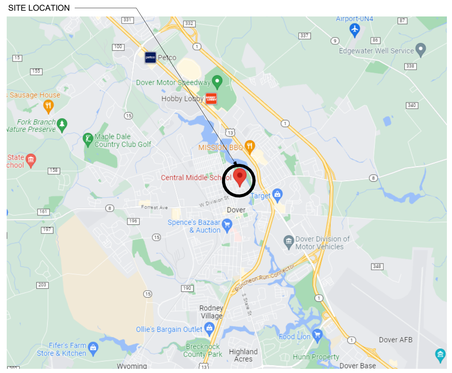
SITE LOCATION



CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ABBREVIATIONS

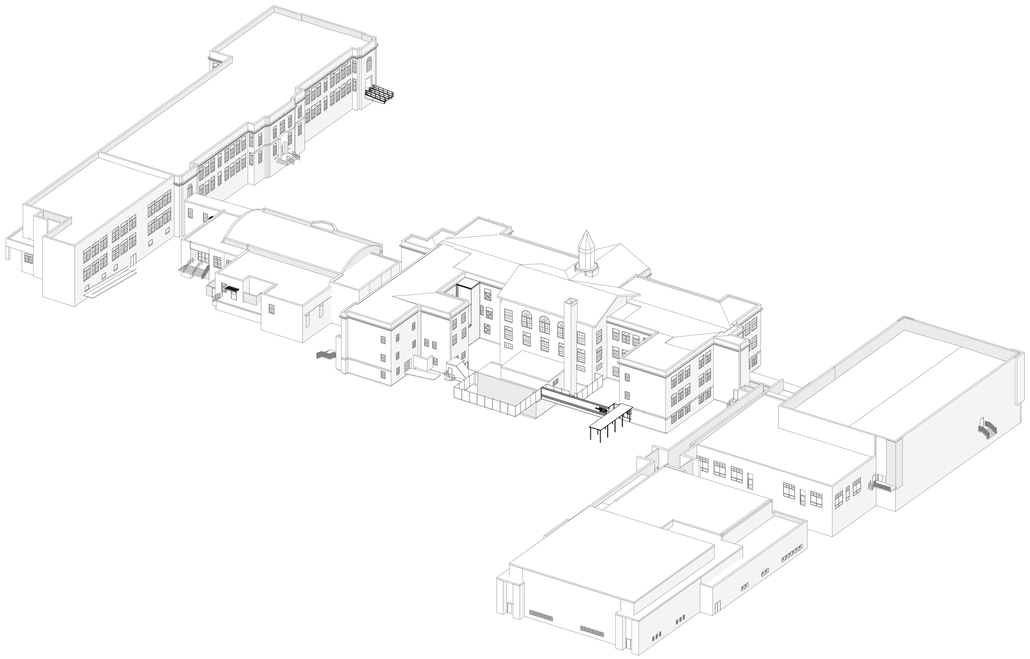
ACT	ACOUSTIC CEILING TILE	F.E.C.	FIRE EXTINGUISHER CABINET	PS., P.S. PT., PTD. PROJECTOR SCREEN PAINTED
AC.	ACOUSTIC	FIN.F.,F.F.	FINISHED FLOOR	P.R.V. POWER ROOF VENTILATOR
AL., ALUM.	ALUMINUM	F.OF S.	FACE OF STUD	ROOF DRAIN
A.P.	ACCESS PANEL	FRP	FIREGLASS REINFORCED PLASTIC	REC. RECESSED
A.R.GWB	ABUSE RESISSTANT GWB	F.R.T.	FIRE RETARDANT TREATED	RECPT. RECEPTIONIST REFRIGERATOR
A.F.F.	ABOVE FINISHED FLOOR	FTG.	FOOTING	REF. REFRIGERATOR REQUIRED REQD.
BD.	BOARD	FURR.	FURRING	R.L. RAIN LEADER
BLDG.	BUILDING	F.V.	FIELD VERIFY	RM. ROOM
B.M.	BENCH MARK	FVC	FIRE VALVE CABINET	R.O. ROUGH OPENING
BRG.	BEARING	GA.	GAUGE	RUB. RUBBER (WALL BASE)
CAB.	CABINET	G.B.	GRAB BAR	S.D. SOAP DISPENSER
CB, C.B.	CHALKBOARD	G.W.B, GWB	GYPSUM WALL BOARD	SECT. SECTION
C.T.	CERAMIC TILE	GYP.BD.	GYPSUM BOARD	S.G.F.T. STRUCT. GLAZED FACING TILE
C.H.	CEILING HEIGHT	H., HT.	HEIGHT	S.H. SHOWER HEAD
CJ, C.J.	CONTROL JOINT	H.C.	HANDICAPPED	SHT. SHEET
C.L.	CENTER LINE	HDW.	HARDWARE	SIM. SIMILAR
CLG.	CEILING	H.M.	HOLLOW METAL	S.M. SURFACE MOUNTED
CLO., C.	CLOSET	HR.	HOUR	S.P. STAND PIPE
CLR.	CLEAR	H.P.	HIGH POINT	S.S. SERVICE SINK
C.M.U., CMU	CONCRETE MASONRY UNIT	I.D.	INSIDE DIAMETER	S/S STAINLESS STEEL
COL.	COLUMN	INSUL.	INSULATION	STL. STEEL
CONC.	CONCRETE	J., JAN.	JANITOR	STOR. STORAGE
CONST.	CONSTRUCTION	JST.	JOIST	STRUCT. STRUCTURAL
CONT.	CONTINUOUS	JOINT	JOINT	SUSP. SUSPENDED
CORR.	CORRIDOR	LAM.	LAMINATE	SYN FL. SYNTHETIC FLOOR
CPT.	CARPET	LAV.	LOW POINT	TB, T.B. TACKBOARD
C.R.	COLD ROLLED	L.P.	LAVATORY SINK	TEL. TELEPHONE
D.A.	DISTURBED AREA	M.	MEN	T.& G. TONGUE AND GROOVE
DET.	DETAIL	MACH.	MACHINE	THRESH. THRESHOLD
D.F.	DRINKING FOUNTAIN	MAINT.	MAINTENANCE	T.O.B. TOP OF BEARING
DBL	DOUBLE	MAS.	MASONRY	T.O.M. TOP OF MASONRY PARAPET
DIA.	DIAMETER	MAT.	MATERIALS	T.P. TOILET PAPER HOLDER
DIM.	DIMENSION	MAX.	MAXIMUM	T.S. TACK STRIP.
DISP.	DISPENSER	MB, M.B.	MARKER BOARD	TEACHING STATION
DR.	DOOR	M.C.	MEDICINE CABINET	T.W. TEACHING WALL
DW	DRYWALL	MECH.	MECHANICAL	TYP. TYPICAL
DS	DOWNSPOUT	MET., MTL.	METAL	U.L. UNDERWRITERS
DWG.	DRAWING	MFR.	MANUFACTURER	LABORATORIES
EA.	EACH	MIN.	MINIMUM	U.O.N. UNLESS OTHERWISE NOTED
E.J., EJ	EXPANSION JOINT	M.O.	MASONRY OPENING	U.S.G. U.S. GYPSUM COMPANY
ELEC.	ELECTRICAL)	M.S.,	METAL SHELVING	V.A.T. VINYL ASBESTOS TILE
EP	EPOXY PAINT	MTD	MOUNTED	V.C.T. VINYL COMPOSITION TILE
EQ.	EQUAL	N.C., NONCOM.	NON COMBUSTIBLE	VERT. VERTICAL
EQUIP. EQPT	EQUIPMENT	N.I.C.	NOT IN CONTRACT	VEST., V. VESTIBULE
E.W.C.	ELECTRIC WATER COOLER	NO., #	NUMBER	V.R.G. VINYL REDUCER STRIP
EXG.	EXISTING	N.T.S.	NOT TO SCALE	V.T.R. VENT THROUGH ROOF
EXP.	EXPANSION	O.C.	ON CENTER	W. WOMEN
EXT.	EXTERIOR	O.D.	OUTSIDE DIAMETER	W/ WITH
F.C.	FIRE CODE	OFF.	OFFICE	WAIN. WAINSCOT
F.C.U.	FAN COIL UNIT	O.H.	OPPOSITE HAND	WARD. WARDROBE
F.D.	FLOOR DRAIN	OPNG.	OPENING	W.C. WATER CLOSET
FON.	FOUNDATION	PART.	PARTITION	WD. WOOD
F.E.	FIRE EXTINGUISHER	PL.	PLATE	WDR. WARDROBE
		PLAM., P-LAM	PLASTIC LAMINATE	WL. WALL
		PLY., PWD	PLYWOOD	W.M. WALL-MOUNTED
		PNL.	PANEL	W.W.W. WELDED WIRE MESH

SYMBOLS OF MATERIALS

- ALL METALS-SMALL SCALE
- ACOUSTIC C.M.U. SMALL SCALE
- ACOUSTIC C.M.U. LARGE SCALE
- BATT INSULATION
- BRICK
- CAST STONE
- CONCRETE
- CONCRETE MASONRY UNITS
- EARTH
- GLASS-LARGE SCALE
- GLAZED C.M.U.
- PARTICLE BOARD
- RIGID INSULATION
- SHINGLES
- SOLID CONCRETE MASONRY UNITS
- STEEL-LARGE SCALE
- STUD PARTITION
- WOOD-FINISH
- WOOD BLOCKING
- METAL PANEL

DRAWING KEYS

- 0 — STRUCTURAL GRID LINES
- 1 A101 SIM — SECTION
- 1 A101 SIM — ELEVATION
- 1 A101 SIM — DETAILS IN PLAN, SECTION
- 1i — WALL TYPE, SEE A501
- NEW WALL
- EXISTING WALL TO REMAIN
- Name 101 — ROOM NAME AND NUMBER
- EXISTING WALL TO BE REMOVED
- SF — WINDOW TAG
- 101 — DOOR TAG



ISSUED FOR BIDDING

09.13.2024

DESIGN TEAM

BECKER MORGAN GROUP	ARCHITECTS
PILOTTOWN ENGINEERING	STRUCTURAL ENGINEERS
RICHARD Y. JOHNSON AND SONS	CONSTRUCTION MANAGER
CMTA, INC.	MECHANICAL, PLUMBING AND ELECTRICAL ENGINEERS

DRAWING LIST

SHEET No.	SHEET TITLE
GENERAL	
G001-E	COVER SHEET
G101-E	LIFE SAFETY CODE STUDY
G102-E	OVERALL FIRST FLOOR LIFE SAFETY PLAN
G103-E	OVERALL SECOND AND THIRD FLOOR LIFE SAFETY PLAN
CIVIL	
C-201	SITE PLAN (FRONT ENTRY)
STRUCTURAL	
S001-E	COVER SHEET
S002-E	PROJECT SCHEDULES & GENERAL NOTES
S100-E	FIRST FLOOR OVERALL KEY PLAN
S101B-E	FOUNDATION PLAN - AREA B
S102B-E	SECOND FLOOR FRAMING PLAN - AREA B
S103B-E	THIRD FLOOR FRAMING PLAN - AREA B
S104B-E	ROOF FRAMING PLAN - AREA B
S201-E	PARTIAL PLANS & DETAILS
S501-E	TYPICAL DETAILS
S502-E	SECTIONS
S503-E	SECTIONS
ARCHITECTURAL	
A001-E	CONSTRUCTION TYPES - WALL TYPES, SLABS, FLOORS, ROOFS, AND CEILINGS
A002-E	CONSTRUCTION TYPES - SIGNAGE, RAILINGS, AND LADDERS
AD101B-E	FIRST FLOOR DEMOLITION PLAN - AREA B
AD101D-E	FIRST FLOOR DEMOLITION PLAN - AREA D/E
AD102B-E	SECOND FLOOR DEMOLITION PLAN - AREA B
AD102D-E	SECOND FLOOR DEMOLITION PLAN - AREA D/E
AD103-E	THIRD FLOOR DEMOLITION PLAN - AREA B
AD104-E	FIRST FLOOR DEMOLITION REFLECTED CEILING PLAN
AD105-E	SECOND AND THIRD FLOOR DEMOLITION REFLECTED CEILING PLANS
A101-E	OVERALL FIRST FLOOR PLAN
A101B-E	FIRST FLOOR PLAN - AREA B
A101D-E	FIRST FLOOR PLAN - AREA D/E
A102-E	OVERALL SECOND AND THIRD FLOOR PLAN
A102B-E	SECOND FLOOR PLAN - AREA B
A102D-E	SECOND FLOOR PLAN - AREA D/E
A103-E	THIRD FLOOR PLAN - AREA B
A104-E	OVERALL FIRST FLOOR REFLECTED CEILING PLAN
A105-E	OVERALL SECOND AND THIRD FLOOR REFLECTED CEILING PLANS
A106-E	FIRST FLOOR FINISH PLAN - AREAS B, D/E (BASE BID)
A107-E	SECOND AND THIRD FLOOR FINISH PLANS - AREAS B, D/E (BASE BID)
A108-E	OVERALL FIRST FLOOR FINISH PLAN (ALTERNATE)
A109-E	OVERALL SECOND AND THIRD FLOOR FINISH PLANS (ALTERNATE)
A110-E	ARCHITECTURAL SITE PLAN
A111-E	ARCHITECTURAL SITE DETAILS
A112-E	ARCHITECTURAL SITE DETAILS
A201-E	EXTERIOR ELEVATIONS
A301-E	BUILDING SECTIONS
A401-E	ELEVATOR ENLARGED PLANS AND SECTIONS
A402-E	ELEVATOR ENLARGED SECTIONS AND DETAILS
A403-E	ENLARGED TOILET PLANS
A404-E	ENLARGED NEW WORK REFLECTED CEILING PLANS
A405-E	ENLARGED STAIR PLANS AND SECTIONS - MONUMENTAL STAIR
A406-E	ENLARGED STAIR PLANS
A407-E	ENLARGED STAIR SECTIONS
A501-E	PLAN DETAILS
A520-E	MANUFACTURER DETAILS - TPO ROOFING / WATERPROOFING
A601-E	DOOR TYPES AND SCHEDULE
A602-E	INTERIOR FLOORING TRANSITION DETAILS
A701-E	INTERIOR ELEVATIONS

SHEET No.	SHEET TITLE
INTERIORS	
I101-E	OVERALL FIRST FLOOR FURNITURE PLAN
I102-E	OVERALL SECOND AND THIRD FLOOR FURNITURE PLAN
PLUMBING	
P-001	PLUMBING LEGEND
PD-100B	UNDER SLAB PLUMBING DEMOLITION PLAN - AREA B
PD-101B	FIRST FLOOR PLUMBING DEMOLITION PLAN - AREA B
PD-101D/E	FIRST FLOOR PLUMBING DEMOLITION PLAN - AREA D/E
PD-102B	SECOND FLOOR PLUMBING DEMOLITION PLAN - AREA B
PD-102D/E	SECOND FLOOR PLUMBING DEMOLITION PLAN - AREA D/E
PD-103B	THIRD FLOOR PLUMBING DEMOLITION PLAN - AREA B
P-100A	BASEMENT PLUMBING PLAN - AREA A
P-100B	UNDER SLAB PLUMBING PLAN - AREA B
P-100D/E	CRAWL SPACE PLUMBING PLAN - AREA D/E
P-101A	FIRST FLOOR PLUMBING PLAN - AREA A
P-101B	FIRST FLOOR PLUMBING PLAN - AREA B
P-101D/E	FIRST FLOOR PLUMBING PLAN - AREA D/E
P-102B	SECOND FLOOR PLUMBING PLAN - AREA B
P-102D/E	SECOND FLOOR PLUMBING PLAN - AREA D/E
P-103B	THIRD FLOOR PLUMBING PLAN - AREA B
P-401	AREA B PLUMBING ENLARGED PLANS
P-402	AREA D/E PLUMBING ENLARGED PLANS
P-501	PLUMBING DETAILS AND SCHEDULES
P-601	PLUMBING DOMESTIC RISER DIAGRAMS
P-602	PLUMBING SANITARY RISER DIAGRAMS
MECHANICAL	
M-001	MECHANICAL LEGEND
M-002	EXISTING ROOFTOP MECHANICAL EQUIPMENT
MD-101B	FIRST FLOOR MECHANICAL DEMOLITION PLAN - AREA B
MD-101D/E	FIRST FLOOR MECHANICAL DEMOLITION PLAN - AREA D/E
MD-102B	SECOND FLOOR MECHANICAL DEMOLITION PLAN - AREA B
MD-102D/E	SECOND FLOOR MECHANICAL DEMOLITION PLAN - AREA D/E
MD-103B	THIRD FLOOR MECHANICAL DEMOLITION PLAN - AREA B
M-101A	FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA A
M-101B	FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA B
M-101D/E	FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA D/E
M-102B	SECOND FLOOR MECHANICAL NEW WORK PLAN - AREA B
M-102D/E	SECOND FLOOR MECHANICAL NEW WORK PLAN - AREA D/E
M-103B	THIRD FLOOR MECHANICAL NEW WORK PLAN - AREA B
M-501	MECHANICAL DETAILS AND SCHEDULES
ELECTRICAL	
E-001	ELECTRICAL LEGEND
ED-101B	FIRST FLOOR ELECTRICAL DEMOLITION PLAN - AREA B
ED-101D/E	FIRST FLOOR ELECTRICAL DEMOLITION PLAN - AREA D/E
ED-102B	SECOND FLOOR ELECTRICAL DEMOLITION PLAN - AREA B
ED-102D/E	SECOND FLOOR ELECTRICAL DEMOLITION PLAN - AREA D/E
ED-103B	THIRD FLOOR ELECTRICAL DEMOLITION PLAN - AREA B
E-101B	FIRST FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B
E-101D/E	FIRST FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA D/E
E-102B	SECOND FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B
E-102D/E	SECOND FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA D/E
E-103B	THIRD FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B
E-201B	FIRST FLOOR ELECTRICAL LIGHTING PLAN - AREA B
E-201D/E	FIRST FLOOR ELECTRICAL LIGHTING PLAN - AREA D/E
E-202B	SECOND FLOOR ELECTRICAL LIGHTING PLAN - AREA B
E-202D/E	SECOND FLOOR ELECTRICAL LIGHTING PLAN - AREA D/E
E-203B	THIRD FLOOR ELECTRICAL LIGHTING PLAN - AREA B
E-501	ELECTRICAL DETAILS
E-601	ELECTRICAL RISER DIAGRAM
E-701	ELECTRICAL PANEL SCHEDULES
E-702	ELECTRICAL PANEL SCHEDULES

GENERAL NOTES:

1. **CODES**: ALL WORK ON THIS PROJECT SHALL BE DONE IN ACCORDANCE WITH ALL APPLICABLE BUILDING CODES, ORDINANCES, REGULATIONS, STANDARDS, AND ANY ADDITIONAL REQUIREMENT STATED IN ANY LAW, ORDINANCE, OR REGULATION PERTAINING TO CONSTRUCTION WITHIN THE LIMITS OF THE AUTHORITY HAVING JURISDICTION OVER THE PROPOSED WORK (INCLUDING BUT NOT LIMITED TO: FIRE, ACCESSIBILITY, ZONING, WATER, WASTEWATER, ENVIRONMENTAL, STRUCTURAL, ARCHITECTURAL, HEALTH, FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL, AND ENERGY CONSERVATION). CONFORMITY TO ALL CODES APPLICABLE TO THIS PROJECT SHALL BE THE CONTRACTORS RESPONSIBILITY.
2. **EGRESS**: ALL MEANS OF EGRESS SHALL BE CONTROLLED BY THE AUTHORITY HAVING JURISDICTION, INCLUDING EXITS, EXIT ACCESS, EXIT DISCHARGE, OTHER EGRESS PATHS, OCCUPANTS LOADS, SPRINKLER PROTECTION, ETC..
3. **ACCESSIBILITY**: ALL BUILDING COMPONENTS, FIXTURES, ACCESSORIES, ETC. SHALL BE INSTALLED WITH MANEUVERING AND OPERATING CLEARANCES, MOUNTING HEIGHTS, ETC. IN ACCORDANCE WITH AMERICANS WITH DISABILITIES ACT STANDARDS, ICC/ANSI A117.1, AND STATE ACCESSIBILITY CODE.
4. **FIELD VERIFICATION**: THE CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS AND PROPOSED BUILDING DIMENSIONS PRIOR TO CONSTRUCTION, ANY VARIATIONS, DISCREPANCIES, OR FIELD ALTERATIONS TO THESE DESIGN DRAWINGS SHALL BE BROUGHT TO THE ARCHITECTS ATTENTION PRIOR TO CONSTRUCTION. IF CONTRACTOR COMMENCES CONSTRUCTION WITHOUT NOTIFYING ARCHITECT OF VARIATIONS, DISCREPENCIES, OR FIELD ALTERATIONS, THAT SHALL CONSTITUTE WAIVER TO ANY CLAIM BY CONTRACTOR FOR ADDITIONAL EXPENSES NECESSARY TO PERFORM WORK ASSOCIATED WITH THOSE CONDITIONS.
5. **SUBMITTALS**: CONTRACTOR SHALL SUBMIT ALL NECESSARY BUILDING COMPONENTS, SYSTEMS, EQUIPMENT, MATERIALS, FINISHES, ETC. FOR REVIEW BY ARCHITECT/OWNER PRIOR TO PROCUREMENT, FABRICATION, AND/OR INSTALLATION.
6. **INSTALLATION**: PROPER ASSEMBLY, INSTALLATION, AND OPERATION OF ALL MATERIALS, COMPONENTS, SYSTEMS, AND FINISHES IS THE CONTRACTOR'S RESPONSIBILITY AND SHALL BE IN ACCORDANCE WITH MANUFACTURES INSTRUCTIONS AND ALL APPLICABLE CODES.
7. **INCIDENTAL WORK**: ANY ITEMS NOT SPECIFICALLY SHOWN ON THE DRAWINGS, BUT WHICH ARE REASONABLY INCIDENTAL TO AND NECESSARY FOR THE SATISFACTORY COMPLETION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE CODES, ORDINANCES, REGULATIONS, AND STANDARDS, ARE INCLUDED WITHIN THE INTENT OF THESE DESIGN DRAWINGS.
8. **OWNER-PROVIDED WORK:** LOCATION OF ALL OWNER-PROVIDED FIXTURES, EQUIPMENT, ETC. SHALL BE COORDINATED TO ENSURE PROPER ALIGNMENT FOR INSTALLATION AND OPERATION, BLOCKING, ETC.
9. **SAFETY**: COMPONENTS FOR CONSTRUCTION SAFETY ARE NOT INDICATED IN THESE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE TO COMPLY WITH ALL RULES AND OTHER REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT (OSHA), AND APPLICABLE STATE AND LOCAL SAFETY REQUIREMENTS DURING ALL CONSTRUCTION ACTIVITIES.
10. **INSPECTIONS**: CONTRACTOR IS RESPONSIBLE FOR SCHEDULING ALL ON-SITE INSPECTIONS REQUIRED PRIOR TO OCCUPANCY APPROVAL.
11. **DIMENSIONS**: UNLESS OTHERWISE INDICATED: WALLS ARE TO FACE OF STUD FRAMING AND TO FACE OF MASONRY; WINDOWS AND DOORS ARE TO CENTERLINE OF OPENING IN STUD FRAMING AND TO FACE OF MASONRY OPENING IN MASONRY; PLUMBING FIXTURES ARE TO CENTERLINE OF FIXTURE.
12. **BLOCKING**: PROVIDE BLOCKING AS REQUIRED FOR INSTALLATION OF ALL PORTIONS OF THE WORK AND PER MANUFACTURER'S WRITTEN RECOMMENDATIONS, WHETHER OR NOT SPECIFICALLY INDICATED IN THESE DRAWINGS.
13. **METAL PROTECTION AT TREATED WOOD**: METAL CONNECTORS THAT COME IN CONTACT WITH TREATED LUMBER SHALL BE STAINLESS STEEL OR "ZMAX" CORROSION RESISTANT MATERIALS TO HELP PROTECT AGAINST ACCELERATED CORROSION. CONTRACTOR SHALL COORDINATE COMPATIBILITY OF ALL METALS USED WITH TREATMENT PRODUCT(S) MANUFACTURER(S)'S WRITTEN RECOMMENDATIONS.
14. **HURRICANE TIES**: CONTRCATOR SHALL PROVIDE HURRICANE TIES AND CONSTRUCTION CONNECTORS PER CODE AND AS REQUIRED BY AUTHORITY HAVING JURISDICTION.
15. **WINDOWS AND DOORS**: WINDOWS AND DOORS ARE INDICATED USING NOMINAL DIMENSIONS. MATERIALS AND INSTALLATION SHALL COMPLY WITH DESIGN PRESSURE (DP) RATINGS, WATER INFILTRATION RATING, IMPACT/SAFETY GLAZING, WIND REQUIREMENTS, EGRESS HARDWARE, U-FACTOR / R-VALUE, ETC.. ALL EXTERIOR UNITS SHALL HAVE CORROSION-RESISTANT HARDWARE.
16. **LIFE SAFETY COMPONENTS**: FINAL LOCATION OF FIRE EXTINGUISHERS, EMERGENCY LIGHTING, AND EXIT SIGNS TO BE AS DIRECTED BY LOCAL FIRE MARSHAL, AND ARE SUBJECT TO FINAL ON-SITE INSPECTION AND EVALUATION. CONTRACTOR SHALL MAKE REVISIONS AND/OR ADDITIONS IN ACCORDANCE WITH FIRE MARSHAL'S INSPECTION..
17. **FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL WORK**: ALL FIRE PROTECTION, PLUMBING, MECHANICAL, AND ELECTRICAL WORK SHALL BE PERFROMED BY QUALIFIED, LICENSED (SUB)CONTRACTORS, AND BE IN ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, STANDARDS, ETC.. ALL COMPONENTS SHALL BE INSTALLED ABOVE THE FLOOD ELEVATION AS REQUIRED BY FEMA, LOCAL A.H.J., AND ALL APPLICABLE CODES
18. **PIPE INSULATION**: CONTRACTOR SHALL INSULATE AND PROTECT PIPES AS REQUIRED BY CODE, AND AS REQURIED TO PROTECT PIPING EXPOSED TO EXTERIOR CONDITIONS.
19. **GRADING**: CONTRACTOR SHALL COORDINATE SITE GRADING TO COMPLY WITH CODES AND ORDINANCES, AND TO MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDING.

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DATE OF SIGNATURE: 08.02.2024
DATE OF REGISTRATION EXPIRATION: 1.31.2026

THE PROFESSIONAL SERVICES OF THE ARCHITECT ARE UNDERTAKEN FOR AND ARE PERFORMED IN THE INTEREST OF: 1) CAPITAL SCHOOL DISTRICT

NO CONTRACTURAL OBLIGATION IS ASSUMED BY THE ARCHITECT FOR THE BENEFIT OF ANY OTHER PERSON INVOLVED IN THE PROJECT.

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

COVER SHEET

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

G001-E

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9/17/2024 9:58:41 AM Autodesk Docs://Central Middle School Renovations/2021101.00.rvt

CODE STUDY DATA

(WHEN ONLY ONE SOURCE IS NOTED, THE DATA LISTED REPRESENTS THE MOST STRINGENT REQUIREMENTS WHEN COMPARING THE TWO CODES)

PROJECT	INFORMATION
PROJECT NAME	CENTRAL ELEMENTARY SCHOOL
PROJECT LOCATION	211 DELAWARE AVE, DOVER, DE 19901
PROJECT DESCRIPTION	CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATIONS
PROPERTY OWNER	CAPITAL SCHOOL DISTRICT

APPLICABLE CODES

2009 INTERNATIONAL BUILDING CODE (IBC)
2021 NFPA 101 LIFE SAFETY CODE (NFPA)
2009 ICC/ANSI A117.1 ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES
2010 ADA STANDARD FOR ACCESSIBLE DESIGN
STATE OF DELAWARE ARCHITECTURAL ACCESSIBILTIY STANDARDS
2021 DELAWARE STATE FIRE PREVENTION REGULATIONS
2018 INTERNATIONAL ENERGY CONSERVATION CODE
2009 INTERNATIONAL EXISTING BUILDING CODE (IEBC)

BUILDING USE AND CONSTRUCTION CLASSIFICATION

BUILDING USE AND CONSTRUCTION CLASSIFICATION	LIFE SAFETY CODE REFERENCE	IBC REFERENCE
USE GROUPS (MIXED - SEPARATED)	EXISTING EDUCATIONAL (15.1.1.1), ASSEMBLY (13.1.1)	E - EDUCATIONAL (305.1), A-1, A-2, A-3 (303.1)
CONSTRUCTION TYPE	CONSTRUCTION TYPE II-000 (TABLE A-8.2.1.2)	II-B (TABLE 503 AND 601)
	FULLY SPRINKLERED	FULLY SPRINKLERED
ALLOWABLE BUILDING HEIGHT AND # STORIES ABOVE GRADE PLANE		55 FEET, 2 STORIES
ACTUAL BUILDING HEIGHT AND # STORIES ABOVE GRADE PLANE		55 FEET, 3 STORIES
ALLOWABLE BUILDING AREA		14,500 SF (TABLE 506.2 W/ FRONTAGE INCREASE PER 506.3, APPLICABLE FRONTAGE INCREASES NOT INCLUDED)
ACTUAL BUILDING AREA (PER IBC 2009)		14,386 GSF BASEMENT, 96,086 GSF FIRST FLOOR PLUS 191 SF ADDITION, 41,028 GSF SECOND FLOOR, 20,058 THIRD FLOOR (171,749 GSF ALL FLOORS)

BUILDING COMPONENT FIRE RATING

TABULAR FIRE RATING REQUIREMENTS OF STRUCTURAL ELEMENTS AND EGRESS COMPONENTS	NFPA 101 LIFE SAFETY CODE / TYPE II-000 CONSTRUCTION			IBC / TYPE II-B CONSTRUCTION		
	REQUIRED RATING			REQUIRED RATING		
	WALL (HRS)	OPNG (HRS) - D (door) / W (window)	REFERENCE	WALL (HRS)	OPNG (HRS)	REFERENCE
PRIMARY STRUCTURAL FRAME						
PRIMARY STRUCTURAL FRAME - Supporting Roof 20' A.F.F.	0	0	NFPA 5000 - 7.2.3.2.8	0	0	TABLE 601
. - supporting more than one floor	0	0	TABLE A. 8.2.1.2	0	0	TABLE 601
. - support one floor only	0	0	TABLE A. 8.2.1.2	0	0	TABLE 601
. - supporting a roof only	0	0	TABLE A. 8.2.1.2	0	0	TABLE 601
BEAMS, GIRDERS, TRUSSED, ARCHES - supporting Roof 20' A.F.F.	0	0	NFPA 5000 - 7.2.3.2.8	0	0	TABLE 601
. - supporting more than one floor	0	0	TABLE A. 8.2.1.2	0	0	TABLE 601
. - supporting one floor only	0	0	TABLE A. 8.2.1.2	0	0	TABLE 601
. - supporting a roof only	0	0	TABLE A. 8.2.1.2	0	0	TABLE 601
BEARING WALLS						
EXTERIOR BEARING WALLS - supporting Roof 20' A.F.F.	0	0	NFPA 5000 - 7.2.3.2.8	0	0	TABLE 601 - NOTE b
. - supporting more than one floor	0	0	TABLE A.8.2.1.2 & TABLE 8.3.4.2 & TABLE 7.3.2.1	0	0	TABLES 601 & 602 & 705.8
. - support one floor only	0	0	TABLE A.8.2.1.2 & TABLE 8.3.4.2 & TABLE 7.3.2.1	0	0	TABLES 601 & 602 & 705.8
. - supporting a roof only	0	0	TABLE A.8.2.1.2 & TABLE 8.3.4.2 & TABLE 7.3.2.1	0	0	TABLES 601 & 602 & 705.8
INTERIOR BEARING WALLS - supporting Roof 20' A.F.F.	0	0	NFPA 5000 - 7.2.3.2.8	0	0	TABLE 601
. - supporting more than one floor	0	0	TABLE A.8.2.1.2 & TABLE 8.3.4.2	0	0	TABLE 601
. - supporting one floor only	0	0	TABLE A.8.2.1.2 & TABLE 8.3.4.2	0	0	TABLE 601
. - supporting a roof only	0	0	TABLE A.8.2.1.2 & TABLE 8.3.4.2	0	0	TABLE 601
NONBEARING WALLS AND PARTITIONS						
EXTERIOR NON-BEARING WALLS	0	0	TABLE A.8.2.1.2 & TABLE 7.3.2.1	0	0	TABLES 601 & 602 & 705.8
INTERIOR NON-BEARING PARTITIONS	0	0	TABLE A. 8.2.1.2	0	0	TABLE 601
FLOOR CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS						
FLOOR-CEILING ASSEMBLIES	0	0	TABLE A. 8.2.1.2	0	0	TABLE 601
ROOF CONSTRUCTION AND ASSOCIATED SECONDARY MEMBERS						
ROOF-CEILING ASSEMBLIES	0	0	TABLE A. 8.2.1.2	0	0	TABLE 601
ROOF-CEILING ASSEMBLIES - 20' A.F.F.	0	0	NFPA 5000 - 7.2.3.2.8	0	0	TABLE 601
RATED EGRESS ASSEMBLIES						
VERTICAL EXIT ENCLOSURES	1	1	8.6.5 & TABLE 8.3.4.2	1	1	SECTION 707.3 & 1023.2 & T716.5
CORRIDORS			7.1.3.1(1)	0		TABLE 1020.1 & T716.5
RATED ASSEMBLIES						
SHAFT ENCLOSURES	1	1	8.6.5 & TABLE 8.3.4.2	1	1	SECTION 713 & T716.5
SMOKE BARRIERS			8.5.1, & TABLE 8.3.4.2			SECTION 709, TABLE 716.15
SMOKE PARTITION						
OCCUPANCY SEPARATION						
OCCUPANCY SEPARATION ( ) TO ( )						TABLE 508.4
INCIDENTAL USES & PROTECTION FROM HAZARDS						
JANITOR / SERVICE CLOSETS	1	3/4	15.3.2.1			

TRAVEL DISTANCE LIMITS

TRAVEL DISTANCE LIMITS	LIFE SAFETY	IBC
MAXIMUM TRAVEL DISTANCE LIMIT TO AN EXIT OR EXIT ACCESS DOOR	200' (TABLE A.7.6)	250' (TABLE 1016.1)
MAXIMUM COMMON PATH OF TRAVEL LIMIT	100' (TABLE A.7.6)	75' (TABLE 1006.2.1)
MAXIMUM DEAD END CORRIDOR LIMIT	50' (TABLE A.7.6)	50' (1020.4)

MINIMUM NUMBER OF EXIT REQUIRED

	LIFE SAFETY	IBC
FLOOR AREA OCCUPANCY LOAD BETWEEN 1 AND 500	-	2 EXITS (TABLE 1021.1)
FLOOR AREA OCCUPANCY LOAD BETWEEN 501 AND 1000		3 EXITS (TABLE 1021.1)
FLOOR AREA OCCUPANCY LOAD OVER 1000		4 EXITS (TABLE 1021.1)
MINIMUM NUMBER OF EXITS PER STORY	2 EXITS (7.4.1.1 AND 14.2.4.1)	-
MINIMUM NUMBER OF ACCESSIBLE ENTRANCES/EXITS	1 (7.5.4.1.1 & 7.5.4.2.2)	60% (1009.1 & 1105.1)

MINIMUM INTERIOR FINISH REQUIREMENTS

MINIMUM INTERIOR FINISH REQUIREMENTS	LIFE SAFETY	IBC
EXIT ENCLOSURES & EXIT PASSAGEWAYS - WALLS	CLASS A OR B (15.3.3.2 AND TABLE A.10.2.2 WITH NOTE 6)	CLASS A OR B (TABLE 803.9)
EXIT ENCLOSURES & EXIT PASSAGEWAYS - FLOORS	N/A (TABLE A.10.2.2 WITH NOTE 6)	CLASS I OR II, DOC FF-1 OR ASTM D2859 (804.4.1)
CORRIDORS & LOBBIES - WALLS	CLASS A, B, OR C (15.3.3.2 AND TABLE A.10.2.2 WITH NOTE 6)	CLASS A, B, OR C (TABLE 803.9)
CORRIDORS & LOBBIES - FLOORS	N/A (TABLE A.10.2.2 WITH NOTE 6)	CLASS I OR II, DOC FF-1 OR ASTM D2859 (804.4.1)
ROOMS & ENCLOSED SPACES - WALLS	CLASS A, B, OR C (15.3.3.2 AND TABLE A.10.2.2 WITH NOTE 6)	CLASS A, B, OR C (TABLE 803.9)
ROOMS & ENCLOSED SPACES - FLOORS	N/A (TABLE A.10.2.2)	CLASS I OR II, DOC FF-1 OR ASTM D2859 (804.4.1)
TRIM		NOT IN EXCESS OF 10% OF AGGREGATE WALL & CEILING AREA OF ANY ROOM/SPACE SHALL BE PERMITTED TO BE CLASS C MATERIAL.

