



Electrical Scope of Work for Building and Site

The Electrical Contractor shall furnish all labor, material, supervision, etc. (Unless otherwise noted) to complete the electrical work, as noted in the Electrical Scope of Work, drawings, and any other misc information noted on the Bid List Documents.

All work shall be completed in accordance with local, state, national codes, and specification on the bid document.

1420 B – Inspections

Electrical Contractor is responsible for all electrical inspections and permits as needed.

1511 S – Temporary Electric

Supply and install 200 amp temp power pole and meter base for utility to connect to.

Supply and install min 250 watt light fixture on temp pole for security.

Supply and install temp electric to new building. (This is to be a 100 amp service)

Supply and install adequate lighting during construction.

13840 B: PLC System -

Wiring- Supply and install a 3 conductor shielded cable from the PLC to the 7 temperature probe locations. Install probes per the electrical drawings and specifications. This should match the display on the PLC, if not please contact the Sheetz Construction Manager.

- a. Installing Probes- Electrical Contractor shall install all the probes. The probes are supplied by Sheetz, and will come with the PLC and contactor box.
- b. Commissioning- Once the store is on line and the plc is connected to the network. The Electrical Contractor shall commission the PLC instruction are below.
 - I. Call 1-800-280-4357
 - II. Select Option 4
 - III. Ask to Speak with Supervisor
 - IV. Be prepared to give them store number, electrician name (company) and return phone number

- V. Set up date and time to complete the onsite commissioning process
- VI. An agent will call the return number given at the date and time agreed upon.

15109 - Fizz City/FCB Conduit (Plastic Pipe and Fittings)

The Contractor shall supply and install the 5 (five) 5" (five inch) conduit chases from the bag in the box in the storage room to the Fizz City/FCB dispensers in the sales area and the refrigeration conduit line from the storefront to the Fizz City/FCB dispensers. All conduit and placement, excavation and backfill are part of the scope. Conduit shall use long radius elbows or 45 degree fittings for direction changes.

16120 S - Secondary Conductors- From Transformer to C T Cabinet

Supply and install (3A) 4 sets of 350 MCM Copper in each conduit from the CT Cabinet to the Transformer Pad

16120 S - Secondary Conductors from CT Cabinet to the MDP -

Supply and install 4 sets of 350 MCM Copper in each conduit from the CT Cabinet to the MDP.

16130 - B Troughs (Raceway and Boxes)

Contractor shall supply and install all troughs, connecting sleeves, wire and conduit as needed to assemble electrical panels.

16130 B - C T Cabinet (Raceway and Boxes)

Electrical contractor shall supply and install the C T cabinet

16134 P - Gas Conduits (Conduits and Tubing)

Electrical Contractor shall supply and install (RMC) rigid metal conduit with EYS type seal offs for the petroleum installation. The conduits are to be run from the utility room to 5' past the sidewalk. The conduit count shows the conduits counts, sizes and where they will exit the Sheetz Store. Some of these conduits may be switched from (RMC) to (PVC) after the first 10' as noted on the conduit count.

16134 S - Site Lighting Conduits (Conduits and Tubing) –

Electrical Contractor shall supply and install 1" rigid conduits with EYS type seal offs for all site lighting. See conduit count for conduit specifications.

- a. Wire no more than 4 light poles per home run conduit
- b. Supply and install #10 THHN from panels through PLC contactors to light pole.
- c. Supply and install #10 THHN to each light pole for the REC on each pole. No more than 4 REC per Circuit
- d. Install Ground rod at each light pole base
- e. Assemble and install all light poles (Pole, Light and REC supplied by Sheetz)

- f. Each home conduit to have 2 spare #10 Gauge wire when project is complete.

16134 S - Pole Sign Conduits (Conduits and Tubing)

Supply and install 2-1" rigid conduits with EYS type seal offs to each pole sign. See site plan for pole sign count. See Conduit Count for conduit specifications.

- a. The low voltage conduit will be against the inside of the pole closest to the roadway.
- b. The high voltage conduit will be run up the pole closest to the Sheetz store.
- c. Supply and install 3 – 20 amp circuits that are run through the contactor box controlled by the plc. These wires are to be #10 Gauge THHN including the ground.
- d. Supply and install 1-20 amp circuit for the sign control. This circuit to be hot 24 hours a day. This is also to be #10 THHN.

16134 S - Flag Pole Light, Camera Conduits & Drive thru Conduits (Conduit and Tubing)

- 1. Supply and install 1-1" conduit with EYS type seal-off.
- 2. Supply and install 1-20 amp 120V circuit to the flag light.
- 3. Flag light mounts on a 2" conduit.
- 4. 2" Conduit supplied by the Electrical Contractor.

16134 S - Drive Thru Conduits (Conduits and Tubing)

- a. Supply and install all conduit and wiring for Drive thru order point and signage.
- b. Sign Circuits controlled by the PLC.

