

ELECTRICAL SPECIFICATIONS

- GENERAL PROVISIONS**
 - Work included in these specifications and included on the drawings shall include furnishing all labor, materials, supplies, and equipment to perform all work required including cutting, channeling, excavating and backfilling to install a complete and working electrical system(s) in accordance with these sections of the specifications and the accompanying drawings. This shall include all required preparation work, raceways, coordination, etc. required to install the electrical system.
 - The electrical work shall include, but in no way be limited to the following:
 - Raceways (To include raceways for conductors and cables, but also apply for designated signal systems and future uses.)
 - Electrical Distribution System - Molded Case Circuit Breakers - NEMA AB 1; provide circuit breakers with integral thermal and instantaneous magnetic trip in each pole. Provide circuit breakers UL listed as Type HACR for air conditioning equipment branch circuits. All breakers shall be bolt on type.
 - Exterior and Interior Lighting Systems.
 - Exterior and Interior Power Systems.
 - Wiring Devices.
 - Connection and Installation of Equipment Furnished Under Other Divisions of the Specification.
 - Utility Service Entrances - Electrical.

C. The contractor is responsible for including any and all work related to the electrical that is noted in any part of the specifications or any part of the drawings, including Divisions 1, 15 and any other sections. The contractor will supply power to equipment at the voltage indicated on the drawings. The contractor will be held responsible for coordinating the equipment voltages, control equipment, wiring, and locations and type of terminations/connectors and/or disconnects required to comply with the National Electrical Code, International Building Code, International Energy Conservation Code, all local codes, and the equipment manufacturer's requirements.

D. Electrical Drawings are diagrammatic in nature except where specific dimensions, or specific details are shown on the electrical, mechanical, or architectural drawings. The contractor shall refer to other drawings for exact locations of equipment, building dimensions, architectural details and conditions affecting the electrical work; however, field measurements take precedence over dimensioned drawings. The Electrical Contractor shall provide all labor and materials and all incidental elements, junction and pull boxes, filters, pull wires, connectors, support materials, fuses, disconnect switches, lamps, and labels, to install, connect, start-up and result in a complete and working system in accordance with the drawings and specifications. The contractor is responsible for coordinating the installation of all electrical work with the work of other contractors and/or trades. The electrical drawings are such that the electrical service to equipment furnished and installed under other sections of the contract documents (examples, include but are not limited to: HVAC equipment, water heaters, fans, pumps, motors, etc.) is coordinated with the specifications only. If the equipment installed under other divisions of the contract documents is not the specified equipment it is the responsibility of the contractor to coordinate the electrical service/interference requirements with the electrical contractor.

E. Provide all wiring, connectors, fittings, connections, and all accessories for the complete installation of, and final connections to, equipment furnished under other divisions of the specifications and where indicated on the drawings or otherwise specified.

F. All safety disconnect switches shall be provided under Division 16 unless specifically noted on drawings. The electrical contractor shall furnish and install fuses that are sized in accordance to the equipment nameplate of the equipment served.

G. The contractor is responsible for obtaining all required permits and complying with all National (NEC, IBC, NFPA), State, County, and Municipal codes and regulations. This shall include, but not be limited to, the following:

- Federal Occupational Safety and Health Act (OSHA)
- NFPA 70 (National Electrical Code)
- NFPA 101 (Life Safety Code)
- Americans with Disabilities Act (ADA)
- International Building Code (IBC)
- International Energy Conservation Code (IECC)

H. The contractor shall keep a set of construction drawings during the length of the project on which he shall note any and all changes from the original drawings. This record set of drawings shall be updated daily.

I. Electrical Subcontractor shall submit for review by the Engineer detailed shop drawings of all material listed below. All submittal data shall be submitted at one time. No material or equipment for which Engineer's review is required shall be delivered to the job site or installed until the Electrical Contractor has in his possession the reviewed and approved shop drawings for the particular material and/or equipment. The Electrical Contractor shall assemble, organize, prepare and review for correctness shop drawings on all materials, equipment, fixtures and devices to be used. If material submitted is the result of "value engineering" or "prior approval" changes, the submittal must contain supporting documentation of the approved changes, otherwise it will be reviewed against the specified products on these plans. The Electrical contractor shall furnish one (1) PDF copy of shop drawings. Shop drawings that are incorrectly submitted, contain errors or omissions, or not in the form and sequence specified shall be rejected as unapproved.

