Sewer System Management Plan (SSMP)

Prepared by:

City of San Bernardino
Public Works Department

300 North "D" Street
San Bernardino, CA 92418

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SEWER SYSTEM MANAGEMENT PLAN

Introduction

One of the requirements of the Water Discharge Requirement (WDR) is to develop and implement a Sewer System Management Plan (SSMP). By developing and implementing the procedures in the plan, the occurrence of sanitary sewer overflows (SSOs) should decrease. Fortunately, due to proactive approaches to sewer system management, the Operations & Maintenance Division within the Public Works Department is currently practicing most of these requirements.

The Public Works Department, in coordination with the Water Department, maintains the City of San Bernardino's sewage collection system. The purpose of this plan is to identify the basic elements of the City's sewage spill response plan, assist and train employees to comply with the responsibilities of our action plan and ensure that appropriate entities are informed of each sewage spill over 1,000 gallons (23CCR 2250(a)).

The City of San Bernardino recognizes the importance of protecting water quality by implementing a plan to reduce and prevent sewer spills and is supplementing its existing sewer system management program with the requirements of the new State regulations.

Goals

The following are key goals for the City of San Bernardino, Public Works Department, Operations & Maintenance Division, and Sewer Line Maintenance Section:

- Minimize the number and impact of SSOs that occur
- Mark and inventory all storm drain systems
- Video camera 20% of the City's sewer system for inventory each year
- Prioritize and repair main lines identified through the video camera system
- Implement a sewer line manhole repair program
- Implement a maintenance and repair program of the City's 12 sewer lift stations
- Implement an emergency response-monitoring program to reduce sewer response call times and claims
- Establish a monitoring system to keep track of the 510 miles of mainline sewers
- Clean and inventory all storm drain systems City-wide
- Increase community awareness of the dangers of SSOs

(i) Goal: The main goal of the Sewer System Management Plan (SSMP) is to provide a plan 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 responsible and authorized representative as detailed in Section H of this Order is **Robert Eisenbeisz, Acting Director/Maintenance Services,** City of San Bernardino Public Works Department, Operations & Maintenance Division.

(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.

- The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures of the SSMP program including the lines of authority are shown in **(Attachment 1).**

(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)).

- The chain of communication for reporting SSOs is shown in **(Attachment 2).** Employees must promptly report any SSOs to their immediate supervisor. The supervisor will then notify the Director/Maintenance Services of the SSOs and contact outside agencies. The Director/Maintenance Services or the Sewer Maintenance Supervisor shall report the SSOs to the Office of Emergency Services (OES) in accordance with California Water Code Section 13271.

The office of Emergency Services can be contacted at (800) 852-7550. See **Appendix "E" of the ("Spill Plan")** for outside agency notification numbers (Note: These agencies **must** also be notified when SSOs occur).

(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.);

- Chapter 13.32 of the City of San Bernardino Municipal Code establishes ordinances that prevent illicit discharges into its sanitary sewer system **(See Attachment 3).**

(b) Require that sewers and connections be properly designed and constructed;

- Chapter 13.08 of the City of San Bernardino Municipal Code establishes ordinances that require that sewers and connections be properly designed and constructed. The City of San Bernardino is committed to ensuring that sewers and connections be properly designed and constructed. This is done by regular inspections during the construction process **(See Attachment 4).**

(c) Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the Public Agency;

- Public Works Department, Operations & Maintenance Division. has access to all its facilities for the proper maintenance or inspections as needed. The access is maintained and repaired as needed.

(d) Limit the discharge of fats, oils, grease and other debris that may cause blockages; and

- The City of San Bernardino Water Department conducts an inspection program to assure the pretreatment of all discharge systems are contained. Sampling of wastewater is preformed on a routine basis to assure compliance with discharge standards. Public Works Department, Operations & Maintenance Division. works in cooperation with the Water Department to assure the standards are maintained.

(e) Enforce any violation of its sewer ordinances.

- The Water Department enforces sewer violations. If violation is criminal in nature, City police and all other agencies involved, including the Health Department, Regional Quality Board, EPA will be contacted.

(iv) Operation and Maintenance Program. The SSMP must include the 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;

- Public Works Department updated its maps of the sanitary sewer system, showing all gravity line segments and manholes, pumping facilities, pressure pipes and valves, and applicable stormwater conveyance facilities. As new developments occur, the system is updated **(See Attachment 5).**

(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 Preventive Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;

- The Sewer Maintenance Section within the Operations & Maintenance Division of the Public Works Department,. has developed several maintenance approaches for the overall sewer collection system. The maintenance approaches include, City wide sewer mainline cleanings, ongoing preventive maintenance of problem areas and the use of closed circuit camera inspections (CCTV) of mainlines. Staff also works with the Water Reclamation Sewer Plant Section in order to minimize Fats, Oils and Grease (FOG) from entering the collection system. Staff uses the iWorq database in order to track the sewer-related work orders **(See Attachment 6).**

- Under the direction of the Public Works Director, the Sewer Maintenance Section is responsible for maintaining approximately 510 miles of sewer mains. They use jetting and vacuum equipment to keep the lines clear. Sewer lines are cleaned on varying schedules. The crew uses video equipment to record the condition of sewer lines and handles emergency repairs 24 hours a day.

- The Public Works Department is responsible for the maintenance of sewer lines and the sanitary sewer collection system. This work includes the maintenance of manholes, sewer siphons, and all sewer lift stations.

(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, as well as 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;

- The Engineering Division within the Public Works Department is responsible for the maintenance of all construction and as-built sewer plans and the sanitary sewer collection system atlas. The Developmental Services Department is also responsible for the sewer master plan, siphon maintenance and for the ongoing reconstruction projects in the sanitary sewer system **(See Attachment 7).**

(d) Provide training on a regular basis for staff in sanitary sewer system operations maintenance, safety procedures, and require contractors to be appropriately trained; and

- Training is the key to the success of this plan. The training sessions below will continue to be conducted. Additionally, employees will review the orientation exercise every six months; one tabletop and one functional full-scale exercise will be conducted annually **(See Attachment 8** for a list of additional training sessions**).**

1. **ORIENTATION EXERCISE -** This exercise will consist of a lecture with handouts and overheads covering all aspects of the response plan. Each employee will learn what their individual duties and responsibilities are and how to work together as a team.

2. **TABLETOP EXERCISE -** In this exercise, equipment or deployment of resources will not be used. All activities will be simulated. Employees will learn through discussion and the use of a facilitator. The exercise will focus on the events leading to a potentially catastrophic spill and how to mitigate the effects.

3. **FUNCTIONAL FULL SCALE EXERCISE -** This exercise will simulate a large-scale spill where employees will respond to a mock spill. Equipment will be deployed including sewer trucks, pumps, and containment equipment. A confined space entry exercise will be conducted in conjunction with this exercise. Back up resources will be controlled and included in one exercise. Following the exercise a critique will be conducted in order to improve this plan**.** Contractors will also be appropriately trained.

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

- The Sewer Maintenance Section within the Public Works Department has an aging fleet. One (1) new combination sewer truck were purchased in July 2010. The Division will also purchase additional emergency response vehicles that will assure a quicker response to SSOs plug ups. Specialized equipment has the ability to videotape and remove debris simultaneously.

(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

- The Sewer Maintenance Section within the Public Works Department is responsible for the maintenance and repairs of all sewer lift stations, including the telemetry system, emergency power and station dry wells. The Engineering Division within the Public Works Department is responsible for the maintenance of all construction and as-built sewer plans and the sanitary sewer collection system atlas.

(b) Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

- The Engineering Division within the Public Works Department has established the procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects **(See Attachment 7)**.

- The Sewer Maintenance Section within the Public Works Department is also responsible for maintaining procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repairs projects. The Sewer Maintenance Section uses the standards that are currently in place.

(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;

- The Sewer Maintenance Section within the Public Works Department has implemented an SSO spill plan and is following established procedures. The established procedures also include all Federal, State, and local government regulations **(See Attachment 9).**

(b) A program to ensure an appropriate response to all overflows**;**

- The City of San Bernardino currently has a program in place to ensure an appropriate response to all overflows. The first crew to respond to a sewer back up and/or spill has the immediate responsibility to protect

people, property and the environment from the effects of a sewage release. To meet these objectives in a rapid, efficient and organized manner, staff shall respond and fulfill the duties in the following categories as directed by the established plan which include:

CONTAIN...spilling sewage..keep it from entering waterways.

- Keep the sewage where it can be recovered and returned to the sewer.
- Make the best of containment opportunities, take advantage of: flood control facilities, construction excavations, vacant lots, etc.
- Containment materials...sand, sand bags, poly sheeting, etc., however, ensure sewage does not enter facilities, which drain to waters of the United States.

CONTROL...the spill..relieve or bypass area of failure.

- Bypass the obstructed line or pump the spillage into a different flowing line.

CLEANUP...the affected areas...to ensure public health.

- Remove visible debris.
- Washdown and contain the affected area being careful not to create a problem somewhere else.
- To disinfect or not to disinfect?
  ...consider requirements of other agencies.
  ...consider beneficial use of receiving waters.
  ...consider the uses and ownership of affected property.
- Clean-up of hard and soft surfaces.

(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;

- Included in current Spill Plan **(See Appendix "E" of Spill Plan).**

(d) Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained;

- The Sewer Maintenance Section within the Public Works Department currently trains and has an ongoing training program to ensure that employees are aware of and follow the Emergency Response Plan.

(e) Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities; and

- The Sewer Maintenance Section within the Public Works Department currently sets up the perimeters and maintains a safe zone during any SSO and clean up procedures. Police services are also utilized for traffic enforcement and crowd control. If an event requires Emergency Operation Center (EOC) services, all EOC standards of operation will be applied. Contact Andy Coady, Environmental Control Officer within the Municipal Water Department, at (909) 384-5507 or cell phone at (951) 905-9495.

(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.

- The Overflow Emergency Response plan ("Spill Plan") currently ensures that all steps are taken to contain and prevent the discharge of untreated and partially treated wastewater **(See "Spill Plan" for details).**

(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;

- The San Bernardino Water Department is currently monitoring this program. The Water Department implements a FOG program through the existing pretreatment program under the regulations outlined in SBMC Chapter 13.32. All permitted restaurants are inspected and monitored a minimum of once a year, with suspect facilities monitored more frequently. During the inspection Best Management Practices (BMP's) are reviewed with the restaurants to minimize the quantity of waste discharged. Copies of these BMP's can be located on the Water Department website under Water Reclamation - Environmental Control - Pollution Prevention **(See Attachment 10).**

(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;

- The Sewer Maintenance Section within the Public Works Department disposes of FOG material through sewer systems at the disposal/treatment facility located at 399 Chandler Pl. San Bernardino, CA 92408.

(c) The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;

- The Water Department has 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;

- The Water Department has the authority to require facilities to install grease removal devices.

(e) Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;

- The Water Department has the authority to inspect grease-producing facilities, enforcement authorities. The Water Department 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

- The Water Department and the The Sewer Maintenance Section within identify sanitary system sections subject to FOG blockages. These sanitary system sections are inspected and cleaned every quarter (4 times a year) to prevent SSOs.

(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.

- The Water Department and the The Sewer Maintenance Section have identified facilities that discharge FOG. However, the Water Department has the authority to develop and implement a source of control measures for all sources of FOG discharged to the sanitary sewer system.

(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;

- The Sewer Maintenance Section within the Public Works Department has completed and implemented the Master Sewer Plan for the City of San Bernardino **(See Attachment 11).**

(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

- The Engineering Division within the Public Works Department will be the leading department in designing criteria for deficiencies in the sanitary sewer system.

(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.

- The Engineering Division within the Public Works Department has completed the CIP Plan and will be implemented as developments occur.

(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.

- The Engineering Division within the Public Works Department has developed an ongoing schedule of completed dates for all portions of the capital improvement program development in (a)–(c) above. This schedule will be reviewed and updated consistent with the SSMP requirements.

(ix) Monitoring, Measurement, and Program Modifications: The Enrollee shall:

(a) Maintain relevant information that can be used to establish and prioritize appropriate SSMP activities;

- The Public Works Department and the Water Department all 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;

- The Public Works Department, and the Water Department all measure the effectiveness of their responsibilities of the SSMP.

(c) Assess the success of the preventative maintenance program;

- The Public Works Department will develop a plan to measure the success of preventative maintenance programs.

(d) Update program elements, as appropriate, based on monitoring or performance evaluations; and

- The Public Works Department and the Water Department will update program elements based on monitoring or performance evaluations.

(e) Identify and illustrate SSO trends, including frequency, location, and volume.

- The Sewer Maintenance Section within the Public Works Department has established a list that identifies problem areas in their sewer system. They monitor these areas to decrease SSOs.

(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.

- The City of San Bernardino shall conduct periodic internal audits every two years, and take corrective action in order to ensure that the SSMP is effective.

(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

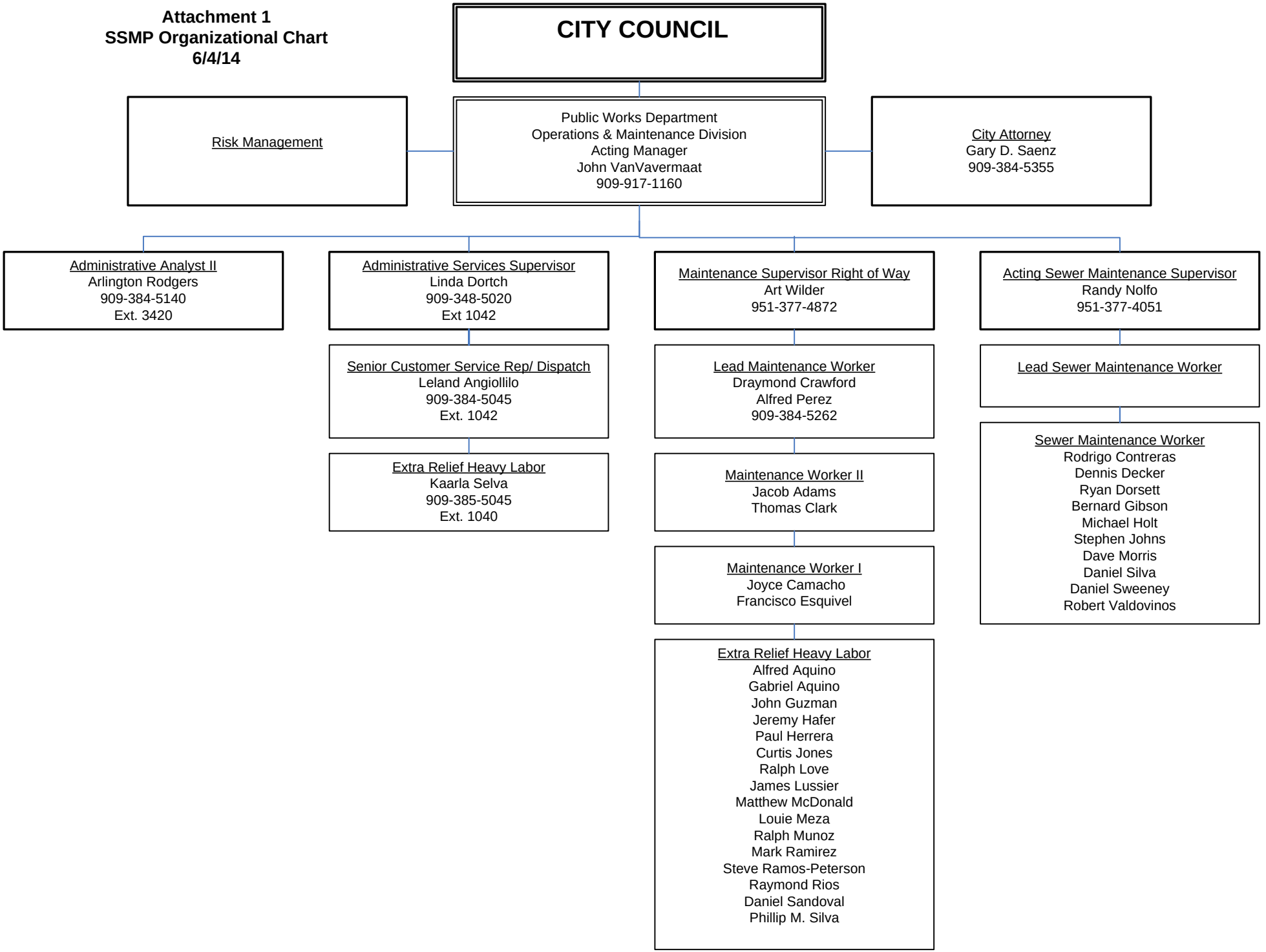
and/or satellite to the Enrollee's sanitary sewer system.

The City of San Bernardino will continue to communicate on a regular basis with the public on development, implementation, and performance of its SSMP via the City's website. The communication will provide the public the opportunity to provide input to the City as the program is developed and implemented. The City will continue to offer Public Services Fairs in the Court Street Square parking lot to the public in order to promote public involvement and participation:

Future Public Services Fairs will feature:

- Informative brochures regarding the dangers of Sanitary Sewer Overflows (SSOs), what causes them and how to avoid them.
- Equipment displays and educational exhibits featuring recycling, storm water pollution prevention, and more public education.

Attachment 1
SSMP Organizational Chart
6/4/14



Attachment "1" – Continued

Definitions:

City Council, City Attorney- Establishes policy. Under policy direction, plans, organizes, directs, and coordinates the activities and operations of the City Attorney's Office; provides sound and efficient legal services for all municipal departments, the Common Council, and advisory boards and commissions; accomplishes complex legal activities primarily involving major litigation and appeals; and performs related duties as required.

Director/Maintenance Services- Under administrative direction, directs, manages, supervises, and coordinates the work of maintenance crews in the Operations & Maintenance Division; coordinates assigned activities with other divisions, departments, and outside agencies; provides highly responsible and complex administrative support to the Director of Public Works; and performs related work as required. Enforces policy, plans strategy, leads staff, allocates resources, delegates responsibility and authorizes outside contractors to perform services. Responsible for developing, preparing and maintaining the SSMP.

Administrative Analyst II- Under administrative direction, performs a variety of professional and technical analytical functions of a confidential and complex nature, including budget preparation, research and report writing on a variety of municipal issues; collects, analyzes and presents information concerning City and departmental operations, policies, procedures and programs; assists with staff reports and Council correspondence; and, performs other related duties as required. Assist in developing, preparing and maintaining the SSMP.

Admin. Operations Supervisor- Under general supervision, performs a variety of administrative and professional staff work; supervises the work of administrative, clerical and accounting employees engaged in preparing, processing, maintaining and retrieving data, records and reports; coordinates activities, programs and procedures within the representative department; collects and analyzes information on projects, services and operational functions; and, performs related work as required. Assist the Deputy Director/Maintenance Services with administrative duties and receives calls from the public.

Sr. Customer Service Representative, Senior Office Assistant- Under general supervision, leads, guides and participates fully in the work of an assigned unit engaged in customer service activities such as billing, posting and customer records maintenance; performs the more difficult work of the clerical unit; trains, instructs and corrects the work of assigned unit members in the performance of specific tasks; and performs related work as required.

Sewer Maintenance Supervisor, Lead Sewer Maintenance Worker- Under general direction, plans, organizes, assigns and supervises the work of field crews in sewers, storm drains and rights-of-way; coordinates assigned activities with other divisions, outside agencies and the general public; and performs related work as required. ***Reports all SSOs to CRWQBS, OES, County Health Department and SWECB website.**

Sewer Maintenance Worker, Sewer Maintenance Crew- Staff that conduct preventative and corrective maintenance activities, mobilize and respond to notification of stoppages and SSOs (mobilize sewer cleaning equipment, by-pass pumping equipment, and portable generators). Under supervision, performs a variety of routine unskilled and semi-skilled maintenance work in the maintenance, repair, construction or installation of City streets, gutters, sewer lines, drainage channels, lift stations, parks and related areas; operates a variety of maintenance and repair tools and equipment; and performs related work as required.

SSMP DEVELOPMENT PLAN AND SCHEDULE

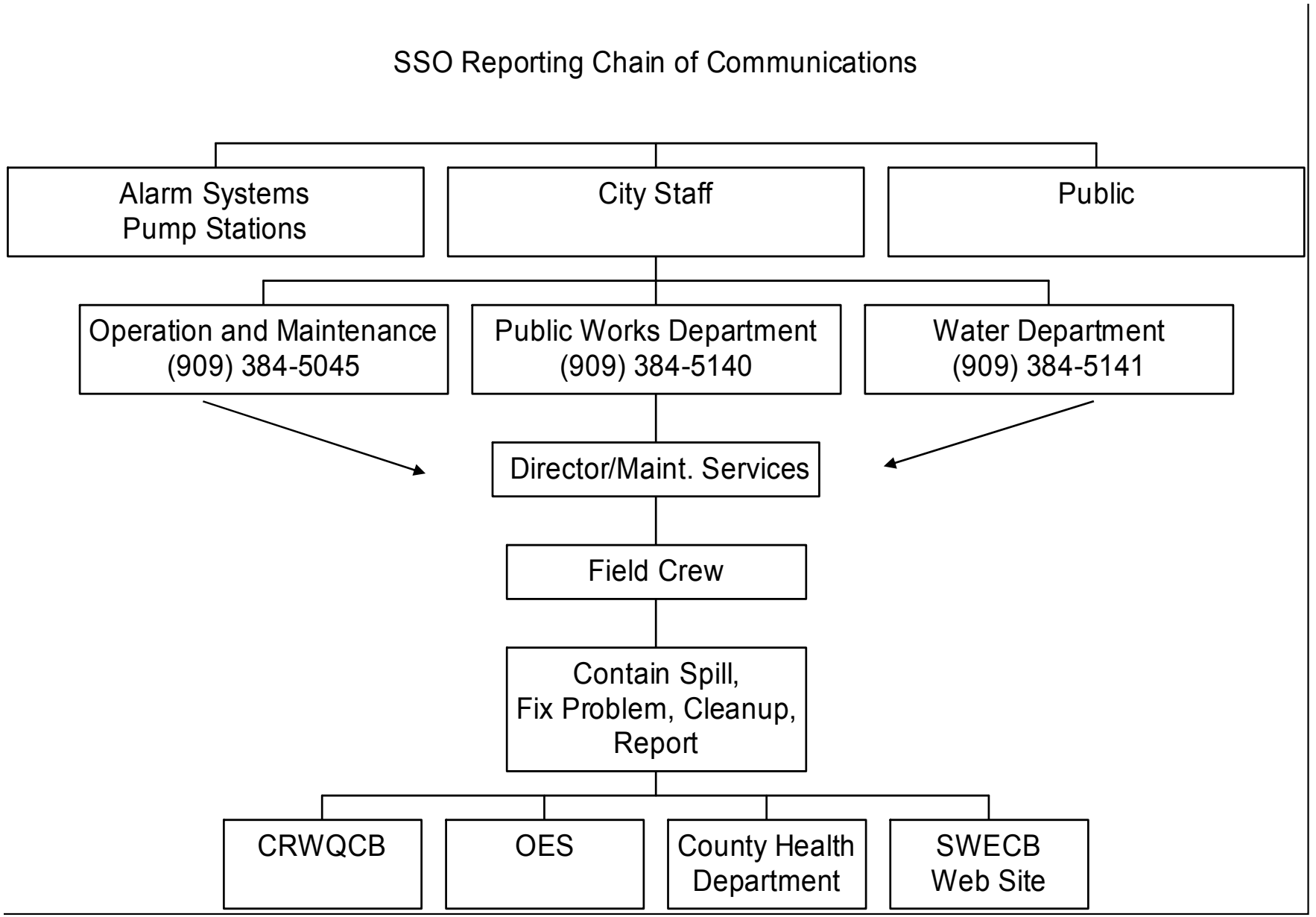
Main Task/Sub-Task	Comments	Status/Due Date	Date Completed	Responsible Party
Application of coverage	Submit Notice of Intent (NOI) to the State indetifying the agency's authorized representative including required permit fee.	11/2/06	10/25/06	Deputy Director /Maintenance Services/ Administrative Analyst II
SSO Electronic reporting program	Agency must report all SSOs to the statewide SSO database via the internet.	Continuous	Continuous	Sewer Maintenance Supervisor and Lead Sewer Maintenance Worker
1. SSMP Development Plan and Schedule	Initial plan on how the agency intends to develop and implement the SSMP.	11/2/07	11/02/07	Deputy Director /Maintenance Services and Administrative Analyst II
2. SSMP Goals	Stated goals for the SSMP.	11/2/07	11/2/07	Deputy Director /Maintenance Services and Administrative Analyst II
3. Organizational Structure	Names and Staff positions responsible for developing and implementing the SSMP including the chain of communications for reporting SSOs.	11/2/07	11/2/07	Administrative Analyst II/ Deputy Director /Maintenance Services
4. Legal Authority	Agency's legal authority to operate and maintain its sewage collection system.	11/2/08	08/17/06	Legal Council/ Administrative Analyst II/ Deputy Director /Maintenance Services
5. Operation and Maintenance	Maintain up-to-date maps of its wastewater collection system, etc.	11/2/08	01/01/09	Deputy Director /Maintenance Services and Sewer Maintenance Supervisor

Mapping	Up to date mapping of the sewage collection system facilities including appropriate storm water systems.	11/2/08	01/01/09	Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
Preventative Maintenance Program	Written description of the preventative maintenance activities the agency employs.	11/2/08	11/2/08	Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
Rehabilitation and Replacement Program	Short and long term plan for the rehabilitation or replacement due to system deficiencies including funding (CIP).	11/2/08	11/2/08	Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
Inspection Program	Program for the regular visual and CCTC inspection of the system.	11/2/08	11/2/08	Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
Staff Training	Staff O&M training and assurance that contractors are adequately trained.	11/2/08	11/2/08	Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
Equipment and Parts Inventory	Equipment and parts inventory including the identification of critical replacement parts.	11/2/08	11/2/08	Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
6. Overflow Emergency Response Plan	Written procedures defining how the agency responds to SSOs.	11/2/08	11/2/08	Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
7. Fats, Oils & Grease Control Program		11/2/08	11/2/08	Water/Administrative Analyst II/ Deputy Director /Maintenance Services
FOG Ordinance	Legal authority to prevent the discharge of FOG into the system.	11/2/08	11/2/08	Legal Council /Administrative Analyst II/ Deputy Director /Maintenance Services

FOG Program	Program to reduce or eliminate FOG related SSOs.	11/2/08	11/2/08	Water/Administrative Analyst II/ Deputy Director /Maintenance Services
8. Design and Performance	Design and construction standards and specifications for the installation of new sanitary sewer systems.	5/2/09	5/2/09	EDA/Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
Design Standards	Design standards for new and rehabilitated systems	5/2/09	5/2/09	EDA/Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
Inspection and testing standards	Inspection and testing standards for new and rehabilitated systems.	5/2/09	Continuous	EDA/Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
9. System Evaluation and Capacity Assurance Plan	Evaluate those portions of the system that are experiencing capacity related overflows. Establish steps to eliminate capacity related overflows including I&I program, and short and long term CIP for capacity issues.	5/2/09	Continuous	Deputy Director /Maintenance Services and Sewer Maintenance Supervisor
10. Monitoring, Measurement, and Program Modifications	Maintain records, monitor and assess the effectiveness of the program and update as necessary.	5/2/09	Continuous	Deputy Director /Maintenance Services, Sewer Maintenance Supervisor and Administrative Analyst II
11. SSMP Audits	Conduct periodic audits, at least every two years, on the SSMP	5/2/09	Continuous	Deputy Director /Maintenance Services, Sewer Maintenance Supervisor and Administrative Analyst II

12. SSMP Communications Program	Public communication	5/2/09	Continuous	Deputy Director /Maintenance Services and Administrative Analyst II
Communications with the public	Develop a public communication program with customers and potential customers that includes the opportunity to provide input during the development, implementation, and performance of its SSMP.	5/2/09	Continuous	Deputy Director /Maintenance Services and Administrative Analyst II
Communications with satellite agency	If there is a satellite agency connected to the collection system, develop a plan of regular communication	5/2/09	Continuous	Deputy Director /Maintenance Services and Administrative Analyst II
13. Final SSMP Implementation	Final the SSMP document after all elements have been developed and implemented.	5/2/09	6/1/09	Deputy Director /Maintenance Services and Administrative Analyst II

Attchment "2"


SSO Reporting Chain of Communications
Alarm Systems
Pump Stations
City Staff
Public
Operation and Maintenance
(909) 384-5045
Public Works Department
(909) 384-5140
Water Department
(909) 384-5141
Director/Maint. Services
Field Crew
Contain Spill,
Fix Problem, Cleanup,
Report
CRWQCB
OES
County Health
Department
SWECB
Web Site

Attchment "2"

Attchment "2"

Attchment "2"

Chapter 13.32
WASTEWATER FACILITIES

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I. ADMINISTRATIVE PROVISIONS

13.32.100 Findings.

A. The wastewater facilities of the City discharge treated effluent to the Santa Ana River Bed. This effluent can affect the quality of stream flow in the river and the quality of the receiving groundwaters.

B. Existing federal and state laws and regulations establish limits on the nature of all effluent discharged to waterways, to the surface, or underground.

C. The Regional Water Quality Control Board ("RWQCB"), Santa Ana Region, has established limits on the concentration of selected biological and chemical constituents of the effluent discharged by the City. These limits are set forth in orders duly adopted by the RWQCB.

D. In order to comply with the requirements contained in those orders, the City

must regulate the content of wastes discharged into its Publicly Owned Treatment Works (POTW). Chapter 13.32 establishes requirements for discharges into the POTW in order to enable the City to comply with the administrative provisions of the Clean Water Act Regulations, the requirements of the RWQCB with regard to effluent limits, Federal Pretreatment Standards, and with other criteria required or authorized by federal or state legislation.

E. The San Bernardino Municipal Water Department (SBMWD) has undertaken and completed specific financial studies relating to the capital needs, as well as the operation and maintenance needs of the facilities and system.

F. The financial requirements of the SBMWD, as shown in the current reports prepared by Staff and Consultants, are based on current, reliable information and data relating to population projections, wastewater flow and capital facilities needs and are expected to be realized in each year of the report.

G. The revenues derived under the provisions of this Ordinance will be used for the acquisition, construction, reconstruction, maintenance and operation of the sewage collection, wastewater treatment and disposal facilities of the SBMWD; to repay principal and interest on debt instruments; or to repay federal and state loans issued for the construction and reconstruction of said sewerage facilities, together with costs of administration and provisions for necessary reserves.

H. The need for upgraded and improved treatment of all wastewater collection, treatment and disposal facilities is required to protect the public health and safety, and to preserve the environment without damage.

I. The charges established and levied by this Ordinance are to allow the SBMWD to recover the costs necessary to provide sewer service to individual parcels of real property which have been improved for type of multiple uses. The basis for the respective charge is the request of the owner of a parcel, for the benefit of him/herself or the occupants of the property, to receive a service based upon actual use, consumption and disposal of water to the POTW in lieu of disposal by other means.

13.32.105 Purpose and Policy.

A. Chapter 13.32 provides for the regulation of wastewater discharges 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) and amendments thereto which are for the following purposes:

1. To prevent the introduction of pollutants into the POTW which will interfere with the operation of the Water Reclamation Plant (WRP), 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 compatible with such works;

3. To improve opportunities to recycle and reclaim wastewater and biosolids;

4. To enable the SBMWD to comply with its National Pollutant Discharge Elimination System (NPDES) Permit conditions, biosolids use and disposal requirements, and any other federal or state laws to which the WRP is subjected;

5. To provide for the equitable distribution of the costs associated with the operation of the WRP; and

6. To protect and preserve the health and safety of the citizens and personnel of the SBMWD and adjacent service areas.

B. Chapter 13.32 shall apply to all users of the WRP. Chapter 13.32 authorizes:

1. The issuance of industrial user permits;
2. Monitoring, compliance, and enforcement activities;
3. Administrative review procedures;
4. 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.

13.32.110 Administration of Policy.

A. ADOPTION OF INTERPRETIVE RULES

The Director may adopt interpretive rules consistent with the provisions of Chapter 13.32 for the protection of the WRP. Interpretive rules by the Director pertain to, but shall not be limited to, discharge limitations, pretreatment requirements, standards for wastewater lines and services and implementation of standards promulgated pursuant to the Federal Water Pollution Control Act as amended by the Clean Water Act and further amendments thereto.

B. GENERAL POWERS OF THE DIRECTOR

Except as otherwise provided herein, the Director shall administer, implement and enforce the provisions of Chapter 13.32. Any powers granted or duties imposed upon the Director may be delegated by the Director to persons acting in the beneficial interest or employ of the SBMWD, but shall remain the responsibility of the Director. In addition to the authority to prevent or eliminate discharges through enforcement of discharge limitations and prohibitions, the Director shall have the authority to respond to the following:

1. Endangerment to the health or welfare of the community. The Director, after informal notice to the affected user, may immediately and effectively halt or prevent any discharge of pollutants into the

collection system of the City or any collection system tributary thereto, by any means available, including physical disconnection from the collection system, whenever the discharge reasonably appears to present an imminent endangerment to the health or welfare of the community;

2. Endangerment to the environment or the WRP. The Director, after written order to the user, may halt or prevent any discharge of pollutants into the collection system of the City or any collection system tributary thereto, by any means available, including physical disconnection from the collection system, whenever such discharge presents or may present an imminent and substantial endangerment to the environment or threatens to damage or interfere with the operation of the WRP; and

3. The discharges referred to in subdivisions 1 and 2 above may be halted or prevented without regard to the compliance of the user with other provisions of Chapter 13.32.

C. SPECIFIC POWERS OF THE DIRECTOR

If wastewater containing any pollutant in excess of discharge limitations as specified in Chapter 13.32, is discharged or proposed to be discharged into the collection system of the City or any collection system tributary thereto, the Director may take any action necessary to:

1. Prohibit the discharge of such wastewater;

2. Require the person discharging to demonstrate that in-plant modifications will reduce or eliminate the pollutant or substance so that the discharge will not violate Chapter 13.32;

3. Require treatment, including storage facilities or flow equalization necessary to reduce or eliminate the pollutants or substance so that the discharge will not violate Chapter 13.32;

4. Require the person making, causing or allowing the discharge to pay any required industrial user permit fees, inspection fees and any additional cost or expense incurred by the SBMWD for handling, treating or disposing of excess pollutant loads imposed on its POTW, including any fines, penalties or legal expenses including attorneys fees payable by the City associated with alleged or actual violations of the SBMWD NPDES Permit attributed to the person's discharge;

5. Obtain timely and factual reports from the person responsible for such discharge; and

6. Take such other or further remedial action as may be deemed to be desirable or necessary to achieve the purposes of Chapter 13.32.

13.32.115 Delegation of Authority.

All power and authority granted to the Director may be delegated by the Director to any person so authorized.

13.32.120 Authorization to Discharge.

It shall be unlawful for any user to commence, significantly increase, or substantially change the quantity or quality of wastewater discharged to the WRP without the express written consent of the Director.

13.32.125 Confidential Information.

All user information and data on file with the SBMWD shall be made available to the public and governmental agencies without restriction unless the user specifically claims the information to be confidential and is able to demonstrate to the satisfaction of the SBMWD that the release of such information would divulge proprietary information or trade secrets. Any such claim must be asserted when the information is submitted to the SBMWD by placing the words "Confidential Business Information" on each page containing such information. If no claim is made at the time of submission, the SBMWD may make the information available to the public without further notification to the user. All sample data obtained by either the user or the SBMWD shall not be considered confidential information. All production related information used to calculate mass based discharge limitations or required for the development of 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 Chapter 13.32, the NPDES Permit or the pretreatment program, and as required by federal or state law.

13.32.130 Signatory Requirements.

All monitoring reports, permit applications, and other information as required by the Director shall contain the following certification statement signed by an authorized representative of the industrial user:

> "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."

13.32.135 Delivery of Notice.

Any notice, order or requirement issued by the Director to a user determined to be in violation of the conditions or requirements specified in Chapter 13.32, the Industrial User Permit, or Discharge Limitations shall be deemed served if delivered to the user as follows:

A. Correctly addressed, postage pre-paid and deposited in the United States mail, to the address on file for the user;

B. Hand delivered to the user or authorized representative or designated contact of the user, at the address on file for the user; 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.

13.32.140 Invalidity.

If any provision of Chapter 13.32 or the application of any condition or requirement upon any user is determined to be invalid, the remainder of Chapter 13.32 or the application of remaining requirements or condition shall not be affected.

13.32.145 Interpretation.

All the provisions of Chapter 13.32 are to be reasonably interpreted. The intent is to recognize there are varying degrees of hazard to the POTW, the WRP sludge, personnel, surface and subsurface waters, environment and the public, and to apply the principle that the degree of protection shall be commensurate with the degree of hazard.

13.32.150 Publication Notice.

The names of all significant industrial users which are found to be in significant noncompliance with Chapter 13.32 shall be published at least annually in the City's largest daily circulating newspaper, in accordance with 40 CFR 403.8(f)(2)(vii).

13.32.155 Definitions of Terms.

Unless otherwise defined herein, terms pertaining to water quality shall be as adopted in the current edition of Standard Methods for the Examination of Water and Wastewater, published by the American Public Health Association, the American Water Works Association, and the Water Environment Federation. Unless otherwise defined herein, terms pertaining to construction and building shall be defined as being the same as set forth in the current edition of the Uniform Building and Plumbing Code. Unless the context specifically indicates otherwise or as previously indicated, the meaning of the terms used in this Ordinance shall be as follows:

1. **Approved Analytical Methods** shall mean the sample analysis 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 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 SBMWD, or any other applicable sampling and analytical

procedures, including procedures suggested by the SBMWD or other parties as approved by the EPA.

2. **Authorized Representative** shall mean:

   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; or the manager of one or more manufacturing or production processes, or operation, if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

   b. A general partner, managing member or proprietor if the user is a partnership, limited liability company or sole proprietorship respectively;

   c. A director, highest appointed official, or employee designated to oversee the operation and performance of the activities of a federal, state or local government facility.

   d. A duly Authorized Representative of the individual designated in a, b, or c, provided such authorization is confirmed in writing by the individual described in a, b, or c; and the authorization specifies the individual is a plant manager or a position of equivalent responsibility or an individual having overall responsibility for environmental matters.

3. **Biochemical Oxygen Demand (BOD)** shall mean the quantity of oxygen, expressed in mg/L, required to biologically oxidize material in a waste or wastewater sample measured under standard laboratory methods of five days at twenty degrees Centigrade.

4. **Board** shall mean the City of San Bernardino Board of Water Commissioners.

5. **Building Official** shall mean the Director of Planning and Building Services, an authorized representative, or any City Officer who is subsequently empowered to assume the duties of the Building Official.

6. **Bypass** shall mean the intentional diversion of waste streams from any point of a user's pretreatment facility.

7. **Categorical Industrial User** shall mean 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 amendments thereto, and as listed by the EPA under the appropriate subpart of 40 CFR Chapter I, Subchapter N, and amendments thereto.

8. **Chemical Oxygen Demand (COD)** shall mean 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. COD results are not necessarily related to BOD results.

9. **City** shall mean the City of San Bernardino, acting through the elected officials and authorized representatives.

10. **City Attorney** shall mean the San Bernardino City Attorney or an authorized representative, deputy, or agent appointed by the City Attorney.

11. **Class I User** shall mean an industrial user (IU) subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; or an industrial user classified as a Significant Industrial User (SIU) as specified in 40 CFR 403.3(t)(ii).

12. **Class II User** shall mean an IU with an average discharge between ten thousand and twenty-four thousand nine hundred ninety-nine gallons per day of industrial wastewater to the POTW.

13. **Class III User** shall mean an IU with an average discharge between one and nine thousand nine hundred ninety-nine gallons per day of industrial wastewater to the POTW and pretreatment is required to reduce the potential for adversely affecting the operation of the POTW or violating any pretreatment standard, prohibition, or requirement of Chapter 13.32.

14. **Class IV User** shall mean an IU that has a temporary need, less than 180 days, to discharge wastewater to the POTW.

15. **Class V User** shall mean an IU that performs operations regulated by Federal Categorical Standards with no industrial wastewater discharged to the POTW from the Categorical process(es) (Dry Categorical).

16. **Class VI User** shall mean a Liquid Wastehauler that hauls domestic liquid wastes from septic tanks, chemical toilets, cesspools, seepage pits, or private disposal systems which are discharged to the septic receiving station located at the WRP.

17. **Collection Agency** shall mean the City or a public agency with which the City has an interjurisdictional agreement covering the collection and discharge of sewage within such agency into the City's collection system for transmission, treatment, and disposal.

18. **Collection System** shall mean all pipes, sewers and conveyance systems carrying wastewater to the WRP, owned and maintained by the City and/or by tributary Service Areas contracting with the City for sewer service, excluding sewer service lateral line connections.

19. **Combined Wastestream Formula** shall mean 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 and Significant Industrial Users whose effluent is a mixture of regulated, unregulated, and dilution wastewater as defined in the formula.

20. **Common Council** shall mean the City of San Bernardino City Council responsible for representing the City and the San Bernardino Municipal Water Department.

21. **Compliance Order** shall mean a time schedule issued to an industrial user by the SBMWD which specifies corrective actions called milestones to be completed by the IU to correct violations of the industrial user's wastewater discharge permit or Chapter 13.32.

22. **Consent Order** shall mean a time schedule agreed upon between the SBMWD and an IU which specifies corrective actions called milestones to be completed by the IU to correct violations of the IU's wastewater discharge permit or Chapter 13.32.

23. **Compliance Schedule** shall mean a time schedule enforceable under Chapter 13.32 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.

24. **Composite Sample** shall mean a collection of individual samples obtained at selected time or flow based increments, which are combined into one sample.

25. **Confined Space**, pursuant to California Code of Regulations, Title 8, Section 5157, subsection b, and amendments thereto, shall mean 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.

26. **Constituent** shall mean any physical, chemical, or biological component of water or wastewater which can be quantified using Approved Analytical Methods.

27. **Conventional Pollutants** shall mean BOD, COD, total suspended

solids, pH, fecal coliform, oil and grease, total nitrogen and such additional pollutants which may be specified and controlled in the NPDES permit issued by the RWQCB.

28. **Cooling Water** shall mean all water used solely for the purpose of cooling a manufacturing process, equipment, or product.

29. **County** shall mean the County of San Bernardino or the Board of Supervisors of the County of San Bernardino.

30. **Day** shall mean calendar day unless otherwise specified by the Director.

31. **Dilution** shall mean the increase in use of water, wastewater or any other means to dilute a wastestream as a partial or complete substitute for adequate treatment to achieve discharge requirements.

32. **Director** shall mean the Director of the WRP or an authorized representative, deputy, or agent appointed by the WRP Director.

33. **Discharger** shall mean any person who directly or indirectly causes or contributes to a discharge to the POTW.

34. **Domestic Liquid Wastes** shall mean all domestic wastes contained in septic tanks, cesspools, seepage pits, holding tanks, private disposal systems, or chemical toilets not connected to the POTW.

35. **Domestic Wastewater** shall mean 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.

36. **Effluent** shall mean treated wastewater flowing from a user or a user's pretreatment equipment to the POTW.

37. **Emergency** shall mean facts or circumstances that SBMWD reasonably determines create an imminent threat of harm to public health or safety, the environment or the POTW.

38. **Engineer** shall mean the City Engineer or an authorized representative or deputy.

39. **EPA** shall mean the United States Environmental Protection Agency.

40. **Exchange Type Soft Water Conditioning Equipment** shall mean any soft water conditioning equipment that is removed from the premises at which it is normally operated for regeneration at a commercial regeneration facility.

41. **Existing Source** shall mean any building, structure, facility, or installation from which there is or may be a discharge of pollutants,

the construction of which commenced before the publication of proposed pretreatment standards under Section 307(c) of the Federal Clean Water Act and amendments thereto.

42. **Federal Categorical Pretreatment Standard** shall mean 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, and amendments thereto.

43. **Flow, Permitted Average** shall mean the mathematical daily average flow of industrial wastewater discharged from a permitted user to the POTW.

44. **Flow, Permitted Maximum** shall mean the permitted average flow plus 20% of the average flow. The permitted maximum flow is designed to allow for periodic production increases which result in an increase in the amount of wastewater discharged to the POTW.

45. **Flow Monitoring Equipment** shall mean the equipment and structures required to be installed, maintained, and calibrated at the user's expense to measure, totalize, and record the amount of water used at the facility or the quantity discharged to the POTW.

46. **General Manager** shall mean the SBMWD General Manager or an authorized representative, deputy, or agent appointed by the General Manager.

47. **Good Faith** shall mean the user's honest intention to remedy noncompliance together with actions that support the intention without the use of enforcement actions by the SBMWD. Examples of these intentions are improved Best Management Practices (BMP) or the installation of pretreatment equipment to reduce or eliminate pollutants.

48. **Grab Sample** shall mean an individual sample collected over a period of time not exceeding fifteen minutes.

49. **Grease Waste** shall mean the floating, solid, and semi-solid waste contained within an approved oil/grease interceptor located at a Restaurant User.

50. **Grease Wastehauler** shall mean any person engaged in the removal, transport, and disposal of grease waste removed from a permitted Restaurant User.

51. **Grease Wastehauler Manifest** shall mean the manifest required to document the removal of pretreatment waste from a permitted Restaurant User.

52. **Hazardous Material** shall mean any material capable of creating imminent endangerment to health or the environment including, but not limited to, any substance designated under 40 CFR Section 310.11(d) and amendments thereto, or any hazardous chemical substance subject to regulation under the Toxic Substances Control Act, 15 USCA Section 2601, et seq. and amendments thereto. In general, substances which are toxic, explosive, corrosive, flammable or irritants, or which generate pressure through heat or decomposition, e.g., heavy metals, pesticides, strong acids or bases, distillate fuels, oxidants, etc.

53. **Heating Water** shall mean all water used solely for the heating of a manufacturing process, equipment, or product.

54. **Industrial User** shall mean all persons, entities, public or private, industrial, commercial, governmental, educational, or institutional which discharge or cause to be discharged, industrial wastewater into the POTW.

55. **Industrial User Permit** shall mean the regulatory permitting procedure established and enforced by the Director to authorize and control the discharge of industrial wastewater from industrial users into the POTW.

56. **Industrial Wastewater** shall mean all water containing wastes of the community, excluding domestic wastewater, and includes all wastewater from any producing, manufacturing, processing, governmental, educational, institutional, commercial, service, agricultural or other operation. Industrial wastewater may also include cooling tower and boiler blowdown water, brine wastewater from the regeneration of water conditioning equipment, and potable water treatment wastewater as determined by the Director.

57. **Infectious Waste** shall mean all wastes that normally cause, or significantly contribute to cause, increased morbidity or mortality of human beings.

58. **Interceptor** shall mean an approved detention chamber designed to remove floatable and settleable material from industrial wastewater prior to discharge to the POTW.

59. **Interference** shall mean any discharge from a user which, alone or in conjunction with a discharge or discharges from other sources both: inhibits or disrupts the City's collection system, WRP, treatment processes or operations, or sludge processes, use or disposal; and which is a cause of a violation of any requirement of the NPDES permit (including an increase in the magnitude or duration of violation) or of the prevention of sewage sludge use or disposal in compliance with Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), 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.

60. **Ion Exchange Water Softener** shall mean a water conditioning apparatus that is designed to remove hardness or other impurities from a user's incoming potable water supply.

61. **Liquid Wastehauler** shall mean any person engaged in the removal, transport, and disposal of domestic liquid wastes from chemical toilets, septic tanks, seepage pits, cesspools, or any other private disposal system for domestic wastewater.

62. **Liquid Wastehauler Manifest** shall mean the manifest required to be completed and submitted to the Director before authorization to discharge domestic liquid wastes at the WRP is granted.

63. **Liquid Wastehauler Permit** shall mean the regulatory permitting procedure established and enforced by the Director to authorize and control the discharge of domestic liquid waste from liquid wastehaulers into the WRP.

64. **Local Discharge Limit** shall mean the maximum concentration of a pollutant determined from either a grab or composite sample which is permitted to be discharged to the POTW, developed by the SBMWD in accordance with 40 CFR 403.5(c) and amendments thereto.

65. **Lower Explosive Limit (LEL)** shall mean the minimum concentration of combustible gas or vapor in the air that will ignite if an ignition source is present.

66. **Mass Emission Rate** shall mean the pounds per day discharged to the City's collection system of a particular pollutant or combination of pollutants, as contained in an Industrial User Permit.

67. **May** shall mean permissive.

68. **Medical Waste** shall mean infectious agents, human blood, blood products, pathological wastes, sharps, recognizable body parts, fomites, etiologic agents, contaminated bedding, surgical wastes, potentially contaminated laboratory waste, dialysis waste, hypodermic needles, syringes, medical instruments/utensils, or any other paper or plastic items of disposable nature used for medically related purposes. The term "Medical Waste" shall exclude de minimus amounts of wastes, human blood and paper items of a disposable nature associated with Domestic Wastewater discharges.

69. **mg/L** shall mean milligrams per liter.

70. **Milestone** shall mean increments of progress in the form of dates,

not to exceed nine months, and are used in compliance schedules. 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.

71. **Monthly Average** shall mean 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.

72. **National Pollutant Discharge Elimination System (NPDES) Permit** shall mean the permit issued by the Regional Water Quality Control Board pursuant to Section 402 of the Act (33 U.S.C. 1342) establishing waste discharge requirements for the SBMWD WRP.

73. **National Pretreatment Standard** shall mean any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307(b) and (c) of the Clean Water Act, which applies to Industrial Users. This term includes prohibitive discharge limits established pursuant to 40 CFR Part 403.5

74. **New Source** shall mean 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 and amendments thereto, 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 facility, and the extent to which the new facility is engaged in the same general type of activity as the existing source may be considered.

75. **Noncompliance Monitoring Program (NMP)** shall mean an Administrative Order issued to an industrial user which requires the

user to submit production and flow data and complete monitoring, at a frequency determined by the Director, for all pollutants determined to be in violation of discharge limits.

76. **Non Contact Cooling or Heating Water** shall mean any water which is used for temperature control and has no direct contact with any raw material, or intermediate or final product.

77. **Non Domestic Wastewater** shall mean all wastewater except Domestic Wastewater, Domestic Liquid Waste, and Unpolluted Water including but not limited to wastewater resulting from industrial, commercial, producing, manufacturing, processing, governmental, educational, institutional, and agricultural operations, brine wastewater from the regeneration of water conditioning equipment, and all non exempt truck hauled liquid wastewater.

78. **Oil and Grease** shall mean 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;

    c. Animal derived products, e.g., fats, greases, oils, lard.

79. **Pass Through** shall mean any discharge which exits the WRP into waters of the United States in quantities or concentrations which, alone or in conjunction with other 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.

80. **Permit-Required Confined Space** pursuant to California Code of Regulations, Title 8, Section 5157, subsection b, and amendments thereto, shall mean 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.

81. **Permittee** shall mean any user which is issued an Industrial User, Liquid Wastehauler, or Grease Wastehauler permit.

82. **Person** shall mean 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.

83. **pH** shall mean the logarithm (base 10) of the reciprocal of the concentration of hydrogen ions, as analyzed in accordance with Approved Analytical Methods. pH represents both acidity and alkalinity on a scale ranging from 0-14 where 7 represents neutrality, values less than 7 represent acidity and values greater than 7 represent alkalinity.

84. **Pollutant** shall mean any constituent or characteristic of wastewater including but not limited to 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.

85. **Pollution** shall mean the man made or man induced adverse alteration of the chemical, physical, biological, or radiological integrity of water.

86. **POTW** shall mean the Publicly Owned Treatment Works and shall include the City's collection system, the collection system of contract cities, and the SBMWD Water Reclamation Plant. This definition includes all devices, equipment, pipes, and systems used in the transmission, storage, treatment, recycling and reclamation of municipal sewage, sludge, or industrial wastewater, except sewer service lateral line connections.

87. **Pretreatment** shall mean 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 POTW. The reduction or alteration may be obtained by physical, chemical or biological processes, process changes, waste minimization, or other legal means designed to remove or reduce pollutants in a wastestream, except dilution.

88. **Pretreatment Requirement** shall mean any substantive or procedural requirement related to pretreatment imposed on an Industrial User.

89. **Pretreatment Standard** shall mean any regulation containing pollutant discharge limits or prohibitions promulgated by EPA or the City, applicable to industrial users, including promulgated Categorical Standards; National Prohibitive Discharge Standards developed pursuant to Section 307(b) of the Clean Water Act and 40 CFR 403.5, general discharge prohibitions contained in SBMC Section 13.32.305; and any specific local discharge limits established by the

City.

90. **Pretreatment Waste** shall mean all waste, liquid, solid, or semi-solid removed from a waste stream or discharge by physical, chemical, or biological means.

91. **Prohibited Discharges** shall mean all discharges specified in Section III of Chapter 13.32 which are prohibited from being discharged to the POTW.

92. **Qualified Professional** shall mean any person who by virtue of experience, education, or training, is qualified to evaluate and assess pollutant discharges and violations of Chapter 13.32.

93. **RCRA** shall mean the Resource Conservation and Recovery Act as contained in 40 CFR Part 260-266 and 270 and amendments thereto.

94. **Restaurant User** shall mean all retail establishments selling prepared foods and drinks for consumption on or off the premises; and lunch counters and refreshment stands selling prepared foods and drinks for immediate consumption. 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, churches, jails, prisons, and juvenile halls), which serve food on the premises may also be considered restaurant users.

95. **Sample Location** shall mean a location approved by the Director where a representative sample of non-domestic wastewater is collected from an industrial user.

96. **SBMWD** shall mean the City of San Bernardino Municipal Water Department.

97. **Service Area** shall mean the physical geographic area where wastewater is generated and discharged to the POTW.

98. **Self-monitoring** shall mean wastewater samples collected by a user or the user's contracted laboratory, consultant, engineer, or similar entity.

99. **Service Lateral Line** shall mean the wastewater collection pipe extending from the premises where the wastewater is generated up to and including the connection to the City's or service area's collection system.

100. **Shall** means mandatory.

101. **Significant Industrial User (SIU)** shall mean all industrial users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N and amendments thereto, or

any user that meets any of the following conditions:

a. Industrial wastewater discharge at an average rate of at least twenty-five thousand gallons per day (gpd) to the WRP (excluding sanitary, noncontact cooling and boiler blowdown wastewater);

b. A process wastestream discharge which makes up five percent or more of the average dry weather hydraulic or organic capacity of the WRP; or

c. Is designated by the Director on the basis that the user has a reasonable potential for adversely affecting the WRP or for violating any pretreatment standard or requirement.

102. **Significant Noncompliance (SNC)** shall mean any compliance violation that meets 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 for each pollutant taken during a consecutive six month period exceed (by any magnitude) the daily maximum limit or the average limit for the same pollutant;

b. Technical review criteria (TRC) violations, which are defined as those in which thirty-three percent or more of all of the measurements for each pollutant taken during a consecutive 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 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 SBMWD determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of WRP personnel or the general public);

d. Any discharge of a pollutant that has caused imminent endangerment to human health or welfare or to the environment or has resulted in the SBMWD exercise of its emergency authority to halt or prevent such a discharge;

e. Failure to meet, within ninety days after the scheduled date, a compliance schedule milestone contained in an Administrative Order, for starting construction, completing construction, or attaining final compliance;

f. Failure to provide, within forty-five days of the due date, any required reports such as baseline monitoring reports, ninety

day compliance reports, periodic self-monitoring reports, and reports on compliance with compliance schedules;

g. Failure to pay, within thirty days, all applicable industrial user application, permit, and enforcement penalty fees;

h. Failure to accurately report non-compliance; or

i. Any other violations or group of violations which the SBMWD believes will adversely affect the operation and implementation of the SBMWD pretreatment program.

103. **Single Pass Non Contact Cooling Water** shall mean water that is used solely for the purpose of cooling, has no direct contact with any raw material, or any intermediate, final or waste product, and is used only once before being discharged.

104. **Single Pass Non Contact Heating Water** shall mean water that is used solely for the purpose of heating, has no direct contact with any raw material, or any intermediate, final or waste product, and is used only once before being discharged.

105. **Slug Discharge** shall mean any non-routine, episodic discharge of wastewater, material or waste with such a high volume or pollutant concentration which will violate any Pretreatment Standard or requirement, or cause damage to, interference with, or pass through in the collection system, WRP, or WRP sludge processes, use, or disposal.

106. **Slug Load Control Plan** shall mean a plan submitted by an Industrial User as required in 40 CFR 403.8(f)(2)(v) and SBMC Section 13.32.475(B), which specifies the potential pollutants used and/or stored at the User's facility; potential pathways the pollutants may enter the POTW, and facilities and procedures for preventing or controlling the occurrence of a Slug Load Discharge to the POTW.

107. **Spent Solutions** shall mean any concentrated non domestic wastewater, such as plating solutions or static rinses, brine wastewater from the regeneration of water conditioning equipment, which contains concentrations of pollutants, the discharge of which may cause Interference, Pass Through, or a violation of any Pretreatment Standard or requirement.

108. **Spill Containment** shall mean a protection system consisting of berms, dikes, or containers, which are used to prevent the discharge of raw materials, waste materials, chemicals, or finished products to the Storm Drain or POTW.

109. **Standard Methods** shall mean the "Standard Methods for the Examination of Water and Wastewater" prepared and published by the American Public Health Association, American Water Works

Association, and Water Environment Federation, which specifies accepted procedures used to assess the quality of water and wastewater.

110. **Storm Drain** shall mean 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 precipitation and surface runoff to a receiving body of water or underground aquifer recharge basins.

111. **Storm water** shall mean water flowing or discharged as a result of rain, snow, or other precipitation.

112. **Temporary Industrial User** shall mean any user who is granted temporary permission by the Director to discharge unpolluted water or wastewater to the WRP and is controlled by a Class IV Industrial User Permit.

113. **Total Dissolved Solids (TDS)** shall mean the total amount of nonvolatile residue by laboratory filtration and dried at 180 degrees C.

114. **Total Suspended Solids (TSS)** shall mean the total amount of residue retained by laboratory filtration and dried at 103-105 degrees C.

115. **Toxic Organic Management Plan (TOMP)** shall mean a plan submitted by an Industrial User pursuant to SBMC Section 13.32.475(A), which specifies the solvents and other toxic organics used and stored, the methods of delivery, storage and disposal; and the procedures for preventing or controlling the discharge of the solvents and toxic organics to the POTW or ground.

116. **Total Toxic Organics (TTO)** shall mean the sum of all quantifiable values of the regulated toxic organic compounds which are found in the user's industrial wastewater discharge.

117. **Unpolluted Water** shall mean cooling and heating water, single pass cooling and heating water, air conditioning condensate, ice melt, condensate, groundwater, landscape irrigation, crop irrigation, rain water, and water not containing any substances limited or prohibited by effluent standards in effect or water whose discharge will not cause any violation of receiving water quality standards.

118. **Upset** shall mean an exceptional incident which causes temporary and unintentional non-compliance with the discharge limitations or prohibitions applicable to a user or the WRP and which is beyond the reasonable control of a user or the WRP.

119. **User** shall mean any person, public or private, residential, industrial, commercial, governmental, educational, or institutional which discharges or causes to be discharged, wastewater into the POTW or contracted service area.

120. **Waste** shall mean any discarded solid, semi-solid, liquid, or gaseous material.

121. **Wastehauler** shall mean any person engaged in vehicular transport of domestic liquid wastes to be discharged at the POTW.

122. **Waste Manifest** shall mean the waste hauling receipt which is required to be retained on site by an industrial user for any hazardous, non-hazardous, or pretreatment waste as required by the Director.

123. **Wastewater** shall mean the liquid and water carried domestic waste or non domestic waste from residential, commercial, industrial, governmental, educational, or institutional facilities, together with any groundwater, surface water, and storm water, that may be present which is discharged to the POTW.

124. **Water Supply** shall mean the water supply serving the area tributary to the collection system of the City or Services Area or WRP.

125. **WRP** shall mean the City of San Bernardino Municipal Water Department Water Reclamation Plant.

II. GENERAL REQUIREMENTS

13.32.200 Use of City Equipment or Facilities.

A. No person or user shall enter, break, damage, destroy, uncover, deface or tamper with any temporary or permanent structure, equipment, or appurtenance which is part of the City's collection system or WRP without prior written approval by the Director.

B. Any person or user who discharges or causes the discharge of any wastewater or pollutant which causes detrimental effects on the City's collection system, WRP, sludge, or any other damages, including the imposition of fines by federal, state, or other regulatory agencies against the City, shall be liable to the City for all damages and costs incurred by the City, including administrative expenses, and fines imposed on the City by any federal, state, or other regulatory agencies. An administrative fee, established by resolution of the Board, shall be included with these charges to cover administrative costs associated with these charges.

13.32.205 Plan Check Requirements.

A. All industrial users who request authorization to connect to the POTW and all existing industrial users who propose tenant improvements shall be required to submit detailed site plans, including plumbing plans which

describe the proposed project, facility expansion, or process modifications, in addition to any other information as required by the Director. The Director shall review the required information and notify the user of any pretreatment requirements. Compliance with the requirements specified by the Director is required before the SBMWD will release the project to the Building Department. The project must be released by the Director before the Building Department will issue a building permit authorizing construction for the project. A Stop Work Order may be issued for any construction projects which have not been issued the required building permit. All industrial users shall comply with all rules and regulations of this Chapter before a Certificate of Occupancy is issued.

B. All industrial users are required to notify the SBMWD during the construction phase of the project in order to conduct onsite inspections of the project. The SBMWD is required to sign off the Building Department job card for underground plumbing and final plumbing of any required pretreatment equipment. All plumbing and pretreatment equipment are required to be exposed during the underground and final plumbing inspections. The industrial user may be required to expose any plumbing or pretreatment equipment which are not visible during the underground and final plumbing inspections. Failure to notify the SBMWD and obtain the necessary onsite inspections and job card signatures may delay the issuance of a Certificate of Occupancy by the Building Department.

13.32.210 Inspection Requirements.

A. The Director shall inspect the facilities of any user to ascertain whether all requirements of Chapter 13.32 are being met. Persons on the premises shall allow the Director ready access at all reasonable times to all parts of the premises for the purpose of inspection, sampling, and records examination.

B. The user shall ensure that there is always a person on site, during normal business hours, knowledgeable of the user's processes and activities to accompany the Director during the inspection.

C. The user shall provide immediate access when an emergency exists.

D. All pretreatment equipment shall be immediately accessible at all times for the purpose of 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 user shall interfere with, delay, resist or refuse entrance to the Director when attempting to inspect any facility which discharges wastewater to the POTW.

F. Where a user has security measures in force which would require proper identification and clearance before entry into the premises, the user shall make all necessary arrangements so that, upon presentation of identification, the Director will be permitted to enter, without delay.

G. The user shall make available for copying by the Director, all records required to be kept under the provisions of Chapter 13.32.

13.32.215 Inspection Warrants.

If the Director has been refused access to a building, structure, or property, or any part, and is able to demonstrate cause that there may be a violation of Chapter 13.32, or that there is a need to inspect or monitor the user's facilities to verify compliance with Chapter 13.32 or any permit or order issued hereunder, or to protect the public health, environment, and the safety and welfare of the community, then the Director 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 Code of Civil Procedure and amendments thereto. However, in the event of an emergency affecting the public health or safety, an inspection or monitoring may be performed without consent or the issuance of a warrant.

13.32.220 Monitoring Requirements.

A. As required by the Director, any user discharging industrial wastewater to the POTW may be required to install monitoring equipment to measure the quality and quantity of wastewater discharged. The monitoring equipment may include but is not limited to: wastewater sampling equipment, flow meters and recorders, pH meters and recorders, electrical conductivity meters and recorders, and process water meters.

B. The monitoring equipment shall be provided by the user in compliance with Chapter 13.32 and all applicable building, plumbing, and construction codes. The Director may require the monitoring equipment have a security closure that can be locked by the SBMWD during any monitoring activities. The installation of any required monitoring equipment shall be completed within a reasonable time frame as required in written notification from the Director.

C. The Director shall have the right to temporarily install upon the user's property such devices as are necessary to conduct wastewater monitoring or metering operations.

D. No user shall interfere with, delay, resist, or refuse entrance to authorized City personnel attempting to install wastewater monitoring equipment on the user's property. Any permanent or temporary obstruction which prevents access to the monitoring equipment shall be immediately removed by the user or property owner at the written or verbal request of the Director and shall not be replaced.

E. Any required monitoring equipment shall be maintained by the user for continuous monitoring and metering. The monitoring equipment shall be calibrated by the user 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. The user shall report any monitoring equipment failure to the Director within twenty-four (24) hours after the user is aware of the failure. The notification

shall be accomplished by a telephone call, telefax transmission, personal visit, or hand delivered notification, to the SBMWD. The user shall submit a written report to the Director documenting the cause of the failure and the corrective actions to be completed within five calendar days after the user discovers the equipment failure.

G. All monitoring shall be completed at the time, place, and frequency as specified by the Director.

H. Samples for pH, cyanide, total phenols, oil/grease, sulfide, and volatile organics shall be analyzed from grab samples. The Director may elect to collect either a twenty-four (24) hour composite sample comprised of discrete time or flow proportioned samples or a grab sample, as appropriate, for all other pollutants.

I. Any wastewater samples collected from a sampling location approved by the Director shall be considered representative of the wastewater discharged from the user to the POTW.

J. All users who request permission to conduct their own wastewater sampling shall submit a written wastewater monitoring plan describing the sample collection methods, equipment used, equipment cleaning practices, employee training, sample preservation methods, and chain of custody procedures. The monitoring plan shall be approved by the Director prior to the implementation of the plan. Any sample(s) collected by a user without an approved plan shall be considered invalid.

K. All users that are required to self-monitor shall have all samples collected according to 40 CFR 403.12(b)(5) specifications and analyzed by a laboratory certified by the State of California, Department of Health Services to complete the specific pollutant analyses.

L. All users that are required to self-monitor shall submit all reporting forms, required by the Director, that include the following information and documents:

1. The date, exact place, time, and methods of sampling or measurements, and sample preservation techniques or procedures;

2. Who performed the sampling or measurements;

3. The date(s) analyses were performed;

4. Beginning and ending flow meter readings which correspond to the time period of the 24 hour composite sample;

5. Who performed the analyses;

6. The analytical techniques or methods used;

7. The results of such analyses; and

8. The reporting limits for each pollutant

M. All users that are required to self-monitor shall submit a copy of the sample analysis and all required reporting forms within the timeframe established by the Director. All sample analysis reports which include discharge violations shall be reported to the Director within twenty-four hours of becoming aware of the violation. The results of the required resample and correspondence which includes a possible explanation for the violation(s) shall be submitted to the Director within 30 days after the user is aware of the initial violation. Failure to report pollutant violations as stated shall constitute a violation of Chapter 13.32 and may subject the user to enforcement actions.

13.32.225 Noncompliance Monitoring Requirements.

A. Noncompliance with any concentration or mass based discharge limit specified in this Ordinance or the User's Permit may be determined by an analysis of a grab or composite sample collected from a designated sample location and shall constitute a violation of Chapter 13.32.

B. As required by the Director, a wastewater resample shall be collected and analyzed for all pollutants in noncompliance with discharge limits. The resample is separate and independent of any wastewater monitoring performed by the SBMWD. All resamples shall be collected according to 40 CFR 403.12(b)(5) specifications and analyzed by a laboratory certified by the State of California, Department of Health Services to complete the specific pollutant analyses. The analysis of all wastewater resamples collected by a user shall be submitted with all required reporting forms to the Director no later than thirty days after the SBMWD has informed the user of the initial violation or the user becomes aware of the violation. Failure to submit the laboratory results within the thirty-day requirement shall constitute a violation of Chapter 13.32 and may subject the user to enforcement actions.

C. As required by the Director, a Noncompliance Monitoring Program shall be completed by a user for any wastewater resamples which are determined to be in noncompliance with discharge limits. The NMP requires the user to collect a representative wastewater sample from the designated sample location at a frequency determined by the Director. The samples are to be analyzed for all pollutants which were determined to be in violation of discharge limits. Continued noncompliance may result in escalated enforcement action and additional monitoring requirements as specified by the Director.

13.32.230 Reporting Requirements.

A. All industrial users shall submit self monitoring reports, as required by the Director, which identify the characteristics of the industrial wastewater discharged to the POTW. The self monitoring reports shall be used to determine compliance with the conditions and discharge requirements specified in Chapter 13.32, the industrial user permit, and federal and state regulations. Reports which may be required include:

1. Baseline Monitoring Reports
2. Compliance Schedule Progress Reports
3. Ninety (90) day Compliance Reports
4. Periodic Reports on continued Compliance
5. Other reports as required by the Director

B. The monitoring frequency and pollutants required to be analyzed shall be specified by the Director in the Industrial User permit issued to the user. All costs associated with the collection and analysis of the required monitoring and the submittal of all required reports shall be the responsibility of the industrial user.

C. Failure to complete any required monitoring or failure to submit any required reports shall be a violation of Chapter 13.32 and may subject the user to enforcement actions.

