

# SEWER SYSTEM MANAGEMENT PLAN

Prepared for

**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.

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## **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:

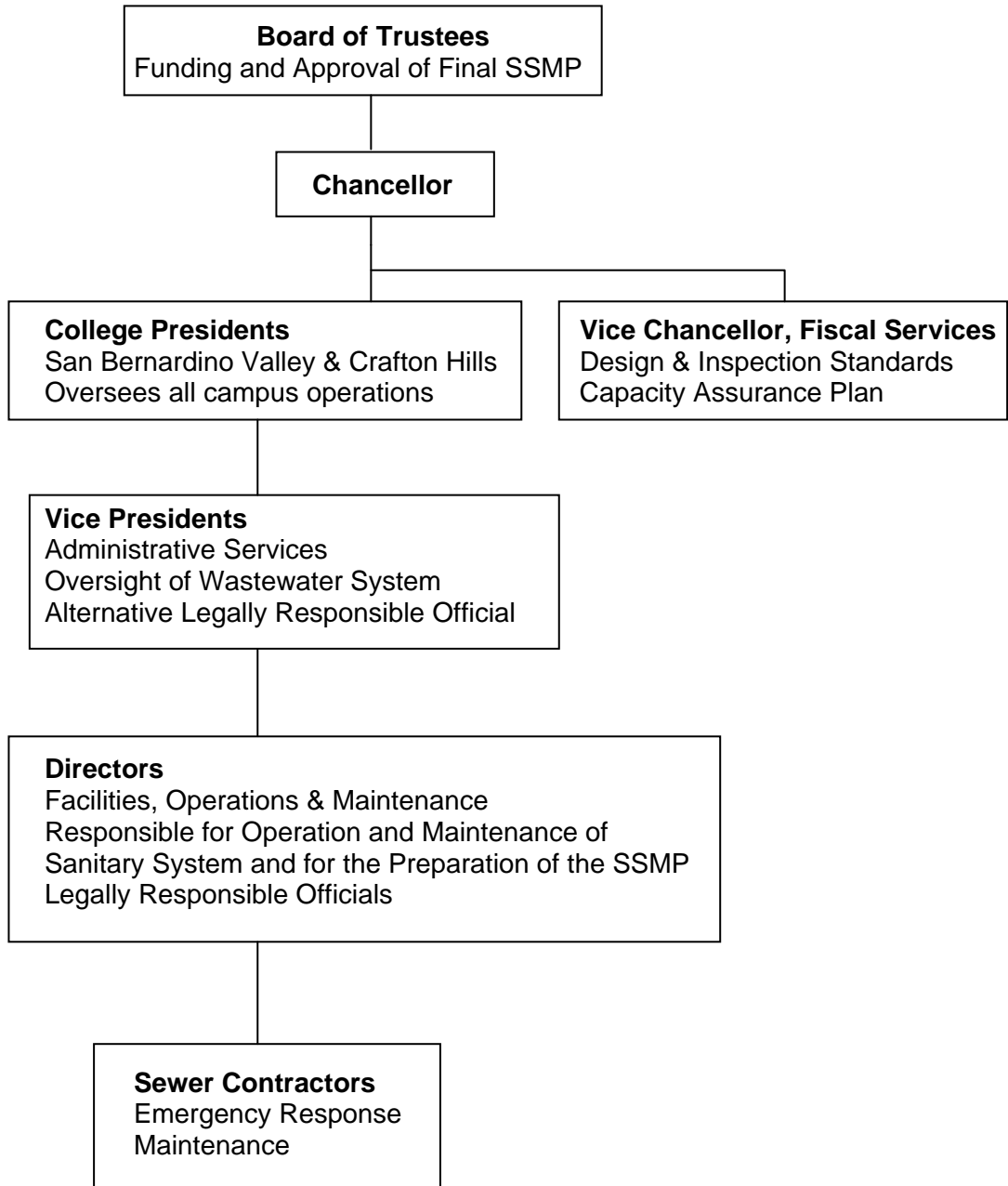
1. The name of the agency's responsible or authorized representative.
2. The names and telephone numbers for management, administrative, and maintenance positions responsible for implementing specific measures in the SSMP program. The SSMP must identify lines of authority through an organization chart 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

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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.

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### **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:

1. 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.

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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:

<b>Grade</b>	<b>Description</b>	<b>Estimated time to Failure</b>
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

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### 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.
- 3 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.
- 6 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;
- 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 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. .

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- (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.

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## **TERMS**

Authorized Representative – 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.

Blockage – 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.

California Water Environment Association (CWEA) – 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: <http://www.cwea.org/>.

Santa Ana Regional Water Quality Control Board – 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: <http://www.waterboards.ca.gov/santaana/>.

Enrollee – 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.

Fats, Oils and Grease (FOG) - 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.

FOG Control Program – 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.

Geographical Information System (GIS) – 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.

Governing Board – 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.

GWDR – General Waste Discharge Requirements – 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.

Groundwater Induced Infiltration (GWI) – Infiltration attributed to groundwater entering the sewer system.

Infiltration – 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.

Inflow – 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.

Lateral – 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.

Monitoring and Reporting Program - 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.

Private Lateral: 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.

Preventative maintenance (PM) – 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.

Rainfall Dependent Infiltration and Inflow – Infiltration and inflow that is attributed directly to rainfall.

Regional Water Board – 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.

Sanitary Sewer Overflow (SSO) – 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

Sanitary Sewer System – 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.

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

Sewer System Management Plan (SSMP) – 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.

Stakeholder - 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.

State Water Resources Control Board: 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”.

System Evaluation and Capacity Assurance Plan – 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
POTW <sub>s</sub>	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 CONTROL 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 addition 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:
  1. 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. Design Criteria: Where design criteria do not exist or are deficient, undertake the evaluation identified in (A) above to establish appropriate design criteria.
  3. Capacity Enhancement Measures: The steps needed to establish a short- and long-term CIP to address identified hydraulic deficiencies, including prioritization, alternatives analysis, and schedules. The CIP may include increases in pipe size, I/I reduction programs, increases and redundancy in pumping capacity, and storage facilities. The CIP shall include an implementation schedule and shall identify sources of funding.
  4. Schedule: 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.

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<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**

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### **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)

<b><u>Position &amp; Name</u></b>	<b><u>Telephone Number</u></b>
<b>Director, Facilities Planning &amp; Construction, District</b> Hussain Agah	(909) 382-4094
<b>Director, Facilities, Operations and Maintenance, San Bernardino Valley College</b> Robert (Bob) Jenkins	(909) 384-8662
<b>Director, Facilities, Operations and Maintenance, Crafton Hills College</b> Larry Cook	(909) 389-3383
<b>Vice President, Office of Administrative Services, San Bernardino Valley College</b> Scott Stark	(909) 384-8958
<b>Vice President, Office of Administrative Services, Crafton Hills College</b> Michael Strong	(909) 389-3210
<b>Director, Safety &amp; Risk Management, District</b> Whitney J. Fields	(909) 382-4070

### **Reporting**

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

	<b><u>Telephone Number</u></b>
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**

Scott Stark

**Phone**

(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, 365 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 performed: 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**

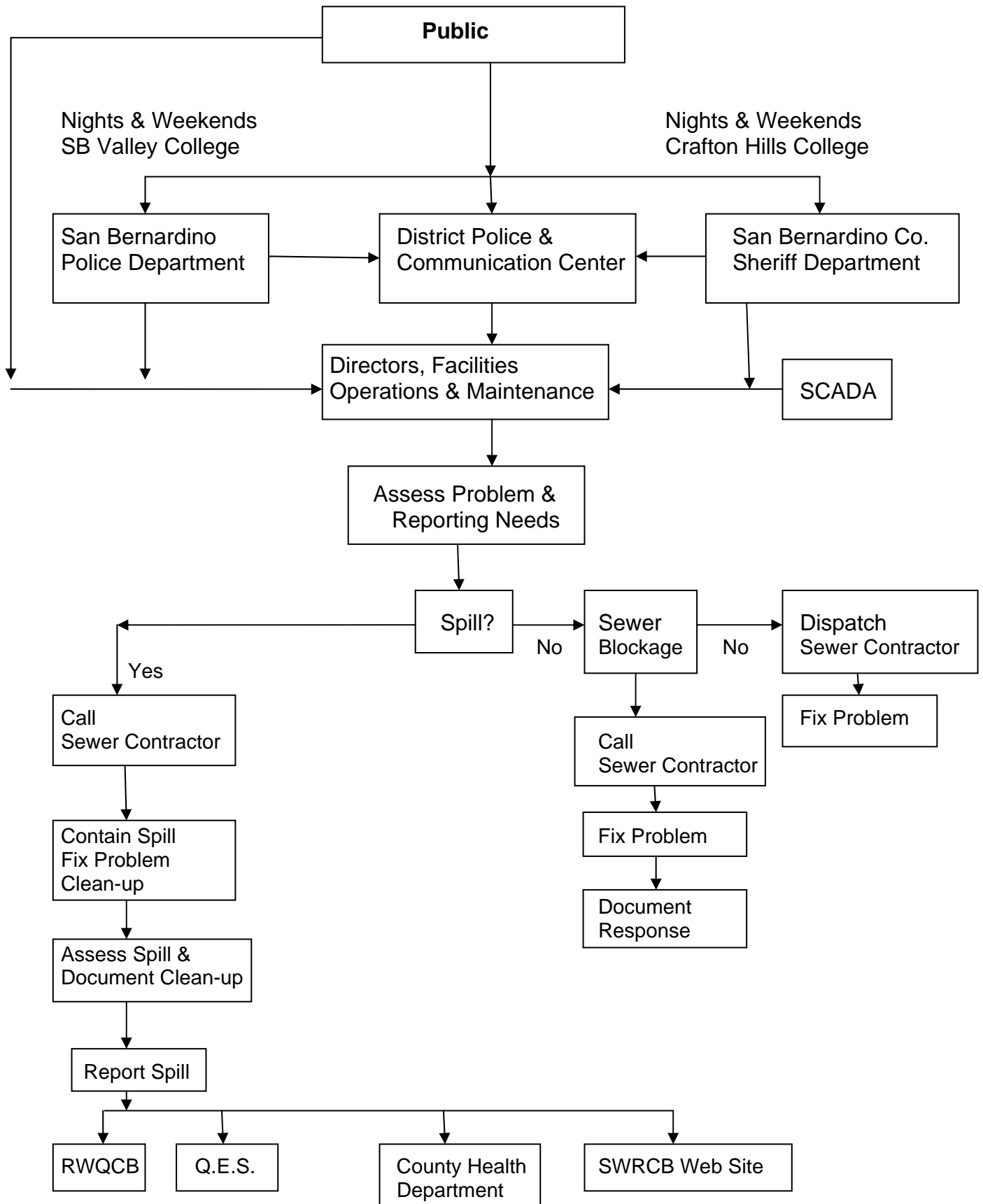
### **National Plant Services, Inc., Long Beach, CA**

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**



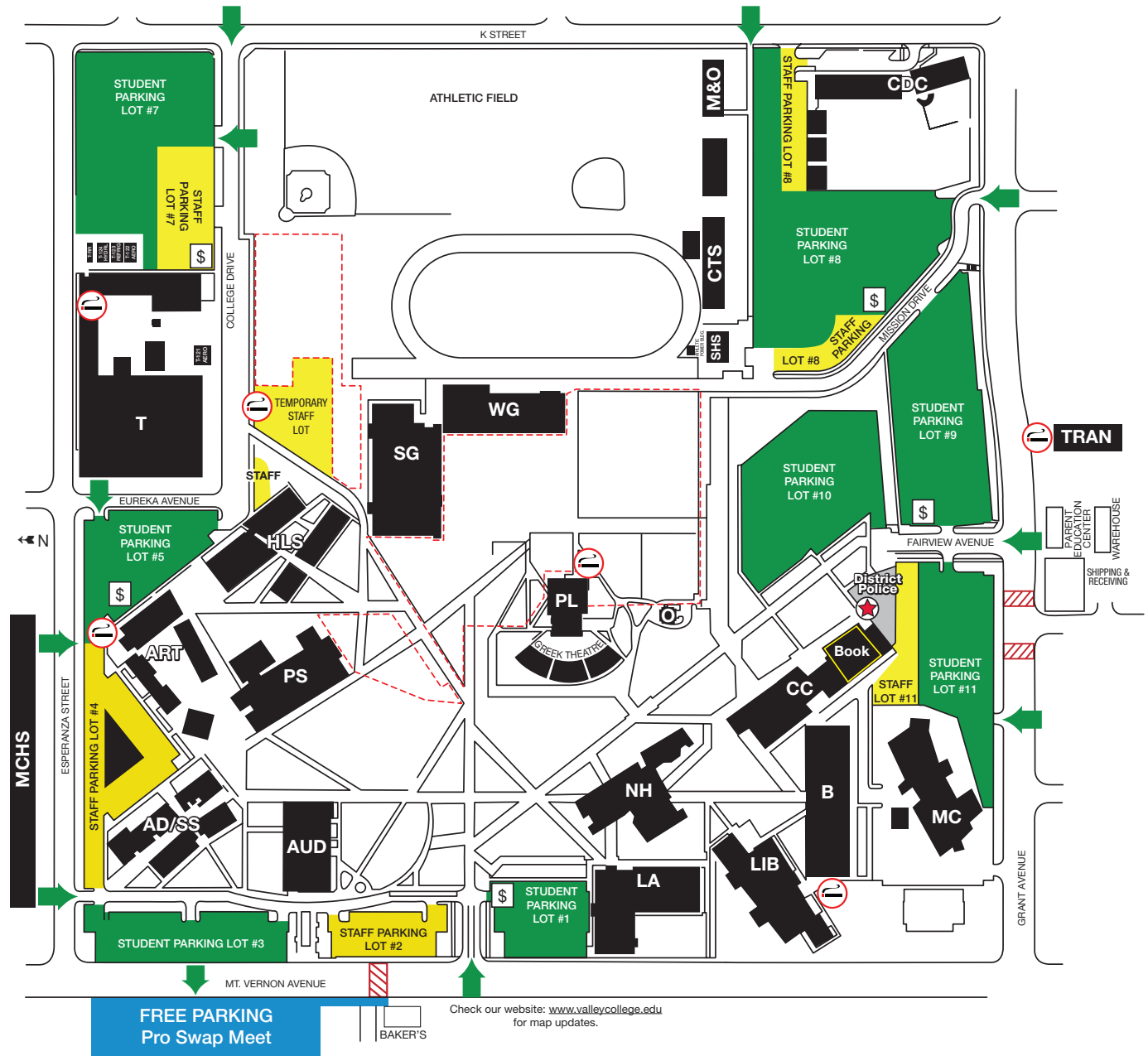
# **APPENDIX 3**

## **GENERAL MAPS**



# San Bernardino Valley College

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



INDICATES CONSTRUCTION AREAS

ARROWS DESIGNATE STUDENT PARKING LOT ENTRANCES

INDICATES PARKING PERMIT DISPENSER

CROSSWALK

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

AD/SS..... Administration/Student Services (Note: AD rooms are located in AD/SS)	MC.....Media/Communications
ART.....Art Center	MCHS..... Middle College High School
AUD..... Auditorium	M&O..... Maintenance & Operations
B..... Business	O..... Observatory
BOOK..... Bookstore	PL..... Planetarium
CC.....Campus Center	PS..... Physical Sciences
CDC.....Child Development Center	SG..... Snyder Gym
CTS.....Computer Technology Services	SHS..... Student Health Services
HLS.....Health & Life Science	T..... Technical
LA..... Liberal Arts	TRAN..... Transportation Center
LIB..... Library	WG..... Women's Gym

**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/decals.

# **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:


1. 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 or 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 than 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 than 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.);
- 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.

#### 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;
- 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. 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
  - i. 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. The notification requirements added by Order No. WQ 2008-0002-EXEC will become effective upon issuance by the Executive Director.

### 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.

  
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Jeanne 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 Bernardino 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 Bernardino Fire Department, the District maintenance crew will take direction from 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-of-way); 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 thoroughly cleaned. 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](http://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**





## SAN BERNARDINO VALLEY COLLEGE SEWER SYSTEM

sewer segment			sewer segment		
A-1	8	270	B-26	8	48
nw'ly SMH2	6	300	ne'ly SMH41	6	368
A-2	8	24	B-27	10	140
A-3	8	170	B-25	8	178
SMH4-SMH5	8	335	B-24	8	119
A-4	8	116	B-23	8	94
nw'ly SMH6	6	148	B-22	8	131
A-5	8	119	B-21	8	164
A-6	8	48	B-20	8	234
A-7	8	298	B-19	8	108
se'ly SMH8	6	645	B-18	8	85
A-8	8	198	B-17A	8	178
A-9	8	268	B-17	8	210
A-10	10	271	B-16	8	135
A-11	6	12	B-15	8	386
A-12	10	183	B-14	8	54
A-13	6	230	B-13	8	195
A-14	10	338	B-12	8	66
A-15	10	195	B-11	8	312
n'ly SMH18	6	322	B-10	8	80
A-16	8	329	B-9	8	222
A-17	8	18	B-8	6	98
A-18	8	65	B-7	8	164
A-19	8	20	B-6	8	133
A-20	8	90	B-5	8	112
A-21	10	55	B-4	8	119
A-22	10	140	B-3	8	41
A-23	10	300	B-2	8	264
A-24	10	199	B-1	6	30
sw'ly SMH20	6	109	n'ly SMH25	6	346
sw'ly SMH20	6	110			
n'ly SMH41	8	426			

**Sub-Total**

**8 segments 6" 1,876**  
**16 segments 8" 2,794**  
**8 segments 10" 1,187**

**Sub-Total**

**4 segments 6" 842**  
**25 segments 8" 3,832**  
**1 segments 10" 140**

**PACP SEWER REPORTS  
SAN BERNARDINO VALLEY COLLEGE**



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH1-SMH2		Start date/time: 2015/09/23 11:06		Street: SOUTH MT VERNON		City: SAN BERNARDINO					
Location details:						Upstream manhole No: SMH1		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH2				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 276.9	Length surveyed: 276.9	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: D	Additional info:							
<b>Starting access point:</b>			Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:						

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	31	AMH										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

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st Inches (mm)	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	AMH										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



The Environmental  
 Protection Specialists

## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH2-SMH3		Start date/time: 2015/09/23 11:46		Street: SOUTH MT VERNON ST		City: SAN BERNARDINO					
Location details:						Upstream manhole No: SMH2		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH3				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 24.2	Length surveyed: 24.1	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: D	Additional info:							
<b>Starting access point:</b>			Easting:		Northing:		Elevation:		Coordinate system:		GPS accuracy:		

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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: R.ZIEGLER      Owner: SBVC      Start date/time: 2015/09/23      Upstream manhole No: SMH2      Pipeline segment ref: SMH2-SMH3      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	26	AMH										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





## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH3-SMH4		Start date/time: 2015/09/23 11:55		Street: SOUTH MT VERNON ST		City: SAN BERNARDINO					
Location details:						Upstream manhole No: SMH3		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH4				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 173.5	Length surveyed: 173.5	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: D	Additional info:							
<b>Starting access point:</b>			Easting:		Northing:		Elevation:		Coordinate system:		GPS accuracy:		

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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: R. ZIEGLER      Owner: SBVC      Start date/time: 2015/09/23      Upstream manhole No: SMH3      Pipeline segment ref: SMH3-SMH4      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	25	AMH										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	

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		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	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH3 -SMH4 AMH at 173.5 ft (D).jpg			DSMH SMH4

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 Protection Specialists

## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH4-SMH6		Start date/time: 2015/09/23 12:26		Street: SOUTH MT VERNON ST		City: SAN BERNARDINO					
Location details:						Upstream manhole No: SMH4		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH6				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 117.3	Length surveyed: 117.3	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: D	Additional info:							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Structural			O&M					Overall Pipe				
Grade	Amount of Structural Defects	Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	4	2200	2	0	0	4	4100	4	8	2.666667
2	2	4				0	0					
3	0	0				0	0					
4	0	0				1	4					
5	0	0				0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	25	AMH										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			

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks	
						1st	2nd			At/From	to					
117.3	787	AMH														DSMH SMH6



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH6-SMH7		Start date/time: 2015/09/24 07:16		Street: EUREKA AVE		City: SAN BENARDINO					
Location details:						Upstream manhole No: SMH6		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH7				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 119.6	Length surveyed: 119.6	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:							
<b>Starting access point:</b>			Easting:		Northing:		Elevation:		Coordinate system:		GPS accuracy:		

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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: R.ZIEGLER      Owner: SBVC      Start date/time: 2015/09/24      Upstream manhole No: SMH6      Pipeline segment ref: SMH6-SMH7      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	30	AMH										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	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH6 -SMH7 AMH at 119.6 ft (D).jpg			DSMH SMH7





## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH7-SMH8		Start date/time: 2015/09/24 07:48		Street: EUREKA AVE SBVC PARKING LOT			City: SAN BERNARDINO				
Location details:						Upstream manhole No: SMH7		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH8				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 52.3	Length surveyed: 52.3	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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: R.ZIEGLER      Owner: SBVC      Start date/time: 2015/09/24      Upstream manhole No: SMH7      Pipeline segment ref: SMH7-SMH8      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				1st	2nd				
0.0	30	AMH										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	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH7 -SMH8 AMH at 52.3 ft (D).jpg			DSMH SMH8

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## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH9-SMH10		Start date/time: 2015/09/24 08:30		Street: COLLEGE DR		City: SAN BENARDINO					
Location details:						Upstream manhole No: SMH9		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH10				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 203.8	Length surveyed: 203.8	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info:							
<b>Starting access point:</b>			Easting:	Northing:	Elevation:	Coordinate system:		GPS accuracy:					

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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	0
4	0	0				0	0						
5	0	0				0	0						

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	27	AMH										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

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## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH10-SMH11		Start date/time: 2015/09/24 08:50		Street: COLLEGE DRIVE SBVC		City: SAN BENARDINO					
Location details:						Upstream manhole No: SMH10		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH11				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 272.3	Length surveyed: 272.3	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info:							
<b>Starting access point:</b>			Easting:	Northing:	Elevation:	Coordinate system:		GPS accuracy:					

Structural			O&M				Overall Pipe					
Grade	Amount of Structural Defects	Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0	0
2	0	0				0	0					
3	0	0				0	0					
4	0	0				0	0					
5	0	0				0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	25	AMH										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	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH1 0-SMH11 AMH at 272.3 ft (D).jpg			DSMH SMH11



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH11-SMH12		Start date/time: 2015/09/24 09:59		Street: COLLEGE DRIVE SBVC			City: SAN BENARDINO				
Location details:						Upstream manhole No: SMH11		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH12				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 275.9	Length surveyed: 275.9	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info:							
<b>Starting access point:</b>			Easting:	Northing:	Elevation:	Coordinate system:		GPS accuracy:					

Structural			O&M				Overall Pipe					
Grade	Amount of Structural Defects	Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	40	2C00	2	0	0	32	4800	4	72	2.571429
2	20	40				0	0					
3	0	0				0	0					
4	0	0				8	32					
5	0	0				0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	31	AMH										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	



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

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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH20-SMH16		Start date/time: 2015/09/24 11:37		Street: K STREET SBVC CUSTODIAL STORAGE			City: SAN BENARDINO				
Location details:						Upstream manhole No: SMH20		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH16				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 53.8	Length surveyed: 53.3	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info:							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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: R.ZIEGLER      Owner: SBVC      Start date/time: 2015/09/24      Upstream manhole No: SMH20      Pipeline segment ref: SMH20-SMH16      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	36	AMH										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	O&M		
46.1	229	TFA				10				9		SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH16 TFA at 46.1 ft (U).jpg			
53.3	292	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH16 AMH at 53.3 ft (U).jpg			USMH SMH16



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH16-SMH15		Start date/time: 2015/09/24 11:48		Street: K STREET SBVC CUSTODIAL STORAGE		City: SAN BENARDINO					
Location details:						Upstream manhole No: SMH16		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH15				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 195.5	Length surveyed: 195.5	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info:							
<b>Starting access point:</b>			Easting:		Northing:		Elevation:		Coordinate system:		GPS accuracy:		

Structural			O&M				Overall Pipe					
Grade	Amount of Structural Defects	Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0	0
2	0	0				0	0					
3	0	0				0	0					
4	0	0				0	0					
5	0	0				0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	42	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH15-SMH14		Start date/time: 2015/09/24 12:06		Street: K STREET SBVC CUSTODIAL STORAGE			City: SAN BENARDINO				
Location details:						Upstream manhole No: SMH15		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH14				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 345.6	Length surveyed: 345.4	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info:							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0						
2	0	0			0	0						
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0			0	0						
5	0	0			0	0						

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				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	O&M		
345.4	913	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH1 5-SMH14 AMH at 345.4 ft (U).jpg			DSMH SMH14



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SMH14-SMH13      Start date/time: 2015/09/24 12:28      Street: K STREET CUSTODIAL STORAGE      City: SAN BENARDINO

Location details: \_\_\_\_\_      Upstream manhole No: SMH14      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: SMH13      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 10

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 184.1      Length surveyed: 184.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: \_\_\_\_\_

Starting access point: \_\_\_\_\_      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Structural			O&M				Overall Pipe					
Grade	Amount of Structural Defects	Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0	0
2	0	0				0	0					
3	0	0				0	0					
4	0	0				0	0					
5	0	0				0	0					



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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	70	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH20-SMH21		Start date/time: 2015/09/24 13:12		Street: K STREET SBVC CUSTODIAL STORAGE			City: SAN BENARDINO				
Location details:						Upstream manhole No: SMH20		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH21				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 140.6	Length surveyed: 140.6	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info:							
<b>Starting access point:</b>			Easting:		Northing:		Elevation:		Coordinate system:		GPS accuracy:		

