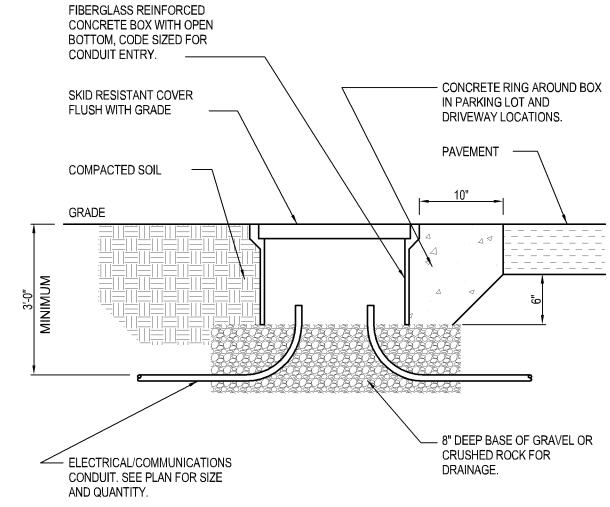
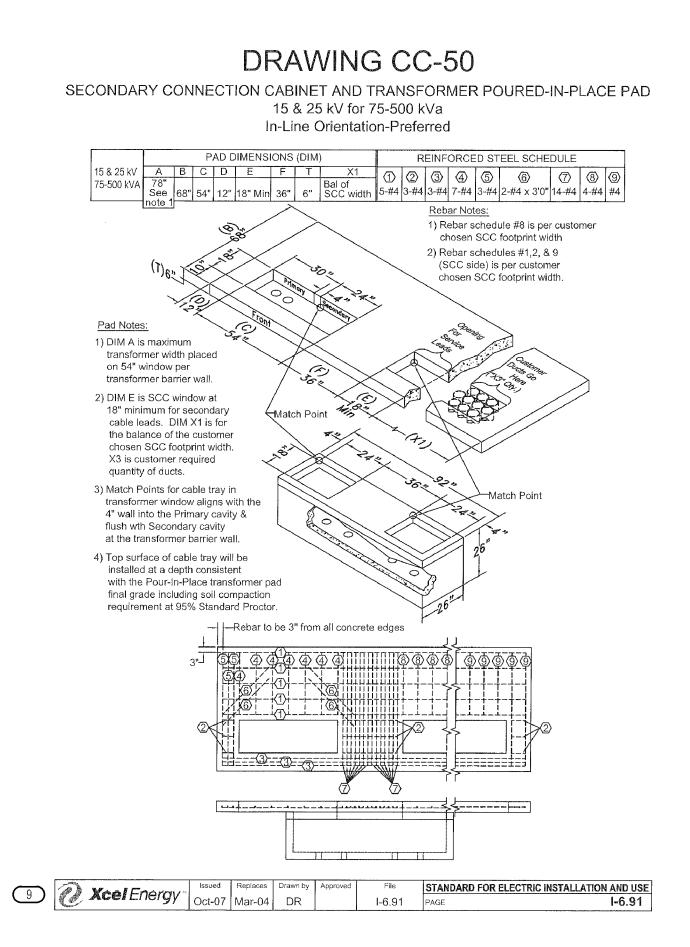
DOUBLE NUT ASSEMBLY AS SPECIFIED BY THE MANUFACTURER. LIGHT POLE SHALL NOT REST ON LEVELING NUTS. PROVIDE GROUTING BETWEEN POLE AND BASE 1" CHAMFER (ALL AROUND) EXPOSED CONCRETE MUST HAVE A RUBBED ANCHOR BOLTS - QUANTITY AND SIZE AS RECOMMENDED BY THE POLE MANUFACTURER CONDUIT AS INDICATED ON PLANS. NOT ALL POLE LIGHTS HAVE ENTER AND EXIT. —— VERTICAL AND HORIZONTAL BARS AS INDICATED IN THE TABLE. PROVIDE A MIN 3" CONCRETE COVER ON SIDES AND BOTTOM, 2" COVER_ 3/4" X 10'-0" COPPER CLAD GROUND ROD REQUIRED -DIMENSIONS Z4 5'-0" 12" 24" 4 #6 12" #6

