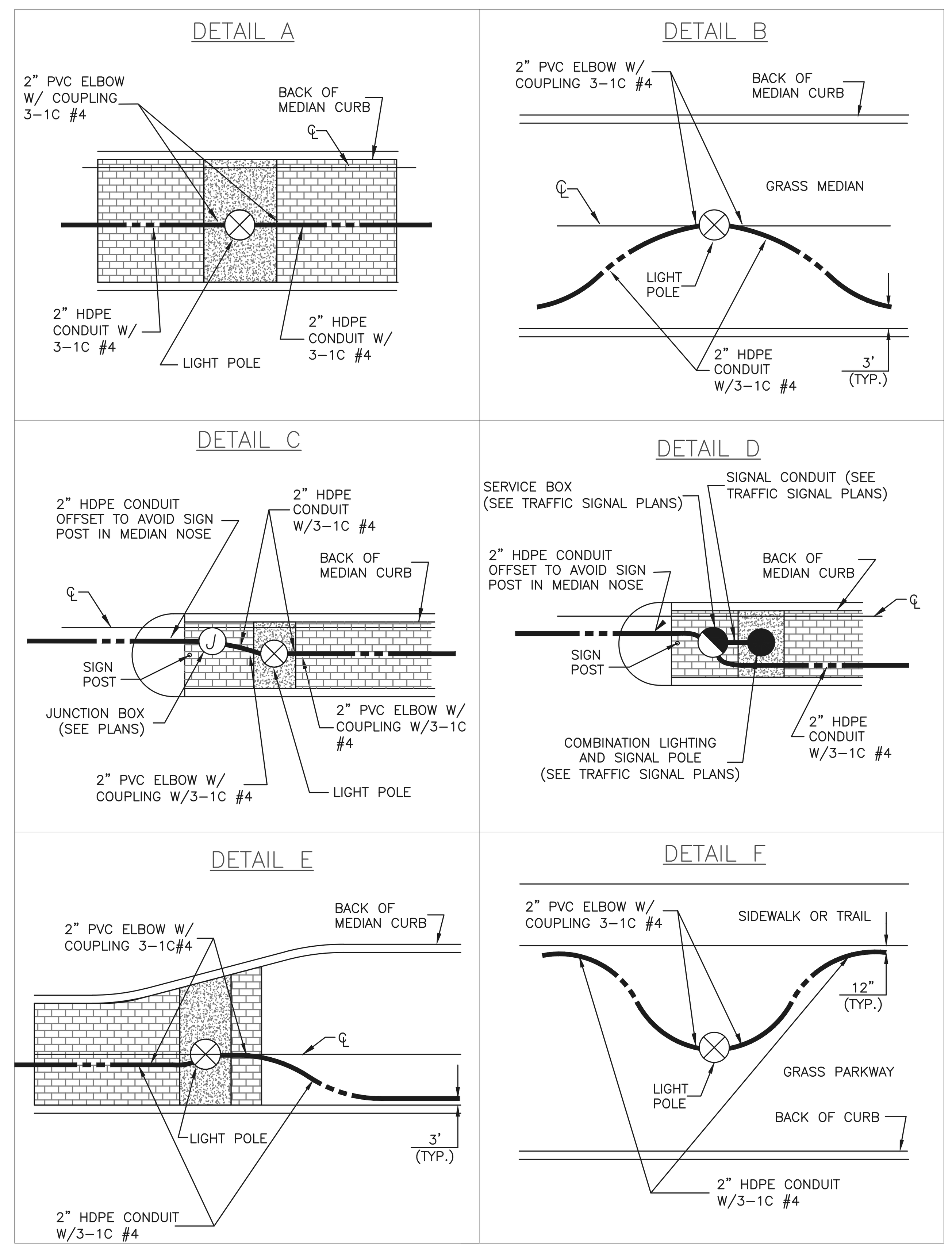
ROADWAY LIGHTING GENERAL NOTES

1. ALL WORK AND MATERIAL SHALL CONFORM TO THE LATEST EDITION OF THE CITY OF LAWRENCE STANDARD SPECIFICATIONS AND DETAILS.
2. ALL TRAFFIC CONTROL IN CONJUNCTION WITH THE STREETLIGHTING CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND HAVE AN APPROVED TRAFFIC CONTROL PLAN WITH THE CITY OF LAWRENCE MUNICIPAL SERVICES AND OPERATIONS DEPARTMENT.
3. THE CONTRACTOR SHALL STAKE THE LOCATIONS FOR ALL POLES, CONTROLLERS AND JUNCTION BOXES TO BE INSTALLED. THE STATIONS AND OFFSETS PROVIDED ARE TO THE CENTER OF THE STREETLIGHTING EQUIPMENT. THE CONTRACTOR SHALL PROVIDE ELEVATIONS. IF OBSTRUCTIONS ARE ENCOUNTERED DURING INSTALLATION, THE CONTRACTOR WILL RE-STAKE THOSE LOCATIONS AFFECTED BY THE OBSTRUCTION. THE CITY TRANSPORTATION INSPECTOR SHALL INSPECT THE STAKING PRIOR TO ANY EXCAVATION/CONSTRUCTION.
4. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, IF SHOWN, ARE APPROXIMATE ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES FOR LOCATIONS OF ALL UNDERGROUND LINES PRIOR TO EXCAVATION AND BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES, WHICH MIGHT OCCUR AS A RESULT OF THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
5. THE CITY OF LAWRENCE IS ON THE ONE CALL SYSTEM. THE CONTRACTOR SHALL CALL TO OBTAIN LOCATES FOR STREETLIGHTING, TRAFFIC SIGNAL, AND FIBER OPTIC CONDUITS/CABLES.
6. ALL CIRCUIT CABLES IN JUNCTION BOXES AND POLES SHALL BE IDENTIFIED WITH COLOR-CODED TAPE AS FOLLOWS:
   NORTH CABLE:TAPE COLOR CODE BLUE
   EAST CABLE: TAPE COLOR CODE YELLOW
   SOUTH CABLE:TAPE COLOR CODE PURPLE
   WEST CABLE: TAPE COLOR CODE RED
   GROUND CABLE: TAPE COLOR CODE GREEN.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING EXISTING EQUIPMENT AS NOTED AND DELIVERING ALL SALVAGEABLE EQUIPMENT TO THE CITY OF LAWRENCE MUNICIPAL SERVICES AND OPERATIONS STORAGE FACILITY NEAR 1900 WAKARUSA DR. THE CONTRACTOR SHALL CONTACT TRAFFIC OPERATIONS AT (785)832-3035 TO COORDINATE DELIVERY (AT LEAST 24-HOUR ADVANCE NOTICE SHALL BE PROVIDED). ALL RETURNED EQUIPMENT SHALL BE DISASSEMBLED PER THE INSTRUCTIONS OF TRAFFIC OPERATIONS OF THE CITY OF LAWRENCE (SEE THIS SHEET). THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE OR LOSS OF SALVAGEABLE EQUIPMENT.
8. CONDUIT SHALL BE BORED UNDER ALL STREET PAVEMENTS THAT ARE IN PLACE AT THE TIME OF INSTALLATION. SAW CUTTING EXISTING STREET PAVEMENT FOR THE PURPOSE OF TRENCHING CONDUIT ACROSS ANY EXISTING PAVEMENT WILL NOT BE ALLOWED. MULTIPLE CONDUITS CANNOT BE PULLED BACK THROUGH THE SAME BORE UNLESS OTHERWISE APPROVED.
9. THE CONDUIT PLACEMENT SHALL BE COORDINATED WITH THE PAVING OPERATION, WHEN APPLICABLE. CONDUIT INSTALLATION AND CONDUIT CONNECTIONS SHALL BE INSPECTED AND APPROVED BY THE CITY TRANSPORTATION INSPECTOR. THE CONTRACTOR SHALL PAY ANY AND ALL EXTRA COSTS OF INSTALLING CONDUITS BY ALTERNATE CONSTRUCTION METHODS AFTER PAVEMENT HAS BEEN PLACED OR FOR ANY DAMAGES TO PAVEMENT THAT MAY OCCUR DURING CONDUIT INSTALLATION. ALL TRENCHES FOR CONDUIT UNDER PROPOSED PAVED SURFACES (DRIVES, STREETS AND SIDEWALKS) SHALL BE BACKFILLED WITH FLOWABLE FILL UNLESS OTHERWISE DIRECTED, TO BELOW THE PROPOSED PAVEMENT SURFACE.
10. CONTINUOUS 2" HDPE CONDUIT SHALL BE INSTALLED BETWEEN ALL STREETLIGHTING APPURTENANCES PRIOR TO PAVING WITHIN THE LIMITS OF THE STREET IMPROVEMENTS. CONDUIT SPLICES BETWEEN APPURTENANCES SHALL NOT BE ALLOWED UNLESS FUSION COUPLINGS OR OTHER FUSION METHODS ARE USED.
11. ALL EXISTING STREETLIGHT POLES TO BE RELOCATED SHALL BE REINSTALLED FROM THEIR PRESENT LOCATION TO THEIR NEW LOCATION ACCORDING TO THE ADDRESS STENCILED ON THE POLE. ALL EXISTING STREETLIGHTING EQUIPMENT TO BE RELOCATED SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR FOR SAFE STORAGE. THE CONTRACTOR, AT HIS OWN EXPENSE, SHALL REPLACE ANY MATERIALS TO BE REUSED THAT HAVE BEEN DAMAGED WITH APPROVED MATERIALS IN ACCORDANCE WITH THE CURRENT STANDARD DETAILS, SPECIFICATIONS, POLICIES AND PRACTICES.
12. THE CONDUIT AND CABLE SHALL BE INSTALLED UNDER UNDERDRAIN PIPE CROSSINGS AND UNDER THE UNDERDRAIN BLANKETS. REFER TO THE STREET PLANS FOR UNDERDRAIN PIPE AND BLANKET LOCATIONS AND APPROPRIATE DETAILS, IF APPLICABLE. WHERE POLE FOUNDATIONS ARE TO BE INSTALLED THROUGH AN UNDERDRAIN BLANKET, THE BLANKET SHALL BE PRE-CUT TO PREVENT DAMAGE OF THE BLANKET. IN THE EVENT THE BLANKET IS DAMAGED, THE FABRIC SHALL BE REPLACED.
13. ALL CABLE CONNECTIONS AT JUNCTION BOXES SHALL BE WATERTIGHT.
14. ALL CABLE RE-CONNECTIONS AT EXISTING LIGHT POLES SHALL REQUIRE NEW CONNECTOR KITS (I.E., MULTI-TAP CONNECTORS AND FUSED AND NON-FUSED CONNECTORS).
15. THE CONNECTIONS OF THE NEW SYSTEM MADE AT AN EXISTING JUNCTION BOX, LIGHT POLE OR CONTROL CENTER FOR THE CONTINUATION OF THE EXISTING CIRCUIT SHALL BE MADE IN THE PRESENCE OF THE TRANPSORTATION INSPECTOR FOR APPROVAL.
16. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO MINIMIZE THE DOWNTIME OF THE EXISTING STREETLIGHTING SYSTEMS TO BE MODIFIED. ANY EXISTING STREETLIGHTING SYSTEM SHALL BE MAINTAINED DURING CONSTRUCTION AS LONG AS POSSIBLE UNTIL THE NEW STREETLIGHTING SYSTEM IS INSTALLED AND OPERATING.
17. DAMAGE TO ANY EXISTING STREETLIGHTING EQUIPMENT DUE TO THE CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE EQUIPMENT SHALL BE REPLACED OR REPAIRED (AS DIRECTED BY THE CITY) WITH MATERIALS EQUAL OR BETTER THAN THE EXISTING MATERIAL.
18. ALL EXISTING STREETLIGHTING EQUIPMENT IS TO BE USED IN PLACE (U.I.P.) UNLESS OTHERWISE NOTED IN THE PLANS.
19. THE CONTRACTOR SHALL NOTIFY THE CITY OF LAWRENCE, TRAFFIC OPERATIONS, (785-832-3035) OF THE EXACT CONSTRUCTION SCHEDULE SO THAT INSPECTION OF THE STREETLIGHT INSTALLATION CAN BE MADE, INCLUDING CONDUIT INSTALLATIONS.
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO EXISTING UNDERGROUND SPRINKLER SYSTEMS DURING CONSTRUCTION. ALL AFFECTED PIPES OR FITTINGS SHALL BE RESTORED TO ORIGINAL CONDITION AND LOCATION WITH NEW MATERIALS SIMILAR TO EXISTING. ALL RESTORATION WORK SHALL BE ACCEPTABLE TO THE ENGINEER AND PROPERTY OWNER.
21. THE CONTRACTOR SHALL INSTALL SERVICE CONDUIT WITH ELECTRICAL SERVICE CABLE FROM THE CONTROL CENTER TO THE EVERGY POWER SOURCE. (SEE STREETLIGHTING SERVICE CONNECTION DETAIL)
22. ALL UNPAVED AREAS DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL CONDITION. UNLESS OTHERWISE DIRECTED, GRASSY AREAS SHALL BE RE-SODDED.
23. THE CONTRACTOR SHALL BE REQUIRED TO APPLY STICK-ON STREET ADDRESS NUMERALS ON THE POLES AND CONTROLLER CABINET AS INDICATED IN THE PLANS. LETTERS AND NUMERALS SHOULD BE 2 INCHES HIGH. (SEE STENCIL DETAIL)
24. CONTRACTOR SHALL USE A POLYMER LUBRICATING AGENT TO FACILITATE CONDUIT BORES UNDER PAVED STREETS. FAILURE TO DO SO WILL RESULT IN A DENIAL TO RETRIEVE BORE HEAD, IN THE CASE OF LOSS, UNDER ANY PAVED STREET BY EXCAVATION METHODS.
25. ALL EXISTING CONCRETE FOUNDATIONS, SHOWN TO BE REMOVED, SHALL BE REMOVED A MINIMUM OF 24" BELOW FINAL GRADE.
26. THE ENDS OF ALL CONDUIT IN SERVICE BOXES, JUNCTION BOXES, AND CONTROLLER CABINETS SHALL BE PLUGGED WITH DUCT SEAL.
27. THE CONTRACTOR SHALL BE REQUIRED TO SUBMIT CATALOG CUTS OR SHOP DRAWINGS FOR ALL EQUIPMENT TO BE INSTALLED ON THIS PROJECT. ALL SUBMITTALS SHALL CONFORM TO THE CITY OF LAWRENCE PRE-APPROVED MATERIALS LIST WHICH IS AVAILABLE IN THE SPECIFICATIONS.
28. IF THE FINAL STREETLIGHT POLE IS LESS THAN TEN (10) FEET AWAY FROM THE NEAREST OVERHEAD POWER LINE, THE CONTRACTOR SHALL CONTACT EVERGY AND REQUEST THEM TO SLEEVE THEIR LINE PRIOR TO POLE INSTALLATION. ALL ASSOCIATED COSTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.



MISCELLANEOUS CONDUIT DETAILS

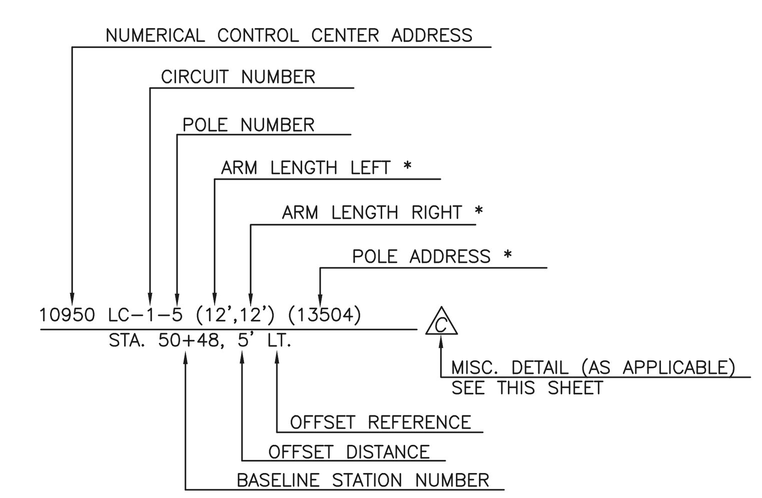
DESIGN CRITERIA:

DESIGN LUMINAIRES:
CLASS C LED LUMINAIRE: LEOTEK GCM1-60J-MV-30K-2R-BK-125-PCR7-CR-RWG-BBL-WL-LSSP2-SC
CLASS D LED LUMINAIRE: LEOTEK GCM1-60J-MV-30K-2R-BK-105-PCR7-CR-RWG-BBL-WL-LSSP2-SC

DESIGN POLE:
POLE AND ARM SHALL PROVIDE A 30' LUMINAIRE MOUNTING HEIGHT. 26' ROADWAY LIGHT POLE AND BASE SHALL BE A 12 FLAT FLUTE A595 GR. A MIN. YIELD 55 KSI. BLACK TGIC OR URETHANE POLYESTER POWDER-COAT FINISH. POLE SHALL BE MANUFACTURED BY VALMONT PART NO: FL70-800A260-6S-AB-HH-NC-C5300-FP BLACK. THE MAXIMUM BANNER ARM SIZE FOR THIS POLE SHALL BE 3' WIDE X 5' HIGH WHEN MOUNTED AT 12' FROM THE BOTTOM OF THE POLE. CONTRACTOR SHALL COORDINATE WITH THE CITY ON THE SIZE OF BANNERS PRIOR TO ORDERING POLES.

BANNER ARM BRACKETS SHALL BE WINDSPILL PRODUCTS DELUXE FIXED BANNER BRACKETS. CONTRACTOR SHALL COORDINATE WITH THE CITY ON THE APPROPRIATE STYLE TO BE USED AND SIZE OF BANNERS. ALL BANNER ARM EQUIPMENT AND HARDWARE SHALL BE BLACK TO MATCH POLE.