Structural			O&M				Overall Pipe					
Grade	Amount of Structural Defects	Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0	0
2	0	0				0	0					
3	0	0				0	0					
4	0	0				0	0					
5	0	0				0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	25	AMH										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	O&M		
28.5	176	TF				8				12		SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH21 TF at 28.5 ft (D).jpg			
140.6	556	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH2 0-SMH21 AMH at 140.6 ft (D).jpg			DSMH SMH21

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



The Environmental  
 Protection Specialists

## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH16-SMH44		Start date/time: 2015/09/25 06:59		Street: K STREET SBVC CUSTODIAL STORAGE AREA			City: SAN BENARDINO				
Location details:						Upstream manhole No: SMH16		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH44				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 2.9	Length surveyed: 2.9	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:							
<b>Starting access point:</b>			Easting:	Northing:	Elevation:	Coordinate system:		GPS accuracy:					

Structural			O&M					Overall Pipe				
Grade	Amount of Structural Defects	Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	5	5100	5	5	5
2	0	0				0	0					
3	0	0				0	0					
4	0	0				0	0					
5	0	0				1	5					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	26	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH16-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						100		12	12		O&M	5	CONCRETE COMPLETELY BLOCKING THE PIPE
2.9	281	MSA													BLOCKED WITH CONCRETE 100%



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SMH21-SMH22      Start date/time: 2015/09/25 07:57      Street: K STREET SBVC      City: SAN BENARDINO

Location details: \_\_\_\_\_      Upstream manhole No: SMH21      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: SMH22      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: D      Flow control: N      Height: 10

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 305.0      Length surveyed: 305.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: \_\_\_\_\_      Location code: C      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0				0	0					
5	0	0				0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	23	AMH										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

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



The Environmental  
 Protection Specialists

## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH22-SMH23		Start date/time: 2015/09/25 08:20		Street: K STREET		City: SAN BENARDINO					
Location details:						Upstream manhole No: SMH22		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH23				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 205.1	Length surveyed: 205.1	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info:							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0						
2	0	0			0	0						
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0			0	0						
5	0	0			0	0						



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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	22	AMH										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	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH2 2-SMH23 AMH at 205.1 ft (D).jpg			DSMH SMH23



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH59SMH23		Start date/time: 2015/09/25 08:54		Street: GRANT AVE		City: SAN BENARDINO					
Location details:						Upstream manhole No: SMH59		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH23				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 125.2	Length surveyed: 125.2	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info:							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0						
2	0	0			0	0						
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0			0	0						
5	0	0			0	0						

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	27	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SMH59-SMH58      Start date/time: 2015/09/25 09:10      Street: GRANT AVE      City: SAN BENARDINO

Location details: \_\_\_\_\_      Upstream manhole No: SMH59      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: SMH58      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 10

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 238.3      Length surveyed: 238.3      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0						
2	0	0			0	0						
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0			0	0						
5	0	0			0	0						

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	30	AMH										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	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH5 9-SMH58 AMH at 238.3 ft (U).jpg			DSMH SMH58 AGAINST THE FLOW



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:		
Work order:		Pipeline segment ref: SMH59-SMH41		Start date/time: 2015/09/25 10:18		Street: GRANT AVE SBVC		City: SAN BENARDINO				
Location details:						Upstream manhole No: SMH59		Rim to invert:		Grade to invert:		Rim to grade:
Downstream manhole No: SMH41				Rim to invert:		Grade to invert:		Rim to grade:	Sewer use: SS	Direction: U	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 29.0	Length surveyed: 29.0	Year laid:	Year renewed:	Media label:			
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code:	Additional info:						
<b>Starting access point:</b>			Easting:	Northing:	Elevation:	Coordinate system:		GPS accuracy:				

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	Overall Pipe Rating Index
1	0	0				0	0						
2	0	0				0	0						
3	0	0	0	0000	0	0	0	0	4	4100	4	4	4
4	0	0				1	4						
5	0	0				0	0						

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	26	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH41-SMH59		Start date/time: 2015/09/25 11:00		Street: GRANT AVE SBVC		City: SAN BENARDINO					
Location details:						Upstream manhole No: SMH41		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH59				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control:	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 5.0	Length surveyed: 4.3	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info:							
<b>Starting access point:</b>			Easting:		Northing:		Elevation:		Coordinate system:		GPS accuracy:		

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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: R. ZIEGLER      Owner: SBVC      Start date/time: 2015/09/25      Upstream manhole No: SMH41      Pipeline segment ref: SMH41-SMH59      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	27	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH41-SMH34		Start date/time: 2015/09/25 11:19		Street: GRANT AVE SBVC		City: SAN BENARDINO					
Location details:						Upstream manhole No: SMH41		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH34				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 6
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 6.0	Length surveyed: 6.0	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code:	Additional info:							
<b>Starting access point:</b>			Easting:		Northing:		Elevation:		Coordinate system:		GPS accuracy:		

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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: R. ZIEGLER      Owner: SBVC      Start date/time: 2015/09/25      Upstream manhole No: SMH41      Pipeline segment ref: SMH41-SMH34      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	29	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH45-SMH46		Start date/time: 2015/09/25 12:15		Street: GRANT AVE SBVC PARKING LOT		City: SAN BENARDINO					
Location details: PARKING LOT				Upstream manhole No: SMH45		Rim to invert:		Grade to invert:		Rim to grade:			
Downstream manhole No: SMH46				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 189.7	Length surveyed: 189.7	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0						
2	0	0			0	0						
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0			0	0						
5	0	0			0	0						

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	30	AMH										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	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH4 5-SMH46 AMH at 189.7 ft (D).jpg			DSMH SMH46



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH46-SMH47		Start date/time: 2015/09/25 12:28		Street: GRANT AVE SBVC PARKING LOT		City: SAN BENARDINO					
Location details: PARKING LOT				Upstream manhole No: SMH46		Rim to invert:		Grade to invert:		Rim to grade:			
Downstream manhole No: SMH47				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 237.4	Length surveyed: 237.4	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe			
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating
1	0	0			0	0					
2	0	0			0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0
4	0	0			0	0					
5	0	0			0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	27	AMH										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

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



The Environmental  
 Protection Specialists

## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SMH47-SMH48      Start date/time: 2015/09/25 12:42      Street: GRANT AVE SBVC PARKING LOT      City: SAN BENARDINO

Location details: PARKING LOT      Upstream manhole No: SMH47      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: SMH48      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: D      Flow control: N      Height: 10

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 266.4      Length surveyed: 266.4      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: G      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Structural			O&M				Overall Pipe					
Grade	Amount of Structural Defects	Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0	0
2	0	0				0	0					
3	0	0				0	0					
4	0	0				0	0					
5	0	0				0	0					



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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	30	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH48-SMH56		Start date/time: 2015/09/25 13:03		Street: GRANT AVE SBVC PARKING LOT		City: SAN BENARDINO					
Location details: PARKING LOT						Upstream manhole No: SMH48		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH56				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 116.1	Length surveyed: 116.1	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0						
2	0	0			0	0						
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0			0	0						
5	0	0			0	0						

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				1st	2nd				
0.0	26	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH56-SMH57		Start date/time: 2015/09/25 14:15		Street: GRANT AVE SBVC PARKING LOT		City: SAN BENARDINO					
Location details: PARKING LOT				Upstream manhole No: SMH56		Rim to invert:		Grade to invert:		Rim to grade:			
Downstream manhole No: SMH57				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 105.9	Length surveyed: 105.9	Year laid:	Year renewed:	Media label:				
Purpose:	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:							
<b>Starting access point:</b>			Easting:	Northing:	Elevation:	Coordinate system:		GPS accuracy:					

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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: R.ZIEGLER     
 Owner: SBVC     
 Start date/time: 2015/09/25     
 Upstream manhole No: SMH56     
 Pipeline segment ref: SMH56-SMH57     
 Sheet number:           

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	27	AMH										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	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH5 6-SMH57 AMH at 105.9 ft (D).jpg			DSMH SMH57

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



The Environmental  
 Protection Specialists

## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH56-SMH48		Start date/time: 2015/09/25 14:30		Street: GRANT AVE SBVC PARKING LOT		City: SAN BENARDINO					
Location details: PARKING LOT				Upstream manhole No: SMH56		Rim to invert:		Grade to invert:		Rim to grade:			
Downstream manhole No: SMH48				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 10
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 194.0	Length surveyed: 194.0	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:							
<b>Starting access point:</b>			Easting:	Northing:	Elevation:	Coordinate system:		GPS accuracy:					

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0						
2	0	0			0	0						
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0			0	0						
5	0	0			0	0						

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	45	AMH										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	AMH										SAN BERNARDINO VALLEY COLLEGE-SMH5 6-SMH48 AMH at 194.0 ft (U).jpg			DSMH SMH48 REVERSE SETUP

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



The Environmental  
 Protection Specialists

## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:		
Work order:		Pipeline segment ref: SMH48-SMH55		Start date/time: 2015/09/25 15:29		Street: GRANT AVE PARKING LOT		City: SAN BENARDINO				
Location details: PARKING LOT						Upstream manhole No: SMH48		Rim to invert:		Grade to invert:		Rim to grade:
Downstream manhole No: SMH55				Rim to invert:		Grade to invert:		Rim to grade:	Sewer use: SS	Direction: U	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 208.0	Length surveyed: 208.8	Year laid:	Year renewed:	Media label:			
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:						
<b>Starting access point:</b>			Easting:	Northing:	Elevation:	Coordinate system:		GPS accuracy:				

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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: R.ZIEGLER      Owner: SBVC      Start date/time: 2015/09/25      Upstream manhole No: SMH48      Pipeline segment ref: SMH48-SMH55      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0		AMH										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

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

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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH55-SMH54		Start date/time: 2015/09/25 15:51		Street: GRANT AVE SBVC PARKING LOT		City: SAN BENARDINO					
Location details: PARKING LOT						Upstream manhole No: SMH55		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH54				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 148.1	Length surveyed: 148.1	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0						
2	0	0			0	0						
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0			0	0						
5	0	0			0	0						

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	32	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH36-SMH31		Start date/time: 2015/09/25 16:48		Street: GRANT AVE SBVC PARKING LOT		City: SAN BENARDINO					
Location details: PARKING LOT				Upstream manhole No: SMH36		Rim to invert:		Grade to invert:		Rim to grade:			
Downstream manhole No: SMH31				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 16.3	Length surveyed: 16.3	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info:							
<b>Starting access point:</b>			Easting:	Northing:	Elevation:	Coordinate system:		GPS accuracy:					

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	34	AMH										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			M							SAN BERNARDINO VALLEY COLLEGE-SMH3 6-SMH31 JAM at 0.0 ft (U).jpg	S	1	
16.3	216	AMH													DSMH SMH31



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH2-SOUTH LATERAL		Start date/time: 2015/09/30 08:58		Street: MT VERNON NEAR STUDENT SERVICES		City: SAN BENARDINO					
Location details: NEAR STUDENT SERVICES						Upstream manhole No: SMH2		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SOUTH LATERAL				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 6
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning: N	Date cleaned:	Weather: 1	Location code: D	Additional info: NO ACCESS DUE TO THE MANHOLE BEING ON CAMPUS SIDEWALK AND COULD NOT FIT THE TRUCK WHERE THE MANHOLE IS LOCATED							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0					
2	0	0			0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0
4	0	0			0	0					
5	0	0			0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		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 TELEWISE 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 TELEWISE DUE TO LOCATION OF MH
0.0	175	MSA													CANNOT TELEWISE DUE TO LOCATION OF MANHOLE WHICH IS LOCATED INSIDE THE WALK WAY OF STUDENTS





## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SMH4-SMH5      Start date/time: 2015/09/30 09:06      Street: MT VERNON NEAR HEALTH AND LIFE SCIENCES      City: SAN BENARDINO

Location details: \_\_\_\_\_      Upstream manhole No: SMH4      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: SMH5      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 0.0      Length surveyed: 0.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: F      Additional info: CANNOT CCTV DUE TO THE LOCATION OF THE MH

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0				0	0					
5	0	0				0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	61	AMH										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



## PACP Sewer Report

Surveyed by: R.ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SECTION A-7-LATERAL GOING SOUTH      Start date/time: 2015/09/30 09:15      Street: MT VERNON      City: SAN BENARDINO

Location details: NEAR CONSTRUCTION PORTABLES      Upstream manhole No: SECTION A-7      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: LATERAL GOING SOUTH      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 6

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 0.0      Length surveyed: 0.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: F      Additional info: THIS SECTION WAS NOT CCTV'ED DUE TO THE LOCATION OF THE MAN HOLE THIS VIDEO IS JUST FOR REFERENCE NO SECTION NUMBER

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0				0	0					
5	0	0				0	0					

Surveyed by: R.ZIEGLER      Owner: SBVC      Start date/time: 2015/09/30      Upstream manhole No: SECTION A-7      Pipeline segment ref: SECTION A-7-LATERAL GOING SOUTH      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location	Image Ref.	Family	Rating	Remarks
						1st	2nd							
0.0	80	AMH									SAN BERNARDINO VALLEY COLLEGE-SECTION 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-SECTION 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



## PACP Sewer Report

Surveyed by: R.ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SECTION C1-GOING EAST      Start date/time: 2015/09/30 09:27      Street: ESPERANZA STREET JUST WEST OF FUTURE TECH BUILDING      City: SAN BENARDINO

Location details: \_\_\_\_\_      Upstream manhole No: SECTION C1      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: GOING EAST      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 6

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 0.0      Length surveyed: 0.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: THIS VIDEO IS JUST A REFERENCE AND WAS NOT CCTV'ED DUE TO NOT HAVEING ACCESS

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0				0	0					
5	0	0				0	0					

Surveyed by: R.ZIEGLER     
 Owner: SBVC     
 Start date/time: 2015/09/30     
 Upstream manhole No: SECTION C1     
 Pipeline segment ref: SECTION C1-GOING EAST     
 Sheet number:                     

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location At/From to	Image Ref.	Family	Rating	Remarks
						1st	2nd							
0.0	52	AMH									SAN BERNARDINO VALLEY COLLEGE-SECTION 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-SECTION 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



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: SBCV      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SMH14-GOING EAST      Start date/time: 2015/09/30 09:34      Street: K STREET      City: SAN BENARDINO

Location details: \_\_\_\_\_      Upstream manhole No: SMH14      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: GOING EAST      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 6

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 0.0      Length surveyed: 0.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: Z      Additional info: THIS MANHOLE IS BUIRED CANNOT CCTV THIS VIDEO IS JUST FOR REFERENCE

Starting access point:      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural		Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M		Overall Pipe Rating	Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating						O&M Pipe Rating	O&M Quick Rating		O&M Pipe Rating Index	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: R.ZIEGLER     
 Owner: SBCV     
 Start date/time: 2015/09/30     
 Upstream manhole No: SMH14     
 Pipeline segment ref: SMH14-GOING EAST     
 Sheet number:                     

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	89	AMH										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





## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH44-SMH43		Start date/time: 2015/09/30 09:45		Street: NEAR THE CUSTODIAL STORAGE AREA		City: SAN BENARDINO					
Location details:						Upstream manhole No: SMH44		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH43				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info: NOT CCTV'ED DUE TO NOT HAVING ACCESS REFER TO VIDEO SMH16-SMH44 THIS VIDEO IS JUST A REFERENCE SECTION A-18							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	Overall Pipe Rating	Overall Pipe Rating Index	
1	0	0			0	0					
2	0	0			0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0
4	0	0			0	0					
5	0	0			0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:		
Work order:		Pipeline segment ref: SMH43-SMH42		Start date/time: 2015/09/30 09:54		Street: NEAR THE CUSTODIAL STORAGE AREA		City: SAN BENARDINO				
Location details: CUSTODIAL STORAGE AREA						Upstream manhole No: SMH43		Rim to invert:		Grade to invert:		Rim to grade:
Downstream manhole No: SMH42				Rim to invert:		Grade to invert:		Rim to grade:	Sewer use: SS	Direction: U	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:			
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS THIS IS SECTION A-17 THIS VIDEO IS JUST FOR REFERENCE						

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0					
2	0	0			0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0
4	0	0			0	0					
5	0	0			0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	33	AMH										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 ACCESS PLEASE REFFER BACK TO VIDEO SMH16-SMH44. THIS VIDEO IS JUST FOR REFERENCE



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH42-SMH19		Start date/time: 2015/09/30 10:00		Street: NEAR THE CUSTODIAL STORAGE AREA		City: SAN BENARDINO					
Location details: CUSTODIAL STORAGE AREA						Upstream manhole No: SMH42		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH19				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control:	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:				
Purpose:	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: G	Additional info: THIS LINE WAS NOT CCTV'ED THIS VIDEO IS JUST FOR REFERENCE PLEASE REFER BACK TO VIDEO SMH16-SMH44 THERE WAS NO ACCESS TO THIS MH SECTION A-17							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0					
2	0	0			0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0
4	0	0			0	0					
5	0	0			0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks	
						1st	2nd			At/From	to					
0.0	64	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH19-SMH18		Start date/time: 2015/09/30 10:10		Street: NEAR THE CUSTODIAL STORAGE AREA		City: SAN BERNARDINO					
Location details: CUSTODIAL STORAGE AREA						Upstream manhole No: SMH19		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH18				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control:	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code:	Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE SECTION A-15							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0					
2	0	0			0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0
4	0	0			0	0					
5	0	0			0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks	
						1st	2nd			At/From	to					
0.0	34	AMH										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





## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SMH41-LATERAL GOING NORTH      Start date/time: 2015/09/30 10:20      Street: NEAR THE CHILD DEVELOPMENT AREA      City: SAN BENARDINO

Location details: NEAR THE CHILD DEVELOPMENT AREA      Upstream manhole No: SMH41      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: LATERAL GOING NORTH      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 0.0      Length surveyed: 0.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: J      Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0				0	0					
5	0	0				0	0					

Surveyed by: R.ZIEGLER      Owner: SBVC      Start date/time: 2015/09/30      Upstream manhole No: SMH41      Pipeline segment ref: SMH41-LATERAL GOING NORTH      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location At/From      to	Image Ref.	Family	Rating	Remarks
						1st	2nd							
0.0	34	AMH									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



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SMH35-SMH34      Start date/time: 2015/09/30 10:29      Street: EAST PARKING LOT OF MEDIA/COMMUNICATIONS      City: SAN BENARDINO

Location details: WEST PARKING LOT OF MEDIA/COMMUNICATIONS      Upstream manhole No: SMH35      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: SMH34      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 0.0      Length surveyed: 0.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: G      Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS, BUSY PART OF THE DAY BLOCKING TRAFFIC. THIS VIDEO IS JUST FOR REFERENCE SECTION B-11

Starting access point:      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	Overall Pipe Rating	Overall Pipe Rating Index	
1	0	0	0	0000	0	0	0	0000	0	0	0
2	0	0									
3	0	0									
4	0	0									
5	0	0									

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		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



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SMH34-SMH33      Start date/time: 2015/09/30 10:34      Street: EAST PARKING LOT FOR MEDIA/COMMUNICATIONS      City: SAN BENARDINO

Location details: EAST PARKING LOT FOR MEDIA/COMMUNICATIONS      Upstream manhole No: SMH34      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: SMH33      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 0.0      Length surveyed: 0.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: \_\_\_\_\_      Location code: G      Additional info: **THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE SECTION B-10**

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0000	0	0	0
2	0	0									
3	0	0									
4	0	0									
5	0	0									

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		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



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: SMH33-SMH32      Start date/time: 2015/09/30 10:44      Street: EAST PARKING LOT FOR MEDIA/COMMUNICATIONS      City: SAN BENARDINO

Location details: EAST PARKING LOT FOR MEDIA/COMMUNICATIONS      Upstream manhole No: SMH33      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: SMH32      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 0.0      Length surveyed: 0.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: G      Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-9

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	Overall Pipe Rating	Overall Pipe Rating Index	
1	0	0	0	0000	0	0	0	0000	0	0	0
2	0	0									
3	0	0									
4	0	0									
5	0	0									

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks	
						1st	2nd			At/From	to					
0.0	33	AMH														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





## PACP Sewer Report

Surveyed by: R. ZIEGLER Certificate No: U-815-07001103 Owner: SBVC Survey Customer: SBVC Drainage area: \_\_\_\_\_ Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_ Pipeline segment ref: SMH32-GOING NORTHTO A CLEAN OUT Start date/time: 2015/09/30 10:51 Street: NEAR LIBERAL ARTS BUILDING City: SAN BENARDINO

Location details: \_\_\_\_\_ Upstream manhole No: SMH32 Rim to invert: \_\_\_\_\_ Grade to invert: \_\_\_\_\_ Rim to grade: \_\_\_\_\_

Downstream manhole No: GOING NORTHTO A CLEAN OUT Rim to invert: \_\_\_\_\_ Grade to invert: \_\_\_\_\_ Rim to grade: \_\_\_\_\_ Sewer use: SS Direction: U Flow control: N Height: 8

Width: \_\_\_\_\_ Shape: C Material: PVC Ln. method: \_\_\_\_\_ Pipe joint length: \_\_\_\_\_ Total length: 0.0 Length surveyed: 0.0 Year laid: \_\_\_\_\_ Year renewed: \_\_\_\_\_ Media label: \_\_\_\_\_

Purpose: \_\_\_\_\_ Sewer category: \_\_\_\_\_ Pre-cleaning: N Date cleaned: \_\_\_\_\_ Weather: 1 Location code: J Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-8

Starting access point: Easting: \_\_\_\_\_ Northing: \_\_\_\_\_ Elevation: \_\_\_\_\_ Coordinate system: \_\_\_\_\_ GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0				0	0					
5	0	0				0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH27-SMH28		Start date/time: 2015/09/30 10:57		Street: GRANT AVE NEAR AUTOPARTS STORE		City: SAN BENARDINO					
Location details:						Upstream manhole No: SMH27		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH28				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:				
Purpose:	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: D	Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-4. THE ROAD HAD A LOCKED CHAIN ACCROSS THE ROAD							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0				
2	0	0			0	0				
3	0	0	0	0000	0	0	0	0000	0	0
4	0	0			0	0				
5	0	0			0	0				

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
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

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH28-SMH29		Start date/time: 2015/09/30 11:03		Street: GRANT AVE NEAR AUTO PARTS STORE		City: SAN BENARDINO					
Location details: NEAR AUTO PARTS STORE						Upstream manhole No: SMH28		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH29				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: D	Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS. SECTION B-5							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0					
2	0	0			0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0
4	0	0			0	0					
5	0	0			0	0					

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH29-SMH45		Start date/time: 2015/09/30 11:09		Street: GRANT AVE		City: SAN BERNARDINO					
Location details: GRANT AVE						Upstream manhole No: SMH29		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH45				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: D	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:				
Purpose:	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: C	Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE SECTION B-6							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0
2	0	0				0	0				
3	0	0				0	0				
4	0	0				0	0				
5	0	0				0	0				



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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential 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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH27-SMH26		Start date/time: 2015/09/30 11:17		Street: GRANT AVE NEAR AUTO PARTS STORE			City: SAN BERNARDINO				
Location details: ALLEY OF AUTO PARTS STORE						Upstream manhole No: SMH27		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH26				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: D	Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, LOCKED CHAIN PREVENTING ACCESS, LOCKED CHAIN PREVENTING US TO GET ACCESS TO MH.SECTION B-2							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe	
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0			0	0			
2	0	0			0	0			
3	0	0	0	0000	0	0	0	0000	0
4	0	0			0	0			
5	0	0			0	0			

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	45	AMH										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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:		
Work order:		Pipeline segment ref: SMH26-SMH25		Start date/time: 2015/09/30 11:23		Street: GRANT AVE NEAR AUTO PARTS STORE		City: SAN BERNARDINO				
Location details: ALLEY OF AUTO PARTS STORE						Upstream manhole No: SMH26		Rim to invert:		Grade to invert:		Rim to grade:
Downstream manhole No: SMH25				Rim to invert:		Grade to invert:		Rim to grade:	Sewer use: SS	Direction: U	Flow control: N	Height: 8
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:			
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: D	Additional info: 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 BUIRED						

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating
1	0	0			0	0				
2	0	0			0	0				
3	0	0	0	0000	0	0	0	0000	0	0
4	0	0			0	0				
5	0	0			0	0				

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm) 1st	2nd			At/From	to				
0.0	49	AMH										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
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



## PACP Sewer Report

Surveyed by: R. ZIEGLER		Certificate No: U-815-07001103		Owner: SBVC		Survey Customer SBVC		Drainage area:		Sheet number:			
Work order:		Pipeline segment ref: SMH25-SMH26		Start date/time: 2015/09/30 11:30		Street: GRANT AVE NEAR BUSINESS BUILDING		City: SAN BERNARDINO					
Location details: NEAR BUSINESS BUILDING ON CAMPUS						Upstream manhole No: SMH25		Rim to invert:		Grade to invert:		Rim to grade:	
Downstream manhole No: SMH26				Rim to invert:		Grade to invert:		Rim to grade:		Sewer use: SS	Direction: U	Flow control: N	Height: 6
Width:	Shape: C	Material: PVC	Ln. method:	Pipe joint length:	Total length: 0.0	Length surveyed: 0.0	Year laid:	Year renewed:	Media label:				
Purpose: G	Sewer category:	Pre-cleaning N	Date cleaned:	Weather: 1	Location code: F	Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS ON CAMPUS. THIS VIDEO IS JUST FOR REFERENCE. SECTION B-1							

**Starting access point:**

Easting:	Northing:	Elevation:	Coordinate system:	GPS accuracy:
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Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe		
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	Overall Pipe Rating	Overall Pipe Rating Index	
1	0	0	0	0000	0	0	0	0	0000	0	0
2	0	0				0	0				
3	0	0				0	0				
4	0	0				0	0				
5	0	0				0	0				

