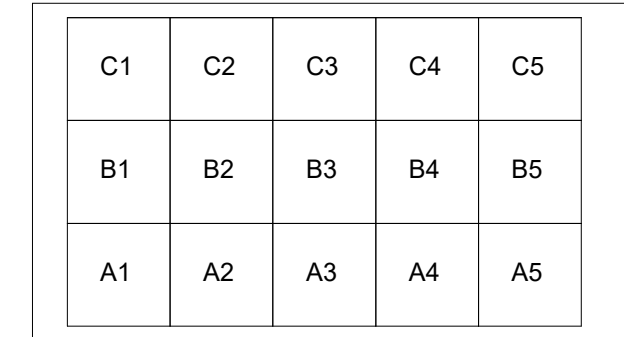




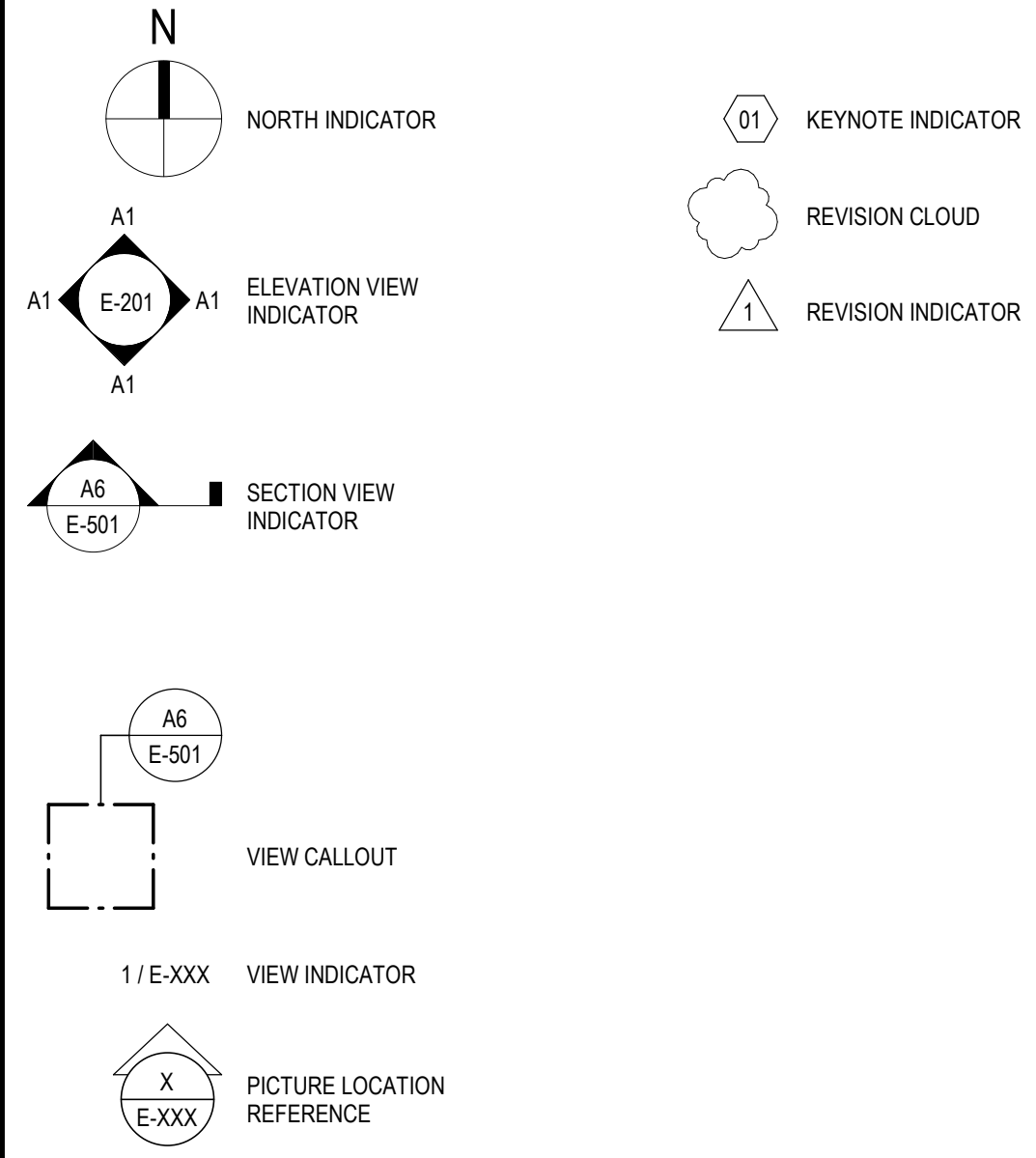
ELECTRICAL SHEET INDEX

E-001	ELECTRICAL SYMBOLS, ABBREVIATIONS & SHEET INDEX
E-002	ELECTRICAL SYMBOLS CONTINUED
E-101	LEVEL 1 PLAN - ELECTRICAL DEMOLITION
E-102	LEVEL 2 PLAN - ELECTRICAL DEMOLITION
E-103	LEVEL 3 PLAN - ELECTRICAL DEMOLITION
E-104	LEVEL 4 PLAN - ELECTRICAL DEMOLITION
E-105	LEVEL 5 PLAN - ELECTRICAL DEMOLITION
E-106	LEVEL 6 PLAN - ELECTRICAL DEMOLITION
E-107	LEVEL 7 PLAN - ELECTRICAL DEMOLITION
E-111	LEVEL 1 PLAN - LIGHTING
E-112	LEVEL 2 PLAN - LIGHTING
E-113	LEVEL 3 PLAN - LIGHTING
E-114	LEVEL 4 PLAN - LIGHTING
E-115	LEVEL 5 PLAN - LIGHTING
E-116	LEVEL 6 PLAN - LIGHTING
E-117	LEVEL 7 PLAN - LIGHTING
E-121	LEVEL 1 PLAN - POWER & SYSTEMS
E-122	LEVEL 2 PLAN - POWER & SYSTEMS
E-123	LEVEL 3 PLAN - POWER & SYSTEMS
E-124	LEVEL 4 PLAN - POWER & SYSTEMS
E-125	LEVEL 5 PLAN - POWER & SYSTEMS
E-126	LEVEL 6 PLAN - POWER & SYSTEMS
E-127	LEVEL 7 PLAN - POWER & SYSTEMS
E-501	ELECTRICAL DETAILS
E-502	ELECTRICAL DETAILS
E-503	ELECTRICAL DETAILS
E-601	ELECTRICAL SCHEDULES
E-602	ELECTRICAL SCHEDULES
E-603	ELECTRICAL SCHEDULES
E-604	ELECTRICAL SCHEDULES
E-610	PANEL SCHEDULES
E-611	PANEL SCHEDULES
E-612	PANEL SCHEDULES
E-613	PANEL SCHEDULES
E-620	ELECTRICAL ONE-LINE POWER DIAGRAM
E-630	ELECTRICAL SYSTEMS WIRING DIAGRAMS

