#### ELECTRICAL GENERAL NOTES:

- DRAWINGS ARE DIAGRAMMATIC AND DEFINE THE INTENT OF THE WORK. LOCATIONS OF EQUIPMENT, FIXTURES, DEVICES, PANELBOARDS, DUCTS, PIPING, DIFFUSERS, PARTITIONS, OPENINGS, ETC. ARE APPROXIMATE AND ARE SUBJECT TO MODIFICATIONS CAUSED BY STRUCTURAL CONDITIONS AND EQUIPMENT PROVIDED BY OTHER CONTRACTORS, SUBCONTRACTORS OR THE OWNER. COORDINATE ALL WORK WITH THE WORK OF OTHER TRADES. DETERMINE ROUGHING LOCATIONS FROM APPROVED SHOP DRAWINGS. MINOR MODIFICATIONS OF LOCATIONS REQUIRED TO EFFECT SUCH COORDINATION SHALL BE MADE AT NO COST TO THE OWNER.
- 2. SPECIFICATIONS MAY REQUIRE WORK, EQUIPMENT, SYSTEMS, METHODS, ETC. THAT IS NOT INDICATED ON THE DRAWINGS.
- 3. DRAWINGS AND SPECIFICATIONS ARE INTENDED TO BE COMPLEMENTARY TO EACH OTHER. WHERE DISCREPANCIES OR CONFLICTS OCCUR, THE CONTRACTOR SHALL INCLUDE THE MORE COSTLY METHOD IN THEIR PROPOSAL UNLESS CLARIFIED BY BULLETIN OR ADDENDUM ACKNOWLEDGED PRIOR TO RECEIPT OF BIDS.
- 4. DRAWINGS SHALL NOT BE SCALED. DRAWINGS ARE ESSENTIALLY DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND REQUIREMENTS OF THE WORK. ALTHOUGH SIZE AND LOCATION OF EQUIPMENT IS DRAWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL OF THE CONTRACT DOCUMENTS AND VERIFY INFORMATION AT THE PROJECT SITE.
- 5. EXISTING PROJECT CONDITIONS INDICATED ARE BASED ON FIELD OBSERVATION, EXISTING DESIGN / CONSTRUCTION DOCUMENTS AND EXISTING RECORD DOCUMENTS AND ARE INTENDED TO INDICATE THE SCOPE OF THE WORK AFFECTED BY THIS PROJECT.
- 6. THE TERM "OTHERS" SHALL BE UNDERSTOOD TO MEAN CONTRACTORS, SUBCONTRACTORS OR TRADESMEN ON THE PROJECT PERFORMING WORK ON THIS PROJECT UNDER SECTIONS OR DIVISIONS OTHER THAN DIVISION 26 ELECTRICAL WORK AND 28 FIRE ALARM WORK.
- 7. VERIFY THAT FIELD MEASUREMENTS AND CIRCUITING ARRANGEMENTS ARE AS INDICATED.
- 8. PRIOR TO BIDDING VISIT THE PROJECT SITE TO DETERMINE THE CONDITIONS UNDER WHICH THE WORK IS TO BE DONE. SCHEDULE SITE VISIT WITH OWNER.
- 9. PROVIDE ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED FOR THE INSTALLATION, RELOCATION AND CONNECTION OF THE ELECTRICAL WORK.
- 10. ALL MATERIAL SHALL BE UNDERWRITERS' LABORATORIES LISTED FOR ITS APPLICATION WHERE SUCH LISTING IS APPLICABLE.
- 11. ALL EQUIPMENT SHALL BE AS INDICATED OR AS APPROVED BY THE ENGINEER.
- 12. SUBMIT SHOP DRAWINGS, PRODUCT DATA SHEETS AND WIRING DIAGRAMS FOR ALL ELECTRICAL AND FIRE ALARM CONSTRUCTION MATERIALS, DEVICES, EQUIPMENT, APPLIANCES AND SYSTEMS. SUBMIT SUBMITTALS IN QUANTITY TO ALLOW DISTRIBUTION TO ARCHITECT (1), OWNER (2), ENGINEER (1), PRIME CONTRACTORS (1 EACH), AND CONTRACTOR'S OWN USE AS REQUIRED.
- 13. UNLESS SPECIFICALLY INDICATED OR REQUESTED OTHERWISE, BIND ALL RELATED PRODUCT DATA TOGETHER PROPERLY INDEXED AND IDENTIFIED AND WITH ALL PERTINENT CATALOG NUMBERS, OPTIONS, ETC. HIGHLIGHTED OR TARGETED.
- 14. OBTAIN SHOP DRAWINGS AND WIRING DIAGRAMS FROM OWNER AND OTHER CONTRACTORS FOR THE PROPER INSTALLATION OF RELATED ELECTRICAL WORK AND, UNLESS OTHERWISE NOTED, WIRE ALL CONTROL DEVICES, VALVES, THERMOSTATS, ETC. REQUIRED FOR THE PROPER OPERATION OF THEIR SYSTEMS.
- 15. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT EDITION IN EFFECT OF THE NATIONAL ELECTRICAL CODE (NEC), NATIONAL ELECTRICAL SAFETY CODE (NESC), AMERICAN ELECTRICIANS' HANDBOOK, 2020 FIRE CODE OF NEW YORK STATE, 2020 BUILDING CODE OF NEW YORK STATE, 2020 EXISTING BUILDING CODE OF NYS, ACCESSIBLE & USABLE BUILDINGS & FACILITIES (ICC/ANSI A117.1) AND NATIONAL ELECTRICAL CONTRACTORS ASSOCIATION (NECA) STANDARD OF INSTALLATION.
- 16. OBTAIN ALL PERMITS REQUIRED, HAVE THE WORK INSPECTED FOR CODE COMPLIANCE AND PAY ALL FEES FOR INSPECTION AND CERTIFICATION.
- 17. MAKE THE NECESSARY ARRANGEMENTS, AND PAY ALL COSTS, FOR TEMPORARY AND/OR PERMANENT ELECTRIC SERVICE FOR THE PROJECT.
- 18. PROVIDE ADEQUATE TEMPORARY ELECTRICAL LIGHT AND POWER FOR THE PROJECT WORK OF ALL TRADES.
- 19. EXACT LOCATION OF EQUIPMENT SHALL BE COORDINATED IN THE FIELD PRIOR TO INSTALLATION, CONTRACTOR TO CONFIRM LOCATION PROPOSED WITH ARCHITECT/ENGINEER.
- 20. REFER TO APPROVED REFLECTED CEILING PLANS FOR EXACT LIGHTING LAYOUTS.
- 21. REFER TO DRAWINGS AND SPECIFICATIONS OF OTHER TRADES FOR EQUIPMENT LOCATIONS AND CONTROLS.
- 22. GROUNDING AND BONDING SHALL MEET NEC AND EQUIPMENT / SYSTEM MANUFACTURER'S REQUIREMENTS.
- 23. CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF DEBRIS GENERATED BY THEIR WORK AND WORKERS AT THE END OF EACH WORKING DAY AND FOR GENERAL GOOD HOUSEKEEPING BY THEIR WORKERS. CONTRACTOR SHALL PROVIDE REQUIRED REFUSE CONTAINERS.
- 24. DISCONNECT AND REMOVE FROM THE PREMISES, OR STORE ON THE PREMISES IF REQUESTED BY THE OWNER, ALL EQUIPMENT FIXTURES, DEVICES, RACEWAY, WIRING, CABLE, SUPPORTING DEVICES, ETC. REMOVED OR ABANDONED AS A RESULT OF THIS WORK. MAKE SAFE ALL WIRING AND CABLE WHICH MUST REMAIN IN SERVICE.
- 25. REMOVE AND REINSTALL CEILING SYSTEM AS REQUIRED FOR THE INSTALLATION OF ELECTRICAL WORK AND REPLACE IN KIND ANY COMPONENTS DAMAGED BY PERSONNEL OR EQUIPMENT DURING PERFORMANCE OF THE WORK, COORDINATE WITH ARCHITECT.
- 26. PERFORM ALL CUTTING AND PATCHING REQUIRED FOR THE INSTALLATION OF THE WORK. CUT NO STRUCTURAL MEMBER WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. PATCH, PRIME AND PAINT AREA TO MATCH ADJACENT SURFACES WITH TWO COATS OF PAINT TO MATCH EXISTING SURFACES AS CLOSELY AS POSSIBLE. SEAL OPENINGS VERMIN AND WATER PROOF AND MAINTAIN FIRE RATING. USE SPECIFIED TECHNOLOGIES, INC. "SPECSEAL" SERIES LCI FOR SLEEVED PENETRATIONS (U. L. SYSTEM #C-AJ-1028; F = 3, T = 0) AND "SPECSEAL" PENSIL 300 SEALANT FOR CUT OR CORED PENETRATIONS (U. L. SYSTEM #C-AJ-1030; F = 3, T = 0). SLEEVES AND ACCESSORIES SHALL BE PER ASTM E 814.
- 27. ALL PENETRATIONS IN FOUNDATION WALLS AND FLOORS INCLUDING SLAB PENETRATIONS SHALL BE SUBSTANTIALLY SEALED BY UTILIZING A NON-CRACKING POLYURETHANE OR EQUIVALENT TO CLOSE OFF THE SOIL GAS ENTRY ROUTES AS REQUIRED BY THE NEW YORK STATE BUILDING CODE. ALL CONDUITS IN THE SPACE BELOW THE FOUNDATION FLOOR WHICH PENETRATE THESE BARRIERS SHALL HAVE THREADED OR SOLVENTED FITTINGS.
- 28. ALL NEW RACEWAY, WIRING AND CABLE IN NEW AND EXISTING FINISHED SPACES SHALL BE RUN CONCEALED IN NEW AND EXISTING CONSTRUCTION UNLESS OTHERWISE INDICATED; CUT AND PATCH AS REQUIRED. PROVIDE PULLBOXES, SIZE AND TYPE AS REQUIRED.
- 29. EXPOSED RACEWAY, IF PERMITTED, SHALL BE RUN TRUE, PLUMB AND PARALLEL OR PERPENDICULAR TO BUILDING LINES. EMT WITH RAINTIGHT STEEL FITTINGS, 3/4 INCH MINIMUM, SHALL BE USED OUTDOORS; ELECTRICAL METALLIC TUBING, 3/4 INCH MINIMUM, SHALL BE USED IN INDOOR UNFINISHED SPACES; SURFACE METAL RACEWAY (WIREMOLD) SHALL BE USED IN INDOOR FINISHED SPACES.
- 30. ALL WIRING SHALL BE COPPER CONDUCTOR WITH 600 VOLTS INSULATION IN METAL RACEWAY WITH APPROVED FITTINGS UNLESS OTHERWISE INDICATED.
- 31. FEEDERS AND BRANCH CIRCUITS UNDERGROUND IN RACEWAY: TYPE THHN-THWN 90 DEGREE C
- 32. INTERIOR FEEDERS AND BRANCH CIRCUITS IN RACEWAY: TYPE THHN 90 DEGREE C.
- 33. UNDERGROUND DIRECT BURIAL BRANCH CIRCUITS BEYOND BUILDING: TYPE UF, 75 DEGREE C.
- 34. BRANCH CIRCUIT HOMERUNS TO FIRST OUTLET: TYPE THHN IN RACEWAY. AFTER THE FIRST OUTLET BOX, APPROVED CABLE MAY BE USED.
- 5. FEEDERS SHALL BE MINIMUM #8 AWG; BRANCH CIRCUIT WIRING MINIMUM #12 AWG; CONTROL WIRING MINIMUM #14 AWG; UNLESS OTHERWISE INDICATED. FEEDER AND BRANCH CIRCUIT WIRING LARGER THAN #10 AWG SHALL BE STRANDED CONDUCTOR; #10 AWG AND SMALLER, STRANDED CONDUCTOR OR SOLID CONDUCTOR; CONTROL WIRING, STRANDED CONDUCTOR.
- 36. METAL CLAD CABLE TYPE MC WITH 600 VOLT THHN INSULATION AND INSULATED GROUND CONDUCTOR FOR BRANCH CIRCUITS RUN IN HOLLOW SPACES, FISHED ABOVE EXISTING HUNG CEILINGS, FIXTURE CONNECTIONS AND ELSEWHERE AS PERMITTED BY THE NEC AND THE ENGINEER.
- 37. FIRE ALARM WIRING SHALL BE APPROVED FOR ITS APPLICATION; #12 AWG IN RACEWAY OR #12 AWG METAL CLAD CABLE FOR 120 VOLT CIRCUITS; #16 AWG FPLR OR FPLP FOR LOW VOLTAGE CIRCUITS IN NON AIR-HANDLING SPACES; AND #14 AWG FPLP FOR LOW VOLTAGE CIRCUITS IN PLENUM SPACES USED AS AIR-HANDLING APPLICATIONS.
- WITH FIRE ALARM POWER SUPPLY CIRCUITS, NON-POWER LIMITED FIRE ALARM CIRCUITS OR POWER LIMITED FIRE ALARM CIRCUITS.

