PHOTOMETRIC ANALYSIS NOTES

A. ALL EXTERIOR WALL MOUNTED LIGHTING FIXTURES SHALL BE INSTALLED ON A LIGHTING CIRCUIT CONTROLLED BY DIGITAL TIMECLOCK WITH PHOTOCELL FOR AUTOMATIC DUSK TO DAWN OPERATION. LIGHTING CIRCUIT SHALL ALSO BE PROVIDED WITH CONTROLS TO DIM ALL FIXTURES TO 50% OPERATION FOR THE HOURS BETWEEN 10PM AND 7AM.

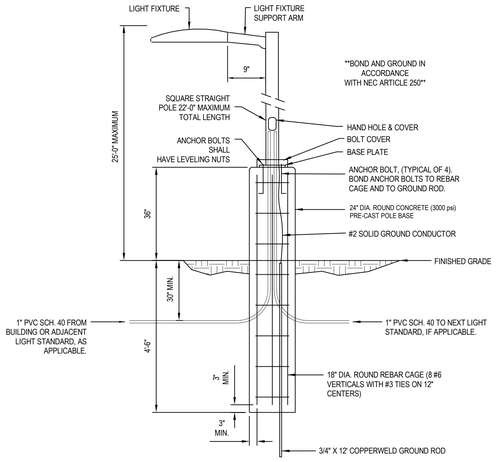
B. E.C. SHALL FURNISH AND INSTALL PHOTOCELL DEVICE WITH DIGITAL TIMECLOCK ON NORTHEAST CORNER OF BUILDING'S ROOF. E.C. SHALL INSTALL PHOTOCELL SO OPERATION IS NOT INHIBITED DUE TO ADJACENT LIGHTING SOURCES IN THE AREA. E.C. SHALL SET FC LEVEL OF PHOTOCELL TO ENSURE EXTERIOR LIGHTING CONTROL SYSTEM IS FULLY 100% COMPLETE AND OPERATIONAL TO THE OWNER'S SATISFACTION.

C. ALL INTERNALLY OR EXTERNALLY ILLUMINATED SIGNAGE SHALL HAVE A MAXIMUM INITIAL ILLUMINATION OF 30 FOOTCANDLES AND THE MAXIMUM LUMEN OUTPUT SHALL NOT EXCEED 1000 LUMENS.

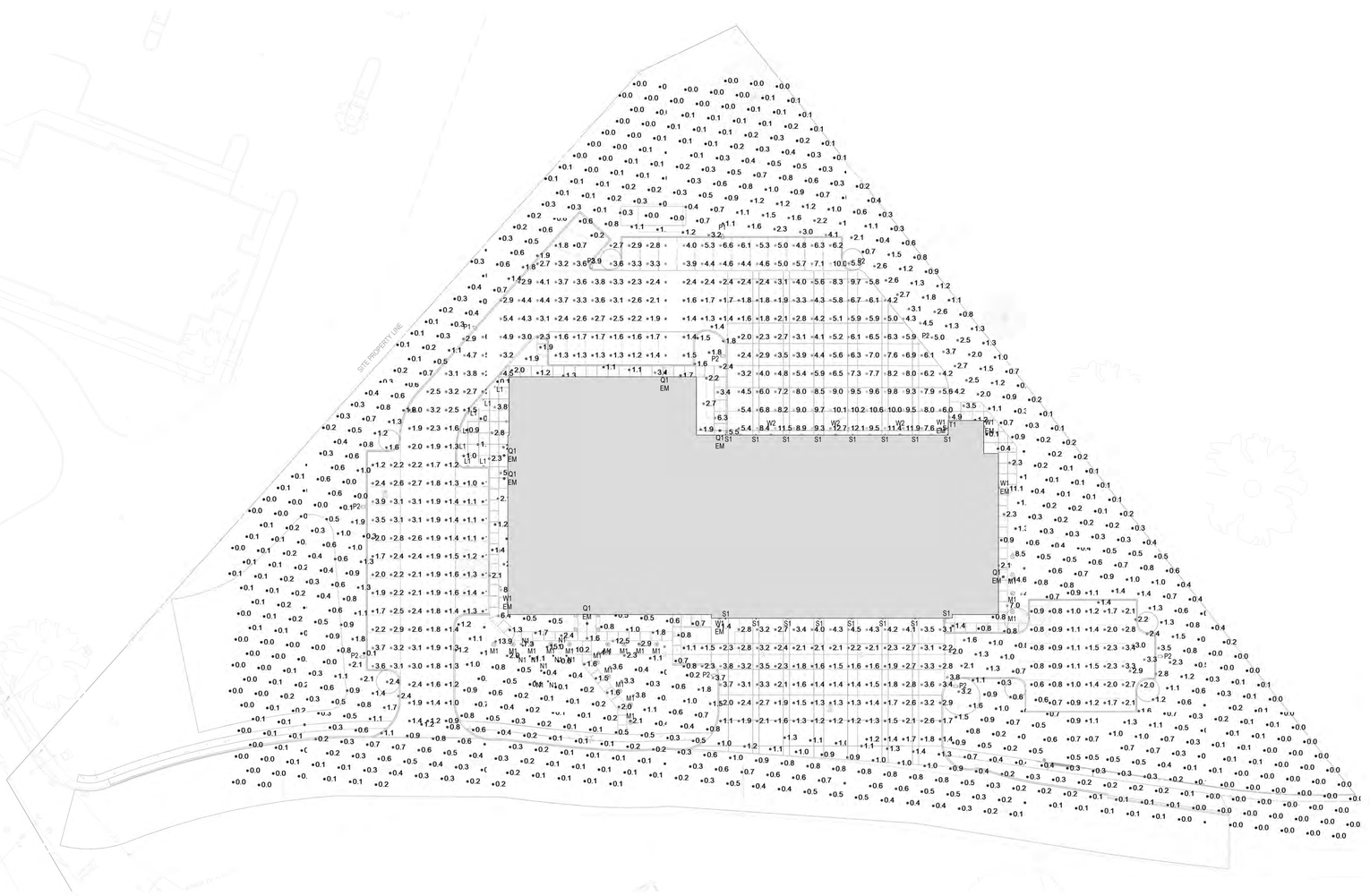
D. 'T1' STRIP LIGHT FIXTURES WERE NOT INCLUDED IN THIS SITE PHOTOMETRIC ANALYSIS.

PHOTOMETRIC ANALYSIS SCHEDULE

Calculation Points Name	Average	Maximum	Minimum	Avg/Min	Max/Min
Grass	0.85 fc	14.99 fc	0.00 fc	198087.6	3608841.8
Parking Lot	3.25 fc	12.70 fc	0.80 fc	4.1	15.8



2 POLE LIGHT DETAIL
NOT TO SCALE



1 ELECTRICAL SITE PHOTOMETRICS
NOT TO SCALE

ALL DRAWINGS ARE PROTECTED BY FEDERAL COPYRIGHT BY MANNS WOODWARD STUDIOS, INC. AND CAN NOT BE REPRODUCED OR MODIFIED IN ANY MANNER WITHOUT WRITTEN PERMISSION. DOCUMENTS MAY NOT BE USED IN PART OR WHOLE TO DEVELOP THE DESIGN OF ANOTHER BUILDING WITHOUT EXPRESS WRITTEN PERMISSION BY MANNS WOODWARD STUDIOS.

MW STUDIOS
ARCHITECTURE + MASTER PLANNING
8098 SANDPIPER CIR, SUITE H
NOTTINGHAM, MD 21236
410-344-1460
INFO@MWSARCH.COM
WWW.MWSARCH.COM

CONSULTANT:

DEDC
ENGINEERING | DESIGN | CONSULTING
Delaware
312 S. Chapel Street
Newark, DE 19711
Phone
302.738.7172
Fax
302.738.7173
www.dedc-eng.com
Pennsylvania
Donna Morris Plaza
30 S. 17th Street
Suite 820
Philadelphia, PA 19103
Phone
267.804.7286

SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
SCOTTIN FRENCH
ENGINEER
PE084120

EXETER TOWNSHIP
EMERGENCY SERVICES FACILITY
70 GIBRALTAR ROAD
READING PA 19606

PROJECT NUMBER: 25-049

SUBMISSION:
BID SET

ORIGINAL ISSUE DATE:
10/01/2026

SHEET REVISION SCHEDULE:
No. DATE

ELECTRICAL SITE PHOTOMETRICS

SHEET NUMBER:
E103

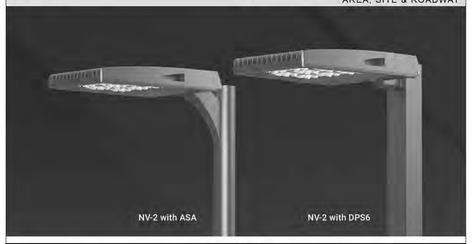
10/1/2026 12:13:01 PM

P1 (TYPE 2) & P2 (TYPE 3) FIXTURES:

NLS LIGHTING

NV-2

AREA, SITE & ROADWAY



LED WATTAGE CHART

Drive Current	80L	96L	112L	128L
700 milliamps	116w-171w	193w-209w	243w	265w-274w
1050 milliamps	250w-262w	288w-311ma	357w-366w	409w-415w
1200 milliamps	-	-	-	467w

KEY FEATURES

- Ideal High Lumen Output for Area, Site, Roadway, and Large Parking Venues such as: Corporate Parks, Shopping Malls, Event & Sports Stadiums, Roadways, and Airports
- Sleek Robust Design of the NV-2 (Weight: 42 lbs., EPA: 0.61)
- IES Distributions T2, T3, T4, and T5
- 80L, 96L, 112, and 128L LED Configurations, 168 to 467 Watts
- Amber, 2700K, 3000K, 3500K, 4000K, 5000K CCT Multichip High Power 70 & 80 CRI LEDs
- IP65 Rated Against Dust & Water Ingress, IK10 Rated for Tamper/Vandalism/Impact Protection
- Mountings available have a 1.5G to 3G Vibration Rating: Architectural Sweep Arm, Direct Pole 6" and 11" Arm, Knuckle Mount, Wall Mount, Trunnion Mount, Mast Arm Mount, and Tennis Arm
- 20kA Surge Protection (120V - 480V), 0 - 10V Programmable, Dimming LED Drivers
- LED Drivers Ambient Temp. Min (°C) is -40°C and Ambient Temp. Max (°C) ranges from 50°C to 55°C
- Silicone Micro Optics providing 96% Clarity and Heat Resistant up to 150°C
- Controls Agnostic, Compatible with Most Control Systems and Sensors
- Environmentally Friendly Product Which Reduces Energy Consumption, L70 > 100,000 hours
- Easy to Install Mounting
- Cost Competitive and Short Shipping Lead Times in Days & Weeks

BUY AMERICAN

To ensure the latest BAA/TAA/BABA Standards are being met, please select BAA, TAA, or BABA in the options section. Please contact the factory before placing an order for any NLS products requesting BAA (Buy American Act), TAA (Trade American Act), or BABA (Build America, Buy America).

