Prepared for

# **San Bernardino Community College District**

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# San Bernardino Community College District







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# BACKGROUND AND INTRODUCTION

#### A. Introduction

The San Bernardino Community College District includes two college campuses, a professional development center, and a public broadcast system. One of the college campuses, the San Bernardino Valley College, is located in the City of San Bernardino. The Crafton Hills College, is located on a hillside in the City of Yucaipa. The general boundaries for both colleges are shown in Attachment 5. The wastewater collection for the San Bernardino Valley College discharges to the City of San Bernardino for conveyance to the City's wastewater treatment plant for treatment and disposal of the water. The wastewater collection for the Crafton Hills College discharges to the City of Redlands for treatment and disposal of the wastewater generated on the campus. The connection to the City of Redlands is through a trunk sewer that extends from the northwest corner of the campus to the eastern edge of the City.

With the exception of a small pumping station in basement of the Performing Arts Center at the Crafton Hills College campus, both wastewater collection systems are composed entirely of gravity flow pipelines and manholes.

#### **B.** SSMP Purpose and Objectives

This document has been developed to comply with SWRCB's General Waster Discharge Requirement (WDR) order No. 2006-0003 and sets specific wastewater collection system requirements and upholds State water quality standards. The WDR requires permittees to prepare and implement a SSMP in order to:

- Provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system in order to provide reliable service in the future,
- Reduce and prevent SSOs,
- Help mitigate any SSOs that do occur.

Sanitary sewer overflows are overflows from sanitary sewer systems of domestic, industrial, and/or commercial wastewater. SSOs may cause a public nuisance, particularly when untreated wastewater is discharged to waters designated for contact recreation. Proactively manage the sewage system in a way that prevents SSOs.

Introductory summary of the General Waste Discharge Requirement is shown in Appendix 4.

# **SECTION 1 - GOALS**

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

The San Bernardino Community College District has established the goals to guide the development, implementation and success of San Bernardino Valley College and the Crafton Hills SSMPs. These goals are designed to facilitate and target the management, operation and maintenance of the sanitary sewer collection system in a manner that will sustain the infrastructure, protect public health and the environment, and achieve compliance with State Water Resources Control Board's General Waste Discharge Requirement (WDR) for Sanitary Sewer Systems. These goals include:

- Provide a plan and schedule to properly manage, operate, and maintain all parts of the sanitary sewer system in order to provide reliable service in the future,
- Reduce and prevent SSOs,
- Help mitigate any SSOs that do occur
- Identify, prioritize, and continuously renew and replace sewer system facilities to maintain reliability
- Implement regular, proactive maintenance of the system to remove roots, debris, and fats, oils and grease in areas prone to blockages that may cause sewer backups or SSOs

# **SECTION 2 - ORGANIZATION**

# A. Organization Requirements

The WDR SSMP organization requirement specifies that each SSMP identify the following:

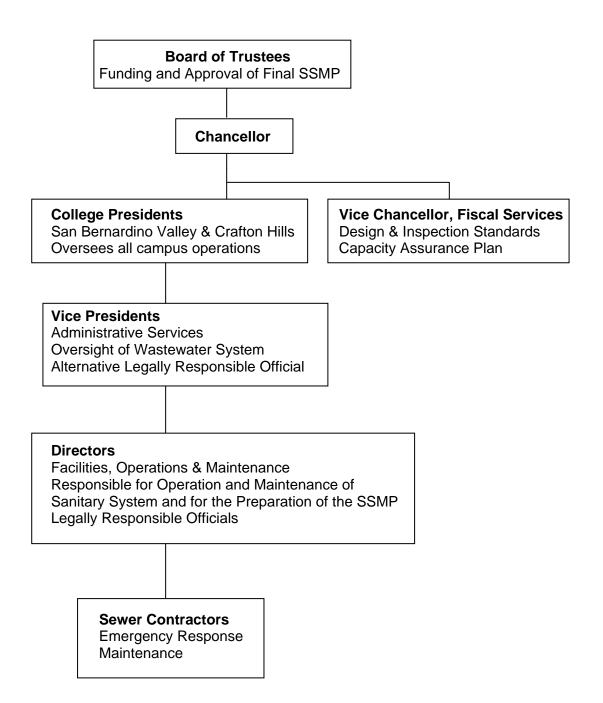
- 1. The name of the agency's responsible or authorized representative.
- 2. The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart or similar document with a narrative explanation; and
- 3. 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 names of the agency's responsible or authorized representatives for each of the District's two campuses are listed in Appendix 2.

Name and telephone numbers for key management, administrative, and maintenance positions for implementing specific measures in the SSMP program are listed in Appendix 2.

The SSMP Responsibility Organization Chart for the San Bernardino Valley College is illustrated in Figure 2.

Figure 2-1
San Bernardino Community College District (SBCCD)
SSMP Responsibility Organization Chart



Descriptions of the positions are included below.

#### **Board of Trustees**

The Board of Trustees of the San Bernardino Community College District is the governing body of the District. The Board is established by, and derives its power and duties from, the Constitution of the State of California and the Statutes of California as adopted by the Legislature and issued in the *California Education Code*, and the directives of the Board of Governors, California Community Colleges, listed in *Title V, California Code of Regulations*.

Seven trustees, elected from the communities served by the District, govern the San Bernardino Community College District. Trustees serve a four-year term. There are also non-voting student trustees that serve a one-year term.

The Board of Trustees is responsible for approving budgets and setting policy. The Chancellor provides overall management of the District.

## Vice Chancellor, Fiscal Services

The Vice Chancellor of Fiscal Services manages all functions associated with facility planning, construction and capital outlay of the District. The Vice Chancellor develops strategies for funding and requests funding as appropriate. The responsibility for this position includes formulating and administering District policy concerning the aforementioned functions and providing contract administration to Colleges. Activities include, but are not limited to, planning, organizing, staffing, directing, and controlling resources.

## Presidents, San Bernardino Valley and Crafton Hills Colleges

The Presidents of the two Colleges plan, organize, coordinate, direct and administer all departments, programs, activities, budgets and personnel of the respective college; implements District policies and procedures as they affect college activities; represents the college to the community and directs the development of quality educational programs; participates in the development, review and addressing of general District policies; performs related duties as required.

## Vice Presidents, Office of Administrative Services

The Vice Presidents of Administrative Services for the two campuses are responsible for planning, organization, implementation, and evaluation of all areas assigned to the Administrative Services unit. Primary responsibilities include: budget development, fiscal operations, fiscal accountability, facilities management, student cashiering, bookstore, business office, custodial, food services, grounds, maintenance, and other duties.

The Vice Presidents of Administrative Services are also alternate Legally Responsible Officials (LRO) for the SSO WDR. These individuals take the lead on responding to any sanitary sewer

overflows and meeting reporting requirements during the absence of the respective campus Director of Facilities, Operations, & Maintenance.

#### **Directors, Facilities, Operations and Maintenance**

The Directors of Facilities, Operations, & Maintenance are responsible for planning, coordinating, and directing the maintenance and operations activities of the two colleges, including having the responsibility for the physical condition of the buildings, grounds, and equipment, and participates in the design, review, and integration of construction projects. The Directors maintain compliance with District policies and local, state, and federal laws and regulations.

The Directors for Facilities, Operations, & Maintenance are the Legally Responsible Officials (LRO) for the monitoring and reporting requirements of the SSO WDR. They also have the overall responsibility for reporting SSOs to the State and Regional Water Board and other agencies as applicable.

#### **Sewer Contractors**

The District plans to use National Plant Services for long term maintenance, including annual sewer line cleaning and CCTV inspection services as necessary.

Emergency Management Technologies (EMT) will provide emergency spill/clean-up response.

Name and telephone number of sewer contractors are listed in Appendix 2.

## **Contact List – Personnel Responsible for SSO Reporting**

Name and telephone number of San Bernardino Community College District's (SBCCD) staff responsible for reporting SSOs to the SWQCB, RWQCB and other applicable agencies are listed in Appendix 2.

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, is shown in Appendix 2.

# **SECTION 3 - LEGAL AUTHORITY**

The WDR SSMP Legal Authority requirement specifies that 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:

- 1. Prevent illicit discharges into its sanitary sewer system, (examples may include I/I, stormwater, chemical dumping, unauthorized debris and cut roots, etc).
- 2. Require that sewers and connections be properly designed and constructed;
- 3. Ensure access for maintenance, inspection or repairs for portions of the lateral owned or maintained by the Public Agency;
- 4. Limit the discharge of FOG and other debris that may cause blockages, and
- 5. Enforce any violation of its sewer ordinances.

The San Bernardino Community College District owns all of the buildings and facilities at the San Bernardino Valley College and the Crafton Hills College. Neither campus allows outside vendors to rent space and sell food that would create any illicit discharge of fats, oil, or grease into either campus's sewer system. Since the District owns all facilities and is the employer of all of the staff who work at both campuses, the District inherently has the authority to:

- A. Prevent illicit discharges into its sanitary sewer system.
- B. Require that sewers and connections be properly designed and constructed.
- C. Ensure access for maintenance, inspection, or repairs for portions of the lateral owned or maintained by the District.
- D. Limit the discharge of fats, oils, and grease and other debris that may cause blockages
- E. Enforce any violation of its sewer ordinances.

Under these conditions, the Campus has the required legal authority stipulated in the WDR and no further action is needed by the District to comply with this element of the WDR.

# **SECTION 4 - OPERATION AND MAINTENANCE PROGRAM**

## A. Operation and Maintenance Program Requirements

The WDR SSMP Operation and Maintenance Program requirement specifies that each SSMP must include those elements listed below that are appropriate and applicable to the Enrollee's system:

- Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas.
   The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders;
- 2. 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 storm water conveyance facilities;
- 3. 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 television inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects. Finally, the rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets. The plan shall include a time schedule for implementing the short- and long-term plans plus a schedule for developing the funds needed for the capital improvement plan;
- 4. Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained; and
- 5. Provide equipment and replacement part inventories, including identification of critical replacement parts.

The sewer system has been re-televised in 2015.

#### B. Rehabilitation and Replacement Plan

National Plant Services performed closed-circuit television (CCTV) inspections and structurally rated the sewer infrastructure for both colleges. The televising prioritized to focus on those sewers with the most potential for repair needs. Maintenance history, past overflow records, sewer locations, and age will be some of the factors used to prioritize the televising schedule.

The digital video pipeline inspection system has been selected. This system allows for the most consistent and thorough collection of data. Under this system, a CCTV van crew gathers video and data for each pipe segment to identify any deficiencies and engineers review the tapes and video logs to determine if the sewer facilities should be repaired or replaced immediately, or scheduled for future improvements.

This program utilizes state-of-the art digital video technology to inspect and identify the existing condition of the sewer collection system and to simplify a host of wastewater management tasks. This new system allows for the most consistent and thorough collection of data and helps comply with new State Water Resources Control Board Waste Discharge Requirements for sewer collection system owners and operators.

This program uses the Pipeline Assessment and Certification Program (PACP) rating system, which was developed by the National Association of Sewer Service Companies (NASSCO). PACP requires CCTV operators to code defects either by infrastructure or maintenance defect. Each defect code is assigned a grade of 1 to 5. With 1 being the least severe and 5 being the most severe defect. These grades only consider the internal pipe conditions obtained from the televised inspection. After a sewer segment has been inspected, several grading systems can be applied to determine the most severe pipe segments.

One of the Condition Grading Systems most commonly use is the Quick Rating. This indicates the number of occurrences for the two highest severity grades for each pipe segment for either maintenance or infrastructure defects. A grade of 1 indicates that a pipe segment is in excellent condition with minor defects and failure is unlikely in the foreseeable future, while a grade of 5 indicates that a pipe segment may require immediate attention. An example of a quick rating may be: 5249, where there are two defects with a grade 5 rating, and 9 defects with a grade 4 rating.

Using the Quick Ratings, we determine the priority list for our maintenance crews, and infrastructure repairs. We mainly consider sewer segments that have Quick Ratings, with 4100 or more for maintenance or repair. Sewer segments with infrastructure defects are reviewed for repair, and are sorted into three categories: 1- Immediate repair, 2- Scheduled repair within 10 years, and 3- May need repair after 10 years will be re-assessed during the next round of CCTV inspection.

A detailed breakdown of the five possible defect grades and their estimated time to failure is as follows:

Grade	Description	Estimated time to Failure
1	EXCELLENT: Minor Defects.	Unlikely in the foreseeable future
2	GOOD: Defects that have not begun to deteriorate.	20 years or more
3	FAIR: Moderate defects that will continue to deteriorate.	10 to 20 years
4	POOR: Severe defects that will become grade 5 defects within the foreseeable future.	5 to 10 years
5	IMMEDIATE ATTENTION: Defects requiring immediate attention.	Has failed or will likely fail within the next 5 years

# 1. Crafton Hills College

The master plan and latest televising report concluded that the sanitary sewer system appeared to be well maintained and functions properly.

It is recommended continued maintenance of cleanouts, manholes, and sanitary sewer lines.

## **Improvements**

CRAFTON COLLEGE						
	Start MH	Stop MH	Road	Total Length	Structural Rating	
1	1	2	Campus Dr.	301	513B	
2	10	9	Campus Dr.	273	3122	
3	10	11	Campus Dr.	244	3700	

# 2. San Bernardino Valley College

#### **Condition**

Previous SSMP stated that sewer mains are cracked and failing. Based on re-televised report of 2015 most of the cracks are Grade 2

# **Improvements**

No immediate repairs were recommended for the this campus sewer system.

It is recommended continued maintenance of cleanouts, manholes, and sanitary sewer lines.

The latest televising report does not show that system is over capacity and undersize as stated in previous SSMP. It is recommended to perform sewer manhole monitoring in couple of years at critical junctions.

# **SECTION 5 - DESIGN AND PERFORMANCE PROVISIONS**

## A. Design and Performance Provisions Requirements

The WDR SSMP Design and Performance Provision requirement specifies that each Enrollee have the following:

- 1. 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
- 2. Procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

District standards will be developed by the engineer of record for the District's infrastructure project in 2010/2011. Consideration will be given to use the County of San Bernardino Special Districts Department Standards for Sanitary Sewers shown below.

- 1. Sewer pipeline materials are limited to:
  - a. Vitrified clay pipe (VCP) per the County's standards
  - b. SDR 26 polyvinyl chloride (PVC) pipe
  - c. Class 50 or higher ductile iron pipe (DIP)
- 2. Manholes sidewalls will be limited to precast concrete
- 3. Air testing shall be used for testing manholes for leakage
- 4. All new sewer pipelines shall be internally inspected using closed circuit television (CCTV) equipment

These Standards may set the design and construction standards and specifications for the installation of new sanitary sewer systems, pump stations and other appurtenances needed for the construction of new improvements and for the rehabilitation and repair of the two existing sanitary sewer systems.

**ITF & Associates, Inc.** will be responsible for the design and inspection of sewer system improvements upon request from the District.

# **SECTION 6 - OVERFLOW EMERGENCY RESPONSE PLAN**

# A. Overflow Emergency Response Plan Requirements

The WDR SSMP requirements specify that each Enrollee shall develop and implement an Overflow Emergency Response Plan (OERP) that identifies measures to protect public health and the environment. At a minimum, this plan must include the following:

- 1 Proper notification procedures so that the primary responders and regulatory agencies are informed of all SSOs in a timely manner.
- 2 A program to ensure an appropriate response to all overflows.
- 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 Monitoring and Reporting Program (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.
- 4 Procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained.
- 5 Procedures to address emergency operations, such as traffic and crowd control and other necessary response activities.
- 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.

# **B.** Response Program and Notification Procedures

The District has developed an Overflow Emergency Response Plan which is located in Appendix 5.

This plan lists the Recommended Emergency Notification & Mitigation Procedures.

The chain of communication for reporting SSOs is included in the figure below.

# **SECTION 7 - FOG CONTROL PROGRAM**

The WDR SSMP Fog Control Program requirement specifies that 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.

FOG source control program shall include the following:

- 1 An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG;
- 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;
- 3 The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG;
- 4 Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, Best Management Practice (BMP) requirements, record keeping and reporting requirements;
- 5 Authority to inspect grease producing facilities, enforcement authorities, and whether the Enrollee has sufficient staff to inspect and enforce the FOG ordinance;
- 6 An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section; and
- 7 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 District has not had a FOG related overflow, thus, it has never had a grease related (FOG) overflow. However: a formal FOG program is required for the San Bernardino Valley College. The District has installed a-grease interceptor outside the Campus Center and also outside of the Child Development Center. These are serviced by staff. There are also under-the-sink grease traps installed under the sinks in the cafeteria and the tea room.

All Food Service Establishments (FSEs) shall implement best management practices (BMPs) in their operation to minimize the discharge of FOG to the sewer system. All FSEs shall be required, at a minimum to implement and comply with the following Kitchen BMPs, whenever applicable:

- (1) Drain screens shall be installed on all drainage pipes in food preparation areas.
- (2) All waste cooking oil shall be collected and stored properly in recycling receptacles such as barrels or drums. Such recycling receptacles shall be maintained properly to ensure that they do not leak. Licensed waste haulers or an approved recycling facility must be used to dispose of waste cooking oil.
- (3) All garbage and food waste shall be disposed of directly into trash bins or containers, and not in sinks.

- (4) Employees of the FSEs shall be trained within 2 weeks of hire and twice each calendar year thereafter.
- (5) Training shall be documented and employee signatures retained indicating each employee's attendance and understanding of the practices reviewed.
- (6) Kitchen BMP and other signs, posters or similar information in appropriate language(s) shall be prominently displayed in the food preparation and dishwashing areas at all times.
- (7) Covered conveyance devices shall be used in order to transport FOG without spilling.
- (8) FOG containers shall be emptied before they are full to avoid accidental or incidental spills.

All grease interceptors shall be operated in accordance with the manufacturer's specifications.

Grease interceptors shall be maintained in efficient operating condition by periodic removal of the full content of the interceptor.

# SECTION 8 - SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

The WDR SSMP System Evaluation and Capacity Assurance Plan requirements specifies that each 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:

#### 1. **Evaluation.**

The District's Sewer Master Plan incorporates a hydraulic analysis of the sewer mains in the system. The peak flow estimates are estimated using flow coefficients developed by the District based on land usage. The flow coefficients used by the District have been compared to the coefficients used by County of San Bernardino Special District Departments. The capacity of each line is determined and those lines unable to handle future master planned flows are identified. The current system capacity is able to handle, without surcharge, the current dry weather and wet weather peak sewer flows.

## 2. **Design Criteria.**

The District has adopted the industry standard of designing new sewer lines up to 18 inches in diameter. The criteria is as follow:

All gravity feed sewer pipe up to and including eight (8) inch diameter shall be sized to carry the peak flow when fifty percent (50%) full. This requirement shall apply regardless of the cross section shape of the sewer. All larger sewer pipe, except those designed as laterals, shall be sized to carry the peak flow when seventy-five (75%) full. This requirement shall apply regardless of the cross-section of the sewer. No sewer main with an internal diameter less than eight (8) inches shall be installed without prior written approval of the District.

Other requirements are shown in Section V.

#### 3. Capacity Enhancement Measures.

The District's plan includes the short and long term CIP to address identified hydraulic deficiencies as shown in previous sections.

The District is also active in reducing Inflow and Infiltration (I/I). The District has ruled out Infiltration as a source of water in the system but has identified Inflow as a source of water. It is recommended to consider completely sealing all manholes in alley type flow and completely sealing manholes in the vicinity of gutters or curb and gutter.

#### 4. Schedule.

The District will develop a schedule of completion dates for all portions of the CIP developed in previous Sections. This schedule should be reviewed and updated on annual bases. The next CIP update should be performed within 5 years.

# SECTION 9 - MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

The WDR SSMP Monitoring, Measurement, and Program Modification requirement specifies that each Enrollee shall do the following:

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

The SSMP will be reviewed yearly to insure all the provisions are implemented and the effectiveness discussed at a meeting of all field staff. Updates will occur as appropriate but will occur no longer than once every five years.

Performance evaluations are ongoing because the daily operation of the District includes all the elements of the program. District Staff will request the Board of Directors include a yearly or regular appropriation to fund the updating.

The sewer maintenance measures will include the cleaning of entire sewer system every two years.

# **SECTION 10 - SSMP PROGRAM AUDITS**

The WDR SSMP Program Audits requirements specify that each 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.

The District will perform periodic internal audits to determine the effectiveness of each element of the SSMP.

The District audit schedule is as follows:

- 1. Every two years following the adoption and approval of this SSMP.
- 2. This SSMP will be updated every five years from the date of adoption and approval and will include all significant program changes that have occurred following the last District Board of Directors approval.

The District will monitor and review sewer performance on a regular basis. The District will initiate/direct corrective action to be taken when and if SSMP deficiencies are identified between/during periodic internal audits.

When significant changes are made to the SSMP that require re-certification, the District will enter the data in the online SSO database and mail the form to the State Water Board.

# **SECTION 11 - COMMUNICATION PROGRAM**

The WDR SSMP Communication Program requirement specifies that each 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 District Engineer will provide interested parties with status updates on the implementation of the components of the SSMP and will also consider comments made by interested parties.

# **TERMS**

<u>Authorized Representative</u> – The person designated, for a municipality, state, federal or other public agency, as either a principal executive officer of ranking elected official, or a duly authorized representative of that person.

<u>Blockage</u> – Something that partially or fully blocks the wastewater from flowing through a sewer pipeline. The blockage can be caused by debris in the sewer, grease buildup, root intrusion, or a partial or full collapse of the pipeline. If not caught in time, the blockage may cause an overflow. This is also called a stoppage.

<u>California Water Environment Association (CWEA)</u> – CWEA is an association of 8,000-plus professionals in the wastewater industry. CWEA is committed to keeping California's water clean. CWEA trains and certifies wastewater professionals, disseminates technical information, and promotes sound policies to benefit society through protection and enhancement of the water environment. CWEA offers services at the state level and locally through 17 geographical local sections. Through their on-line bookstore, CWEA offers technical references for sewer system operation and maintenance. Website: <a href="http://www.cwea.org/">http://www.cwea.org/</a>.

<u>Santa Ana Regional Water Quality Control Board</u> – Also known as the Regional Water Board or RWQCB. The mission of this state regulatory agency is to: preserve, enhance and restore the quality of California's water resources, and ensure their proper allocation and efficient use for the benefit of present and future generations. Website: <a href="http://www.waterboards.ca.gov/santaana/">http://www.waterboards.ca.gov/santaana/</a>.

<u>Enrollee</u> – The legal public entity that owns a sanitary sewer system, as defined by the GWDR, which has submitted a complete and approved application for coverage under the GWDR. This is also called a sewer system agency or wastewater collection system agency.

<u>Fats, Oils and Grease (FOG)</u> - <u>Fats, oils, and grease that are discharged into the sanitary sewer collection system by Food Service Establishments (FSE), homes, apartments and other sources. FOG is a major cause of blockages leading to increased maintenance and sometimes SSOs.</u>

<u>FOG Control Program</u> – To be implemented at the Enrollee's discretion. May include public education program; plan and schedule for the disposal of FOG; legal authority to prohibit FOG related discharges; requirement to install grease removal devices; authority to inspect grease producing facilities; identification of sanitary sewer system sections subject to FOG blockages and the establishment of a cleaning schedule for each section; development and implementation of source control measures for all sources of FOG.

<u>Geographical Information System (GIS)</u> – A database linked with mapping, which includes various layers of information used by government officials. Examples of information found on a GIS can include a sewer map; sewer features such as pipe location, diameter, material, condition, last date cleaned or repaired. The GIS also typically contains base information such as streets and parcels.

<u>Governing Board</u> – This is the governing board of the sewer entity developing the SSMP. Examples would be the Board of Directors, the City Council, or the County Board of Supervisors.

<u>GWDR – General Waste Discharge Requirements</u> – A GWDR is an authorization to discharge waste with certain conditions, which can be issued on an individual basis or to a group of dischargers. The Statewide General WDR for Sanitary Sewer Systems was adopted by the SWCRB and will be implemented by the Regional Water Boards and SWRCB.

<u>Groundwater Induced Infiltration (GWI)</u> – Infiltration attributed to groundwater entering the sewer system.

<u>Infiltration</u> – The entry of groundwater into a sewer system, including service connections. Infiltration occurs through defects in the piping network including defective or cracked pipes, pipe joints, and through defects in manhole walls and joints.

<u>Inflow</u> – Stormwater runoff entry into a sewer system from such sources as roof leaders, cellars, yard and area drains, foundation drains, cooling water discharges, drains from springs and swampy areas, around manhole covers that are not properly sealed to the top of manholes or through holes in the covers, and cross connections from storm sewer systems and catch basins. Inflow differs from infiltration in that it is a direct discharge into the sewer rather than seepage of groundwater into the sewer.

<u>Lateral</u> – The portion of sewer that connects the waste plumbing from a home or business with the sewer main pipeline in the street. Some sewer system agencies own or maintain a portion of the lateral.

*Upper Lateral*: Portion of lateral from building to property line (or easement line), usually privately owned and maintained.

*Lower Lateral*: Portion of lateral from property line (or easement line) to sewer mainline in the street or easement. This portion of the lateral is sometimes privately owned and maintained and sometimes publicly owned and maintained.

<u>Monitoring and Reporting Program</u> - The Monitoring and Reporting Program established in the WDR that establishes monitoring, record keeping, reporting and public notification requirements for the GWDR.

Overflow Emergency Response Plan – Identifies measures to protect public health and the environment. A plan must include the following: notification procedure, appropriate response plan, regulatory notification procedures, employee training plan, procedures to address emergency operations, a program that ensures all reasonable steps are taken to contain and prevent discharges.

<u>Private Lateral:</u> That portion of the lateral that is owned and maintained by the private property owner that it serves. Based on an individual agency's ordinance, this may just be the upper lateral or can include the lower lateral.

<u>Preventative maintenance (PM)</u> – Regularly scheduled servicing of machinery, infrastructure or other equipment using appropriate tools, tests, and lubricants. This type of maintenance can

prolong the useful life of equipment, infrastructure, and machinery and increase its efficiency by detecting and correcting problems before they cause a breakdown of the equipment, or failure of the infrastructure.

<u>Rainfall Dependent Infiltration and Inflow</u> – Infiltration and inflow that is attributed directly to rainfall.

<u>Regional Water Board</u> – Is a short name for any of the nine regional boards including the Central Valley Regional Water Quality Control Board.

Rehabilitation and Replacement Plan (also referred to as a Capital Improvement Plan) – Identifies and prioritizes system deficiencies and implements short-term and long-term rehabilitation actions to address each deficiency.

<u>Sanitary Sewer Overflow (SSO)</u> – The Statewide GWDR defines an SSO as any overflow, spill, release, discharge or diversion of untreated or partially treated wastewater from a sanitary sewer system, including overflows or releases that reach waters of the United States, overflows or releases that *do not* reach water of the United States, and backups into buildings and/or private property caused by conditions within the publicly owned portion of the sewer system.

#### Sanitary Sewer Overflow Categories

- *Category 1* All discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system that equals or exceeds 1000 gallons; or result in a discharge to a drainage channel and/or surface water; or discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.
- Category 2 All other discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system
- Private Lateral Sewage Discharges Sewage discharges that are caused by blockages or other problems within a privately owned lateral

<u>Sanitary Sewer System</u> – Any system of gravity sewer pipelines, pump stations, force mains, or other facilities upstream of the headworks of a wastewater treatment plant. The sanitary sewer system is used to collect and convey wastewater to the publicly owned treatment facility. Temporary storage and conveyance facilities are considered to be part of the sanitary sewer system and discharges into these temporary storage facilities are not to be considered SSOs.

<u>Satellite Collection System</u> – The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility to which the sanitary sewer system is tributary.

<u>Sewer System Management Plan (SSMP)</u> – A series of written site specific programs that address how a collection system owner/operator conducts their daily business as is outlined in the WDR. Each SSMP is unique for an individual discharger. The plan includes provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems, while taking into consideration risk management and cost benefit analysis. The plan must also contain a spill response plan. Certification is offered by technically qualified and experienced

persons and provides a useful cost effective means for ensuring that SSMPs are developed and implemented appropriately.

<u>Stakeholder</u> - A person or organization that has a vested interest in the development and outcome of the SWRCB Order No. 2006-0003 Statewide General Waste Discharge Requirements for Sanitary Sewer Systems.

<u>State Water Resources Control Board:</u> Also called the State Board. This is the State agency that developed and passed the GWDR for collection systems and the agency that maintains the SSO reporting web site.

Stoppage - See "Blockage".

<u>System Evaluation and Capacity Assurance Plan</u> – A required component of an agency's SSMP and is an important part of any agency's overall Capital Improvement Plan that provides 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.

Wastewater Collection System: See "Sanitary Sewer System".