BUILDING ENVELOPE PERFORMANCE

Minimum building envelope performance requirements are taken from the following code:
- IECC 2018
- Climate Zone: 4
- Building Type: Non-Residential

Note: Products specified in the work may exceed requirements noted below.

1. Roof
   A. Insulation Entirely above Deck
      a. U-0.032 maximum
      b. R-30 c.i. minimum
2. Exterior Walls
   A. Mass
      a. U-0.104 maximum
      b. R-9.5 c.i. minimum
3. Walls, Below Grade
   A. C-0.119
   B. R-7.5 c.i.
4. Slab-on-Grade Floors
   A. Unheated
      a. F-0.520 maximum
      b. R-15 for 24 inches minimum
5. Opaque Doors
   A. Swinging
      a. U-0.61 maximum
6. Fenestration
   A. Metal framing, fixed
      a. U-0.38 maximum
   B. Metal framing, entrance door
      a. U-0.77 maximum
   C. SHGC (projection factor and orientation can increase)
      - 0.36 maximum
   D. VT/SHGC – 1.10 minimum
7. Air barrier required (AHSRAE 5.4.3.1 and IECC C402.5)
   A. Maximum air leakage for fenestration:
      a. Glazed swinging entrance doors: 1.0 cfm/sf @ 1.57psf per AAMA/WDMA/CSA 101/I.S.2/A440, NFRC 400, or ASTM E 283
      b. Curtainwall and storefront: 0.06 cfm/sf @ 1.57psf per NFRC 400 or ASTM E 283
      c. Other nonswinging opaque doors, glazed sectional garage doors, and upward acting nonswinging glazed doors: 0.4 cfm/sf @ 1.57psf per ANSI/DASMA 105, NFRC 400, or ASTM E 283
      d. All other products: 0.2 cfm/sf @ 1.57psf per AAMA/WDMA/CSA101/I.S.2/A440 or NFRC 400, or 0.3 cfm/sf @ 6.24psf per AAMA/WDMA/CSA 101/I.S.2/A440
8. Other requirements:
   A. Vestibules: Conditions (ASHRAE 5.4.3.4 and IECC C402.5.7)
   B. Recessed luminaires: IC-rated, air leakage max 2.0cfm per ASTM E 283 @ 1.57psf, and sealed with gasket or sealant between housing and wall or ceiling covering.

PLUMBING FIXTURE CALCULATIONS

USE GROUP	OCCUPANTS	WATER CLOSETS						LAVATORIES			DRINKING FOUNTAINS			OTHER	
		MEN			WOMEN										
		REQUIRED		PROVIDED	REQUIRED		PROVIDED	REQUIRED		PROVIDED	REQUIRED		PROVIDED	REQUIRED	PROVIDED
BASEMENT	**166**		**1.66**	2		**1.66**	2		**3.32**	8		**1.66**	2		
E - EDUCATIONAL	166	1/50	1.66		1/50	1.66		1/50	3.32		1/100	1.66			
FIRST FLOOR	**4269**		**25.84**	27		**35.54**	36		**41.05**	49		**19.04**	27		
A2 - CAFETERIA	329	1/75	2.2		1/75	2.2		1/200	1.65		1/500	0.66		1 SERV SINK	
A3 - GYM, AUX GYM + AUDITORIUM, MULTI-PURPOSE ROOM	2627	1/125	10.51		1/65	20.21		1/200	13.14		1/500	5.25		1 SERV SINK	
E - EDUCATIONAL	1313	1/50	13.13		1/50	13.13		1/50	26.26		1/100	13.13		1 SERV SINK	
SECOND FLOOR	**898**		**3.56**	4		**3.56**	4		**7.12**	8		**3.56**	8		
E - EDUCATIONAL (AREA B)	356	1/50	3.56		1/50	3.56		1/50	7.12		1/100	3.56		1 SERV SINK	
			5.43	5		**5.43**	5		**10.86**	11		**5.43**	4		
E - EDUCATIONAL (AREA D/E)	543	1/50	5.43		1/50	5.43		1/50	10.86		1/100	5.43		1 SERV SINK	
THIRD FLOOR	**381**		**3.56**	5		**3.72**	5		**7.01**	10		**3.48**	9		
A3 - MEDIA CENTER	41	1/125	0.16		1/65	0.32		1/200	0.21		1/500	0.08		1 SERV SINK	
E - EDUCATIONAL	340	1/50	3.4		1/50	3.4		1/50	6.8		1/100	3.4		1 SERV SINK	
TOTAL	**5548**		**40.04**	42		**49.9**	51		**69.34**	79		**33.16**	50		

CODE STUDY NOTES

1. FIRE RESISTIVE MATERIALS AND JOINT TREATMENTS, SUBMITTED DETAILS AND PRODUCTS SHALL BE U.L.-LISTED ASSEMBLIES OR U.L.-LISTED ASSEMBLIES WITH MANUFACTURER'S ENGINEERING JUDGMENT FOR SPECIFIC PENETRATION CONDITION.

ENERGY CODE INSPECTION NOTES

CONSTRUCTION MANAGER SHALL ARRANGE FOR ENERGY-CODE-RELATED INSPECTIONS WITH A.H.J. AS FOLLOWS:
a. FOOTING AND FOUNDATION: INSULATION R-VALUE, LOCATION, THICKNESS,DEPTH OF BURIAL, AND PROTECTION (IECC C104.2.1)
b. FRAMING AND ROUGH-IN: INSULATION TYPES, R-VALUE, LOCATION, INSTALATION, FENESTRATION PROPERTIES (U-FACTOR, SHGC, AND VT) AND INSTALLATION, AND AIR LEAKAGE CONTROLS (IECC C104.2.2)
c. PLUMBING ROUGH-IN: INSULATION TYPES, R-VALUE, AND PROTECTION, REQUIRED CONTROLS, AND HEAT TRAPS (IECC C104.2.3).
d. MECHANICAL ROUGH-IN: HVAC EQUIPMENT TYPE & SIZE, REQUIRED CONTROLS, INSULATION AND R-VALUE, SYSTEM AND DAMPER AIR LEAKAGE, AND ENERGY RECOVERY AND ECONOMIZERS (IECC C104.2.4).
e. ELECTRICAL ROUGH-IN: LIGHTING SYSTEMS, COMPONENTS AND CONTROLS (IECC C104.2.5).
f. FINAL INSPECTION (PRIOR TO REQUESTING CERTIFICATE OF OCCUPANCY); INSTALLATION AND PROPER OPERATION OF ALL REQUIRED BUILDING CONTROLS, BUILDING COMMISSIONING DOCUMENTATATION (IECC C104.2.6).

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

LIFE SAFETY CODE STUDY

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	12" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

G101-E

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1 LIFE SAFETY PLAN - FIRST FLOOR
SCALE: 1" = 20'-0"

2 LIFE SAFETY PLAN - BASEMENT
SCALE: 1" = 20'-0"

3 LIFE SAFETY PLAN - BASEMENT
SCALE: 1" = 20'-0"

LIFE SAFETY PLAN NOTES

1. PROVIDE NEW FIRE EXTINGUISHERS IN CABINETS (FEC) AND FIRE EXTINGUISHERS ON BRACKETS (FE) AS SHOWN ON FLOOR PLANS. PROVIDE NEW FIRE EXTINGUISHERS IN KITCHEN (TYPE K), MECHANICAL, ELECTRICAL (TYPE B-C), FIRE PUMP AND ELEVATOR MACHINE ROOMS, AND AS INDICATED.
2. FIRE EXTINGUISHER SHALL BE MINIMUM 3A-40BC RATING.
3. MARK ALL RATED WALLS AND PARTITIONS PER 2018 IBC 703.7 AND AS DETAILED.

TRAVEL DISTANCE SCHEDULE

Path	Travel Distance
1	174' - 2"
2	144' - 8"
3	137' - 10"
4	191' - 11"
5	132' - 9"
6	129' - 4"
7	204' - 8"
8	222' - 3"
9	196' - 4"
10	177' - 9"

LIFE SAFETY PLAN LEGEND

- TRAVEL PATH # — 50' - 0" — EXIT ACCESS TRAVEL DISTANCE; PATH OF EXIT ACCESS TRAVEL
- CLASSROOM 119 — ROOM NAME & NUMBER
- 786 SF — ROOM AREA
- 39 OCC. — OCCUPANCY LOAD ("AC" = ACCESSORY SPACE)
- MIN. EGRESS WIDTH REQ'D (INCHES); MAX. OCC ALLOWED; ACTUAL OCCUPANTS; ACTUAL EGRESS WIDTH PROVIDED (INCHES) — EXIT CAPACITY
- PROPERTY LINE / IMAGINARY LOT LINE
- 2WC — 2-WAY COMMUNICATION SYSTEM
- A.S. — STAIR DESIGNATED AS ACCESSIBLE MEANS OF EGRESS. PER IBC 1007.3 EXCEPTION 2, WIDTH <48" IS ACCEPTABLE. PER EXCEPTION 3, AREA OF REFUGE NOT REQUIRED.
- N.I.C. / REPAIRS
- LEVEL 1 ALTERATIONS
- LEVEL 2 ALTERATIONS
- ADDITIONS

RATED WALL/PARTITION LEGEND

TYPE OF WALL/PARTITION	ASSEMBLY RATING, IN HOURS) 0	1/2	1	2	3	4
EXTERIOR WALL						
FIRE WALL/PARTY WALL						
FIRE BARRIER						
FIRE PARTITION						
SMOKE BARRIER						
SMOKE PARTITION						
NON-RATED PARTITION						

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

OVERALL FIRST FLOOR LIFE SAFETY PLAN

0' 10' 20' 40'
SCALE: 1" = 20'

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: CES	PROJ MGR: BAH

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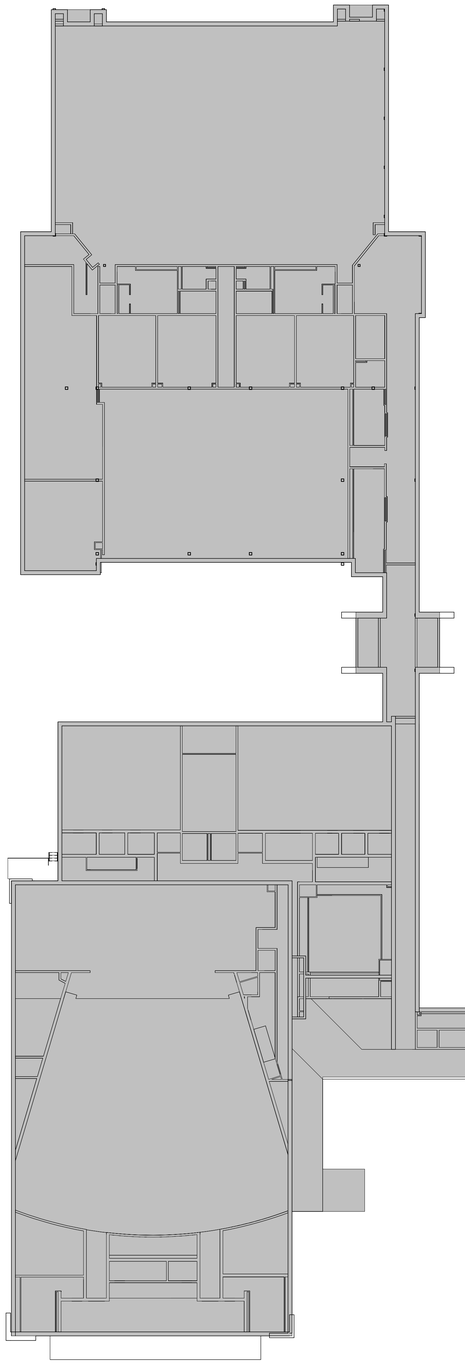
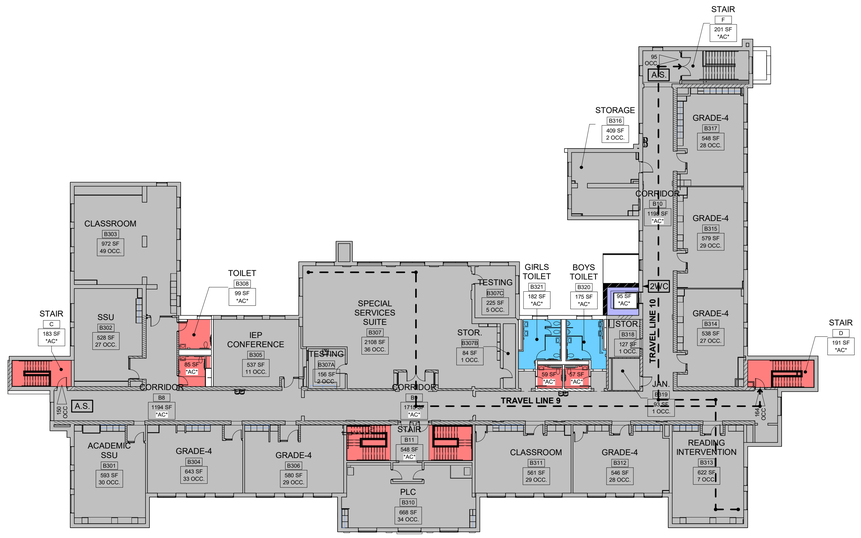
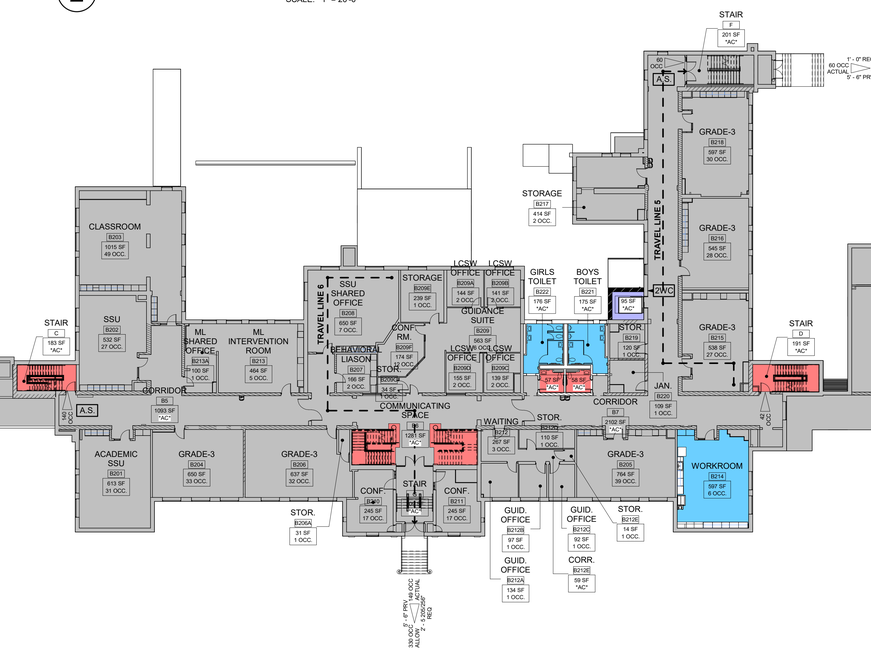




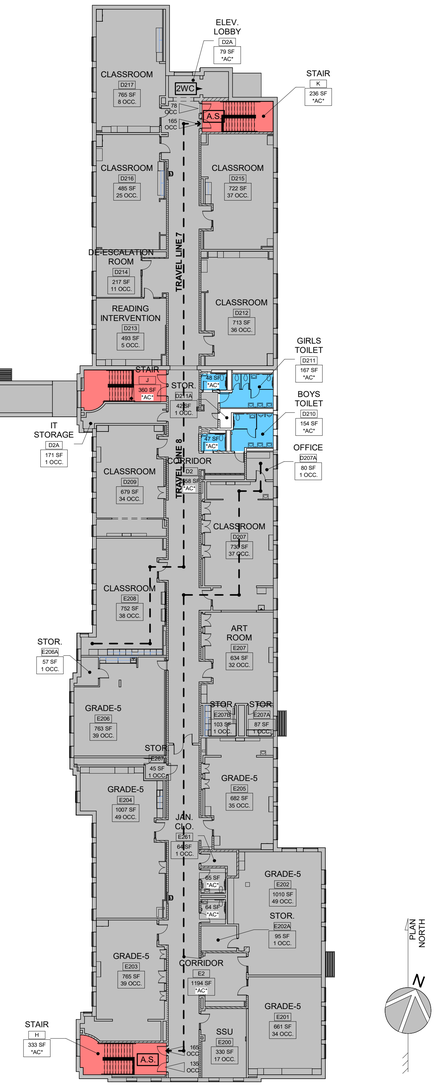
2 LIFE SAFETY PLAN - THIRD FLOOR

SCALE: 1" = 20'-0"



1 LIFE SAFETY PLAN - SECOND FLOOR

SCALE: 1" = 20'-0"



LIFE SAFETY PLAN NOTES

1. PROVIDE NEW FIRE EXTINGUISHERS IN CABINETS (FEC) AND FIRE EXTINGUISHERS ON BRACKETS (FE) AS SHOWN ON FLOOR PLANS. PROVIDE NEW FIRE EXTINGUISHERS IN KITCHEN (TYPE K), MECHANICAL, ELECTRICAL (TYPE B-C), FIRE PUMP AND ELEVATOR MACHINE ROOMS, AND AS INDICATED.
2. FIRE EXTINGUISHER SHALL BE MINIMUM 3A-40BC RATING.
3. MARK ALL RATED WALLS AND PARTITIONS PER 2018 IBC 703.7 AND AS DETAILED.

TRAVEL DISTANCE SCHEDULE

Path	Travel Distance
1	174' - 2"
2	144' - 8"
3	137' - 10"
4	191' - 11"
5	132' - 9"
6	129' - 4"
7	204' - 8"
8	222' - 3"
9	196' - 4"
10	177' - 9"

LIFE SAFETY PLAN LEGEND

- TRAVEL PATH # — 50' - 0" — EXIT ACCESS TRAVEL DISTANCE; PATH OF EXIT ACCESS TRAVEL
- CLASSROOM 119 — ROOM NAME & NUMBER
- 786 SF — ROOM AREA
- 39 OCC. — OCCUPANCY LOAD ("AC" = ACCESSORY SPACE)
- MIN. EGRESS WIDTH REQ'D (INCHES); MAX. OCC ALLOWED; ACTUAL OCCUPANTS; ACTUAL EGRESS WIDTH PROVIDED (INCHES) — EXIT CAPACITY
- PROPERTY LINE / IMAGINARY LOT LINE
- 2WC — 2-WAY COMMUNICATION SYSTEM
- A.S. — STAIR DESIGNATED AS ACCESSIBLE MEANS OF EGRESS. PER IBC 1007.3 EXCEPTION 2, WIDTH <48" IS ACCEPTABLE. PER EXCEPTION 3, AREA OF REFUGE NOT REQUIRED.
- N.I.C. / REPAIRS
- LEVEL 1 ALTERATIONS
- LEVEL 2 ALTERATIONS
- ADDITIONS

RATED WALL/PARTITION LEGEND

TYPE OF WALL/PARTITION	ASSEMBLY RATING, IN HOURS) 0	1/2	1	2	3	4
EXTERIOR WALL						
FIRE WALL/PARTY WALL						
FIRE BARRIER						
FIRE PARTITION						
SMOKE BARRIER						
SMOKE PARTITION						
NON-RATED PARTITION						

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

OVERALL SECOND AND THIRD FLOOR LIFE SAFETY PLAN

0' 10' 20' 40'
SCALE: 1" = 20'

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: CES	PROJ MGR: BAH

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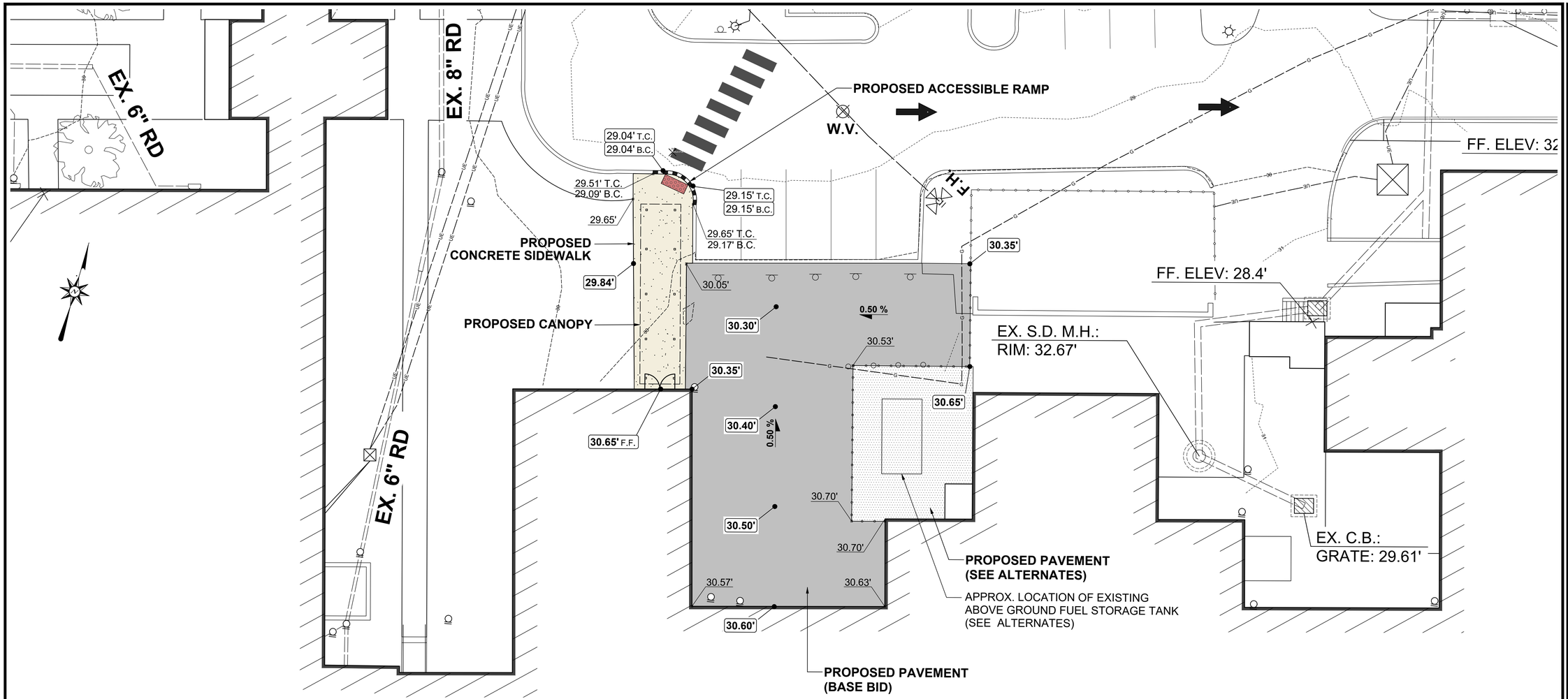
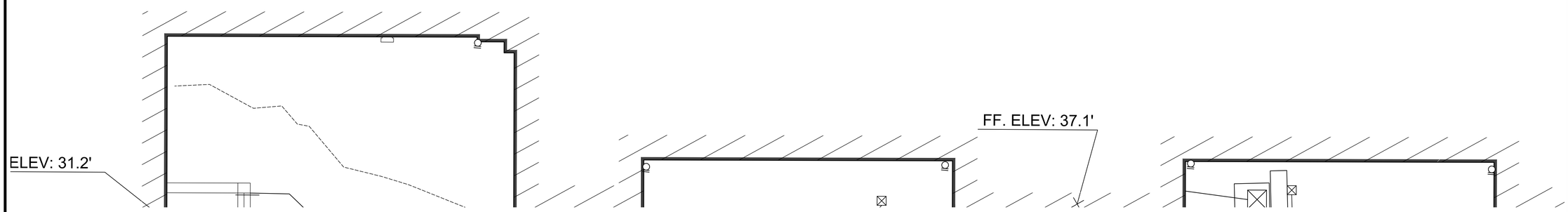
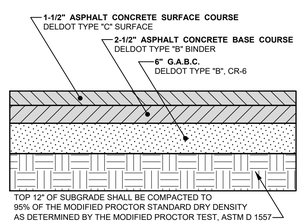






PAVEMENT SECTION DETAIL

NO SCALE — BMG NO. : SW-2AB

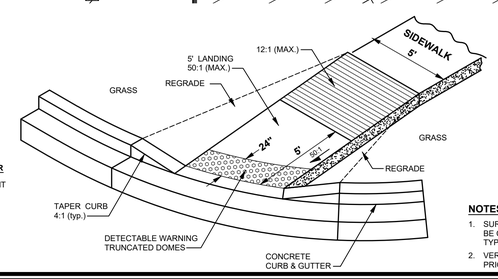
NOTES :

PER CURRENT ADAAG:

1. PRIOR TO INSTALLATION VERIFY MATERIALS AND COLORS WITH DELDOT AND/OR LOCAL AGENCIES.
2. THE AREA OF DETECTABLE WARNING TRUNCATED DOMES SHALL BE 2'-0" LONG AND THE FULL WIDTH OF THE RAMP OR DEPRESSED CURB.
3. DETECTABLE WARNINGS MUST HAVE A LIGHT-TO-DARK CONTRAST WITH THE SIDEWALK MATERIAL.
4. LIGHT REFLECTANCE VALUE CONTRAST MUST BE AT LEAST 70%.
5. THE COLOR OF DETECTABLE WARNINGS TO BE USED FOR SIDEWALK MATERIAL IS AS FOLLOWS:

SIDEWALK / CURB RAMP MATERIAL	DETECTABLE WARNING SYSTEM COLOR
CONCRETE	BROWN CONCRETE, DARK GRAY, BRIGHT RED, ORANGE (BRICK) RED OR BLACK

**IF USING A DIFFERENT SIDEWALK MATERIAL THAN SHOWN ABOVE OR IF THE SIDEWALK MATERIAL IS A DIFFERENT COLOR THAN NORMAL (I.E., CONCRETE OR HOT-MIX WITH A PIGMENT SO THAT IT IS NOT THE "NATURAL" OFF-WHITE OR BLACK RESPECTIVELY), CONTACT DELDOT CONSISTENCY CONTROL, QUALITY PROGRAM MANAGER AT (302) 760-2342 FOR COLOR CHOICES.

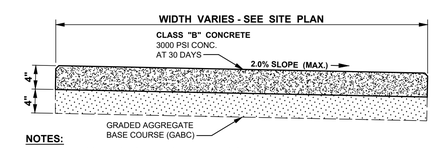


ACCESSIBLE RAMP DETAIL

NO SCALE — BMG NO. : SW-04A1

NOTES :

1. SURFACE TEXTURE OF RAMPS SHALL BE COARSE BROOMING OR NON-SKID TYPE SURFACE.
2. VERIFY WIDTH OF RAMP ON SITE PLAN PRIOR TO CONSTRUCTION.



NOTES:

1. MARK IN 4' SQUARES, USE PREMOLDED EXPANSION JOINTS AT INTERVALS NOT GREATER THAN 16'
2. CONCRETE SIDEWALKS SHALL BE CONSTRUCTED AS PER SPECIFICATIONS.

CONCRETE SIDEWALK DETAIL

NO SCALE — BMG NO.: SW-03C

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PROJECT TITLE

CENTRAL MIDDLE SCHOOL

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SITE PLAN (FRONT ENTRY)

0 5 10 20
SCALE: 1" = 10'

ISSUE BLOCK

MARK	DATE	DESCRIPTION

LAYER STATE: C201

PROJECT NO.:	2021101.00
DATE:	07/26/24
SCALE:	1" = 10'
DRAWN BY: G.P.S.	PROJ. MGR.: E.E.P.

