

DRAWN BY:	AKF		
DESIGNER:	AKF		
CHECKED BY:	JPC		
DESIGN TEAM	NO.	BY	DATE

REVISIONS	

SEH
 PHONE: 651-490-2000
 330 VERNON CENTER DRIVE
 ST. PAUL, MN 55110-5156
 www.sehinc.com

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

Date: 01/27/2021

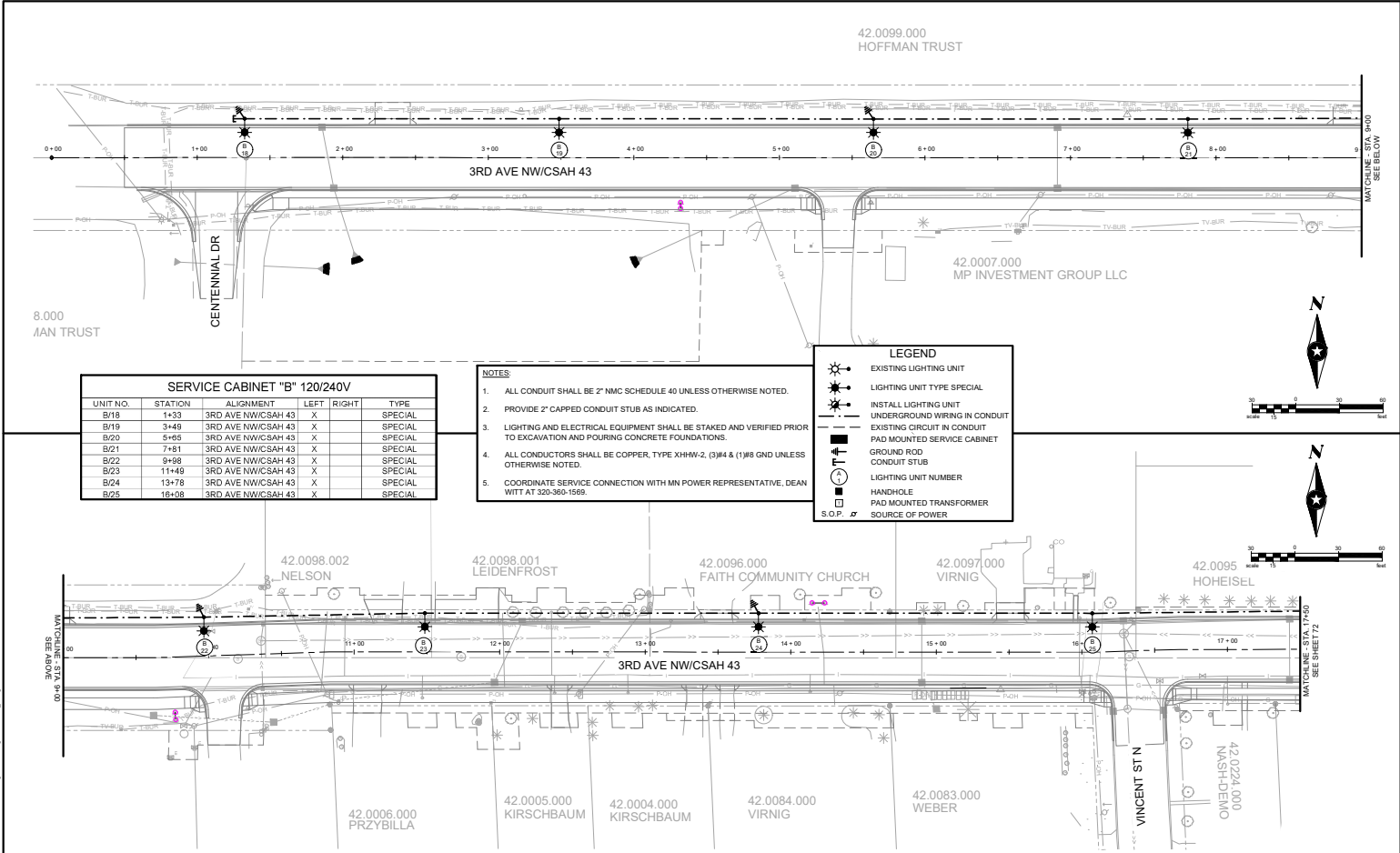
JOHN P. CARLSON, P.E.
 Lic. No. 28802

MORRISON COUNTY, MINNESOTA
 SAP 049-643-017; SAP 049-639-014;
 SP 049-691-005

LIGHTING PLAN REMOVALS 2021 CSAH 43 & 39 RECONSTRUCTION AND SRTS

FILE NO. MORRC 150439
 70
 97

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SERVICE CABINET "B" 120/240V

