

ENTRANCE LIGHTING FOR FOREST LAKES A MULTI-FAMILY RESIDENTIAL DEVELOPMENT PHASE III



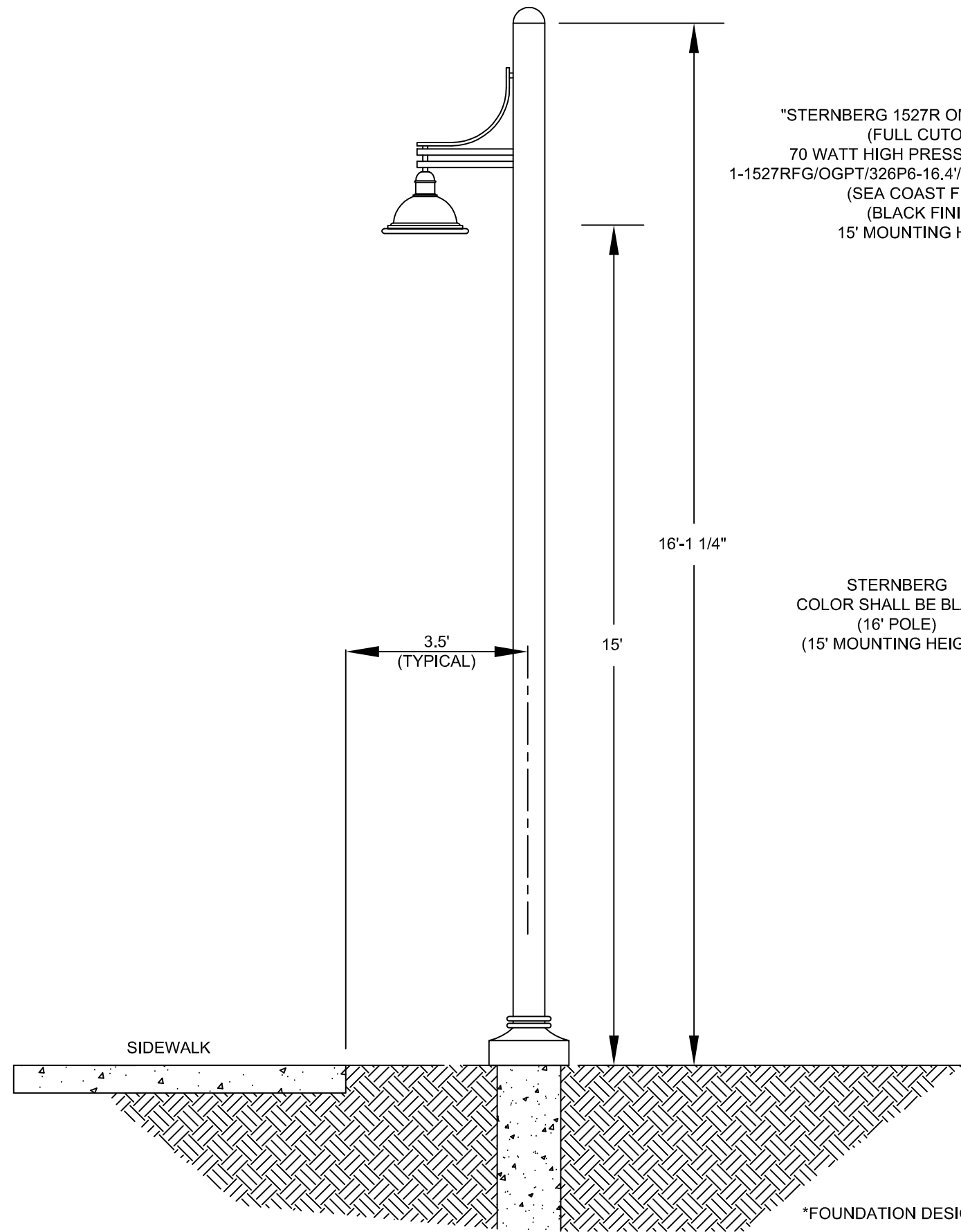
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ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ALTERED IN SIZE BY REPRODUCTION. THIS MAY BE CONSIDERED WHEN OBTAINING SCALED DATA.

