

PUBLIC LIGHTING AUTHORITY OF DETROIT
CITY OF DETROIT, WAYNE COUNTY, MICHIGAN
CONSTRUCTION PLANS FOR KERCHEVAL STREETSCAPE - 48214
KERCHEVAL FROM EAST GRAND BOULEVARD TO PARKER

PROJECT DESCRIPTION

UPDATE THE STREET LIGHTING DUE TO THE STREETSCAPE PROJECT ALONG KERCHEVAL FROM EAST GRAND BOULEVARD TO PARKER. NEW ROUND TAPERED ALUMINUM POLES WILL BE INSTALLED WITH TWO FIXTURES PER POLE. ONE FIXTURE WILL BE FOR STREET LIGHTING WHILE THE OTHER FIXTURE WILL BE FOR PEDESTRIAN LIGHTING.

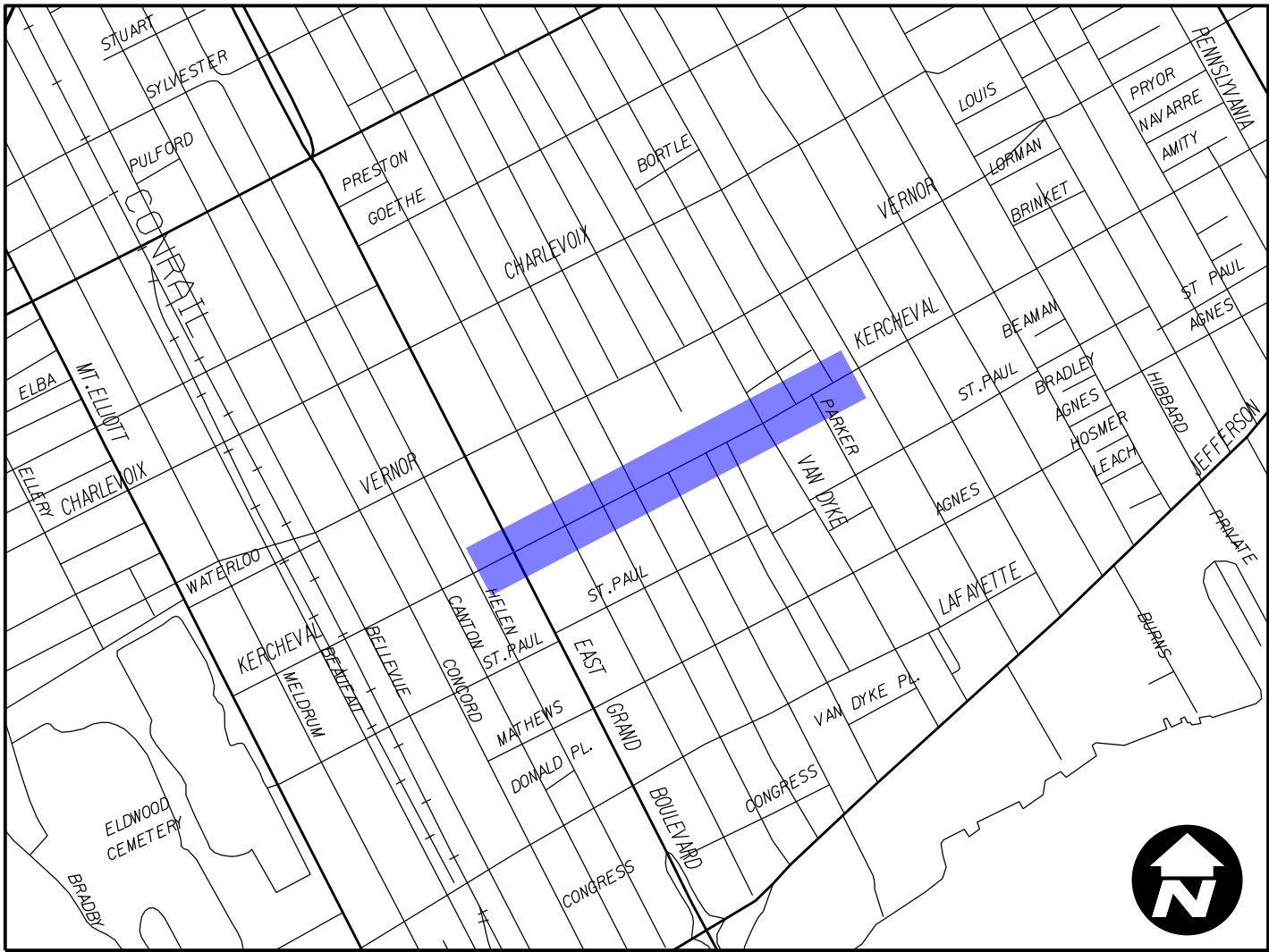
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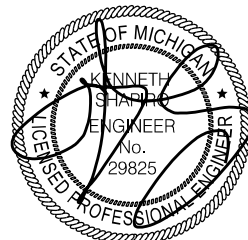
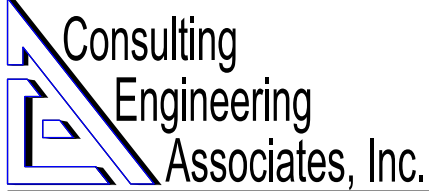
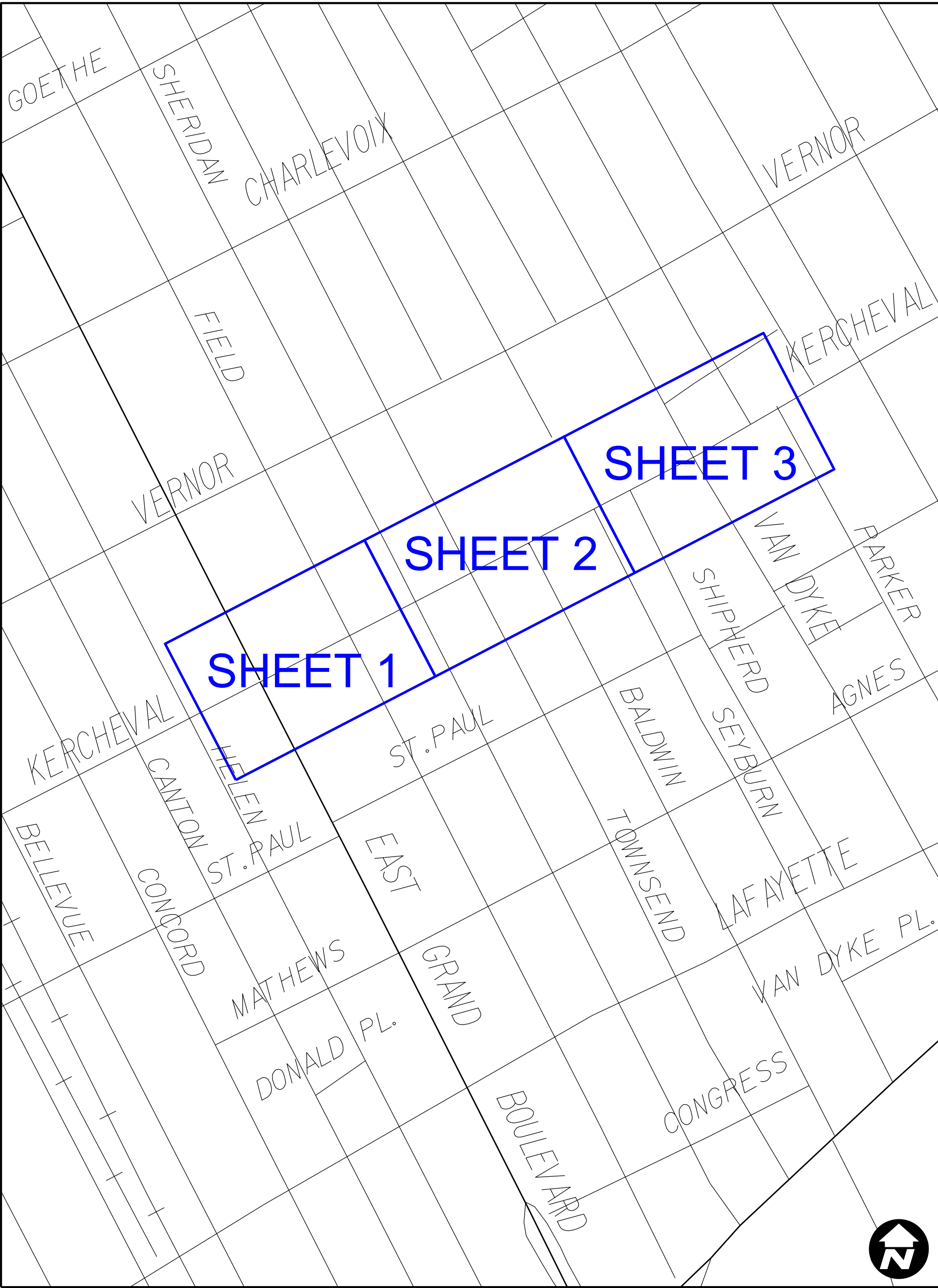
COUNTY LOCATION MAP



PROJECT LOCATION MAP



INSTALLATION PLAN SHEET INDEX



REVISIONS

DATE:	DESCRIPTION:
2019-06-18	CONTRACT DOCUMENTS

LEGENDS

GENERAL LEGEND

EGC	Equipment Ground Conductor
PLA	Detroit Public Lighting Authority
PLD	Detroit Public Lighting Department
C.P.	Cable Pole
	Existing Lighting Controller (LC)
	Existing Wood Pole
	Existing Wood Pole with Bracket Arm and Luminaire
	Existing Lighting Standard
	Existing Double Luminaire Lighting Standard
	Existing Strain Pole with Bracket Arm and Luminaire
	Existing Traffic Signal Pedestal
	Existing Polymer Handhole
	Existing Polymer Manhole
	Existing PLA Precast Concrete Round Handhole
	Existing PLD Polymer Handhole

UNDERGROUND CONSTRUCTION AND REMOVAL PLANS

	Remove Luminaire, Bracket Arm, Lighting Standard and Foundation
	Remove (2) Luminaires, (2) Bracket Arms, Lighting Standard and Foundation
	Remove and Salvage Luminaire, Bracket Arm and Lighting Standard Remove Lighting Standard Foundation
	Remove Luminaire, Bracket Arm and Lighting Standard Remove the Lighting Standard Foundation as Necessary Install a New Lighting Standard Foundation as Necessary
	Install Double Fixture Tapered Aluminum Lighting Standard Foundation
	Remove Wood Pole
	Remove Luminaire, Bracket Arm and Wood Pole
	Install Wood Pole
	Remove Strain Pole and Foundation
	Existing Overhead Street Lighting Cable (Unless Otherwise Noted)
	Remove Street Lighting Cable Overhead Triplex (Unless Otherwise Noted)
	Install (2) 3" Direct Buried Conduits (Unless Otherwise Noted)
	Install (6) 3" Direct Buried Conduits (Unless Otherwise Noted)
	Install (2) 3" Directional Bored Conduits (Unless Otherwise Noted)
	Install (6) 3" Encased Conduits (Unless Otherwise Noted)
	Install Polymer Handhole
	Install Precast Concrete Round Handhole
	Install Polymer Manhole
	Install Ground Rod

OVERHEAD CONSTRUCTION AND CABLING PLANS

	Install Tapered Aluminum Lighting Standard Assembly With a 139W Street Luminaire and 101W Sidewalk Luminaire
	Existing Overhead Street Lighting Cable (Unless Otherwise Noted)
	Remove Cable Remove Underground (3) 1/C Phase Conductors (Unless Otherwise Noted)
	Install 600 V Aluminum Underground Cable (4) 1/C 4 AWG Phase Conductors and (1) 1/C 4 AWG EGC for Street Lighting The Phase Conductors are (2) X Phase and (2) Neutrals - X = Luminaire Phase (Unless Otherwise Noted)
	Install 600 V Aluminum Underground Cable (3) 1/C 4 AWG Phase Conductors and (1) 1/C 4 AWG EGC for Street Lighting The Phase Conductors are (1) A Phase, (1) B Phase and (1) Neutral (Unless Otherwise Noted)
	Install 600 V Aluminum Overhead Quadruplex Cable - Hackney (3) 1/C 4 AWG Phase Conductors and (1) 1/C 4 AWG EGC for Street Lighting The Phase Conductors are (1) A Phase, (1) B Phase and (1) Neutral (Unless Otherwise Noted)
	Install 600 V Aluminum Overhead Triplex Cable - Periwinkle (2) 1/C 4 AWG Phase Conductors and (1) 1/C 4 AWG EGC for Street Lighting The Phase Conductors are (1) A Phase and (1) Neutral (Unless Otherwise Noted)
	Remove Luminaire on Existing Bracket Arm and Wood Pole
	Install Luminaire on Existing Bracket Arm and Wood Pole
	Remove Luminaire and Bracket Arm on Existing Wood Pole
	Install Luminaire and Bracket Arm on Existing Wood Pole
	Install Lighting Controller (LC)
	Remove Lighting Controller (LC)

ELECTRICAL DIAGRAMS

	Existing Lighting Controller Not Connected to Circuit
	Lighting Controller Connected to Circuit
	Lighting Standard Luminaire Not Connected to the Lighting Controller
	Lighting Standard Luminaire Connected to the Lighting Controller
	Pole Mounted Luminaire Not Connected to the Lighting Controller
	Pole Mounted Luminaire Connected to the Lighting Controller
	Overhead Street Lighting Cable Not Connected to the Lighting Controller
	600 V Aluminum Underground Cable Connected to the Lighting Controller (4) 1/C 4 AWG Phase Conductors and (1) 1/C 4 AWG EGC The Phase Conductors are (2) X Phase and (2) Neutrals - X = Luminaire Phase (Unless Otherwise Noted)
	600 V Aluminum Underground Cable Connected to the Lighting Controller (3) 1/C 4 AWG Phase Conductors and (1) 1/C 4 AWG EGC The Phase Conductors are (1) A Phase, (1) B Phase and (1) Neutral (Unless Otherwise Noted)
	600 V Aluminum Overhead Quadruplex Cable Connected to the Lighting Controller (3) 1/C 4 AWG Phase Conductors and (1) 1/C 4 AWG EGC The Phase Conductors are (1) A Phase, (1) B Phase and (1) Neutral (Unless Otherwise Noted)

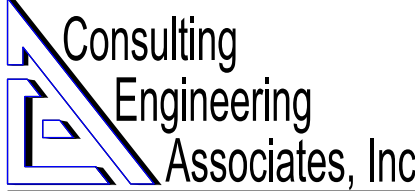
LUMINAIRE ID TAG FORMAT

TAG FORMAT	WYYYZZZZZ-OO
CODES	DESCRIPTION
W	Luminaire Type - Options Are: L = LED Luminaire S = Sodium Luminaire
YYY	Luminaire Wattage Such as 150 for a 150W Luminaire
ZZZZZ	The Assigned Alphanumeric ID Code Such as ABC123
-OO	Work Code Option That Is Not Part of ID Tag - Options Are: AX = Connect Luminaire to Circuit AX Phase A = A Phase - Single Circuit A1 = A1 Phase - Multiple Circuits A2 = A2 Phase - Multiple Circuits BX = Connect Luminaire to Circuit BX Phase B = B Phase - Single Circuit B1 = B1 Phase - Multiple Circuits B2 = B2 Phase - Multiple Circuits O = Connect Luminaire to Next Phase in Sequence to Source Luminaire Location X = Luminaire Circuit Phase Connection Unknown R = Location With a Receptacle RT = Install or Replace Luminaire ID Tag Where No Other Work is Being Performed

**** CAUTION: Utility information is approximate. Contact MISS DIG and exercise caution when excavating.**

LIST OF PAY ITEM QUANTITIES

		QUANTITIES									
MDOT CODE	DESCRIPTION	SHEET	UG-01	UG-02	UG-03	IN-01	IN-02	IN-03	MISC	TOTAL	UOM
2040055	Sidewalk, Rem			170						170	Syd
8037010	Sidewalk, Conc, 6 inch, Modified			1500						1,500	Sft
8190016	Cable, Rem					1,935	1,210	1,095		4,240	Ft
8190032	Conduit, DB, 2, 3 inch		1,300	1,325	1,210					3,835	Ft
8190276	Light Std Arm, Install Salv					1				1	Ea
8190278	Light Std Arm, Rem and Salv		1							1	Ea
8190280	Light Std Fdn, Rem		1							1	Ea
8190301	Light Std Shaft, Install Salv					1				1	Ea
8190306	Light Std Shaft, Rem and Salv		1							1	Ea
8190350	Luminaire, Install Salv					1				1	Ea
8190360	Luminaire, Rem		7	8	7					22	Ea
8190365	Luminaire, Rem and Salv		1							1	Ea
8190495	Wood Pole, Fit Up, Sec Cable Pole						2			2	Ea
8190505	Wood Pole, Rem		6	8	4					18	Ea
8190604	Conduit, Directional Bore, 2, 3 inch		670	1,065	490					2,225	Ft
8197001	Cable, Equipment Grounding Wire, 1/C#4, Modified					2,200	2,655	1,905		6,760	Ft
8197001	Cable, Sec, 600V, 2, 1/C#4, Modified					250		300		550	Ft
8197001	Cable, Sec, 600V, 3, 1/C#4, Modified					1,855	2,580	1,530		5,965	Ft
8197001	Cable, Sec, 600V, 4, 1/C#4, Modified					95	75	75		245	Ft
8197001	Cable, Sec, Quadruplex, Aluminum, 4 AWG					700				700	Ft
8197001	Cable, Sec, Triplex, Aluminum, 4 AWG						230			230	Ft
8197050	Bracket Arm, Bolt On, Install					16	16	14		46	Ea
8197050	Bracket Arm, Bolt On, Rem		7	8	7					22	Ea
8197050	Bracket Arm, Clamp On, Install					16	16	14		46	Ea
8197050	Hh, Polymer Conc, Modified		17	18	14					49	Ea
8197050	Hh, Round, Modified								1	1	Ea
8197050	Light Std Fdn, Modified		17	16	14					47	Ea
8197050	Light Std, Tapered Aluminum								5	5	Ea
8197050	Light Std, Tapered Aluminum, Install					16	16	14		46	Ea
8197050	Luminaire, 101W								5	5	Ea
8197050	Luminaire, 101W, Install					16	16	14		46	Ea
8197050	Luminaire, 139W								5	5	Ea
8197050	Luminaire, 139W, Install					16	16	14		46	Ea
8197050	Photo Control, Lighting						2			2	Ea
8197050	Photocell, Lighting					1				1	Ea
8197050	Tag, Pole					4				4	Ea



GENERAL INFORMATION

1.

ALL MATERIAL AND EQUIPMENT FURNISHED BY THE CONTRACTOR MUST BE NEW AND MUST COMPLY WITH THE SPECIFICATIONS FOR THAT MATERIAL AND EQUIPMENT. THE OWNER SHALL HAVE THE RIGHT TO REJECT ANY EQUIPMENT WHICH DOES NOT MEET WITH SPECIFICATIONS.
2.

CONSTRUCTION MUST BE PERFORMED BY QUALIFIED AND EXPERIENCED PERSONNEL. ALL WORK MUST MEET THE STANDARDS AND PRACTICES OF THE PUBLIC LIGHTING AUTHORITY (PLA), THE NATIONAL ELECTRICAL CODE, THE ELECTRIC CODE OF THE CITY OF DETROIT AND THE NATIONAL ELECTRICAL SAFETY CODE.
3.

THE CONTRACTOR MUST USE PUBLIC LIGHTING AUTHORITY (PLA) SPECIFICATIONS FOR THIS PROJECT.
4.

THE CONSTRUCTION CONTRACTOR SHALL RETURN ALL SALVAGED PUBLIC LIGHTING AUTHORITY (PLA) EQUIPMENT TO THE PLA.

LOCATION:1135 BEAUFAIT STREET, DETROIT, MICHIGAN 48207

CONTACT:MELANIE STEELE (STATELINE) AT (313) 909-7509 AND
JOHN VERNON (PLA) AT (313) 324-8290

HOURS:MONDAY FRIDAY FROM 9:30 A.M. TO 3:30 P.M. MUST PROVIDE 48 HOURS NOTICE.

THE CONSTRUCTION CONTRACTOR IS RESPONSIBLE FOR TRANSPORTING ALL SALVAGED EQUIPMENT TO THE PLA YARD.
5.

THE CONSTRUCTION CONTRACTOR SHALL RETURN ALL REMOVED DETROIT PUBLIC LIGHTING DEPARTMENT (PLD) EQUIPMENT TO THE PLD.

THE CONSTRUCTION CONTRACTOR IS RESPONSIBLE FOR TRANSPORTING DECOMMISSIONED EQUIPMENT TO THE PLD YARD.
6.

ALL SHOP DRAWINGS MUST BE APPROVED BY THE PUBLIC LIGHTING AUTHORITY (PLA). CONTACT (313) 324-8290.
7.

CALL MISS DIG AT 811 OR (800) 482-7171 A FULL THREE WORKING DAYS BEFORE TO ANY EXCAVATION FOR THE LOCATIONS OF UNDERGROUND UTILITIES.
8.

THE CONTRACTOR IS TO NOTIFY DTE GAS AT (800) 477-4747 IF A PROTECTIVE COATED GAS MAIN IS EXPOSED OR DAMAGED.
9.

THE CONTRACTOR IS TO NOTIFY DTE ELECTRIC AT (800) 477-4747 IF THE PROTECTIVE COATING OF ANY DTE ELECTRIC HIGH VOLTAGE UNDERGROUND LINE IS EXPOSED OR DAMAGED.
10.

ALL EXISTING DETROIT PUBLIC LIGHTING DEPARTMENT (PLD) LIGHTING, PRIMARY TRANSMISSION, ETC., CIRCUITS MUST ALWAYS BE MAINTAINED IN AN OPERATIONAL CONDITION. NOTIFY THE PLD SYSTEM OPERATOR AT (313) 961-1364 48 HOURS BEFORE TO BEGINNING WORK ON PLD CIRCUITS AND KEEP THE OPERATOR INFORMED DAILY.
11.

ALL VEHICLE DIRECTION, STREET NAME, AND PARKING SIGNS ON CITY OF DETROIT ROADS ARE THE PROPERTY OF THE CITY OF DETROIT DEPARTMENT OF PUBLIC WORKS (DPW). THE CONTRACTOR WILL NOT REMOVE OR RELOCATE ANY VEHICLE DIRECTION, STREET NAME OR PARKING SIGNS UNLESS CITY OF DETROIT DPW GRANTS ADVANCE AUTHORIZATION. FOR ANY VEHICLE DIRECTION, STREET NAME OR PARKING SIGN ENCOUNTERED ON A STREET LIGHT POLE, THE CONTRACTOR WILL STOP WORK AND CALL THE DETROIT DPW SIGN SHOP AT (313) 224-6950 TO COORDINATE 72 HOURS PRIOR TO THE REMOVAL OR RELOCATION.
12.

ANY PERMANENT SIGNS THAT ARE DAMAGED OR REMOVED MUST EITHER BE REINSTALLED, IF IN USABLE CONDITION, OR REPLACED WITH A UNIT THAT MEETS THE CURRENT SPECIFICATIONS OF THE SIGN'S MAINTAINING AGENCY.
13.

REMOVAL, REPLACEMENT, EXCAVATION, AND BACKFILL RELATED TO PAVEMENT, SIDEWALKS AND CURBS MUST BE DONE ACCORDING TO THE CITY OF DETROIT, DEPARTMENT OF PUBLIC WORKS, CITY ENGINEERING DIVISION STANDARD SPECIFICATIONS FOR PAVING AND RELATED CONSTRUCTION OR THE SPECIFICATION OF THE AUTHORITY HAVING JURISDICTION.
14.

WITHIN FIVE DAYS OF COMPLETING EACH SECTION OF THE UNDERGROUND OR OVERHEAD WORK, THE CONTRACTOR SHALL FURNISH TO THE PUBLIC LIGHTING AUTHORITY (PLA) AN EXACT RECORD, AS-BUILT DRAWINGS, OF ALL UNDERGROUND AND OVERHEAD WORK INSTALLED. THE AS-BUILT DRAWINGS SHALL INCLUDE, BUT NOT LIMITED TO, STREET LIGHTING COMPONENTS, STRUCTURES, CONDUIT LENGTHS AND CABLE ROUTING INCLUDING THEIR LOCATIONS.
15.

THE CONTRACT UNIT PRICE SHALL BE PAYMENT IN FULL FOR FOUNDATION REMOVAL AND BACKFILLING THE HOLE WITH GRANULAR MATERIAL. DISPOSAL OF WASTE EXCAVATED MATERIAL ALONG WITH REMOVING PAVEMENT, SIDEWALK, CURB AND GUTTER ALONG WITH ANY ASSOCIATED REPLACEMENT IS ALSO INCLUDED.
16.