UNIT NO.	STATION	ALIGNMENT	LEFT	RIGHT	TYPE
B/19	1+53	3RD AVE NW/CSAH 43	X		SPECIAL
B/19	3+49	3RD AVE NW/CSAH 43	X		SPECIAL
B/20	5+65	3RD AVE NW/CSAH 43	X		SPECIAL
B/21	7+81	3RD AVE NW/CSAH 43	X		SPECIAL
B/22	9+98	3RD AVE NW/CSAH 43	X		SPECIAL
B/23	11+49	3RD AVE NW/CSAH 43	X		SPECIAL
B/24	13+78	3RD AVE NW/CSAH 43	X		SPECIAL
B/25	16+08	3RD AVE NW/CSAH 43	X		SPECIAL

- NOTES:**
1. ALL CONDUIT SHALL BE 2" NMC SCHEDULE 40 UNLESS OTHERWISE NOTED.
 2. PROVIDE 2" CAPPED CONDUIT STUB AS INDICATED.
 3. LIGHTING AND ELECTRICAL EQUIPMENT SHALL BE STAKED AND VERIFIED PRIOR TO EXCAVATION AND POURING CONCRETE FOUNDATIONS.
 4. ALL CONDUCTORS SHALL BE COPPER, TYPE XHHW-2, (3) #4 & (1) #8 GND UNLESS OTHERWISE NOTED.
 5. COORDINATE SERVICE CONNECTION WITH MN POWER REPRESENTATIVE, DEAN WITT AT 320-360-1569.

LEGEND

- EXISTING LIGHTING UNIT
- LIGHTING UNIT TYPE SPECIAL
- INSTALL LIGHTING UNIT
- UNDERGROUND WIRING IN CONDUIT
- EXISTING CIRCUIT IN CONDUIT
- PAD MOUNTED SERVICE CABINET
- GROUND ROD
- CONDUIT STUB
- LIGHTING UNIT NUMBER
- HANDHOLE
- PAD MOUNTED TRANSFORMER
- S.O.P. SOURCE OF POWER

