

SHELBYVILLE POWER SYSTEM
UNDERGROUND PRIMARY

Three Phase Underground Primary:

1. Schedule 40, 80 or rigid conduit, depending on soil conditions. **(NOTE: ALL CONDUIT TO BE ENCASED IN 12" OF CONCRETE)**
2. Minimum 38" depth.
3. **Provide 4" spare conduit.**
4. Conduit size - Minimum 4" **with 1/4" pull rope inserted.**
5. Rigid (metal) conduit on pole and metal sweep 90° elbows. (36" radius at poles, transformers.)
6. All conduit, bushings, weather head, & conduit ground clamp furnished by customer.
7. All ditches opened and closed by customer. **S.P.S. must inspect conduit before closing of ditch.**
8. Conduit straps for pole furnished and installed on pole by Shelbyville Power System (S.P.S.).
9. Wire from pole to transformer furnished by S.P.S.
10. Depending upon distance from pole to transformer, all pull boxes will be furnished by customer and spotted by S.P.S.
11. Underground tape (supplied by S.P.S.) will be placed by customer 6" below final grade.

Single Phase Underground Primary:

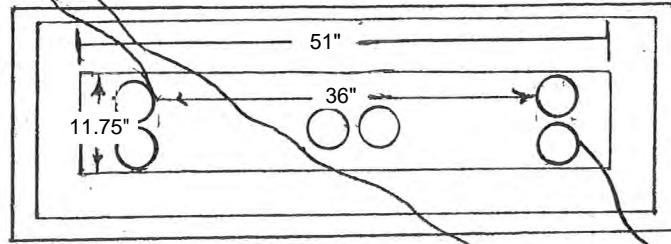
1. Schedule 40, 80 or rigid conduit, depending on soil conditions. **(NOTE: ALL CONDUIT TO BE ENCASED IN 12" OF CONCRETE)**
2. Minimum 38" deep.
3. **Provide 2" spare conduit.**
4. Conduit size - Minimum 2" with 1/4" pull rope inserted.
5. Rigid (metal) conduit on pole and metal sweep 90° elbows in all cases. (36" radius at poles, transformers.)
6. All conduit, bushings, weather head, and conduit ground clamp furnished by customer.
7. All ditches opened and closed by customer. **S.P.S. must inspect conduit before closing of ditch.**
8. Conduit straps for pole furnished and installed by S.P.S.
9. Wire from pole to transformer furnished by S.P.S.
10. Underground tape (supplied by S.P.S.) will be placed by customer 6" below grade.

SECTOR BASE DETAIL (THREE PHASE) HV PEDESTAL

TYPICAL
3/4" TEAR DROP
GROUND CLAMP

TOP VIEW

NOTE: Contractor will drive two(2) 5/8"x8' copper ground rods for each high voltage pedestal. SPS will furnish 1/0 bare copper wire. The contractor will furnish and install two(2) 3/4" tear drop clamps.