Shop drawings shall contain or cover page a letter by the supplying Vendor stating that the Vendor has received full contract documents and that to the best of his or her knowledge the submittal is in compliance with the contract documents and design intent including all ancillary parts and pieces required for a complete job.

Review of shop drawings in no way relieves the Contractor of his responsibility of quantity, dimensions, weights, means and methods, safety, or coordination with others.

Failure of the Contractor to submit shop drawings to the Engineer with reasonable time for review shall not entitle the Contractor to an extension of contract time. Reasonable review time is fifteen working days unless otherwise specified.

At minimum shop drawings shall be submitted for:

- Panelboards
- SPD's
- Basic materials; wire, conduit, fittings, wiring devices

J. Requests for Substitution

Substitution Requests must be received electronically to D5bids@exrich5.org by the deadline noted in the District's solicitation document. Substitution requests shall contain cut sheets, catalog numbers, the manufacturer's published description, or other descriptive documents establishing exactly what is being proposed. Requests shall include adequate photometric and energy use documentation for comparison to specified. The District shall reserve the exclusive right to determine products and/or services which are approved as equal to those specified in the solicitation. Substituted items will not result in an increase in cost to the Owner.

K. Catalog numbers and names that appear in the specifications or on the plans may be incomplete or obsolete and are for descriptive purposes only. As such they may not indicate all of the parts, pieces and systems required for a complete and operating installation. It is the responsibility of the Electrical Contractor, the Vendor and the Supplier to review the plans, specifications and applications to determine the correct item(s) required to include all installation and support materials and systems for a complete and working installation.

2. RACEWAYS/CONDUITS AND ASSOCIATED EQUIPMENT

- The work shall include all raceways, conduits, fittings, and all other equipment required to install a raceway system. This shall include, but not be limited to the following:
 - Rigid metal conduit and fittings.
 - Electrical metallic tubing and fittings.
 - Flexible metal conduit and fittings.
 - Liquid tight flexible metal conduit and fittings.
 - Non-metallic conduit and fittings.

B. Except where otherwise permitted on drawings route all conductors in conduit.

C. All signal systems shall have their wiring installed in conduit/raceways to above accessible ceiling. All cabling exposed above ceiling shall be plenum rated.

Conduit routing and device wiring for signal system components is not shown on the drawings. The contractor shall coordinate with the signal system manufacturer to determine the conduit (size and routing) and wiring requirements to circuit the equipment shown on the drawings.

D. Specified products and their areas of use shall be as described on drawings.

E. Fittings shall be steel compression type, concrete tight for all EMT raceways. For PVC raceways, use slip fittings with glue joints. For rigid galvanized steel and IMC fittings shall be threaded galvanized iron, heavy steel, concrete tight.

F. Size conduit for conductor type installed; 1/2 inch minimum size.

G. For all empty raceways, furnish and install a nylon pull cord. The nylon pull cord shall be rated for a 200 pound force pull strength.

3. WIRE AND CABLE - 600 VOLTS AND LESS

- Work shall include the furnishing and installing of all required wire and cable to complete the wiring and electrical system. This shall include, but not be limited to the following:
 - Building wire.
 - Wiring connections and terminations.

B. All service entrance power cable shall be type XHHW OR THWN-2, 90 degree C, copper conductor U.N.O. Feeders and Branch Circuits Larger Than 8 AWG: stranded conductor, 600 volt insulation, THHN. Feeders and Branch Circuits 8 AWG and Smaller: Copper conductor, 600 volt insulation, THHN. 6 and 8 AWG, stranded conductor; smaller than 8 AWG, solid conductor. MINIMUM SIZE SHALL BE #12 FOR ALL WIRING ABOVE 48 VOLTS. All conductors in damp or wet locations (including below grade) shall be listed for that use, THWN-2 or equivalent.

C. All cables shall be color coded. Color coding shall be as follows:

120/208 Volt	Phase	277/480 Volt	Phase
Black	A	Brown	B
Red	B	Orange	C
Blue	C	Yellow	Neutral
White	Neutral	Gray	Ground
Green	Ground	Green	

D. Each wire or cable in a feeder at its terminal points, and in each pull-box, junction box, and panel gutter through which it passes shall be identified to show the circuit number of the breaker that it connects to. Each common wire, common circuit to common loop of a system, sound system, or any signal system conductor, shall be identified.

