

NOTE:
 ALL SPLICES SHALL BE MADE IN AN ACCESSIBLE LOCATION WITH UL RATED CONNECTIONS, USING RAYCHEM GEL CAP SL KITS, OR AN APPROVED EQUIVALENT.

Pole manufacturer to insert single G.F.C.I. receptacle w/ weather-proof cover

PUBLIC WORKS DEPARTMENT RECOMMENDS:

- 13' to 20' Pole heights above grade for commercial and industrial areas. Receptacles and banner arms are allowed, as per electrical design criteria, and must be powder coated to match the pole color.

1 Lumec S55 with 7pin receptacle (See details on SH. SL-3)

2 Ameron traditional series pole, Victorian Style II with Amerishield anti graffiti coating. Color options: black, green, salt & pepper or other, by City approval. Pole height above grade to be 13' to 20'.

Optional (to be approved by Public Works Department): Provide banner arm set - hook & inserts included (See Detail SH. SL 10).

3 4" x 6" Handhole w/ recessed cast alum. frame & flush cover at 0° w/(2)1/4"-20 Stainless Steel (S.S) tamperproof screws. All handholes must face sidewalk (typ).

4 Furnish & install new sod to match existing across parkway - 2' min. around each pole (typ).

5 Furnish & install "Newbasis" Pull box (See Detail SH. SL 4) Install flush to finished grade (typ).

6 Provide & install 12" pearock bed over compacted ground.

7 Furnish & install new #10 AWG Pole circuit w/ 3/4" SCH. 40 PVC Conduit.

8 Pole base - flush with ground line.

9 Contractor to auger 2' dia. x 4'-6" deep hole. Install pole, plumb & backfill around base w/ #57 limestone (or FDOT approved road subgrade). Compact in 6" increments to existing finished grade. Pole installation shall meet 170mph load requirements (See note 17 on SH. SL 7).

Furnish & install yellow "CAUTION" tape 12" deep (typical)

EXIST CURB

EXIST PAVEMENT SURFACE

2" SCH. 40 PVC Feeder circuit conduit out to next pull box

5/8" X 10' Copper clad grounding rod in all pull boxes to be installed per Galvan Industries, Inc. Ground Rod and Coupling Specifications or an approved equivalent.

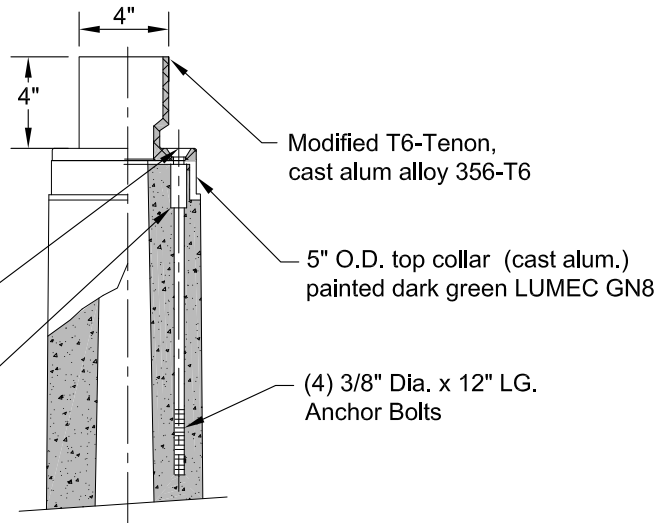
2" SCH 40 PVC Feeder circuit conduit in from previous pull box

(2) 2-1/4" x 9" Cable entrances: (1) @ 90° & (1) @ 270°

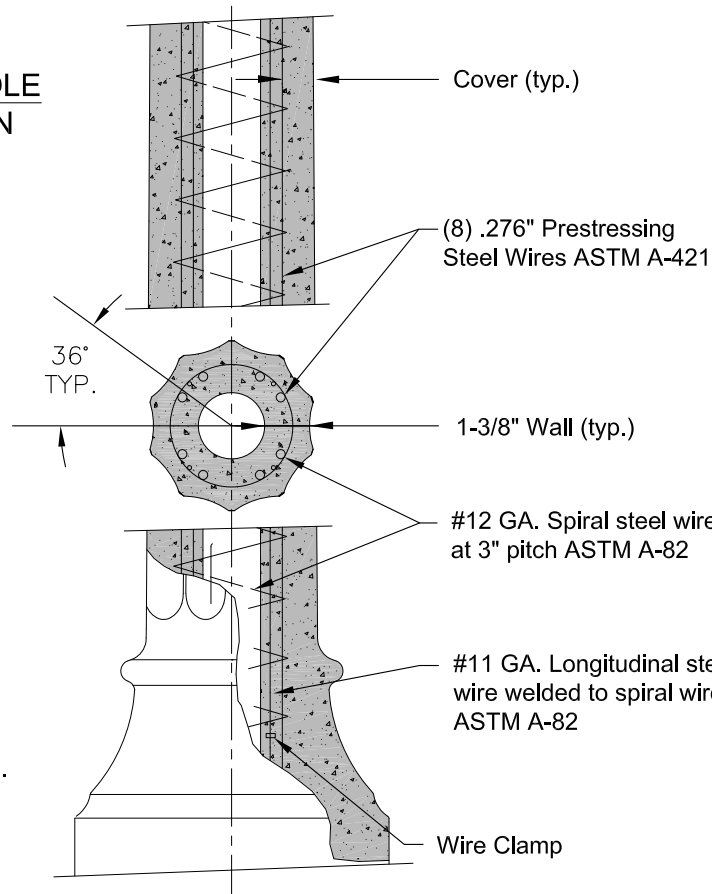
REVISED: APR-2017	STREET LIGHTS - AMERON TRADITIONAL SERIES POLE VICTORIAN STYLE II OR AN APPROVED EQUIVALENT	STANDARD DETAIL
ISSUED: APR-2017		CITY OF WEST PALM BEACH - PUBLIC WORKS DEPT
		SL-1

