

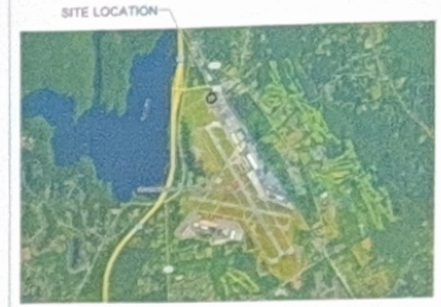
WESTCHESTER COUNTY

WESTCHESTER COUNTY

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

CONTRACT No. 23-528
NEW SNOW EQUIPMENT STORAGE FACILITY

WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK



LOCATION MAP
SCALE: N.T.S.

DRAWING LIST

SHEET NUMBER		SHEET NAME	DPW FILE NO.	REV
G-001	1	COVER SHEET AND SHEET INDEX	48-16-T-67	0
GC-101	2	CONTRACTOR HAUL ROUTE AND STAGING AREA PLAN	48-16-C-68	0
GC-102	3	CONSTRUCTION SAFETY & PHASING PLAN	48-16-C-69	0
GC-501	4	CONSTRUCTION SAFETY & PHASING NOTES AND DETAILS	48-16-D-70	0
C-001	5	GENERAL NOTES, ABBREVIATIONS AND LEGEND	48-16-C-71	0
C-002	6	EXISTING CONDITIONS PLAN	48-16-C-72	0
CD-101	7	DEMOLITION PLAN	48-16-C-73	0
C-101	8	SITE PLAN	48-16-C-74	0
C-102	9	UTILITY PLAN	48-16-C-75	0
C-103	10	GRADING PLAN	48-16-C-76	0
C-104	11	FIRE TRUCK TRAVEL PATH PLAN	48-16-C-77	0
C-105	12	FIRE TRUCK TRAVEL PATH PLAN	48-16-C-78	0
C-501	13	DETAILS	48-16-C-79	0
C-502	14	DETAILS	48-16-C-80	0
C-503	15	DETAILS	48-16-C-81	0
S-001	16	GENERAL NOTES	48-16-S-82	0
S-002	17	GENERAL NOTES	48-16-S-83	0
S-101	18	FOUNDATION PLAN	48-16-S-84	0
S-102	19	FLOOR SLAB LAYOUT PLAN	48-16-S-85	0
S-103	20	FLOOR SLAB REINFORCEMENT PLAN	48-16-S-86	0
S-104	21	ROOF FRAMING PLAN	48-16-S-87	0
S-301	22	SECTIONS	48-16-S-88	0
S-302	23	SECTIONS	48-16-S-89	0
S-501	24	DETAILS	48-16-S-90	0
S-502	25	DETAILS	48-16-S-91	0
S-503	26	DETAILS	48-16-S-92	0
S-504	27	DETAILS	48-16-S-93	0
S-505	28	DETAILS	48-16-S-94	0
S-506	29	DETAILS	48-16-S-95	0
S-507	30	DETAILS	48-16-S-96	0
S-601	31	SCHEDULES	48-16-S-97	0
A-001	32	SYMBOLS, ABBREVIATIONS, AND TYPICAL DETAILS	48-16-A-98	0
A-002	33	CODE COMPLIANCE AND LIFE SAFETY PLAN	48-16-A-99	0
AD-101	34	DEMOLITION FLOOR PLAN	48-16-A-100	0
A-100	35	OVERALL FLOOR PLAN	48-16-A-101	0
A-101	36	FLOOR PLAN	48-16-A-102	0

DRAWING LIST

SHEET NUMBER		SHEET NAME	DPW FILE NO.	REV
A-102	37	ROOF PLAN	48-16-A-103	0
A-111	38	REFLECTED CEILING PLAN	48-16-A-104	0
A-201	39	EXTERIOR ELEVATIONS	48-16-A-105	0
A-301	40	BUILDING SECTIONS	48-16-A-106	0
A-302	41	WALL SECTIONS AND DETAILS	48-16-A-107	0
A-401	42	ENLARGED PLANS, INTERIOR ELEVATIONS, AND DETAILS	48-16-A-108	0
A-601	43	SCHEDULES AND DOOR DETAILS	48-16-A-109	0
F-001	44	DETAILS, NOTES, & SYMBOLS	48-16-F-110	0
F-101	45	FLOOR PLAN	48-16-F-111	0
P-101	46	SANITARY/STORM PLUMBING PLAN, DETAILS & LEGEND	48-16-P-112	0
P-102	47	WATER, PROPANE, COMPRESSOR PLUMBING PLAN & DETAILS	48-16-P-113	0
P-401	48	SANITARY RISER	48-16-P-114	0
P-402	49	GAS RISER	48-16-P-115	0
M-001	50	ABBREVIATIONS, GENERAL NOTES, AND SYMBOLS	48-16-M-116	0
M-002	51	HVAC BUILDING AIR BALANCE DIAGRAM	48-16-M-117	0
M-101	52	HVAC FLOOR PLAN	48-16-M-118	0
M-102	53	HVAC ROOF PLAN	48-16-M-119	0
M-301	54	ELEVATIONS	48-16-M-120	0
M-501	55	DETAILS	48-16-M-121	0
M-502	56	DETAILS	48-16-M-122	0
M-601	57	SCHEDULES	48-16-M-123	0
E-001	58	ELECTRICAL NOTES, SYMBOLS, ABBREVIATIONS AND COMPLIANCE	48-16-E-124	0
EG-100	59	ELECTRICAL SITE PLAN - REMOVALS	48-16-E-125	0
ED-101	60	ELECTRICAL FIRST FLOOR PLAN - REMOVALS	48-16-E-126	0
E-100	61	ELECTRICAL SITE PLAN	48-16-E-127	0
E-101	62	ELECTRICAL FLOOR PLAN	48-16-E-128	0
E-102	63	ELECTRICAL FLOOR PLAN	48-16-E-129	0
E-103	64	ELECTRICAL CEILING PLAN	48-16-E-130	0
E-104	65	ELECTRICAL ROOF PLAN	48-16-E-131	0
E-105	66	ELECTRICAL LIGHTING PLAN	48-16-E-132	0
E-501	67	ELECTRICAL DETAILS	48-16-E-133	0
E-502	68	ELECTRICAL DETAILS	48-16-E-134	0
E-503	69	ELECTRICAL DETAILS	48-16-E-135	0
E-601	70	ELECTRICAL SCHEDULES	48-16-E-136	0
FA-001	71	DETAILS, NOTES, & SYMBOLS	48-16-FA-137	0
FA-101	72	FIRE ALARM FIRST FLOOR PLAN	48-16-FA-138	0

THE FOLLOWING PERMIT APPLICATIONS ARE TO BE FILED WITH THE WESTCHESTER COUNTY DEPARTMENT OF PUBLIC WORKS & TRANSPORTATION BUILDING AND CODE ENFORCEMENT OFFICE FOR ALL WORK, INCLUDING ANY TEMPORARY FACILITIES AND SERVICES:

- APPLICATION FOR DEMOLITION PERMIT
- APPLICATION FOR BUILDING PERMIT
- APPLICATION FOR PROPOSED ELECTRICAL PERMIT
- APPLICATION FOR PROPOSED PLUMBING WORK
- APPLICATION FOR PROPOSED PLUMBING GAS WORK

CONTRACTOR SHALL BE RESPONSIBLE FOR DEFERRED PERMITS FOR WORK INCLUDING BUT NOT LIMITED TO SPRINKLER, VEHICLE LIFT, FIRE ALARM, SOLAR PHOTOVOLTAICS, PROPANE TANKS, BACKFLOW PREVENTER, OR AS DEEMED BY CODE ENFORCEMENT OFFICIAL.

PROFESSIONAL SEAL

REGISTERED ARCHITECT — STATE OF NEW YORK

IT IS A VIOLATION OF NYS LAW FOR ANY PERSON TO ALTER THIS DOCUMENT IN ANY WAY UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER. IF A DOCUMENT BEARING THE SEAL OF AN ENGINEER IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE DOCUMENT THEIR SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY THEIR SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

CONSULTANT INFORMATION

C&S COMPANIES

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

RECORD DRAWING CERTIFICATION

☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

IN CHARGE OF
CHECKED BY
MADE BY

2/17/26
RECOMMENDED FOR DESIGN DATE
JEFFREY A. DEAN, P.E.
ASSOCIATE ENGINEER
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION

2/17/26
RECOMMENDED FOR CONSTRUCTION DATE
ANGELO SGOBBO, P.E.
DIRECTOR OF DESIGN COORDINATION
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION

2/17/2026
RECOMMENDED FOR CONSTRUCTION DATE
GAYLE M. KATZMAN, P.E.
FIRST DEPUTY COMMISSIONER
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION

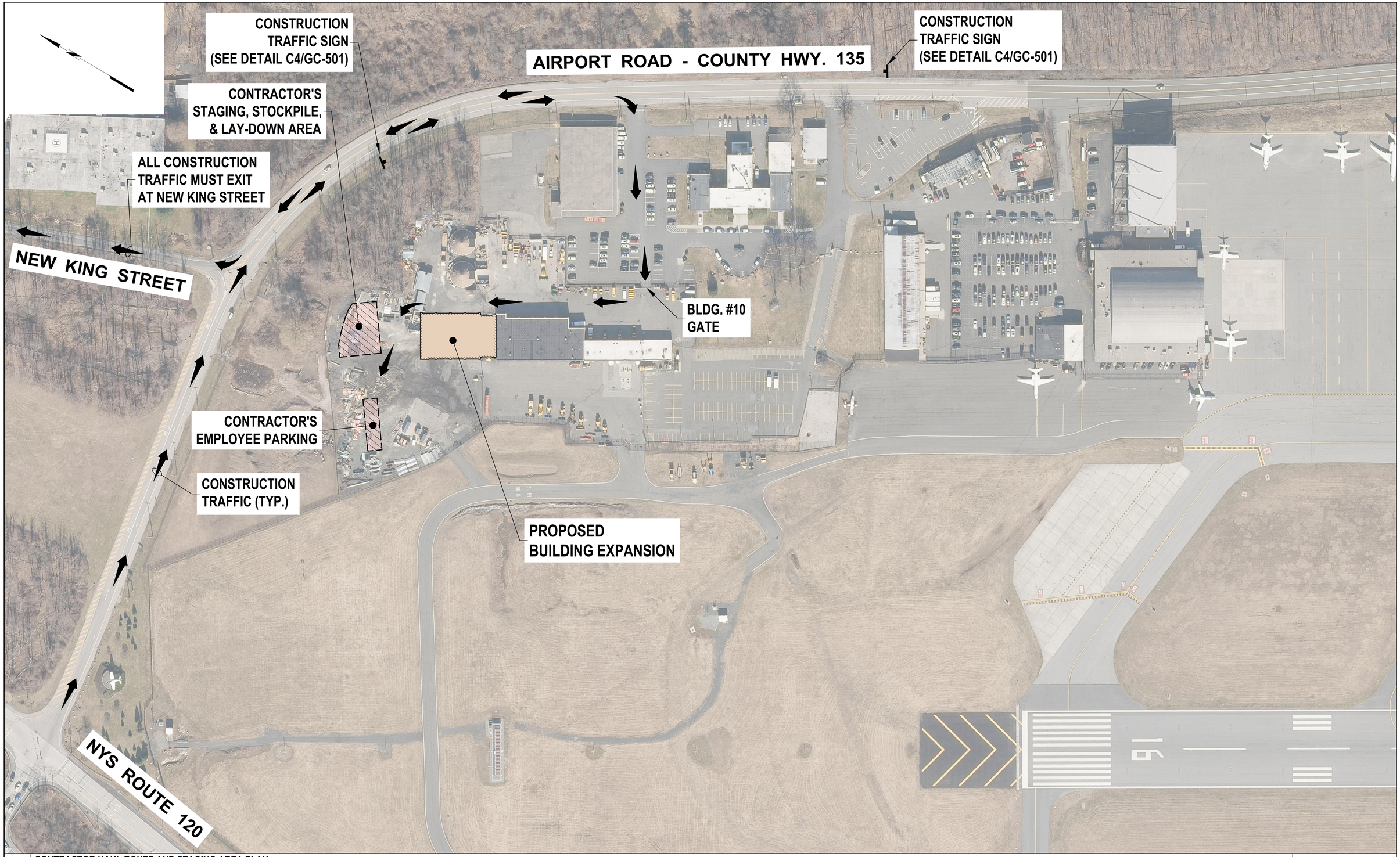
2/17/26
APPROVED FOR CONSTRUCTION DATE
HUGH J. GREECHAN, JR., P.E.
COMMISSIONER
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
COVER SHEET AND SHEET INDEX

CONTRACT NUMBER	SHEET NUMBER
23-528	G-001

SHEET NO. 1 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-T-67
REV NO. 0



A1 CONTRACTOR HAUL ROUTE AND STAGING AREA PLAN
SCALE: 1" = 80'-0"

0 80' 160'

CERTIFICATE OF AUTHORIZATION # 0021365

IN CHARGE OF S. MEARON
CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

STATE OF NEW YORK · ERIC KENNA · 088339 · LICENSED PROFESSIONAL ENGINEER

REGISTRATION EXPIRES: 07/31/2027

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
www.cscos.com

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
CONTRACTOR HAUL ROUTE AND STAGING AREA PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	GC-101

SHEET NO. 2 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-G-68
REV. NO. 0

LIMITS OF WORK AREA 'A'

CONTRACTOR'S STAGING, SOIL STOCKPILE, CONCRETE WASH-OUT & LAY-DOWN AREA

WORK AREA "A"

PROPOSED SRE BUILDING ADDITION
(+/- 13,140 s.f.)

25'

20'

MASONRY BUILDING

MASONRY BUILDING
10/SNOW REMOVAL EQUIPMENT
(F.F.E. = 422.87'±)

CONTRACTOR'S HAUL ROUTE (FROM COUNTY HWY. 135 / AIRPORT ROAD)

CONTRACTOR MAINTAINED ACCESS ROAD FOR COUNTY & AIRPORT VEHICLES

GATE 10 - CONTRACTOR'S ACCESS GATE

REFLECTIVE PLASTIC BARREL BARRICADE. SPACED 10' O.C. MAX. (TYP.)

CONTRACTOR'S EMPLOYEE PARKING

AIRPORT OPERATIONS AREA
NO ENTRY BEYOND THIS POINT

CONTRACTOR MAINTAINED ACCESS ROAD FOR COUNTY & AIRPORT VEHICLES

AIRPORT OPERATIONS AREA
NO ENTRY BEYOND THIS POINT

A1 CONSTRUCTION SAFETY & PHASING PLAN
SCALE: 1" = 30'-0"

0 30' 60'

CERTIFICATE OF AUTHORIZATION # 0021365

IN CHARGE OF S. MEARON
CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

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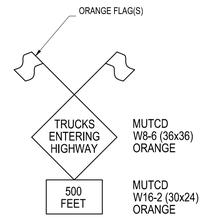
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DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
CONSTRUCTION SAFETY & PHASING PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	GC-102

SHEET NO. 3 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-G-69
REV. NO. 0

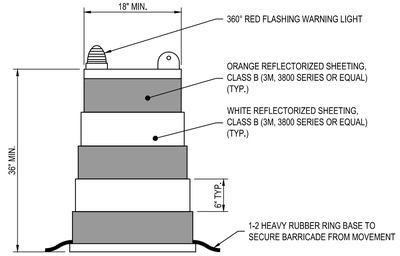


NOTES:

1. LOCATE 500' FEET FROM TRUCK ENTRANCE OR EXIT TO PROJECT SITE.
2. SIGN SHALL BE MOUNTED PER MUTCD REQUIREMENTS.

C4 CONSTRUCTION TRAFFIC SIGN DETAIL

SCALE: NOT TO SCALE



NOTE:
BARRICADES SHALL BE SPACED 8' MAX. O.C.

B4 REFLECTIVE PLASTIC BARREL BARRICADE DETAIL

SCALE: NOT TO SCALE

1. REFER TO THE CONSTRUCTION SAFETY AND PHASING PLAN (CSPP) FOR A COMPREHENSIVE DESCRIPTION OF WORK PHASING REQUIREMENTS.
2. THE CONTRACTOR SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE AIRPORT BEFORE ACCESSING ANY WORK AREA. NO WORK AREAS SHALL BE CLOSED TO AIRCRAFT UNTIL AUTHORIZED BY THE AIRPORT. CONTACT AIRPORT OPERATIONS FOR ALL COORDINATION.
3. THE CONTRACTOR SHALL COORDINATE AND MANAGE ALL ACCESS LOCATIONS WITH THE AIRPORT. ALL GATES SHALL BE STAFFED AND MONITORED CONTINUOUSLY BY THE CONTRACTOR TO CONTROL ACCESS IN ACCORDANCE WITH THE AIRPORTS REQUIREMENTS.
4. THE CONTRACTOR SHALL PROVIDE STRICT SECURITY FOR ALL PERSONNEL AT THE SITE INCLUDING SUBCONTRACTORS AND DELIVERY VEHICLES. NO PERSON OR VEHICLE SHALL ENTER INTO AN ACTIVE AIRPORT OPERATING SURFACE AT ANY TIME. ANY VIOLATORS WILL BE PROMPTLY AND PERMANENTLY REMOVED FROM THE JOB AND THE CONTRACTOR MAY FACE FINES IMPOSED BY THE AIRPORT AND/OR FAA.
5. NO PERSONNEL OR VEHICLE SHALL EVER ENTER AN AIR OPERATIONS AREA (AOA).
6. THE CONTRACTOR SHALL PROVIDE FOR EMPLOYEE PARKING OUTSIDE OF THE SECURED AREA. ONLY AUTHORIZED VEHICLES WILL BE ALLOWED INSIDE THE SECURITY FENCE.
7. A DAILY START-UP AND SHUT-DOWN CHECKLIST WILL BE JOINTLY PREPARED BY THE CONTRACTOR AND AIRPORT WHICH WILL BE FOLLOWED THROUGHOUT THE PROJECT. THIS CHECKLIST WILL INCLUDE, BUT NOT BE LIMITED TO, BARRICADES, HAUL ROUTES, ACCESS POINTS, CLEANUP, ETC.
8. PROJECT ACCESS LOCATIONS, HAUL ROUTES AND STAGING AREAS ARE APPROXIMATE ONLY AND SHALL BE COORDINATED WITH THE AIRPORT PRIOR TO CONSTRUCTION.

A4 CONSTRUCTION WORK SAFETY PHASING NOTES

SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION # 0021365

IN CHARGE OF S. MEARON
CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

STATE OF NEW YORK ERIC KENNA 088339 LICENSED PROFESSIONAL ENGINEER

REGISTRATION EXPIRES: 07/31/2027

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WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
CONSTRUCTION SAFETY & PHASING NOTES AND DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	GC-501

SHEET NO. 4 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-G-70	0

1. NO ATTEMPT HAS BEEN MADE TO SHOW ALL EXISTING UTILITIES AND THE LOCATION OF THOSE SHOWN ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL VERIFY THE TRUE LOCATION BEFORE COMMENCING WORK. BEFORE ANY CONDUIT IS PLACED THE CONTRACTOR SHALL UNCOVER ALL UTILITIES AT UTILITY CROSSINGS TO ENABLE THE ENGINEER TO VERIFY THAT THE PROPOSED CONDUIT SHOWN ON THE PLANS IS NOT OBSTRUCTED BY EXISTING UTILITIES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THIS CONTRACT.
2. CONTRACTOR SHALL NOTIFY DIG SAFELY NEW YORK AT LEAST 72 HOURS PRIOR TO START OF WORK.
3. CONTRACTOR SHALL COORDINATE ALL WORK WITH UTILITY COMPANIES.
4. IN THE EVENT THAT THE CONTRACTOR DAMAGES ANY EXISTING UTILITIES, HE SHALL IMMEDIATELY NOTIFY THE OWNER AND THE AFFECTED UTILITIES REPRESENTATIVE OF SUCH DAMAGE. ANY DAMAGE SHALL PROMPTLY AND SATISFACTORILY BE REPAIRED BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
5. CONTRACTOR TO ABANDON, CUT AND CAP ALL EXISTING UTILITIES SERVICING THE STRUCTURES MARKED FOR DEMOLITION. CONTRACTOR TO COORDINATE UTILITY DISCONNECTIONS WITH THE UTILITIES REPRESENTATIVE.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES ENCOUNTERED IN THIS WORK, WHERE NECESSARY, THE CONTRACTOR SHALL PROVIDE TIMBER , PLANK OR OTHER APPROVED MATERIALS AND SECURELY BRACE AND PROTECT THESE UTILITIES. THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THE CONTRACT.
7. THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY SUPPORTS, BRACING AND OTHER DEVICES AS MAY BE REQUIRED OR AS DIRECTED BY THE ENGINEER TO PROTECT THE SAFETY OF THE ADJACENT STRUCTURES, ROADWAY AND UTILITIES. ALL COSTS SHALL BE INCLUDED IN VARIOUS ITEMS IN THE CONTRACT.
8. CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT PRIOR TO PAVEMENT REMOVAL.
9. ALL FOUNDATIONS, FOR STRUCTURES MARKED FOR DEMOLITION, SHALL BE REMOVED THE FULL DEPTH.
10. ALL FOUNDATION, CONCRETE SLAB AND PAVEMENT VOIDS, CREATED AFTER REMOVAL, SHALL BE FILLED TO MATCH EXISTING GRADE (GRADE TO DRAIN) WITH COMPACTED RUN A BANK OR APPROVED EQUAL.
11. ALL UNSUITABLE SPOIL MATERIAL, SUCH AS CONCRETE AND ASPHALT AND EXCAVATED MATERIAL, SHALL BE DISPOSED OF OFF PROPERTY.
12. CONTRACTOR WILL BE REQUIRED TO IMPORT MATERIAL TO THE SITE TO COMPLETE ALL GRADING WORK.
13. ALL GRASS AREAS DISTURBED AS A RESULT OF THE CONSTRUCTION OPERATIONS SHALL BE GRADED TO PROVIDE A SMOOTH MAINTAINABLE SURFACE AND ALLOW FOR POSITIVE DRAINAGE, THEY SHALL ALSO BE RESTORED EQUAL TO OR BETTER THAN ORIGINAL CONDITION. SEE DETAIL C3/C-501.
14. IT WILL BE THE CONTRACTORS OBLIGATION AND RESPONSIBILITY TO USE METHODS AND EQUIPMENT WHICH WILL INSURE THE SATISFACTORY COMPLETION OF THE REQUIRED WORK WITHIN THE CONTRACT TIME ALLOWED.
15. THE CONTRACTOR MUST BE ACQUAINTED WITH THE DRAINAGE CHARACTERISTICS OF THE AREA SO THAT HE WILL PROGRESS HIS WORK EFFICIENTLY WITH FULL KNOWLEDGE OF THE POTENTIAL DRAINAGE PROBLEMS.
16. ALL EXISTING DRAINAGE SYSTEMS, INCLUDING DITCHES AND CULVERTS, WITHIN THE CONTRACT LIMITS SHALL BE CLEANED AND KEPT CLEAN AND FREE FLOWING FOR THE DURATION OF THE CONTRACT, THE COST OF THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR VARIOUS ITEMS IN THIS CONTRACT.
17. THE CONTRACTOR SHALL BE REQUIRED TO PROTECT HIS WORKERS AT ALL TIMES IN CONFORMANCE WITH APPLICABLE OSHA REGULATIONS.
18. THE CONTRACTOR'S STAGING AREA SHALL BE COORDINATED WITH THE OWNER PRIOR TO THE START OF WORK.
19. CONTRACTOR SHALL KEEP EXISTING ROADWAYS CLEAR OF MUD AND DEBRIS. CONTRACTOR SHALL CLEAN PAVEMENT AS REQUIRED DURING THE FULL DURATION OF THE PROJECT.
20. CONTRACTOR SHALL UTILIZE THE PROPOSED STABILIZED CONSTRUCTION ENTRANCE FOR ACCESS TO THE SITE AS SHOWN ON SHEET C-104.

C3 GENERAL NOTES
SCALE: NOT TO SCALE

&	AND	DMH	DRAINAGE MANHOLE	LF	LINEAR FEET	PVC	POLYVINYL CHLORIDE
@	AT	DW	DRY WELL	MAX	MAXIMUM	S	SLOPE
BLDG.	BUILDING	EA	EACH	MC	MECHANICAL CONTRACT(OR)	SA, SAN	SANITARY SEWER
℄	CENTERLINE	EL, ELEV	ELEVATION	MH	MANHOLE	SH	SIGNAL HAND HOLE
CATV	CABLE TELEVISION	EC	ELECTRICAL CONTRACT(OR)	MIN	MINIMUM	SF	SILT FENCE
CB	CATCH BASIN	ELEC	ELECTRICAL	MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES	S.F., SQ. FT.	SQUARE FEET
CHH	COMMUNICATION HAND HOLE	ES	END SECTION	N	NORTH	ST	STORM SEWER
CMH	COMMUNICATION MANHOLE	EX, EXIST	EXISTING	NTS	NOT TO SCALE	STD	STANDARD
CLR	CLEAR	F.F.E.	FINISH FLOOR ELEVATION	O.C.	ON CENTER	T	TELEPHONE
C.O.	CLEAN OUT	FT	FOOT, FEET	OCS	OUTLET CONTROL STRUCTURE	TCF	TEMPORARY CONSTRUCTION FENCE
CONC	CONCRETE	GC	GENERAL CONTRACTOR	℗	PROPERTY LINE	TYP	TYPICAL
Ø, DIA	DIAMETER	HDPE	HIGH DENSITY POLYETHYLENE	PC	PLUMBING CONTRACT(OR)	UD	UNDERDRAIN
DH	DEEP HOLE	HH	HAND HOLE	PT	PERCOLATION TEST	UON	UNLESS OTHERWISE NOTED
		INV	INVERT			V	VENT
						W	WATER

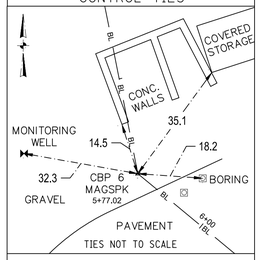
NOTE: NOT ALL ABBREVIATIONS ARE USED.

B3 ABBREVIATIONS
SCALE: NOT TO SCALE

PROPOSED BUILDING	PROPOSED BUILDING	WV	PROPOSED CURB STOP AND BOX
	PROPOSED HEAVY DUTY ASPHALT PAVEMENT SECTION	PIV	PROPOSED POST INDICATOR VALVE
	PROPOSED CONCRETE APRON / PAD		PROPOSED PIPE BOLLARD
	PROPOSED GRASS AREA	DMH-1	PROPOSED DRAINAGE MANHOLE
	EXISTING ASPHALT / CONCRETE PAVEMENT TO BE REMOVED	OCS-1	PROPOSED OUTLET CONTROL STRUCTURE
ST	PROPOSED STORM SEWER PIPE	CB-1	PROPOSED CATCH BASIN
W	PROPOSED WATER SERVICE LINE		PROPOSED HYDRODYNAMIC SEPARATION UNIT
UE	PROPOSED UNDERGROUND ELECTRIC CONDUIT	X 1035.50'	PROPOSED SPOT ELEVATION
470	PROPOSED CONTOUR LINE		PROPOSED INLET PROTECTION
X X X X X	PROPOSED CHAIN LINK PERIMETER FENCE		EXISTING OBJECT / UTILITY TO BE REMOVED OR DEMOLISHED
	PROPOSED COMPOST FILTER SOCK	MONITORING WELL	EXISTING MONITORING WELL
	PROPOSED SILT FENCE		EXISTING BORING / TEST PIT
L.O.D.	PROPOSED LIMIT OF DISTURBANCE		
	PROPOSED BOX BEAM GUARD RAIL		

A2 SURVEY BASELINE CONTROL TIES
SCALE: NOT TO SCALE

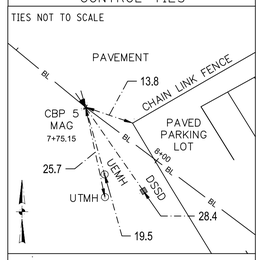
2023 SURVEY BASELINE CONTROL TIES



MAG SPIKE SET IN GRAVEL DRIVE SOUTHERLY OF STOCKPILE BINS

NYSPCS EAST ZONE NAD 83
N: 819095.2124
E: 709134.3161
NAD 88 EL: 420.552

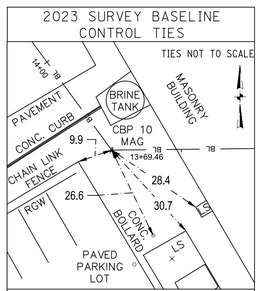
2023 SURVEY BASELINE CONTROL TIES



MAG NAIL SET IN PAVEMENT

NYSPCS EAST ZONE NAD 83
N: 818969.1395
E: 709287.1584
NAD 88 EL: 421.280

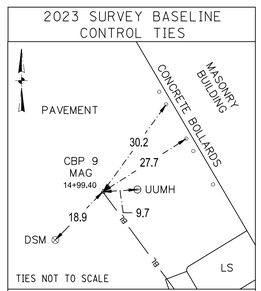
2023 SURVEY BASELINE CONTROL TIES



MAG NAIL SET IN PAVEMENT SOUTHERLY OF THE WATER SUPPLY TANK

NYSPCS EAST ZONE NAD 83
N: 818701.9100
E: 709274.3748
NAD 88 EL: 421.460

2023 SURVEY BASELINE CONTROL TIES



MAG NAIL SET IN PAVEMENT IN THE MIDDLE OF THE SOUTHWESTERLY SIDE OF THE MASONRY BUILDING

NYSPCS EAST ZONE NAD 83
N: 818806.6104
E: 709197.4063
NAD 88 EL: 421.560

A3 LEGEND
SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION # 0021365

IN CHARGE OF S. MEARON
CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

STATE OF NEW YORK — ERIC C. KENNA — 088339 — LICENSED PROFESSIONAL ENGINEER

REGISTRATION EXPIRES: 07/31/2027

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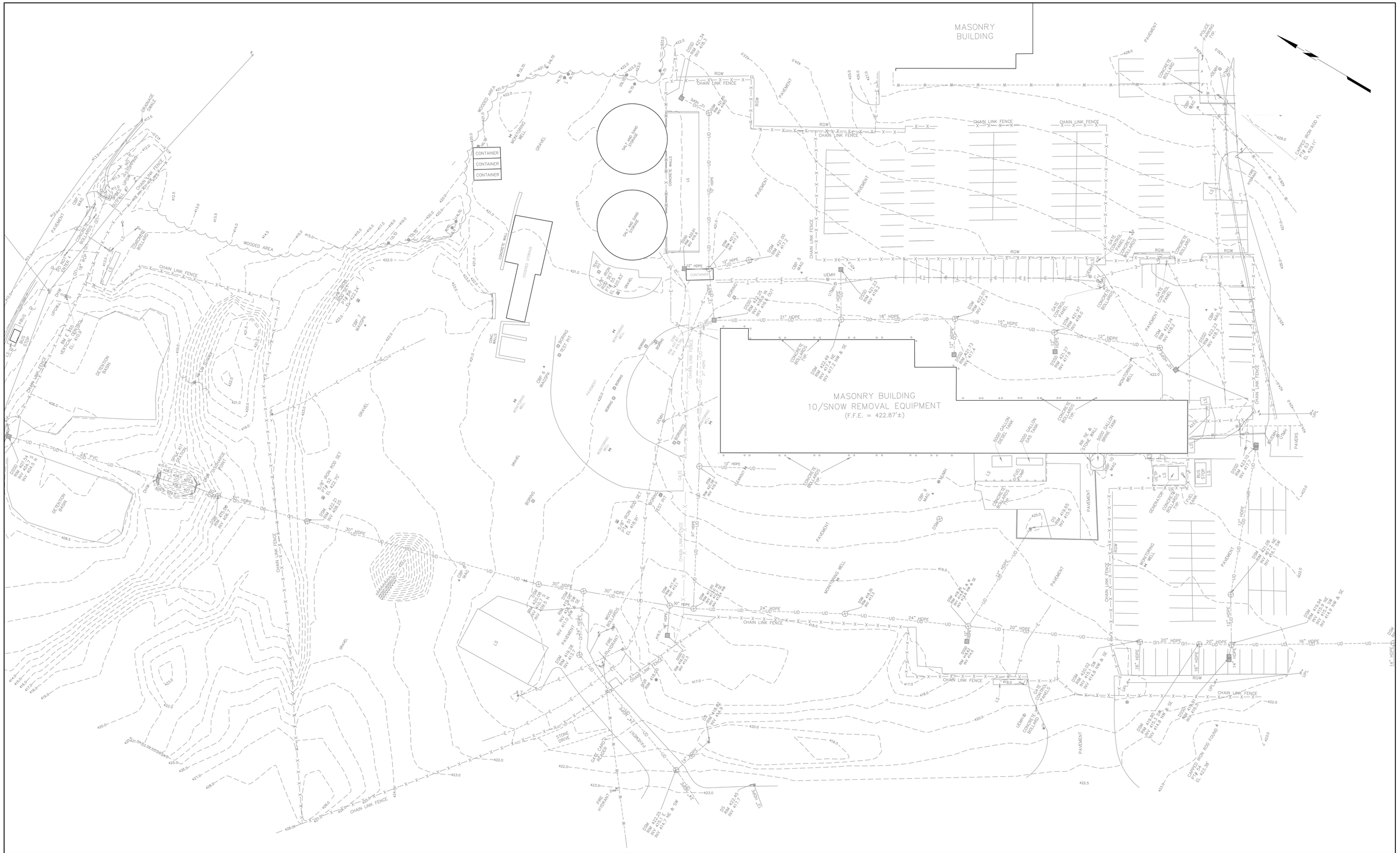
PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

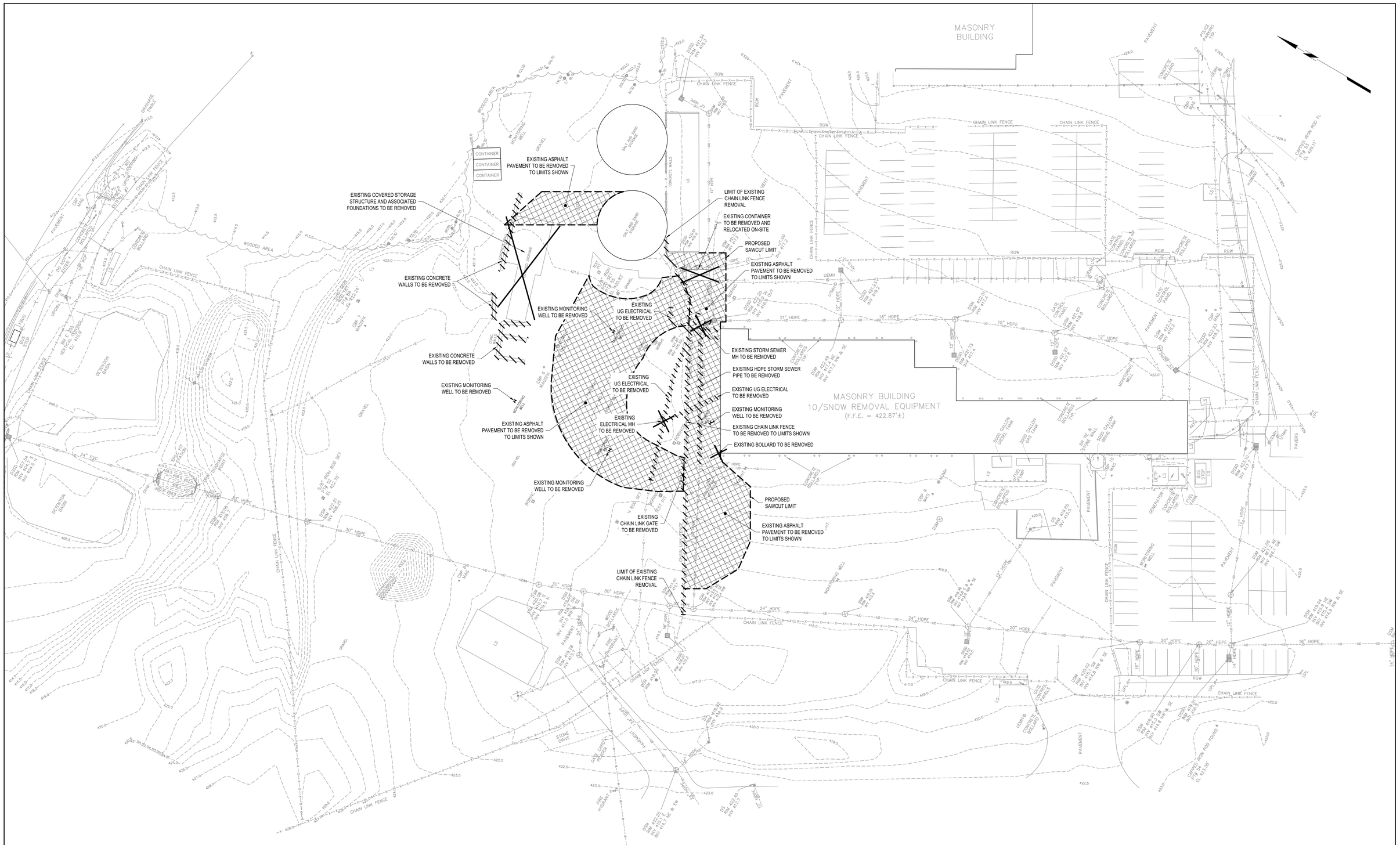
WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

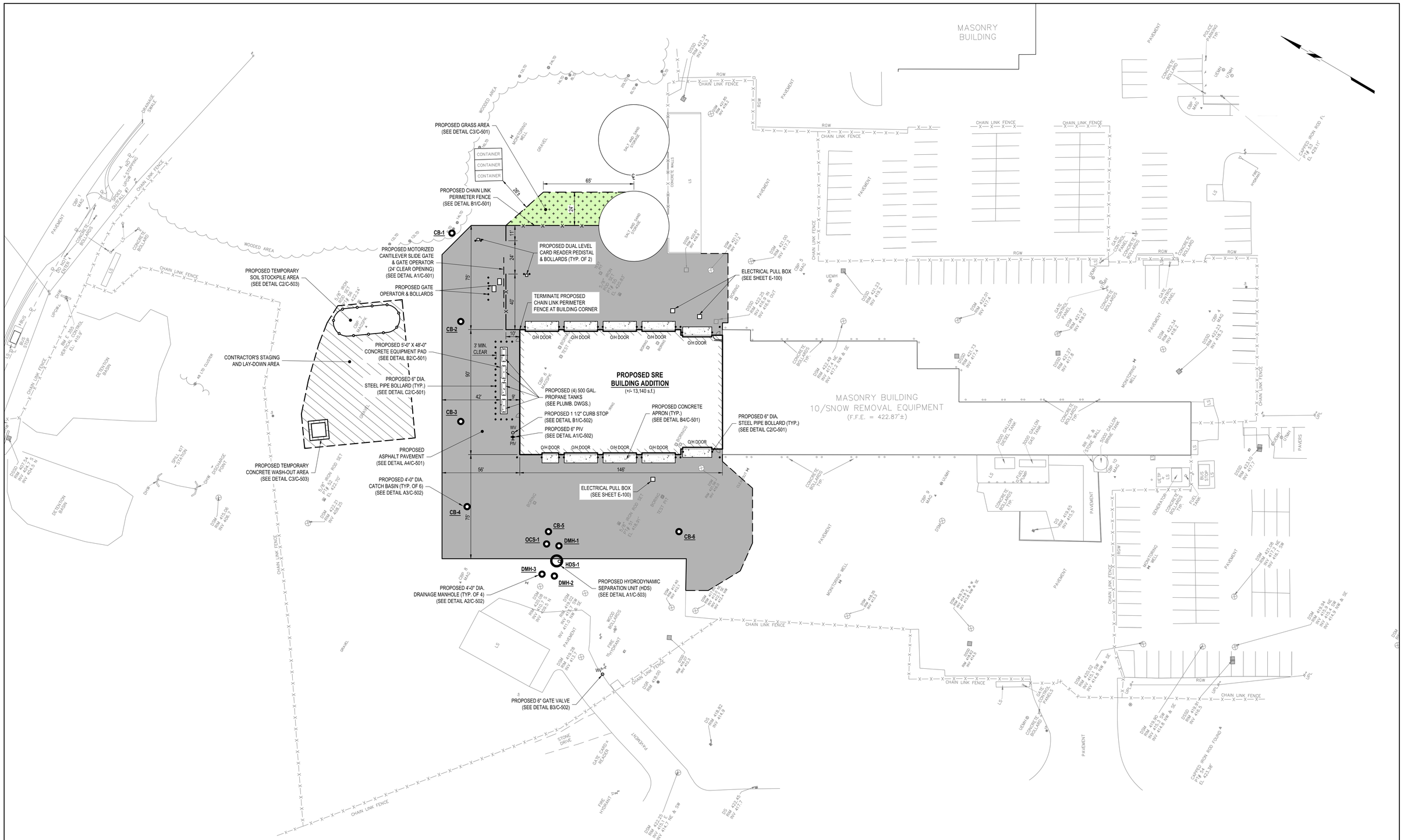
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
GENERAL NOTES, ABBREVIATIONS AND LEGEND

CONTRACT NUMBER	SHEET NUMBER
23-528	C-001

SHEET NO. 5 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-C-71
REV. NO. 0


MASONRY BUILDING
MASONRY BUILDING
10/SNOW REMOVAL EQUIPMENT
(F.F.E. = 422.87'±)
CONTAINER
CONTAINER
CONTAINER
SALT AND SAND STORAGE
SALT AND SAND STORAGE
COVERED STORAGE
CONCRETE WALLS
CONCRETE WALL
DETENTION BASIN
WOODED AREA
WOODED AREA
GRAVEL
PAVEMENT
CHAIN LINK FENCE
RGW
LS
UGM
UEM
UEMH
UWMH
DRAINAGE SWALE
MONITORING WELL
BORING
TEST PIT
CONCRETE BOLLARD
CONCRETE BOLLARDS TYP.
GATE CONTROL PANEL
GATE CONTROL PANELS
3000 GALLON DIESEL TANK
3000 GALLON GAS TANK
5000 GALLON BRINE TANK
GENERATOR
FUEL TANK
SLUDGE TANK
PAVERS
POLICE PARKING
CLAMPED IRON ROD FD. EL. 430.11'
CLAMPED IRON ROD FOUND EL. 423.38'
STONE DRIVE
GATE CHAIN/ POSTS
FIRE HYDRANT
WOOD BOLLARDS
CONCRETE WALLS
GABLE ROOF
STEEL CANOPY
CONCRETE PAD
CONCRETE BOLLARD
GUIDE RAIL
SIGN
BUS STOP
LIGHT POLE
UTILITY POLE
GUY WIRE
CATCH BASIN
DRAIN MANHOLE
SEWER MANHOLE
WATER MANHOLE
GAS VALVE
GAS METER
HYDRANT
WATER VALVE
WATER SHUT OFF
GAS LINE
WATER LINE
SEWER LINE
STORM SEWER
UNDERGROUND ELECTRIC
OVERHEAD WIRES
UTILITY POLE W/ TRANSFORMER
UTILITY POLE W/ LIGHT
UTILITY POLE W/ GUY WIRE
UTILITY POLE W/ TRANSFORMER & LIGHT
UTILITY POLE W/ TRANSFORMER & GUY WIRE
UTILITY POLE W/ LIGHT & GUY WIRE
UTILITY POLE W/ TRANSFORMER, LIGHT & GUY WIRE
TELEPHONE PEDESTAL
ELECTRIC METER
ELECTRIC MANHOLE
ELECTRIC VAULT
ELECTRIC HANDHOLE
TELEPHONE MANHOLE
TELEPHONE VAULT
TELEPHONE HANDHOLE
CABLE TV MANHOLE
CABLE TV VAULT
CABLE TV HANDHOLE
FIBER OPTIC MANHOLE
FIBER OPTIC VAULT
FIBER OPTIC HANDHOLE
TRAFFIC SIGNAL
TRAFFIC SIGNAL W/ PEDESTRIAN SIGNAL
TRAFFIC SIGNAL W/ PEDESTRIAN SIGNAL & PUSH BUTTON
TRAFFIC SIGNAL W/ PUSH BUTTON
TRAFFIC SIGNAL W/ PUSH BUTTON & PEDESTRIAN SIGNAL


EXISTING COVERED STORAGE STRUCTURE AND ASSOCIATED FOUNDATIONS TO BE REMOVED
EXISTING CONCRETE WALLS TO BE REMOVED
EXISTING CONCRETE WALLS TO BE REMOVED
EXISTING MONITORING WELL TO BE REMOVED
EXISTING MONITORING WELL TO BE REMOVED
EXISTING ASPHALT PAVEMENT TO BE REMOVED TO LIMITS SHOWN
EXISTING ASPHALT PAVEMENT TO BE REMOVED TO LIMITS SHOWN
EXISTING UG ELECTRICAL TO BE REMOVED
EXISTING UG ELECTRICAL TO BE REMOVED
EXISTING ELECTRICAL MH TO BE REMOVED
EXISTING MONITORING WELL TO BE REMOVED
EXISTING CHAIN LINK GATE TO BE REMOVED
LIMIT OF EXISTING CHAIN LINK FENCE REMOVAL
LIMIT OF EXISTING CHAIN LINK FENCE REMOVAL
EXISTING CONTAINER TO BE REMOVED AND RELOCATED ON-SITE
PROPOSED SAWCUT LIMIT
PROPOSED SAWCUT LIMIT
EXISTING ASPHALT PAVEMENT TO BE REMOVED TO LIMITS SHOWN
EXISTING STORM SEWER MH TO BE REMOVED
EXISTING HDPE STORM SEWER PIPE TO BE REMOVED
EXISTING UG ELECTRICAL TO BE REMOVED
EXISTING MONITORING WELL TO BE REMOVED
EXISTING CHAIN LINK FENCE TO BE REMOVED TO LIMITS SHOWN
EXISTING BOLLARD TO BE REMOVED
MASONRY BUILDING
MASONRY BUILDING
10/SNOW REMOVAL EQUIPMENT
(F.F.E. = 422.87'±)
CONTAINER
CONTAINER
CONTAINER
SALT AND SAND STORAGE
SALT AND SAND STORAGE
DETENTION BASIN
DETENTION BASIN
WOODED AREA
WOODED AREA
GRAVEL
PAVEMENT
CHAIN LINK FENCE
CONCRETE BOLLARDS
RGW
STONE DRIVE
PAVERS
LS
DRAINAGE SWALE
24" RCP
30" HDPE
24" HDPE
20" HDPE
18" HDPE
16" HDPE
15" HDPE
14" HDPE
12" HDPE
21" HDPE
CB#1 MA/GRATE
CB#2 MA/GRATE
CB#3 MA/GRATE
CB#4 MA/GRATE
CB#5 MA/GRATE
CB#6 MA/GRATE
CB#7 MA/GRATE
CB#8 MA/GRATE
CB#9 MA/GRATE
CB#10 MA/GRATE
DMH #1 RIM 408.0 INV 401.5
DMH #2 RIM 422.3 INV 408.25
DMH #3 RIM 422.0 INV 416.8
DMH #4 RIM 422.34 INV 418.2
DMH #5 RIM 422.0 INV 416.5
DMH #6 RIM 422.0 INV 416.5
DMH #7 RIM 422.0 INV 416.5
DMH #8 RIM 422.0 INV 416.5
DMH #9 RIM 422.0 INV 416.5
DMH #10 RIM 422.0 INV 416.5
DMH



A1 **SITE PLAN**
SCALE: 1" = 30'-0"

CERTIFICATE OF AUTHORIZATION # 0021365

IN CHARGE OF S. MEARON
CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

STATE OF NEW YORK — ERIC KENNA — 088339 — LICENSED PROFESSIONAL ENGINEER
REGISTRATION EXPIRES: 07/31/2027

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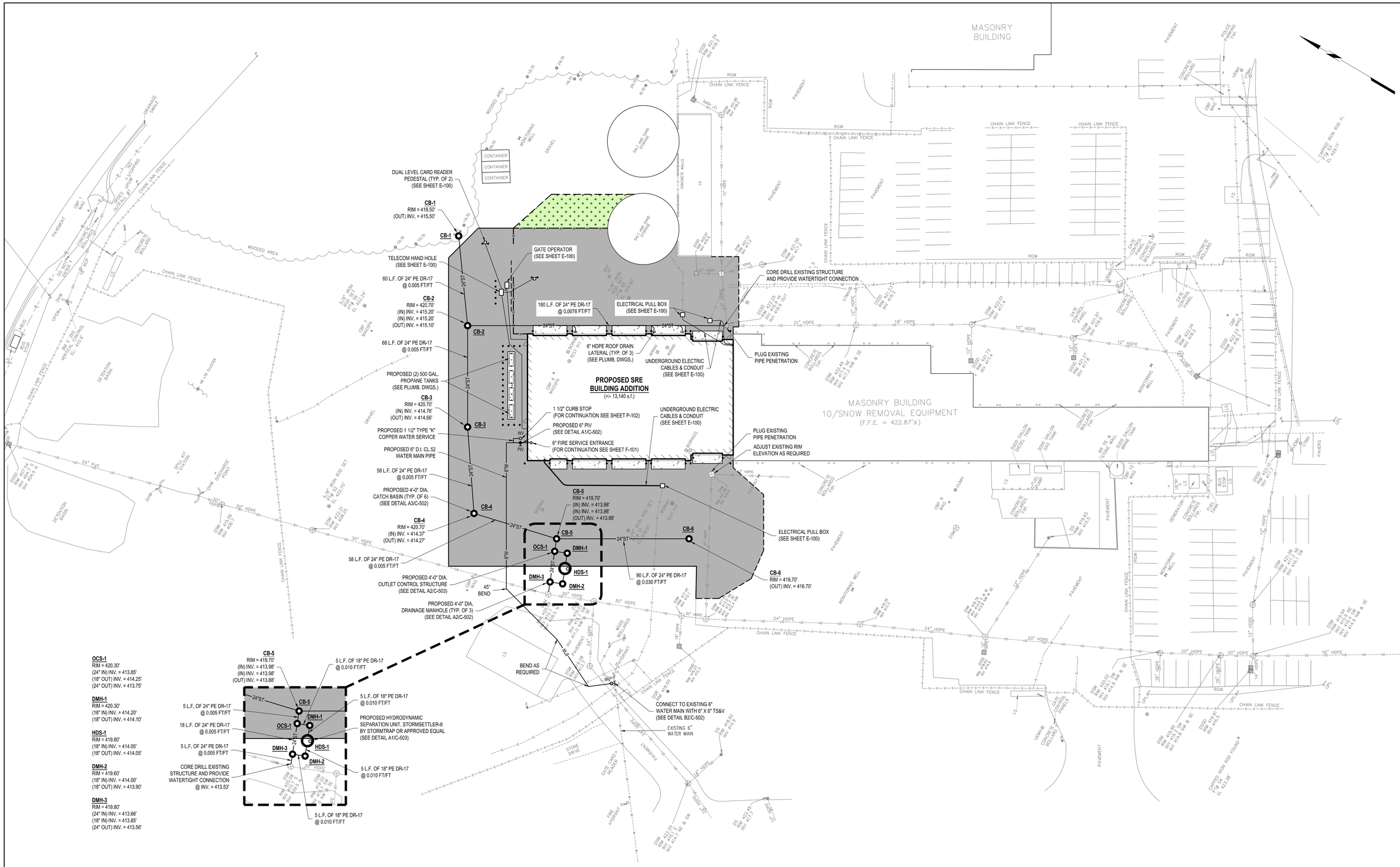
PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
SITE PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	C-101

SHEET NO. 8 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-C-74
REV. NO. 0



A1 **UTILITY PLAN**
SCALE: 1" = 30'-0"

0 30' 60'

CERTIFICATE OF AUTHORIZATION # 0021365

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CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

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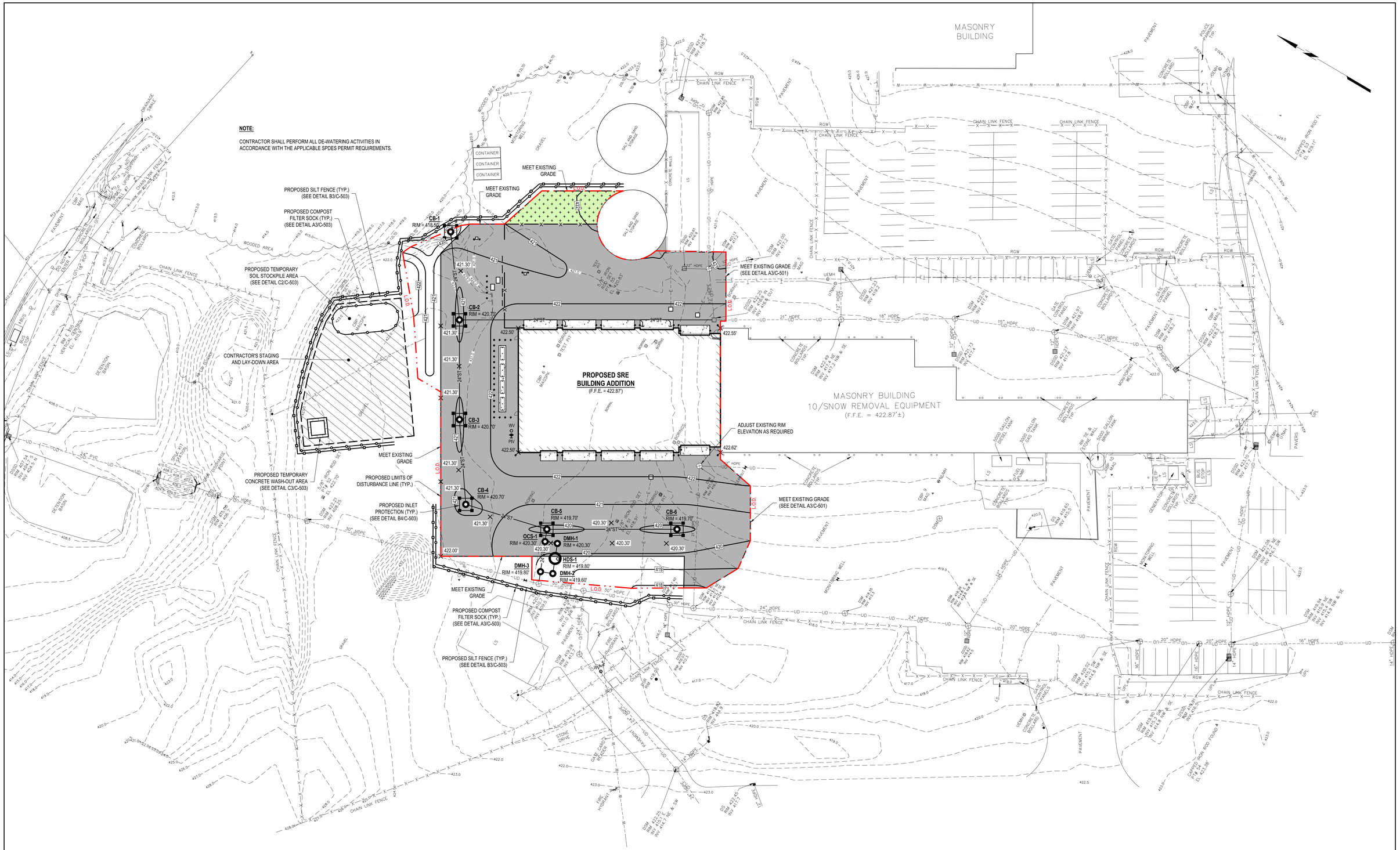
PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
UTILITY PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	C-102

SHEET NO. 9 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-C-75
REV. NO. 0



A1 **GRADING PLAN**
SCALE: 1" = 30'-0"

0 30' 60'

CERTIFICATE OF AUTHORIZATION # 0021365

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CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

STATE OF NEW YORK ERIC KENNA 088339 LICENSED PROFESSIONAL ENGINEER
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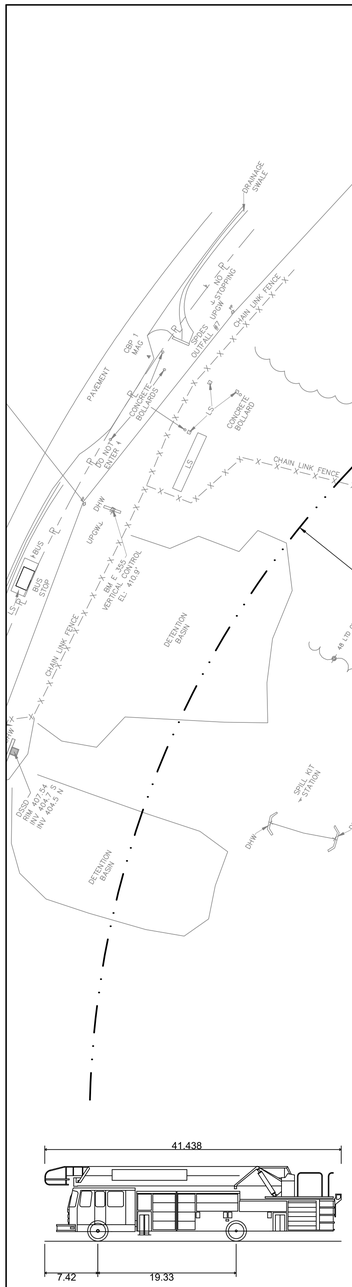
PROJECT COORDINATOR
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SIGNATURE
TITLE DATE

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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
GRADING PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	C-103

SHEET NO. 10 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-C-76
REV. NO. 0



Sutphen MiniTower SL75' Aerial Apparatus

Overall Length	41.438ft
Overall Width	8.167ft
Overall Body Height	10.461ft
Min Body Ground Clearance	0.891ft
Track Width	8.167ft
Lock-to-lock time	5.00s
Curb to Curb Turning Radius	35.417ft

A1 **SITE PLAN**
SCALE: 1" = 30'-0"

0 30' 60'

CERTIFICATE OF AUTHORIZATION # 0021365

IN CHARGE OF S. MEARON
CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

STATE OF NEW YORK ERTC KENNA LICENSED PROFESSIONAL ENGINEER 088339

REGISTRATION EXPIRES: 07/31/2027

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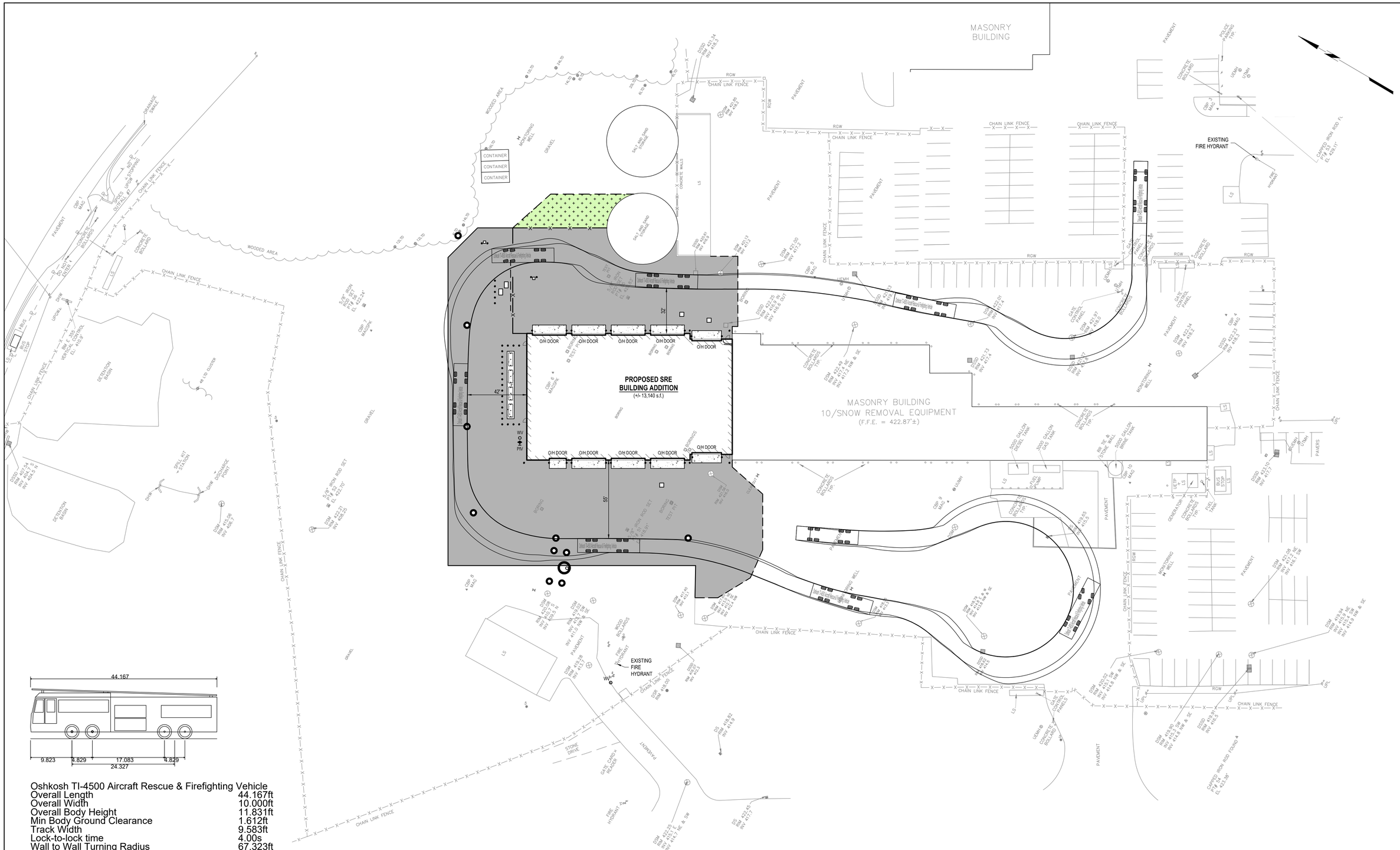
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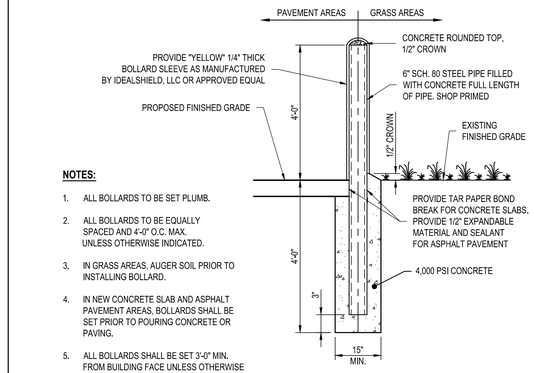
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NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
FIRE TRUCK TRAVEL PATH PLAN (STANDARD AERIAL LADDER TRUCK)

CONTRACT NUMBER	SHEET NUMBER
23-528	C-104

SHEET NO. 11 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-C-77
REV. NO. 0


MASONRY BUILDING
PROPOSED SRE BUILDING ADDITION
(+/- 13,140 s.f.)
MASONRY BUILDING
10/SNOW REMOVAL EQUIPMENT
(F.F.E. = 422.87'±)
EXISTING FIRE HYDRANT
CONTAINER
CONTAINER
CONTAINER
SALT AND SAND STORAGE
SALT AND SAND STORAGE
CONCRETE WALLS
O/H DOOR
O/H DOOR
O/H DOOR
O/H DOOR
O/H DOOR
O/H DOOR
O/H DOOR
O/H DOOR
O/H DOOR
42'
55'
32'
WOODED AREA
WOODED AREA
GRAVEL
GRAVEL
PAVEMENT
PAVEMENT
PAVEMENT
PAVEMENT
PAVEMENT
CHAIN LINK FENCE
CHAIN LINK FENCE
CHAIN LINK FENCE

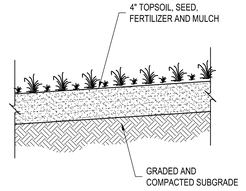


NOTES:

1. ALL BOLLARDS TO BE SET PLUMB.
2. ALL BOLLARDS TO BE EQUALLY SPACED AND 4'-0" O.C. MAX. UNLESS OTHERWISE INDICATED.
3. IN GRASS AREAS, AUGER SOIL PRIOR TO INSTALLING BOLLARD.
4. IN NEW CONCRETE SLAB AND ASPHALT PAVEMENT AREAS, BOLLARDS SHALL BE SET PRIOR TO POURING CONCRETE OR PAVING.
5. ALL BOLLARDS SHALL BE SET 3'-0" MIN. FROM BUILDING FACE UNLESS OTHERWISE NOTED.

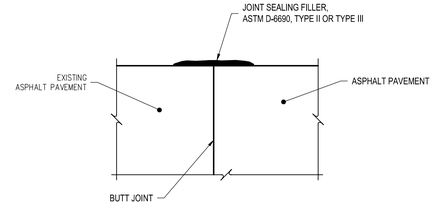
C2 TYPICAL STEEL PIPE BOLLARD DETAIL

SCALE: NOT TO SCALE



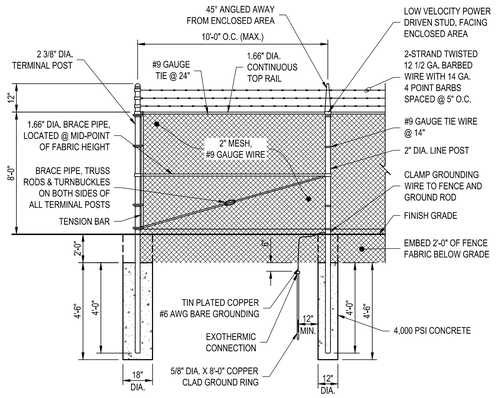
C3 GRASS RESTORATION DETAIL

SCALE: NOT TO SCALE



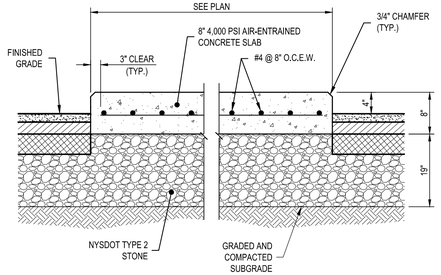
C4 TYPICAL JOINT SEALING DETAIL

SCALE: NOT TO SCALE



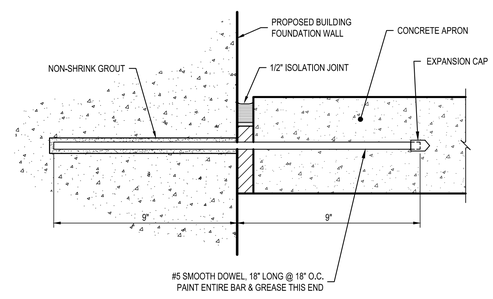
B1 CHAIN LINK PERIMETER FENCE DETAIL

SCALE: NOT TO SCALE



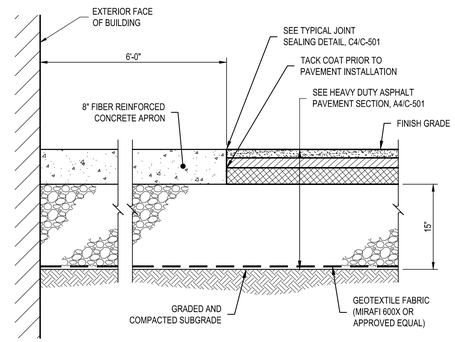
B2 CONCRETE EQUIPMENT PAD DETAIL

SCALE: NOT TO SCALE



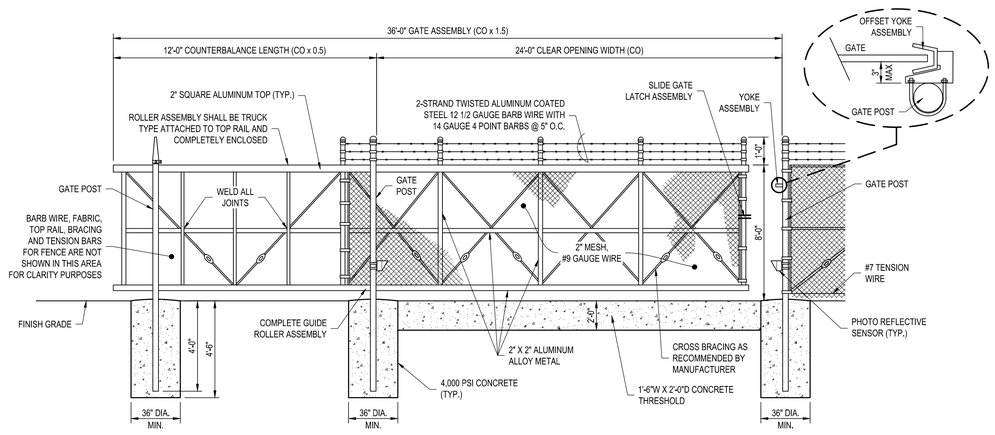
B3 DOWEL DETAIL @ CONCRETE APRON & BUILDING FACE

SCALE: NOT TO SCALE



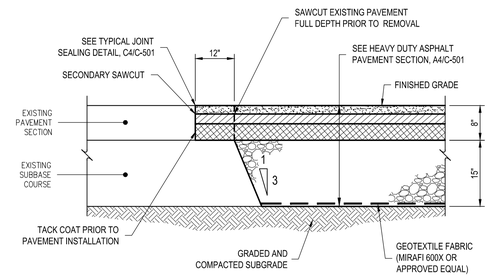
B4 CONCRETE APRON @ OVERHEAD DOORS

SCALE: NOT TO SCALE



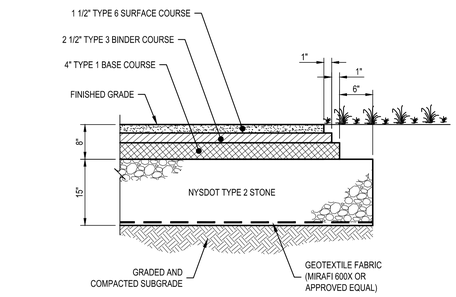
A1 SLIDE GATE DETAIL

SCALE: NOT TO SCALE



A3 HEAVY DUTY KEYING DETAIL @ EXISTING PAVEMENT

SCALE: NOT TO SCALE



A4 HEAVY DUTY PAVEMENT SECTION DETAIL

SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION # 0021365

IN CHARGE OF S. MEARON
CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

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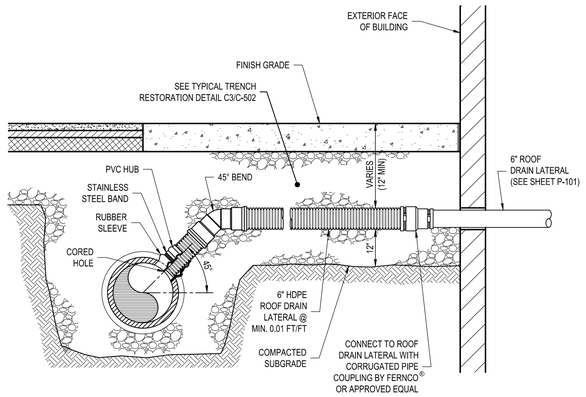
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	C-501

SHEET NO. 13 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-C-79	0



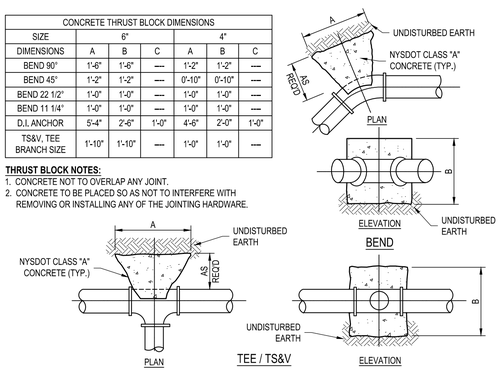
C1 ROOF LEADER CONNECTION DETAIL

SCALE: NOT TO SCALE

CONCRETE THRUST BLOCK DIMENSIONS						
SIZE	6"			4"		
DIMENSIONS	A	B	C	A	B	C
BEND 90°	1'-6"	1'-6"	----	1'-2"	1'-2"	----
BEND 45°	1'-2"	1'-2"	----	0'-10"	0'-10"	----
BEND 22 1/2°	1'-0"	1'-0"	----	1'-0"	1'-0"	----
BEND 11 1/4°	1'-0"	1'-0"	----	1'-0"	1'-0"	----
D.I. ANCHOR	5'-4"	2'-6"	1'-0"	4'-6"	2'-0"	1'-0"
TS&V, TEE BRANCH SIZE	1'-10"	1'-10"	----	1'-0"	1'-0"	----

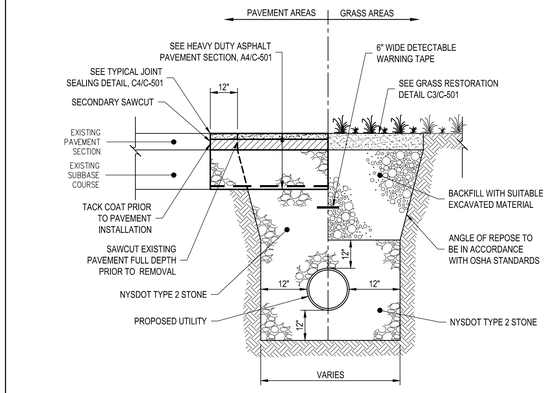
THRUST BLOCK NOTES:

1. CONCRETE NOT TO OVERLAP ANY JOINT.
2. CONCRETE TO BE PLACED SO AS NOT TO INTERFERE WITH REMOVING OR INSTALLING ANY OF THE JOINTING HARDWARE.



