

ORIGINATION FORM

Proposed Revisions to a Standard Plans Index
(Please provide all information – Incomplete forms will be returned)

Contact Information:

Date: March 5, 2019
Originator: **Gil A. Ramirez, PE**
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Standard Plans:

Index Number: **639-001**
Sheet Number (s): 2
Index Title: Service Point Details

Summary of the changes:

1. In the top right of the Typical Distribution Point Schematic Detail is a symbol for an HOA switch (Hand-Off-Automatic). The "off" text is shown at the connection of the hot lead, should be above the off position.
2. Same detail has annotation stating "120V Photo Electric Cell ... Mercury with Surge Protection for 2000V Peak. The text should read "120V Photoelectric cell, 1800VA with 2000V Peak Surge Protection."

Commentary / Background:

1. Just a scrivener's error.
2. A scouring of the inventory of most major electrical manufacturers and suppliers revealed no "mercury photo electric cells". I also went back through approved shop drawings for the past several years and noted no approved photoelectric cells mentioning mercury as a component.

Other Affected Offices / Documents: (Provide name of responsible personnel)

- | Yes | No | |
|--------------------------|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Standard Plans – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | FDOT Design Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Basis of Estimates Manual – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Standard Specifications – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Approved Product List – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Construction – |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Maintenance – |

Origination Package Includes: (Email or hand deliver package to Derwood Sheppard)

- | Yes | N/A | |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | Redline Mark-ups |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Proposed Standard Plan Instructions (SPI) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Revised SPI |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other Support Documents |

Implementation:

- Design Bulletin (Interim) DCE Memo Program Mgmt. Bulletin FY-Standard Plans (Next Release)

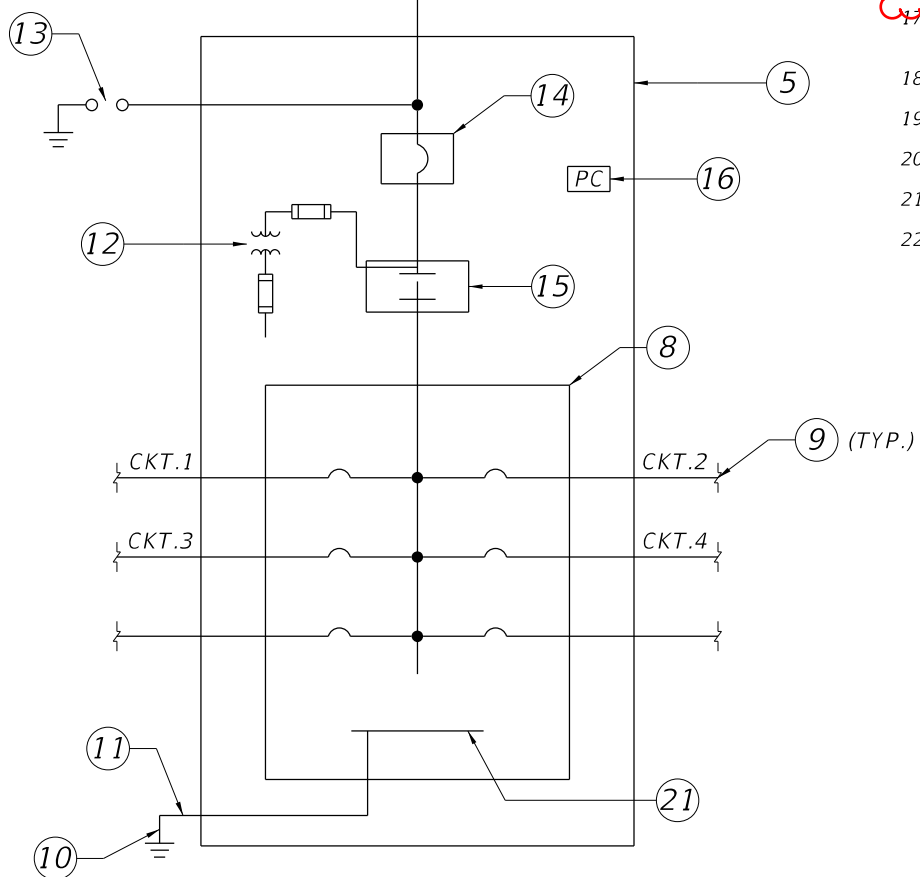
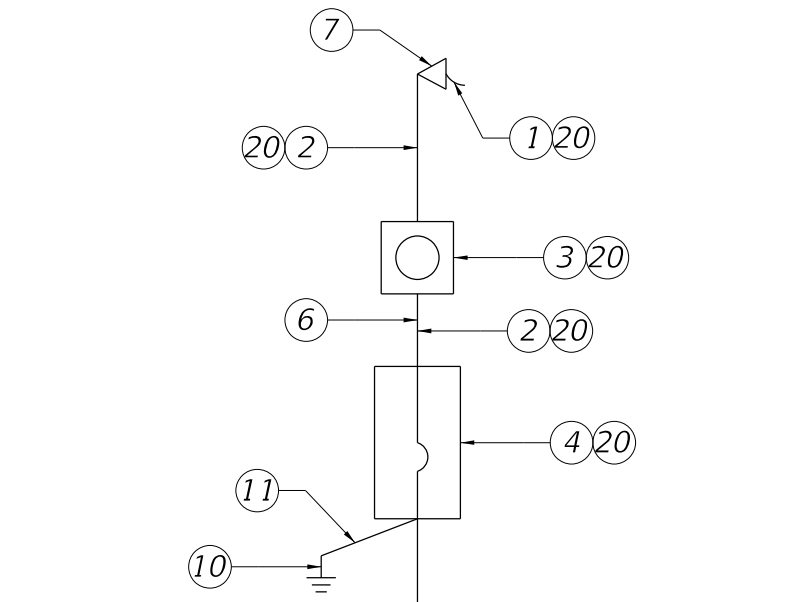
Contact the Roadway Design Office for assistance in completing this form