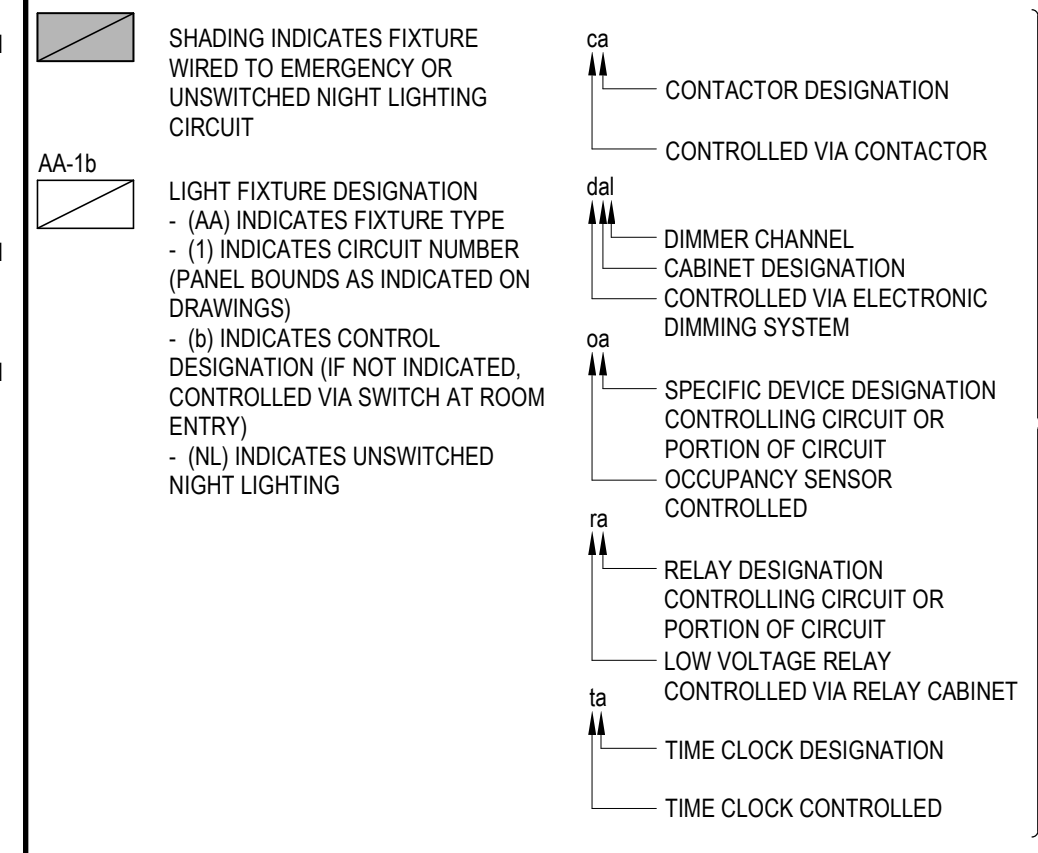
VIEW LOCATION LEGEND



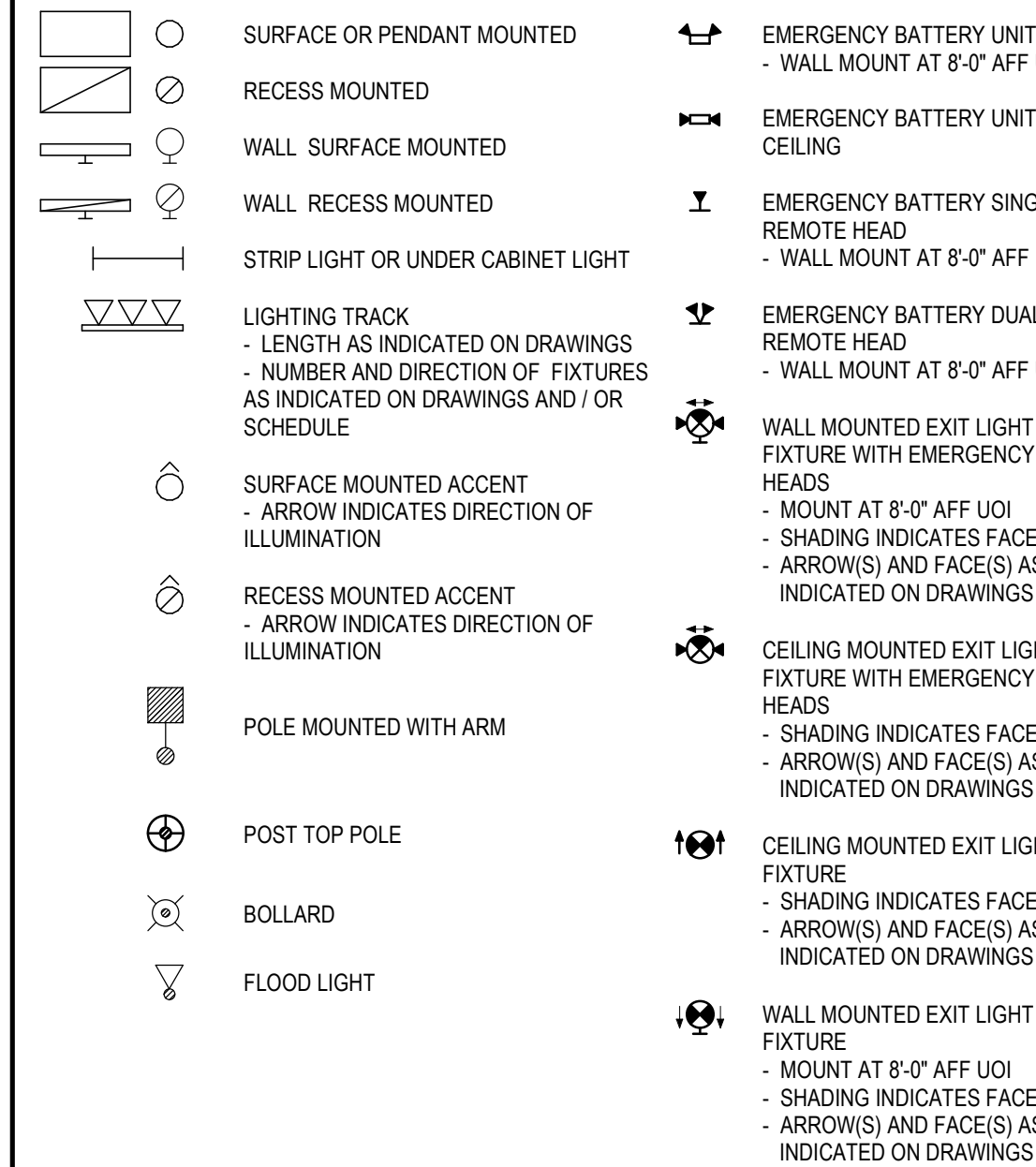
GENERAL SYMBOLS



LIGHTING FIXTURE DESIGNATIONS



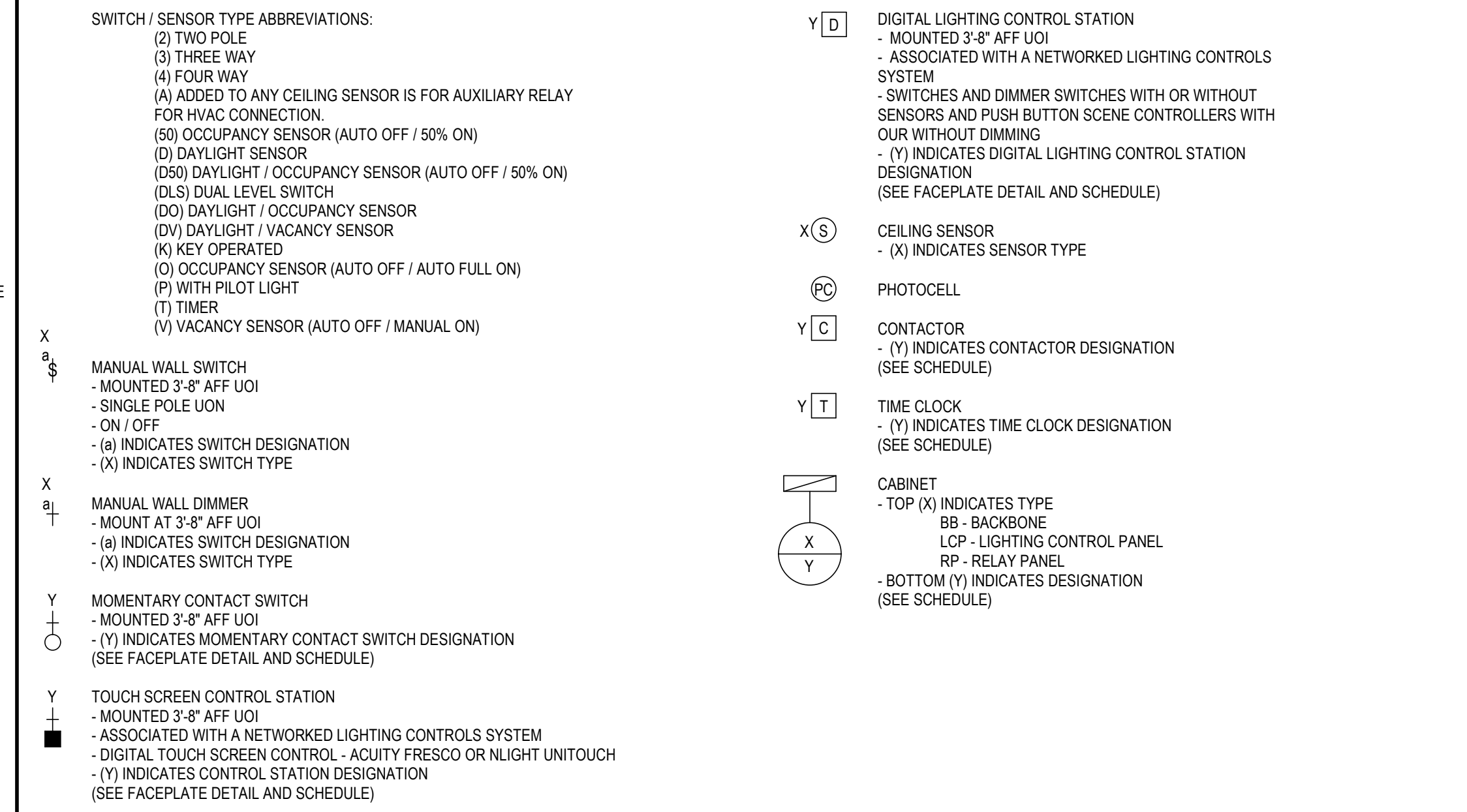
LIGHTING FIXTURES



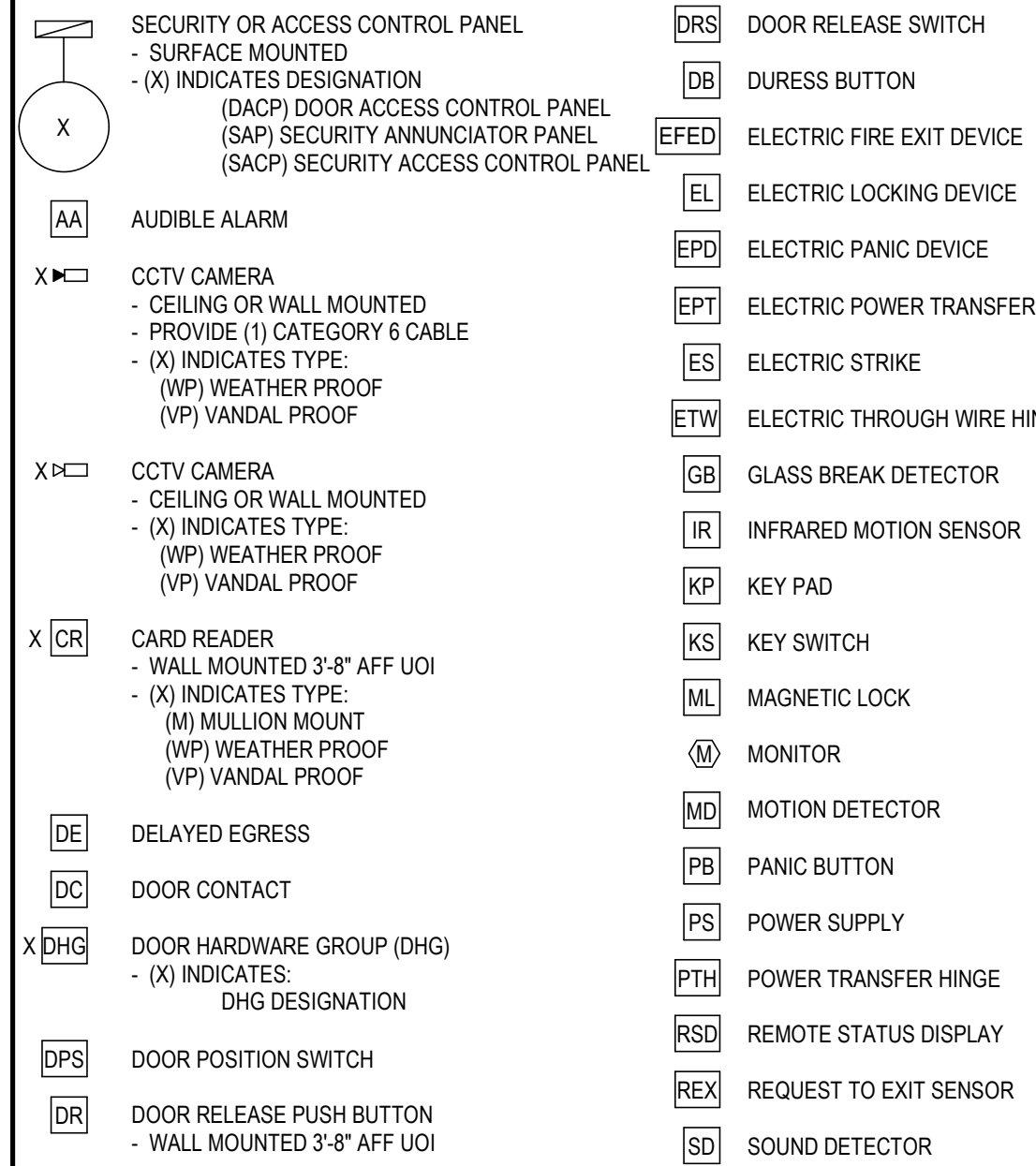
ELECTRICAL ABBREVIATIONS

1P	ONE POLE	MH	MANHOLE
2P	TWO POLE	MLO	MAIN LUGS ONLY
3P	THREE POLE	MTD	MOUNTED
4P	FOUR POLE	MTG	MOUNTING
1P, 1W	ONE POLE, ONE WIRE	MTS	MANUAL TRANSFER SWITCH
1P, 2W	ONE POLE, TWO WIRE	MW	MICROWAVE
2P, 2W	TWO POLE, TWO WIRE	MV	MEDIUM VOLTAGE
2P, 3W	TWO POLE, THREE WIRE	N/A	NOT APPLICABLE
3P, 2W	THREE POLE, TWO WIRE	NC	NORMALLY CLOSED
3P, 3W	THREE POLE, THREE WIRE	NEC	NATIONAL ELECTRIC CODE
3P, 4W	THREE POLE, FOUR WIRE	NIC	NOT IN CONTRACT
4P, 4W	FOUR POLE, FOUR WIRE	NO	NORMALLY OPEN
AC	ALTERNATING CURRENT	#	NUMBER
AF	AMPERE FRAME	NTS	NOT TO SCALE
AFF	ABOVE FINISHED FLOOR	OSP	OUTSIDE PLANT
AFG	ABOVE FINISHED GRADE	P	POLE
AIC	AMPERE INTERRUPTING CAPACITY	PB	PULL BOX
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	PC	PLUMBING SYSTEM CONTRACTOR
AL	ALUMINUM	PH	PHASE
AS	AMP SWITCH	PNL	PANEL OR PANELBOARD
AT	AMP TRIP	PP	POWER PANEL
ARCH	ARCHITECT	PAIR	PAIR
ATS	AUTOMATIC TRANSFER SWITCH	PRI	PRIMARY
A/V	AUDIO VISUAL	PROJ	PROJECTOR
AWG	AMERICAN WIRE GAUGE	PVC	POLYVINYL CHLORIDE
B	PEDESTAL MOUNTED ON BENCH TOP	REC	RECESSED
BOD	BASIS OF DESIGN	RE / CKT	REUSE EXISTING CIRCUIT
BFC	BELOW FINISHED CEILING	REF	REFRIGERATOR
BFF	BELOW FINISHED FLOOR	RSC	RIGID STEEL CONDUIT
BFG	BELOW FINISHED GRADE	SC	SECURITY CONTRACTOR/RUNDING
BLDG	BUILDING	SEC	SECONDARY
C	CONDUIT	SN	SOLID NEUTRAL
CAM	CAMERA	SP	SPARE
CAT	CATALOG	SS	STAINLESS STEEL
CATV	CABLE TELEVISION	ST	SHUNT TRIP
CB	CIRCUIT BREAKER	STP	SHIELDED TWISTED PAIR
CKT	CIRCUIT	SUSP	SUSPENDED
CLG	CEILING MOUNTED	SW	SWITCH
CO	COPIER	SWBD	SWITCHBOARD
CT	CURRENT TRANSFORMER	TBB	TAMPER RESISTANT SAFETY RECEPTACLE
CU	COPPER	TC	TELECOMMUNICATIONS BONDING BACKBONE
CL	CENTERLINE	TCI	TELECOMMUNICATIONS CABLING INSTALLER
DC	DIRECT CURRENT	TELE / DATA	TELEPHONE / DATA
DR	DRYER	TEL	TELEPHONE
A	DELTA	TELECOM	TELECOMMUNICATIONS
DISC	DISCONNECT	TGP	TELECOMMUNICATIONS GROUNDING BUSBAR
DW	DISHWASHER	TMGB	TELECOMMUNICATIONS MAIN GROUNDING BUSBAR
DWG	DRAWING	TP	TWISTED PAIR
E	EMERGENCY	TYP	TYPICAL
EC	ELECTRICAL CONTRACTOR	UG	UNDERGROUND
EMT	ELECTRIC METALLIC TUBING	UTP	UNSHIELDED TWISTED PAIR
ETR	EXISTING TO REMAIN	UOI	UNLESS OTHERWISE INDICATED
ER	EXISTING TO BE REMOVED	V	VOLT
ERL	EXISTING TO BE RELOCATED	W	WATT
ERLD	RELOCATED EQUIPMENT'S NEW LOCATION	WA	WASHER
ENC	ELECTRIC WATER COOLER	WAP	WIRELESS ACCESS POINT
EX	EXISTING	WP	WEATHERPROOF
FA	FIRE ALARM	XFMR	TRANSFORMER
FLA	FULL LOAD AMPS	XR	XRAY
FO	FIBER OPTIC	XV	XRAY VIEWER
FPC	FIRE PROTECTION CONTRACTOR	Y	WYE
GC	GENERAL CONTRACTOR	ZAM	ZONE ADAPTER MODULE
GDS	GENERATOR DOCKING STATION		
GFCI	GROUND FAULT CIRCUIT INTERRUPTER		
GFPE	GROUND FAULT PROTECTION EQUIPMENT		
GND	GROUND		
GRC	GALVANIZED RIGID CONDUIT		
HH	HANDHOLE		
HP	HORSEPOWER		
HVAC	HEATING, VENTILATING, AND AIR CONDITIONING		
HZ	HERTZ (CYCLE) PER SECOND		
IECC	INTERNATIONAL ENERGY CONSERVATION CODE		
ISP	INSIDE PLANT		
IT	INFORMATION TECHNOLOGY		
JB	JUNCTION BOX		
KVA	KILOVOLT AMPERE		
KVAR	KILOVOLT AMPERE REACTIVE		
KW	KILOWATT		
LP	LIGHTING PANEL		
LS	LIMIT SWITCH		
LTG	LIGHTING		
LV	LOW VOLTAGE		
MC	MECHANICAL CONTRACTOR		
MCA	MINIMUM CIRCUIT AMPS		
MCC	MOTOR CONTROL CENTER		
MDP	MAIN DISTRIBUTION PANEL		
MISC	MISCELLANEOUS		

LIGHTING CONTROL



SECURITY AND ACCESS CONTROL



1 2 3 4 5

PROJECT GENERAL NOTES

A. EXISTING PROJECT CONDITIONS:
 a. INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION, APPEARS ON PROJECT DRAWINGS. THIS INFORMATION IS BASED ON AVAILABLE RECORDS AS WELL AS INFORMATION COLLECTED WITH REASONABLE CARE AT THE PROJECT SITE. CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR VERIFYING DIMENSIONS AND RELATED INFORMATION AT THE PROJECT SITE PRIOR TO PROCURING ANY MATERIALS, PRODUCTS OR EQUIPMENT TO PERFORM THEIR WORK.

GENERAL SHEET NOTES

A. ROUTE CONDUITS IN BEAM CAVITY GOING PLAN NORTH AND SOUTH. ROUTE CONDUITS GOING EAST AND WEST ALONG COLUMNS 1 AND 4. KEEP ALL CONDUITS ABOVE 8'-0" TO MAINTAIN GARAGE CLEARANCES. SEE DETAILS ON SHEET E-502 FOR MORE INFORMATION.
 B. ROUTE CONDUITS TO NEXT LEVEL FROM IN BETWEEN GRID LINES 2 AND 3, F AND Q, W AND EE. FLOOR CAN BE CORED BETWEEN A AND C NEAR GRID 4 SEE PENETRATION DETAIL ON ARCHITECTURAL DRAWINGS. IF MORE PENETRATIONS ARE NEEDED THE FLOOR IS POST TENSION AND NEEDS TO BE SURVEYED BEFORE CORING.

SHEET KEYNOTES

3 PROVIDE A GENERATOR ANNUNCIATOR IN OFFICE. VERIFY FINAL LOCATION WITH OWNER PRIOR TO INSTALL. PROVIDE CABLING (PER MANUFACTURER'S REQUIREMENTS) BETWEEN ATS, GENERATOR, AND REMOTE ANNUNCIATOR LOCATION. ROUTE IN 1/2" RACEWAY.



275 West Wisconsin Avenue,
 Suite 300
 Milwaukee, WI 53203
 414 / 259 1500

www.graef-usa.com

CLIENT:
 CITY OF MADISON



MADISON MUNICIPAL BUILDING
 215 MARTIN LUTHER KING BLVD
 SUITE 109
 MADISON, WISCONSIN 53703

PROJECT TITLE:
 OVERTURE CENTER GARAGE
 ELECTRICAL UPGRADES

318 WEST MIFFLIN STREET
 MADISON, WI

ISSUE:
 10/17/2025 FINAL REVIEW SET

NOT FOR CONSTRUCTION

PROJECT INFORMATION:

PROJECT NUMBER: 2025-5004.02
 DATE: 10/17/2025
 DRAWN BY: DJK
 CHECKED BY: DJK
 APPROVED BY: DJK
 SCALE: AS NOTED

SHEET TITLE:

LEVEL 1 PLAN - POWER & SYSTEMS

SHEET NUMBER:

E-121

C

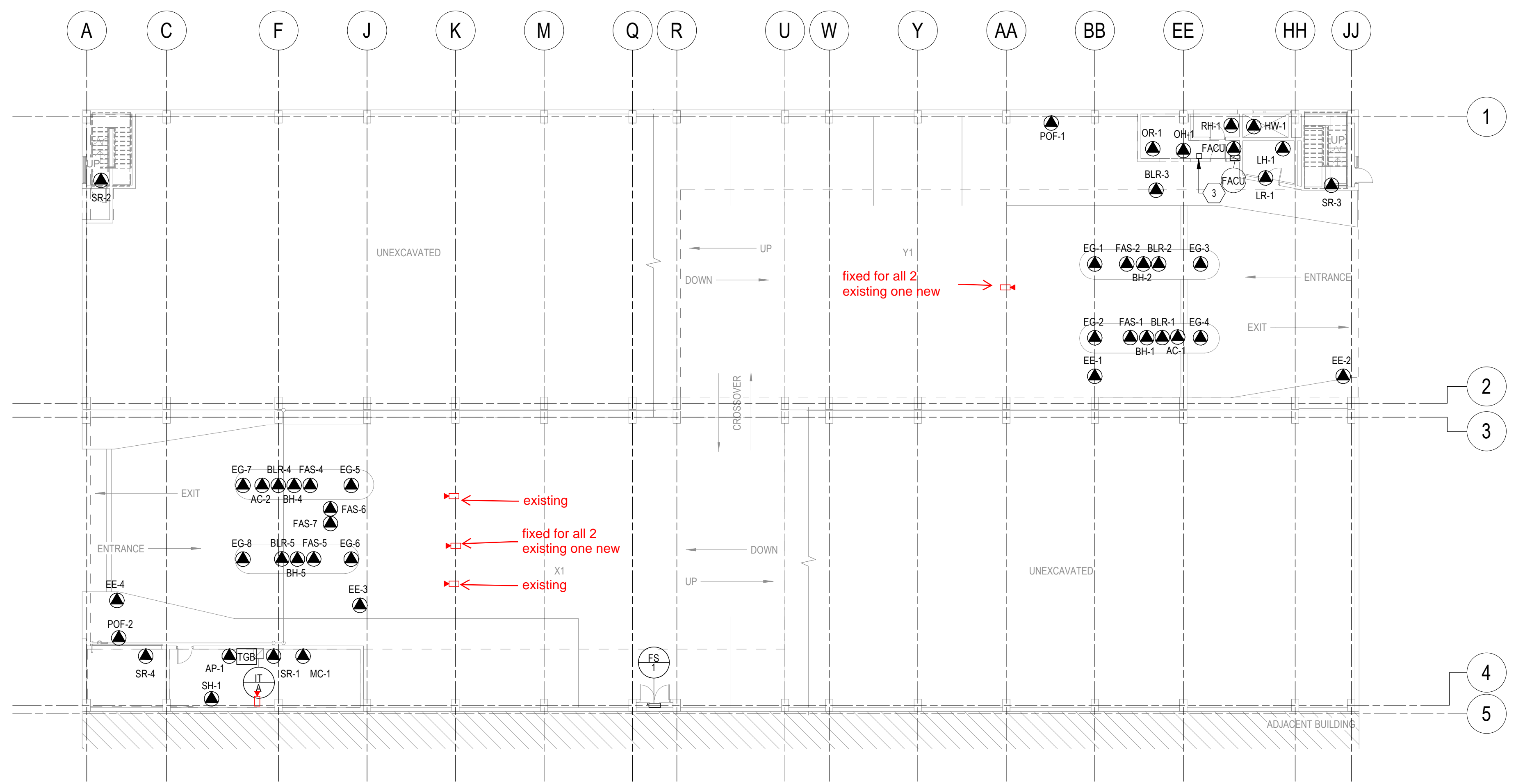
B

A

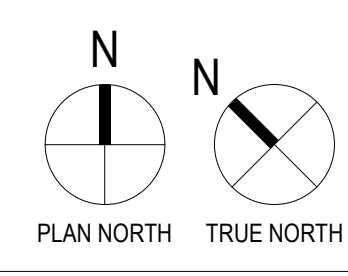
C

B

A

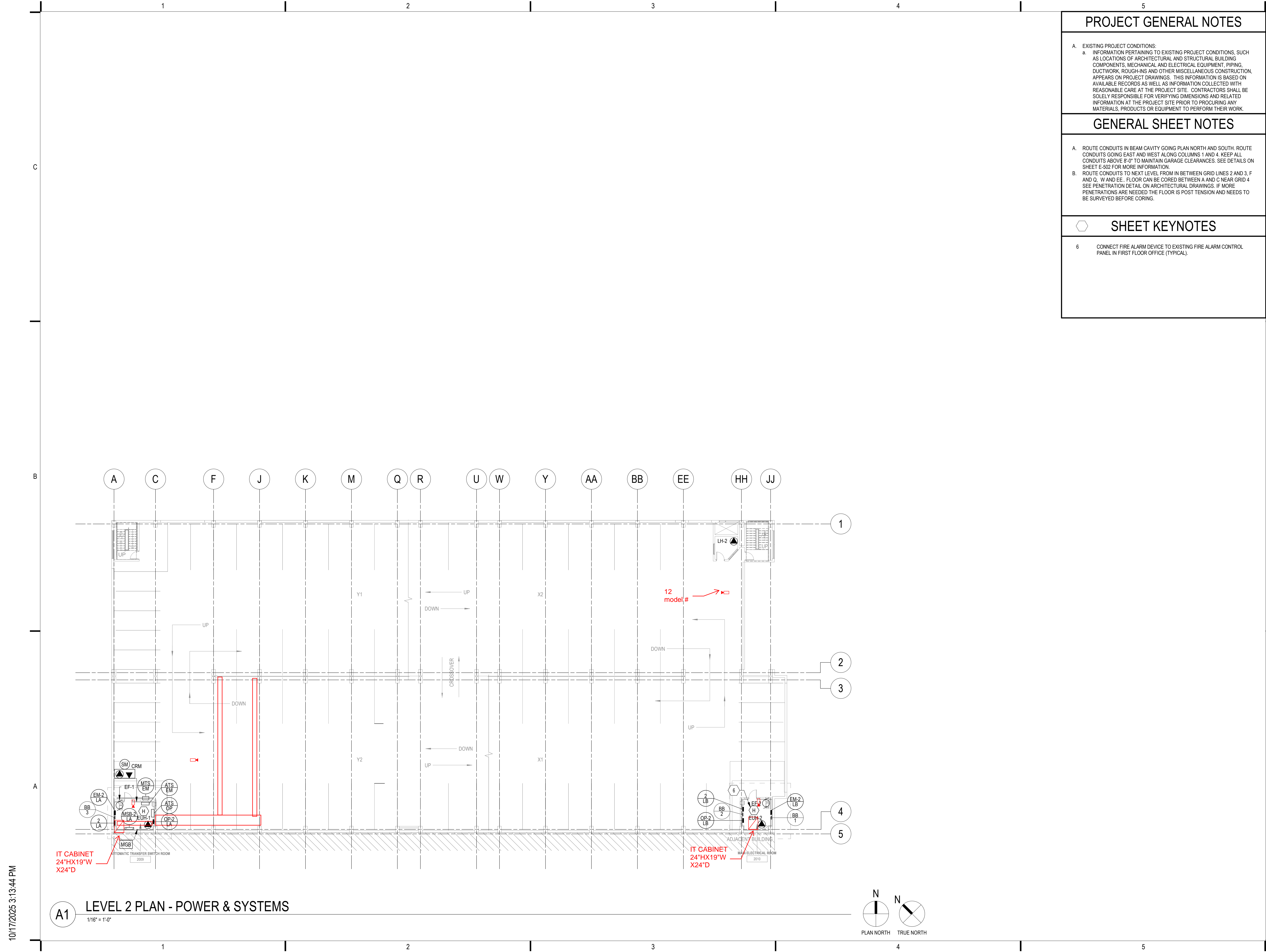


A1 LEVEL 1 PLAN - POWER & SYSTEMS
 1/16" = 1'-0"



10/17/2025 3:13:43 PM

1 2 3 4 5



PROJECT GENERAL NOTES

A. EXISTING PROJECT CONDITIONS:
 a. INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION, APPEARS ON PROJECT DRAWINGS. THIS INFORMATION IS BASED ON AVAILABLE RECORDS AS WELL AS INFORMATION COLLECTED WITH REASONABLE CARE AT THE PROJECT SITE. CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR VERIFYING DIMENSIONS AND RELATED INFORMATION AT THE PROJECT SITE PRIOR TO PROCURING ANY MATERIALS, PRODUCTS OR EQUIPMENT TO PERFORM THEIR WORK.

GENERAL SHEET NOTES

A. ROUTE CONDUITS IN BEAM CAVITY GOING PLAN NORTH AND SOUTH. ROUTE CONDUITS GOING EAST AND WEST ALONG COLUMNS 1 AND 4. KEEP ALL CONDUITS ABOVE 8'-0" TO MAINTAIN GARAGE CLEARANCES. SEE DETAILS ON SHEET E-502 FOR MORE INFORMATION.
 B. ROUTE CONDUITS TO NEXT LEVEL FROM IN BETWEEN GRID LINES 2 AND 3, F AND Q, W AND EE. FLOOR CAN BE CORED BETWEEN A AND C NEAR GRID 4. SEE PENETRATION DETAIL ON ARCHITECTURAL DRAWINGS. IF MORE PENETRATIONS ARE NEEDED THE FLOOR IS POST TENSION AND NEEDS TO BE SURVEYED BEFORE CORING.

SHEET KEYNOTES

6. CONNECT FIRE ALARM DEVICE TO EXISTING FIRE ALARM CONTROL PANEL IN FIRST FLOOR OFFICE (TYPICAL).



275 West Wisconsin Avenue,
 Suite 300
 Milwaukee, WI 53203
 414 / 259 1500

www.graef-usa.com

CLIENT:
 CITY OF MADISON



MADISON MUNICIPAL BUILDING
 215 MARTIN LUTHER KING BLVD
 SUITE 109
 MADISON, WISCONSIN 53703

PROJECT TITLE:
 OVERTURE CENTER GARAGE
 ELECTRICAL UPGRADES

318 WEST MIFFLIN STREET
 MADISON, WI

ISSUE:
 10/17/2025 FINAL REVIEW SET

NOT FOR CONSTRUCTION

PROJECT INFORMATION:
 PROJECT NUMBER: 2025-5004.02
 DATE: 10/17/2025
 DRAWN BY: DJK
 CHECKED BY: DJK
 APPROVED BY: DJK
 SCALE: AS NOTED

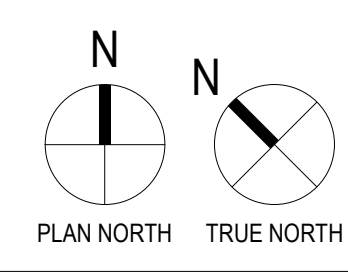
SHEET TITLE:
 LEVEL 2 PLAN - POWER &
 SYSTEMS

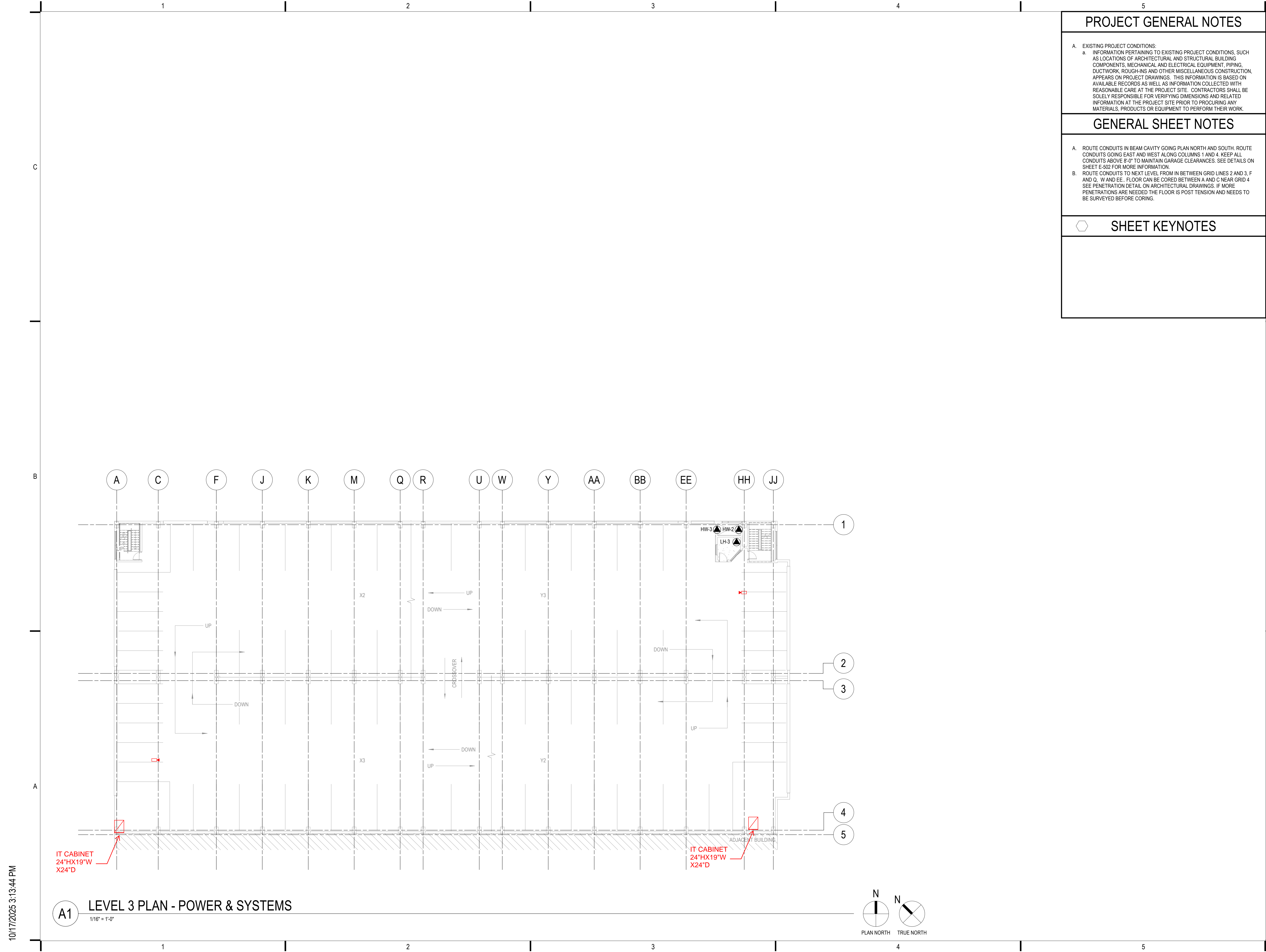
SHEET NUMBER:

E-122

10/17/2025 3:13:44 PM

A1 LEVEL 2 PLAN - POWER & SYSTEMS
 1/16" = 1'-0"





PROJECT GENERAL NOTES

A. EXISTING PROJECT CONDITIONS:
 a. INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION, APPEARS ON PROJECT DRAWINGS. THIS INFORMATION IS BASED ON AVAILABLE RECORDS AS WELL AS INFORMATION COLLECTED WITH REASONABLE CARE AT THE PROJECT SITE. CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR VERIFYING DIMENSIONS AND RELATED INFORMATION AT THE PROJECT SITE PRIOR TO PROCURING ANY MATERIALS, PRODUCTS OR EQUIPMENT TO PERFORM THEIR WORK.

GENERAL SHEET NOTES

A. ROUTE CONDUITS IN BEAM CAVITY GOING PLAN NORTH AND SOUTH. ROUTE CONDUITS GOING EAST AND WEST ALONG COLUMNS 1 AND 4. KEEP ALL CONDUITS ABOVE 8'-0" TO MAINTAIN GARAGE CLEARANCES. SEE DETAILS ON SHEET E-502 FOR MORE INFORMATION.
 B. ROUTE CONDUITS TO NEXT LEVEL FROM IN BETWEEN GRID LINES 2 AND 3, F AND Q, W AND EE. FLOOR CAN BE CORED BETWEEN A AND C NEAR GRID 4. SEE PENETRATION DETAIL ON ARCHITECTURAL DRAWINGS. IF MORE PENETRATIONS ARE NEEDED THE FLOOR IS POST TENSION AND NEEDS TO BE SURVEYED BEFORE CORING.

SHEET KEYNOTES



275 West Wisconsin Avenue,
 Suite 300
 Milwaukee, WI 53203
 414 / 259 1500

www.graef-usa.com

CLIENT:
 CITY OF MADISON



MADISON MUNICIPAL BUILDING
 215 MARTIN LUTHER KING BLVD
 SUITE 109
 MADISON, WISCONSIN 53703

PROJECT TITLE:
 OVERTURE CENTER GARAGE
 ELECTRICAL UPGRADES

318 WEST MIFFLIN STREET
 MADISON, WI

ISSUE:
 10/17/2025 FINAL REVIEW SET

NOT FOR CONSTRUCTION

PROJECT INFORMATION:
 PROJECT NUMBER: 2025-5004.02
 DATE: 10/17/2025
 DRAWN BY: DJK
 CHECKED BY: DJK
 APPROVED BY: DJK
 SCALE: AS NOTED

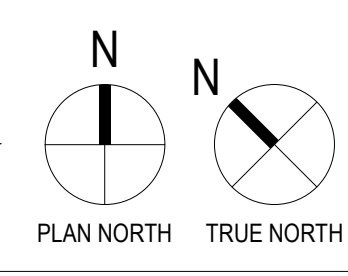
SHEET TITLE:
 LEVEL 3 PLAN - POWER &
 SYSTEMS

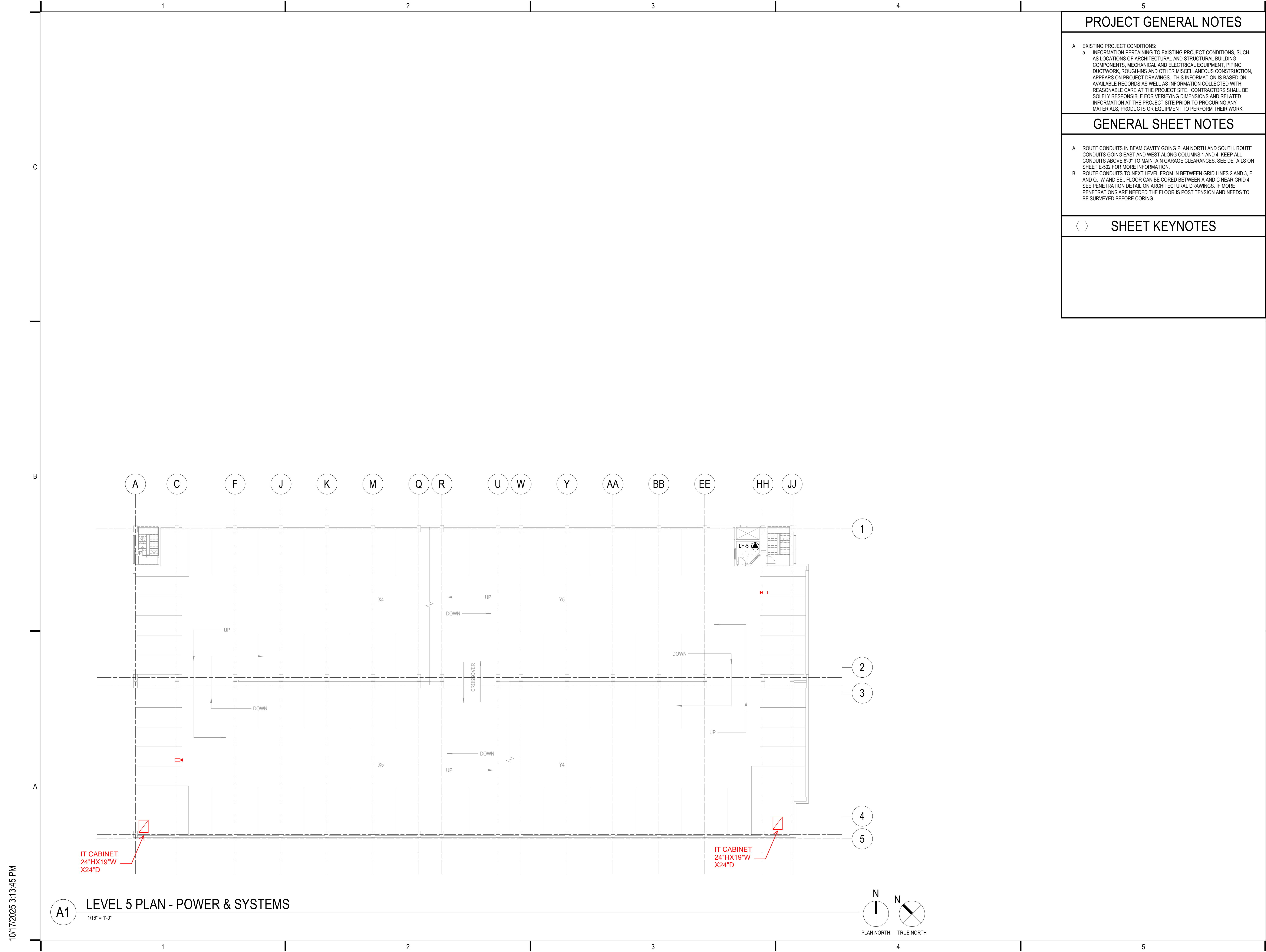
SHEET NUMBER:

E-123

10/17/2025 3:13:44 PM

A1 LEVEL 3 PLAN - POWER & SYSTEMS
 1/16" = 1'-0"





PROJECT GENERAL NOTES

A. EXISTING PROJECT CONDITIONS:
 a. INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION, APPEARS ON PROJECT DRAWINGS. THIS INFORMATION IS BASED ON AVAILABLE RECORDS AS WELL AS INFORMATION COLLECTED WITH REASONABLE CARE AT THE PROJECT SITE. CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR VERIFYING DIMENSIONS AND RELATED INFORMATION AT THE PROJECT SITE PRIOR TO PROCURING ANY MATERIALS, PRODUCTS OR EQUIPMENT TO PERFORM THEIR WORK.

