- 1.6 Rehabilitation and Replacement Plan [SSSWDR, Sect. D.13(iv)(c)], if not contained within your agency's SSMP

¹ To satisfy SSSWDR, Sect. D.13(x), the SSMP Audit must occur at least every two years following the original approval date of the agency's SSMP by the local governing board. The SSMP Audit must measure the effectiveness and compliance of an Enrollee's SSMP.

- 1.7 Capital Improvement Plan (CIP) Schedule for System Evaluation and Capacity Assurance Plan (SECAP) [SSSWDR, Sect. D.13(viii)], if not contained within your agency's SSMP

2 Basic Information

2.1 Collection System Waste Discharge ID number (WDID) and Collection System Name: _____

2.2 Collection System Main Point(s) of Contact (name, title, address, email, and telephone number):

2.3 Type of Sanitary Sewer System (select ONE of the following: Municipal, Park, School, Military, Hospital, Prison, Airport, Port, Other)

2.4 What is the population served by your agency's sanitary sewer system?

2.5 What is this fiscal year's budget for operation and maintenance sanitary sewer system facilities?

2.6 What is this fiscal year's budget for capital expenditures for sanitary sewer system facilities?

For questions 2.7 - 2.10, please identify the total number of employees (technical and mechanical) for your agency's sanitary sewer system (including pump station operations) working within the different classifications listed below.

2.7 Entry Level (Less than 2 years experience)

Number of agency employees?

2.8 Journey Level (Greater than or equal to 2 years experience)

Number of agency employees?

2.9 Supervisory Level

Number of agency employees?

2.10 Managerial Level

Number of agency employees?

For questions 2.11 – 2.14, please identify the total number of employees who hold CWEA Certification for Collection System Maintenance for your agency's sanitary sewer system (including pump station operations) for the various Certificates and Grades levels listed below.

2.11 Grade I

Number of certified (Grade I Collection System Maintenance) agency employees:

Number of certified (Grade I Plant Maintenance Technologist) agency employees:

2.12 Grade II

Number of certified (Grade II Collection System Maintenance) agency employees:

Number of certified (Grade II Electrical/Instrumentation Technologist) agency employees:

Number of certified (Grade II Mechanical Technologist) agency employees:

2.13 Grade III

Number of certified (Grade III Collection System Maintenance) agency employees:

Number of certified (Grade III Electrical/Instrumentation Technologist) agency employees:

Number of certified (Grade III Mechanical Technologist) agency employees:

2.14 Grade IV

Number of certified (Grade IV Collection System Maintenance) agency employees:

Number of certified (Grade IV Electrical/Instrumentation Technologist) agency employees:

Number of certified (Grade IV Mechanical Technologist) agency employees:

2.15 Estimated Size Distribution of Assets

Diameter of sewer pipe	Gravity Sewers (miles)	Force Mains (miles)
6 inches or less	[# or ENTER ZERO]	[# or ENTER ZERO]
8 inches	[# or ENTER ZERO]	[# or ENTER ZERO]
9 - 18 inches	[# or ENTER ZERO]	[# or ENTER ZERO]
19 - 36 inches	[# or ENTER ZERO]	[# or ENTER ZERO]
> 36 inches	[# or ENTER ZERO]	[# or ENTER ZERO]
Unknown Diameter	[# or ENTER ZERO]	[# or ENTER ZERO]
Totals	[# or ENTER ZERO]	[# or ENTER ZERO]

2.16 For which portion of sewer service laterals is your agency responsible?

(If None, skip question 2.17.)

2.17 Estimated total miles of sewer service laterals (upper and lower) for which your agency is responsible?

2.18 Number of sewer service lateral connections?

2.19 Estimated total miles of easements within your sanitary sewer system?

2.20 What is your total easement sewer system cleaning production in miles/year?

2.21 What is your total gravity sewer system cleaning production in miles/year?

2.22 Does your agency own any separately enrolled collection systems? [Y/N]

2.23 If yes to question 2.22, which collection system(s) does your agency own?

Collection System name(s):

Collection System WDID(s):

2.24 Which wastewater treatment plant(s) (WWTPs) ultimately receive wastewater from this collection system?

Receiving Treatment Plant name(s):

Receiving Treatment Plant WDID(s):

2.25 For question 2.24, does your agency own this/these WWTP(s)? [Y/N]

2.26 Does your collection system discharge into any other collection system(s)? [Y/N]

2.27 If yes to question 2.26, which collection system(s) receive wastewater from this collection system?

Receiving Collection System name(s):

Receiving Collection System WDID(s):

2.28 Do any upstream collection systems greater than 25,000 gallons/day (gpd) discharge into this collection system? [Y/N]

2.29 If yes to question 2.28, which collection system(s) discharge into this collection system?

Upstream Collection System name(s):

Upstream Collection System WDID(s):

2.30 Estimated Collection System Flow Characteristics for your collection system:

Average Daily Dry Weather Flow (MGD)	Peak Daily Wet Weather Flow (MGD)
[# or Unknown]	[# or Unknown]
Enter description here how info. Is derived (based on EDUs measured, etc.)	Enter description here how info. Is derived (based on EDUs measured, etc.)

2.31 How many pump stations are there throughout the sewer collection system?

2.32 How many feet of above ground gravity pipelines are there throughout the sewer collection system?

2.33 How many feet of above ground pressurized pipelines are located throughout the sewer collection system?

2.34 How many air relief valves (ARVs) are located throughout the sewer collection system?

2.35 How many siphons are there throughout the sewer collection system?

2.36 Specify the percentage of piping and the number of pump stations constructed in the following table below:
(note: total percentage must equal 100%)

Age	Source of Age Info. (records, estimated, etc.)	Gravity & Pressure Sewers (%)	Pump Stations ² 25k Gal/day & Over (number of stations)	Pump Stations ¹ Under 25k Gal/day (number of stations)
2000 - Present		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
1980 - 1999		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
1960 - 1979		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
1940 - 1959		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
1920 - 1939		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
1900 - 1919		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
Before 1900		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
Unknown Age		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]
Totals		[%]	[# or ENTER ZERO]	[# or ENTER ZERO]

¹ For pump stations, flow categories are the maximum flow rate occurring over a 24-hr period based on annual operating data. Age is date asset was originally constructed.

3 ORGANIZATION

Local Governing Board Information

3.1 [SSSWDR, Sect. D.13(ii)]: Is/are your agency's Legally Responsible Official(s) and Data Submitter(s) registration information up-to-date with the State Water Board? [Y/N]

3.2 [SSSWDR, Sect. D.13(ii)]: If your local governing board has an internet website, please specify the internet address here:

3.3 [SSSWDR, Sect. D.13(ii)]: Please list the names and titles of each of your agency's current governing board members:

Sewer System Management Plan Information

3.4 [SSSWDR, Sect. E.]: Is your agency's SSMP available on your agency's website? [Y/N]

3.5 [SSSWDR, Sect. E.]: If yes to question 3.4, please provide the internet address here: _____

4 SEWER SYSTEM ASSETS

General System Information

4.1 [SSSWDR, Findings 2 & 3]: Please specify the basis for the population estimate in question 2.4 (e.g., official census data, estimated by agency, etc.)?

4.2 [SSSWDR, Sects. D.8, D.10]: What is the approximate size of the service area served by the sewer collection system for your agency, in square miles? [# or Unknown]

4.3 [SSSWDR, Sects. D.8, D.10]: Please describe the terrain within your agency's sewer service area (Mountainous, Hilly, Flat, Valley, etc.)?

4.4 [SSSWDR, Sects. D.8, D.10]: Please specify what percentage of the collection system's flow comes from residential, commercial, industrial, and institutional sources. [% FOR EACH or Unknown]

Asset Mapping

4.5 [SSSWDR, D.13(iv)]: Has your agency identified and mapped all the gravity sewer line segments, public access points (manholes, lamp holes, rod holes, etc.), pumping facilities, pressure pipes and valves, and stormwater-related facilities? [Y/N]

4.6 [SSSWDR, D.13(iv)]: Does your agency currently have sewer system assets mapped in a Geographic Information System (GIS)? [Y/N]

4.7 [SSSWDR, D.13(iv)]: Does your agency currently have stormwater-related facilities mapped in GIS? [Y/N]

4.8 [SSSWDR, D.8 and D.10]: What is the estimated number of gravity sewer line pipe segments located throughout the collection system? [# or Unknown]

4.9 [SSSWDR, D.13(iv)]: Does your agency have a formal review process in place to ensure that any mapping issues noted by field staff or others are addressed? [Y/N]

4.10 [SSSWDR, D.13(iv)]: Please indicate the total number of public access points (manholes, lamp holes, rod holes, etc.) located within your sewer collection system. [# or Unknown]

Sewer Service Laterals [SSSWDR, D.8, D.13(iv)]

4.11 Has your agency ever historically owned or maintained any portion of sewer service laterals? [Y/N or Unknown]

4.12 Does your agency have a voluntary sewer service lateral incentive program in place? [Y/N]

4.13 How many incoming complaints did your agency receive for privately-owned sewer service lateral problems in the previous fiscal year? [# or Unknown]

4.14 How many service calls did your agency respond to in the field for privately-owned service lateral problems in the previous fiscal year? [# or Unknown]

Pumping Facility Assets

For questions 4.15 – 4.32 refer to your pump station assets from question 2.31 (above)