SHEET
C-201

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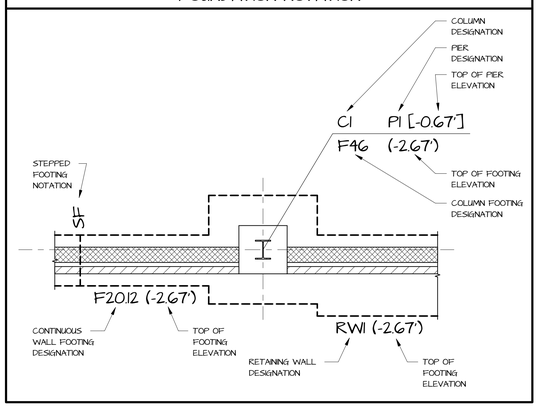
F:\AutoCAD\Projects\2021\2021101\DWG\2021101-SITE-C3D-21.dwg, Sep 13, 2024 - 2:34pm

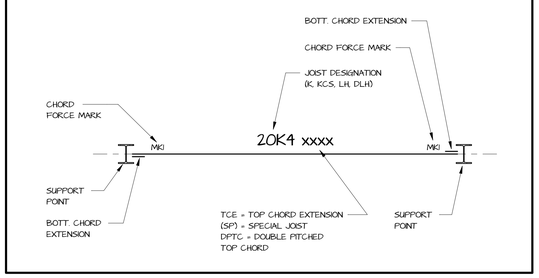
PROJECT TITLE

124.103 - CENTRAL MIDDLE TO ELEMENTARY SCHOOL RENOVATION

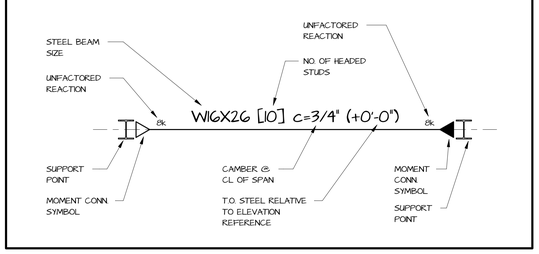
FOUNDATION NOTATION



JOIST NOTATION



STEEL BEAM NOTATION



DRAWING ABBREVIATIONS

ADD'L	ADDITIONAL	LG	LONG
ADJ	ADJACENT	LL	LIVE LOAD
AFF	ABOVE FINISHED FLOOR	LLH	LONG LEG HORIZONTAL
ALT	ALTERNATE	LLV	LONG LEG VERTICAL
APPROX	APPROXIMATE	LP	LOW POINT
ARCH	ARCHITECTURAL	LW	LIGHT WEIGHT CONCRETE
B.O.	BOTTOM OF	MAX	MAXIMUM
BLDG	BUILDING	MECH	MECHANICAL
BM	BEAM	MEP	MECHANICAL, ELECTRICAL, PLUMBING
BOTT	BOTTOM	MFR, MANUF	MANUFACTURER
BP	BEARING PLATE	MIN	MINIMUM
BRG	BEARING	MISC	MISCELLANEOUS
BS	BOTH SIDES	N/A	NOT AVAILABLE
CANT	CANTILEVER	NBL	NON-BEARING LINTEL
CANT LE	CANTILEVER LEFT END	NBMH	NON-BEARING METAL HEADER
CANT RE	CANTILEVER RIGHT END	NBWH	NON-BEARING WOOD HEADER
CC	CONCRETE COLUMN	NC	NOT IN CONTRACT
CIP	CAST IN PLACE	NOM	NOMINAL
CJ	CONTROL JOINT/ CONSTRUCTION JOINT	NS	NEAR SIDE
CL	CENTER LINE	NTS	NOT TO SCALE
CLR	CLEAR	NW	NORMAL WEIGHT CONCRETE
CMU	CONCRETE MASONRY UNIT	o/c	ON CENTER
COL	COLUMN	OD	OUTSIDE DIAMETER
CONC	CONCRETE	OPNG	OPENING
CONN	CONNECTION	OPP	OPPOSITE
CONT	CONTINUOUS	P/C	PRECAST CONCRETE
COORD	COORDINATE	PCF	POUNDS PER CUBIC FOOT
D	DEPTH, DEEP	PL	PLATE
DBL	DOUBLE	PREFAB	PREFABRICATED
DIA, Ø	DIAMETER	PSF	POUNDS PER SQUARE FOOT
DIM	DIMENSION	PSI	POUNDS PER SQUARE INCH
DL	DEAD LOAD	PT	PRESSURE TREATED
DN	DOWN	RAD	RADIUS
DWG	DRAWING	RD	ROOF DRAIN
DWLS	DOWELS	REBAR	REINFORCING BAR
EF	EACH FACE	REF	REFER OR REFERENCE
EIFS	EXTERIOR INSULATION FINISH SYSTEM	REINF	REINFORCING
EJ	EXPANSION JOINT	REQ'D	REQUIRED
EL	ELEVATION	RR	ROOF RAFTER
ELEV	ELEVATOR	RW	RETAINING WALL
EOS	EDGE OF SLAB	SF	STEPPED FOOTING
EQ	EQUAL	SIM	SIMILAR
EQUIP	EQUIPMENT	SOG	SLAB ON GRADE
EW	EACH WAY	SPEC	SPECIFICATION
EWEF	EACH WAY EACH FACE	SQ	SQUARE
EXIST / (E)	EXISTING	SS	STAINLESS STEEL
EXT	EXTERIOR	STD	STANDARD
FD	FLOOR DRAIN	STIFF	STIFFENER
FF	FINISH FLOOR	STL	STEEL
FIN	FINISH	T&B	TOP & BOTTOM
FLR	FLOOR	T.O	TOP OF
FND	FOUNDATION	T.O.B.	TOP OF BEAM
FRM	FRAMING	T.O.C.	TOP OF CONCRETE
FT	FOOT	T.O.F.	TOP OF FOOTING
GA	GAUGE	T.O.P	TOP OF PARAPET
GALV	GALVANIZED	T.O.S.	TOP OF SLAB
GB	GRADE BEAM	T.O.STL.	TOP OF STEEL
GT	GIRDER TRUSS	T.O.W.	TOP OF WALL
HB	HOIST BEAM	TDS	TURNED DOWN SLAB
HEF	HORIZONTAL EACH FACE	THK	THICK, THICKNESS
HIF	HORIZONTAL INSIDE FACE	TS	THICKENED SLAB
HK	HOOK	TSF	THICKENED SLAB FOOTING
HOF	HORIZONTAL OUTSIDE FACE	TYP	TYPICAL
HORIZ	HORIZONTAL	UNO	UNLESS NOTED OTHERWISE
HP	HIGH POINT	VERT	VERTICAL
HS	HAUNCHED SLAB	W	WIDTH, WIDE
IBC	INTERNATIONAL BUILDING CODE	w/	WITH
k	KIPS (1000lbs)	w/o	WITHOUT
KSF	KIPS PER SQUARE FOOT	WD	WOOD
L	ANGLE	WF	WIDE FLANGE
LBS	POUNDS	WWF	WELDED WIRE FABRIC

DRAWING SYMBOLS

SYMBOL	DESCRIPTION
	MOMENT CONNECTION - BEAM TO BEAM OR BEAM TO COLUMN - SEE PLAN FOR REQUIRED CONNECTION MOMENT CAPACITY, IF NO LOAD SHOWN, PROVIDE FULL CAPACITY OF BEAM IN ADDITION TO FULL DEPTH SHEAR CONNECTION
	FLEXIBLE MOMENT CONNECTION (FMC) - BEAM TO COLUMN CONNECTION SEE PLAN FOR REQUIRED CONNECTION MOMENT. IF NO LOAD SHOWN, SEE TYPICAL DETAILS
	SLIDING CONNECTION & EXPANSION JOINT
	CRIPPLE POINT IN STEEL MEMBER - SEE TYPICAL DETAIL FOR ADDITIONAL INFORMATION
	CHANGE IN SLAB ELEVATION
[_]	SPOT ELEVATION LOCATION
S_/ D_	SLAB/ DECK CONSTRUCTION TAG - SEE SCHEDULE ON DRAWING FOR ADDITIONAL INFORMATION
	UTILITY LINE - COORDINATE SIZE & INVERT w/ UTILITY DRAWINGS
	SLAB CONTROL/ CONSTRUCTION JOINT - SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION
FD	FLOOR DRAIN - COORDINATE SIZE & LOCATION w/ ARCHITECTURAL & PLUMBING DRAWINGS
TD	TRENCH DRAIN - COORDINATE SIZE & LOCATION w/ ARCHITECTURAL & PLUMBING DRAWINGS
SL	SLOPE OF FLOOR/ ROOF/ SLAB
1 A101	SECTION MARK
1 S-0	BUILDING ELEVATION
1 A101	DETAIL/ ENLARGED PLAN CALLOUT
	MECHANICAL UNIT ID & WEIGHT
H	WALL TAG
LEVEL ELEVATION	LEVEL DESIGNATION
O	STRUCTURAL GRID DESIGNATION
O	EXISTING STRUCTURAL GRID DESIGNATION

DRAWING MATERIALS

CONCRETE/ PRECAST CONCRETE	SHEAR WALLS
COMPACTED EARTH / SITEWORK	RIGID INSULATION
CRUSHED STONE	GROUT
CONCRETE MASONRY UNIT	MANY CONCRETE MASONRY UNIT
AREA OF OVERFRAMING	MECHANICAL UNIT
BRICK VENEER	WOOD
STONE VENEER	STEEL
PLYWOOD SHEATHING/ DECKING	METAL DECKING

DRAWING LIST

SHEET NUMBER	SHEET NAME
S001-E	COVER SHEET
S002-E	PROJECT SCHEDULES & GENERAL NOTES
S100-E	FIRST FLOOR OVERALL KEY PLAN
S101B-E	FOUNDATION PLAN - AREA B
S102B-E	SECOND FLOOR FRAMING PLAN - AREA B
S103B-E	THIRD FLOOR FRAMING PLAN - AREA B
S104B-E	ROOF FRAMING PLAN - AREA B
S201-E	PARTIAL PLANS & DETAILS
S501-E	TYPICAL DETAILS
S502-E	SECTIONS
S503-E	SECTIONS

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JAMES R. BAWDEN REGISTERED PROFESSIONAL ENGINEER No. 13556 DELAWARE
9/13/2024

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

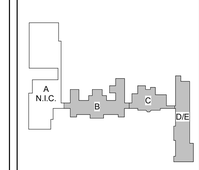
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

COVER SHEET



ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: JNR	PROJ MGR: JRB

S001-E

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9/13/2024 10:12:41 AM Autodesk Docs://Central Middle School Renovations/124103 - R24 - Central Middle Reno - S.rvt

PROJECT SPECIFICATIONS & GENERAL NOTES

GENERAL

1. COMPLETE ALL WORK PER THE DRAWINGS AND SPECIFICATIONS CONTAINED HEREIN.
2. MEANS AND METHODS INCLUDING ALL WORK RELATED TO THE STAGING, CONSTRUCTION PRACTICES, AND SAFETY OF THE PROJECTS WORKERS AND PROPERTY SHALL BE COMPLETED BY THE CONTRACTOR IN ACCORDANCE WITH STANDARD INDUSTRY PRACTICE AND ALL CODES AND STANDARDS. ENGINEER SITE VISITS ARE FOR THE REVIEW OF THE STRUCTURAL WORK FOR GENERAL CONFORMANCE WITH THE DRAWINGS AND SPECIFICATIONS AND ARE NOT FOR THE REVIEW OF CONTRACTOR RESPONSIBILITIES, INCLUDING BUT NOT LIMITED TO PROJECT SAFETY AND MEANS AND METHODS OF CONSTRUCTION.
3. ALL DRAWINGS HAVE BEEN PREPARED IN ACCORDANCE WITH THE 2021 INTERNATIONAL BUILDING CODE.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE EVALUATION AND COMPLIANCE WITH LOADING RESTRICTIONS FOR MEANS AND METHODS OF CONSTRUCTION AS WELL AS STAGING FOR OTHER TRADES.
5. SPECIAL INSPECTIONS SHALL BE IN ACCORDANCE WITH CHAPTER 17 OF THE REFERENCED INTERNATIONAL BUILDING CODE. SUBMIT ALL REPORTS TO THE ENGINEER OF RECORD FOR REVIEW. AT THE COMPLETION OF THE PROJECT, THE SPECIAL INSPECTION REPORT SHALL BE COMPLETED AND SUBMITTED TO THE ENGINEER OF RECORD.
6. CONTRACTOR SHALL NOT SCALE DRAWINGS TO DETERMINE DIMENSIONS OF ELEMENTS.
7. STRUCTURAL DRAWINGS SHALL NOT BE REPRODUCED TO CREATE SHOP DRAWINGS OR SHORING DOCUMENTATION WITHOUT THE EXPRESS WRITTEN CONSENT OF PILOTTOWN ENGINEERING.
8. DIMENSIONS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE COORDINATED WITH THE OTHER DISCIPLINE DRAWINGS. THE HORIZONTAL AND VERTICAL DIMENSIONS CONTAINED ON THE STRUCTURAL DRAWINGS WERE DEVELOPED BY OTHER DISCIPLINES FOR THE PURPOSE OF THIS PROJECT.
9. THE STRUCTURAL DOCUMENTS ARE TO BE USED IN COORDINATION WITH ALL OTHER DISCIPLINES INCLUDING THE ARCHITECTURAL, MECHANICAL, PLUMBING, AND ELECTRICAL DRAWINGS. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ATTENTION OF THE DESIGN TEAM PRIOR TO THE COMMENCEMENT OF WORK.
10. UNLESS SPECIFICALLY APPROVED, ALL REQUESTED CHANGES IN WORK BY THE CONTRACTOR ARE CONSIDERED TO BE COMPLETED AT NO ADDITIONAL COST AND ARE SUBJECT TO THE APPROVAL OF THE DESIGN TEAM AND OWNER.
11. REFER TO THE ARCHITECTURAL DOCUMENTS FOR ALL WATERPROOFING AND FIREPROOFING LOCATIONS AND DETAILS.

SHOP DRAWING REQUIREMENTS

1. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW BY PILOTTOWN ENGINEERING AND THE DESIGN TEAM FOR THE FOLLOWING ITEMS FOR THIS THE PROJECT:
   a. CONCRETE MIX DESIGNS INCLUDING ALL LABORATORY TESTING, MATERIALS, ETC.
   b. REINFORCING SHOP DRAWINGS
   c. STRUCTURAL PRECAST
   d. ANCHOR BOLT AND CONCRETE EMBEDDED ASSEMBLIES
   e. STAIRS, HANDRAILS AND GUARDRAILS
   f. MASONRY PRODUCTS
   g. ALL ADMIXTURES, SEALANTS, HARDENERS, AND COATINGS
2. CONTRACTORS TO ALLOW FOR A 10 BUSINESS DAY REVIEW PERIOD BY THE DESIGN TEAM FOR ALL SHOP DRAWINGS NOTED ABOVE. CONTRACTOR RESPONSIBLE TO SUBMITTED SHOP DRAWINGS IN A TIMELY MANNER AND ALL SUBMITTED DRAWINGS SHALL BE REVIEWED BY THE CONSTRUCTION MANAGER PRIOR TO SUBMISSION.
3. DELEGATED DESIGN SUBMITTALS REQUIRE THE REVIEW AND APPROVAL FROM A PROFESSIONAL ENGINEER AND SHALL BE SUBMITTED WITH CALCULATIONS AND SIGNED AND SEALED DRAWINGS PRIOR TO REVIEW.

EXISTING CONSTRUCTION

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN, COORDINATION, AND INSTALLATION OF SHORING AND STABILIZATION OF EXISTING CONSTRUCTION AS REQUIRED TO PERFORM THE WORK CONTAINED IN THE DRAWINGS AND SPECIFICATIONS.
2. DIMENSIONS SHOWN REFERRING TO EXISTING STRUCTURES ARE FOR REFERENCE ONLY. ALL DIMENSIONS RELATED TO EXISTING BUILDINGS AND FRAMING SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY INFORMATION RELATING TO THE EXISTING STRUCTURE THAT HAS BEEN UNCOVERED DUE TO DEMOLITION AND REMOVAL OF FINISHES.

FOUNDATIONS

1. BOTTOM OF FOOTINGS SHALL BEAR ON UNDISTURBED VIRGIN SOIL OR CONTROLLED COMPACTED FILL CAPABLE OF SAFELY SUPPORTING 2,500 PSF.
2. ALL SOILS SUPPORTING FOOTINGS AND SLABS SHOULD BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY OR AS DETERMINED BY A REGISTERED GEOTECHNICAL ENGINEER.
3. BOTTOM OF FOOTING SUBGRADE MUST BE INSPECTED AND APPROVED BY A REGISTERED GEOTECHNICAL ENGINEER PRIOR TO PLACING ANY CONCRETE FOUNDATIONS. APPROVAL IN WRITING MUST INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN THE SPECIFIED BEARING PRESSURE AND ALL REPORTS TO BE SUBMITTED TO THE ENGINEER OR RECORD.
4. BOTTOM OF ALL FOOTINGS SUBJECTED TO FREEZE THAW CONDITIONS SHALL BE A MINIMUM 3 FEET BELOW FINISHED GRADE.
5. BACKFILL SHALL NOT BE PLACED AGAINST ANY BASEMENT WALLS UNTIL FLOOR FRAMING AND SLAB OR SHEATHING IS IN-PLACE. ALTERNATIVELY, WALLS CAN BE ADEQUATELY BRACED PRIOR TO BACKFILLING HOWEVER SHALL BE DESIGNED BY AN ENGINEER HIRED DIRECTLY BY THE CONTRACTOR.
6. CONTROL JOINTS FOR SITE RETAINING WALLS, LOADING DOCK WALLS, BASEMENT WALLS, AND EXPOSED CONCRETE WALLS SHALL BE SPACED A MAXIMUM OF 20 FEET ON CENTER UNLESS OTHERWISE NOTED ON THE DRAWINGS. MASONRY OR CONCRETE WALLS WITH INTEGRAL COLUMN PIERS OR PILASTERS SHALL HAVE A FORMED CONTROL JOINT ON ONE SIDE OF EACH PIER ON THE EXPOSED FACE OF THE WALL. ALL CONTROL JOINTS SHALL BE FILLED WITH SEALANT AS NOTED ON THE ARCHITECTURAL DRAWINGS.
7. UNDERPINNING, SHEETING, AND SHORING OF EXISTING FOUNDATIONS NOTED ON THE DRAWINGS IS A DELEGATED DESIGN ITEM AND IS THE RESPONSIBILITY OF THE CONTRACTOR. THESE ITEMS SHALL BE DESIGNED AND DETAILED BY A REGISTERED PROFESSIONAL ENGINEER WITH A MINIMUM OF 3 YEARS EXPERIENCE IN THE DESIGN OF FOUNDATION SHORING. SUBMIT SIGNED AND SEALED DRAWINGS, CALCULATIONS, AND A PHASING PLAN TO THE ENGINEER FOR REVIEW AND RECORD.

CONCRETE

1. ALL CONCRETE SHALL BE READY-MIX AND PROPORTIONED ON THE BASIS OF LABORATORY TRIAL MIXTURE OR FIELD TEST DATA OR BOTH ACCORDING TO ACI 301 AND ACI 318. DESIGN MIXTURES SHALL MEET THE REQUIREMENTS BELOW BASED ON CONCRETE PLACEMENT LOCATIONS:
   a. INTERIOR SLABS ON GRADE:
      1. MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS
      2. EXPOSURE CATEGORY: F0
   b. EXTERIOR SLABS ON GRADE:
      1. MINIMUM COMPRESSIVE STRENGTH OF 4500 PSI AT 28 DAYS
      2. EXPOSURE CATEGORY: F2
      3. 6% AIR-ENTRAINMENT (+/- 1.5%)
   c. FOOTINGS AND FOUNDATION WALLS:
      1. MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS
      2. EXPOSURE CATEGORY: F0
2. CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION OF DESIGN MIXTURES FOR EACH APPLICATION/LOCATION USED IN CONSTRUCTION AS NOTED ABOVE AND ON THE DRAWINGS.
3. ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE FOLLOWING:
   a. ACI BUILDING CODE (ACI 318).
   b. ACI DETAILING MANUAL (MNL-66).
   c. SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS (ACI 301).
4. ALL REINFORCING STEEL SHALL BE MANUFACTURED AND CONFORM TO ASTM DESIGNATION A615 GRADE 60. ALL BARS TO BE LAPPED A MINIMUM 48 BAR DIAMETERS UNLESS OTHERWISE NOTED.
5. ALL WWF SHALL BE MANUFACTURED FROM HIGH STRENGTH STEEL CONFORMING TO ASTM A1064/A1064M. ALL WWF SHALL LAP A MINIMUM OF 6 INCHES.
6. CONCRETE SLAB ON GRADE SHALL BE FINISHED TO TOLERANCE FOR FLOOR FLATNESS (FF) OF 25 AND FLOOR LEVELNESS (FF) OF 20 UNLESS OTHERWISE MANDATED BY ARCHITECTURAL FINISH REQUIREMENTS.
7. PLACE TRANSVERSE REINFORCING (SWB) IN BOTTOM LAYER OF CONTINUOUS FOOTINGS. PROVIDE CORNER BARS IN FOOTINGS TO MATCH CONTINUOUS REINFORCEMENT. EXTEND WALL FOOTING REINFORCING INTO COLUMN FOOTINGS A MINIMUM OF 2 FEET.
8. PROVIDE KEYS IN CONCRETE WALLS, PIERS, GRADE BEAMS, AND FOOTINGS AT INTERSECTIONS UNLESS NOTED OTHERWISE. PROVIDE CORNER BARS TO MATCH HORIZONTAL REINFORCEMENT AT WALL CORNERS AND TEE INTERSECTIONS.
9. CONCRETE SHALL ACHIEVE A MINIMUM OF 70% OF THE DESIGN STRENGTH PRIOR TO STEEL ERECTION. WRITTEN CONFIRMATION OF THIS STRENGTH SHOULD BE SUBMITTED TO THE ENGINEER OF RECORD PRIOR TO THE COMMENCEMENT OF STEEL ERECTION.

PRECAST CONRETE

1. THE DESIGN, FABRICATION AND ERECTION OF PRECAST CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF ACI 318, PCI MNL 116, AND PCI MNL 117.
2. PRECAST MANUFACTURER SHALL BE PCI APPROVED. PRECAST MANUFACTURER SHALL SUBMIT DRAWINGS AND CALCULATIONS WHICH MUST BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
3. ALL PRECAST ELEMENTS SHALL BE DESIGNED TO SUPPORT ALL SUPERIMPOSED GRAVITY AND LATERAL LOADS INCLUDING PARTITION LOADS. COORDINATE ALL LOCATIONS OF PARTITIONS WITH THE ARCHITECTURAL DRAWINGS.
4. IF SHIMS ARE REQUIRED AT PRECAST PLANK BEARING, THEY MUST BE CONTINUOUS FOR THE FULL WIDTH OF THE PLANK. POINT SHIMMING IS NOT ACCEPTABLE. USE KOREALATH SHIMS OR APPROVED EQUAL.
5. PRECAST CONCRETE PLANK AND WALL PANEL MEMBERS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 5000 PSI. PRECAST CONCRETE TEES, BEAMS, AND GIRDERS SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 7000 PSI.
6. PRECAST MANUFACTURER SHALL COORDINATE WITH OTHER TRADES AND ALL CONTRACT DRAWINGS FOR SIZE AND LOCATION OF ALL OPENINGS. PRECAST MANUFACTURER SHALL DESIGN, PROVIDE, AND INSTALL ALL HANGERS, INSERTS, ATTACHMENTS, AND APPURTENANCES AS REQUIRED.
7. ALL OPENINGS IN PRECAST CONCRETE MUST BE PROVIDED BY OR APPROVED IN WRITING BY PRECAST MANUFACTURER. NO REINFORCING IN PRECAST CONCRETE IS TO BE CUT WITHOUT PRIOR APPROVAL OF THE PRECAST MANUFACTURER.

MASONRY

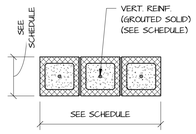
1. ALL MASONRY UNITS SHALL BE NORMAL WEIGHT MASONRY UNITS MEETING ASTM C90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI (Fm) (AVERAGE OF 3 TESTS).
2. ALL MASONRY UNITS TO BE GROUTED SOLID BELOW GRADE, AT ALL VERTICAL REINFORCING LOCATIONS, AND WHERE INDICATED IN DRAWINGS.
3. STAIR TOWERS AND ELEVATOR SHAFTS SHALL BE GROUTED SOLID. PROVIDE REINFORCING AS SHOWN ON THE DRAWINGS.
4. ALL CMU SHALL BE LAID IN A FULL BED OF MORTAR.
5. CONTRACTOR TO CONSTRUCT COLUMN PIERS INTEGRALLY WITH FOUNDATION AND ABOVE GRADE WALLS AND CONTINUE HORIZONTAL WALL REINFORCEMENT THROUGH THE PIER.
6. THE FOLLOWING BLOCK STRENGTHS ARE REQUIRED UNLESS ASSEMBLY STRENGTH IS JUSTIFIED VIA THE PRISM TEST:
   a. 2800 PSI ON GROSS AREA FOR SOLID INDIVIDUAL UNITS.
   b. 1900 PSI ON NET AREA OF HOLLOW INDIVIDUAL UNITS.
7. ALL MASONRY MORTAR SHALL BE ASTM C270 TYPE S WITH A MINIMUM COMPRESSIVE STRENGTH OF 1800 PSI AT 28 DAYS.
8. ALL MORTAR SHALL BE FIELD-TESTED PER ASTM C780.
9. COMPRESSIVE STRENGTH VALUES DETERMINED THROUGH ASTM C780 IN THE FIELD ARE NOT EXPECTED TO ACHIEVE THE COMPRESSIVE STRENGTHS OF LABORATORY TESTED ASTM C270 SPECIFICATION MORTARS.
10. GROUT SHALL BE A HIGH SLUMP MIX, PROPORTIONED IN ACCORDANCE WITH ASTM C476, THAT ACHIEVES THE COMPRESSIVE STRENGTH OF THE MASONRY (Fm), NOT LESS THAN 2000 PSI AT 28 DAYS.
11. ALL GROUT SHALL BE TESTED USING FIELD OBTAINED CYLINDERS IN ACCORDANCE WITH ASTM C109.
12. ALL CONCRETE MASONRY SHALL BE CONSTRUCTED IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES ACI 530/ASCE 5/TMS 402" AND THE "SPECIFICATION FOR MASONRY STRUCTURES ACI 530/ASCE 6/TMS 602".
13. ALL BRICK MASONRY UNITS SHALL BE GRADE SW IN ACCORDANCE WITH ASTM C216 WITH A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI, BONDED TOGETHER WITH TYPE S MORTAR.
14. PROVIDE HOT-DIPPED GALVANIZED TRUSS TYPE HORIZONTAL JOINT REINFORCEMENT, MIN. 9 GA. AT 16" ON CENTER VERTICAL IN ALL MASONRY WALLS SPACE HORIZONTAL JOINT REINFORCEMENT AT 8 INCHES ON CENTER IN ALL PARAPETS. USE SHOP FABRICATED SPECIAL PIECES AT ALL CORNERS AND TEES.

COLD FORMED STRUCTURAL METAL FRAMING

1. COLD FORMED METAL FRAMING SHOULD BE PROVIDED AS INDICATED ON STRUCTURAL DRAWINGS. PROVIDE INFORMATION INDICATING MEMBER CUT SHEETS, FRAMING DETAILS, CONNECTIONS, BRACING, AND BRIDGING OF MEMBERS CONFORM TO LOAD CRITERIA & DESIGN INDICATED. SUBMISSION OF UNMARKED PRODUCT CATALOG PAGES AND FULL PRODUCT CATALOGS IS NOT PERMITTED.
2. ALL STRUCTURAL METAL STUDS SHALL BE HOT-DIPPED GALVANIZED (G60) IN ACCORDANCE WITH ASTM A924. COLD FORMED METAL STUDS SHALL BE DESIGNED, MANUFACTURED, AND INSTALLED IN ACCORDANCE WITH THE AISI SPECIFICATIONS AND SHALL COMPLY WITH STEEL SHEET ASTM A1003 STRENGTH AS FOLLOWS:
   a. 16 GA AND THICKER - FY = 50KSI
   b. 18 GA AND 20 GA - FY = 33KSI
3. ALL WELDING OF LIGHT GAUGE STEEL FRAMING MUST BE DONE UTILIZING E6010X ELECTRODES AND SHALL BE COMPLETED BY CERTIFIED WELDERS IN ACCORDANCE WITH AWS D1.3, STRUCTURAL WELDING CODE-SHEET STEEL.
4. ALL CONNECTIONS SHALL BE MADE WITH SELF-TAPPING SCREWS OR WELDING SO THAT THE CONNECTIONS MEET OR EXCEED THE DESIGN LOADS. ALWAYS USE WELDS WHERE SHOWN ON DRAWINGS.
5. CUT ALL LIGHT GAUGE STEEL FRAMING MEMBERS WITH SAWS OR SHEARS. FLAME CUTTING IS NOT PERMITTED.
6. THE LIGHT GAUGE STEEL FRAMING SUPPLIER AND ERECTOR, SHALL HAVE A MINIMUM OF 5 YEARS OF EXPERIENCE IN THE FABRICATION AND ERECTION OF LIGHT GAUGE STEEL FRAMING SYSTEMS.

STAIR CONSTRUCTION

1. ALL STAIR CONSTRUCTION SHALL CONFORM TO THE 2021 INTERNATIONAL BUILDING CODE.
2. ALL STEEL STAIR CONSTRUCTION SHALL CONFORM TO THE AISC MANUAL FOR STEEL CONSTRUCTION AND THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS METAL STAIRS MANUAL.
3. ALL STAIR HANDRAIL DESIGN SHALL CONFORM TO THE NATIONAL ASSOCIATION OF ARCHITECTURAL METAL MANUFACTURERS PIPE RAILINGS MANUAL.
4. ALL STEEL FOR STAIR FRAMING COMPONENTS SHALL BE ASTM A36, UNLESS NOTED OTHERWISE.
5. ALL STEEL HANDRAIL AND GUARDRAIL MATERIALS SHALL CONFORM TO THE FOLLOWING REQUIREMENTS:
   a. ALL PIPE FOR HANDRAILS AND GUARDRAILS SHALL BE ASTM 53 GR. B (TYPE E OR TYPE S), ASTM A501, OR ASTM A500, GR. C.
   b. ALL PIPE FOR HANDRAIL POSTS SHALL BE SHALL BE ASTM A500 GR. C, FY = 46 KSI.
   c. ALL PICKETS AND OTHER INFILL MEMBERS SHALL BE ASTM A36.
6. ALL SHOP AND FIELD WELDING SHALL BE PERFORMED BY WELDERS CERTIFIED, AS DESCRIBED IN "AMERICAN WELDING SOCIETY'S STANDARD QUALIFICATION PROCEDURE", AWS D1.1 TO PERFORM THE WORK REQUIRED.
7. ALL CONNECTIONS SHALL BE BOLTED WITH 3/4" A325N HIGH STRENGTH BOLTS OR WELDED. BOLTS SHALL BE AT 3 INCH O/C VERT. PROVIDE MINIMUM 3/8" THICK FULL DEPTH THRU-PLATE FOR ALL PIPE AND TUBE COLUMN CONNECTIONS.
8. ALL STEEL WELDING RODS SHALL BE E70XX.
9. SUBMIT ALL STEEL SHOP DRAWINGS FOR REVIEW PRIOR TO FABRICATION.
10. STAIR FABRICATOR IS SOLELY RESPONSIBLE FOR SURVEYING AND VERIFYING EXISTING CONDITIONS, INCLUDING BUT NOT LIMITED TO THE LOCATION, ELEVATION, AND DIMENSIONS OF EXISTING WALLS AND FRAMING.
11. ALL STAIR TREADS SHALL BE CONSTRUCTED OF THE FOLLOWING:
    a. AS NOTED ON THE ARCHITECTURAL DRAWINGS
12. ALL STAIR LANDINGS SHALL BE CONSTRUCTED OF THE FOLLOWING:
    a. AS NOTED ON THE ARCHITECTURAL DRAWINGS
13. LIVE LOAD REQUIREMENTS FOR STEEL STAIRS AND HANDRAILS IS AS FOLLOWS:
    a. TREADS - 100 POUNDS PER SQUARE FOOT OR 300LB. CONCENTRATED LOAD AT MIDSPAN
    b. LANDINGS - 100 POUNDS PER SQUARE FOOT.
    c. HANDRAILS - 50 POUNDS PER LINEAR FOOT LOAD IN ANY DIRECTION OR 200 LB. CONCENTRATED LOAD IN ANY DIRECTION.
    d. GUARDRAILS - 50 POUNDS PER LINEAR FOOT LOAD IN ANY DIRECTION OR 200LB. CONCENTRATED LOAD IN ANY DIRECTION.
    e. INFILL MEMBERS - 50LB. CONCENTRATED LOAD SPREAD OVER A 1 SQUARE FOOT AREA.



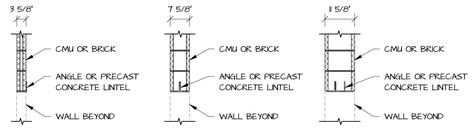
PARTIAL PLAN DETAIL 'A'

WALL FOOTING SCHEDULE

MARK	DIMENSIONS		REINFORCING		REMARKS
	WIDTH	THICKNESS	LONGITUDINAL	TRANSVERSE	
F20_12	2' - 0"	1' - 0"	3 - #4	#4 @ 24"	
F26_12	2' - 6"	1' - 0"	(4) #4	#4 @ 24" o/c	
F36_12	3' - 6"	1' - 0"	(4) #5	#4 @ 24" o/c	

MASONRY PIER SCHEDULE

MARK	DIMENSIONS		REINFORCEMENT		PLAN DETAIL	REMARKS
	WIDTH	LENGTH	VERTICAL	TIES		
MP1	7 5/8"	2' - 0"	(3) #5	HORIZ. JOINT REINF. @ 8" o/c	A	GROUT SOLID FULL HEIGHT

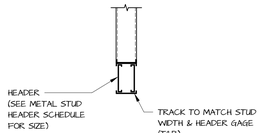


4" WALL 8" WALL 12" WALL

NON-BEARING STEEL & PRECAST CONCRETE LINTEL SCHEDULE

WIDTH OF OPENING	STEEL FOR EACH 4" OF WALL THICKNESS	PRECAST CONC. FOR EA. 4" OF WALL THICKNESS
UP TO 2'-4"	L 3-1/2 x 3-1/2 x 5/16	(1) #4 TOP & BOTTOM
3'-0" TO 3'-4"	L 4 x 3-1/2 x 5/16	(1) #4 TOP & BOTTOM
4'-0" TO 5'-4"	L 5 x 3-1/2 x 5/16	(1) #4 TOP & BOTTOM
6'-0" TO 8'-0"	L 6 x 3-1/2 x 5/16	(1) #5 TOP & BOTTOM

NOTES:
1. ALL CONCRETE LINTELS SHALL BE 4000 PSI CONCRETE AT 28 DAYS WITH GRADE 60 REINFORCING.
2. ALL STEEL LINTELS SHALL BE ASTM A-36.
3. FILL CMU VOIDS SOLID (2) COURSES BELOW LINTEL BEARING.
4. ALL LINTELS SHALL HAVE 8" MINIMUM BEARING UNO.
5. LINTEL TYPE (STEEL OR PRECAST) IS THE CONTRACTOR'S OPTION UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.