E. All installation shall be in accordance with the NEC. All splices shall be in junction boxes and shall be electrically and mechanically secure. Where a circuit home run is shown on the plans without any conductor or raceway identification, it shall be a minimum of 2 # 12, 1 # 12 Ground, 1/2" Conduit. Place an equal number of conductors for each phase of a circuit in some raceway or cable. Splice only in junction or outlet boxes. Neatly train and lace wiring inside boxes, equipment, and panelboards. Perform continuity test on all power and equipment branch circuit conductors. Verify proper phasing connections.

4. WIRING DEVICES

A. The shall include the furnishing and installing of any and all wiring devices required to make a complete and functioning wiring system. See the drawings for symbols and descriptions of devices. Devices specified are to establish a level of quality. All devices shall be best specification grade. Equivalent devices by Pass and Seymour or Leviton are acceptable. Color of devices shall be per Architect.

B. Duplex receptacle shall be 20 ampere, 120 volt, 2-Pole, 3-Wire, NEMA 5-20R. Unit shall be HBL #5362 or HBL #5362TR (where required).

C. Ground Fault receptacle shall be HBL #GF5362 or HBL #GF5362TR (where required).

D. Light switches other than snap switches and low voltage button stations shall be 20 ampere, 120-277 volt. Unit shall be HBL #1221 for SPST, HBL #1223 for three-way, and HBL #1224 for Four-Way.

E. Installation shall be per NEC. Include ground wire and connection with all receptacle circuits. Quadplex receptacles shall be two duplex receptacles installed in a two gang box. Install wall switches OFF position down. Install convenience receptacles grounding pole on top. Install devices and wall plates flush and level. Provide GFCI receptacle within 6' of any water source. GFCI receptacles shall not be used to protect non-GFCI receptacles.

F. Wiring Device Plates:

- Provide over-sized Thermoset type cover plates for all flush mounted devices. Color shall match existing or provide at minimum selection of white, ivory, brown or gray.
- Plates for surface mounted devices in unfinished areas shall be steel, galvanized types with beveled edges.
- Screws securing the plate shall have flush mounted heads (when installed) with finish to match that of the plate.
- Weather-proof plates shall be constructed with cast aluminum base plates and covers. Hinge pins, springs and screws shall be constructed of stainless steel. Covers shall comply with appropriate UL and NEC requirements for use in wet locations.

- PANELBOARDS**
 - This section includes furnishing and installing panelboards and related equipment to form a complete and functioning electrical system. This shall include, but not be limited to the following:
 - Service and distribution panelboards.
 - Lighting and appliance branch circuit panelboards.
 - Panelboards shall be as manufactured by Square D or approved alternate.
 - Provide cabinet front with concealed trim clamps, and hinged door with flush lock. Finish in manufacturer's standard gray enamel. Provide panelboards with bus ratings as schedule. Provide ground bus in all panelboards. Minimum Integrated Short Circuit Rating. See drawings for details. Molded Case Circuit Breakers - NEMA AB 1; provide circuit breakers with integral thermal and instantaneous magnetic trip in each pole. Provide circuit breakers UL listed as Type HACR for air conditioning equipment branch circuits. All breakers shall be bolt on type.
 - Furnish and install all required materials to install and mount the panelboards to the wall shown on the drawings. Install physical conduits and flush with wall finishes, in conformance with NEMA PS 1.1. Provide filler plates for unused spaces in panelboards.
 - Evaluate typed circuit directory for each circuit breaker in each panelboard. Visual and Mechanical Inspection: Inspect for physical damage, proper alignment, anchorage, and grounding. Check proper installation and tightness of connections for circuit breakers, fusible switches, and fuses. Provide name plates for each panel and switch as described in the General Notes on the drawings.