STREETLIGHT DESIGNATION



* NOT APPLICABLE FOR 14' POLES

STREETLIGHT LEGEND

EXISTING

- 100W HPS POST-TOP LUMINAIRE W/ 14' POLE
- 150W HPS POST-TOP LUMINAIRE W/ 14' POLE
- 150W HPS COBRA-HEAD LUMINAIRE W/ 30' POLE
- 150W HPS COBRA-HEAD LUMINAIRE W/ 40' POLE
- 250W HPS COBRA-HEAD LUMINAIRE W/ 30' POLE
- 250W HPS COBRA-HEAD LUMINAIRE W/ 40' POLE
- 310W HPS COBRA-HEAD LUMINAIRE W/ 30' POLE
- 310W HPS COBRA-HEAD LUMINAIRE W/ 40' POLE
- 400W HPS COBRA-HEAD LUMINAIRE W/ 30' POLE
- 400W HPS COBRA-HEAD LUMINAIRE W/ 40' POLE
- KCPL OWNED STREET LIGHT
- TYPE 1 SERVICE BOX
- TYPE 2 SERVICE BOX
- TYPE 1 JUNCTION BOX
- TYPE 2 JUNCTION BOX
- TYPE 1 FIBER OPTIC SERVICE BOX
- TYPE 2 FIBER OPTIC SERVICE BOX
- PAD MOUNTED CONTROL CENTER (SHADED AREA INDICATES PHOTOCELL ORIENTATION)
- 2 INCH PVC CONDUIT
- 2 INCH HDPE CONDUIT
- HDPE FIBER OPTIC CONDUIT W/LOCATING CABLE

PROPOSED

- POST-TOP LED RETROFIT LUMINAIRE W/ 10' POLE
- CLASS A LED COBRA-HEAD LUMINAIRE W/ 30' POLE
- CLASS A LED COBRA-HEAD LUMINAIRE W/ 40' POLE
- CLASS B LED COBRA-HEAD LUMINAIRE W/ 30' POLE
- CLASS B LED COBRA-HEAD LUMINAIRE W/ 40' POLE
- CLASS C LED COBRA-HEAD LUMINAIRE W/ 30' POLE
- CLASS C LED COBRA-HEAD LUMINAIRE W/ 40' POLE
- CLASS D LED COBRA-HEAD LUMINAIRE W/ 30' POLE
- CLASS E LED COBRA-HEAD LUMINAIRE W/ 30' POLE
- TYPE 1 SERVICE BOX
- TYPE 2 SERVICE BOX
- TYPE 1 JUNCTION BOX
- TYPE 2 JUNCTION BOX
- TYPE 1 FIBER OPTIC SERVICE BOX
- TYPE 2 FIBER OPTIC SERVICE BOX
- PAD MOUNTED CONTROL CENTER (SHADED AREA INDICATES PHOTOCELL ORIENTATION) (NORTH OR EAST)
- 2 INCH HDPE CONDUIT (GRAY)
- 2 INCH PVC CONDUIT
- HDPE FIBER OPTIC CONDUIT W/LOCATING CABLE (ORANGE)
- CONSTRUCTION NOTE NUMBER
- ELECTRICAL SERVICE

2026 EDITION

SHEET ______ OF ______

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Lawrence KANSAS

STANDARD DETAILS FOR
ROADWAY LIGHTING
GENERAL NOTES

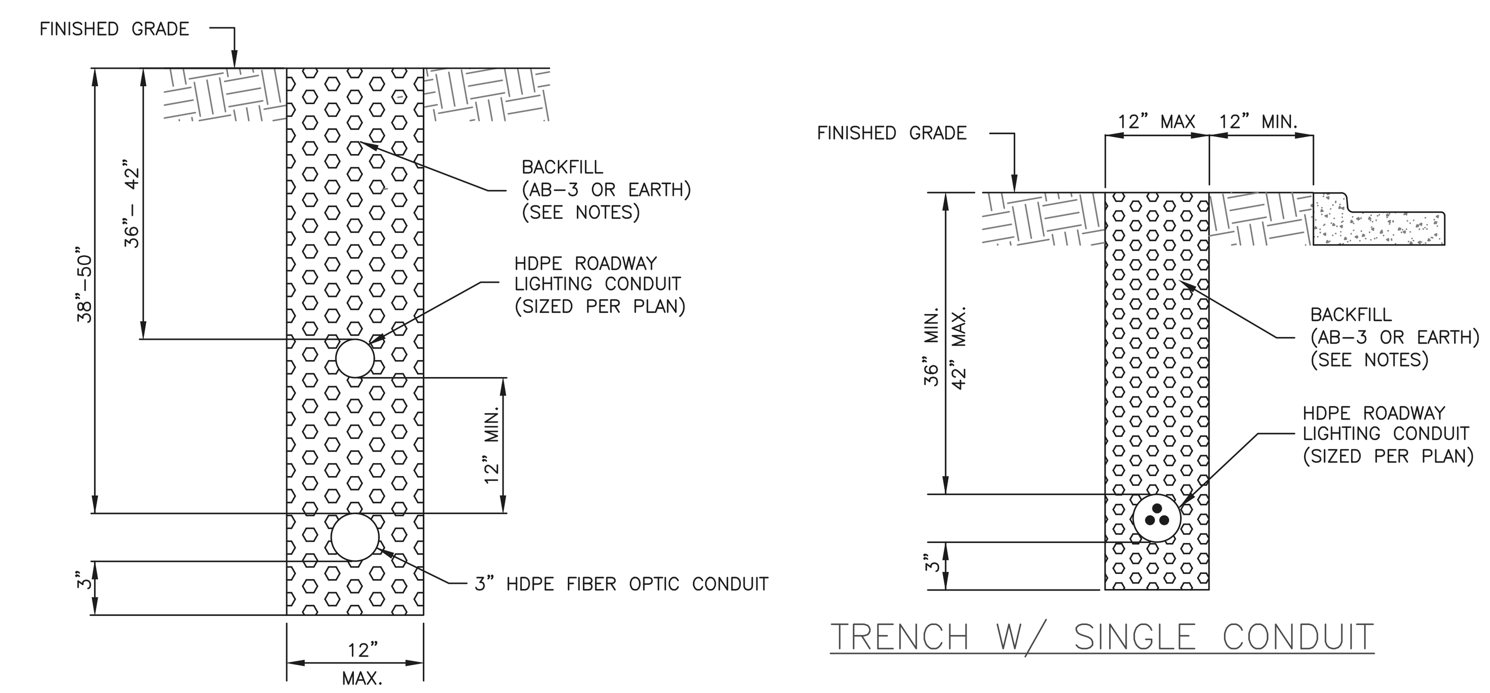
DAVID P. CRONIN
CITY ENGINEER

CRAIG S. OWENS
CITY MANAGER

ITEM	UNIT	QUANTITY	
STEEL COMBINATION LIGHTING/SIGNAL POLE	EACH	X	(3)
30' ALUMINUM POLE W/__' BRACKET ARM	EACH	X	
30' ALUMINUM POLE W/12' BRACKET ARM	EACH	X	
30' ALUMINUM POLE W/ TWIN 8' BRACKET ARMS	EACH	X	
10' ALUMINUM POLE	EACH	X	
CONCRETE POLE FOUNDATION CAP	EACH	X	
CONCRETE FOUNDATION FOR 40' POLE	EACH	X	
CONCRETE FOUNDATION FOR 30' POLE	EACH	X	
CONCRETE FOUNDATION FOR 10' POLE	EACH	X	
½" X 10' GROUND ROD W/ CLAMP FOR CONCRETE FOUNDATION	EACH	X	
TYPE F1 SCREW-IN FOUNDATION	EACH	X	
TYPE F2 SCREW-IN FOUNDATION	EACH	X	
TYPE T1 SCREW-IN FOUNDATION	EACH	X	
TYPE R SCREW-IN FOUNDATION	EACH	X	
CLASS A LED COBRA-HEAD LUMINAIRE	EACH	X	(4)
CLASS B LED COBRA-HEAD LUMINAIRE	EACH	X	(4)
CLASS C LED COBRA-HEAD LUMINAIRE	EACH	X	(4)
CLASS D LED COBRA-HEAD LUMINAIRE	EACH	X	(4)
CLASS E LED COBRA-HEAD LUMINAIRE	EACH	X	(4)
POST-TOP LUMINAIRE W/___ LED H.P.S. LAMP	EACH	X	
TYPE 1 SERVICE BOX	EACH	X	
TYPE 1 JUNCTION BOX	EACH	X	
TYPE 2 JUNCTION BOX	EACH	X	
CONTROL CENTER – PAD MOUNTED (1-CIRCUIT) (100 AMP; 240 V)	EACH	X	
CONTROL CENTER – PAD MOUNTED (4 CIRCUIT) (100 AMP; 240 V)	EACH	X	
CONCRETE CONTROL CENTER FOUNDATION (1-CIRCUIT CONTROL CENTER)	EACH	X	
CONCRETE CONTROL CENTER FOUNDATION (4-CIRCUIT CONTROL CENTER)	EACH	X	
1/2" X 10'-0" GROUND ROD WITH CLAMP FOR CONTROL CENTER	EACH	X	
PHOTO CELL	EACH	X	
METALLIC CONDUIT 2" (FOR EXTENSION OF EXISTING CONDUIT ONLY)	LN. FT.	X	
SCHEDULE 40 PVC CONDUIT, 1" (FOR EQUIPMENT GROUND CABLE)	LN. FT.	X	
SCHEDULE 40 PVC CONDUIT, 2" OR SDR 13.5 HDPE (BLACK W/ RED STRIPES) EVERGY ELECTRICAL SERVICE CONDUIT, 2"	LN. FT.	X	
SCHEDULE 40 PVC CONDUIT, 3" OR SDR 13.5 HDPE (BLACK W/ RED STRIPES) EVERGY ELECTRICAL SERVICE CONDUIT, 3"	LN. FT.	X	
SDR 13.5 HDPE (GRAY) CONDUIT, 2"	LN. FT.	X	
SDR 13.5 HDPE (GRAY) CONDUIT, 3"	LN. FT.	X	
DISTRIBUTION CABLE 3-1C NO. 4 AWG TYPE USE	LN. FT.	X	
POLE AND BRACKET CABLE 1C NO. 10 AWG TYPE THHN/THWN	LN. FT.	X	
SOLID COPPER GROUND CABLE (BARE # 6 AWG)	LN. FT.	X	
LOCATING CABLE (RED) 1C NO. 10 AWG TYPE THHN/THWN	LN. FT.	X	
ELECTRICAL SERVICE POWER CABLE 3-1C #4 AWG	LN. FT.	X	
8 AMP FUSE	EACH	X	
BREAK-AWAY NON-FUSED CONNECTOR KITS	EACH	X	
BREAK-AWAY FUSED CONNECTOR KITS	EACH	X	
MULTIPLE STREETLIGHT TAP CONNECTOR	EACH	X	
REMOVE EXISTING EQUIPMENT	EACH	X	(2)
RELOCATE EXISTING EQUIPMENT	EACH	X	
BREAKAWAY POLE DEVICE	SET/EACH	X	

BILL OF MATERIALS (1)

NOTES:
1. THESE APPROXIMATE QUANTITIES WERE PREPARED SOLELY FOR THE CONTRACTOR'S CONVENIENCE. IT IS NOT GUARANTEED THAT THIS LIST OF MATERIALS CONSTITUTES ALL ITEMS REQUIRED FOR THE COMPLETION OF THE WORK.
2. APPROVED BREAK-AWAY COUPLINGS OR FRANGIBLE BASES ARE ACCEPTABLE. FRANGIBLE BASES SHALL BE MEASURED PER EACH AND COUPLINGS SHALL BE MEASURED AS FOUR UNITS PER SET.
3. REFER TO CHART B "TRAFFIC SIGNAL POLE SUMMARY" ON TRAFFIC SIGNAL DETAIL SHEET FOR DESIGN PARAMETERS.
4. ALL LED COBRA-HEAD LUMINAIRES SHALL HAVE A MINIMUM 10 YEAR MANUFACTURER'S WARRANTY

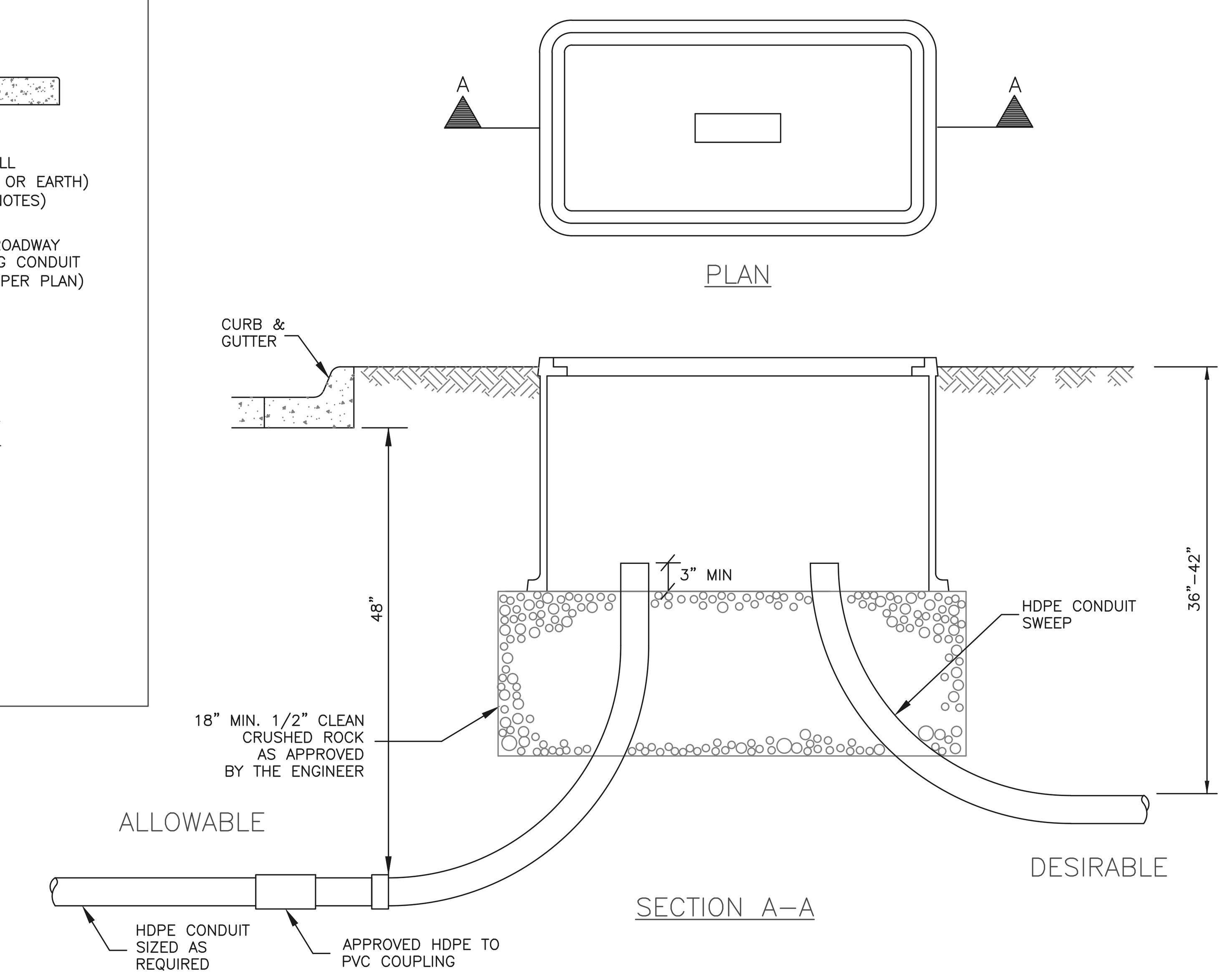


TRENCH W/ MULTIPLE CONDUITS

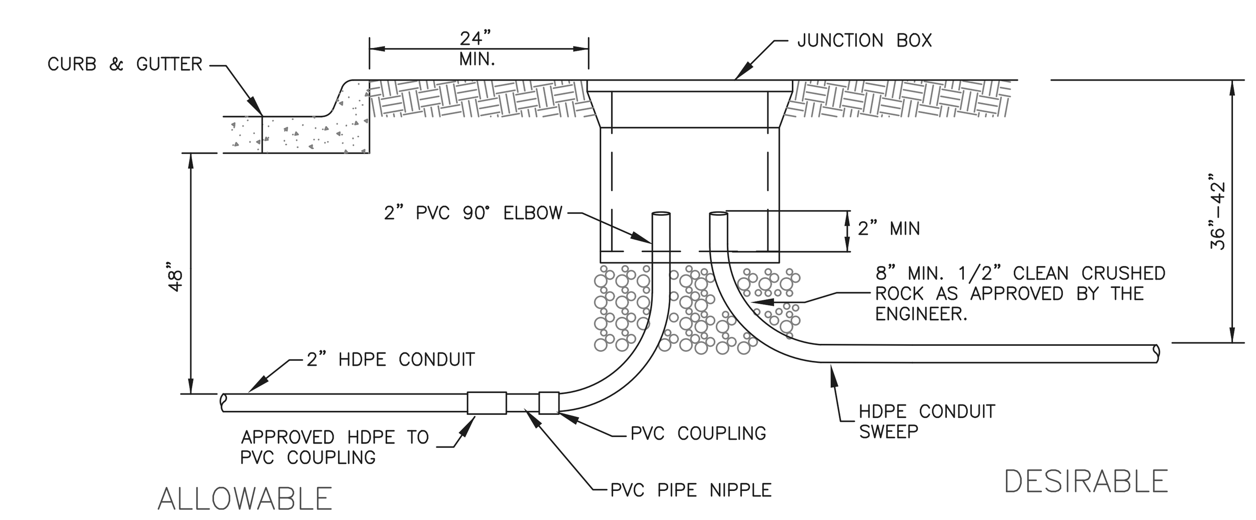
TRENCH W/ SINGLE CONDUIT

NOTE:
1. ALL TRENCHES FOR CONDUIT UNDER PROPOSED PAVED SURFACES SHALL BE BACKFILLED WITH FLOWABLE FILL.
2. BACKFILL IN UNPAVED AREAS SHALL BE FREE OF RUBBLE AND ROCK.
3. IF MULTIPLE CONDUITS ARE INSTALLED, THEY SHALL HAVE A MINIMUM OF 12" HORIZONTAL OR VERTICAL CLEARANCE BETWEEN THEM.