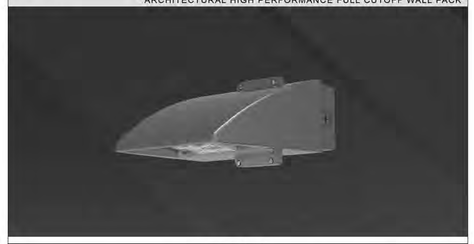
NV-02.09.24

W1 EM FIXTURE:

NLS LIGHTING

NV-W

ARCHITECTURAL HIGH PERFORMANCE FULL CUTOFF WALL PACK



LED WATTAGE CHART

	19L	32L
400 milliamps	21w	-
530 milliamps	29w	-
700 milliamps	37w	71w
1000 milliamps	-	100w
1050 milliamps	56w	-

KEY FEATURES

- Ideal for Exterior Walls, Entryways, Pathways, New Construction and Renovation, Warehouse and Receiving Docks, Court Yards, and School Playgrounds
- Sleek Minimalistic Design of the the NV-W (up to 11,000 Lumens, 12"W x 9"D x 5.5"H) Compliments the Design of the NV-W2 (up to 24,000 Lumens, 18"W x 9.38"D x 5"H)
- Amber, 2700K, 3000K, 3500K, 4000K, 5000K CCT Multichip High Power 70 & 80 CRI LEDs
- IP65 Rated Against Dust & Water Ingress, IK10 Rated for Tamper/ Vandalism/Impact Protection
- 20kA Surge Protection (120V - 480V) Cold Weather Integrated Battery Back-Up Safety Options
- Silicone Optics providing 96% Clarity and Heat Resistant up to 150°C
- Controls Agnostic, Compatible with Most Control Systems and Sensors
- Environmentally Friendly Product Which Reduces Energy Consumption, L70 > 100,000 hours
- IDA qualified for 3000K CCT and Lower for Down-light Application, Reducing Light Pollution and Trespass
- Buy America(n) Option Available, Quick Mount for Easy Installation
- Cost Competitive and Short Shipping Lead Times in Days & Weeks

BUY AMERICAN

To ensure the latest BAA/TAA/BABA Standards are being met, please select BAA, TAA, or BABA in the options section. Please contact the factory before placing an order for any NLS products requesting BAA (Buy American Act), TAA (Trade American Act), or BABA (Build America, Buy America).

Rev. 02.03.26

W2 (TYPE 4) FIXTURE:

NLS LIGHTING

NV-W2

ARCHITECTURAL HIGH PERFORMANCE FULL CUTOFF WALL PACK



LED Wattage Chart

Drive Current	64L
530 milliamps	99W
700 milliamps	139W
1050 milliamps	205W

KEY FEATURES

- Ideal for Exterior Walls, Entryways, Pathways, New Construction and Renovation, Warehouse and Receiving Docks, Court Yards, and School Playgrounds
- Sleek Minimalistic Design of the NV-W2 (up to 24,000 Lumens, 18"W x 9.38"D x 5"H) Compliments the NV-W (up to 11,000 Lumens, 12"W x 9"D x 5.5"H)
- 2700K, 3000K, 3500K, 4000K, 5000K CCT Multichip High Power 70 & 80 CRI LEDs
- IP66 Rated Against Dust & Water Ingress, IK10 Rated for Tamper/Vandalism/Impact Protection
- 20KA Surge Protection (120V - 480V) Cold Weather Integrated Battery Back-Up Safety Options
- Silicone Optics providing 96% Clarity and Heat Resistant up to 150°C
- Controls Agnostic, Compatible with Most Control Systems and Sensors Listings
- Environmentally Friendly Product Which Reduces Energy Consumption, L70 > 100,000 hours
- IDA qualified for 3000K CCT and Lower for Down-light Application, Reducing Light Pollution and Trespass
- Buy America(n) Option Available, Quick Mount for Easy Installation
- Cost Competitive and Short Shipping Lead Times in Days & Weeks

BUY AMERICAN

To ensure the latest BAA/TAA/BABA Standards are being met, please select BAA, TAA, or BABA in the options section. Please contact the factory before placing an order for any NLS products requesting BAA (Buy American Act), TAA (Trade American Act), or BABA (Build America, Buy America).

Rev. 12.08.25

M1 FIXTURE:

LIGMAN LIGHTING USA

ULH-10665
Lightsoft 1 Bollard



27w LED 1164 Lumens
TDES - Suitable For Wet Locations
IK08 - Impact Resistant (Vandal Resistant)
Weight 17 lbs.



Top View:

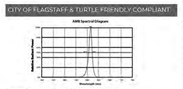


Mounting Detail



NHLS - Internal top access driver housing, gasketed with IP67 rated lens assembly for extra guard for easy installation.

CITY OF FLAGSTAFF & TURTLE FRIENDLY COMPLIANT



Narrow-Spectrum Amber LEDs
Peak wavelength between 585 & 595 nanometers and a full width of 50% power no greater than 15 nanometers.t

Construction

Aluminum
Less than 0.1% copper content – Marine Grade 6060 extruded & LM6 -Aluminum High Pressure die casting provides excellent mechanical strength, clean detailed product lines and excellent heat dissipation.

Pre-paint
8 step degrease and phosphate process that includes passivation and etching as well as a zinc and nickel phosphate process before powder painting.

Memory Retentive, Silicon Gasket
Provided with special injection molded TPE for purpose of long life sealing. Memory retentive properties ensure the gasket retains the gaskets exact profile and seal over years of use and compression.

Thermal management
LM6 Aluminum is used for its excellent mechanical strength and thermal dissipation properties in low and high ambient temperatures. The superior thermal heat sink design by Ligman engineers ensures that the LED's are kept within their most critical temperature range to ensure maximum luminous flux output, as well as providing long LED service life and ensuring less than 10% lumen depreciation at 50,000 hours.

Surge Suppression
Standard 10kv surge suppressor provided with all fixtures.

RoG Rating
R1 - U3 - G1

Finishing
All Ligman products go through an extensive finishing process that includes fettling to improve paint adherence.

Paint
UV Stabilized 4.5Mil thick powder coat paint and baked at 200 Deg C. This process ensures that Ligman products can withstand harsh environments. Rated for use in natatoriums.

MicroPRIM Finishes

MicroPRIM is Ligman's trade marked decorative powder coating technology that permanently infuses colors, patterns, or imagery directly into the surface of luminaires and poles, thereby providing protections that standard powder coating does not offer.

MicroPRIM finishes include nature-inspired wood grains and stone aesthetics, material-inspired finishes such as brushed metals, and Ligman's full range of RAL and Ligman standard colors, as well as any RAL or Pantone color. Decorative patterns, custom imagery and more.

Coating and Infusion Process

Metal components are pre-treated and powder coated with a proprietary, polyurethane-based coating engineered for outdoor architectural use. Decorative patterns or imagery are then permanently infused into the cured powder coat through a heat-based process, creating a durable, integrated finish.

Performance and Validation

MicroPRIM finishes are suitable for indoor and outdoor applications and meet AAMA2605 architectural coating requirements. Performance is validated through laboratory and real-world testing to ASTM standards for UV exposure, adhesion, abrasion, impact, salt spray, chemical resistance, and graffiti resistance.

All MicroPRIM finishes are backed by Ligman's 10-year warranty.

Key Performance Attributes:
•Anti-graffiti resistance
•UV and weather resistance
•Scratch and abrasion resistance.
•Aluminum R2o6 for installation in corrosive environments

Hardware
Provided Hardware is Marine grade 316 Stainless steel.

Anti Seize Screw Holes
Tapped holes are provided with a special anti seize compound designed to prevent seizure of threaded connections, due to electrolysis from heat, corrosive atmospheres and moisture.

Crystal Clear Low Iron Glass Lens
Ligman uses premium quality low iron tempered crystal clear low iron glass ensuring no green glass tinge.

Optics & LED
Precise optic design provides exceptional light control and precise distribution of light.
LED CRI > 80

Lumen - Maintenance Life
L80 /B10 at 50,000 hours (This means that at least 90% of the LED still achieves 80% of their original flux)

Indirect light-emitting bollard range. Smooth and sharp devised bollard family with wonderful soft controlled lighting options.

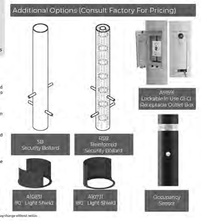
The innovative reflector technology of the Lightsoft bollard guarantees a high degree of efficiency and optimal visual comfort. Lightsoft has been developed to have excellent controlled downward light providing wide spacing ratios. It has three light shield accessories with different light distributions. The Lightsoft is available in a cylindrical or square shape design with two different heights.
The Lightsoft Bollard comes standard with a unique waterproof internal driver housing compartment that is situated at the top of the pole to stop water and dust from entering the electrical components. This fixture is supplied completely wired with powercord and waterproof gland from the driver enclosure to the base of the bollard ensuring quick trouble-free installation. Custom bollard heights are available, please specify.
Color temperature 2700K, 3000K, 3500K and 4000K.
Custom wattages can be provided to suit customer and Title 24 requirements. (Specify total watts per fixture)

All Ligman fixtures can be manufactured using a special pre-treatment and coating process that ensures the fixture can be installed in natatoriums as well as environments with high concentrations of chlorine or salt and still maintain Ligman's 10-year warranty. For this natatorium rated process please specify NAT in options.