  39. MAKE FLEXIBLE CONDUIT CONNECTIONS TO MOTORS AND OTHER ROTATING / VIBRATING EQUIPMENT FOR INDOOR

38. DO NOT INSTALL CONDUCTORS, WIRES OR CABLES OF ANY OTHER SYSTEM IN THE SAME RACEWAY OR CABLE

40. TAPS AND SPLICES FOR BRANCH CIRCUITS AND FEEDERS LARGER THAN #10 AWG SHALL BE MADE WITH BURNDY "INSUL-TAP" TYPE BIPC, OR APPROVED EQUAL, INSULATION PIERCING CONNECTORS OR BURNDY "HYLUG", OR APPROVED EQUAL, COMPRESSION SPLICES.

PUMP MOTORS AND ALL OUTDOOR LOCATIONS FLEXIBLE LIQUID-TIGHT CONDUIT CONNECTIONS SHALL BE MADE.

- 41. TAPS AND SPLICES FOR BRANCH CIRCUITS AND FEEDERS #10 AWG AND SMALLER SHALL BE MADE WITH IDEAL MODELS 410, 411 AND 412 CRIMP CONNECTORS, OR APPROVED EQUAL, WITH MODELS 415 OR 417 INSULATED CAPS.
- 42. BRANCH CIRCUIT AND FEEDER TAPS SHALL BE FULL CIRCUIT SIZE UP TO THEIR OVERCURRENT PROTECTION DEVICE
- 43. CONNECTIONS TO FIXTURE AND MOTOR LEADS #10 AWG AND SMALLER SHALL BE MADE WITH 3M "SCOTCHLOK" PRE-INSULATED SPRING PRESSURE CONNECTORS TYPES Y, R OR G OR APPROVED EQUAL.
- 44. STRANDED WIRING CONDUCTORS SHALL BE MADE UP TO SCREW TERMINALS WITH 3M, T&B OR PANDUIT LOCKING FORK CRIMP TERMINALS WITH NYLON INSULATED GRIPS.
- 45. WIRE EXIT SIGNS AND EMERGENCY LIGHTING FIXTURES (UNIT EQUIPMENT) TO LOCAL AREA LIGHTING CIRCUIT SERVING THE RESPECTIVE AREA AHEAD OF SWITCH / DIMMER CONTROL.