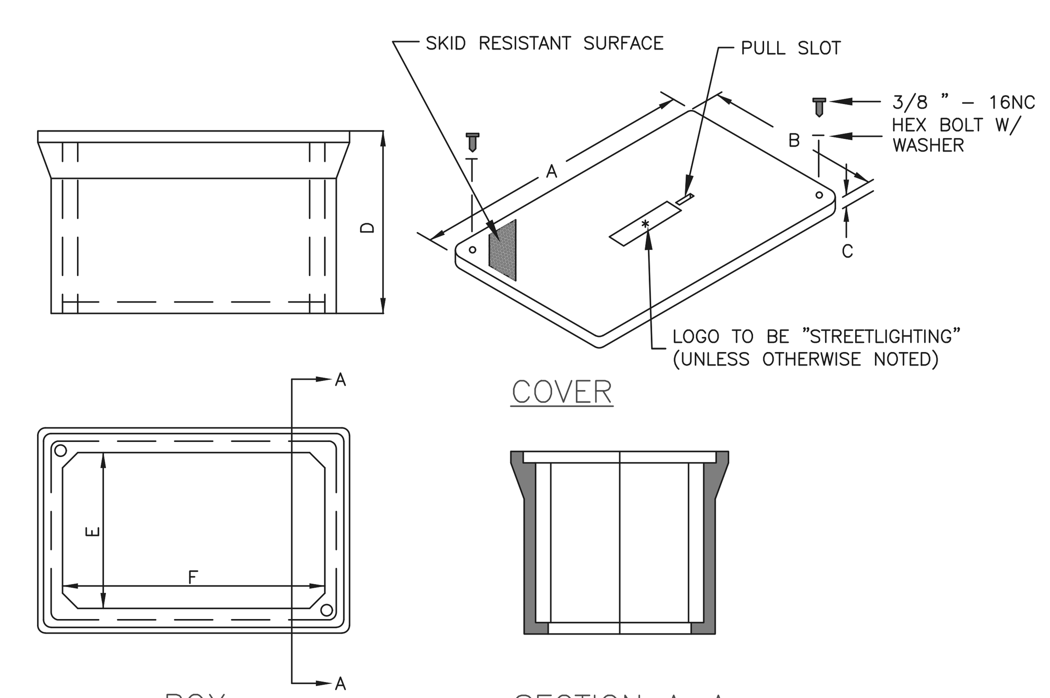
TRENCHING DETAILS IN UNPAVED AREAS



SERVICE BOX INSTALLATION DETAIL



JUNCTION BOX INSTALLATION DETAIL



BOX NOTES:

1. BOXES SHALL BE STACKABLE FOR EXTRA DEPTH.
2. ALL JUNCTION BOXES, SERVICE BOXES,, AND COVERS SHALL BE RATED AT NO LESS THAN 22,500 LBS. TEST LOAD (TIER 15) PER ANSI/SCTE-77.
3. MATERIAL TO BE AN AGGREGATE CONSISTING OF SAND AND GRAVEL BOUND TOGETHER WITH A POLYMER AND REINFORCED WITH CONTINUOUS WOVEN GLASS STRANDS. IT SHALL HAVE THE FOLLOWING PROPERTIES.

   COMPRESSIVE STRENGTH-11,000 PSI ASTM C-109/D-3410
   TENSILE STRENGTH-1,700 PSI ASTM C-496/D-638/D-2343
   FLEXURAL STRENGTH-7,500 PSI ASTM C-580/D-790

4. THE TYPE 2 SERVICE BOX SHALL HAVE A TWO-PIECE OVERLAPPING COVER.

TYPE	APPROXIMATE DIMENSIONS (INCHES)					
	A	B	C	D	E	F
1-JUNCTION	12⅞	12⅞	¾	12¾	9¾-10½	9¾-10½
2-JUNCTION	18-18½	11¼ -11½	2	12	9½-10¼	16½-17¼
1-SERVICE	35⅝	24	3	24	22¼	33⅞
2-SERVICE (4)	47⅝	30⅛	3	24	28⅛	45⅝

FIBERGLASS REINFORCED POLYMER CONCRETE JUNCTION & SERVICE BOX DETAILS

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BILL OF MATERIALS / BOX DETAILS

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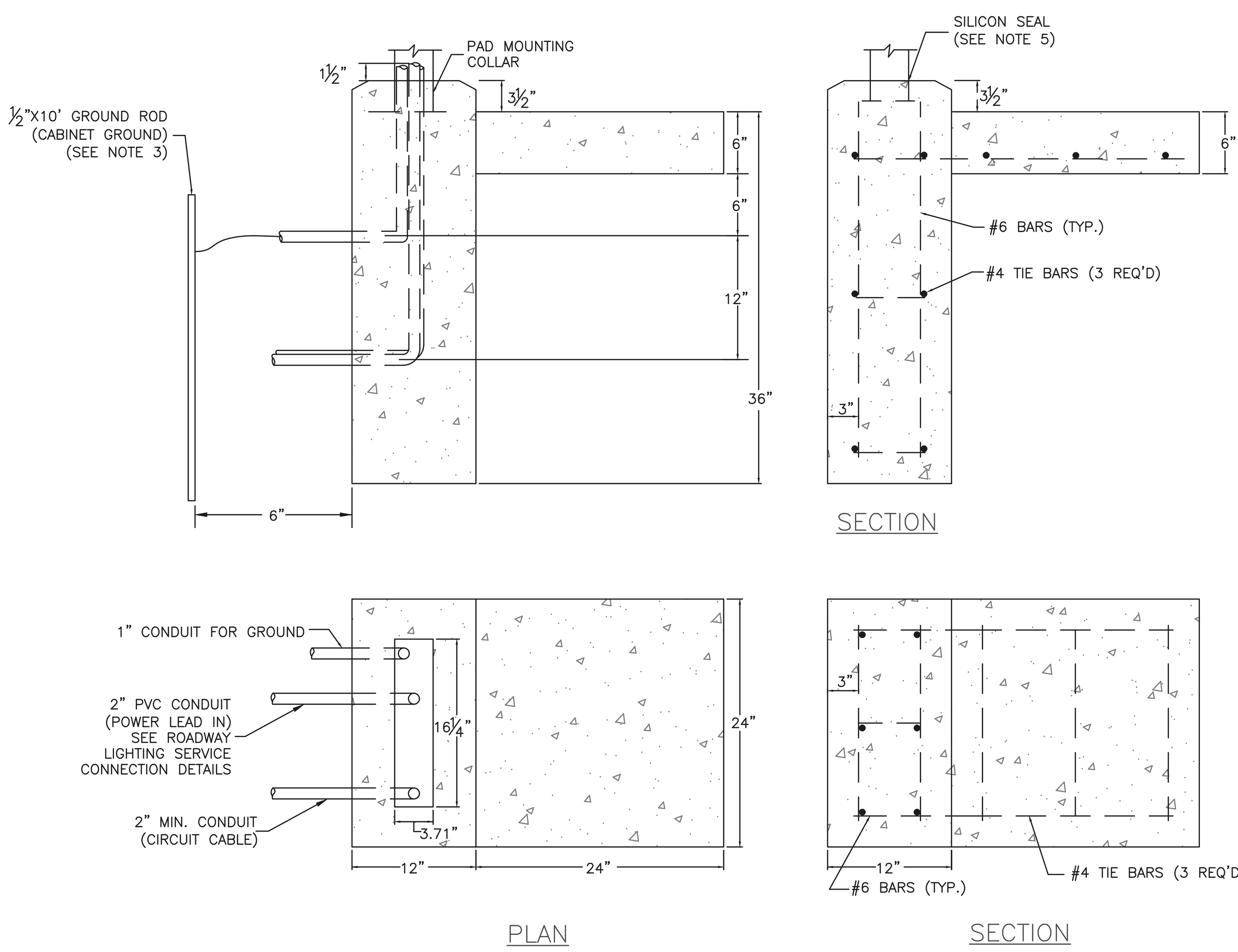
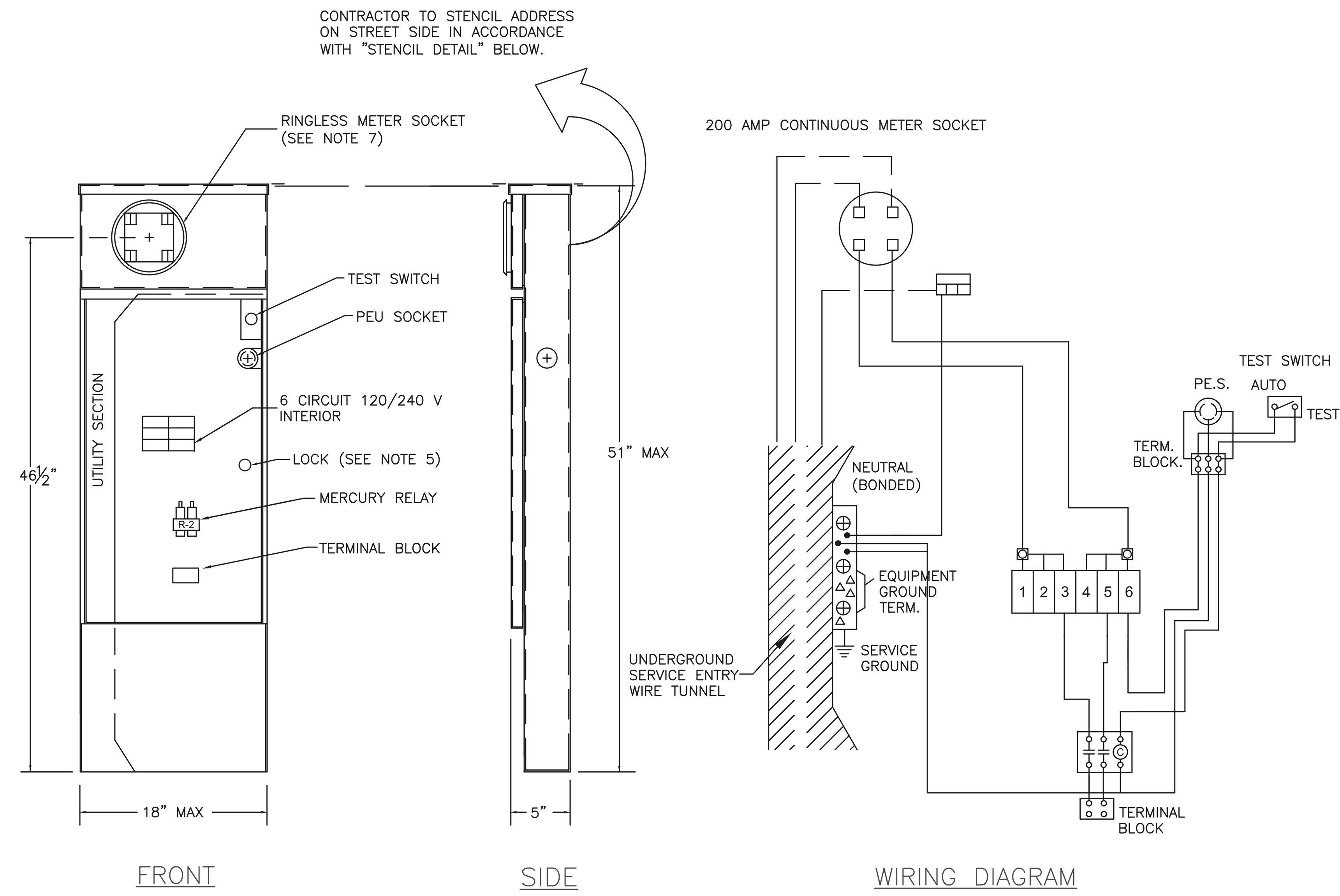
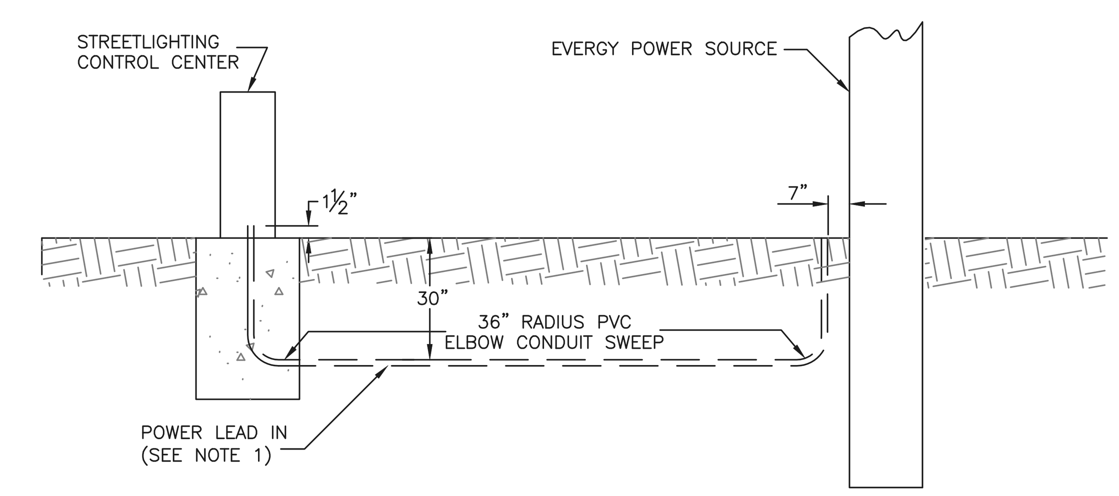


CONCRETE FOUNDATION
(1–CIRCUIT CONTROLLER)

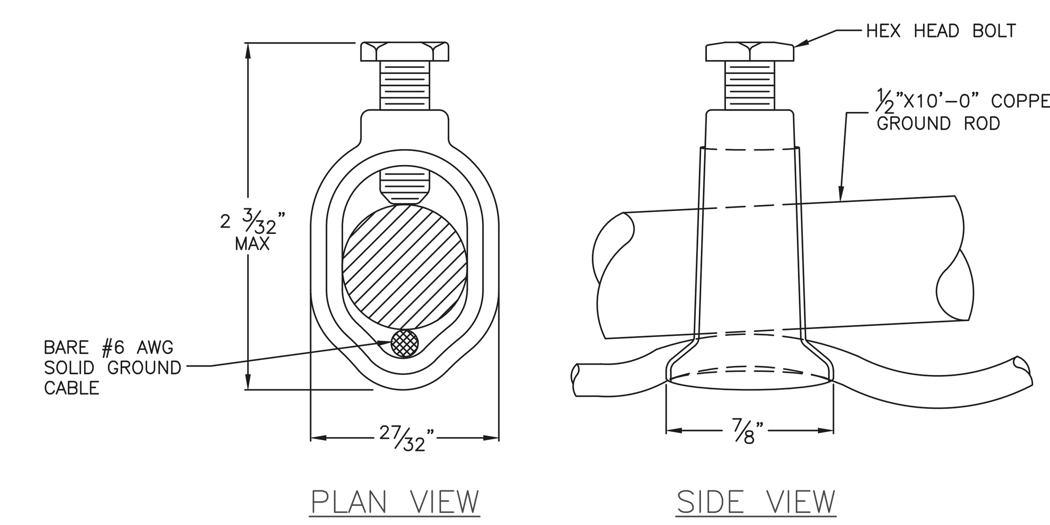


PAD MOUNTED CONTROLLER (1–CIRCUIT)
(USED ONLY AS APPROVED BY THE CITY)

1. CONTRACTOR SHALL INSTALL SCHEDULE 40 PVC (GRAY) CONDUIT (SIZED PER PLAN AND DETAILS). THE CONDUIT SHALL BE INSTALLED 30" DEEP WITH A 36" RADIUS 90° PVC ELBOW TO WITHIN 7" FROM THE BASE OF THE POWER SOURCE AND AT THE CONTROLLER CABINET. IF THERE ARE MULTIPLE CONDUITS ON THE POWER POLE, THE NEW CONDUIT SHOULD BE INSTALLED ADJACENT TO, AND IN CONTACT WITH, THE EXISTING CONDUITS.
2. THE END OF THE CONDUIT SHALL BE LEFT TEMPORARILY EXPOSED UNTIL EVERGY COMPLETES THE SERVICE HOOK–UP. A LIGHTED BARRICADE OR ORANGE CONSTRUCTION SAFETY FENCING SHALL BE PLACED AT THE EXCAVATION.
3. CONTRACTOR SHALL INSTALL ELECTRICAL SERVICE POWER CABLE FROM CONTROLLER TO THE EVERGY POWER SOURCE. CONTRACTOR SHALL CONNECT CABLES TO THE METER LUGS AND COIL ENOUGH SLACK AT THE POWER SOURCE TO EXTEND UP THE POLE OR TO CONNECT IN THE POWER PEDESTAL.



