Addendum No. 3

June 9th, 2016

 Project:
 Gallatin Valley YMCA

 Location:
 Baxter Lane, Bozeman, Montana 59715

 Bid Date:
 June 16th, 2016 at 10:30 a.m. Acknowledgment of receipt of this addendum is required on bid form.





NOTICE TO BIDDERS:

You are hereby notified of the following clarification of, addition or revisions to, the Bid Documents for the above referenced project.

The following information is being issued to all plan holders of record as of the date of this Addendum. It is the responsibility of each Bidder to notify his/her sub-contractors, suppliers, etc., and to verify all items covered by the Contract Documents, including Addenda, as related to their bids, prior to bid submittal.

This Addendum is hereby made part of the project requirements and contract documents for "Gallatin Valley YMCA" prepared by CTA Architects Engineers, Inc. and dated May 23, 2016. <u>Be sure to acknowledge this Addendum on</u> your Bid Form(s). This addendum consists of the items listed below and the following attachments:

1.0 GENERAL

1.1 **Bid Date and Time is June 16th, 2016 at 10:30 am**. Review "Invitation to Bid" and "Instructions to Bidders" Documents included in the specifications.

1.2 **Geotechnical Clarification**. In regard to the last paragraph on page nine of the YMCA at the Commons Geotechnical report: This paragraph was a reference only in regard to the overexcavation that was completed for the previous Journey Church project. It is <u>not</u> a recommendation for the YMCA project. Since the YMCA will be supported by helical piers bearing on the dense gravel deposits at depth the only over-excavation required for the YMCA project is for interior concrete floor slabs (see Section 4.2). Over excavation under grade beams and or interior column footings is <u>not</u> required.

1.3 Roller Shade Clarification: Sidelites on type S, R & I storefronts do not require roller shades.

1.4 **Cabinet and Casework Clarifications:** All Panels shown at the Reception Desk on Detail 21/A801 are ST1 Steel Panels with SM1 Standoffs as described on A501. All vanity tops in rooms 103, 104, and 105 are plastic laminate. On sheets A501 and A502, Under "Additional Notes", change Note 9 to read "See plan for locations of 'PT2 Paint'. Add Note 10, to read "PL2 Plastic Laminate to be install on this wall directly over plywood".

1.5 **Door and Hardware Clarifications:** Door 110-2 Should be a HM door, not WD. 128-1 and 128-2 should be hardware group #1 and 128-3 and 128-4 should be hardware group #2. A rim device is an acceptable alternate to the vertical rods for door 100-2.

2.0 PROJECT MANUAL

- 2.1 Specification Section 05 5213 Pipe and Tube Railings: Delete sections 2.3.E and 2.6.Q
- **2.2 Specification Section 02 4600 Steel Helical Piers:** Replace original specification with attached revised specification section.
- 2.3 Prior Approvals Add the following as approved substitutions: None at this time.

3.0 Drawings

- 3.1 Replace the following sheets, with the attached sheets:
 - 1. Sheets C300, A402, A602, A604

3.2 Make the following revisions:

- 1. The following items are clarified in the revised sheets above and are narrated here for convenience: Central stair railing infill changed to wire mesh. See revised sheet A402. Interior windows V & W are to be Hollow metal. See revised A602 and additional detail on A604.
- 2. On Sheet A103, Notes 1 and 2, Change 30 mil Infiltration/Vapor Barrier to 10 mil Vapor Barrier.
- 3. On Sheet E201 and 202, Note that Fixtures called out as P3E are identical to P3 with the exception of added emergency battery backup.
- 4. Make the changes noted on the Electrical Sheets referenced below.