**LIGHT POLE
TOP MOUNT
DETAIL**

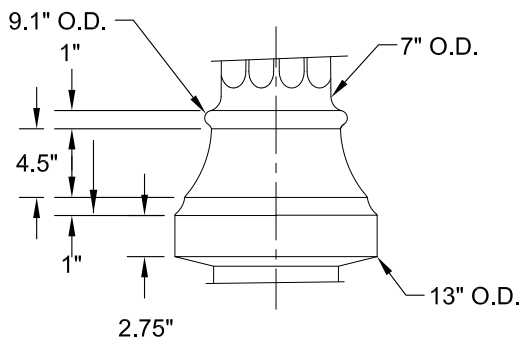
- (4) 3/8"-16 x 1-1/4" LG. S.S. Flat head screws on 3-1/2" dia. B.C.
- (4) 3/8"-16 x 1-3/4" LG. Steel Couplings @ 90° ON 3-1/2" B.C.



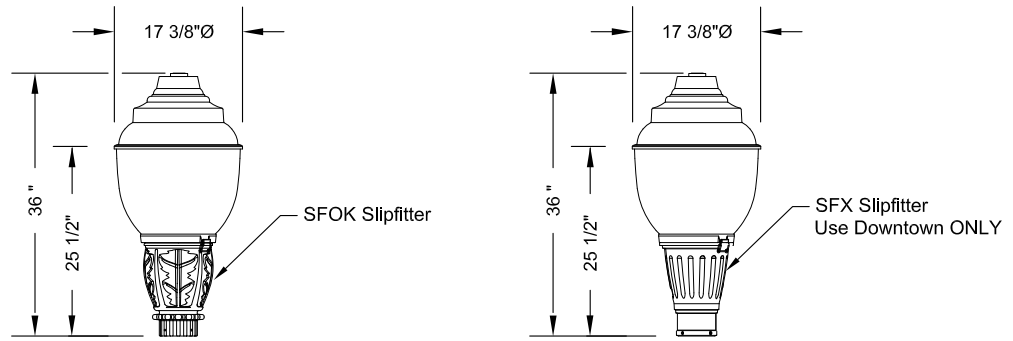
**LIGHT POLE
SECTION**



**LIGHT POLE BELL
DETAIL**



REVISED: APR-2017	STREET LIGHTING - AMERON TRADITIONAL SERIES POLE, VICTORIAN STYLE II - POLE DETAILS	STANDARD DETAIL
ISSUED: APR-2017		CITY OF WEST PALM BEACH - PUBLIC WORKS DEPT
		SL-2