6. **SECONDARY GROUNDING**

- Work included shall include power system grounding, communication system grounding, and electrical equipment and raceway grounding and bonding. Ground electrical work in accordance with NEC Article 250, local codes as specified herein, and as shown on the drawings.
- Ground the electrical service system neutral at service entrance equipment to metallic water service and to supplementary grounding electrode(s). Provide communications system grounding conductor at point of service entrance. Bond together system neutrals, service equipment enclosures, exposed non-current carrying metal parts of electrical equipment, metal raceway systems, grounding conductor in raceways and cables, receptacle ground connectors, and plumbing systems.
- Provide a grounding system that includes all connections and testing of: ground rods, ground cables, ground buses, conduits, fittings, anchors, supports, CADWELD(R) materials and equipment, and other materials as required for a complete installation. Provide ground cables composed of soft drawn, stranded bare copper of 98 percent conductivity enclosed in nonmetallic conduit above grade. Cable to be buried not less than 24 inches below grade. Install as required to provide sufficient mechanical protection. All copper to copper and copper to steel connections of #6 AWG and larger shall be made with the CADWELD(R).
- Ground Rods: Copper-encased steel, 3/4 inch diameter, minimum length 10 feet. Number as required to achieve 10 ohms maximum.

E. Provide a separate, insulated equipment grounding conductor in feeder and branch circuits. Terminate each end on a grounding lug, bus, or bushing. Connect grounding conductor to metal water pipe using a suitable ground clamp. Make connections to be flanged pipe at street side of flange. Provide bonding jumper around water meter. Supplementary Grounding Electrode: Use driven ground rods on exterior of building.

F. Install ground cables continuous between connections. Splices will not be allowed except where indicated on the drawings. Connections made by the CADWELD(R) Process are not considered splices. Where ground cables pass through floor slabs, building walls, etc., and are not in metallic enclosures, provide the sleeves of approved nonmetallic material.

G. Install equipment grounding conductors in raceway with feeder and branch circuit conductors. Flexible metal conduit shall have a ground wire installed with the power conductors. Where connections are made to motors or equipment with flexible metal conduit, grounding conductor shall be stranded copper conductor within the conduit, bonded to the equipment and to the rigid metal raceway system.

7. **TESTING**

- GUARANTEE OF WORK, EQUIPMENT AND MATERIALS**
 - The complete system shall be free of faults, short circuits, grounds and open circuits. Balance loads across phases to obtain minimum neutral current in feeders and branch circuits.
 - The Electrical Contractor shall perform inspections and test as herein specified. The Electrical Contractor shall provide all material, equipment, labor and supervision to perform such tests and inspections.
 - It is the intent of these tests to assure that all tested electrical equipment and systems are operational and within industry and the manufacturer's tolerance and is installed in accordance with the design Specifications. The test and inspections shall determine suitability for energization.
 - Written documentation of the tests and inspections shall be provided and shall include the company name performing the work, project name, date and time of tests, weather and humidity.

B. Systems and equipment are to be tested and operated to verify compliance with the requirements of the contract documents and applicable codes.

Equipment, systems, conductors and devices to be tested are as follows:

- Power Distribution Equipment shown on the one-line (Power Riser) diagram.
- Proper torque values on lugs and connectors.
- Proper operation of equipment ground fault protective devices.
- Conductors - Conductors rated 100 amperes and above.
- Proper conductor and insulation type.
- Insulation resistance test (Megger) at 1000 volts DC for 1 Minute or per cable manufacturer specifications.
- Minimum insulation resistance values shall not be less than fifty (50) megohms.

C. Grounding

- Test ground resistance using the attached rod technique (ART) or the fall of potential method according to IEEE 81 at the service entrance.
- Verify proper type and size of grounding conductors and proper ground connections.
- If ground resistance exceeds 10 ohms or values otherwise specified in the Specifications, equipment requirements or General or Special Conditions notify the Engineer immediately. The Electrical Contractor shall be responsible for providing alternate and/or additional means of grounding to reduce the ground resistance to 10 ohms or below at no additional cost.

D. All devices which must be adjusted or set to operate on a schedule (time clocks, program mechanisms, etc.) shall be set prior to substantial completion to operate on schedules directed by the Owner. Instruct the owner on the proper operation of these devices.

8. TRANSFORMERS - DRY TYPE

A. General

The transformer core shall be constructed using high-grade, non-aging, silicon steel with high magnetic permeability and low hysteresis and eddy current losses. The transformer core volume shall allow for efficient transformer operation at 10% above the nominal tap voltage. The core laminations shall be tightly clamped and compressed. Coils shall be wound of electrical grade aluminum or copper, and are of continuous wound construction to the BIL (Basic Impulse Level) for all 600-volt class windings shall be 10 kV or higher. Transformers shall utilize a 220°C insulation system with 150°C temperature rise for 15KVA and below, 115°C temperature for 30KVA to 112.5KVA, and 80°C temperature for above 112.5KVA. Ventilated transformers shall be designed to deliver 200% of nameplate load for 30 minutes, 150% of nameplate load for 1 hour and 100% of nameplate load for 4 hours without being damaged, provided that a constant 50% load precedes and follows the overload. Four primary taps, two - 2.5% BNFC and two - 2.5% ANFC, shall be available on transformers 30KVA and larger to allow compensation for source voltage variations.