- 46. CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION AND INSTALLATION DETAILS AND VERIFY ALL MANUFACTURER'S REQUESTS PRIOR TO ANY SUBMISSION FOR CONSIDERATION BY THE ARCHITECT, ENGINEER OR OWNER
- 47. WIRING RUNS INDICATED ON THE DRAWINGS EXPRESS THE INTENT OF CIRCUIT ASSIGNMENT AND SWITCH CONTROL. ACTUAL WIRING METHODS USED SHALL BE SUITED FOR THE CONSTRUCTION OF THE BUILDING. REFER TO DRAWINGS OF OTHER TRADES AND EXISTING CONDITIONS. REFER TO ARCHITECTURAL DRAWINGS FOR REFERENCE AND CONFIRM EXISTING CONDITIONS. THE NUMBER OF CONDUCTORS ARE NOT ALWAYS INDICATED ON THE DRAWINGS.
- 48. PROVIDE DISCONNECT SWITCHES OF REQUIRED TYPE AND RATINGS FOR ALL APPLIANCES, EQUIPMENT, MOTORS AND CONTROLLERS WHERE NOT FURNISHED WITH EQUIPMENT. WHERE DISCONNECT SWITCHES ARE FURNISHED AND INSTALLED WITH EQUIPMENT, INSTALL AND PROVIDE CONDUIT AND WIRING FOR SWITCHES. FOR FRACTIONAL HORSEPOWER MOTORS, PROVIDE MOTOR RATED TOGGLE TYPE DISCONNECT SWITCHES.
- 49. INSTALL MOTOR STARTERS, CONTROLLERS OR COMBINATION STARTERS FURNISHED FOR EACH MOTOR OR EQUIPMENT BY OTHERS. LOCATE AS DIRECTED IN THE FIELD BY THE CONTRACTOR SUPPLYING THE EQUIPMENT AND ACCORDING TO THE CODE.
- 50. PROVIDE UN-SWITCHED 125 VOLT 20 AMP RECEPTACLE OUTLETS LOCATED ON THE SAME LEVEL AND WITHIN 25 FEET OF ALL HEATING, AIR-CONDITIONING AND REFRIGERATION EQUIPMENT UNLESS OTHERWISE NOTED.
- 52. PROVIDE SEISMIC RESTRAINTS AND ANCHORS FOR ENGINE-DRIVEN GENERATORS, LIGHTING FIXTURES, MOTOR CONTROL CENTERS, FLOOR MOUNTED SWITCHBOARDS, SWITCHGEAR, TRANSFORMERS, WIREWAYS AND CONDUITS LARGER THAN 2-1/2" INCHES TRADE DIAMETER. PROVIDE SWAY BRACES FOR CONDUIT AND EQUIPMENT SUSPENDED FROM THE OVERHEAD. PROVIDE ANCHOR BOLTS FOR FLOOR AND WALL MOUNTED EQUIPMENT.

51. ROUTE RACEWAYS THROUGH ROOF USING DEDICATED ROOF JACKS OR PITCH POCKETS. RUN RACEWAY ON ROOF

53. ALL 125 VOLT, SINGLE PHASE, 15- AND 20-AMPERE SINGLE AND DUPLEX RECEPTACLES WHICH DO NOT SERVE A DEDICATED APPLIANCE AND ARE WITHIN A 6 FOOT RADIUS OF A SINK, ARE INSTALLED IN WET LOCATIONS, ARE INSTALLED IN BATHROOMS, ON ROOFS, OR OUTDOORS WITH DIRECT GRADE ACCESS, SHALL BE GROUND FAULT CIRCUIT INTERRUPTING TYPE WHERE AVAILABLE OR SHALL BE PROTECTED BY GROUND FAULT CIRCUIT

COMPLY WITH THE 2020 BUILDING CODE OF NEW YORK STATE CHAPTERS 16 AND 17.

- 54. DO NOT INSTALL EXPOSED WIRING, OR CABLE NOT U. L. LISTED FOR THE PURPOSE; WOOD SUPPORTS OR ANCHORAGES; NONMETALLIC CONDUIT, BOXES OR FITTINGS; OR VINYL, PLASTIC, NYLON, OR OTHER COMBUSTIBLE OR SMOKE PRODUCING IDENTIFICATION OR CONSTRUCTION MATERIALS IN THE SPACE ABOVE
- HUNG CEILINGS USED AS A PLENUM FOR THE RETURN OF ENVIRONMENTAL AIR.

  55. DEMONSTRATE PRODUCT CAPABILITY AND COMPLIANCE WITH REQUIREMENTS OF ALL ELECTRICAL DEVICES,
- EQUIPMENT AND SYSTEMS.

  56. PERFORM MANUFACTURER'S RECOMMENDED TESTS AND SUBMIT RESULTS TO THE ARCHITECT/ENGINEER..
- 57. VERIFY PROPER ROTATION OF ALL ROTATING ELECTRICAL MACHINERY.

ON DEDICATED ROOF SUPPORTS EIGHT INCHES HIGH MINIMUM.

INTERRUPTING CIRCUIT BREAKERS.

AT NO COST TO THE OWNER.

- 58. TEST SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, CABLES, BUS DUCTS, SWITCHES, CIRCUIT BREAKERS, GROUNDING SYSTEM, GROUND FAULT PROTECTION SYSTEM, SURGE ARRESTORS AND TVSS DEVICES, GENERATORS, AND TRANSFER SWITCHES IN ACCORDANCE WITH APPLICABLE SECTIONS OF INTERNATIONAL ELECTRICAL TESTING ASSOCIATION ACCEPTANCE TESTING SPECIFICATIONS FOR ELECTRIC POWER DISTRIBUTION EQUIPMENT AND SYSTEMS NETA ATS-1999. PERFORM EACH VISUAL AND MECHANICAL INSPECTION AND ELECTRICAL TEST LISTED.
- 59. PROVIDE FIVE SETS OF OPERATION AND MAINTENANCE MANUALS, BOUND AND INDEXED, WITH INSTRUCTIONS FOR ALL ELECTRICAL DEVICES, EQUIPMENT, APPLIANCES AND SYSTEMS.
- 60. PROVIDE ONE SET OF REPRODUCIBLE CONTRACT DRAWINGS, OR DIGITAL DATA FILES USING USING AUTOCAD MEP 2023 THAT HAVE BEEN REVISED AND ANNOTATED TO REFLECT THE AS-BUILT CONDITIONS OF THE PROJECT.
- 61. DELIVER CERTIFICATES OF ELECTRICAL AND OTHER INSPECTIONS, OR COPIES THEREOF, TO THE OWNER AT THE COMPLETION OF THE PROJECT WITH COPIES TO THE ENGINEER.
- 62. GUARANTEE ALL WORK IN WRITING TO THE OWNER AGAINST ANY AND ALL DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM DATE OF ACCEPTANCE AND PERFORM ALL CORRECTIVE WORK
- 63. A CONTRACTOR MAKING A BID FOR WORK ON THIS PROJECT IS MADE AWARE BY THIS NOTE THAT IT IS THE INTENT OF THE OWNER TO HAVE A COMPLETELY INSTALLED JOB. THE CONTRACTOR MAKING A BID FOR THIS WORK WARRANTS THAT THEY WILL COMPLETE AND WIRE, PROVIDING ALL NECESSARY ELECTRICAL WORK FOR EQUIPMENT SHOWN AND / OR DETAILED ON ANY PROJECT DRAWINGS OR SPECIFICATIONS AND NOT JUST THOSE COMMONLY REFERRED TO AS A SINGLE TRADE DRAWING UNLESS SPECIFICALLY IDENTIFIED ELSEWHERE AS WORK OF OTHER TRADES. WHERE EQUIPMENT REQUIRING WIRING IS SPECIFIED OR SHOWN ON DRAWINGS OTHER THAN ELECTRICAL DRAWINGS, OR INDICATED, OR IMPLIED, SUCH AS ON SHOP DRAWINGS SUBMITTED LATER, THE CONTRACTOR CAN AND SHALL REQUEST DIRECTION REGARDING CIRCUIT SIZING PROTECTION AND ROUTING WHERE NECESSARY BUT SHALL UNDERSTAND ALL NECESSARY WORK TO COMPLETE THE INSTALLATION SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER OR PROJECT.
- 64. INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S REQUIRED MAINTENANCE CLEARANCES, RECOMMENDATIONS, INSTALLATION INSTRUCTIONS, GOOD ENGINEERING PRACTICE, AND PREVAILING CODE.

