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Streetlight Maintenance – North East Zone

Various Inventory

Miami-Dade County

Volume 2 of 2

Appendix “B” to the Special Provisions
Street Lighting Details

Supplemental Solicitation
and Contract Documents

Small Business Enterprise-Construction Program (SBE-CONST.):

Not Applicable

Community Workforce Program:

Not Applicable

DTPW Capital Improvements Engineer:

Jean Bernard Philippeaux

RPQ Issue Date:

October 2, 2026

APPENDIX "B" TO THE SPECIAL PROVISIONS

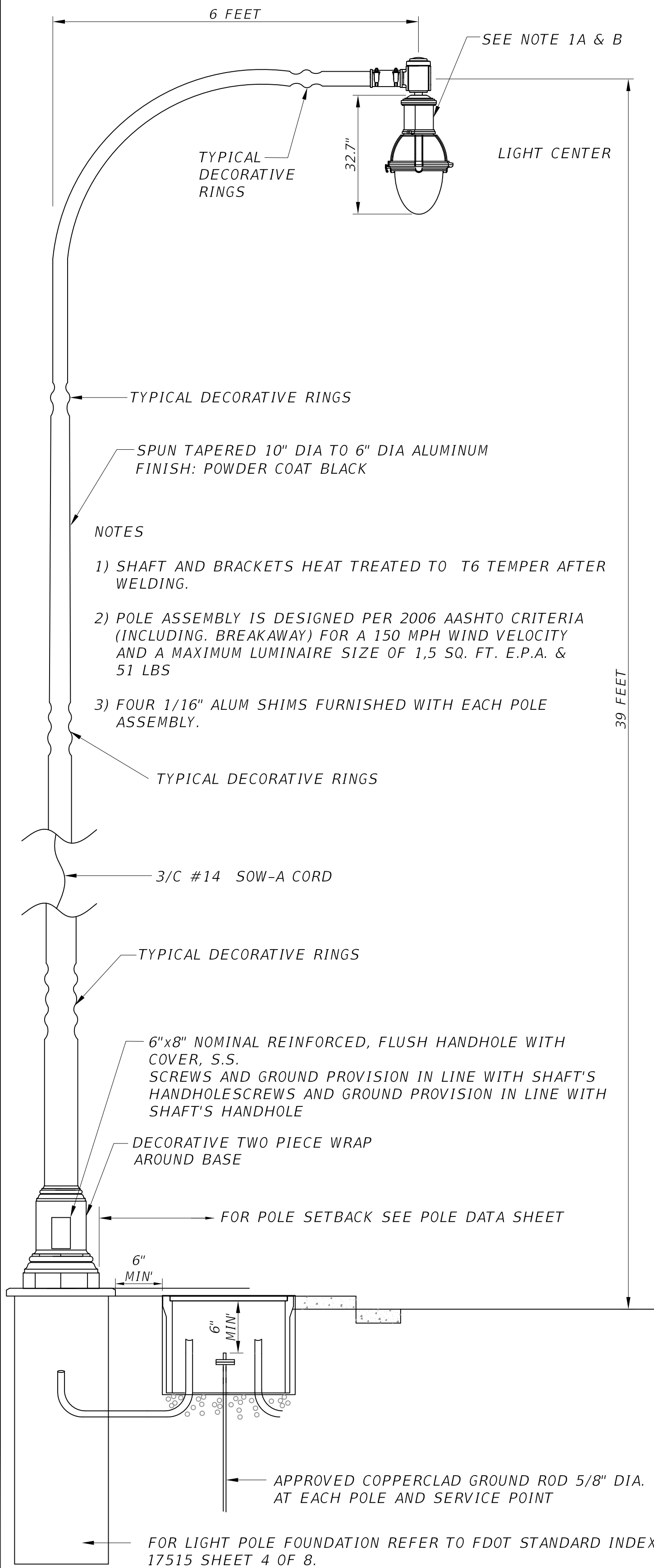
STREET LIGHTING DETAILS

CONSULTANT'S NAME

CONVENTIONAL POLE DETAIL

SHEET

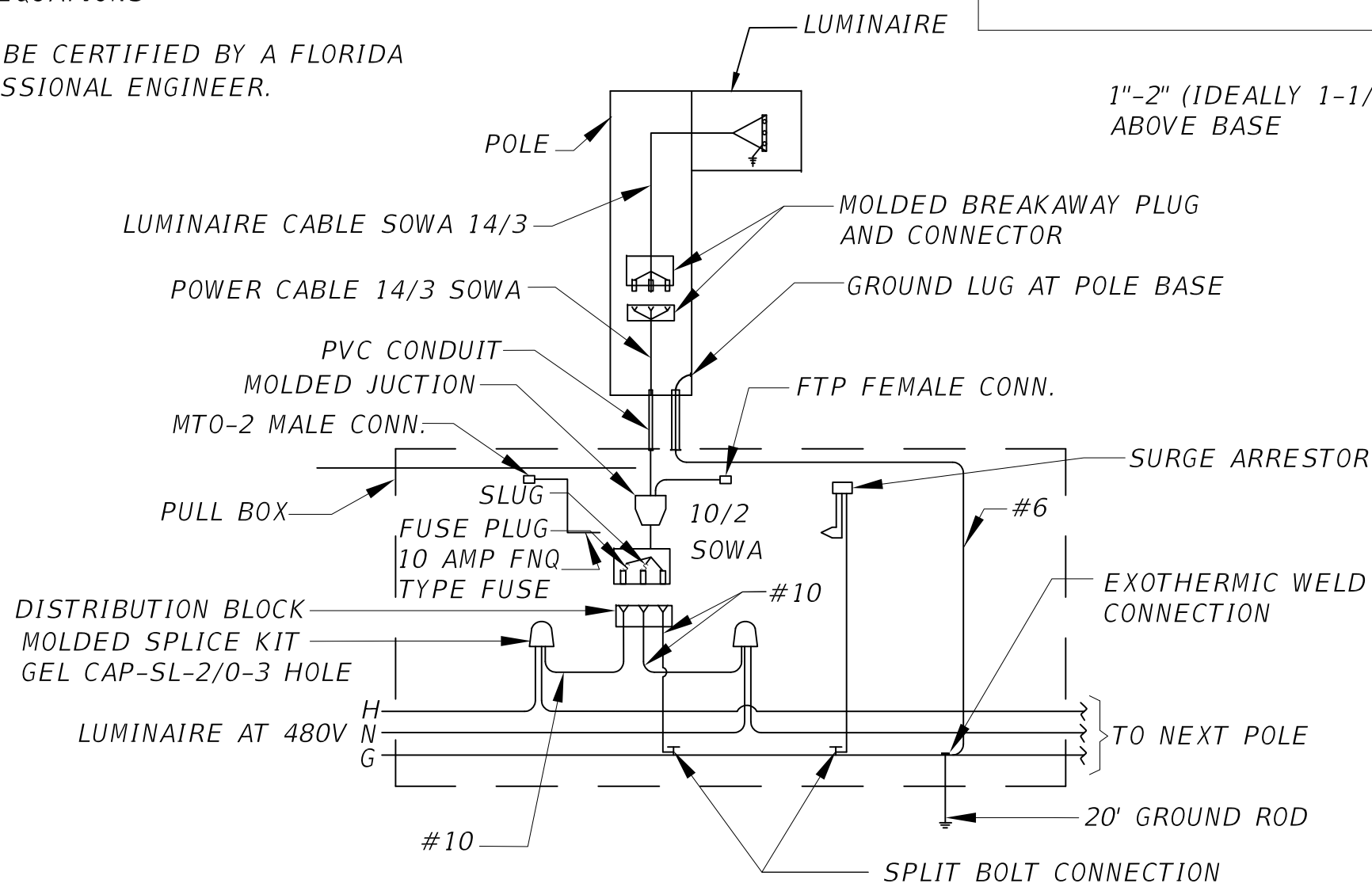
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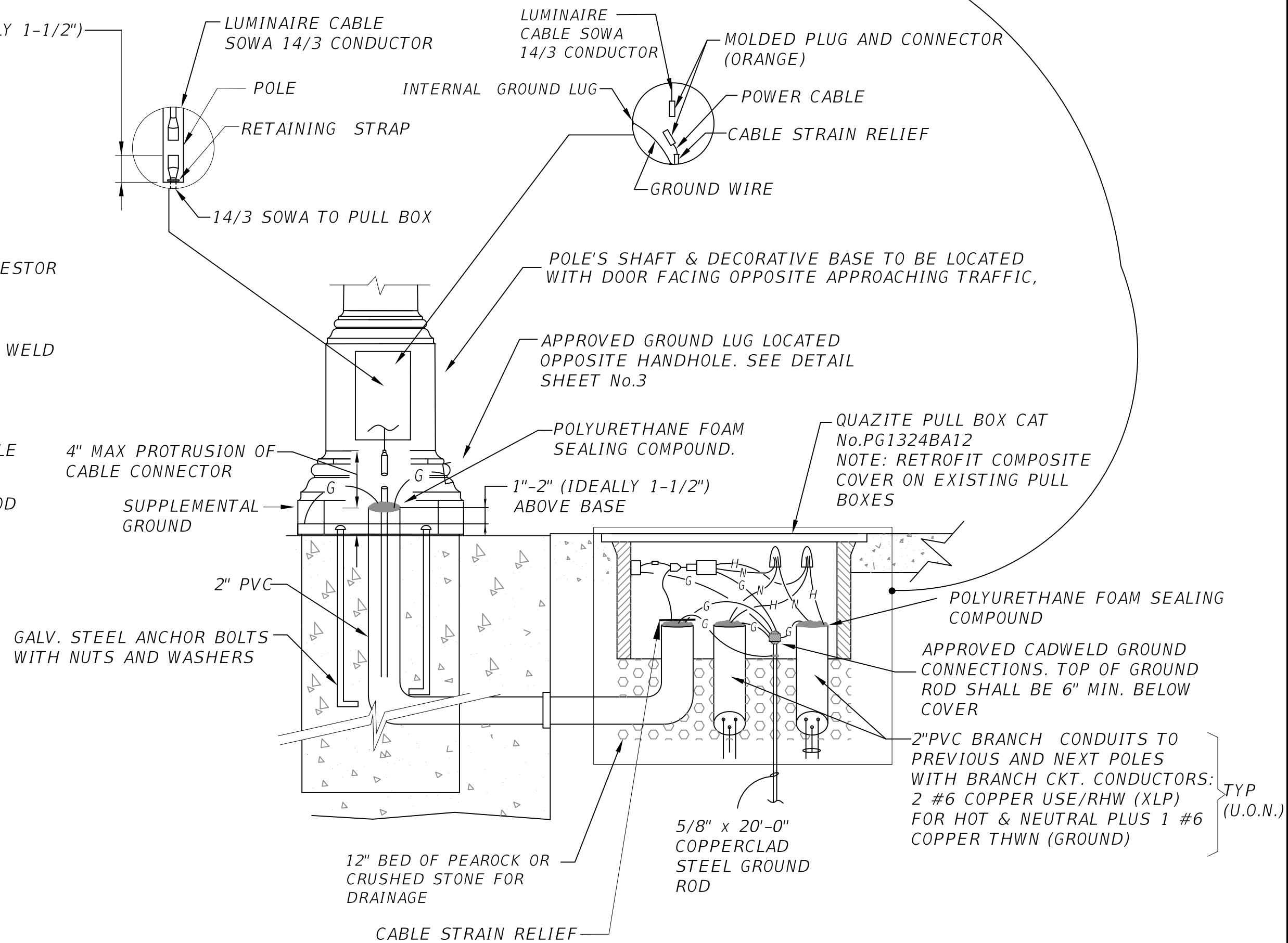
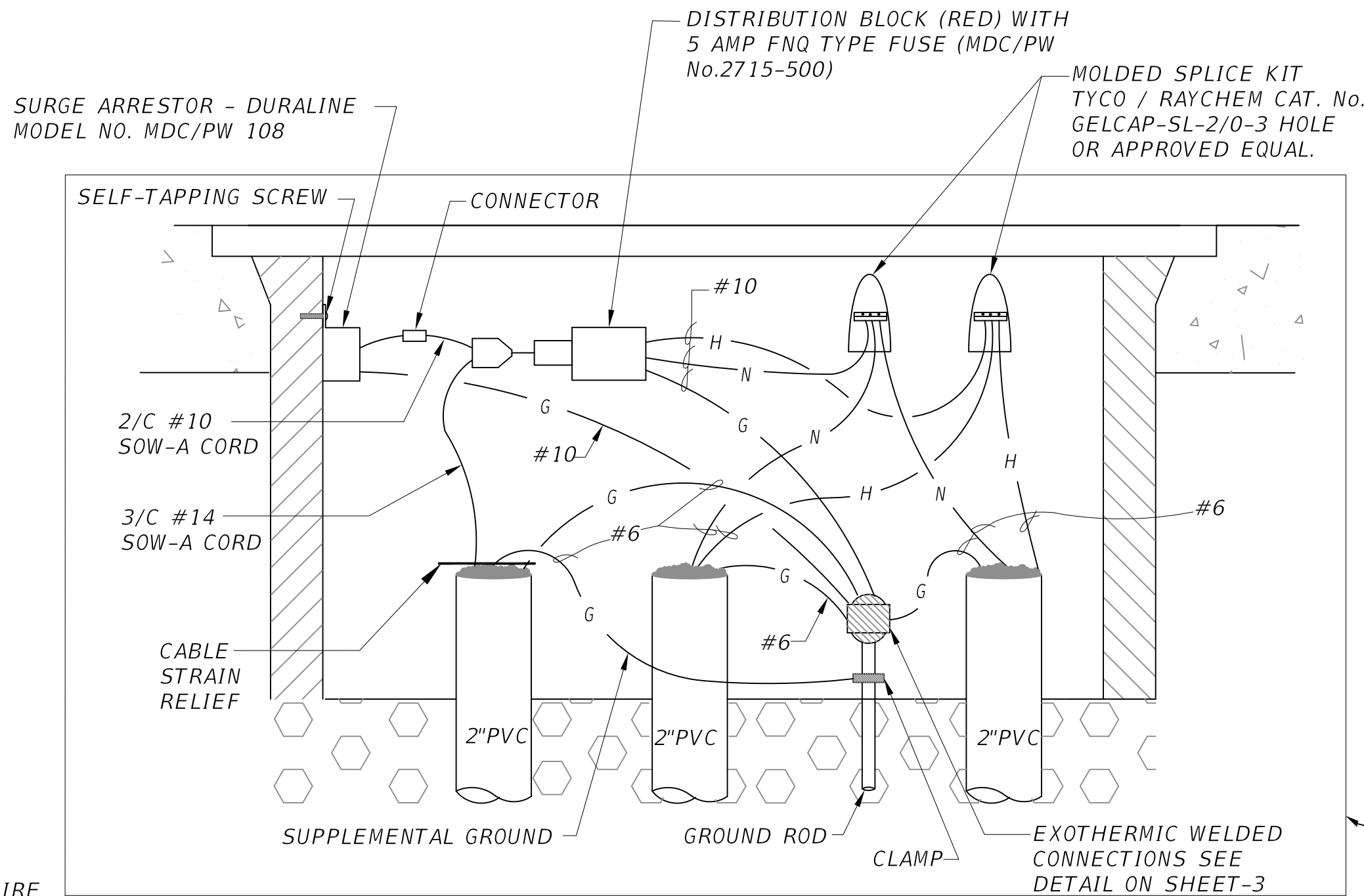
TYPICAL METAL POLE INSTALLATION DETAIL
N.T.S.

SHOP DRAWINGS

- A. DESIGN CRITERIA/PARAMETERS/POLE SHOP DRAWINGS
1. MUST COMPLY WITH CURRENT AASHTO SPECIFICATIONS IN REGARD TO GROUP LOADING,WIND VELOCITY,HEIGHT & DRAG COEFFICIENT ETC.
 2. LIST: AREA OF WIND EXPOSURE,COMPONENT DEAD WEIGHTS, APPLICABLE COEFFICIENT FOR EACH
 3. IDENTIFY ANY EXEPTIONS TO AASHTO (LOADING/AND OR ANALYSIS)
 4. PROVIDE MATERIALS SPECIFICATIONS,ALLOWABLE STRESSES, METHODS OF ANALYSIS.
- B. POLE SHAFT COMPUTATIONS
1. CONSIDER WIND AND DEAD LOAD ON ALL COMPONENTS
 2. ANALYZE EFFECTS OF COMBINED STRESS
 - A) MOMENT
 - B) SHEAR
 - C) TORSION
 - D) COMPUTE CSR PER AASHTO
 3. CRITICAL AREAS OF STRESS
 - A) BASE OF POLE
 - B) MANHOLE
 - C) POLE CROSS-SECTION
- C. ARM STRESS COMPUTATIONS
1. CONSIDER WIND AND DEAD LOAD ON ALL COMPONENTS.
 2. ANALYZE EFFECTS OF COMBINED STRESS.
 - A) MOMENT
 - B) SHEAR
 - C) COMPUTE CSR PER AASHTO
 3. CRITICAL AREAS OF STRESS
 - A) TUBE COMPONENTS AT POLE CONNECTION
 - B) ACTUAL CONNECTION/FASTENERS
- D. MISCELLANEOUS COMPUTATIONS / ANALYSIS
1. SECTION PROPERTIES
 2. WELD ANALYSIS (IF APPLICABLE)
 3. LOADING DIAGRAM (POLE AND ARM)
 4. CONNECTION DETAILS
 5. TEST REFERENCES,EQUATIONS
- E. THE TEST REPORT SHALL BE CERTIFIED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.



- NOTES
- 1) A- ESPLANADE TEAR DROP TEARDROP LED 2 SERIES UP TO 25,331 LUMENS: 2700K, 3000K, 4000K AND 5000K CCT, AUTO-SENSING VOLTAGE (120-277 AND 347 THRU 480) 50/60 HZ, BLACK, TEARDROP GLASS AND DOOR, TYPE 3 ASYMMETRIC DISTRIBUTION, QUICK LOCK STEM MOUNT, RATED 40 DEG C, OPTIONS: FACTORY PROGRAMMED DRIVER, ADJUSTABLE OUTPUT DIMMING, HSS, DEEP AND SHALLOW SKIRTS, BOWL AND SAG GLASS OR APPROVED EQUAL.
 - B- HPS FIXTURE UL LISTED FOR WET LOCATION LUMINAIRE SHALL BE HOLOPHANE DECORATIVE OUTDOOR ESPLANADE CAT. ESU 250 HP 48B4DS OR APPROVED EQUAL.
 - 2) POLES, BRACKETS ARMS AND TRANSFORMER BASES SHALL BE ALLUMINUM AND DESIGNED IN ACCORDANCE WITH LOCAL DESIGN CRITERIA USING THE APPLICABLE EQUATIONS FOUND IN "STANDARD SPECIFICATIONS FOR HIGHWAY SIGNS, LUMINAIRE AND TRAFFIC SIGNALS" PUBLISHED BY CURRENT A.A.S.H.T.O. THE CONTRACTOR (SUPPLIER) SHALL SUBMIT EVIDENCE OF DEMOSTRATED COMPLIANCE WITH THE REQUIREMENTS OF THIS SPECIFICATION ALONG WITH HIS EQUIPMENT SUBMITTAL DATA. NO POLES ARE TO BE INSTALLED PRIOR TO DEPARTMENT APPROVAL.



POLE WIRING DETAIL WITH PULL BOX
N.T.S.

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
[PROJECT NAME]
[LIMITS]
PROJECT NO. _____ SHEET ____ OF ____
THESE DRAWINGS DEPICT PREFERRED INSTALLATION METHODS OR SOLUTION FOR STANDARD JOB CONDITIONS. PROJECT ENGINEER SHALL EVALUATE SPECIFIC JOB REQUIREMENTS BEFORE APPLYING ANY OF THESE DETAILS, AND SHALL PROVIDE ADDITIONAL DETAILS ON SEPARATE SHEETS TO SUIT JOB CONDITIONS

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CONSULTANT'S NAME

DESIGNED BY	CHECKED BY	NAME	DATE	DRAWN BY	CHECKED BY	NAME	DATE
SUPERVISED BY:							

MIAMI-DADE	DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS TRAFFIC, SIGNALS & SIGNS DIVISION 7100 NW 36 STREET MIAMI, FLORIDA 33166
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**DECORATIVE POLE
DETAIL 1**

SHEET



- A. DESIGN CRITERIA/PARAMETERS/POLE SHOP DRAWINGS
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AND 347 THRU 480) 50/60 HZ, BLACK, TEARDROP GLASS AND DOOR, TYPE
3 ASYMMETRIC DISTRIBUTION, QUICK LOCK STEM MOUNT, RATED 40 DEG C,
OPTIONS: FACTORY PROGRAMMED DRIVER, ADJUSTABLE OUTPUT DIMMING,
HSS, DEEP AND SHALLOW SKIRTS, BOWL AND SAG GLASS OR APPROVED
EQUAL.

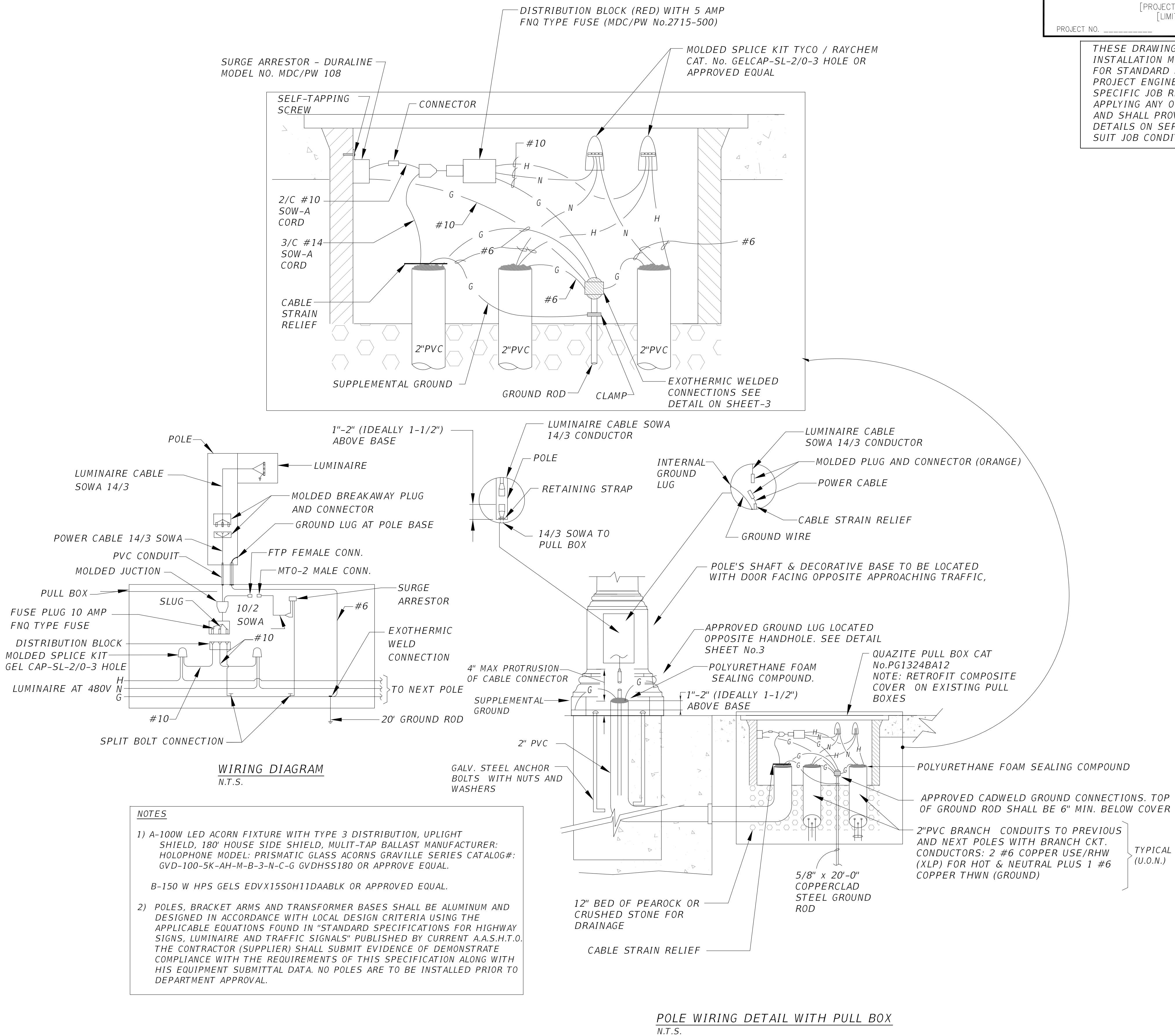
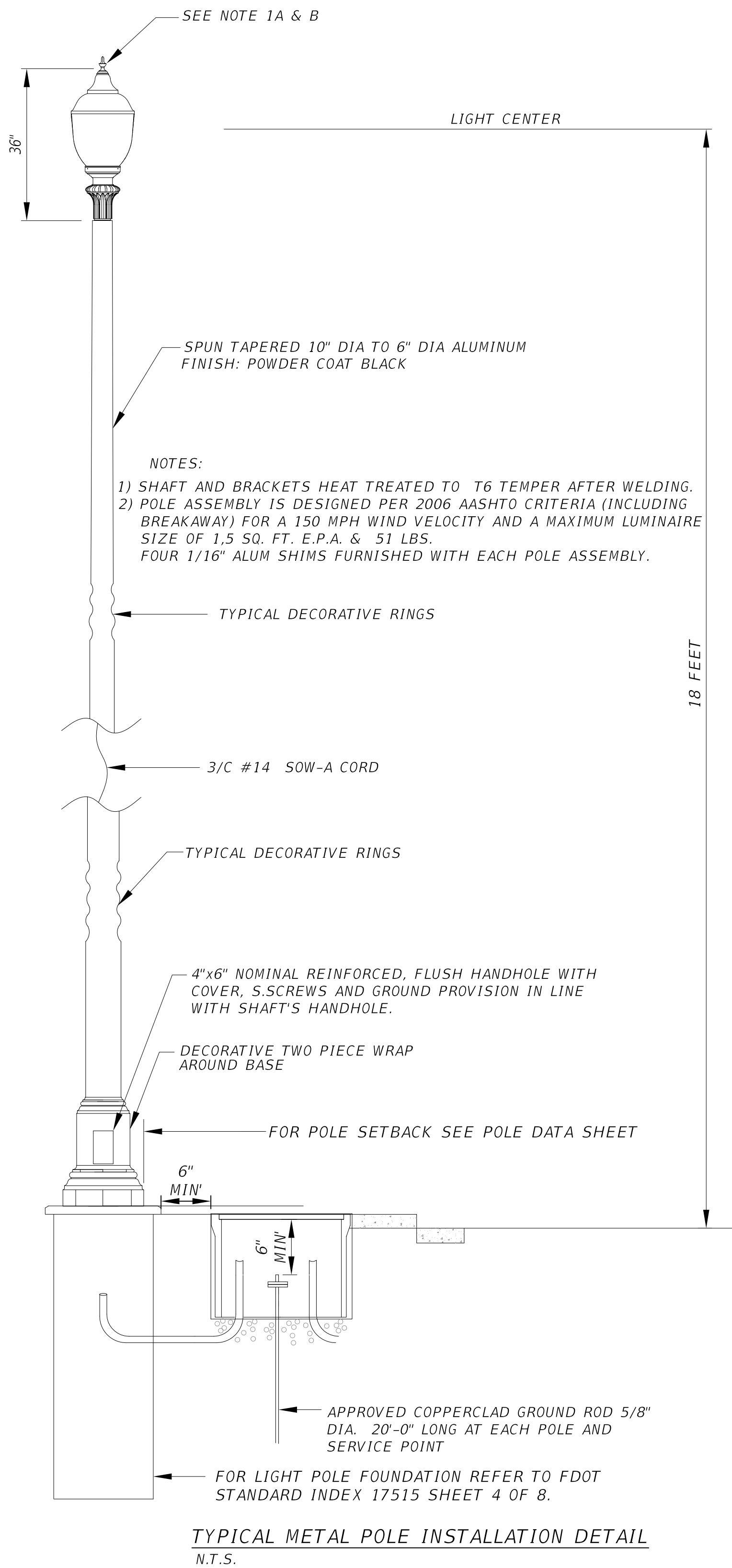
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CONSULTANT'S NAME

DECORATIVE POLE
DETAIL 2

SHEET

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MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
[PROJECT NAME]
[LIMITS]
PROJECT NO. _____ SHEET ____ OF ____

THESE DRAWINGS DEPICT PREFERRED
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PROJECT ENGINEER SHALL EVALUATE
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AND SHALL PROVIDE ADDITIONAL
DETAILS ON SEPARATE SHEETS TO
SUIT JOB CONDITIONS

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CONSULTANT'S NAME

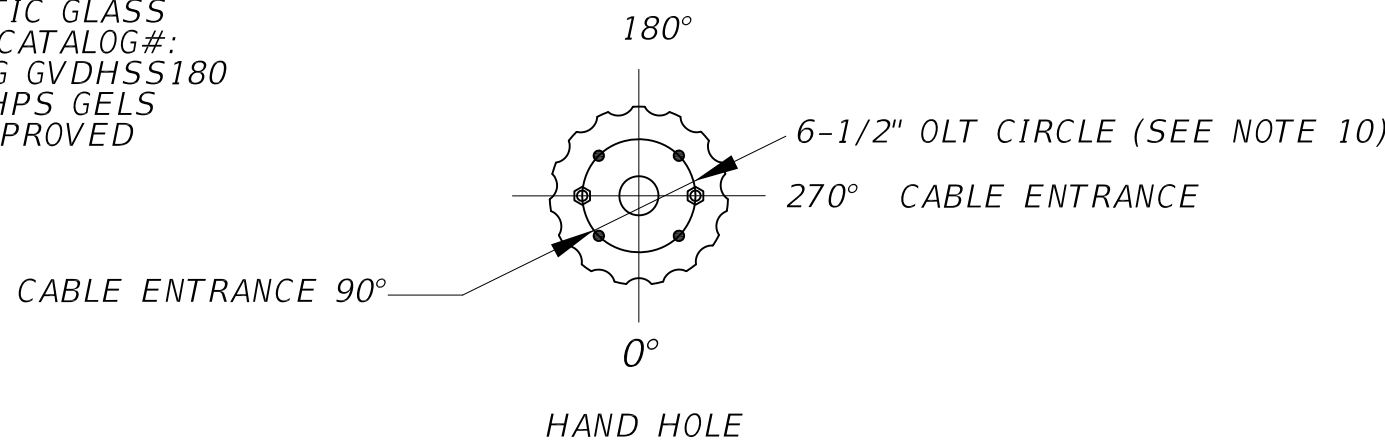
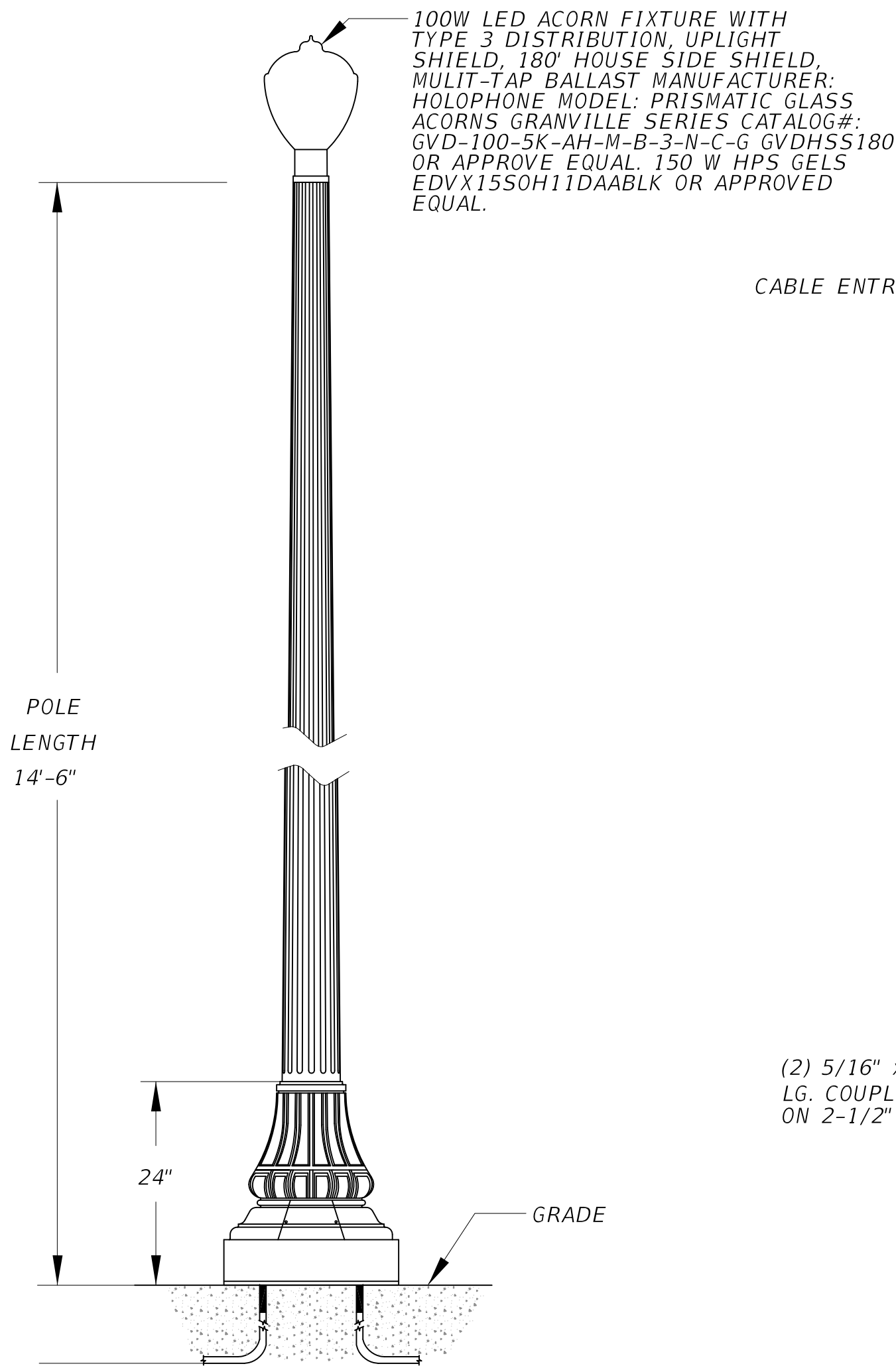
DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY:					

