



Beacon Flagpole Ground Sleeve Installation

1. SCOPE OF WORK

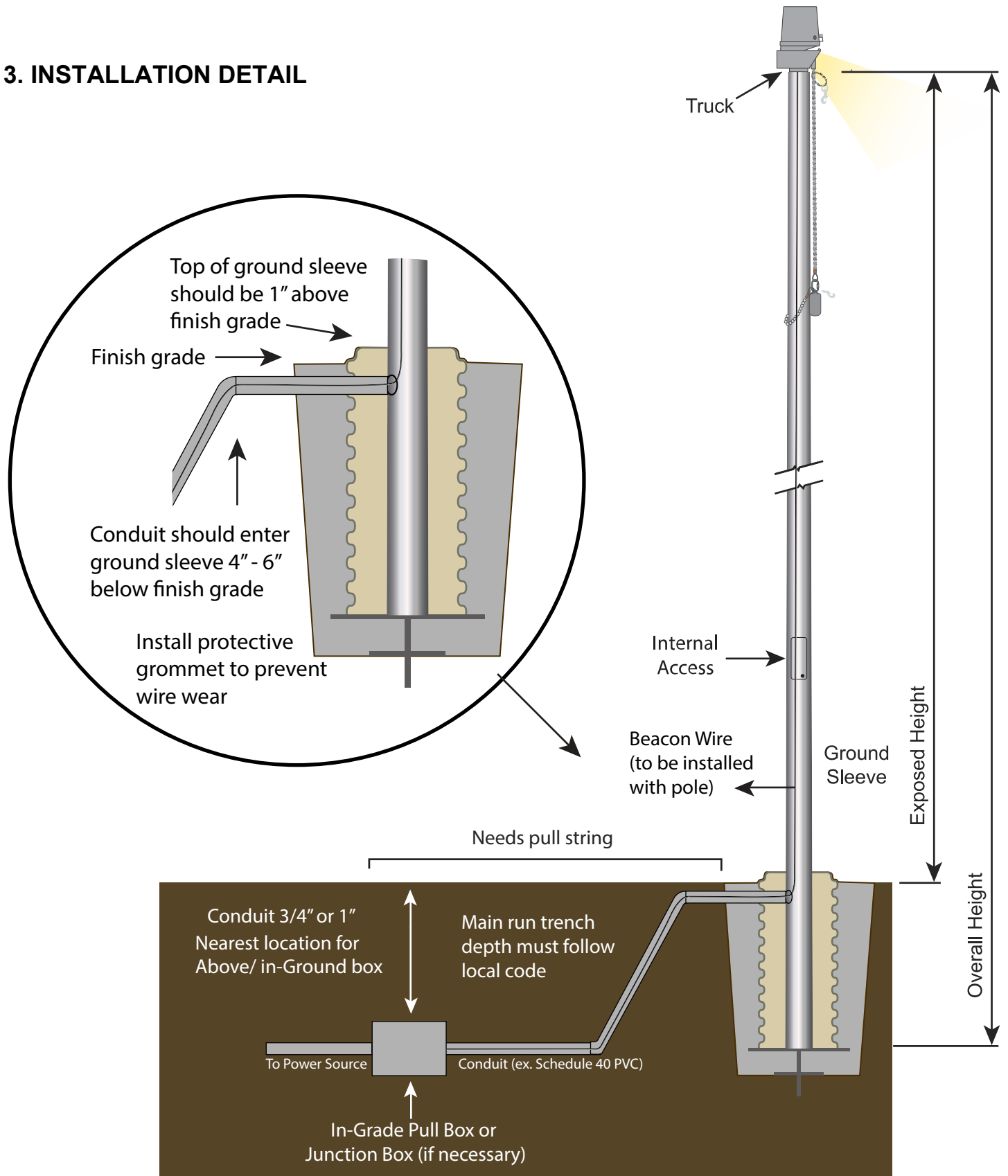
This submittal provides the general contractor and/or electrical contractor with the information needed to prepare the site for a flagpole-mounted beacon light installation. The ground sleeve serves as the permanent below-grade foundation that receives the flagpole shaft. Proper preparation of the ground sleeve, conduit routing, and electrical rough-in is critical to ensure correct alignment, drainage, and long-term structural integrity of the beacon assembly.

2. SYSTEM OVERVIEW

The beacon installation consists of the following major components:

Component	Description
Beacon Light	Beacon light mounted at the top of the flagpole. Wiring runs internally through the pole shaft.
Flagpole Shaft	Tapered aluminum, fiberglass or steel pole that seats into the ground sleeve. Houses internal wiring and halyard system.
Winch / Cam Cleat	Mechanism located at the base of the flagpole (above grade) used to raise and lower the flag and service the beacon.
Steel Ground Sleeve	Below-grade steel tube set in concrete that receives the flagpole butt. Available in various diameters and lengths to match pole size.
Electrical Conduit	3/4" or 1" conduit routed from the nearest above-grade or in-ground junction box to the ground sleeve, entering 4"–6" below finish grade.
Pull String	A pull string must be left in the conduit run from the junction box through to the interior of the ground sleeve to facilitate wire pulling.