THE CONTRACTOR SHALL SECURE ALL NECESSARY PERMITS COVERING CONSTRUCTION OPERATIONS INCLUDING PERMITS FROM THE PUBLIC AUTHORITIES HAVING JURISDICTION OVER THE STREETS OR OTHER PUBLIC PROPERTIES IN WHICH THE WORK IS LOCATED AND THE IMPROVEMENT THEREIN. THE BIDDER SHALL ASCERTAIN THE AMOUNT OF ANY CHARGES REQUIRED BY SUCH AUTHORITIES AND WILL INCLUDE THE COST THEREOF IN THE BID PRICES.
17.

THE CONTRACTOR MUST ASCERTAIN THE REQUIREMENTS OF THE PUBLIC AUTHORITIES HAVING JURISDICTION OVER THE STREETS OR OTHER PUBLIC PROPERTIES; OR THE PRIVATE PROPERTY OWNER AND INCLUDE IN HIS BID PRICE ALL EXISTING INFRASTRUCTURE RESTORATION COSTS INCLUDING SIDEWALKS, PAVEMENT AND LANDSCAPING TO THE SATISFACTION OF THE AUTHORITY HAVING JURISDICTION OR PROPERTY OWNER IN EACH CASE, WHICH MAY INCLUDE UPGRADES FROM THE EXISTING CONDITION.

18.

THE CONTRACTOR ASSUMES ALL RISKS AND RESPONSIBILITIES BECAUSE OF EXISTING SOIL CONDITIONS AND MUST COMPLETE THE WORK IN WHATEVER MATERIAL AND UNDER WHATEVER GROUND CONDITIONS MAY BE ENCOUNTERED OR CREATED WITHOUT ADDITIONAL COST TO THE PUBLIC LIGHTING AUTHORITY (PLA).
19.

THE LOCATIONS OF EXISTING UNDERGROUND OBSTRUCTIONS OR UTILITY FACILITIES ARE NOT NECESSARILY INDICATED ON THE PLANS. WHERE UTILITY FACILITIES ARE SHOWN, LOCATIONS ARE ONLY APPROXIMATIONS. CORRECTNESS OF EXACT UTILITY LOCATIONS IS NOT GUARANTEED. THE CONTRACTOR MUST EXERCISE CAUTION IN AVOIDING DAMAGE TO UTILITIES AND MUST NOTIFY THE UTILITIES THAT THEY ARE PROPOSING TO BREAK PAVEMENT OR EXCAVATE SO THAT THEY MAY PROVIDE THE CONTRACTOR WITH THE VERY LATEST LOCATION INFORMATION OF THEIR EXISTING FACILITIES.
20.

HANDHOLE AND MANHOLE STRUCTURE LOCATIONS ARE SHOWN IN PROXIMITY TO WHERE THEY ARE TO BE INSTALLED. STRUCTURES ARE NOT TO BE INSTALLED IN ADA RAMPS. STRUCTURE INSTALLATION IN SIDEWALKS, ROADWAYS OR DRIVEWAYS IS TO BE AVOIDED WHERE POSSIBLE UNLESS CALLED FOR BY THE PLANS. STRUCTURES INSTALLED IN ROADWAYS OR DRIVEWAYS SHALL BE OF THE PRECAST CONCRETE TYPE. STRUCTURES SHALL NOT BE INSTALLED ON PRIVATE PROPERTY UNLESS CALLED FOR SPECIFICALLY BY THE PLANS WITH AN AUTHORIZED EASEMENT. FURTHER, STRUCTURES ARE TO BE INSTALLED CLEAR OF FIRE HYDRANTS, TREES, UTILITIES, AND ANY OTHER UNDERGROUND STRUCTURES.
21.

NO SPLICING WILL BE ALLOWED BETWEEN THE CONTROL CABINET AND HANDHOLE/MANHOLE; HANDHOLE/MANHOLE TO HANDHOLE/MANHOLE; HANDHOLE/MANHOLE TO UNDERGROUND STREET LIGHTING STANDARD; AND HANDHOLE/MANHOLE TO CABLE RISER.
22.

THE FOLLOWING WIRE COLOR CODING IS TO BE USED FOR THE UNDERGROUND STREET LIGHTING AND RECEPTACLES ON THIS PROJECT: BLACK (A PHASE); RED (B PHASE); WHITE (NEUTRAL); GREEN (GROUND).
23.

THE FOLLOWING CABLE IDENTIFICATION IS TO BE USED FOR GROUNDED OVERHEAD TRIPLEX AND QUADRUPLX ON THIS PROJECT: NO RIB (A PHASE); ONE RIB (NEUTRAL); TWO RIBS (B PHASE); BARE MESSENGER (EQUIPMENT GROUNDING CONDUCTOR OR EGC).

THE CABLE IDENTIFICATION FOR INSTANCES OF EXISTING UNGROUNDED OVERHEAD DUPLEX OR TRIPLEX ALONG WITH CONNECTIONS TO THE EXISTING UNGROUNDED OVERHEAD ON THIS PROJECT: NO RIB (A PHASE); ONE RIB (B PHASE); BARE MESSENGER (NEUTRAL).

IF ANY EXISTING OVERHEAD CABLE DOES NOT MATCH EITHER OF THESE SCENARIOS, CONTACT THE PROJECT ENGINEER BEFORE MAKING ANY CONNECTIONS.
24.

THE CONTRACTOR MUST CORE INTO PRECAST HANDHOLES AND MANHOLES.
25.

THE CONTRACTOR IS TO TRIM EXISTING TREES TO PROVIDE A CLEAR 10 FOOT RADIUS AROUND EACH LUMINAIRE.
26.

ALL UNDERGROUND STREET LIGHTING STANDARD LOCATIONS ARE TO BE INSTALLED WITH THE CENTER 3 FEET BACK OF CURB FACE (BOC) UNLESS OTHERWISE INDICATED ON THE PLANS.
27.

THE CONTRACTOR IS TO CALL THE DETROIT PUBLIC LIGHTING DEPARTMENT (PLD) SENIOR SYSTEM OPERATOR AT (313) 267-4151 FOR ANY PLD FACILITIES COORDINATION. COORDINATION INCLUDES BEING GRANTED ACCESS TO PLD MANHOLES AND HANDHOLES; GAINING LOCKOUT/TAGOUT PROTECTION FOR WORKING ON PLD EQUIPMENT; ANY OTHER WORK INVOLVING PLD FACILITIES.
28.

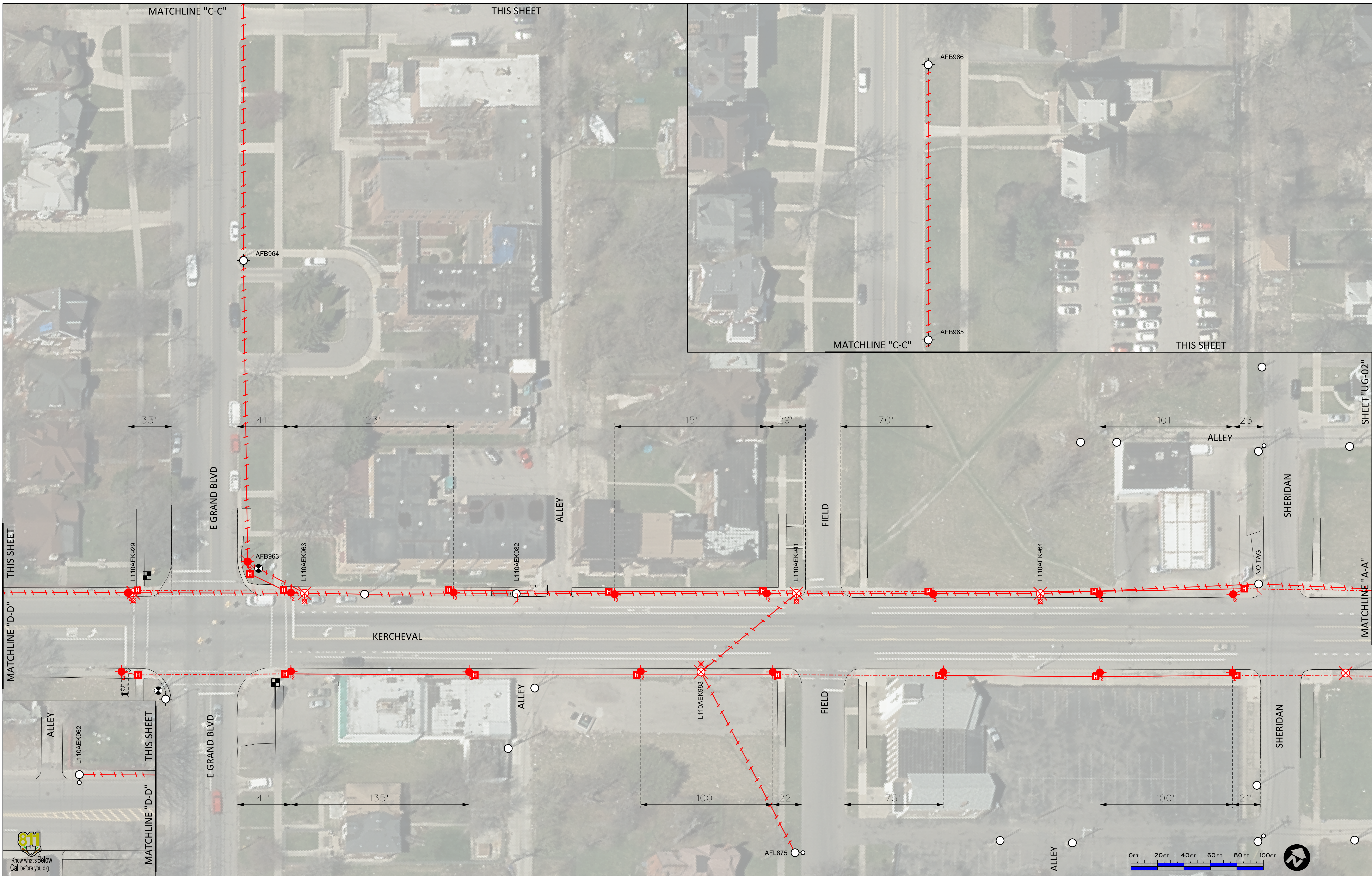
THE CONTRACTOR IS TO CALL (313) 224-1610 FOR COORDINATING ANY DETROIT DEPARTMENT OF PUBLIC WORKS TRAFFIC SIGNAL WORK.
29.

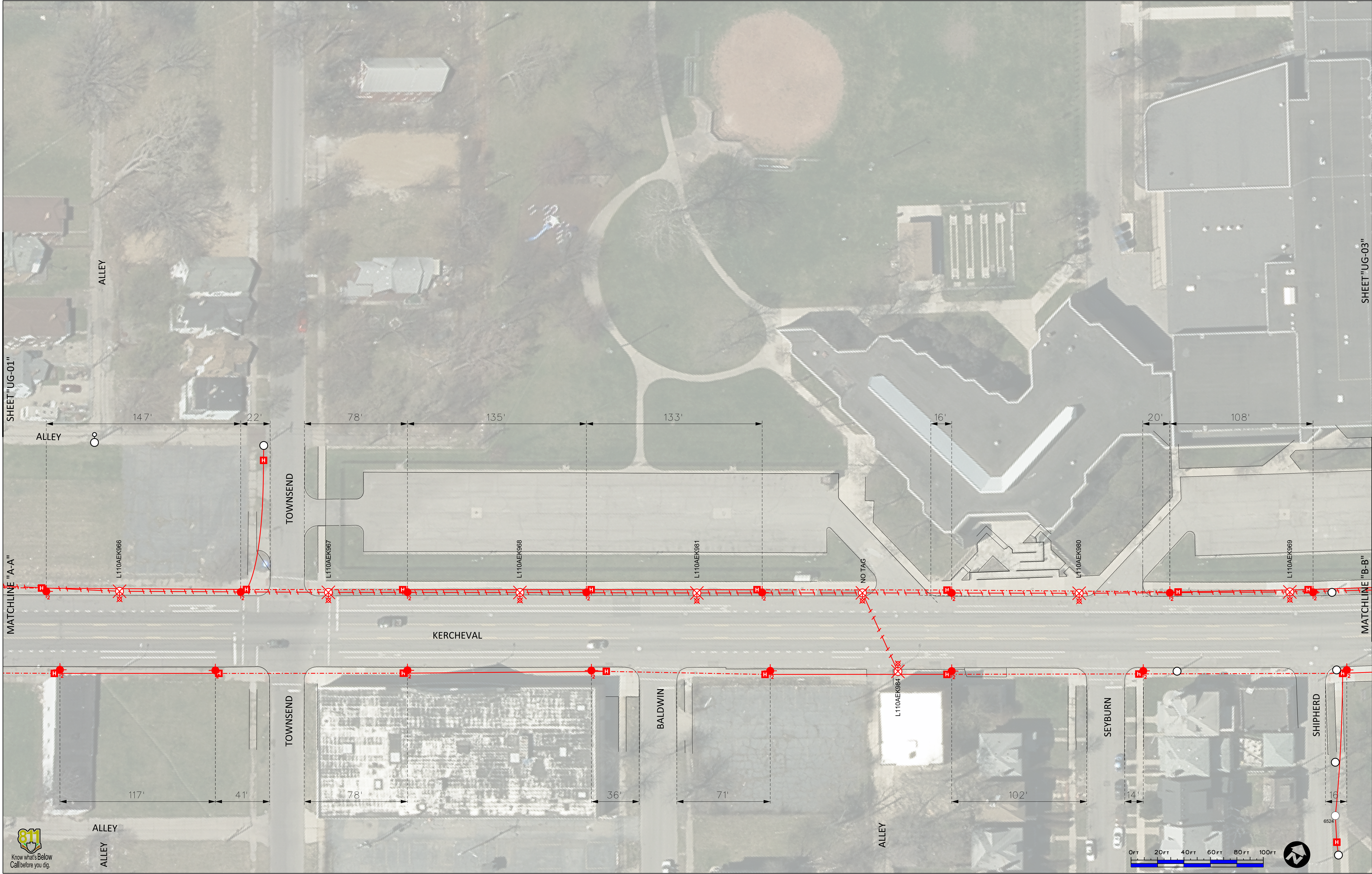
LUMINAIRE WOOD POLE MOUNTING HEIGHT SHALL BE AT 30 FEET UNLESS THE PLANS SPECIFY OTHERWISE.
30.

REPLACEMENT LUMINAIRE LOCATIONS SHALL BE CONNECTED TO THE SAME CIRCUIT PHASE OF THE LUMINAIRE LOCATION THEY ARE REPLACING. NEW LUMINAIRE LOCATIONS WILL BE CONNECTED TO THE CIRCUIT PHASE CALLED FOR ON THE PLAN SHEETS.
31.

INSTALL SHORTING CAPS ON ALL LUMINAIRES UNLESS OTHERWISE DIRECTED BY THE PLANS.
32.

REFER TO THE STREETScape PAVING PLANS FOR UNDERGROUND UTILITY LOCATIONS.





Public Lighting Authority
of Detroit
65 Cadillac Square, Suite 3100
Detroit, Michigan 48226
313-324-8290 office
313-638-2805 fax
pladetroit.org



PROJECT DESCRIPTION
DESIGN ENGINEERING FOR KERCHEVAL STREETSCAPE

UNDERGROUND CONSTRUCTION AND REMOVALS PLAN
SHEET 2 OF 3

Consulting Engineering Associate and Wade Trim Joint Venture
16580 Wyoming
Detroit, Michigan 48221
313-341-5797
Consulting
Engineering
Associates, Inc. **WADE
TRIM**

REVISIONS	DATE:	DESCRIPTION:	SHEET	
	2019-06-18	CONTRACT DOCUMENTS	UG-02	
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SHEET "UG-02"
MATCHLINE "B-B"



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PROJECT DESCRIPTION
DESIGN ENGINEERING FOR KERCHEVAL STREETSCAPE

UNDERGROUND CONSTRUCTION AND REMOVALS PLAN
SHEET 3 OF 3

Consulting Engineering Associate and Wade Trim Joint Venture
16580 Wyoming
Detroit, Michigan 48221
313-341-5797

DURAND

DURAND

ALLEY

ALLEY

MAXWELL

VAN DYKE

PARKER

PARKER

VAN DYKE

ALLEY

ALLEY

ALLEY

137'

116'

23'

75'

119'

ALLEY

77'

21'

118'

144'

101'

19'

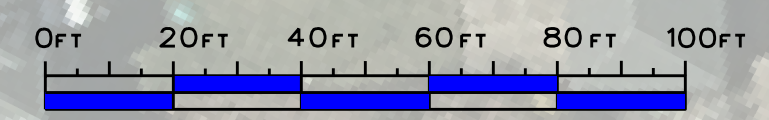
61'

ALLEY

123'

53'

52'



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UG-03	
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Consulting Engineering Associate and Wade Trim Joint Venture
16580 Wyoming
Detroit, Michigan 48221
313-341-5797

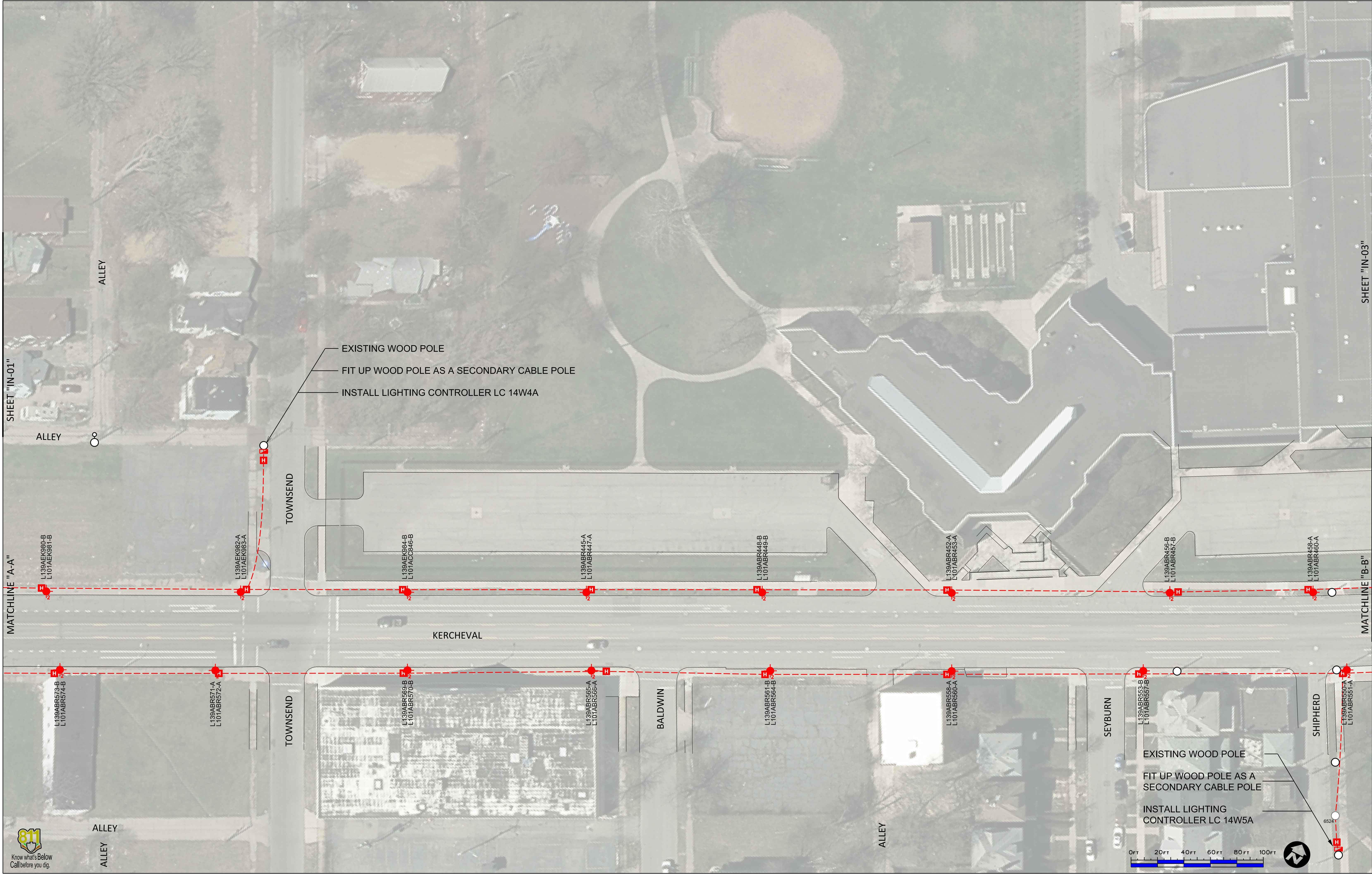
 Consulting
Engineering
Associates Inc.

 WADE
TRIM






R E V I S I O N	DATE:	DESCRIPTION:	SHEET IN-01 P.O. NO. 1792 JOB NO. 142815
	2019-06-18	CONTRACT DOCUMENTS	



SHEET "IN-02"

MATCHLINE "B-B"



Public Lighting Authority
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Detroit, Michigan 48226
313-324-8290 office
313-638-2805 fax
pladetroit.org



PROJECT DESCRIPTION
DESIGN ENGINEERING FOR KERCHEVAL STREETSCAPE
OVERHEAD CONSTRUCTION AND CABLING PLAN
SHEET 3 OF 3

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16580 Wyoming
Detroit, Michigan 48221
313-341-5797
Consulting
Engineering
Associates, Inc.
WADE
TRIM



WADE
TRIM

DURAND

DURAND

ALLEY

ALLEY

ALLEY

MAXWELL

PARKER

PARKER

ALLEY

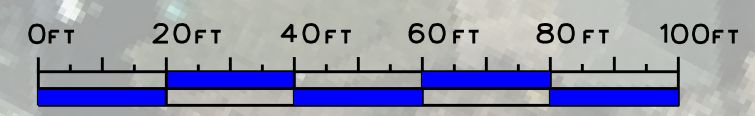
ALLEY

ALLEY

VAN DYKE

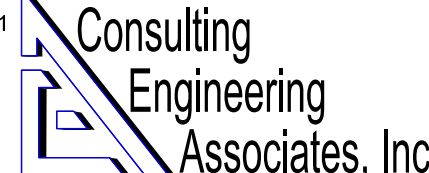
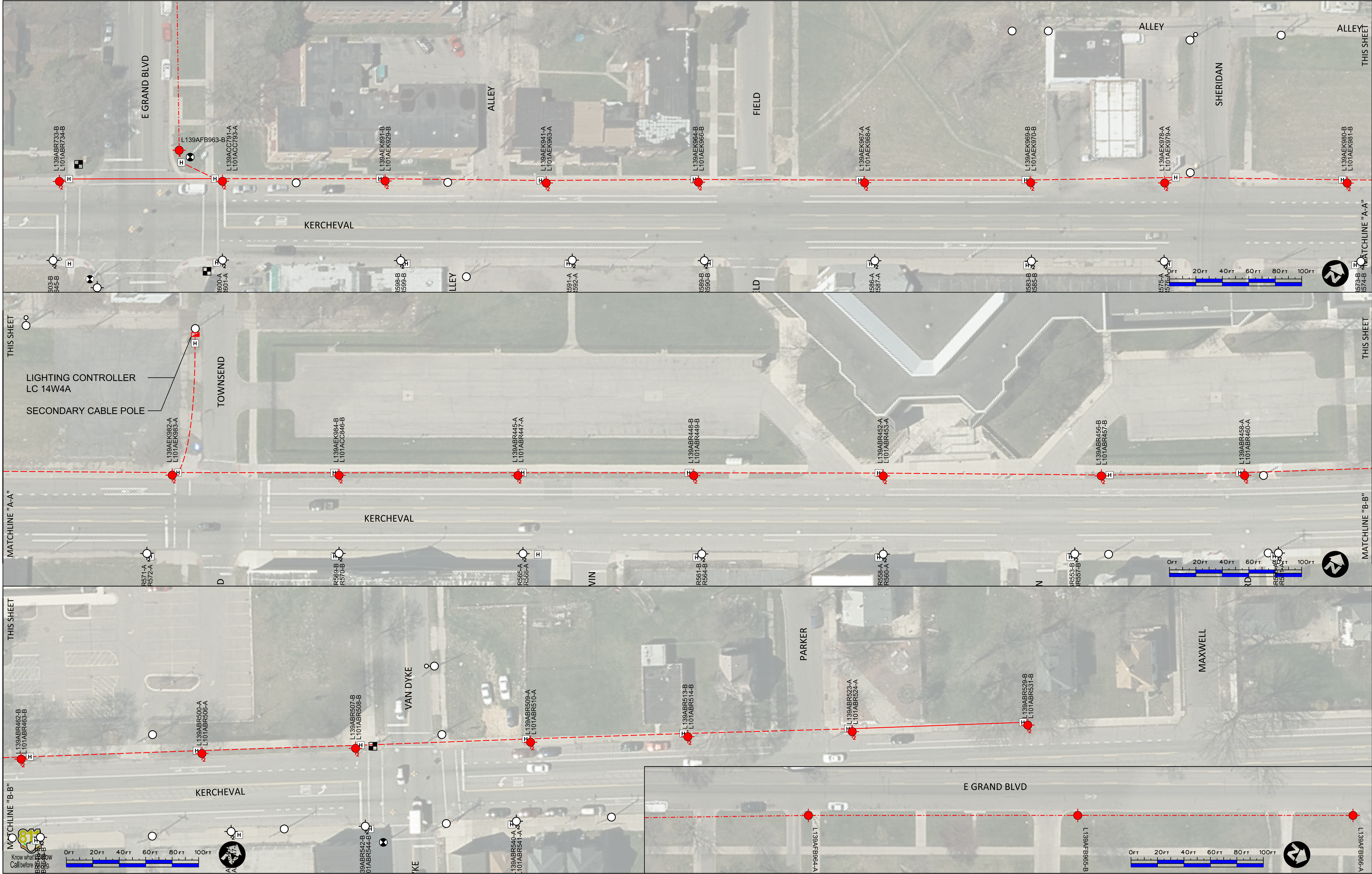
VAN DYKE