Security Bollard:
This product can be modified with optional Security Bollard cores. Ligman has **two** security bollard options designed to deter unauthorized vehicular access in restricted areas. Ligman' **Standard Security Bollards (SB)** are structurally engineered and simulated to meet the performance criteria of a typical traffic-rated bollard system, which corresponds to a 5,000 lb vehicle impact up to 30mph with less than 4ft of penetration.
Ligman **Reinforced Security Bollards (RSB)** are structurally engineered for impact resistance and simulated to meet the performance criteria of ASTM F2656 M30 P1 (formerly known as K4), which corresponds to a 15,000 lb vehicle impact up to 30mph with less than 3.3 ft of penetration.
These bollards are not certified as crash-rated.
Please refer to the product installation sheet for additional requirements and installation guidelines

NOTE: This product is available with integrated occupancy sensor detection, please see page 2 for more information.

Additional Options (Consult Factory For Pricing)



Ligman Lighting USA reserves the right to change specifications without prior notice, please contact factory for latest information. Due to the continual improvements in LED technology data and components may change without notice.

LIGHTING FIXTURE SCHEDULE (PHOTOMETRIC)

TYPE	WATTS	VOLTS	LAMP TYPE	KELVIN TEMP	MANUFACTURER/MODEL (OR APPROVED EQUAL)	DESCRIPTION	REMARKS	Description
L1	12W	277V	LED	3000 K	ABOVE ALL LIGHTING / SMWL-12-SW-1-RM-BZ-M-D	EXTERIOR SLIM RECESSED STEP AND WALL LIGHT, ALUMINUM HOUSING, TEMPERED GLASS LENS, 0-10V ELECTRONIC DIMMING DRIVER		PHOTOMETRIC
M1	27W	277V	LED	3000 K	LIGMAN / ULH-10665-27W-W30-01-120/277V-GFCI-DIM	42" TALL ROUND BOLLARD LIGHT, BLACK FINISH, MARINE GRADE ALUMINUM HOUSING, POWDER COAT PAINT FINISH, IP66 RATED, WET LOCATION LISTED ELECTRONIC DRIVER		PHOTOMETRIC
N1	10W	277V	LED	3000 K	VISTA PRO / 1182-SS-SS-NS-30-C-DV-CX-ND-B34-T010	IN GROUND LED SPOT LIGHT, STAINLESS STEEL HOUSING, DRIVE OVER GRADE, NARROW SPOT, CLEAR POLYMER LENS, IP68 RATED, 10 DEGREE TILT OPTIC.	E.C. SHALL PROVIDE (3) AIMINGS PER FIXTURE.	PHOTOMETRIC
P1	171W	277V	LED	3000 K	NLS LIGHTING / NV-2-T3-80L-7-30K8-UNV-ASA-BRZ-8S-MGF-HSS-GL	SINGLE LUMINARE ROADWAY POLE LIGHT FIXTURE, DIE CAST ALUMINUM, MARINE GRADE BRONZE FINISH, TEMPERED GLASS LENS, HOUSE SIDE SHIELD, 0-10V ELECTRONIC DIMMING DRIVER	FIXTURE SHALL BE MOUNTED ONTO 4" ROUND STEEL POLE MODEL #SSSP-22-4R-7G-128C-SGL-BRZ-136-MGF-UL-PROV AS MANUFACTURED BY NLS LIGHTING WITH A MOUNTING CONFIGURATION OF 'SGL'.	PHOTOMETRIC
P2	171W	277V	LED	3000 K	NLS LIGHTING / NV-2-T4FTW-80L-7-30K8-UNV-ASA-BRZ-8S-MGF-HSS-GL	SINGLE LUMINARE ROADWAY POLE LIGHT FIXTURE, DIE CAST ALUMINUM, MARINE GRADE BRONZE FINISH, TEMPERED GLASS LENS, HOUSE SIDE SHIELD, 0-10V ELECTRONIC DIMMING DRIVER	FIXTURE SHALL BE MOUNTED ONTO 4" ROUND STEEL POLE MODEL #SSSP-22-4R-7G-128C-SGL-BRZ-136-MGF-UL-PROV AS MANUFACTURED BY NLS LIGHTING WITH A MOUNTING CONFIGURATION OF 'SGL'.	PHOTOMETRIC
Q1 EM	21W	277V	LED	3000 K	NLS LIGHTING / VSR-S-T2-16L-40-30K8-UNV-CM-BRZ-MGF	CEILING MOUNTED CANOPY LIGHT FIXTURE, LOW PROFILE, SPUN ALUMINUM, MARINE GRADE BRONZE FINISH	ALL FIXTURES MARKED 'EM' SHALL BE PROVIDED WITH 90 MINUTE MINIMUM INTEGRATED EMERGENCY BATTERY BACKUP.	PHOTOMETRIC
S1	60W	277V	LED	3000 K	METEOR / LA6-60-309-RGB-UNV-DMX-40-40-BLK-OUT-WW	RGB IP65 RATED WALL CYLINDER DIRECT/INDIRECT LIGHT FIXTURE		PHOTOMETRIC
V1	26W	277V	LED	3000 K	TARGETTI / SOL-CC-FE-L2-ZM-30	ADJUSTABLE FLOODLIGHT PROJECTOR, ANODIZED DIE-CAST ALUMINUM, IP68	E.C. SHALL PROVIDE (3) AIMINGS PER FIXTURE.	PHOTOMETRIC
W1 EM	37W	277V	LED	3000 K	NLS LIGHTING / NV-2-T2-16L-7-30K8-UNV-WM-BRZ-MGF-GL-EM8	SINGLE LUMINARE FULL CUTOFF WALL PACK, DIE-CAST ALUMINUM HOUSING, BRONZE FINISH, OUTDOOR RATED, ONE-PIECE GASKET, IMPACT RESISTANT GLASS LENS, 90 MINUTE MINIMUM EMERGENCY BACKUP BATTERY.	ALL FIXTURES MARKED 'EM' SHALL BE PROVIDED WITH 90 MINUTE MINIMUM INTEGRATED EMERGENCY BATTERY BACKUP.	PHOTOMETRIC
W2	136	277V	LED	3000 K	NLS LIGHTING / NV-2-T4FTW-64L-7-30K8-UNV-WM-BRZ-MGF-GL	SINGLE LUMINARE FULL CUTOFF WALL PACK, DIE-CAST ALUMINUM HOUSING, BRONZE FINISH, OUTDOOR RATED, ONE-PIECE GASKET, IMPACT RESISTANT GLASS LENS, 90 MINUTE MINIMUM EMERGENCY BACKUP BATTERY.	ALL FIXTURES MARKED 'EM' SHALL BE PROVIDED WITH 90 MINUTE MINIMUM INTEGRATED EMERGENCY BATTERY BACKUP.	PHOTOMETRIC

MW STUDIOS
ARCHITECTURE + MASTER PLANNING
8098 SANDPIPER CIR, SUITE H
NOTTINGHAM, MD 21236
☎ 410-344-1460
✉ INFO@MWSARCH.COM
WWW.MWSARCH.COM

CONSULTANT:

DEDC
ENGINEERING | DESIGN | CONSULTING
Delaware
212 S. Chapel Street
Newark, DE 19711
Phone
302.738.7172
Fax
302.738.7175
www.dedc-eng.com
Pennsylvania
Donna Morris Plaza
30 S. 17th Street
Suite 820
Philadelphia, PA 19103
Phone
267.804.7286

SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
SCOTT W. FRENCH
ENGINEER
PE094132

EXETER TOWNSHIP
EMERGENCY SERVICES FACILITY
70 GIBRALTAR ROAD
READING PA 19606

PROJECT NUMBER: 25-049

SUBMISSION:
BID SET

ORIGINAL ISSUE DATE:
10/01/2026

SHEET REVISION SCHEDULE:
No. DATE

ELECTRICAL SITE PHOTOMETRICS

SHEET NUMBER:
E104

10/1/2026 12:13:02 PM

ALL DRAWINGS ARE PROTECTED BY FEDERAL COPYRIGHT BY MANNS WOODWARD STUDIOS, INC. AND CAN NOT BE REPRODUCED OR MODIFIED IN ANY MANNER WITHOUT WRITTEN PERMISSION. DOCUMENTS MAY NOT BE USED IN PART OR WHOLE TO DEVELOP THE DESIGN OF ANOTHER BUILDING WITHOUT EXPRESS WRITTEN PERMISSION BY MANNS WOODWARD STUDIOS.

N1 FIXTURE:

VISTA MODEL **1182**-SS | Specification Sheet
Commercial Series • In-Grade • LED

TYPE: MODEL:
PROJECT:

PRODUCT FEATURES

Wattage	6 – 14 W
Voltage	120 or 277 VAC
Lumens	287 – 1300 Delivered Lumens
Distribution	NEMA type (Ax.Y) 1x1 (nd), 1x1 (ns), 4x4 (wf), 5x5 (mf)
CCT	2700K, 3000K, 3500K, 4000K, 5000K
CRI	80 CRI min.
Dimming	0-10V or Phase Cut (TRIAC/ELV-120VAC only) available
Driver	Dual Volt 120 or 277VAC with tri-modal dimming capabilities
Dimensions	5" DIA x 4" D



ORDERING INFORMATION

EXAMPLE: 1182-SS-SS-MF-27-B-DV-CX-PCT-812-TO10

MODEL	DOOR	FINISH	DIST	TEMP	LUMENS	VOLTAGE	LENS	DIMMING	ENTRIES	ACC
1182	SS	SS				DV				

MODEL	DOOR COVER	FINISH	DISTRIBUTION	COLOR TEMP	DELIVERED LUMENS
1182	SS Stainless Steel **ORDERING NOTES** Powder Coated Aluminum Door Cover option available. See 1182-AL specification.	SS Stainless Steel	VNS Very Narrow Spot NS Narrow Spot MF Medium Flood WF Wide Flood	27 2700K 30 3000K 35 3500K 40 4000K 50 5000K	VNS NS MF WF B 287 455 564 569 C 511 777 906 903 D 588 912 1043 1084 E 646 1093 1241 1300

VOLTAGE	LENS	DIMMING	CONDUIT ENTRIES	ACCESSORIES
DV Dual Volt (120 or 277VAC)	CX Crowned Clear AX Anti Slip Clear	ND Non Dimming (N.C.R.E Delivered Lumens) 010 0-10V (E Delivered Lumens only) PCT Phase Cut (TRIAC/ELV-120VAC only) (E Delivered Lumens only)	512 Side ½" 812 Bottom ½" 834 Bottom ¾"	T05 Tilt Optic 5° T010 Tilt Optic 10° T015 Tilt Optic 15° DF Diffuse Filter LSF Linear Spread Filter STR Stainless Steel Trim Ring RBK Rebar Bracket Kit

ORDERING INFORMATION

Q1 FIXTURE:

NLS LIGHTING

VSR-S-CM

GARAGE, CANOPY AND CEILING



LED Wattage Chart		
Drive Current	14L	32L
400 milliamps	21W	
530 milliamps	28W	56W
700 milliamps	36W	71W
1050 milliamps	56W	106W

FORM AND FUNCTION
- Sleek, low profile housing
- Economy performance
- Engineered for optimum thermal management
- Low depreciation rate
- Reduces energy consumption and costs up to 65%
- Optical system designed for Parking Structures

CONSTRUCTION
- Spun Aluminum
- Corrosion resistant external hardware
- One-piece silicone gasket ensures IP65 seal for electronics compartment
- Two-piece silicone Micro Optic system ensures IP67 level seal around each PCB

BUY AMERICAN
To ensure the latest BAA/TAA/BABA Standards are being met, please select BAA, TAA, or BABA in the options section. Please contact the factory before placing an order for any NLS products requesting BAA (Buy American Act), TAA (Trade American Act), or BABA (Build America, Buy America).