# **ACRONYMS**

AB Assembly Bill

BAT Best Available Technology
BMP Best Management Practice

CASA California Association of Sanitation Agencies

CCTV Closed-Circuit Television

CFR Code of Federal Regulations

CIP Capital Improvement Plan or Program and/or Project

CM Corrective Maintenance

CMMS Computerized Maintenance Management System

CWEA California Water Environment Association

CVCWA Central Valley Clean Water Association

District San Bernardino Community College District

EPA Environmental Protection Agency

FOG Fats, Oils, and Grease

FSE Food Service Establishments

GIS Geographical Information System

GPS Global Positioning System

GWI Groundwater Induced Infiltration

GWDR General Waste Discharge Requirements also referred to as Waste Discharge

Requirements (WDR)

I/I Inflow / Infiltration

IWD Industrial Waste Division

LRO Legally Responsible Official

MGD million gallons per day

MRP Monitoring and Reporting Program

MSC Municipal Service Center

MSDS Material Safety Data Sheets

NPDES National Pollution Discharge Elimination System

O&M Operation and Maintenance

OERP Overflow Emergency Response Plan

#### **Acronyms**

OES Office of Emergency Services

Order SWRCB Order No. 2006-0003-DWQ adopted May 2, 2006

PdM Predictive Maintenance

PM Preventative Maintenance

PMP Preventative Maintenance Program

POTWs Publicly Owned Treatment Works

R&R Rehabilitation and Replacement

RDII Rainfall Dependent Infiltration and Inflow

RWQCB Regional Water Quality Control Board

SBCSA 70 County of San Bernardino, County Service Area 70

SOP Standard Operating Procedure

SSMP Sewer System Management Plan

SSO Sanitary Sewer Overflow

SWRCB State Water Resources Control Board

TOC Table of Contents

USA Underground Service Alert

WDP Waste Discharge Permit

WDR Waste Discharge Requirements also referred to as General Waste Discharge

Requirements (GWDR)

WW Wastewater

WWCS Wastewater Collection System

WWTP Wastewater Treatment Plant

# **APPENDIX 1**

# STATE WATER RESOURCES COTROL BOARD (SWRCB) ORDER NO. 2006-0003-DWQ

# SPECIFICATIONS FOR SEWER MAINTENANCE (SWRCB 2006-0003-DWQ)

#### PART 1 - GENERAL

#### 1.1 DESCRIPTION

A. Supply provisions to provide proper and efficient management, operation, and maintenance of sanitary sewer systems to prevent sanitary sewer overflows (SSOs). Contractor is responsible for verifying actual site conditions. Contractor shall provide all labor, materials, services, insurance, and equipment which is specified, shown, or reasonably implied for the requirements outlined in SWRCB Order No. 2006-0003-DWQ.

#### 1.2 PROCEDURES

- A. In additional to requirements specified in SWRCB Order No. 2006-0003-DWQ, Contractor shall comply, without limitation, with the following:
  - 1. Title 33 United States Code Section 1251 Federal Clean Water Act
  - 2. Title 23 California Code of Regulations California Water Code
  - 3. National Pollutant Discharge Elimination System (NPDES)

#### **PART 2 - REQUIREMENTS**

#### 2.1 PREVENTATIVE MAINTENANCE

- A. Ensure proper management, operation and maintenance.
- B. Ensure there are adequate treatment facilities, sanitary sewer system facilities, and/or components with an appropriate design capacity, to reasonably prevent SSOs.
- C. Develop a preventative maintenance program (including cleaning and fats, oils, and grease (FOG) control).
- D. Install adequate backup equipment.
- E. Ensure inflow and infiltration (I/I) prevention and control to the extent practicable.
- F. Provide adequate capacity to convey base flows and peak flows, including flows related to wet weather events.
- G. Sanitary sewer capacity shall meet or exceed the design criteria as defined in the San Bernardino Valley College and Crafton Hills College's (SBVC/CHC's) System Evaluation and Capacity Assurance Plan (see Section 2.6) for all parts of the sanitary sewer system owned or operated by SBVC/CHC.

#### 2.2 OPERATIONS AND MAINTENANCE PROGRAM

- A. Prepare and 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 storm water conveyance facilities.
- B. Describe routine preventive operation and maintenance activities by staff and contractors, including a system for scheduling regular maintenance and cleaning of the sanitary sewer system with more frequent cleaning and maintenance targeted at known problem areas.
- C. The Preventative Maintenance (PM) program should have a system to document scheduled and conducted activities, such as work orders.
- D. 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:
  - 1. The program should include regular visual and inline closed-circuit camera inspections of manholes and sewer pipes, and a system for ranking the condition of sewer pipes and scheduling rehabilitation.
  - 2. Rehabilitation and replacement should focus on sewer pipes that are at risk of collapse or prone to more frequent blockages due to pipe defects.
  - 3. The rehabilitation and replacement plan should include a capital improvement plan that addresses proper management and protection of the infrastructure assets.
  - 4. 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.
- E. Provide training on a regular basis for staff in sanitary sewer system operations and maintenance, and require contractors to be appropriately trained.
- F. Provide equipment and replacement part inventories, including identification of critical replacement parts.

#### 2.3 DESIGN AND PERFORMANCE PROVISIONS

- A. Develop 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.
- B. Develop procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

#### 2.4 OVERFLOW EMERGENCY RESPONSE PLAN

- A. Ensure proper notification procedures are in place so that the first responders and regulatory agencies are informed of all SSO's in a timely manner.
- B. Develop a program to ensure an appropriate response to all overflows.
- C. Develop procedures to ensure prompt notification to appropriate agencies and other potentially

- affected entities of all SSO's that potentially affect public health or reach waters of the State in accordance with the Monitoring and Reporting Program (MRP).
- D. All SSO's shall be reported in accordance with the MRP, the California Water Code, other State law, and other applicable RWQCB WDR's, or National Pollution Discharge and Elimination System (NPDES) permit requirements.
- E. Develop procedures to ensure that appropriate staff and contractor personnel are aware of and follow the Emergency Response Plan and are appropriately trained.
- F. Develop procedures to address emergency operations, such as traffic and crowd control and other necessary response activities.
- G. Develop 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 SSO's including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the discharge.

# 2.5 FATS, OILS, AND GREASE (FOG) CONTROL PROGRAM

- A. The service areas shall be evaluated to determine whether or not a FOG control program is needed. If it is determined that a FOG control program is not needed, justification should be provided. If FOG is found to be a problem, a FOG source control program must be prepared and implemented to reduce the amount of these substances discharged to the sanitary sewer system. This plan shall include the following as appropriate:
  - 1. An implementation plan and schedule for a public education outreach program that promotes proper disposal of FOG.
  - 2. 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.
  - 3. The legal authority to prohibit discharges to the system and identify measures to prevent SSOs and blockages caused by FOG.
  - 4. Requirements to install grease removal devices (such as traps or interceptors), design standards for the removal devices, maintenance requirements, best management practice (BMP) requirements, record keeping and reporting requirements.
  - 5. Authority to inspect grease producing facilities, enforcement authorities, and whether SBVC/CHC has sufficient staff to inspect and enforce the FOG ordinance.
  - 6. An identification of sanitary sewer system sections subject to FOG blockages and establishment of a cleaning maintenance schedule for each section.
  - 7. Development and implementation of source control measures for all sources of FOG discharged to the sanitary sewer system for each section identified in (6) above.

#### 2.6 SYSTEM EVALUATION AND CAPACITY ASSURANCE PLAN

- A. 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:
  - 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.
  - 2. <u>Design Criteria</u>: Where design criteria do not exist or are deficient, undertake the evaluation identified in (A) above to establish appropriate design criteria.
  - 3. <u>Capacity Enhancement Measures</u>: 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.
  - 4. <u>Schedule</u>: A schedule of completion dates shall be developed for all portions of the CIP developed in the above (1) to (3). This schedule shall be reviewed and updated consistent with the Sewer System Management Plan (SSMP).

#### 2.7 MONITORING, MEASUREMENT, AND PROGRAM MODIFICATIONS

- A. Maintain relevant information that can be used to establish and prioritize appropriate Sewer System Management Plan<sup>1</sup> (SSMP) activities.
- B. Monitor the implementation and, where appropriate, measure the effectiveness of each element of the SSMP.
- C. Assess the success of the preventative maintenance program.
- D. Update program elements, as appropriate, based on monitoring or performance evaluations.
- E. Identify and illustrate SSO trends, including: frequency, location, and volume.

<sup>&</sup>lt;sup>1</sup> Sewer System Management Plan, San Bernardino Community College District, February, 2010

# 2.8 SEWER SYSTEM MANAGEMENT PLAN (SSMP) PROGRAM AUDITS AND COMMUNICATION PROGRAM

#### A. SSMP Program Audits

1. As part of the SSMP, periodic internal audits, appropriate to the size of the system and the number of SSOs shall be conducted. 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 SBVC/CHC's compliance with the SSMP requirements, including identification of any deficiencies in the SSMP and steps to correct them.

#### B. Communication Program

- 1. SBVC/CHC 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 as the program is developed and implemented.
- 2. Create a plan of communication with systems that are tributary and/or satellite to SBVC/CHC's sanitary sewer system.

#### END OF SECTION

# **APPENDIX 2**

# Organizational Documents

- Authorized Representatives
- Personnel Responsible for SSMP Elements
- Contact List Personnel Responsible for SSO Reporting

# **Organization Documents**

## Legally Responsible Officials (LROs) and Personnel Responsible for SSO Reporting

Name and telephone number of San Bernardino Community College District's (SBCCD) Legally Responsible Officials are listed below. These members of the District's staff are responsible for reporting SSOs to the SWQCB, RWQCB and other applicable agencies listed below. (All numbers use area code 909 unless otherwise noted)

Position & Name	<u>Telephone Number</u>
-----------------	-------------------------

## **Director, Facilities Planning & Construction, District**

Hussain Agah (909) 382-4094

# Director, Facilities, Operations and Maintenance, San Bernardino Valley College Robert (Bob) Jenkins (909) 384-8662

Director, Facilities, Operations and Maintenance, Crafton Hills College

Larry Cook (909) 389-3383

# Vice President, Office of Administrative Services, San Bernardino Valley College Scott Stark (909) 384-8958

Vice President, Office of Administrative Services, Crafton Hills College Michael Strong

(909) 389-3210

# Director, Safety & Risk Management, District

Whitney J. Fields (909) 382-4070

## Reporting

The above individual(s) are responsible for reporting SSOs and notifying the following:

	Telephone Number
OES - Obtain control number, complete field spill report form	1-800-852-7550
Santa Ana Regional Water Quality Control Board	1-951-782-4130
San Bernardino County Environmental Health	1-909-387-4666

# Contact List – People, Agencies and Firms Responsible for Implementing Specific Measures of the SSMP

#### **Board of Trustees**

The current members of the Board of Trustees are listed below:

John Longville

Joseph Williams

Gloria Macias

Harrison

Donna Ferracone

Dr. Donald Singer

Dr. Anne L. Viricel

Nickolas Zoumbos

Pablo Machado, SBVC Student Trustee

Beverly Rapouw, CHC Student Trustee

The members of the Board of Trustees can be reached through the District Administrative offices phone line at (909) 382-4000.

#### Chancellor

The Chancellor - Bruce Baron. The Chancellor can be reached through the District Administrative offices phone line at (909) 382-4000.

#### Vice Chancellor, Fiscal Services

The Vice Chancellor, Fiscal Services - Jose Torres. (909) 382-4021.

#### Director, Facilities Planning & Construction, District

Hussain Agah (909) 382-4094

#### President, San Bernardino Valley College and Crafton Hills College

The President of the San Bernardino Valley College - Diana Rodriquez.

The President of the Crafton Hills College - Dr. Wei Zhou.

Both Presidents can be reached through the District Administrative offices at (909) 382-4000.

#### **Vice President, Office of Administrative Services**

San Bernardino Valley College	<b>Phone</b>
Scott Stark	(909) 384-8958
Crafton Hills College	
Michael Strong	(909) 389-3210
Director, Facilities, Operations and Maintenance	
San Bernardino Valley College	
Robert (Bob) Jenkins	(909) 384-8662.
Crafton Hills College	
Larry Cook	(909) 389-3383
Supervisor, Maintenance & Grounds	
San Bernardino Valley College	
Christopher (Chris) Hylton	(909) 384-1608
Crafton Hills College	
	Not Applicable

#### **Sewer Contractors**

The District plans to use National Plant Services for long term maintenance, including annual sewer line cleaning and CCTV inspection services as necessary.

Emergency Management Technologies (EMT) will provide emergency spill/clean-up response.

#### **Sewer Contractors**

Emergency Management Technologies (EMT) will provide emergency spill/clean-up response.

#### **Environmental Management Technologies, inc.**

Address: 1456 S. Gage Street, San Bernardino, CA 92408

phone: 800-579-6834

#### Point of Contact

Jeremy Brown
ENVIRONMENTAL MANAGEMENT TECHNOLOGIES, INC.
800-579-6834-O
951-323-4773-M
562-624-4567-F
jbrown@emt4env.com

#### Services

ENVIRONMENTAL MANAGEMENT TECHNOLOGIES (EMT) offers top rated customer service in all fields of RCRA Hazardous waste, Non-RCRA, and Non-Hazardous waste removal.

EMT showcases a full line of equipment, professional and experienced drivers that are courteous and well trained. Supported by our office staff that is ready to tackle any scope of work presented to us, we are your source for a cost efficient solution to your environmental needs. Please contact one of our representatives so we can provide you with a competitive bid and service worthy of earning your business for years to come.

#### Vacuum Tanker Pumping

We at EMT are confident that any services you may require in regards to vacuum tanker needs can be managed quickly by using our 120 or 130 bbl Vacuum Tanker. These fully equipped tankers are available 24 hours a day 365 days a year for your convenience. Offering this type of equipment to our clients gives them the peace of mind that all of their generated liquid, sludge waste can be removed in a timely manner for your company to run more productively.

#### **Confined Space**

Confined Space entry is essential for many businesses. EMT is able to have technicians on site with proper certifications, training and compliance knowledge. Allowing our personnel to access and maintain the cleaning of tanks, clarifiers, underground servicing and many other aspects of confined space work will be the defining factor in your companies productivity and compliance objectives. This service is available 24 hours a day 365 days a year. EMT will show up ready to go with the correct equipment on site to perform this scope of work.

#### 24 Hour Emergency

EMT specialists are highly trained and available to assess any situation and prepare for immediate evacuation of personnel. We specialize in helping with the dangers of contamination under any circumstance, at which our clean-up team can get to work taking care of the containment and handling of spilled toxins, acids, oil, gas and any other waste material spills. Wherever the emergency may occur, we are quick to respond to your workplace, job site, or even during a transport. We are available 24 hours, 356 days per year. Contact us for more information about our services.

#### **Transportation Services**

EMT proudly offers a number of different trucks for your convenience and complete efficiency of job site remediation and bulk solid load removal. Able to handle effectively the generated waste your company may require this service for. We have the ability to run these trucks 24 hours a day 365 days a year to accommodate all industries at a very competitive cost. Allowing you to call EMT for all of your waste disposal needs.

National Plant Services, Inc. (NTS) will provide CCTV inspection and annual sewer line cleaning.

#### **National Plant Services, Inc.**

Address: 1461 Harbor Avenue, Long Beach, CA 90813

Phone: 562-436-7600

Services to be preformed: Cleaning and Inspection

#### Experience:

National Plant Services, Inc. was incorporated in 1981. It is a wholly owned affiliate of the Carylon Corporation, Chicago, Ill. Founded in 1949, the Carylon Corporation is the nation's oldest, largest, privately-held sewer maintenance contractor. The Carylon Corporation has over 15 "sister" companies located across the United States. No other sewer and storm drain maintenance and study/investigating contractor can match the resources and experience and equipment that can be provided by the Carylon companies.

Their facility is a full-service operation - housing Administration, Accounting, Operations and Maintenance. All men and equipment required to perform this work will be dispatched and managed from this location. Representatives of the City of West Hollywood are invited to visit their headquarters in Long Beach to inspect their facility and their fleet at any time.

National Plant Services, Inc. operates as a full-service sewer and storm drain cleaning, inspections and maintenance contractor. National Plant Services, Inc. has been providing these services to cities (including Long Beach), counties, sanitation districts, developers, contractors and industries in 11 Western States since 1981. National Plant Services, Inc. operates 24 hours per day, 7 days per week, providing emergency vacuum, jetting and other cleaning and inspection services. National Plant Services owns all the equipment and has all the personnel necessary to meet all specifications and requirements and to perform this work to the complete satisfaction of the City of Berkeley.

National Plant Services, Inc. is a financially strong, healthy company. The Company is fully capable financially of undertaking this project.

#### **Dennis R. Keene – President**

#### National Plant Services, Inc., Long Beach, CA

Mr. Keene has been employed by the Carylon Corporation since 1972. He has been President of National Plant Services, Inc., a multiple location company, since 1987.

He is responsible for coordinating Carylon Corporation efforts in the 11 Western States and is responsible for the direction and supervision of daily operations of National Plant Services' three locations in California (Long Beach, San Diego and San Leandro).

Mr. Keene has been involved with all aspects of the business. Mr. Keene has hands-on experience with every piece of equipment operated by National Plant Services, Inc.

Mr. Keene has surveyed, bid and managed sewer cleaning and inspections projects for over 33 years in several Western States. He has worked closely with cities and sanitary districts throughout California in planning and performing sewer cleaning, closed circuit television inspection and pipe rehabilitation projects. He has a firm understanding of what agencies expects from a specialty contractor and has the field experience to deal with the problems that can be encountered during the course of the performance of a project.

Mr. Keene has been responsible for bidding and managing all work that National Plant Services has performed for the past 34 years. If awarded this Project, Mr. Keene will be the primary of Point of Contact and will be the Project Manager for televising portion of the project.

#### **Duke Brown - Operations Manager & Safety Director**

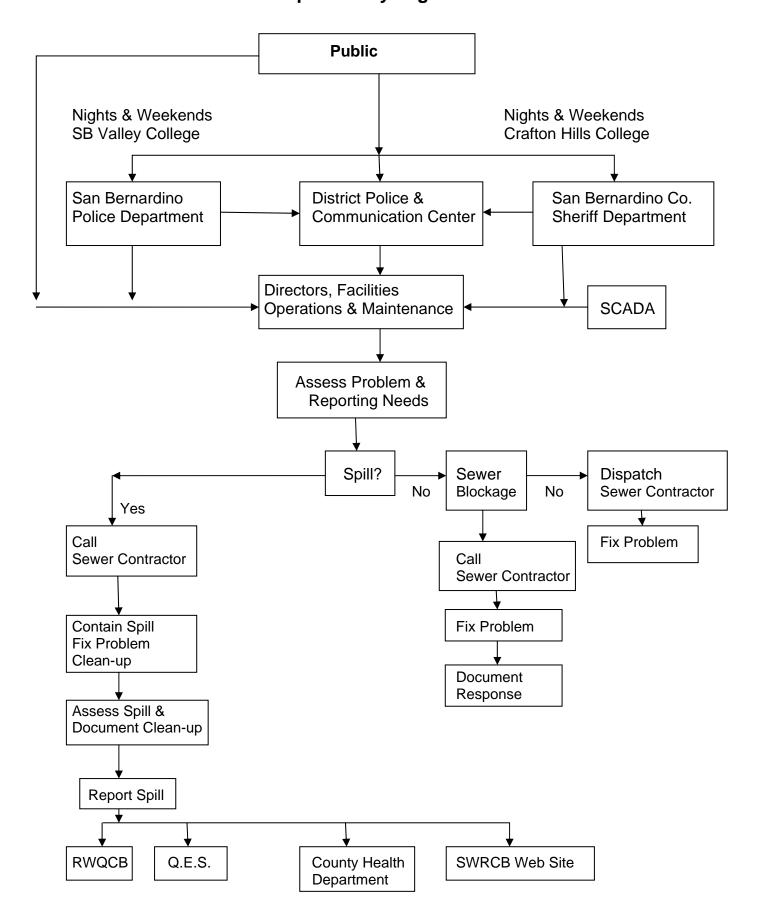
#### **National Plant Services, Inc., Long Beach, CA**

Mr. Brown has worked for the Carylon Corporation since 1970. He has hands-on experience and can operate every piece of equipment owned by National Plant Services. Mr. Brown has been a Project Manager and Project Superintendent on hundreds of sewer cleaning and inspections projects in California, Arizona, New Mexico, Utah and several other Western States. Mr. Brown has cleaned and inspected more sewer lines than any other active sewer cleaning professional in Southern California. He is thoroughly knowledgeable and completely professional with every piece of equipment operating in the industry today.

In addition to over 39 years of hands-on experience, Mr. Brown has received professional training in Confined Space Entry and holds 40 Hour Hazwoper Training credentials.

Mr. Brown is part of National Plant Services' Safety Team. Mr. Brown has attended the 10 Hour OSHA Construction Safety Training course. Mr. Brown has been the Project. Mr. Brown is extremely safety conscious and thoroughly trained in hazard and accident prevention in the field of sewer cleaning.

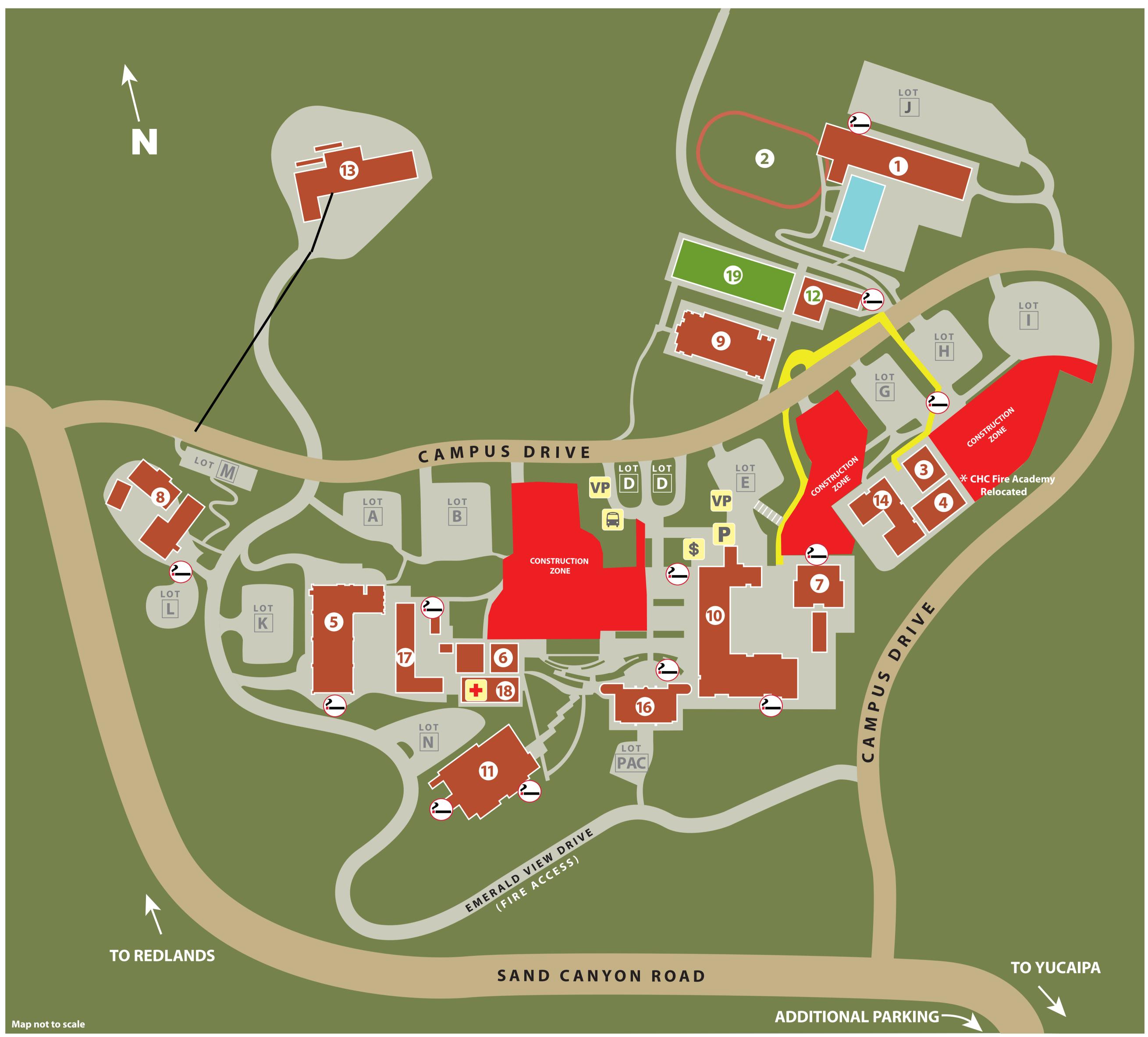
Figure 2-2
San Bernardino Community College District (SBCCD)
SSMP Responsibility Organization Chart



### **APPENDIX 3**

**GENERAL MAPS** 

# CAMPUS DIRECTORY



Updated: 1-23-15

\$ ATM



Nurse's Station

Police/Security

Pedestrian Detour

**Visitor Parking** 

# Parking Permits (Daily)

Parking permits/decals are required to park in all parking lots and on all college streets.

Daily parking permits available in all lots.

Parking in disabled stalls requires a valid California disabled placard and a valid SBCCD parking permit/decal.



# **Smoking Areas**

This is a smoke-free campus smoking in non-designated areas or buildings may result in the issuance of a citation (Board Policy #3570; Government Code #7597)

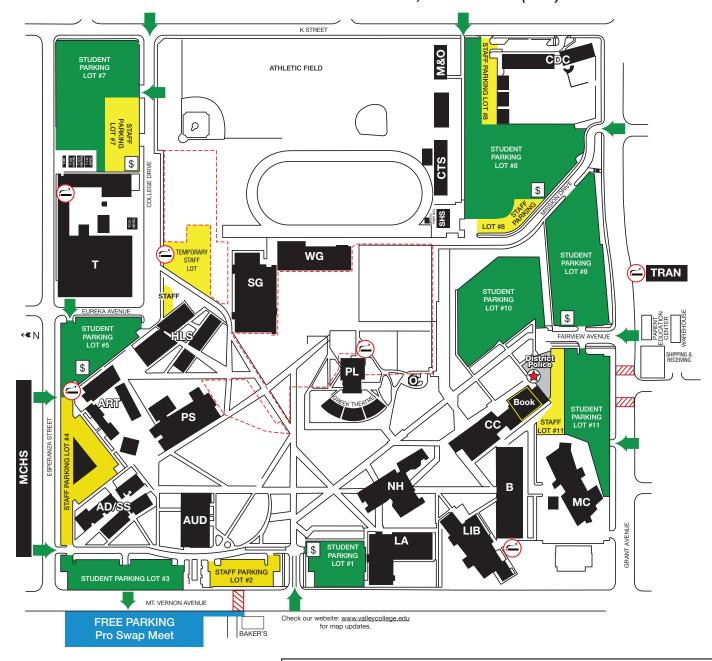
**District Police (909) 389-3275** 

1	KINESIOLOGY, HEALTH & KHA
	AQUATICS COMPLEX
2	ATHLETIC FIELD
3	BC CLASSROOM BUILDING
4	BOOKSTOREBK
5	STUDENT CENTER/CAFETERIA
6	CL CLASSROOM BUILDINGCL Financial Aid
7	CHEMISTRY/HEALTH SCIENCES CHS
8	CHILD DEVELOPMENT CENTER CDC
9	GYMNASIUM
10	LABORATORY/ADMINISTRATION LADM Campus Business Office Parking Permits (Semester/Annual)
	POLICE (LADM 153)
11	LEARNING RESOURCE CENTERLRC Copy Center Multi-purpose Room Gallery Teaching Center Lecture Hall Tutoring Center Library

**MAINTENANCE & OPERATIONS/ SHIPPING & RECEIVING UNDER CONSTRUCTION** Admissions & Records EOPS **Counseling** Health & Wellness Center **Disabled Student Services** 19 TENNIS COURTS . . . . . . . . . . . . . . . . TC-CRTS CHC Fire Academy has been temporarily relocated during construction to: **CALFIRE** 3800 N. Sierra Way, San Bernardino, CA 92405 For Information Call: 909-389-3418 or **Visit: craftonhills.edu/fireacademy** 

## San Bernardino Valley College

701 South Mount Vernon • San Bernardino, CA 92410 • (909) 384-4400







\$ INDICATES PARKING PERMIT DISPENSER



INDICATES APPROVED SMOKING AREAS (10)
This is a smoke-free campus - smoking in non-designated areas or buildings may result in the issuance of a citation (Board Policy #3570; Government Code #7597)

#### Building Symbols

Building	Symbols
AD/SS Administration/Student Services	MCMedia/Communications
(Note: AD rooms are located in AD/SS)	MCHS Middle College High School
ARTArt Center	M&O Maintenance & Operations
AUD Auditorium	O Observatory
BBusiness	PLPlanetarium
BOOK Bookstore	PSPhysical Sciences
CCCampus Center	SGSnyder Gym
CDCChild Development Center	SHS Student Health Services
CTSComputer Technology Services	TTechnical
HLSHealth & Life Science	TRANTransportation Center
LALiberal Arts	WGWomen's Gym
LIBLibrary	

#### DISTRICT POLICE

Campus Center Rm. 100 (909) 384-4491

Parking permits/decals are required to park in all parking lots and on all college streets.

Parking in disabled stalls requires a valid California disabled placard and a valid SBCCD parking permit/decal.