MIAMI-DADE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

PEDESTRIAL POLE
DETAIL 1

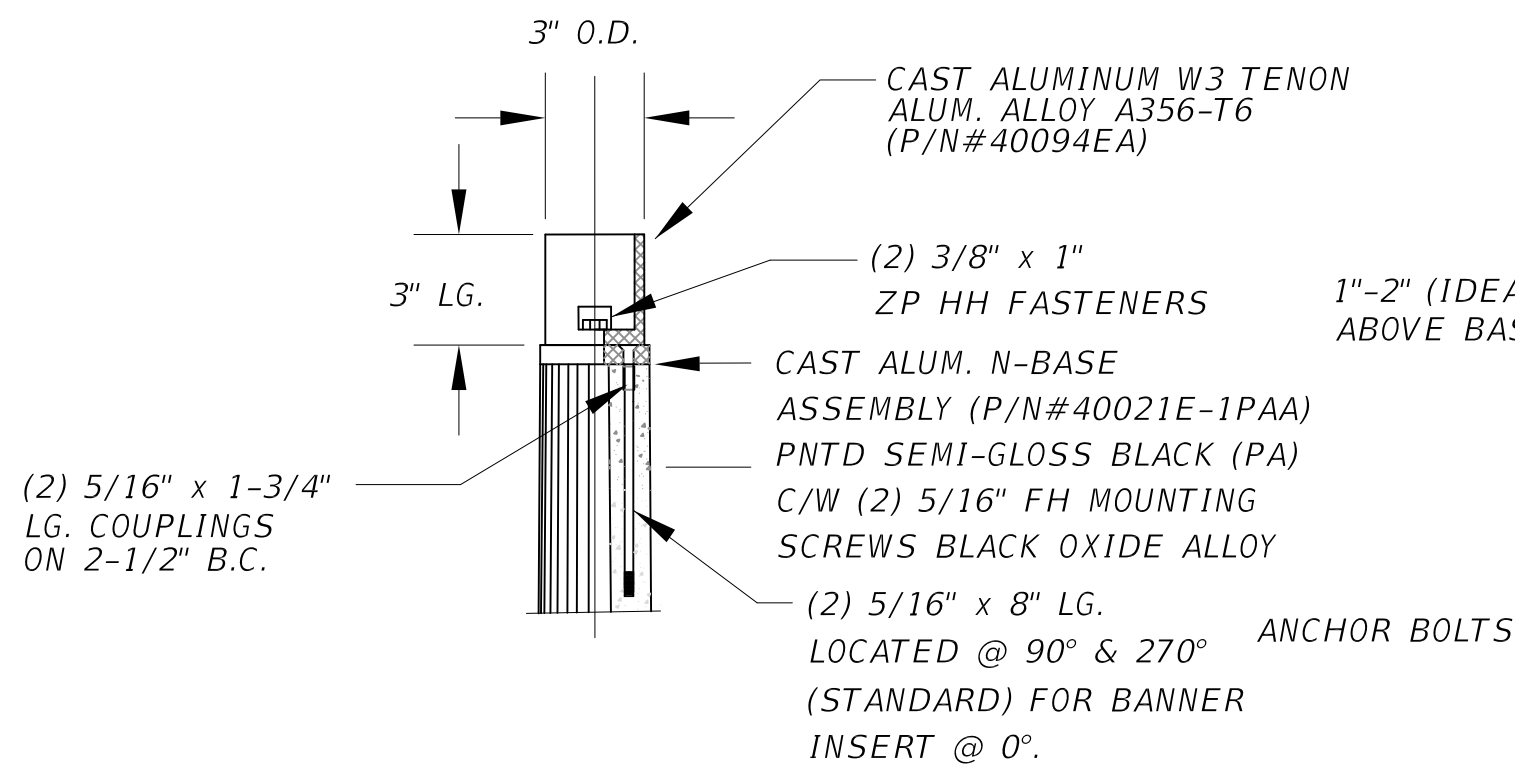
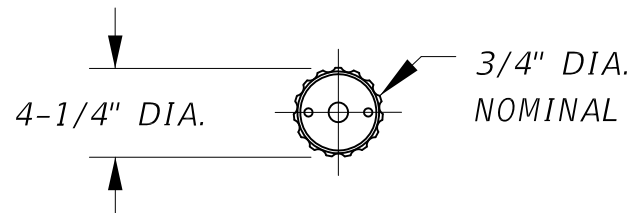
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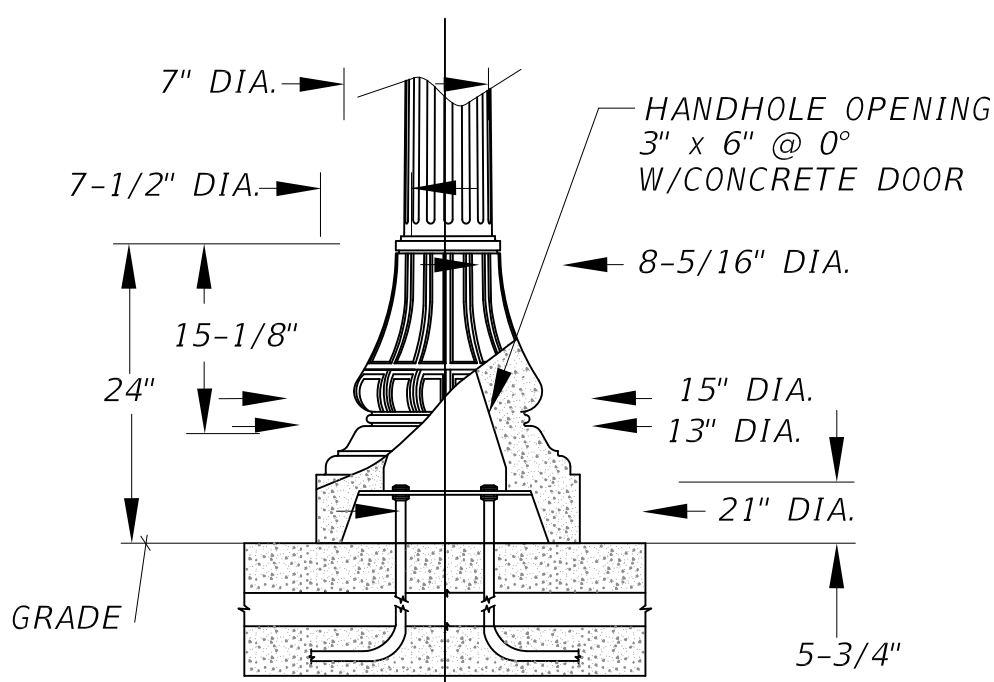
POLE ORIENTATIONS

N.T.S.



TOP MOUNT DETAIL

N.T.S.



BASE DETAIL

N.T.S.

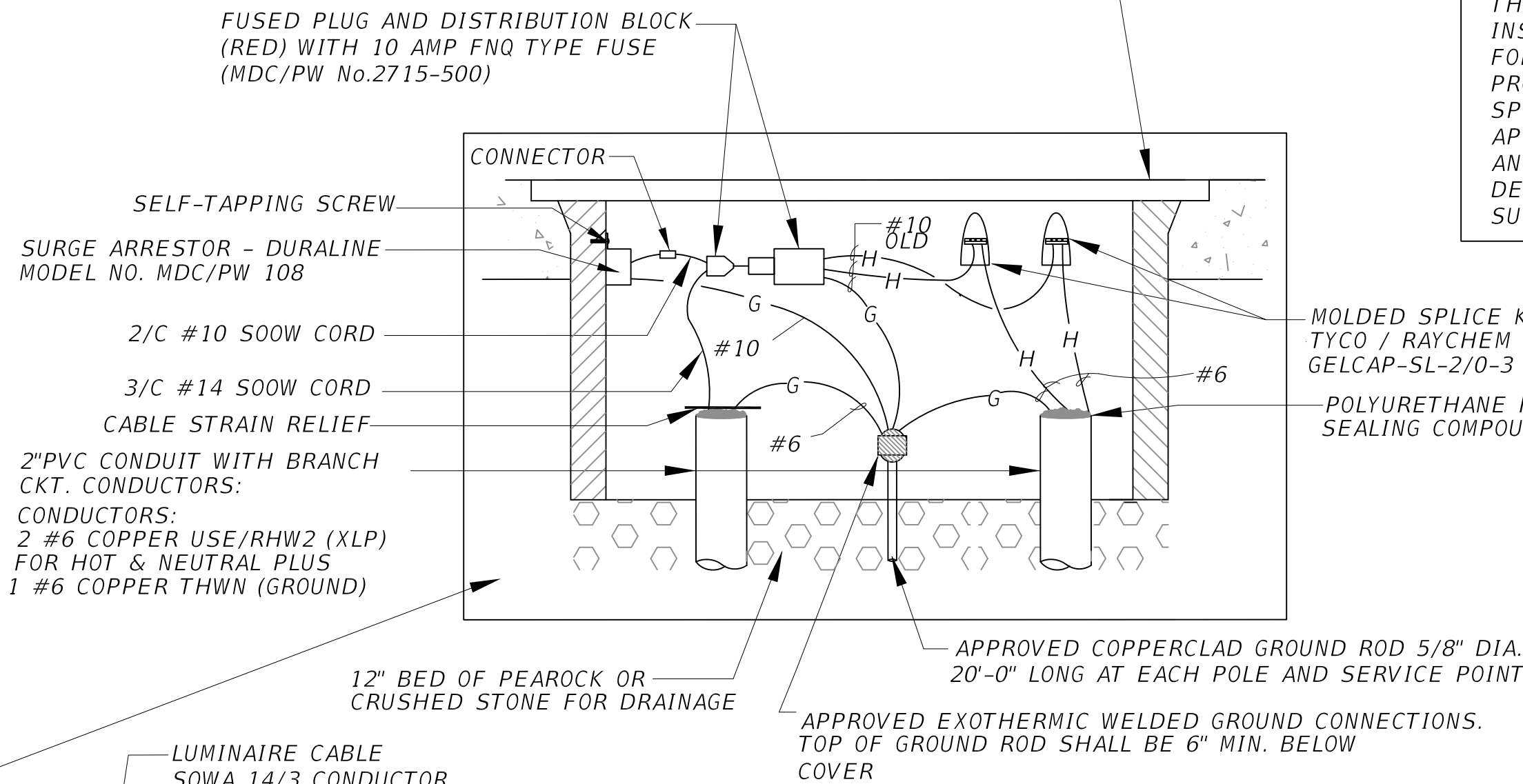
NOTES:

- CONCRETE MIX (121): BLACK , EXPOSED AGGREGATE FINISH, WITH AMERSHIELD ANTI-GRAFFITI COATING.
- ASTM C-150 TYPE III GRAY CEMENT.
- f'c @ 28 DAYS = 7,000 PSI, USING SPUN CYLINDER TEST.
- f'c @ 28 DAYS = 5,000 PSI, USING ASTM C-31 CYLINDER TEST.
- POLES MANUFACTURED PER ASTM C-1089-97 SPECIFICATIONS.
- BITUMASTIC COAT P.C. WIRES AT POLE ENDS.
- PRESTRESSED WITH (4) 9MM DIA A-421 MONOSTRAND TENDONS.
- PAINT EXPOSED TENON TOP SEMI-GLOSS BLACK (PA).
- ULTIMATE GROUND LINE MOMENT = 7,500 FT-LBS.
- PROPOSED DRILLED SHAFT FOUNDATION (2'-6" X 6'-0"), ANCHOR BOLT MATERIAL AND PROJECTION SHALL BE IN ACCORDANCE WITH FDOT INDEX 17515 SHEET 4 OF 8. BOLT DIAMETER AND BOLT CIRCLE SHALL BE AS PER MANUFACTURER'S SPECIFICATIONS. ANCHOR BOLTS AND HARDWARE TO BE GALVANIZED PER SECTION 460-30 OF FDOT SPECIFICATION.
- CONTRACTOR SHALL SUBMIT LIGHT POLE SHOP DRAWINGS FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.

INTERNAL BASE PLATE STYLE - INFORMATION

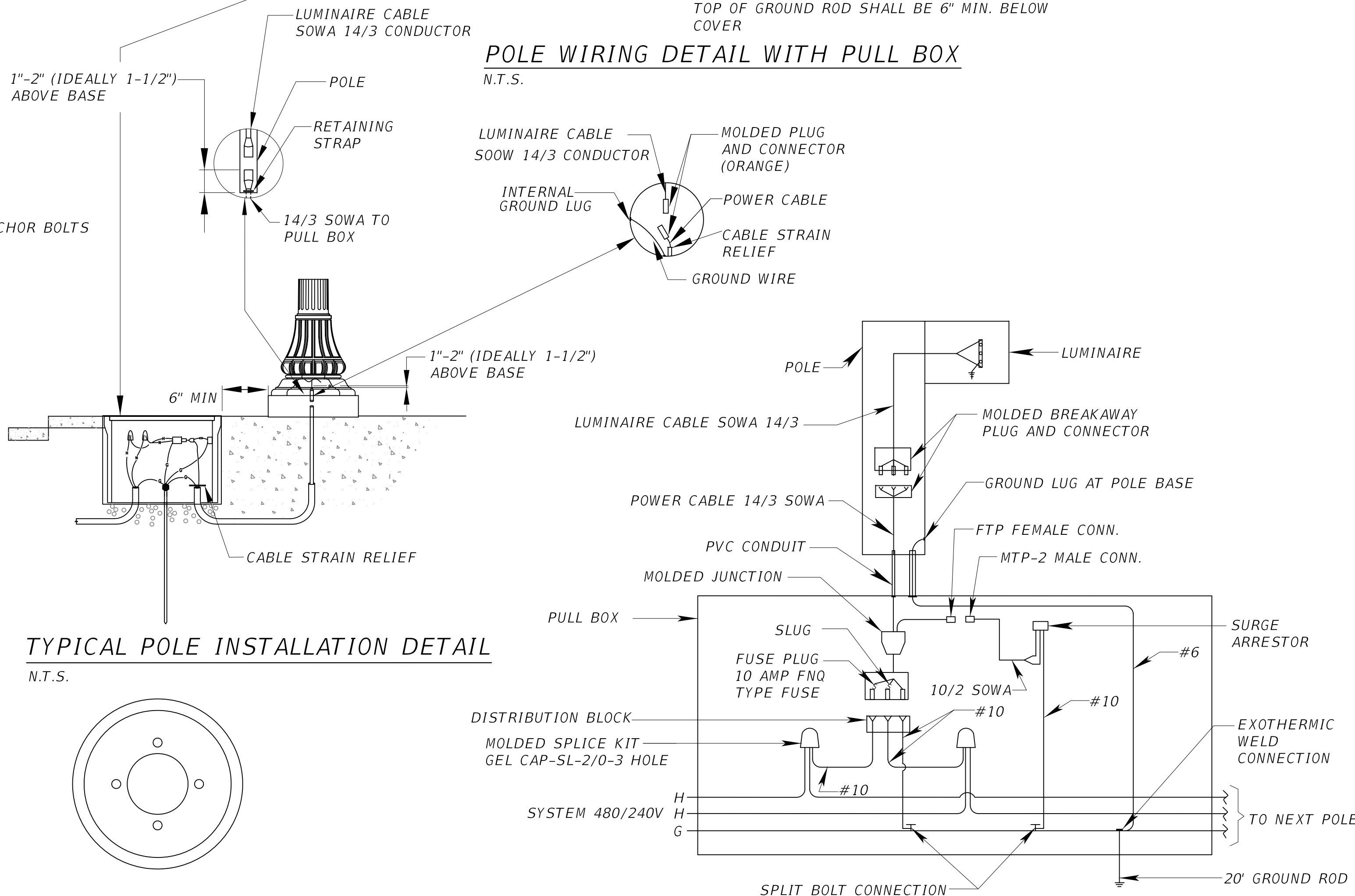
CATALOG NUMBER	POLE HEIGHT "A"	BASE O.D.	ANCHOR BOLT SIZE A449	BOLT CIRCLE (IN)	BASE PLATE (SQ)	ULTIMATE G.L. MOMENT (FT.LBS.)	POLE WIEGHT (LBS.)	MAXIMUM EPA/MPH (SQ FT)* 80 90 100
26ST14	14'-6"	21"	3/4" A449	6-1/2"	N/A	7,500	480	7.0 6.0 5.0

QUAZITE PULL BOX CAT No.PG1324BA12 OR APPROVED EQUAL.
NOTE: RETROFIT COMPOSITE COVER ON EXISTING PULL BOXES



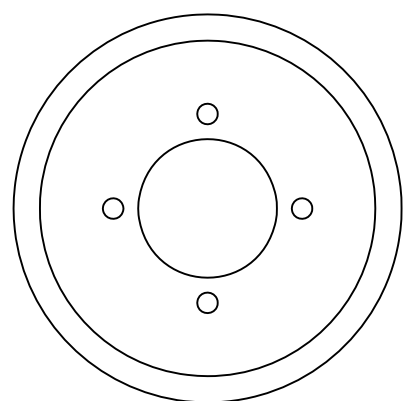
POLE WIRING DETAIL WITH PULL BOX

N.T.S.



TYPICAL POLE INSTALLATION DETAIL

N.T.S.



INTERNAL BOLTING

N.T.S.

WIRING DIAGRAM (POLE CABLE DISTRIBUTION SYSTEM)

N.T.S.

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
[PROJECT NAME]
[LIMITS]
PROJECT NO. _____ SHEET ____ OF ____

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REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CONSULTANT'S NAME

DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY					



PEDESTRIAN POLE
DETAIL 2

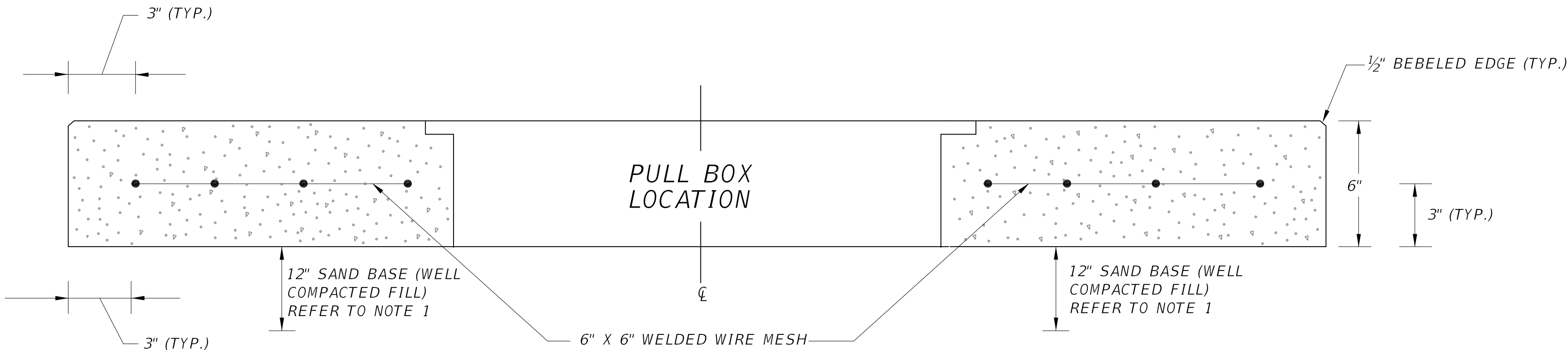
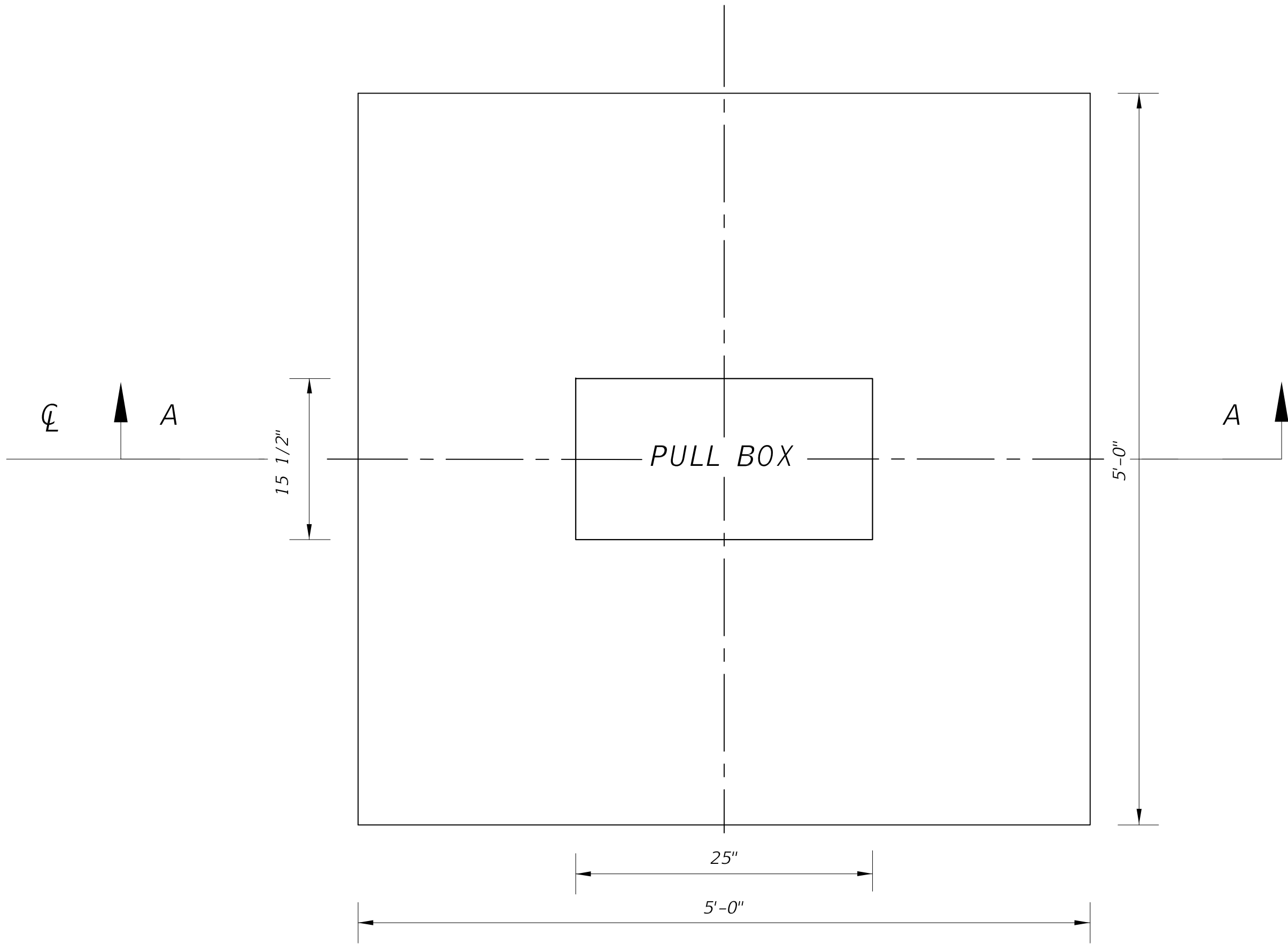
SHEET

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NOTES:

- 1- USE COMPACTED SELECT MATERIAL IN ACCORDANCE WITH FDOT STANDARD INDEX 505.
- 2- CONCRETE SHALL BE CLASS NS WITH A MINIMUM STRENGTH AT 28 DAYS OF F'C=2.5 KSI.
- 3- OUTSIDE EDGE OF SLAB SHALL BE CAST AGAINST FORM-WORK.
- 4- THE PULL BOX SHOWN IS 13" x 24" (INTERIOR DIMENSIONS) & 15 1/2" X 25" (EXTERIOR DIMENSIONS); OTHERS APPROVED UNDER SECTION 635 OF THE STANDARD SPECICATIONS MAY USED.
- 5- SLABS TO BE PLACED AROUND ALL POLES AND PULL BOXES IN RULAL LOCATIONS. IN URBAN AREAS OR WHERE SPACE IS LIMITED SLAB DIMENSIONS MAY BE ADJUSTED AS SHOWN IN THE PLANS.
- 6- CONCRETE FOR SLABS AROUND PULL BOXES BE INCLUDED IN THE PRICE OF PULL BOX.
- 7- CONCRETE FINISH TO BE LIGHT BROOM FINISH AND SLOPING AWAY FROM CENTERS.

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MIAMI-DADE

DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

SLAB DETAILS FOR
INTERMEDIATE
PULL BOX LOCATIONS 1

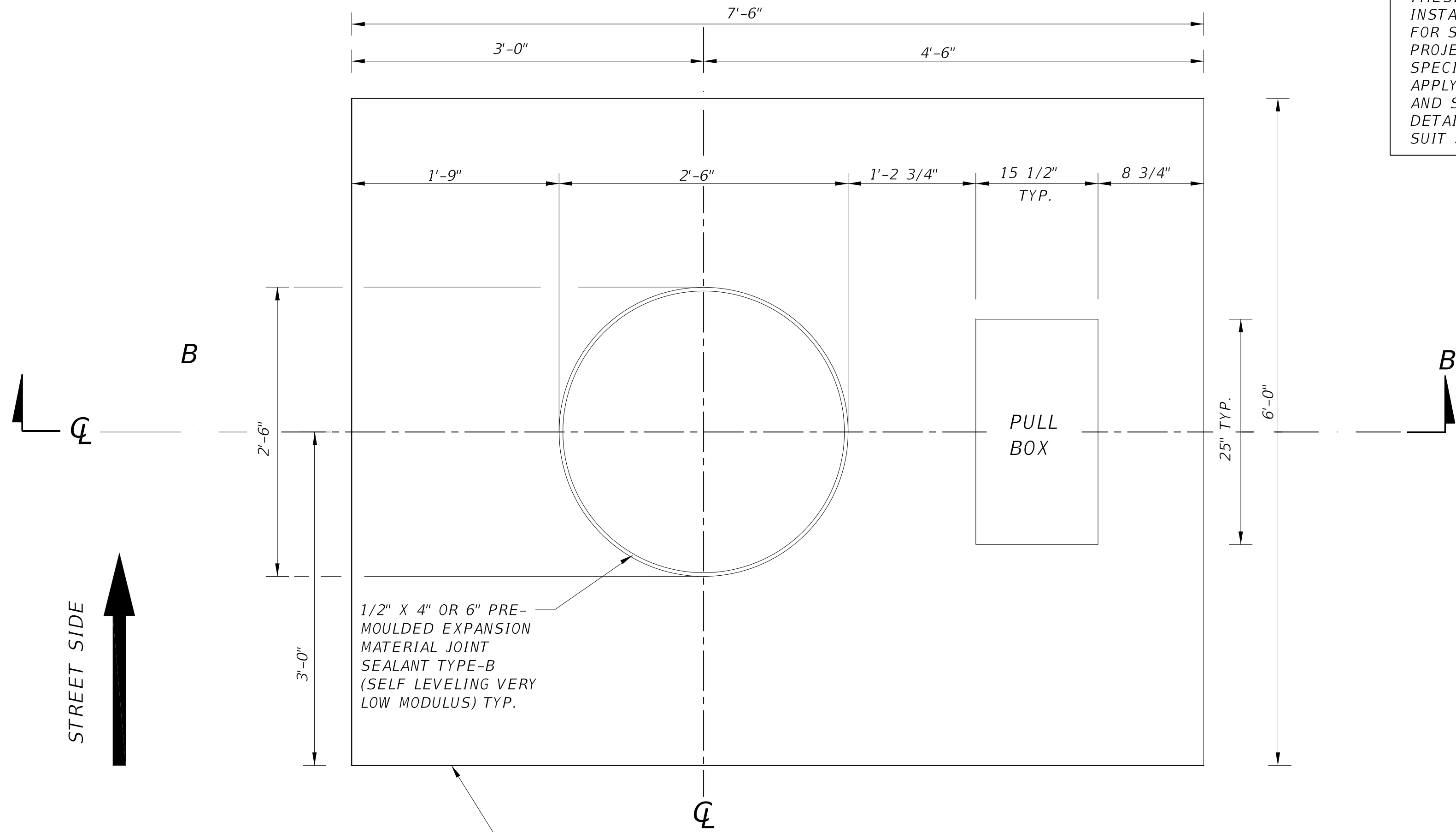
SHEET

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- NOTES:
- 1- THIS DETAIL IS APPLICABLE FOR INSTALLATION IN SOD AREA AND NOT FOR SIDEWALK.
 - 2- USE COMPACTED SELECT MATERIAL IN ACCORDANCE WITH FDOT STANDARD INDEX 505.
 - 3- CONCRETE SHALL BE CLASS NS WITH A MINIMUM STRENGTH AT 28 DAYS OF F'C=2.5 KSI.
 - 4- OUTSIDE EDGE OF SLAB SHALL BE CAST AGAINST FORMWORK.
 - 5- THE PULL BOX SHOWN IS 13" X 24" (INTERIOR DIMENSIONS) & 15 1/2" X 25" (EXTERIOR DIMENSIONS); OTHERS APPROVED UNDER SECTION 635 OF THE STANDARD SPECIFICATIONS MAY BE USED.
 - 6- SLABS TO BE PLACED AROUND ALL POLES AND PULL BOXES. IN URBAN AREAS OR WHERE SPACE IS LIMITED SLAB DIMENSIONS MAY BE ADJUSTED AS SHOWN IN THE PLANS.
 - 7- CONCRETE FOR SLABS AROUND POLES AND PULL BOXES SHALL BE INCLUDED IN THE PRICE OF POLE OR PULL BOX.
 - 8- THE EXPANSION JOINT SHALL CONSIST OF 1/2" OF CLOSED-CELL POLYETHELENE FOAM EXPANSION MATERIAL. THE TOP 1/2" OF EXPANSION MATERIAL SHALL BE REMOVED AFTER POURING THE SLAB AND SEALED WITH AN APL APPROVED TYPE A SEALANT MEETING THE REQUIREMENTS OF SECTION 932.

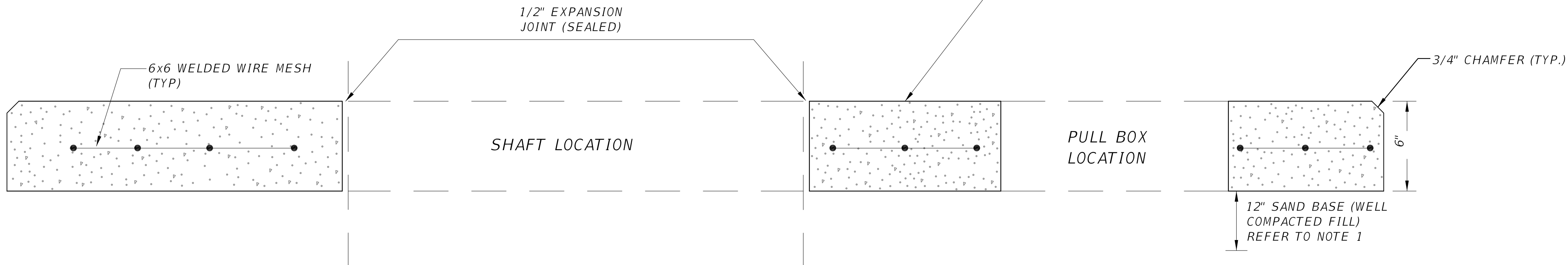
MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
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SLAB DIMENSIONS

PER FDOT 17502 (SHEET 7 OF 7)
AND ON THE MARKING ON THE PREVIOUS SHEET 2 OF 3



SECTION B-B

REVISIONS							
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

CONSULTANT'S NAME

DESIGNED BY	CHECKED BY	NAME	DATE	DRAWN BY	CHECKED BY	NAME	DATE
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MIAMI-DADE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

SLAB DETAILS FOR
INTERMEDIATE
PULL BOX LOCATIONS 2

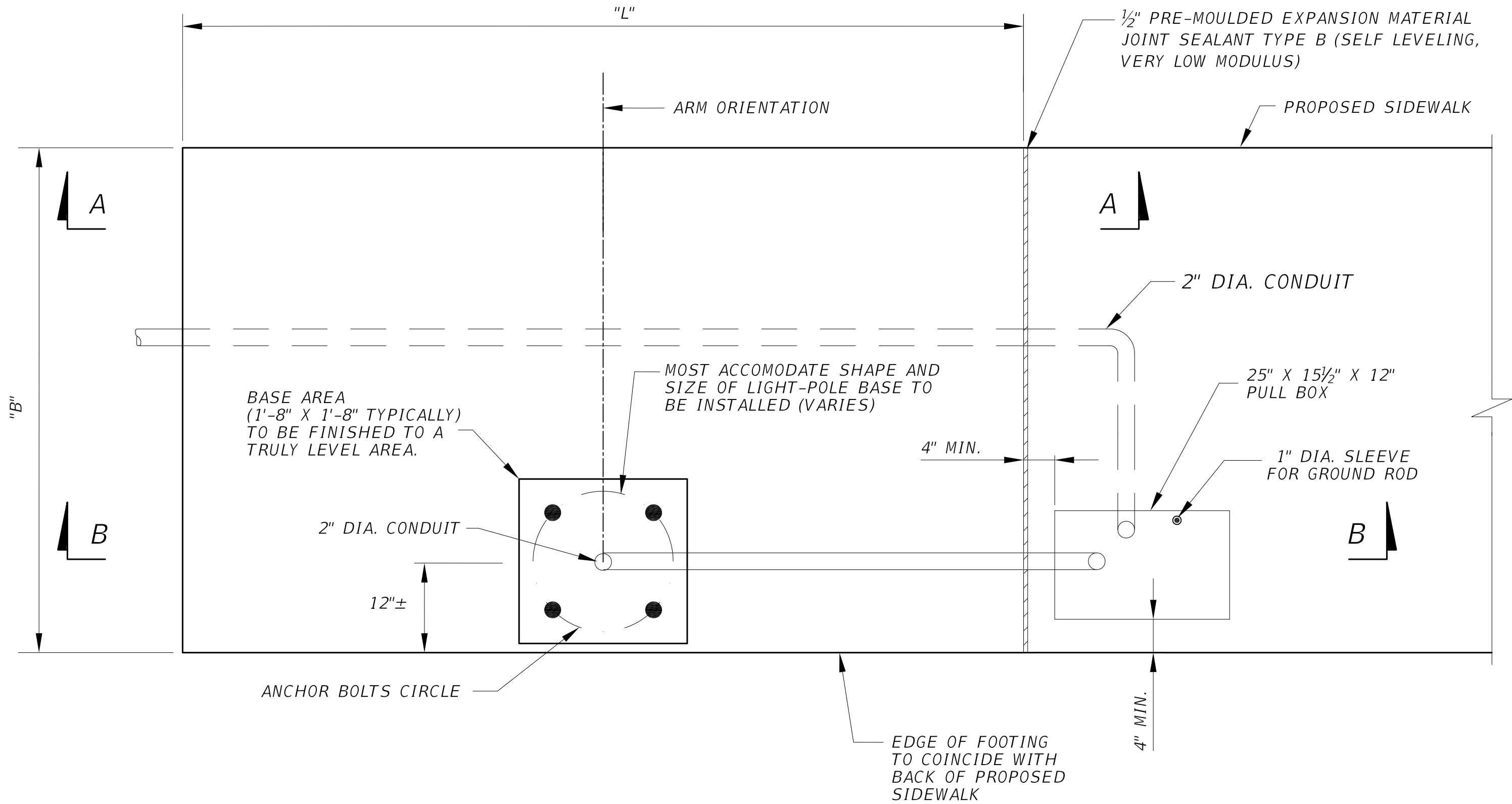
SHEET

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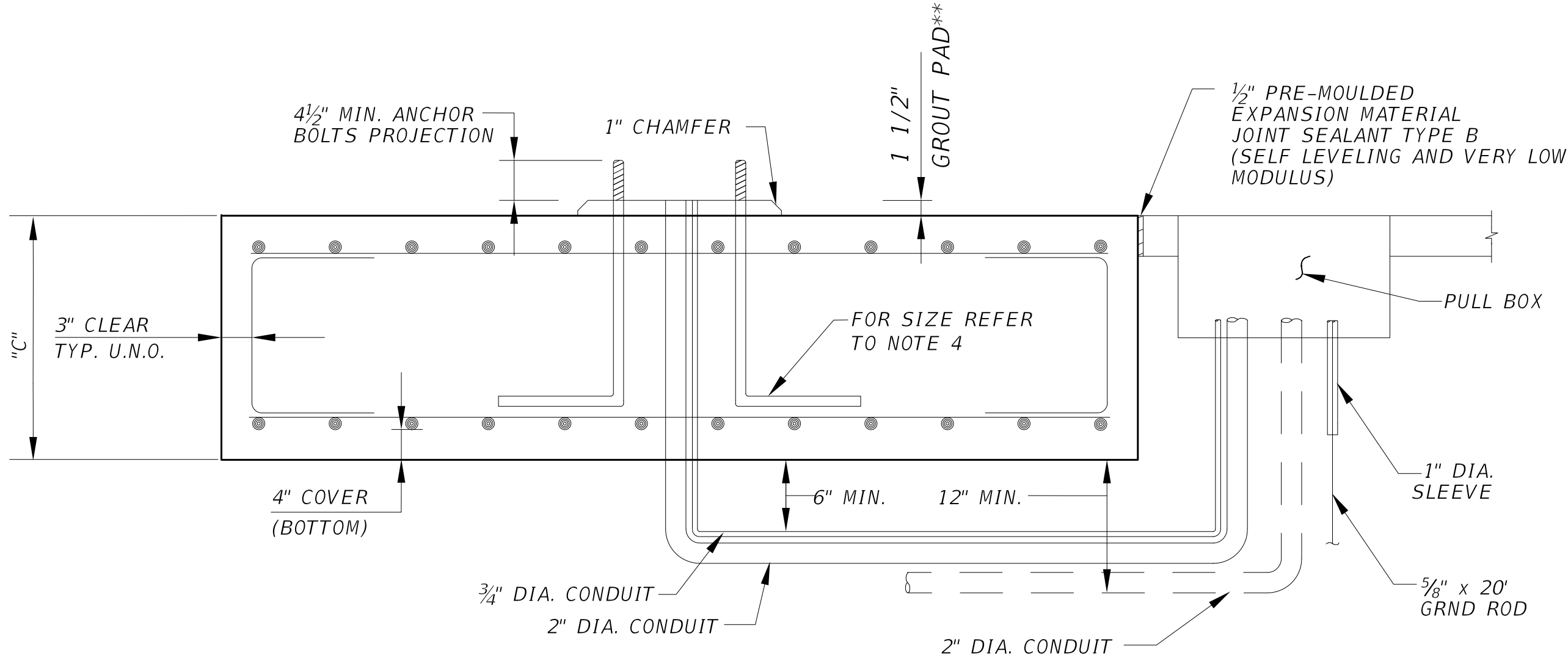
NOTE:
SPREAD FOUNDATION SHALL BE ENGRAVED WITH THIS WARNING:
" DO NOT CUT. THIS IS A STRUCTURAL FOUNDATION".