A. Sound per Table 19.1-6, NEMA ST-20 and IEEE C57.12.01 - 50db or less.

B. Comply with energy-efficient standards DOE-2016.

C. Transformer Installation:

- All electrical connections to the transformer shall be made using flexible conduit. Provide equipment rack, see drawings. Schemically anchor transformer to rack. Transformer may be mounted to pad with approval of Owner. Where transformer is mounted directly to concrete rack base, it shall be mounted on 4" concrete pad extending above level of rack pad. Concrete for rack pad shall extend minimum of 24" from any face of enclosure.
- Transformer grounding and bonding shall be per NEC 250.30 and 250.104.

D. Transformer grounding and bonding shall be per NEC 250.30 and 250.104.

E. Service Entrance:

- Service Entrance: IMC, GRS, SCHED 40 PVC (WITH GRS 90 ELBOWS). IMC AND GRS TO HAVE BITUMINOUS COATING IF INSTALLED BELOW GRADE.
- SERVICE ENTRANCE WHERE EXPOSED TO PHYSICAL DAMAGE OR ABOVE GRADE: IMC, GRS, SCHEDULE 80 PVC.
- FEEDERS: GRS EXCEPT WHERE OTHERWISE NOTED
- OUTDOORS BELOW GRADE: SAME AS SERVICE ENTRANCE.
- OUTDOORS EXPOSED: IMC, GRS (WITH THE EXCEPTION OF CONNECTIONS TO MECHANICAL EQUIPMENT WHICH MAY BE FLEXIBLE WATERTIGHT CONDUIT).
- CONNECTIONS TO ENCLOSURES SHALL ONLY BE PERMITTED ON SIDES OR BOTTOM OF ENCLOSURES; PROVIDE WATERTIGHT HUBS (OVERS HUBS OR EQUIVALENT) FOR ALL CONNECTIONS TO ENCLOSURES.

F. Service Entrance:

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- FEEDERS: GRS EXCEPT WHERE OTHERWISE NOTED
- OUTDOORS BELOW GRADE: SAME AS SERVICE ENTRANCE.
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G. Service Entrance:

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- FEEDERS: GRS EXCEPT WHERE OTHERWISE NOTED
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- OUTDOORS EXPOSED: IMC, GRS (WITH THE EXCEPTION OF CONNECTIONS TO MECHANICAL EQUIPMENT WHICH MAY BE FLEXIBLE WATERTIGHT CONDUIT).
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H. Service Entrance:

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J. Service Entrance:

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K. Service Entrance:

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L. Service Entrance:

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M. Service Entrance:

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P. Service Entrance:

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- FEEDERS: GRS EXCEPT WHERE OTHERWISE NOTED
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S. Service Entrance:

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- FEEDERS: GRS EXCEPT WHERE OTHERWISE NOTED
- OUTDOORS BELOW GRADE: SAME AS SERVICE ENTRANCE.
- OUTDOORS EXPOSED: IMC, GRS (WITH THE EXCEPTION OF CONNECTIONS TO MECHANICAL EQUIPMENT WHICH MAY BE FLEXIBLE WATERTIGHT CONDUIT).
- CONNECTIONS TO ENCLOSURES SHALL ONLY BE PERMITTED ON SIDES OR BOTTOM OF ENCLOSURES; PROVIDE WATERTIGHT HUBS (OVERS HUBS OR EQUIVALENT) FOR ALL CONNECTIONS TO ENCLOSURES.

