

Star School  
Makerspace Renovations – Solar Additions  
Addendum #2  
Friday, March 29, 2024

This addendum is issued to modify, clarify, or amend the original Project Drawings and Specifications and is hereby made part of the Contract Documents. The Contractor shall be responsible for incorporating items in this Addendum to the Work. The following shall take precedence over anything to the contrary in the Drawings or Specifications.

Contractor submitted questions:

Question:

Page E300, PV And Energy Storage System Note C, d. calls out for a PV rapid shutdown system. This is not required for a ground mount PV array with no PV circuits entering the building, and would add significant cost to the project. They are also not on the one line diagram. I would like to verify that we are not adding a PV RSS to the system.

Answer:

Rapid system shutdown components will be removed from requirements.

Question:

Page E300 Riser Diagram Keyed Note #3 calls out for any above ground exterior conduit to be IMC conduit.

Answer:

No changes to exterior conduit requirements.

Question:

Page E401-I can not find the load center S1 anywhere else on the prints and can only assume it is an artifact left over from the original design that had batteries located inside the building and doesn't even exist anymore and is therefore outside the scope of work for the solar installation? Please clarify.

Answer:

Schedule removed from drawings.

Question:

Page E500-It appears to me that the makerspace building, waterline, gas line and foundation grounding should be handled by the Makerspace building's load center P1 and is outside the scope of work for the solar install.

Answer:

Correct, this is not shown as part of Solar Bid set. These grounding components are under the hatched "not in scope" portion of the drawings.

Question:

Also, I believe that either MTS-PV or PV3 should be the system main bonding point and the multi ground rod assembly would ground to one or the other of these and is included in the scope of work for the solar installation as such. Please clarify.

Answer:

PV3 will be the location of the neutral ground bond.

Question:

-I'd like to propose that not only do we locate the inverters and batteries adjacent and just West of the pumphouse, but that we also locate PV1, PV2, PV3, MTS-PV, XFR-P1 and NFD-P1 on the same concrete pad with them. This serves several purposes:

Answer:

All solar equipment aside from PV array will be relocated to Wellpump Pad area. refer to updated drawings.

Question:

Existing generators are 3 wire delta configuration: Given the age and condition of the generators, it may be best to not touch them or try to figure them out and instead just add a 480 delta/480 Wye isolation transformer after the existing generator transfer switch, and then just replace the wires in the existing conduit from that transformer to the hand hole access point.

Answer:

An isolation transformer will be added to establish wye configuration. Refer to updated drawings.

Question:

It has come to my attention that the SolArk batteries each require a single phase 208 2 pole circuit to power the climate control, BMS, and fire suppression systems.

Answer:

Power will be provided as a change order to the original makerspace building once deferred submittal drawings are produced. This will not be in this contractors scope beyond coordination of overlap with makerspace building contractor.

Question:

page E001, Keynote 5 states that "PV pad layout per Solar Engineers final drawings" Where are those drawings? I assume the Solar Contractor awarded this Bid will be responsible for construction of the PV pad?

Answer:

A basis of design pad layout will be provided. Dimensions will be flexible per the final PV deferred design submittal. Refer to updated plans.

Question:

Page E101 Panel PV3 is shown as a wall mount panel. I want to verify that this is indeed correct as discussed at the pre bid meeting and not as shown on page E300- which is a concrete pad mounted unit.

Answer:

Design intent is for this to be an I-line style wall mounted panelboard, not a switchboard. Pad annotation will be removed from one-line diagram to clarify this.

## Drawing Revisions Summary:

### Sheet E001:

- Revised location of solar pad, clarified feeders scope between solar, well pump building, gen building and makerspace building.

### Sheet E101:

- Added solar pad layout and clarified intent for pad design and layout. Clarified feeder from gen handhole to panels and revised scope.
- relocate XFR P1 from adjacent to makerspace building to generator pad to simplify installation.
- Added isolation transformer for generator to establish neutral

### Sheet E300:

- Deleted NFD P1, clarified MTS-P1 is service entrance rated with main circuit breaker.
- Added XFR GEN and NFD XFR GEN.
- Clarified equipment locations

### Sheet E401

- Deleted schedule for Load center S1

### Sheet E500

- Added detail 5 panel uni-strut mounting detail.

End of Addendum.