GENERAL SHEET NOTES

A. ROUTE CONDUITS IN BEAM CAVITY GOING PLAN NORTH AND SOUTH. ROUTE CONDUITS GOING EAST AND WEST ALONG COLUMNS 1 AND 4. KEEP ALL CONDUITS ABOVE 8'-0" TO MAINTAIN GARAGE CLEARANCES. SEE DETAILS ON SHEET E-502 FOR MORE INFORMATION.
 B. ROUTE CONDUITS TO NEXT LEVEL FROM IN BETWEEN GRID LINES 2 AND 3, F AND Q, W AND EE. FLOOR CAN BE CORED BETWEEN A AND C NEAR GRID 4. SEE PENETRATION DETAIL ON ARCHITECTURAL DRAWINGS. IF MORE PENETRATIONS ARE NEEDED THE FLOOR IS POST TENSION AND NEEDS TO BE SURVEYED BEFORE CORING.

SHEET KEYNOTES



275 West Wisconsin Avenue,
 Suite 300
 Milwaukee, WI 53203
 414 / 259 1500

www.graef-usa.com

CLIENT:
 CITY OF MADISON



MADISON MUNICIPAL BUILDING
 215 MARTIN LUTHER KING BLVD
 SUITE 109
 MADISON, WISCONSIN 53703

PROJECT TITLE:
 OVERTURE CENTER GARAGE
 ELECTRICAL UPGRADES

318 WEST MIFFLIN STREET
 MADISON, WI

ISSUE:
 10/17/2025 FINAL REVIEW SET

NOT FOR CONSTRUCTION

PROJECT INFORMATION:
 PROJECT NUMBER: 2025-5004.02
 DATE: 10/17/2025
 DRAWN BY: DJK
 CHECKED BY: DJK
 APPROVED BY: DJK
 SCALE: AS NOTED

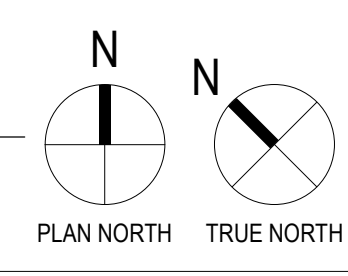
SHEET TITLE:
 LEVEL 5 PLAN - POWER &
 SYSTEMS

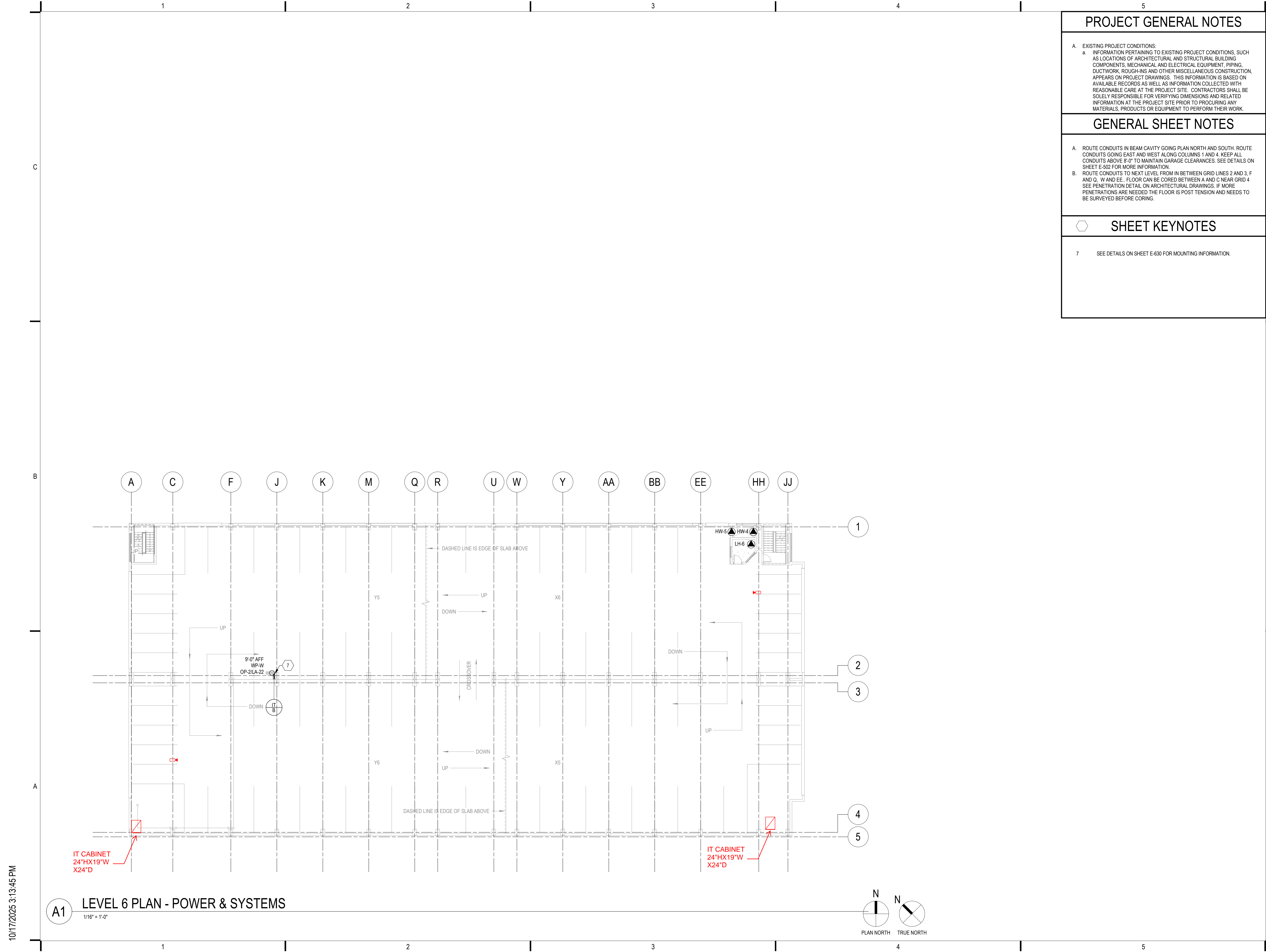
SHEET NUMBER:

E-125

10/17/2025 3:13:45 PM

A1 LEVEL 5 PLAN - POWER & SYSTEMS
 1/16" = 1'-0"





PROJECT GENERAL NOTES

A. EXISTING PROJECT CONDITIONS:
 a. INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION, APPEARS ON PROJECT DRAWINGS. THIS INFORMATION IS BASED ON AVAILABLE RECORDS AS WELL AS INFORMATION COLLECTED WITH REASONABLE CARE AT THE PROJECT SITE. CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR VERIFYING DIMENSIONS AND RELATED INFORMATION AT THE PROJECT SITE PRIOR TO PROCURING ANY MATERIALS, PRODUCTS OR EQUIPMENT TO PERFORM THEIR WORK.

GENERAL SHEET NOTES

A. ROUTE CONDUITS IN BEAM CAVITY GOING PLAN NORTH AND SOUTH. ROUTE CONDUITS GOING EAST AND WEST ALONG COLUMNS 1 AND 4. KEEP ALL CONDUITS ABOVE 8'-0" TO MAINTAIN GARAGE CLEARANCES. SEE DETAILS ON SHEET E-502 FOR MORE INFORMATION.
 B. ROUTE CONDUITS TO NEXT LEVEL FROM IN BETWEEN GRID LINES 2 AND 3, F AND Q, W AND EE. FLOOR CAN BE CORED BETWEEN A AND C NEAR GRID 4. SEE PENETRATION DETAIL ON ARCHITECTURAL DRAWINGS. IF MORE PENETRATIONS ARE NEEDED THE FLOOR IS POST TENSION AND NEEDS TO BE SURVEYED BEFORE CORING.

SHEET KEYNOTES

7 SEE DETAILS ON SHEET E-630 FOR MOUNTING INFORMATION.



275 West Wisconsin Avenue,
 Suite 300
 Milwaukee, WI 53203
 414 / 259 1500

www.graef-usa.com

CLIENT:
 CITY OF MADISON



MADISON MUNICIPAL BUILDING
 215 MARTIN LUTHER KING BLVD
 SUITE 109
 MADISON, WISCONSIN 53703

PROJECT TITLE:
 OVERTURE CENTER GARAGE
 ELECTRICAL UPGRADES

318 WEST MIFFLIN STREET
 MADISON, WI

ISSUE:
 10/17/2025 FINAL REVIEW SET

NOT FOR CONSTRUCTION

PROJECT INFORMATION:
 PROJECT NUMBER: 2025-5004.02
 DATE: 10/17/2025
 DRAWN BY: DJK
 CHECKED BY: DJK
 APPROVED BY: DJK
 SCALE: AS NOTED

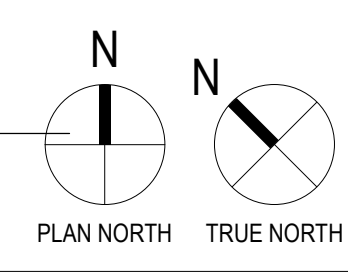
SHEET TITLE:
 LEVEL 6 PLAN - POWER &
 SYSTEMS

SHEET NUMBER:

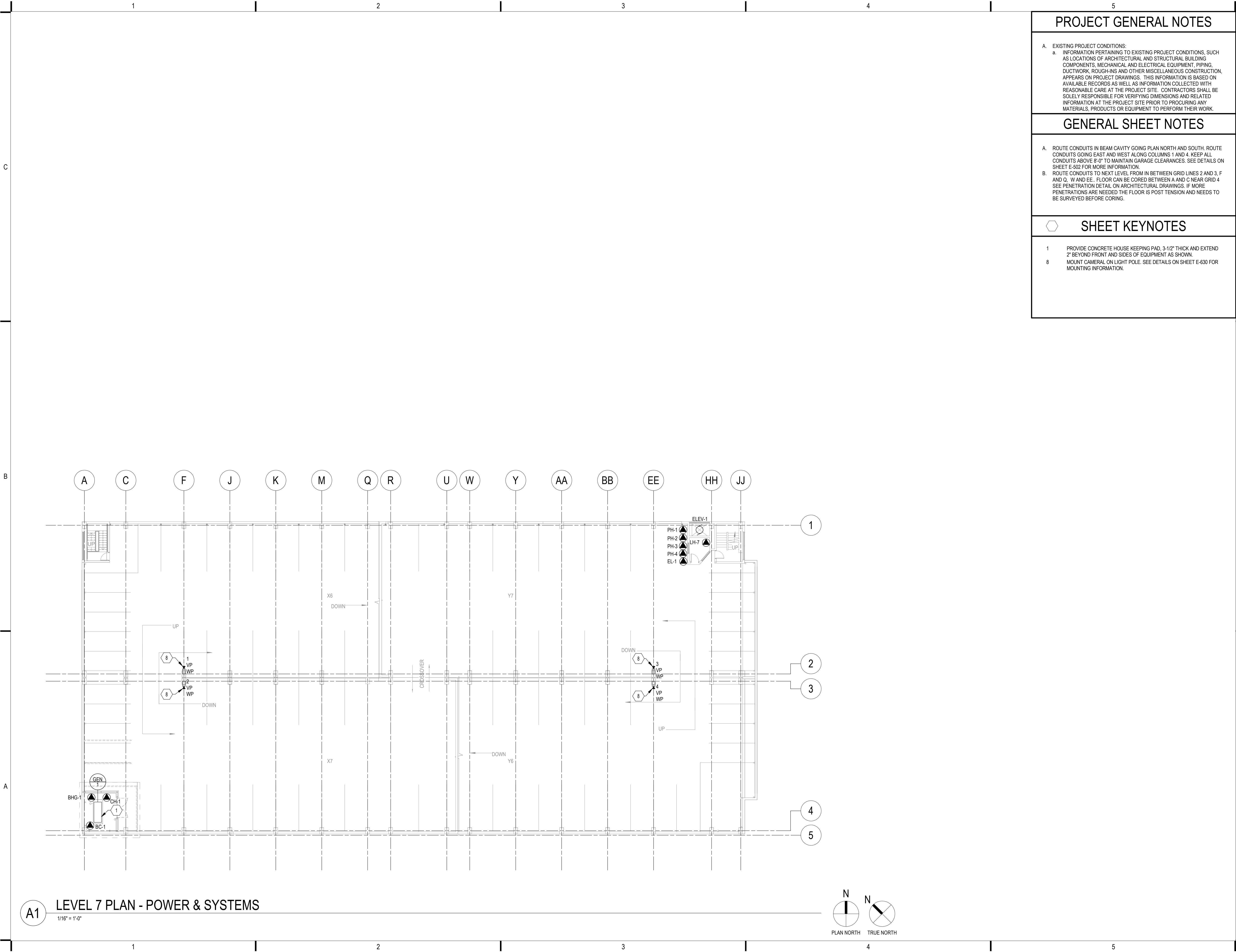
E-126

10/17/2025 3:13:45 PM

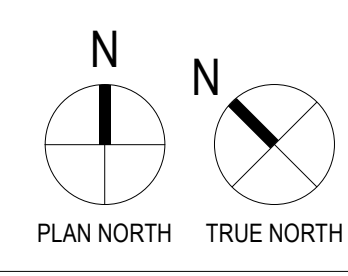
A1 LEVEL 6 PLAN - POWER & SYSTEMS
 1/16" = 1'-0"



10/17/2025 3:13:46 PM



A1 LEVEL 7 PLAN - POWER & SYSTEMS
1/16" = 1'-0"



PROJECT GENERAL NOTES	
A.	EXISTING PROJECT CONDITIONS: a. INFORMATION PERTAINING TO EXISTING PROJECT CONDITIONS, SUCH AS LOCATIONS OF ARCHITECTURAL AND STRUCTURAL BUILDING COMPONENTS, MECHANICAL AND ELECTRICAL EQUIPMENT, PIPING, DUCTWORK, ROUGH-INS AND OTHER MISCELLANEOUS CONSTRUCTION, APPEARS ON PROJECT DRAWINGS. THIS INFORMATION IS BASED ON AVAILABLE RECORDS AS WELL AS INFORMATION COLLECTED WITH REASONABLE CARE AT THE PROJECT SITE. CONTRACTORS SHALL BE SOLELY RESPONSIBLE FOR VERIFYING DIMENSIONS AND RELATED INFORMATION AT THE PROJECT SITE PRIOR TO PROCURING ANY MATERIALS, PRODUCTS OR EQUIPMENT TO PERFORM THEIR WORK.
GENERAL SHEET NOTES	
A.	ROUTE CONDUITS IN BEAM CAVITY GOING PLAN NORTH AND SOUTH. ROUTE CONDUITS GOING EAST AND WEST ALONG COLUMNS 1 AND 4. KEEP ALL CONDUITS ABOVE 8'-0" TO MAINTAIN GARAGE CLEARANCES. SEE DETAILS ON SHEET E-502 FOR MORE INFORMATION.
B.	ROUTE CONDUITS TO NEXT LEVEL FROM IN BETWEEN GRID LINES 2 AND 3, F AND Q, W AND EE. FLOOR CAN BE CORED BETWEEN A AND C NEAR GRID 4 SEE PENETRATION DETAIL ON ARCHITECTURAL DRAWINGS. IF MORE PENETRATIONS ARE NEEDED THE FLOOR IS POST TENSION AND NEEDS TO BE SURVEYED BEFORE CORING.
SHEET KEYNOTES	
1	PROVIDE CONCRETE HOUSE KEEPING PAD, 3-1/2" THICK AND EXTEND 2' BEYOND FRONT AND SIDES OF EQUIPMENT AS SHOWN.
8	MOUNT CAMERA ON LIGHT POLE. SEE DETAILS ON SHEET E-630 FOR MOUNTING INFORMATION.