DRAWINGS

SHEET E001

- LIGHTING FIXTURE SCHEDULE Type P2: Change to CFL PENDANT CYLINDER, DIMMING BALLAST, SCOTT S2127 1C13E BA OAH XX DIM 120V, 13W QUAD 35K OR EQUAL. COORDINATE FINAL MOUNTING HEIGHT WITH ARCHITECT.
- SHEET E002
 - INTERIOR LIGHTING CONTROL DETAIL Change description of Relay 12 to "FRONT DESK PENDANTS (120V) DIMMABLE CFL "I". INCLUDE CFL DIMMING CONTROLLER FOR THIS LOAD.
- SHEET E302
 - 3. SHEET WORK NOTES NOTE 3: Change COMBINATION FLOOR RECEPTACLE/DATA OUTLET TO A WIREMOLD SURFACE STYLE POKE-THRU SECTIONALIZED DEVICE RC4 OR AV3 SERIES OR EQUAL WITH 5-20R RECEPTACLE AND (1) CAT6 DATA PORT, GRAY COLOR. COORDINATE FINAL CONNECTION REQUIREMENTS WITH EXERCISE EQUIPMENT SUBMITTAL.
- SHEET E402
 - 4. SHEET WORK NOTES Note 5: Change COMBINATION FLOOR RECEPTACLE/DATA OUTLET TO A WIREMOLD SURFACE STYLE POKE-THRU SECTIONALIZED DEVICE RC4 OR AV3 SERIES OR EQUAL WITH 5-20R RECEPTACLE AND (1) CAT6 DATA PORT, GRAY COLOR. COORDINATE FINAL CONNECTION REQUIREMENTS WITH EXERCISE EQUIPMENT SUBMITTAL.

END OF ADDENDUM NO.3













SECTION 024600 - STEEL HELICAL PIERS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section specifies furnishing and installing uncased Helical Piers® manufactured by the A.B. Chance Company, Centralia, Missouri.
- B. Uncased Helical Piers® shall be designed and installed to provide a service load capacity (unfactored) as indicated by construction documents. Size Helical Piers to best match the loads listed on the construction documents. The geotechnical report prepared for the site by Dowl is included in this project manual for reference. Opinions in this report are those of the geotechnical engineer and represent interpretations of subsoil conditions, tests, and results of analyses conducted by the geotechnical engineer. Owner will not be responsible for interpretations or conclusions drawn from this data by the Contractor.

1.3 QUALITY ASSURANCE

- A. Manufacturer's Representative: Manufacturer shall be available for consultation from Installer during the duration of the project if any irregularities are encountered during installation. This representative shall be a Professional Engineer licensed in the State of Montana.
- B. Installer Qualifications: Installation shall be done by an A.B. Chance authorized installation contractor. Proof of current certification with the A.B. Chance Company shall be submitted to the Engineer prior to starting installation.
- C. Testing Agency Qualifications: An independent testing agency (Geotechnical Representative) qualified by professional status and relevant experience, acceptable to A.B. Chance, shall be present during installation of all helical piers.
- D. Welding: Meet requirements of AWS "Structural Welding Code," D1.1, latest edition. All welders shall be AWS certified.
- E. Steel Helical Piers® as specified shall be manufactured by a facility whose quality control systems comply with ISO (International Organization of Standard) 9001 requirements. Certificates of Registration denoting ISO Standards Number shall be presented upon request to the owner or their representative.

1.4 SUBMITTALS

- A. Submit Shop Drawings indicating shaft and helix sizes, and include manufacturer's catalog cuts, data sheets, and engineering recommendations.
- B. Submit Installation Records as indicated in the Field Quality Control Section of this specification.
- C. Submit Test Results for the installer performed Proof Load Testing as indicated in the Field Quality Control Section of this specification.

PART 2 - PRODUCTS

2.1 MATERIAL

- A. The steel Helical Pier® system shall be ICBO listed. Installing contractor shall furnish evidence to the Engineer by means of the ICBO evaluation report number ER-5110.
- B. Pier Shafts (Lead Section and Extensions):
 - 1. The round cornered square (RCS) solid steel shafts shall conform to the general requirements of ASTM A29 and the following descriptions:
 - a. High strength low alloy (HSLA), low to medium carbon steel grade (similar to AISI 1530) with improved strength due to fine grain size and structure with a minimum yield strength of 70 ksi.
- C. Helices: Carbon steel sheet, strip, or plate formed on matching metal dies to true helical shape and shall conform to the following ASTM Specifications:
 - 1. ASTM A656 or A1018 Grade 80.
- D. Bolts: The sizes and types of bolts used to connect the Helical Pier® extensions to lead sections or another extension shall conform to the following ASTM specifications:
 - 1. 0.875 inch diameter bolt per ASTM A193 Grade B7.
- E. Couplings: Couplings will be formed as an integral part of (RCS) shaft extension material through a forging process.
- F. Finish: All material shall have a Class B-1 hot dipped galvanized coating complying with ASTM A153.