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
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[LIMITS]
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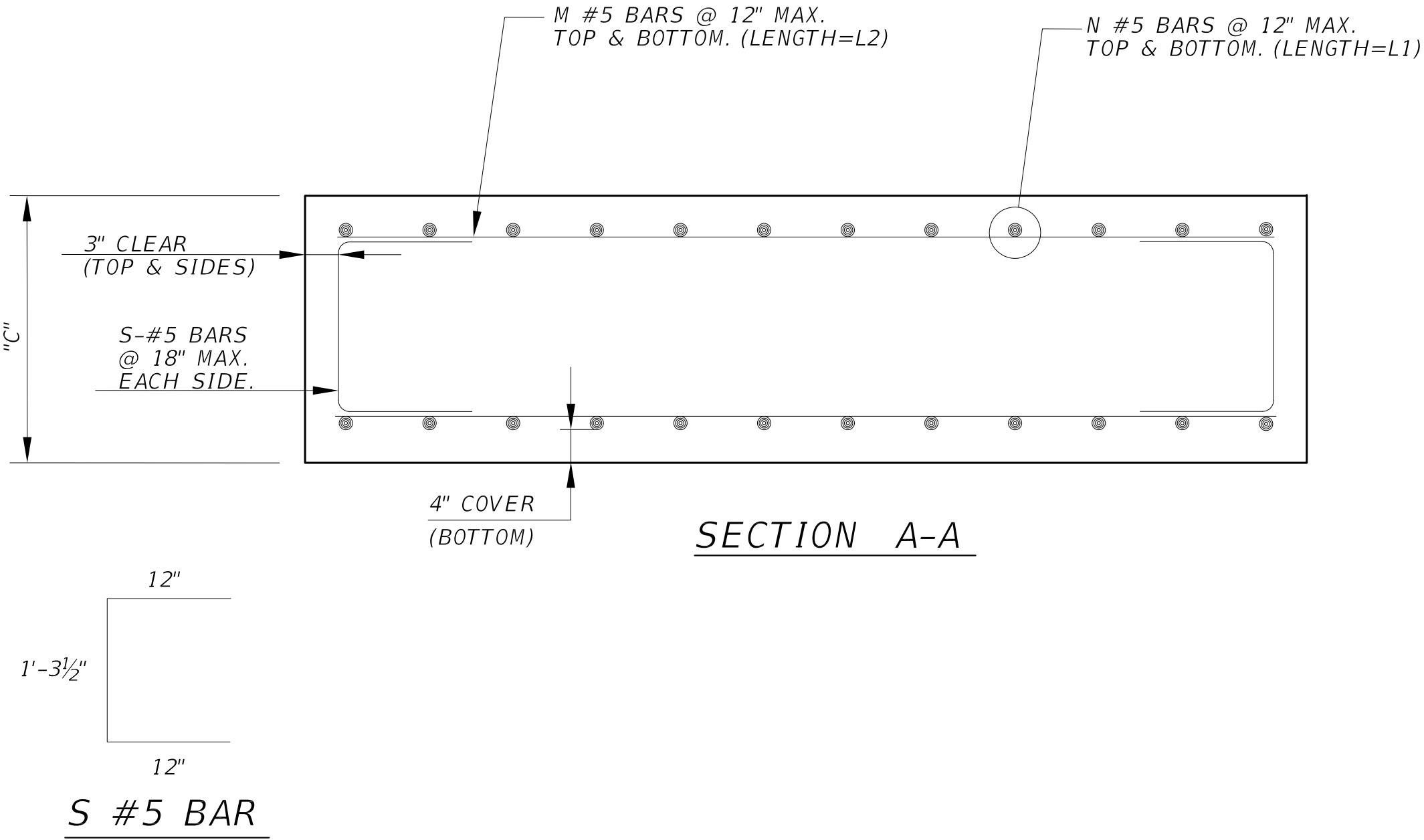


PLAN
SPREAD FOUNDATION (N.T.S.)



SECTION B-B
(CONTRACTOR MAY ADJUST BARS AS REQUIRED TO AVOID CONFLICT WITH CONDUITS)

** ALTERNATIVELY, SHIM PLATES WITH A MAXIMUM THICKNESS OF 1/2" MAY BE USED.



DESIGN SOIL PARAMETERS:

FRICTION ANGLE : *
SOIL DRY UNIT WEIGHT : *
SOIL SUBMERGED UNIT WEIGHT : *
ALLOWABLE BEARING CAPACITY : *
ULTIMATE BEARING CAPACITY : *
PERFORMANCE FACTOR: 0.45

* TO BE PROVIDED BY GEOTECHNICAL ENGINEER

DESIGN LOADS (45-FT POLE):

AXIAL DEAD LOAD : 405 LBS
WIND MOMENT (TRANSVERSE) : 28.52 FT-KIPS
WIND MOMENT (LONGITUDINAL) : 5.70 FT-KIPS
DEAD LOAD MOMENT (LONGIT.) : 1.342 FT-KIPS
SHEAR (TRANSVERSE) : 1,103 LBS
TORSION : 3.62 FT-KIPS

DESIGN LOADS (50-FT POLE):

AXIAL DEAD LOAD : 566 LBS
WIND MOMENT (TRANSVERSE) : 29.32 FT-KIPS
WIND MOMENT (LONGITUDINAL) : 5.87 FT-KIPS
DEAD LOAD MOMENT (LONGIT.) : 1.345 FT-KIPS
SHEAR (TRANSVERSE) : 1,103 LBS
TORSION : 2.84 FT-KIPS

TABLE OF SPREAD FOOTING PARAMETERS

POLE NO.	STATION	FOOTING TYPE	DIM. L	DIM. B	DIM. C	N	M	L1	L2	S
XX-X	XX+XX	1	11'-0"	6'-0"	2'-0"	24	14	5'-6"	10'-6"	10

NOTE: N & M INCLUDE TOP AND BOTTOM STEEL MATS.

NOTES:

- DESIGN SPECIFICATIONS:
FDOT STRUCTURES MANUAL, JANUARY 2015.
AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS (6TH ED) AS MODIFIED BY FDOT.
- FOUNDATION HAS BEEN DESIGNED FOR LIGHT POST OF UP TO 50'-0" MOUNTING HEIGHT AND UP TO 15'-0" ARM LENGTH.
DESIGN WIND PRESSURE BASED ON A 25 YEAR MEAN RECURRENCE INTERVAL (150 M.P.H. WIND SPEED).
- CONCRETE: CLASS II CONCRETE F'C=3400 PSI 28 DAYS MINIMUM COMP. STRENGTH.
- ANCHOR BOLTS: MATERIAL AND PROJECTION IN ACCORDANCE WITH STANDARD INDEX NO. 17515. DIAMETER, LENGTH, AND BOLTS CIRCLE AS PER MANUFACTURER'S SPECIFICATIONS.
ANCHOR BOLTS AND HARDWARE TO BE GALVANIZED PER SECTION 460-30 OF F.D.O.T. SPECIFICATIONS.
- SOIL SHALL BE CAPABLE OF WITHSTANDING BEARING PRESSURE.
- ALL CONDUITS SHALL BE P.V.C. SCHEDULE 40.
- WORK THIS SHEET IN CONJUNCTION WITH LIGHTING PLANS.
- CONDUIT SHALL NOT BE EMBEDDED IN FOOTING EXCEPT AS SHOWN IN SECTION B-B.

CONSULTANT'S NAME

DESIGNED BY	CHECKED BY	NAME	DATE	DRAWN BY	CHECKED BY	NAME	DATE

MIAMI-DADE

DEPARTMENT OF TRANSPORTATION
AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

SPREAD FOUNDATION
50' LIGHT POLE

SHEET

3" CLEAR (TOP & SIDES)

5 #5 BARS @ 12" MAX. EACH SIDE.

4" COVER (BOTTOM)

M #5 BARS @ 12" MAX. TOP & BOTTOM. (LENGTH=L2)

N #5 BARS @ 12" MAX. TOP & BOTTOM. (LENGTH=L1)

SECTION A-A

12"

1'-3 1/2"

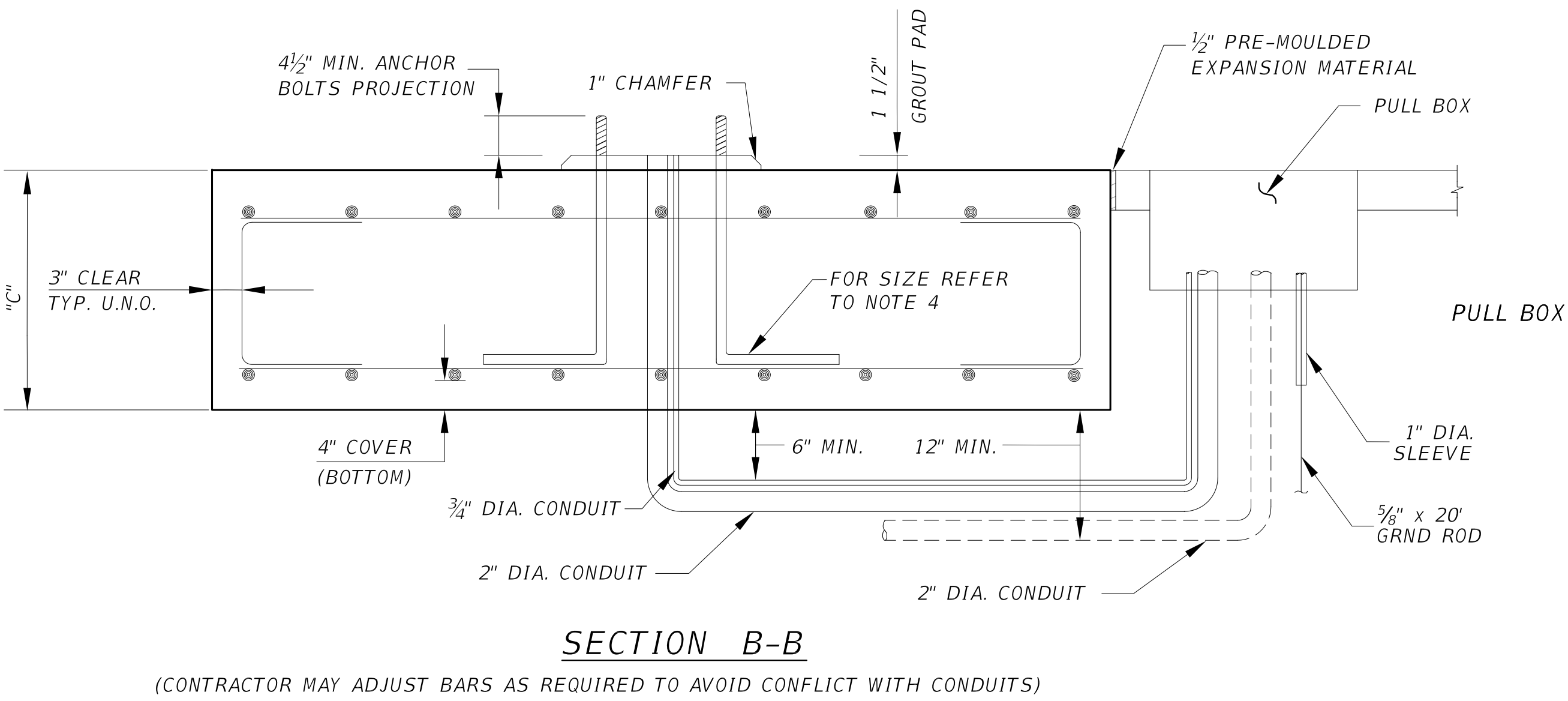
12"

S #5 BAR

AXIAL DEAD LOAD : 405 LBS
WIND MOMENT (TRANSVERSE) : 28.52 FT-KIPS
WIND MOMENT (LONGITUDINAL) : 5.70 FT-KIPS
DEAD LOAD MOMENT (LONGITUDINAL) : 1.342 FT-KIPS
SHEAR (TRANSVERSE) : 1,103 LBS
TORSION : 3.62 FT-KIPS

POLE NO.	STATION	FOOTING TYPE	DIM. L	DIM. B	DIM. C	N	M	L1	L2	S
XX-X	XX+XX	1	10'-0"	6'-0"	2'-0"	22	14	5'-6"	9'-6"	10

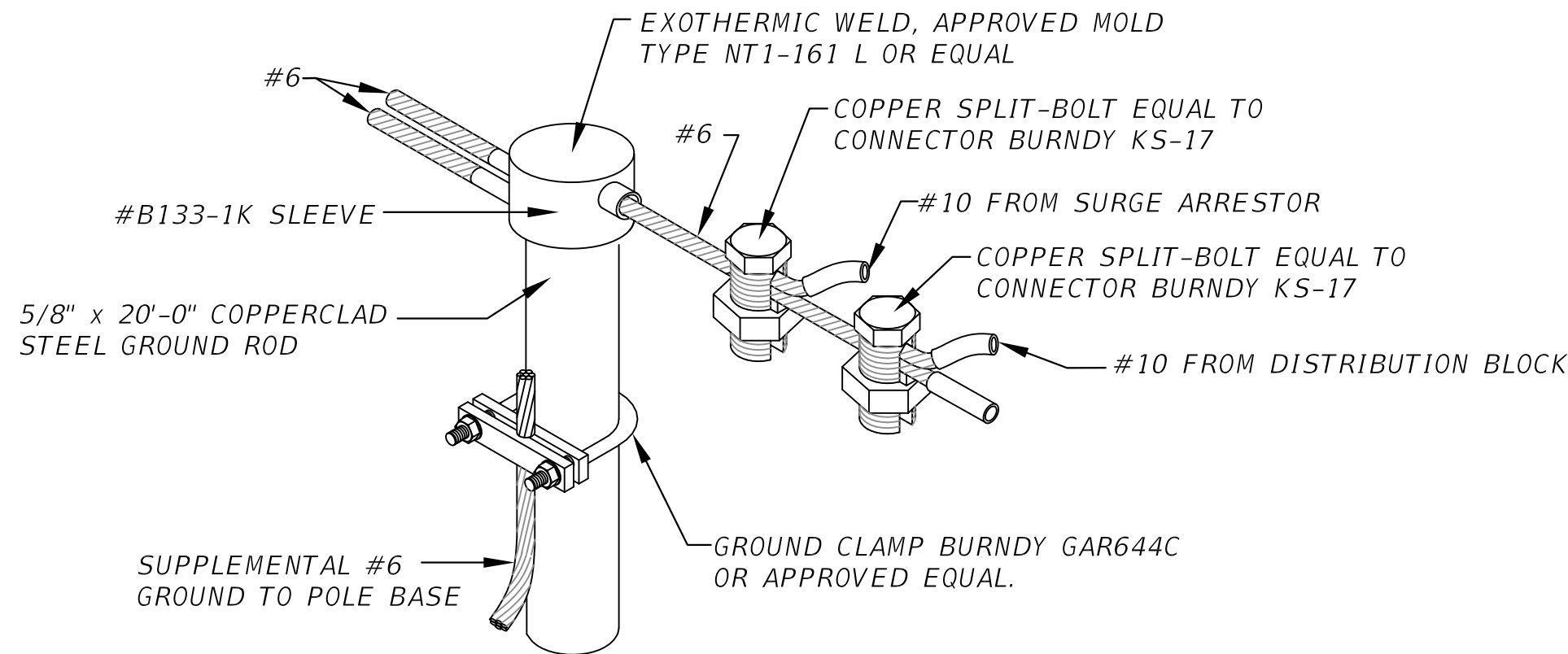
1. DESIGN SPECIFICATIONS:
FDOT STRUCTURES MANUAL, JANUARY 2015.
AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS (6TH ED) AS MODIFIED BY FDOT
2. FOUNDATION HAS BEEN DESIGNED FOR LIGHT POST OF UP TO 45'-0" MOUNTING HEIGHT AND UP TO 15'-0" ARM LENGTH.
DESIGN WIND PRESSURE BASED ON A 25 YEAR MEAN RECURRENCE INTERVAL (150 M.P.H. WIND SPEED).
3. CONCRETE: CLASS II CONCRETE $f'_c=3400$ PSI 28 DAYS MINIMUM COMP. STRENGTH.
4. ANCHOR BOLTS: MATERIAL AND PROJECTION IN ACCORDANCE WITH STANDARD INDEX NO. 17515. DIAMETER, LENGTH, AND BOLTS CIRCLE AS PER MANUFACTURER'S SPECIFICATIONS.
ANCHOR BOLTS AND HARDWARE TO BE GALVANIZED PER SECTION 460-30 OF F.D.O.T. SPECIFICATIONS.
5. SOIL SHALL BE CAPABLE OF WITHSTANDING BEARING PRESSURE.
6. ALL CONDUITS SHALL BE P.V.C. SCHEDULE 40.
7. WORK THIS SHEET IN CONJUNCTION WITH LIGHTING PLANS.
8. CONDUIT SHALL NOT BE EMBEDDED IN FOOTING EXCEPT AS SHOWN IN SECTION B-B.

[illegible]

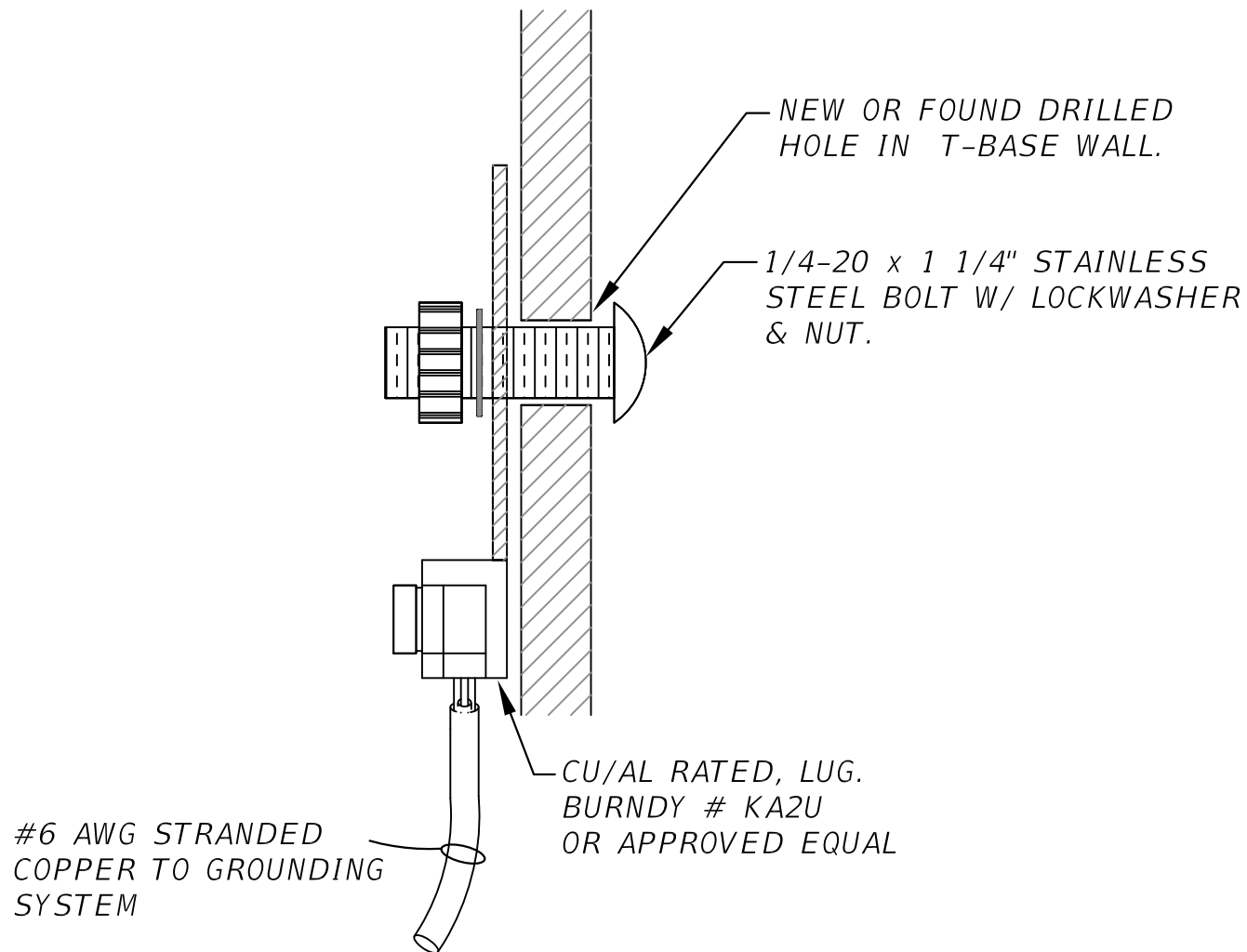
CONSULTANT'S NAME

	NAME	DATE		NAME	DATE
DESIGNED BY			DRAWN BY		
CHECKED BY			CHECKED BY		
SUPERVISED BY:					

THESE DRAWINGS DEPICT PREFERRED INSTALLATION METHODS OR SOLUTION FOR STANDARD JOB CONDITIONS. PROJECT ENGINEER SHALL EVALUATE SPECIFIC JOB REQUIREMENTS BEFORE APPLYING ANY OF THESE DETAILS, AND SHALL PROVIDE ADDITIONAL DETAILS ON SEPARATE SHEETS TO SUIT JOB CONDITIONS



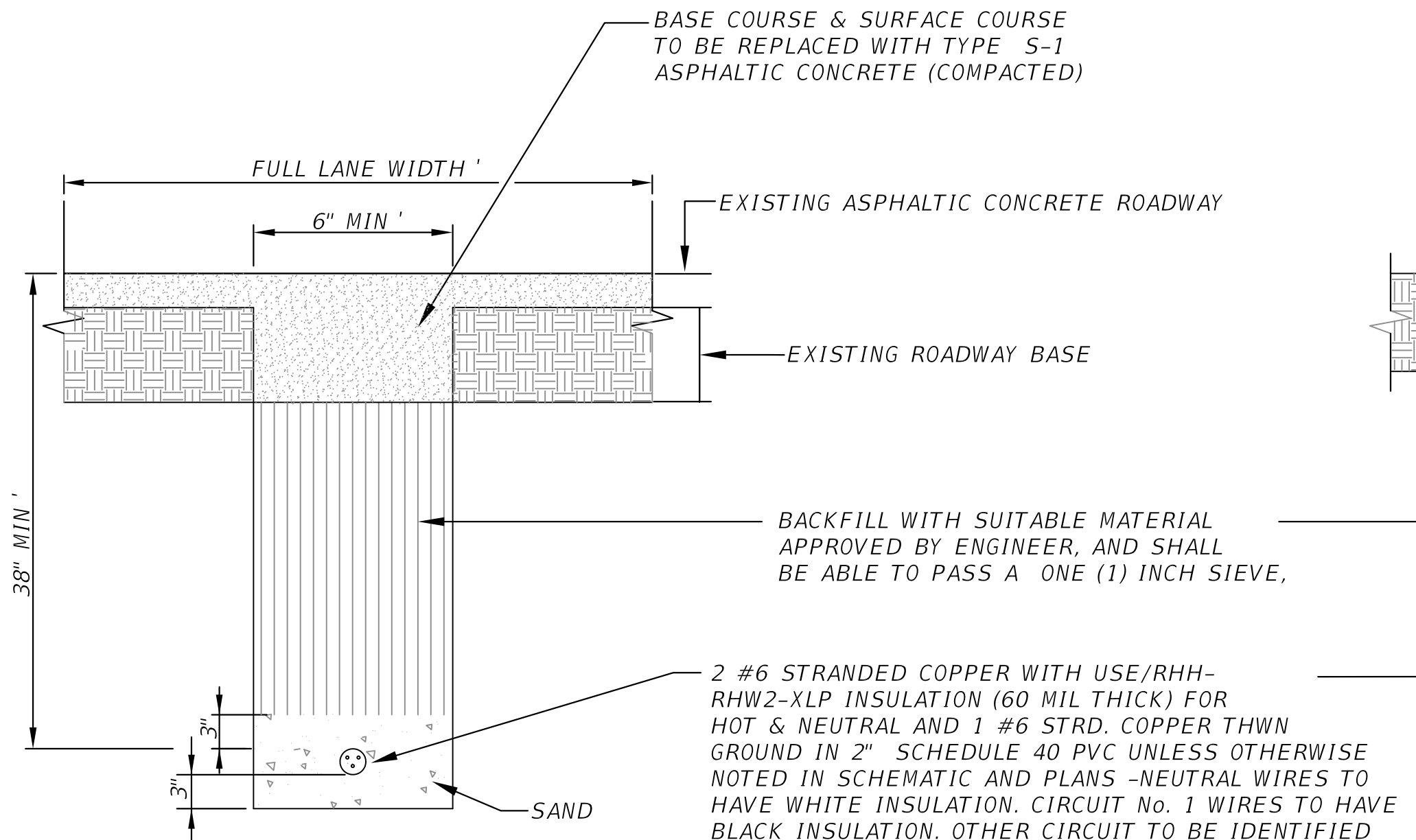
CABLE TO GROUND ROD DETAIL
(COPPER WIRE FOR GROUNDING)
N.T.S.



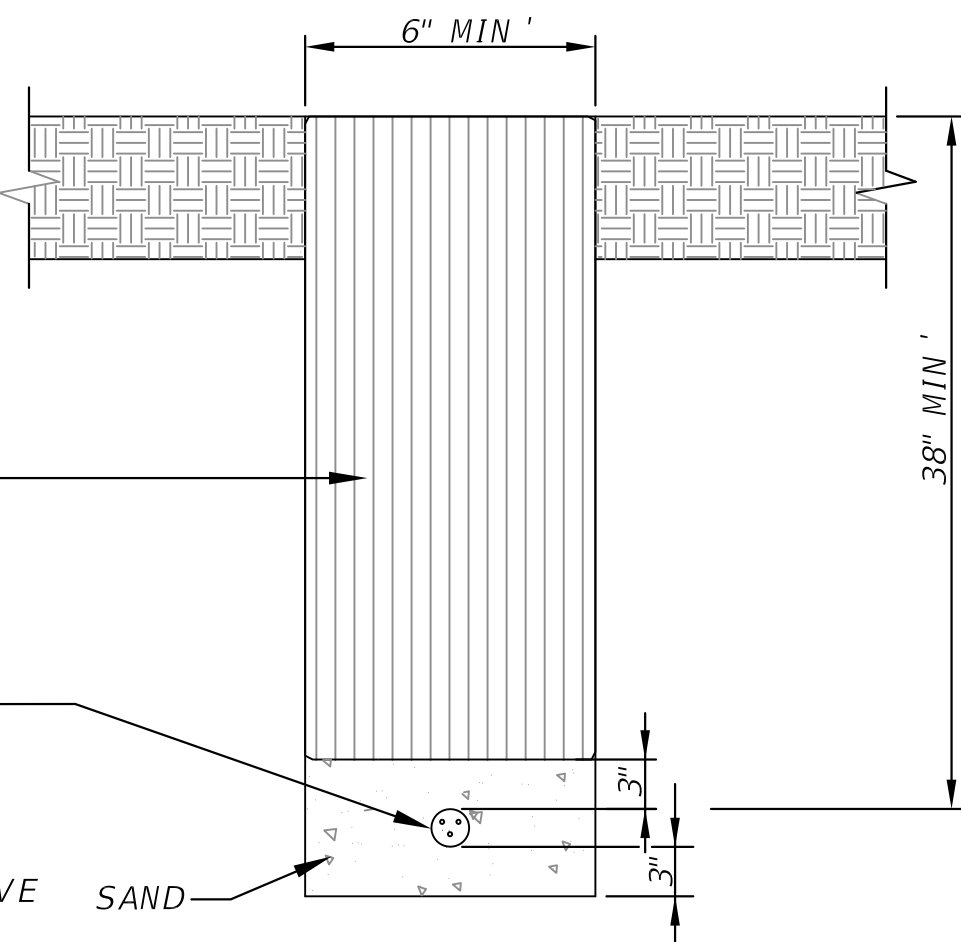
GROUND LUG DETAIL
(COPPER WIRE FOR GROUNDING)
N.T.S.

PULL BOX SPECIFICATION.

- ALL STREET LIGHT PULLBOXES SHALL HAVE AN OPEN-BOTTOM, QUAZITE POLYMER CONCRETE DESIGN OR PRECAST CONCRETE DESIGN CONSTRUCTED OF CLASS 1 CONCRETE HAVING A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT TWENTY- EIGHT (28) DAYS. POLYMER CONCRETE PULLBOX SHALL BE QUAZITE PRODUCT NO. PG1324BA12 OR APPROVED EQUIVALENT. CONCRETE PULLBOX SHALL BE BROOKS 38 SERIES OR APPROVED EQUIVALENT. IN EITHER CASE, BOTH PULLBOXES SHALL BE CONSTRUCTED PER ABOVE SPECIFIED MANUFACTURERS SIZE, MATERIALS AND PERFORMANCE SPECIFICATIONS. THEREFORE, BELOW SPECIFIED PULLBOX COVER SHALL BE FULLY INTER- CHANGEABLE WITH EITHER PULLBOX. ALL PULLBOX COVERS FURNISHED AND INSTALLED SHALL BE POLYMER CONCRETE QUAZITE PRODUCT NO. PG1324HA00 OR APPROVED EQUIVALENT. NO OTHER DESIGN, SIZE, MODIFICATION OR MATERIALS SHALL BE ACCEPTABLE. PULLBOX COVERS SHALL BE MARKED "STREET LIGHTING" OR "ELECTRIC/ MIAMI-DADE HD" .
- IN SITUATIONS WHERE PULLBOX IS LOCATED OUTSIDE OF SIDEWALK, i.e. SWALE AREA. THE PULLBOX IS TO HAVE A 6'x5' MIN CONCRETE APRON (6" THICK) PLACED AROUND IT. COST OF CONCRETE APRON IS TO BE INCLUDED IN THE PULLBOX INSTALLATION COST.