GRAEF
275 West Wisconsin Avenue,
Suite 300
Milwaukee, WI 53203
414 / 259 1500

www.graef-usa.com

CLIENT:
CITY OF MADISON



MADISON MUNICIPAL BUILDING
215 MARTIN LUTHER KING BLVD
SUITE 109
MADISON, WISCONSIN 53703

PROJECT TITLE:
OVERTURE CENTER GARAGE
ELECTRICAL UPGRADES

318 WEST MIFFLIN STREET
MADISON, WI

ISSUE:
10/17/2025 FINAL REVIEW SET

NOT FOR CONSTRUCTION

PROJECT INFORMATION:
PROJECT NUMBER: 2025-5004.02
DATE: 10/17/2025
DRAWN BY: DJK
CHECKED BY: DJK
APPROVED BY: DJK
SCALE: AS NOTED

SHEET TITLE:
LEVEL 7 PLAN - POWER & SYSTEMS

SHEET NUMBER:

E-127

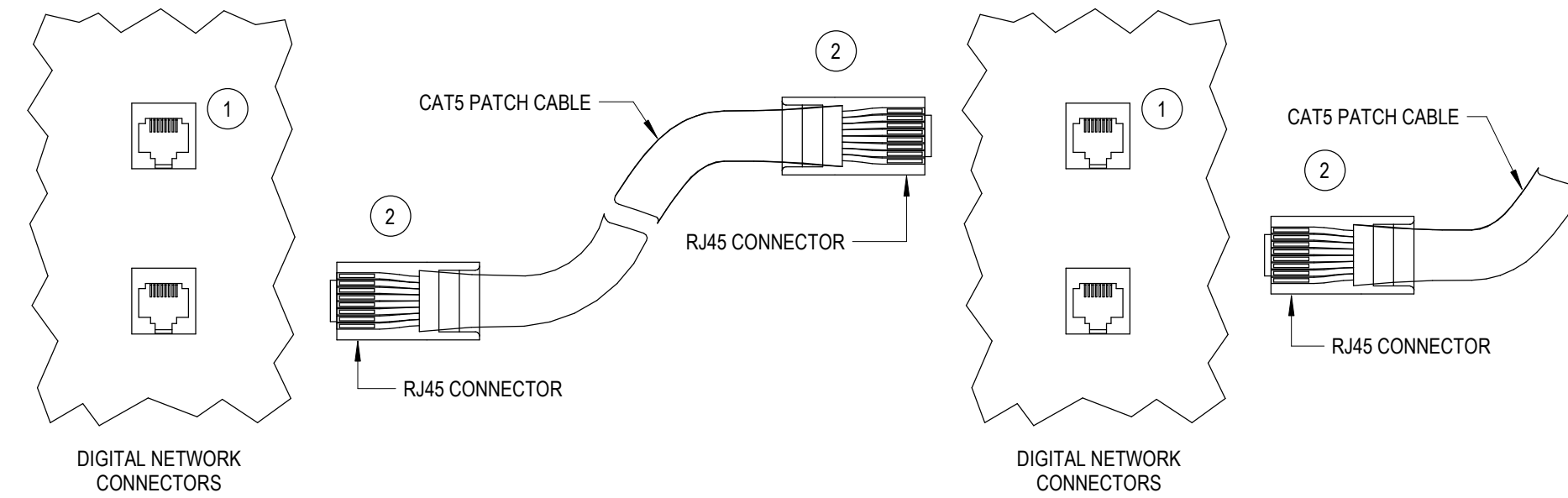
TIA / EIA-568-B CABLING STANDARD TERMINATION			
FUNCTION	PAIR #	PIN OUT (T568B)	WIRE COLOR
(T1) (R1)	1	5 4	WHITE w/ BLUE BLUE
Tx + (T2) Tx - (R2)	2	1 2	WHITE w/ ORANGE ORANGE
Rx + (T3) Rx - (R3)	3	3 6	WHITE w/ GREEN GREEN
(T4) (R4)	4	7 8	WHITE w/ BROWN BROWN

TERMINATION & TESTING OF CAT5 CABLES MUST BE DONE BY A QUALIFIED NETWORK INSTALLER

CABLE TERMINATION REQUIREMENTS:

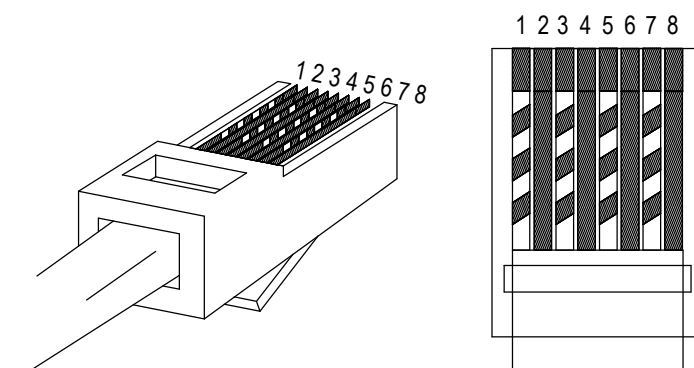
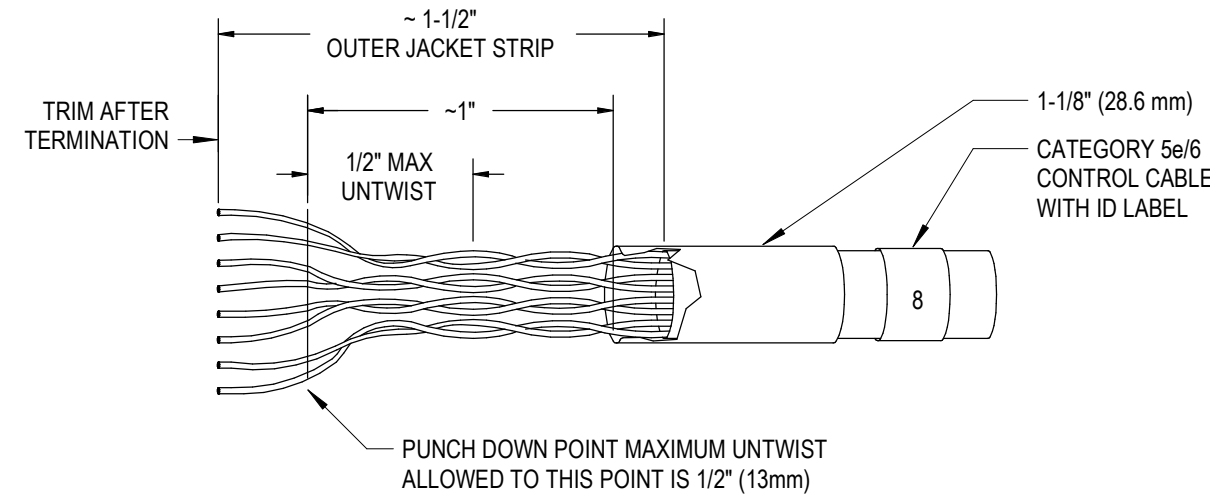
- STRIP OFF OUTER JACKET - APPROXIMATELY 1-1/2" (37.6 mm)
- TERMINATE APPROXIMATELY 1/2" (12.2 mm) FROM END OF CONDUCTORS ON TYPE 110 PUNCH DOWN BLOCK OR CONNECTOR PER SCHEDULE (T568B) - MAXIMUM UNTWIST OF CONDUCTORS TO TERMINATIONS IS 1/2" (12.2 mm) - TRIM EXCESS LEADS.

SEE SYSTEM SPECIFIC NOTES ON SHEET LC0.1 FOR MAXIMUM CABLE LENGTHS.



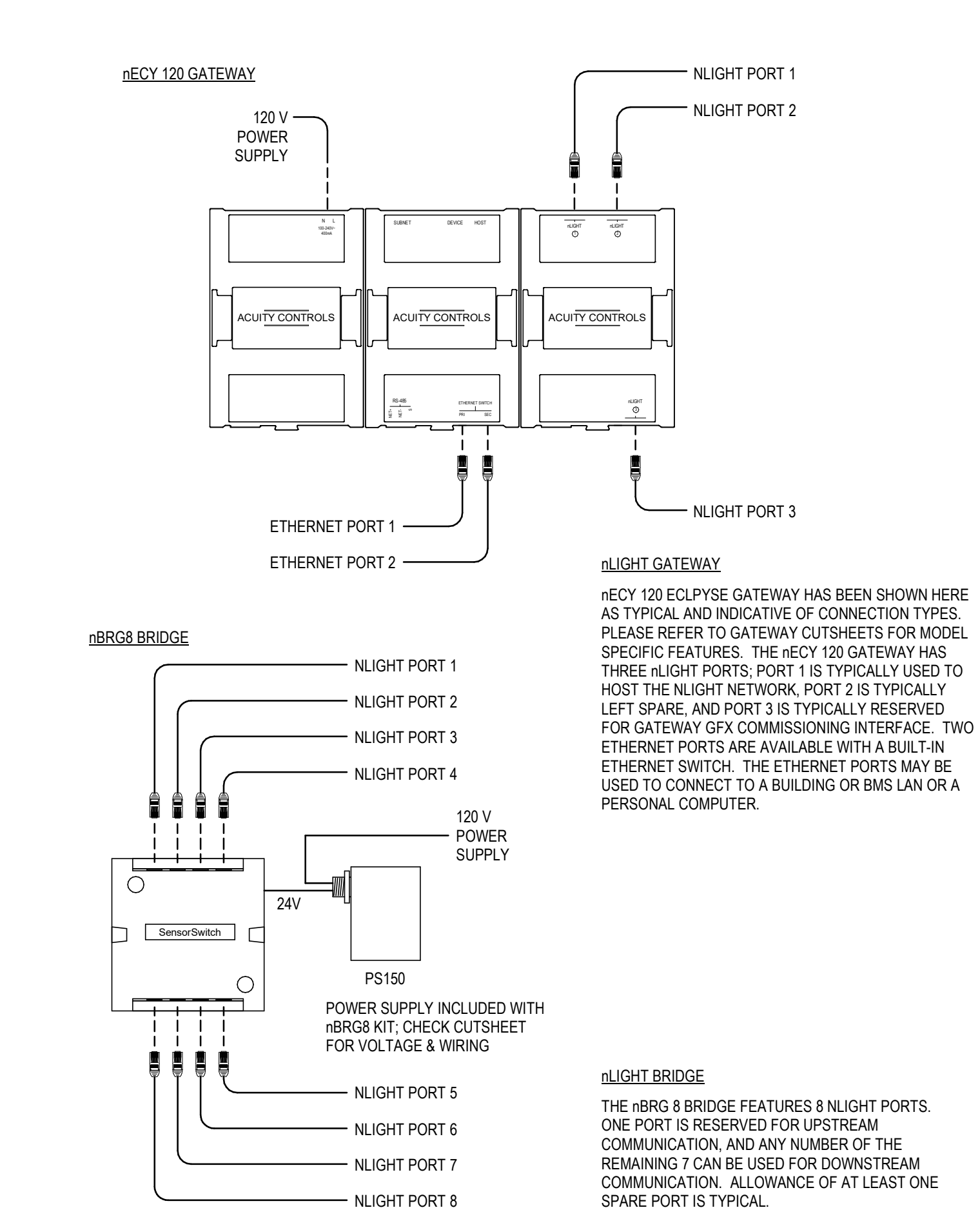
- 1 RJ45 FEMALE CONNECTOR
- 2 RJ45 MALE CONNECTORS. ALL CABLES SUPPLIED BY CONTRACTOR.

B1 DIGITAL LIGHTING CONTROLS CAT5E/6 CABLE TERMINATION
NTS



- 1. WHITE WITH ORANGE
- 2. ORANGE
- 3. WHITE WITH GREEN
- 4. BLUE
- 5. WHITE WITH BLUE
- 6. GREEN
- 7. WHITE WITH BROWN
- 8. BROWN

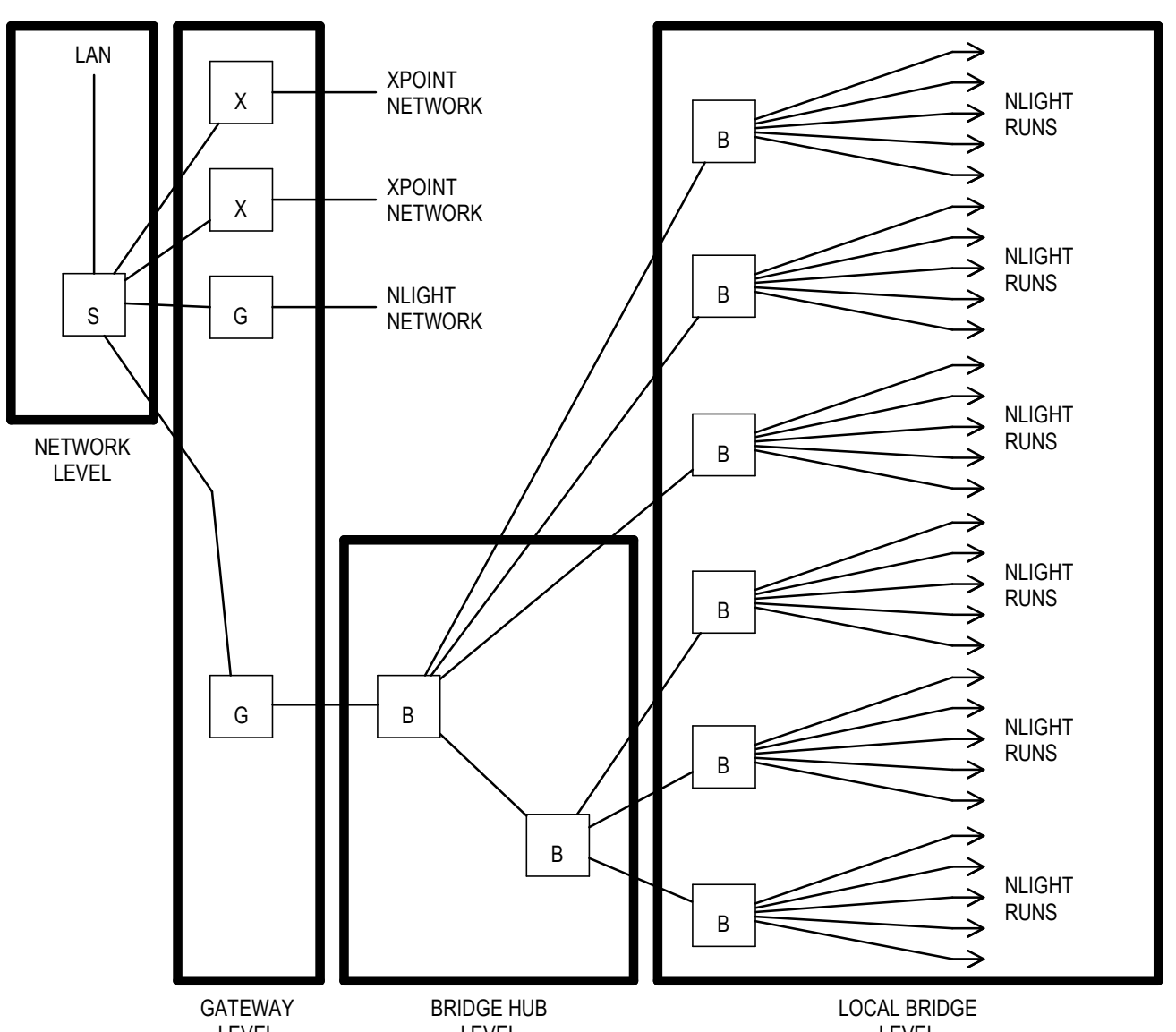
NOTES:
DAISY-CHAIN CAT5 PATCH CABLE WITH RJ45 CONNECTORS FROM DIGITAL DEVICE TO DIGITAL DEVICE.
REFER TO MANUFACTURERS INSTRUCTIONS FOR LONG DISTANCE RUNS BETWEEN DIGITAL DEVICES.
CRIMP AND TEST EACH CABLE WITH A LAN CIRCUIT TESTER PRIOR TO INSTALLATION.



nLIGHT GATEWAY
nECY 120 ECLYPSE GATEWAY HAS BEEN SHOWN HERE AS TYPICAL AND INDICATIVE OF CONNECTION TYPES. PLEASE REFER TO GATEWAY CUTSHEETS FOR MODEL SPECIFIC FEATURES. THE nECY 120 GATEWAY HAS THREE nLIGHT PORTS; PORT 1 IS TYPICALLY USED TO HOST THE nLIGHT NETWORK; PORT 2 IS TYPICALLY LEFT SPARE; AND PORT 3 IS TYPICALLY RESERVED FOR GATEWAY GFX COMMISSIONING INTERFACE. TWO ETHERNET PORTS ARE AVAILABLE WITH A BUILT-IN ETHERNET SWITCH. THE ETHERNET PORTS MAY BE USED TO CONNECT TO A BUILDING OR BMS LAN OR A PERSONAL COMPUTER.

nLIGHT BRIDGE
THE nBRG 8 BRIDGE FEATURES 8 nLIGHT PORTS. ONE PORT IS RESERVED FOR UPSTREAM COMMUNICATION, AND ANY NUMBER OF THE REMAINING 7 CAN BE USED FOR DOWNSTREAM COMMUNICATION. ALLOWANCE OF AT LEAST ONE SPARE PORT IS TYPICAL.

