

Attachment 1- Answers and Clarification Document- Addendum 3

Bidders' Questions:

1. What does the hardware materials need to made out of for all of the nuts, bolts, washers, pipe supports, hangers, etc. in reservoir 3 pump room?

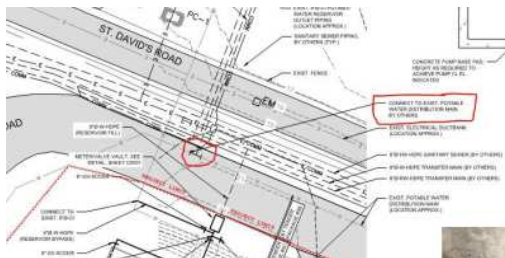
Designer Answer: Within the pump room, all hardware is to be galvanized steel.

2. Does the overhead duct work over the stairs need to be removed as part of the pump room demo?

BLDC Answer: All Overhead Duct work is to remain. Not part of the demo.

3. Does the 4" pipe out on the top of the pump roof need to be reconnected, or does it demoed out when we demo the pump room? The new drawings does not show this pipe being reconnected anywhere?

Designer Answer: This pipe currently serves the water truck fill station and is the water supply for buildings on the ships wharf area. The water truck station is to be removed and will no longer require to be serviced. The supply for the buildings on the wharf is to now come from a connection point closer to reservoir 3 (see picture). This is to be carried out as part of TP5B. Contractor of TP5C.3 to coordinate with contractor of TP5B to ensure this has been carried out and a smooth transition of water supply can occur. Once connections have been confirmed the exterior pipe can be removed.



4. Does the floor and the walls of the pump room need to get painted before handing over the completed fit out?

Designer Answer: No painting of walls and floors required.

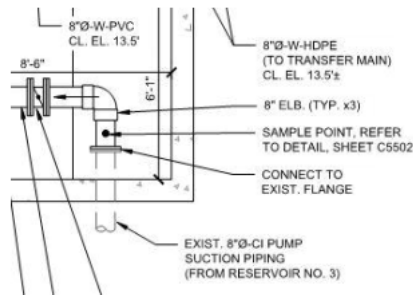
5. Looking at the Onsite Engineering drawings C5408, Floor Plan, its show that the pumps are sucking off of a common suction pipe that is piped through the pumps and it is also showing it to be 6". The current triplex pump skid has a 4" suction header. So the question is does the two (2) new transfer pump skids come with a 4" or 6" pump suction header? If they are 4" suction headers then we will need to redesign/pipe these pump suction out differently that what is shown on the drawings.

Designer Answer: I believe the current triplex pumps have 6" suction lines see picture below, the pipes appear larger than 4", did you measure them to confirm they are 4"?



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The common suction pipe that will feed all pumps is currently shown as 8" on the drawings not 6".



Based on this information it appears that the suction line may need a reduction from 8" to 6" before reaching the existing distribution pump that is to be reused. The triplex pump is on the end of the shared suction line, and thus a reduction to 6" will have no impact on the upstream pumps or pipe configuration.

BLDC Answer: The Contractor to Accommodate for this Reduction from 8" to 6" in the Lump sum cost.

6. Can we cut the cut sheets on these new transfer pumps showing the dimensions and their weights?

Designer Answer: Yes, we have the cut sheets already; they can be shared with you in due course.

7. With the new transfer pump skids, does the controller come separate, or is it attached to the pump skid like the current triplex pump skid. I only ask as the floor plan drawing shows the controllers mounted on the edge of the stairs.

Designer Answer: This information is on the pump cut sheets, which will be shared with you, from what I have read they are attached to the pump skids not separate and on the wall as shown on the drawings.

8. On floor plan drawing it shows one (1) 8" butterfly valve on the common pump suction. Is BLDC supplying that valve?

Designer Answer: Yes, BLDC is providing. All information can be found on the specifications, this document should be read thoroughly. See below snip indicating BLDC will supply this equipment.

C BLDC will furnish the following equipment and materials for installation by Contractor:

1. Skid-mounted transfer and distribution pumping systems at Reservoir Nos. 16, 13, 9, 6, 5 and 3, including pumps, motors, suction and discharge header piping and associated valves, base plates, diaphragm pressure tanks, and VFD/control cabinets.
2. Submersible pumping system at Building 609, including motors, flow sleeves, strainer, support brackets, and VFD/control cabinets.
3. Valves, as scheduled

9. When the new pipes are installed into reservoir 3, what happens at the end of the two (2) pipes? Do they stay looking straight or does there need to be a 90 degree elbow put on the end looking down?

Designer Answer: The existing suction lines are to remain in place to feed the new pumps.