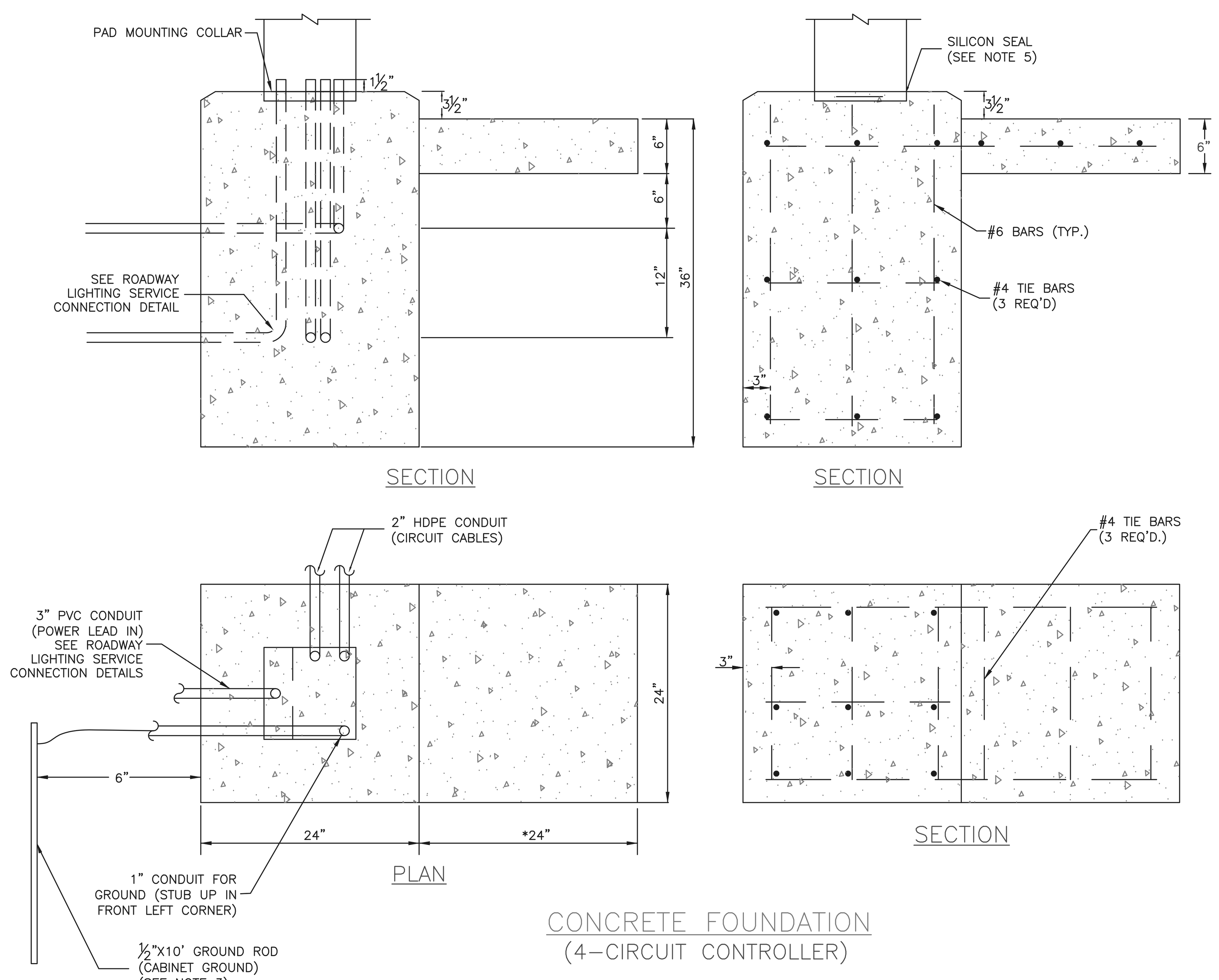
ROADWAY LIGHTING SERVICE CONNECTION DETAILS



GROUND ROD CLAMP CONNECTION DETAIL

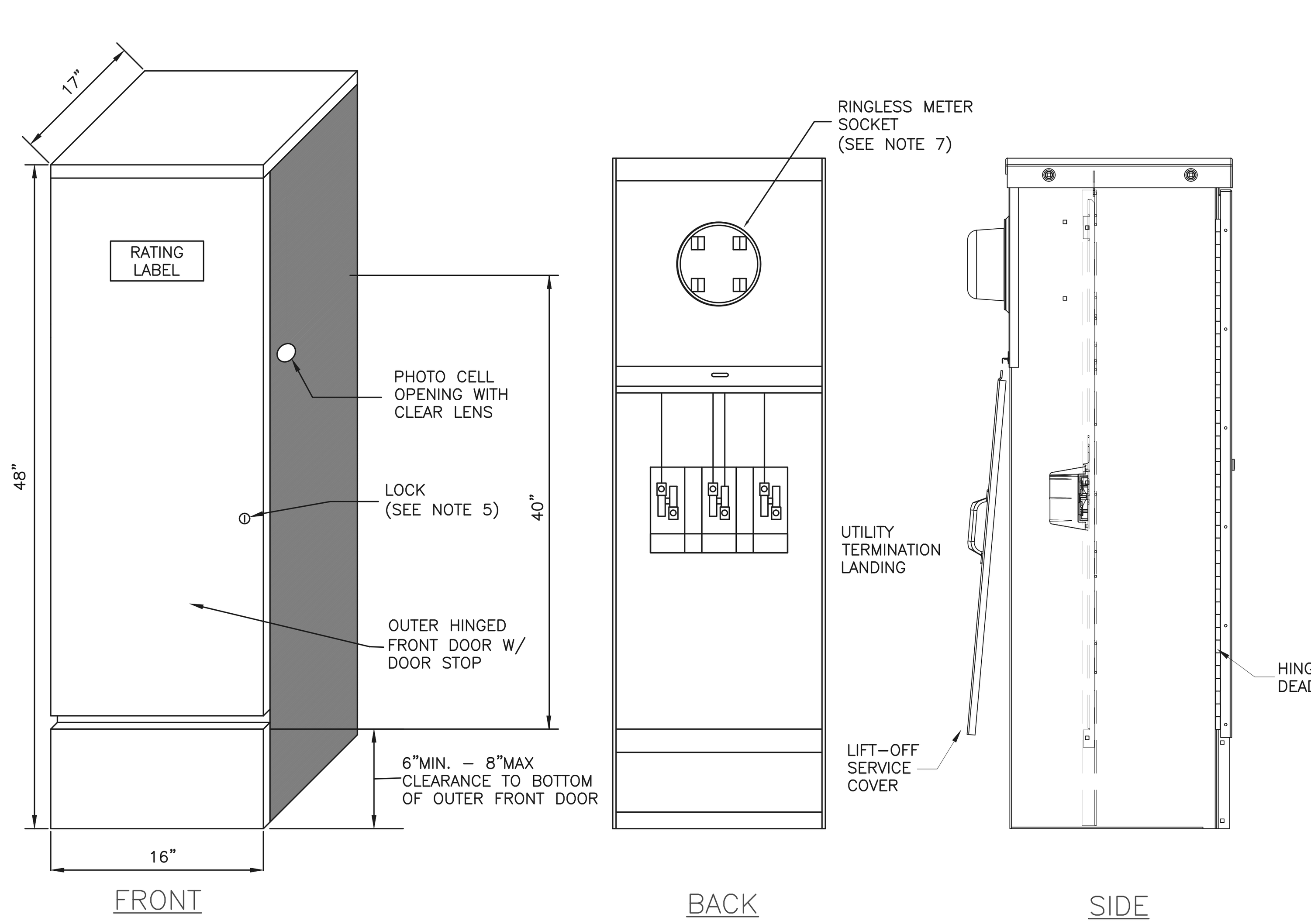
CONCRETE FOUNDATION NOTES:
1. SEE THE PLAN SHEETS FOR SPECIFIC DETAILS (I.E. PAD SIZE, CONDUIT REQUIREMENTS FOR CIRCUIT CABLES) FOR EACH INDIVIDUAL CONTROL CENTER.
2. ALL CONCRETE USED IN THIS WORK SHALL MEET THE REQUIREMENTS OF KCMMB4K CONCRETE.
3. CONTRACTOR TO PROVIDE GROUND ROD(S) AS REQUIRED FOR MAXIMUM OF 25 OHMS RESISTANCE TO GROUND.
4. DUCT SEAL SHALL BE APPLIED AT ALL CONDUIT ENTRANCES AFTER CABLE INSTALLATION.
5. SEAL THE BOTTOM EDGE OF THE CABINET AT THE CONTACT POINT WITH THE CONCRETE PAD WITH SILICON SEALANT.
6. ALL REINFORCING STEEL SHALL BE ASTM A615 GR60.

1–CIRCUIT & 4–CIRCUIT CONTROLLER NOTES:
1. 3R ENCLOSURE TO BE CODE 0.125 INCH CORROSION RESISTANT ALUMINUM.
2. ALL FACTORY INSTALLED WIRE TO BE COPPER.
3. ALL TERMINALS APPROVED FOR COPPER OR ALUMINUM WIRE #6 TO 350 MCM AWG.
4. SILVER–PLATED COPPER BUSSED CIRCUIT BREAKER INTERIOR.
5. FACTORY INSTALLED CORBIN LOCK ASSEMBLY DESIGNED FOR STANDARD NO. 2 KEY WITH TAPERED LATCH.
6. FINISH: NATURAL ALUMINUM UNLESS OTHERWISE SPECIFIED.
7. EXPOSED 200A 240V 5 TERMINAL METER SOCKET W/HORN BYPASS AND RINGLESS COVER.
8. CONTRACTOR PERFORMING WORK ON ANY STREETLIGHT CIRCUIT SHALL BE REQUIRED TO INSTALL A CITY APPROVED LOCKOUT DEVICE FOR EACH RESPECTIVE CIRCUIT AFFECTED. A CITY APPROVED TAG, INDICATING CONTRACTOR'S NAME AND CONTACT INFORMATION SHALL BE ATTACHED TO THE LOCKOUT DEVICE.
9. PHOTOCELL AND PAD SHALL BE ORIENTED TO THE NORTH OR EAST. PHOTOCELL IS LOCATED ON THE RIGHT SIDE OF THE CABINET.
10. SHALL BE UL LISTED FOR 5,000 AMP SHORT CIRCUIT CURRENT RATING.
11. INCLUDE MOUNTING COLLAR WITH CABINET.

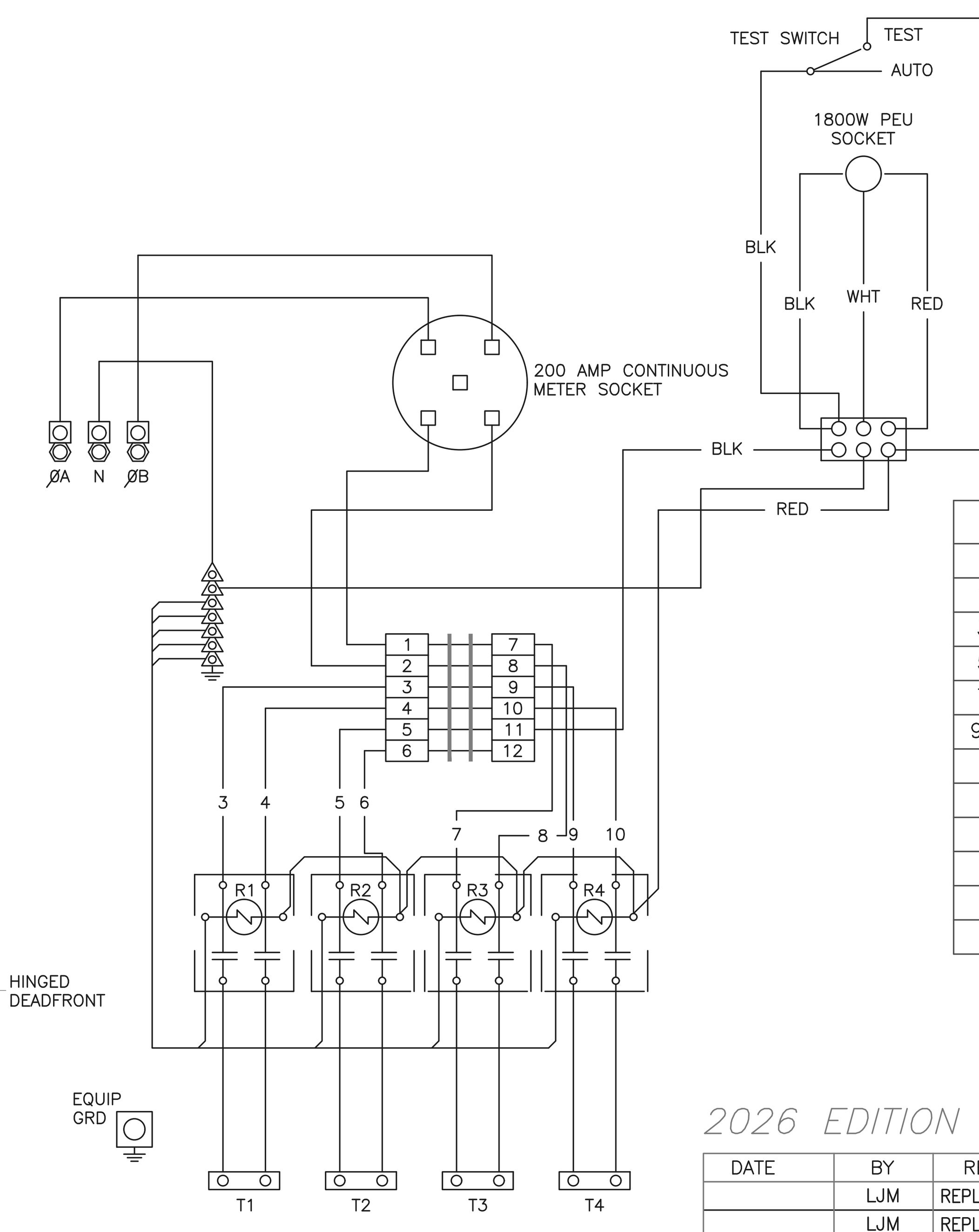


CONCRETE FOUNDATION
(4–CIRCUIT CONTROLLER)

STENCIL DETAIL NOTE:
2" HIGH LETTERS AND NUMERALS WITH BLACK STICK–ON SIGN SHEETING FILM ON ONE PIECE OF WHITE RETROREFLECTIVE SHEETING WITH BLACK BORDER BY THE CONTRACTOR. APPLY ON "STREET SIDE" OF CABINET FACING THE STREET REFERENCED IN THE ADDRESS.



PAD MOUNTED CONTROLLER (4–CIRCUIT)



WIRING DIAGRAM

CIRCUIT DIRECTORY				
NO.	DESCRIPTION	QTY	AMP	POLE
1,2	MAIN	1	100	2
3,4	BREAKER 1	1	30	2
5,6	BREAKER 2	1	30	2
7,8	BREAKER 3	1	30	2
9,10	BREAKER 4	1	30	2
11	BREAKER 5	1	15	1
12	BLANK			
R1	RELAY 1	1	30	2
R2	RELAY 2	1	30	2
R3	RELAY 3	1	30	2
R4	RELAY 4	1	30	2

2026 EDITION

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	LJM	REPLACES ALL PREVIOUS VERSIONS OF ROADWAY LIGHTING DETAILS
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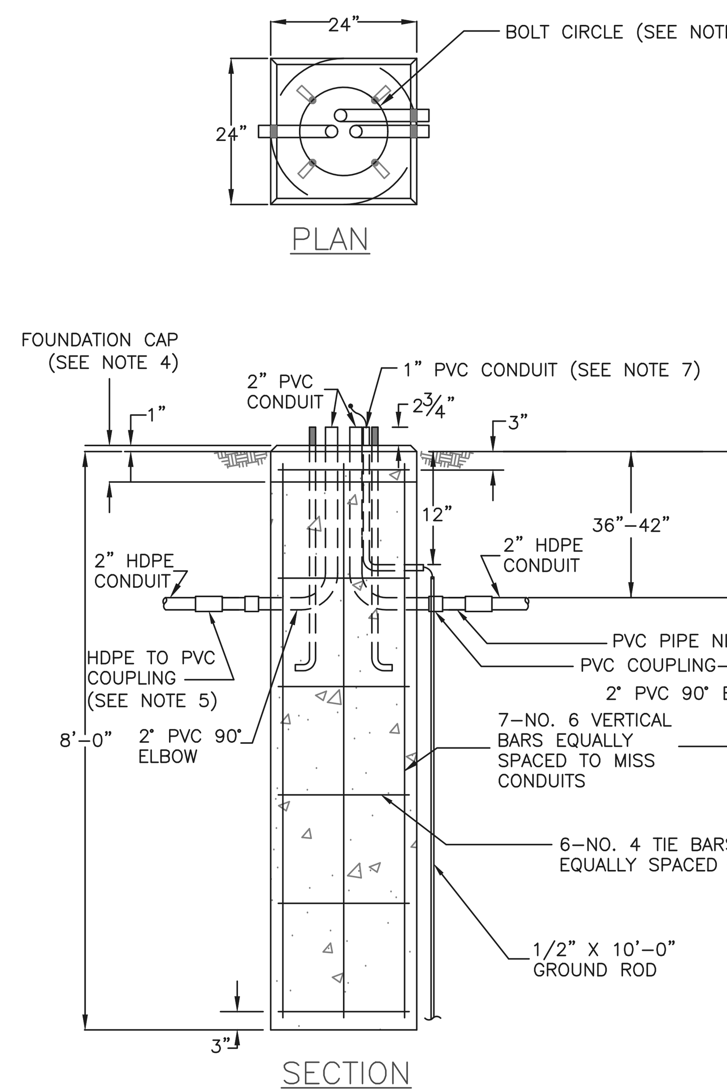
Lawrence KANSAS