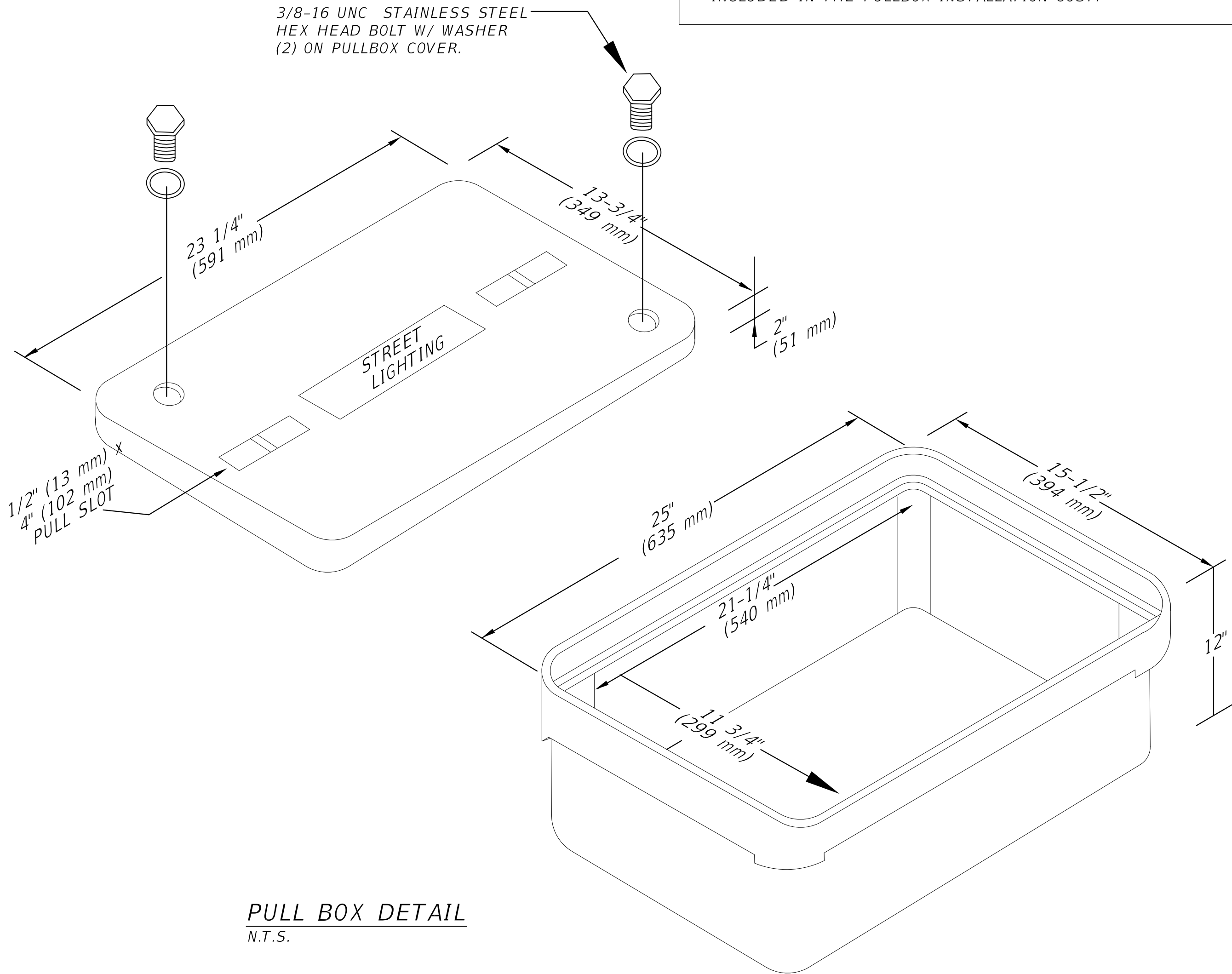


TRENCH DETAIL (ROAD)
N.T.S.



TRENCH DETAIL (SWALE)
N.T.S.

* IF IN THE OPINION OF THE ENGINEER, APPRECIABLE SETTLEMENT OCCURS DURING THE ONE YEAR GUARANTEE PERIOD, THE CONTRACTOR WILL BE REQUIRED TO RESTORE THE AREA OF CUT TO ADJACENT ROADWAY ELEVATION. SEE "TRAFFIC CONTROL EQUIPMENT SPECIFICATIONS AND STANDARDS FOR THE MTCSDC".



PULL BOX DETAIL
N.T.S.

CONSULTANT'S NAME

DESIGNED BY	CHECKED BY	NAME	DATE	DRAWN BY	CHECKED BY	NAME	DATE

MIAMI-DADE

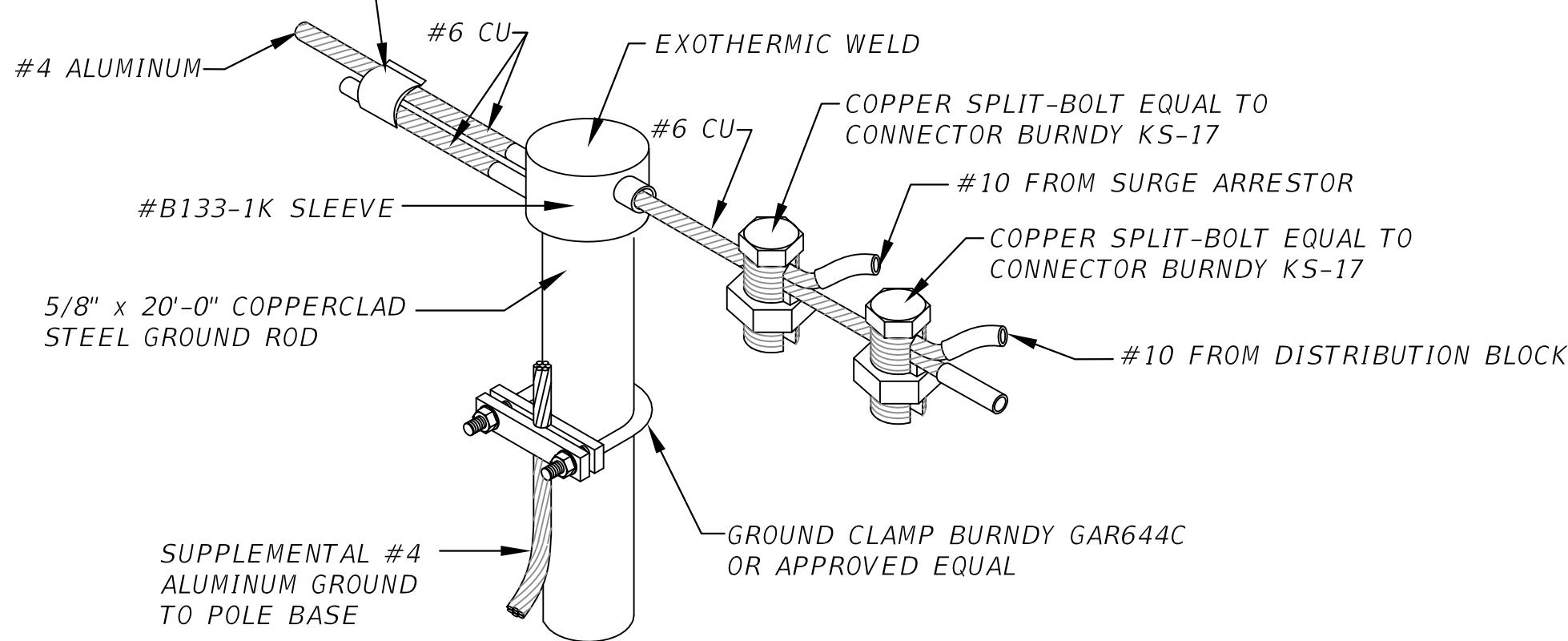
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

MISCELLANEOUS
DETAILS 1

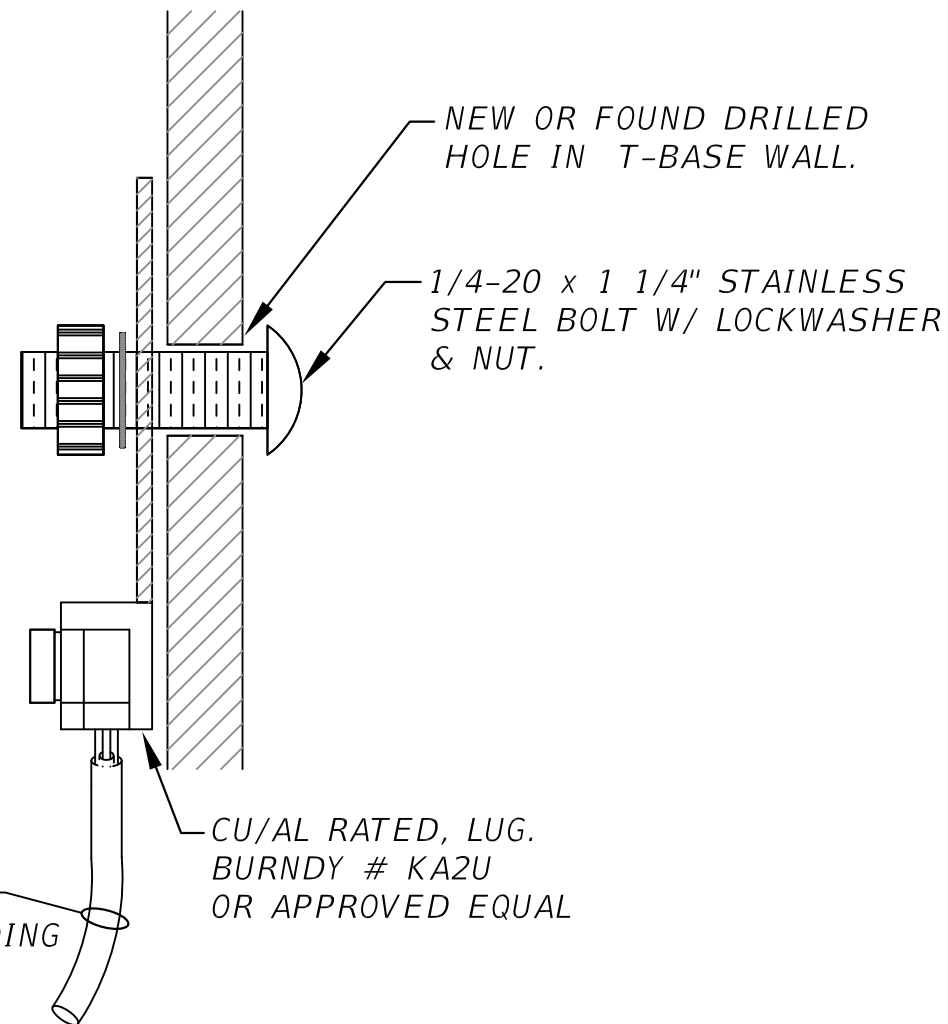
SHEET

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BURNDY OR APPROVED EQUAL CU/AL RATED 'H-FRAME' SERIES COMPRESSION 'TAP' TYPE CONNECTOR PRESSED WITH BURNDY TOOL-DIE COMBINATION. FINISHED CONNECTOR WHEN PROPERLY PRESSED SHALL DISPLAY EMBOSSED DIE NUMBER PAINT CONNECTOR AND EXPOSED ALUMINUM CONDUTOR.



CABLE TO GROUND ROD DETAIL
(ALUMINUN WIRE FOR GROUNDING)
N.T.S.

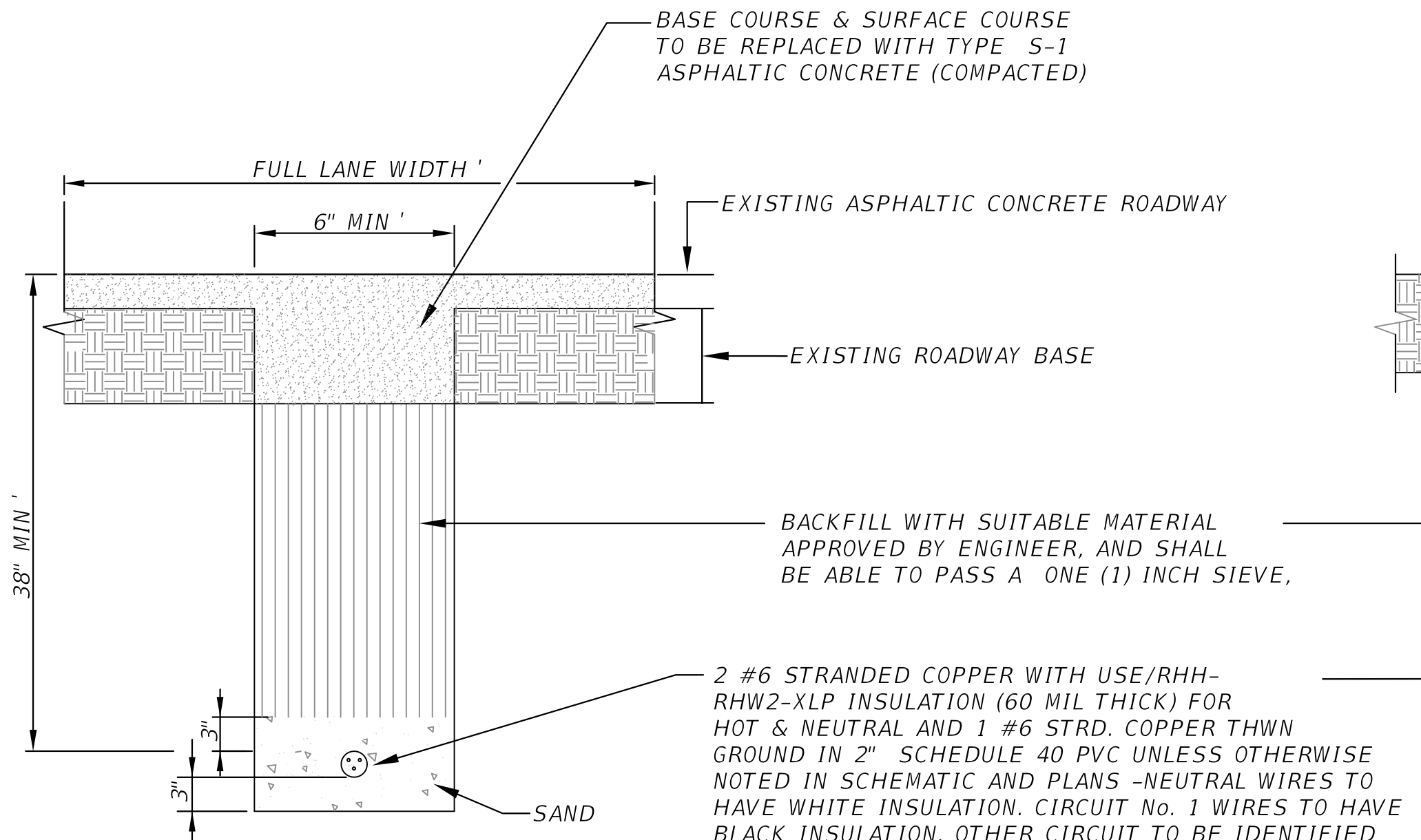


GROUND LUG DETAIL
(ALUMINUM WIRE FOR GROUNDING)
N.T.S.

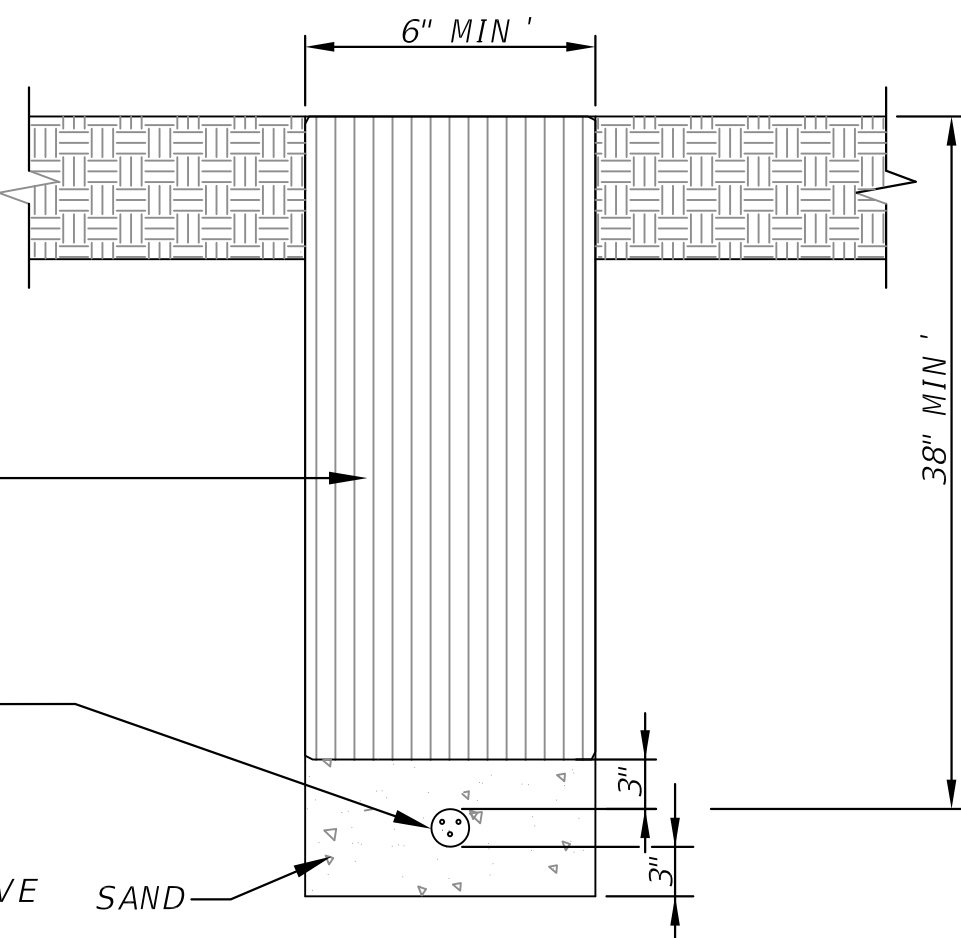
THESE DRAWINGS DEPICT PREFERRED INSTALLATION METHODS OR SOLUTION FOR STANDARD JOB CONDITIONS. PROJECT ENGINEER SHALL EVALUATE SPECIFIC JOB REQUIREMENTS BEFORE APPLYING ANY OF THESE DETAILS, AND SHALL PROVIDE ADDITIONAL DETAILS ON SEPARATE SHEETS TO SUIT JOB CONDITIONS

PULL BOX SPECIFICATION.

- ALL STREET LIGHT PULLBOXES SHALL HAVE AN OPEN-BOTTOM, QUAZITE POLYMER CONCRETE DESIGN. POLYMER CONCRETE PULLBOX SHALL BE QUAZITE PRODUCT NO. PG1324BA12 OR APPROVED EQUIVALENT. PULLBOXES SHALL BE CONSTRUCTED PER ABOVE SPECIFIED MANUFACTURER SIZE, MATERIALS AND PERFORMANCE SPECIFICATIONS. THEREFORE, ALL PULLBOX COVERS FURNISHED AND INSTALLED SHALL BE POLYMER CONCRETE QUAZITE PRODUCT NO. PG1324HA00 OR APPROVED EQUIVALENT. NO OTHER DESIGN, SIZE, MODIFICATION OR MATERIALS SHALL BE ACCEPTABLE. PULLBOX COVERS SHALL BE MARKED "STREET LIGHTING" OR "ELECTRIC/ MIAMI-DADE HD" .
- IN SITUATIONS WHERE PULLBOX IS LOCATED OUTSIDE OF SIDEWALK, I.E. SWALE AREA, THE PULLBOX IS TO HAVE A 6'x5' MIN CONCRETE APRON (6" THICK) PLACED AROUND IT. COST OF CONCRETE APRON IS TO BE INCLUDED IN THE PULLBOX INSTALLATION COST.

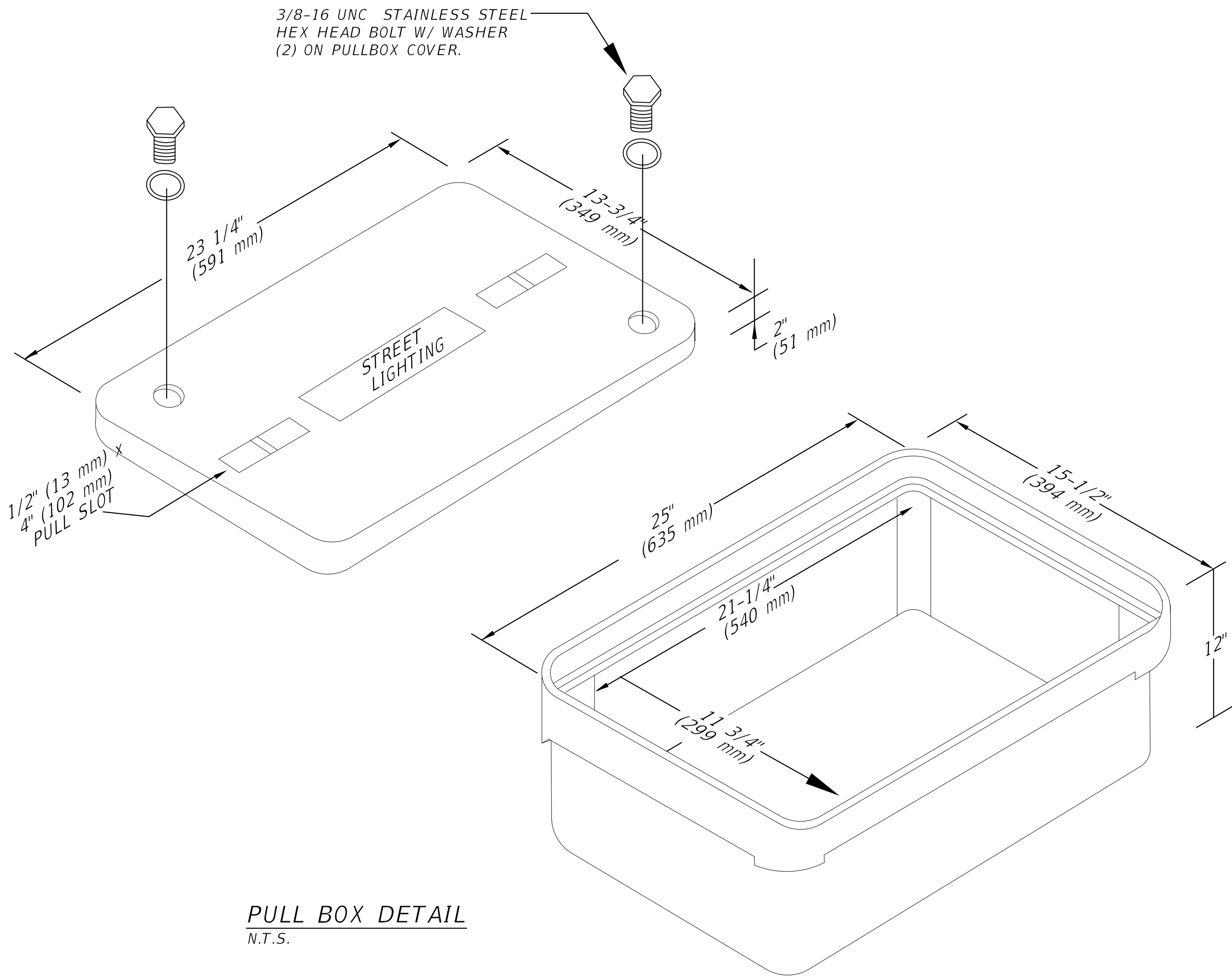


TRENCH DETAIL (ROAD)
N.T.S.



TRENCH DETAIL (SWALE)
N.T.S.

* IF IN THE OPINION OF THE ENGINEER, APPRECIABLE SETTLEMENT OCCURS DURING THE ONE YEAR GUARANTEE PERIOD, THE CONTRACTOR WILL BE REQUIRED TO RESTORE THE AREA OF CUT TO ADJACENT ROADWAY ELEVATION. SEE "TRAFFIC CONTROL EQUIPMENT SPECIFICATIONS AND STANDARDS FOR THE MTCSDC".



PULL BOX DETAIL
N.T.S.

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CONSULTANT'S NAME

DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY					

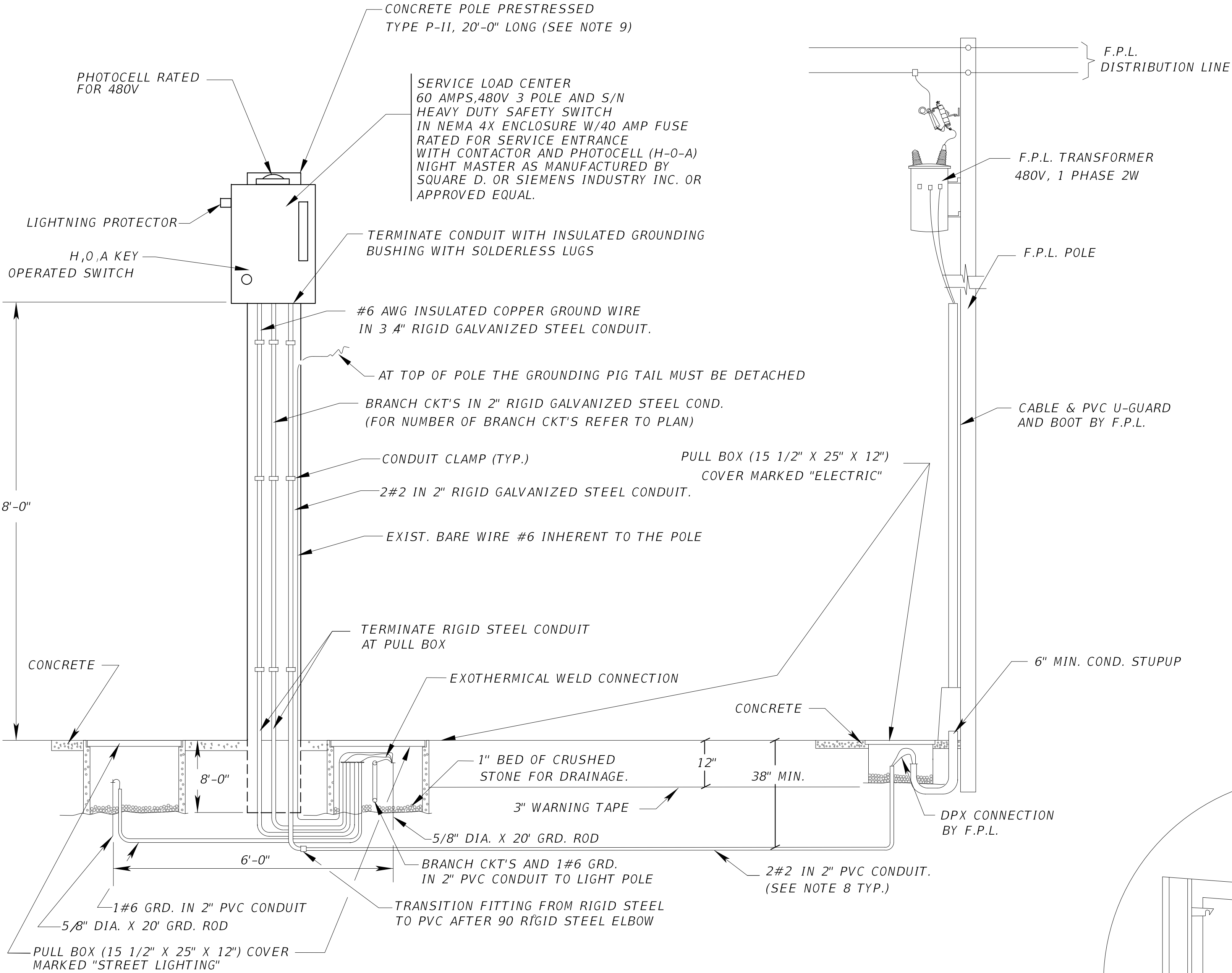
MIAMI-DADE

DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

MISCELLANEOUS
DETAILS 2

SHEET

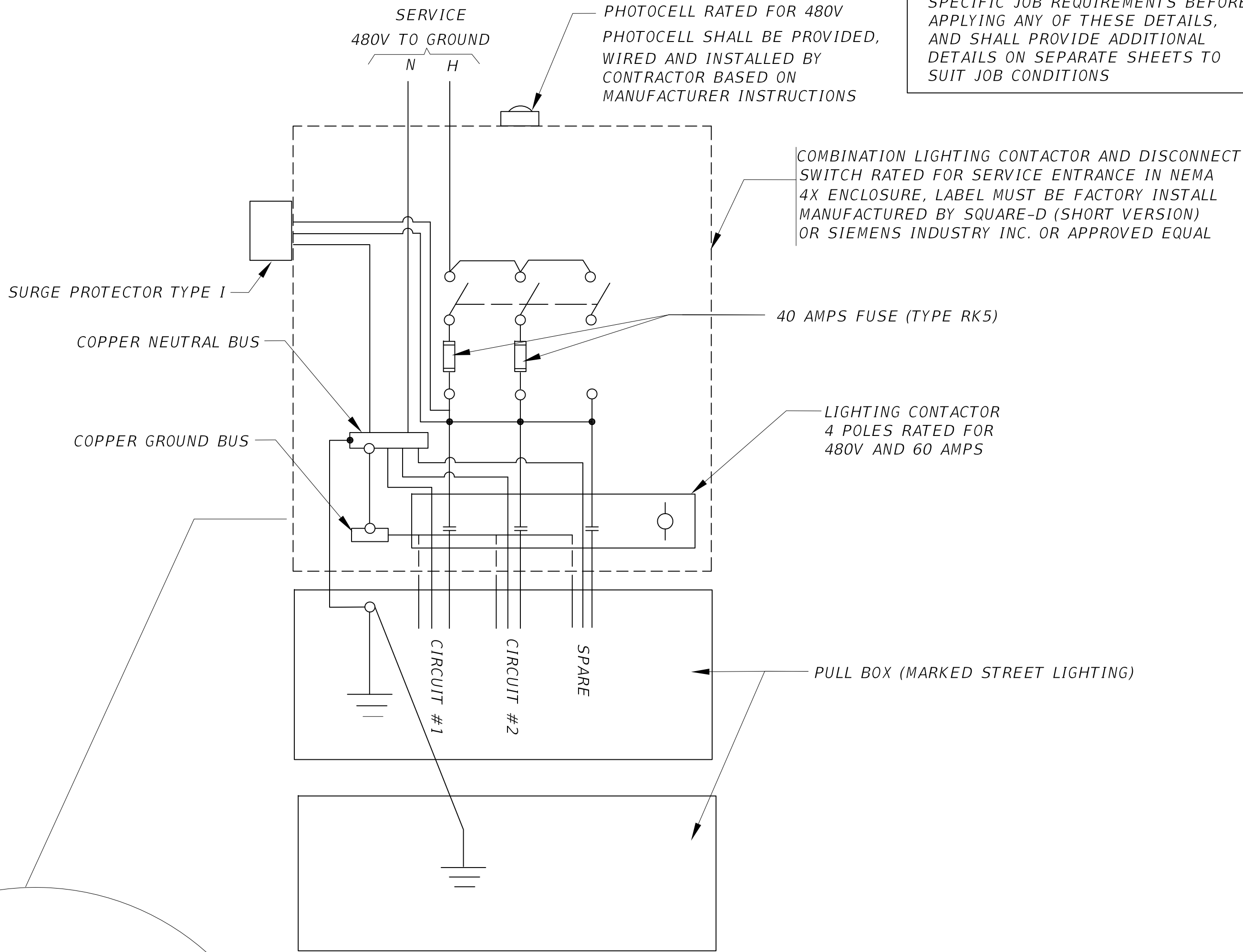
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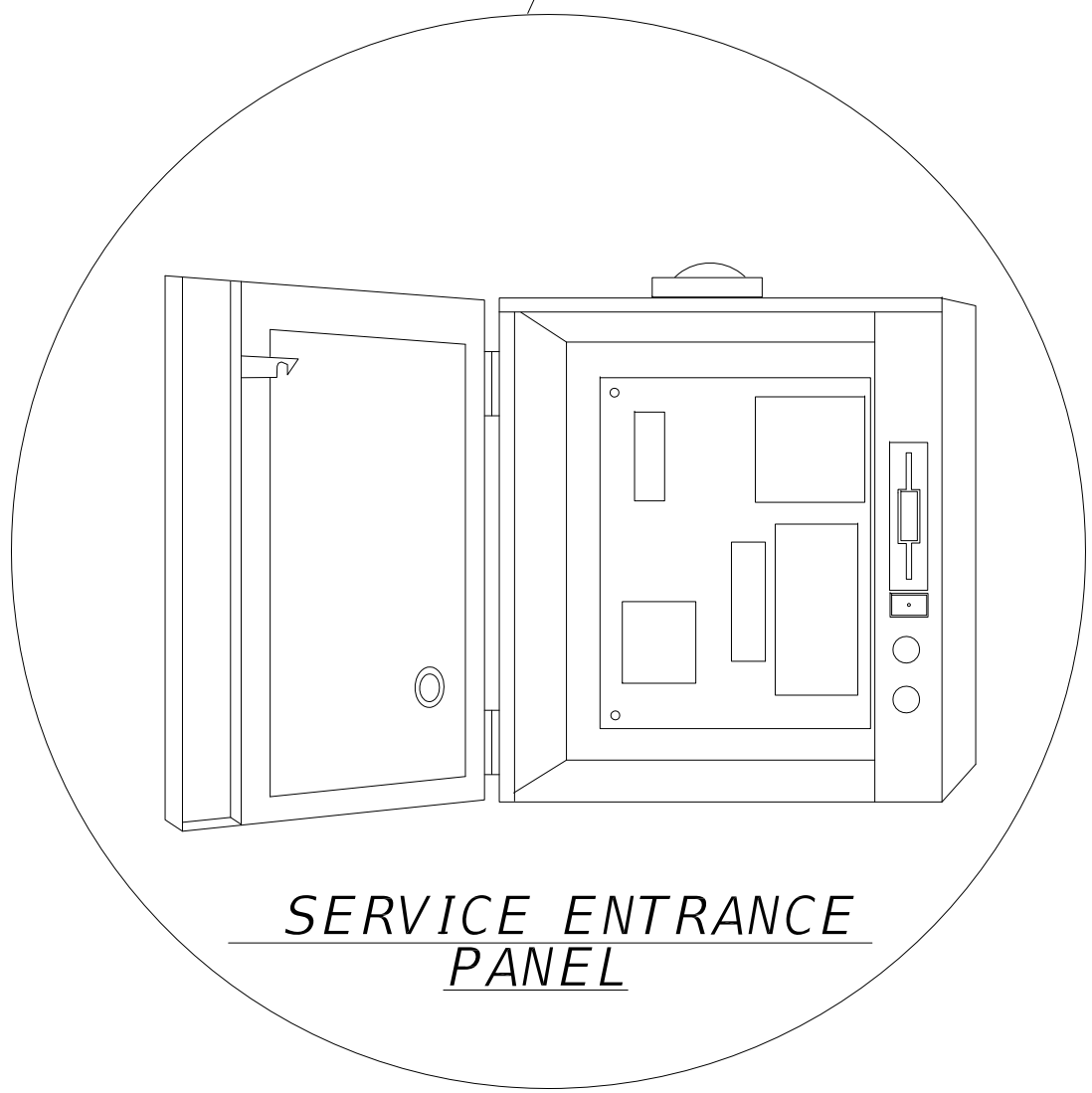
SERVICE POINT DETAIL
N.T.S.