S1 FIXTURE:

GALENE LED WALL LIGHT
Indirect and Direct Light

ABOVE ALL www.AboveAllLighting.com



The Galene Wall Light is designed in a round or square shape with durable powder coat paint. It combines aluminum structure with a tempered glass diffuser radiating light upward and downward against the wall where installed.

TECHNICAL DATA

Wattage	Selectable 20W/40W
Beam Angles	25°, 45°, 60°
CRI	70 standard
	80 optional
CCT	Selectable 3000K, 4000K, 5000K
Input Voltage	120-347VAC, 50/60Hz
Operating Temp.	-40°F to 104°F(-40°C to 40°C)
Driver	Non dimming
Certifications	cUL Listed
	Suitable for wet locations
	RoHS compliant
Power Factor	>0.9 at full load
Projected Lifetime	L70 - 100,000 Hours

FEATURES

- **Shape Options:** Round and square shapes available.
- **Light Distribution:** Direct and indirect light.

©2026 ABOVE ALL Lighting, Inc. All rights reserved.

ED WALL L
irect Light



L1 FIXTURE:

SOLID SLIM
Recessed Step And Wall Light

ABOVE ALL www.AboveAllLighting.com



Compact and inconspicuous design with asymmetrical light distribution, directing light downward, minimizing uplight while revealing the texture of the stepped baffle. Die-cast aluminum housing, silicone rubber gasket, tempered glass, akzoNobel powder coating. Heavier powder coating optional for marine ambient corrosion resistance. Ideal for the illumination of ground surfaces, building entrances stairs and footpaths.

TECHNICAL DATA

Wattage	4W, 7W, 12W
	Selectable 7W/9W/12W
CRI	80
CCT	3000K, 4000K
	Selectable 3000K/4000K/5000K
Input Voltage	120-277VAC, 50/60Hz
Operating Temp.	-4°F to 104°F(-20°C to 40°C)
Driver	
Standard	Non dimming
Optional	0-10V dimming
Certifications	cETL Listed
	RoHS compliant
Power Factor	>0.9 at full load
Harmonic Distortion	<20% at full load
Projected Lifetime	L70 - 100,000 Hours
IP Rating	IP65

FEATURES

- **Housing Construction:** Heavy duty cast aluminum housing with tempered glass lens.
- **Mounting System:** Stainless steel pre-installed housing with marine grade treatment available.
- **Optical Performance:** Asymmetrical light distribution.

©2026 ABOVE ALL Lighting, Inc. All rights reserved.

MW STUDIOS
ARCHITECTURE + MASTER PLANNING
8098 SANDPIPER CIR, SUITE H
NOTTINGHAM, MD 21236
☎ 410-344-1460
✉ INFO@MWSARCH.COM
WWW.MWSARCH.COM

CONSULTANT:

DEDC ENGINEERING | DESIGN | CONSULTING
Delaware
212 S. Chapel Street
Newark, DE 19711
Phone
302.738.7172
Fax
302.738.7175
www.dedc-eng.com
Pennsylvania
Donna Morris Plaza
30 S. 17th Street
Suite 820
Philadelphia, PA 19103
Phone
267.804.7286

SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
SCOTT W. FRENCH
ENGINEER
PE084124
COMMONWEALTH OF PENNSYLVANIA

EXETER TOWNSHIP
EMERGENCY SERVICES FACILITY
70 GIBRALTAR ROAD
READING PA 19606

PROJECT NUMBER: 25-049

SUBMISSION:
BID SET

ORIGINAL ISSUE DATE:
10/01/2026

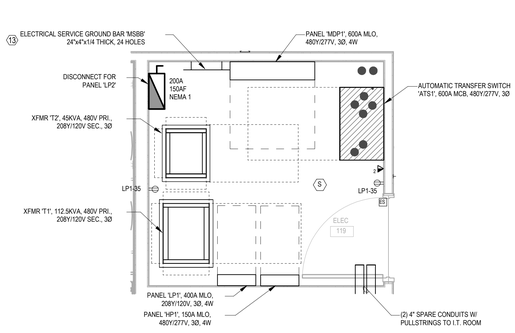
SHEET REVISION SCHEDULE:
No. DATE

ELECTRICAL SITE PHOTOMETRICS

SHEET NUMBER:
E105

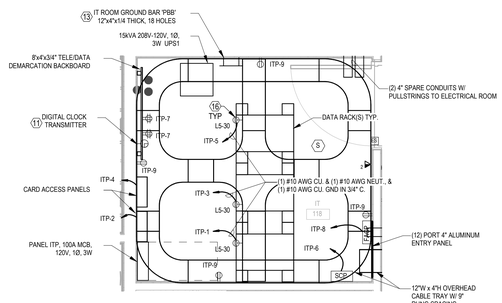
10/1/2026 12:13:03 PM

ALL DRAWINGS ARE PROTECTED BY FEDERAL COPYRIGHT BY MANNS WOODWARD STUDIOS, INC. AND CAN NOT BE REPRODUCED OR MODIFIED IN ANY MANNER WITHOUT WRITTEN PERMISSION. DOCUMENTS MAY NOT BE USED IN PART OR WHOLE TO DEVELOP THE DESIGN OF ANOTHER BUILDING WITHOUT EXPRESS WRITTEN PERMISSION BY MANNS WOODWARD STUDIOS.



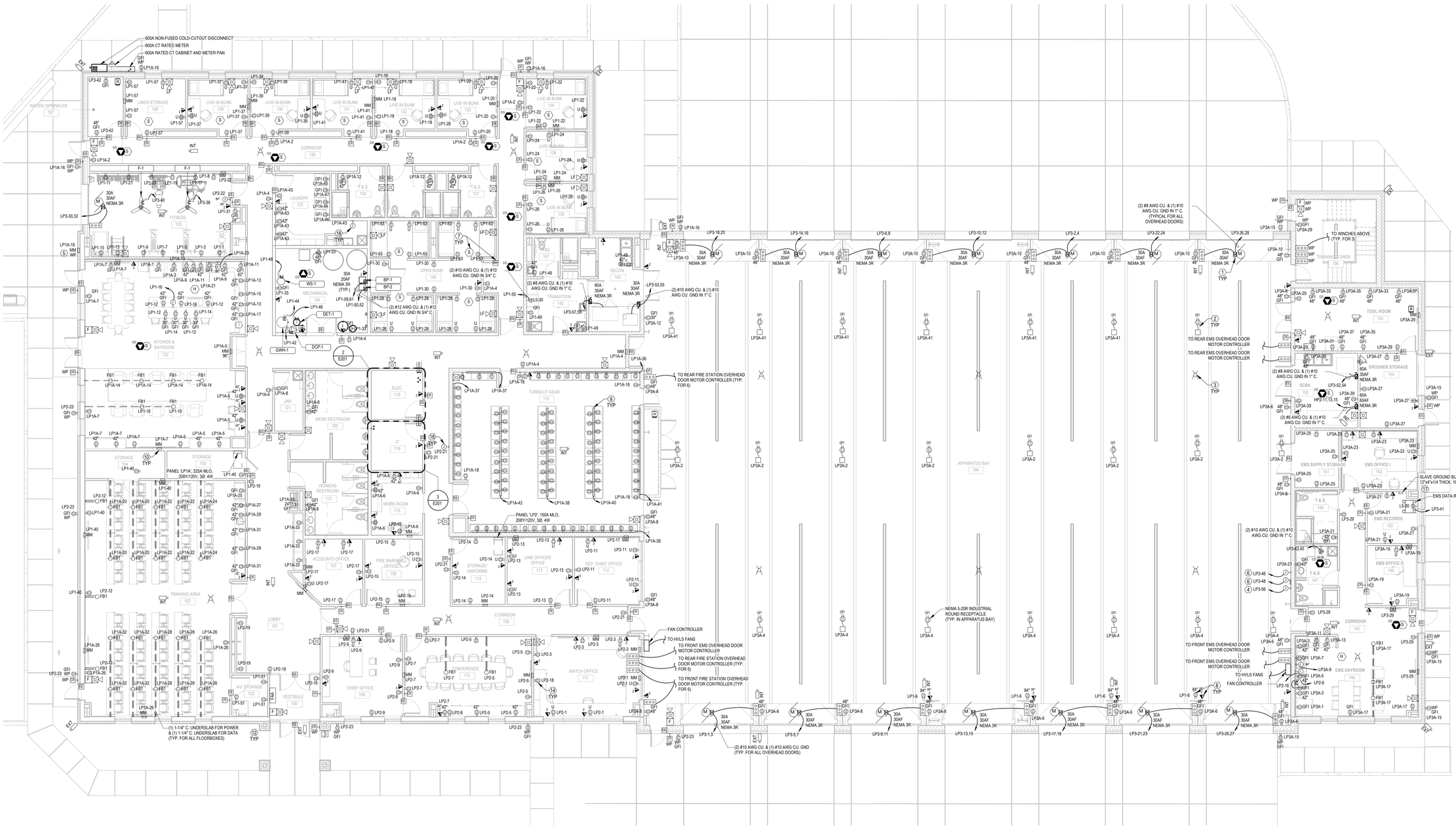
2 FIRST FLOOR ENLARGED ELECTRIC ROOM

3/8" = 1'-0"