- 4.15 [SSSWDR, D.8, D.13(iv)]: Has your agency mapped each pump station's actual GPS coordinates? [Y/N]
- 4.16 [SSSWDR, D.8, D.13(iv)]: Has your agency conducted a risk assessment for each asset? [Y/N]
- 4.17 [SSSWDR, D.8 and D.10]: How many of these assets have redundant pipelines installed? [#]
- 4.18 [SSSWDR, D.8 and D.10]: How many have dedicated emergency stand-by power generators located onsite? [#]
- 4.19 [SSSWDR, D.8 and D.10]: Has your agency developed standard and emergency operating procedures for each asset in the event of a power and/or pumping failure? [Y/N]
- 4.20 [SSSWDR, D.8 and D.10]: Has your agency determined the lowest hydraulic overflow point(s) and calculated the longest possible holding time(s) for each asset? [Y/N]
- 4.21 [SSSWDR, D.6(iii) and (vi), D.8 and D.10]: Has your agency identified critical spare parts for each asset? [Y/N]
- 4.22 [SSSWDR, D.6(iii) and (vi), D.8 and D.10]: For question 4.21, does your agency maintain the spare parts identified for each asset? [Y/N]
- 4.23 [SSSWDR, D.8 and D.10]: How many facilities are located within 100 feet of a surface water, creek or drainage channel? [#]
- 4.24 [SSSWDR, D.8 and D.10]: How many are located within 20 feet of a storm drain inlet? [#]
- 4.25 [SSSWDR, D.8 and D.10]: How many pump stations are equipped with audible and/or visual alarms located in public view to expedite notification to your agency in the event of an SSO? [#]
- 4.26 [SSSWDR, D.8 and D.10]: How many pump stations are equipped with an Auto Dialer Alarm System(s) for detecting pump failure and/or high wet well levels? [#]
- 4.27 [SSSWDR, D.8 and D.10]: How many have a supervisory, control and data acquisition system (SCADA) installed and operational? [#]
- 4.28 [SSSWDR, D.8 and D.10]: For question 4.27, how many can be remotely operated? [#]
- 4.29 [SSSWDR, D.8 and D.10]: How many pump stations display emergency notification signage, including agency contact information, in public view to expedite notification to your agency in the event of an SSO? [#]
- 4.30 [SSSWDR, D.8 and D.10]: Does your agency implement vandalism control efforts to discourage unauthorized access and/or vandalism to these assets? [#]
- 4.31 [SSSWDR, D.8 and D.10]: How many pump stations have built-in pumping bypass capability for emergency use? [#]
- 4.32 [SSSWDR, D.8 and D.10]: How many have electrical power connections installed to allow for the use of portable emergency generators? [#]

Force Main Sewer Assets

- 4.33 [SSSWDR, D.8, D.13(iv)]: How many sewer force mains are owned by your agency? [#]
- 4.34 [SSSWDR, D.8, D.13(iv)]: For the assets in question 4.33, has your agency conducted a risk assessment for each asset? [Y/N]
- 4.36 [SSSWDR, D.8 and D.10]: For the assets in question 4.33, how many have a dedicated corrosion protection system(s) installed? [#]
- 4.37 [SSSWDR, D.8 and D.10]: For the assets in question 4.33, what is the total number of air relief valves installed? [#]

5 FINANCIAL INFORMATION

Funding Sources and Revenues [SSSWDR, D.9]

- 5.1 Does your agency utilize an Enterprise Fund for services provided to the public? [Y/N]
- 5.2 If yes to question 5.1, what are the total estimated annual revenues generated from this fund? [#]
- 5.3 If yes to 5.1, what is the current fund balance? [#]
- 5.4 Please provide a brief description of all sewer collection system funding source(s) (e.g., user fees, annual budget allocation, property taxes, etc.).
-
- 5.5 What is your agency's total number of billed sewer connections? [# OR Unknown]
- 5.6 What is your agency's total number of billed customers for sewer service? [# OR Unknown]
- 5.7 What is your agency's current average monthly household user fee for sewage collection only? [\$ or Unknown]
- 5.8 For the answer in 5.7, what is your agency's sewer fee rate basis (e.g., measured flow, calculated flow, flat fee, etc.)
- 5.9 Has your local governing board approved any future sewer use fee increase(s)? [Y/N]

Operations, Maintenance and Capital Funds and Expenditures [SSSWDR, Sects. D.9]

- 5.10 How much did your agency spend in the last fiscal year for operations and maintenance activities (O&M) of sewer assets? [\$]
- 5.11 How much did your agency spend in the last fiscal year on capital expenditures for sewer assets (e.g., new pipelines or equipment)? [\$]

6 LOCAL SEWER USE ORDINANCE [SSSWDR, D.13(iii) and/or D.13(vii)]

- 6.1 Does your agency have an adopted sewer use ordinance (Ordinance)? [Y/N]
- If no to question 6.1, skip to question 7.1
- 6.2 Specify the date of last update/change of your agency's local Ordinance approved by your agency's local governing board. [DATE]
- 6.3 Specify the time frequency in which the Ordinance is reviewed. [FREQ]
- 6.4 Does your agency have legal authority within the Ordinance to limit and enforce illicit discharges from upstream public and/or private satellite collection system(s)? [Y/N]
- 6.5 If no to question 6.4, does your agency have service agreements or other procedures to limit and enforce illicit discharges from upstream public and/or private satellite collection system(s)? [Y/N]
- 6.6 Does the Ordinance ban inflow from stormwater sources? [Y/N]
- 6.7 Does the Ordinance specify who owns and/or maintains the sewer service lateral from the building foundation to the property line (upper lateral portion)? [Y/N]
- 6.8 Does the Ordinance specify who owns and/or maintains the sewer service lateral from the property line to the sewer main line (lower lateral portion)? [Y/N]
- 6.9 Does the Ordinance require testing and/or inspection of the sewer service lateral upon remodeling, renovations and/or transfer of property/residence? [Y/N]

- 6.10 Does the Ordinance prohibit illicit discharges from service connections into the sewer? [Y/N]
- 6.11 Does the Ordinance require sewers and connections to be properly designed and constructed? [Y/N]
- 6.12 Does the Ordinance require proper maintenance, inspection and repairs of laterals? [Y/N]
- 6.13 Does the Ordinance limit the discharge of fats, oils and grease (FOG) and other debris that may cause blockages? [Y/N]
- 6.14 Does the Ordinance give your agency the authority to inspect grease producing facilities? [Y/N]
- 6.15 Does the Ordinance reference the Uniform Building Code? [Y/N]
- 6.16 Does the Ordinance reference the California Plumbing Code? [Y/N]
- 6.17 Does the Ordinance give your agency the authority to inspect, maintain and repair assets located within sewer easements? [Y/N]
- 6.18 Does the Ordinance provide your agency with the proper authority to issue notices of violation (NOVs)? [Y/N]
- 6.19 If yes to question 6.18, how many NOVs has your agency issued in the past 3 years? [# or Unknown]
- 6.20 Does the Ordinance provide your agency with the proper authority to issue enforcement penalties for violators? [Y/N]
- 6.21 If yes to question 6.20, how many enforcement penalties has your agency issued in the past 3 years? [# or Unknown]
- 6.22 Does Ordinance provide your agency with the proper authority to ban connections and/or disconnect services for violators? [Y/N]
- 6.23 If yes to question 6.22, how many actions has your agency undertaken in the past 3 years? [Y/N]
- 6.24 Does the Ordinance provide your agency with the authority to limit future development and/or building? [Y/N]
- 6.25 If yes to question 6.24, how many actions has your agency undertaken in the past 3 years? [# or Unknown]

7 CAPITAL IMPROVEMENT PLAN

- 7.1 [SSSWDR, D.9]: What is the approval date of your Sewer Capital Improvement Plan (Sewer CIP) by your agency's local governing board? [M/D/Y]
- 7.2 [SSSWDR, D.8 and D.13(iv)]: For question 7.1, is your Sewer CIP available on the internet for public review? [Y/N]
- 7.3 [SSSWDR, D.8 and D.13(iv)]: If yes to question 7.2, please specify the internet address:

- 7.4 [SSSWDR, D.8 and D.13(iv)]: What is the projected date of your next Sewer CIP update? [M/D/Y]

8 OPERATIONS AND MAINTENANCE PROGRAM

Computerized Maintenance Management System (CMMS)

- 8.1 [SSSWDR, D.8 and D.13(iv)]: Does your agency use a computerized maintenance management system (CMMS) to generate work orders and track sewer maintenance, operations and management information? [Y/N]
- 8.2 [SSSWDR, D.7 and D.13(iv)]: If yes to question 8.1, is CMMS data used for ongoing strategies to eliminate/reduce SSOs? [Y/N]
- 8.3 [SSSWDR, D.7 and D.13(iv)]: If yes to question 8.1, is the CMMS data used to evaluate cleaning production rates? [Y/N]
- 8.4 [SSSWDR, D.7, D.13(iv) and D.13(ix)]: If yes to question 8.1, does your agency use the CMMS information to provide data for tracking system trends, problems and/or performance? [Y/N]
- 8.5 [SSSWDR, D.7, D.13(iv) and D.13(ix)]: If no to question 8.1, does your agency have a different method in place to provide data for tracking system trends, problems and/or performance? [Y/N]