JOB NO. F1001.04	DATE	BY	REVISIONS	DESIGNED BY R.C.F.	APPROVED BY: REID C. FELLOWS	MARCH 4, 2013	TRANSPORTATION CONSULTANTS, INC.	2726 OAK RIDGE COURT, SUITE 503 FORT MYERS, FLORIDA 33901-9356 (239) 278-3090 CERTIFICATE OF AUTHORIZATION: #27003	FOREST LAKES SIDEWALK LIGHTING - PHASE III	SHEET NO.
				DRAWN BY W.L.F.	CHECKED BY R.C.F.					COVER

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS		GRAND TOTAL	
			L-5		PLAN	FINAL
			PLAN	FINAL		
555-1-1	DIRECTIONAL BORE (LESS THAN 6") (F&I) (2" UL LISTED HDPE LIGHTING CONDUITS)	LF	136		136	
715-1-12	CONDUCTOR (FURNISH & INSTALL) (NO. 6 AWG)	LF	1185		1185	
715-2-11	CONDUIT (F & I UNDERGROUND) (PVC SCHEDULE 40) (2")	LF	259		259	
715-4-600	LIGHT POLE COMPETE (REMOVE)	EA	3		3	
715-14-11	PULL BOX (FURNISH & INSTALL) (ROADSIDE) (MOULDED) "STREET LIGHTING"	EA	2		2	
715-511-115	LIGHTING POLE COMPLETE (F&I) (15' MH) (STERNBERG 1527 OMEGA - 70W HPS - OGPT16' POLE) (DRILLED SHAFT)	EA	5		5	



"STERNBERG 1527R OMEGA SERIES"
 (FULL CUTOFF)
 70 WATT HIGH PRESSURE SODIUM
 1-1527RFG/OGPT/326P6-16.4'/RO3HS/70HPS/BK-SC
 (SEA COAST FINISH)
 (BLACK FINISH)
 15' MOUNTING HEIGHT

STERNBERG
 COLOR SHALL BE BLACK.
 (16' POLE)
 (15' MOUNTING HEIGHT)

CONVENTIONAL LIGHTING DESIGN CRITERIA
 Average Initial Intensity 1.0 Foot Candles
 Avg./Min.Uniformity Ratio..... 4:1 Or Less
 Max./Min.Uniformity Ratio.....10:1 Or Less
 Wind Speed.....150 MPH

CONTACTS:

TECO PEOPLES GAS PATTY MAYES 5901 ENTERPRISE LANE FORT MYERS, FL. 33905 PH:(239) 690-5513 FAX:(239) 690-1487	COMCAST MIKE PIGOTT 26880 OLD U.S. 41 BONITA SPRINGS, FL 34134 (239) 793-9600	FPL ROBINSON ZAFRA 26430 OLD US 41 RD. BONITA SPRINGS, FL. 34135
EMBARQ TELEPHONE STEVE WYNKOOP PO BOX 2469 NAPLES, FL. 34106 (239) 263-6245	COLLIER COUNTY MIKE GREEN, P.E 2885 HORSESHOE DRIVE SOUTH NAPLES, FL 34104 (239) 252-8192	

*DUE TO THE PRESENCE OF SIGNIFICANT CAPROCK DISCOVERED IN PHASE 1, PROVIDE BID ALTERNATE PRICING FOR SPREAD FOOTERS AND PRECAST CONCRETE CYLINDER BASES AS PER THE STRUCTURAL DETAILS PREPARED BY OTHERS.

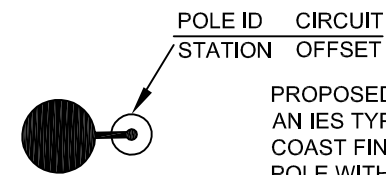
*FOUNDATION DESIGN BY OTHERS.

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				DRAWN BY W.L.F.	REID C. FELLOWS P.E. 61673				POLE DETAIL	L-3