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

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						Inches (mm)				At/From	to				
0.0	40	AMH										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



## PACP Sewer Report

Surveyed by: R.ZIEGLER      Certificate No: U-815-07001103      Owner: SBVC      Survey Customer: SBVC      Drainage area:      Sheet number:

Work order:      Pipeline segment ref: SMH25-GOING NORTH TOWARD L.ARTS      Start date/time: 2015/09/30 11:40      Street: GRANT AVE NEAR BUSINESS BUILDING      City: SAN BERNARDINO

Location details: ON CAMPUS NEAR BUSINESS BUILDING      Upstream manhole No: SMH25      Rim to invert:      Grade to invert:      Rim to grade:

Downstream manhole No: GOING NORTH TOWARD L.ARTS      Rim to invert:      Grade to invert:      Rim to grade:      Sewer use: SS      Direction: U      Flow control: N      Height: 6

Width:      Shape: C      Material: PVC      Ln. method:      Pipe joint length:      Total length: 0.0      Length surveyed: 0.0      Year laid:      Year renewed:      Media label:

Purpose: G      Sewer category:      Pre-cleaning: N      Date cleaned:      Weather: 1      Location code: F      Additional info: THIS LINE WAS NOT CCTV'ED DUE TO NOT HAVING ACCESS. THIS VIDEO IS JUST FOR REFERENCE, ON CAMPUS BETWEEN TWO BUILDINGS. SECTION B-1

Starting access point:      Easting:      Northing:      Elevation:      Coordinate system:      GPS accuracy:

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0				0	0					
2	0	0				0	0					
3	0	0	0	0000	0	0	0	0000	0	0	0	0
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: R.ZIEGLER      Owner: SBVC      Start date/time: 2015/09/30      Upstream manhole No: SMH25      Pipeline segment ref: SMH25-GOING NORTH TOWARD L.ARTS      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		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							

Surveyed by: R.ZIEGLER     
 Owner: SBVC     
 Start date/time: 2015/09/30     
 Upstream manhole No: SMH25     
 Pipeline segment ref: SMH25-GOING NORTH TOWARD L.ARTS     
 Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks	
						1st	2nd			At/From	to					
0.0	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**



## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH13-MH14</b>	City: <b>YUCAIPA</b>	Street: <b>ON CAMPUS</b>	
Start date/time:	Width:	Height: <b>8</b>	Material: <b>PVC</b>	Location code: <b>F</b>
Direction: <b>Downstream</b>	Length surveyed:	Weather: <b>1</b>	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH14-MH15</b>	City: <b>YUCAIPA</b>	Street: <b>ON CAMPUS</b>	
Start date/time:	Width:	Height: <b>6</b>	Material: <b>PVC</b>	Location code: <b>F</b>
Direction: <b>Downstream</b>	Length surveyed:	Weather: <b>1</b>	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH15-MH16</b>	City: <b>YUCAIPA</b>	Street: <b>ON CAMPUS</b>	
Start date/time:	Width:	Height: <b>6</b>	Material: <b>RCP</b>	Location code: <b>F</b>
Direction: <b>Downstream</b>	Length surveyed:	Weather: <b>1</b>	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH16-MH17</b>	City: <b>YUCAIPA</b>	Street: <b>ON CAMPUS</b>	
Start date/time:	Width:	Height: <b>8</b>	Material: <b>RCP</b>	Location code: <b>F</b>
Direction: <b>Downstream</b>	Length surveyed:	Weather: <b>1</b>	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH18A-MH20</b>	City: <b>YUCAIPA</b>	Street: <b>ON CAMPUS</b>	
Start date/time:	Width:	Height: <b>8</b>	Material: <b>RCP</b>	Location code: <b>F</b>
Direction: <b>Downstream</b>	Length surveyed:	Weather: <b>1</b>	Media label:	







## Main Inspection with Pipe-Run and Scoring

Project Name: CRAFTON HILLS COLLEGE	Pipeline segment ref: MH20-MH21	City: YUCAIPA	Street: ON CAMPUS	
Start date/time:	Width:	Height: 6	Material: PVC	Location code: F
Direction: Downstream	Length surveyed:	Weather: 1	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH21-MH22</b>	City: <b>YUCAIPA</b>	Street: <b>ON CAMPUS</b>	
Start date/time:	Width:	Height: <b>6</b>	Material: <b>PVC</b>	Location code: <b>F</b>
Direction: <b>Downstream</b>	Length surveyed:	Weather: <b>1</b>	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: CRAFTON HILLS COLLEGE	Pipeline segment ref: MH20-MH23	City: YUCAIPA	Street: ON CAMPUS	
Start date/time:	Width:	Height: 8	Material: PVC	Location code: F
Direction: Downstream	Length surveyed:	Weather: 1	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: CRAFTON HILLS COLLEGE	Pipeline segment ref: MH20-MH24	City: YUCAIPA	Street: ON CAMPUS	
Start date/time:	Width:	Height: 8	Material: PVC	Location code: F
Direction: Downstream	Length surveyed:	Weather: 1	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH24-MH25</b>	City: <b>YUCAIPA</b>	Street: <b>ON CAMPUS</b>	
Start date/time:	Width:	Height: <b>8</b>	Material: <b>PVC</b>	Location code: <b>F</b>
Direction: <b>Downstream</b>	Length surveyed:	Weather: <b>1</b>	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH25-MH26</b>	City: <b>YUCAIPA</b>	Street: <b>ON CAMPUS</b>	
Start date/time:	Width:	Height: <b>8</b>	Material: <b>PVC</b>	Location code: <b>F</b>
Direction: <b>Downstream</b>	Length surveyed:	Weather: <b>1</b>	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: CRAFTON HILLS COLLEGE	Pipeline segment ref: MH26-MH27	City: YUCAIPA	Street: ON CAMPUS	
Start date/time:	Width:	Height: 8	Material: PVC	Location code: F
Direction: Downstream	Length surveyed:	Weather: 1	Media label:	





## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH28-MH29</b>	City: <b>YUCAIPA</b>	Street: <b>ON CAMPUS</b>	
Start date/time:	Width:	Height: <b>8</b>	Material: <b>PVC</b>	Location code: <b>F</b>
Direction: <b>Downstream</b>	Length surveyed:	Weather: <b>1</b>	Media label:	

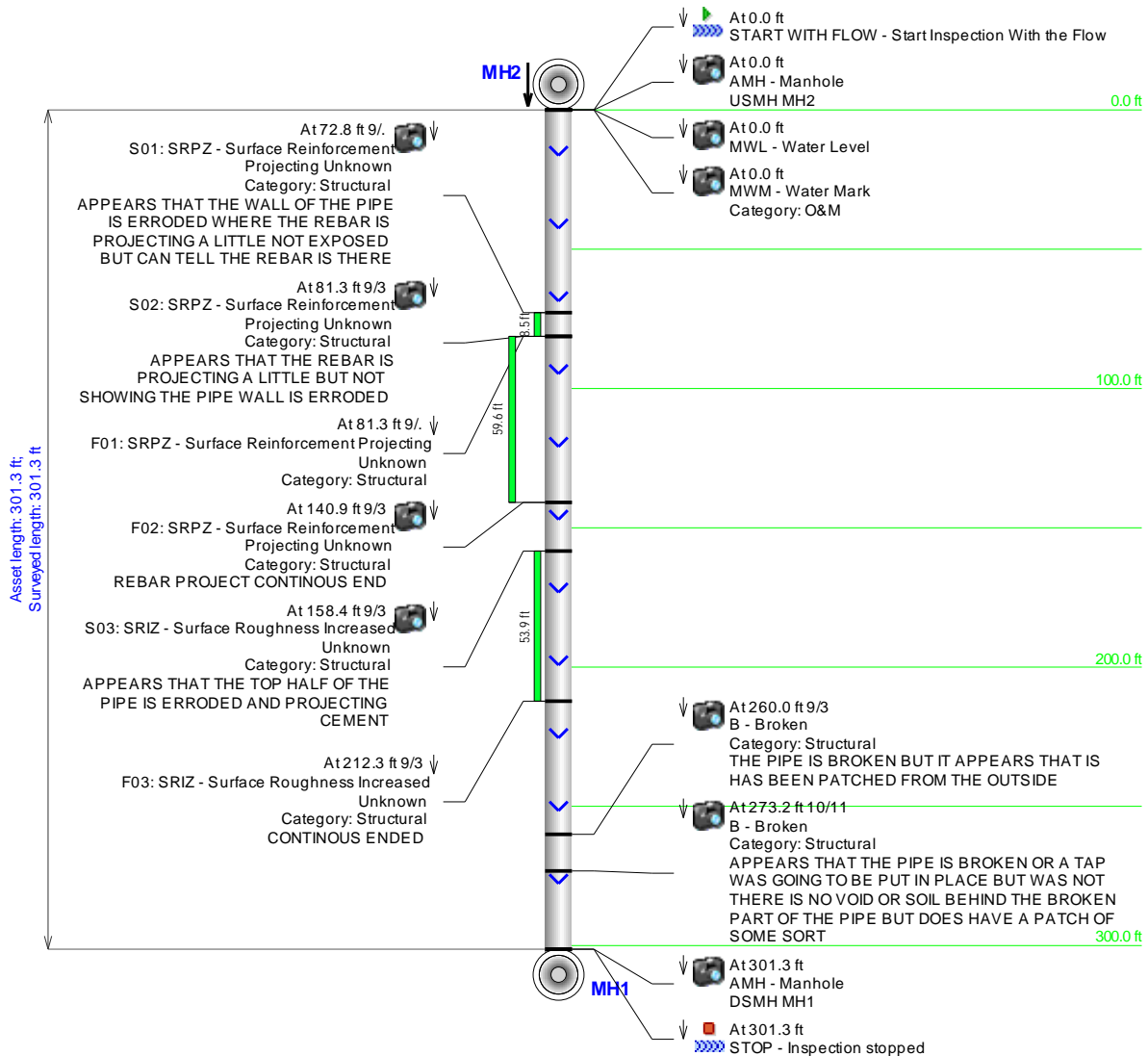






## Main Inspection with Pipe-Run and Scoring

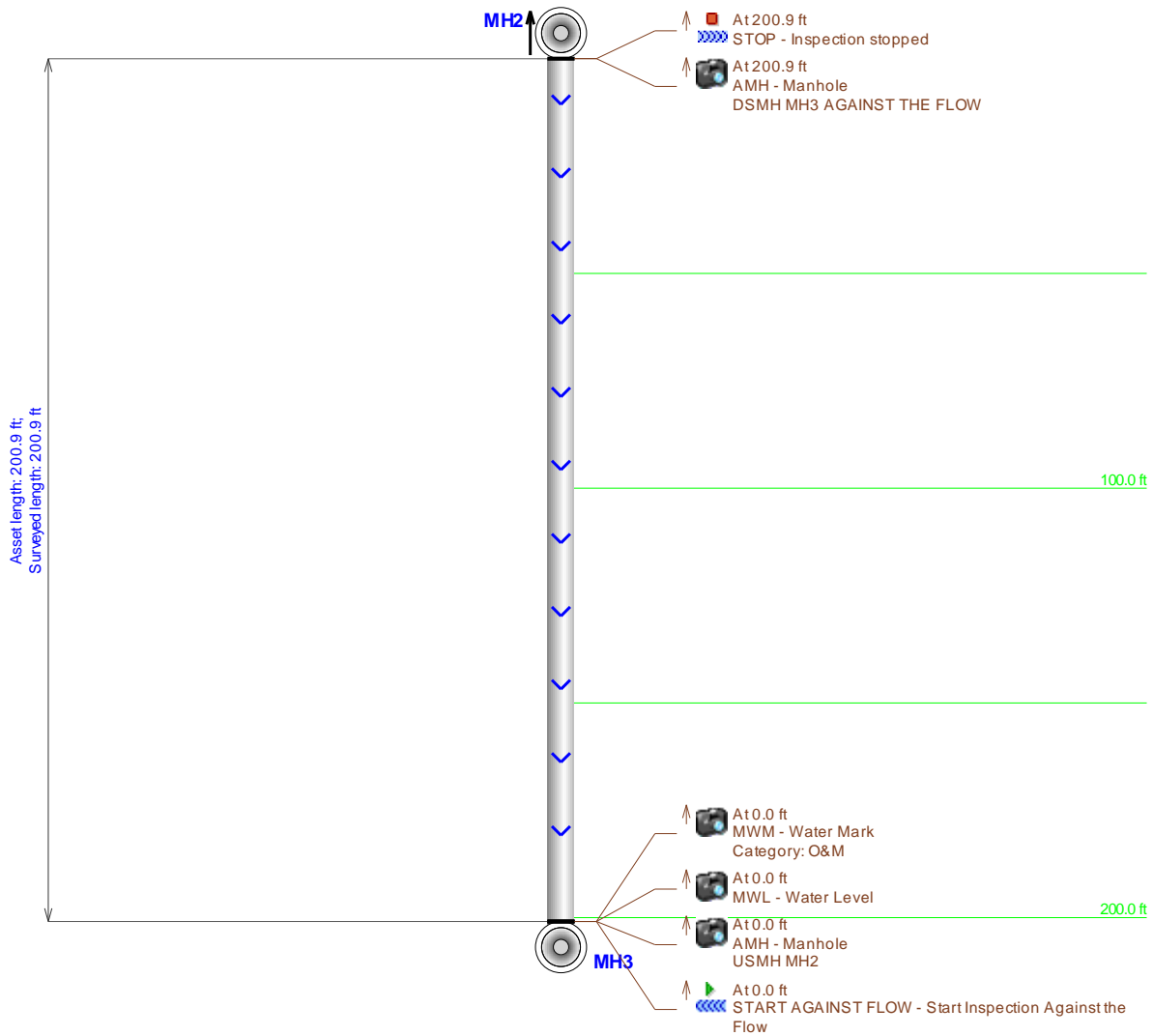
Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH2-MH1	YUCAIPA	CAMPUS DRIVE
Start date/time:	Width:	Height:	Material:
9/29/2015		8	RCP
Direction:	Length surveyed:	Weather:	Media label:
Downstream	301.3	1	





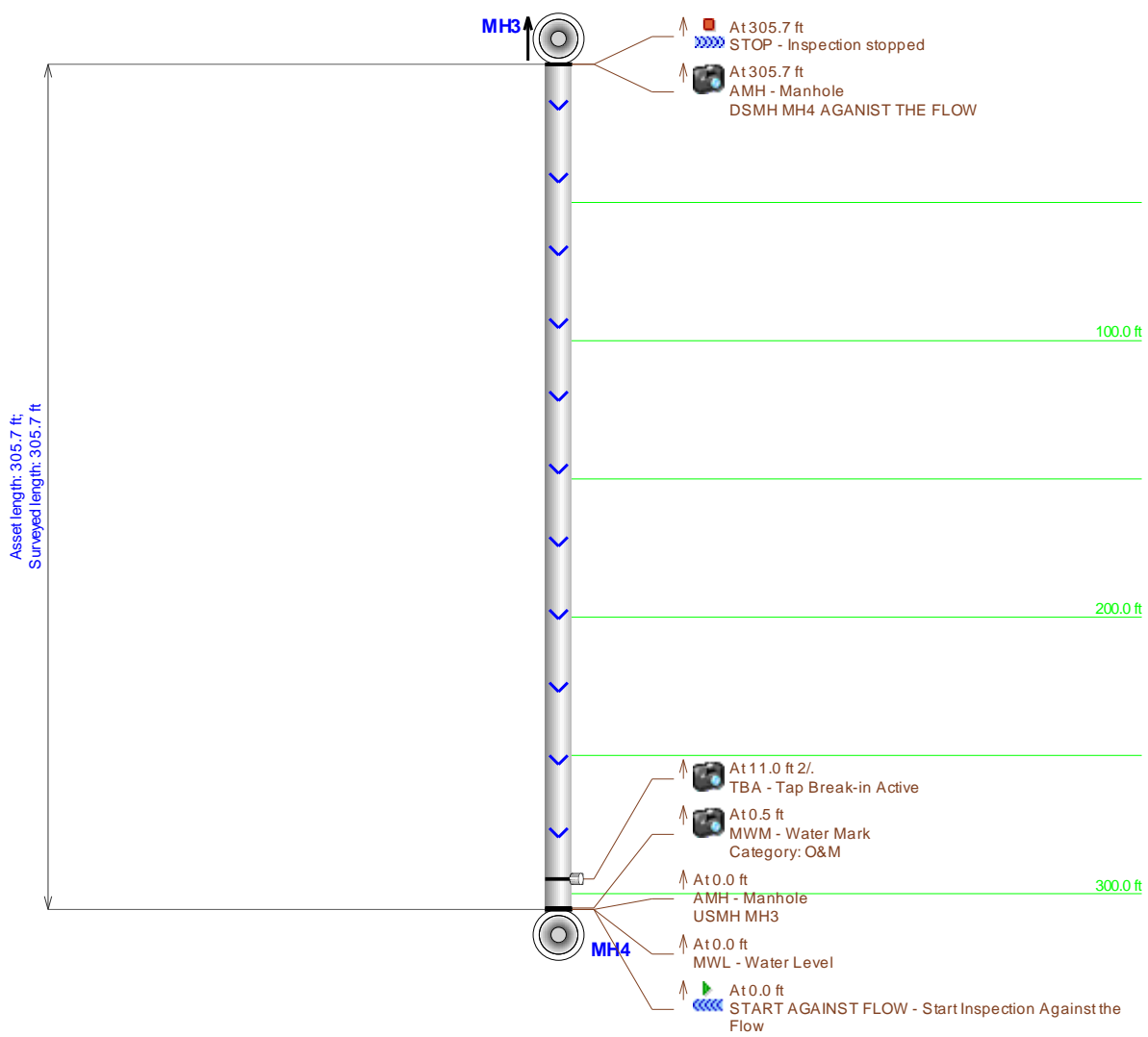
## Main Inspection with Pipe-Run and Scoring

Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH2-MH3	YUCAIPA	CAMPUS DRIVE
Start date/time:	Width:	Height:	Material:
9/29/2015		8	RCP
Location code:			
C			
Direction:	Length surveyed:	Weather:	Media label:
UPSTREAM	200.9	1	



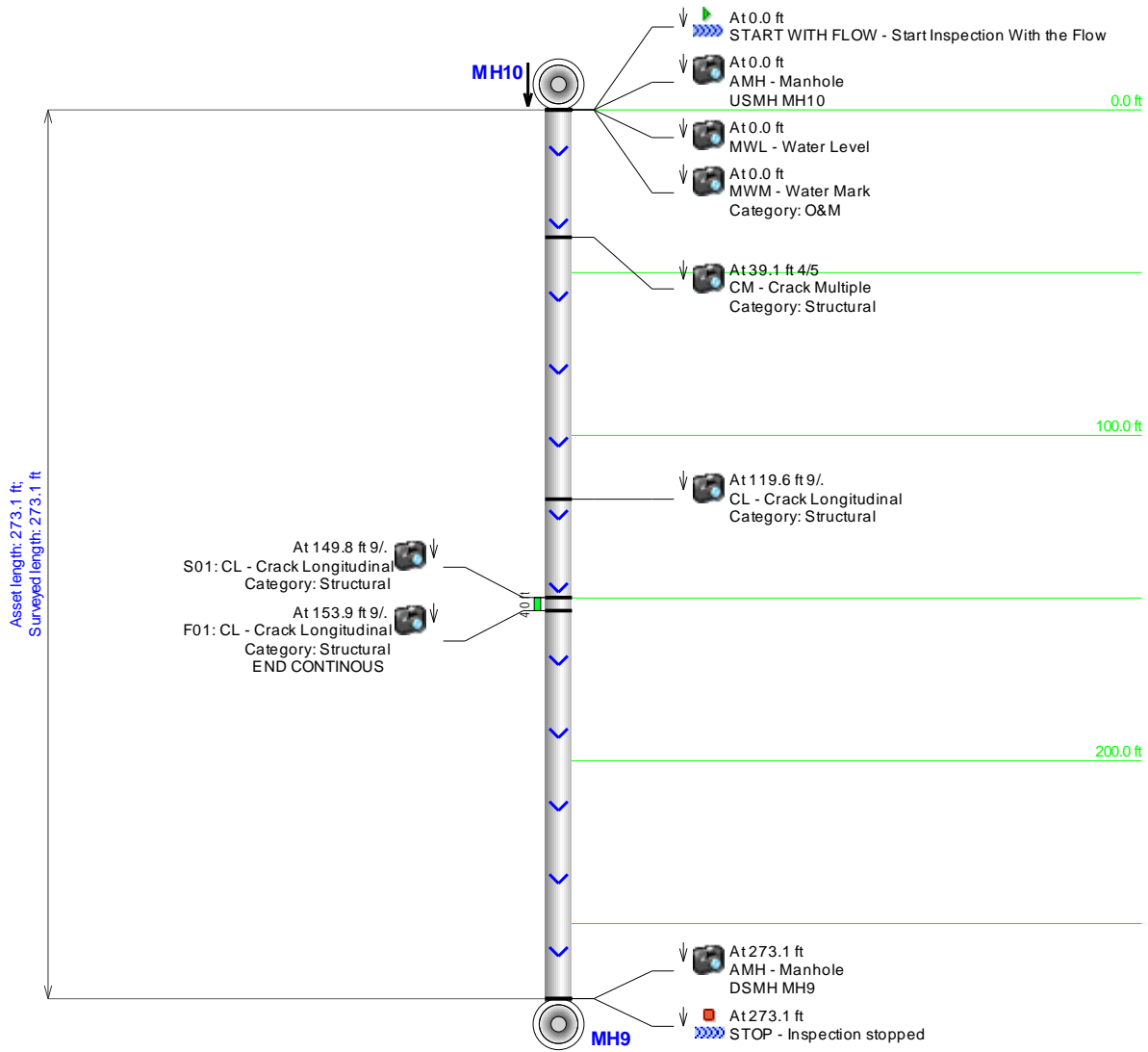
## Main Inspection with Pipe-Run and Scoring

Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH3-MH4	YUCAIPA	CAMPUS DRIVE
Start date/time:	Width:	Height:	Material:
9/29/2015		8	RCP
Location code:	Direction:	Length surveyed:	Weather:
C	UPSTREAM	305.7	1
Media label:			



## Main Inspection with Pipe-Run and Scoring

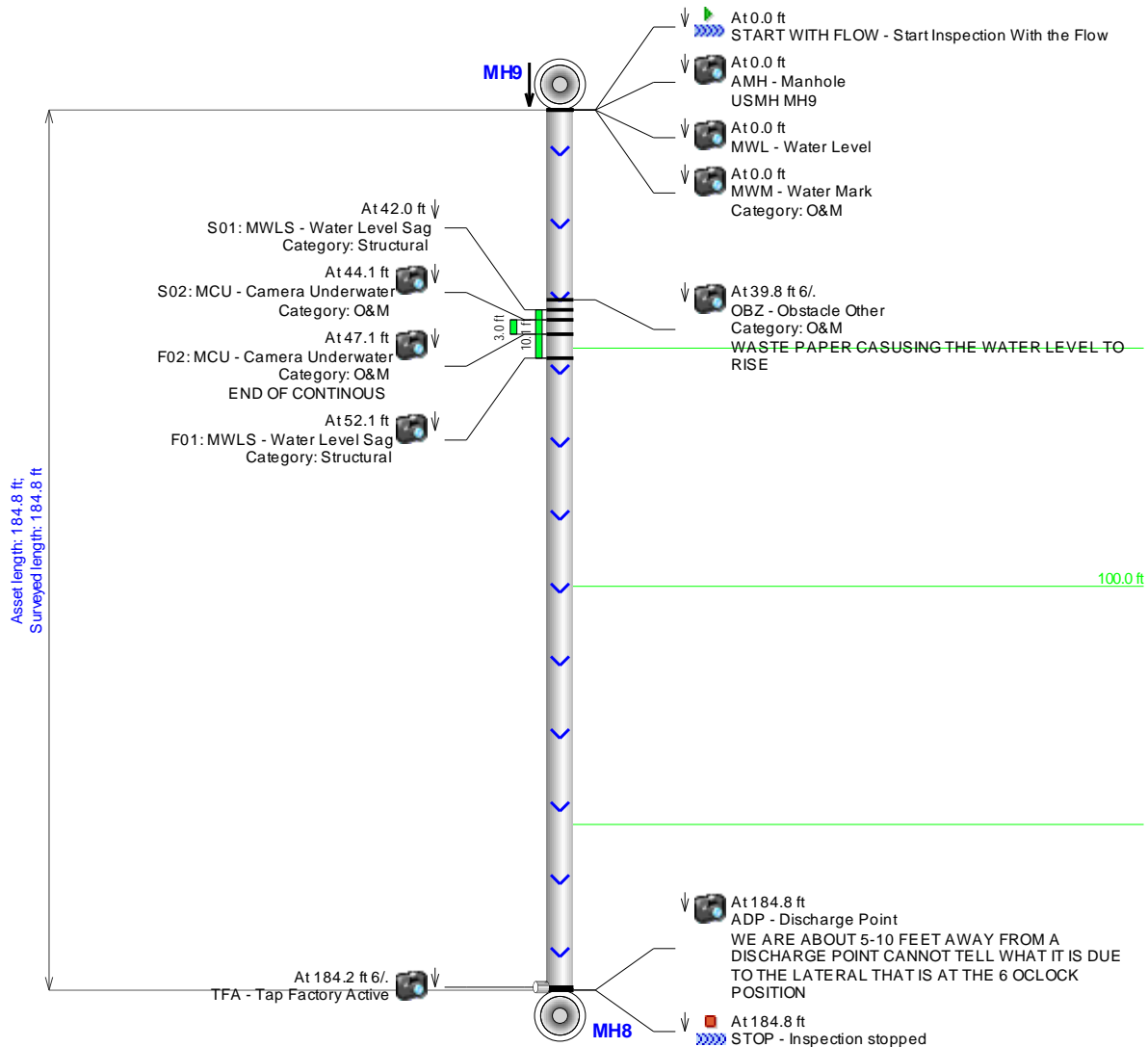
Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH10-MH9	YUCAIPA	CAMPUS DR
Start date/time:	Width:	Height:	Material:
9/29/2015		8	RCP
Location code:	Direction:	Length surveyed:	Weather:
C	Downstream	273.1	1
Media label:			