2 POLE BASE DETAIL NOT TO SCALE

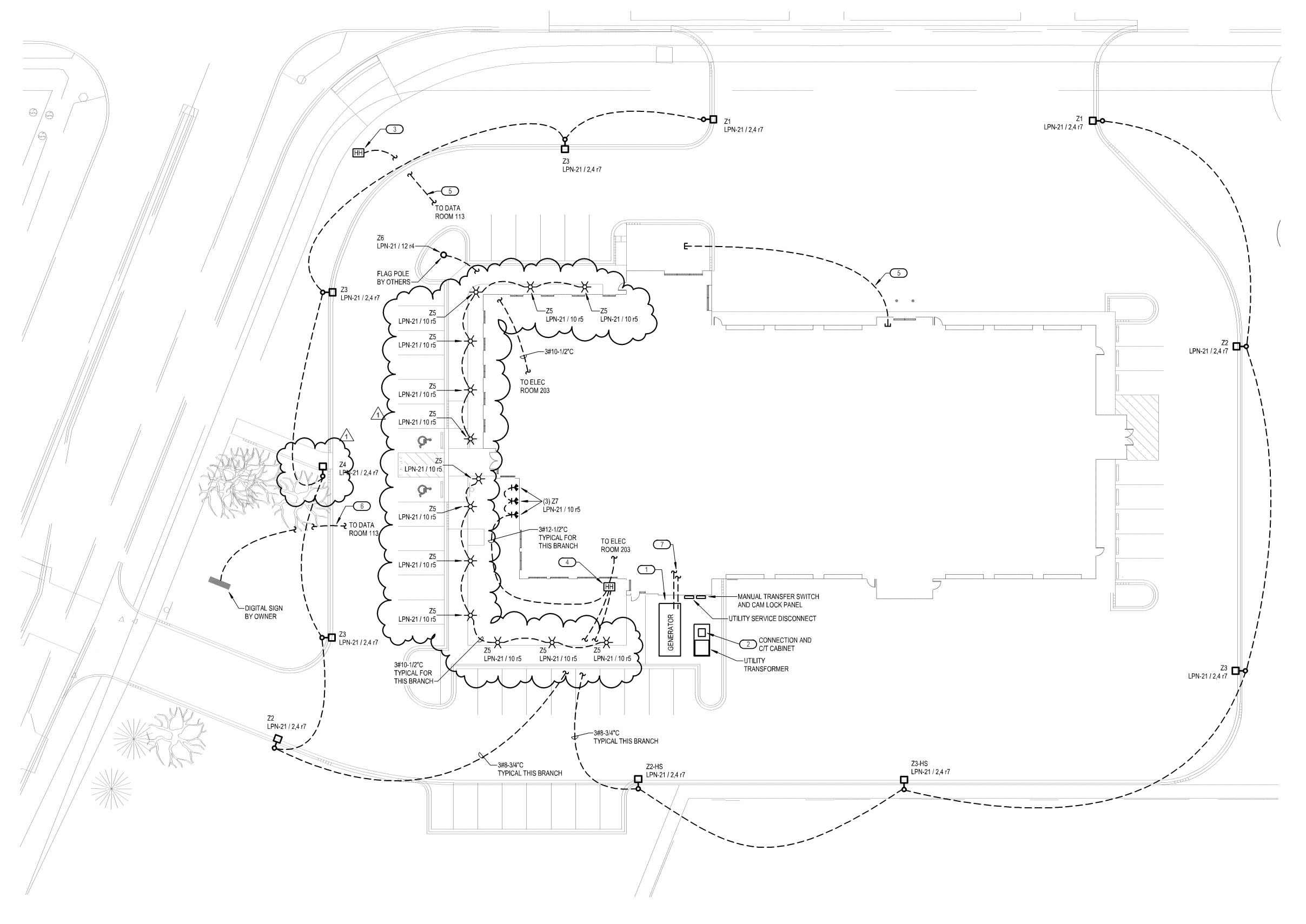


3 HAND HOLE DETAIL

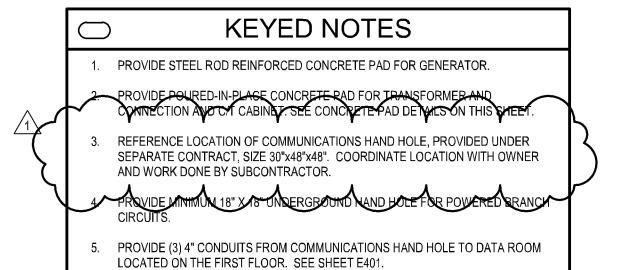


4 TRANSFORMER PAD DETAIL NOT TO SCALE

CASE FILE #PL201800344



1 ELECTRICAL SITE PLAN



SIGN LOCATION. PROVIDE WITH PULL-STRING FOR FUTURE USE.

ALTERNATE-F:
PROVIDE (1) 2" CONDUIT TO DIGITAL SIGNAL FOR COMMUNICATIONS USE AND (1) 1-1/4"C FOR POWER CIRCUIT. COMMUNICATION CONDUIT SHALL BE ROUTED TO

DATA ROOM ON FIRST FLOOR. CONFIRM CONDUIT ROUTING INTO DIGITAL SIGN

PROVIDE (1) 2" CONDUIT TO DIGITAL SIGN FOR COMMUNICATIONS USE AND (1)

1-4"C FOR POWER CIRCUIT. COMMUNICATION CONDUIT SHALL BE ROUTED TO

DATA ROOM ON FIRST FLOOR. CONDUITS SHALL BE STUBBED-UP AND CAPPED AT

- WITH INSTALLER.

 PROVIDE THE FOLLOWING TO GENERATOR IN ADDITION TO FEEDERS SHOWN ON ONE-LINE DIAGRAM:

 A. (1) 1-1/4"C FOR LOW VOLTAGE START/STOP TO ATS IN 2ND FLR. ELEC.

 B. (1) 1-1/4"C FOR REMOTE ANNUNCIATOR SWITCH IN 1ST FLR.
- WATCH/COMM ROOM.

 8. PROVIDE 1" CONDUIT FOR IRRIGATION CONTROL CIRCUIT, FROM CIVIL GREEN SPACE TO UTILITY CLOSET LOCATED IN APPARATUS BAY. COORDINATE PATHING WITH IRRIGATION SYSTEM INSTALLER. SEE UTILITY PLAN FOR MORE INFORMATION
- DETAIL FOR REFERENCE ONLY. EC TO REFERENCE AND COMPLY WITH MOST CURRENT XCEL ENERGY STANDARD FOR ELECTIC INSTALLATION AND USE, AS WELL AS ALL APPLICABLE EXCEL ENERGY REQUIREMENTS.

GENERAL NOTES

- MINIMUM WIRING SIZES SHALL BE #8AWG FOR POWER AND LIGHTING CIRCUITS, ULESS NOTED OTHERWISE.
- MINIMUM BURIED DEPTH OF CONDUITS IS 2'-0" BELOW FINISHED GRADE.PROVIDE PULL BOXES / HAND HOLES WHERE INDICATED. PROVIDE ADDITIONAL PULL
- BOXES / HAND HOLES AS REQUIRED FOR INSTALLATION.

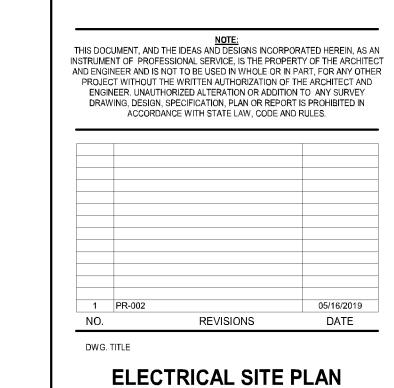
 COORDINATE ALL UTILITY WORK WITH UTILITY COMPANY. COMPLY WITH ALL UTILITY
- ALL EXTERIOR RECEPTACLES SHALL BE GFCI RECEPTACLES WITH WEATHER-PROOF-WHILE-IN-USE COVERS.

REQUIREMENTS.

ALTERNATE CONDITIONS.

- SEE INTERIOR LIGHTING PLANS FOR ALL BUILDING FACADE, EGRESS, CANOPY, AND
- SIMILAR LIGHTING FLANS FOR ALL BUILDING FACADE, EGRESS, CANOPY, AND SIMILAR LIGHTING FIXTURES.

 THIS SHEET CONTAINS NOTES PERTAINING TO ARCHITECTURAL ALTERNATES. REFER TO ARCHITECTURAL DRAWINGS FOR FURTHER CLARIFICATION OF BASE VS



BLOOMINGTON

MINNESOTA

THE CITY OF BLOOMINGTON

MINNESOTA

2301 EAST 86th STREET BLOOMINGTON, MN 55425

BLOOMINGTON FIRE STATION NO. 3

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*****Five Bugles Design

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I hereby certify that this plan, specification, or report was

prepared by me or under my direct supervision and that I am a duly Licensed Engineer under the laws of the State of Minnesota.