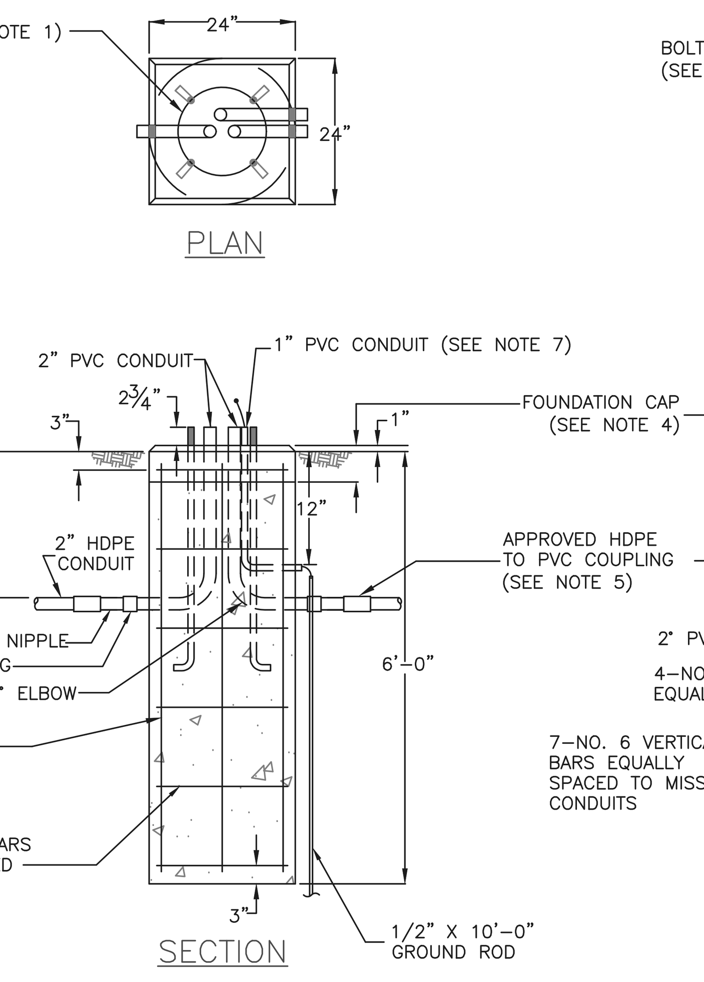
STANDARD DETAILS FOR
ROADWAY LIGHTING
CONTROLLER

DAVID P. CRONIN
CITY ENGINEER

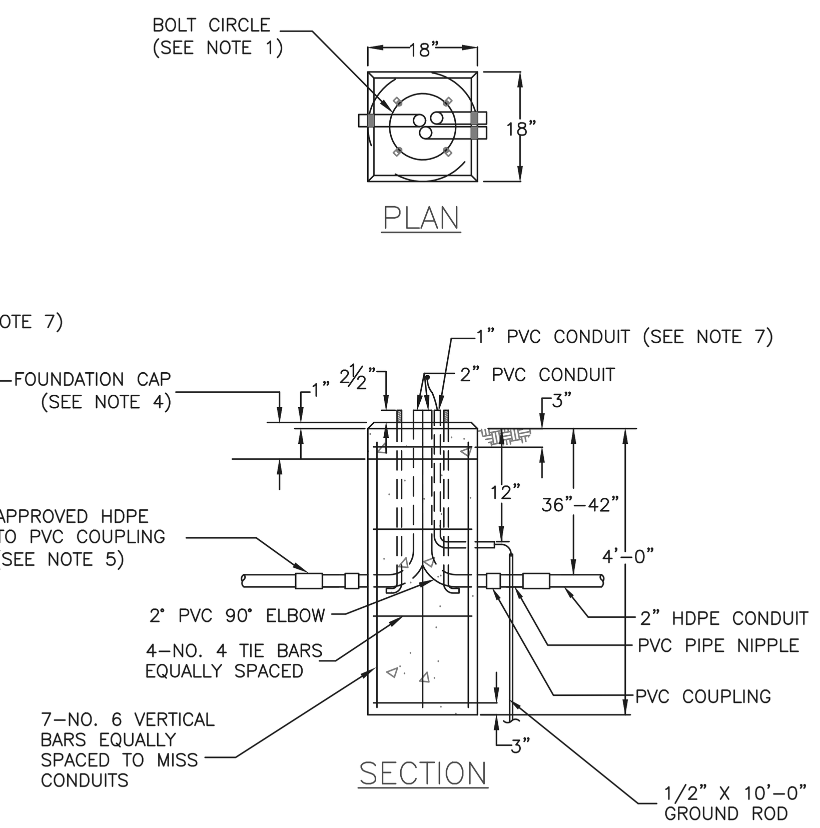
CRAIG S. OWENS
CITY MANAGER



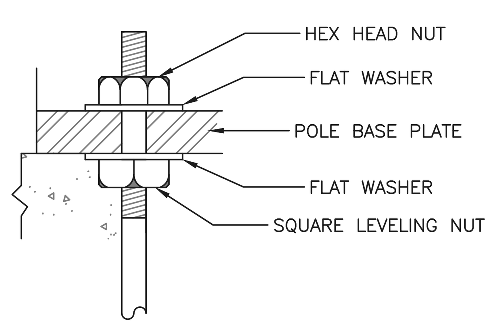
40 FOOT POLE



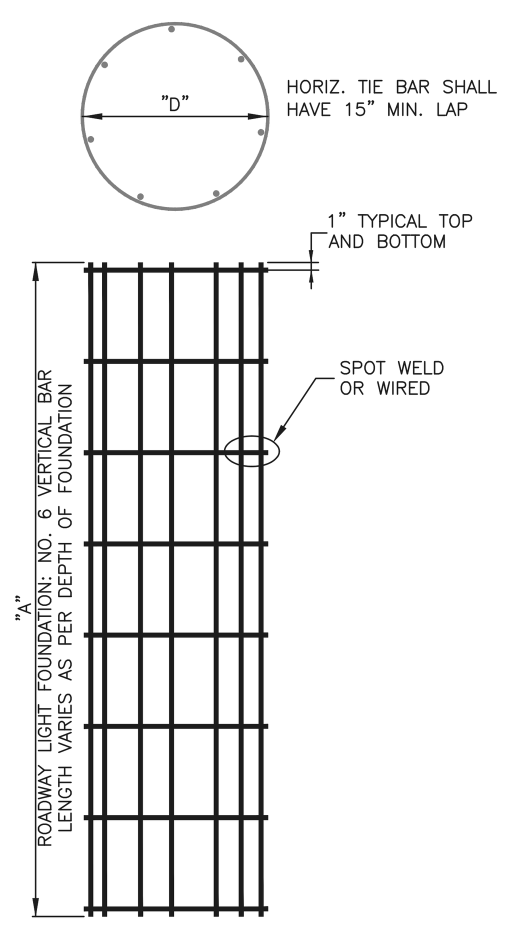
30 FOOT POLE



10 FOOT POLE



ANCHOR BOLT DETAIL



REBAR CAGE DETAIL

CONCRETE FOUNDATION NOTES:

1. FINAL POLE, ANCHOR BOLT SIZE, ANCHOR BOLT PROJECTION, AND BOLT CIRCLE SHALL BE AS PER MANUFACTURER'S RECOMMENDED PRACTICES.
2. ALL CONDUITS AND ANCHOR BOLTS FOR ALL THE NEW POLE BASES SHALL BE RIGIDLY INSTALLED BEFORE CONCRETE IS PLACED. ANCHOR BOLTS SHALL BE SPACED BY MEANS OF A FACTORY CERTIFIED TEMPLATE OR DRAWING, THE CENTER OF WHICH SHALL COINCIDE WITH THE CENTER OF THE BASE.
3. ALL CONCRETE POLE BASES SHALL BE CONSOLIDATED BY AN INTERNAL TYPE VIBRATOR.
4. FINAL 6" OF CONCRETE FOUNDATION (POLE CAP) SHALL BE FORMED SQUARE. THE CAP SHALL BE FORMED AND POURED AFTER THE ARMS ARE ATTACHED AND THE POLE PLUMB.
5. PVC CONDUIT ELBOWS IN CONCRETE FOUNDATIONS SHALL BE CONNECTED TO HDPE CONDUIT WITH PVC PIPE NIPPLE AND APPROVED PVC TO HDPE COUPLING. ALL CONDUIT ELBOWS SHALL BE CONSIDERED SUBSIDIARY TO THE TRAFFIC SIGNAL POLE BASE.
6. ALL CONCRETE USED IN THIS WORK SHALL MEET THE REQUIREMENTS OF THE KCMMB4K CONCRETE.
7. BARE NO. 6 SOLID COPPER GROUND CONDUCTOR FROM INTERNAL POLE GROUNDING NUT TO CLAMP ON GROUND ROD.
8. ALL REINFORCING STEEL SHALL BE ASTM A615 GR60.

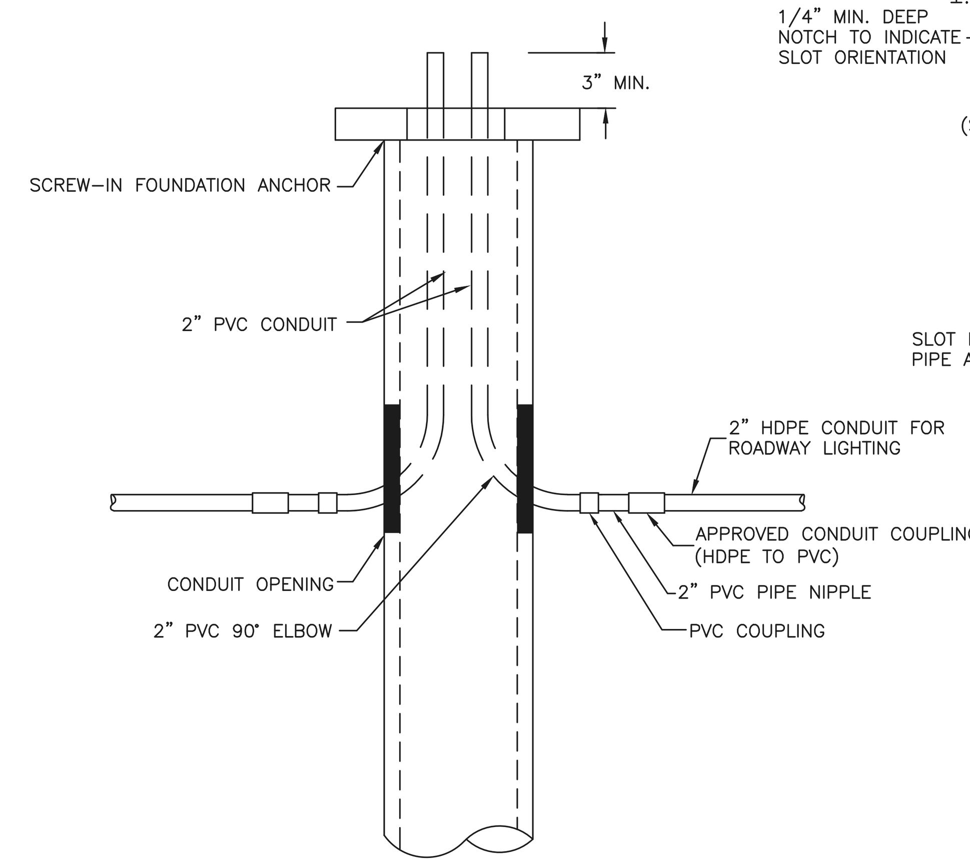
ROADWAY LIGHTING FOUNDATION HORIZONTAL REBAR

POLE FND. DIA.	POLE FND. DEPTH	REBAR CIR. "D"	SPACING
18"	4'	15"	12" MAX.
24"	6'	20"	12" MAX.
24"	8'	20"	12" MAX.

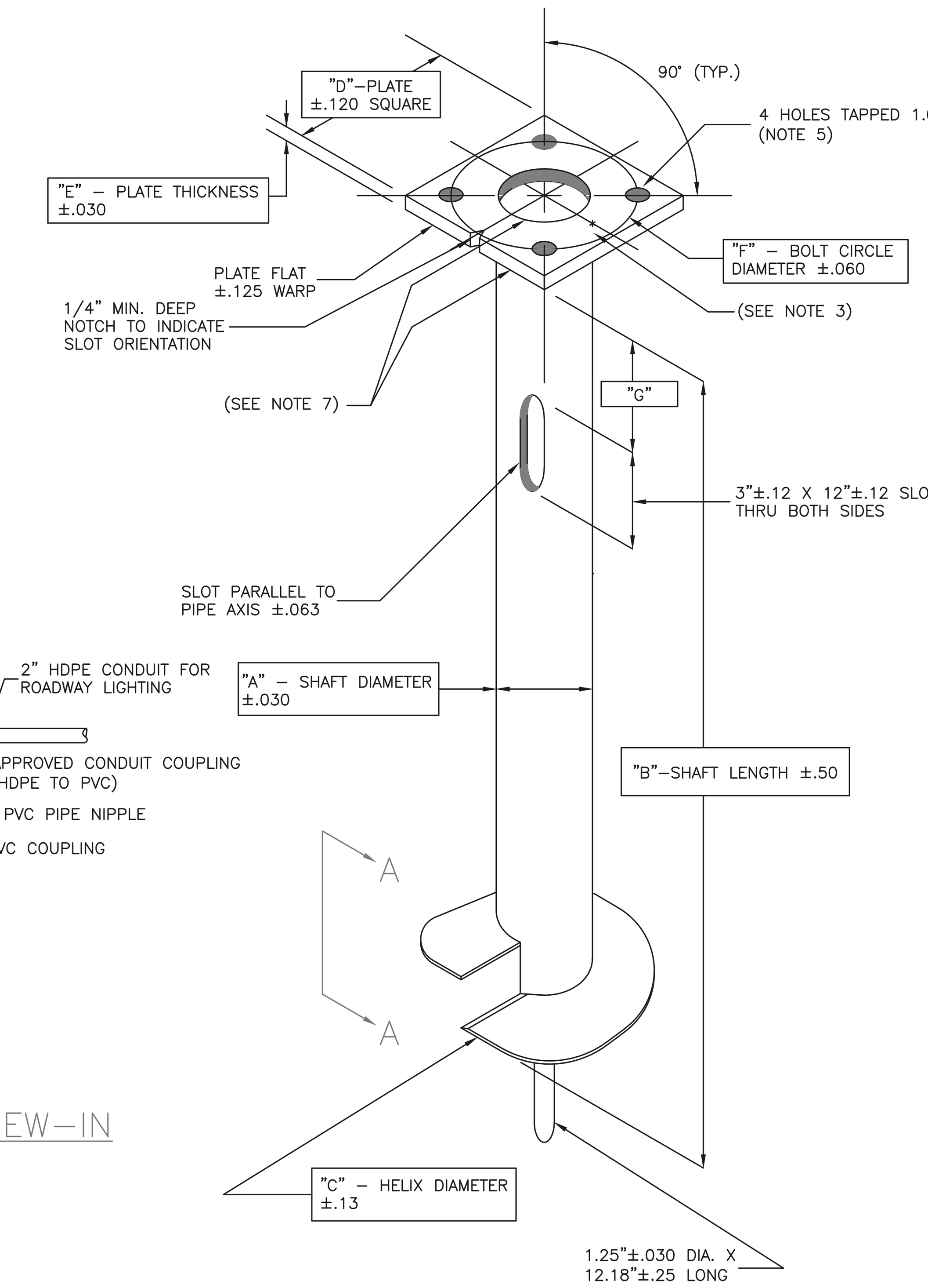
ROADWAY LIGHTING FOUNDATION VERTICAL REBAR

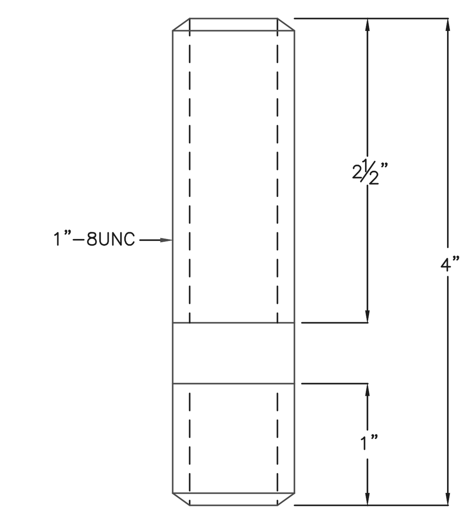
POLE FOUNDATION DEPTH	LENGTH "A"
4'–0"	3'–8"
6'–0"	5'–8"
8'–0"	7'–8"

CONCRETE FOUNDATION DETAILS



CONDUIT ENTRANCE INTO SCREW–IN FOUNDATION ANCHOR





THREADED STUD
(USE WITH BREAKAWAY COUPLINGS)

SCREW–IN FOUNDATION NOTES:

1. FINISH: HOT DIP GALVANIZE PER ASTM–A153.
2. BASEPLATE TO BE PERPENDICULAR TO SHAFT AXIS (±1°) AND HOLE AND CONCENTRIC (±.188 I.D. FIM) TO SHAFT AXIS.
3. ALL BASES SHALL BE IDENTIFIED BY THE MANUFACTURER NAME, ABBREVIATION, OR SYMBOL ENGRAVED ON THE SHAFT AND/OR TOP PLATE. THE ANCHOR TYPE (R, T1, F1 & F2) SHALL BE ENGRAVED INTO THE TOP PLATE WITH 1/4" TO 1/2" LETTERING.
4. PILOT POINT AND SHAFT AXES TO BE CONCENTRIC (±.125 FIM) AND IN LINE (±2°).
5. TAP 1" HOLES ON THE SPECIFIED BOLT CIRCLE PERPENDICULAR TO THE BASEPLATE. CLEAN AND CHASE THE THREADS AFTER HOT–DIP GALVANIZING SO THAT A BOLT MAY BE HAND INSTALLED.
6. PREHEAT (ROOM TEMPERATURE 70°F), TUMBLEBLAST, HANDGRIND, AND CLEAN BASEPLATE, HELIX, AND CORE ON ALL WELDED AREAS.
7. FLAMECUT IRREGULARITIES PERMISSIBLE:
   (1) VALLEYS NOT TO EXCEED 3/32 IN. BELOW NOMINAL SURFACE LEVEL.
   (2) PEAKS OR POSITIVE IRREGULARITIES NOT TO EXCEED 1/32 IN. ABOVE NOMINAL SURFACE LEVEL OR INTERSECTIONS OF NOMINAL SURFACES.
8. MANUFACTURER TO HAVE IN EFFECT INDUSTRY RECOGNIZED WRITTEN QUALITY CONTROL FOR ALL MATERIALS AND MANUFACTURING PROCESSES.
9. ALL 30' AND 40' ALUMINUM LIGHT POLES SHALL BE FURNISHED WITH BREAKAWAY POLE DEVICE. BREAKAWAY POLE DEVICES ARE NOT REQUIRED FOR 14' LIGHT POLES.
10. ALL MATERIAL IS TO BE NEW, UNUSED AND MILL TRACEABLE MEETING THE FOLLOWING SPECIFICATIONS:

BASEPLATE: ASTM A36–HOT ROLLED STEEL PLATE

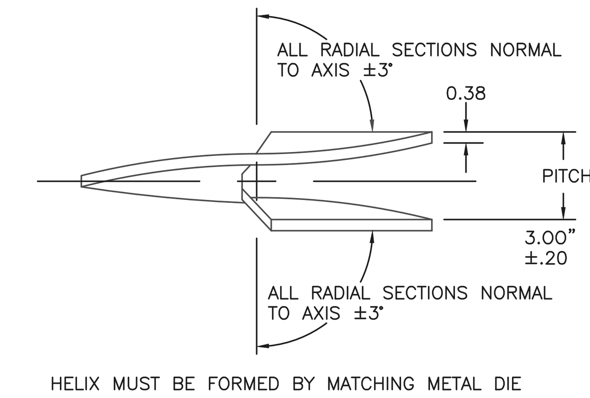
SHAFT: STEEL PIPE PILES, SEAMLESS OR STRAIGHT WELDED, GRADE 2 PER ASTM A252. ALTERNATE MATERIAL: STEEL PIPE TYPE E OR S, GRADE B PER ASTM A53.