T. Service Entrance:

- Service Entrance: IMC, GRS, SCHED 40 PVC (WITH GRS 90 ELBOWS). IMC AND GRS TO HAVE BITUMINOUS COATING IF INSTALLED BELOW GRADE.
- SERVICE ENTRANCE WHERE EXPOSED TO PHYSICAL DAMAGE OR ABOVE GRADE: IMC, GRS, SCHEDULE 80 PVC.
- FEEDERS: GRS EXCEPT WHERE OTHERWISE NOTED
- OUTDOORS BELOW GRADE: SAME AS SERVICE ENTRANCE.
- OUTDOORS EXPOSED: IMC, GRS (WITH THE EXCEPTION OF CONNECTIONS TO MECHANICAL EQUIPMENT WHICH MAY BE FLEXIBLE WATERTIGHT CONDUIT).
- CONNECTIONS TO ENCLOSURES SHALL ONLY BE PERMITTED ON SIDES OR BOTTOM OF ENCLOSURES; PROVIDE WATERTIGHT HUBS (OVERS HUBS OR EQUIVALENT) FOR ALL CONNECTIONS TO ENCLOSURES.

U. Service Entrance:

- Service Entrance: IMC, GRS, SCHED 40 PVC (WITH GRS 90 ELBOWS). IMC AND GRS TO HAVE BITUMINOUS COATING IF INSTALLED BELOW GRADE.
- SERVICE ENTRANCE WHERE EXPOSED TO PHYSICAL DAMAGE OR ABOVE GRADE: IMC, GRS, SCHEDULE 80 PVC.
- FEEDERS: GRS EXCEPT WHERE OTHERWISE NOTED
- OUTDOORS BELOW GRADE: SAME AS SERVICE ENTRANCE.
- OUTDOORS EXPOSED: IMC, GRS (WITH THE EXCEPTION OF CONNECTIONS TO MECHANICAL EQUIPMENT WHICH MAY BE FLEXIBLE WATERTIGHT CONDUIT).
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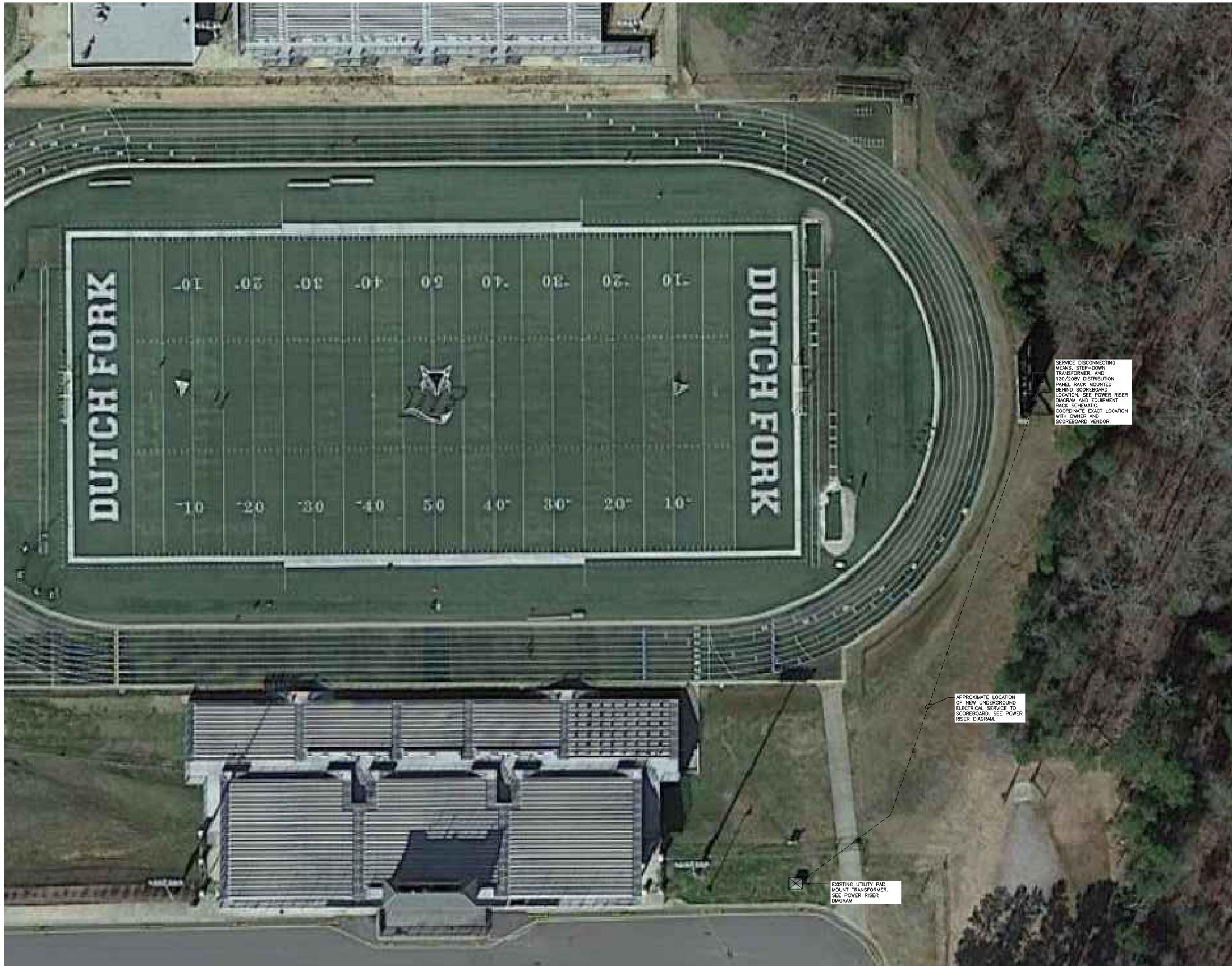
V. Service Entrance:

- Service Entrance: IMC, GRS, SCHED 40 PVC (WITH GRS 90 ELBOWS). IMC AND GRS TO HAVE BITUMINOUS COATING IF INSTALLED BELOW GRADE.
- SERVICE ENTRANCE WHERE EXPOSED TO PHYSICAL DAMAGE OR ABOVE GRADE: IMC, GRS, SCHEDULE 80 PVC.
- FEEDERS: GRS EXCEPT WHERE OTHERWISE NOTED
- OUTDOORS BELOW GRADE: SAME AS SERVICE ENTRANCE.
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W. Service Entrance:

- Service Entrance: IMC, GRS, SCHED 40 PVC (WITH GRS 90 ELBOWS). IMC AND GRS TO HAVE BITUMINOUS COATING IF INSTALLED BELOW GRADE.
- SERVICE ENTRANCE WHERE EXPOSED TO PHYSICAL DAMAGE OR ABOVE GRADE: IMC, GRS, SCHEDULE 80 PVC.
- FEEDERS: GRS EXCEPT WHERE OTHERWISE NOTED
- OUTDOORS BELOW GRADE: SAME AS SERVICE ENTRANCE.
- OUTDOORS EXPOSED: IMC, GRS (WITH THE EXCEPTION OF CONNECTIONS TO MECHANICAL EQUIPMENT WHICH MAY BE FLEXIBLE WATERTIGHT CONDUIT).
- CONNECTIONS TO ENCLOSURES SHALL ONLY BE PERMITTED ON SIDES OR BOTTOM OF ENCLOSURES; PROVIDE WATERTIGHT HUBS (OVERS HUBS OR EQUIVALENT) FOR ALL CONNECTIONS TO ENCLOSURES.

X. Service Entrance:



SERVICE DISCONNECTING MEANS: STEP-DOWN TRANSFORMER, AND 120/208V DISTRIBUTION PANEL RACK MOUNTED BEHIND SCOREBOARD. LOCATION: SEE POWER RISER DIAGRAM AND EQUIPMENT RACK SCHEMATIC. COORDINATE EXACT LOCATION WITH OWNER AND SCOREBOARD VENDOR.

APPROXIMATE LOCATION OF NEW UNDERGROUND ELECTRICAL SERVICE TO SCOREBOARD. SEE POWER RISER DIAGRAM.

EXISTING UTILITY PAD MOUNT TRANSFORMER. SEE POWER RISER DIAGRAM.

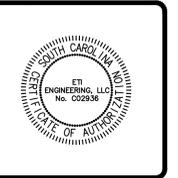


ENGINEERING, LLC

5725 Bush River Road
Columbia, SC 29212
803.233.9396 (Phone)
803.233.4371 (Fax)

Project Manager:
Troy Lowder PE, x105

ETI #2310-40526



DUTCH FORK HIGH SCHOOL
FOOTBALL FIELD SCOREBOARD ELECTRICAL SERVICE
1400 OLD TAMAH RD., IRMO, SC 29063

ELECTRICAL SITE PLAN

DRAWN BY: TRL
CHECKED BY: BDT
REVISIONS:

E-2

DATE: 04/22/2024