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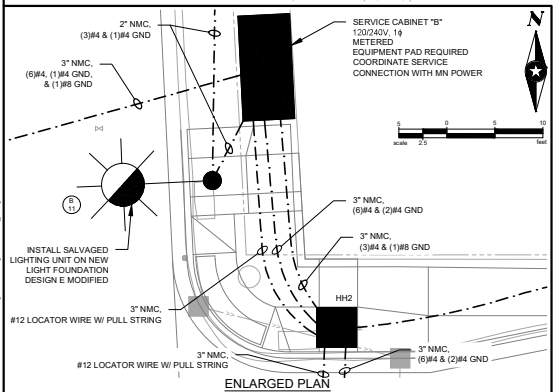
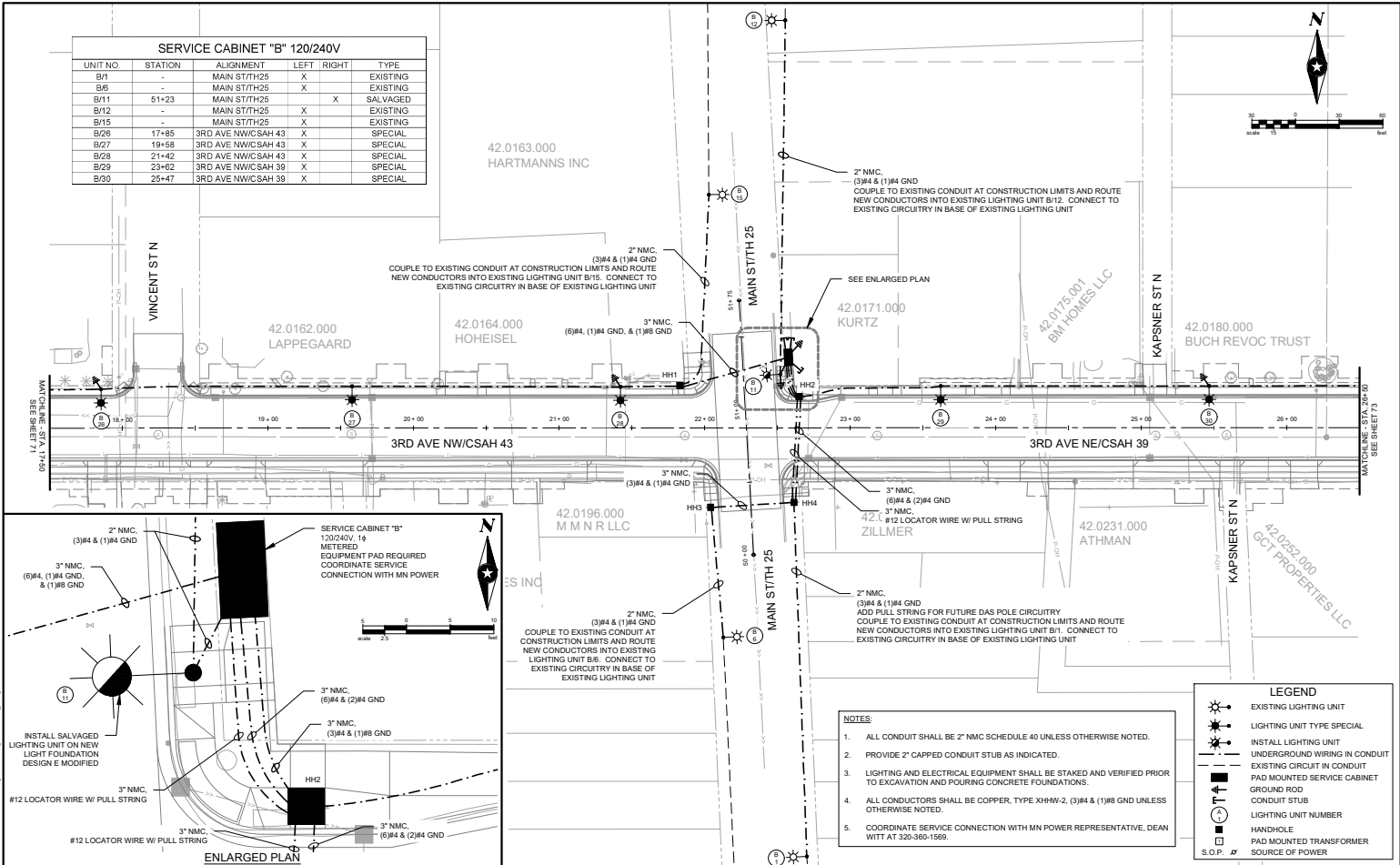
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 Date: 01/27/2021
 JOHN P. CARLSON, P.E.
 Lic. No. 28901

MORRISON COUNTY, MINNESOTA
 SAP 049-643-017; SAP 049-639-014;
 SP 049-691-005

LIGHTING PLAN
PROPOSED
2021 CSAH 43 & 39 RECONSTRUCTION
AND SRTS

FILE NO. 71
 MORRIS 150439
 97

SERVICE CABINET "B" 120/240V					
UNIT NO.	STATION	ALIGNMENT	LEFT	RIGHT	TYPE
B/1	-	MAIN ST/TH25	X		EXISTING
B/6	-	MAIN ST/TH25	X		EXISTING
B/11	51+23	MAIN ST/TH25		X	SALVAGED
B/12	-	MAIN ST/TH25	X		EXISTING
B/15	-	MAIN ST/TH25	X		EXISTING
B/26	17+85	3RD AVE NW/CSAH 43	X		SPECIAL
B/27	19+56	3RD AVE NW/CSAH 43	X		SPECIAL
B/28	21+42	3RD AVE NW/CSAH 43	X		SPECIAL
B/29	23+62	3RD AVE NW/CSAH 39	X		SPECIAL
B/30	25+47	3RD AVE NW/CSAH 39	X		SPECIAL

