

Element 5:

DESIGN & PERFORMANCE PROVISIONS

This section of the SSMP discusses the District's sewer system design and performance standards. This section fulfills the Design and Performance Provisions SSMP requirement for the SWRCB.

5.1 Regulatory Requirements for Design & Performance Provisions

The requirements for the Design and Performance Provision element of the SSMP are summarized below.

SWRCB Requirement

The District must have design and construction standards and specifications for the installation of new sewer systems, lift stations and other appurtenances; and for the rehabilitation and repair of existing sewer systems. The District must also have procedures and standards for inspecting and testing the installation of new sewers, pumps, and other appurtenances and for rehabilitation and repair projects.

5.2 Element 5 Attachments

Supporting information for Element 5 is included in Attachment E-5. This attachment includes the following documents:

Attachment E5-A: Table of Contents of the District's Standards Manual for Water and Sewer Facilities along with the Table of Contents (subsections) for Sewer Related Facilities and Sewer Standard Drawings (June, 2011)

Attachment E5-B: Preconstruction Conference and Notice To Proceed Documentation

5.3 Design & Construction Standards Discussion

The District periodically updates its Water and Sewer Facilities Standards Manual. The last significant update was made to the Standard Drawings in August 2016. Occasionally, Standard Drawings are revised to meet current practices and requirements under the authority of the Engineering Manager. The previous Board Approved full update to the Standards Manual was in June 2011. A full update is proposed for Fiscal Year 2019/20.

Public sewer mains within the District are designed in accordance with Section IV of the District's Standards Manual. This section includes sewer system design criteria such as location of mains, flow rate computations, pipe sizing, manholes, pipe velocities, slopes, bedding, backflow valves, sewage injectors, lateral connections to mains, and industrial waste provisions.

Section V (subsections A, D and E) of the District's Standards Manual addresses sanitary sewer installation. These subsections include general specifications as well as specifications for pipes,

manholes, cleanouts, sewer lateral materials and construction methods. Additionally, items such as sewer line testing (exfiltration or air), acceptance, and final inspection by CCTV are included. These requirements should provide reasonable assurance that sewers constructed to these specifications will perform adequately with minimal infiltration or maintenance problems and will maintain their structural integrity for the duration of their intended useful lives. The following reference specifications are used to cover other items that may not be included in the District's Standards Manual:

1. State of California Department of Transportation, Standard Specifications (latest edition) [i.e. "Caltrans Specifications"]
2. "Standard Specifications for Public Works Construction" (latest edition) [i.e. "Green Book" Specifications]

Many of the specifications included in Sections IV and V of the District's Standards Manual would also apply to sewer pipeline rehabilitation and repair projects. Additional specifications related to sewer rehabilitation and repair will be added as needed when such projects are implemented by the District, or will be included in project-specific specifications.

Prior to the start of Construction, the District requires a Preconstruction Conference. As part of this conference the District provides training and information to contractors regarding the prevention and response requirements regarding SSO's. Documentation of the Preconstruction Conference may be found in Attachment E5-B.

The District currently operates ten (9) active lift stations and three (2) standby lift stations. Lift station plans and specifications are not included in the District's Standards Manual because they are designed to meet the specific circumstances of each location. Design standards and construction specifications for lift stations are developed as needed on a project-specific basis should any new lift stations or lift station rehabilitation projects be required.

Attachment E5-A: Table of Contents of the
District's Standards Manual for Water and
Sewer Facilities along with the Table of
Contents (subsections) for Sewer Related
Facilities and Sewer Standard Drawings
(June, 2011)



Jurupa
COMMUNITY SERVICES DISTRICT



STANDARDS MANUAL

For

WATER AND SEWER FACILITIES

JUNE, 2011

A L B E R T A .

WEBB

A S S O C I A T E S

**JURUPA COMMUNITY SERVICES DISTRICT
STANDARDS MANUAL**

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Attachment E5-B: Preconstruction
Conference and Notice To Proceed
Documentation

06/20/2014

**JURUPA COMMUNITY SERVICES DISTRICT
DEVELOPMENT PROJECT
PRECONSTRUCTION CONFERENCE REQUIREMENTS**

All construction projects involving facilities that will be owned and operated by the Jurupa Community Services District shall require a preconstruction conference. A preconstruction conference shall always be held prior to issuance of a Notice to Proceed. Prior to the District scheduling a preconstruction conference, the District requires the following information:

- 1. Project Name _____
(Tract, P.M., P.P. #, etc.)

- 2. Developers Name _____
Address _____

Phone No. _____
License Type & No. _____
Contact's Name _____

- 3. Contractors Name _____
Address _____

Phone No. _____
License Type & No. _____
Contact's Name _____

Has the Contractor completed a Contractor Qualification Experience Questionnaire as provided in Appendix E of the District's Standards Manual? YES NO
(Circle One)

If No, it is necessary for the Contractor to complete the questionnaire and submit it to the District prior to scheduling the preconstruction conference.

