

## RECORD DOCUMENTS 09/30/24

- A. The 2018 EJCDC General Conditions, Paragraph 7.12A states the following:

*Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all approved Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.*

- B. In addition to the EJCDC requirements, the WVWA requires the following:

1. Record Documents shall be kept and maintained on site in the form of "Red-Line" Documents (construction documents that have been updated in red with changes made in the field). These "Red-Line" Documents shall be updated as soon as any deviations to the construction drawings are built or installed. It is the requirement of this section to update the "Red-Line" documents as the changes occur, not to wait until the end of the project and make updates at that time.
2. The permanent set of Record Documents shall be submitted to the Participating Utility for review and shall be approved prior to granting of Substantial Completion.
3. Documents that are unclear, illegible, torn, etc., will not be accepted.
4. The words "RECORD DOCUMENTS" and the date shall be clearly printed in large bold letters on every sheet.
5. "Red-Line" mark-ups for linear work such as water or sewer lines shall include both horizontal and vertical adjustments as well as the data listed below.
  - a. Sewer:
    - i. Manhole pipe inverts and manhole depth at outgoing pipe.
    - ii. Cleanout depth.
    - iii. Fitting locations.
  - b. Water:
    - i. Water valve depth to the top of the nut in inches.
    - ii. Call out double water meter boxes.

- iii. WVWA Hydrant Tag number with make, model and cast date for each hydrant.
  - iv. Fitting locations – horizontal and vertical
  - v. Air Valves/Blow Offs.
  - vi. Water Vault – size and depth
6. “Red-Line” mark-ups for non-linear projects (pumping stations and treatment plants) shall include both horizontal and vertical adjustments as well as the data listed below.
- a. Treatment tank locations/dimensions
  - b. Equipment locations
  - c. Panel locations/dimensions
  - d. Piping locations/sizes
  - e. Building locations/sizes
  - f. Any and all items built differently than that shown on the construction drawings.
7. Where there is a change in alignment of any proposed piping, or when any valves, fittings, manholes, or other appurtenances are moved to a location other than shown on the latest approved plans, the Record Documents shall accurately reflect such changes. The original design shall be struck through from the Final Record Documents so that it is clearly communicated what was and was not constructed.
8. Crossing of existing utilities shall be documented on the “red line” documents. Actual horizontal location and vertical information shall be shown on plan and profile views. For each crossing, denote utility type (gas, storm, telecom, etc.), material (concrete, plastic, etc.), dimension, and depth. Clearly annotate separation distance between existing and new utility at each location.
9. A post-construction survey shall be completed by the contractor or their representative, using a licensed surveyor, to show accurate horizontal and vertical location on all above ground appurtenances installed as part of the project to include but not be limited to Equipment, Center of Manhole Lid, Center of Valve Lid, Center of Meter Lids, Center Top of Water Vaults, Center of Blow Off Lid, Sampling Stations, Center of Clean-Outs, etc. The survey should include horizontal and vertical location of any items that were installed as part of this project and are visible after construction is complete. See Section “C” below for list of data required to be submitted as part of the survey.

C. Submittal shall consist of the following:

- 1. Contractor’s original full size sealed construction drawings field set of “Red-Line” Drawings. Contractor shall sign and date this document and include the statement that “This work has been completed in accordance with Contract Documents, with reasonable accuracy, and that any deviations have been “Red-Lined” annotated or otherwise captured in change order documentation.”

2. Any detailed submittal drawings that include “Red-Line” mark-ups that are necessary for clarity.
3. CSV survey file that meets the following criteria.
  - a. Surveyed in Virginia State Plane Coordinate System, South Zone, NAD 1983, FIPS 4502 Feet, US Survey Feet
  - b. Mandatory Fields: Point ID, X, Y, Z, Type, Precision, Survey Date
  - c. Optional Fields: Notes distinguishing any field observations. Ex, Double Meter Box.
4. A letter that states the survey work was performed by a licensed engineer or surveyor in the state of Virginia and contains their signed, dated seal.