1 Items to be Included
1.1 Certain control points and benchmarks are shown on the plans, or will be available from the Project Manager. These points must be used by the Contractor to provide as-built utility information for this project.
1.2 The Contractor must locate all existing utilities encountered during the construction of the project and record all information necessary to accurately locate that item in the future.
1.3 At a minimum all newly installed utilities must have the x-y-z coordinates (distance north-south, and east-west; and depth) referenced to the control and a written description of all points located (i.e., elevation, location, material, etc.).
   1.3.1 This information should include information at the start point, end point and any change in direction of the newly installed utility.
   1.3.2 Reference should also include structures, and any splice from damaged utility lines.
   1.3.3 Show all changes in size, material, location, and elevation of all new, existing, and/or abandoned underground utility lines or other pertinent work.
   1.3.4 Show the location (x-y-z) of all valves, manholes, etc.

2 Format and Delivers
2.1 The as built drawing sheet size will be the same as the original drawings unless otherwise authorized by the Project Manager.
2.2 Drawings will be prepared by a competent draftsman in a neat and acceptable manner to scale and finally dimensioned.
2.3 As-built information will be accepted in an electronic format (i.e., CAD software such as AutoCAD or MicroStation), and a hardcopy tracing.
2.4 Original contract documentation may be used as the base for the “as-built” document.
2.5 The “As-Built” document shall be stamped “As-Built” on each drawing sheet. As-Builts submitted in CAD format should have an appropriate reflection in each file name (ex. A101ab.dwg).
2.6 Upon completion of the project, the “As-Built” drawings will be delivered to the PM.