Keyed Notes:

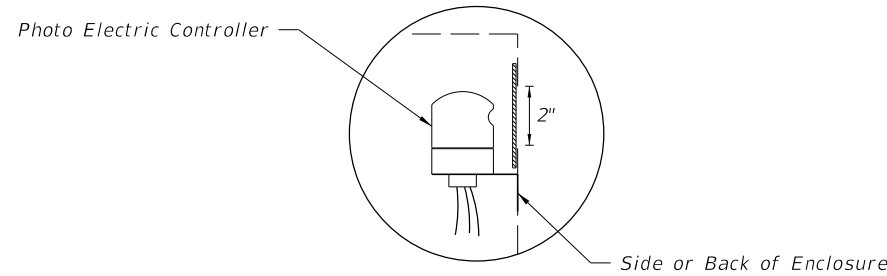
1. 240/480V, Single Phase 3 Wire Electric Distribution Overhead Service Drop.
2. Service Feeder in Rigid Galvanized Steel Conduit.
3. Meter Socket by Contractor
4. Service Main Disconnect.
5. Lighting Control Panel Enclosure (NEMA 4X SST). Dimensions as Necessary for Equipment Inside. Ground Mounted Cabinet per Index 639-002.
6. Concrete Riser Pole.
7. Weatherhead.
8. Electrical Panel. Number and Rating of Branch Circuit Breakers shall be as Indicated on Distribution Point Description on Lighting Plan Sheets.
9. Branch Circuit to Roadway Luminaires.
10. 5/8" Copper Clad Ground Rod, 40' Long.
11. #6 Insulated Copper Ground Wire. Bond the Service Neutral to Ground at Service Main Disconnect.
12. Fused Control Power Transformer 0.5 KVA, Single Phase, 480V Primary, 120V Secondary (Part of Lighting Contactor, Shown Outside for Clarity).
13. Lightning Arrester Mounted on Outside of Enclosure.
14. Lighting Control Panel Main Breaker.
15. 2 Pole Electrical Lighting Contactor.
16. Photo Electric Switch-120V Rated.
17. Hand Off Automatic Selector Switch (Part of Lighting Contactor, Shown Outside for Clarity).
18. Concrete Pad.
19. Underground Feeder Conduit.
20. Mount on Riser Pole.
21. Ground BUS.
22. NEMA 4X SST Ground Mounted Storage Cabinet with Two Shelves. Only Required for High Mast Lighting Systems.