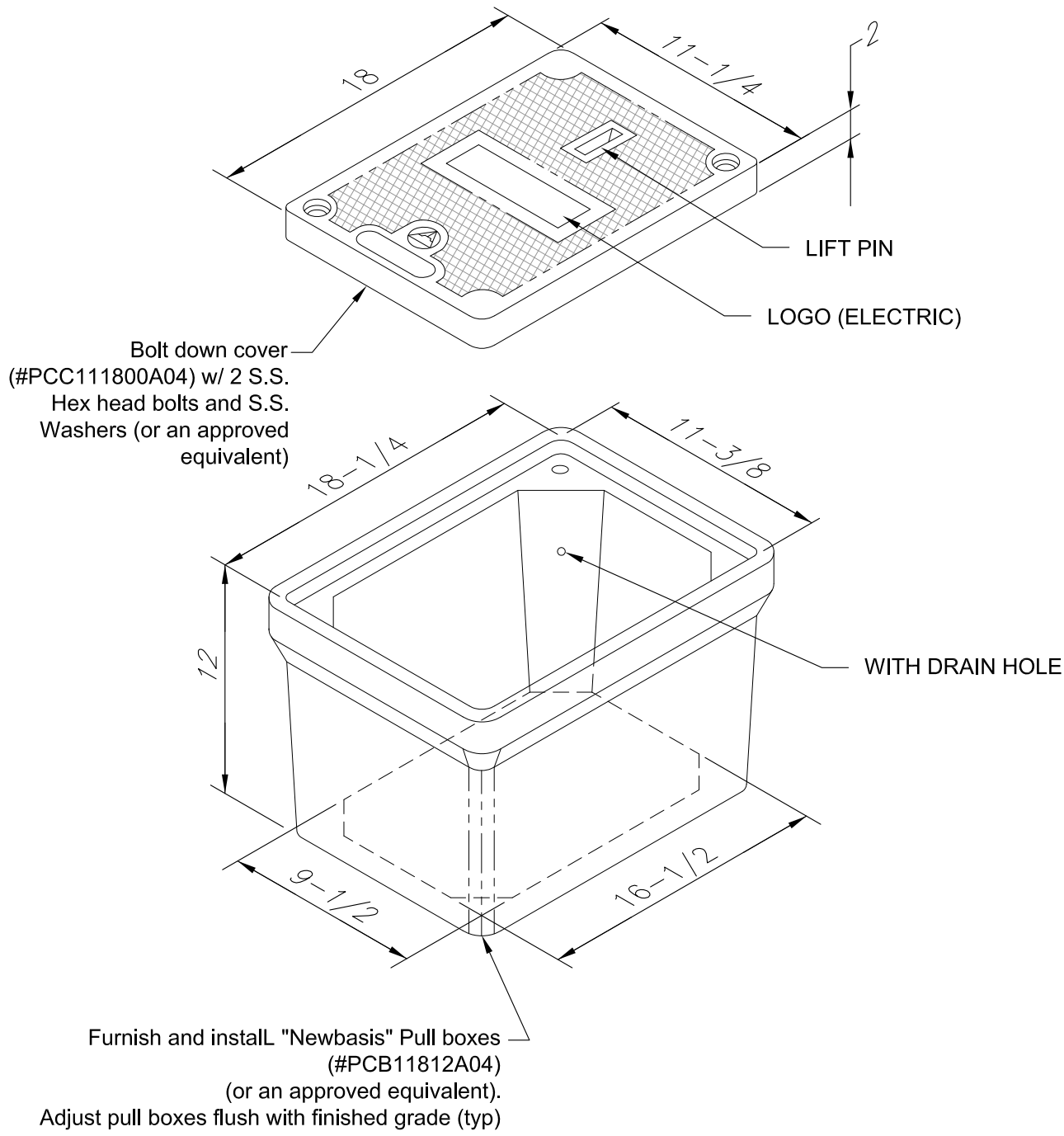


(S55-007)-35W32LED4K-T-GL-LE3-UNV-DMG-SFOK-RCD7-TN3-COLTX

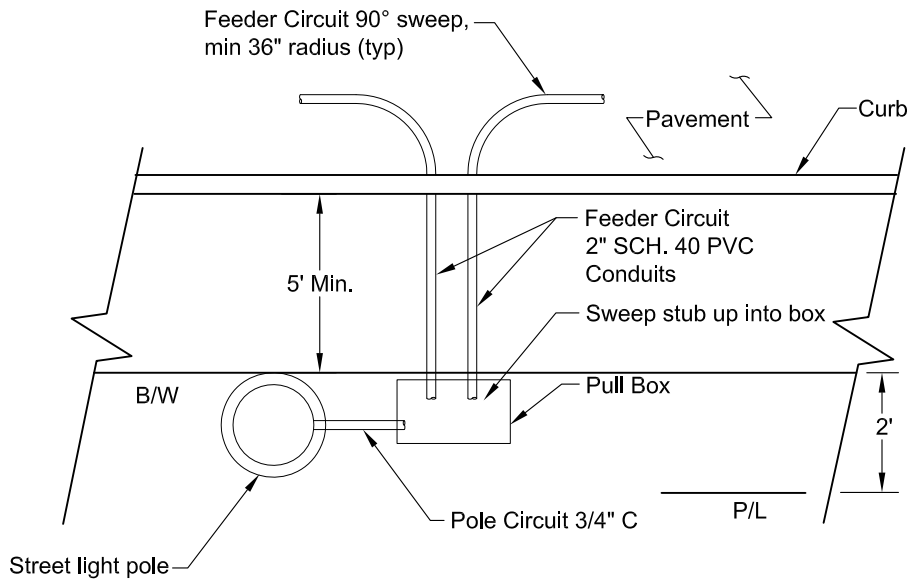
COMPONENTS:

- PC RECEPTACLE:** Receptacle with 7 pins for future wireless control node. Install shorting cap.
- HOOD:** Spun aluminum 1100-0 dome, permanently assembled to the globe.
A cast A360. 1 Aluminum technical ring with latch and hinge. The mechanism shall offer tool-free access to the inside of the luminaire. An embedded memory-retentive gasket shall ensure weatherproofness.
- ACCESS-MECHANISM:**
- HEAT SINK:** Made of cast aluminum optimising the LEDs efficiency and life. Product does not use any cooling device with moving parts (only passive cooling device).
- GLOBE:** (GL), One-piece, seamless, pressure-molded colorless borosilicate glass globe having internal glare softening prisms with smooth external self-cleaning surface. The globe is permanently sealed to the access mechanism.
- LED MODULE:** High-performance white LEDs, Color temperature as per ANSI/NEMA bin Neutral white, 4000k nominal (3985K +/- 275 or 3710K to 4260K, CRI 70 Min. 75 Typical.
- OPTICAL SYSTEM:** Philips Lumec LE3 Asymmetrical. Performance shall be tested per LM-63, LM-79, and TM-15 (IESNA) certifying its photometric performance. Street side indicated.
- DRIVER:** (DMG) Dimming compatible 0-10v. High power factor of 90% minimum. Electronic driver, operation range 50/60hz. Auto adjusting voltage input from 120 to 277VAC rated for both application line to line or line to neutral, Class 1, THD of 20% max.
- SURGE PROTECTOR:** Tested in accordance with ANSI/IEEE C62.45 per ANSI/IEEE 62.41.2 Scenario i Category C High Exposure 10kV/10kA waveforms for Line-Ground, Line-neutral and Neutral-Ground, and in accordance with USDOE, MSSLC Model specification for LED roadway luminaires electrical immunity requirements for High Test level 10kV/10kA.
- FITTER:** Cast aluminum A360. 1 c/w 4 set screws 3/8-16 UNC. Fits on a 4"(102mm) outside diameter x 4"(102mm) long tenon.
- HARDWARE:** All exposed screws shall be stainless steel. All seals and sealing devices are made and/or lined with EPDM and/or silicone.
- FINISH:** Textured color shall be polyester powder coat paint (4 mils/100 microns). The chemical composition provides a highly durable UV and salt spray resistant finish in accordance to the ASTM-B117-73 Standard and humidity proof in accordance to the ASTM-D2247-68 Standard.
- NOTE:** Color options: Black Textured (BKTX), or other, by City approval.

REVISED: APR-2017	STREET LIGHTING - LUMEC S55 LED FIXTURE WITH 7-PIN PC RECEPTACLE OR AN APPROVED EQUIVALENT	STANDARD DETAIL
ISSUED: APR-2017		SL-3
CITY OF WEST PALM BEACH - PUBLIC WORKS DEPT		