A1 nLIGHT NETWORK RISER
NTS



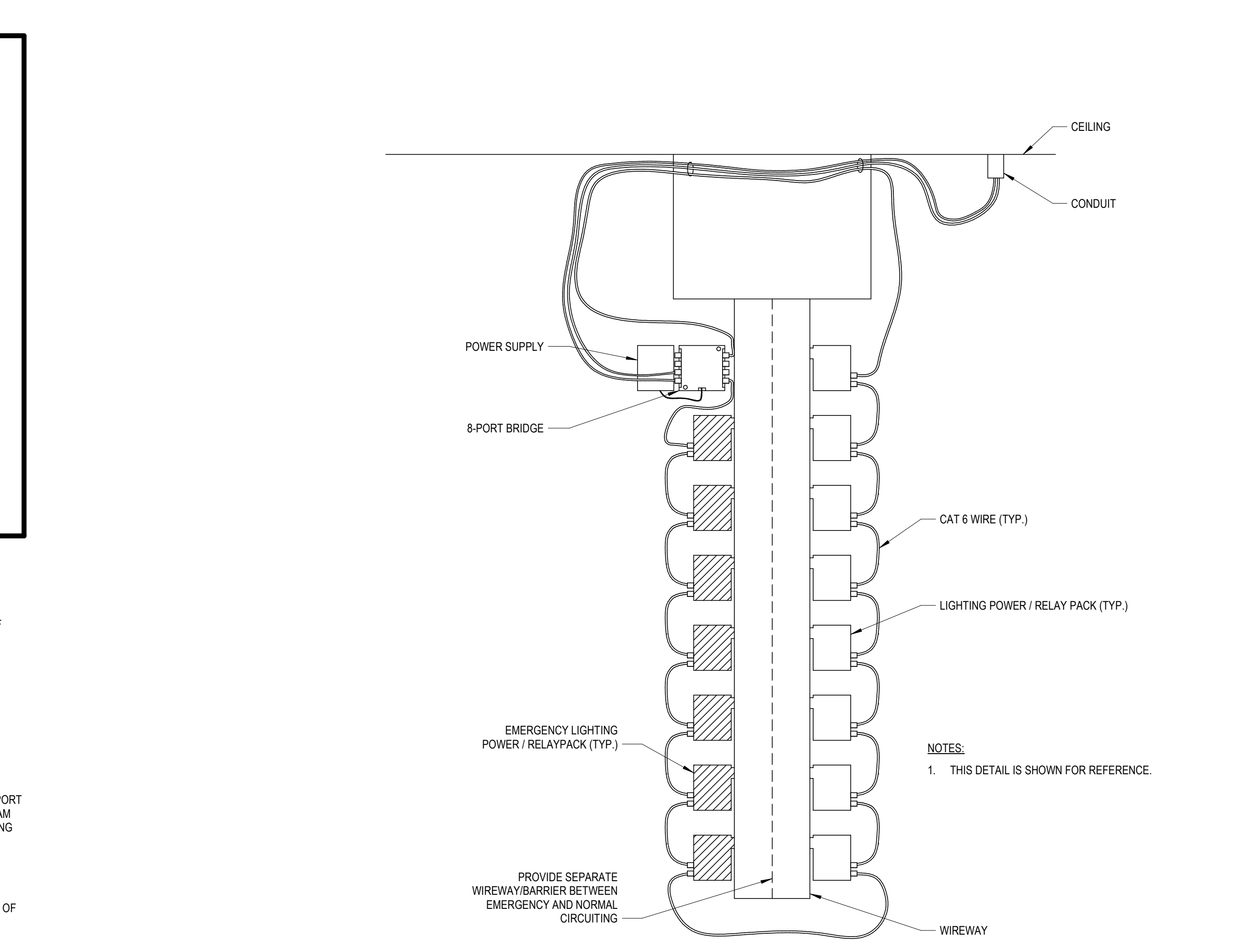
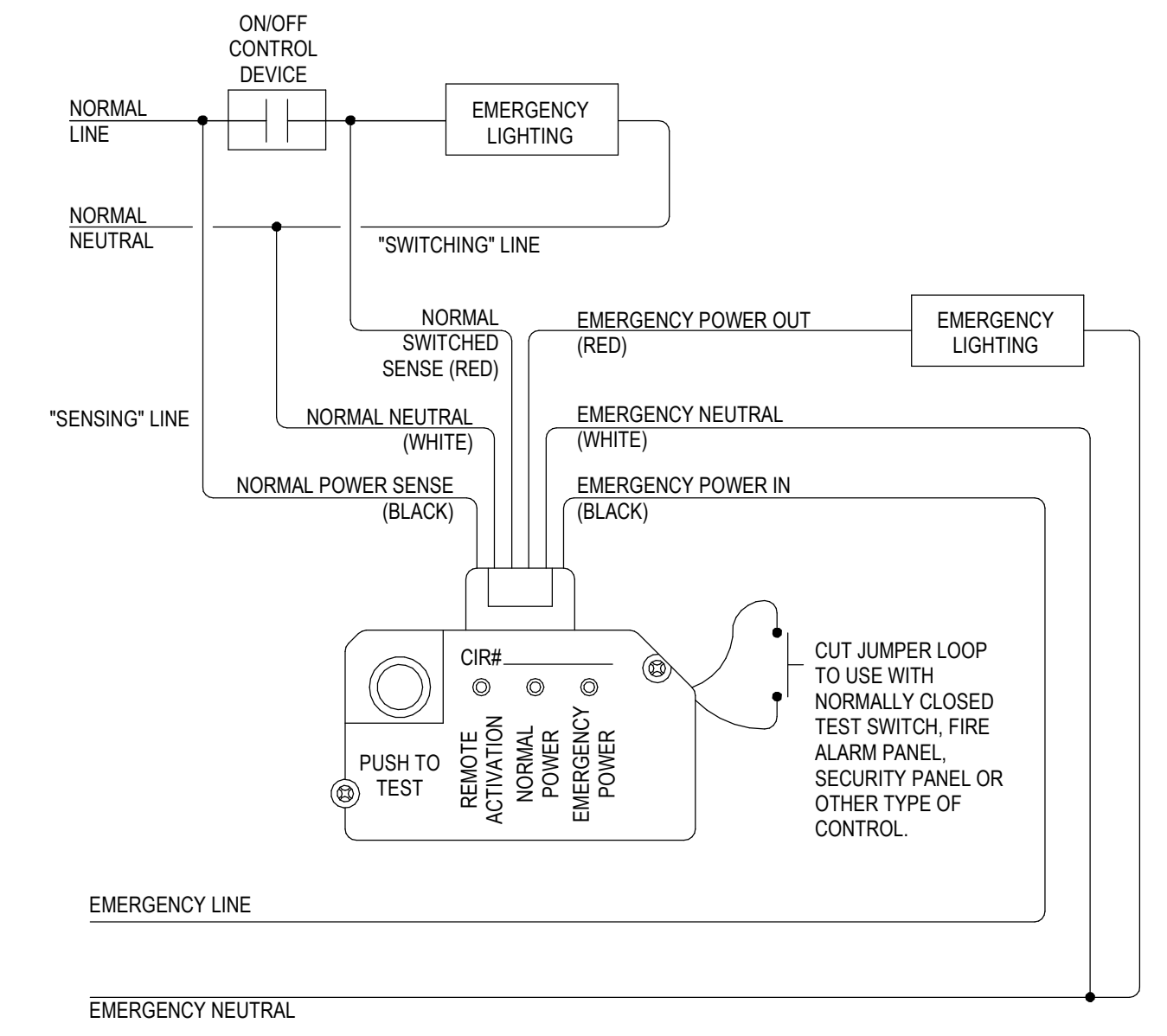
NETWORK LEVEL
ALL nLIGHT GATEWAY DEVICES ARE CONNECTED OVER A LOCAL AREA NETWORK. COMPUTERS ON THIS LEVEL MAY CONNECT THROUGH SENSORVIEW AND BUILDING AUTOMATION SYSTEMS MAY ACCESS SYSTEM OFFER BACNET/IP IF THIS OPTION IS PROVIDED.

GATEWAY LEVEL
nLIGHT GATEWAYS ON THIS LEVEL WILL HOST AN nLIGHT NETWORK. THE XPOINT BRIDGE RESIDES ON THIS LEVEL HOSTING AN XPOINT NETWORK. DEVICES ON THIS LEVEL ARE NETWORK VISIBLE.

BRIDGE HUB LEVEL
nLIGHT BRIDGES ON THIS LEVEL FUNCTION AS HUBS IN A STAR TOPOLOGY. THE nLIGHT NETWORK HOSTED BY THE GATEWAY MUST BE ROUTED TO EACH BRIDGE ON THE LOCAL BRIDGE LEVEL. EACH BRIDGE HUB WILL UTILIZE ONE PORT TO RUN UPSTREAM (TOWARDS THE GATEWAY) AND ANY NUMBER OF THE REMAINING 7 PORTS TO FEED DOWNSTREAM (TOWARDS nLIGHT ZONE RUNS). LARGE SYSTEMS WILL OFTEN USE A TIERED APPROACH WITH BRIDGE HUBS RUNNING TO ADDITIONAL BRIDGE HUBS; IN THESE SITUATIONS, THE MAXIMUM NUMBER OF BRIDGE HUB TIERS IS 8.

LOCAL BRIDGE LEVEL
nLIGHT BRIDGES ON THIS LEVEL UTILIZE ONE PORT TO RUN UPSTREAM (TOWARDS BRIDGE HUBS) AND ANY NUMBER OF THE REMAINING 7 PORTS TO FACILITATE nLIGHT ZONES CONSISTING OF CAT5 DAISY-CHAINED nLIGHT LIGHTING CONTROL DEVICES.

B3 UL924 DEVICE DETAIL
NTS



NOTES:
1. THIS DETAIL IS SHOWN FOR REFERENCE.

A4 nLIGHT NORMAL & EMERGENCY POWER / RELAY PACK WIREWAY
NTS

GENERAL SHEET NOTES

- BASIS OF DESIGN FOR DIGITAL LIGHTING CONTROLS IS nLIGHT BY ACUTY.
- LIGHT SWITCHING AND CONTROLS PACKAGES SHALL COMPLY WITH IECC 2021.
- ACCEPTABLE LIGHTING CONTROLS PACKAGES INCLUDE:
 - CRESTRON ZULINK - NETWORKED SOLUTION
 - CRESTRON ZUMMESH - WIRELESS SOLUTION
 - HUBBELL NX DISTRIBUTED INTELLIGENCE - NETWORKED SOLUTION
 - HUBBELL WISCAPE - WIRELESS OUTDOOR SOLUTION
 - INTELLIGENT LIGHTING CONTROLS
 - LUTRON VIVE - WIRELESS SOLUTION - LUTRON DRIVERS REQUIRED.
 - LUTRON QUANTUM - NETWORKED SOLUTION - LUTRON DRIVERS REQUIRED.
 - PHILIPS SPACEWISE DT - WIRELESS SOLUTION
 - STEINEL DCS - WIRELESS SOLUTION
 - WATTSTOPPER DLM - WIRELESS AND NETWORKED SOLUTIONS
 - PRIOR APPROVED EQUAL PRODUCT.
- CONTROLS PACKAGE MUST INCLUDE THE FOLLOWING:
 - NETWORK SYSTEM.
 - PROVIDE BRIDGES AS REQUIRED AND INCLUDE (1) ADDITIONAL BRIDGE USED AS A HUB.
- PROVIDE POWER TO THE FOLLOWING ITEMS FROM THE NEAREST AVAILABLE NORMAL / EMERGENCY 120V CIRCUIT.
 - HEAD END EQUIPMENT
 - BRIDGES
 - TOUCH SCREEN (IF APPLICABLE)
- LINE VOLTAGE WIRING SHALL BE #12 AWG MINIMUM, INSTALLED IN CONDUIT. CONTROL CABLING SHALL BE CAT 5e AS REQUIRED BY CONTROL DEVICE MANUFACTURER. INSTALL IN CONDUIT OR ROUTE IN FREE AIR AS ALLOWED BY THE SPECIFICATIONS. PROVIDED BY ELECTRICAL CONTRACTOR.
- DIGITAL LIGHTING CONTROL DEVICE DETAILS ARE DIAGRAMMATIC. SEE FLOOR PLANS FOR QUANTITIES AND TYPES OF DEVICES REQUIRED IN EACH ROOM OR SPACE.
- LIGHTING CONTROL RELAY / POWER PACKS ARE NOT SHOWN ON FLOOR PLANS. PROVIDE IN QUANTITIES AS REQUIRED TO ACCOMMODATE LIGHTING CONTROL SCHEME INDICATED ON FLOOR PLANS. LOCATE RELAY / POWER PACKS ABOVE ACCESSIBLE ROOM CEILING, IN AN ACCESSIBLE LOCATION NEAR ROOM SERVED OR USE A WIREWAY SYSTEM NEAR THE nLIGHT ECLYPSE OR POWER PANEL. INDICATE EXACT LOCATIONS OF RELAY / POWER PACKS ON AS-BUILT RECORD DRAWINGS.
- IF ANOTHER DIGITAL LIGHTING CONTROLS PACKAGE IS APPROVED FOR THIS PROJECT, FOLLOW MANUFACTURERS WIRING DIAGRAMS AND INSTALLATION INSTRUCTIONS. FOR PROJECTS WITH LUTRON LIGHTING CONTROLS, PROVIDE LUTRON DRIVERS AS REQUIRED.
- PROVIDE COMMISSIONING OF THE ENTIRE SYSTEM.



275 West Wisconsin Avenue,
Suite 300
Milwaukee, WI 53203
414 / 259 1500

www.graef-usa.com

CLIENT:
CITY OF MADISON



MADISON MUNICIPAL BUILDING
215 MARTIN LUTHER KING BLVD
SUITE 109
MADISON, WISCONSIN 53703

PROJECT TITLE:
OVERTURE CENTER GARAGE
ELECTRICAL UPGRADES

318 WEST MIFFLIN STREET
MADISON, WI

ISSUE:
10/17/2025 FINAL REVIEW SET

PROJECT INFORMATION:
PROJECT NUMBER: 2025-5004.02
DATE: 10/17/2025
DRAWN BY: DJK
CHECKED BY: DJK
APPROVED BY: DJK
SCALE: AS NOTED

SHEET TITLE:
ELECTRICAL DETAILS

SHEET NUMBER:

E-501

10/17/2025 3:13:46 PM



NOT FOR CONSTRUCTION

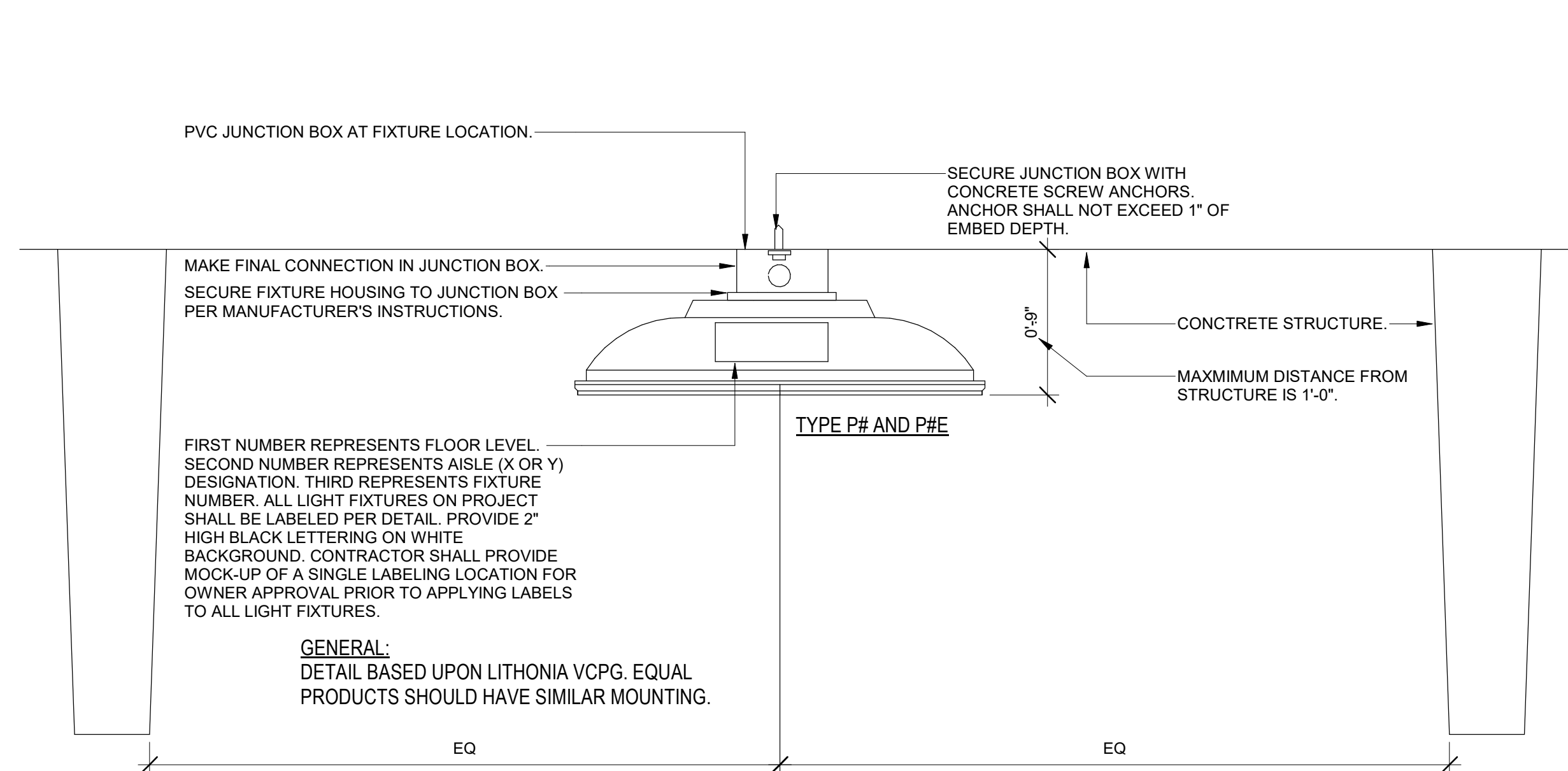
PROJECT INFORMATION:

PROJECT NUMBER: 2025-5004.02
DATE: 10/17/2025
DRAWN BY: DJK
CHECKED BY: DJK
APPROVED BY: DJK
SCALE: AS NOTED

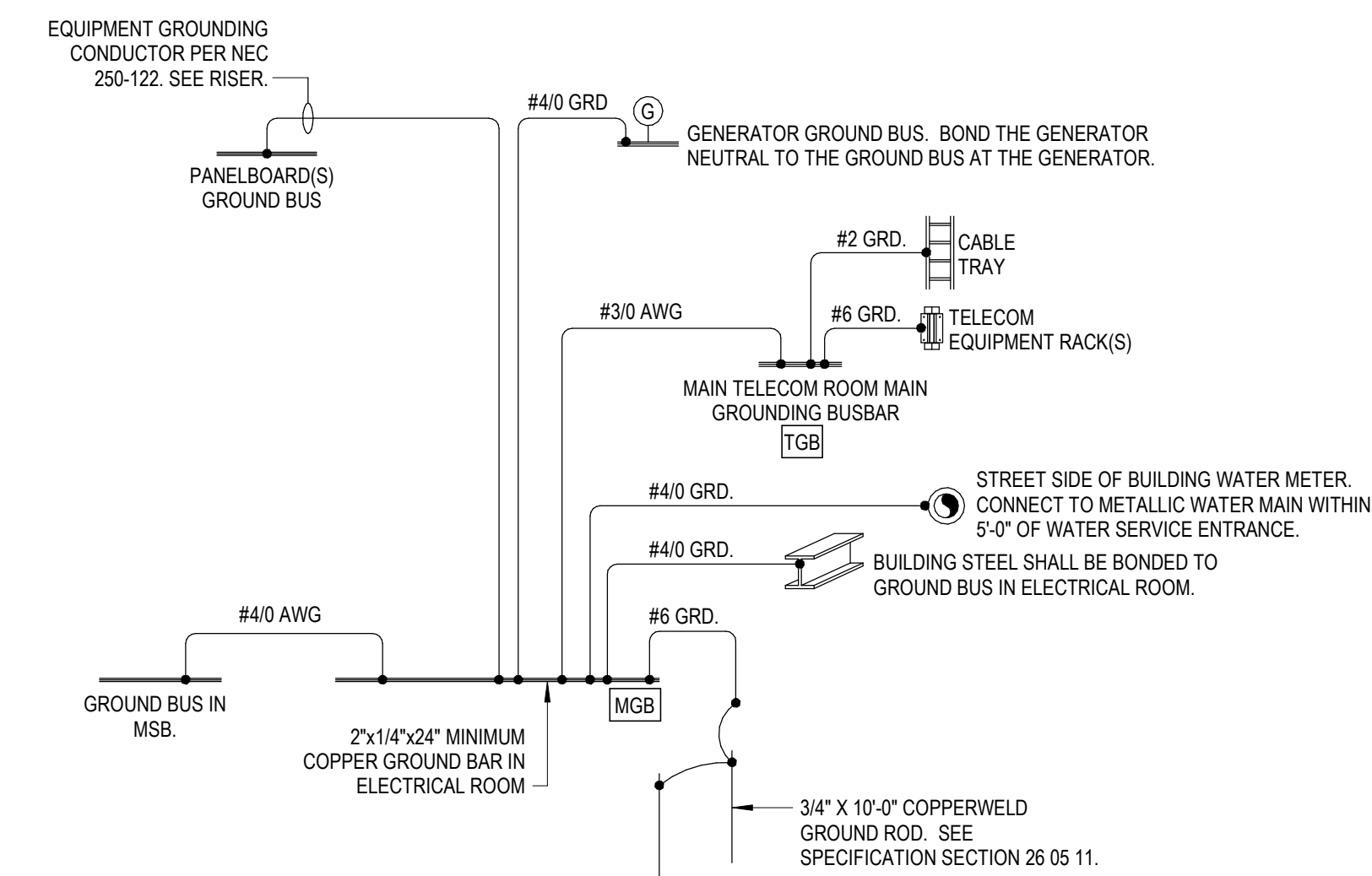
SHEET TITLE:
ELECTRICAL DETAILS

SHEET NUMBER:

E-502



A1 LIGHT FIXTURE MOUNTING DETAIL



- NOTES:
- ALL GROUND CONDUCTORS TO BE ROUTED IN PVC CONDUIT.
 - ALL GROUND CONDUCTORS ON THIS DIAGRAM SHALL BE COPPER.

A4 GROUNDING SYSTEM DETAIL

LIGHT FIXTURE SCHEDULE

GENERAL NOTES:
 A. SEE SPECIFICATION SECTION FOR ADDITIONAL INFORMATION REGARDING FIXTURE AND INSTALLATION REQUIREMENTS.
 B. MANUFACTURERS LISTED AS ACCEPTABLE SHALL MEET ALL REQUIREMENTS AND FEATURES INDICATED. ACCEPTABLE MANUFACTURERS MUST MEET THE PHOTOMETRIC PERFORMANCE OF THE LISTED UNIT. ELECTRICAL CONTRACTOR SHALL ENSURE THE FIXTURE DEPTH / HEIGHT WILL COMPLY WITH ADA REQUIREMENTS AND WILL NOT INTERFERE WITH OTHER TRADES WITHIN THE CEILING CAVITY.
 C. ELECTRICAL CONTRACTOR SHALL COORDINATE T-GRID, WOOD AND SPECIALTY CEILING SYSTEMS WITH ARCHITECT PRIOR TO ORDERING.
 D. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED PARTS AND PIECES FOR A COMPLETE INSTALLATION.
 E. ALL REMOTE DRIVERS SHALL BE LOCATED IN AN ACCESSIBLE LOCATION THAT MEETS THE AMBIENT TEMPERATURE REQUIREMENTS OF THE DRIVER. ELECTRICAL CONTRACTOR SHALL VERIFY WITH SUBMITTED SHOP DRAWING WIRING DIAGRAMS THAT ALL DRIVER LOCATIONS ARE WITHIN.

NOTES:
 1. PROVIDE SURFACE MOUNTING KIT ACCESSORY (VCPGSRM U) FOR LIGHT FIXTURE
 2. PROVIDE JUNCTION BOX EXTENSION.
 3. PROVIDE LITHONIA POLE MODEL# SSS 12 4C DM19AS EHHXY EHHXY DDBXD.
 4. PROVIDE LITHONIA POLE MODEL# SSS 12 4C DM28AS EHHXY EHHXY DDBXD. PROVIDE EXTRA HANDHOLES FOR POLES WITH CAMERAS.
 5. PROVIDE GTD FOR ALL LIGHT FIXTURES.

TAG	PERFORMANCE & ELECTRICAL DATA				LIGHT FIXTURE PROPERTIES			OPTIONS & ACCESSORIES				NO EQUALS	ACCEPTABLE MANUFACTURERS	SEE NOTE
	LUMENS	KELVIN TEMP	LOAD	FIXTURE VOLTAGE	DESCRIPTION	MANUFACTURER	CATALOG SERIES	COLOR / FINISH	DIMMING TYPE	REQUIRED LISTINGS	SENSOR TYPE			
A1	3500	4000	32 VA	120	2'X2' FLAT PANEL LED	LITHONIA	CPX 2X2 AL07 80CRI SWW7 SWL MVOLT NLTAIR2	W	0-10-10	-	-	METALUX/PEERLESS/FINELITE		
F1	5800	4000	57 VA	120	VANDEL RESISTANT LINEAR STAIRWAY SURFACE MOUNT	LUMINAIRE LED	CLF7 4FT AL MIN10 2DRV 50W 40K 120 OP WHT PC OCCFA	W	0-10-10	DL VR	D MO P	KENALL/NEW STAR		
F1E	5800	4000	57 VA	120	VANDEL RESISTANT LINEAR STAIRWAY SURFACE MOUNT	LUMINAIRE LED	CLF7 4FT AL MIN10 2DRV 50W 40K 120 OP WHT PC OCCFA	W	0-10-10	DL VR	D MO P	KENALL/NEW STAR		
F2E	4500	4000	43 VA	120	VANDEL RESISTANT LINEAR STAIRWAY SURFACE MOUNT	LUMINAIRE LED	CLF7 3FT AL MIN10 2DRV 40W 40K 120 OP WHT PC OCCFA	W	0-10-10	DL VR	D MO P	KENALL/NEW STAR		
P1	11000	4000	81 VA	120	PARKING GARAGE LUMINAIRE	LITHONIA	VCPGX LED V8 P5 40K 80CRI T5W MVOLT SRM BSW NLTAIR2 PIR DNAXD	NA	0-10-10	DL	D MO P	MCGRAW-EDISON/CREE/GARDCO	1	
P1E	11000	4000	81 VA	120	PARKING GARAGE LUMINAIRE ON EM	LITHONIA	VCPGX LED V8 P5 40K 80CRI T5W MVOLT SRM BSW NLTAIREM2 PIR DNAXD	NA	0-10-10	DL	D MO P	MCGRAW-EDISON/CREE/GARDCO	1.2	
P2	13000	4000	108 VA	120	PARKING GARAGE LUMINAIRE	LITHONIA	VCPGX LED V8 P6 40K 80CRI LANE MVOLT SRM BSW NLTAIR2 PIR DNAXD	NA	0-10-10	DL	D MO P	MCGRAW-EDISON/CREE/GARDCO	1	
P2E	13000	4000	108 VA	120	PARKING GARAGE LUMINAIRE ON EM	LITHONIA	VCPGX LED V8 P6 40K 80CRI LANE MVOLT SRM BSW NLTAIREM2 PIR DNAXD	NA	0-10-10	DL	D MO P	MCGRAW-EDISON/CREE/GARDCO	1.2	
P3	7000	4000	55 VA	120	PARKING GARAGE LUMINAIRE	LITHONIA	VCPGX LED V8 P4 40K 80CRI T5W MVOLT SRM BSW NLTAIR2 PIR DNAXD	NA	0-10-10	DL	D MO P	MCGRAW-EDISON/CREE/GARDCO	1	
PL1	9000	4000	72 VA	120	SINGLE HEAD LED POLE MOUNTED - 12' POLE	LITHONIA	RSX1 LED P2 40K R4 MVOLT SPA NLTAIR2 PIRHN BS DDBXD	DBZ	0-10-10	WL	D MO P	MCGRAW-EDISON/CREE/GARDCO	3	
PL2	9000	4000	144 VA	120	TWIN HEAD LED POLE MOUNTED - 12' POLE	LITHONIA	RSX1 LED P2 40K R4 MVOLT SPA NLTAIR2 PIRHN BS DDBXD	DBZ	0-10-10	WL	D MO P	MCGRAW-EDISON/CREE/GARDCO	4	
S1	5000	4000	32 VA	120	4' LED STRIP WITH DIFFUSE LENSE	LITHONIA	CLX L48 5000LM SEF RDL MVOLT GZ10 40K 80CRI NLTAIR2 RIO	W	0-10-10	DL	-	METALUX/PEERLESS/FINELITE		
S2	5000	4000	32 VA	120	4' LED STRIP WITH DIFFUSE LENSE	LITHONIA	CLX L48 5000LM SEF RDL MVOLT GZ10 40K 80CRI NLTAIR2 RIOEM	W	0-10-10	DL	-	METALUX/PEERLESS/FINELITE		
W1	1200	4000	10 VA	120	LED WALL PACK LOW PROFILE	LITHONIA	WDGE2 LED P1SW 40K 80CRI VW SRM PBBW NLTAIR2 PIR924 DDBXD	DBZ	0-10-10	DL	D O P	MCGRAW-EDISON/CREE/GARDCO		
X1	-	-	3 VA	120	ONE SIDED EXIT SIGN PARALLEL WALL MOUNT	LITHONIA	LV S AW1 R 120/277 UM 4X	W	-	4X	-	ISOLITE/HOLOPHANE/THOMAS & BETTS		

LIGHT FIXTURE SCHEDULE ABBREVIATIONS

COLOR / FINISH	DIMMING TYPE	LENS TYPE	REQUIRED LISTINGS	SENSOR TYPE
B = BLACK	0-10-0.1 = 0-10 V 0.1%	C = CLEAR	## = IP ## RATED	D = DAYLIGHT SENSOR
BZ = BRONZE	0-10-1 = 0-10 V 1%	D = DROP DOWN	AT = AIR TIGHT	MO = MULTI-LEVEL OCCUPANCY SENSOR
C = CLEAR	0-10-5 = 0-10 V 5%	F = FLUSH	CHDF = CLASS # DIVISION #	N = NONE
CU = COPPER	0-10-10 = 0-10 V 10%	F = FLUSH	N = NONE	O = OCCUPANCY SENSOR
CUS = CUSTOM PAINTED FINISH - COLOR AS SELECTED BY ARCHITECT	BL = BILEVEL / STEP	R = REGRESSED	DL = DAMP LOCATION	P = PHOTOCCELL
DBZ = DARK BRONZE	E = ELDOLED	O = OPAL	F = FIRE RATED	
G = GOLD	FF = FORWARD PHASE	P = POP UP	IC = IC RATED	
GL = GLOSS	D = DALI	PA = PATTERN 12 ACRYLIC	IR = IMPACT RESISTANT	
M = MATTIE	DX = DMX	LR = LIGATURE RESISTANT	LR = LIGATURE RESISTANT	
NA = NATURAL ALUMINUM	L = LUTRON	SL = SHOWER LIGHT	SL = SHOWER LIGHT	
RAL# = RAL NUMBER	N = NONE	TR = TAMPER RESISTANT	TR = TAMPER RESISTANT	
S = SILVER	O = OSRAM	VR = VANDAL RESISTANT	VR = VANDAL RESISTANT	
SSP = SEMI-SPECULAR / HAZE	P = PHASE	WL = WET LOCATION	WL = WET LOCATION	
W = WHITE	RF = REVERSE PHASE	4X = NEMA 4X	4X = NEMA 4X	

CAMERA SCHEDULE

ABBREVIATIONS:
 POC = POWER OVER ETHERNET
 PTZ = PAN-TILT-ZOOM

GENERAL NOTE:
 A. CAMERAS, HOUSINGS (DOMES), LENS AND MOUNTING BRACKETS PROVIDED BY CONTRACTOR, INSTALLED AND WIRED BY CONTRACTOR. REFERENCE SPECIFICATIONS 28 08 00 AND 28 23 00.

NOTE:
 1. NOT USED.

CAMERA NO.	MOUNT	TYPE		VIEWING OBJECTIVE	APPROXIMATE VIEWING DISTANCE (STATED IN FEET)	FEATURES										ACCESSORIES				SEE NOTE				
		FIXED	PTZ			VANDAL PROOF	WEATHER PROOF	SMOKED DOME	IK10, IP66 & NEMA 4X	VARIABLE FOCUS	REMOTE FOCUS & ZOOM	PoE	ENVIRONMENTAL	WALL MOUNT BRACKET	CORNER BRACKET	KEYBOARD & JOY STICK	MIDSPAN PoE POWER							
1	ARM	■		360	60 FT	■	■	■																
2	ARM	■		360	60 FT	■	■	■																
3	ARM	■		360	60 FT	■	■	■																
4	ARM	■		360	60 FT	■	■	■																

LIGHTING CONTROL BACKBONE (ECLYPSE) SCHEDULE

GENERAL NOTES:
 A. LIGHT SWITCHING AND CONTROLS PACKAGE SHALL COMPLY WITH IECC 2021.
 B. BASIS OF DESIGN IS ACUITY CONTROLS. PRIOR APPROVED EQUALS WILL BE CONSIDERED.
 C. CONTROLS PACKAGE SHALL INCLUDE THE FOLLOWING:
 NETWORK SYSTEM - ROOMS WITH LOW VOLTAGE SWITCHING GO BACK TO THE BACKBONE.
 PROVIDE BRIDGES AS REQUIRED AND INCLUDE (1) ADDITIONAL BRIDGE USED AS A HUB.
 D. PROVIDE POWER TO THE BACKBONE AND BRIDGES FROM THE NEAREST AVAILABLE EMERGENCY / NORMAL BRANCH PANEL.
 E. PROVIDE ALL CAT6 CABLING AS REQUIRED FOR DIGITAL SWITCHING.
 F. IF "GFXX" IS INCLUDED IN THE CATALOG NUMBER BELOW, IT INCLUDES A TOUCHSCREEN INTERFACE MODEL NGWY2 GFX, PS150 POWER SUPPLY AND CAT6 CABLE. MOUNT TOUCHSCREEN AND POWER SUPPLY NEAR THE ECLYPSE BACKBONE ENCLOSURE AND CONNECT IT TO THE ECLYPSE VIA THE CAT6 CABLE. PROVIDE POWER FROM THE NEAREST EMERGENCY / NORMAL BRANCH PANEL.
 G. IF "AIR" IS INCLUDED IN THE CATALOG NUMBER BELOW, IT INCLUDES A NECYD NLTAIR G2 TO SUPPORT UP TO 150 DEVICES.