SIDEWALK LIGHTING NOTES AND SPECIFICATIONS

1. PRIOR TO ANY EQUIPMENT ORDER, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE ENGINEER IN CHARGE OF THE PROJECT, FINAL FOUNDATION DESIGN & CALCULATIONS, EQUIPMENT SPECIFICATIONS, DESIGN DATA OR SHOP DRAWING SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF FLORIDA FOR ALL MATERIAL PROPOSED FOR USE ON THIS PROJECT AND MUST INCLUDE (BUT NOT LIMITED TO) SPECIFICALLY:
 - A) LUMINAIRE PHOTOMETRICS
 - B) POLE STRENGTH CALCULATIONS WITH ARMS
 - C) TRANSFORMER BASE SHOP DRAWING
 - D) POLE FRANGIBILITY TEST RESULTS
 - E) BOLT SPECIFICATION AND BOLT CIRCLE DIAMETER
 - F) FOUNDATION DETAIL AND CALCULATIONS
 - G) SERVICE POINT ELECTRICAL EQUIPMENT
 - H) FUSE HOLDER, FUSE, FUSE NEUTRAL & SECONDARY SURGE ARRESTOR AT T-BASE
 - I) PULL BOX WITH LID
 - J) CONTROL PANELS & CONTACTORS
2. POLE AND FOUNDATION DESIGN SHALL CONFORM WITH FDOT STRUCTURAL DESIGN GUIDELINES.
3. LOCATION OF UTILITIES HAVE NOT BEEN FIELD VERIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD LOCATING UTILITIES(INCLUDING BUT NOT LIMITED TO WATER, SANITARY SEWER, STORM SEWER, ELECTRIC, TELEPHONE AND CABLE) PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE ENGINEER IN WRITING OF ANY CONFLICT PRIOR TO COMMENCING WITH ANY CONSTRUCTION WITHIN THE CORRIDOR/ROADWAY WHERE CONFLICTS WERE FOUND.
4. THE LOCATION OF EACH POWER SERVICE POINT MAY BE ADJUSTED 200' NORTH OR SOUTH FROM THE POINT SHOWN FOR COINCIDENCE WITH CLOSEST FPL POWER POLE/TRANSFORMER OR OTHER IN-FIELD PRACTICAL CONSIDERATIONS.
5. SIDEWALK LIGHTING WIRING SHALL RUN AS SHOWN INSOFAR AS PRACTICAL. FIELD COORDINATE ALL ROUTINGS WITH LANDSCAPE DETAILS AND IRREGULARITIES, AND WITH FPL POWER LINES, EMBARQ AND COMCAST TRUNKS, WATER AND SEWER LINES, STREET PAVEMENTS AND SIDEWALKS. CONTRACTOR TO SUBMIT AS-BUILT DRAWINGS OF ANY BURIED CONDUIT DEVIATING FROM THE PLANS.
6. CONDUCTORS FOR SIDEWALK LIGHTING CIRCUITS SHALL ALL BE COPPER - STRANDED. HOT CONDUCTOR SHALL BE RED OR BLACK, NEUTRAL CONDUCTOR SHALL BE WHITE, GROUNDING CONDUCTOR SHALL BE GREEN.
7. CONDUIT INSTALLATION PER FDOT INDEX 17721 (PULLING BELLS ARE REQUIRED). CONDUIT ROUTING SHALL BE POLE TO POLE MAINTAINING POLE SETBACK DISTANCE FROM EDGE OF PAVEMENT.
8. ALL CONDUIT THAT WILL REMAIN EMPTY, AS SPARES SHALL BE MANDREL TESTED, CLEANED INSIDE AND BOTH ENDS CAPPED. INSTALL A CORROSION RESISTANT PULL/DRAW WIRE AND PLACE PULL BOXES TO MARK THE LOCATION OF THE ENDS OF THE CONDUITS.
9. AT ALL PULL BOXES AND POLE BASES ENDS OF CONDUIT SHALL BE A MINIMUM OF 2 INCHES ABOVE THE FOUNDATION AND SEALED.
10. FURNISH AND INSTALL A BLACK 4 INCH SERIES "C" NUMBER FOR EACH POLE AS INDICATED ON THE POLE DATA SHEET. POLE NUMBER SHALL BE PLACED AT APPROXIMATELY BREAST HEIGHT 45 DEGREES FROM PERPENDICULAR TO ROADWAY AND VISIBLE IN THE DIRECTION OF THE TRAVEL LANE. TWO DIGIT NUMBERS SHALL BE PLACED HORIZONTAL. THREE DIGIT NUMBERS SHALL BE PLACED VERTICAL. (GREEN, BLACK & BLUE COATED POLES SHALL HAVE A WHITE 4 INCH SERIES "C" NUMBER FOR EACH POLE AS INDICATED ON DRAWING.)
11. SOD USED IN THE RESTORATION OF DISTURBED EARTH SHALL BE DUG-IN OR ROLLED AS REQUIRED TO MATCH THE EXISTING GRADE.
12. ONE INCH OF WATER PER WEEK SHALL BE REQUIRED FOR A MINIMUM OF FOUR (4) CONSECUTIVE WEEKS FOR THE PURPOSE OF ESTABLISHING SOD. THIS CAN BE WAIVED DURING CONSTRUCTION, IF AND ONLY IF THERE IS A MINIMUM OF ONE INCH OF RAIN PER WEEK ON ALL SOD ON THE PROJECT.
13. EACH LUMINAIRE SHALL BE GROUNDED TO AN INDIVIDUAL 5/8" X 20' DRIVEN GROUND ROD, AND ALSO TO THE EQUIPMENT GROUNDING CONDUCTOR.
14. PULL BOXES SHALL BE INSTALLED WITH THE TOPS FLUSH WITH THE GROUND. PULL BOXES SHALL BE POLYMER CONCRETE AND REINFORCED FIBERGLASS WITH LOCKING COVER AND LOGO "STREET LIGHTING" ON TOP.
15. A SURGE ARRESTOR SHALL BE LOCATED AT AND BE READILY ACCESSIBLE IN EACH SIDEWALK LIGHTING POLE. SURGE ARRESTOR SHALL PROTECT BOTH THE GROUNDED AND UNGROUNDED CURRENT CARRYING CONDUCTORS.