- NOTES:
- THE ENCLOSURE SHALL BE NEMA 4X (STAINLESS STEEL), POLE MOUNTED, RIGIDLY ATTACHED TO THE POLE FACE.
 - THE ENCLOSURE DOOR SHALL BE SECURED BY LOCKABLE LATCH.
 - A 600V SURGE PROTECTOR TYPE I SHALL BE WIRED INSIDE THE ENCLOSURE. NO SPLICING IN ENCLOSURE.
 - ALL SERVICE EQUIPMENT SHALL BE U.L. APPROVED.
 - CONTRACTOR SHALL COORDINATE WITH F.P.L. ENGINEERS FOR THE INSTALLATION OF THE F.P.L. RISER WHICH INCLUDES A CONNECTION FEE. (THIS FEE SHALL BE INCLUDED IN BID ITEM 715-7-11)
 - ALL GROUND ROD SHALL BE INTERCONNECTED (USING #6 GROUND WIRE).
 - PROVIDE SUPPLEMENTARY GROUND ELECTRODE SPACE AT LEAST 6FT.
 - ALL CONDUCTOR SHALL BE TYPE RHH-RHW2-XLP. (OTHER TYPE OF CONDUCTOR IS NOT ALLOWED. EXCEPT GROUND WIRE WHICH SHALL BE TYPE THWN.)
 - CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS OF THE POLE, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
 - SURGE PROTECTOR TO BE WIRED ON LOAD SIDE OF DISCONNECT SWITCH.

* NOTE TO DESIGNER: TO BE USED FOR 2 CIRCUITS ONLY.



WIRING DIAGRAM
N.T.S.



SERVICE ENTRANCE
PANEL

FUSIBLE SWITCH SCHEDULE					
CKT NO	SERVING	KVA	AMPS	FUSE	WIRE/CONDUCT

DISCONNECT SWITCH LOAD CALCULATION:

CONTINUOUS LOADS= VA
25% CONT. LOAD= VA
TOTAL= VA

Amp= $\frac{VA}{V}$

CONSULTANT'S NAME

DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY:					



SERVICE POINT
DISCONNECT SWITCH
DETAIL 480V TO GROUND

SHEET



1. THE ENCLOSURE SHALL BE NEMA 4X (STAINLESS STEEL), POLE MOUNTED, RIGIDLY ATTACHED TO THE POLE FACE.
2. THE ENCLOSURE DOOR SHALL BE SECURED BY LOCKABLE LATCH.
3. A 600V SURGE PROTECTOR TYPE I SHALL BE WIRED INSIDE THE ENCLOSURE. NO SPLICING IN ENCLOSURE.
4. ALL SERVICE EQUIPMENT SHALL BE U.L. APPROVED.
5. CONTRACTOR SHALL COORDINATE WITH F.P.L. ENGINEERS FOR THE INSTALLATION OF THE F.P.L. RISER WHICH INCLUDES A CONNECTION FEE. (THIS FEE SHALL BE INCLUDED IN BID ITEM 715-7-11)
6. ALL GROUND ROD SHALL BE INTERCONNECTED (USING #6 GROUND WIRE).
7. PROVIDE SUPPLEMENTARY GROUND ELECTRODE SPACE AT LEAST 6FT.
8. ALL CONDUCTOR SHALL BE TYPE RHH-RHW2-XLP. (OTHER TYPE OF CONDUCTOR IS NOT ALLOWED. EXCEPT GROUND WIRE WHICH SHALL BE TYPE THWN.)
9. CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS OF THE POLE, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
11. SURGE PROTECTOR TO BE WIRED ON LOAD SIDE OF DISCONNECT SWITCH.



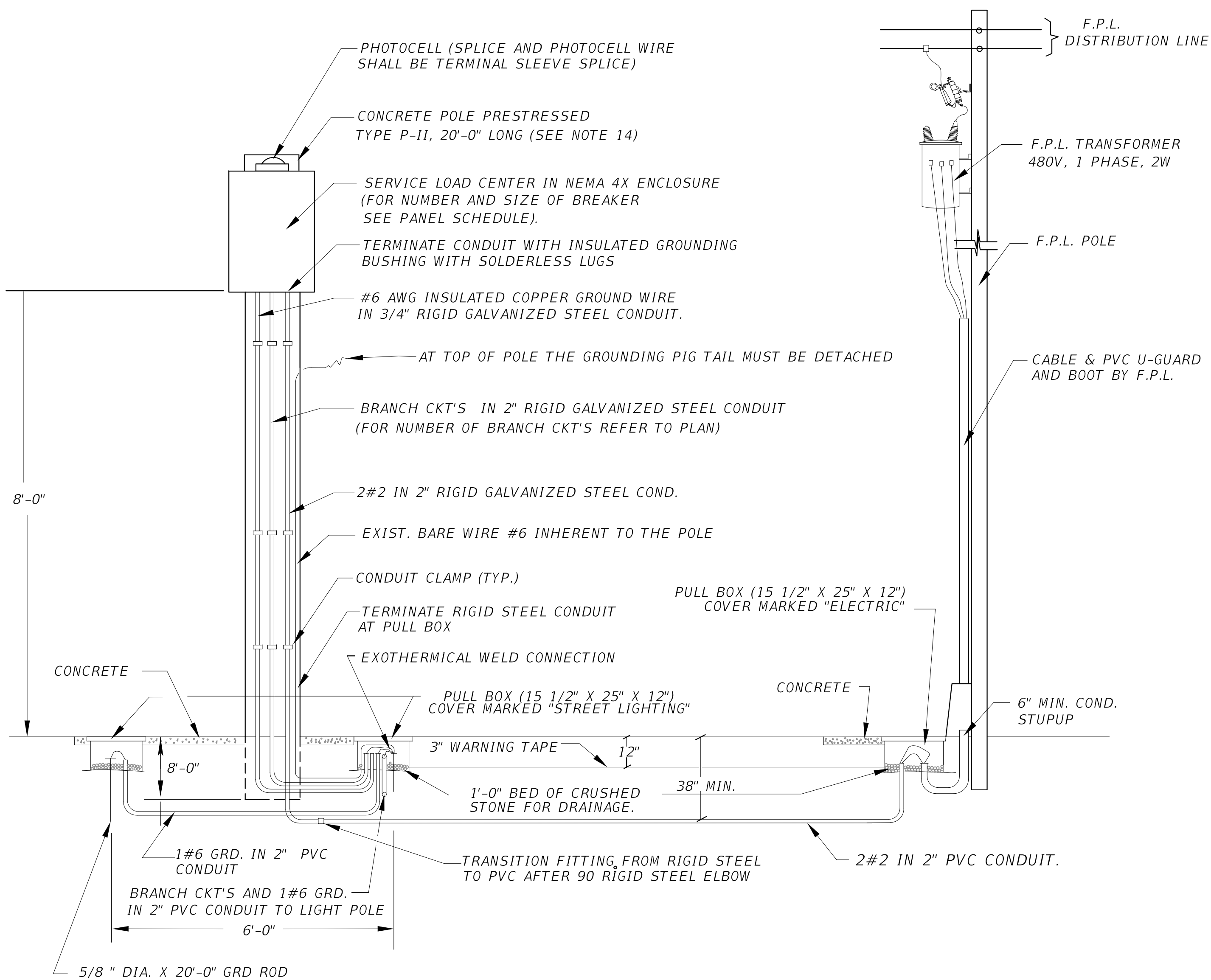
CONTINUOUS LOADS=	VA	$Amp = \frac{VA}{V}$
25% CONT. LOAD=	VA	
TOTAL=	VA	

* NOTE TO DESIGNER: TO BE USED FOR 2 CIRCUITS ONLY.

SHEET

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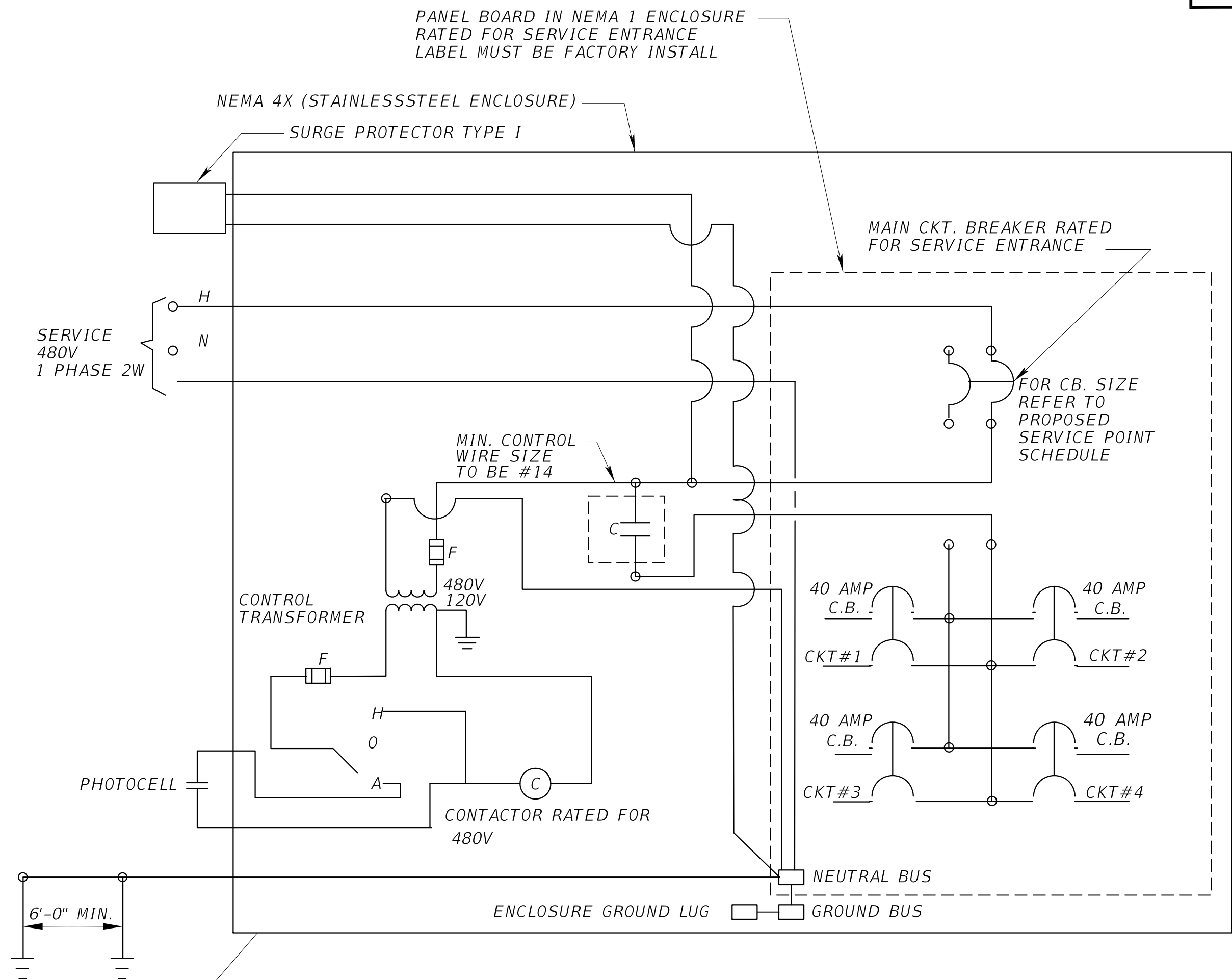
THESE DRAWINGS DEPICT PREFERRED INSTALLATION METHODS OR SOLUTION FOR STANDARD JOB CONDITIONS. PROJECT ENGINEER SHALL EVALUATE SPECIFIC JOB REQUIREMENTS BEFORE APPLYING ANY OF THESE DETAILS, AND SHALL PROVIDE ADDITIONAL DETAILS ON SEPARATE SHEETS TO SUIT JOB CONDITIONS



SERVICE POINT DETAIL
N.T.S

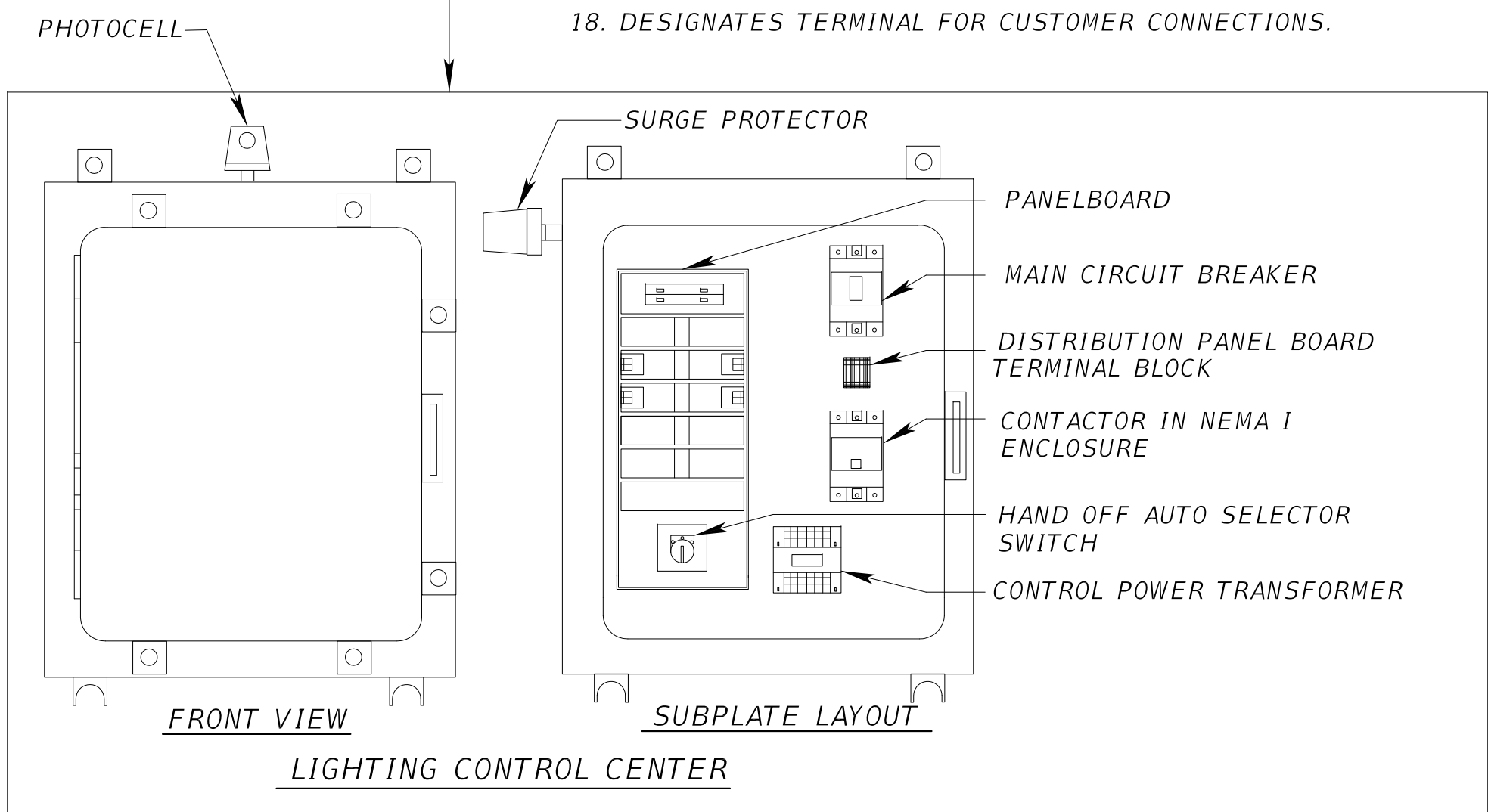
NOTES:

1. THE ENCLOSURE SHALL BE NEMA 4X (STAINLESS STEEL), POLE MOUNTED, RIGIDLY ATTACHED TO THE POLE FACE.
2. THE ENCLOSURE DOOR SHALL BE SECURED BY LOCKABLE LATCH. THE DOOR SHALL HAVE A MINIMUM OF THREE HINGES AND BE LATCHABLE. NO SCREWS TO BE USED TO ATTACH DOOR.
3. 480V MINIMUM RATING BOLT IN TYPE BREAKERS SHALL BE USED.
4. A 600V SURGE PROTECTOR TYPE I SHALL BE WIRED OUTSIDE THE ENCLOSURE. NO SPlicing IN ENCLOSURE.
5. A MAIN BREAKER IS REQUIRED IN ALL SERVICE PANELS WITH 2 OR MORE FEEDER BREAKERS.
6. ALL SERVICE EQUIPMENT SHALL BE U.L. APPROVED.
7. BUS BAR TO BE COPPER COATED AND HAVE A MINIMUM RATING OF 60 AMPS. WHEN MAIN BREAKER EXCEEDS 60 AMPS BUS BAR TO MATCH MAIN BREAKER AMPERAGE.
8. LOCATE CONTACTOR, TRANSFORMER, AND H.O.A. SWITCH INSIDE ENCLOSURE. THE ENCLOSURE TO BE SIZED TO ACCOMODATE AS MANY BREAKERS AS CALLED FOR AND ALL OTHER SERVICE EQUIPMENT.
9. THE ENCLOSURE TO BE RIGIDLY ATTACHED TO THE POLE FACE.
10. CONTRACTOR SHALL COORDINATE WITH F.P.L. ENGINEERS FOR THE INSTALLATION OF THE F.P.L. RISER WHICH INCLUDES A CONNECTION FEE. (THIS FEE SHALL BE INCLUDED IN BID ITEM 715-7-11)



NOTES (CONT.)

11. ALL GROUND ROD SHALL BE INTERCONNECTED (USING #6 GROUND WIRE).
12. PROVIDE SUPPLEMENTARY GROUND ELECTRODE SPACED AT LEAST 6FT APART (AS PER N.E.C. REQUIREMENT).
13. ALL CONDUCTOR SHALL BE TYPE RHH-RHW2-XLP. (OTHER TYPE OF CONDUCTOR IS NOT ALLOWED. EXCEPT GROUND WIRE WHICH SHALL BE TYPE THWN.)
14. CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS OF THE POLE, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
15. AFTER OPENING THE PANEL, THE PANEL BOARD SHALL HAVE A DEAD FRONT COVER FOR THE PURPOSE OF COVERING ALL THE WIRING AND EXPOSING ONLY THE BUTTONS OF THE BREAKERS; IN COMPLIANCE WITH THE N.E.C.
16. ALL WIRES EXTERNAL TO CONTROL CABINET TO BE TERMINATED TO A TERMINAL.
17. WIRES END WITHIN CABINET TO BE IDENTIFIED WITH WIRE MARKERS.
18. DESIGNATES TERMINAL FOR CUSTOMER CONNECTIONS.



PANEL BOARD SCHEDULE					
NEMA-1 10,3W,480V, (1P - 100 A MCB) 25,000 RMS SYMETRICAL SURF-MTD					
CKT NO	SERVING	KVA	AMPS	C. BKR	WIRE/CONDUCT

NUMBERS OF BRANCH CKT. BREAKERS AS REQUIRED

LOAD CENTER LOAD CALCULATION:

CONTINUOUS LOADS= VA
25% CONT. LOAD= VA
TOTAL= VA

Amp= $\frac{VA}{V}$

REVISIONS							
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

CONSULTANT'S NAME

DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY:					

MIAMI-DADE

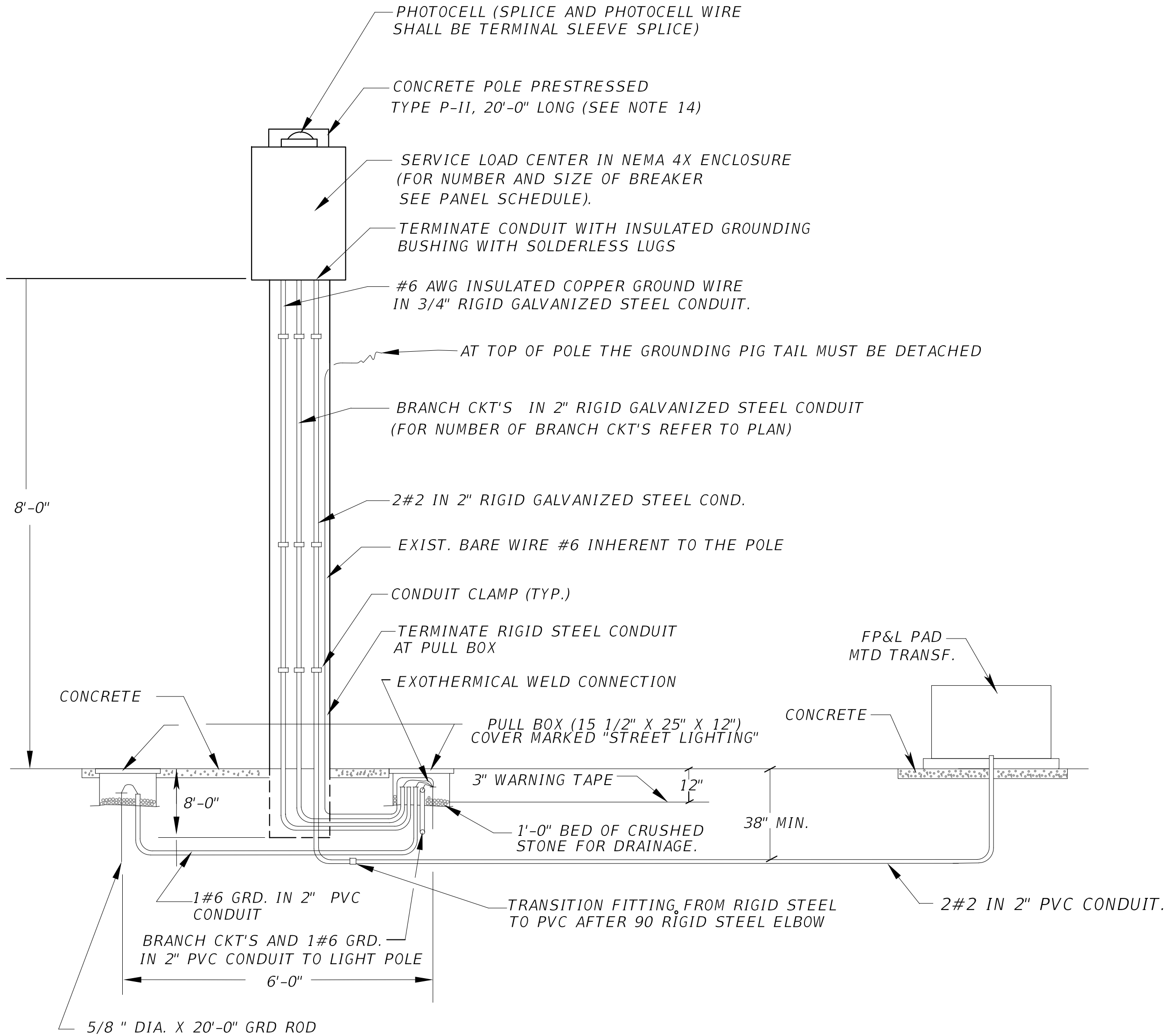
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

SERVICE POINT DETAIL
PANELBOARD 480V
TO GROUND

SHEET

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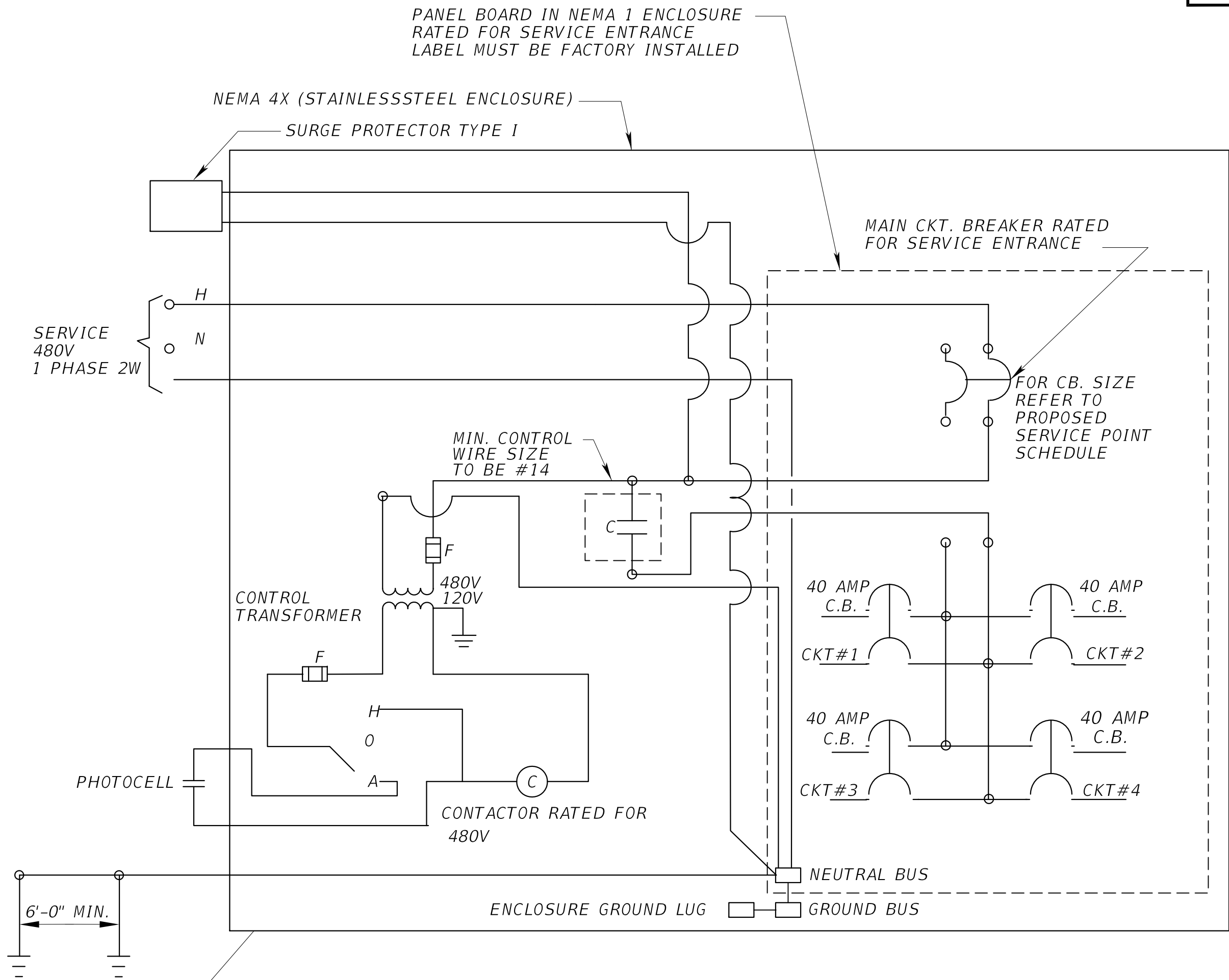
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SERVICE POINT DETAIL
N.T.S

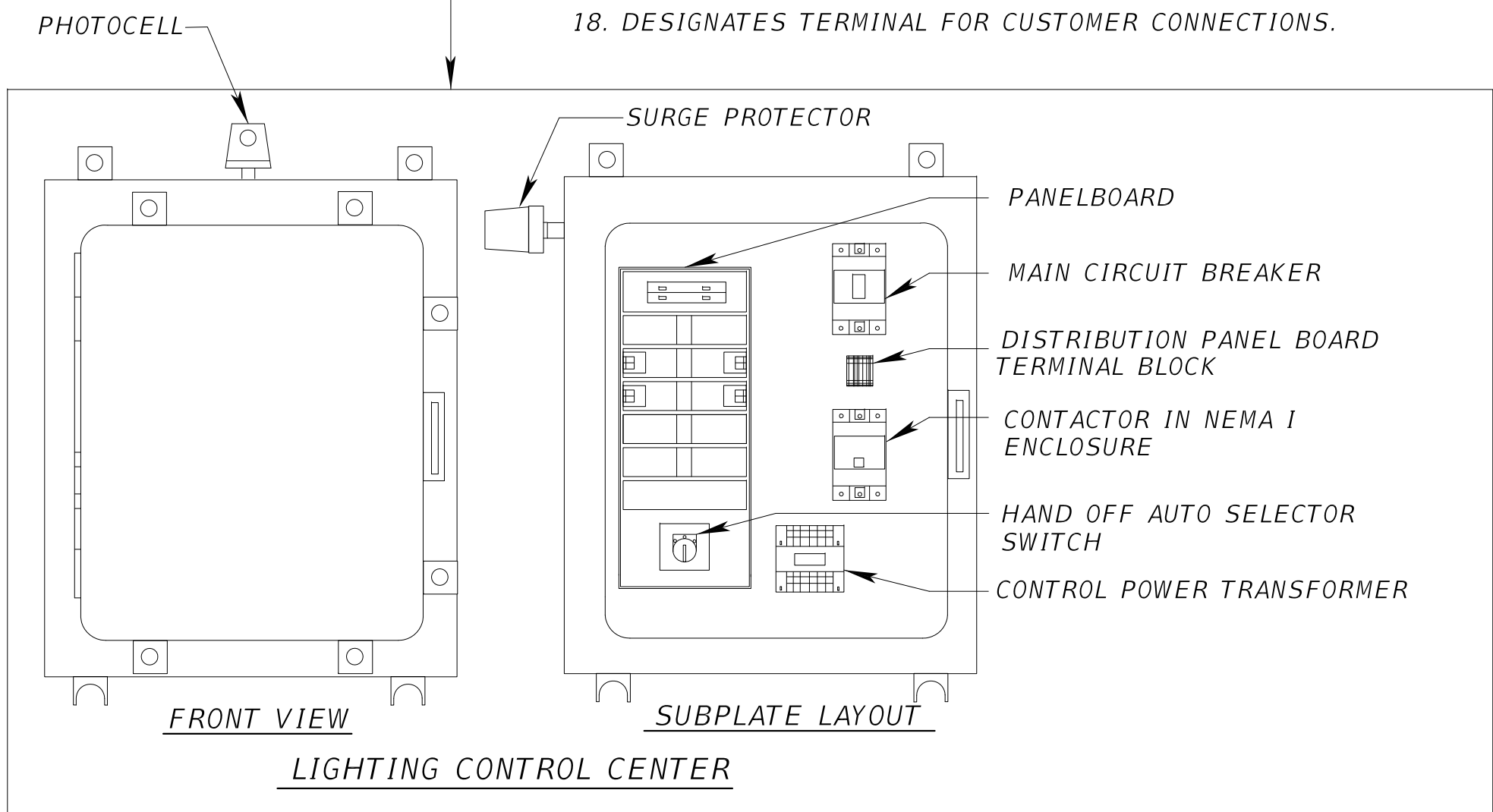
NOTES:

1. THE ENCLOSURE SHALL BE NEMA 4X (STAINLESS STEEL), POLE MOUNTED, RIGIDLY ATTACHED TO THE POLE FACE.
2. THE ENCLOSURE DOOR SHALL BE SECURED BY LOCKABLE LATCH. THE DOOR SHALL HAVE A MINIMUM OF THREE HINGES AND BE LATCHABLE. NO SCREWS TO BE USED TO ATTACH DOOR.
3. 480V MINIMUM RATING BOLT IN TYPE BREAKERS SHALL BE USED.
4. A 600V SURGE PROTECTOR TYPE I SHALL BE WIRED OUTSIDE THE ENCLOSURE. NO SPlicing IN ENCLOSURE.
5. A MAIN BREAKER IS REQUIRED IN ALL SERVICE PANELS WITH 2 OR MORE FEEDER BREAKERS.
6. ALL SERVICE EQUIPMENT SHALL BE U.L. APPROVED.
7. BUS BAR TO BE COPPER COATED AND HAVE A MINIMUM RATING OF 60 AMPS. WHEN MAIN BREAKER EXCEEDS 60 AMPS BUS BAR TO MATCH MAIN BREAKER AMPERAGE.
8. LOCATE CONTACTOR, TRANSFORMER, AND H.O.A. SWITCH INSIDE ENCLOSURE. THE ENCLOSURE TO BE SIZED TO ACCOMODATE AS MANY BREAKERS AS CALLED FOR AND ALL OTHER SERVICE EQUIPMENT.
9. THE ENCLOSURE TO BE RIGIDLY ATTACHED TO THE POLE FACE.
10. CONTRACTOR SHALL COORDINATE WITH F.P.L. ENGINEERS FOR THE INSTALLATION OF THE F.P.L. RISER WHICH INCLUDES A CONNECTION FEE. (THIS FEE SHALL BE INCLUDED IN BID ITEM 715-7-11)



NOTES (CONT.)

11. ALL GROUND ROD SHALL BE INTERCONNECTED (USING #6 GROUND WIRE).
12. PROVIDE SUPPLEMENTARY GROUND ELECTRODE SPACED AT LEAST 6FT APART (AS PER N.E.C. REQUIREMENT).
13. ALL CONDUCTOR SHALL BE TYPE RHH-RHW2-XLP. (OTHER TYPE OF CONDUCTOR IS NOT ALLOWED, EXCEPT GROUND WIRE WHICH SHALL BE TYPE THWN.)
14. CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS OF THE POLE, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
15. AFTER OPENING THE PANEL, THE PANEL BOARD SHALL HAVE A DEAD FRONT COVER FOR THE PURPOSE OF COVERING ALL THE WIRING AND EXPOSING ONLY THE BUTTONS OF THE BREAKERS; IN COMPLIANCE WITH THE N.E.C.
16. ALL WIRES EXTERNAL TO CONTROL CABINET TO BE TERMINATED TO A TERMINAL.
17. WIRES END WITHIN CABINET TO BE IDENTIFIED WITH WIRE MARKERS.
18. DESIGNATES TERMINAL FOR CUSTOMER CONNECTIONS.