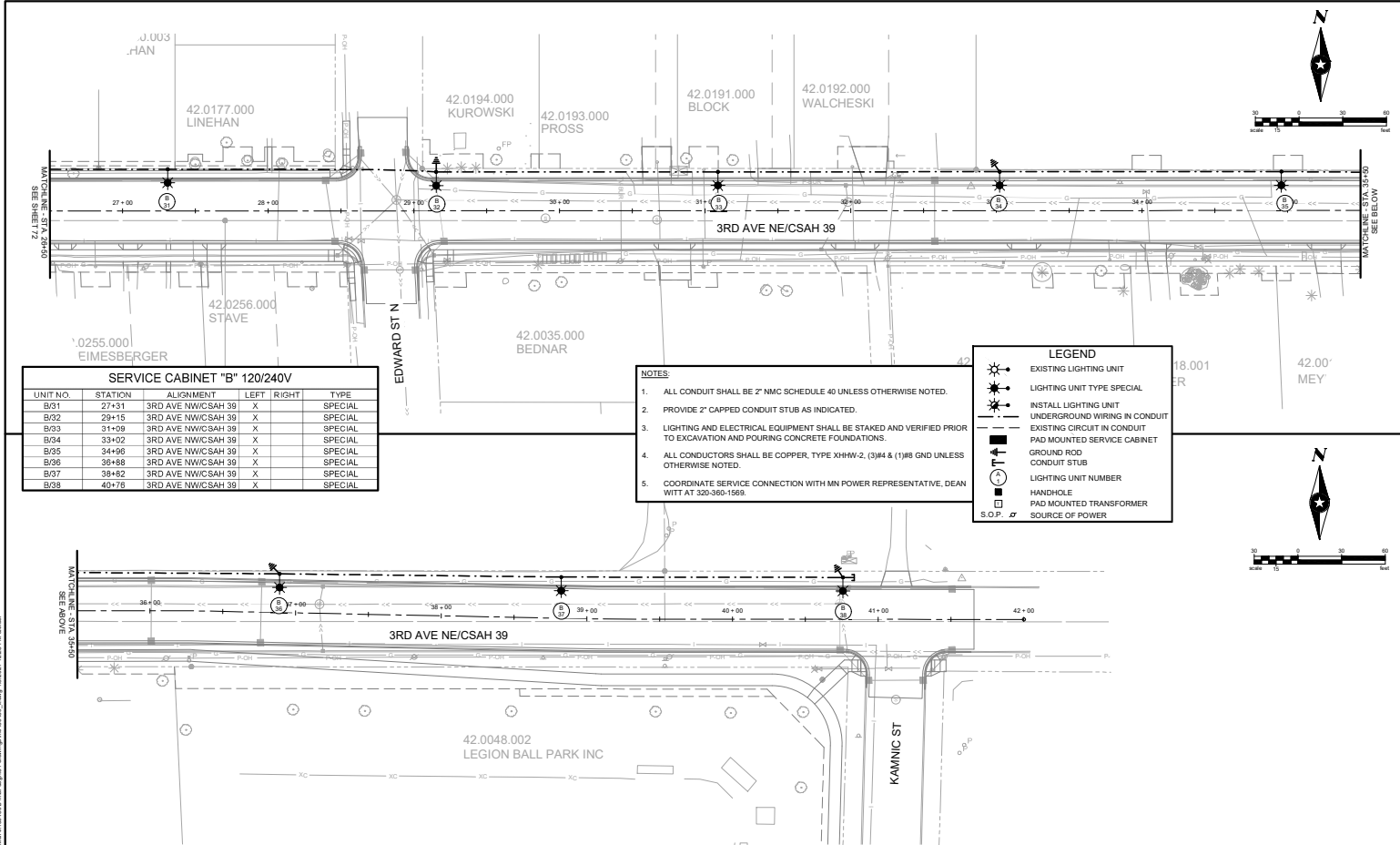


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1. ALL CONDUIT SHALL BE 2" NMC SCHEDULE 40 UNLESS OTHERWISE NOTED.
 2. PROVIDE 2" CAPPED CONDUIT STUB AS INDICATED.
 3. LIGHTING AND ELECTRICAL EQUIPMENT SHALL BE STAKED AND VERIFIED PRIOR TO EXCAVATION AND POURING CONCRETE FOUNDATIONS.
 4. ALL CONDUCTORS SHALL BE COPPER, TYPE XHHW-2, (3) #4 & (1) #8 GND UNLESS OTHERWISE NOTED.
 5. COORDINATE SERVICE CONNECTION WITH MN POWER REPRESENTATIVE, DEAN WITT AT 320-360-1569.