Corrected and moved to the Notes.

~~120V Photo Electric Cell
1800VA Mercury with Surge
Protection for 2000V Peak~~

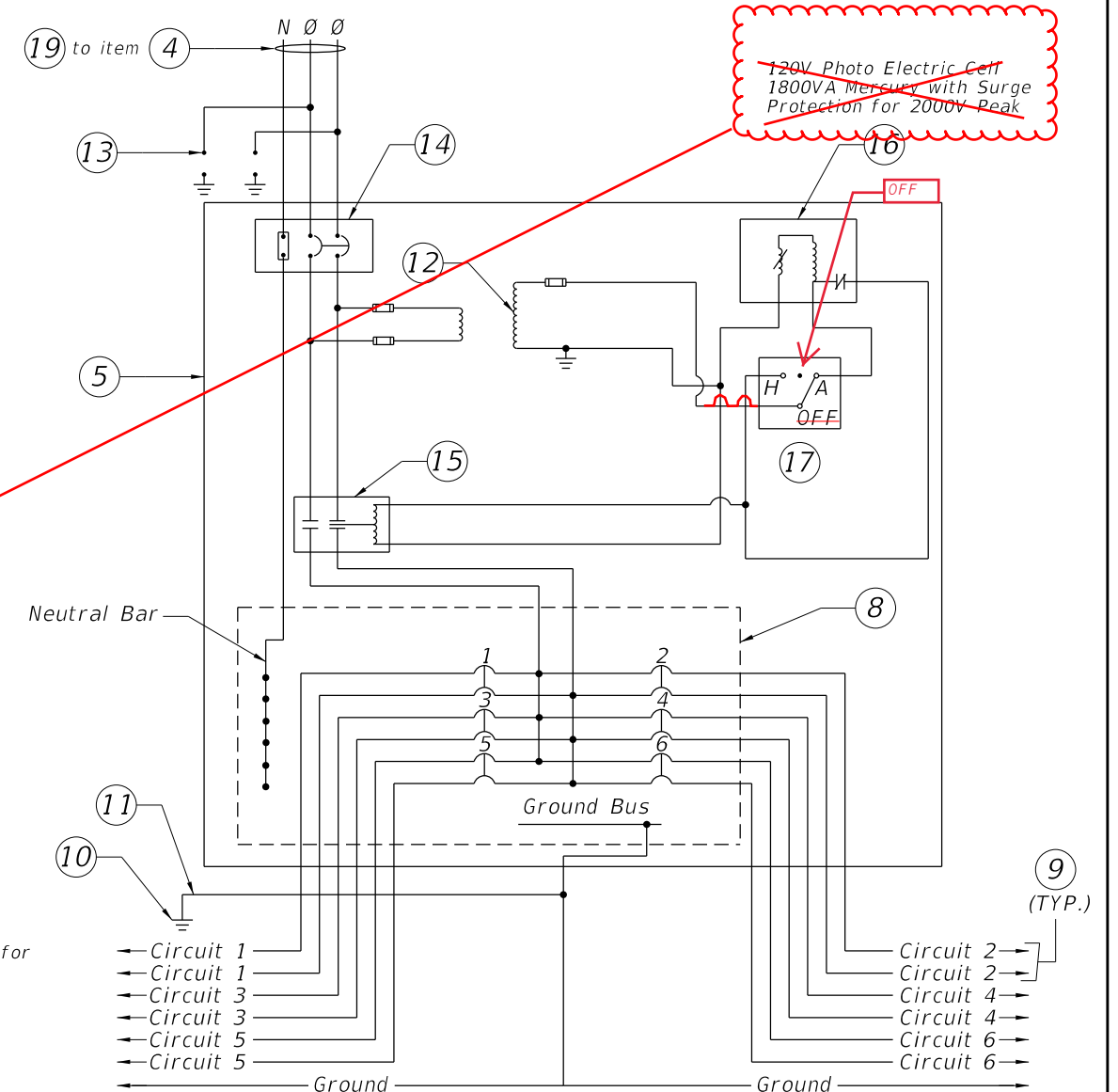


ONE LINE DIAGRAM DISTRIBUTION POINT

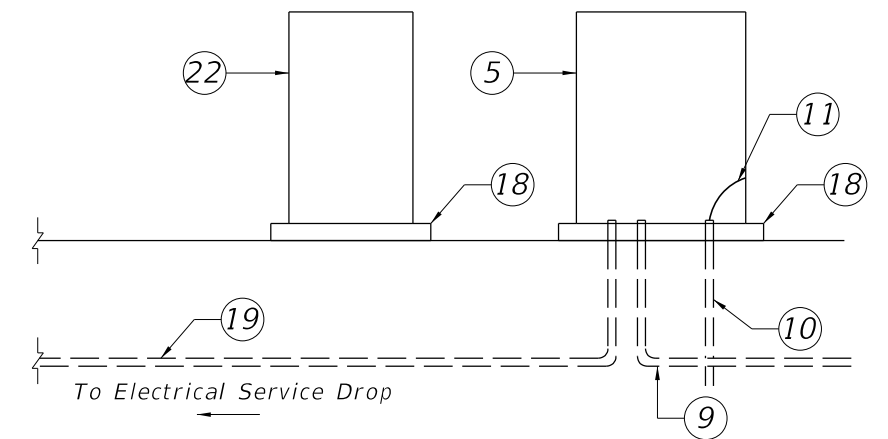


Cut a 2" hole in the side of the Lighting Control Panel enclosure for the