### **APPENDIX 4**

# STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEM

#### STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

#### **ORDER NO. WQ 2008-0002-EXEC**

ADOPTING AMENDED MONITORING AND REPORTING REQUIREMENTS FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

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

- The State Water Board is authorized to prescribe statewide general waste discharge requirements for categories of discharges that involve the same or similar operations and the same of similar types of waste pursuant to Water Code 13263, subdivision (i).
- 2. The State Water Board on May 2, 2006, adopted Statewide General Waste Discharge Requirements for Sanitary Sewer Systems, Order No. 2006-0003-DWQ, pursuant to that authority.
- 3. The State Water Board on May 2, 2006, adopted Monitoring and Reporting Requirements to implement the General Waste Discharge Requirements for Sanitary Sewer Systems.
- 4. State Water Board Order No. 2006-0003-DWQ, paragraph G.2., and the Monitoring and Reporting Requirements, both provide that the Executive Director may modify the terms of the Monitoring and Reporting Requirements at any time.
- 5. The time allowed in those Monitoring and Reporting Requirements for the filing of the initial report of an overflow is too long to adequately protect the public health and safety or the beneficial uses of the waters of the state when there is a sewage collection system spill. An additional notification requirement is necessary and appropriate to ensure the Office of Emergency Services, local public health officials, and the applicable regional water quality control board are apprised of a spill that reaches a drainage channel or surface water.
- 6. Further, the burden of providing a notification as soon as possible is de minimis and will allow response agencies to take action as soon as possible to protect public health and safety and beneficial uses of the waters of the state.

#### IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Resolution No. 2002-0104 and Order No. 2006-0003-DWQ, the Monitoring and Reporting Requirements for Statewide General Waste Discharge Requirements for Sanitary Sewer Systems No. 2006-0003-DWQ is hereby amended as shown in Attachment A, with new text indicated by double-underline.

Dated: February 20,2008

Dorothy Rice

Executive Director

#### ATTACHMENT A

# STATE WATER RESOURCES CONTROL BOARD MONITORING AND REPORTING PROGRAM NO. 2006-0003-DWQ (AS REVISED BY ORDER NO. WQ 2008-0002-EXEC)

# STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order No. 2006-2003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems." Revisions to this MRP may be made at any time by the Executive Director, and may include a reduction or increase in the monitoring and reporting.

#### **NOTIFICATION**

Although State and Regional Water Board staff do not have duties as first responders, this Monitoring and Reporting Program is an appropriate mechanism to ensure that the agencies that do have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

- 1. For any discharges of sewage that results in a discharge to a drainage channel or a surface water, the Discharger shall, as soon as possible, but not later then two (2) hours after becoming aware of the discharge, notify the State Office of Emergency Services, the local health officer or directors of environmental health with jurisdiction over affected water bodies, and the appropriate Regional Water Quality Control Board.
- 2. As soon as possible, but no later then twenty-four (24) hours after becoming aware of a discharge to a drainage channel or a surface water, the Discharger shall submit to the appropriate Regional Water Quality Control Board a certification that the State Office of Emergency Services and the local health officer or directors of environmental health with jurisdiction over the affected water bodies have been notified of the discharge.

#### A. SANITARY SEWER OVERFLOW REPORTING

#### **SSO Categories**

- 1. Category 1 All discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system that:
  - A. Equal or exceed 1000 gallons, or
  - B. Result in a discharge to a drainage channel and/or surface water; or
  - C. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.

- 2. Category 2 All other discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system.
- 3. Private Lateral Sewage Discharges Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

#### **SSO Reporting Timeframes**

4. Category 1 SSOs – Except as provided above, all SSOs that meet the above criteria for Category 1 SSOs must be reported as soon as: (1) the Enrollee has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the Enrollee is made aware of the SSO. Minimum information that must be contained in the 3-day report must include all information identified in section 9 below, except for item 9.K. A final certified report must be completed through the Online SSO System, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

The above reporting requirements are in addition to do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (local County Health Officers, local Director of Environmental Health, Regional Water Boards, or Office of Emergency Services (OES)) or State law.

- 5. Category 2 SSOs All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the SSO occurs (e.g. all SSOs occurring in the month of January must be entered into the database by March 1st).
- 6. Private Lateral Sewage Discharges All sewage discharges that meet the above criteria for Private Lateral sewage discharges may be reported to the Online SSO Database based upon the Enrollee's discretion. If a Private Lateral sewage discharge is recorded in the SSO Database, the Enrollee must identify the sewage discharge as occurring and caused by a private lateral, and a responsible party (other than the Enrollee) should be identified, if known.
- 7. If there are no SSOs during the calendar month, the Enrollee will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SSOs for the designated month.
- 8. In the event that the SSO Online Database is not available, the enrollee must fax all required information to the appropriate Regional Water Board office in

accordance with the time schedules identified above. In such event, the Enrollee must also enter all required information into the Online SSO Database as soon as practical.

#### Mandatory Information to be Included in SSO Online Reporting

All Enrollees must obtain SSO Database accounts and receive a "Username" and "Password" by registering through the California Integrated Water Quality System (CIWQS). These accounts will allow controlled and secure entry into the SSO Database. Additionally, within thirty (30) days of receiving an account and prior to recording SSOs into the SSO Database, all Enrollees must complete the "Collection System Questionnaire", which collects pertinent information regarding an Enrollee's collection system. The "Collection System Questionnaire" must be updated at least every 12 months.

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

#### 9. Category 2 SSOs:

- A. Location of SSO by entering GPS coordinates;
- B. Applicable Regional Water Board, i.e. identify the region in which the SSO occurred;
- C. County where SSO occurred;
- D. Whether or not the SSO entered a drainage channel and/or surface water;
- E. Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system;
- F. Estimated SSO volume in gallons;
- G. SSO source (manhole, cleanout, etc.);
- H. SSO cause (mainline blockage, roots, etc.);
- Time of SSO notification or discovery;
- J. Estimated operator arrival time;
- K. SSO destination;
- L. Estimated SSO end time; and
- M. SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO Identification (ID) Number.

#### 10. Private Lateral Sewage Discharges:

- A. All information listed above (if applicable and known), as well as;
- B. Identification of sewage discharge as a private lateral sewage discharge; and
- C. Responsible party contact information (if known).

#### 11. Category 1 SSOs:

- A. All information listed for Category 2 SSOs, as well as;
- B. Estimated SSO volume that reached surface water, drainage channel, or not recovered from a storm drain;
- C. Estimated SSO amount recovered;
- D. Response and corrective action taken;
- E. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA must be selected.
- F. Parameters that samples were analyzed for (if applicable);
- G. Identification of whether or not health warnings were posted;
- H. Beaches impacted (if applicable). If no beach was impacted, NA must be selected;
- Whether or not there is an ongoing investigation;
- J. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
- K. OES control number (if applicable);
- L. Date OES was called (if applicable);
- M. Time OES was called (if applicable);
- N. Identification of whether or not County Health Officers were called;
- O. Date County Health Officer was called (if applicable); and
- P. Time County Health Officer was called (if applicable).

#### Reporting to Other Regulatory Agencies

These reporting requirements do not preclude an Enrollee from reporting SSOs to other regulatory agencies pursuant California state law. These reporting requirements do not replace other Regional Water Board telephone reporting requirements for SSOs.

1. The Enrollee shall report SSOs to OES, in accordance with California Water Code Section 13271.

#### Office of Emergency Services Phone (800) 852-7550

- 2. The Enrollee shall report SSOs to County Health officials in accordance with California Health and Safety Code Section 5410 et seq.
- 3. The SSO database will automatically generate an e-mail notification with customized information about the SSO upon initial reporting of the SSO and final certification for all Category 1 SSOs. E-mails will be sent to the appropriate County Health Officer and/or Environmental Health Department if the county desires this information, and the appropriate Regional Water Board.

#### **B. Record Keeping**

1. Individual SSO records shall be maintained by the Enrollee for a minimum of five years from the date of the SSO. This period may be extended when requested by a Regional Water Board Executive Officer.

#### [2. Omitted.]

- 3. All records shall be made available for review upon State or Regional Water Board staff's request.
- 4. All monitoring instruments and devices that are used by the Enrollee to fulfill the prescribed monitoring and reporting program shall be properly maintained and calibrated as necessary to ensure their continued accuracy;
- 5. The Enrollee shall retain records of all SSOs, such as, but not limited to and when applicable:
  - a. Record of Certified report, as submitted to the online SSO database;
  - b. All original recordings for continuous monitoring instrumentation;
  - c. Service call records and complaint logs of calls received by the Enrollee;
  - d. SSO calls;
  - e. SSO records;
  - f. Steps that have been and will be taken to prevent the SSO from recurring and a schedule to implement those steps.
  - g. Work orders, work completed, and any other maintenance records from the previous 5 years which are associated with responses and investigations of system problems related to SSOs;
  - h. A list and description of complaints from customers or others from the previous 5 years; and
  - Documentation of performance and implementation measures for the previous 5 years.
- 6. If water quality samples are required by an environmental or health regulatory agency or State law, or if voluntary monitoring is conducted by the Enrollee or its agent(s), as a result of any SSO, records of monitoring information shall include:
  - a. The date, exact place, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) analyses were performed;
  - d. The individual(s) who performed the analyses;
  - e. The analytical technique or method used; and,
  - f. The results of such analyses.

#### C. Certification

- 1. All final reports must be certified by an authorized person as required by Provision J of the Order.
- 2. Registration of authorized individuals, who may certify reports, will be in accordance with the CIWQS' protocols for reporting.

Monitoring and Reporting Program No. 2006-0003 will become effective on the date of adoption by the State Water Board. <u>The notification requirements added by Order No. WQ 2008-0002-EXEC will become effective upon issuance by the Executive Director.</u>

#### **CERTIFICATION**

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

Jean he Townsend Clerk to the Board

### **APPENDIX 5**

### **SSO EMERGENCY RESPONSE PROCEDURE**

#### SSO EMERGENCY RESPONSE PROCEDURES

This section describes the actions the District will take in cooperation with the SWRCB to address discharges of sanitary sewer pollutants to surface water bodies from the wastewater collection system.

#### A. Receipt of Information Regarding a Sewer Overflow

An overflow may be detected by residents, District employees, or by others. District maintenance staff is responsible for receiving phone calls from the public of possible sewer overflows from the wastewater collection system, and for responding to the calls.

Telephone calls from the public reporting sanitary sewer overflows are received by the Community Development Department office staff during regular office hours and by an automated answering service during other hours. An emergency phone number is on file with the Police Department, and calls are forwarded to District maintenance staff. The emergency phone line is available 24-hour a day, 365 days a year.

- 1. The call receiver shall obtain all relevant information available regarding the overflow including:
  - a. Time and date call was received;
  - b. Specific location and description of facility;
  - c. Description of problem;
  - d. Time the overflow was noticed by the caller;
  - e. Callers name and phone number;
  - f. Observations by the caller (e.g. odor, duration, amount);
  - g. Other relevant information that will enable the responding investigator and crews, if required, to quickly locate, assess and stop the overflow; and
  - h. Any information that is requested on the "Sanitary Sewer Overflow Report Form" (attached) that may help in responding to the overflow.
- 2. The call receiver then records the overflow information on the information form (attached) and notifies the District maintenance personnel.
- 3. If spill is larger than 1,000 gallons, may imminently and substantially endanger human health or cause a fish kill, then the office of the California Emergency Management Agency (800) 825-7550 must be notified by the discharger within 2-hours of the becoming aware of the discharge, in accordance with California Code Section 13271.
- 4. For discharges of sewage that result in a discharge to a drainage channel or a surface water body the discharger shall within 2-hours notify Cal EMA, County Environmental Health with jurisdiction over the affected water bodies, and the RWQCB. No later than 24-hours after becoming aware of the discharge, the discharger must submit to the RWQCB a certification that Cal EMA and County Environmental Health with jurisdiction over the affected water bodies have been notified of the discharge.
- 5. Pump station failures are received by District office staff or the emergency

- contact and immediately conveyed to District maintenance staff or a maintenance contractor to initiate the response.
- 6. Sewer overflows detected by any personnel in the course of their normal duties shall be reported immediately to maintenance staff. Maintenance personnel should record all relevant overflow information and dispatch a sewer investigator and additional response crews, as needed.

The Sanitary Sewer Overflow Report Form (attached) will be completed by District maintenance staff within 24-hours of the crew's spill confirmation. The Street Supervisor is responsible for reviewing, updating, and signing the final Overflow Report.

#### B. Dispatch of Appropriate Crews to Site of Sewer Overflow

Failure of any element within the wastewater collection system that threatens to cause or causes a sewer overflow will trigger an immediate response to isolate and correct the problem. Crews and equipment shall be available to respond to any sewer overflow immediately. Also, additional resources are to be "on-call" should they be needed.

#### 1. Dispatching Crews

- District maintenance staff will receive notification of sewer overflows and dispatch the appropriate crews and resources as required.
- District maintenance staff shall notify the District Engineer regarding sewer overflows and field crew locations.

#### 2. Additional Resources

• The Street Supervisor will receive and shall convey to appropriate parties requests for additional personnel, materials, supplies, and equipment from crews working at the site of a sewer overflow.

#### 3. Preliminary Assessment of Damage to Public and Private Property

The response crews should use discretion in assisting the property owner/occupant as reasonably as they can. The response crew may enter private property for the purpose of assessing damage. Photographs or video, if possible, should be taken of the outdoor area of the sewer overflow and impacted area in order to thoroughly document the nature and extent of impacts and are to be included for filing with the overflow report.

#### 4. Coordination with Hazardous Materials Response

- Upon arrival at the scene of a sewer overflow, should a suspicious substance (e.g. oil sheen, foamy residue) be found in the area, or should a suspicious odor (e.g. gasoline) not common to the sewer system be detected, the response crew should immediately contact the County Hazardous Materials Response Team or the San Bernandino Fire Department to take over the scene. Remember that any vehicle engine, portable pump, or open flame (e.g. cigarette lighter) can provide the ignition for an explosion or fire if flammable fluids or vapors are present. Keep a safe distance, and apply caution until assistance arrives.
- Upon arrival of the County Hazardous Materials Response Team or San Bernandino Fire Department, the District maintenance crew will take direction form the person with the lead authority from that team. Only when that authority determines that it is safe and

appropriate can the maintenance crew proceed, under the guidance of the SSOERP, with the containment, clean up, and correction.

#### C. Overflow Containment, Clean-up, and Correction

Spills of various volumes may result from blocked sewers, pipe failures, or mechanical malfunctions among other natural or man-made causes. The District is constantly on alert and should be ready to respond upon notification and confirmation of an overflow.

Specific actions are to be performed by crews during a sewer overflow. The objectives of these actions are:

- To protect the public health, environment, and property from sewage overflows and to restore the surrounding area back to normal as soon as possible;
- To establish perimeters and control zones with appropriate traffic cones, barricades, vehicles, or use of natural topography (e.g. hills or berms);
- To promptly notify the regulatory agency's communication center of preliminary overflow information and potential impacts;
- To contain the sewer overflow to the maximum extent possible, including preventing the discharge from entering into surface waters; and
- To minimize the District exposure to any regulatory agency penalties and fines.

Under most circumstances the District will handle all initial response actions with its own maintenance staff. An important issue with respect to an emergency response is to ensure that the temporary actions necessary to divert flows and repair the problem do not produce a problem elsewhere in the system.

The District will use private contractors as needed to meet the response needs.

#### 1. Responsibilities of Response Crew Upon Arrival

It is the responsibility of the first personnel who arrive at the site of a sewer overflow to protect the health and safety of the public by mitigating the impact of the overflow to the maximum extent possible. Upon arrival at a sewer overflow the response crew shall do the following:

- Determine the cause of the overflow (e.g. sewer line blockage, sewer line break, or pump station failure);
- Identify and request, if necessary, assistance or additional resources to correct the overflow or to assist in the determination of the cause;
- Take immediate steps to stop the overflow (e.g. relieve pipeline blockage, manually operate pump station controls, repair pipe). Extraordinary steps may be considered where overflows from private property threatens public health and safety (e.g. an overflow running off of private property into the public right-ofway); and
- Request additional personnel, materials, supplies, or equipment that will expedite and minimize the impact of the overflow.
- Establish traffic control based on the latest Edition of the WATCH Manual.

#### 2. Initial Measures for Containment

Maintenance staff will initiate measures to contain the overflowing sewage and recover, where possible, sewage that has already been discharged. These actions should always minimize impacts to the public health and the environment.

- Determine the immediate destination of the overflow (e.g. R/W, stormdrain, waters of the U.S.);
- Identify and request the necessary materials and equipment to contain or isolate the overflow if not readily available;
- Take immediate steps to contain the overflow (e.g. block or bag stormdrain inlets, recover through use of vacuum truck, divert to downstream manhole);

#### 3. Additional Measures Under Potentially Prolonged Overflow Conditions

In the event of a prolonged sewer line blockage or a sewer line collapse a determination should be made to set up a portable by-pass pumping operation around the obstruction.

- Appropriate measures shall be taken to determine the proper size and number of pumps required to effectively handle the sewage overflow.
- Continuation or periodic monitoring of the by-pass pumping operation shall be implemented as required.
- Regulatory agency issues shall be addressed in conjunction with emergency repairs.

#### 4. Cleanup

Sewer overflow sites are to be thoroughly cleaned after an overflow. No readily identified residue (e.g. sewage solids, papers, rags, plastics, rubber products) is to remain.

- The overflow site is to be secured to prevent contact by members of the public until the site has been thoroughlycleaned. Posting if required should be undertaken pursuant to Section IV.
- The area of discharge is to be cleaned of any sewage. Solids and debris are to be vacuumed, swept, raked, picked up, and transported for proper disposal.
- Where appropriate, the overflow site is to be disinfected and deodorized.
- Where sewage has resulted in ponding the pond should be vacuumed dry and the residue disposed of in accordance with applicable regulations and policies.
- If a ponded area contains sewage that cannot be vacuumed dry it may be treated with bleach and absorbent material and swept up.
- Use of portable aerators may be required where complete recovery of sewage is not practical and where severe oxygen depletion in

existing surface water is expected.

#### **D.** Customer Satisfaction

The Street Supervisor shall follow-up in person or by telephone with the citizen(s) reporting the overflow. The cause of the overflow and its resolution will be disclosed.

#### II. PUBLIC ADVISORY PROCEDURE

This section describes the actions The District should take in cooperation with the SWRCB to limit public access to areas potentially impacted by un-permitted discharges of pollutants to surface water bodies from the wastewater collection system.

#### A. Temporary Signage

The District has primary responsibility for determining when to post notices of polluted surface water bodies or ground waters that result from uncontrolled wastewater discharges from its facilities. The postings do not necessarily prohibit use of recreational areas unless posted otherwise, but provide warning of potential public health risks due to sewage contamination.

#### III. REPORTING/RECORD KEEPING

#### A. SSO Categories

- 1. Category 1 All discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system that:
  - A. Equal or exceed 1000 gallons, or
  - B. Result in a discharge to a drainage channel and/or surface water; or
  - C. Discharge to a storm drainpipe that was not fully captured and returned to the sanitary sewer system.
- 2. Category 2 All other discharges of sewage resulting from a failure in the Enrollee's sanitary sewer system.
- 3. Private Lateral Sewage Discharges Sewage discharges that are caused by blockages or other problems within a privately owned lateral.

#### **B.** SSO Reporting Timeframes

1. Category 1 SSOs – All SSOs that meet the above criteria for Category 1 SSOs must be reported as soon as: (1) the Enrollee has knowledge of the discharge, (2) reporting is possible, and (3) reporting can be provided without substantially impeding cleanup or other emergency measures. Initial reporting of Category 1 SSOs must be reported to the Online SSO System as soon as possible but no later than 3 business days after the Enrollee is made aware of the SSO. Minimum information that must be contained in the 3-day report must include all information identified in section 9 below, except for item 9.K. A final certified report must be completed through the Online SSO System, within 15 calendar days of the conclusion of SSO response and remediation. Additional information may be added to the certified report, in the form of an attachment, at any time.

The above reporting requirements do not preclude other emergency notification requirements and timeframes mandated by other regulatory agencies (local County Health Officers, local Director of Environmental Health, Regional Water Boards, or Cal EMA) or State law.

- 2. Category 2 SSOs All SSOs that meet the above criteria for Category 2 SSOs must be reported to the Online SSO Database within 30 days after the end of the calendar month in which the SSO occurs (e.g. all SSOs occurring in the month of January must be entered into the database by March 1st).
- 3. Private Lateral Sewage Discharges All sewage discharges that meet the above criteria for Private Lateral sewage discharges may be reported to the Online SSO Database based upon the Enrollee's discretion. If a Private Lateral sewage discharge is recorded in the SSO Database, the Enrollee must identify the sewage discharge as occurring and caused by a private lateral, and a

responsible party (other than the Enrollee) should be identified, if known.

- 4. If there are no SSOs during the calendar month, the Enrollee will provide, within 30 days after the end of each calendar month, a statement through the Online SSO Database certifying that there were no SSOs for the designated month.
- 5. In the event that the SSO Online Database is not available, the enrollee must fax all required information to the appropriate Regional Water Board office in accordance with the time schedules identified above. In such event, the Enrollee must also enter all required information into the Online SSO Database as soon as practical.

#### **C.** SSO On-line Reporting Information

The discharger shall report monthly through the California Integrated Water Quality System Project (CIWQS) website www.waterboards.ca.gov all SSOs.

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

#### Category 2 SSOs:

- A. Location of SSO by entering GPS coordinates;
- B. Applicable Regional Water Board, i.e. identify the region in which the SSO occurred:
- C. County where SSO occurred;
- D. Whether or not the SSO entered a drainage channel and/or surface water;
- E. Whether or not the SSO was discharged to a storm drain pipe that was not fully captured and returned to the sanitary sewer system;
- F. Estimated SSO volume in gallons;
- G. SSO source (manhole, cleanout, etc.);
- H. SSO cause (mainline blockage, roots, etc.);
- I. Time of SSO notification or discovery;
- J. Estimated operator arrival time;
- K. SSO destination:
- L. Estimated SSO end time; and
- M. SSO Certification. Upon SSO Certification, the SSO Database will issue a Final SSO Identification (ID) Number.

#### Private Lateral Sewage Discharges:

- A. All information listed above (if applicable and known), as well as;
- B. Identification of sewage discharge as a private lateral sewage discharge; and
- C. Responsible party contact information (if known).

#### Category 1 SSOs:

- A. All information listed for Category 2 SSOs, as well as;
- B. Estimated SSO volume that reached surface water, drainage channel, or not

recovered from a storm drain;

- C. Estimated SSO amount recovered:
- D. Response and corrective action taken;
- E. If samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA must be selected.
- F. Parameters that samples were analyzed for (if applicable);
- G. Identification of whether or not health warnings were posted;
- H. Beaches impacted (if applicable). If no beach was impacted, NA must be selected:
- I. Whether or not there is an ongoing investigation;
- J. Steps taken or planned to reduce, eliminate, and prevent reoccurrence of the overflow and a schedule of major milestones for those steps;
- K. Cal EMA control number (if applicable);
- L. Date Cal EMA was called (if applicable);
- M. Time Cal EMA was called (if applicable);
- N. Identification of whether or not County Health Officers were called;
- O. Date County Health Officer was called (if applicable); and
- P. Time County Health Officer was called (if applicable).

If there are no sanitary sewer overflows for the month a statement certifying such will be provided through the CIWQS on-line reporting system. Sanitary sewer overflow summary reports and certification statements shall be submitted via the CIWQS system by the 30<sup>th</sup> day of the month following the spill reporting period.

#### D. Trend Report

Once a spill has occurred at the same location of a previous spill, whether or not due to the same suspected cause, steps need to be taken to prevent the overflow from recurring and a schedule must be developed to implement a plan of action.

#### E. Record Keeping

The discharger shall retain records of all SSOs, including, but not limited to:

- A. All original strip chart recordings for continuous monitoring instrumentation;
- B. Service call records and complaint logs of calls received by the discharger;
- C. Spill Calls;
- D. Hard copies of all e-mails and internet reports;
- E. Spill records including location of overflow and impacted receiving water if any (street address and GPS coordinates);
- F. Copies of all SSO reports;
- G. An estimate of the volume of the overflow;
- H. A description of the sewer system component from which the release occurred (e.g. manhole, constructed overflow pipe, crack in pipe);
- I. The estimated date and time when the overflow began and when it stopped;
- J. The cause or suspected cause of the overflow;
- K. Steps that have been and will be taken to prevent the overflow from recurring and a schedule to implement those steps;

- L. Work orders from the previous 3 years that are associated with responses and investigations of system problems related to sanitary sewer overflows;
- M. A list and description of complaints from customers or others from the previous 3 years; and
- N. Documentation of performance and implementation measures for the previous 3 years.

#### IV. FOLLOW-UP PROCEDURES

Following the spill response, clean-up, and reporting, additional actions may be required to ensure that similar spills do not occur in the future. These actions can include, but are not limited to, the following:

Coordinated response through the Neighborhood Improvement Services Department (NIS).

- Issuance of a Notice of Violation to the responsible party.
- Issuance of a Administrative Citation to the responsible party.

Coordinated response through the Public Works Department

- Coordination of enforcement action with other agencies (LACDPH, RWQCB, and LACSD).
- Video Recording of Sanitary Sewer Main.
- Repair or reconstruction of Sanitary Sewer Main.
- Monitoring and testing.

#### VII. DISTRIBUTION AND MAINTENANCE OF SSOERP

#### A. Submittal and Availability of SSOERP

Copies of the SSOERP and any amendments or updates will be distributed to the Regional Water Quality Control Board. All other personnel who may become incidentally involved in responding to overflows will be familiar with the SSOERP.

#### B. Review and Update of SSOERP

The SSOERP will be reviewed annually and amended as appropriate. The District shall also update the SSOERP with the issuance of a revised or new NPDES permit or state waste discharge permit.

#### C. Training

Relevant training programs, reading materials, and videocassette tapes or DVDs that could assist response crews in executing their duties and responsibilities in confirming overflows, identifying their causes, and resolving them will be made available by the Public Works Department. Periodic field drills of the overflow response procedures will be addressed and could be executed in conjunction with other periodic emergency preparedness drills.

### **APPENDIX 6**

### **PACP SEWER REPORTS**

#### **CRAFTON HILLS COLLEGE SEWER SYSTEM**

sewer segment			sewer segr	ment
1-2	8	300	3-33	6
2-3	8	200	33-34	6
3-4	8	302	34-35	6
4-5	8	257	10-36	6
5-6	8	316	36-37	6
6-7	8	278	37-38	6
7-8	8	293	38-39	6
8-9	8	184	39-40	6
9-10	8	272	40-41	6
10-11	8	244	41-42	6
6-12	8	301	42-43	6
12-13	8	113	43-44	6
13-14	8	102	44-45	6
14-15	8	100	45-46	6
15-16	8	143	11-47	6
16-17	8	103	47-48	6
8-18	8	212	48-49	6
18-19	8	266	50-51	6
18A-20	8	150	51-52	6
20-21	6	137	5-53	8
21-22	6	125	53-54	8
20-23	8	71	54-55	8
20-24	8	90	55-56	8
24-25	8	20	56-57	8
25-26	8	243	57-58	8
26-27	8	61	59-60	6
28-29	8	63	60-61	6
29-30	8	269	61-62	6
30-31	8	90		
31-32	8	197		

Total		\$8,528
	6"	2,146
	8"	6.382

#### SAN BERNARDINO VALLEY COLLEGE SEWER SYSTEM

Sub-Total			Sub-Total		
8 segments	6"	1,876	4 segments	6"	842
16 segments	8"	2,794	25 segments	8"	3,832
8 segments	10"	1,187	1 segments	10"	140

n'ly SMH41

# PACP SEWER REPORTS SAN BERNARDINO VALLEY COLLEGE

National Plant Services, Inc.

1461 Harbor Avenue

Long Beach, Ca. 90813

Office: 562-436-7600



					PACE	' Sewei	r Repor	t						
Surveyed by: R.ZIEGLE	R	Certificate No.		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:		
Work order:	Pipeline segme			t date/time: 15/09/23					City: SAN BERNARDINO					
Location detail	ls:					Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:		
Downstream r	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:		
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: Length surveyed: 276.9 276.9			Year laid:	Year re	enewed:	Media label:		
Purpose: S	Sewer category:	Pre-cleaning Date	e cleaned:	Weather:	/eather: Location code: Additional info:  D  Output  D									
Starting	access point:	Easting:		Northir	ng:	Elevation:			Coordinate sy	stem:	GPS accuracy:			
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe: Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index		
1	0	0		-		0	0							
2	5	10				1	2							
3	0	0	10	2500	2	0	0	2	2100	2	12	2		
4	0	0				0	0							
5	0	0				0	0							

National Plant Services, Inc. 1461 Harbor Avenue Long Beach, Ca. 90813 Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/23 SMH1 SMH1-SMH2

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	/alue s (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	31	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 AMH at 0.0 ft (D).jpg			SMH1
0.0	80	MWL					5							
0.0	90	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 MWM at 0.0 ft (D).jpg	O&M		
19.5	358	MWLS	S01				10				SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 MWLS at 19.5 ft (D).jpg	S	2	
22.5	443	TFA			6				10		SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 TFA at 22.5 ft (D).jpg			
26.4	560	TFA			6				3					
26.4	595	TFD			6				3		SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 TFD at 26.4 ft (D).jpg	O&M	2	LOOKS LIKE THE LATERAL IS BROKEN FROM 8 TO 3
32.8	726	MWLS	F01				10				SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 MWLS at 32.8 ft (D).jpg	S	2	END OF SAG

National Plant Services, Inc. 1461 Harbor Avenue Long Beach, Ca. 90813 Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/23 SMH1 SMH1-SMH2

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		iferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
88.2	937	TFA			6				2		SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 TFA at 88.2 ft (D).jpg			
163.1	1228	SZ							9		SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 SZ at 163.1 ft (D).jpg			BLISTER IN PVC DENTED IN
165.2	1393	SZ							9		SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 SZ at 165.2 ft (D).jpg			BLISTER, DENTED IN AT THE 9 O CLOCK POSITION
175.7	1492	TFA			6				9		SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 TFA at 175.7 ft (D).jpg			
263.6	1777	MWLS	S02				10				SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 MWLS at 263.6 ft (D).jpg	S	2	
273.9	1849	MWLS	F02				10				SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 MWLS at 273.9 ft (D).jpg	S	2	SAG ENDING
276.9	1909	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH1 -SMH2 AMH at 276.9 ft (D).jpg			DSMH SMH2

National Plant Services, Inc.