- 8.6 [SSSWDR, D.8, D.13(iv)]: What was your agency's total gravity sewer collection system cleaning production (hydro flushing, mechanical and hand rodding) over the past 12 months (miles per year)? [# or Unknown]
- 8.7 [SSSWDR, D.8, D.13(iv)]: What is your agency's total gravity sewer collection system cleaning production scheduled (hydro flushing, mechanical and hand rodding) for the next 12 months (miles per year)? [# or Unknown]
- 8.8 [SSSWDR, D.8, D.13(iv)]: What was your agency's total video (CCTV) Inspection production in the past 12 months (miles)? [# or Unknown]
- 8.9 [SSSWDR, D.8, D.13(iv)]: What is your agency's total video (CCTV) inspection production scheduled for the next 12 months (miles)? [# or Unknown]
- 8.10 [SSSWDR, D.8, D.13(iv)]: Does your agency have a method in use for reviewing and analyzing force main sewers and their components? [Y/N]
- 8.11 [SSSWDR, D.7 and D.13(iv)]: What is the total number of focused problem areas ("SSO hot spots") located throughout the collection system? [# or Unknown]
- 8.12 [SSSWDR, D.8 and D.10]: Does your agency have a program to inspect and maintain air relief valves (ARVs)? [Y/N/ n/a]
- 8.13 [SSSWDR, D.8 and D.10]: How many ARVs are not accessible for inspection/maintenance? [#/ n/a]
- 8.14 [SSSWDR, D.7 and D.13(iv)]: What was the total number of ARVs exercised and cleaned in past 12 months? [# or Unknown]
- 8.15 [SSSWDR, D.7 and D.13(iv)]: What is the total number of ARVs planned to be exercised and cleaned in the next 12 months? [# or Unknown]
- 8.16 [SSSWDR, D.13(iv)]: What is the total number of public access points (manholes, lamp holes, rod holes, etc.) inspected in the past 12 months? [# or Unknown]
- 8.17 [SSSWDR, D.13(iv)]: What is the total number of public access points (manholes, lamp holes, rod holes, etc.) scheduled to be inspected in the next 12 months? [# or Unknown]
- 8.18 [SSSWDR, D.13(iv)]: Does your agency visually inspect pipeline routes at least annually, and after major storms, earthquakes or other events that could damage these assets, to check for sink holes or leaks along force main(s)? [Y/N]
- 8.19 [SSSWDR, D.13(iv)]: How many above ground crossings (if applicable) were inspected in the past 12 months? [#, N/A or Unknown]
- 8.20 [SSSWDR, D.13(iv)]: How many siphons (if applicable) were inspected in the past 12 months? [#, N/A or Unknown]
- 8.21 [SSSWDR, D.13(iv)]: Does your agency have a process to identify areas subject to excess hydrogen sulfide corrosion? [Y or N]
- 8.22 [SSSWDR, D.13(iv)]: Does your agency have a formal pipe grading process in place to identify pipe discontinuities? [Y or N]
- 8.23 [SSSWDR, D.13(iv)]: Does your agency require video (CCTV) inspections before and after cleaning to measure the effectiveness of these activities? [#]
- 8.24 [SSSWDR, D.13(iv)]: Does your agency video (CCTV) inspect pipes after all SSO(s)? [Y/N]
- 8.25 [SSSWDR, D.13(iv)]: Does your agency conduct smoke, dye or other tests to check for illicit connections? [Y/N]
- 8.26 [SSSWDR, D.13(iv)]: If yes to question 8.25, how many miles of sewer system were tested in the past 12 months? [# or Unknown]
- 8.27 [SSSWDR, D.13(iv)]: Does your agency use video (CCTV) to monitor discharger compliance for illicit connections? [Y/N]
- 8.28 [SSSWDR, D.13(iv)]: If yes to question 8.27, list the total number of miles of video (CCTV) inspection conducted for this purpose in the past 12 months. [# or Unknown]

- 8.29 [SSSWDR, D.13(iv) and D.13(viii)]: Does your agency have formal agreements in place to increase resources through established mutual assistance agreements with other agencies/contractors for wet weather episodes or for SSO response activities? [Y/N]
- 8.30 [SSSWDR, D.13(iv) and D.13(viii)]: Does your agency have a program in place to identify areas with inflow and infiltration (I/I) ? [Y/N]
- 8.31 [SSSWDR, D.13(iv) and D.13(viii)]: If yes to question 8.30, estimate the total number of miles identified by this program. [# or Unknown]
- 8.32 [SSSWDR, D.13(iv)]: Does your agency have an active root control program in place? [Y/N]
- 8.33 [SSSWDR, D.13(iv)]: If yes to question 8.32, please list the type(s) of control efforts in place (e.g., chemical, mechanical, etc.).
- 8.34 [SSSWDR, D.13(iv)]: If your agency uses chemical(s) for root control, please list chemical(s) used. [N/A if no chem. root program]

Fats, Oils and Grease [SSSWDR, D.13(iv) and D.13(viii)]

- 8.35 Does your agency have a commercial FOG program in place? [Y/N]
- 8.36 If no to question 8.35, has your agency justified in its SSMP why a FOG program is not needed? [Y/N]
- 8.37 If yes to question 8.35, does your agency have a FOG Ordinance separate from the sewer use ordinance? [Y/N]
- 8.38 If yes to question 8.37, please list the FOG Ordinance citation number:
- 8.39 If yes to question 8.35, approximately how many food service establishments (FSEs) such as restaurants, schools, hospitals, jails, and convalescent homes are subject to FOG control. [#]
- 8.40 If yes to question 8.35, what is the total number of FSE permits issued for FOG control? [#]
- 8.41 If yes to question 8.35, what is the total number of dedicated FSE FOG inspectors? [#]
- 8.42 If yes to question 8.35, how many FSE FOG inspections were conducted in past 12 months? [#]
- 8.43 If yes to question 8.35, how many FSE FOG enforcement action(s) were initiated in the past 12 months?
- 8.44 If yes to question 8.35, how many FSE FOG inspections are planned for the next 12 months? [#]
- 8.45 Does your agency have a residential FOG program in place? [Y/N]
- 8.46 If yes to question 8.45, briefly describe the program: _____

Sewer Contract Services

- 8.47 [SSSWDR, D.8 and D.13(iv)]: Does your agency retain contract service(s) for sewer collection system maintenance, operations, and/or management? [Y/N]
- 8.48 [SSSWDR, D.8 and D.13(iv)]: If yes to question 8.47, for services in excess of \$10,000/year, please provide some basic information about these services in the table below:

Contractor Name	Description (cleaning, root control, repairs, , etc.)	Frequency of Contract	Budget (annual \$)

9 SSO EMERGENCY RESPONSE PROGRAM [SSSWDR, D.13(vi)]

- 9.1 Does your agency's SSO Emergency Response Plan incorporate procedures for pump stations/force main sewers? [Y/N]
- 9.2 Does your agency have a dispatcher(s) within your agency to handle, dispatch and document incoming complaints from your sewer system customers? [Y/N]
- 9.3 If yes to 9.2, does your agency utilize a dispatch radio system for notifying collection crews who respond to SSOs? [Y/N]
- 9.4 If yes to 9.3, please list the frequency(s) in use for the dispatch radio system: _____
- 9.5 Does your agency have standard operating procedures (SOPs) in place to test and document, at least once per year, the performance of its after-hours emergency notification system(s)? [Y/N]
- 9.6 Does your agency provide and document any scenario-based SSO emergency response simulation training for collections staff at least on an annual basis to ensure staff are properly trained and prepared in the event of an SSO? [Y/N]
- 9.7 If yes to 9.6, does this training include practical exercises including researching SSO start times and calculating the SSO volume spilled and recovered? [Y/N]
- 9.8 Do your emergency operating procedures (EOPs) include requirements to determine the impact of an SSO, including accelerated or additional environmental monitoring? [Y/N]

10 SSO REDUCTION PERFORMANCE AND MONITORING PROGRAM [SSSWDR, D.13(ix)]

- 10.1 Does your agency have a process in place to collect data to monitor performance of its SSMP and efforts in reducing SSOs? [Y/N]
- 10.2 If yes to question 9.1, does your agency use the data collected to update SSMP program elements? [Y/N]

11 COLLECTIONS STAFFING AND TRAINING

- 11.1 [SSSWDR, D.9]: What is the total number of dedicated sewer maintenance crews in place at your agency? [#]
- 11.2 [SSSWDR, D.9]: For question 11.1, how many staff are typically in each maintenance crew? [#]
- 11.3 [SSSWDR, D.9 and D.13(iv)(d)]: Does your agency have a program in place to identify and document the core competencies/capabilities of collections staff at least on an annual basis (examples include sewer line cleaning, point repairs, video (CCTV) inspection, pump station maintenance, excavation, utility line locating, etc.)? [Y/N]
- 11.4 [SSSWDR, D.9]: If yes to question 11.3, does this program identify gap(s) in competencies/capabilities of collections staff? [Y/N]
- 11.5 [SSSWDR, E]: Does your agency require collections staff to review the SSSWDR and the agency's SSMP at least annually? [Y/N]
- 11.6 [SSSWDR, D.9]: Does your agency use a workforce planning/retention program to ensure adequate future collections staff? [Y/N]
- 11.7 [SSSWDR, D.8 and D.13(iv) and (vi)]: Does your agency provide initial and recurrent training to appropriate staff [including outside contractor(s)] regarding your agency's SSO Emergency Response Plan and O&M programs? [Y/N]
- 11.8 [SSSWDR, D.8 and D.13(iv) and (vi)]: If yes to 11.7, what is the total number of individuals trained in the past 12 months. [#]
- 11.9 [SSSWDR, D.8 and D.13(iv) and (vi)]: For contracted sewer services, do your contracting specifications contain specific language requiring initial and recurrent training of contractor staff regarding your agency's SSO Emergency Response Plan and O&M programs? [Y/N]