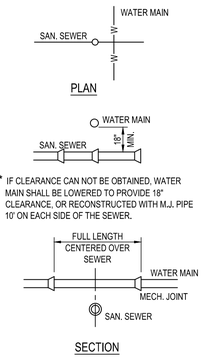
C2 TYPICAL THRUST BLOCK DETAIL

SCALE: NOT TO SCALE



C3 UTILITY TRENCH AND RESTORATION DETAIL

SCALE: NOT TO SCALE

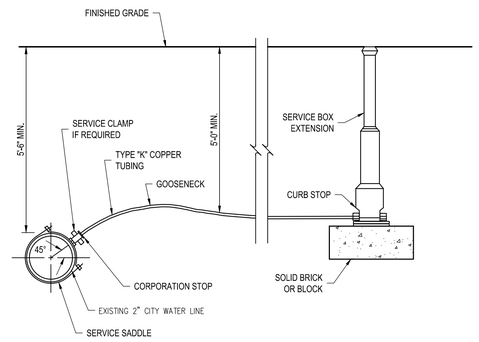


NOTE:

WHEREVER REQUIRED VERTICAL CLEARANCE CAN NOT BE OBTAINED, THE SANITARY SEWER SHALL BE ENCASED IN NYSDOT CLASS "A" CONCRETE FOR A DISTANCE OF 10' EITHER SIDE OF THE INTERSECTION WITH THE WATER MAIN AS INSTRUCTED BY THE ENGINEER. CLEARANCE REQUIREMENTS SHALL BE AS OUTLINED IN PART 8.8 IN THE "RECOMMENDED STANDARDS FOR WATER WORKS." ALSO REQUIRED IS A 10' MINIMUM HORIZONTAL SEPARATION BETWEEN STORM SEWERS & WATER MAINS.

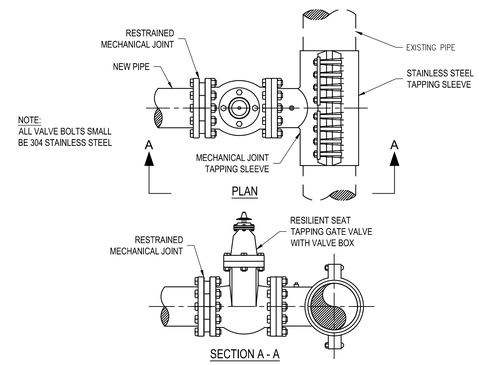
C4 SEWER MAIN & WATER MAIN SEPARATION DETAIL

SCALE: NOT TO SCALE



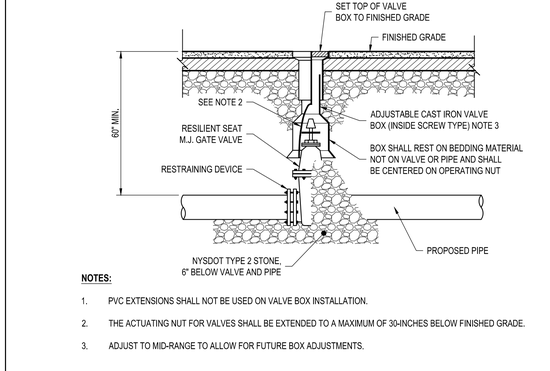
B1 TYPICAL WATER SERVICE CONNECTION DETAIL

SCALE: NOT TO SCALE



B2 TAPPING SLEEVE AND VALVE (TS&V) DETAIL

SCALE: NOT TO SCALE

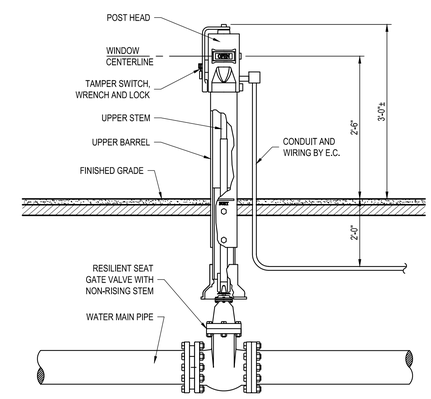


NOTES:

1. PVC EXTENSIONS SHALL NOT BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR VALVES SHALL BE EXTENDED TO A MAXIMUM OF 30-INCHES BELOW FINISHED GRADE.
3. ADJUST TO MID-RANGE TO ALLOW FOR FUTURE BOX ADJUSTMENTS.

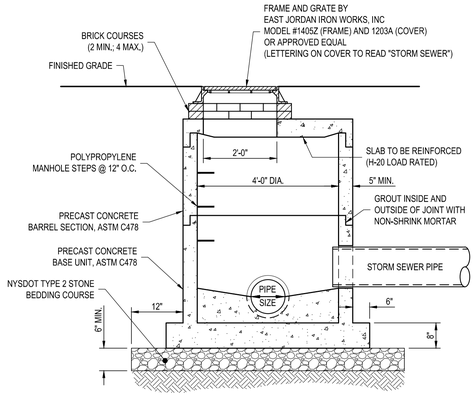
B3 GATE VALVE DETAIL

SCALE: NOT TO SCALE



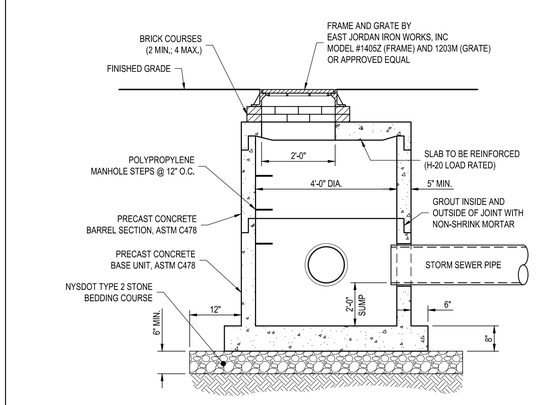
A1 POST INDICATOR VALVE (PIV) DETAIL

SCALE: NOT TO SCALE



A2 4' DIA. CONCRETE DRAINAGE MANHOLE DETAIL

SCALE: NOT TO SCALE



A3 4' DIA. CONCRETE CATCH BASIN DETAIL

SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION # 0021365

IN CHARGE OF S. MEARON
CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

STATE OF NEW YORK · ERIC KENNA · 088339 · LICENSED PROFESSIONAL ENGINEER

REGISTRATION EXPIRES: 07/31/2027

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Syracuse, New York 13212
Phone: 315-455-2000
www.cscos.com

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

RECORD DRAWING CERTIFICATION

☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

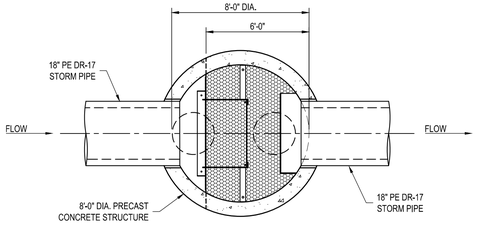
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	C-502

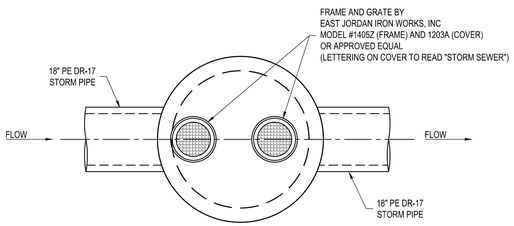
SHEET NO. 14 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

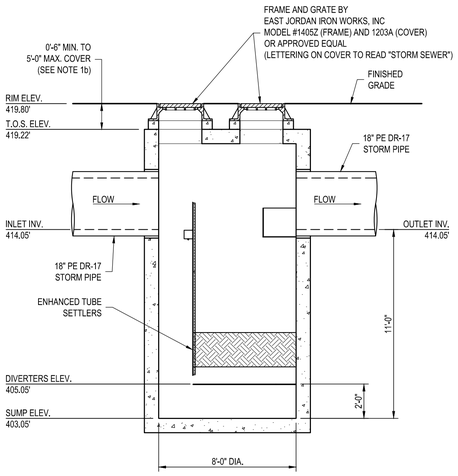
DPW FILE NO.	REV. NO.
48-16-C-80	0



PLAN SECTION



PLAN VIEW



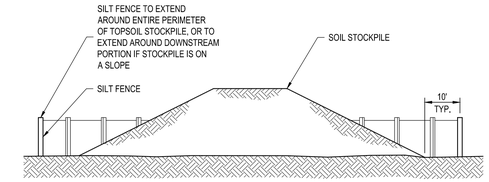
SECTION

DESIGN NOTES:

1. DESIGN LOADING
   a. LOAD RATING: AASHTO HS-20
   b. ALLOWABLE COVER: 0'-6" TO 5'-0".
2. MAXIMUM WATER QUALITY FLOW RATE:
   a. 5.63 CFS PER NJDEP CERTIFICATION (50%).
   b. 3.71 CFS PER OK-110 NJDEP VERIFICATION (80%).
3. CONCRETE COMPONENTS SHALL BE MANUFACTURED IN ACCORDANCE WITH ASTM C478.
4. CONTRACTOR TO INSTALL THE STRUCTURE IN ACCORDANCE WITH ASTM C1821.
5 CONTRACTOR TO PROVIDE ALL LABOR AND EQUIPMENT REQUIRED TO OFFLOAD AND INSTALL UNIT.
6. CONTRACTOR TO PROVIDE AND INSTALL ALL PIPES, FRAMES, COVERS, HATCHES, AND RISERS UNLESS SPECIFIED OTHERWISE.
7. CONTRACTOR TO ADD JOINT SEALANT (PROVIDED BY MANUFACTURER) BETWEEN ALL STRUCTURE SECTIONS.

A1 HYDRODYNAMIC SEPARATION UNIT DETAIL

SCALE: NOT TO SCALE

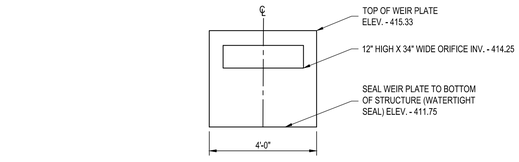


TEMPORARY SOIL STOCKPILE NOTES:

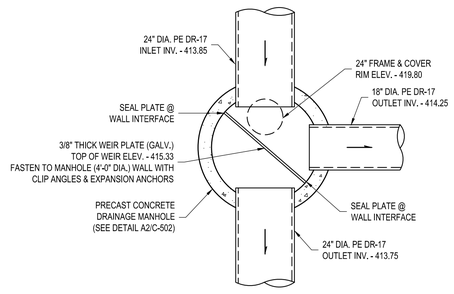
1. REFER TO SILT FENCE DETAIL FOR MATERIALS AND INSTALLATION METHODS.
2. IF THE STOCKPILE IS TO REMAIN FOR MORE THAN 14 DAYS, IT SHALL BE STABILIZED WITH BURLAP MATTING OR SEEDED WITHIN 7 DAYS OF COMPLETION TO MINIMIZE EROSION.
3. INSPECTION OF SILT FENCE SHALL BE AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF 1/2". REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
4. SEDIMENT TRAPPED BY THE SILT FENCE SHALL BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.
5. SILT FENCE SHALL BE MAINTAINED IN PLACE UNTIL SOIL STOCKPILE HAS BEEN ELIMINATED AND SHALL BE REMOVED ONLY WHEN DIRECTED BY THE ENGINEER.
6. SOIL STOCKPILE LOCATION SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE OWNER OR AN AUTHORIZED REPRESENTATIVE

C2 TEMPORARY SOIL STOCKPILE DETAIL

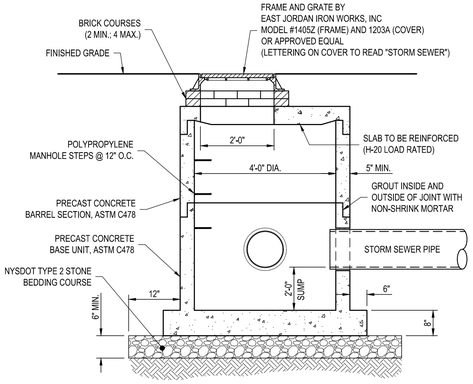
SCALE: NOT TO SCALE



WEIR PLATE - ELEVATION VIEW



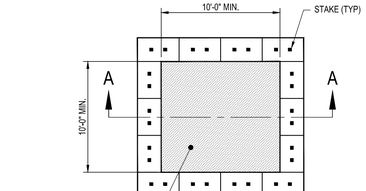
PLAN



SECTION

A2 OUTLET CONTROL STRUCTURE DETAIL

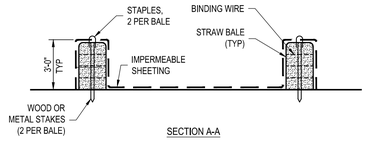
SCALE: NOT TO SCALE



PLAN

NOTE:

CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH



SECTION A-A



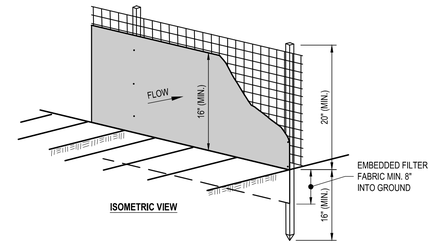
STAPLE DETAIL

CONSTRUCTION SPECIFICATIONS:

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC,
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER.
6. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

C3 TEMPORARY CONCRETE WASH-OUT AREA (STRAW BALE) DETAIL

SCALE: NOT TO SCALE



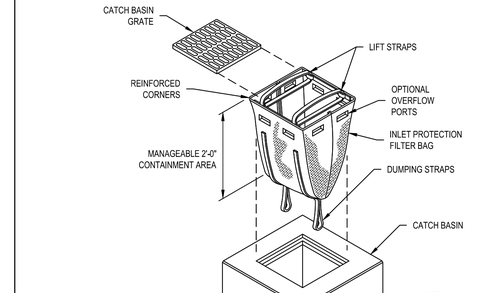
ISOMETRIC VIEW

SILT FENCE NOTES:

1. SILT FENCE SHALL BE INSTALLED UPSTREAM OF THE COMPOST FILTER SOCK.
2. WOVEN WIRE FENCE SHALL BE SECURELY FASTENED TO FENCE POSTS WITH WIRE TIES OR STAPLES.
3. SILT FENCE FABRIC SHALL BE SECURELY FASTENED TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID-SECTION. WHEN TWO SECTIONS OF SILT FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
4. MAINTENANCE SHALL BE PROVIDED BY THE CONTRACTOR AS DIRECTED BY ENGINEER AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
5. CONTRACTOR SHALL REMOVE THE SILT FENCE AT THE APPROPRIATE TIME, DRESS THE DISTURBED AREAS, AND DISPOSE OF THE SILT FENCE.

B3 SILT FENCE DETAIL

SCALE: NOT TO SCALE

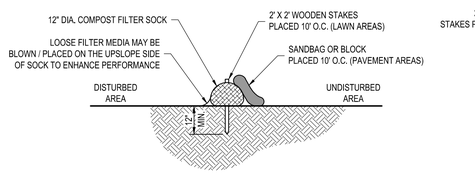


NOTE:

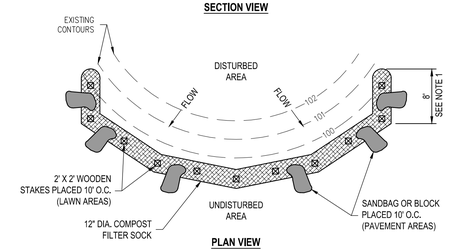
INLET PROTECTION FILTER BAG SHALL BE A DANDY SACK ™ BY DANDY PRODUCTS, INC. OR APPROVED EQUAL.

B4 INLET PROTECTION FILTER BAG

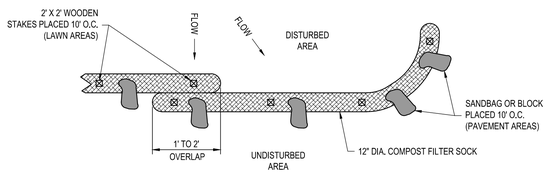
SCALE: NOT TO SCALE



SECTION VIEW



PLAN VIEW



OVERLAPPING

COMPOST FILTER SOCK NOTES:

1. COMPOST FILTER SOCK SHALL BE PLACED AT EXISTING LEVEL GRADE. BOTH ENDS OF THE SOCK SHALL BE EXTENDED AT LEAST 8 FEET UP SLOPE AT 45 DEGREES TO THE MAIN SOCK ALIGNMENT. STAKES MAY BE INSTALLED IMMEDIATELY DOWNSLOPE OF THE SOCK IF SO SPECIFIED BY THE MANUFACTURE
2. TRAFFIC SHALL NOT BE PERMITTED TO CROSS FILTER SOCKS.
3. ACCUMULATED SEDIMENT SHALL BE REMOVED WHEN IT REACHES HALF THE ABOVEGROUND HEIGHT OF THE SOCK AND DISPOSED IN THE MANNER DESCRIBED ELSEWHERE IN THE PLAN.
4. SOCKS SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT. DAMAGED SOCKS SHALL BE REPAIRED ACCORDING TO MANUFACTURER'S SPECIFICATIONS OR REPLACED WITHIN 24 HOURS OF INSPECTION.
5. BIODEGRADABLE FILTER SOCKS SHALL BE REPLACED AFTER 6 MONTHS; PHOTODEGRADABLE SOCKS AFTER 1 YEAR. POLYPROPYLENE SOCKS SHALL BE REPLACED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
6. UPON STABILIZATION OF THE AREA TRIBUTARY TO THE SOCKS, STAKES SHALL BE REMOVED. THE SOCK MAY BE LEFT IN PLACE AND VEGETATED OR REMOVED. IN THE LATTER CASE, THE MESH SHALL BE CUT OPEN AND THE MULCH SPREAD AS A SOIL SUPPLEMENT.

A3 COMPOST FILTER SOCK DETAIL

SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION # 0021365

IN CHARGE OF S. MEARON
CHECKED BY E. KENNA, P.E.
MADE BY M. ZINGARO

STATE OF NEW YORK · ERIC KENNA · 088339 · LICENSED PROFESSIONAL ENGINEER

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REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

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☐ AS BUILT – CHANGES AS NOTED
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CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	C-503

SHEET NO. 15 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-C-81	0

GENERAL NOTES:

1. CODES AND REFERENCE STANDARDS: 2020 NYS BUILDING CODE AND ASCE 7-16

2. STRUCTURAL LOADING DESIGN DATA:

A.	ROOF DEAD LOAD:	
	MAIN ROOF AND WASHBAY ROOF DL + COLATTERAL:	15 PSF
	STEEL JOIST WEIGHT:	32 PLF
	SOLAR SYSTEM ENTIRE ROOF SURFACE COLATTERAL:	8 PSF (+4PSF MAX AT EDGE LINE OF PANELS AT GRID 1, 5 & 7)
	MECHANICAL ROOM CAP ROOF:	10 PSF
B.	ROOF LIVE LOAD:	
	MAIN ROOF AND WASHBAY ROOF:	20 PSF
	MECHANICAL ROOM:	100 PSF INCIDENTAL/MECH (NOT FOR STORAGE)
C.	GROUND FLOOR LIVE LOAD:	
	FIRST FLOOR :	175 PSF
	FIRST FLOOR : (ANALYZED SEPARATELY FROM 175PSF):	AASHTO HL-93 TRUCK & LANE LOADING
	MECHANICAL ROOMS:	200 PSF, 2000 LBS*
	LIVE LOAD REDUCTION	N/A
D.	GROUND FLOOR DEAD LOADS:	
	SUPERIMPOSED DL	5 PSF
E.	WIND LOAD (3-SEC. GUST):	
	ULTIMATE WIND SPEED:	115 MPH
	RISK CATEGORY:	II
	EXPOSURE CATEGORY:	C
	INTERNAL PRESSURE COEFFICIENT:	±0.18
	WIND-BORNE DEBRIS REGION	NA
F.	RAIN INTENSITY:	2.61 IN./HR
G.	SNOW LOAD:	
	GROUND SNOW LOAD (Pg)	30 PSF
	FLAT-ROOF SNOW LOAD (Pf)	21 PSF
	SNOW EXPOSURE FACTOR (Ce)	1.0
	SNOW IMPORTANCE FACTOR (Is)	1.0
	THERMAL FACTOR (Ct)	1.0
	DRIFT LOADS (3:1 TRIANGLE DISTRIBUTION PER ASCE7)	UPPER ROOF: NO DRIFT, WASHBAY +68 PSF MAX @2'-6" FROM GRID 5
H.	SEISMIC LOAD:	
	RISK CATEGORY	II
	SEISMIC IMPORTANCE FACTOR	1.0
	SS	.285
	S1	.061
	SITE CLASS	C - PER GEOTECH REPORT
	Sds	.247
	Sd1	.061
	SEISMIC DESIGN CATEGORY	B
	ANALYSIS PROCEDURE USED	EQUIVALENT LATERAL FORCE
	BASIC SEISMIC FORCE-RESISTING SYSTEM	DUAL SYSTEM WITH INTERMEDIATE MOMENT FRAMES & ORDINARY REINFORCED MASONRY SHEAR WALLS
	RESPONSE MODIFICATION COEFFICIENT, R	3.0
	SEISMIC RESPONSE COEFFICIENT, Cs	.070
	STEEL MSFRS ULTIMATE SEISMIC BASE SHEAR, V	42.5 KIPS (>25% OF TOTAL BASE SHEAR PER ASCE 7-16)
	TOTAL MSFRS ULTIMATE SEISMIC BASE SHEAR, V	93 KIPS

3. HANDRAIL ASSEMBLIES AND GUARDS SHALL BE DESIGNED FOR 50 PLF OR A CONCENTRATED LOAD OF 200 LBS LOCATED AT ANY POINT APPLIED IN ANY DIRECTION AT THE TOP AND TRANSFER THE LOAD TO THE SUPPORT STRUCTURE. THE LOADS NEED NOT TO ACT CONCURRENTLY.

GENERAL (THE FOLLOWING REQUIREMENTS TOGETHER WITH THE PROJECT PLANS AND SPECIFICATIONS SHALL APPLY TO THE STRUCTURES IN THIS CONTRACT.)

1. THE CONTRACTOR IS RESPONSIBLE FOR THE SURVEY AND FIELD VERIFYING ALL EXISTING CONDITIONS.

2. WORK ON STRUCTURAL DRAWINGS REPRESENTS FINAL CONDITIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR THE STRUCTURAL STABILITY OF ALL INTERMEDIATE CONDITIONS DURING CONSTRUCTION.

3. THE CONTRACTOR SHALL COORDINATE THE ARCHITECTURAL, PLUMBING, HVAC, AND ELECTRICAL DRAWINGS AND SPECIFICATIONS FOR ADDITIONAL INFORMATION NOT INDICATED ON THE STRUCTURAL DRAWINGS. SUCH INFORMATION INCLUDES, AS A MINIMUM, EMBEDDED SLEEVES AND INSERTS, MISCELLANEOUS DETAILS, SPECIAL FLOOR FINISHES, DOOR THRESHOLDS, SLOPES TO DRAINS, NAILERS, OPENINGS IN STRUCTURAL ELEMENTS, ETC.

4. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE ERECTION PROCEDURE AND SEQUENCE TO ENSURE THE SAFETY OF THE STRUCTURE AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE ADDITION OF WHATEVER TEMPORARY BRACING, GUYS, TIE-DOWNS, AND/OR SHORING MAY BE NECESSARY. SUCH MATERIAL SHALL BE REMOVED AND SHALL REMAIN THE PROPERTY OF THE CONTRACTOR AFTER THE COMPLETION OF THE PROJECT.

5. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR FOR INITIATING, MAINTAINING, AND SUPERVISING ALL SAFETY PROCEDURES. THE STRUCTURAL ENGINEER OF RECORD IS NOT RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION OR FOR RELATED SAFETY PROCEDURES.

6. TYPICAL NOTES AND DETAILS SHOWN ON STRUCTURAL TYPICAL DETAILS SHALL BE APPLICABLE TO ALL PARTS OF THE STRUCTURAL WORK EXCEPT WHERE SPECIFICALLY REQUIRED OTHERWISE ON THE CONTRACT DOCUMENTS. DETAILS NOT SPECIFICALLY SHOWN SHALL BE SIMILAR TO THOSE SHOWN FOR THE MOST NEARLY SIMILAR CONDITION ON THE DRAWINGS AS DETERMINED BY THE ENGINEER.

7. DO NOT SCALE DRAWING DIMENSIONS. IN THE EVENT OF A GRID LINE DIMENSION CONFLICT, THE ARCHITECTURAL DRAWINGS SHALL GOVERN.

8. THE CONTRACTOR SHALL SUBMIT COMPLETE SHOP DRAWINGS FOR ALL PARTS OF THE WORK INCLUDING DESCRIPTION OF DEMOLITION, TEMPORARY BRACING, CONSTRUCTION METHODS AND SEQUENCING, WHERE APPLICABLE NO PERFORMANCE OF WORK SHALL COMMENCE WITHOUT REVIEW OF THE SHOP DRAWINGS BY THE ENGINEER.

9. FABRICATION PRIOR TO THE RECEPT OF AN APPROVED SHOP DRAWINGS SHALL BE AT THE CONTRACTOR'S OWN RISK AND THAT INSTALLATION OF ANY WORK PRIOR TO RECEIPT OF AN APPROVED SHOP DRAWING SHALL BE STRICTLY PROHIBITED.

10. FOR ELEVATIONS REFER TO THE PLAN SHEETS.

11. DRILLING, CORING, SAW CUTTING AND ETC. INTO CONCRETE SHALL MEET THE LATEST OSHA REGULATIONS FOR SILICA DUST EXPOSURE.

EXCAVATION:

1. DEWATER, EXCAVATE, FILL AND COMPACT SOIL IN PREPARATION FOR SLAB ON GRADE, WALLS, AND FOUNDATION IN ACCORDANCE WITH THE RECOMMENDATIONS PRESENTED IN THE GEOTECHNICAL REPORT PREPARED BY RENAISSANCE GEOTECHNICAL ENGINEERING, PLLC REPORT NUMBER 23.0018 DATED MAY 08, 2023, AND RENAISSANCE GEOTECHNICAL ENGINEERING, PLLC GEOTECHNICAL REPORT ADDENDUM 1 DATED AUGUST 27, 2023. PER GEOTECHNICAL REPORT THIS SITE HAS A HIGH WATER TABLE GENERAL CONTRACTOR IS RESPONSIBLE FOR DESIGN INSTALLATION AND PROPER APPLICATION OF DEWATERING SYSTEM TO SERVE THE MEANS AND METHODS INTENT AND PHASES OF CONSTRUCTION OPERATIONS ON THE SITE. PROTECT GRADE MATERIALS FROM DEGREDATION DUE TO WATER AND WEATHER EXPOSURE.

2. ALL EXCAVATIONS SHALL BE DEWATERED TO MAINTAIN GROUNDWATER AT LEAST 24" BELOW FOOTING BEFORE PLACING OF CONCRETE.

3. SLOPE THE EXTERIOR GRADE AWAY FROM THE STRUCTURE. REFER TO CIVIL PLANS FOR DETAILS.

4. CONTRACTOR RESPONSIBLE TO PROVIDE TEMPORARY OR PERMANENT SUPPORTS, SHORING, SHEETING OR BRACING SO THAT NO HORIZONTAL MOVEMENT OR VERTICAL SETTLEMENT OCCURS TO ADJACENT STRUCTURES, STREETS, SOILS OR UTILITIES ADJACENT TO OR WITHIN THE PROJECT SITE.

5. BACKFILL SHALL BE PLACED IN COMPACTED LIFTS PER THE EARTHWORK SPECIFICATIONS.

6. NO FOUNDATION CONCRETE SHALL BE PLACED IN WATER.

7. DO NOT BACKFILL BEHIND FOUNDATION WALLS UNTIL THE PERMANENT LATERAL SUPPORT SYSTEM IS IN PLACE AND OF FULL STRENGTH.

8. COMPONENTS OF ANY SUPPORT OF EXCAVATION SYSTEM SHALL REMAIN IN PLACE UNTIL ALL PERMANENT STRUCTURAL SYSTEMS AT AND BELOW GROUND ARE IN PLACE.

9. STRUCTURE WITH BACKFILL ON BOTH SIDES SHALL RECEIVE BACKFILL IN BALANCED 95% COMPACTED LIFTS OF CRUSHED STONE EACH SIDE.

10. FOUNDATIONS SHALL BE DRILLED DISPLACEMENT MICROPILES DESIGNED BY INSTALLER'S ENGINEER FOR THE SOIL CONDITIONS AND CONSTRAINTS OUTLINED IN THE MICROPILING REQUIREMENTS OF GEOTECHNICAL REPORT ADDENDUM 1. REQUIRED CAPACITY NOTED ON S-101

SOILS:

1. THE FOUNDATION HAS BEEN DESIGNED IN ACCORDANCE WITH THE RECOMMENDATIONS CONTAINED IN THE GEOTECHNICAL REPORT PREPARED BY RENAISSANCE GEOTECHNICAL ENGINEERING, PLLC REPORT NUMBER 23.0018 DATED MAY 08, 2023.

2. THE GEOTECHNICAL REPORT NAMED ABOVE IS AVAILABLE TO THE CONTRACTOR UPON REQUEST TO THE OWNER. THE ARCHITECT AND ENGINEER WILL NOT BE RESPONSIBLE FOR THE ACCURACY OR APPLICABILITY OF SUCH DATA THEREIN.

3. NO RESPONSIBILITY IS ASSUMED BY THE ENGINEER FOR THE VALIDITY OF THE SUBSURFACE CONDITIONS DESCRIBED ON THE DRAWINGS, SPECIFICATIONS, TEST BORINGS, OR TEST PITS. THESE DATA ARE INCLUDED ONLY TO ASSIST THE CONTRACTOR DURING BIDDING AND SUBSEQUENT CONSTRUCTION. THEY REPRESENT CONDITIONS ONLY AT THE SPECIFIC LOCATIONS AT THE TIME DATA WAS COLLECTED.

4. MAXIMUM ALLOWABLE SOIL BEARING PRESSURE = STRUCTURE SUPPORTED BY PILES

5. PILE CAPS TO BEAR ON NATURAL UNDISTURBED SOIL OR COMPACTED FILL PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS TO EXHIBIT A DENSITY OF AT LEAST 95 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D 1557 (MODIFIED PROCTOR).

6. GEOTECHNICAL ENGINEER MUST REVIEW THE FINAL SITE AND GRADING PLANS TO VALIDATE ALL RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND CONFIRM THEIR FINDINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF INSPECTIONS OR EXAMINATIONS PRIOR TO CONSTRUCTION COMMENCEMENT.

7. PERFORM SOIL COMPACTION TESTING, AT LEAST ONE TEST EVERY 100 LINEAR FEET OF FOUNDATION. PROVIDE A MINIMUM OF 2 SOIL COMPACTION TESTS AT EVERY 1000 SF OF BUILDING SLAB.

STRUCTURAL STEEL:

1. STANDARDS:
   DESIGN - AISC 360 - 2016
   CONSTRUCTION - AISC 303, LATEST EDITION
   BOLTED CONNECTIONS - LATEST EDITION OF AISC SPECIFICATIONS FOR STRUCTURAL JOINTS USING ASTM A325.
   WELDED CONNECTIONS - AMERICAN WELDING SOCIETY (AWS) D1.1, LATEST EDITION

2. WIDE FLANGE SECTIONS AND TEES - ASTM A992 (Fy = 50 KSI)

3. SQUARE, RECTANGULAR & ROUND HOLLOW STRUCTURAL SECTIONS (HSS) - ASTM A500 GRADE C.

4. ANGLES, PLATES AND BARS - ASTM A572-50, (EXCEPT WHERE NOTED TO BE ASTM A36)

5. BEAM/COLUMN CONTINUITY PLATES AND DOUBLER PLATES - ASTM A572-50

6. PIPE SECTIONS - ASTM A53 GRADE B.

7. ALL STRUCTURAL BOLTS SHALL BE ASTM A-325 TYPE N UNLESS OTHERWISE NOTED.

8. ALL EMBEDDED STEEL ANCHOR BOLTS SHALL BE FABRICATED IN ACCORDANCE WITH THE LATEST A.I.S.C. STANDARD SPECIFICATIONS AND SHALL BE ASTM F1554, GRADE 55, U.N.O.

9. USE WELDED OR BOLTED SHOP CONNECTIONS AND BOLTED FIELD CONNECTIONS WHERE POSSIBLE.

10. ALL EMBEDDED STEEL SHALL BE HOT DIPPED GALVANIZED AFTER FABRICATION.

11. ALL WELDING SHALL CONFORM WITH THE LATEST EDITION OF AWS CODE. ALL WELDERS (SHOP & FIELD) SHALL BE AWS D1.1 CERTIFIED FOR THE TYPE OF WELDING BEING PERFORMED.

12. TO OBTAIN SPECIFIED ALIGNMENT AND FIT-UP U.N.O. FIELD WELDING MUST BE PERFORMED WHERE SPECIFICALLY NOTED. EDGE OF SLAB AND ROOF BENT PLATES, ANGLES AND OTHER MISC EXTERIOR, OR INTERIOR WALL ALIGNMENT ITEMS SHALL BE FIELD WELDED TO BEAMS. PROVIDE FABRICATION AND ERECTION TOLERANCES MORE STRINGENT THAN SPECIFIED BY AISC WHERE REQUIRED TO ACHIEVE THE DETAILS INDICATED.

13. ALL WELDING SHALL BE DONE USING E70XX ELECTRODES, U.N.O.

14. WHERE A GROOVE WELD IS SHOWN WITHOUT AN INDICATED DEPTH OF PENETRATION THE JOINT SHALL BE A COMPLETE JOINT PENETRATION WELD (CJP).

15. CONNECTIONS ARE DESIGNED AND DIMENSIONED ON THESE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR RETAINING AN AISC CERTIFIED FABRICATOR AND THE SERVICES OF A QUALIFIED STEEL DETAILER TO FINALIZE DETAILING FOR FABRICATION IN ACCORDANCE WITH THE PLAN REQUIREMENTS HEREIN AND AISC CODE OF STANDARD PRACTICE. CONNECTION DIMENSIONS DETAILED ARE TYPICAL TO THAT CONNECTION. FOR ANY DIMENSIONS NOT PROVIDED SEE NOTES 31 & 32 BELOW. DESIGN AND DETAILING OF MISCELLANEOUS METALS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

17. ANCHOR BOLTS OR RODS SHALL BE BUILT INTO CONNECTING WORK PRESET BY TEMPLATES OR SIMILAR METHODS.

18. MINIMUM CONNECTION BOLT DIAMETER IS 3/4 INCH. BEAM CONNECTIONS MUST HAVE AT LEAST TWO BOLTS.

19. PROVIDE FRICTION TYPE BOLT CONNECTIONS IN ALL MOMENT CONNECTIONS.

20. SIMPLE SHEAR CONNECTIONS SHALL BE CAPABLE OF END ROTATION PER AISC REQUIREMENTS FOR UNRESTRAINED MEMBERS.

22. MINIMUM SIZE OF FILLET WELDS SHALL BE 1/4 INCH UNO.

23. PROVIDE FRAMED OR TOP OF COLUMN BEARING BEAM CONNECTIONS IN ACCORDANCE WITH THE AISC MANUAL OF STEEL CONSTRUCTION. UNLESS OTHERWISE NOTED, BEAM CONNECTIONS SHALL BE DETAILED TO HAVE A CAPACITY OF NOT LESS THAN ONE-HALF THE TOTAL ALLOWABLE UNIFORM LOAD DETERMINED IN ACCORDANCE WITH AISC MANUAL OF STEEL CONSTRUCTION TABLE (ASD) FOR "UNIFORM LOAD CONSTRAINTS FOR BEAMS LATERALLY SUPPORTED", FOR BEAMS AND SPANS IN QUESTION, UNLESS A MEMBER LOAD IS SPECIFIED ON WITHIN THESE DOCUMENTS. SEE S-104 & S-504.

24. MINIMUM BEAM END REACTION SHALL BE 10 KIPS (ASD).

25. ENDS OF COLUMNS AT SPLICES OR LOOSE BASE PLATES SHALL BE "FINISHED TO FULL CONTACT".

26. PROVIDE STIFFENERS "FINISHED TO CONTACT" UNDER ALL LOAD CONCENTRATIONS ON SUPPORTING MEMBERS, OVER COLUMNS, AND WHERE SHOWN ON THE DRAWINGS.

27. PROVIDE TEMPORARY ERECTION BRACING AND SUPPORTS TO HOLD THE STRUCTURAL STEEL FRAME SECURELY IN POSITION. BRACING SHALL NOT BE REMOVED UNTIL THE PERMANENT LATERAL LOAD RESISTING SYSTEM IS IN PLACE AND CONCRETE FOR FLOORS AND ROOFS HAVE ACHIEVED AT LEAST 75% OF THEIR DESIGN STRENGTH. THE STEEL FRAME SHALL BE CONSIDERED A NON SELF-SUPPORTING FRAME UNTIL ALL SLAB DIAPHRAGMS, DECK DIAPHRAGMS AND DECK ANGLES ARE IN PLACE.

28. FIELD CUTTING OF STRUCTURAL STEEL OR ANY FIELD MODIFICATIONS SHALL NOT BE MADE WITHOUT PRIOR WRITTEN APPROVAL BY THE ENGINEER FOR EACH INDIVIDUAL CASE.

29. STRUCTURAL STEEL EXPOSED TO THE WEATHER OR LOCATED IN A NONCONDITIONED SPACE, SHALL BE HOT DIPPED GALVANIZED. ALL STRUCTURAL STEEL IN WASHBAY AND ON GRIDLINE 5 SUPPORTING WASHBAY SHALL BE HOT DIPPED GALVANIZED.

30. BEAM AND JOISTS SHALL BE SPACED EQUALLY BETWEEN COLUMNS UNO.

31.TYPICAL STEEL FRAME CONNECTION REQUIREMENTS UNO:
ALL MOMENT AND END PLATE CONNECTIONS SHALL BE SYMMETRICAL TO BEAM CENTERLINE UNO
ALL MOMENT AND END PLATE CONNECTIONS SHALL UTILIZE WORKABLE GAUGE OF CONNECTED MEMBER FOR BOLT PLACEMENT, ALL BEAMS AND COLUMNS ON THIS PROJECT WITH THESE CONNECTION TYPES HAVE A WORKABLE GAUGE OF 5 1/2".
ALL STIFFENERS SHALL BE FULL DEPTH, HAVE 1" CORNER CLIPS AND BE WELDED EACH SIDE TO THE WEB AND BOTH FLANGES UNO
ALL STIFFENERS SHALL HAVE WIDTH THAT EXTENDS EQUAL TO THE BEAM FLANGE WIDTH IN THE CONNECTION
BEAM ENDS SHALL HAVE 1/2" ERECTION GAP FROM SUPPORT, AND BEAM ENDS CUT PARALLEL TO SUPPORT FACE.
FULLY TIGHTEN TO PRETENSION ALL BOLTS IN STEEL TO STEEL CONNECTIONS UTILIZE TC BOLTS IN ALL AREAS TOOL ACCESSIBLE

32. TYPICAL STEEL FRAME CONNECTION DIMENSIONS UNO: (NOT APPLICABLE TO LINTELS)

SHEAR CONN PLATE THICKNESS:	tsp= 3/8"
MOMENT CONN FLANGE PLATE THICKNESS:	tmp= 3/4"
MOMENT END & CAP PLATE THICKNESS:	tep= 1 1/4"
WEB STIFFENER THICKNESS:	tws= 5/8"
BOLT CL TO BEAM SIDE EDGE OF PLATES	Lelh= 1 1/2" (LARGER AT END & CAP PL, WIDTH EQUAL OR WIDER THAN LARGER FLANGE)
T&B BOLT CL TO T&B EDGE OF SHEAR PL	Levs= 1 1/2"
LAST BOLT CL TO END OF MOM & END PL	Levm= 1 3/4"
FIRST SPS BOLT CL TO FACE OF SUPPORT	as= 2 1/2" (2" BOLT CL TO END OF BEAM PER REQUIRED ERECTION GAP ABOVE)
FIRST MOM BOLT CL TO FACE OF SUPPORT	am= 3" (2 1/2" BOLT CL TO END OF BEAM PER REQUIRED ERECTION GAP ABOVE)
BOLT SPACING WITHIN LINE	s= 3"
FLANGE BOLT GAUGE SPACING	sg= 5 1/2"

JOISTS:

1. ALL JOIST AND JOIST GIRDER MEMBERS SHALL BE IN ACCORDANCE WITH STEEL JOIST INSTITUTE SPECIFICATIONS FOR STEEL JOISTS (SJI K10), JOIST GIRDERS (SJI JG-10) AND LONG SPAN JOISTS (SJI LH/DLH-10).

2. DO NOT INSTALL JOISTS UNTIL SUPPORTING CONSTRUCTION IS IN PLACE AND SECURED. CAMBER SHALL BE CALIBRATED IN JOISTS TO ALLOW FOR INSTALLATION OF DECKING TO ADJACENT JOISTS AND TO PERIMETER FRAMING.

3. FIELD WELD JOISTS TO SUPPORTING STEEL. COMPLY WITH AWS REQUIREMENTS AND PROCEDURES.

4. JOIST MANUFACTURER SHALL DESIGN AND PROVIDE ALL JOIST BRIDGING PER STEEL JOIST INSTITUTE REQUIREMENTS. THE MANUFACTURER IS RESPONSIBLE FOR INCLUDING ALL REQUIRED BRIDGING AND AT A MINIMUM UPLIFT BRIDGING LOCATED NEAR THE FIRST PANEL POINT AT THE BOTTOM CHORD OF EACH END OF THE BAR JOISTS, CONSIDERED WHEN UPLIFT WIND PRESSURE IS PART OF A DESIGN COMBINATION. REFER TO THE COMPONENT AND CLADDING DRAWINGS ON S-002 FOR GROSS UPLIFT PRESSURES. IGNORE SOLAR PV WEIGHT IN UPLIFT DESIGN SEE NOTE 5.

5. DESIGN AND FABRICATE JOISTS AND GIRDERS, BRIDGING, CONNECTIONS, AND ANCHORAGES AS REQ'D TO MEET ALL LOAD CONDITIONS INCLUDING UPLIFT. JOIST SHALL NOT BE REDUCED FOR FABRICATION FROM THE DETAILING THAT PROVIDES THE FULL SJI CAPACITY FOR THE SPECIFIED JOIST. UPLIFT DESIGN SHALL NOT UTLIZE SOLAR PV PANEL DEAD WEIGHT TO OFFSET UPLIFT FOR ASSURANCE AGAINST FUTURE REMOVAL OF THIS SYSTEM AND LIGHTER BALLASTING THAN SPECIFIED ASSUMPTION.

6. JOISTS SHALL BE DESIGNED TO RESIST AN ADDITIONAL ASD INCIDENTAL AXIAL LOAD OF 1 KIP T&C FROM FORCES ON AND MOVEMENT OF OTHER CONNECTED BUILDING FRAMING ELEMENTS NOT RELATED TO JOIST SLOPE.

METAL DECK:

1. METAL DECK REFERENCE STANDARDS:
   ALL METAL DECK: SDI PUBLICATION NO. 31

2. MATERIAL SPECIFICATION: REFER TO SPECIFICATION FOR DECK MATERIAL PHYSICAL PROPERTIES AND ATTACHMENT REQUIREMENTS.

3. INSTALL DECK IN TRIPLE SPAN CONDITION IN ALL LOCATIONS WHERE POSSIBLE PROVIDE 1 DOUBLE SPAN AS NECESSARY IN SHORTEST SPAN CONDITIONS TO ALLOW TRIPLE SPAN ELSEWHERE. SINGLE SPANS, IF THEY OCCUR, MAY REQUIRE SHORING DURING PLACEMENT, AND MUST BE HIGHLIGHTED FOR ADDITIONAL REVIEW ON APPROVED SHOP DRAWINGS.

4. INSTALL DECK WITH ALL REQUIRED ACCESSORIES, INCLUDING BUT NOT LIMITED TO POUR STOPS, CLOSURE STRIPS, GIRDER FILLERS, AND ALL OTHER MISCELLANEOUS DECK ACCESSORIES.

5. SEE PLAN FOR METAL DECK SHEAR CONNECTORS, SEE PROJECT SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

6. METAL DECK WITH SIDE LAP FASTENERS SHALL BE AT 12" MAX AND NO WIDER THAN 1/2 x CL TO CL SPAN.

CONCRETE:

1. CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 301 - SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.

2. STANDARDS:

DESIGN:	ACI 318 - 2014
DETAILS:	ACI 315 - 1999
MATERIALS:	ACI 301 - 2010

3. DESIGN STRENGTH:

SLAB ON GRADE:	5000 PSI COMPRESSIVE STRENGTH @ 28 DAYS, NORMAL WEIGHT CONCRETE
WALLS:	5000 PSI COMPRESSIVE STRENGTH @ 28 DAYS, NORMAL WEIGHT CONCRETE
FOUNDATIONS:	5000 PSI COMPRESSIVE STRENGTH @ 28 DAYS, NORMAL WEIGHT CONCRETE
PILE CAPS:	5000 PSI COMPRESSIVE STRENGTH @ 28 DAYS, NORMAL WEIGHT CONCRETE
BEAMS:	5000 PSI COMPRESSIVE STRENGTH @ 28 DAYS, NORMAL WEIGHT CONCRETE

4. SUBMIT PROPOSED CONCRETE MIX DESIGN TO THE OWNER'S REPRESENTATIVE AND TESTING LABORATORY CONCURRENTLY FOR REVIEW AND APPROVAL.

5. CONCRETE COVER TO REINFORCEMENT SHALL EQUAL:
   CONCRETE DEPOSITED ON GROUND 3".
   FORMED CONCRETE EXPOSED TO GROUND, WEATHER, WATER OR CAST ON VAPOR BARRIER. #6 & LARGER: 2"
   FORMED CONCRETE EXPOSED TO GROUND, WEATHER, WATER OR CAST ON VAPOR BARRIER. #5 & SMALLER: 1 1/2"
   WALLS & SLABS NOT EXPOSED TO GROUND, WEATHER OR WATER: 1-1/2".

6. CLEAN AND APPLY BONDING AGENT TO ALL EXISTING CONCRETE SURFACES TO RECEIVE NEW CONCRETE. INTENTIONALLY ROUGHEN SURFACES TO RECIEVE CMU DURING FINISHING. ALL REINFORCED CONCRETE TO CONFORM WITH THE ACI - 301.

7. SECTIONS AND DETAILS MAY NOT SHOW ALL REQUIRED CONCRETE REINFORCEMENT. ADDITIONAL REINFORCEMENT MAY BE DESCRIBED IN SCHEDULES (IF APPLICABLE) AND NOTES.

8. PROVIDE BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH REQUIREMENTS OF ACI 315 UNLESS NOTED OTHERWISE.

9. NOT ALL ITEMS EMBEDDED IN THE CONCRETE ARE SHOWN ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE INSTALLATION OF ALL OPENINGS AND EMBEDDED ITEMS IN THE CONCRETE PERTAINING TO THE DIFFERENT TRADES AS SHOWN ON THEIR PERSPECTIVE DRAWINGS. SLEEVES, MECHANICAL OPENINGS, CONDUITS, PIPES, RECESSES, DEPRESSIONS, CURBS, AND ALL EMBEDDED ITEMS SHALL BE PROVIDED AS SHOWN ON THE ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS AND AS REQUIRED BY THE EQUIPMENT MANUFACTURERS.

10. EMBEDDED CONDUITS, PIPES, OR OTHER UTILITIES NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. WHERE EMBEDDED ITEMS ARE ALLOWED, THEY SHALL BE SPACED NOT LESS THAN THREE DIAMETERS ON CENTER EACH WAY BUT WITH NOT LESS THAN TWO INCHES CLEAR SPACE BETWEEN EMBEDDED ITEMS. THE TOTAL DEPTH OF ALL EMBEDDED ITEMS AND THE CLEAR SPACE BETWEEN THEM SHALL NOT EXCEED 1/3 OF THE TOTAL CONCRETE DEPTH AND SHALL BE CONFINED TO THE MIDDLE THIRD OF THE CONCRETE DEPTH.

11. HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE POURS (EXCEPT SHEAR WALLS) ARE PROHIBITED. ALL CONSTRUCTION JOINTS TO BE AUTHORIZED BY ENGINEER.

12. UNLESS OTHERWISE NOTED ON THE DRAWINGS, THE SIZE OF CONCRETE PLACEMENTS SHALL BE LIMITED AS FOLLOWS:
   A. STRIP FOOTINGS AND WALLS: 60 FT (UNLESS INTERMEDIATE CONTROL JOINTS ARE PROVIDED)

13. PROVIDE 3/4" CHAMFER ON ALL EXPOSED CONCRETE EDGES U.N.O

14. THROUGH PENETRATIONS FOR CONCRETE WALLS OR SLABS SHALL CONFORM TO STANDARD DETAIL DRAWINGS.

15. MULTIPLE PENETRATIONS SHALL NOT BE SPACED CLOSER THAN THREE TIMES THE DIAMETER OR THREE TIMES THE WIDTH OF THE LARGER OPENING WITHOUT APPROVAL OF THE ENGINEER.

16. SEE S-002 FOR CONCRETE MASONRY GENERAL NOTES

17. MODELING LINES SHOWN IN CONCRETE PLANS OR DETAILS SHALL NOT BE ASSUMED TO PERMIT CONSTRUCTION JOINTS. ALL CONSTRUCTION JOINT LOCATIONS NOT SPECIFICALLY CALLED OUT SHALL BE SUBMITTED AS DETAILED SHOP DRAWINGS

18. CONTRACTOR REQUIRED TO SUBMIT DETAILED CONCRETE OPENING AND SLEEVE SHOP DRAWINGS FOR REVEIW BY STRUC & MEP

POST INSTALLED ANCHORS AND DOWELS:

1. ALL POST INSTALLED ANCHORS INTO MASONRY USE HILTI-HY 70 SYSTEM OR APPROVED EQUAL.

2. ALL POST INSTALLED ANCHORS INTO EXISTING CONCRETE USE HILTI HIT-HY 200 INJECTION ADHESIVE ANCHOR OR APPROVED EQUAL.

3. ALL POST INSTALLED ANCHOR PRODUCTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION PROCEDURES.

4. DRILLING, CORING, SAW CUTTING AND ETC. INTO CONCRETE SHALL MEET THE LATEST OSHA REGULATIONS FOR SILICA DUST EXPOSURE.

5. WEDGE EXPANSION ANCHORS SHALL UTILIZE HILTI KWIKBOLT TZ OR A DEWALT POWER-STUD SD1 OR APPROVED EQUAL OR GREATER CAPACITY RATED FOR SEISMIC LOADING AND CRACKED CONCRETE, INSTALLED FULLY INTO CONCRETE OR FULLY GROUTED CONCRETE MASONRY CELLS.

6. ALL DOWELS SHALL BE SET IN ADVANCE AND TIED NOT WET SET. DOWELS SHALL INCLUDE FULL CLASS B DEVELOPMENT LENGTH OR STANDARD 90 DEGREE HOOKS. SET HOOK DEPTH FOR VERTICAL BARS DOWN TO THE BOTTOM REINFORCEMENT OF THE SUPPORTING ELEMENT.

7.ACCIDENTALLY MISSED DOWELS REPLACED WITH DRILL AND EPOXY DOWELS AT REQUEST SHALL INCLUDE REVIEW BY CONTRACTOR THAT REQUESTED DRILLED EMBEDMENT EXTENDS PAST SUPPORTING REINFORCING ELEMENT SURFACE NOT ONLY CONCRETE SURFACE. PROVIDE DETAILED SUBMITTAL OF REQUESTED LOCATIONS AND DIMENSIONS

LEGEND / ABBREVIATIONS:

AESS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL	FD	FLOOR DRAIN	SCH	SCHEDULE
ADDL	ADDITIONAL	FF	FINISHED FLOOR	SIM	SIMILAR
AFF	ABOVE FINISHED FLOOR	FS	FOUNDATION STEP	SLBB	SHORT LEG BACK TO BACK
ALT	ALTERNATE	GALV	GALVANIZED	SOG	SLAB ON GRADE
		GB-_	GRADE BEAM		
BPE	BOTTOM OF PILE ELEVATION	HORIZ	HORIZONTAL	TB-_	TIE BEAM
B/F	BOTTOM OF FOOTING	HP	HIGH POINT	T&B	TOP AND BOTTOM
BRG	BEARING			TPC	TOP OF PILE CAP
		K	KIP	T/PIER	TOP OF PIER ELEVATION
CANT	CANTILEVER			T/S	TOP OF STEEL ELEVATION
CFMF	COLD-FORMED METAL FRAMING	L	ANGLE	T/SLAB	TOP OF SLAB ELEVATION
CJ	CONTROL JOINT	LLBB	LONG LEG BACK TO BACK	T/WALL	TOP OF WALL ELEVATION
CJP	COMPLETE JOINT PENETRATION WELD	LLH	LONG LEG HORIZONTAL	TYP	TYPICAL
CL	CENTERLINE	LLV	LONG LEG VERTICAL	UNO	UNLESS NOTED OTHERWISE
CLR	CLEAR	LONG	LONGITUDINAL		
CMU	CONCRETE MASONRY UNIT	LP	LOW POINT	VERT	VERTICAL
COL	COLUMN	LW	LIGHT WEIGHT		
COMP	COMPRESSIBLE			WP	WORK POINT
CONC	CONCRETE	MAX	MAXIMUM	WWF	WELDED WIRE FABRIC
CONT	CONTINUOUS	MIN	MINIMUM		
		MO	MASONRY OPENING	[_] 2L	NUMBER OF STUDS DOUBLE ANGLE
DIA	DIAMETER				
do	DO OVER	NIC	NOT IN CONTRACT		
DW	DOWEL				
D2L	DEFORMED BAR ANCHOR	OC	ON CENTER		
		OCEF	ON CENTER, EACH FACE		
EF	EACH FACE	OCEW	ON CENTER, EACH WAY		
EFEW	EACH FACE, EACH WAY				
EL	ELEVATION	P__	PIER		

1. FURNISH AND CONSTRUCT CONCRETE MASONRY UNIT WORK ACCORDING TO REQUIREMENTS OF TMS402/602. CONTACT OWNER'S REPRESENTATIVE BEFORE MASONRY WORK TO SCHEDULE PRE-CONSTRUCTION CONFERENCE WITH ENGINEER, GENERAL CONTRACTOR, MASONRY CONTRACTOR AND TESTING LABORATORY.

2. TEST (VERIFY) THE COMPRESSIVE STRENGTH OF THE MASONRY BY THE UNIT STRENGTH METHOD. VERIFY THE COMPRESSIVE STRENGTH OF THE MASONRY BEFORE CONSTRUCTION. ALL CONCRETE MASONRY ASSEMBLAGES SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH (FM) OF 2,500 PSI. MASONRY UNITS SHALL BE ACCORDING TO REQUIREMENTS OF ASTM C90 HOLLOW CORE, GRADE N, WITH A NET AREA COMPRESSIVE STRENGTH 3,250 PSI MINIMUM. MORTAR SHALL BE TYPE S WITH WASHED SAND AGGREGATE ACCORDING TO REQUIREMENTS OF ASTM C144. MORTAR SHALL BE ACCORDING TO REQUIREMENTS OF ASTM C270 (PROPORTION SPECIFICATION TYPE S). SUBMIT FOR REVIEW PRODUCT DATA CONFIRMING THAT MASONRY PRODUCTS MEET OR EXCEED THESE STANDARDS.

3. FOR FILLING SPACES 4" OR LARGER IN BOTH DIRECTIONS, USE "COARSE GROUT" WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI. THE GROUT SHALL BE TESTED IN ACCORDANCE WITH ASTM C1019. FOR FILLING SPACES LESS THAN 4" IN ONE OR BOTH DIRECTIONS USE FINE GROUT PROPORTIONED PER ASTM C476 WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.

4. PLACE GROUT IN 4'-0" LIFTS AT 9" TO 11" SLUMP (HIGH-RANGE WATER REDUCING ADMIXTURE ASTM C494 TYPE F OR TYPE G). GROUT SHALL BE MIXED AT THE PLANT AND DELIVERED TO THE SITE BY A READY-MIX CONCRETE COMPANY. THE GROUT SHALL NOT BE MIXED ON SITE.

5. PROVIDE LAP SPLICES AND DEVELOPMENT OF ALL CMU REINFORCING NO LESS THAN 48 BAR DIAMETERS (Db) IN LENGTH PER S-601. LONGER LENGTHS MAY BE REQUIRED IN DETAILS AND SHALL NOT BE LESS THAN 48Db REGARDLESS OF DETAILS. ALL REINFORCEMENT SHALL BE WIRE TIED IN PLACE. ANY SPLICES OF CMU REBAR ANCHORAGE TAKING PLACE IN CONCRETE SHALL BE NO LESS THAN CLASS B CONCRETE SPLICE NOR LESS THAN 48Db. CMU ANCHORAGE INTO CONCRETE SHALL HAVE STANDARD HOOKS AT THE END DEVELOPED TO THE BOTTOM OF THE CONCRETE FOUNDATION ELEMENT AND NO LESS THAN Ldh INTO THE FOUNDATION ELEMENT.

6. AT MASONRY OPENINGS WITH MASONRY LINTEL ABOVE OPENINGS, PROVIDE DOWELS WITH 48Db PROJECTION INTO LINTEL, MATCH VERT STEEL SIZE & REINF.

7. ALL MASONRY SHALL HAVE STANDARD HORIZONTAL JOINT REINFORCING AT 16" O.C. HOT DIPPED GALV.

8. WALLS RECEIVING EXTERIOR WIND LOADS: VERTICAL REINFORCING TO BE #5 @48" O.C. IN GROUTED CELLS, UNLESS NOTED OTHERWISE. SINGLE BARS TO BE CENTERED WITHIN CELLS, WHERE 2 BARS ARE SPECIFIED PER CELL INSTALL ONE EACH WALL FACE WITHIN THE CELL. PROVIDE ADDITIONAL VERTICAL #5 BARS AT CORNERS, WALL ENDS, WALL INTERSECTIONS, AND EACH SIDE OF OPENINGS (PER TYP DETAIL). PER TMS 402 REBAR SHALL BE 1/2" MIN CLEAR OF CELL INTERIOR FACES AND 1 1/2" MIN CLEAR OF EXTERIOR FACE OF WALL. BARS SHALL BE PLACED DIRECTLY AT THE CLEAR COVER DISTANCE FROM EACH FACE OF WALL WHERE TWO BARS ARE SPECIFIED IN THE SAME CELL.

9. INTERIOR WALL VERTICAL REINFORCING TO BE #5 @ 48" O.C. MAX. IN GROUTED CELLS, UNLESS NOTED OTHERWISE. BARS TO BE CENTERED WITHIN CELLS. PROVIDE VERTICAL #5 BARS AT CORNERS, WALL ENDS, WALL INTERSECTIONS, AND EACH SIDE OF OPENINGS (PER TYP DETAILS).

10. PROVIDE DOWELS @ BOTTOM OF CMU WALL, MATCH VERTICAL BAR SIZE AND SPACING, TYP.

11. PROVIDE STANDARD HOOKED HORIZONTAL BARS ENDS OF BOND BEAMS BEYOND VERTICAL BARS OF SUPPORTING WALL. ALL VERTICAL BARS SHALL HAVE STANDARD HOOK INTO FOUNDATIONS, AND BE CONTINOUS THROUGH OR HOOKED INTO BOND BEAMS AT TOP OF VERTICAL RUN. ALL HOOKS EXTEND BEYOND TO THE FURTHEST PERPINDICULAR REINFORCING IN THE CONNECTED ELEMENT.

12. REFER TO THE ARCHITECTURAL DRAWINGS FOR FINAL ROUGH MASONRY OPENING DIMENSIONS & ELEVATIONS.

13. MAXIMUM SPACING OF CMU CONTROL JOINTS NOT TO EXCEED 25'-0" EXCEPT WHERE MULTIPLE CONTINUOUS REINFORCED BOND BEAMS ELIMINATE NEED FOR CMU CONTROL JOINTS IN ACCORDANCE WITH TMS CODE. SEE PLANS FOR CONTROL JOINT LOCATIONS. NO CMU CONTROL JOINTS ARE TO BE INSTALLED IN WALLS ALONG GRIDS A & E.

14. CONTRACTOR IS RESPONSIBLE FOR CMU WALL BRACING DURING CONSTRUCTION AND COORDINATION OF BRACING OF THE STEEL FRAMING SYSTEM. THE STEEL SYSTEM RIGIDITY OF THE STEEL SYSTEM IS NOT BE ASSUMED COMPLETE UNTIL ALL STEEL FRAMING, JOISTS AND DECKING IS COMPLETE.

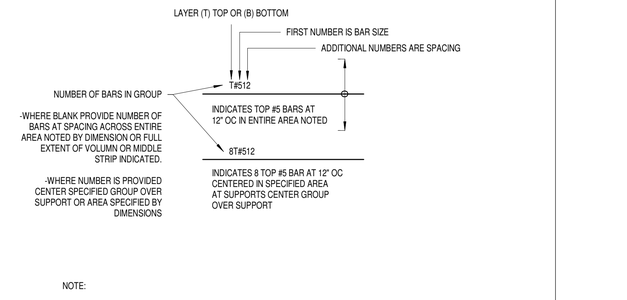
15. REINFORCED MASONRY IS CONTROLLED MATERIAL THAT REQUIRES INSPECTION DURING CONSTRUCTION. COORDINATE CONSTRUCTION WITH THE SPECIAL INSPECTOR AND WITH THE STATEMENT OF SPECIAL INSPECTIONS.

16. THROUGH PENETRATIONS FOR CMU WALLS THAT ARE CONFINED TO A SINGLE 8"X16" MASONRY CELL SHALL NOT REQUIRE LINTELS OR OTHER REINFORCEMENT. PENETRATIONS SHALL NOT BE LOCATED THROUGH A REINFORCED CELL.

17. MULTIPLE PENETRATIONS THROUGH CMU WALLS SHALL NOT REQUIRE REINFORCEMENT PROVIDED THERE IS ONE FULL 8"X16" WITHOUT PENETRATIONS BETWEEN PENETRATIONS. PENETRATIONS SHALL NOT BE LOCATED THROUGH A REINFORCED CELL.

18. WHERE MULTIPLE PENETRATIONS ARE THROUGH ADJACENT 8"X16" MASONRY UNITS PROVIDE REINFORCED MASONRY LINTELS PER STANDARD DETAIL DRAWINGS WITH A CLEAR SPAN TREATING ALL PENETRATED UNITS AS PART OF THE OPENING.

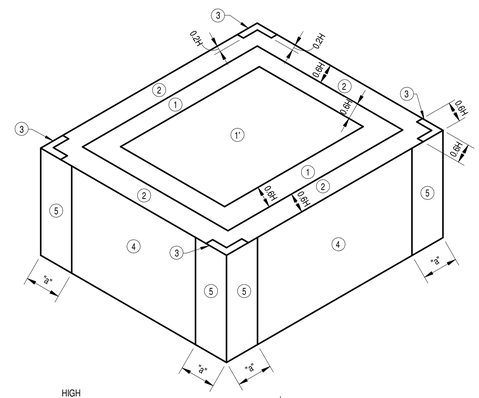
B3 MASONRY GENERAL NOTES
SCALE: NOT TO SCALE

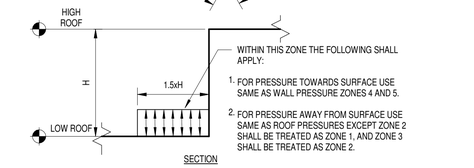


NOTE:

1. WHERE NOT SPECIFIED BY DETAILS A BAR REQUIRING ADDITIONAL HOOKS WILL BE NOTED WITH AN L FOR STANDARD HOOK 1 END AND U FOR STANDARD HOOK EACH END. ALL TOP BARS SHALL HAVE HOOKS AT EDGES AND STEPS IN SLABS, MINIMUM 2 BOTTOM BARS SHALL HOOK OVER SUPPORTS AT EDGES OR STEPS.
2. WHERE A MAT IS SPECIFIED BAR MARKS INDICATED AS NOTED ABOVE ARE IN ADDITION TO THE MAT REINFORCEMENT THAT IS TYPICAL ACROSS THE ENTIRE SLAB.
3. MINIMUM 2 TOP BARS AND 2 BOTTOM BARS SHALL BE PLACED OVER PILE SUPPORTS BELOW.

A3 BAR MARK LEGEND
SCALE: 1/4" = 1'-0"





SECTION

ROOF STEP - COMPONENTS AND CLADDING
ROOF WIND PRESSURE ZONE DESIGNATIONS

DESIGN WIND PRESSURE FOR EXTERIOR COMPONENTS AND CLADDING MATERIALS

ROOF SLOPE	SURFACE	EFFECTIVE WIND AREA (SF)	WIND PRESSURE TOWARD SURFACE (+ PSF)	WIND PRESSURE AWAY FROM SURFACE (- PSF)
0° TO 7°	ZONE 1 ROOF	10	14	54
		20	13	50
		50	12	45
		100	11	42
	ZONE 2 ROOF EDGES	10	14	70
		20	13	66
		50	12	60
		100	11	56
	ZONE 3 ROOF CORNERS	10	14	95
		20	13	86
		50	12	75
		100	11	66
	ZONE 1' ROOF FIELD	10	14	31
		20	13	31
		50	12	31
		100	11	31
NA	ZONE 4 WALL	10	30	33
		20	29	32
		50	27	30
		100	26	28
		500	23	25
	ZONE 5 WALL CORNERS	10	36	40
		20	35	38
		50	33	34
		100	31	32
		500	23	25

COMPONENTS AND CLADDING WIND PRESSURE NOTES:

1. THE COMPONENTS AND CLADDING WIND LOAD PRESSURES IN THE TABLES ABOVE ARE BASED ON ASCE 7-2016. THE WIND PRESSURES ARE ULTIMATE LOAD PRESSURES. REFER TO THE GENERAL NOTES AND DESIGN DATA NOTES FOR WIND LOAD INFORMATION AND PARAMETERS.
2. THE PRESSURES IN THE TABLES ABOVE ARE TO BE USED FOR WIND LOAD CONTRIBUTION TO THE TOTAL LOAD APPLIED TO ANY COMPONENTS AND CLADDING MEMBER OR MATERIAL WHICH IS PART OF A ROOF OR EXTERIOR WALL ASSEMBLY.
3. REFER TO CHAPTER 16 OF THE BUILDING CODE AND ASCE 7-2016 FOR DEFINITION OF TERMS.
4. CONFIGURATION OF END ZONES, EDGE STRIPS AND CORNERS SHALL BE PER ASCE 7-2016.
5. INTERPOLATION FOR EFFECTIVE WIND AREA BETWEEN 10 SF AND 100 SF FOR ROOFS, AND 10 SF AND 500 SF FOR WALLS IS PERMITTED.
6. PRESSURES ARE APPLIED NORMAL TO THE SURFACE OF THE COMPONENT OR CLADDING ELEMENT.
7. POSITIVE AND NEGATIVE PRESSURES ACT SIMULTANEOUSLY AT PARAPETS.
8. THE WIDTH OF EDGE STRIP (a) SHALL BE 10 PERCENT OF THE LEAST HORIZONTAL, OR 40 PERCENT OF THE EAVE HEIGHT, WHICHEVER IS LESS, BUT NOT LESS THAN EITHER 4 PERCENT OF THE LEAST HORIZONTAL DIMENSION OR 3 FEET.
9. ROOF JOIST UPLIFT DESIGN:
PRESSURE AWAY FROM SURFACE IS WIND ONLY LOAD SEE S-001 FOR DEAD LOAD FOR REDUCTION OF UPLIFT. EXCLUDE SOLAR WIEGHT FROM UPLIFT REDUCTIONS AS THE FINAL BALLASTED WEIGHT IS UNKNOWN, AND IS TO BE DESIGNED BY MANUFACTUERERS ENGINEER.
SOLAR TO BE EXCLUDED FROM JOIST UPLIFT DESIGN. THE S-001 NOTED ASSUMED SOLAR WEIGHT IS A CONSERVATIVE ASSUMPTION BASED ON EXPERIENCE WITH SOLAR INSTALLATION, THIS DOWN PRESSURE IS TO INCLUDED IN ANY LOAD DOWNFORCE ANALYSIS BY JOIST MANUFACTURER.