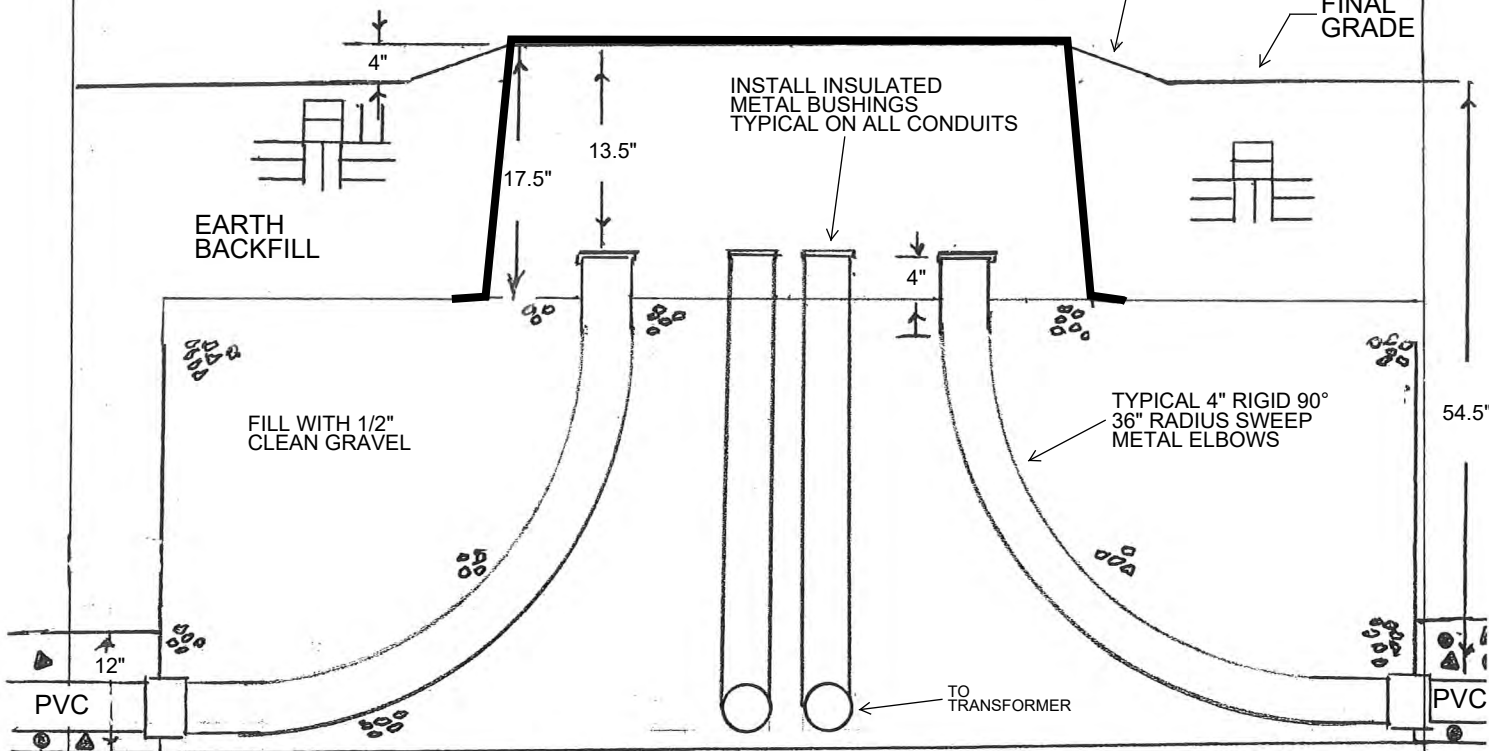


TYPICAL
3/4" TEAR DROP
GROUND CLAMP

1/0 BARE COPPER WIRE
FURNISHED BY SPS
INSTALLED BY CONTRACTOR

SLOPE FINAL GRADE TO TOP OF
SECTOR BASE AND TYPICAL ON
ALL SIDES

SIDE VIEW



NOTES:

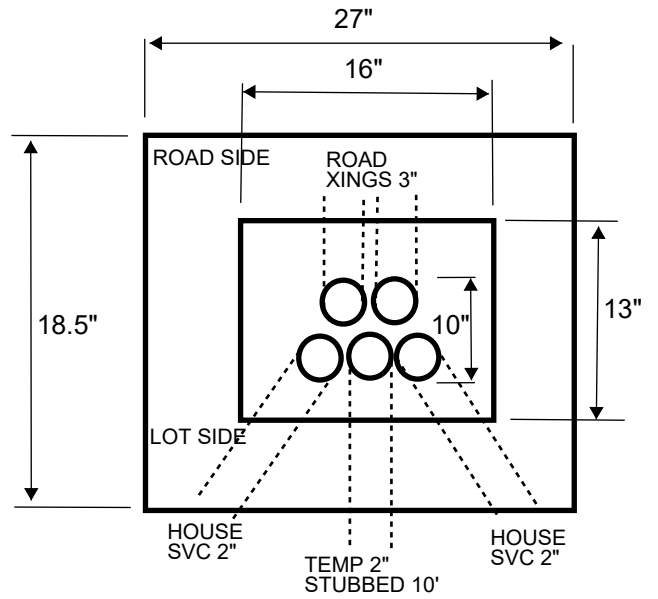
- 1.) ELBOWS SHALL BE 36" RADIUS
- 2.) ALL CONDUITS SHALL BE CAPPED
- 3.) PROVIDE AND INSTALL INSULATED THREADED METAL BUSHINGS
- 4.) INSTALL 1/4" PULL ROPE