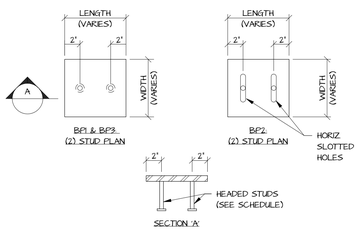


METAL STUD HEADER SCHEDULE
(NON-BEARING WALLS)

WIDTH OF OPENING	METAL STUD LINTEL SIZE	JAMB STUDS
UP TO 7'-0"	(2) 600S162-54	(2) STUDS
7'-0" TO 10'-0"	(2) 800S162-68	(2) STUDS
10'-0" TO 12'-0"	(2) 1000S162-68	(2) STUDS

STEEL LINTEL SCHEDULE

MARK	DESCRIPTION	SECTION
L1	W12x35 w/ 3/8"x 4 STEEL BOTTOM PLATE	
L2	(4) L 6 x 3-1/2 x 3/8	



STEEL BEARING PLATE SCHEDULE

MARK	THICKNESS	WIDTH	LENGTH	HEADED STUDS
BP1	3/8"	7-1/2"	8"	(2)
BP2	3/8"	7-1/2"	10"	(2)
BP3	3/8"	7-1/2"	10"	(2)

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JAMES R. BAWDEN REGISTERED PROFESSIONAL ENGINEER No. 13555 DELAWARE 9/13/2024

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

PROJECT SCHEDULES & GENERAL NOTES

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: JNR	PROJ MGR: JRB

S002-E

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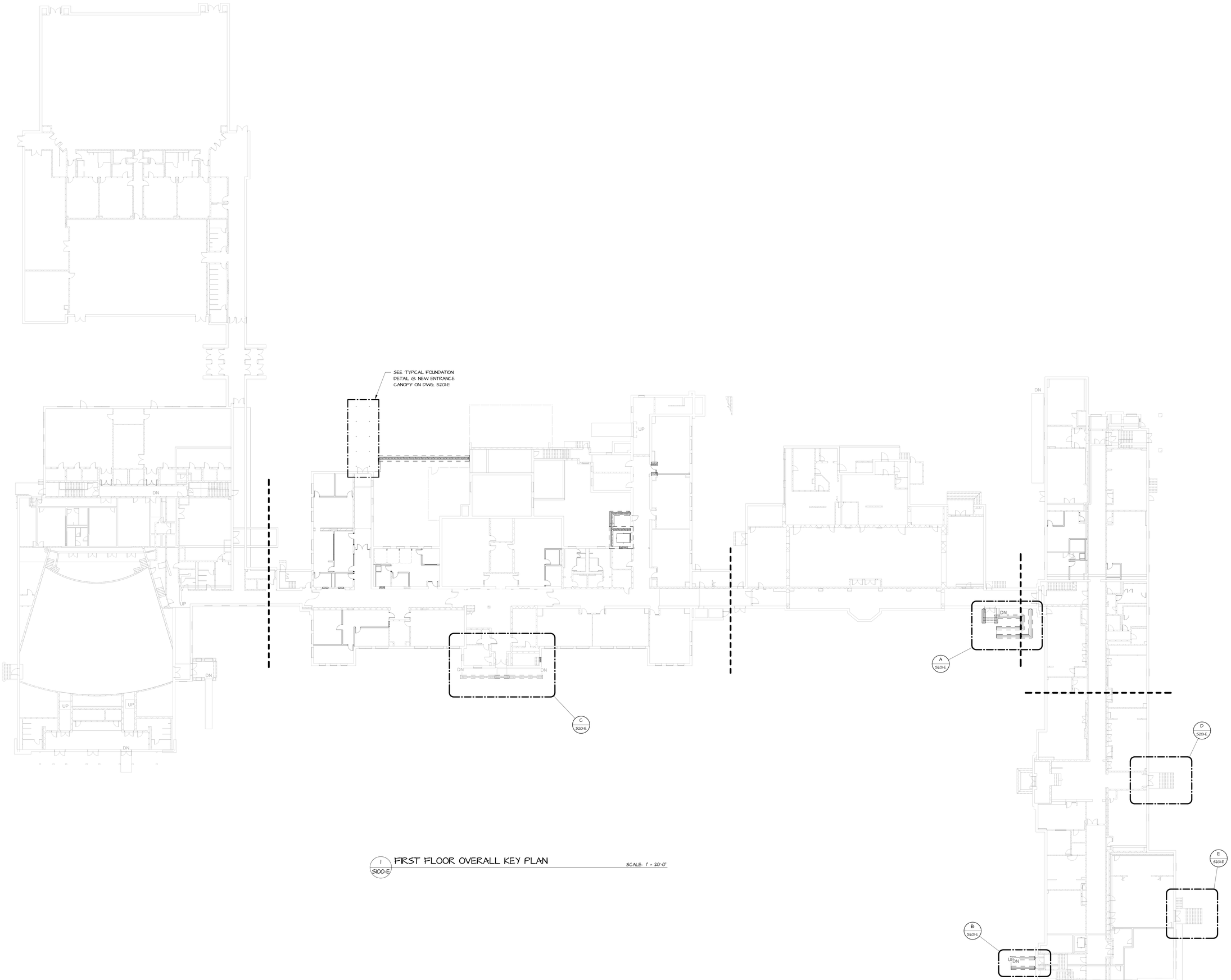

1 S100-E FIRST FLOOR OVERALL KEY PLAN

SCALE: 1" = 20'-0"

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FIRST FLOOR OVERALL KEY PLAN

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
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SCALE:	1" = 20'-0"
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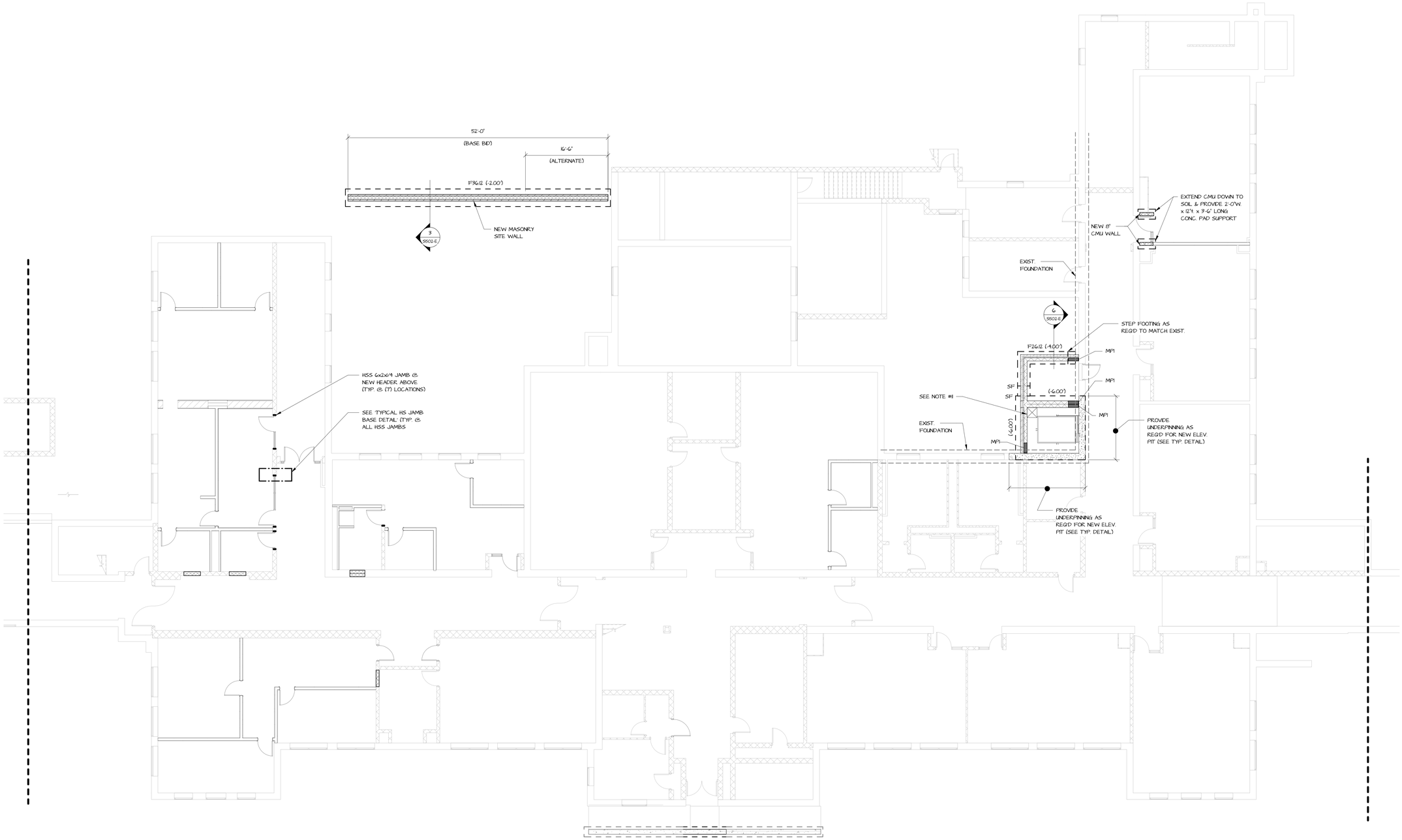
1 S101B-E FOUNDATION PLAN - AREA B

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

NOTES:

1. TOP OF SLAB EL. = DATUM EL. (0.00') UNLESS NOTED OTHERWISE THUS (.).
2. SEE PLAN FOR TOP OF FOOTING ELEVATION BELOW DATUM ELEVATION.
3. TOP OF PIER EL. = [-0.67'] BELOW DATUM UNLESS NOTED OTHERWISE THUS [..].
4. 'SF' INDICATES STEPPED FOOTING. SEE TYPICAL DETAIL FOR ADDITIONAL INFORMATION.
5. 'TDS' INDICATES TURNED DOWN SLAB. SEE TYPICAL DETAIL FOR ADDITIONAL INFORMATION.
6. 'S.../D...' INDICATES FLOOR/ ROOF CONSTRUCTION. SEE SCHEDULE ON THIS SHEET FOR ADDITIONAL INFORMATION.
7. COORDINATE ALL UNDER SLAB PIPING WITH ARCHITECTURAL/ MECHANICAL DRAWINGS.
8. COORDINATE ALL DIMENSIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO BUILDING LAYOUT.
9. '(+)' INDICATES DIMENSION TO BE VERIFIED w/ ELEVATOR MANUFACTURER PRIOR TO BUILDING LAYOUT.
10. 'R.W...' INDICATES RETAINING WALL. SEE SECTIONS INDICATED FOR ADDITIONAL INFORMATION.
11. PROVIDE 2'-0" x 2'-0" x 2'-0" DEEP SUMP PIT. COORDINATE DIMENSIONS w/ ARCHITECTURAL & MECHANICAL DIMENSIONS.
12. 'MP...' INDICATES MASONRY PIER. SEE SCHEDULE ON DWG. S002-E FOR ADDITIONAL INFORMATION.



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JAMES R. BAWDEN REGISTERED PROFESSIONAL ENGINEER No. 13555 DELAWARE
9/13/2024

PROJECT TITLE

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211 DELAWARE AVE
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ISSUED: 09/13/2024

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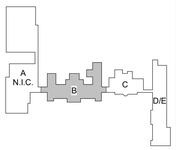
FOUNDATION PLAN - AREA B



ISSUE BLOCK

Mark	Date	Description

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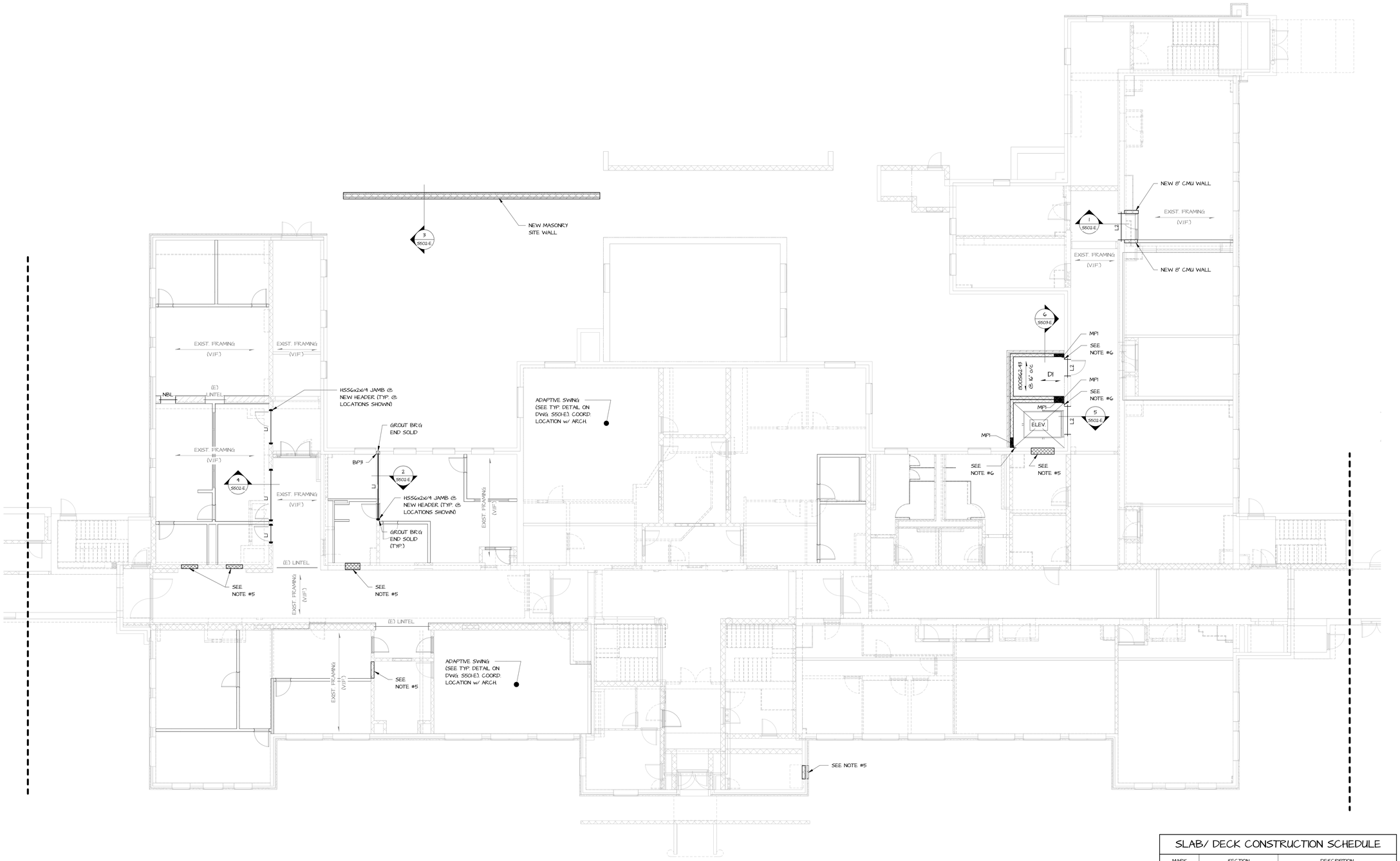
1 / S102B-E SECOND FLOOR FRAMING PLAN - AREA B

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

NOTES:

1. SEE PLAN FOR TOP OF DECK ELEVATION.
2. "S..../D..." INDICATES FLOOR/ ROOF CONSTRUCTION. SEE SCHEDULE ON THIS SHEET FOR ADDITIONAL INFORMATION.
3. "L..." INDICATES LINTEL. SEE SCHEDULE FOR ADDITIONAL INFORMATION.
4. "BP..." INDICATES BEARING PLATE. SEE SCHEDULE FOR ADDITIONAL INFORMATION.
5. INFILL EXISTING OPENING w/ CMU/ BRICK AS REQ'D TO MATCH EXISTING WALL THICKNESS (V.I.F. & COORD. w/ ARCH'L).
6. PROVIDE L6x4x5/16 x 1'-0"LG. w/ (2) 1/2"Ø HILTI HY270 @ NEW CMU WALL TO EXISTING WALL. LOCATE AT EXISTING FLOOR LEVEL. SEE TYP. DETAIL ON DWG. S103B-E.
7. "MP..." INDICATES MASONRY PIER. SEE SCHEDULE ON DWG. S002-E FOR ADDITIONAL INFORMATION.



SLAB/ DECK CONSTRUCTION SCHEDULE

MARK	SECTION	DESCRIPTION
S1		4" CONCRETE SLAB ON GRADE w/ 6x6-W1.4xW1.4 WWF OVER 4" CRUSHED STONE
S1A		4" CONCRETE (w/ 6% AIR ENTRAINMENT) SLAB ON GRADE w/ 6x6-W1.4xW1.4 WWF OVER 4" CRUSHED STONE
D1		1-1/2" 20GA. WIDE RIB METAL ROOF DECK (PAINTED)

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9/13/2024

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SECOND FLOOR FRAMING PLAN - AREA B

A N.I.C. B C D/E

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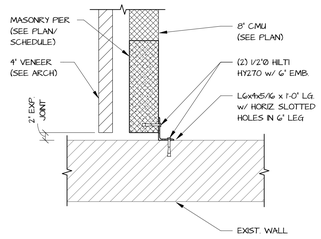
1 / S103B-E THIRD FLOOR FRAMING PLAN - AREA B

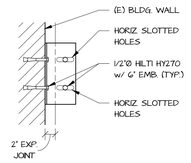
SCALE: 1/8" = 1'-0"

NOTES:

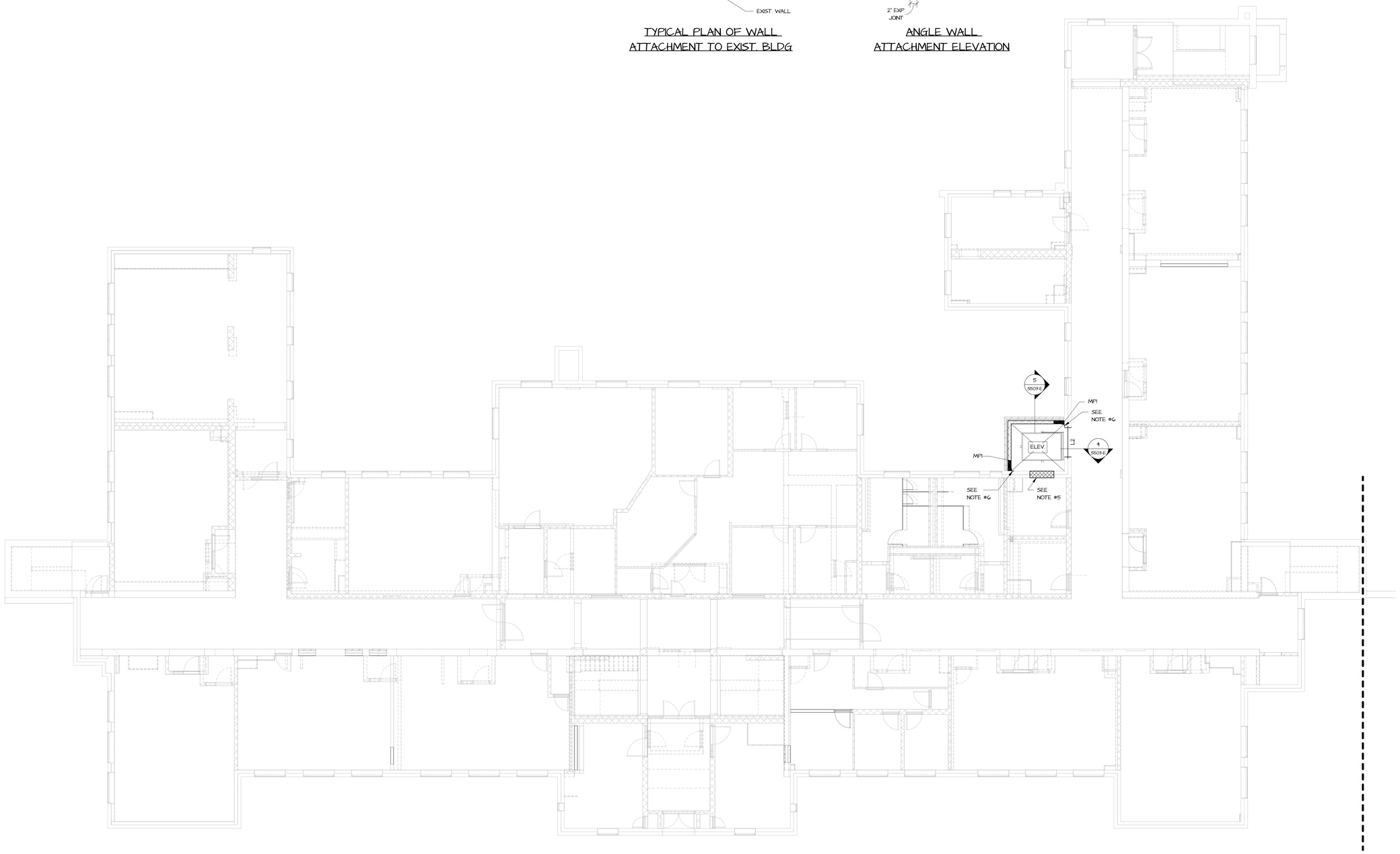
1. SEE PLAN FOR TOP OF DECK ELEVATION.
2. "S.../D..." INDICATES FLOOR/ ROOF CONSTRUCTION. SEE SCHEDULE ON THIS SHEET FOR ADDITIONAL INFORMATION.
3. "L..." INDICATES LINTEL. SEE SCHEDULE FOR ADDITIONAL INFORMATION.
4. "BP..." INDICATES BEARING PLATE. SEE SCHEDULE FOR ADDITIONAL INFORMATION.
5. INFILL EXISTING OPENING w/ CMU AS REQ'D TO MATCH EXISTING WALL THICKNESS (V.I.F.).
6. PROVIDE L6x4x5/16 x 1'-0"LG. w/ (2) 1/2"Ø HILTI HY270 @ NEW CMU WALL TO EXISTING WALL. LOCATE AT EXISTING FLOOR LEVEL. SEE TYP. DETAIL ON DWG. S103B-E.
7. "MP..." INDICATES MASONRY PIER. SEE SCHEDULE ON DWG. S002-E FOR ADDITIONAL INFORMATION.



TYPICAL PLAN OF WALL ATTACHMENT TO EXIST. BLDG



ANGLE WALL ATTACHMENT ELEVATION



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JAMES R. BAWDEN REGISTERED PROFESSIONAL ENGINEER No. 13566 DELAWARE
9/13/2024

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

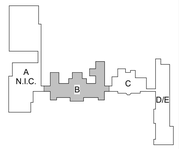
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

THIRD FLOOR FRAMING PLAN - AREA B



ISSUE BLOCK

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S103B-E

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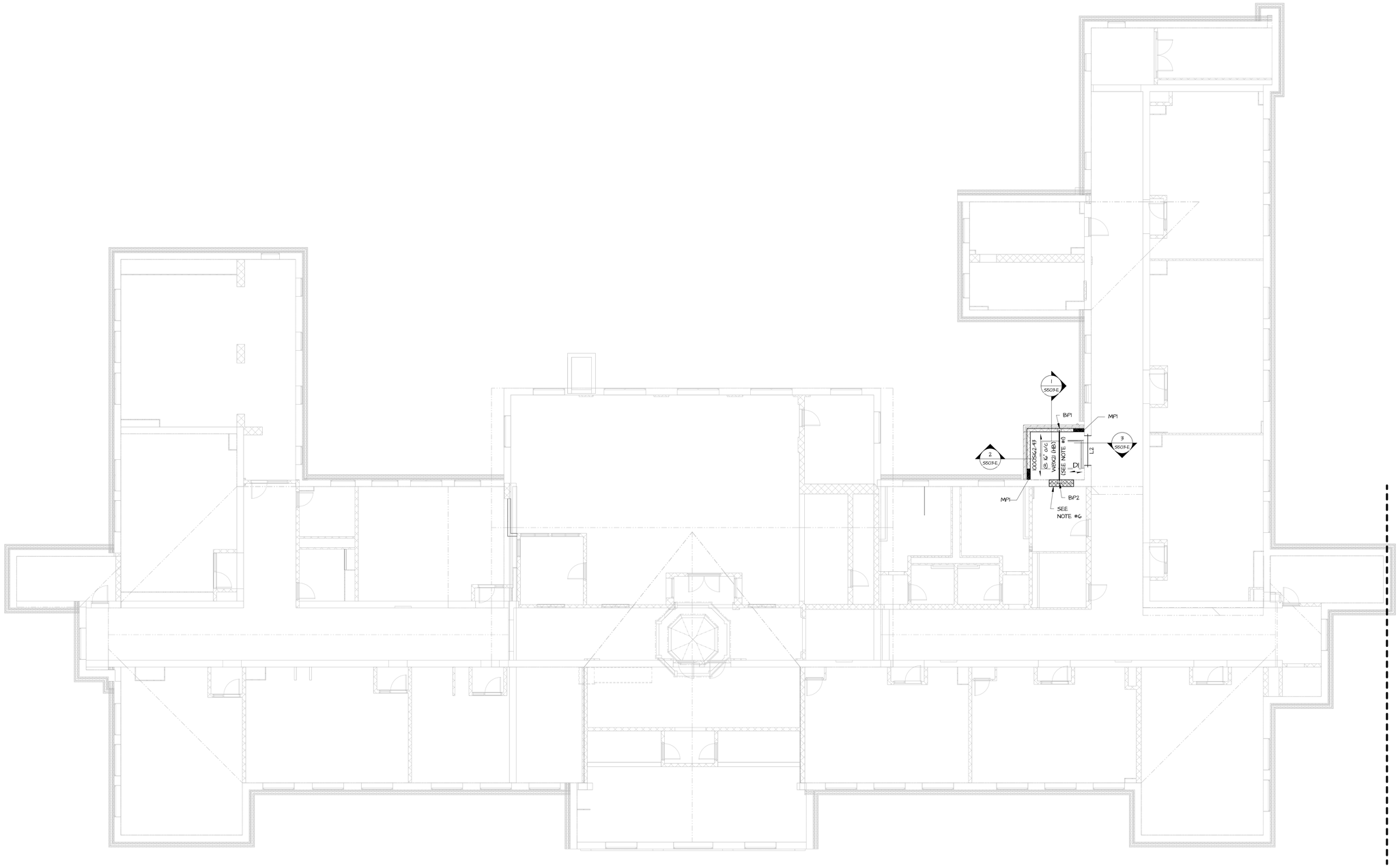
1 S104B-E ROOF FRAMING PLAN - AREA B

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

NOTES:

1. BOTTOM OF HOIST BEAM STEEL TO BE (12'-8") ABOVE THIRD FLOOR LEVEL @ LOW POINT. COORDINATE w/ ARCH/ ELEV. MANUF.
2. 'S...(1)...' INDICATES FLOOR/ ROOF CONSTRUCTION. SEE SCHEDULE ON THIS SHEET FOR ADDITIONAL INFORMATION.
3. 'L...' INDICATES LINTEL. SEE SCHEDULE FOR ADDITIONAL INFORMATION.
4. COORDINATE ROOF TOP UNIT LOCATIONS & DUCT PENETRATIONS WITH ARCHITECTURAL/ MECHANICAL DRAWINGS. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.
5. 'BP...' INDICATES BEARING PLATE. SEE SCHEDULE FOR ADDITIONAL INFORMATION.
6. INFILL EXISTING OPENING w/ NEW CMU. MATCH EXISTING WALL THICKNESS (VIF) & AT LOCATIONS SHOWN ON ARCHL DRAWINGS.
7. 'MP...' INDICATES MASONRY PIER. SEE SCHEDULE ON DWG. S002-E FOR ADDITIONAL INFORMATION.



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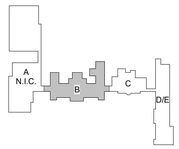
ROOF FRAMING PLAN - AREA B



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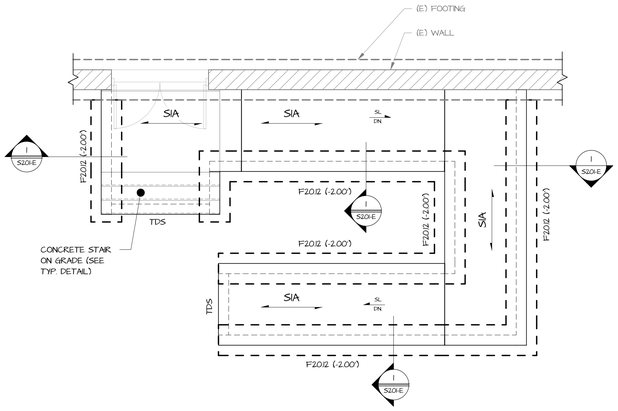
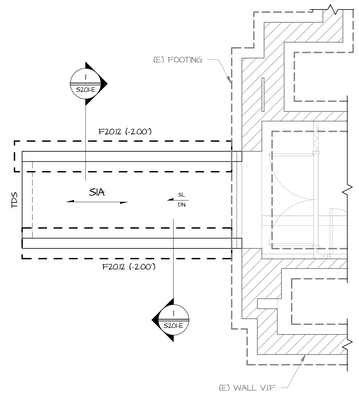


A S201-E PARTIAL RAMP/ STAIR FOUNDATION PLAN SCALE: 1/4" = 1'-0"



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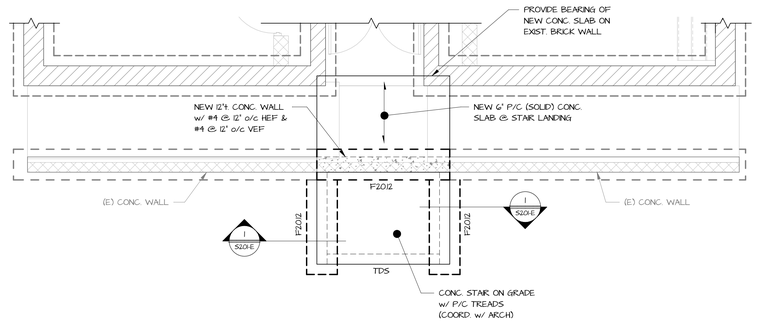
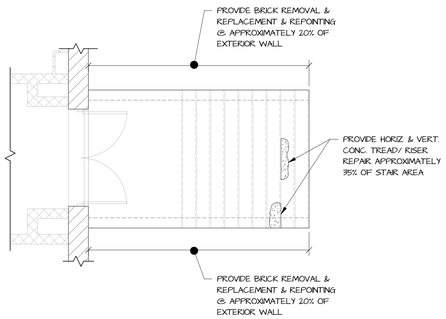


C S201-E PARTIAL MAIN ENTRANCE STAIR PLAN SCALE: 1/4" = 1'-0"



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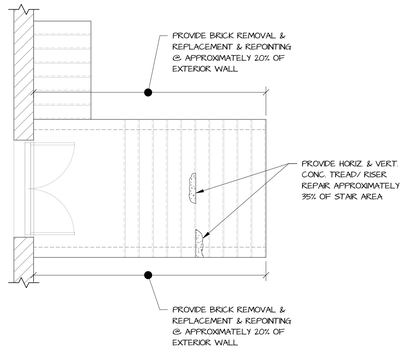

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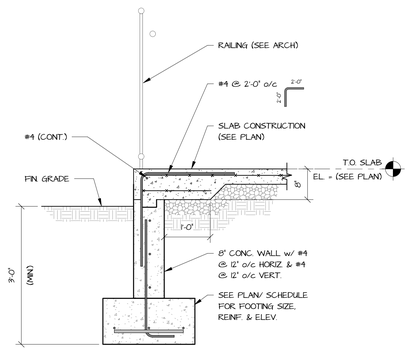
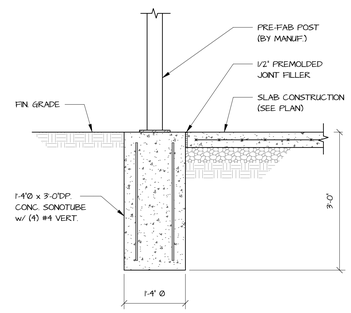


SECTION 1 S201-E



TYPICAL FOUNDATION DETAIL @ NEW ENTRANCE CANOPY PRE-FAB POST

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JAMES R. BAWDEN REGISTERED PROFESSIONAL ENGINEER No. 13555 DELAWARE
9/13/2024

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

PARTIAL PLANS & DETAILS

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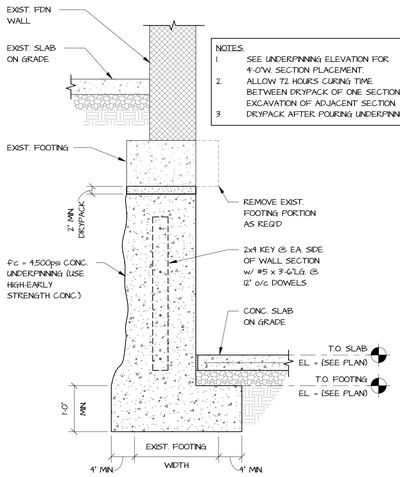
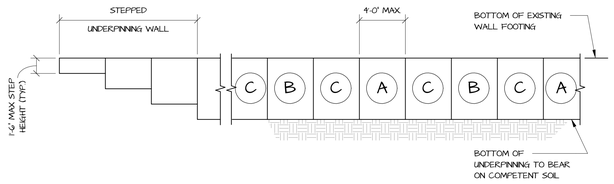


NOTES:
1. SEE UNDERPINNING ELEVATION FOR 4'-0"W. SECTION PLACEMENT.
2. ALLOW 72 HOURS CURING TIME BETWEEN DRYPACK OF ONE SECTION & EXCAVATION OF ADJACENT SECTION.
3. DRYPACK AFTER POURING UNDERPINNING.