Date <u>02/28/2019</u> Reg. No. <u>41678</u>

Engineer <u>Darren Dickenson</u>

DATE 02.28.2019

SCALE As indicated

DWN. CAJ CHK. DRD

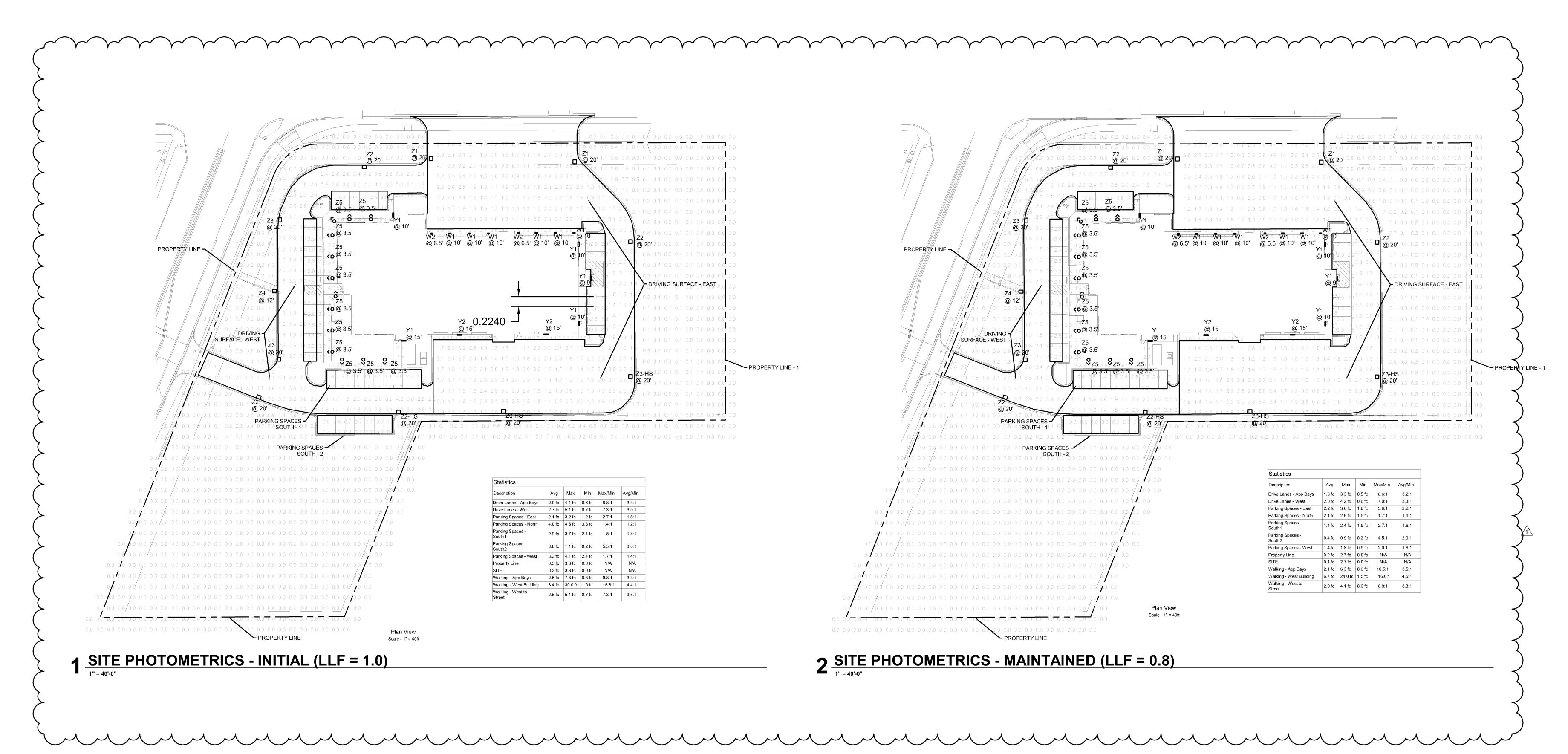
PROJ. No. 484401

CIENT. No. 2017-56

E100

DWG. No.

CASE FILE #PL201800344



LIGHTING PLAN APPROVED



05/24/2019



THE CITY OF **BLOOMINGTON, MINNESOTA** 2301 EAST 86th STREET BLOOMINGTON, MN 55425

BLOOMINGTON FIRE STATION NO. 3



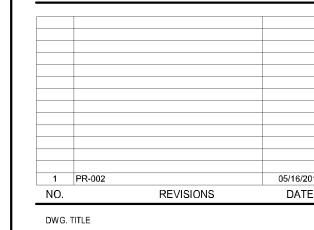
Wendel WD Architecture, Engineering, Surveying and Landscape Architecture, P.C. Five Bugles Design



I hereby certify that this plan, specification, or report was duly Licensed Engineer under the laws of the State of Minnesota. Engineer <u>Darren Dickenson</u>

Date <u>02/28/2019</u> Reg. No. <u>41678</u>

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PHOTOMETRY

SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY DWN. CAJ CHK. DRD

E101

CASE FILE #PL201800344

FVNR: FULL VOLTAGE NON-REVERSING MSS: MOTOR STATER SWITCH MSR: MOTOR RATED SWITCH

VFD: VARIABLE FREQUENCY DRIVE

GENERAL NOTES:

A. PROVIDE GROUND CONDUCTORS IN ALL MOTOR FEEDERS PER NEC.

B. COORDINATE LL MOTORS AND LOCATIONS WITH ARCHITECT AND MECHANICAL.

KEYED NOTES:

1. PROVIDE DUCT SMOKE DETECTOR ON THE RETURN DUCT OF MECHANICAL UNIT.

			TURE SCHEDULE			
TYPE A1	DESCRIPTION 2' X 4' LED EDGE-LIT FLAT PANEL, 0-10V DIMMING	MOUNTING RECESSED - ACT	MANUFACTURER: MODEL LITHONIA: EPANL H.E. WILLIAMS: LP-24 PHILIPS DAYBRITE: 2FXP SYLVANIA: EDGE-LIT FLAT PANEL	LAMP LED 4800LM, 4000K, 80CRI	NOTES	Voltage 120 V
A2	2' X 2' LED EDGE-LIT FLAT PANEL, 0-10V DIMMING	RECESSED - ACT	EATON METALUX: 24FP LITHONIA: EPANL H.E. WILLIAMS: LP-22 PHILIPS DAYBRITE: 2FXP	LED 2000LM, 4000K, 80CRI		120 V
A3	2' X 4' LED EDGE-LIT FLAT PANEL, 0-10V DIMMING	RECESSED - ACT	SYLVANIA: EDGE-LIT FLAT PANEL EATON METALUX: 22FP LITHONIA: EPANL H.E.WILLIAMS: LP-24 PHILIPS DAYBRITE: 2FXP	LED 4800LM, 3000K, 80CRI		120 V
A4	2' X 2' LED EDGE-LIT FLAT PANEL, 0-10V DIMMING	RECESSED - ACT	SYLVANIA: EDGE-LIT FLAT PANEL EATON METALUX: 24FP LITHONIA: EPANL H.E.WILLIAMS: LP-22 PHILIPS DAYBRITE: 2FXP	LED 2000LM, 3000K, 80CRI		120 V
B1	2' X 4' LED ARCHITECTURAL TROFFER, 0-10V DIMMING	RECESSED - ACT	SYLVANIA: EDGE-LIT FLAT PANEL EATON METALUX: 22FP MARK ARCH LTG: WHSPR LCTR PHILIPS LEADER LEADER	LED 4800LM, 4000K, 80CRI		120 V
B2	2' x 2' LED ARCHITECTURAL TROFFER, 0-10V DIMMING	RECESSED - ACT	PINNACLE ARCH LTG: ADEO EATON METALUX: 24RLN MARK ARCH LTG: WHSPR LCTR PHILIPS DAYBRITE: 2FP PINNACLE ARCH LTG: ADEO	LED 2000LM, 4000K, 80 CRI		120 V
D1	6" APERTURE LED DOWNLIGHT	RECESSED - ACT	EATON METALUX: 24RLN GOTHAM: EVO6 PATHWAY LTG: 6VLFL2X SERIES ATLANTIC: LED6	LED 1000LM, 3500K, 80CRI		120 V
D2	6" APERTURE LED DOWNLIGHT WET LOCATION LISTED	RECESSED - GYP	HE WILLIAMS: L60 GOTHAM: EVO6 PATHWAY LTG: 4SQLFL2X-NF PATHWAY LTG: 6LB79V WLE SERIES ATLANTIC LED6	LED 1000LM, 3500K, 80CRI	FOR FIXTURES MOUNTED IN LID OF SHOWER, VERIFY INSTALLATION LOCATION WITH ARCHITECT BEFORE ROUGH-IN.	120 V
D3	3-4" SQUARE APERTURE DOWNLIGHT WHITE PAINTED FLANGE	RECESSED - GYP	HE WILLIAMS: L60 GOTHAMI: EVO4SQ PATHWAY LTG: 4SQLFL2X AMERLUX: EVOKE 2.9" HP TECH LTG: 3" ELEMENT FIXED	LED 1000LM, 3500K, 80CRI		120 V
EX1	UNIVERSAL MOUNTED, SINGLE FACE, LED EXIT SIGN, PLASTIC HOUSING, GREEN LETERES.	UNIVERSAL	LITHONIA: EXR LIGHTALARMS: QLX500RN EMERGI-LITE: ELXN400 EATON SURE-LITE: APXH7	LED		
EX2	UNIVERSAL MOUNTED, DOUBLE FACE, LED EXIT SIGN, PLASTIC HOUSING, GREEN LETERES. SEE PLANS FOR ARROW DIRECTIONS	UNIVERSAL	LITHONIA: EXR LIGHTALARMS: QLX500RN EMERGI-LITE: ELXN400 EATON SURE-LITE: APXH7	LED		
F4	SUSPENDED LINEAR LED LUMINAIRE. NOMINAL 3" WIDTH X 4'-0" LENGTH. DIRECT/INDIRECT LIGHT DISTRIBUTION. WHITE PAINTED FINISH.	SUSPENDED - STEM MOUNT	CORONET: LS3 UP/DN MERCURY / ALM: MLS3 EATON NEO-RAY: DEFINE 3 PINNACLE ARCH LTG: EDGE EVO EX3 LED	LED, 600 LM/FT UP, 600 LM/FT DN, 4000K, 80CRI		120 V
F4W F8 F12	SAME AS F-4 WITH WALL MOUNTED CONFIGURATION SAME AS F-4, WITH 8'-0" NOMINAL LENGTH. SAME AS F-4, WITH 12'-0" NOMINAL LENGTH, AND HIGHER LUMEN PACKAGE	SURFACE - WALL		800 LM/FT UP, 800 LM/FT DN	9'-0" AFF	120 V 120 V 120 V
H	HIGH BAY LED LUMINAIRE, 0-10V DIMMING	SUSPENDED - CHAIN HUNG	LITHONIA: I-BEAM IBE PHILIPS DAYBRITE: FBY EATON METALUX: HB LUMAX LTG: HBRLED HE WILLIAMS: GL	LED 24000LM, 3500K, 80 CRI, MED DISTR		120 V
J	LINEAR LED LUMINAIRE. 3-4" NOMINAL WIDTH X 10'-0" LENGTH.	RECESSED - GYP	MARK ARCH LTG: SLOT 4 MERCURY / ALM: MLS3-F EATON NEO-RAY: DEFINE 4 PINNACLE ARCH LTG: EDGE EVO3 LED	LED 750LM/FT, 3500K, 80CRI		120 V