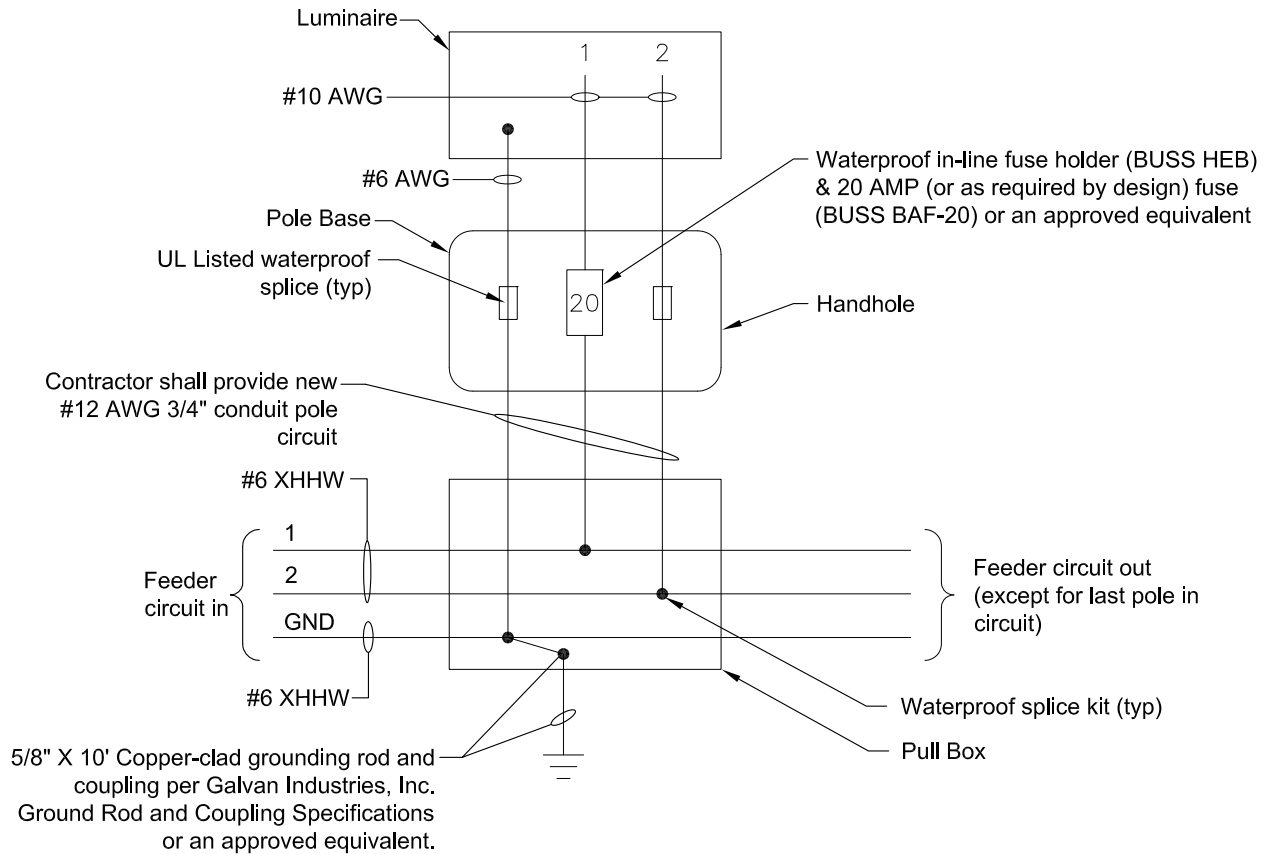


REVISED: JAN-2017	STREET LIGHTING - PULL BOX DETAIL	STANDARD DETAIL
ISSUED: FEB-2017	CITY OF WEST PALM BEACH - PUBLIC WORKS DEPT	SL-4



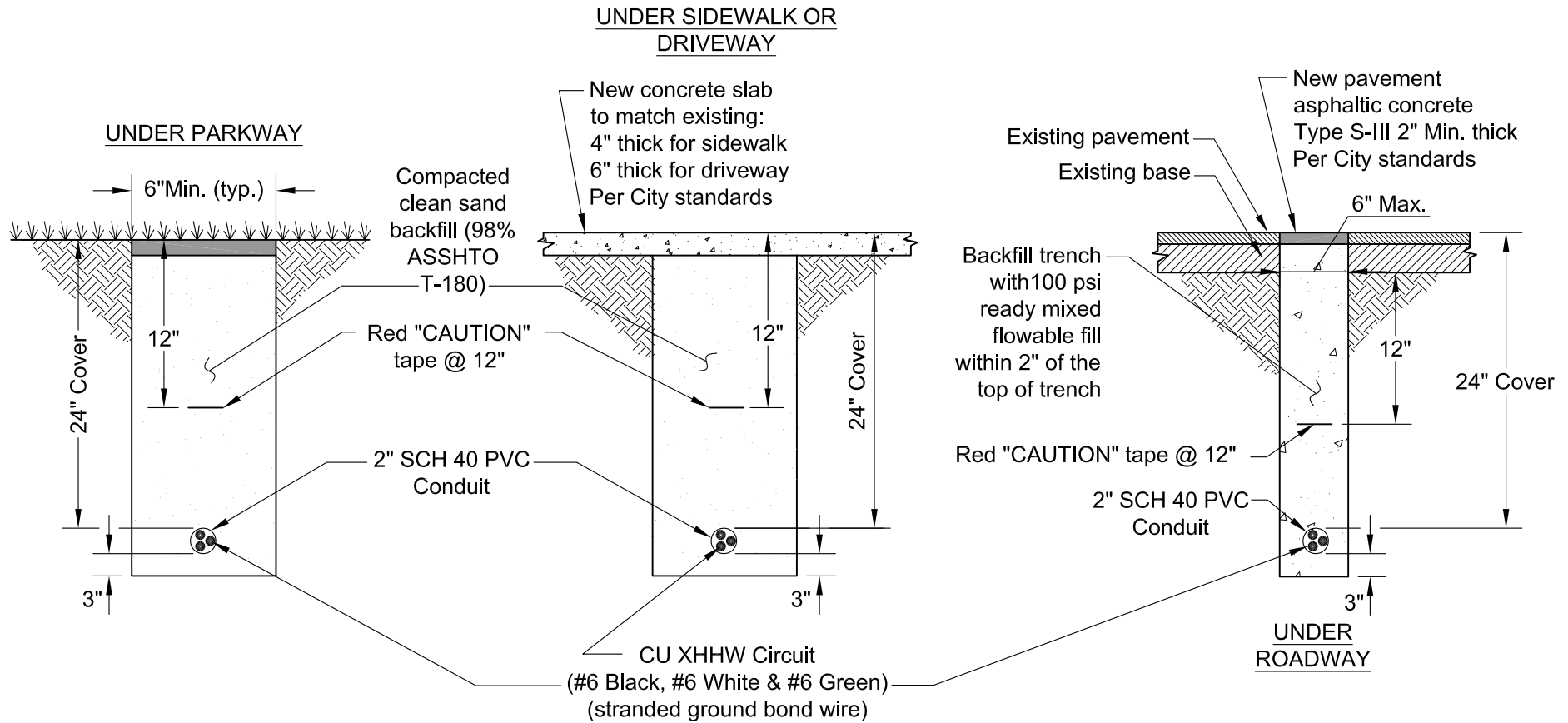
1. Pull box opposite side of pole similar.
2. This detail shall be utilized in locations where parkways are not present. For locations with parkways, the pole shall be installed in the center of the parkway. The layout shall remain the same.