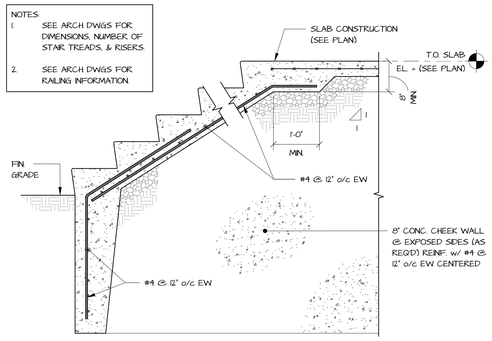
TYPICAL UNDERPINNING DETAIL



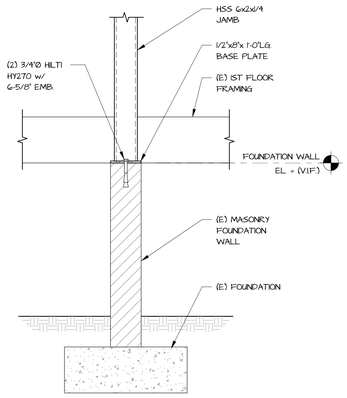
1. EXCAVATE & PLACE PANELS (A) FIRST. MINIMUM CLEAR DISTANCE BETWEEN SIMULTANEOUS CUTS SHALL BE 6'-0". ALLOW CONCRETE TO REACH MINIMUM COMPRESSIVE STRENGTH OF 4,000psi BEFORE PROCEEDING TO PANELS (B). EXCAVATE & PLACE PANELS (B) SECOND. ALLOW CONCRETE TO REACH MINIMUM COMPRESSIVE STRENGTH OF 4,000psi BEFORE PROCEEDING TO PANELS (C). EXCAVATE & PLACE PANELS (C) THIRD.
2. WHEN GRADUAL SLOPE CANNOT BE MAINTAINED IN THE EXCAVATION (e.g. DUE TO THE PRESENCE OF ADJACENT STRUCTURE), THE SITE SHALL BE PROTECTED AGAINST CAVING & MOVEMENT OF SOIL AT ALL TIMES. THIS SHALL BE ACCOMPLISHED BY THE USE OF H-PILES & BREAST-BOARDS, INTERLOCKING STEEL SHEETING, OR OTHER APPROPRIATE METHODS & MATERIALS (SEE NOTE #5).
3. THE CONTRACTOR WILL BE REQUIRED TO SAFELY SUPPORT & MAINTAIN ADJACENT & ABUTTING PROPERTY & STRUCTURES.
4. WHEN REQUIRED, CONTRACTOR SHALL UNDERPIN EXISTING STRUCTURES. UNDERPINNING SHALL BE PERFORMED BY MEANS OF TRENCHING. EXCAVATION & CONCRETING OF THE UNDERPINNING PITS SHALL BE PERFORMED IN ALTERNATE SECTIONS OF 4'-0" MAX. IN WIDTH. UNDERPINNING DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW (SEE NOTE #6).
5. THE CONTRACTOR SHALL PROTECT THE UNDERPINNING FROM HEAVING DUE TO FROST & BEARING WASHOUT.
6. THE CONTRACTOR SHALL ENGAGE THE SERVICES OF A LICENSED PROFESSIONAL ENGINEER, LICENSED IN THE COMMONWEALTH OF _____ & SEALED BY THE LICENSED PROFESSIONAL ENGINEER PRIOR TO SUBMITTAL TO THE DESIGNER FOR REVIEW.
7. UNDERPINNING SHALL EXTEND TO COMPETENT SOIL.

SUGGESTED WALL UNDERPINNING ELEVATION

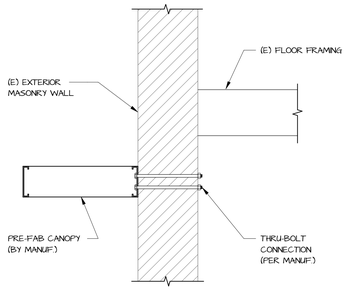
NOTES:
1. SEE ARCH DWGS FOR DIMENSIONS, NUMBER OF STAIR TREADS, & RISERS.
2. SEE ARCH DWGS FOR RAILING INFORMATION.



TYPICAL EXTERIOR CONCRETE STAIR ON GRADE DETAIL

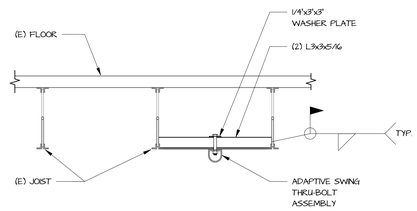


TYPICAL HSS JAMB BASE DETAIL

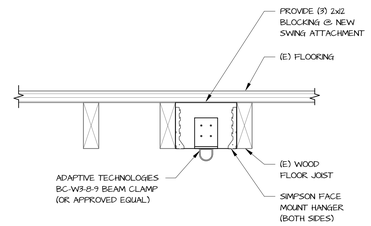


TYPICAL DETAIL @ NEW PRE-FAB CANOPY

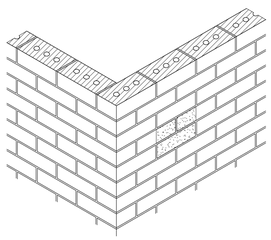
NOTES:
1. SEE ARCH'L DWG'S FOR CANOPY LOCATIONS & SIZE.



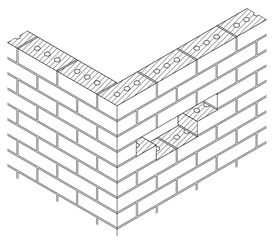
ADAPTIVE SWING SUPPORT DETAIL @ EXIST. STEEL FRAMING



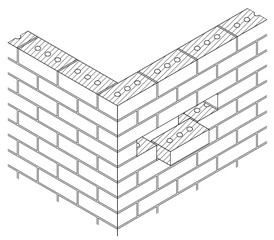
ADAPTIVE SWING SUPPORT DETAIL @ EXIST. WOOD FRAMING



DAMAGED BRICK UNITS
1. DRILL HOLES IN JOINT SURROUNDING THE BRICK AS WELL AS IN THE BRICK ITSELF.



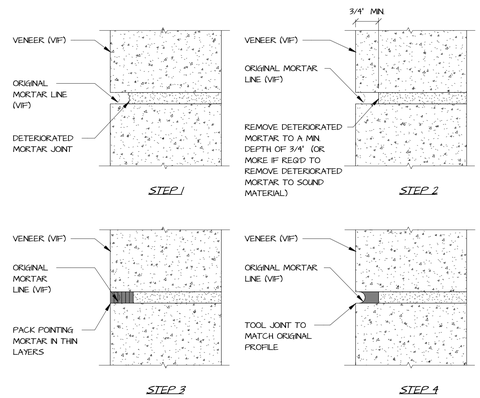
BRICK UNITS AND MORTAR
2. USE CHISEL TO CHOP OUT BRICK.
3. CLEAN OUT OPENING.



REPLACEMENT UNITS
4. PLACE MORTAR BED ON HORIZONTAL SURFACE MAKING SURE IT IS THICKER THAN THE JOINT REMOVED.
5. BUTTER THE BRICK ON THE REMAINING THREE SIDES.
6. PLACE BRICK IN OPENING, LINING THE FACE OF THE BRICK WITH THE ADJACENT BRICK FACES.
7. POINT JOINT MATCHING THE EXISTING JOINT PATTERN.

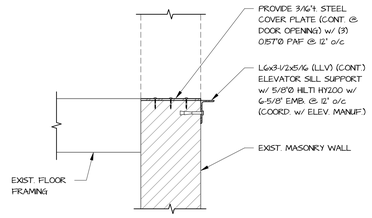
BRICK REPLACEMENT DETAIL

NOTES:
1. BRICK & MORTAR TO MATCH EXISTING
2. TEMPORARILY SUPPORT BRICK ABOVE REMOVED PORTION IF WIDTH IS GREATER THAN 24".



MASONRY POINTING DETAIL

NOTES:
1. MORTAR TO MATCH EXISTING PROFILE & COLOR.



TYPICAL ELEVATOR SILL DETAIL @ FLOORS

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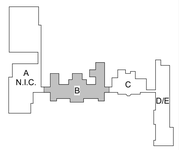
TYPICAL DETAILS



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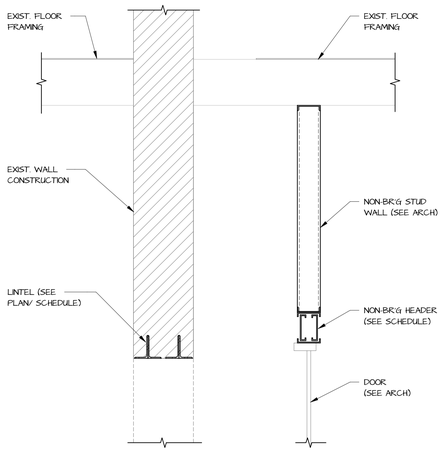
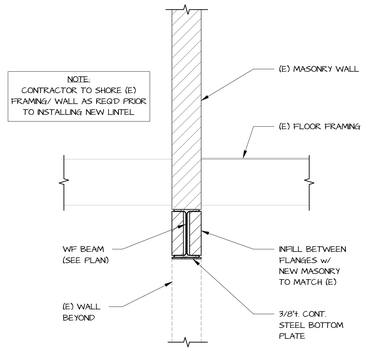
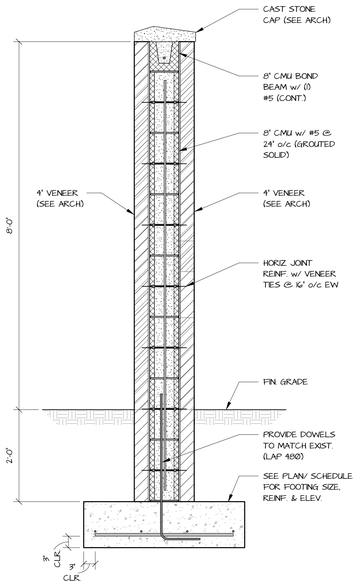


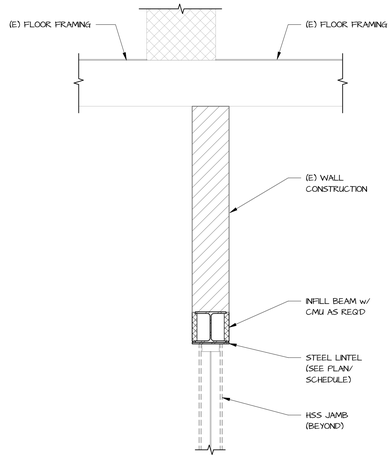
SECTION 1 / S502-E



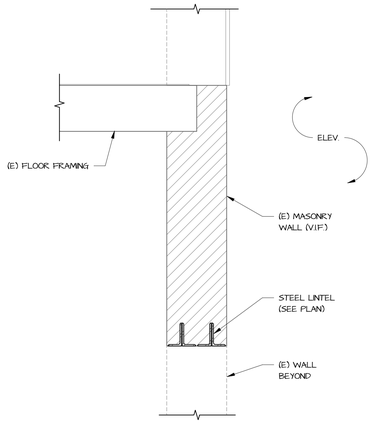
SECTION 2 / S502-E



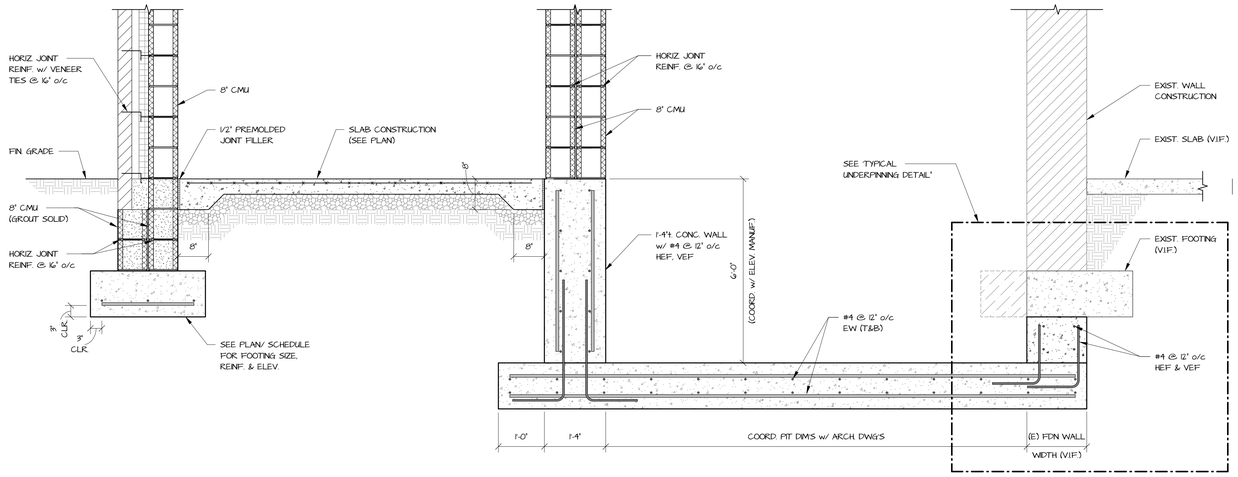
SECTION 3 / S502-E



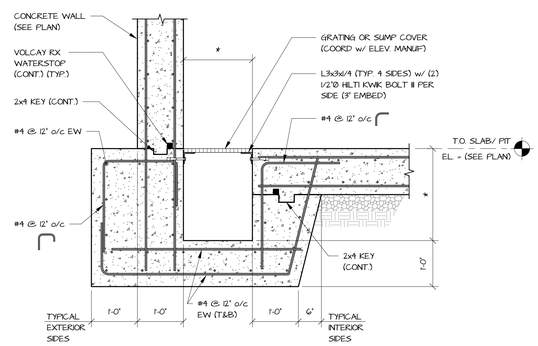
SECTION 4 / S502-E



SECTION 5 / S502-E



SECTION 6 / S502-E



TYPICAL SUMP DETAIL @ SIDE WALL

NOTES:
1. SEE TYPICAL ELEVATOR PIT DETAIL FOR ADD'L INFORMATION.
2. * INDICATES DIMENSION TO BE COORDINATED w/ ARCH/ MEP.

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STRUCTURAL ENGINEER
17585 NASSAU BOULEVARD, UNIT 3
LEWES, DE 19958
Job Number: 124.103
302-703-1770

RICHARD Y. JOHNSON & SON, INC.
CONSTRUCTION MANAGER
18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

JAMES R. BAWDEN REGISTERED PROFESSIONAL ENGINEER No. 13555 DELAWARE
9/13/2024

PROJECT TITLE

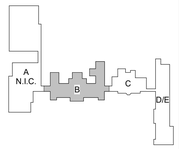
CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECTIONS



ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	3/4" = 1'-0"
DRAWN BY: JNR	PROJ MGR: JRB

S502-E

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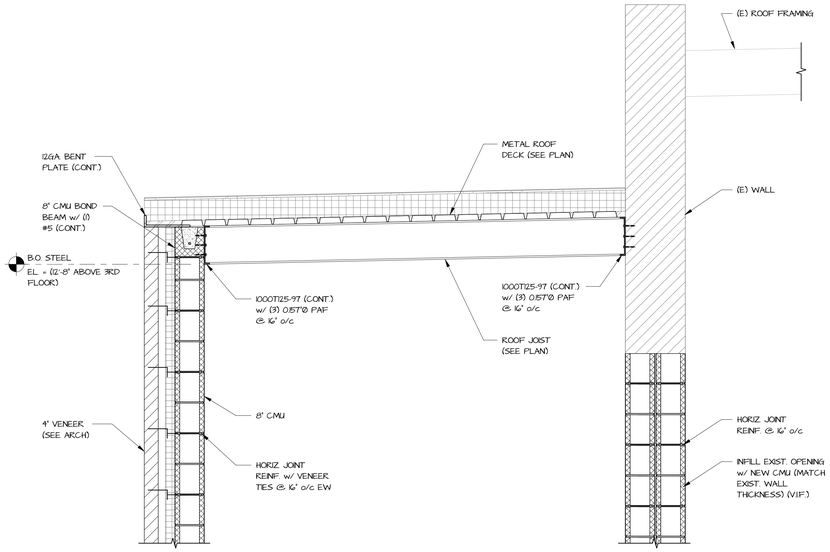

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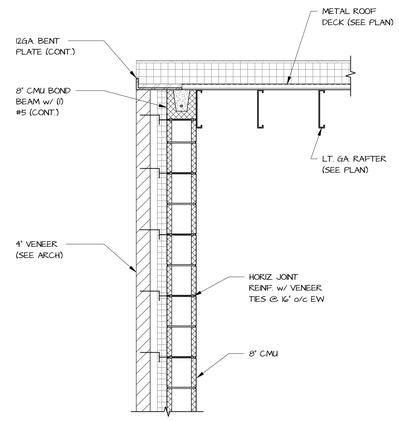

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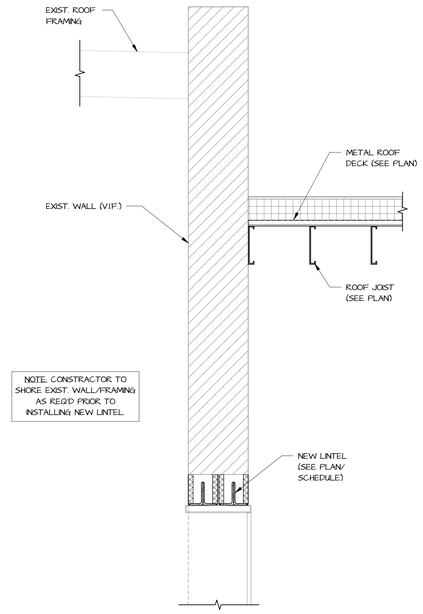

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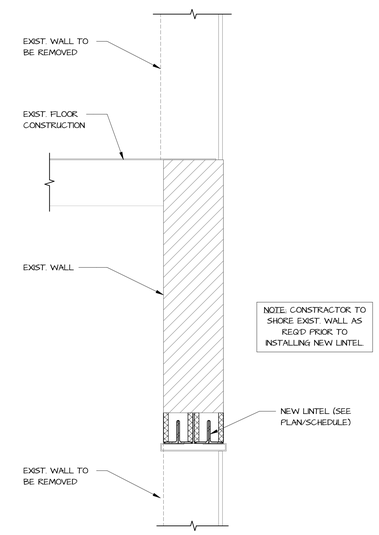

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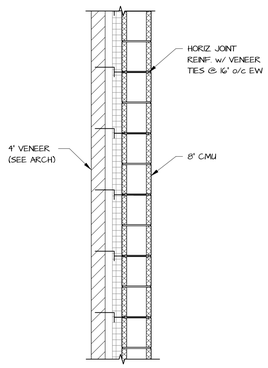

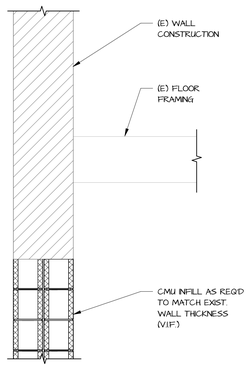

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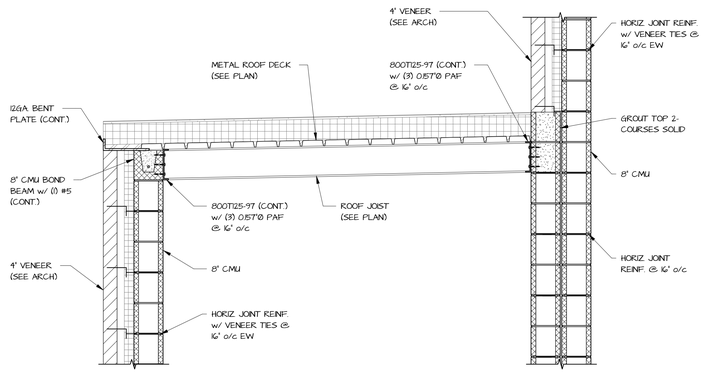

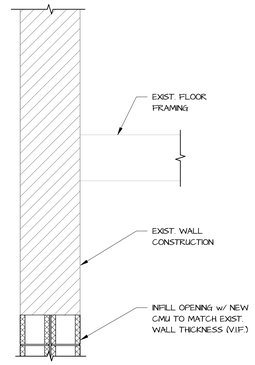

SECTION 6 S503-E

BECKER MORGAN GROUP

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309 S Governors Ave
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North Carolina
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9/13/2024

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CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

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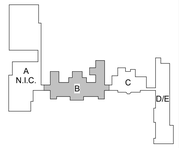
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

SECTIONS



ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
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SCALE:	3/4" = 1'-0"
DRAWN BY: JNR	PROJ MGR: JRB

S503-E

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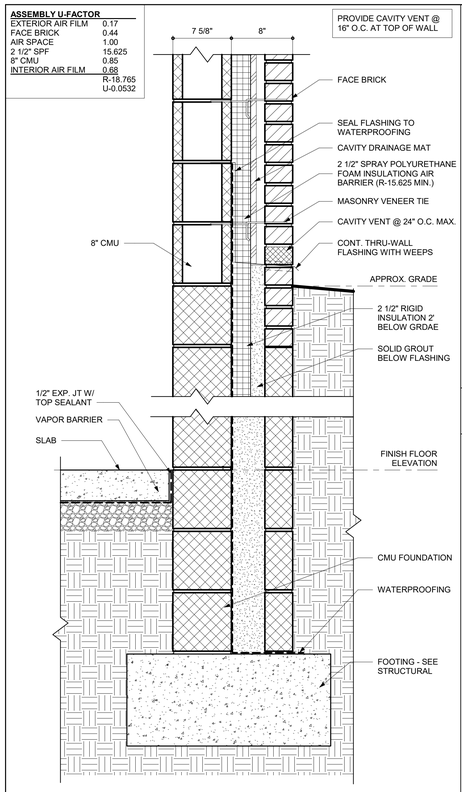
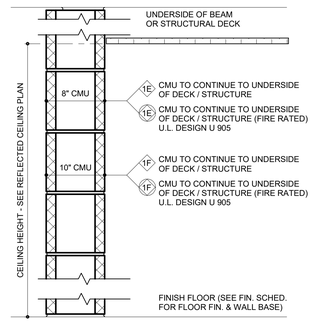
ASSEMBLY U-FACTOR

EXTERIOR AIR FILM	0.17
FACE BRICK	0.44
AIR SPACE	1.00
2 1/2" SPF	15.625
8" CMU	0.85
INTERIOR AIR FILM	0.68
	R-18.765
	U-0.0532

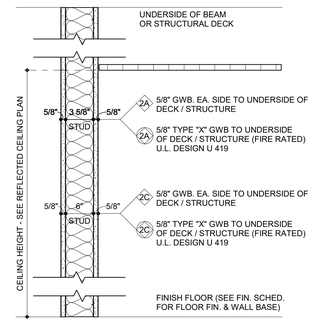
PROVIDE CAVITY VENT @ 16" O.C. AT TOP OF WALL



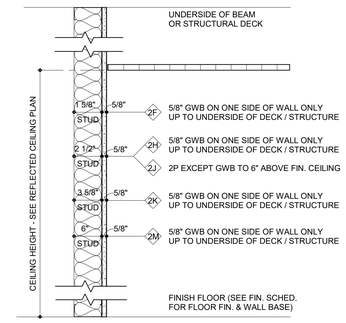
EXTERIOR WALL TYPE 6A



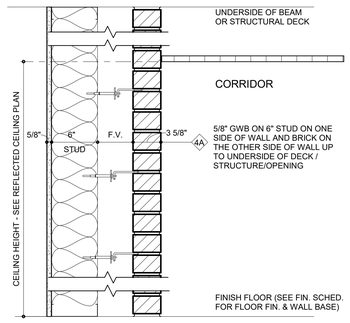
WALL TYPES 1E 1E 1F 1F



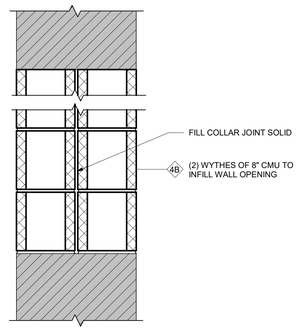
WALL TYPES 2A 2A 2C 2C



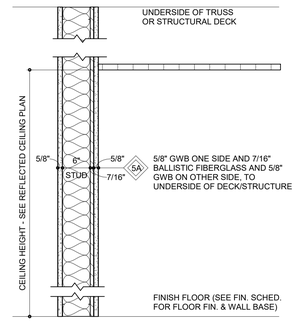
WALL TYPES 2F 2H 2J 2K 2M



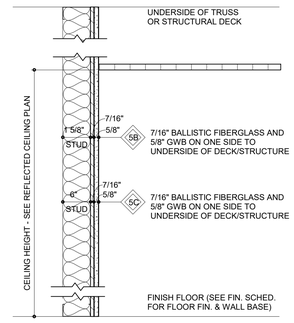
WALL TYPES 4A



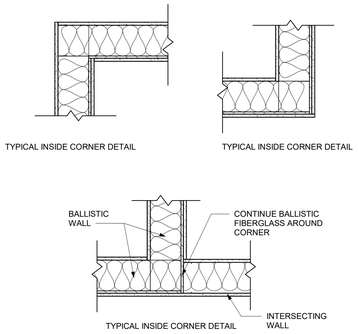
WALL TYPES 4B



WALL TYPES 5A



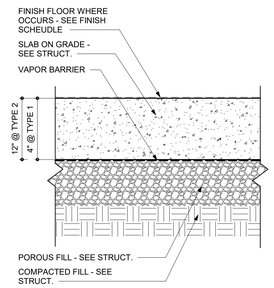
WALL TYPES 5B 5C



WALL TYPE GENERAL NOTES

1. SEE CODE SHEETS, G100- AND G500-SERIES, FOR REQUIRED FIRE RATINGS OF ALL WALL ASSEMBLIES. MULTIPLE LAYERS OF GWB MAY BE REQUIRED AT RATED PARTITIONS. COORDINATE WITH U.L. DESIGN(S).
2. PROVIDE SOUND-ATTENUATING FIRE BATT INSULATION IN RATED STUD-FRAMED PARTITIONS AND FIBERGLASS SOUND BATT INSULATION IN NON-RATED STUD PARTITIONS.
3. PROVIDE MOLD AND MOISTURE RESISTANT GWB AT ALL STUD-FRAMED PARTITIONS IN WET LOCATIONS, INCLUDING TOILET ROOMS, AND AT SINKS AND LAVATORIES. EXTEND TO END OF CASEWORK RUN, INCLUDING SIDEWALLS WHERE ADJACENT TO SINKS.
4. BRACE NON-STRUCTURAL METAL STUD PARTITIONS WHERE NOT ATTACHED TO STRUCTURE ABOVE OR WHERE HEIGHT OF STRUCTURE EXCEEDS MANUFACTURER'S LIMITING HEIGHT FOR 5PSF @ 16" O.C., OR PROVIDE COLD-FORM FRAMING. SEE SPECIFICATIONS AND STRUCTURAL DRAWINGS.
5. SEE STRUCTURAL FOR BRACING OF PART-HEIGHT MASONRY PARTITIONS, INCLUDING MASONRY PARTITIONS WITH METAL STUD PARTITIONS CONTINUING ABOVE.
6. SEE STRUCTURAL AND SPECIFICATIONS FOR MASONRY TIES IN MULTIPLE-WYTHE MASONRY WALLS AND PARTITIONS. CORRUGATED AND MESH TIES ARE NOT ACCEPTABLE.
7. PROVIDE BULLNOSE MASONRY UNITS AT OUTSIDE CORNERS AND PER SPECIFICATIONS.
8. PROVIDE SPECIAL-SHAPED MASONRY UNITS PER DETAILS AND SPECIFICATIONS.
9. FILL ALL CORES IN MASONRY UNITS AT THE FOLLOWING LOCATIONS: MECHANICAL ROOMS / MEZZANINES / PENTHOUSES / EQUIPMENT PLATFORMS, ELEVATOR MACHINE ROOMS, AND AS INDICATED. SEE SPECIFICATIONS.
10. PROVIDE ACOUSTICAL SEALANT AT PARTITIONS IN THE FOLLOWING LOCATIONS: MECHANICAL ROOMS / MEZZANINES / PENTHOUSES / EQUIPMENT PLATFORMS, AND ELEVATOR MACHINE ROOM. SEE SPECIFICATIONS.
11. PROVIDE CONTROL JOINTS IN MASONRY WALLS AS INDICATED ON PLANS, ELEVATIONS, DETAILS, AND AS SPECIFIED. WHERE JOINTS ARE NOT SHOWN, PROVIDE ACCORDING TO B.I.A AND N.C.M.A. TEK NOTES. SUBMIT SHOP DRAWING FOR ARCHITECT'S APPROVAL.

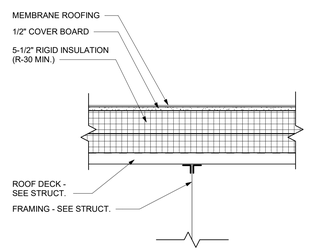
WALL TYPE GENERAL NOTES



SLAB TYPE 1 - TYPICAL UNLESS OTHERWISE NOTED
SLAB TYPE 2 - TYPICAL AT ELEVATOR PITS AND AS NOTED.

SLAB TYPES 1 & 2

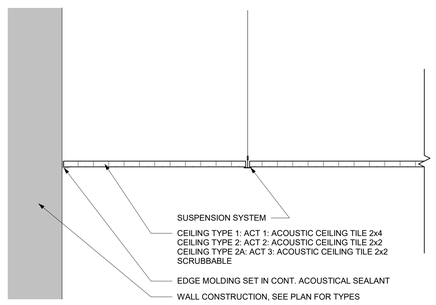
SCALE : N.T.S.



ROOF TYPE 1 - TYPICAL AT ALL AREAS U.O.N.

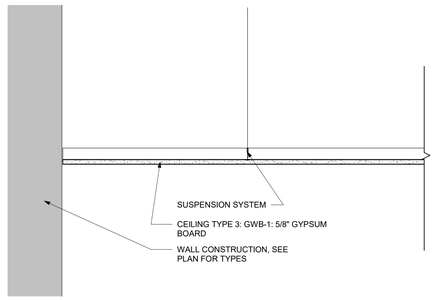
ROOF TYPES 1

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



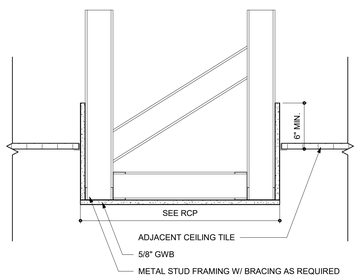
CEILING TYPES 1, 2, 2A - ACT ON SUSPENSION SYSTEM

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



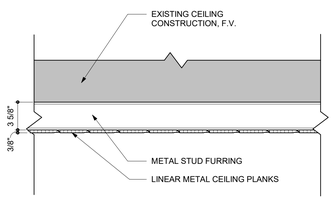
CEILING TYPE 3 - GWB ON SUSPENSION SYSTEM

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



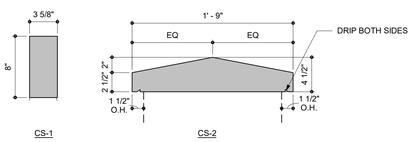
CEILING TYPE 4 - GWB ON MTL. STUD

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



CEILING TYPE 5 - LINEAR METAL PLANK CEILING

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



CAST STONE PROFILES

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

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

CONSTRUCTION TYPES - WALL TYPES, SLABS, FLOORS, ROOFS, AND CEILINGS

0' 4" 8" 16"
SCALE: 1-1/2" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: WA	PROJ MGR: BAH

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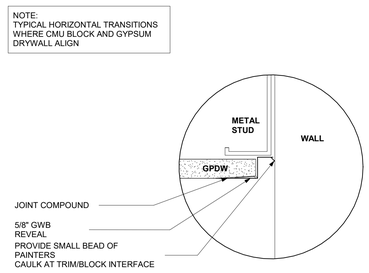
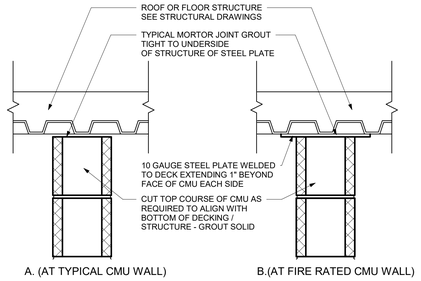


1 TYPICAL REVEAL DETAIL

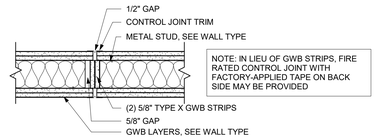
SCALE : N.T.S.



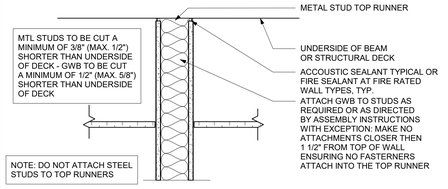
A. (AT TYPICAL CMU WALL) B.(AT FIRE RATED CMU WALL)

2 TYPICAL TOP OF CMU WALL TERMINATION DETAIL

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



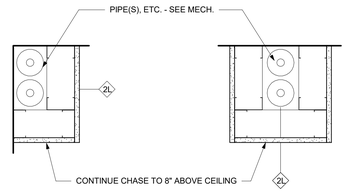
1B. CONTROL JOINT DETAIL AT RATED STUD PARTITION



1A. STUD WALL HEAD DETAIL

3 TYPICAL STUD WALL DETAILS

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

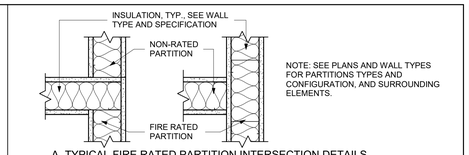


A. TYPICAL CHASE IN CORNER B. TYPICAL FREE STANDING CHASE

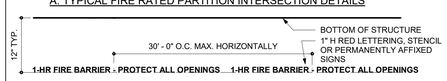
NOTE: COORDINATE CHASE SIZES WITH MECHANICAL/PLUMBING & STRUCTURAL REQUIREMENTS AND WITH DIMENSIONS INDICATED ON FLOOR PLANS. ALIGN CHASE WITH ADJACENT WALLS AS INDICATED ON PLANS.