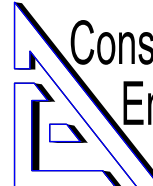
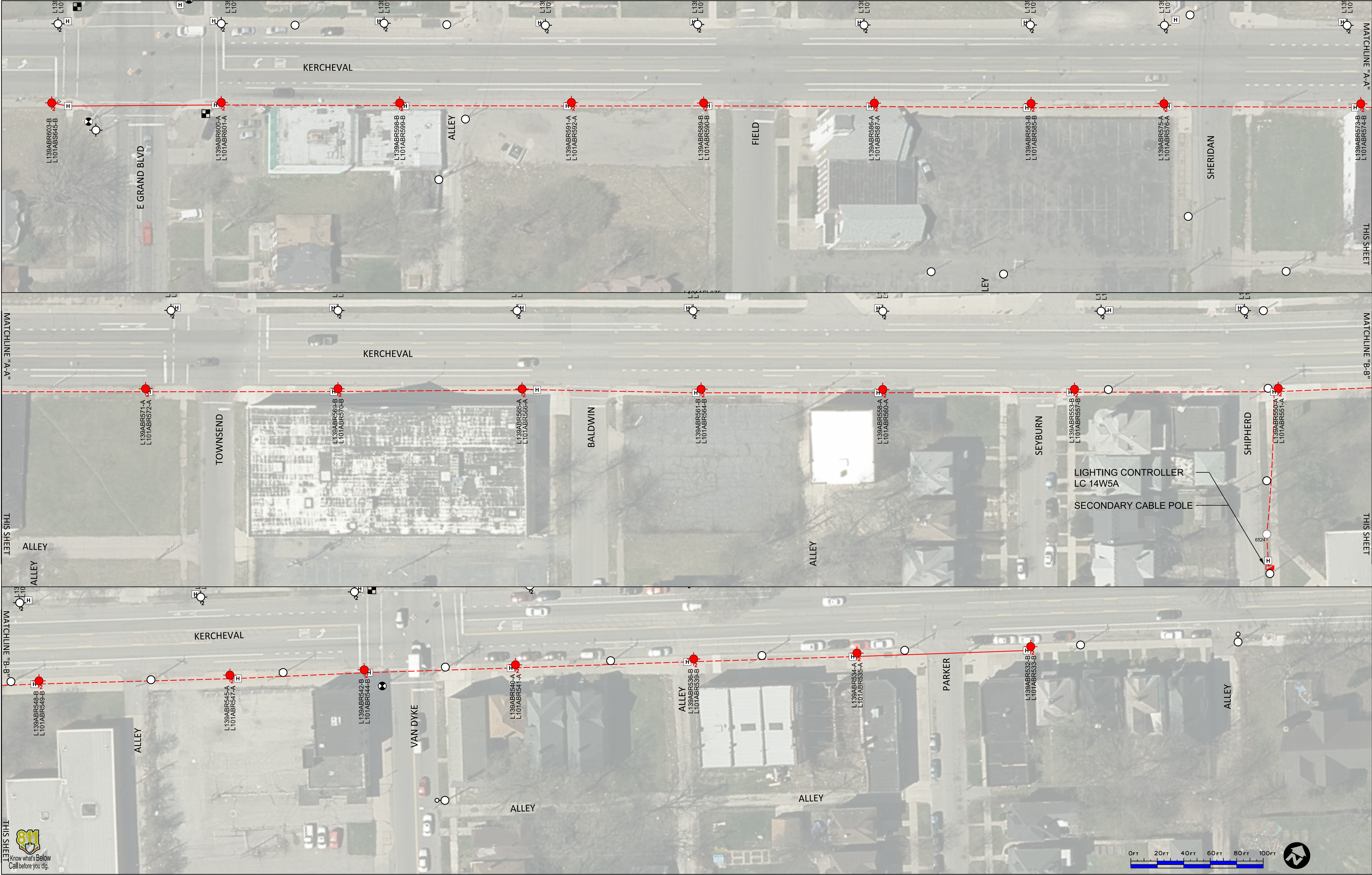
KERCHEVAL



REVISIONS	DATE:	DESCRIPTION:
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SHEET	
IN-03	
P.O. NO.	JOB NO.
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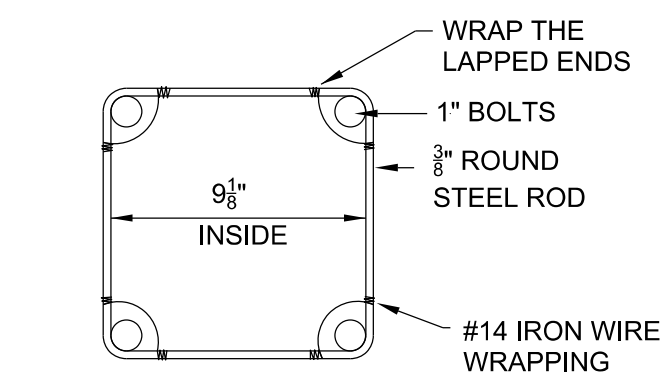
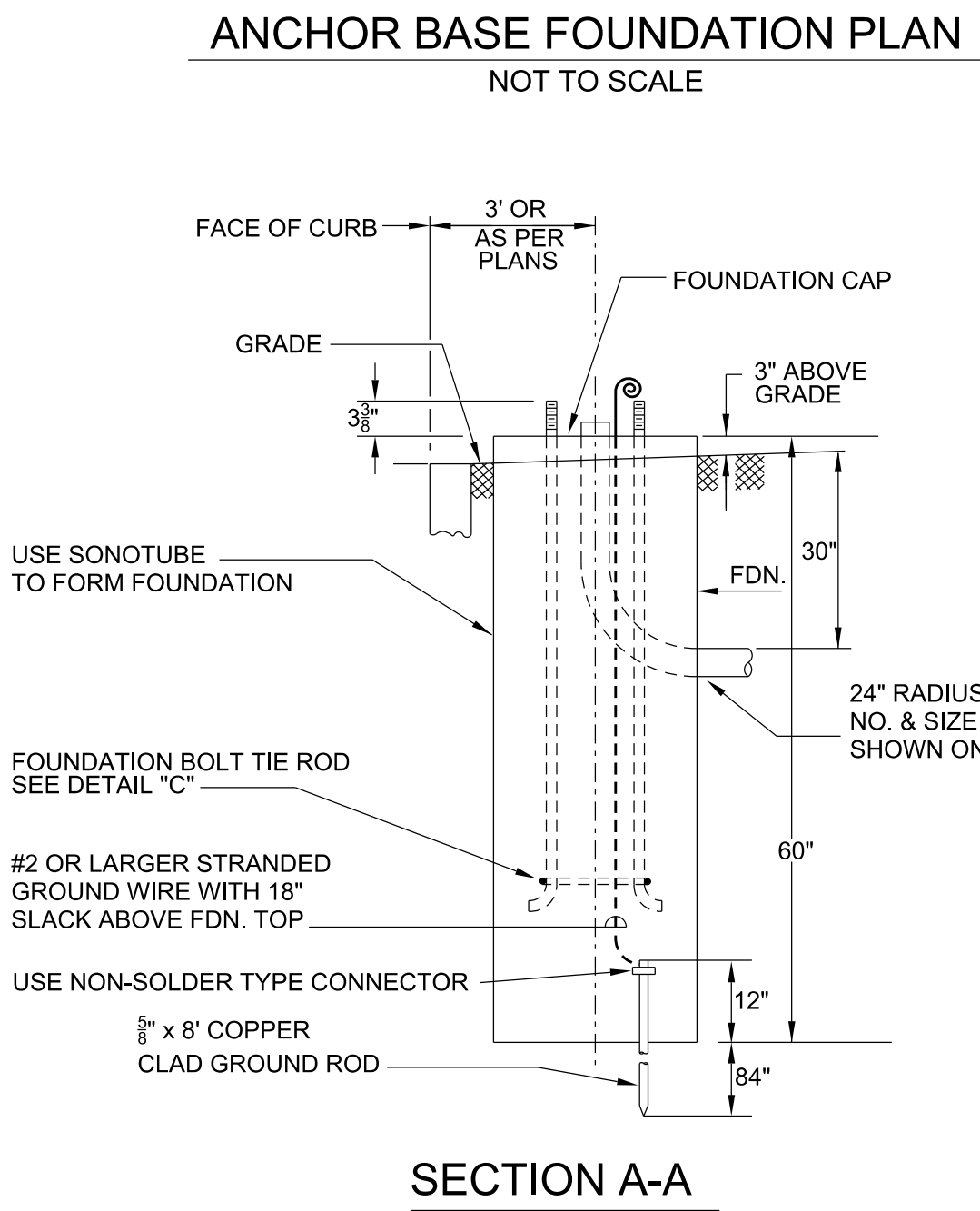
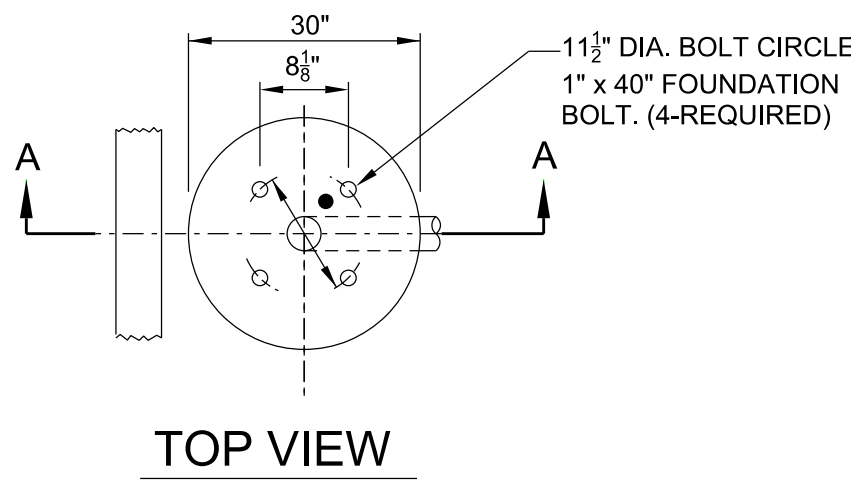
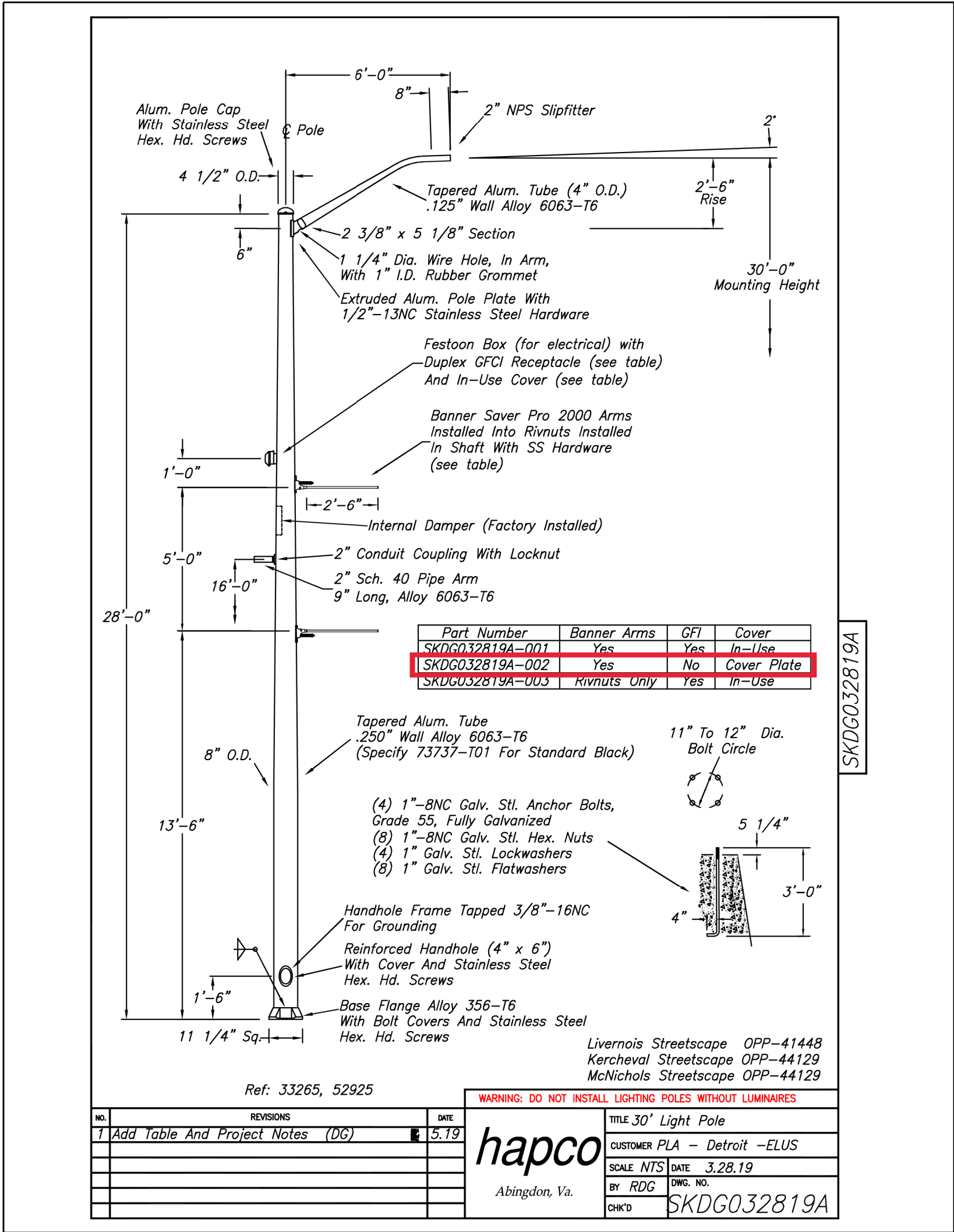




Consulting
Engineering
Associates, Inc.



WADE
TRIM



DETAIL "C"

ANCHOR BOLT TIE ROD

ALL FOUNDATION CAPS SHALL HAVE A SMOOTH FINISH WITH BEVELED EDGES & SHALL BE SHAPED TO ALLOW COMPLETE DRAINAGE OF WATER. ANCHOR BOLT PROJECTIONS ABOVE CAP SHALL BE CLEANED OF ALL CONCRETE & FULLY USABLE THEIR FULL LENGTH.



STREET SIDE LUMINAIRE

XSP Series

XSP2™ LED Street/Area Luminaire – Double Module – Version C

Product Description

Designed from the ground up as a totally optimized LED street and area lighting system, the XSP Series delivers incredible efficiency without sacrificing application performance. Beyond substantial energy savings and reduced maintenance, Cree achieves greater optical control with our NanoOptic® Precision Delivery Grid™ optic when compared to traditional cobra head luminaires. The XSP Series is the better alternative for traditional street and area lighting with quick payback and improved performance. Applications: Roadway, parking lots, walkways and general area spaces

Performance Summary

NanoOptic® Precision Delivery Grid™ optic

Assembled in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

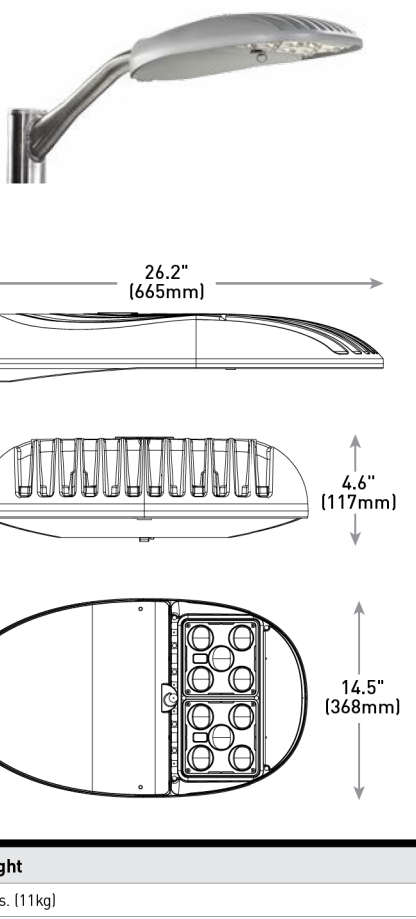
CCT: 3000K (+/- 300K), 4000K (+/- 300K), 5700K (+/- 500K)

Limited Warranty*: 10 years on luminaire/limited 10 years on Colorfast DeltaGuard® finish

*See <http://lighting.cree.com/warranty> for warranty terms

Accessories

Field-Installed	
Backlight Control Shield XA-SP2BLS	Bird Spikes XA-SP2BROSPK
Provides 1/2 mounting height cutoff	



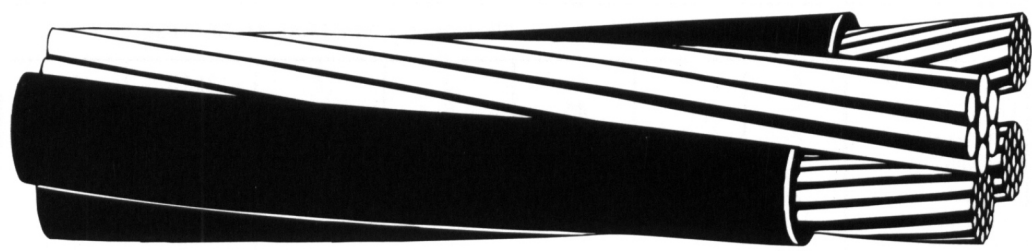
Ordering Information

Example: BXSP-C-HI-ZME-F-30K-UL-SV

BXSP	C	HT		F				Color Options	Options
Product	Version	Mounting	Optic	Input Power Designator	CCT	Voltage			
BXSP	C	HI	Z10* Type II Long 2ME* Type II Medium 3ME* Type II Medium 4ME* Type IV Medium	13W 3000K 4000K 5700K	UL 30K 40K 57K	Universal 120-277V Universal 347-480V	BK Black BR Bronze SI Silver WH White	G Small Four Point Mounting Mounts to 1.25\" (32mm) IP, 1.66\" (42mm) O.D. horizontal tenon Large Four Point Mounting Mounts to 2\" (51mm) IP, 2.375\" (60mm) O.D. horizontal tenon N-G10/G10T/G10/G10A Utility Label, NEMA 7-Pin Photocell Receptacle & Field Adjustable Output Must select G1, G2, G3, G4, G5 or G6 Settings G3-G5 are not available with N option External wattage label per ANSI C136.15 based on G setting selected 7-pin receptacle per ANSI C136.41 Factory connected 0-10V dim leads Photocell and shunting cap by others Power/Lumens may only be adjusted down in the field Refer to page 6 for power and lumen values R NEMA 7-Pin Photocell Receptacle Must select G1, G2, G3, G4, G5 or G6 Settings G3-G5 are not available with N option External wattage label per ANSI C136.15 based on G setting selected 7-pin receptacle per ANSI C136.41 Factory connected 0-10V dim leads Photocell and shunting cap by others Power/Lumens may only be adjusted down in the field Refer to page 6 for power and lumen values UTL Utility Label Includes exterior wattage label per ANSI C136.15 that indicates the maximum available wattage of the luminaire	01/06/07/04/05/04/03/02/01 Field Adjustable Output Must select G1, G2, G3, G4, G5, G6, G7, G8, G9, G10, G11, G12, G13, G14, G15, G16, G17, G18, G19, G20, G21, G22, G23, G24, G25, G26, G27, G28, G29, G30, G31, G32, G33, G34, G35, G36, G37, G38, G39, G40, G41, G42, G43, G44, G45, G46, G47, G48, G49, G50, G51, G52, G53, G54, G55, G56, G57, G58, G59, G60, G61, G62, G63, G64, G65, G66, G67, G68, G69, G70, G71, G72, G73, G74, G75, G76, G77, G78, G79, G80, G81, G82, G83, G84, G85, G86, G87, G88, G89, G90, G91, G92, G93, G94, G95, G96, G97, G98, G99, G100, G101, G102, G103, G104, G105, G106, G107, G108, G109, G110, G111, G112, G113, G114, G115, G116, 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G1526, G1527, G1528, G1529, G1530, G1531, G1532, G1533, G1534, G1535, G1536, G1537, G1538, G1539, G1540, G1541, G1542, G1543, G1544, G1545, G1546, G1547, G1548, G1549, G1550, G1551, G1552, G1553, G1554, G1555, G1556, G1557, G1558, G1559, G1560, G1561, G1562, G1563, G1564, G1565, G1566, G1567, G1568, G1569, G1570, G1571, G1572, G1573, G1574, G1575, G1576, G1577, G1578, G1579, G1580, G1581, G1582, G1583, G1584, G1585, G1586, G1587, G1588, G1589, G1590, G1591, G1592, G1593, G1594, G1595, G1596, G1597, G1598, G1599, G1600, G1601, G1602, G1603, G1604, G1605, G1606, G1607, G1608, G1609, G1610, G1611, G1612, G1613, G1614, G1615, G1616, G1617, G1618, G1619, G1620, G1621, G1622, G1623, G1624, G1625, G1626, G1627, G1628, G1629, G1630, G1631, G1632, G1633, G1634, G1635, G1636, G1637, G1638, G1639, G1640, G1641, G1642, G1643, G1644, G1645, G1646, G1647, G1648, G1649, G1650, G1651, G1652, G1653, G1654, G1655, G1656, G1657, G1658, G1659, G1660, G1661, G1662, G1663, G1664, G1665, G1666, G1667, G1668, 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G1812, G1813, G1814, G1815, G1816, G1817, G1818, G1819, G1820, G1821, G1822, G1823, G1824, G1825, G1826, G1827, G1828, G1829, G1830, G1831, G1832, G1833, G1834, G1835, G1836, G1837, G1838, G1839, G1840, G1841, G1842, G1843, G1844, G1845, G1846, G1847, G1848, G1849, G1850, G1851, G1852, G1853, G1854, G1855, G1856, G1857, G1858, G1859, G1860, G1861, G1862, G1863, G1864, G1865, G1866, G1867, G1868, G1869, G1870, G1871, G1872, G1873, G1874, G1875, G1876, G1877, G1878, G1879, G1880, G1881, G1882, G1883, G1884, G1885, G1886, G1887, G1888, G1889, G1890, G1891, G1892, G1893, G1894, G1895, G1896, G1897, G1898, G1899, G1900, G1901, G1902, G1903, G1904, G1905, G1906, G1907, G1908, G1909, G1910, G1911, G1912, G1913, G1914, G1915, G1916, G1917, G1918, G1919, G1920, G1921, G1922, G1923, G1924, G1925, G1926, G1927, G1928, G1929, G1930, G1931, G1932, G1933, G1934, G1935, G1936, G1937, G1938, G1939, G1940, G1941, G1942, G1943, G1944, G1945, G1946, G1947, G1948, G1949, G1950, G1951, G1952, G1953, G1954, G1955, G1956, G1957, G1958, G1959, G1

Quadruplex Service Drop

Aluminum Conductors, Polyethylene or Crosslinked Polyethylene Insulation.



APPLICATIONS

Used to supply 3-phase power, usually from a pole-mounted transformer, to the user's service head where connection to the service entrance cable is made. To be used at voltages of 600 volts phase-to-phase or less and at conductor temperatures not to exceed 75°C for polyethylene insulated conductors or 90°C for crosslinked polyethylene (XLP) insulated conductors.