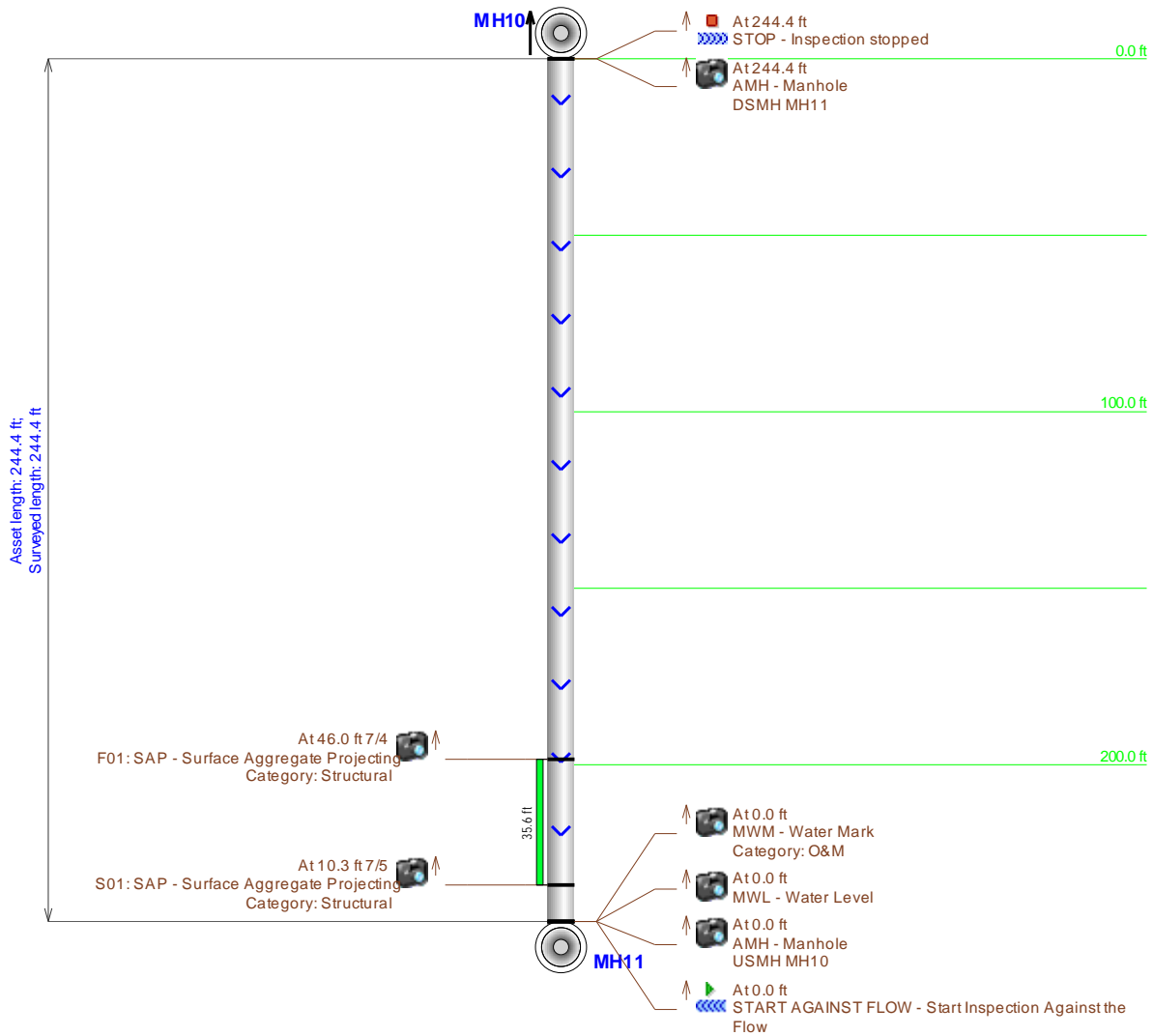
## Main Inspection with Pipe-Run and Scoring

Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH9-MH8	YUCAIPA	CAMPUS DRIVE
Start date/time:	Width:	Height:	Material:
9/29/2015		8	RCP
Location code:	Direction:	Length surveyed:	Weather:
C	Downstream	184.8	1
Media label:			



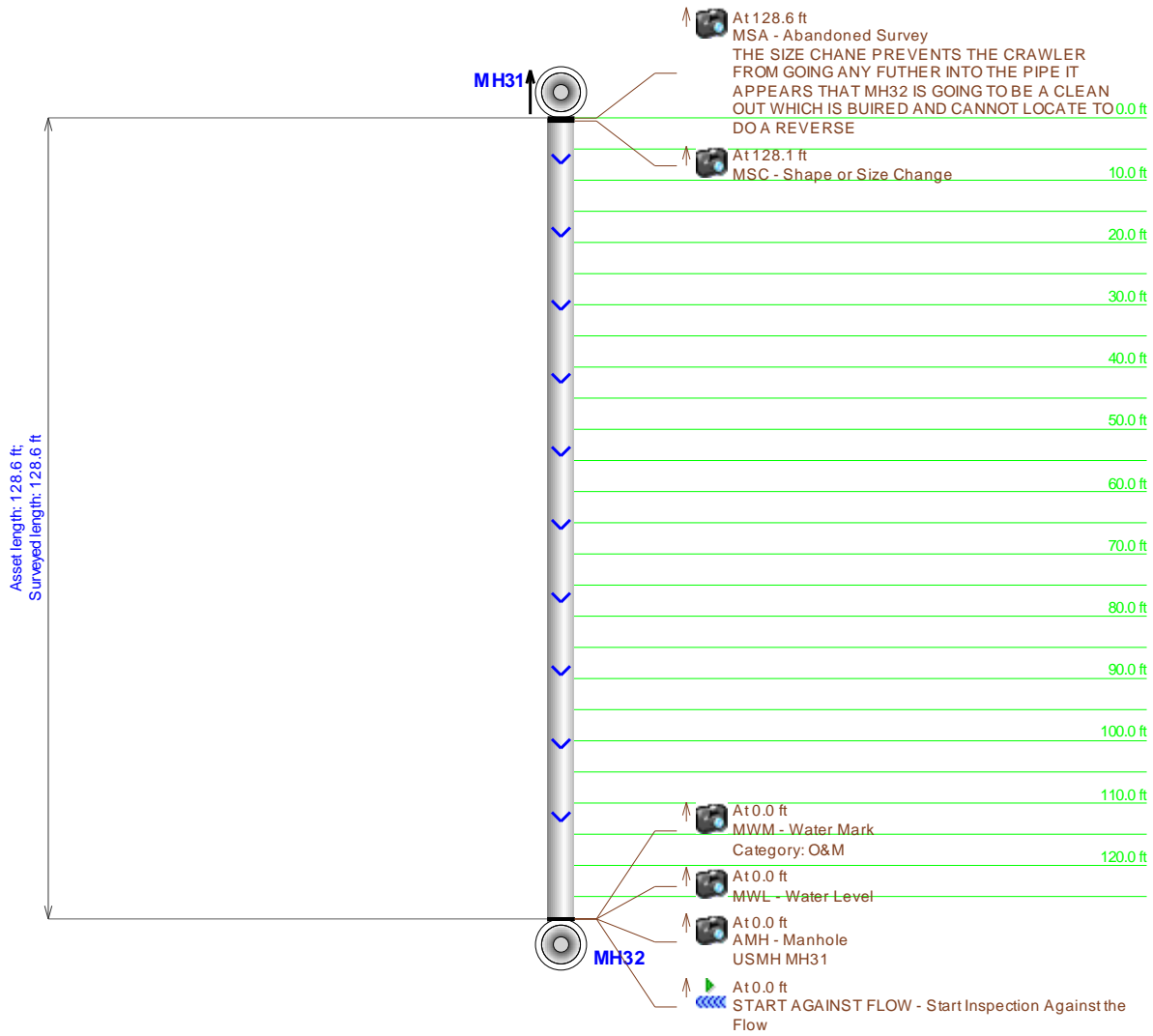
## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH10-MH11</b>	City: <b>YUCAIPA</b>	Street: <b>CAMPUS DRIVE</b>
Start date/time: <b>9/29/2015</b>	Width: <b></b>	Height: <b>8</b>	Material: <b>RCP</b>
Location code: <b>C</b>	Direction: <b>UPSTREAM</b>	Length surveyed: <b>244.4</b>	Weather: <b>1</b>
		Media label: <b></b>	



## Main Inspection with Pipe-Run and Scoring

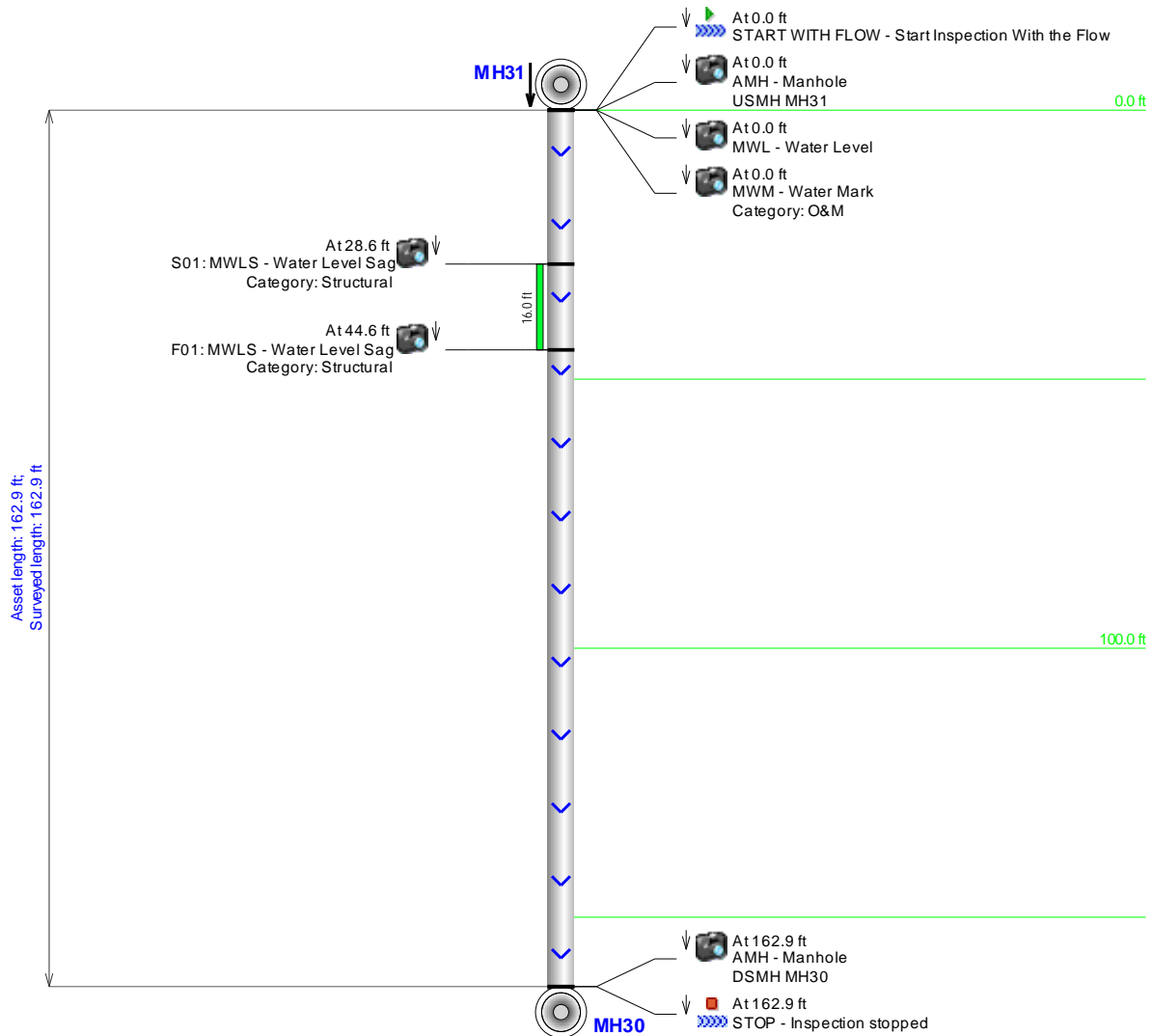
Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH31-MH32	YUCAIPA	CRAFTON HILLS MATIENCE ROAD
Start date/time:	Width:	Height:	Material:
9/29/2015		8	PVC
Direction:	Length surveyed:	Weather:	Media label:
UPSTREAM	128.6	1	





## Main Inspection with Pipe-Run and Scoring

Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH31-MH30	YUCAIPA	MATIENCE ROAD
Start date/time:	Width:	Height:	Material:
9/29/2015		8	PVC
Direction:	Length surveyed:	Weather:	Media label:
Downstream	162.9	1	

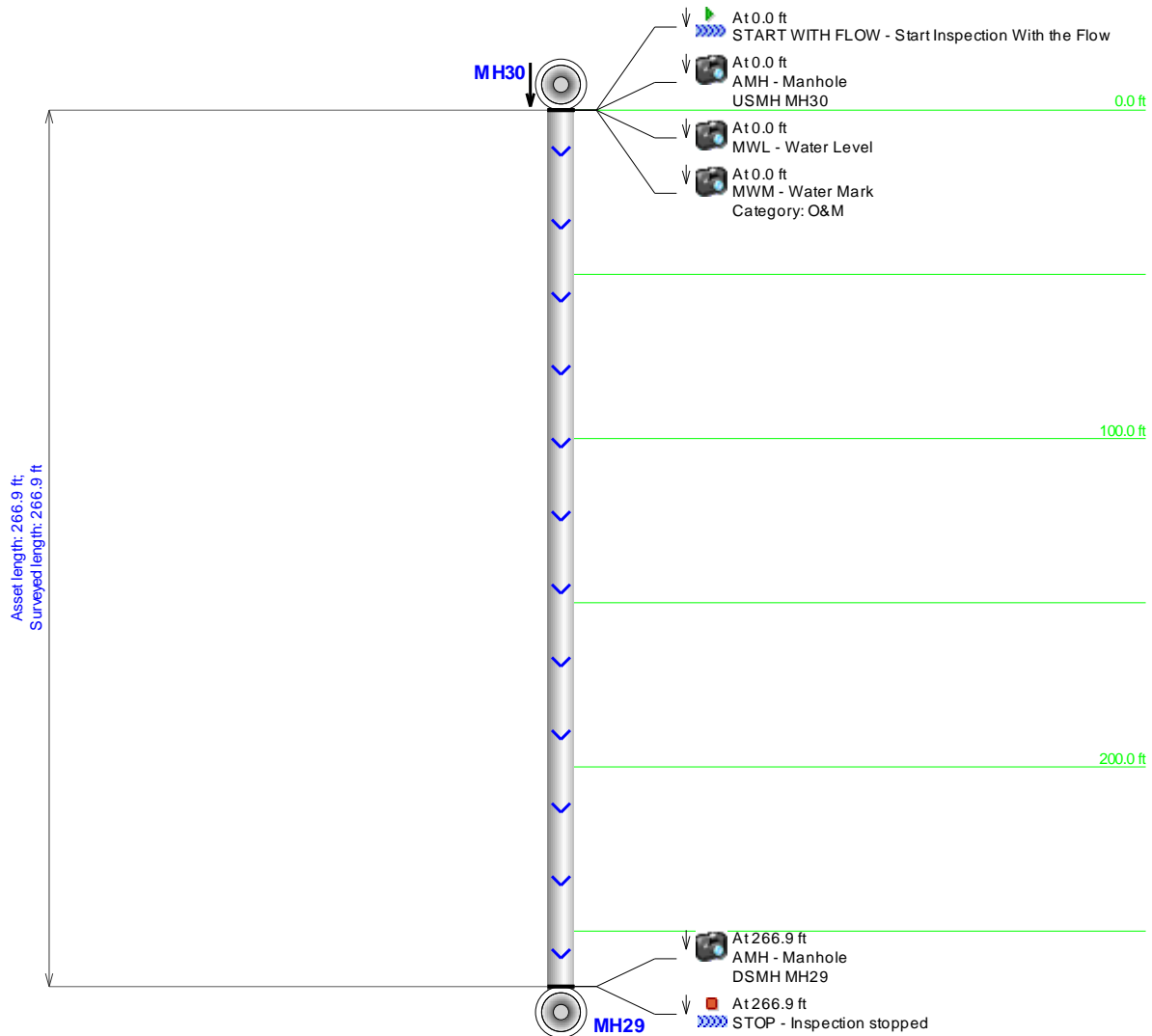






## Main Inspection with Pipe-Run and Scoring

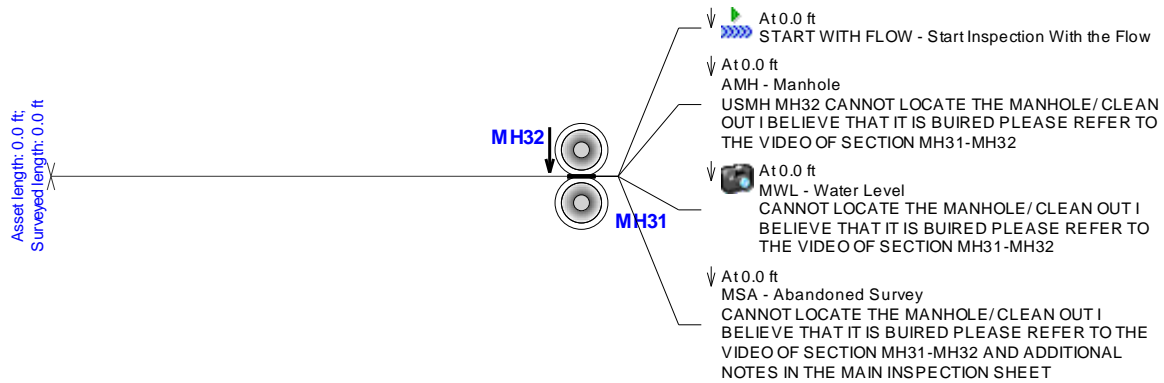
Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH30-MH29</b>	City: <b>YUCAIPA</b>	Street: <b>CRAFTON HILLS MATIENCE ROAD</b>
Start date/time: <b>9/29/2015</b>	Width: <b></b>	Height: <b>8</b>	Material: <b>PVC</b>
Direction: <b>Downstream</b>	Length surveyed: <b>266.9</b>	Weather: <b>1</b>	Location code: <b>C</b>
			Media label: <b></b>





## Main Inspection with Pipe-Run and Scoring

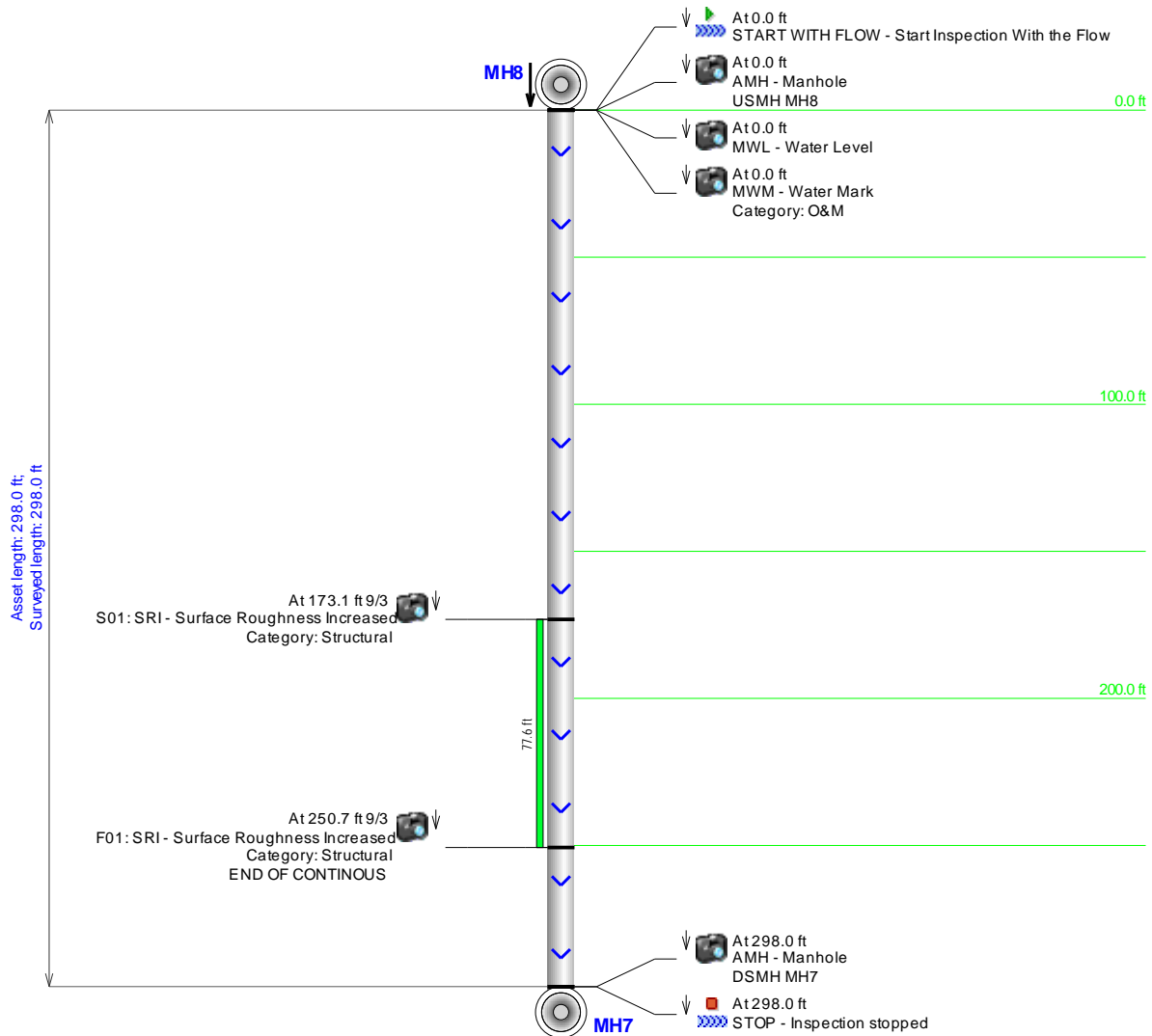
Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH32-MH31</b>	City: <b>YUCAIPA</b>	Street: <b>CRAFTOM HILLS MATIENCE ROAD</b>
Start date/time: <b>9/30/2015</b>	Width: <b></b>	Height: <b>8</b>	Material: <b>PVC</b>
Location code: <b>C</b>	Direction: <b>Downstream</b>	Length surveyed: <b>0.0</b>	Weather: <b>1</b>
			Media label: <b></b>





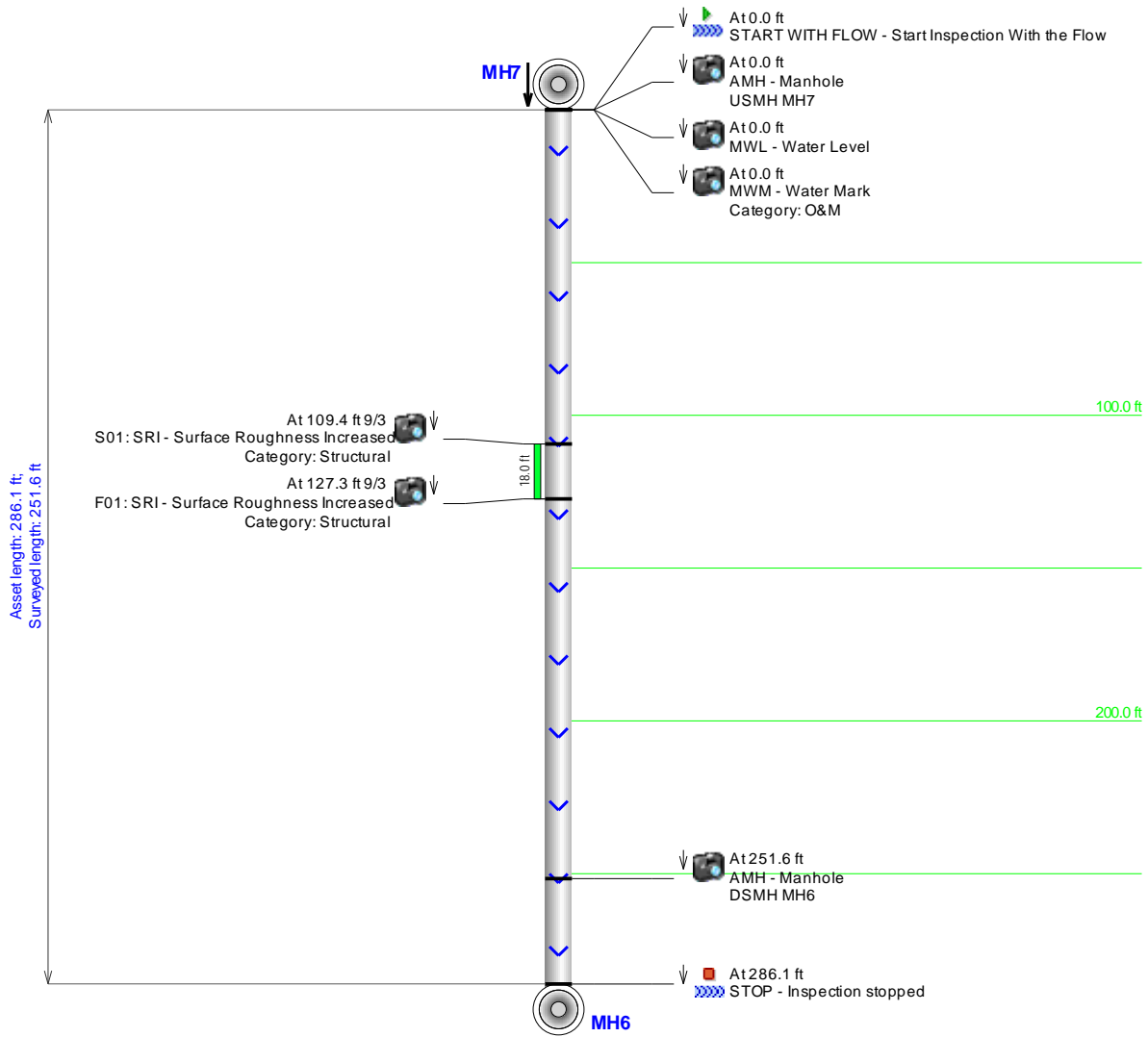
## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH8-MH7</b>	City: <b>YUCAIPA</b>	Street: <b>CAMPUS DRIVE</b>
Start date/time: <b>10/3/2015</b>	Width: <b></b>	Height: <b>8</b>	Material: <b>RCP</b>
Location code: <b>C</b>	Direction: <b>Downstream</b>	Length surveyed: <b>298.0</b>	Weather: <b>1</b>
			Media label: <b></b>