TYPICAL STREET LIGHT PLAN DETAIL



TYPICAL SCHEMATIC FOR 120/240V SERVICE

REVISED: JAN-2017	STREET LIGHTING - SCHEMATIC WIRING DETAIL	STANDARD DETAIL
ISSUED: FEB-2017	CITY OF WEST PALM BEACH - PUBLIC WORKS DEPT	SL-5



1. This detail is only required for open trench cut. Directional bore shall be 30" min below surface.
2. Red electrical caution tape shall be installed in all trenched locations & boring pits. Tape shall be @ 12" deep.

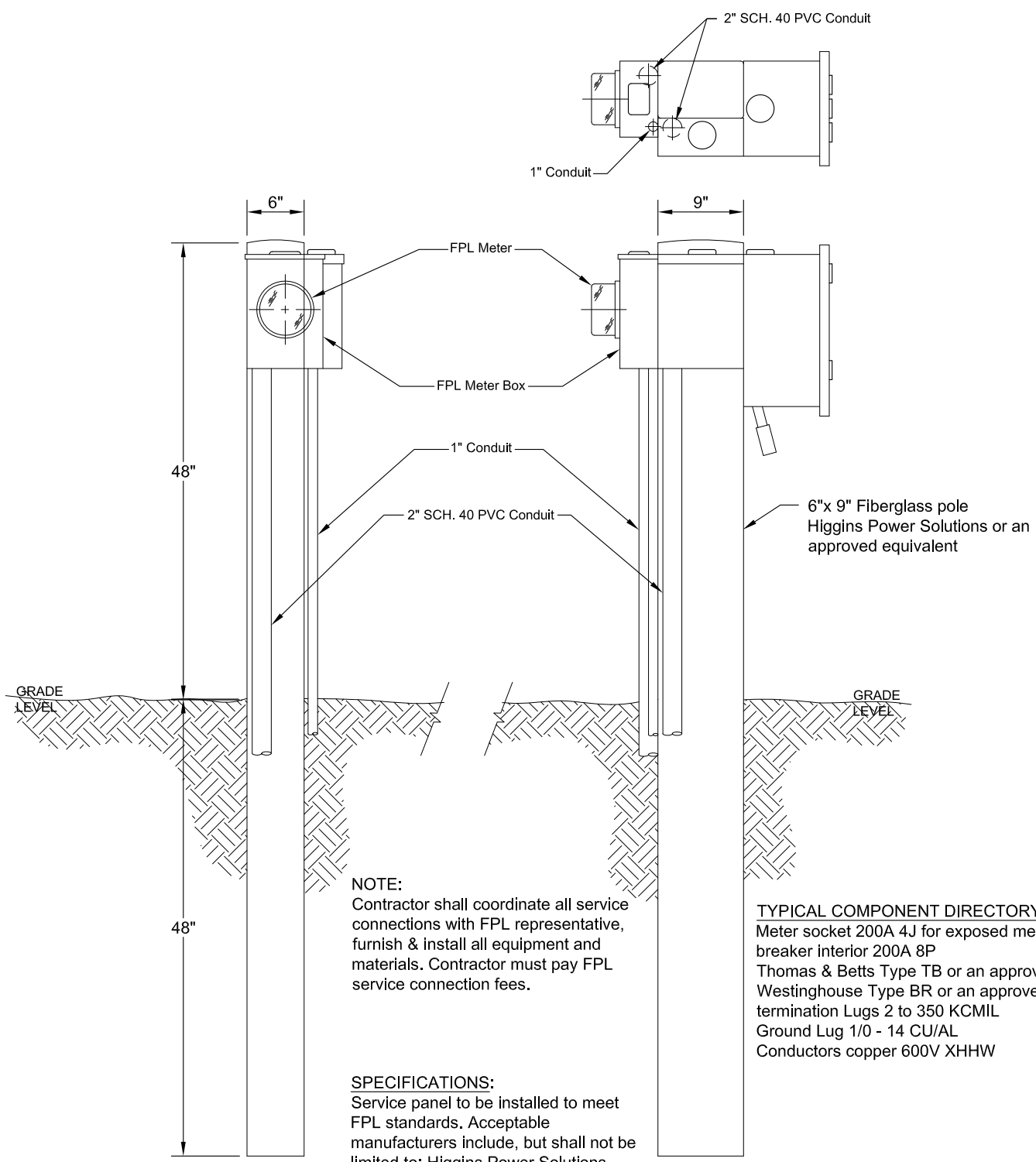
REVISED: JAN-2017	STREET LIGHTING - TYPICAL TRENCH DETAILS	STANDARD DETAIL
ISSUED: FEB-2017	CITY OF WEST PALM BEACH - PUBLIC WORKS DEPT	SL-6