Misc Notes for Exterior

- a. All outside lighting is controlled by the PLC. The gas contractor will mount the PLC and Contactor Box. All exterior wiring is to be #10 Gauge THHN.
- b. The Electrical Contractor is responsible for terminating site lighting, flag light, exterior building lighting, exterior sheet sign, misc exterior signage, Power to the PLC, Photo eye, stages from the PLC to the contactor box, and temp probes.

16134 S - Secondary Conduits (Conduits and Tubing)

Supply & install 4 4" Conduits from transformer to CT Cabinet at Building
(These must be encased in concrete)

16134 S - Secondary Conduits From CT to MDP–

Supply and install (4) – 4" Conduits from the CT Cabinet to the MDP.

16134 S - Phone Conduit for Main Service (Conduit and Tubing) -

4" PVC -Supply and install 4" PVC as shown on the utility plan (Unless otherwise noted)

16134 S - Cable Conduit

a. 3" Conduit -Supply and install 1-3" PVC conduit from the utility room the location shown on the utility plan(unless otherwise noted)

b. Pull Rope -Supply and install Pull rope in this conduit

16134 S - Primary Electrical Conduits (Conduit and Tubing)

Supply and Install (2) – 4" PVC sch 40 conduits from proposed service pole to transformer with pull rope. (These must be encased in concrete)

16134 B - Interior Phone work (Conduit and Tubing)

Supply and install (EMP to the following areas) This EMT is to run from box in the wall to above the ceiling to an area that is accessible.

- a. Store phones
- b. Tank Monitor
- c. Misc location in the office and other locations throughout the store labeled as P or C&D.

16134 B - Under slab Conduit (Conduit and Tubing)

Supply and install all under slab PVC and wiring per the plans

16134 B - Above Slab Conduit (Conduits and Tubing)

Supply and install all above slab EMT conduit per drawings and NEC. All wiring to be in EMT with short runs of MC cable out to fixtures.

16142 B – Receptacles, Switches and Wiring Devices

- a. E-stop Button supply and install circuit to front counter to install E-stop Button (E-stop Button supplied by Sheetz). This is a 4 wire circuit
- b. All rec covers and boxes to be labeled with circuit and panel number
- c. All counter wiring to be minimum #12 THHN with separate neutrals.
- d. All counter j-boxes to have 1 spare circuit at the end of the project. This wire is to be Purple
- e. Supply and install all junction boxes, rec boxes, for all equipment.
- f. Supply and install all receptacles, switches, etc. as called out on the plans.

16150 B - HVAC & Refrigeration Wiring (Wiring Devices) -

- a. Disconnects- Electrical Contractor to supply and install all disconnects for Refrigeration and HVAC Equipment. (This includes the rooftop equipment and

the equipment in the coolers and freezers.) HVAC Units are equipped with disconnects.

- b. Wiring- Electrical Contractor to supply and install all conduit, wire, boxes, etc. to all roof top units, and equipment in the coolers and freezers.
- c. Light Fixtures- Install all light fixtures as shown on the plans. Light Fixtures supplied by Sheetz.

16400 B - Fryers Fire Suppression (Low Voltage Distribution)

Electrical Contractor is responsible for wiring the fire suppression system for the fryer.

16440 - Sheetz Supplied Equipment (Switchboard Panels)

Install Sheetz supplied electrical equipment, Main Distribution Panels, Breakers, Disconnects, etc. as shown on drawings.

16510 B - Light Fixtures

- a. Light Fixtures are supplied by Sheetz
- b. Installation – Electrical Contractor to supply all labor and material needed to install the light fixtures.

Car Wash Electrical**16120 - Supply and install 600 mcm (Conductors and Cables)**

Supply and install 600 mcm cu from meter to panel.

16130 - Junction Boxes (Raceway and Boxes)

Supply and Install Junction boxes by main panel and at entrance end of panel.

16134 - Meter Base to Pole (Conduits and Tubing)

Supply and Install 2 – 4” PVC from meter base to pole and 1 – 4” from meter to panel.

16134 - Car Wash Accessories Under-Ground Rigid Conduit, Wiring & Fixtures (Conduits and Tubing)

Supply conduit and wire for the following:

Car Wash Menu Board

Car Wash Arrow Sign

Cash Acceptor/Teller

Conduit, wire and installation of Vacuum.

Conduit, wire and installation of Air Machine.

16134 - Reclaim Tanks (Conduits and Tubing)

Supply and install ¾" Conduit for Reclaim Tanks and float and wire.

16150 - Car Wash Final Connections (Wiring Connections)

Make Final connections in Car Wash

16270 - Meter Base (Transformers)

Supply and install 400 Amp meter base.

16290 - Surge Protection (Power Measurements and Control)

Install surge protection

16740 - Communication conduits (Communication and Data)

Supply and install conduit