13.32.235 Flow Measurement Requirements.

A. Any industrial user who discharges a daily average of twenty-five thousand gallons per day or more of industrial wastewater, is designated as an Industrial Rate facility for sewer billing purposes, or any other industrial user as required by the Director, shall install a continuous monitoring flow or water meter approved by the Director, which is capable of measuring the volume of industrial wastewater discharged from the industrial user to the POTW. The readings collected from the flow or water meter shall be used to calculate the permitted daily average and daily maximum flows. Daily readings which exceed the daily maximum shall be reviewed by the Director. Continuous daily discharge readings which deviate more than 20% from the daily permitted flow shall require the permitted flow to be revised accordingly.

B. The user shall record daily flow or water meter readings, as specified by the Director, on an approved log sheet. As required by the Director, monthly flow or water meter records shall be submitted to the SBMWD by the fifth calendar day of each month for the preceding month. The flow or water meter shall conform to standards issued by the Director and shall be equipped with a non-resetting flow totalizer. All flow and water meters shall be calibrated at least annually to ensure the accuracy of the actual flow. All industrial users shall post the type, size, totalizer units, and flow multipliers for any flow or water meters used to measure the volume of wastewater discharged from the user.

13.32.240 Liquid Waste Discharge Requirements.

A. Only domestic liquid wastes from chemical toilets, septic tanks, seepage pits, cesspools, or any other similar receptacles approved by the Director, that contain no industrial waste, shall be disposed at the designated WRP disposal site.

B. The WRP disposal site is the only designated disposal site for liquid wastehaulers who have been issued a liquid wastehauler permit by the SBMWD.

C. A liquid waste manifest form shall be completed and signed by a permitted liquid wastehauler for each load to be dumped at the WRP disposal site. The manifest shall include documentation identifying the origin of the hauled wastes. The origin of the hauled wastes requires the physical address where the wastes were originally generated and does not include the address of any temporary storage location. The liquid waste manifest shall be reviewed and signed by an authorized SBMWD employee before any load is approved to be discharged at the designated WRP disposal site.

D. Domestic liquid wastes disposed at the designated WRP disposal site shall be subject to inspection, sampling and analysis to determine compliance with all applicable provisions of Chapter 13.32. Authorized personnel of the SBMWD shall perform or supervise such inspection, sampling and analysis at any time during the delivery of the domestic liquid waste, including prior to the discharge of the domestic liquid waste by the liquid wastehauler. If the WRP finds the wastes do not comply with the requirements of Chapter 13.32 or liquid wastehauler permit, the liquid wastehauler shall pay the WRP for all costs associated with such inspection, sampling, and analysis, and any other fees, charges or penalties assessed by the Director.

E. If the WRP determines the wastes hauled by the liquid wastehauler to be or contain hazardous substances, the liquid wastehauler shall remain at the WRP until the liquid wastehauler transfers the hazardous substances to a wastehauler properly licensed to transport and dispose of such hazardous substances.

F. Any liquid wastehauler providing false information to the SBMWD in any permit application, hauler's report or manifest, or correspondence shall be in violation of Chapter 13.32 and may be subject to enforcement action including permit suspension or revocation.

G. Any liquid wastehauler that hauls both industrial wastes and domestic wastes shall remove all industrial waste contamination from the interior of the vacuum tank prior to loading any domestic liquid wastes into such tank.

H. If the wastes hauled by a liquid wastehauler are found unacceptable for discharge into the WRP, the liquid wastehauler shall dispose of the wastes at a legal disposal site. The liquid wastehauler shall provide the SBMWD with a copy of the manifest documenting the legal disposal of the rejected wastes within fourteen calendar days from the date the wastes were rejected by the SBMWD.

13.32.245 Record Keeping.

All industrial users shall keep records of all waste hauling, pretreatment equipment maintenance reports, monitoring equipment recording charts and calibration reports, effluent flow or water meter records, sample analysis data, and any other information required by the Director, on the site of the wastewater generation. All records are subject to inspection by Director and shall be copied as needed. All records must be kept on the site of wastewater generation for a minimum period of three years. The record retention period may be extended beyond three years in the event enforcement proceedings have been initiated

against the user or an extensive history of the industrial user is required.

13.32.250 Written Responses.

All users required by the Director to provide a written response to any correspondence, order, or notice shall do so by the date specified.

13.32.255 Compliance Extension.

Any time limit or due date required in any report, written notice or any provision of this Ordinance may be extended only upon a showing of good cause by the user and a written extension by the Director.

13.32.260 Falsifying Information.

Any user who knowingly makes any false statement, representation, or certification in any record, correspondence, or other document submitted or required to be maintained by the Director shall be in violation of Chapter 13.32 and may subject the user to enforcement actions.

III. DISCHARGE PROHIBITIONS

13.32.300 Point of Discharge.

No person or user shall discharge any wastewater directly into a manhole or other opening in the collection system other than through an approved building sewer connection, unless written permission for the discharge has been granted by the Director. This prohibition shall not apply to authorized SBMWD, City, or contract city personnel involved with the maintenance, cleaning, repair, or inspection of the collection system.

13.32.305 Prohibited Waste Discharges.

Except as hereinafter provided, no person or user shall discharge or cause to be discharged into the POTW, or any opening, sump, tank, clarifier, piping or waste treatment system, which drains or flows into the POTW, any of the following:

A. Any earth, sand, rocks, ashes, cinders, spent lime, stone, stone cutting dust, gravel, plaster, concrete, glass, metal filings, or 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 will obstruct the flow of sewage in the collection system or any object which will cause clogging 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 recognizable portions of human or animal anatomy.

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 SBMWD or City personnel, the 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 and amendments thereto.

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 may be permitted by the Director.

G. Any discharge from any wastewater holding tank of a recreational vehicle, trailer, bus and other vehicle, except as may be permitted by the Director.

H. Any storm water, groundwater, well water, street drainage, subsurface drainage, roof drainage, yard drainage or runoff from any field, driveway or street. The Director may temporarily approve the discharge of such waters, in addition to unpolluted water from the SBMWD geothermal facility, to the POTW, when no reasonable alternative method of discharge is available, subject to the payment of all applicable User charges and fees by the discharger. Water from swimming pools, wading pools, spas, whirlpools, and therapeutic pools may be discharged to the POTW between the hours of 8:00 pm and 6:00 am, unless specifically prohibited by the Director.

I. Any substance or heat in amounts that will inhibit biological activity in the 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. In no case shall any substance or heat be discharged to the sewer that will raise the WRP influent higher than one hundred four degrees Fahrenheit (forty degrees Celsius).

J. Any radioactive waste in excess of federal, state or county regulations.

K. Any pollutant(s), material or quantity of material which 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 WRP, its treatment processes, operations, sludge processes, use or disposal. This applies to each user introducing pollutants into the POTW whether or not the user is subject to other National Pretreatment Standards or any Federal, State, or local pretreatment requirements; or

6. A violation of the SBMWD NPDES permit.

L. Any quantities of herbicides, algaecides, or pesticides in excess of the local or national categorical discharge standards.

M. Any petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in excess of local discharge limits or national pretreatment standards.

N. Any material or quantity of material(s) which will cause abnormal sulfide generation.

O. Any wastewater having a corrosive property capable of causing damage to the POTW, equipment, or structures, or harm to SBMWD or City personnel. However, in no case shall wastewater be discharged to the POTW with a pH below 5.0, or greater than 11.0, or which will change the influent pH of the WRP to below 6.5 or above 8.0.

P. Any substance that will cause discoloration of the WRP effluent.

Q. Any unpolluted water, including cooling water, heating water, storm water, subsurface water, single pass cooling water, and single pass heating water. The Director 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.

R. Any substance which may cause the WRP 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 WRP to violate applicable 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, and amendments to these Acts or regulations.

S. Any pollutant, including oxygen demanding pollutants (BOD, COD, etc.) released in a discharge at a flow rate and/or pollutant concentration that will cause interference with the WRP.

T. Pollutants that 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.

U. Any hazardous substance which violates the objectives of the General Pretreatment Regulations (40 CFR 403), Chapter 13.32, or any statute, rule, regulation or chapter of any public agency having jurisdiction over said discharge, and amendments thereto.

V. Any discharge from any groundwater remediation projects, except as may be permitted by the Director.

W. Any slug loads from raw material, spent solutions, or sludges generated from processing tanks or vessels, unless no reasonable alternative is available to prevent severe loss of life or to protect the environment. These shall include, but are not limited to wash tanks, chemical conversion tanks, acid and alkali tanks, lubricating tanks, condensate from dry cleaning processes, fruit and vegetable wash tanks, brine wastewater from soft water regeneration processes above permitted limits, and any other tank or vessel containing a material which would exceed permitted discharge limits.

X. Any radiator fluid or coolant, cutting oil, water soluble cutting oil, or water-based solvent.

Y. Any photo processing waste from developing or fixing solutions or rinse waters that are not in compliance with the discharge limits specified in this Ordinance.

Z. Any Toxic Organics in amounts which are determined to be toxic to the maintenance or operation of the POTW. The SBMWD may require the submittal of a Toxic Organic Management Plan (TOMP) from any user determined to discharge Toxic Organics above detection limits.

13.32.310 Liquid Waste Discharge Prohibitions.

A. Liquid wastehaulers shall not discharge or cause to be discharged any hazardous material or hazardous waste, as defined by RCRA, to the designated WRP disposal site.

B. Liquid wastehaulers shall not discharge any industrial wastewater into the designated WRP disposal site, POTW or the collection system of a service area which receives sewer service from the City.

C. Liquid wastehaulers shall not mix industrial wastewater and domestic liquid wastes in an attempt to discharge the mixture to the designated WRP disposal site.

D. Liquid wastehaulers shall not mix or dilute any rejected load with another load in order to achieve compliance with Chapter 13.32 or liquid wastehauler permit.

E. Liquid wastehaulers shall not dispose of any rejected load into any septic tank, cesspool, seepage pit or similar devices, any grease interceptor or trap, any storm drain, or any collection system opening except as authorized by the Director.

13.32.315 Interceptor Prohibitions.

The use of any biological or chemical products or other materials designed to metabolize, emulsify, suspend, or dissolve oil and grease within any sand/oil or oil/grease interceptor is prohibited.

13.32.320 Prohibited Discharge of Pretreatment Waste.

No person shall discharge any waste removed from any pretreatment equipment, systems, or devices into any sewer or storm drain opening or any drains or other openings leading to any sewer or storm drain or to the ground without authorization and permits from the regulatory agency having jurisdiction over the discharge of such waste. All waste removed from pretreatment equipment shall be disposed of in accordance with all applicable federal, state, county, and local laws and regulations.

13.32.325 Medical Waste Disposal.

A. No user shall discharge medical waste to the POTW without first complying with all requirements of the California Medical Waste Management Act (California Health and Safety Code Sections 117600 – 118360) and obtaining written permission from the Director. The request shall be submitted to the Director and shall include:

1. The source and volume of the medical waste;

2. The procedures and equipment used for disinfection of the medical waste; and

3. Employee training procedures for the legal disposal of the medical waste.

B. If the Director believes that the waste would not be adequately disinfected, the Director 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 Director believes that adequate disinfection of the waste can be achieved prior to discharge of the waste to the collection system, then 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 of the medical waste, the user:

1. Shall adequately disinfect the medical waste prior to discharge to the POTW as outlined in the approval letter;

2. Shall not dispose of solid medical waste to the POTW, including hypodermic needles, syringes, instruments, utensils or other paper and plastic items of a disposable nature, or recognizable portions of human or animal anatomy; and

3. Shall be subject to periodic inspections to verify that all disinfection methods, procedures, and practices are being performed.

E. As authorized by the Director, wastewater generated from medically required life saving operations, including but not limited to dialysis facilities, may be approved for disposal to the POTW.

13.32.330 Dilution Prohibited As A Substitute For Treatment.

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 Chapter 13.32 and the user's permit, or to establish an artificially high flow rate for permitted mass emission rates or permitted flow amounts.

13.32.335 Water Softening Prohibitions.

A. No industrial user shall install, replace, enlarge, or use any apparatus for softening all or any part of the water supply to any premises when such apparatus is an ion-exchange softener or demineralizer of the type that is regenerated at the site of use with the regeneration wastes being discharged to the ground, storm drain or the POTW unless the apparatus is in compliance with the following conditions:

1. 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;

2. The backwash equipment shall be equipped with an electrical conductivity controlled discharge valve that controls the wastewater discharged to the POTW. The electrical conductivity valve shall be calibrated at a minimum annually or as often as necessary to control and prevent any wastewater from being discharged to the POTW that exceeds the maximum electrical conductivity, total dissolved solids, or associated sodium and chloride concentrations established in the local discharge limitations specified in this Ordinance; and

3. The industrial user shall maintain the electrical conductivity controlled discharge valve in proper operating condition at all times. The industrial user shall notify the Director within twenty-four (24) hours in the event of a valve failure and immediately cease the discharge of all wastewater to the POTW associated with the soft water regenerating processes. A written report documenting the cause of the failure and the corrective actions taken shall be submitted to the Director, within five calendar days after discovery of the electrical conductivity valve failure.

B. Pursuant to California Health and Safety Code Sections 116775-116795 and amendments thereto, no residential water softening or conditioning appliance shall be installed except in either of the following circumstances:

1. The regeneration of the appliance is performed at a nonresidential facility separate from the location of the residence where such appliance is used; or

2. The regeneration of the appliance discharges to the waste disposal system of the residence where such appliance is used and the following conditions are met:

   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 Building 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 Director for inspection at reasonable times.

E. Notwithstanding subdivision 2 of subsection B of this Section, the SBMWD may limit the availability, or prohibit the installation, of residential water softening or conditioning appliances that discharge to the POTW if the Director makes all of the following findings:

1. The WRP is not in compliance with the discharge or water reclamation requirements specified in the NPDES permit issued by the Regional Water Quality Control Board;

2. Limiting the availability, or prohibiting the 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.

13.32.340 Limitation on Wastewater Strength.

No user shall discharge industrial wastewater to the POTW unless the wastewater conforms to the limitations and requirements of Chapter 13.32. Discharge limitations shall be revised as needed to ensure compliance of the WRP effluent and bio-solids reuse in compliance with the SBMWD NPDES Permit. For Categorical Users, the SBMWD may exercise one or more of the following options:

A. Where a categorical pretreatment standard is expressed in terms of either mass or concentration of a pollutant, the Director may impose equivalent concentration or mass limits in accordance with 40 CFR 403.6(C) and amendments thereto;

B. When wastewater subject to a categorical pretreatment standard is mixed with wastewater not regulated by the same standard, the

Director 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 and amendments thereto, that factors relating to its discharge are fundamentally different from the factors considered by the EPA when developing the categorical pretreatment standard.

13.32.345 Local Discharge Limitations.

As required by the Director, all users shall comply with the Local Discharge Limits as set forth in the Industrial User Local Discharge Limitation Table and Wastehauler Discharge Limitation Table. The pollutant discharge limits included in the Wastehauler Discharge Table are applicable to all septic and chemical toilet waste disposed at the WRP septic receiving station. All Categorical Industrial Users shall be required to meet the more stringent of Local Discharge Limits and the specific Categorical Pretreatment Standards.

INDUSTRIAL USER LOCAL DISCHARGE LIMITATION TABLE
[Daily Maximum Discharge Limit]

CONSTITUENT	MILLIGRAMS/LITER
Arsenic	0.9
Boron	1.0
Cadmium	0.2
Chloride	990
Chromium (Total)	2.3
Copper	7.4
Cyanide	1.5
Fluoride	3.8
Lead	2.2
Mercury	0.1
Nickel	2.3
Phenol	2.13
Silver	2.5
Sodium	495
Sulfate	382
Zinc	8.4

WASTEHAULER DISCHARGE LIMITATION WASTE
[Daily Maximum Discharge Limit]

CONSTITUENT	MILLIGRAMS/LITER
Arsenic	0.9
Cadmium	0.3
Chromium (total)	2.3
Copper	15.0
Lead	4.0
Nickel	2.3
Zinc	31.0

13.32.350 Federal Categorical Pretreatment Standards.

The Federal Categorical Pretreatment Standards found in 40 CFR Chapter I, Subchapter N and amendments thereto are hereby incorporated into Chapter 13.32 by reference. Where duplication of the same pollutant limitation exists, the limitation that is more stringent 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 Director. New sources shall have all required pretreatment equipment, which is necessary to meet applicable pretreatment standards, installed and operating before beginning any discharge. New sources must meet all applicable pretreatment standards within the shortest feasible time, not to exceed ninety days.

IV. PRETREATMENT REQUIREMENTS

13.32.400 Separation of Wastewater.

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 and monitoring equipment or devices. For existing Categorical Industrial Users that cannot separate the domestic wastes from the industrial wastes prior to the permitted sample location, the combined wastestream formula shall be applied to determine applicable discharge limitations.

13.32.405 Pretreatment of Industrial Wastewater.

All industrial users shall:

A. Provide wastewater pretreatment, as required, to comply with Chapter 13.32;

B. Achieve compliance with all applicable Federal Categorical Pretreatment Standards, as contained in 40 CFR Chapter I, Subchapter N and amendments thereto, and local limits, whichever are more stringent, within the time limitations as specified by the Director or Federal Pretreatment Regulations;

C. Provide, operate, and maintain all necessary equipment, systems, and devices, as required by the Director, at the user's expense;

D. Provide detailed plans to the Director for review and approval indicating 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 pretreating wastewater to produce an effluent acceptable to the Director under the provisions of Chapter 13.32;

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 Director 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 users compliance with the requirements of Chapter 13.32; and

G. Notify the Director of any pretreatment equipment failure within twenty-four (24) hours after the user is aware of the failure. The notification shall be accomplished by a telephone call, telefax transmission, personal visit or hand delivered notification, to the SBMWD. A written report documenting the cause of the failure and the corrective actions completed shall be submitted to the Director, within five calendar days after discovery of the pretreatment

equipment failure.

13.32.410 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) is necessary to perform essential maintenance ensuring adequate operation of the pretreatment equipment or device and does not cause a violation of applicable discharge limits.

B. All users shall comply with the following bypass notification requirements:

1. Anticipated bypass: The user shall submit a written notice to the Director at least ten days before the date of the scheduled bypass; or

2. Unanticipated bypass: The user shall notify the Director within twenty-four (24) hours upon learning that any pretreatment equipment or device has been bypassed. The user shall submit a written report to the Director within five working days after the bypass.

All bypass reports shall include:

a. A description of the bypass, including the volume and duration;
b. If the bypass was corrected; and
c. Actions completed or proposed to prevent a recurrence of the bypass.

13.32.415 Standard Interceptor Designs.

The Director shall maintain a file, available to the public, of suitable designs of gravity separation interceptors. This file shall be for informational purposes only and shall not provide or imply any endorsements 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 Chapter 13.32 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 of preventing the discharge of industrial wastewater to the POTW which exceeds permitted discharge limits.

13.32.420 Pretreatment Requirements For Existing Users.

All existing industrial users which do not have adequate pretreatment shall be required to install pretreatment equipment, as specified by the Director, to meet the required local discharge limits specified herein, under the following conditions:

A. The user has been determined to cause or contribute to an increase in the frequency of sewer line maintenance cleaning or repairs.

B. The user has been determined to cause or contribute to sewer line

blockages or Sanitary Sewer Overflows.

C. The user has sold or transferred operation of the facility to a new user or operator.

D. The user has completed any changes to the following:

1. A significant interior plumbing modification;
2. A significant increase in seating capacity;
3. A significant increase in operating hours;
4. A significant change in the type of food prepared at the facility;
5. A significant change in the maximum meals served per peak hour;
6. A significant change in the type of equipment used;
7. Any other changes which result in a significant change to the quantity or quality of the wastewater discharged.

13.32.425 Interceptor Requirements.

All interceptors and grease traps required to be installed must be approved by the Director prior to installation. All users required to install an interceptor shall comply with the following conditions:

A. The interceptor shall be watertight, structurally sound, durable and have a minimum of two chambers with a separate ring and cover for each chamber, unless otherwise approved by the Director, to insure adequate cleaning capabilities. All rings shall be affixed to the interceptor to insure a gas and watertight seal.

B. All interceptor chambers shall be immediately accessible at all times for the purpose of inspection, sampling, cleaning, and maintenance. 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.

C. Any interceptor legally and properly installed before the effective date of Chapter 13.32 shall be acceptable as an alternative to the current interceptor requirements provided the interceptor is effective in removing floatable and settleable material and is accessible for inspection, sampling, cleaning, and maintenance.

D. All drains, openings and service lateral lines connected to an approved interceptor shall be kept free from any obstructions or restrictions to wastewater discharge. All drains and openings connected to an approved interceptor shall be equipped with screens or devices which will prevent all material and particles with a cubic dimension greater than three-eighths of an inch from being discharged to the POTW.

E. All interceptors shall be equipped with an influent tee extending no more than twelve 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 interceptor chamber, including the final chamber. The Director shall review and either approve or deny any alternate manufacturers engineered interceptor designs contrary to standard requirements.

F. All interceptors shall be equipped with a sample box as required by the Director.

G. No user shall install or use any elbows or tees in any interceptor sample box.

H. No user shall install any interceptor or sample box in a confined space or a permit-required confined space.

I. If the Director 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 Director shall reject such interceptor and declare that the interceptor does not meet the requirements of this Section. The user shall be required to install, at the user's expense, an interceptor that is acceptable to the Director.

J. No user shall abandon, seal, fill, or in any other way bypass an existing interceptor or grease trap unless prior approval has been requested and granted by the Director. The approval of the Director shall require the user to propose and receive approval from the Director for the proper disposal of any wastes or industrial wastewater generated by the user.

13.32.430 Sand/Oil Interceptors.

A. No user that owns, operates, or maintains a facility for the servicing, repair, cleaning, washing, or any other type of maintenance activities performed on roadway machinery, industrial transportation equipment, motor vehicles, public or private transportation vehicles, or any other facility as required by the Director, shall discharge wastewater to the POTW without first complying with all sand/oil interceptor requirements specified by the Director. Such users shall complete and submit a Class III Industrial User Permit Application to the Director for review of sand/oil interceptor requirements.

B. The Director shall notify the user of the Directors determination whether installation of a sand/oil interceptor is required prior to such users discharge to the POTW. It is unlawful for any user to discharge wastewater to the POTW without use of a sand/oil interceptor, in accordance with Chapter 13.32, as required by the Director.

C. The Director shall calculate the size of the sand/oil interceptor to be used by the maintenance facility. The interceptor shall have a minimum operational fluid capacity of one hundred gallons and shall be designed to retain material which will float or settle. Domestic wastewater shall not be allowed to pass

through the interceptor.

D. Any user required to install a sand/oil interceptor shall direct all wastewater from all drains, sinks, and wash racks, through an approved minimum size one hundred gallon sand/oil interceptor which complies with SBMC Section 13.32.425. Such user shall keep all domestic wastewater from restrooms, showers, drinking fountains, and condensate (i.e., ice melt, air conditioning condensate) separate from the wastewater until the wastewater has passed through all necessary sand/oil interceptors, pretreatment equipment, and/or monitoring stations.

E. Any user required to install a sand/oil interceptor shall maintain such interceptor in accordance with SBMC Section 13.32.445.

13.32.435 Restaurant Requirements.

A. No user that owns, operates, or maintains a restaurant facility shall discharge wastewater to the POTW without first complying with all oil/grease interceptor requirements specified by the Director. Such restaurant users shall complete and submit a Class III Restaurant User Permit Application to the Director for review of oil/grease interceptor requirements.

B. The Director shall notify the restaurant user whether installation of an oil/grease interceptor is required prior to such restaurant user's discharge to the POTW. It is unlawful for any restaurant user to discharge restaurant wastewater to the POTW without use of a grease interceptor, in accordance with Chapter 13.32, as required by the Director.

C. The Director shall calculate the size of the grease interceptor required to be used by the restaurant user, in accordance with the sizing criteria specified in the Uniform Plumbing Code 2000, Appendix H, as amended. In order to provide adequate retention time for the separation of oil/grease, the Director shall require the installation of a 750 gallon interceptor and sample box for all users who are sized between a 100 and 750 gallon interceptor. The Director may elect to use the following sizing criteria in lieu of maximum seating capacity, as indicated in the UPC Appendix H, as amended, to determine the number of meals served per peak hour:

1. Full Service Restaurants: Maximum number of seats

2. Fast food/Sandwich Shop Restaurants: One and a half times the maximum number of seats

3. Dinner Theater/Pizza Parlors: One quarter times the maximum number of seats

The Directors decision shall be based on the type of restaurant, the condition of the collection system serving the restaurant, and possible adverse affects caused by the restaurants discharge. The Director reserves the right to require a larger interceptor when necessary and to set a maximum interceptor size when appropriate, to prevent the accumulation of sewer gas in underutilized interceptors.

D. Any restaurant user required to install an oil/grease interceptor shall direct all wastewater from all restaurant drains, sinks, wash racks, dishwashers, and garbage grinders through an approved minimum size seven hundred fifty gallon oil/grease interceptor which complies with SBMC Section 13.32.425. Such restaurant user shall keep all domestic wastewater from restrooms, showers, drinking fountains, and condensate (i.e., ice melt, air conditioning condensate) separate from the restaurant wastewater until the restaurant wastewater has passed through all necessary oil/grease interceptors, pretreatment equipment, and/or monitoring stations.

E. Any restaurant user required to install a grease interceptor shall maintain such interceptor in accordance with SBMC Section 13.32.445.

F. All restaurant users are required to segregate all waste oil from deep fryers, cookers, etc. from all other waste streams. The segregated waste oil is not permitted to be discharged to the POTW. The waste oil is required to be stored onsite and hauled to an approved disposal site.

13.32.440 Conditional Waivers.

The Director may conditionally waive the oil/grease interceptor requirement or require the installation of an under sink grease trap, as approved by the San Bernardino County Department of Environmental Health, for any restaurant user determined by the Director not to have a reasonable potential to cause an adverse effect on the operation of the POTW. The Director may revoke such conditional waiver for the following reasons:

A. Changes in menu;

B. Falsification of information submitted in the 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 quantity or quality of the wastewater discharged; or

H. Increased sewer line maintenance or sanitary sewer overflows (SSOs) which is attributed to the restaurant user's wastewater discharge.

13.32.445 Interceptor Maintenance.

A. Any user who owns or operates an interceptor shall properly maintain the interceptor 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 accumulate which

would cause a public nuisance. An interceptor is considered to be in violation of Chapter 13.32 under the following conditions:

1. Odors generated from the interceptor cause a public nuisance.

2. The interceptor is not in good working condition and appears to be surcharging.

3. The operational fluid capacity of the interceptor has been reduced by more than twenty-five percent by the accumulation of floating material, sediment, solids, oil or grease.

4. The industrial wastewater discharged from the user is determined to contain more than 250 mg/L of oil and grease.

B. When an interceptor is cleaned, the interceptor must be pumped out completely and the removed sediment, liquid and floating material shall be lawfully disposed at a facility legally approved to accept such waste.

C. The user shall maintain a manifest for the removed interceptor waste. The manifest shall include at a minimum: the name and address of the facility where the waste is removed, the disposal site for the interceptor waste, the volume removed, and the date and time of removal. Failure to maintain and provide the required information may require the user to document the required information on a SBMWD issued grease hauler manifest form.

D. The removed pretreatment waste shall not be reintroduced into the interceptor or discharged into another interceptor at another location which has not been approved by the Director to accept such waste.

E. If the interceptor is not maintained adequately and increased pumping is determined to be insufficient to maintain the effective operation of the interceptor, the user shall be required to install an interceptor of sufficient size, that is effective in pretreating the wastewater to acceptable standards.

F. The owner and lessee, sub-lessee, proprietor, operator and superintendent of any facility, required to install an interceptor, are individually and severally liable for any failure to properly maintain such interceptor.

13.32.450 Silver Recovery Pretreatment Systems.

A. All industrial users who discharge wastewater to the POTW which is generated from the development of photographic film, film negatives, x-rays, or plate negatives shall install silver recovery pretreatment equipment, as required by the Director.

B. The silver recovery equipment shall be capable of sufficiently removing silver from the fixer solution and any silver laden rinse water to meet the required local discharge limits specified herein.

C. The photo developing solution shall be required to be separated, reclaimed, hauled by a licensed wastehauler to an approved disposal site and shall not

be discharged to the silver recovery equipment.

D. As required by the Director, the user shall install an approved sample collection device at the discharge end of the silver recovery equipment to facilitate the collection of representative wastewater samples.

13.32.455 Industrial User Modifications.

All permitted users shall report proposed changes to the Director, for review and approval, thirty days prior to initiation of the changes. The reporting shall be done in writing from the authorized representative of the permitted industrial user. For the purposes of this section "changes" shall include any of the following:

A. A sustained twenty percent increase or decrease in the industrial wastewater flow discharged or in production capacity;

B. Additions, deletions or changes to processes or equipment; or

C. Experimentation with new processes and/or equipment that will affect the quantity or quality of the wastewater discharged.

13.32.460 Unauthorized 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 Chapter 13.32 and shall subject the user to enforcement actions.

13.32.465 Notice of Potential Problems to Director.

All users shall notify the Director within twenty-four (24) hours of any substantial change, in the quantity or quality of the wastewater discharged, that could cause a problem at the POTW, including any slug loadings of any material. Wastewater discharges that may cause a problem at the POTW include, but are not limited to, acids, alkalis, oils, greases, high strength organic waste, salts, hazardous substances and waste, colored wastes, and batch discharges. All users shall notify the Fire Department in the event the discharge has the potential to cause a fire or explosion hazard.

All users shall provide the Director, within five business days from the incident, a written report detailing the cause of the discharge and the corrective actions completed to prevent a recurrence.

13.32.470 Spill Containment Systems.

All users, as required by the Director, shall install spill containment systems which conform to established requirements. The spill containment systems shall be sufficient to prevent the discharge of any bulk chemicals, raw materials, finished product, etc. to the POTW. Spill containment requirements include but are not limited to the following:

A. Spill containment systems for tanks, carboys, and vats shall consist of a system of dikes, walls, barriers, berms, or other devices

approved by the Director which are designed to contain a minimum of 110% of the liquid contents of the largest container stored in the containment device.

B. Spill containment systems for drums and barrels may consist of individual spill containment skids, pallets, or other devices approved by the Director which are designed to contain a minimum of 110% of the entire contents of all containers stored in the containment device.

C. Spill containment systems shall be constructed of materials that are impermeable and non-reactive to the liquids being contained.

D. Outdoor spill containment systems shall be constructed with adequate covering to prevent the accumulation of water from inclement weather or irrigation within the spill containment device.

E. Spill containment systems shall not allow incompatible substances to mix and cause a hazardous situation in the event of a failure of one or more containers.

F. At no time shall a user use a spill containment system for the storage of waste other than from a spill generated from a contained liquid.

G. Liquid contained within the spill containment system shall be removed as soon as possible or as instructed by the Director to restore the capacity of the spill containment system to the original volume.

13.32.475 Facility Waste Management Plan.

Permitted Significant Industrial Users may be required to develop and maintain a Facility Waste Management Plan (FWMP). The FWMP may include any of the following documents:

A. TOXIC ORGANIC MANAGEMENT PLAN (TOMP) is required of all categorical industrial users which are permitted to submit a TOMP in lieu of required pollutant monitoring.

B. SLUG LOAD CONTROL PLAN (SLCP) 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, would violate any of the prohibited discharge requirements of Chapter 13.32.

C. PRETREATMENT SYSTEMS OPERATIONS MANUAL is required of all industrial users that operate and maintain pretreatment equipment.

D. HAZARDOUS MATERIALS/WASTE MANAGEMENT PLAN is required of all industrial users that use or possess a hazardous substance or generate a hazardous substance. The City's 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 Director has determined such WM/PPP is necessary to achieve a water quality objective;

2. Determined by the California State Water Quality Control Board (State or Regional Board) to be a chronic violator, and the State Board, Regional Board or City determines that pollution prevention (as defined in Water Code Section 13263.3(b)) could assist;

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. The WM/PPP may be required to include:

1. A wastewater analysis of pollutant(s), as directed by the State Board, Regional Board, or SBMWD, that the user discharges to the POTW, a description of the source(s) of the pollutant(s), and a comprehensive review of the processes used by the users that result in the generation and discharge of the pollutant(s).

2. An analysis of the WM/PPP to reduce the generation of the pollutant(s), including the application of innovative and alternative technologies and any adverse environmental impacts resulting from the use of those methods.

3. A detailed description of the tasks and time schedules required to investigate and implement various elements of pollution prevention techniques.

4. A statement of the user's pollution prevention goals and strategies, including priorities for short-term and long-term action.

5. A description of the users existing pollution prevention methods.

6. A statement that the users existing and planned pollution prevention strategies do not constitute cross media pollution transfers unless clear environmental benefits of such an approach are identified to the satisfaction of the SBMWD.

7. Proof of compliance with the Hazardous Waste Source Reduction and Management Review Act of 1989 (Article 11.9 (Section 25244.12) of Chapter 6.5 of Division 20 of the Health and Safety Code), if applicable.

8. An analysis of the pollution prevention measures, relative costs, and benefits of the proposed pollution prevention activities selected by the user.

V. WASTEWATER DISCHARGE PERMITS

13.32.500 General Permit Requirements.

A. It is unlawful for any Class I, II, III, IV, V, or VI User to connect or discharge to the POTW without a valid industrial user or liquid wastehauler permit.

B. Plans and building permits shall not be approved by the Director for any sewer connection to the POTW unless the user has first obtained the appropriate industrial user permit or the user has received written permission from the Director to connect to the POTW after agreeing in writing not to discharge industrial wastewater until an industrial user permit has been obtained.

C. The Director shall have the authority to deny or establish discharge limitations for all users who propose new or increased contributions of pollutants, or changes in the nature of pollutants to the POTW where the contributions do not meet applicable pretreatment standards, requirements or would cause the SBMWD to violate its NPDES permit.

13.32.505 Industrial User Permit Application Requirements.

A. All users required to obtain an industrial user permit shall complete and file with the Director a permit application form provided by the Director and shall pay all applicable fees invoiced by the SBMWD. The permit application may require the applicant to supply any or all of the following information:

1. Name, address, and location of the facility (if different from the mailing address);

2. Name, title and phone number of authorized representative(s) and contact(s);

3. NAICS number of the operation(s) carried out by the industrial user, according to the Federal North American Industry Classification System, Office of Management and Budget, 1997, as amended;

4. EPA hazardous waste generator's number, if applicable;

5. A description of operations including the nature, average rate of production, and a schematic process diagram which indicates points of discharge to the POTW;

6. Flow measurement information showing the measured average daily and maximum daily flow in gallons per day discharged to the POTW from process waste streams and all other waste streams, as necessary, to determine the permitted flow of the user and to allow use of the combined waste stream formula;

7. Time and duration that wastewater is discharged;

8. Wastewater samples collected according to 40 CFR 403.12(b)(5) specifications and analyzed by a laboratory certified by the State of California, Department of Health Services to complete the specific pollutant analyses;

9. 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 mass) shall be reported. All analyses shall be performed in accordance with the techniques prescribed in 40 CFR part 136 and amendments thereto;

10. A list of all environmental control permits held;

11. Site plans, floor plans, process and pretreatment flow charts, mechanical and plumbing plans with details to show all sewers, sewer connections, monitoring equipment, pretreatment equipment, systems and devices, production areas and all areas of wastewater generation;

12. Certification statement, as set forth in 40 CFR Part 403.6(a)(2)(ii) and amendments thereto, 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 pretreatment equipment is necessary to achieve compliance with pretreatment standards and requirements; and

13. Any other information as may be necessary for the Director to evaluate the permit application.

The accuracy of all data submitted, including monitoring data, shall be certified by an authorized representative of the industrial user as set forth in 40 CFR Part 403.6(a)(2)(ii).

B. After receiving the completed application and all required support information, the Director shall evaluate the application and information furnished by the applicant and either issue an industrial user permit subject to the terms and conditions provided in Chapter 13.32, suspend the issuance of the permit or disapprove the application pursuant to Subsection F of this Section. The Director shall issue the permit, if the Director believes that sufficient and accurate information has been provided by the applicant in the permit application and the Director 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 Chapter 13.32;

2. The proposed operation and discharge of the applicant would not interfere with the normal and efficient operation of the WRP;

3. The proposed operation and discharge of the applicant shall not result in a violation by the SBMWD of the terms and conditions of its NPDES permit or cause a pass through of any toxic materials to the WRP; and

4. The applicant has paid all applicable industrial user permit fees.

C. The Director may suspend the permit application process if the users business will not be operational at the conclusion of the application review process. The Director will supply the user with an interim approval letter in order to receive a permit to commence construction from the Building Department. The user is required to notify the Director at least fourteen days prior to the commencement of business operations. The industrial user permit will be issued upon proper notification by the user.

D. If the Director determines that the proposed discharge will not be acceptable, the Director shall disapprove the application and shall notify the applicant in writing, specifying the reason(s) for denial and the applicable appeals process.

13.32.510 Industrial User Permit Requirements.

A. Industrial user permits shall be subject to all provisions of Chapter 13.32 and all other applicable regulations, charges and fees established by resolution(s) approved by the Board.

B. Permits may contain or require any or all of the following:

1. Limitations on the maximum daily and average monthly wastewater pollutants and mass emission rates for pollutants;

2. Limitations on the average and maximum daily wastewater flow rates;

3. Requirements for the submittal of daily, monthly, annual and long-term production rates;

4. Requirements for reporting changes and/or modifications to equipment and/or processes that affect the quantity or quality of the wastewater discharged;

5. Requirements for installation and maintenance of monitoring and sampling equipment and devices;

6. Requirements for the installation of pretreatment technology, pollution control, or construction of appropriate spill containment devices;

7. 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);

8. Requirements for reporting flow exceedances and pollutant violations;

9. Requirements for submission of technical or discharge reports, Baseline Monitoring Reports (BMR), compliance reports, and reports on continued compliance;

10. Reports on compliance with Federal Categorical Pretreatment Standards deadlines. All categorical industrial users shall submit reports to the Director 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;

11. All significant industrial users shall collect representative wastewater samples collected from the approved sample location during the first month of the first and third quarters. The sample analysis compliance reports shall be submitted to the SBMWD by the end of the second month of the first and third quarter. These reports shall include effluent sample analyses results with the name and concentration or mass of the pollutants in the industrial user permit; average and maximum daily wastewater flows for all processes and total flow for the reporting period; average and maximum daily production rates; and total production rate for the reporting period;

12. 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;

13. All required reports must have an accompanying certification statement, by an authorized representative, stating whether the pretreatment standards are or are not being met as set forth in 40 CFR Section 403.12(b)(6) and amendments thereto;

14. 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 Director;

15. Requirements for notification of slug or accidental discharges and significant changes in volume or characteristics of the pollutants discharged;

16. Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements of Chapter 13.32 and amendments thereto; and

17. Other conditions or requirements as deemed appropriate by the Director to ensure compliance with Chapter 13.32 and amendments thereto.

13.32.515 Liquid Wastehauler Permits.

A. It is unlawful for any liquid wastehauler to discharge to the designated WRP disposal site without a current liquid wastehauler permit, and a current San Bernardino County Department of Environmental Health liquid wastehauler permit and decal, or to otherwise fail to comply with the provisions of Chapter 13.32.

B. No person shall be issued a liquid wastehauler permit by the SBMWD without first completing and submitting an application for a SBMWD liquid wastehauler permit which contains the following information:

1. Name, address, and phone number of the liquid wastehauler;

2. Number of vehicles (vehicles include trucks, tankers and trailers), gallon capacity, license plate number, registered owner's name, and make and model, of each vehicle operated by the liquid wastehauler for the purpose of hauling domestic liquid wastes;

3. Name of the liquid wastehauler's authorized representative;

4. Name and policy number of the liquid wastehauler's insurance carrier and bonding company, if applicable;

5. The number of the current permit issued to the liquid wastehauler by the San Bernardino County Department of Environmental Health for transportation and disposal of liquid wastes; and

6. Such other information as may be required by the Director.

C. Liquid wastehauler permit conditions may include, but are not limited to, the following:

1. Liquid wastehauler's obligation to comply with all permit terms and conditions;

2. Liquid wastehauler's obligation to comply with the terms of Chapter 13.32;

3. Liquid wastehauler's obligation to comply with the applicable rules and regulations of the San Bernardino County Health Department regarding cleanliness and sanitary conditions;

4. Restrictions on operating hours for the designated WRP disposal

site;

5. The revocation, suspension, or placement on probation of the permit and imposition of other enforcement actions against the liquid wastehauler for violation of the permit terms or conditions, or Chapter 13.32;

6. Liquid wastehauler record keeping and reporting requirements;

7. Liquid wastehauler obligation to notify the Director immediately of any unusual circumstances observed during liquid waste pumping operations; and

8. Other conditions, limitations or prohibitions as specified by the Director.

D. The Director may deny the issuance of a liquid wastehauler permit for any of the following reasons:

1. The applicant knowingly falsified information on the application or any document required by the application;

2. The applicant's previous liquid wastehauler permit was suspended or otherwise revoked and the condition upon which such action was taken still exists; or

3. The applicant is not current on all disposal and permit related reports and charges.

E. In the event a liquid wastehauler permit application is denied, the Director shall notify the applicant in writing of such denial and the appeal procedures. Such notification shall state the grounds for such denial and necessary actions that must be taken by the applicant prior to the issuance of a permit.

F. SBMWD issued liquid wastehauler permits shall be valid for a maximum of three years, and the Director may impose additional, or modify or delete permit terms and conditions at any time during the duration of the permit.

G. Liquid wastehauler permits are issued for a specific company and/or vehicle and any attempted permit transfer will void the permit.

13.32.520 Permit Duration.

Industrial User and liquid wastehauler permits shall be issued for a specified time period, not to exceed three years.

13.32.525 Duty to Comply.

All users that have been issued an industrial user or liquid wastehauler permit have a duty to comply with all conditions and limitations in these control documents. Any user failing to comply with the requirements of the permit shall be subject to administrative, civil or criminal enforcement actions in accordance with

13.32.530 Permit Renewal.

All industrial users and liquid wastehaulers shall submit a completed permit application, required monitoring information or production reports, and any other information required by the Director for permit renewal a minimum of ninety calendar days prior to the expiration of the existing permit. All users shall pay all applicable permit fees after invoicing by the SBMWD. If the Director fails to notify user of the 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 existing permit for up to thirty working days until the actual permit can be issued or denied. Any discharge of industrial wastewater or liquid waste to the POTW with an expired permit shall be a violation of Chapter 13.32 and may subject the user to enforcement action.

13.32.535 Permit Modifications.

A. The terms and conditions of the industrial user or liquid wastehauler permit shall be subject to modification during the term of the permit for reasons specified by the Director, including the following:

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 permit issuance;

3. A change in the POTW that requires either a temporary or permanent reduction or elimination of the permitted discharge;

4. The permitted wastewater discharge poses a threat to the POTW, SBMWD or City personnel, residents, or receiving waters;

5. Violation of any term or condition of the user's permit;

6. Misrepresentations or failure to fully disclose all relevant facts in the user's permit application or in any required reporting; or

7. To correct typographical or other errors in the user's permit; or

B. When possible, the SBMWD shall notify the user of any proposed permit changes at least thirty days prior to the effective date of the changes. Any modifications in the permit shall include a reasonable time schedule for compliance.

13.32.540 Permit Transfer.

Each industrial user and liquid wastehauler permit is issued to a specific user for a specific operation for a specified time. Any assignment, transfer or sale of an

industrial user or liquid wastehauler permit to a new owner, new user, different premises, or different use is prohibited and is a violation of Chapter 13.32.

13.32.545 Permit Suspension or Revocation.

The Director may suspend or revoke any industrial user or liquid wastehauler permit if the user is in violation of any provision of Chapter 13.32 or user permit. These violations include but are not limited to: falsification of any required information; denial of the SBMWD right to entry; failure to re-apply for a permit or request a required permit modification; failure to pay required permit fees or charges; or any discharges in violation of Chapter 13.32. The Director may suspend or revoke the industrial user or liquid wastehauler permit upon a minimum notice of fifteen calendar days when the Director finds the user violated any provision of Chapter 13.32 or user permit. The permit suspension or revocation will result in the immediate suspension of all discharge rights and privileges as specified in SBMC Section 13.32.640. All costs associated with the permit suspension or revocation, and any reissuance of the permit, shall be paid by the user.

VI. ENFORCEMENT NOTICES

13.32.600 Enforcement Response Plan (ERP).

The City shall adopt an Enforcement Response Plan (ERP), as required by 40 CFR 403.8(f)(5), and delegate authority to the Board of Water Commissioners to enforce the ERP. The ERP shall be used to guide the SBMWD in imposing progressive enforcement actions against users in noncompliance with Chapter 13.32.

13.32.605 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 required reports or correspondence by the scheduled due date;

3. Failure to submit a compliance report by the due date specified without prior notification to the SBMWD;

4. Failure to conduct required monitoring;

5. Failure to notify the Director of a violation of a permit condition within twenty-four hours after discovery of the violation; or

6. Failure to pay any 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 Director of a slug discharge immediately after discovery of said discharge;

2. Failure to submit required reports or correspondence within 30 days after the original due date;

3. Failure to submit a compliance report within 30 days after the original due date;

4. Falsification of documents or attempting to mislead SBMWD officials;

5. Failure to cooperate with SBMWD officials exercising their authority under Chapter 13.32, including monitoring and inspection activities;

6. A pattern of minor administrative violations;

7. Failure to provide the SBMWD with access to the user's premises for the purpose of inspection, 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 thirty calendar days late;

11. Failure to pay charges pursuant to SBMC Section 13.32.700, 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 Director 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 an individual major administrative violation.

13.32.610 Discharge Violations.

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 the Director has determined, either alone or in combination with other discharge violations; pose no significant threat to the operation of the WRP, the environment, or the health and safety of the general public or SBMWD and City employees.

2. Major discharge violations include, but are not limited to, the following:

a. Violation(s) which result in Significant Noncompliance;

b. Discharge violations which, either alone or in combination with other discharge violations; pose a significant threat to the operation of the WRP, the environment, or the health and safety of the general public or SBMWD and City employees, or cause or contribute to additional treatment costs incurred by the SBMWD 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 specified by the Director;

f. Tampering with or purposely rendering inaccurate any monitoring device, method or record required to be maintained by the SBMWD or the User;

g. Intentional discharge of a prohibited waste by a liquid wastehauler into the POTW; or

h. Wastewater discharge without a valid industrial user or liquid wastehauler permit after notification.

B. Upon notice of appropriate mitigating circumstances, the Director has sole discretion to treat a major discharge violation as a minor discharge violation. The Director also has sole discretion to treat a pattern of minor discharge violations with aggravating circumstances as an individual major discharge violation.

13.32.615 Liquid Wastehauler Violations.

A. Upon the Director's determination of a violation of Chapter 13.32, the liquid

wastehauler shall be subject to the enforcement actions set forth in Chapter 13.32, the Enforcement Response Plan, and the liquid wastehauler permit as necessary to protect the WRP, the public, the environment or SBMWD and City employees.

B. All liquid wastehauler permits issued to any person may be revoked, suspended or placed on probation up to one year upon a finding by the Director that any of the following facts exist:

1. Such person or representative thereof failed to display any permit or discharge authorization document upon request by an authorized representative of the SBMWD;

2. Such person or representative thereof has changed, altered or otherwise modified the face of a permit or discharge authorization document without the permission of the Director;

3. Such person or representative thereof has violated any condition of the permit;

4. Such person or representative thereof has falsified any application, liquid waste manifest, record, report, monitoring results, or any other information required to be maintained by the Director, has failed to make them immediately available to the Director upon request, or has withheld required information;

5. Such person or representative thereof failed to immediately cease the discharge from his or her truck into the designated WRP disposal site upon order of any authorized SBMWD employee;

6. Such person or representative thereof discharged or attempted to discharge hazardous waste into the designated disposal site;

7. Such person or representative thereof discharged or attempted to discharge industrial waste into the designated disposal site;

8. Such person or representative thereof has discharged or attempted to discharge waste to the designated WRP disposal site, that has been previously rejected by another regulatory agency, municipality, or entity having authority to grant permission for the disposal of the waste, without prior notification to the Director of the rejected status of the waste;

9. Such person or representative thereof has physically harmed any SBMWD employee; or

10. Such person or representative thereof has made threatening remarks or threatening acts toward any SBMWD employee.

C. Any liquid wastehauler permit which has been revoked, suspended or placed on probation pursuant to this Section may be reinstated upon a finding by the Director that the condition which caused the revocation, suspension or

probation no longer exists.

D. Any authorized SBMWD employee shall have the authority to order the immediate cessation of the discharge from any liquid wastehauler vehicle into the designated WRP disposal site. Such order shall be based on the employee's best professional judgment that said discharge may be in violation of any applicable condition of Chapter 13.32 or may otherwise harm or threaten to harm the operation of the WRP, the environment, SBMWD and City employees, and the general public.

13.32.620 Unclassified Violations.

For any violation by any user that is not classified herein, or for the violation of any rule or regulation promulgated hereunder, the Director 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 Director shall consider the magnitude of the violation, its duration, and its effect on receiving waters, the POTW, the WRP sludge, the health and safety of SBMWD and City employees, contractors, users, and the general public. The Director shall also evaluate the user's compliance history, good faith, and any other factors the Director deems relevant.

13.32.625 Public Nuisance.

Any user found to be in violation of Chapter 13.32, user permit, or any administrative order issued pursuant to Chapter 13.32 shall be declared a public nuisance and shall be guilty of a misdemeanor.

13.32.630 Administrative Orders.

The Director may require compliance with Chapter 13.32 and any permit or order issued under Chapter 13.32, by issuing Administrative Orders that are enforceable in a court of law, or by directly seeking court action. The Director 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:

A. NOTICE OF NONCOMPLIANCE (NNC): A Notice of Noncompliance shall be issued to a user for any initial pollutant violations, any minor violations discovered during an inspection, or the user's permit or SBMC 13.32. The timeframe required for the NNC to be corrected is normally 7-14 days. A copy of the NNC is either submitted to the user at the conclusion of the inspection or mailed to the user with a written receipt of delivery. The NNC shall require the user to correct the violation or submit a written response of the violation(s) and a plan for immediate compliance or actions to comply with the specified violation(s). A compliance time extension or series of time extensions may be granted, at the discretion of the Director, to a user who fails to correct a minor violation required by a NNC, upon a showing of "good faith" by the user. "Good Faith" shall be defined as the user's honest intention to remedy noncompliance together with actions that support the intention without the use of enforcement

actions by the SBMWD.

B. VERBAL NOTICE (VN): A Verbal Notice shall be used to notify a user that required correspondence, monitoring data, or any other type of required report has not been received by the required compliance date. The VN shall be completed through a phone call, telefax, or personal visit and shall be completed within five days after the original compliance date. All VN issued to an SIU shall be documented with a written memo to the SIU file.

C. WARNING NOTICE (WN): A Warning Notice shall be issued to a user when compliance has not been achieved by the original due date specified in the NNC issued to the user. The WN shall be issued within 5 days after the original or extended due date and shall state the provision(s) violated and the facts alleged to constitute the violation. The WN will also inform the user that additional enforcement action, including the issuance of a Notice of Violation and monetary penalties will be issued to the user if compliance is not achieved by the date specified. A WN shall be documented in a written inspection report at the time of the follow up inspection or mailed to the user with a written receipt of delivery.

D. NONCOMPLIANCE MONITORING PROGRAM (NMP): A Noncompliance Monitoring Program (NMP) shall be issued to a user when analysis results from consecutive samples indicate violations for the same pollutant. The timeframe required for the NMP response is normally 7 to 14 days, in addition to specific due dates for the submittal of all required sample monitoring reports. The NMP requires the user to collect a representative wastewater sample from the designated sample location at a frequency determined by the Director. The samples are to be analyzed for all pollutants which were determined to be in violation of discharge limits. The user shall be responsible for all costs associated with the NMP. Production information, including daily flow meter records shall be submitted for each sample, as required by the Director. The NMP shall be hand delivered or delivered certified mail with a written receipt of delivery. Continued noncompliance may result in escalated enforcement action and additional monitoring requirements as specified by the Director.

E. NOTICE OF VIOLATION (NOV): A Notice of Violation shall be issued to a user for any repeat pollutant violations, any violations which result in Significant Noncompliance, or any major violations discovered during an inspection, the user's permit or SBMC 13.32. A Notice of Violation is also issued to a user who has not complied with the requirements contained in a Notice of Noncompliance, Warning Notice, or Stop Work Order. The timeframe required for the NOV to be corrected is normally 7-14 days. The NOV shall state the provision(s) violated and the facts alleged to constitute the violation, and may include proposed compliance measures or additional monitoring which may be required. The NOV will also inform the user that additional enforcement action, up to and including

suspension or termination of sewer service will be issued to the user if compliance is not achieved. The NOV shall require the user to correct the violation or submit a written response of the violation(s) and a plan for immediate compliance or actions to comply with the specified violation(s). Submission of this plan in no way relieves the user of liability for any violations occurring before or after receipt of the NOV. The NOV shall be hand delivered or delivered certified mail with a written receipt of delivery. The NOV shall include a $100 penalty fee.

F. STOP WORK ORDER (SWO): A Stop Work Order shall be issued to a user to stop any new construction, tenant improvements, alterations, or additions, when the user has not received all necessary City permits, has initiated work without written approval of the Director, or violations of Chapter 13.32 related to the building activity have been discovered at the site. The SWO requires the user to cease all building activity until the user has achieved compliance with the conditions specified in the SWO and received authorization from the Director to resume building activity. The SWO shall be documented in a written inspection report completed during the onsite inspection. A copy of the SWO is either submitted to the user at the conclusion of the inspection or mailed to the user with a written receipt of delivery. The SWO shall include a $100 penalty fee.

G. VIOLATION MEETING ORDER (VMO): A Violation Meeting Order shall be issued to a user who has failed to achieve compliance after the issuance of an NOV, or at the conclusion of an NMP that has resulted in Significant Noncompliance. A VMO is an informal meeting between the user and the Environmental Control Section and is intended for the user to propose possible corrective actions and request time extensions to comply with the NOV. The VMO is also used by the user to demonstrate good faith efforts towards achieving compliance. The VMO may also be used by the City to draft a consent order or compliance order, or for the user to draft a compliance schedule, or file an appeal. The VMO shall be hand delivered or delivered certified mail with a written receipt of delivery. The VMO shall include a $100 penalty fee.

H. CEASE AND DESIST ORDER (CDO): A Cease and Desist Order shall be issued to a user who is in violation of an NOV, or Chapter 13.32, industrial user permit, or any order issued under Chapter 13.32, which is determined to pose an immediate threat to the POTW, SBMWD personnel, environment or the public. A CDO may also be issued to a user who is discharging industrial wastewater to the POTW without a valid industrial user permit. The CDO may result in the immediate revocation of the user's permit and shall require the user to take such appropriate remedial or preventive action as determined by the Director to gain immediate compliance and eliminate the threat, including halting operations and terminating the discharge to the POTW. The cease and desist order shall include the provision violated and the facts constituting the violation. The

CDO shall be hand delivered or delivered certified mail with a written receipt of delivery. The CDO shall include a $250 penalty fee.

I. CONSENT ORDER (CONS): A Consent Order shall be issued to a user after an NOV has failed to achieve compliance with the requirements specified in Chapter 13.32, industrial user permit, or any order issued under Chapter 13.32. The CONS is routinely developed as a result of information collected during the VMO between the SBMWD and a user who has exhibited a willingness to comply. The CONS is a written agreement developed jointly between the City and the user with individual milestones, specific actions submitted by the user, or other remedies used to gain compliance with the violation(s). The CONS shall specify the provisions violated and the facts constituting the violation(s), and shall require adequate treatment facilities, devices, or other pretreatment technology be installed and properly operated by the user to achieve and maintain compliance. No individual milestone, including milestone extensions is permitted to exceed nine months in length. The CONS shall be hand delivered or delivered certified mail with a written receipt of delivery. The user is required to submit written progress reports to the SBMWD every 30 days, as scheduled by the Director, to accurately document the current status of the project and to maintain the required schedule. The CONS shall include a $500 penalty fee.

J. COMPLIANCE ORDER (COMP): A Compliance Order shall be issued to a user after an NOV has failed to achieve compliance with the requirements specified in Chapter 13.32, industrial user permit, or any order issued under Chapter 13.32. The COMP is routinely developed as a result of information collected during the VMO between the SBMWD and a user who has exhibited a lack of cooperation and is unwilling to comply. The COMP is used to compel uncooperative users to achieve compliance and shall be developed by the SBMWD with no input from the user. The COMP is a compliance schedule with individual milestones developed by the SBMWD which requires the user to complete specific actions, or other remedies to gain compliance with the violation(s). The COMP shall specify the provisions violated and the facts constituting the violation(s), and shall require adequate treatment facilities, devices, or other pretreatment technology be installed and properly operated by the user to achieve and maintain compliance. No individual milestone, including milestone extensions is permitted to exceed nine months in length. The COMP shall be hand delivered or delivered certified mail with a written receipt of delivery. The user is required to submit written progress reports to the SBMWD every 30 days, as scheduled by the Director, to accurately document the current status of the project and to maintain the required schedule. The COMP shall include a $500 penalty fee.

K. SHOW CAUSE ORDER (SHOW): A Show Cause Order shall be issued to a user who is in violation of SBMC Ordinance 13.32, user permit, or any order issued under Chapter 13.32, and has failed to

achieve compliance with previous enforcement actions. The SHOW shall be served on the user specifying the time and place for the hearing; the proposed enforcement action and the reasons for such action, including any alleged violation(s) and the facts constituting the violation. The SHOW allows the user an opportunity to show why Civil and/or Criminal Action should not be brought against the user for failure to comply with previous enforcement actions. The SHOW notice shall be served upon the user personally or by certified mail at least fifteen calendar days prior to the hearing; unless the user requests an earlier date for the hearing. The Director 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. The Director may request the attendance and testimony of witnesses and the production of evidence relevant to any matter, and may seek the issuance of a subpoena from the presiding court for the presence of prospective witnesses. 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. Attendees at the Show Cause Hearing may include; a representative from the City Attorney's Office, the SBMWD General Manager, the SBMWD WRP Director, and the SBMWD Environmental Control Officer. Prior to the issuance of a SHOW, representatives from the City and SBMWD shall review the case to determine possible compliance measures. Upon review of the findings of fact, the Director or his designee shall make a final decision which shall be served upon the user. The SBMWD may immediately impose an enforcement action after the hearing whether or not a duly notified user appears as required. The SHOW shall include a $1000 penalty fee.

L. PROBATION ORDER (PO): A Probation Order may be issued to any user for any repeat pollutant or Ordinance violations. The PO shall require the user to conduct repeated monitoring, as determined by the Director, submit recurring documentation as required by the Director, or complete any other actions the Director deems necessary to affirm the continued compliance of the user. The PO shall be hand delivered or delivered certified mail with a written receipt of delivery. The PO shall include a $100 penalty fee.

M. PERMIT REVOCATION ORDER (PRO): A Permit Revocation Order may be issued to any user who has not complied with the requirements contained in any enforcement action. The permit revocation requires the user to immediately cease the discharge of all wastewater determined by the Director to be in noncompliance. The permit revocation requires the user to demonstrate continued compliance prior to the re-issuance of permit authorizing the continued discharge of the specified wastewater to the sewer system. The PRO shall be hand delivered or delivered certified mail with a written receipt of delivery. The PRO shall include a $100 penalty fee and the user shall be responsible for all costs associated with the re-issuance of the permit.

13.32.635 Sewer Suspension Order (SUSP)

A Sewer Suspension Order may be issued to any user who has either willfully or negligently violated the requirements contained in a Permit Revocation Order, failed to comply with the requirements of a CONS or COMP, or whose actual or impending discharge to the POTW presents or may present an imminent endangerment to the health and welfare of persons or to the environment, may pass through or cause interference with the operations of any part of the POTW, is in violation of Chapter 13.32 or the user's permit, or may cause the SBMWD to violate its NPDES permit or any other federal or state law or regulation. The SUSP shall be hand delivered or delivered certified mail with a written receipt of delivery. Any user issued a SUSP shall immediately cease the discharge of all wastewater to the POTW, as specified by the Director. The SUSP will result in the immediate revocation of the users permit. Noncompliance with the conditions of the SUSP may result in the immediate termination of sewer service as specified in SBMC Section 13.32.640. As soon as reasonably practicable but in no event more than five (5) business days following the issuance of the SUSP, the General Manager shall schedule a hearing to provide the user with an opportunity to present information which states the reasons the SUSP should not be executed. The scheduled hearing shall not delay or prevent the effects of the SUSP. The hearing shall be conducted in accordance with procedures established by the Board. Within five (5) business days following the hearing, the General Manager shall issue a written decision to the user regarding the status of the SUSP. The General Manager may allow the user to resume sewer service or wastehauler discharge service if the user demonstrates continued compliance with all discharge and Ordinance requirements. The user shall be responsible for all costs associated with the issuance of the SUSP. The SUSP shall include a $500 penalty fee and the user shall be responsible for all costs associated with the SUSP and re-issuance of the permit.

13.32.640 Sewer Termination Order (TERM)

A Sewer Termination Order may be issued to any user who has either willfully or negligently violated the requirements contained in a Sewer Suspension Order, failed to comply with the requirements of a CONS or COMP, or whose actual or impending discharge to the POTW presents or may present an imminent endangerment to the health and welfare of persons or to the environment, may pass through or cause interference with the operations of any part of the POTW, is in violation of Chapter 13.32 or the user's permit, or may cause the SBMWD to violate its NPDES permit or any other federal or state law or regulation. The TERM shall be hand delivered or delivered certified mail with a written receipt of delivery. The TERM will result in the immediate revocation of the user's permit and the immediate severance of the user's sewer connection and/or the termination of water service. As soon as reasonably practicable but in no event more than five (5) business days following the issuance of the TERM, the General Manager shall schedule a hearing to provide the user with an opportunity to present information which states the reasons the TERM should not be executed. The scheduled hearing shall not delay or prevent the effects of the TERM. The hearing shall be conducted in accordance with procedures established by the Board. Within five (5) business days following the hearing, the General Manager shall issue a written decision to the user regarding the status of the TERM. The General Manager may allow the user to reconnect to the sewer and/or resume water service if the user demonstrates continued compliance with all discharge and Ordinance requirements. The TERM

shall include a $1000 penalty fee and the user shall be responsible for all costs associated with the TERM, including the termination and reconnection of sewer and/or water service, and re-issuance of the permit.

13.32.645 Civil Penalties (CIV)

A Civil Penalty may be issued to any user in violation of the user's permit, any provision of SBMC 13.32, administrative order, or has failed to comply with the requirements or conditions specified in previous enforcement action. The CIV shall be issued by the City Attorney and shall include all penalties authorized in this Section. The user shall be responsible for all costs associated with the violation(s); 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.

A. AUTHORITY: All users of the POTW are subject to enforcement actions administratively or judicially by the City, United States Environmental Protection Agency, State of California Regional Water Quality Board, or the County of San Bernardino District Attorney. The actions may be taken pursuant to the authority and provisions of several laws, including but not limited to: (1) Federal Water Pollution Control Act, commonly known as the Clean Water Act (33 U.S.C.A. Section 1251 et seq.); (2) California Porter Cologne Water Quality Control Act (California Water Code Section 13000 et seq.); (3) California Hazardous Waste Control Law (California Health & Safety Code Sections 25100 to 25250); (4) Resource Conversation and Recovery Act of 1976 (42 U.S.C.A. Section 6901 et seq.); and (5) California Government Code, Sections 54739 -54740.

B. RECOVERY OF FINES OR PENALTIES: In the event the City is required to pay fines or penalties pursuant to the legal authority and actions of other regulatory or enforcement agencies based on a violation of law or regulation or its permits, and the violation can be attributed to the discharge of the user in violation of any provision of Chapter 13.32, the user's permit, any prohibition, effluent limit, or an administrative order issued pursuant to Chapter 13.32; the City shall be entitled to recover all costs and expenses, including, but not limited to, the full amount of said fines or penalties from the user.

C. ORDINANCE: Pursuant to the Authority of California Government Code Sections 54739-54740, any person who violates any provision of Chapter 13.32; the user's permit, any prohibition, effluent limit; or any suspension or revocation order shall be liable civilly for a sum not to exceed $25,000.00 per violation for each day in which such violation occurs. Pursuant to the authority of the Clean Water Act, 33 U.S.C. Section 1251 et seq., any person who violates any provision of Chapter 13.32, the user's permit, or effluent limit shall be liable civilly for a sum not to exceed $25,000.00 per violation for each day in which such violation occurs. The City Attorney, at the request of the General Manager may petition a court of competent jurisdiction to impose, assess and recover all costs pursuant to federal and/or state legislative authorization.

D. ADMINISTRATIVE CIVIL PENALTIES:

1. Pursuant to the authority of California Government Code Sections 54740.5 and 54740.6, the City may issue an administrative complaint to any person who violates:

   a. any provision of Chapter 13.32;
   b. any permit condition, prohibition, or effluent limit; or
   c. any suspension or revocation order.

2. The administrative complaint shall be served by personal delivery or certified mail and shall inform the user that a hearing will be conducted, and shall specify a hearing date within sixty (60) days following service. The administrative complaint will allege the act or failure to act that constitutes the violation of the City's requirements, the provisions of law authorizing civil liability to be imposed, and the proposed civil penalty. The matter shall be heard by the General Manager. The user to whom the administrative complaint has been issued may waive the right to a hearing, in which case the hearing will not be conducted.

3. At the hearing, the user shall have an opportunity to respond to the allegations set forth in the administrative complaint by presenting written or oral evidence. The hearing shall be conducted in accordance with the procedures established by the General Manager and approved by the counsel for the City.

4. After the conclusion of the hearing, the General Manager shall prepare a written report which includes a statement of the facts found to be true, a determination of the issues presented, and conclusions. If the General Manager's designee conducts the hearing, the designee shall prepare and submit the written report to the General Manager.

5. Upon preparation of the written report, the General Manager shall make his determination, and should he find that the grounds exist for assessment of a civil penalty against the user, he shall issue his decision and order in writing within thirty calendar days after the conclusion of the hearing.

6. If after the hearing or appeal, if any, it is found that the user has violated reporting or discharge requirements, the General Manager or Board may assess a civil penalty against that user. In determining the amount of the civil penalty, the General Manager or Board may consider all relevant circumstances, including but not limited to the extent of harm caused by the violation, the economic benefit derived through any non-compliance, the nature and persistence of the violation, the length of time over which the violation occurred, and any corrective action attempted by the user.

7. Civil penalties may be assessed as follows:

   a. In an amount which shall not exceed two thousand dollars ($2000.00) for each day for failing or refusing to furnish technical or monitoring reports;

   b. In an amount which shall not exceed three thousand dollars ($3000.00) for each day for failing or refusing to timely comply with any compliance schedules established by the SBMWD;

   c. In an amount which shall not exceed five thousand dollars ($5000.00) for each day of discharge in violation of any waste discharge limit, permit condition, or requirement issued, reissued, or adopted by the SBMWD;

   d. In any amount which does not exceed ten dollars ($10.00) per gallon for discharges in violation of any suspension, revocation, cease and desist order or other orders, or prohibition issued, reissued, or adopted by the SBMWD.

8. In determining the amount of such penalties, damages and costs, 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.

9. An order assessing administrative civil penalties issued by the SBMWD shall be final in all respects on the thirty-first (31st) day after it is delivered to the user unless a notice of appeal is filed with the Board pursuant to SBMC Section 13.32.675 no later than the thirtieth (30th) day following delivery of the notice. An order assessing administrative penalties issued by the Board shall be final.

10. Copies of the administrative order shall be either hand delivered or by certified mail to the user served with the administrative complaint.

11. Payment of the administrative civil penalties shall be made within thirty (30) days of the date the administrative order becomes final. A lien shall be placed against the users real property for any outstanding penalties which remain delinquent sixty (60) days. The lien shall not be in effect until recorded with the county recorder. The SBMWD may record the lien for any unpaid administrative civil penalties on the ninety-first (91st) day following the date the administrative order becomes final.

12. No administrative civil penalties shall be recoverable under SBMC Section 13.32.645 (D) for any violation which the City has recovered civil penalties through a judicial proceeding filed pursuant to Government Code Section 54740.

13.32.650 Criminal Penalties (CRIM)

A Criminal Penalty may be issued to any user in violation of the user's permit, SBMC 13.32, or an enforcement action issued by the Director or has failed to comply with the requirements or conditions specified in previous enforcement action. A Criminal Penalty may also be issued to 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 Chapter 13.32 or the user's permit, or which falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under Chapter 13.32. The CRIM shall be issued by the City Attorney or County District Attorney and shall include all penalties authorized in this Section. The penalties shall be consistent with the Federal Clean Water Act, 33 U.S.C. 1251, and any relevant State laws. The user 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 provision of Chapter 13.32. A user shall be guilty of a separate violation for each day a violation of any provision of Chapter 13.32 or user's permit is committed or continued by such user.

13.32.655 Remedies Nonexclusive.

The enforcement actions for Chapter 13.32 are not exclusive. The General Manager may take any, all, or any combination of the enforcement responses against a user who is determined to be in noncompliance with conditions and requirements specified in Chapter 13.32, user's permit, or discharge limits.