12 MAJOR EQUIPMENT INVENTORY [SSSWDR, D.4, D.7, D.8, D.13(iv)]

- 12.1 How many combination truck(s) (hydro flush/vacuum models) are owned and/or leased by your agency? [#]
- 12.2 For question 12.1, how many have a dedicated logbook(s) to document fieldwork activities? [#]
- 12.3 How many hydro flusher(s) are owned and/or leased by your agency? [#]
- 12.4 How many mechanical rodder(s) are owned and/or leased by your agency? [#]
- 12.5 How many video (CCTV) inspection vehicle(s) are owned and/or leased by your agency? [#]
- 12.6 How many utility truck(s) are owned and/or leased by your agency? [#]
- 12.7 How many portable sewage pump(s) are owned and/or leased by your agency? [#]
- 12.8 How many portable generator(s) are owned and/or leased by your agency? [#]
- 12.9 Does your agency own equipment designed to block the storm drain system, in an emergency, to prevent untreated or partially treated wastewater from reaching surface waters? [Y/N]

13 EXTERNAL COMMUNICATIONS PROGRAM

- 13.1 [SSSWDR, D.13(xi)]: Does your agency have a program in place for communicating on a regular basis with the public regarding the development, implementation, and performance of its SSMP?
- 13.2 [SSSWDR, D.13(xi)]: Does your agency have a program in place for communicating with upstream or downstream satellite sewer system(s) connected to its collection system? [Y/N or N/A]
- 13.3 [SSSWDR, D.11]: Does your agency participate in responding to Underground Service Alert(s) (USA) or other similar organizations to identify and mark sewer lines? [Y/N]
- 13.4 [SSSWDR, D.7, D.13(iv), G, and Amended MRP]: Does your agency's communication program give the public the opportunity to provide input as your SSMP is being implemented? [Y/N]

14 NOTIFICATION, REPORTING AND RECORD KEEPING

- 14.1 [SSSWDR, Amended MRP B(5)]: Are all the records required in the Amended MRP, B(5) ("Record Keeping") readily available for review by the Water Boards? [Y/N]
- 14.2 [SSSWDR, Amended MRP, B(5)]: Does your agency maintain a list and description of all sewer-related complaints from customers for the past 5 years, including calls received after normal working hours? [Y/N]
- 14.3 [SSSWDR, Amended MRP, B(5)]: If yes to question 14.2, does this include information for privately owned sewer laterals? [Y/N]
- 14.4 [SSSWDR, G, and Amended MRP]: Does your agency have a quality assurance/quality control (QA/QC) procedure in place for review of technical information collected by field staff prior to certification of the SSO report(s) in the Water Board's online reporting system (CIWQS) by the Legally Responsible Official(s)? [Y/N]
- 14.5 [SSSWDR, G and Amended MRP]: Does your agency require crews to take photos of all SSOs? [Y/N]
- 14.6 [SSSWDR, G and Amended MRP]: If no to question 14.5, does your agency at least require crews to take photos of SSOs that result in backups into structures? [Y/N]
- 14.7 [SSSWDR, G and Amended MRP]: Does your agency have a procedure(s) in place for collecting field information to assist in determining the actual SSO start time? [Y/N]

- 14.8 [SSSWDR, G and Amended MRP]: Does your agency use SOPs to estimate SSO volume spilled, recovered and not recovered, including estimation of cleanup water used? [Y/N]
- 14.9 [SSSWDR, G and Amended MRP]: Does your agency regularly update initial reports given to the California Emergency Management Agency, local health department, and Regional Board as information develops regarding SSOs requiring notification? [Y/N]
- 14.10 [Amended MRP, B.6]: Does your agency maintain water quality monitoring records as required by the Amended MRP, section B(6)?

15 SSO PREVENTION AND MITIGATION

- 15.1 [SSSWDR, D.13(ix)]: Does your agency generate SSO reduction performance metric(s) for its collection system for use in future planning? [Y/N]
- 15.2 [SSSWDR, D.13(ix)]: Does your agency have a program in place to conduct periodic video (CCTV) inspections of areas throughout the collection system that have never been evaluated by video (CCTV) to date? [Y/N or N/A]
- 15.3 [SSSWDR, D.13(ix)]: Does your agency document meetings between O&M and source control staff, if applicable? [Y/N or N/A]
- 15.4 [SSSWDR, 8 and D.6]: Does your agency document meetings between O&M and engineering staff to discuss system problem areas and projects, if applicable? [Y/N or N/A]
- 15.5 [SSSWDR, 8 and D.6]: Does your agency hold post-SSO briefings with collections staff, management and others involved, to evaluate root cause of SSOs and document service changes necessary to be prepared in responding to SSOs in the future? [Y/N]
- 15.6 [SSSWDR, 8 and D.6]: Does your agency pursue investigation of upstream satellite(s) or potential illicit dischargers as part of the SSO cause determination process? [Y/N]
- 15.7 [SSSWDR, 8 and D.6]: Does your agency adjust sewer collection system cleaning interval(s) for problem areas based on review and analysis of each past SSO? [Y/N]
- 15.8 [SSSWDR, 8 and D.6]: How many of the SSOs over the past 12 months were preventable through more proactive maintenance? [# OR Unknown]
- 15.9 [SSSWDR, 8 and D.6]: How many of the SSOs over the past 4 years occurred at repeat locations? [# OR Unknown]

15 DECLARATION

INSTRUCTIONS: Please print this page, sign it, and mail the original of this page to:

**State Water Resources Control Board
Office of Enforcement, Special Investigations Unit
1001 I Street, 16th Floor, Sacramento, CA 95814**


I, _____, the approved Legally Responsible Official (LRO) of collection system (name and Waste Discharge ID#) _____ certify under penalty of law that based on my inquiry of the person or persons who manage this system, or those persons directly responsible for gathering the information, the information in this Pre-Inspection Questionnaire (Version 1.0) is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of a fine or imprisonment, for knowing violations.

Legally Responsible Official Signature


Date

7.2 INTERNAL SELF-AUDITS

California
Water Boards
Protecting California's Water




Sewer System Management Plan SELF AUDITS




Jim Fischer, P.E.
Julie Berrey
State Water Resources Control Board
Office of Enforcement

Bay Area Clean Water Agencies (December 8, 2011)

- 
1. Review of SSMP Self Audit requirements
 2. How SSMP Self Audits are used by Water Boards
 3. Response to noncompliance
 4. Summary of what we've seen so far
 5. **Sample SSMP Audits**
 6. Changes to Audit requirements being considered
 7. Contact Information

2



1. Review of Audit Requirements

3



1. Review of Audit Requirements, cont.

WHY discharger must do SSMP Self Audit:

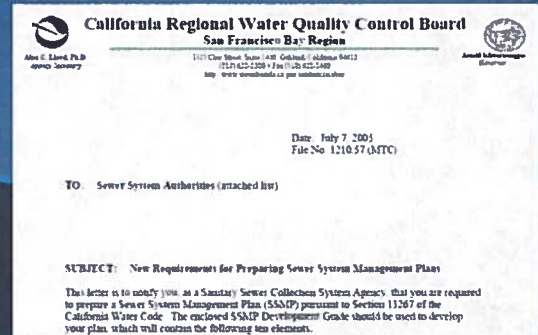
1. San Francisco Regional Water Board (Region 2) letter issued 5/7/2005 requires it annually for collection systems >10,000 population in Region 2
2. Statewide General WDR issued 5/2/2006 requires it at a minimum every 2 years (post-SSMP adoption) for all systems (not just those in Region 2)

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1.a. Region 2 Requirements

1.a. Review of Audit Requirements, cont.

Annual SSMP Audit required for systems serving population >10,000 (since 5/7/2005)



1.a. Review of Audit Requirements, cont.

Region 2: Accelerated SSMP timelines

Region 2

SSMP Item	Required by completion Date
<ul style="list-style-type: none"> • Goals • Organization • Enforcement Response Plan • IIR Control Program • Legal Authority • Missions and Authority • Finance and Resources of Authority • Regulatory Management • Management, Maintenance and Physical Infrastructure • SSMP Goals 	August 1, 2006
<ul style="list-style-type: none"> • Goals • Organization • Enforcement Response Plan • IIR Control Program • Legal Authority • Missions and Authority • Finance and Resources of Authority • Regulatory Management • Management, Maintenance and Physical Infrastructure • SSMP Goals 	August 1, 2007
<ul style="list-style-type: none"> • Goals • Organization • Enforcement Response Plan • IIR Control Program • Legal Authority • Missions and Authority • Finance and Resources of Authority • Regulatory Management • Management, Maintenance and Physical Infrastructure • SSMP Goals 	August 1, 2008

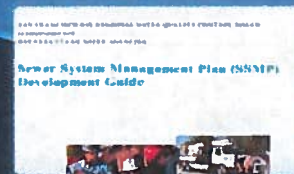
General WDR

Item	Priority	Responsible Party	Completion Date	Priority
Annual Assessment Plan and Schedule	High	Authority	August 1, 2006	High
SSMP Goals	High	Authority	August 1, 2006	High
Organization	High	Authority	August 1, 2006	High
Enforcement Response Plan	High	Authority	August 1, 2006	High
IIR Control Program	High	Authority	August 1, 2006	High
Legal Authority	High	Authority	August 1, 2006	High
Missions and Authority	High	Authority	August 1, 2006	High
Finance and Resources of Authority	High	Authority	August 1, 2006	High
Regulatory Management	High	Authority	August 1, 2006	High
Management, Maintenance and Physical Infrastructure	High	Authority	August 1, 2006	High
SSMP Goals	High	Authority	August 1, 2006	High

1.a. Review of Requirements, cont.

Region 2: Developed SSMP Audit Guidelines

- "SSMP Development Guide" issued in July 2005
- Developed jointly by Region 2 and Bay Area Clean Water Agencies (BACWA)
- Guidelines only; no approved Audit format developed



1.a. Review of Requirements, cont.



Region 2 "SSMP Development Guide" contents

10. SSMP Audits

Requirement: Each wastewater collection system agency shall conduct an annual audit of their SSMP which includes any deficiencies and steps to correct them (if applicable), appropriate to the size of the system and the number of overflows, and submit a report of such audit.