SPECIFICATIONS

Southwire's quadruplex service drop cable meets or exceeds the following ASTM specifications:

- B-230 Aluminum Wire, 1350-H19 for Electrical Purposes.
- B-231 Aluminum Conductors, Concentric-Lay-Stranded.
- B-232 Aluminum Conductors, Concentric-Lay-Stranded, Coated Steel Reinforced (ACSR).
- B-399 Concentric-Lay-Stranded, 6201-T81 Aluminum Alloy Conductors.
- B-901 Compressed Round Stranded Aluminum Conductors Using Single Input Wire.

Southwire's quadruplex service drop cable meets or exceeds all applicable requirements of ICEA S-76-474 .

CONSTRUCTION

Conductors are concentrically stranded, compressed 1350-H19 aluminum. Insulated with either polyethylene or crosslinked polyethylene (XLP). Neutral messengers are concentrically stranded 6201, AAC, or ACSR. Conductors are manufactured with ridges for phase identification (one conductor one ridge, one conductor two ridges, one conductor plain.)



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Quadruplex Service Drop

Code* Word	Phase Conductor			Bare Neutral Messenger				Weight Per 1000 ft.(lbs.)		Allowable Ampacities+	
	Size (AWG or kcmil)	Strand-ing	Insul. Thick. (mils)	Equiv. Dia. (AWG)++	Size++ (kcmil)	Strand-ing	Rated Strength (lbs.)	XLP	POLY	XLP	POLY
6201 ALLOY NEUTRAL-MESSENGER											
Bay	6	1	45	6	30.58	7	1110	137	137	75	60
French Coach	6	7	45	6	30.58	7	1110	148	148	75	60
German Coach	4	1	45	4	48.69	7	1760	205	205	100	80
Arabian	4	7	45	4	48.69	7	1760	217	217	100	80
Belgian	2	7	45	2	77.47	7	2800	328	328	135	105
Shetland	1/0	9	60	1/0	123.3	7	4460	519	519	180	140
Thoroughbred	2/0	11	60	2/0	155.4	7	5390	639	639	205	160
Trotter	3/0	17	60	3/0	195.7	7	6790	789	789	235	185
Walking	4/0	18	60	4/0	246.9	7	8560	977	977	275	210

*Code words for XLP insulated products are formed by adding "XLP" to the conventional code words above (e.g.-Bay/XLP).
+Conductor temperature of 90°C for XLP, 75°C for Poly; ambient temperature of 40°C; emissivity 0.9; 2 ft./sec. wind in sun.
++Designated sizes are: ACSR 6/1 diameter equivalent and AAC with equivalent resistivity per ASTM B-399 for 6201.

Code* Word	Phase Conductor			Bare Neutral Messenger			Weight Per 1000 ft.(lbs.)		Allowable Ampacities+	
	Size (AWG or kcmil)	Strand-ing	Insul. Thick. (mils)	Size (AWG or kcmil)	Strand-ing	Rated Strength (lbs.)	XLP	POLY	XLP	POLY
AAC NEUTRAL-MESSENGER										
Clydesdale	4	1	45	4	7	881	198	198	100	80
Pinto	4	7	45	4	7	881	211	211	100	80
Mustang	2	7	45	2	7	1350	318	318	135	105
Criollo	1/0	9	60	1/0	7	1990	503	503	180	140
Percheron	2/0	11	60	2/0	7	2510	619	619	205	160
Hanovarian	3/0	17	60	3/0	19	3310	764	764	235	185
Oldenburg	4/0	18	60	4/0	19	4020	945	945	275	210
Lippizaner	336.4	19	80	336.4	19	6146	1519	1519	370	280

*Code words for XLP insulated products are formed by adding "XLP" to the conventional code words above (e.g.-Bay/XLP).
+Conductor temperature of 90°C for XLP, 75°C for Poly; ambient temperature of 40°C; emissivity 0.9; 2 ft./sec. wind in sun.



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Quadruplex Service Drop

Code* Word	Phase Conductor			Bare Neutral Messenger			Weight Per 1000 ft.(lbs.)		Allowable Ampacities+	
	Size (AWG or kcmil)	Strand-ing	Insul. Thick. (mils)	Size (AWG or kcmil)	Strand-ing	Rated Strength (lbs.)	XLP	POLY	XLP	POLY
ACSR NEUTRAL-MESSENGER										
Morochuca	6	1	45	6	6/1	1190	145	145	75	60
Chola	6	7	45	6	6/1	1190	153	153	75	60
Morgan	4	1	45	4	6/1	1860	217	217	100	80
Thickney	4	7	45	4	6/1	1860	229	229	100	80
Palomino	2	7	45	2	6/1	2850	347	347	135	105
Costena	1/0	9	60	1/0	6/1	4380	549	549	180	140
Grullo	2/0	11	60	2/0	6/1	5310	677	677	205	160
Suffolk	3/0	17	60	3/0	6/1	6620	837	837	235	185
Appalosa	4/0	18	60	4/0	6/1	8350	1038	1038	275	210
Gelding	336.4	19	80	4/0	6/1	8350	1494	1494	370	280
Bronco	336.4	19	80	336.4	18/1	8680	1568	1568	370	280

*Code words for XLP insulated products are formed by adding "XLP" to the conventional code words above (e.g.-Bay/XLP).
+Conductor temperature of 90°C for XLP, 75°C for Poly; ambient temperature of 40°C; emissivity 0.9; 2 ft./sec. wind in sun.



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SIMpull XHHW-2®
Aluminum XHHW Wire & Cable



600 Volt Alumaflex® Brand Aluminum Alloy (AA-8176) Conductor. Cross-linked Polyethylene (XLPE) Insulation. Moisture Resistant High Heat. Sunlight Resistant in Sizes 6 AWG and Larger. CT Rated in Sizes 1/0 AWG and Larger.

APPLICATIONS

Southwire SIMpull XHHW-2® aluminum conductors are primarily used in conduit or recognized raceways for service and feeder wiring as specified in the National Electrical Code. XHHW-2 conductors may be used in wet or dry locations at temperatures not to exceed 90°C. Voltage rating for XHHW-2 conductors is 600 volts. Suitable for use in Health Care Facilities per section 517.160 of the NEC where a dielectric constant of 3.5 or less may be specified. This product is designed to be installed without the application of pulling lubricant.

STANDARDS & REFERENCES

Southwire Aluminum Type XHHW-2 conductors comply with the following:

- ASTM- All Applicable Standards
- UL Standard 44
- NOM-ANCE 90° C
- Federal Specification A-A-59544
- National Electrical Code, NFPA 70
- NEMA WC-70 (ICEA S-95-658) Construction Requirements
- RoHS/Reach Compliant

CONSTRUCTION

Southwire Type XHHW-2 aluminum conductors are Alumaflex® brand AA-8000 series aluminum alloy, compact stranded. The insulation is an abrasion, moisture and heat resistant SIMpull® thermoset cross-linked polyethylene. Conductor sizes 6 AWG and larger are listed and marked sunlight resistant in all colors. Available in black, white, red, blue, brown, orange, yellow, purple, gray, and green. Some colors are subject to economic order quantity.



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Conductor		Insulation Thickness (mils)	Nominal O.D. (mils)	Approx. Net Wt. Per 1000' (lbs.)	Allowable Ampacities*			Standard Package
Size (AWG or kcmil)	No. of strands				60°C	75°C	90°C	
8	7	45	227	30	35	40	45	BCD
6	7	45	259	39	40	50	55	BCD
4	7	45	303	57	55	65	75	BCD
2	6	45	358	85	75	90	100	BCD
1	8	55	413	108	85	100	115	BC
1/0	10	80	450	180	115	135	150	ABC
2/0	12	55	490	161	115	135	150	ABCD
3/0	16	55	537	198	130	155	175	BCD
4/0	19	55	589	243	150	180	205	ABCD
250	22	55	650	293	170	205	230	BCD
300	35	65	700	346	195	230	260	BC
350	35	65	746	398	210	250	280	BCD
400	35	65	789	449	225	270	305	CD
500	35	65	866	552	260	310	350	ABCDE
600	58	80	973	675	285	340	385	ABD
700	58	80	1037	777	315	375	425	N/A
750	58	80	1068	829	320	385	435	ABCE
900	58	80	1162	979	355	425	480	N/A
1000	58	80	1220	1085	375	445	500	C

* Allowable Ampacities shown are for general use as specified by the National Electrical Code, Sections 310.15 and 240.4(D). Unless the equipment is marked for use at higher temperatures, the conductor ampacities shall be limited to the following per NEC 110.14(C): 60°C - When terminated to equipment for circuits rated 100 amperes or less marked for 14 through 1 AWG conductors. 75°C - When terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG. 90°C - THHN dry locations and THWN wet or dry locations for ampacity adjustment purposes using NEC section 310.15.

Package Codes
A-500'
B-2,500'
C-1,000'
D-5,000'

RECOMMENDED SAMPLE SPECIFICATIONS:
Conductors shall be UL listed Type XHHW-2, suitable for operation at 600 volts or less in wet or dry locations at temperatures not to exceed 90 °C. Conductors shall be annealed Alumaflex® brand aluminum alloy as manufactured by Southwire Company or approved equal.

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Conductor		Stock Numbers
Size (AWG or kcmil)	No. of strands	
8	7	Stock #: N/A
6	7	Stock #: BK:112706, BN:591209, OE:591210, YW:591211, GN:585321
4	7	Stock #: BK:112714, RD:591114, BE:591115, WE:591116, BN:591201, OE:591202, YW:591203, GN:585320
2	7	Stock #: BK:112722, BN:591213, OE:591214, YW:591215, GN:585319
1	18	Stock #: BK:112730, RD:591204, BE:591205, WE:591206, BN:591207, OE:591208, YW:591216, GN:585318, GY:596497
1/0	18	Stock #: BK:112748, RD:591284, BE:591285, WE:591286, BN:585291, OE:585292, YW:585293, GY:585294, GN:585290, PE:596423
2/0	18	Stock #: BK:112755, RD:591288, BE:591289, WE:591290, BN:585296, OE:585297, YW:585298, GY:585300, GN:585295, PE:596422
3/0	18	Stock #: BK:112763, RD:585302, BE:585303, WE:585304, BN:585305, OE:585306, YW:585308, GY:585309, GN:585301, PE:596421
4/0	18	Stock #: BK:112771, RD:585317, BE:585316, WE:585314, BN:585313, OE:585312, YW:585311, GY:585310, GN:567439, PE:592563
250	22	Stock #: BK:278341, RD:576390, BE:576391, WE:576392, BN:576385, OE:576386, YW:576387, GY:576388, GN:567440, PE:592468
300	35	Stock #: BK:278358, RD:576382, BE:576383, WE:576384, BN:576133, OE:576134, YW:576135, GY:576136, GN:576361, PE:593380
350	35	Stock #: BK:278366, RD:576378, BE:576379, WE:576380, BN:576374, OE:576375, YW:576376, GY:576377, GN:567437, PE:592562
400	35	Stock #: BK:278374, RD:576370, BE:576372, WE:576373, BN:576127, OE:576129, YW:576130, GY:576131, GN:567384, PE:593379
500	35	Stock #: BK:278382, RD:576367, BE:576368, WE:576369, BN:576362, OE:576364, YW:576365, GY:576366, GN:576394, PE:589196
600	58	Stock #: BK:278390, RD:576350, BE:576351, WE:576352, BN:576345, OE:576346, YW:576347, GY:576349, GN:567375, PE:589197
700	58	Stock #: BK:278408, RD:591293, BE:591294, WE:591295, BN:576341, OE:576342, YW:576343, GY:576344, GN:591296
750	58	Stock #: BK:278416, RD:592233, BE:592234, WE:592235, BN:567432, OE:567433, YW:567434, GY:567435, GN:567436, PE:592469
900	58	Stock #: BK:564059, BN:560445, OE:560446, YW:560447, GY:560448, PE:596424
1000	58	Stock #: BK:278424

Color Abbreviations

BK-Black RD-Red BE-Blue WE-White BN-Brown
OE-Orange YW- Yellow GY-Grey GN-Green PE-Purple

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SIMpull THHN® Aluminum THHN Wire & Cable with Alumaflex® Brand Conductors



600 Volt Alumaflex® Brand Aluminum Alloy (AA-8176) Conductor, Thermoplastic Insulation/SIM Nylon Sheath, Heat, Moisture, Gasoline and Oil Sunlight Resistant. Also Rated THWN-2. SIM Technology® for Easier Pulling

APPLICATIONS

Southwire SIMpull THHN® Aluminum THHN Wire & Cable with Alumaflex® Brand conductors are primarily used in conduit and cable trays for services, feeders and branch circuits in commercial or industrial applications as specified in the 2011 National Electrical Code. When used as Type THHN or T90 Nylon conductor is suitable for use in dry locations at temperatures not to exceed 90°C. When used as Type THWN-2 or TWIN75, conductor is suitable for use in wet or dry locations at temperatures not to exceed 90°C or not to exceed 75°C when exposed to oil or coolant. Voltage for all applications is 600 volts. This cable should be installed without application of pulling lubricant.

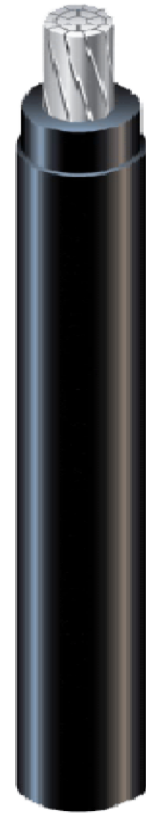
STANDARDS & REFERENCES

Southwire Aluminum SIMpull THHN® conductors comply with the following:

- ASTM B-800 and B-801
- UL Standard 83
- CSA
- Federal Specification A-A-59544
- VW-1 – Sizes 4 through 1 AWG
- CT - Sizes 1/0 AWG and larger Sizes Rated for CT use
- FT1 - Sizes 4 AWG through 750 kcmil
- T90 Nylon – Sizes 4 AWG through 750 kcmil
- TWIN 75 – Sizes 8 AWG through 750 kcmil
- National Electrical Code, NFPA 70
- NEMA WC-70 Construction Requirements
- RoHS/Reach Compliant

CONSTRUCTION

Southwire SIMpull THHN® conductors are Alumaflex® Brand AA-8000 series aluminum alloy, compact stranded. Insulated with a tough heat and moisture-resistant polyvinyl chloride (PVC), over which a SIM (SLIKQWIK® Infused Membrane) nylon (polyamide) or UL-listed equal jacket is applied. Conductor sizes 1/0 AWG and larger are listed and marked sunlight resistant in colors. Available in black, white, red, blue,



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purple, green, yellow, orange, brown, and gray. Also available in striped configurations. Some colors are subject to economic order quantity.

Conductor		Insulation Thickness (mils)	Jacket Thickness (mils)	Nominal O.D. (mils)	Net Wt. Per 1000' (lbs.)	Allowable Ampacities*			Standard Package
Size (AWG or kcmil)	No. of strands					60°C	75°C	90°C	
8	7	30	5	204	27	35	40	45	B
6	7	30	5	239	38	40	50	60	C
4	7	40	6	305	62	55	65	75	BCD
2	6	40	6	360	91	75	90	100	BC
1	8	50	7	413	117	85	100	115	BC
1/0	10	50	7	450	141	100	120	135	BCD
2/0	12	50	7	490	172	115	135	150	BCD
3/0	16	50	7	537	210	130	155	175	BCD
4/0	19	50	7	589	257	150	180	205	BCD
250	22	60	8	656	311	170	205	230	ABC
300	35	60	8	706	365	190	230	255	BC
350	35	60	8	752	418	210	250	280	BC
400	35	60	8	795	471	225	270	305	BC
500	35	60	8	872	576	260	310	350	BC
600	58	70	9	971	700	285	340	385	BC
700	58	70	9	1035	804	310	375	420	C
750	58	70	9	1068	856	320	385	435	ABC
900	58	70	9	1139	1013	355	425	480	N/A
1000	58	70	9	1218	1117	375	445	500	N/A

* Allowable Ampacities shown are for general use as specified by the National Electrical Code, Sections 310.15 and 340.4(C). Unless the equipment is marked for use at higher temperatures, the conductor ampacities shall be limited to the following per NEC 110.14(C): 60°C - When terminated to equipment for circuits rated 100 amperes or less marked for 14 through 1 AWG conductors. 75°C - When terminated to equipment for circuits rated over 100 amperes or marked for conductors larger than 1 AWG. 90°C - THHN dry locations and THWN wet or dry locations for ampacity adjustment purposes using NEC section 310.15.H(17)

Package Codes
A-500'
B-2500'
C-1,000'
D-5,000'

RECOMMENDED SAMPLE SPECIFICATIONS:
Conductors shall be UL-listed Type THHN and THWN-2, suitable for operation at 600 volts, as specified in the National Electrical Code. Sizes 8 through 1 AWG shall be rated VW-1, larger sizes shall be rated for CT Use. Conductors shall be Alumaflex aluminum alloy, insulated with high-heat and moisture resistant PVC, jacketed with abrasion, moisture, gasoline, and oil resistant nylon or UL-listed equivalent as manufactured by Southwire Company or approved equal.

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Conductor		Stock Numbers
Size (AWG or kcmil)	No. of strands	
8	7	Stock #: N/A
6	7	Stock #: BK:563768, RD:573834, BE:573835, WE:578332, GN:566358
4	7	Stock #: BK:563769, RD:573544, BE:573833, WE:577628, GN:562211
2	7	Stock #: BK:563770, RD:573541, BE:573542, WE:563493, BN:587026, OE:587027, YW:587028, GY:578329, GN:562745
1	18	Stock #: BK:583771, RD:583155, BE:583156, WE:578328, BN:587023, OE:587024, YW:587025, GY:578327, GN:562746
1/0	18	Stock #: BK:562747, RD:562748, BE:562749, WE:562750, BN:562753, OE:562754, YW:562752, GY:562755, GN:562756, PE:573380
2/0	18	Stock #: BK:562212, RD:562214, BE:562621, WE:562213, BN:562758, OE:562759, YW:562757, GY:562760, GN:562761, PE:573370
3/0	18	Stock #: BK:562663, RD:562665, BE:562666, WE:562664, BN:562763, OE:562764, YW:562762, GY:562765, GN:562766, PE:573371
4/0	18	Stock #: BK:562671, RD:562673, BE:562674, WE:562672, BN:561805, OE:561806, YW:561807, GY:562767, GN:562768, PE:573372
250	22	Stock #: BK:560444, RD:562626, BE:562627, WE:562625, BN:561863, OE:561864, YW:561865, GY:561866, GN:561867, PE:573373
300	35	Stock #: BK:562667, RD:562669, BE:562670, WE:562668, BN:562771, OE:562772, YW:562770, GY:562773, GN:562774, PE:573374
350	35	Stock #: BK:560443, RD:562623, BE:562624, WE:562622, BN:561858, OE:561859, YW:561861, GY:561862, GN:562775, PE:573375
400	35	Stock #: BK:562677, RD:562776, BE:562778, WE:562779, BN:562781, OE:562782, YW:562780, GY:562783, GN:562699, PE:573376
500	35	Stock #: BK:560442, RD:562696, BE:562697, WE:562698, BN:561853, OE:561854, YW:561855, GY:561856, GN:561857, PE:573377
600	58	Stock #: BK:560441, RD:562630, BE:562631, WE:562628, BN:561847, OE:561848, YW:561849, GY:561850, GN:561851, PE:573379
700	58	Stock #: BK:562689, RD:562690, BE:562691, WE:562692, BN:561843, OE:561844, YW:561846, GY:562693
750	58	Stock #: BK:562632, RD:562634, BE:562635, WE:562633, BN:561838, OE:561839, YW:561840, GY:561841, GN:561842, PE:573481
900	58	Stock #: BK:562679, RD:562681, BE:562682, WE:562683, BN:561782, OE:561783, YW:561785, GY:561786, GN:562684
1000	58	Stock #: BK:562680, BN:564280, OE:564281, YW:564282, GY:564283

Color Abbreviations

BK-Black RD-Red BE-Blue WE-White BN-Brown
OE-Orange YW-Yellow GY-Grey GN-Green

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TRON® In-Line Fuse Holders

HEB Series Single-Pole Breakaway & Non-Breakway for 1/32" x 1 1/2" Fuses



Non-Breakaway Fuse Holders

See page 2 for breakaway holders

Catalog Symbol: HEB

Description:

Water resistant, single-pole non-breakaway in-line fuse holders for 1/32" x 1 1/2" midget fuses. Typical fuse types: BAF, DCM, FNM, FNO and KTK.

Ratings:

Volts: 600V (or less)

Amps: Up to 30A*

Agency Information:

(1)UL Recognized, Guide IZLT2, File E14853

(2)CSA Certified, Class 6225-01, File 47235

(3)CE

Coupling Nut Torque:

10-20lb-in.

Part Number Explanation

Example: HEB-AK

• HEB = Holder series

• A = Loadside terminal (copper crimp for #12 copper wire)

• K = Lineside terminal (copper setscrew for two #6 copper wires)

Part Number Selection

From the table on page three, select the combination of desired loadside and lineside terminals for the application (define terminal type, wire size, number of wires per terminal and whether the terminal accepts solid and/or stranded conductors). Then in the right hand two columns, select either the non-breakaway or breakaway holder part number to order.