PANEL BOARD SCHEDULE					
NEMA-1 10,3W,480V, (1P - 100 A MCB) 25,000 RMS SYMETRICAL SURF-MTD					
CKT NO	SERVING	KVA	AMPS	C. BKR	WIRE/CONDUCT

NUMBERS OF BRANCH CKT. BREAKERS AS REQUIRED

LOAD CENTER LOAD CALCULATION:

CONTINUOUS LOADS= VA
25% CONT. LOAD= VA
TOTAL= VA
Amp= $\frac{VA}{V}$

REVISIONS							
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

CONSULTANT'S NAME

DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY:					

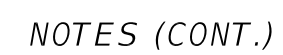


SERVICE POINT DETAIL
PANELBOARD 480V
TO GROUND

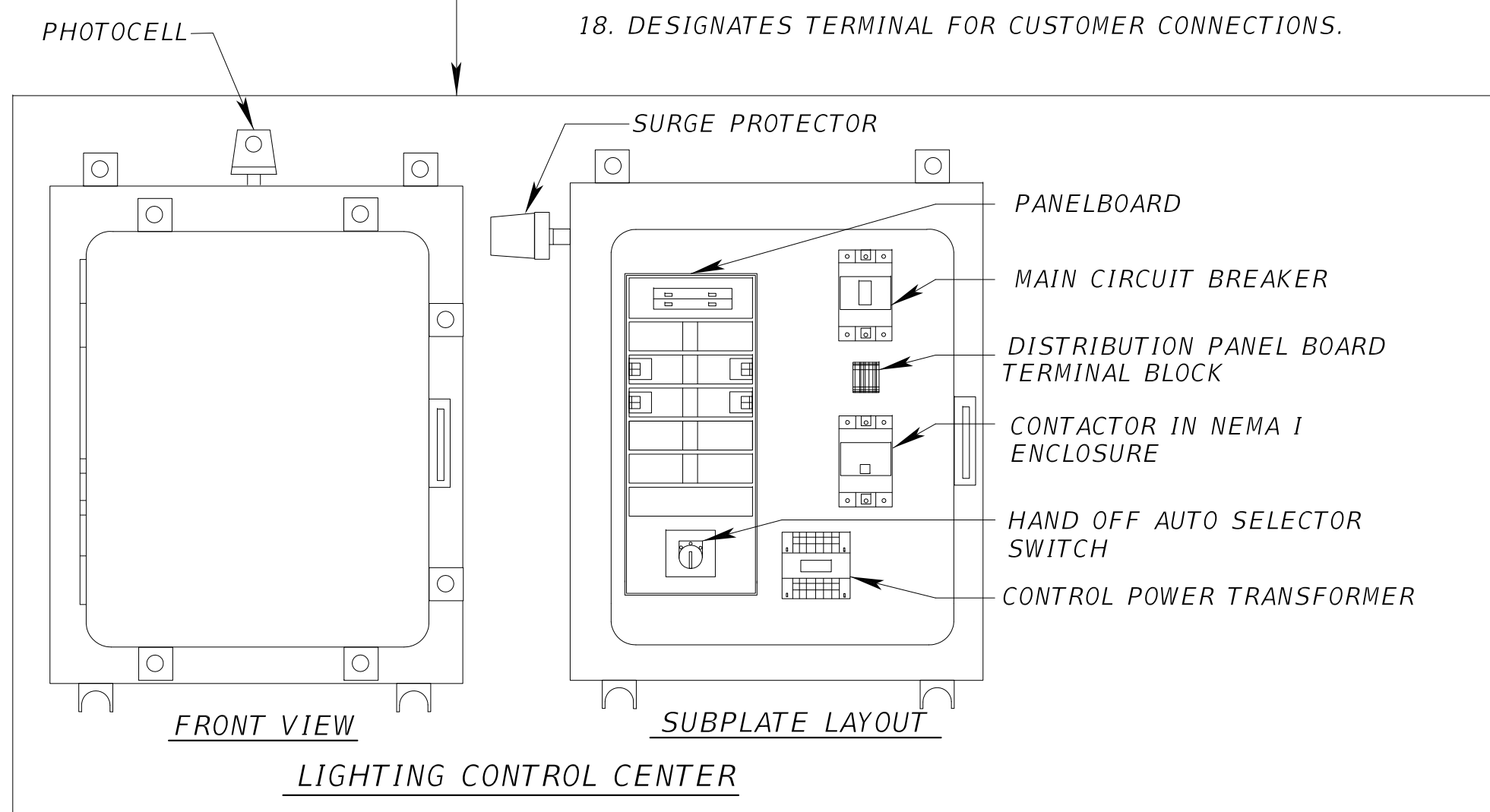
SHEET



1. THE ENCLOSURE SHALL BE NEMA 4X (STAINLESS STEEL), POLE MOUNTED, RIGIDLY ATTACHED TO THE POLE FACE.
2. THE ENCLOSURE DOOR SHALL BE SECURED BY LOCKABLE LATCH.
THE DOOR SHALL HAVE A MINIMUM OF THREE HINGES AND BE LATCHABLE. NO SCREWS TO BE USED TO ATTACH DOOR.
3. 480V MINIMUM RATING BOLT IN TYPE BREAKERS SHALL BE USED.
4. A 480V SURGE PROTECTOR TYPE 1 SHALL BE WIRED OUTSIDE THE ENCLOSURE. NO SPLICING IN ENCLOSURE.
5. A MAIN BREAKER IS REQUIRED IN ALL SERVICE PANELS WITH 2 OR MORE FEEDER BREAKERS.
6. ALL SERVICE EQUIPMENT SHALL BE U.L. APPROVED.
7. BUS BAR TO BE COPPER COATED AND HAVE A MINIMUM RATING OF 60 AMPS. WHEN MAIN BREAKER EXCEEDS 60 AMPS BUS BAR TO MATCH MAIN BREAKER AMPERAGE.
8. LOCATE CONTACTOR, TRANSFORMER, AND H.O.A. SWITCH INSIDE ENCLOSURE. THE ENCLOSURE TO BE SIZED TO ACCOMMODATE AS MANY BREAKERS AS CALLED FOR AND ALL OTHER SERVICE EQUIPMENT.
9. THE ENCLOSURE TO BE RIGIDLY ATTACHED TO THE POLE FACE.
10. CONTRACTOR SHALL COORDINATE WITH F.P.L. ENGINEERS FOR THE INSTALLATION OF THE F.P.L. RISER WHICH INCLUDES A CONNECTION FEE. (THIS FEE SHALL BE INCLUDED IN BID ITEM 715-7-11)



11. ALL GROUND ROD SHALL BE INTERCONNECTED (USING #6 GROUND WIRE).
12. PROVIDE SUPPLEMENTARY GROUND ELECTRODE SPACED AT LEAST 6FT APART (AS PER N.E.C. REQUIREMENT).
13. ALL CONDUCTOR SHALL BE TYPE RHH-RHW2-XLP. (OTHER TYPE OF CONDUCTOR IS NOT ALLOWED. EXCEPT GROUND WIRE WHICH SHALL BE TYPE THWN.)
14. CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS OF THE POLE, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
15. AFTER OPENING THE PANEL, THE PANEL BOARD SHALL HAVE A DEAD FRONT COVER FOR THE PURPOSE OF COVERING ALL THE WIRING AND EXPOSING ONLY THE BUTTONS OF THE BREAKERS; IN COMPLIANCE WITH THE N.E.C.
16. ALL WIRES EXTERNAL TO CONTROL CABINET TO BE TERMINATED TO A TERMINAL.
17. WIRES END WITHIN CABINET TO BE IDENTIFIED WITH WIRE MARKERS.
18. DESIGNATES TERMINAL FOR CUSTOMER CONNECTIONS.



PANEL BOARD SCHEDULE					
NEMA-1 10,3W,480/240 V, (2P - 100 A MCB) 25,000 RMS SYMETRICAL SURF-MTD					
CKT NO	SERVING	KVA	AMPS	C. BKR	WIRE/CONDUCT

NUMBERS OF BRANCH CKT. BREAKERS AS REQUIRED

LOAD CENTER LOAD CALCULATION:

CONTINUOUS LOADS= VA
 25% CONT. LOAD= VA
 TOTAL= VA

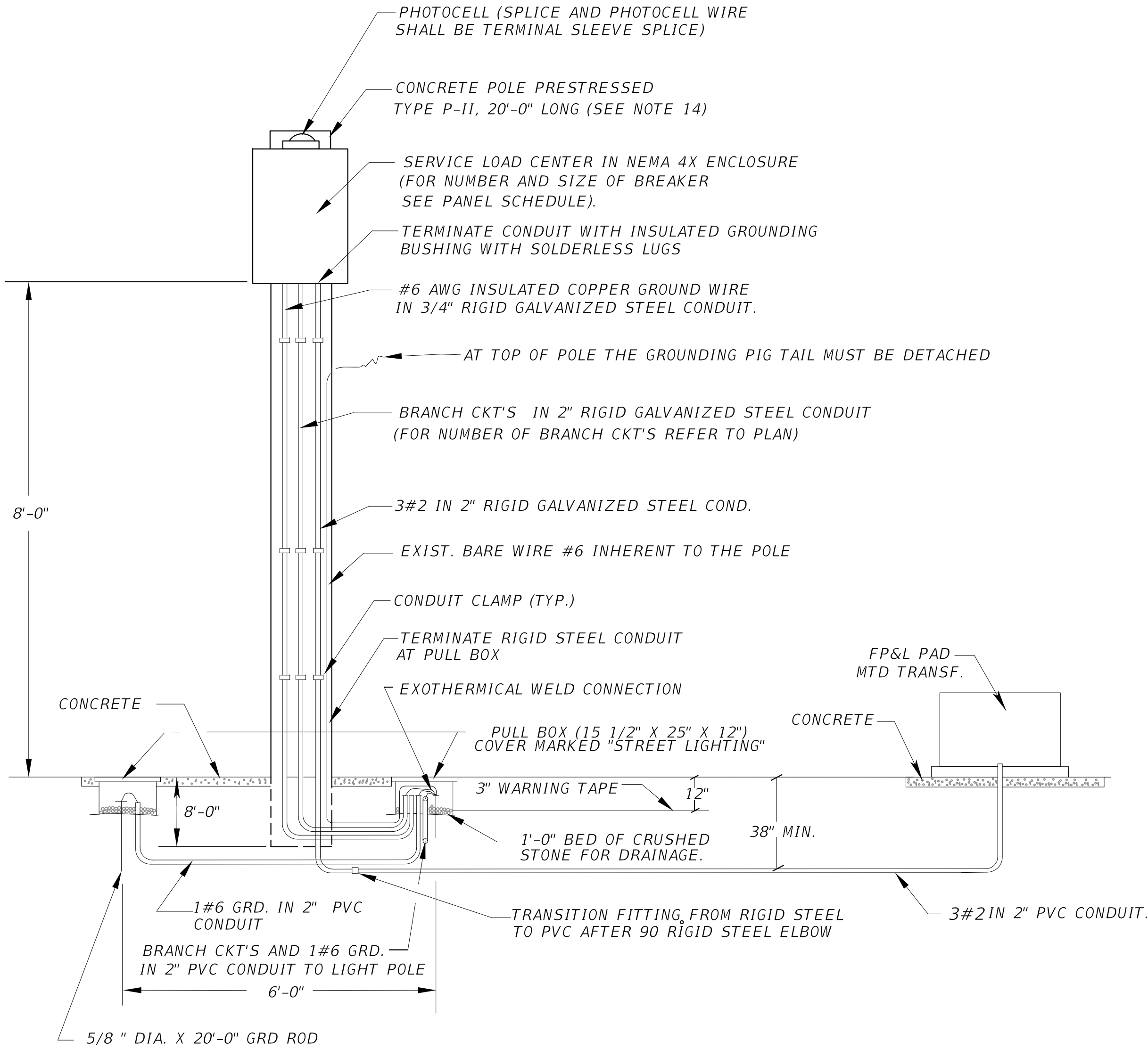
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CONSULTANT'S NAME

	NAME	DATE		NAME	DATE
DESIGNED BY			DRAWN BY		
CHECKED BY			CHECKED BY		
SUPERVISED BY:					

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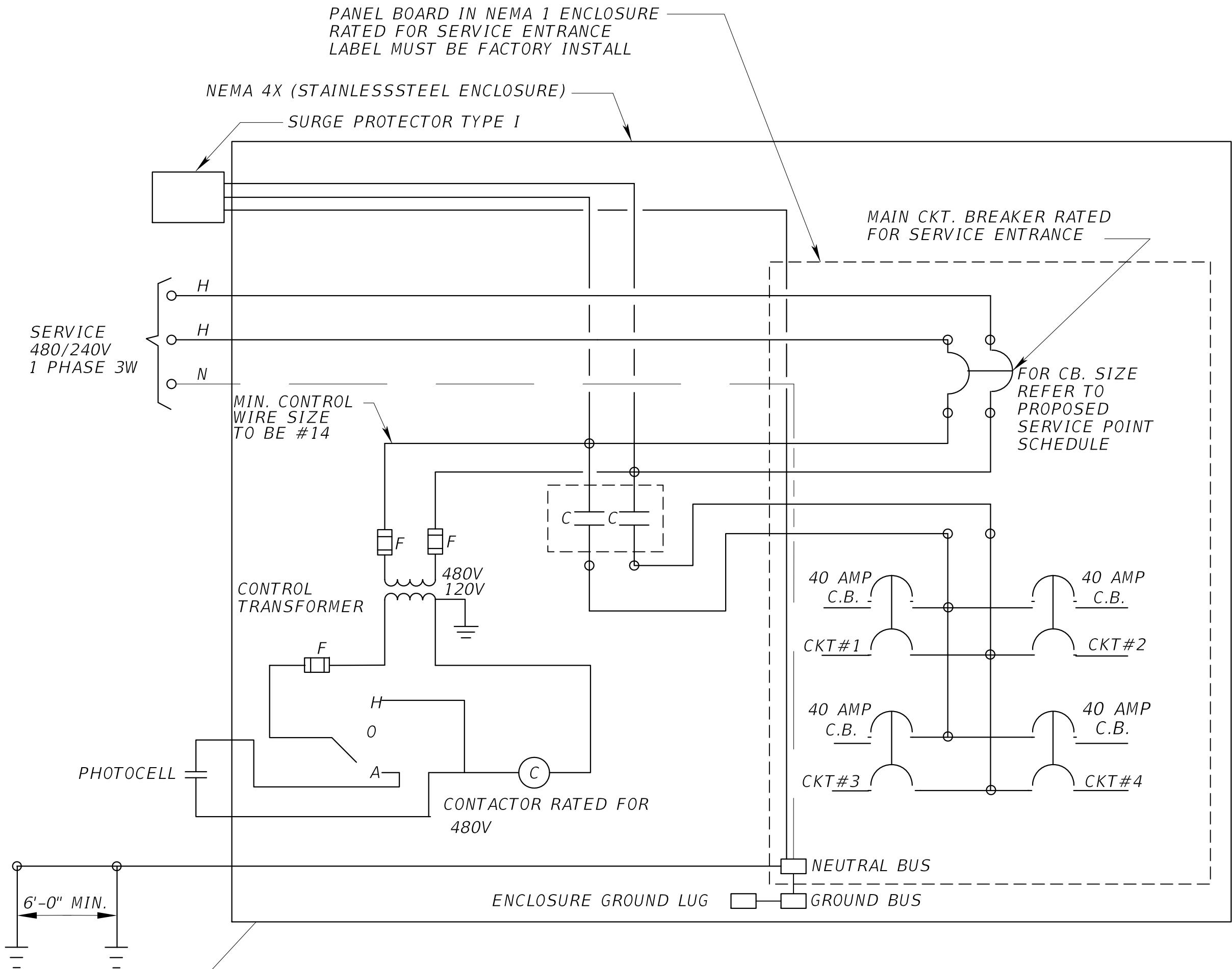
THESE DRAWINGS DEPICT PREFERRED INSTALLATION METHODS OR SOLUTION FOR STANDARD JOB CONDITIONS. PROJECT ENGINEER SHALL EVALUATE SPECIFIC JOB REQUIREMENTS BEFORE APPLYING ANY OF THESE DETAILS, AND SHALL PROVIDE ADDITIONAL DETAILS ON SEPARATE SHEETS TO SUIT JOB CONDITIONS



SERVICE POINT DETAIL
N.T.S

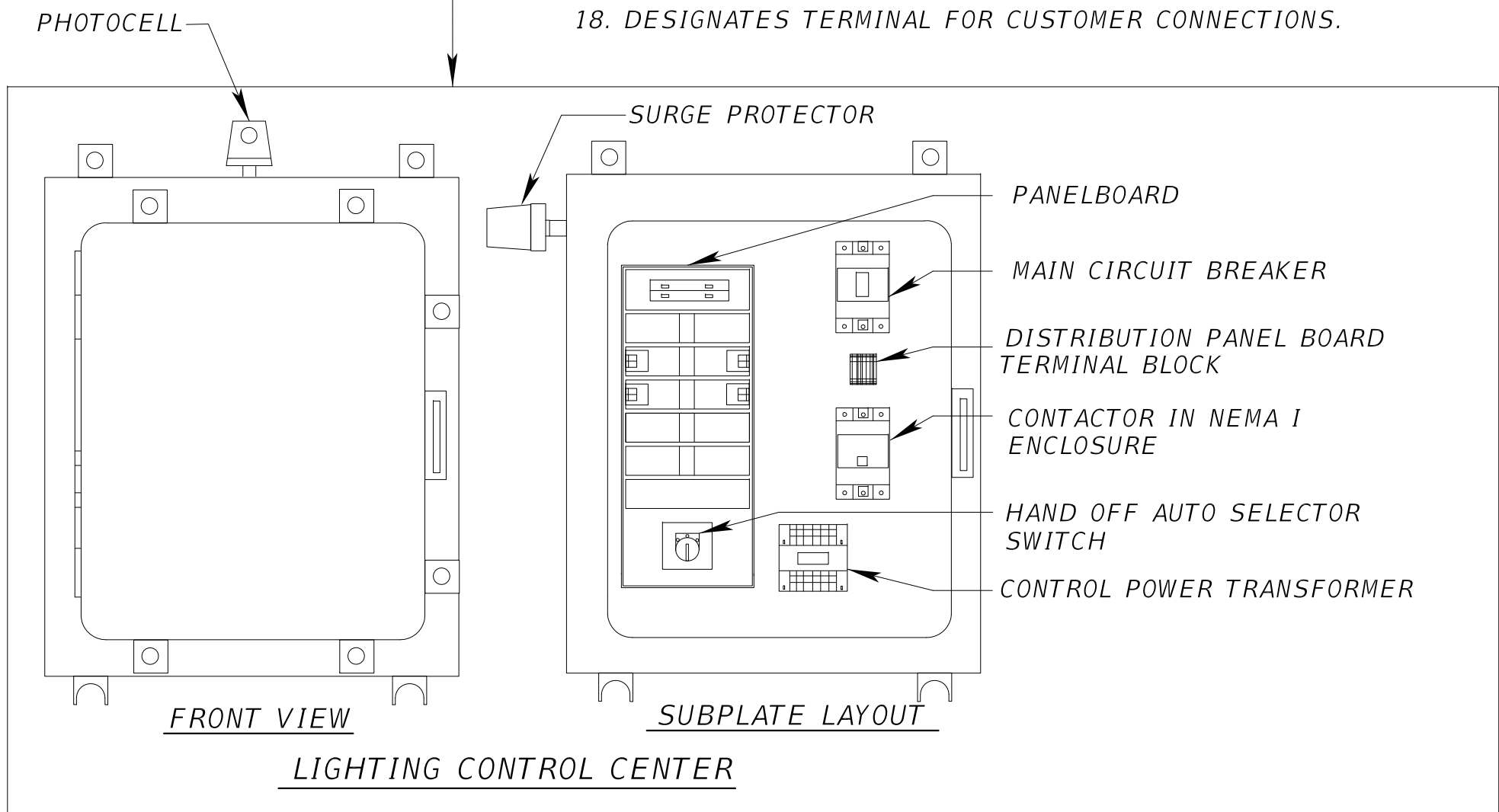
NOTES:

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NOTES (CONT.)

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CKT NO	SERVING	KVA	AMPS	C. BKR	WIRE/CONDUCT

NUMBERS OF BRANCH CKT. BREAKERS AS REQUIRED

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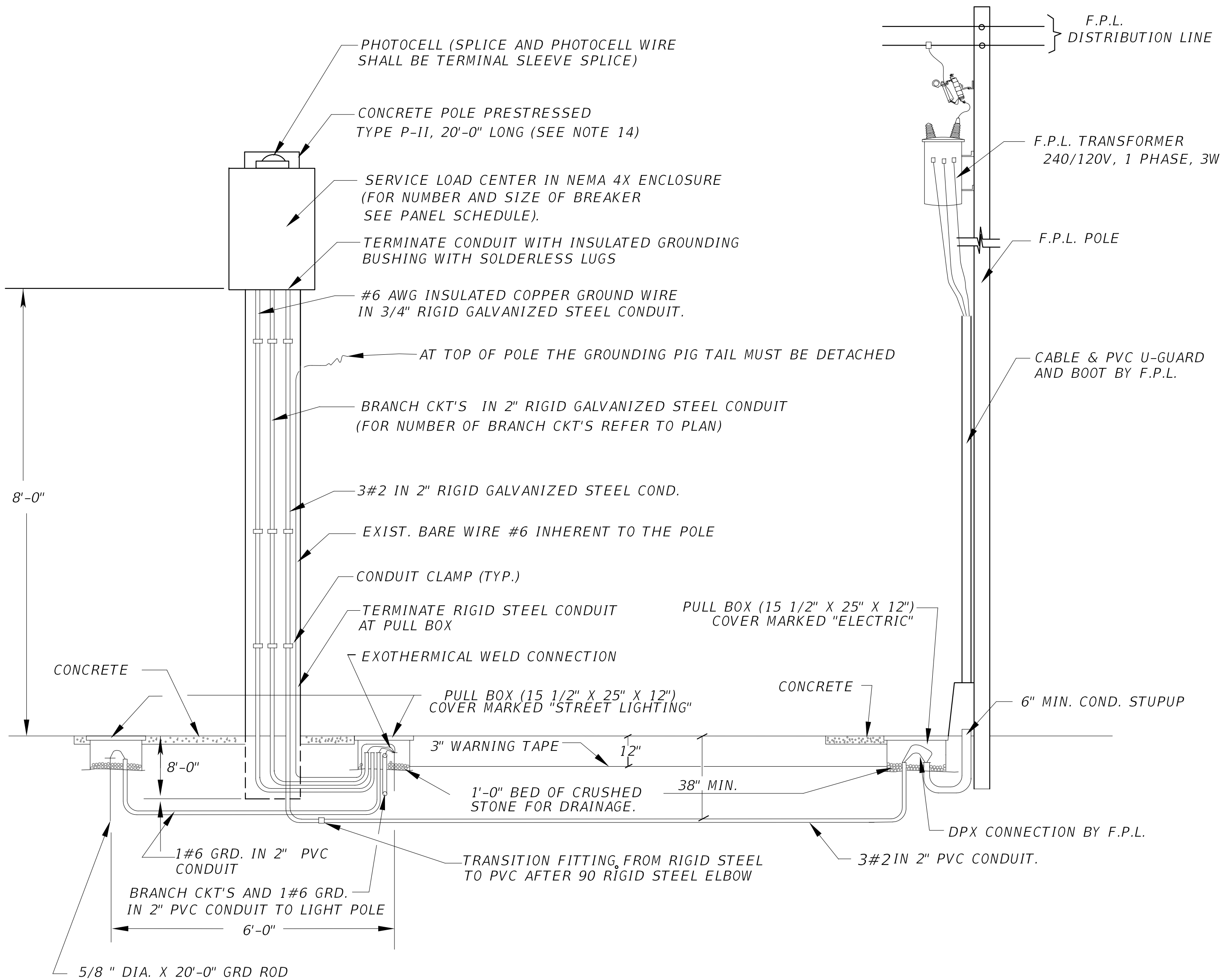
Amp= $\frac{VA}{V}$

REVISIONS							
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

CONSULTANT'S NAME

DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY:					

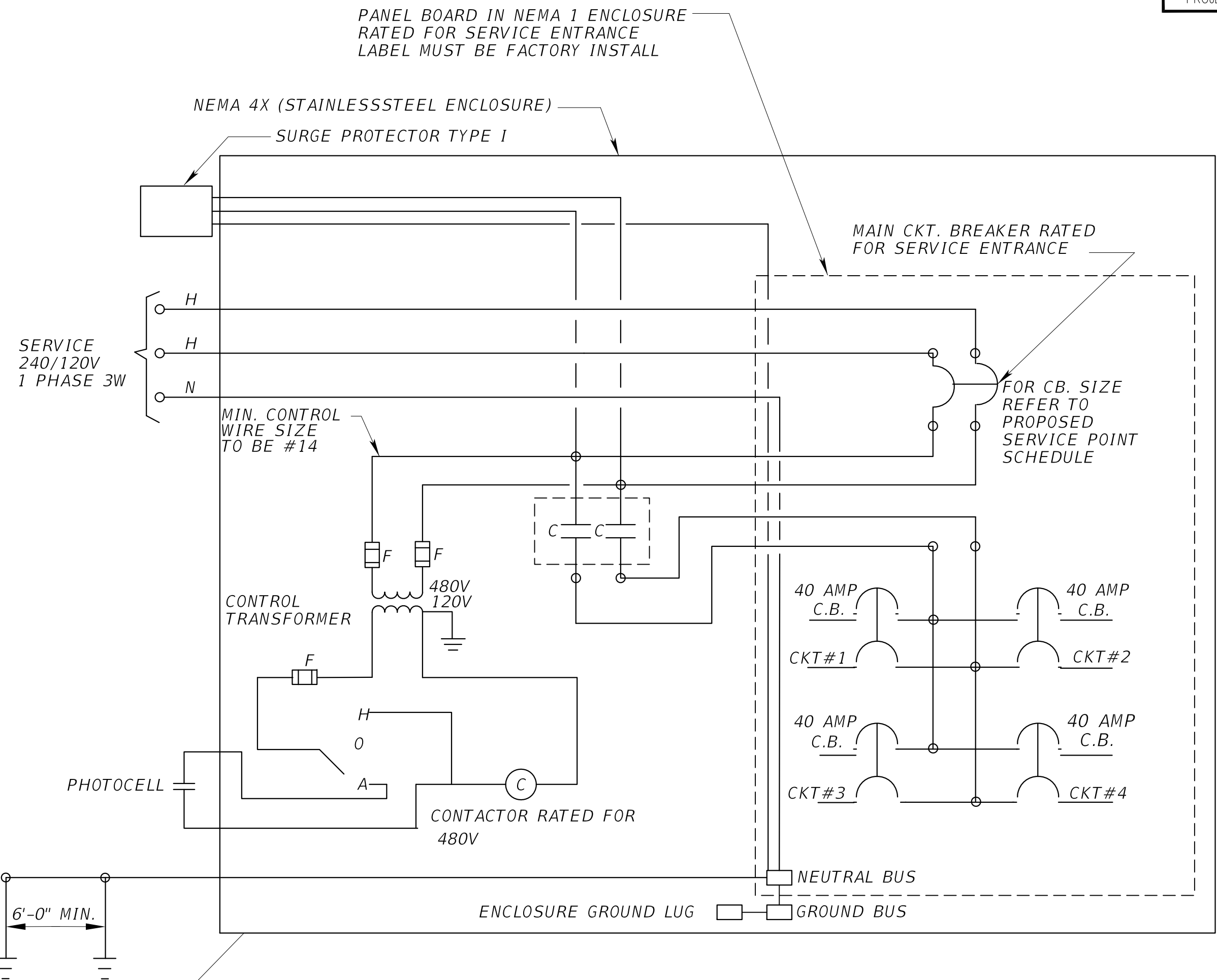
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SERVICE POINT DETAIL
N.T.S

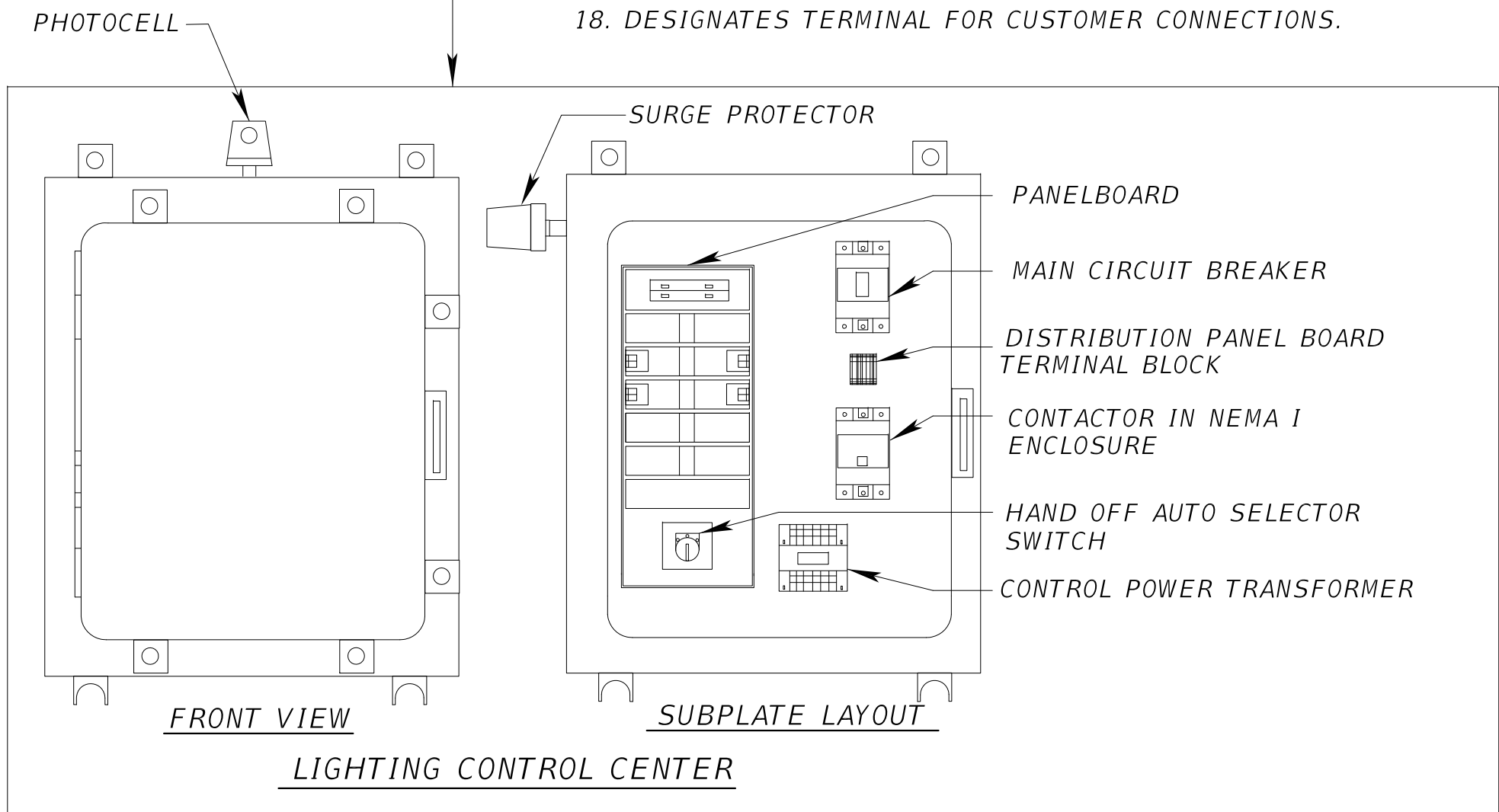
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CKT NO	SERVING	KVA	AMPS	C. BKR	WIRE/CONDUCT

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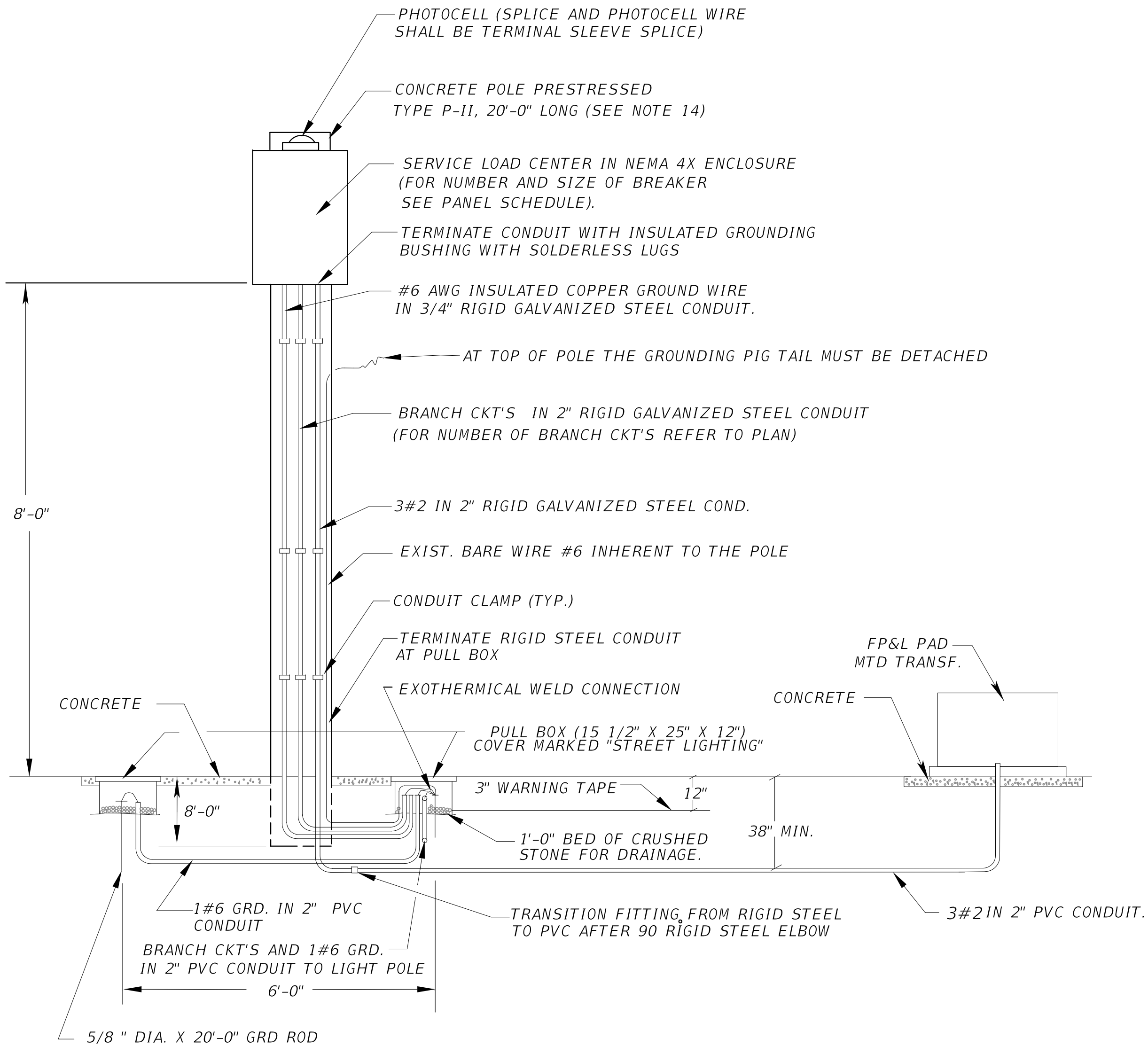
DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