## Main Inspection with Pipe-Run and Scoring

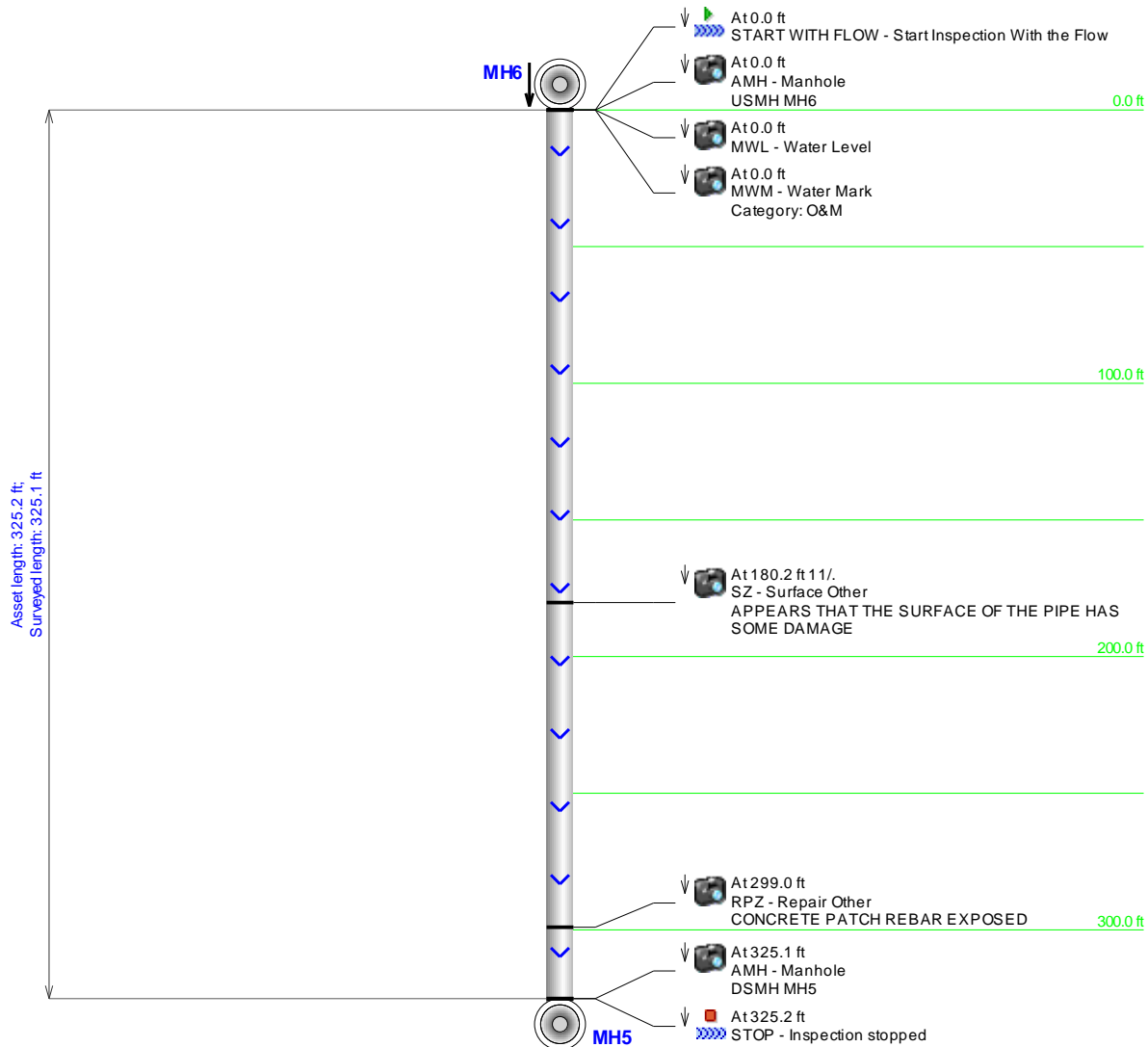
Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH7-MH6	YUCAIPA	CAMPUS DRIVE
Start date/time:	Width:	Height:	Material:
10/3/2015		8	RCP
Location code:	Direction:	Length surveyed:	Weather:
C	Downstream	251.6	1
Media label:			





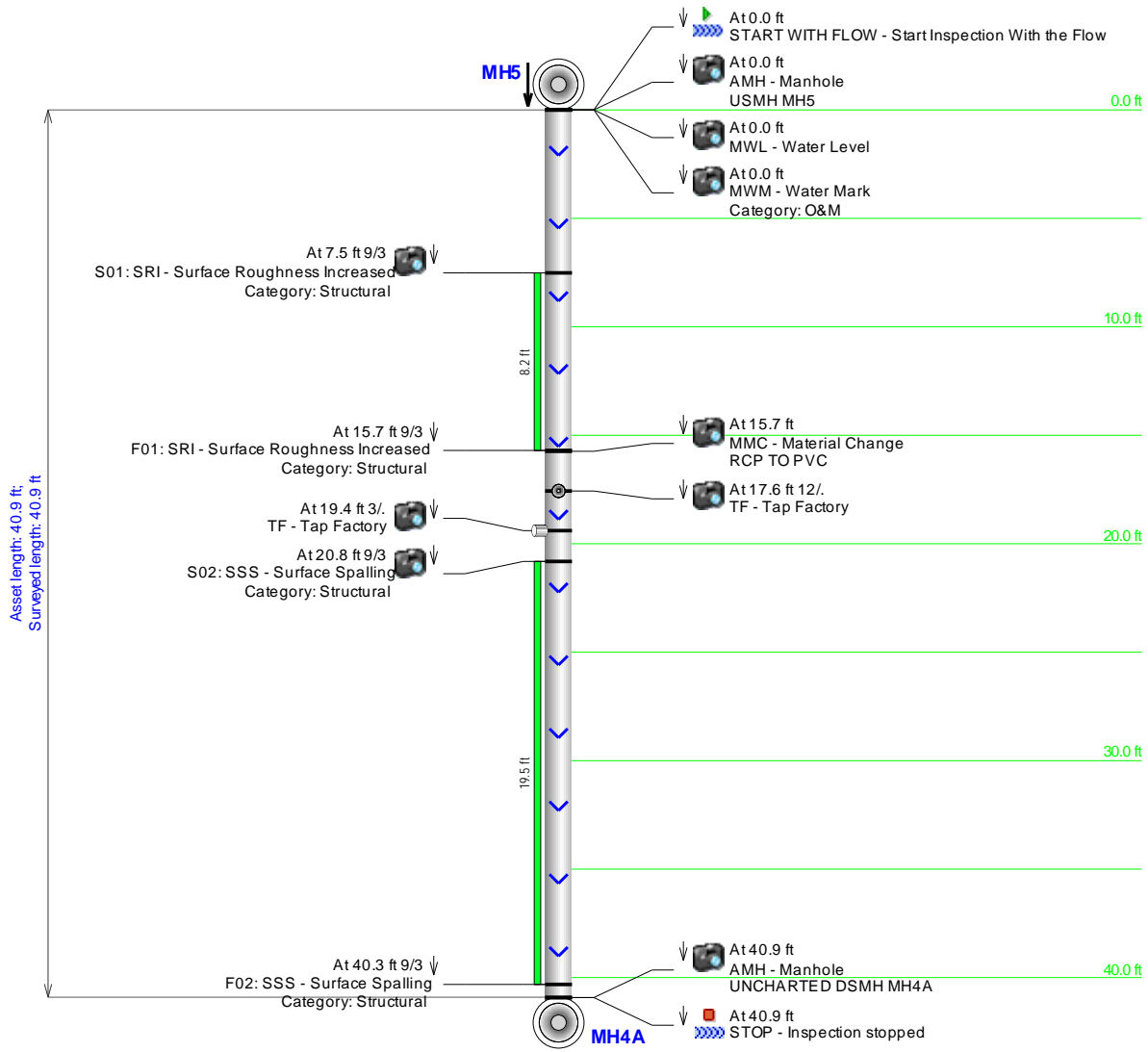
## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH6-MH5</b>	City: <b>YUCAIPA</b>	Street: <b>CAMPUS DRIVE</b>
Start date/time: <b>10/3/2015</b>	Width: 	Height: <b>8</b>	Material: <b>RCP</b>
Direction: <b>Downstream</b>	Length surveyed: <b>325.1</b>	Weather: <b>1</b>	Location code: <b>C</b>
			Media label: 



## Main Inspection with Pipe-Run and Scoring

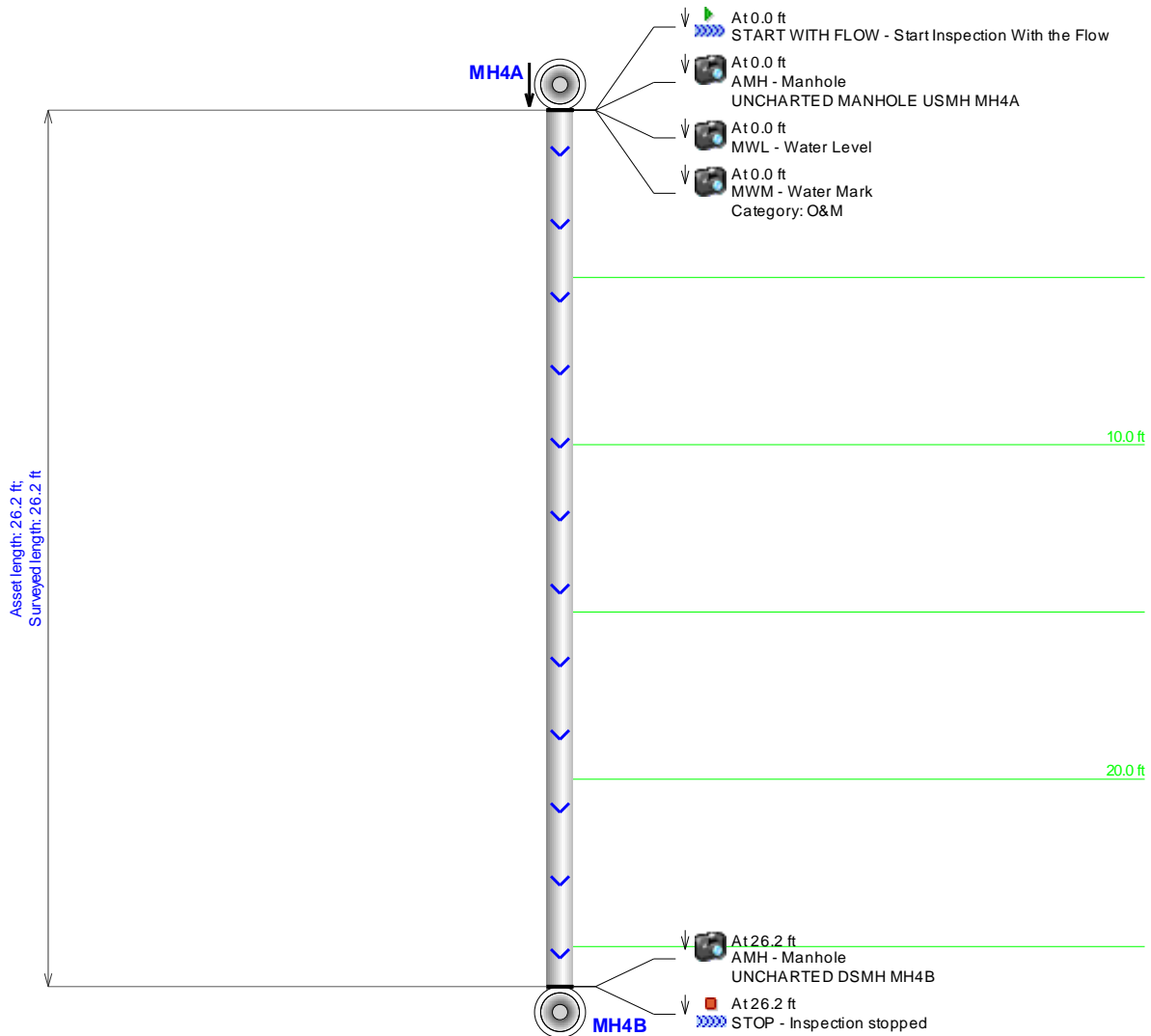
Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH5-MH4A	YUCAIPA	CAMPUS DRIVE
Start date/time:	Width:	Height:	Material:
10/3/2015		8	RCP
Location code:	Direction:	Length surveyed:	Weather:
C	Downstream	40.9	1
Media label:			





## Main Inspection with Pipe-Run and Scoring

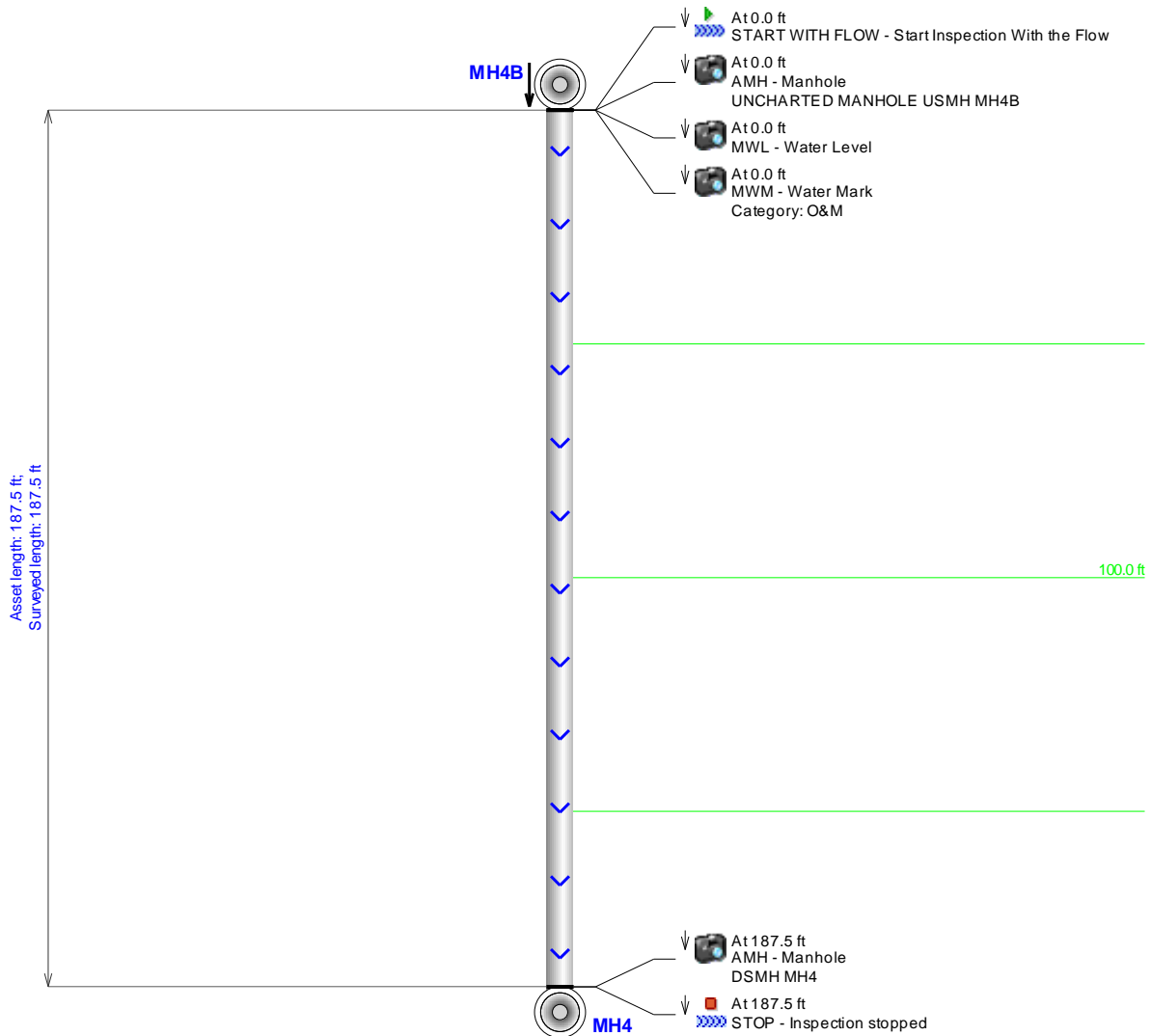
Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH4A-MH4B	YUCAIPA	CAMPUS DRIVE AND EMERAL VIEW
Start date/time:	Width:	Height:	Material:
10/3/2015		8	RCP
Direction:	Length surveyed:	Weather:	Media label:
Downstream	26.2	1	





## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH4B-MH4</b>	City: <b>YACAIPA</b>	Street: <b>CAMPUS DRIVE AND EMERALD VIEW</b>
Start date/time: <b>10/3/2015</b>	Width: <b></b>	Height: <b>8</b>	Material: <b>RCP</b>
Location code: <b>C</b>	Direction: <b>Downstream</b>	Length surveyed: <b>187.5</b>	Weather: <b>1</b>
			Media label: <b></b>

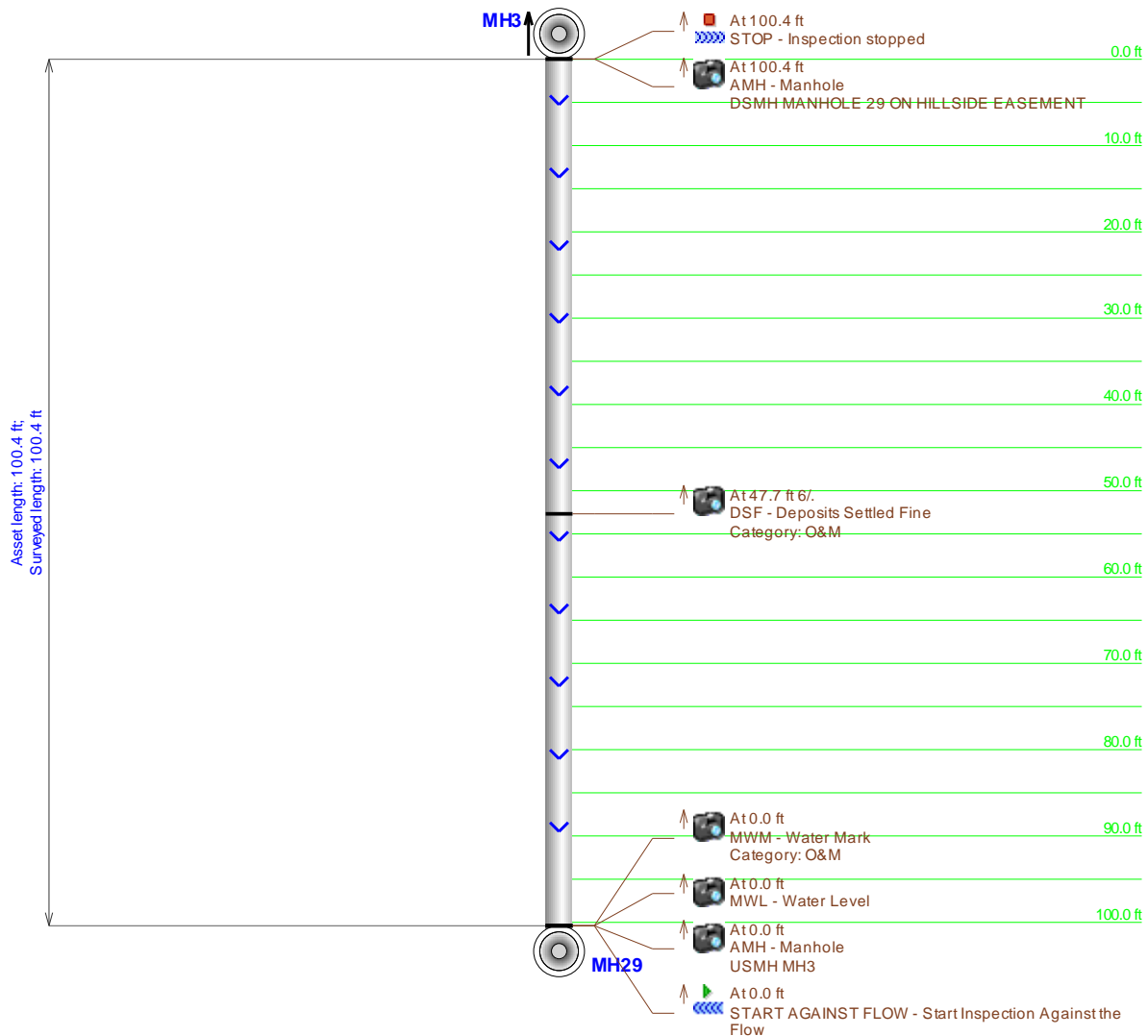






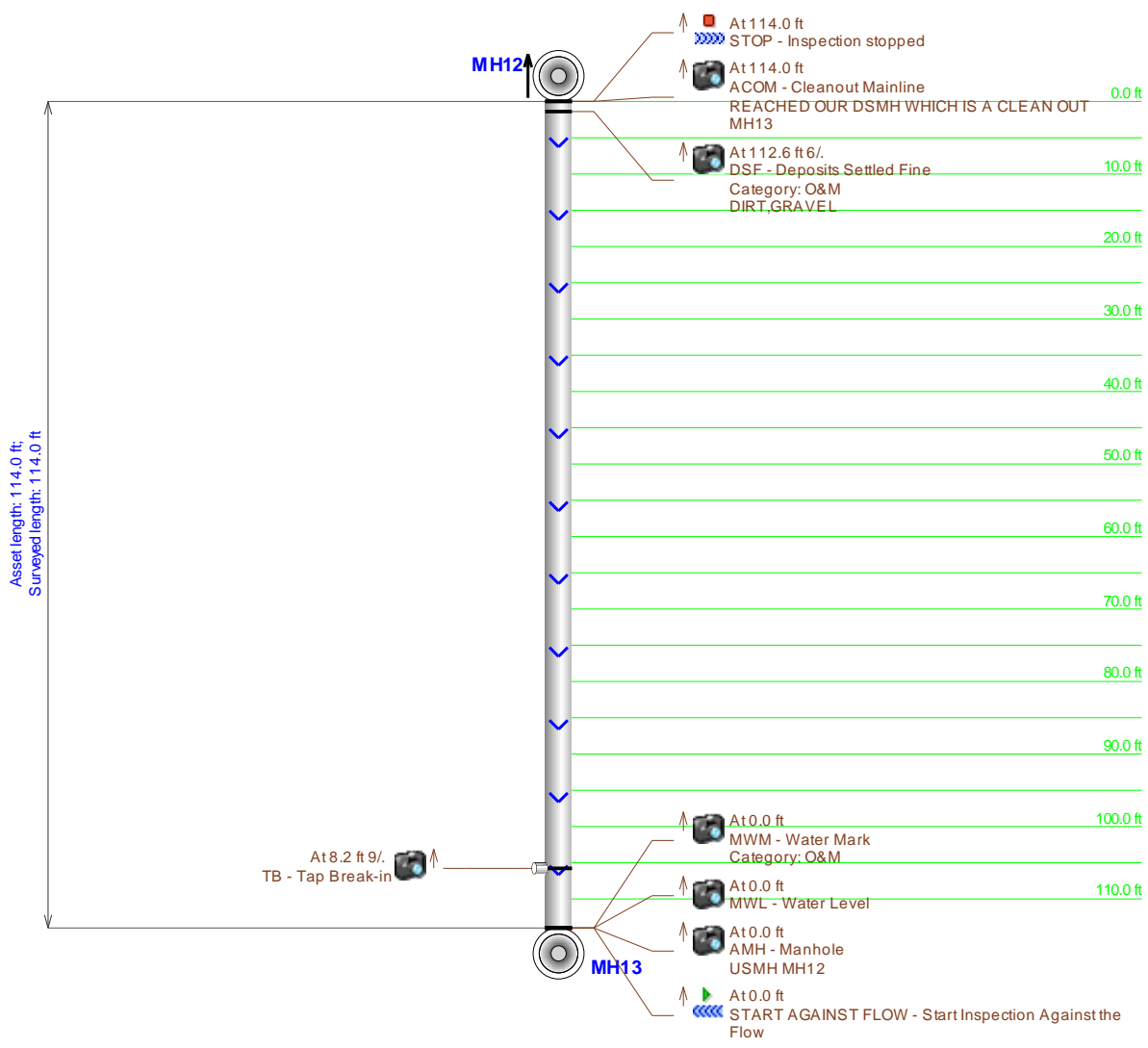
## Main Inspection with Pipe-Run and Scoring