4 TYPICAL CHASE DETAILS

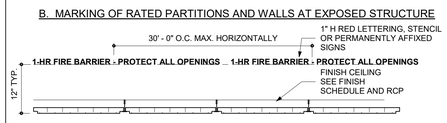
SCALE : 1 1/2" = 1'-0"



A. TYPICAL FIRE RATED PARTITION INTERSECTION DETAILS



B. MARKING OF RATED PARTITIONS AND WALLS AT EXPOSED STRUCTURE

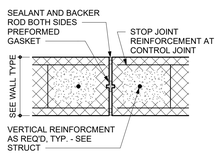


C. MARKING OF RATED PARTITIONS AND WALLS AT FINISH CEILING

NOTES:
1. MARK BOTH SIDES OF RATED WALLS AND PARTITIONS.
2. WHERE WALL OR PARTITION CHANGES DIRECTION, MARK EACH SEGMENT INDIVIDUALLY.
3. LOCATE MARKINGS SO AS TO NOT BE OBSTRUCTED BY WIRES, CONDUIT, PIPES, EQUIPMENT, ETC..
4. LETTERING SHALL READ AS FOLLOWS:
   A. SMOKE PARTITION: " SMOKE PARTITION - PROTECT ALL OPENINGS "
   B. 1-HR FIRE BARRIER: " 1-HR FIRE BARRIER - PROTECT ALL OPENINGS "
   C. 2-HR FIRE WALL: " 2-HR FIRE WALL - PROTECT ALL OPENINGS "

5 TYPICAL RATED PARTITION DETAILS

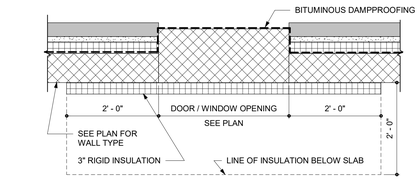
N.T.S.



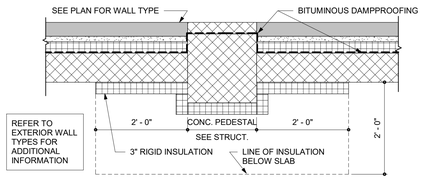
A. NON-RATED AND UP TO 2-HR RATED

6 TYPICAL CMU CONTROL JOINT DETAILS

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



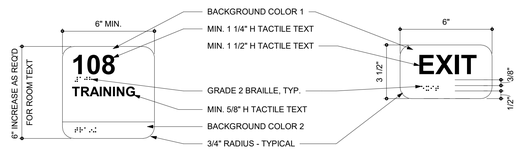
A. TYP. FOUNDATION INSULATION DETAIL AT DOOR/ WINDOW



B. TYP. FOUNDATION INSULATION DETAIL AT COLUMN PEDESTAL

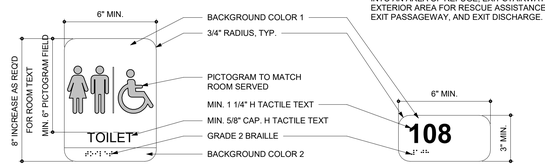
7 TYPICAL PLAN DETAILS AT FOUNDATION INSULATION

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



A. TYPICAL ROOM SIGN C. EXIT SIGN

PROVIDE SIGN AT EACH DOOR LEADING INTO AN AREA OF REFUGE, EXIT STAIRWAY, EXTERIOR AREA FOR RESCUE ASSISTANCE, EXIT PASSAGEWAY, AND EXIT DISCHARGE.

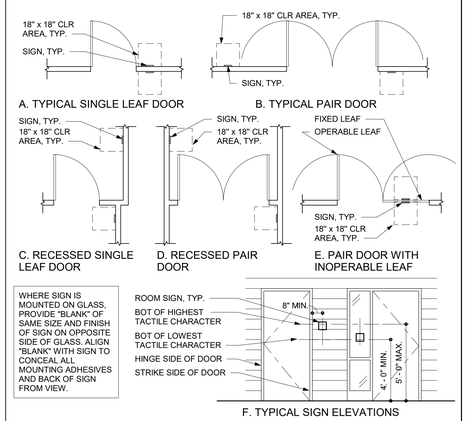


B. TYPICAL TOILET ROOM SIGN D. ROOM NUMBER SIGN

(USED ONLY WHERE INDICATED AND AS DIRECTED DURING SHOP DRAWING REVIEW)

GENERAL SIGNAGE NOTES:
1. SIGNAGE SHALL COMPLY WITH 2010 ADA STANDARDS, ICC/ANSI A117.1-2017, IBC, AND NFPA 101.
2. COORDINATE SIGN MESSAGES WITH APPROVED ROOM NAMES AND NUMBERS.
3. TEXT COLOR SHALL CONTRAST WITH BACKGROUND COLOR. BRAILLE COLOR SHALL MATCH BACKGROUND COLOR.
4. REFER TO ELECTRICAL FOR ILLUMINATED AREA OF REFUGE AND EXTERIOR AREA FOR RESCUE ASSISTANCE SIGNS.
5. PROVIDE INSTRUCTION SIGN AT AREAS OF REFUGE FOR USE OF THE AREA UNDER EMERGENCY CONDITIONS.
6. WHERE LUMINOUS EGRESS PATH MARKINGS ARE REQUIRED. SPECIAL EXIT SIGNS AND STAIR LANDING SIGNS SHALL BE OF SAME LUMINOUS MATERIALS.
7. TACTILE TEXT SHALL BE RAISED 1/32".

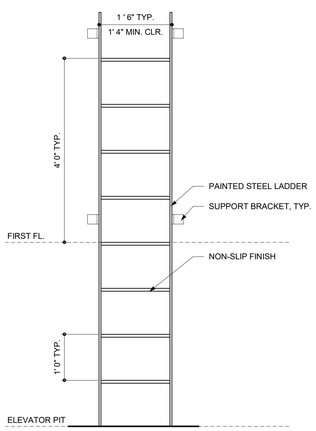
8 TYPICAL SIGNAGE DETAILS



A. TYPICAL SINGLE LEAF DOOR B. TYPICAL PAIR DOOR C. RECESSED SINGLE LEAF DOOR D. RECESSED PAIR DOOR E. PAIR DOOR WITH INOPERABLE LEAF F. TYPICAL SIGN ELEVATIONS

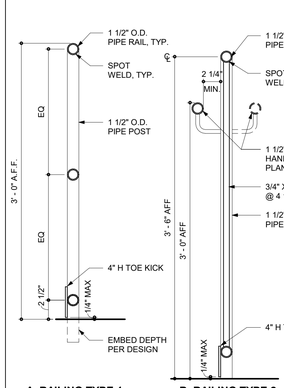
9 TYPICAL SIGNAGE MOUNTING LOCATIONS

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

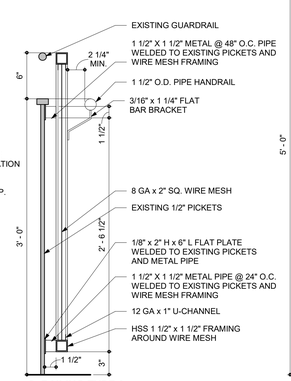


10 ELEVATOR LADDER DETAIL

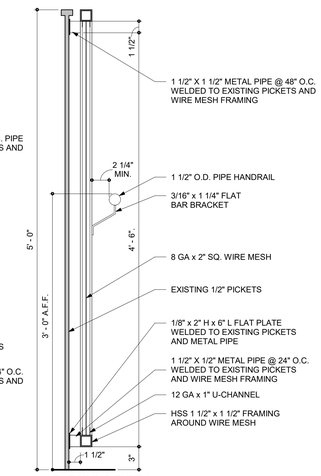
SCALE: 3/4" = 1'-0"



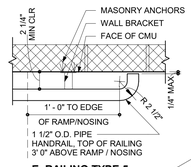
A. RAILING TYPE 1 B. RAILING TYPE 2



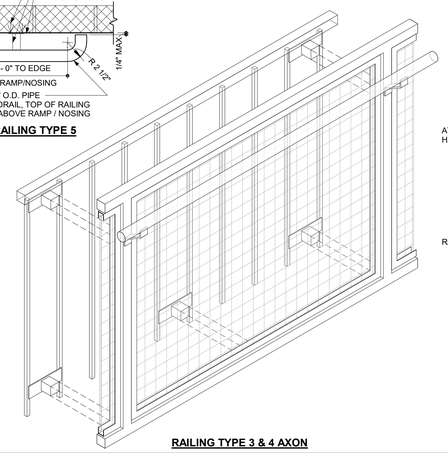
C. RAILING TYPE 3



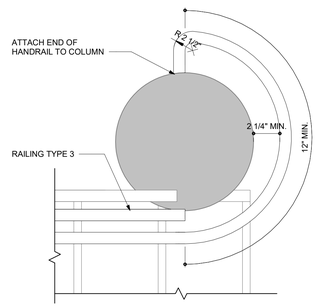
D. RAILING TYPE 4



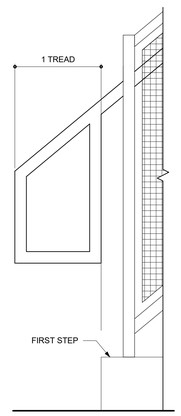
E. RAILING TYPE 5



RAILING TYPE 3 & 4 AXON



COLUMN CONDITION



RAILING END CONDITION

11 FLOOR-MOUNTED HANDRAIL SECTION & WALL-MOUNTED HANDRAIL PLAN DETAIL

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

0' 4" 8" 16"
SCALE: 1-1/2" = 1'-0"

0' 2" 4' 8'
SCALE: 1/4" = 1'-0"

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RICHARD Y. JOHNSON & SON, INC.
CONSTRUCTION MANAGER
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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

CONSTRUCTION TYPES - SIGNAGE, RAILINGS, AND LADDERS

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: WA	PROJ MGR: BAH

A002-E

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DEMOLITION KEYNOTE LEGEND

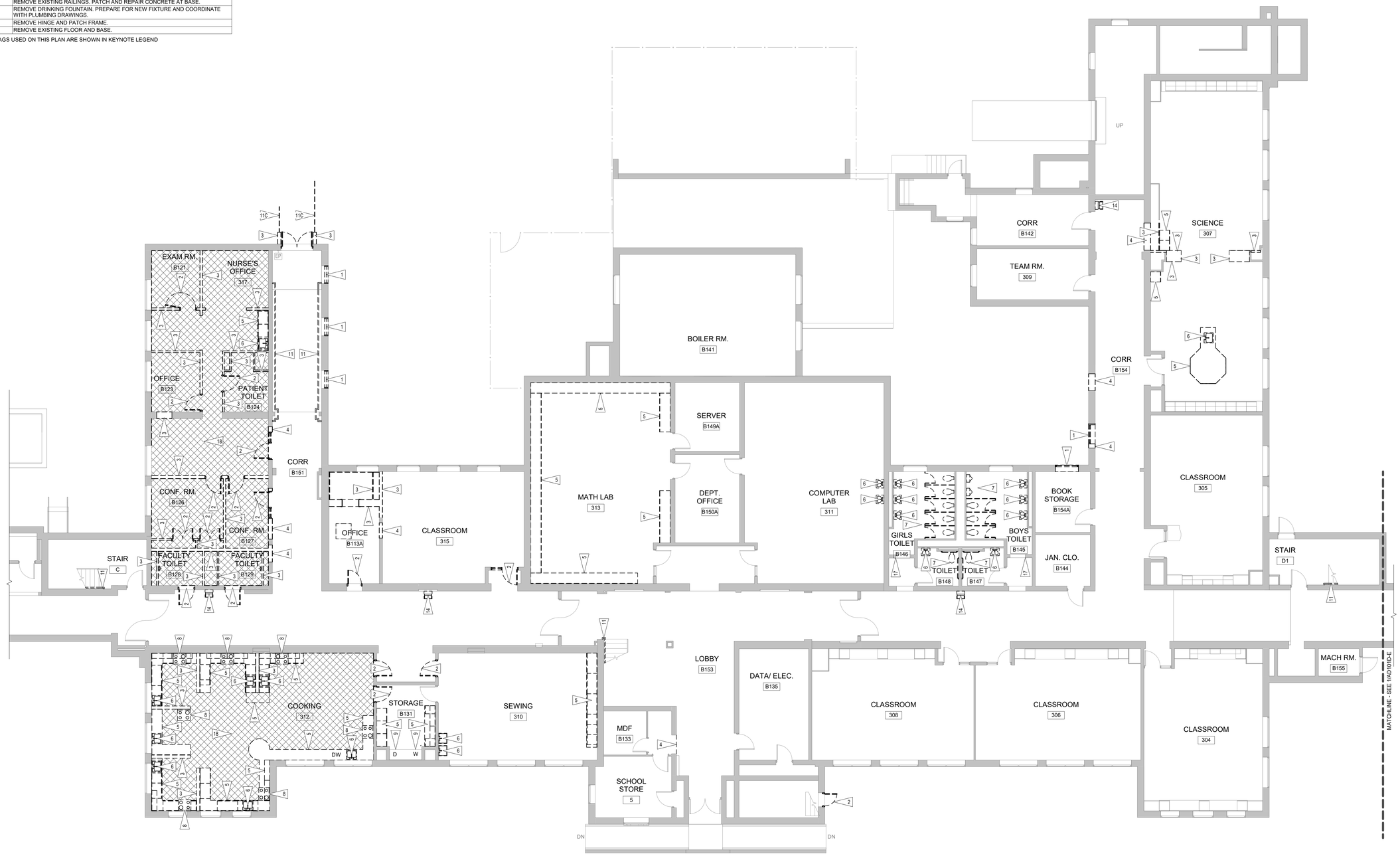
TAG	DESCRIPTION
1	REMOVE WINDOW, ASSOCIATED FRAME, SASH, SILL, TRIM AND ACCESSORIES. COORDINATE OPENING WITH NEW WORK.
2	REMOVE DOOR, ASSOCIATED FRAME, HARDWARE AND ACCESSORIES.
3	REMOVE WALL. COORDINATE WITH NEW WORK.
4	REMOVE PORTION OF WALL AND PREPARE FOR NEW OPENING.
5	REMOVE EXISTING CASEWORK, INCLUDING UPPER AND LOWER CABINETS.
6	REMOVE EXISTING SINK. COORDINATE WITH PLUMBING NEW WORK.
7	REMOVE EXISTING PLUMBING FIXTURES, TOILET PARTITIONS AND FLOOR FINISH. SEE MEP DEMOLITION SHEETS AND COORDINATE WALL AND OTHER DEMO AS REQUIRED.
8	REMOVE EXISTING STOVE, MICROWAVE, AND ANY OTHER KITCHEN EQUIPMENT.
9	REMOVE EXISTING WASHER AND DRYER.
11	REMOVE EXISTING RAILINGS AND HARDWARE. PREPARE FOR NEW RAILINGS.
11C	REMOVE EXISTING RAILINGS. PATCH AND REPAIR CONCRETE AT BASE.
14	REMOVE DRINKING FOUNTAIN. PREPARE FOR NEW FIXTURE AND COORDINATE WITH PLUMBING DRAWINGS.
17	REMOVE HINGE AND PATCH FRAME.
18	REMOVE EXISTING FLOOR AND BASE.

** ONLY TAGS USED ON THIS PLAN ARE SHOWN IN KEYNOTE LEGEND

GENERAL DEMOLITION NOTES

1. CONTRACTOR TO PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED TO ACCOMPLISH DEMOLITION ACTIVITIES AND MAINTAIN STRUCTURAL STABILITY UNTIL NEW WORK IS INSTALLED.
2. FIELD VERIFY ALL EXISTING CONDITIONS.
3. EXISTING WORK TO REMAIN SHALL BE PROTECTED FROM DEMOLITION OPERATIONS.
4. COORDINATE EXTENT OF DEMOLITION REQUIRED WITH NEW WORK.
5. HAZARDOUS MATERIALS WILL BE REMEDIATED UNDER OWNER SEPARATE CONTRACT. COORDINATE SCHEDULE AS REQUIRED.
6. PATCH AND REPAIR SURFACES AT DEMOLISHED ITEMS TO MATCH EXISTING ADJACENT UNDAMAGED SURFACES.
7. EXISTING CEILING-MOUNTED EQUIPMENT TO REMAIN. TEMPORARILY SUPPORT DURING CONSTRUCTION OR REMOVE, SALVAGE, AND REINSTALL AT CONSTRUCTION COMPLETION.

N.I.C. (NOT IN CONTRACT) KEYNOTE #18



1 FIRST FLOOR DEMOLITION PLAN - AREA B

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

PLAN NORTH

N

BECKER MORGAN GROUP

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RICHARD Y. JOHNSON & SON, INC.
CONSTRUCTION MANAGER
18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

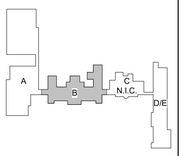
CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR DEMOLITION PLAN - AREA B



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

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DEMOLITION KEYNOTE LEGEND

TAG	DESCRIPTION
2	REMOVE DOOR, ASSOCIATED FRAME, HARDWARE AND ACCESSORIES.
3	REMOVE WALL. COORDINATE WITH NEW WORK.
5	REMOVE EXISTING CASEWORK, INCLUDING UPPER AND LOWER CABINETS.
6	REMOVE EXISTING SINK. COORDINATE WITH PLUMBING NEW WORK.
7	REMOVE EXISTING PLUMBING FIXTURES, TOILET PARTITIONS AND FLOOR FINISH. SEE MEP DEMOLITION SHEETS AND COORDINATE WALL AND OTHER DEMO AS REQUIRED.
11	REMOVE EXISTING RAILINGS AND HARDWARE. PREPARE FOR NEW RAILINGS.
11A	REMOVE EXISTING HANDRAIL. PREPARE FOR NEW HANDRAIL AND MESH.
14	REMOVE DRINKING FOUNTAIN. PREPARE FOR NEW FIXTURE AND COORDINATE WITH PLUMBING DRAWINGS.
16	REMOVE PORTION OF FLOORING. PREPARE FOR NEW SHOWER.

** ONLY TAGS USED ON THIS PLAN ARE SHOWN IN KEYNOTE LEGEND

GENERAL DEMOLITION NOTES

1. CONTRACTOR TO PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED TO ACCOMPLISH DEMOLITION ACTIVITIES AND MAINTAIN STRUCTURAL STABILITY UNTIL NEW WORK IS INSTALLED.
2. FIELD VERIFY ALL EXISTING CONDITIONS.
3. EXISTING WORK TO REMAIN SHALL BE PROTECTED FROM DEMOLITION OPERATIONS.
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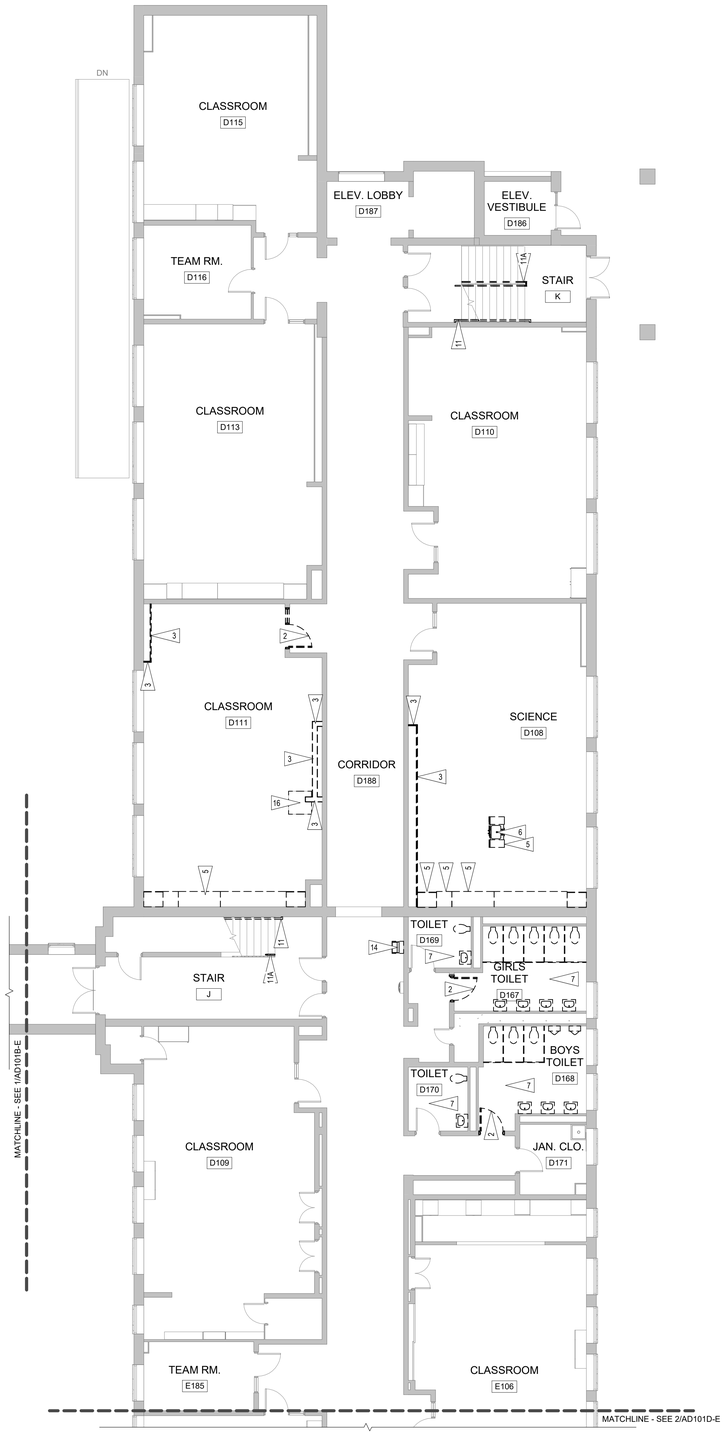
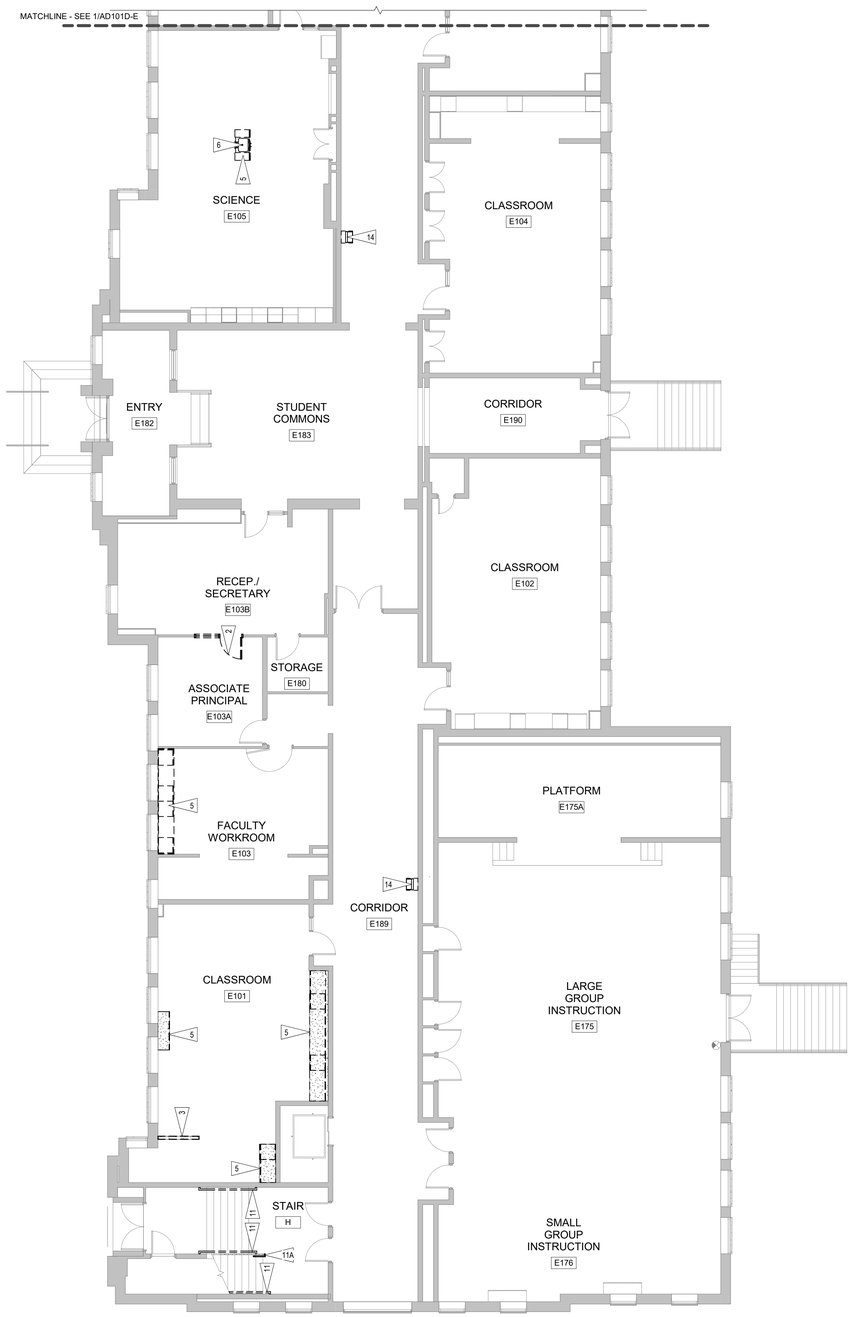
7. EXISTING CEILING-MOUNTED EQUIPMENT TO REMAIN. TEMPORARILY SUPPORT DURING CONSTRUCTION OR REMOVE, SALVAGE, AND REINSTALL AT CONSTRUCTION COMPLETION.

N.I.C. (NOT IN CONTRACT) KEYNOTE #18



1 FIRST FLOOR DEMOLITION PLAN - AREA D/E NORTH

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



2 FIRST FLOOR DEMOLITION PLAN - AREA D/E SOUTH

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

PLAN NORTH

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RICHARD Y. JOHNSON & SON, INC.
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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

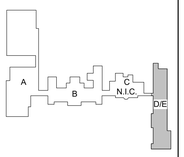
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR DEMOLITION PLAN - AREA D/E



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
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DRAWN BY: CES	PROJ MGR: BAH

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DEMOLITION KEYNOTE LEGEND

TAG	DESCRIPTION
1	REMOVE WINDOW, ASSOCIATED FRAME, SASH, SILL, TRIM AND ACCESSORIES. COORDINATE OPENING WITH NEW WORK.
2	REMOVE DOOR, ASSOCIATED FRAME, HARDWARE AND ACCESSORIES.
3	REMOVE WALL. COORDINATE WITH NEW WORK.
4	REMOVE PORTION OF WALL AND PREPARE FOR NEW OPENING.
5	REMOVE EXISTING CASEWORK, INCLUDING UPPER AND LOWER CABINETS.
6	REMOVE EXISTING SINK. COORDINATE WITH PLUMBING NEW WORK.
7	REMOVE EXISTING PLUMBING FIXTURES, TOILET PARTITIONS AND FLOOR FINISH. SEE MEP DEMOLITION SHEETS AND COORDINATE WALL AND OTHER DEMO AS REQUIRED.
10	REMOVE DOOR, ASSOCIATED FRAME, HARDWARE AND ACCESSORIES. PREPARE AND INFILL THE OPENING.
11	REMOVE EXISTING RAILINGS AND HARDWARE. PREPARE FOR NEW RAILINGS.
11B	PREPARE EXISTING RAILING FOR NEW HANDRAIL AND MESH.
14	REMOVE DRINKING FOUNTAIN. PREPARE FOR NEW FIXTURE AND COORDINATE WITH PLUMBING DRAWINGS.
18	REMOVE EXISTING FLOOR AND BASE.

** ONLY TAGS USED ON THIS PLAN ARE SHOWN IN KEYNOTE LEGEND

GENERAL DEMOLITION NOTES

1. CONTRACTOR TO PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED TO ACCOMPLISH DEMOLITION ACTIVITIES AND MAINTAIN STRUCTURAL STABILITY UNTIL NEW WORK IS INSTALLED.
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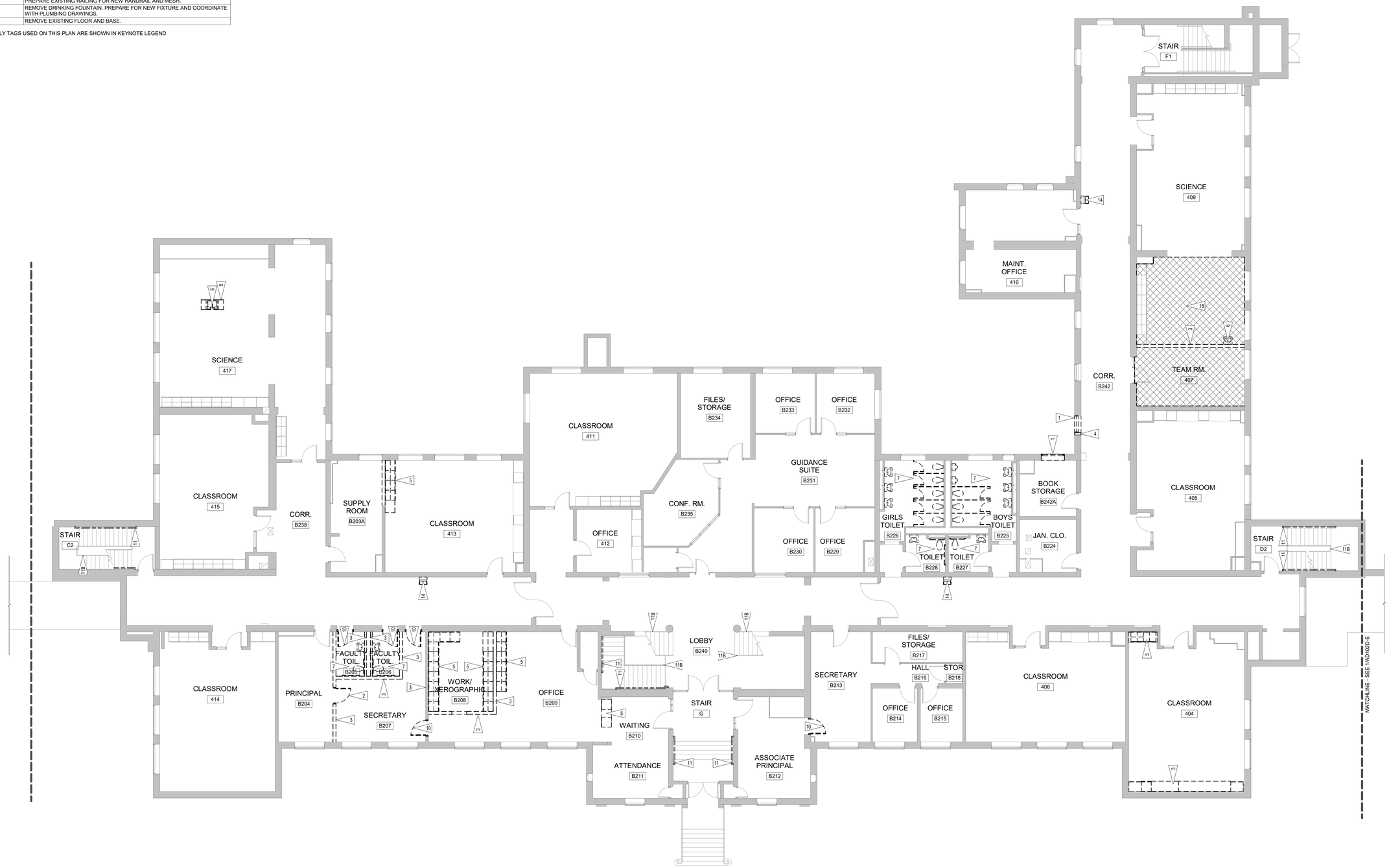
7. EXISTING CEILING-MOUNTED EQUIPMENT TO REMAIN. TEMPORARILY SUPPORT DURING CONSTRUCTION OR REMOVE, SALVAGE, AND REINSTALL AT CONSTRUCTION COMPLETION.