K	WALL MOUNTED LED SQUARE VANITY LUMINAIRE. 4' NOMINAL LENGTH, BRUSHED NICKEL FINISH. WALL MOUNTED LED LUMINAIRE.	SURFACE - GYP WALL SURFACE - GYP WALL	LITHONIA: FMVCSL BROWNLEE LTG: 5178 TERON LTG: KATONA BFP LED 48" SPI LTG: ECHO REFLECTIONS EEW12086	3500K, 90CRI LED 6,000LM, 3500K	MOUNT ABOVE MIRROR VFY MOUNTING HEIGHT WITH ARCH ON INSTALL 13'-0" AFF	120 V 120 V
L	INDIRECT DISTRIBUTION, WITH FIELD ADJUSTABLE DISTRIBUTION RATCHETS.		WINONA: WLAWC804 SERIES EATON AMETRIX: ASYX-WM S2	, ,	VFY WITH ARCH ON INSTALL	
N	LINEAR LED PENDANT - 8'-0" NOMINAL LENGTH. DIRECT & INDIRECT DISTRIBUTION - SINGLE CIRCUIT 0-10V DIMMING WHITE PAINTED FINISH	SUSPENDED - FIELD ADJUSTABLE CABLE	LUMENWERX: CAVSPDI PEERLESS: OPM4 SERIES FLUXWERX: PF1 SERIES PRUDENTIAL LTG: STREAM SQUARE LUMIUM: CV3	LED 500LM/FT, 3500K, 80CRI	6'-6" AFF VFY WITH ARCH ON INSTALL	120 V
P1	DECORATIVE PENDANT LED LUMINAIRE. 19" RADIUS X 11" HEIGHT - VFY FINISH AT TIME OF SUBMITTAL. SINGLE LED LAMP OPTION. DECORATIVE PENDANT LED LUMINAIRE.	SUSPENDED - FIELD ADJUSTABLE CABLE SUSPENDED - FIELD	TECH LTG: CUNEO PENDANT TECH LTG: KONOS PENDANT	LED VINTAGE STYLE LAMP BY MANUF. LED E26 BASE G40 LAMP BY	PROVIDE \$630 ALLOWANCE VFY MOUNTING HEIGHT WITH ARCH ON INSTALL PROVIDE \$550 ALLOWANCE	120 V 120 V
S1	28" RADIUS X 13" HEIGHT - VFY FINISH AT TIME OF SUBMITTAL PROVIDE WITH LED LAMP BY OTHERS. 4'-0" LED STRIPLIGHT WITH DROP LENS. WHITE PAINTED FINISH	ADJUSTABLE CABLE SUSPENDED - CHAIN HUNG	LITHONIA: ZL1D H.E.WILLIAMS: 75S SERIES	OTHERS 900 LM, 3000K LED, 2500LM, 4000K, 80CRI	VFY MOUNTING HEIGHT WITH ARCH ON INSTALL	120 V
S2	4'-0" LED SEALED AND GASKETED STRIPLIGHT FOR WET LOCATIONS. FROSTED POLYCARBONATE LENS, WHITE PAINTED FINISH	SURFACE - BLOCK WALL	PHILIPS DAY-BRITE: FSS SERIES EATON METALUX: SNLED LITHONIA: FEM LED H.E.WILLIAMS: 96 LED	LED, 6000LM, 3000K, 90CRI		120 V
T	TRACK HEAD LUMINAIRE. WIDE 60 DEGREE DISTRIBUTION. ONE CIRCUIT TRACK ADAPTER. SOFTENING GLASS LENS. LUMINAIRE HEAD, INTERIOR BEZEL, AND	TRACK MOUNTED	PHILIPS: DW SERIES EATON METALUX: VAPORTITE LED LUMENPULSE: SPOT ZEN JUNO: T383L SERIES	LED, 2000 LM, 3500K, 90+ CRI		120 V
Т8	TRACK ADAPTER ALL TO BE MATTE BLACK FINISH. SURFACE MOUNTED SINGLE CIRCUIT LUMINAIRE TRACK. 8'-0" NOMINAL LENGTH. BLACK PAINTED FINISH.	SURFACE - GYP	PHILIPS LIGHTOLIER: LC SERIES AMERLUX: SPEQ-M LUMENPULSE: GES ONE CIRCUIT TRACK JUNO: T SERIES			120 V
T10	SAME AS T8 WITH 10'-0" NOMINAL LENGTH		PHILIPS LIGHTOLIER: 6000 LYTESPAN SERIES AMERLUX: GLOBAL TRACK 1 CIR			120 V
T12 U-14	SAME AS T8 WITH 12'-0" NOMINAL LENGTH UNDERCABINET LED LUMINAIRE. NOMINAL 14" LENGTH X 3" WIDTH X 1" DEPTH. EXTRUDED ALUMINUM HOUSING, BLACK PAINTED FINISH. SOFT FOCUS DIFFUSER LENS	SURFACE - UNDERCABINET	JUNO: PRO-SERIES SOFTTASK UNDERCABINET	LED, 300LM, 3000K, 90+CRI		120 V 120 V
U-22 U-30	SAME AS U-14, 22" NOMINAL LENGTH SAME AS U-14, 30" NOMINAL LENGTH			LED, 420LM, 3000K, 90+CRI LED, 730LM, 3000K, 90+CRI		120 V 120 V 120 V
U-40 W	SAME AS U-40, 40" NOMINAL LENGTH WALL MOUNTED LED LUMINAIRE, WITH INTEGRAL OCCUPANCY SENSING.	SURFACE - WALL VFY WITH ARCH PLANS	LITHONIA: WL SERIES PHILIPS DAYBRITE: FSW SERIES	LED, 840LM, 3000K, 90+CRI LED 2000LM, 4000K, 80CRI		120 V 120 V
Y1	EXTERIOR LED WALLPACK LUMINAIRE. TYPE 4 MEDIUM DISTRIBUTION	SURFACE - BLOCK WALL	EATON METALUX: SWLED LITHONIA: DSXW1-10C-1000 NATIONAL LTG SOLUTIONS: NV-1-16L-53-30K VISIONAIRE LTG: VSC SERIES EATON MCGRAW-EDISON: GWC	LED 3500LM, 3000K	10'-0" AFF	120 V