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The two new pipes indicated in the drawing are inlet pipes that will fill the reservoir from the transfer pumps. The drawing indicates that these pipes are to penetrate the side walls and run at a high level inside of the tank.

This direction has changed and the pipes are now to run up the side walls and along the tops of the tank penetrating through the top slab. similar to what is shown in the picture below



BLDC Answer: The Contractor to accommodate for this Change as part of the Lump Sum Cost provided under this tender Cost submission. This Change in pipe routing to be external is part of the contract Cost.

10. Is it our responsibility to drain down the tank for us to do the work inside the tank?

Designer Answer: Yes, If necessary you are responsible for this. Given the new concept of running the inlet pipes on the top of the slab, it may be possible to carry this out without draining the tank down, however this is for you to determine the best means and methods.

11. Do we need to have the tank cleaned out once we are finished working in the tank? Also, how deep is this tank?

Designer Answer: Tank cleaning will be necessary if excessive mess is created. This said, the project owner may want the tank cleaned regardless. You should have this discussion with the BLDC who is the client. I have been inside the tank and it wasn't too bad but there was a layer of sediment on the bottom of the tank.

The tank has an internal depth of 16' 6". It's very deep.

BLDC Answer: The Contractor to accommodate a cost for Cleanup of the tanks as part of the Lump sum cost and the work will be under the tender submission and part of the Contract Price.

12. On drawing C5408 for the wall brackets inside of the tank it calls for stainless steel. In the section 40 05 07 hangers and Support For Utility Piping section 2.1 A. 1. calls for hangers and supports to be HDG (hot dipped galvanized). Please let us know what the hangers are to be made from and finished off.

Designer Answer: Any hardware internal to the reservoir should be stainless as called out on the drawings. This said, with the new concept of running the inlet pipes externally and penetrating through the top slab. External hardware can be HDG.

BLDC Answer: As per the Change in design as directed in Question #9 above. All External Piping to be priced as HDG and internal as Stainless Steel and to include all necessary

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connection and flanges between the two pipes.

13. Can we get the cutsheets on the calcium hypochlorite disinfection system?

BLDC Answer: We do not have cut sheets yet, please see below a screen shot of the material to be provided along with the Manufacturer name.

Manufacturer Name: *Solenis*

Snap Shots of the Material that to be provided for Your Information:

Calcium hypochlorination Systems/ RO Treated water sites

Five (5) MC4-50 Constant Chlor® (NFS 60) Dry Cal-Hypo Feeder pre-wired and piped, each consisting of:

- 1- Skid mounted Nema 4 Control Panel furnished with feeder status HMI with output.
- 1- Skid mounted circulation Pump – for purpose of always maintaining solution stability and suspension of solids in chemical feed tank.
- 1- Skid mounted Chemical solution tank, 13 gallons working capacity.
- 1- Skid mounted Automated solution tank refill.
- 1- Skid mounted 75 LB capacity briquette hopper.
- 1- Skid mounted secondary containment.

Five (5) ChlorTrak chemical consumption systems installed on each MC4-50 feeder.

Five (5) MC4-50 feeder Hopper Reduction Inserts (for use with < 6 PPD briquette applications. Supplied loose).

Five (5) Peristaltic type metering pumps each capable of delivering up to 15.0 GPH against a maximum discharge pressure of 100 psig. Each pump is capable of manual or automatic control.

Calcium hypochlorination System/ Reclaim WWTP effluent

One (1) MC4-50 Constant Chlor® (NFS 60) Dry Cal-Hypo Feeder pre-wired and piped, as described above.

One (1) ChlorTrak chemical consumption system installed on the MC4-50 feeder.

One (1) MC4-50 feeder Hopper Reduction Insert (for use with < 6 PPD briquette applications. (Supplied loose).

One (1) Peristaltic type metering pump capable of delivering 15.0 GPH against a maximum discharge pressure of 100 psig. The pump is capable of manual or automatic control..

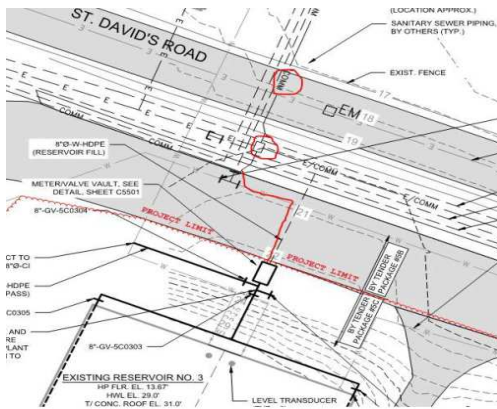
Twenty Four (24) Pails of Constant Chlor, NSF 61, briquettes.