GEOMETRY AND APPLICABLE SURFACE DEAD LOAD FOR USE IN ROOF JOIST UPLIFT DESIGN:
0.6 X H = 15.6'
0.2 X H = 5.2'
DL= 15 PSF + MECHANICAL UNITS,+ JOIST SELF WEIGHT PER S-001, SOLAR PV DEAD LOADS OMITTED

A4 C&C WIND LOAD DIAGRAM
SCALE: NOT TO SCALE

IN CHARGE OF B. BYRNES, P.E.
CHECKED BY J. OBLEMAN, P.E.
MADE BY B. ZUHRIC

CERTIFICATE OF AUTHORIZATION#: 0021365
REGISTRATION EXPIRATION 12/31/2026

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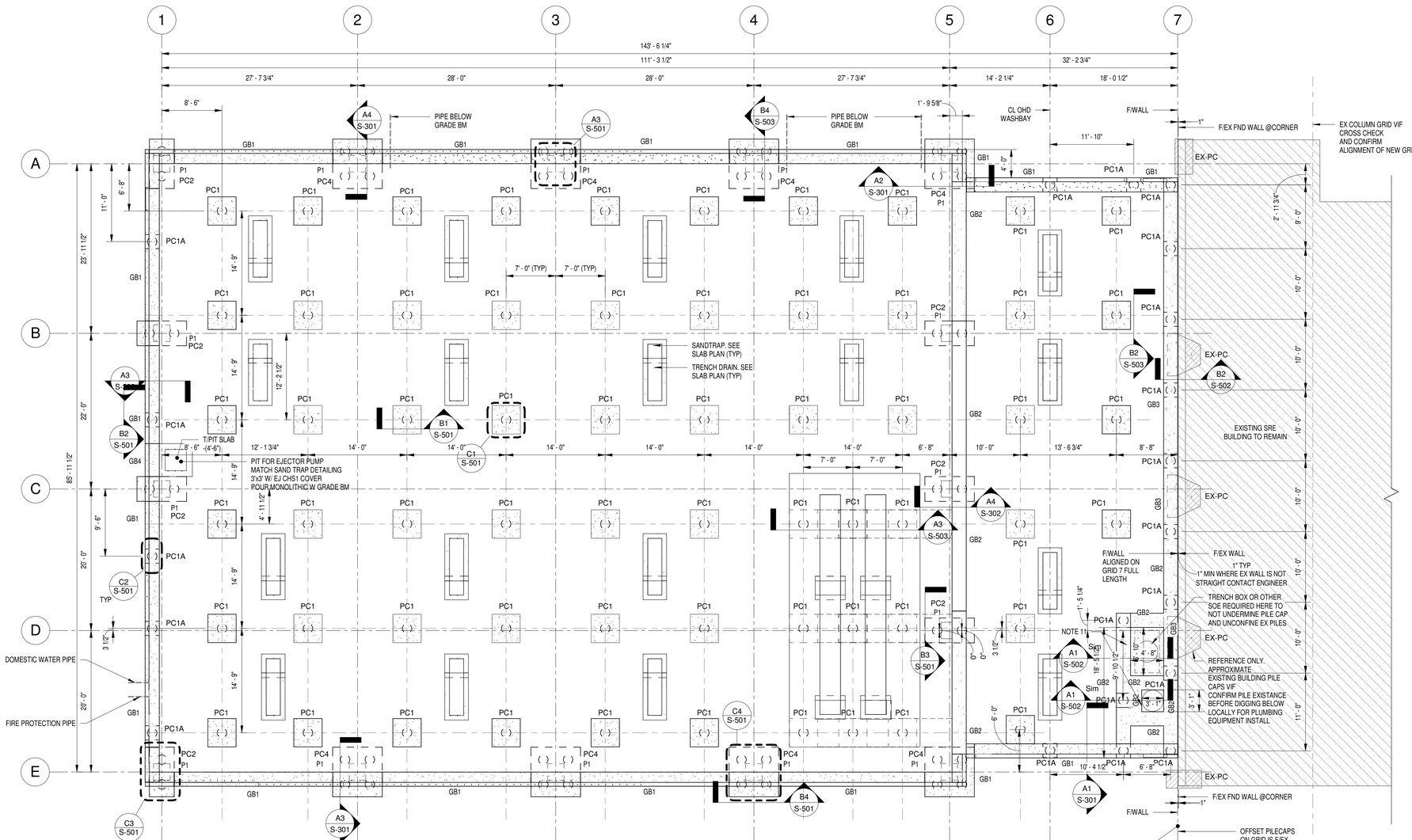
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TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
GENERAL NOTES

CONTRACT NUMBER 23-528
SHEET NUMBER S-002
SHEET NO. 17 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-83
REV. NO. 0



NOTES:

1. T/FTG = -3' - 0" UNO FOR EXTERIOR WALL & COLUMN SUPPORTING PILE CAPS. GRIDS 1, 5, 6, 7, A, E
2. T/FTG = -1' - 0" UNO FOR INTERIOR PILE CAPS
3. 0' - 0" SET POINT. ELEVATIONS ESTABLISHED FROM EXISTING BUILDING SLAB ELEVATION AT DOOR. SEE S-102
4. T/PIER = -1' - 0" UNO TYPICAL PIER AT ALL COLUMNS FOR REINF SEE S-501
5. T/GRADE BEAM = -1' - 0" UNO
6. GRADE BEAM HORIZONTAL REINFORCEMENT IS CONTINUOUS THROUGH PIERS & PILE CAPS SEE SCHEDULE S-601
7. CL COLUMN = CL PIER = CL PILE CAP, AT GRIDS
   CL PILECAP BELOW SLAB AS DIMENSIONED
   SEE A4/S-501 FOR PIER & PILECAP SCHEDULE
8. PILES TO BE 100 KIP (50 TON) DRILLED DISPLACEMENT MICRO PILES WITH CONCRETE SURROUNDING THE STEEL PIPE
   PILE BASIS OF DESIGN: STELCOR OR ENGINEER APPROVED EQUAL, DESIGNED SIGNED AND SEALED BY NYS PE
   16" DIAMETER SOCKETED 2 FEET INTO WEATHERED ROCK UNLESS FULL CAPACITY CAN BE DEVELOPED WITH LESS.
   WEIGHTED AVERAGE PILE LENGTH: 20'-0" SEE A4/S-501 FOR PILE SCHEDULE AND PILE CAP SCHEDULE
9. ALL SECTION MARKS ARE TYPICAL FOR THAT GEOMETRY AND SHALL BE APPLIED AT ALL MATCHING CONDITIONS
10. ESTABLISH A SET GRID LINE AT THE CORNERS OF EXISTING WALL AT ELEVATION 0'-0". SEE NOTES ON PLAN GRID 7
    ONCE ALIGNMENT IS CONFIRMED AND CROSS CHECKED WITH EXISTING BUILDING
    ALL NUMBERED GRIDS SHALL BE PARALLEL
    ALL LETTERED GRIDS SHALL BE PERPENDICULAR
11. GB2 FRAMED OPENINGS SHOWN ARE FOR HANGING OIL WATER SEPARATOR AND SUMP EJECTOR PIT HANGER LEDGE
    SEE PLUMBING DRAWINGS SET LEDGES NEAR TOP OF SLAB PER MFG SPECS TO FLUSH MOUNT COVERS AT SLAB
    SET PITS BY PLUMBING CONTRACTOR PRIOR TO GB2 PLACEMENT. FACE FORMING MAY BE ROUNDED TO MATCH PITS
    PROVIDE 11" SLAB #5@12" & #5@9 B AT B/PIT MATCHING SAND TRAP & TRENCH DRAIN DETAILING A1 S-502
    SLEEVE SLAB AND GB2 AS REQUIRED FOR PUMBING, SHIFT DO NOT CUT REBAR.
12. PC1A TOP OF CAP IS BOTTOM OF GRADE BEAM

0 4' 8' 16'

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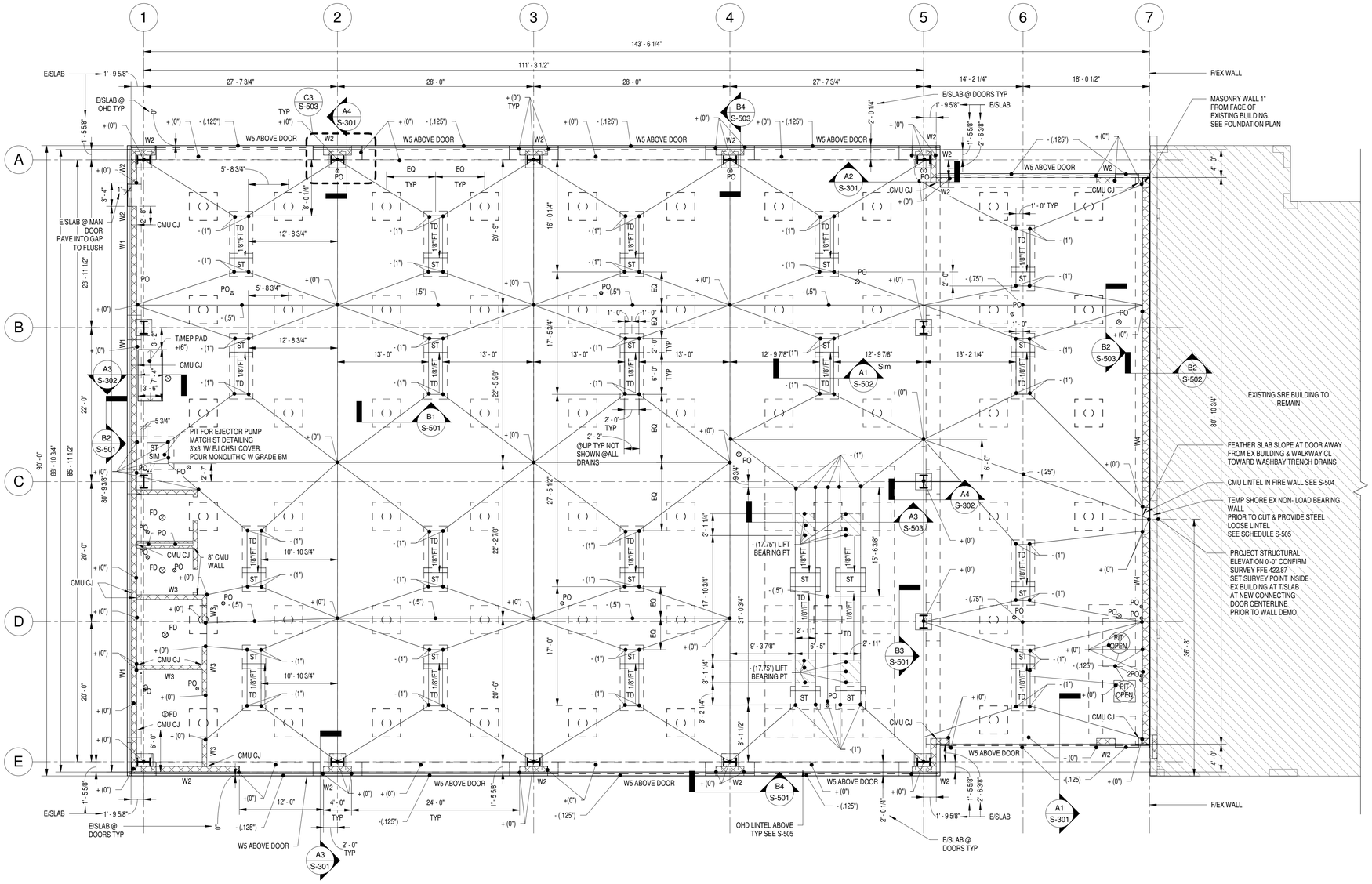
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NAME
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WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
FOUNDATION PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	S-101

SHEET NO. 18 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-84
REV. NO. 0



NOTES:
1. TYPICAL T/CONC SLAB= +0'-0" ALL PLAN NOTED ELEVATIONS REFERENCED (+) OR (-) FROM 0'-0"
   TYPICAL B/CONC SLAB= -1'-0" SET BOTTOM LEVEL IN TYPICAL SLAB AREAS,
   T/CONC = 0'-0" BELOW ALL CMU WALLS, ALL DOORS AND OVERHEAD DOOR LANDING POINTS
2. SLAB f'c=11" MINIMUM THICKNESS REINFORCED CONCRETE STRUCTURAL SLAB.
   ELEVATED SLAB CAST ON GRADE SUPPORTED BY PILES SPANNING POOR SOIL
   PROVIDE +/- 1/8":1'-0" SLOPE DOWN TO TRENCH DRAIN & SAND TRAP (TD & ST)
   SLAB EDGE OF TD&ST SHALL BE LOCAL LOW POINTS IN SLAB WITH HIGH POINTS AT MID POINTS BETWEEN DRAINS AND AT THE INSIDE FACE OF CMU WALL. TROWEL ROUGHEN BELOW CMU WALLS.
   PITCH ANY SLAB PORTION OUTSIDE OF OVERHEAD DOORS OUT 1/8":1'-0"
3. ST = 2'-0" x 2'-0" SAND TRAP DRAIN T/SLAB = -4'-6"
4. TD = 6'-0" x 2'-0" TRENCH DRAIN CENTERED BETWEEN GRIDS UNO
5. STRUCTURAL 0'-0" ELEVATION COORDINATED WITH SITE CIVIL ELEVATION
6. SEE S-103 FOR SLAB REINFORCEMENT. NONE SHOWN THIS PLAN
7. ALL SECTION MARKS ARE TYPICAL AND ARE TO BE APPLIED AT ALL MATCHING CONDITIONS.
8. FD INDICATES FLOOR DRAIN, PO INDICATES PLUMBING OPENING EACH REQUIRES (4) #4 REINFORCEMENT

PLAN NORTH

A1 FLOOR PLAN
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

CERTIFICATE OF AUTHORIZATION#: 0021365
REGISTRATION EXPIRATION 12/31/2026

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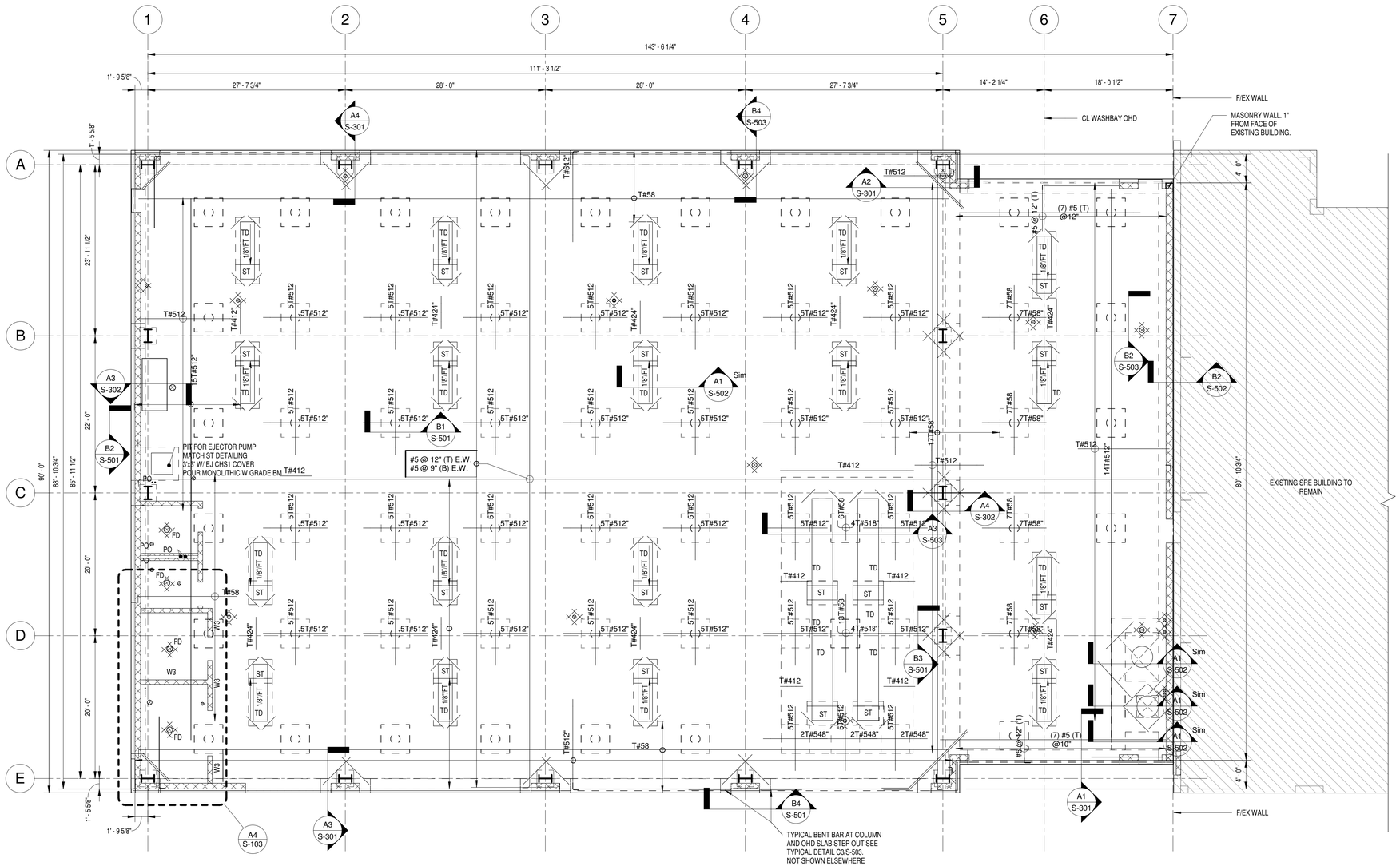
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DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
FLOOR SLAB LAYOUT PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	S-102

SHEET NO. 19 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-85
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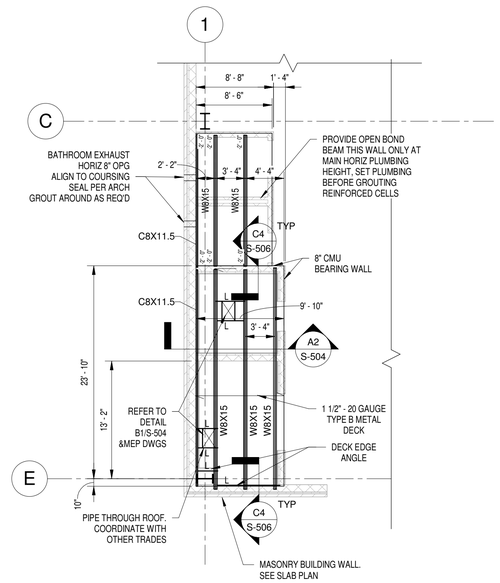


NOTES:
1. SEE S-102 FOR SLAB GEOMETRIC LAYOUT NOTES.
2. B/CONC SLAB= -1'-0" SLAB REBAR SHALL BE LEVEL BASED ON THE 11" SLAB THICKNESS THEREFROM 1.5" CLEAR COVER EF SLAB SLOPES SHALL BE MONOLITHIC ADDITIONAL COVER WHERE THICKNESS EXCEEDS 11" DUE TO HIGH POINTS OF SLOPES
3. ALL SLAB TOP REINFORCEMENT HOOKS AT SLAB EDGES. ALL SLAB TOP AND BOTTOM REINFORCEMENT HOOKS WHERE INTERRUPTED BY OPENINGS, STEPS, AND DRAINS.
4. COLUMN SCHEDULE AND CMU WALL REINFORCEMENT SCHEDULE SEE S-601 LINTEL SCHEDULES SEE S-504 & S-505
5. TYPICAL TOP AND BOTTOM CONTINUOUS MAT BARS NOTED ON PLAN WITHIN BOX APPLIES TO ALL AREAS OF PLAN ALL OTHER BARS NOTED ARE IN ADDITION TO THE TYPICAL MAT REINFORCEMENT
6. DIAGONAL CRACK CONTROL BARS NOTED WITHOUT BAR MARKS ON PLAN SEE TYPICAL DETAILS FOR THESE BARS ALL BARS OF THIS TYPE SHALL NOT BE ASSUMED TO BE SHOWN IN FULL ON PLAN
7. SEE A3&B3/S-502 & P-101 FOR PIPE SUPPORT HANGERS FOR UNDERGROUND PIPING PROVIDE (2) ADDL #4 x48" (1) ES @ ROD MIDDLE BENT DOWN BAR UNDER HANGER PLATE AND OVER LOWER MAT OF TOP BARS 12"-6"12"6"-12" + (1) ADDL #4x24" @PL
8. PITS, THICKENED AREAS AND PILE CAPS CONTAIN ADDITIONAL REBAR CONSULT DETAILS FOR BARS NOT PART OF MAIN SLAB THICKNESS. RUN CONTINUOUS TOP AND BOTTOM MAT UNDER TD WITH BENT DOWN SPLICED BARS
9. REINFORCE SAND TRAP h=10" PIT WALLS #5@6 VERT Z BARS TYP& #4@12 HORIZ PERIMETER COLUMN STIRRUPS EF TRAP PIT SLAB B5@6 T&B CONT W/ WALL Z BARS SEE B1/S-502
10. ALL BELOW SLAB PIPING WILL REQUIRE PIPE HANGERS SUPPORTED BY GROUND FLOOR SLAB FOR SOIL CONDITIONS SEE MECHANICAL DRAWINGS FOR PIPE HANGER REQUIREMENTS AND SPACING. ANCHOR HOOK ABOVE 3RD WAY BARS IN TOP MAT.
11. OUTERMOST REINFORCEMENT IN SLAB RUNS NORTH TO SOUTH 1ST WAY BOTTOM MAT, 2ND WAY TOP MAT

PLAN NORTH

A1 FLOOR REINFORCEMENT PLAN
SCALE: 1/8" = 1'-0"

0 4' 8' 16'



NOTES:
1. T/S = 12'-0" UNO
2. ALL PLAN NOTED ELEVATIONS REFERENCED (+) OR (-) THEREFROM
3. PUDDLE WELD AND SIDE LAP IN ACCORDANCE WITH ROOF PLAN S-104
4. PROVIDE BENTONITE WATERSTOP UNDER WALLS AND 1'-0" UP CONTROL JOINTS BETWEEN ELECTRICAL ROOM AND ADJACENT ROOMS WITH PLUMBING.

PLAN NORTH

A4 MECHANICAL ROOM INTERIOR ROOF FRAMING
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

CERTIFICATE OF AUTHORIZATION#: 0021365
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IN CHARGE OF B. BYRNES, P.E.
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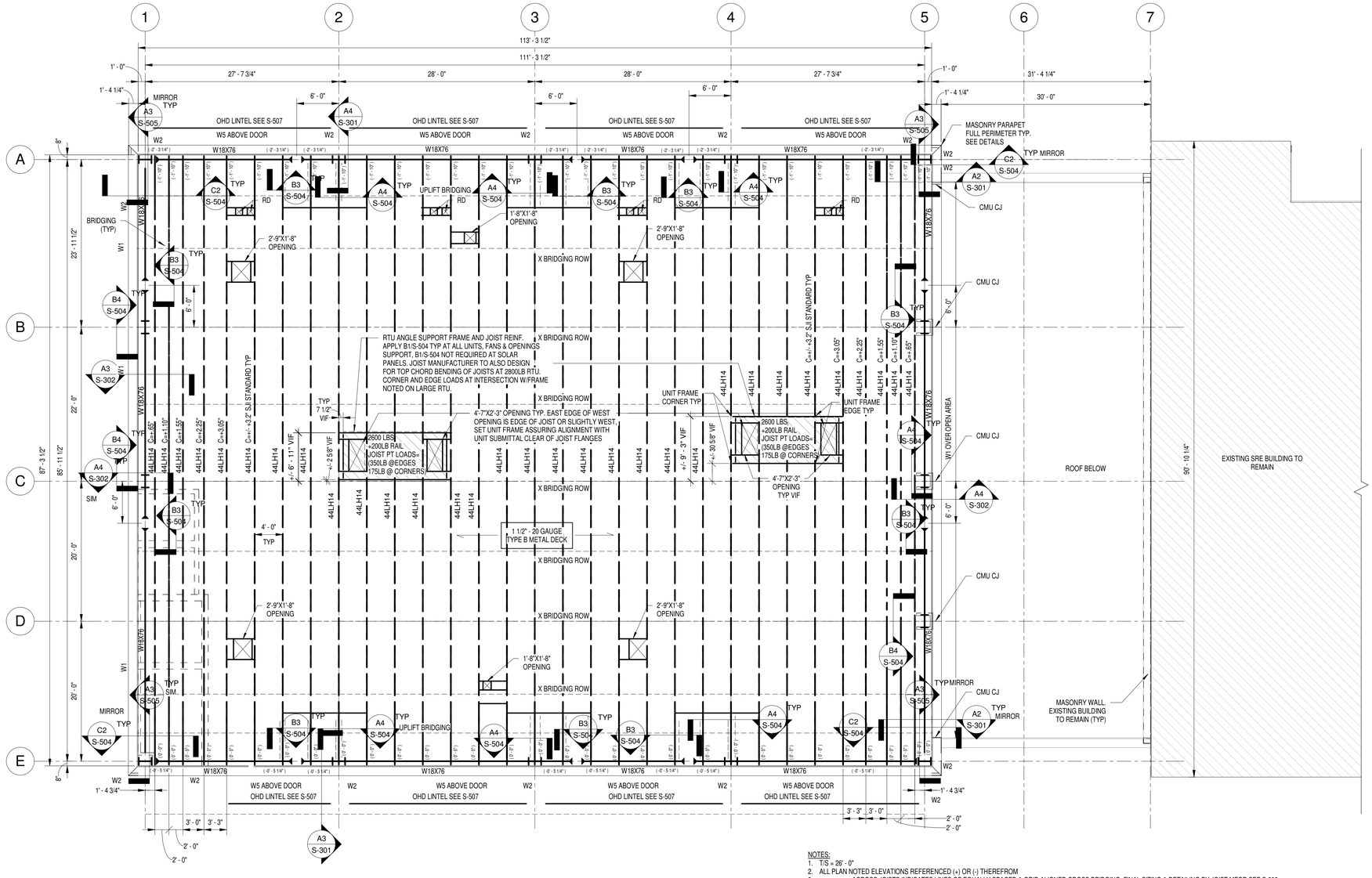
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DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
FLOOR SLAB REINFORCEMENT PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	S-103

SHEET NO. 20 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-86
REV. NO. 0

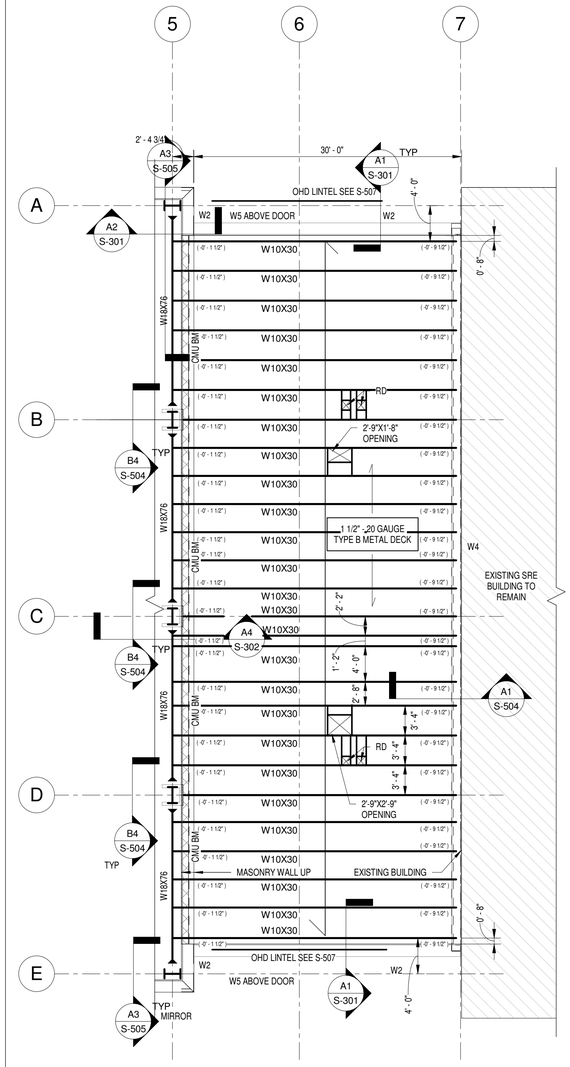


NOTES:
1. T/S = 26' - 0"
2. ALL PLAN NOTED ELEVATIONS REFERENCED (+) OR (-) THEREFROM
3. – – – – – ACROSS JOISTS INDICATES LINES OF EQUALLY SPACED & GRID ALIGNED CROSS BRIDGING, FINAL SIZING & DETAILING BY JOIST MFGR SEE S-302
4. ROOF SOLAR INSTALLATION MAY ACCOUNT FOR ADDITIONAL TOTAL ROOF DEFLECTION POTENTIALLY LATER IN PROJECT PHASING. CONTRACTOR TO REVIEW INSTALLATION PHASING TO ASSURE ALL MEP SYSTEMS ARE NOT IMPACTED. NO SOLAR PANEL MAY BE PLACED WITHIN 5 FEET OF MECHANICAL UNITS AND SERVICE WALKWAYS MUST BE LEFT CLEAR OF SOLAR PANELS
5. SEE DETAILS ON S-504 FOR STEEL CONNECTION FORCES, SEE 500 SERIES DRAWINGS FOR TYPICAL DETAILING & S-601 FOR COLUMN SCHEDULE
6. JOISTS ARE SELECTED TO ACCOUNT FOR SOLAR, ISOLATED MEHANICAL UNIT AND SNOW LOADING CONDITIONS, ALL FALL WITHIN BASIC TABULATED CAPACITY SP JOISTS ARE NOT INTENDED FOR THIS APPLICATION TOTAL LOADING LESSER THAN JOIST TABLE SPECIFIED LOADING. RTU SURROUNDED BY CODE REQUIRED WALKWAY AREA NOT LOADED BY SOLAR SEE ARCH. NO JOIST SHALL BE DESIGNED FOR LESS THAN MAX TABLE LOAD JOISTS ARE SPACED MORE TIGHTLY AT PERIMETER TO TAPER DECK DEFLECTION AT EDGES AND EASE JOIST WIND UPLIFT, WIND UPLIFT DESIGN LOADS ARE OUTLINED ON S-002, DESIGN BY JOIST MANUFACTTURER WELDED JOIST END CONNECTIONS DESIGNED BY JOIST MANUFACTURER
7. DECK SHALL BE SECURED 4-36 FIELD WITH 5/8" PUDDLE WELDS, 7-36 WITH 5/8" PUDDLE WELDS TO ALL STEEL WITHIN 15FT FROM ALL BUILDING EDGES. PROVIDE #12 SIDELAP FASTENER SCREWS AT 12" OC MAX. ALTERNATIVE PIN CONNECTED DECK SECURING MUST PROVIDE EQUIVALENT OR GREATER STRENGTH AND STIFFNESS SUBMITTED WITH FULLY DETAILED COMPARATIVE DATA.
8. SHORT UNLABELED FRAMING LINES BETWEEN JOISTS ARE ANGLE FRAME SUPPORTS FOR MEP SEE B1/S-504 FINALIZED LOCATION COORDINATION BY CONTRACTOR

PLAN NORTH

A1 ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"

0 4' 8' 16'



NOTES:
1. T/S WASHBAY = 18' - 0 1/2"
2. ALL PLAN NOTED ELEVATIONS REFERENCED (+) OR (-) THEREFROM
3. TYPICAL BEAM BEARING PLATE BP-1. SEE SCHEDULE FOR SIZE
4. SEE DETAILS ON S-504 FOR CONNECTION FORCES
5. ALL STEEL THIS PLAN TO BE GALVANIZED AND PAINTED INCLUDING COLUMNS ON GRID 5 FULL HEIGHT
6. SHORT UNLABELED FRAMING LINES BETWEEN W10 ARE ANGLE FRAME SUPPORTS FOR MEP SEE B1/S-504 FINALIZED LOCATION COORDINATION BY CONTRACTOR
7. DECK SHALL BE SECURED 7-36 WITH 5/8" PUDDLE WELDS TO ALL STEEL PROVIDE #12 SIDELAP FASTENER SCREWS AT 12' OC MAX. ALTERNATIVE PIN CONNECTED DECK SECURING MUST PROVIDE EQUIVALENT OR GREATER STRENGTH AND STIFFNESS SUBMITTED WITH FULLY DETAILED COMPARATIVE DATA.

PLAN NORTH

A4 WASHBAY ROOF FRAMING
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

CERTIFICATE OF AUTHORIZATION#: 0021365
REGISTRATION EXPIRATION 12/31/2026

STATE OF NEW YORK — BRIAN R. BYRNES — 089005 — LICENSED PROFESSIONAL ENGINEER — EXPIRES: 4/30/2028

IN CHARGE OF B. BYRNES, P.E.
CHECKED BY J. OBLEMAN, P.E.
MADE BY B. ZUHRIC

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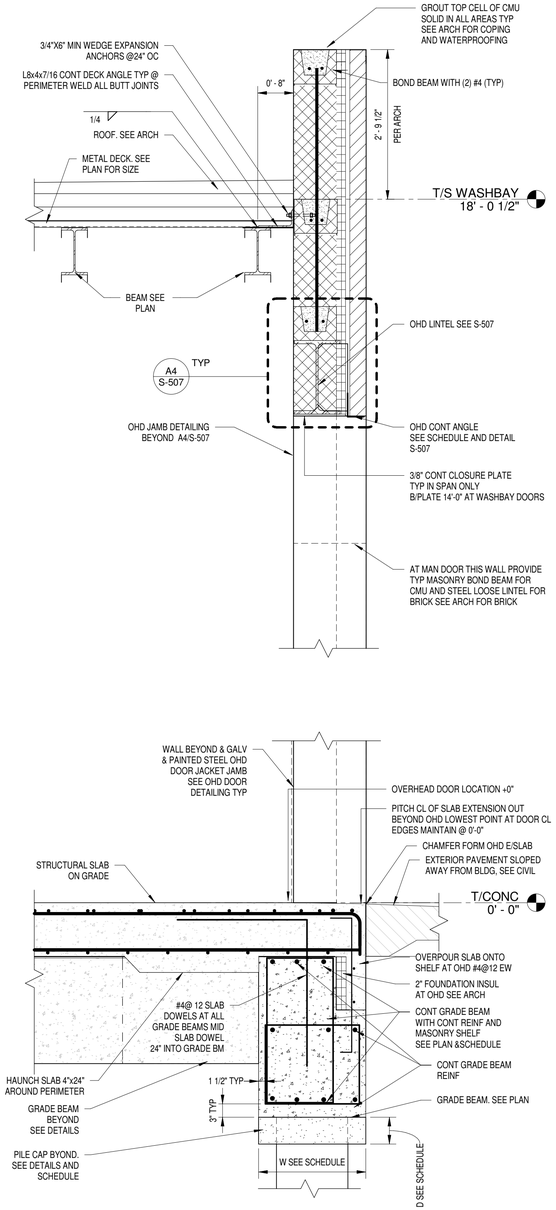
PROJECT COORDINATOR
NAME
SIGNATURE
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WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ROOF FRAMING PLAN

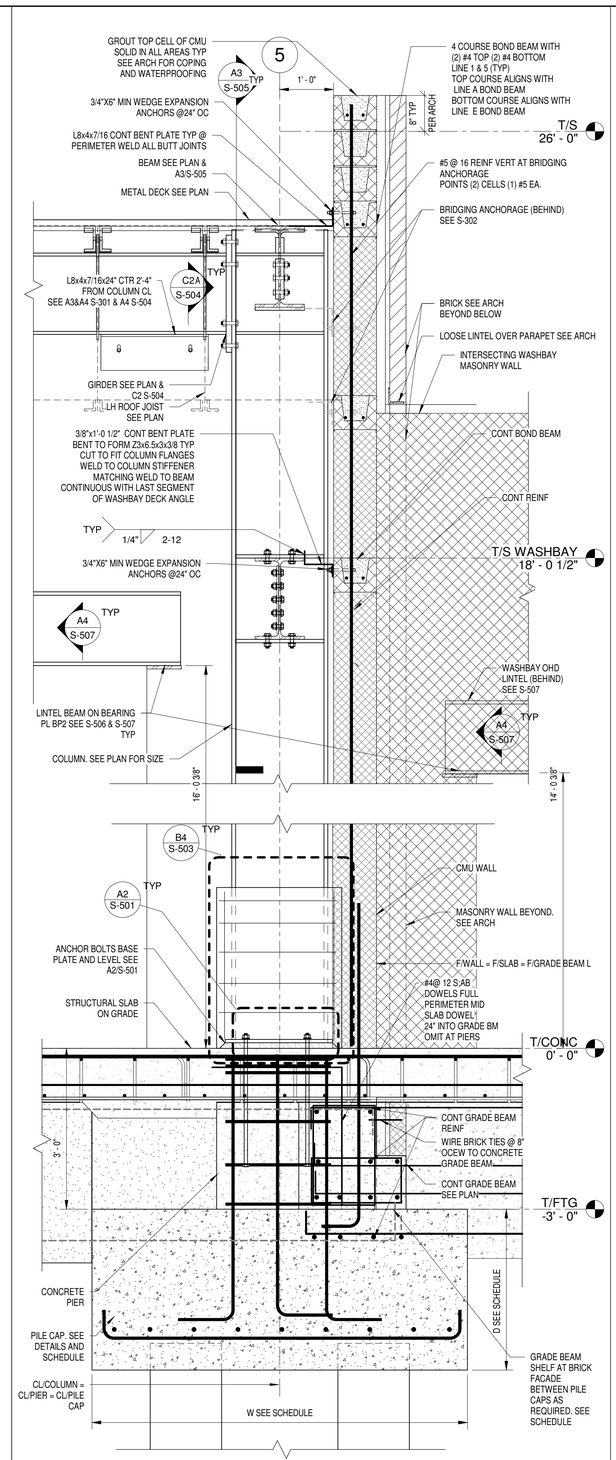
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23-528	S-104

SHEET NO. 21 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-87
REV. NO. 0



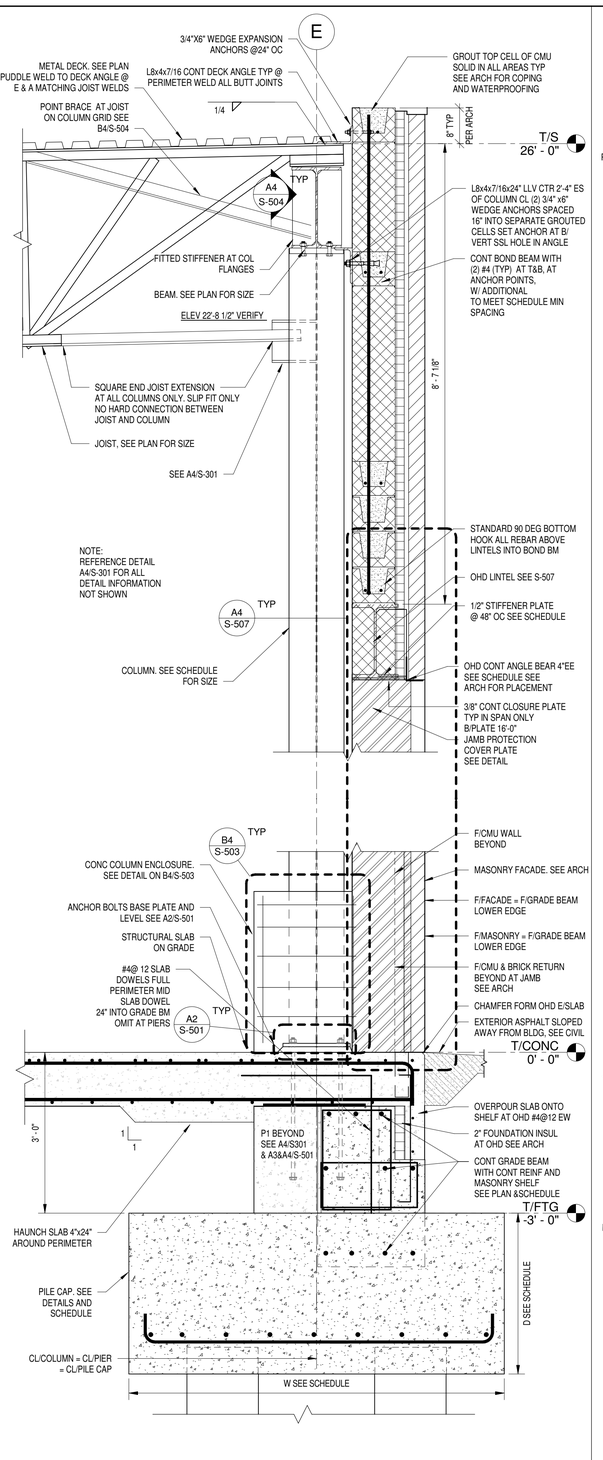
A1 WASHBAY TYPICAL FOUNDATIOPN AND FRAMING WALL SECTION AT OHD

SCALE: 3/4" = 1'-0"



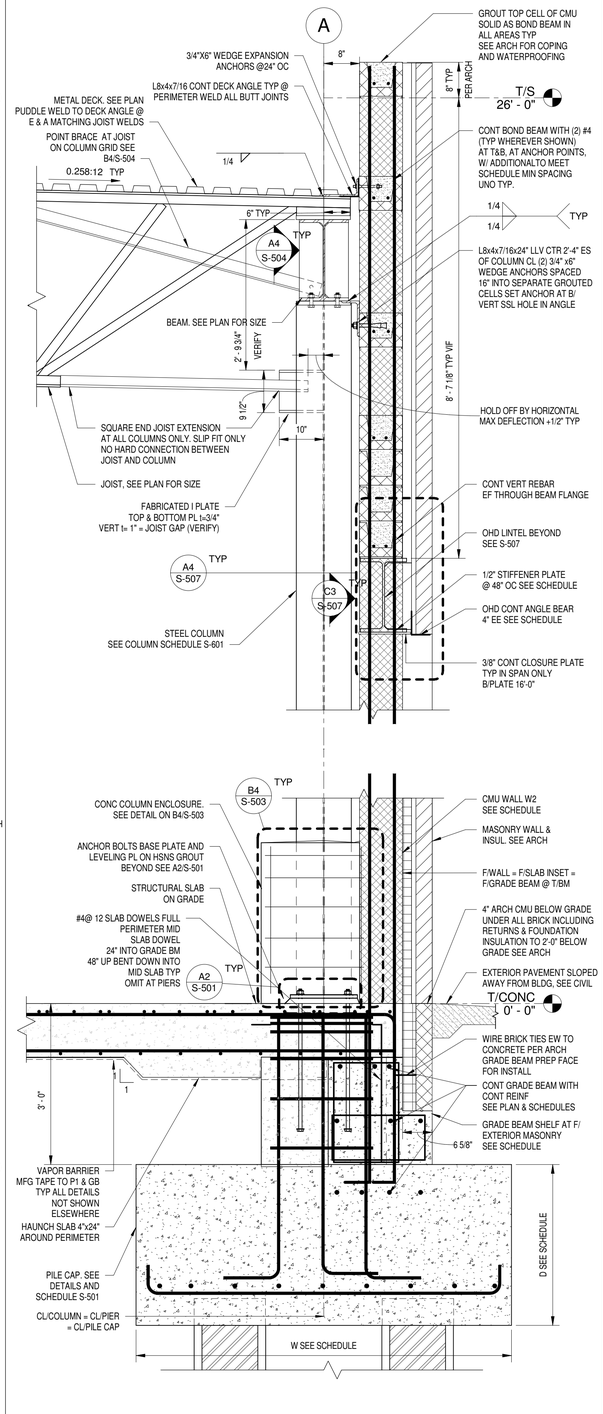
A2 GRIDLINE 5 CORNER WALL SECTION FACING GRID A, MIRROR AT GRID E

SCALE: 3/4" = 1'-0"



A3 TYPICAL WALL SECTION

SCALE: 3/4" = 1'-0"



A4 TYPICAL WALL SECTION

SCALE: 3/4" = 1'-0"

CERTIFICATE OF AUTHORIZATION#: 0021365
REGISTRATION EXPIRATION:12/31/2026

STATE OF NEW YORK — BRIAN R BYRNES — 089005 — LICENSED PROFESSIONAL ENGINEER

EXPIRES: 4/30/2028

IN CHARGE OF	B. BYRNES, P.E.
CHECKED BY	J. OBLEMAN, P.E.
MADE BY	B. ZUHRIC

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WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

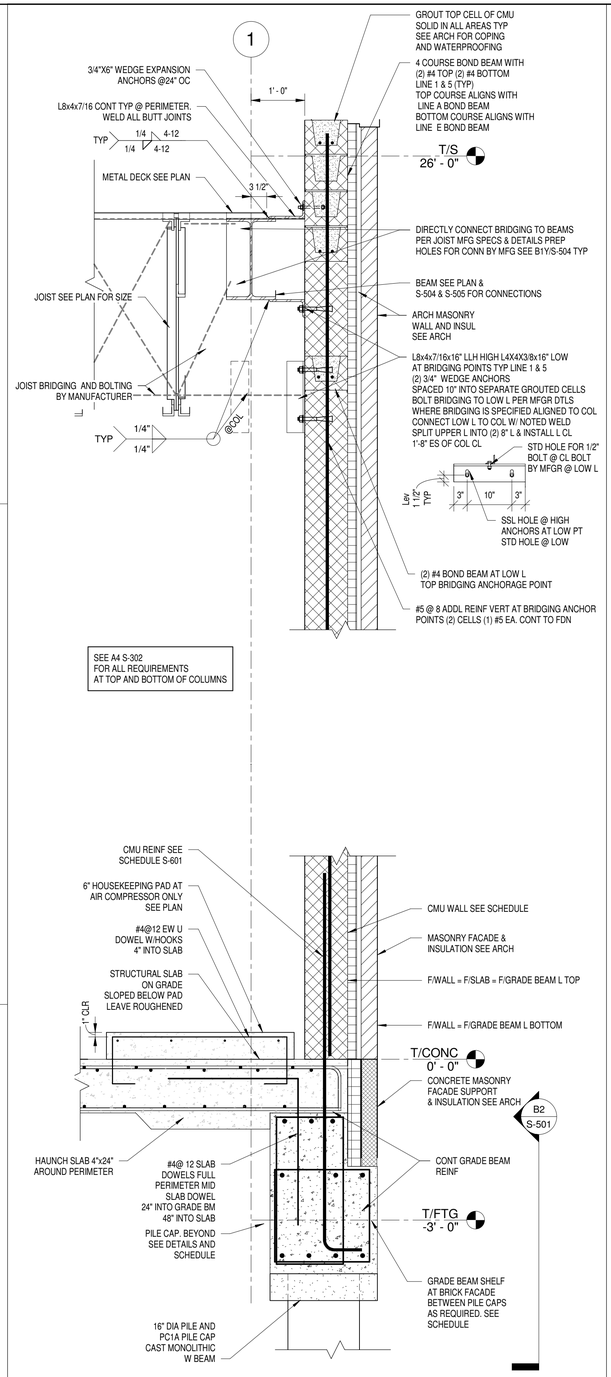
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
SECTIONS

CONTRACT NUMBER	SHEET NUMBER
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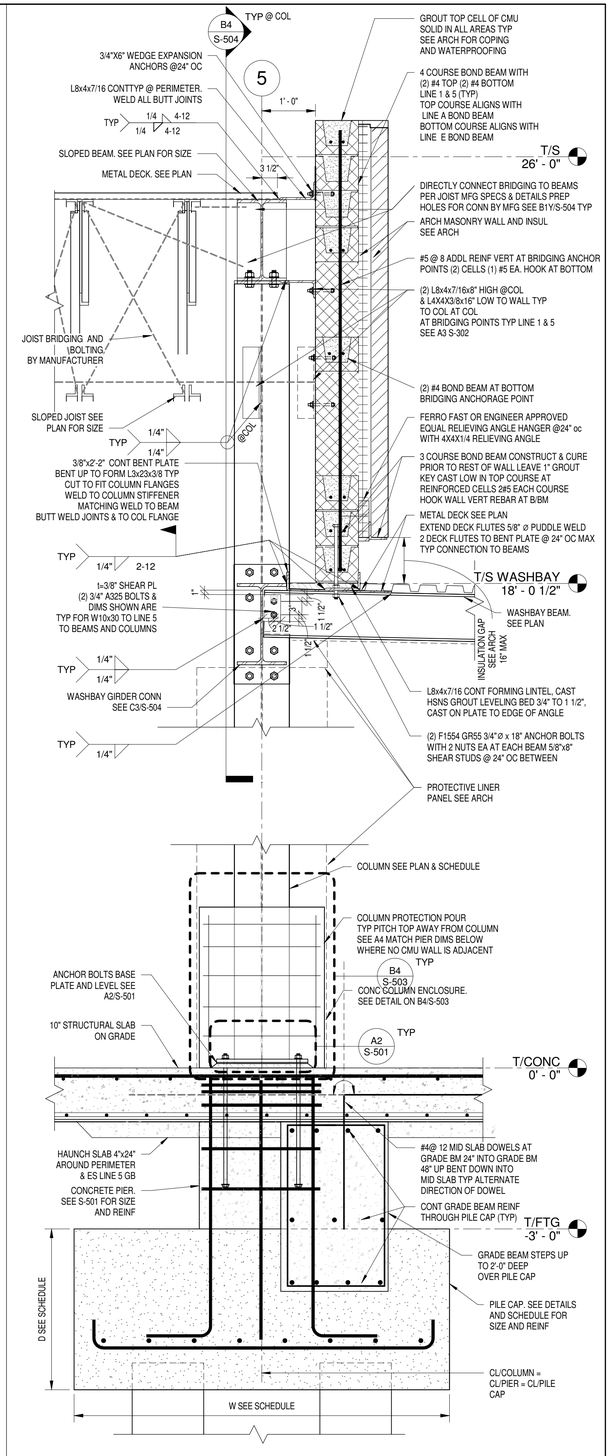
SHEET NO. 22 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-S-88	0



A3 GRIDLINE 1 FOUNDATION AND FRAMING WALL SECTION
SCALE: 3/4" = 1'-0"



A4 GRIDLINE 5 FOUNDATION AND FRAMING WALL SECTION
SCALE: 3/4" = 1'-0"

CERTIFICATE OF AUTHORIZATION#: 0021365
REGISTRATION EXPIRATION 12/31/2026

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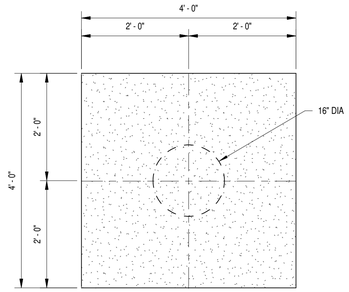
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DIVISION OF ENGINEERING

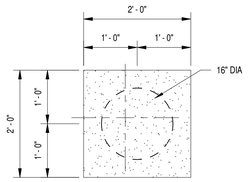
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
SECTIONS

CONTRACT NUMBER	SHEET NUMBER
23-528	S-302

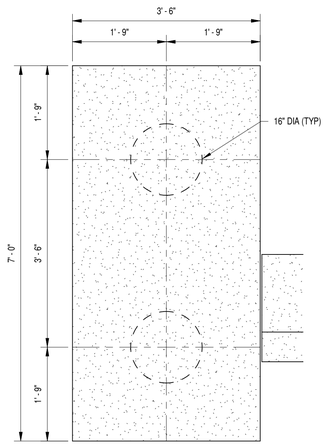
SHEET NO. 23 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-89
REV. NO. 0



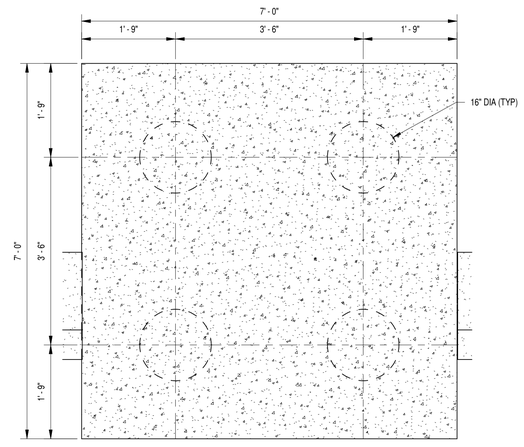
C1 TYPICAL PILE PC1 PLAN
SCALE: 3/4" = 1'-0"



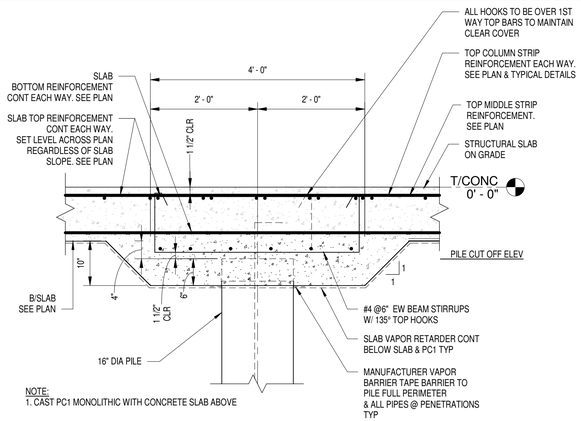
C2 TYPICAL PILE PC1A PLAN
SCALE: 3/4" = 1'-0"



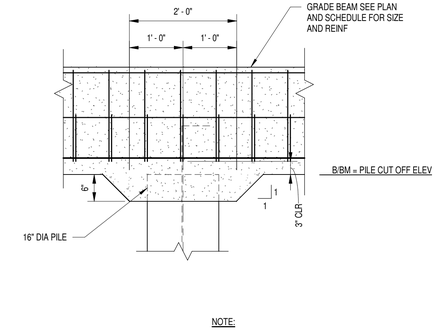
C3 TYPICAL PILE PC2 PLAN
SCALE: 3/4" = 1'-0"



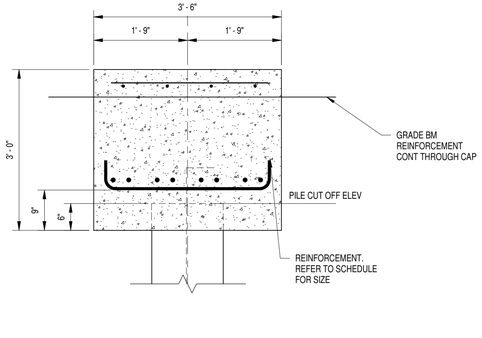
C4 TYPICAL PILE PC4 PLAN
SCALE: 3/4" = 1'-0"



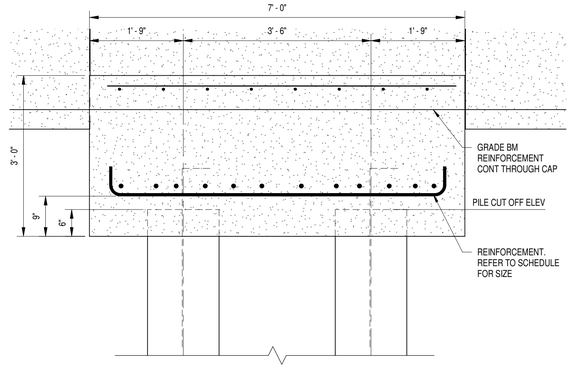
B1 TYPICAL PC1 & SLAB REINFORCEMENT SECTION
SCALE: 3/4" = 1'-0"



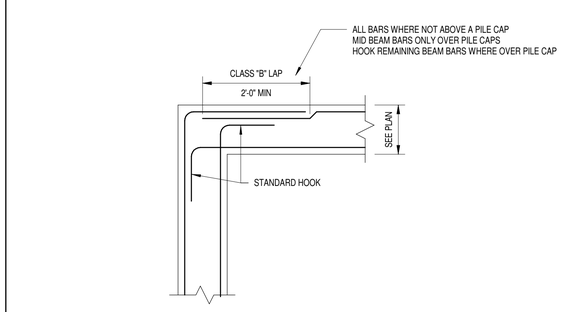
B2 TYPICAL PILE PC1A SECTION
SCALE: 3/4" = 1'-0"



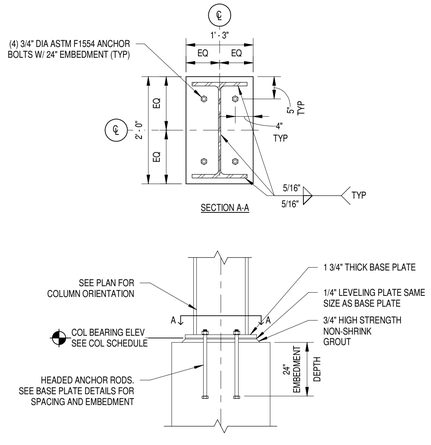
B3 TYPICAL PILE PC2 SECTION
SCALE: 3/4" = 1'-0"



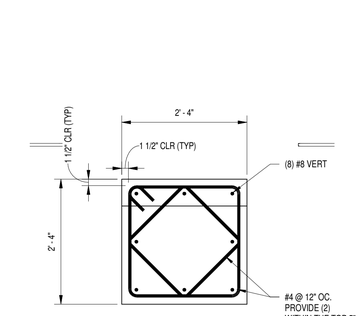
B4 TYPICAL PILE PC4 SECTION
SCALE: 3/4" = 1'-0"



A1 TYPICAL CONCRETE GRADE BEAM CORNER DETAIL
SCALE: 3/4" = 1'-0"



A2 TYPICAL COLUMN BASE PLATE SECTION
SCALE: 3/4" = 1'-0"



A3 PIER P1 DETAIL
SCALE: 3/4" = 1'-0"

PILE CAP SCHEDULE

MARK	DIMENSIONS "W"	DIMENSIONS "L"	DIMENSIONS "H"	REINFORCING	PILE SCHEDULE: TOP CUT OFF ELEVATION	PILE SCHEDULE: TOTAL # PILES
PC1	4' - 0"	4' - 0"	0' - 10"	SEE B2/S-501, MONOLITHIC WITH SLAB	-(1'-4")	52
PC1 @ LIFT	4' - 0"	4' - 0"	0' - 10"	SEE B2/S-501, A3/S-503 MONOLITHIC WITH SLAB	-(2'-9 3/4")	9
PC1A	2' - 0"	2' - 0"	0' - 6"	BEAM REINF. ONLY, MONOLITHIC WITH BEAM	-(4'-0")	15
PC1A @GB3	2' - 0"	2' - 0"	0' - 6"	BEAM REINF. ONLY, MONOLITHIC WITH BEAM	-(3'-0")	5
PC2	7' - 0"	3' - 6"	3' - 0"	(8) #8B LONG , (12) #6B SHORT #5@10" TOP EW	-(5'-6")	14
PC4	7' - 0"	7' -0"	3' - 0"	(12) #8B EW, #5@10" TOP EW	-(5'-6")	32

CL/COLUMN = CL/PIER = CL/PILE CAP AT COLUMN GRIDS
ALL CUT OFF ELEVATIONS ARE REFERENCED FROM T.CONC SLAB ELEVATION +0'-0"
16" TYP 100 KIP DRILLED DISPLACEMENT MICRO PILES.
STELCOR OR ENGINEER APPROVED EQUAL
DESIGNED SIGNED AND SEALED BY NYSPE
BASED ON EXISTING SURVEY & BORING LOCATIONS
ASSUMED AVERAGE BOTTOM OF PILE DEPTH = -(23'-2")
WEIGHTED AVERAGE PILE LENGTH: 20'-0"
PROVIDE 1#4 L40"x6" SET 24" INTO CL GROUT OF EACH PILE MIN
SEE S-101 FOR ADDITIONAL NOTATIONS

PIER SCHEDULE

MARK	SIZE (WIDTHxLENGTH)	VERT. REINF.	TIE REINF.	REF. DETAIL
P1	28 x 28	(8) #8	#4 @12" OC	A3/S-501

A4 PILE CAP AND PIER SCHEDULE
SCALE: NTS

CERTIFICATE OF AUTHORIZATION#: 0021365
REGISTRATION EXPIRATION 12/31/2026

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WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS

CONTRACT NUMBER 23-528
SHEET NUMBER S-501
SHEET NO. 24 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-90
REV. NO. 0

BAR SIZE	F'c = 5000 psi	
	Lhb	0.7Lhb
#3	7	6
#4	9	7
#5	11	8
#6	13	10
#7	15	11
#8	17	12
#9	19	14
#10	22	16
#11	24	18



NOTES:
1. Ldh = DEVELOPMENT LENGTH OF STANDARD HOOKS IN TENSION (INCHES).
2. Ldh = Lhb UNLESS CONDITIONS OF ITEM 3 ARE SATISFIED.
3. Ldh = 0.7Lhb WHEN SIDE COVER NORMAL TO PLANE OF HOOK IS NOT LESS THAN 2 1/2 INCHES AND FOR 90 DEGREE HOOKS, COVER ON BAR EXTENSION BEYOND HOOK IS NOT LESS THAN 2 INCHES. 6 INCHES MINIMUM
4. HOOKS SHALL NOT BE CONSIDERED EFFECTIVE FOR DEVELOPING BARS IN COMPRESSION. HOOKS SHALL NOT BE LESS THAN 12Db PLUS 1/2 TYP BEND DIA.
5. VALUES SHOWN ARE FOR GRADE 60 BARS. MULTIPLY BY 1.25 FOR GRADE 75 BARS.
6. Ldh SHALL BE MULTIPLIED BY 1.2 FOR EPOXY-COATED HOOKED BARS.
7. ROTATE HOOKS SLIGHTLY TO FIT ELEMENT AND CLEAR COVER DO NOT CHANGE BEND

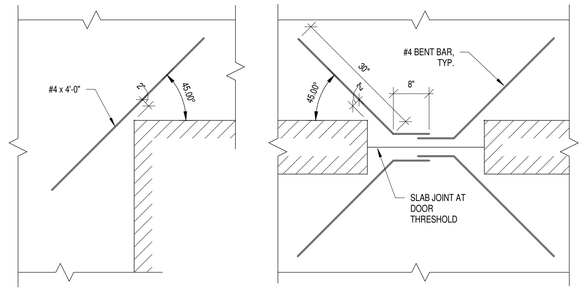
TENSION DEVELOPMENT LENGTHS OF STANDARD HOOKS- NORMAL WEIGHT CONCRETE (GRADE 60 REINFORCING BARS)

BAR SIZE	F'c = 5000 psi	
	CLASS A (1.0 Ld)	CLASS B (1.3 Ld)
#3	13	17
#4	17	22
#5	22	28
#6	26	33
#7	37	49
#8	43	55
#9	48	63
#10	54	70
#11	60	78

NOTES:
1. Ld = TENSION DEVELOPMENT LENGTH OF BAR WITHOUT HOOKS INTO CONCRETE .
2. 1.3 Ld = TENSION LAP SPLICE LENGTH FOR REBAR TO REBAR SPLICES
3. ALL SPLICE LENGTHS ARE IN INCHES.
4. FOR TOP BARS, MULTIPLY SPLICE LENGTHS BY 1.30. TOP BARS REQUIRE A MINIMUM OF 12" FRESH CONCRETE BELOW BAR.
5. FOR EPOXY-COATED BARS, MULTIPLY SPLICE LENGTHS BY 1.5. THE PRODUCT OF THE TOP BAR MULTIPLIER AND THE EPOXY-COATED BAR MULTIPLIER NEED NOT BE MORE THAN 1.7.
6. WHEN LAP SPLICING BARS OF DIFFERENT SIZES, THE LAP LENGTH IS DETERMINED BY THE SMALLER BAR, BUT MAY NOT BE LESS THAN THE CLASS A SPLICE LENGTH OF THE LARGER BAR.
7. SPLICE LENGTHS ARE BASED OFF A MINIMUM OF 1 1/2" OF COVER.

TENSION DEVELOPMENT AND SPLICE LENGTHS- NORMAL WEIGHT CONCRETE (GRADE 60 REINFORCING BARS)

C2 CONCRETE REINFORCEMENT TENSION DEVELOPMENT AND SPLICE LENGTHS
SCALE: 12" = 1'-0"

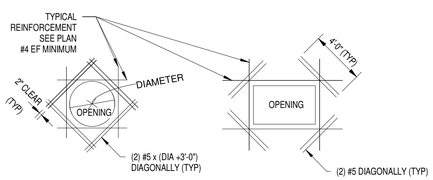


NOTE: DOUBLE REINFORCEMENT AT ENTIRE BUILDING CORNERS WHERE SLAB SHRINKAGE CAN HAVE LARGE IMPACT NOT ALL ADDITIONAL REINFORCEMENT SHOWN ON PLAN APPLY THIS DETAIL IN ALL APPLICABLE AREAS.

TYP. RE-ENTRANT CORNER

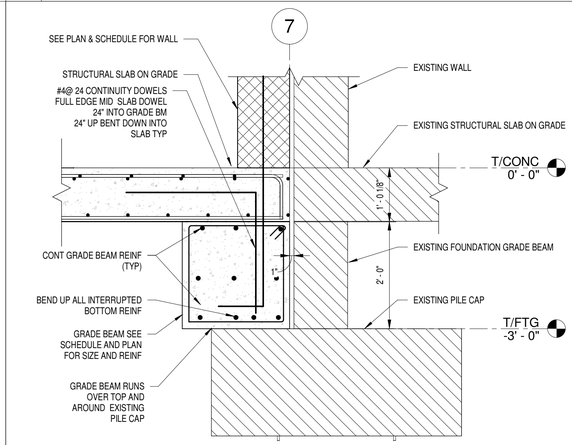
RE-ENTRANT CORNERS AT DOORS

C4 SLAB RE-ENTRANT CORNER REINF
SCALE: 3/4" = 1'-0"

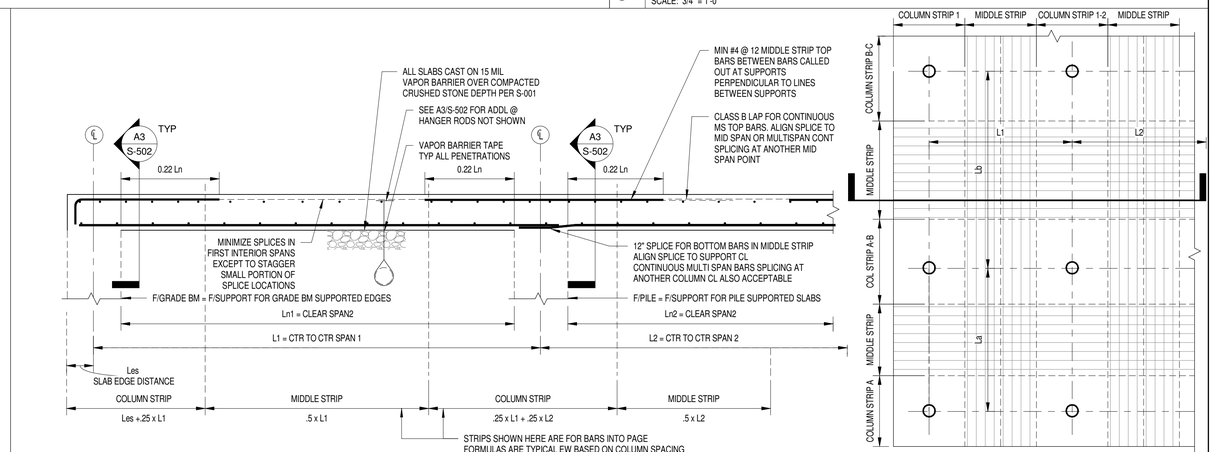


NOTES:
1.) FOR WALLS WITH OPENINGS GREATER THAN 6" IN ANY DIRECTION. PLACE BARS AT EACH FACE FOR WALLS WITH (2) LAYERS OF REINFORCING.
2.) FOR WALLS WITH REINFORCEMENT LARGER THAN #5 BARS, MATCH WALL REINFORCEMENT BAR SIZE.
3.) ALL PIPE PENETRATIONS THROUGH GRADE BEAM SHALL REQUIRE GRADE BEAM TO EXTEND NO LESS THAN 12" BELOW BOTTOM EDGE OF OPENING IN THAT ENTIRE SPAN BETWEEN SUPPORTS. SPLAY BOTTOM BARS BELOW TO SAME CLEAR COVER DO NOT CUT REINFORCEMENT.
4.) FOR SLABS ALL DIAGONAL BARS SHALL FALL DIRECTLY BELOW LOWER MAT OF TOP BARS FOR WALLS AND GRADE BEAMS DIAGONAL BARS SHALL BE DIRECTLY INBOARD EACH FACE FROM OUTERMOST MAIN REINFORCEMENT.