Y2	EXTERIOR LED WALLPACK LUMINAIRE. TYPE 4 MEDIUM DISTRIBUTION	SURFACE - BLOCK WALL	LITHONIA: DSXW1-20C-1000 NATIONAL LTG SOLUTIONS: NV-1-32L-7-30K VISIONAIRE LTG: VSC SERIES EATON MCGRAW-EDISON: GWC	LED 7000LM, 3000K	15-0" AFF	120 V
Y3	ARCHITECTURAL WALL SCONCE, WITH INTEGRAL LED DOWNLIGHT ON SEPARATE CIRCUIT. RECTANGULAR DIFFUSER, 51" HEIGHT X 8" WIDTH CUSTOM CAGE WITH RED ACCENT AT BOTTOM.	SURFACE - BLOCK WALL	ECLIPSE LTG: GALILEO DECO STYLE C EVERGREEN LTG: CUSTOM FRM51" MANNING LTG: HO-794-FINISH-S64-35-DO-120 DEL TORO LTG: 616W	LED, 4000LM, 3000K		120 V
Y4	WALL MOUNTED LINEAR FACADE ACCENT LIGHT. 36'-0" CONTINUOUS RUN, MOOUNTED ABOVE SIGN WITH 2'-0" STEM. SEE LIGHTING DETAIL.	SURFACE - WALL VFY WITH ARCH PLANS	SPI LTG: STYK LINEAR LUMENPULSE: LUMEN FACADE LOGH	LED, 3500K, 90+ CRI		120 V
Y5	EXTERIOR RATED FLEXIBLE RGB LED TAPE. PROVIDE WITH DRIVER AND HARDWARE TO CONTROL ACCENT COLOR. LED TAPE TO TRACE OUTLINE OF '3' SIGNAGE. EC TO FIELD VERIFY TAPE LENGTHS REQUIRED. SEE ARCH DETAIL.	SURFACE - SEE DETAIL ON SHEET E700	NOVAFLEX: RGB 60 KLUS DESIGN: K-1225-RGB-24V LLI ARCHITECTURAL: LLI-LCC4.4W-65 TIVOLI: TPL-RGBW-O-24	LED, TUNABLE RGB		120 V
Y6	STEM MOUNTED FLOODLIGHT 24" STEM, MEDIUM FLOOD OPTIC, SOFT FOCUS LENS BLACK PAINTED FINISH	SURFACE - BLOCK WALL	BK LIGHTING: TWIN SIGN STAR HYDREL: PLACERTWIN SERIES HUNZA: TWIN BAR LITE	LED, 400LM, 3000K		120 V
Z1 Z2	POLE MOUNTED AREA LIGHT. PROVIDE 17' ROUND STEEL POLE. FORWARD THROW MEDIUM DISTRIBUTION POLE MOUNTED AREA LIGHT. PROVIDE 17' ROUND STEEL POLE.	POLE MOUNTED POLE MOUNTED	LITHONIA: DSX1-TFTM-P4 NATIONAL LTG SOLUTIONS: NV-1 VISIONAIRE LTG: VSX-1 SERIES EATON MCGRAW-EDISON: GLEON LITHONIA: DSX1-T2M-P3	LED 13000LM, 3000K LED 11000LM, 3000K	PROVIDE 17' ROUND STEEL POLE PROVIDE 17' ROUND STEEL POLE	208 V
Z2-HS	TYPE 2 MEDIUM DISTRIBUTION SAME AS Z2 WITH HOUSE SHIELD	, OLL IVIOUNTED	NATIONAL LTG SOLUTIONS: NV-1 VISIONAIRE LTG: VSX-1 SERIES EATON MCGRAW-EDISON: GLEON	LLD I TOUULIVI, SUUUK		208 V
Z3	POLE MOUNTED AREA LIGHT. PROVIDE 17' ROUND STEEL POLE. TYPE 4 MEDIUM DISTRIBUTION	POLE MOUNTED	LITHONIA: DSX1-T4M-P3 NATIONAL LTG SOLUTIONS: NV-1 VISIONAIRE LTG: VSX-1 SERIES EATON NCGRAW-EDISON: GLEON	LED 11000LM, 3000K	PROVIDE 17' ROUND STEEL POLE	208 V
Z3-HS Z4	SAME AS Z3 WITH HOUSE SHIELD POLE MOUNTED AREA LIGHT. PROVIDE 10' ROUND STEEL POLE TYPE 2 MEDIUM DISTRIBUTION	POLE MOUNTED	LITHONIA: DSX0-T2M-P2 NATIONAL LTG SOLUTIONS: NV-1 VISIONAIRE LTG: VSX-1 SERIES EATON MCGRAW-EDISQN: GLEON	LED 5500LM, 3000K	PROVIDE 10' ROUND STEEL POLE	208 V 208 V
Z 5	8" DIAMETER X 42" HEIGHT LED BOLLARD. ZERO UPLIGHT WITH FORWARD ASYMMETRIC THROW. BLACK PAINTED FINISH.	ON-GRADE	LITHONIA: Q-SERIES BOIL ARD NATIONAL LTG SOLUTIONS: SEASIDE BOLLARD SSF VISIONAIRE LTG: OWK-1 SERIES ALUMILITE: DB-CR 800 LED SERIES	LED, 2100LM, 3000K		208 V
Z6 Z7	POLE MOUNTED FLAG LIGHT. GREY PAINTED FINISH. ON-GRADE FLOODLIGHT. 40 DEGREE FLOOD OPTIC. BLACK PAINTED FINISH.	FLAGPOLE MOUNTED ON-GRADE	POLELED: BASIC/EXTENDED LUMENPULSE: LUMENQUAD LARGE	LED, 3250LM, 5000K LED, 4000LM, 3000K	PROVIDE \$1,625 ALLOWANCE VERIFY RADIUS WITH FLAGPOLE SUBMITTAL PRIOR TO ORDER VERIFY MOUNTING WITH CIVIL AND ARCH	120 V 120 V
	TON ON WELL ECOPEIOTH, TO DEGILE FEUOD OF HO, BLACK PAINTED FINISH.	O14-O1/ADE	NORTHSTAR: PRO1 SERIES	LLD, TOUOLIVI, SUUUK	VERMIT MODIFIERD WITH CIVIL AND ARCH	120 V