SHELBYVILLE POWER SYSTEM
SECTOR BASE FOR 3 PHASE
HV PEDESTAL

DATE: 1-16-2020

LOW VOLTAGE PEDESTAL

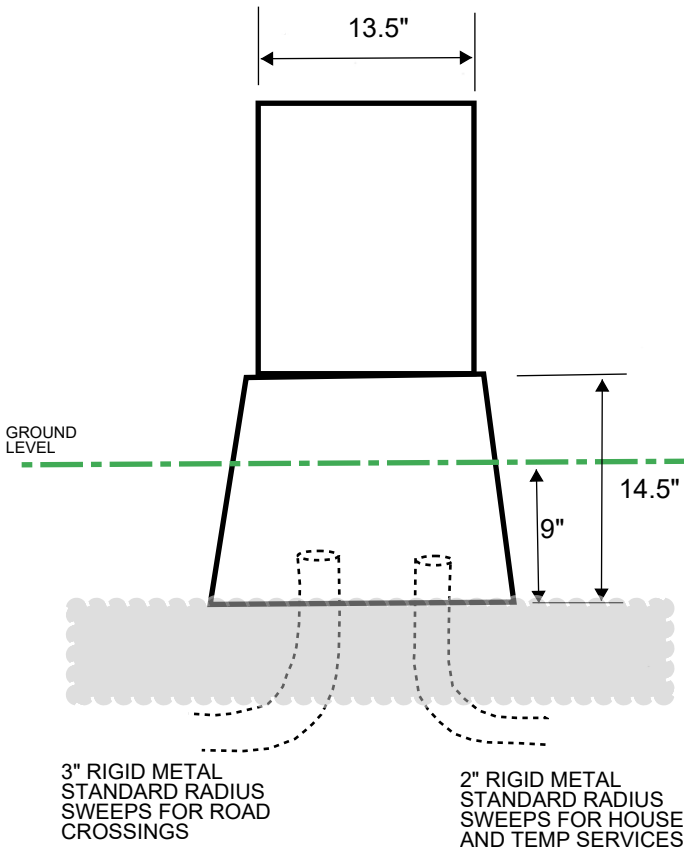
TOP VIEW



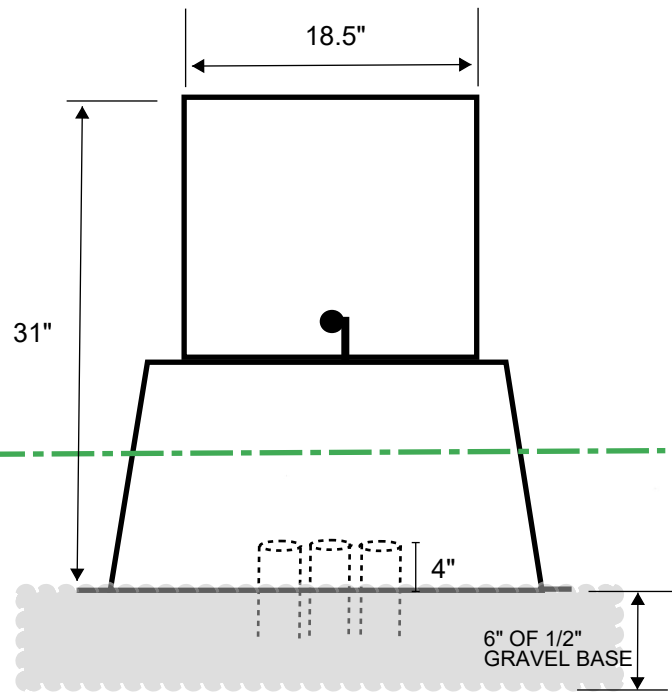
NOTES:

- ALL CONDUITS SHALL BE CAPPED
- CONTRACTOR DRIVES ONE 5/8" COPPER GROUND ROD FOR EACH LV PEDESTAL.