SYMBOL	TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	MOUNTING	LAMPS	VOLTAGE	FIXTURE
		W/ WOT / COTOTICET	O, TI LEGE HOMBER	BESSIA FISH	Woorthite	2,	10217102	WATTAGE
	A	COLUMBIA DUAL-LITE	CBT22-LS35 EMERGENCY CBT-LS35 PLD10M PLRST	2X2 BACK-LIT TROFFER, 4400/3300/2750 SWITCHABLE LUMENS, 3500K CCT. EMERGENCY 10W EMERGENCY BATTERY PACK	RECESSED	LED	120	24-40
	В	COLUMBIA	LCAT22-35MLG-EU EMERGENCY LCAT22-35MLG-EU-ELL14ST	2' X 2' AMBIENT LED TROFFER, CURVED LENS, 3380 LM, 80 CRI 3500K. EMERGENCY 1400 LUMEN EMERGENCY BATTERY PACK	RECESSED	LED	120	29
	$\overline{C}$	LITECONTROL	STNC-AR-P-ID-LPA-8-8-SOF-WHS-35K9-I125 D035-1C-UNV-FA1-CB1	8' DIRECT INDIRECT PENDANT, 80% UP 20% DOWN, 12800 LUMENS	PENDANT	LED	120	85.6
	(C1)	LITECONTROL	STNC-AR-P-ID-LPA-8-8-SOF-WHS-35K9-I50 D040-1C-UNV-FA1-CB1	8' DIRECT INDIRECT PENDANT, 80% UP 20% DOWN, 14800 LUMENS	PENDANT	LED	120	104
	D	LITECONTROL	STNC-AR-P-ID-LPA-4-4-SOF-WHS-35K9-I50 D040-1C-UNV-FA1-CB1	4' DIRECT INDIRECT PENDANT, 80% UP 20% DOWN, 7400 LUMENS	PENDANT	LED	120	52
	F	AXIS	(45° POSITIVE-2') SCRG 600 90 35 FL PP45X2 W UNV DP 1 MFTB15 (45° NEGATIVE-2') SCRG 600 90 35 FL PN45X2 W UNV DP 1 MFTB15	2' DIRECT RECESSED PARALLELOGRAM, 600 LUMENS / FOOT COMPATIBLE WITH ARMSTRONG DESIGNFLEX CEILING SYSTEM	RECESSED	LED	120	100
፟ 🏖 🕸	$\langle \chi \rangle$	DUAL LITE	EVEURWEI	EXIT SIGN, 6" RED LETTERS, PLASTIC HOUSING, BATTERY BACKUP	UNIVERSAL	LED	120	2
NOTES:					EMERGENC	Y TYPE LE	GEND:	
2. THI SEI REG	NSTRUC <sup>*</sup> E LIGHTIN LECTION: QUIREME	TION FOR AVAILABLE S NG MANUFACTURERS A S FOR THIS PROJECT A ENTS AND 2020 ENERG	SPACE, CLEARANCE, ACCESSIBILITY, ETC.  AND CATALOG NUMBERS INDICATED IN THE ALAND COMPLY WITH THE ILLUMINATING ENGINE Y CONSERVATION CONSTRUCTION CODE OF N	FIXTURES. COORDINATE COMPATIBILITY OF FIXTURES WITH BUILDING BOVE LIGHTING FIXTURE SCHEDULE REPRESENT THE BASIS OF DESIGN ERING SOCIETY (IES) LIGHTING LIBRARY ILLUMINATION LEVEL EW YORK STATE. SHOULD THE CONTRACTOR ELECT TO SUBSTITUTE AN MANCE OF THE FIXTURE IS CRITICAL AND PROVIDING PHOTOMETRIC	INTEG BATT	GRAL OR REI	HADED SHALI MOTE EMERGI O PROVIDE A MERGENCY LIG	ENCY MINIMUM OF

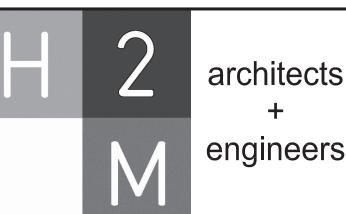
LIGHTING ILLUMINATION LEVELS BASED ON THE QUANTITY AND LOCATIONS OF THE LIGHT FIXTURES INDICATED ON THE CONTRACT LIGHTING PLAN

DRAWINGS.

SYMBOL	DESCRIPTION	COMMENTS
S	SINGLE POLE TOGGLE SWITCH: 120V, 20A	46" AFF TO CL U
S <sub>3</sub> S <sub>K</sub>	THREE - WAY SWITCH: 120V, 20A SINGLE POLE KEY SWITCH	46" AFF TO CL U
>K 	GFCI RECEPTACLE: 120V, 20A.	46" AFF TO CL U
	GFCI RECEPTACLE: 120V, 20A. MOUNTED 6" ABOVE COUNTER OR SINK	
⊕ HD	HAND DRYER	
(OS)	OCCUPANCY SENSOR - DUAL TECHNOLOGY - CEILING MOUNTED	
	2 #12 AWG + #12 AWG GND IN 3/4" E.C. CONCEALED IN WALL OR CEILING	
<u> </u>	3 #12 AWG + #12 AWG GND IN 3/4" E.C. CONCEALED IN OR BELOW SLAB	
PP	LIGHTING CONTROL RELAY POWER PACK	
— <u> </u>	DUPLEX RECEPTACLE: 120V, 20A.	FLUSH
<b>+</b>	DUPLEX RECEPTACLE: 120V, 20A. MOUNTED 6" ABOVE COUNTER	FLUSH
<u> </u>	QUAD RECEPTACLE: 120V, 20A.	FLUSH
<u> </u>	FIRE ALARM MANUAL PULL STATION	46" AFF
(SD)	FIRE ALARM SMOKE DETECTOR	
H	FIRE ALARM HEAT DETECTOR	
HAC	FIRE ALARM HEAT DETECTOR - MOUNTED ABOVE CEILING	
F<	FIRE ALARM HORN / STROBE	80" - 96" AFF
HF)	FIRE ALARM STROBE	80" - 96" AFF
DSD	DUCT SMOKE DETECTOR	
HS	SPEAKER - WALL MOUNTED	
	ELECTRICAL PANEL , RECESSED; SEE PANEL SCHEDULE.	
·/////	ELECTRICAL PANEL, SURFACE MOUNT; SEE PANEL SCHEDULE.	
<u></u>	CONDUIT GOING UP.	
<u> </u>	CONDUIT GOING DOWN.	
<b>A</b>	TELEPHONE OUTLET WITH CAT 3 CABLE RUN TO TELEPHONE DEMARC IN BASEMENT	
Δ	DATA OUTLET WITH CAT 6 CABLE RUN TO NETWORK SWITCH IN BASEMENT	
FO	FIRE ALARM BELL STROBE	
CB	PROGRAM BELL	
WAP	WIRELESS ACCESS POINT	
⊗ ⊗	EXIT SIGN	
44	EMERGENCY LIGHTING UNIT	
<u>©</u>	DIGITAL CLOCK DISPLAY	
s	SPEAKER - RECESSED CEILING MOUNTED	
8	CCTV CAMERA DOME	
	LIGHT FIXTURE	
ВВ	BELL BOX	
MD	MOTION DETECTOR	
[PT]	LIGHT FIXTURE WITH EMERGENCY BATTERY PACK	
H	"HALO" SMART SENSOR DETECTOR	
SR	SECONDARY SERVER RACK	