Available Part Numbers

HEB-AA⁽¹⁾ (2) (3), HEB-AB⁽²⁾, HEB-AC⁽²⁾, HEB-AD⁽²⁾, HEB-AE⁽²⁾, HEB-AJ, HEB-AK, HEB-AL, HEB-AR, HEB-AV, HEB-BA⁽²⁾, HEB-BB⁽²⁾, HEB-BD⁽²⁾, HEB-BJ, HEB-BK, HEB-BL, HEB-BM, HEB-BN, HEB-BP⁽²⁾, HEB-BQ⁽²⁾, HEB-BS, HEB-BT⁽²⁾, HEB-BU, HEB-BV, HEB-BW, HEB-BX, HEB-BY, HEB-BZ, HEB-CA⁽²⁾, HEB-CB⁽²⁾, HEB-CC⁽²⁾, HEB-CD⁽²⁾, HEB-CE, HEB-CF, HEB-CG, HEB-CH, HEB-CI, HEB-CJ, HEB-CK, HEB-CL, HEB-CM, HEB-CN, HEB-CO, HEB-CP, HEB-CQ, HEB-CR, HEB-CS, HEB-CT, HEB-CU, HEB-CV, HEB-CW, HEB-CX, HEB-CY, HEB-CZ, HEB-DA⁽²⁾, HEB-DB⁽²⁾, HEB-DC⁽²⁾, HEB-DD⁽²⁾, HEB-DE, HEB-DF, HEB-DG, HEB-DH, HEB-DI, HEB-DJ, HEB-DK, HEB-DM, HEB-DN, HEB-DO, HEB-DP, HEB-DQ, HEB-DS, HEB-DT, HEB-DU, HEB-DV, HEB-DW, HEB-DX, HEB-DY, HEB-DZ, HEB-EA⁽²⁾, HEB-EB⁽²⁾, HEB-EC⁽²⁾, HEB-ED⁽²⁾, HEB-EE, HEB-EF, HEB-EG, HEB-EH, HEB-EI, HEB-EJ, HEB-EK, HEB-EL, HEB-EM, HEB-EN, HEB-EO, HEB-EP, HEB-EQ, HEB-ER, HEB-ES, HEB-ET, HEB-EU, HEB-EV, HEB-EW, HEB-EX, HEB-EY, HEB-EZ, HEB-FA⁽²⁾, HEB-FB⁽²⁾, HEB-FC⁽²⁾, HEB-FD⁽²⁾, HEB-FE, HEB-FG, HEB-FH, HEB-FI, HEB-FJ, HEB-FK, HEB-FL, HEB-FM, HEB-FN, HEB-FO, HEB-FP, HEB-FQ, HEB-FR, HEB-FS, HEB-FT, HEB-FU, HEB-FV, HEB-FW, HEB-FX, HEB-FY, HEB-FZ, HEB-GA⁽²⁾, HEB-GB⁽²⁾, HEB-GC⁽²⁾, HEB-GD⁽²⁾, HEB-GE, HEB-GF, HEB-GH, HEB-GI, HEB-GJ, HEB-GK, HEB-GL, HEB-GM, HEB-GN, HEB-GO, HEB-GP, HEB-GQ, HEB-GR, HEB-GS, HEB-GT, HEB-GU, HEB-GV, HEB-GW, HEB-GX, HEB-GY, HEB-GZ, HEB-HA⁽²⁾, HEB-HB⁽²⁾, HEB-HC⁽²⁾, HEB-HD⁽²⁾, HEB-HE, HEB-HF, HEB-HG, HEB-HI, HEB-HJ, HEB-HK, HEB-HL, HEB-HM, HEB-HN, HEB-HO, HEB-HP, HEB-HQ, HEB-HR, HEB-HS, HEB-HT, HEB-HU, HEB-HV, HEB-HW, HEB-HX, HEB-HY, HEB-HZ, HEB-IA⁽²⁾, HEB-IB⁽²⁾, HEB-IC⁽²⁾, HEB-ID⁽²⁾, HEB-IE, HEB-IF, HEB-IG, HEB-IH, HEB-II, HEB-IJ, HEB-IK, HEB-IL, HEB-IM, HEB-IN, HEB-IO, HEB-IP, HEB-IQ, HEB-IR, HEB-IS, HEB-IT, HEB-IU, HEB-IV, HEB-IW, HEB-IX, HEB-IY, HEB-IZ, HEB-JA⁽²⁾, HEB-JB⁽²⁾, HEB-JC⁽²⁾, HEB-JD⁽²⁾, HEB-JE, HEB-JF, HEB-JG, HEB-JH, HEB-JI, HEB-JJ, HEB-JK, HEB-JL, HEB-JM, HEB-JN, HEB-JO, HEB-JP, HEB-JQ, HEB-JR, HEB-JS, HEB-JT, HEB-JU, HEB-JV, HEB-JW, HEB-JX, HEB-JY, HEB-JZ, HEB-KA⁽²⁾, HEB-KB⁽²⁾, HEB-KC⁽²⁾, HEB-KD⁽²⁾, HEB-KE, HEB-KF, HEB-KG, HEB-KH, HEB-KI, HEB-KJ, HEB-KL, HEB-KM, HEB-KN, HEB-KO, HEB-KP, HEB-KQ, HEB-KR, HEB-KS, HEB-KT, HEB-KU, HEB-KV, HEB-KW, HEB-KX, HEB-KY, HEB-KZ, HEB-LA⁽²⁾, HEB-LB⁽²⁾, HEB-LC⁽²⁾, HEB-LD⁽²⁾, HEB-LE, HEB-LF, HEB-LG, HEB-LH, HEB-LI, HEB-LJ, HEB-LK, HEB-LL, HEB-LM, HEB-LN, HEB-LO, HEB-LP, HEB-LQ, HEB-LR, HEB-LS, HEB-LT, HEB-LU, HEB-LV, HEB-LW, HEB-LX, HEB-LY, HEB-LZ, HEB-MA⁽²⁾, HEB-MB⁽²⁾, HEB-MC⁽²⁾, HEB-MD⁽²⁾, HEB-ME, HEB-MF, HEB-MG, HEB-MH, HEB-MI, HEB-MJ, HEB-MK, HEB-ML, HEB-MN, HEB-MO, HEB-MP, HEB-MQ, HEB-MR, HEB-MS, HEB-MT, HEB-MU, HEB-MV, HEB-MW, HEB-MX, HEB-MY, HEB-MZ, HEB-NA⁽²⁾, HEB-NB⁽²⁾, HEB-NC⁽²⁾, HEB-ND⁽²⁾, HEB-NE, HEB-NF, HEB-NG, HEB-NH, HEB-NI, HEB-NJ, HEB-NK, HEB-NL, HEB-NM, HEB-NO, HEB-NP, HEB-NQ, HEB-NR, HEB-NS, HEB-NT, HEB-NU, HEB-NV, HEB-NW, HEB-NX, HEB-NY, HEB-NZ, HEB-PA⁽²⁾, HEB-PB⁽²⁾, HEB-PC⁽²⁾, HEB-PD⁽²⁾, HEB-PE, HEB-PF, HEB-PG, HEB-PH, HEB-PI, HEB-PJ, HEB-PK, HEB-PL, HEB-PM, HEB-PN, HEB-PO, HEB-PP, HEB-PQ, HEB-PR, HEB-PS, HEB-PT, HEB-PU, HEB-PV, HEB-PW, HEB-PX, HEB-PY, HEB-PZ, HEB-QA⁽²⁾, HEB-QB⁽²⁾, HEB-QC⁽²⁾, HEB-QD⁽²⁾, HEB-QE, HEB-QF, HEB-QG, HEB-QH, HEB-QI, HEB-QJ, HEB-QK, HEB-QL, HEB-QM, HEB-QN, HEB-QO, HEB-QP, HEB-QQ, HEB-QR, HEB-QS, HEB-QT, HEB-QU, HEB-QV, HEB-QW, HEB-QX, HEB-QY, HEB-QZ, HEB-RA⁽²⁾, HEB-RB⁽²⁾, HEB-RC⁽²⁾, HEB-RD⁽²⁾, HEB-RE, HEB-RF, HEB-RG, HEB-RH, HEB-RI, HEB-RJ, HEB-RK, HEB-RL, HEB-RM, HEB-RN, HEB-RO, HEB-RP, HEB-RQ, HEB-RR, HEB-RS, HEB-RT, HEB-RU, HEB-RV, HEB-RW, HEB-RX, HEB-RY, HEB-RZ, HEB-SA⁽²⁾, HEB-SB⁽²⁾, HEB-SC⁽²⁾, HEB-SD⁽²⁾, HEB-SE, HEB-SF, HEB-SG, HEB-SH, HEB-SI, HEB-SJ, HEB-SK, HEB-SL, HEB-SM, HEB-SN, HEB-SO, HEB-SP, HEB-SQ, HEB-SR, HEB-SS, HEB-ST, HEB-SU, HEB-SV, HEB-SW, HEB-SX, HEB-SY, HEB-SZ, HEB-TA⁽²⁾, HEB-TB⁽²⁾, HEB-TC⁽²⁾, HEB-TD⁽²⁾, HEB-TE, HEB-TF, HEB-TG, HEB-TH, HEB-TI, HEB-TJ, HEB-TK, HEB-TL, HEB-TM, HEB-TN, HEB-TO, HEB-TP, HEB-TQ, HEB-TR, HEB-TS, HEB-TT, HEB-TU, HEB-TV, HEB-TW, HEB-TX, HEB-TY, HEB-TZ, HEB-UA⁽²⁾, HEB-UB⁽²⁾, HEB-UC⁽²⁾, HEB-UD⁽²⁾, HEB-UE, HEB-UF, HEB-UG, HEB-UH, HEB-UI, HEB-UJ, HEB-UK, HEB-UL, HEB-UM, HEB-UN, HEB-UO, HEB-UP, HEB-UQ, HEB-UR, HEB-US, HEB-UT, HEB-UY, HEB-UZ, HEB-VA⁽²⁾, HEB-VB⁽²⁾, HEB-VC⁽²⁾, HEB-VD⁽²⁾, HEB-VE, HEB-VF, HEB-VG, HEB-VH, HEB-VI, HEB-VJ, HEB-VK, HEB-VL, HEB-VM, HEB-VN, HEB-VO, HEB-VP, HEB-VQ, HEB-VR, HEB-VS, HEB-VT, HEB-VU, HEB-VV, HEB-VW, HEB-VX, HEB-VY, HEB-VZ, HEB-WA⁽²⁾, HEB-WB⁽²⁾, HEB-WC⁽²⁾, HEB-WD⁽²⁾, HEB-WE, HEB-WF, HEB-WG, HEB-WH, HEB-WI, HEB-WJ, HEB-WK, HEB-WL, HEB-WM, HEB-WN, HEB-WO, HEB-WP, HEB-WQ, HEB-WR, HEB-WS, HEB-WT, HEB-WU, HEB-WV, HEB-WX, HEB-WY, HEB-WZ, HEB-XA⁽²⁾, HEB-XB⁽²⁾, HEB-XC⁽²⁾, HEB-XD⁽²⁾, HEB-XE, HEB-XF, HEB-XG, HEB-XH, HEB-XI, HEB-XJ, HEB-XK, HEB-XL, HEB-XM, HEB-XN, HEB-XO, HEB-XP, HEB-XQ, HEB-XR, HEB-XS, HEB-XT, HEB-XU, HEB-XV, HEB-XW, HEB-XX, HEB-XY, HEB-XZ, HEB-YA⁽²⁾, HEB-YB⁽²⁾, HEB-YC⁽²⁾, HEB-YD⁽²⁾, HEB-YE, HEB-YF, HEB-YG, HEB-YH, HEB-YI, HEB-YJ, HEB-YK, HEB-YL, HEB-YM, HEB-YN, HEB-YO, HEB-YP, HEB-YQ, HEB-YR, HEB-YS, HEB-YT, HEB-YU, HEB-YV, HEB-YW, HEB-YX, HEB-YZ, HEB-ZA⁽²⁾, HEB-ZB⁽²⁾, HEB-ZC⁽²⁾, HEB-ZD⁽²⁾, HEB-ZE, HEB-ZF, HEB-ZG, HEB-ZH, HEB-ZI, HEB-ZJ, HEB-ZK, HEB-ZL, HEB-ZM, HEB-ZN, HEB-ZO, HEB-ZP, HEB-ZQ, HEB-ZR, HEB-ZS, HEB-ZT, HEB-ZU, HEB-ZV, HEB-ZW, HEB-ZX, HEB-ZY, HEB-ZZ.

Insulating Boots

For insulating boots, see page 2. Insulating boots are not included with non-breakaway holders and must be ordered separately. They come standard with the breakaway holders.

When insulating boots are utilized, extra heat retention requires that fuses are sized at a minimum of 200% of the RMS load current.

*Amp rating limited by conductor size.

0908

BU-SB08489

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Data Sheet 2127



Breakaway Fuse Holders

Catalog Symbol: HEB

Description:

Single-pole breakaway in-line fuse holders for 1/32" x 1 1/2" midget fuses. Typical fuse types: BAF, DCM, FNM, FNO AND KTK.

Ratings:

Volts: 600V (or less)

Amps: Up to 30A*

Agency Information:

(1)UL Recognized, Guide IZLT2, File E14853

(2)CSA Certified, Class 6225-01, File 47235

(3)CE

Coupling Nut Torque:

10-20lb-in.

Part Number Explanation

Example: HEB-AW-RYC

• HEB = Holder series

• AW = Loadside terminal (copper crimp for #12 copper wire)

• RYC = Lineside terminal (copper setscrew for two #6 copper wires)

Part Number Selection

From the table on page three, select the combination of desired loadside and lineside terminals for the application (define terminal type, wire size, number of wires per terminal and whether the terminal accepts solid and/or stranded conductors). Then in the right hand two columns, select either the non-breakaway or breakaway holder part number to order.

Available Part Numbers

Breakaway Units:

(Includes fuse holder, breakaway part and insulating boots):

HEB-AW-RLA, HEB-AW-RLC-A⁽¹⁾ (2) (3), HEB-AW-RLC-B,

HEB-AW-RLC-C, HEB-AW-RLC-J, HEB-AW-RYA,

HEB-AW-RYC, HEB-BW-RLC-A, HEB-BW-RLC-B,

HEB-BW-RYC, HEB-JW-RLC-J, HEB-JW-RLA,

HEB-KW-RLC-J, HEB-KW-RYC, HEB-LW-RLA,

HEB-LW-RLC-J, HEB-LW-RYA

HEB-JW, HEB-LW

Fuse Holder Only: HEB-AW⁽²⁾, HEB-BW⁽²⁾, HEB-DW⁽²⁾,

HEB-JW, HEB-LW

Breakaway Part: RLC-A, RLC-B, RLC-C, RLC-J,

RYC, RLA, RYA

*Amp rating limited by conductor size.

0908

BU-SB08489

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Data Sheet 2127



Specification Data - Lineside Breakaway

Breakaway Receptacles

Terminal Type	Conductor Data Size	No. Per Terminal	Solid	Stranded	Catalog Symbol
Copper Crimp	#12 to #8	1	•	•	-RLC-A
	#8	1	•	•	-RLC-B
	#4	1	•	•	-RLC-C

Copper Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLC-J
	#8	1	•	•	-RLC-K
	#4	1	•	•	-RLC-L

Aluminum Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Crimp

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Crimp

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Crimp

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Crimp

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Crimp

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Crimp

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Crimp

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Crimp

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Crimp

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Setscrew

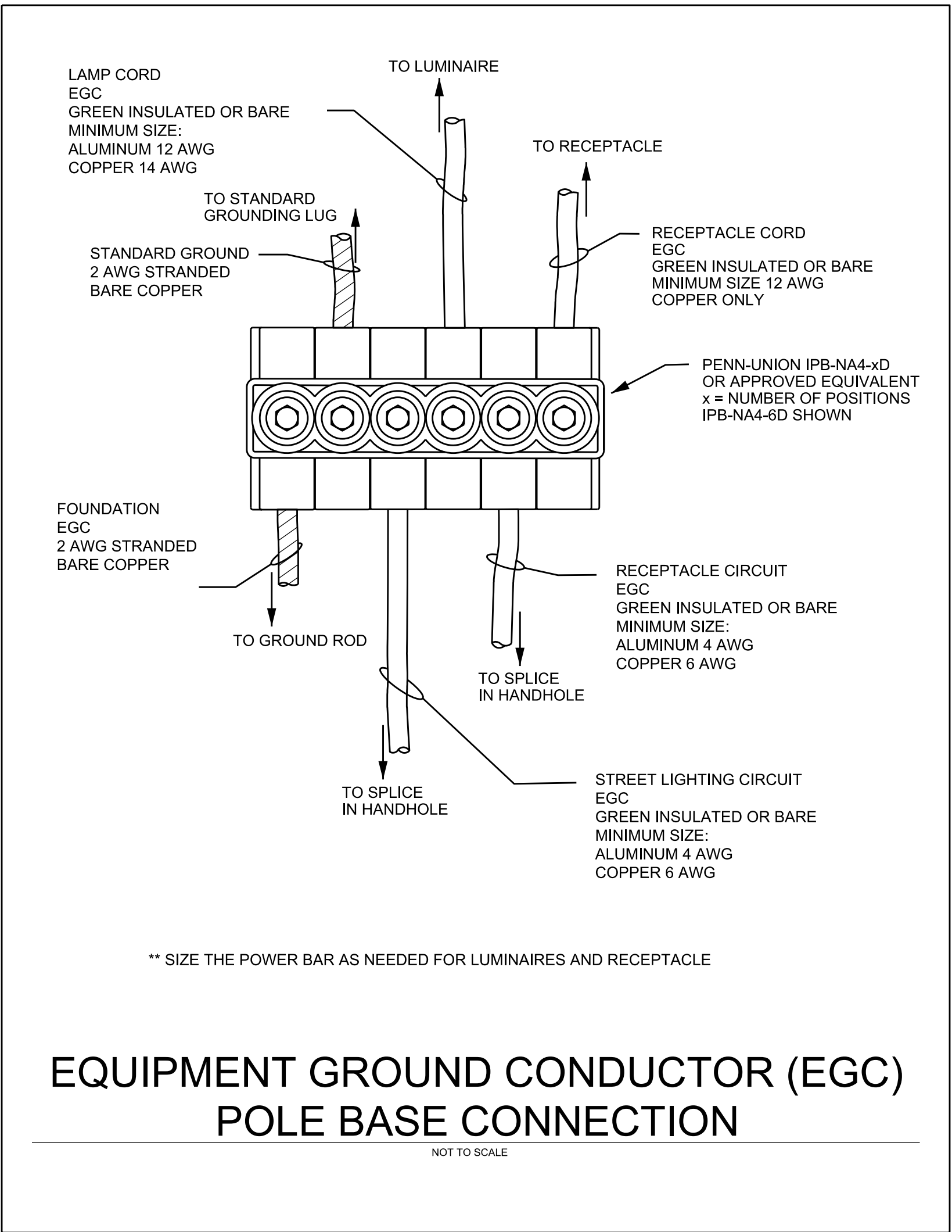
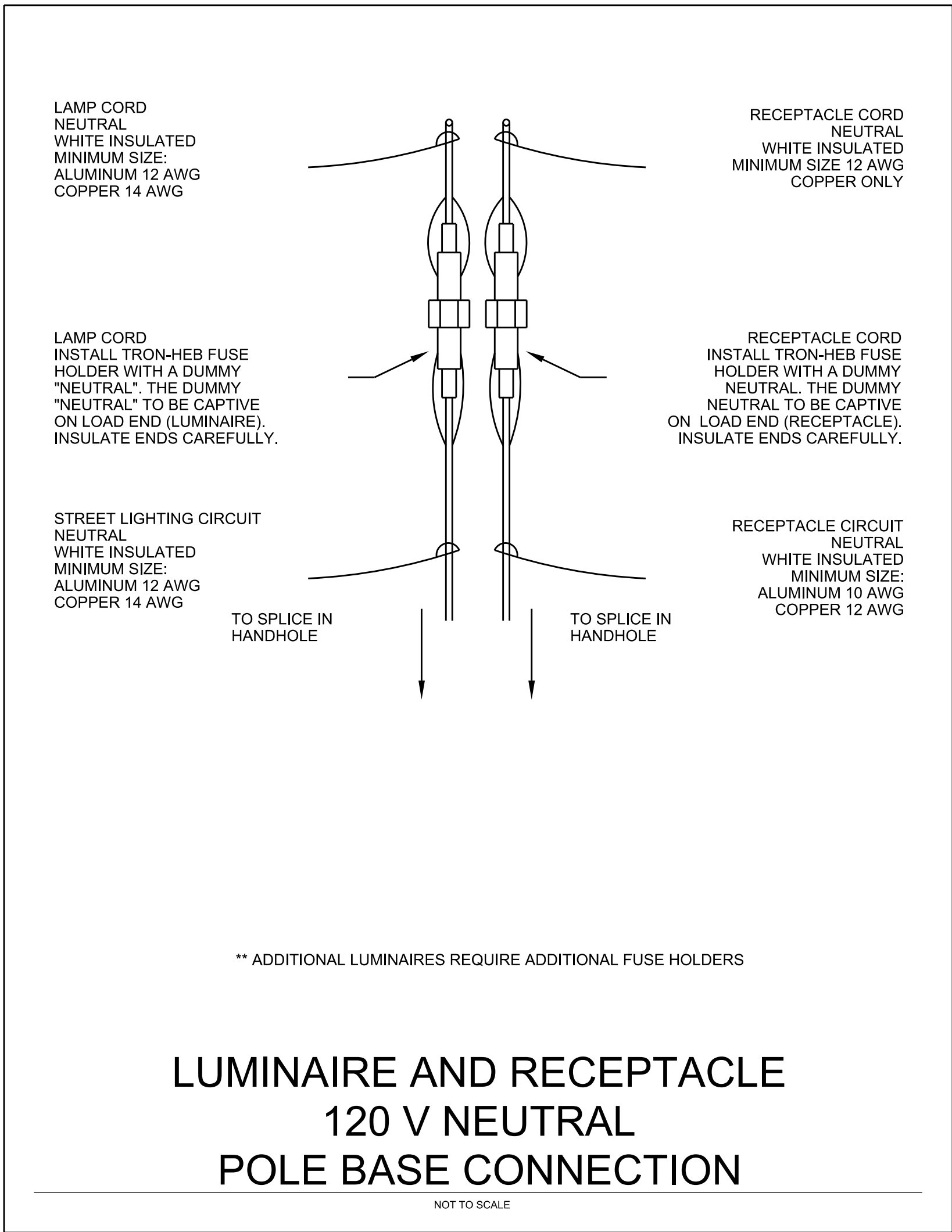
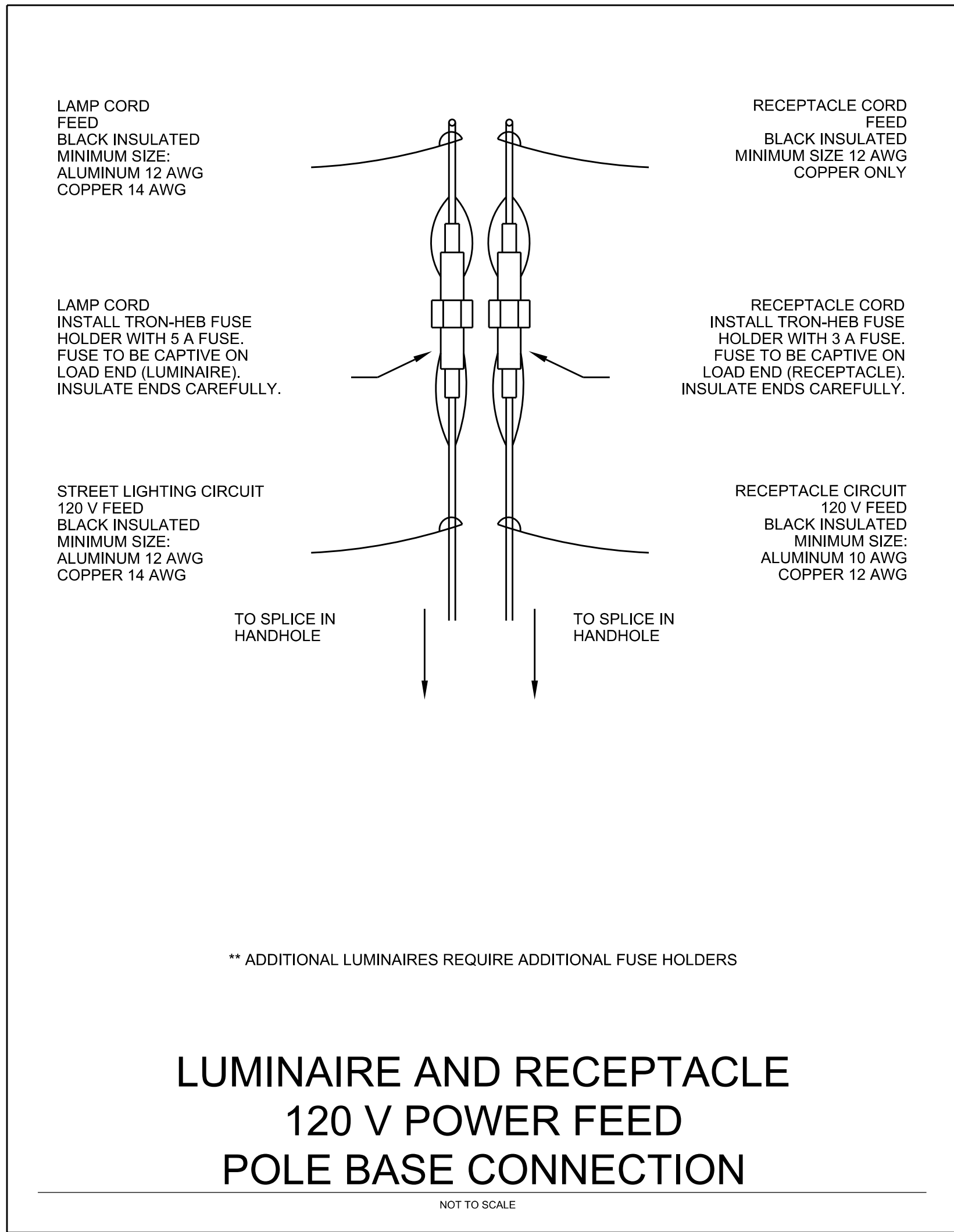
Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Crimp

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B
	#4	1	•	•	-RLA-C

Aluminum Setscrew

Copper Crimp	#12 to #8	1	•	•	-RLA
	#8	1	•	•	-RLA-B



IDENTIFICATION TAG TEXT LEGEND

LIGHTING CONTROLLER (LC) NAMING CONVENTION ID TAG LEGEND

THE FORMAT FOR LIGHTING CONTROLLER ID TAGS SHALL FOLLOW THE FOLLOWING PATTERN:

LCVVWXX

THE SECTIONS SEPARATED FOR CLARITY ARE LC-VV-W-XX. THE LC STAND FOR LIGHTING CONTROLLER. THE V, W AND X ARE AS FOLLOWS:

VV LAST TWO DIGITS OF THE ZIP CODE WHERE THE LIGHTING CONTROLLER IS LOCATED

W ID ASSIGNED TO THE FIRM DESIGNING THE CIRCUIT. EXAMPLES INCLUDE:

 M METRO ENGINEERING SOLUTIONS
 T TETRA TECH
 W C.E.A. AND WADE TRIM JOINT VENTURE

XX ID ASSIGNED TO THE LIGHTING CONTROLLER (LC)

THE TAG SHALL HAVE THE LETTERS MOUNTED HORIZONTALLY WITH THE HOLDER MOUNTED VERTICALLY.

AN EXAMPLE LIGHTING CONTROLLER ID TAG IS:

LC16W30 AN LC INSTALLED IN THE 48230 ZIP THAT WAS LAID OUT BY THE C.E.A AND WADE TRIM JOINT VENTURE AND HAS BEEN ASSIGNED AN ID OF 30 IN THAT ZIP CODE.