- SPS WILL FURNISH 1/0 COPPER WIRE

SIDE VIEW

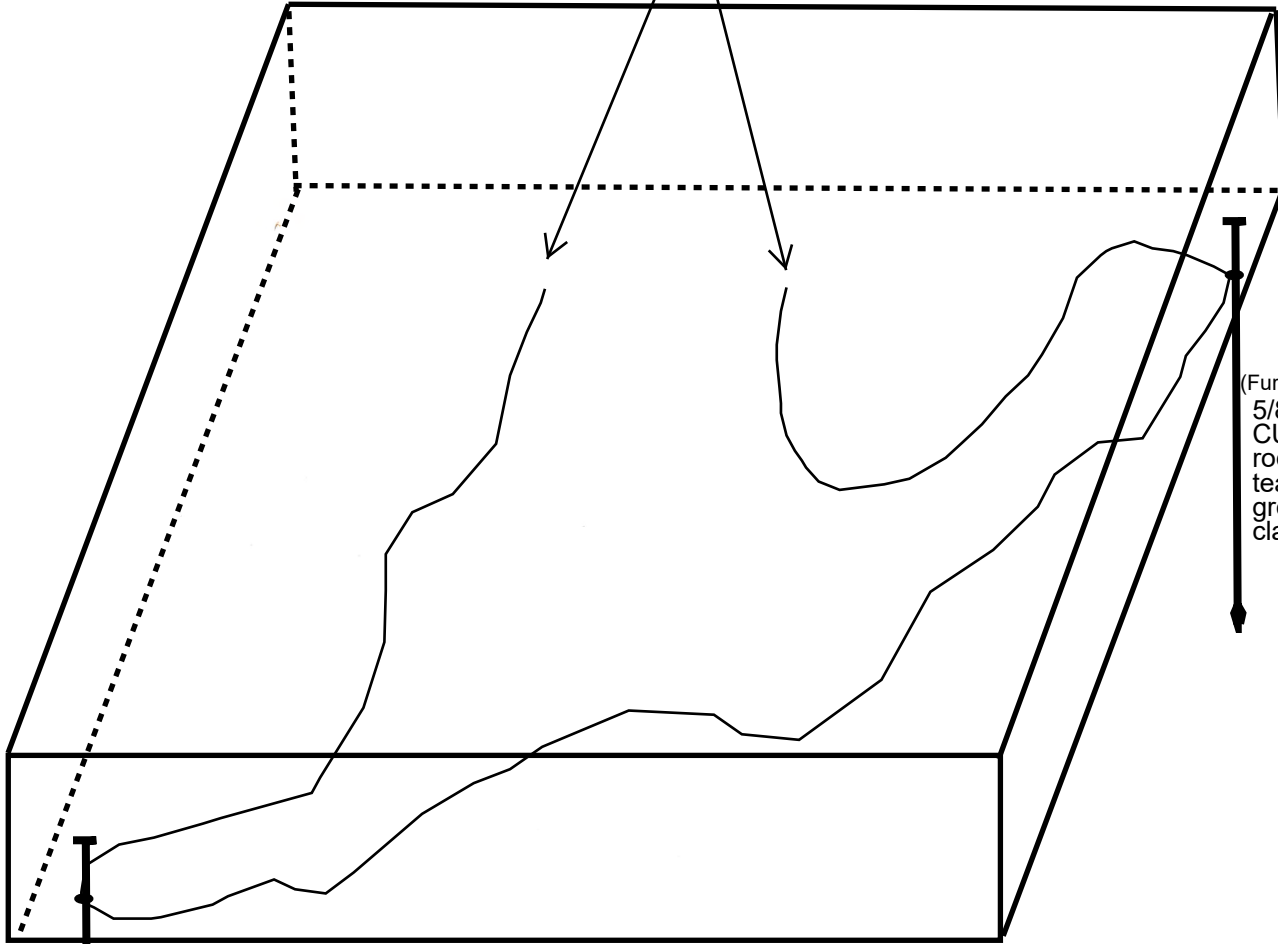


FRONT VIEW (LOT SIDE)



GROUNDING OF TRANSFORMER PAD

(Furnished by SPS)
1/0 CU whips to be left 6' above pad with one whip taped to a primary conduit and the other taped to a secondary conduit.

