



Addendum 02

Corporate Headquarters
7535 N. Palm Ave. #201
Fresno, CA 93711

559.437.0887 T
559.438.7554 F
teterae.com

PROJECT:

West Hills Coalinga Chiller
Replacement
Coalinga, CA

Date : February 26, 2024
TETER Project No.: 22-12358

CLIENT:

West Hills Community
College District
275 Phelps Ave.
Coalinga, CA

DSA File No.: 10-C1
DSA Appl. No.: 02-120711

The following additions, deletions and revisions to the plans, specifications and Addenda shall become a part of the plans and specifications. It is the responsibility of the General Contractor to submit the information contained in this addendum to all subcontractors and suppliers. The Bidder shall acknowledge receipt of the Addendum in the Bid Proposal. (Addendum number of pages: 2 pages + 9 attachments = 11 total pages).

PROJECT MANUAL:

- 2 – 01:** PROJECT MANUAL, SPECIFICATION SECTION 01 – “ALLOWANCES”, add specification section. See attachment **AD2-01**.
- 2 – 02:** PROJECT MANUAL, SPECIFICATION SECTION 232113 – “UNDERGROUND HYDRONIC PIPING”, revise as follows:
- A. Replace specification section in its entirety, see attachment **AD2-02**.
- 2 – 03:** PROJECT DRAWING, SHEET A120 “ENLARGED DITE PLAN”, revise as follows:
- A. Revise Keynote 3.02 to read as follows: “NEW CONCRETE SLAB, 5” MIN. THICK. PROVIDE #4@18” O.C. EA WAY, CENTERED.”

Bid RFIs:

- 2 – 04:** Can you let me know if the owner will be responsible for Builder’s Risk Insurance or is it the responsibility of the General Contractor?
- A. RESPONSE: The General Contractor is responsible for insurance.

2 – 05: What is the completion time for this project?

A. RESPONSE: Completion time is 60 calendar days from Notice to Proceed.

2 – 06: What amount of liquidated damages?

A. RESPONSE: Liquidated damages is \$250 per day.

2 – 07: There is no detail for keynote item 3.02 or 3.06 per sheet A120. Is rebar to be installed?

A. RESPONSE: There is to be #4 rebar for the 5" concrete slab, see addendum item 2-03 for keynote revision. No rebar is required in the concrete walkway.

2 – 08: Clarify specification section 232113 Underground Hydronic Piping 3.4.F. Carrier pipe fittings can be either field manufactured or factory manufactured?

A. RESPONSE: No exception is taken to fittings being either field or factory manufactured and insulated.

2 – 09: There is likely existing, abandoned electrical conduit between the switchboard and new chiller panel. Can this conduit be reused?

A. RESPONSE: The condition and size of the existing conduit cannot be confirmed as reuseable; as such, the contractor will be required to provide new conduit per the construction drawings. Where possible, the new conduit can utilize the same trench as the chilled water piping. If during construction, it is verified the existing conduit is in acceptable condition to reuse, a deductive change order can be executed at that time.

END OF ADDENDUM NO. 2



Aya Shitanishi
Architect

SECTION 01 21 00
ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements governing allowances.
 - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.
- B. Types of allowances to include the following:
 - 1. Allowance No. 1: Unforeseen Contingency allowance, \$60,000.00.

1.3 SELECTION AND PURCHASE

- A. At the earliest practical date after award of the Contract, advise Architect of the date when final selection and purchase of each product or system described by an allowance must be completed to avoid delaying the work.
- B. At the Architect's request obtain proposals for each allowance for use in making final selections. Include recommendations that are relevant to performing the work.

1.4 ACTION SUBMITTALS

- A. Submit proposals for purchase of products or systems included in allowances, in the form specified for change orders.

1.5 INFORMATION SUBMITTALS

- A. Submit invoices or delivery slips to show actual quantities of materials delivered to the site for use in fulfillment of each allowance.

- B. Submit time sheets and other documentation to show labor time and cost for installation of allowance items that include installation as part of the allowance.
- C. Coordinate and process submittals for allowance items in same manner as for other portions of the work.

1.6 COORDINATION

- A. Coordinate allowance items with other portions of the work. Furnish templates as required to coordinate installation.

1.7 CONTINGENCY ALLOWANCES

- A. Use the contingency allowance only as directed by Architect for Owner's purposes and only by Change Orders that indicate amounts to be charged to the allowance.
- B. Contractor's overhead, profit, and related costs for products and equipment ordered by Owner under the contingency allowance are included in the allowance and are not part of the Contract Sum. These costs include delivery, installation, taxes, insurance, equipment rental, and similar costs.
- C. Change Orders authorizing use of funds from the contingency allowance will include Contractor's related costs and reasonable overhead and profit.
- D. At Project closeout, credit unused amounts remaining in the contingency allowance to Owner by Change Order.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine products covered by an allowance promptly on delivery for damage or defects. Return damaged or defective products to manufacturer for replacement.