LUMINAIRE NAMING CONVENTION ID TAG LEGEND

THE FORMAT FOR LUMINAIRE ID TAGS SHALL FOLLOW THE FOLLOWING PATTERN:

WXXXYYYZZZ

THE SECTIONS SEPARATED FOR CLARITY ARE W-XXX-YYY-ZZZ. THE W, X, Y AND Z ARE AS FOLLOWS:

W THE LUMINAIRE TYPE. SOME LUMINAIRE TYPES ARE:

 L LIGHT EMITTING DIODE (LED) FIXTURE
 S SODIUM VAPOR FIXTURE

XXX THE LUMINAIRE WATTAGE. SOME EXAMPLES ARE:

 118 118W LUMINAIRE
 152 152W LUMINAIRE

 THESE WATTAGES ARE REGARDLESS OF THE LUMINAIRE TYPE.

YYY THE ALPHA PORTION OF THE PLA ASSIGNED LUMINAIRE ID.

ZZZ THE NUMERIC PORTION OF THE PLA ASSIGNED LUMINAIRE ID.

THE TAG SHALL HAVE THE LETTERS MOUNTED HORIZONTALLY WITH THE HOLDER MOUNTED VERTICALLY.

AN EXAMPLE LUMINAIRE ID TAG IS:

L118AFK941 A 118W LED LUMINAIRE WITH THE PLA ID OF AFK941.

CABLE NAMING CONVENTION ID TAG LEGEND

THE FORMAT FOR CABLE TAGS SHALL FOLLOW THE FOLLOWING PATTERN:

UUUVVWXXYZ

THE SECTIONS SEPARATED FOR CLARITY ARE UUU-VV-W-XX-Y-Z. THE VV-W-XX COMES FROM THE ASSIGNED LIGHTING CONTROLLER ID. THE VARIOUS VALUES STAND FOR:

UUU PLA FOR STREET LIGHTING CIRCUITS
 REC FOR RECEPTACLE CIRCUITS

VVWXX THE ASSIGNED LC ID. SEE THE LC NAMING CONVENTION

Y THE CIRCUIT BRANCH ID (1, 2, 3, 4, ETC.)

Z THE CONDUCTOR CLASSIFICATION

 CLASSIFICATIONS ARE:
 A A PHASE CONDUCTOR
 B B PHASE CONDUCTOR
 N NEUTRAL CONDUCTOR
 G EQUIPMENT GROUND CONDUCTOR (EGC)

THE TAG SHALL HAVE THE LETTERS MOUNTED AND THE HOLDER MOUNTED HORIZONTALLY.

NOTE: CABLE TAG LABELS ARE GENERATED FOR THE CABLE(S) BEING TAGGED DEPENDING ON WHAT IS INCLUDED UNDER THE TAG. FOR INSTANCE, AN ENTIRE BRANCH CIRCUIT 4 CABLE BUNDLE INCLUDING 2 POWER LEGS, 1 NEUTRAL AND 1 EGC COULD BE TAGGED WITH A SINGLE UUU-VV-W-XXY TAG AS LONG AS THE CABLES ARE ALL PHYSICALLY TIED TOGETHER. WHEN AN ENTIRE BRANCH CIRCUIT IS BUNDLED AND TAGGED TOGETHER WITH A CIRCUIT IDENTIFIER OF UUU-VV-W-XX-Y THEN THE INDIVIDUAL CABLES IN THAT BUNDLE CAN BE TAGGED WITH JUST AN “A”, “B”, “N”OR “G”.

NOTE:AN EQUIPMENT GROUND CONDUCTOR (EGC) CAN BE SHARED BETWEEN BRANCH CIRCUITS OR EVEN LIGHTING CONTROLLER CIRCUITS IF ALL THE CABLES SHARE THE SAME CONDUIT WHICH CREATES A UNIQUE TAGGING CONVENTION. THE EGC, IF TAGGED SEPARATELY, IS TAGGED TO INDICATE WHAT LEVEL OF SHARING IS USING THE EGC. THE LEVELS OF EGC TAGGING ARE:

UUUVVWXXY AN EGC FOR A BRANCH CIRCUIT OR INDIVIDUAL PHASE BUNDLE
UUUVVWXXG AN EGC SHARED BETWEEN MULTIPLE BRANCH CIRCUITS
EGC AN EGC SHARED BETWEEN DIFFERENT TYPES OF CIRCUITS OR LCS

NOTE:THERE EXISTS DECORATIVE LIGHTING WITHIN THE DETROIT LIGHTING AREA UTILIZING STRAND LIGHTING. THOSE CIRCUITS ARE BUNDLED TOGETHER AND GET A UNIQUE TAG OF “STRAND”.

EXAMPLE CABLES TAGS ARE:

PLA26W5A1A PLA STREET LIGHTING BRANCH CIRCUIT BUNDLE
PLA26W5A1AA PLA STREET LIGHTING BRANCH CIRCUIT LAMP LOOP
REC26W5A1A RECEPTACLE BRANCH CIRCUIT BUNDLE
STRAND STRAND LIGHTING FEED CABLE BUNDLE

MATERIALS

CABLE CIRCUIT IDENTIFICATION TAGS

THE IDENTIFICATION TAGS FOR CABLE CIRCUITS SHALL USE TECH PRODUCTS, INC. FASTTAGS MINIATURE MARKERS. THE TAGS SHALL HAVE BLACK RAISED LETTERING ON A YELLOW BACKGROUND. THE LETTERING SHALL BE ORIENTATED HORIZONTALLY AND IN A SINGLE LINE.

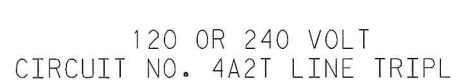
LIGHTING CONTROLLER IDENTIFICATION TAGS

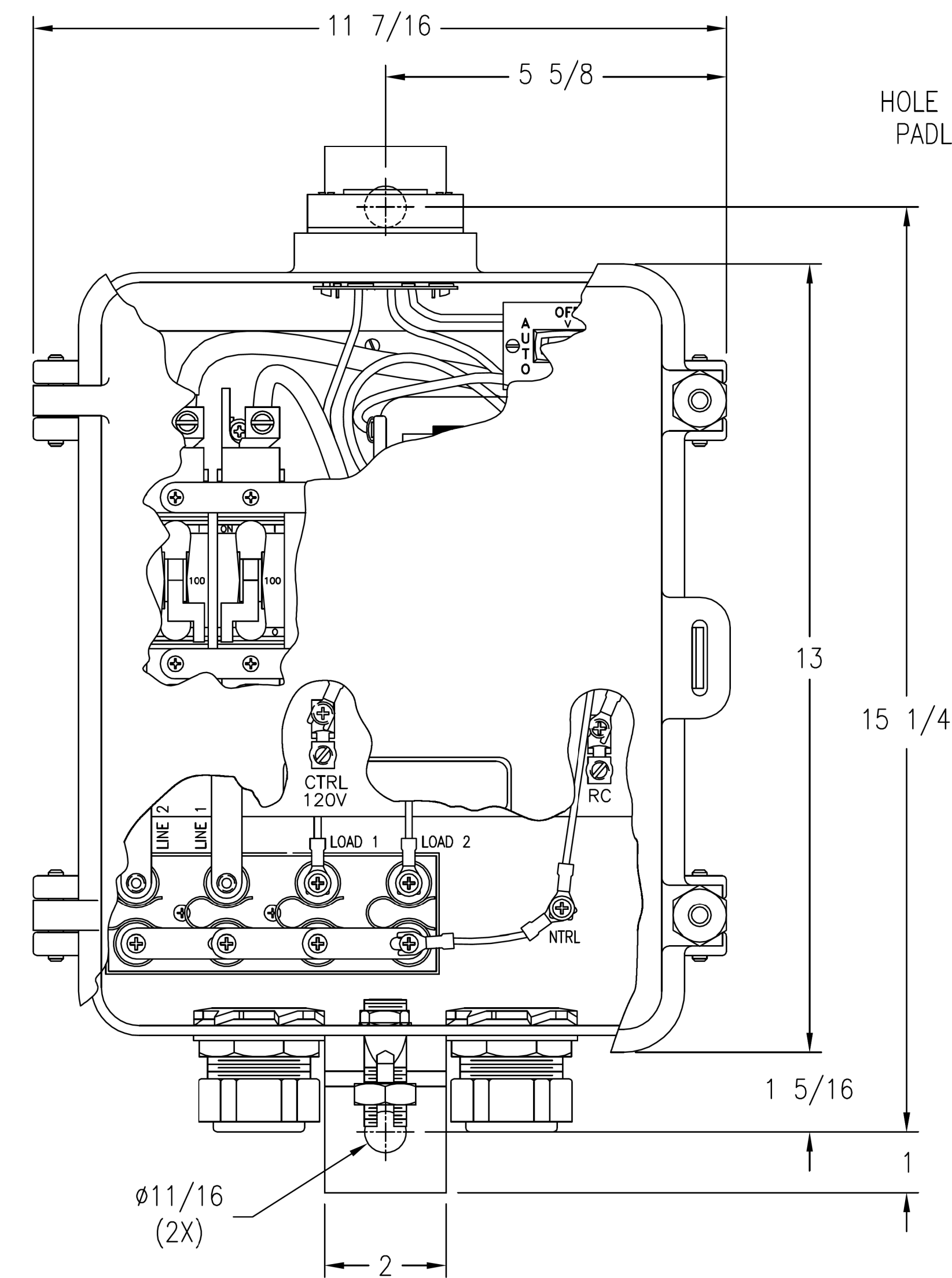
THE IDENTIFICATION TAGS FOR LIGHTING CONTROLLERS SHALL USE TECH PRODUCTS, INC. EVERLAST 1” VERTICALLY MOUNTED NUMBERS AND LETTERS WITH SOLID BLACK POLYPROPYLENE CHARACTERS EMBEDDED IN A BRIGHT YELLOW POLYPROPYLENE BACKGROUND. THE LETTERS SHALL BE STACKED VERTICALLY WITH THE HOLDER MOUNTED VERTICALLY ON THE POLE. EACH CHARACTER SHALL BE 0.70”TALL WHEN MOUNTED. THE TAG SHALL BE MOUNTED ON THE POLE’S STREETSIDE.

LUMINAIRE IDENTIFICATION TAGS

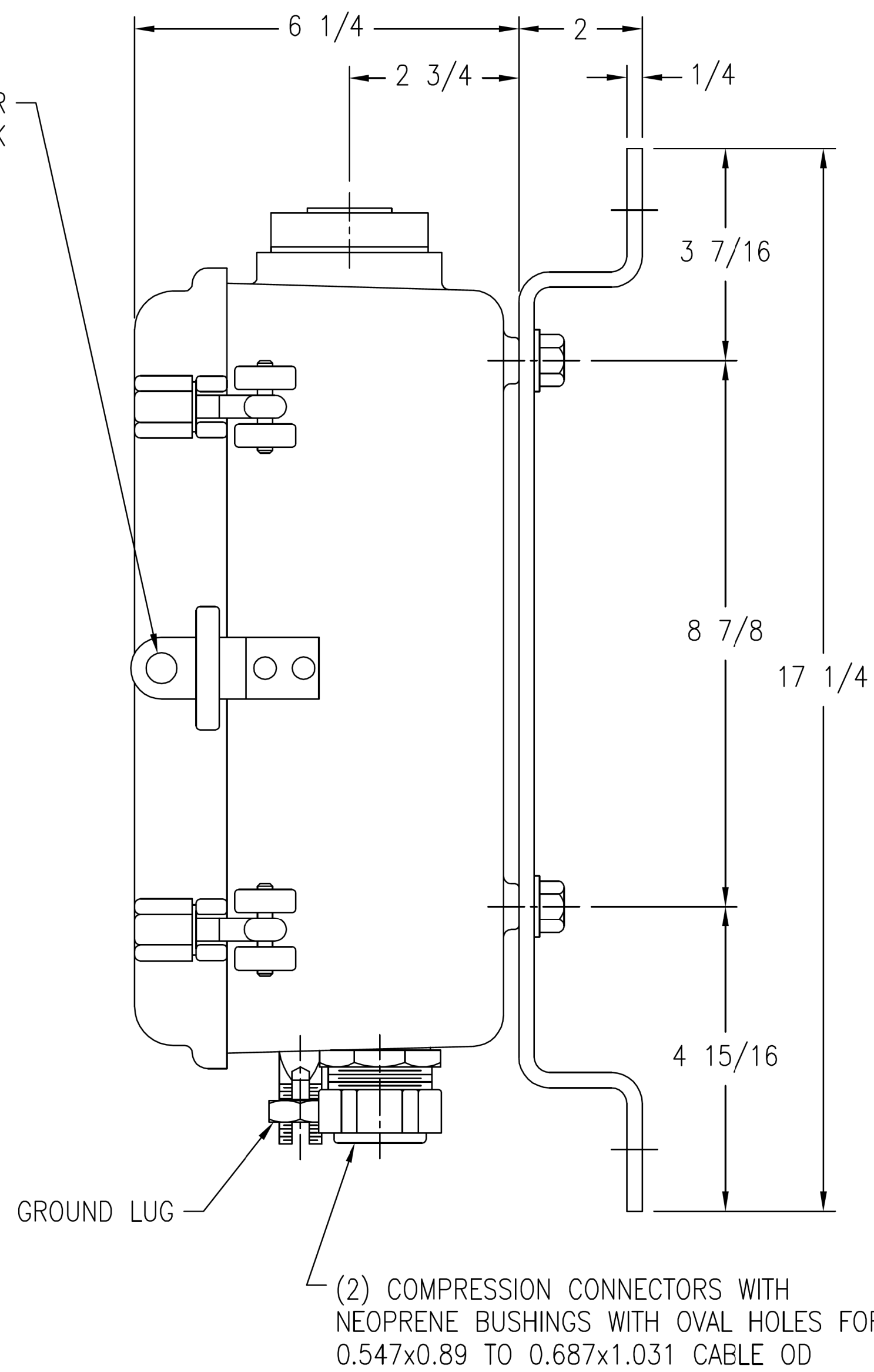
THE IDENTIFICATION TAGS FOR LUMINAIRES SHALL USE TECH PRODUCTS, INC. EVERLAST 1”VERTICALLY MOUNTED NUMBERS AND LETTERS WITH SOLID BLACK POLYPROPYLENE CHARACTERS EMBEDDED IN A BRIGHT YELLOW POLYPROPYLENE BACKGROUND. THE LETTERS SHALL BE STACKED VERTICALLY WITH THE HOLDER MOUNTED VERTICALLY ON THE POLE. EACH CHARACTER SHALL BE 0.70”TALL WHEN MOUNTED. A TAG IS MOUNTED ON THE POLE FOR EACH INDIVIDUAL LUMINAIRE ON THE POLE. THE TAG(S) SHALL BE MOUNTED ON THE POLE’S STREETSIDE.



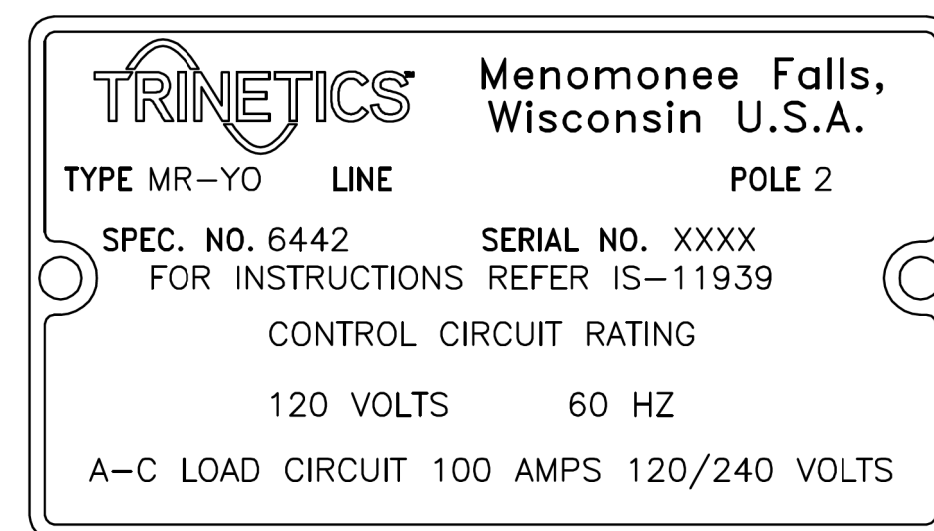




CONTROL TERMINALS WILL ACCEPT #6 THRU #14 AWG WIRE
LINE/LOAD TERMINALS WILL ACCEPT #4 THRU #1/0 AWG WIRE

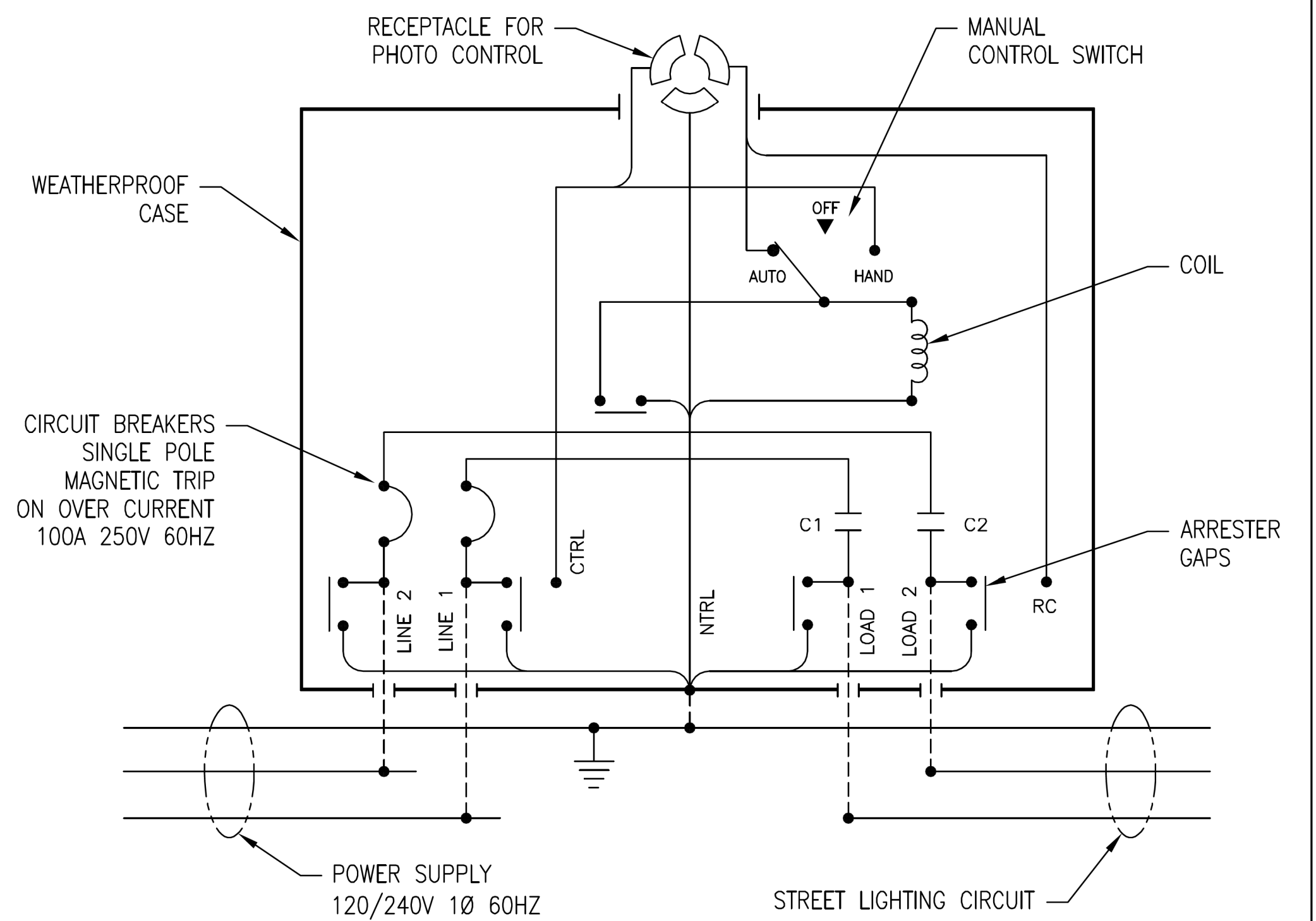


CAST ALUMINUM WEATHERPROOF CASE WITH BRACKET



NAMEPLATE DETAIL

CONNECTIONS FOR TYPE MR-YO SPEC 6442 STREET LIGHT CONTROL ASS'Y WITH SINGLE POLE MAGNETIC TRIP ON OVERLOAD CIRCUIT BREAKERS.



TWO POLE STREET LIGHT CONTROL ASS'Y WIRED FOR OPERATION WITH 120V PHOTO CONTROL UNIT AND RATED FOR SWITCHING A STREET LIGHTING LOAD WITH NORMAL CURRENT WHICH DOES NOT EXCEED THE LOAD CURRENT RATING SHOWN ON THE NAMEPLATE. IF SUPPLY IS 240/480V, A SEPARATE 120V SOURCE MUST BE CONNECTED TO "CTRL" TERMINAL FOR PC OPERATION.

THE LOCATION OF THE PHOTO CONTROL UNIT MAY BE EITHER AT THE CONTROL ASS'Y AND PLUGGED INTO THE RECEPTACLE PROVIDED FOR SAME, OR AT A REMOTE POINT SUCH AS AN AUXILIARY PHOTO CONTROL MOUNTING ADAPTER OR ANOTHER STREET LIGHT CONTROL ASS'Y.

WHEN PHOTO CONTROL IS TO BE REMOTE, CLOSE THE SELF CONTAINED RECEPTACLE FOR PHOTO CONTROL WITH AN OPEN CIRCUITED CAP. ESTABLISH THE OPERATING CIRCUIT BY WIRING FROM THE "RC" TERMINAL TO THE LOAD LEAD OF THE REMOTELY LOCATED AUXILIARY PHOTO CONTROL MOUNTING ADAPTER, OR TO THE "RC" TERMINAL OF ANOTHER STREET LIGHT CONTROL ASS'Y. INTERCONNECTION OF "RC" TERMINALS OF TWO OR MORE STREET LIGHT CONTROL ASSEMBLIES PROVIDES GANG OPERATION WITH A SINGLE PC UNIT.

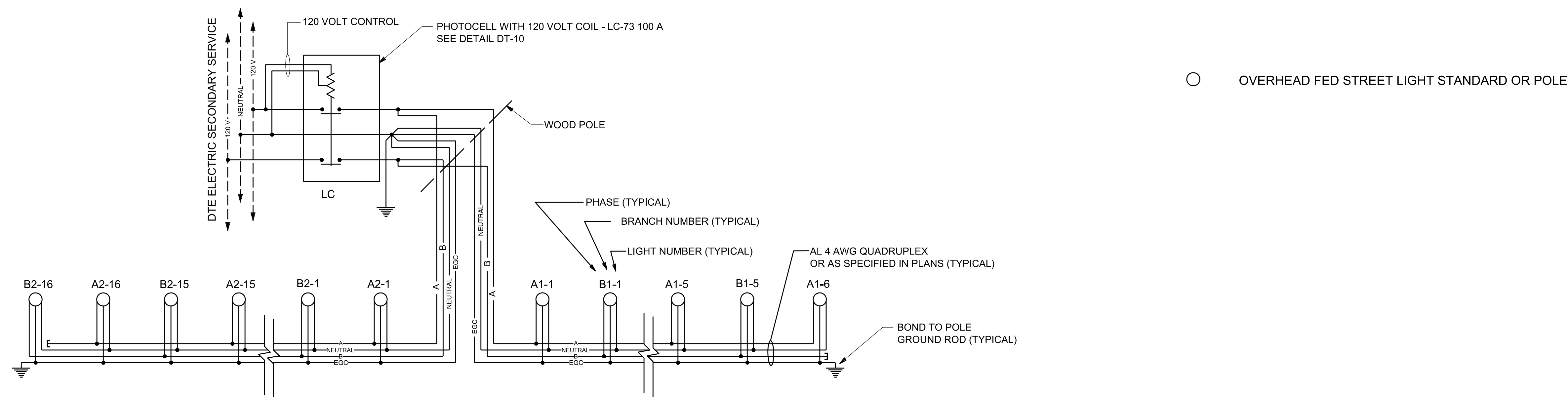
MANUAL CONTROL SWITCH IS SHOWN IN "AUTO" POSITION AND PHOTO CONTROL ESTABLISHES ON-OFF STREET LIGHT OPERATING SCHEDULE. MANUAL CONTROL SWITCH IN HAND OR OFF POSITIONS BY-PASSES PHOTO CONTROL TO PROVIDE, RESPECTIVELY, STREET LIGHT CIRCUIT ON OR OFF OPERATION. REMOTE PC LOCATION OR GANG OPERATION CONNECTIONS ARE NOT AFFECTED BY OPERATION OF INDIVIDUAL MANUAL CONTROL SWITCHES. HOWEVER, 120V MUST BE AVAILABLE AT EACH STREET LIGHT CONTROL ASSEMBLY TO PERMIT HAND-ON CIRCUIT OPERATION WITH RESPECTIVE MANUAL CONTROL SWITCH.