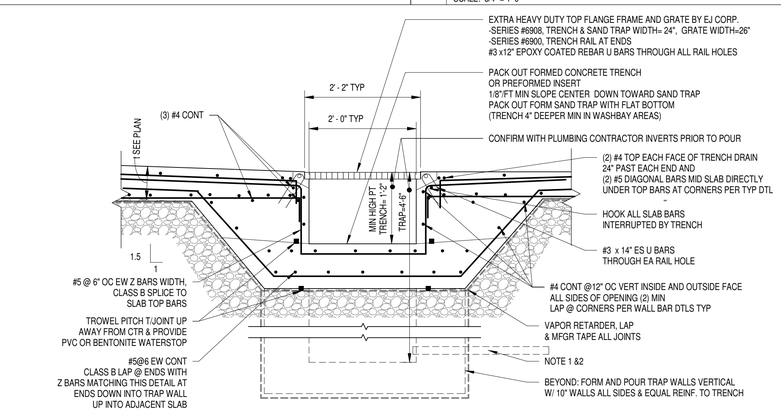
B1 CONCRETE OPENING REINFORCING DETAIL
SCALE: 3/4" = 1'-0"



B2 TYPICAL NEW TO EXISTING FOUNDATION DETAIL
SCALE: 3/4" = 1'-0"

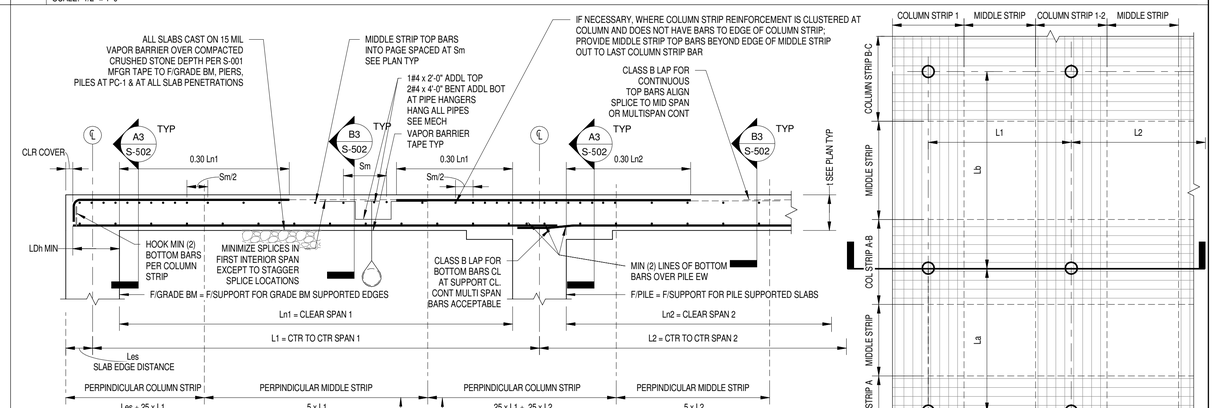


B3 TYPICAL 2-WAY SLAB MIDDLE STRIP REINFORCEMENT
SCALE: 1/2" = 1'-0"



NOTES:
1. REFER TO PLUMBING DRAWINGS FOR INVERT ELEVATIONS & SEAL REQUIREMENTS, INSTALL TO MATCH
2. ALL BELOW SLAB PIPING WILL REQUIRE PIPE HANGERS SUPPORTED BY GROUND FLOOR SLAB FOR SOIL CONDITIONS SEE P-101 FOR PIPE HANGER REQUIREMENTS AND SPACING & A3/S-502 FOR SLAB REQUIREMENTS
3. 1 1/2" CLEAR COVER ON ALL FACES PER S-001

A1 TYPICAL TRENCH DRAIN DETAIL
SCALE: 3/4" = 1'-0"



A3 TYPICAL 2-WAY SLAB COLUMN STRIP REINFORCEMENT
SCALE: 1/2" = 1'-0"

CERTIFICATE OF AUTHORIZATION#: 0021365
REGISTRATION EXPIRATION 12/31/2026



EXPIRES: 4/30/2028

IN CHARGE OF B. BYRNES, P.E.
CHECKED BY J. OBLEMAN, P.E.
MADE BY B. ZUHRIC

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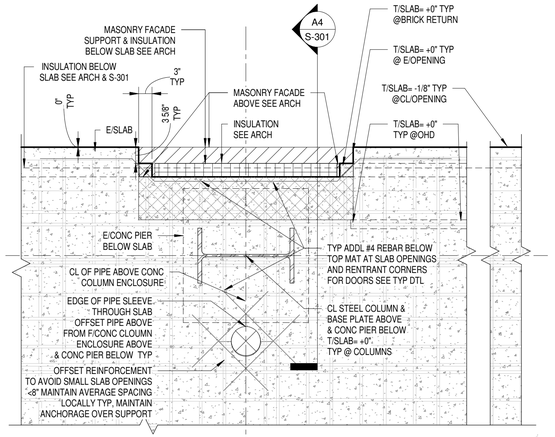
PROJECT COORDINATOR
NAME
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WESTCHESTER COUNTY, NEW YORK
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DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS

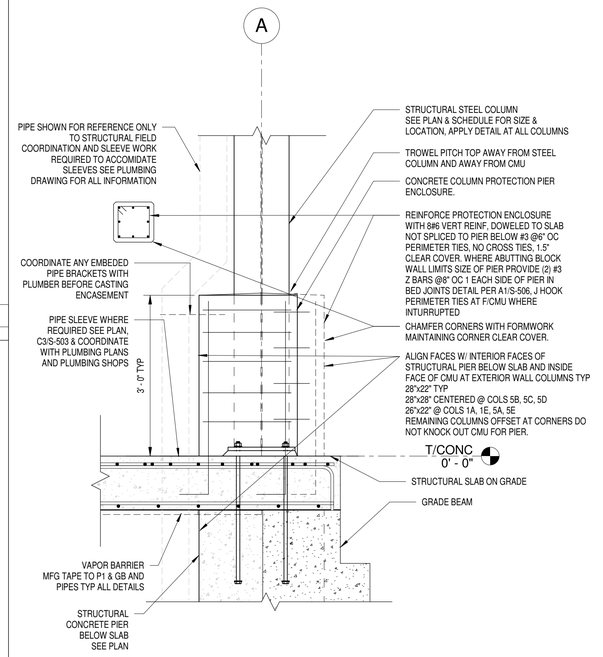
CONTRACT NUMBER	SHEET NUMBER
23-528	S-502

SHEET NO. 25 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-91
REV. NO. 0

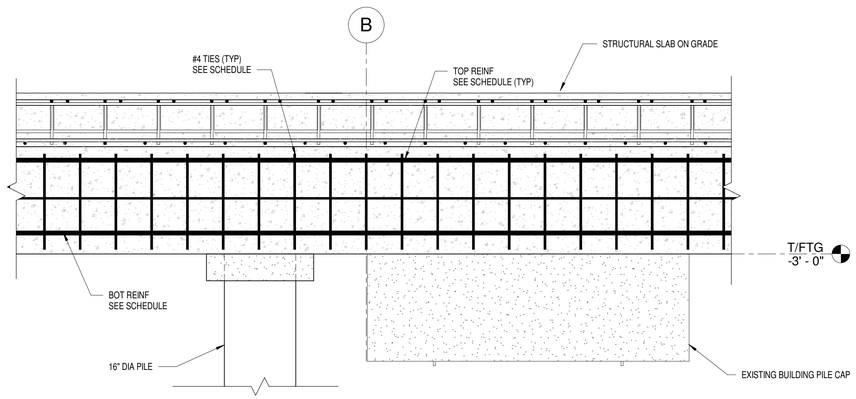


C3 TYPICAL SLAB AT PIER, PLUMBING OPENING & OHD

SCALE: 3/4" = 1'-0"



NOTE:
SOME TYPICAL ELEMENTS NOT APPLICABLE
TO DETAIL NOT SHOWN

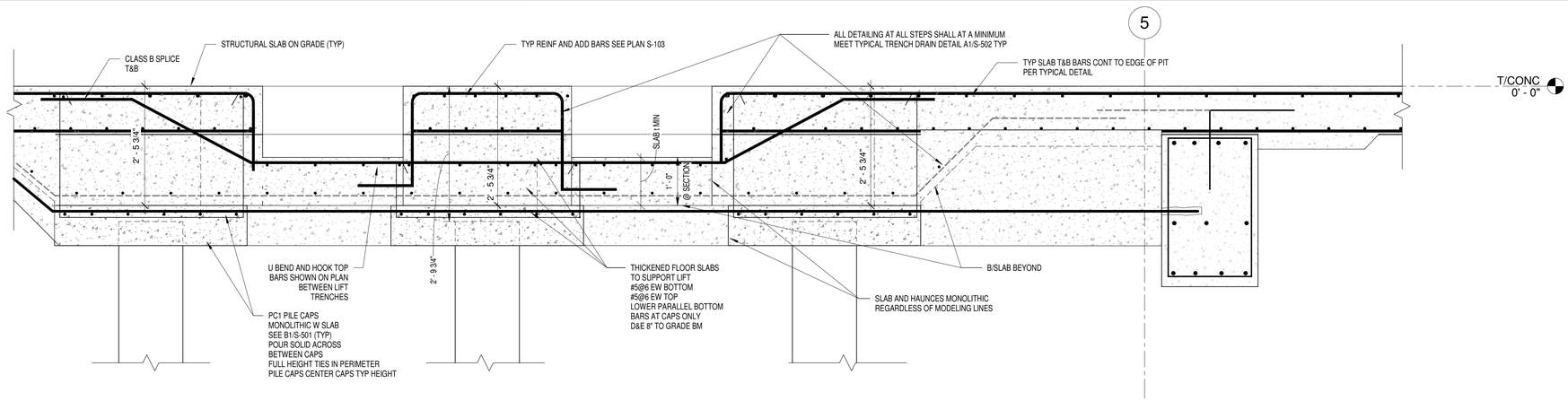


B2 TYPICAL GRADE BEAM AROUND EXISTING BULIDING PILE CAP DETAIL

SCALE: 3/4" = 1'-0"

B4 TYPICAL CONCRETE BOTTOM OF COLUMN ENCASEMENT DETAIL

SCALE: 3/4" = 1'-0"



A3 TYPICAL LIFT FOUNDATION SECTION

SCALE: 3/4" = 1'-0"

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REGISTRATION EXPIRATION:12/31/2026

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089005
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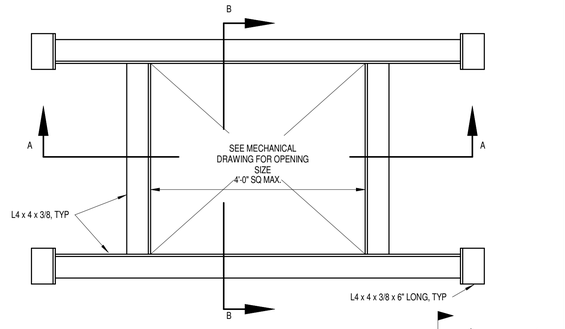
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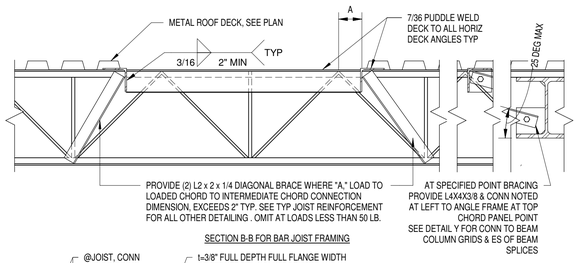
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CONTRACT NUMBER	SHEET NUMBER
23-528	S-503

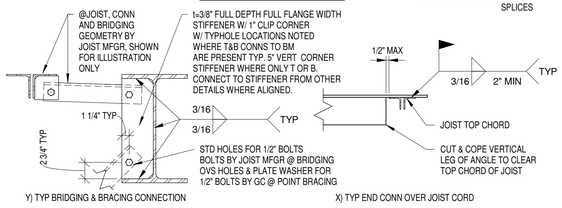
SHEET NO. 26 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-92
REV. NO. 0



SECTION A-A FOR WIDE FLANGE BEAM FRAMING



SECTION B-B FOR BAR JOIST FRAMING

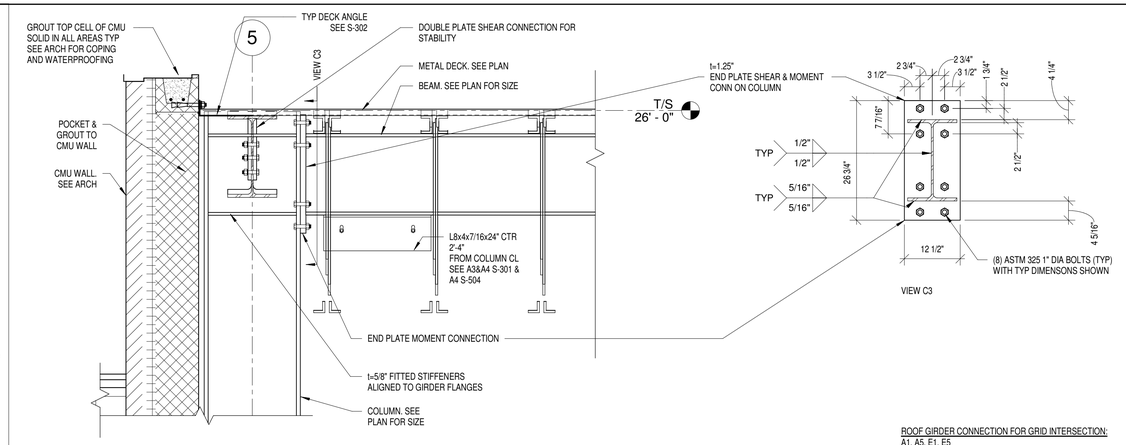


Y) TYP BRIDGING & BRACING CONNECTION

X) TYP END CONN OVER JOIST CORD

B1 TYP ROOF ANGLE FRAMING

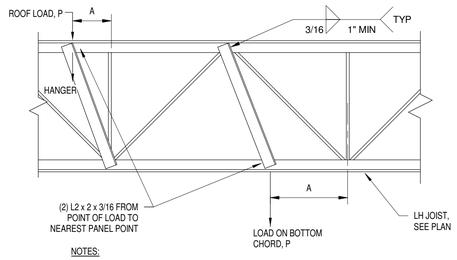
SCALE: 1" = 1'-0"



ROOF GIRDER CONNECTION FOR GRID INTERSECTION:
A1, A5, E1, E5
SEE A3/S-505 FOR SHEAR CONNECTION OF GRID 1 & 5 BEAM

C2 TYPICAL CORNER CONNECTIONS

SCALE: 3/4" = 1'-0"

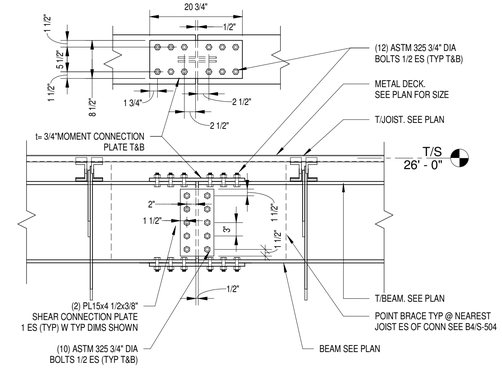


NOTES:

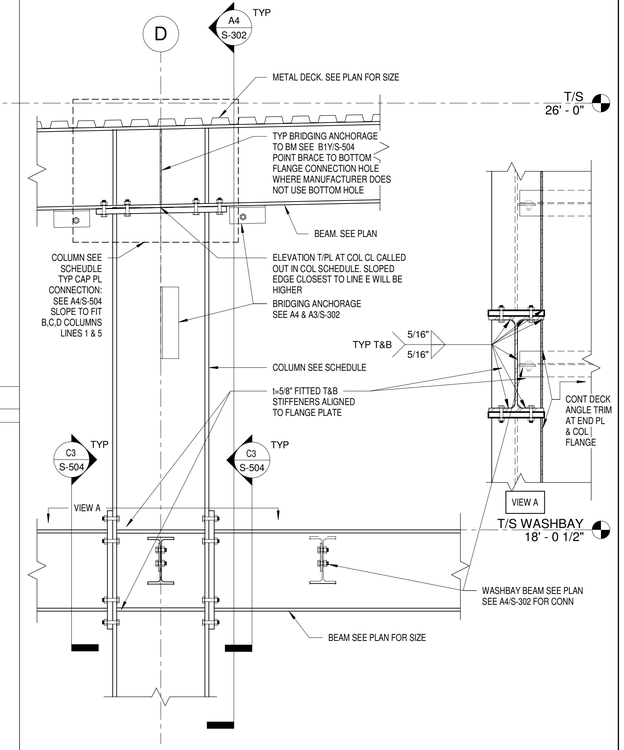
1. DIAGONAL BRACE IS NOT REQUIRED FOR "A" LESS THAN 4 INCHES.
2. PROVIDE DIAGONAL BRACE AT LOCATIONS OF CONCENTRATED LOADS SUCH AS PARTITIONS, HEAVY PIPES, MECHANICAL UNITS, HEAVY LIGHTS, AND ANY OTHER CONCENTRATED LOADS AS DIRECTED BY STRUCTURAL ENGINEER.
3. P = CONCENTRATED LOAD. MAXIMUM LOAD = 200 LBS. CONTACT ENGINEER FOR LOADS THAT EXCEED THE MAXIMUM.
4. DETAIL DOES NOT APPLY FOR SUPPORT OF HANGERS TO RIGGING, CATWALKS OR MECHANICAL FLOORS. DO NOT HANG ANYTHING FROM JOIST BRIDGING
5. STRUTS ARE NOT REQUIRED FOR LOADS AT OR UNDER 50 LBS, UNLESS SPECIFICALLY RESTRICTED FURTHER BY JOIST MANUFACTURER

C3 W18 END PLATE TO W21 FLANGE CONNECTION DETAIL

SCALE: 3/4" = 1'-0"



ROOF BEAM/GIRDER SPLICE CONNECTION FOR ALL SPLICES GRID:
A,E,1,5



CONNECTION FOR GRID INTERSECTION:
WASHBAY LEVEL GIRDER: B5, C5, D5
ROOF LEVEL SLOPED : B1, C1, B5, C5, D5 (REFER TO DETAIL A4/S-504)
SEE A4/S-302 FOR WASHBAY BEAM CONNECTION

B2 TYP JOIST REINFORCEMENT AT POINT LOADS

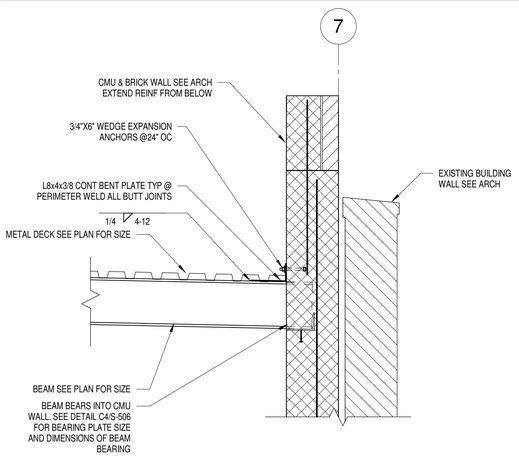
SCALE: 1" = 1'-0"

B3 TYPICAL BEAM SHEAR AND MOMENT CONNECTION

SCALE: 3/4" = 1'-0"

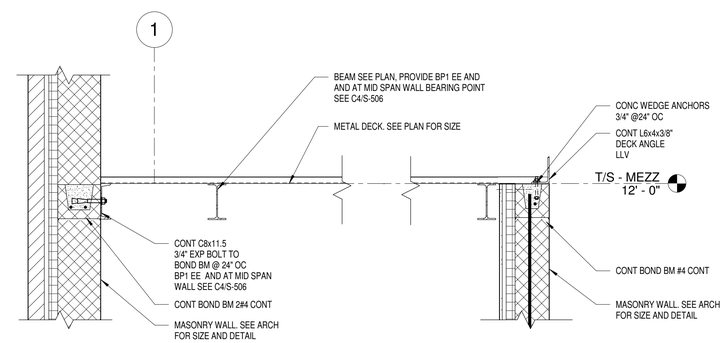
B4 TYPICAL BEAM AND COLUMN CONNECTION DETAIL GRID 1 & 5

SCALE: 3/4" = 1'-0"



A1 TYPICAL WASHBAY BEAM FRAMING INTO CMU DETAIL

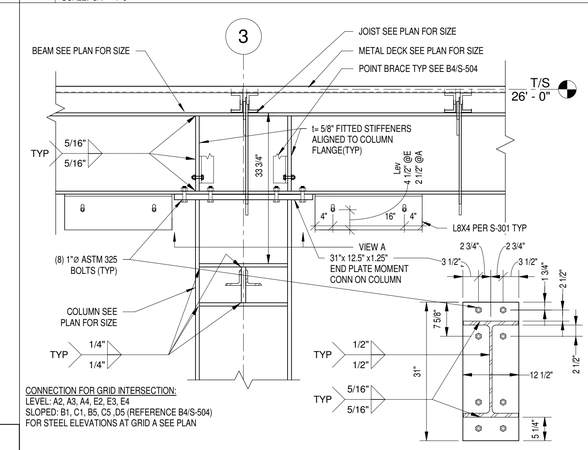
SCALE: 3/4" = 1'-0"



SHEET NOTE:
SOME ELEMENTS NOT APPLICABLE TO CONNECTIONS SHOWN ON OTHER DETAILS OMITTED HERE FOR CLARITY SEE S-001
ALL MOMENT CONNECTIONS & CONECTIONS TO COLUMNS ARE TO BE CONSIDERED PART OF THE MAIN LATERAL FORCE RESISTING SYSTEM.

A2 MECHANICAL ROOM ROOF AND WALL DETAIL

SCALE: 3/4" = 1'-0"



CONNECTION FOR GRID INTERSECTION:
LEVEL: A2, A3, A4, E2, E3, E4
SLOPED: B1, C1, B5, C5 ,D5 (REFERENCE B4/S-504)
FOR STEEL ELEVATIONS AT GRID A SEE PLAN

A4 TYPICAL COLUMN CAP MOMENT CONNECTION

SCALE: 3/4" = 1'-0"

IN CHARGE OF B. BYRNES, P.E.
CHECKED BY J. OBLEMAN, P.E.
MADE BY B. ZUHRIC

CERTIFICATE OF AUTHORIZATION#: 0021365
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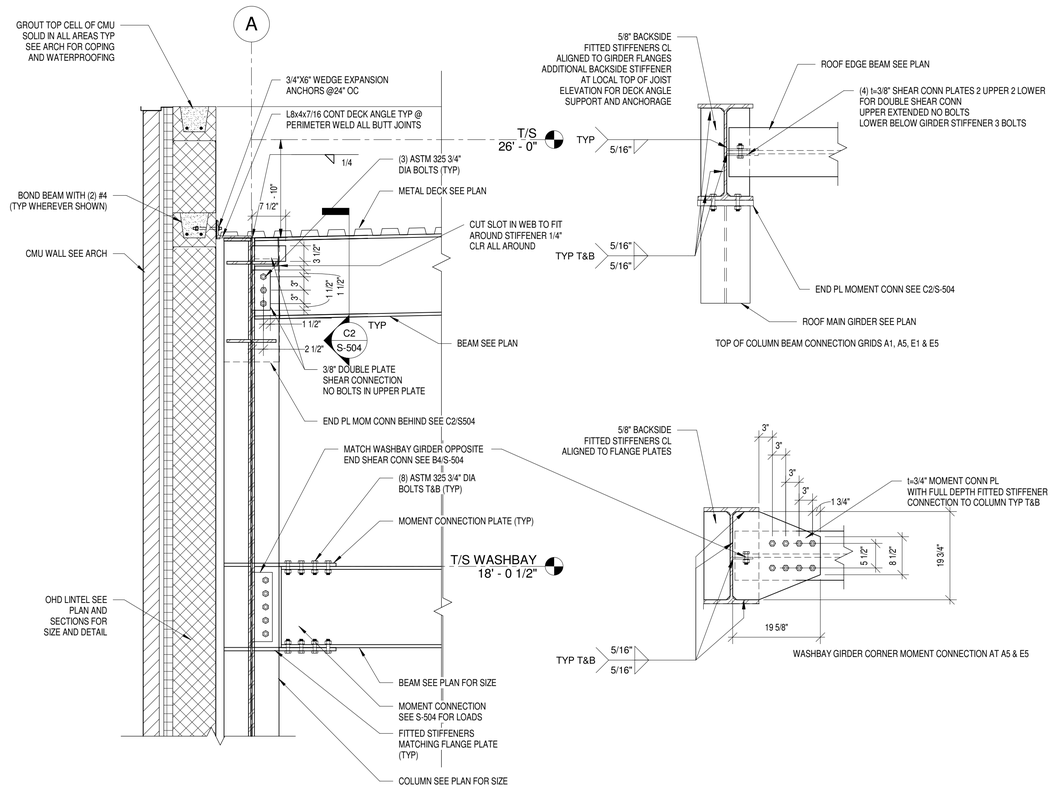
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DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	S-504

SHEET NO. 27 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-93
REV. NO. 0



BEAM CONNECTION FOR GRID INTERSECTION:
ROOF BEAMS ALONG GRIDLINES 1 AND 5 AT: A1, A5, E1, & E5
WASHBAY GIRDERRS ALONG GRID 5 AT: A5 & E5
SEE C2/S-504 FOR CONNECTION OF GIRDER ON GRID A & E

A3 CORNER WASHBAY GIRDER CONNECTION AT GRID 5 & CORNER ROOF BEAM CONNECTIONS AT GRID 1 & 5

SCALE: 3/4" = 1'-0"

IN CHARGE OF B. BYRNES, P.E.
CHECKED BY J. OBLEMAN, P.E.
MADE BY B. ZUHRIC

CERTIFICATE OF AUTHORIZATION#: 0021365
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CONTRACT NUMBER	SHEET NUMBER
23-528	S-505

SHEET NO. 28 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-94
REV. NO. 0

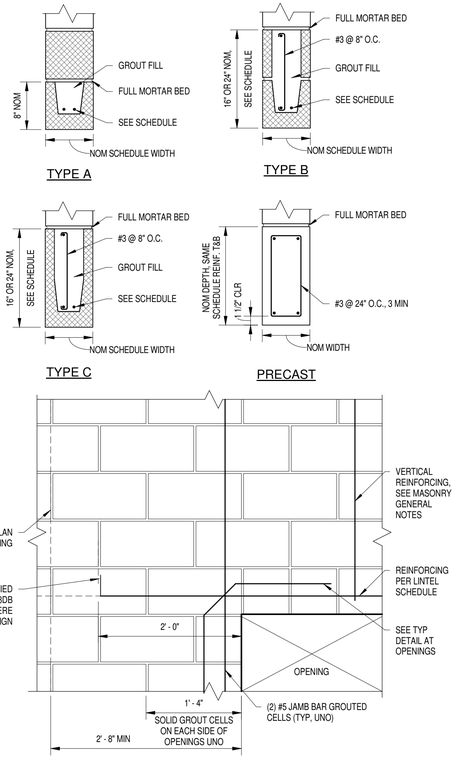
B1 CMU LINTEL SCHEDULE

SCALE: 1" = 1'-0"

CLEAR SPAN	REINFORCING REQUIREMENTS IN NOMINAL LINTEL SECTION (UNO)		
[ft-in]	8x8	8x16	8x24
3-4	2 - #5	N/A	N/A
4-0	2 - #5	N/A	N/A
4-8	N/A	2 - #5	N/A
5-4	N/A	2 - #5	N/A
6-0	N/A	2 - #5	N/A
6-8	N/A	2 - #5	N/A
7-4	N/A	2 - #5	N/A
8-0	N/A	N/A	2 - #6 T&B
8-8	N/A	N/A	2 - #6 T&B
9-4	N/A	N/A	2 - #6 T&B
10-0	N/A	N/A	2 - #6 T&B
12-0	N/A	N/A	2 - #6 T&B

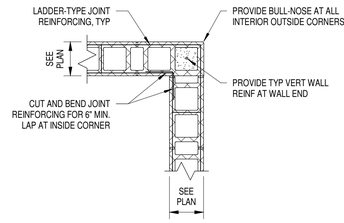
NOTES:

1. SEE ARCHITECTURAL DWGS FOR SIZE AND LOCATION OF OPENINGS.
2. PROVIDE 16" OF BEARING AT EACH JAMB REINFORCEMENT SHALL PROJECT A MINIMUM OF 16" ONTO THE BEARING.
3. MINIMUM MASONRY COMPRESSIVE STRENGTH f'm=2500 PSI.
4. LINTELS SCHEDULED AS 16" OR 24" HIGH MAY BE EITHER TYPE B OR TYPE C AS DETAILED.
5. PRECAST CONCRETE LINTELS AS SHOWN MAY BE USED WITH ARCHITECTURAL APPROVAL, f'c=4000 PSI MINIMUM.
6. 8 x 16 = NOMINAL WIDTH x MIN. DEPTH OF LINTEL.
7. CONTRACTOR TO PROVIDE FORMWORK WHERE REQ'D FOR LINTELS
8. FOR OHD ALL MASONRY LINTEL ALTERNATE SEE A2/S-507



C3 8" INTERIOR ROOM CMU WALL CORNER

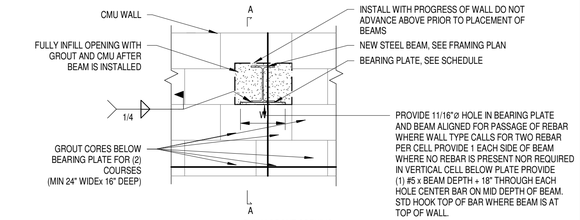
SCALE: 3/4" = 1'-0"



NOTE: TOOTH MASONRY AT WALL CORNERS FOR TRUE BOND

C4 STEEL BEAM TO CMU BEARING PLATE DETAIL

SCALE: 3/4" = 1'-0"

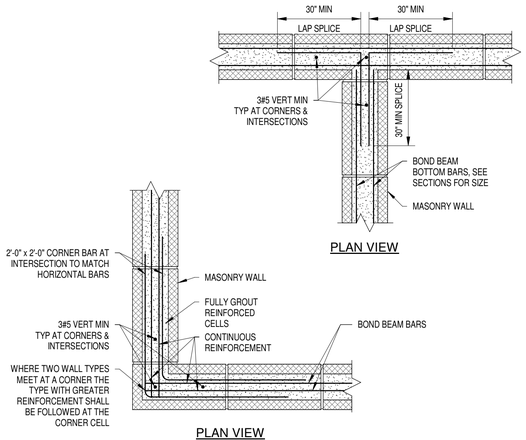


BEARING PLATE SCHEDULE				
TYPE	W	N	T	BM
BP-1	7"	6"	1/2"	TYP
BP-2	9 1/2"	7 1/2"	5/8"	OHD

NOTES:
ALL BEARING PLATES SHALL BE FABRICATED BASED ON COURSING OF WALLS PROVIDING REBAR HOLES IN APPROPRIATE OPEN CELL LOCATIONS

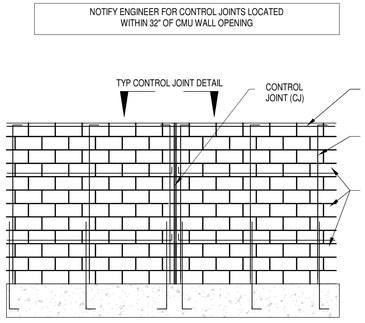
B3 CMU BOND BEAM T & CORNER REINF

SCALE: 1" = 1'-0"



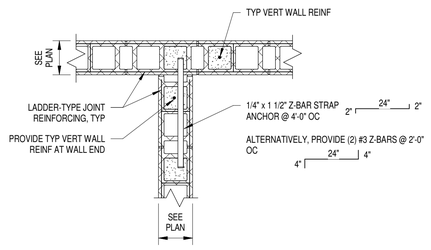
B4 TYP CMU CONTROL JOINTS ELEVATION

SCALE: 3/32" = 1'-0"



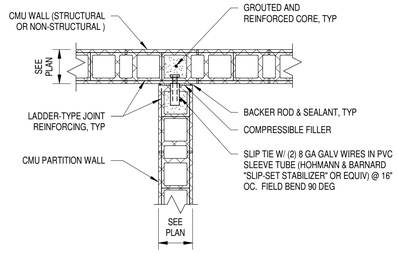
A1 CMU WALL RIGID INTERSECTION

SCALE: 3/4" = 1'-0"



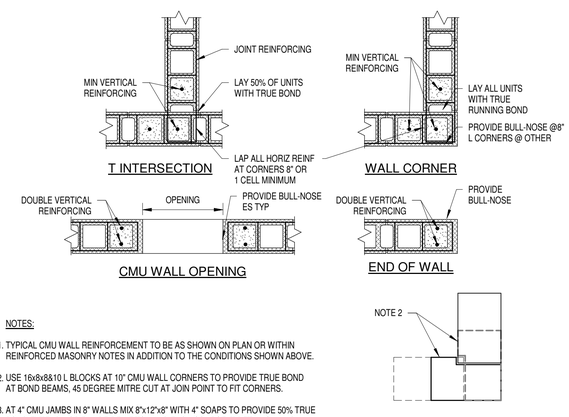
A2 CMU WALL INTERSECTION WITH CONTROL JOINT DETAIL

SCALE: 3/4" = 1'-0"



A3 TYPICAL MASONRY REINFORCED WALL INTERSECTION

SCALE: 3/4" = 1'-0"

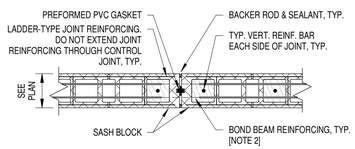


NOTES:

1. TYPICAL CMU WALL REINFORCEMENT TO BE AS SHOWN ON PLAN OR WITHIN REINFORCED MASONRY NOTES IN ADDITION TO THE CONDITIONS SHOWN ABOVE.
2. USE 16x8x8&10 L BLOCKS AT 10" CMU WALL CORNERS TO PROVIDE TRUE BOND AT BOND BEAMS, 45 DEGREE MITRE CUT AT JOIN POINT TO FIT CORNERS.
3. AT 4" CMU JAMBS IN 8" WALLS MIX 8"x12"x8" WITH 4" SOAPS TO PROVIDE 50% TRUE BOND EXTEND HORIZ WIRE REINF TO JAMB EACH COURSE, T DETAIL SIMILAR.

A4 TYP CMU CONTROL JOINT

SCALE: 3/4" = 1'-0"



NOTES:1) SEE PLAN FOR CONTROL JOINT LOCATIONS. IF NOT SHOWN, JOINT SPACING SHALL BE LESSER OF 28'-0" AND 2x WALL HEIGHT UNLESS REINFORCED WITH BOND BEAMS @ 48' OC. IN WHICH CASE NO CONTROL JOINTS SHALL BE PROVIDED UNLESS SECIFICALLY CALLED FOR ON PLAN.
2) UNLESS OTHERWISE NOTED, BOND BEAM REINFORCING FOR BOND BEAMS AT FLOOR OR ROOF LEVELS, LINTELS AND LEDGERS IS CONTINUOUS AND REINFORCING FOR INTERMEDIATE BOND BEAMS BETWEEN ARE NOT CONTINUOUS THROUGH CONTROL JOINTS.
3) CONTROL JOINTS SHALL BEGIN 1/2 TYPICAL SPACING FROM CORNERS
4) FOR CONTROL JOINTS AT INTERSECTIONS SEE OTHER TYP DETAILS
5) CMU CONTROL JOINTS DO NOT ALIGN WITH BRICK CONTROL JOINTS SEE ARCHITECTRUAL FOR BRICK CONTROL JOINT LOCATIONS
6) NO CONTROL JOINTS GRID LINES A, E, & 7

IN CHARGE OF B. BYRNES, P.E.
CHECKED BY J. OBLEMAN, P.E.
MADE BY B. ZUHRIC

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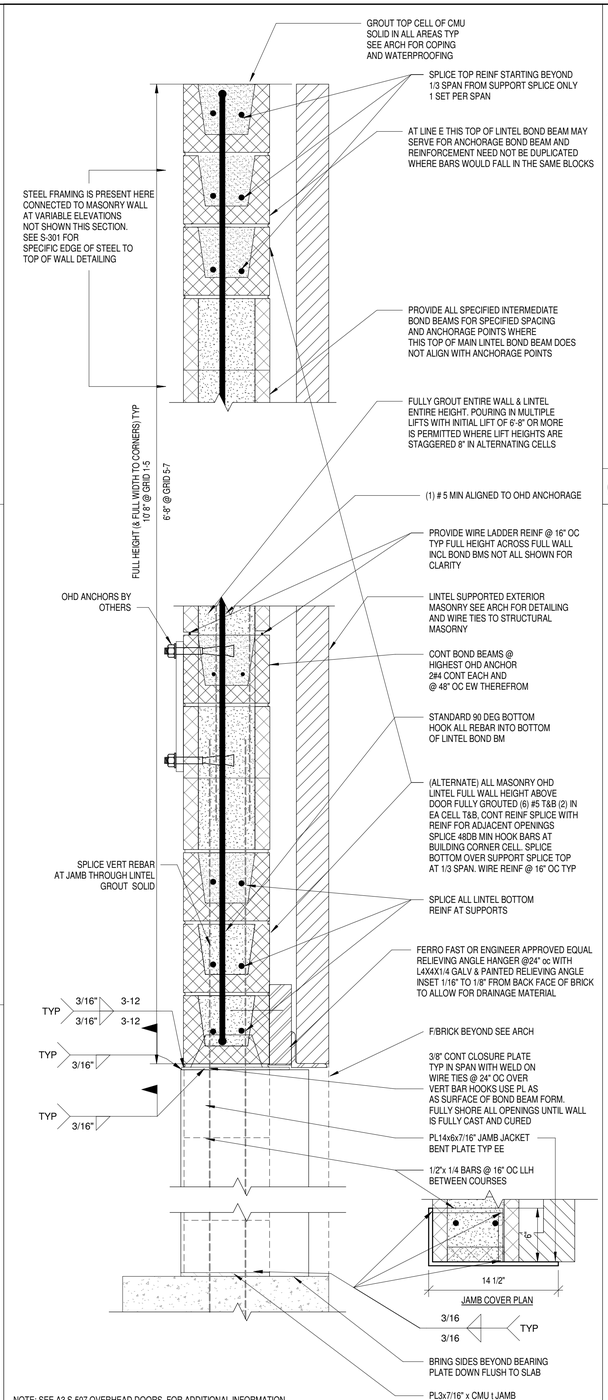
PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	S-506

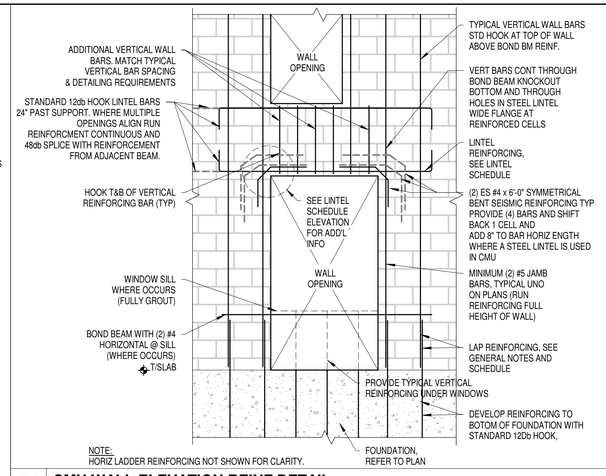
SHEET NO. 29 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-95
REV. NO. 0



NOTE: SEE A3 S-507 OVERHEAD DOORS FOR ADDITIONAL INFORMATION
SEE C3/S-507 FOR TYPICAL SEISMIC CORNER BAR REINFORCING NOT SHOWN HERE
GALVANIZE AND PAINT TYP ALL JAMB COVERSCLOSURE PLATES AND OHD LINTELS, ALL STRUCTURAL STEEL THIS DETAIL PER S-001 REQUIREMENTS
THIS DETAIL IS AN ALTERNATE FULL MASONRY LINTEL FOR THIS LONG SPAN OPENING AND REQUIRES SHORING AND POURING OF ALL OHD OPENINGS. WITH SPLICED REINFORCEMENT, CONTRACTOR FULLY RESPONSIBLE FOR ENGINEERED FORMING AND SHORING DESIGN
CONTRACTOR TO BID BASED ON INTENDED APPROACH WITH SUBCONTRACTORS NO SEPARATE LINE ITEM IN BIDDING WILL BE ACCEPTED.

A2 TYPICAL OVERHEAD DOOR (OHD) ALT MASONRY LINTEL & JAMB

SCALE: 1 1/2" = 1'-0"



NOTE:
HORIZ LADDER REINFORCING NOT SHOWN FOR CLARITY.

C3 CMU WALL ELEVATION REINF DETAIL

SCALE: 3/4" = 1'-0"

STEEL LOOSE LINTEL SCHEDULE

WITHIN NON-BEARING WALLS

WALL THICKNESS	BRICK MASONRY OPENING		OVERHEAD DOORS
	UP TO 4'-0" 4" BEARING EACH END	4'-0" TO 8'-0" 8" BEARING EACH END	8" BEARING EACH END ON 10" CMU
4"	L4 X 3 1/2" X 5/16" LLV OR WT4 X 6.5 *	L6 X 3 1/2 X 5/16" LLV OR WT6 X 8 *	W16x77 LINTEL SET FLANGE FLUSH WITH INTERIOR F/BLOCK 1/2" STIFFENERS @4'-0 OC L6 X 4 X 5/16" LLV HUNG LINTEL @ FACADE BRICK USE BP2 BEARING PLATE EE W DRILLED VERT HOLES ES FOR WALL REBAR SPLICING FULL DEPTH 5/8 STIFFENER PLATE ES 5/8" IN FROM EACH END OR PROVIDE OHD MASONRY LINTEL PER A2/S-507
6"	WT4 X 6.5	WT6 X 8	
8"	2 - L'S 4 X 3 1/2 X 5/16" LLV OR WT4 X 12 *	2 - L'S 6 X 3 1/2 X 5/16" LLV OR WT7 X 15 *	
10"	L5 X 5 X 5/16" + L4 X 3 1/2 X 5/16" LLV OR WT4 X 15.5	L5 X 5 X 5/16" + L5 X 3 1/2 X 5/16" LLV OR WT6 X 20	
12"	3 - L'S 4 X 3 1/2 X 5/16" LLV OR 2 X WT5 X 11	3 - L'S 6 X 3 1/2" X 5/16" LLV OR 2 WT5 X 11	

* CUT FLANGES TO 3 1/2" WIDTH

INTERIOR LINTEL NOTES:

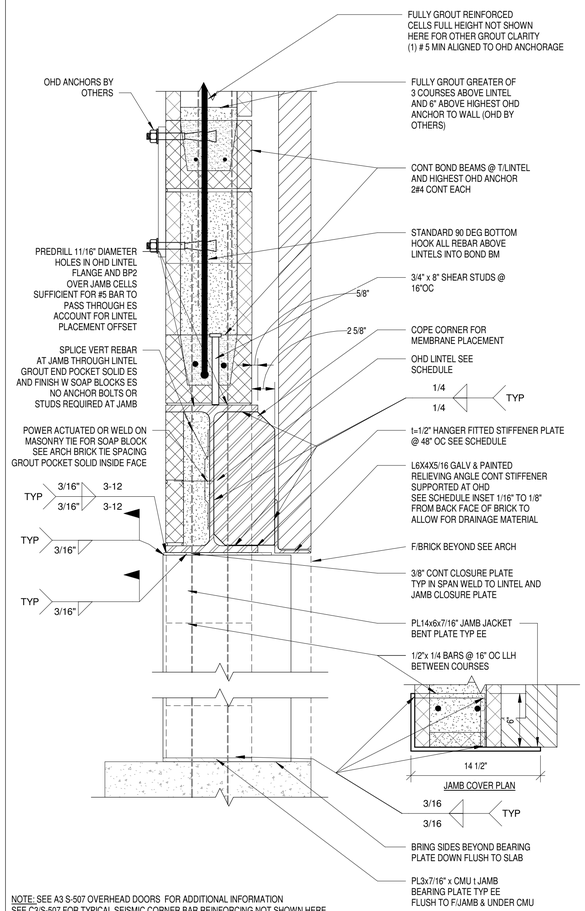
1. FOR LINTELS NOT SHOWN ON PLANS, SEE SCHEDULE ABOVE.
2. SEE ARCHITECTURAL AND MECHANICAL DRAWINGS FOR OPENING LOCATION.
3. FOR SPECIAL CONDITIONS SEE ARCHITECTURAL SCHEDULES OR SECTIONS.
4. FOR OPENINGS OVER 8'-0" REFER TO DETAILS OR SCHEDULE THIS SHEET.
5. TACK WELD BACK-TO-BACK VERTICAL LEGS OF MULTIPLE ANGLE LINTELS.
6. FOR ALL CMU OPENINGS SMALLER THAN OVERHEAD DOORS USE CMU LINTELSCHEDULE B1/S-506

EXTERIOR WALL LINTEL NOTES:

1. FOR CMU SEE MASONRY LINTEL SCHEDULE ON S-506 AND A2/S-507 FOR ALTERNATE MASONRY OHD LINTEL
2. HUNG AND CLIPPED LINTELS TO EXTEND 4" INTO MASONRY EACH END. LOOSE LINTELS UP TO 4'-0" TO HAVE 4" MIN. BEARING AND LOOSE LINTELS FROM 4'-0" TO 8'-0" TO HAVE 8" MIN. BEARING.
3. PROVIDE FOR VERTICAL AND HORIZONTAL ADJUSTMENT OR 1/2" ON ALL HUNG AND CLIPPED LINTELS TACK WELD ALL SLOTTED HOLES IN LINTELS AND CLIPS AFTER FINAL ADJUSTMENT.
4. FOR INCIDENTAL OPENINGS NOT SHOW ON STRUCTURAL PLANS PROVIDE ONE L4 X 3 1/2 X 5/16" LLV FOR EACH 4" OF WALL THICKNESS UP TO 4'-0" OPENING; OR ONE L6 X 3 1/2 X 5/16" LLV FOR EACH 4" OF WALL THICKNESS FOR OPENINGS U 4'-0" UP TO 8'-0".
5. TACK WELD BACK-TO-BACK VERTICAL LEGS OF MULTIPLE ANGLE LINTELS.
6. USE HOT-DIP GALVANIZE AND PAINT ALL STEEL LINTELS AND ALL RELIEVING ANGLES FOR ALL EXTERIOR OPENINGS.

A3 LINTEL SCHEDULE

SCALE: NOT TO SCALE



NOTE: SEE A3 S-507 OVERHEAD DOORS FOR ADDITIONAL INFORMATION
SEE C3/S-507 FOR TYPICAL SEISMIC CORNER BAR REINFORCING NOT SHOWN HERE
GALVANIZE AND PAINT TYP ALL JAMB COVERSCLOSURE PLATES AND OHD LINTELS, ALL STRUCTURAL STEEL THIS DETAIL PER S-001 REQUIREMENTS
A FULL HEIGHT MASONRY LINTEL REPLACING THIS STEEL OHD LINTEL MAY BE USED IN ACCORDANCE WITH A2/S-507 OTHER DETAILING UNCHANGED

A4 TYPICAL OVERHEAD DOOR (OHD) LINTEL & JAMB

SCALE: 1 1/2" = 1'-0"

IN CHARGE OF B. BYRNES, P.E.
CHECKED BY J. OBLEMAN, P.E.
MADE BY B. ZUHRIC

CERTIFICATE OF AUTHORIZATION#: 0021365
REGISTRATION EXPIRATION 12/31/2026
STATE OF NEW YORK · BRIAN R. BYRNES · 089005 · LICENSED PROFESSIONAL ENGINEER
EXPIRES: 4/30/2028

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WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	S-507

SHEET NO. 30 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-S-96
REV. NO. 0

(W) WALL SCHEDULE

NOTES:
1. ONLY GROUT REINFORCED CELLS UNO. SOLID GROUT BOTTOM 4'-0" OF ALL WALLS.
2. FULLY GROUTED WALLS ARE REQUIRED IN LOCATIONS ON THIS PROJECT SEE SCHEDULE BELOW.
3. ALL WALLS RECIEVE STANDARD 9 GAUGE (W1.7) 2 WIRE LADDER REINFORCEMENT @ 16" OC, OMIT ONLY AT BOND BEAM COURSES.
4. SPLICE ALL MASONRY REBAR AND MASONRY DOWELS 48 BAR DIAMETERS MINIMUM
5.REBAR DOWELS FROM FOUNDATIONS SHALL HAVE BOTTOM HOOKS FULLY DEVELOPED INTO FOUNDATION CONCRTE NOT INCLUDING SLAB DEPTH
6.REBAR DOWELS FROM FOUNDATIONS SHALL PROVIDE MATCHING SIZE AND SPACING FOR SPECIFIED WALL REINFORCEMENT.
7. HOOKS AND DEVELOPMENT INTO CONCRETE SHALL FOLLOW TABLES PROVIDED ON C2/S502
8. HOOKS IN MASONRY WORK SHALL HAVE NO SMALLER DIMENSION THAN DETAILS NOR C2/S-502
9. PROVIDE (2) # 5 SPACE @8" OC ADDL VERT FULL HEIGHT SIDE WALLS AT JOIST BRIDGING LINES SEE SECTIONS.
10. PROVIDE REINFORCEMENT MATCHING WALL TYPE IN ALL THREE CORNER CELLS (CORNER CELL AND 1 ADJACENT EACH WAY) AT ALL CORNERS

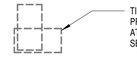
MARK	THICKNESS	TYPE	REINFORCING				REMARKS
			VERTICAL	SPACING	HORIZONTAL	SPACING	
W1	0' - 9 5/8"	MASONRY	#5	24" O.C.	STD WIRE LADDER REINF NOTE 3	16" O.C.	
W2	0' - 9 5/8"	MASONRY	(2) #5	8" O.C.	NOTE3 + (2) #4	48" O.C. BOND BEAMS	FULLY GROUTED FULL HEIGHT
W3	0' - 7 5/8"	MASONRY	#4	48" O.C.	STD WIRE LADDER REINF NOTE 3	16" O.C.	CONT BENTONITE WATERSTOP IN BOTTOM BED JOINT AND 1'-0" UP CONTROL JOINTS OF WALL
W4	0' - 11 5/8"	MASONRY	#5	24" O.C.	NOTE3 + (2) #4	48" O.C. BOND BEAMS	FIRE WALL & SHEAR WALL FULLY GROUTED NO CONTROL JOINTS
W5	0' - 9 5/8"	MASONRY	#5	24" O.C.	NOTE3 + (2) #4	48" O.C. BOND BEAMS	BOND BEAMS ARE SPECIFIED ON DETAILS 48" IS MAXIMUM SPACING PROVIDE ADD'L ONLY WHERE RESULTING SPACING FROM SECTION DETAILED BEAMS WOULD NOT MEET THIS MAX.

C2 MASONRY WALL SCHEDULE
SCALE: 1/4" = 1'-0"

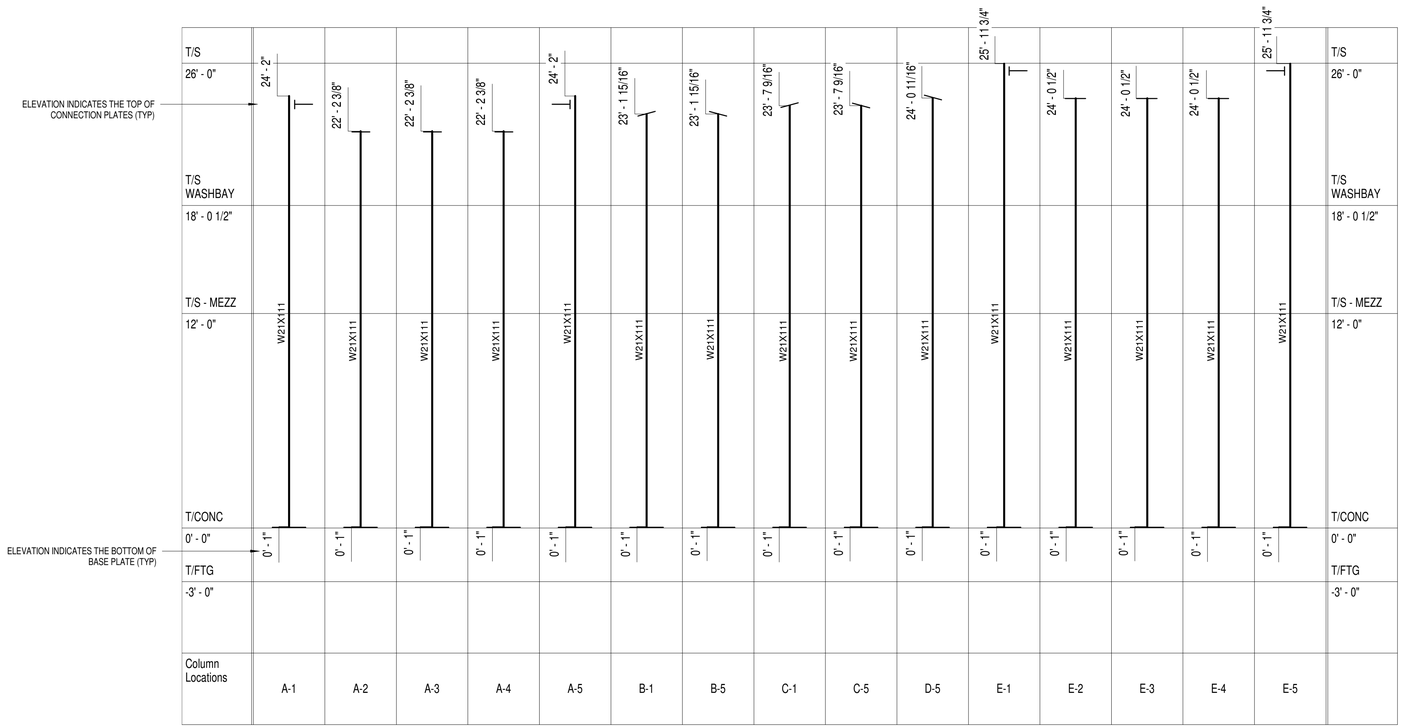
GRADE BEAM SCHEDULE

MARK	DIMENSIONS			BOT REINF	TOP REINF	STIRRUP SIZE AND SPACING
	"W"	"H"	"L"			
GB1	2 '-0"(NOTE 5)	3' - 0"	SEE PLAN	4 #8	3 #8	#4 @ 10" OC
GB2	2' - 0"	3' - 0"	SEE PLAN	4 #8	4 #8	#4 @ 10" OC
GB3	2' - 0"	2' - 0"	SEE PLAN	4 #8	4 #8	#4 @ 8" OC
GB4	2' - 0" (NOTE 7)	4' - 6"	SEE PLAN	4 #8	3 #8	#4 @ 10" OC

NOTE:
1. ALL GRADE BEAMS PROVIDE 3 #6 MID HEIGHT AT 1'-4" BELOW TOP OF BEAM
2. TYP CLEAR COVER TO TIES = 1.5" TOP/SIDES, 3" BOTTOM
3. OVER PILE CAPS ADJUST TIE SIZES TO CAST BEAM CONTINUOUS OVER CAP
4. INSTALL GRADE BEAM BOTTOM REINFORCEMENT CONTINUOUS THROUGH PILE CAPS
5. TOP 1" OF GB1 HEIGHT IS 6 5/8" LESSER IN WIDTH THAN SCHEDULED WIDTH
6. MANUFACTURER TAPE VAPOR BARRIER TO FACE OF ALL GRADE BEAMS AT INTERFACE. VAPOR BARRIER IS CONTINUOUS BELOW SLABS AND ALL PC-1
7. GB4 SHALL HAVE EQUAL DETAILING TO GB 1 CONTINUOUS MAIN REINFORCEMENT SHARED BY BEAMS EXCEPT HAVE TIES EXTENDING TO FULL DEPTH AND 2#6 ADDITIONAL AT BOTTOM OF BEAM FRAMING CORNERS OF THESE TIES ADJACENT TO EJECTOR PIT CAST MONOLITHIC WITH EJECTOR PIT WALLS AND RUN WALL OUTSIDE FACE REINF INTO BEAM



C4 GRADE BEAM SCHEDULE
SCALE: 1/4" = 1'-0"



NOTE:
ELEVATIONS PROVIDED ARE TO THE BOTTOM OF BASE PLATE AND TOP OF CAP PLATE AT CENTERLINE OF COLUMN
ROOF BEAMS ALONG GRID LINES 1 AND 5 ARE SLOPED TOP OF COLUMN CALLED OUT IN SCHEDULE IS AT CL OF COLUMN EDGE OF COLUMN CLOSEST TO GRIDLINE E WILL BE HIGHER
TRIM INNER FLANGES AT TOP OF COLUMNS E-1 AND E-5 TO MATCH BEAM SLOPE AND AVOID DECK CONFLICT
TYPICAL BASE PLATE ALL COLUMNS REFER TO A2/S-501 FOR BASE PLATE SECTION
TYPICAL PIER ALL COLUMNS REFER TO A3/S-501 FOR PIER GEOMETRY, SEE A4/S-501 FOR PIER SCHEDULE AND REINFORCEMENT EXTEND PIER REBAR INTO SLAB SEE A3/S-301
ALL COLUMNS ARE ENCASED IN CONCRETE ABOVE SLAB AT THE BOTTOM OF COLUMN FOR PROTECTION FROM TRUCK IMPACT AND CORROSIVE EXPOSURE SEE B4/S-503
COLUMNS ADJACENT TO WASHBAY SHALL HAVE SAME PROTECTIVE COATING AS ALL BEAM FRAMING IN THE SAME AREA

NOTE: SCHEDULES LOCATED ON OTHER SHEETS DUE TO ASSOCIATED DETAILING ALSO LOCATED ON THAT SHEET.

SEE S-501 FOR PILE CAP & PIER SCHEDULES
SEE S-504 FOR MASONRY LINTEL SCHEDULE USED AT FIRE WALL
SEE S-505 FOR STEEL LINTEL SCHEDULE USED AT OVERHEAD DOORS AND NEW OPENING IN EXISTING BUILDING EXTERIOR WALL

A1 NOTES
SCALE: NTS

A2 COLUMN SCHEDULE
SCALE: 1/4" = 1'-0"

IN CHARGE OF B. BYRNES, P.E.
CHECKED BY J. OBLEMAN, P.E.
MADE BY B. ZUHRIC

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TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
SCHEDULES

CONTRACT NUMBER 23-528
SHEET NUMBER S-601
SHEET NO. 31 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
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REV. NO. 0

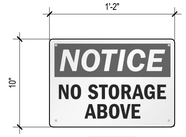
A3 SYMBOLS LEGEND

SCALE: NOT TO SCALE

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
0000	STRUCTURAL GRID		LEVEL REFERENCE
SIM A1 A-101	EXTERIOR ELEVATION	A1 / A-101	VIEW REFERENCE
SIM A1 A-101	INTERIOR ELEVATION	ROOM NAME 101 150 SF	ROOM TAG
SIM A1 A-101	BUILDING SECTION	MA-4	WALL TAG
		101	DOOR TAG
		A	WINDOW TAG
SIM A1 A-101	WALL SECTION	1	REVISION TAG
			STRUCTURAL GRID LINE
			FINISHED SURFACE LINE
			DEMOLITION LINE
SIM A1 A-101	DETAIL CALLOUT		OVERHEAD/HIDDEN LINE

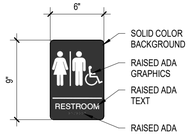
C2 SIGNAGE DETAILS

SCALE: 1 1/2" = 1'-0"



S-1

NOTES:
1. SIGN TO BE OSHA COMPLIANT
2. MATERIAL: LAMINATED PLASTIC
3. ATTACHMENT: MECHANICALLY FASTENED
4. MOUNTING HEIGHT: 9'-0" AFF TO BOTTOM OF SIGN



S-2

NOTES:
1. SIGN TO BE ADA COMPLIANT
2. MATERIAL: LAMINATED PLASTIC
3. ATTACHMENT: MECHANICALLY FASTENED
4. COLOR: AS SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD OPTIONS.
5. MOUNTING HEIGHT: 4'-0" AFF TO BOTTOM OF SIGN

C3 GENERAL WALL NOTES

SCALE: NOT TO SCALE

GENERAL WALL NOTES

1. THE TERM "WALL" AND "PARTITION" ARE USED INTERCHANGEABLY.
2. ALL DIMENSIONS ARE NOMINAL FACE OF METAL STUD PARTITION OR FACE OF MASONRY UNLESS OTHERWISE NOTED.
3. ALL GYPSUM BOARD (GYP BD) TO BE 5/8 "TYPE X" 1 HOUR FIRE RATED EXCEPT WHERE CEMENTITIOUS BACKER BOARD IS REQUIRED AT TILE INSTALLATIONS. ALL GYPSUM BOARD SHALL BE INSTALLED VERTICALLY WITH JOINTS STAGGERED WHERE THERE ARE TWO LAYERS. NO GLUING ALLOWED.
4. PROVIDE ACOUSTICAL SEALANT AT ALL PARTITION PERIMETERS, RUNNERS, ELECTRICAL OUTLETS, PENETRATIONS AND OPENINGS. TO MINIMIZE SOUND TRANSMISSION ELECTRICAL OUTLETS SHALL BE SEPARATED BY A MINIMUM OF ONE STUD, BACK TO BACK.
5. THE LOCATIONS OF FIRE RATED WALLS ARE SHOWN ON THE DRAWINGS. PENETRATIONS IN RATED ASSEMBLIES SHALL BE FIRE STOPPED TO MAINTAIN REQUIRED RATING.
6. WALL HEIGHTS:
   -ALL FIRE RATED WALLS SHALL BE FULL HEIGHT TO UNDERSIDE OF STRUCTURE. UNLESS OTHERWISE NOTED ON THE DRAWINGS ALL WALLS SHALL BE PARTIAL HEIGHT TO 6" ABOVE CEILING. STUDS MAY CONTINUE TO STRUCTURE FOR BRACING, OR BRACED AS NOTED BELOW.
7. LATERAL BRACING:
   -PROVIDE APPROPRIATE LATERAL BRACING FOR WALLS EXCEEDING THE UNBRACED HEIGHT INDICATED OR THOSE THAT DO NOT EXTEND TO STRUCTURE. SEE LATERAL BRACING DETAILS FOR ADDITIONAL REQUIREMENTS.
8. GYPSUM WALL BOARD CONSTRUCTION SHALL BE ISOLATED WITH CONTROL JOINTS WHERE:
   -PARTITIONS OR CEILINGS OF DISSIMILAR CONSTRUCTION MEET AND REMAIN IN THE SAME PLANE.
   -EXPANSION OR CONTROL JOINTS OCCUR IN THE BUILDING STRUCTURE OR WALL CONSTRUCTION.
   PROVIDE CONTROL JOINTS IN THE FACE OF GWB PARTITIONS AND CEILINGS WHEN THE SIZE OF THE SURFACE EXCEEDS THE FOLLOWING CONTROL JOINT SPACING:
   -PARTITIONS: 30' MAX. IN EITHER DIRECTION
   -CEILINGS: 50' MAX. IN EITHER DIRECTION (WITH PERIMETER RELIEF)
9. PROVIDE METAL STUD INSERT BLOCKING AT ALL WALLS RECEIVING WALL MOUNTED EQUIPMENT AND/OR ACCESSORIES. COORDINATE WITH ALL TRADES AND OWNER EQUIPMENT LAYOUTS.
10. SEE PARTITION TYPES FOR LOCATIONS OF ACOUSTIC AND THERMAL INSULATION.

A4 ABBREVIATION LIST

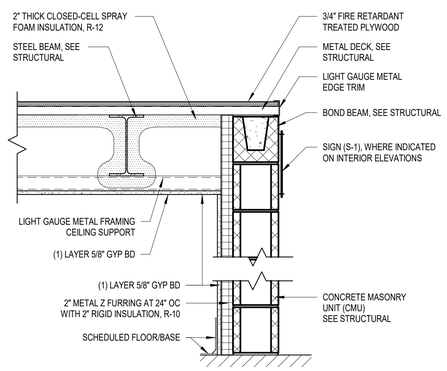
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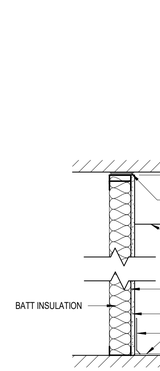
A	
AFF	ABOVE FINISHED FLOOR
ACT	ACOUSTICAL CEILING TILE
AMP	ACOUSTICAL METAL PANEL
ALUM	ALUMINUM
L	ANGLE
B	
BLK	BLOCK
BD	BOARD
BOT	BOTTOM
BLDG	BUILDING
BL	BUILDING LINE
C	
CPT	CARPET TILE
CLKG	CAULK(ING)
CLG	CEILING
CBB	CEMENTITIOUS BACKER BOARD
CTR	CENTER
CL	CENTER LINE
CT	CERAMIC TILE
CH BD	CHALKBOARD
CLR	CLEAR / CLEARANCE
CLO	CLOSET
COL	COLUMN
CONC	CONCRETE
CMU	CONCRETE MASONRY UNIT
CONT	CONTINUOUS
CJ	CONTROL JOINT
CG	CORNER GUARD
CORR	CORRIDOR
CTR	COUNTER
CRS	COURSE(S)
CRN	CROWN
D	
DEMO	DEMOLISH / DEMOLITION
DET	DETAIL
DIA	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DN	DOWN
DWG	DRAWING
DF	DRINKING FOUNTAIN
E	
EA	EACH
ELEC	ELECTRIC
EWC	ELECTRIC WATER COOLER
EL	ELEVATION
ELEV	ELEVATOR
ENCL	ENCLOSURE
ENTR	ENTRANCE
EQ	EQUAL
EQUIP	EQUIPMENT
EXH	EXHAUST
EXIST	EXISTING
ETR	EXISTING TO REMAIN
EXP	EXPANSION
EJ	EXPANSION JOINT
EXP	EXPOSED
EXT	EXTERIOR
F	
FOF	FACE OF FINISH
FOM	FACE OF MASONRY
FOS	FACE OF STUDS
FOW	FACE OF WALL
F/F	FACE TO FACE
FT	FEET/FOOT
FRP	FIBER REINFORCED POLYESTER
FGL	FIBERGLASS
FIN	FINISH(ED)
FF	FINISH FLOOR
FIN GR	FINISH GRADE
FFL	FINISHED FLOOR
FA	FIRE ALARM
FEC	FIRE EXTINGUISHER CABINET
FHC	FIRE HOSE CABINET
FP	FIRE PROTECTION
FRT	FIRE RETARDANT
FP	FIREPROOF
FIXT	FIXTURE
FLASH	FLASHING
FLR	FLOOR
FD	FLOOR DRAIN
FTG	FOOTING
FDTN	FOUNDATION
FURN	FURNISH
FBO	FURNISHED BY OTHERS
FURG	FURRED(ING)
G	
GA	GAGE / GAUGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GL	GLASS
GL BLK	GLASS BLOCK
GB	GRAB BAR
GRL	GRILLE
GWB	GYPSUM BOARD
H	
HCP	HANDICAPPED
HNDRL	HANDRAIL
HDWD	HARDWOOD
HT	HEIGHT
HP	HIGH POINT
HM	HOLLOW METAL
I	
IRWC	IMPACT RESISTANT WALL COVERING
ID	INSIDE DIAMETER
INSUL	INSULATION / INSULATED
INT	INTERIOR
J	
JAN CL	JANITOR'S CLOSET
K	
KD	KNOCKDOWN

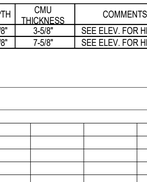
L	
LAM	LAMINATE
LAV	LAVATORY
L	LENGTH / LONG
LF	LINEAL FEET
LG	LAMINATED GLASS
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LPT	LOW POINT
M	
MFR	MANUFACTURER
MO	MASONRY OPENING
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MTL	METAL
MEZZ	MEZZANINE
MIN	MINIMUM
MLP	METAL LINER PANEL
N	
NOM	NOMINAL
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NTS	NOT TO SCALE
O	
OC	ON CENTER
OPNG	OPENING
OPP	OPPOSITE
OD	OUTSIDE DIAMETER
OH	OVERHEAD
P	
PT	PAINT
PTD	PAPER TOWEL DISPENSER
PBD	PARTICLE BOARD
PTN	PARTITION
PLAS	PLASTER
PLAM	PLASTIC LAMINATE
PLBG	PLUMBING
PLYWD	PLYWOOD
POL	POLISHED
PVC	POLYVINYL CHLORIDE
PT	PRESSURE TREATED
Q	
QT	QUARRY TILE
QTZ	QUARTZ
R	
R	RADIUS
REINF	REINFORCE
REQD	REQUIRED
RF	RESILIENT FLOORING
REV	REVISION / REVISED
R	RISER
RD	ROOF DRAIN
RL	ROOF LEADER
RTU	ROOF TOP UNIT
RM	ROOM
RO	ROUGH OPENING
RBR	RUBBER
RB	RUBBER BASE
S	
SCH	SCHEDULE (D)
SLNT	SEALANT
SLR	SEALER
SECT	SECTION
SHTHG	SHEATHING
SIM	SIMILAR
SD	SOAP DISPENSER
SAFB	SOUND ATTENUATION FIBERGLASS BATT
SPEC	SPECIFICATION
SF	SQUARE FEET
STN	STAIN
SS	SOLID SURFACE
SST	STAINLESS STEEL
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPENDED
SYS	SYSTEM
T	
TK BD	TACK BOARD
TMPD GL	TEMPERED GLASS
TER	TERRAZZO
THK	THICKNESS
THRES	THRESHOLD
TL	TILE
TPTN	TOILET PARTITION
T&B	TOP AND BOTTOM
TO	TOP OF
TOS	TOP OF STEEL
TOW	TOP OF WALL
T&G	TONGUE AND GROOVE
T	TREAD(S)
TYP	TYPICAL
U	
UNFIN	UNFINISHED
UON	UNLESS OTHERWISE NOTED
V	
VB	VAPOR BARRIER
VR	VAPOR RETARDER
VTR	VENT THROUGH ROOF
V/F	VERIFY IN FIELD
VERT	VERTICAL
VEST	VESTIBULE
VCT	VINYL COMPOSITION TILE
VWB	VINYL WALL BASE
VWC	VINYL WALL COVERING
VP	VISION PANEL
W	
WSCT	WAINSCOT
W CAB	WALL CABINET
WC	WATER CLOSET
W	WIDE
WG	WIRE GLASS
W/	WITH
WM	WIRE MESH
WD	WOOD
WBL	WOOD BLOCKING

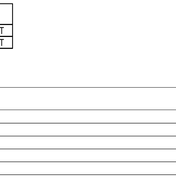
B1 ANCHOR PLATE DETAIL AT MTL STUD PARTITION

SCALE: 3/4" = 1'-0"









TYPICAL NOTES

1. WOOD BLOCKING INSIDE OF INTERIOR PARTITION IS NOT ALLOWED.
2. TREATED WOOD BLOCKING IS GENERALLY ACCEPTED FOR ROOFING AND WINDOW FRAMED OPENINGS ONLY. REVIEW WITH ARCHITECT ANY CONCERNS REGARDING BLOCKING. USE STAINLESS STEEL FOR ALL FASTENERS IN CONTACT WITH PRESERVATIVE TREATED WOOD.

ACOUSTICAL CAULK NOTES

1. (WHERE ACOUSTICAL CAULK IS CALLED FOR ON THE DETAIL) SEAL PERIMETER AND ALL PIPE, DUCT, ETC. OPENINGS AND AROUND ELECTRICAL BOXES AND FIRE EXTINGUISHER CABINETS.

GENERAL NOTES

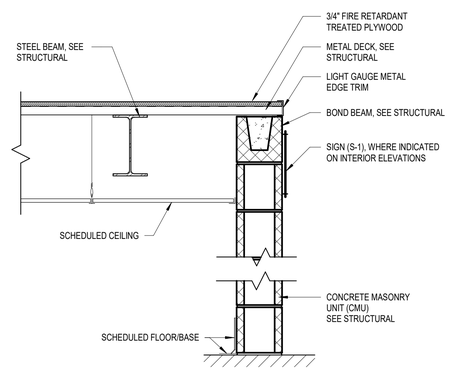
1. ALL GYPSUM BOARD SHALL BE INSTALLED VERTICALLY WITH JOINTS STAGGERED WHERE THERE ARE TWO LAYERS.
2. FIRE TAPE, SMOKE TIGHT ALL GYPSUM BOARD VENEER ABOVE CEILING OR OTHERWISE CONCEALED.
3. SEE PARTITION TYPES FOR LOCATIONS OF ACOUSTIC AND THERMAL INSULATION.

