

SECTION 017839

PROJECT RECORD DOCUMENTS

PART 1 - GENERAL

1.1 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. Maintaining and submitting project record documents and samples.
- B. The Contractor shall maintain at the site for the City one (1) record copy of:
 - 1. Construction Plans
 - 2. Technical Specifications
 - 3. Addenda
 - 4. Change Orders and other Modifications to the Contract
 - 5. Approved Shop Drawings, Product Data, and Samples for which samples are specified to be furnished
 - 6. Field test records
 - 7. Detailed Progress Schedule
 - 8. Inspection certificates.
 - 9. Manufacturers' certificates.
 - 10. Manufacturers' operating and maintenance manuals.
 - 11. Up to date project as-built red-lines.
- C. At Contract closeout, deliver signed and sealed (as applicable) as-builts and other record documents and samples to the City for the City.

1.1 RELATED REQUIREMENTS

- A. Section 013000: Shop Drawings, Submittals and Samples.
- B. Section 017710: Contract Closeout.

1.2 RECORDING

- A. Record information on a full-size set of Construction Plans.
- B. Use separate colors for each major system for recording information.
- C. Record information concurrently with construction progress. Do not conceal any work until required information is recorded.
- D. Measured locations shall be referenced to horizontal and vertical datums of the original Construction Plans.
- E. Utility As-Built Drawings: The utility as-built drawings shall correctly and accurately show all utilities found during construction and shall reflect all new construction as it was built. These drawings shall be neat and legible, showing only the actual position of the utilities and not the proposed. The drawings shall show all elevations and horizontal control for all utilities encountered. They shall include but not limited to, the material used to construct the utilities and all structures, pipes, and fittings. At a minimum, comply with the following:
 - 1. Identify all utility conflicts and crossings. Provide horizontal locations and elevations of each utility at conflicts and crossing. Identify the material, size, usage, etc., for each utility line.
 - 2. Provide horizontal locations and elevations at top of pipe elevations at an interval not exceeding 100 LF. Finished grade elevations shall be recorded at each location.
 - 3. Provide surveyed horizontal locations and elevations and swing ties on all underground appurtenances, including but not limited to:
 - a. Ductile iron fittings
 - b. Couplings
 - c. Valves
 - d. Provide top of nut elevations for valves and top of pipe elevations adjacent to valves.
 - e. Service saddles
 - f. Meters
 - g. Air release assemblies
 - h. End points of casings
 - i. End points of pipe installed by horizontal directional drilling methods
 - 4. For each underground appurtenance, provide three-point swing-ties (maximum distance of 200 feet). Swing ties shall be measured from permanent reference points (i.e., edge of power or telephone poles, center of manholes and storm inlet structures, building comers, fire

hydrant bonnets, and other objects not likely to be relocated at a later time). Unacceptable reference points shall include fence posts, street curbs, driveway comers, trees, signs, valve boxes, nails, survey marks, etc.

5. Identify limits of restrained joint pipe.
6. Identify locations for changes in pipe material.
7. Identify limits of utilities abandoned in place, if applicable.
8. Identify changes made by addenda or modifications.
9. Provide details not on the Plans.
10. As-built drawing information shall be provided to the City and Engineer in pdf format and as a single utility layer in AutoCAD, or as a GIS Shape File. Hard copies of the as-builts shall be signed and sealed by Florida Licensed Surveyor.

F. Specifications: Legibly mark each item to record actual construction, including:

1. Manufacturer, trade name, and catalog number of each product actually installed, particularly optional items and substitute items.
2. Changes made by addenda or modifications.

G. Other Required Record Documents:

1. Maintain manufacturers' certifications, inspection certifications, and field test records, required by individual Technical Specification Sections.
2. Provide bore logs for underground utilities installed using horizontal directional drilling methods. A minimum of one reading for each rod length of bore constructed shall be included. The bore log shall include horizontal and vertical locations for each point referenced to the horizontal and vertical datums used in preparing the Plans.

1.3 STORMWATER POLLUTION PREVENTION PLANS

A. In accordance with EPA Guidelines, prepare an National Pollutant Discharge Elimination System (NPDES) plan and maintain records on stormwater management controls and inspections. Prepare an inspection and maintenance plan that corresponds to the sequencing of major activities.

1. Reference Document: U.S. EPA Stormwater Management for Construction Activities; Developing Pollution Prevention Plans and Best Management Practices, EPA 832-R-92-005, September, 1992.
- B. Provide for inspection of silt fencing and erosion control measures once every seven (7) days or after each rainfall event.
- C. Keep a record of these inspections in the field office. Note any changes to best management practices shown in the Contract Documents.
 1. Record the amount of rainfall on a daily basis.
 2. Dates when major grading activities occur.
 3. Dates when construction activities temporarily cease.
 4. Dates when construction activities permanently cease.
 5. Report any release of reportable quantities of oil or hazardous materials.
- D. Update and change the Stormwater Pollution Prevention Plan as necessary to address any change in design or construction operation.

1.4 SUBMITTALS

- A. At Contract closeout, the Contractor shall deliver all project record documents and samples specified herein to the City for use in the preparation of Project Record Drawings.
- B. As-built drawings shall be submitted to the City in the following format:
 1. One (1) CDs/DVDs or USB flash drive with as-built drawings in both PDF and AutoCAD formats.
 - a. AutoCAD Format: Utilize the existing AutoCAD design as a base and add new information. New items shall be included on new, clearly identified layers.
 2. One (1) full-size original and one (1) 11"X17" hard copies signed and sealed by a Florida Licensed Surveyor.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION (NOT USED)

END OF SECTION