operation and mounting of the Photo Electric controller. Use plexiglass and a clear silicone sealant to cover hole, install Photo Electric Controller.

PHOTO ELECTRIC CONTROLLER DETAIL



TYPICAL DISTRIBUTION POINT SCHEMATIC DETAIL



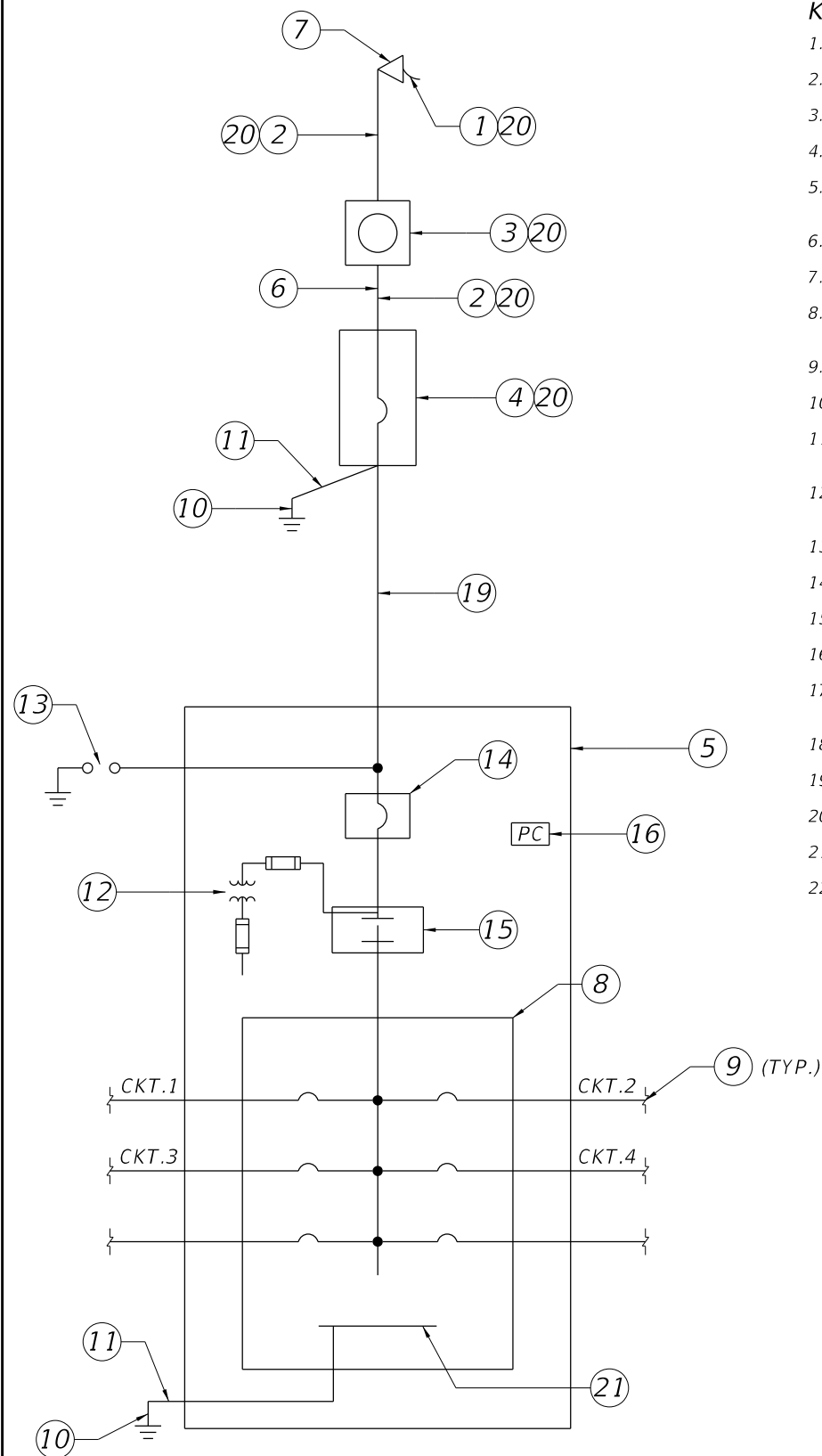
RISER DIAGRAM - TYPICAL DISTRIBUTION POINT