THE RELAY MUST BE ENERGIZED CONTINUOUSLY AT 120V DURING THE TIME OF RELAY CONTACT CLOSURE.

THIS DRAWING AND ALL INFORMATION THEREON IS THE SOLE PROPERTY OF TRINETICS. IT MUST NOT BE COPIED, REPRODUCED OR SUBMITTED TO OTHERS WITHOUT WRITTEN AUTHORIZATION. ALL REPRODUCTIONS ARE SUBJECT TO RETURN ON DEMAND.

TRINETICS		RELAY ASSEMBLY MR-YO SPEC 6442		
THIRD ANGLE PROJECTION	SIZE B	DRAWN BY G Pietschmann	DATE 7/14/11	PART NUMBER
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED	FAMILY ID C1643	APPROX. WEIGHT 24 LB	SCALE 5/16	31183000





CURRENT LIGHTING CONTROL DIAGRAM
QUADRUPLX WITH EQUIPMENT GROUND CONDUCTOR (EGC)

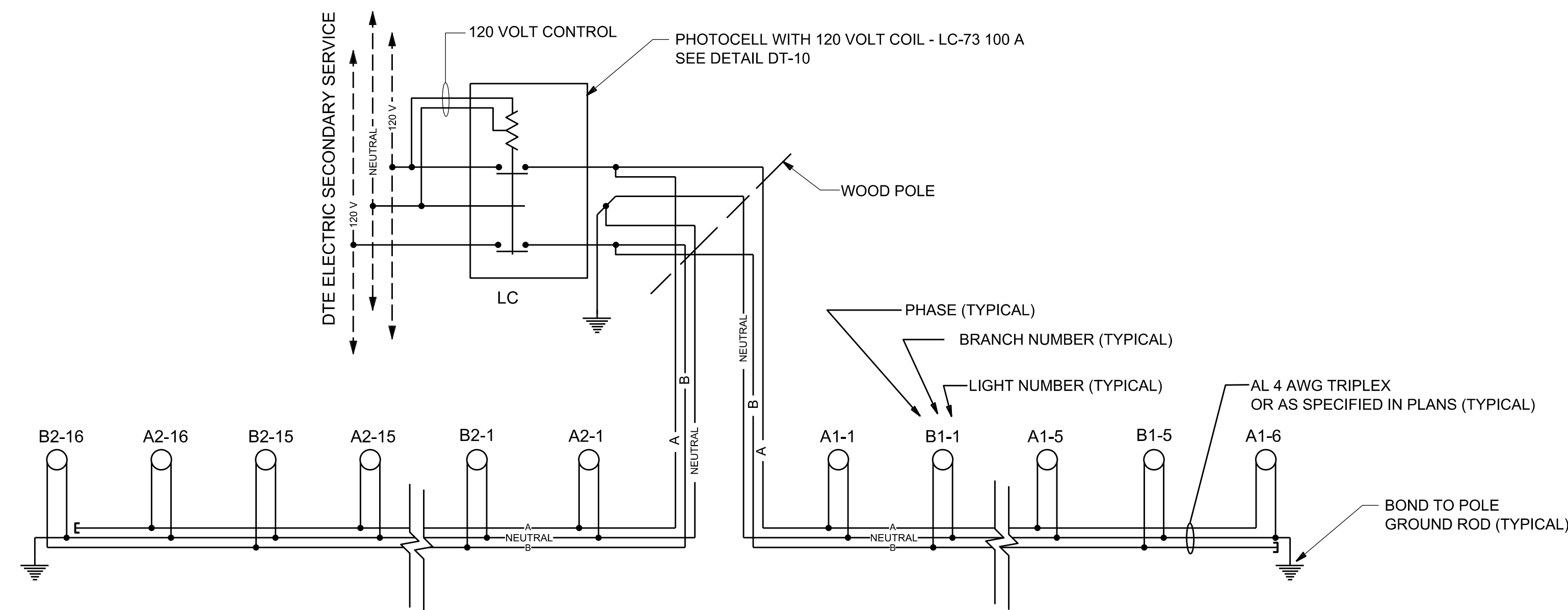
NOT TO SCALE

OVERHEAD PHASE IDENTIFICATION				
CURRENT OVERHEAD CONSTRUCTION WIRING STANDARD				
CABLE TYPE	NO RIB	1 RIB	2 RIBS	MESSENGER
QUADRUPLX	A PHASE	NEUTRAL	B PHASE	EGC
TRIPLEX	A PHASE	NEUTRAL	----	EGC
DUPLEX	----	----	----	----
OBSOLETE OVERHEAD CONSTRUCTION WIRING STANDARD				
CABLE TYPE	NO RIB	1 RIB	2 RIBS	MESSENGER
QUADRUPLX	----	----	----	----
TRIPLEX	A PHASE	B PHASE	----	NEUTRAL
DUPLEX	A PHASE	----	----	NEUTRAL

*** WHEN MODIFICATIONS OR ADDITIONS ARE REQUIRED ON OBSOLETE STYLE CONSTRUCTION CIRCUITS, THE CHANGES SHOULD BE MADE WITH THE OBSOLETE STYLE OR THE ENTIRE CIRCUIT MUST BE UPDATED.

*** THE CURRENT OVERHEAD CONSTRUCTION AND THE OBSOLETE OVERHEAD CONSTRUCTION STANDARDS SHALL NOT BE INTERMINGLED EXCEPT AT THE CIRCUIT SOURCE POINT WHERE THE NEUTRAL IS BONDED TO THE GROUND AT THE MAIN BREAKER.

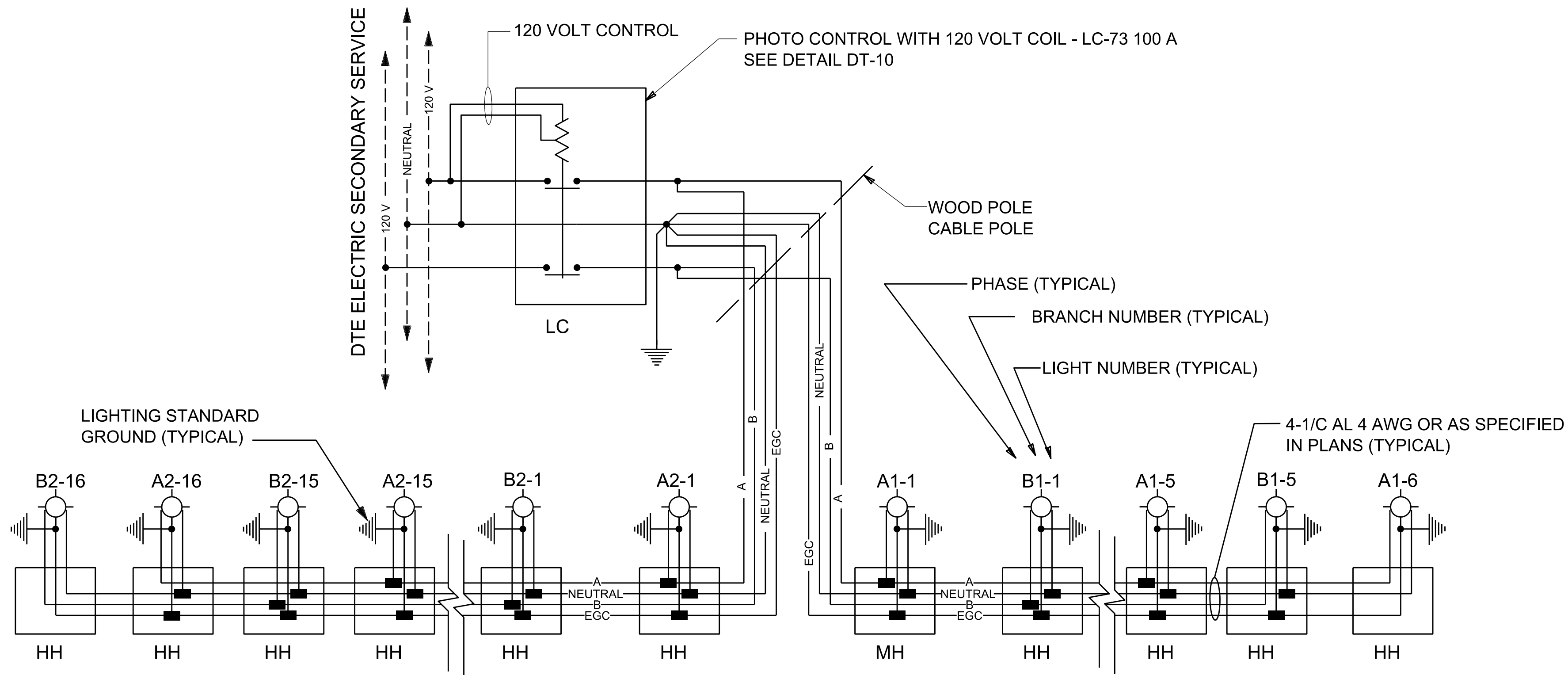
*** THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CIRCUIT PHASE IDENTIFICATIONS PRIOR TO CONNECTING ANY NEW CIRCUIT CABLING TO EXISTING CIRCUIT CABLING. IF THE EXISTING CIRCUIT CABLING IS FOUND TO HAVE IMPROPER PHASE IDENTIFICATIONS THEN THE EXISTING CIRCUIT CABLING MUST BE CORRECTED PRIOR TO CONNECTING ANY NEW CABLING.



OBSOLETE LIGHTING CONTROL DIAGRAM
TRIPLEX WITH NEUTRAL BONDED TO GROUND

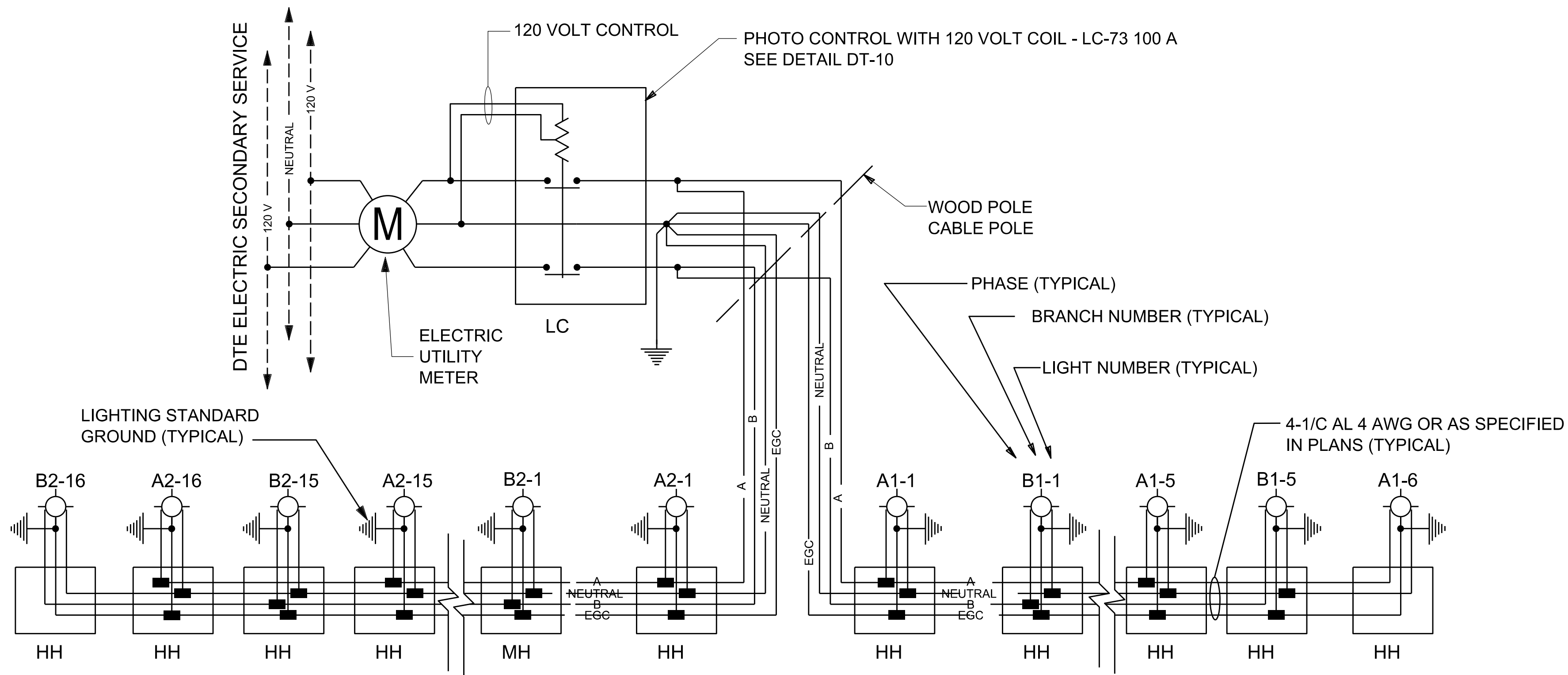
NOT TO SCALE





UNDERGROUND STREET LIGHTING CIRCUIT TYPICAL WIRING SCHEMATIC
THREE CONDUCTOR AND EQUIPMENT GROUND CONDUCTOR (EGC)

NOT TO SCALE



RECEPTACLE CIRCUIT TYPICAL WIRING SCHEMATIC
THREE CONDUCTOR AND EQUIPMENT GROUND CONDUCTOR (EGC)

NOT TO SCALE

CABLE ROUTING IN HANDHOLES AND MANHOLES:

STREET LIGHTING AND RECEPTACLE CABLES IN HANDHOLES AND MANHOLES SHALL BE PULLED STRAIGHT THROUGH THE STRUCTURE UNLESS THERE IS A TAP REQUIRED TO SERVICE A STREET LIGHT, RECEPTACLE OR CIRCUIT BRANCH LOCATION.

LOCATIONS REQUIRING A SERVICE TAP WILL HAVE THE SERVICE PHASE TAPPED WITH THE APPROPRIATE HOMAC RAB CONNECTOR AND THE NON-SERVICE PHASE PULLED STRAIGHT THROUGH.

LOCATIONS REQUIRING CIRCUIT TAPS FOR CIRCUIT BRANCHES WILL BE IDENTIFIED ON THE PLANS WITH THE REQUIRED TAP SIZE AND PHASE PROVIDED.

EXAMPLE 1 - LAMP LOOP:

AN EXAMPLE IS A HANDHOLE LOCATION WITH BOTH THE A PHASE AND THE B PHASE COMING IN AND CONTINUING ALONG TO FEED ADDITIONAL STREET LIGHT LOCATIONS. THE HANDHOLE ALSO FEEDS A STREET LIGHTING STANDARD THAT HAS 2 LUMINAIRES THAT ARE TO BE CONNECTED TO THE B PHASE CABLE AND NO RECEPTACLE. THE B PHASE CABLE WILL HAVE A 4-WAY HOMAC RAB CONNECTOR INSTALLED. THE NEUTRAL WILL HAVE A 4-WAY HOMAC RAB CONNECTOR INSTALLED. THE EGC WILL HAVE A 3-WAY HOMAC RAB CONNECTOR INSTALLED. THE A PHASE CABLE WILL BE PULLED STRAIGHT THROUGH.

EXAMPLE 2 - CIRCUIT BRANCH:

AN EXAMPLE IS A HANDHOLE LOCATION WITH BOTH THE A PHASE AND THE B PHASE COMING IN AND FEEDING TWO DIFFERENT DIRECTIONS GOING OUT WITHOUT A STREET LIGHT LOCATION DIRECTLY CONNECTED TO THE HANDHOLE. THIS EXAMPLE REQUIRES CABLE 3-WAYS (ALSO CALLED A T-TAP OR BRANCH) TO BE INSTALLED TO FEED THE TWO DIFFERENT DIRECTIONS. A 3-WAY HOMAC RAB WILL BE INSTALLED ONTO EACH OF THE A PHASE, B PHASE, NEUTRAL AND EGC CABLES.

UNDERGROUND FED STREET LIGHT STANDARD

HOMAC RAB 1/0-xx MECHANICAL CONNECTOR INSTALLED IN HANDHOLE
xx = IS THE OUTLET CONFIGURATION RAB 1/0-21 IS SHOWN
LIGHTING CIRCUIT: SIZE AS NECESSARY FOR LUMINAIRES
RECEPTACLE CIRCUIT: RAB 1/0-21

HANDHOLE (HH) OR MANHOLE (MH)

UNDERGROUND PHASE IDENTIFICATION

CURRENT UNDERGROUND CONSTRUCTION WIRING STANDARD				
CONDUCTOR ID	BLACK	WHITE/WHITE STRIPE	RED/RED STRIPE	GREEN/BARE
PHASE	A PHASE	NEUTRAL	B PHASE	EGC
OBSOLETE UNDERGROUND CONSTRUCTION WIRING STANDARD				
CONDUCTOR ID	BLACK	WHITE/WHITE STRIPE	RED/RED STRIPE	GREEN/BARE
PHASE	A PHASE	NEUTRAL	B PHASE	----

*** WHEN MODIFICATIONS OR ADDITIONS ARE REQUIRED ON OBSOLETE STYLE CONSTRUCTION CIRCUITS, THE CHANGES SHOULD BE MADE WITH THE OBSOLETE STYLE OR THE ENTIRE CIRCUIT MUST BE UPDATED.

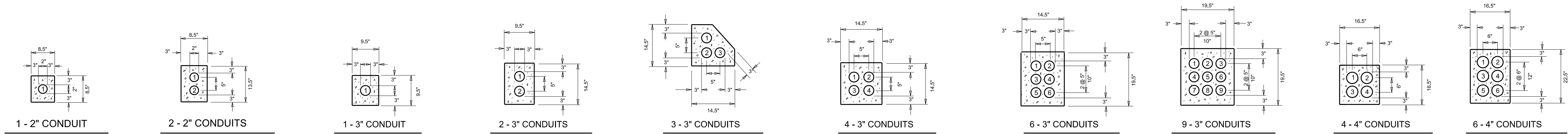
*** THE CURRENT UNDERGROUND CONSTRUCTION AND THE OBSOLETE UNDERGROUND CONSTRUCTION STANDARDS SHALL NOT BE INTERMINGLED EXCEPT AT THE CIRCUIT SOURCE POINT WHERE THE NEUTRAL IS BONDED TO THE GROUND AT THE MAIN BREAKER.

*** THERE ARE INSTALLATIONS WHERE NEITHER COLOR-CODED, EITHER COLORED INSULATION OR PHASE MARKED, CONDUCTORS ARE USED SO THAT ALL THE CONDUCTORS ARE THE SAME COLOR, TYPICALLY BLACK. PHASING MUST BE FIELD VERIFIED PRIOR TO CONNECTING ANY COLOR-CODED CONDUCTORS TO NON-CODED CONDUCTORS.

*** PRIOR TO CONNECTING ANY NEW CIRCUIT CABLING TO EXISTING CIRCUIT CABLING, CARE IS TO BE TAKEN BY VERIFYING THE EXISTING CIRCUIT CABLING PHASING TO ENSURE THAT PROPER ELECTRICAL CONNECTIONS ARE MADE. IF THE EXISTING CIRCUIT CABLING IS FOUND TO HAVE IMPROPER PHASE IDENTIFICATIONS THEN THE EXISTING CIRCUIT CABLING MUST BE CORRECTED PRIOR TO CONNECTING ANY NEW CABLING.