13.32.660 Damage to POTW Operation.

A. Any user who discharges any wastewater which causes or contributes to any obstruction, interference, damage, or any other impairment to the operation of the POTW shall be liable for all costs required to resume normal operations of the POTW.

B. Any user who discharges any wastewater which causes or contributes to the SBMWD violating any limitation, condition or requirement of its NPDES permit or any other discharge requirement established by any regulatory agency which incurs additional expenses, losses or damage to the POTW, shall be liable for any fines, penalties, fees or assessments imposed on the SBMWD by other regulatory agencies or the courts.

13.32.665 Legal Action.

If any user violates or has the reasonable potential to violate any provision of its Wastewater Discharge Permit, this Chapter, Federal or State Pretreatment Standards or Requirements, or any administrative order issued pursuant to this

Chapter, the City Attorney may petition a court of competent jurisdiction for appropriate legal, equitable or injunctive relief including, but not limited to, issuance of a temporary restraining order, preliminary injunction, permanent injunction, and/or any other relief that may be appropriate to restrain the continued violation or prevent threatened violations by the User. In addition to the penalties provided herein, the Director may recover reasonable attorney fees, court costs, court reporter's fees, and other expenses of litigation by appropriate suit of law against the Person found to have violated any of the provisions of this Chapter or the orders, rules, regulations, and Permits issued thereunder.

13.32.670 Written Appeals.

A. Any user affected by and dissatisfied with any decision, order, or enforcement action, made by the Director interpreting or implementing the provisions of Chapter 13.32 or user's permit, may file with the Director a written appeal requesting 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 Director shall render a ruling on the request for reconsideration to the user in writing within thirty 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. Any user affected by and dissatisfied with any decision, order, or enforcement action, made by the Director interpreting or implementing the provisions of Chapter 13.32 or user's permit, may file with the General Manager a written appeal requesting 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 General Manager shall render a ruling on the request for reconsideration to the user in writing within thirty 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.

C. If the ruling on the request for reconsideration made by the General Manager is unsatisfactory, the user may, within ten calendar days after receipt of notice of the General Manager's ruling, file a written appeal with the Board, lodging such appeal with the SBMWD along with an appeals fee of one hundred dollars. All requests for a hearing on appeals concerning an award of civil penalties, or orders of permit suspension, revocation, or denial shall be reviewed by the Board. All other hearing requests shall be at the sole discretion of the Board. The written appeal shall result in a hearing, after notice to the affected parties, for a complete review of the decision, order, or enforcement action. The hearing shall be conducted within sixty calendar days of the written request. The hearing may be recorded or transcribed and the testimony may be required to be given under oath. The Board shall make a ruling on the appeal within sixty calendar days from the date of filing and shall contain the findings of facts regarding the order.

D. The SBMWD shall have the burden of proof during these hearings and shall be responsible to submit a preponderance of evidence for all claims. The appellant may submit written evidence during the hearing to support the claims of the appellant. Formal rules of evidence shall not apply in the hearings under this Chapter. Evidence will be admissible if it is relevant and of the sort on which responsible persons are accustomed to rely in conduct of serious affairs. The SBMWD reserves the right to adopt additional procedural guidelines governing the conduct of the hearings.

E. The ruling of the Board shall be deemed a final decision, order or action by the SBMWD which any person adversely affected by such decision, order or action may appeal to the appropriate court in the County of San Bernardino. No person may obtain judicial review of any decision, order, or enforcement action by the SBMWD under Chapter 13.32 without first having exhausted his or her administrative remedies set forth in this Section.

13.32.675 Judicial Review.

A. PURPOSE AND EFFECT: Pursuant to Section 1094.6 of the California Code of Civil Procedure, the City hereby enacts this Section to limit to ninety (90) days following final decisions in adjudicatory administrative hearings the time within which an action can be brought to review such decisions by means of administrative mandamus.

B. DEFINITIONS: As used in this Section, the following terms and words shall have the following meanings:

1. Decision shall mean and include adjudicatory administrative decisions that are made after hearing, and after an award of civil penalties pursuant to Section 13.32.645(D), after revoking, suspending, or denying an application for a Permit or a license, or after other administrative hearings taken to enforce this Chapter.

2. Complete Record shall mean and include the transcript, if any exists, of the proceedings, all pleadings, all notices and orders, any proposed decision by the Director, and the final decision, all admitted exhibits, all rejected exhibits in the possession of the City or its officers or agents, all written evidence, and any other papers in the case.

C. TIME LIMIT: Except as set forth in Section 13.32.675(G), judicial review of any decision of the City or its officer or agent may be made pursuant to Section 1094.5 of the Code of Civil Procedure only if the petition for writ of mandate is filed not later than the ninetieth (90th) day following the date on which the decision becomes final. If there is no provision for reconsideration in the procedures governing the proceedings or if the date is not otherwise specified, the decision is final on the date it is made. If there is a provision for reconsideration, the decision is final upon the expiration of the period during which such reconsideration can be sought; provided that if reconsideration is sought by the aggrieved party pursuant to such provision, the decision is final for the purposes of this Section on the date that reconsideration is acted upon by the Board, or officer or agent, and written

notice thereof is provided.

D. PREPARATION OF THE RECORD: The complete record of the proceedings shall be prepared by the City officer or agent who made the decision and shall be delivered to the petitioner within ninety (90) days after he has filed written request therefore. The City may recover from the petitioner its actual costs for transcribing and otherwise preparing the record.

E. EXTENSION: If the petitioner files a request for the record within ten (10) days after the date the decision becomes final, the time within which a petition, pursuant to Section 1094.5 of the Code of Civil Procedure, may be filed shall be extended to not later than the thirtieth (30th) day following the date on which the record is either personally delivered or mailed to the petitioner or the petitioner's attorney of record, if appropriate.

F. NOTICE: In making a final decision, the City shall provide notice to the Person(s) subject to the administrative decision that the time within which judicial review must be sought is governed by Section 1094.6 of the Code of Civil Procedure.

G. ADMINISTRATIVE CIVIL PENALTIES: Notwithstanding the foregoing in Section 13.32.675, and pursuant to Government Code Section 54740.6, judicial review of an order imposing administrative civil penalties pursuant to Section 13.32.645(D) may be made only if the petition for writ of mandate is filed not later than the thirtieth (30th) day following the day on which the order of the Board becomes final.

13.32.680 Judicial Collection.

After an enforcement order requiring a monetary assessment has become final, or after a court has entered a final judgment in favor of the City, the General Manager, through the City Attorney, may initiate a civil action, in the appropriate court to recover such amount. Any user who fails to pay the amount of the assessment, by the due date established, shall be required to pay to the City, in addition to the original assessment, all costs associated with recovery of the assessment. These costs may include; City Attorney fees and costs, court filing fees, and process service fees for collection of the assessment.

VII. CONNECTION CHARGES AND FEES

13.32.700 Establishment of Charges and Fees.

The SBMWD is authorized to establish user charges and fees for the equitable distribution of all costs of financing, maintaining, and operating the POTW and developing the necessary reserve funds to ensure the future operation of the POTW. These charges and fees are in accordance with good engineering and fiscal practices and comply with all applicable governmental regulations regarding the operation of the POTW. These fees and charges relate exclusively to matters covered by this Chapter, and related Resolutions adopted by the Board, and are separate from all other fees and charges imposed by the SBMWD. The amount of these charges and fees and method of implementation shall be established by

resolution of the Board.

13.32.705 Recovery of Costs.

In the event a user fails to comply with any of the terms and conditions of this Chapter, an administrative order, compliance schedule or a permit issued hereunder, the City shall be entitled to reasonable attorney fees and costs which may be incurred in order to enforce any of the terms and conditions, with or without filing proceedings in court.

13.32.710 Connection Requirements.

A. The owner of any property used for human occupancy, employment, recreation, or other purposes situated within the SBMWD service area may be required to connect the property directly to the City sewerage system. The property owner may petition the Mayor and Common Council under SBMC 13.08.080 for reimbursement of the costs for the portion of the sewer line extension over three hundred (300) feet from the point of connection with the City sewerage system to the owners property line.

B. The City may waive or modify the sewerage system connection requirements where one or more of the following conditions exist:

1. The proposed single family residential development will be constructed on property larger than one-half acre, or the proposed commercial/industrial development will generate less than 200 gallons of domestic sewage per day (based on fifteen (15) gallons of sewage per day per employee); there is a natural obstruction that prevents the property from being connected to the City sewerage system.

2. The proposed residential development of four (4) units or less is an infill project, where structures exist on at least 75% of the block and none of the properties are connected to the City sewerage system.

3. The proposed development is an expansion, is less than 25% in area of the existing structure, and does not exceed one thousand (1000) square feet.

4. The proposed development will not generate any sewage.

C. A waiver to connect to the City sewerage system shall not be construed as approval for the installation of a septic tank. Permits for construction of septic tanks shall be subject to the City Building Department environmental review and approval process. All waivers shall be considered temporary. Connection to the City sewerage system will be required within one hundred twenty (120) days when the City sewerage system is constructed less than three hundred (300) feet from the owners property line. The sewer connection waiver requires the property owner to waive all future property rights protesting the formation of a sewer assessment district which encompasses the property. An administrative fee of five hundred dollars ($500) is required for all requests to waive the sewer connection

requirements.

D. A connection permit is required before any person is authorized to connect and discharge any wastewater to the City sewage system. The connection permit authorizes the person to physically connect the property to the City sewerage system. The connection permit is separate and distinct from the Industrial User discharge permit required which is required of Class I-V users.

E. Connection permits shall be issued by the City Building Department in accordance with applicable regulations which describe the permit conditions, required construction specifications, and the corresponding fees for the connection permit.

F. Each property shall be connected to the City sewerage system through a separate connection; unless the General Manager determines that a single connection will adequately protect the interests of the City. Individual connection permits are required for each separate connection.

G. The property owner is required to seal all sewer connections upon abandonment of the property to prevent wastewater flow to the City sewerage system.

13.32.715 Construction of Public Sewer Extension.

A. Any extension of the public sewer system by a user shall be approved by the City and constructed in accordance with all applicable Ordinances, regulations and Building codes. The costs of any sewer extension shall be the responsibility of the user requesting the extension and the users benefiting from the sewer extension.

B. The City shall enter into an agreement with any user completing an extension of the public sewer system for the repayment of all costs of the extension not owned or controlled by the user. The agreement shall be made pursuant to the requirements of the City and shall be approved by the Mayor and Common Council.

13.32.720 Sewer Service Charges.

A. All single family residential dwelling units shall be charged a fixed monthly fee for each individual dwelling unit. The residential sewer charge shall be established by resolution of the Board. The sewer fees shall be sufficient to cover the share of sewerage costs attributed to the residential class of users. The costs shall include all costs associated with financing, maintaining, and operating the sewerage system and developing the necessary reserve funds to ensure future development and operation of the system.

B. Multi-family residential units, commercial users, and other designated users shall be charged on the basis of total water consumption during a comparable water billing cycle. Commercial users shall be placed in the

appropriate sewer class based on the primary operations conducted for proper billing. The rate for each class of users shall be established by resolution of the Board. The sewer fees shall be sufficient to cover the share of sewerage costs attributed to this class of users. The costs shall include all costs associated with financing, maintaining, and operating the sewerage system and developing the necessary reserve funds to ensure future development and operation of the system.

C. All users that discharge wastewater to the POTW that contains an average of more than 300 mg/L of BOD or TSS or any users that discharge large volumes of wastewater, as determined by the Director, shall be designated "industrial rate users" and shall pay monthly sewer service fees based on the industrial rate established by resolution of the Board. Unless otherwise approved by the Director, all Industrial Rate monitoring shall consist of individual twenty-four (24) hour composite samples collected over three consecutive production days during the first month of the quarterly monitoring cycle, or as otherwise approved by the Director. The sample analysis are averaged together to determine the BOD and TSS for each billing cycle. Monthly flow discharge rates are used to calculate the amount of BOD and TSS discharged to the POTW each month. All self monitoring completed for Industrial Rate billing must be approved by the Director and will be averaged with the data collected from SBMWD monitoring for the months remaining in the quarterly monitoring cycle. The industrial sewer rates shall be based upon total volume of wastewater discharged and the SBMWD costs for providing services and treatment for the pounds of BOD, and TSS discharged.

13.32.725 Permit Charges and Fees.

All users shall be required to pay a permit fee based on the designated class of permit issued to the user. The permit fee shall include charges for the issuance of the user's permit and the costs for routine inspections and monitoring as established by resolution of the Board for the specific class of user.

13.32.730 Monitoring and Inspection Charges and Fees.

All users shall be charged additional monitoring and/or inspection fees, as established by resolution of the Board, for all supplemental activities completed by the SBMWD which are necessary to verify compliance with previously issued violations of Chapter 13.32, user's permit, applicable discharge limits, or any other related proceedings completed by the SBMWD.

13.32.735 Payment of Charges and Fees.

A. The charges for any user shall be collected with the charges and rates for water service furnished to the user by the City or other public water purveying agency. The charges shall be included on the same bill prepared for charges for water service and shall be due and payable monthly at the same time that such charges for services are due and payable. The total amount due for the charges shall be paid as a unit.

B. In the event any user fails to pay any charge when the charge becomes due,

the City may, in addition to any other remedies it may have, shut off water service or any of the services and facilities referred to in this Chapter after giving the user a five-day notice thereof. Service shall not resume until all delinquent charges, together with any charges necessitated by resumption of such services have been paid in full.

C. In the event the City or any other public water purveying agency does not furnish water service to the user, then the charges for such user shall be due and payable monthly on the first day of each and every month or bimonthly as necessitated by other billing periods, and shall be paid by the occupant, owner or Person in charge of such user. It shall be the duty of the SBMWD to prepare and send (or have another billing agency prepare and/or send) separate monthly bills for all charges for such user.

D. It shall be the duty of the SBMWD to collect all charges provided herein.

E. All funds and monies received from the collection of sewer service charges as herein established shall be deposited with the City Treasurer for deposit in the sewer fund.

F. The charges established by and pursuant to this Chapter shall not be imposed where a building, structure, trailer or park space or other occupancy specified by Resolution of the Board is being newly constructed or placed on vacant property and served by SBMWD water until such time as the building, structure or park space is first occupied. Thereafter, charges shall be imposed on a regular basis in accordance with the terms and conditions of this Chapter and resolutions or ordinances, as appropriate, adopted or enacted pursuant thereto and shall be placed on the billing for water following the date of initial occupancy.

G. The owner of any rental property shall promptly advise the SBMWD of the date of the first occupancy of the premises.

13.32.740 Sewer Use Deposit Requirements.

A. COMPLIANCE DEPOSIT: The SBMWD may require a user that has been subject to enforcement and/or collection proceedings to submit a compliance deposit to the SBMWD in an amount determined necessary by the Director to guarantee payment of all future charges, fees, penalties, costs and expenses that may be incurred, before continued sewer service is provided by the SBMWD.

B. DELINQUENT ACCOUNTS: The SBMWD may elect to amend the permit of any user who fails to make payment in full of all charges and fees assessed by the SBMWD or otherwise incurred by the user.

C. BANKRUPTCY: Every user filing any legal action in any court of competent jurisdiction, including the United States Bankruptcy Court, for purposes of discharging its financial debts or obligations or seeking court ordered protection from its creditors, shall, within ten days of filing such action, apply for and obtain the issuance of an amendment to its permit.

D. SECURITY DEPOSIT: The SBMWD may require a user who has been suspended or revoked sewer service to submit a security deposit to the SBMWD in an amount equal to the average total fees and charges for two (2) calendar quarters during the preceding year. The deposit shall be used to guarantee payment of all future fees and charges incurred for sewer service provided by the SBMWD.

E. SECURITY DEPOSIT RETURN: The SBMWD will either return the security deposit or credit the account of a user provided the user remits all required payments in full over a continuous two year period.

VIII. ORDINANCE ADOPTION

13.32.800 Effective Date – Annexations.

Any discharges from Premises in areas not presently being served which are annexed to the City subsequent to the enactment of this Chapter shall be considered new discharges. Wherever in this Ordinance time limits are established or periods of compliance or extensions thereof are specified, the commencement date for computing such periods of time limits for areas annexed to the City of San Bernardino subsequent to December 15, 1977 shall be the official annexation date. This Section shall have no application to firms or industries established in annexed areas subsequent to the annexation date.

13.32.805 Effective Date of Ordinance.

This Ordinance shall become effective in the City of San Bernardino and portions of San Bernardino County served by the POTW thirty days after adoption.

13.32.810 Ordinance Conflicts.

All ordinances or portions of ordinances in conflict herewith are hereby repealed.
(Ord. MC-1216, 2-21-06; Ord. MC-1012, 1-12-98; Ord. MC-1010, 11-17-97; Ord. MC-853, 11-2-92; Ord. MC-835, 6-1-92; Ord. MC-571, 12-22-86; Ord. MC-460, 5-13-85; Ord. MC-273, 5-23-83)

Chapter 13.36
UNDERGROUND UTILITIES[2]

Sections:

13.36.010	**Definitions.**
13.36.020	**Public Hearing by Council.**
13.36.030	**Council may designate underground utility districts by resolution.**
13.36.040	**Unlawful acts.**

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[2]For statutory provisions on conversion of utilities' facilities to underground locations, see Str. and Hwys. Code §5896.1 et seq. and Gov. Code §38793; for provisions on telegraph and telephone poles, see Ch. 12.12 of this Code.

Chapter 13.08
CONNECTION WITH PUBLIC SEWER[1]

Sections:

13.08.010	**Definitions.**
13.08.020	**Permit-Required.**
13.08.030	**Written application required.**
13.08.040	**Inspection fee.**
13.08.050	**Fees accompanying application.**
13.08.055	**Exemption of fees.**
13.08.060	**Connection fees to apply pro rata when.**
13.08.070	**Fees deemed debt to City.**
13.08.080	**Reimbursement to owner for expenses.**
13.08.090	**Compliance with City Engineer's Specifications.**
13.08.100	**Inspections.**
13.08.105	**Capping Sewer Laterals.**
13.08.110	**Violation - Penalty.**

13.08.010 Definitions.

For the purpose of this Chapter, the following terms shall be deemed and construed to have the meanings respectively ascribed to them in this section unless from the particular context it clearly appears that some other meaning is intended:

A. "House sewer" means that portion of the plumbing system used to collect sewage waste from any plumbing fixture or drain for the proper discharging of such sewage into the sewer lateral.

B. "Person" means and includes persons, public entities or public agencies, firms, corporations, associations, syndicates, joint ventures, joint stock companies, partnerships, and any other form of business organization.

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[1]For statutory provisions on sewers, see Health and Saf. Code §5400 et seq.; for provisions authorizing cities to construct sewers, see Gov. Code §38900.

C. "Sewer lateral" means the piping or conduit connecting the sewer main and the house sewer.

D. "Sewer main" means the system of piping or conduit installed in or under any public street, alley, place or easement for the purpose of collecting sewage.

(Ord. 3407 (part), 1974; Ord. 2158 §1, 1957.)

13.08.020 Permit - Required.

It is unlawful for any person to connect any property with any public sewer without filing an application for and obtaining a connection permit from the Street Superintendent, and, concurrently with the application for the permit, pay to the Street Superintendent the required inspection and connection fees. (Ord. 3835 §2, 1979; Ord. 2158 §2, 1957.)

13.08.030 Written application required.

Any person desiring a permit under this Chapter shall present a written application to the Street Superintendent setting forth the following:

A. The name and address of the applicant;

B. The tract number if the permit is for a subdivision approved pursuant to the Subdivision Map Act;

C. A drawing showing the location where the connection is to be made;

D. The number of the street cutting permit obtained in accordance with Ordinance 1879 (Chapter 12.04).

(Ord. 3835 §3, 1979; Ord. 2158 §3, 1957.)

13.08.040 Inspection fee.

Each application for a permit shall be accompanied by an inspection fee which shall be established by resolution of the City. (Ord 3835 §4 (part), 1979; Ord. 3744 §1, 1978; Ord. 2158 §4(a), 1957.)

13.08.050 Fees accompanying application.

Each application for a permit to connect any property with a public sewer, in addition to all other fees, shall be accompanied by all of the following fees which apply:

A. Connection fee designated for off-site trunk lines and collection facilities required for the disposal of sanitary sewage, which fee shall be deposited in the sewer line construction fund of the City, in an amount established by resolution of the City.

B. Connection fee designated for construction and improvement of wastewater treatment plant, to provide additional capacity to meet increased demand, which fee shall be transmitted to the Water Department, in an amount established by resolution of the City.

C. Connection fee designated to recover extra administrative costs relating to processing an application for property located outside the incorporated limits of the City and served by the City sewer system which fee shall be deposited in the general fund of the City, in an amount established by resolution of the City.

D. Connection fee designated for reimbursement of funds advanced by the sewer line construction fund or by owners for sewer line extension pursuant to Section 13.08.080. All properties subject to this fee shall pay a pro rata share of the costs of the sewer extension line plus seven percent (7%) interest on such pro rata share compounded annually from date of advancement of any funds by the City. The costs shall be as set forth in the audited reports filed by the owner under San Bernardino Municipal Code Section 13.08.080. The City Engineer is hereby authorized to collect an administrative charge for costs of administering any agreement entered into pursuant to Section 13.08.080. Such charge shall be in an amount equal to seven percent (7%) of the costs to be reimbursed. Such charge may be amended by resolution of the Mayor and Common Council.

The pro rata share shall be based on the frontage of the lot, parcel or tract for which this connection fee is collected. The City Engineer shall make the determination as to the frontage of property benefited by connection to the sewer line extension. In no case shall the charge be less than that for sixty feet of frontage.

(Ord MC-6I4, 12-7-87; Ord. MC-406, 9-10-84; Ord. MC-4, 1980; Ord. 3835 §4 (part), 1979; Ord. 3744 §2, 1978; Ord. 3208, 1971; Ord. 2158 §4(b), 1957.)

13.08.055 Exemption of fees.

A. The fees prescribed in Section 13.08.050 shall not be charged for any dwelling being relocated from one existing sewer line to another existing sewer line within the City as a result of moving any such dwelling from an area designated as a disaster area by resolution of the Mayor and Common Council.

B. The fees prescribed in Section 13.08.050 shall not be charged for the reconstruction of any dwelling demolished at the election of the owner or as a public nuisance or destroyed by flood, fire, other than fire intentionally set by the applicant, or other disaster. This exemption shall apply only if the applicant provides proof satisfactory to the Superintendent of Building and Safety that such connection fees were collected by the City at the time of construction of the dwelling to be replaced. If the reconstructed dwelling includes a greater number of bedrooms than the destroyed dwelling, the fees imposed in Section 13.08.050 shall be charged only as to the number of additional bedrooms in the reconstructed dwelling as set forth by resolution.

C. The fees prescribed in Section 13.08.050 Subsection A shall not be charged for dwellings in areas designated by resolution of the Mayor and Common Council as blighted areas in which federal community development funds are used for installation of any portion of the municipal sewer system.

D. For the construction of new single-family homes, the fees imposed by Section 13.08.050 may be deferred at the request of the owner of the property until the release of utilities is issued or eighteen (18) months from the issuance of the Building Permit, whichever is less. The owner of the property must personally guarantee payment of the fees, sign documents authorizing the City to place a lien on the property in the amount of the fees, agree to place the payment of the fees in any escrow for the sale of the property, authorize the City to demand payment in any such escrow, and pay an administrative fee set by resolution of the Mayor and Common Council. The amount of the fees due shall be the amount in effect at the time of collection of the fees. In no event shall utilities be released until the fees are paid, except that electrical service may be released at the discretion of the building official where necessary for security or maintenance purposes.

(Ord. MC-1045, 4-19-99; Ord. MC-1044, 4-5-99; Ord. MC-1011, 12-15-97; Ord. MC-961, 3-18-96; Ord. MC-332, 1-9-84; Ord. MC-291, 7-18-83; Ord. MC-173, 6-21-82; Ord. MC-156, 4-19-82.)

13.08.060 Connection fees to apply pro rata when.

The connection fees imposed in Sections 13.08.040 and 13.08.050 shall also apply pro rata to any alteration or addition resulting in an additional dwelling unit in a hotel or motel, but shall not apply to alterations or additions to single-family residences. The connection fees imposed by Sections 13.08.040 and 13.08.050 shall also apply pro rata to any alteration or addition to any commercial, institutional or industrial development requiring a new building permit for additional area, whether or not there are sewer facilities in the addition or enlargement. (Ord. 3835 §4 (part), 1979; Ord. 2476, 1963; Ord. 2158 §4(c), 1957.)

13.08.070 Fees deemed debt to City.

The amount of any sewer connection fee shall be deemed a debt owing to the City, and any person who connects to a street sewer without having paid the connection fee in full as provided in Sections 13.08.040 through 13.08.080, or any portion thereof, shall be liable in an action brought in the name of the City in any court of competent jurisdiction for the amount of such fee, attorney fees and court costs. The conviction and punishment of any person for connecting to a street sewer without obtaining a permit to do so shall not relieve such person from paying the connection fee due and unpaid at the time of such conviction, nor shall the payment of any connection fee prevent a criminal prosecution for the violation of any of the provisions of this Chapter. All remedies prescribed under this Chapter shall be cumulative, and the use of any one or more remedies shall not bar the use of any other remedy for the purpose of enforcing the provisions of this Chapter. (Ord. 3835 §4 (part), 1979; Ord. 3407 (part), 1974; Ord. 2158 §4(d), 1957.)

13.08.080 Reimbursement to owner for expenses.

A. The owner of property serviced by a sewer main extended by such owner three hundred feet or more beyond the existing sewer facilities as measured from the point of connection with such existing facilities to the point where the extension enters the lot, parcel or tract to be served by such line, may file with the City Engineer, two copies of an audited report of his costs incurred for the sewer line extension and manhole construction (except laterals) as an application for the reimbursement of such costs. Said reports shall be filed within ninety days after written acceptance of such extension by the City of San Bernardino. The City Engineer shall review such documentation and shall within forty-five days after acceptance of same, make a recommendation to the City Administrator that:

1. All or a portion of such costs be accepted or denied;

2. That City enter into a payback agreement with the owner or developer. Said agreement shall provide that persons making connection to the line be assessed a fee on a pro rata basis as determined by the frontage of the lot, parcel or tract serviced by such sewer line extension and, that all fees so collected shall be paid over to the original builder of the line. Any such agreement shall have a maximum term of ten years and shall not pay interest; or

3. Recommend that the owner receive immediate payment from the sewer construction fund of the allowed costs of such construction.

B. In making his recommendation the City Engineer shall consider the following criteria:

1. That the extension represents a logical and reasonable extension of sewer line;

2. Properties along the extension have a reasonable probability of development within the ensuing ten years;

3. There are sufficient unencumbered monies in the sewer line construction fund to finance the line;

4. The extension does not conflict with or delay the five-year sewer line construction plan;

5. The extension is in compliance with the General Plan; and

6. Applicant is not receiving any other form of government financing including but not limited to inducement, reimbursement, or fee waiver for such development. Based on the above, the City Administrator shall thereafter make his or her recommendation to the Mayor and Common Council.

C. No reimbursement shall be made hereunder unless and until the City Administrator determines that the audited report and verified claim have been filed within the allotted time periods and are otherwise acceptable to the City.

(Ord. MC-614, 12-7-87; Ord. 3835 §4 (part), 1979; Ord. 2158 §4(e), 1957.)

13.08.090 Compliance with City Engineer's specifications.

All installations of sewer laterals shall comply with the provisions and requirements of the current standard specifications of the City on file in the office of the City Engineer, as related to the construction of sanitary sewers. (Ord. 2158 §5, 1957.)

13.08.100 Inspections.

Every person doing work under this Chapter shall cause all work to be inspected by the Street Superintendent's office before pipe is covered by backfill. The Street Superintendent's office shall be notified twenty-four hours in advance of the time the inspection is required. Any work completed without such inspection shall not be accepted. (Ord. 2158 §6, 1957.)

13.08.105 Capping sewer laterals.

A. The Director of Public Services is hereby authorized to issue sewer capping permits upon the payment of a fee set by resolution of the Mayor and Council. When a sewer capping permit has been issued, the Department of Public Services will schedule for capping and will cap the sewer lateral The issuance of the permit gives the Department of Public Services the authority to enter onto the private property of the requesting party to perform the required work.

B. Prior to issuing a demolition permit or a house or building moving permit, the Development Services Department must be provided a sewer capping receipt number.

(Ord. MC-1027, 9-8-98; Ord. MC-729, 5-21-90.)

13.08.110 Violation - Penalty.

Any person, firm or corporation violating any provision of this Chapter is guilty of a misdemeanor, which upon conviction thereof is punishable in accordance with the provisions of Section 1.12.010 of this Code. (Ord. MC-460, 5-13-85; Ord. 2158 §7,1957.

CITY OF SAN BERNARDINOS
SEWER SYSTEM
04/09

CITY OF San Bernardino

CGIS City Geographic Information System

Printed 03/09

1" = 350'

Sewer Grid

00 01 02 03 04 10 11 12 13 14 15 16 17 20 21 22 23 24 25 26 27 28 31 32 33 34 35 36 37 38 39 42 43 44 45 46 47 48 49 52 53 54 55 56 57 58 59 62 63 64 65 66 67 68 69 6A 6B 72 73 74 75 76 77 78 79 7A 7B 85 86 87 88 89 96 97 98

215 18 30 259 210 330 10

UNIVERSITY PKWY
SIERRA WY
E ST
WATERMAN AV
VALENCIA AV
TIPPECANOE AV
DEL ROSA AV
STERLING AV
ARDEN AV
VICTORIA AV
PALM AV
40TH ST
30TH ST
HIGHLAND AV
16TH ST
BASE LINE ST
9TH ST
Foothill Blvd
RIALTO AV
MILL ST
5TH ST
CENTRAL AV
SAN BERNARDINO AV
REDLANDS BLVD
PEPPER AV
MERIDIAN AV
RANCHO AV
CALIFORNIA ST
MT VERNON AV
AUTO PLAZA DR

Sewer Pipe Length/Grid

2/25/2008 11:15:45 AM

Grid No:11

Pipe Diameter (in inches): 0

Shape_Length Sum
679.085835

Pipe Diameter (in inches): 8

Shape_Length Sum
9186.333689

Pipe Diameter (in inches): 10

Shape_Length Sum
1319.249384

Pipe Diameter (in inches): 12

Shape_Length Sum
292.000171

Pipe Diameter (in inches): 15

Shape_Length Sum
8656.06554

Shape_Length Sum
20132.734618

Grid No:12

Pipe Diameter (in inches): 15

Shape_Length Sum
0

Pipe Diameter (in inches): 0

Shape_Length Sum
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Pipe Diameter (in inches): 8

Shape_Length Sum
60362.5801

Pipe Diameter (in inches): 10

Shape_Length Sum
460.188542

Pipe Diameter (in inches): 12

Shape_Length Sum
2622.149729

Pipe Diameter (in inches): 15

Shape_Length Sum
2431.31472

Shape_Length Sum
71275.811602

Grid No:13

Pipe Diameter (in inches): 8

Shape_Length Sum
16827.484996

Pipe Diameter (in inches): 10

Shape_Length Sum
392.462837

Pipe Diameter (in inches): 12

Shape_Length Sum
1415.350028

Shape_Length Sum
18635.297861

Grid No:2

Pipe Diameter (in inches): 8

Shape_Length Sum
1461.767078

Shape_Length Sum
1461.767078

Grid No:21

Pipe Diameter (in inches): 8

Shape_Length Sum
618.12992

Pipe Diameter (in inches): 15

Shape_Length Sum
995.698356

Pipe Diameter (in inches):	18
Shape_Length Sum	
1552.073238	

Shape_Length Sum
3165.901514

Grid No:22

Pipe Diameter (in inches):	0
Shape_Length Sum	
720.492004	

Pipe Diameter (in inches):	8
Shape_Length Sum	
13351.370889	

Pipe Diameter (in inches):	10
Shape_Length Sum	
2698.324772	

Pipe Diameter (in inches):	12
Shape_Length Sum	
4208.487821	

Pipe Diameter (in inches):	15
Shape_Length Sum	
2707.786918	

Pipe Diameter (in inches):	18
Shape_Length Sum	
9124.861925	

Pipe Diameter (in inches):	21
Shape_Length Sum	
723.501871	

Shape_Length Sum
33534.826199

Grid No:23

Pipe Diameter (in inches):	0

Shape_Length Sum
208.605675

Pipe Diameter (in inches):	4

Shape_Length Sum
1190.461328

Pipe Diameter (in inches):	6

Shape_Length Sum
1794.876519

Pipe Diameter (in inches):	8

Shape_Length Sum
38266.195716

Pipe Diameter (in inches):	18

Shape_Length Sum
3856.222843

Pipe Diameter (in inches):	21

Shape_Length Sum
1401.565083

Pipe Diameter (in inches):	24

Shape_Length Sum
1406.611035

Shape_Length Sum
48124.538199

Grid No:24

Pipe Diameter (in inches):	6

Shape_Length Sum
2712.259502

Pipe Diameter (in inches):	8

Shape_Length Sum
23549.16517

Pipe Diameter (in inches):	10

Shape_Length Sum
3039.921708

Pipe Diameter (in inches): 12

Shape_Length Sum
2497.351271

Pipe Diameter (in inches): 15

Shape_Length Sum
1512.387954

Shape_Length Sum
33311.085606

Grid No:25

Pipe Diameter (in inches): 0

Shape_Length Sum
696.944402

Pipe Diameter (in inches): 6

Shape_Length Sum
833.937119

Pipe Diameter (in inches): 8

Shape_Length Sum
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Pipe Diameter (in inches): 10

Shape_Length Sum
1342.305409

Pipe Diameter (in inches): 15

Shape_Length Sum
2306.380216

Pipe Diameter (in inches): 18

Shape_Length Sum
1386.599176

Shape_Length Sum
40906.397286

Grid No:26

Pipe Diameter (in inches): 0

Shape_Length Sum
2054.978827

Pipe Diameter (in inches): 6

Shape_Length Sum
392

Pipe Diameter (in inches): 7

Shape_Length Sum
264.01584

Pipe Diameter (in inches): 8

Shape_Length Sum
58561.440395

Shape_Length Sum
61272.435063

Grid No:27

Pipe Diameter (in inches): 8

Shape_Length Sum
14024.601927

Shape_Length Sum
14024.601927

Grid No:28

Pipe Diameter (in inches): 8

Shape_Length Sum
2454.836849

Shape_Length Sum
2454.836849

Grid No:32

Pipe Diameter (in inches): 0

Shape_Length Sum
570.723144

Pipe Diameter (in inches): 8

Shape_Length Sum
15691.783762

Pipe Diameter (in inches): 15

Shape_Length Sum

1194.82628

Pipe Diameter (in inches): 18

Shape_Length Sum

3311.648517

Shape_Length Sum

20768.981703

Grid No:33

Pipe Diameter (in inches): 0

Shape_Length Sum

617.661243

Pipe Diameter (in inches): 8

Shape_Length Sum

16518.864841

Pipe Diameter (in inches): 15

Shape_Length Sum

6926.986471

Pipe Diameter (in inches): 18

Shape_Length Sum

5261.402977

Pipe Diameter (in inches): 21

Shape_Length Sum

669.266016

Pipe Diameter (in inches): 27

Shape_Length Sum

595.047963

Pipe Diameter (in inches): 30

Shape_Length Sum

335.811044

Shape_Length Sum

30925.040555

Grid No:34

Pipe Diameter (in inches): 0

Shape_Length Sum
68.92174

Pipe Diameter (in inches): 8

Shape_Length Sum
18321.791094

Pipe Diameter (in inches): 10

Shape_Length Sum
1813.089139

Pipe Diameter (in inches): 21

Shape_Length Sum
3000.685874

Pipe Diameter (in inches): 27

Shape_Length Sum
2153.59361

Shape_Length Sum
25358.081457

Grid No:35

Pipe Diameter (in inches): 0

Shape_Length Sum
579.16267

Pipe Diameter (in inches): 6

Shape_Length Sum
108.441964

Pipe Diameter (in inches): 8

Shape_Length Sum
25623.902701

Pipe Diameter (in inches): 10

Shape_Length Sum
2671.259585

Pipe Diameter (in inches): 12

Shape_Length Sum
2019.010892

Pipe Diameter (in inches):	15

Shape_Length Sum
1331.290352

Pipe Diameter (in inches):	24

Shape_Length Sum
2926.344061

Pipe Diameter (in inches):	27

Shape_Length Sum
1253.515802

Pipe Diameter (in inches):	30

Shape_Length Sum
1070.287152

Shape_Length Sum
37583.215179

Grid No:36

Pipe Diameter (in inches):	0

Shape_Length Sum
413.948299

Pipe Diameter (in inches):	6

Shape_Length Sum
2566.691292

Pipe Diameter (in inches):	8

Shape_Length Sum
42803.63919

Pipe Diameter (in inches):	10

Shape_Length Sum
2365.152497

Pipe Diameter (in inches):	12

Shape_Length Sum

3118.445012

Pipe Diameter (in inches): 27

Shape_Length Sum

4429.891973

Pipe Diameter (in inches): 30

Shape_Length Sum

2118.554401

Pipe Diameter (in inches): 33

Shape_Length Sum

1408.480525

Shape_Length Sum

59224.803189

Grid No:37

Pipe Diameter (in inches): 0

Shape_Length Sum

285.214975

Pipe Diameter (in inches): 8

Shape_Length Sum

56314.13504

Pipe Diameter (in inches): 10

Shape_Length Sum

2559.95997

Shape_Length Sum

59159.309986

Grid No:38

Pipe Diameter (in inches): 0

Shape_Length Sum

1729.571785

Pipe Diameter (in inches): 8

Shape_Length Sum

38334.036838

Shape_Length Sum

40063.608622

Grid No:39

Pipe Diameter (in inches): 0

Shape_Length Sum

36.492532

Pipe Diameter (in inches): 8

Shape_Length Sum

19300.659188

Shape_Length Sum

19337.15172

Grid No:43

Pipe Diameter (in inches): 8

Shape_Length Sum

7211.086261

Pipe Diameter (in inches): 15

Shape_Length Sum

3573.801426

Pipe Diameter (in inches): 21

Shape_Length Sum

7962.698404

Pipe Diameter (in inches): 24

Shape_Length Sum

2625.463367

Shape_Length Sum

21373.049457

Grid No:44

Pipe Diameter (in inches): 0

Shape_Length Sum

392.257047

Pipe Diameter (in inches): 4

Shape_Length Sum

186.469083

Pipe Diameter (in inches): 6

Shape_Length Sum

872.435718

Pipe Diameter (in inches): 8

Shape_Length Sum

41247.750722

Pipe Diameter (in inches): 15

Shape_Length Sum

6524.828116

Shape_Length Sum

49223.740686

Grid No:45

Pipe Diameter (in inches): 0

Shape_Length Sum

1270.368152

Pipe Diameter (in inches): 6

Shape_Length Sum

348.722899

Pipe Diameter (in inches): 8

Shape_Length Sum

78343.976403

Pipe Diameter (in inches): 12

Shape_Length Sum

2041.124392

Pipe Diameter (in inches): 15

Shape_Length Sum

3729.916355

Pipe Diameter (in inches): 18

Shape_Length Sum

2056.681252

Pipe Diameter (in inches): 21

Shape_Length Sum
653.224465

Shape_Length Sum
88444.013919

Grid No:46

Pipe Diameter (in inches):	0

Shape_Length Sum
2026.606941

Pipe Diameter (in inches):	6

Shape_Length Sum
242.930587

Pipe Diameter (in inches):	8

Shape_Length Sum
87132.182122

Pipe Diameter (in inches):	10

Shape_Length Sum
5081.740081

Pipe Diameter (in inches):	12

Shape_Length Sum
644.239356

Pipe Diameter (in inches):	15

Shape_Length Sum
270.326186

Pipe Diameter (in inches):	18

Shape_Length Sum
2643.276692

Pipe Diameter (in inches):	21

Shape_Length Sum
4678.5638

Pipe Diameter (in inches):	27

Shape_Length Sum

6152.787887

Shape_Length Sum

108872.653652

Grid No:47

Pipe Diameter (in inches): 4

Shape_Length Sum

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Pipe Diameter (in inches): 8

Shape_Length Sum

58959.196349

Pipe Diameter (in inches): 10

Shape_Length Sum

6385.053226

Pipe Diameter (in inches): 21

Shape_Length Sum

3857.04648

Shape_Length Sum

69678.725416

Grid No:48

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Shape_Length Sum

396.347887

Pipe Diameter (in inches): 6

Shape_Length Sum

22.500016

Pipe Diameter (in inches): 8

Shape_Length Sum

41290.376575

Pipe Diameter (in inches): 10

Shape_Length Sum

1965.057999

Pipe Diameter (in inches): 12

Shape_Length Sum
3031.268941

Pipe Diameter (in inches): 15

Shape_Length Sum
366.618578

Shape_Length Sum
47072.169996

Grid No:49

Pipe Diameter (in inches): 0

Shape_Length Sum
393.137213

Pipe Diameter (in inches): 8

Shape_Length Sum
2971.698771

Pipe Diameter (in inches): 10

Shape_Length Sum
300

Pipe Diameter (in inches): 12

Shape_Length Sum
504.007358

Pipe Diameter (in inches): 15

Shape_Length Sum
4108.731712

Shape_Length Sum
8277.575054

Grid No:53

Pipe Diameter (in inches): 0

Shape_Length Sum
128.715803

Pipe Diameter (in inches): 8

Shape_Length Sum

27543.358058

Pipe Diameter (in inches): 24

Shape_Length Sum

3236.779929

Shape_Length Sum

30908.85379

Grid No:54

Pipe Diameter (in inches): 0

Shape_Length Sum

1691.065166

Pipe Diameter (in inches): 8

Shape_Length Sum

75798.921656

Pipe Diameter (in inches): 12

Shape_Length Sum

2054.709506

Pipe Diameter (in inches): 24

Shape_Length Sum

3266.182014

Pipe Diameter (in inches): 27

Shape_Length Sum

1976.060278

Shape_Length Sum

84786.93862

Grid No:55

Pipe Diameter (in inches): 0

Shape_Length Sum

2083.235693

Pipe Diameter (in inches): 8

Shape_Length Sum

71331.609927

Pipe Diameter (in inches):	10
Shape_Length Sum	
4977.218384	

Pipe Diameter (in inches):	12
Shape_Length Sum	
7850.064529	

Pipe Diameter (in inches):	14
Shape_Length Sum	
1331.636752	

Pipe Diameter (in inches):	15
Shape_Length Sum	
2393.405424	

Shape_Length Sum
89967.170709

Grid No:56

Pipe Diameter (in inches):	0
Shape_Length Sum	
2359.681589	

Pipe Diameter (in inches):	6
Shape_Length Sum	
3670.928032	

Pipe Diameter (in inches):	8
Shape_Length Sum	
89374.138308	

Pipe Diameter (in inches):	10
Shape_Length Sum	
1205.279985	

Pipe Diameter (in inches):	12
Shape_Length Sum	
661.816354	

Pipe Diameter (in inches):	15

Shape_Length Sum
728.671991

Pipe Diameter (in inches):	18

Shape_Length Sum
2845.822725

Pipe Diameter (in inches):	21

Shape_Length Sum
2160.873932

Pipe Diameter (in inches):	24

Shape_Length Sum
756.226007

Pipe Diameter (in inches):	27

Shape_Length Sum
9528.005103

Shape_Length Sum
113291.444026

Grid No:57

Pipe Diameter (in inches):	0

Shape_Length Sum
763.225965

Pipe Diameter (in inches):	8

Shape_Length Sum
63532.427698

Pipe Diameter (in inches):	10

Shape_Length Sum
3399.484516

Pipe Diameter (in inches):	12

Shape_Length Sum
6363.34317

Pipe Diameter (in inches):	15

Shape_Length Sum
5795.454788

Pipe Diameter (in inches):	21

Shape_Length Sum
832.682734

Shape_Length Sum
80686.618871

Grid No:58

Pipe Diameter (in inches):	0

Shape_Length Sum
12.585275

Pipe Diameter (in inches):	8

Shape_Length Sum
14564.697197

Pipe Diameter (in inches):	10

Shape_Length Sum
4443.382806

Pipe Diameter (in inches):	12

Shape_Length Sum
3510.638126

Pipe Diameter (in inches):	15

Shape_Length Sum
1890.027097

Pipe Diameter (in inches):	18

Shape_Length Sum
1149.915004

Pipe Diameter (in inches):	21

Shape_Length Sum
3336.277737

Pipe Diameter (in inches):	24

Shape_Length Sum

872.535301

Shape_Length Sum

29780.058542

Grid No:59

Pipe Diameter (in inches): 0

Shape_Length Sum

279.846408

Pipe Diameter (in inches): 15

Shape_Length Sum

2792.228218

Pipe Diameter (in inches): 18

Shape_Length Sum

662.842159

Shape_Length Sum

3734.916785

Grid No:62

Pipe Diameter (in inches): 0

Shape_Length Sum

232.460109

Pipe Diameter (in inches): 8

Shape_Length Sum

29903.619241

Pipe Diameter (in inches): 10

Shape_Length Sum

662.194561

Shape_Length Sum

30798.273911

Grid No:63

Pipe Diameter (in inches): 8

Shape_Length Sum

32624.652269

Pipe Diameter (in inches): 10

Shape_Length Sum

6528.331673

Pipe Diameter (in inches): 12

Shape_Length Sum

946.709761

Shape_Length Sum

40099.693703

Grid No:64

Pipe Diameter (in inches): 0

Shape_Length Sum

874.194793

Pipe Diameter (in inches): 6

Shape_Length Sum

409.858223

Pipe Diameter (in inches): 8

Shape_Length Sum

53854.753575

Pipe Diameter (in inches): 10

Shape_Length Sum

1700.067578

Pipe Diameter (in inches): 27

Shape_Length Sum

3286.033696

Pipe Diameter (in inches): 30

Shape_Length Sum

1138.506846

Shape_Length Sum

61263.41471

Grid No:65

Pipe Diameter (in inches): 0

Shape_Length Sum

1467.426578

Pipe Diameter (in inches):	6
Shape_Length Sum	
384.999936	

Pipe Diameter (in inches):	8
Shape_Length Sum	
58857.516073	

Pipe Diameter (in inches):	10
Shape_Length Sum	
3689.095005	

Pipe Diameter (in inches):	12
Shape_Length Sum	
7537.722289	

Pipe Diameter (in inches):	15
Shape_Length Sum	
1751.567556	

Pipe Diameter (in inches):	18
Shape_Length Sum	
1695.395187	

Pipe Diameter (in inches):	21
Shape_Length Sum	
1530.809367	

Pipe Diameter (in inches):	24
Shape_Length Sum	
2065.113298	

Pipe Diameter (in inches):	27
Shape_Length Sum	
7416.01724	

Shape_Length Sum
86395.66253

Grid No:66

Pipe Diameter (in inches):	0

Shape_Length Sum

7328.742247

Pipe Diameter (in inches): 6

Shape_Length Sum

669.317934

Pipe Diameter (in inches): 8

Shape_Length Sum

80655.616583

Pipe Diameter (in inches): 10

Shape_Length Sum

2574.727284

Pipe Diameter (in inches): 12

Shape_Length Sum

5125.037789

Pipe Diameter (in inches): 14

Shape_Length Sum

682.241791

Pipe Diameter (in inches): 15

Shape_Length Sum

350.401838

Pipe Diameter (in inches): 18

Shape_Length Sum

1199.52156

Pipe Diameter (in inches): 21

Shape_Length Sum

2100.592676

Pipe Diameter (in inches): 24

Shape_Length Sum

2274.690643

Pipe Diameter (in inches): 27

Shape_Length Sum
2672.724116

Pipe Diameter (in inches):	30

Shape_Length Sum
6299.139315

Pipe Diameter (in inches):	33

Shape_Length Sum
810.784293

Pipe Diameter (in inches):	36

Shape_Length Sum
347.948759

Shape_Length Sum
113091.486829

Grid No:67

Pipe Diameter (in inches):	0

Shape_Length Sum
1484.811455

Pipe Diameter (in inches):	6

Shape_Length Sum
1346.57989

Pipe Diameter (in inches):	8

Shape_Length Sum
18400.630752

Pipe Diameter (in inches):	10

Shape_Length Sum
7512.038695

Pipe Diameter (in inches):	12

Shape_Length Sum
5720.754153

Pipe Diameter (in inches):	15

Shape_Length Sum
779.907075

Pipe Diameter (in inches):	21

Shape_Length Sum
1397.351121

Pipe Diameter (in inches):	27

Shape_Length Sum
400.110334

Pipe Diameter (in inches):	33

Shape_Length Sum
2355.951888

Pipe Diameter (in inches):	36

Shape_Length Sum
1501.066559

Pipe Diameter (in inches):	39

Shape_Length Sum
1998.525945

Pipe Diameter (in inches):	48

Shape_Length Sum
1278.429658

Shape_Length Sum
44176.157524

Grid No:68

Pipe Diameter (in inches):	0

Shape_Length Sum
755.933933

Pipe Diameter (in inches):	8

Shape_Length Sum
4081.339676

Pipe Diameter (in inches):	21

Shape_Length Sum

275.014558

Pipe Diameter (in inches): 24

Shape_Length Sum

1758.992132

Pipe Diameter (in inches): 27

Shape_Length Sum

3203.296978

Pipe Diameter (in inches): 30

Shape_Length Sum

1497.192755

Shape_Length Sum

11571.770032

Grid No:72

Pipe Diameter (in inches): 0

Shape_Length Sum

416.320379

Pipe Diameter (in inches): 8

Shape_Length Sum

50030.962912

Pipe Diameter (in inches): 10

Shape_Length Sum

2648.865896

Pipe Diameter (in inches): 12

Shape_Length Sum

607.777232

Shape_Length Sum

53703.926419

Grid No:73

Pipe Diameter (in inches): 0

Shape_Length Sum

245.152952

Pipe Diameter (in inches):	6
Shape_Length Sum	
3139.741288	

Pipe Diameter (in inches):	8
Shape_Length Sum	
33470.737907	

Pipe Diameter (in inches):	10
Shape_Length Sum	
6497.781707	

Pipe Diameter (in inches):	12
Shape_Length Sum	
4755.539363	

Pipe Diameter (in inches):	15
Shape_Length Sum	
313.419067	

Shape_Length Sum
48422.372284

Grid No:74

Pipe Diameter (in inches):	6
Shape_Length Sum	
2054.482108	

Pipe Diameter (in inches):	8
Shape_Length Sum	
5454.183516	

Pipe Diameter (in inches):	10
Shape_Length Sum	
722.586121	

Pipe Diameter (in inches):	12
Shape_Length Sum	
2159.014005	

Pipe Diameter (in inches):	15

Shape_Length Sum
4260.082208

Pipe Diameter (in inches):	18

Shape_Length Sum
1180.245099

Pipe Diameter (in inches):	20

Shape_Length Sum
59.340544

Pipe Diameter (in inches):	21

Shape_Length Sum
670.641995

Shape_Length Sum
16560.575596

Grid No:75

Pipe Diameter (in inches):	0

Shape_Length Sum
1329.515827

Pipe Diameter (in inches):	6

Shape_Length Sum
714.062883

Pipe Diameter (in inches):	8

Shape_Length Sum
65896.261991

Pipe Diameter (in inches):	10

Shape_Length Sum
288.54522

Pipe Diameter (in inches):	12

Shape_Length Sum
9914.886269

Pipe Diameter (in inches):	22

Shape_Length Sum

199.186115

Pipe Diameter (in inches): 24

Shape_Length Sum

4102.583108

Pipe Diameter (in inches): 27

Shape_Length Sum

1602.115608

Pipe Diameter (in inches): 36

Shape_Length Sum

2067.560729

Shape_Length Sum

86114.717751

Grid No:76

Pipe Diameter (in inches): 0

Shape_Length Sum

3722.21748

Pipe Diameter (in inches): 6

Shape_Length Sum

179.066353

Pipe Diameter (in inches): 8

Shape_Length Sum

35499.756683

Pipe Diameter (in inches): 10

Shape_Length Sum

2701.797877

Pipe Diameter (in inches): 12

Shape_Length Sum

8713.986359

Pipe Diameter (in inches): 14

Shape_Length Sum

3476.748755

Pipe Diameter (in inches): 15

Shape_Length Sum

1350.725197

Pipe Diameter (in inches): 16

Shape_Length Sum

2526.628713

Pipe Diameter (in inches): 18

Shape_Length Sum

2274.630359

Pipe Diameter (in inches): 21

Shape_Length Sum

2792.219879

Pipe Diameter (in inches): 24

Shape_Length Sum

3019.232764

Pipe Diameter (in inches): 27

Shape_Length Sum

766.474041

Pipe Diameter (in inches): 30

Shape_Length Sum

606.434915

Pipe Diameter (in inches): 33

Shape_Length Sum

1454.87085

Pipe Diameter (in inches): 36

Shape_Length Sum

4347.171905

Pipe Diameter (in inches): 42

Shape_Length Sum

2019.79941

Pipe Diameter (in inches): 45

Shape_Length Sum

466.186672

Pipe Diameter (in inches): 48

Shape_Length Sum

2053.045087

Pipe Diameter (in inches): 54

Shape_Length Sum

2292.564385

Shape_Length Sum

80263.557685

Grid No:77

Pipe Diameter (in inches): 0

Shape_Length Sum

2577.517288

Pipe Diameter (in inches): 4

Shape_Length Sum

245.262633

Pipe Diameter (in inches): 8

Shape_Length Sum

24385.239453

Pipe Diameter (in inches): 10

Shape_Length Sum

3365.444822

Pipe Diameter (in inches): 12

Shape_Length Sum

2841.778831

Pipe Diameter (in inches): 15

Shape_Length Sum
3202.189472

Pipe Diameter (in inches):	18

Shape_Length Sum
2849.360971

Pipe Diameter (in inches):	21

Shape_Length Sum
2118.402614

Pipe Diameter (in inches):	24

Shape_Length Sum
334.16087

Pipe Diameter (in inches):	36

Shape_Length Sum
971.721728

Pipe Diameter (in inches):	48

Shape_Length Sum
3436.053681

Pipe Diameter (in inches):	54

Shape_Length Sum
3374.192905

Shape_Length Sum
49701.325269

Grid No:78

Pipe Diameter (in inches):	8

Shape_Length Sum
5172.474535

Pipe Diameter (in inches):	10

Shape_Length Sum
967.243276

Pipe Diameter (in inches):	12

Shape_Length Sum
4555.22299

Pipe Diameter (in inches): 15

Shape_Length Sum
5213.128413

Pipe Diameter (in inches): 21

Shape_Length Sum
742.227009

Pipe Diameter (in inches): 36

Shape_Length Sum
4426.365278

Shape_Length Sum
21076.661502

Grid No:79

Pipe Diameter (in inches): 12

Shape_Length Sum
3355.534836

Pipe Diameter (in inches): 36

Shape_Length Sum
1110.011397

Shape_Length Sum
4465.546232

Grid No:85

Pipe Diameter (in inches): 8

Shape_Length Sum
12461.610318

Pipe Diameter (in inches): 10

Shape_Length Sum
1977.444794

Shape_Length Sum
14439.055113

Grid No:86

Pipe Diameter (in inches): 0

Shape_Length Sum
1506.590604

Pipe Diameter (in inches):	6

Shape_Length Sum
156.71285

Pipe Diameter (in inches):	8

Shape_Length Sum
13572.707305

Pipe Diameter (in inches):	10

Shape_Length Sum
4966.203264

Pipe Diameter (in inches):	12

Shape_Length Sum
6090.583014

Pipe Diameter (in inches):	15

Shape_Length Sum
3840.629196

Pipe Diameter (in inches):	20

Shape_Length Sum
876.107228

Pipe Diameter (in inches):	21

Shape_Length Sum
89.796375

Pipe Diameter (in inches):	30

Shape_Length Sum
2915.007005

Pipe Diameter (in inches):	54

Shape_Length Sum
3077.181083

Shape_Length Sum
37091.517922

Grid No:87

Pipe Diameter (in inches):	0
Shape_Length Sum	
4180.683196	

Pipe Diameter (in inches):	6
Shape_Length Sum	
453.236633	

Pipe Diameter (in inches):	8
Shape_Length Sum	
21267.310942	

Pipe Diameter (in inches):	12
Shape_Length Sum	
3718.841415	

Pipe Diameter (in inches):	15
Shape_Length Sum	
3314.745428	

Pipe Diameter (in inches):	21
Shape_Length Sum	
77.250432	

Pipe Diameter (in inches):	24
Shape_Length Sum	
3794.152486	

Pipe Diameter (in inches):	36
Shape_Length Sum	
3095.692862	

Pipe Diameter (in inches):	54
Shape_Length Sum	
4486.336569	

Shape_Length Sum
44388.249963

Grid No:88

Pipe Diameter (in inches):	0

Shape_Length Sum
675.128469

Pipe Diameter (in inches):	6

Shape_Length Sum
1417.445792

Pipe Diameter (in inches):	8

Shape_Length Sum
16500.52544

Pipe Diameter (in inches):	10

Shape_Length Sum
1858.615974

Pipe Diameter (in inches):	12

Shape_Length Sum
1938.166403

Pipe Diameter (in inches):	15

Shape_Length Sum
2599.917675

Pipe Diameter (in inches):	18

Shape_Length Sum
1096.761123

Pipe Diameter (in inches):	21

Shape_Length Sum
4028.143349

Pipe Diameter (in inches):	24

Shape_Length Sum
348.438523

Shape_Length Sum
30463.142749

Grid No:89

Pipe Diameter (in inches):	0

Shape_Length Sum
719.470149

Pipe Diameter (in inches):	6

Shape_Length Sum
420.00913

Pipe Diameter (in inches):	8

Shape_Length Sum
19913.578809

Pipe Diameter (in inches):	10

Shape_Length Sum
3185.995121

Pipe Diameter (in inches):	15

Shape_Length Sum
2306.437407

Pipe Diameter (in inches):	18

Shape_Length Sum
4261.324597

Shape_Length Sum
30806.815213

Grid No:96

Pipe Diameter (in inches):	0

Shape_Length Sum
1408.54242

Pipe Diameter (in inches):	6

Shape_Length Sum
6095.246408

Pipe Diameter (in inches):	8

Shape_Length Sum
5769.682012

Pipe Diameter (in inches):	10

Shape_Length Sum
552.225506

Pipe Diameter (in inches):	12

Shape_Length Sum
6122.201195

Pipe Diameter (in inches):	15

Shape_Length Sum
1257.153255

Pipe Diameter (in inches):	18

Shape_Length Sum
453.000011

Pipe Diameter (in inches):	21

Shape_Length Sum
1421.850402

Pipe Diameter (in inches):	24

Shape_Length Sum
339.721877

Pipe Diameter (in inches):	27

Shape_Length Sum
1962.288057

Shape_Length Sum
25381.911144

Grid No:97

Pipe Diameter (in inches):	0

Shape_Length Sum
960.568558

Pipe Diameter (in inches):	6

Shape_Length Sum
2797.083267

Pipe Diameter (in inches):	8

Shape_Length Sum

38579.50861

Pipe Diameter (in inches): 10

Shape_Length Sum

619.75726

Pipe Diameter (in inches): 18

Shape_Length Sum

573.168281

Pipe Diameter (in inches): 21

Shape_Length Sum

4051.492871

Pipe Diameter (in inches): 24

Shape_Length Sum

2397.581402

Shape_Length Sum

49979.160248

Grid No:98

Pipe Diameter (in inches): 0

Shape_Length Sum

1037.079766

Pipe Diameter (in inches): 8

Shape_Length Sum

5115.180399

Pipe Diameter (in inches): 18

Shape_Length Sum

337.734159

Shape_Length Sum

6489.994325

Shape_Length Sum

2453563.344388

CITY OF SAN BERNARDINOS
SEWER SYSTEM
04/09

CITY OF San Bernardino

CGIS City Geographic Information System

Printed 03/09

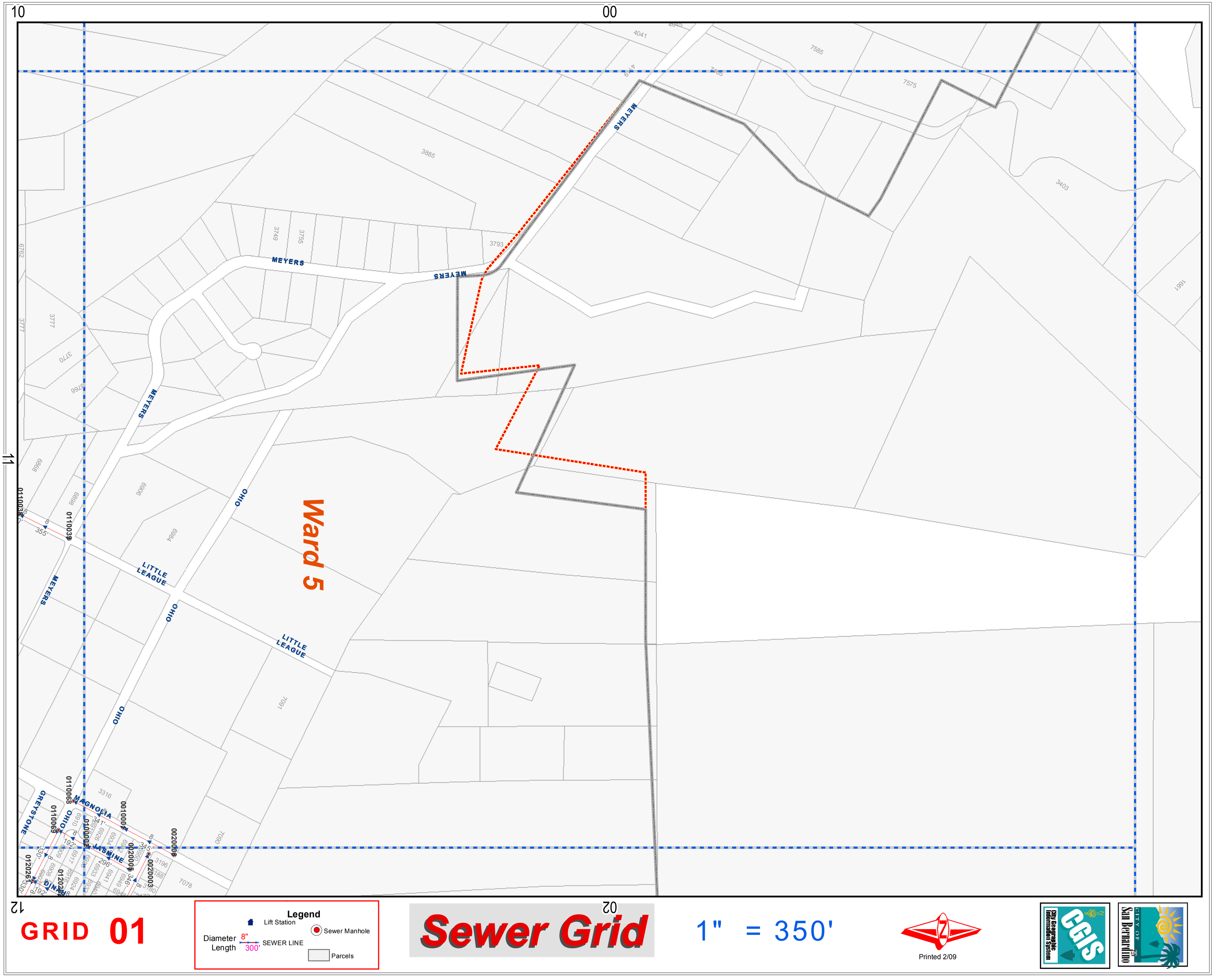
1" = 350'

Sewer Grid

00 01 02 03 04 10 11 12 13 14 15 16 17 20 21 22 23 24 25 26 27 28 31 32 33 34 35 36 37 38 39 42 43 44 45 46 47 48 49 52 53 54 55 56 57 58 59 62 63 64 65 66 67 68 69 6A 6B 72 73 74 75 76 77 78 79 7A 7B 85 86 87 88 89 96 97 98

215 18 30 259 210 330 10

UNIVERSITY PKWY
SIERRA WY
E ST
WATERMAN AV
VALENCIA AV
TIPPECANOE AV
DEL ROSA AV
STERLING AV
ARDEN AV
VICTORIA AV
PALM AV
40TH ST
30TH ST
HIGHLAND AV
16TH ST
BASE LINE ST
9TH ST
Foothill Blvd
RIALTO AV
MILL ST
5TH ST
CENTRAL AV
SAN BERNARDINO AV
REDLANDS BLVD
PEPPER AV
MERIDIAN AV
RANCHO AV
CALIFORNIA ST
MT VERNON AV
AUTO PLAZA DR



GRID 01

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300' SEWER LINE

Parcels

Sewer Grid

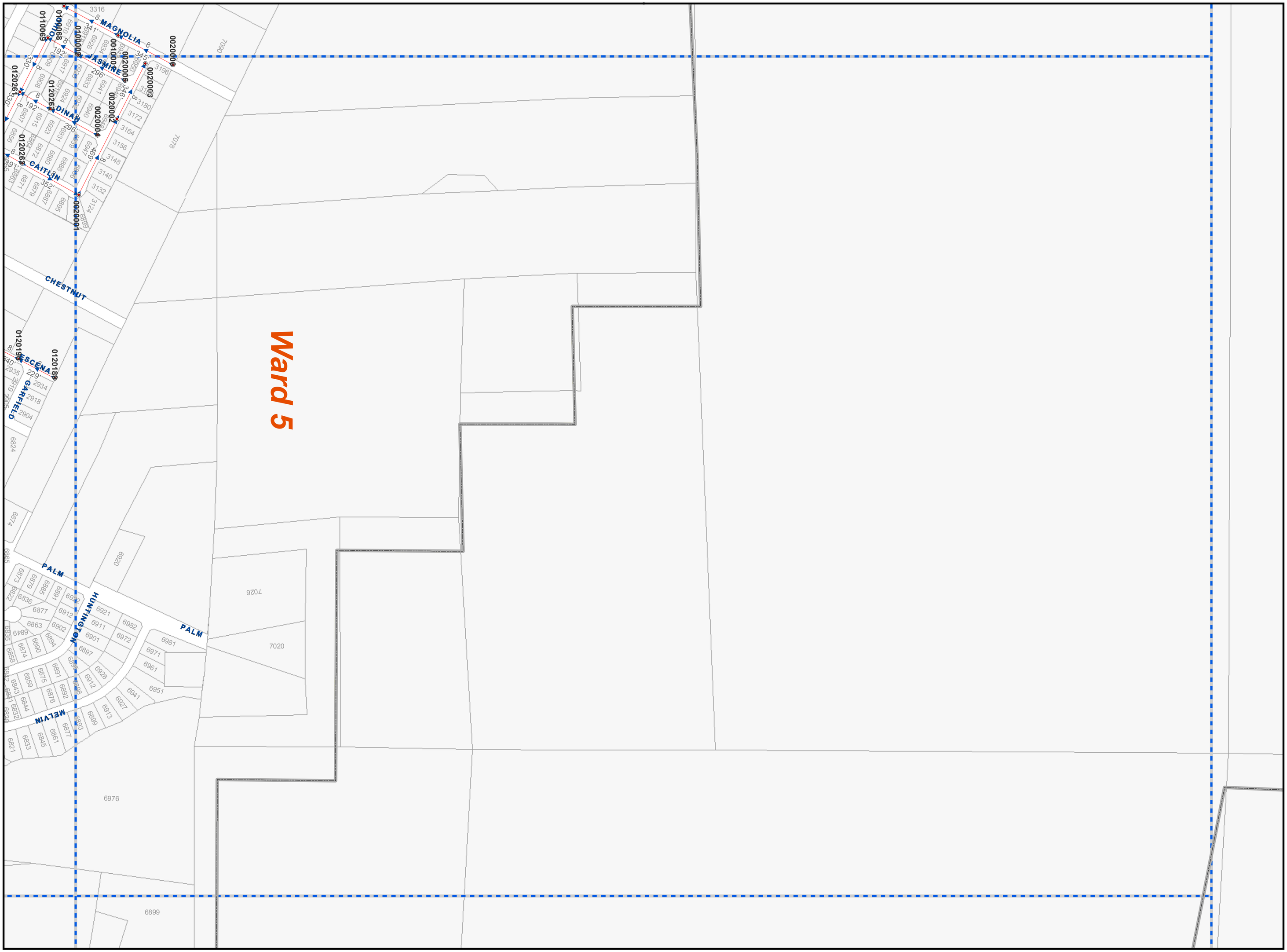
1" = 350'