HELIX: ASTM A635–HOT ROLLED STEEL PLATE

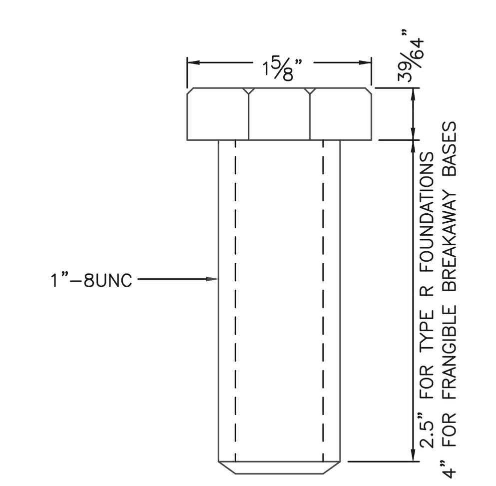
PILOT POINT: ASTM A575–HOT ROLLED STEEL

STUD: ANSI C 1045 HOT ROLLED STEEL. SPECIAL 1" DIAMETER HOT DIP GALVANIZED STUD THREADED AT BOTH ENDS FOR T AND F TYPE FOUNDATIONS WHEN USED WITH BREAKAWAY COUPLINGS. STUD DIAMETER WITHOUT THREADS SHALL BE LARGE ENOUGH TO AVOID SLIPPING THROUGH THREADED HOLE.

BOLT: ASTM A325 OR GRADE 5 SAE J429–1" DIAMETER HOT DIP GALVANIZED HEX HEAD BOLT FOR TYPE R SCREW–IN FOUNDATION OR T AND F TYPE FOUNDATIONS WHEN USING FRANGIBLE BREAKAWAY BASES. BOLT SHALL INCLUDE ONE EACH LOCK AND FLAT WASHER.



VIEW A–A



HEX HEAD BOLT
(USE WITH FRANGIBLE BREAKAWAY BASES OR TYPE R FOUNDATIONS)

SCREW–IN FOUNDATION ANCHOR DETAILS

TYPE	POLE TYPE(S)	MAX TORQUE RATING (LBS FT)	A SHAFT DIA	B SHAFT LENGTH	C HELIX DIA	D PLATE SIZE	E PLATE THICKNESS	F BOLT CIRCLE	G SLOT LOCATION
R	LAW10	15,000	6"	48"	12"	10"	0.75"	9.5"	12"
T1	LAW301,302,303	15,000	6"	60"	12"	12"	1.0"	11"	18"

SCREW–IN FOUNDATION DETAILS

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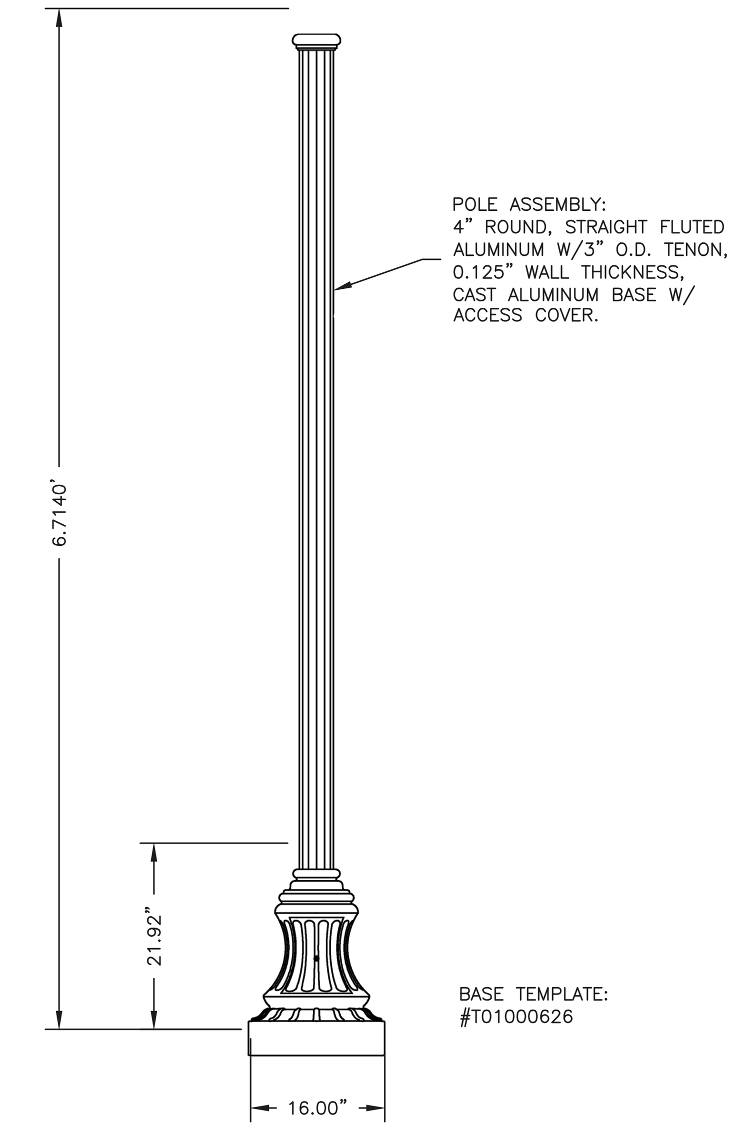
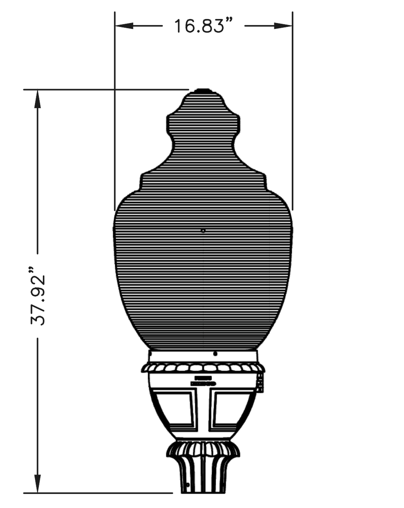
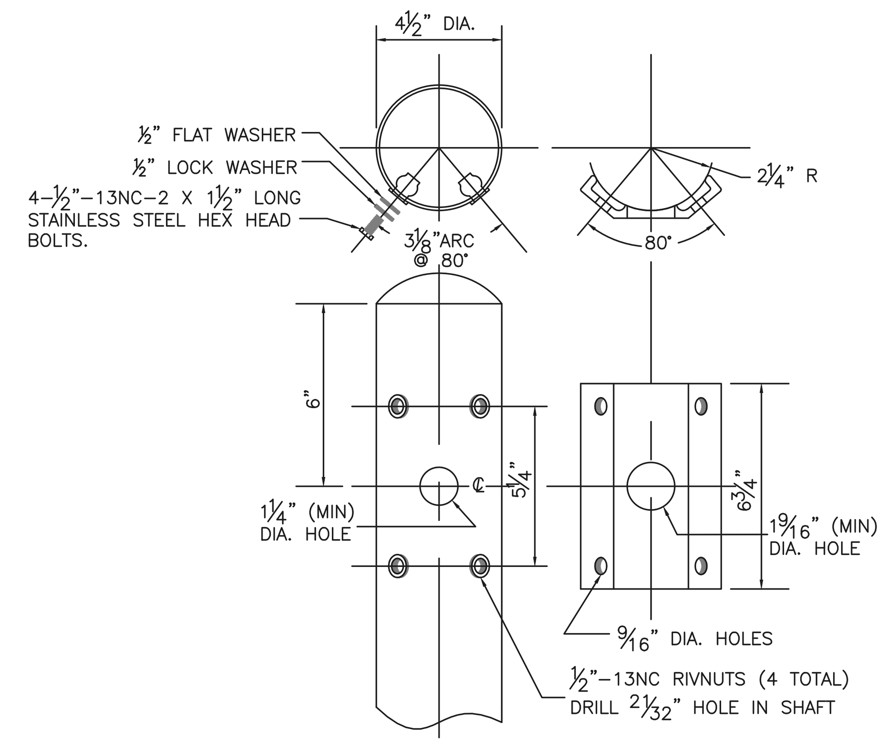


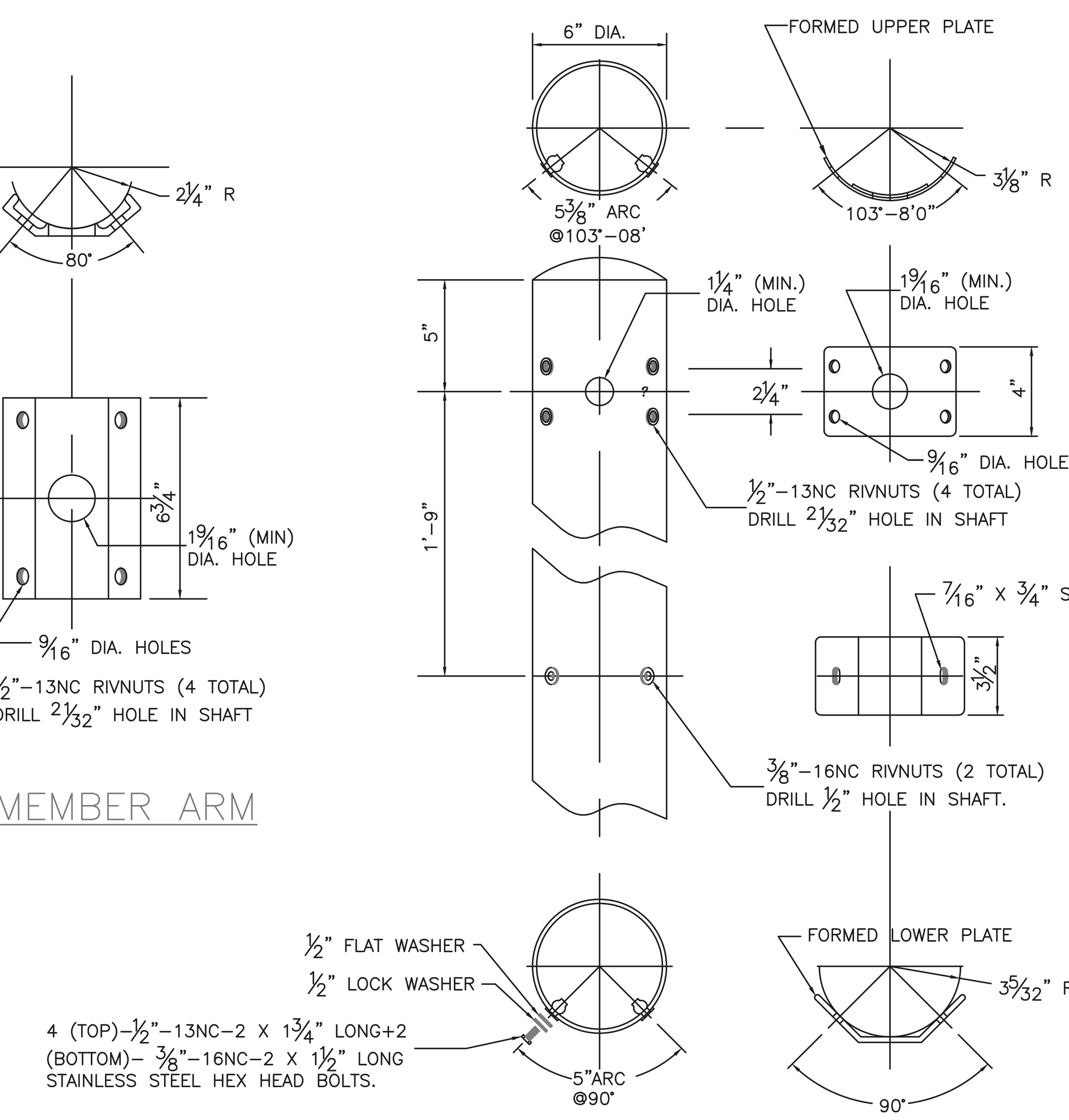
10' POLE WITH POST TOP RETROFIT LUMINAIRE



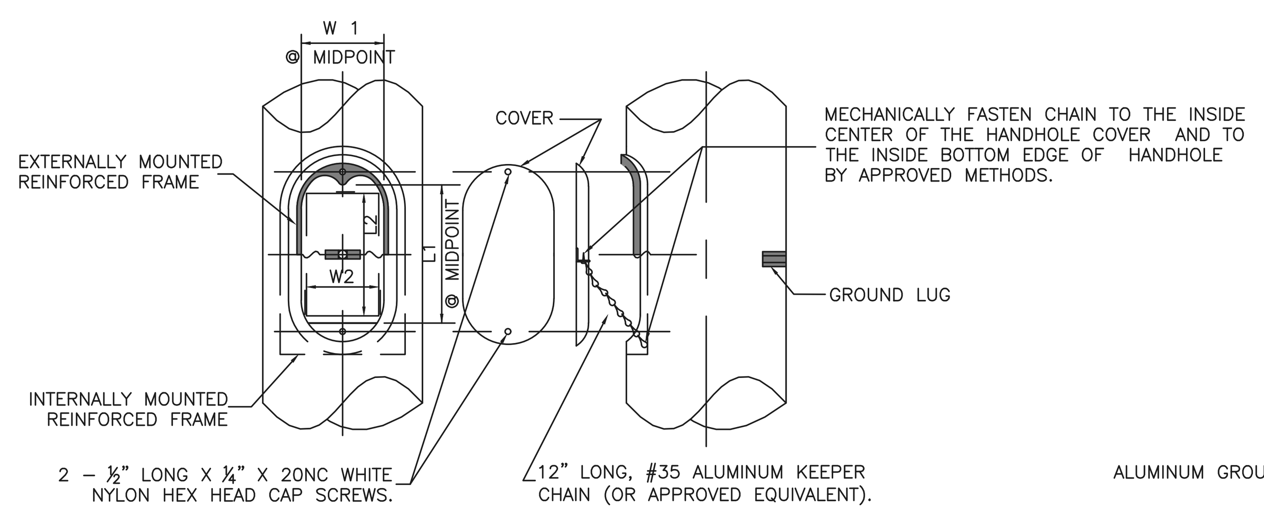
POST TOP LED RETROFIT LUMINAIRE



TYPE A – SINGLE MEMBER ARM



TYPE B – TRUSS ARM

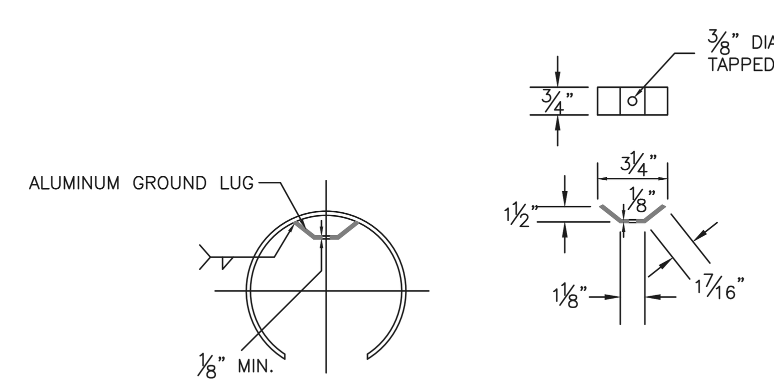


FRONT

SIDE

HANDHOLE

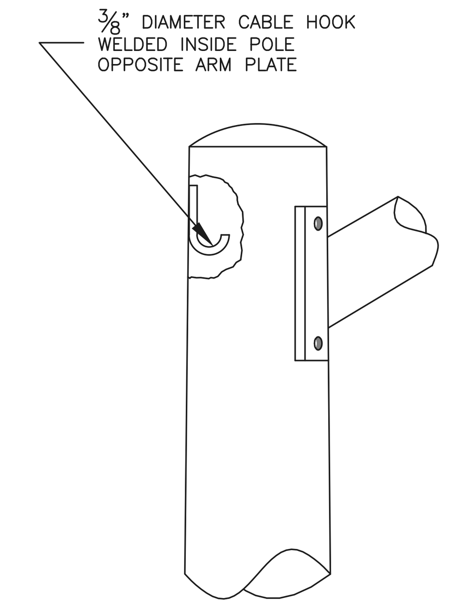
HANDHOLE NOTES:
1. THE DIMENSIONS FOR THE HANDHOLE OPENING SHALL BE CLEAR OF ANY INTERFERENCE FROM THE HANDHOLE REINFORCING FRAME. THESE DIMENSIONS REPRESENT MINIMUM VALUES.
2. THE HANDHOLE OPENING SHALL BE SMOOTH AND FREE OF BURRS.
3. THE HANDHOLE COVER SHALL BE UNIFORM AND FIT TIGHTLY WITH NO GAPS AND SECURED WITH NYLON HEX HEAD SCREWS.
4. HOLES IN COVER SHALL BE OVERDRILLED AND NOT TAPPED ALLOWING SCREW TO SLIDE THROUGH.
5. HANDHOLE FOR POLES LOCATED ON BRIDGES SHALL BE ON SAME SIDE AS LUMINAIRE ARM.
6. HANDHOLE COVERS SHALL BE UNIVERSAL IN SIZE TO FIT ALL POLES INTERCHANGEABLY.