3.2 PREPERATION

- A. Coordinate materials and their installation for each allowance with related materials and installations to ensure that each allowance item is completely integrated and interfaced with related work.

3.3 SCHEDULE OF ALLOWANCES

- A. Allowance No. 1 Unforeseen Conditions: Include the sum of \$ 60,000.00 for use according to Owner's written instruction to Exceed for unforeseen conditions during construction.
1. This allowance includes material cost, receiving, handling, installation, and contractor overhead and profit.
 2. Prior approval and use of this Allowance by the owner is required. Lack of owner approval maybe grounds for rejection of any contractor submitted costs.
 3. Contractor shall submit all material invoices for material being replaced as part of the allowance. Any portion of the allowance that is not used will be credited back to the owner in a deductive Change Order.

END OF SECTION

SECTION 232113.13
UNDERGROUND HYDRONIC PIPING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
1. Plastic pipe and fittings.
 2. Transition fittings.
 3. Cased piping system.

1.3 PERFORMANCE REQUIREMENTS

- A. Provide components and installation capable of producing hydronic piping systems with the following minimum working-pressure ratings:
1. Chilled-Water Piping: 100 psig at 200 deg F.

1.4 SUBMITTALS

- A. Product Data: For the following:
1. Cased piping.
- B. Shop Drawings: For underground hydronic piping. Signed and sealed by a professional engineer.
1. Calculate requirements for expansion compensation for underground piping.
 2. Show expansion compensators, offsets, and loops with appropriate materials to allow piping movement in the required locations. Show anchors and guides that restrain piping movement with calculated loads and show concrete thrust block dimensions.
 3. Show pipe sizes, locations, and elevations. Show piping in trench, conduit, and cased pipe with details showing clearances between piping, and show insulation thickness.
- C. Profile Drawings: Show system piping in elevation. Draw profiles at horizontal scale of not less than 1 inch equals 50 feet and at vertical scale of not less than 1 inch equals 5

feet. Indicate manholes and piping. Show types, sizes, materials, and elevations of other utilities crossing hydronic piping.

- D. Qualification Data: For qualified Installer.
- E. Welding certificates.
- F. Material Test Reports: For cased piping.
- G. Source quality-control reports.
- H. Field quality-control reports.

1.5 QUALITY ASSURANCE

- A. Welding Qualifications: Qualify procedures and personnel according to ASME Boiler and Pressure Vessel Code: Section IX.
 - 1. Comply with provisions in ASME B31.9, "Building Services Piping."
 - 2. Certify that each welder has passed AWS qualification tests for welding processes involved and that certification is current.
- B. ASME Compliance: Comply with ASME B31.9, "Building Services Piping," for materials, products, and installation.

PART 2 - PRODUCTS

2.1 PLASTIC PIPE AND FITTINGS

- A. HDPE Plastic:
 - 1. Pipe: ASTM D-3350, plain ends as indicated in "Piping Application" Article.
 - 2. Pipe Fittings: Fittings shall be heat fusion butt-welded to adjacent pipe sections.

2.2 TRANSITION FITTINGS

- A. Plastic-to-Metal Transition Fittings: CPVC one-piece fitting with one threaded brass or copper insert and one Schedule 80 solvent-cemented-joint end.

2.3 CASED PIPING SYSTEM

- A. Description: Factory-fabricated piping with carrier pipe, insulation, and casing.
 - 1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - a. Insul-Tek Piping Systems, Inc.

- b. Perma-Pipe, Inc.
 - c. Rovanco Piping Systems, Inc.
 - d. Thermacor Process, L.P.
 - e. Thermal Pipe Systems.
 - f. Urecon Ltd.
- B. Carrier Pipe: Plastic pipe and fittings.
- C. Carrier Pipe Insulation:
 - 1. Polyurethane Foam Pipe Insulation: Rigid, cellular, high-pressure injected between carrier pipe and jacket.
 - a. Comply with ASTM C 591; thermal conductivity (k-value) shall not exceed 0.16 Btu x in./h x sq. ft. x deg F at 75 deg F after 180 days of aging.
- D. Casing: HDPE.
- E. Casing accessories include the following:
 - 1. Joint Kit: Half-shell, pourable or split insulation, casing sleeve, and shrink-wrap sleeve.
 - 2. Expansion Blanket: Elastomeric foam, formed to fit over piping.
 - 3. End Seals: Shrink wrap the casing material to seal watertight around casing and carrier pipe.