N.I.C. (NOT IN CONTRACT) KEYNOTE #18



1 SECOND FLOOR DEMOLITION PLAN - AREA B

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

PLAN NORTH

N

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302-422-3732 fax 302-422-4696

PROJECT TITLE

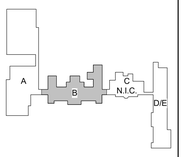
CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR DEMOLITION PLAN - AREA B



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
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DEMOLITION KEYNOTE LEGEND

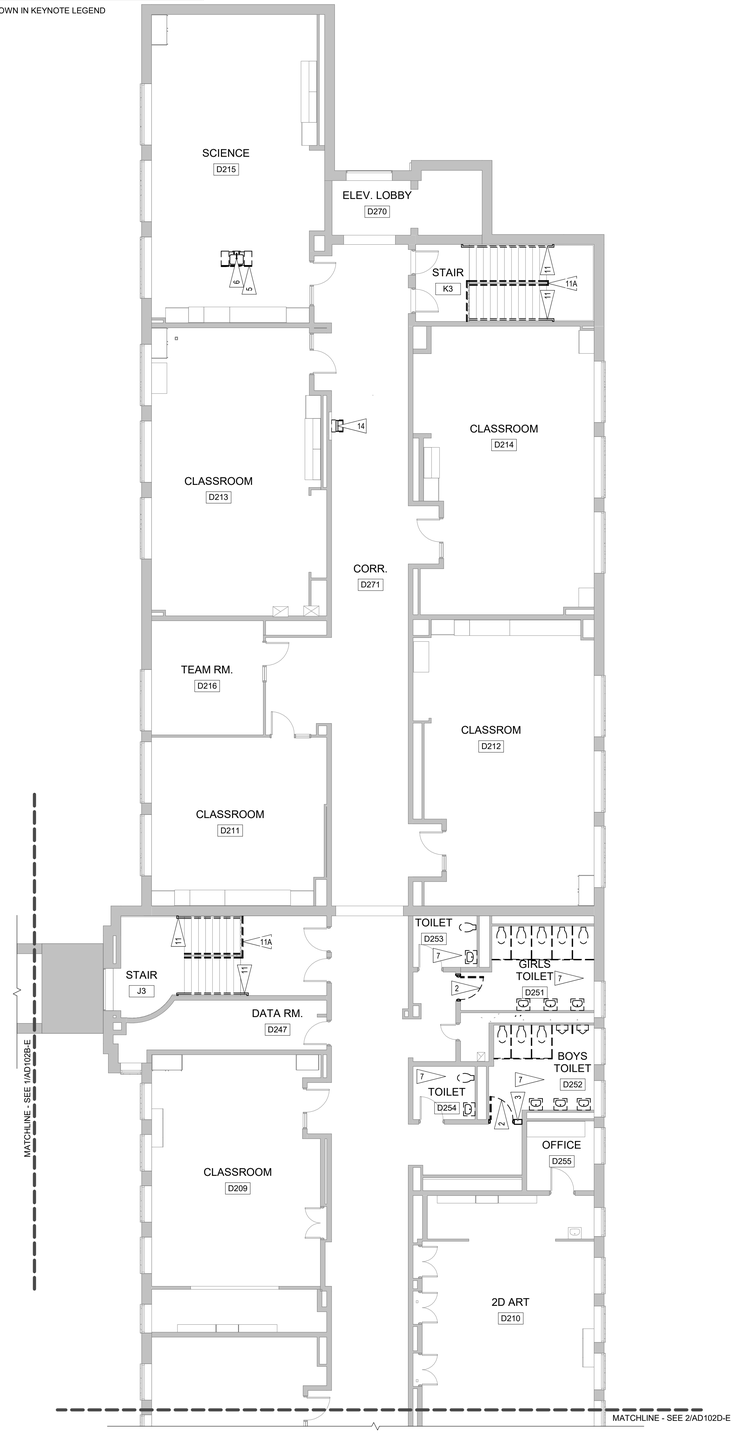
TAG	DESCRIPTION
2	REMOVE DOOR, ASSOCIATED FRAME, HARDWARE AND ACCESSORIES.
3	REMOVE WALL. COORDINATE WITH NEW WORK.
5	REMOVE EXISTING CASEWORK, INCLUDING UPPER AND LOWER CABINETS.
6	REMOVE EXISTING SINK. COORDINATE WITH PLUMBING NEW WORK.
7	REMOVE EXISTING PLUMBING FIXTURES, TOILET PARTITIONS AND FLOOR FINISH. SEE MEP DEMOLITION SHEETS AND COORDINATE WALL AND OTHER DEMO AS REQUIRED.
11	REMOVE EXISTING RAILINGS AND HARDWARE. PREPARE FOR NEW RAILINGS.
11A	REMOVE EXISTING HANDRAIL. PREPARE FOR NEW HANDRAIL AND MESH.
14	REMOVE DRINKING FOUNTAIN. PREPARE FOR NEW FIXTURE AND COORDINATE WITH PLUMBING DRAWINGS.

** ONLY TAGS USED ON THIS PLAN ARE SHOWN IN KEYNOTE LEGEND

GENERAL DEMOLITION NOTES

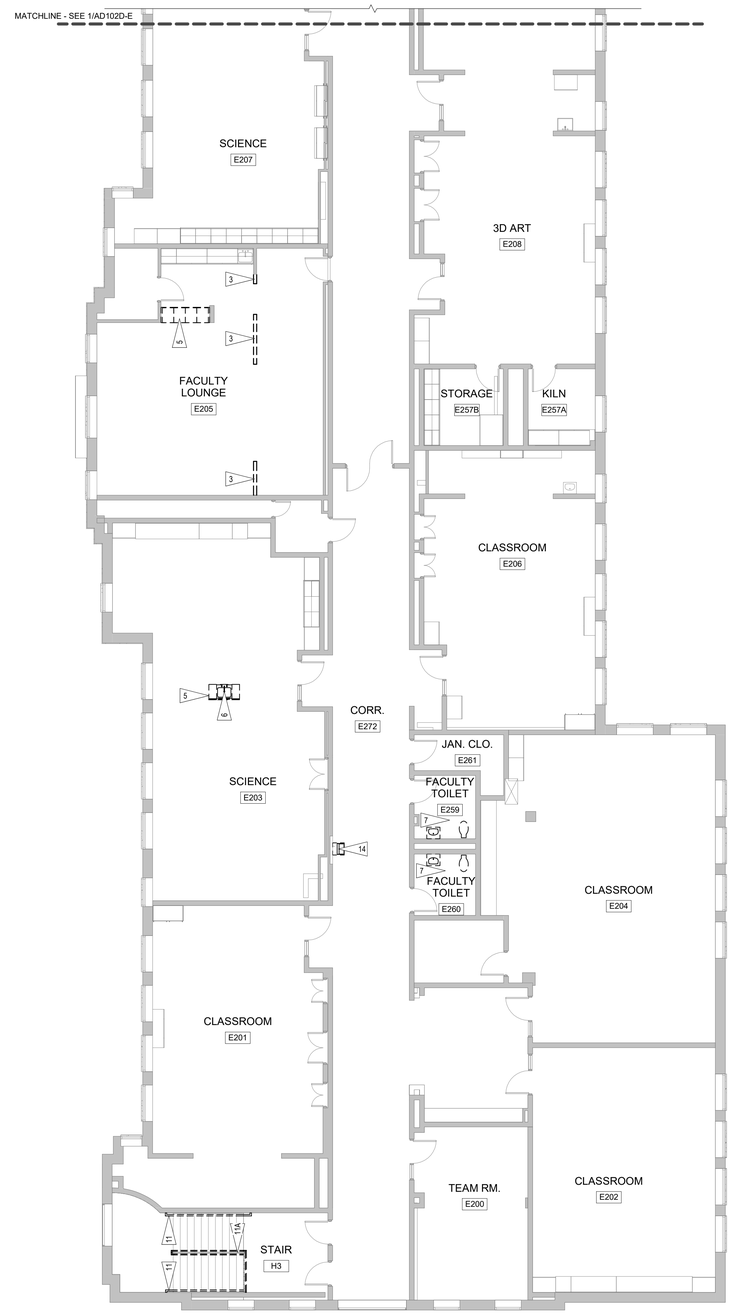
1. CONTRACTOR TO PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED TO ACCOMPLISH DEMOLITION ACTIVITIES AND MAINTAIN STRUCTURAL STABILITY UNTIL NEW WORK IS INSTALLED.
2. FIELD VERIFY ALL EXISTING CONDITIONS.
3. EXISTING WORK TO REMAIN SHALL BE PROTECTED FROM DEMOLITION OPERATIONS.
4. COORDINATE EXTENT OF DEMOLITION REQUIRED WITH NEW WORK.
5. HAZARDOUS MATERIALS WILL BE REMEDIATED UNDER OWNER SEPARATE CONTRACT. COORDINATE SCHEDULE AS REQUIRED.
6. PATCH AND REPAIR SURFACES AT DEMOLISHED ITEMS TO MATCH EXISTING ADJACENT UNDAMAGED SURFACES.
7. EXISTING CEILING-MOUNTED EQUIPMENT TO REMAIN. TEMPORARILY SUPPORT DURING CONSTRUCTION OR REMOVE, SALVAGE, AND REINSTALL AT CONSTRUCTION COMPLETION.

N.I.C. (NOT IN CONTRACT) KEYNOTE #18



1 SECOND FLOOR DEMOLITION PLAN - AREA D/E NORTH

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



2 SECOND FLOOR DEMOLITION PLAN - AREA D/E SOUTH

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

PLAN NORTH

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RICHARD Y. JOHNSON & SON, INC.
CONSTRUCTION MANAGER
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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

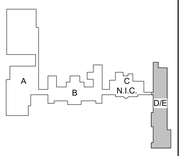
CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR DEMOLITION PLAN - AREA D/E



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

AD102D-E

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DEMOLITION KEYNOTE LEGEND

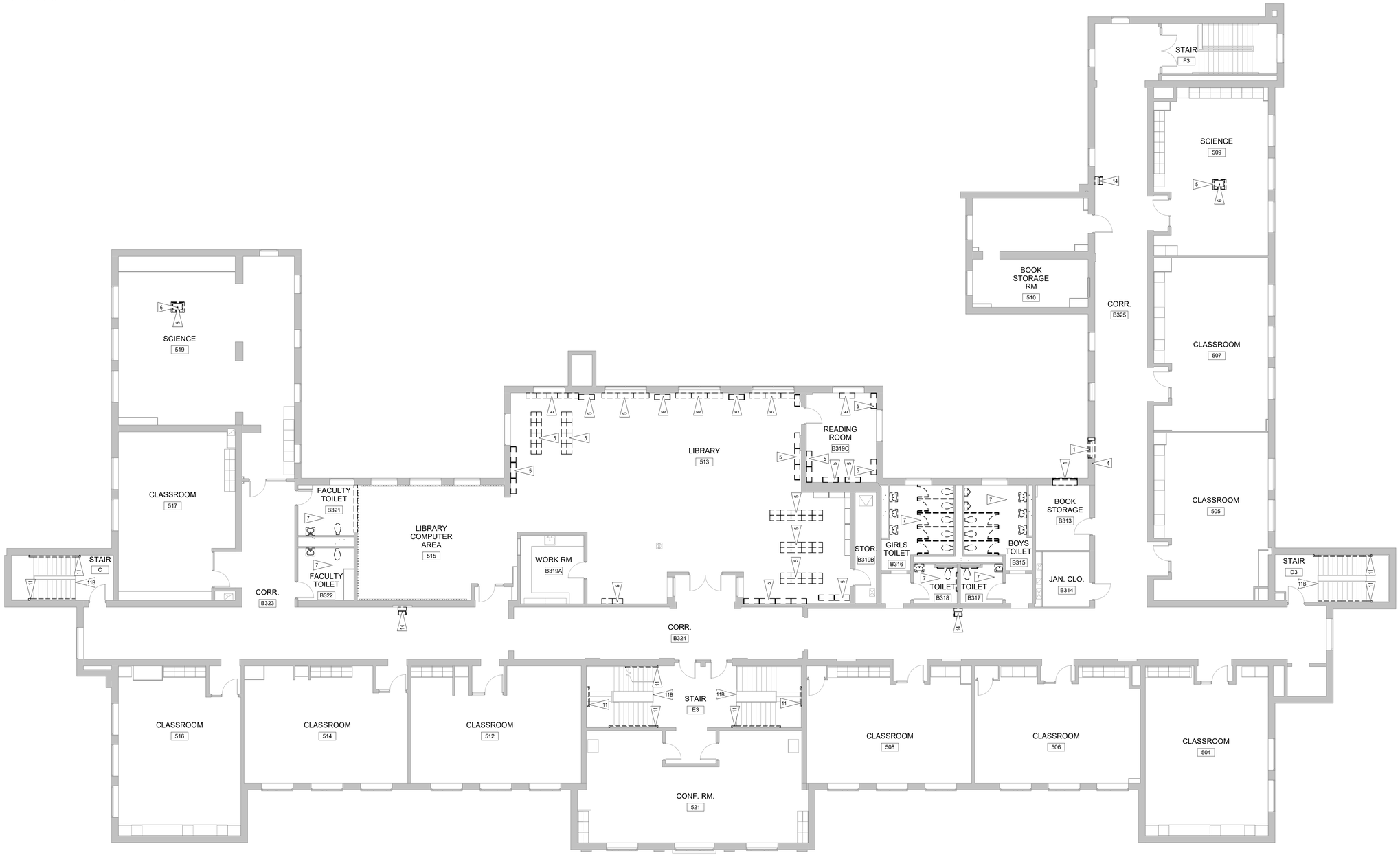
TAG	DESCRIPTION
1	REMOVE WINDOW, ASSOCIATED FRAME, SASH, SILL, TRIM AND ACCESSORIES. COORDINATE OPENING WITH NEW WORK.
4	REMOVE PORTION OF WALL AND PREPARE FOR NEW OPENING.
5	REMOVE EXISTING CASEWORK, INCLUDING UPPER AND LOWER CABINETS.
6	REMOVE EXISTING SINK. COORDINATE WITH PLUMBING NEW WORK.
7	REMOVE EXISTING PLUMBING FIXTURES, TOILET PARTITIONS AND FLOOR FINISH. SEE MEP DEMOLITION SHEETS AND COORDINATE WALL AND OTHER DEMO AS REQUIRED.
11	REMOVE EXISTING RAILINGS AND HARDWARE. PREPARE FOR NEW RAILINGS.
11B	PREPARE EXISTING RAILING FOR NEW HANDRAIL AND MESH.
14	REMOVE DRINKING FOUNTAIN. PREPARE FOR NEW FIXTURE AND COORDINATE WITH PLUMBING DRAWINGS.

** ONLY TAGS USED ON THIS PLAN ARE SHOWN IN KEYNOTE LEGEND

GENERAL DEMOLITION NOTES

1. CONTRACTOR TO PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED TO ACCOMPLISH DEMOLITION ACTIVITIES AND MAINTAIN STRUCTURAL STABILITY UNTIL NEW WORK IS INSTALLED.
2. FIELD VERIFY ALL EXISTING CONDITIONS.
3. EXISTING WORK TO REMAIN SHALL BE PROTECTED FROM DEMOLITION OPERATIONS.
4. COORDINATE EXTENT OF DEMOLITION REQUIRED WITH NEW WORK.
5. HAZARDOUS MATERIALS WILL BE REMEDIATED UNDER OWNER SEPARATE CONTRACT. COORDINATE SCHEDULE AS REQUIRED.
6. PATCH AND REPAIR SURFACES AT DEMOLISHED ITEMS TO MATCH EXISTING ADJACENT UNDAMAGED SURFACES.
7. EXISTING CEILING-MOUNTED EQUIPMENT TO REMAIN. TEMPORARILY SUPPORT DURING CONSTRUCTION OR REMOVE, SALVAGE, AND REINSTALL AT CONSTRUCTION COMPLETION.

N.I.C. (NOT IN CONTRACT) KEYNOTE #18



1 THIRD FLOOR DEMOLITION PLAN - AREA B

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

PLAN NORTH

BECKER MORGAN GROUP

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RICHARD Y. JOHNSON & SON, INC.
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302-422-3732 fax 302-422-4696

PROJECT TITLE

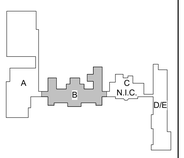
CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

THIRD FLOOR DEMOLITION PLAN - AREA B



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

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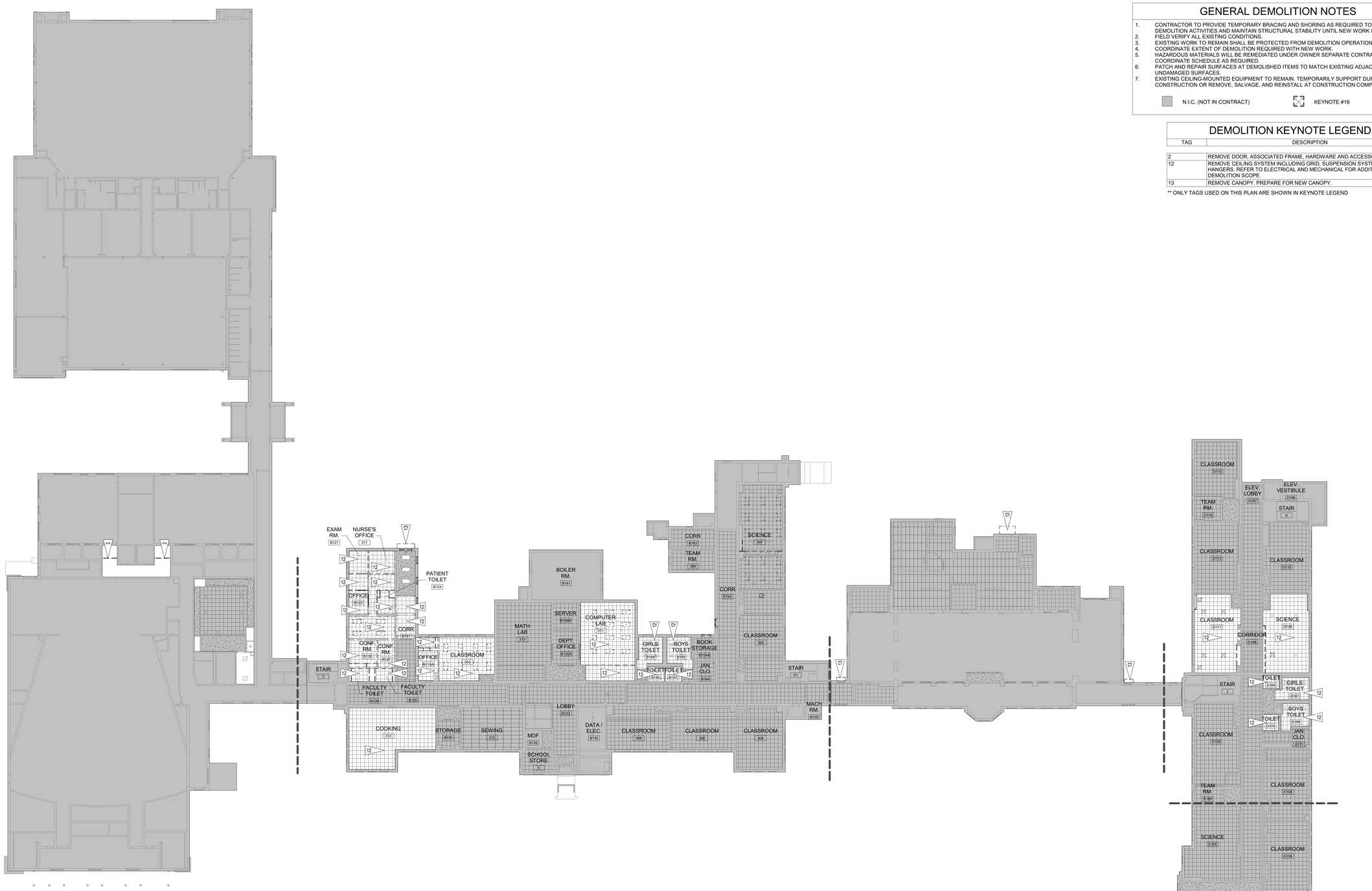

1 FIRST FLOOR DEMOLITION REFLECTED CEILING PLAN

SCALE: 1" = 20'-0"

GENERAL DEMOLITION NOTES

1. CONTRACTOR TO PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED TO ACCOMPLISH DEMOLITION ACTIVITIES AND MAINTAIN STRUCTURAL STABILITY UNTIL NEW WORK IS INSTALLED.
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N.I.C. (NOT IN CONTRACT)

KEYNOTE #18

DEMOLITION KEYNOTE LEGEND

TAG	DESCRIPTION
2	REMOVE DOOR, ASSOCIATED FRAME, HARDWARE AND ACCESSORIES.
12	REMOVE CEILING SYSTEM INCLUDING GRID, SUSPENSION SYSTEM, AND HANGERS. REFER TO ELECTRICAL AND MECHANICAL FOR ADDITIONAL DEMOLITION SCOPE.
13	REMOVE CANOPY. PREPARE FOR NEW CANOPY.

** ONLY TAGS USED ON THIS PLAN ARE SHOWN IN KEYNOTE LEGEND

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

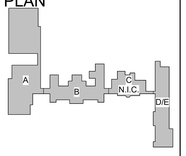
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR DEMOLITION REFLECTED CEILING PLAN



0' 10' 20' 40'
SCALE: 1" = 20'

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
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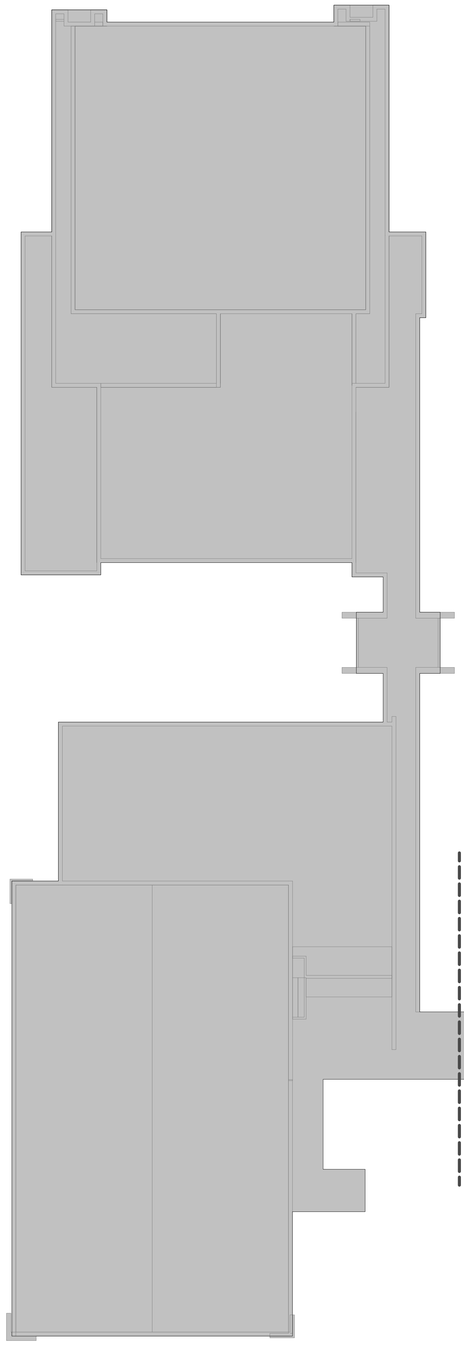
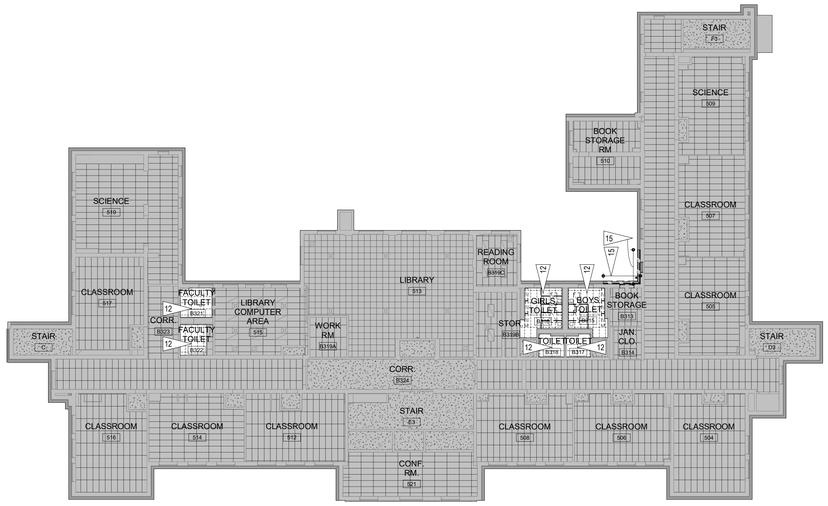
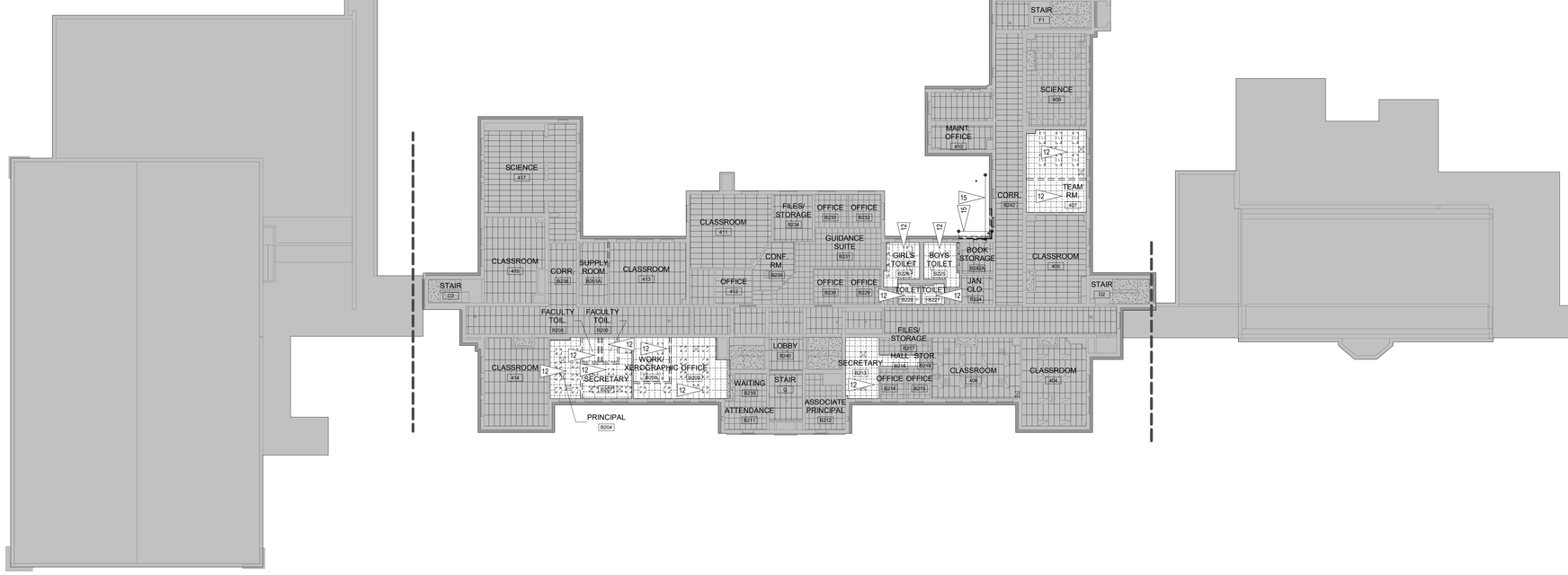




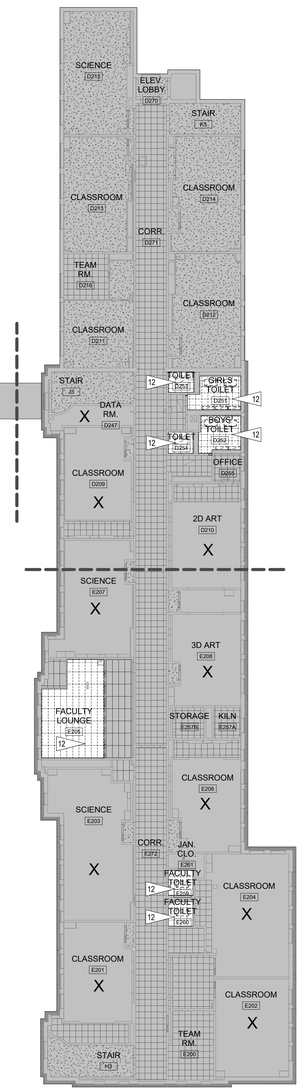
2 THIRD FLOOR DEMOLITION REFLECTED CEILING PLAN

SCALE: 1" = 20'-0"



1 SECOND FLOOR DEMOLITION REFLECTED CEILING PLAN

SCALE: 1" = 20'-0"



PLAN NORTH

GENERAL DEMOLITION NOTES

1. CONTRACTOR TO PROVIDE TEMPORARY BRACING AND SHORING AS REQUIRED TO ACCOMPLISH DEMOLITION ACTIVITIES AND MAINTAIN STRUCTURAL STABILITY UNTIL NEW WORK IS INSTALLED.
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4. COORDINATE EXTENT OF DEMOLITION REQUIRED WITH NEW WORK.
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N.I.C. (NOT IN CONTRACT)

KEYNOTE #18

DEMOLITION KEYNOTE LEGEND

TAG	DESCRIPTION
12	REMOVE CEILING SYSTEM INCLUDING GRID, SUSPENSION SYSTEM, AND HANGERS. REFER TO ELECTRICAL AND MECHANICAL FOR ADDITIONAL DEMOLITION SCOPE.
15	REMOVE CORNICE.

** ONLY TAGS USED ON THIS PLAN ARE SHOWN IN KEYNOTE LEGEND

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

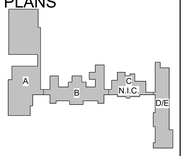
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

SECOND AND THIRD FLOOR DEMOLITION REFLECTED CEILING PLANS



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SCALE: 1" = 20'

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: CES	PROJ MGR: BAH

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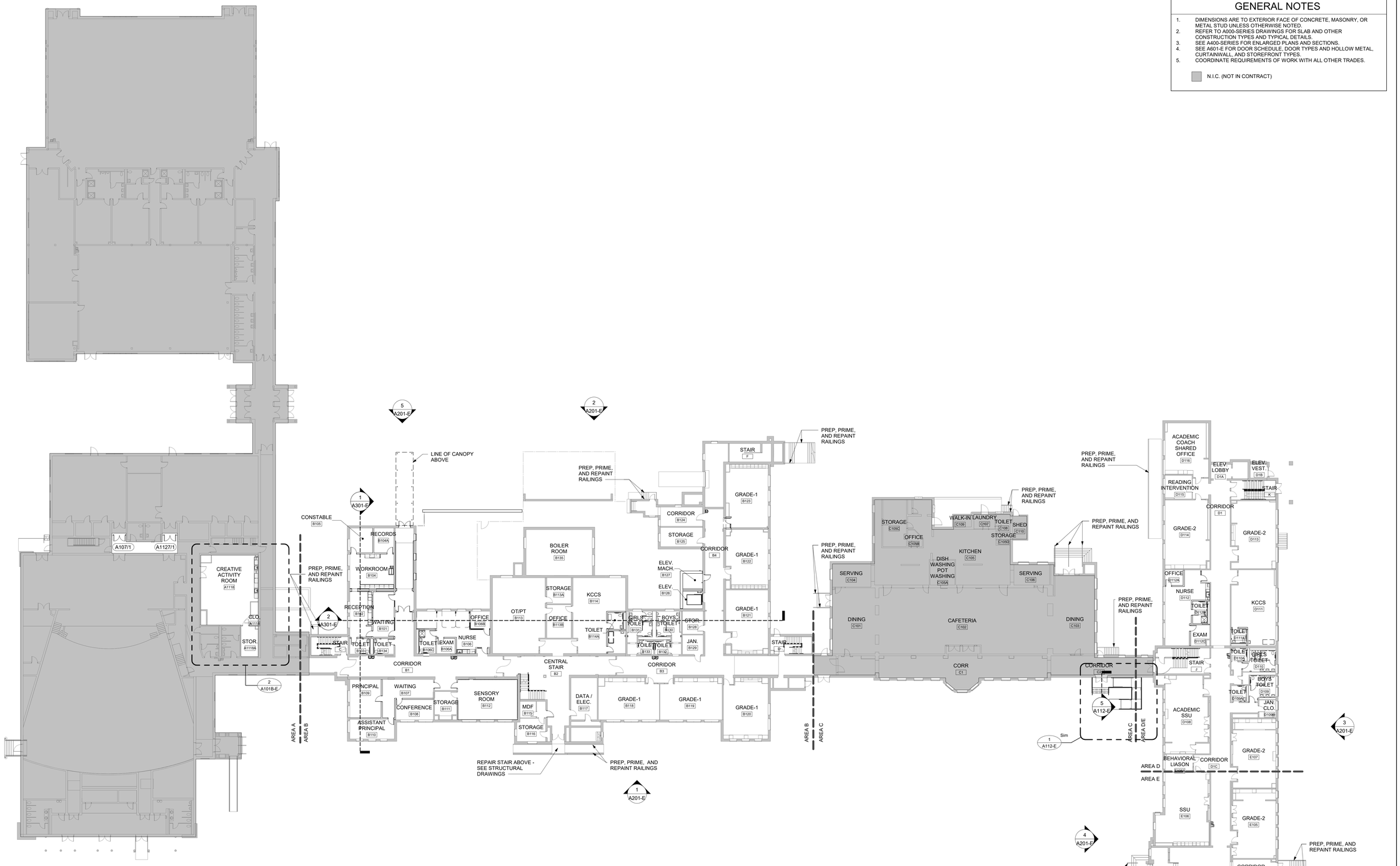
1. DIMENSIONS ARE TO EXTERIOR FACE OF CONCRETE, MASONRY, OR METAL STUD UNLESS OTHERWISE NOTED.
2. REFER TO A000-SERIES DRAWINGS FOR SLAB AND OTHER CONSTRUCTION TYPES AND TYPICAL DETAILS.
3. SEE A400-SERIES FOR ENLARGED PLANS AND SECTIONS.
4. SEE A601-E FOR DOOR SCHEDULE, DOOR TYPES AND HOLLOW METAL, CURTAINWALL, AND STOREFRONT TYPES.
5. COORDINATE REQUIREMENTS OF WORK WITH ALL OTHER TRADES.