SYMBO	OLS LEGEND	
100	ROOM DESIGNATION	
5 A2.2	BUILDING SECTION CUT	
5 A2.2	WALL SECTION CUT	
5 A2.2	DETAIL KEY	
5 A2.2	ELEVATION KEY	
—-—H	COLUMN GRID	
<del></del>	ELEVATION LINE	
Title  SCALE:	DRAWING TITLE	
3 4 A2.2 1	INTERIOR ELEVATION REFERENCE	
# #	SEE NOTE # ON DWG #	

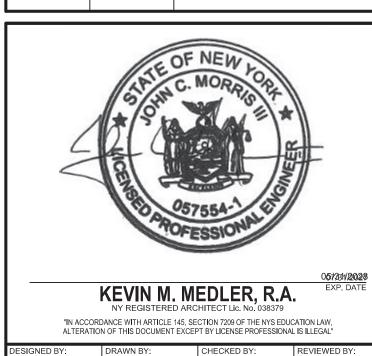
BBREVIATION	DESCRIPTION	COMMENTS
AFF	ABOVE FINISHED FLOOR	
AFC	ABOVE FINISHED CEILING	
AFCI	ARC FAULT CIRCUIT INTERRUPTER	
AFG	ABOVE FINISHED GRADE	
AHJ	AUTHORITY HAVING JURISDICTION	
AMP, A	AMPERE	
ATS	AUTOMATIC TRANSFER SWITCH; SEE TRANSFER SWITCH SCHEDULE	
AWG	AMERICAN WIRE GAUGE	
BFC	BELOW FINISHED CEILING	
CL	CENTERLINE	
СТ	COUNTER TOP	
EC	ELECTRICAL CONDUIT	
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	
GFI	GROUND FAULT INDICATOR	
GND	GROUND	
PSEG	PUBLIC SERVICE ELECTRIC AND GAS COMPANY (LOCAL ELECTRIC UTILITY)	
MCB	MAIN CIRCUIT BREAKER	
MLO	MAIN LUGS ONLY	
NTS	NOT TO SCALE	
TYP	TYPICAL	
UON	UNLESS OTHERWISE NOTED	
UC	UNDER COUNTER	
V	VOLT	
VAC	VOLTS ALTERNATING CURRENT	
VDC	VOLTS DIRECT CURRENT	
X-FMR	TRANSFORMER	



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NSULTANTS:

DATE	DESCRIPTION
09-11-24	SED SUBMISSION
02-25-25	SED ADDENDUM 1
05-28-25	FINAL BID SET
06-13-25	FINAL BID SET - ADDENDUM #3
	09-11-24 02-25-25 05-28-25