							M	OIOF	R & EQUIPMEN	II SCHE	DULE					
PE NU	JMBER	EQUIPMENT DESCRIPTION	LOCATION	VOLTAGE	PHASE	HP	FLA	MCA	CONDUIT & WIRE SIZE	STARTER E	BY STARTER	DISCONNECT B	Y DISCONNECT TYP	E PANEL	CIRCUIT NUM	MBER NOTES
1	Α	NIR COMPRESSOR	MEZZANINE A 221	208 V	3	10	32.2	40.25	3/4"C, 4#8, 1#10GND	ELEC	NEMA 2	ELEC	FVNR	LPN-13	51,53,55	PROVIDE HAND/OFF/AUTO SWITCH AT APP BAFLOOR. SEE POWER PLAN FOR LOCATIONS
1	В	BOILER	MECH 202	120 V	1	-	16	20	1/2"C, 2#12, 1#12GND	N/A	N/A	N/A	N/A	LPN-23	26	
2	В	BOILER	MECH 202	120 V	1	-	16	20	1/2"C, 2#12, 1#12GND	N/A	N/A	N/A	N/A	LPN-23	28	
1	В	BOOSTER FAN	DECON HALL 109	120 V	1	-	0.73	-	1/2"C, 2#12, 1#12GND	N/A	N/A	N/A	N/A	LPN-23	36	
1	C	CIRCULATION PUMP	MECH 202	120 V	1	1/20	0.8	-	1/2"C, 2#12, 1#12GND	N/A	N/A	ELEC	MRS	LPN-23	30	
1	C	CABINET UNIT HEATER	VESTIBULE 100	120 V	1	1/4	5.8	-	1/2"C, 2#12, 1#12GND	N/A	N/A	ELEC	MRS	LPN-23	55	(2) 1/4 HP EACH UNIT
2	C	CABINET UNIT HEATER	STAIR A 004	120 V	1	1/4	5.8	-	1/2"C, 2#12, 1#12GND	N/A	N/A	ELEC	MRS	LPN-23	57	(2) 1/4 HP EACH UNIT
3	C	CABINET UNIT HEATER	STAIR B 003	120 V	1	1/4	5.8	-	1/2"C, 2#12, 1#12GND	N/A	N/A	ELEC	MRS	LPN-23	59	(2) 1/4 HP EACH UNIT
1		DESTRATIFICATION FAN	APPARATUS BAY 115	120 V	1	-	1	-	1/2"C, 2#12, 1#12GND	MECH	VFD	ELEC	MRS	LPN-13	35	KEYPAD WIRING BY MECH
2	0	DESTRATIFICATION FAN	APPARATUS BAY 115	120 V	1	-	1	-	1/2"C, 2#12, 1#12GND	MECH	VFD	ELEC	MRS	LPN-13	35	KEYPAD WIRING BY MECH
3		DESTRATIFICATION FAN	APPARATUS BAY 123	120 V	1	-	1	-	1/2"C, 2#12, 1#12GND	MECH	VFD	ELEC	MRS	LPN-13	37	KEYPAD WIRING BY MECH
4	0	DESTRATIFICATION FAN	APPARATUS BAY 123	120 V	1	-	1	-	1/2"C, 2#12, 1#12GND	MECH	VFD	ELEC	MRS	LPN-13	37	KEYPAD WIRING BY MECH
1	E	XHAUST FAN	ROOF	120 V	1	1/2	9.8	15	1/2"C, 2#12, 1#12GND	MECH	ECM	MECH	DIV 20	LPN-23	15	
2A	E	EXHAUST FAN	DECON TOILET 109A	120 V	1	FRAC	; -	-	1/2"C, 2#12, 1#12GND	N/A	N/A	ELEC	MRS	LPN-23	17	
2B	E	XHAUST FAN	DECON TOILET 109B	120 V	1	FRAC) -	-	1/2"C, 2#12, 1#12GND	N/A	N/A	ELEC	MRS	LPN-23	17	
3	E	EXHAUST FAN	ROOF	120 V	1	1/4	5.8	15	1/2"C, 2#12, 1#12GND	MECH	VFD	MECH	MECH	LPN-23	19	ELEC WIRE REVERSE ACT. THERM
4	E	EXHAUST FAN	ROOF	120 V	1	1/6	4.4	15	1/2"C, 2#12, 1#12GND	MECH	ECM	MECH	MRS	LPN-23	19	
6	E	XHAUST FAN	ROOF	208 V	1	2	24	30	3/4"C, 3#10, 1#10GND	MECH	ECM	MECH	MRS	LPN-23		
7	E	XHAUST FAN	ROOF	208 V	1	2	24	30	3/4"C, 3#10, 1#10GND	MECH	ECM	MECH	MRS	LPN-23	· · · · · · · · · · · · · · · · · · ·	
8		XHAUST FAN	ROOF	208 V	1	2	24	30	3/4"C, 3#10, 1#10GND	MECH	ECM	MECH	MRS	LPN-23	31,33	
9		XHAUST FAN	ROOF	208 V	1	2	24	30	3/4"C, 3#10, 1#10GND	MECH	ECM	MECH	MRS	LPN-23	35,37	
10		XHAUST FAN	ROOF	120 V	1	1/10	-	-	1/2"C, 2#12, 1#12GND	MECH	ECM	MECH	MRS	LPN-23		
11		EXHAUST FAN	ROOF	120 V	1	1/2	-	-	1/2"C, 2#12, 1#12GND	MECH	ECM	MECH	MRS	LPN-23		
12		RUCK EXHAUST	APPARATUS BAY 115	208 V	3		25.3	30	3/4"C, 4#10, 1#10GND	MECH	NEMA 1	ELEC	FVNR	LPN-13	45,47,49	
1		KITCHEN HOOD	KITCHEN 201	112 V	1	-	4	-	1/2"C, 2#12, 1#12GND	N/A	N/A	N/A	N/A	LPN-23		
1		MAKE UP AIR UNIT	ROOF	208 V	3	5	17.5	20	3/4"C, 4#12, 1#10GND	MECH	VFD	ELEC	NFS	LPN-23	1,3,5	
2		MAKE UP AIR UNIT	ROOF	208 V	3	5	17.5	20	3/4"C, 4#12, 1#10GND	MECH	VFD	ELEC	NFS	LPN-23	7,9,11	
3		MAKE UP AIR UNIT	ROOF	120 V	1	1		20.8	3/4"C, 2#10, 1#12GND	ELEC	FVNR-NEMA 1		NFS	LPN-23		
1A		AINI SPLIT A/C UNIT - INDOOR	DATA ROOM 113	24 V	1	<u> -</u>	-	_	WIRE TO MS-1B	N/A	N/A	N/A	N/A	2,1120		ELEC TO PIPE/WIRE TO ROOF UNIT
1B		/// SPLIT A/C UNIT - OUTDOOR	ROOF	208 V	1	-	14	13	1/2"C, 2#12, 1#12GND	ELEC	FVNR	ELEC	NEMA 0	LPN-23	41 43	ELECTOTIC ENVIRENTE TO ROOF ONT
2A		/INI SPLIT A/C UNIT - INDOOR	SCBA 118	24 V	1	<u> </u>	-	-	WIRE TO MS-2B	N/A	N/A	N/A	N/A	LI 11-25	71,75	ELEC TO PIPE/WIRE TO ROOF UNIT
2B		// SPLIT A/C UNIT - OUTDOOR	ROOF	120 V	1	-	14	13	1/2"C, 2#12, 1#12GND	ELEC	FVNR	ELEC	NEMA 0	LPN-23	45 47	ELECTOTIC ENVIRE TO ROOF ONT
3A		/INI SPLIT A/C UNIT - INDOOR	EMS STORAGE 117	24 V	1	1_	1.	-	WIRE TO MS-3B	N/A	N/A	N/A	N/A	LI 11 20	10,11	ELEC TO PIPE/WIRE TO ROOF UNIT
3B		AINI SPLIT A/C UNIT - OUTDOOR	ROOF	120 V	1	-	14	13	1/2"C, 2#12, 1#12GND	ELEC	FVNR	ELEC	NEMA 0	LPN-23	19 51	ELECTOTII ENVIRCE TO ROOF BIRT
1A		PUMP	MECH 202	208 V	3	1.5	1	15	1/2"C, 4#12, 1#12GND	ELEC	FVNR	ELEC	FVNR	LPN-23		
1B		PUMP	MECH 202	208 V	3	1.5		15	1/2"C, 4#12, 1#12GND	ELEC	FVNR	ELEC	FVNR	LPN-23	1 1	
2A		PUMP	MECH 202	208 V	3	3	11	15	1/2"C, 2#12, 1#12GND	MECH	VFD	ELEC	NF		14,16,18	
2B		PUMP	MECH 202	208 V	3	3	11	15	1/2"C, 2#12, 1#12GND	MECH	VFD	ELEC	NF	LPN-23		
1		ROOF TOP UNIT	ROOF	208 V	3	-	88.5	100.2	2"C, 3#1/0, 1#6GND	MECH	VFD	MECH	NFS	MSB	6	SMOKE DETECTOR (RA) WIRE TO FIRE ALARM
1		STEAM GENERATOR	DECON HALL 109	208 V	3	- -	34	42.5	1"C, 3#8, 1#10GND	INT	INT	N/A	N/A		38,40,42	SWOKE DETECTOR (IVA) WINE TO TIKE ALAKW
1		ELEVATOR SUMP PUMP	TRAINING/STORAGE 112	120 V	1	- -	8.5	10.6	1/2"C, 2#12, 1#12GND	MECH	CTRL. PNL.	ELEC	NFS	LI IN-ZU	30,40,42	
1		JNIT HEATER	APPARATUS BAY 115	120 V	1	1/2	4.68	5.85	1/2"C, 2#12, 1#12GND	INT	INT	ELEC	MRS	LPN-13	30	
1 2		JNIT HEATER JNIT HEATER	APPARATUS BAY 115	120 V	1	_	4.68	5.85	1/2 °C, 2#12, 1#12GND	INT	INT	ELEC	MRS	LPN-13		
2		JNIT HEATER JNIT HEATER	APPARATUS BAY 113	120 V	1		4.68	5.85	1/2 °C, 2#12, 1#12GND	INT	INT	ELEC	MRS	LPN-13		
) /		JNIT HEATER JNIT HEATER	APPARATUS BAY 123	120 V	1				<u>'</u>			ELEC	MRS	LPN-13		
4 c		JNIT HEATER JNIT HEATER	HOSE/TRAINING TOWER 116	208 V	3		4.68 2.75	5.85	1/2"C, 2#12, 1#12GND 1/2"C, 2#12, 1#12GND	INT	INT	ELEC	MRS			
٥		JNIT HEATER JNIT HEATER	MECH 202		1			3.4375					MRS		59,61,63	
0		VATER HEATER	MECH 202	120 V 120 V	1	1/8	1.58	1.975	1/2"C, 2#12, 1#12GND 1/2"C, 2#12, 1#12GND	N/A	INT N/A	ELEC ELEC	NFS	LPN-23 LPN-23		POWERED VENT