This section can be waived for collection systems serving a population of 10,000 or less.

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1.a. Review of Requirements, cont.



Region 2 "SSMP Development Guide" contents, cont.

Key Point

The audit should cover the most recent calendar year, and be submitted to the Regional Water Board by March 15 of the year following the calendar year for which the analysis applies.

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1.a. Review of Requirements, cont.



Region 2 "SSMP Development Guide" contents, cont.

Helpful Information

The audit can contain information about successes in implementing the most recent version of the SSMP, and identify revisions that may be needed for a more effective program. Information collected as part of Section 9 above can be used in preparing the audit. Tables and figures or

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1.a. Review of Requirements, cont.



Region 2 "SSMP Development Guide" contents, cont.

charts can be used to summarize information about these indicators. An explanation of the SSMP development, and accomplishments in improving the sewer system, should be included in the audit, including:

- Progress made on development of SSMP elements, and if the sewer system agency is on schedule in development of the SSMP. Provide justification on the delay if the sewer system agency is behind schedule on development of the SSMP;
- How the sewer system agency implemented SSMP elements in the past year;
- The effectiveness of implementing SSMP elements;
- A description of the additions and improvements made to the sanitary sewer collection system in the past reporting year; and
- A description of the additions and improvements planned for the upcoming reporting year with an estimated schedule for implementation.

1.a. Review of Requirements, cont.



Region 2 "SSMP Development Guide" contents, cont.

Additional Tips

Helpful Information

- You may want to include a section up front entitled "System Overview," which describes the size and physical features of the system, to put the rest of the document into context
- When you prepare the SSMP for the first time, you may want to include a "Sewer Overflow History" to give you a place to start from in evaluating any trends for SSOs in the future

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1.b. General WDR Requirements



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1.b. Review of Audit Requirements, cont.



General WDR, section D.13(x):

- ✓ Essentially mirrors RB2 SSMP Audit requirements
- ✓ Only required min. of every 2 years following initial SSMP adoption date

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1.b. Review of Audit Requirements, cont.



- (y) **frequency, location, and volume.**
- (x) **SSMP Program Audits** - As part of the SSMP, the Enrollee shall conduct periodic internal audits, appropriate to the size of the system and the number of SSOs. At a minimum, these audits must occur every two years and a report must be prepared and kept on file. This audit shall focus on evaluating the effectiveness of the SSMP and the

State Water Resources Control Board Order No. 2006-0003-DWQ
Statewide General WDR For Wastewater Collection Agencies

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5/2/06

Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them

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1.b. Review of Audit Requirements, cont.



General WDR, section D.13(x):

"...audit shall focus on evaluating the effectiveness of the SSMP and the Enrollee's compliance with the SSMP requirements identified in this subsection (D.13), including identification of any deficiencies in the SSMP and steps to correct them."

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1.b. Review of Audit Requirements, cont.



Minimum Audit Contents per General WDR:

1. Narrative of SSMP Effectiveness
 - Documents things working well
 - Documents areas needing improvement
 - Lists strategies to reduce/eliminate SSOs/impacts
2. Demonstration of agency's compliance with ALL applicable SSMP requirements
 - Validates status of SSMP compliance with D.13

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1.b. Review of Requirements, cont.



General WDR, section D.13(x) also says Audit are "appropriate to the size of the system and number of SSOs."

- Larger systems with **HIGH** number/volume of SSOs:
 - **MORE** in-depth discussion expected about problems and planned improvements/solutions
- Smaller systems with **LOW** number/volume SSOs:
 - **LESS** in-depth discussion expected about problems and planned improvements/solutions

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2. How SSMP Self Audits are used by the Water Boards



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2. How SSMP Audits are Used, cont.

1. Provides tool for checking adequacy of: 1) system operations/management; 2) compliance performance; and, 3) level of effort/professionalism in reducing SSOs
2. Assists with statewide inspection/enforcement prioritization
3. Improves efficiency of Water Board/contractor inspections
4. Provides data to justify CIWQS data submitted
5. Improves Waterboard knowledge for regulatory purposes

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3. Response to Noncompliance

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3. Response to Noncompliance, cont.

- ✓ What if discharger found to be in violation of SSMP Self Audit Requirement?
 - Must provide information to address violation
 - May be issued Notice of Violation (NOV)
 - May be issued 13267 Order
 - May be subject to inspection/investigation
 - May be subject to formal enforcement (ACL, etc.)

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4. Summary of What We've Seen so Far

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4. Summary of What We've Seen, cont.



✓ October 2011 Statewide SSMP Audit Request:

- 42 systems statewide (population 40-50K)
- 2-year SSMP self Audit requested
- System Evaluation and Capacity Assurance Plan (SECAP) also requested

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4. Summary of What We've Seen, cont.



✓ RESULTS: Most systems not complying with D.13(x)

- Many missed evaluation of SSMP effectiveness
- Some missed SSMP compliance evaluation
- Some failed to submit any information or missed deadline

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5. Sample SSMP Audits



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5. Sample SSMP Audits, cont.



1. City of Woodland, CA
 - + Measures SSMP effectiveness
 - Does not completely evaluate SSMP compliance with section D.13
2. Union Sanitary District (Union City, CA)
 - + Measures SSMP effectiveness
 - Does not completely evaluate SSMP compliance with D.13
3. City of La Mesa, CA
 - + Evaluates SSMP compliance with D.13
 - Does not completely measure SSMP effectiveness

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5. Sample SSMP Audits, cont.



- 4. Discharger "1" (uses BACWA SSMP checklist)
 - + Evaluates SSMP element compliance with D.13
 - Does not completely measure SSMP effectiveness
- 5. Discharger "2" (generic audit)
 - Does not measure SSMP effectiveness
 - Does not evaluate SSMP compliance

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5. Sample SSMP Audits, cont.



Example #1:

City of Woodland

- + Measures SSMP effectiveness
- Does not completely evaluate SSMP compliance with section D.13 in General WDR
- ✓ Presents improvements needed to SSMP and to system operations to reduce SSOs/impacts

Objectives

This investment analyzes the performance of the City of Woodland's Sewer System Management Plan (SSMP) for FY06/07 and FY11/12. The purpose of the SSMP is to provide a written framework for the management, operation, and maintenance programs provided by the City, with the ultimate goal of maintaining the level of service of the sewer collection system while insuring sanitary sewer overflow (SSO). This review is completed as part of the annual audit process described in sections 6 and 7 of the City's SSMP. This process helps the SSMP document to evolve over time to address identified deficiencies in the management, operation and maintenance of the sewer collection system. This memo summarizes the following information:

1. SSO history, describing the number and nature of SSOs over the past six years.
2. Summary of progress of further development of the SSMP elements which have a plan and schedule for full implementation.
3. Summary how SSMP elements were implemented over last year.
4. Effectiveness of the implemented SSMP elements.
5. What SSMP elements are planned to be implemented next year.
6. Description of additions and improvements to the collection system over the last year.
7. Description of the additions and improvements to the collection system planned for the upcoming year.
8. Review of performance indicators and overall summary of the past two fiscal years with proposed modifications for implementation in fiscal year 11/12 in areas in need of improvement.

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5. Sample SSMP Audits, cont.



Example #1, cont.:

City of Woodland



5. Sample SSMP Audits, cont.



Example #1, cont.: City of Woodland

- ✓ Example narrative explaining necessary SSMP improvements

Progress on development of SSMP elements

The SSMP audit has identified some elements that need refinement in the frequency of data collection and type of data collected for both the Utility Maintenance Workers and management staff. Some elements only need to be collected on an annual basis. Some new data needs to be collected to facilitate data collection for the SSMP and analysis of future needs. Furthermore, the communication plan for the SSMP was not completely implemented and progress of finishing implementation will happen in FY11/12. Overall, the SSMP is 90% complete.

32

5. Sample SSMP Audits, cont.

Example #1, cont.: City of Woodland

- ✓ SSMP Performance Indicators used to track necessary collection system operational improvements (CCTV improvements)

Performance Indicators	Rating			
	Below Goal	Acceptable	Good	Excellent
1 Feet inspected with CCTV / year	< 100,000	100,000-170,000	170,000-200,000	> 200,000
2 Pipe segments inspected / year	< 400	400-600	600-800	> 800
3 Footage inspected / 16 work hours	< 1500	1500-1750	1750-2000	> 2000
4 % Passing quality control check	< 90%	90%	95%	98%

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5. Sample SSMP Audits, cont.

Example #1, cont.: City of Woodland

- ✓ SSMP Performance Indicators used to track necessary collection system operational improvements (CCTV improvements)

Date	Class	Measured Value				Performance Assessment Comments
FY 10-11		1	2	3	4	3. Staffing vacancies attributed to low number of inspectors 4. OAJCV field not in use because CCTV has not been implemented with CA&CTP module.
	Value	125,976	375	1,663	N/A	

Annual Performance Assessment / Recommendations for Updates

FY 10-11 Ratings:

1. Acceptable
2. Below Goal
3. Acceptable
4. Below Goal

Recommendation #1: Filling vacancies will increase the amount of pipe inspected
 Recommendation #2: Filling vacancies will increase the amount of pipe inspected
 Recommendation #3: Filling vacancies will increase the amount of pipe inspected
 Recommendation #4: Anticipate CA&CTP linkage to CCTV module FY 11/12

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5. Sample SSMP Audits, cont.