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH3-MH29</b>	City: <b>YUCAIPA</b>	Street: <b>CAMPUS ROAD AND CRAFTON HILLS MATIENCE ROAD</b>
Start date/time: <b>10/3/2015</b>	Width: 	Height: <b>8</b>	Material: <b>PVC</b>
Location code: <b>C</b>	Direction: <b>UPSTREAM</b>	Length surveyed: <b>100.4</b>	Weather: <b>1</b>
			Media label: 



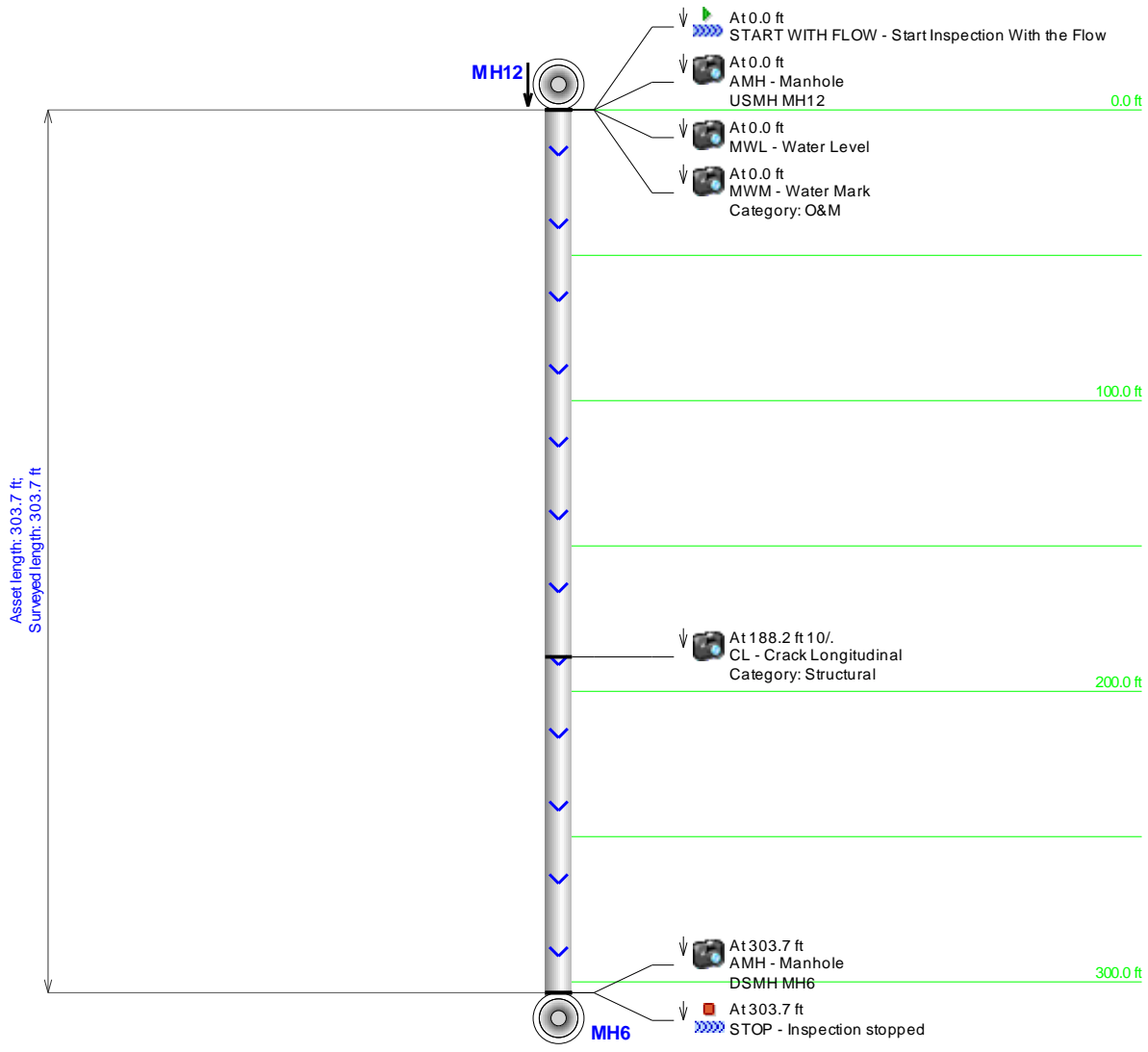
## Main Inspection with Pipe-Run and Scoring

Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH12-MH13	YUCAIPA	PARKING LOT B
Start date/time:	Width:	Height:	Material:
10/3/2015		8	RCP
Location code:	Direction:	Length surveyed:	Weather:
G	UPSTREAM	114.0	1
Media label:			



## Main Inspection with Pipe-Run and Scoring

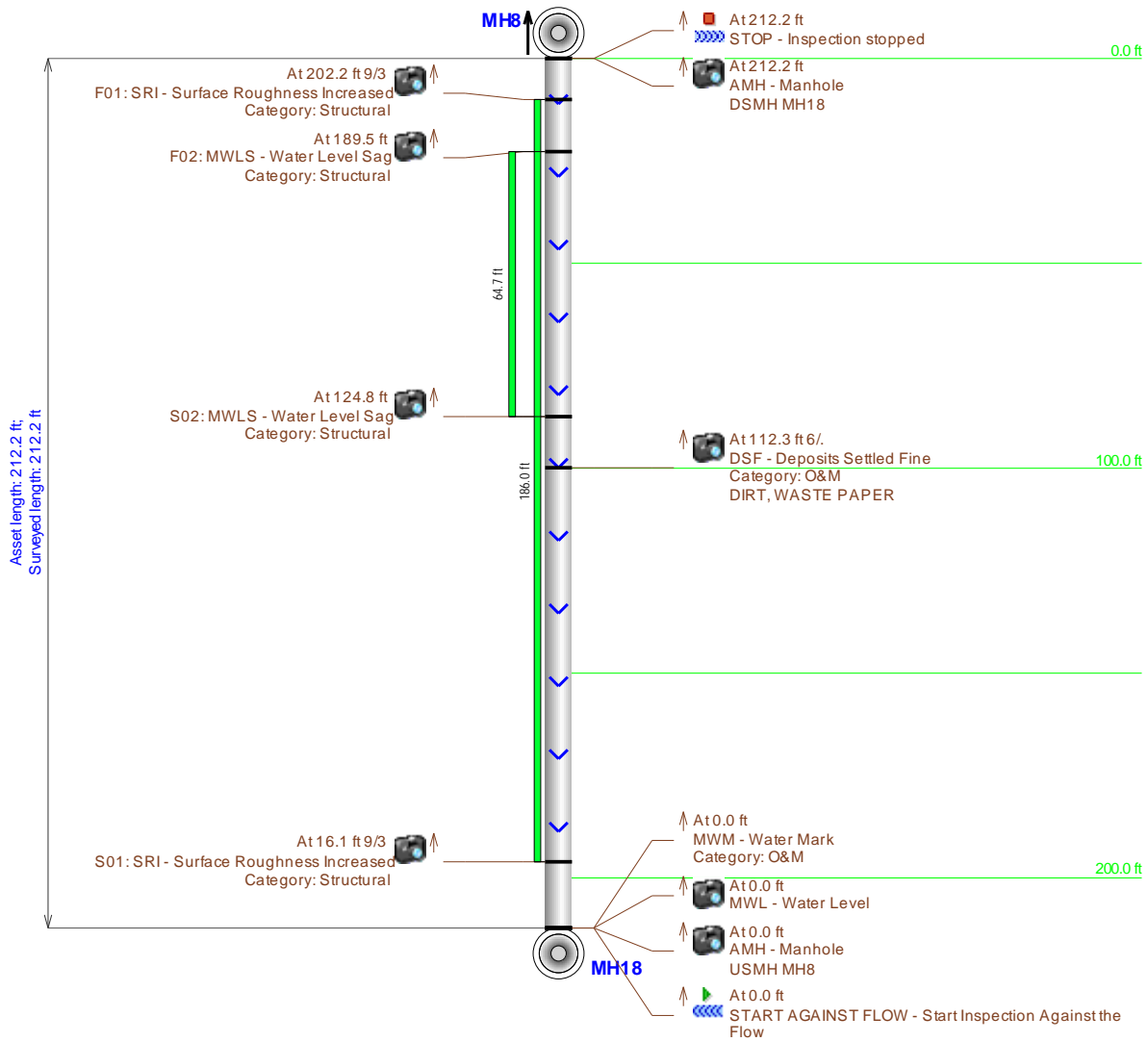
Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH12-MH6	YUCAIPA	PARKING LOT B
Start date/time:	Width:	Height:	Material:
10/3/2015		8	RCP
Direction:	Length surveyed:	Weather:	Media label:
Downstream	303.7	1	





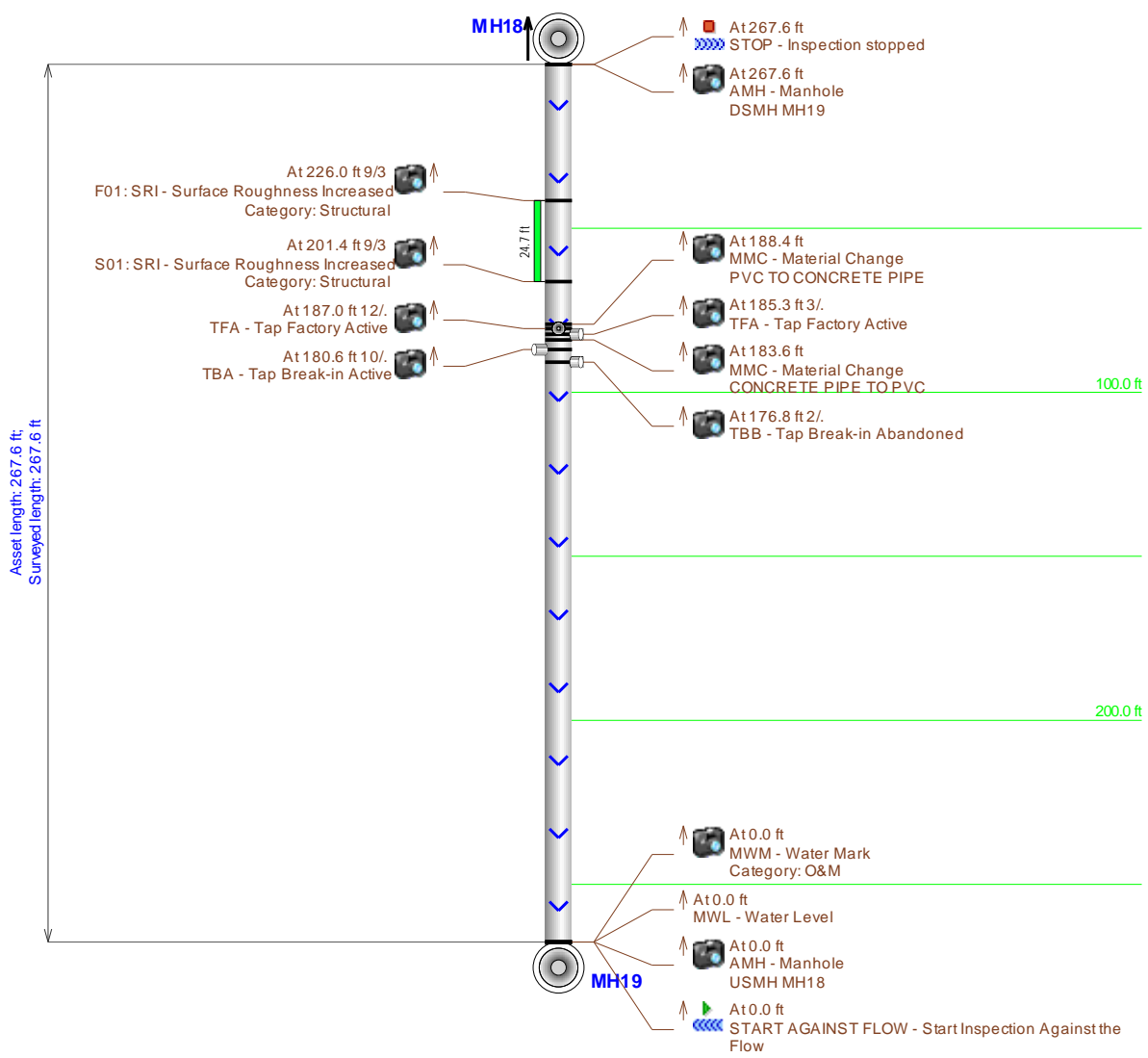
## Main Inspection with Pipe-Run and Scoring

Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH8-MH18	YUCAIPA	CAMPUS DRIVE-PARKING LOT D
Start date/time:	Width:	Height:	Material:
10/3/2015		8	RCP
Direction:	Length surveyed:	Weather:	Media label:
UPSTREAM	212.2	1	



## Main Inspection with Pipe-Run and Scoring

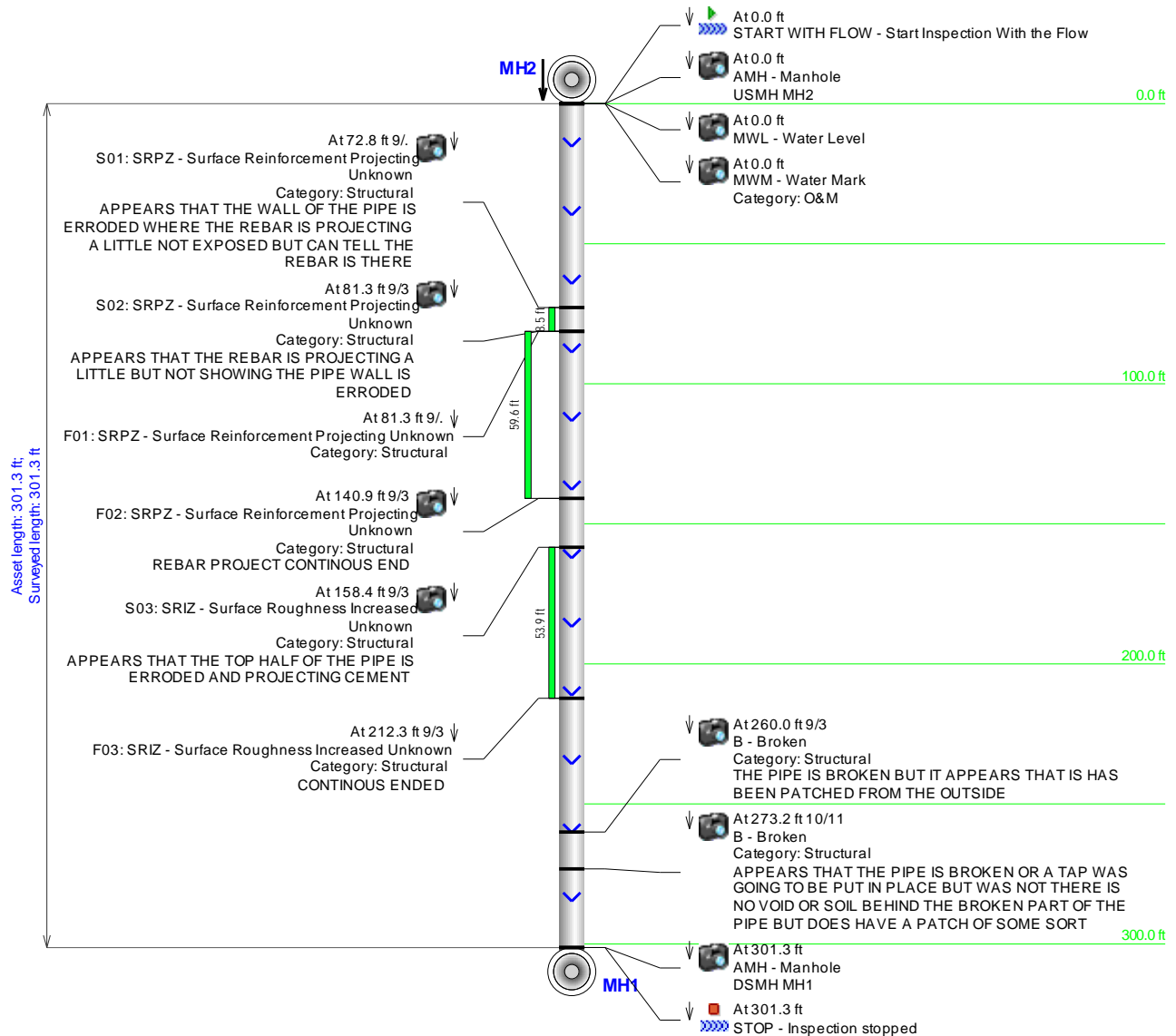
Project Name:	Pipeline segment ref:	City:	Street:
CRAFTON HILLS COLLEGE	MH18-MH19	YUCAIPA	PARKING LOT D
Start date/time:	Width:	Height:	Material:
10/3/2015		8	CP
Location code:	Direction:	Length surveyed:	Weather:
G	UPSTREAM	267.6	1
			Media label:





## Main Inspection with Pipe-Run Graph

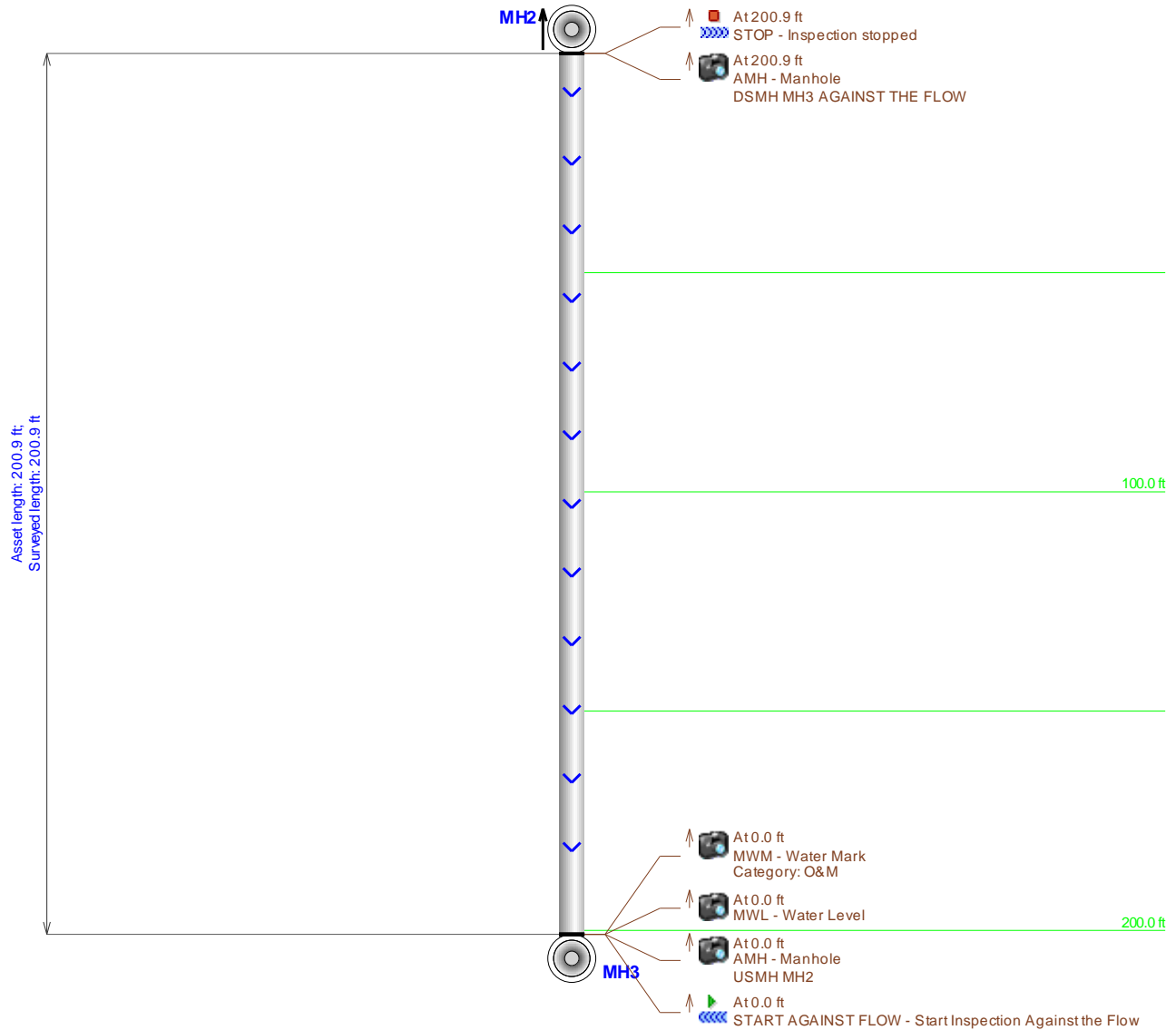
Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH2-MH1</b>	City: <b>YUCAIPA</b>	Street: <b>CAMPUS DRIVE</b>
Start date/time: <b>9/29/2015</b>	Width: 	Height: <b>8</b>	Material: <b>RCP</b>
Direction: <b>Downstream</b>	Length surveyed: <b>301.3</b>	Surveyed by: <b>R.ZIEGLER</b>	Additional info: 
		Location code: <b>C</b>	Weather: <b>1</b>





## Main Inspection with Pipe-Run Graph

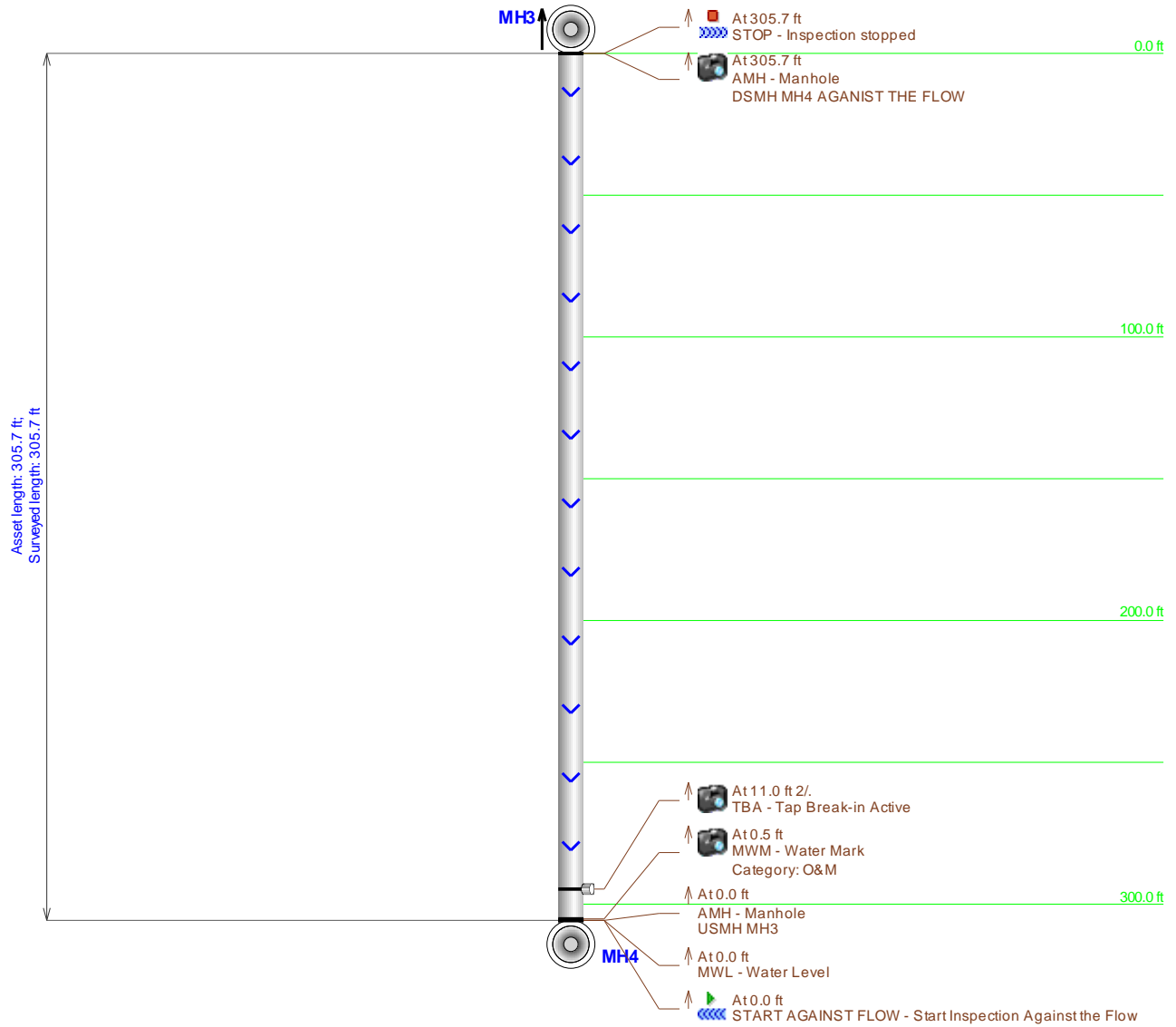
Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH2-MH3</b>	City: <b>YUCAIPA</b>	Street: <b>CAMPUS DRIVE</b>
Start date/time: <b>9/29/2015</b>	Width: 	Height: <b>8</b>	Material: <b>RCP</b>
Direction: <b>UPSTREAM</b>	Length surveyed: <b>200.9</b>	Surveyed by: <b>R.ZIEGLER</b>	Additional info: 
Location code: <b>C</b>		Weather: <b>1</b>	