3 FIRST FLOOR ENLARGED I.T. ROOM

3/8" = 1'-0"



1 FIRST FLOOR POWER PLAN

1/8" = 1'-0"

KEYNOTES

1. E.C. SHALL COORDINATE ALL DEVICES, WIRE SIZES, AND CONNECTIONS WITH OVERHEAD DOOR VENDOR PRIOR TO COMMENCEMENT OF NEW WORK.
2. E.C. SHALL FURNISH AND INSTALL ELECTRIC CORD REEL SECURELY TO BUILDING STRUCTURE. E.C. SHALL FURNISH AND CONFIGURE BALLSTOP FOR PROPER USAGE AND LET DOWN OF ELECTRICAL CORD FROM REEL. E.C. SHALL COORDINATE EXACT LOCATION IN FIELD WITH ARCHITECTURAL DRAWINGS PRIOR TO COMMENCEMENT OF NEW WORK.
3. E.C. SHALL FURNISH AND INSTALL WIRELESS ACCESS POINT SECURELY TO BUILDING STRUCTURE. ALL ACCESS POINTS SHALL BE SPECIFIED BY OWNER. E.C. SHALL COORDINATE EXACT LOCATIONS IN FIELD WITH OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF NEW WORK.
4. E.C. SHALL PROVIDE (1) 120V 20A CIRCUIT FOR COINO2 CONTROLS SYSTEM. E.C. SHALL COORDINATE INTERCONNECTION REQUIREMENTS WITH OVERHEAD DOOR MASTER CONTROL BOX AND ALL SUBSEQUENT DOOR CONTROLLERS FOR AUTOMATIC OPENING AND CLOSING VIA THE COINO2 SYSTEM. E.C. SHALL COORDINATE EXACT REQUIREMENTS IN FIELD WITH COINO2 SYSTEM VENDOR AND MECHANICAL CONTRACTOR PRIOR TO COMMENCEMENT OF NEW WORK.
5. E.C. SHALL COORDINATE EXACT LOCATION AND HEIGHT OF EXTERIOR WEATHERPROOF MULTIMEDIA BOX IN FIELD WITH ARCHITECTURAL DRAWINGS AND OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK.
6. E.C. SHALL PROVIDE CIRCUIT FOR AIRVAC CONTROLS SYSTEM. E.C. SHALL COORDINATE EXACT LOCATION OF JUNCTION BOX IN FIELD WITH AIRVAC SYSTEM VENDOR AND MECHANICAL CONTRACTOR PRIOR TO COMMENCEMENT OF NEW WORK.
7. E.C. SHALL TIE ELECTROMAGNETIC DOOR HOLDERS AND SMOKE DETECTORS FOR INTERIOR SMOKE RATED DOORS TO FIRE ALARM SYSTEM.
8. E.C. SHALL COORDINATE EXACT LOCATION AND HEIGHTS OF RECEPTACLE AND DATA FOR APPARATUS BAY TELEVISION WITH ARCHITECTURAL DRAWINGS PRIOR TO COMMENCEMENT OF NEW WORK.
9. E.C. SHALL INSTALL OWNER-FURNISHED GEARGRID POWER BAR ABOVE LOCKERS IN TURNOUT GEAR ROOM. E.C. SHALL COORDINATE ALL ELECTRICAL REQUIREMENTS AND EXACT POWER BAR RUN LENGTHS WITH ARCHITECTURAL DRAWINGS, GEARGRID VENDOR, AND OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF NEW WORK.

KEYNOTES

10. E.C. SHALL COORDINATE ALL CABLING PATHWAYS FOR MULTIMEDIA SURROUND SOUND IN DAYROOM WITH ARCHITECTURAL DRAWINGS AND AV VENDOR PRIOR TO COMMENCEMENT OF NEW WORK.
11. E.C. SHALL FURNISH AND INSTALL PYRAMID S9DWXSLAUB DIGITAL CLOCK TRANSMITTER. WIRE TO IT ROOM NETWORK PATCH PANEL. COORDINATE CONNECTION PORT WITH IT AND OWNER PRIOR TO INSTALLATION.
12. E.C. SHALL COORDINATE EXACT LOCATIONS OF FLOORBOXES IN FIELD WITH OWNER'S REPRESENTATIVE AND ARCHITECTURAL DRAWINGS PRIOR TO COMMENCEMENT OF NEW WORK.
13. E.C. SHALL FURNISH AND INSTALL GROUND BAR. REFER TO GROUND BAR DETAIL ON SHEET 'E601' FOR MORE INFORMATION.
14. E.C. SHALL FURNISH AND INSTALL RGBW CONTROLLER IN WATCH OFFICE FOR CONTROL OF COLOR CHANGING FIXTURES IN THE BUILDING. E.C. SHALL FURNISH AND INSTALL POE 16 PORT SWITCH FOR LOW-VOLTAGE CAT-6 WIRING FROM CONTROLLER TO SWITCH AND FROM CONTROLLER TO FIXTURES. E.C. SHALL FURNISH AND INSTALL POWER SUPPLY TO FIXTURES AS REQUIRED FROM DATA ENABLER PRO DEVICE IN WATCH OFFICE. E.C. SHALL COORDINATE ALL WORK WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS AND TYPICAL CONNECTION DIAGRAM SHOWN ON SHEET 'E604' AS TO MAKE RGBW COLOR CHANGING BUILDING SYSTEM 100% OPERATIONAL AND TO OWNER'S SATISFACTION.
15. E.C. SHALL FURNISH AND INSTALL DATA RACK FOR EMS PORTION OF BUILDING. E.C. SHALL COORDINATE ALL ROUTING AND CABLING FROM MAIN I.T. ROOM TO EMS RECORDS ROOM FOR INTERCONNECTION TO MAIN SERVER SYSTEM.
16. E.C. SHALL FURNISH AND INSTALL LOCKING RECEPTACLE ON CABLE TRAY ABOVE RACK. E.C. SHALL COORDINATE ALL WORK IN FIELD.
17. E.C. SHALL FURNISH AND INSTALL SLAVE GROUND BUS BAR IN THIS LOCATION FOR GROUNDING OF ANTENNA SYSTEM. E.C. SHALL BOND SBB TO GROUND BAR PBB IN I.T. ROOM. E.C. SHALL COORDINATE ALL WORK IN FIELD WITH RADIO SYSTEM VENDOR AND G.C. PRIOR TO COMMENCING WORK.
18. E.C. SHALL FURNISH AND INSTALL (1) JUNCTION BOX ABOVE FINISHED CEILING TO FEED NEW TRAP PRIMER. E.C. SHALL COORDINATE FINAL LOCATION AND CONNECTION IN FIELD WITH MECHANICAL CONTRACTOR PRIOR TO COMMENCEMENT OF NEW WORK.

GENERAL POWER NOTES

- A. E.C. SHALL COORDINATE ALL DEVICE LOCATIONS IN FIELD WITH ARCHITECTURAL DRAWING AND OWNER'S ONSITE REPRESENTATIVE BEFORE WORK COMMENCES.
- B. E.C. SHALL FURNISH AND INSTALL ALL ELECTRICAL SYSTEMS AND EQUIPMENT PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. E.C. SHALL FURNISH AND INSTALL ALL ACCESSORY EQUIPMENT REQUIRED, BUT NOT PROVIDED WITH EQUIPMENT, TO MAKE SYSTEMS AND EQUIPMENT FULLY COMPLETE AND 100% OPERATIONAL.
- C. ALL RECEPTACLES SHOWN AS GFCI THAT CANNOT BE INSTALLED IN AN EASILY ACCESSIBLE LOCATION FOR RESET FUNCTIONALITY SHALL BE FURNISHED AS A STANDARD RECEPTACLE FED FROM A GFCI TYPE BREAKER.
- D. E.C. SHALL REFER TO DRAWING E000 FOR LEGEND INFORMATION.
- E. PROVIDE CUTTING, PATCHING, AND RESTORATION OF FINISHES NECESSARY FOR WORK SURFACES DAMAGED BY THIS WORK. SPACES AROUND CONDUITS PASSING THROUGH FLOORS AND WALLS SHALL BE NEATLY PATCHED AND FINISHED TO MATCH NEW/EXISTING. STRUCTURAL MEMBERS SHALL NOT BE CUT OR PENETRATED IN ANY MANNER. THE SPACES AROUND THE CONDUITS SHALL BE SEALED TO PREVENT ENTRANCE OF MOISTURE. PROVIDE FIRE STOPPING PER UL APPROVED METHODS.
- F. E.C. SHALL PROVIDE TYPED CIRCUIT BOARD DIRECTORIES TO REFLECT AS-CONSTRUCTED CONDITIONS. FIELD VERIFY DURING CONSTRUCTION AND REVISE ACCORDINGLY.
- G. ALL ITEMS SHOWN DARK AND SOLID REPRESENTS NEW WORK TO BE FURNISHED AND FULLY INSTALLED BY ELECTRICAL CONTRACTOR. ALL ITEMS SHOWN LIGHT AND SOLID REPRESENT EQUIPMENT AND WORK TO BE PERFORMED BY ANOTHER TRADE.