SRF

WPSD2401

White Plains City School District

MAY 2025

SS

AS SHOWN

Renovations at Rochambeau Alternate High School



228 Fisher Avenue White Plains, NY 10606

SED #66-22-00-01-0-015-020

CONTRACT E
ELECTRICAL CONSTRUCTION

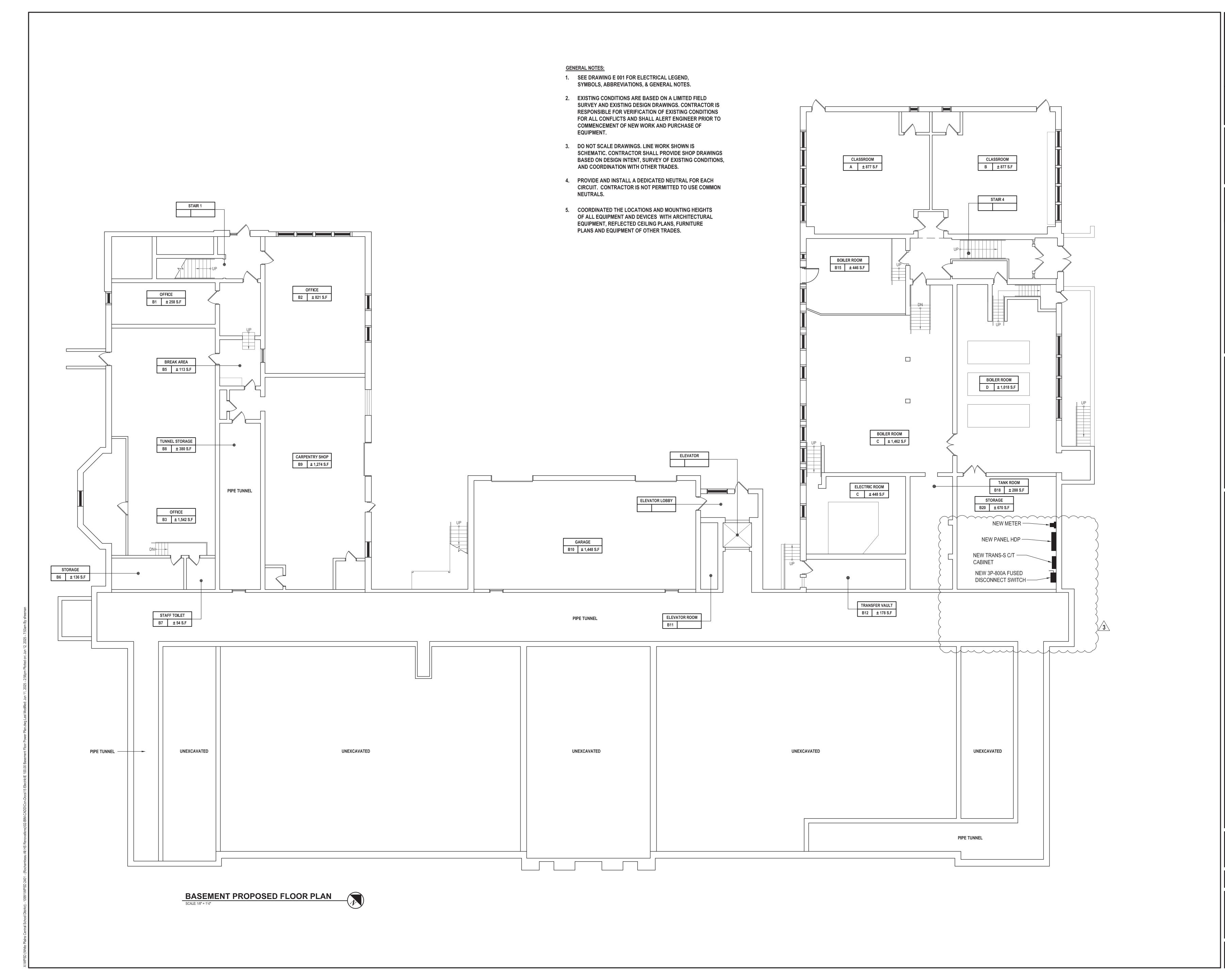
FINAL BID DOCUMENT

EET TITLE

GENERAL NOTES AND LEGENDS

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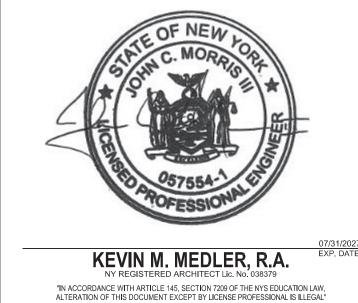


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NSULTANTS:

MARK	DATE	DESCRIPTION
0	09-11-24	SED SUBMISSION
1	02-25-25	SED ADDENDUM 1
	05-28-25	FINAL BID SET
3	06-13-25	FINAL BID SET - ADDENDUM #3



SRF

### White Plains City School District

MAY 2025

SS

AS SHOWN

Renovations at Rochambeau Alternate High School



228 Fisher Avenue White Plains, NY 10606

SED #66-22-00-01-0-015-020

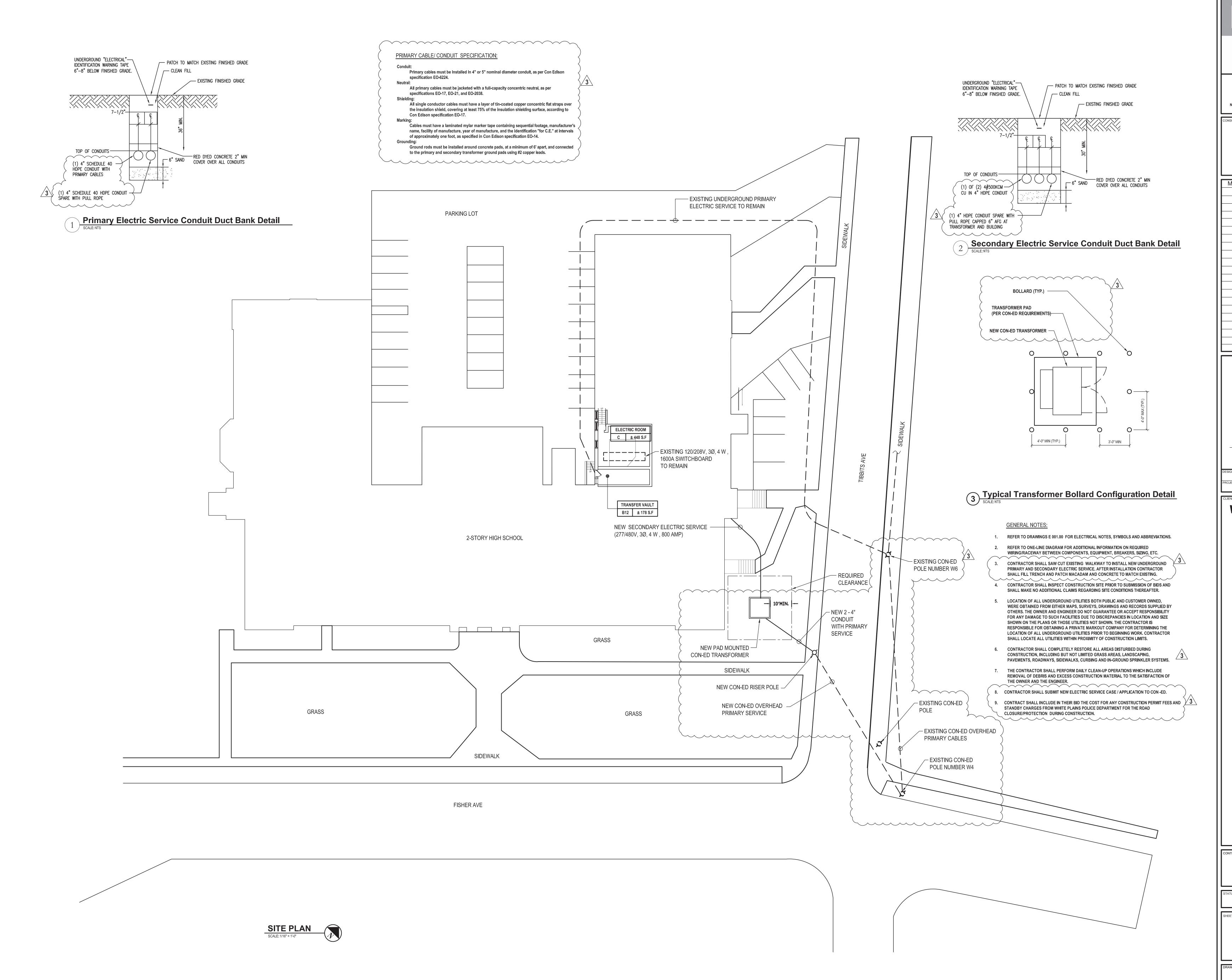
CONTRACT E
ELECTRICAL CONSTRUCTION

FINAL BID DOCUMENT

ET TITLE

BASEMENT PROPOSED FLOOR PLAN

E 100.00



H 2 architects + engineers

1133 Westchester Ave., Suite N-210
White Plains, NY 10605
914.358.5623 • www.h2m.com
NY Architecture & Landscape Architecture: No Certificate Required
NY Engineering Certificate of Authorization No. 0018178

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MARK	DATE	DESCRIPTION
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1	02-25-25	SED ADDENDUM 1
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3	06-13-25	FINAL BID SET - ADDENDUM #3



KEVIN M. MEDLER, R.A.

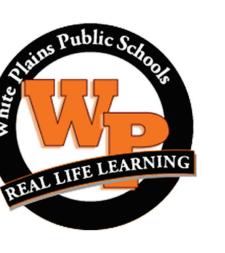
NY REGISTERED ARCHITECT Lic. No. 038379

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GNED BY:
SRF
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JECT No.:
WPSD2401
MAY 2025
AS SHOWN