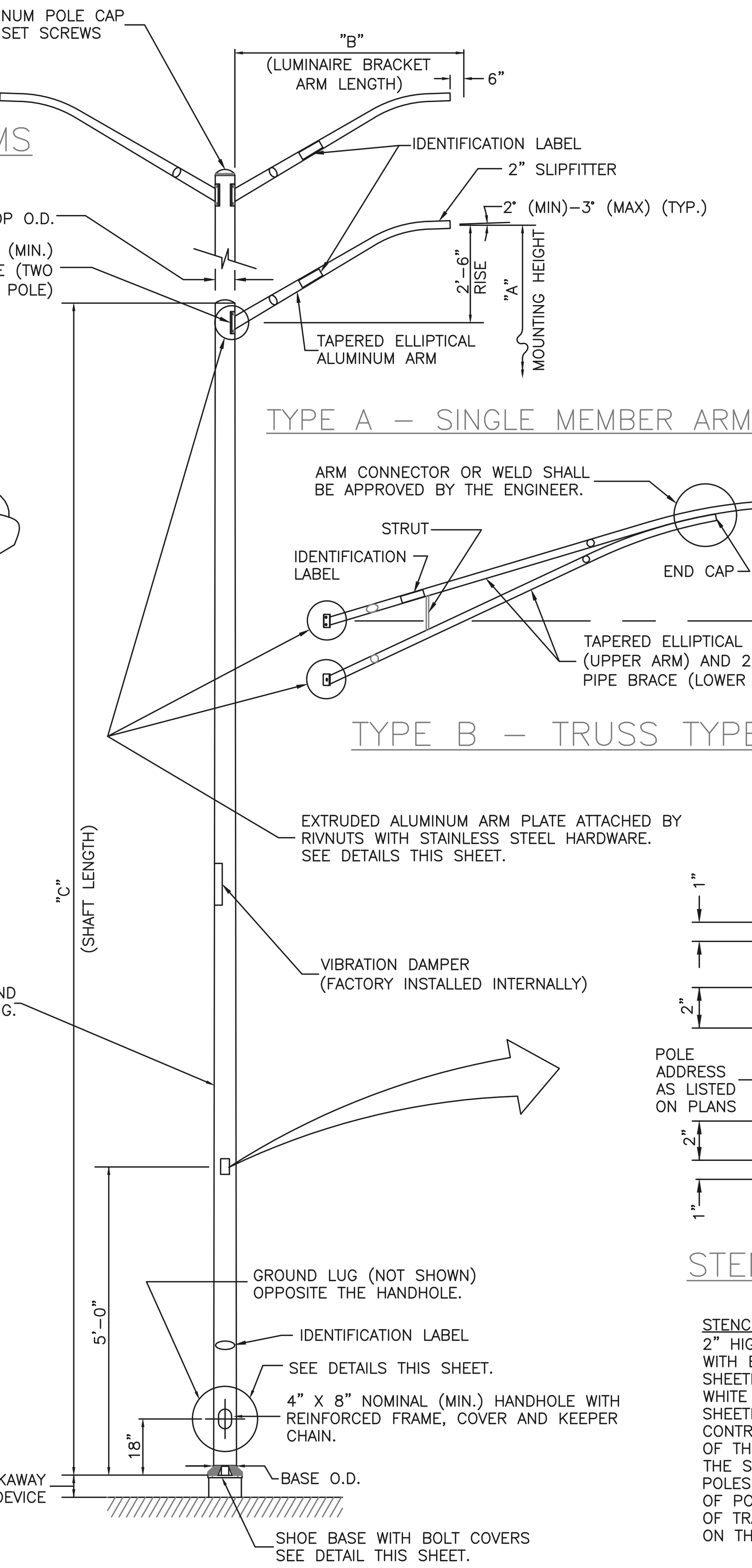
GROUND LUG

	4" X 6"	4" X 8"
W1	3⅞"	4"
L1	5¼"	7¼"
W2	3"	3⁷⁄₁₆"
L2	3¹⁵⁄₁₆"	6³⁄₃₂"

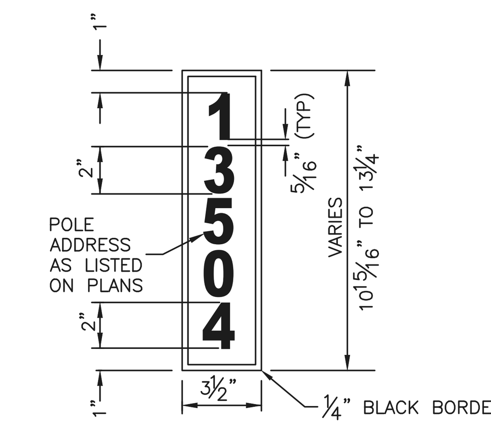
HANDHOLE OPENING DIMENSIONS (MIN)



POLE TOP



30' POLE ELEVATION
(SEE TABLE 1 FOR DESIGNATIONS & DIMENSIONS)



STENCIL DETAIL

STENCIL NOTE:
2" HIGH LETTERS AND NUMERALS WITH BLACK STICK-ON SIGN SHEETING FILM ON ONE PIECE OF WHITE RETROREFLECTIVE SIGN SHEETING WITH BLACK BORDER BY CONTRACTOR. APPLY ON TWO SIDES OF THE POLE 180° APART FACING THE STREET FOR MEDIAN MOUNTED POLES. APPLY ON THE STREET SIDE OF POLE FACING CLOSEST LANE OF TRAFFIC FOR POLES MOUNTED ON THE OUTSIDE CURB.

MATERIAL DATA

COMPONENT	ALUMINUM ALLOY DESIGNATION	SPECIFICATION
SHOE BASE	356-T6, CAST	ASTM B26 OR B108
FRANGIBLE BASES	356-T6	ASTM B108
BREAKAWAY COUPLINGS	6061-T6, EXTRUDED	1985 AASHTO
SKIRT (BREAKAWAY COUPLING ASSEMBLY)	3003-H14, SHEET	ASTM B209
BOLT COVERS	356 F OR 443, CAST	ASTM B26 OR B108
POLE SHAFT	6063-T6, EXTRUDED	ASTM B221
GROUND LUG	6061-T6 OR 6063-T6	ASTM B221
REINFORCED HANDHOLE FRAME	356-T6 OR 6061-T6	ASTM B26, B108, OR B221
HANDHOLE COVER	6063-T6	ASTM B209, B221, OR B241
LUMINAIRE ARM – TUBING – PIPE*	6063-T6 6063-T6	ASTM B221 OR B241 ASTM B429
LUMINAIRE ARM PLATE	6061-T6 OR 6063-T6	ASTM B221
LUMINAIRE ARM, STRUT* & CONNECTOR*	6061-T6 OR 6063-T6	ASTM B221, B24,1 OR B429
POLE CAP	356 F OR 443, CAST	ASTM B26 OR B108
ANCHOR BOLTS	N/A	ASTM A-576 STEEL, GALVANIZED PER ASTM A-153

*TRUSS-TYPE LUMINAIRE ARMS (TYPE B) ONLY.

MATERIAL NOTES:
1. POLE SHAFT SHALL HAVE A SATIN GROUND FINISH.
2. ALL HARDWARE (BOLTS, NUTS, WASHERS BUT NOT INCLUDING ANCHOR BOLTS) NOT OTHERWISE SPECIFICALLY DESIGNATED IN THE SPECIFICATIONS OR DETAILS SHALL BE STAINLESS STEEL PER ASTM A193 CLASS I B8.
3. ANCHOR BOLTS – GALVANIZED STEEL ANCHOR BOLTS WITH 50,000 PSI MINIMUM YIELD; TOP 10" MIN. GALVANIZED; INCLUDE ONE NUT EACH AND TWO FLAT WASHERS GALVANIZED TO ASTM A-153 STANDARDS (4 BOLTS, 4 NUTS, & 8 WASHERS TO BE PROVIDED WITH EACH POLE). ANCHOR BOLTS SHALL BE USED WITH CONCRETE FOUNDATIONS. THREADED STUD (SEE POLE FOUNDATION DETAIL SHEET) SHALL BE USED WITH TYPE T AND F SCREW-IN FOUNDATION ANCHOR WHEN USING BREAKAWAY COUPLINGS. HEX HEAD BOLT (SEE POLE FOUNDATION DETAIL SHEET) SHALL BE USED WITH TYPE R SCREW-IN FOUNDATION ANCHOR OR T AND F FOUNDATIONS WHEN USING FRANGIBLE BREAKAWAY BASE.
4. ALL WELDING IS TO BE DONE WITH 4043 WELD WIRE. ALL ARMS AND SHAFTS SHALL HAVE A MECHANICAL STRENGTH OF NOT LESS THAN T6 TEMPER.

LAWRENCE DESIGNATION	MOUNTING HEIGHT (A)	LUMINAIRE ARM(S)				POLE SHAFT				SHOE BASE	ANCHOR BOLT FOR CONCRETE FOUNDATION			SCREW-IN ANCHOR FOUNDATION
		LUMINAIRE 1		LUMINAIRE 2		BASE O.D.	TOP O.D.	MINIMUN WALL THICKNESS	SHAFT LENGTHS (C)	BOLT CIRCLE (BC)	DIAMETER	LENGTH	HOOK	TYPE
		LENGTH (B)	TYPE	LENGTH (B)	TYPE									
LAW301	30	6, 8	A	NA	NA	7"	4.5"	0.188"	27'-6"	11"	1.0" 8NC	36"	4"	T1
LAW302	30	12	B	NA	NA	8"	6"	0.188"	26'-8"	11"	1.0" 8NC	36"	4"	T1
LAW303	30	8	A	8	A	8"	4.5"	0.188"	27'-6"	11"	1.0" 8NC	36"	4"	T1

TABLE 1 – LUMINAIRE ARM, POLE, SHOE BASE & ANCHOR BOLT DATA

TABLE 1 NOTES:
1. THE INTENT OF THESE MATERIAL RESTRICTIONS IS TO PROVIDE INTERCHANGEABILITY OF BOTH TYPES OF LUMINAIRE ARMS FOR MOUNTING ON A 30' POLE.
2. LUMINAIRE ARMS – 6' & 8' ARMS SHALL BE SINGLE MEMBER (TYPE A) UNLESS OTHERWISE NOTED ON THE PLANS; 10, 12 & 15' ARMS SHALL BE TRUSS-TYPE (TYPE B).
3. TABLE 1 REPRESENTS POLE SHAFT DIMENSIONS FOR A 30' AND 40' POLE TO BE INSTALLED WITH BREAKAWAY DEVICES. THE POLE SHAFT LENGTH SHALL BE DIMENSIONED ACCORDINGLY BUT THE TOP & BOTTOM POLE DIAMETERS, BOLT CIRCLE, MOUNTING HEIGHT, AND LUMINAIRE ARM DESIGN AND RISE SHOWN IN TABLE 1 AND NOTED IN THE POLE ELEVATION DETAIL SHALL BE MAINTAINED (SEE NOTE 2).
4. ANCHOR BOLTS/THREADED STUDS SHALL PROJECT ABOVE THE FOUNDATION AS PER MANUFACTURER'S RECOMMENDED PRACTICES – 2.5" TO 3". THE LEVELING DEVICES (I.E. WASHERS) SHALL BE INSTALLED BETWEEN THE STEEL SHIM PLATE, PROVIDED AS PER THE MANUFACTURER'S RECOMMENDED PRACTICES, AND THE TOP OF THE POLE FOUNDATION.
5. LAW10 (10' POLE) TO BE INSTALLED PER DETAIL AND MANUFACTURER'S SPECIFICATIONS.

GENERAL NOTES:
1. ALL POLES, ARMS, AND MISCELLANEOUS EQUIPMENT SHALL CONFORM TO THESE DETAILS AND AS SPECIFIED IN THE LATEST EDITION OF THE LAWRENCE STREETLIGHTING SPECIFICATION. THE POLES AND ARMS SHALL BE DIMENSIONED TO ENABLE INTERCHANGEABILITY.
2. THE ALUMINUM LIGHTING STANDARD INCLUDING ANCHORAGE WITH LUMINAIRE PROPERLY INSTALLED SHALL BE IN ACCORDANCE WITH THE CURRENT AASHTO "STANDARDS SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS". FOR CONTINUOUS 90 MPH WIND AND A MAXIMUM LUMINAIRE SIZE OF 1.3 SQ. FT. EFFECTIVE PROJECTED AREA AND MAXIMUM 55 LBS.
3. MINOR ADJUSTMENTS IN THE LOCATION OF STREETLIGHT POLES SHOULD BE MADE IN THE FIELD DURING CONSTRUCTION IN ORDER TO MAINTAIN 4'-0" CLEARANCE FROM THE CENTERLINE OF ANY FIRE HYDRANT TO THE FACE OF POLE.
4. ALL POLES AND ARMS SHALL BE CLEARLY IDENTIFIED BY THE MANUFACTURER NAME, ABBREVIATION OR SYMBOL ENGRAVED ON THE SHAFT, BASEPLATE, HANDHOLE OR OTHER MEANS SUCH AS TO BE READILY VISIBLE AFTER INSTALLATION.
5. ALL 14' POLES SHALL BE INSTALLED WITH THE HANDHOLE ORIENTED 180 DEGREES FROM THE DIRECTION VEHICLES APPROACH.

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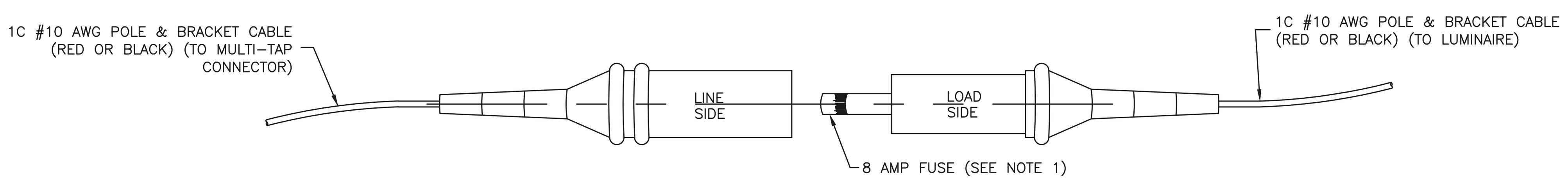
Lawrence KANSAS