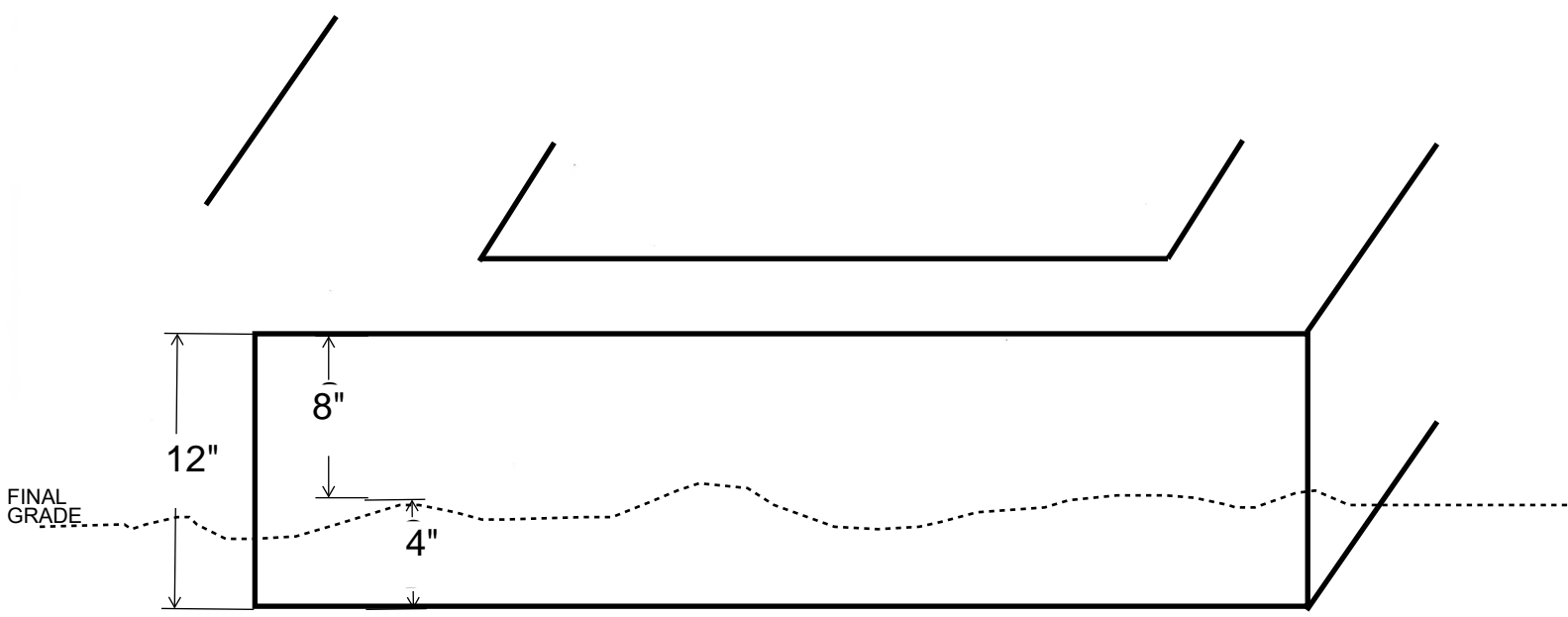
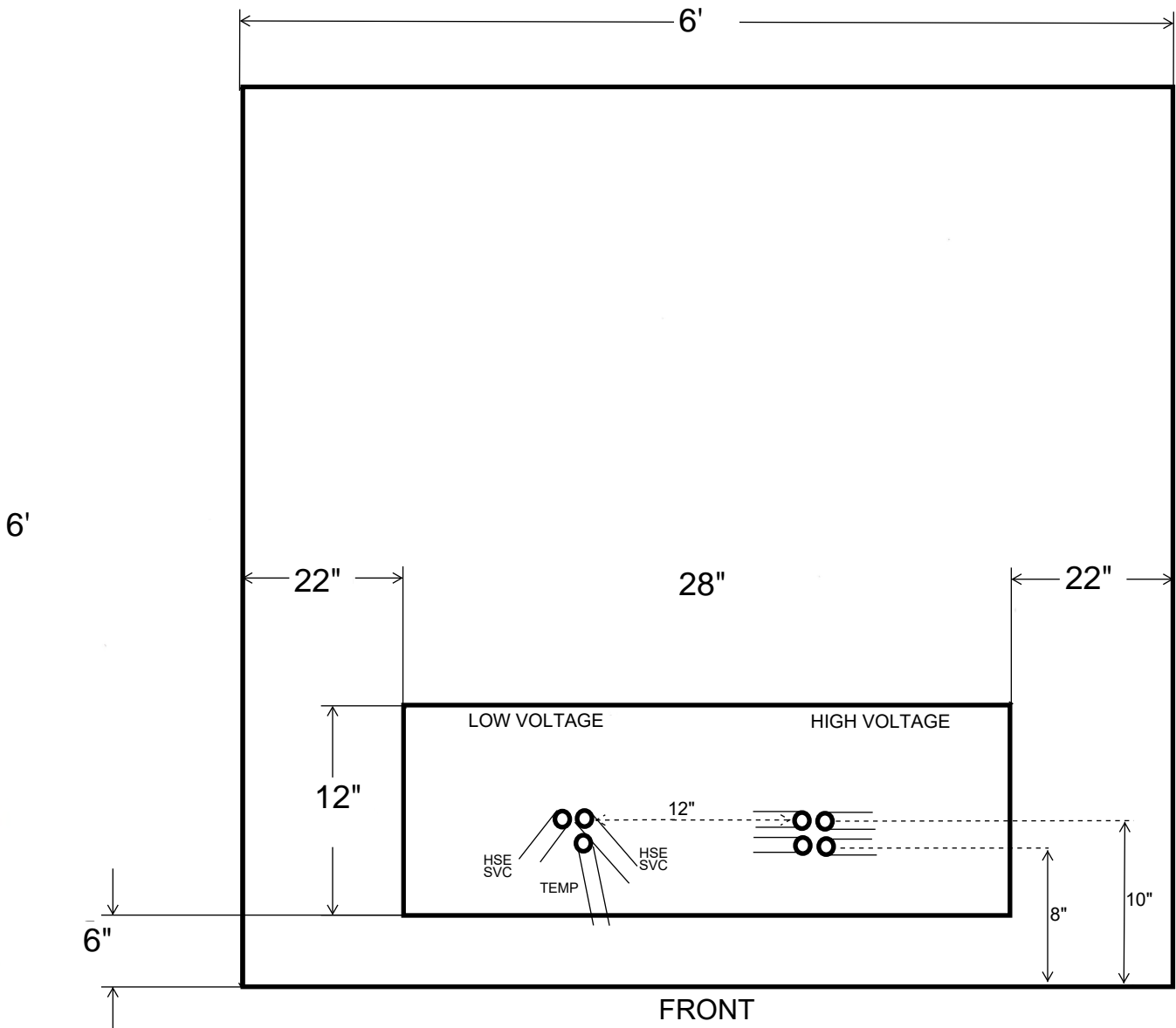