17. SIDEWALK LIGHTS SHALL BE CONTROLLED BY A MASTER HEAVY DUTY PHOTOELECTRIC CELL INSTALLED AT THE POWER SOURCE, AS SPECIFIED IN THE RISER DIAGRAM LEGEND.
18. POLES SHALL BE INSTALLED IN ACCORDANCE WITH POLE MANUFACTURER'S RECOMMENDATIONS. SHOP DRAWINGS SHALL BE SUBMITTED PRIOR TO POLE ERECTION. CONTRACTOR OR POLE VENDOR SHALL FURNISH CERTIFICATION STATING THAT POLES WITH FIXTURES SELECTED, AND IF ERECTED AS SPECIFIED WILL SATISFY COLLIER COUNTY CRITERION TO WITHSTAND WINDS OF 150 M.P.H.
19. CONTRACTOR TO VERIFY LOCATION OF ALL SLEEVES AND CONDUITS CROSSING ROADS, PATHWAYS AND DRIVEWAYS PRIOR TO CONSTRUCTION.
20. ALL WORK IS TO BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE.
21. ALL LIGHT POLES SHALL BE MOUNTED WITH FRANGIBLE/BREAKWAY TRANSFORMER BASES.
22. CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL SIDEWALK LIGHTS PER PLAN SET BASED UPON CENTER LINE STATIONING.
23. BEFORE FINAL ACCEPTANCE, CONTRACTOR SHALL PROVIDE 2 SETS OF FULL SIZE AS-BUILT PLANS TO THE TRAFFIC OPERATIONS SECTION OF THE TRANSPORTATION OPERATIONS DEPARTMENT.
24. CONTRACTOR TO ADJUST POLE/ FOUNDATION AS NEEDED TO KEEP WITHIN EASEMENT AREAS.
25. GFI OUTLET AND CIRCUIT SHALL INCLUDE ALL CONDUCTORS, CONDUITS AND NECESSARY MATERIALS AND LABOR FOR A WORKING INSTALLATION WIRED TO EXISTING SERVICE POINT AT/NEAR ENTRANCE SIGN LIGHTING ON WOOD SHIRE LANE.

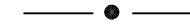


LEGEND

PROPOSED "STERNBERG 1527R OMEGA SERIES" 70 WATT HIGH PRESSURE SODIUM LUMINAIRE WITH AN IES TYPE 3 FULL CUT-OFF OPTICAL SYSTEM. (1527RFG/OGPT/326P6-16.4'/R03HS/70HPS/BK-SC) (SEA COAST FINISH) MOUNTED AT 15' ON A ROUND, DECORATIVE, ALUMINUM SMOOTH STRAIGHT SHAFT POLE WITH A BLACK FINISH. (SEE DETAIL SHEET L-3).



FOR PULL BOX, SEE INDEX 17503 OF ROADWAY AND TRAFFIC DESIGN STANDARDS. PULL BOXES ARE REQUIRED AT BOTH ENDS OF CONDUIT AT ROADWAY CROSSINGS AND AS NECESSARY FOR COMPLETION OF THE PROJECT. USE STRONGWELL PG1324BA12 WITH HEAVY DUTY LID PG1324HA00 OR EQUIVALENT.



2" SCHEDULE 40 OR 80 PVC CONDUIT UNDERGROUND.



2" SCHEDULE HDPE UL LISTED CONDUIT IN DIRECTIONAL BORE (6" OR LESS) (REQUIRED AT ALL ROADWAY CROSSINGS). EXTEND CONDUIT TO PULL BOXES LOCATED A MINIMUM OF 4' BEYOND THE EDGE OF PAVEMENT. PROVIDE SPARE 2" PVC CONDUIT AT ALL ROADWAY CROSSINGS.