PART 3 - EXECUTION

3.1 EQUIPMENT

STEEL HELICAL PIERS

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A. Installation Equipment:

- 1. Shall be a rotary type motor with equal forward and reverse torque capabilities. This equipment shall be capable of continual adjustment of the torque drive unit's revolutions per minute (RPM's) during installation. Percussion drilling equipment will not be allowed.
- 2. Shall be capable of applying installation torque equal to the torque required to meet the pier loads.
- 3. Equipment shall be capable of applying down pressure and torque simultaneously.
- B. Torque Monitoring Devices:
 - 1. The torque being applied by the installing units shall be monitored throughout the installation by the installer. The torque monitoring device shall either be a part of the installing unit or an independent device in-line with the installing unit. Calibration for either unit shall be available for review by the Owner.

3.2 INSTALLATION PROCEDURES:

- A. Advancing Sections:
 - 1. Engage and advance the Helical Pier® sections in a smooth, continuous manner with the rate of pier rotation in the range of 5 to 35 RPM.
 - 2. Apply sufficient down pressure to uniformly advance the helical sections to approximately 3 inches per revolution. The rate of rotation and magnitude of down pressure must be adjusted for different soil conditions and depths in order to maintain the penetration rate.
 - 3. If the helical section ceases to advance, refusal will have been reached and the installation shall be terminated.
- B. Termination Criteria:
 - 1. The torque as measured during the installation shall not exceed the torsional strength rating of the steel helical lead and extension sections.
 - 2. The minimum depth criteria indicated on the Drawings must be satisfied prior to terminating the steel Helical Piers®.
 - 3. The top of the helix is to be located not less than five (5) feet below the bottom of grade.
 - 4. If the torsional strength rating of the pier and/or installing unit has been reached prior to satisfying the minimal depth required, the installing contractor shall have the following options:
 - a. Terminate the installation at the depth obtained with the approval of the Engineer; or
 - b. Remove the existing pier and install a pier with smaller and/or fewer helices. This revised pier shall be terminated at least three (3) feet beyond

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the terminating depth of the original pier.

- 5. In the event the minimum installation torque is not achieved at minimum depth, the Contractor shall install the foundation deeper using additional plain extension sections.
- 6. The average toque for the last three (3) feet of penetration shall be used as a basis of comparison with the minimum recommended installation torque. The average torque is the average of the last three readings recorded at one (1) foot intervals. This average torque is intended solely as an indication of the pier's ultimate compression capacity.

3.3 FIELD QUALITY CONTROL

- A. The contractor (an AB Chance approved installer) shall keep a written installation record for each Helical Pier®. The record must be approved and signed by the Manufacturer's Representative identified in section 1.3.
 - 1. This record shall include the following information:
 - a. Project name and location.
 - b. Name of authorized and certified dealer and installer.
 - c. Name of installer's foreman or representative witnessing the installation
 - d. Name of Owner's Representative witnessing the installation
 - e. Date of installation.
 - f. Location of Helical Pier®.
 - g. Description of lead section including number and diameter of helices and extensions used.
 - h. Overall depth of installation from a known reference point
 - i. Installation torque at termination of pier.
 - j. Quantity of grout take up.
 - k. Depth of grouted cylinder and termination elev. of top of cylinder.
 - l. Remarks regarding installation.
- B. Installer shall implement a quality control testing program to ensure stability of the overall foundation system. This Quality Control Testing Program shall include conducting proof load tests for a minimum of ten percent of the production piers as indicated below. Proof load tests shall be performed to 1.3 times the design loads indicated in the Construction Documents. Proof Load Tests shall follow FHWA "Micropile Design and Construction Guidelines", FHWA-SA-97-070, for load schedule, creep, and acceptance criteria with the following exceptions: each incremental load shall be held for a minimum of two minutes and total deflection at 1.3 times the design loads indicated shall not exceed 0.6 inches.
- C. Contractor will engage a qualified testing agency (Geotechnical Representative) to provide observation that the installer is meeting the minimum pier performance indicated in the construction documents and observe the installer conducting the proof load test noted in paragraph B above.

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D. If a production Helical Pier® that is tested fails to meet the acceptance criteria, the Contractor shall be directed to proof test another Pier in the vicinity. For failed Helical Piers® and further construction of other foundations, the Contractor shall modify the design, the construction procedure, or both. These modifications include, but are not limited to, installing replacement Helical Piers® modifying the installation methods and equipment, increasing the minimum effective installation torque, changing the helix configuration, or changing the Helical Pier® material. Modifications that require changes to the structure shall have the prior review and approval by the Engineer and Owner. Modifications to pier designs, installation procedures, or foundation elements resulting from failed test results shall be at the Contractor's expense.

END OF SECTION 024600