1461 Harbor Avenue

Long Beach, Ca. 90813

Office: 562-436-7600



					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEI	R	Certificate N U-815-0		Owner: SBVC	;		Survey Customer SBVC			ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/23	11:46	Street: SOUTH MT	VERNON ST		City: SAN BEI	RNARDINO		
Location detai	ls:				Upstream manh SMH2	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:	
Downstream manhole No: SMH3				Rim to inv	ert:	Grade to invert:	Rim to gr	ade: Sewer use:		Direction:	Flow contr	ol: Height:
Width:	Shape:	: Material: Ln. method: Pipe joint length: PVC			ength:	Total length: Length surveyed: 24.2 24.1			Year laid:	Year re	newed: Media label:	
Purpose: S	se: Sewer category: Pre-cleaning Date cleaned:			Weather:	her: Location code: Additional info:							
Starting	access point:	Easting:		Northir	ng:	Elevation:			Coordinate sy	stem:	GPS accuracy:	
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ig O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

National Plant Services, Inc. 1461 Harbor Avenue Long Beach, Ca. 90813

Long Beach, Ca. 90813 Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/23 SMH2 SMH2-SMH3

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V. Inches	alue (mm)	%	Joint		iferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	26	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH2 -SMH3 AMH at 0.0 ft (D).jpg			USMH SMH2
0.0	79	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH2 -SMH3 MWL at 0.0 ft (D).jpg			
0.0	88	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH2 -SMH3 MWM at 0.0 ft (D).jpg	O&M		
24.1	267	AMH												DSMH SMH3

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACE	<sup>o</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLE		Certificate N U-815-0	lo: 7001103	Owner:			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segm SMH3-SM			rt date/time: 15/09/23	11:55	Street: SOUTH MT	VERNON ST			City: SAN BEF	RNARDINO	
Location deta	ils:					Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream SMH4	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint	length:	Total length: 173.5	Length 173.5	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Date N	te cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratinç	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	5	10				1	2					
3	0	0	10	2500	2	0	0	10	4221	3.333333	20	2.5
4	0	0				2	8					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/23 SMH3 SMH3-SMH4

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		nferential cation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	25	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH3 -SMH4 AMH at 0.0 ft (D).jpg			USHM SMH3
0.0	68	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH3 -SMH4 MWL at 0.0 ft (D).jpg			
0.4	82	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH3 -SMH4 MWM at 0.4 ft (D).jpg	O&M		
59.3	330	MWLS	S01				10				SAN BERNARDINO VALLEY COLLEGE-SMH3 -SMH4 MWLS at 59.3 ft (D).jpg	S	2	
62.5	390	MCU	S02								SAN BERNARDINO VALLEY COLLEGE-SMH3 -SMH4 MCU at 62.5 ft (D).jpg	O&M	4	
71.3	466	MCU	F02									O&M	4	
82.1	518	MWLS	F01				10				SAN BERNARDINO VALLEY COLLEGE-SMH3 -SMH4 MWLS at 82.1 ft (D).jpg	S	2	
89.5	591	TBC			8				12		SAN BERNARDINO VALLEY COLLEGE-SMH3 -SMH4 TBC at 89.5 ft (D).jpg	O&M	2	

National Plant Services, Inc. 1461 Harbor Avenue Long Beach, Ca. 90813

Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/23 SMH3 SMH3-SMH4

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V: Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
90.4	673	TFC			8				9		SAN BERNARDINO VALLEY COLLEGE-SMH3 -SMH4 TFC at 90.4 ft (D).jpg			
173.5	1028	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH3 -SMH4 AMH at 173.5 ft (D).jpg			DSMH SMH4

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACF	' Sewei	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage are	e <b>a</b> :	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/23	12:26	Street: SOUTH MT	VERNON ST			City: SAN BEF	RNARDINO	
Location detai	ls:					Upstream manh	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use: S	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 117.3	Length 117.3	surveyed:	Year laid:	Year rei	newed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	2	4				0	0					
3	0	0	4	2200	2	0	0	4	4100	4	8	2.666667
4	0	0				1	4					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/23 SMH4 SMH4-SMH6

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint	Circum Loc	nferential cation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	25	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH4 -SMH6 AMH at 0.0 ft (D).jpg			USMH SMH4
0.0	61	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 -SMH6 MWL at 0.0 ft (D).jpg			
0.0	74	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 -SMH6 MWM at 0.0 ft (D).jpg	O&M		
8.6	138	MWLS	S01				10					S	2	
15.4	198	MCU	S02								SAN BERNARDINO VALLEY COLLEGE-SMH4 -SMH6 MCU at 15.4 ft (D).jpg	O&M	4	
20.1	267	MCU	F02								SAN BERNARDINO VALLEY COLLEGE-SMH4 -SMH6 MCU at 20.1 ft (D).jpg	O&M	4	
20.8	301	MWLS	F01				10				SAN BERNARDINO VALLEY COLLEGE-SMH4 -SMH6 MWLS at 20.8 ft (D).jpg	S	2	
82.7	580	TFA			6				9		SAN BERNARDINO VALLEY COLLEGE-SMH4 -SMH6 TFA at 82.7 ft (D).jpg			

National Plant Services, Inc. 1461 Harbor Avenue Long Beach, Ca. 90813

Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/23 SMH4 SMH4-SMH6

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	S/M/L		alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
				1st	2nd			At/From	to				
117.3	787	AMH											DSMH SMH6

PACP Sewer Report Friday, February 12, 2016 2:47 PM Page 3 of 3

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACE	<sup>9</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0	lo: 7001103	Owner:			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segm SMH6-SM			rt date/time: 15/09/24	07:16	Street: EUREKA AV	/E			City: SAN BEN	NARDINO	
Location deta	ils:					Upstream manh	nole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream SMH7	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use: S	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint	ength:	Total length: 119.6	Length 119.6	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Date	te cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurad	cy:
Grade	Amount of Structu Defects	Structural Iral Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH6 SMH6-SMH7

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Inches		%	Joint	Loc	ferential ation	Image Ref.	Family	Rating	Remarks
0.0	30	АМН			1st	2nd			At/From	to	SAN BERNARDINO VALLEY COLLEGE-SMH6 -SMH7 AMH at 0.0 ft (D).jpg			USMH SMH6
0.0	76	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH6 -SMH7 MWL at 5.0 ft (D).jpg			
5.0	94	MWM					5					O&M		
31.1	284	MMC									SAN BERNARDINO VALLEY COLLEGE-SMH6 -SMH7 MMC at 31.1 ft (D).jpg			APPEARS THAT A LINER WAS PUT IN CIPP
71.1	515	MMC									SAN BERNARDINO VALLEY COLLEGE-SMH6 -SMH7 MMC at 71.1 ft (D).jpg			LINER ENDS CIPP BACK TO PVC
92.0	656	TFA			8				3		SAN BERNARDINO VALLEY COLLEGE-SMH6 -SMH7 TFA at 92.0 ft (D).jpg			
119.6	791	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH6 -SMH7 AMH at 119.6 ft (D).jpg			DSMH SMH7

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEI	R	Certificate N U-815-0		Owner: SBVC	;		Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/24	07:48	Street: EUREKA AV	E SBVC PARK	ING LOT		City: SAN BEF	RNARDINO	
Location detail	ls:					Upstream manh SMH7	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape: Material: Ln. method PVC  Sewer category: Pre-cleaning Date cleaned:			Pipe joint I	ength:	Total length: 52.3	Length 52.3	surveyed:	Year laid:	Year re	enewed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipes Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ig O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

National Plant Services, Inc. 1461 Harbor Avenue Long Beach, Ca. 90813

Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH7 SMH7-SMH8

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	30	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH7 -SMH8 AMH at 0.0 ft (D).jpg			USMH SMH7
0.0	88	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH7 -SMH8 MWL at 5.0 ft (D).jpg			
5.0	110	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH7 -SMH8 MWM at 5.0 ft (D).jpg	O&M		
52.3	286	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH7 -SMH8 AMH at 52.3 ft (D).jpg			DSMH SMH8

1461 Harbor Avenue

Long Beach, Ca. 90813 Office: 562-436-7600



					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLER	?	Certificate No U-815-07		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/24	08:30	Street:	R			City: SAN BEN	NARDINO	
Location detail	s:					Upstream manh SMH9	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 203.8	Length 203.8	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S	J ,	Pre-cleaning Date	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	
Grade	Amount of Structure Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0		-		0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH9 SMH9-SMH10

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				_
0.0	27	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH9 -SMH10 AMH at 0.0 ft (D).jpg			USMH SMH9
0.0	69	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH9 -SMH10 MWL at 0.0 ft (D).jpg			
0.0	95	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH9 -SMH10 MWM at 0.0 ft (D).jpg	O&M		
203.8	688	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH9 -SMH10 AMH at 203.8 ft (D).jpg			DSMH SMH10

Long Beach, Ca. 90813



					PACE	<sup>o</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0	o: 7001103	Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/24	08:50	Street:	RIVE SBVC			City: SAN BEN	NARDINO	
Location deta	ils:					Upstream manh SMH10	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream SMH11	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint	length:	Total length: 272.3	Length 272.3	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Date	te cleaned:	Weather:	Location code C	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratino	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

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Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH10 SMH10-SMH11

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V: Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	25	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH1 0-SMH11 AMH at 0.0 ft (D).jpg			USMH SMH10
0.0	69	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH1 0-SMH11 MWL at 0.8 ft (D).jpg			
0.0	100	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH1 0-SMH11 MWM at 0.0 ft (D).jpg	O&M		
272.3	887	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH1 0-SMH11 AMH at 272.3 ft (D).jpg			DSMH SMH11

Long Beach, Ca. 90813



					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	e <b>a</b> :	SI	neet number:
Work order:	Pipeline segme			rt date/time: 15/09/24	09:59	Street:	RIVE SBVC			City: SAN BEN	NARDINO	
Location detai	ls:					Upstream manh SMH11	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		ewer use: S	Direction:	Flow contro	Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 275.9	Length 275.9	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	y:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	20	40				0	0					
3	0	0	40	2C00	2	0	0	32	4800	4	72	2.571429
4	0	0				8	32					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH11 SMH11-SMH12

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	31	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH1 1-SMH12 AMH at 0.0 ft (D).jpg			USMH SMH11
0.0	64	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH1 1-SMH12 MWL at 0.0 ft (D).jpg			
0.0	76	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH1 1-SMH12 MWM at 0.0 ft (D).jpg	O&M		
174.7	533	MWLS	S01				10					S	2	
214.4	681	MCU	S02								SAN BERNARDINO VALLEY COLLEGE-SMH1 1-SMH12 MCU at 214.4 ft (D).jpg	O&M	4	
221.5	738	MCU	F02								SAN BERNARDINO VALLEY COLLEGE-SMH1 1-SMH12 MCU at 221.5 ft (D).jpg	O&M	4	
240.9	813	MCU	S03									O&M	4	
275.8	1063	MCU	F03									O&M	4	
275.9	1086	MWLS	F01				10					S	2	

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Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH11 SMH11-SMH12

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	S/M/L	V: Inches	alue (mm)	%	Joint		erential ation	Image Ref.	Family	Rating	Remarks
				1st	2nd			At/From	to				
275.9	1131	АМН								SAN BERNARDINO VALLEY COLLEGE-SMH1 1-SMH12 AMH at 275.9 ft (D).jpg			DSMH SMH12 THE MANHOLE IS BURIED NOT ABLE TO LOCATE

Long Beach, Ca. 90813



					PACP	<sup>o</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segm SMH20-SI			rt date/time: 15/09/24	11:37	Street: K STREET S	SBVC CUSTOD	IAL STORAG	Ξ	City: SAN BEN	IARDINO	
Location deta	ils:					Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream SMH16	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint	length:	Total length: 53.8	Length 53.3	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Dat	te cleaned:	Weather:	Location code C	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurad	ey:
Grade	Amount of Structu Defects	Structural Iral Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratinç	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH20 SMH20-SMH16

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	36	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH16 AMH at 0.0 ft (U).jpg			DSMH SMH20
0.0	77	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH16 MWL at 0.0 ft (U).jpg			
0.2	96	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH16 MWM at 0.2 ft (U).jpg			
46.1	229	TFA			10				9		SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH16 TFA at 46.1 ft (U).jpg			
53.3	292	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH16 AMH at 53.3 ft (U).jpg			USMH SMH16

Long Beach, Ca. 90813



					PACE	<sup>o</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/24	11:48	Street: K STREET S	SBVC CUSTOD	IAL STORAG	Ξ	City: SAN BEN	IARDINO	
Location deta	ils:					Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream SMH15	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint	ength:	Total length: 195.5	Length 195.5	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Date	te cleaned:	Weather:	Location code C	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH16 SMH16-SMH15

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	42	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH1 6-SMH15 AMH at 0.0 ft (U).jpg			DSMH SMH16
0.0	86	MWL					10							
0.0	102	MWM					10				SAN BERNARDINO VALLEY COLLEGE-SMH1 6-SMH15 MWM at 0.0 ft (U).jpg	O&M		
29.9	203	TF			8				2		SAN BERNARDINO VALLEY COLLEGE-SMH1 6-SMH15 TF at 29.9 ft (U).jpg			
195.5	696	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH1 6-SMH15 AMH at 195.5 ft (U).jpg			USMH SMH15

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEI	R	Certificate N U-815-0		Owner: SBVC	;		Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/24	12:06	Street: K STREET S	SBVC CUSTOD	IAL STORAG	Ε	City: SAN BEI	NARDINO	
Location detai	ls:					Upstream manh SMH15	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction: U	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 345.6	Length 345.4	surveyed:	Year laid:	Year re	enewed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurad	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipes Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH15 SMH15-SMH14

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	35	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH1 5-SMH14 AMH at 0.0 ft (U).jpg			DSMH SMH15
0.0	80	MWL					10				SAN BERNARDINO VALLEY COLLEGE-SMH1 5-SMH14 MWL at 0.0 ft (U).jpg			
0.0	106	MWM					10				SAN BERNARDINO VALLEY COLLEGE-SMH1 5-SMH14 MWM at 0.0 ft (U).jpg			
345.4	913	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH1 5-SMH14 AMH at 345.4 ft (U).jpg			DSMH SMH14

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					PACF	Sewel	r Repor	t				
Surveyed by: R.ZIEGLEI	R	Certificate No.		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/24	12:28	Street: K STREET C	CUSTODIAL ST	ORAGE		City: SAN BE	NARDINO	
Location detai	ls:					Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 184.1	Length 184.0	surveyed: )	Year laid:	Year re	enewed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Date	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurac	:y:
Grade	Amount of Structu Defects	Structural Iral Structural Segment Grade	Structural Pipe! Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ig O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

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Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH14 SMH14-SMH13

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	70	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH1 4-SMH13 AMH at 0.0 ft (U).jpg			DSMH SMH14
0.0	116	MWL					10				SAN BERNARDINO VALLEY COLLEGE-SMH1 4-SMH13 MWL at 0.0 ft (U).jpg			
0.0	129	MWM					10				SAN BERNARDINO VALLEY COLLEGE-SMH1 4-SMH13 MWM at 0.0 ft (U).jpg	O&M		
184.0	567	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH1 4-SMH13 AMH at 184.0 ft (U).jpg			USMH SMH13 AGAINST THE FLOW

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					PACE	'Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0	o: 7001103	Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segm SMH20-SI			rt date/time: 15/09/24	13:12	Street: K STREET S	SBVC CUSTOD	IAL STORAG	E	City: SAN BEN	IARDINO	
Location deta	ils:					Upstream manh SMH20	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream SMH21	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 140.6	Length 140.6	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Date	te cleaned:	Weather:	Location code C	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	cy:
Grade	Amount of Structu Defects	Structural Iral Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/24 SMH20 SMH20-SMH21

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	25	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH21 AMH at 0.0 ft (D).jpg			USMH SMH20
0.0	47	MWL					5							
0.0	60	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH21 MWM at 0.0 ft (D).jpg			
28.5	176	TF			8				12		SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH21 TF at 28.5 ft (D).jpg			
140.6	556	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH21 AMH at 140.6 ft (D).jpg			DSMH SMH21

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACE	Sewe	r Repor	t				
Surveyed by: R.ZIEGLER	?	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segmen			rt date/time: 15/09/25	06:59	Street: K STREET S	SBVC CUSTOD	IAL STORAG	E AREA	City: SAN BEI	NARDINO	
Location detail	ls:					Upstream manh SMH16	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	rol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint	length:	Total length: 2.9	Length	surveyed:	Year laid:	Year re	enewed:	Media label:
Purpose: S	9 ,	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accura	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	5	5100	5	5	5
4	0	0				0	0					
5	0	0				1	5					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH16 SMH16-SMH44

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		iferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	26	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH1 6-SMH44 AMH at 0.0 ft (U).jpg			DSMH SMH16 AGAINST THE FLOW
0.0	67	MWL					5							
2.9	195	MWM					5					O&M		
2.9	214	OBZ					10 0		12	12		O&M	5	CONCRETE COMPLETLY BLOCKING THE PIPE
2.9	281	MSA												BLOCKED WITH CONCRETE 100%

Long Beach, Ca. 90813



					PACF	<sup>9</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segm SMH21-SI			rt date/time: 15/09/25	07:57	Street: K STREET S	SBVC			City: SAN BEN	NARDINO	
Location deta	ils:					Upstream manh	nole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream SMH22	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use: S	Direction:	Flow contr	ol: Height:
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint	length:	Total length: 305.0	Length 305.0	surveyed: )	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Date	te cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurad	ey:
Grade	Amount of Structu Defects	Structural Iral Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratinç	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH21 SMH21-SMH22

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	23	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH2 1-SMH22 AMH at 0.0 ft (D).jpg			USMH SMH21
0.0	54	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH2 1-SMH22 MWL at 0.0 ft (D).jpg			
0.0	67	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH2 1-SMH22 MWM at 0.0 ft (D).jpg	O&M		
305.0	709	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH2 1-SMH22 AMH at 305.0 ft (D).jpg			DSMH SMH22

Long Beach, Ca. 90813



					PACE	Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage are	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/25	08:20	Street: K STREET				City: SAN BEN	NARDINO	
Location detai	ls:					Upstream manh SMH22	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use: S	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 205.1	Length 205.1	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH22 SMH22-SMH23

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V: Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	22	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH2 2-SMH23 AMH at 0.0 ft (D).jpg			USMH SMH22
0.0	53	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH2 2-SMH23 MWL at 0.0 ft (D).jpg			
0.0	65	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH2 2-SMH23 MWM at 0.0 ft (D).jpg	O&M		
205.1	412	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH2 2-SMH23 AMH at 205.1 ft (D).jpg			DSMH SMH23

1461 Harbor Avenue

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					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage are	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/25	08:54	Street: GRANT AVE				City: SAN BEN	NARDINO	
Location detai	ils:					Upstream manh SMH59	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		ewer use: S	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 125.2	Length 125.2	surveyed: 2	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratinç	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH59 SMH59SMH23

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	27	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH23 AMH at 0.0 ft (D).jpg			USMH SMH59
0.0	63	MWL					10				SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH23 MWL at 0.0 ft (D).jpg			
0.0	80	MWM					10				SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH23 MWM at 0.0 ft (D).jpg	O&M		
125.2	404	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH23 AMH at 125.2 ft (D).jpg			DSMH SHM23

Long Beach, Ca. 90813



					PACE	Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage are	e <b>a</b> :	S	heet number:
Work order:	Pipeline segm SMH59-SI			rt date/time: 15/09/25	09:10	Street: GRANT AVE	<u> </u>			City: SAN BEN	NARDINO	
Location detai	ls:					Upstream manh SMH59	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use: S	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint	ength:	Total length: 238.3	Length 238.3	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH59 SMH59-SMH58

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	30	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH58 AMH at 0.0 ft (U).jpg			USMH SMH59 AGAINST THE FLOW
0.0	74	MWL					10				SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH58 MWL at 0.0 ft (U).jpg			
0.0	97	MWM					10				SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH58 MWM at 0.0 ft (U).jpg	O&M		
18.1	237	MGO									SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH58 MGO at 18.1 ft (U).jpg			LOOKS LIKE THE PIPE IS OFFSET AND CONNECTED WITH SOME SORT OF GASKET
21.7	413	MGO									SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH58 MGO at 21.7 ft (U).jpg			LOOKS LIKE THE PIPE JOINT IS CUT AND A GASKET IS SEALING THE TWO JOINTS TOGETHER
238.3	985	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH58 AMH at 238.3 ft (U).jpg			DSMH SMH58 AGAINST THE FLOW

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Long Beach, Ca. 90813



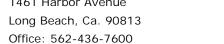
					PACE	Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage are	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/25	10:18	Street: GRANT AVE	SBVC			City: SAN BEN	IARDINO	
Location detai	ls:					Upstream manh SMH59	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use: S	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 29.0	Length 29.0	surveyed:	Year laid:	Year rei	newed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	4	4100	4	4	4
4	0	0				1	4					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH59 SMH59-SMH41

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	26	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH41 AMH at 0.0 ft (U).jpg			USMH SMH59 AGAINST THE FLOW
0.0	88	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH41 MWL at 0.0 ft (U).jpg			
0.0	114	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH41 MWM at 0.0 ft (U).jpg	O&M		
27.1	189	LR					45				SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH41 LR at 27.1 ft (U).jpg	O&M	4	
29.0	240	MSA									SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH41 MSA at 29.0 ft (U).jpg			THE CRAWER COULD NOT MAKE THE BEND

1461 Harbor Avenue





					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEI	R	Certificate N U-815-0		Owner: SBVC	;		Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/25	11:00	Street: GRANT AVE	SBVC			City: SAN BEI	NARDINO	
Location detai	ls:					Upstream manh SMH41	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 5.0	Length 4.3	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural Iral Structural Segment Grade	Structural Pipes Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	4	4100	4	4	4
4	0	0				1	4					
5	0	0				0	0					

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Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH41 SMH41-SMH59

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Inches		%	Joint	Loca	ferential ation	Image Ref.	Family	Rating	Remarks
0.0	27	АМН			1st	2nd			At/From	to	SAN BERNARDINO VALLEY COLLEGE-SMH4 1-SMH59 AMH at 0.0 ft (D).jpg			USMH SMH41
0.0	61	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 1-SMH59 MWL at 0.0 ft (D).jpg			
0.0	95	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 1-SMH59 MWM at 0.0 ft (D).jpg	O&M		
4.3	215	LL					45				SAN BERNARDINO VALLEY COLLEGE-SMH4 1-SMH59 LL at 4.3 ft (D).jpg	O&M	4	
5.0	243	MSA									SAN BERNARDINO VALLEY COLLEGE-SMH4 1-SMH59 MSA at 4.3 ft (D).jpg			THE CAMERA CANNOT MAKE THE TURN FLIPPED OVER ON ITS SIDE





					PACE	<sup>o</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLER	?	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/25	11:19	Street: GRANT AVE	E SBVC			City: SAN BEN	NARDINO	
Location detail	S:					Upstream manh SMH41	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		sewer use:	Direction: U	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 6.0	Length	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Dat	te cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	cy:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index	Ove Overall Pipe Rating	rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	4	4100	4	4	4
4	0	0				1	4					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH41 SMH41-SMH34

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		iferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	29	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH4 1-SMH34 AMH at 0.0 ft (U).jpg			USMH SMH41
0.0	69	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 1-SMH34 MWL at 0.0 ft (U).jpg			
0.0	80	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 1-SMH34 MWM at 0.0 ft (U).jpg	O&M		
5.3	118	MMC									SAN BERNARDINO VALLEY COLLEGE-SMH4 1-SMH34 MMC at 5.3 ft (U).jpg			PVC TO VCP
5.8	228	OBZ					30		4	8		O&M	4	DEBRIS BLOCKING THE CAMERA
6.0	351	MSA									SAN BERNARDINO VALLEY COLLEGE-SMH4 1-SMH34 MSA at 6.0 ft (U).jpg			DEBRIS ARE PREVENTING CAMERA FROM GOING ANY FURTHER INTO THE PIPE

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					PACF	Sewel	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate No.		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/25	12:15	Street: GRANT AVE	SBVC PARKII	NG LOT		City: SAN BE	NARDINO	
Location detail						Upstream manh	ole No:		Rim to	) invert:	Grade to invert:	Rim to grade:
Downstream r	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use: SS	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 189.7	Length 189.7	surveyed:	Year laid:	Year re	enewed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Date	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurad	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe! Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0		-		0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH45 SMH45-SMH46

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	30	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH4 5-SMH46 AMH at 0.0 ft (D).jpg			USMH SMH45 WITH THE FLOW
0.0	79	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 5-SMH46 MWL at 0.0 ft (D).jpg			
0.0	101	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 5-SMH46 MWM at 0.0 ft (D).jpg	O&M		
189.7	511	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH4 5-SMH46 AMH at 189.7 ft (D).jpg			DSMH SMH46

1461 Harbor Avenue

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					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEI	R	Certificate N U-815-0		Owner: SBVC	;		Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/25	12:28	Street: GRANT AVE	SBVC PARKII	NG LOT		City: SAN BEI	NARDINO	
Location detail						Upstream manh SMH46	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 237.4	Length 237.4	surveyed:	Year laid:	Year re	enewed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipes Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ig O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH46 SMH46-SMH47

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				_
0.0	27	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH4 6-SMH47 AMH at 0.0 ft (D).jpg			USMH SMH46
0.0	57	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 6-SMH47 MWL at 0.0 ft (D).jpg			
0.0	70	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 6-SMH47 MWM at 0.0 ft (D).jpg	O&M		
237.4	572	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH4 6-SMH47 AMH at 237.4 ft (D).jpg			DSMH SMH47

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACE	Sewel	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate No.		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/25	12:42	Street: GRANT AVE	SBVC PARKII	NG LOT		City: SAN BEI	NARDINO	
Location detail						Upstream manh	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 266.4	Length 266.4	surveyed:	Year laid:	Year re	enewed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Date	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural Iral Structural Segment Grade	Structural Pipe! Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

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Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH47 SMH47-SMH48

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	30	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH4 7-SMH48 AMH at 0.0 ft (D).jpg			USMH SMH47
0.0	62	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 7-SMH48 MWL at 0.1 ft (D).jpg			
0.1	76	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 7-SMH48 MWM at 0.1 ft (D).jpg	O&M		
266.4	618	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH4 7-SMH48 AMH at 266.4 ft (D).jpg			DSMH SMH48

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEI	R	Certificate N U-815-0		Owner: SBVC	;		Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/25	13:03	Street: GRANT AVE	SBVC PARKII	NG LOT		City: SAN BEI	NARDINO	
Location detail						Upstream manh SMH48	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 116.1	Length 116.1	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipes Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ng O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH48 SMH48-SMH56

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	26	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH56 AMH at 0.0 ft (D).jpg			USMH SMH48
0.0	47	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH56 MWL at 0.0 ft (D).jpg			
0.0	69	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH56 MWM at 0.0 ft (D).jpg	O&M		
116.1	923	MSA												LOSS OF TRACTION GOING TO DO A REVERSE SETUP

National Plant Services, Inc. 1461 Harbor Avenue

Long Beach, Ca. 90813



					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner: SBVC	:		Survey Customer SBVC		Drainage are	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/25	14:15	Street: GRANT AVE	SBVC PARKII	NG LOT		City: SAN BEN	IARDINO	
Location detail						Upstream manh SMH56	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream I	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use: S	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 105.9	Length 105.9	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurad	cy:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				1	1					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	1	1100	1	1	1
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH56 SMH56-SMH57

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	27	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH5 6-SMH57 AMH at 0.0 ft (D).jpg			USMH SMH56
0.0	63	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH5 6-SMH57 MWL at 0.0 ft (D).jpg			
0.0	74	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH5 6-SMH57 MWM at 0.0 ft (D).jpg	O&M		
61.7	243	LR					10				SAN BERNARDINO VALLEY COLLEGE-SMH5 6-SMH57 LR at 61.7 ft (D).jpg	O&M	1	
105.9	373	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH5 6-SMH57 AMH at 105.9 ft (D).jpg			DSMH SMH57

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACF	Sewel	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage are	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/25	14:30	Street: GRANT AVE	SBVC PARKII	NG LOT		City: SAN BEN	NARDINO	
Location detai						Upstream manh	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use: S	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 194.0	Length 194.0	surveyed: )	Year laid:	Year rei	newed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH56 SMH56-SMH48

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	45	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH5 6-SMH48 AMH at 0.0 ft (U).jpg			USMH SMH56 REVERSE
0.0	85	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH5 6-SMH48 MWL at 0.0 ft (U).jpg			
0.0	96	MWM					5					O&M		
194.0	503	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH5 6-SMH48 AMH at 194.0 ft (U).jpg			DSMH SMH48 REVERSE SETUP