14. Will we require to install an additional conduit from the pump controller to the meter/valve vault shown on 5408 via the existing handhole or is there a conduit existing. This is for the 4" flow meter and the electric actuated valve. If so what size conduit and has there been allowances made coming out of the existing handhole to connect to?

Designer Answer: The majority of the conduit should be installed as part of TP5B. In the below snip you will see a comm hand hole, you may need to run a short length of conduit from the meter vault to this hand hole as indicated by the red line, the best routing of this is to be determined by you.

In general 4" comm conduit is being installed everywhere. As there is not much equipment in the vault, 4" may not be needed and a smaller size could be used. If cost difference is negligible it may be best to continue with 4" pipe.

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15. Is there an existing conduit installed from the handhole located on 5408 to Reservoir 3?

Designer Answer: See response to previous RFI 14.

16. Will the level transducers be provided by the BLDC and if so, will the cable length equipped with the transducers be long enough to make if from RES # 3 to the pump station?

Designer Answer: Level transducers will be provided by the BLDC. The contractor will be responsible for providing the wire to connect the equipment to its termination points. I believe this is standard electrical wire, unsure of the gauge at this stage.

17. Should we allow for the conduits/conductors for the generator and the ATS switch? As per the meeting it was unclear if the Genset/ATS will be required.

Designer Answer: The Genset and ATS is required but is the responsibility of the BLDC to procure and supply. You will be responsible for conduits/ conductors, these should be relatively short runs. BLDC will need to clarify details and specs of the Genset / ATS.

BLDC Answer: H& H Contracting Is providing the Generator. Generator Submittals will be shared with Contractor in due course. ATS may be switched to Manual Transfer Switch; BLDC will provide (ATS or MTS). Contractor to be responsible for Conduit/Conductors as part of the Lump Sum cost provided under this Contract.

18. E-5408 says “relocated Distribution pump set with skid mounted control panel. Provide new Fiber switch for existing panel (Refer to TP-6 for more information) Can you provide TP-6 or the required information?

Designer Answer: TP6 has not yet been issued but will contain this information. BLDC/ the project manager can keep you informed on the status of this and provide it once complete.

BLDC Answer: the Fiber Switches are part of the Control panel, Contractor not to provide any switches. TP#6 will include the fiber connection to the Fiber Switches.

19. On drawing E-5408 can you confirm “LC” stands for level controller- I do not see a legend.

Designer Answer: Yes it stands for level controller. The electrical cover sheet was issued in Addendum #2. This sheet E-5001 is part of the Contract Drawings as per addendum # 2.

20. On drawing E-5408 Shows a “M” for meter and a “FTU” on exterior wall above what is the FTU, and does it need its own meter?

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Designer Answer: The Acronym for FTU is “Belco Feeder Terminal Unit”. This information are found on the electrical cover sheet E-5001. The electrical cover sheet was issued in Addendum #2 and accordingly it is part of the Contract Drawings.

21. On drawing E-5408 shows a Heat detector in the center of the room- is there an existing system installed? Should we allow for a fire alarm panel? Does this need to communicate with any central location within the BLDC? or does the BLDC already have a provider for this?

Designer Answer: Heat detector is currently shown as stand alone unit.

22. On drawing E-5408 show a DL and a mag lock but no card reader. Does the BLDC have a provider for this system/equipment? Or any requirements for the system?

BLDC Answer: Card Readers are not part of this Contract.

23. On drawing E-5601 on the panel schedule shows “intrusion alarm” From “Door intrusion switch” to “Pump control panel”. Is this correct? Or is this a misprint.

Designer Answer: This is correct, the BLDC requested it be tied into the pump panels. BLDC can provide more information on the function / purpose of this.

24. Will the pump controllers be preprogrammed with the required parameters, or will the BLDC provide the programming of the controllers? Or should we allow?

BLDC Answer: The controllers to come preprogrammed. Contractor not to provide any programming

25. E-5408 shows the drywall partition is to be removed – Should we allow for NEMA 4 panel to be installed in the pump room?

Designer Answer: Yes mount where most appropriate.

26. Can you confirm if the EMG/exit signs are existing or should we allow for to install – if so, will any of the fixtures be provided by the BLDC

BLDC Answer: EMG/Exit Signs are out of this cope of Contract. If any necessities required at a later stage, that will be handled in a change order.

27. Can you confirm the SCH 40 PVC conduit for electrical is approved. I will assume we will need either fiberglass or stainless-steel hangers /uni-strut and fasteners.

Designer Answer: Schedule 40 PVC is acceptable. If inside the pump room, fiberglass or HDG is acceptable. Stainless is not necessary.