B2 TYPICAL ATTACHMENT DETAILS

SCALE: 1" = 1'-0"

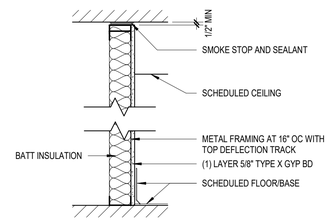
CA

TYPE	MATERIAL	DEPTH	CMU THICKNESS	COMMENTS
CA-8	CMU/GWB	10-1/4"	7-5/8"	SEE ELEV. FOR HEIGHT



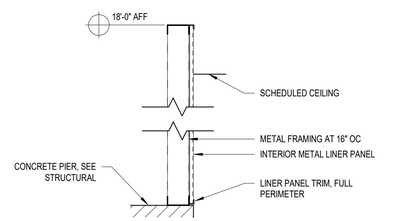
CB

TYPE	MATERIAL	DEPTH	CMU THICKNESS	COMMENTS
CB-4	CMU	3-5/8"	3-5/8"	SEE ELEV. FOR HEIGHT
CB-8	CMU	7-5/8"	7-5/8"	SEE ELEV. FOR HEIGHT



MD

TYPE	MATERIAL	DEPTH	STUD	COMMENTS
MD-3	GWB	4-1/4"	3-5/8"	-



MP

TYPE	MATERIAL	DEPTH	STUD	COMMENTS
MP-3	MLP	4-3/8"	3-5/8"	-

B3 MATERIAL LEGEND

SCALE: NOT TO SCALE

EARTH	WOOD (FINISHED)
GRANULAR FILL	WOOD (CONTINUOUS)
CONCRETE	WOOD (BLOCKING)
BRICK	INSULATION (LOOSE OR BATT)
CONCRETE MASONRY UNIT	INSULATION (RIGID BOARD)
STEEL SECTION	GLASS
STRUCTURAL STEEL	ACOUSTIC/CERAMIC TILE
PLYWOOD	GYPSUM WALL BOARD, SAND, PLASTER, CEMENT, GROUT
	TERRAZZO
	CARPET

A1 PARTITION LEGEND

SCALE: 1" = 1'-0"

IN CHARGE OF A.M. BRUCE, AIA
CHECKED BY K. COLLINS, RA
MADE BY A.M. BRUCE, AIA

CERTIFICATE OF AUTHORIZATION# 020240

REGISTERED ARCHITECT MICHAEL W LAMONTAGNE 031950 STATE OF NEW YORK

REGISTRATION EXPIRES: 5/31/2028

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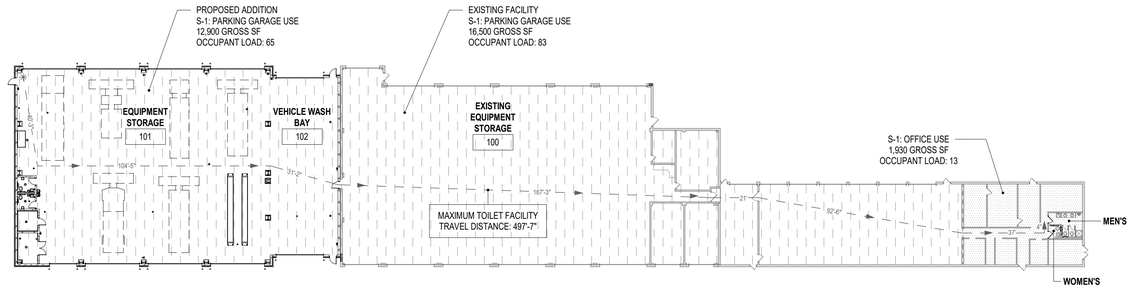
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TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
SYMBOLS, ABBREVIATIONS, AND TYPICAL DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	A-001

SHEET NO. 32 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-A-98
REV. NO. 0



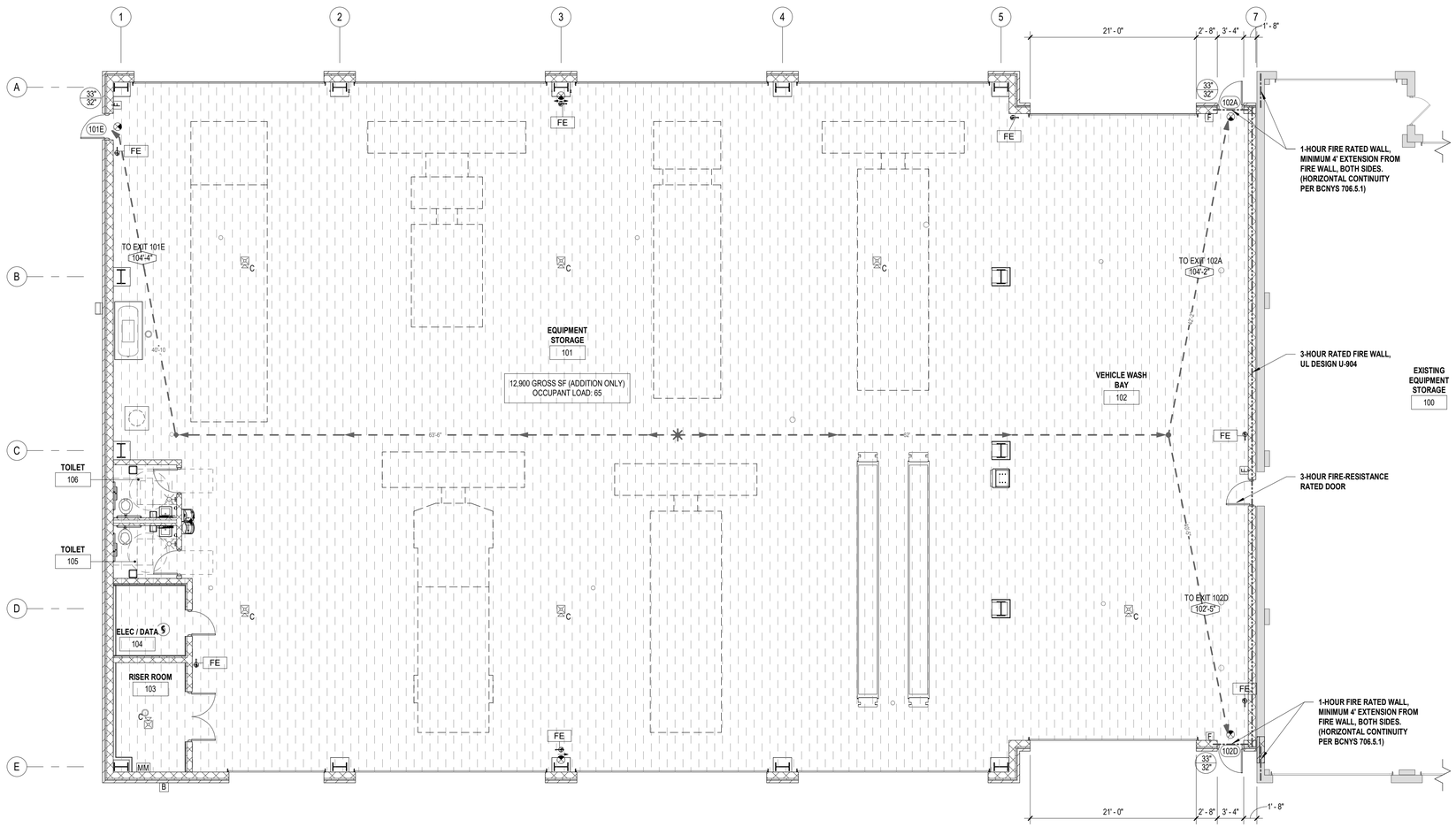
C1 CODE COMPLIANCE PLAN - OVERALL BUILDING

SCALE: 1/32" = 1'-0"

LIFE SAFETY PLAN LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
✳	EGRESS START POINT	— — →	PATH OF TRAVEL TO EXIT
XX'-XX"	TRAVEL DISTANCE	X" / XX"	EXIT WIDTH PROVIDED / REQUIRED
1-HOUR FIRE RESISTANCE RATED CONSTRUCTION		3-HOUR FIRE RESISTANCE RATED CONSTRUCTION	
	EXIT SIGNAGE (REFER TO ELECTRICAL DRAWINGS FOR SPECIFIED FIXTURE)		FIRE ALARM HORN / STROBE (15 CANDELA UNLESS OTHERWISE NOTED OTHERWISE, REFER TO FIRE ALARM DRAWINGS FOR SPECIFIED FIXTURE)
F	FIRE ALARM MANUAL PULL STATION		
FE	FIRE EXTINGUISHER (BRACKET MOUNTED) MAX FL AREA PER EXTINGUISHER: 11,250 SF / MAX TRAVEL DISTANCE 75' "FIRE EXTINGUISHER" ARROW SIGN AT 10' ABOVE FINISHED FLOOR.		
	GROUP S-1 MODERATE-HAZARD STORAGE OCCUPANCY, PARKING GARAGE USE		
	GROUP S-1 MODERATE-HAZARD STORAGE OCCUPANCY, ACCESSORY BUSINESS USE		
	EXISTING CONSTRUCTION TO REMAIN		
	NEW CONSTRUCTION, SEE PLANS AND WALL SECTIONS FOR WALL TYPES AND CONSTRUCTION		

C3 LIFE SAFETY PLAN LEGEND

SCALE: NOT TO SCALE



A1 LIFE SAFETY PLAN - ADDITION

SCALE: 1/8" = 1'-0"

0 4' 8' 16'

BCNYS CODE COMPLIANCE

I. 2020 Existing Building Code of New York State

A. Chapter 6 Classification of Work
1. Section 606 Addition 12,900 gross sf
   A. Shall comply with Chapter 11 and the applicable provisions of the 2020 Building Code of New York State.

B. Chapter 11 Additions
1. Section 1102 Heights and Areas
   Addition shall not increase the height or area beyond that permitted by Chapter 5 of the Building Code of New York State.
2. Section 1102.3 Fire Protection Systems
   Existing fire areas increased by the addition shall comply with Chapter 9 of the Building Code of New York State.
3. Section 1107 Energy Conservation
   Additions shall conform to the Energy Conservation Construction Code of New York State for new construction.

II. 2020 Building Code of New York State

A. Chapter 3 Use and Occupancy Classification
1. Section 3011 - Moderate-Hazard Storage, Group S-1

B. Chapter 5 – General Building Heights and Areas
1. Section 504.3 - Allowable Building Height
   Allowable: 75'
   Actual: 27'
2. Section 504.4 - Allowable Number of Stories
   Allowable: 3
   Actual: 1
3. Section 506 - Allowable Area
   Allowable: Unlimited per 507.4
   Actual: 31,334 SF (gross) total

C. Chapter 6 Types of Construction
1. Section 602.3 Type IIB Construction
   Type II construction is that type of construction in which the building elements listed on Table 601 are of noncumbustible material.
2. Table 601- Fire Resistance Rating

Requirements for Building Elements	Hours Protection
- Structural Frame	0
- Bearing Walls Exterior	0
- Bearing Walls Interior	0
- Nonbearing Walls	0
- Floor Construction	0
- Roof Construction	0

D. Chapter 7 Fire and Smoke Protection Systems
1. Section 706 - Fire Walls
   Table 706.4 - Fire wall shall have a fire-resistance rating of 3 hours.
2. Section 706.5 Horizontal Continuity
   Exception 1 - Fire wall shall be permitted to terminate at the interior surface of combustible sheathing provided the exterior wall has not less than a 1-hour rating for a horizontal distance of 4' beyond the fire wall. Openings shall have a 3/4 hour fire resistance rating.
3. Section 706.5.1 Exterior Walls
   Option 1 - Exterior walls on both sides of the fire wall shall have a 1-hour fire-resistance rating with 3/4-hour opening protection where required by Section 705.8. The fire-resistance rating of the exterior wall shall extend not less than 4 feet on each side of the fire wall.
4. Section 706.6 Vertical Continuity
   Fire wall shall extend from the foundation to a point not les than 30" above both roofs.

E. Chapter 9 - Fire Protection and Life Safety Systems
1. Section 903 - Automatic Sprinkler Systems
   903.2.9 Group S-1: Fire Area exceeds 12,000 SF
   Automatic Sprinkler System Required and Provided in Addition
   Existing facility is unsprinklered; Proposed **Fire Wall** per §706 for complete separation between the Addition and the existing facility.

F. Chapter 10 Means of Egress
1. Section 1004 Occupant Load
   Addition- Vehicle Storage = 12,900 SF / 200 SF per Occupant = 65 Occupants
   Existing- Vehicle Storage = 16,500 SF / 200 SF per Occupant = 83 Occupants
   Existing- Business = 1,930 SF / 150 SF per Occupant = 13 Occupants
   Total Occupant Load = 161 Occupants
2. Section 1005 - Egress Sizing
   Doors: Required: Total 9.75" Provided: See plans
   Minimum 32" clear at each door per 1010.1.1
3. Section 1006 Number of Exits and Exit Access Doorways
   Required: 2 Provided: 3
4. Section 1011.12 Stairway to Roof
   Buildings four or more stories above grade plane shall have one stairway, alternating tread device, or permanent ladder.
   Proposed building is one story; no stairway or roof access ladder is required.
5. Section 1017 Exit Access Travel Distance
   Group S-1: Maximum 250'
   Provided: Maximum 104'-4"

III. 2020 Plumbing Code of New York State

A. Chapter 4 Fixtures, Faucets and Fixture Fittings
   Section 403.3.3 Location of toilet facilities in occupancies other than malls.
   Required Travel Distance: 500' maximum
   Provided Travel Distance: 480'

B. Section 403.1 Minimum number of required plumbing fixtures
   Vehicle Storage and Repair Use (65 + 83 + 13 = 161 Total occupants)
   Water Closets: 1 per 100 occupants 81 / 100 = 1 For each sex
   Lavatories: 1 per 100 occupants 81 / 100 = 1 For each sex

	Total Required	Total Provided
Men's water closets	1	4
Men's lavatories	1	3
Women's water closets	1	2
Women's lavatories	1	2

IV. 2020 Energy Conservation Construction Code of New York State

A. Chapter 3 General Requirements
   - Table 301.1 Climate Zones
     Westchester County, Zone 4A

B. Chapter 4 Commercial Energy Efficiency
1. Section 402 Building Envelope Requirements
   OPAQUE THERMAL ENVELOPE INSULATION
   COMPONENT MINIMUM REQUIREMENTS - The building envelope components to be altered shall meet each of the applicable requirements in Tables 402.1.3 or 402.1.4 based on Climate Zone

- Roofs, Insulation entirely above deck	R-30ci
- Walls, above grade, Mass	R-9.5ci / U-0.104
- Slab, unheated	R-10 for 24" below
- Swinging Doors	U-0.61
- Garage Doors	U-0.31

2. Table 402.4 Building Envelope Fenestration Requirements
   Window and Glazed Door Area 30 Percent or Less of Above Grade Wall Area

- Fixed Fenestration	U-0.38; SHGC < 0.36
- Operable Fenestration	U-0.45; SHGC < 0.36
- Entrance Doors	U-0.77; SHGC < 0.36

A4 2020 BCNYS CODE COMPLIANCE

SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION# 020240

IN CHARGE OF A.M. BRUCE, AIA
CHECKED BY K. COLLINS, RA
MADE BY A.M. BRUCE, AIA

REGISTERED ARCHITECT MICHAEL W. LAMONTAGNE 031950 STATE OF NEW YORK
REGISTRATION EXPIRES: 5/31/2028

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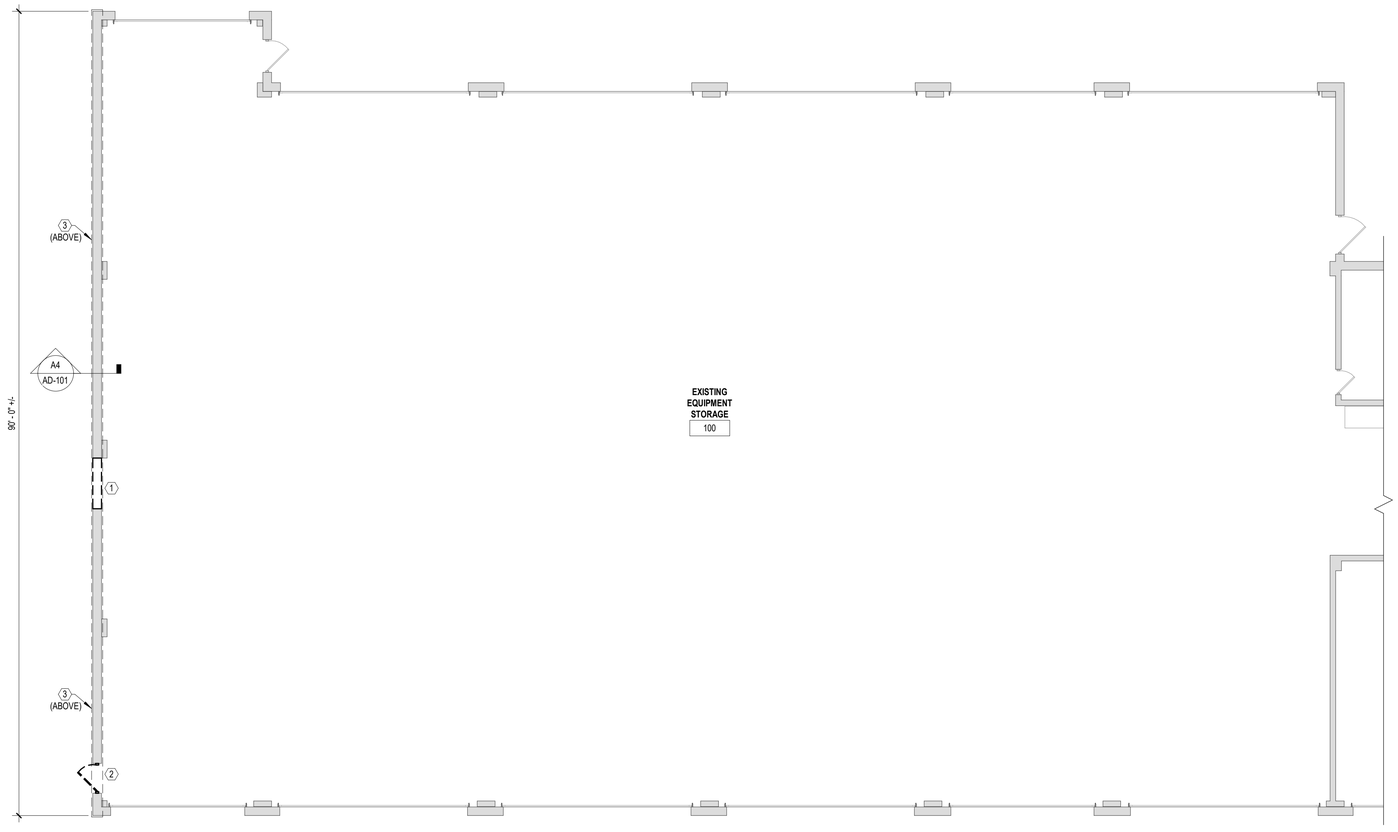
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
CODE COMPLIANCE AND LIFE SAFETY PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	A-002

SHEET NO. 33 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-A-99	0



A1 DEMOLITION FLOOR PLAN

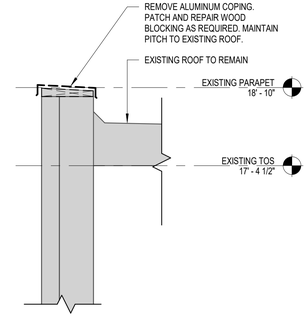
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

#	DEMOLITION KEYNOTES
1	SAW CUT AND REMOVE PORTION OF CMU AND BRICK WALL AS REQUIRED FOR NEW OPENING AND TOOTHED-IN JAMB BLOCKS ON BOTH SIDES. VERIFY SIZE WITH NEW MASONRY OPENING, SEE NEW CONSTRUCTION PLANS. PATCH AND REPAIR EDGES AS NEEDED TO MATCH ADJACENT FINISHES.
2	REMOVE 3'-0" x 7'-0" +/- HOLLOW METAL DOOR, FRAME, AND ALL ASSOCIATED HARDWARE.
3	REMOVE ALUMINUM COPING. PATCH AND REPAIR WOOD BLOCKING AS REQUIRED. MAINTAIN PITCH TO EXISTING ROOF. SEE A4/A-302

B4 DEMOLITION KEYNOTES

SCALE: NOT TO SCALE



A4 DEMOLTION WALL SECTION

SCALE: 3/4" = 1'-0"

IN CHARGE OF A.M. BRUCE, AIA
CHECKED BY K. COLLINS, RA
MADE BY A.M. BRUCE, AIA

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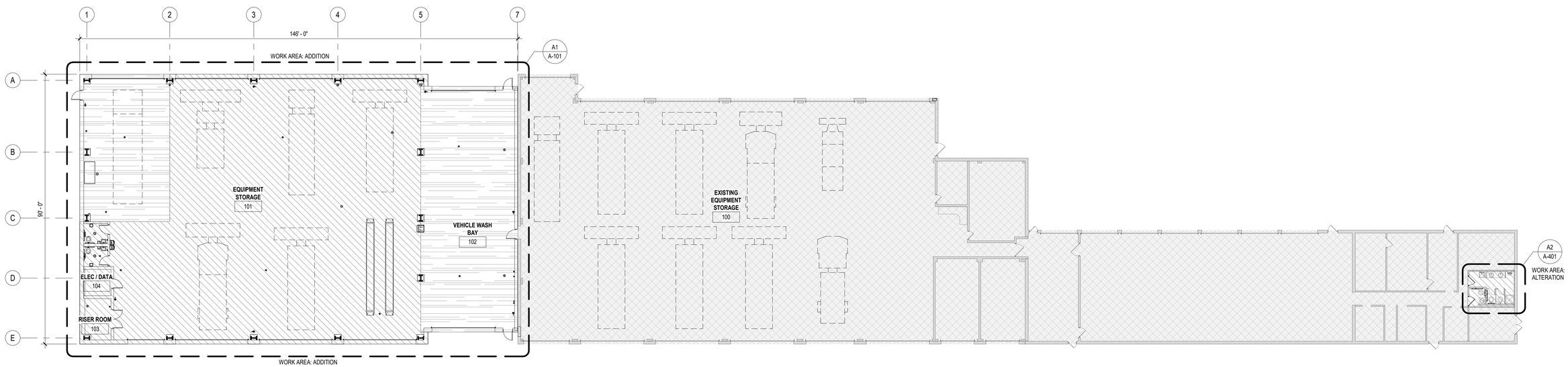
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DEMOLITION FLOOR PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	AD-101

SHEET NO. 34 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-A-100
REV. NO. 0

LEGEND

- EXISTING BUILDING TO REMAIN
- AIP ELIGIBLE SCOPE OF WORK
- AIP NON-ELIGIBLE SCOPE OF WORK
  NOTE: INCLUDES ROOFTOP SOLAR PV
- EXISTING CONSTRUCTION TO REMAIN
- NEW CONSTRUCTION, SEE PLANS AND WALL SECTIONS FOR WALL TYPES AND CONSTRUCTION



PLAN NORTH

A1 OVERALL FLOOR PLAN & AIP ELIGIBILITY

SCALE: 1/16" = 1'-0"

0 4' 8' 16'

CERTIFICATE OF AUTHORIZATION# 020240

REGISTERED ARCHITECT MICHAEL W LAMONTAGNE 021950 STATE OF NEW YORK

REGISTRATION EXPIRES: 5/31/2028

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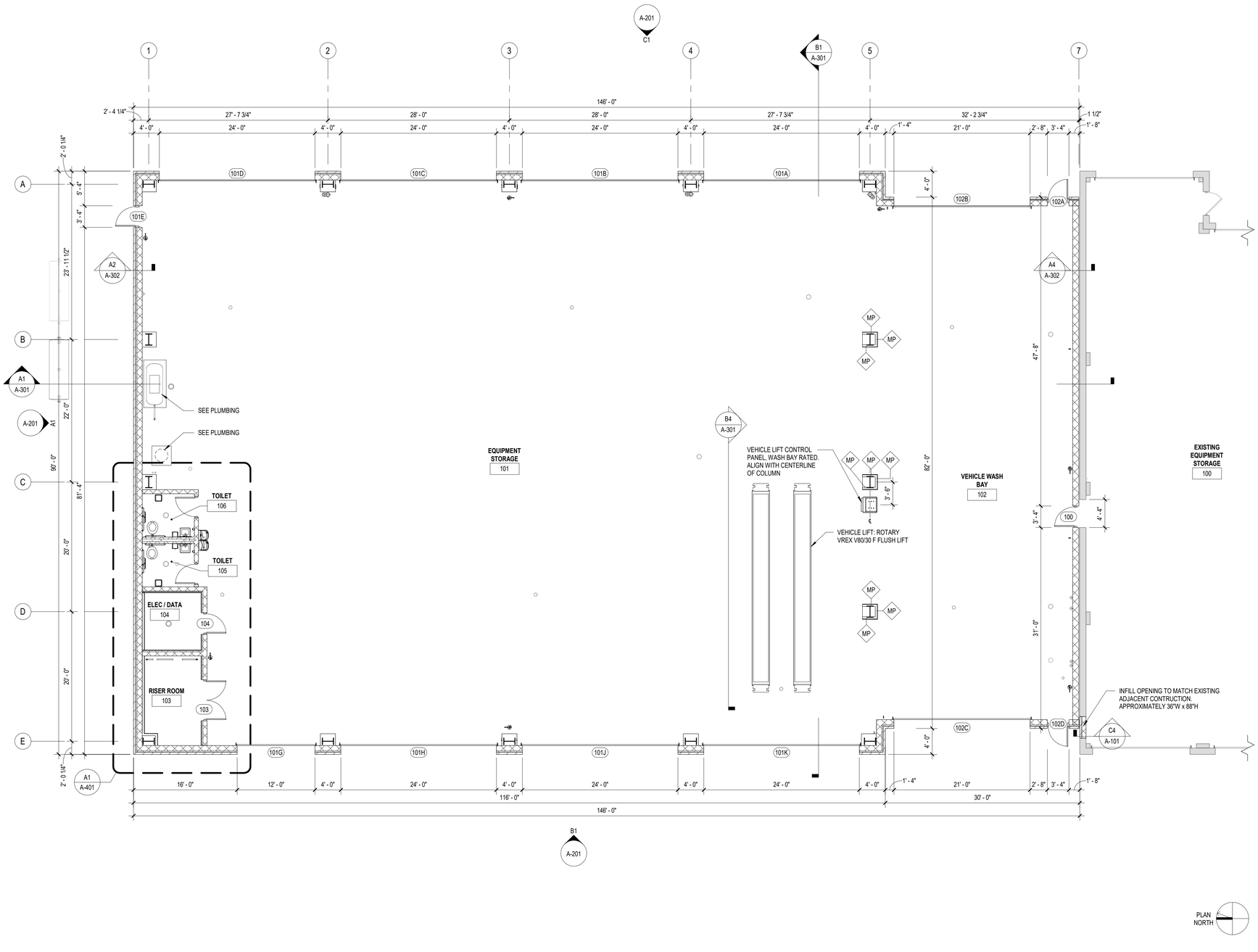
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WESTCHESTER COUNTY AIRPORT
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OVERALL FLOOR PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	A-100

SHEET NO. 35 OF 72

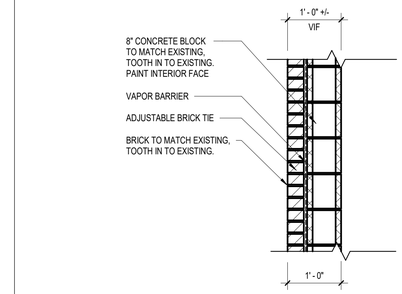
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-A-101	0



A1 FLOOR PLAN

SCALE: 1/8" = 1'-0"



C4 EXISTING WALL INFILL

SCALE: 3/4" = 1'-0"

0 1' 2' 3'

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MADE BY A.M. BRUCE, AIA

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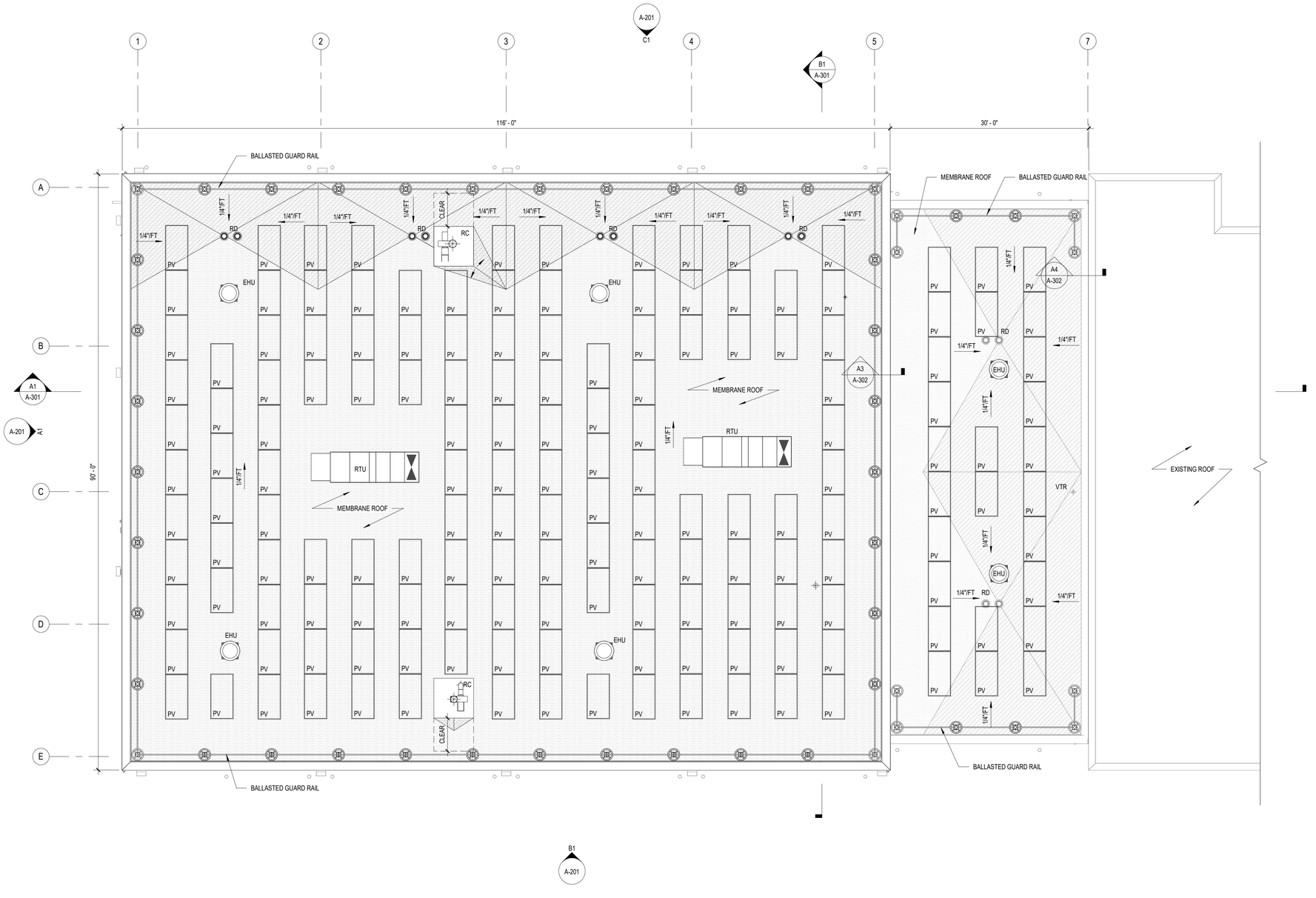
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WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
FLOOR PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	A-101

SHEET NO. 36 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-A-102
REV. NO. 0



ROOF LEGEND

RD	ROOF DRAIN WITH ADJACENT OVERFLOW DRAIN
	NEW MEMBRANE ROOF SYSTEM
	TAPERED INSULATION CRICKET, PITCH AS NOTED
	ROOF PITCH, 1/4"/FT MIN
+XX"	THICKNESS OF INSULATION
VTR	VENT THRU ROOF, SEE PLUMBING AND MECHANICAL
RTU	ROOF TOP UNIT, SEE MECHANICAL
EHU	EXHAUST UNIT, SEE MECHANICAL
RC	6'-0"W x 6'-0"L x MIN. 18" H INSULATED ROOF CURB, PROVIDE CRICET AT ROOF UPSLOPE. SEE MECHANICAL
PV	BALLASTED PHOTOVOLTAIC PANEL, SEE ELECTRICAL
	BALLASTED GUARD RAIL

C4 ROOF LEGEND
SCALE: NOT TO SCALE

A1 ROOF PLAN
SCALE: 1/8" = 1'-0"

IN CHARGE OF A.M. BRUCE, AIA
CHECKED BY K. COLLINS, RA
MADE BY A.M. BRUCE, AIA

CERTIFICATE OF AUTHORIZATION# 020240
REGISTERED ARCHITECT — MICHAEL W LAMONTAGNE — 021950 — STATE OF NEW YORK
REGISTRATION EXPIRES: 5/31/2028

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SIGNATURE
TITLE DATE

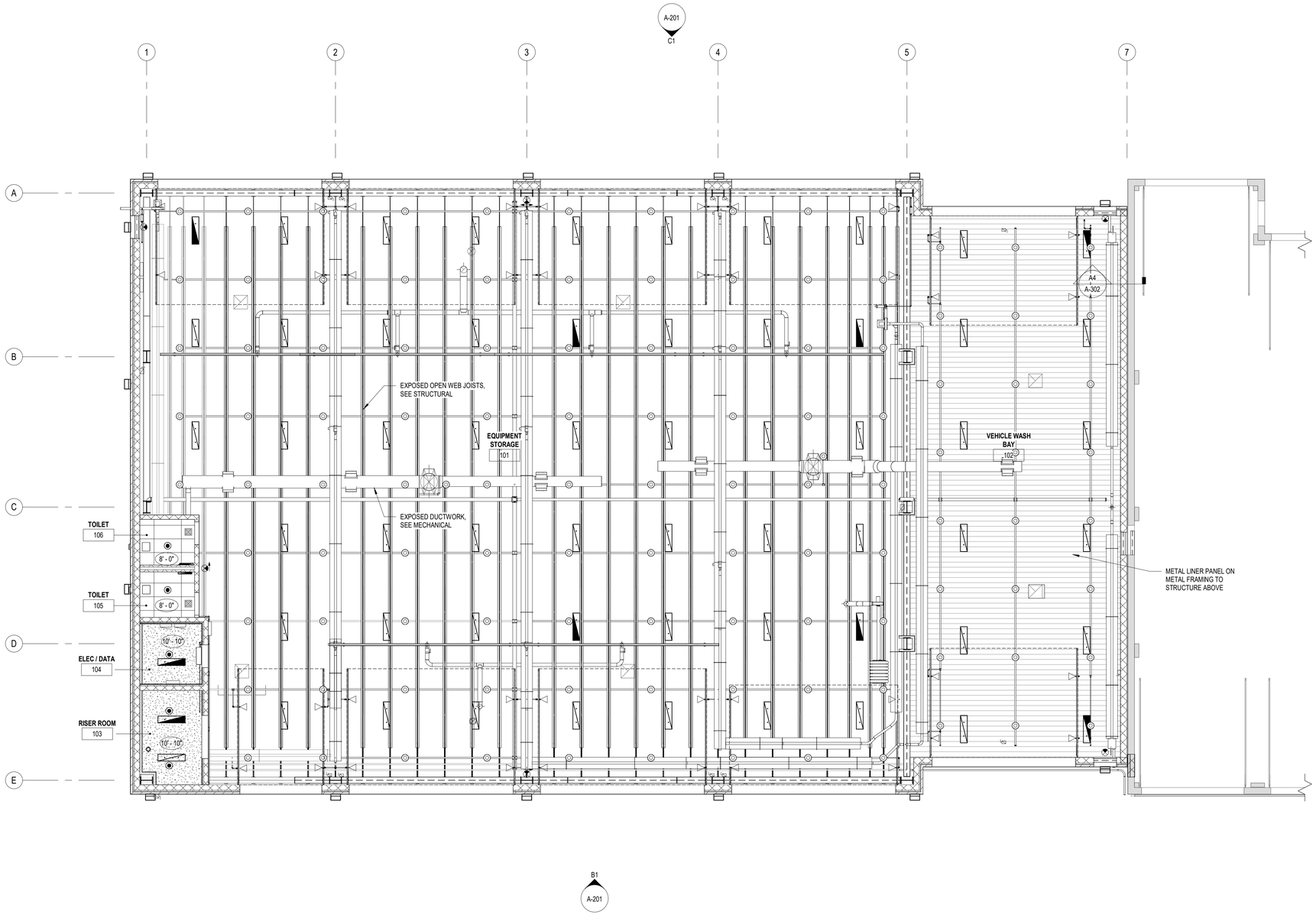
PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ROOF PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	A-102

SHEET NO. 37 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-A-103
REV. NO. 0



REFLECTED CEILING PLAN LEGEND

- X'-X" — CEILING HEIGHT
- GYP BD CEILING
- ACT CEILING
- PENDANT LIGHT FIXTURE, SEE ELECTRICAL
- WALL PACK, SEE ELECTRICAL
- EXIT LUMINAIRE, SEE ELECTRICAL
- SPRINKLER HEAD, SEE FIRE PROTECTION

C4 REFLECTED CEILING PLAN LEGEND

SCALE: NOT TO SCALE

A1 FIRST FLOOR REFLECTED CEILING PLAN

SCALE: 1/8" = 1'-0"

0 4' 8' 16'

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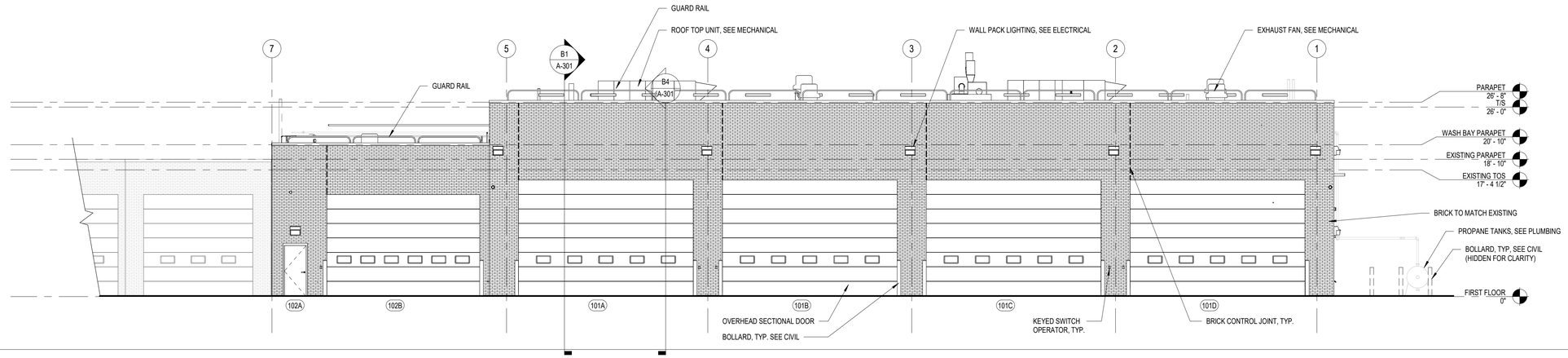
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NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
REFLECTED CEILING PLAN

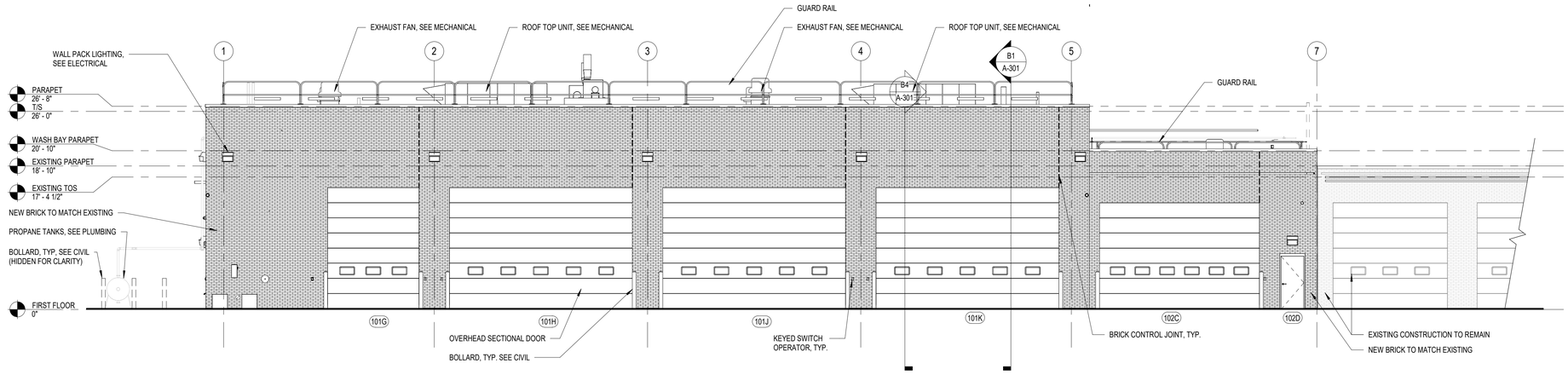
CONTRACT NUMBER	SHEET NUMBER
23-528	A-111

SHEET NO. 38 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-A-104
REV. NO. 0



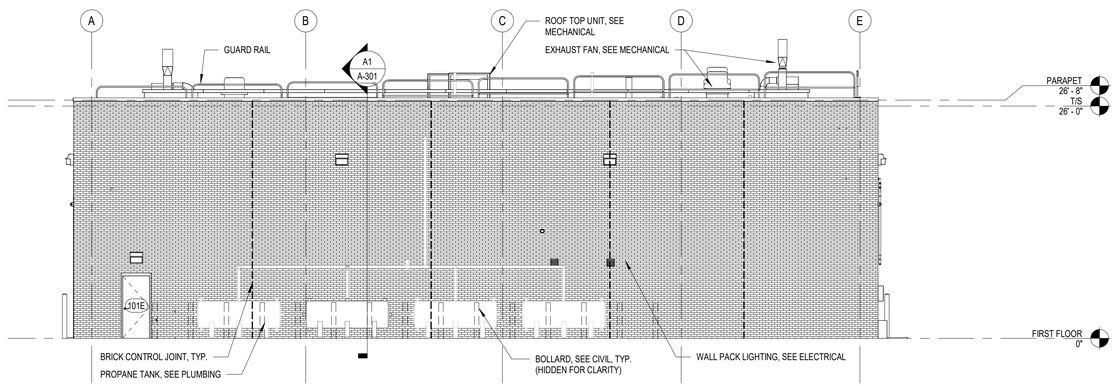
C1 EAST ELEVATION

SCALE: 1/8" = 1'-0"



B1 WEST ELEVATION

SCALE: 1/8" = 1'-0"



A1 NORTH ELEVATION

SCALE: 1/8" = 1'-0"

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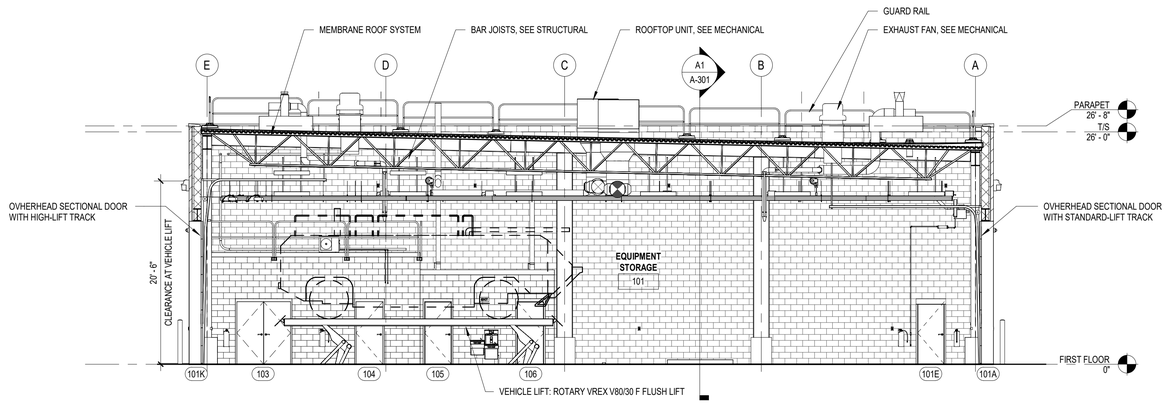
PROJECT COORDINATOR
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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
EXTERIOR ELEVATIONS

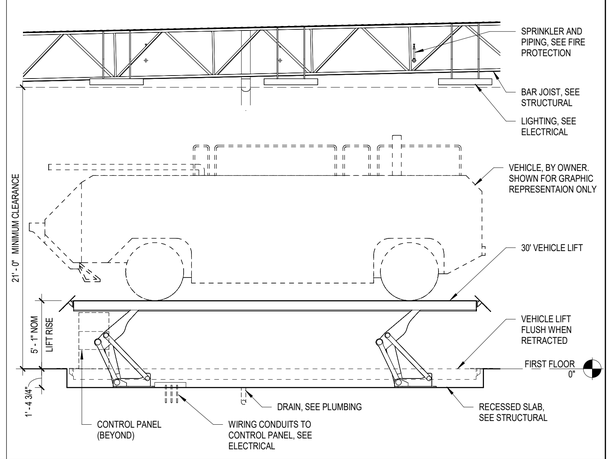
CONTRACT NUMBER	SHEET NUMBER
23-528	A-201

SHEET NO. 39 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-A-105
REV. NO. 0



B1 BUILDING SECTION 2

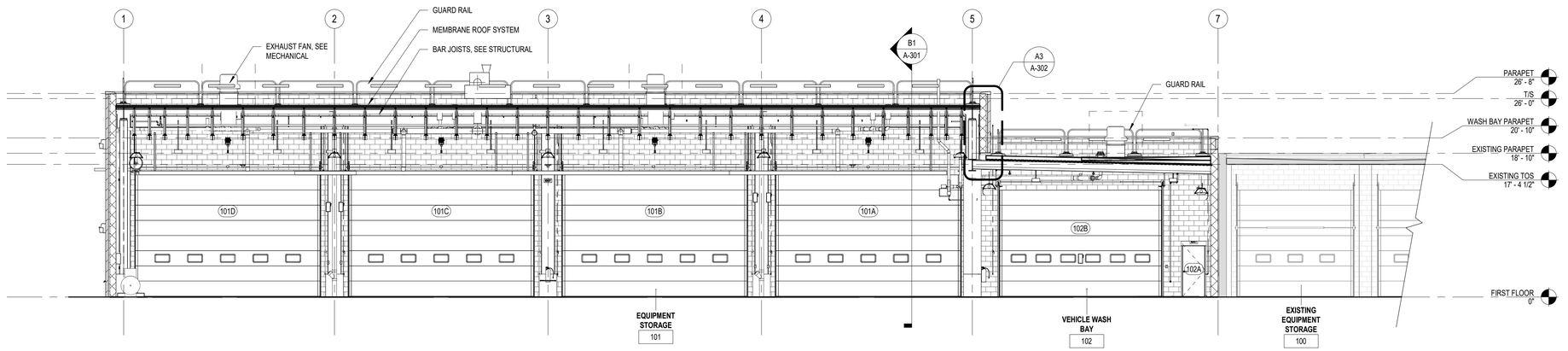
SCALE: 1/8" = 1'-0"



B4 VEHICLE LIFT SECTION

SCALE: 3/16" = 1'-0"

0 4' 8' 12'



A1 BUILDING SECTION 1

SCALE: 1/8" = 1'-0"

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CERTIFICATE OF AUTHORIZATION# 020240

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REGISTRATION EXPIRES: 5/31/2028

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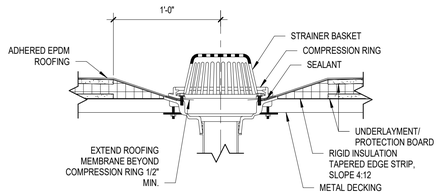
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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
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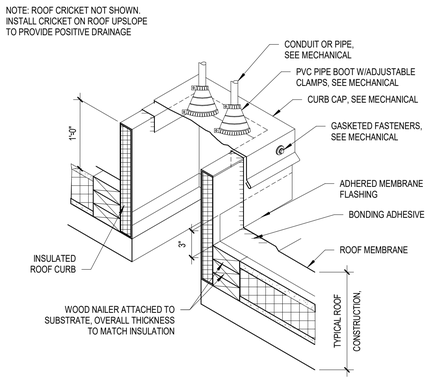
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
BUILDING SECTIONS

CONTRACT NUMBER	SHEET NUMBER
23-528	A-301

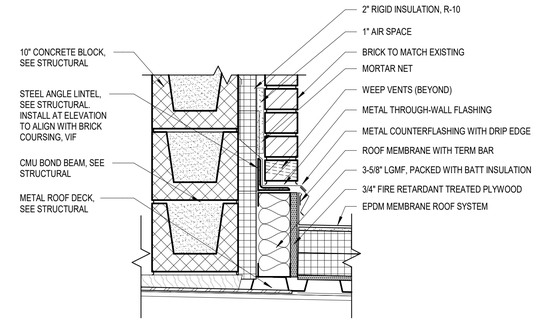
SHEET NO. 40 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-A-106
REV. NO. 0



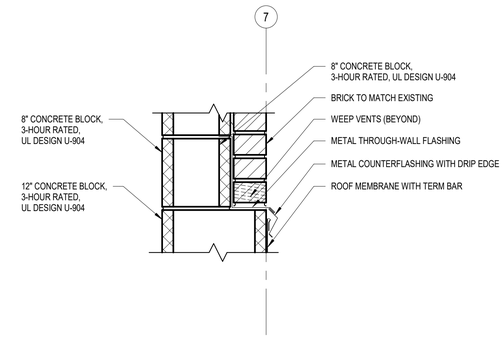
C1 ROOF DRAIN DETAIL
SCALE: 1 1/2" = 1'-0"



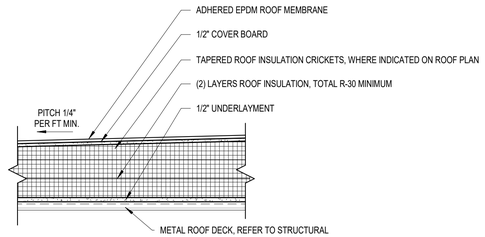
C2 PIPE CURB ASSEMBLY DETAIL
SCALE: 1 1/2" = 1'-0"



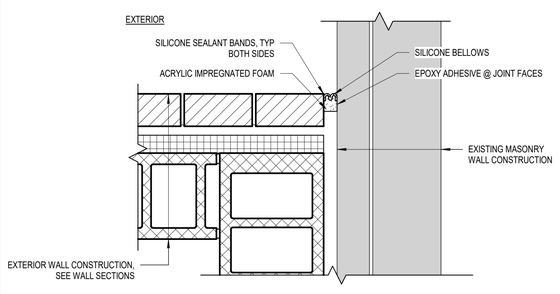
C3 BRICK FLASHING AT ROOF
SCALE: 1 1/2" = 1'-0"



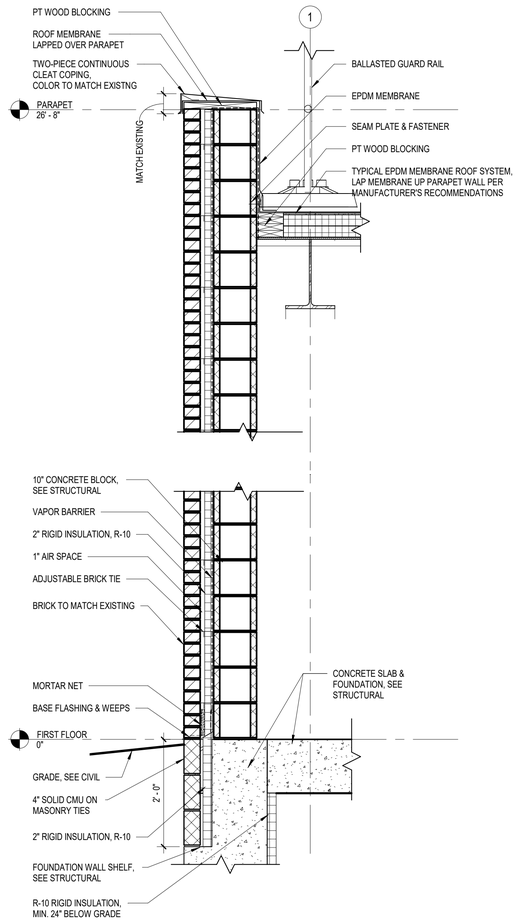
C4 BRICK FLASHING AT FIRE WALL
SCALE: 1 1/2" = 1'-0"



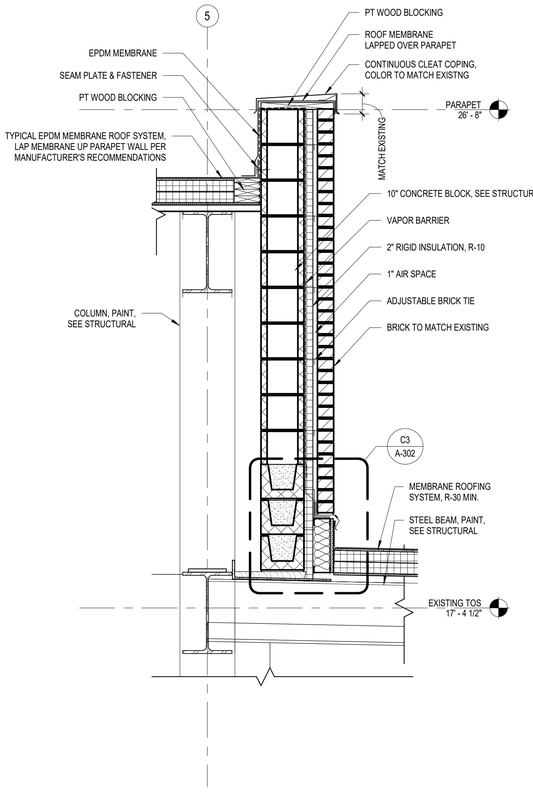
B1 TYPICAL ROOF CONSTRUCTION
SCALE: 1 1/2" = 1'-0"



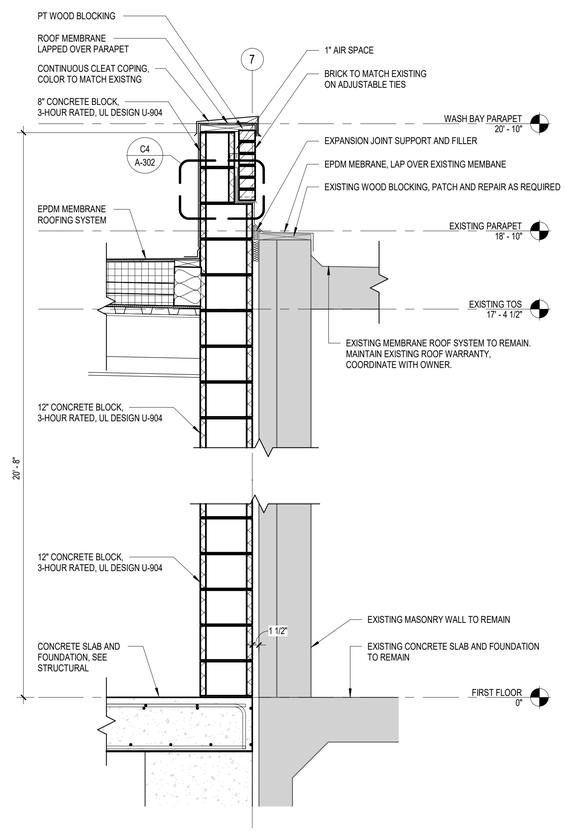
A1 TYPICAL WALL EXPANSION JOINT
SCALE: 1 1/2" = 1'-0"



A2 WALL SECTION 1
SCALE: 3/4" = 1'-0"



A3 WALL SECTION 2
SCALE: 3/4" = 1'-0"



A4 WALL SECTION 3
SCALE: 3/4" = 1'-0"

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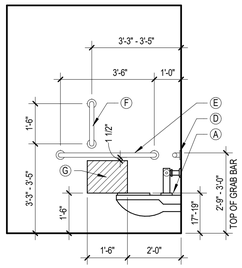
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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
WALL SECTIONS AND DETAILS

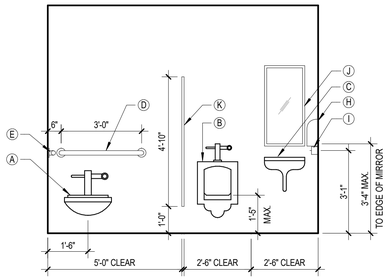
CONTRACT NUMBER	SHEET NUMBER
23-528	A-302

SHEET NO. 41 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-A-107
REV. NO. 0



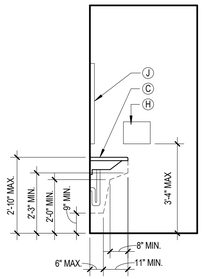
TYPICAL ACCESSIBLE TOILET ROOM ELEVATION

INSULATE ALL EXPOSED PIPING TO MEET ADA ACCESSIBILITY REQUIREMENTS



TYPICAL ACCESSIBLE TOILET ROOM ELEVATION

INSULATE ALL EXPOSED PIPING TO MEET ADA ACCESSIBILITY REQUIREMENTS



TYPICAL ACCESSIBLE TOILET ROOM ELEVATION

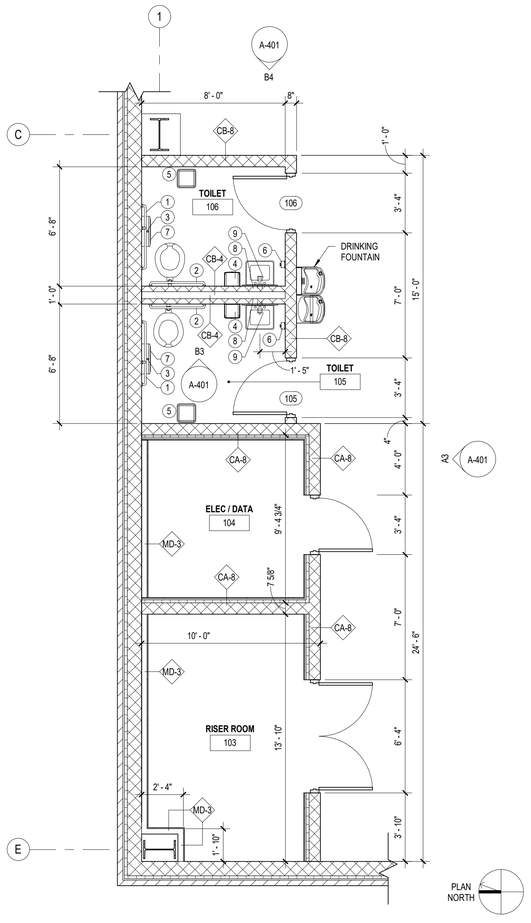
INSULATE ALL EXPOSED PIPING TO MEET ADA ACCESSIBILITY REQUIREMENTS

PLUMBING FIXTURES & ACCESSORIES LEGEND	
Ⓐ	TOILET
Ⓑ	URINAL
Ⓒ	LAVATORY
Ⓓ	36" GRAB BAR
Ⓔ	42" GRAB BAR
Ⓕ	18" VERTICAL GRAB BAR
Ⓖ	TOILET PAPER HOLDER & SANITARY NAPKIN RECEPTACLE
Ⓗ	HAND DRYER
Ⓘ	SOAP DISPENSER
Ⓙ	MIRROR (MIN. 36" TALL)
Ⓚ	TOILET PARTITION
Ⓛ	URINAL SCREEN (MIN. 18" WIDE)

NOTES:
1. FIXTURES AND ACCESSORIES IN THIS DETAIL ARE SHOWN ONLY TO DEFINE TYPICAL MOUNTING LOCATIONS AND DO NOT REPRESENT ACTUAL LAYOUTS, QUANTITIES, AND SPECIFIED ITEMS IN THE PROJECT.

D1 TYPICAL PLUMBING FIXTURE & ACCESSORIES LOCATIONS

SCALE: NOT TO SCALE



A1 ENLARGED PLAN - ADDITION

SCALE: 1/4" = 1'-0"

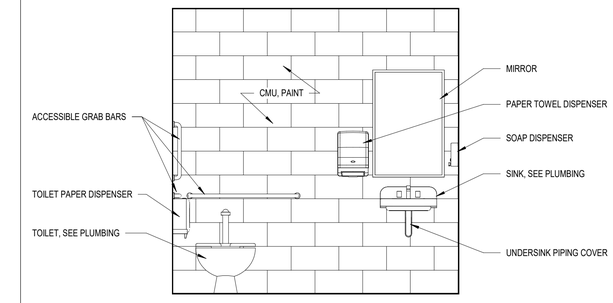
ACCESSORIES SCHEDULE		ROOM NUMBER				COMMENTS
⊖	ITEM	001A	001B	105	106	
1	42" GRAB BAR	1	1	1	1	
2	36" GRAB BAR	-	-	1	1	
3	18" VERTICAL GRAB BAR	1	1	1	1	
4	PAPER TOWEL DISPENSER	-	-	1	1	PROVIDED BY OWNER
5	WASTE RECEPTACLE	-	-	1	1	
6	SOAP DISPENSER	-	-	1	1	
7	TOILET PAPER DISPENSER	-	-	1	1	PROVIDED BY OWNER
8	MIRROR, 24"W x 36"H	-	-	1	1	
9	UNDERLAVATORY GUARD PIPING COVER	1	2	1	1	
10	24" GRAB BAR	1	1	-	-	

GENERAL NOTES:

1. MOUNT ALL ACCESSORIES WITH FASTENERS AND ANCHORS AS RECOMMENDED BY THE MANUFACTURER.
2. MOUNT ALL ACCESSORIES AT ADA ACCESSIBLE HEIGHTS AND LOCATIONS AS RECOMMENDED BY THE MANUFACTURER.

B2 ACCESSORY SCHEDULE

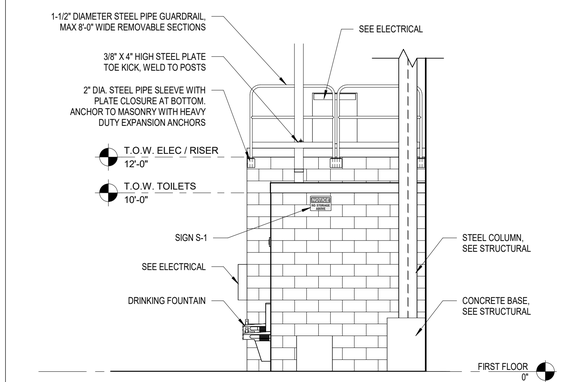
SCALE: NOT TO SCALE



NOTE: INTERIOR ELEVATION OF TOILET ROOM 106 IS SIMILAR, MIRRORED

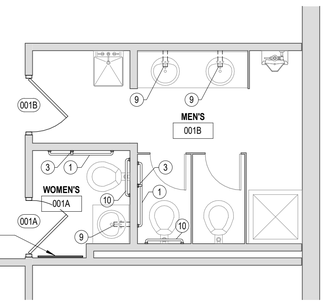
B3 INTERIOR ELEVATION AT TOILET ROOM

SCALE: 1/2" = 1'-0"



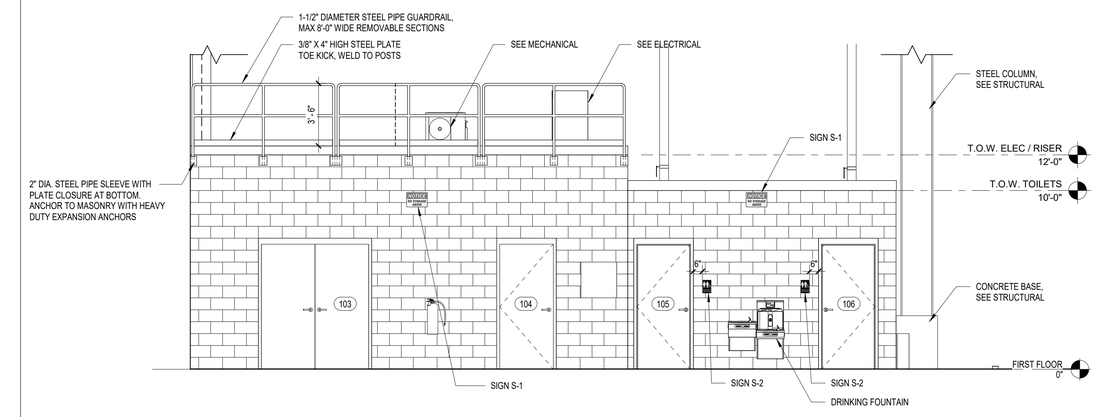
B4 INTERIOR ELEVATION AT ELEC/DATA

SCALE: 1/4" = 1'-0"



A2 ENLARGED PLAN - EXISTING TOILET ROOMS

SCALE: 1/4" = 1'-0"



A3 INTERIOR ELEVATION AT RISER & ELEC/DATA

SCALE: 1/4" = 1'-0"

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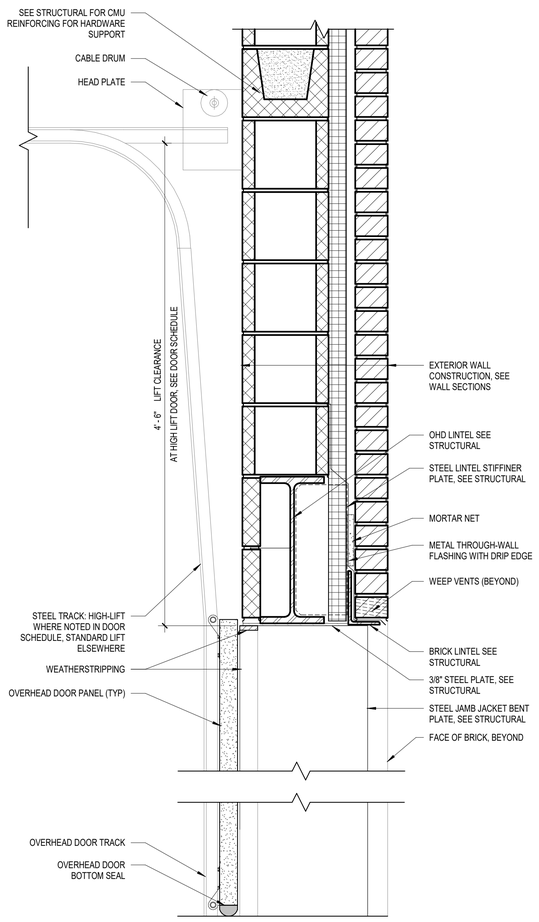
PROJECT COORDINATOR
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SIGNATURE
TITLE DATE

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DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ENLARGED PLANS, INTERIOR ELEVATIONS, AND DETAILS

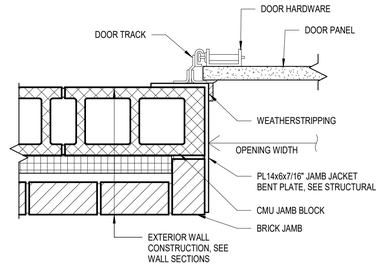
CONTRACT NUMBER	SHEET NUMBER
23-528	A-401

SHEET NO. 42 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-A-108
REV. NO. 0



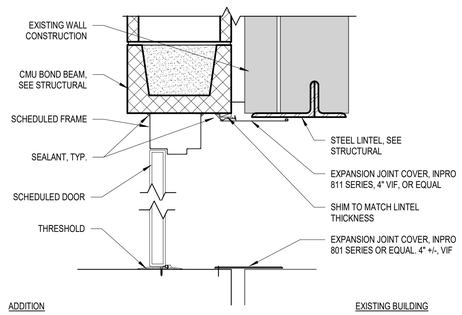
B1 OVERHEAD SECTIONAL DOOR HEAD AND THRESHOLD

SCALE: 1 1/2" = 1'-0"



C2 OVERHEAD SECTIONAL DOOR JAMB DETAIL

SCALE: 1 1/2" = 1'-0"



B2 DOOR HEAD AND THRESHOLD - 3-HOUR RATED WALL

SCALE: NOT TO SCALE

ROOM FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS (SUBSTRATE/FINISH) NORTH	SOUTH	EAST	WEST	CEILING SUBSTRATE/FINISH	HEIGHT	NOTES
100	EXISTING EQUIPMENT STORAGE	ETR	ETR	ETR	ETR	ETR	ETR	ETR	ETR	
101	EQUIPMENT STORAGE	CONC/SLR	-	CMU/PT	-	CMU/PT	CMU/PT	EXP/PT	-	
102	VEHICLE WASH BAY	CONC/SLR	-	-	CMU/PT	CMU/PT	CMU/PT	MLP	VARIES	CEILING ANCHORED DIRECTLY TO STRUCTURAL BEAMS, ABOVE
103	RISER ROOM	CONC/SLR	RBR	GWB/PT	GWB/PT	CMU/PT	GWB/PT	GWB/PT	10'-10"	
104	ELEC / DATA	CONC/SLR	RBR	GWB/PT	GWB/PT	GWB/PT	GWB/PT	GWB/PT	10'-10"	
105	TOILET	CONC/SLR	RBR	CMU/PT	CMU/PT	CMU/PT	CMU/PT	ACT	8'-0"	
106	TOILET	CONC/SLR	RBR	CMU/PT	CMU/PT	CMU/PT	CMU/PT	ACT	8'-0"	

NOTE: ALL ROOMS NOT SHOWN IN THE FINISH SCHEDULE ARE EXISTING TO REMAIN.

ABBREVIATIONS:

CONC	-	CONCRETE
CMU	-	CONCRETE MASONRY UNIT
EXP	-	EXPOSED
GWB	-	GYPSUM WALL BOARD
MLP	-	INTERIOR METAL LINER PANEL ON METAL FRAMING
PT	-	PAINT
RBR	-	RUBBER
SLR	-	SEALER

C4 ROOM FINISH SCHEDULE

SCALE: NOT TO SCALE

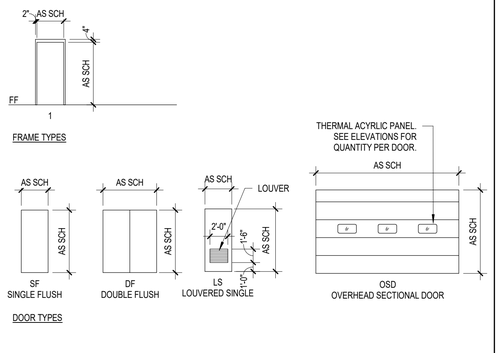
DOOR SCHEDULE

DOOR NO.	ROOM NO.	DOOR TYPE	DOOR WIDTH	DOOR HEIGHT	DOOR MATERIAL	DOOR FINISH	FRAME TYPE	FRAME MATERIAL	FRAME FINISH	HARDWARE SET	FIRE RATING	NOTES
001A	001A	ETR	3' - 0"	7' - 0"	ETR	ETR	ETR	ETR	ETR	5	-	4
001B	001B	ETR	3' - 0"	7' - 0"	ETR	ETR	ETR	ETR	ETR	5	-	4
100	102	SF	3' - 0"	7' - 0"	HM	PT	1	HM	PT	1	3 HR	2
101A	101	OSD	24' - 0"	16' - 0"	STL	PT	-	STL	PT	-	-	3
101B	101	OSD	24' - 0"	16' - 0"	STL	PT	-	STL	PT	-	-	3
101C	101	OSD	24' - 0"	16' - 0"	STL	PT	-	STL	PT	-	-	3
101D	101	OSD	24' - 0"	16' - 0"	STL	PT	-	STL	PT	-	-	3
101E	101	SF	3' - 0"	7' - 0"	HM	PT	1	HM	PT	1	-	2
101G	101	OSD	12' - 0"	16' - 0"	STL	PT	-	STL	PT	-	-	3
101H	101	OSD	24' - 0"	16' - 0"	STL	PT	-	STL	PT	-	-	3
101J	101	OSD	24' - 0"	16' - 0"	STL	PT	-	STL	PT	-	-	3
101K	101	OSD	24' - 0"	16' - 0"	STL	PT	-	STL	PT	-	-	1, 3
102A	102	SF	3' - 0"	7' - 0"	HM	PT	1	HM	PT	1	3/4 HR	2
102B	102	OSD	21' - 0"	14' - 0"	STL	PT	-	STL	PT	-	-	3
102C	102	OSD	21' - 0"	14' - 0"	STL	PT	-	STL	PT	-	-	3
102D	102	SF	3' - 0"	7' - 0"	HM	PT	1	HM	PT	1	3/4 HR	2
103	101	DF	6' - 0"	7' - 0"	HM	PT	1	HM	PT	2		2
104	101	SF	3' - 0"	7' - 0"	HM	PT	1	HM	PT	3	-	2
105	105	LS	3' - 0"	7' - 0"	MH	PT	1	HM	PT	4	-	
106	101	LS	3' - 0"	7' - 0"	HM	PT	1	HM	PT	4	-	

ABBREVIATIONS:

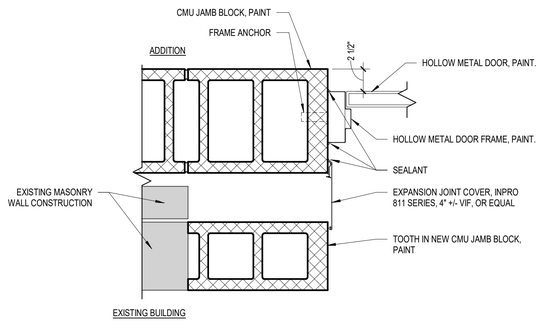
ETR	-	EXISTING TO REMAIN
FF	-	FINISH FLOOR
HM	-	HOLLOW METAL
PT	-	PAINT
STL	-	STEEL

NOTES:
1. HIGH LIFT TRACK
2. INSULATED SWINGING DOOR; MAXIMUM U-0.61 & SHGC 0.36; TO BE INSULATED AND WEATHERSTRIPPED; SEE SPECIFICATION SECTION 081113 FOR ALLOWABLE MANUFACTURERS AND ADDITIONAL INFORMATION
3. GARAGE DOOR; MAXIMUM U-0.31 & SHGC 0.36; TO BE INSULATED AND WEATHERSTRIPPED; SEE SPECIFICATION SECTION 083613 FOR ALLOWABLE MANUFACTURERS AND ADDITIONAL INFORMATION
4. PROVIDE NEW HARDWARE ON EXISTING DOOR. REMOVE EXISTING HARDWARE WHERE NEW IS NOTED.