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEI	R	Certificate No.		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/25	15:29	Street: GRANT AVE	E PARKING LO	Т		City: SAN BEI	NARDINO	
Location detail						Upstream manh SMH48	nole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream r	manhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction: U	Flow contr	Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 208.0	Length 208.8	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Date	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	:y:
Grade	Amount of Structu Defects	Structural Iral Structural Segment Grade	Structural Pipes Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	g O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	4	8				38	76					
3	0	0	8	2400	2	0	0	76	2F00	2	84	2
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH48 SMH48-SMH55

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0		АМН									SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH55 AMH at 0.0 ft (U).jpg			USMH SMH48
0.0		MWL					10				SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH55 MWL at 0.0 ft (U).jpg			
0.0		MWM					10				SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH55 MWM at 0.0 ft (U).jpg	O&M		
0.0		OBZ	S01				10		6		SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH55 OBZ at 0.0 ft (U).jpg	O&M	2	WASTE,DIRT,MISC
176.9		VR			5						SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH55 VR at 176.9 ft (U).jpg	O&M	2	MOUSE
185.8		MWLS	S02				10				SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH55 MWLS at 185.8 ft (U).jpg	S	2	
185.8		OBZ	F01				10		6		SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH55 OBZ at 185.8 ft (U).jpg	O&M	2	WASTE,DIRT,MISC

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Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH48 SMH48-SMH55

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches 1st	alue (mm) 2nd	%	Joint	ferential ation to	Image Ref.	Family	Rating	Remarks
207.5		MWLS	F02				10			SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH55 MWLS at 207.5 ft (U).jpg	S	2	
208.8		АМН								SAN BERNARDINO VALLEY COLLEGE-SMH4 8-SMH55 AMH at 208.8 ft (U).jpg			DSMH SMH55

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACF	Sewel	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate No.		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/25	15:51	Street: GRANT AVE	SBVC PARKIN	NG LOT		City: SAN BE	NARDINO	
Location detail						Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream r	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use: SS	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 148.1	Length	surveyed:	Year laid:	Year re	enewed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Date	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	ey:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe! Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ig O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0		-		0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH55 SMH55-SMH54

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	32	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH5 5-SMH54 AMH at 0.0 ft (U).jpg			USMH SMH55
0.0	68	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH5 5-SMH54 MWL at 0.0 ft (U).jpg			
0.0	80	MWM					5				SAN BERNARDINO VALLEY COLLEGE-SMH5 5-SMH54 MWM at 0.0 ft (U).jpg	O&M		
147.0	501	MMC									SAN BERNARDINO VALLEY COLLEGE-SMH5 5-SMH54 MMC at 147.0 ft (U).jpg			PVC TO RCP
148.1	563	MGO									SAN BERNARDINO VALLEY COLLEGE-SMH5 5-SMH54 MGO at 148.1 ft (U).jpg			THE PIPE IS CAPPED WITH CONCRETE
148.1	711	MSA												THE PIPE IS CAPPED NO MANHOLE UNSURE IF THIS WAS SMH 54

1461 Harbor Avenue

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					PACE	Sewel	r Repor	t				
Surveyed by: R.ZIEGLE	R	Certificate No.		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			t date/time: 15/09/25	16:48	Street: GRANT AVE	SBVC PARKII	NG LOT		City: SAN BE	NARDINO	
Location detail						Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream r	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use: SS	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 16.3	Length 16.3	surveyed:	Year laid:	Year re	enewed:	Media label:
Purpose: S	Sewer category:	Pre-cleaning Date	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	:y:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipes Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ig O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	1	1		-		0	0					
2	0	0				0	0					
3	0	0	1	1100	1	0	0	0	0000	0	1	1
4	0	0				0	0					
5	0	0				0	0					

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Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/25 SMH36 SMH36-SMH31

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	34	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH3 6-SMH31 AMH at 0.0 ft (U).jpg			USMH SMH36
0.0	80	MWL					5				SAN BERNARDINO VALLEY COLLEGE-SMH3 6-SMH31 MWL at 0.0 ft (U).jpg			
0.0	90	MWM					5					O&M		
0.0	121	JAM		М							SAN BERNARDINO VALLEY COLLEGE-SMH3 6-SMH31 JAM at 0.0 ft (U).jpg	S	1	
16.3	216	AMH												DSMH SMH31

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					PACE	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEF	₹	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme SMH2-SOU	nt ref: JTH LATERAL		rt date/time: 15/09/30	08:58	Street: MT VERNO	N NEAR STUDE	ENT SERVICI	ES	City: SAN BEN	NARDINO	
Location detail NEAR STU	s: DENT SERVICE	S				Upstream manh SMH2	nole No:		Rim t	o invert:	Grade to invert:	Rim to grade:
Downstream m				Rim to inv	ert:	Grade to invert	: Rim to gr		Sewer use: SS	Direction:	Flow contr	ol: Height:
Width:  Purpose: S G	,	Material: PVC  Pre-cleaning Dat N	Ln. method:	Pipe joint I  Weather:	ength:  Location code		0.0	surveyed:	Year laid:	Year re		Media label:
G		Easting:		Northir			E TRUCK WHE			CATED	GPS accurac	
Starting	access point:				•							
Grade	Amount of Structur Defects	Structural al Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	ng O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH2 SMH2-SOUTH LATERAL

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L		/alue s (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	69	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH2 -SOUTH LATERAL AMH at 0.0 ft (U).jpg			USMH SMH2 CANNOT TELEVISE DUE TO LOCATION OF MH
0.0	141	MWL					0				SAN BERNARDINO VALLEY COLLEGE-SMH2 -SOUTH LATERAL MWL at 0.0 ft (U).jpg			CANNOT TELEVISE DUE TO LOCATION OF MH
0.0	175	MSA												CANNOT TELEVISE DUE TO LOCATION OF MANHOLE WHICH IS LOCATED INSIDE THE WALK WAY OF STUDENTS

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACE	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEF	?	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage ar	ea:	s	heet number:
Work order:	Pipeline segmer			rt date/time: 15/09/30	09:06	Street: MT VERNO	N NEAR HEALT	H AND LIFE	SCIENCES	City: SAN BEN	NARDINO	
Location detail	S:					Upstream manh SMH4	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		ewer use: SS	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length 0.0	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code F		info: OT CCTV DUE T	O THE LOCA	TION OF TH	НЕ МН		
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	/stem:	GPS accurad	ey:
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH4 SMH4-SMH5

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Inches		%	Joint	Loca	ferential ation	Image Ref.	Family	Rating	Remarks
0.0	61	АМН			1st	2nd			At/From	to	SAN BERNARDINO VALLEY COLLEGE-SMH4 -SMH5 AMH at 0.0 ft (U).jpg			USMH SMH4 CANNOT CCTV DUE TO THE LOCATION OF THE MAN HOLE
0.0	104	MWL					0				SAN BERNARDINO VALLEY COLLEGE-SMH4 -SMH5 MWL at 0.0 ft (U).jpg			
0.0	123	MSA												CANNOT CCTV DUE TO THE LOCATION OF THE MAN HOLE THIS VIDEO IS JUST FOR REFERNCE

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Long Beach, Ca. 90813



					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLEF	₹	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segmer SECTION A GOING SOI	-7-LATERAL		rt date/time: 15/09/30	09:15	Street: MT VERNOR	N			City: SAN BEN	IARDINO	
NEAR CON	s: ISTRUCTION PC	RTABLES				Upstream manh			Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream m	nanhole No: GOING SOUTH			Rim to inve	ert:	Grade to invert:	Rim to gr		iewer use:	Direction:	Flow contro	ol: Height:
Width:	Shape: C Sewer category:	Material: PVC  Pre-cleaning Dat	Ln. method:	Pipe joint I  Weather:	ength:  Location code	THIS S	0.0	surveyed:	Year laid:	Year rei	newed:	Media label:
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurac	y:
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

National Plant Services, Inc. 1461 Harbor Avenue Long Beach, Ca. 90813

Office: 562-436-7600



Surveyed by: R.ZIEGLER

Owner: SBVC

Start date/time: 2015/09/30

Upstream manhole No: SECTION A-7

Pipeline segment ref:

Sheet number:

SECTION A-7-LATERAL GOING SOUTH

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Inches		%	Joint	Loc	ferential ation	Image Ref.	Family	Rating	Remarks
0.0	80	АМН			1st	2nd			At/From	to	SAN BERNARDINO VALLEY COLLEGE-SECTI ON A-7-LATERAL GOING SOUTH AMH at 0.0 ft (U).jpg			USMH IN SECTION A-7 UNABLE TO CCTV DUE TO THE LOCATION OF THE LATERAL AND HAVE NO MANHOLE TO ACCESS THIS LATERAL
0.0	186	MWL					0				SAN BERNARDINO VALLEY COLLEGE-SECTI ON A-7-LATERAL GOING SOUTH MWL at 0.0 ft (U).jpg			
0.0	196	MSA												UNABLE TO CCTV DUE TO THE LOCATION OF THE LATERAL NO ACCESS POINT MAY BE ABLE TO LATERAL LAUNCH BUT THIS VIDEO IS JUST FOR REFERENCE

National Plant Services, Inc. 1461 Harbor Avenue

Long Beach, Ca. 90813



					PACP	Sewe	r Report	t				
Surveyed by: R.ZIEGLER	?	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segmer SECTION C	nt ref: :1-GOING EAS		rt date/time: 15/09/30	09:27	Street: ESPERANZA BUILDING	A STREET JUST	Γ WEST OF F	URTURE TE	CH SAN BEN	NARDINO	
Location detail	S:					Upstream manh SECTION C			Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n				Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction: U	Flow contr	ol: Height:
Width:  Purpose: S	Shape: C sewer category: F	Material: PVC Pre-cleaning Dat	Ln. method:	Pipe joint I  Weather:	ength:	Total length: 0.0  Additional	0.0	surveyed:	Year laid:	Year re	newed:	Media label:
G		N Date	e cicaned.	1	C		IDEO IS JUST	A REFERENC	CE AND WAS	S NOT CCTV'ED	DUE TO NO	T HAVEING
Starting	access point:	Easting:		Northin	ng:		Elevation:		Coordinate sy	rstem:	GPS accurac	
Grade	Amount of Structura Defects	Structural Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

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Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number:

R.ZIEGLER SBVC 2015/09/30 SECTION C1 SECTION C1-GOING EAST

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	52	АМН									SAN BERNARDINO VALLEY COLLEGE-SECTI ON C1-GOING EAST AMH at 0.0 ft (U).jpg			USMH SECTION C-1 GOING EAST AGAINST THE FLOW, THE VIDEO IS JUST FOR REFERENCE
0.0	105	MWL					0				SAN BERNARDINO VALLEY COLLEGE-SECTI ON C1-GOING EAST MWL at 0.0 ft (U).jpg			
0.0	118	MSA												THIS SECTION C-1 WAS NOT CCTV'ED DUE TO NOT HAVEING ACCESS THIS VIDEO IS JUST FOR REFERENCE

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					PACF	<sup>9</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLE		Certificate N U-815-0	lo: 7001103	Owner: SBCV	,		Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segm SMH14-G	ent ref: OING EAST		rt date/time: 15/09/30	09:34	Street: K STREET				City: SAN BEN	NARDINO	
Location deta	ils:					Upstream manh SMH14	nole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream GOING E				Rim to inv	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length 0.0	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose:	Sewer category:	Pre-cleaning Date	te cleaned:	Weather:	Location code			JIRED CANN	OT CCTV TH	IIS VIDEO IS J	UST FOR REF	ERENCE
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurac	ey:
Grade	Amount of Structu Defects	Structural Iral Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

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Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBCV 2015/09/30 SMH14 SMH14-GOING EAST

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	89	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH1 4-GOING EAST AMH at 0.0 ft (U).jpg			USMH AGAINST THE FLOW, MANHOLE IS BUIRED CANNOT CCTV THIS SECTION
0.0	136	MWL					0				SAN BERNARDINO VALLEY COLLEGE-SMH1 4-GOING EAST MWL at 0.0 ft (U).jpg			MANHOLE IS BUIRED CANNOT CCTV THIS SECTION
0.0	153	MSA												MANHOLE IS BUIRED CANNOT CCTV THIS SECTION, THIS VIDEO IS JUST FOR REFERNCE

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Long Beach, Ca. 90813



					PACE	<sup>9</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLEF	?	Certificate N U-815-0	o: 7001103	Owner: SBVC			Survey Customer SBVC		Drainage ar	rea:	s	heet number:
Work order:	Pipeline segmen			rt date/time: 15/09/30	09:45	Street: NEAR THE	CUSTODIAL ST	TORAGE ARE	ΞA	City: SAN BEN	NARDINO	
Location detail	s:					Upstream manh SMH44	nole No:		Rim t	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert:	: Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:  Purpose: S		Material: PVC  Pre-cleaning Dat N	Ln. method:	Pipe joint I  Weather:	ength:  Location code	NOT CO	0.0 I info: CTV'ED DUE TO			Year re		Media label: SMH44 THIS
Starting	access point:	Easting:		Northir	ng:	VIDEO	IS JUST A REF		CTION A-18 Coordinate sy		GPS accurac	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index	Ove Overall Pipe Rating	rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH44 SMH44-SMH43

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint	Circumf Loca	erential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	49	AMH												USMH SMH44-SMH43 CANNOT CCTV THIS SECTION DUE TO NOT HAVING ACCESS PLEASE REFFER TO VIDEO SMH16-SMH44.THI S VIDEO IS JUST A REFERENCE
0.0	163	MWL					0				SAN BERNARDINO VALLEY COLLEGE-SMH4 4-SMH43 MWL at 0.0 ft (U).jpg			VIDEO IS JUST A REFERENCE
0.0	191	MSA												THIS VIDEO IS JUST A REFERENCE DID NOT CCTV DUE TO NOT HAVING ACCESSS

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					PACF	<sup>9</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLER	?	Certificate N U-815-0	o: 7001103	Owner: SBVC			Survey Customer SBVC		Drainage ar	rea:	S	heet number:
Work order:	Pipeline segme SMH43-SN			rt date/time: 15/09/30	09:54	Street: NEAR THE	CUSTODIAL ST	TORAGE ARE	ĒΑ	City: SAN BEN	IARDINO	
Location detail	s: AL STORAGE AR	REA				Upstream manh SMH43	nole No:		Rim t	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert	: Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape: C Sewer category:	Material: PVC Pre-cleaning Date	Ln. method:	Pipe joint I  Weather:	ength:	Total length:  0.0  Additional	0.0	surveyed:	Year laid:	Year re	newed:	Media label:
G	, ,	N Ball	e dicuried.	1	G	THIS L				HAVING ACCES	S THIS IS SE	CTION A-17
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	/stem:	GPS accurac	
Grade	Amount of Structur Defects	Structural al Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	ng O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0	1				
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH43 SMH43-SMH42

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Inches		%	Joint	Loc	ferential ation	Image Ref.	Family	Rating	Remarks
0.0	33	АМН			1st	2nd			At/From	to	SAN BERNARDINO VALLEY COLLEGE-SMH4 3-SMH42 AMH at 0.0 ft (U).jpg			USMH SMH43-DSMH SMH42 NO ACCESS. VIDEO JUST FOR REFERENCE
0.0	99	MWL					0							
0.0	110	MSA												THIS WAS NOT CCTV'ED DUE TO ACESS PLEASE REFFER BACK TO VIDEO SMH16-SMH44. THIS VIDEO IS JUST FOR REFERENCE

1461 Harbor Avenue

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					PACE	Sewe	r Repor	t				
Surveyed by: R.ZIEGLER	₹	Certificate N U-815-0		Owner: SBVC	;		Survey Customer SBVC		Drainage ar	ea:	SI	neet number:
Work order:	Pipeline segmen			rt date/time: 15/09/30	10:00	Street: NEAR THE	CUSTODIAL ST	TORAGE ARE	ĒA	City: SAN BEI	NARDINO	
Location detail	s: AL STORAGE AR	EA				Upstream manh SMH42	nole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		Sewer use: SS	Direction:	Flow contro	DI: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code	THIS L	INE WAS NOT			S JUST FOR RE NO ACCESS TO		
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurac	y:
Grade	Amount of Structure Defects	Structural al Structural Segment Grade	Structural Pipe: Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH42 SMH42-SMH19

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	64	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH4 2-SMH19 AMH at 0.0 ft (U).jpg			USMH SMH42 NO ACCESS THIS VIDEO IS JUST FOR REFERENCE
0.0	108	MWL					0							
0.0	116	MSA												THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE

1461 Harbor Avenue

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					PACE	<sup>9</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLER	R	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/30	10:10	Street: NEAR THE	CUSTODIAL S	ΓORAGE ARI	ΞA	City: SAN BEF	RNARDINO	
Location detail	<sub>ls:</sub> AL STORAGE AF	REA				Upstream manh SMH19	oole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	manhole No:			Rim to inv	ert:	Grade to invert	Rim to gr		Sewer use: SS	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint	length:	Total length: 0.0	Length 0.0	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S	J ,	Pre-cleaning Date	te cleaned:	Weather:	Location code	THIS L			JE TO NOT H	AVING ACCES	S. THIS VIDE	O IS JUST
Starting	access point:	Easting:		Northii	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	y:
Grade	Amount of Structur Defects	Structural al Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ng O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0	1				
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH19 SMH19-SMH18

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V. Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	34	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH1 9-SMH18 AMH at 0.0 ft (U).jpg			USMH SMH19 SECTION A-15
0.0	68	MWL					0							
0.0	76	MSA												THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE SECTION A-15

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					PACE	<sup>9</sup> Sewe	r Report	t				
Surveyed by: R.ZIEGLEF	?	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme SMH41-LA NORTH	nt ref: TERAL GOING		rt date/time: 15/09/30	10:20	Street: NEAR THE	CHILD DEVELO	PMENT ARE	A	City: SAN BEN	IARDINO	
Location detail	s: CHILD DEVELO	OPMENT AREA				Upstream manh SMH41	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No: GOING NORTH			Rim to inve	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length s	surveyed:	Year laid:	Year rei	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code	THIS L		CCTV'ED DU	IE TO NOT H	IAVING ACCES	S. THIS VIDE	EO IS JUST
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurac	
Grade	Amount of Structure Defects	Structural al Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

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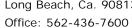
Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number:

R.ZIEGLER SBVC 2015/09/30 SMH41 SMH41-LATERAL GOING NORTH

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	34	АМН									SAN BERNARDINO VALLEY COLLEGE-SMH4 1-LATERAL GOING NORTH AMH at 0.0 ft (U).jpg			USMH MH41 GOING NORTH. THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE
0.0	78	MWL					0							
0.0	95	MSA												THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE

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					PACE	<sup>o</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLER	?	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	rea:	S	heet number:
Work order:	Pipeline segmen			rt date/time: 15/09/30	10:29	Street: EAST PARK	(ING LOT OF M	EDIA/COMM	IUNICATION	City: SAN BEN	NARDINO	
Location detail	s: RKING LOT OF M	MEDIA/COMMU	JNICATION	S		Upstream manh SMH35	nole No:		Rim t	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert	: Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length 0.0	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code	THIS L	INE WAS NOT			HAVING ACCES OR REFERENCE		
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	ystem:	GPS accurad	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH35 SMH35-SMH34

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	46	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH3 5-SMH34 AMH at 0.0 ft (U).jpg			USMH SMH35-SMH34 THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS,BLOKING TRAFFIC. THIS VIDEO IS JUST FOR REFERENCE
0.0	101	MWL					0							
0.0	110	MSA												THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS, DUE TO BLOCKING TRAFFIC. THIS VIDEO IS JUST FOR REFERENCE

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					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLER	₹	Certificate N U-815-0	o: 7001103	Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme SMH34-SN			rt date/time: 15/09/30	10:34	Street: EAST PARK	(ING LOT FOR	MEDIA/COM	MUNICATIO	City: NS SAN BEN	NARDINO	
Location detail EAST PAR	s: KING LOT FOR	MEDIA/COMM	UNICATION	IS		Upstream manh SMH34	nole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert	: Rim to gr		Sewer use: SS	Direction:	Flow contr	ol: Height:
Width:	Shape:	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length :	surveyed:	Year laid:	Year re	newed:	Media label:	
Purpose: S	,	Pre-cleaning Dat N	te cleaned:	Weather:	Location code	THIS L			JE TO NOT H	HAVING ACCES	S. THIS VIDE	O IS JUST
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	
Grade	Amount of Structur Defects	Structural al Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH34 SMH34-SMH33

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V. Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	41	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH3 4-SMH33 AMH at 0.0 ft (U).jpg			USMH SMH34-SMH33 THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE SECTION B-10
0.0	82	MWL					0							
0.0	92	MSA												THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-10

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLER	₹	Certificate N U-815-0	o: 7001103	Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme SMH33-SN			rt date/time: 15/09/30	10:44	Street: EAST PARK	(ING LOT FOR	MEDIA/COM	MUNICATIO	City: NS SAN BEN	NARDINO	
Location detail EAST PAR	s: KING LOT FOR	MEDIA/COMM	UNICATION	IS		Upstream manh SMH33	nole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inv	ert:	Grade to invert:	: Rim to gr		Sewer use: SS	Direction:	Flow contr	ol: Height:
Width:	Shape:	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length :	surveyed:	Year laid:	Year re	newed:	Media label:	
Purpose: S		Pre-cleaning Dat	te cleaned:	Weather:	Location code	THIS L			JE TO NOT H	HAVING ACCES	S. THIS VIDE	O IS JUST
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	_
Grade	Amount of Structur Defects	Structural al Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index	Ove Overall Pipe Rating	rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH33 SMH33-SMH32

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches 1st	alue (mm) 2nd	%	Joint	iferential ation to	Image Ref.	Family	Rating	Remarks
0.0	33	АМН											USMH SMH33-SMH32 THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE SECTION B-9
0.0	106	MWL					0						THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-9
0.0	135	MSA											THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE.SEC TION B-9

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					PACE	<sup>9</sup> Sewe	r Report	t				
Surveyed by: R.ZIEGLER	2	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage ar	ea:	s	heet number:
Work order:	Pipeline segme SMH32-GC CLEAN OU	ING NORTHT		rt date/time: 15/09/30	10:51	Street: NEAR LIBE	RAL ARTS BUII	LDING		City: SAN BEN	IARDINO	
Location detail	ls:					Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No: DRTHTO A CLEA	N OUT		Rim to inve	ert:	Grade to invert:	Rim to gr		sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length :	surveyed:	Year laid:	Year rei	newed:	Media label:	
Purpose: S	Sewer category:	e cleaned:	Weather:	Location code	THIS L			IE TO NOT H	IAVING ACCES	S. THIS VIDE	EO IS JUST	
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurad	
Grade	Amount of Structur Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

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Surveyed by: R.ZIEGLER Owner: SBVC

Start date/time: 2015/09/30 Upstream manhole No: SMH32

Pipeline segment ref:

Sheet number:

SMH32-GOING NORTHTO A CLEAN OUT

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V: Inches 1st	alue (mm) 2nd	%	Joint	ferential ation to	Image Ref.	Family	Rating	Remarks
0.0	32	AMH								SAN BERNARDINO VALLEY COLLEGE-SMH3 2-GOING NORTHTO A CLEAN OUT AMH at 0.0 ft (U).jpg			THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-8
0.0	54	MWL					0			SAN BERNARDINO VALLEY COLLEGE-SMH3 2-GOING NORTHTO A CLEAN OUT MWL at 0.0 ft (U).jpg			THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-8
0.0	85	MSA											THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-8

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					PACE	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEF	?	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme SMH27-SM			rt date/time: 15/09/30	10:57	Street: GRANT AVE	E NEAR AUTOP	ARTS STORE	Ξ	City: SAN BEN	NARDINO	
Location detail	s:					Upstream manh SMH27	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length 0.0	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code D	THIS L	INE WAS NOT			HAVING ACCES IAD A LOCKED		
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurac	
Grade	Amount of Structur Defects	Structural al Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0	]				
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH27 SMH27-SMH28

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches 1st	alue (mm) 2nd	%	Joint	ferential ation to	Image Ref.	Family	Rating	Remarks
0.0	45	AMH								SAN BERNARDINO VALLEY COLLEGE-SMH2 7-SMH28 AMH at 0.0 ft (D).jpg			USMH SMH27-SMH28 THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS
0.0	122	MWL					0						THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS

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Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH27 SMH27-SMH28

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V. Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	137	MSA												THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS

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					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLEF	?	Certificate N U-815-0		Owner: SBVC	,		Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segmen			rt date/time: 15/09/30	11:03	Street: GRANT AVE	E NEAR AUTO F	PARTS STOR	RE	City: SAN BEN	NARDINO	
Location detail NEAR AUT	s: O PARTS STOR	E				Upstream manh SMH28	nole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream m	nanhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		Sewer use: SS	Direction:	Flow contr	ol: Height:
Width:	Shape: C	Ln. method:	Pipe joint I	length:	Total length: 0.0	Length :	surveyed:	Year laid:	Year re	newed:	Media label:	
Purpose: S	J ,	Pre-cleaning Dat	te cleaned:	Weather:	Location code	THIS	LINE WAS NOT			HAVING ACCES IG ACCESS. SE		EO IS JUST
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	ey:
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ig O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH28 SMH28-SMH29

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches 1st	alue (mm) 2nd	%	Joint	ferential ation to	Image Ref.	Family	Rating	Remarks
0.0	42	AMH								SAN BERNARDINO VALLEY COLLEGE-SMH2 8-SMH29 AMH at 0.0 ft (D).jpg			USMH SMH28-SMH29. THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS SECTION B-5
0.0	125	MWL					0						
0.0	135	MSA											THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS. SECTION B-5

1461 Harbor Avenue

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					PACE	Sewe	r Report					
Surveyed by: R.ZIEGLEF	?	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segmer SMH29-SM			t date/time: 15/09/30	11:09	Street: GRANT AVE	Ξ			City: SAN BEF	RNARDINO	
Location detail						Upstream manh	ole No:		Rim to	invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length s	surveyed:	Year laid:	Year re	enewed:	Media label:	
Purpose: S	ŭ , '	Pre-cleaning Dat	e cleaned:	Weather:	Location code	THIS L			UE TO NOT	HAVING ACCES	SS. THIS VID	EO IS JUST
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accura	cy:
Grade	Amount of Structura Defects	Structural al Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH29 SMH29-SMH45

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V. Inches	alue (mm)	%	Joint	Location		Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	33	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH2 9-SMH45 AMH at 0.0 ft (D).jpg			USMH SMH29-SMH45 THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE SECTION B-6
0.0	92	MWL					0							
0.0	104	MSA												THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-6

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					PACF	<sup>9</sup> Sewe	r Repor	t				
Surveyed by: R.ZIEGLER	?	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/30	11:17	Street: GRANT AVE	E NEAR AUTO I	PARTS STOR	E	City: SAN BEF	RNARDINO	
	Location details: ALLEY OF AUTO PARTS STORE					Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n				Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use: Direction:		Flow contr	ol: Height:
Width:	n: Shape: Material: Ln. method		Ln. method:	Pipe joint I	ength:	Total length:	Length 0.0	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S	Sewer category: Pre-cleaning Date cleaned:			Weather:	Location code D	THIS I	INE WAS NOT	CKED CHAIN	PREVENTIN	HAVING ACCES NG ACCESS, LO		
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	/stem:	GPS accurac	cy:
Grade	Amount of Structu Defects	Structural ral Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	g O&M Quick Rating	O&M Pipe Rating Index	Ove Overall Pipe Rating	rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH27 SMH27-SMH26

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches 1st	alue (mm) 2nd	%	Joint	ferential ation to	Image Ref.	Family	Rating	Remarks
0.0	45	АМН								SAN BERNARDINO VALLEY COLLEGE-SMH2 7-SMH26 AMH at 0.0 ft (U).jpg			USMH SMH27-SMH26 THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS. B-2
0.0	95	MWL					0						
0.0	106	MSA											THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS. SECTION B-2

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					PACF	<sup>o</sup> Sewe	r Report	t				
Surveyed by: R.ZIEGLEF	?	Certificate N U-815-0		Owner: SBVC			Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segme			rt date/time: 15/09/30	11:23	Street: GRANT AVE	E NEAR AUTO F	PARTS STOR	ŀΕ	City: SAN BEF	RNARDINO	
Location detail ALLEY OF	s: AUTO PARTS S	TORE				Upstream manh SMH26	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n				Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	C PVC			Pipe joint I	Pipe joint length: Total length: Length surveyed: Year laid: Year renew 0.0 0.0				newed:	Media label:		
Purpose: S		Pre-cleaning Dat										
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	vstem:	GPS accura	-
Grade	Amount of Structur Defects	Structural ral Structural Segment Grade	Structural Pipe: Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH26 SMH26-SMH25

	Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches 1st	alue (mm) 2nd	%	Joint	iferential ation to	Image Ref.	Family	Rating	Remarks
	0.0	49	АМН								SAN BERNARDINO VALLEY COLLEGE-SMH2 6-SMH25 AMH at 0.0 ft (U).jpg			USMH SMH26-SMH25 THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS. SECTION B-2. SMH IS BUIRED
Ĭ	0.0	90	MWL					0						
	0.0	100	MSA											THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS. SECTION B-2. SMH25 IS BURIED

1461 Harbor Avenue

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					PACF	Sewe	r Repor	t				
Surveyed by: R.ZIEGLEF	?	Certificate N U-815-0		Owner: SBVC	,		Survey Customer SBVC		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segmen			rt date/time: 15/09/30	11:30	Street: GRANT AVE	E NEAR BUSIN	ESS BUILDI	NG	City: SAN BEF	RNARDINO	
Location detail NEAR BUS	s: SINESS BUILDIN	IG ON CAMPU	S			Upstream manh SMH25	nole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream m	nanhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint	length:	Total length: 0.0	Length 0.0	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S	J ,	Pre-cleaning Dat	te cleaned:	Weather:	Location code	THIS L				AVING ACCES	S ON CAMPU	S. THIS VIDEO
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	vstem:	GPS accurac	:y:
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ig O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number: R.ZIEGLER SBVC 2015/09/30 SMH25 SMH25-SMH26