10/24/2018 9:16:47 AM

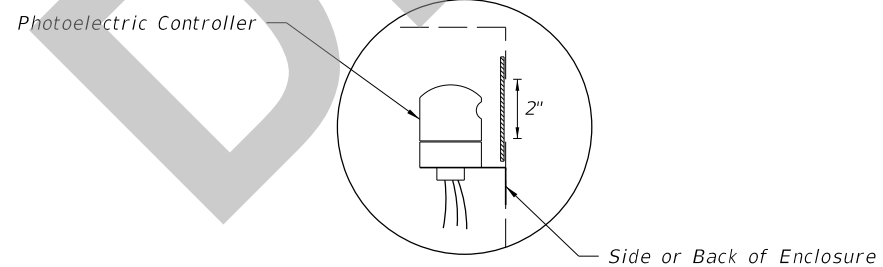
LAST REVISION	DESCRIPTION:
11/01/17	← 11/01/19

Keyed Notes:

1. 240/480V, Single Phase 3 Wire Electric Distribution Overhead Service Drop.
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4. Service Main Disconnect.
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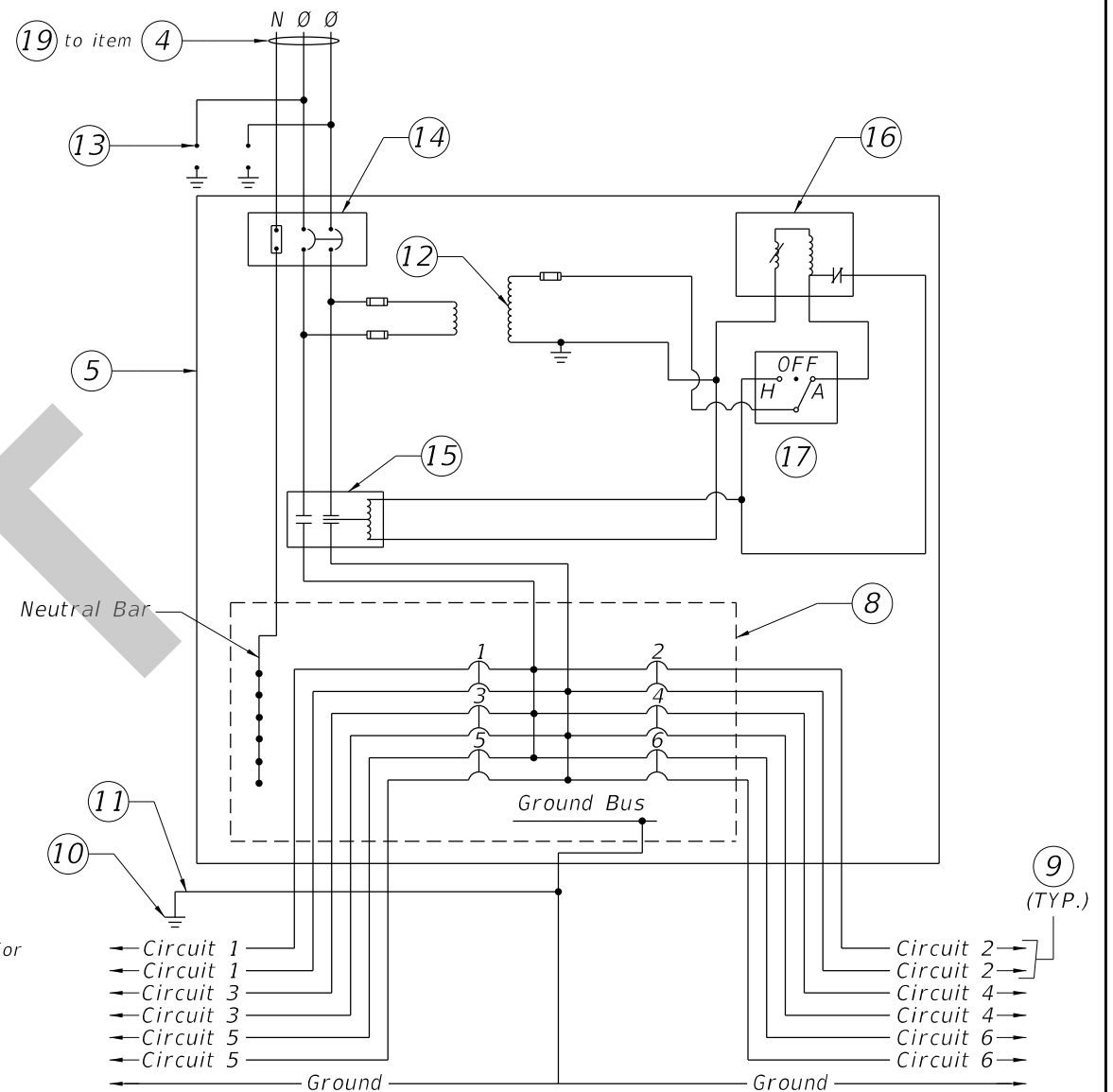


ONE LINE DIAGRAM DISTRIBUTION POINT