1. The work to be performed by the contractor includes furnishing all materials, labor, tools, equipment, light, power, transportation, superintendency, temporary construction of every nature, and all other services and facilities of any nature whatsoever necessary to modify, complete, deliver and place in operation the referenced project.
2. The electrical contractor is to provide all materials and labor to install the electrical systems as indicated on the drawings. It is not the intent of these plans to show every minor detail of construction. Items not shown but obviously necessary for the completion of the work shall be included.
3. If the City determines open cut installation is not acceptable, the contractor shall install directional bore 2" gray PVC electrical conduit for the entire length of the project, including medians, road crossings and parkways. Any open cut trench shall be approved by the City prior to excavation. All work shall be performed per Florida Building Code (current edition)
4. The drawings are not intended to show the exact location of the conduit runs. Trenching and/or directional boring shall be coordinated with other utilities, so that conflicts are avoided prior to installation. Additionally, maintain enough distance from existing trees and landscape areas such that minimum damage is done to existing roots.
5. Contractor shall coordinate service connections with FP&L. Install light poles in the approximate location shown, with the pull boxes accordingly.
6. All work shall conform to latest approved edition of the National Electrical Code (NEC). The contractor will review all drawings for compliance with the permit office requirements. The contractor shall retain a professional engineer licensed in the State of Florida to seal the drawings and submit to the building official for permit approval.
7. Contractor shall coordinate all work with the Public Works Department Construction Coordinator Leader and the Public Works Department Street Lighting Supervisor, prior to starting construction.
8. Locate all existing underground utilities before directional boring. Repair damaged utilities to safe operational conditions immediately.
9. Contractor shall hand dig at locations of new poles, under curbs, etc., to ensure the absence of underground utilities.
10. For all feeder circuits, provide (2) #6 AWG Standard Copper XHHW 600V (min.) and (1) #6 AWG 600V (min.) THWN from FPL hand holes to pull boxes. Install waterproof fuse holders equal to Bussman Type HEB-WW with fuses in hand holes. Provide photocell controlled service.
11. Contractor shall verify that luminaire is bonded to circuit ground wire after installation. Provide said bonding if absent.
12. All phase conductors shall be color coded black; all neutral conductors shall be white; all insulated ground conductors shall be green.
13. All conductors from pull boxes to poles shall be copper, 600 volt (min.), RHW (XLP), THWN or XHHW in PVC SCH 40 Conduit or plastic coated flexible metal conduit.
14. The wires at hand holes and junction boxes shall be looped to provide sufficient length to completely move connectors outside the hand holes or junction boxes for maintenance or trouble shooting.
15. Provide waterproof seal on all junction and pull box covers.
16. Provide duct seals at ends of conduit that enter pull boxes and junction boxes.
17. All light pole installations shall be suitable wind resistance as required by the current edition of the Florida Building Code, section 1609, Risk Category III. The contractor shall include with shop drawing submittal, a wind loading calculation for pole and for embedment, sealed by a Florida professional engineer. The embedded length of the concrete pole shall be increased by the pole manufacturer to meet the given wind load requirements. The City does not want additional concrete poured around the embedment portion of the poles.
18. All work shall be done by licensed electricians. All electrical work shall be permitted and inspected by the City of West Palm Beach, Development Services Department.

REVISED: JAN-2017	STREET LIGHTING - ELECTRICAL NOTES	STANDARD DETAIL
ISSUED: FEB-2017	CITY OF WEST PALM BEACH - PUBLIC WORKS DEPT	SL-7

19. All equipment shall be new and listed by U.L. or other recognized testing agency, including wet label
20. At the end of the job, the contractor shall perform a comprehensive inspection and testing of the street lighting system with the City Public Works / Engineering Services Construction Coordinator, and repair or replace all defective work to the satisfaction of the City.
21. The contractor shall barricade, provide and install yellow caution tape all around open trenches, for the safety of the public. Trenches shall not remain open overnight.
22. Contractor shall take all necessary steps to prevent objectionable blowing or drifting of dirt, soil or other debris during excavation and installation of electrical conduit.
23. Contractor shall leave the site clean and orderly at the end of each workday.
24. Contractor shall be responsible for lost, stolen or damaged equipment or material.
25. Contractor shall submit as-built record drawings to Public Works Engineering Services Department prior to final payment submittal.
26. Contractor and all subcontractors shall be licensed to work in the City of West Palm Beach.