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches 1st	alue (mm) 2nd	%	Joint	iferential ation to	Image Ref.	Family	Rating	Remarks
0.0	40	АМН								SAN BERNARDINO VALLEY COLLEGE-SMH2 5-SMH26 AMH at 0.0 ft (U).jpg			USMH SMH25-SMH26 THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS ON CAMPUS BETWEEN TWO BUILDINGS. THIS VIDEO IS JUST FOR REFERENCES. SECTION B-1
0.0	118	MWL					0						
0.0	128	MSA											THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS ON CAMPUS BETWEEN TWO BUILDINGS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-1

National Plant Services, Inc. 1461 Harbor Avenue

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					PACP	Sewe	r Report	t				
Surveyed by: R.ZIEGLER	₹	Certificate N U-815-0		Owner:			Survey Customer SBVC		Drainage ar	ea:	s	heet number:
Work order:	Pipeline segmer SMH25-GO TOWARD L	ING NORTH		rt date/time: 15/09/30	11:40	Street: GRANT AVE	NEAR BUSIN	ESS BUILDIN	IG	City: SAN BEF	RNARDINO	
Location details	s: JS NEAR BUSIN	ESS BUILDIN	G			Upstream manh SMH25	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream m	nanhole No: DRTH TOWARD I	ARTS		Rim to inve	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape: C ewer category:	Ln. method: e cleaned:	Pipe joint I  Weather:	ength:  Location code F	THIS L	0.0 info:	surveyed:	Year laid:	Year re HAVING ACCES D BUILDINGS.	newed:	Media label:	
Starting	Easting:				ng:		Elevation:		Coordinate sy	stem:	GPS accuracy:	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	g O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number:

R.ZIEGLER SBVC 2015/09/30 SMH25 SMH25-GOING NORTH TOWARD L.ARTS

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V: Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	63	AMH									SAN BERNARDINO VALLEY COLLEGE-SMH2 5-GOING NORTH TOWARD L.ARTS AMH at 0.0 ft (U).jpg			USMH SMH25- GOING NORTH TOWARDS THE LIBERAL ARTS BUILDING.THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS, ON CAMPUS BETWEEN TWO BUILDINGS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-1
0.0	178	MWL					0							

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Office: 562-436-7600



 Surveyed by:
 Owner:
 Start date/time:
 Upstream manhole No:
 Pipeline segment ref:

 R.ZIEGLER
 SBVC
 2015/09/30
 SMH25
 SMH25-GOING

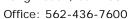
Pipeline segment ref: Sheet number:

SMH25-GOING NORTH
TOWARD L.ARTS

Distance (Feet) \ (Meters)		Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0 1	190	MSA												USMH SMH25- GOING NORTH TOWARDS THE LIBERAL ARTS BUILDING.THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS, ON CAMPUS BETWEEN TWO BUILDINGS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-1

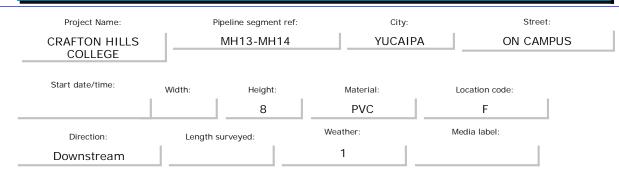
## PACP SEWER REPORTS CRAFTON HILLS COLLEGE

1461 Harbor Avenue Long Beach, Ca. 90813





## Main Inspection with Pipe-Run and Scoring

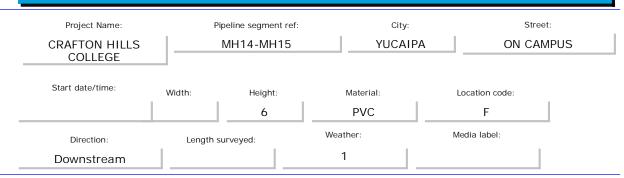




1 of

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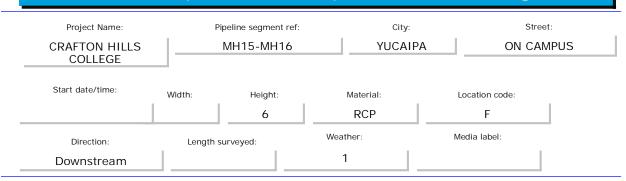




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## Main Inspection with Pipe-Run and Scoring

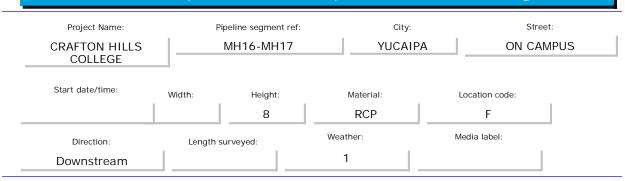




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## Main Inspection with Pipe-Run and Scoring

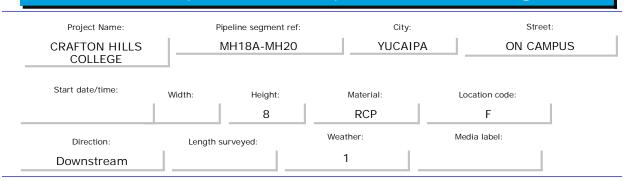




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## Main Inspection with Pipe-Run and Scoring

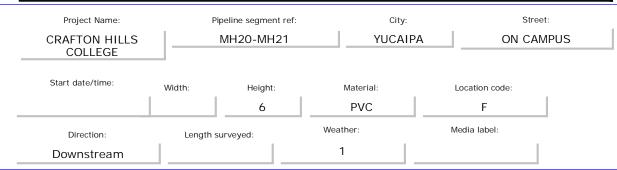




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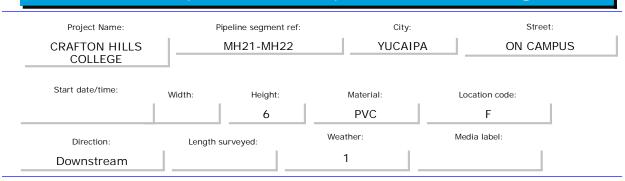






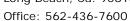
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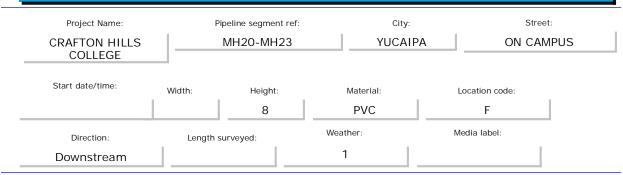




1461 Harbor Avenue Long Beach, Ca. 90813



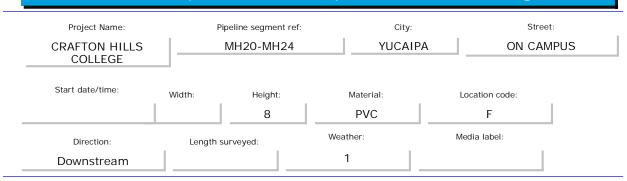






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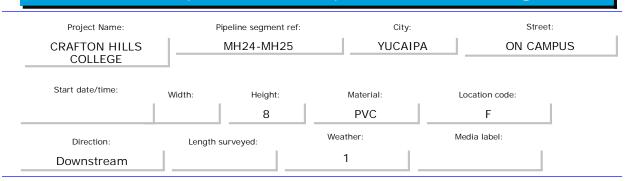






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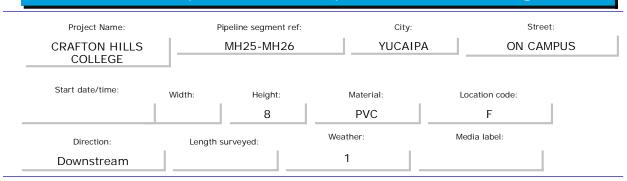






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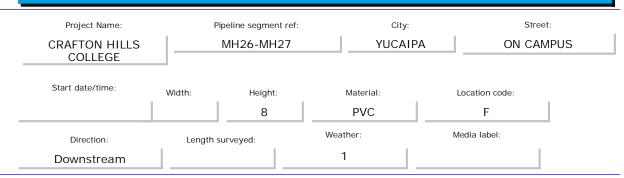






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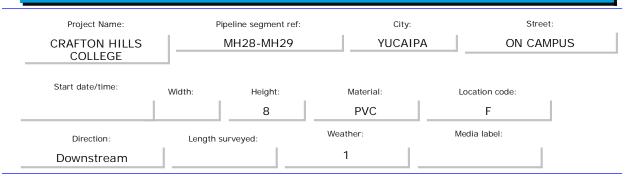




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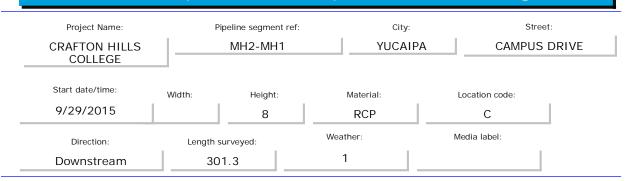


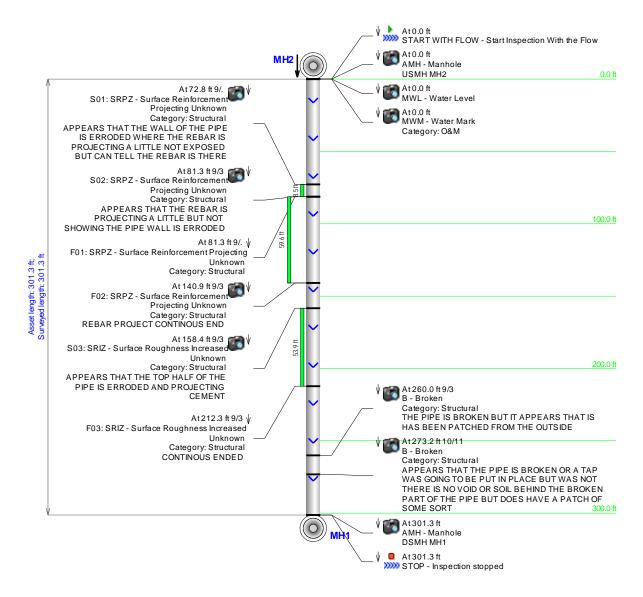


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#### Main Inspection with Pipe-Run and Scoring

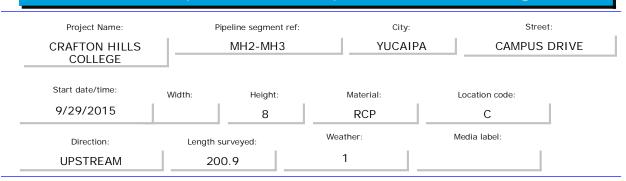


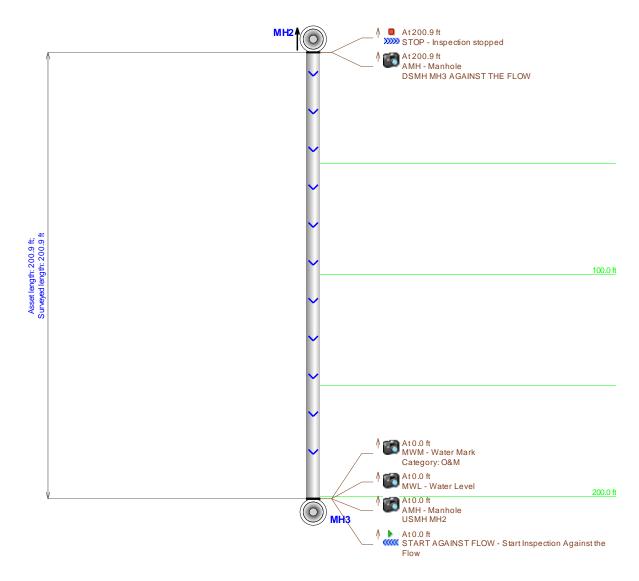


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#### Main Inspection with Pipe-Run and Scoring

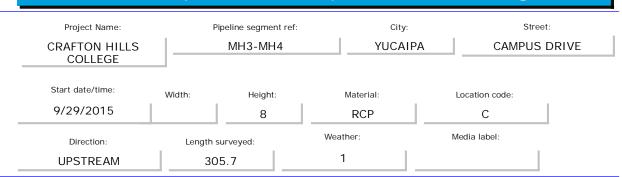


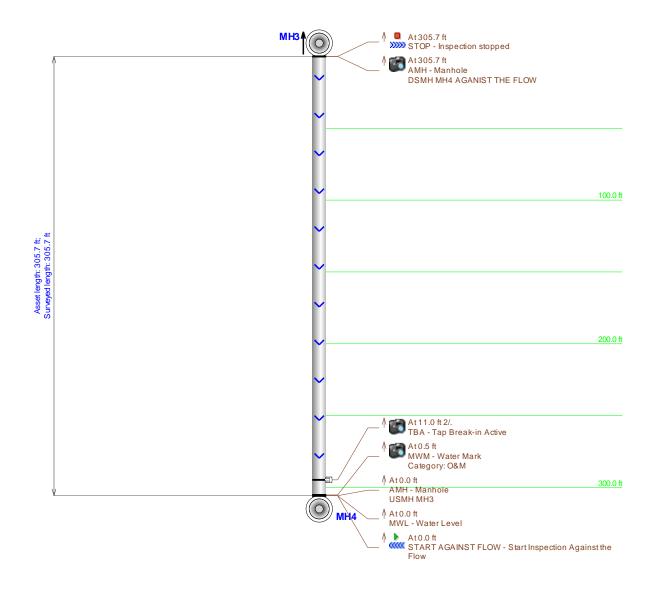


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#### Main Inspection with Pipe-Run and Scoring

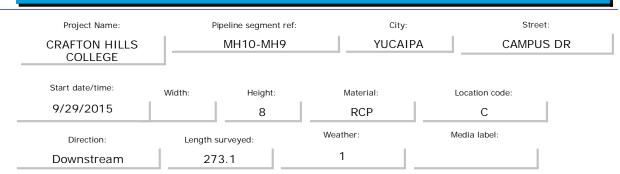


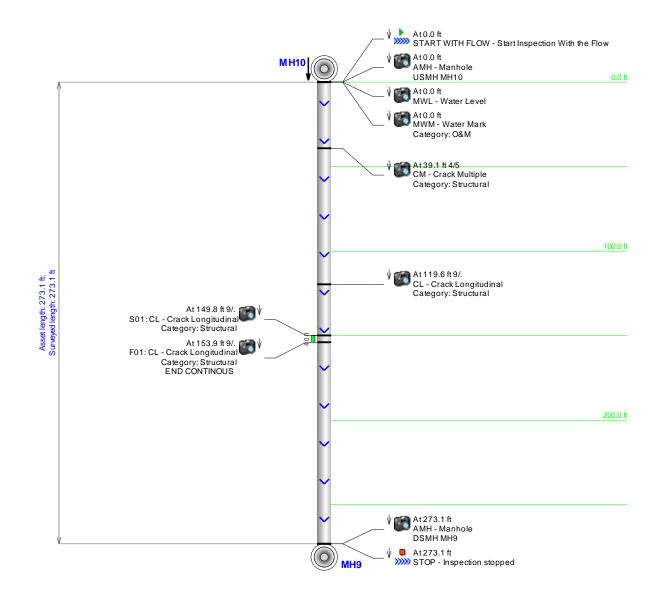


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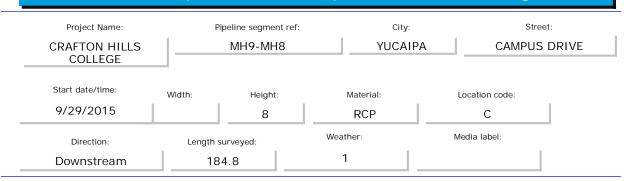
## Main Inspection with Pipe-Run and Scoring

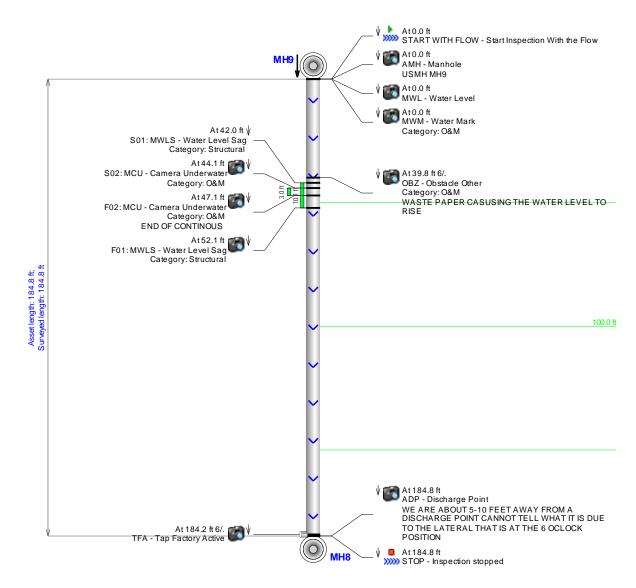




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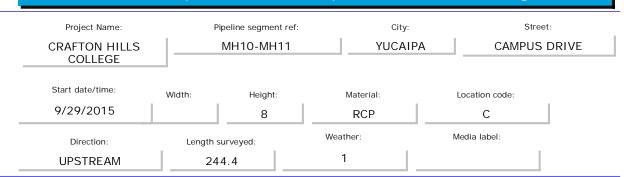


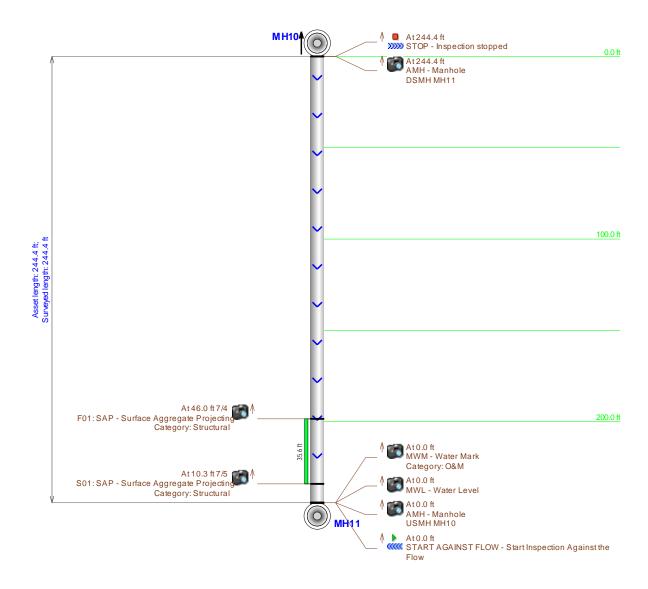
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Office: 562-436-7600



## Main Inspection with Pipe-Run and Scoring

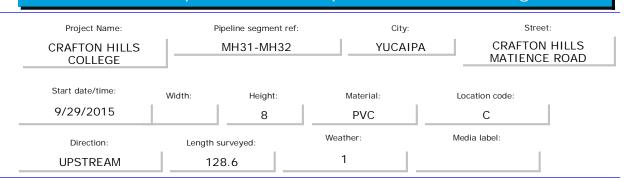


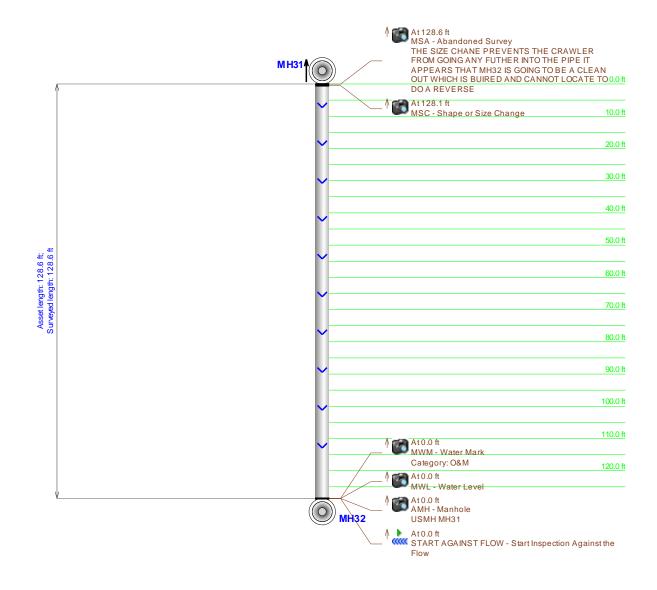


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## Main Inspection with Pipe-Run and Scoring

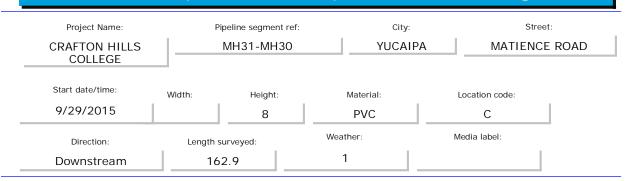


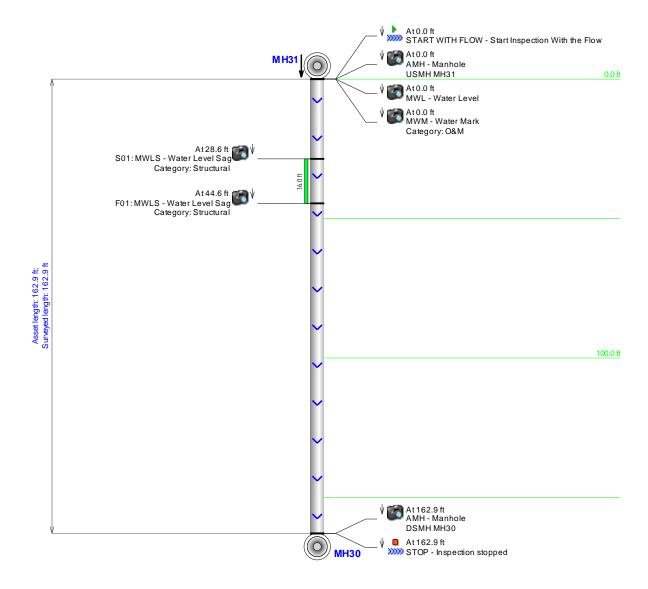


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## Main Inspection with Pipe-Run and Scoring

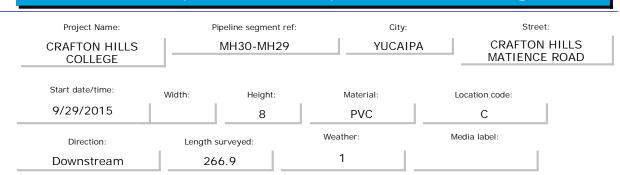


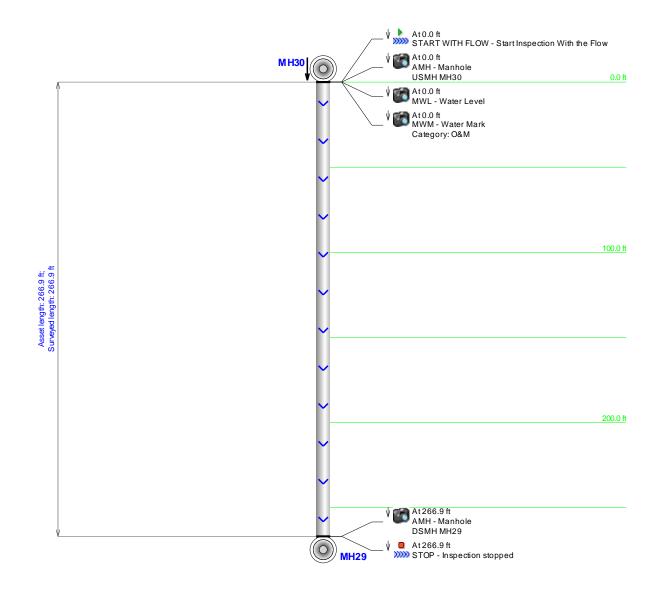


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#### Main Inspection with Pipe-Run and Scoring



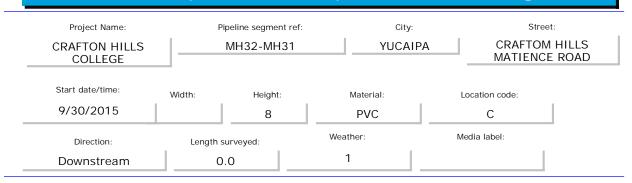


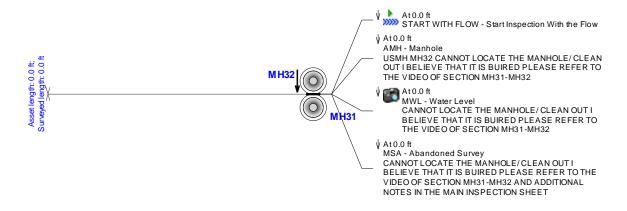
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#### Main Inspection with Pipe-Run and Scoring





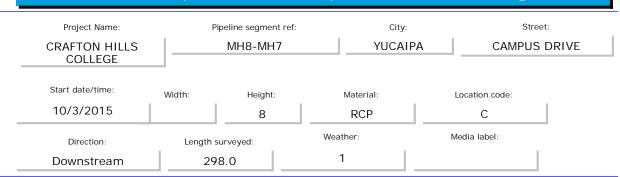
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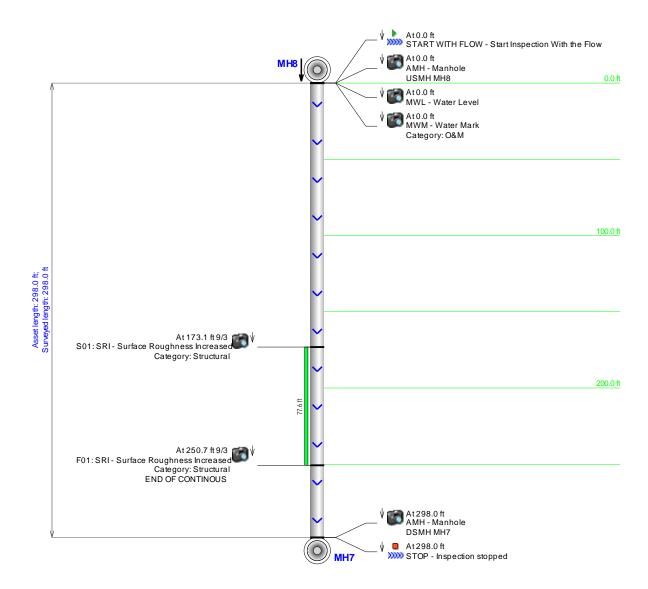
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## Main Inspection with Pipe-Run and Scoring

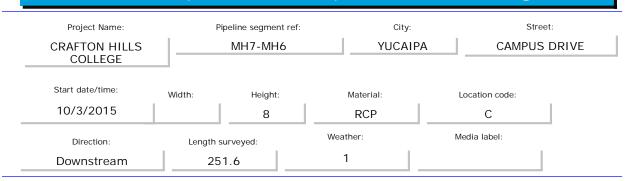


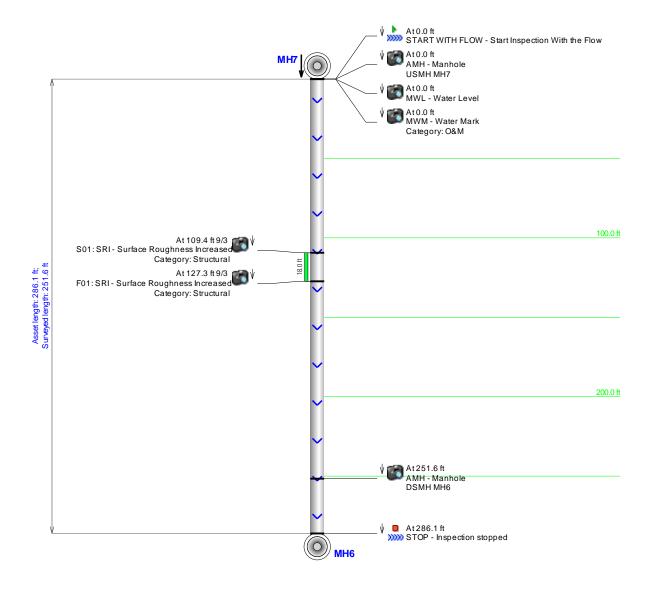


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#### Main Inspection with Pipe-Run and Scoring

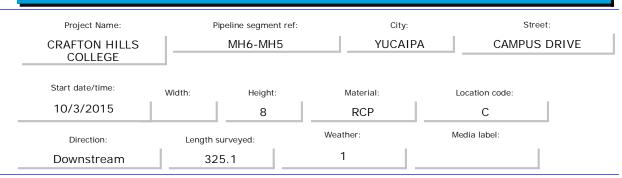


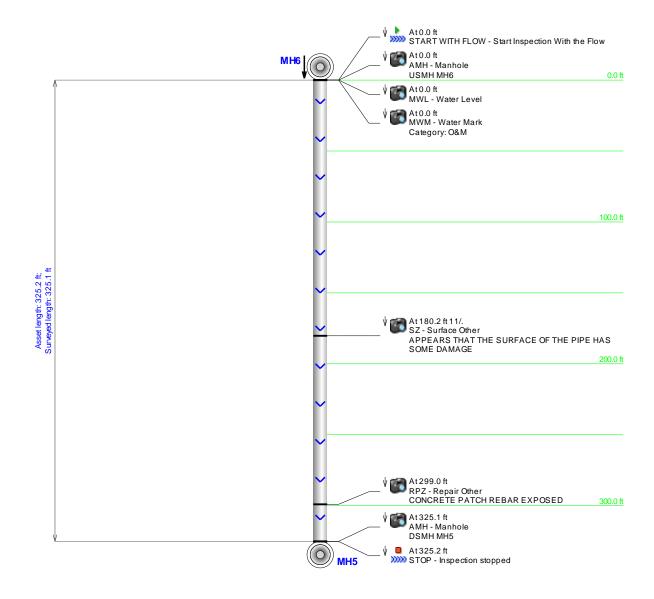


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## Main Inspection with Pipe-Run and Scoring