(Furnished by Customer)
5/8" x 8'
CU ground
rod & 3/4"
tear drop
ground rod
clamp

(Furnished by Customer)
5/8" x 8'
CU ground
rod & 3/4"
tear drop
ground rod
clamp

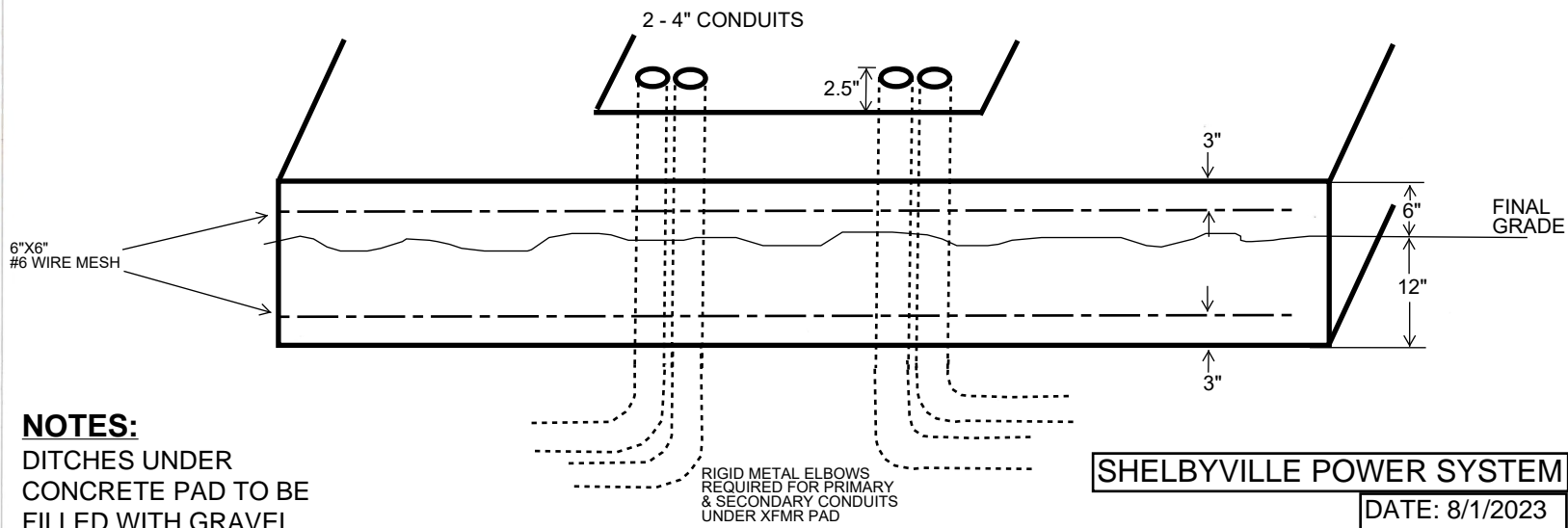
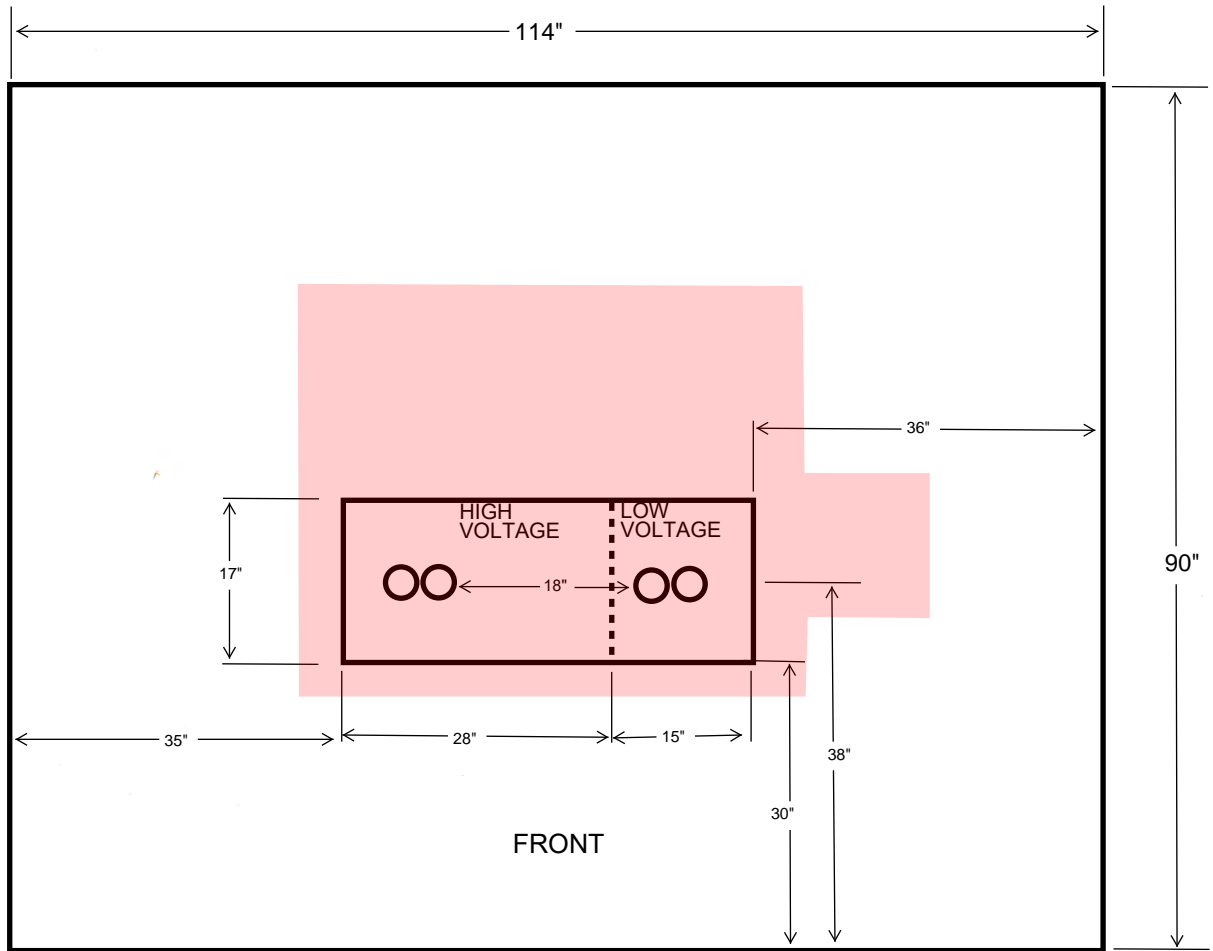
CONCRETE PAD TO BE A MINIMUM OF 4,000 lb/in² CONCRETE

