The purpose of this addendum is to answer vendor questions, correct specifications and provide revised drawing per the attached sheets (4 pages).

Please note receipt of the addendum on bid and or sign and return with any price changes noted.

All other specifications remain unchanged.
ADDENDUM 2

VENDOR QUESTIONS:

1. Para 2.3 STEAM PIPING SYSTEMS Sub Para A:

   You are calling out a Permapipe Xtru-Therm when you should be calling out Multi-Therm 500 (Tricon Steel-Con Plus).

   Xtru-Therm (Tricon Steel 250) is ok for the condensate but not the steam lines.

   **Answer:** The 8” steam line & 4” condensate line are in a tunnel and were thus engineered to be the Xtru-Therm (or equal) for that reason. The 6” steam & 3” condensate are direct bury and designed to be the Multi-Therm product (or equal).

2. Site Plan Drawing ES-01 is not clear when sent via fax. It is very important that we can clearly see the piping layout so that we can make sure the system will be quoted properly and safely.

   **Answer:** Please see the attached revised drawing (1 page).

3. I cannot find the temperature of the steam and condensate lines anywhere. This too is imperative to be able to quote a safe and reliable system.

   **Answer:** The steam temp is 304° @ 50 psi and the condensate is 200° @ 25 psi.

4. Your list of materials does not explain if expansion is required in any of the pipe lengths or elbows. Again, this is imperative if you are giving me a list of materials to bid without a clear piping layout to determine if your list of materials will work.

   **Answer:** The expansion is a bellows type expansion system located near the middle of the tunnel with each end anchored. The designed units are Hyspan Model 3502 (or equal) in 8” and 4”.

5. Only one company in the US is ISO 9000 certified. You will not get competitive bids if you hold the specification.

   **Answer:** We have been given direction that all equipment shall be manufactured to the ISO 9000 Standards, thus manufacturers are to be certified.
CORRECTIONS TO SPECIFICATIONS:

To specification section 23 22 13 replace section 2.3 in its entirety with the following:

2.3. STEAM PIPING SYSTEMS

A. 8” Steam Pipe System, Perma-Pipe Xtru-Therm (or Equal) HDPE 125 Mil Std Jacket; No installed shrink end caps on square insulation ends; Std Weight (Sch 40), no OD coating on carrier pipe with 0.98in of Pyrogel XT insulation with bent ells. **Maximum OD of pipe system is 10.82in.**
   1. 254 ft. of pre-insulated straight pipe (40’ lengths)
   2. 20 ft. of pre-insulated straight pipe (20’ lengths)
   3. 2 each Xtru-Therm Std 90deg elbow
   4. 1 each pre-fabricated anchor
   5. 1 each pre-fabricated reducing tee 8”x6”x4”
   6. 16 each Xtru-Therm field joint kits
   7. 3 each Multi-Therm Gland Seals

B. 6” Steam Pipe System, Perma-Pipe Multi-Therm (or Equal), Std Weight (Sch 40) ERW; No OD coating on carrier pipe with 0.984in of Pyrogel XT insulation with bent ells. Maximum OD of pipe system is 10.75in.
   1. 106 ft. of pre-fabricated Multi-Therm straight pipe
   2. 1 each Multi-Therm Elbow
   3. 1 each pre-fabricated anchor
   4. 1 each Multi-Therm end seal
   5. 1 each Multi-Therm gland seal

C. 4” Condensate Pipe System, Perma-Pipe Xtru-Therm (or Equal) HDPE 125 Mil Std Jacket; No installed shrink end caps on square insulation ends; Schedule 80; no OD coating on carrier pipe with 1.5in of insulation, with bent ells.
   1. 240 ft. of pre-insulated straight (40’ lengths)
   2. 20 ft. of pre-insulated straight (20’ lengths)
   3. 2 each Xtru-Therm std 90deg elbow
   4. 1 each pre-fabricated cross-over reducing tee 4”x3”x2”
   5. 1 each pre-fabricated anchor
   6. 3 each Wall entry jacket end seal kit
   7. 16 each Xtru-Therm field joint kits

D. 3” Condensate Pipe System, 10 Ga A139 Steel conduit; Perma-Pipe Multi-Therm (or Equal) insulation & HDPE 100 Mil Std Jacket; Schedule 80; ERW; No OD coating on carrier pipe with 0.197in of Pyrogel XT insulation with bent ells. Maximum OD of pipe system is 6.625in.
   1. 106 ft. of pre-fabricated Multi-Therm straight pipe
   2. 1 each Multi-Therm Elbow
   3. 1 each pre-fabricated anchor
   4. 1 each Multi-Therm end seal
   5. 1 each Multi-Therm gland seal
E. Hyspan Model 3502 (or equal) 150 psi bellows type externally pressurized, completely enclosed expansion joints.
   1. 1 each 8” steam expansion joint
   2. 1 each 4” condensate expansion joint”
THE EXISTING 4" STEAM LINE WILL BE REPLACED WITH AN 8" STEAM LINE.

THE EXISTING 3" CONDENSATE LINE WILL BE REPLACED WITH A 4" CONDENSATE LINE.

EXISTING 4" STEAM LINE AND 2" CONDENSATE LINE

APPROXIMATELY 62 FEET

APPROXIMATELY 195 FEET

APPROXIMATELY 26 FEET

APPROXIMATELY 16 FEET

APPROXIMATELY 90 FEET