Example #1, cont.: City of Woodland

- ✓ SSMP Performance Indicators track collection system operational improvements (SSO reduction performance)

Performance Indicators	Rating			
	Below Goal	Acceptable	Good	Excellent
1 % captured of SSO (flat, 1-5%)	< 70%	70%-80%	90-90%	90-100%
2 % captured of SSO (steep, > 5%)	< 30%	30-50%	50-90%	90-100%
3 Average time to investigate SSO with CCTV	> 1 week	5-7 days	3-5 days	< 3 days
4 % complete on-line reporting for category 3 spills	< 70%	70-80%	80-90%	90-100%

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5. Sample SSMP Audits, cont.

Example #1, cont.: City of Woodland

- ✓ SSMP Performance Indicators track collection system operational improvements (SSO reduction performance)

Date	Class	Measured Value				Performance Assessment Comments
FY 09-10		1	2	3	4	3. 24 out of 40 SSO's were CCTV but can't capture floor CCTV occurred for 22 of the work orders 4. 10 private lateral SSO's and 5 reported on line
	Value	60%	N/A	24/66	50%	

Annual Performance Assessment / Recommendations for Updates

FY 09-10 Ratings:

1. Excellent - generally sewer captures 100% of any spill.
2. Below Goal - Not applicable to Woodland.
3. Below Goal - 22 work orders did not specify when the CCTV occurred. CCTV is in the spill site but difficulty in capturing the time in the work orders.
4. Below Goal - Decision was made during the FY to stop reporting private lateral SSO's on-line as no other city does report private lateral SSO's.

Recommendation #1: None.

Recommendation #2: Woodland is a flat area with a slope of less than 2% throughout the city. Performance indicator does not apply in Woodland and should be removed.

Recommendation #3: Modify data entry in City work3 to capture sewer CCTV began.

Recommendation #4: Change or remove performance indicator.

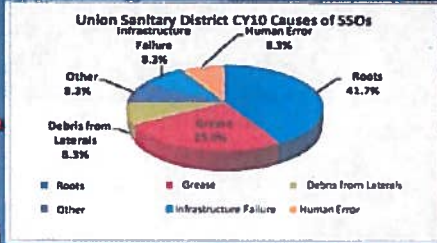
36

5. Sample SSMP Audits, cont.



Example #2: Union Sanitary District

- + Measures SSMP effectiveness
- Does not completely evaluate SSMP compliance with D-13



- ✓ Includes historic and planned activities to reduce SSOs/impacts

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5. Sample SSMP Audits, cont.



Example #2, cont.: Union Sanitary District

- ✓ Includes detailed SSO information (SSO causes and corrective actions undertaken as a result of overflows)

2010 Major Spills Summary (CY05 to 2010)	Date	Amount	Summary
748147	01/02/2010	300	This spill occurred from LWD manhole 2411038 on Horizon St. in Union City. All of the 300 gallons spilled were recovered and returned back to the collection system. On January 6, a CCTV was used to inspect the line which was reported to have depth of grease and debris. This line is being inspected every six months for 18 years to determine if the existing invertible pipes are good. This spill occurred from LWD manhole 2411038 on 24400 Mission Blvd. in Union City. All of the 200 gallons spilled were recovered and returned back to the collection system. After the review of this structure history, the structure history was reviewed and a Smart Cover was installed. This spill occurred from LWD manhole 2411038 on the end of E. of Fremont. Estimated spill volume was 200 gallons and 218 gallons was recovered for a total of 418 gallons spilled down the storm sewer system and all results were reported to the owner. The sewer system down the affected area, was cleaned up all of the water and returned it to the collection system. A CCTV was performed the line and found a large root mass which was observed to cause the spill. The line was re-inspected and the root removed by hand using a rooter. This spill occurred from LWD manhole 2411037 located on Tremont St. in Fremont. All of the 600 gallons spilled were recovered and returned back to the collection system. The street, gutter and storm sewer were also cleaned down and all of the water was removed and returned to the collection system. On April 6, CCTV was inspected the line and found small amounts of grease and root material in several locations. The line was cleaned

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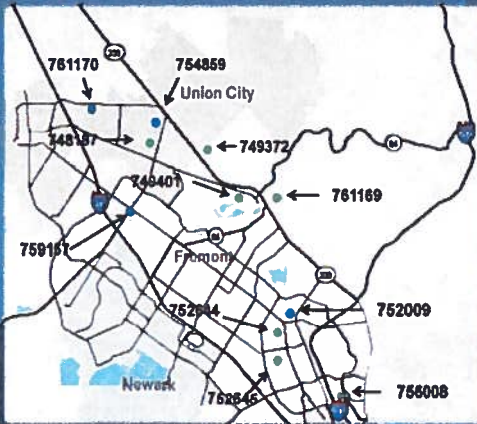
5. Sample SSMP Audits, cont.



Example #2, cont.:

Union Sanitary District

- ✓ Includes sewer system map showing each SSO location



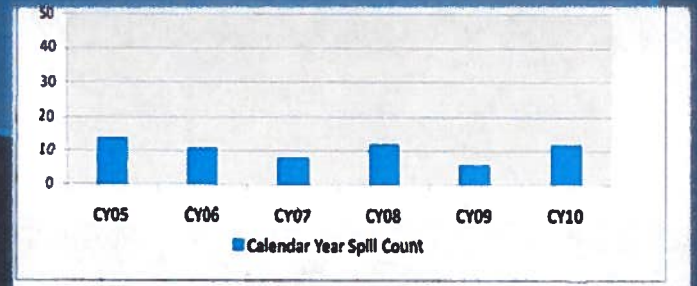
39

5. Sample SSMP Audits, cont.



Example #2, cont.: Union Sanitary District

- ✓ Graphic shows historic SSO performance



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5. Sample SSMP Audits, cont.

Example #2, cont.: Union Sanitary District

✓ Highlights Accomplishments

Client Information

In the calendar year 2010, we had the following accomplishments:

Programs/Accomplishments

- Completed 1,821,411 feet of cleaning and 488,948 hours of televising of sewer lines in CY2010
- Responded to 238 service request calls in CY2010
- Completed a total of 212 main repairs in CY2010
- Provided support on the following projects: Asset Hierarchy, Sider Project, Pipe Vulnerability, Blower Rd, Cast Iron Pipe Lining, IT Master Plan Update, and Plant Shut Downs
- Provided input on CFWQS outline SSO reporting to State Water Board
- Hosted the kick off meeting for the CFWQS Data Review Task Force (TF)
- Participated with the Sonoma Purvers WTR TF - Discussing potential changes to the General Waste Discharge Reassessments
- Presented and handed out the new Best Practices Manual for SSO Reduction Strategies at the annual RACWA membership meeting
- Participated in CWDA TCP update and validation TF
- Presented for CWDA Santa Clara Session - Failure Analysis/SSO Prevention Strategies
- Presented for CWDA 14th Summer Conference in Merced Bay
- Presented for CWDA at Northern Regional Training Conference in Modesto
- Presented for CWDA SF Bay Section training in Antioch
- Attended CWDA Safety Conference in Woodland
- Hosted the CWDA SF Bay Section Vendor Fair
- Attended APWA training conference
- Attended CWRWA workshop on SSOs and Planned Shutdowns
- Attended the Sewer Smart Summit hosted by ASAQ

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5. Sample SSMP Audits, cont.

Example #2, cont.: Union Sanitary District

✓ Explains details about historic/future efforts

USD has an SSMP addressing all of the required elements that has been in place for six years. We use the SSMP as a tool to manage our collection system. In 2010, we updated our SSMP twice. Specifics of the changes can be made available upon request.

Twice a year we audit and update our SSMP, once at the beginning of the Fiscal Year and once at the beginning of the Calendar Year

In 2010, CIP completed the following:

- Completed the construction of the Blower Rd Sewer Rehabilitation/Replacement project
- Completed the construction of the Misc. Sewer Spot Repairs - Phase I project
- Completed the construction of the Cast Iron Sewer Pipeline Rehabilitation - Phase I project
- Completed the Treatment Plant Drainage study

In 2011, CIP is expected to work on:

- The design of the I-680 Freeway Sewer Crossing replacement at Hayward Fault
- The design and construction of the SFPL/CMAA/MSW Blvd. Rehabilitation project
- The design of the Misc. Sewer Spot Repairs - Phase III project
- The design of the Cast Iron Sewer Pipeline Rehabilitation - Phase III project
- The design of replacing the flanged coupling adapters on the sewer main pipelines inside the pump station valve boxes

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5. Sample SSMP Audits, cont.

Example #2, cont.:

Union Sanitary District

✓ Shows summary chart of sewage collected and sewage spilled

Description	Quantity	Percentage
CY10 Gallons Collected	8,416,160,000	98.899209%
CY10 Gallons Spilled	8,084	0.000095%
CY10 Not Recovered, That Did Not Reach State Waters	8	0.000001%
CY10 Reached State Waters	0	0.000000%

✓ Shows list of efforts being undertaken to prevent SSOs

CY 2010 Efforts to Prevent SSOs and Minimize Their Impact Through O & M

Count	Description of Effort	CY09
239	Service Requests Investigated	343
38	Spot Repairs Completed	41
136	Sanitation Project Repairs Completed	134
74	Main Cleaned for the Scheduling Maintenance Program (lines are done that have had blockages in the past)	53
1,970	Maintained on 12 Month Preventive Maintenance Program	1,361
886	Maintained for River Control (lines are done that have had some excess blockages in the past or were likely to do so)	731
18	Repairs that did not result in a spill due to a quick response or our system design with grade breaks and relief valves	17
1,247	Maintained for routine line maintenance	1,247
138	Maintained that resulted in a spill due to a sewer repair activity on the	20

5. Sample SSMP Audits, cont.

Example #3

City of La Mesa

+ Evaluates SSMP compliance with D.13

- Does not completely measure SSMP effectiveness

Performance Measures	2008	2009	2010
	Actual	Actual	Actual
Staff			
Total number of wastewater field personnel	0	9	9
Workload/Output			
Total number of SSO responded to in 12-month period	6	7	9
Total miles of sewer line maintained	172	185	198
Linear feet of sewer televised	27,948	13,500	26,805
Total SSO > 1,000 gallons responded to	0	0	0
Total FOO related SSOs responded to	0	9	2
Total root related SSOs responded to	3	2	1
Total SSOs due to other causes (debris, vandalism, etc)	3	5	1
Total number of capacity related SSOs	0	0	5
Total number of SSOs due to pump station malfunction	0	0	0
Number of SSOs responded to within 2 hours or less	0	6	9
Total number of SSOs not reaching storm drain system	1	4	0
Effectiveness/Compliance			
Percentage of SSOs > 1,000 gallons	0%	0%	00%
Percentage of SSOs due to FOO	0%	0%	22%
Percentage of SSOs due to roots	50%	29%	11%
Percentage of SSOs due to other causes	50%	71%	66%
Percentage of SSOs that reached waters of United States	83%	43%	100%
Percentage of SSOs with response time 2 hours or less	100%	86%	100%

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5. Sample SSMP Audits, cont.