Printed 2/09

City Geographic Information System

CGIS

City of San Bernardino



GRID 02

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300' SEWER LINE

Parcels

Sewer Grid

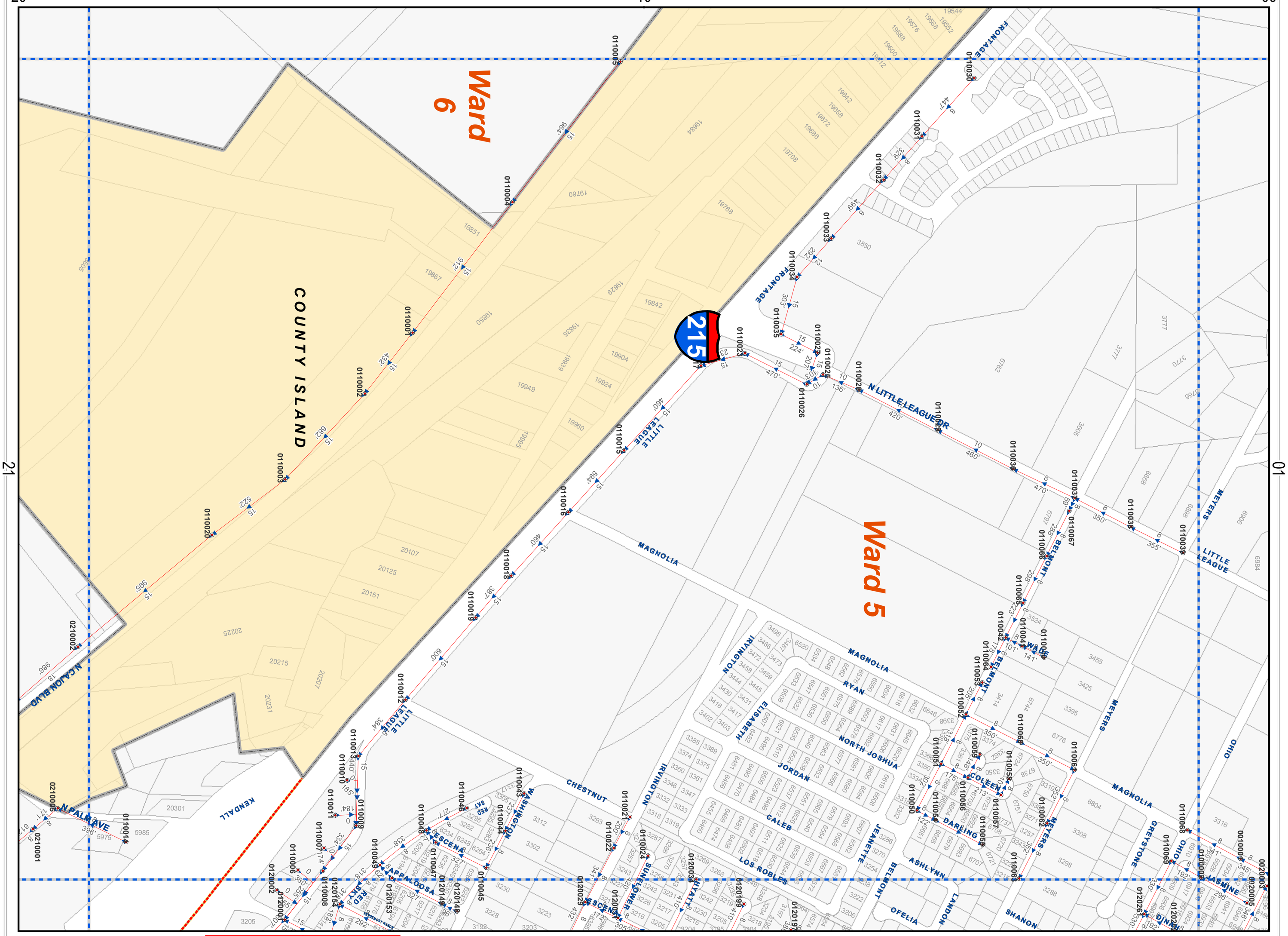
1" = 350'

Printed 2/09

City Geographic Information System

CGIS

City of San Bernardino


20
10
00
21
01
22
02
12
Ward 6
Ward 5
COUNTY ISLAND
215
FRONTAGE
N LITTLE LEAGUE DR
LITTLE LEAGUE
MAGNOLIA
CHESTNUT
N PALM AVE
N CALOMA BLVD
KENDALL
IRVINGTON
WASHINGTON
ESCENA
APPALOOSA
RED SKY
RYAN
ELISABETH
NORTH JOSHUA
JORDAN
CALEB
LOS ROBLES
JEANETTE
SUNFLOWER
SCENIC
BELMONT
DARLING
COLEEN
ASHLYNN
OFELIA
LANDON
SHANON
MEYERS
OHIO
GREYSTONE
JASMINE
LITTLE LEAGUE
WATT
0110003
0110004
0110001
0110002
0110020
0210002
0210005
0210001
0110014
0110005
0110006
0120002
0120007
0110008
0120154
0120153
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0110010
0110011
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0110012
0110018
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0110016
0110015
0110017
0110021
0110022
0110024
0120034
0120199
0120229
0110043
0110044
0110045
0110047
0120149
0110048
0110049
0110026
0110025
0110028
0110027
0110029
0110030
0110031
0110032
0110033
0110034
0110035
0110036
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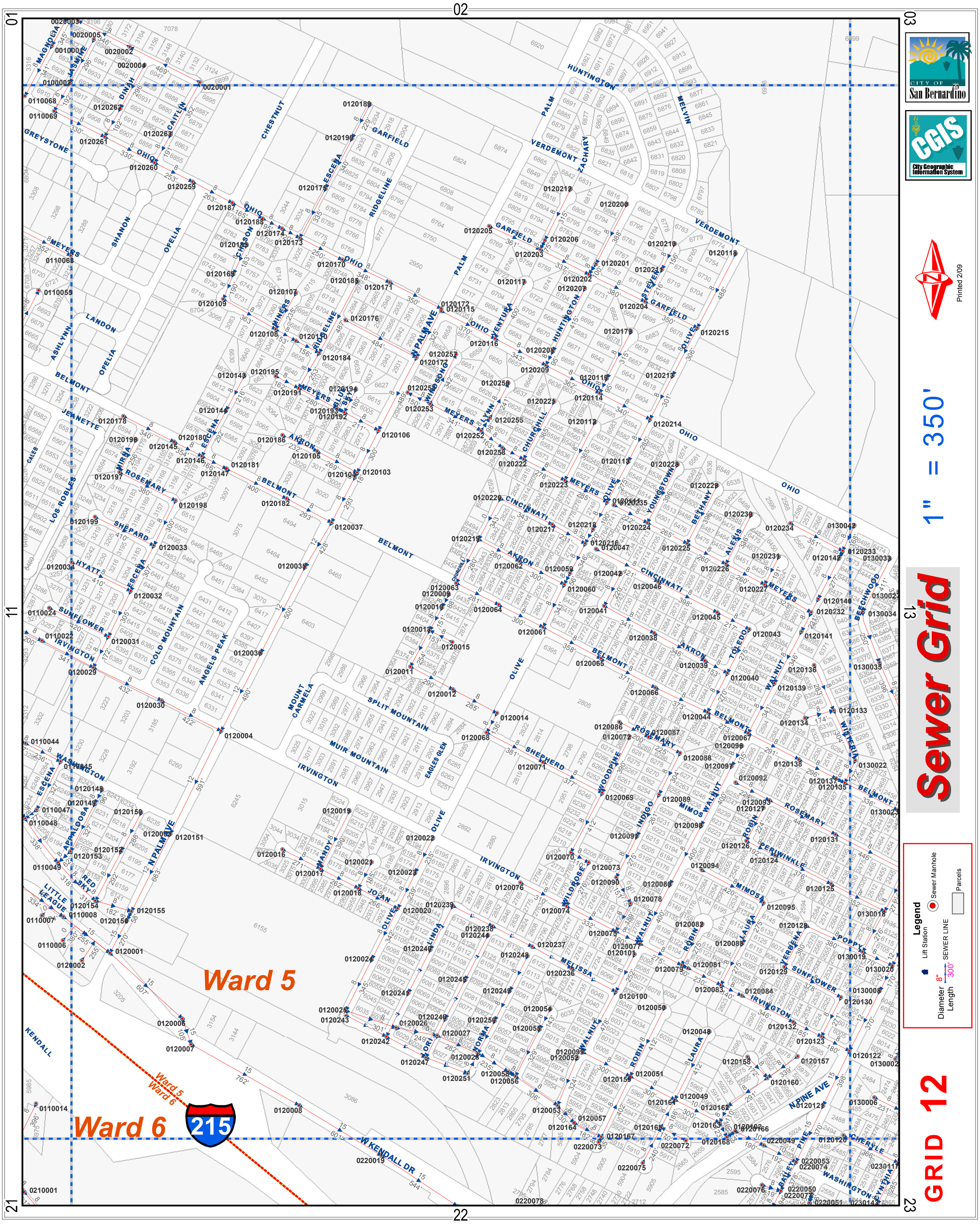
0110038
0110067
0110065
0110042
0110064
0110053
0110052
0110051
0110050
0110054
0110056
0110055
0110057
0110058
0110062
0110063
0110068
0110069
0110070
0120261
0120262
0120005
0020003
0020004
Legend
Lift Station
Sewer Manhole
Diameter
Length
8"
300'
SEWER LINE
Parcels
GRID 11
Sewer Grid
1" = 350'
Printed 2/09
City Geographic Information System
CGIS
City of San Bernardino

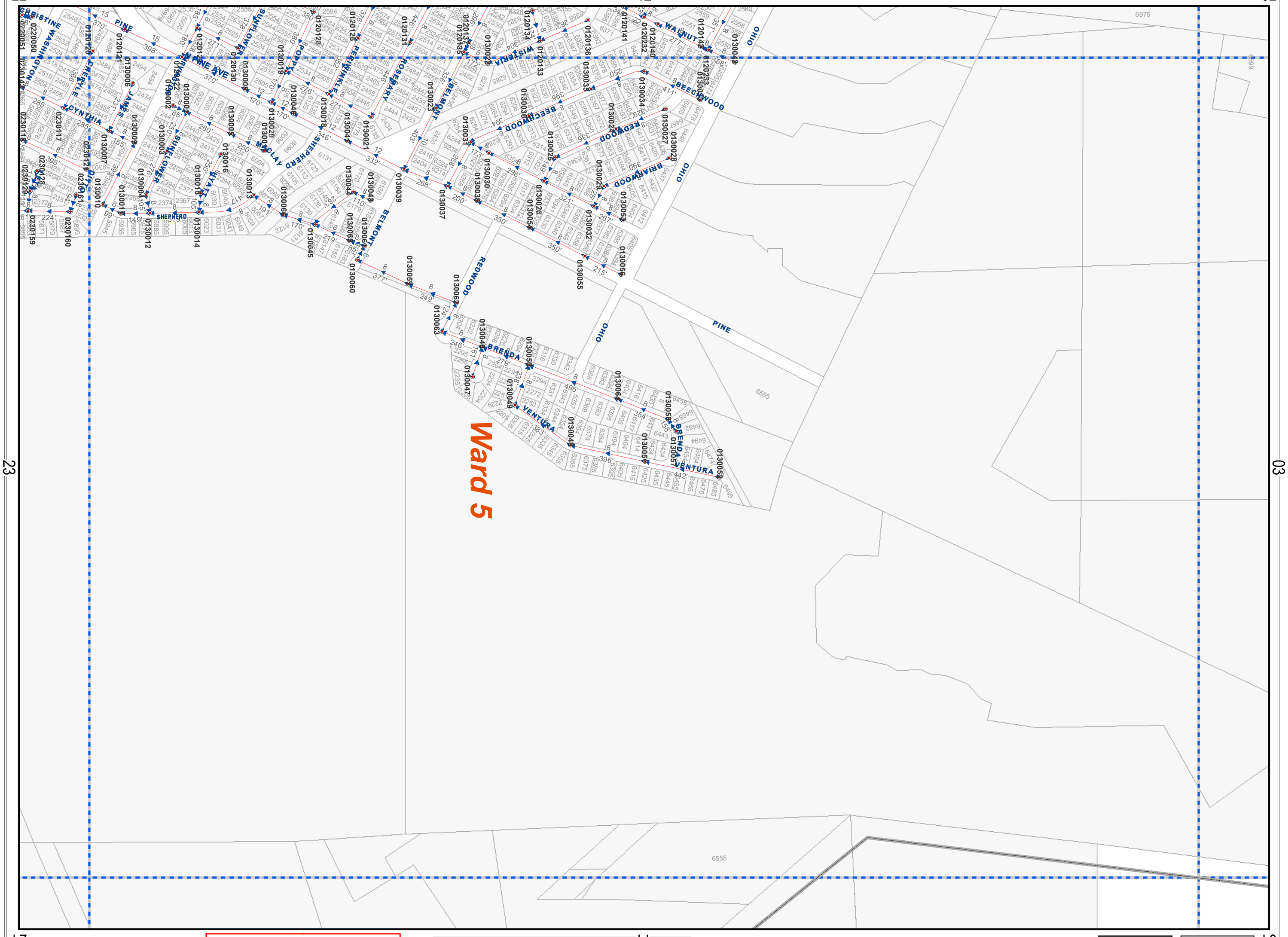


Sewer Grid
GRID 12
1" = 350'
Printed 2/09
Legend
Lift Station
Sewer Manhole
Parcels
Diameter 8"
Length 300'
SEWER LINE
Ward 5
Ward 6
215

22 12 02

23 03

24 14 04



GRID 13

Legend

Lift Station

Sewer Manhole

Diameter 8"

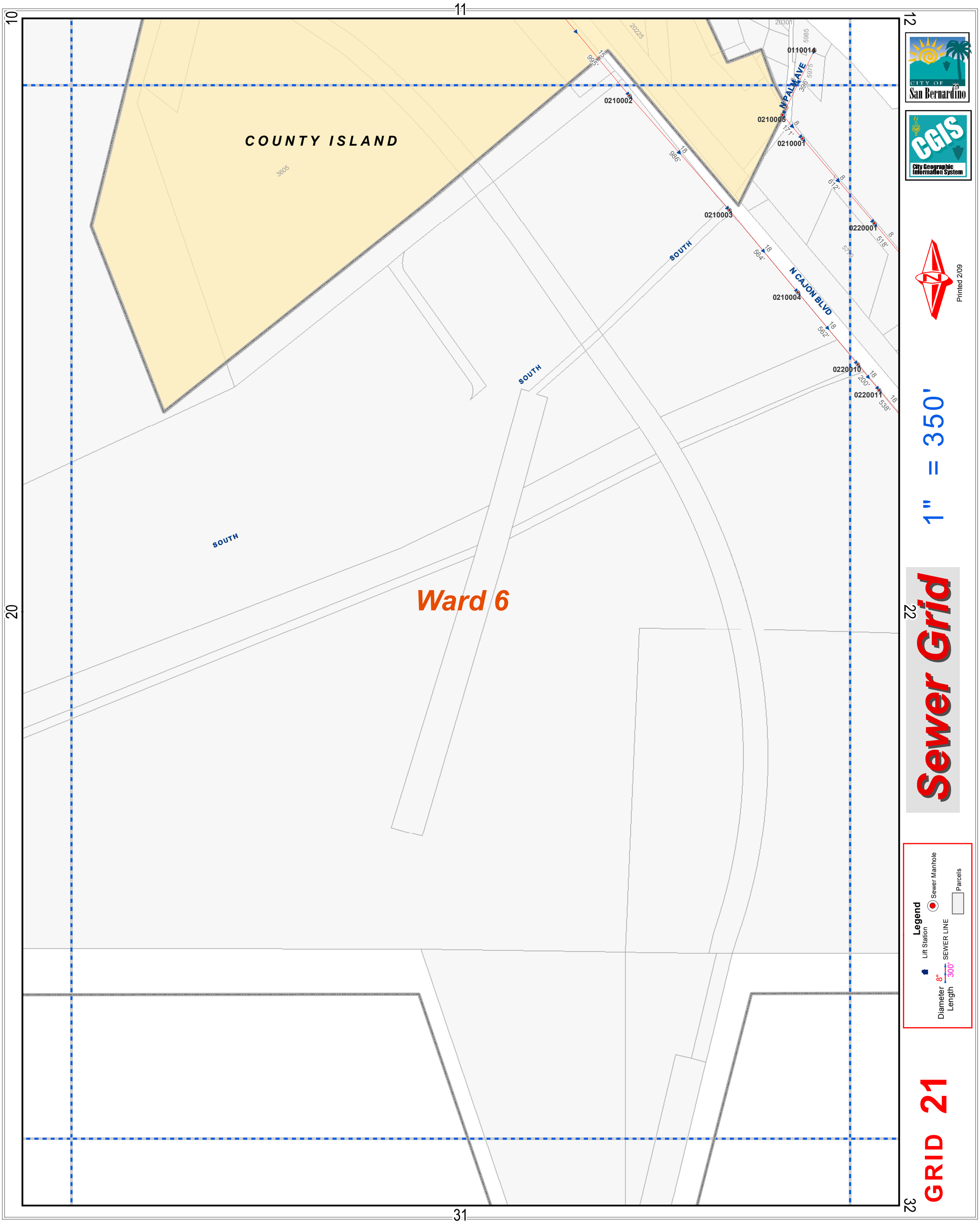
Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

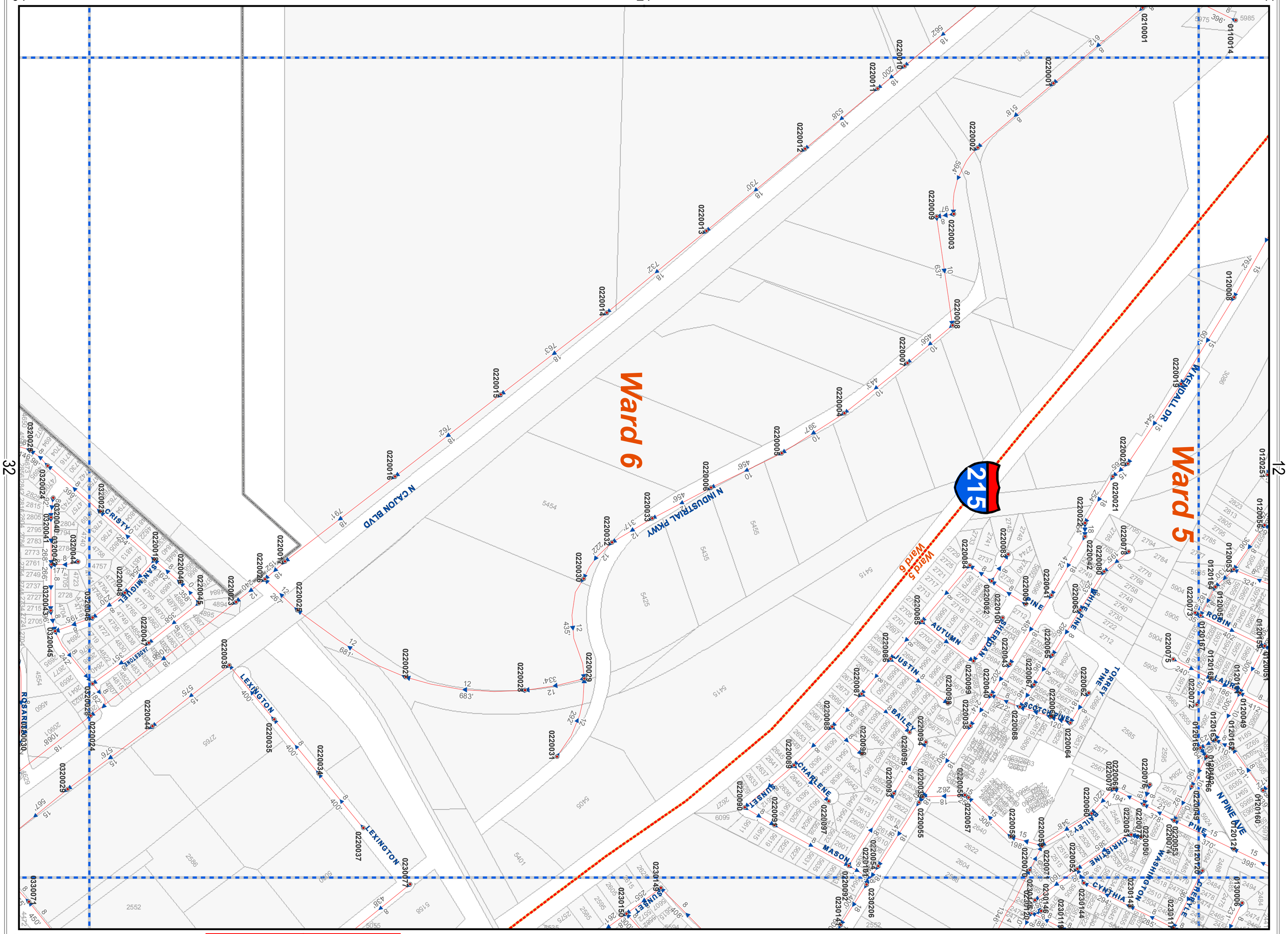


11
10
12
20
22
31
32
COUNTY ISLAND
3605
20225
20301
5985
5975
396'
0110014
N PALM AVE
0210002
0210005
0210001
0210003
0220001
0210004
0220010
0220011
N CAJON BLVD
SOUTH
SOUTH
SOUTH
Ward 6
CITY OF San Bernardino
CGIS City Geographic Information System
Printed 2/09
1" = 350'
Sewer Grid
Legend
Lift Station
Sewer Manhole
Parcels
Diameter 8"
Length 300'
SEWER LINE
GRID 21

31 21 11

32 12

33 23 13



GRID 22

Legend
Lift Station
Sewer Manhole
Diameter 8"
Length 300'
SEWER LINE
Parcels

Sewer Grid

1" = 350'

Printed 2/09

City Geographic Information System

City of San Bernardino

32 22 12

33 13

34 24 14

GRID 23

Sewer Grid

1" = 350'

Printed 2/09

Legend

- Lift Station
- Sewer Manhole
- Diameter / Length 8" / 300' SEWER LINE
- Parcels

Ward 6

Ward 5

Ward 5

215

LEXINGTON

N INDUSTRIAL PKWY

SHENANDOAH

PEPPER-LINDEN

COLLEGE

IRIS

ASTER

DOLORES

JASMINE

HYACINTH

SHERIDAN

THISTLE

BUCKBOARD

SUNSET

WAGONWHEEL

SURREY

KENDALL

W KENDALL DR

MASON

PALEY

CHRISTINE

CYNTHIA

WASHINGTON

CASSANDRA

PINE

CHRISTOPHER

FIRE STATION

LA SALLE

REVERE

MARQUETTE

STANFORD

LAKE FOREST

AUBURN

CITADEL

48TH

GRAND

VARSITY

SHORTER

UNIVERSITY

CLEMSON

CAMBRIDGE

N UNIVERSITY PKWY

COLLEGE

STATE

MELBOURNE

PEAR

VALLES

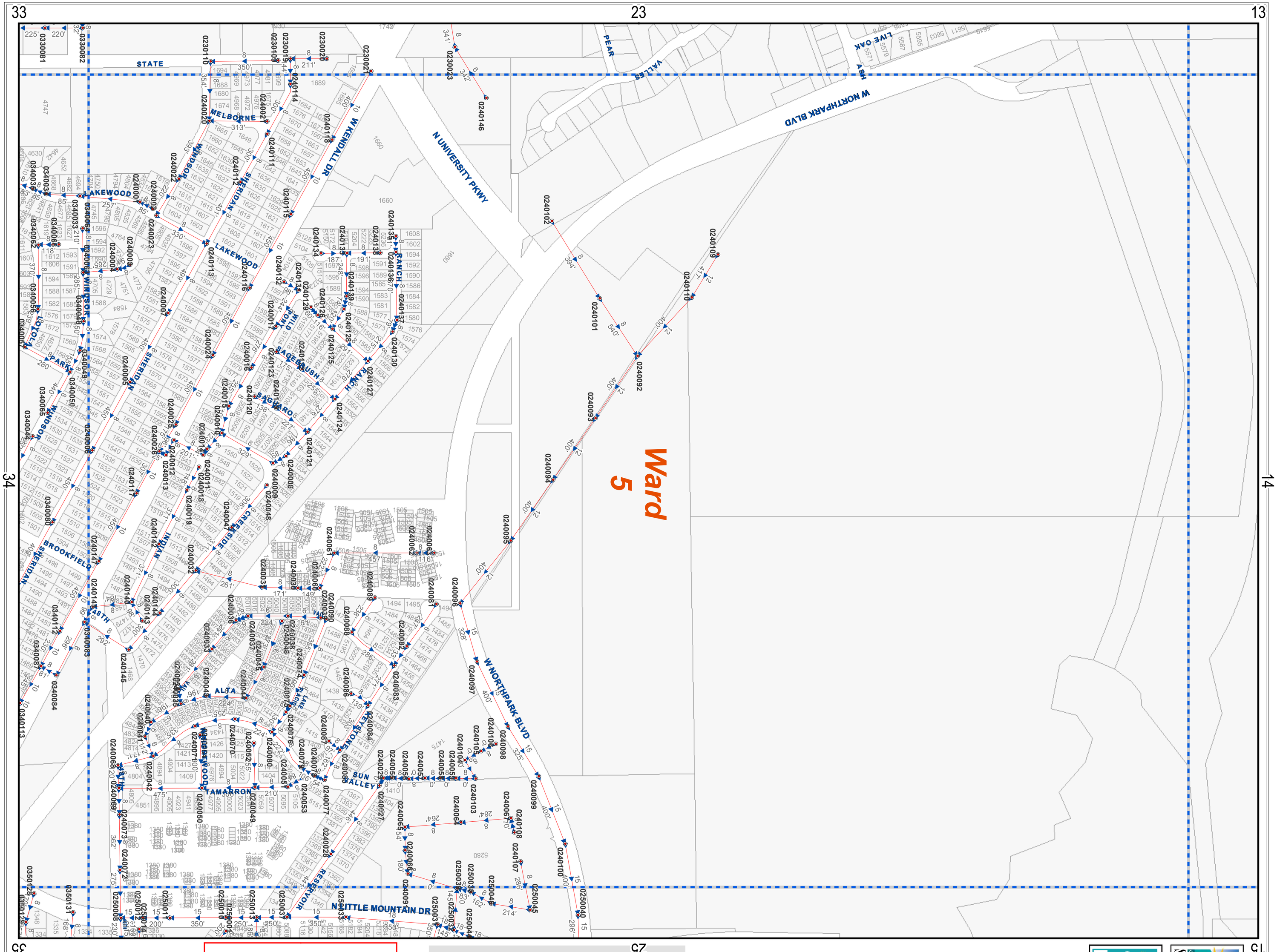
SYCAMORE

GINKGO

ASH

LIVE OAK

W NORTHPARK BLVD



GRID 24

Legend

Lift Station

Sewer Manhole

Diameter 8" Length 300' SEWER LINE

Parcels

Sewer Grid

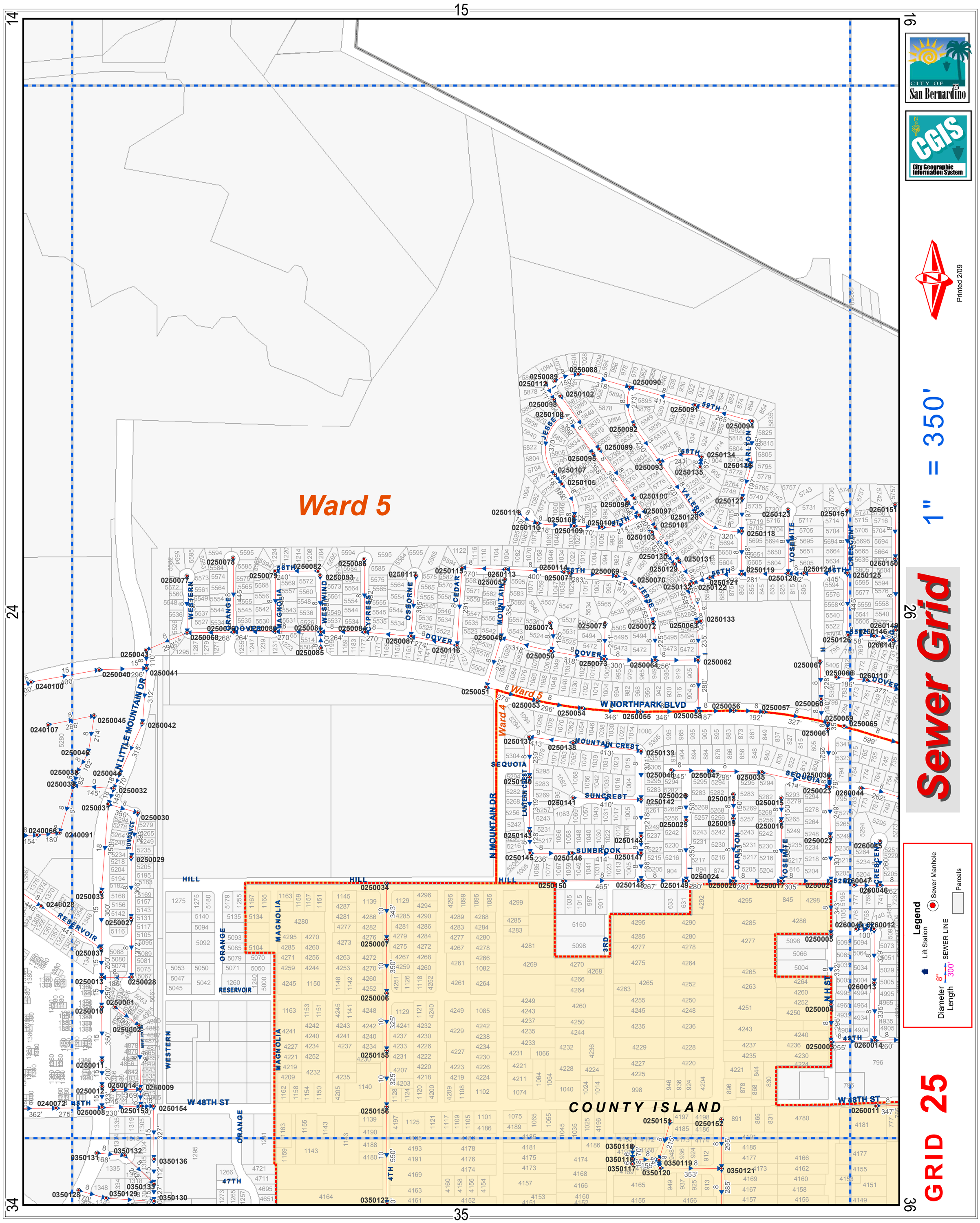
1" = 350'

Printed 2/09

City Geographic Information System

CGIS

City of San Bernardino

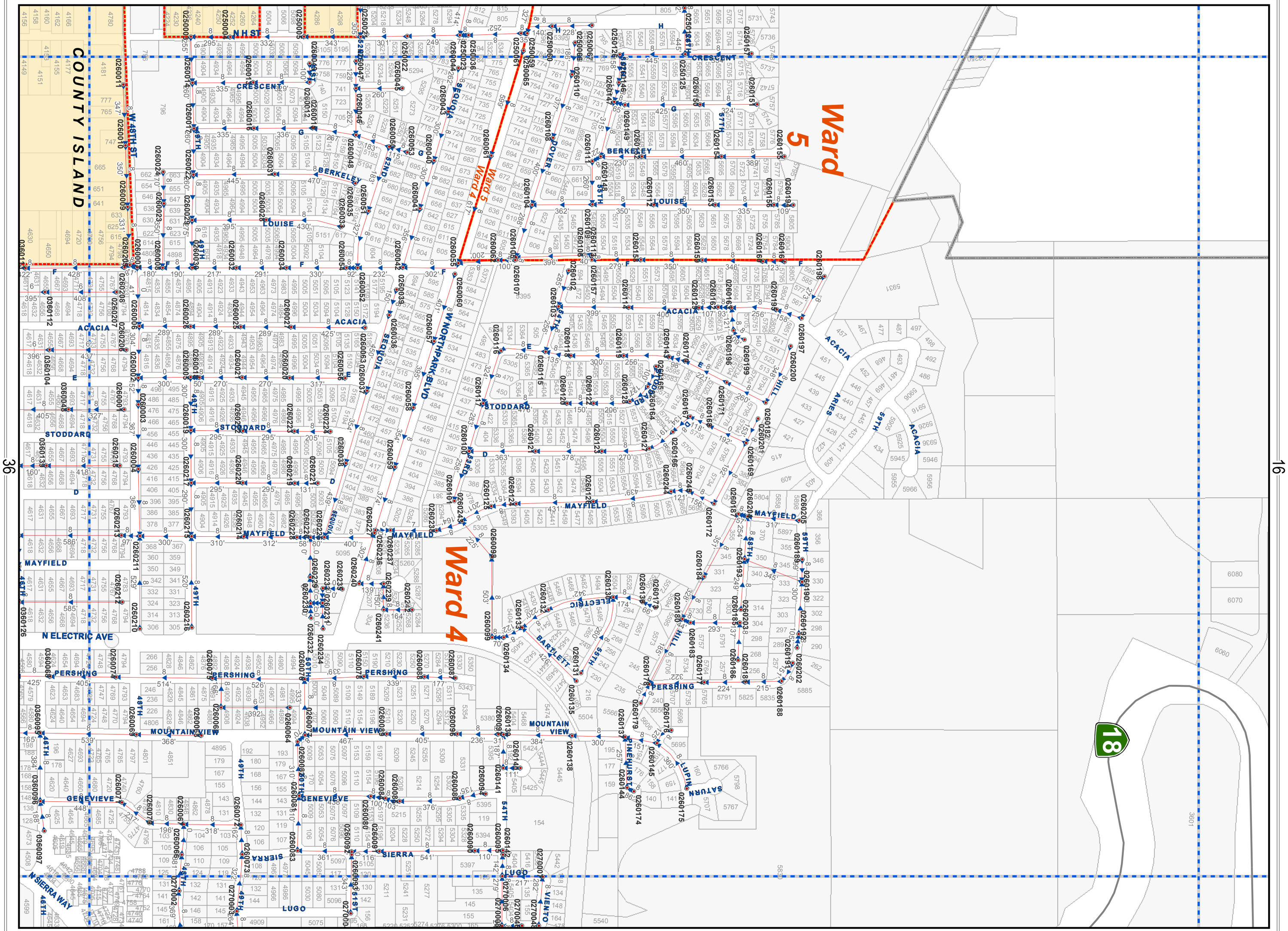


Ward 5
Ward 4
COUNTY ISLAND
W NORTHPARK BLVD
N MOUNTAIN DR
N LITTLE MOUNTAIN DR
W 48TH ST
HILL
RESERVOIR
MAGNOLIA
WESTERN
ORANGE
DOVER
MOUNTAIN CREST
SEQUOIA
SUNCREST
SUNBROOK
LANTERN CREST
CARLTON
YOSEMITE
CRESCENT
VALERIE
JESSE
CEDAR
OSBORNE
CYPRESS
WESTWIND
MAGNOLIA
SUNDANCE
59TH
58TH
57TH
56TH
49TH
48TH
47TH
4TH
3RD
N H ST
Sewer Grid
1" = 350'
GRID 25
Legend
Lift Station
Sewer Manhole
Parcels
Diameter
Length
8"
300'
SEWER LINE
Printed 2/09
CITY OF San Bernardino
CGIS City Geographic Information System

35 25 15

36 16

37 27 17



GRID 26

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300' SEWER LINE

Parcels

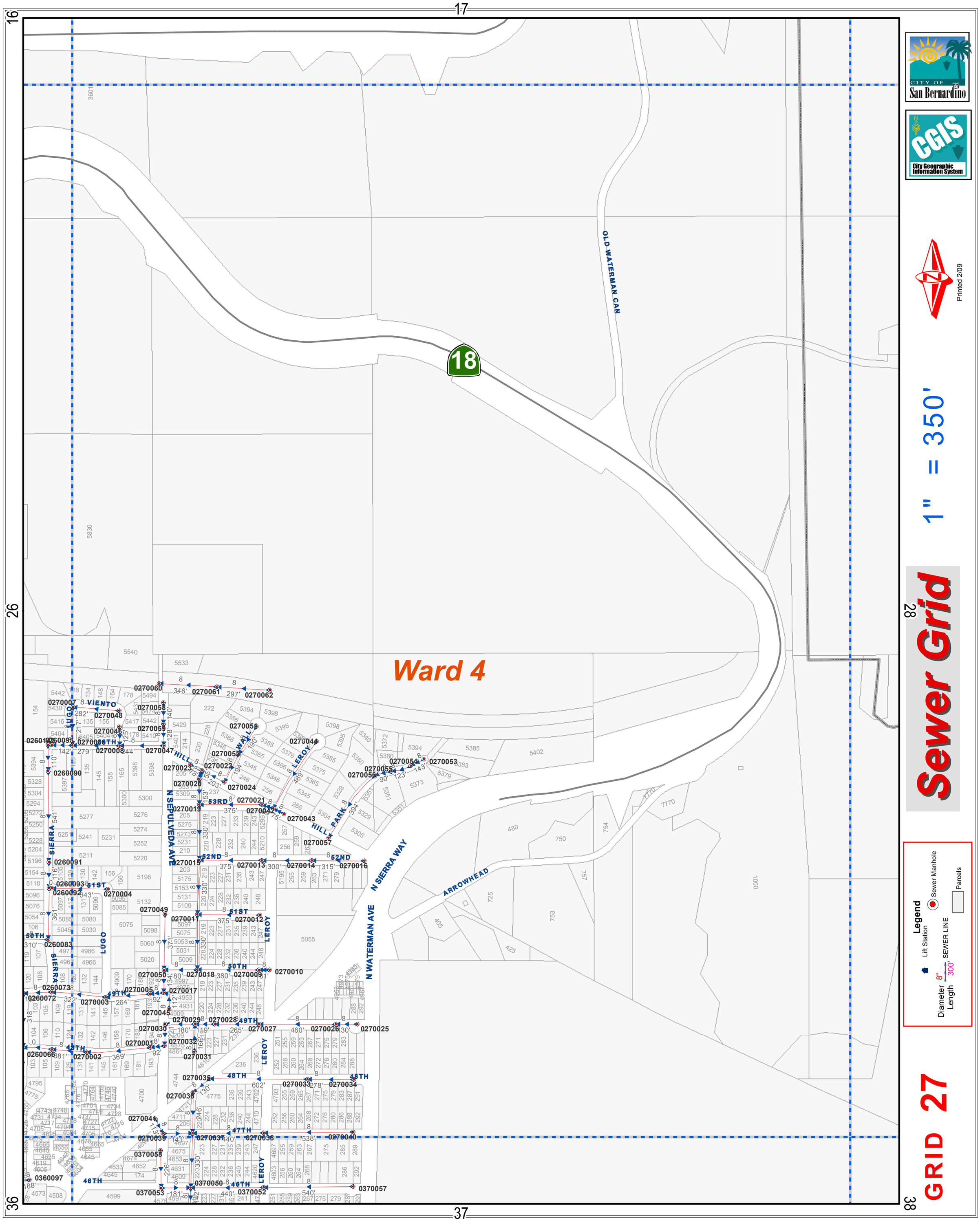
Sewer Grid

1" = 350'

Printed 2/09

CGIS City Geographic Information System

City of San Bernardino

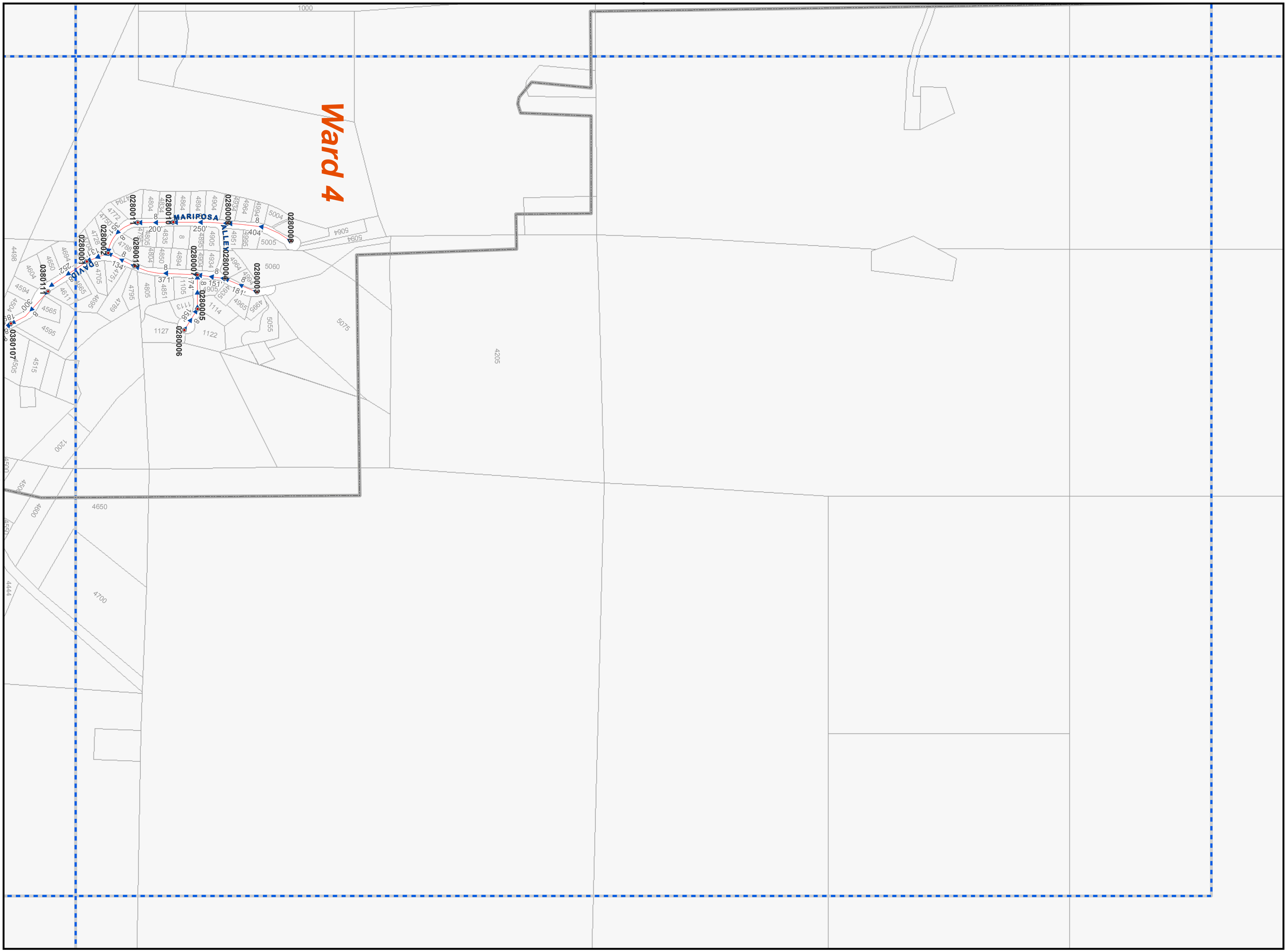


17
16
26
28
36
37
38
Ward 4
18
OLD WATERMAN CAN
N SEPULVEDA AVE
N SIERRA WAY
N WATERMAN AVE
ARROWHEAD
LUGO
VIENTO
SIERRA
HILL
LEROY
PARK
WALL
53RD
52ND
51ST
50TH
49TH
48TH
47TH
46TH
Sewer Grid
1" = 350'
Printed 2/09
Legend
Lift Station
Sewer Manhole
Parcels
Diameter 8"
Length 300'
SEWER LINE
GRID 27

37 27 17

38

39



GRID 28

Legend

Lift Station

Sewer Manhole

Diameter 8" Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

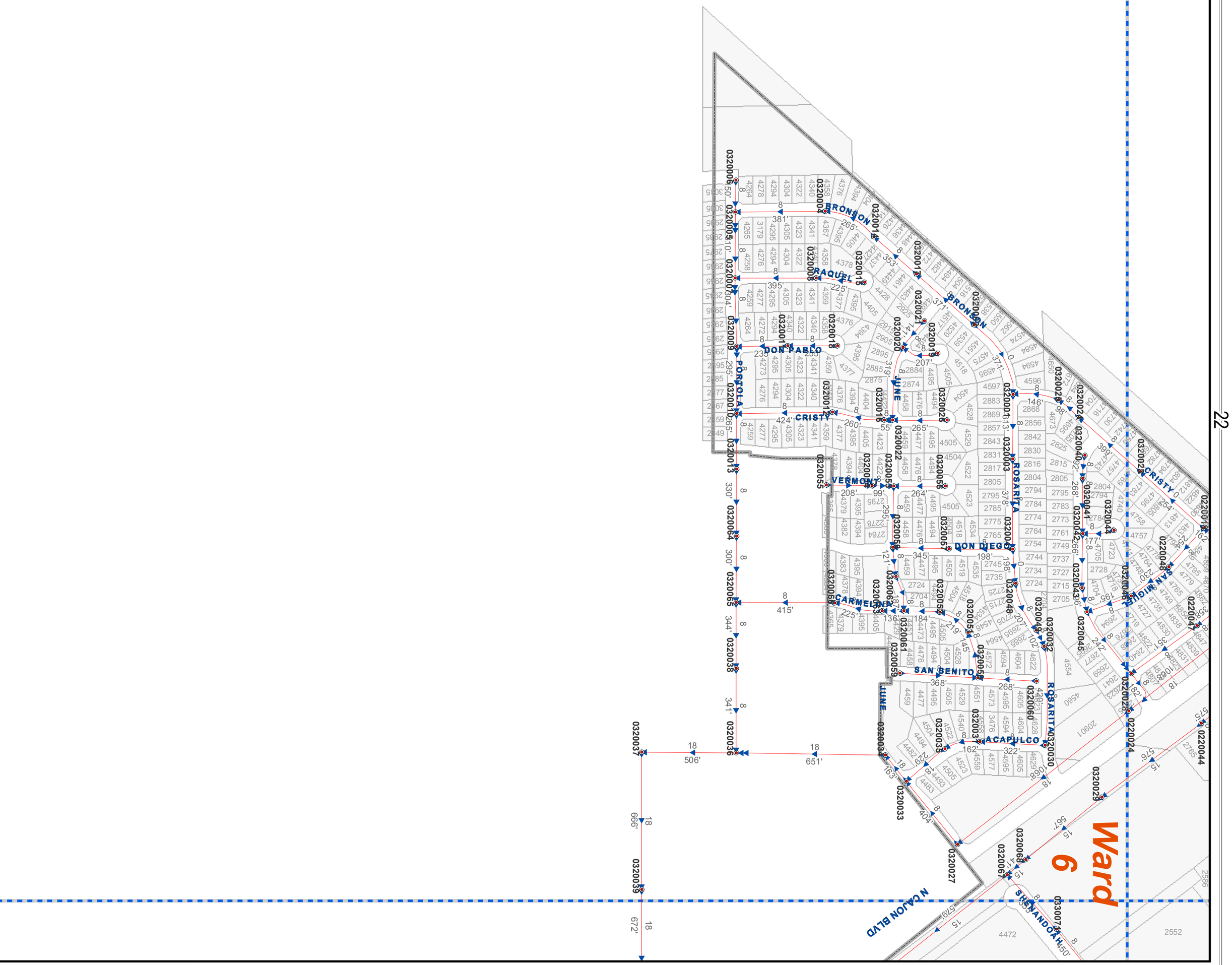
Printed 2/09

31

21

42

22



43

33

23

GRID 32

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300'

SEWER LINE

Parcels

Sewer Grid

1" = 350'

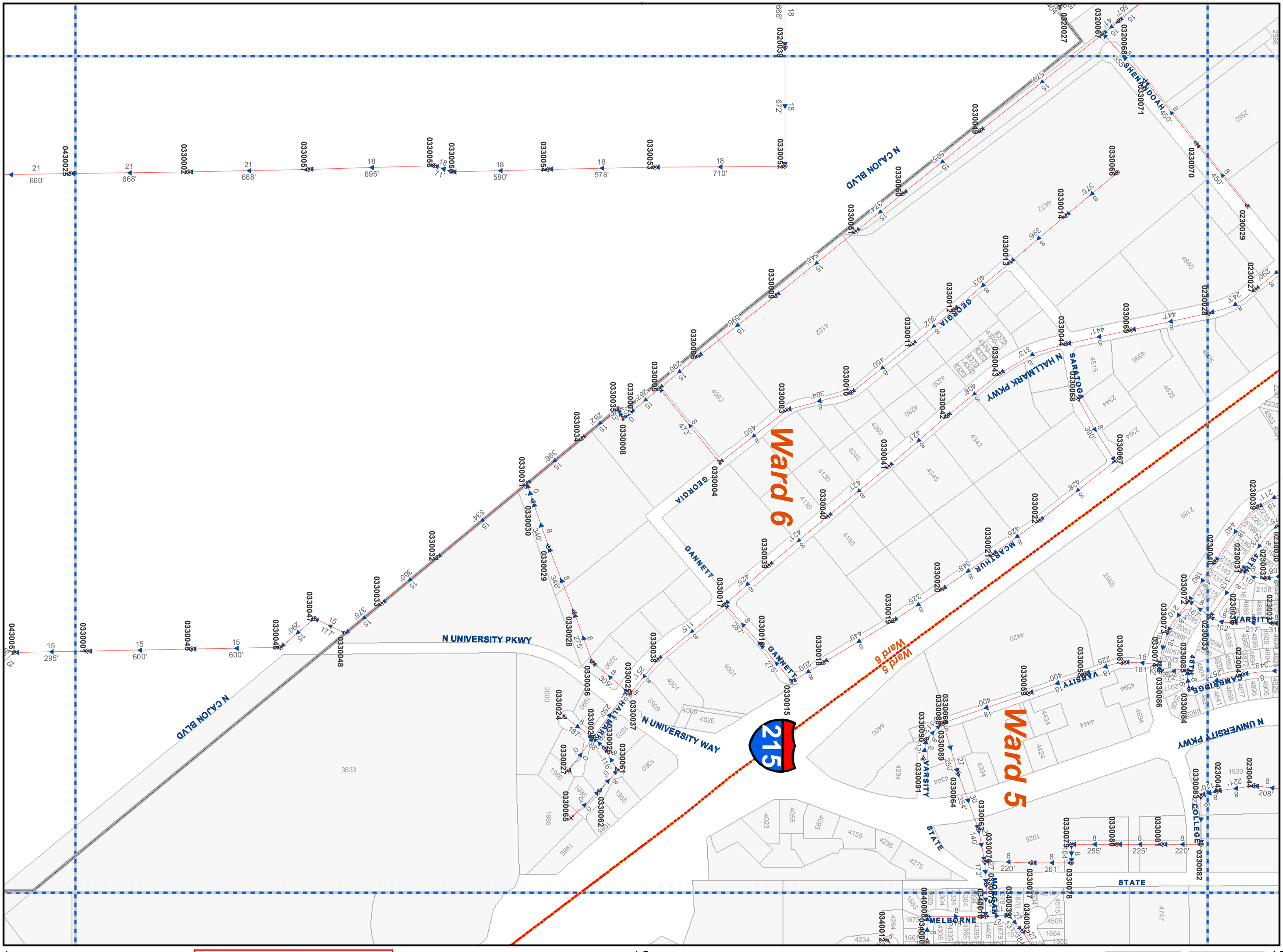
Printed 2/09

City Geographic Information System

City of San Bernardino

42 32 22

43 23



44 34 24

GRID 33

Legend

Lift Station

Sewer Manhole

Diameter 8"

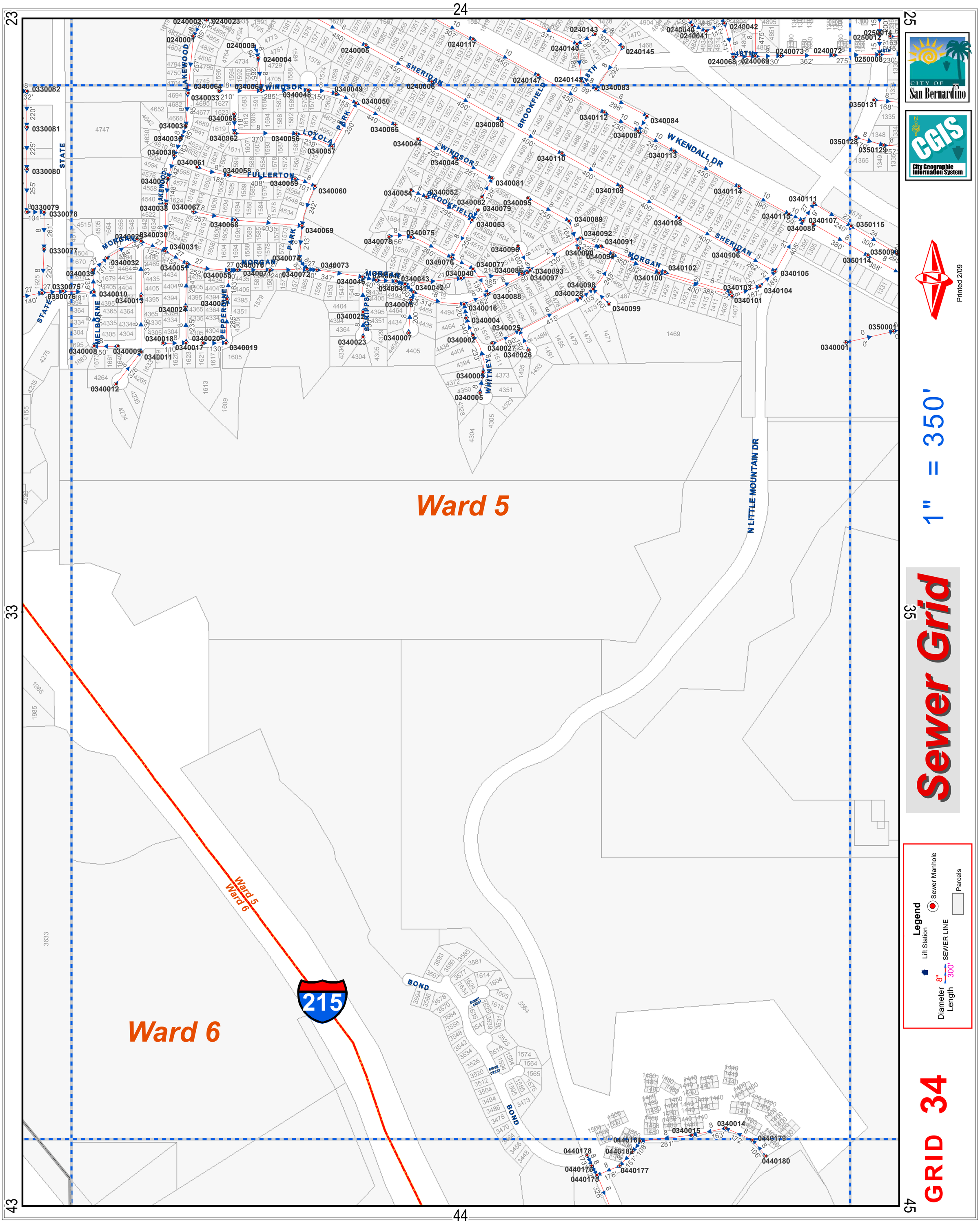
Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09



CITY OF San Bernardino

CGIS City Geographic Information System

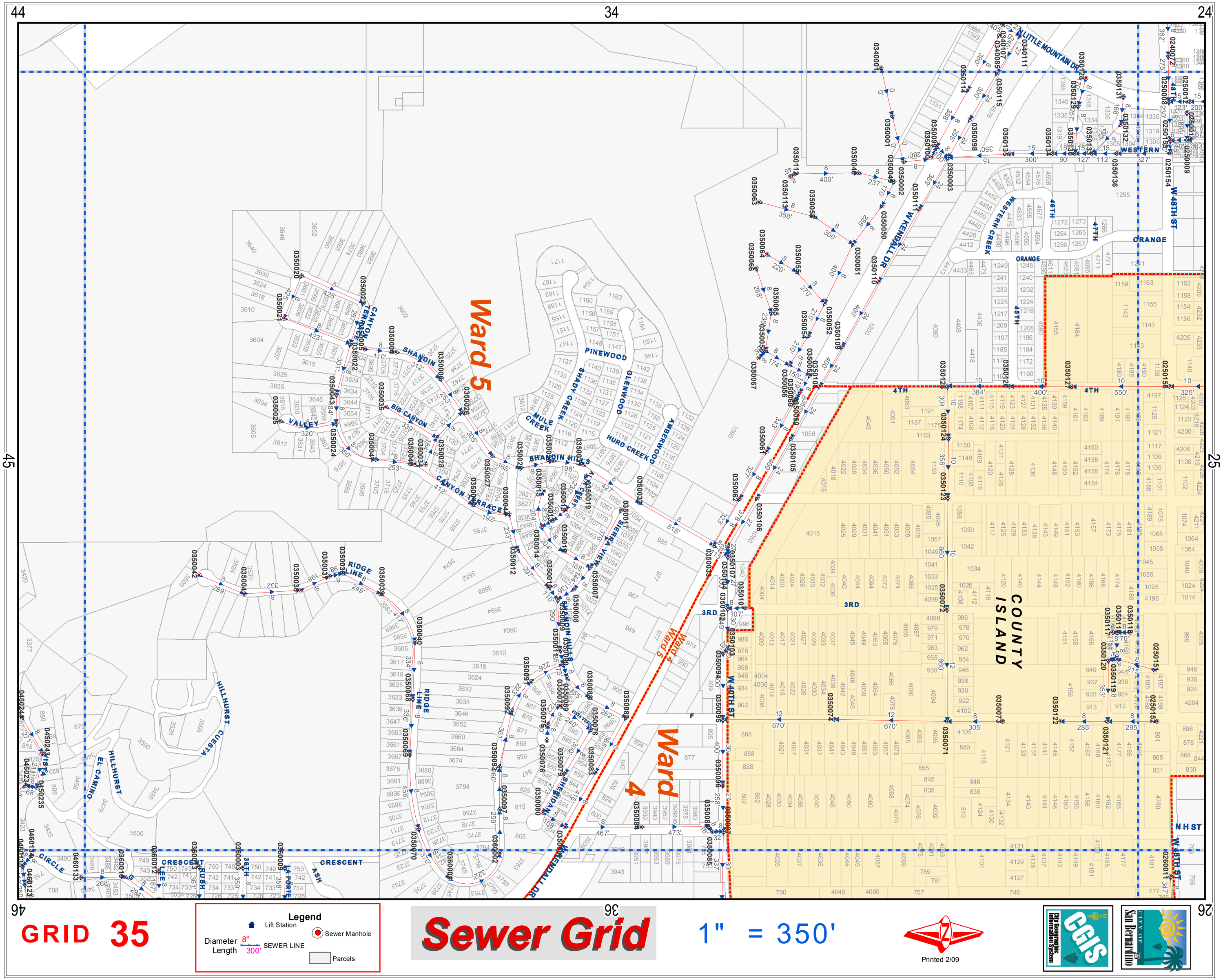
Printed 2/09

1" = 350'

Sewer Grid

Legend
Lift Station
Sewer Manhole
Parcels
Diameter 8"
Length 300'
SEWER LINE

GRID 34



GRID 35

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300'

SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

City Geographic Information System

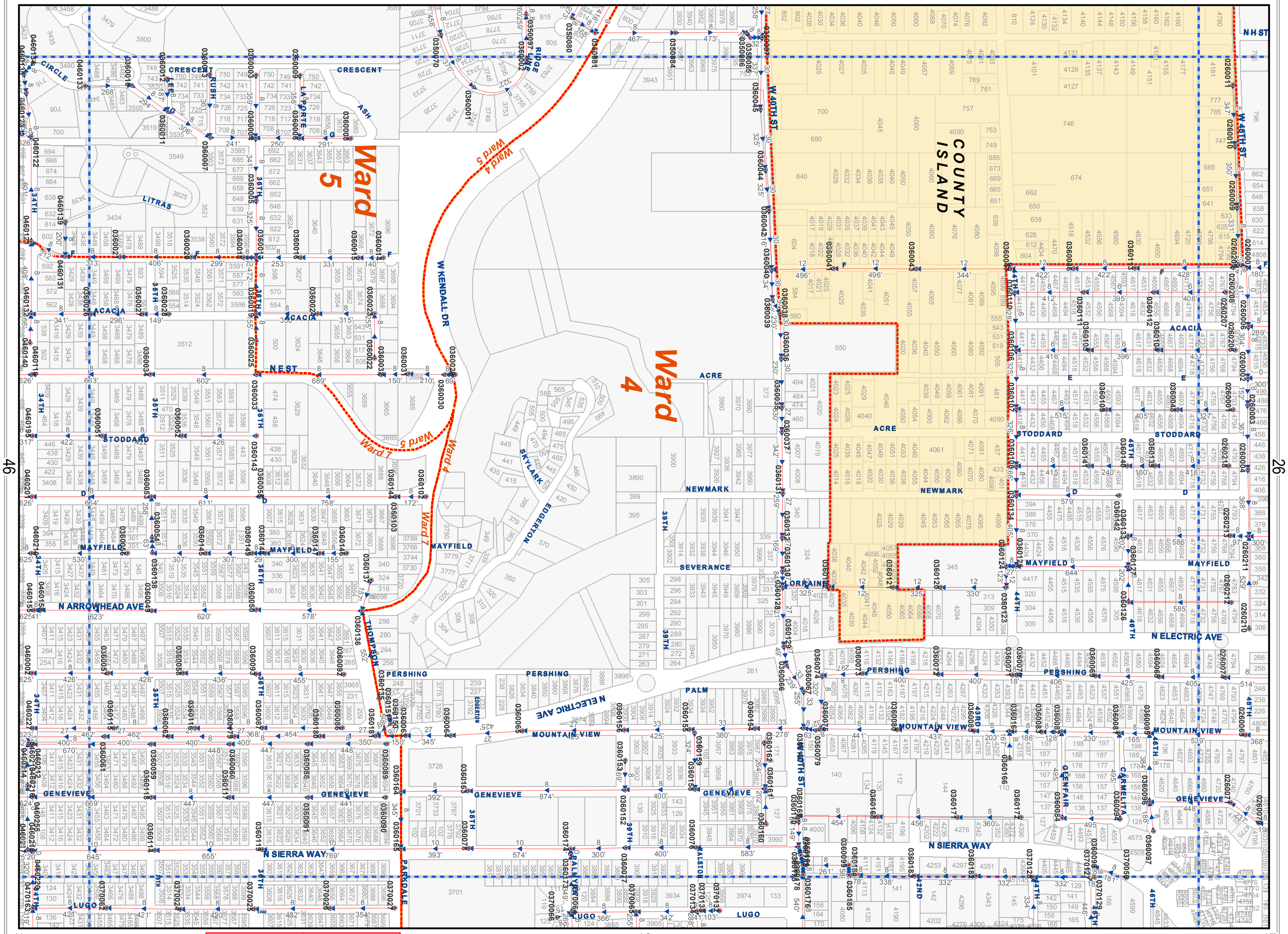
CGIS

City of San Bernardino

45 35 25

46 26

47 37 27



GRID 36

Legend

- Lift Station
- Sewer Manhole
- Diameter / Length: 8" / 300' SEWER LINE
- Parcels

Sewer Grid

1" = 350'

Printed 2/09

GRID 37

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300'

SEWER LINE

Parcels

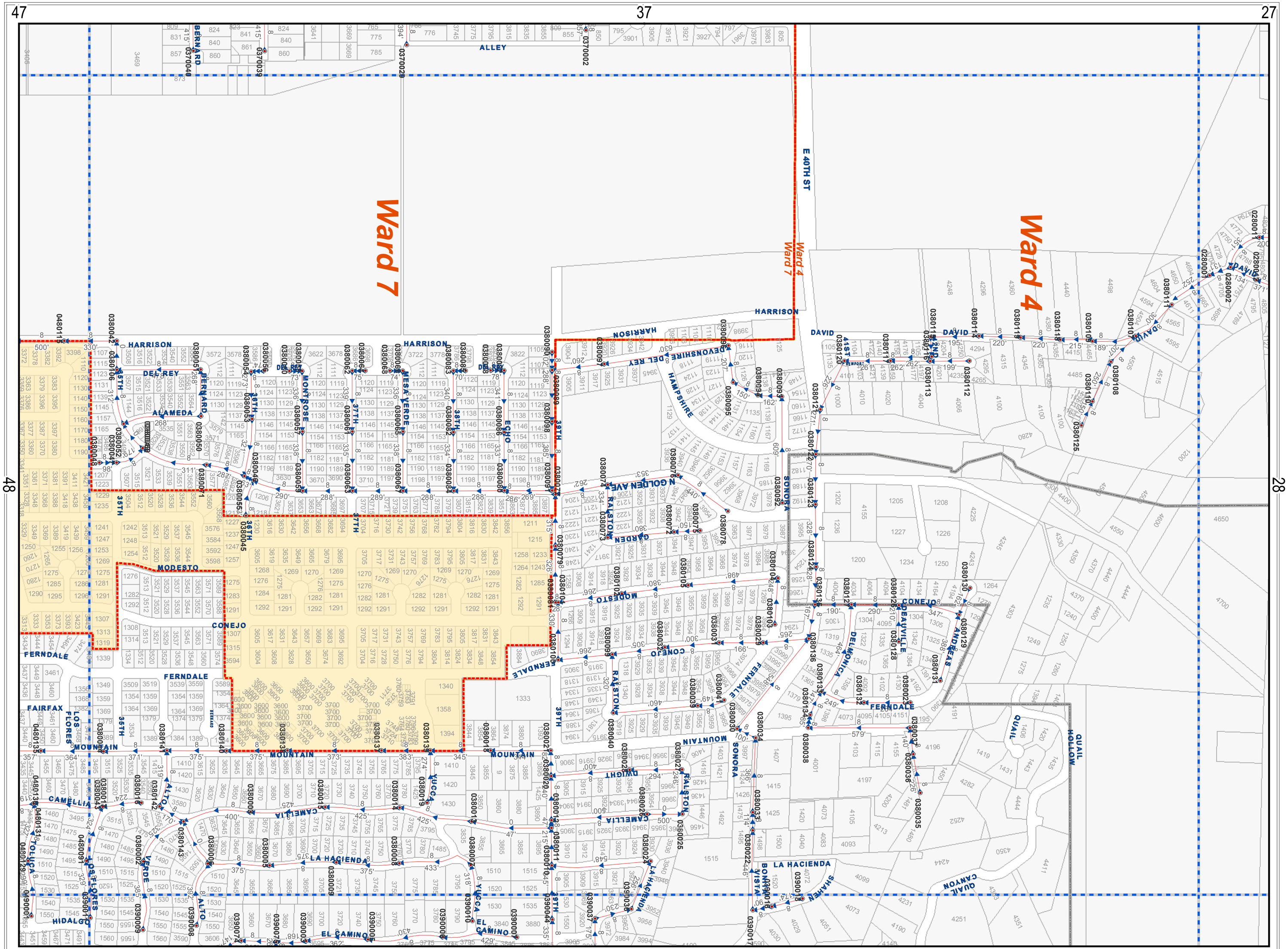
Sewer Grid

1" = 350'

Printed 2/09

CGIS City Geographic Information System

City of San Bernardino



GRID 38

Legend

- Lift Station
- Sewer Manhole
- Diameter 8" / Length 300' SEWER LINE
- Parcels

Sewer Grid

1" = 350'