PART 3 - EXECUTION

3.1 EARTHWORK

- A. See Division 31 Sections for excavating, trenching, and backfilling.

3.2 PIPING APPLICATION

- A. Chilled-Water Piping:
 - 1. Shall be the following:
 - a. HDPE plastic pipe and fittings.
 - 2. Cased piping with polyurethane carrier-pipe insulation.
 - a. Piping Insulation Thickness: 1 inch.

3.3 PIPING INSTALLATION

- A. Drawing plans, schematics, and diagrams indicate general location and arrangement of piping systems. Indicate piping locations and arrangements if such were used to size

pipe and calculate friction loss, expansion, pump sizing, and other design considerations. Install piping as indicated unless deviations to layout are approved on Coordination Drawings.

- B. Remove standing water in the bottom of trench.
- C. Do not backfill piping trench until field quality-control testing has been completed and results approved.
- D. Install piping at uniform grade of 0.2 percent. Install drains, consisting of a tee fitting, NPS 3/4 ball valve, and short NPS 3/4 threaded nipple with cap, at low points and elsewhere as required for system drainage. Install manual air vents at high points.
- E. Install components with pressure rating equal to or greater than system operating pressure.
- F. Install piping free of sags and bends.
- G. Install fittings for changes in direction and branch connections.
- H. See Division 23 Section "Common Work Results for HVAC" for sleeves and mechanical sleeve seals through exterior building walls.
- I. Secure anchors with concrete thrust blocks. Concrete is specified in Division 03 Section "Cast-in-Place Concrete."
- J. See Division 26 Section "Cathodic Protection" for cathodic devices and connections to piping and conduit systems.

3.4 JOINT CONSTRUCTION

- A. See Division 33 Section "Common Work Results for Utilities" for basic piping joint construction.
- B. Join pipe and fittings according to the following requirements and Division 23 Sections specifying piping systems.
- C. Ream ends of pipes and tubes and remove burrs. Bevel plain ends of steel pipe.
- D. Remove scale, slag, dirt, and debris from inside and outside of pipe and fittings before assembly.
- E. Straight run joints consisting of pipe and jacket are butt fusion welded and field insulated using urethane foam to the thickness specified and jacketed with a heat shrinkable sleeve over the HDPE sleeve mold. Joints can be made beside the trench or inside the trench.
- F. Carrier pipe fittings of the same material and pressure rating shall be heat fusion butt-welded to adjacent pipe sections. Fittings that are butt fusion welded are to be field installed or, at engineer's option, factory insulated. If fittings are factory manufactured, fittings are pre-insulated using factory PE fitting covers welded to the jackets.

3.5 IDENTIFICATION

- A. Install continuous plastic underground warning tapes during back filling of trenches for underground hydronic piping. Locate tapes 6 to 8 inches below finished grade, directly over piping. See Division 31 Sections for warning-tape materials and devices and their installation.

3.6 FIELD QUALITY CONTROL

- A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.
- B. Perform tests and inspections.
 - 1. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect components, assemblies, and equipment installations, including connections, and to assist in testing.
- C. Tests and Inspections:
 - 1. Prepare hydronic piping for testing according to ASME B31.9 and as follows:
 - a. Leave joints, including welds, uninsulated and exposed for examination during test.
 - b. The piping system shall be restrained from uncontrolled movement in the event of a failure. Appropriate safety precautions shall be taken to guard against possible injury to personnel in the event of a failure.
 - c. Fill system with water. Where there is risk of freezing, air or a safe, compatible liquid may be used.
 - d. Use vents installed at high points to release trapped air while filling system.
 - e. Expansion phase: Initial pressurization period of three hours at one and one-half times the normal system operating pressure. Make-up water shall be added to the system during this period to maintain the desired pressure.
 - 2. Test hydronic piping as follows:
 - a. The test shall commence immediately after the expansion phase. The pressure shall be reduced by 10 psi and the test clock started.
 - b. System pressure remaining within 5% of the target test pressure for one hour indicates no leakage has occurred.
 - c. If the entire test procedure cannot be completed within eight hours of the initial pressurization, the system shall be depressurized and allowed to relax for a minimum of eight hours before another test is attempted.
 - d. After hydrostatic test pressure has been applied, examine joints for leakage. Remake leaking joints using new materials and repeat hydrostatic test until no leaks exist.
 - 3. Test conduit as follows:
 - a. Seal vents and drains and subject conduit to 15 psig for four hours with no loss of pressure. Repair leaks and retest as required.

D. Prepare test and inspection reports.

END OF SECTION