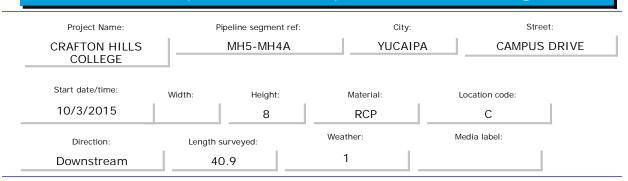


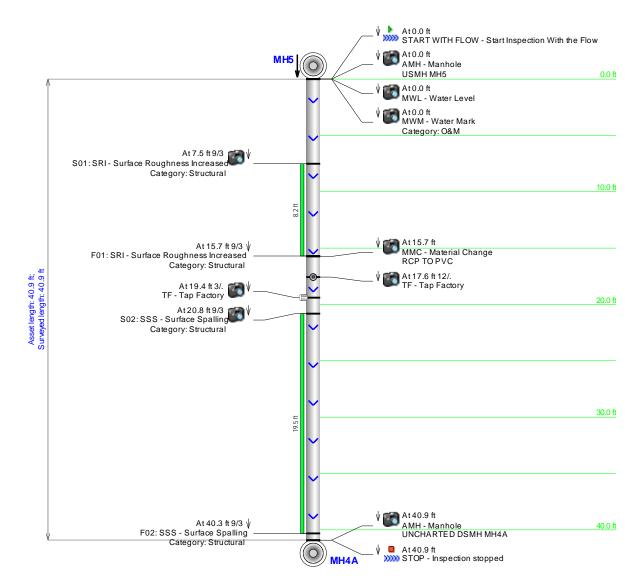
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#### Main Inspection with Pipe-Run and Scoring

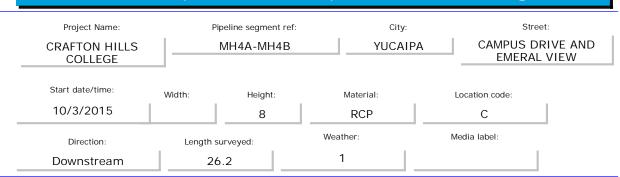


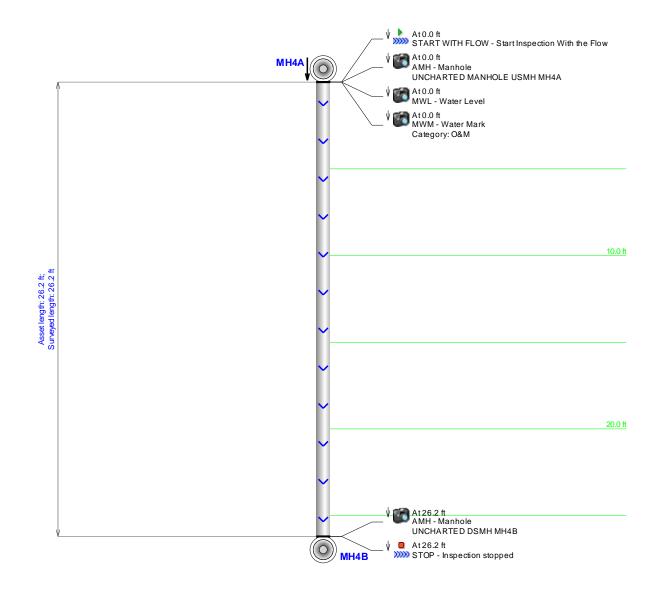


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#### Main Inspection with Pipe-Run and Scoring



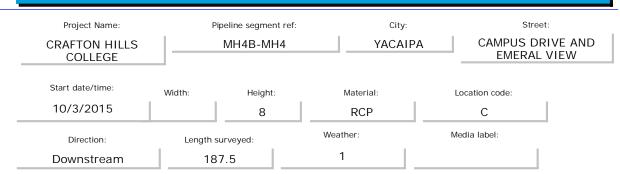


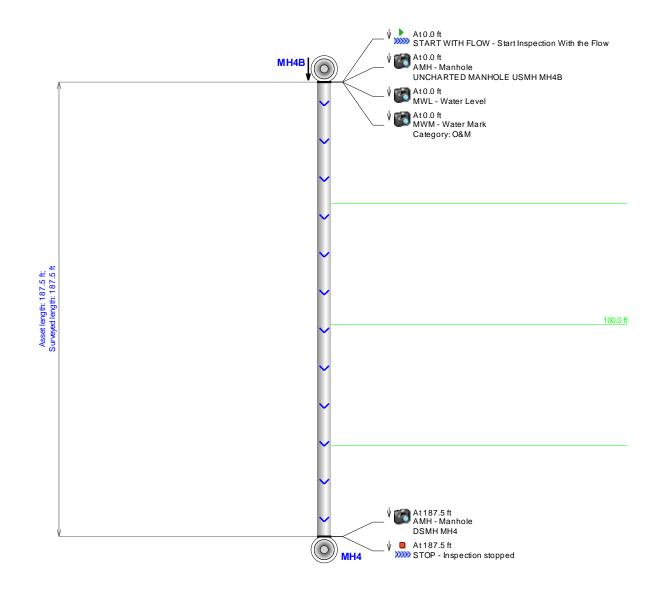
1 of

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#### Main Inspection with Pipe-Run and Scoring

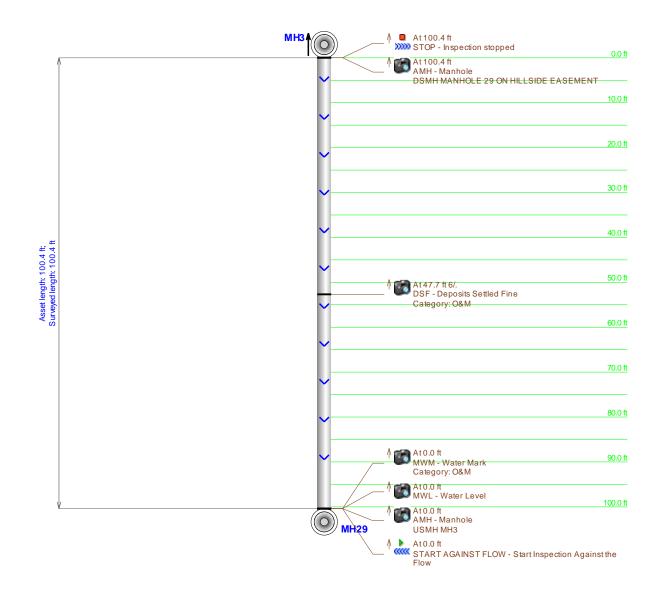




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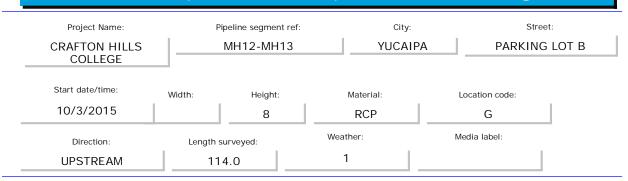
#### Main Inspection with Pipe-Run and Scoring Project Name: Pipeline segment ref: City: Street: CAMPUS ROAD AND **CRAFTON HILLS** MH3-MH29 YUCAIPA **CRAFTON HILLS** COLLEGE MATIENCE ROAD Start date/time: Width: Height: Material: Location code: 10/3/2015 8 **PVC** С Weather: Media label: Direction: Length surveyed: UPSTREAM 1 100.4

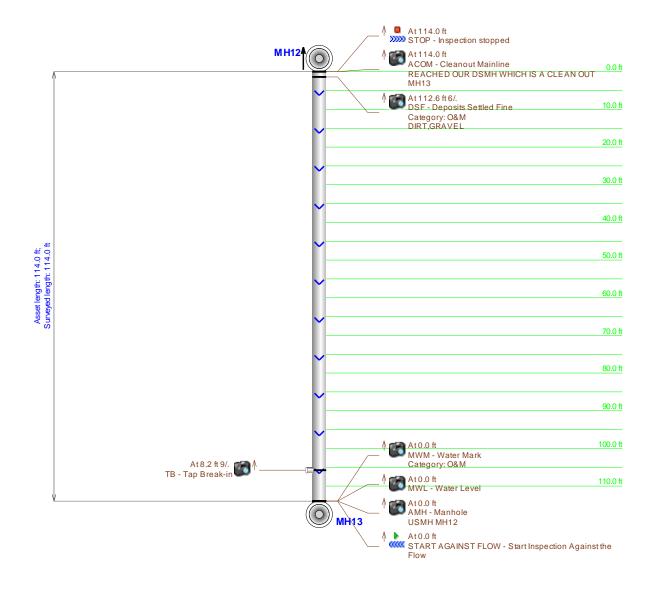


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## Main Inspection with Pipe-Run and Scoring



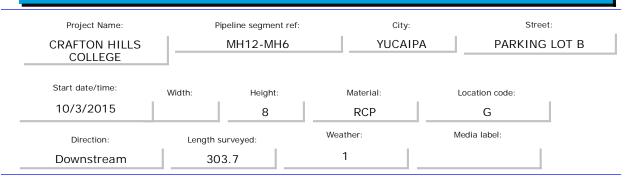


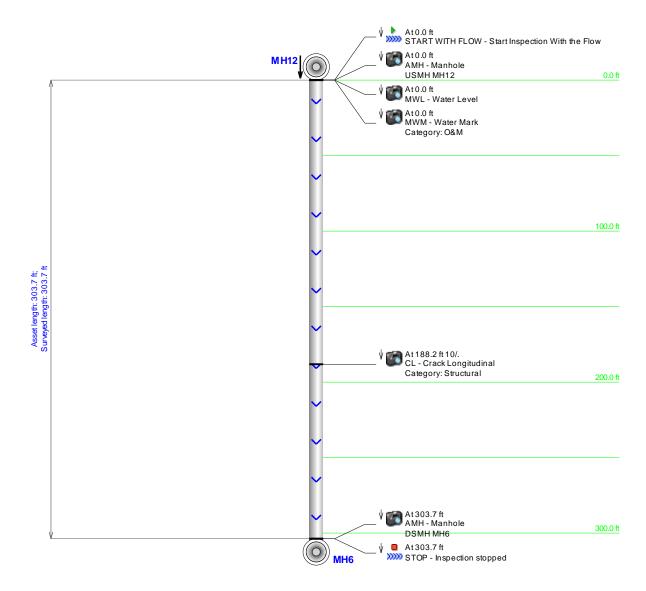
of

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#### Main Inspection with Pipe-Run and Scoring

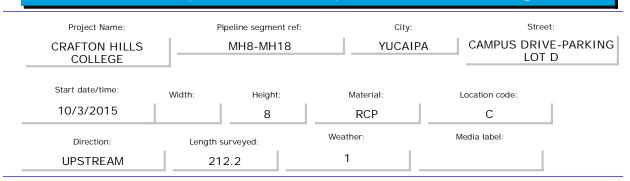


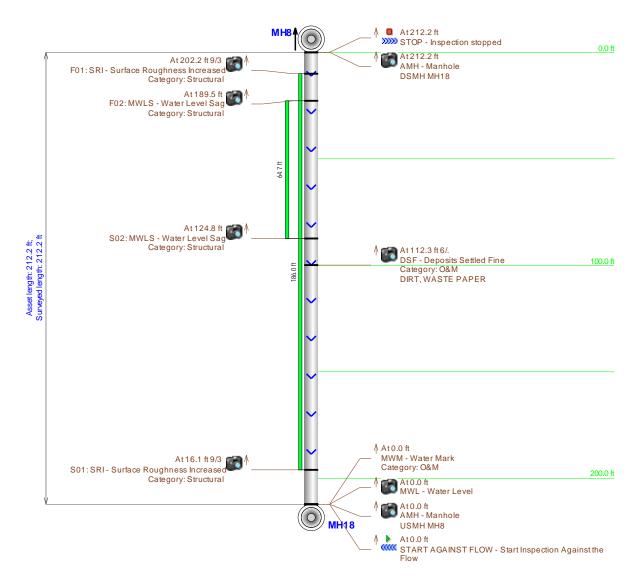


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#### Main Inspection with Pipe-Run and Scoring

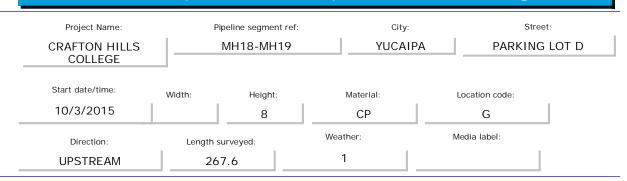


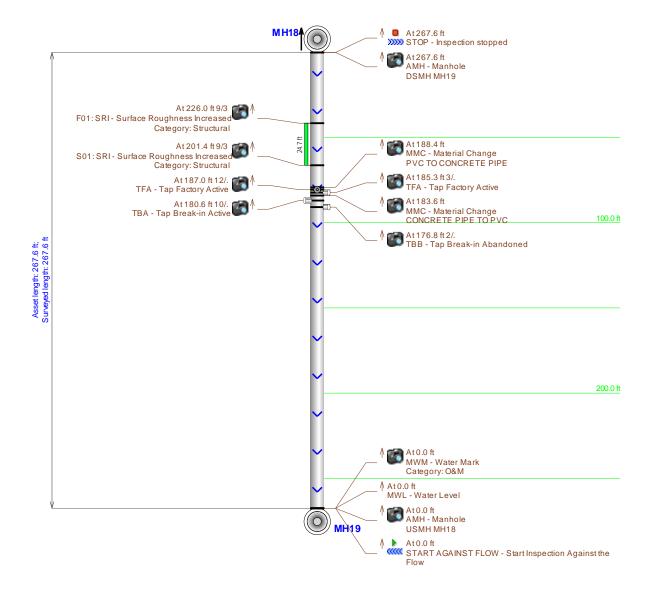


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## Main Inspection with Pipe-Run and Scoring

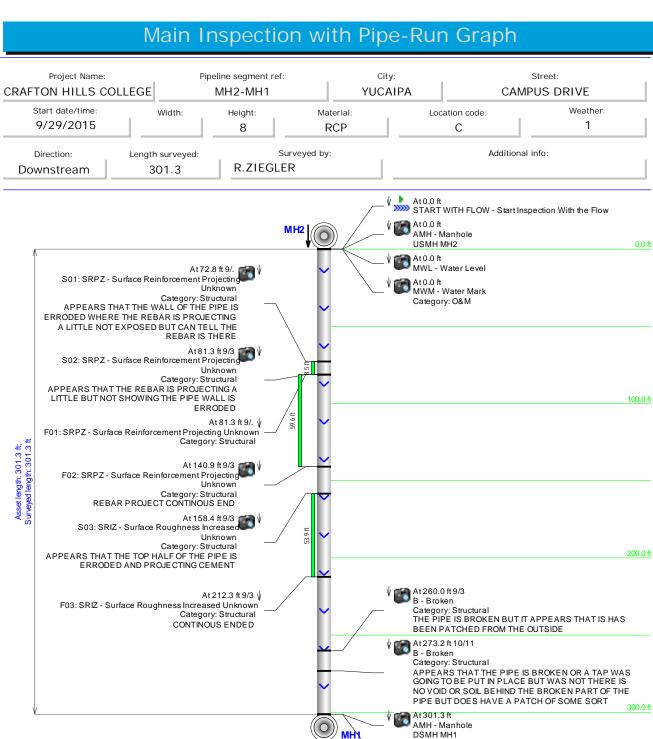




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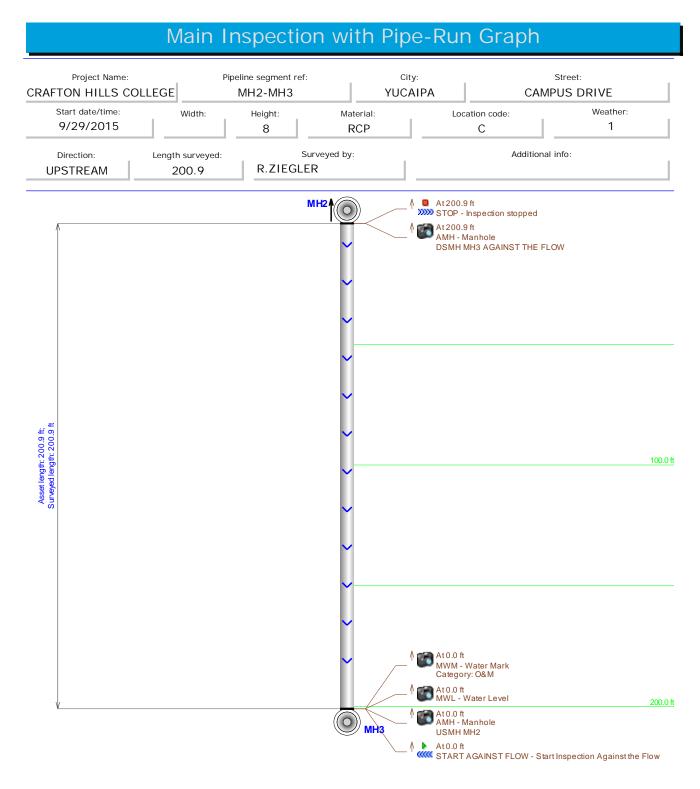
At 301.3 ft

STOP - Inspection stopped

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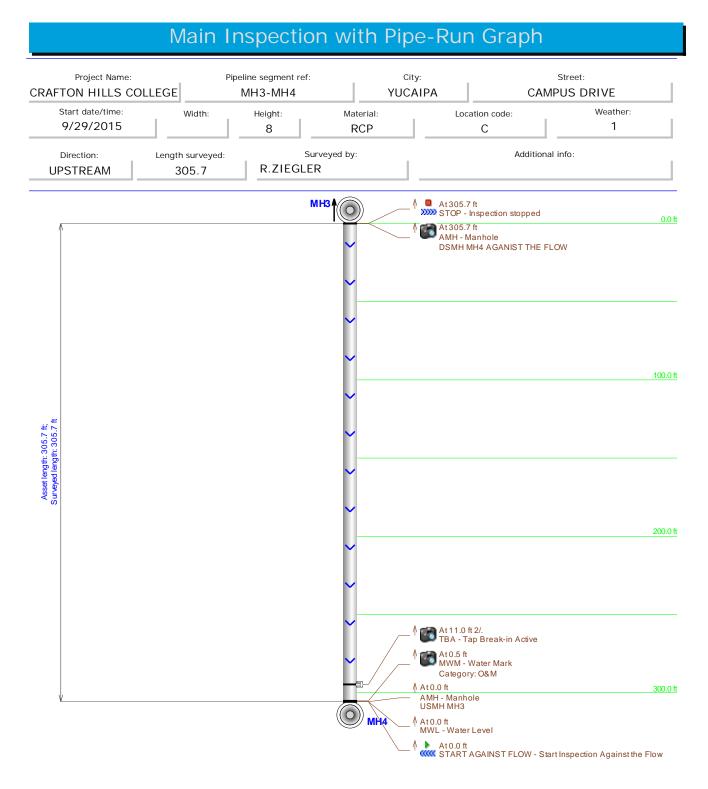


of

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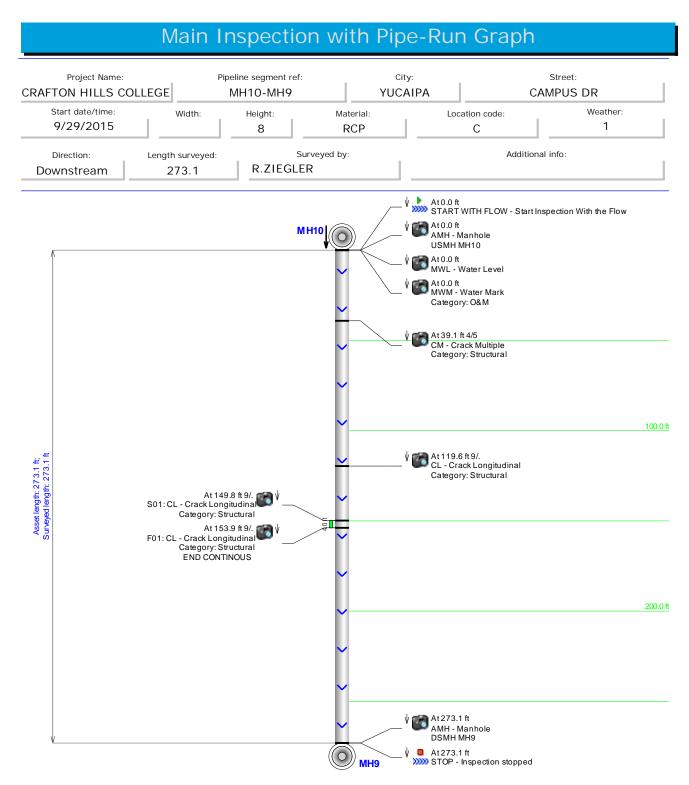




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#### Main Inspection with Pipe-Run Graph Project Name: Pipeline segment ref: City: Street: CRAFTON HILLS COLLEGE MH9-MH8 YUCAIPA CAMPUS DRIVE Start date/time: Width: Material: Location code: Height: 9/29/2015 С 8 **RCP** Surveyed by: Additional info: Direction: Length surveyed: R.ZIEGLER Downstream 184.8 At 0.0 ft START WITH FLOW - Start Inspection With the Flow At 0.0 ft AMH - Manhole 0 USMH MH9 At 0.0 ft MWL - Water Level At 0.0 ft MWM - Water Mark Category: O&M At 42.0 ft $\sqrt{\phantom{0}}$ S01: MWLS - Water Level Sag Category: Structural

3.0 ft

At 39.8 ft 6/.

At 184.8 ft

At 184.8 ft
STOP - Inspection stopped

OBZ - Obstacle Other Category: O&M

WASTE PAPER CASUSING THE WATER LEVEL TO RISE

At 44.1 ft S02: MCU - Camera Underwater

Category: O&M END OF CONTINOUS At 52.1 ft F01: MWLS - Water Level Sag Category: Structural

At 184.2 ft 6/.
TFA - Tap Factory Active

Category: O&M

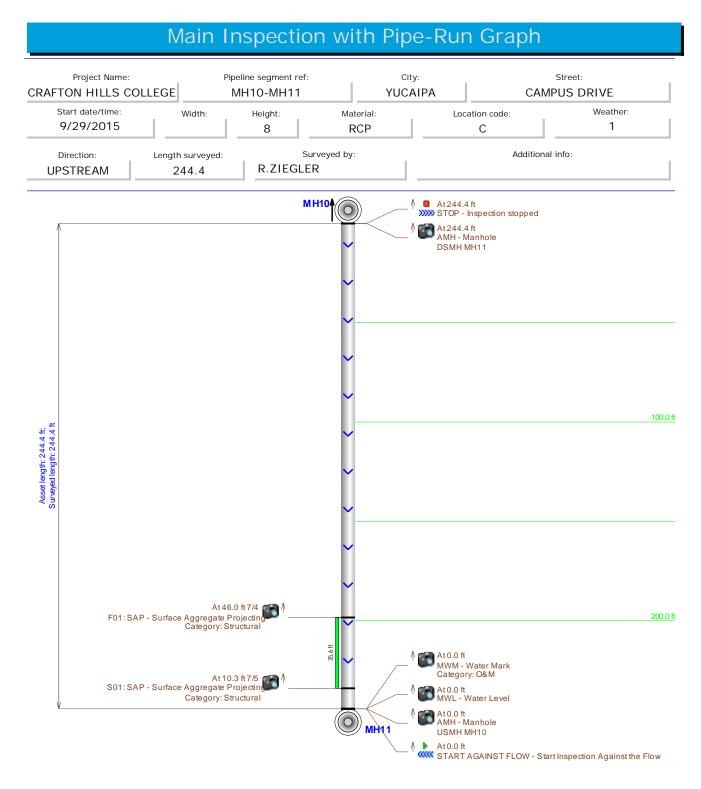
ADP - Discharge Point WE ARE ABOUT 5-10 FEET AWAY FROM A DISCHARGE POINT CANNOT TELL WHAT IT IS DUE TO THE LATERAL THAT IS AT THE 6 OCLOCK POSITION

100.0 ft

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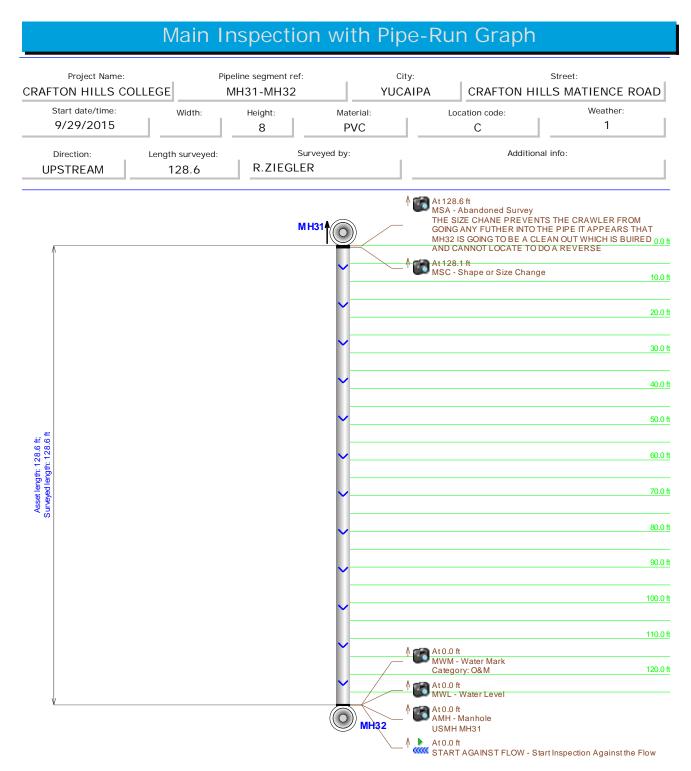


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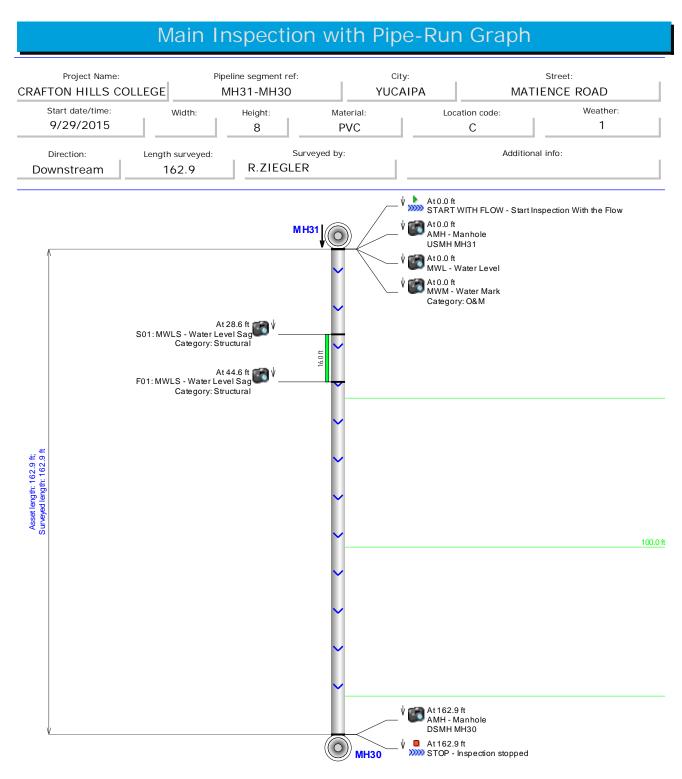




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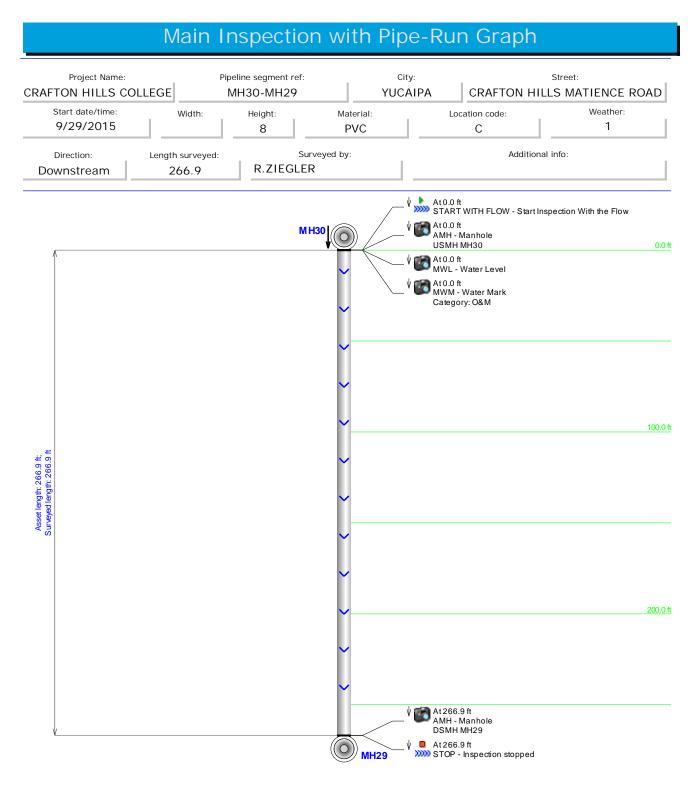
Office: 562-436-7600