Printed 2/09

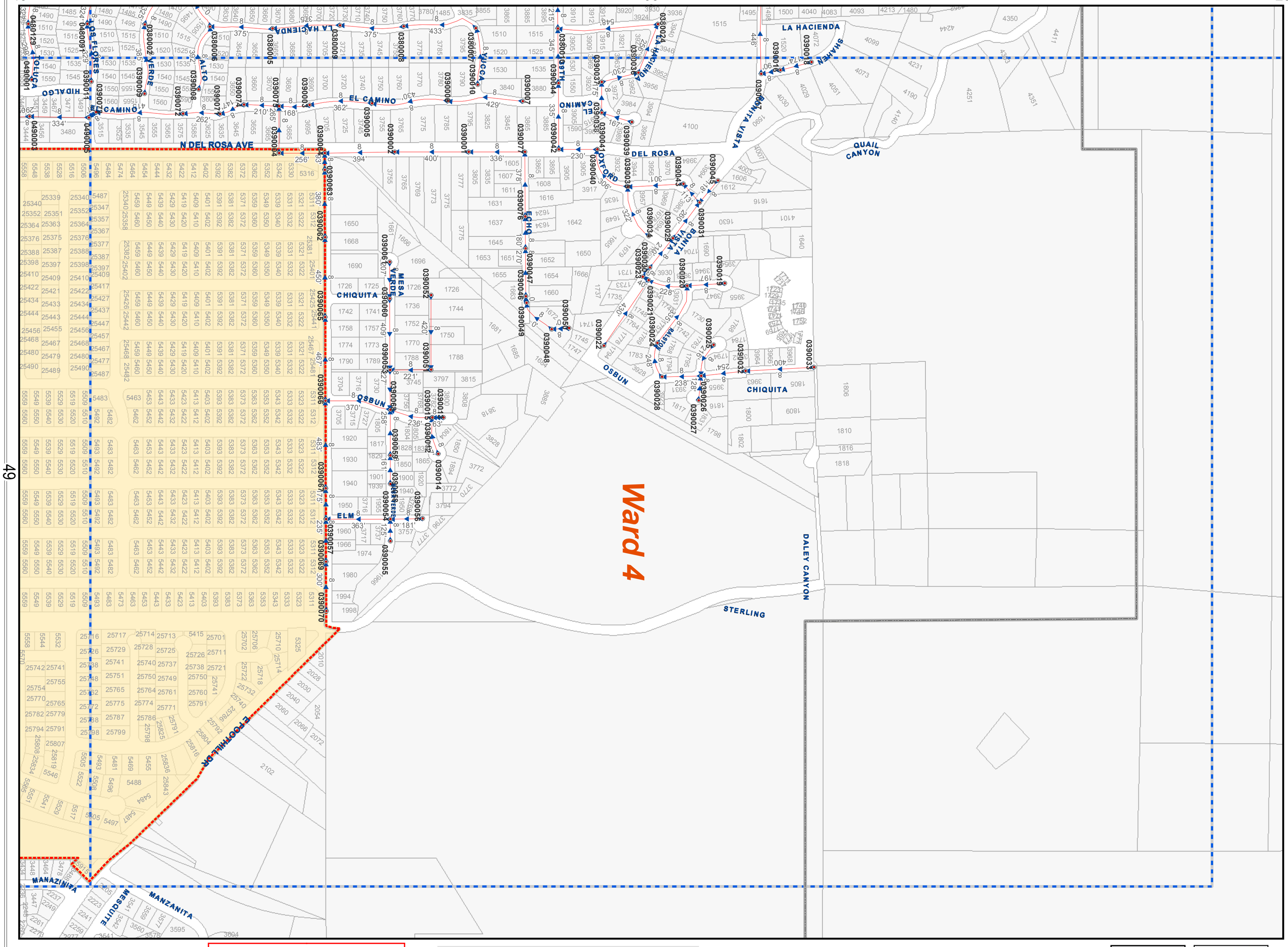
City Geographic Information System

CGIS

City of San Bernardino

48 38 28

49



GRID 39

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300' SEWER LINE

Parcels

Sewer Grid

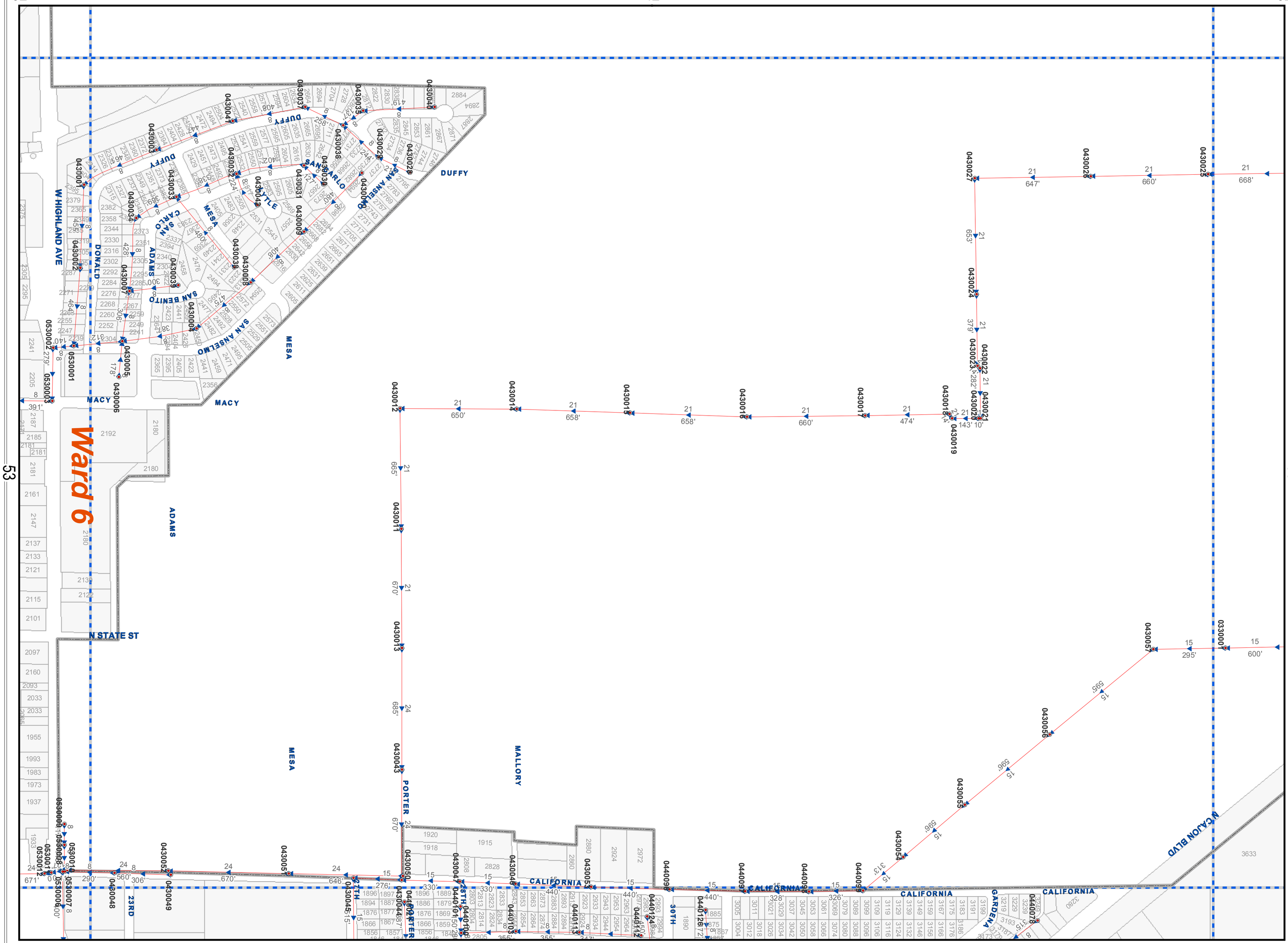
1" = 350'

Printed 2/09

52 42 32

53 33

54 44 34



GRID 43

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300'

SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

Sewer Grid

GRID 44

1" = 350'

Printed 2/09

Ward 5

Ward 6

Ward 2

Legend
- Lift Station
- Sewer Manhole
- SEWER LINE
- Diameter 8"
- Length 300'
- Parcels

CITY OF San Bernardino

CGIS City Geographic Information System

Ward 5

Ward 5
Ward 2

30

Ward 2
Ward 7

Ward 2
Ward 6

215

259

Ward 2

Ward 6

HILLHURST
EL CAMINO
VISTA
GRANDE
CIRCLE
EDGEHILL
CRESCENT
3RD
H
CARLA
PALM
EDGEMONT
W MARSHALL BLVD
MARSHALL
BUSSEY
LINCOLN
LADERA
31ST
30TH
NIST
MIRAMONTE
MT VERNON
TURRILL
HERRINGTON
PICO
LOMITA
LYNWOOD
DAVIDSON
SERRANO
MUSCUPIABE
COLIMA
29TH
OAKWOOD
GARNER
MIRADA
28TH
ALEXANDER
26TH
25TH
24TH
23RD
W 27TH ST
CARLTON
PATTERSON
N LITTLE MOUNTAIN DR
N CAJON BLVD
CAJON
W HIGHLAND AVE

Sewer Grid

GRID 45

1" = 350'

Printed 2/09

Legend
Lift Station
Sewer Manhole
SEWER LINE
Parcels
Diameter 8"
Length 300'

GRID 46

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300' SEWER LINE

Parcels

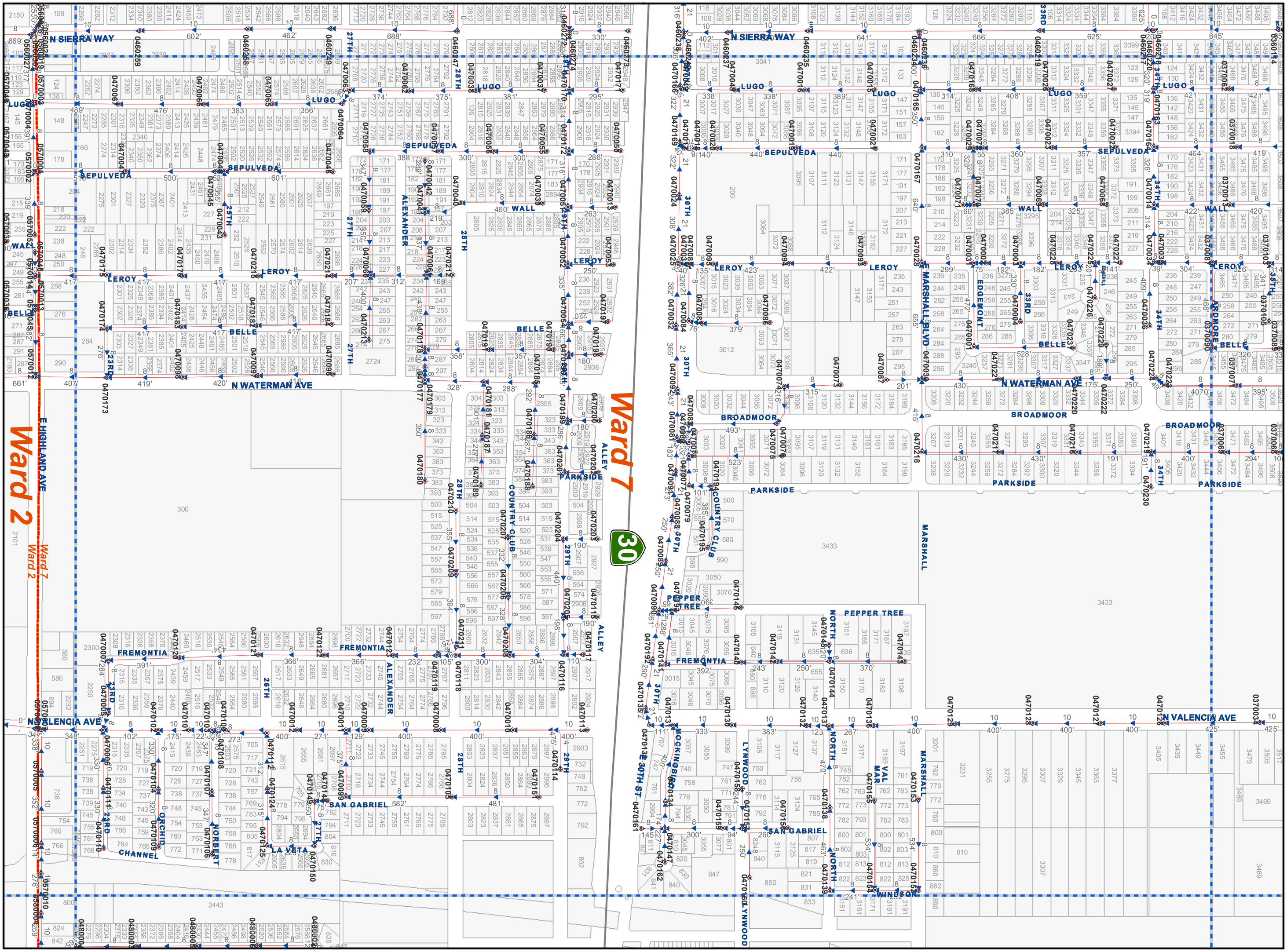
Sewer Grid

1" = 350'

Printed 2/09

City Geographic Information System

CITY OF SAN BERNARDINO



GRID 47

Legend

- Lift Station
- Sewer Manhole
- Diameter 8" / Length 300' SEWER LINE
- Parcels

Sewer Grid

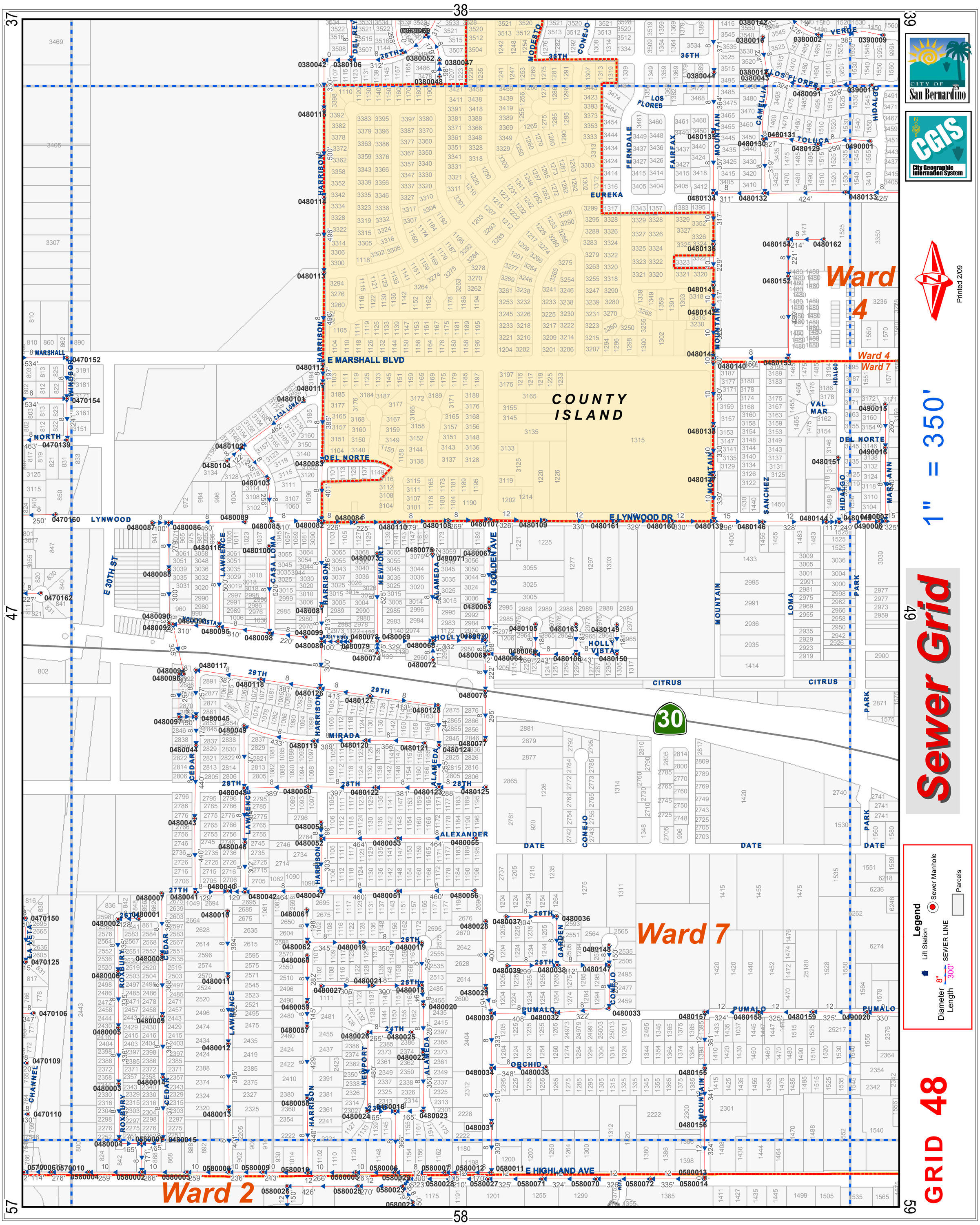
1" = 350'

Printed 2/09

City Geographic Information System

CGIS

City of San Bernardino



38
37
39
47
49
57
58
59
Ward 4
Ward 7
Ward 2
COUNTY ISLAND
E MARSHALL BLVD
E LYNWOOD DR
E HIGHLAND AVE
DEL NORTE
LYNWOOD
CITRUS
DATE
30
Sewer Grid
1" = 350'
GRID 48
Legend
Lift Station
Sewer Manhole
Parcels
Diameter 8"
Length 300'
SEWER LINE
Printed 2/09
CITY OF San Bernardino
CGIS
City Geographic Information System

Sewer Grid

GRID 49

Printed 2/09

1" = 350'

CITY OF San Bernardino

CGIS City Geographic Information System

Legend
- Sewer Manhole
- Parcels
- Lift Station
- SEWER LINE
- Diameter 8"
- Length 300'

COUNTY ISLAND

Ward 4

Ward 7

Ward 2

E MARSHALL BLVD

E MARSHALL AVE

E FOOTHILL DR

E LYNWOOD DR

E HIGHLAND AVE

VERDE

CAMINO EL

LOS FLORES

HIDALGO

TOLUCA

EUREKA

N DEL ROSA AVE

MANZANITA

MESQUITE

PALOMAR

MCKINLEY

BONNIE

VAL MAR

DEL NORTE

MARY ANN

IRONWOOD

N STERLING AVE

NEWCOMB

MIMOSA

JACARANDA

HAWTHORNE

LOCUST

ASHWOOD

PARK

CARPENTER

CITRUS

DATE

CHIQUITA

OSBUN

ELMWOOD

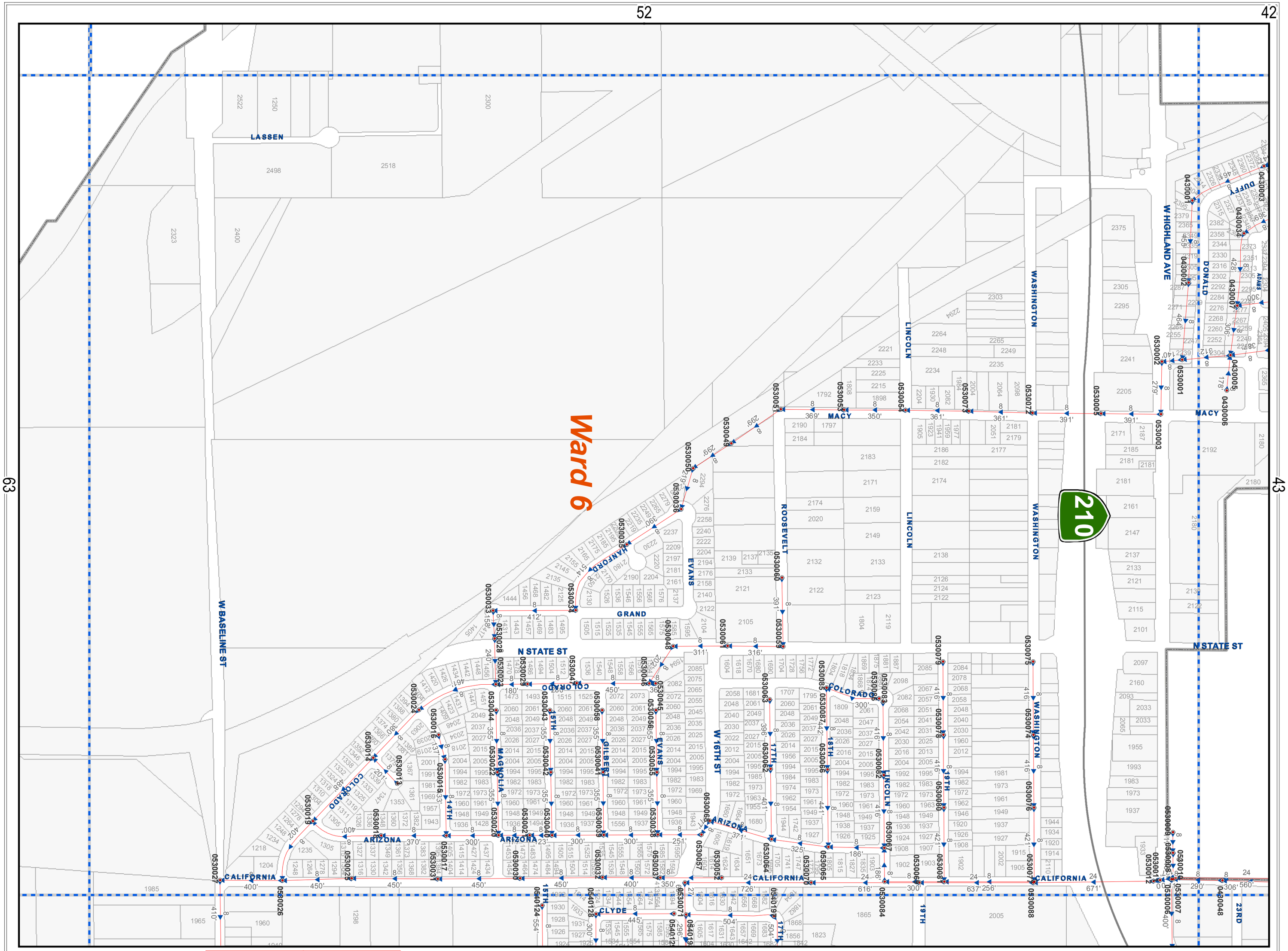
TAYLOR

PUMALO

OUTER HIGHLAND

30

0380002 0390009 0390073 0390011 0490005 0480091 0480129 0490001 0490003 0490002 0480133 0490004 0490019 0490018 0490017 0480162 0490015 0490033 0490016 0490034 0480151 0480144 0490006 0490032 0480145 0490007 0490031 0490030 0490029 0490008 0490011 0490009 0490010 0490012 0490013 0490028 0490027 0490026 0490025 0490022 0480159 0490020 0490021 0490024 0490023 0490014 0590001 0590002



GRID 53

Legend

Lift Station

Sewer Manhole

Diameter 8" Length 300' SEWER LINE

Parcels

Sewer Grid

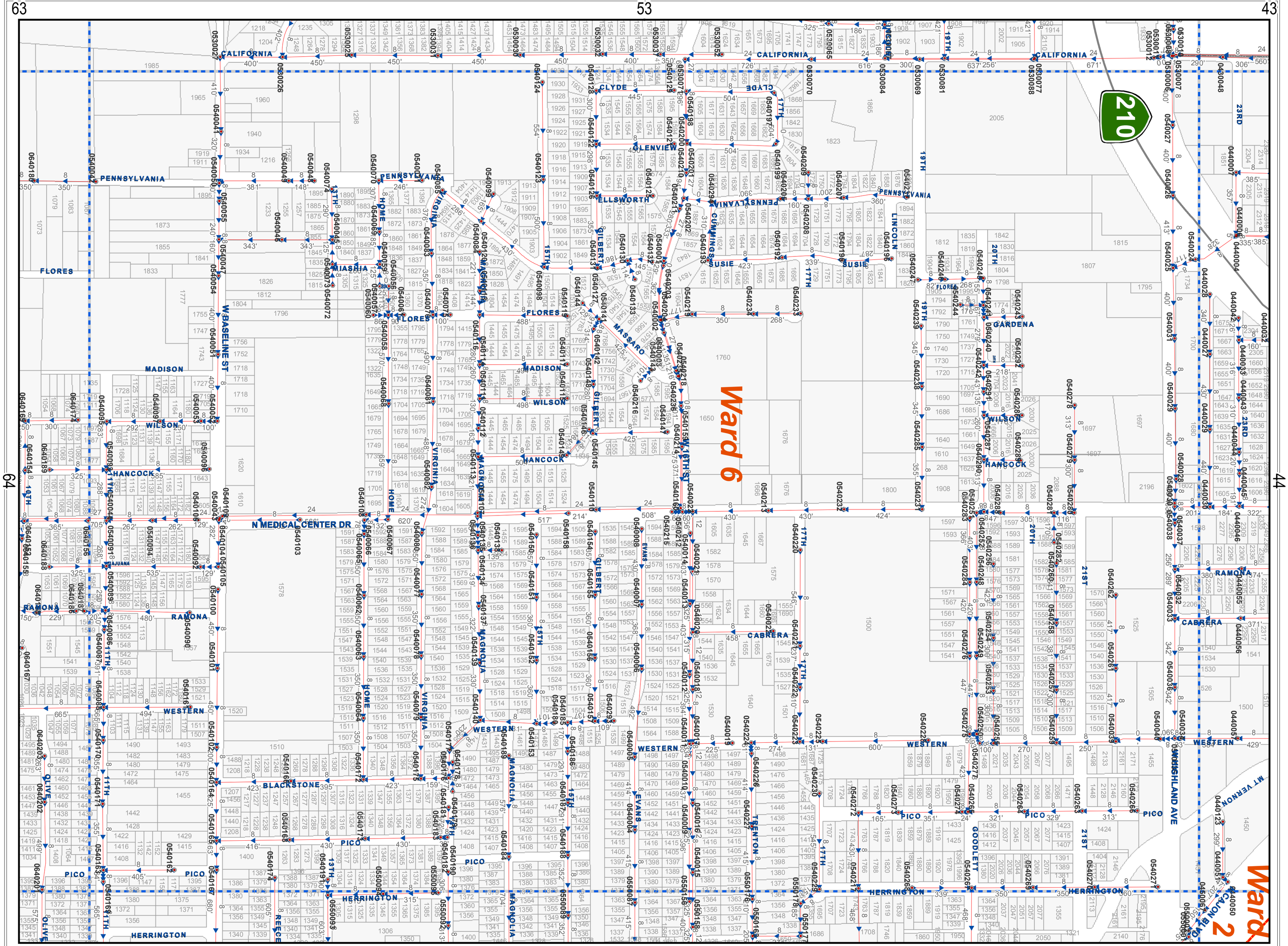
1" = 350'

Printed 2/09

City Geographic Information System

CGIS

City of San Bernardino



GRID 54

Legend

Lift Station

Sewer Manhole

Diameter 8" / Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

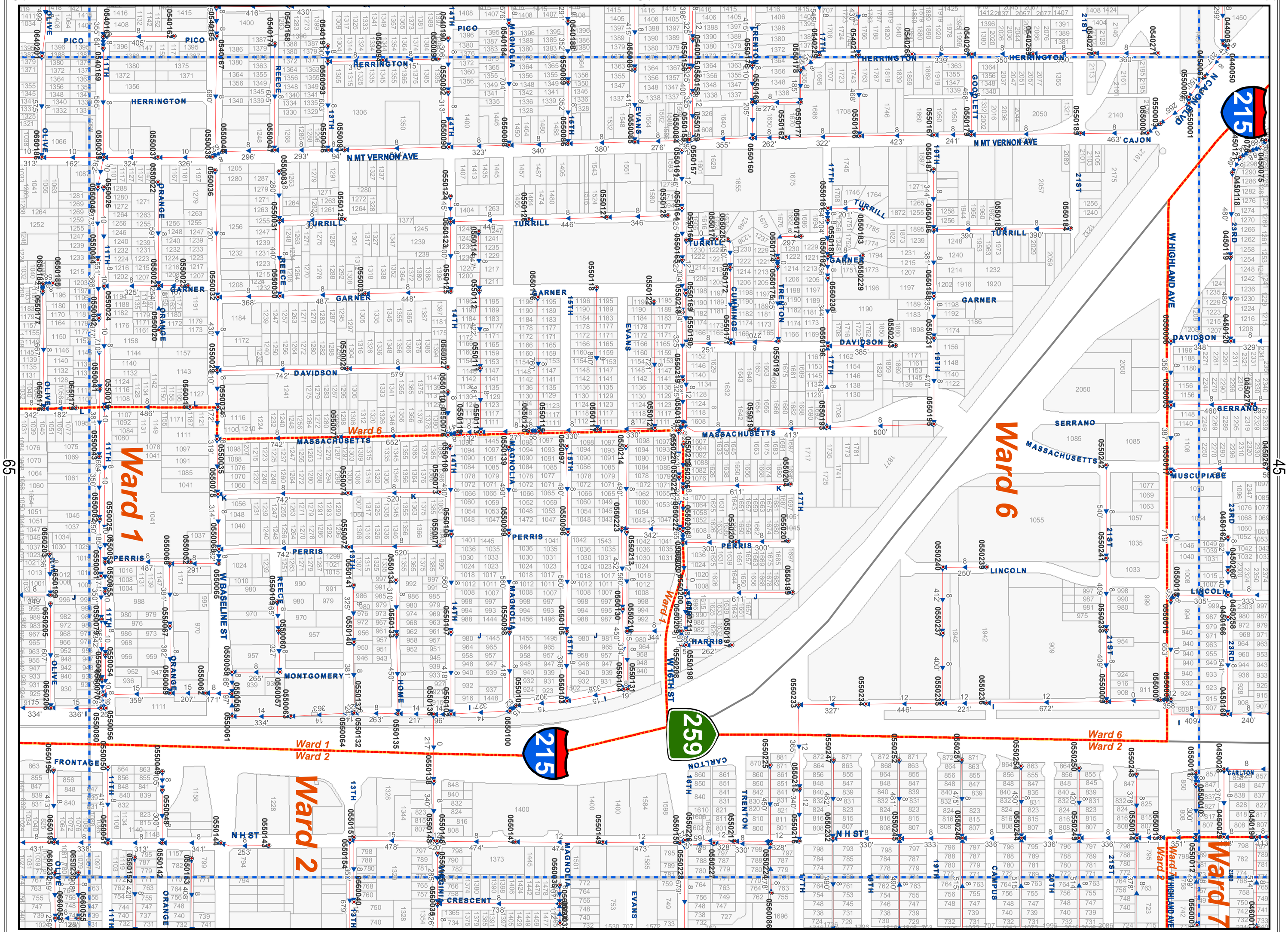
City Geographic Information System

CGIS

City of San Bernardino

64 54 44

65 45



99 56 46

GRID 55

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300' SEWER LINE

Parcels

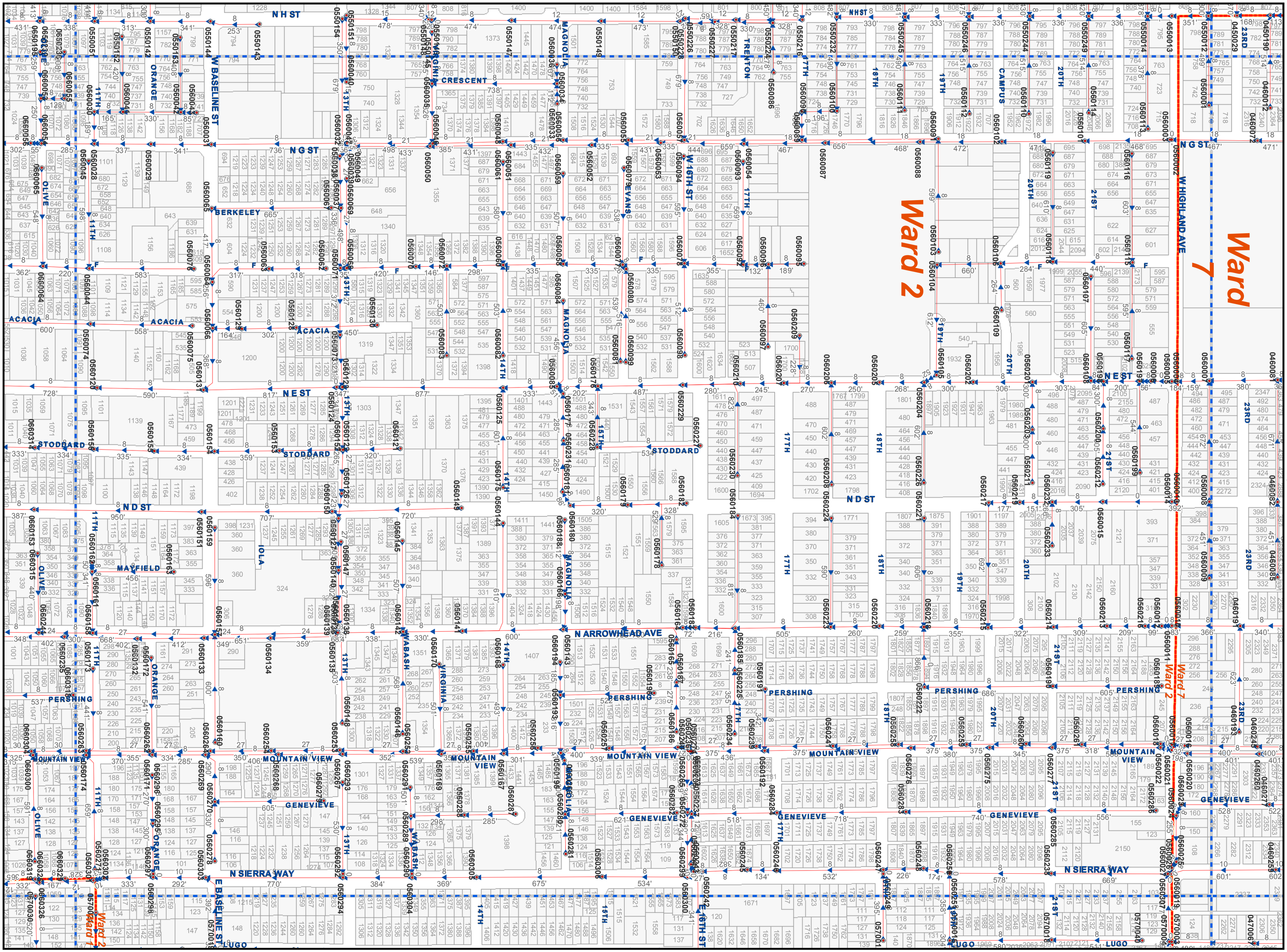
Sewer Grid

1" = 350'

Printed 2/09

City Geographic Information System

CITY OF San Bernardino



GRID 56

Legend

Lift Station

Sewer Manhole

Diameter 8" Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

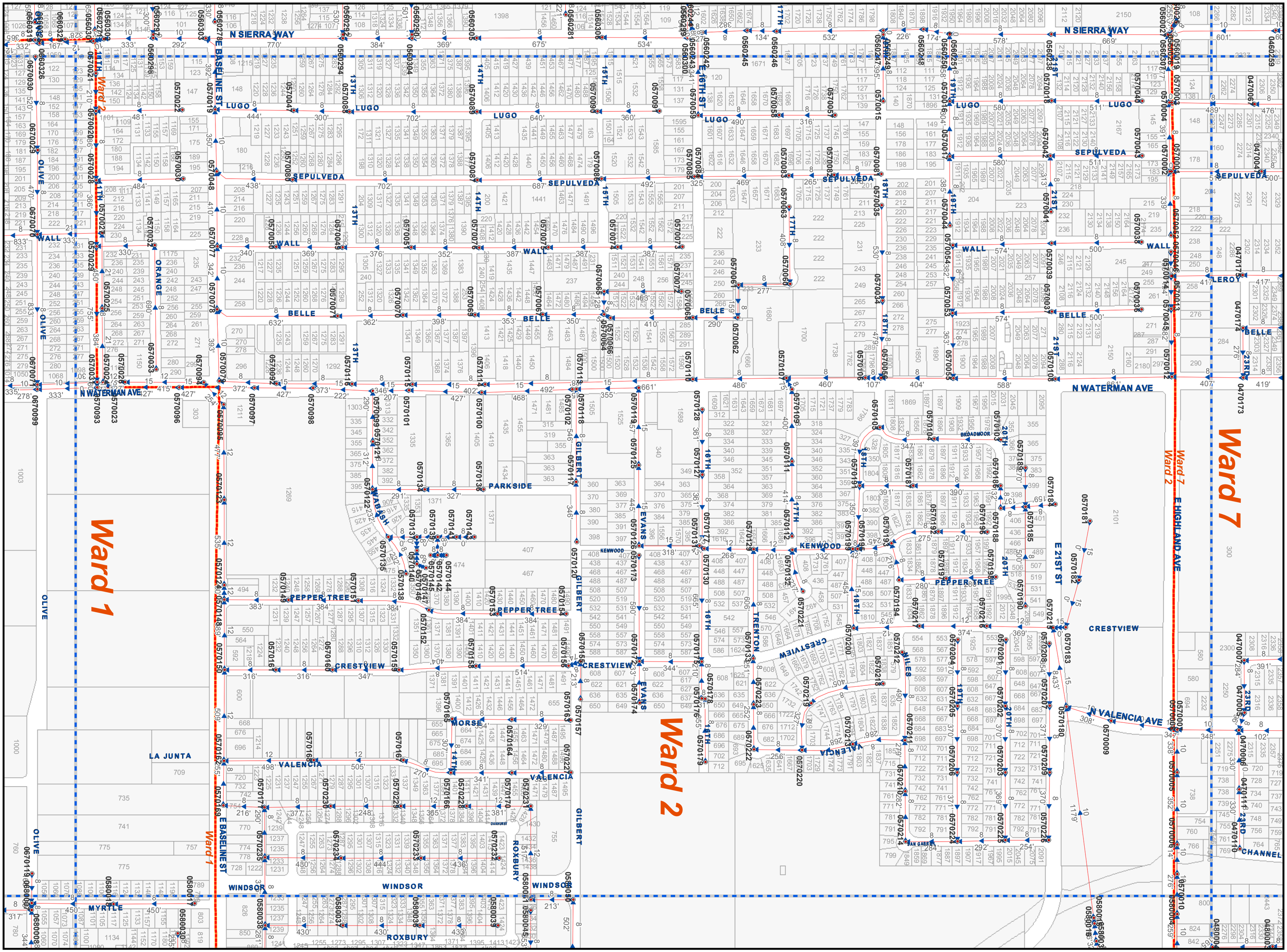
City Geographic Information System

CGIS

City of San Bernardino

66 56 46

67 47



68 58 48

GRID 57

Sewer Grid

1" = 350'

Printed 2/09

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300'

SEWER LINE

Parcels

47 48 49

57 58 59

67 68 69

Sewer Grid

GRID 58

1" = 350'

Printed 2/09

CITY OF San Bernardino

CGIS City Geographic Information System

Ward 7

Ward 2

Ward 1

COUNTY ISLAND

E HIGHLAND AVE

E 21ST ST

N PERRIS HILL RD

E PACIFIC ST

E BASELINE ST

GILBERT

HILLSIDE

17TH

CHANNEL

ROXBURY

CEDAR

LAWRENCE

HARRISON

NEWPORT

MOUNTAIN

VISTA

CONEJO

FAIRFAX

CROSS

GARDEN

PERRIS HILL

PERRIS HILL PARK

BARTON

TIPPECANOE

DWIGHT

GLASGOW

YATES

WINDSOR

ROXBURY

CANYON

CEDAR

BOBBETT

MYRTLE

OLIVE

BELVAN

N TIPPECANOE ST

0470110 0480014 0480003 0480004 0480015 0480007 0480013 0480058 0480024 0480016 0480023 0480031 0480156

0570006 0570010 0580004 0580002 0580003 0580008 0580009 0580010 0580006 0580007 0580012 0580011 0580013 0580014

0580026 0580025 0580023 0580028 0580027 0580071 0580070 0580072

0580033 0580034 0580035 0580032 0580031 0580016 0580015

0580021 0580022 0580024

0580074 0580073 0580076 0580075 0580080 0580078 0580077 0580079 0580081 0580082 0580083

0580046 0580084 0580085 0580069 0580061 0580062 0590004 0580063

0580047 0580060 0580059 0580057 0580058 0580056 0580053 0580054

0580050 0580049 0580048 0580051 0580045 0580044 0570232 0580039 0580043 0570233 0580036 0580041 0570234 0580037 0580042 0570235 0580038 0580040

0580017 0580030 0580019 0580018 0580020 0670119 0680007 0680008 0680010

0580066 0580065 0580067 0580064 0580055 0580068 0580052 0680046 0680047 0680045 0680044

Legend

Lift Station

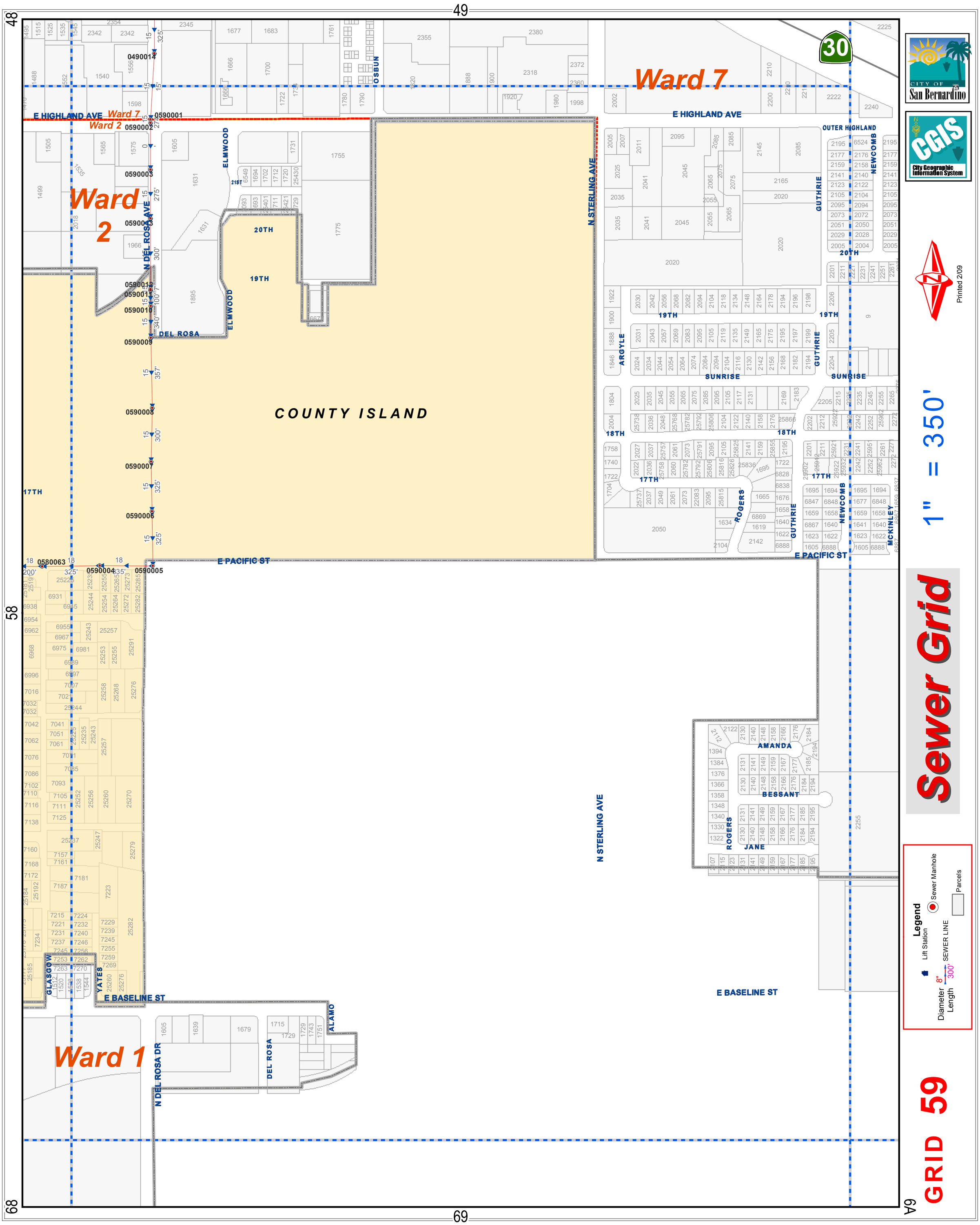
Sewer Manhole

SEWER LINE

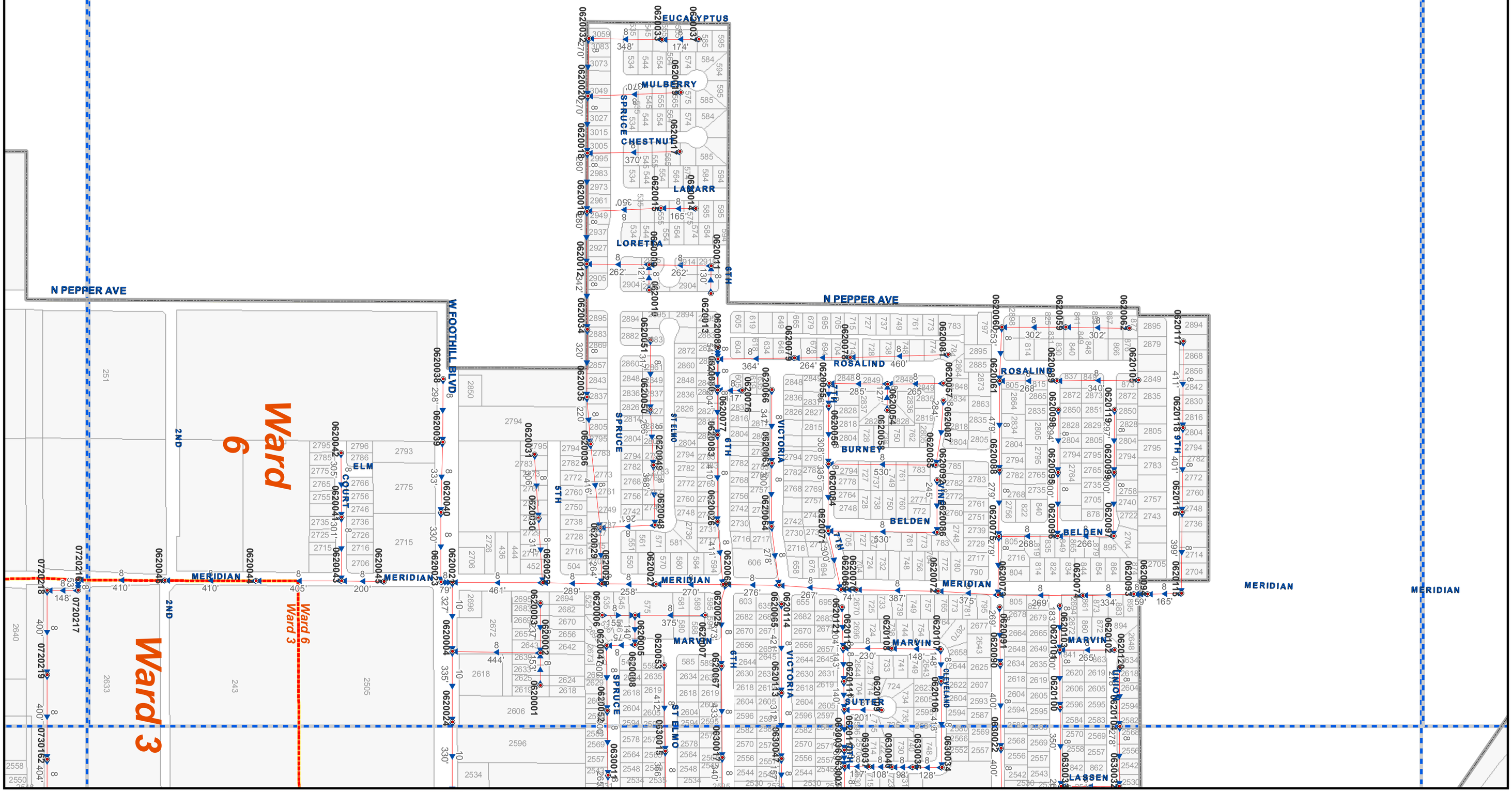
Diameter 8" 300'

Length

Parcels



49
48
58
68
69
6A
Ward 7
Ward 2
Ward 1
COUNTY ISLAND
E HIGHLAND AVE
E PACIFIC ST
E BASELINE ST
N STERLING AVE
N DEL ROSA AVE
N DEL ROSA DR
DEL ROSA
ELMWOOD
OSBUN
GUTHRIE
NEWCOMB
ARGYLE
ROGERS
MCKINLEY
AMANDA
BESSANT
JANE
GLASGOW
YATES
ALAMO
OUTER HIGHLAND
20TH
19TH
18TH
17TH
30
CITY OF San Bernardino
CGIS City Geographic Information System
Printed 2/09
1" = 350'
Sewer Grid
Legend
Lift Station
Sewer Manhole
Parcels
Diameter 8"
Length 300'
SEWER LINE
GRID 59



GRID 62

Legend

- Lift Station
- Sewer Manhole
- Diameter 8" / Length 300' SEWER LINE
- Parcels

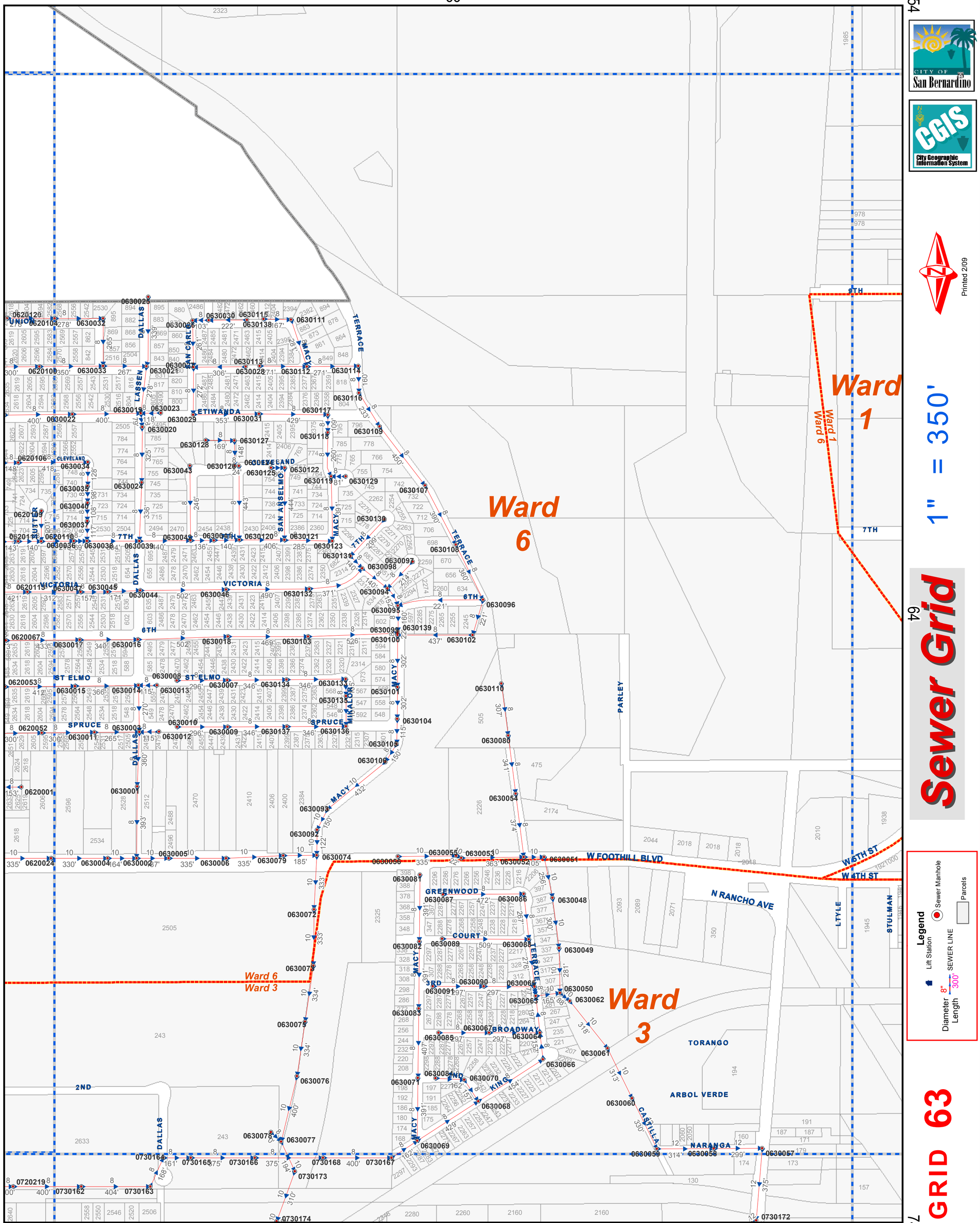
Sewer Grid

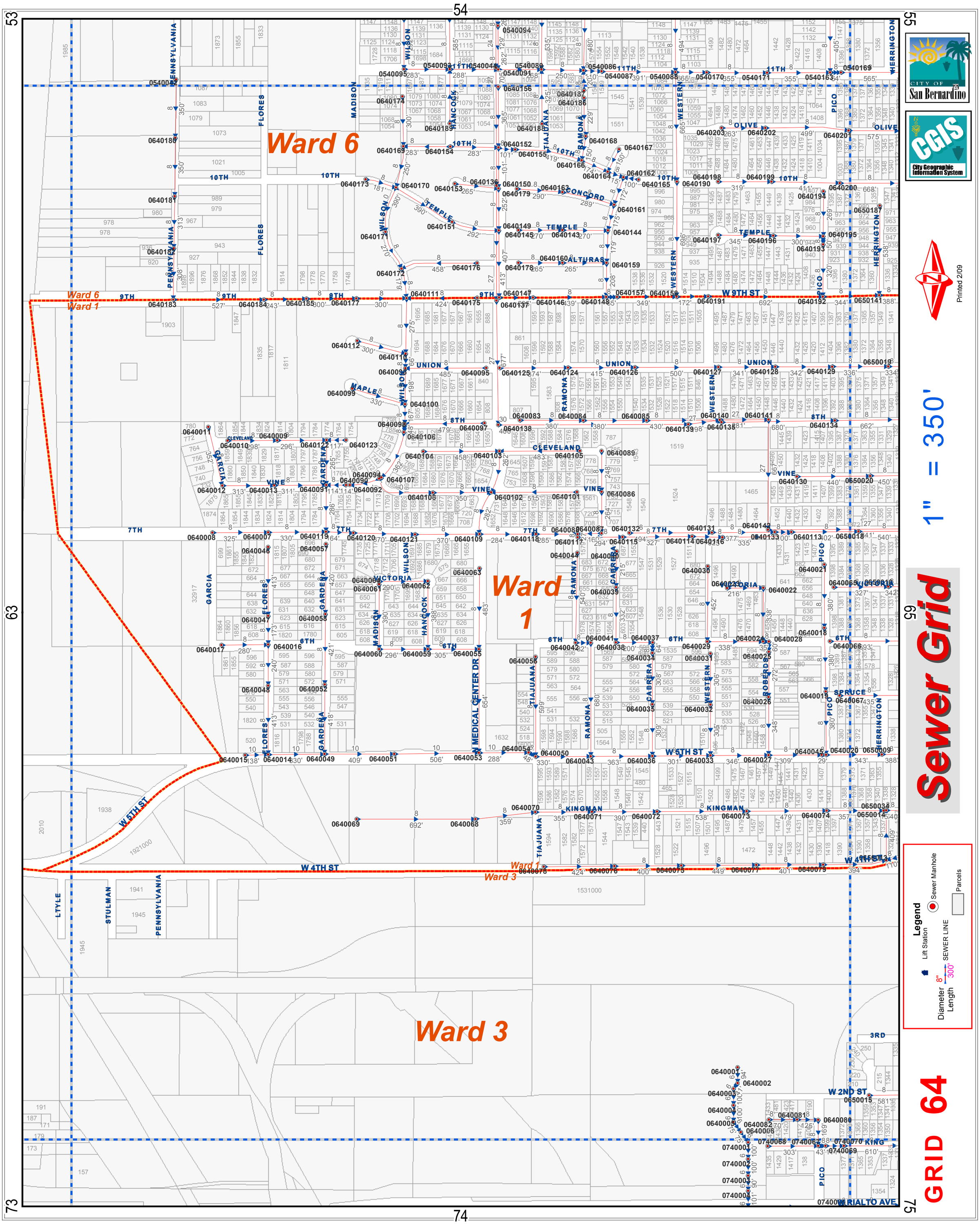
1" = 350'

Printed 2/09

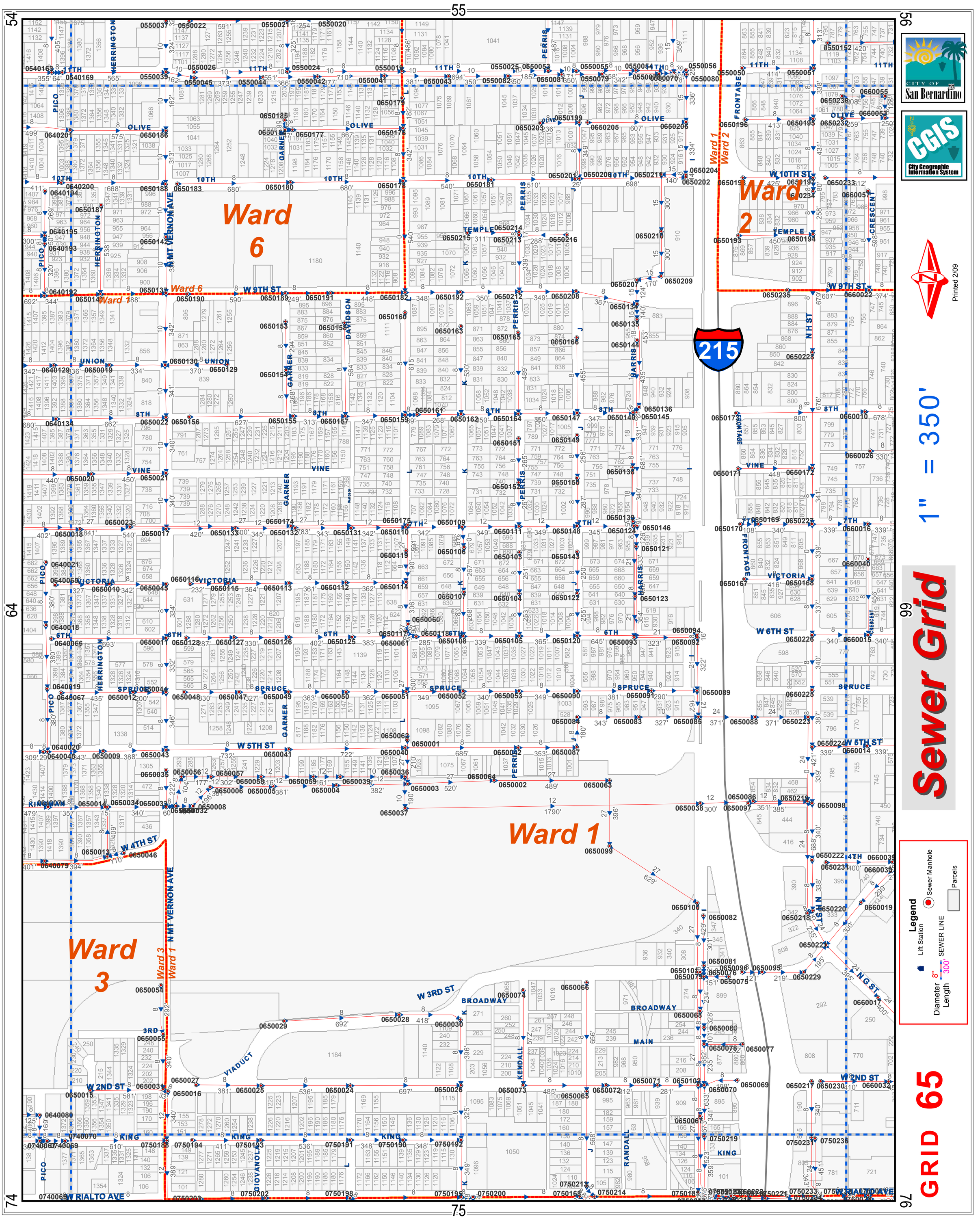
CGIS City Geographic Information System

City of San Bernardino

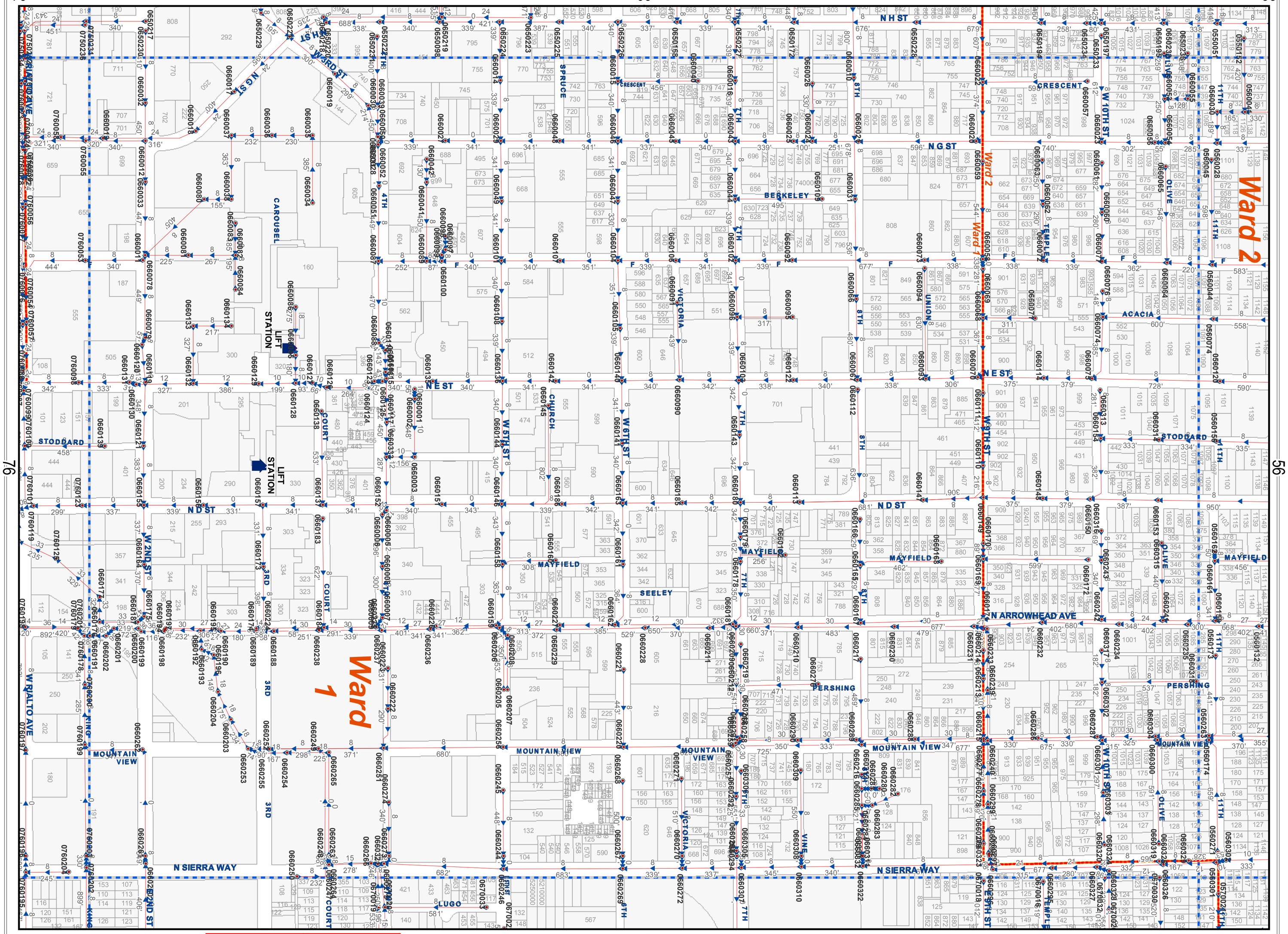

Ward 6
Ward 3
Ward 1
Ward 1
Ward 6
Sewer Grid
GRID 63
1" = 350'
Printed 2/09
Legend
Lift Station
Sewer Manhole
SEWER LINE
Parcels
Diameter 8"
Length 300'
9TH
7TH
6TH
5TH
4TH
3RD
2ND
VICTORIA
CLEVELAND
ETIWANDA
SPRUCE
ST ELMO
UNION
DALLAS
LASSEN
MACY
TERRACE
SAN ANSELMO
MIRALOMA
PARLEY
KING
BROADWAY
COURT
GREENWOOD
CASTILLA
NARANGA
TORANGO
ARBOL VERDE
N RANCHO AVE
W FOOTHILL BLVD
W 6TH ST
W 4TH ST
LTYLE
STULMAN



Ward 6
Ward 1
Ward 3
Sewer Grid
GRID 64
1" = 350'
Printed 2/09
CITY OF San Bernardino
CGIS City Geographic Information System
Legend
Lift Station
Sewer Manhole
Parcels
Diameter 8"
Length 300'
SEWER LINE
W 9TH ST
W 5TH ST
W 4TH ST
W 2ND ST
W RIALTO AVE
PENNSYLVANIA
FLORES
MADISON
WILSON
HANCOCK
TIAJUANA
RAMONA
WESTERN
PICO
HERRINGTON
OLIVE
TEMPLE
CONCORD
ALTURAS
UNION
MAPLE
CLEVELAND
VINE
GARCIA
GARDENA
VICTORIA
CABRERA
ROBERDS
SPRUCE
KINGMAN
N MEDICAL CENTER DR
LTYLE
STULMAN



Sewer Grid
GRID 65
1" = 350'
Ward 1
Ward 2
Ward 3
Ward 6
Legend
Lift Station
Sewer Manhole
Parcels
Diameter 8"
Length 300'
SEWER LINE
Printed 2/09
CITY OF San Bernardino
CGIS City Geographic Information System



GRID 66

Legend

Lift Station

Sewer Manhole

Diameter 8" Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

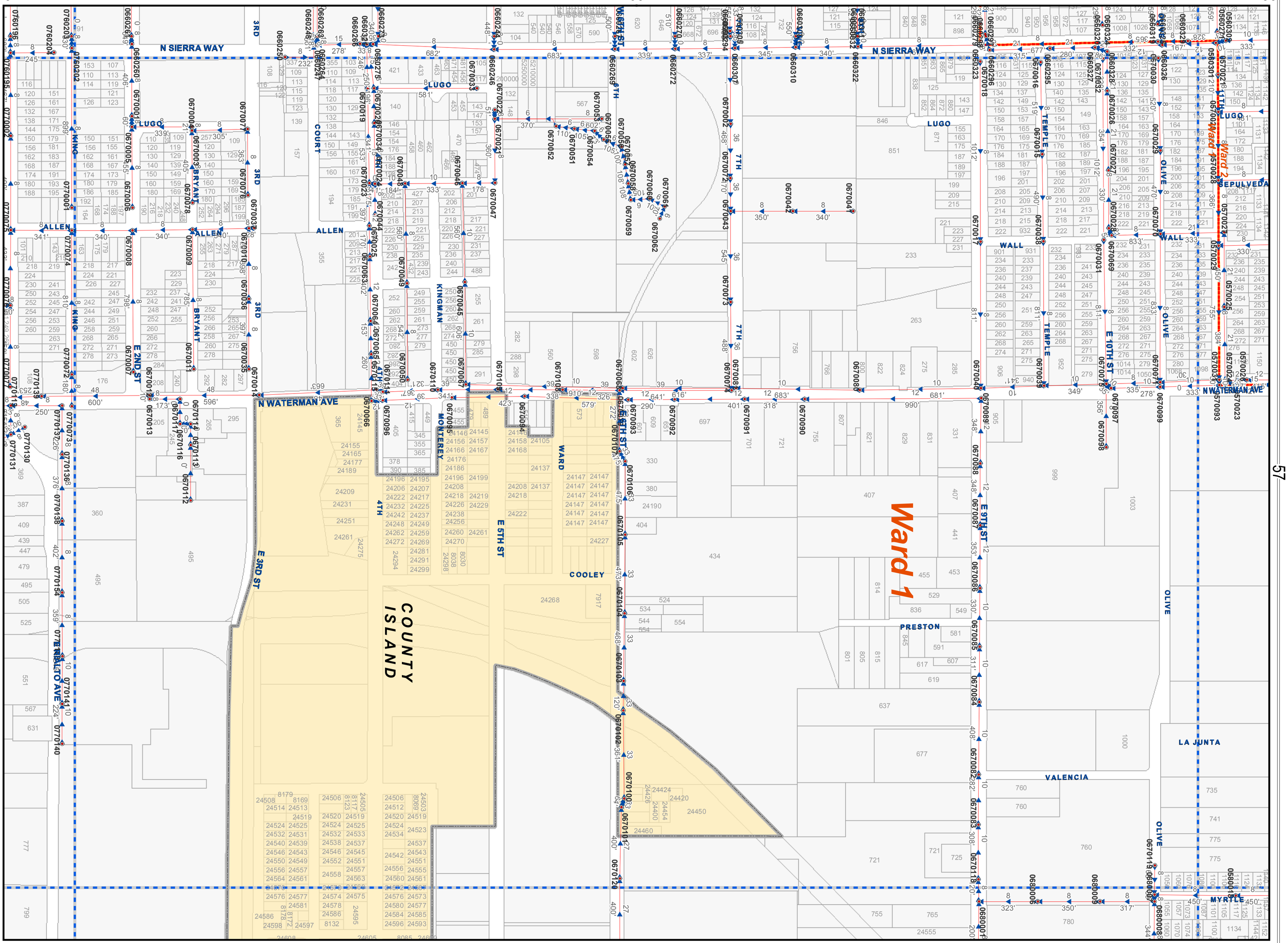
City Geographic Information System

CGIS

City of San Bernardino

76 66 56

77 57



78 68 58

GRID 67

Legend
Lift Station
Sewer Manhole
Diameter 8"
Length 300' SEWER LINE
Parcels

Sewer Grid

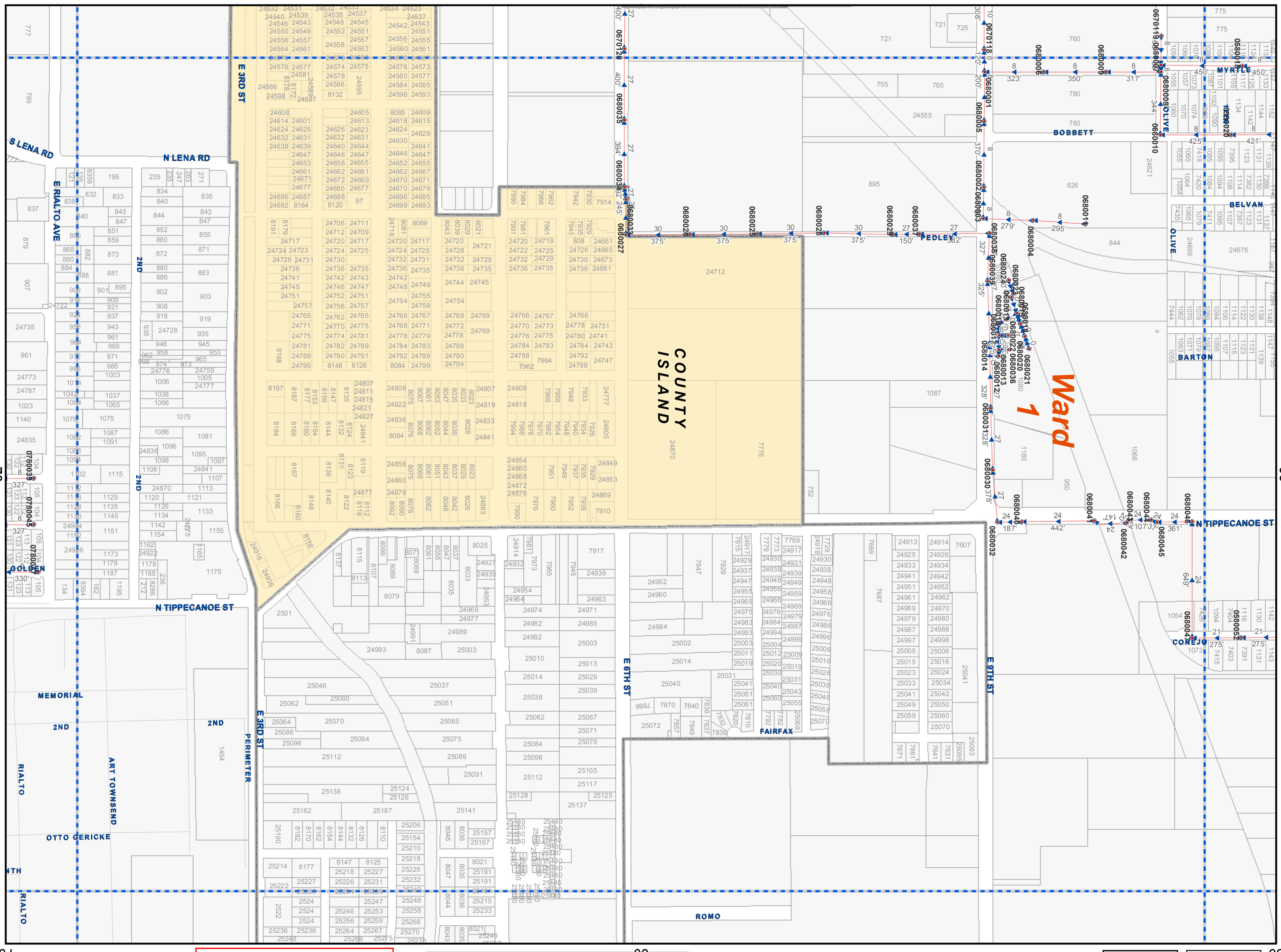
1" = 350'