## Main Inspection with Pipe-Run Graph

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH3-MH4</b>	City: <b>YUCAIPA</b>	Street: <b>CAMPUS DRIVE</b>
Start date/time: <b>9/29/2015</b>	Width: <b></b>	Height: <b>8</b>	Material: <b>RCP</b>
Direction: <b>UPSTREAM</b>	Length surveyed: <b>305.7</b>	Surveyed by: <b>R.ZIEGLER</b>	Additional info: <b></b>
Location code: <b>C</b>	Weather: <b>1</b>		

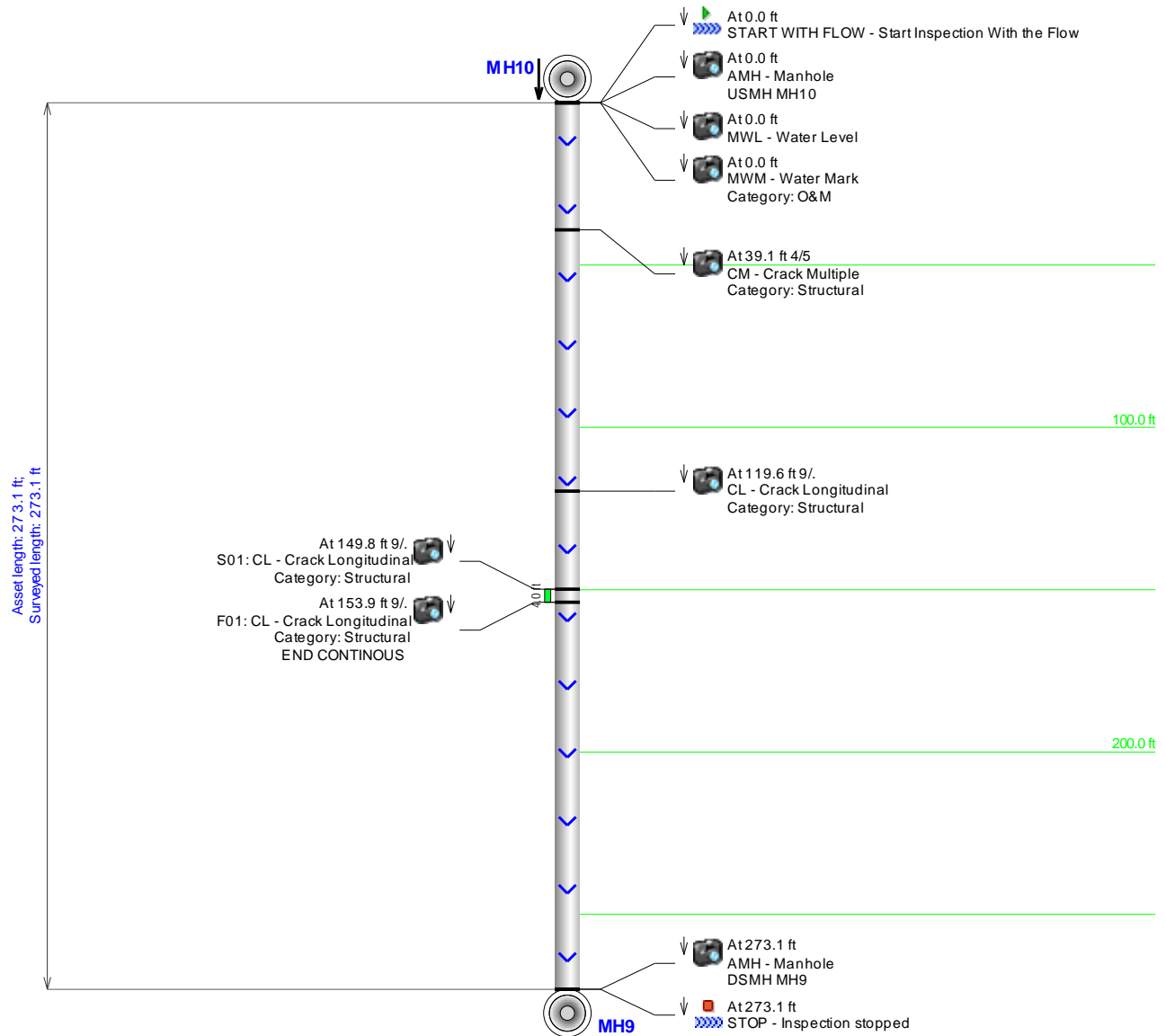






## Main Inspection with Pipe-Run Graph

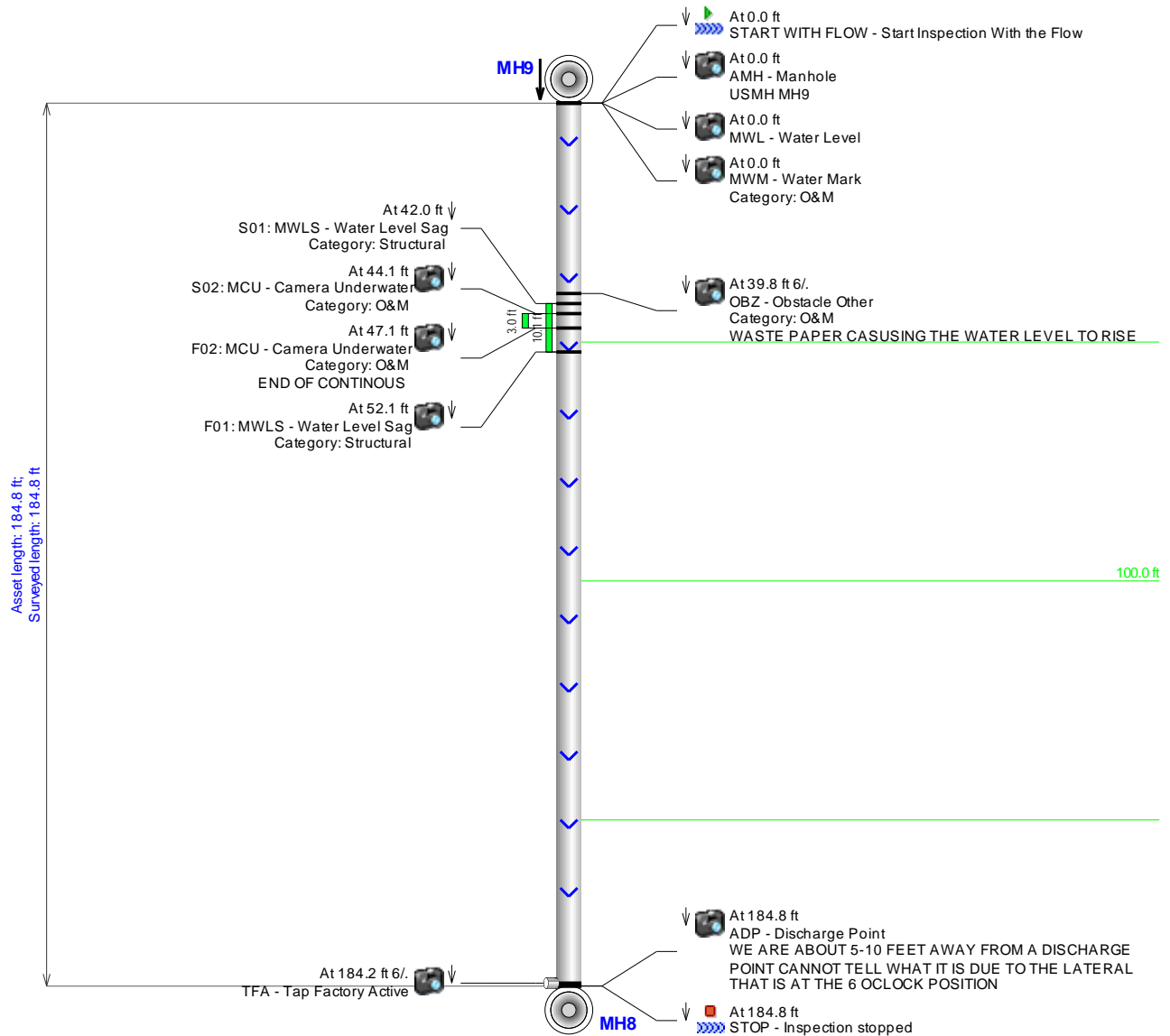
Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH10-MH9</b>	City: <b>YUCAIPA</b>	Street: <b>CAMPUS DR</b>
Start date/time: <b>9/29/2015</b>	Width: 	Height: <b>8</b>	Material: <b>RCP</b>
Direction: <b>Downstream</b>	Length surveyed: <b>273.1</b>	Surveyed by: <b>R.ZIEGLER</b>	Location code: <b>C</b>
			Weather: <b>1</b>
Additional info:			





## Main Inspection with Pipe-Run Graph

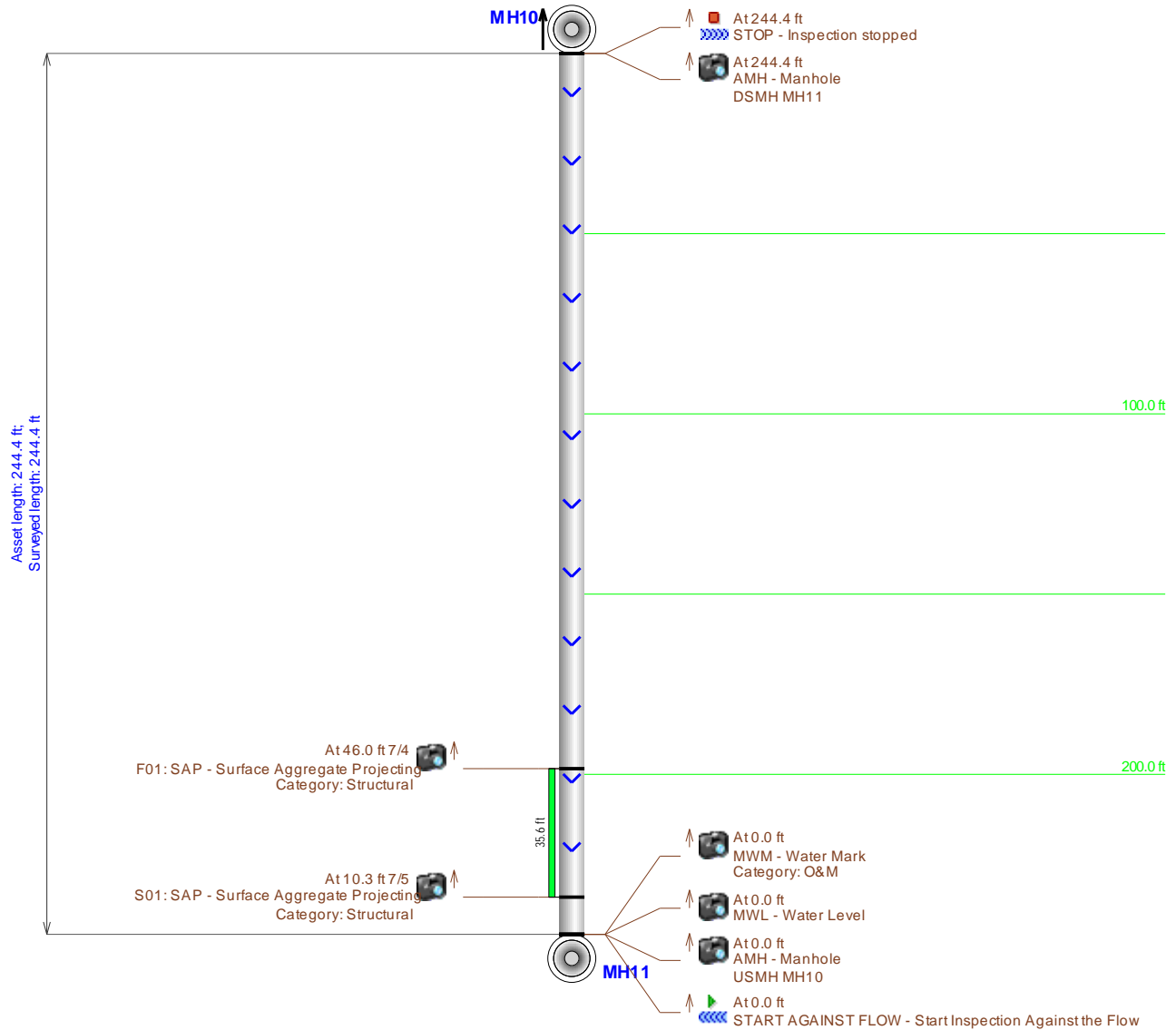
Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH9-MH8</b>	City: <b>YUCAIPA</b>	Street: <b>CAMPUS DRIVE</b>
Start date/time: <b>9/29/2015</b>	Width: 	Height: <b>8</b>	Material: <b>RCP</b>
Direction: <b>Downstream</b>	Length surveyed: <b>184.8</b>	Surveyed by: <b>R.ZIEGLER</b>	Location code: <b>C</b>
			Weather: <b>1</b>
			Additional info: 





# Main Inspection with Pipe-Run Graph

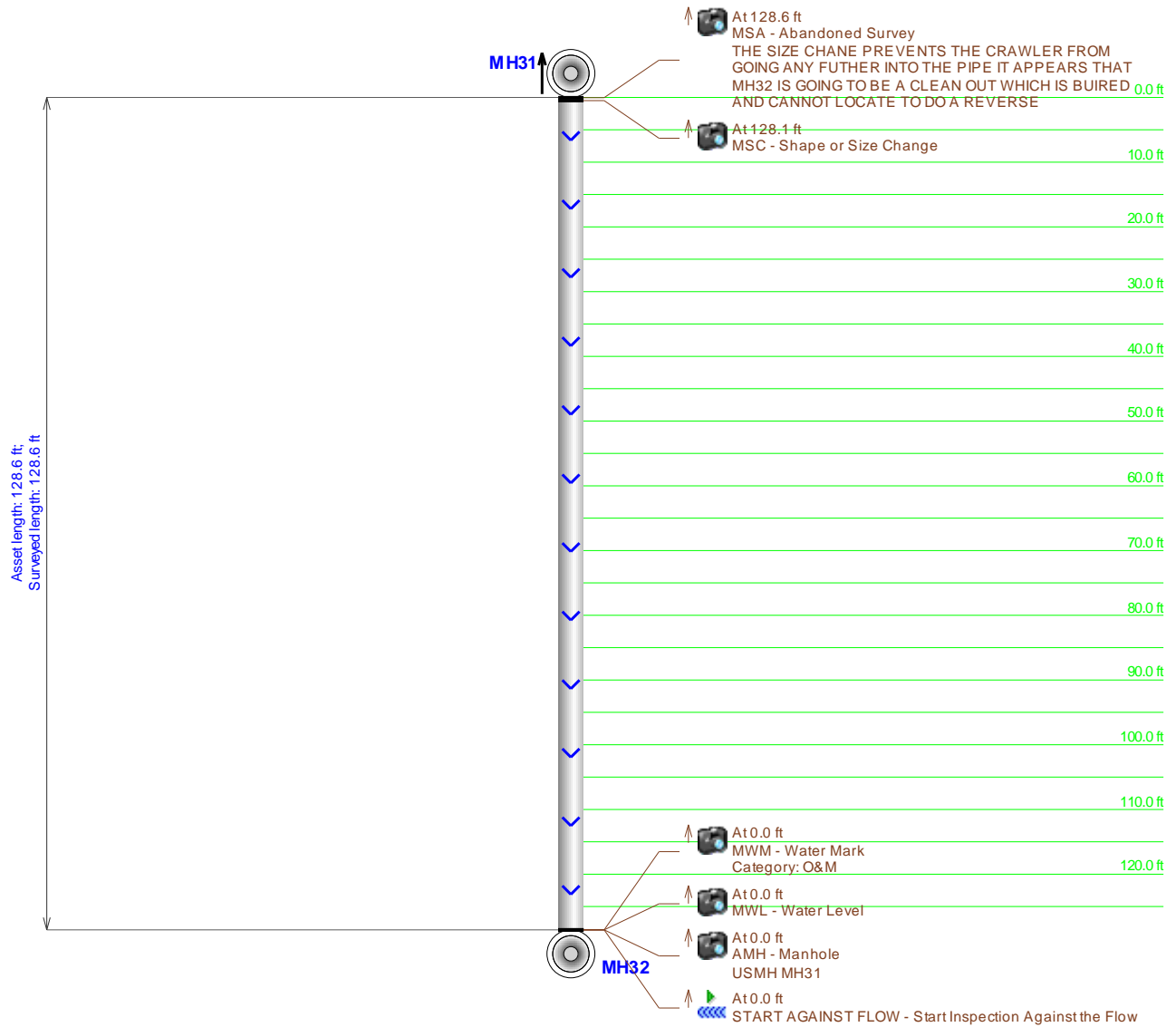
Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH10-MH11</b>	City: <b>YUCAIPA</b>	Street: <b>CAMPUS DRIVE</b>
Start date/time: <b>9/29/2015</b>	Width: <b></b>	Height: <b>8</b>	Material: <b>RCP</b>
Location code: <b>C</b>	Weather: <b>1</b>		
Direction: <b>UPSTREAM</b>	Length surveyed: <b>244.4</b>	Surveyed by: <b>R.ZIEGLER</b>	Additional info: <b></b>





## Main Inspection with Pipe-Run Graph

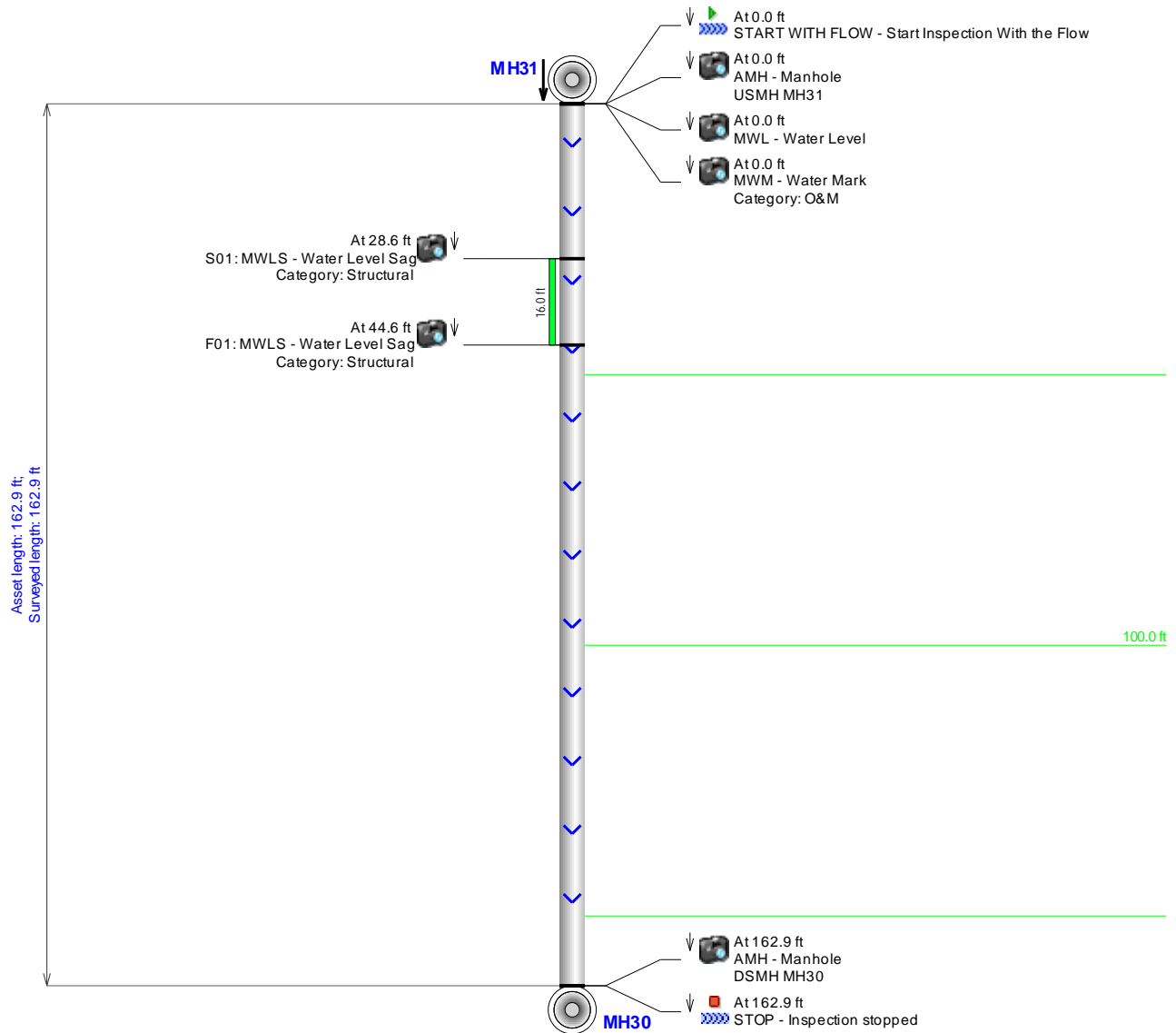
Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH31-MH32</b>	City: <b>YUCAIPA</b>	Street: <b>CRAFTON HILLS MATIENCE ROAD</b>
Start date/time: <b>9/29/2015</b>	Width: <b></b>	Height: <b>8</b>	Material: <b>PVC</b>
Direction: <b>UPSTREAM</b>	Length surveyed: <b>128.6</b>	Surveyed by: <b>R.ZIEGLER</b>	Location code: <b>C</b>
		Weather: <b>1</b>	
Additional info: <b></b>			





## Main Inspection with Pipe-Run Graph

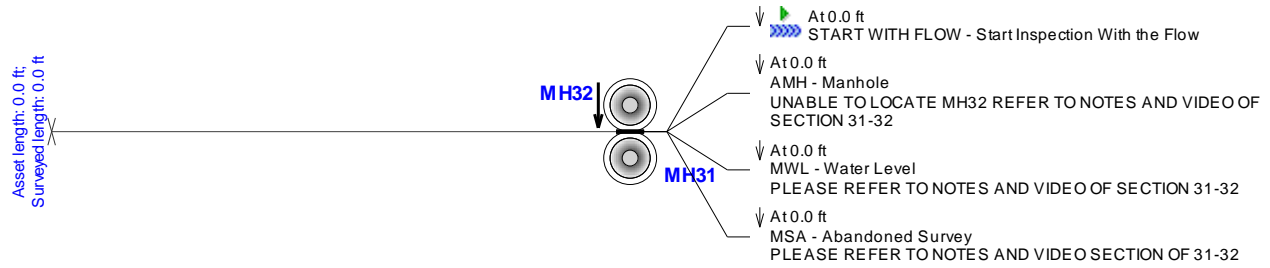
Project Name: <b>CRAFTON HILLS COLLEGE</b>		Pipeline segment ref: <b>MH31-MH30</b>		City: <b>YUCAIPA</b>		Street: <b>MATIENCE ROAD</b>	
Start date/time: <b>9/29/2015</b>		Width: <b>8</b>		Material: <b>PVC</b>		Location code: <b>C</b>	
Direction: <b>Downstream</b>		Length surveyed: <b>162.9</b>		Surveyed by: <b>R.ZIEGLER</b>		Additional info:	