MW STUDIOS
ARCHITECTURE + MASTER PLANNING
8098 SANDPIPER CIR, SUITE H
NOTTINGHAM, MD 21236
410-344-1460
INFO@MWSARCH.COM
WWW.MWSARCH.COM

CONSULTANT:
DEDC ENGINEERING | DESIGN | CONSULTING
Delaware: 212 S. Chapel Street, Newark, DE 19711, Phone 302.738.7172, Fax 302.738.7175
Pennsylvania: Duane Morris Plaza 30 S. 17th Street, Suite 820, Philadelphia, PA 19103, Phone 267.804.7286
www.dedc-eng.com

SEAL:
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL SCOTTIN FRENCH DEGREE PE064182

EXETER TOWNSHIP
EMERGENCY SERVICES FACILITY
70 GIBRALTAR ROAD
READING PA 19606

PROJECT NUMBER: 25-049

SUBMISSION: BID SET

ORIGINAL ISSUE DATE: 10/01/2026

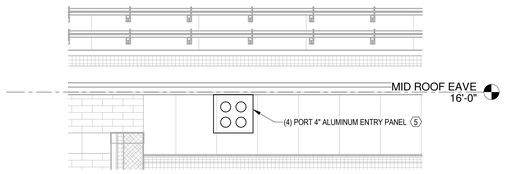
SHEET REVISION SCHEDULE:
No. DATE

FIRST FLOOR POWER PLAN

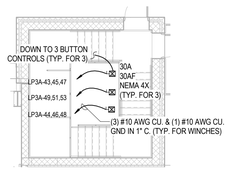
SHEET NUMBER:
E201

10/1/2026 1:37:22 PM

ALL DRAWINGS ARE PROTECTED BY FEDERAL COPYRIGHT BY MANNS WOODWARD STUDIOS, INC. AND CAN NOT BE REPRODUCED OR MODIFIED IN ANY MANNER WITHOUT WRITTEN PERMISSION. DOCUMENTS MAY NOT BE USED IN PART OR WHOLE TO DEVELOP THE DESIGN OF ANOTHER BUILDING WITHOUT EXPRESS WRITTEN PERMISSION BY MANNS WOODWARD STUDIOS.



2 RADIO ANTENNA ENTRY PANEL
1/2" = 1'-0"



3 TRAINING TOWER - THIRD FLOOR
1/8" = 1'-0"

GENERAL POWER NOTES

A E.C. SHALL COORDINATE ALL DEVICE LOCATIONS IN FIELD WITH ARCHITECTURAL DRAWING AND OWNER'S ONSITE REPRESENTATIVE BEFORE WORK COMMENCES.

B E.C. SHALL FURNISH AND INSTALL ALL ELECTRICAL SYSTEMS AND EQUIPMENT PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. E.C. SHALL FURNISH AND INSTALL ALL ACCESSORY EQUIPMENT REQUIRED, BUT NOT PROVIDED WITH EQUIPMENT, TO MAKE SYSTEMS AND EQUIPMENT FULLY COMPLETE AND 100% OPERATIONAL.

C ALL RECEPTACLES SHOWN AS GFCI THAT CANNOT BE INSTALLED IN AN EASILY ACCESSIBLE LOCATION FOR RESET FUNCTIONALITY SHALL BE FURNISHED AS A STANDARD RECEPTACLE FED FROM A GFCI TYPE BREAKER.

D E.C. SHALL REFER TO DRAWING E000 FOR LEGEND INFORMATION.

E PROVIDE CUTTING, PATCHING, AND RESTORATION OF FINISHES NECESSARY FOR WORK SURFACES DAMAGED BY THIS WORK. SPACES AROUND CONDUITS PASSING THROUGH FLOORS AND WALLS SHALL BE NEATLY PATCHED AND FINISHED TO MATCH NEW/EXISTING. STRUCTURAL MEMBERS SHALL NOT BE CUT OR PENETRATED IN ANY MANNER. THE SPACES AROUND THE CONDUITS SHALL BE SEALED TO PREVENT ENTRANCE OF MOISTURE. PROVIDE FIRE STOPPING PER UL APPROVED METHODS.

F E.C. SHALL PROVIDE TYPED CIRCUIT BOARD DIRECTORIES TO REFLECT AS-CONSTRUCTED CONDITIONS. FIELD VERIFY DURING CONSTRUCTION AND REVISE ACCORDINGLY.

G ALL ITEMS SHOWN DARK AND SOLID REPRESENTS NEW WORK TO BE FURNISHED AND FULLY INSTALLED BY ELECTRICAL CONTRACTOR. ALL ITEMS SHOWN LIGHT AND SOLID REPRESENT EQUIPMENT AND WORK TO BE PERFORMED BY ANOTHER TRADE.

KEYNOTES

1 E.C. SHALL FURNISH AND INSTALL BRANCH CIRCUIT FROM CEILING FAN TO FAN CONTROLLER. E.C. SHALL FURNISH AND INSTALL FIRE ALARM CONTROL MODULE FOR INTERCONNECTION TO FIRE ALARM SYSTEM FOR AUTOMATIC SHUTDOWN OF CEILING FANS IN A BUILDING SYSTEM FIRE ALARM ACTIVATION EVENT. E.C. SHALL COORDINATE ALL FIRE ALARM WORK IN FIELD WITH FIRE ALARM CONTRACTOR. E.C. SHALL COORDINATE ALL LOCATIONS OF DISCONNECTS AND CONTROLS TO BE IN AN EASILY ACCESSIBLE AREA ON THE FIRST FLOOR AS COORDINATED IN FIELD WITH OWNER/ ARCHITECT.

2 E.C. SHALL WIRE CEILING FANS FROM FAN CONTROLLER. E.C. SHALL CONNECT CEILING FAN WIRING TO A 208V, 2P, 20A RATED FIRE ALARM CONTROL MODULE FOR AUTOMATIC SHUTDOWN OF CEILING FANS IN A BUILDING SYSTEM FIRE ALARM ACTIVATION EVENT. E.C. SHALL COORDINATE ALL FIRE ALARM WORK IN FIELD WITH FIRE ALARM CONTRACTOR.

3 E.C. SHALL FURNISH AND INSTALL ALUMINUM ENTRY PANEL FOR INTERCONNECTION OF RADIO ANTENNA INTERIOR CABLE TRAY RUNS TO EXTERIOR PENETRATION BELOW EAVE ON PEMB BUILDING FACE. E.C. SHALL COORDINATE EXACT LOCATION OF ALUMINUM ENTRY PANEL PENETRATION WITH RADIO ANTENNA VENDOR, ARCHITECTURAL DRAWINGS, AND OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF NEW WORK.

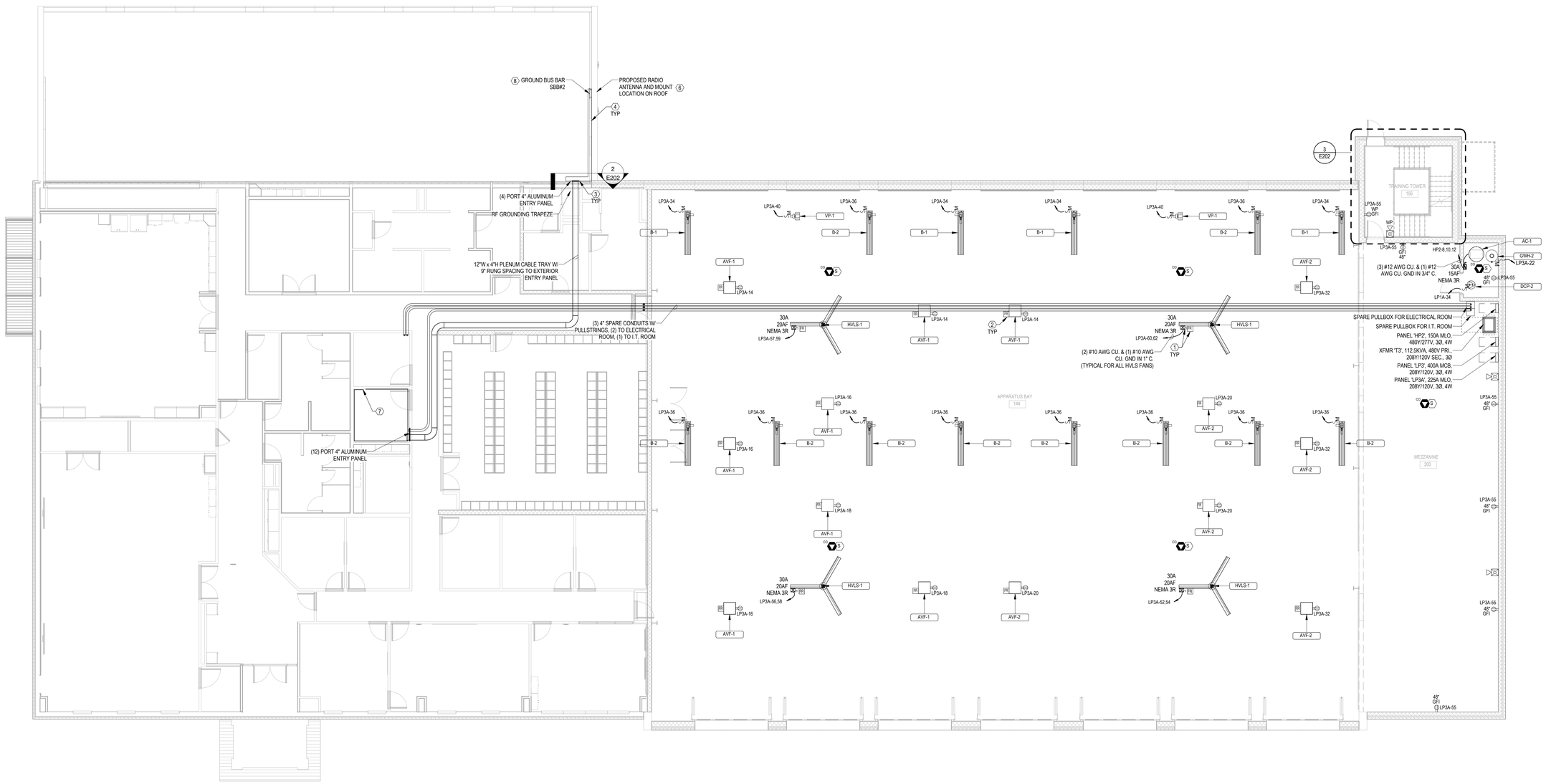
4 E.C. SHALL COORDINATE EXACT ROUTING AND SIZE OF EXTERIOR WALL MOUNTED CABLE MANAGEMENT SYSTEM FOR EXTERIOR RATED RADIO CABLING BY RADIO SYSTEM VENDOR. E.C. SHALL COORDINATE EXACT LOCATION OF RADIO ANTENNAS. E.C. SHALL COORDINATE ALL RADIO ANTENNA SYSTEM EQUIPMENT, ATTACHMENT REQUIREMENTS, AND EXACT FINAL LOCATIONS WITH RADIO SYSTEM VENDOR, ARCHITECTURAL DRAWINGS, AND OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF NEW WORK.

5 E.C. SHALL FURNISH (4) ROXTEC CABLE ENTRY PORT SEALS FOR (4) PORT INTERIOR-EXTERIOR ALUMINUM ENTRY PANEL. E.C. SHALL INSTALL AND SEAL ALL UNUSED PORTS AS PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. E.C. SHALL GROUND ENTRY PANEL TO TRAPEZE LOCATED ON INTERIOR OF BUILDING.