4. Subcontractors Name(s) _____
 Address _____

 Phone No. _____
 License Type & No. _____
 Name _____
 Address _____

 Phone No. _____
 License Type & No. _____

5. Attach copies of all applicable permits (i.e. Encroachment Permits, OSHA, etc.)

6. Provide 3 sets of District Approved Plans.

7. Provide 3 sets of District Approved Submittals.

8. Provide 24 hr. emergency phone no. of the Contractor's responsible party.

Name of Contact _____
 Phone No. _____
 Relationship to Project (i.e. Contractor, Project Manager,
 Superintendent, etc.) _____

9. Geotechnical Consultants Name _____
 Address _____

 Phone No. _____
 Contact _____

10. Provide all applicable information as delineated in Appendix H of the Standards Manual.

Subsequent to District review and approval of the required information, the District will contact the developer and inform him/her that a preconstruction conference may be scheduled at his/her convenience during normal District office hours.

PRECONSTRUCTION CONFERENCE AND NOTICE TO PROCEED

The following outlines the general requirements and the expectations of the Pre-construction Conference and Notice to Proceed and shall apply to all developer-paid water and/or sewer facility construction within the District's jurisdiction.

1. Sequence of Events: A Pre-construction Conference shall always be held prior to issuance of a Notice to Proceed. Prior to the Pre-construction Conference, the District must have the following applicable items indicated as complete and checked off:
 - a. WATER AND/OR SEWER PLANS: Drawings, complete, signed as approved by the District, and signed by the required officials of Riverside County (Health Department, Road Department, Fire Marshall, etc.).
 - b. Recorded Tract Map/Parcel Map and applicable street improvement plans and grading plans.
 - c. Applicable fees and deposits made to the District, Deposit Agreement signed, and appropriate Work Order Numbers opened and assigned.
 - d. Environmental Assessment completed.
 - e. A fully signed construction Agreement with signatures of the Developer, Contractor, and the District's General Manager.
 - f. Agreement for PARTICIPATION/REFUND WAIVER OR AGREEMENT for participation and refund SIGNED.
 - g. Streets shall have been constructed to final subgrade and Certification signed by the Developer that streets are to final subgrade.
 - h. Easements shall be properly obtained, if required, and dedicated to the District.
 - i. Property corners shall be surveyed and set by owner/developer's surveyor to identify lot lines which will assist in proper location of mains and appurtenances.
 - j. District certification of contractor for intended size job.
 - k. A copy of tentative Bid between contractor and developer shall be submitted to the District.
 - l. Necessary permits have been obtained.
 - m. Required 100% Performance Bond and 100% Labor & Materials Bond must be posted and District approved. (See Appendix D).
 - n. Required Insurance form naming District as additionally insured must be executed and on file with the District (See Appendix F).

2. Pre-construction Conference: A pre-construction conference shall be scheduled by the District prior to issuance of Notice to Proceed and commencement of work. The Pre-construction Conference shall allow all parties to present their views and requirements, and provide a forum for satisfactory solution to all anticipated problems.
 - a. Parties to be invited:
 - 1) District:
District Inspector
District Representative
 - 2) Developer (and owner if different)
 - 3) Developer's Engineer
 - 4) Contractor and Foreman
 - 5) County Construction Inspector
 - 6) Other affected agencies and utilities: (if their facilities are involved)
 - 7) Material Suppliers (If Required)
 - b. Items to be Discussed:
 - 1) Review of plans and fabrication drawings. Verify main footage and location of fittings and appurtenances.
 - 2) Material deliveries, quantities, and problems
 - 3) Construction schedule
 - 4) Connection to existing facilities
 - 5) Street grading. Verification for final subgrade elevations and satisfactory subgrade compaction
 - 6) Curb and gutter/berm placement
 - 7) Project phasing
 - 8) Temporary water services
 - 9) Other Public Agency requirements. Check compliance with standard requirements for other public agencies.
 - 10) Plans for testing and disinfection, bacterial samples
 - 11) Clearance of other utilities
 - 12) Blasting/rock removal
 - 13) Traffic control
 - 14) Dust control
 - 15) Safety and OSHA requirements. (Contractor's responsibility)

- 16) Review of possible field conflicts and method of solution
 - 17) Sanitary Sewer Overflow (SSO). Should the Contractor witness or cause an SSO, the attached procedures shall be followed. Contractors working on District sewers shall develop a sewage overflow emergency response plan (OERP) in accordance with the attached requirements.
 - 18) As-built dimensions and drawings
3. Notice to Proceed: If all the District requirements have been met and no outstanding problems exist, the District will issue a written Notice to Proceed to the Developer and Contractor with copy to District Inspector at the Pre-construction conference.

If any requirements remain to be completed or if there is any problem with the above-listed items, such problems shall be resolved by cognizant parties. When completed to District satisfaction, a written Notice to Proceed will be issued to the Developer and Contractor.

No water and/or sewer system construction shall commence until the written Notice to Proceed is issued. After the Notice to Proceed is issued, the Developer may then finalize bid requirements with contractor or sub-contractors, sign the acceptance of bid and forward a copy of the firm BID CONTRACT to the District.

06/20/2014

INSERT CONTRACTOR ORIENTATION

Contractors Working on District Sewer Facilities

All contractors working on District sewer facilities will be required to develop a project-specific sewage overflow Emergency Response Plan (OERP). All contractor personnel will be required to receive training in the Contractor's OERP and to follow that OERP in the event that they cause or observe an SSO. The OERP must be approved by the Sewer Operations Manager or designee prior to training of the Contractor's staff or subcontractors. The training requirements will include the same required data as per the attached.