LEGEND

- EXISTING LIGHTING UNIT
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- GROUND ROD
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- LIGHTING UNIT NUMBER
- HANDHOLE
- PAD MOUNTED TRANSFORMER
- SOURCE OF POWER

DRAWN BY: AKF DESIGNER: AKF CHECKED BY: JPC	DESIGN TEAM: [] NO. BY DATE REVISIONS	<p>PHONE: 651-490-2000 320 WILSON CENTER DRIVE ST. PAUL, MN 55110-5156 www.sen.com</p>	I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. Date: 03/27/2021 JOHN P. CARLSON, P.E. Lic. No. 28901	MORRISON COUNTY, MINNESOTA SAP 049-643-017; SAP 049-639-014; SP 049-691-005	LIGHTING PLAN PROPOSED 2021 CSAH 43 & 39 RECONSTRUCTION AND SRTS	FILE NO. MORRC 150439 72 97
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SERVICE CABINET "B" 120/240V

UNIT NO.	STATION	ALIGNMENT	LEFT	RIGHT	TYPE
B/G1	27+31	3RD AVE NW/CSAH 39	X		SPECIAL
B/G2	29+15	3RD AVE NW/CSAH 39	X		SPECIAL
B/G3	31+09	3RD AVE NW/CSAH 39	X		SPECIAL
B/G4	33+02	3RD AVE NW/CSAH 39	X		SPECIAL
B/G5	34+96	3RD AVE NW/CSAH 39	X		SPECIAL
B/G6	36+88	3RD AVE NW/CSAH 39	X		SPECIAL
B/G7	38+62	3RD AVE NW/CSAH 39	X		SPECIAL
B/G8	40+76	3RD AVE NW/CSAH 39	X		SPECIAL

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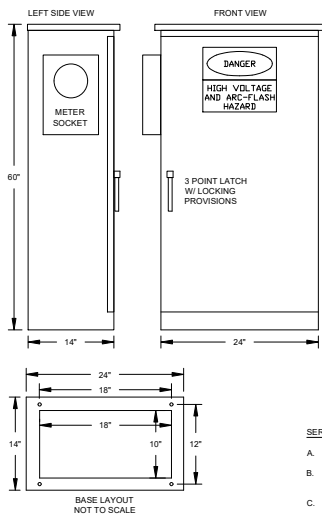
SEN
 PHONE: 651-490-2000
 330 VANDAN CENTER DRIVE
 ST. PAUL, MN 55110-5156
 www.seninc.com

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LIGHTING PLAN
PROPOSED
2021 CSAH 43 & 39 RECONSTRUCTION
AND SRTS

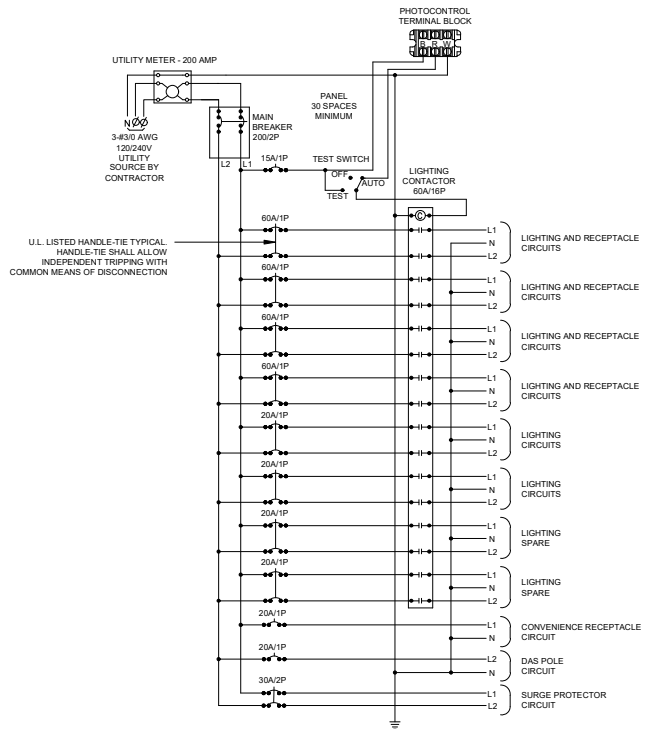
FILE NO. MORRIS 150439
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SERVICE CABINET NOTES:

- A. PROVIDE METER SOCKET PER UTILITY COMPANY REQUIREMENTS.
- B. CIRCUIT BREAKERS SHALL BE 120/240 VOLT AC, 50% AND SHALL BE CLEARLY MARKED WITH THE "ON" AND "OFF" POSITIONS AND IDENTIFIED WITH THE LOAD WHICH IT IS CARRYING.
- C. SHORT CIRCUIT RATING - 22,000 AIC SYMMETRICAL.
- D. 3-POSITION SELECTOR SWITCH ALLEN BRADLEY #800T-J2A.
- E. CIRCUIT CONTACTORS SHALL HAVE A 240 VOLT RATING, WITH 120 VOLT COIL.
- F. PROVIDE 50KA SURGE PROTECTOR.
- G. PROVIDE PANEL WITH DIMENSIONS AS REQUIRED TO FIT EQUIPMENT PROPOSED.
- H. PROVIDE A 25-OHM GROUND AT CABINET AS PER NEC.
- I. PROVIDE 20A WR-RATED GFCI RECEPTACLE MOUNTED TO CABINET DEAD-FRONT.
- J. BOTH PHOTOCONTROL AND ITS SOCKET SHALL BE 3 TERMINAL, POLARIZED, TWIST-LOCK TYPE. IT SHALL BE EQUIPPED WITH A MOV TYPE LIGHTNING ARRESTER.
- K. CABINET SHALL BE MANUFACTURED BY POVOLNY SPECIALTIES INC. 651.452.7335.
- L. COORDINATE SERVICE CONNECTION WITH MN POWER DESIGNER DEAN WITT AT 320-360-1569.

SERVICE CABINET DETAILS



SERVICE CABINET SCHEMATIC

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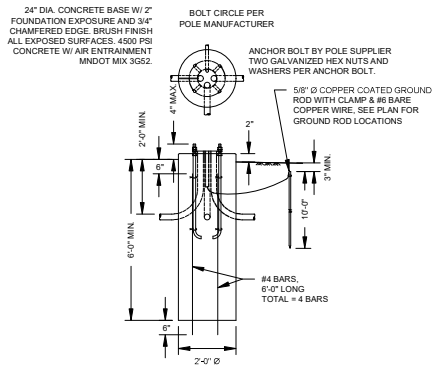
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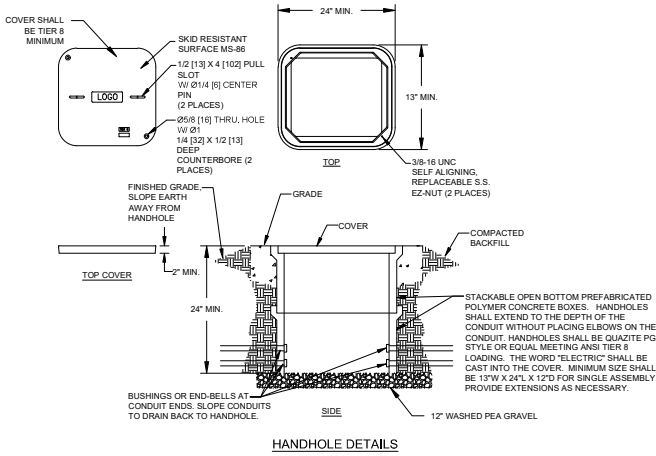
**LIGHTING PLAN
DETAILS
2021 CSAH 43 & 39 RECONSTRUCTION
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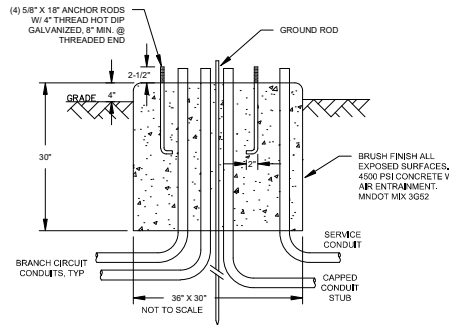
EQUIPMENT SCHEDULE					
SYMBOL	DESCRIPTION	LAMP SOURCE	MOUNTING	OPTICS	MANUFACTURER & SERIES #
	LIGHTING UNIT TYPE SPECIAL LED COBRAHEAD STYLE LUMINAIRE ON ROUND TAPERED ALUMINUM POLE WITH TRANSFORMER BASE, DAVIT ARM, BANNER ARMS, AND BLACK ANODIZED FINISH	133 WATT 40 LED 3000K	30' POLE ON LIGHT FOUNDATION DESIGN E MODIFIED	TYPE III	AEL - LUMINAIRE: ATB2-40BLEDE10-MVOLT-R3-3K-BK-AD-P7-SH HAPCO - POLE: RTA3008BFD16-ASX