Printed 2/09

77 67 57

78 58

79 69 59



GRID 68

Legend

Lift Station

Sewer Manhole

Diameter 8"

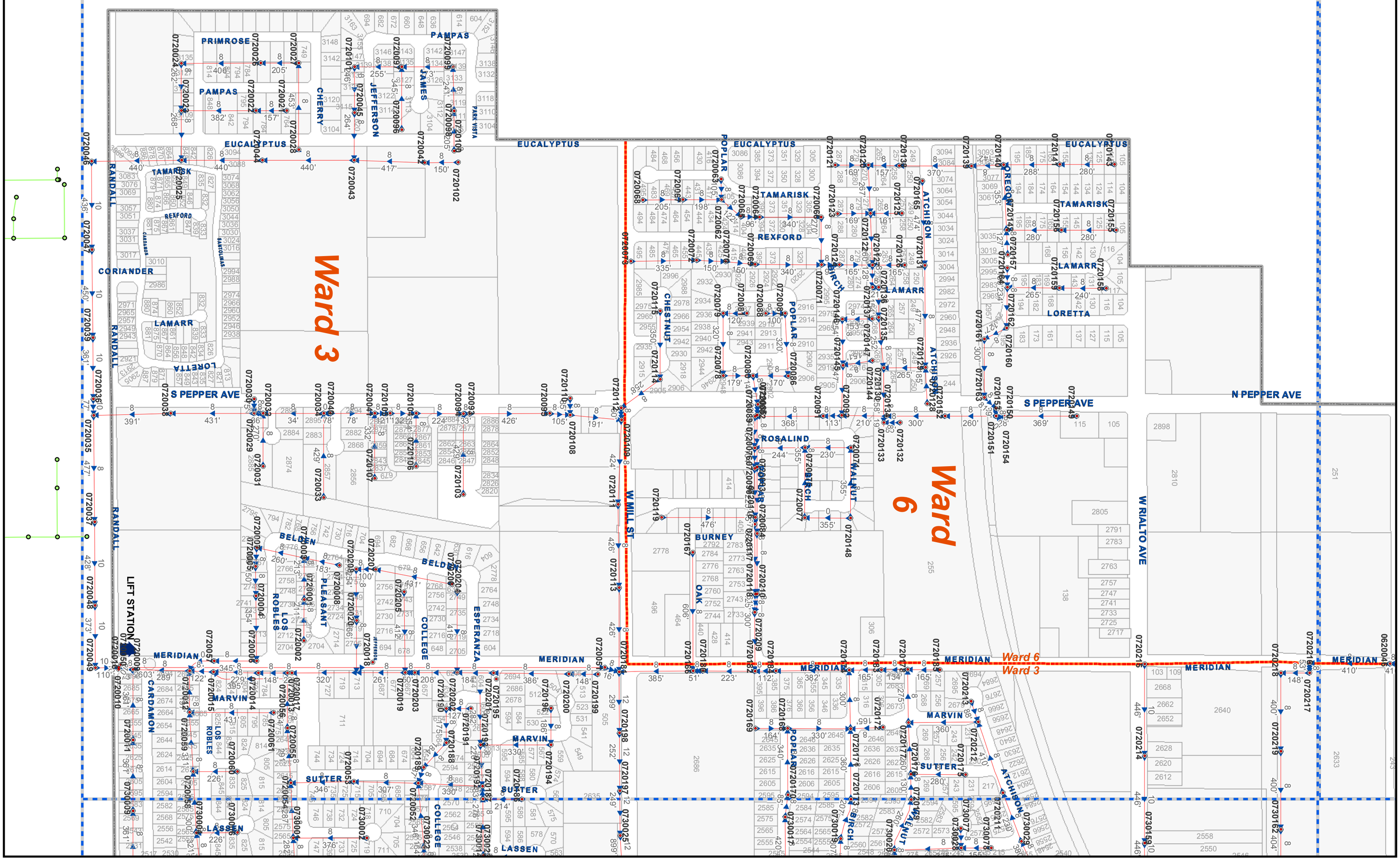
Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09



GRID 72

Legend

Lift Station

Sewer Manhole

Diameter 8"

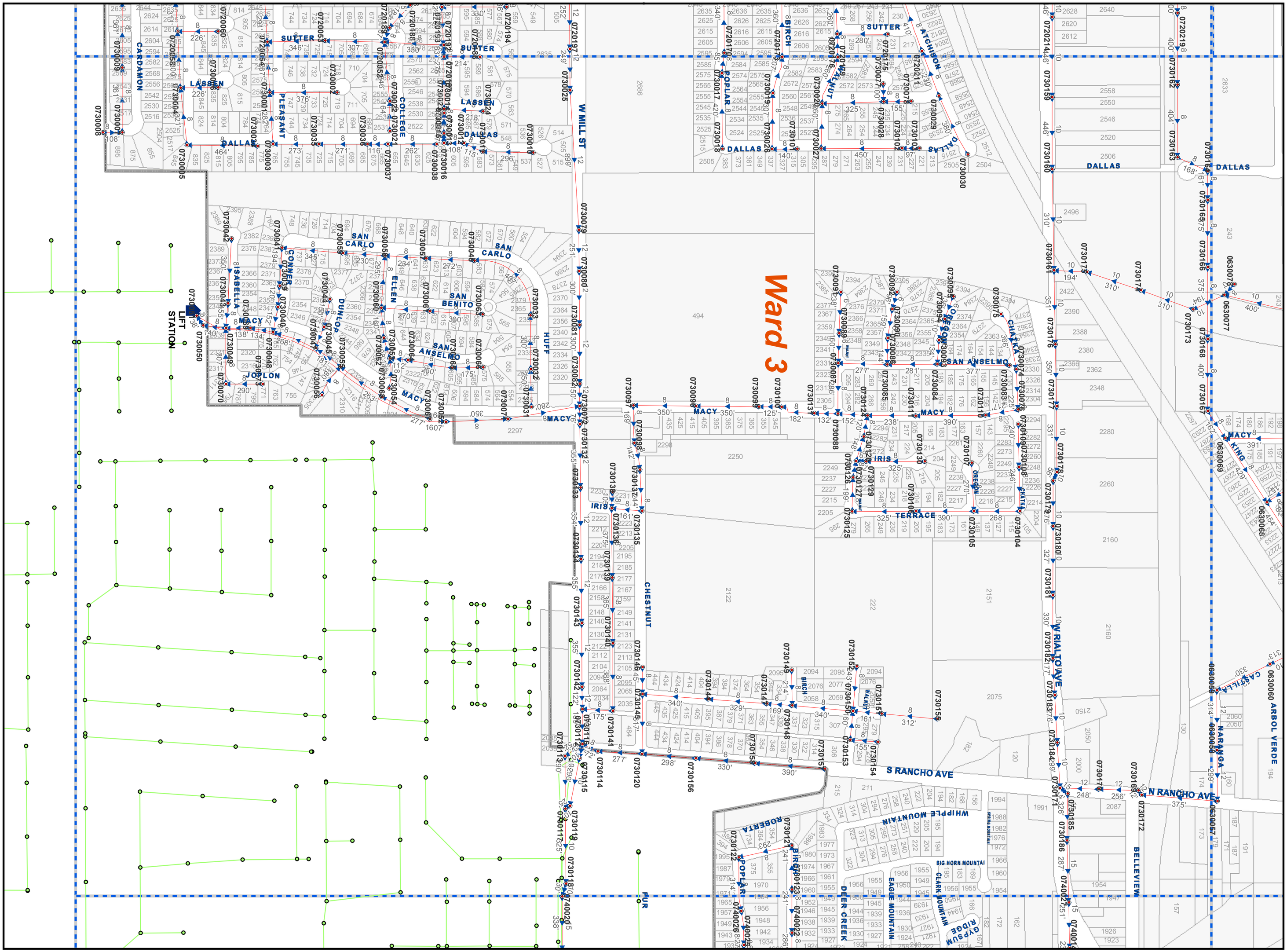
Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09



GRID 73

Legend
Lift Station
Sewer Manhole
Diameter 8"
Length 300' SEWER LINE
Parcels

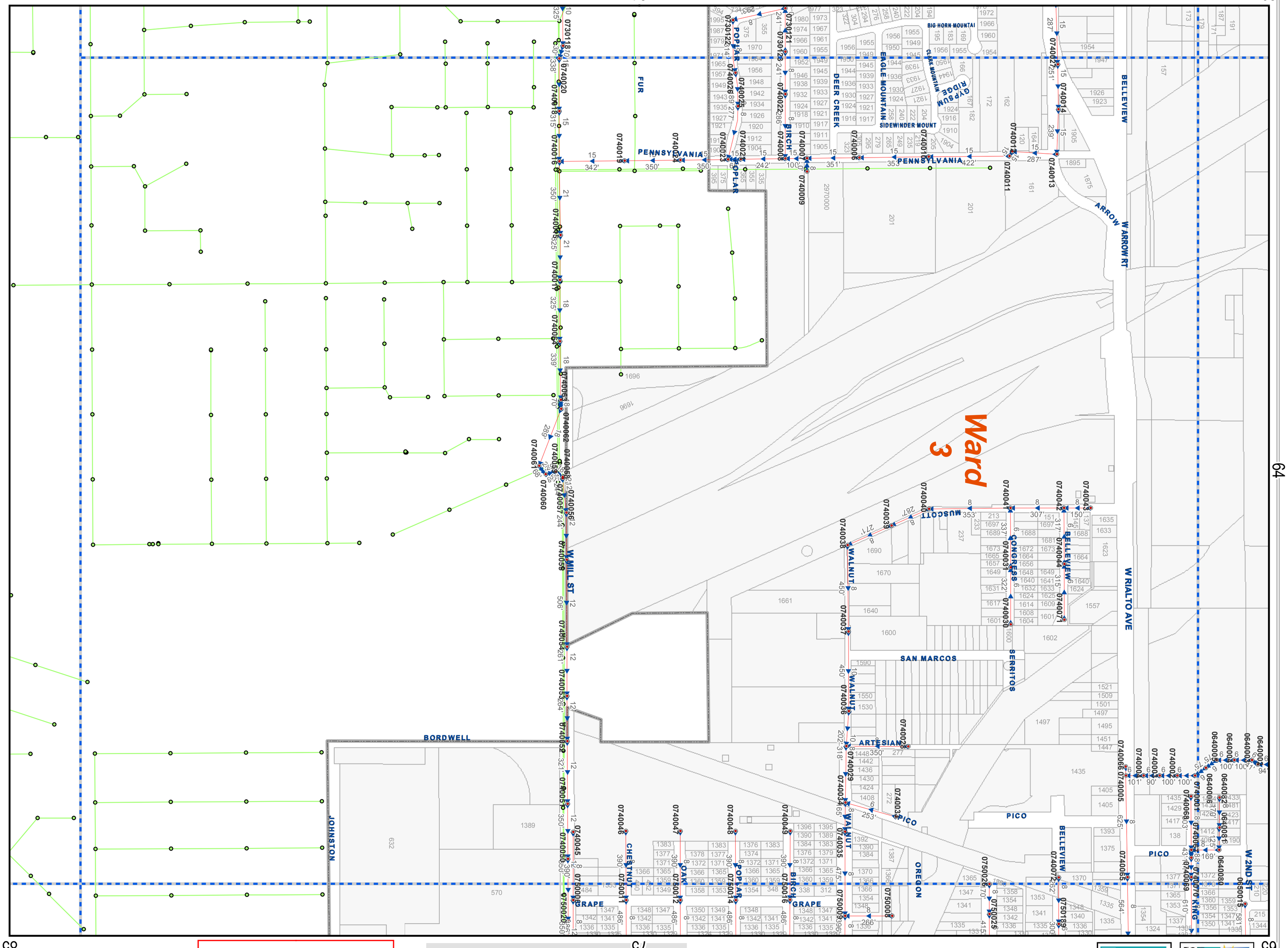
Sewer Grid

1" = 350'

Printed 2/09

City Geographic Information System

CITY OF San Bernardino



GRID 74

Legend

Lift Station

Sewer Manhole

Diameter 8" Length 300' SEWER LINE

Parcels

Sewer Grid

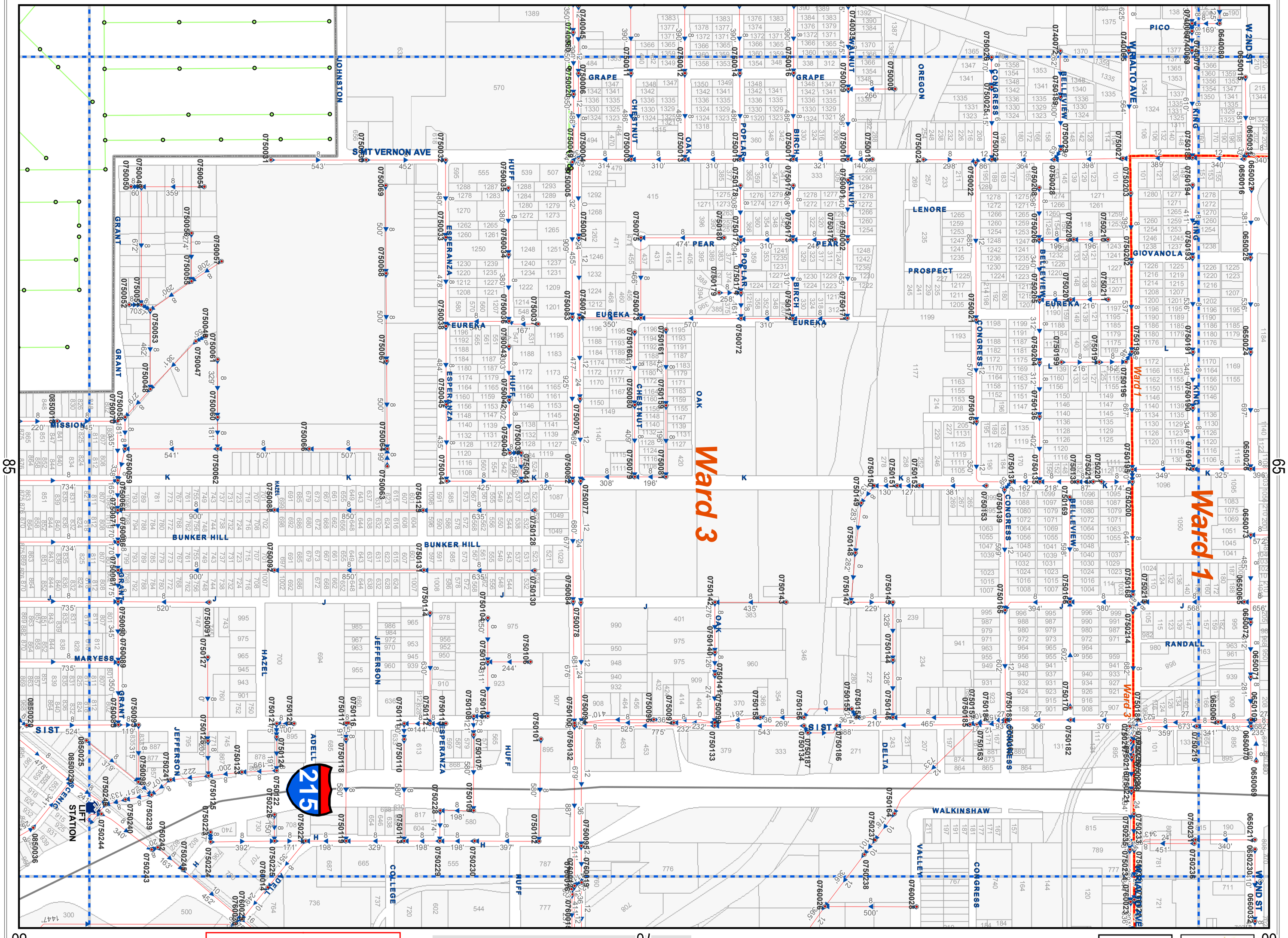
1" = 350'

Printed 2/09

City Geographic Information System

CGIS

City of San Bernardino



GRID 75

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300'

SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

City Geographic Information System

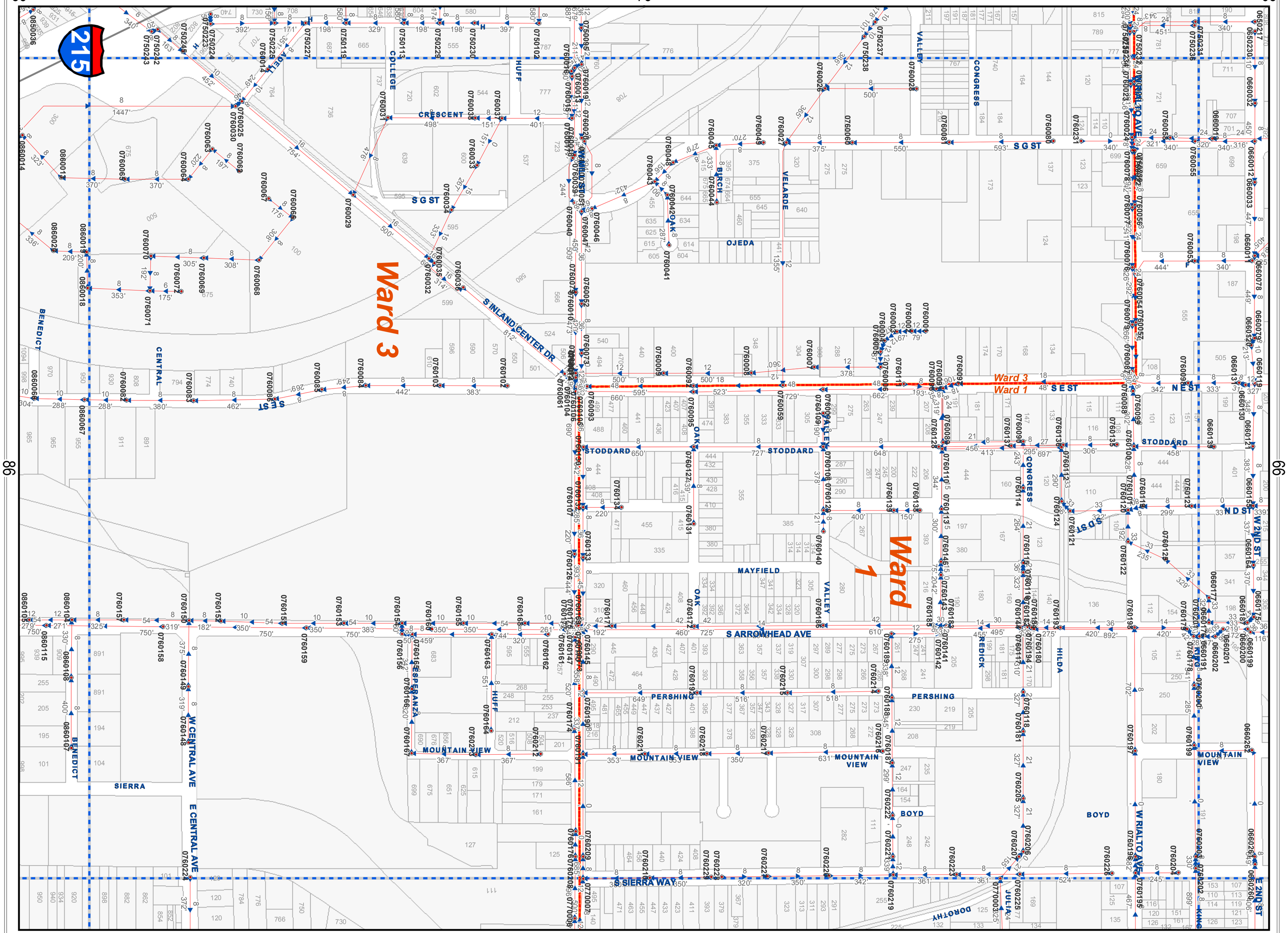
CGIS

City of San Bernardino

85 75 65

86 66

87 77 67



GRID 76

Legend

Lift Station

Sewer Manhole

Diameter 8"

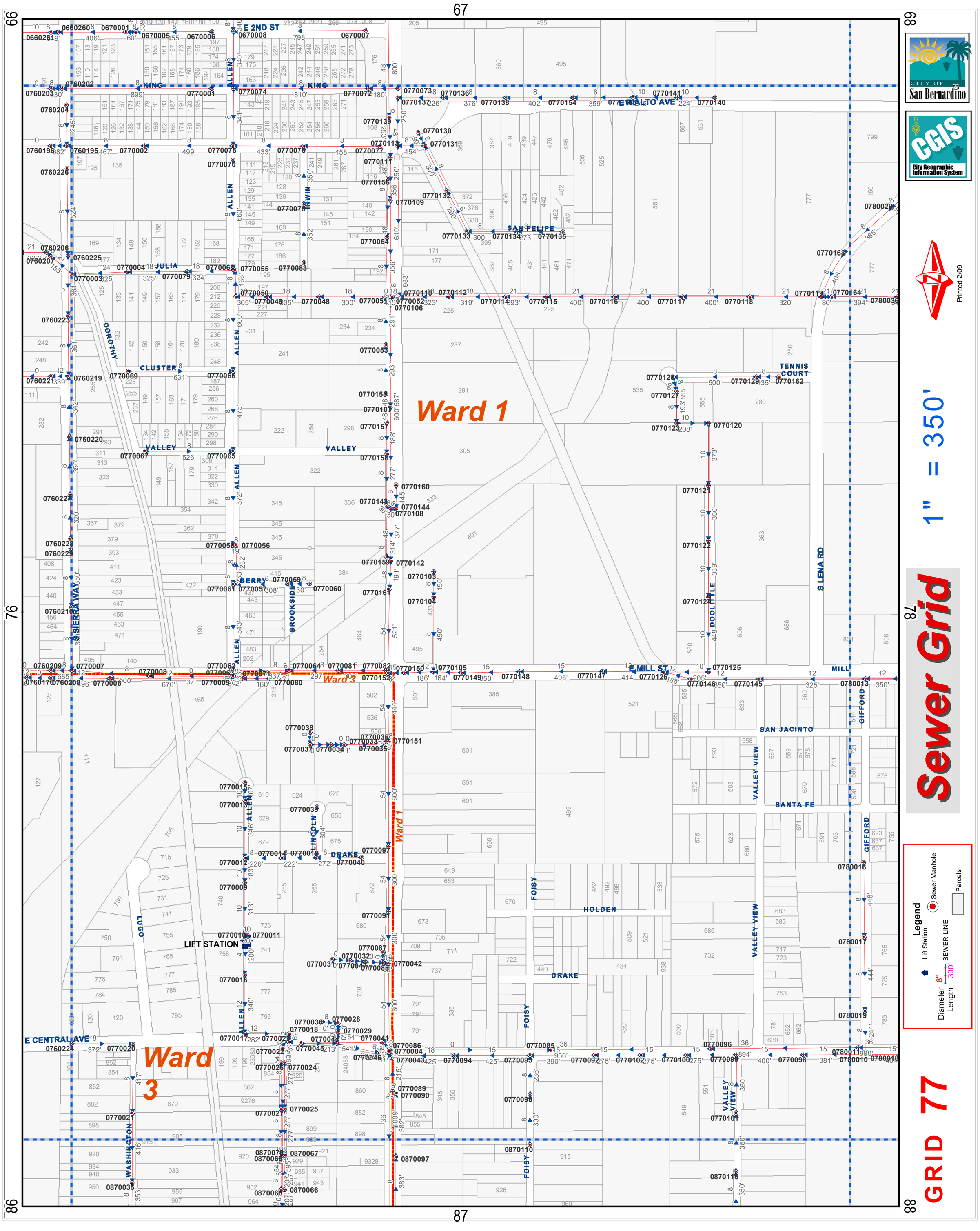
Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

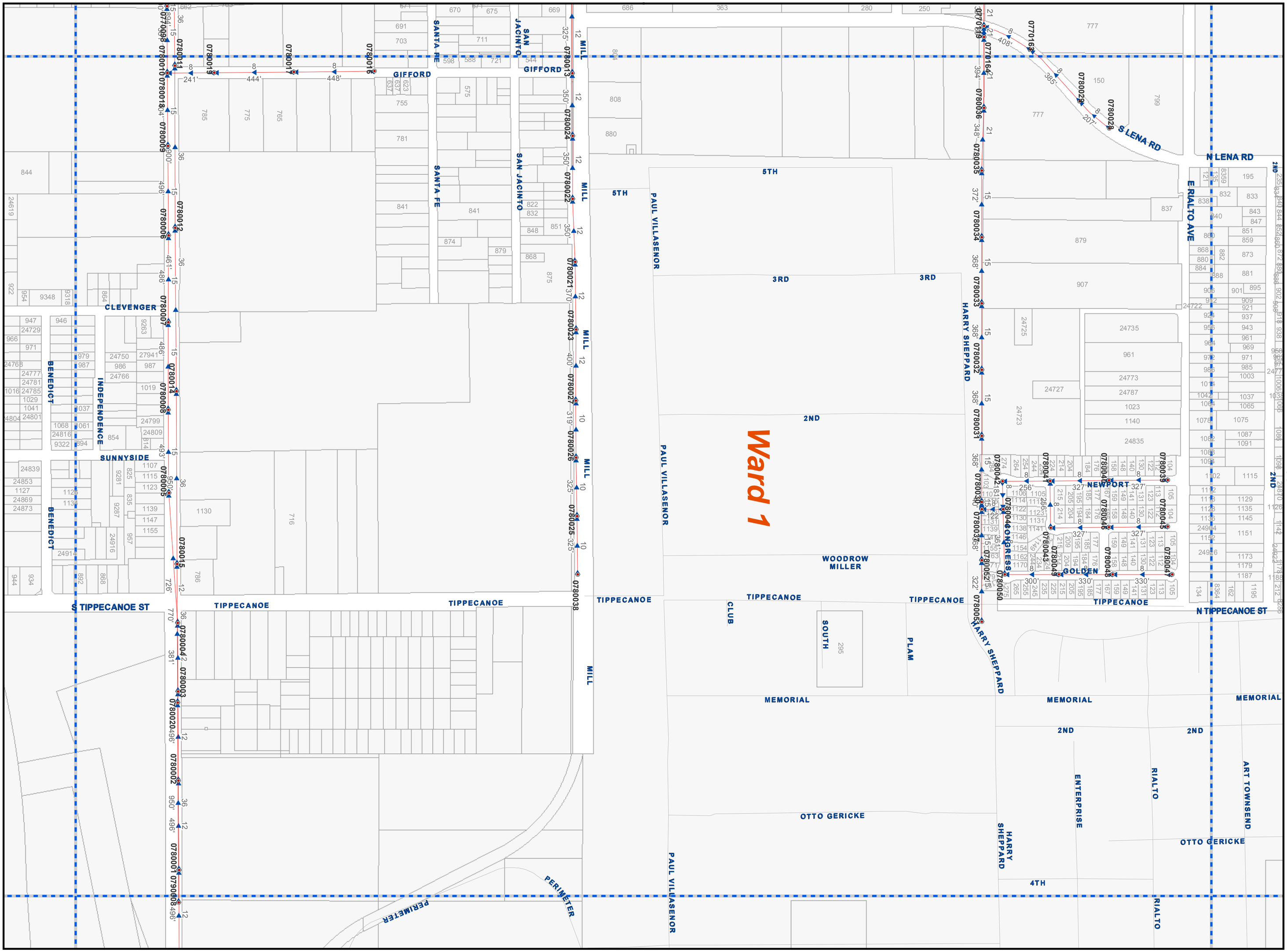
Printed 2/09



Sewer Grid
GRID 77
1" = 350'
Printed 2/09
Ward 1
Ward 3
LIFT STATION
E 2ND ST
KING
ALLEN
IRWIN
JULIA
DOROTHY
CLUSTER
VALLEY
BERRY
BROOKSIDE
SIERRA WAY
E RIALTO AVE
SAN FELIPE
TENNIS COURT
S LENA RD
DOOLITTLE
E MILL ST
MILL
GIFFORD
SAN JACINTO
VALLEY VIEW
SANTA FE
HOLDEN
DRAKE
FOISY
LINCOLN
LUGO
E CENTRAL AVE
WASHINGTON
Legend
Lift Station
Sewer Manhole
Parcels
Diameter
Length
SEWER LINE

87 77 67

88 68



68 67 69

GRID 78

Legend

Lift Station

Sewer Manhole

Diameter 8"

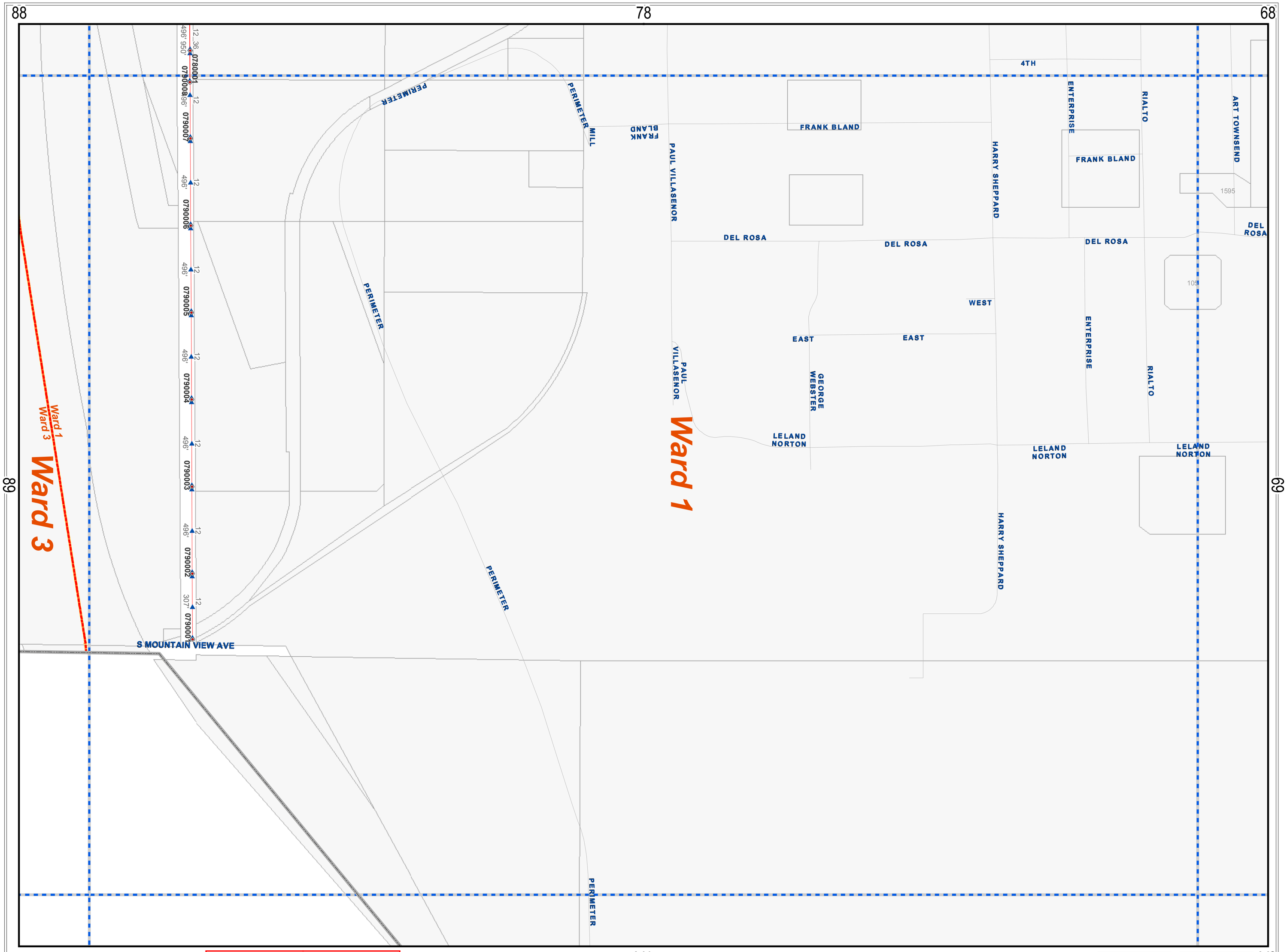
Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09



GRID 79

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

City Geographic Information System

CGIS

City of San Bernardino

74

75

96

98

76

Ward 3

GRANT

MISSION

BUNKER HILL

MARYESS

S INLAND CENTER DR

RIVERWALK

EAGLE VIEW

MONICA

SCENIC

SIST

LIFT STATION

S AUTO PLAZA DR

SHOW CASE-SOUTH

215

GRID 85

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300' SEWER LINE

Parcels

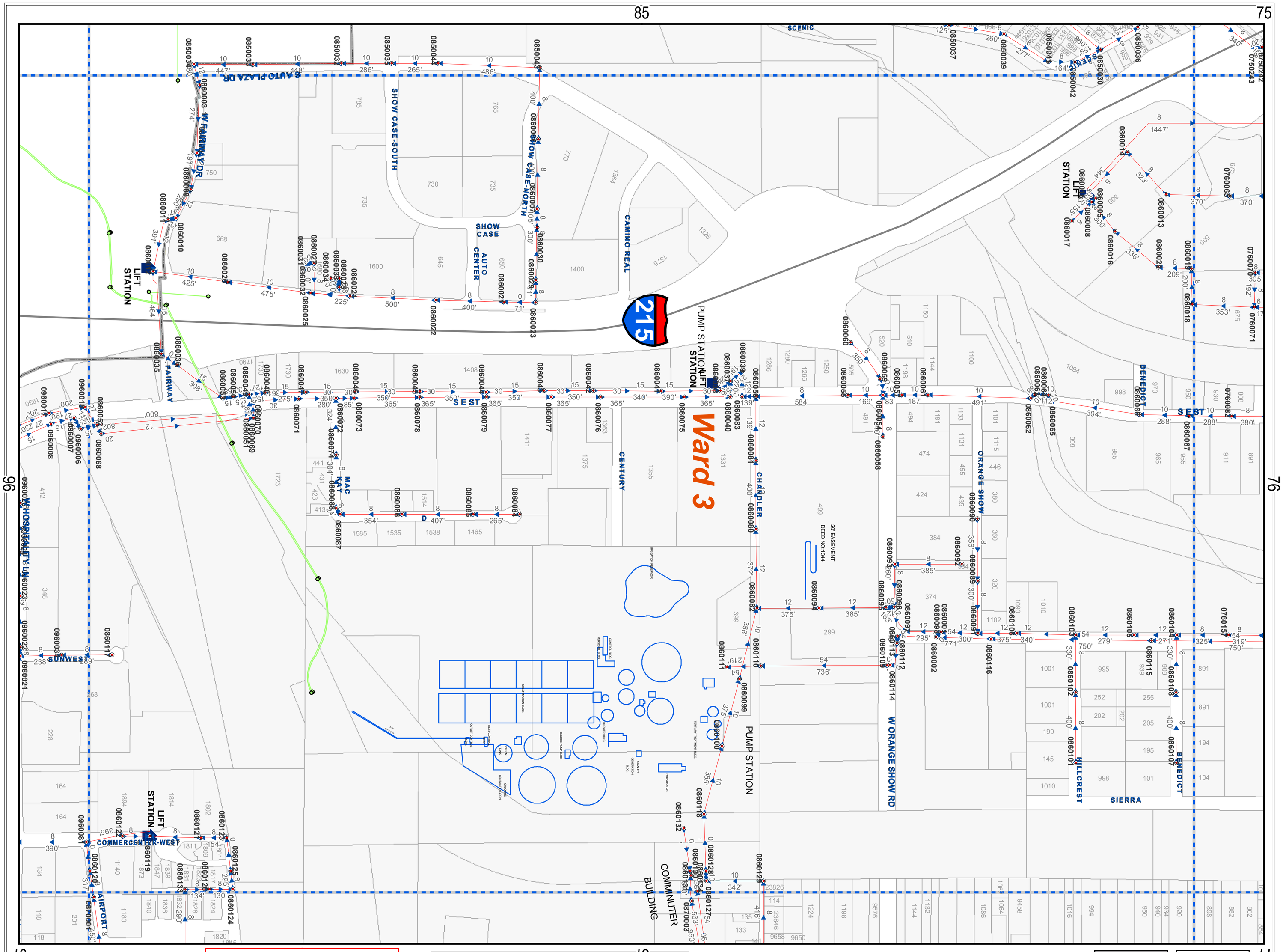
Sewer Grid

1" = 350'

Printed 2/09

City Geographic Information System

City of San Bernardino



GRID 86

Legend

Lift Station

Sewer Manhole

Diameter 8" Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

City Geographic Information System

CGIS

City of San Bernardino

76 77 78

86 88

96 97

CITY OF San Bernardino

CGIS City Geographic Information System

Printed 2/09

1" = 350'

Sewer Grid

Ward 1

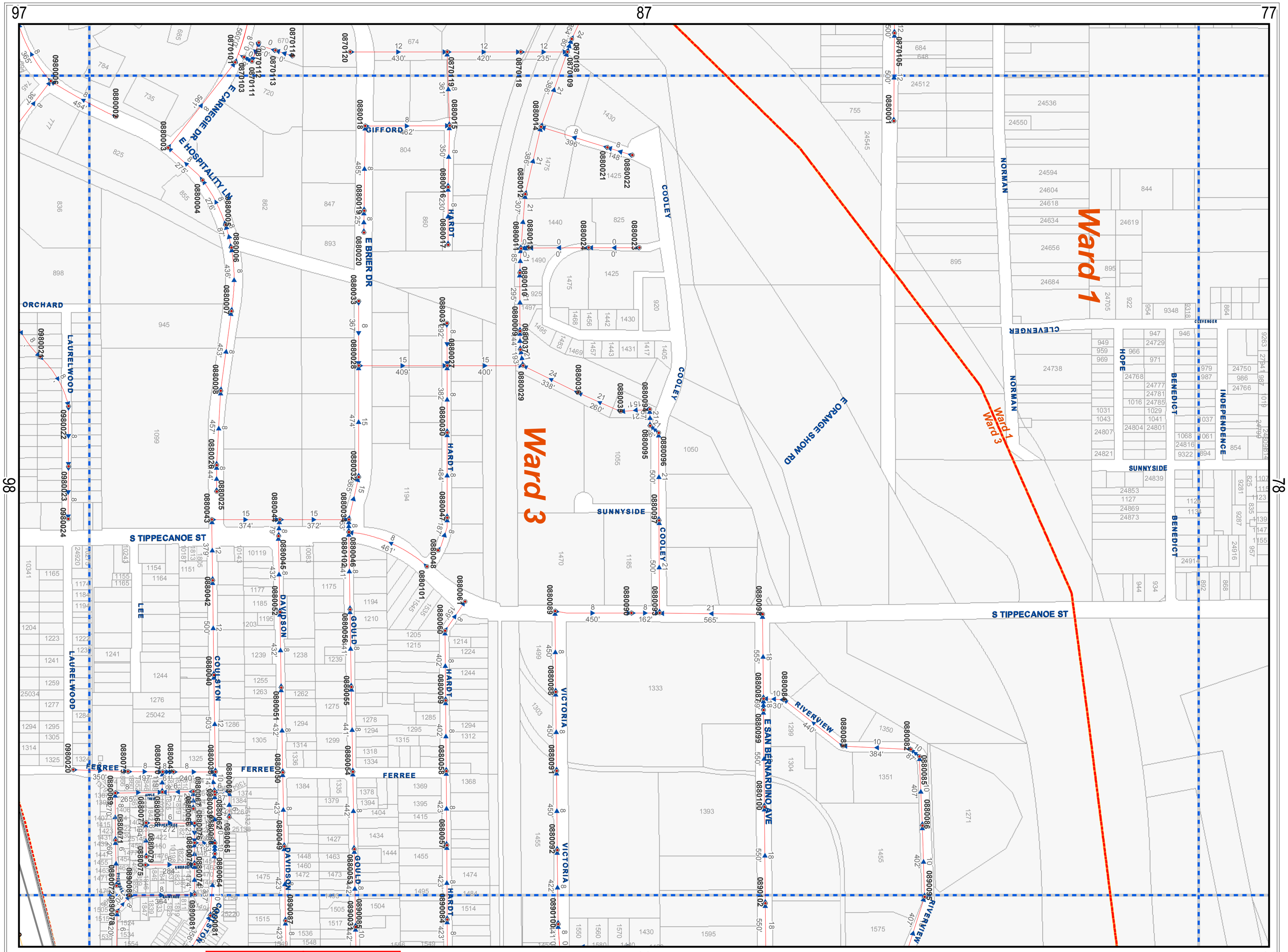
Ward 3

Ward 1
Ward 3

GRID 87

Legend
- Lift Station
- Sewer Manhole
- SEWER LINE
- Parcels
- Diameter 8"
- Length 300'

WASHINGTON
ENNIS
E ORANGE SHOW RD
FOISY
VALLEY VIEW
ROLLINS
NORMAN
DUMAS
EMMET
S WATERMAN AVE
BUSINESS CENTER
COMMERCENTER
COMMERCENTER-EAST
AIRPORT
VANDERBILT
E HOSPITALITY LN
E BRIER DR
CARNEGIE DR
LIFT STATION
COMMUTER BUILDING



GRID 88

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

City Geographic Information System

City of San Bernardino

98 88 78

79

Ward 1

Ward 1
Ward 3

Ward 3

RICHARDSON

LILAC

JASMIN

COLOMA

SHEDDEN

CURTIS

ELM

ROSENA

COULSTON

DAVIDSON

GOULD

HARDT

VICTORIA

COOLEY

E SAN BERNARDINO AVE

WALLACE

RIVERVIEW

S MOUNTAIN VIEW AVE

GRID 89

Legend

Lift Station

Sewer Manhole

Diameter 8" SEWER LINE

Length 300'

Parcels

Sewer Grid

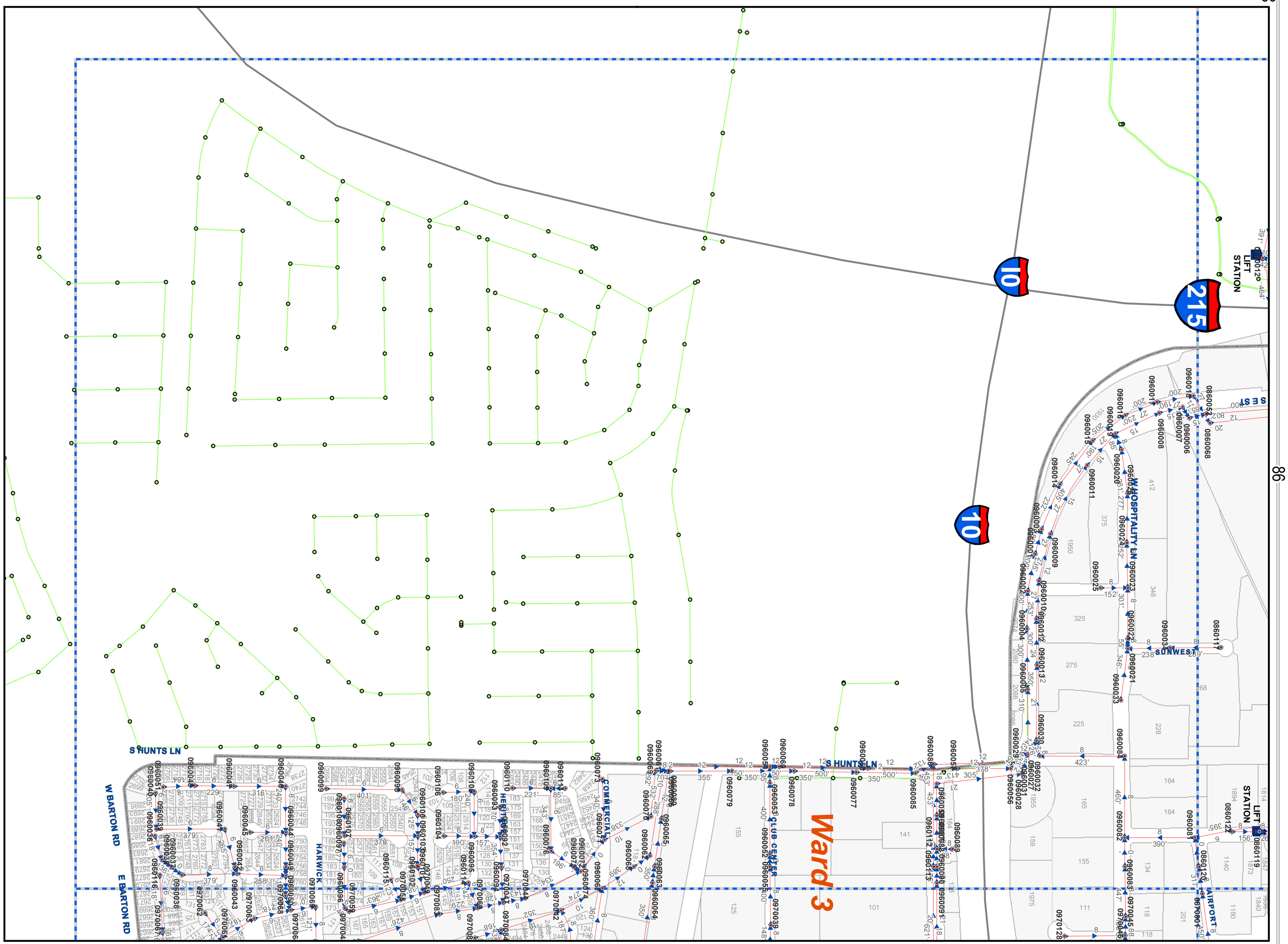
1" = 350'

Printed 2/09

City Geographic Information System

City of San Bernardino

7A



GRID 96

Legend

Lift Station

Sewer Manhole

Diameter 8" Length 300' SEWER LINE

Parcels

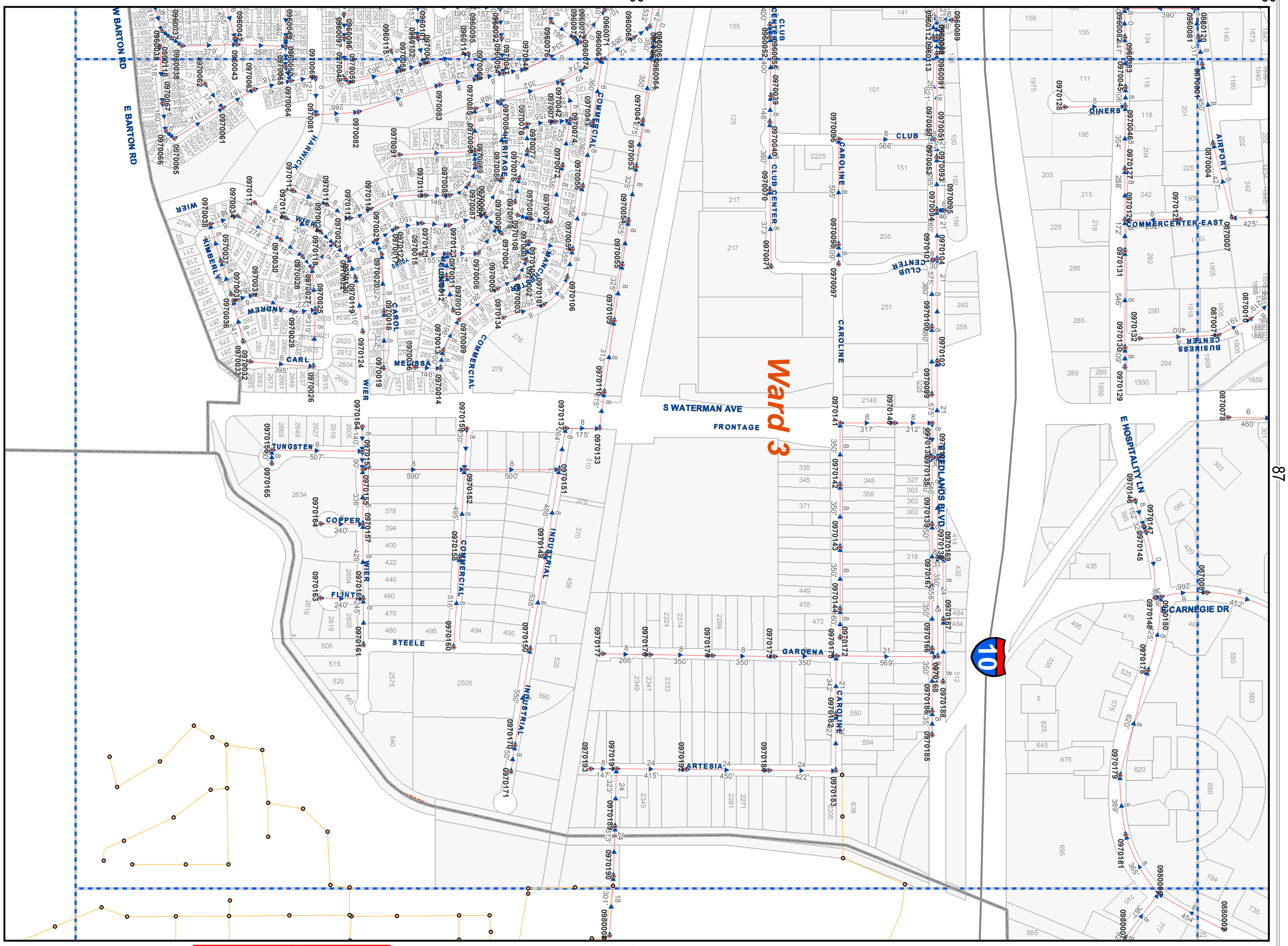
Sewer Grid

1" = 350'

Printed 2/09

CGIS City Geographic Information System

CITY OF San Bernardino



GRID 97

Legend

Lift Station

Sewer Manhole

Diameter 8" / Length 300' SEWER LINE

Parcels

Sewer Grid

86

1" = 350'

Printed 2/09

CGIS City Geographic Information System

City of San Bernardino

97

87

88

Ward 3

ORCHARD

HARRIMAN

LAURELWOOD

LEE

ROSEWOOD

FERREE

S TIPPECANOE ST

10

GRID 98

Legend

Lift Station

Sewer Manhole

Diameter 8"

Length 300' SEWER LINE

Parcels

Sewer Grid

1" = 350'

Printed 2/09

68

Attachment "6"

PREVENTIVE MAINTENANCE AND OPERATIONS

Public Works Department, Sewer Line Maintenance Section has developed several maintenance approaches for the overall sewer collection system. The maintenance approaches include, City wide sewer mainline cleanings, ongoing preventive maintenance of problem areas and the use of closed circuit camera inspections (CCTV) of mainlines. Staff also works with the Water Reclamation Sewer Plant section in order to minimize Fats, Oils and Grease (FOG) from entering the collection system.

The Public Works Department, Sewer Line Maintenance Section, has established the following collection system management goals:

1. Ensure proper maintenance, operations and management of all parts of the wastewater collection system.

2. Provision of adequate capacity in the collection system to convey peak flows.

3. Minimize the number and impact of sanitary sewer overflows (SSOs) that occur.

4. Video camera 20% of the City's sewer system for inventory each year.

5. Prioritize and repair main lines identified through the video camera system.

Objectives of Sewer Maintenance Preventive Maintenance Program include:

1. Increase Preventive Maintenance on the collection system to decrease SSOs.

    a. Clean all sewers mainlines within the identified required maintenance period all sewer mains cleaned once a year.

    b. Continue with monthly, quarterly, bi-annual and annual preventive maintenance hydro-cleaning and power-rod cleaning of identified sewer mainline problem areas.

    c. Conduct a video condition assessment of each sewer mainline every five years and continuously identify areas requiring repair or root control.

    d. Video & repair mainlines that are repeat non-scheduled maintenance.

    e. Conduct appropriate analysis/evaluation of SSOs utilizing historical maintenance and activity data and records and provide recommendations to reduce future risk.

2. Identify collection system blockages due to Fats, Oil and Grease (FOG) and develop strategies to decrease backups.

3. Operate all 12 lift stations at peak efficiency and perform preventive maintenance on equipment at all sanitary sewer lift stations.

4. Maintain records of the sanitary sewer system and respond to inquiries.

5. Assist with the development of the Capital Improvement Program (CIP) which is directed towards maintaining the current sewer assets, improving system reliability and providing adequate future capacity.

6. Continue with manhole a restoration program effort which includes lid and ring replacement, manhole lining and reconstruction.

    a. Lid and Ring replacement - raising and replacing man hole lid & rings - 100 per year.

    b. Reline and reconstruction man holes – as needed.

Attachment "6"

PUMP STATION PREVENTIVE MAINTENANCE

The pump crew is in charge of the operations and maintenance of 12 sewage pumping stations (Liftstations). The only other sewage pump station is South E Street and is operated and maintained by the wastewater treatment plant. All 12 liftstations have pumps that alternate lead/lag. Wet well operations use bubblers to start and stop the pumps. In case of power outages, 6 liftstations have backup power on site while the other 6 liftstations are backed up using trailer-mounted generators. All generators are maintained in house.

As part of the pump station preventive maintenance program, liftstations are maintained and inspected weekly. Work activities are developed and prioritized based on these inspections and completed prior to the next inspection. Preventative maintenance inspections cover the following:

LUBRICATION	INSPECTION	LEAK CHECKS	EXERCISE	HOUSEKEEPING
Motors	Sump Pumps	Fuel/Oil lines	Motors	Clean Interior
Main Pumps	Belts	Valves	Valves	Clean Exterior
Drive Shafts	Flap Gates	Packing		Leaf/debris pickup
Valves	Backflow Preventors	Seals		Purge Air Systems
Mechanical seal	Controls/Alarms	Lubricators		Wash Down Wet Well
Filter cleaning seals	Wet Well	Air Systems		
Latches & Hinges	backup battery 9, 12 volt			
Locks & Padlocks	Voice dialer			

Pump station #	Pump station address	Phone # & Comp.	Startup
1	Carousel Mall - Between 320 & 334 N. E St.	909-884-1683 Verizon	11/30/1993
2	May Comp. S. W. C. of Inland Center Mall	909-884-4693 Verizon	12/17/1993
3	Colton - E/O 841 Colton Ave	909-888-1676 Verizon	11/17/1993
4	Fairway - Corner of Fairway and Auto Plaza	909-825-8142 SBC/AT&T	11/9/1993
5	Airport dr. In Front of 1894 Commercenter West.	909-884-2683 Verizon	11/17/1993
6	Valley Truck Farm In front of 1002 Washington St.	909-889-0854 Verizon	12/17/1993
7	Allen St. In front of 741Allen St.	909-884-9384 Verizon	11/17/1993
8	Pine St. 2403 Christine street	909-880-0923 Verizon	12/17/1993
9	City Hall 300 N. D street Basement	909-384-5066 Verizon	Aug-97
10	Meridian North of Randall on Meridian	909-421-2413 SBC/AT&T	12/23/1993
11	Macy North of 1695 Macy street	909-383-1269 Verizon	12/17/1993
12	Riverwalk Corner of Riverwalk dr. and Scenic dr.	909-889-8076 Verizon	2/19/1999

CITY OF SAN BERNARDINO
THE ENGINEERING DIVISION OF PUBLIC WORKS DEPARTMENT
SEWER POLICY & PROCEDURES
Issued 1/5/87

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DIVISION V	Testing & Inspection
DIVISION VI	Sewer Plan Check List
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DIVISION I -- AUTHORITY

It is the intent of this policy statement to provide guidelines and acceptable practices to be used for the design and/or modification of sewer systems within the City of San Bernardino. It is intended to clarify and join together the Standard Specifications for Public Works Construction Code and Municipal Code, as well as accepted practices and Design Standards making a general reference guide.

Criteria set forth herein is for the design of City Sewer Systems to be dedicated to the City for operation and maintenance. Guidelines shall also be used for private on-site sewer mains.

Authority for connection or construction of public sewers is contained in the City of San Bernardino Municipal Code in Sections 13.08 "Connection with Public Sewers," Section 13.32 "Wastewater Facilities," and Section 18.44 "Improvements." These code sections (attached at back of policy paper) establish the criteria, fees, policies and discharge limitations for the sewer system. They in turn refer to council resolutions that establish the specific charges for services. As the resolutions setting fees are from time to time changed, please contact the public counter in the Engineering Section for the current fee structure.

In addition to the Municipal Code and its authority, the City has conducted two separate master sewer plan studies. This information is on file in the office of the City Engineer and contains information on the capacity, size and future needs of the system. It may be used as a guideline for both alignment and size of proposed sewer lines as well as indicating deficiencies in the present system that may require correction prior to development and/or connection to the system.

The City Engineer must review and approve all sewer plans prior to construction and approved plans are required prior to the recordation of Final Maps. Permits for lateral connections to the existing sewer are obtained from the Public Works Department.

All developments must secure sewer capacity rights for disposal at the treatment plant prior to approval of the plans. Information on sewer capacity rights can be obtained from the Water Department.

All development must connect to the City sewer system. Septic systems must be approved by the Building and Safety section of the Development Services Department with concurrence by Regional Water Quality Control Board.

Developments within East Valley Water District shall contact East Valley Water for connection information. On-site mains shall be approved by the City of San Bernardino.

DIVISION II — DESIGN CRITERIA FOR MAIN LINE SEWERS (under 15' dia.)

1. Pipe shall be designed to flow at 0.5D or less at design flow. Minimum pipe slope shall be 0.4% except cul-de-sac streets where the pipe slope shall not be less than 1.0%.

2. Minimum design velocity shall be 2 feet per second.

3. Maximum design velocity shall not exceed 10 feet per second.

4. N = 0.013 for VCP or N = 0.011 PVC/ABS unless other values approved in advance.

5. Depth from surface to flow line 8 feet (desirable design depth that may be modified by special field conditions). Less than 8 feet to a minimum of 4 feet requires special approval of the City Engineer. Sewers less than 4 feet deep shall be encased in concrete per City Standard No. 309.

6. Recommended depth of lateral at property line is 6 feet (minimum acceptable depth is 4 feet).

7. Minimum pipe diameter is 8 inches.

8. 6-inch diameter sewers are permitted providing they serve no more than 24 units, extend no more than 500 feet and there is no possibility of further extension beyond the 500 foot limit and normal design criteria for grade and velocity are met.

9. Design flow is calculated as $Q_d = 3.6(Q_a)^{.85}$ where Q_d = Design Q and Q_a = Average flow.

10. Average flows are as contained in Table A.

11. Typical manhole spacing 300 to 500 feet with considerations made for line size, alignment and site topography.

12. Clean outs may be permitted at the end of 8- inch and smaller lines as a temporary measure provided the clean out is not more than 150 feet from the downstream manhole, and there are no immediate plans for extension of the sewer line.

13. Drop manholes are not permitted unless no other solution exists and approval is obtained from the City Engineer.

14. Preferred location for sewers is 5 feet north or 5 feet east of centerline of streets.

15. All sewers shall be contained in street right-of-way or, if necessary, in a dedicated easement (minimum width 10 feet).

16. A minimum of 0.10 ' fall shall be provided across the manhole base unless slope requires greater fall.

17. Curved sewers will be considered that conform to minimum radius of 250' Manholes will be required at the B.C. and the E.C. of the curved section as well as normal spacing along the curve.

18. For sewers increasing in size, the soffit grades shall match across the manhole.

19. Sewers to extend across full frontage of development if there is the possibility of future extension.

20. All recommendations of the State Department o f Health Services relative to crossing and parallel lines with water supply lines shall be complied with. (See attached Standard Drawings)

21. Laterals and main connections shall be at 90' angle unless approved otherwise. Use standard WYE connection.

22. Supplemental size or capacity may be required based on the City Master Plan or other design considerations.

23. Backflow device required where floor elevation is below rim of upstream manhole. Cleanout shall be installed immediately downstream of the backflow device.

24. Private on-site mains are private sewers serving more than one legally defined lot or unit and where the units are accessed by legally defined private roads or streets.

25. Private lateral systems are private sewer systems that fall entirely within a single legally defined lot that is not served by private streets or roads. Private lateral systems shall be constructed in conformance with the Uniform Plumbing Code and must be submitted for review, approval, and permit.

DIVISION III - DESIGN CRITERIA FOR TRUNK SEWERS (15 inch dia. and over)

1. Pipe designed to flow at .75D at design flow.

2. Minimum velocity is 2 feet per second.

3. Maximum design velocity is 10 feet per second unless abrasive characteristics and pipe materials are established to preclude erosion.

4. Minimum design slope 0.0008 (must meet design velocity requirements).

5. N= .013 for VCP N = 0.011 for PVC unless otherwise approved.

6. Minimum depth from surface to top of pipe is 7.5 feet. Special field conditions may permit adjustments but it must be approved prior to submittal of design drawings.

7. Lateral connections to individual units are not permitted.

8. Design flow is calculated as $Q_d = 3.6(Q_a)^{.85}$ where Q_d = Design Q and Q_a = Average flow.

9. Average flows by type of development are contained in Table A.

10. Manhole spacing is 500 to 1000 feet depending on grade, line size, connections and flow rates.

11. Sewers to be in dedicated street right of way or easements. Minimum easement width to be 10 feet wider than pipe diameter.

12. At changes in pipe diameter, soffit grades are to match.

13. All recommendations of the State Department of Health Services relative to crossings and parallel lines with water supply lines shall be complied with.

14. Parallel water and sewer lines shall have a minimum of 10 feet separation (outside of pipe to outside of pipe).

15. Siphons are not permitted without specific approval and only in cases where no other solutions are possible. Criteria for design will be decided on a case by case basis.

16. Lift stations or pump stations are not permitted without approval and will be evaluated on a case by case basis. They should be avoided if at all possible. Approved lift stations shall also provide for operation and maintenance by Assessment District or other approved method.

17. Supplemental size or capacity may be required based on the City Master Plan or other design considerations.

18. Connection to existing systems may be denied if the system is beyond design capacity or connection would pose a threat to the health and safety of the community.

19. Curved sewers will be considered that conform to minimum radius 250 feet and will require manholes at the E.C. and B.C. additionally, curved sections must maintain integrity of the joints and maintain normal manhole spacing.

20. Sewers must be extended across the full frontage of the development if there is a possibility for future extension of the line.

DIVISION IV -- GUIDELINES FOR PLAN PREPARATION

A Plan Requirements

1. Sheet size is 24 x 36 inches. (Plan and Profile)

2. Plan to show the following:
   - a) Vicinity Map
   - b) North arrow
   - c) Scale
   - d) Profile
   - f) Utility crossing (shown in profile)
   - g) Legend
   - h) General Notes
   - i) Registered Civil Engineer
   - j) Expiration date of license
   - k) Existing/proposed surface over sewer line
   - l) Rights-of-way
   - m) Existing/proposed improvements
   - n) Lot Lines
   - o) Wyes/laterals
   - p) Manhole top/flow elevation
   - q) Rate of grade
   - r) Peak discharge
   - s) Quantity estimate
   - t) Details & Standards

3. Submit 2 sets of plans for checking, with calculations.

4. Private on-site sewer mains may be shown in plan view.

B. General Notes (On all Plans)

1. All work shall be in accordance with the Standard Specifications for Public Works Construction (Green Book) latest edition and all supplements.

2. Approval of this plan by the City of San Bernardino does not constitute a representation as to the accuracy of the location or of the existence or nonexistence of any underground utility pipe or structure within the limits of this project. The Contractor shall assume full responsibility for the protection of all utilities within the limits of the project.

3. Inspection shall be by the City of San Bernardino, Public Works Department. All requests for inspection shall be made at least 24 hours in advance of the proposed construction.

4. During the period of construction, the Contractor shall furnish, erect and maintain such warnings, signs, stop signs, barricades and other safety measures as directed by the City of San Bernardino, Public works Department with reference to W.A.T.C.H. manual.

5. Sewer pipe shall comply with Section 207-7, “Asbestos Cement Pressure Pipe”: Section 207- 16. “ABS Composite Pipe”; Section 207-17, “Polyvinyl Chloride Plastic Pipe'; Section 207-15, “ABS Solid Wall Pipe”; and Section 207-8, “Vitrified Clay Pipe”, of the Standard Specifications.

6. All PVC and ABS solid wall pipe shall have a Standard Diameter Ratio (S.D.R.) of 26 or less.

7. Use of a pipe deflector or re-rounder shall not be permitted on over-deflected pipe.

8. After backfilling and compaction of ABS or PVC pipe, the sewer shall be cleaned and mandrelled. Mandrell shall be rigid type with 9 runners, minimum diameter of 96% of inside pipe diameter and a length equal to or greater than the pipe diameter.

9. Contractor shall not open more trenches than can be properly constructed and filled in a day’s operation. Any trench unavoidably left open during the hours of darkness or over a weekend shall be fenced with 6-foot chain link fencing and properly lighted.

10. Contractor shall reinstall pavement markings and striping that has been disturbed by his operations.

11. OSHA Permit required for trenches over 5 feet in depth prior start of trench excavation.

12. Contractor shall contact Underground Service Alert prior to beginning work.

Additional Notes (To be used as required by specific projects)

1. The Contractor shall provide safe and continuous passage for local pedestrian and vehicular traffic at all times.
2. Traffic signal functions shall be the responsibility of the City. However, the Contractor is required to give 48-hour notice prior to construction that will

damage or affect any buried traffic detectors.

3. Should any of the existing utilities or any other facilities conflict with the proposed sewer line, the Contractor shall notify the engineer and await the relocation and/or alternate design .

4. The Contractor shall so conduct his operations as to offer the least possible obstruction and inconvenience to the public, and he shall have under construction no greater length or amount of work than he can prosecute properly with due regard to the rights of the public.
Convenient access to driveways, houses, and buildings along the line of work shall be maintained, and temporary crossings shall be provided and maintained in good condition. Not more than one crossing or intersecting street or road shall be closed at any one time without the approval of the Engineer. The Contractor shall provide and maintain such fences, barriers, directional signs, lights, and flagmen as are necessary to give adequate warning to the public at all times of any dangerous conditions to be encountered as a result of the construction work and to give directions to the public.

5. The Contractor shall exercise due care to avoid injury to existing improvements or facilities, utility facilities, adjacent property, and trees and shrubbery that are not to be removed. Contractor shall notify USA prior to entering project site.

6. In accordance with generally accepted construction practices, the Contractor shall be soley and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work, and the Contractor shall fully comply with all state and federal laws, rules, regulations, and orders relating to safety to the public and workmen.

