

BID PACKAGE 10-003 – OLIVE GARDEN SITE UTILITIES WORK

TULALIP, WASHINGTON

SECTION 010500 – FIELD ENGINEERING

PART 1 – GENERAL

1.01 REQUIREMENTS INCLUDED

- A. General: This Section specifies administrative and procedural requirements for field engineering services, including, but not necessarily limited to, the following:
 - 1. Land survey work.
 - 2. Civil engineering services.
 - 3. NOT USED.

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Special Conditions.
- B. Section 010100 – SCOPE OF WORK.
- C. Section 013400 – SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.

1.03 SUBMITTALS

- A. Submit name, address and telephone number of Professional Engineer or Registered Land Surveyor before starting survey work.
- B. Upon request, submit documentation verifying accuracy of survey work.
- C. All drawings, documentation, and other submittals of the Professional Engineer or Registered Land Surveyor shall bear the appropriate seal of the Professional evidencing licensure in the state where the project is located.
- D. Certificates: Submit a certificate signed by the Professional Engineer or Registered Land Surveyor certifying that the location and elevation of improvements comply with the Contract Documents.
- E. Project Record Documents: Submit a record of Work performed and record survey data as required under provisions of Section 013400 – SHOP DRAWINGS, PROJECT DATA AND SAMPLES.

PART 2 – PRODUCTS (Not Applicable)

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Contractor and all other contractors shall verify locations of survey control points prior to starting work. Promptly notify the Construction Manager of any discrepancies discovered.

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- B. Contractor and all other contractors shall verify all measurements; ANY DIFFERENCE WHICH MAY BE FOUND SHALL BE SUBMITTED IN WRITING TO THE CONSTRUCTION MANAGER FOR CONSIDERATION BEFORE PROCEEDING WITH THE WORK.
- C. Contractor shall verify layout information shown on the Drawings, in relation to the property survey and existing benchmarks before preceding to layout the Work. Locate and protect existing benchmarks and control points. Preserve permanent reference points during construction.
 - 1. Do not change or relocate benchmarks or control points without prior written approval from the Construction Manager. Promptly report to the Construction Manager lost or destroyed reference points or requirements to relocate reference points because of necessary changes in grades or locations.
- D. Contractor shall verify grades, lines and dimensions as shown on the Drawings and shall report errors and inconsistencies discovered in the information furnished by the Drawings to the Project Engineer, through the Construction Manager, prior to commencing Work and shall perform the following.
 - 1. Maintain major grades, lines, levels and bench marks necessary and required by the Work.
 - 2. Maintain bench marks at two widely separated places.
- E. Existing Utilities and Equipment: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning any site work, investigate and verify the existence and location of underground utilities and other construction.
 - 1. Prior to construction verify the location and invert elevation at points of connection of sanitary sewer, storm sewer and water service piping.

3.02 PERFORMANCE

- A. Working from lines and levels established by the property survey, Contractor shall establish benchmarks and markers to set lines and levels at each story of construction and elsewhere as needed to properly locate each element of the Project. Calculate and measure required dimensions within indicated or recognized tolerances. Do not scale Drawings to determine dimensions.
 - 1. Advise entities engaged in construction activities of marked lines and levels provided for their use.
 - 2. As construction proceeds check every major element for line, level and plumbness.
- B. Surveyor's Log: Maintain a surveyor's log of control and other survey Work. Make this log available for reference.
 - 1. Record deviations from required lines and levels and advise the Construction Manager when deviations that exceed indicated or

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recognized tolerances are detected. On Project Record Drawings record deviations that are accepted and not corrected.

- C. Site Improvements: Contractor shall be responsible to locate and layout site improvements, including pavements, stakes for grading, fill and topsoil placement, utility slopes and invert elevations by instrumentation and similar appropriate means.
- D. Building Lines and Levels: NOT USED.
- E. Existing Utilities: Contractor or other contractor(s) encountering a conflict shall furnish information necessary to adjust, move or relocate existing structures, utility poles, lines, services or other appurtenances located in or affected by construction to local authorities having jurisdiction.

END OF SECTION 010500