SERVICE POINT DETAIL
PANELBOARD 240V/120V

SHEET

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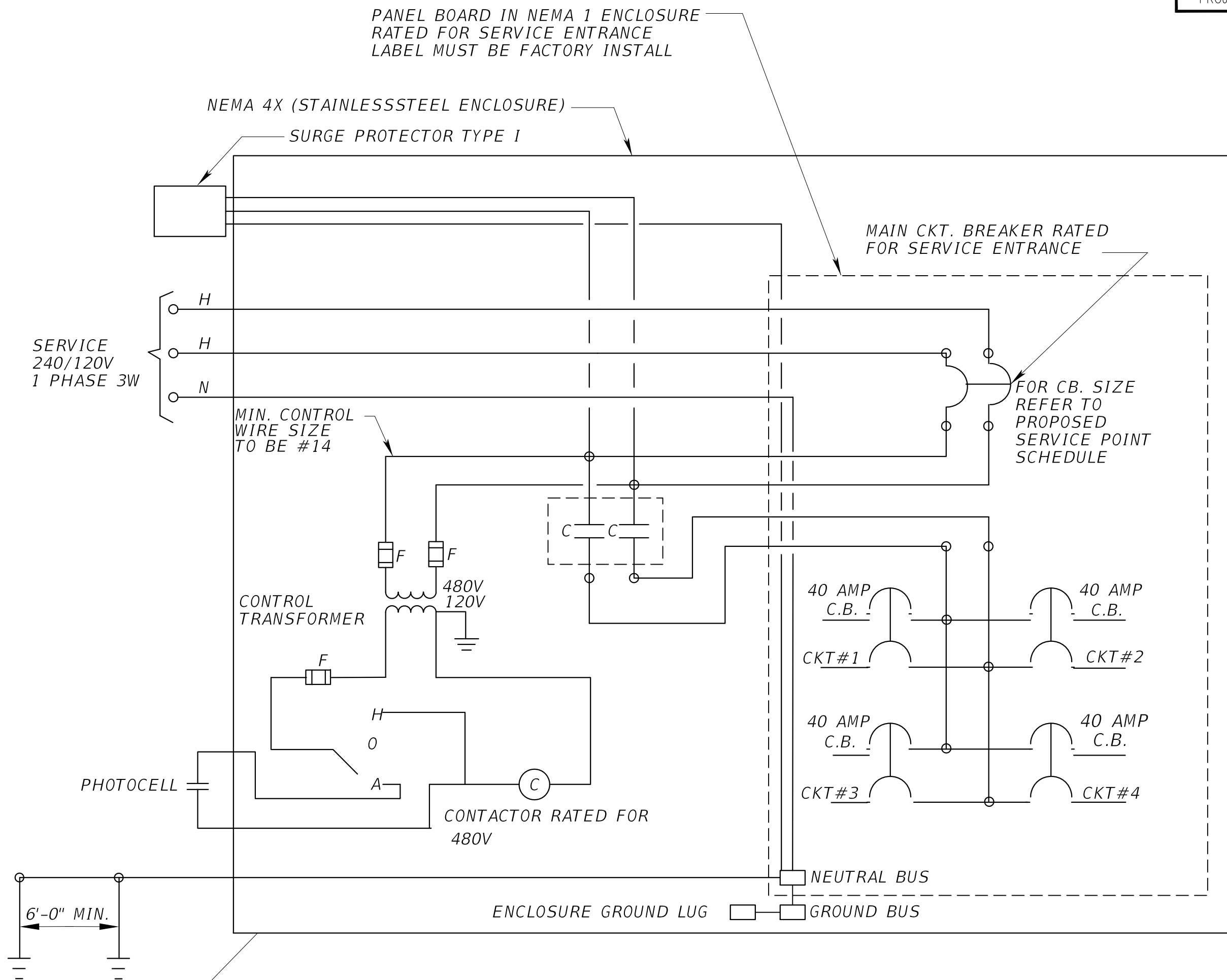
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SERVICE POINT DETAIL
N.T.S

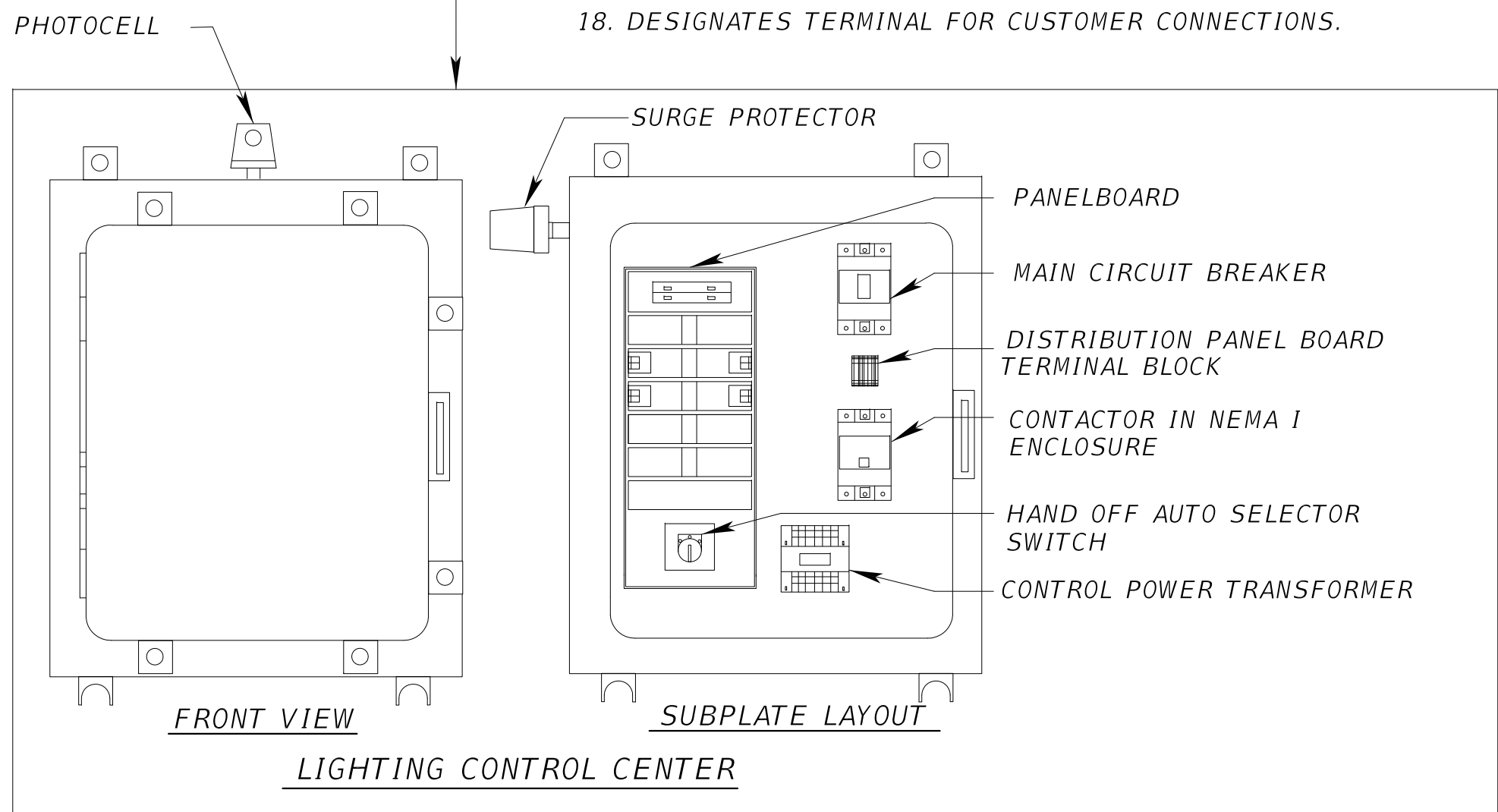
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NOTES (CONT.)

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PANEL BOARD SCHEDULE					
NEMA-1 10,3W,240/120 V, (2P - 100 A MCB) 25,000 RMS SYMETRICAL SURF-MTD					
CKT NO	SERVING	KVA	AMPS	C. BKR	WIRE/CONDUCT

NUMBERS OF BRANCH CKT. BREAKERS AS REQUIRED

LOAD CENTER LOAD CALCULATION:

CONTINUOUS LOADS= VA
25% CONT. LOAD= VA
TOTAL= VA
Amp= $\frac{VA}{V}$

REVISIONS							
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

CONSULTANT'S NAME

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SUPERVISED BY					

MIAMI-DADE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

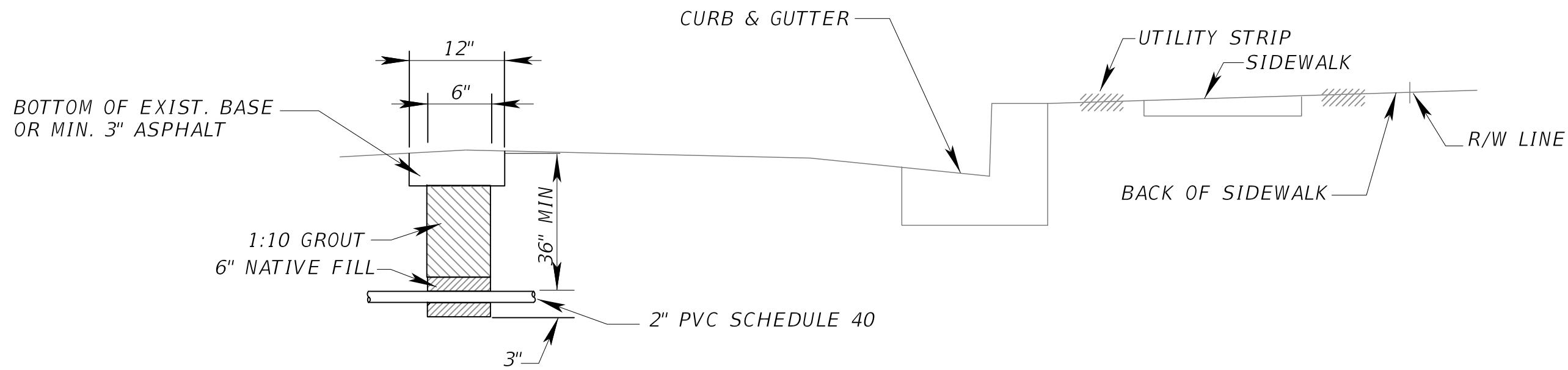
**SERVICE POINT DETAIL
PANELBOARD 240V/120V**

SHEET

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1 OPTION

CONDUIT BURIED WHEN CROSSING ROAD

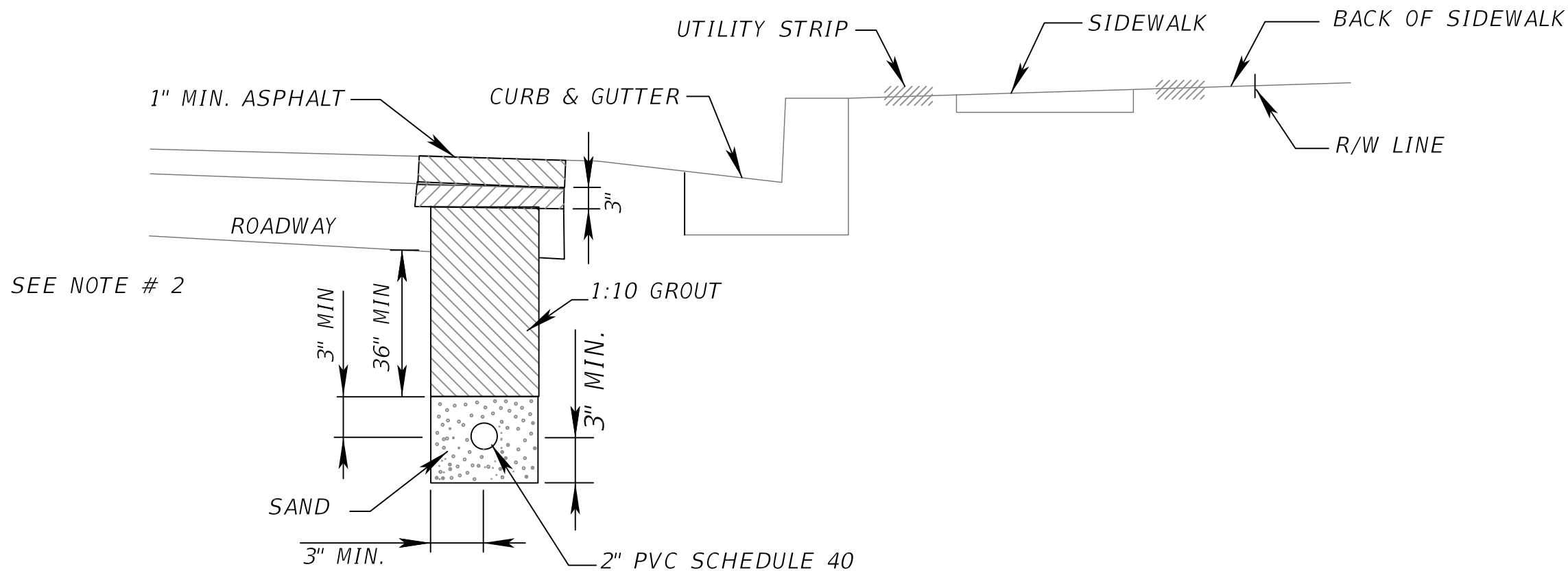


NOTE:
TRENCH NOT TO BE OPENED MORE THAN 250' AT A TIME

* MAY BE ADJUSTED IN FIELD DUE TO FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

2 OPTION

CONDUIT BURIAL IN ROADWAY



NOTE:

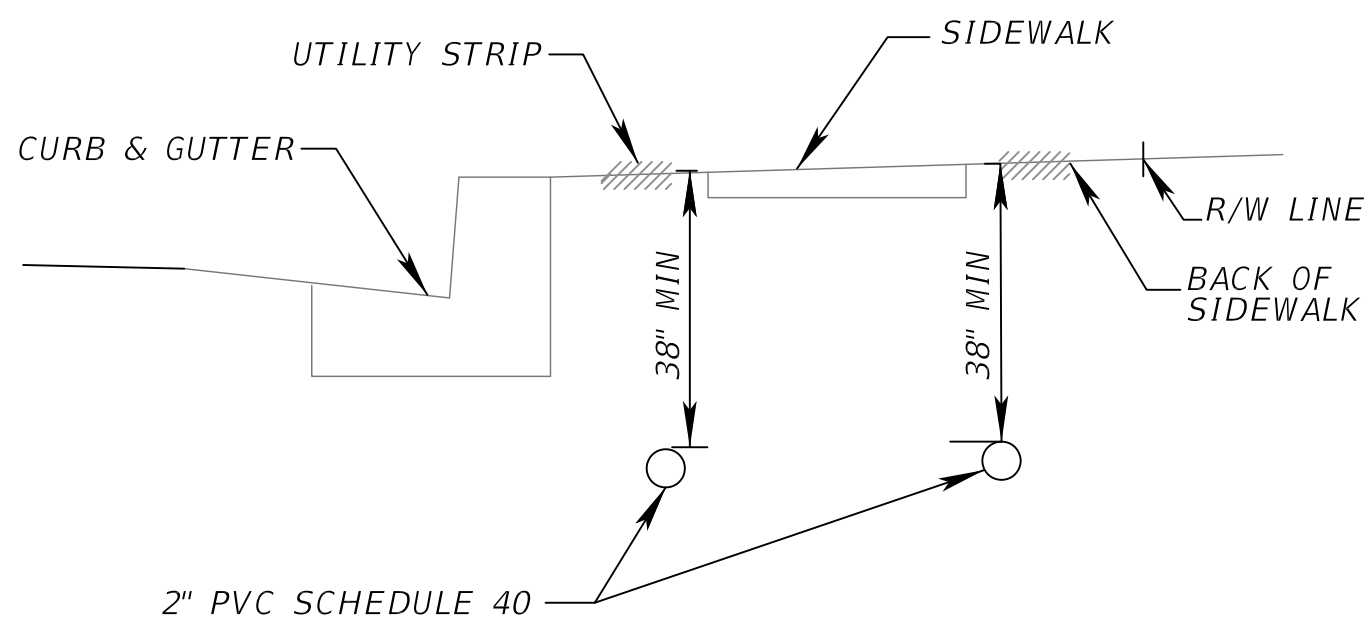
1. TRENCH NOT TO BE OPENED MORE THAN 250' AT A TIME.

2. THIS AREA SHALL BE BACKFILLED WITH TYPE S-1 ASPHALTIC CONCRETE TO WITHIN 1 INCH OF FINISHED GRADE.

* MAY BE ADJUSTED IN FIELD DUE TO FIELD CONDITIONS AS DIRECTED BY THE ENGINEER.

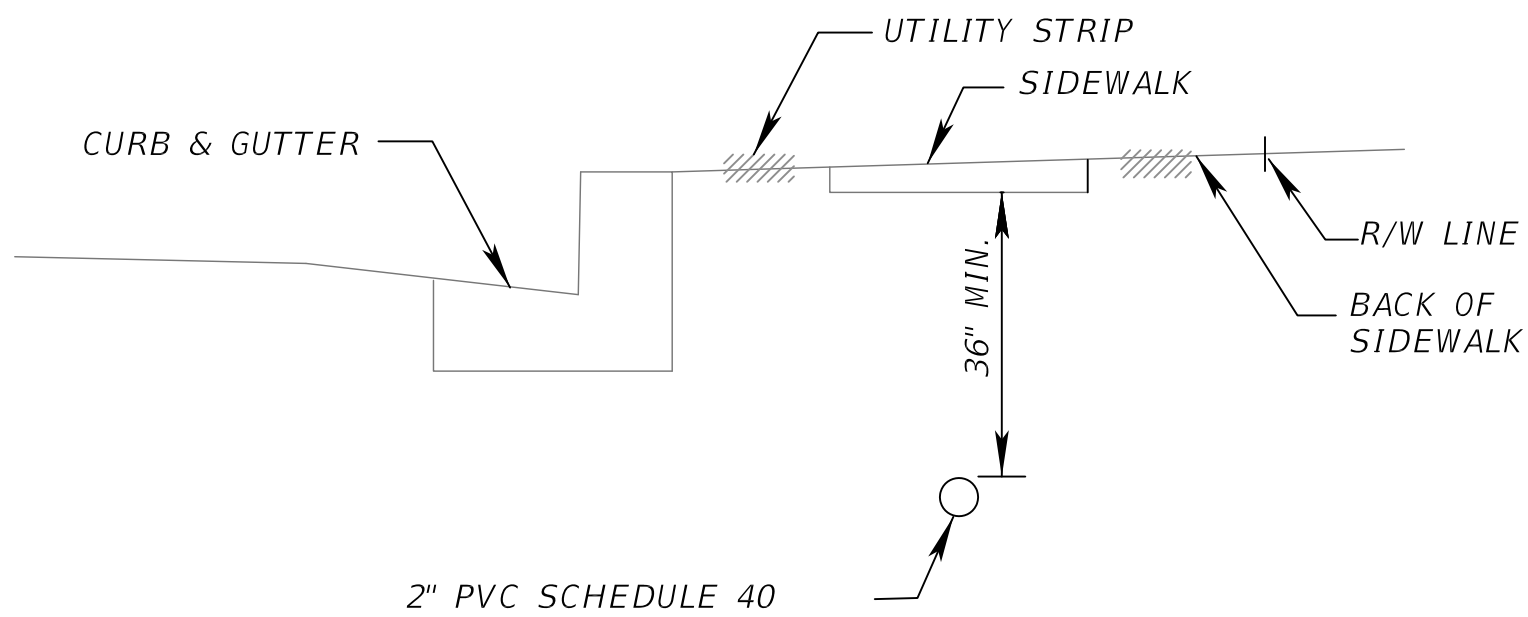
3 OPTION

CONDUIT IN UTILITY AND BACK OF SIDEWALK



4 OPTION

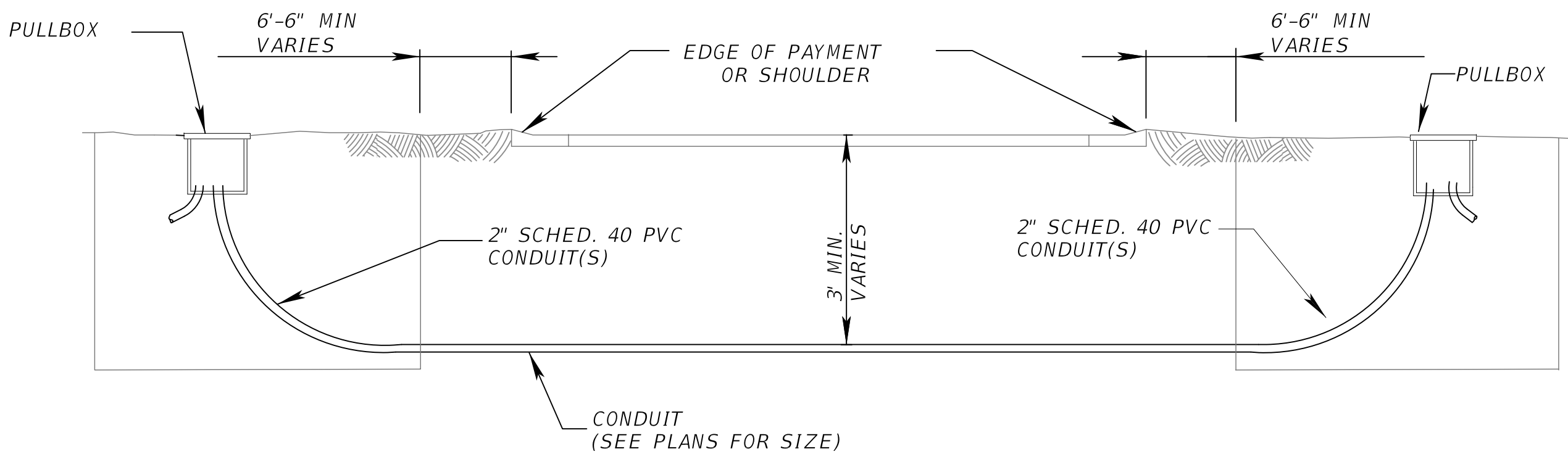
CONDUIT UNDER SIDEWALK



NOTE:
IN PLACING CONDUIT UNDER SIDEWALK REPLACEMENT OF ENTIRE SIDEWALK SECTION SHALL BE NECESSARY.

5 OPTION

CONDUIT DIRECTIONAL BORE



NOTES:

1. DIRECTIONAL BORING OPERATIONS SHALL BE DONE IN ACCORDANCE WITH THE F.D.O.T. UTILITY ACCOMODATION MANUAL.

CONSULTANT'S NAME

DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY:					