7. Street cuts must be obtained from the City Engineer.

8. All removals in paved areas shall be saw cut on a neat, straight line parallel to the pipeline. The cut edge shall be protected from crushing and all broken edges shall be recut prior to paving operations.

DIVISION V — TESTING AND INSPECTION

Testing and inspection shall be per the Standard Specifications for Public Works Construction (Green Book), and the provisions of the City of San Bernardino Municipal Code. Requirements for separation and location of crossings of water supply lines shall be per the standards of the Department of Health Services State of California.

In addition to the above requirements, the following will apply:

1. All trench backfills shall be tested and certified by a soils engineer prior to acceptance.

2. 24 hours advance notice is required for inspection. Arrangements for inspection can be made by calling (909) 384-5019 between 7:30 a.m. and 4:30 p.m. weekdays. Please also refer to the 9/80 work schedule posted at this site for downloading.

3. Base inspection hours are 7:30 a.m. to 4:30 p.m. Monday through Friday. Requests for inspection at other times or on other days must be submitted to the Division of Public Works a minimum of 48 hours before the inspection is required. The contractor must bear the cost of such overtime inspections and will be billed accordingly. Normal overtime rates are 1.5 times the base rate. Overtime inspections will be made solely at the discretion of the City and based on staff availability. Closed Fridays under the 9/80 schedule are also subject to overtime inspection rates.

4. Contractors will be required to obtain City business licenses, insurance and provide evidence of it to inspection staff upon request.

5. Pipe deflection testing may be required as provided for in the Standard Specifications, Air or water tests for pipeline integrity are required.

6. Permits are required for all sewer connections.

DIVISION VI — SEWER PLAN CHECK LIST

SEWER PLAN CHECK LIST

_____1st submittal
_____2nd submittal
_____3rd submittal

Project Name
Owner_____ Checked by

Engineer_____ Phone

_____OK

_____Needs Correction

_____No Requirement

Submittal Completion

_____2 sets of plans

_____2 copies of design calculations

_____Engineer's cost data and itemized quantity estimate complete

_____Permit or clearance needed from

_____Condition #_____from Review Committee or Planning Commission needs to be satisfied.

_____Street Cuts require a separate permit.

_____Plans signed by RCE with expiration date shown

_____Return check prints from previous plan checks

Show on Plans:

_____Vicinity map
_____North arrow
_____Horizontal and vertical scales
_____Profile
_____Utility Crossing (Shown in profile)
_____Legend
_____General notes and additional notes as required
_____Registered Civil Engineer's Signature and License Expiration Date.
_____Right-of-way
_____Existing and proposed construction
_____Lot Lines
_____Wyes and Laterals
_____Manhole top and flowline elevations
_____Rate of Grade
_____Peak discharge rate
_____Quantity Estimate
_____Details and Standards
_____Bench Mark
_____Backflow prevention device required
_____Separation requirements from existing or proposed water lines per DHS standards

FEES AND PERMITS

_____Pay plan check fee

_____Pay permit fee

_____Reimbursement fee

_____Inspection fee

_____Plans signed and approved by Director of Public Works/City Engineer

_____Permit issued

_____Other Departments notified

_____CAL-OSHA Permit on File

CITY OF SAN BERNARDINO
DEPARTMENT OF PUBLIC WORKS
SEWER POLICY & PROCEDURES
Issued 1/5/87

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- B. List of City Standard Drawings

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DIVISION I -- AUTHORITY

It is the intent of this policy statement to provide guide lines and acceptable practices to be used for the design and/or modification of sewer systems within the City of San Bernardino. It is intended to clarify and join together the Standard Specifications for Public Works Construction Code and Municipal Code, as well as accepted practices and Design Standards making a general reference guide.

Criteria set forth herein is for the design of City Sewer Systems to be dedicated to the City for operation and maintenance. Guidelines shall also be used for private on-site sewer mains.

Authority for connection or construction of public sewers is contained in the City of San Bernardino Municipal Code in Sections 13.08 "Connection with Public Sewers," Section 13.32 "Wastewater Facilities," and Section 18.44 "Improvements." These code sections (attached at back of policy paper) establish the criteria, fees, policies and discharge limitations for the sewer system. They in turn refer to council resolutions that establish the specific charges for services. As the resolutions setting fees are from time to time changed, please contact the public counter in the Engineering Section for the current fee structure.

In addition to the Muncipal Code and its authority, the City has conducted two separate master sewer plan studies and reports. This information is on file in the office of the Director of Public Works/ City Engineer and contains information on the capacity, size and future needs of the system. It may be used as a guideline for both alignment and size of proposed sewer lines as well as indicating deficiencies in the present system that may require correction prior to development and/or connection to the system.

The Director of Public Works/City Engineer must review and approve all sewer plans prior to construction and approved plans are required prior to the recordation of Final Maps. Permits for lateral connections to the existing sewer are obtained from the Public Services Section.

All developments must secure sewer capacity rights for disposal at the treatment plant prior to approval of the plans. Information on sewer capacity rights can be obtained from the Water Department.

All development must connect to the City sewer system. Septic systems must be approved by Building and Safety with concurrence by Regional Water Quality Control Board.

Developments within East Valley Water District shall contact East Valley Water for connection information. On-site mains shall be approved by the City of San Bernardino.

DIVISION II — DESIGN CRITERIA FOR MAIN LINE SEWERS (under 15' dia.)

1. Pipe shall be designed to flow at 0.5D or less at design flow. Minimum pipe slope shall be 0.4% except cul-de-sac streets where the pipe slope shall not be less than 1.0%.

2. Minimum design velocity shall be 2 feet per second.

3. Maximum design velocity shall not exceed 10 feet per second.

4. N = 0.013 for VCP or N = 0.011 PVC/ABS unless other values approved in advance.

5. Depth from surface to flow line 8 feet (desirable design depth that may be modified by special field conditions). Less than 8 feet to a minimum of 4 feet requires special approval of the Director of Public Works/City Engineer. Sewers less than 4 feet deep shall be encased in concrete per City Standard No. 309.

6. Recommended depth of lateral at property line is 6 feet (minimum acceptable depth is 4 feet).

7. Minimum pipe diameter is 8 inches.

8. 6-inch diameter sewers are permitted providing they serve no more than 24 units, extend no more than 500 feet and there is no possibility of further extension beyond the 500 foot limit and normal design criteria for grade and velocity are met.

9. Design flow is calculated as $Q_d = 3.6(Q_a)^{.85}$ where Q_d = Design Q and Q_a = Average flow.

10. Average flows are as contained in Table A.

11. Typical manhole spacing 300 to 500 feet with considerations made for line size, alignment and site topography.

12. Clean outs may be permitted at the end of 8- inch and smaller lines as a temporary measure provided the clean out is not more than 150 feet from the downstream manhole, and there are no immediate plans for extension of the sewer line.

13. Drop manholes are not permitted unless no other solution exists and approval is obtained from the Director of Public Works/City Engineer.

14. Preferred location for sewers is 5 feet north or 5 feet east of centerline of streets.

15. All sewers shall be contained in street right-of-way or, if necessary, in a dedicated easement (minimum width 10 feet).

16. A minimum of 0.10 ' fall shall be provided across the manhole base unless slope requires greater fall.

17. Curved sewers wilI be considered that conform to minimum radius of 250' . Manholes will be required at the B.C. and the E.C. of the curved section as well as normal spacing along the curve.

18. For sewers increasing in size, the soffit grades shall match across the manhole.

19. Sewers to extend across ful 1 frontage of development if there is the possibility of future extension.

20. AlI recommendations of the State Department o f Health Services relative to crossing and parallel lines with water supply lines shall be complied with. (See attached Standard Drawings)

21. Laterals and main connections shall be at 90' angle unless approved otherwise. Use standard WYE connection.

22. Supplemental size or capacity may be required based on the City Master Plan or other design considerations.

23. Backflow device required where floor elevation is below rim of upstream manhole. Cleanout shall be installed immediately downstream of the backflow device.

24. Private on-site mains are private sewers serving more than one legally defined lot or unit and where the units are accessed by legally defined private roads or streets.

25. Private lateral systems are private sewer systems that fall entirely within a single legally defined lot that is not served by private streets or roads. Private lateral systems shall be constructed in conformance with the Uniform Plumbing Code and must be submitted for review, approval, and permit.

DIVISION III — DESIGN CRITERIA FOR TRUNK SEWERS (15 inch dia. and over)

1. Pipe designed to flow at .75D at design flow.

2. Minimum velocity is 2 feet per second.

3. Maximum design velocity is 10 feet per second unless abrasive characteristics and pipe materials are established to preclude erosion .

4. Minimum design slope 0.0008 (must meet design velocity requirements).

5. N= .013 for VCP N = 0.011 for PVC unless otherwise approved.

6. Minimum depth from surface to top of pipe is 7.5 feet. Special field conditions may permit adjustments but it must be approved prior to submittal of design drawings.

7. Lateral connections to individual units are not permitted.

8. Design flow is calculated as $Q_d = 3.6(Q_a)^{.85}$ where Q_d = Design Q and Q_a = Average flow.

9. Average flows by type of development are contained in Table A.

10. Manhole spacing is 500 to 1000 feet depending on grade, line size, connections and flow rates.

11. Sewers to be in dedicated street right of way or easements. Minimum easement width to be 10 feet wider than pipe diameter.

12. At changes in pipe diameter, soffit grades are to match.

13. All recommendations of the State Department of Health Services relative to crossings and parallel lines with water supply lines shall be complied with.

14. Parallel water and sewer lines shall have a minimum of 10 feet separation (outside of pipe to outside of pipe).

15. Siphons are not permitted without specific approval and only in cases where no other solutions are possible. Criteria for design will be decided on a case by case basis.

16. Lift stations or pump stations are not permitted without approval and will be evaluated on a case by case basis. They should be avoided if at all possible. Approved lift stations shall also provide for operation and maintenance by Assessment District or other approved method.

17. Supplemental size or capacity may be required based on the City Master Plan or other design considerations.

18. Connection to existing systems may be denied if the system is beyond design capacity or connection would pose a threat to the health and safety of the community.

19. Curved sewers will be considered that conform to minimum radius 250 feet and will require manholes at the E.C. and B.C. additionally, curved sections must maintain integrity of the joints and maintain normal manhole spacing.

20 .Sewers must be extended across the full frontage of the development if there is a possibility for future extension of the line.

TABLE A				
AVERAGE FLOWS — DU = DWELLING UNIT				
Land Use Designation	Description	DU/Acre	Persons/Ac	CFS/AC
R-1	Residential	1	2.6	.000282
R-2	Residential	2	5.2	.000563
R-3	Residential	3	7.8	.000845
R-4	Residential	4	10.4	.001130
R-6	Residential	6	15.6	.001690
R-8	Residential	8	20.8	.002250
R-11	Residential	11	28.6	.003100
R-14	Residential	14	36.4	.003940
R-15	Residential	15	39.0	.004220
R-20	Residential	20	52.0	.005630
R-30	Residential	30	78.0	.008450
E	Elementary School			.002000
J	Junior High School			.002000
S	Senior High School			.002000
JC	Junior College			.002500
SC	Colleges and Universities			.002500
(E)	Proposed Elementary School			.002000
(J)	Proposed Junior High School			.002000
(S)	Proposed Senior High School			.002000
C	Commercial			.003000

RC	Retail Core (Central City)	.006000

TABLE A (CONTINUED)

Land Use Designation	Description	CFS/AC
LI	Light Industrial	.003000
GI	General Industrial	.005000
HI	Heavy Industrial	.005000
A	Airport	.001000
H	Hospital	.008000
SH	State Hospital (Patton)	.008000
OS	Open Space	.000000

DIVISION IV -- GUIDELINES FOR PLAN PREPARATION

A Plan Requirements

1. Sheet size is 24 x 36 inches. (Plan and Profile)

2. Plan to show the following:

a)	Vicinity Map	k)	Existing/proposed surface over sewer line
b)	North arrow	l)	Rights-of-way
c)	Scale	m)	Existing/proposed improvements
d)	Profile	n)	Lot Lines
f)	Utility crossing (shown in profile)	o)	Wyes/laterals
g)	Legend	p)	Manhole top/flow elevation
h)	General Notes	q)	Rate of grade
i)	Registered Civil Engineer	r)	Peak discharge
j)	Expiration date of license	s)	Quantity estimate
		t)	Details & Standards

3. Submit 2 sets of plans for checking, with calculations.

4. Private on-site sewer mains may be shown in plan view.

B. General Notes (On all Plans)

1. All work shall be in accordance with the Standard Specifications for Public Works Construction (Green Book) latest edition and all supplements .

2. Approval of this plan by the City of San Bernardino does not constitute a representation as to the accuracy of the location or of the existence or non-existence of any underground utility pipe or structure within the limits of this project. The Contractor shall assume full responsibility for the protection of all utilities within the limits of the project.

3. Inspection shall be by the City of San Bernardino, Department of Public Works. All requests for inspection shall be made at least 24 hours in advance of the proposed construction.

4. During the period of construction, the Contractor shall furnish, erect and maintain such warnings, signs, stop signs, barricades and other safety measures as directed by the City of San Bernardino, Department of Public Works with reference to W.A.T.C.H. manual.

5. Sewer pipe shall comply with Section 207-7, “Asbestos Cement Pressure Pipe”: Section 207- 16. “ABS Composite Pipe”; Section 207-17, “Polyvinyl Chloride Plastic Pipe'; Section 207-15, “ABS Solid Wall Pipe”; and Section 207-8, “Vitrified Clay Pipe”, of the Standard Specifications.

6. All PVC and ABS solid wall pipe shall have a Standard Diameter Ratio (S.D.R.) of 26 or less.

7. Use of a pipe deflector or re-rounder shall not be permitted on over-deflected pipe.

8. A f ter backfilling and compaction of ABS or PVC pipe, the sewer shall be cleaned and mandrelled. Mandrell shall be rigid type with 9 runners, minimum diameter of 96% of inside pipe diameter and a length equal to or greater than the pipe diameter.

9. Contractor shall not open more trench than can be properly constructed and filled in a days operation. Any trench unavoidably left open during the hours of darkness or over a weekend shall be fenced with 6 foot chain link fencing and properly lighted.

10. Contractor shall reinstall pavement markings and striping that has been disturbed by his operations.

11. OSHA Permit required for trenches over 5 feet in depth prior start of trench excavation.

12. Contractor shall contact Underground Service Alert prior to beginning work.

Additional Notes (To be used as required by specific projects)

1. The Contractor shall provide safe and continuous passage for local pedestrian and vehicular traffic at all times.
2. Traffic signal functions shall be the responsibility of the City. However, the Contractor is required to give 48 hour notice prior to construction that will

damage or affect any buried traffic detectors.

3. Should any of the existing utilities or any other facilities conflict with the proposed sewer line, the Contractor shall notify the engineer and await the relocation and/or alternate design .

4. The Contractor shall so conduct his operations as to offer the least possible obstruction and inconvenience to the public, and he shall have under construction no greater length or amount of work than he can prosecute properly with due regard to the rights of the public.

   Convenient access to driveways, houses, and buildings along the line of work shall be maintained, and temporary crossings shall be provided and maintained in good condition. Not more than one crossing or intersecting street or road shall be closed at any one time without the approval of the Engineer.

   The Contractor shall provide and maintain such fences, barriers, directional signs, lights, and flagmen as are necessary to give adequate warning to the public at all times of any dangerous conditions to be encountered as a result of the construction work and to give directions to the public.

5. The Contractor shall exercise due care to avoid injury to existing improvements or facilities, utility facilities, adjacent property, and trees and shrubbery that are not to be removed. Contractor shall notify USA prior to entering project site.

6. In accordance with generally accepted construction practices, the Contractor shall be soley and completely responsible for conditions of the job site, including safety of all persons and property during performance of the work, and the Contractor shall fully comply with all state and federal laws, rules, regulations, and orders relating to safety to the public and workmen.

7. Street cuts must be obtained from the Department of Public Works/City Engineer.

8. All removals in paved areas shall be saw cut on a neat, straight line parallel to the pipe line. The cut edge shall be protected from crushing and all broken edges shall be recut prior to paving operations .

DIVISION V — TESTING AND INSPECTION

Testing and inspection shall be per the Standard Specifications for Public Works Construction (Green Book), and the provisions of the City of San Bernardino Municipal Code. Requirements for separation and location of crossings of water supply lines shall be per the standards of the Department of Health Services State of California.

In addition to the above requirements, the following will apply:

1. All trench backfills shall be tested and certified by a soils engineer prior to acceptance.

2. 24 hours advance notice is required for inspection. Arrangements for inspection can be made by calling (714) 383-5166 between 7:30 a.m. and 4:30 p.m. weekdays. Please also refer to the 9/80 work schedule posted at this site for downloading.

3. Base inspection hours are 7:30 a.m. to 4:30 p.m. Monday through Friday. Requests for inspection at other times or on other days must be submitted to the Department of Public Works a minimum of 48 hours before the inspection is required. The contractor must bear the cost of such overtime inspections and will be billed accordingly. Normal overtime rates are 1.5 times the base rate. Overtime inspections will be made soley at the discretion of the City and based on staff availability. Closed Fridays under the 9/80 schedule are also subject to overtime inspection rates.

4. Contractors will be required to obtain City business licenses, insurance and provide evidence of same to inspection staff upon request.

5. Pipe deflection testing may be required as provided for in the Standard Specifications, Air or water tests for pipe line integrity are required.

6. Permits are required for all sewer connections.

DIVISION VI — SEWER PLAN CHECK LIST

SEWER PLAN CHECK LIST

_____1st submittal
_____2nd submittal
_____3rd submittal

Project Name
Owner_____Checked by
Engineer _____Phone

_____OK

_____Needs Correction

_____No Requirement

Submittal Completion

_____2 sets of plans

_____2 copies of design calculations

_____Engineer's cost data and itemized quantity estimate complete

_____Permit or clearance needed from

_____ Condition #_____ from Review Committee or Planning Commission needs to be satisfied.

_____Street Cuts require a separate permit.

_____Plans signed by RCE with expiration date shown

_____Return check prints from previous plan checks

Show on Plans:

_____Vicinity map
_____North arrow
_____Horizontal and vertical scales
_____Profile
_____Utility Crossing (Shown in profile)
_____Legend
_____General notes and additional notes as required
_____Registered Civil Engineer's Signature and License Expiration Date.
_____Right-of-way
_____Existing and proposed construction
_____Lot Lines
_____Wyes and Laterals
_____Manhole top and flowline elevations
_____Rate of Grade
_____Peak discharge rate
_____Quantity Estimate
_____Details and Standards
_____Bench Mark
_____Backflow prevention device required
_____Separation requirements from existing or proposed water lines per DHS standards

FEES AND PERMITS

_____Pay plan check fee

_____Pay permit fee

_____Reimbursement fee

_____Inspection fee

_____Plans signed and approved by Director of Public Works/City Engineer

_____Permit issued

_____Other Departments notified

_____CAL-OSHA Permit on File

APPENDIX "A"

(Note: These regulations are promulgated by the Department of Health Services and are reproduced herein for the convenience of the user. The City of San Bernardino can offer no guarantee that these regulations are current or complete)

STATE OF CALIFORNIA — HEALTH AND WELFARE AGENCY
DEPARTMENT OF HEALTH SERVICES

REQUIRED SEPARATION BETWEEN WATER MAINS AND SANITARY SEWERS
(10 Feet Horizontal and I Foot Vertical)

I PUBLIC HEALTH REASONS

Sanitary sewers frequently leak and saturate the surrounding soil with sewage. Water mains cannot always be relied upon to have continuous Positive pressure therein and can be contaminated by a nearby leaking sewer. To install new water mains or to repair breaks in existing mains in sewage contaminated areas is a serious public health hazard. Hazards also can exist if a nearby existing sewer is broken in the course of installing or repairing a water main; this can allow sewage to enter the water main trench or the water main. Water main failures will likely result in failure of any sewer located above or too near the water main.

A community with its buried water mains end sanitary sewers in close proximity is extremely vulnerable to waterborne disease outbreaks in the event of earthquake or man-made disasters that would cause simultaneous fractures to these conduits.

Any case in which both a water main and sewer fail in close proximity is extremely hazardous to the water consumers. There can be no dollar value set on the reduction Of such hazards. All practical steps must be taken to avoid them.

II. BASIC SEPARATION REQUIREMENTS

Water Mains and sewer, should be separated as far as is reasonable in both the horizontal and vertical directions with sewers always lower than water mains.

Parallel construction: The horizontal distance between pressure water mains and sewers shall be at least 10 feet.

Perpendicular Construction (crossing): Pressure water mains shall be at least one foot above sanitary sewers where these lines must cross.

III. EXCEPTIONS TO SEPARATION REQUIREMENTS

Certain local conditions of topography, available space. etc. may create a situation where there is no alterative but to install water mains or sewer lines at less than the

required separation. In such cases, more rigid construction requirements must be met as specified in Section IV below subject to the special provisions and restrictions given in Section V.

The basic separation requirements apply to sewers of 24 inches in diameter or less. Larger sewers may create special hazards because of flow volumes and type of joints used. Each installation of sewers larger than 24 inches in diameter must be reviewed in advance to determine if the separation end protection provided to nearby water mains is adequate.

IV SPECIAL CONSTRUCTION REQUIREMENTS

The special construction requirements necessary for sewers or water mains where the minimum required separation cannot be maintained are given in Attachment No.

1. There are three situations encountered in the field:

Case 1	-	New sewer - Existing water main
Case 2	-	New water main - Existing sewer
Case 3	-	New water main and new sewer

For Case I and 3 the special construction requirements apply to the-sewer. For Case 2 the special requirements may apply to either or both the water main and sewer.

The special construction requirements shall apply to house laterals that cross above pressure water main but not to those house laterals that cross below a pressure water main.

The special construction requirements given are for the normal conditions found with sewage collection lines and water distribution mains. More stringent requirements may be necessary for special circumstances such as water mains buried deeper than normal, unstable soil conditions, high ground water, etc. These situations must be reviewed with the Health Department in advance.

The special provisions and restrictions given in Section V must be followed.

V SPECIAL PROVISIONS AND RESTRICTIONS

1 Sewer force mains are not permitted to be constructed over water mains. Force mains constructed parallel to water mains must have the required separation as given in Section II regardless of construction. When sewer force mains must cross under-water mains, special approval of the Health Department is required in advance.

2 Construction of any sanitary sewers within 25 feet horizontal distance of low head water mains shall be reviewed and approved by the Health Department in advance. (Low head water mains are defined in the State Health Department Policy as any water main which has less than 5 psi at any time at any point in the mark.)

3 Where a sewer must cross over a water main, it should cross at a 90 degree angle if possible and the length of sewer pipe shall be centered on the water main so the sewer joints are the maximum distance from the water main.

4 In pressure tested new water means and/or sewers, special attention should be given to those area where the lines are in close proximity.

ATTACHMENT NO. 1 TO
REQUIRED SEPARATION BETWEEN WATER MAINS AND SANITARY SEWERS

SPECIAL CONSTRUCTION REQUIREMENTS
Where Required Separation Cannot Be Maintained

CASE 1 AND 3: NEW SEWER BEING INSTALLED

Zone	Special Construction Required for Sewer
A	Sewer lines will not be permitted in this zone without special permission from the Department of Health.
B	Extra-strength vitrified clay pipe with compression Joints; or Concrete pipe with reinforced concrete collars around the joints, which joints shall have & minimum thickness of six inches and a minimum distance along the Pipe of six inches on either side of the joint; or rubber gasket,. reinforced concrete pipe; or rubber gasketed asbestos cement pipe; or rubber gasketed plastic pipe; or cast iron with compression joints.
C or D	Class 150 or heavier cast-iron pipe with hot dip bituminous coating and approved mechanical joints; or any sewer pipe within a continuous steel casing, which casing shall have a thickness of not less than one-fourth inch and with all voids between Fewer pipe end compression grouted with sand-cement grout.

CASE 2: NEW WATER MAIN BEING INSTALLED - EXISTING SEWER

If an existing sewer is located within Zone A, B, C, or D of a proposed water main, the following special requirements apply:

Zone	Special Construction Requirements
A	No water mains shall be constructed without special permission from the Department of Health..
B	If the sewer does not meet the Zone B requirements given above the water main shall be of Class 200 pipe or equivalent.
C	No water mains shall be constructed without, special permission from the Department of Health. If permission Is granted, the sewer shall be encased with reinforced concrete and the water main shall be of Class 200 pipe or equivalent.
D	The sewer shall be encased with reinforced concrete.

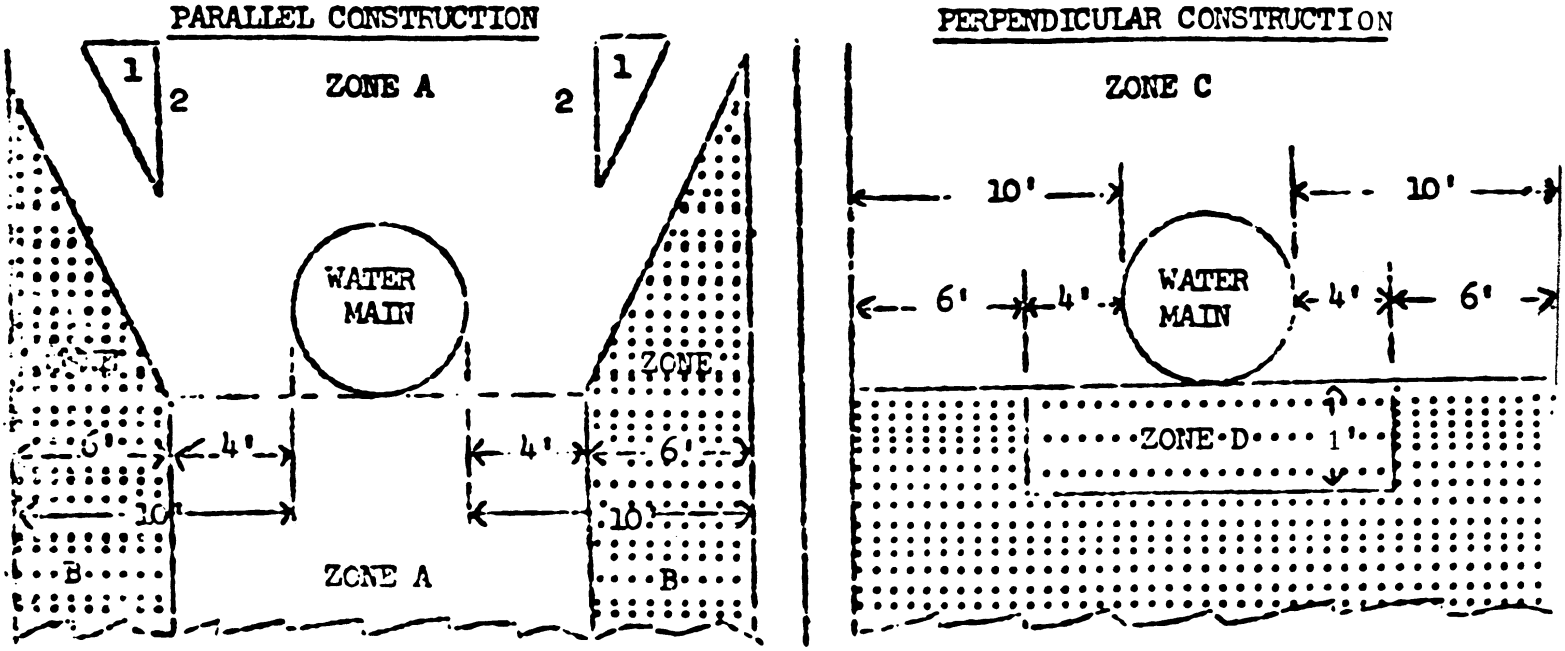
Definitions:

1. Compression joints are rubber ring or gasket joints.
2. Mechanical joints are bolted joints.
. Acceptable reinforced concrete encasement is as follows:

Concrete shall be Class 3 (California Department of Transportation Standard Specifications, Section 90, current issue) or equivalent.

ATTACHMENT NO. 1 to
REQUIRED SEPARATION BETWEEN WATER MAINS AND SANITARY SEWERS

SPECIAL CONSTRUCTION REQUIREMENTS
Where Required Separation Cannot Be Maintained



Notes: Dimensions are from outside of water main to outside of sewer. Explanation of compression and mechanical joints and reinforced concrete encasement on page 4.

CASE 1 and 3: NEW SEWER BEING INSTALLED

Zone	Special Construction Required for Sewer
A.	Sewer lines will not be permitted in this zone without special permission from the Department of Health.
B.	Extra-strength vitrified clay pipe with compression joints; or concrete pipe with reinforced concrete collars around the joints, which joints shall have a minimum thickness of six inches and a minimum distance along the pipe of six inches on either side of the joint; or rubber gasket reinforced concrete pipe; or rubber gasketed asbestos-cement pipe; or rubber gasketed plastic pipe; or cast iron pipe with compression joints.
C. or D.	Class 150 or heavier cast-iron pipe with hot dip bituminous coating and approved mechanical joints; or any sewer pipe within a continuous steel casing, which casing shall have a thickness of not less than one-fourth inch and with all voids between sewer pipe and casing pressure grouted with sand-cement grout.

(Continued on page 4)

CASE 2: NEW WATER MAIN BEING INSTALLED - EXISTING SEWER

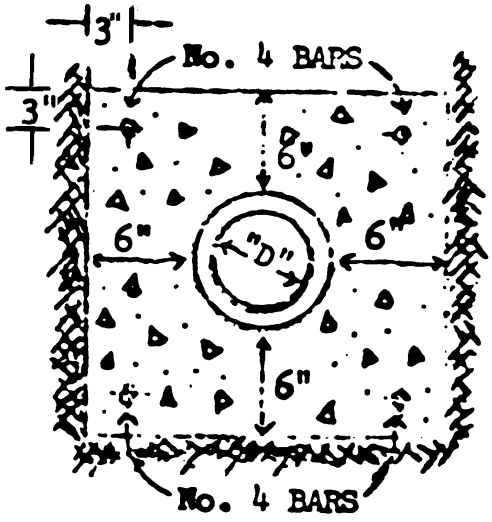
If an existing sewer is located within Zone A, B, C, or D of a proposed water main, the following special requirements apply.

Zone

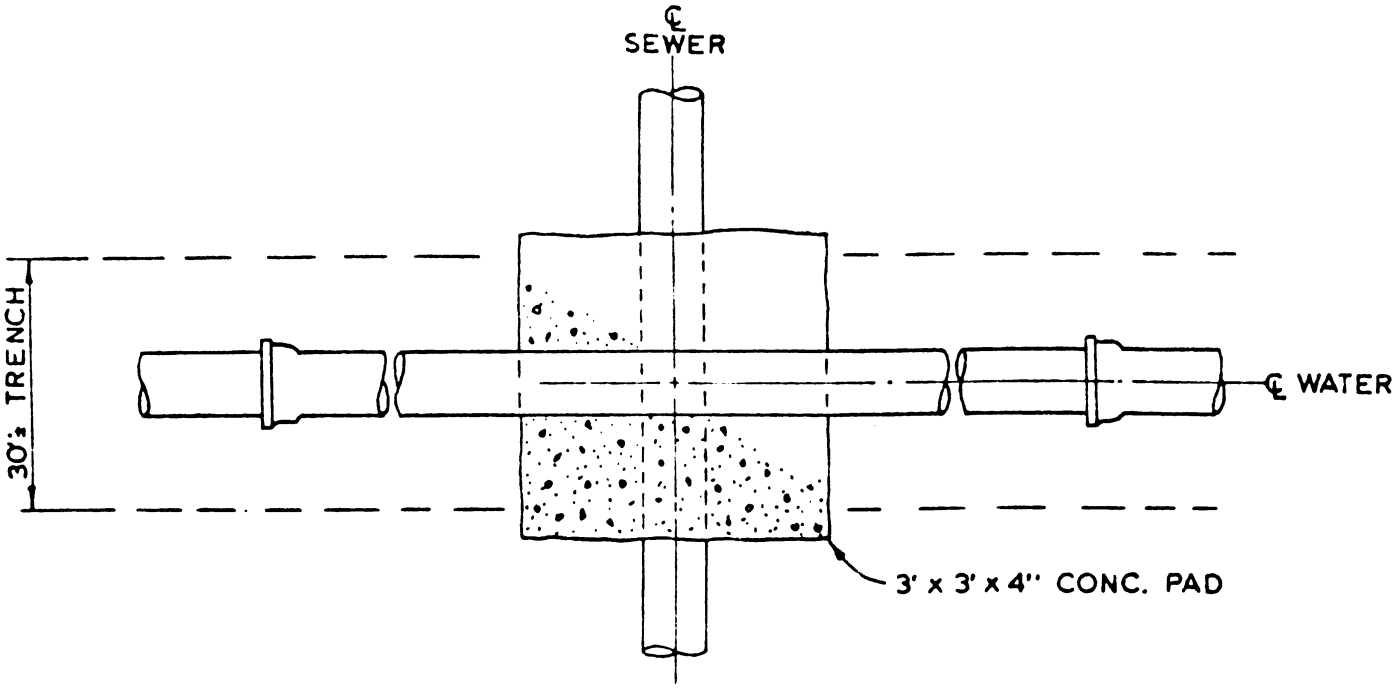
A.	**No water mains shall be constructed without special permission from the Department of Health.**
B.	**If the sewer does not meet the Zone B requirements given above the water main shall be of Class 200 pipe or equivalent.**
C.	**No water mains shall be constructed without special permission from the Department of Health. If permission is granted, the sewer shall be encased with reinforced concrete and the water main shall be of Class 200 pipe or equivalent.**
D.	**The sewer shall be encased with reinforced concrete.**

Definitions:

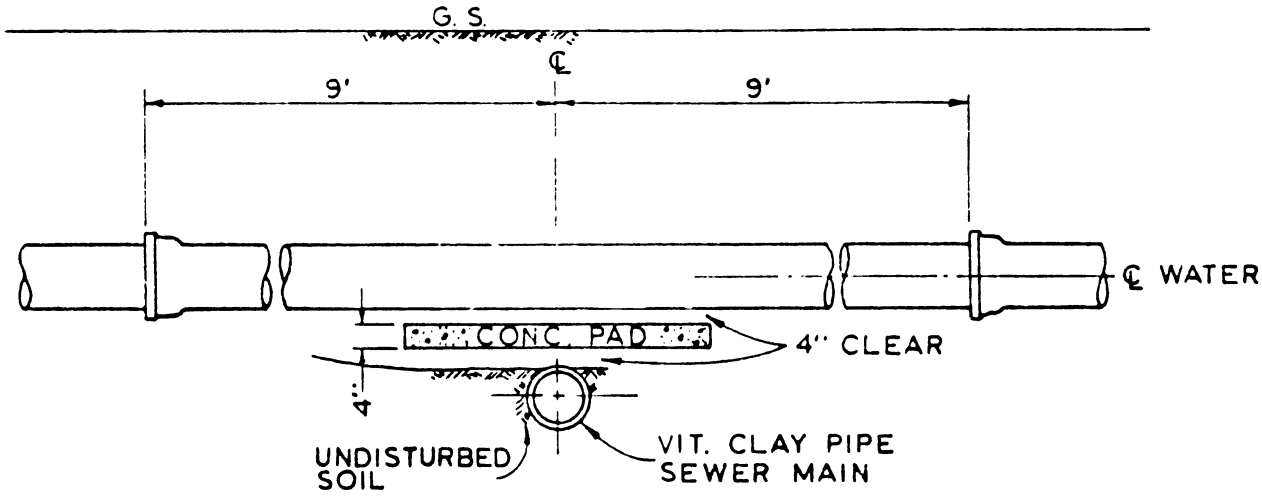
1. **Compression joints are rubber ring or gasket joints.**
2. **Mechanical joints are bolted joints.**
3. **Acceptable reinforced concrete encasement is as follows:**



Concrete shall be Class B (California Department of Transportation Standard Specifications, Section 90, current issue) or equivalent.



PLAN
1/2"=1'-0"



PROFILE
1/2"=1'-0"

WATER & SEWER MAIN INTERFERENCE
SPECIAL CONSTRUCTION - WATER OVER SEWER

A

NO.	DATE	INT'L'S.	REVISIONS DESCRIPTION	APP'V'D

DEPARTMENT OF WATER AND POWER
WATER SYSTEM — CITY OF LOS ANGELES

	NAME	DATE	APPROVED
DESIGNED	K L N.	12-75	
DRAWN	K L N.	✓	
CHECKED	R.G.W.	✓	

Draft 06-18-2014 @ 2:00pm

City of San Bernardino

Draft 10 Year projection

CIP NO	PROJECT	WARD	LEAD DEPT	WO	12/13	13/14	14/15	15/16	16/17	17/18	18/19	19/20	20/21	21/22	22/23	TOTAL	Beyond 10yrs
Sewers																	
SW - A	Sewer Main Extension in Excess of 300' for SFR Development	ALL	PW/ENG	7406	0	0	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	20,000	160,000	0
SW - B	Sewer Main Extensions	ALL	PW/ENG	7407	0	192,816	0	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	367,816	0
SW - C	Sewer Manhole Rehabilitation at Various Locations	ALL	PW/O&M	7474	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	250,000	0
SW - D	Sewer Siphon Flushing at Various Locations	1,2,3,5,6	PW/ENG	7475	0	157,472	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	25,000	357,472	0
SW - E	Miscellaneous Sewer Repairs	ALL	PW/O&M	7701	250,000	310,883	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	50,000	960,883	0
SW - F	Sewer C.I.P. Administration	ALL	PW/ENG	7856	0	0	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	15,000	120,000	0
SW04-013	Lincoln Avenue Sewer Main Study	6	PW/ENG	7412	0	0	0	0	0	0	0	0	0	0	0	0	0
SW08-002	11th Street Sewer Main Replacement from Wilson St to "I" Street	1,6	PW/ENG	7761	0	0	0	150,000	150,000	150,000	150,000	150,000	150,000	150,000	150,000	1,050,000	3,000,000
SW08-003	17th Street & "H" Street Sewer Main Replacement from "I" Street to 13th St	2,6	PW/ENG	7762	60,000	0	0	400,000	90,000	90,000	90,000	90,000	90,000	90,000	90,000	1,000,000	0
SW08-004	16th Street / Perris St / Evans St Sewer Main Replacement	1,6	PW/ENG	7763	0	0	0	0	0	0	0	350,000	500,000	500,000	500,000	1,350,000	1,625,000
SW08-006	Laurelwood Dr. Study for New Sewer Main from Tippecanoe Ave to Ferree St	3	PW/ENG	7766	0	80,000	0	0	0	0	0	0	0	0	0	80,000	0
SW08-009	Cajon Blvd Sewer Main Replacement from University Pkwy to Fern St	6	PW/ENG	7852	0	0	0	0	0	0	0	0	0	0	0	0	0
SW08-010	27th Street Sewer Main Replacement from Muscupiabe Dr. to Serrano Rd (Design Only)	2	PW/ENG	7844	0	0	0	325,000	500,000	500,000	500,000	150,000	0	0	0	1,975,000	0
SW08-011	13th Street & "G" Street Sewer Main Replacement from "H" Street to "G" Street & from 13th Street to 10th Street (Design Only)	2	PW/ENG	7845	0	0	0	200,000	200,000	50,000	50,000	50,000	50,000	50,000	50,000	650,000	1,500,000
SW08-013	"E" Street Sewer Replacement from Athol Street to Rialto Avenue	1,3	PW/ENG		0	0	0	0	0	0	0	0	0	0	0	0	2,000,000
SW08-014	"G" Street Sewer Replacement from 9th Street to 4th Street	1	PW/ENG		0	0	0	0	220,000	0	0	0	0	0	0	220,000	1,500,000
SW09-001	"I" Street Sewer Relocation from 5th Street to 16th Street (Design Only)	1	PW/ENG	7846	0	48,213	0	0	0	0	0	0	0	0	0	48,213	0
SW09-002	Court Street @ Sierra Way Sewer Main Replacement (Design Only)	1	PW/ENG	7847	0	0	0	0	0	0	0	0	0	0	0	0	2,000,000
SW10-001	Highland Ave Sewer Realignment Study (West of Cedar to Twin Creek Bridge)	2,7	PW	7857	0	0	0	0	0	50,000	0	0	0	0	0	50,000	0
SW10-002	9th Street Sewer Main Study from Wall Street to Waterman Ave	1	PW	7858	0	0	0	0	0	0	0	0	0	50,000	50,000	50,000	0
SW10-003	Gilbert Street Sewer Line Study	2	PW	7859	0	0	0	0	90,000	0	0	0	0	0	0	90,000	0
SW10-004	13th Street Sewer Line Relocation Study between Base Line St & Spruce Alley	1	PW	7860	0	0	0	0	0	0	0	0	0	0	0	0	0
SW10-005	Blackstone St Sewer Line Study	6	PW/O&M	7861	0	0	0	0	0	0	0	0	50,000	0	0	50,000	0
SW10-006	Huff St & "K" Street Sewer Realignment Study	3	PW	7862	0	0	0	0	0	0	0	0	0	0	0	0	0
SW10-007	Rialto Ave Sewer Replacement Study from "K" Street to 'H" Street	1,3	PW	7863	0	0	0	0	0	0	0	0	0	0	0	0	0
SW10-008	Cedar St & Highland Ave Sewer Line Study	2,7	PW	7864	0	10,000	210,000	0	0	0	0	0	0	0	0	220,000	0
SW10-009	28th Street & Waterman Ave Sewer Line Study	7	PW	7865	0	0	0	0	0	0	0	50,000	0	0	0	50,000	0
SW10-010	Wall St & Olive Ave Sewer Line Study	1	PW/O&M	7866	0	0	0	0	0	0	0	0	0	0	0	0	0
SW10-011	17th Street & Arrowhead Ave Sewer Realignment Study	2	PW	7867	0	0	0	0	0	0	50,000	0	0	0	0	50,000	0
SW10-012	Waterman Ave & Twin Creek Bridge Sewer Line Study	1	PW	7868	0	0	0	0	90,000	0	0	0	0	0	0	90,000	0
SW10-013	"E" Street / Mill St / Inland Center Dr. - Relocate Manholes	1,3	PW/O&M	7869	0	0	0	90,000	0	0	0	0	0	0	0	90,000	0
SW10-014	Sewer Master Plan	ALL	PW/ENG	7870	0	0	700,000	50,000	0	0	0	0	0	0	0	750,000	0
SW11-001	Wet Weather Flow Monitoring	ALL	PW/ENG	7902	0	0	200,000	125,000	0	0	0	0	0	0	0	325,000	0
SW11-002	Sewer Repair in "H" Street & Adjacent Sewer Mains (Design Only)	2	PW/ENG	7901	0	0	0	0	0	0	0	0	0	0	0	0	0
SW15-001	Sewer Replacement in Arrowhead Ave at Warm Creek	1	PW/ENG		0	0	300,000	0	0	0	0	0	0	0	0	300,000	0
				Restricted Funds (132)	275,000	493,355	400,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	2,918,355	
				Restricted Funds (245)	60,000	331,029	1,145,000	750,000	750,000	250,000	250,000	250,000	250,000	250,000	250,000		
				General Funds				500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	3,500,000	
				Grand Totals	335,000	824,384	1,545,000	1,500,000	1,500,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	6,418,355	

Attachment "8"

SEWER MAINTENANCE STAFF TRAINING

The City of San Bernardino Sewer Line Maintenance staff is required to complete various types of training as listed below. Maintenance staff is encouraged to study, prepare for and take CWEA Certification testing. The following is a list of Sewer Line Maintenance staff training:

Training List		Yearly	Every two years
CORE	Customer Service	X	
	Harassment		X
	Commercial Drivers License *	X	
	CWEA Certifications		X
EQUIPMENT	Mainline Cleaning (Hydro jet. Cable rodder, Root Saw, Chain Flail, Warthog)	X	
	Jack Hammer	X	
	SSO Spill Van	X	
	Pump Trailer (6", 4" 3", 2" pumps)	X	
	Light Towers	X	
OPERATIONS	Confined Space *	X	
	Gas Detection *	X	
	Shoring	X	
	Traffic Control *		X
	USA Locating		X
	I WorQ Data Base	X	
	SSO Mock Spill	X	
	SSO Prevention	X	
PUMP CREW	Electrical training		X
	Back up Generator Trailer	X	
	SCADA	X	
	Pump Repairs	X	
EMERGENCY	Emergency Evacuation Plan	X	
MEDICAL TRAINING	First Aid Training *	X	
	CPR *	X	
	Heat Stroke / Dehydration	X	
	Blood Borne Pathogen	X	

Contractor training *

Last update: 4-22-09

SPILL PLAN

INTRODUCTION

The City of San Bernardino's sewage collection system is maintained by the Sewer Maintenance Section within the Public Works Department, in coordination with the Engineering Division within the Public Works Department and the Water Department. The purpose of the network of systems is to convey raw sewage to the treatment plant for treatment and final discharge to the Santa Ana River. Failure at any point within the conveyance lines can cause a spill of raw sewage, with its attendant problems, including threat of a public health hazard and contamination of the environment.

The purpose of this plan is to identify the basic elements of the City's sewage spill response plan, assist and train employees to comply with the responsibilities of our action plan and ensure that appropriate entities are informed of each sewage spill.

RESPONDING STAFF RESPONSIBILITIES

The first crew to respond to a sewer back up and/or spill has the immediate responsibility to protect people, property and the environment from the affects of a sewage release. To meet these objectives in a rapid, efficient and organized manner, staff shall respond and fulfill the duties in the following categories as directed by this plan.

CONTAIN...Spilling sewage...keep it from entering waterways.

- Keep the sewage where it can be recovered and returned to the sewer.
- Make the best of containment opportunities, take advantage of: flood control facilities, construction excavations, vacant lots, etc.
- Containment materials...sand, sand bags, poly sheeting, etc., however, ensure sewage does not enter facilities, which drain to waters of the United States.

CONTROL...The spill. relieve or bypass area of failure.

- Bypass the obstructed line or pump the spillage into a different flowing line.

CLEANUP...The affected areas...to ensure public health.

- Remove visible debris.
- Washdown and contain the affected area being careful not to create a problem somewhere else.
- To disinfect or not to disinfect?
  ...consider requirements of other agencies.
  ...consider beneficial use of receiving waters.
  ...consider the uses and ownership of affected property.
- Clean-up of hard and soft surfaces.

DEPARTMENT RESPONSIBILITIES

THE OPERATIONS & MAINTENANCE DIVISION, PUBLIC WORKS DEPARTMENT

The Operations & Maintenance Division of the Public Works Department is responsible for the maintenance of the sanitary sewer collection system. The Department is also responsible for maintenance of manholes, sewer siphons, and 12 sewer lift stations. The Department is responsible for reporting spills only within the area of responsibility as mentioned previously. Spills outside the area of responsibility may also be responded to, and assistance provided to other departments as necessary or requested to protect public health and the environment.

THE ENGINEERING DIVISION, PUBLIC WORKS DEPARTMENT

The Engineering Division, within the Public Works Department is responsible for the maintenance and repair of all sewer siphons. The Department is also responsible for the maintenance of all construction and as built sewer plans and the sanitary sewer collection system atlas.

WATER DEPARTMENT

The Water Department is responsible for all facilities on the Water Reclamation Facility property and the "E" Street sewer lift station property including maintenance, repair, reporting and Reclamation staff training, see Appendix "J", Water Reclamation Facility Site Plan. This department is also responsible for the City's industrial waste pretreatment program, and may assist other departments when requested.

TRAINING PLAN

Training is the key to the success of this plan. Within thirty (30) working days of the approval of this plan by the California Regional Water Quality Control Board the training sessions below will be conducted. Additionally, employees will review the orientation exercise every six months; one tabletop and one functional full-scale exercise will be conducted annually.

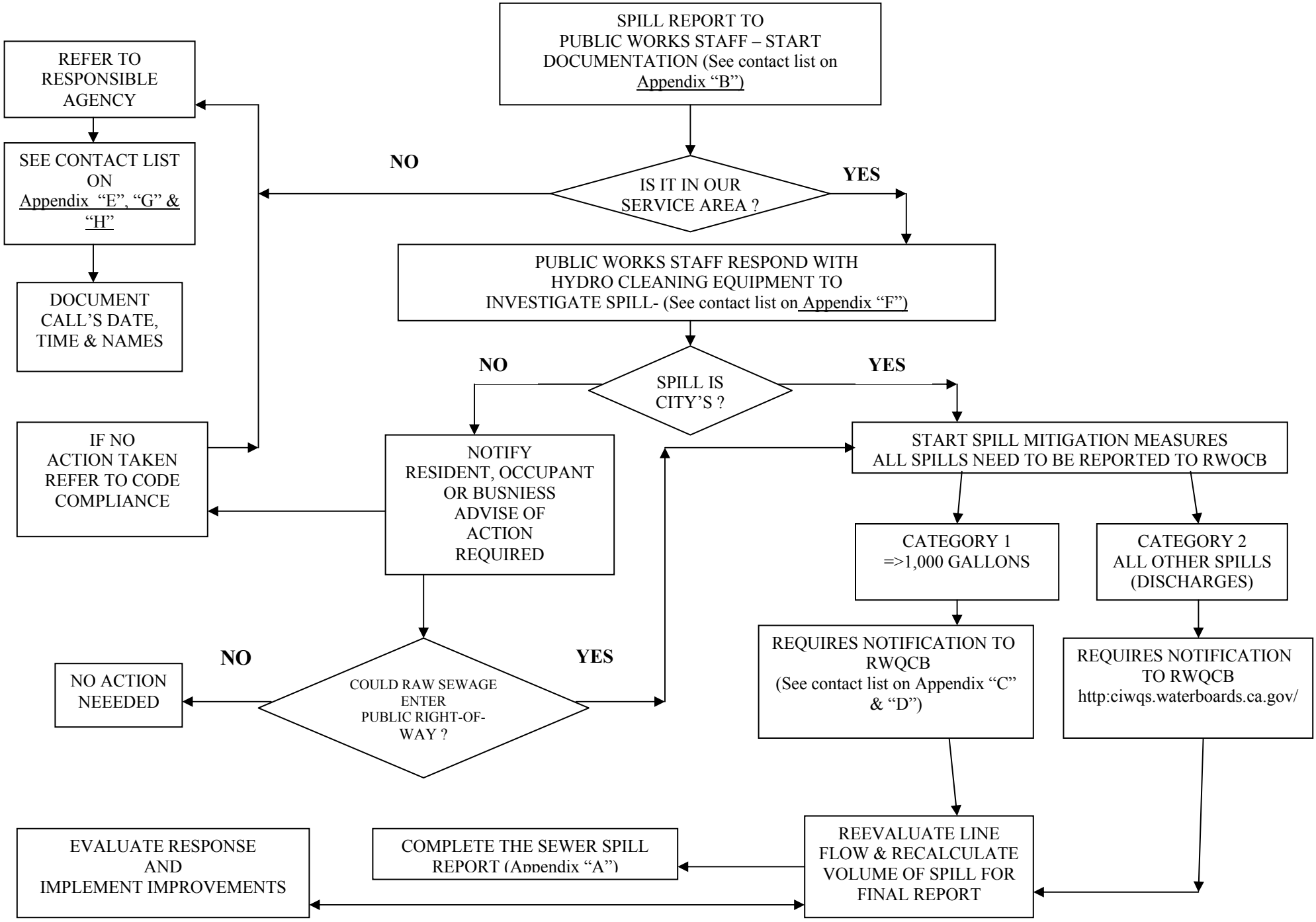
ORIENTATION EXERCISE - This exercise will consist of a lecture with handouts and overheads covering all aspects of the response plan. Each employee will learn what their individual duties and responsibilities are and how to work together as a team.

TABLETOP EXERCISE - In this exercise, equipment or deployment of resources will not be used. All activities will be simulated. Employees will learn through discussion and the use of a facilitator. The exercise will focus on the events leading to a potentially catastrophic spill and how to mitigate the effects.

FUNCTIONAL FULL SCALE EXERCISE - This exercise will simulate a large-scale spill where employees will respond to a mock spill. Equipment will be deployed including sewer trucks, pumps, and containment equipment. A confined space entry exercise will be conducted in conjunction with this exercise. Back up resources will be controlled and included in one exercise. Following the exercise a critique will be conducted in order to improve this plan**.**

THE FOLLOWING DETAILED PLANS ARE TO BE FOLLOWED ON ALL OCCASIONS WHEN RAW SEWERAGE FLOWS ONTO PRIVATE OR PUBLIC PROPERTY.

SPILL RESPONSE PLAN FLOW CHART



CATEGORY I, II, III AND PLSD: SPILL RESPONSE PLAN
FIELD PROCEDURES

1. ARRIVAL: Emergency Response Crew arrives at site with Vactor/Vacon and contingency equipment within 1 HOUR.

2. ASSESS SITE OF SPILL

   • Call for backup if more Vactor trucks, crews or pump crews are required.
   • Check underground map books to determine best method for spill containment.
   • Take Photographs close-up and of spill area for determination of volume.
   • Contact Supervisor
   • Supervisor or Leadworker calls to RWQCB, OES and County Health.

3. BARRICADE AND POST

   • Ensure public contact does not occur.
   • Direct staff to cone & barricade spill area and utilize appropriate signage to direct pedestrian and auto traffic around/away from spill area (signs & cones). Post flyers "Warning! Raw Sewage Spill. Area Closed. Keep children and pets out of the area. Sewer Maintenance 909-384-5045." Street may be closed as necessary after contacting Police/Fire Department and Public Works.
   • If discharge is reaching storm waters, post the "Contaminated Water" signs and block the contaminated areas with yellow caution tape and barricades." Signs are not to be removed until authorized by a Supervisor.
   • Photograph Barricaded Area

STEP ACTIONS

1. Diversion & Containment

DIVERT AWAY FROM SENSITIVE AREAS
(Schools, Daycare's, Playgrounds, Intersections, Creeks, etc.)

- Install air plugs on storm drains to contain the spill.
- Divert using small berm to change direction of flow back to sewer.
- Divert spill by pumping around overflow and return to sewer.

CONTAIN SPILL & RETURN TO SYSTEM

- Contain spill by letting it collect in a naturally low area and recover sewage when time permits.
- Dike/Dam (or sand bagging) spill by building dirt berm to collect spill.

PHOTOGRAPH DIVERSION & CONTAINMENT

2. Clear Blockage RELIEVE CAUSE OF SPILL
   - Relieve the stoppage as soon as possible by use of Sewer Rodder, Hydro-jet or Snake (flex).
   - Have Vactor set up downstream or use trap at downstream manhole to catch any debris that may get released.
   - Refer to and follow all Safety Regulations.

3. Area Clean-Up CLEAN UP AND DISINFECTING
   - Remove all signs of gross pollution (solids, TP, etc.)
   - Spray disinfectant (and broom area). Wait 10 min.
   - Flush area with water. The amount of flush water should be at least three times that of the spill.

• Water shall be contained and returned to sewer.

PHOTOGRAPH AREA AFTER CLEAN-UP

4. Contact NPDES and /or Code Compliance – If the spill is a lateral problem, notify the resident of their responsibility and if the property owner refuses to correct the problem, contact Code Compliance:
CODE COMPLIANCE PHONE NUMBER DAYTIME 384-7272
OR 24 Hrs. 384-5777 Fire Dispatch

5. CCTV – CCTV to be performed as soon as possible to help determine cause. Burned DVD of pipe inspection required.

NOTE: If the spill has caused damage to private property, a copy of the report and photos must be provided to your supervisor. The supervisor will check and forward the report and photos to Risk Management if needed. Confine pictures to only the affected area. **Contact the Risk Management Division at (909) 384-5308.**

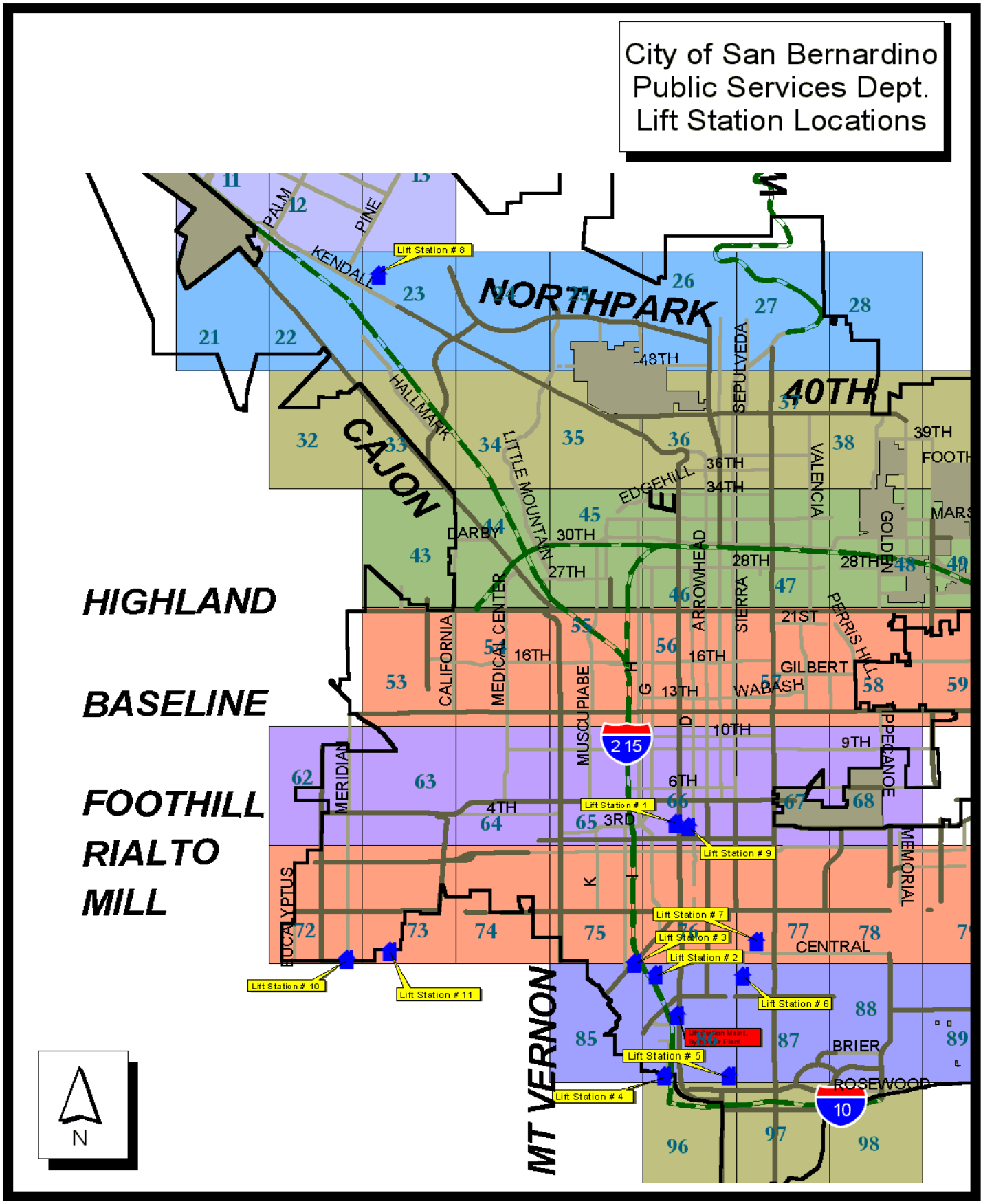
Determine Cause of Spill – Grease or other obstructions; describe what caused the problem and what actions were taken to correct the problem. This information is required for Department records.

Check and Clear Downstream Manholes – There's a possibility that debris may accumulate at the next down stream manhole following a backup. Always check the manhole to ensure that the line is flowing properly.

Clean Up Spill Area and Pick Up Containment – Leave the area as clean as possible. Pick up rags, papers, etc. Emphasis should be placed on removing all materials that are on or around the contaminated area and all materials used to clean the contaminated area. If necessary, remove any contaminated soil and deliver to the Water Reclamation Facility. BEFORE WASH DOWN OR DISINFECTION WHERE NECESSAY, ALL CONTAMINATED MATERIALS AND CONTAMINATED SOIL MUST BE REMOVED. Wash down the street, sidewalk, manhole, etc.

Private Property Spills – City Staff should be aware of, and monitor, how the spill and area of spill is contained and how the materials are disposed of. To ensure proper containment and clean up, the City may have to assist clean up by using City Staff and equipment, then back charging the responsible parties. If the spill should reach the public right-of-way, it is then the City's responsibility to contain the spill and assure a proper clean up.

Appendices:
See Appendix "B and C" Public Works Department Call Out List
See Appendix "D" Emergency Call Out List
See Appendix "E", Outside Agency List
See Appendix "F" for list of equipment
See Appendix "G" Agencies Bordering the City of San Bernardino
See Appendix "H" Utilities


City of San Bernardino
Public Services Dept.
Lift Station Locations
NORTHPARK
CAJON
HIGHLAND
BASELINE
FOOTHILL
RIALTO
MILL
MT VERNON
40TH
CENTRAL
BRIER
ROSEWOOD
Lift Station # 1
Lift Station # 2
Lift Station # 3
Lift Station # 4
Lift Station # 5
Lift Station # 6
Lift Station # 7
Lift Station # 8
Lift Station # 9
Lift Station # 10
Lift Station # 11
N

MEASURING SEWER SYSTEM OVERFLOWS

A. VISUAL METHOD

To expedite system overflow calculations the visual method, using the attached series of photos as a gauge, is suggested.

This should be used as the initial assessment but should not be the sole tool used to calculate overflow rates.

If using this measurement system, it is determined that a supervisor must be contacted. Either the gauge or calculating method must be performed to more accurately measure the flow.

IMPORTANT:

ANY SPILL MUST BE REPORTED TO CALIFORNIA REGIONAL WATER QUALITY

REMEMBER THAT CONTAINMENT IS OUR FIRST PRIORITY. PROTECT STORM DRAIN SYSTEMS WHENEVER POSSIBLE AND ATTEMPT TO DIRECT SPILLAGE INTO AN AREA THAT CAN BE REMOVED LATER.

CALCULATING SPILLS

The purpose of this report is to take the mystery out of calculating spills. Ninety-eight percent of all spills can be calculated using the two examples discussed in this section.

I use the orifice equation when I try to figure out the volume of a spill. Understanding the orifice equation is not as complex as it may sound. If you know the diameter of the hole (i.e., pick hole or annular space between the ring and cover) and the height at which the fluid is coming out of the hole, then you can figure the flow out of that hole.

The equation is $Q = Ca\sqrt{2gh}$
Where Q = flow of fluid from the hole,
C = coefficient of discharge,
a = area of the hole (measured in ft),
g = gravity (32.2 ft/sec) and
h = height of the fluid above the cover (measured in ft).

The coefficient of discharge (C) is the product of the coefficient of velocity (Cv) multiplied by the coefficient of contraction (Cc). The values for Cv have been found to vary from 0.954 for 3/4 inch orifices to 0.991 for 2.5 inch orifices. The values for Cc have been found to vary from 0.67 for 3/4 inch orifices to 0.614 for 2.5 inch orifices.

Example 1

You receive a report of a spill occurring at 12 noon. Your crews respond to the spill and relieve the spill at 2:30 p.m. In addition, they inform you that the flow was coming from two 3/4 inch pick holes in the manhole cover, and when they arrived on the scene, the flow appeared to be coming out of the holes approximately four inches above the lid. What is the total flow that you are to report to the Regional Board?

Assumptions for Example 1 spill:

1. Flow started at noon and was stopped at 2:30 p.m.
   Total time of spill was 2.5 hours (150 minutes).

2. Flow was coming from two - 3/4 inch pick holes.
   The area of each 3/4 inch hole is 0.44179 in. (see Table 1-2).
   To convert in^2 to ft^2 multiply by 0.006944.

   Therefore, a = 0.44179 inch ^{2} x 0.006944 = 0.0031 ft^2 for each hole

3. Flow was coming out of each hole at a height of four inches.
   To convert inches to feet, multiply by $\frac{1\ foot}{12\ inches}$

   Therefore, $H = 4\ inches \times \frac{1\ foot}{12\ inches} = 0.33ft$

4. The coefficient of discharge, C = Cv x Cc. For a 3/4 inch hole
   Cv = 0.954, Cc = 0.67.

   Therefore, C = 0.954 x 0.67 = 0.639

5. Using the orifice equation $Qh = Ca\sqrt{2gH}$ the flow from each hole is:

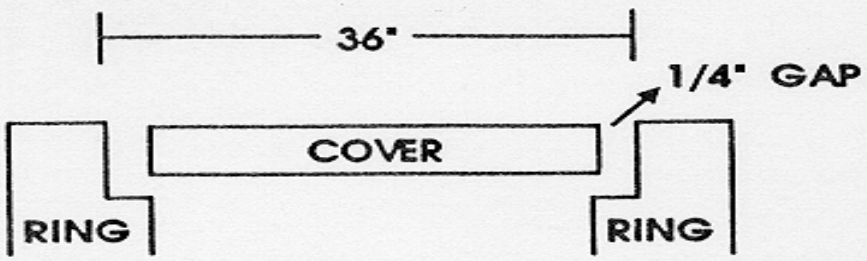
   $Qh = 0.639((0.0031 ft^2)\sqrt{2(32.2 ft/sec^2)(0.33 ft)}$

Example 2

In this next Example, the facts are similar to example 1 except, in addition to the flow coming out of the two pick holes, it is also coming out of the 1/4 inch gap between the ring and cover at a height of 4 inches.

7. In addition to steps 1-6 in Example 1, you also need to figure the total area where the flow is coming out between the ring and cover.

   We know that the relationship between the ring and cover probably looks like this:



This problem is made simple if you take the ID of the ring (shown here to be 36 inches), figure out its area and subtract it from the area of the cover (shown here to be 36" - 1/2" = 35.5 inches). Since both of these areas are circles, we know that the formula is $A = \pi(D/2)^2$. Therefore;

A = A ring - A cover

= $[\pi(36/2)^2] - [\pi(35.5/2)^2]$ $\pi = 3.1416$

= [3.1416 (324)] - [3.1416(315.1)]

= 1017.9 - 989.8

= 28.1 in^2 x 0.006944 = 0.195 ft^2

8. From example 1; H = 0.33 ft, g = 32.2 ft/sec, C = 0.639

9. Using orifice equation $Q=Ca\sqrt{2gh}$

$Q=0.639((0.195ft^2)\sqrt{2(32.2ft/sec^2)(0.33ft)}$

= 0.574 ft/sec = 257.82 gpm

= 257.82 gpm x 150 min = 38,673 gallons

10. In this example, flow was coming from two pick holes and the space between the ring and cover. So in this example we must add the flow calculated in step 6 above to the flow calculated in step 9 above - making the total flow of the spill in this example:

Qt = 1230 gallons + 38,673 gallons

= 39,903 gallons

Appendix VI-F-1: San Diego Manhole Flow Rate Chart

City of San Diego
Metropolitan Wastewater Department

Reference Sheet for Estimating Sewer Spills from Overflowing Sewer Manholes
All estimates are calculated in gallons per minute (gpm)

Wastewater Collection Division
(619) 654-4160

5 gpm

25 gpm

50 gpm

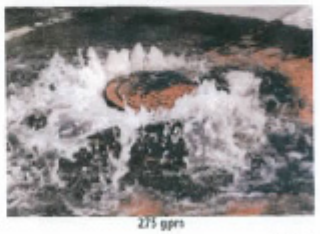
100 gpm

150 gpm

200 gpm

225 gpm

250 gpm


275 gpm

All photos were taken during a demonstration using metered water from a hydrant in cooperation with the City of San Diego's Water Department.

rev. 4/99

NEW

Attachment D - Sample Templates for SSO Volume Estimation

TABLE 'A'

ESTIMATED SSO FLOW OUT OF M/H WITH COVER IN PLACE

24" COVER

Height of spout above M/H rim H in inches	S S O FLOW Q in gpm	in MGD	Min. Sewer size in which these flows are possible
1/4	1	0.001	
1/2	3	0.004	
3/4	6	0.008	
1	9	0.013	
1 1/4	12	0.018	
1 1/2	16	0.024	
1 3/4	21	0.030	
2	25	0.037	
2 1/4	31	0.045	
2 1/2	38	0.054	
2 3/4	45	0.065	
3	54	0.077	
3 1/4	64	0.092	
3 1/2	75	0.107	
3 3/4	87	0.125	
4	100	0.145	
4 1/4	115	0.166	
4 1/2	131	0.189	
4 3/4	148	0.214	
5	166	0.240	
5 1/4	185	0.266	
5 1/2	204	0.294	
5 3/4	224	0.322	6"
6	244	0.352	
6 1/4	265	0.382	
6 1/2	286	0.412	
6 3/4	308	0.444	
7	331	0.476	
7 1/4	354	0.509	
7 1/2	377	0.543	
7 3/4	401	0.578	8"
8	426	0.613	
8 1/4	451	0.649	
8 1/2	476	0.686	
8 3/4	502	0.723	
9	529	0.761	

36" COVER

Height of spout above M/H rim H in inches	S S O FLOW Q in gpm	in MGD	Min. Sewer size in which these flows are possible
1/4	1	0.002	
1/2	4	0.006	
3/4	8	0.012	
1	13	0.019	
1 1/4	18	0.026	
1 1/2	24	0.035	
1 3/4	31	0.044	
2	37	0.054	
2 1/4	45	0.065	
2 1/2	55	0.079	
2 3/4	66	0.095	
3	78	0.113	
3 1/4	93	0.134	
3 1/2	109	0.157	
3 3/4	127	0.183	
4	147	0.211	
4 1/4	169	0.243	
4 1/2	192	0.276	
4 3/4	217	0.312	6"
5	243	0.350	
5 1/4	270	0.389	
5 1/2	299	0.430	
5 3/4	327	0.471	
6	357	0.514	
6 1/4	387	0.558	8"
6 1/2	419	0.603	
6 3/4	451	0.649	
7	483	0.696	
7 1/4	517	0.744	
7 1/2	551	0.794	
7 3/4	587	0.845	10"
8	622	0.896	
8 1/4	659	0.949	
8 1/2	697	1.003	
8 3/4	734	1.057	
9	773	1.113	

Disclaimer:
This sanitary sewer overflow table was developed by Ed Euyen, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

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TABLE 'C'

ESTIMATED SSO FLOW OUT OF M/H PICK HOLE

Height of spout above M/H cover H in inches	SSO FLOW Q in gpm
1/8	1.0
1/4	1.4
3/8	1.7
1/2	1.9
5/8	2.2
3/4	2.4
7/8	2.6
1	2.7
1 1/8	2.9
1 1/4	3.1
1 3/8	3.2
1 1/2	3.4
1 5/8	3.5
1 3/4	3.6
1 7/8	3.7
2	3.9
2 1/8	4.0
2 1/4	4.1
2 3/8	4.2
2 1/2	4.3
2 5/8	4.4
2 3/4	4.5
2 7/8	4.6
3	4.7
3 1/8	4.8
3 1/4	4.9
3 3/8	5.0
3 1/2	5.1
3 5/8	5.2
3 3/4	5.3
3 7/8	5.4
4	5.5
4 1/8	5.6
4 1/4	5.6
4 3/8	5.7
4 1/2	5.8
4 5/8	5.9
4 3/4	6.0
4 7/8	6.0
5	6.1

Height of spout above M/H cover H in inches	SSO FLOW Q in gpm	
5 1/8	6.2	
5 1/4	6.3	
5 3/8	6.3	
5 1/2	6.4	
5 5/8	6.5	
5 3/4	6.5	
5 7/8	6.5	
6	6.7	
6 1/8	6.8	
6 1/4	6.8	
6 3/8	6.9	Unrestrained M/H cover will start to lift
6 1/2	7.0	
6 5/8	7.0	
6 3/4	7.1	
6 7/8	7.2	
7	7.2	
7 1/8	7.3	
7 1/4	7.4	
7 3/8	7.4	
7 1/2	7.5	
7 5/8	7.6	
7 3/4	7.6	
7 7/8	7.7	
8	7.7	
8 1/8	7.8	
8 1/4	7.9	
8 3/8	7.9	
8 1/2	8.0	
8 5/8	8.0	
8 3/4	8.1	
8 7/8	8.1	
9	8.2	
9 1/8	8.3	
9 1/4	8.3	
9 3/8	8.4	
9 1/2	8.4	
9 5/8	8.5	
9 3/4	8.5	
9 7/8	8.6	
10	8.7	

Note: This chart is based on a 7/8 inch diameter pick hole

Disclaimer: This sanitary sewer overflow table was developed by Ed Euyon, Civil Engineer, P.E. No. 33955, California, for County Sanitation District 1. This table is provided as an example. Other Agencies may want to develop their own estimating tables.