## Main Inspection with Pipe-Run Graph

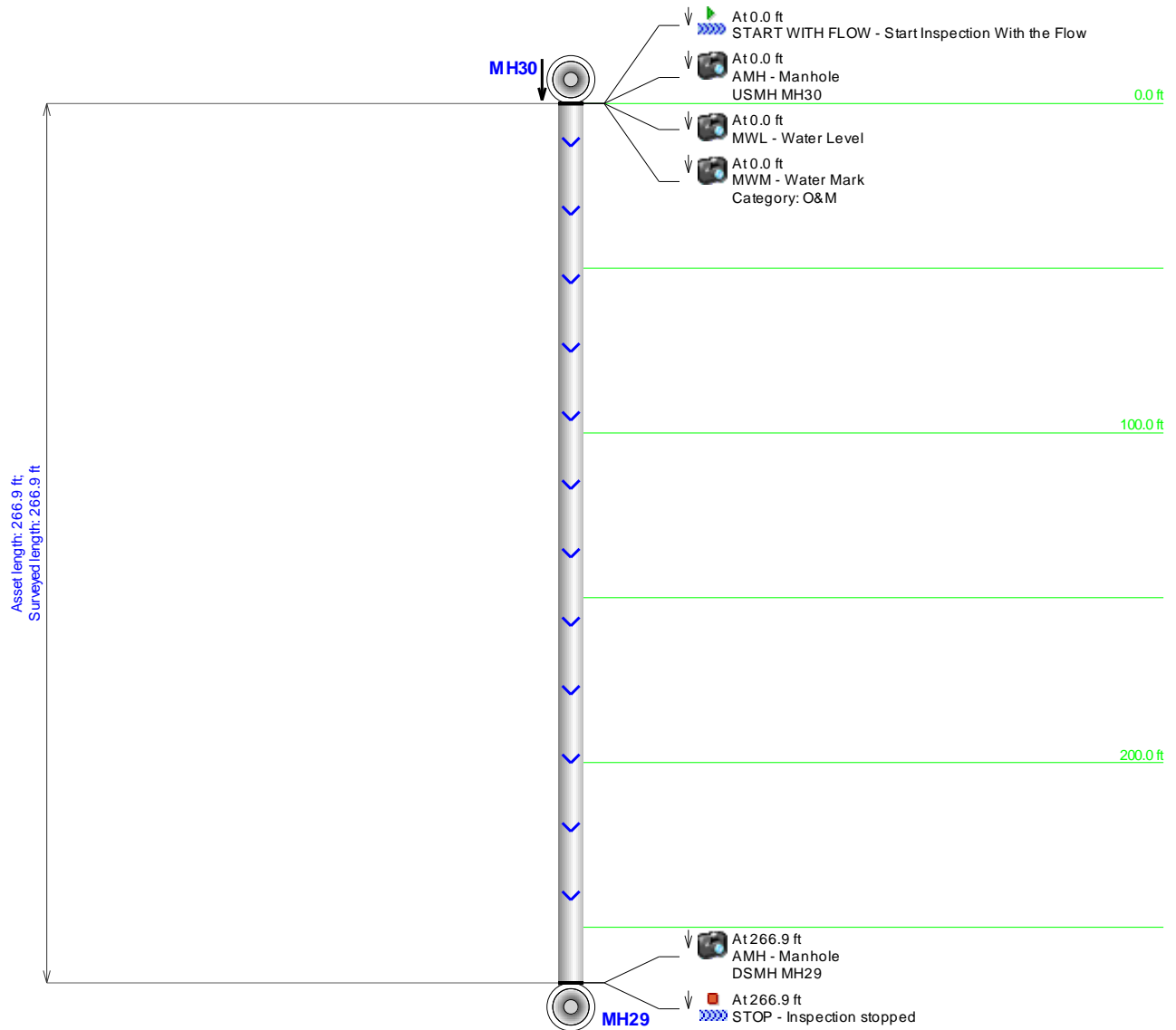
Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH32-MH31</b>	City: <b>YUCAIPA</b>	Street: <b>CRAFTOM HILLS MATIENCE ROAD</b>
Start date/time: <b>9/29/2015</b>	Width: <b></b>	Height: <b>8</b>	Material: <b>PVC</b>
Direction: <b>Downstream</b>	Length surveyed: <b>0.0</b>	Surveyed by: <b>R.ZIEGLER</b>	Additional info: <b>MH32 IS BURIED NOT ABLE TO LOCATE POSSIBLE A C/O FROM VIDEO MH31-MH32</b>
			Location code: <b>C</b>
			Weather: <b>1</b>





## Main Inspection with Pipe-Run Graph

Project Name: <b>CRAFTON HILLS COLLEGE</b>	Pipeline segment ref: <b>MH30-MH29</b>	City: <b>YUCAIPA</b>	Street: <b>CRAFTON HILLS MATIENCE ROAD</b>
Start date/time: <b>9/29/2015</b>	Width: 	Height: <b>8</b>	Material: <b>PVC</b>
Direction: <b>Downstream</b>	Length surveyed: <b>266.9</b>	Surveyed by: <b>R.ZIEGLER</b>	Location code: <b>C</b>
		Weather: <b>1</b>	
Additional info: 			





## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: CRAFTON HILLS COLLEGE      Survey Customer: ITF      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: MH2-MH1      Start date/time: 2015/09/29 07:42      Street: CAMPUS DRIVE      City: YUCAIPA

Location details: \_\_\_\_\_      Upstream manhole No: MH2      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: MH1      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: D      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: RCP      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 301.3      Length surveyed: 301.3      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			Amount of O&M Defects	O&M			Overall Pipe			
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating		O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index	
1	11	11	61	513B	2.259259	0	0	0	0000	0	61	2.259259
2	0	0				0	0					
3	15	45				0	0					
4	0	0				0	0					
5	1	5				0	0					



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/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	27	AMH										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 CONTINUOUS END

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/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		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	CONTINUOUS ENDED
260.0	2325	B								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	B								10	11	MH2_MH1_2015 09290742_273. 2.jpg	S	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



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: CRAFTON HILLS COLLEGE      Survey Customer: ITF      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: MH2-MH3      Start date/time: 2015/09/29 09:00      Street: CAMPUS DRIVE      City: YUCAIPA

Location details: \_\_\_\_\_      Upstream manhole No: MH2      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: MH3      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: RCP      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 200.9      Length surveyed: 200.9      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M		Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0
2	0	0				0	0				
3	0	0				0	0				
4	0	0				0	0				
5	0	0				0	0				

Surveyed by: R.ZIEGLER      Owner: CRAFTON HILLS COLLEGE      Start date/time: 2015/09/29      Upstream manhole No: MH2      Pipeline segment ref: MH2-MH3      Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		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	AMH										MH2_MH3_2015 09290900_200. 9.jpg			DSMH MH3 AGAINST THE FLOW

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



The Environmental  
 Protection Specialists

## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: CRAFTON HILLS COLLEGE      Survey Customer: ITF      Drainage area:      Sheet number:

Work order:      Pipeline segment ref: MH3-MH4      Start date/time: 2015/09/29 09:17      Street: CAMPUS DRIVE      City: YUCAIPA

Location details: CAMPUS DRIVE      Upstream manhole No: MH3      Rim to invert:      Grade to invert:      Rim to grade:

Downstream manhole No: MH4      Rim to invert:      Grade to invert:      Rim to grade:      Sewer use: SS      Direction: U      Flow control: N      Height: 8

Width:      Shape: C      Material: RCP      Ln. method:      Pipe joint length:      Total length: 305.7      Length surveyed: 305.7      Year laid:      Year renewed:      Media label:

Purpose: G      Sewer category:      Pre-cleaning: N      Date cleaned:      Weather: 1      Location code: C      Additional info:

Starting access point:      Easting:      Northing:      Elevation:      Coordinate system:      GPS accuracy:

Grade	Amount of Structural Defects	Structural			O&M		Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0
2	0	0				0	0				
3	0	0				0	0				
4	0	0				0	0				
5	0	0				0	0				

Surveyed by: R. ZIEGLER     
 Owner: CRAFTON HILLS COLLEGE     
 Start date/time: 2015/09/29     
 Upstream manhole No: MH3     
 Pipeline segment ref: MH3-MH4     
 Sheet number:                     

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

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



The Environmental  
 Protection Specialists

## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: CRAFTON HILLS COLLEGE      Survey Customer: ITF      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: MH10-MH9      Start date/time: 2015/09/29 10:23      Street: CAMPUS DR      City: YUCAIPA

Location details: CAMPUS DRIVE SEGMENT 10-9      Upstream manhole No: MH10      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: MH9      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: D      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: RCP      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 273.1      Length surveyed: 273.1      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	7	3122	2.333333	0	0	0	0000	0	7	2.333333
2	2	4				0	0					
3	1	3				0	0					
4	0	0				0	0					
5	0	0				0	0					

Surveyed by: R. ZIEGLER     
 Owner: CRAFTON HILLS COLLEGE     
 Start date/time: 2015/09/29     
 Upstream manhole No: MH10     
 Pipeline segment ref: MH10-MH9     
 Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	27	AMH										MH10_MH9_201509291023_0.0.jpg			USMH MH10
0.0	76	MWL						5				MH10_MH9_201509291023_0.0.jpg			
0.0	95	MWM						5				MH10_MH9_201509291023_0.01.jpg	O&M		
39.1	339	CM								4	5	MH10_MH9_201509291023_39.1.jpg	S	3	
119.6	635	CL								9		MH10_MH9_201509291023_119.6.jpg	S	2	
149.8	820	CL		S01						9		MH10_MH9_201509291023_149.8.jpg	S	2	
153.9	894	CL		F01						9		MH10_MH9_201509291023_153.9.jpg	S	2	END CONTINUOUS
273.1	1345	AMH										MH10_MH9_201509291023_273.1.jpg			DSMH MH9





## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: CRAFTON HILLS COLLEGE      Survey Customer: ITF      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: MH9-MH8      Start date/time: 2015/09/29      10:52      Street: CAMPUS DRIVE      City: YUCAIPA

Location details: CAMPUS DRIVE SECTION 9-8      Upstream manhole No: MH9      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: MH8      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: D      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: RCP      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 184.8      Length surveyed: 184.8      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M		Overall Pipe					
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	4	2200	2	0	0	6	4121	3	10	2.5
2	2	4				1	2					
3	0	0				0	0					
4	0	0				1	4					
5	0	0				0	0					

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/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	27	AMH										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 CONTINUOUS
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			

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/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
184.8	1569	ADP										MH9_MH8_2015 09291052_184. 8.jpg			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



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: CRAFTON HILLS COLLEGE      Survey Customer: ITF      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: MH10-MH11      Start date/time: 2015/09/29 12:21      Street: CAMPUS DRIVE      City: YUCAIPA

Location details: CAMPUS DRIVE SECTION 10-11      Upstream manhole No: MH10      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: MH11      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: RCP      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 244.4      Length surveyed: 244.4      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	21	3700	3	0	0	0	0000	0	21	3
2	0	0				0	0					
3	7	21				0	0					
4	0	0				0	0					
5	0	0				0	0					

Surveyed by: R. ZIEGLER     
 Owner: CRAFTON HILLS COLLEGE     
 Start date/time: 2015/09/29     
 Upstream manhole No: MH10     
 Pipeline segment ref: MH10-MH11     
 Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		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



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: CRAFTON HILLS COLLEGE      Survey Customer: ITF      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: MH31-MH32      Start date/time: 2015/09/29 13:05      Street: CRAFTON HILLS MATIENCE ROAD      City: YUCAIPA

Location details: CRAFTON HILLS MATIENCE ROAD      Upstream manhole No: MH31      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: MH32      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: U      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 128.6      Length surveyed: 128.6      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M		Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index	
1	0	0	0	0000	0	0	0	0	0000	0	0
2	0	0				0	0				
3	0	0				0	0				
4	0	0				0	0				
5	0	0				0	0				

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/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location	Image Ref.	Family	Rating	Remarks
						1st	2nd							
0.0	29	AMH									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



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: CRAFTON HILLS COLLEGE      Survey Customer: ITF      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: MH31-MH30      Start date/time: 2015/09/29 13:36      Street: MATIENCE ROAD      City: YUCAIPA

Location details: CRAFTON HILLS MATIENCE ROAD      Upstream manhole No: MH31      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: MH30      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: D      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 162.9      Length surveyed: 162.9      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M			Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	6	2300	2	0	0	0	0000	0	6	2
2	3	6				0	0					
3	0	0				0	0					
4	0	0				0	0					
5	0	0				0	0					



Surveyed by: R. ZIEGLER     
 Owner: CRAFTON HILLS COLLEGE     
 Start date/time: 2015/09/29     
 Upstream manhole No: MH31     
 Pipeline segment ref: MH31-MH30     
 Sheet number:                     

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location	Image Ref.	Family	Rating	Remarks
						1st	2nd							
0.0	42	AMH									MH31_MH30_201509291336_00.jpg			USMH MH31
0.0	113	MWL						5			MH31_MH30_201509291336_00.jpg			
0.0	125	MWM						5			MH31_MH30_201509291336_01.jpg	O&M		
28.6	346	MWLS		S01				10			MH31_MH30_201509291336_28.jpg	S	2	
44.6	415	MWLS		F01				10			MH31_MH30_201509291336_44.jpg	S	2	
162.9	719	AMH									MH31_MH30_201509291336_162.9.jpg			DSMH MH30



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: CRAFTON HILLS COLLEGE      Survey Customer: ITF      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: MH32-MH31      Start date/time: 2015/09/29 13:53      Street: CRAFTON HILLS MATIENCE ROAD      City: YUCAIPA

Location details: CRAFTON HILLS MATIENCE ROAD      Upstream manhole No: MH32      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: MH31      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: D      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 0.0      Length surveyed: 0.0      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: MH32 IS BURIED NOT ABLE TO LOCATE POSSIBLE A C/O FROM VIDEO MH31-MH32

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Structural		O&M		Overall Pipe								
Grade	Amount of Structural Defects	Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	Amount of O&M Defects	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0	0
2	0	0				0	0					
3	0	0				0	0					
4	0	0				0	0					
5	0	0				0	0					

Surveyed by: R.ZIEGLER     
 Owner: CRAFTON HILLS COLLEGE     
 Start date/time: 2015/09/29     
 Upstream manhole No: MH32     
 Pipeline segment ref: MH32-MH31     
 Sheet number: \_\_\_\_\_

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value		%	Joint	Circumferential Location	Image Ref.	Family	Rating	Remarks	
						1st	2nd								
0.0	58	AMH													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



## PACP Sewer Report

Surveyed by: R. ZIEGLER      Certificate No: U-815-07001103      Owner: CRAFTON HILLS COLLEGE      Survey Customer: ITF      Drainage area: \_\_\_\_\_      Sheet number: \_\_\_\_\_

Work order: \_\_\_\_\_      Pipeline segment ref: MH30-MH29      Start date/time: 2015/09/29 14:11      Street: CRAFTON HILLS MATIENCE ROAD      City: YUCAIPA

Location details: CRAFTON HILLS MATIENCE ROAD      Upstream manhole No: MH30      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_

Downstream manhole No: MH29      Rim to invert: \_\_\_\_\_      Grade to invert: \_\_\_\_\_      Rim to grade: \_\_\_\_\_      Sewer use: SS      Direction: D      Flow control: N      Height: 8

Width: \_\_\_\_\_      Shape: C      Material: PVC      Ln. method: \_\_\_\_\_      Pipe joint length: \_\_\_\_\_      Total length: 266.9      Length surveyed: 266.9      Year laid: \_\_\_\_\_      Year renewed: \_\_\_\_\_      Media label: \_\_\_\_\_

Purpose: G      Sewer category: \_\_\_\_\_      Pre-cleaning: N      Date cleaned: \_\_\_\_\_      Weather: 1      Location code: C      Additional info: \_\_\_\_\_

**Starting access point:**      Easting: \_\_\_\_\_      Northing: \_\_\_\_\_      Elevation: \_\_\_\_\_      Coordinate system: \_\_\_\_\_      GPS accuracy: \_\_\_\_\_

Grade	Amount of Structural Defects	Structural			O&M		Overall Pipe				
		Structural Segment Grade	Structural Pipe Rating	Structural Quick Rating	Structural Pipe Rating Index	O&M Segment Grade	O&M Pipe Rating	O&M Quick Rating	O&M Pipe Rating Index	Overall Pipe Rating	Overall Pipe Rating Index
1	0	0	0	0000	0	0	0	0	0000	0	0
2	0	0				0	0				
3	0	0				0	0				
4	0	0				0	0				
5	0	0				0	0				

Surveyed by: R. ZIEGLER     
 Owner: CRAFTON HILLS COLLEGE     
 Start date/time: 2015/09/29     
 Upstream manhole No: MH30     
 Pipeline segment ref: MH30-MH29     
 Sheet number:                     

Distance (Feet) (Meters)	Video Ref.	Group/ Descriptor	Modifier/ Severity	Continuous Defect	S/M/L	Value Inches (mm)		%	Joint	Circumferential Location		Image Ref.	Family	Rating	Remarks
						1st	2nd			At/From	to				
0.0	35	AMH										MH30_MH29_201509291411_00.jpg			USMH MH30
0.0	77	MWL						5				MH30_MH29_201509291411_00.jpg			
0.0	87	MWM						5				MH30_MH29_201509291411_01.jpg	O&M		
266.9	569	AMH										MH30_MH29_201509291411_266.9.jpg			DSMH MH29

# Crafton Hills College

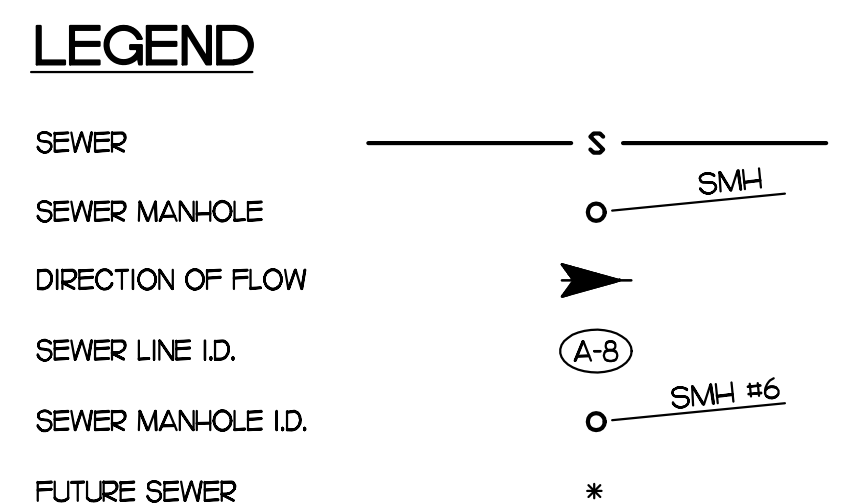
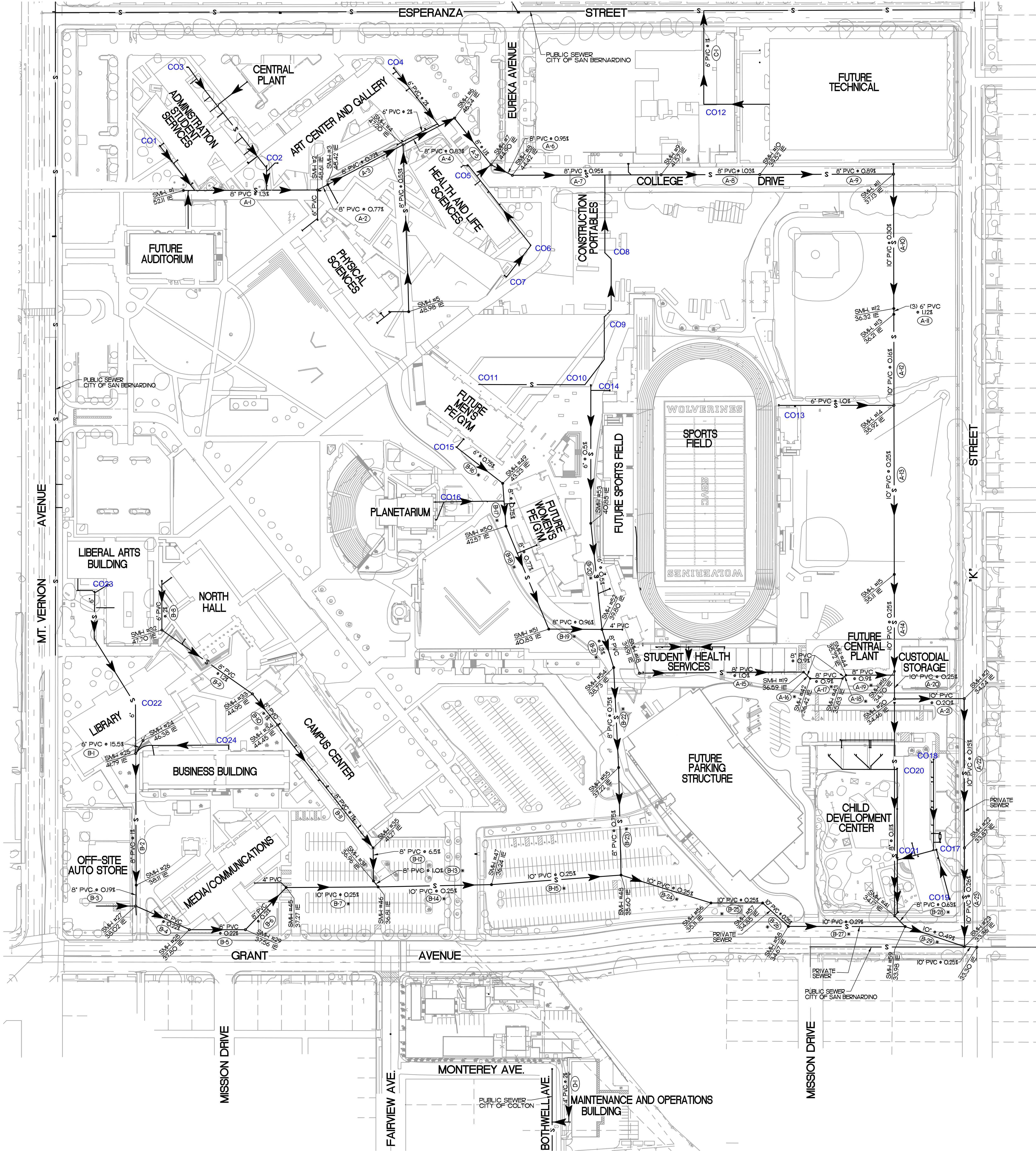
- Legend**
- G — Gas
  - C — Copper
  - FO — Fiber Optics
  - FC — Fiber & Copper
  - W — Water
  - I — Irrigation
  - D — Drainage
  - S — Sewer
  - P — Power
  - LW — Lighting Wiring

**NOTE:** Linetype lettering with a "3" after it indicates that information about that is from existing drawings location or has been estimated, but was not be confirmed by field investigation.

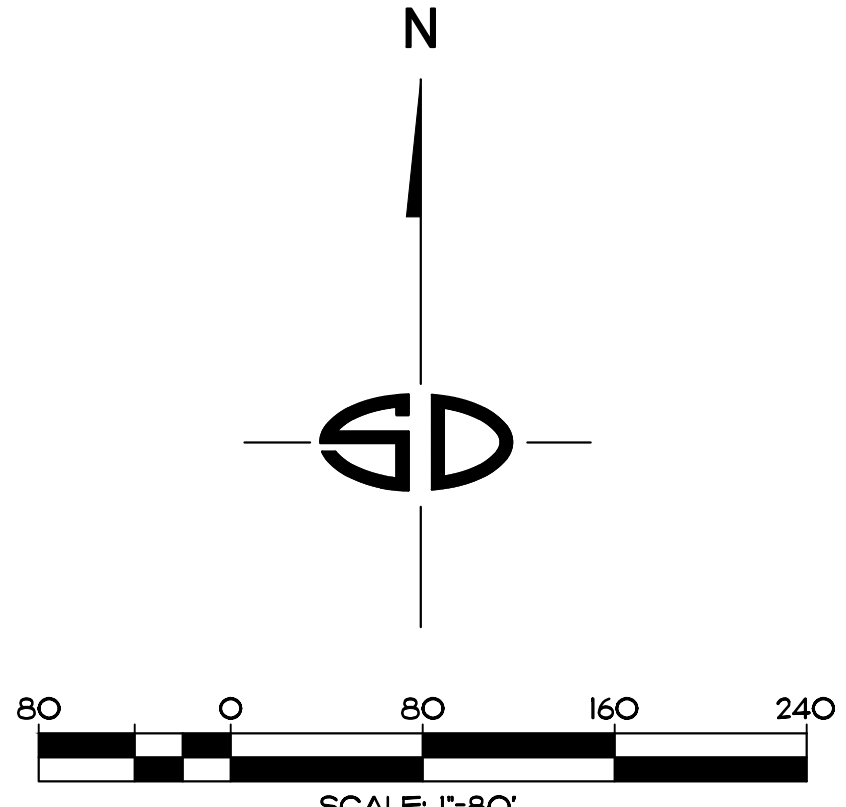
**Private Engineer's Notice to Contractors:**  
 The existence and location of any underground utility pipes, conduits, or structures shown on these plans and field investigation. To the best of our knowledge, the information shown on these plans shows the location of all utility lines and structures shown on these plans. The contractor is required to verify the location of all utility lines and structures shown on these plans. The contractor is responsible for the utility lines, conduits, or structures shown on or not shown on these drawings. The contractor shall assume sole and complete responsibility for any conditions during the construction of the project and the safety of all persons and property that the contractor is responsible for. The contractor shall be held liable for any damage to the utility lines, conduits, or structures shown on or not shown on these drawings. The contractor shall be held liable for any damage to the utility lines, conduits, or structures shown on or not shown on these drawings. The contractor shall be held liable for any damage to the utility lines, conduits, or structures shown on or not shown on these drawings.

- LEGEND:**
- X - OVERHEAD LIGHT
  - HL - FIRE HYDRANT
  - UL - UTILITY POLE
  - PO - POST
  - V - VALVE
  - B - BOX
  - M - METER
  - WM - WATER METER
  - FS - FIRE SPRINKLER
  - SP - STREET LIGHT
  - SS - SATELLITE SIGNAL
  - TP - TREE PENETRUM
  - EB - ELECTRICAL BOX
  - CL - CHIMNEY
  - EC - ELECTRICAL CABINET
  - GM - GAS METER
  - GT - GAS TANK
  - IC - IRRIGATION CONTROL VALVE
  - IFL - FINISH FLOOR ELEVATION
  - SMH - STORM DRAIN MANHOLE
  - TV - TELEPHONE WALK
  - HH - HANDBOLE
  - DMH - GAS MANHOLE
  - SCD - SINK CLEAN OUT
  - TC - TOP OF CURB
  - FL - FLOW LINE
  - TO - TOP OF GRADE
  - BT - BOTTOM OF WALL
  - PRV - IDENTIES PRESSURE RELEASE VALVE





**NOTE:**  
ADD 1000 FEET  
TO ALL ELEVATIONS



SEWER SYSTEM EVALUATION	SAN BERNARDINO VALLEY COLLEGE FUTURE CONDITIONS
RESIGNED: NICKLA DRAWN: BVM CHECKED: RLE/BAWK DATE: 11/07/12	JOB NAME DATE
BY:	REVISION DESCRIPTION
NO. DATE	NO. DATE
SHEET <b>E-2</b>	SHEETS
8348 CENTER DRIVE, SUITE G, LA MESA, CA 91942-2910 (619) 697-9234, FAX (619) 460-2033	
<b>SNIPES-DYE ASSOCIATES</b>	

S:\SNIPES\SR100x\_SBC Sewer System Evaluation\DWG\C10.dwg Dec 03, 2012 @ 3:04pm Plotted by matt

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 TELEVISION 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