25 - 167 kVA 1Ø CONCRETE PAD



NOTE:
-CONDUITS SHALL NOT EXTEND OUT OF
CONCRETE MORE THAN 2"

3Ø 150 kVA CONCRETE PAD



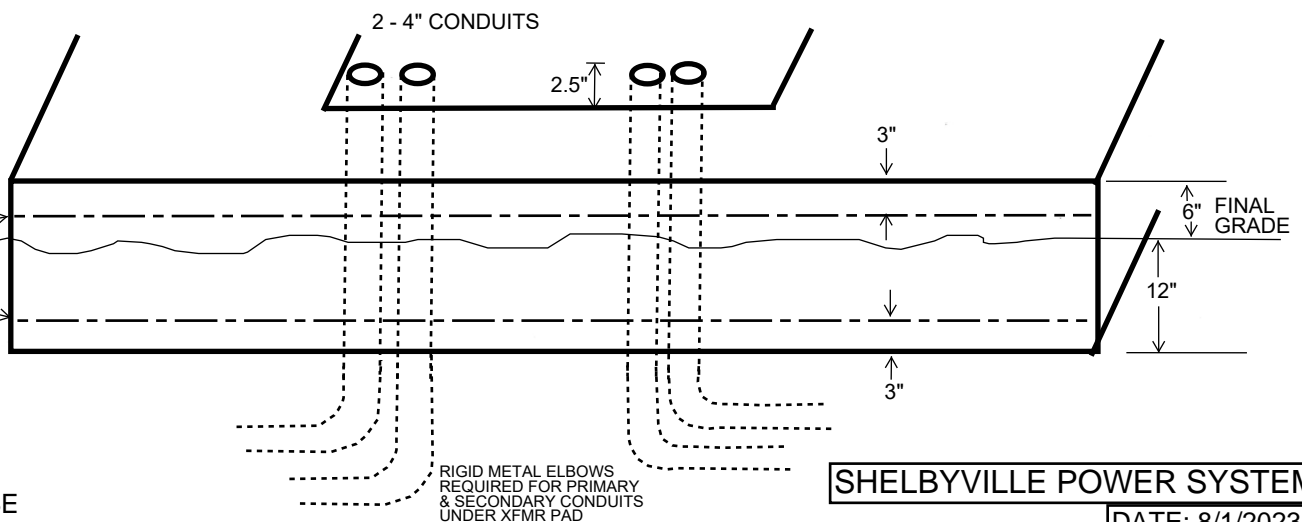
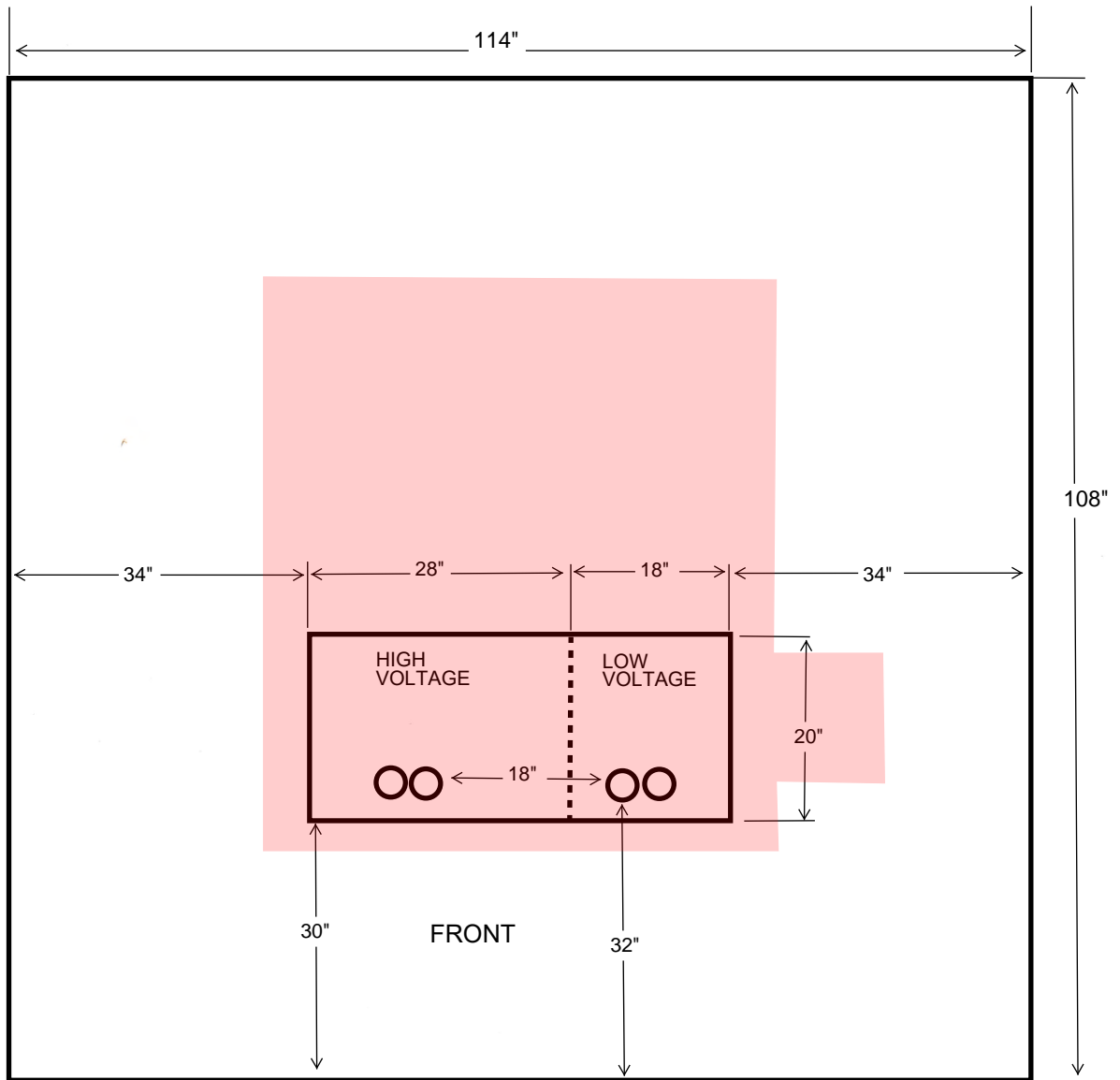
NOTES:
 DITCHES UNDER
 CONCRETE PAD TO BE
 FILLED WITH GRAVEL