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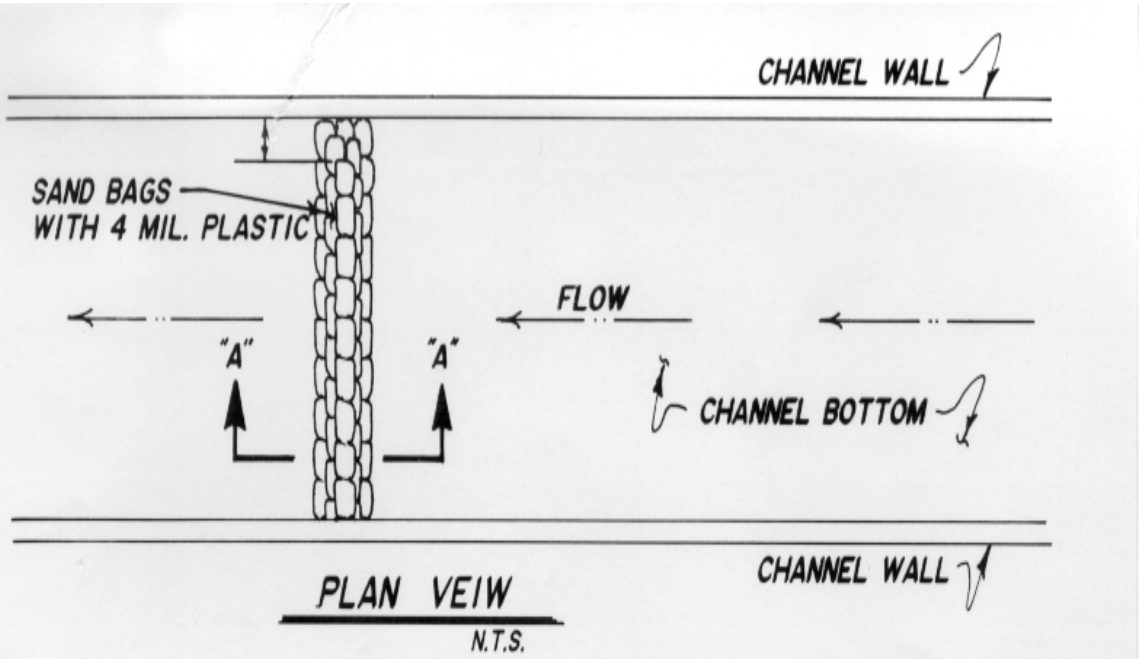
NEW



PLAN VEIW

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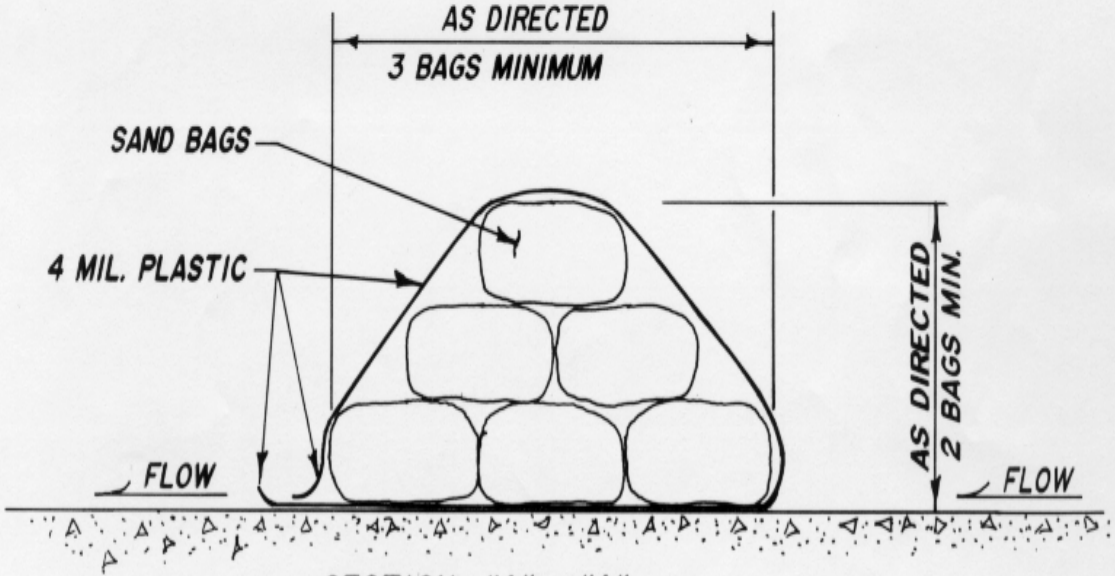
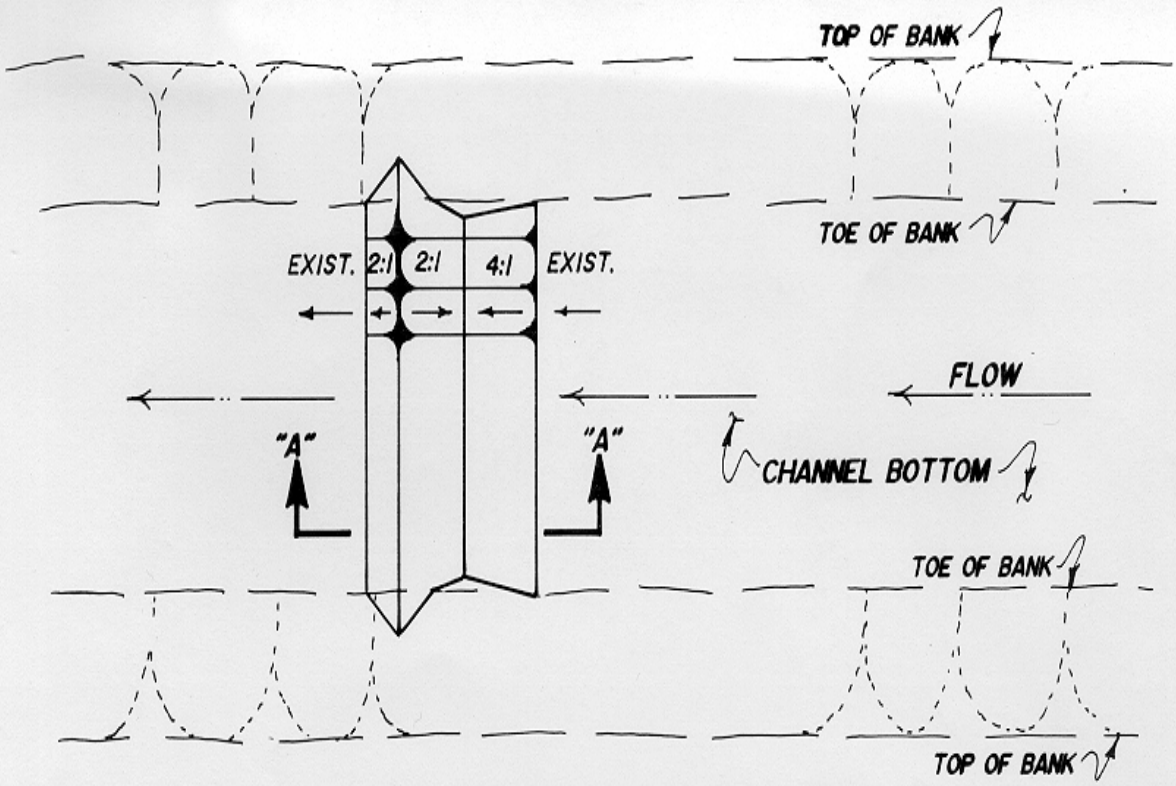


SECTION "A" - "A"

N.T.S.

HARD BOTTOM CHANNEL



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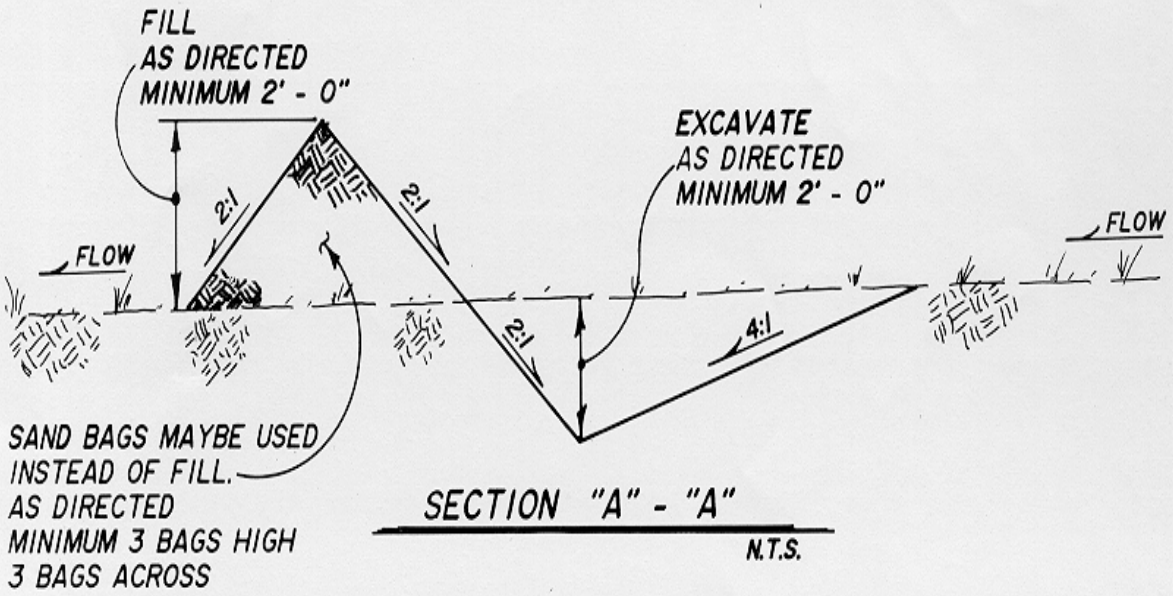
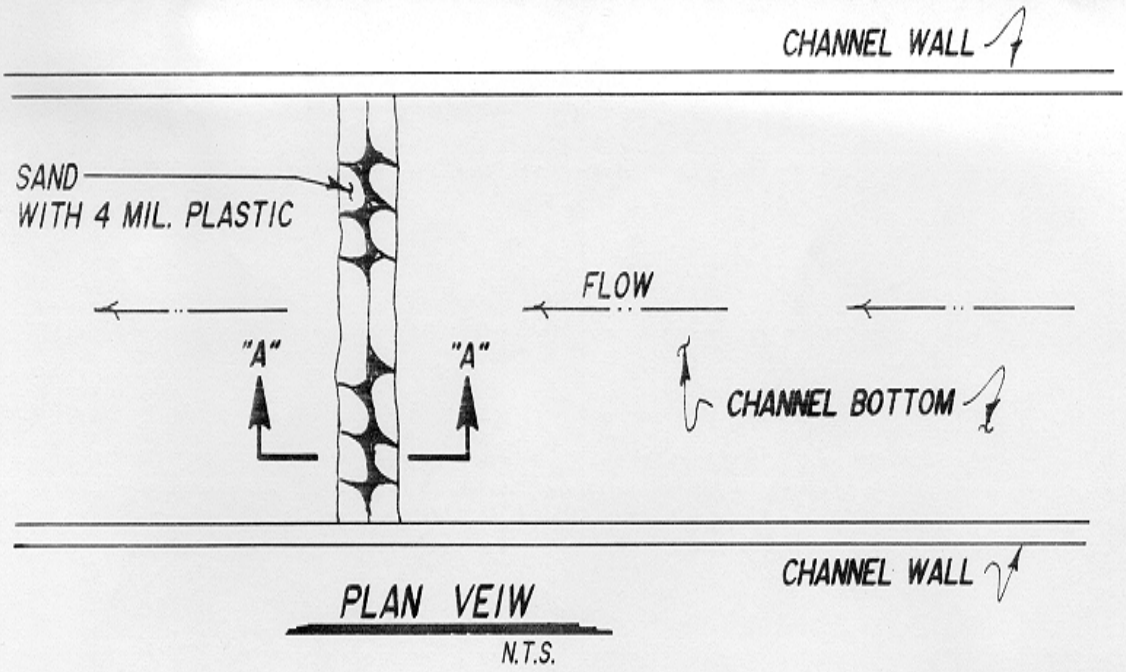


SECTION "A" - "A"

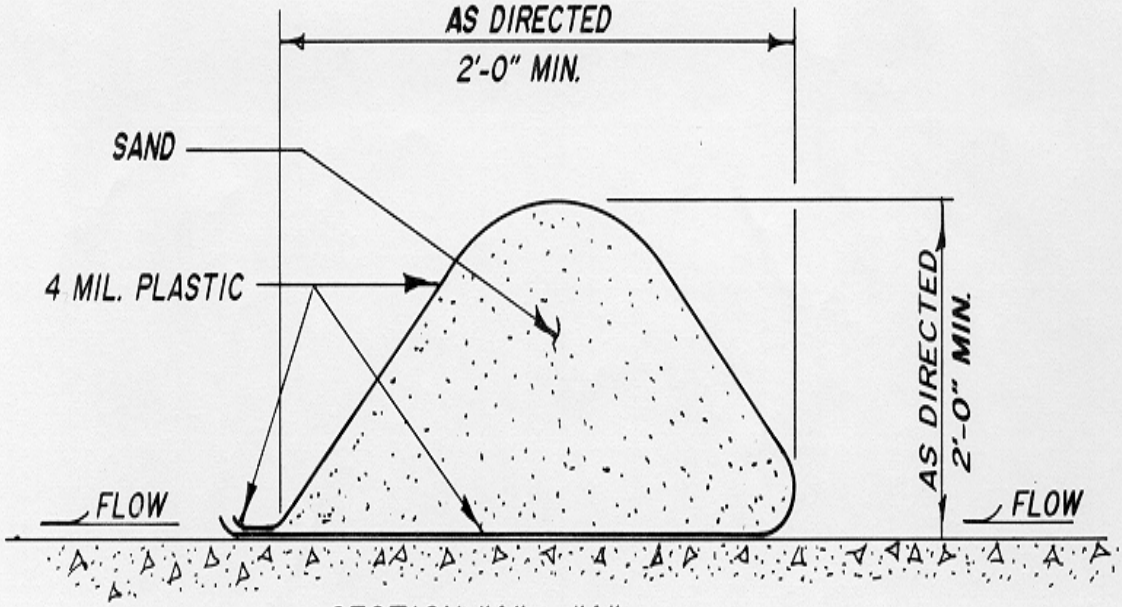
N.T.S.

SOFT BOTTOM CHANNEL



PLAN VEIW

N.T.S.

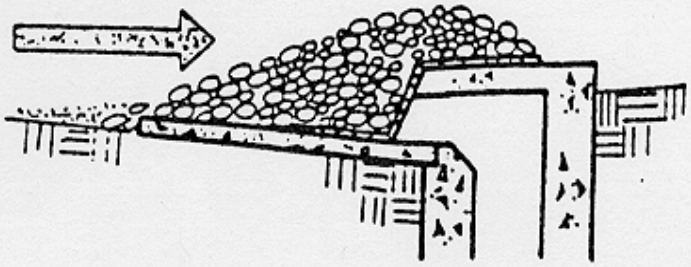


SECTION "A" - "A"

N.T.S.

ALTERNATE HARD BOTTOM CHANNEL

BMP: STORM DRAIN INLET PROTECTION



Objectives

- Housekeeping Practices
- Contain Waste
- Minimize Disturbed Areas
- Stabilize Disturbed Areas
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

GENERAL DEFINITION

Devices of various designs which detain sediment-laden runoff and allow the sediment it to settle prior to discharge into a storm drain inlet or catch basin.

SUITABLE APPLICATIONS

- Every storm drain inlet receiving sediment-laden runoff should be protected, either by covering the inlet or promoting sedimentation upstream of the inlet.

INSTALLATION/APPLICATION

- Five types of inlet protection are presented below, however, it is recognized that other effective methods and proprietary device, exist and may be selected:
  - Filter Fabric Fence: Appropriate for drainage basins less than one acre with less than a 5 percent slope.
  - Block and Gravel Filter: Appropriate for flows greater than 0.5 cfs.
  - Gravel and Wire Mesh Filter: Used on curb or drop inlets where construction equipment may drive over the inlet.
  - Sand bag barrier: Used to create a small sediment trap upstream of inlets on sloped, paved streets.
  - Excavated Drop Inlet Sediment Trap: An excavated area around the inlet to trap sediment (see Sediment Trap ESC 55).
- Select the appropriate type of inlet protection and design as referred to or as described in this fact sheet.
- Use only for drainage areas smaller than one acre unless a sediment trap first intercepts the runoff.
- Provide area around the inlet for water to pond without flooding structures and property.

REQUIREMENTS

- Maintenance
  - Inspect weekly and after each rain.
  - Replace clogged filter fabric or stone filters immediately.
  - Remove sediment when depth exceeds half the height of the filter, or half the depth of the sediment trap.
  - Remove as soon as upstream soils are stabilized and streets are swept.
- Cost (source: EPA, 1992)
  - Average annual cost for installation and maintenance (1 year useful life) is $150 per inlet.

Targeted Pollutants

- ● Sediment
- ○ Nutrients
- ○ Toxic Materials
- ○ Oil & Grease
- ◒ Floatable Materials
- ○ Other Construction Waste

- ● Likely to Have Significant Impact
- ○ Probable Low or Unknown Impact

Implementation Requirements

- ◒ Capital Costs
- ○ O&M Costs
- ◒ Maintenance
- ○ Training
- ○ Suitability for Slopes >5%

● High ○ Low

ESC54

Best Management Practices

BMP: STORM DRAIN INLET PROTECTION (Continue)

LIMITATIONS

- Drainage area should not exceed 1 acre.
- Runoff will bypass protected inlets on slopes.
- Pooding will occur at a protected inlet, with possible short-term flooding.
- Straw bales are not effective for inlet protection.

ESC54

Additional Information — Storm Drain Inlet Protection

Storm drain inlet protection consists of a sediment filter or an impounding area around or upstream of a storm drain, drop inlet, or curb inlet. This erosion and sedimentation control BMP prevents excessive sediment from entering storm drainage systems prior to permanent stabilization of the disturbed area.

All on-site storm drain inlets should be protected. Off-site, inlets should be protected in areas where construction activity tracks sediment onto paved areas or where inlets receive runoff from disturbed areas.

Installation/Aplication Criteria

Planning

Large amounts of sediment may enter the storm drain system when storm drains are installed before the upslope drainage area is stabilized, or where construction is adjacent to an existing storm drain. In cases of extreme sediment loading, the storm drain itself may clog and lose a major portion of its capacity. To avoid these problems, it is necessary to prevent sediment from entering the system at the inlets.

Inlet control measures presented in this handbook should not be used for inlets draining more than one acre. Runoff from larger disturbed areas should be first routed through a Temporary Sediment Trap (see ESC 56). Different types of inlet protection are appropriate for different applications depending on site conditions and the type of inlet. Inlet protection methods not presented in this handbook should be approved by the local storm water management agency.

General Design and sizing criteria:

- Grates and spaces around all inlets should be sealed to prevent seepage of sediment-laden water.
- Excavate sediment sumps (where needed)1 to 2 feet with 2:1 side slopes around the inlet.

Installation procedures for filter fabric fence:

a. Place 2 inch by 2 inch wooden stakes around the perimeter of the inlet a maximum of 3 feet apart and drive them at least 8 inches into the ground. The stakes must be at least 3 feet long.
b. Excavate a trench approximately 8 inches wide and 12 inches deep around the outside perimeter of the stakes.
c. Staple the filter fabric (for materials and specifications, see Silt Fence ESC 50) to wooden stakes so that 32 inches of the fabric extends out and can be formed into the trench. Use heavy-duty wire staples at least one inch in length.
d. Backfill the trench with 3/4 inch or less washed gravel all the way around.

Installation procedure for block and gravel filter:

a. Place hardware cloth or comparable wire mesh with one-half inch openings over the drop inlet so that the wire extends a minimum of 1 foot beyond each side of the inlet structure. If more than one strip is necessary, overlap the strips. Place filter fabric over the wire mesh.
b. Place concrete blocks lengthwise on their sides in a single row around the perimeter of the inlet, so that the open ends face outward, not upward. The ends of adjacent blocks should abut. The height of the barrier can be varied, depending on design needs, by stacking combinations of blocks that are 4 inches, 8 inches, and 12 inches wide. The row of blocks should be at least 12 inches but no greater than 24 inches high.
c. Place wire mesh over the outside vertical face (open end) of the concrete blocks to prevent stone from being washed through the blocks. Use hardware cloth or comparable wire mesh with one half inch openings.
d. Pile washed stone against the wire mesh to the top of the blocks. Use 3/4 to 3 inch gravel.

Installation procedure for gravel and wire mesh filters:

a. Place wire mesh over the drop inlet so that the wire extends a minimum of 1 foot beyond each side of the inlet structure. Use hardware cloth or comparable wire mesh with one-half inch openings. If more than one strip of mesh is necessary, overlap the strips. Place filter fabric over wire mesh.

ESC54

Additional Information — Storm Drain Inlet Protection

b. Place 3/4 to 3 inch gravel over the filter fabric/wire mesh. The depth of the gravel should be at least 12 inches over the entire inlet opening (see attached figure).

Installation procedure for sand bag barrier:

a. Use sand bag made of geotextile fabric (not burlap), and fill with 3/4 in. rock or 1/4 in. pea gravel.
b. Construct on gently sloping street.
c. Leave room upstream of barrier for water to pond and sediment to settle.
d. Place several layers of sand bags--overlapping the bags and packing them tightly together.
e. Leave gap of one bag on the top row to serve as a spillway. Flow from a severe storm (e.g., 10-year storm) should not overtop the curb.

Maintenance Requirements

- For filter fabric fences: Inspections should be made on a regular basis, especially after large storm events. If the fabric becomes clogged, it should be replaced. Sediment should be removed when it reaches approximately one-half the height of the fence. If a sump is used, sediment should be removed when it fills approximately one-half the depth of the hole.
- For gravel filters: If the gravel becomes clogged with sediment, it must be carefully removed from the inlet, and either cleaned or replaced. Since cleaning gravel at a construction site may be difficult, use the sediment-laden stone instead as fill and put fresh stone around the inlet.
- The inlet protection should be removed 30 days after the upslope area has been fully stabilized. Any sediment around the inlet must be carefully removed and disposed.

REFERENCES

Best Management Practices and Erosion Control Manual for Construction Sites, Flood Control District of Maricopa County, Arizona, September 1992.

"Draft - Sedimentation and Erosion Control, An Inventory of Current Practices", U.S.E.P.A., April, 1990.

Erosion and Sediment Control Handbook, S.J. Goldman, K. Jackson, T.A. Bursetynsky, P.E., McGraw Hill Book Company.

Manual of Standards of Erosion and Sediment Control Measures, Association of Bay Area Governments, June 1981.

Proposed Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters, Work Group Working Paper, USEPA, April, 1992.

Stormwater Management Water for the Puget Sound Basin, Washington State Department of Ecology, The Technical Manual - February 1992, Publication # 91-75.

Storm Water Pollution Prevention Handbook, First Edition, State of California, Department of Transportation Division of New Technology, Materials, and Research, October 1992.

ESC54

ACTIVITY: NON-STORM WATER DISCHARGES TO DRAINS

Applications

- Manufacturing
- Material Handling
- Vehicle Maintenance
- Construction
- Commercial Activities
- Roadways
- Waste Containment
- Housekeeping Practices

DESCRIPTION

Eliminate non-storm water discharges to the storm water collection system. Non-storm water discharges may include: process wastewaters, cooling waters, wash waters, and sanitary wastewater.

APPROACH

The following approaches may be used to identify non-storm water discharges:

- Visual Inspection
  - The easiest method is to inspect each discharge point during dry weather.
  - Keep in mind that drainage from a storm event can continue for three days or more and groundwater may infiltrate the underground storm water collection system.
- Piping Schematic Review
  - The piping schematic is a map of pipes and drainage systems used to carry wastewater, cooling water, sanitary wastes, etc.
  - A review of the "as-built" piping schematic is a way to determine if there are any connections to the storm water collection system.
  - Inspect the path of floor drains in older buildings.
- Smoke Testing
  - Smoke testing of wastewater and storm water collection systems is used to detect connections between the two systems.
  - During dry weather the storm water collection system is filled with smoke and then traced to sources. The appearance of smoke at the base of a toilet indicates that there may be a connection between the sanitary and the storm water system.
- Dye Testing
  - A dye test can be performed by simply releasing a dye into either your sanitary or process wastewater system and examining the discharge points from the storm water collection system for discoloration.

REQUIREMENTS

Costs (Capital, O&M)

- Can be difficult to locate illicit connections especially if there is groundwater infiltration.

LIMITATIONS

- Many facilities do not have accurate, up-to-date schematic drawings.
- TV and visual inspections can identify illicit connections to the storm sewer, but further testing is sometimes required (e.g. dye, smoke) to identify sources.

Targeted Constituents

○	Sediment
●	Nutrients
●	Heavy Metals
●	Toxic Materials
◒	Floatable Materials
●	Oxygen Demanding Substances
●	Oil & Grease
●	Bacteria & Viruses

● Likely to Have Significant Impact
○ Probable Low or Unknown Impact

Implementation Requirements

◒	Capital Costs
○	O&M Costs
○	Maintenance
◒	Training

● High ○ Low

SC1

Best Management Practices

Additional Information — Non-Storm Water Discharges to Drains

Facilities subject to storm water permit requirements must include a certification that the storm water collection system has been tested or evaluated for the presence of non-storm water discharges. The State's General Industrial Storm Water Permit requires that non-storm water discharges be eliminated prior to implementation of the facility's SWPPP.

Non-storm water discharges to the storm water collection system may include any water used directly in the manufacturing process (process wastewater), air conditioning condensate and coolant, non-contact cooling water, cooling equipment condensate, outdoor secondary containment water, vehicle and equipment wash water, sink and drinking fountain wastewater, sanitary wastes, or other wastewaters. Table 4.1 presents disposal option information for specific types of wastewaters.

To ensure that the storm water system discharge contains only storm water, industry should:

- Locate discharges to the municipal storm sewer system or waters of the United States from the industrial storm sewer system from:
  - "as-built" pipeline schematics, and
  - visual observation (walk boundary of plant site).
- Locate and evaluate all discharges to the industrial storm sewer system (including wet weather flows) from:
  - "as-built" pipeline schematics,
  - visual observation,
  - dye tests,
  - TV camera,
  - chemical field test kits, and
  - smoke tests.
- Develop plan to eliminate illicit connections:
  - replumb sewer lines,
  - isolate problem areas, and
  - plug illicit discharge points.
- Develop disposal options.
- Document that non-storm water discharges have been eliminated by recording tests performed, methods used, dates of testing, and any on-site drainage points observed.

REFERENCES

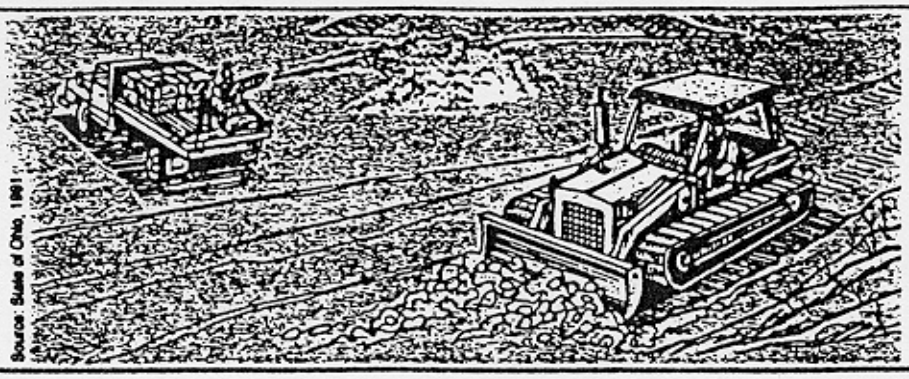
General Industrial Storm Water Permit, SWRCB, 1992.

NPDES General Permit for Discharges of Storm Water Associated with Industrial Activity in Santa Clara County to South San Francisco Bay or its Tributaries, SFBRWQCB, 1992.

Storm Water Management for Industrial Activities: Developing Pollution Prevention Plans, and Best Management Practices, EPA 832-R-92-006, USEPA, 1992.

SC1

ACTIVITY: CONTAMINATED SOIL MANAGEMENT



DESCRIPTION

Prevent or reduce the discharge of pollutants to storm water from contaminated soil and highly acidic or alkaline soils by conducting pre-construction surveys, inspecting excavations regularly, and remediating contaminated soil promptly.

APPROACH

Contaminated soils may occur on your site for several reasons including:

- Past site uses and activities;
- Detected or undetected spills and leaks; and
- Acid or alkaline solutions from exposed soil or rock formations high in acid or alkaline-forming elements.

Most developers conduct pre-construction environmental assessments as a matter of routine. Recent court rulings holding contractors liable for cleanup costs when they unknowingly move contaminated soil, highlight the need for contractors to confirm that a site assessment is completed before earth moving begins.

The following steps will help reduce storm water pollution from contaminated soil:

- Conduct thorough site planning including pre-construction geologic surveys.
- Look for contaminated soil as evidenced by discoloration, odors, differences in soil properties, abandoned underground tanks or pipes, or buried debris.
- Prevent leaks and spills to the maximum extent practicable. Contaminated soil can be expensive to treat and/or dispose of properly. However, addressing the problem before construction is much less expensive than after the structures are in place.
- Test suspected soils at a certified laboratory.
- If the soil is contaminated, work with the local regulatory agencies to develop options for treatment and/or disposal.
- For a quick reference on disposal alternatives for specific wastes, see Table 4.2, CA40, Employee/Subcontractor Training.

REQUIREMENTS

- Costs (Capital, O&M)
  - Prevention of leaks and spills is inexpensive. Treatment and/or disposal of contaminated soil can be quite expensive.
- Maintenance
  - Inspect excavated areas daily for signs of contaminated soil.
  - Implement CA12, Spill Prevention and Control, to prevent leaks and spills as much as possible.

Objectives

- Housekeeping Practices
- **Contain Waste**
- **Minimize Disturbed Areas**
- **Stabilize Disturbed Areas**
- Protect Slopes/Channels
- Control Site Perimeter
- Control Internal Erosion

Targeted Pollutants

- ◒ Sediment
- ○ Nutrients
- ● Toxic Materials
- ○ Oil & Grease
- ○ Floatable Materials
- ○ Other Construction Waste

- ● Likely to Have Significant Impact
- ○ Probable Low or Unknown Impact

Implementation Requirements

- ○ Capital Costs
- ◒ O&M Costs
- ◒ Maintenance
- ◒ Training
- ○ Suitability for Slopes >5%

● High ○ Low

CA22

Best Management Practices

ACTIVITY: CONTAMINATED SOIL MANAGEMENT (Continue)

LIMITATIONS

- Contaminated soils that cannot be treated on-site must be disposed of off-site by a licensed hazardous waste hauler.
- The presence of contaminated soil may indicate contaminated water as well. See CA1 (Dewatering Operations) in this chapter for more information.

REFERENCES

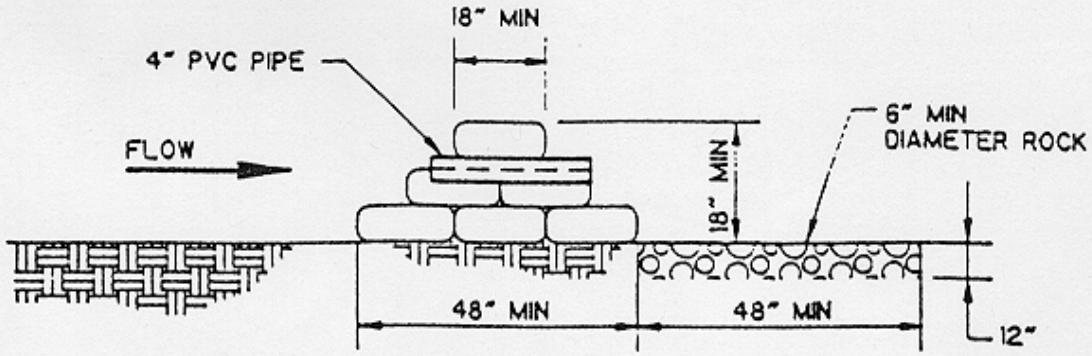
Blueprint for a Clean Bay-Construction-Related Industries: Best Management Practices for Storm Water Pollution Prevention; Santa Clara Valley Nonpoint Source Pollution Control Program, 1992.

Processes, Procedures, and Methods to Control Pollution Resulting from all Construction Activity; USEPA, 430/9-73-007, 1973.

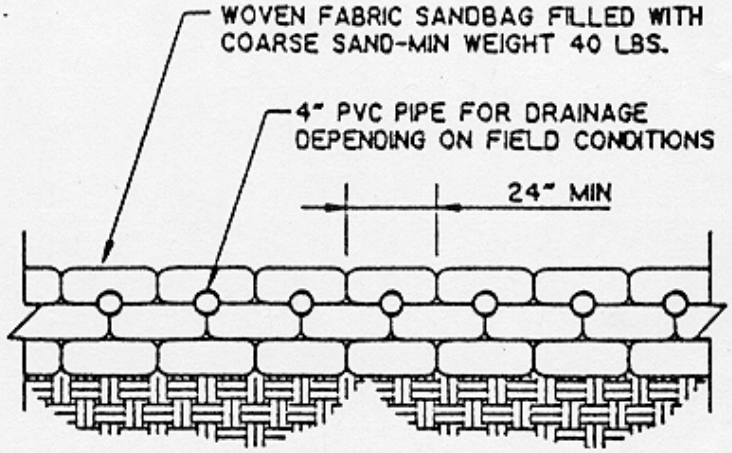
Storm Water Management for Construction Activities, Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92005; USEPA, April 1992.

CA22

Additional Information — Sand Bag Barrier



CROSS-SECTION



FRONT VIEW

SAND BAG BERM

ESC52

Santa Ana Regional Water Quality Control Board
Regional Sewer Spill Response Training

A REGULATOR'S PERSPECTIVE

1. **Objectives**

   a. COMMUNICATE REGIONAL WATER QUALITY CONTROL BOARD'S STAFF EXPECTATIONS
   b. COMMUNICATE THE FOUR C'S TO BE CONSIDERED IN THE EVENT OF A SPILL

2. **Sewage Spill Response Expected by Regional Water Quality Control Board Staff**

   a. WHY BE CONCERNED WITH SEWAGE SPILLS?
   b. WHY REPORT SEWAGE SPILLS? BECAUSE IT'S THE LAW! (CALIFORNIA WATER CODE SECTION 13271)
   c. REPORTABLE QUANTITY FOR SEWAGE SPILLS....1,000 GALLONS OR MORE (CALIFORNIA CODE OF REGULATIONS TITLE 23, SECTION 2250)
   d. REPORTING SPILLS LESS THAN 1,000 GALLONS

3. **California Code of Regulations Title 23 - Waters**

   a. SUBCHAPTER 9.2 REPORTABLE QUANTITIES AND REPORTING REQUIREMENTS
   b. SECTION 2250 REPORTABLE QUANTITY FOR SEWAGE
   c. FOR THE PURPOSES OF SECTION 13271 OF THE WATER CODE, A REPORTABLE QUANTITY FOR SEWAGE IS DEFINED TO BE ANY UNAUTHORIZED DISCHARGE OF 1,00 GALLONS OR MORE
   d. SECTION 2260 REPORTING REQUIREMENTS
   e. ANY PERSON RESPONSIBLE FOR A DISCHARGE IN EXCESS OF THE REPORTABLE QUANTITIES OF THIS SUBCHAPTER AND THAT COULD AFFECT THE WATERS OF THE STATE SHALL IMMEDIATELY REPORT THAT DISCHARGE IN ACCORDANCE WITH SECTION 13271 OF THE WATER CODE.

Presented by Mark Adelson
California Regional Water Quality Control Board

f. THE REPORTING OF DISCHARGES IN EXCESS OF THE REPORTABLE QUANTITIES OF THIS SUBCHAPTER SHALL NOT APPLY TO DISCHARGES IN COMPLIANCE WITH WASTE WATER DISCHARGE REQUIREMENTS, CONDITIONS OF WAIVER OF WASTE DISCHARGE REQUIREMENTS, OR OTHER PROVISIONS OF DIVISION 7 OF THE WATER CODE.

g. AUTHORITY: SECTION 1028, WATER CODE

h. REFERENCE: SECTION 13271, WATER CODE (REVISED MAY 10, 1988, AND ADOPTED BY THE STATE WATER RESOURCES CONTROL BOARD JUNE 16, 1988)

j. WHO TO REPORT TO, AND WHEN?
STATE OFFICE OF EMERGENCY SERVICES: 1-800-852-7550 SANTA ANA REGIONAL WATER QUALITY CONTROL BOARD VOICE: 909-782-413 6 FAX: 909-781-6288 (OR DIRECTLY TO INDIVIDUAL BOARD STAFF) EVERYONE ELSE... REPORT AS SOON AS POSSIBLE: RULE OF THUMB - WITHIN AN HOUR.

4. **Be prepared to report, by telephone and fax.**

a. YOUR NAME
b. WHAT AGENCY YOU REPRESENT
c. A PHONE NUMBER WHERE YOU CAN BE REACHED
d. MATERIAL BEING SPILLED
e. LOCATION OF SPILL (INCLUDING CROSS STREETS)
f. WHEN YOU RECEIVED THE SPILL REPORT
g. APPROXIMATE VOLUME OF THE SPILL (OR SOME ASSESSMENT OF ITS RELATIVE SIZE)
h. DIRECTIONS TO THE SPILL SITE
i. WHETHER THE SPILL IS ON-GOING OR CONTROLLED
j. OTHER AGENCIES THAT HAVE BEEN OR WILL B NOTIFIED OF THE SPILL
k. WATERWAYS (INCLUDING STORM DRAINS)THAT HAVE BEEN OR MAY BE AFFECTED BY THE SPILL
l. NAME OF INCIDENT COMMANDER AND/OR ALTERNATE CONTACT PERSON AND THEIR PHONE NUMBERS

5. **Be prepared to report in writing**

a. ALL OF THE ABOVE
b. DISCUSSION OF CORRECTIVE STEPS AND CLEAN-UP MEASURES

c. PROPOSED MITIGATION MEASURES AND SCHEDULES
d. WITH A MAP SHOWING WHERE THE SPILL OCCURRED, AND ANY WATER WAYS AFFECTED
e. REPORT MUST BE SIGNED

6. **Direct Sewage Spill Prohibitions**

a. REGIONAL BOARD BASIN PLANS
b. NARRATIVE DISCHARGE SPECIFICATIONS OR PROVISIONS IN WASTE DISCHARGE REQUIREMENTS/NPDES PERMITS

7. **Indirect Sewage Spill Prohibitions**

a. NUMERICAL DISCHARGE SPECIFICATIONS IN WASTE DISCHARGE REQUIREMENTS
b. CALIFORNIA WATER CODE SECTION 13260: REQUIREMENTS FOR SUBMITTING REPORTS OF WASTE DISCHARGE

8. **Sewage Spill Response...What is Expected**

a. PROTECT PUBLIC HEALTH AND BENEFICIAL USES OF RECEIVING WATER

9. **The Four C's**

a. CONTAIN SPILLING SEWAGE...KEEP IT FROM ENTERING WATERWAYS
b. CONTROL THE SPILL...RELIEVE OR BYPASS AREA OF FAILURE
c. CLEAN-UP THE AFFECTED AREAS...A SUBJECT BY ITSELF
d. COMMUNICATE TO REGULATORY AGENCIES

10. **Sewage Spill Containment**

a. GOAL...KEEP THE SEWAGE WHERE IT CAN BE RECOVERED AND RETURNED TO THE SEWER
b. CONTAINMENT OPPORTUNITIES, OR, MAKING THE BEST OF A BAD SITUATION...ON STREETS, IN FLOOD CONTROL FACILITIES,

b. ENFORCEMENT ORDERS...
AUTHORITY: CALIFORNIA WATER CODE SECTION 13300

c. ADMINISTRATIVE CIVIL LIABILITY...
AUTHORITY: CALIFORNIA WATER CODE SECTIONS 13350, 13385

Santa Ana Regional Water Quality Control Board
Regional Sewer Spill Response Training

Disinfection

1. **To Disinfect or Not to Disinfect**
   a. Clean up first
   b. When not to disinfect ? When the disinfectant cannot be contained and is likely to reach a "surface water".

2. **When and Where to Disinfect**
   a. Only when the disinfectant will not reach surface waters.
   b. On pavements, with containments in place;
      - ...liquid chlorine (bleach) is preferred
      - ...recovering the disinfectant

3. **When and Where to Disinfect**
   a. On bare soil areas;
      - ...when you can leave it alone
      - ...disking
      - ...dry chlorine, lime

4. **How to Disinfect**
   a. Chlorine bleach: 1 quart/100 square feet
      - ...application methods
   b. Dry pool chlorine
      - ...application methods

Presented by Mark Adelson
California Regional Water Quality Control Board

5. How to Disinfect

   a. Lime: 10 pounds/100square feet

      ●...Application methods

   b. Personal protection concerns

6. **Managing Public Access to Sewage Spill Clean-up Sites**

   a. Hard surfaces disinfect with chlorine

      ●...Immediate access

   b. Soft surfaces disinfect with lime or chlorine

      ●...Restrict access for at least 24 hours or more, depending on weather and soil moisture

7. **Managing Public Access to Sewage Spill Clean-up Sites**

   a. Soft surfaces that have been disked

      ●...Restrict access for at least 7 days, depending on weather and soil moisture

   b. Soft surfaces that have not been disked

      ●...Restrict access for at least two weeks, depending on weather and soil moisture

DISCHARGE OF HAZARDOUS SUBSTANCES OR SEWAGE IN STATE WATERS

PORTER-COLOGNE WATER QUALITY CONTROL ACT
Water Code § 13271; 23 CCR § 2250 and § 2251

SOURCE

SUBSTANCES: Any hazardous substance or sewage. — Water Code 13271(a)

"Hazardous substance" means either of the following: — Water Code 13050(p)(1)

1. For discharge to surface waters, substances determined to be hazardous pursuant to 33 USC § 1321(b)(2)(CWA):
   A. Substances listed at 40 CFR Part 302 (see Appendix FED-5);
   B. Hazardous substances listed at 40 CFR § 116.1 et seq., reportable quantities for which appear at 40 CFR § 117.1 et seq. (see Appendix FED-2);
2. For discharge to groundwater, substances listed as hazardous waste or hazardous material pursuant to Health & Safety Code § 25140 (22 CCR §§ 66261.30-.33 or 66261.126, Appendix X) (see Appendix CAL-1), without regard to whether the substance is intended to be used, reused, or discarded.

"Hazardous substance" does not include: — Water Code 13050(p)(2)

1. Nontoxic, nonflammable, noncorrosive stormwater runoff drained from underground vaults, chambers, or manholes into gutters or storm sewers;
2. Lawfully applied pesticides;
3. Discharges to surface water of less than reportable quantities under 33 USC § 1321(b)(4) regulations (40 CFR § 117.1 et seq.) (see Appendix FED-2); and
4. Discharges to land which result, or probably will result, in a discharge to groundwater if the amount of the discharge is less than a reportable quantity (see "Reportable Quantity" provisions below) for substances listed as hazardous pursuant to Health & Safety Code § 25140 (see 22 CCR § 66261.1 et seq.) (Appendix CAL-1).

"Sewage" means the effluent of either a municipal or private wastewater treatment plant, as those terms are defined in § 13265. — Water Code 13271(f)

Oil and petroleum products are not considered hazardous substances under this Act. — Water Code 13050(p)(1)(B)

TYPE OF RELEASE: Discharge of any hazardous substance or sewage on any waters of the state, or discharge or deposit where it is, or probably will be, discharged in or on any waters of the state. State regulations provide that discharges shall be reported if they "could affect" waters of the state. — 23 CCR 2260

"Waters of the state" means any surface water or groundwater, including saline waters, within the boundaries of the state. — Water Code 13050(e)

"Discharge" not specifically defined.

QUANTITY:

Hazardous substances: Reportable quantity as determined per CERCLA. See 40 CFR Part 302 (Appendix FED-5). State Water Resources Control Board regulations specify 40 CFR dated July 1, 1987. Board staff advise that current version of 40 CFR should be used, but there is some question whether post-1987 changes adding new substances or increasing reportable quantities could be enforced. — 23 CCR 2251

Note: The statute requires the State Water Resources Control Board and the Department of Toxic Substances Control to establish, by regulation, reportable quantities of certain substances based on whether they may pose a risk to human health or the environment if they are discharged to ground or surface water. Such regulations have not yet been promulgated.

Sewage: Any unauthorized discharge of 1,000 gallons or more. — 23 CCR 2250(a)

EXEMPTIONS:

Notification requirement does not apply to discharges in compliance with waste discharge requirements or other provisions of this Act. (See, e.g., Water Code § 13263 and § 13269.)

WHO REPORTS:

Any person who, without regard to intent or negligence, causes or permits discharge or deposit of the hazardous substance or sewage.

WHEN TO REPORT:

Immediately: As soon as there is knowledge of the discharge and notification is possible without substantially impeding clean-up or other emergency measures.

WHERE TO REPORT:

Office of Emergency Services (OES)
(800) 852-7550 (if call to the 800 number cannot be completed, call: (916) 262-1621)
and
State Water Quality Control Board
(916) 227-4400
or
Regional Water Quality Control Board (see Appendix CAL-3)

Note that immediate notification of an appropriate agency of the federal government constitutes compliance with this reporting requirement.

Note: The OES is independently required to inform the appropriate Regional Water Quality Control Board of the discharge. The person who initially reports the discharge has no liability for the OES' failure to make this additional notification or for the accuracy of the notification — Gov't Code 5589.7

WHAT TO REPORT:

Report must be in accordance with spill reporting provisions of state toxic disaster contingency plan. In view of fact that this plan is not yet completed, OES advises that report should conform to following requirements of Health & Safety Code § 25507:

1. Exact location of release;
2. Name of person reporting;
3. Hazardous materials involved;
4. Estimate of quantity of hazardous materials involved; and
5. If known, potential hazard presented by the hazardous materials.

PENALTIES:

Misdemeanor, punishable by fine of not more than $20,000, or imprisonment of not more than one year, or both, for failure to report.

Does not apply to any discharge to land which does not result in a discharge to the waters of the state, except where discharge to waters of state would have occurred but for cleanup or emergency response by a public agency.

Note that notification received pursuant to this section or information obtained by use of such notification shall not be used against the person providing the notification in any criminal case, except in a prosecution for perjury/ giving false statements.

A failure to report, depending on the circumstances, may trigger additional criminal penalties. See page 46.

SEWER SPILL REPORT FORM

STAGE _____

Location: _____ M.H. Number _____

Thomas Guide: Page Number _____ Coordinates _____

Date:_____Time call was received: _____ a.m. p.m.

Call from_____

Time crew arrived at site of spill: _____a.m. p.m.
Time line was cleared: _____a.m. p.m.
Time cleanup was completed: _____a.m. p.m.

Responding Crew _____

Name Crew Member: _____

Name Crew Member: _____

Name Supervisor _____

Detailed Description of Cause: _____

_____

Detailed Containment Actions: _____

_____

Initial Estimate of Spill:

☐ Volume of Spill: _____ gallon. Total Spill Time: _____
Spill Volume Data: _____

☐ Spill Contained in an Area: Length _____ Width_____ Depth_____

☐ Overflowing Manhole With Lid:
Number of holes in cover _____ Height of water flowing from holes _____
Gap from casting to lid _____ Height of water flowing from gap _____
Diameter of casting _____ Time M.H. started overflowing _____

☐ Overflowing Manhole,With No Lid: Diameter of casting _____
Height of water above casting_____Time M.H. started overflowing_____

☐ Estimated Amount of Spill Returned to System _____%
Method of Return: Vactor Truck _____Number of Tank Loads _____
Pump_____Type _____ Total Run Time _____

☐ Estimated Amount of Spill Discharged to Surface Water _____%
Chance of Human Contact (yes)_____(no)_____

Explain _____

_____

_

Description of Spill Area _____

_____

_

In the event of the Sewer Spill necessitating access to the Flood Control Channels with the intent

to curtail the flow of the spill, after the start of accessing the channel, notify the Flood Control District and reach an understanding as to the manner in which the work is to be done at (909)387-2800 or Contact Fire Dispatch at (909) 356-3805.

Residential or Commercial Flooding:

Location_____

Resident Name _____Phone_____

Property Owner _____Phone_____

Name of Sewer Standby Pickup Contacted _____Time Contacted _____

Contacted Risk Management (yes)___(no)___ Name of Contact _____

Was Flooding Possibly City Tree Related? (yes)_____(no)_____(maybe) _____

Cause and Description of Flooded Area _____

_____

Description of Spill or Flooding Photographs:

1._____ 7. _____

2._____ 8. _____

3._____ 9. _____

4._____10._____

5._____11._____

6._____12._____

Is a Follow Up by Field Supervisor Needed (yes)_____(no)_____

Persons Needed to be Contacted_____ Phone_____

Contacted_____ Phone_____

Contacted_____ Phone_____

Contacted_____ Phone_____

City Policies Given to Resident (yes)___ (no) ___

Comment Card Given to Resident (yes)___ (no)___

Written Certification from the California Regional Water Quality Control Board and San Bernardino County Department of Environmental Health Services stating that the clean up of spill meets their approval sent to the Flood Control District.

Comments _____

_____

_____

_____

Form Completed By _____ Date_____

Signature _____ **Date** _____

APPENDIX "B"

EMPLOYEE EMERGENCY CALL OUT LIST
PUBLIC WORKS DEPARTMENT

SUPERVISORS	Business	Residence	Cellular
Randy Nolfo, Sewer Supervisor	909-384-5045		951-377-4051
Eddie Kelley, Asphalt/Grading Supervisor	909-384-5045		951-377-4866
Art Wilder, Graffiti/Right A Way Supervisor	909-384-5262		951-377-4872
John Van Havermaat/O&M Division Manager	909-384-5020		909-917-1160
Tony Frossard/ Director	909-384-5140		909-361-0813

EMPLOYEES

Sewer Crew

Unfilled, Lead Sewer Maintenance Worker		909-384-5045	
Henry Adame, Hazmat Tech		909-384-5045	909-379-2042
Ryan Dorsett	" "	909-384-5045	909-991-4411
Bernard Gibson	" "	909-384-5045	909-904-4930
Michael Holt	" "	909-384-5045	909-659-5288
Stephen Johns	" "	909-384-5045	909-283-0448
Dave Morris	" "	909-384-5045	951-588-9256
Danny Sweeney	" "	909-384-504	909-863-7812
Dennis Decker	" "	909-384-5045	909-922-6699
Robert Valdovinos	" "	909/384-5045	909-831-7357
Mike Ellison	Pump station	909/384-5045	951-259-2621
John Pinkston	Pump Station	909/384-5045	951-874-2362

Heavy Equipment Operator

Robert Arispe Lead Maintenance Worker		909/384-5045	951/377-4870
Dave Miller		909/384-5045	951/529-0428
Scott Washburn		909/384-5045	909/646-5981

APPENDIX "C"

EMPLOYEE EMERGENCY CALL OUT LIST
PUBLIC WORKS DEPARTMENT Street Lighting

SUPERVISORS	Business	Residence	Cellular
Clemente, Street Lighting Supervisor	909/884-3433		951-232-8755

EMPLOYEES

Traffic Signals

Frank Villalobos	909/795-1448		
Jack Mc Pherson	909/862-3507		909/213-5710
Daniel Morris	909/862-6228		909/936-5122

APPENDIX "D"

EMERGENCY CALL OUT LIST
WATER RECLAMATION FACILITY

	Business	Residence	Cellular
John Claus Director of Water Reclamation	909/384-5502		909/915-8993
Stacey Aldstadt General Manager Water Department	909/384-5141 909/384-5091	951/781-7173	909/915-8993
John Bradley, Maintenance Supervisor-Acting (Mechanical)	909/384-5358		909/771-6407
Joe Perez, Maintenance Supervisor-Acting (Electrical)	909/384-5509		909/379-2596
Valerie Housel, Regulatory Compliance Monitoring Coordinator	909/384-5117	822-4335	909/915-8994
Andy Coady Environmental Control Officer	909/384-5507		909/379-2597

APPENDIX "E"

OUTSIDE AGENCY NOTIFICATION NUMBERS

Immediately call the Office of Emergency Services at **Tel: (800) 852-7550** and the California Regional Water Quality Control Board/Santa Ana Region at **Tel: (951) 782-4130 FAX: (951) 781-6288** to report SSO spills. The Online SSO System can be found at: http:ciwqs.waterboards.ca.gov

Include the following in your report:

a. The estimated volume of the sewage spill and the volume that was discharged to surface waters.

b. A discussion of the events or circumstances that resulted in the sewage spill.

c. A discussion of the impacts on public health or the environment resulting from the spill and the corrective actions that were taken during the incident to stop or mitigate the effects of the sewage discharge.

The following agencies **must** also be notified:

		Phone #	Time of Call	Initial
a.	Calif.Reg.Water Quality	(951) 782-4130	_____	_____
	After hrs.	(951) 320-6362	_____	_____
	Fax	(951) 781-6288	_____	_____
b.	County Environmental	(909) 387-4666	_____	_____
	After hour's Com Center	(909) 356-3811	_____	_____
c.	State Office of Emergency	(800) 852-7550	_____	_____
	Fax	(916) 845-8910	_____	_____
d.	County Flood Control	(909) 387-7995	_____	_____
	Fax	(909) 387-8043	_____	_____
	After hour's Com Center	(909) 356-3811	_____	_____
e.	Dept. of Fish & Game	(909) 484-0167	_____	_____
	After Office Hours (if channel access is needed)	(951)782-4353	_____	_____

APPENDIX "F"
PUBLIC WORKS DEPARTMENT
ON SITE EQUIPMENT LIST

COMBINATION TRUCKS

#549 Vactor	1,500 gallons	Fresh Water	2,000 gallons	10 Yards Waste Water
#08-548 Vactor	1,500 gallons	" "	2,000 gallons	10 Yards " "
#08-547 Vactor	1,500 gallons	" "	2,000 gallons	10 Yards " "
#10-546 Vacon	1,300 gallons	" "	2,200 gallons	11 Yards " "
#554 Vactor	600 gallons	" "	600 gallons	3 Yards " "

PUMPING EQUIPMENT	gpm	Suction Hose Length	Discharge Hose Length	Trailer Mounted
6" Wacker	1300	25 feet	700 feet	Yes
4" Home Lite	600	25 feet	675 feet	Yes
4" Multiquip	600	25 feet	675 feet	Yes
3" Wacker	425	70 feet	850 feet	No
2" Wacker	205	15 feet	300 feet	No
2" Multiquip	190	15 feet	300 feet	No
2" Submersible	85	0	200 feet	No
Sub-Total	**3405 gpm**			

Generator powered pump – trailer mounted with 6" suction line up to 1200 Gallons per Minute capability of passing 2" solid masses. This pump also is equipped with same flexible suction and discharge hoses as newly purchased 6" diesel pumps.

GENERATOR EQUIPMENT

Dyna	9,500 watt	Winco 5,500 watt	Makita 3,500 watt	240 & 110 volts

TREATMENT PLANT
ON SITE EQUIPMENT LIST

CASE TRACTOR
480E with Backhoe
580C with Scrapper Blade

CASE LOADER
Model 621 Front Loader

PORTABLE PUMPS HYDRAULICALLY OPERATED	gpm	DISCHARGE HOSE LENGTH
(2) 3" Pumps	600	475 feet
(2) 2" Pumps	205	150 feet
Sub-Total	**805 gpm**	
GRAND TOTAL	**1610 gpm**	

APPENDIX "F" - Cont'd
RENTAL EQUIPMENT RESOURCE LIST

PUMPER TRUCKS

West Coast Storm	Phone #	(909) 890-5700
	24 Hr	(909) 496-6154
BHI Portable Services	Phone #	(909) 883-8827
Big Mike's Plumbing	Phone #	(909) 888-9577
	24 Hr	(909) 634-9577
National Plant Services Long Beach	Phone #	800-445-3614

6" PUMPS

Bear State Pump & Equip.	Phone #	(909) 923-9809
National Plant Services	Phone #	800-445-3614

Trench Plates

Trench Plate Rental Co.	Phone #	800-821-4478

Director of Administrative Services

David Cain:	Office #	(909) 384-5086

APPENDIX "G"

AGENCIES BORDERING SAN BERNARDINO

EMERGENCY CONTACT NUMBERS

CITY	DAYTIME	NIGHTTIME
Colton	(909) 370-5065	(909) 370-5000 **Police Dispatch**
Highland (East Valley Water District)	(909) 888-8986	(909) 889-9501
Redlands (Utility Department)	(909) 798-76981	(909) 798-7681 **Police Dispatch**
Rialto (Water Department)	(909) 820-2608	(909) 820-2608 **Answering Service**
San Bernardino County (County Environmental Health)	(909) 387-4666	(909) 356-3811

APPENDIX "H"

CALL OUT LIST
UTILITIES

Southern Cal. Edison	800/684-8123	24 Hr.
Southern Cal. Gas	800/427-2200	24 Hr.

FOR MORE INFORMATION

Please Contact:

The City of San Bernardino

Municipal Water Department

Environmental Control Section

399 Chandler Place

San Bernardino, CA 92408

Phone: 909-384-5383

Fax: 909-384-5258

Internet: www. sbcitywater.org

City of San Bernardino Municipal Water Department
Environmental Control Section
399 Chandler Place
San Bernardino, CA 92408

CITY OF SAN BERNARDINO MUNICIPAL WATER DEPARTMENT FATS, OILS, and GREASE (FOG) CONTROL PROGRAM

City of San Bernardino
Municipal Water Department

John A. Perry, P.E., Director

FOG CONTROL REGULATIONS

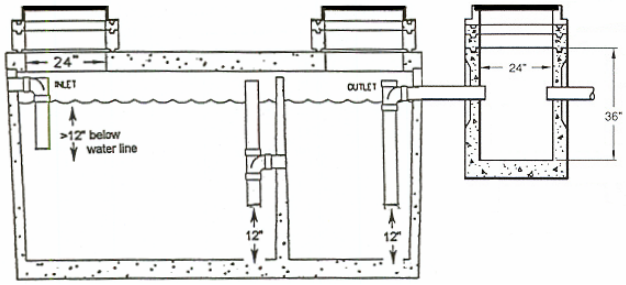
The San Bernardino Municipal Water Department (SBMWD) Environmental Control Section (EC Section) is required to control the discharge of FOG related waste to the sewer system. The discharge of FOG to the sewer system can result in sewer line blockages, increased sewer line maintenance costs, and may cause operational difficulties at the Publicly Owned Treatment Works.

Significant contributors of FOG include restaurants, cafeterias, grocery meat and bakery departments, and similar food service facilities. These food service facilities are required to complete a Restaurant User Permit Application to determine if an oil/grease interceptor is required to remove oil/grease and solids before the wastewater is discharged to the sewer system. The oil/grease interceptor must be pumped out as often as necessary to maintain the operating efficiency of the unit. All maintenance records of the oil/grease interceptor are required to be kept on site for a minimum of three years. These records will be reviewed during facility inspections completed by the EC Section.

FOG INTERCEPTOR REQUIREMENTS

San Bernardino Municipal Code 13.32 requires designated food service facilities to install an approved oil/grease interceptor. The interceptor is required to meet the requirements of the EC Section.

The interceptor is sized according to the design criteria specified in the Uniform Plumbing Code Appendix H. The interceptor shall contain a minimum of two chambers, with a manhole cover over each chamber, and shall include a sample box. The sample box is used to collect wastewater samples to verify the wastewater is in compliance with required discharge limits. SBMC 13.32 requires permitted food service facilities to meet an oil/grease discharge limit of 250 mg/L. The following diagram is an approved interceptor design.



BEST MANAGEMENT PRACTICES (BMPs)

Food Service Facilities are required to implement Best Management Practices to reduce the amount of oil/grease discharged to the sewer system and to prevent sewer blockages. Effective BMPs include:

- Recycle waste cooking oil
- Scrape food into trash receptacles
- Dry wipe all pots, pans, and plates
- Install sink strainers to catch solids
- Sweep floor areas before mopping
- Minimize the use of detergents
- Routinely clear all discharge pipes
- Maintain oil/grease interceptor
- Post all BMPs in kitchen area
- Review BMPs with employees

PARA MAS INFORMACIÓN

Contacta o llama

The City of San Bernardino

Municipal Water Department

Environmental Control Section

399 Chandler Place

San Bernardino, CA 92408

Phone: 909-384-5383

Fax: 909-384-5258

Internet: www. sbcitywater.org

City of San Bernardino Municipal Water Department
Environmental Control Section
399 Chandler Place
San Bernardino, CA 92408

PROGRAM DE LA CIUDAD DE SAN BERNARDINO PARA CONTROLAR DESCARGAS DE ACETIES Y GRASAS AL SISTEMA SANITARIO (FOG)

City of San Bernardino
Municipal Water Department

John A. Perry, P.E., Director

REGULACIÓNES PARA CONTROLAR GARSAS

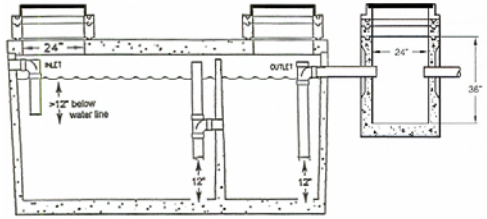
El departamento de control del medio ambiente (EC) para el Departamento de Agua de la Cuidad de San Bernardino (SBMWD) tiene que controlar las descargas de grasas y de aceites al sistema sanitario. Las descargas de estos desechos pueden bloquear las lineas, resultando en mas costos para mantenimiento y pueden causar dificultades el la operación de la planta de tratamiento.

Los contribuidores principal de aceite y grasa son restaurantes, cafeterías, los supermercados con departamentos de carne y panadería y instalaciónes similares del servicio de alimento. Estos tipos de negocios tienen que llenar una aplicación para determinar si necesitan un clarificador o trampa de aceite/grasa antes descargar el sistema sanitario. El clarificador o trampa para funcionare efectivamente necesita mantenimiento de una compañia que se dedicada a limpiar y vaciar la trampa. Todos los papeles de servicio y manifestos de la trampa tiene que ser mantenido en el negocio por tres años. Los inspectores de EC revisan estos documentos quando conductan una inspección del negocio.

REQUISITOS PAR CLARIFICADOR O TRAMPA DE GRASA

Para establecimientos de comida que necesitan un permiso industrial, los requisitos especificados en el capitulo 13.32, Código Municipal de San Bernardino (SBMC 13.32) requiere instalar un clarificador o trampa de aceite/grasa aprobada por la sección de EC.

El clarificador o trampa se clasifica según los criterios del diseño especificados en el apéndice uniforme H del código de la plomería. El clarificador o trampa contendrá un mínimo de dos compartimientos, con una tapa sobre cada compartimiento, y incluirá una caja para extractar muestra de las aguas residuales. La caja se usa para colectar muestras de las aguas residuales para vertificar que la descarga complé con los limites de descarga. SBMC 13.32 estableca un limite de 250 mg/L para la descarga de aceite y grasa que aplica a los negocios de alimento. El diagrama siguiente es un diseño aprobado de el clarificador o trampa.



LAS MEJORES PRÁCTICAS DE MANEJARMIENTO (BMPs)

Los establecimientos que servien comida necesitan emplear las mejores practicas de manejarmiento (BMP) para reducir la cantidad de aceite/grasa descargada al sistema sanitario y prevenir obstrucciónes. BMP incluye:

- Reciclando aceite y grasa
- Raspe desechos de comida en receptáculos de la basura
- Limpia en seco platos, cazuelas, y ollas.
- Instale coladores del fregadero para coger los sólidos
- Barrer los pisos ante lavar
- Reduzca al mínimo el uso de detergentes
- Rutinariamente clarar todas las pipas de descarga
- Mantengan el clarificador o trampa de grasa
- Repase con sus empleados los BMPs.
- Situar los BMPs en el área de la cocina

Best Management Practices

The best way to manage FOG is to keep it out of the plumbing system in the first place! The following are some ways to greatly reduce the amount of FOG entering the sewer system:

- Scrape pots and pans prior to washing.
- Do not pour, scrape, or otherwise dispose of fats, oils, or grease into the sink or drains.
- Collect fryer oil and store in barrels for recycling.
- Dump mop water only to drains connected to your grease treatment system.
- Use absorbents to soak up spills containing fats, oils, and grease (FOG).
- Do not put food (including liquid food) including milk shake syrups, batters, and gravy down the drain.
- Use strainers on sinks and floor drains to prevent solid material from entering the sewer.
- Post "NO GREASE" signs near sinks and drains.
- If you have an automatic grease recovery device (GRD), empty the collection pan before it becomes full.
- Provide your employees with the proper equipment for cleaning your grease trap or GRD.
- Wastewater generated from duct/range filter cleaning must be routed through the grease treatment system.
- Train all kitchen staff in best management practices for grease disposal and the impacts of grease accumulation in the sewer.
- Provide regular refresher training/discussion for proper disposal of fats, oils, and grease for all employees.
- Inspect grease abatement devices/interceptors after pumping to ensure adequate cleaning was performed.

Licensed Sewage and Grease Haulers

1) Big Mike's Plumbing - 268 W. Cluster St. San Bernardino, CA. 92408 (909) 888-8736

2) West Coast Storm, Inc - 654 South Lincoln, San Bernardino, CA. 92408-2229 (909) 890-5700

3) National Plant Services – 1461 Harbor Ave., Long Beach, CA. 90813 (562)-436-7600

All vendors usually, we make arrangement for them to dump at the city's wastewater treatment plant.