#### Main Inspection with Pipe-Run Graph Project Name: Pipeline segment ref: City: CRAFTON HILLS COLLEGE MH32-MH31 YUCAIPA CRAFTOM HILLS MATIENCE ROAD Start date/time: Weather: Width: Height: Material: Location code: 9/29/2015 **PVC** С 8 Surveyed by: Additional info: Direction: Length surveyed: **R.ZIEGLER** MH32 IS BURIED NOT ABLE TO LOCATE Downstream 0.0 POSSIBLE A C/O FROM VIDEO MH31-MH32 √ At 0.0 ft AMH - Manhole UNABLE TO LOCATE MH32 REFER TO NOTES AND VIDEO OF SECTION 31-32 √ At 0.0 ft MWL - Water Level PLEASE REFER TO NOTES AND VIDEO OF SECTION 31-32 MSA - Abandoned Survey PLEASE REFER TO NOTES AND VIDEO SECTION OF 31-32

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Long Beach, Ca. 90813



					PACP	<sup>9</sup> Sewe	r Report	t				
Surveyed by: R.ZIEGLEF	2	Certificate N U-815-0		Owner: CRAF COLL	TON HILLS		Survey Customer ITF		Drainage ar	rea:	s	neet number:
Work order:	Pipeline segmer MH2-MH1	nt ref:		rt date/time: 15/09/29	07:42	Street: CAMPUS D	RIVE			City: YUCAIPA	A	
Location detail	s:					Upstream manh MH2	nole No:		Rim t	o invert:	Grade to invert:	Rim to grade:
Downstream m	nanhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	Height:
Width:	Shape:	Material: RCP	Ln. method:	Pipe joint I	ength:	Total length: 301.3	Length s	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	te cleaned:	Weather:	Location code	e: Additional	l info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	ystem:	GPS accurad	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ng O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	11	11				0	0					
2	0	0				0	0					
3	15	45	61	513B	2.259259	0	0	0	0000	0	61	2.259259
4	0	0				0	0					
5	1	5				0	0					

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Surveyed by: R.ZIEGLER

Owner:
CRAFTON HILLS
COLLEGE

Start date/time: 2015/09/29

Upstream manhole No:

MH2

Pipeline segment ref: MH2-MH1

Sheet number:

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		iferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	27	АМН									MH2_MH1_2015 09290742_0.0.j pg			USMH MH2
0.0	66	MWL					5				MH2_MH1_2015 09290742_0.00. jpg			
0.0	78	MWM					5				MH2_MH1_2015 09290742_0.01. jpg	O&M		
72.8	616	SRPZ	S01						9		MH2_MH1_2015 09290742_72.8. Jpg	S	3	APPEARS THAT THE WALL OF THE PIPE IS ERRODED WHERE THE REBAR IS PROJECTING A LITTLE NOT EXPOSED BUT CAN TELL THE REBAR IS THERE
81.3	958	SRPZ	S02						9	3	MH2_MH1_2015 09290742_81.3. jpg	S	3	APPEARS THAT THE REBAR IS PROJECTING A LITTLE BUT NOT SHOWING THE PIPE WALL IS ERRODED
81.3	1110	SRPZ	F01						9			S	3	
140.9	1370	SRPZ	F02						9	3	MH2_MH1_2015 09290742_140. 9.jpg	S	3	REBAR PROJECT CONTINOUS END

Office: 562-436-7600



Surveyed by: R.ZIEGLER

Owner:
CRAFTON HILLS
COLLEGE

Start date/time: 2015/09/29

Upstream manhole No:

MH2

Pipeline segment ref: MH2-MH1

Sheet number:

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V. Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
158.4	1637	SRIZ	S03						9	3	MH2_MH1_2015 09290742_158. 4.jpg	S	1	APPEARS THAT THE TOP HALF OF THE PIPE IS ERRODED AND PROJECTING CEMENT
212.3	2025	SRIZ	F03						9	3		S	1	CONTINOUS ENDED
260.0	2325	В							9	3	MH2_MH1_2015 09290742_260. 0.jpg	S	5	THE PIPE IS BROKEN BUT IT APPEARS THAT IS HAS BEEN PATCHED FROM THE OUTSIDE
273.2	2471	В							10	11	MH2_MH1_2015 09290742_273. 2.jpg	Ø	3	APPEARS THAT THE PIPE IS BROKEN OR A TAP WAS GOING TO BE PUT IN PLACE BUT WAS NOT THERE IS NO VOID OR SOIL BEHIND THE BROKEN PART OF THE PIPE BUT DOES HAVE A PATCH OF SOME SORT
301.3	2782	AMH									MH2_MH1_2015 09290742_301. 3.jpg			DSMH MH1

National Plant Services, Inc. 1461 Harbor Avenue

Long Beach, Ca. 90813



					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLER	₹	Certificate N U-815-0		Owner: CRAF COLL	TON HILLS EGE		Survey Customer ITF		Drainage ar	ea:	S	neet number:
Work order:	Pipeline segmer MH2-MH3	nt ref:		rt date/time: 15/09/29	09:00	Street: CAMPUS DE	RIVE			City: YUCAIPA	1	
Location detail	s:					Upstream manh MH2	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape: C	Material: RCP	Ln. method:	Pipe joint I	ength:	Total length: 200.9	Length : 200.9	surveyed:	Year laid:	Year rei	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurac	y:
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	g O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number:

R.ZIEGLER CRAFTON HILLS COLLEGE

MH2-MH3

MH2-MH3

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	S/M/L	Va Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
				1st	2nd			At/From	to				
0.0	21	AMH								MH2_MH3_2015 09290900_0.0.j pg			USMH MH2
0.0	56	MWL				5				MH2_MH3_2015 09290900_0.00. jpg			
0.0	72	MWM				5				MH2_MH3_2015 09290900_0.01. jpg	O&M		
200.9	679	АМН								MH2_MH3_2015 09290900_200. 9.jpg			DSMH MH3 AGAINST THE FLOW

1461 Harbor Avenue

Long Beach, Ca. 90813 Office: 562-436-7600



					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLER	₹	Certificate N U-815-0		Owner: CRAF COLL	TON HILLS EGE		Survey Customer ITF		Drainage ar	ea:	SI	neet number:
Work order:	Pipeline segmer MH3-MH4	nt ref:		rt date/time: 15/09/29	09:17	Street: CAMPUS DE	RIVE			City: YUCAIPA	<b>A</b>	
Location detail						Upstream manh MH3	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		ewer use:	Direction:	Flow contro	ol: Height:
Width:	Shape:	Material: RCP	Ln. method:	Pipe joint I	ength:	Total length: 305.7	Length : 305.7	surveyed:	Year laid:	Year rei	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurac	y:
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Rating	g O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

National Plant Services, Inc. 1461 Harbor Avenue Long Beach, Ca. 90813 Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number:

R.ZIEGLER CRAFTON HILLS COLLEGE

MH3

MH3-MH4

MH3-MH4

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	26	MWL					5							
0.0	1749	АМН												USMH MH3
0.5	80	MWM					5				MH3_MH4_2015 09290917_0.5.j pg	O&M		
11.0	207	ТВА			6				2		MH3_MH4_2015 09290917_18.2. jpg			
305.7	1664	АМН									MH3_MH4_2015 09290917_305. 7.jpg			DSMH MH4 AGANIST THE FLOW

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLER	₹	Certificate N U-815-0		Owner: CRAF COLL	TON HILLS		Survey Customer ITF		Drainage ar	rea:	s	heet number:
Work order:	Pipeline segmer			rt date/time: 15/09/29	10:23	Street: CAMPUS DI	R			City: YUCAIPA	Α	
Location detail	ls: DRIVE SEGMENT	Г 10-9				Upstream manh	nole No:		Rim t	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: RCP	Ln. method:	Pipe joint	length:	Total length: 273.1	Length: 273.1	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	te cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	ystem:	GPS accurad	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	2	4				0	0					
3	1	3	7	3122	2.333333	0	0	0	0000	0	7	2.333333
4	0	0				0	0					
5	0	0				0	0					

Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number:

R.ZIEGLER CRAFTON HILLS COLLEGE

MH10-MH9

MH10-MH9

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
						2nd			At/From					
0.0	27	АМН									MH10_MH9_201 509291023_0.0. jpg			USMH MH10
0.0	76	MWL					5				MH10_MH9_201 509291023_0.0 0.jpg			
0.0	95	MWM					5				MH10_MH9_201 509291023_0.0 1.jpg	O&M		
39.1	339	СМ							4	5	MH10_MH9_201 509291023_39. 1.jpg	S	3	
119.6	635	CL							9		MH10_MH9_201 509291023_119 .6.jpg	S	2	
149.8	820	CL	S01						9		MH10_MH9_201 509291023_149 .8.jpg	S	2	
153.9	894	CL	F01						9		MH10_MH9_201 509291023_153 .9.jpg	S	2	END CONTINOUS
273.1	1345	AMH									MH10_MH9_201 509291023_273 .1.jpg			DSMH MH9

National Plant Services, Inc. 1461 Harbor Avenue

Long Beach, Ca. 90813



					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLER	2	Certificate N U-815-0		Owner: CRAF COLL	TON HILLS EGE		Survey Customer ITF		Drainage ar	ea:	S	neet number:
Work order:	Pipeline segmer MH9-MH8	nt ref:		rt date/time: 15/09/29	10:52	Street: CAMPUS DI	RIVE			City: YUCAIPA	4	
Location detail	s: DRIVE SECTION	9-8				Upstream manh	ole No:		Rim t	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inv	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	Height:
Width:	Shape: C	Material: RCP	Ln. method:	Pipe joint I	ength:	Total length: 184.8	Length:	surveyed: 3	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurac	y:
Grade	Amount of Structura Defects	Structural al Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	2	4				1	2					
3	0	0	4	2200	2	0	0	6	4121	3	10	2.5
4	0	0				1	4					
5	0	0				0	0					

National Plant Services, Inc. 1461 Harbor Avenue Long Beach, Ca. 90813 Office: 562-436-7600



Surveyed by: R.ZIEGLER

Owner:
CRAFTON HILLS
COLLEGE

Start date/time: 2015/09/29

Upstream manhole No: MH9

Pipeline segment ref: MH9-MH8

Sheet number:

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	27	АМН									MH9_MH8_2015 09291052_0.0.j pg			USMH MH9
0.0	64	MWL					5				MH9_MH8_2015 09291052_0.00. jpg			
0.0	76	MWM					5				MH9_MH8_2015 09291052_0.01. jpg	O&M		
39.8	244	OBZ					10		6		MH9_MH8_2015 09291052_39.8. jpg	O&M	2	WASTE PAPER CASUSING THE WATER LEVEL TO RISE
42.0	445	MWLS	S01				15					S	2	
44.1	502	MCU	S02								MH9_MH8_2015 09291052_44.1. jpg	O&M	4	
47.1	543	MCU	F02								MH9_MH8_2015 09291052_47.1. jpg	O&M	4	END OF CONTINOUS
52.1	607	MWLS	F01				15				MH9_MH8_2015 09291052_52.1. jpg	S	2	
184.2	1346	TFA			8				6		MH9_MH8_2015 09291052_184. 2.jpg			

Office: 562-436-7600



Surveyed by: Owner: Start date/time:

R.ZIEGLER CRAFTON HILLS 2015/09/29

COLLEGE

date/time: Upstream manhole No:

MH9

MH9-MH8

Pipeline segment ref:

Sheet number:

Distance (Feet) (Meters) Group/ Modifier/ Descriptor Severity Circumferential Location Continuous Defect Image Ref. MH9\_MH8\_2015 184.8 1569 ADP WE ARE ABOUT 09291052\_184. 5-10 FEET AWAY 8.jpg FROM A **DISCHARGE POINT CANNOT** TELL WHAT IT IS DUE TO THE LATERAL THAT IS AT THE 6 OCLOCK **POSITION** 

1461 Harbor Avenue

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					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLER	₹	Certificate N U-815-0		Owner: CRAF COLL	TON HILLS EGE		Survey Customer ITF		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segmer MH10-MH1			rt date/time: 15/09/29	12:21	Street: CAMPUS DE	RIVE			City: YUCAIPA	4	
Location detail	s: DRIVE SECTION	10-11				Upstream manh MH10	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: RCP	Ln. method:	Pipe joint I	ength:	Total length: 244.4	Length:	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code	:: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurad	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade		Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	7	21	21	3700	3	0	0	0	0000	0	21	3
4	0	0				0	0					
5	0	0				0	0					

Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number:

R.ZIEGLER CRAFTON HILLS COLLEGE

MH10-MH11

MH10-MH11

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	25	AMH									MH10_MH11_20 1509291221_0. 0.jpg			USMH MH10
0.0	45	MWL					5				MH10_MH11_20 1509291221_0. 00.jpg			
0.0	57	MWM					5				MH10_MH11_20 1509291221_0. 01.jpg	O&M		
10.3	149	SAP	S01						7	5	MH10_MH11_20 1509291221_10 .3.jpg	S	3	
46.0	279	SAP	F01						7	4	MH10_MH11_20 1509291221_46 .0.jpg	S	3	
244.4	838	AMH									MH10_MH11_20 1509291221_24 4.4.jpg			DSMH MH11

1461 Harbor Avenue

Long Beach, Ca. 90813



					PACF	Sewe	r Report	t				
Surveyed by: R.ZIEGLEF	2	Certificate N U-815-0		Owner: CRAF COLL	TON HILLS		Survey Customer ITF		Drainage ar	rea:	s	heet number:
Work order:	Pipeline segmer MH31-MH3			rt date/time: 15/09/29	13:05	Street: CRAFTON H	HILLS MATIENC	CE ROAD		City: YUCAIPA	A	
Location detail	s: HILLS MATIENC	CE ROAD				Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream m	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 128.6	Length s	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	ystem:	GPS accurad	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ng O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

National Plant Services, Inc. 1461 Harbor Avenue Long Beach, Ca. 90813 Office: 562-436-7600



Surveyed by: R.ZIEGLER

Owner: CRAFTON HILLS COLLEGE Start date/time: 2015/09/29

Upstream manhole No:

MH31

Pipeline segment ref:

MH31-MH32

Sheet number:

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	Va Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	29	АМН									MH31_MH32_20 1509291305_0. 0.jpg			USMH MH31
0.0	61	MWL					5				MH31_MH32_20 1509291305_0. 00.jpg			
0.0	72	MWM					5				MH31_MH32_20 1509291305_0. 01.jpg	O&M		
128.1	506	MSC			4						MH31_MH32_20 1509291305_13 1.4.jpg			
128.6	812	MSA									MH31_MH32_20 1509291305_12 8.6.jpg			THE SIZE CHANE PREVENTS THE CRAWLER FROM GOING ANY FUTHER INTO THE PIPE IT APPEARS THAT MH32 IS GOING TO BE A CLEAN OUT WHICH IS BUIRED AND CANNOT LOCATE TO DO A REVERSE

National Plant Services, Inc. 1461 Harbor Avenue

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					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLEF	2	Certificate N U-815-0		Owner: CRAF COLL	TON HILLS EGE		Survey Customer ITF		Drainage ar	ea:	s	heet number:
Work order:	Pipeline segmer MH31-MH3			rt date/time: 15/09/29	13:36	Street: MATIENCE	ROAD			City: YUCAIPA	A	
Location detail	s: HILLS MATIENC	CE ROAD				Upstream manh	ole No:	Grade to invert:	Rim to grade:			
Downstream m	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 162.9	Length:	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	vstem:	GPS accurad	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratir	ng O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	3	6				0	0					
3	0	0	6	2300	2	0	0	0	0000	0	6	2
4	0	0				0	0					
5	0	0				0	0					

Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number:

R.ZIEGLER CRAFTON HILLS COLLEGE

MH31-MH30

MH31-MH30

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	42	AMH									MH31_MH30_20 1509291336_0. 0.jpg			USMH MH31
0.0	113	MWL					5				MH31_MH30_20 1509291336_0. 00.jpg			
0.0	125	MWM					5				MH31_MH30_20 1509291336_0. 01.jpg	O&M		
28.6	346	MWLS	S01				10				MH31_MH30_20 1509291336_28 .6.jpg	S	2	
44.6	415	MWLS	F01				10				MH31_MH30_20 1509291336_44 .6.jpg	S	2	
162.9	719	АМН									MH31_MH30_20 1509291336_16 2.9.jpg			DSMH MH30

1461 Harbor Avenue

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					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLEF	2	Certificate N U-815-0		Owner: CRAF COLL	TON HILLS EGE		Survey Customer ITF		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segmer MH32-MH3			rt date/time: 15/09/29	13:53	Street: CRAFTOM I	HILLS MATIENC	CE ROAD		City: YUCAIPA	A	
Location detail CRAFTON	s: HILLS MATIENC	CE ROAD				Upstream manh	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream m	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 0.0	Length s	surveyed:	Year laid:	Year re	newed:	Media label:
Purpose: S		Pre-cleaning Dat	te cleaned:	Weather:	Location code			T ABLE TO L	OCATE POS	SIBLE A C/O FF	ROM VIDEO N	ИН31-МН32
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	rstem:	GPS accurac	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		all Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number:

R.ZIEGLER CRAFTON HILLS COLLEGE

MH32

MH32-MH31

MH32-MH31

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	Continuous Defect	S/M/L	V Inches	alue (mm)	%	Joint		ferential ation	Image Ref.	Family	Rating	Remarks
					1st	2nd			At/From	to				
0.0	58	АМН												UNABLE TO LOCATE MH32 REFER TO NOTES AND VIDEO OF SECTION 31-32
0.0	181	MWL					0							PLEASE REFER TO NOTES AND VIDEO OF SECTION 31-32
0.0	247	MSA												PLEASE REFER TO NOTES AND VIDEO SECTION OF 31-32

National Plant Services, Inc. 1461 Harbor Avenue

Long Beach, Ca. 90813



					PACE	Sewe	r Report	t				
Surveyed by: R.ZIEGLEF	?	Certificate N U-815-0		Owner: CRAF COLL	TON HILLS EGE		Survey Customer ITF		Drainage ar	ea:	S	heet number:
Work order:	Pipeline segmer			rt date/time: 15/09/29	14:11	Street: CRAFTON F	HILLS MATIENC	CE ROAD		City: YUCAIPA	A	
Location detail	s: HILLS MATIENC	CE ROAD				Upstream manh MH30	ole No:		Rim to	o invert:	Grade to invert:	Rim to grade:
Downstream n	nanhole No:			Rim to inve	ert:	Grade to invert:	Rim to gr		Sewer use:	Direction:	Flow contr	ol: Height:
Width:	Shape:	Material: PVC	Ln. method:	Pipe joint I	ength:	Total length: 266.9	Length 9	surveyed:	Year laid:	Year rei	newed:	Media label:
Purpose: S		Pre-cleaning Dat	e cleaned:	Weather:	Location code	e: Additional	info:					
Starting	access point:	Easting:		Northir	ng:		Elevation:		Coordinate sy	stem:	GPS accurad	
Grade	Amount of Structura Defects	Structural al Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M O&M Pipe Ratin	g O&M Quick Rating	O&M Pipe Rating Index		rall Pipe Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0	0000	0	0	0
4	0	0				0	0					
5	0	0				0	0					

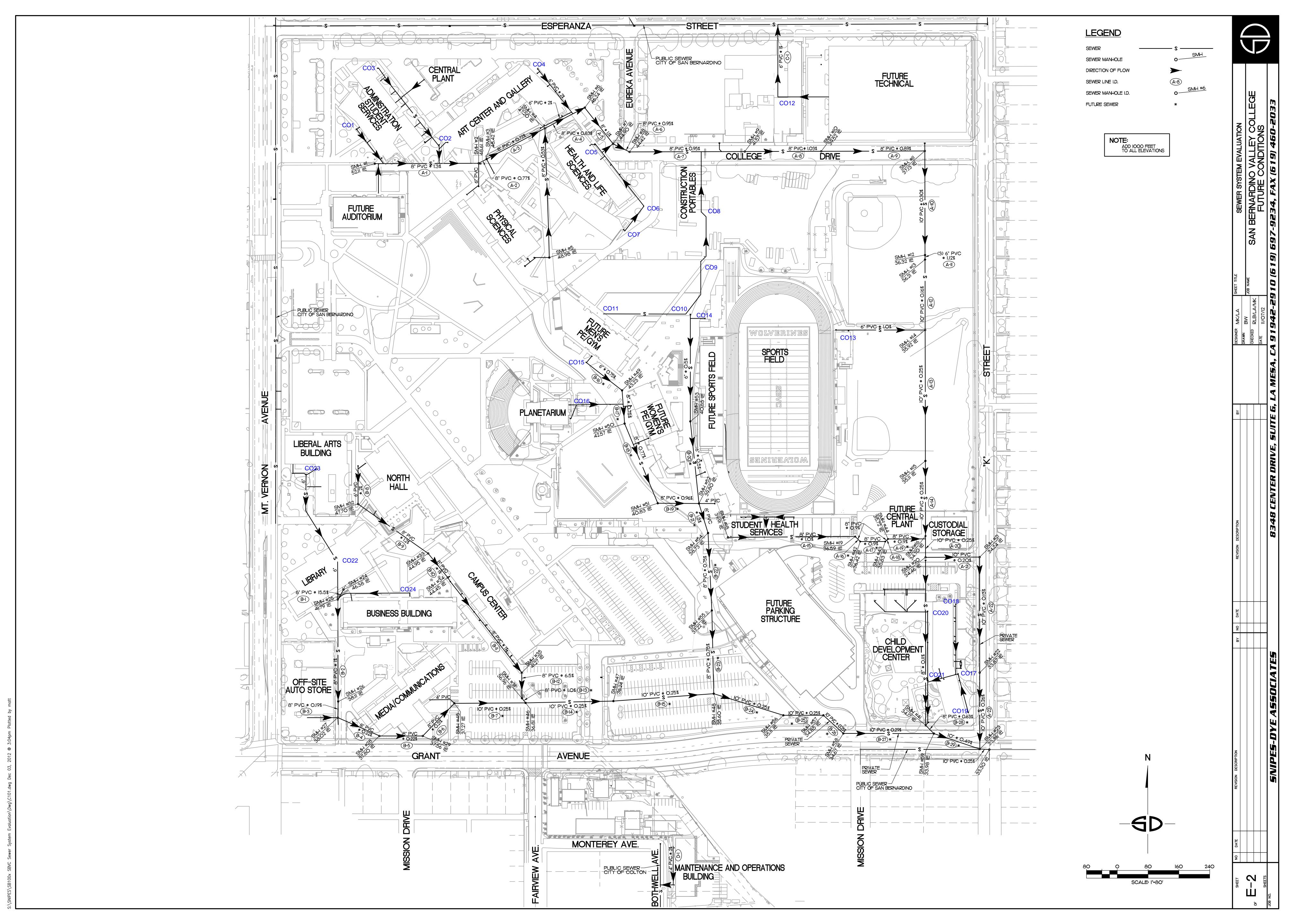
Office: 562-436-7600



Surveyed by: Owner: Start date/time: Upstream manhole No: Pipeline segment ref: Sheet number:

R.ZIEGLER
CRAFTON HILLS
COLLEGE
MH30
MH30-MH29
MH30-MH29

Distance (Feet) (Meters)	Video Ref.	Group/ Modifier/ Descriptor Severity	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
				1st	2nd			At/From	to				
0.0	35	АМН								MH30_MH29_20 1509291411_0. 0.jpg			USMH MH30
0.0	77	MWL				5				MH30_MH29_20 1509291411_0. 00.jpg			
0.0	87	MWM				5				MH30_MH29_20 1509291411_0. 01.jpg	O&M		
266.9	569	АМН								MH30_MH29_20 1509291411_26 6.9.jpg			DSMH MH29





# San Bernardino Community College District Board of Trustees Business Meeting District Board Room Thursday, November 10, 2016 - 4:00 p.m.

## 1. CALL TO ORDER – PLEDGE OF ALLEGIANCE

## 2. ANNOUNCEMENT OF CLOSED SESSION ITEMS

- a. Conference with Labor Negotiators Government Code 54957.6 Agency Negotiators: Bruce Baron and Karl Sparks CSEA, CTA
- b. Public Employee Performance Evaluation, Government Code 54957 Title: Chancellor
- c. Public Employee Discipline/Dismissal/Release/Non Re-Employment Government Code 54957 and Education Code 87678 (2 cases)

### 3. PUBLIC COMMENTS ON CLOSED SESSION ITEMS

The San Bernardino Community College Board of Trustees offers an opportunity for the public to address the Board on any agenda item prior to or during the Board's consideration of that item. Matters not appearing on the agenda will be heard after the board has heard all action agenda items. Comments must be limited to five (5) minutes per speaker and twenty (20) minutes per topic if there is more than one speaker. At the conclusion of public comment, the Board may ask staff to review a matter or may ask that a matter be put on a future agenda. As a matter of law, members of the Board may not discuss or take action on matters raised during public comment unless the matters are properly noticed for discussion or action in Open Session.

Anyone who requires a disability-related modification or accommodation in order to participate in the public meeting should contact the Chancellor's Office at (909) 382-4091 as far in advance of the Board meeting as possible.

This is an opportunity for members of the public to address the Board concerning closed session items.

### 4. CONVENE CLOSED SESSION

- 5. RECONVENE PUBLIC MEETING AT 5:00 pm
- 6. REPORT OF ACTION IN CLOSED SESSION (if any)

#### 7. CONSIDERATION OF APPROVAL TO TELEVISE BOARD MEETINGS (p.5)

#### 8. REPORTS

Under Section 54954.2(a)(2) of the Brown Act, trustees are permitted to make a brief announcement or to make a brief report on his or her own activities. Reports from all groups are intended to be non-controversial and used for reporting on conferences, meetings, and other activities related to District business. No action will be taken.

- a. Board Members
  - i. Oral Reports from Members of the Board Ad Hoc Committees
  - ii. Board Information Requests (p.10)
- b. Student Trustees
- c. Chancellor
- d. SBVC
  - i. President
  - ii. Academic Senate
  - iii. Classified Senate
  - iv. Associated Students

AYES: Longville, Williams, Harrison, Ferracone, Singer, Viricel, Zoumbos, Machado, Rapouw

NOES: None ABSENT: None ABSTENTIONS: None

#### Consideration of Approval of Temporary Academic Employees

Trustee Harrison, Trustee Singer seconded the motion and the board members voted as follows:

To approve the temporary academic appointment of Jason Vandiver effective December 21, 2016 and Wendy McKeen effective August 12, 2016. Correction to Wendy McKeen's salary. She is to be placed at Column F, Step 5, \$65,385.57 per year.

AYES: Longville, Williams, Harrison, Ferracone, Singer, Viricel, Zoumbos, Machado, Rapouw

NOES: None ABSENT: None ABSTENTIONS: None

## Consideration of Approval to Adopt the Sewer System Management Plan (SSMP) for First Reading

Trustee Harrison, Trustee Singer seconded the motion and the board members voted as follows:

To approve the San Bernardino Community College District Sewer System Management Plan (SSMP) for first reading.

AYES: Longville, Williams, Harrison, Ferracone, Singer, Viricel, Zoumbos, Machado, Rapouw

NOES: None ABSENT: None ABSTENTIONS: None

# Consideration of Approval to Amend Sabbatical Leave and Approve Resolution Waiving Posting of Bond by Faculty Member

Trustee Harrison, Trustee Singer seconded the motion and the board members voted as follows:

To approve amending the period of sabbatical leave previously granted to Kathryn Crow for the Fall 2016 semester so that she may take the leave during the Spring 2017 semester instead.

AYES: Longville, Williams, Harrison, Ferracone, Singer, Viricel, Zoumbos, Machado, Rapouw

NOES: None ABSENT: None ABSTENTIONS: None

#### Consideration of Approval of Professional Expert Short-Term and Substitute Employees

Trustee Harrison, Trustee Singer seconded the motion and the board members voted as follows: To approve the employment of Professional Expert, Short-Term, and Substitute Employees.

AYES: Longville, Williams, Harrison, Ferracone, Singer, Viricel, Zoumbos, Machado, Rapouw

NOES: None ABSENT: None ABSTENTIONS: None

#### **BUSINESS & FISCAL SERVICES**

## Consideration of Approval of Professional Services Contracts-Agreements

Trustee Harrison, Trustee Singer seconded the motion and the board members voted as follows: To approve the list of Professional Services contracts/agreements.

AYES: Longville, Williams, Harrison, Ferracone, Singer, Viricel, Zoumbos, Machado, Rapouw

NOES: None ABSENT: None ABSTENTIONS: None

#### Consideration of Approval of Purchase Order Report

Trustee Harrison, Trustee Singer seconded the motion and the board members voted as follows: To approve the list of purchase orders.

AYES: Longville, Williams, Harrison, Ferracone, Singer, Viricel, Zoumbos, Machado, Rapouw

NOES: None ABSENT: None