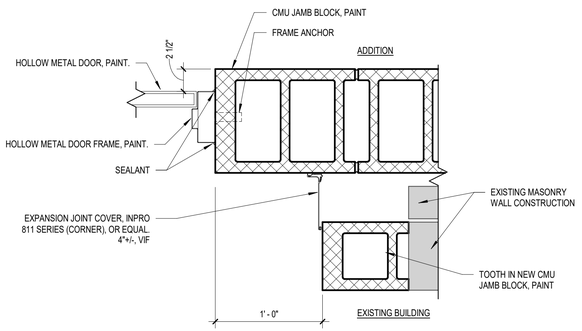
B4 DOOR SCHEDULE

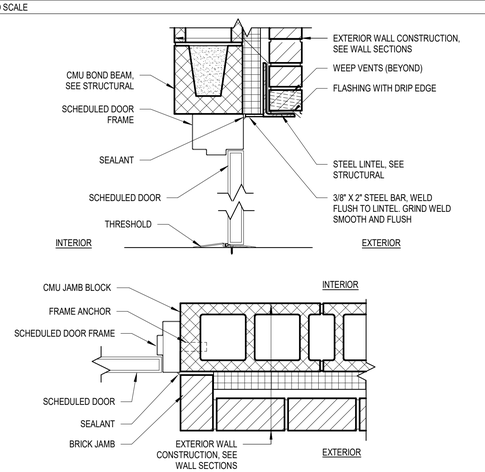
SCALE: NOT TO SCALE



A2 DOOR JAMB - 3-HOUR RATED WALL

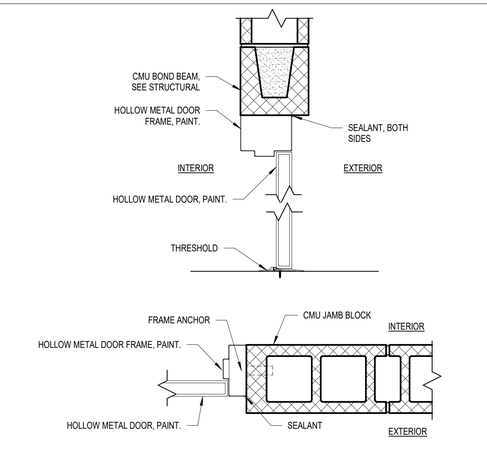
SCALE: 1 1/2" = 1'-0"





A3 DOOR HEAD, JAMB, AND THRESHOLD - EXTERIOR

SCALE: 1 1/2" = 1'-0"



A4 DOOR HEAD, JAMB, AND THRESHOLD - INTERIOR CMU

SCALE: 1 1/2" = 1'-0"

IN CHARGE OF A.M. BRUCE, AIA
CHECKED BY K. COLLINS, RA
MADE BY A.M. BRUCE, AIA

CERTIFICATE OF AUTHORIZATION# 020240
REGISTERED ARCHITECT MICHAEL V. LAMONTAGNE 031950 STATE OF NEW YORK
REGISTRATION EXPIRES: 5/31/2028

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WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

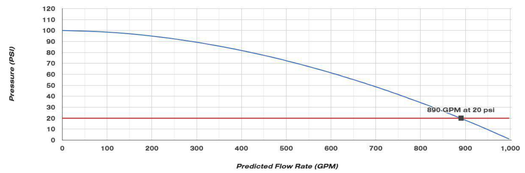
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
SCHEDULES AND DOOR DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	A-601

SHEET NO. 43 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-A-109
REV. NO. 0

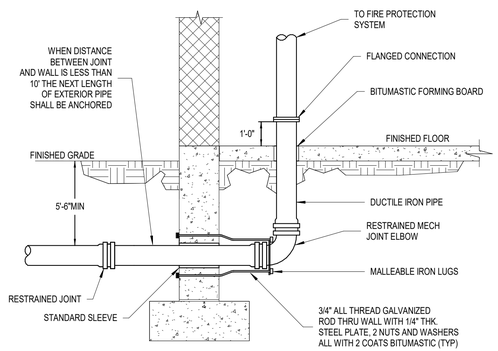
DESIGN STANDARD:	NFPA 13 (2016)
HAZARD CLASSIFICATION:	ORDINARY HAZARD 2
DENSITY:	0.2 GPM/SF
REMOTE AREA:	1,950 SF
AREA PER SPRINKLER:	120 SF
HOSE STREAM ALLOWANCE:	250 GPM
SYSTEM REQUIRED FLOW:	432.7 GPM
TOTAL REQUIRED FLOW:	682.7 GPM
REQUIRED PRESSURE:	45.9 PSI
AVAILABLE PRESSURE:	50.9 PSI
SAFETY FACTOR:	10%

C1 HYDRAULIC DESIGN INFORMATION
SCALE: NOT TO SCALE

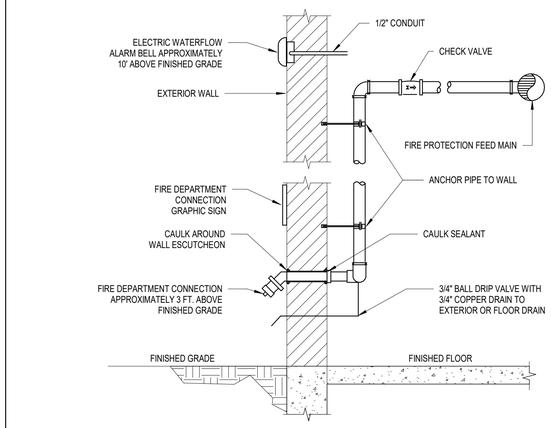


DATE:	9/7/23
PERFORMED BY:	JEREMY SKINNER; CALCULATED FIRE PROTECTION
LOCATION:	LOOP ROAD; NEAR WEST CORNER OF AIRFIELD MAINTENANCE BUILDING
MAIN SIZE:	6" DUCTILE IRON
MANUFACTURER:	MUELLER 5 1/4 2010
STATIC:	100 PSI
RESIDUAL:	28 PSI
FLOW:	840 GPM

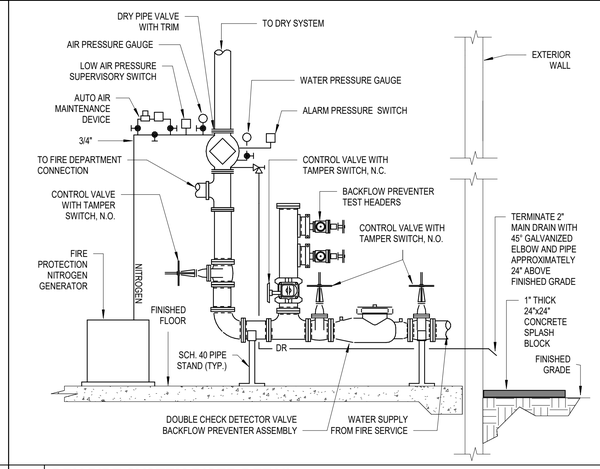
B1 WATER SUPPLY INFORMATION
SCALE: NOT TO SCALE



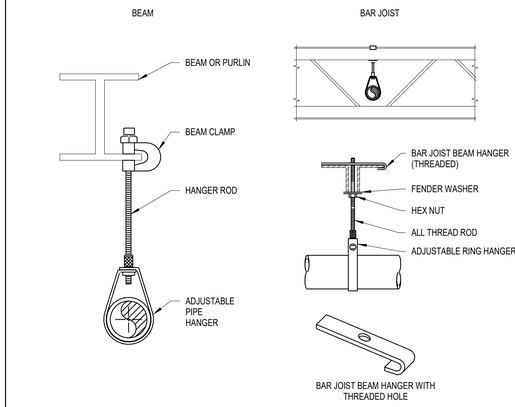
A1 FIRE SERVICE LEAD-IN DETAIL
SCALE: NOT TO SCALE



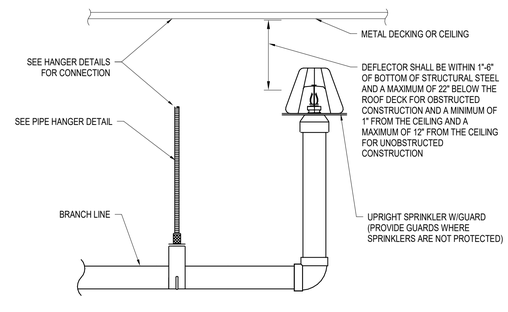
C2 FIRE DEPARTMENT CONNECTION DETAIL
SCALE: NOT TO SCALE



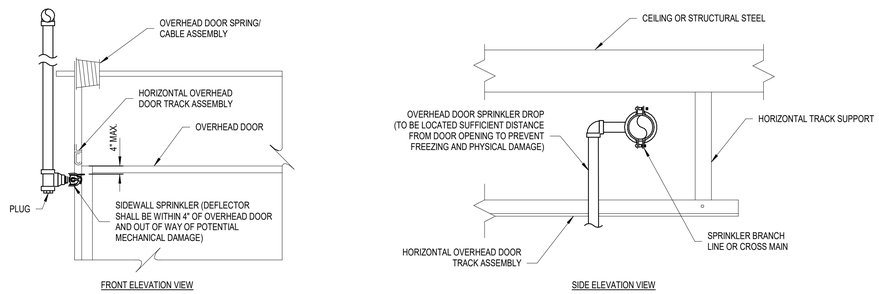
B2 DRY PIPE SYSTEM RISER DETAIL
SCALE: NOT TO SCALE



C3 PIPE HANGER DETAILS
SCALE: NOT TO SCALE



B3 UPRIGHT SPRINKLER DETAIL
SCALE: NOT TO SCALE



NOTES:

1). PROVIDE NECESSARY NUMBER OF SIDEWALL SPRINKLERS TO MEET NFPA 13 SPACING REQUIREMENTS FOR HAZARD CLASS.

A2 OVERHEAD DOOR SPRINKLER DETAIL
SCALE: NOT TO SCALE

SCOPE OF WORK:

THE SCOPE OF WORK SHALL INCLUDE THE FOLLOWING:

1. THE LAYOUT, INSTALLATION, AND TESTING OF NEW FIRE PROTECTION, AUTOMATIC DRY-PIPE SPRINKLER SYSTEMS THROUGHOUT THE RENOVATION AREA.
2. PERFORM AND DOCUMENT HYDRANT FLOW TEST IN ACCORDANCE WITH NFPA 291.
3. SUBMISSION OF DOCUMENTATION AS REQUIRED.

APPLICABLE CODES:

1. 2020 BUILDING CODE OF NEW YORK STATE.
2. 2020 FIRE CODE OF NEW YORK STATE .
3. NFPA 13 - 2016, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS

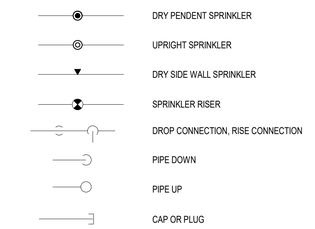
DESIGN CRITERIA:

1. THE DESIGN DOCUMENTS PROVIDED HEREIN IDENTIFY THE MINIMUM SYSTEM REQUIREMENTS, IN ACCORDANCE WITH THE ABOVE REFERENCED CODES AND REGULATIONS.
2. PROVIDE A COMPLETE AUTOMATIC DRY-PIPE SPRINKLER SYSTEM FOR AREAS INDICATED. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH NFPA 13. REFER TO DIVISION 21 SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
   A. STORAGE, MECHANICAL/ELECTRICAL, AND SIMILAR SPACES: ORDINARY HAZARD GROUP 1, QUICK RESPONSE SPRINKLERS, 0.15 GPM/SQ.FT. OVER 1,500 SQ.FT., 250 GPM HOSE STREAM.
   B. VEHICLE STORAGE AREAS: ORDINARY HAZARD GROUP 2, QUICK RESPONSE SPRINKLERS, 0.20 GPM/SQ.FT. OVER 1,500 SQ.FT., 250 GPM HOSE STREAM.
   C. FOR DRY PIPE SYSTEMS AND PREACTION SYSTEMS, THE AREA OF SPRINKLER OPERATION SHALL BE INCREASED BY 30 PERCENT WITHOUT REVISING THE DENSITY.
3. PERFORM AND DOCUMENT WATER FLOW TEST IN ACCORDANCE WITH NFPA 291. FLOW TEST SHALL HAVE BEEN PERFORMED WITHIN 12 MONTHS PRIOR TO THE DATE OF SUBMISSION OF PERMIT.
4. PIPING AND DETAILS SHOWN ARE DIAGRAMMATIC IN NATURE. CONTRACTOR IS RESPONSIBLE FOR FINAL SPRINKLER SYSTEM PIPE LAYOUT AND SIZING HYDRAULIC CALCULATIONS, AND COORDINATION WITH OTHER TRADES.
5. PROVIDE MINIMUM 10% HYDRAULIC SAFETY FACTOR.
6. CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE ENGINEER OF RECORD (THROUGH THE APPROPRIATE PARTIES) COMPLETE SHOP DRAWINGS OF THE FIRE SPRINKLER SYSTEMS, MATERIAL DATA, AND CALCULATIONS AT THE SAME TIME. INCOMPLETE SUBMITTALS WILL BE RETURNED WITHOUT REVIEW. SHOP DRAWINGS SHALL INCLUDE, AT MINIMUM, WORKING PLANS WITH HYDRAULIC CALCULATIONS, AND COORDINATION WITH OTHER TRADES.

GENERAL NOTES:

1. ALL SPRINKLER AND SYSTEM COMPONENTS SHALL COMPLY WITH THE LISTING AND/OR PERFORMANCE REQUIREMENTS OF NFPA 13.
2. INSTALLATION PERSONNEL SHALL BE SUPERVISED BY PERSONS WHO ARE QUALIFIED AND EXPERIENCED IN THE INSTALLATION, INSPECTION, AND TESTING OF FIRE SPRINKLER SYSTEMS.
3. COORDINATE SPRINKLERS WITH ALL OTHER TRADES TO AVOID CONFLICTS. (SUCH AS LIGHTS, CEILING FANS, HVAC DUCTS AND GRILLS, ETC.) IN CEILINGS WITH ACT, CENTER SPRINKLERS IN TILES.
4. ALL PIPING SHALL BE GALVANIZED STEEL.
5. PIPING SHALL BE INSTALLED CONCEALED ABOVE FINISHED CEILINGS UNLESS NOTED OTHERWISE.
6. PIPING SHALL BE INSTALLED EXPOSED IN UNFINISHED CEILING AREAS UNLESS NOTED OTHERWISE. LOCATE PIPING TIGHT TO STRUCTURE AND ABOVE OTHER SYSTEMS WHERE POSSIBLE. ALL EXPOSED PIPING IN FINISHED ROOM AREAS ARE SUBJECT TO OWNER'S REPRESENTATIVE'S REVIEW.
7. SPRINKLER VALVE TAMPER SWITCHES, PRESSURE SWITCHES, AND WATER FLOW SWITCHES SHALL BE PROVIDED BY FIRE SUPPRESSION CONTRACTOR. FIRE ALARM CONTRACTOR SHALL PROVIDE, INSTALL, WIRE, AND PROGRAM MONITOR MODULES.
8. ALL PENETRATIONS THROUGH FIRE/SMOKE RATED ASSEMBLIES SHALL BE FIRE STOPPED. FIRE STOPPING SHALL BE OF U.L. LISTED ASSEMBLY.

B4 FIRE PROTECTION GENERAL NOTES
SCALE: NOT TO SCALE



A4 FIRE PROTECTION SYMBOL LIST
SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF M. OSTROFF, P.E.
CHECKED BY B. DONNER
MADE BY M. OSTROFF, P.E.

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NAME
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TITLE DATE

WESTCHESTER COUNTY, NEW YORK
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DIVISION OF ENGINEERING

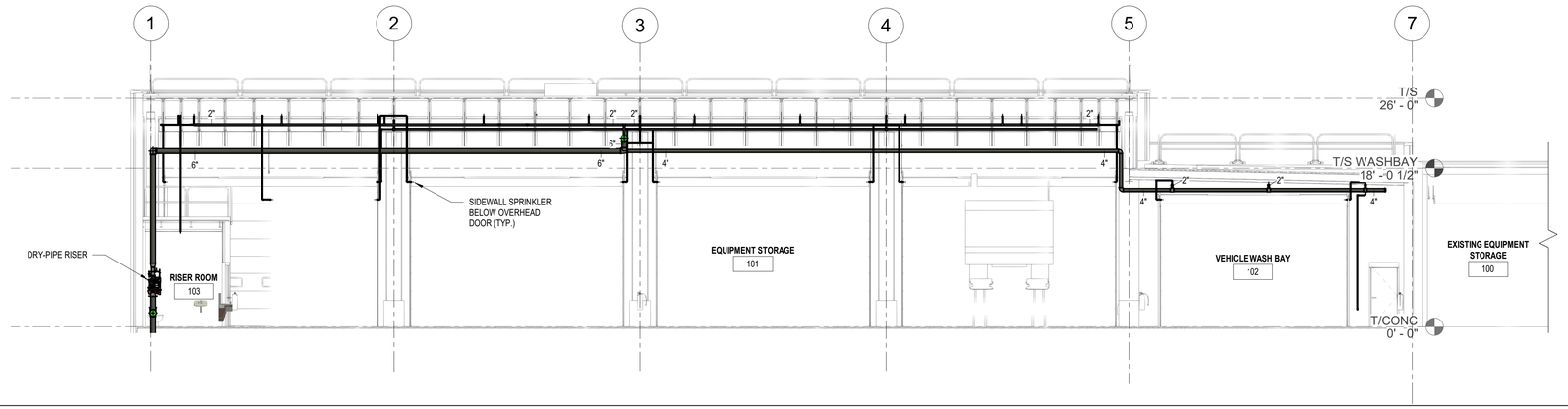
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS, NOTES, & SYMBOLS

CONTRACT NUMBER	SHEET NUMBER
23-528	F-001

SHEET NO. 44 OF 72

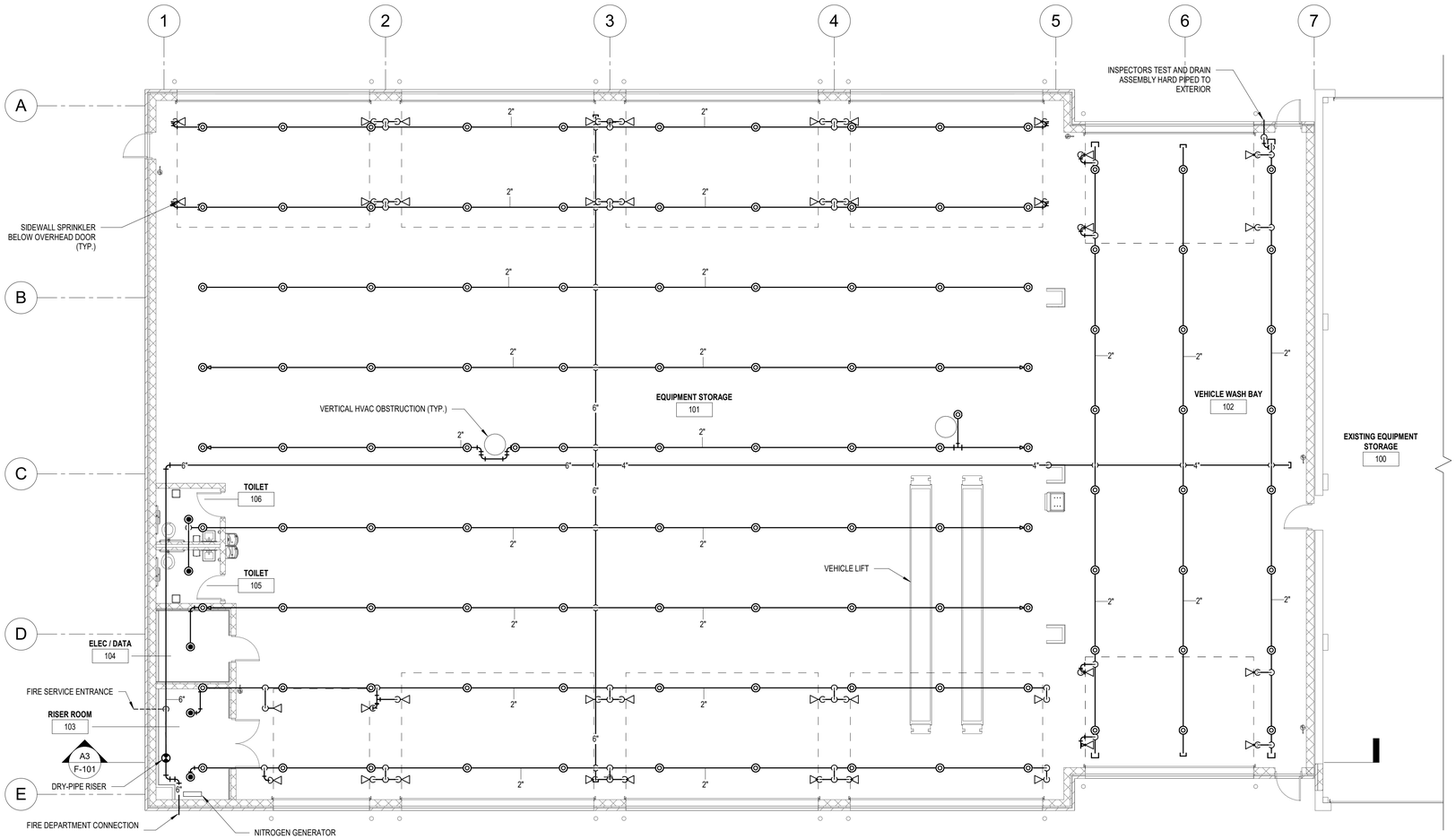
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-F-110	0



A3 SECTION VIEW
SCALE: 1/8" = 1'-0"

0 4' 8' 16'



A1 FLOOR PLAN
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF M. OSTROFF, P.E.
CHECKED BY B. DONNER
MADE BY M. OSTROFF, P.E.

STATE OF NEW YORK · KARA L' PIERRE · No. 096513 · LICENSED PROFESSIONAL ENGINEER

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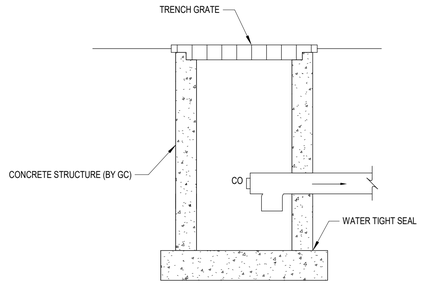
PROJECT COORDINATOR
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SIGNATURE
TITLE DATE

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DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
FLOOR PLAN

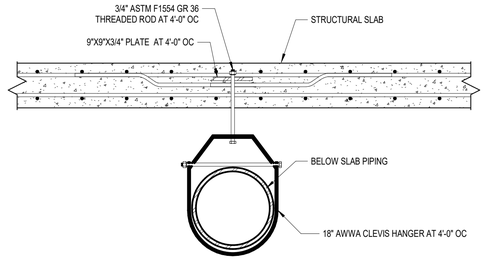
CONTRACT NUMBER	SHEET NUMBER
23-528	F-101

SHEET NO. 45 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-F-111
REV. NO. 0



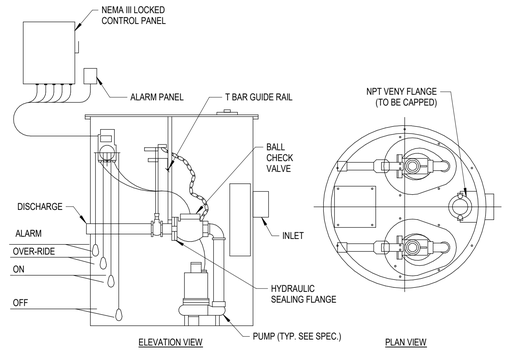
2 TYPICAL TRENCH DRAIN DETAIL

SCALE: NOT TO SCALE



3 PIPE SUPPORT HANGER DETAIL

SCALE: NOT TO SCALE



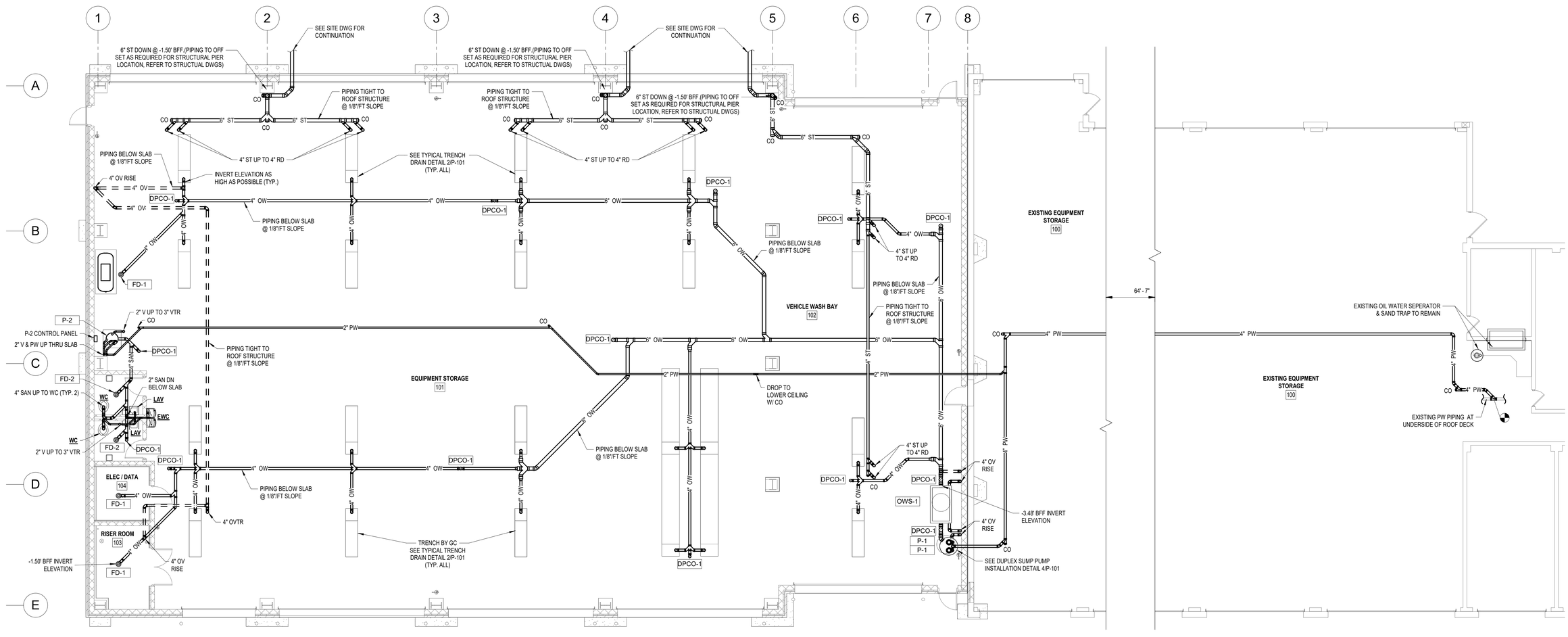
4 DUPLEX SUMP PUMP INSTALLATION

SCALE: NOT TO SCALE

A	COMPRESSED AIR (A)	CO	CLEANOUT
DCW	DOMESTIC COLD WATER (DCW)	DPCO	DECK PLATE CLEANOUT
P	PROPANE (P)	FD	FLOOR DRAIN
PW	PUMPED WASTE (PW)	RD	ROOF DRAIN
OW	OIL WASTE (OW)	OWS	OIL WATER SEPARATOR
SAN	SANITARY (SAN)	P-1	SUMP PUMP
W	WASTE (W)	BFF	BELOW FINISHED FLOOR
ST	STORM PRIMARY/SECONDARY (ST / STO)	ESEW	EMERGENCY SHOWER EYEWASH STATION (PORTABLE)
OV	OIL VENT (OV)	EWC	ELECTRIC WATER COOLER
V	VENT (V)	WC	WATER CLOSET
		LAV	LAVATORY
		SA	SHOCK ABSORBER
		VTR	VENT THRU ROOF
			CONNECT TO EXISTING

5 PIPE LEGEND

SCALE: NOT TO SCALE



1 SANITARY/STORM PLUMBING PLAN

SCALE: 1/8" = 1'-0"

IN CHARGE OF K.L. PIERCE, P.E.
CHECKED BY D.J. CHAMBERS
MADE BY E.R. LUKOWSKI

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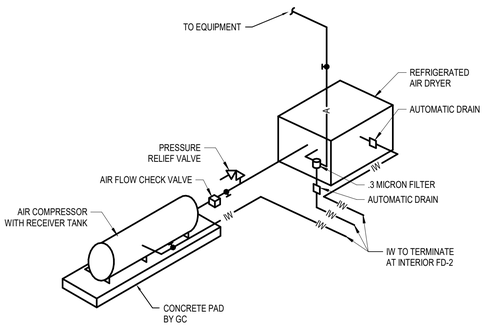
PROJECT COORDINATOR
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WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
SANITARY/STORM PLUMBING PLAN, DETAILS & LEGEND

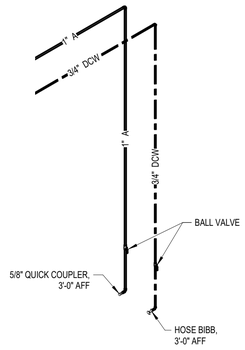
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23-528	P-101

SHEET NO. 46 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-P-112
REV. NO. 0



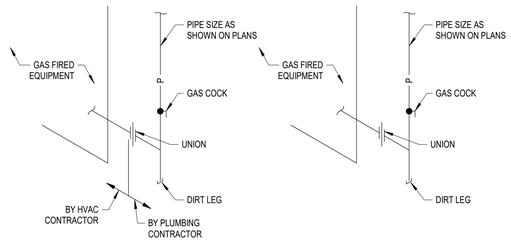
2 COMPRESSED AIR SCHEMATIC

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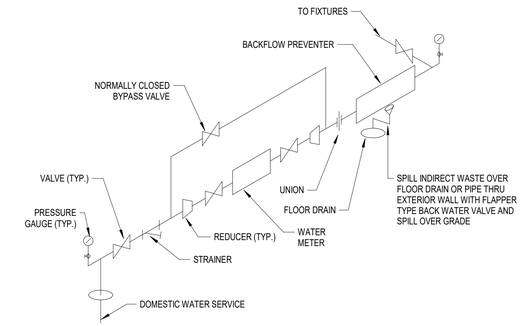
3 TYPICAL DROP DETAIL

SCALE: NOT TO SCALE



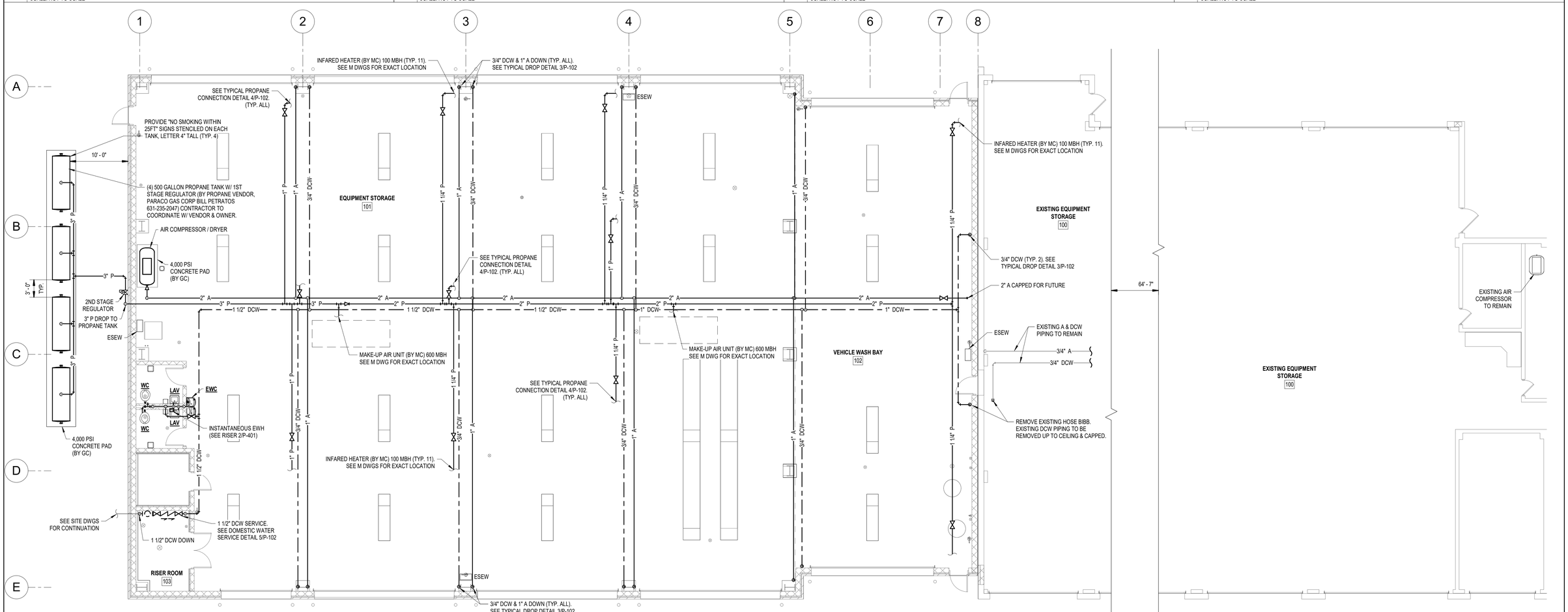
4 TYPICAL PROPANE CONNECTION DETAIL

SCALE: NOT TO SCALE



5 DOMESTIC WATER SERVICE

SCALE: NOT TO SCALE



1 DOMESTIC PLUMBING PLAN

SCALE: 1/8" = 1'-0"

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MADE BY E.R. LUKOWSKI

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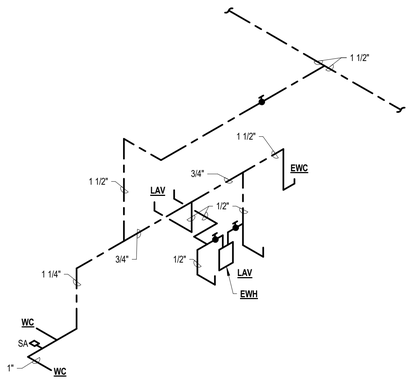
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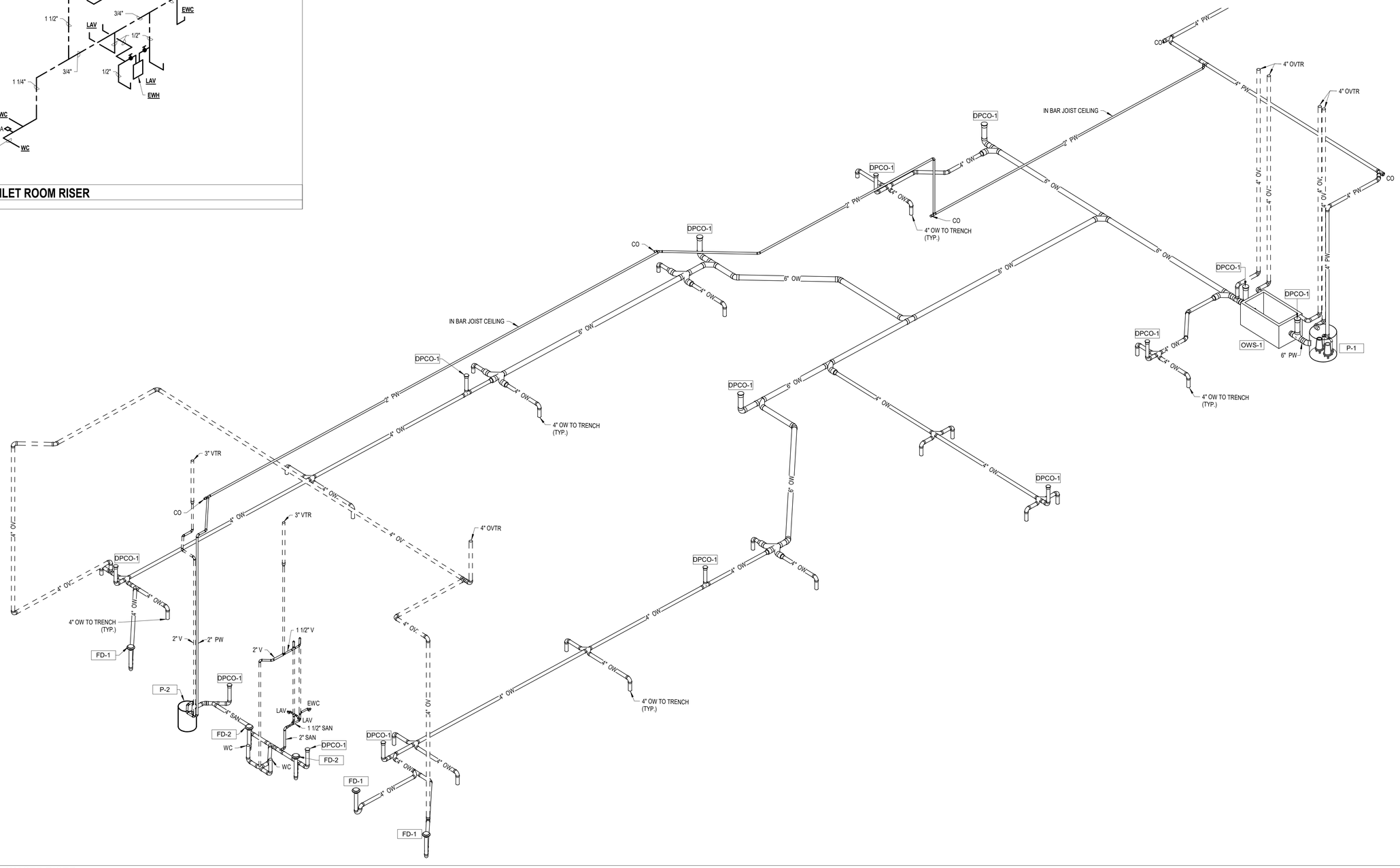
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
WATER, PROPANE, COMPRESSOR PLUMBING PLAN & DETAILS

CONTRACT NUMBER 23-528
SHEET NUMBER P-102
SHEET NO. 47 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-P-113
REV. NO. 0



2 DOMESTIC - TOILET ROOM RISER

SCALE: NOT TO SCALE



1 SANITARY & OIL WASTE RISER

SCALE: NOT TO SCALE

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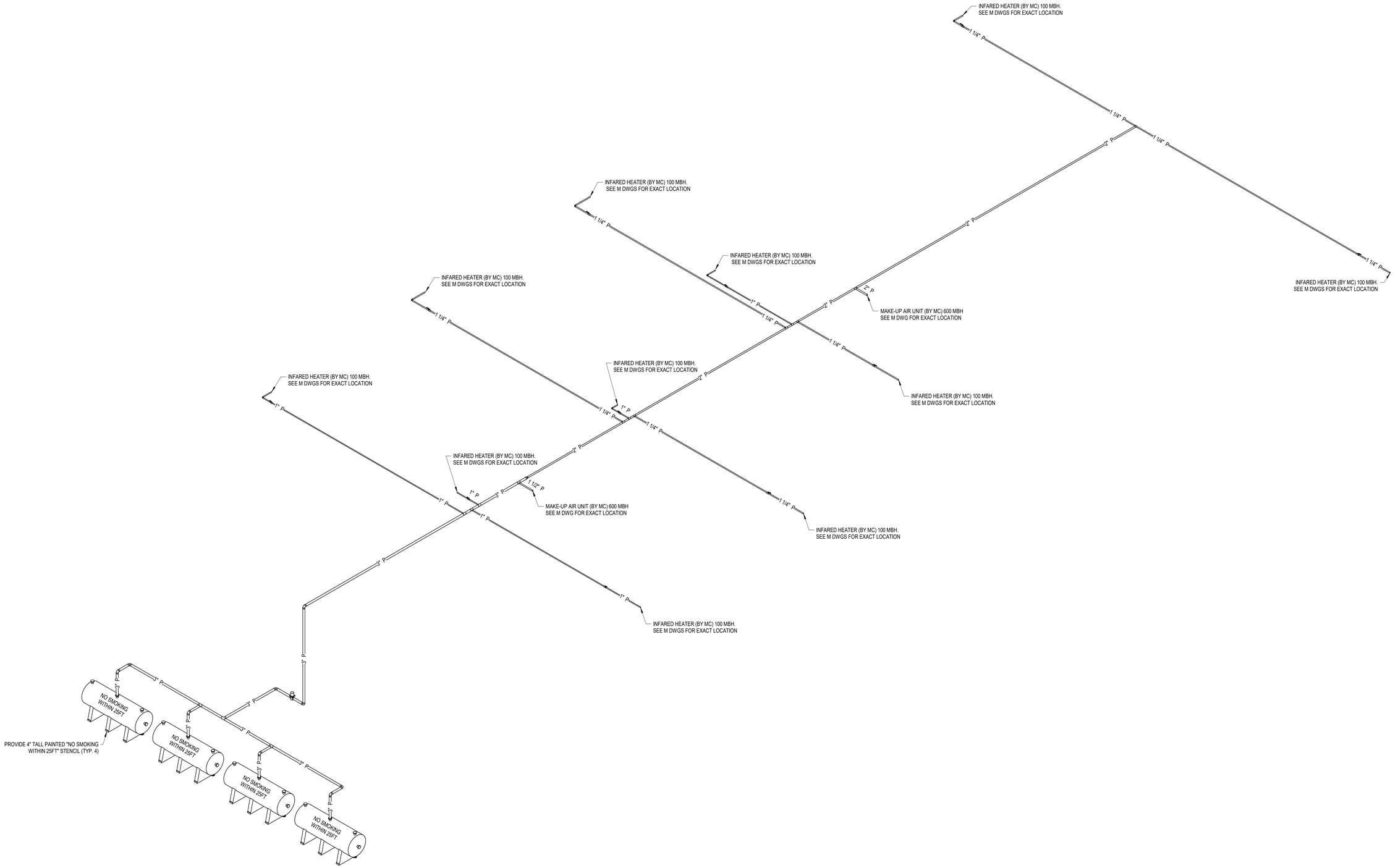
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NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
SANITARY RISER

CONTRACT NUMBER 23-528
SHEET NUMBER P-401
SHEET NO. 48 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-P-114
REV. NO. 0



1 GAS RISER

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NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
GAS RISER

CONTRACT NUMBER 23-528
SHEET NUMBER P-402
SHEET NO. 49 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-P-115
REV. NO. 0

ABBREVIATIONS

AMP	AMPERES	DSD	DUCT SMOKE DETECTOR	HP	HORSEPOWER	PTAC	PACKAGED TERMINAL AIR CONDITIONER
AAD	AUTOMATIC AIR DAMPER	DTR	DUAL TEMPERATURE WATER RETURN	HPC	HIGH PRESSURE CONDENSATE	RA	RETURN AIR
ACCU	AIR COOLED CONDENSING UNIT	DTS	DUAL TEMPERATURE WATER SUPPLY	HPS	HIGH PRESSURE STEAM	RAD	RADIATOR, RADIANT PANEL
ACU	AIR CONDITIONING UNIT	DWH	DOMESTIC WATER HEATER	HR	HUMIDITY RATIO, HOUR	RCP	RADIANT CEILING PANEL
ACV	AIR CONTROL VALVE	DX	DIRECT EXPANSION	HRU	HEAT RECOVERY UNIT	RH	RELATIVE HUMIDITY
AFF	ABOVE FINISHED FLOOR	EAT	ENTERING AIR TEMPERATURE	HUM	HUMIDIFIER	RHC	REHEAT COIL
AHU	AIR HANDLING UNIT	EBB	ELECTRIC BASE BOARD	HWC	HOT WATER COIL	RPM	REVOLUTION PER MINUTE
APD	AIR PRESSURE DROP	EC	EXPANSION COMPENSATOR	HWS	HOT WATER SUPPLY	RTH	RADIANT TUBE HEATER
AS	AIR SEPARATOR	EDB	ENTERING DRY BULB TEMPERATURE	HWR	HOT WATER RETURN	RTU	ROOF TOP UNIT
B	BOILER	EFF	EFFICIENCY	HX	HEAT EXCHANGER	SA	SUPPLY AIR
BD	BYPASS DAMPER	ENC	ENCLOSURE	HZ	HERTZ	SS	SOLIDS SEPARATOR
BDD	BACK DRAFT DAMPER	ERU	ENERGY RECOVERY UNIT	IN	INCH	SD	SMOKE DAMPER
BHP	BRAKE HORSE POWER	ESP	EXTERNAL STATIC PRESSURE	IND	INDUCTION UNIT	SHC	SENSIBLE HEAT CAPACITY
BOD	BOTTOM OF DUCT	ET	EXPANSION TANK	KH	KILN HOOD	SP	STATIC PRESSURE
BTU	BRITISH THERMAL UNIT	EWB	ENTERING WET BULB TEMPERATURE	KW	KILOWATT	SQ	SQUARE
BTUH	BRITISH THERMAL UNIT PER HOUR	EWT	ENTERING WATER TEMPERATURE	LAT	LEAVING AIR TEMPERATURE	SRV	STATIONARY ROOF VENT
C	COMMON	EXH	EXHAUST AIR	LB	POUND	TD	TRIPLE DUTY VALVE
CCU	CEILING CASSETTE UNIT	EXIST	EXISTING	LDB	LEAVING DRY BULB TEMPERATURE	TDH	TOTAL DYNAMIC HEAD
CD	COLD CONDENSATE DRAIN	F	FAN	LPC	LOW PRESSURE CONDENSATE	TG	TRANSFER GRILLE
CDWS	CONDENSER WATER SUPPLY	°F	FAHRENHEIT	LPS	LOW PRESSURE STEAM	THC	TOTAL HEAT CAPACITY
CDWR	CONDENSER WATER RETURN	F&T	FLOAT AND THERMOSTATIC TRAP	LV	LOUVER	TSP	TOTAL STATIC PRESSURE
CFM	CUBIC FEET PER MINUTE	FC	FLEXIBLE CONNECTION	LWB	LEAVING WET BULB	TYP	TYPICAL
CH	CHILLER	FCU	FAN COIL UNIT	LWT	LEAVING WATER TEMPERATURE	UV	UNIT VENTILATOR
CGR	CHILLED GLYCOL RETURN	FD	FIRE DAMPER	MAX	MAXIMUM	V	VOLT
CGS	CHILLED GLYCOL SUPPLY	FIL	FILTER	MAU	MAKEUP AIR UNIT	VAL	VALANCE UNIT
CWS	CHILLED WATER SUPPLY	FSD	COMBINATION FIRE/SMOKE DAMPER	MBH	1000 BTUH	VAV	VARIABLE AIR VOLUME
CWR	CHILLED WATER RETURN	FMS	FLOW MEASURING STATION	MCA	MINIMUM CIRCUIT AMPACITY	VD	VOLUME DAMPER
CO	CLEANOUT	FPM	FEET PER MINUTE	MIN	MINIMUM	VIF	VERIFY IN FIELD
CONV	CONVECTOR	FR	FURNACE	MOP	MAXIMUM OVERCURRENT PROTECTION	VP	VACUUM PUMP
CP	CONDENSATE PUMP	FT	FEET	MV	MANUAL VENT	VSD	VARIABLE SPEED DRIVE
CT	COOLING TOWER	FTR	FIN TUBE RADIATION	NC	NORMALLY CLOSED	VUV	VERTICAL UNIT VENTILATOR
CUH	CABINET UNIT HEATER	GAL	GALLONS	NIC	NOT IN CONTRACT	WH	UNIT HEATER
dB	DECIBELS	GC	GENERAL CONTRACTOR	NO	NORMALLY OPEN, NUMBER	WB	WET BULB TEMPERATURE
DB	DRY BULB TEMPERATURE	GPM	GALLONS PER MINUTE	OA	OUTSIDE AIR	WCU	WALL CASSETTE UNIT
DC	DUST COLLECTOR	GR	GRAINS	P	PUMP	WFS	WATER FLOW SWITCH
DIA	DIAMETER	HD	HEAD	PD	PRESSURE DROP	WG	WATER GAUGE
DN	DOWN	HGR	HOT GLYCOL RETURN	PG	PROPYLENE GLYCOL	WH	WALL HEATER
DP	DEWPOINT TEMPERATURE	HGS	HOT GLYCOL SUPPLY	PH	PHASE	WPD	WATER PRESSURE DROP
				PSI	POUNDS PER SQUARE INCH	WWM	WELDED WIRE MESH
						ZD	ZONE DAMPER

NOTE: NOT ALL ABBREVIATIONS ARE USED.

A1 ABBREVIATIONS
SCALE: NOT TO SCALE

COMcheck Software Version COMcheckWeb

Mechanical Compliance Certificate

Project Information

Energy Code:	2018 IECC
Project Title:	Westchester County Airport SRE
Location:	White Plains, New York
Climate Zone:	4a
Project Type:	Addition

Construction Site: Owner/Agent: Designer/Contractor:

Mechanical Systems List

Quantity System Type & Description

1 MAU-1 (Single Zone):
Heating: 1 each - Central Furnace, Propane, Capacity = 600 kBtu/h
No minimum efficiency requirement applies
Fan System: MAU-1 SF [SAE STORAGE – Compliance (Motor nameplate HP and fan efficiency method) : Passes
Fans:
FAN 1 Supply, Single-Zone VAV, 6200 CFM, 5.0 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

1 MAU-2 (Single Zone):
Heating: 1 each - Central Furnace, Propane, Capacity = 600 kBtu/h
No minimum efficiency requirement applies
Fan System: MAU-1 SF [SRE STORAGE – Compliance (Motor nameplate HP and fan efficiency method) : Passes
Fans:
FAN 1 Supply, Single-Zone VAV, 6200 CFM, 5.0 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

1 IR-1 thru IR-11 (Single Zone w/ PerimeterSystem):
Heating: 9 each - Radiant Heater, Propane, Capacity = 100 kBtu/h
No minimum efficiency requirement applies

1 IR-1 thru IR-11 (Single Zone w/ PerimeterSystem):
Heating: 2 each - Radiant Heater, Propane, Capacity = 80 kBtu/h
No minimum efficiency requirement applies

1 DS-1/ACCU-1 (Single Zone):
Cooling: 1 each - VRF Zone Fan Unit, Capacity = 9 kBtu/h, Unknown Economizer
No minimum efficiency requirement applies
Fan System: VRV SF – Compliance (Motor nameplate HP and fan efficiency method) : Passes
Fans:
FAN 2 Supply, Constant Volume, 300 CFM, 0.1 motor nameplate hp, 0.0 fan efficiency grade, 0.0 total fan efficiency, 0.0 design fan efficiency , fan exception: Single fan <= 5HP

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 2018 IECC requirements in *COMcheck* Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Andrew J. Milne,P.E. - Senior Project Engineer — Andrew J. Milne — 2/11/2025
Name - Title — Signature — Date

C3 ENERGY CODE REVIEW - COMPLIANCE REPORT
SCALE : NOT TO SCALE

1. ALL WORK SHALL CONFORM TO ALL APPLICABLE RULES, REGULATIONS AND CODES, INCLUDING, BUT NOT LIMITED TO THE 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE, AND 2020 BUILDING CODES OF NEW YORK STATE.
2. ALL EQUIPMENT SHALL COMPLY WITH THE PROVISIONS OF THE 2020 ENERGY CONSERVATION CODE OF NEW YORK STATE. ALL SUBMITTALS FOR EQUIPMENT COVERED BY THE CODE SHALL INCLUDE THE MANUFACTURER'S STATEMENT OF CONFORMANCE TO THE CODE.
3. FIELD VERIFY ALL DIMENSIONS PRIOR TO DUCTWORK FABRICATION OR ANY OTHER MECHANICAL WORK. MECHANICAL CONTRACTOR SHALL COORDINATE INSTALLATION OF EQUIPMENT, PIPING, DUCTWORK, AND PADS WITH OTHER CONTRACTORS. PROVIDE FITTINGS, ELEVATION CHANGES, TRANSITIONS, AND OFFSETS REQUIRED, WHETHER SHOWN OR NOT, TO AVOID CONFLICTS WITH WORK OF OTHER CONTRACTS.
4. MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING ALL HVAC PENETRATIONS (PIPING, DUCTWORK, ETC) IN ACCORDANCE WITH THE BUILDING CODE OF NEW YORK STATE, AND WHERE SHOWN OR SPECIFIED.
5. ITEMS OF SPECIFIC MANUFACTURER'S SHALL BE INSTALLED IN STRICT ACCORDANCE WITH THE PRINTED INSTRUCTIONS AND/OR MANUFACTURER'S REPRESENTATIVES DIRECTIONS.
6. MECHANICAL CONTRACTOR TO INSTALL ALL NECESSARY STIFFENERS, BRACES, STRUTS, ETC, WHETHER SHOWN OR NOT, TO PROVIDE A COMPLETE, SAFE, AND DURABLE SYSTEM.
7. DIMENSIONS SHOWN "AFF" INDICATE THE ACTUAL CLEAR DIMENSIONS FROM THE BOTTOM OF THE ITEM TO THE FINISHED FLOOR ELEVATION; UNLESS INDICATED OTHERWISE.
8. SUPPORT AND EQUIPMENT DETAILS MAY VARY TO SUIT EQUIPMENT AND PARTS SUPPLIED.
9. WELD ALL STEEL ANGLE JOINTS UNLESS OTHERWISE SHOWN.
10. PROVIDE NECESSARY BY-PASSES AND BALANCING MEANS AS REQUIRED TO ASSURE PROPER SYSTEM OPERATION.
11. ALL DUCT DIMENSIONS SHOWN ARE "SIDE SEEN" BY "SIDE NOT SEEN" AND ARE THE CLEAR INSIDE DIMENSIONS UNLESS OTHERWISE NOTED.
12. PROVIDE ACCESS DOORS AND CLEARANCES FOR EASY ACCESS TO ALL FIRE DAMPERS, CONTROL DAMPERS, LOUVERS, FILTERS, COILS, AND FANS.
13. BRANCH DUCTS TO GRILLES, DIFFUSERS OR REGISTERS SHALL BE THE SAME SIZE AS GRILLE, DIFFUSER OR REGISTER NECK SIZE UNLESS INDICATED OTHERWISE.
14. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN FOR PRECISE LOCATION OF DIFFUSERS AND REGISTERS.
15. PROVIDE MANUAL VOLUME DAMPERS IN ALL BRANCH TAKE-OFFS AND WHERE SHOWN.
16. PROVIDE ALL CONTROL AND INTERLOCK WIRING REQUIRED OR SPECIFIED THAT IS NOT PROVIDED BY THE ELECTRICAL CONTRACTOR.
17. COORDINATE WITH ELECTRICAL CONTRACTOR AND FIRE PROTECTION CONTRACTOR REGARDING THE RESPONSIBILITIES FOR SUPPLYING, INSTALLING AND WIRING OF HVAC-RELATED DISCONNECT SWITCHES, STARTERS, SAFETY INTERLOCKS, EMERGENCY SHUTDOWN AND WIRING.
18. WORK ON M-SERIES DRAWINGS IS BY THE MECHANICAL CONTRACTOR UNLESS OTHERWISE NOTED.
19. VERIFY ALL LOCATIONS, DIMENSIONS, EQUIPMENT ARRANGEMENTS, CLEARANCES AND ELECTRICAL CHARACTERISTICS IN THE FIELD PRIOR TO BID. PROMPTLY NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
20. PRIOR TO CUTTING THROUGH FLOORS AND WALLS, THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL STRUCTURAL MEMBERS, JOISTS, AND OR COLUMNS. PROMPTLY NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES. DO NOT CUT ANY STRUCTURAL MEMBERS UNLESS SPECIFICALLY DIRECTED TO DO SO.
21. THE MECHANICAL CONTRACTOR SHALL REMOVE DUCTWORK BACK TO A POINT WHICH WILL ALLOW THE INSTALLATION OF SUPPORT STEEL THAT IS REQUIRED / RELATED TO THE HVAC EQUIPMENT. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE GENERAL CONTRACTOR IN THE LOCATIONS WHICH WILL REQUIRE MECHANICAL SUPPORT STEEL.
22. INSTALL ALL NEW DUCT AND PIPE WITHIN EXISTING OPENINGS SUCH THAT IT ALLOWS AS MUCH SPACE AS POSSIBLE TO ONE SIDE WHICH MAY ALLOW PASSAGE.

A3 GENERAL NOTES
SCALE: NOT TO SCALE

PIPING

BALL VALVE
BUTTERFLY VALVE
CHECK VALVE
NEEDLE VALVE
PRESSURE RELIEF VALVE
MANUAL AIR VENT
AUTOMATIC AIR VENT
PRESSURE GAUGE
THERMOMETER
FLEXIBLE PIPE CONNECTOR
UNION
REDUCER
STRAINER

TRIPLE DUTY VALVE
TWO-WAY CONTROL VALVE
THREE-WAY CONTROL VALVE
PIPE DROP
PIPE RISER
PIPE ANCHOR
PIPE GUIDE
OR — PIPE CAP
OR — CALIBRATED FLOW BALANCING VALVE
OR — INLINE PUMP
AIR SEPARATOR
BASE MOUNTED PUMP
PIPE CONNECTION OFF BOTTOM
PIPE CONNECTION OFF TOP

DUCTWORK

RETURN GRILLE
SUPPLY DIFFUSER
EXHAUST GRILLE
LINEAR SLOT DIFFUSER
SQUARE TO ROUND DUCT TRANSITION
SQUARE MAIN TO ROUND BRANCH TAKE-OFF
FC — FLEXIBLE DUCT CONNECTOR
POSITIVELY PRESSURIZED SUPPLY DUCT OUT OF THE PLANE
POSITIVELY PRESSURIZED SUPPLY DUCT INTO THE PLANE
NEGATIVELY PRESSURIZED RETURN DUCT OUT OF THE PLANE
NEGATIVELY PRESSURIZED RETURN DUCT INTO THE PLANE
NEGATIVELY PRESSURIZED EXHAUST DUCT OUT OF THE PLANE
NEGATIVELY PRESSURIZED EXHAUST DUCT INTO THE PLANE
SQUARE ELBOW WITH TURNING VANES
MANUAL VOLUME DAMPER
AAD OR AAD — AUTOMATIC AIR DAMPER
TYPE / CFM — NECK SIZE (TYPICAL OF) — DIFFUSER/GRILLE/REGISTER DESIGNATION
UNIT — GENERAL EQUIPMENT DESIGNATION
UNIT GPM/GPM (HEATING / COOLING) — UNIT WITH HEATING AND COOLING
UNIT MAX. CFM — UNIT WITH AIR FLOW
UNIT GPM — UNIT WITH HEATING OR COOLING
TYPE NO. — FTR-X — FIN-TUBE RADIATION DESIGNATION
ACTIVE LENGTH — "X'-X"
BALANCED FLOW — X.X GPM

GENERAL

NEW PIPING
EXISTING PIPING
REMOVALS
DISCONNECT FROM EXISTING
CONNECT TO EXISTING
TS — TEMPERATURE SENSOR
T — THERMOSTAT
TG — THERMOSTAT W/ GUARD
TD — THERMOSTAT W/ DIGITAL DISPLAY
P — PRESSURE SENSOR
H — HUMIDISTAT
CO_2 — CARBON DIOXIDE SENSOR (DEMAND CONTROL VENTILATION)
CO — CARBON MONOXIDE SENSOR
DP — DIFFERENTIAL PRESSURE SENSOR
M — DAMPER ACTUATOR
S — SOLENOID ACTUATOR
DIRECTION OF AIRFLOW
X — KEYNOTE
VIEW / SHEET — ENLARGED PLAN & DETAIL CALL OUT
FD — FIRE DAMPER
VOLUME DAMPER

NOTE: NOT ALL SYMBOLS ARE USED.

A4 SYMBOLS
SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION #0021365

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REGISTRATION EXPIRES: 10/31/2026

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CHECKED BY M.P. MCQUINN, P.E.
MADE BY C.K. JANUSZKA

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

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☐ AS BUILT – NO CHANGES

CONTRACTOR
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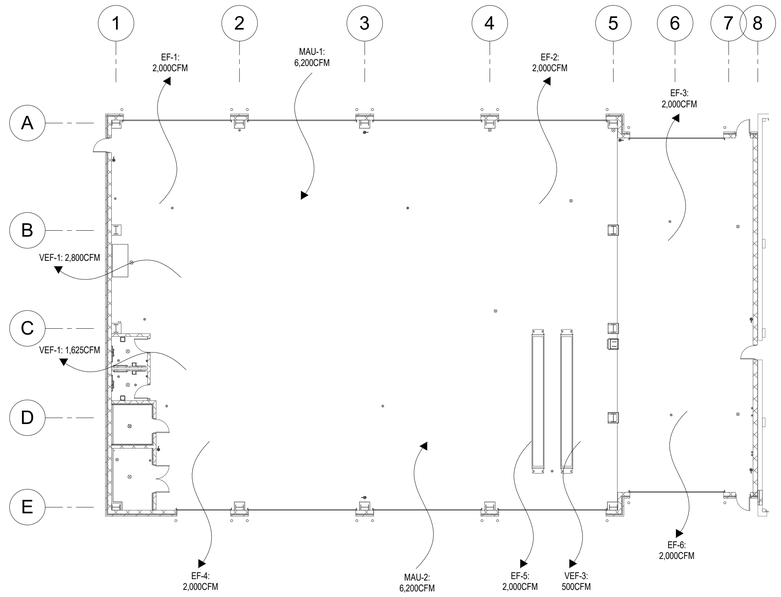
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NAME
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WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ABBREVIATIONS, GENERAL NOTES, AND SYMBOLS

CONTRACT NUMBER	SHEET NUMBER
23-528	M-001

SHEET NO. 50 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-M-116
REV. NO. 0



	EQUIPMENT	AIRFLOW (CFM)	VEHICLE EXHAUST FAN CONDITIONS					
INPUTS	VEF-1	(2,800)	ON	OFF	OFF	ON	ON	OFF
	VEF-2	(1,625)	OFF	ON	OFF	ON	ON	OFF
	VEF-3	(500)	OFF	OFF	ON	OFF	ON	OFF
OUTPUTS	EF-1	(2,000)	ON	ON	ON	ON	ON	ON
	EF-2	(2,000)	OFF	OFF	ON	OFF	OFF	ON
	EF-3	(2,000)	ON	ON	ON	ON	OFF	ON
	EF-4	(2,000)	ON	ON	ON	ON	ON	ON
	EF-5	(2,000)	OFF	ON	ON	OFF	OFF	ON
	EF-6	(2,000)	ON	ON	ON	ON	ON	ON
	TOTAL AIR BALANCE		1,600	775	(100)	(25)	1,475	400

SEQUENCE OF OPERATIONS

A.**MAU-1 & MAU-2** RUN CONTINOUSLY DURING OCCUPIED PERIOD (6AM - 6PM;ADJ.) WHEN ALL OVERHEAD DOORS ARE CLOSED OR WHEN THE OUTDOOR AIR TEMPERATURE IS BELOW 55°F (ADJ.). IF TWO OR MORE OVERHEAD DOORS ARE OPEN AND THE OUTDOOR AIR TEMPERATURE IS ABOVE 55°F(ADJ.) THE MAU SHALL DISABLE. THIS OPERATION SHALL BE COMPLETED VIA DOOR SWITCH AT EACH OVERHEAD DOOR. IF THE DISCHARGE AIR TEMPERATURE FALLS BELOW 60°F(ADJ.) THE BURNER SHALL STAGE ON TO MAINTAIN THE DISCHARGE AIR TEMPERATURE OF 60°F. .

B. **EF-1 THRU EF-6**: EXHAUST FANS SHALL RUN CONTINUOUSLY DURING OCCUPIED PERIOD (6AM-6PM; ADJ.). FANS SHALL BE SEQUENCED TO ENABLE OR DISABLE DEPENDENT ON ACTIVATION OF THE (3) VEHICLE EXHAUST REMOVAL SYSTEMS LOCATED WITHIN THE BUILDING. THE TABLE ABOVE SHOWS THE (6) SEPERATE SCENARIOS THAT COULD TAKE PLACE.

A1 HVAC BUILDING AIR BALANCE DIAGRAM
SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF A.J. MILNE
CHECKED BY M.P. MCQUINN, P.E.
MADE BY C.K. JANUSZKA

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11/2025
REGISTRATION EXPIRES: 10/31/2026

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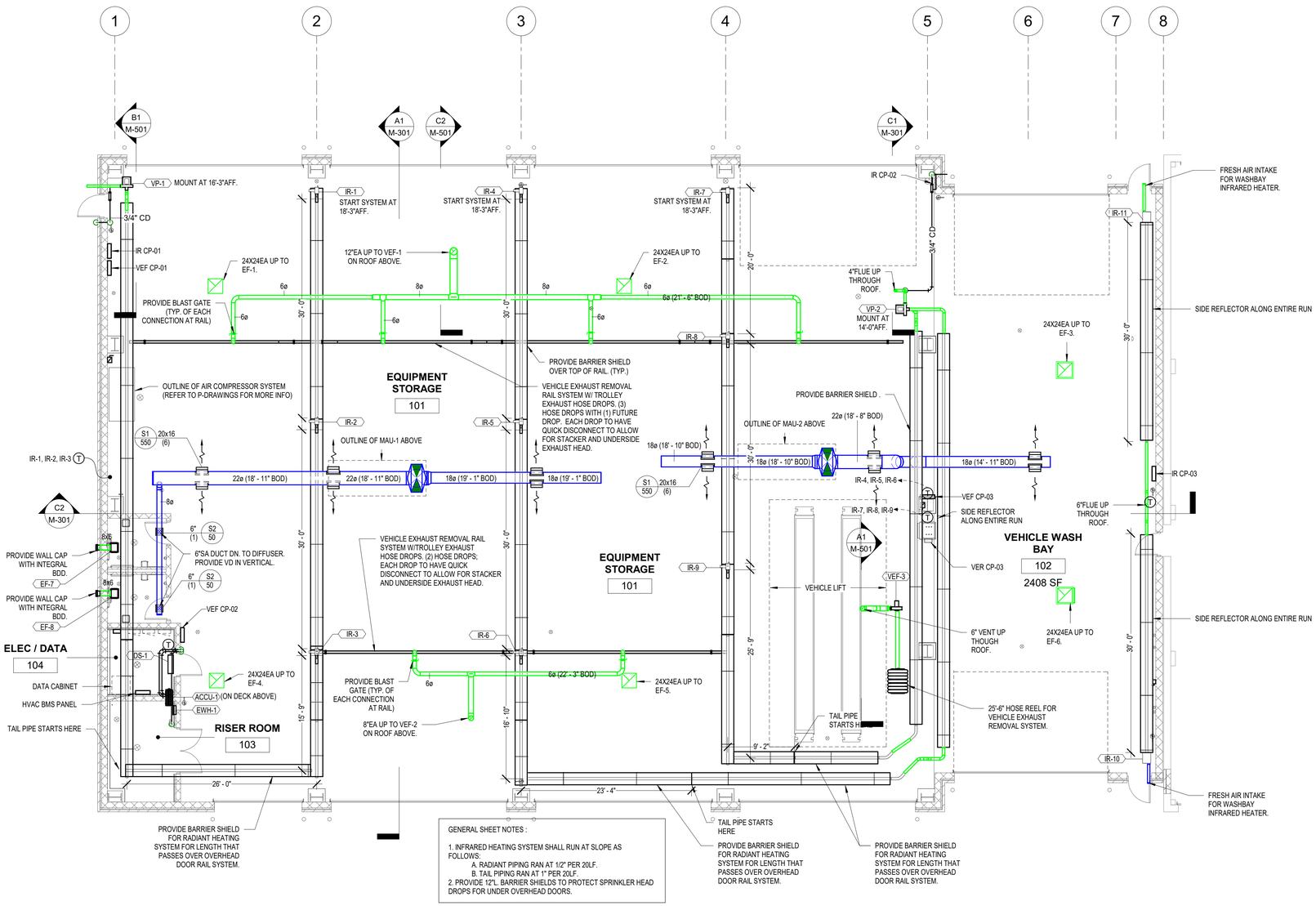
CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
HVAC BUILDING AIR BALANCE DIAGRAM

CONTRACT NUMBER 23-528
SHEET NUMBER M-002
SHEET NO. 51 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-M-117
REV. NO. 0



GENERAL SHEET NOTES :

1. INFRARED HEATING SYSTEM SHALL RUN AT SLOPE AS FOLLOWS:
   A. RADIANT PIPING RAN AT 1/2" PER 20LF.
   B. TAIL PIPING RAN AT 1" PER 20LF.
2. PROVIDE 12"L. BARRIER SHIELDS TO PROTECT SPRINKLER HEAD DROPS FOR UNDER OVERHEAD DOORS.