Example #3, cont.: City of La Mesa

SSMP Program Audit
City of La Mesa

Chapter 4.0: Legal Authority

The Legal Authority element includes the following subsections:

- Regulatory Requirements for Legal Authority Provisions
- Background for Legal Authority
- Summary and Evaluation of the City's Existing Legal Authority

The intent of the Legal Authority element is to provide authority for the City to administer its collection system and to provide measures to enforce codes and regulations.

Audit Questions

Does the SSMP contain current information about the City's legal authority?
Yes No

Does the City have sufficient legal authority to control sewer use and maintenance?
Yes No

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5. Sample SSMP Audits, cont.



Example #3, cont.: City of La Mesa

Discussion

The SSMP contains a background section which discusses the regulatory authority derived from Federal and State regulations as well as a section which discusses and evaluates the City's existing legal authority. As stated in the SSMP, on April 14, 2009, the City adopted additional municipal codes to ensure the City possesses the necessary legal authority to require, implement, and enforce compliance with the SSMP elements. As elements of the SSMP evolve and are further refined, the legal authority necessary to implement the provisions and require compliance by its residents and rate payers may also be addressed. At this time, it is determined that the City has adequate legal authority to administer the collection system, and enforce codes and regulations.

Updates to This Chapter

The City shall add the Fats, Oils, and Grease (FOG) Ordinance 2009-2794 and 2009-2795 to Appendix H of the Sewer Master Plan, which is referenced in the SSMP. The updates are included within Attachment A-1 to this document.

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5. Sample SSMP Audits, cont.



Example #3, cont.: City of La Mesa

SSMP Program Audit
City of La Mesa

Chapter 4.0: Legal Authority

The Legal Authority element includes the following subsections:

- Regulatory Requirements for Legal Authority Provisions
- Background for Legal Authority
- Summary and Evaluation of the City's Existing Legal Authority

The intent of the Legal Authority element is to provide authority for the City to administer its collection system and to provide measures to enforce codes and regulations.

Audit Questions

Does the SSMP contain current information about the City's legal authority?
Yes No

Does the City have sufficient legal authority to control sewer use and maintenance?
Yes No

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5. Sample SSMP Audits, cont.



Example #4:

Discharger "1"

- Does not measure SSMP effectiveness
- Presents no details

Directions: Please check YES or NO for each question. If NO is answered for any question, describe the updates/changes needed and the timeline to complete those changes in the "Description of Scheduled Updates/Changes to the SSMP" section at the end of this form.

	YES	NO
REGULATORY REQUIREMENTS FOR LEGAL AUTHORITY PROVISIONS		
A. Are the provisions in the SSMP well represented and accurate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BACKGROUND FOR LEGAL AUTHORITY		
A. Is the Public Works Key Staff Telephone List current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. Is the Sewer Overflow Response/Telephone List current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Is the SSMP "City Organization Chart" current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. Are the positions designated as necessary personnel for all responsibilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E. Is the SSMP "Chain of Command for Reporting and Responding to SSOs" accurate and up-to-date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
EVALUATION OF LEGAL AUTHORITY		
A. Does the SSMP section excerpt from the current City Municipal Code documenting the City's legal authority to:		
A. Prevent illicit discharges?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. Require proper design and siting of sewers and connections?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Require access for nonstop inspection or repairs for portions of the lateral owned or maintained by the City?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. Limit discharges of fats, oils, and grease?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E. Enforce any violation of an sewer ordinance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
REGULATIONS, OPERATIONS AND MAINTENANCE		
Collection System Maps		
A. Does the SSMP reference the current process and procedures for maintaining the City's wastewater collection system maps?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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5. Sample SSMP Audits, cont.



Example #4, cont.:

Discharger "1"

B	Are all City's wastewater collection system pipe sanitary, correct size and well-maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C	Does the City allocate sufficient funds for the collection system, maintenance and repair of the wastewater collection system and is the current budget structure described in the SSMP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D	Does the SSMP describe current preventive maintenance activities and the system for prioritizing the elimination of sewer lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E	Are the City's preventive maintenance activities sufficient and effective in maintaining SSOs and blockages?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
F	Is there an ongoing assessment program in place to develop a capital improvement plan addressing the proper programming and protection of infrastructure assets? Are the latest elements of that program documented in the SSMP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
G	Emergency Equipment and Replacement Inventory	<input checked="" type="checkbox"/>	<input type="checkbox"/>
H	Does the SSMP list the major equipment currently used in the operation and maintenance of the collection system and document the procedure to inventory management?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
I	Are emergency equipment and replacement parts sufficient to respond to emergencies and promptly conduct regular maintenance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
J	Training	<input checked="" type="checkbox"/>	<input type="checkbox"/>
K	Is the training sufficient current?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
L	Does the SSMP document current training expectations and programs within the City's Wastewater Division?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
M	Access to Manholes and Reducing Unsanitary	<input checked="" type="checkbox"/>	<input type="checkbox"/>
N	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
O	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
P	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Q	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
R	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
S	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
T	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
U	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
V	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
W	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
X	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Y	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Z	Does the SSMP document current access to manholes and building construction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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5. Sample SSMP Audits, cont.



Example #5: Discharger "2"

X. SSMP Program Audits

New, or different information that has been reflected in SSMP keeping the document accurate in terms of staff, and contact information, and the addition of two SSO's which have occurred since August 2009.

Organization

LRO:

Data Submitter: I

Operations staff:

Recent SSO's

February 6, 2010: (reached receiving waters)

April 4, 2010:

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6. SSMP Audit changes being considered



6. SSMP Audit Changes Being Considered, cont.

1. Delete RB2 Annual SSMP Audit Requirement; revert to General WDR's 2-year time requirement
2. Possible changes being considered for inclusion in revised General WDR:
 - 1) Require results of D.13(ix), "Monitoring, Measurement and Program Modifications" to be included in 2-year Audit
 - 2) Consider 2-year Audit time clock to "reset" if SSMP is re-adopted by local governing board

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6. SSMP Audit Changes Being Considered, cont.



3. Develop new Online CIWQS Form to satisfy 2-year SSMP Audit requirement.

Benefits:

- Helps discharger comply with General WDR SSMP Audit requirements
- Helps ensure statewide consistency and compliance
- Utilizes CIWQS information to auto generate audit metrics (# of SSOs, volume, causes, etc.)
- Provides platform to showcase discharger's strategic efforts, programs, strategies, and approaches to reduce/eliminate SSOs

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Contact Information



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(510) 622-2223

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7.3 OTHER RESOURCES

- 7.3.1 California Water Environment Association
(http://www.cwea.org/et_sowdr.shtml)
- 7.3.2 California Rural Water Association
(<http://www.calruralwater.org/>)
- 7.3.3 Rural Community Assistance Corporation
(<http://www.rcac.org/pages/81>)
- 7.3.4 Central Valley Clean Water Association
(<http://www.cvcwa.org/>)
- 7.3.5 Bay Area Clean Water Agencies
(<http://bacwa.org/>)
- 7.3.6 Southern California Alliance of Publicly Owned Treatment Works
(<http://scap1.org/SitePages/Home.aspx>)
- 7.3.7 Cal FOG
(<http://www.calfog.org>)

APPENDIX M

November 2021 FOG Postcad Mailing



IMPORTANT NOTICE

NOTICIA IMPORTANTE

**Do not pour
Fats, Oils, or Grease
Down the Drain!**

This causes sewer spill overflows.

**No echen
Grasas, Aceites, o Petróleo
por el Desagüe!**

**Esto causa desbordamientos de derrames
en las alcantarillas!**

Edgemont
Community Services District



**NO GREASE!
¡NO GRASA!**



PLEASE
PLACE
STAMP
HERE

APPENDIX N

ECSD Lateral Letter to Home Owners R1, January 2022



Webb WO.: 2015-0026

January 11, 2022

<<Property Owner>>
<<Address>>
Moreno Valley, CA 92553

Re: Results of Sewage System Video Survey
Potential Partial Blockage of Sewer Lateral
Parcel Identification Number: <<PIN>>

To Whom It May Concern:

Edgemont Community Services District (ECSD), your sewerage service provider, has performed a video survey of the sewerage system and determined that there may be a partial blockage of the sewer lateral. ECSD suggests you retain a licensed plumber to clear your sewer lateral if you encounter any problems with the discharge of sewage from your residence.

Please feel free to contact me with any questions.