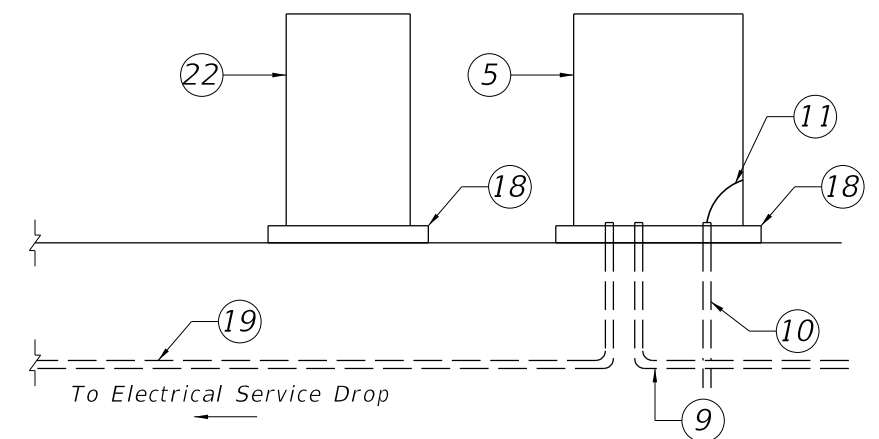


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PHOTOELECTRIC CONTROLLER DETAIL



TYPICAL DISTRIBUTION POINT SCHEMATIC DETAIL



RISER DIAGRAM - TYPICAL DISTRIBUTION POINT

8/27/2019 6:45:26 AM

LAST REVISION 11/01/19	DESCRIPTION:
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FY 2020-21
STANDARD PLANS

SERVICE POINT DETAILS

INDEX
639-001

SHEET
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