6 E.C. SHALL PERFORM RADIO AMPLIFICATION TESTING AS REQUIRED BY IFC CHAPTER 5. E.C. SHALL COORDINATE ALL TESTING REQUIREMENTS AS REQUIRED BY CODE AND RADIO SYSTEM VENDOR. E.C. SHALL PROVIDE GROUNDING TO ANTENNA MOUNTING LOCATION FURNISHED AND INSTALLED BY G.C.

7 E.C. SHALL FURNISH AND INSTALL HALO RING AT 8' A.F.F. ON WALL AROUND PERIMETER OF ROOM. E.C. SHALL BOND ONE END OF LOOP TO BUS BAR "PBB" AND PROVIDE A BREAK ON THE OTHER END. E.C. SHALL FOLLOW ALL R-56 GROUNDING STANDARDS IN I.T. ROOM.

8 E.C. SHALL FURNISH AND INSTALL SLAVE GROUND BUS BAR IN THIS LOCATION FOR GROUNDING OF ANTENNA SYSTEM. E.C. SHALL BOND SBB TO GROUND BAR PBB IN I.T. ROOM. E.C. SHALL COORDINATE ALL WORK IN FIELD WITH RADIO SYSTEM VENDOR AND G.C. PRIOR TO COMMENCING WORK.



1 MEZZANINE POWER PLAN
1/8" = 1'-0"

MW STUDIOS
ARCHITECTURE + MASTER PLANNING
8098 SANDPIPER CIR, SUITE H
NOTTINGHAM, MD 21236
☎ 410-344-1460
✉ INFO@MWSARCH.COM
WWW.MWSARCH.COM

CONSULTANT:

DEDC
ENGINEERED DESIGN CONSULTING
Delaware
212 S. Chapel Street
Newark, DE 19711
Phone
302.738.7172
Fax
302.738.7175
www.dedc-eng.com
Pennsylvania
Donna Morris Plaza
30 S. 17th Street
Suite 820
Philadelphia, PA 19103
Phone
267.804.7286

SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
SCOTTIN FRENCK
ENGINEER
PE084132

EXETER TOWNSHIP
EMERGENCY SERVICES FACILITY
70 GIBRALTAR ROAD
READING PA 19606

PROJECT NUMBER: 25-049

SUBMISSION:
BID SET

ORIGINAL ISSUE DATE:
10/01/2026

SHEET REVISION SCHEDULE:
No. DATE

MEZZANINE POWER PLAN

SHEET NUMBER:
E202

10/1/2026 12:13:14 PM

ALL DRAWINGS ARE PROTECTED BY FEDERAL COPYRIGHT BY MANNS WOODWARD STUDIOS, INC. AND CAN NOT BE REPRODUCED OR MODIFIED IN ANY MANNER WITHOUT WRITTEN PERMISSION. DOCUMENTS MAY NOT BE USED IN PART OR WHOLE TO DEVELOP THE DESIGN OF ANOTHER BUILDING WITHOUT EXPRESS WRITTEN PERMISSION BY MANNS WOODWARD STUDIOS.

KEYNOTES

1 E.C. SHALL PROVIDE (1) 120V/1PH DEDICATED CIRCUIT TO RADON FAN WITH DISCONNECT SWITCH WITHIN SIGHT OF FAN. E.C. SHALL VERIFY FINAL FAN ELECTRICAL REQUIREMENTS WITH PLUMBING CONTRACTOR'S RADON DELEGATED DESIGN SUBMITTAL BEFORE ROUGH-IN. RADON FAN SHALL NOT BE INTERLOCKED OR SWITCHED WITH OTHER EQUIPMENT. E.C. SHALL COORDINATE ALL WORK PRIOR TO COMMENCEMENT OF NEW WORK.

GENERAL POWER NOTES

A E.C. SHALL COORDINATE ALL DEVICE LOCATIONS IN FIELD WITH ARCHITECTURAL DRAWING AND OWNER'S ONSITE REPRESENTATIVE BEFORE WORK COMMENCES.

B E.C. SHALL FURNISH AND INSTALL ALL ELECTRICAL SYSTEMS AND EQUIPMENT PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. E.C. SHALL FURNISH AND INSTALL ALL ACCESSORY EQUIPMENT REQUIRED, BUT NOT PROVIDED WITH EQUIPMENT, TO MAKE SYSTEMS AND EQUIPMENT FULLY COMPLETE AND 100% OPERATIONAL.

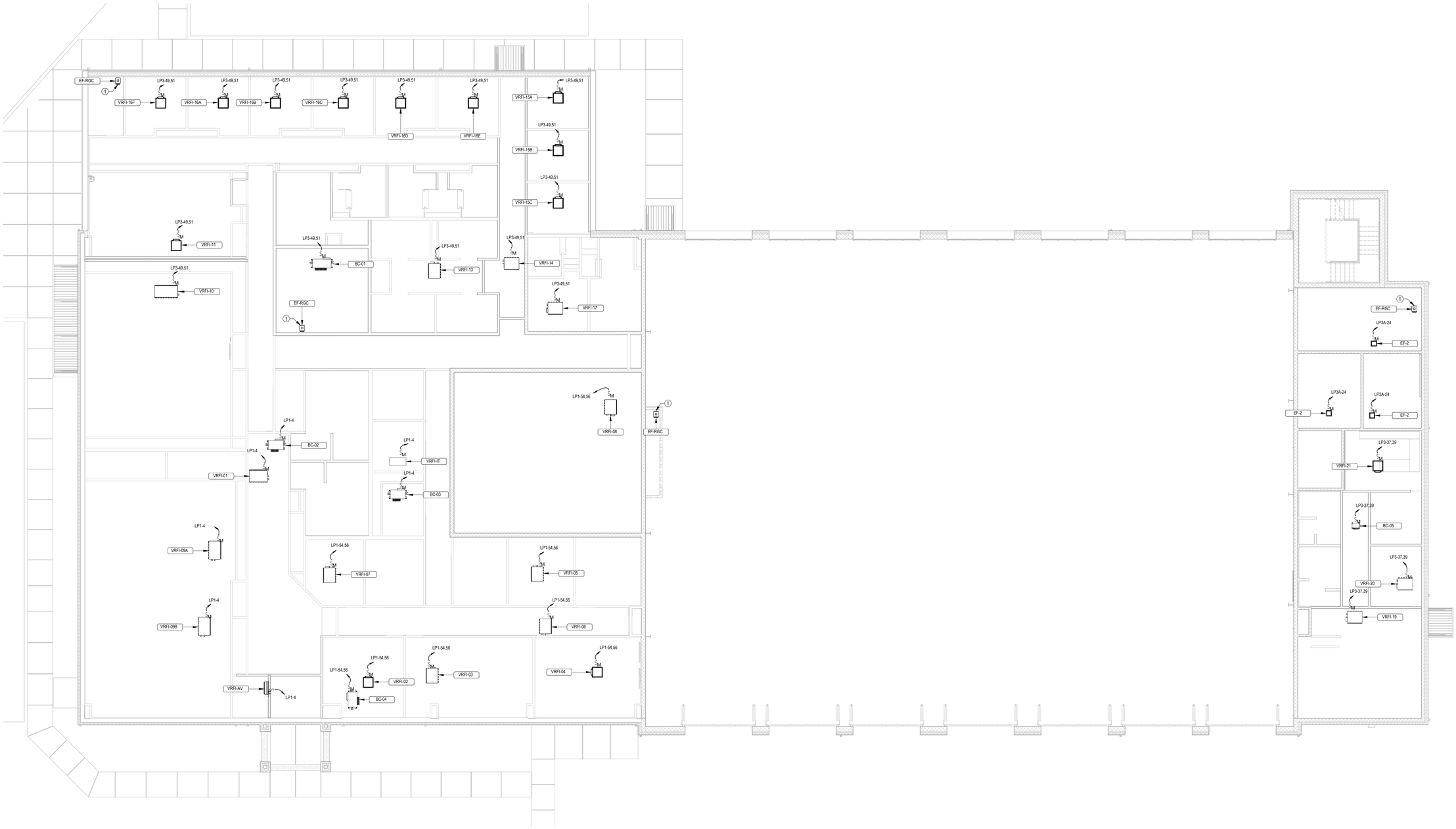
C ALL RECEPTACLES SHOWN AS GFCI THAT CANNOT BE INSTALLED IN AN EASILY ACCESSIBLE LOCATION FOR RESET FUNCTIONALITY SHALL BE FURNISHED AS A STANDARD RECEPTACLE FED FROM A GFCI TYPE BREAKER.

D E.C. SHALL REFER TO DRAWING E000 FOR LEGEND INFORMATION.

E PROVIDE CUTTING, PATCHING, AND RESTORATION OF FINISHES NECESSARY FOR WORK SURFACES DAMAGED BY THIS WORK. SPACES AROUND CONDUITS PASSING THROUGH FLOORS AND WALLS SHALL BE NEATLY PATCHED AND FINISHED TO MATCH NEW/EXISTING. STRUCTURAL MEMBERS SHALL NOT BE CUT OR PENETRATED IN ANY MANNER. THE SPACES AROUND THE CONDUITS SHALL BE SEALED TO PREVENT ENTRANCE OF MOISTURE. PROVIDE FIRE STOPPING PER UL APPROVED METHODS.

F E.C. SHALL PROVIDE TYPED CIRCUIT BOARD DIRECTORIES TO REFLECT AS-CONSTRUCTED CONDITIONS. FIELD VERIFY DURING CONSTRUCTION AND REVISE ACCORDINGLY.

G ALL ITEMS SHOWN DARK AND SOLID REPRESENTS NEW WORK TO BE FURNISHED AND FULLY INSTALLED BY ELECTRICAL CONTRACTOR. ALL ITEMS SHOWN LIGHT AND SOLID REPRESENT EQUIPMENT AND WORK TO BE PERFORMED BY ANOTHER TRADE.