PLAN NORTH

A1 FIRST FLOOR HVAC

SCALE: 1/8" = 1'-0"

0 4' 8' 16'

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF A.J. MILNE
CHECKED BY M.P. MCQUINN, P.E.
MADE BY C.K. JANUSZKA

STATE OF NEW YORK · ANDREW J. MILNE · LICENSED PROFESSIONAL ENGINEER · 108861 · 10/31/2025

REGISTRATION EXPIRES: 10/31/2026

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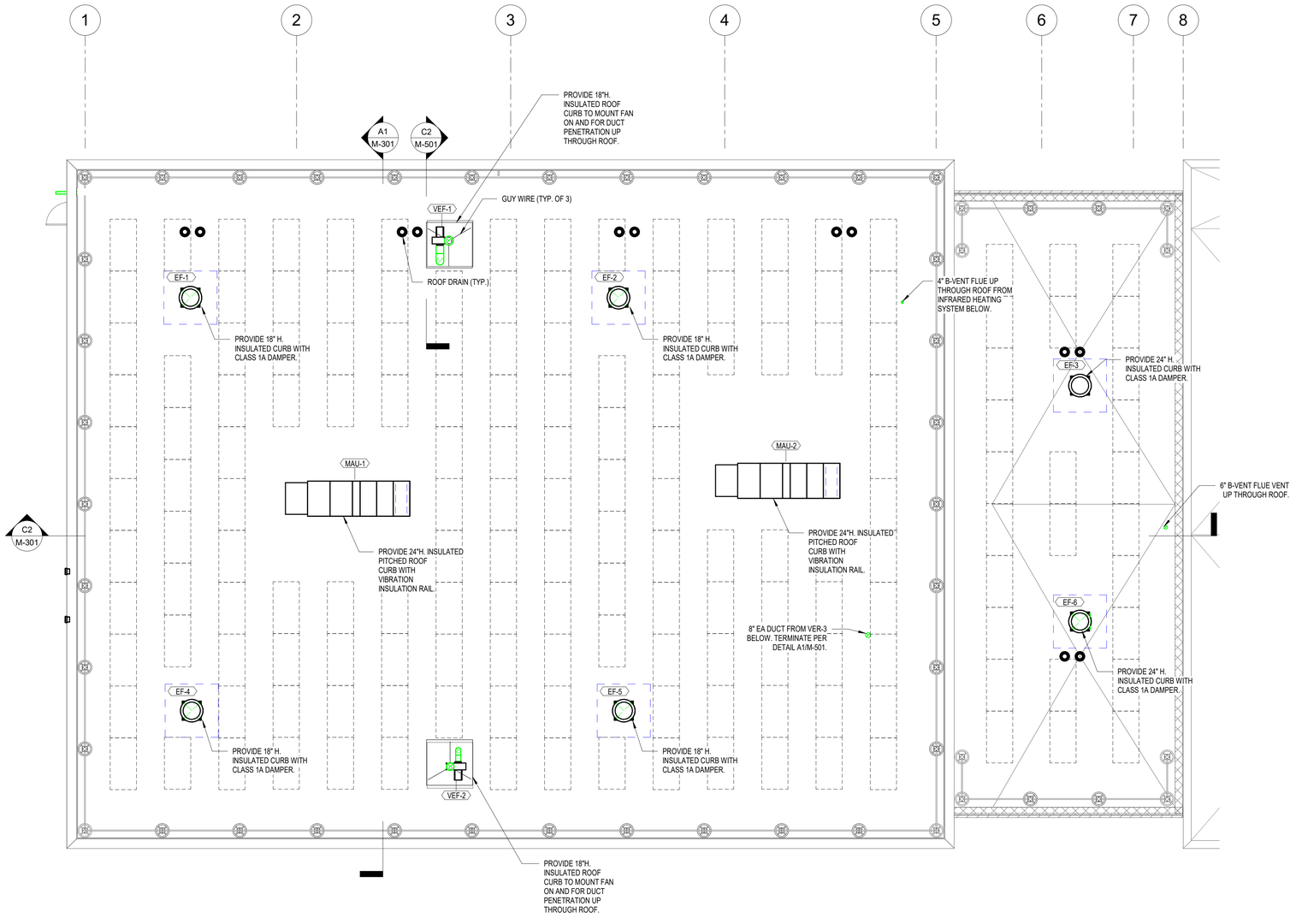
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
HVAC FLOOR PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	M-101

SHEET NO. 52 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-M-118	0



PLAN NORTH

A1 **HVAC ROOF PLAN**
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

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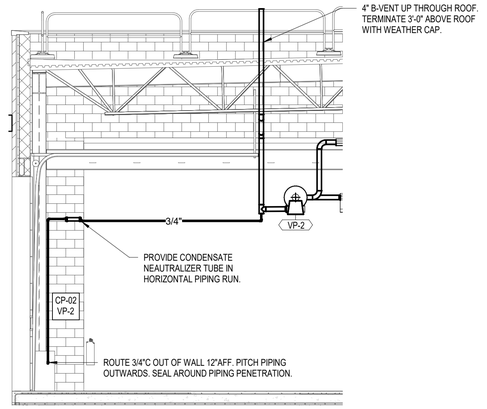
PROJECT COORDINATOR
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SIGNATURE
TITLE DATE

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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
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NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
HVAC ROOF PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	M-102

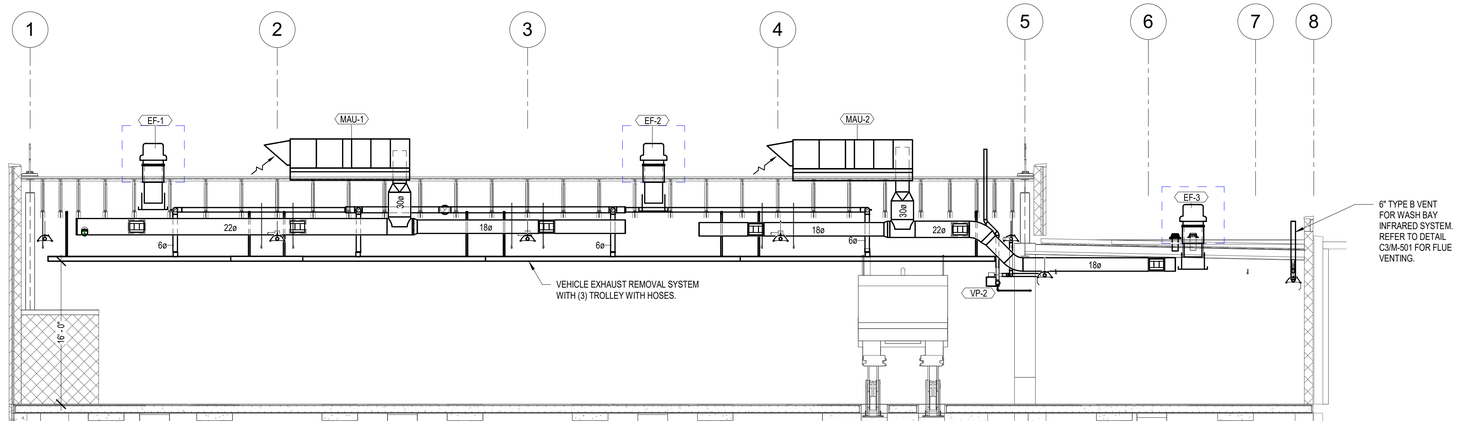
SHEET NO. 53 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-M-119
REV. NO. 0



C1 VP-2 ELEVATION

SCALE: 3/16" = 1'-0"

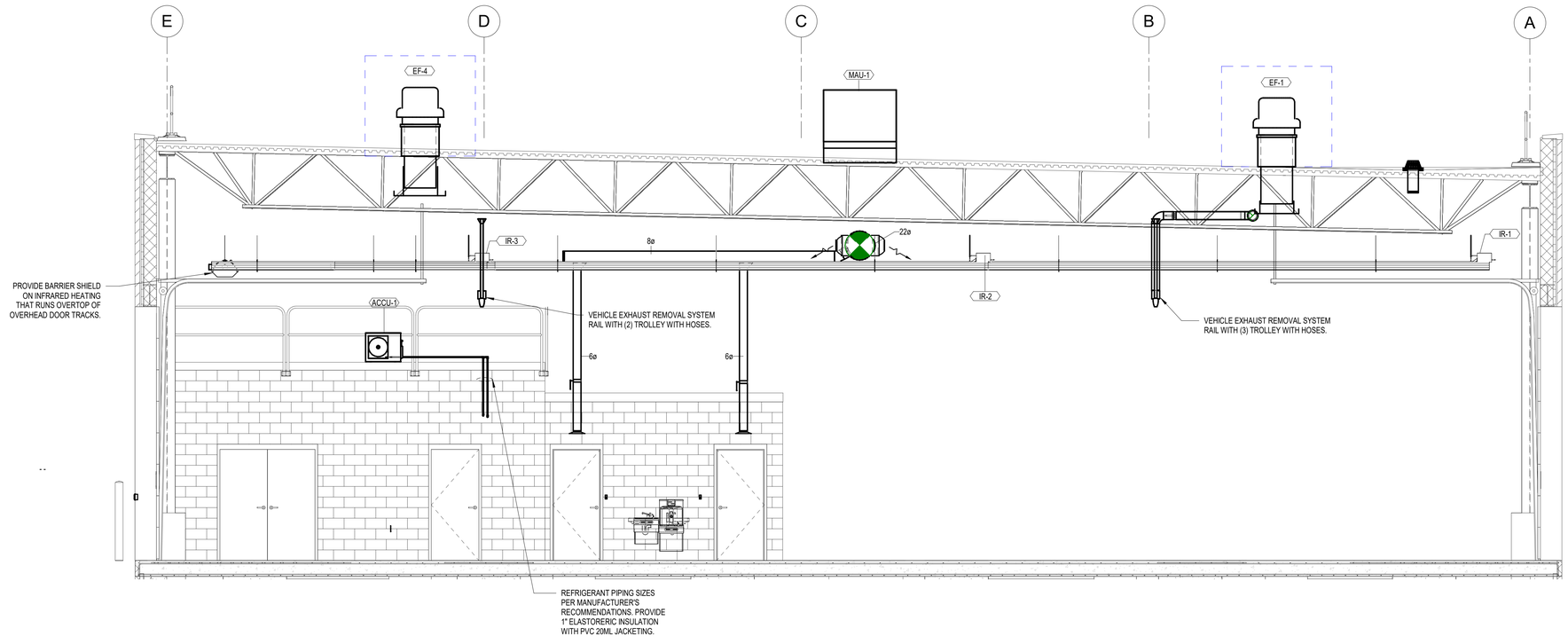
0 4' 8' 16'



C2 HVAC PLAN NORTH SECTION

SCALE: 1/8" = 1'-0"

0 2' 4' 8'



A1 WEST BUILDING ELEVATION VIEW

SCALE: 1/4" = 1'-0"

0 2' 4' 8'

CERTIFICATE OF AUTHORIZATION #0021365

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CHECKED BY M.P. MCQUINN, P.E.

MADE BY C.K. JANUSZKA

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10/31/2025

REGISTRATION EXPIRES: 10/31/2026

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TITLE _____ DATE _____

PROJECT COORDINATOR

NAME _____

SIGNATURE _____

TITLE _____ DATE _____

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DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELEVATIONS

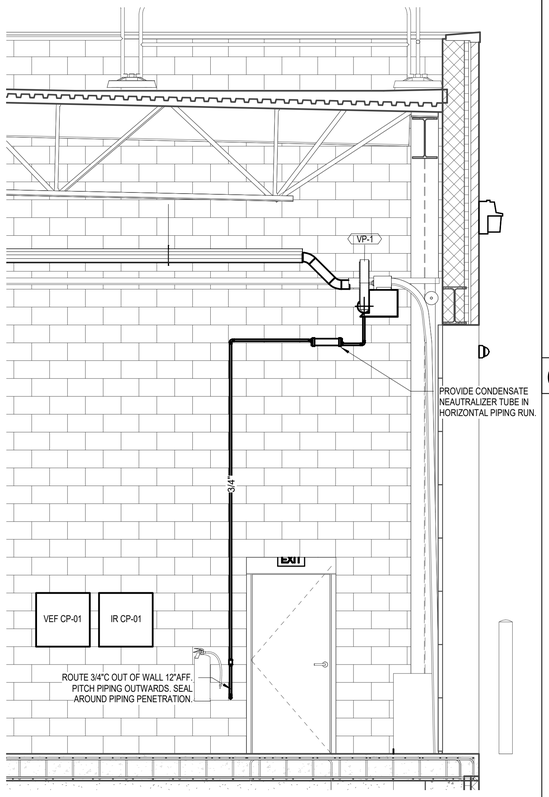
CONTRACT NUMBER	SHEET NUMBER
23-528	M-301

SHEET NO. 54 OF 72

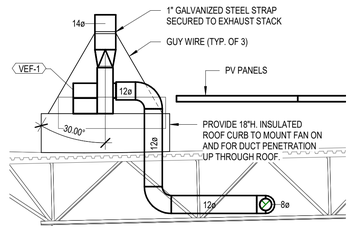
SCALE: AS SHOWN

DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-M-120	0

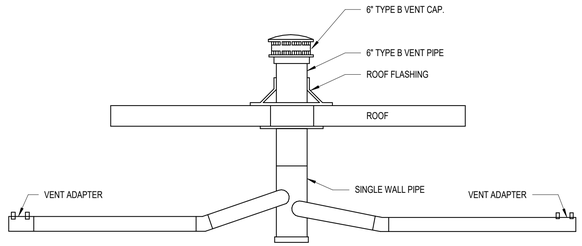


B1 VP-1 ELEVATION
SCALE: 3/8" = 1'-0"

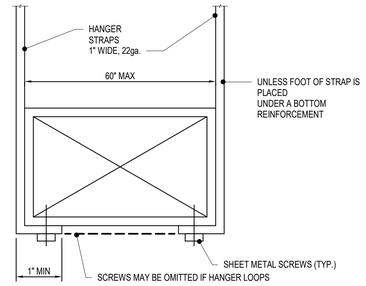


NOTE:
PROVIDE BACKDRAFT DAMPER 2'-0" BELOW TOP OF STACK.

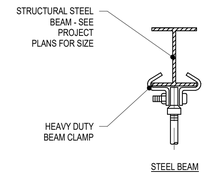
C2 VEF-1 ELEVATION
SCALE: 1/4" = 1'-0"

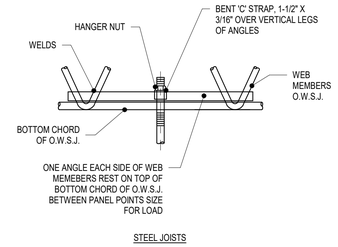


C3 INFRARED VENT DETAIL
SCALE: NOT TO SCALE

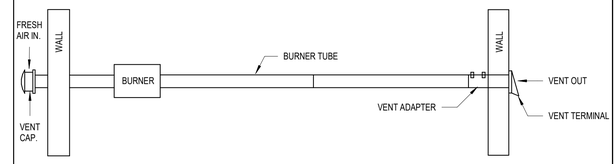


C4 RIGID DUCT SUPPORT DETAIL
SCALE: NOT TO SCALE

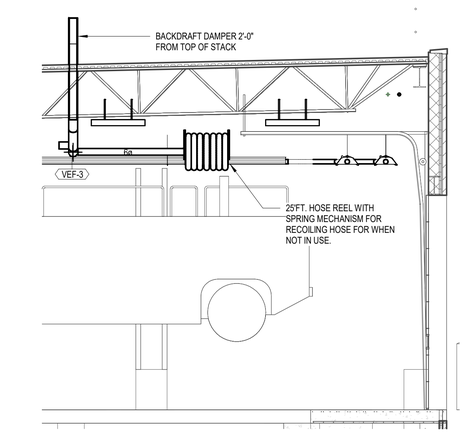




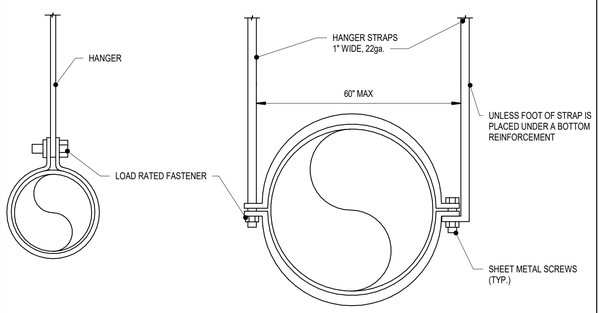
B3 HANGER DETAILS
SCALE: NOT TO SCALE



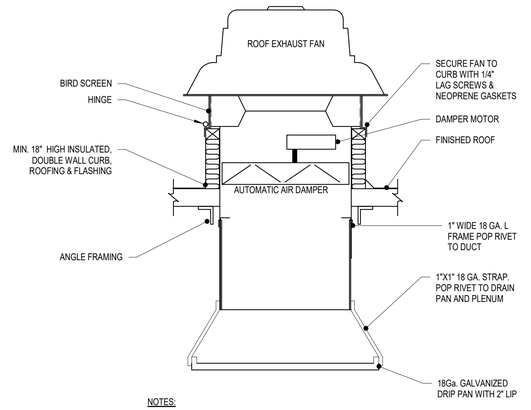
B4 IR FRESH AIR INTAKE DETAIL
SCALE: NOT TO SCALE



A1 VEHICLE EXHAUST FAN (VEF-3) THROUGH ROOF DETAIL
SCALE: 3/16" = 1'-0"

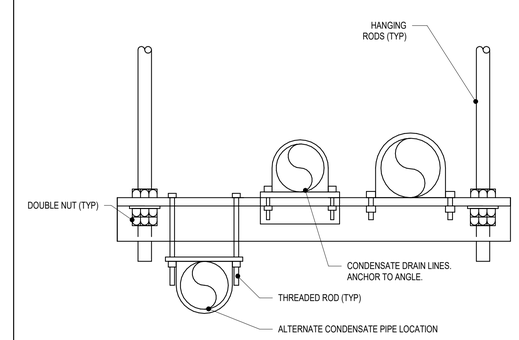


A2 RIGID ROUND DUCT SUPPORT DETAIL
SCALE: 12" = 1'-0"



NOTES:
1. GENERAL CONTRACTOR TO PROVIDE ROOF OPENING, FRAMING ANGLE AND FLASHING. LOCATION SETTING AND SECURING OF CURB BY HVAC.
2. SHIM CURB LEVEL.

A3 ROOF EXHAUST FAN CURB DETAIL
SCALE: NOT TO SCALE



NOTE:
DESIGN SHALL COMPLY WITH SECTION 230529 "HANGERS AND SUPPORTS FOR HVAC PIPING AND EQUIPMENT."

A4 PIPE SUPPORT DETAILS
SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION #0021365

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CHECKED BY M.P. MCQUINN, P.E.
MADE BY C.K. JANUSZKA

STATE OF NEW YORK — ANDREW J. MILNE — LICENSED PROFESSIONAL ENGINEER — 108861 — 10/31/2025
REGISTRATION EXPIRES: 10/31/2026

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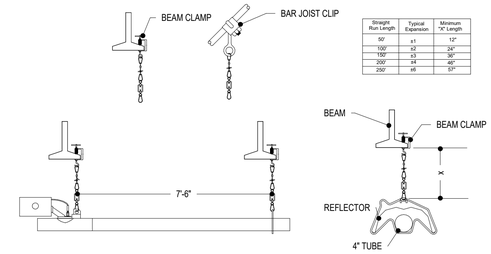
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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	M-501

SHEET NO. 55 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-M-121
REV. NO. 0

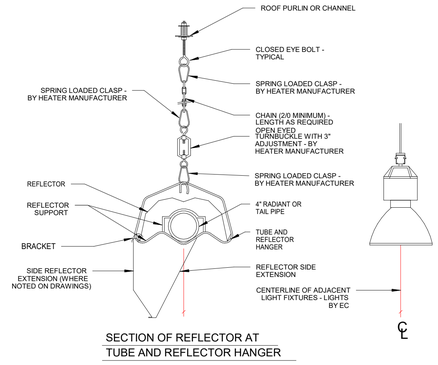


Straight Run Length	Typical Expansion	Minimum "X" Length
50'	±1	12"
100'	±2	24"
150'	±3	36"
200'	±4	48"
250'	±6	57"

NOTES: FIRST HANGER AFTER EACH BURNER SHALL BE 7'-6" DOWNSTREAM.
AFTER THAT ALL OTHER HANGERS SHALL BE SPACED AT 10'-0".

C4 INFRARED HEATING SYSTEM HANGER DETAIL

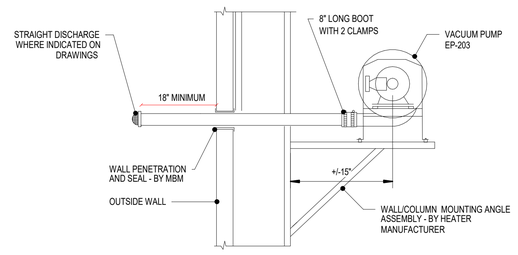
SCALE: NOT TO SCALE



SECTION OF REFLECTOR AT
TUBE AND REFLECTOR HANGER

B4 REFLECTOR AND REFLECTOR HANGER DETAIL

SCALE: NOT TO SCALE



ELEVATION

DETAIL NOTES:

1. WALL SHALL BE MADE BY METAL BUILDING MANUFACTURER USING RUBBER "DEKTITE" PIPE FLASHING.
2. DENOTED AS ⇦ ON HEATING PLANS.
3. COORDINATE INSTALLATION AND MOUNTING REQUIREMENTS WITH THE METAL BUILDING MANUFACTURER.

A4 VACUUM PUMP VENT DETAIL

SCALE: NOT TO SCALE

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CHECKED BY M.P. MCQUINN, P.E.
MADE BY C.K. JANUSZKA

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10/11/2025
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NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	M-502

SHEET NO. 56 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-M-122	0

MAKE-UP AIR UNIT SCHEDULE-(MAU)

UNIT NO.	LOCATION	AREA SERVED	COMBUSTION TYPE	SUPPLY AIR (CFM)	GAS HEATING				FAN DATA				ELECTRICAL DATA					BASIS OR DESIGN		REMARKS
					FURNACE 1															
					INPUT MBH	OUTPUT MBH	TEMP RISE (°F)	# OF STAGES	TYPE	ESP (IN WG)	RPM	BHP	VOLTS	PHASE	HP	MCA	MOCP	MANUFACTURER	MODEL	
MAU-1	ROOF	EQUIPMENT STORAGE 101	INDIRECT-FIRED	6200	600	480	71	2		1.00	865	3.05	208	3	5	13.6	25	STERLING HVAC	PV60A7J02K63S2AA5B1J3	1,2,3,4,5,6,7
MAU-2	ROOF	EQUIPMENT STORAGE 101/ VEHICLE WASH BAY 102	INDIRECT-FIRED	6200	600	480	71	2		1.00	865	3.05	208	3	5	13.6	25	STERLING HVAC	PV60A7J02K63S2AA5B1J3	1,2,3,4,5,6,7

1. PROVIDE CLASS 1A LOW-LEAKAGE OUTDOOR AIR DAMPER.
2. PROVIDE 18"H. INSULATED ROOF CURB.
3. PROVIDE MERV 8 PLEATED FILTERS. PROVIDE (1) SPARE SET OF FILTERS AT COMPLETION OF PROJECT.
4. PROVIDE ELECTRONIC MODULATING GAS CONTROL WITH DUCT THERMOSTAT. SETPOINT OF 65°F (ADJ.).
5. PROVIDE UNIT WITH ALUMINZED STEEL HEAT EXCHANGER.
6. PROVIDE SUPPLY FAN MOTOR VFD (FACTORY INSTALLED).

EXHAUST FAN SCHEDULE (EF)

MARK	SERVICE	LOCATION	TYPE	ARRANGEMENT	CFM	ESP (IN WG)	BHP	RPM	MAX. SONES	ELECTRICAL DATA			BASIS OF DESIGN		REMARKS
										VOLTS	PHASE	HP (W)	MANUFACTURER	MODEL	
EF-1	EQUIPMENT STORAGE 3	EQUIPMENT STORAGE 3	BELT	CENTRIFUGAL	2000	0.25	0.22	655	7.0	208	3	1/4	Greenheck	GB-180-20	1,2,3,4
EF-2	EQUIPMENT STORAGE 3	EQUIPMENT STORAGE 3	BELT	CENTRIFUGAL	2000	0.25	0.22	655	7.0	208	3	1/4	Greenheck	GB-180-20	1,2,3,4
EF-3	EQUIPMENT STORAGE 3	WASH BAY	BELT	CENTRIFUGAL	2000	0.25	0.22	655	7.0	208	3	1/4	Greenheck	GB-180-20	1,2,3,4
EF-4	EQUIPMENT STORAGE 3	EQUIPMENT STORAGE 3	BELT	CENTRIFUGAL	2000	0.25	0.22	655	7.0	208	3	1/4	Greenheck	GB-180-20	1,2,3,4
EF-5	EQUIPMENT STORAGE 3	EQUIPMENT STORAGE 3	BELT	CENTRIFUGAL	2000	0.25	0.22	655	7.0	208	3	1/4	Greenheck	GB-180-20	1,2,3,4
EF-6	EQUIPMENT STORAGE 3	WASH BAY	BELT	CENTRIFUGAL	2000	0.25	0.22	655	7.0	208	3	1/4	Greenheck	GB-180-20	1,2,3,4
EF-7	TOILET 106	TOILET 106	DIRECT	CENTRIFUGAL	75	0.25	0.01	950	1.0	120	1	(16)	GREENHECK	SP-A110	1,5,6,7,8
EF-8	TOILET 105	TOILET 105	DIRECT	CENTRIFUGAL	75	0.25	0.01	950	1.0	120	1	(16)	GREENHECK	SP-A110	1,5,6,7,8

1. PROVIDE MOTOR STARTER.
2. PROVIDE CLASS 1A LOW-LEAKAGE OUTDOOR AIR DAMPER.
3. PROVIDE 24"H. INSULATED ROOF CURB. COORDINATE CURB CANT/SHIMS WITH SLOPED STRUCTURE.
4. PROVIDE CONTROLS RELAY(S) FOR FAN OPERATION WITH MAU AND DDC CONTROLS.
5. PROVIDE WALL-CAP TERMINATION WITH INTEGRAL BBD.
6. PROVIDE PVC WHITE CEILING GRILLE.
7. PROVIDE NEOPRENE VIBRATION ISOLATION KIT..
8. LIGHTING TO BE INTERLOCKED WITH LIGHTING CIRCUIT.

ELECTRIC WALL HEATER SCHEDULE (EWH)

UNIT NO.	CAPACITY MBH	CAPACITY KW	CFM	ENCLOSURE			MOUNTING HEIGHT (IN.)	ELECTRICAL			BASIS OF DESIGN		REMARKS
				HEIGHT	WIDTH	DEPTH		VOLTS	PHASE	MCA	MANUFACTURER	MODEL	
EWH-1	6.8	2	100	19-15/16"	1' - 3 3/4"	1 1/4"	18"	208	1	7.2	Marley Engineered Products	AWH4000 Series	1,2,3

1. PROVIDE INTEGRAL THERMOSTAT.
2. PROVIDE INTEGRAL DISCONNECT.
3. PROVIDE WITH SEMI-RECESSED FRAME.

DIFFUSER AND GRILLE SCHEDULE (S&R)

TYPE	DESCRIPTION	FACE SIZE	MAX. N.C.	MATERIAL	FINISH	CEILING TYPE	BASIS OF DESIGN		REMARKS
							MANUFACTURER	MODEL	
S1	HIGH CAPACITY DRUM LOUVERS - SPIRAL DUCT FRAME	SEE PLANS	30	ALUMINUM	WHITE	N/A	PRICE	HCD	1,2,3
S2	SQUARE CONE DIFFUSER	12X12	25	ALUMINUM	WHITE	LAY-IN	PRICE	SCD	

1. PROVIDE WITH MANUAL VOLUME DAMPER FOR BALANCING.
2. PROVIDE WITH SPIRAL FRAME MOUNTING KIT.
3. INSTALL AT 30° ANGLE TO GROUND ON DUCT.

INFRARED RADIANT HEATING SYSTEM SCHEDULE (IR)

UNIT NO.	LOCATION	FUEL TYPE	INPUT MBH	GAS PRESSURE MIN. (IN WG)	GAS PRESSURE MAX. (IN WG)	# OF STAGES	ELECTRICAL			BASIS OF DESIGN		REMARKS
							VOLTS	PHASE	MCA	MANUFACTURER	MODEL	
IR-1	EQUIPMENT STORAGE	PROPANE	100	11	14	2	115	1	1	Roberts Gordon	CRV-B-10	1,2,3
IR-2	EQUIPMENT STORAGE	PROPANE	100	11	14	2	115	1	1	Roberts Gordon	CRV-B-10	1,2,3
IR-3	EQUIPMENT STORAGE	PROPANE	100	11	14	2	115	1	1	Roberts Gordon	CRV-B-8	1,2,3
IR-4	EQUIPMENT STORAGE	PROPANE	100	11	14	2	115	1	1	Roberts Gordon	CRV-B-10	1,2,3
IR-5	EQUIPMENT STORAGE	PROPANE	100	11	14	2	115	1	1	Roberts Gordon	CRV-B-10	1,2,3
IR-6	EQUIPMENT STORAGE	PROPANE	100	11	14	2	115	1	1	Roberts Gordon	CRV-B-10	1,2,3
IR-7	EQUIPMENT STORAGE	PROPANE	80	11	14	2	115	1	1	Roberts Gordon	CRV-B-8	1,2,3
IR-8	EQUIPMENT STORAGE	PROPANE	100	11	14	2	115	1	1	Roberts Gordon	CRV-B-10	1,2,3
IR-9	EQUIPMENT STORAGE	PROPANE	80	11	14	2	115	1	1	Roberts Gordon	CRV-B-8	1,2,3
IR-10	EQUIPMENT STORAGE	PROPANE	100	11	14	2	115	1	1	Roberts Gordon	VANTAGE® HEV	1,2
IR-11	EQUIPMENT STORAGE	PROPANE	100	11	14	2	115	1	1	Roberts Gordon	VANTAGE® HEV	1,2

1. RADIANT PIPE SHALL BE ALUMINZED STEEL. TAIL PIPE SHALL BE PORCELAIN.
2. ELECTRICAL CONTRACTOR SHALL PROVIDE RECEPTACLE WITHIN 18" OF EACH BURNER.
3. PROVIDE CONTROL PANELS AND WALL-MOUNTED THERMOSTATS AS SHOWN ON DRAWINGS.
4. MECHANICAL CONTRACTOR TO PROVIDE NEMA 6P DISCONNECT SWITCH FOR IR-10 AND IR-11.

VACUUM PUMP SCHEDULE (VP)

UNIT NO.	LOCATION	TYPE	ARRANGEMENT	SYSTEM SERVED	RPM	ELECTRICAL DATA				BASIS OF DESIGN		REMARKS
						VOLTS	PHASE	HP	FLA	MANUFACTURER	MODEL	
VP-1	EQUIPMENT STORAGE 101	NEGATIVE PRESSURE	HORIZONTAL DISCHARGE	IR-1,IR-2,IR-3	3450	208	3	3/4	230	Roberts Gordon	EP 203	1
VP-2	EQUIPMENT STORAGE 101	NEGATIVE PRESSURE	HORIZONTAL DISCHARGE	IR-4,IR-5,IR-6,IR-7,IR-8,IR-9	3450	208	3	3/4	230	Roberts Gordon	EP 203	1

1. PROVIDE CONTROL PANELS AS NOTED ON DRAWINGS. COORDINATE WITH ELECTRICAL CONTRACTOR FOR POWER. IR CP-01 FOR VP-1 & IR CP-02 FOR VP-2.

VEHICLE EXHAUST REMOVAL FAN SCHEDULE (VEF)

MARK	SERVICE	ARRANGEMENT	CFM	ESP (IN WG)	RPM	ELECTRICAL DATA			WEIGHT (LBS)	BASIS OF DESIGN		REMARKS
						VOLTS	PHASE	HP		MANUFACTURER	MODEL	
VEF-1	EQUIPMENT STORAGE 101	OUTDOORS - WALL-MOUNTED	2800	5	3515	208	3	5	187	PLYMOVENT	TEV-559	1
VEF-2	EQUIPMENT STORAGE 101	OUTDOORS - WALL-MOUNTED	1625	5	3460	208	3	3	93	PLYMOVENT	TEV-3110	1
VEF-3	EQUIPMENT STORAGE 101	INDOORS - SUSPENDED	500	4.8	3450	208	3	3/4	51.8	PLYMOVENT	FUA-1800	1

1. PROVIDE ES-90 CONTROL BOX; UL-LISTED LOCK COVER BOX HOUSING FAN STARTER, OVERLOAD RELAYS, TIMER WILL BE SOLID STATE, FIVE-MINUTE FIXED ADJUSTABLE TIMER. COORDINATE WITH EC FOR POWER BETWEEN CONTROL BOX AND FAN.

AIR COOLED CONDENSING UNIT SCHEDULE (ACCU)

UNIT NO.	LOCATION	UNIT SERVED	REFRIGERANT TYPE	TOTAL HEAT REJECTION (MBH)	AMBIENT (F)	COMPRESSORS			FANS		ELECTRICAL				BASIS OF DESIGN		REMARKS
						QTY	TYPE	# OF STAGES	QTY	EER (SEER)	VOLTS	PHASE	MCA	MOP	MANUFACTURER	MODEL	
ACCU-1	EQUIPMENT STORAGE 101	DS-1	R-410A	9.0	90	1	SWING	VARIABLE	1	12.5	208	1	12.1	15	DAIKIN	RX09NMVJU	1,2

1. PROVIDE WALL BRACKET FOR MOUNTING ON CMU WALL.
2. REFRIGERANT PIPING SIZES PER MANUFACTURER'S RECOMMENDATIONS.

DUCTLESS INDOOR SPLIT SYSTEM SCHEDULE (DS)

UNIT NO.	CONDENSING UNIT LOCATION	AREA SERVED	NOMINAL CAPACITY (TONS)	TOTAL COOLING (MBH)	SENSIBLE COOLING (MBH)	NOMINAL CFM	ELECTRICAL				BASIS OF DESIGN		REMARKS
							VOLTS	PHASE	MCA	MOCP	MANUFACTURER	MODEL	
DS-1	EQUIPMENT STORAGE 101	ELEC/DATA 104	0.8	9.0 Btu/h	8.2 Btu/h	300 CFM	208	1	1	15	DAIKIN	FTX09NMVJU	1,2,3

1. PROVIDE WASHABLE FILTERS. PROVIDE (1) SPARE SET OF FILTERS AT END OF PROJECT FOR EACH UNIT.
2. PROVIDE WALL-MOUNTED 7-DAY PROGRAMMABLE THERMOSTAT WITH DIGITAL DISPLAY.
3. PROVIDE WITH INTEGRAL CONDENSATE PUMP (BASIS OF DESIGN: AQUA PUMPS)

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF A.J. MILNE
CHECKED BY M.P. MCQUINN, P.E.
MADE BY C.K. JANUSZKA

STATE OF NEW YORK · ANDREW J. MILNE · LICENSED PROFESSIONAL ENGINEER · 108861 · 10/31/2025

REGISTRATION EXPIRES: 10/31/2026

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REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

RECORD DRAWING CERTIFICATION

☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
SCHEDULES

CONTRACT NUMBER	SHEET NUMBER
23-528	M-601

SHEET NO. 57 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-M-123
REV. NO. 0

1. ALL ELECTRICAL WORK SHALL CONFORM TO ALL STATE, LOCAL, AND NATIONAL ELECTRICAL CODES.
2. ELECTRICAL CHARACTERISTICS SHALL BE VERIFIED WITH EQUIPMENT MANUFACTURER.
3. ITEMS OF SPECIFIC MANUFACTURERS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH MANUFACTURER'S PRINTED INSTRUCTIONS AND/OR MANUFACTURER'S REPRESENTATIVE'S DIRECTIONS.
4. THE CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS AND DIMENSIONS SHOWN ON DRAWINGS
5. ALL CONDUIT AND WIRING SCHEDULES SHALL BE VERIFIED BEFORE INSTALLATION.
6. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL EQUIPMENT WITH OTHER CONTRACTORS.
7. ALL AREAS DISTURBED BY WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN ORIGINAL AS DETERMINED BY THE ENGINEER.
8. THE CONTRACTOR SHALL PROVIDE RACEWAYS, WIRING, AND CONNECTIONS FOR ALL CONTROL CIRCUITS AND INTERLOCK.
9. ALL ELECTRICAL CONDUIT AND CONDUCTORS DISCONNECTED AND NOT TO BE REUSED SHALL BE REMOVED.
10. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS BEFORE STARTING WORK. IF ONLY A PORTION OF AN EXISTING CIRCUIT IS BEING REMOVED FOR DEMOLITION, CONTINUITY SHALL BE MAINTAINED TO THE REST OF THE REMAINING CIRCUIT.
11. ALL BRANCH CIRCUIT CONDUCTORS SHALL BE #12AWG UNLESS OTHERWISE SHOWN.
12. ALL BRANCH CIRCUITS SHALL CONSIST OF 2 CONDUCTORS PLUS GROUND, UNLESS OTHERWISE SHOWN.
13. NOT ALL DISCONNECTS AND/OR STARTERS SHOWN ON PLANS. SEE SCHEDULES ON E-601.

C1 ELECTRICAL GENERAL NOTES
SCALE: NOT TO SCALE

COMcheck Software Version 4.1.5.5

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Snow Equipment Storage Facility
Project Type: Addition

Construction Site: 240 Airport Road, White Plains, NY 10604
Owner/Agent: Westchester County Airport
Designer/Contractor: C&S Engineer, Inc., 499 Col. Eileen Collin Blvd., Syracuse, NY 13212

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-Automotive:Vehicular Maintenance Area	12043	0.56	6744
2-Common Space Types:Electrical/Mechanical	194	0.43	83
		Total Allowed Watts =	6828

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Automotive:Vehicular Maintenance Area				
A: A: LED Linear 33W:	1	48	65	3120
B: B: LED Linear 33W:	1	12	65	780
2-Common Space Types:Electrical/Mechanical				
C: C: LED Linear 33W:	1	3	42	127
			Total Proposed Watts =	4027

Interior Lighting PASSES: Design 41% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Francesca Neiley, P.E. - Managing Engineer — Name - Title
Signature
11/10/2023 — Date

Project Title: Snow Equipment Storage Facility — Report date: 11/06/23
Data filename: F:\Project\595A - Westchester County\595004001 - SRE Facility\Design\Technical\Electrical\Comcheck_Lighting.cck — Page 1 of 2

COMcheck Software Version 4.1.5.5

Exterior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Snow Equipment Storage Facility
Project Type: Addition
Exterior Lighting Zone: 2 (Light industrial area with limited nighttime use (LZ2))

Construction Site: 240 Airport Road, White Plains, NY 10604
Owner/Agent: Westchester County Airport
Designer/Contractor: C&S Engineer, Inc., 499 Col. Eileen Collin Blvd., Syracuse, NY 13212

Allowed Exterior Lighting Power

A Area/Surface Category	B Quantity	C Allowed Watts / Unit	D Tradable Wattage	E Allowed Watts (B X C)
Driveway	11460 ft2	0.04	Yes	458
		Total Tradable Watts (a) =		458
		Total Allowed Watts =		458
		Total Allowed Supplemental Watts (b) =		400

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.
(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Proposed Exterior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
Driveway (11460 ft2): Tradable Wattage				
D: D: LED Linear 33W:	1	12	60	720
E: LED Panel 33W:	1	4	28	112
			Total Tradable Proposed Watts =	832

Exterior Lighting PASSES: Design 3% better than code

Exterior Lighting Compliance Statement

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Francesca Neiley, P.E. - Managing Engineer — Name - Title
Signature
11/10/2023 — Date

Project Title: Snow Equipment Storage Facility — Report date: 11/06/23
Data filename: F:\Project\595A - Westchester County\595004001 - SRE Facility\Design\Technical\Electrical\Comcheck_Lighting.cck — Page 2 of 2

CERTIFICATE OF AUTHORIZATION #0021365

STATE OF NEW YORK — FRANCESCA K. NEILEY — 099826 — PROFESSIONAL ENGINEER
07/11/2025
REGISTRATION EXPIRES: 02/28/2027

C&S COMPANIES®

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499 Col. Eileen Collins Blvd.
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Phone: 315-455-2000
www.cscos.com

IN CHARGE OF F.K. NEILEY, P.E.
CHECKED BY S.H. SHOVA
MADE BY F.K. NEILEY, P.E.

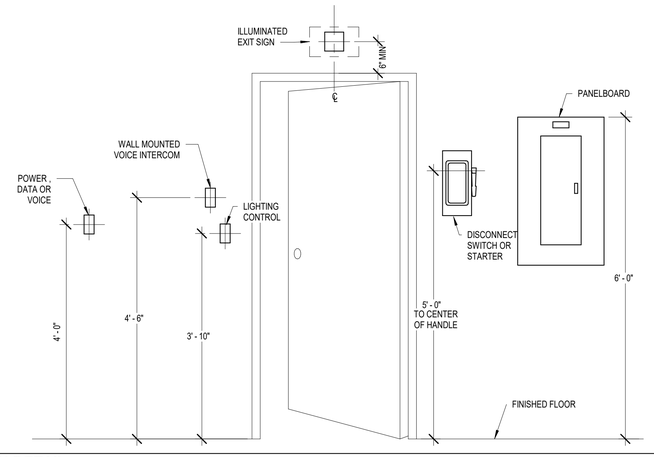
B2 ONELINE SYMBOLS
SCALE: NOT TO SCALE

ONE-LINE SYMBOLS	
	DISCONNECT SWITCH (TICKS INDICATE NUMBER OF POLES)
	CIRCUIT BREAKER (TICKS INDICATE NUMBER OF POLES)
	FUSED DISCONNECT SWITCH (TICKS INDICATE NUMBER OF POLES)
BPS	BOLTED PRESSURE SWITCH w/FUSE
	TRANSFORMER
	GROUND
	CONNECTION POINT OR CABLE SPLICE
	GENERATOR
	TRANSFER SWITCH
	UTILITY POLE
M	METER
C	CONTACTOR ("M" DENOTES MOTOR CONTACTOR)
	CONTACTS (NORMALLY OPEN)
	CONTACTS (NORMALLY CLOSED)
	INDICATOR LIGHT LETTER INDICANTS COLOR. R=RED, G=GREEN, Y=YELLOW, B=BLUE, NO LETTER=CLEAR
	FUSE
	PANELBOARD

B3 ABBREVIATIONS
SCALE: NOT TO SCALE

A	AMPERE	L	LENGTH, LONG
A/C	AIR CONDITIONING	LGT	LIGHTING
AC	ALTERNATE CURRENT		
ACCU	AIR COOLED CONDENSING UNIT	MA	MILLIAMPERES
AF	AMPERE FRAME	MBB	MONITOR BREAKOUT BOX
AFF	ABOVE FINISHED FLOOR	MCB	MAIN CIRCUIT BREAKER
AFG	ABOVE FINISHED GRADE	MCC	MOTOR CONTROL CENTER
AHU	AIR HANDLER	MCM	1000 CIRCULAR MILS
AIC	AMPERE INTERRUPTING CAPACITY	MECH	MECHANICAL
AT	AMPERE TRIP	MIC	MICROPHONE
ATS	AUTOMATIC TRANSFER SWITCH	MIN	MINIMUM
AU	AT UNIT	MISC	MISCELLANEOUS
AUX	AUXILIARY	MLO	MAIN LUGS ONLY
AWG	AMERICAN WIRE GAUGE	MM	MULTI MODE
		MTD	MOUNTED
BC	BARE COPPER		
BFG	BELOW FINISHED GRADE	N/A	NOT APPLICABLE
BRK	BREAKER	NC	NORMALLY CLOSED
BOH	BACK OF HOUSE	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASS.
		NF	NON-FUSED
C	CONDUIT	NFPA	NATIONAL FIRE PROTECTION ASS.
CA	CABLE	NO	NORMALLY OPEN
CAB	CABINET	NTS	NOT TO SCALE
CAT5E	CATEGORY-5E		
CC	CABLED CONDUCTORS	OLS	OVERLOADS
CH	CHILLER	OC	ON CENTER
CKT	CIRCUIT		
CLL	CONTRACT LIMIT LINE	P	POLE
CMH	COMMUNICATION MANHOLE	PB	PULLBOX
CO	CONDUIT ONLY	PNL	PANEL
COMM	COMMUNICATION	PR	PAIR
CPB	COMMUNICATION PULLBOX	PVC	POLYVINYL CHLORIDE
CT	CURRENT TRANSFORMER	PWR	POWER
CTR	ABOVE COUNTER	POC	POINT OF CONNECTION
CUC	COMMON USER CABLE	POS	POINT OF SALES
CUTC	COMMON USER TERMINAL CABINET	PT	POTENTIAL TRANSFORMER
		PV	PHOTOVOLTAIC
D	DEEP		
DC	DIRECT CURRENT	REF	REFERENCE
DISC	DISCONNECT	REM	REMARKS
DN	DOWN	RGS	RIGID GALVANIZED STEEL
DP	DISTRIBUTION PANEL	RM	ROOM
DPST	DOUBLE POLE SINGLE THROW	RMS	ROOT-MEAN-SQUARE
DPDT	DOUBLE POLE DOUBLE THROW	RCPT	RECEPTACLE
EER	ELECTRICAL EQUIPMENT ROOM	SBB	SOUND BREAKOUT BOX
ELECT	ELECTRICAL	SDB	SOUND DISTRIBUTION BOX
ELEV	ELEVATION	SLC	SIGNALING LINE CIRCUIT
EMT	ELECTRICAL METALLIC TUBING	SM	SINGLE MODE
EQUIP	EQUIPMENT	SPECS	SPECIFICATIONS
EXIST	EXISTING	SPKR	SPEAKER
		SPST	SINGLE POLE SINGLE THROW
F	FUSE	SPDT	SINGLE POLE DOUBLE THROW
FA	FIRE ALARM	SR	SOUND RACK
FACP	FIRE ALARM CONTROL PANEL	SST	STAINLESS STEEL
FAT	FIRE ALARM TERMINATION	ST	SHUNT TRIP
FBO	FURNISHED BY OWNER	SW	SWITCH
FD/SD	FIRE DAMPER / SMOKE DETECTOR	SWBD	SWITCHBOARD
FDR	FEEDER		
FLA	FULL LOAD AMPERES	TEL	TELEPHONE
		TP	TWISTED PAIR CABLE
GFI	GROUND FAULT INTERRUPT	TTB	TELEPHONE TERMINAL BOARD
GND	GROUND	TYP	TYPICAL
H	HIGH	UON	UNLESS OTHERWISE NOTED
HP	HORSEPOWER		
HZ	HERTZ	V	VOLT
		VFD	VARIABLE FREQUENCY DRIVE
I/C	INTERCOM		
IG	ISOLATED GROUND	W	WATT, WIRE, WIDE
IMC	INTERMEDIATE METAL CONDUIT	WP	WEATHERPROOF
JB	JUNCTION BOX	XFMR	TRANSFORMER
		XP	EXPLOSION PROOF
KA	KILOAMP		
KV	KILOVOLT		
KVA	KILOVOLT AMPERES		
KW	KILOWATT		
KWH	KILOWATT HOUR		
KWHD	KILOWATT HOUR DEMAND METER		

A2 DEVICE ELEVATION DETAIL
SCALE: NOT TO SCALE



PLAN SYMBOLS	
	EXISTING WORK LINETYPE
or	DEMOLITION WORK LINETYPES
	NEW WORK LINETYPE
Φ^{XX}	DUPLEX RECEPTACLE, MOUNT AT 18" AFF UNLESS NOTATION INDICATES OTHERWISE. CTR = ABOVE COUNTER IG = ISOLATED GROUND GFI = GROUND FAULT CIRCUIT INTERRUPTER, MOUNT AT 48" AFF UNLESS OTHERWISE NOTED WP = GFI WITH WEATHERPROOF COVER, MOUNT AT 42" AFF UNLESS OTHERWISE NOTED SP = SURGE PROTECTED
	QUAD RECEPTACLE, MOUNT 18" AFF UNLESS OTHERWISE NOTED
CR	CORD REEL
	SPECIAL RECEPTACLE
$^{XX}	SINGLE POLE SWITCH, UNLESS NOTATION INDICATES OTHERWISE. OS = OCCUPANCY SENSOR OSD = OCCUPANCY SENSOR WITH DIMMER 2 = DOUBLE POLE SWITCH 3 = THREE-WAY SWITCH 4 = FOUR-WAY SWITCH D = DIMMER SWITCH K = KEYED SWITCH, WEATHERPROOF, MOUNT 4' - 6" A.F.F. M = MANUAL MOTOR STARTER PB = PUSH BUTTON, MOUNT 4' - 6" A.F.F. LV = LOW VOLTAGE SWITCH
PC	PHOTO CELL FOR EXTERIOR LIGHTING CONTROL
VFD	COMBINATION MOTOR STARTER/CIRCUIT BREAKER DISCONNECT SWITCH VFD = VARIABLE FREQUENCY DRIVE
	FUSED DISCONNECT SWITCH
	NON FUSED DISCONNECT SWITCH
J	JUNCTION BOX
	ELECTRICAL MOTOR (SEE EQUIPMENT CONNECTION SCHEDULE)
	PANEL BOARD, REFER TO PANEL BOARD SCHEDULE
XXX	BRANCH CIRCUIT HOME RUN WITH CIRCUIT NUMBER SEE PANEL SCHEDULES FOR DETAILS
A	LUMINAIRE, LETTER DENOTES TYPE, SEE LUMINAIRE SCHEDULE NL = NIGHT LIGHT
A	POLE MOUNTED LUMINAIRE LETTER DENOTES TYPE, SEE LUMINAIRE SCHEDULE
A	INDICATES WALL MOUNTED LUMINAIRE, LETTER DENOTES TYPE, SEE LUMINAIRE SCHEDULE
A NL	INDICATES EMERGENCY LUMINAIRE, LETTER DENOTES TYPE, SEE LUMINAIRE SCHEDULE NL = NIGHT LIGHT
	EMERGENCY LIGHT WITH BATTERY PACK
OS	CEILING MOUNTED OCCUPANCY SENSOR
MH	MANHOLE
HH	HANDHOLE
UE	UNDERGROUND ELECTRIC
	GROUND ROD
A A	EXIT LUMINAIRE, SHADED AREA DENOTES FACE, LETTER DENOTES TYPE
CR	CARD READER
	CAMERA
	TELECOM OUTLET, (2) CAT 6 CABLES

A4 PLAN SYMBOLS
SCALE: NOT TO SCALE

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

RECORD DRAWING CERTIFICATION
☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR: NAME / SIGNATURE / TITLE / DATE
PROJECT COORDINATOR: NAME / SIGNATURE / TITLE / DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL NOTES, SYMBOLS, ABBREVIATIONS AND COMPLIANCE

CONTRACT NUMBER	SHEET NUMBER
23-528	E-001
SHEET NO. 58 OF 72	
SCALE: AS SHOWN	
DATE: OCTOBER 10, 2025	
DPW FILE NO. 48-16-E-124	REV. NO. 0

1 REMOVAL POINT

2 PULL BACK CABLES TO REMOVAL POINT FOR SPLICING. REMOVE CONDUIT. CONTRACTOR SHALL VERIFY ALL POWER SOURCES PRIOR TO REMOVALS.

3 REMOVE ELECTRIC MAN HOLE.

MASONRY BUILDING
10/SNOW REMOVAL EQUIPMENT
(F.F.E. = 422.87'±)

A1 ELECTRICAL SITE PLAN – REMOVALS

SCALE: 1" = 20'-0"

0 20' 40'

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF F.K. NEILEY, .P.E.
CHECKED BY S.H. SHOVA
MADE BY F.K. NEILEY, .P.E.

REGISTRATION EXPIRES: 02/28/2027

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
www.cscos.com

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

RECORD DRAWING CERTIFICATION

☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL SITE PLAN – REMOVALS

CONTRACT NUMBER	SHEET NUMBER
23-528	ED-100

SHEET NO. 59 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-E-125	0

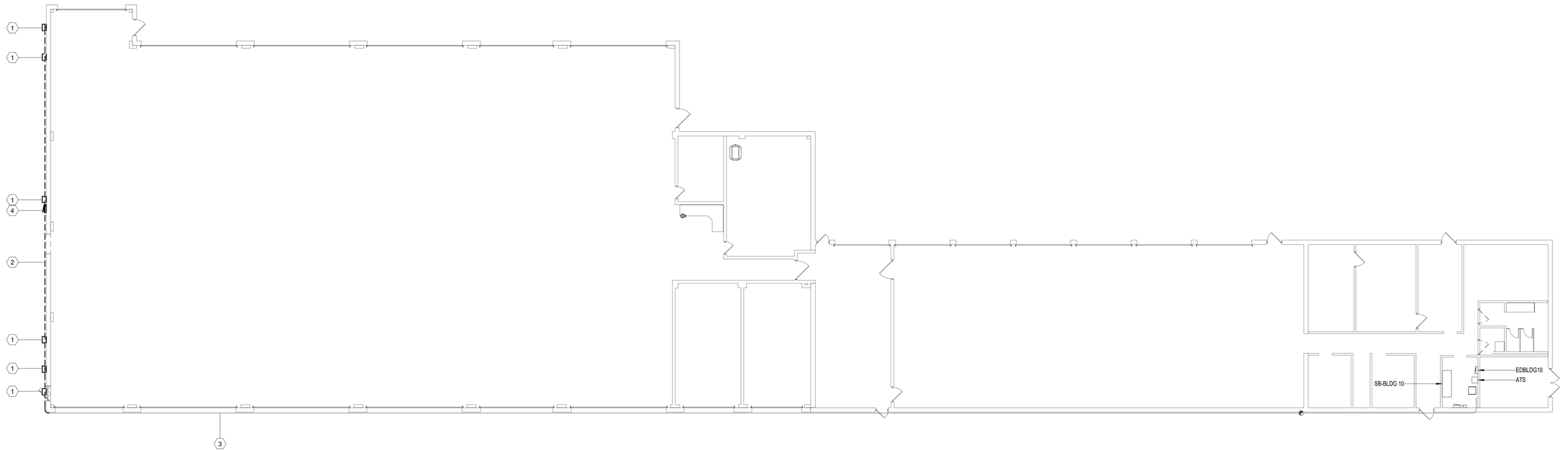
KEYED NOTE THIS SHEET

1 REMOVE EXISTING SITE LIGHTING. REMOVE CONDUCTORS AND CONDUITS BACK TO SOURCE.

2 REMOVE EXISTING 480/277V PANEL FEEDER AND CONDUIT. PULL EXISTING CONDUCTORS BACK TO CORNER OF EXISTING BUILDING. EXISTING CONDUCTORS TO BE REUSED.

3 EXISTING 480/277V PANEL FEEDER INSTALLED ALONG EXTERIOR OF BUILDING TO REMAIN.

4 EXISTING 480/277V PANEL TO BE REMOVED AND RELOCATED. EXISTING FEEDERS TO BE EXTENDED TO NEW LOCATION.



PLAN NORTH

A1 FIRST FLOOR- REMOVALS

SCALE: 3/32" = 1'-0"

0 10' 20' 40'

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF Approver

CHECKED BY S.H. SHOVA

MADE BY F.K. NEILEY, P.E.

STATE OF NEW YORK FRANCESCA K. TAYLOR 090684 LICENSED PROFESSIONAL ENGINEER 07/11/2025

REGISTRATION EXPIRES: 02/28/2027

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Phone: 315-455-2000
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REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

RECORD DRAWING CERTIFICATION

☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL FIRST FLOOR PLAN – REMOVALS

CONTRACT NUMBER	SHEET NUMBER
23-528	ED-101

SHEET NO. 60 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-E-126	0

1. PROVIDE CABLES AND CONDUITS FOR RELOCATED CIRCUITS. MATCH EXISTING CABLE SIZES AND TYPE.
2. PROVIDE PULL BOX; SIZED AS REQUIRED. SPLICE NEW AND EXISTING CABLES.
3. PROVIDE JUNCTION BOX OR PULL BOX AT BUILDING. SPLICE NEW AND EXISTING CABLES.
4. PROVIDE CABLES AND CONDUIT TO PANEL. SEE E-101.
5. GATE OPERATOR. SEE DETAIL ON E-502. SEE PANEL SCHEDULE FOR CIRCUIT INFORMATION.
6. PROVIDE 2" CONDUIT TO TELECOM HAND HOLE FROM DATA ROOM.
7. TELECOM HAND HOLE 24" X 18" X24" DEEP, TIER 22 RATED
8. PROVIDE (1) 1-1/2" CONDUIT INTO THE BASE OF THE CARD READER PEDESTAL
9. DUAL LEVEL CARD READER PEDESTAL.
10. GATE OPERATOR CONDUITS TO PANELS. SEE E-102.
11. PROVIDE (2) 1" CONDUIT BETWEEN GATE OPERATOR AND BUILDING. SEE E-502.

WOODED AREA
CONTAINER
CONTAINER
CONTAINER
SALT AND SAND STORAGE
SALT AND SAND STORAGE
CONCRETE WALLS
LS
RGW
RGW
RGW
RGW
12" HDPE
12" HDPE
UEMH
UTMH
GATE CONTROL PANEL
GATE CONTROL PANEL
GATE CONTROL PANEL
5/8" IRON ROD SET P.T.# 515 EL 420.83'
21" HDPE
18" HDPE
15" HDPE
12" HDPE
12" HDPE
12" HDPE
MASONRY BUILDING
10/SNOW REMOVAL EQUIPMENT
(F.F.E. = 422.87'±)
5000 GALLON DIESEL TANK
3000 GALLON GAS TANK
RR TIE & STONE WALL
5000 GALLON BRINE TANK
FUEL PUMP
UETP
BUS STOP
GENERATOR
FUEL TANK
5/8" IRON ROD SET P.T.# 517 EL 418.91'
DS RIM 419.65 INV 415.5
30" HDPE
30" HDPE
30" HDPE
24" HDPE
24" HDPE
21" HDPE
12" HDPE
12" HDPE

A1 ELECTRICAL SITE PLAN
SCALE: 1" = 20'-0"

0 20' 40'

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF F.K. NEILEY, .P.E.
CHECKED BY S.H. SHOVA
MADE BY F.K. NEILEY, .P.E.

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07/31/2025
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SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL SITE PLAN

CONTRACT NUMBER 23-528
SHEET NUMBER E-100
SHEET NO. 61 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-E-127
REV. NO. 0

KEYED NOTES THIS SHEET

1 PANELS DP1 AND DP2 FEEDER CONDUITS INSTALLED ALONG EXTERIOR OF BUILDING; PROVIDE RGS CONDUITS COORDINATE INSTALLATION WITH EXISTING BUILDING MOUNTED EQUIPMENT, DEVICES, AND CONDUITS. INSTALL CONDUITS PARALLEL WITH EXISTING CONDUIT(S).

2 PANEL PP1 FEEDER CONDUIT EXTENDED AND INSTALLED ALONG EXTERIOR OF BUILDING; PROVIDE RGS CONDUIT AND PULL BOXES AS REQUIRED. COORDINATE INSTALLATION WITH EXISTING BUILDING MOUNTED EQUIPMENT, DEVICES, AND CONDUITS.

3 TERMINATE 2" CONDUIT IN WALL MOUNTED DATA CABINET, TERMINATE 12 STRAND FIBER IN A RACK MOUNT ENCLOSURE.

4 PROVIDE (3) 2" CONDUITS TO LIGHT POLE AND GATES. SEE E-100.

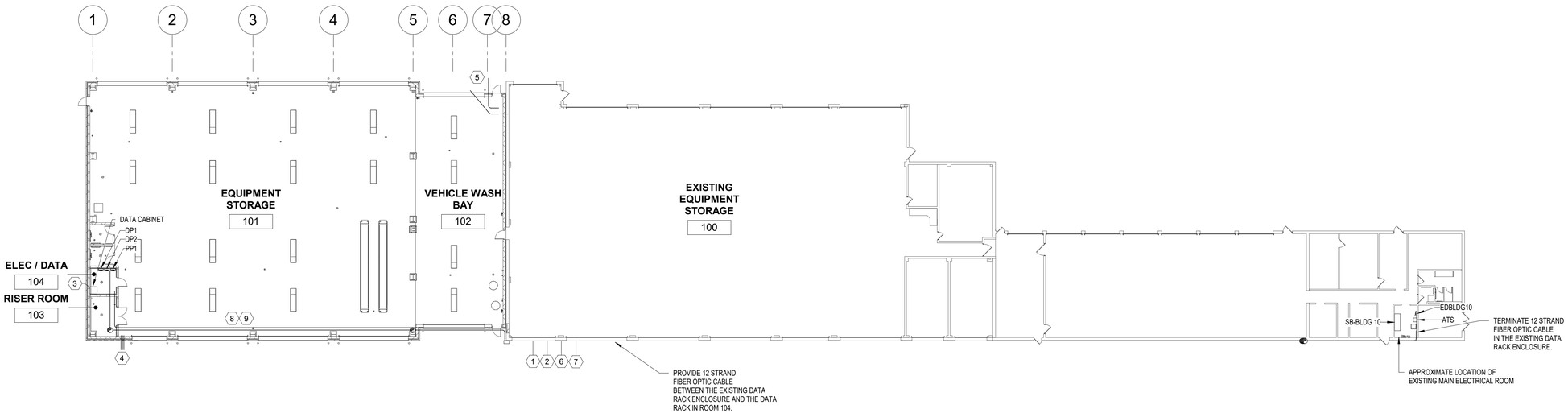
5 PROVIDE (2) 4" CONDUITS. SPLICE NEW AND EXISTING CABLES. SEE E-100.

6 PROVIDE 20A/2P CIRCUIT IN PANEL EDBLDG10. PROVIDE 3#4 AWG IN 1"C. REDUCE CONDUCTOR SIZE ADJACENT TO PANEL TO FACILITATE TERMINATIONS. INSTALL CONDUIT ALONG EXTERIOR OF BUILDING AND PARALLEL WITH EXISTING CONDUITS.

7 TELECOM 2" CONDUIT INSTALLED ALONG EXTERIOR OF BUILDING WITH 12 STRAND SINGLE MODE FIBER OPTIC CABLE, PROVIDE RGS CONDUIT AND PULL BOXES AS REQUIRED. COORDINATE INSTALLATION WITH EXISTING BUILDING MOUNTED EQUIPMENT, DEVICES AND CONDUITS. INSTALL CONDUIT PARALLEL WITH EXISTING CONDUITS.

8 PROVIDE (1) 2" CONDUIT TO EXTERIOR TO EXISTING BUILDING.

9 CONDUITS INSTALLED ALONG CEILING.



PLAN NORTH

A1 FIRST FLOOR - EXISTING BUILDING
SCALE: 1" = 20'-0"

0 10' 20' 40'

CERTIFICATE OF AUTHORIZATION #0021365

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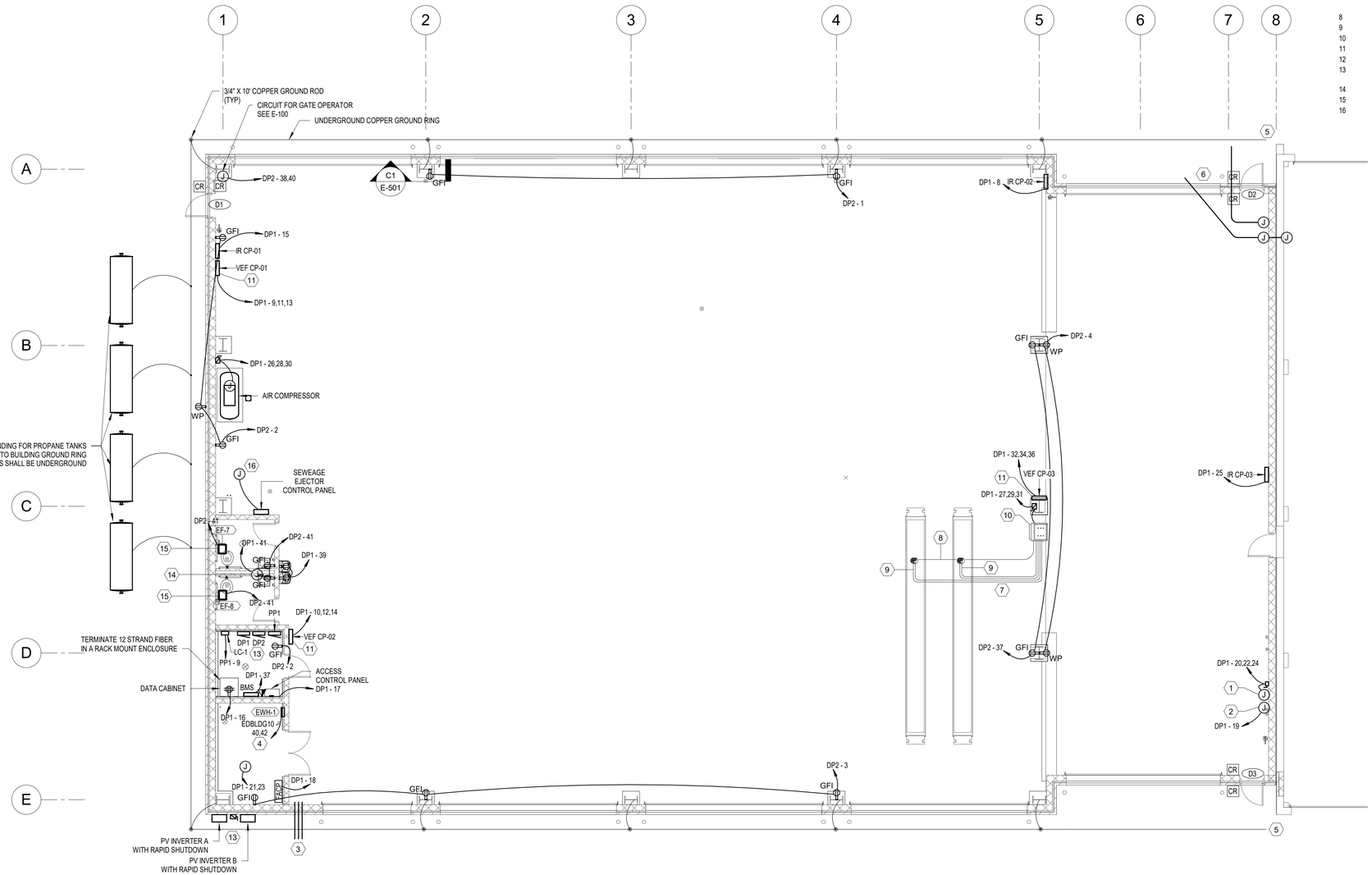
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DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL FLOOR PLAN

CONTRACT NUMBER 23-528
SHEET NUMBER E-101
SHEET NO. 62 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-E-128
REV. NO. 0



PLAN NORTH

0 4' 8' 16'

A1 FIRST FLOOR - EXPANSION

SCALE: 1/8" = 1'-0"

KEYED NOTES THIS SHEET

1	POWER CONNECTION FOR SUMP PUMP. COORDINATE FINAL LOCATION.
2	POWER CONNECTION FOR OIL-WATER SEPARATOR CONTROL PANEL. COORDINATE FINAL LOCATION.
3	PROVIDE (3) 2" CONDUITS TO LIGHT POLE AND GATES. SEE E-100.
4	PROVIDE 20A/2P CIRCUIT IN PANEL EDBLDG10. PROVIDE 3#4 AWG IN 1"C. REDUCE CONDUCTOR SIZE ADJACENT TO PANEL TO FACILITATE TERMINATIONS. INSTALL CONDUIT ALONG EXTERIOR OF BUILDING AND PARALLEL WITH EXISTING CONDUITS.
5	CONNECT NEW GROUND RING TO EXISTING GROUND RING.
6	PROVIDE (2) 4" CONDUITS. SPLICE NEW AND EXISTING CABLES. SEE E-100.
7	PROVIDE CONDUITS, WIRING, AND TERMINATIONS FOR VEHICLE LIFT PER MANUFACTURER'S REQUIREMENTS. COORDINATE WITH OTHER TRADES PRIOR TO INSTALLATION. CONDUIT DEPTHS MAY VARY.
8	PROVIDE (1) 4" SCH 40 PVC CONDUIT FOR HYDRAULIC SUPPLY SERVICE.
9	PROVIDE (2) 1" PVC-COATED RGS CONDUITS IN CONCRETE FLOOR.
10	VEHICLE LIFT CONTROL STATION.
11	PROVIDE NEMA 1 NONFUSED DISCONNECT ON LINE SIDE OF CONTROL PANEL.
12	CONDUITS INSTALLED ALONG CEILING.
13	PROVIDE LABELING FOR PV SYSTEM IN ACCORDANCE WITH NEC 609.12 AND 2020 FIRE CODE OF NYS 1204.5.
14	PROVIDE DEDICATED RECEPTACLE/ELECTRICAL CONNECTION FOR TANKLESS WATER HEATER.
15	CIRCUIT WITH AREA LIGHTING AND CONTROLS.
16	SEWAGE EJECTOR PUMP BELOW SLAB

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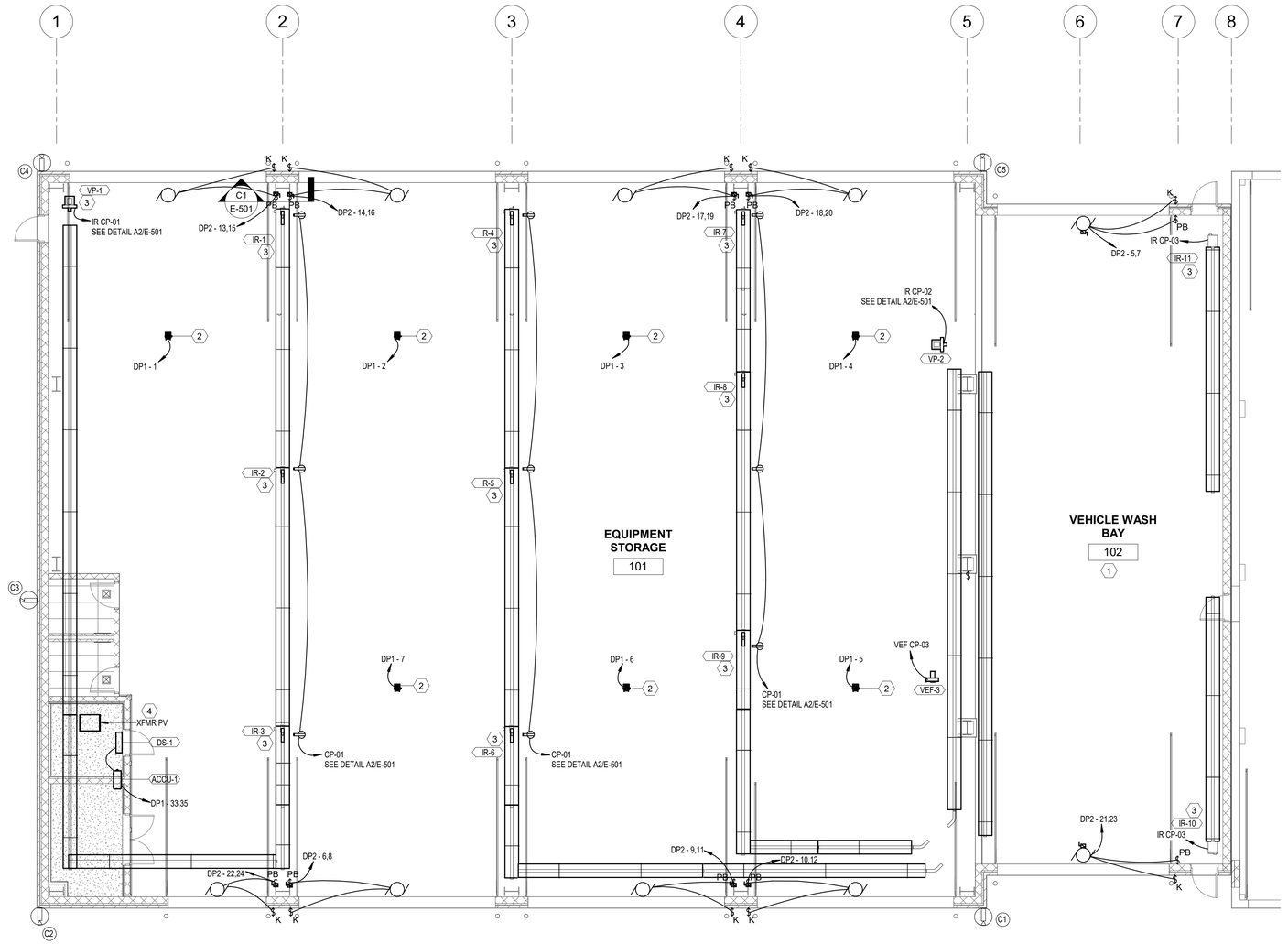
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL FLOOR PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	E-102

SHEET NO. 63 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-E-129
REV. NO. 0

KEYED NOTES THIS SHEET

1 ALL DEVICES IN VEHICLE WASH BAY SHALL BE IP66 RATED.
2 PROVIDE CORD REEL AT CEILING WITH GFCI DUPLEX RECEPTACLE WITH 30' CORD LENGTH.
3 PROVIDE INFRARED HEATING SYSTEM WIRING PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE WITH MECHANICAL DRAWINGS AND CONTRACTOR.
4 PROVIDE TRANSFORMER ABOVE CEILING IN ELECTRICAL ROOM. PROVIDE MOUNTING AND SUPPORTS AS REQUIRED.



