



City of Tacoma

Tacoma Power/Transmission & Distribution

ADDENDUM NO. 1

DATE: 01/29/26

REVISIONS TO:

**Request for Bids Specification No. PT25-0237F
Multiple Substation Retrofit (Rebid)**

NOTICE TO ALL BIDDERS:

This addendum is issued to clarify, revise, add to or delete from, the original specification documents for the above project. This addendum, as integrated with the original specification documents, shall form the specification documents. The noted revisions shall take precedence over previously issued specification documents and shall become part of this contract.

REVISIONS TO THE SUBMITTAL DEADLINE:

The submittal deadline remains the same.

REVISIONS TO THE SPECIFICATIONS:

Replace the Scope of Work in its entirety with the Scope of Work marked Addendum 1. This revised scope of work is intended to clarify the number of holes and rods required for these projects.

NOTE: Acknowledge receipt of this addendum by initialing the corresponding space as indicated on the signature page. Vendors who have already submitted their bid/proposal may contact the Purchasing Division at 253-502-8468 and request return of their bid/proposal for acknowledgment and re-submittal. Or, a letter acknowledging receipt of this addendum may be submitted in an envelope marked Request for Bids Specification No. PT25-0237F Addendum No. 1. The City reserves the right to reject any and all bids, including, in certain circumstances, for failure to appropriately acknowledge this addendum.

cc: Igal Muhamed, T&D Engineer; Erica Pierce, T&D Contract Program Manager

Scope of Work – Substation Grounding Retrofit: Deep Ground Electrode Installation

1. General Description

The Contractor shall furnish all labor and equipment to install deep vertical ground electrodes at various locations within the substation site. This includes drilling boreholes up to 80 feet deep and 4–6 inches in diameter, placing ground rods, backfilling with a Ground Enhancement Material (GEM).

The contractor shall be responsible for obtaining and maintaining all required well drilling permits.

Note: This work involves highly specialized methods and equipment not typical of conventional electrical or civil construction. Contractors must have demonstrated experience in the drilling and installation of deep grounding including the handling of GEM and subsurface water.

2. Work Included

The scope shall include, but not be limited to, the following tasks:

A. Mobilization and Site Preparation

- Transport and mobilize all specialized equipment to the project site, including, but not limited to:
 - HBR Hutte Drill Rig (or equivalent)
 - CG-600 Grout Plant for GEM mixing
 - All-terrain forklifts (8k and 10k)
 - Skid steer or backhoe for spoils handling
- Conduct site walkdown and locate existing underground utilities before drilling.
- Establish safe entry, exit, and designated work zones with the help of Tacoma Power Crews.

B. Borehole Drilling and Ground Rod Installation

- Drill vertical boreholes up to 80 feet deep and 4–6 inches in diameter at specified locations.
- Remove and store excavated soil for environmental testing and subsequent disposal or reuse by Tacoma Power.
- Install provided copper rods with couplers per project specifications and as detailed by the substation grounding layout drawing.
- Mix GEM (Ground Enhancement Material) with water per manufacturer's instructions and place into the borehole to fully encase each ground rod.
- Ensure each electrode installation meets depth and bonding specification or as instructed by Tacoma Power representatives.

C. Quality Assurance

- Provide as-built drawings showing locations and depths of installed electrodes.
- Ensure all work is in full compliance with the safety/environmental procedures.
- Work must be coordinated closely with the Tacoma Power representative to maintain safety and operational integrity of the substation.
- All work is subject to inspection and approval by Tacoma Power representatives.

D. Demobilization and Cleanup

- Remove all construction debris, excess material, and equipment from the site.
- Restore work areas to pre-existing or better conditions.

3. Contractor Qualifications

To ensure quality and safety, only contractors with the following qualifications will be considered:

- Proven prior **experience with drilling deep ground electrode systems** in utility or substation environments.
- Use of **specialized equipment** for vertical drilling and GEM placement.
- Trained personnel with demonstrated knowledge of grounding systems, environmental compliance, and utility safety procedures.

Substation #1

Items #	# of holes	Depth (ft.)	Rod diameter (in.)	In GEM (4 in. diameter hole) Notes
1	19	16	0.75	No holes. 2 coupled rods will be driven at 16 ft in 19 different locations into the native soil
2	5	64	0.75	5 augered holes (4" dia) with 8 rods(with GEM) in each hole at 5 different locations.
3	4	40	0.75	4 augered holes (4" dia) with 5 rods(with GEM) in each hole at 4 different locations
4	4	24	0.75	4 augered holes (4" dia) with 3 rods (with GEM) in each hole at 4 different locations
5	2	24	0.75	no holes. 3 coupled rods will be driven at 24 ft in 2 locations into the native soil.

Substation #2

Items #	# of holes	Depth (ft.)	Rod diameter (in.)	In GEM (4 in. diameter hole)
1	3	64	0.75	3 augered holes (4" dia) with 8 rods(with GEM) in each hole at 3 different locations.
2	5	40	0.75	5 augered holes (4" dia) with 5 rods(with GEM) in each hole at 5 different locations
3	15	24	0.75	no holes. 3 coupled rods will be driven at 24 ft in 15 locations into the native soil.
4	9	16	0.75	no holes. 2 coupled rods will be driven at 16 ft in 9 locations into the native soil.

Substation #3

Items #	# of Holes	Depth (ft.)	Rod diameter (in.)	In GEM (6 in. diameter hole)
1	9	80	0.75	9 augered holes (6" dia) with 10 rods(with GEM) in each hole at 9 different locations.
2	2	48	0.75	no holes. 6 coupled rods will be driven at 48 ft in 2 locations into the native soil.
3	7	24	0.75	no holes. 3 coupled rods will be driven at 24 ft in 7 locations into the native soil.
4	5	16	0.75	no holes. 2 coupled rods will be driven at 16 ft in 5 locations into the native soil.

updated as of 1/28/26