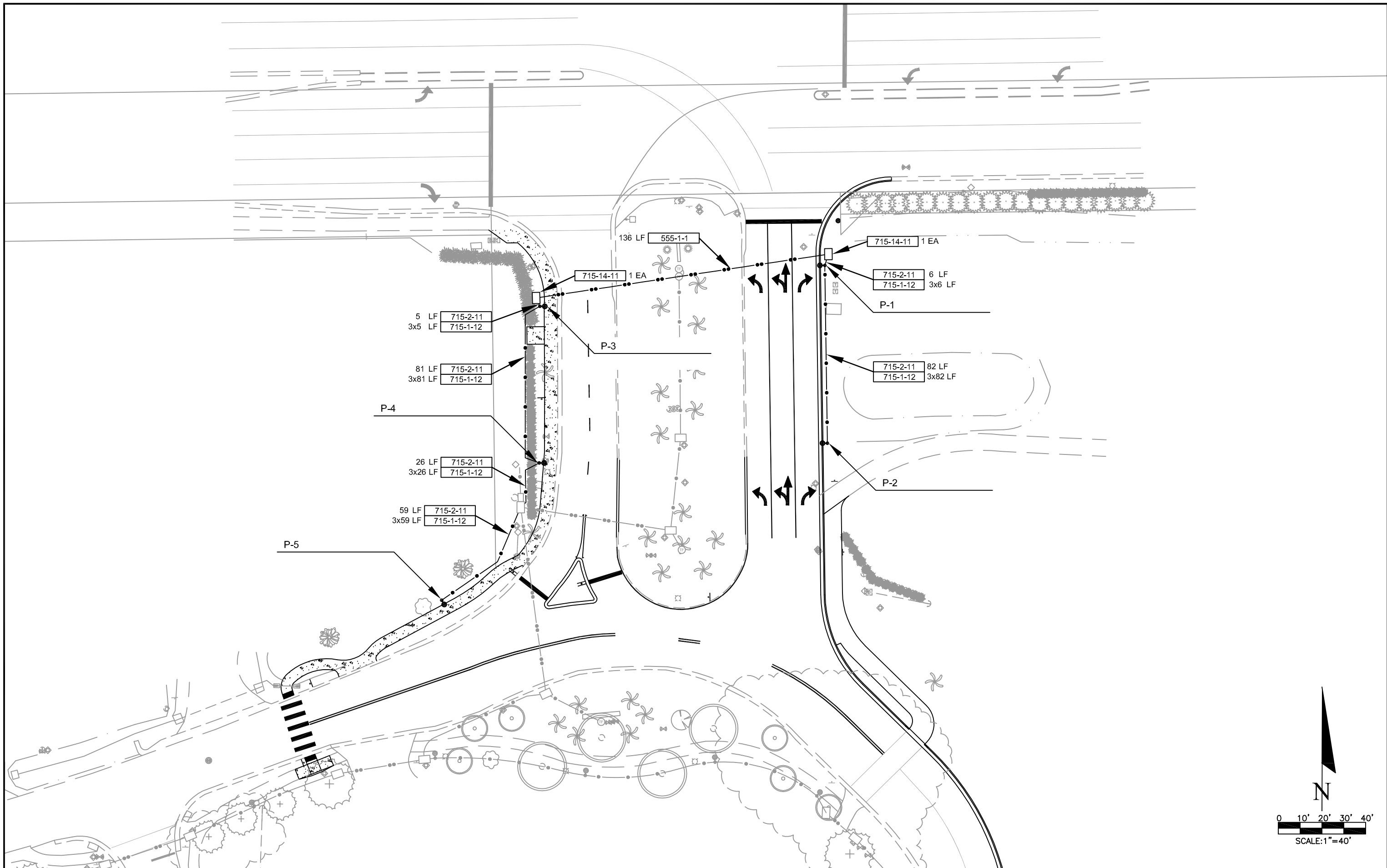


FOR DISTRIBUTION POINT, SEE INDEX 17504 OF ROADWAY AND TRAFFIC DESIGN STANDARDS. SECONDARY SURGE ARRESTOR AT SERVICE POINT ENTRANCE AND SUPPORT POST WITH STAINLESS STEEL DISCONNECT SAFETY SWITCH (SEE DETAIL SHEET L-6).

CONTROL PANELS AND CONTACTORS SHALL BE ITE OR SQUARE D BRAND OR APPROVED EQUIVALENT. ENCLOSURE SHALL BE STAINLESS STEEL E-BOX CATALOG NO. S36248N4X WITH VERTICAL 36 INCH HINGE ON THE LEFT SIDE OR EQUIVALENT.

PAY ITEM 555-1-1 (DIRECTIONAL BORE 6" OR LESS), 715-2-11 SHALL INCLUDE THE FURNISHING AND INSTALLING OF ALL CONDUITS AND PULLING BELLS IN THE TRENCH AND / OR DIRECTIONAL BORE AS SPECIFIED IN THESE PLANS. (SEE FDOT SECTION 555)

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