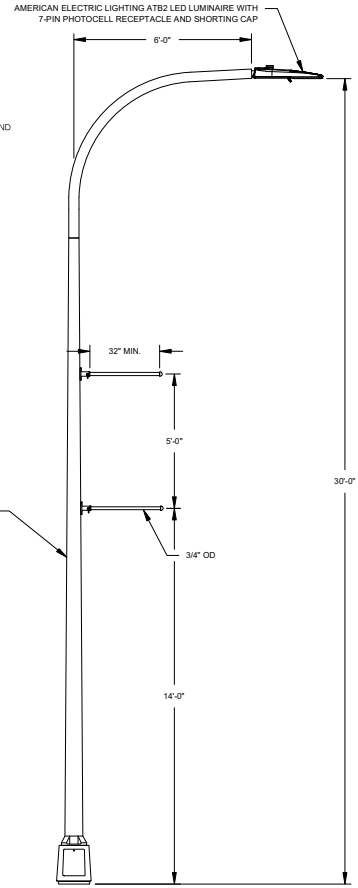
LIGHT FOUNDATION DESIGN E MODIFIED DETAIL



HANDHOLE DETAILS



EQUIPMENT PAD DETAILS
(SERVICE CABINET FOUNDATION)



LIGHTING UNIT TYPE SPECIAL DETAIL

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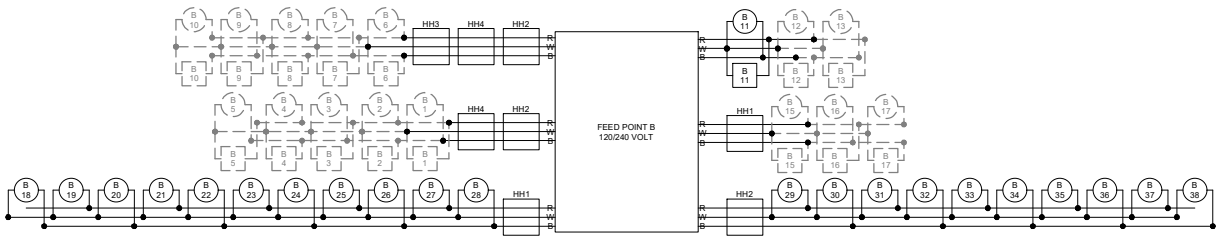
PHONE: 651-490-2000
 930 WILSON CENTER DRIVE
 ST. PAUL, MN 55110-5156
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MORRISON COUNTY,
 MINNESOTA
 SAP 049-643-017; SAP 049-639-014;
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LIGHTING PLAN
 DETAILS
 2021 CSAH 43 & 39 RECONSTRUCTION
 AND SRTS

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B AND R DENOTE CURRENT CARRYING CONDUCTORS
 W DENOTES NEUTRAL CONDUCTOR
 HH DENOTES HANDHOLE
 GROUND NOT SHOWN
 DASHED/SHADED LINES DENOTE EXISTING CIRCUITRY/EQUIPMENT

X
 XX FESTOON RECEPTACLE
 X
 XX LUMINAIRE

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