NOTE:
 1. NOT USED.

TAG	MANUFACTURER	CATALOG NUMBER	REMARKS	SEE NOTE
BB1	ACUITY	NECY-MVOLT-BAC-SVS-ENC-AIR-NECYD NLTAIR G2		
BB2	ACUITY	NECY-MVOLT-BAC-SVS-ENC-AIR-NECYD NLTAIR G2		
BB3	ACUITY	NECY-MVOLT-BAC-SVS-ENC-AIR-NECYD NLTAIR G2		



275 West Wisconsin Avenue,
 Suite 300
 Milwaukee, WI 53203
 414 / 259 1500

www.graef-usa.com

CLIENT:

CITY OF MADISON



MADISON MUNICIPAL BUILDING
 215 MARTIN LUTHER KING BLVD
 SUITE 109
 MADISON, WISCONSIN 53703

PROJECT TITLE:

OVERTURE CENTER GARAGE
 ELECTRICAL UPGRADES

318 WEST MIFFLIN STREET
 MADISON, WI

ISSUE:

10/17/2025 FINAL REVIEW SET

NOT FOR CONSTRUCTION

PROJECT INFORMATION:

PROJECT NUMBER: 2025-5004.02

DATE: 10/17/2025

DRAWN BY: DJK

CHECKED BY: DJK

APPROVED BY: DJK

SCALE: AS NOTED

SHEET TITLE:

ELECTRICAL SCHEDULES

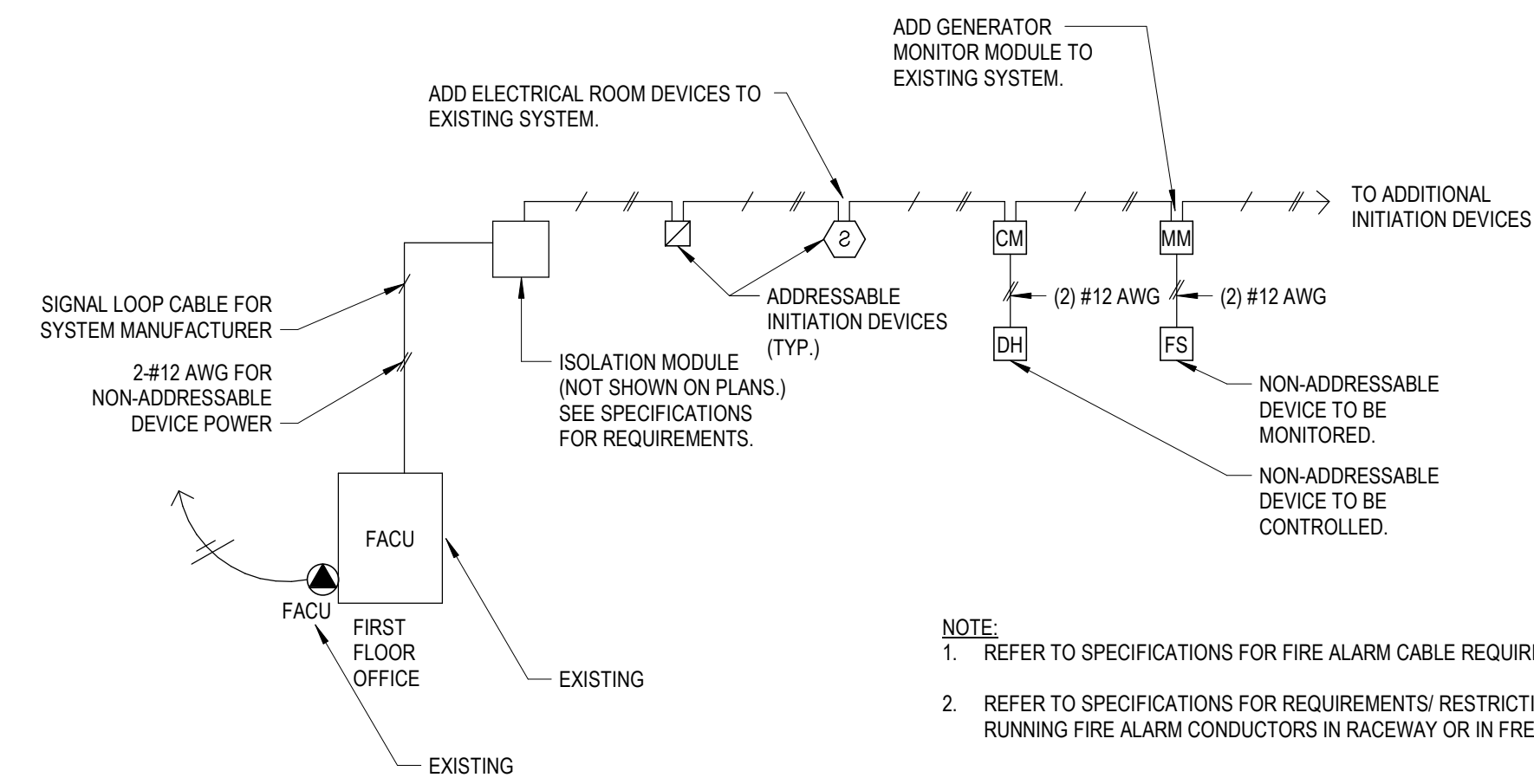
SHEET NUMBER:

E-601

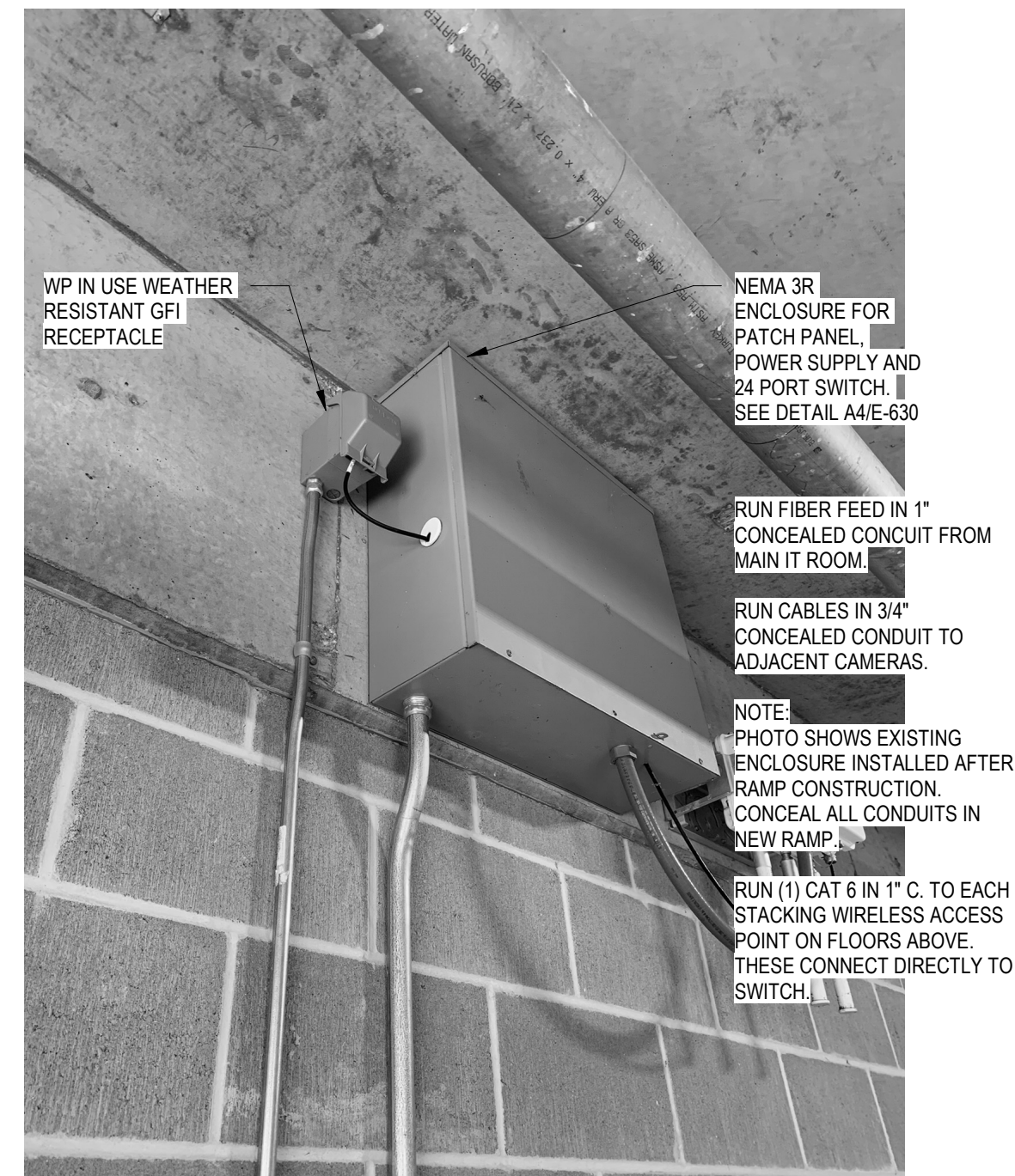
10/17/2025 3:13:47 PM



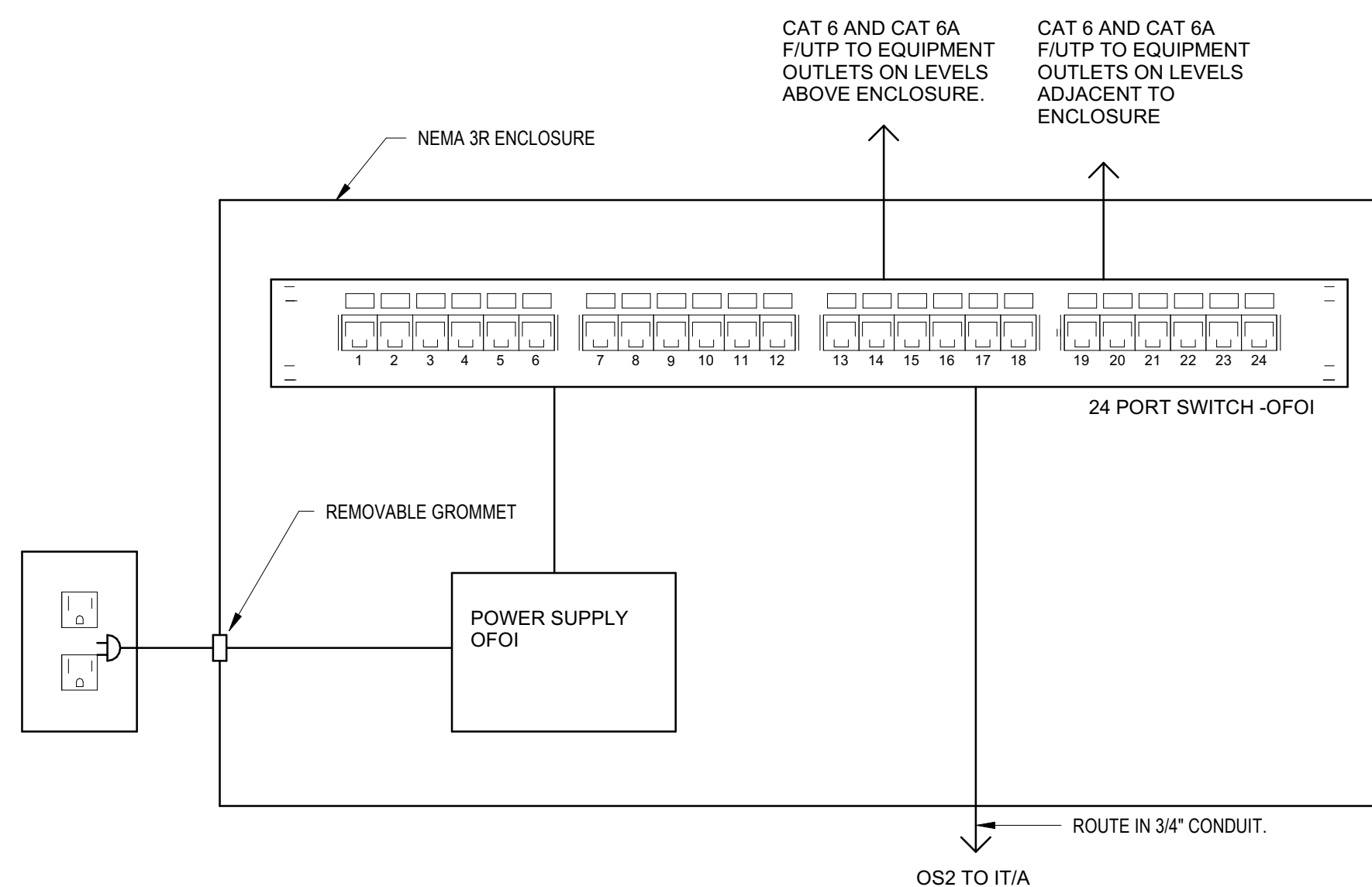
NOT FOR CONSTRUCTION



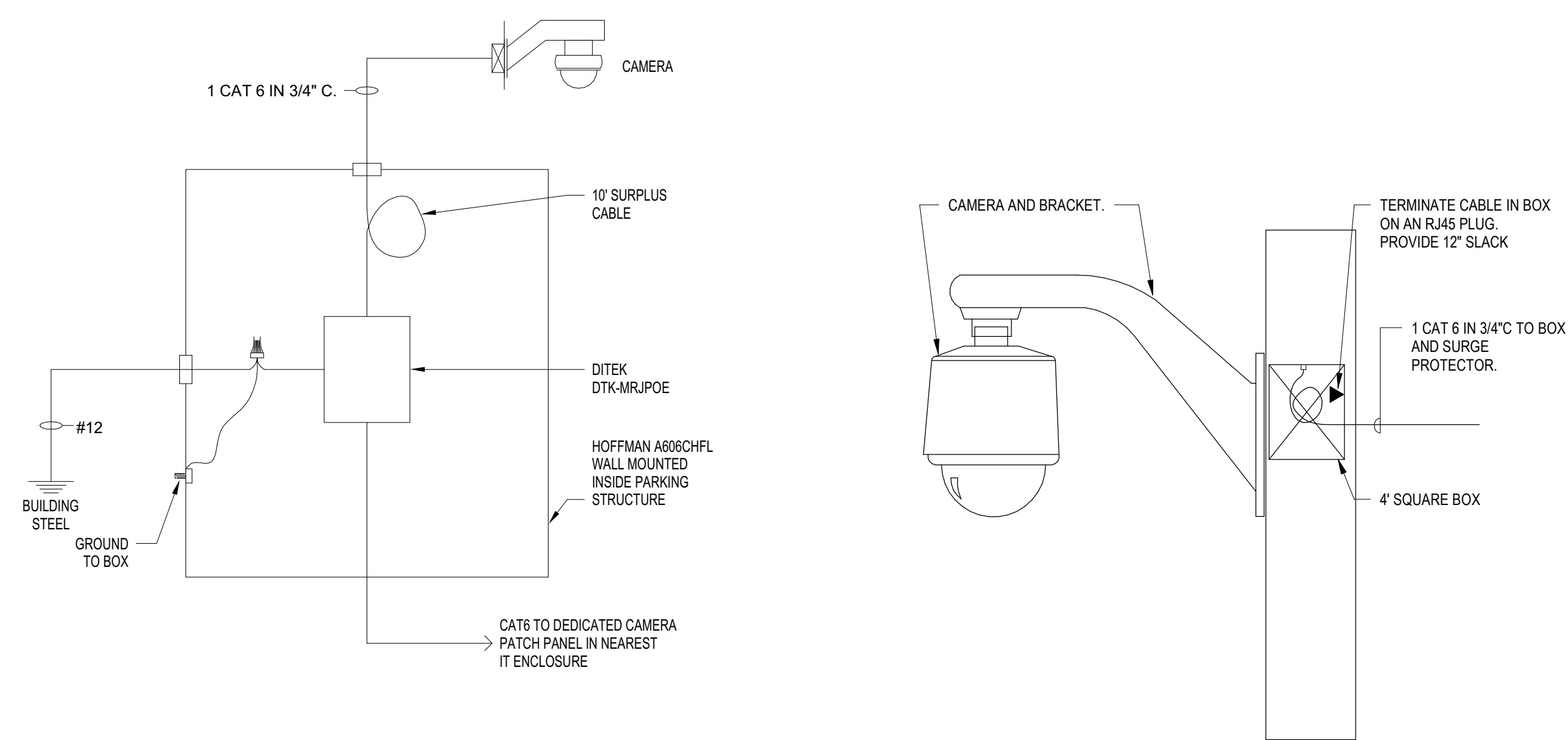
C4 FIRE ALARM RISER DIAGRAM
NTS



B4 IT ENCLOSURE INSTALL - APPLIES TO IT/B
NTS



A4 ENCLOSURE IT/B
NTS



A1 CAMERA SURVEILLANCE SURGE PROTECTION
NTS

A2 CAMERA MOUNTING DETAIL
NTS