Sincerely,

EDGEMONT COMMUNITY SERVICES DISTRICT

A handwritten signature in blue ink that reads "Jessica Pfalmer". The signature is written in a cursive, flowing style.

Jessica Pfalmer
General Manager

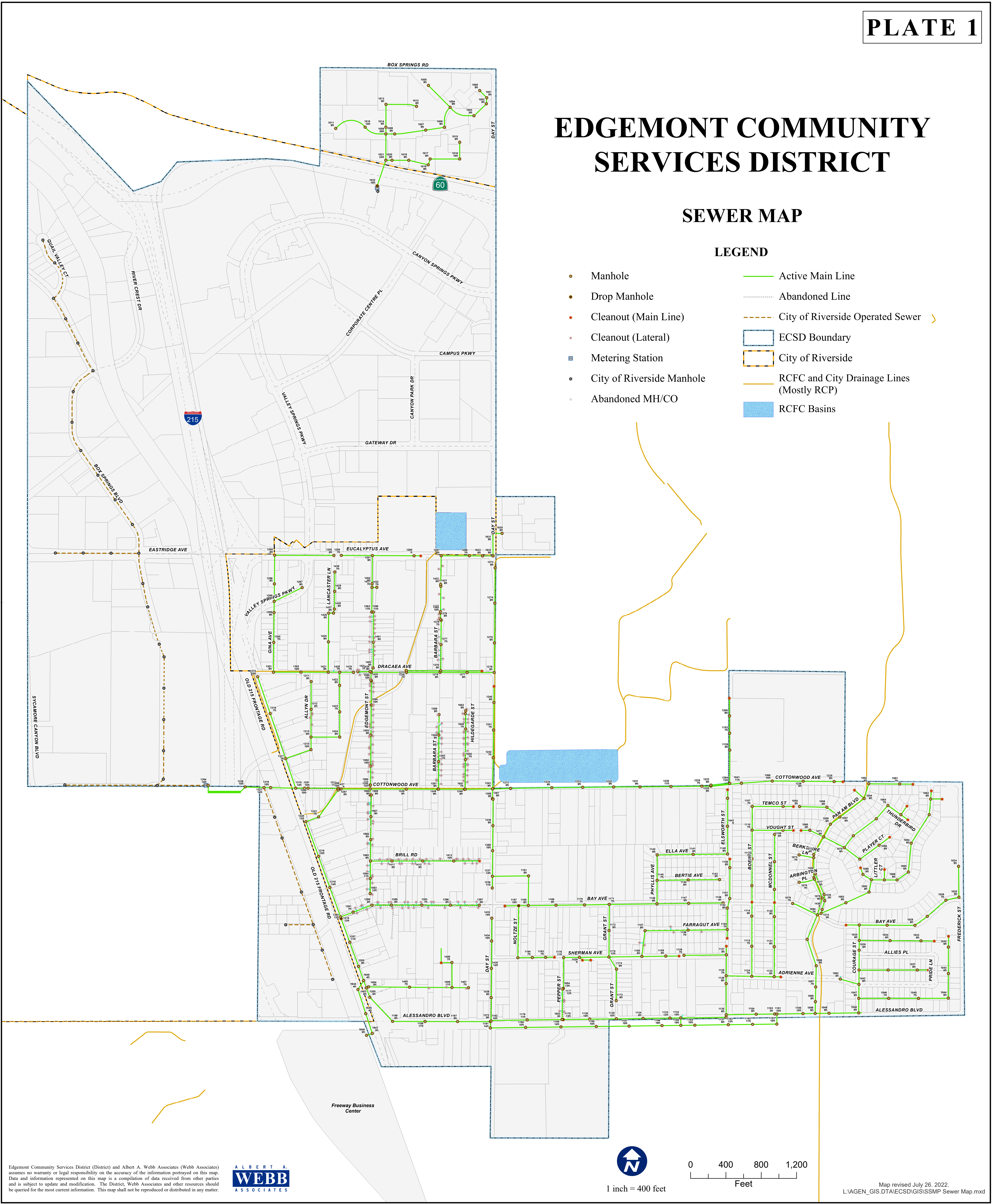
cc: Mr. Edward Mackey, Attorney at Law
Mr. Sam I. Gershon, RCE, Senior Vice President Albert A. Webb Associates

EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP

LEGEND

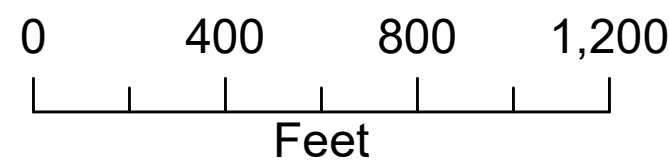
- Manhole
- Drop Manhole
- Cleanout (Main Line)
- Cleanout (Lateral)
- Metering Station
- City of Riverside Manhole
- Abandoned MH/CO
- Active Main Line
- Abandoned Line
- - - - City of Riverside Operated Sewer
- ▭ ECSD Boundary
- ▭ City of Riverside
- RCFC and City Drainage Lines (Mostly RCP)
- ▭ RCFC Basins



Edgemont Community Services District (District) and Albert A. Webb Associates (Webb Associates) assumes no warranty or legal responsibility on the accuracy of the information portrayed on this map. Data and information represented on this map is a compilation of data received from other parties and is subject to update and modification. The District, Webb Associates and other resources should be queried for the most current information. This map shall not be reproduced or distributed in any matter.

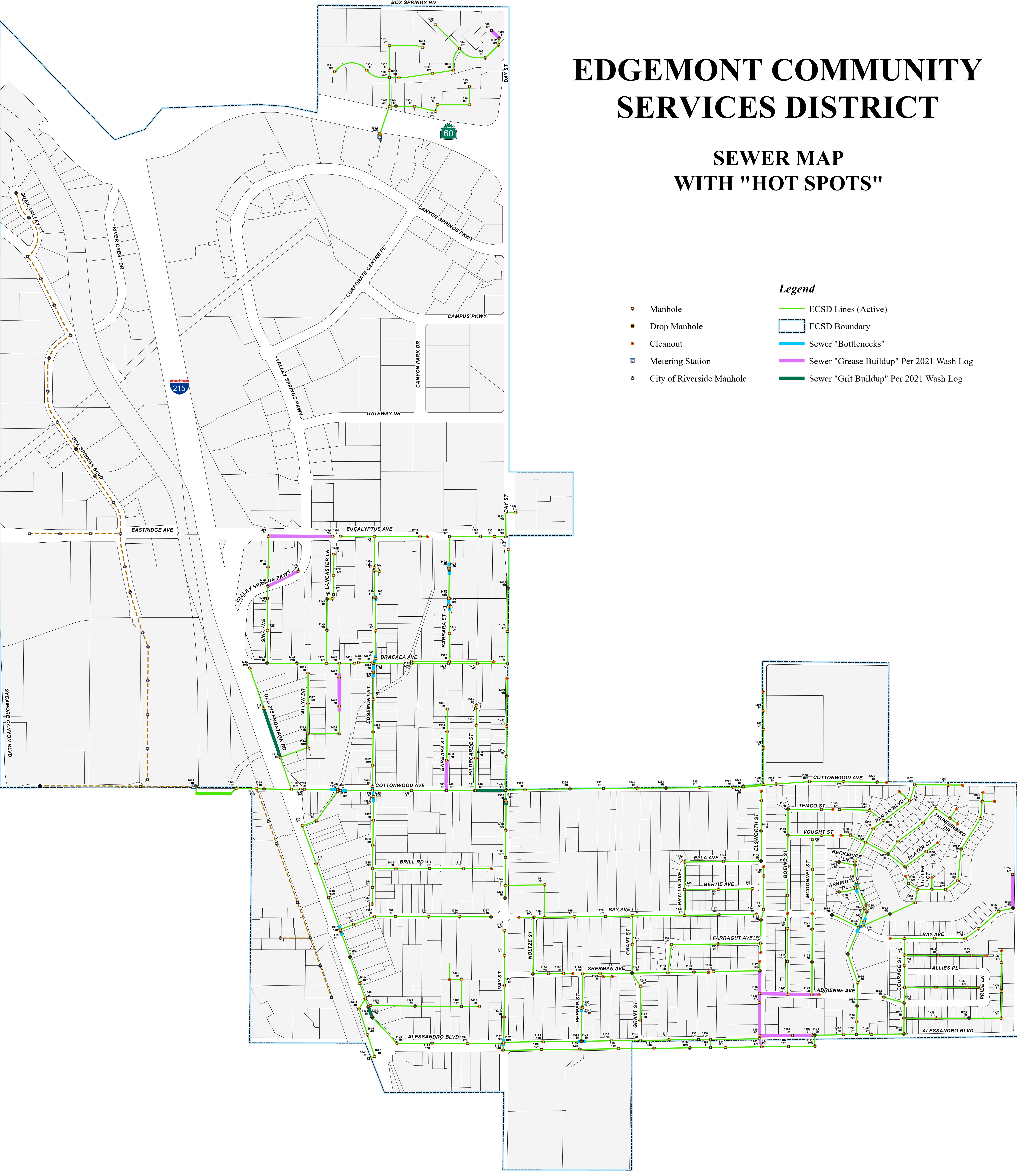


1 inch = 400 feet



EDGEMONT COMMUNITY SERVICES DISTRICT

SEWER MAP WITH "HOT SPOTS"



Legend

- Manhole
- Drop Manhole
- Cleanout
- Metering Station
- City of Riverside Manhole
- ECSD Lines (Active)
- ▭ ECSD Boundary
- Sewer "Bottlenecks"
- Sewer "Grease Buildup" Per 2021 Wash Log
- Sewer "Grit Buildup" Per 2021 Wash Log

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