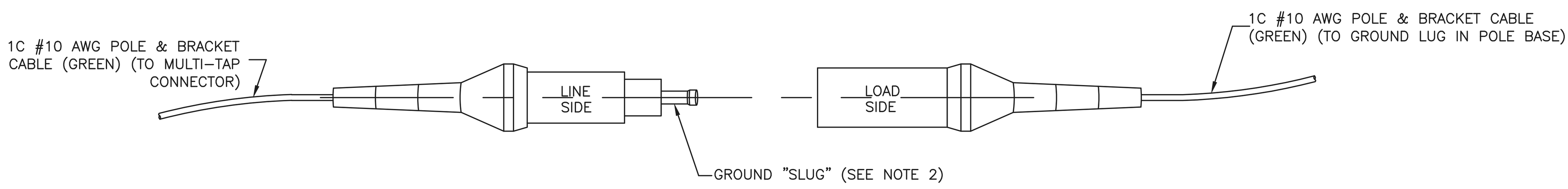
STANDARD DETAILS FOR ROADWAY LIGHTING POLE AND LUMINAIRE

DAVID P. CRONIN
CITY ENGINEER

CRAIG S. OWENS
CITY MANAGER



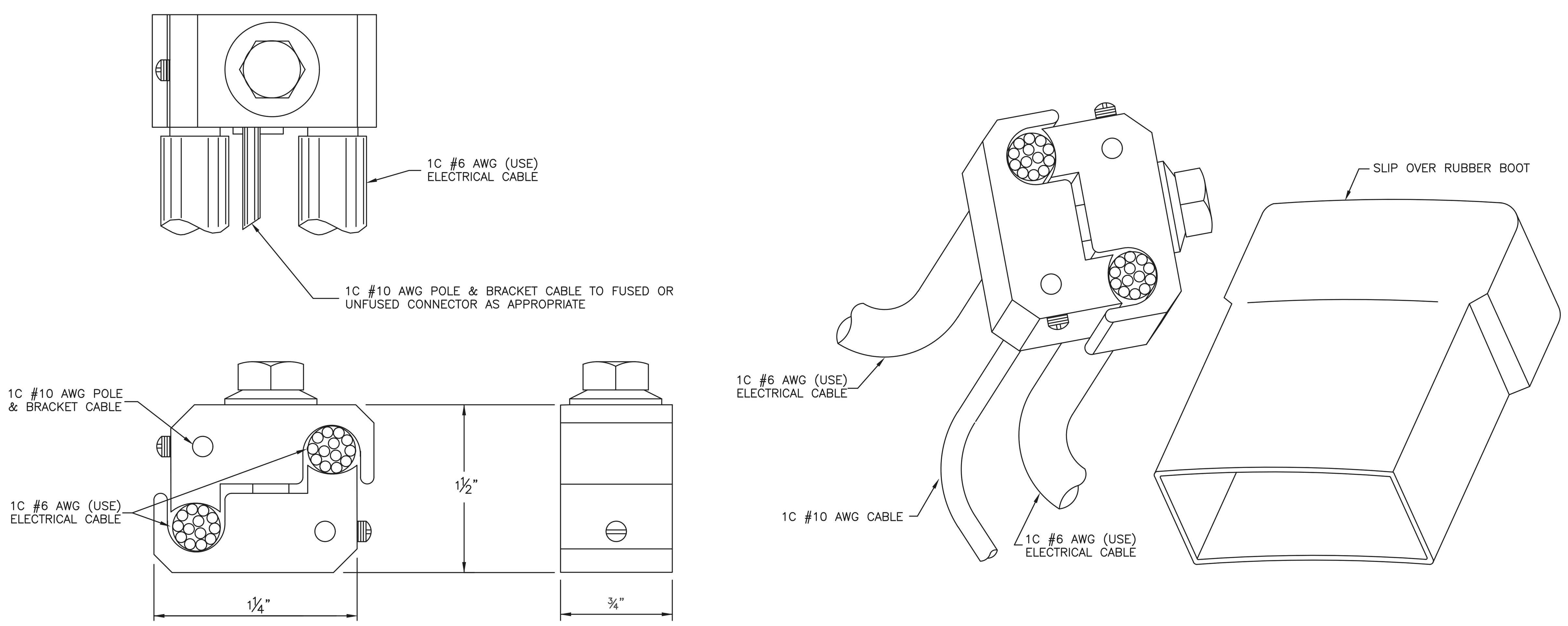
BREAK-AWAY FUSED ELECTRICAL CONNECTOR



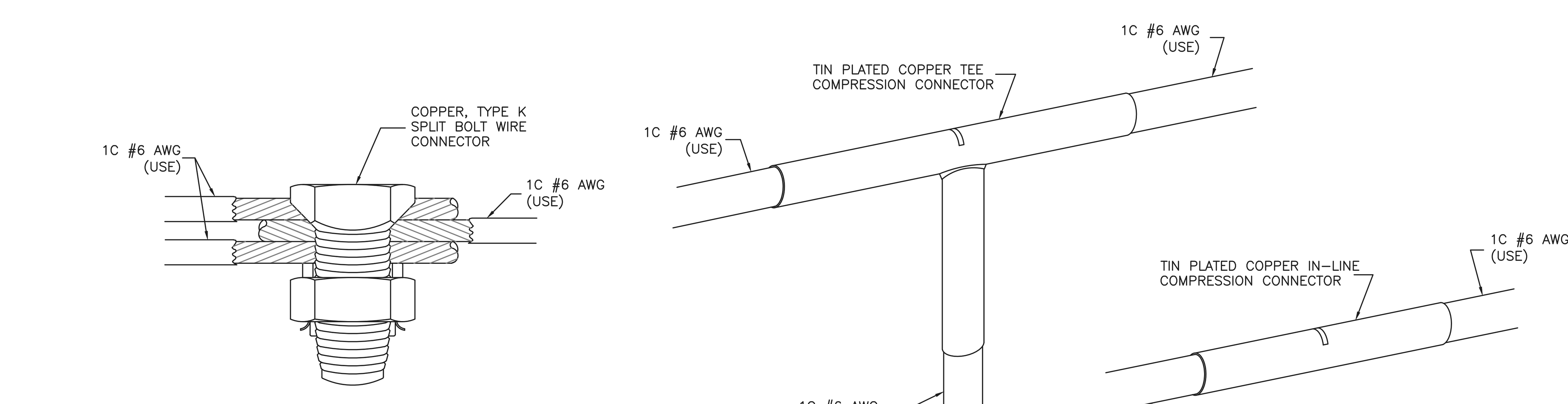
BREAK-AWAY NON FUSED ELECTRICAL CONNECTOR

NOTES:

1. FUSE REMAINS IN "LOAD SIDE" AFTER BREAK-AWAY.
2. GROUND "SLUG" REMAINS IN "LINE SIDE" AFTER BREAK-AWAY.

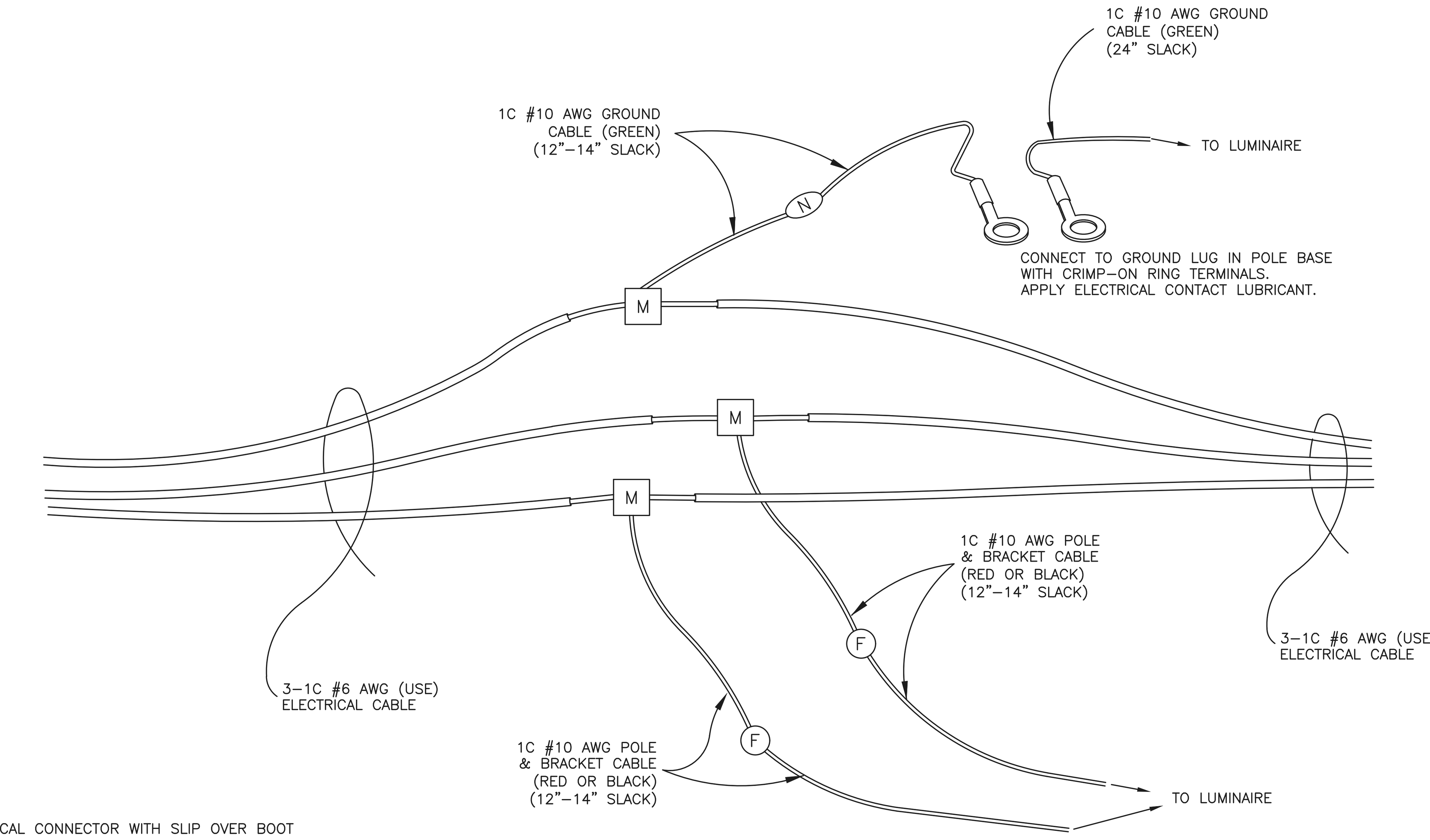


MULTI-TAP ELECTRICAL CONNECTOR



1. TAPE CONNECTOR COMPLETELY WITH RUBBER ELECTRICAL TAPE TO COVER ALL BARE WIRE AND CONNECTOR.
2. TAPE OVER WITH VINYL ELECTRICAL TAPE
3. APPLY LIQUID SCOTCH COAT.

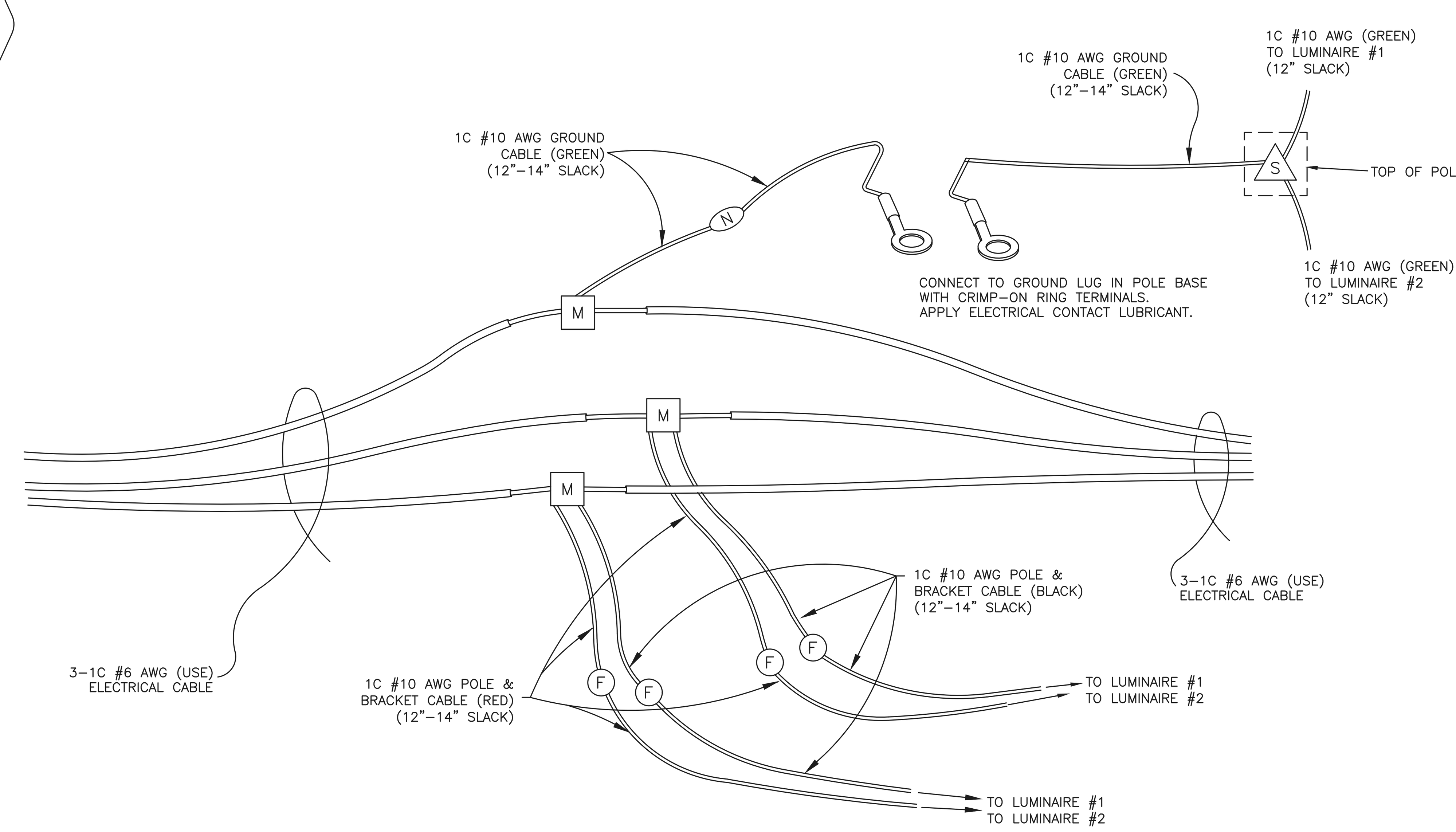
SPLICE KIT DETAILS



LEGEND

- M — MULTI-TAP ELECTRICAL CONNECTOR WITH SLIP OVER BOOT
- F — BREAK-AWAY FUSED ELECTRICAL CONNECTOR WITH 8 AMP FUSE
- N — BREAK-AWAY NON-FUSED ELECTRICAL CONNECTOR WITH GROUND "SLUG"
- S — SPLICE KIT

ELECTRICAL CONNECTOR KIT SCHEMATIC
(SINGLE LUMINAIRE)



NOTES:

1. RED CABLES SHALL BE CONNECTED TO WEST OR NORTH ORIENTED LUMINAIRE. BLACK CABLES SHALL BE CONNECTED TO EAST OR SOUTH ORIENTED LUMINAIRE.
2. THE SPECIFIED CABLE SLACK SHALL BE PROVIDED ON EACH SIDE OF THE FUSED AND UN-FUSED CONNECTORS.

ELECTRICAL CONNECTOR KIT SCHEMATIC
(TWIN LUMINAIRES)

2026 EDITION

SHEET ______ OF ______

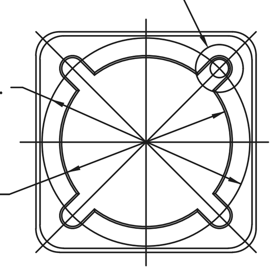
DATE	BY	REVISION
	LJM	REPLACES ALL PREVIOUS VERSIONS OF ROADWAY LIGHTING DETAILS
	LJM	REPLACES ALL PREVIOUS VERSIONS OF ROADWAY LIGHTING DETAILS

Lawrence KANSAS

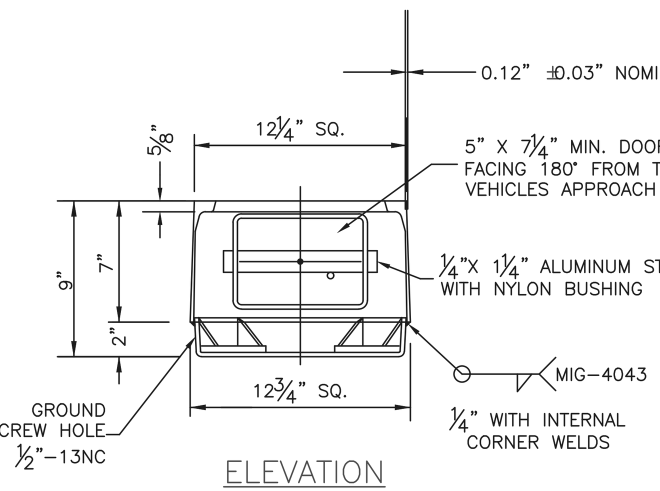
STANDARD DETAILS FOR
ROADWAY LIGHTING
ELECTRICAL CONNECTOR

DAVID P. CRONIN
CITY ENGINEER

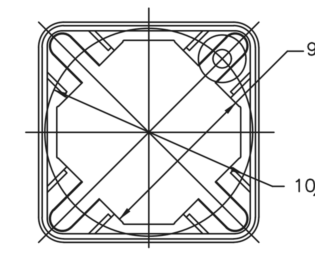
CRAIG S. OWENS
CITY MANAGER



TOP VIEW



ELEVATION

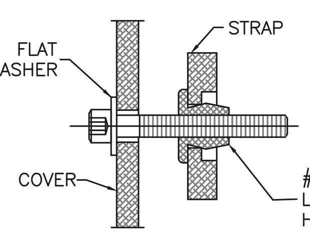


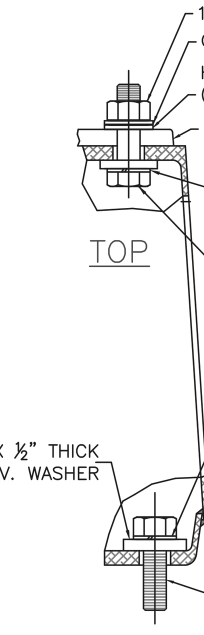
BOTTOM VIEW

FRANGIBLE BASE (30' POLE)

FRANGIBLE BASE NOTES:

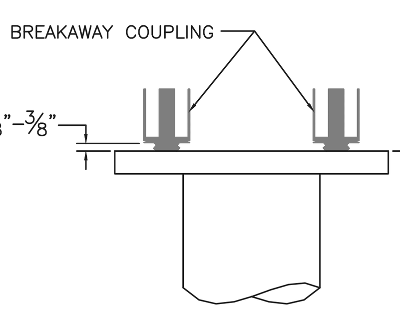
1. MATERIAL SHALL CONFORM TO ASTM DESIGNATION B108 ALLOY 356-T6.
2. BASE SHALL CONFORM TO BREAKAWAY CRITERIA OF AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS (LATEST EDITION)
3. FASTENER QUANTITIES:
   - (8) 1"-8NC X 4" LONG GALVANIZED HEX HEAD BOLT SAE GR.5
   - (4) HARDENED GALVANIZED FLAT WASHER
     - 2½" O.D. (VALMONT POLES)
     - 2" O.D. (HAPCO POLES)
   - (4) 1" GALVANIZED HEX NUT
   - (8) GALVANIZED LOCK WASHER
   - (8) 2¾" O.D. X ½" THICK GALVANIZED WASHER





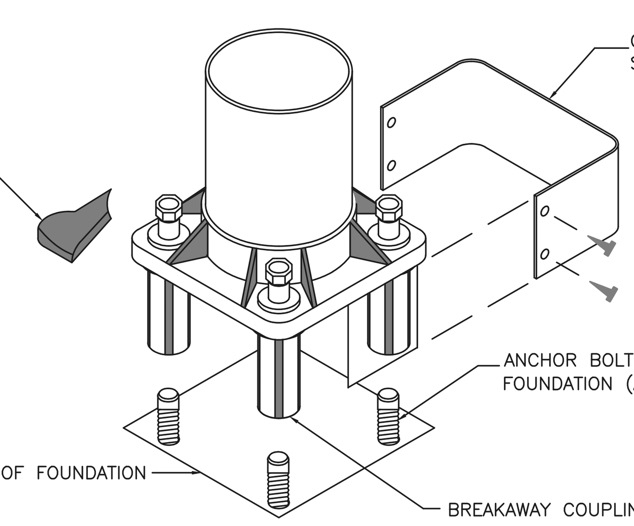
DOOR SCREW

FRANGILE BASE DETAILS



BREAKAWAY COUPLING INSTALLATION

COUPLING NOTES:
1. SHALL BE AS PER MANUFACTURER'S RECOMMENDED PROCEDURES.
2. ALL 30' & 40' POLES SHALL BE FURNISHED WITH BREAKAWAY COUPLINGS OR BREAKAWAY BASES AS DETAILED



BREAKAWAY COUPLING ASSEMBLY & COVERSKIRT DETAIL

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STANDARD DETAILS FOR
ROADWAY LIGHTING
BREAKAWAY POLE BASE

7 OF 7

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