PLAN NORTH

A1 FIRST FLOOR
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

CERTIFICATE OF AUTHORIZATION #0021365

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NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL CEILING PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	E-103

SHEET NO. 64 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-E-130
REV. NO. 0

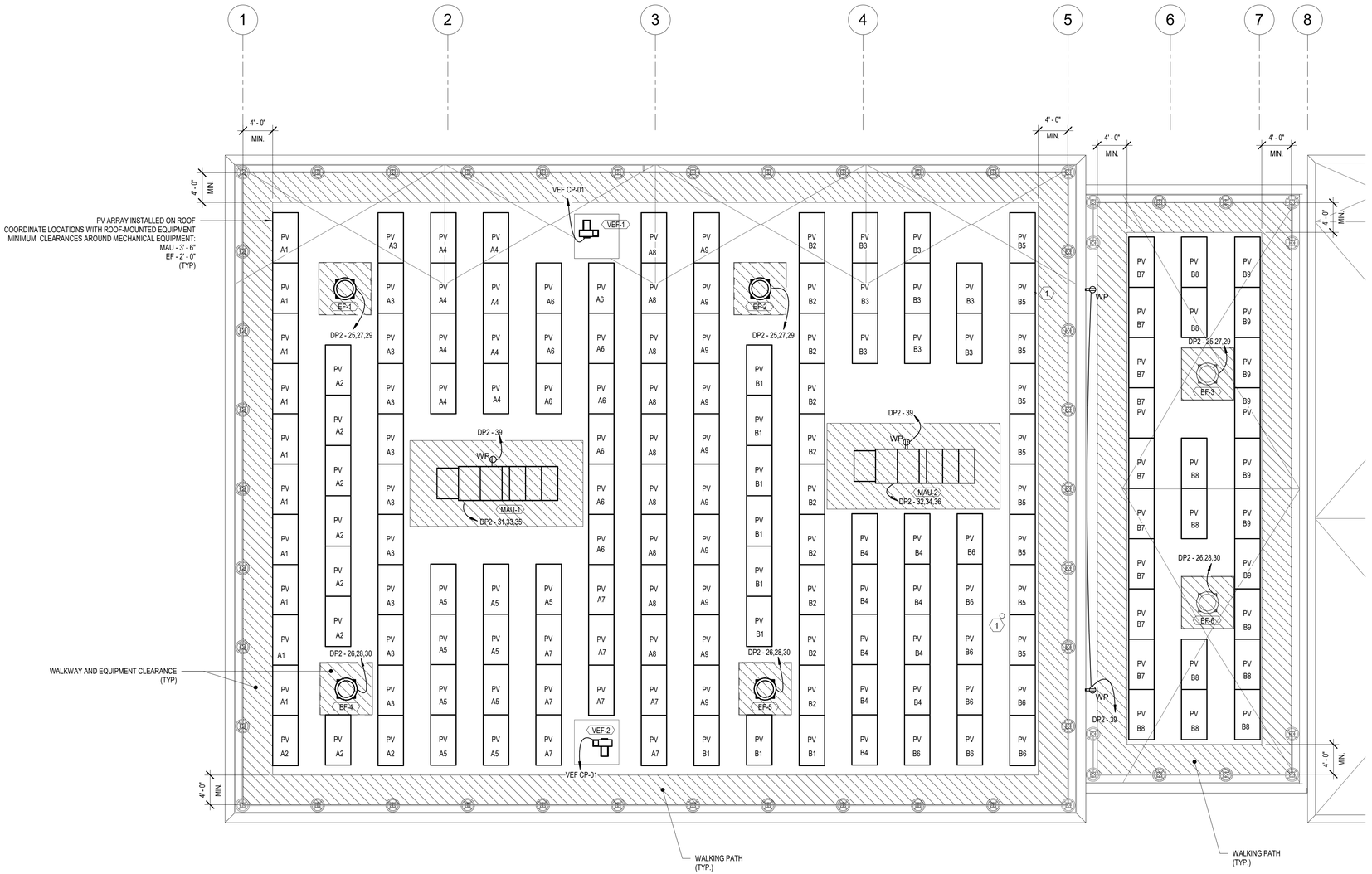
PROJECT OVERVIEW			
PARAMETERS	**QUANTITY**	**UNIT OF MEASUREMENT**	**REMARKS**
PLANNED CAPACITY (AC OUTPUT)	66	KWp	
DC/AC RATIO	1.21		
DC CAPACITY	80	KWp	
MODULE CAPACITY	460	Wp	
MODULE QUANTITY	171	Nos	
INVERTER CAPACITY	33	KW	
TOTAL NUMBER OF INVERTERS REQUIRED	2	Nos	

PV MODULE SPECIFICATION			
PARAMETERS	**QUANTITY**	**UNIT OF MEASUREMENT**	**REMARKS**
RATING	460	Wp	
OPEN CIRCUIT VOLTAGE (VOC)	90.5	V	
VMP (DC)	77.3	V	
ISC @ 25 DEGREES CELSIUS	6.38	A	
IMP	5.95	A	
TEMP COEFFICIENT (VOC)	-0.29%	%	
VOC @ -20 DEGREES CELSIUS	99.5	V	
VMP @ -20 DEGREES CELSIUS	86.3	V	

PV MODULE SPECIFICATION			
PARAMETERS	**QUANTITY**	**UNIT OF MEASUREMENT**	**REMARKS**
RATING	33	KW	
MAX VOLTAGE (DC)	1000	V	
MPPT VOLTAGE RANGE (DC)	500-800	V	
NUMBER OF MPPTS	6/2	Nos	MPP TRAKERS/STRING PER MPP INPUT
MAX INPUT CURRENT	120	A	

KEYED NOTES THIS SHEET

1 MECHANICAL FLUE SHOWN FOR COORDINATION. SEE M-102.



PLAN NORTH

A1 ROOF PLAN
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

CERTIFICATE OF AUTHORIZATION #0021365

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MADE BY F.K. NEILEY, P.E.

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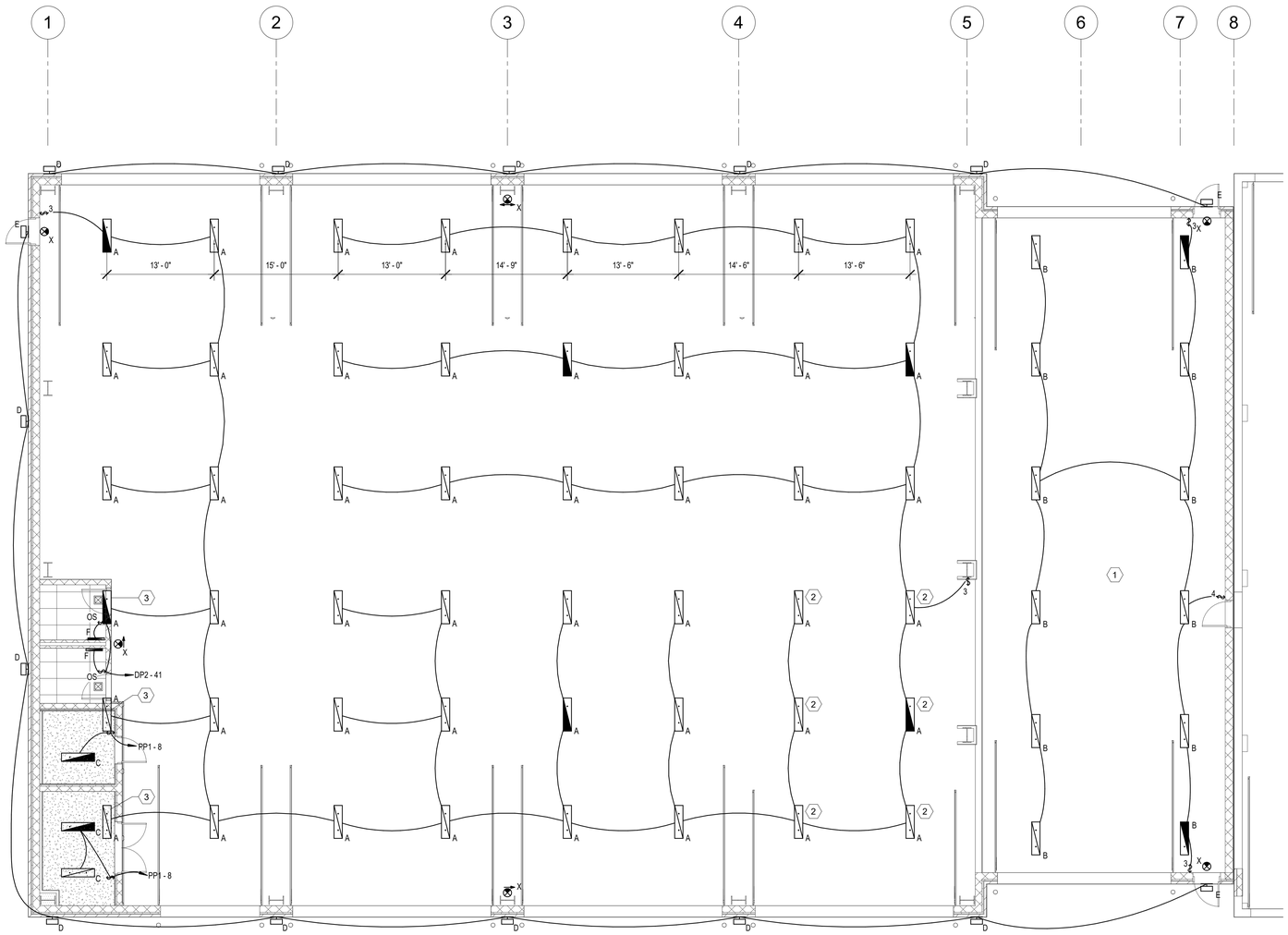
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DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL ROOF PLAN

CONTRACT NUMBER 23-528
SHEET NUMBER E-104
SHEET NO. 65 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-E-131
REV. NO. 0



KEYED NOTES THIS SHEET

1 ALL DEVICES IN VEHICLE WASH BAY SHALL BE IP66 RATED.
2 MOUNT LUMINAIRE 21'-2" A.F.F. TO CLEAR OVERHEAD DOOR.
3 LUMINAIRE MOUNTED ABOVE MIRROR. SEE LUMINAIRE SCHEDULE.

PLAN NORTH

A1 FIRST FLOOR - LIGHTING
SCALE: 1/8" = 1'-0"

0 4' 8' 16'

CERTIFICATE OF AUTHORIZATION #0021365

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DIVISION OF ENGINEERING

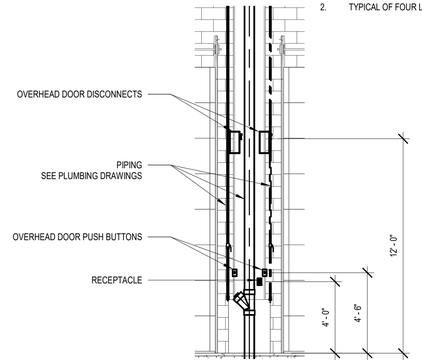
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL LIGHTING PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	E-105

SHEET NO. 66 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-E-132
REV. NO. 0

NOTES:

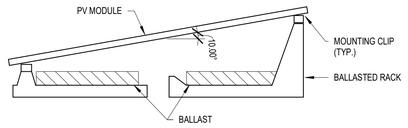
1. PROVIDE MOUNTING HARDWARE/STRUCTURE TO STRUCTURAL COLUMN FOR PUSH BUTTON AND RECEPTACLE INSTALLATIONS.
2. TYPICAL OF FOUR LOCATIONS.



C1 DEVICE MOUNTING AT COLUMN DETAIL

SCALE: 1/4" = 1'-0"

0 2' 4' 8'

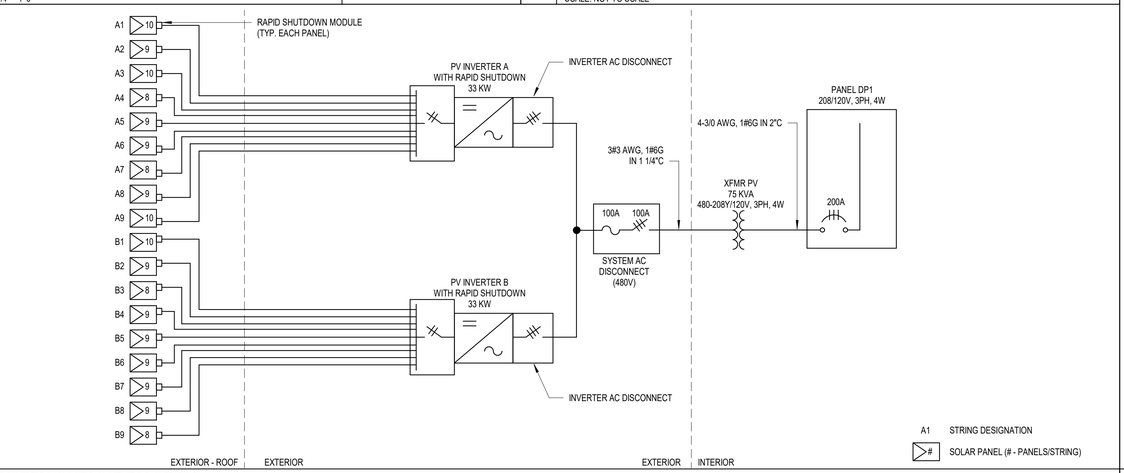


NOTES:

1. BASIS-OF-DESIGN: DYNOGRIP EVOLUTION FR.
2. PROVIDE BALLAST AS REQUIRED FOR 115 MPH WIND LOADING.
3. PITCH 10 DEGREES FOR PV MODULE.
4. SUBMIT BALLAST CALCULATIONS AT TIME OF SHOP DRAWING SUBMITTAL.

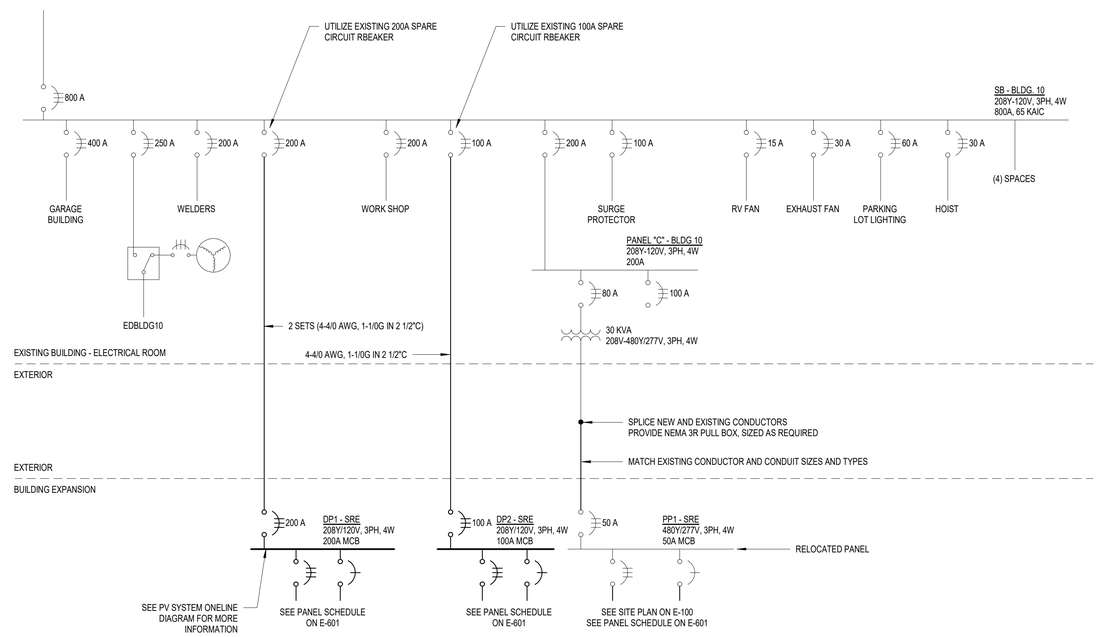
C2 PV MODULE MOUNTING DETAIL

SCALE: NOT TO SCALE



B1 PV SYSTEM ONELINE DIAGRAM

SCALE: NOT TO SCALE

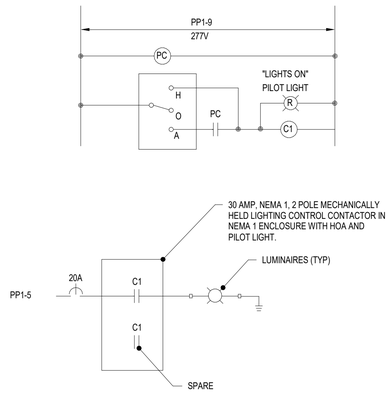


NOTES:

1. PROVIDE ADDITIONAL LUGS AS REQUIRED TO FACILITATE CABLE TERMINATIONS.

B3 ONELINE DIAGRAM

SCALE: NOT TO SCALE

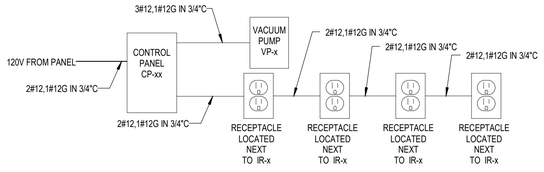


NOTES:

1. INSTALL CONTACTOR IN ELECTRCAL ROOM. PROVIDE PLASTIC ENGRAVED LABEL.
2. MOUNT PHOTO CELL ON EXTERIOR OF NORTH WALL.
3. COIL CLEARING CONTACTS AND UNLATCH COIL NOT SHOWN.

A1 EXTERIOR LIGHTING CONTROL DETAIL

SCALE: NOT TO SCALE

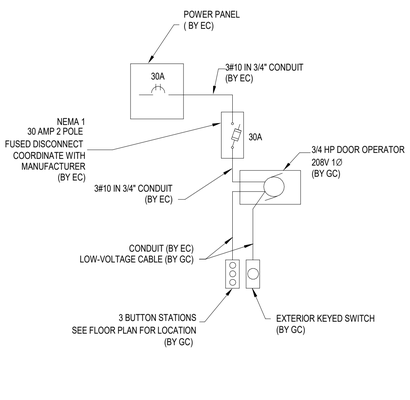


NOTE:

1. SEE FLOOR PLANS FOR EXACT NUMBER OF RECEPTACLES REQUIRED.

A2 INFRARED WIRING DETAIL

SCALE: NOT TO SCALE

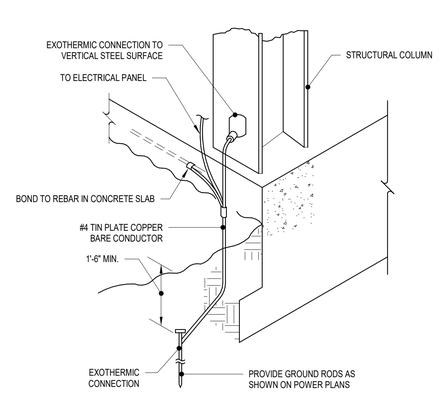


NOTE:

1. PROVIDE CONDUIT FOR ALL DOOR CONTROL AND SAFETY DEVICES, COORDINATE WITH DOOR MANUFACTURER.

A3 OVERHEAD DOOR DETAIL

SCALE: NOT TO SCALE



A4 GROUND BOND DETAIL

SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF F.K. NEILEY, P.E.

CHECKED BY S.H. SHOVA

MADE BY F.K. NEILEY, P.E.

REGISTRATION EXPIRES: 02/28/2027

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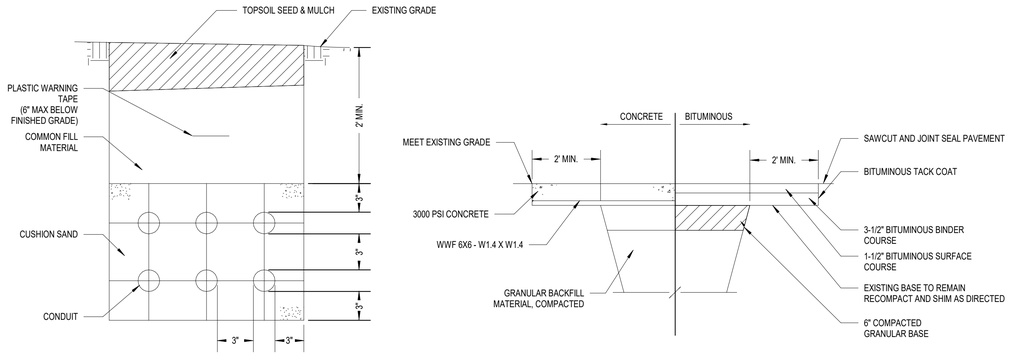
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	E-501

SHEET NO. 67 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-E-133	0

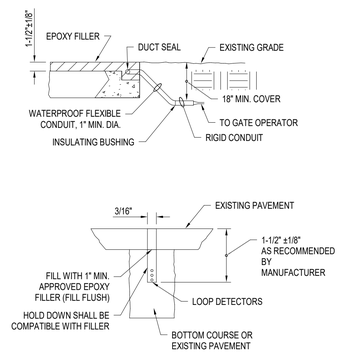


NOTES:

1. TO BE USED IN TURFED ARES AND UNDER SIDEWALKS UNLESS OTHERWISE SHOWN.
2. NUMBER OF CONDUITS AS PER PLANS.

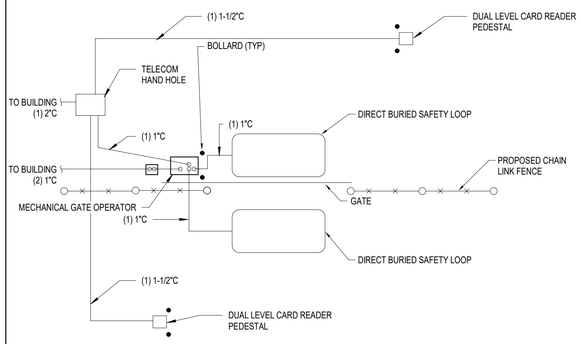
C1 TRENCHING AND RESTORATION DETAIL

SCALE: NOT TO SCALE



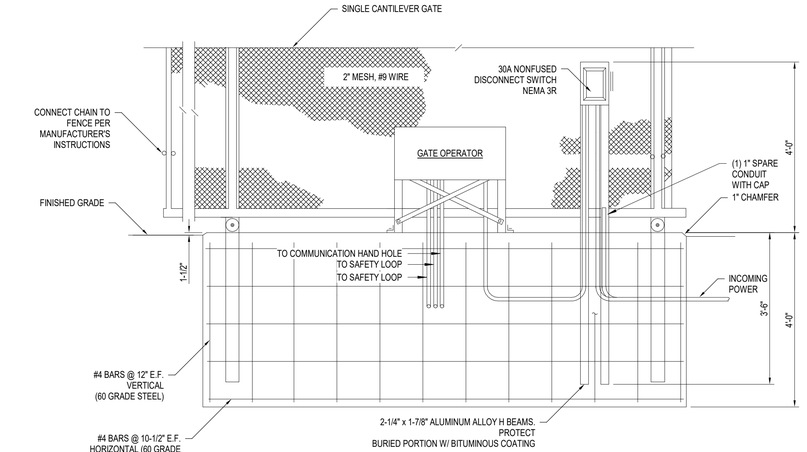
B1 LOOP DETECTOR DETAIL

SCALE: NOT TO SCALE



B2 VEHICLE GATE LAYOUT DIAGRAM

SCALE: NOT TO SCALE

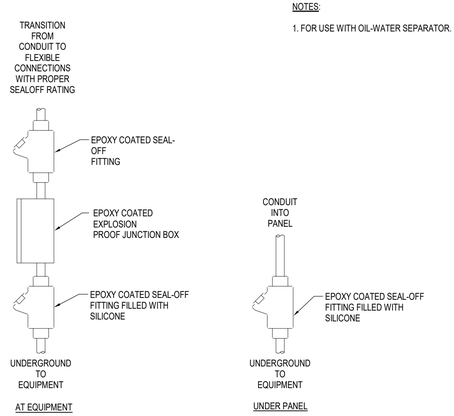


B3 GATE OPERATOR DETAIL

SCALE: NOT TO SCALE

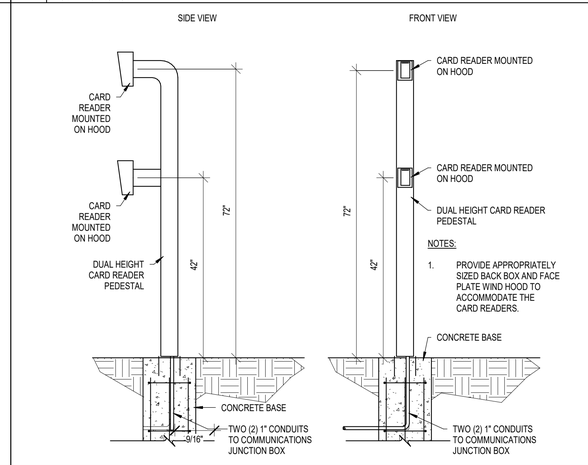
NOTES:

1. FOR USE WITH OIL-WATER SEPARATOR.



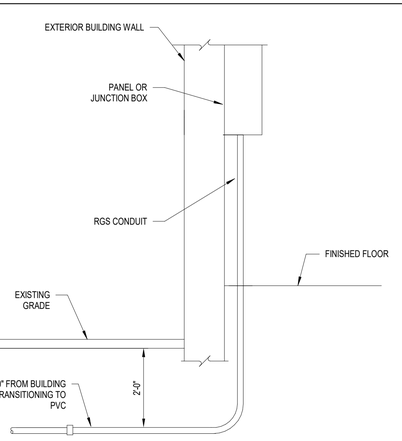
A1 SEAL-OFF DETAIL

SCALE: NOT TO SCALE



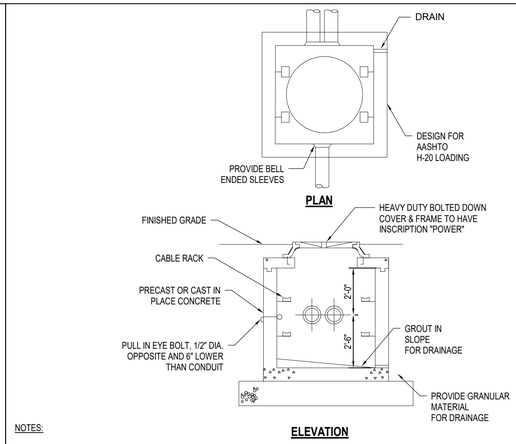
A2 CARD READER PEDESTAL

SCALE: NOT TO SCALE



A3 UNDERGROUND CONDUIT ENTRANCE DETAIL

SCALE: NOT TO SCALE



NOTES:

1. PULL BOX AND COVER TO BE DESIGNED TO H-20 LOADING UNLESS OTHERWISE NOTED.
2. NUMBER OF CONDUIT AS SHOWN ON SITE PLAN.

A4 PULL BOX DETAIL

SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF F.K. NEILEY, P.E.

CHECKED BY S.H. SHOVA

MADE BY F.K. NEILEY, P.E.

STATE OF NEW YORK — FRANCESCA K. NEILEY — 099358 — LICENSED PROFESSIONAL ENGINEER

07/11/2025

REGISTRATION EXPIRES: 02/28/2027

C&S COMPANIES®

C&S Engineers, Inc.
499 Col. Eileen Collins Blvd.
Syracuse, New York 13212
Phone: 315-455-2000
www.cscos.com

REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

RECORD DRAWING CERTIFICATION

☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR

NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR

NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

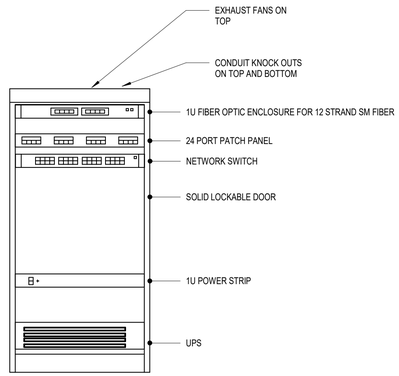
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL DETAILS

CONTRACT NUMBER	SHEET NUMBER
23-528	E-502

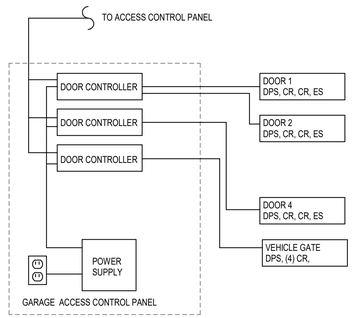
SHEET NO. 68 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-E-134	0



C1 DATA RACKS
SCALE: NOT TO SCALE



C2 ACCESS CONTROL ONE LINE
SCALE: NOT TO SCALE

DOOR TYPES:

A. SINGLE DOOR, ELECTRIC STRIKE, DOOR POSITION SWITCH , REQUEST TO EXIT DEVICE, (2) CARD READERS.

B. VEHICLE GATE, GATE OPERATOR, GATE POSITION SWITCHE, (4) CARD READERS ON PEDESTALS

DOOR NUMBER	DOOR TYPE	LOCATION	TERMINATION LOCATION
D1	A	NORTH WEST CORNER	ACCESS CONTROL PANEL
D2	A	WASH BAY	ACCESS CONTROL PANEL
D3	A	WASH BAY	ACCESS CONTROL PANEL
GATE	A	WEST WALL	ACCESS CONTROL PANEL

C3 ACCESS CONTROL SCHEDULE
SCALE: NOT TO SCALE

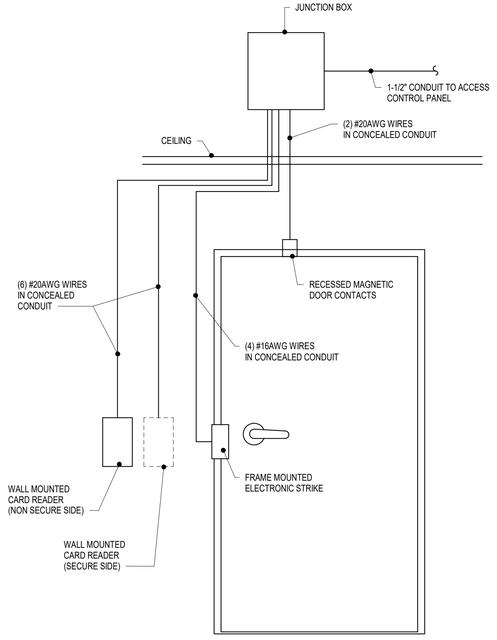
CAMERA TYPES:

A. OUTDOOR 20MP MULTI IMAGER 360 °
WALL/CORNER MOUNT

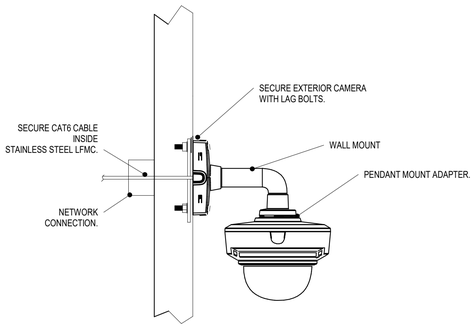
B. EXISTING CAMERA
WALL MOUNT

CAMERA NUMBER	CAMERA TYPE	CAMERA LOCATION	TERMINATION LOCATION
C1	A	NORTH WALL	DATA RACK
C2	A	NORTH WALL	DATA RACK
C3	B	EAST WALL	DATA RACK
C4	A	SOUTH WALL	DATA RACK
C5	A	SOUTH WALL	DATA RACK

C4 CAMERA SCHEDULE
SCALE: NOT TO SCALE



A3 TYPICAL ACCESS CONTROL DOOR
SCALE: NOT TO SCALE



A4 EXTERIOR MOUNT CAMERA DETAIL
SCALE: NOT TO SCALE

IN CHARGE OF F.K. NEILEY, P.E.
CHECKED BY S.H. SHOVA
MADE BY W. BARLEY

CERTIFICATE OF AUTHORIZATION #0021365
REGISTRATION EXPIRES: 02/28/2027
07/11/2025

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RECORD DRAWING CERTIFICATION

☐ AS BUILT – CHANGES AS NOTED
☐ AS BUILT – NO CHANGES

CONTRACTOR
NAME
SIGNATURE
TITLE DATE

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TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL DETAILS

CONTRACT NUMBER 23-528
SHEET NUMBER E-503
SHEET NO. 69 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-E-135
REV. NO. 0

PANEL SCHEDULE DP1

BUS SIZE: 200 A
VOLTS: 120/208 Wye
PHASE: 3
WIRE: 4
POLES: 42

MAIN TYPE: MCB
MAIN BREAKER: 200 A
GND. BAR TYPE: COPPER
SC RATING: 22 KAIC
ENCLOSURE: TYPE 1

INSTALLATION: SURFACE
LOCATION: EQUIPMENT STORAGE BUILDING

NOTES:

CIRCUIT DESCRIPTION	WIRE SIZE	CONDUIT	CB. AM...	Poles	CKT	A	B	C	CKT	Poles	CB. AM...	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION
CORD REEL	1-#12, 1-#12,...	3/4"	20 A	1	1				2	1	20 A	3/4"	1-#12, 1-#12,...	CORD REEL
CORD REEL	1-#12, 1-#12,...	3/4"	20 A	1	3				4	1	20 A	3/4"	1-#12, 1-#12,...	CORD REEL
CORD REEL	1-#12, 1-#12,...	3/4"	20 A	1	5				6	1	20 A	3/4"	1-#12, 1-#12,...	CORD REEL
CORD REEL	1-#12, 1-#12,...	3/4"	20 A	1	7				8	1	20 A	3/4"	1-#12, 1-#12,...	IR CP-02
					9				10					
VEF CP01	3-#8, 1-#10	3/4"	35 A	3	11				12	3	20 A	3/4"	3-#12, 1-#12	VEF-2
					13				14					
IR CP-01	1-#12, 1-#12,...	3/4"	20 A	1	15				16	1	20 A	3/4"	1-#12, 1-#12,...	DATA CABINET
NGP-1320 PANEL	1-#12, 1-#12,...	3/4"	20 A	1	17				18	1	20 A	3/4"	1-#12, 1-#12,...	FACP
OIL-WATER SEPARATOR CONTROL PANEL	1-#10, 1-#10,...	3/4"	30 A	1	19				20					
NITROGEN GENERATOR	2-#12, 1-#12	3/4"	20 A	2	21				22	3	20 A	3/4"	3-#12, 1-#12	OIL-WATER SEPARATOR
					23				24					
IR CP-03	1-#12, 1-#12,...	3/4"	20 A	1	25				26					
VEHICLE LIFT	3-#4, 1-#4, 1-#8	1 1/2"	80 A	3	27				28	3	90 A	1 1/2"	3-#3, 1-#8	COMPRESSOR
					29				30					
					31				32					
ACCU-1	2-#12, 1-#12	3/4"	20 A	2	33				34	3	20 A	3/4"	3-#12, 1-#12	VEF CP-03
					35				36					
BMS	1-#12, 1-#12,...	3/4"	20 A	1	37				38					
WATER COOLER	1-#12, 1-#12,...	3/4"	20 A	1	39				40	3	200 A	--	--	PV CONNECTION
TANKLESS WATER HEATER	1-#8, 1-#8, 1-#10	3/4"	35 A	1	41				42					

PANEL SCHEDULE DP2

BUS SIZE: 100 A
VOLTS: 120/208 Wye
PHASE: 3
WIRE: 4
POLES: 42

MAIN TYPE: MCB
MAIN BREAKER: 100 A
GND. BAR TYPE: COPPER
SC RATING: 22 KAIC
ENCLOSURE: TYPE 1

INSTALLATION: SURFACE
LOCATION: EQUIPMENT STORAGE BUILDING

NOTES:

CIRCUIT DESCRIPTION	WIRE SIZE	CONDUIT	CB. AM...	Poles	CKT	A	B	C	CKT	Poles	CB. AM...	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION
VEHICLE STORAGE RECEPTACLES	1-#12, 1-#12,...	3/4"	20 A	1	1				2	1	20 A	3/4"	1-#12, 1-#12,...	VEHICLE STORAGE RECEPTACLES
VEHICLE STORAGE RECEPTACLES	1-#12, 1-#12,...	3/4"	20 A	1	3				4	1	20 A	3/4"	1-#12, 1-#12,...	VEHICLE STORAGE RECEPTACLES
					5				6					
OVERHEAD DOOR - WASH BAY	2-#10, 1-#10	3/4"	30 A	2	7				8	2	30 A	3/4"	2-#10, 1-#10	OVERHEAD DOOR
					9				10					
OVERHEAD DOOR	2-#10, 1-#10	3/4"	30 A	2	11				12	2	30 A	3/4"	2-#10, 1-#10	OVERHEAD DOOR
					13				14					
OVERHEAD DOOR	2-#10, 1-#10	3/4"	30 A	2	15				16	2	30 A	3/4"	2-#10, 1-#10	OVERHEAD DOOR
					17				18					
OVERHEAD DOOR	2-#10, 1-#10	3/4"	30 A	2	19				20	2	30 A	3/4"	2-#10, 1-#10	OVERHEAD DOOR
OVERHEAD DOOR - WASH BAY	2-#10, 1-#10	3/4"	30 A	2	21				22	2	20 A	3/4"	2-#12, 1-#12	OVERHEAD DOOR (SMALL)
					23				24					
					25				26					
EF-1,2,3	3-#12, 1-#12	3/4"	20 A	3	27				28	3	20 A	3/4"	3-#12, 1-#12	EF-4,5,6
					29				30					
					31				32					
MAU-1	3-#10, 1-#10	3/4"	25 A	3	33				34	3	25 A	3/4"	3-#10, 1-#10	MAU-2
					35				36					
VEHICLE STORAGE RECEPTACLES	1-#12, 1-#12,...	3/4"	20 A	1	37				38	2	20 A	3/4"	2-#12, 1-#12	GATE OPERATOR
ROOF RECEPTACLE	1-#12, 1-#12,...	3/4"	20 A	1	39				40					
RESTROOM RECEPTACLES, LIGHTING, FAN	1-#12, 1-#12,...	3/4"	20 A	1	41				42	1	20 A	3/4"	1-#12, 1-#12,...	SEWEAGE EJECTOR CONTROL PANEL

PANEL SCHEDULE PP1

BUS SIZE: 225 A
VOLTS: 480/277 Wye
PHASE: 3
WIRE: 4
POLES: 16

MAIN TYPE: MCB
MAIN BREAKER: 200 A
GND. BAR TYPE: COPPER
SC RATING:
ENCLOSURE: TYPE 4

INSTALLATION: SURFACE
LOCATION:

NOTES: THIS PANEL IS EXISTING AND RELOCATE...

	CIRCUIT DESCRIPTION	WIRE SIZE	CONDUIT	CB. AM...	Poles	CKT	A	B	C	CKT	Poles	CB. AM...	CONDUIT	WIRE SIZE	CIRCUIT DESCRIPTION	
NOTE 2	POLE 1 (LIGHT POLE)	--	--	20 A	1	1				2						
NOTE 1	EXTERIOR WALL PACKS (TO BE REMOVED)	--	--	20 A	1	3				4	3	20 A	--	--	GATE 1	NOTE 2
NOTE 3	EXPANSION EXTERIOR LIGHTING	1-#12, 1-#12, 1-#12	3/4"	20 A	1	5				6						
NOTE 3	VEHICLE WASH BAY LIGHTING	1-#12, 1-#12, 1-#12	3/4"	20 A	1	7				8	1	20 A	3/4"	1-#12, 1-#12, 1-#12	EXPANSION INTERIOR LIGHTING	NOTE 3
NOTE 3	LC-1	1-#12, 1-#12, 1-#12	3/4"	20 A	1	9				10						
						11				12						
NOTE 2	GATE 2	--	--	30 A	3	13				14	3	30 A	--	--	GATE 3	NOTE 2
						15				16						

NOTES:

1. REMOVE EXISTING CIRCUIT LABEL AS "SPARE."
2. EXTEND EXISTING CIRCUIT TO NEW PANEL LOCATION. SEE E-100.
3. PROVIDE NEW CIRCUIT.

MASTER LUMINAIRE SCHEDULE

FIXTURE DESCRIPTION	MANUFACTURER AND MODEL NUMBER	NUMBER AND TYPE OF LAMP	VOLTS	DRIVER	MOUNTING	REMARKS
A	H.E. WILLIAMS #96-4-L81/840-HIAFR-DIM-UNV OR APPROVED EQUAL	65W LED	277	LED DRIVER	SUSPENDED AT 18-9" A.F.F. UNLESS OTHERWISE NOTED.	PROVIDE EMERGENCY BATTERY AS NOTED.
B	H.E. WILLIAMS #96-4-L81/840-HIAFR-WTT/1-DIM-UNV OR APPROVED EQUAL	65W LED	277	LED DRIVER	SUSPENDED AT 15-0" A.F.F.	PROVIDE EMERGENCY BATTERY AS NOTED.
C	H.E. WILLIAMS #14-4-L55/840-AF-DRV-UNV OR APPROVED EQUAL	42.3W LED	277	LED DRIVER	SUSPENDED AT 10'-0" A.F.F.	PROVIDE EMERGENCY BATTERY AS NOTED.
D	NLS LIGHTING #NV-F2-T4-32L-60W-40K7-UNV-KM-AGV-BR OR APPROVED EQUAL	60W LED	277	LED DRIVER	WALL MOUNT 20'-0" A.F.F. UNLESS OTHERWISE NOTED	SEE LIGHTING CONTROL DETAIL.
E	H.E. WILLIAMS #WPCS-L30/840-BZ-EM/6W-DIM-UNV OE APPROVED EQUAL	28W LED	277	LED DRIVER	WALL MOUNT 9'-0" A.F.F.	SEE LIGHTING CONTROL DETAIL.
F	H.E. WILLIAMS #LLM2-L15-835-S-SQ-EM/10WRM-DRV-UNV OR APPROVED EQUAL	10.4W LED	UNV	LED DRIVER	WALL MOUNT 6" +/- ABOVE MIRROR	PROVIDE EMERGENCY BATTERY AS NOTED.
X	H.E. WILLIAMS #EXIT-R-EM-BLK-SDT-D OR APPROVED EQUAL	3.8W LED	277	LED DRIVER	WALL MOUNT	

CONTRACT RESPONSIBLE		ENCLOSURE		DISCONNECT TYPE		STARTER TYPE		CONTROLS		LOCATION	
G	GENERAL	1	NEMA 1 - INDOOR GENERAL	1	NON-FUSED SAFETY SWITCH	1	MAGNETIC X-LINE	1	START/STOP PB W/PILOT LIGHT IN COVER	A	AT EQUIPMENT
M	MECHANICAL	3R	NEMA 3R - EXTERIOR RAINPROOF	2	FUSED SAFETY SWITCH	2	COMBINATION X-LINE	2	H-O-A SWITCH W/PILOT LIGHT ON COVER	B	REMOTE
H	HVAC	4	NEMA 4 - OUTDOOR WATERTIGHT	3	TOGGLE SWITCH	3	MANUAL	3	AUXILIARY CONTACTS	C	IN MOTOR CONTROL CENTER
E	ELECTRICAL	4X	NEMA 4X - CORROSION RESISTANT	4	INTEGRAL TO STARTER	4	REDUCED VOLTAGE	4	CONTROL TRANSFORMER	D	IN MECHANICAL ROOM
P	PLUMBING	7	NEMA 7 - INDOOR EXPLOSION PROOF	5	CORD & PLUG	5	VFD	5	PROVIDED BY EQUIPMENT MANUFACTURER	E	IN ELECTRICAL ROOM
FP	FIRE PROTECTION	12	NEMA 12 - INDOOR DUST-TIGHT	6	PART OF CONTROL PANEL	6	SOFT START	6	REMOTE PUSHBUTTON STATIONS	F	OTHER (SEE REMARKS)
C	COMMUNICATIONS	13	NEMA 13 - INDOOR OIL TIGHT	7	BY EQUP. MANF.	7	TWO-SPEED	7	PART OF DIRECT DIGITAL CONTROL SYSTEM (DDC)		
O	OWNER			8	OTHER (SEE REMARKS)	8	BY EQUP. MANF.	8	CONTROL PANEL		
						9	OTHER (SEE REMARKS)	9	OTHER (SEE REMARKS)		

EQUIPMENT CONNECTION SCHEDULE

EQUIPMENT			ELECTRICAL SUPPLY								DISCONNECT						STARTER						CONTROLS		
UNIT NO.	PROVIDED BY	LOCATION	HP	KW	MCA	AMPS	MOCP	VOLT	PHASE	WIRING BETWEEN PROVIDED BY	PROVIDED BY	TYPE	SIZE	ENCL	LOCATION	WIRING BETWEEN PROVIDED BY	PROVIDED BY	TYPE	SIZE	ENCL	LOCATION	WIRING BETWEEN PROVIDED BY	PROVIDED BY	TYPE	REMARKS
ACCU-1	M	EQUIPMENT STORAGE 101			12.1			208 V	1	E	E	1	30	3R	A	M	M	-	-	3R	A	M	M		
DS-1	M	EQUIPMENT STORAGE 101			1		15	208 V	1	E	E	-	-	1	B	M	M	-	-	1	B	M	M		
EF-1	M	ROOF	1/4					208 V	3	E	E	2	4	3R	A	E	M	8	-	3R	A	M	M		
EF-2	M	ROOF	1/4					208 V	3	E	E	2	4	3R	A	E	M	8	-	3R	A	M	M		
EF-3	M	ROOF	1/4					208 V	3	E	E	2	4	3R	A	E	M	8	-	3R	A	M	M		
EF-4	M	ROOF	1/4					208 V	3	E	E	2	4	3R	A	E	M	8	-	3R	A	M	M		
EF-5	M	ROOF	1/4					208 V	3	E	E	2	4	3R	A	E	M	8	-	3R	A	M	M		
EF-6	M	ROOF	1/4					208 V	3	E	E	2	4	3R	A	E	M	8	-	3R	A	M	M		
EF-7	M	RESTROOM		0.016				120 V	1	E	E	3	-	1	A	M	M	-	-	1	A	E	E	-	
EF-8	M	RESTROOM		.0160				120 V	1	E	E	3	-	1	A	M	M	-	-	1	A	E	E	-	
EWH-1	M	RISER ROOM		3	7.2			208 V	1	E	M	7	-	1	A	M	M	-	-	1	A	M	M		
IR-1	M	EQUIPMENT STORAGE			1			120 V	1	E	E	5	-	1	A	M	M	-	-	1	A	M	M		
IR-2	M	EQUIPMENT STORAGE			1			120 V	1	E	E	5	-	1	A	M	M	-	-	1	A	M	M		
IR-3	M	EQUIPMENT STORAGE			1			120 V	1	E	E	5	-	1	A	M	M	-	-	1	A	M	M		
IR-4	M	EQUIPMENT STORAGE			1			120 V	1	E	E	5	-	1	A	M	M	-	-	1	A	M	M		
IR-5	M	EQUIPMENT STORAGE			1			120 V	1	E	E	5	-	1	A	M	M	-	-	1	A	M	M		
IR-6	M	EQUIPMENT STORAGE			1			120 V	1	E	E	5	-	1	A	M	M	-	-	1	A	M	M		
IR-7	M	EQUIPMENT STORAGE			1			120 V	1	E	E	5	-	1	A	M	M	-	-	1	A	M	M		
IR-8	M	EQUIPMENT STORAGE			1			120 V	1	E	E	5	-	1	A	M	M	-	-	1	A	M	M		
IR-9	M	EQUIPMENT STORAGE			1			120 V	1	E	E	5	-	1	A	M	M	-	-	1	A	M	M		
IR-10	M	EQUIPMENT STORAGE			1			120 V	1	M	M	7	-	6P	A	M	M	-	-	-	B	M	M		
IR-11	M	EQUIPMENT STORAGE			1			120 V	1	M	M	7	-	6P	A	M	M	-	-	-	B	M	M		
MAU-1	M	ROOF			13.6		25	208 V	3	E	E	1	30	3R	A	M	M	-	-	3R	A	M	M		
MAU-2	M	ROOF			13.6		25	208 V	3	E	E	1	30	3R	A	M	M	-	-	3R	A	M	M		
VEF-1	M	ROOF	5					208 V	3	E	E	2	25	3R	A	M	M	-	-	3R	A	M	M		POWERED FROM CONTROL PANEL.
VEF-2	M	ROOF	3					208 V	3	E	E	2	17.5	3R	A	M	M	-	-	3R	A	M	M		POWERED FROM CONTROL PANEL.
VEF-3	M	EQUIPMENT STORAGE	1					208 V	3	E	E	2	8	1	B	M	M	-	-	1	A	M	M		POWERED FROM CONTROL PANEL.
VP-1	M	EQUIPMENT STORAGE						208 V	3	E	E	2	-	1	A	M	M	-	-	1	A	M	M		POWERED FROM CONTROL PANEL.
VP-2	M	EQUIPMENT STORAGE						208 V	3	E	E	2	-	1	A	M	M	-	-	1	A	M	M		POWERED FROM CONTROL PANEL.

NOTES:

1. ALL LINE-VOLTAGE CABLING AND CONDUIT SHALL BE PROVIDED BY THE EC.
2. ALL CONTROL-VOLTAGE CABLING AND CONDUIT SHALL BE PROVIDED BY THE MC.

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF F.K. NEILEY, P.E.
CHECKED BY S.H. SHOVA
MADE BY F.K. NEILEY, P.E.

STATE OF NEW YORK · FRANCESCO K. NEILEY · 090334 · LICENSED PROFESSIONAL ENGINEER
07/31/2025
REGISTRATION EXPIRES: 02/28/2027

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Syracuse, New York 13212
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REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

RECORD DRAWING CERTIFICATION

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☐ AS BUILT – NO CHANGES

CONTRACTOR
NAME
SIGNATURE
TITLE DATE

PROJECT COORDINATOR
NAME
SIGNATURE
TITLE DATE

WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

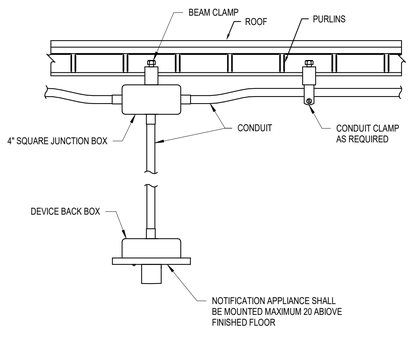
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
ELECTRICAL SCHEDULES

CONTRACT NUMBER 23-528
SHEET NUMBER E-601
SHEET NO. 70 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025
DPW FILE NO. 48-16-E-136
REV. NO. 0

FIRE ALARM CABLE LEGEND	
SYMBOL	CONDUCTOR
SLC	1 PAIR #18 AWG
120 VAC	1 PAIR + GROUND #12 AWG
NAC	1 PAIR #14 AWG

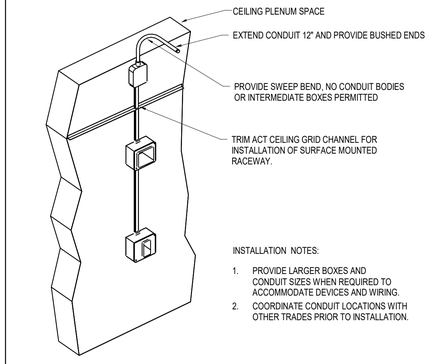
C3 FIRE ALARM CABLE LEGEND

SCALE: NOT TO SCALE



B2 EXPOSED STEEL CEILING MOUNTED DEVICE DETAIL

SCALE: NOT TO SCALE

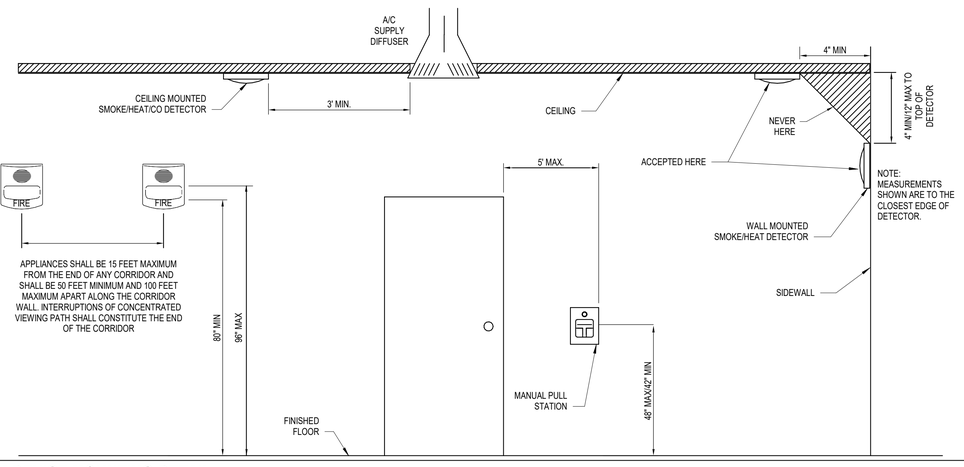


INSTALLATION NOTES:

1. PROVIDE LARGER BOXES AND CONDUIT SIZES WHEN REQUIRED TO ACCOMMODATE DEVICES AND WIRING.
2. COORDINATE CONDUIT LOCATIONS WITH OTHER TRADES PRIOR TO INSTALLATION.

B3 SURFACE MOUNTED FIRE ALARM DEVICE RACEWAY

SCALE: NO SCALE



A1 FIRE ALARM DEVICE MOUNTING DETAIL

SCALE: NOT TO SCALE

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL WITH CELLULAR COMMUNICATOR
MM FS	MONITOR MODULE FOR FLOW SWITCH
MM TS	MONITOR MODULE FOR TAMPER SWITCH
MM PS	MONITOR MODULE FOR PRESSURE SWITCH
XXX	FIRE ALARM HORN/STROBE (15 CANDELA UNLESS NOTED OTHERWISE)
	FIRE ALARM STROBE (15 CANDELA UNLESS NOTED OTHERWISE)
B	ELECTRIC WATER FLOW ALARM BELL
F	FIRE ALARM MANUAL PULL STATION
?	SMOKE DETECTOR
C	CEILING MOUNTED DEVICE
WP	WEATHERPROOF DEVICE

A3 FIRE ALARM SYMBOLS

SCALE: NOT TO SCALE

SCOPE OF WORK:

THE SCOPE OF WORK SHALL INCLUDE THE FOLLOWING:

1. THE LAYOUT, INSTALLATION, AND TESTING OF NEW FIRE ALARM SYSTEM THROUGHOUT THE NEW BUILDING.
2. FURNISH, WIRE, INSTALL, PROGRAM, AND TEST NEW DEVICES, WIRING, AND RACEWAYS.
3. ACCEPTANCE TESTING OF SYSTEM PER NFPA 72.
4. SUBMISSION OF DOCUMENTATION AS REQUIRED.

APPLICABLE CODES:

1. 2020 BUILDING CODE OF NEW YORK STATE
2. 2020 FIRE CODE OF NEW YORK STATE
3. NFPA 72 - 2016, NATIONAL FIRE ALARM AND SIGNALING CODE
4. NFPA 70 - 2017, NATIONAL ELECTRIC CODE

DESIGN CRITERIA:

1. THE DESIGN DOCUMENTS PROVIDED HEREIN IDENTIFY THE MINIMUM SYSTEM REQUIREMENTS, IN ACCORDANCE WITH THE ABOVE REFERENCED CODES AND REGULATIONS.
2. INSTALLATION PERSONNEL SHALL BE SUPERVISED BY PERSONS WHO ARE QUALIFIED AND EXPERIENCED IN THE INSTALLATION OF, INSPECTION, AND TESTING OF FIRE ALARM SYSTEMS. EXAMPLES OF QUALIFIED PERSONNEL SHALL INCLUDE BUT NOT BE LIMITED TO:
   A. FACTORY TRAINED AND CERTIFIED PERSONNEL
   B. NICET LEVEL III OR HIGHER CERTIFIED PERSONNEL
   C. PERSONNEL LICENSED OR CERTIFIED BY THE STATE OR LOCAL AUTHORITY, PER NFPA 72
3. THE FIRE ALARM SYSTEM SHALL BE FULLY ADDRESSABLE, PROVIDE GENERAL EVACUATION SIGNAL FOR THE BUILDING, AND REPORT TO AN APPROVED CENTRAL STATION IN ACCORDANCE WITH NFPA 72.
4. THE FIRE ALARM SYSTEM WIRING SUPERVISION SHALL BE IN ACCORDANCE WITH NFPA 72.
   A. SIGNALING LINE CIRCUITS: CLASS B
   B. NOTIFICATION APPLIANCE CIRCUITS: CLASS B
5. THE FIRE ALARM SYSTEM SHALL FUNCTION IN ACCORDANCE WITH THE SEQUENCE OF OPERATIONS MATRIX AND NFPA 72.
6. ALL FIRE ALARM CIRCUITS ENTERING OR LEAVING BUILDINGS SHALL BE PROVIDED WITH APPROVED SURGE PROTECTION DEVICE(S). ALL CONDUCTORS UNDERGROUND SHALL BE RATED FOR WET LOCATIONS. ALL DEVICES AND EQUIPMENT INSTALLED OUTSIDE SHALL BE WEATHERPROOF AND LISTED FOR OUTDOOR USE.
7. ALL CONDUCTORS IN EXPOSED AREAS OR CONCEALED IN WALLS SHALL BE INSTALLED IN RED EMT CONDUIT. CONDUIT HANGER AND MATERIAL, SPACING, AND METHOD OF ATTACHMENT SHALL BE PER NFPA 70, NFPA 72, AND MANUFACTURER'S RECOMMENDATIONS. MINIMUM BURIAL COVER DEPTH SHALL BE NOT LESS THAN 24" WHERE UNDER VEHICLE TRAFFIC AND 6" IN AREAS NOT EXPOSED TO VEHICLE TRAFFIC PER NFPA 70.
8. NOTIFICATION APPLIANCE CIRCUITS SHALL BE 14 GAUGE OR LARGER 2-CONDUCTOR THHN CABLE. FIRE ALARM CONTRACTOR SHALL PERFORM AND SUBMIT BATTERY BACKUP AND VOLTAGE DROP CALCULATIONS TO ENSURE VOLTAGE AT FINAL DEVICE IS ACCEPTABLE PER THE FIRE ALARM MANUFACTURER AND SUFFICIENT STANDBY POWER IS AVAILABLE FOR 24 HOURS OF STANDBY OPERATION FOLLOWED BY 15 MINUTES OF ALARM.
9. SIGNALING LINE CIRCUITS SHALL BE 18 GAUGE OR LARGER 2-CONDUCTOR FPLR CABLE. FIRE ALARM CONTRACTOR SHALL DETERMINE CABLE BASED ON FIRE ALARM MANUFACTURER REQUIREMENTS AND CABLE LENGTH LIMITATIONS.
10. USE SUITABLE CABLE FITTINGS AND CONNECTORS WHERE CABLE ENTERS/EXITS ALL JUNCTION AND DEVICE BACK BOXES. LEAVE 18" EXCESS CABLE AT EACH TERMINATION AT A DEVICE AND OTHER SYSTEM OUTLET. LEAVE 6' EXCESS CABLE AT EACH TERMINATION AT SYSTEM CONTROL PANELS OR POWER SUPPLIES.
11. SPLICE CABLE ONLY IN ACCESSIBLE JUNCTION BOXES OR AT TERMINAL BLOCK UNITS. THERE SHALL BE NO T-TAPPING OF SLC CIRCUITS BETWEEN TERMINAL CABINETS AND THE LAST INITIATING DEVICE ON THE SLC CIRCUIT. THE ONLY T-TAPPING IN THE SYSTEM SHALL TAKE PLACE AT THE TERMINAL CABINETS. MAKE CABLE SHIELDS CONTINUOUS AT ALL SPLICES AND CONNECT CIRCUIT SHIELD TO EQUIPMENT GROUND ONLY AT SOURCE END.
12. SPRINKLER VALVE TAMPER SWITCHES AND WATER FLOW SWITCHES SHALL BE PROVIDED BY FIRE SPRINKLER CONTRACTOR. FIRE ALARM CONTRACTOR SHALL PROVIDE, INSTALL, WIRE, AND PROGRAM MONITOR MODULES. MONITOR MODULES SHALL BE MOUNTED NOT MORE THAN 3' FROM DEVICE/EQUIPMENT BEING MONITORED. FIRE ALARM CONTRACTOR SHALL SUPERVISE ALL VALVES AND OTHER SUPERVISORY POINTS INDICATING OFF-NORMAL CONDITION OF OR NEED FOR ACTION FOR THE FIRE PROTECTION SYSTEMS WITHIN THE BUILDINGS.
13. COORDINATE INSTALLATION WITH ALL OTHER TRADES. ALL SMOKE AND DETECTORS SHALL BE AT LEAST 12" FROM ANY PART OF A LIGHT FIXTURE AND A MINIMUM OF 3' FROM AIR DIFFUSERS/RETURN GRILLES OR AIR HANDLING SYSTEMS. SMOKE DETECTORS SHALL NOT BE INSTALLED UNTIL CONSTRUCTION IS ESSENTIALLY COMPLETE AND THE BUILDING HAS BEEN THOROUGHLY CLEANED. MERELY PROVIDING DETECTORS WITH FACTORY DUST COVERS AND INSTALLING EARLY IN CONSTRUCTION OF THE PROJECT IS NOT ACCEPTABLE. IF DETECTORS ARE INSTALLED PRIOR TO THE FULL FINAL CLEANING OF THE BUILDING, THE FIRE ALARM CONTRACTOR SHALL REMOVE EVERY DETECTOR IN THE BUILDING AND HAVE THEM THOROUGHLY CLEANED AND RECERTIFIED BY A FACTORY CERTIFIED TECHNICIAN.
14. FIRE ALARM SYSTEM SHALL INCLUDE FULL IDENTIFICATION. ALL SYSTEM CONDUIT, JUNCTION BOXES, TERMINAL BOXES, PULL BOXES, AND COVERS SHALL BE RED IN CONCEALED SPACES AND SHALL BE IDENTIFIED WITH ENGRAVED LABELS BY THE ZONE AND CIRCUIT IT CONTAINS. ALL LB'S AND SIMILAR UNITS SHALL BE THE COLOR RED IN CONCEALED SPACES. ALL CONDUIT, BOXES, AND COVERS LOCATED IN EXPOSED AREAS SHALL BE THE COLOR RED AND PROVIDED WITH ENGRAVED LABELS. LABEL ALL FIRE ALARM DEVICES WITH ADDRESSES. ONLY PRINTED STICK ON TYPE LABELS SHALL BE USED. LABELING DEVICE WITH MARKERS IS NOT ACCEPTABLE. THE PRINTED STICK ON TYPE LABELS MUST BE VISIBLE UPON APPROACH TO THE DEVICE AND BE MADE OF SUCH A MATERIAL TO RESIST FADING OR EASY REMOVAL.
15. ALL PENETRATIONS THROUGH FIRE/SMOKE RATED ASSEMBLIES SHALL BE FIRE STOPPED. FIRE STOPPING SHALL BE OF U.L. LISTED ASSEMBLY.
16. CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE ENGINEER OF RECORD (THROUGH THE APPROPRIATE PARTIES) COMPLETE SHOP DRAWINGS OF THE FIRE ALARM SYSTEMS, MATERIAL DATA, AND CALCULATIONS AT THE SAME TIME. INCOMPLETE SUBMITTALS WILL BE RETURNED WITHOUT REVIEW. SHOP DRAWINGS SHALL INCLUDE AT MINIMUM: WORKING PLANS WITH ALL APPLIANCES, DEVICES, INTERCONNECTIONS, AND POINT TO POINT WIRING SHOWN, BATTERY CALCULATIONS, VOLTAGE DROP CALCULATIONS, AND ALL REQUIRED MATERIAL DATA. SHOP DRAWINGS SHALL INDICATE ALL ITEMS IDENTIFIED IN NFPA 72 AND THE FOLLOWING: ADDRESSABLE APPLIANCE ADDRESS, CONDUCTOR SIZE, NON-TYPICAL RISER DIAGRAM, AND NAME AND MAKE OF EACH DEVICE/APPLIANCE.

A4 FIRE ALARM GENERAL NOTES

SCALE: NOT TO SCALE

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF M. OSTROFF, P.E.
CHECKED BY R. GLEASON, P.E.
MADE BY V. ZAWACKI, P.E.

REGISTRATION EXPIRES: 05/26

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REVISION NUMBER	DATE	MADE BY	APP'D BY	REVISION

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☐ AS BUILT – NO CHANGES

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WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

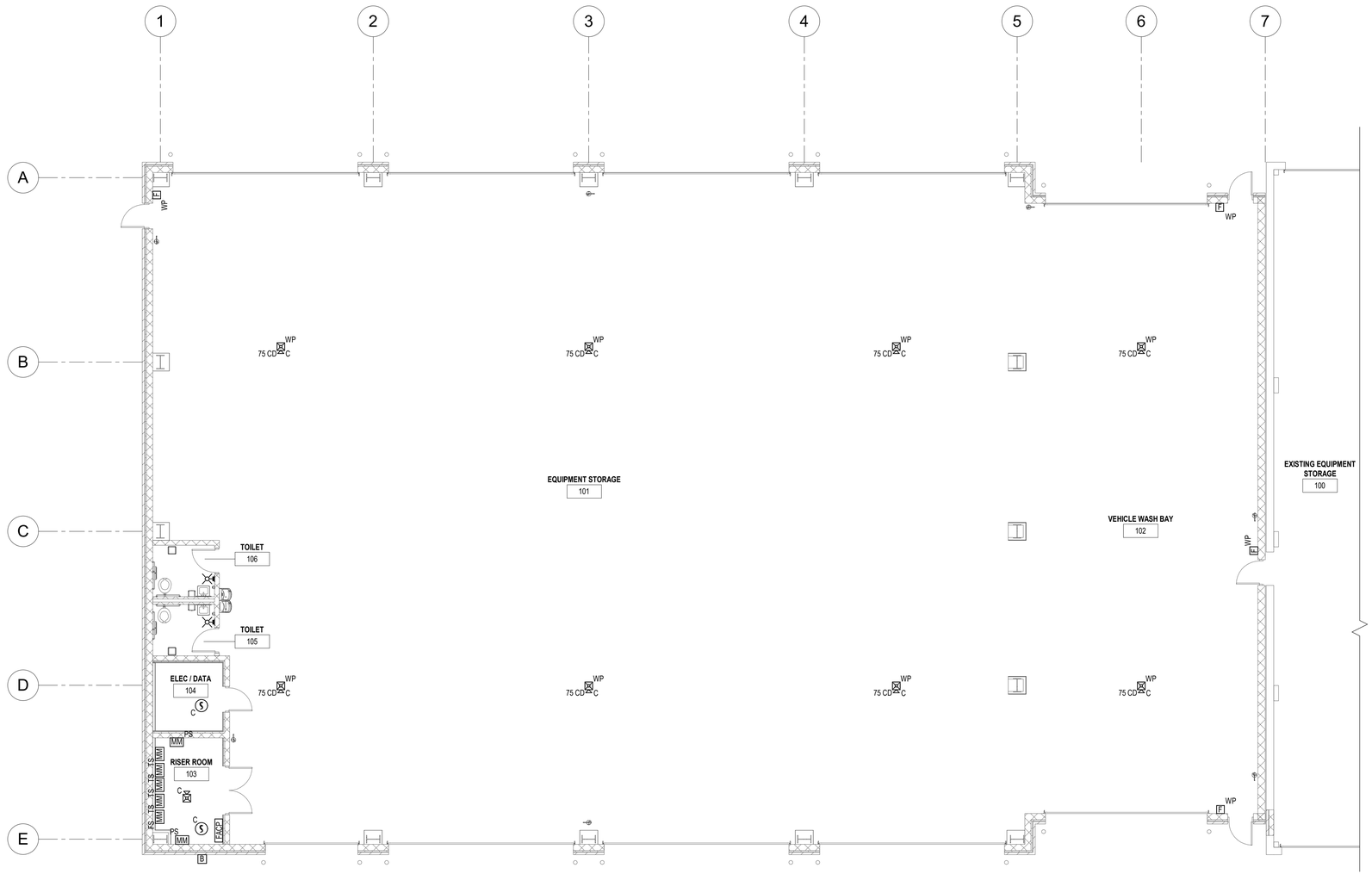
NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
DETAILS, NOTES, & SYMBOLS

CONTRACT NUMBER	SHEET NUMBER
23-528	FA-001

SHEET NO. 71 OF 72

SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-FA-137	0



PLAN NORTH

A1 **FIRE ALARM FLOOR PLAN**
SCALE: 1/8" = 1'-0"

0 4" 8" 16"

CERTIFICATE OF AUTHORIZATION #0021365

IN CHARGE OF M. OSTROFF, P.E.
CHECKED BY R. GLEASON, P.E.
MADE BY V. ZAWACKI, P.E.

STATE OF NEW YORK · ROBERT JOSEPH GLEASON III · 104306 · LICENSED PROFESSIONAL ENGINEER

REGISTRATION EXPIRES: 05/26

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WESTCHESTER COUNTY, NEW YORK
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DIVISION OF ENGINEERING

NEW SNOW EQUIPMENT STORAGE BUILDING
WESTCHESTER COUNTY AIRPORT
TOWNS OF HARRISON AND NORTH CASTLE AND VILLAGE OF RYE BROOK
FIRE ALARM FIRST FLOOR PLAN

CONTRACT NUMBER	SHEET NUMBER
23-528	FA-101

SHEET NO. 72 OF 72
SCALE: AS SHOWN
DATE: OCTOBER 10, 2025

DPW FILE NO.	REV. NO.
48-16-FA-138	0