# White Plains City School District

Renovations at Rochambeau Alternate High School



228 Fisher Avenue White Plains, NY 10606

SED #66-22-00-01-0-015-020

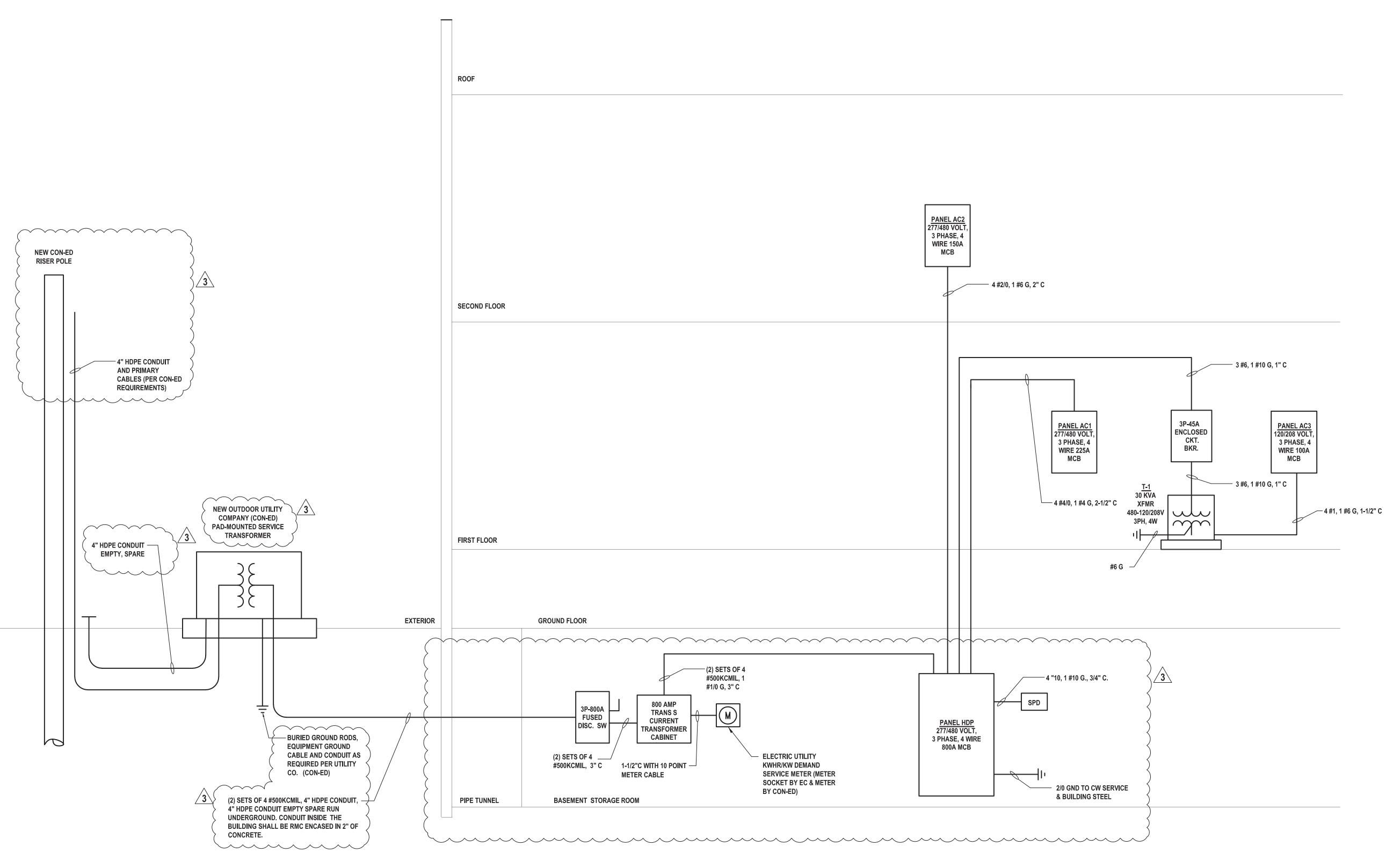
CONTRACT E
ELECTRICAL CONSTRUCTION

FINAL BID DOCUMENT

EET TITLE

ELECTRICAL SITE PLAN

E 110.00



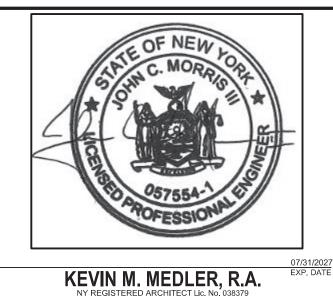
1 Electrical Power One Line Riser Diagram
SCALE: NONE

architects
+
engineers

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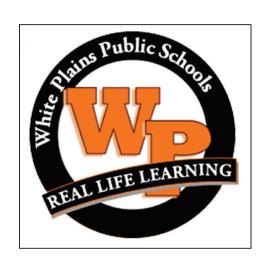
SIGNED BY: DRAWN BY: CHECKED BY: REVIEWED BY: SRF SS SS

DJECT No.: DATE: SCALE:

WPSD2401 MAY 2025 AS SHOWN

## White Plains City School District

Renovations at Rochambeau Alternate High School



228 Fisher Avenue White Plains, NY 10606

SED #66-22-00-01-0-015-020

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ET TITLE

ELECTRICAL
ONE LINE DIAGRAM

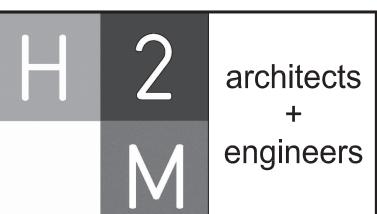
E 500.00

YS1	EM: <b>480Y/277V,</b> 3	8Ø, 4W	NUMB	ER OF PO	OLES	: CONT	rinuous	BUS	AREA SERVED:	HVAC SYSTEMS			
US	RATING: 800 A	MINIMUM CB IC: 65kA RMS SYM	EQUIP	GROUN	D BU	S: YES			PANEL LOCATION:	STORAGE ROOM			
ΛAI	NS TYPE: MCB	MAINS RATING: 800 A	ISOLAT	ED GND	D BUS: NO				MOUNTING:	SURFACE	SUPPLIED FROM:	UTILITY	
IR.	SERVES		LC	DAD	(	CIRCUIT BR	EAKER	MINIMUN	/I FEEDER	COMMENTS	s		
#			kVA	AMP	Р	FRAME	TRIP	AND CON	DUIT SIZE				
1	AC1		121	146	3	250	225	SEE RISER	DIAGRAM				
<u>.</u>	AC2		65	78	3	225	150	SEE RISER	DIAGRAM				
3	AC3 VIA TRANSFORMER	T1	29	35	3	100	45	SEE RISER	DIAGRAM				
ŀ	FUTURE CUH-1		14	17	3	100	25						
5	FUTURE CUH-2		14	17	3	100	25						
5	FUTURE CUH-3		14	17	3	100	25						
,	SPARE				3	250	175						
3	SPARE				3	225	100						
)	SPACE				3								
0	SPACE				3								
1	SPACE			~~	3		~~~						
	SPD		1	1	3	100	30						
_							~~~						
		TOTAL CONNECTED LOAD (k	VA) 2	58			<u>/3</u>	<u> </u>					
		TOTAL CONNECTED LOAD (AM	IPS) 3	10	1								