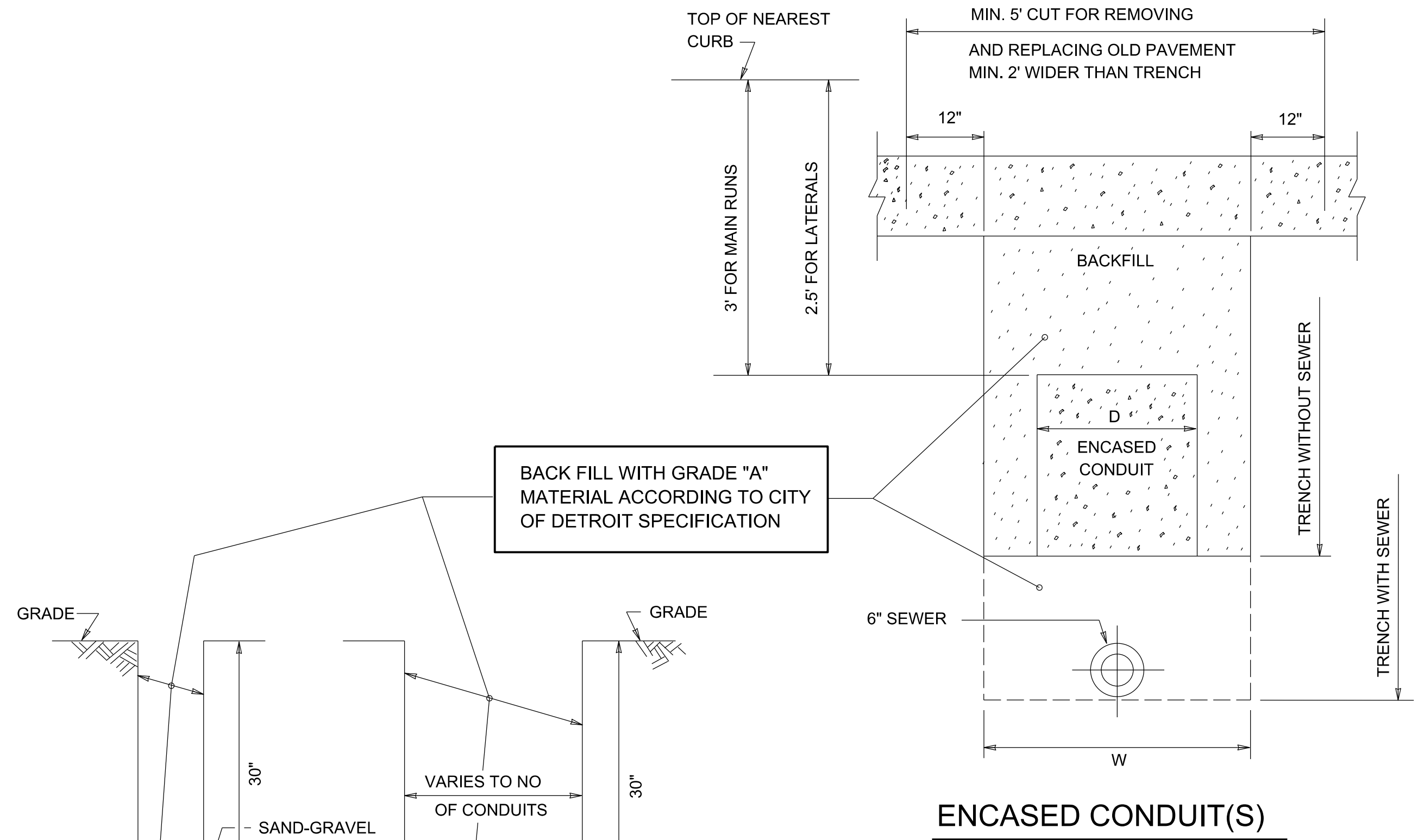
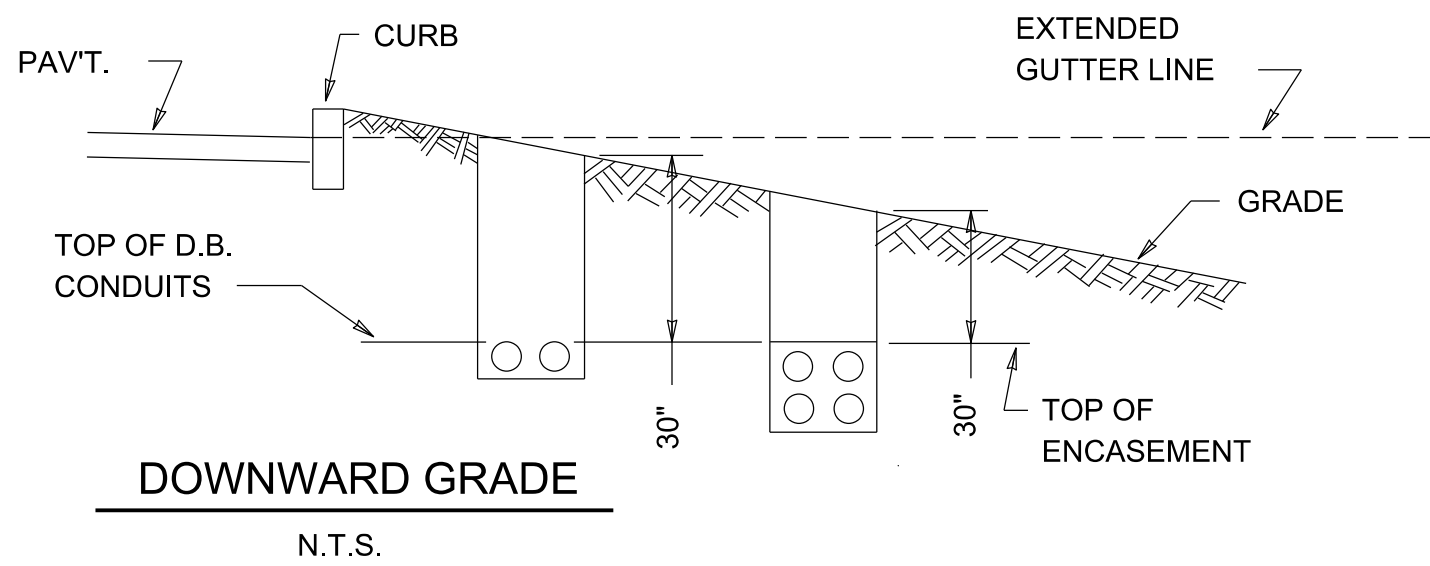
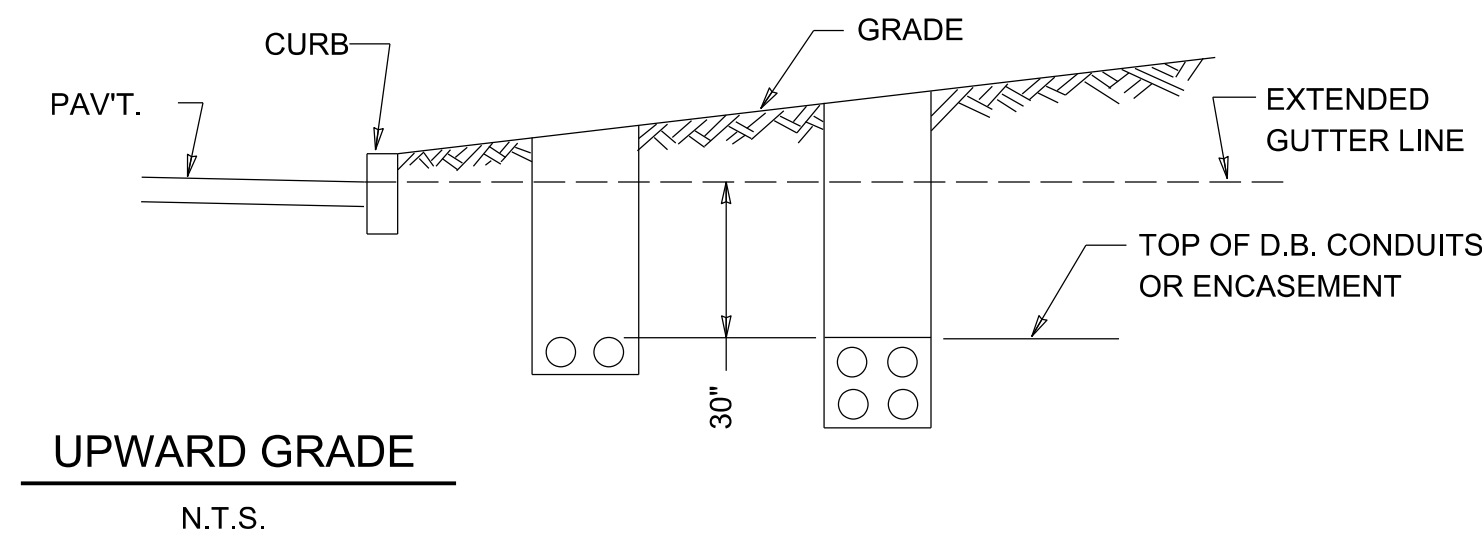
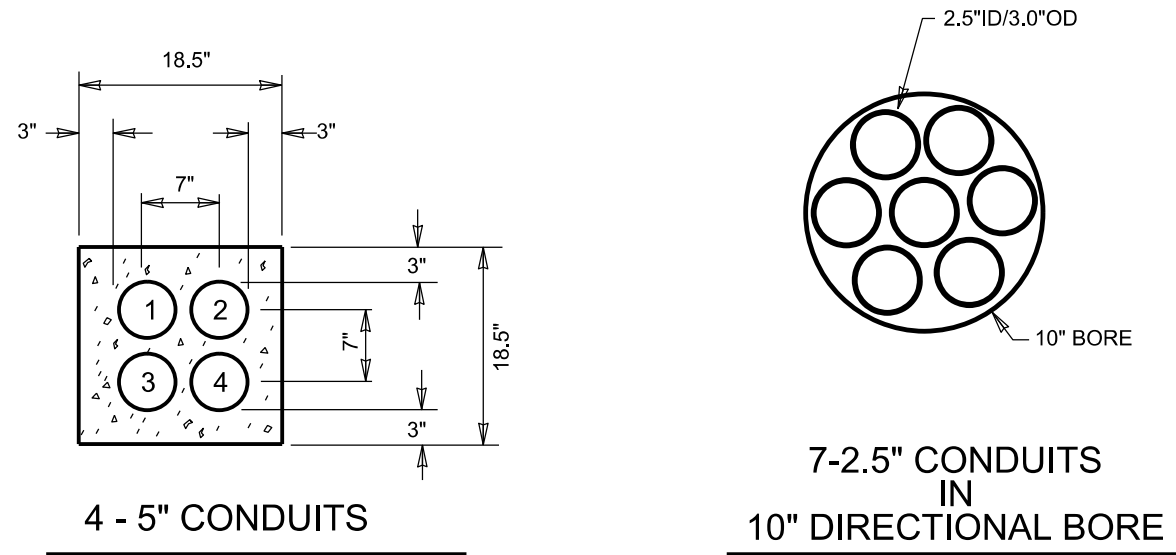
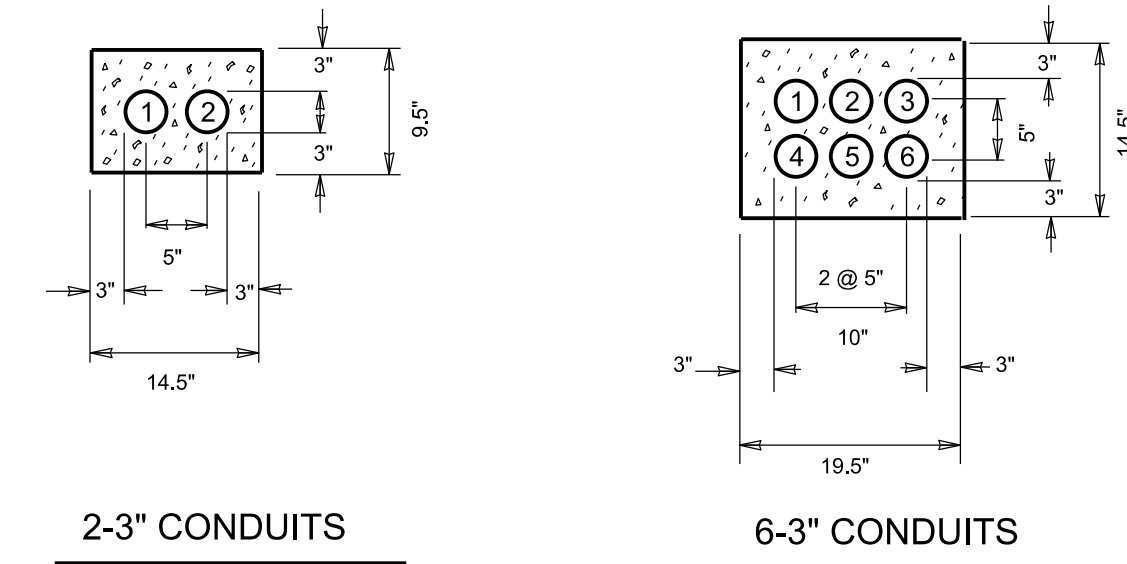
*** THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING EXISTING CIRCUIT PHASE IDENTIFICATIONS PRIOR TO CONNECTING ANY NEW CIRCUIT CABLING TO EXISTING CIRCUIT CABLING. IF THE EXISTING CIRCUIT CABLING IS FOUND TO HAVE IMPROPER PHASE IDENTIFICATIONS THEN THE EXISTING CIRCUIT CABLING MUST BE CORRECTED PRIOR TO CONNECTING ANY NEW CABLING.





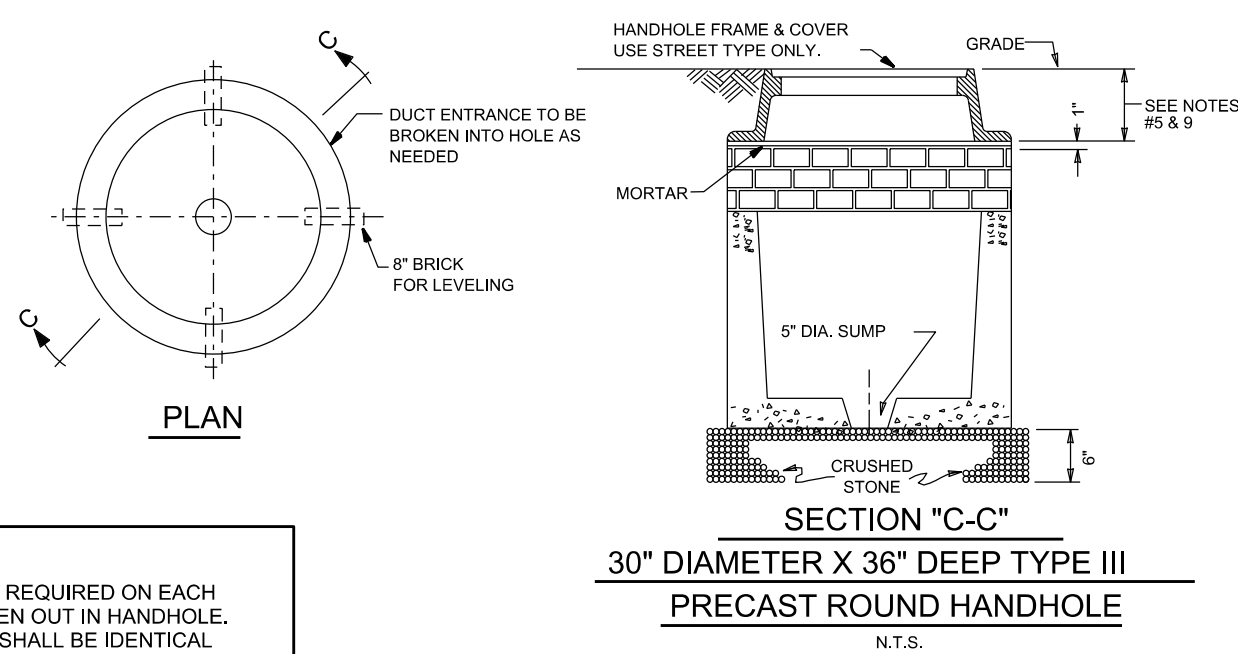
ALTERNATE ARRANGEMENT OF 3" CONDUIT

(TO SUIT FIELD CONDITIONS)
(TO BE APPROVED BY THE ENGINEER)

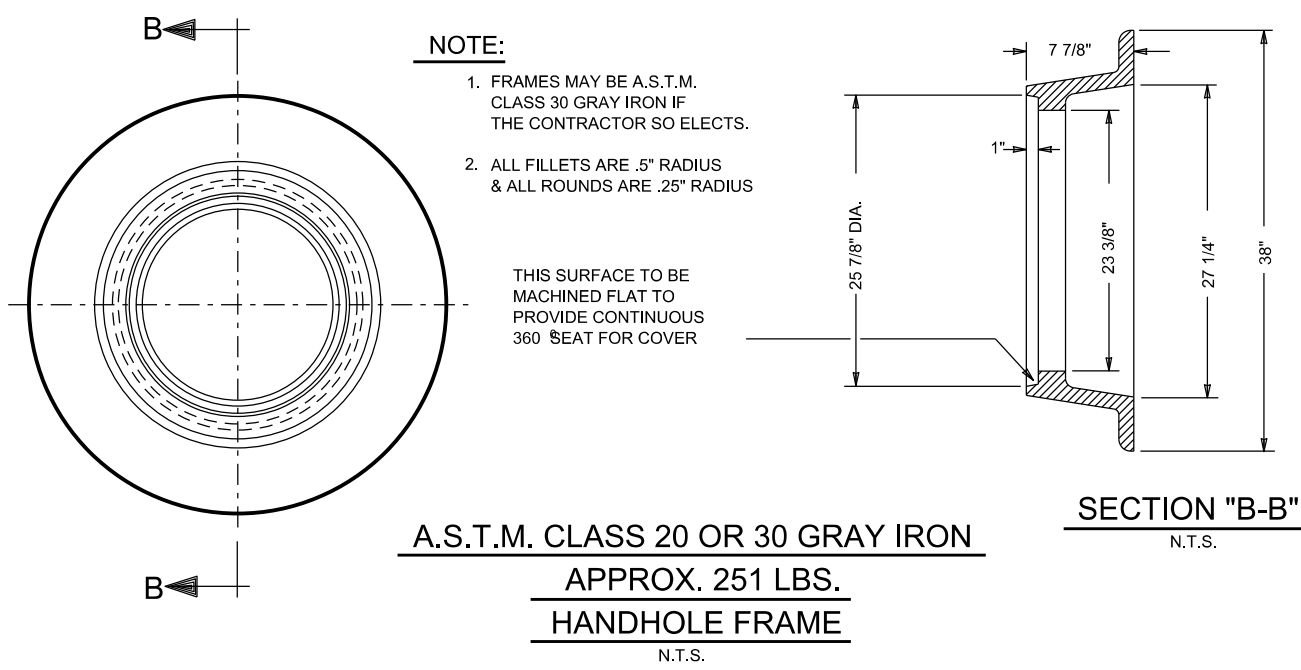


DIRECT BURIAL CONDUIT(S)

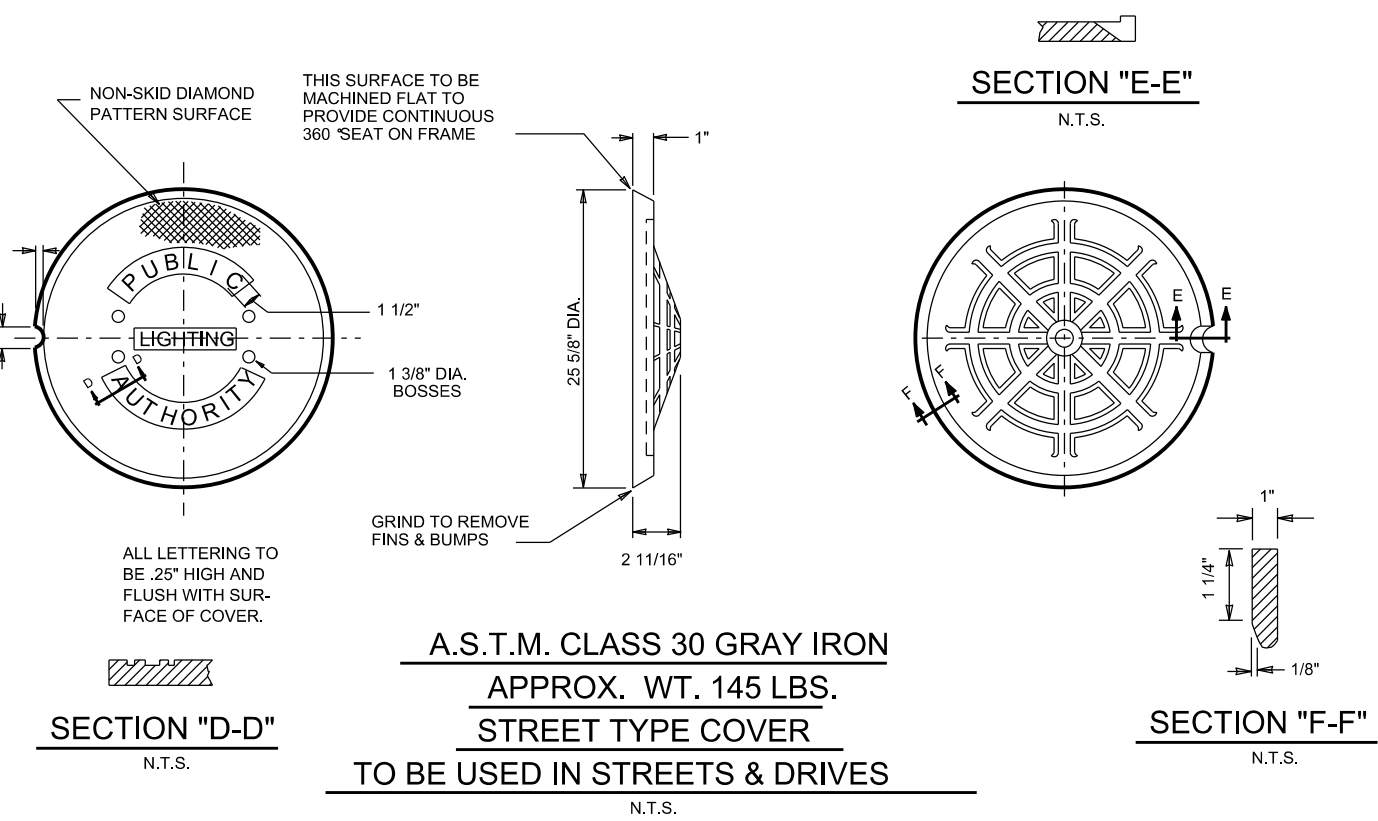
ROUND PRECAST HANDHOLE DETAILS



NOTE:
BELL ENDS ARE REQUIRED ON EACH CONDUIT BROKEN OUT IN HANDHOLE. TYPE AND SIZE SHALL BE IDENTICAL TO CONDUIT TYPE AND SIZE.



NOTE:
1. FRAMES MAY BE A.S.T.M. CLASS 30 GRAY IRON IF THE CONTRACTOR SO ELECTS.
2. ALL FILLETS ARE .5" RADIUS & ALL ROUNDS ARE .25" RADIUS



POLYMER CONCRETE HANDHOLE

13" x 24" BOX ASSEMBLY

12" to 24" DEPTHS

POLYMER CONCRETE

A6001946

ARMORCAST

ARMORCAST PRODUCTS COMPANY

Standard Marking

Bolt Down

Polymer Concrete Cover with Non-Skid Surface

Armorcast Logo

Cover Lift Pin

Polymer Concrete Box

SPECIFY DEPTH
SEE CHART
BELOW

13"W x 24"L BOX ASSEMBLIES

Specify Depth Below

DESCRIPTION	NOMINAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER	APPROX. WEIGHT	PALLET QTY.
Box & Cover Assembly	13" x 24" x 12"	10K	8	A6001946APCX12 / A6001946HDAPCX12	83 lbs.	15
Box & Cover Assembly	13" x 24" x 18"	20K	8	A6001946APCX18 / A6001946HDAPCX18	91 lbs.	10
Box & Cover Assembly	13" x 24" x 24"	20K	8	A6001946APCX24 / A6001946HDAPCX24	125 lbs.	5

COMPONENTS

DESCRIPTION

NOMINAL SIZE
W x L x D

LOAD
RATING

ANSI
TIER

PART NUMBER

APPROX.
WEIGHT

PALLET
QTY.

Replacement Covers

13" x 24"

10K / 20K

8 / 15

A6001966

33 lbs.

50

Replacement Boxes

13" x 24" x 12"

10K / 20K

8 / 15

A6001946PCX12

50 lbs.

15

13" x 24" x 18"

10K / 20K

8 / 15

A6001946PCX18

84 lbs.

10

13" x 24" x 24"

10K / 20K

8 / 15

A6001946PCX24

92 lbs.

5

• Boxes are Open Bottom and Stackable, also available with Solid Bottoms.

• For sizes not shown please contact Armorcast Products for more information.

www.armorcastprod.com

Tel: (818) 982-3600 Fax: (818) 982-7742

POLYMER CONCRETE BOXES

13" x 24" BOX ASSEMBLY

STANDARD DIMENSIONS

POLYMER CONCRETE

A6001946

ARMORCAST

ARMORCAST PRODUCTS COMPANY

A

B

A

B

FLOATING NUT (2X)

13 3/4"

23 1/4"

2"

POLYMER CONCRETE COVER

25"

23 1/2"

22 1/8"

2"

20 3/4"

23 1/4"

SECTION A-A

15 1/2"

14"

12 5/8"

2"

11 1/4"

13 3/4"

SECTION B-B

POLYMER CONCRETE BOX

Armorcast Products Company reserves the right to update or discontinue product information at any time without notice.

www.armorcastprod.com

Tel: (818) 982-3600 Fax: (818) 982-7742

POLYMER CONCRETE BOXES

POLYMER CONCRETE MANHOLE

30" x 48" BOX ASSEMBLY

12" to 48" DEPTHS

POLYMER CONCRETE

A6001430

ARMORCAST

ARMORCAST PRODUCTS COMPANY

2 PIECE COVER

STANDARD MARKING

POLYMER CONCRETE COVER WITH NON-SKID SURFACE

SUPPORT BEAM

BOLT DOWN

ARMORCAST LOGO

Cover Lift Pin

1 PIECE COVER

SPECIFY DEPTH
SEE CHART
BELOW

POLYMER CONCRETE BOX

30"W x 48"L BOX ASSEMBLIES

Specify Depth Below

DESCRIPTION	NOMINAL SIZE W x L x D	LOAD RATING	ANSI TIER	PART NUMBER	APPROX. WEIGHT	PALLET QTY.
Box & Cover Assembly	30" x 48" x 12"	10K	8	A6001430APCX12 / A6001430HDAPCX12	317 lbs.	5
Box & Cover Assembly	30" x 48" x 18"	20K	8	A6001430APCX18 / A6001430HDAPCX18	377 lbs.	2
Box & Cover Assembly	30" x 48" x 24"	20K	8	A6001430APCX24 / A6001430HDAPCX24	435 lbs.	3
Box & Cover Assembly	30" x 48" x 30"	20K	8	A6001430APCX30 / A6001430HDAPCX30	498 lbs.	3
Box & Cover Assembly	30" x 48" x 36"	20K	8	A6001430APCX36 / A6001430HDAPCX36	568 lbs.	1
Box & Cover Assembly	30" x 48" x 48"	20K	8	A6001430APCX48 / A6001430HDAPCX48	671 lbs.	1

COMPONENTS

DESCRIPTION

NOMINAL SIZE
W x L x D

LOAD
RATING

ANSI
TIER

PART NUMBER

APPROX.
WEIGHT

PALLET
QTY.

Replacement Covers

30" x 48" - 1 pc.

10K

8

A6001630

146 lbs.

10

30" x 48" - 2 pc.

10K

8

A6001470 (2 pc. Req.)

96 lbs. ea.

20

30" x 48" - 2 pc.

20K

15 / 22

A6001470T / A6001470HD (2 pc. Req.)

100 lbs. ea.

20

Replacement Boxes

30" x 48" x 12"

10K / 20K

22

A6001430PCX12

137 lbs.

8

30" x 48" x 18"

10K / 20K

22

A6001430PCX18

189 lbs.

2

30" x 48" x 24"

10K / 20K

22

A6001430PCX24

265 lbs.

3

30" x 48" x 30"

10K / 20K

22

A6001430PCX30

300 lbs.

3

30" x 48" x 36"

10K / 20K

22

A6001430PCX36

371 lbs.

1

30" x 48" x 48"

10K / 20K

22

A6001430PCX48

468 lbs.

1

• Boxes are Open Bottom and Stackable, also available with Solid Bottoms.

• For sizes not shown please contact Armorcast Products for more information.

www.armorcastprod.com

Tel: (818) 982-3600 Fax: (818) 982-7742

POLYMER CONCRETE BOXES

30" x 48" BOX ASSEMBLY

STANDARD DIMENSIONS

POLYMER CONCRETE

A6001430

ARMORCAST

ARMORCAST PRODUCTS COMPANY

B

A

B

A

FLOATING NUT (2X)

30 1/8"

47 5/8"

3"

1 PIECE COVER
POLYMER CONCRETE COVER

32 3/8"

30 3/8"

28"

3"

49 7/8"

47 7/8"

45 1/2"

1/2" TYP.

SECTION A-A

3"

30 1/8"

47 5/8"

3"

SPECIFY DEPTH
SEE CHART

SECTION B-B

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POLYMER CONCRETE BOXES