1 **FIRST FLOOR EQUIPMENT POWER PLAN**
1/8" = 1'-0"

ALL DRAWINGS ARE PROTECTED BY FEDERAL COPYRIGHT BY MANNS WOODWARD STUDIOS, INC. AND CAN NOT BE REPRODUCED OR MODIFIED IN ANY MANNER WITHOUT WRITTEN PERMISSION. DOCUMENTS MAY NOT BE USED IN PART OR WHOLE TO DEVELOP THE DESIGN OF ANOTHER BUILDING WITHOUT EXPRESS WRITTEN PERMISSION BY MANNS WOODWARD STUDIOS.

MW STUDIOS
ARCHITECTURE + MASTER PLANNING
8098 SANDPIPER CIR, SUITE H
NOTTINGHAM, MD 21236
410-344-1460
INFO@MWSARCH.COM
WWW.MWSARCH.COM

CONSULTANT:

DEDC
ENGINEERING | DESIGN | CONSULTING
Delaware
312 S. Chapel Street
Newark, DE 19711
Phone
302.738.7172
Fax
302.738.7175
www.dedc-eng.com
Pennsylvania
Dunne Manns Plaza
30 S. 17th Street
Suite 820
Philadelphia, PA 19103
Phone
267.804.7286

SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
SCOTTIN FRENCH
ENGINEER
PE084132

EXETER TOWNSHIP
EMERGENCY SERVICES FACILITY
70 GIBRALTAR ROAD
READING PA 19606

PROJECT NUMBER: 25-049

SUBMISSION:
BID SET

ORIGINAL ISSUE DATE:
10/01/2026

SHEET REVISION SCHEDULE:
No. DATE

FIRST FLOOR EQUIPMENT POWER PLAN

SHEET NUMBER:
E203

10/1/2026 1:20:18 PM

GENERAL POWER NOTES

A E.C. SHALL COORDINATE ALL DEVICE LOCATIONS IN FIELD WITH ARCHITECTURAL DRAWING AND OWNER'S ONSITE REPRESENTATIVE BEFORE WORK COMMENCES.

B E.C. SHALL FURNISH AND INSTALL ALL ELECTRICAL SYSTEMS AND EQUIPMENT PER MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS. E.C. SHALL FURNISH AND INSTALL ALL ACCESSORY EQUIPMENT REQUIRED, BUT NOT PROVIDED WITH EQUIPMENT, TO MAKE SYSTEMS AND EQUIPMENT FULLY COMPLETE AND 100% OPERATIONAL.

C ALL RECEPTACLES SHOWN AS GFCI THAT CANNOT BE INSTALLED IN AN EASILY ACCESSIBLE LOCATION FOR RESET FUNCTIONALITY SHALL BE FURNISHED AS A STANDARD RECEPTACLE FED FROM A GFCI TYPE BREAKER.

D E.C. SHALL REFER TO DRAWING E000 FOR LEGEND INFORMATION.

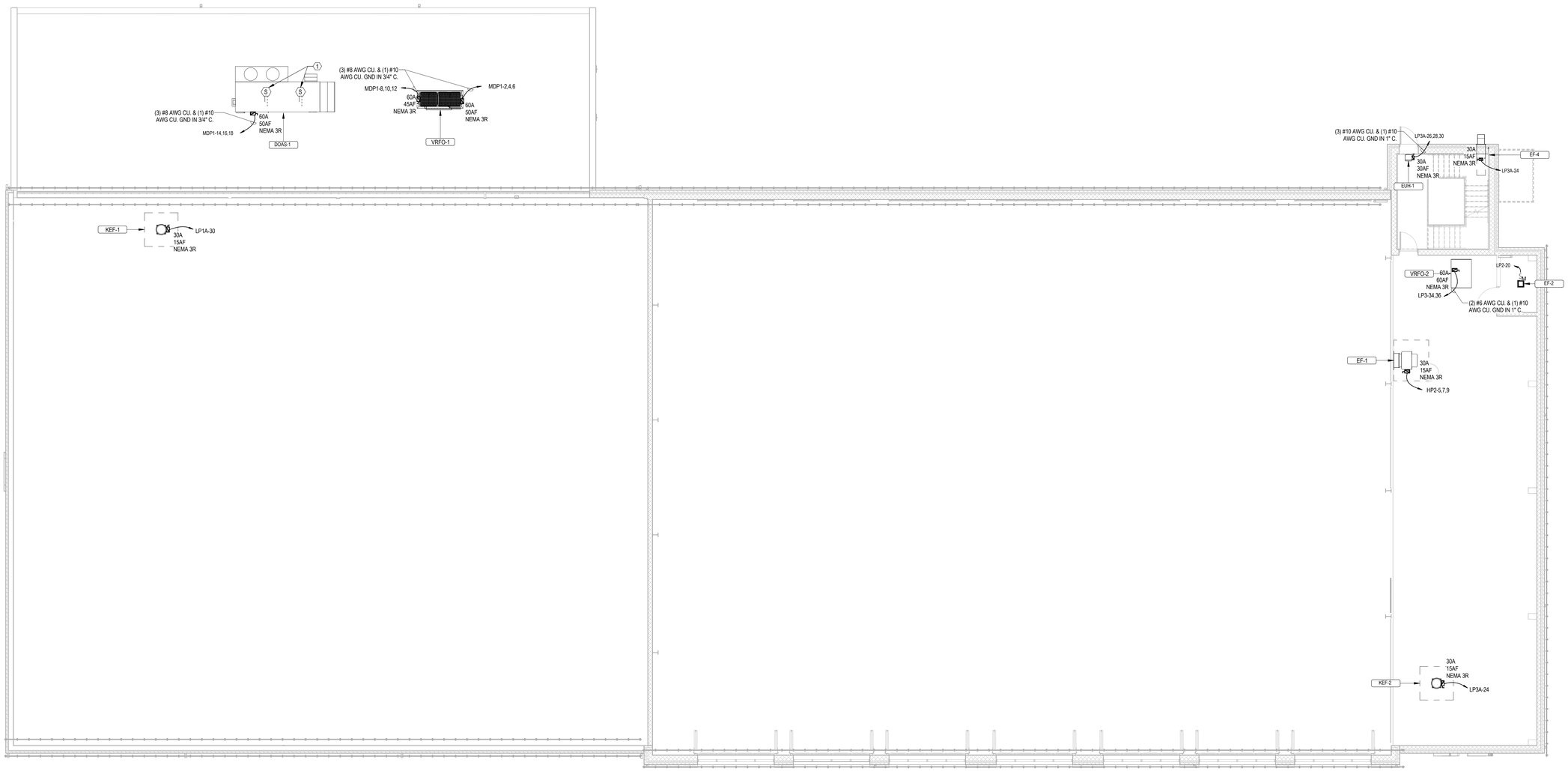
E PROVIDE CUTTING, PATCHING, AND RESTORATION OF FINISHES NECESSARY FOR WORK SURFACES DAMAGED BY THIS WORK. SPACES AROUND CONDUITS PASSING THROUGH FLOORS AND WALLS SHALL BE NEATLY PATCHED AND FINISHED TO MATCH NEW/EXISTING. STRUCTURAL MEMBERS SHALL NOT BE CUT OR PENETRATED IN ANY MANNER. THE SPACES AROUND THE CONDUITS SHALL BE SEALED TO PREVENT ENTRANCE OF MOISTURE. PROVIDE FIRE STOPPING PER UL APPROVED METHODS.

F E.C. SHALL PROVIDE TYPED CIRCUIT BOARD DIRECTORIES TO REFLECT AS-CONSTRUCTED CONDITIONS. FIELD VERIFY DURING CONSTRUCTION AND REVISE ACCORDINGLY.

G ALL ITEMS SHOWN DARK AND SOLID REPRESENTS NEW WORK TO BE FURNISHED AND FULLY INSTALLED BY ELECTRICAL CONTRACTOR. ALL ITEMS SHOWN LIGHT AND SOLID REPRESENT EQUIPMENT AND WORK TO BE PERFORMED BY ANOTHER TRADE.

KEYNOTES

1 E.C. SHALL FURNISH DUCT SMOKE DETECTOR TO MECHANICAL CONTRACTOR FOR INSTALLATION IN DUCTWORK. E.C. SHALL OBTAIN DUCT SMOKE DETECTOR FROM FIRE ALARM CONTRACTOR CONTRACTED TO PROVIDE THE BUILDING'S FIRE ALARM SYSTEM. E.C. SHALL FURNISH AND INSTALL ALL WIRING, CONDUITS, RELAYS AND FIRE ALARM PROGRAMMING FOR DUCT SMOKE DETECTOR INSTALLATION. E.C. SHALL FURNISH AND INSTALL DUCT SMOKE TEST SWITCH IN LOCATION DETERMINED BY OWNER.



1 MEZZANINE AND ROOF EQUIPMENT POWER PLAN

1/8" = 1'-0"

ALL DRAWINGS ARE PROTECTED BY FEDERAL COPYRIGHT BY MANNS WOODWARD STUDIOS, INC. AND CAN NOT BE REPRODUCED OR MODIFIED IN ANY MANNER WITHOUT WRITTEN PERMISSION. DOCUMENTS MAY NOT BE USED IN PART OR WHOLE TO DEVELOP THE DESIGN OF ANOTHER BUILDING WITHOUT EXPRESS WRITTEN PERMISSION BY MANNS WOODWARD STUDIOS.

MW STUDIOS
ARCHITECTURE + MASTER PLANNING
8098 SANDPIPER CIR, SUITE H
NOTTINGHAM, MD 21236
410-344-1460
INFO@MWSARCH.COM
WWW.MWSARCH.COM

CONSULTANT:

DEDC
ENGINEERING | DESIGN | CONSULTING
Delaware
212 S. Chapel Street
Newark, DE 19711
Phone
302.738.7172
Fax
302.738.7175
www.dedc-eng.com
Pennsylvania
Drums Morris Plaza
30 S. 17th Street
Suite 820
Philadelphia, PA 19103
Phone
267.804.7286

SEAL:

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
SCOTTIN FRENCK
ENGINEER
PE084132

EXETER TOWNSHIP
EMERGENCY SERVICES FACILITY
70 GIBRALTAR ROAD
READING PA 19606

PROJECT NUMBER: 25-049

SUBMISSION:
BID SET

ORIGINAL ISSUE DATE:
10/01/2026

SHEET REVISION SCHEDULE:
No. DATE

MEZZANINE AND ROOF EQUIPMENT POWER PLAN

SHEET NUMBER:

E204

10/1/2026 12:13:19 PM