YSTEM:	480Y/277V, 3Ф, 4	w		NU	MBER C	F POLES:	30				AREA SERVED: HVAC	SYSTEMS		
US RATING:	250 A	MINIMUM CB IC:	42kA RMS SYM	EQI	JIP GRO	OUND BUS	: YES				PANEL LOCATION: STORA	AGE ROOM		
MAINS TYPE:	МСВ	MAINS RATING:	150 A	ISO	LATED (	GND BUS:	NO				MOUNTING: SURFA	ACE	SUPPLIED FROM: HDP	
IR. SERVES		LOAD	MINIMUM BRANCH	BR	EAKER		PHASE		BREA	KER	MINIMUM BRANCH	LOAD	SERVES	CIR
#			CIRCUIT & CONDUIT SIZE	Р	TRIP	Α	В	С	TRIP	Р	CIRCUIT & CONDUIT SIZE			#
1		7175				14350						7175		2
3 CU-2		7175	3#8, #10 G, 3/4" C	3	35		14350		35	3	3#8, #10 G, 3/4" C	7175	CU-6	4
5		7175						14350				7175		6
7		7175				7175			_	1			SPACE	8
9 CU-4		7175	3#8, #10 G, 3/4" C	3	35		7175		_	1			SPACE	10
11		7175						7175	-	1			SPACE	12
13						0			-	1			SPACE	14
15 SPARE				3	35		0		-	1			SPACE	16
17								0	-	1			SPACE	18
19 SPARE				1	20	0			-	1			SPACE	20
21 SPACE				1	-		0		_	1			SPACE	22
23 SPACE				1	-			0	-	1			SPACE	24
25 SPACE				1	-	0			-	1			SPACE	26
27 SPACE				1	-		0		-	1			SPACE	28
29 SPACE				1	-			0	-	1			SPACE	30
<u> </u>		•		'	•	21525	21525	21525	VA P	ER P	PHASE	•		
		(VA) 64575				78	78	78	AMP:	S PE	R PHASE	78	TOTAL CONNECTED LOAD (A	MPS)

UHE	DULE FO	OR PANEL: A	C1													
YSTE	M:	480Ү/277V, 3Ф,	4W			NUI	MBER (	OF POLES:	42				AREA SERVED: HVAC	SYSTEMS		
US R	ATING:	250 A	MINIMUM	CB IC:	42kA RMS SYM	EQI	JIP GRO	OUND BUS	: YES				PANEL LOCATION: STORA	AGE ROOF	И	
1AIN	S TYPE:	МСВ	MAINS RAT	TING:	225 A	ISO	LATED	GND BUS:	NO				MOUNTING: SURFA	ACE	SUPPLIED FROM: HDP	
IR. S	ERVES			LOAD	MINIMUM BRANCH	BR	EAKER		PHASE		BREA	KER	MINIMUM BRANCH	LOAD	SERVES	CIR
#					CIRCUIT & CONDUIT SIZE	Р	TRIP	Α	В	С	TRIP	Р	CIRCUIT & CONDUIT SIZE			#
1				5707				9115						3408		2
3 0	:U-5			5707	3#10, #10 G, 3/4" C	3	25		9115		20	3	3#12, #12 G, 3/4" C	3408	CU-7	4
5				5707						9115				3408		6
7				5707				11414						5707		8
9 0	:U-5			5707	3#10, #10 G, 3/4" C	3	25		11414		25	3	3#10, #10 G, 3/4" C	5707	CU-3	10
.1			ļ	5707						11414				5707		12
.3				5707				11414						5707		14
.5 0	:U-1			7175	3#8, #10 G, 3/4" C	3	35		12882		25	3	3#10, #10 G, 3/4" C	5707	CU-3	16
7				7175	-					12882				5707	-	18
9				7175				7175			-	1			SPACE	20
1 0	:U-1			7175	3#8, #10 G, 3/4" C	3	35		7175		-	1			SPACE	22
23				7175	-					7175	-	1			SPACE	24
25								0			-	1			SPACE	26
.7 S	PARE				-	3	25		0		-	1			SPACE	28
9					-					0	-	1			SPACE	30
31								0			-	1			SPACE	32
33 S	PARE				-	3	35		0		-	1			SPACE	34
35			-		-					0	-	1			SPACE	36
	PARE					1	20	0		<u> </u>	_	1			SPACE	38
39   5	PARE					1	20		0		-	1			SPACE	40
41 S	PARE					1	20	1	<u> </u>	0	-	1			SPACE	42
			<u> </u>		I.		1	39118	40586	40586	VA PI	ER P	HASE	1	1	
	TOTAL C	ONNECTED LOAD	(VA)	120290				141	147	147	AMP:	S PE	R PHASE	145	TOTAL CONNECTED LOAD (AM	PS)

SYSTEM:	208Y/120V, 3Ф, 4W			NU	MBER C	OF POLES:	30				AREA SERVED: HVAC SYSTEMS					
BUS RATING:	100 A MINIM	UM CB IC:	22kA RMS SYM	EQI	JIP GRO	OUND BUS	: YES	ES .			PANEL LOCATION: STORA	GE ROOF	M			
MAINS TYPE:	MCB MAINS	RATING:	100 A	ISOLATED GND BUS: NO							MOUNTING: SURFA	ACE SUPPLIED FROM: HDP VIA T1				
CIR. SERVES		LOAD	MINIMUM BRANCH	BR	EAKER		PHASE		BREA	KER	MINIMUM BRANCH	LOAD	SERVES	CIR		
#			CIRCUIT & CONDUIT SIZE	Р	TRIP	Α	В	С	TRIP	Р	CIRCUIT & CONDUIT SIZE			#		
1 CU-8		3026	2#8, #10 G, 3/4" C	2	35	3206			20	1	2#12, #12 G, 3/4" C	180	RECEPTACLE - ROOF	2		
3		3026					3206		20	1	2#12, #12 G, 3/4" C	180	RECEPTACLE - ROOF	4		
5 CU-9		3026	2#8, #10 G, 3/4" C	2	35			3566	20	1	2#12, #12 G, 3/4" C	540	RECEPTACLES - ROOF	6		
7		3026				4106	\ 		20	1	2#12, #12 G, 3/4" C	1080	CP-1 THRU 6	8		
9 CU-10		3026	2#8, #10 G, 3/4" C	2	35		4106		20	1	2#12, #12 G, 3/4" C	1080	CP-7 THRU 11 AND CP-31	10		
11		3026	-					4646	20	1	2#12, #12 G, 3/4" C	1620	CP-12 THRU CP-20	12		
13 EU-1		63	2#12, #12 G, 3/4" C	2	15	1143			20	1	2#12, #12 G, 3/4" C	1080	CP-21 THRU 26	14		
15		63					963		20	1	2#12, #12 G, 3/4" C	900	CP-27 THRU 30 AND CP-32	16		
17 EU-2		42	2#12, #12 G, 3/4" C	2	15			1218	20	1	2#12, #12 G, 3/4" C	1176	KE-1	18		
19		42				1767			15	1	2#12, #12 G, 3/4" C	1725	ERV-1	20		
21 EU-3		63	2#12, #12 G, 3/4" C	2	15		63		20	1			SPARE	22		
23		63						63	-	1			SPACE	24		
25 SPARE				1	20	0			-	1			SPACE	26		
27 SPARE				1	20		0		-	1			SPACE	28		
29 SPACE				1	-			0	-	1			SPACE	30		
		<b>'</b>		<u>'</u>	•	10222	8338	9493	VA P	ER P	HASE					
TOTAL C	ONNECTED LOAD (VA)	28053				85	69	79	AMP:	S PE	R PHASE	78	TOTAL CONNECTED LOAD (AP	MPS)		



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0 09-11-24 SED SUBMISSION 1 02-25-25 SED ADDENDUM 05-28-25 FINAL BID SET 3 06-13-25 FINAL BID SET - ADDEND	Ν
05-28-25 FINAL BID SET	N
	11
3 06-13-25 FINAL BID SET - ADDEND	
	DUM #



WEVIN M. MEDLER, R.A.

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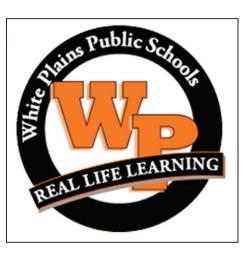
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DATE:

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228 Fisher Avenue White Plains, NY 10606

SED #66-22-00-01-0-015-020

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NG No.

E 600.00