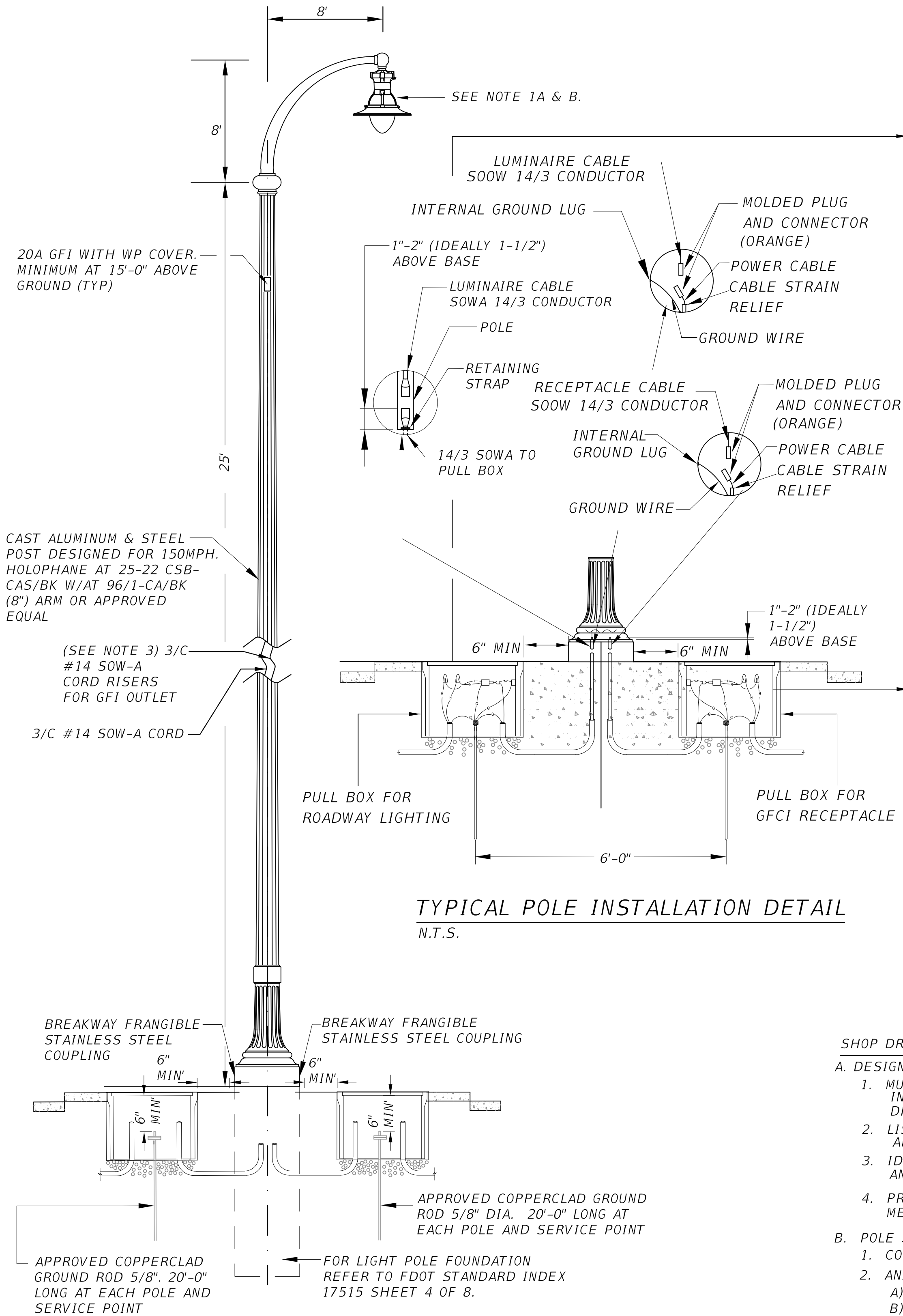
MIAMI-DADE

DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

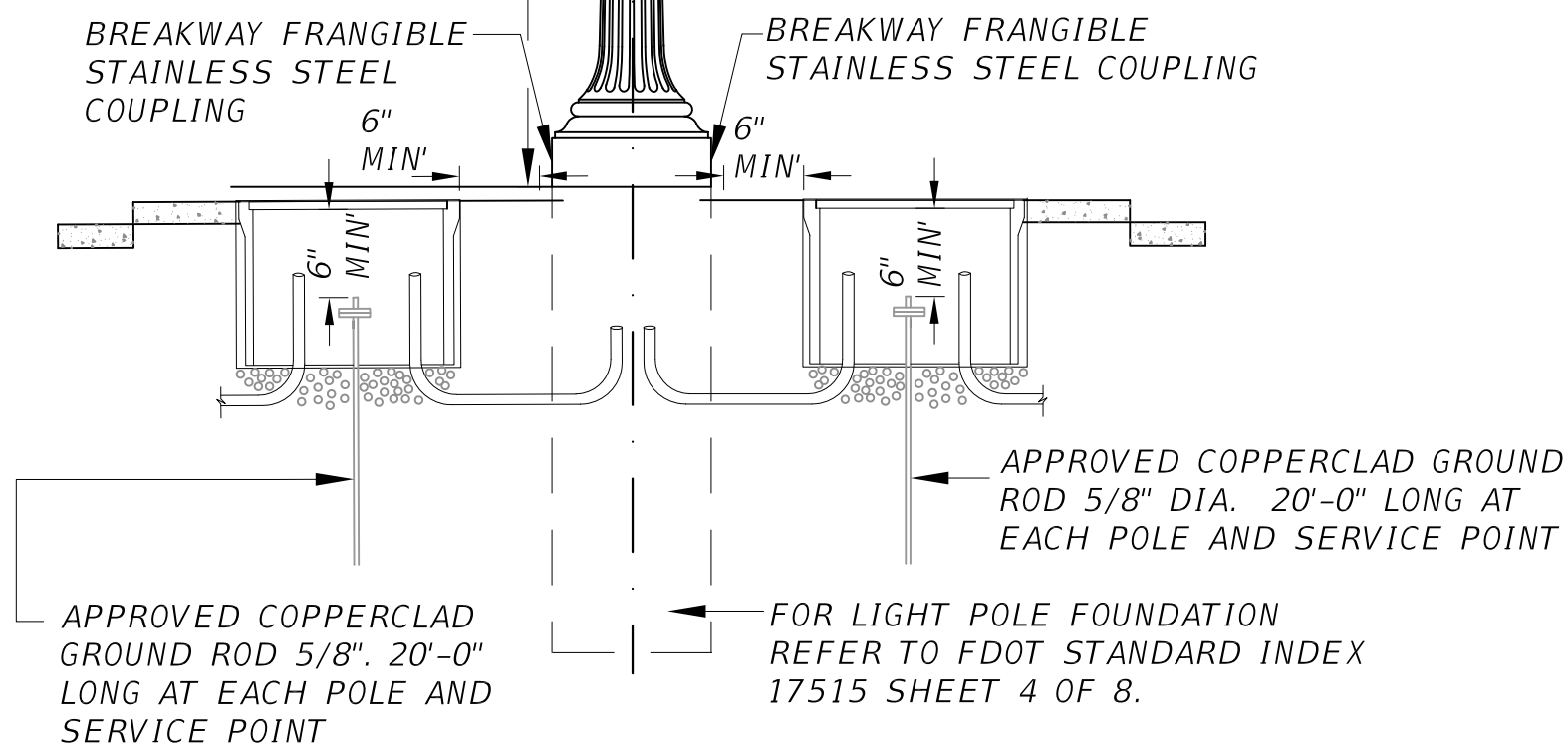
CONDUIT BURIAL DETAILS

SHEET

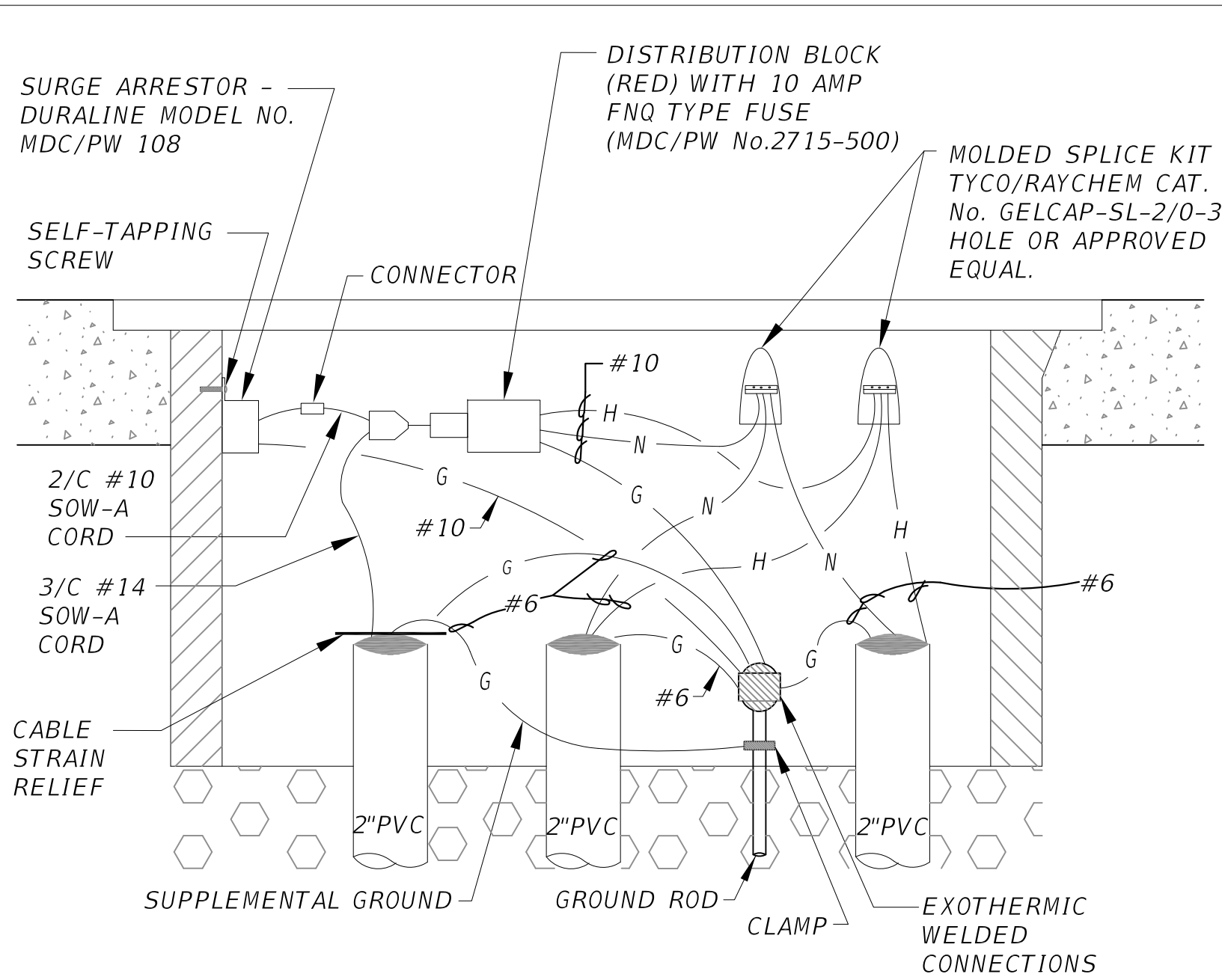
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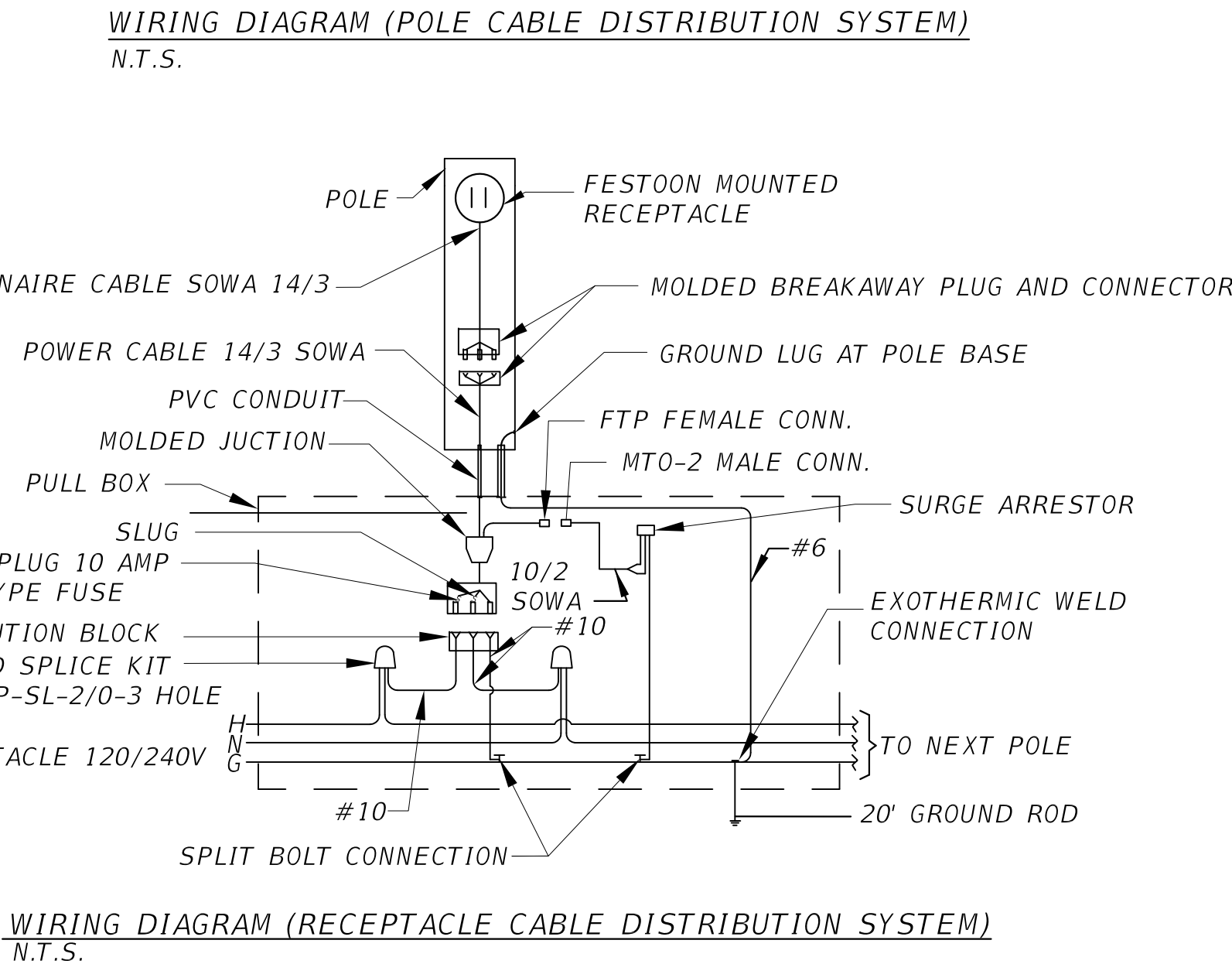
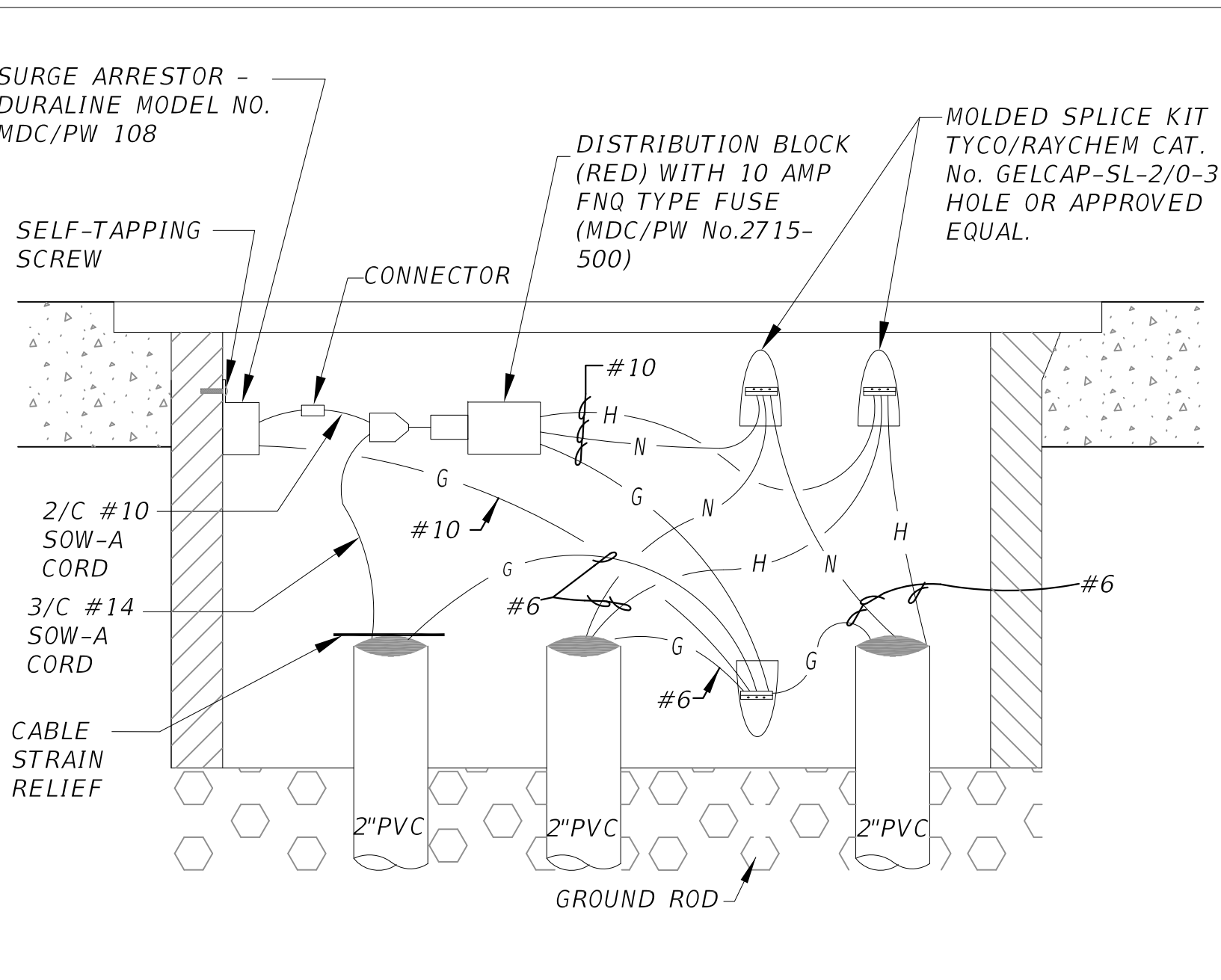
TYPICAL POLE INSTALLATION DETAIL
N.T.S.



TYPICAL METAL POLE INSTALLATION DETAIL
N.T.S.



WIRING DIAGRAM (POLE CABLE DISTRIBUTION SYSTEM)
N.T.S.



WIRING DIAGRAM (RECEPTACLE CABLE DISTRIBUTION SYSTEM)
N.T.S.

SHOP DRAWINGS

A. DESIGN CRITERIA/PARAMETERS/POLE SHOP DRAWINGS

1. MUST COMPLY WITH CURRENT AASHTO SPECIFICATIONS IN REGARD TO GROUP LOADING,WIND VELOCITY,HEIGHT & DRAG COEFFICIENT ETC.
2. LIST: AREA OF WIND EXPOSURE,COMPONENT DEAD WEIGHTS, APPLICABLE COEFFICIENT FOR EACH
3. IDENTIFY ANY EXEPTIONS TO AASHTO (LOADING/AND OR ANALYSIS)
4. PROVIDE MATERIALS SPECIFICATIONS,ALLOWABLE STRESSES, METHODS OF ANALYSIS.

B. POLE SHAFT COMPUTATIONS

1. CONSIDER WIND AND DEAD LOAD ON ALL COMPONENTS
2. ANALYZE EFFECTS OF COMBINED STRESS
 - A) MOMENT
 - B) SHEAR
 - C) TORSION
 - D) COMPUTE CSR PER AASHTO
3. CRITICAL AREAS OF STRESS
 - A) BASE OF POLE
 - B) MANHOLE
 - C) POLE CROSS-SECTION

C. ARM STRESS COMPUTATIONS

1. CONSIDER WIND AND DEAD LOAD ON ALL COMPONENTS.
2. ANALYZE EFFECTS OF COMBINED STRESS.
 - A) MOMENT
 - B) SHEAR
 - C) COMPUTE CSR PER AASHTO
3. CRITICAL AREAS OF STRESS
 - A) TUBE COMPONENTS AT POLE CONNECTION
 - B) ACTUAL CONNECTION/FASTENERS

D. MISCELLANEOUS COMPUTATIONS / ANALYSIS

1. SECTION PROPERTIES
2. WELD ANALYSIS (IF APPLICABLE)
3. LOADING DIAGRAM (POLE AND ARM)
4. CONNECTION DETAILS
5. TEST REFERENCES,EQUATIONS

E. THE TEST REPORT SHALL BE CERTIFIED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER.

NOTES

- 1) A-ESPLANADE TEAR DROP TEARDROP LED 2 SERIES UP TO 25,331 LUMENS: 2700K, 3000K, 4000K AND 5000K CCT, AUTO-SENSING VOLTAGE (120-277 AND 347 THRU 480) 50/60 HZ, BLACK, TEARDROP GLASS AND DOOR, TYPE 3 ASYMMETRIC DISTRIBUTION, QUICK LOCK STEM MOUNT, RATED 40 DEG C, OPTIONS: FACTORY PROGRAMMED DRIVER, ADJUSTABLE OUTPUT DIMMING, HSS, DEEP AND SHALLOW SKIRTS, BOWL AND SAG GLASS OR APPROVED EQUAL.

B-HPS FIXTURE UL LISTED FOR WET LOCATION LUMINAIRE SHALL BE HOLOPHANE DECORATIVE OUTDOOR ESPLANADE CAT. ESU 250 HP 48B4DS OR APPROVED EQUAL.
- 2) POLES, BRACKETS ARMS AND TRANSFORMER BASES SHALL BE ALLUMINUM AND DESIGNED IN ACCORDANCE WITH LOCAL DESIGN CRITERIA USING THE APPLICABLE EQUATIONS FOUND IN "STANDARD SPECIFICATIONS FOR HIGHWAY SIGNS, LUMINAIRE AND TRAFFIC SIGNALS" PUBLISHED BY CURRENT A.A.S.H.T.O. THE CONTRACTOR (SUPPLIER) SHALL SUBMIT EVIDENCE OF DEMONSTRATED COMPLIANCE WITH THE REQUIREMENTS OF THIS SPECIFICATION ALONG WITH HIS EQUIPMENT SUBMITTAL DATA. NO POLES ARE TO BE INSTALLED PRIOR TO DEPARTMENT APPROVAL.
- 3) GFI OUTLET CIRCUIT SHALL BE RUN IN A SEPARATE CONDUIT AND PULL BOX SYSTEM. GROUNDING ELECTRODES SHALL BE KEPT SEPARATE BETWEEN 480V AND 120V SYSTEMS BY AT LEAST 6'-6". SEE WIRING SCHEMATIC.

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CONSULTANT'S NAME

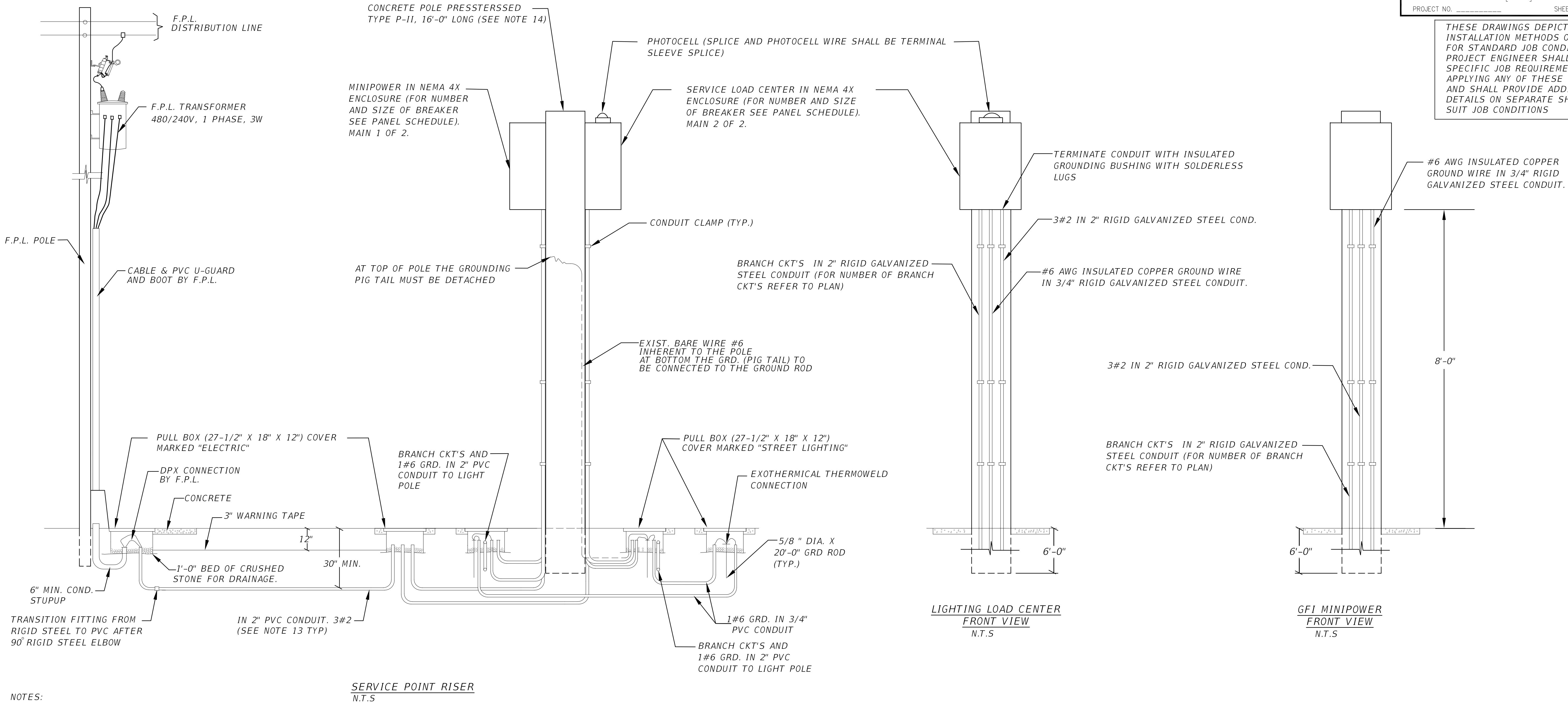
DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY					



DECORATIVE POLE
DETAIL WITH GFI
RECEPTACLE

SHEET

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MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
[PROJECT NAME]
[LIMITS]
PROJECT NO. _____ SHEET ____ OF ____
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- A MAIN BREAKER IS REQUIRED IN ALL SERVICE PANELS WITH 2 OR MORE FEEDER BREAKERS.
- ALL SERVICE EQUIPMENT SHALL BE U.L. APPROVED.
- BUS BAR TO BE COPPER COATED AND HAVE A MINIMUM RATING OF 100 AMPS. WHEN MAIN BREAKER EXCEEDS 100 AMPS BUSBAR TO MATCH BREAKER AMPERAGE.
- LOCATE CONTACTOR, TRANSFORMER, AND H.O.A. SWITCH INSIDE ENCLOSURE. THE ENCLOSURE TO BE SIZED TO ACCOMMODATE AS MANY BREAKERS AS CALLED FOR AND ALL OTHER SERVICE EQUIPMENT.
- THE ENCLOSURE TO BE RIGIDLY ATTACHED TO THE POLE FACE.
- CONTRACTOR SHALL COORDINATE WITH F.P.L. ENGINEERS FOR THE INSTALLATION OF THE F.P.L. RISER WHICH INCLUDES A CONNECTION FEE. (THIS FEE SHALL BE INCLUDED IN BID ITEM 715-7-11) THIS LAYOUT HAVE BEEN APPROVED BY THE MAINTENANCE AGENCY (MIAMI-DADE COUNTY AND F.D.O.T. DISTRICT SIX)

- ALL GROUND ROD SHALL BE INTERCONNECTED (USING #6 GROUND WIRE).
- PROVIDE SUPPLEMENTARY GROUND ELECTRODE SPACE AT LEAST 6FT (AS PER N.E.C., MIAMI-DADE COUNTY AND F.D.O.T. DISTRICT SIX REQUIREMENT)
- ALL CONDUCTOR SHALL BE TYPE THWN-2. (OTHER TYPE OF CONDUCTOR IS NOT ALLOWED. EXCEPT GROUND WIRE WHICH SHALL BE TYPE THWN.)
- CONTRACTOR SHALL SUBMIT STRUCTURAL CALCULATIONS OF THE POLE, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER.
- AFTER OPENING THE PANEL, THE PANEL BOARD SHALL HAVE A DEAD FRONT COVER FOR THE PURPOSE OF COVERING ALL THE WIRING AND EXPOSING ONLY THE BUTTONS OF THE BREAKERS; IN COMPLIANCE WITH THE N.E.C.
- ALL WIRES EXTERNAL TO CONTROL CABINET TO BE TERMINATED TO A TERMINAL.
- WIRES END WITHIN CABINET TO BE IDENTIFIED WITH WIRE MARKERS.
- DESIGNATES TERMINAL FOR CUSTOMER CONNECTIONS.

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CONSULTANT'S NAME

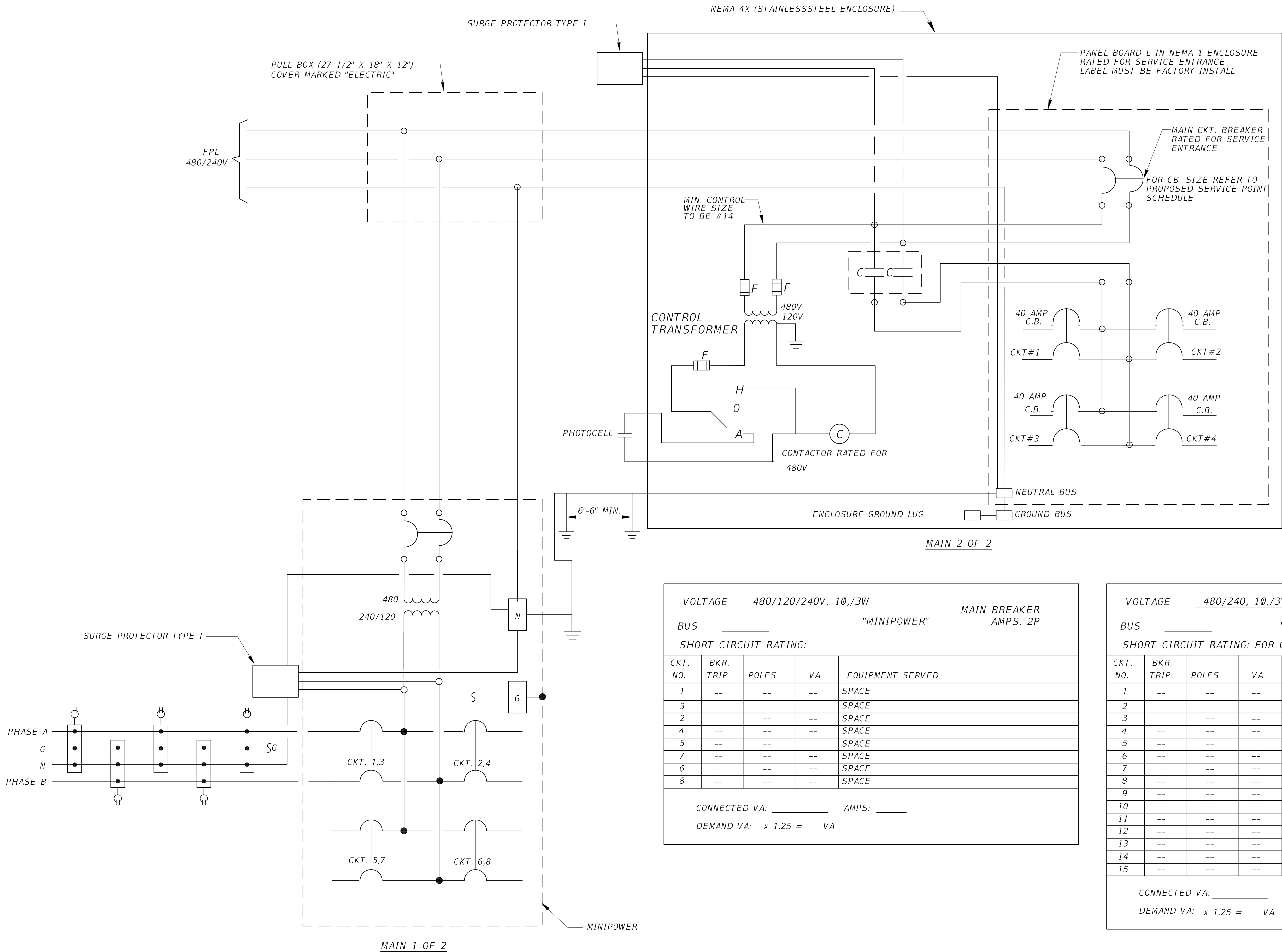
DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY					

MIAMI-DADE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

STREET LIGHTING/GFI
SERVICE POINT DETAIL 1

SHEET

P:\MDC-PW Roadway Lighting Manual\Lighting Manual\Item #2 Lighting Manual\CAD Details\WVC\30-Street Lighting GFI Service Point Detail 2.dwg Sep 30, 2016 -- 4:50pm ERAMOS



VOLTAGE 480/120/240V, 10,/3W				
BUS "MINIPOWER"				
MAIN BREAKER AMPS, 2P				
SHORT CIRCUIT RATING:				
CKT. NO.	BKR. TRIP	POLES	VA	EQUIPMENT SERVED
1	--	--	--	SPACE
3	--	--	--	SPACE
2	--	--	--	SPACE
4	--	--	--	SPACE
5	--	--	--	SPACE
7	--	--	--	SPACE
6	--	--	--	SPACE
8	--	--	--	SPACE
CONNECTED VA: _____ AMPS: _____				
DEMAND VA: x 1.25 = VA				

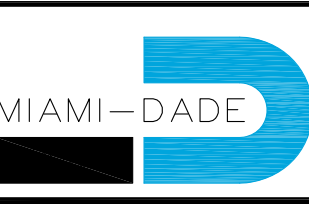
VOLTAGE 480/240, 10,/3W				
BUS "PANEL L"				
MAIN BREAKER AMPS, 2P				
SHORT CIRCUIT RATING: FOR GFI RECEPT				
CKT. NO.	BKR. TRIP	POLES	VA	EQUIPMENT SERVED
1	--	--	--	SPACE
2	--	--	--	SPACE
3	--	--	--	SPACE
4	--	--	--	SPACE
5	--	--	--	SPACE
6	--	--	--	SPACE
7	--	--	--	SPACE
8	--	--	--	SPACE
9	--	--	--	SPACE
10	--	--	--	SPACE
11	--	--	--	SPACE
12	--	--	--	SPACE
13	--	--	--	SPACE
14	--	--	--	SPACE
15	--	--	--	SPACE
CONNECTED VA: _____ AMPS: _____				
DEMAND VA: x 1.25 = VA				

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
[PROJECT NAME]
[LIMITS]
PROJECT NO. _____ SHEET ____ OF ____
THESE DRAWINGS DEPICT PREFERRED INSTALLATION METHODS OR SOLUTION FOR STANDARD JOB CONDITIONS. PROJECT ENGINEER SHALL EVALUATE SPECIFIC JOB REQUIREMENTS BEFORE APPLYING ANY OF THESE DETAILS, AND SHALL PROVIDE ADDITIONAL DETAILS ON SEPARATE SHEETS TO SUIT JOB CONDITIONS

REVISIONS							
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

CONSULTANT'S NAME

DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY:					

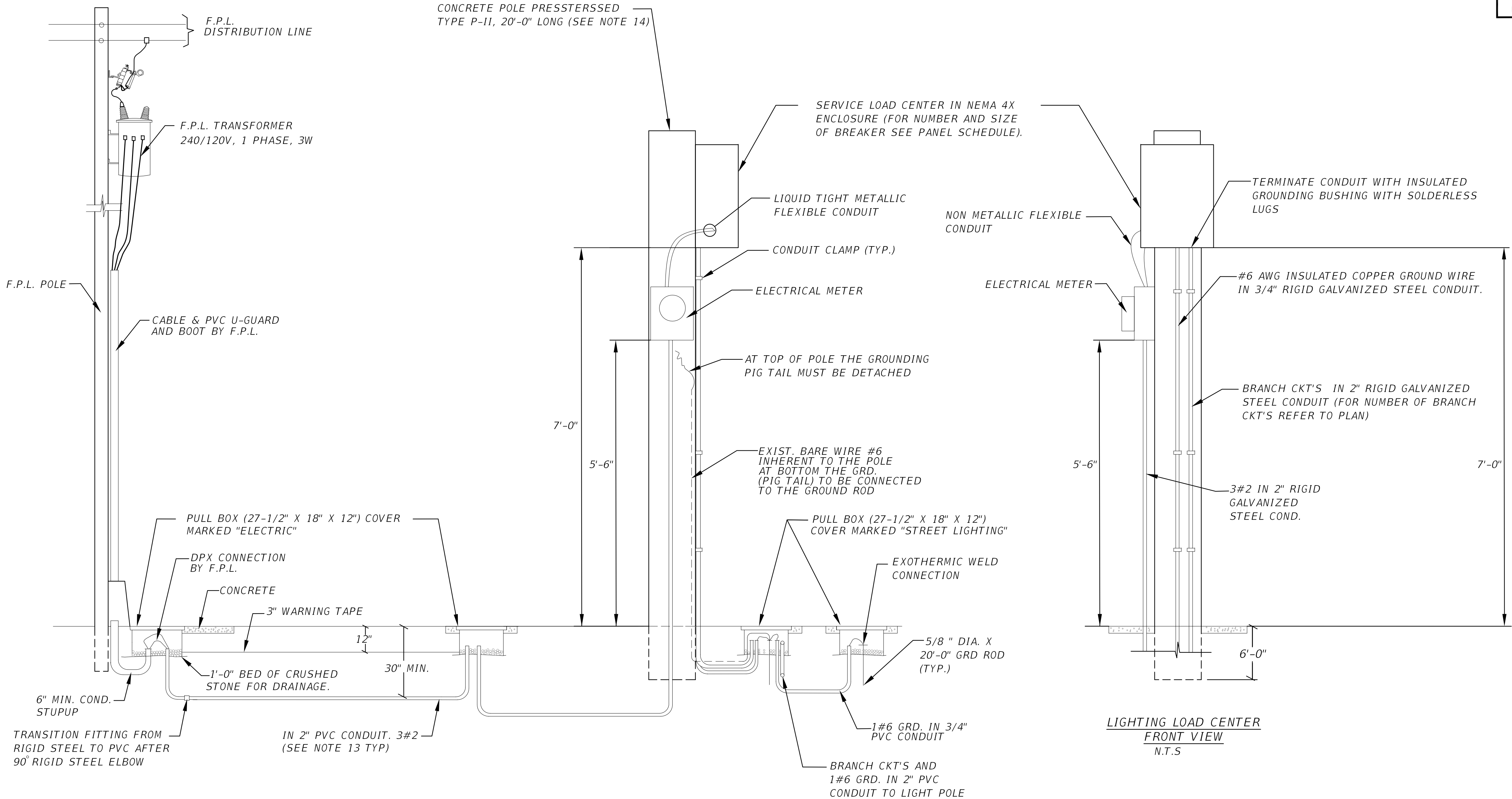


DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

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MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
[PROJECT NAME]
[LIMITS]
PROJECT NO. _____ SHEET ____ OF ____

THESE DRAWINGS DEPICT PREFERRED
INSTALLATION METHODS OR SOLUTION
FOR STANDARD JOB CONDITIONS.
PROJECT ENGINEER SHALL EVALUATE
SPECIFIC JOB REQUIREMENTS BEFORE
APPLYING ANY OF THESE DETAILS,
AND SHALL PROVIDE ADDITIONAL
DETAILS ON SEPARATE SHEETS TO
SUIT JOB CONDITIONS



NOTES:

1. THE ENCLOSURE SHALL BE NEMA 4X (STAINLESS STEEL), POLE MOUNTED, RIGIDLY ATTACHED TO THE POLE FACE.
2. THE ENCLOSURE DOOR SHALL BE SECURED BY LOCKABLE LATCH. THE DOOR SHALL HAVE A MINIMUM OF THREE HINGES AND BE LATCHABLE. NO SCREWS TO BE USED TO ATTACH DOOR.
3. 480V MINIMUM RATING BOLT IN TYPE BREAKERS SHALL BE USED.
4. A 600V LIGHTNING PROTECTOR SHALL BE WIRED OUTSIDE THE ENCLOSURE.
5. A MAIN BREAKER IS REQUIRED IN ALL SERVICE PANELS WITH 2 OR MORE FEEDER BREAKERS.
6. ALL SERVICE EQUIPMENT SHALL BE U.L. APPROVED.
7. BUS BAR TO BE COPPER COATED AND HAVE A MINIMUM RATING OF 100 AMPS. WHEN MAIN BREAKER EXCEEDS 100 AMPS BUSBAR TO MATCH BREAKER AMPERAGE.
8. LOCATE CONTACTOR, TRANSFORMER, AND H.O.A. SWITCH INSIDE ENCLOSURE. THE ENCLOSURE TO BE SIZED TO ACCOMODATE AS MANY BREAKERS AS CALLED FOR AND ALL OTHER SERVICE EQUIPMENT.
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11. ALL GROUND ROD SHALL BE INTERCONNECTED (USING #6 GROUND WIRE).
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16. ALL WIRES EXTERNAL TO CONTROL CABINET TO BE TERMINATED TO A TERMINAL.
17. WIRES END WITHIN CABINET TO BE IDENTIFIED WITH WIRE MARKERS.
18. DESIGNATES TERMINAL FOR CUSTOMER CONNECTIONS.

REVISIONS								
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

CONSULTANT’S NAME

DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY:					

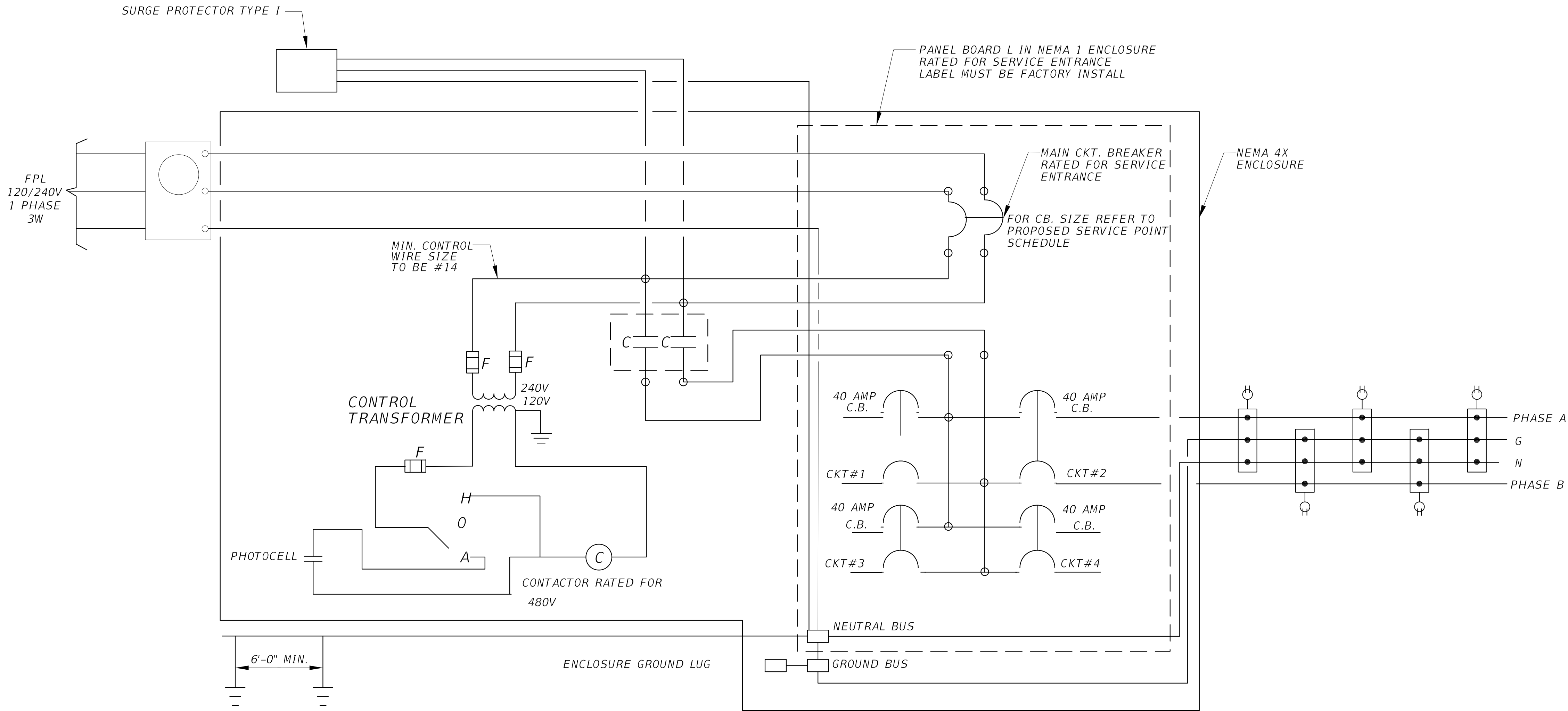
MIAMI-DADE DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166

GFI RECEPTACLES
SERVICE POINT DETAIL 1

SHEET

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THESE DRAWINGS DEPICT PREFERRED INSTALLATION METHODS OR SOLUTION FOR STANDARD JOB CONDITIONS. PROJECT ENGINEER SHALL EVALUATE SPECIFIC JOB REQUIREMENTS BEFORE APPLYING ANY OF THESE DETAILS, AND SHALL PROVIDE ADDITIONAL DETAILS ON SEPARATE SHEETS TO SUIT JOB CONDITIONS



VOLTAGE		<u>120/240, 1Ø, 3W</u>		MAIN BREAKER	
BUS		_____		"PANEL L" FOR GFI RECEPT	
SHORT CIRCUIT RATING:					
CKT. NO.	BKR. TRIP	POLES	VA	EQUIPMENT SERVED	
1	--	--	--	SPACE	
2	--	--	--	SPACE	
3	--	--	--	SPACE	
4	--	--	--	SPACE	
5	--	--	--	SPACE	
6	--	--	--	SPACE	
7	--	--	--	SPACE	
8	--	--	--	SPACE	
9	--	--	--	SPACE	
10	--	--	--	SPACE	
11	--	--	--	SPACE	
12	--	--	--	SPACE	
13	--	--	--	SPACE	
14	--	--	--	SPACE	
15	--	--	--	SPACE	
CONNECTED VA: _____ AMPS: _____					
DEMAND VA: $\times 1.25 =$ VA					

REVISIONS							
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY

CONSULTANT'S NAME

DESIGNED BY	NAME	DATE	DRAWN BY	NAME	DATE
CHECKED BY			CHECKED BY		
SUPERVISED BY:					

MIAMI-DADE

DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS
TRAFFIC, SIGNALS & SIGNS DIVISION
7100 NW 36 STREET
MIAMI, FLORIDA 33166