REVISED: JAN-2017	STREET LIGHTING - ELECTRICAL NOTES, Continued	STANDARD DETAIL
ISSUED: FEB-2017	CITY OF WEST PALM BEACH - PUBLIC WORKS DEPT	SL-7.1

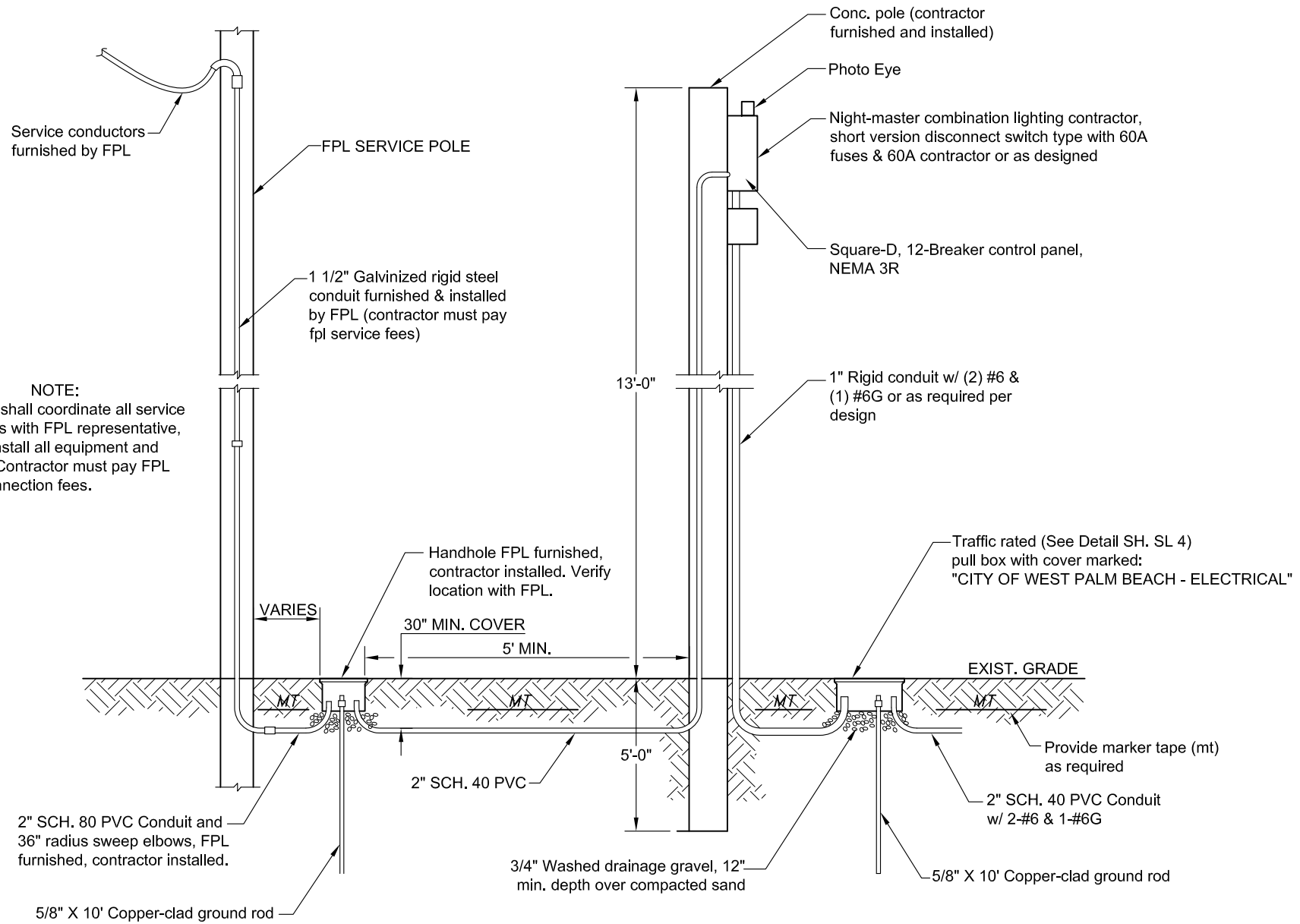


NOTE:
 Contractor shall coordinate all service connections with FPL representative, furnish & install all equipment and materials. Contractor must pay FPL service connection fees.

SPECIFICATIONS:
 Service panel to be installed to meet FPL standards. Acceptable manufacturers include, but shall not be limited to: Higgins Power Solutions

TYPICAL COMPONENT DIRECTORY
 Meter socket 200A 4J for exposed meter circuit
 breaker interior 200A 8P
 Thomas & Betts Type TB or an approved equivalent
 Westinghouse Type BR or an approved equivalent
 termination Lugs 2 to 350 KCMIL
 Ground Lug 1/0 - 14 CU/AL
 Conductors copper 600V XHHW

REVISED: JAN-2017	STREET LIGHTING - UNDERGROUND SERVICE PEDESTAL	STANDARD DETAIL
ISSUED: FEB-2017	CITY OF WEST PALM BEACH - PUBLIC WORKS DEPT	SL-8



REVISED: JAN-2017	STREET LIGHTING - FPL UNMETERED SERVICE CONNECTION	STANDARD DETAIL
ISSUED: FEB-2017	CITY OF WEST PALM BEACH - PUBLIC WORKS DEPT	SL-9