RIGID METAL ELBOWS
 REQUIRED FOR PRIMARY
 & SECONDARY CONDUITS
 UNDER XFMR PAD

SHELBYVILLE POWER SYSTEM

DATE: 8/1/2023

3Ø 300 & 500 kVA CONCRETE PAD



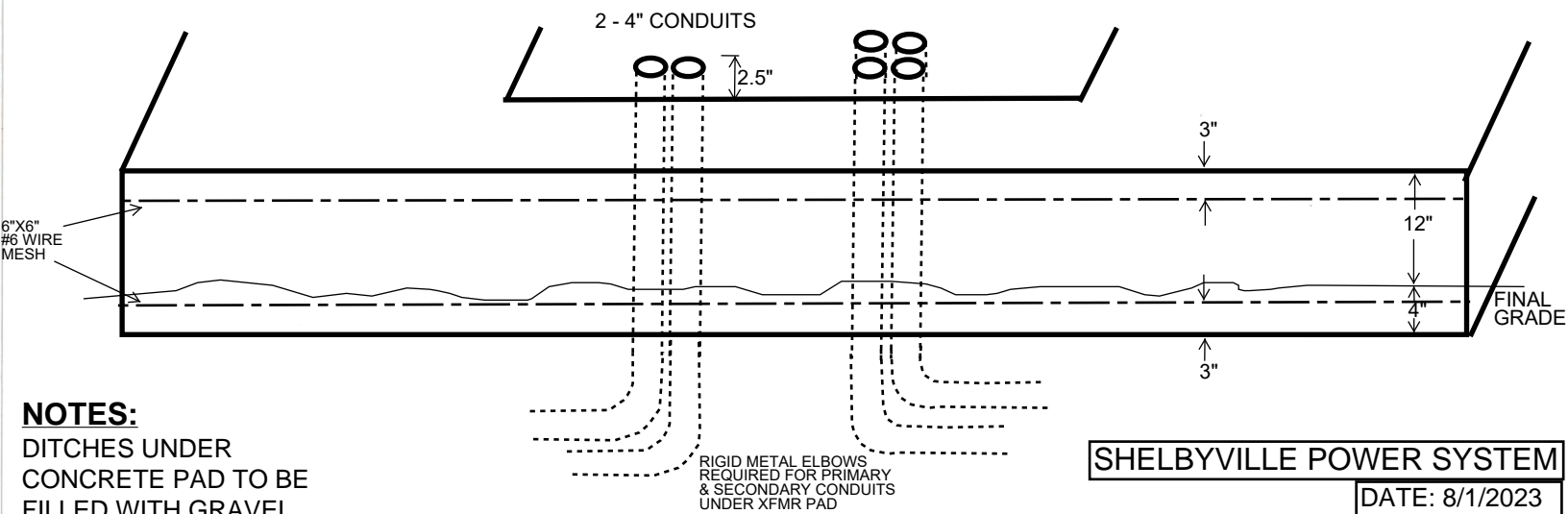
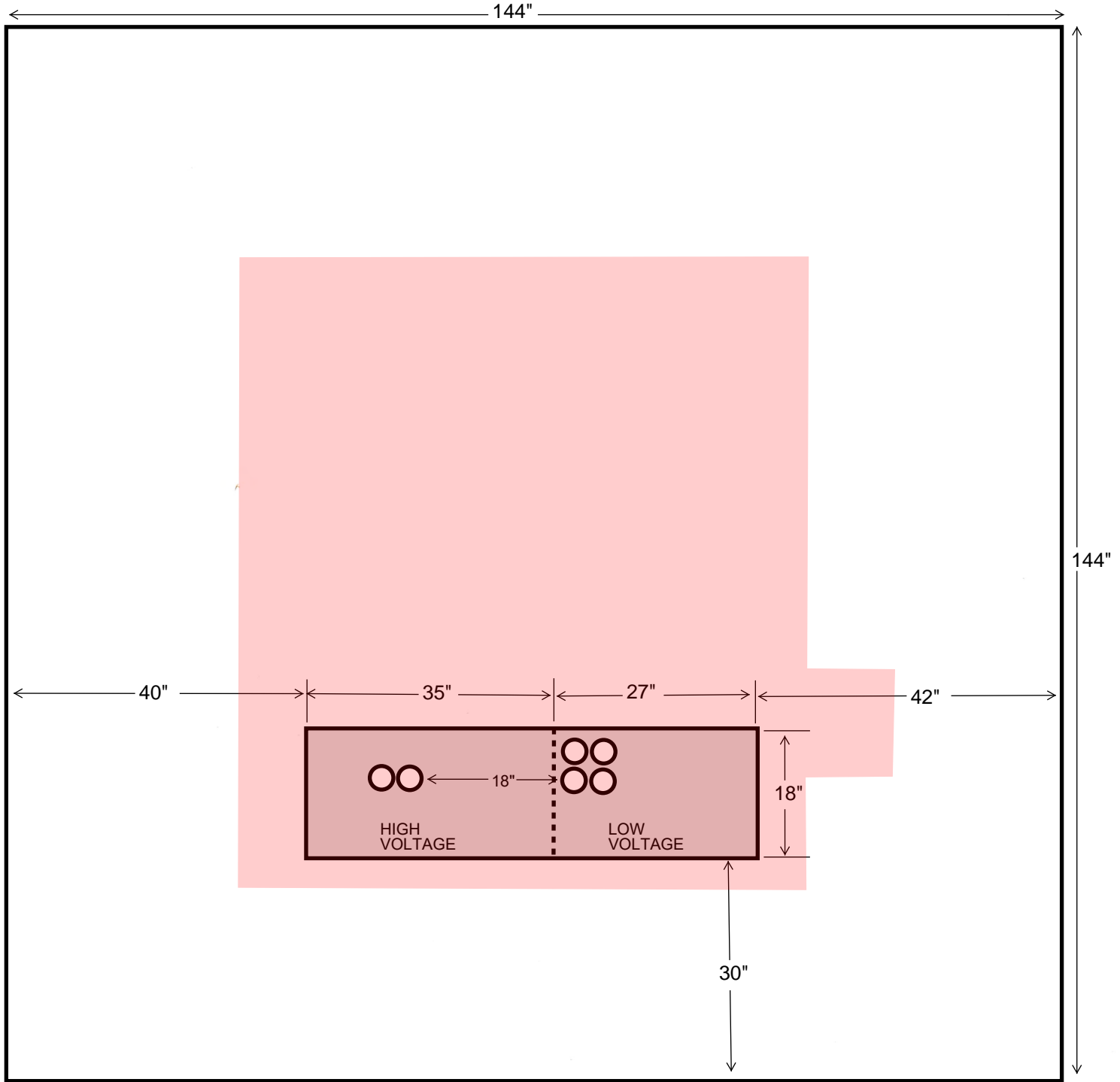
NOTES:
 DITCHES UNDER
 CONCRETE PAD TO BE
 FILLED WITH GRAVEL

RIGID METAL ELBOWS
 REQUIRED FOR PRIMARY
 & SECONDARY CONDUITS
 UNDER XFMR PAD

SHELBYVILLE POWER SYSTEM

DATE: 8/1/2023

1500 or 2500 kVA PAD



NOTES:
 DITCHES UNDER
 CONCRETE PAD TO BE
 FILLED WITH GRAVEL

RIGID METAL ELBOWS
 REQUIRED FOR PRIMARY
 & SECONDARY CONDUITS
 UNDER XFMR PAD

SHELBYVILLE POWER SYSTEM
 DATE: 8/1/2023