3. INSTALLATION DETAIL



Subcontractor Scope: Ground Sleeve & Conduit Rough-In

- **Conduit Requirement:** Install Schedule 40 PVC from the power source to the ground sleeve.
- **Pull String:** Install a rot-resistant pull string (poly-line) inside the conduit, secured at both the power source and inside the ground sleeve for the flagpole installer.
- **Sleeve Entry:** Drill a hole in the ground sleeve that aligns with your trench depth to allow for conduit entry.
- **Depth & Grade:** Set the top of the ground sleeve 1" above finished grade. The conduit should enter the sleeve approximately 4" - 6" below finish grade.
- **Stub-Up Protection:** Ensure the conduit is capped or taped off inside the sleeve to prevent concrete or debris from entering during the pour.
- **Concrete Pour:** Pour concrete around the exterior of the sleeve only; do NOT fill the inside of the sleeve with concrete or dirt.

WARNINGS

1. **DO NOT** fill the interior of the ground sleeve with concrete or dirt.
2. **REQUIRED:** Install a continuous pull string from the power source into the sleeve interior.
3. **DEBURR:** Ensure the conduit entry hole is smooth to prevent wire shearing.
4. **CAP:** Tape or cap conduit ends until final wire pull.

4. SITE PREPARATION INSTRUCTIONS

The following steps must be completed by the general contractor and/or electrical contractor prior to flagpole and beacon installation.

1. Excavation

- Excavate a hole at the designated flagpole location. The hole must be sized to accommodate the ground sleeve plus a minimum of 3" of concrete on all sides.
- Depth of the hole must equal the full length of the ground sleeve plus 4–6" of gravel base for drainage.
- Verify soil conditions and ensure a stable, level base before proceeding.

2. Conduit Routing (By Electrical Contractor)

- Install 3/4" or 1" electrical conduit from the nearest power source (above-grade or in-ground junction box) to the ground sleeve location.
- The conduit must enter the ground sleeve 4"–6" below finish grade. Do not route conduit into the bottom of the sleeve.

- Maintain a minimum burial depth per local code (typically 18–24" for direct-buried conduit) from the junction box to the sleeve entry point.
- A pull string must be left in the conduit to facilitate wire pulling after the flagpole is set. This is the responsibility of the electrical contractor or the party installing the conduit.

3. Ground Sleeve Placement

- Place 4"–6" of clean gravel at the bottom of the excavation for drainage.
- Set the steel ground sleeve plumb and centered in the excavation. The top of the sleeve should be slightly above finish grade (typically about 1"), as specified by the flagpole manufacturer.
- Verify that the conduit stub-up enters the sleeve wall at the correct elevation (4"–6" below finish grade).
- Brace or stake the sleeve to prevent movement during the concrete pour.

4. Concrete Placement

- Pour concrete around the ground sleeve to the level specified by the flagpole manufacturer.
- Use a minimum 3,000 PSI concrete mix. Crown the top surface of the concrete slightly to promote water drainage away from the sleeve opening.
- Re-verify plumb of the sleeve before concrete sets.
- Allow concrete to cure (or per structural engineer's recommendation) before setting the flagpole.

5. Electrical Rough-In

- Ensure the dedicated circuit matches the Beacon light voltage (typically 120V)
- The junction box should be located at the nearest practical location to the ground sleeve. It may be above-grade or in-ground (flush-mount), per site conditions.
- All wiring, circuit protection, and grounding must comply with NEC and local electrical codes.

6. Pre-Installation Checklist (Before Flagpole Arrival)

- Ground sleeve is set plumb in cured concrete.
- Conduit enters the sleeve wall at 4"–6" below grade with pull string in place.
- Junction box is installed and circuit is available.
- Sleeve interior is free of debris, water, and construction material.
- Finish grade is established around the sleeve.

5. IMPORTANT NOTES

CRITICAL COORDINATION ITEMS

- The pull string in the conduit is essential. Without it, wire cannot be routed from the junction box through the conduit and up into the flagpole. This is labeled “By Others” on the installation detail and must be coordinated between the GC and electrician.
- Confirm the required ground sleeve size with the flagpole manufacturer before procurement. The sleeve must be properly sized to receive the flagpole butt diameter and provide the required embedment depth.
- All work must comply with NEC, local building codes, and the flagpole manufacturer’s installation instructions.