CB: CIRCUIT BREAKER
FS: FUSED SWITCH

C. NOMINAL SYSTEM VOLTAGES ARE LISTED (IE: 120, 208, 480). IF NAMEPLATE UTILIZATION VOLTAGE (IE: 115, 200, 460) ARE NOT COMPATIBLE WITH THE NOMINAL VOLTAGE, NOTIFY ENGINEER.

D. WHERE MOTOR STARTER AND DISCONNECT ARE INDICATED AS IN THE SAME LOCATION PROVIDE A COMBINATION MOTOR STARTER.

MRS: MOTOR RATED SWITCH NFS: NON-FUSED SWITCH REC: RECEPTACLE

RELAY#	LOCATION	PANEL / CIRCUIT	ON	OFF
r1	LOBBY / VESTIBULE	LPN-12 / 1 (1) 120V/1PH	MANUAL	TIMECLO
r2	APP BAY SCONCE / RED LIGHTS	LPN-21 / 2 (1) 120V/1PH	TIMECLOCK	TIMECLO
r3	BUILDING MOUNTED WALLPACKS	LPE-21 / 2 (1) 120V/1PH	PHOTOCELL	TIMECLO
r4	FLAG POLE LIGHT	LPN-21 / 12 (1) 120V/1PH	PHOTOCELL	TIMECLO
r5	EXTERIOR FACADE LIGHTS	LPN-21 / 10 (1) 120V/1PH	TIMECLOCK	TIMECLO
r6	SITE BOLLARDS	LPN-21 / 6, 8 (1) 208V/1PH	PHOTOCELL	РНОТОСЕ
r7	SITE POLE MOUNTED LIGHTS	LPN-21 / 2, 4 (1) 208V/1PH	PHOTOCELL	РНОТОСЕ
r8	APP BAYS 115 & 123	LPN-22 / 11, 13, 15, 17 (4) 120V/1PH	PA SYSTEM INPUT	TIMECLO



THE CITY OF **BLOOMINGTON,** 2301 EAST 86th STREET BLOOMINGTON, MN 55425

BLOOMINGTON FIRE STATION NO. 3



Wendel WD Architecture, Engineering, Surveying and Landscape Architecture, P.C. Five Bugles Design

860 Blue Gentian Rd. Suite #175 | Eagan, MN 55121 P: 651.379.9120 | F: 651.379.9125 | mepassociates.com I hereby certify that this plan, specification, or report was

prepared by me or under my direct supervision and that I am a duly Licensed Engineer under the laws of the State of Minnesota. Engineer Darren Dickenson

Date <u>02/28/2019</u> Reg. No. <u>41678</u>

LIGHTING RELAY SCHEDULE									
RELAY#	LOCATION	PANEL / CIRCUIT	ON	OFF					
r1	LOBBY / VESTIBULE	LPN-12 / 1 (1) 120V/1PH	MANUAL	TIMECLOCK					
r2	APP BAY SCONCE / RED LIGHTS	LPN-21 / 2 (1) 120V/1PH	TIMECLOCK	TIMECLOCK					
r3	BUILDING MOUNTED WALLPACKS	LPE-21 / 2 (1) 120V/1PH	PHOTOCELL	TIMECLOCK					
r4	FLAG POLE LIGHT	LPN-21 / 12 (1) 120V/1PH	PHOTOCELL	TIMECLOCK					
r5	EXTERIOR FACADE LIGHTS	LPN-21 / 10 (1) 120V/1PH	TIMECLOCK	TIMECLOCK					
r6	SITE BOLLARDS	LPN-21 / 6, 8 (1) 208V/1PH	PHOTOCELL	PHOTOCELL					
r7	SITE POLE MOUNTED LIGHTS	LPN-21 / 2, 4 (1) 208V/1PH	PHOTOCELL	PHOTOCELL					
r8	APP BAYS 115 & 123	LPN-22 / 11, 13, 15, 17 (4) 120V/1PH	PA SYSTEM INPUT	TIMECLOCK					

SCALE BAR SHOWN IS TWO INCHES ON THE ORIGINAL DRAWING.
IF NOT TWO INCHES ON THIS SHEET, ADJUST ACCORDINGLY DATE 02.28.2019 SCALE 12" = 1'-0" DWN. CAJ CHK. DRD CLIENT. No. 2017-56 PROJ. No. 484401

NOTE:
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF THE ARCHITECT AND ENGINEER AND IS NOT TO BE USED IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF THE ARCHITECT AND ENGINEER. UNAUTHORIZED ALTERATION OR ADDITION TO ANY SURVEY DRAWING, DESIGN, SPECIFICATION, PLAN OR REPORT IS PROHIBITED IN ACCORDANCE WITH STATE LAW, CODE AND RULES.

ELECTRICAL SCHEDULES

1. ALTERNATES MAY BE SUBMITTED WITH PRE-BID PRIOR APPROVAL BY ENGINEER. 2. VOLTAGES ARE SHOWN FOR CIRCUITING INFORMATION. LUMINAIRES SHALL INCLUDE VOLT/UNIVERSAL DRIVERS IF AVAILABLE