N.I.C. (NOT IN CONTRACT)



1 OVERALL FIRST FLOOR PLAN

SCALE: 1" = 20'-0"

BECKER MORGAN GROUP

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

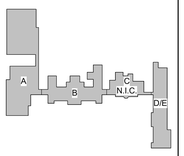
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

OVERALL FIRST FLOOR PLAN



0' 10' 20' 40'
SCALE: 1" = 20'

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: CES	PROJ MGR: BAH

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GENERAL NOTES

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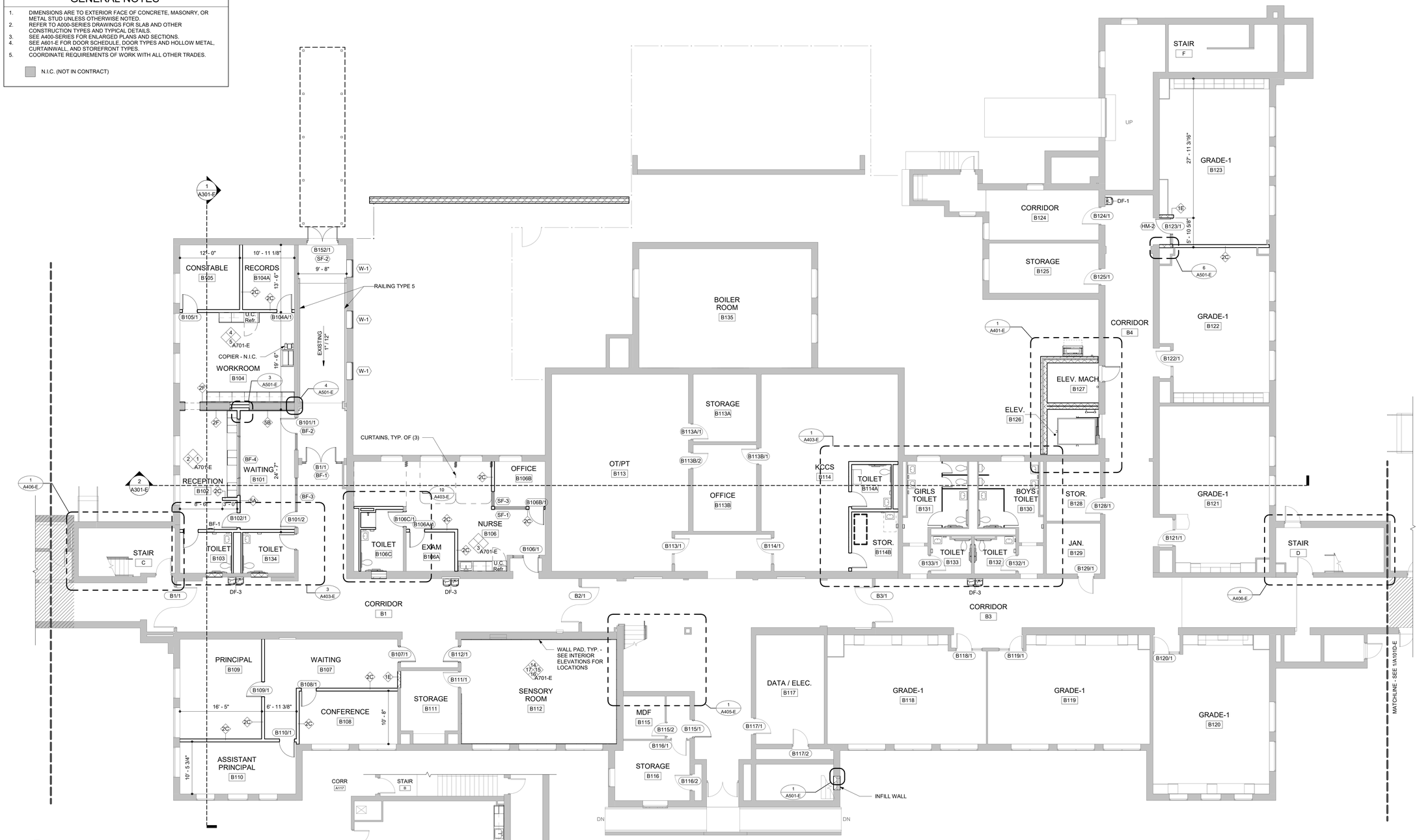
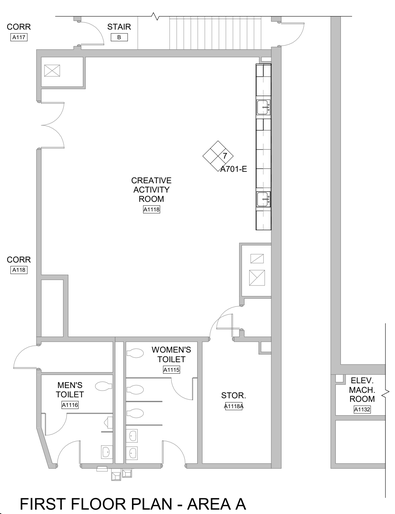
2. REFER TO A000-SERIES DRAWINGS FOR SLAB AND OTHER CONSTRUCTION TYPES AND TYPICAL DETAILS.
3. SEE A400-SERIES FOR ENLARGED PLANS AND SECTIONS.
4. SEE A601-E FOR DOOR SCHEDULE, DOOR TYPES AND HOLLOW METAL, CURTAINWALL, AND STOREFRONT TYPES.
5. COORDINATE REQUIREMENTS OF WORK WITH ALL OTHER TRADES.

N.I.C. (NOT IN CONTRACT)



1 FIRST FLOOR PLAN - AREA B
SCALE: 1/8" = 1'-0"



2 FIRST FLOOR PLAN - AREA A PARTIAL PLAN
SCALE: 1/8" = 1'-0"

PLAN NORTH

BECKER MORGAN GROUP

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302-422-3732 fax 302-422-4696

PROJECT TITLE

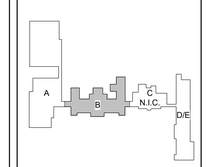
CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR PLAN - AREA B



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

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GENERAL NOTES

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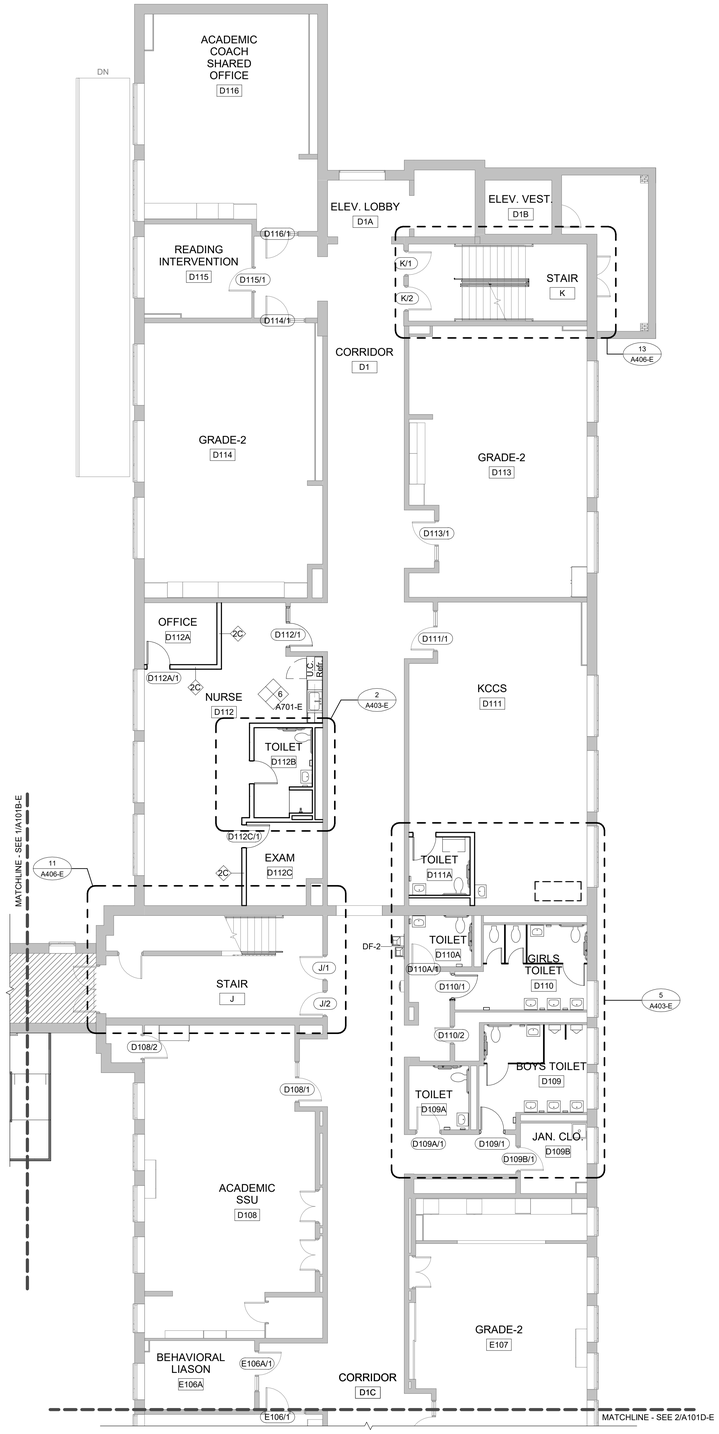
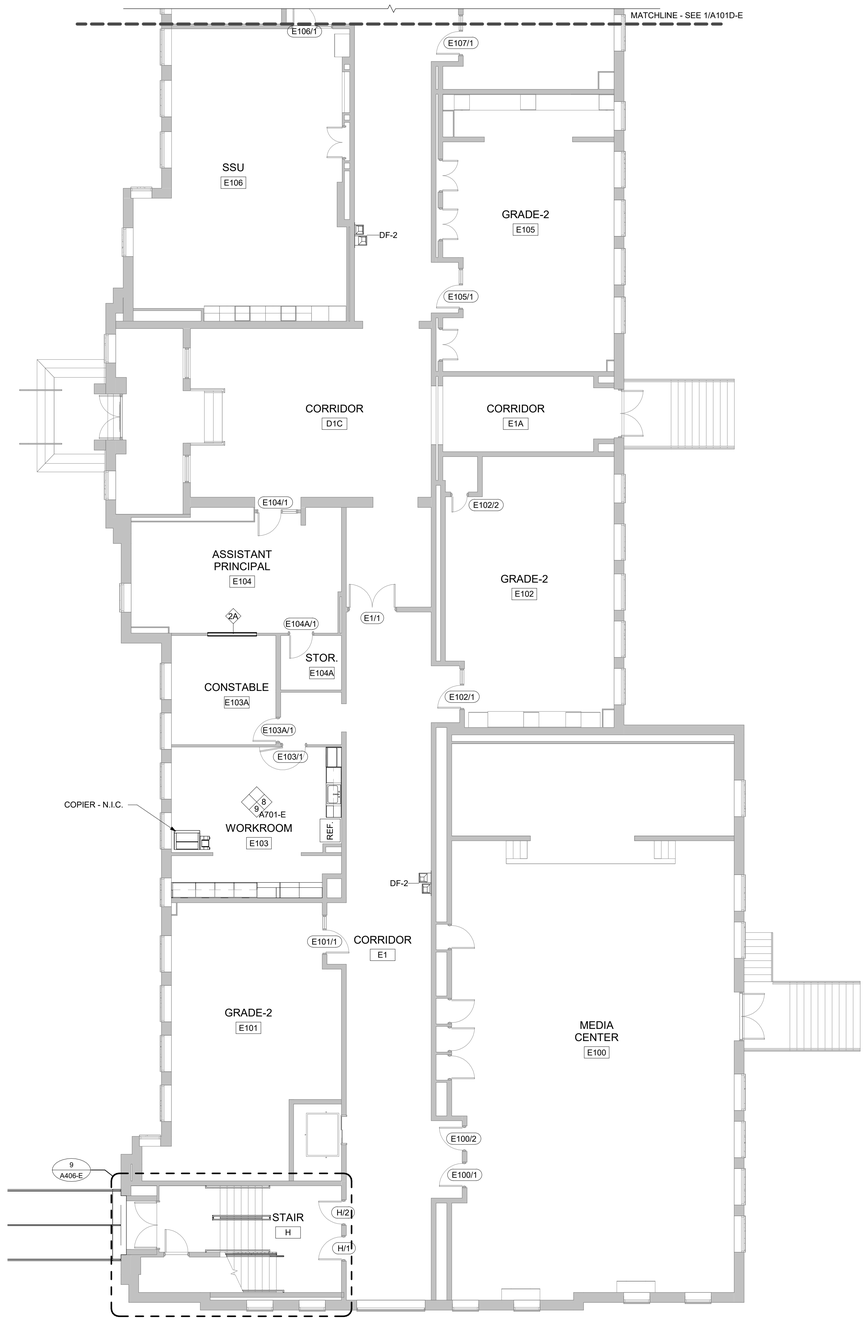
4. SEE A601-E FOR DOOR SCHEDULE, DOOR TYPES AND HOLLOW METAL, CURTAINWALL, AND STOREFRONT TYPES.
5. COORDINATE REQUIREMENTS OF WORK WITH ALL OTHER TRADES.

N.I.C. (NOT IN CONTRACT)



1 FIRST FLOOR PLAN - AREA D/E NORTH

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



2 FIRST FLOOR PLAN - AREA D/E SOUTH

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

PLAN NORTH

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RICHARD Y. JOHNSON & SON, INC.
CONSTRUCTION MANAGER
18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

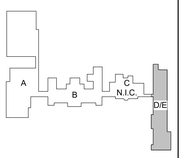
CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR PLAN - AREA D/E



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

A101D-E

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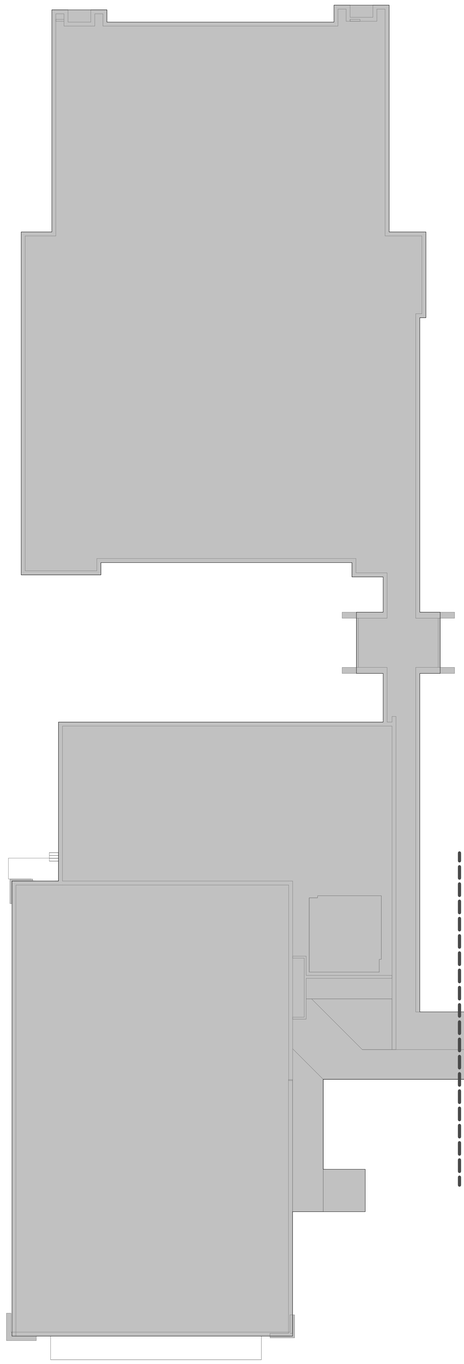
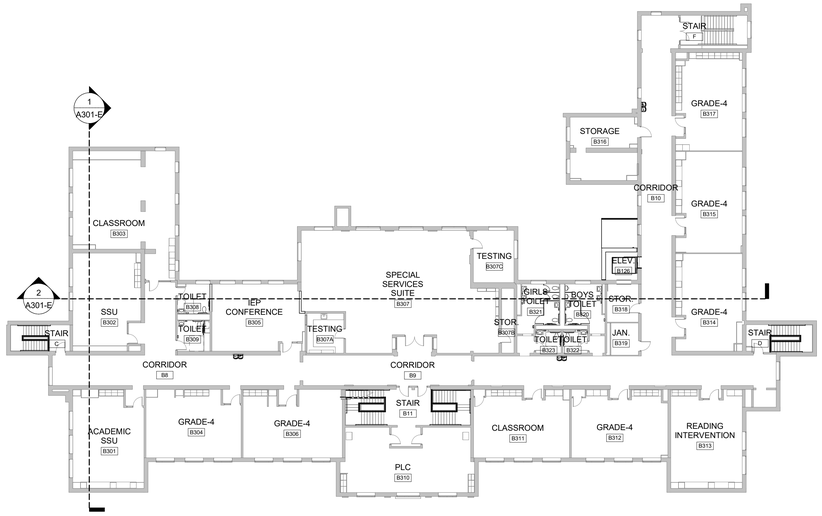
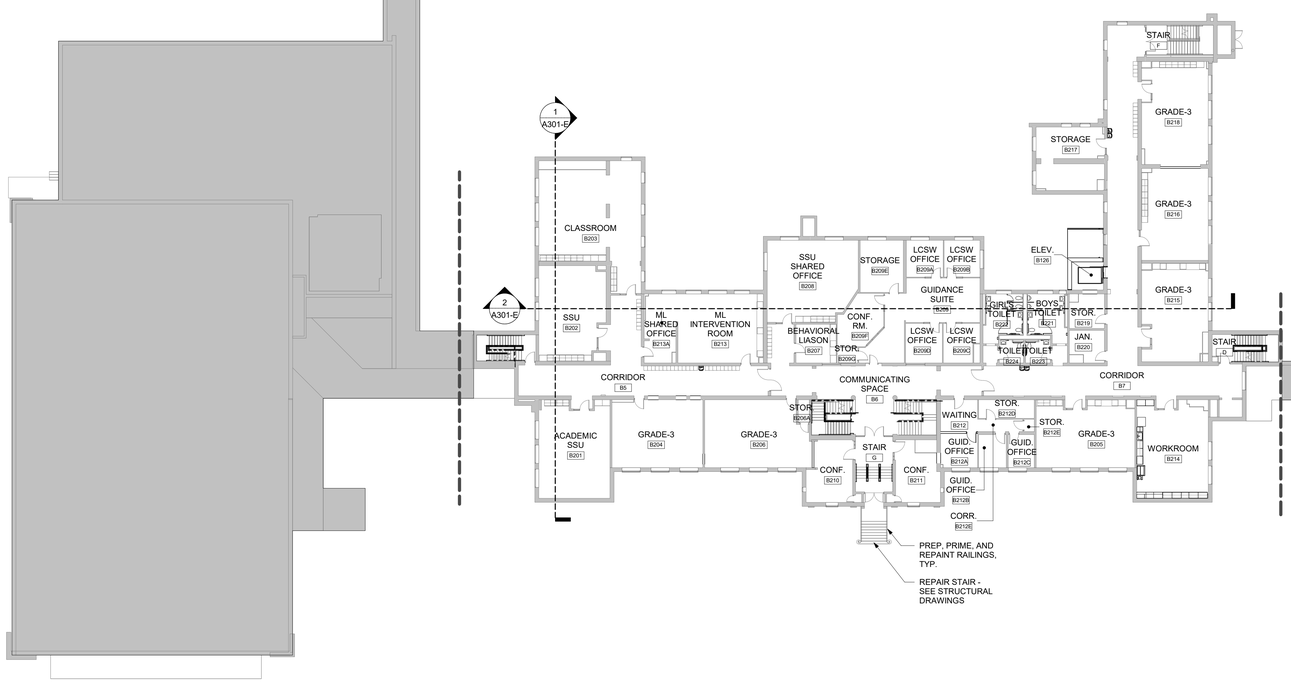
N.I.C. (NOT IN CONTRACT)





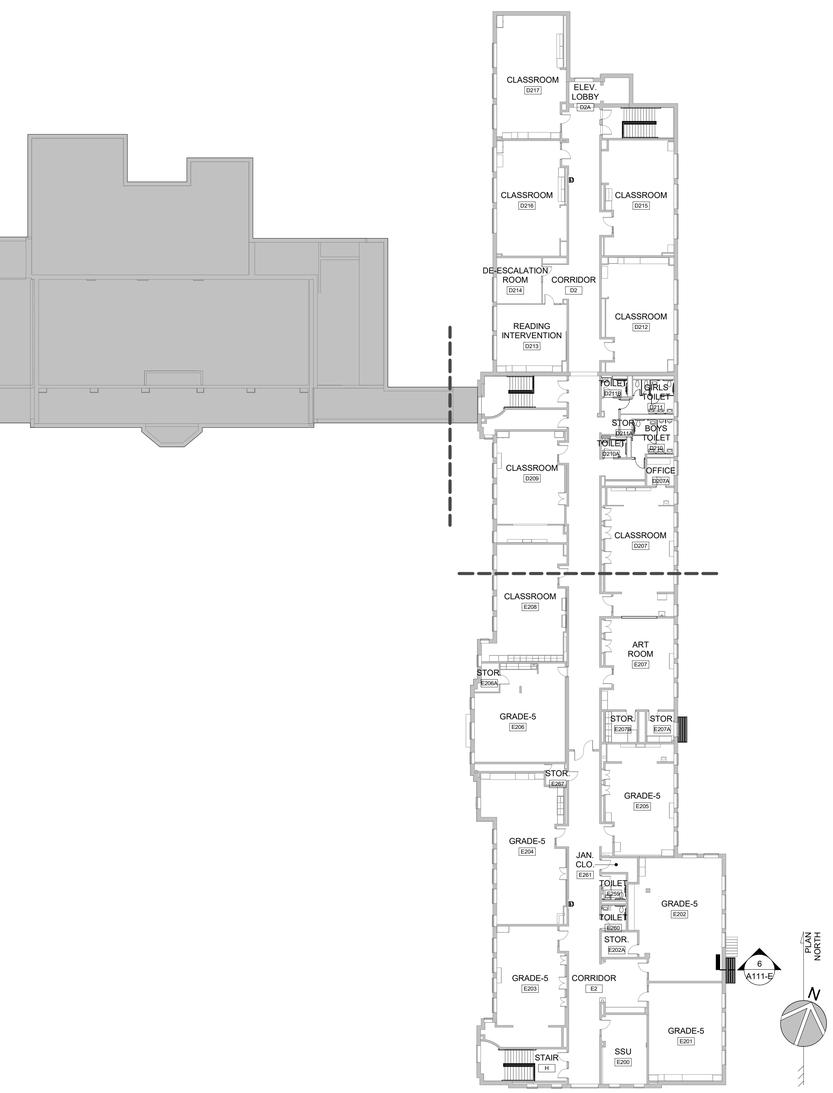
2 THIRD FLOOR PLAN - OVERALL

SCALE: 1" = 20'-0"



1 SECOND FLOOR PLAN - OVERALL

SCALE: 1" = 20'-0"



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PROJECT TITLE

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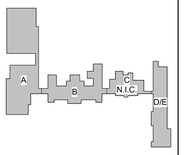
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

OVERALL SECOND AND THIRD FLOOR PLAN



0' 10' 20' 40'
SCALE: 1" = 20'

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: CES	PROJ MGR: BAH

A102-E

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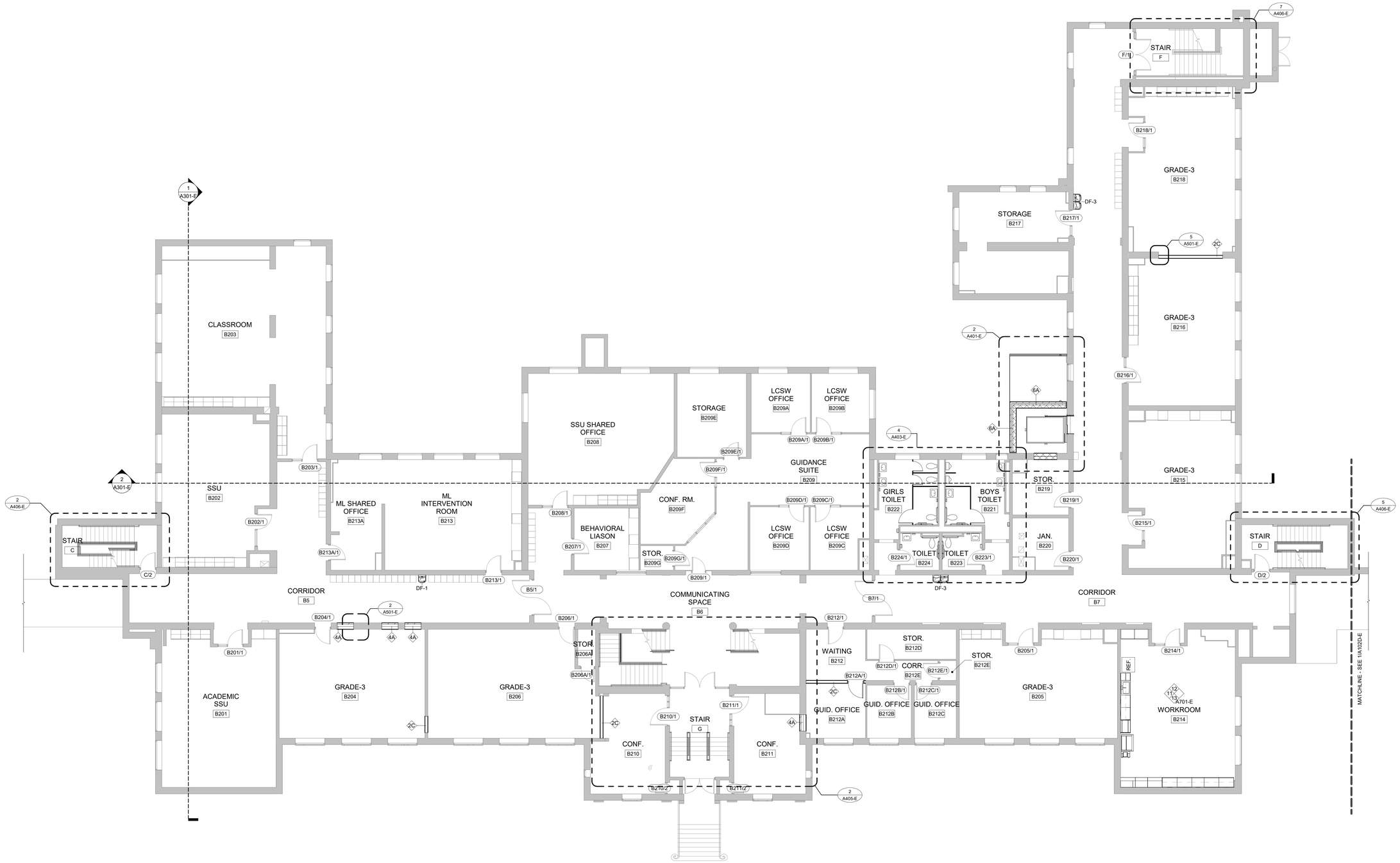

1 SECOND FLOOR PLAN - AREA B
SCALE: 1/8" = 1'-0"

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302-422-3732 fax 302-422-4696

PROJECT TITLE

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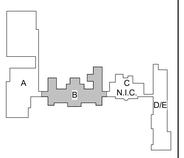
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR PLAN - AREA B



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

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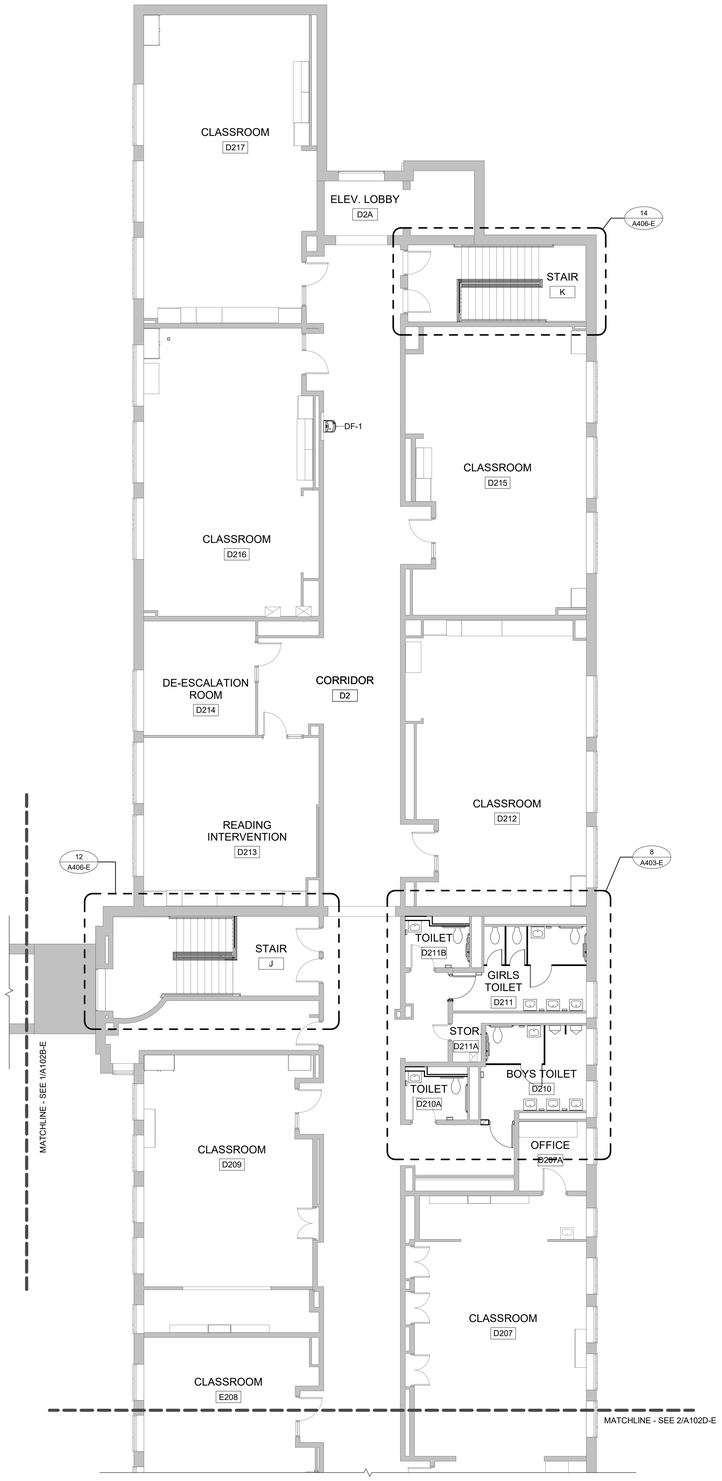
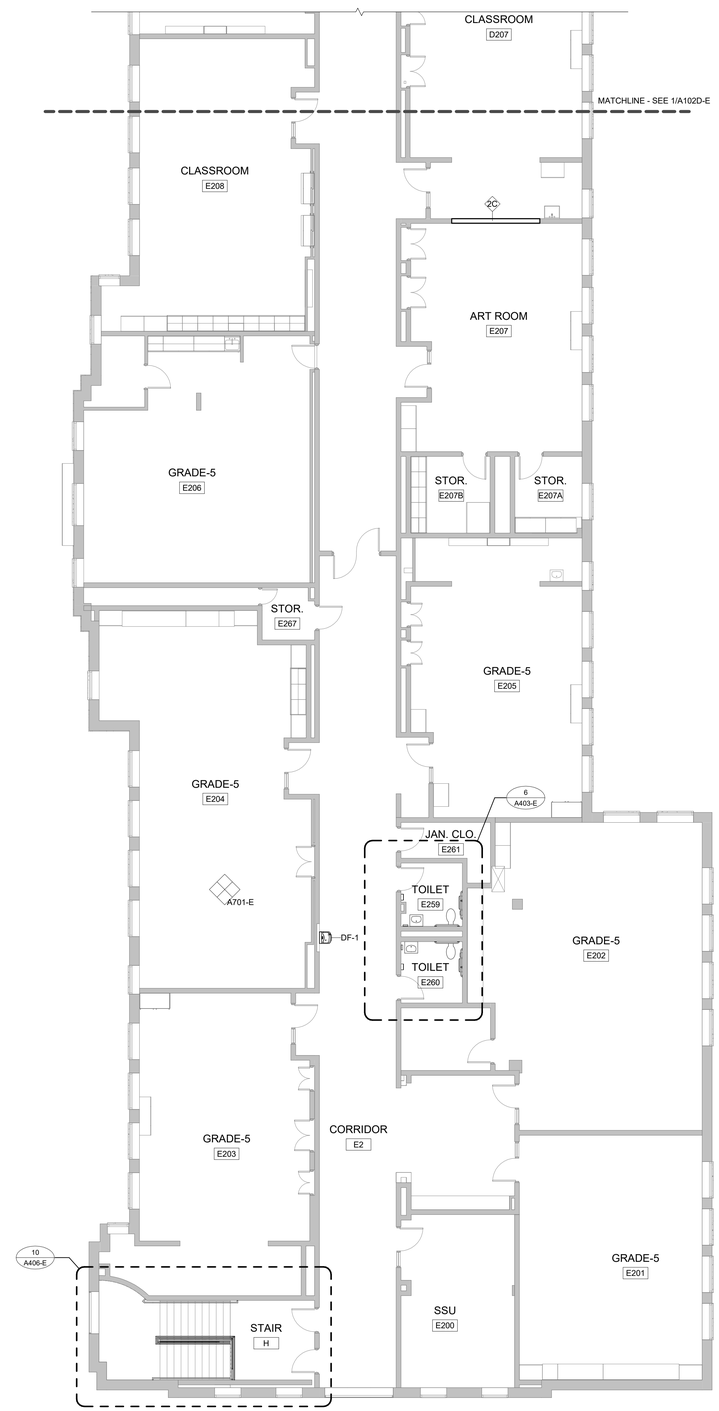


1 SECOND FLOOR PLAN - AREA D/E NORTH

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



2 SECOND FLOOR PLAN - AREA D/E SOUTH

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

PLAN NORTH

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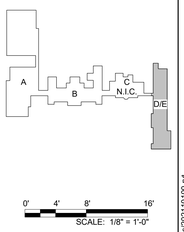
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR PLAN - AREA D/E



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

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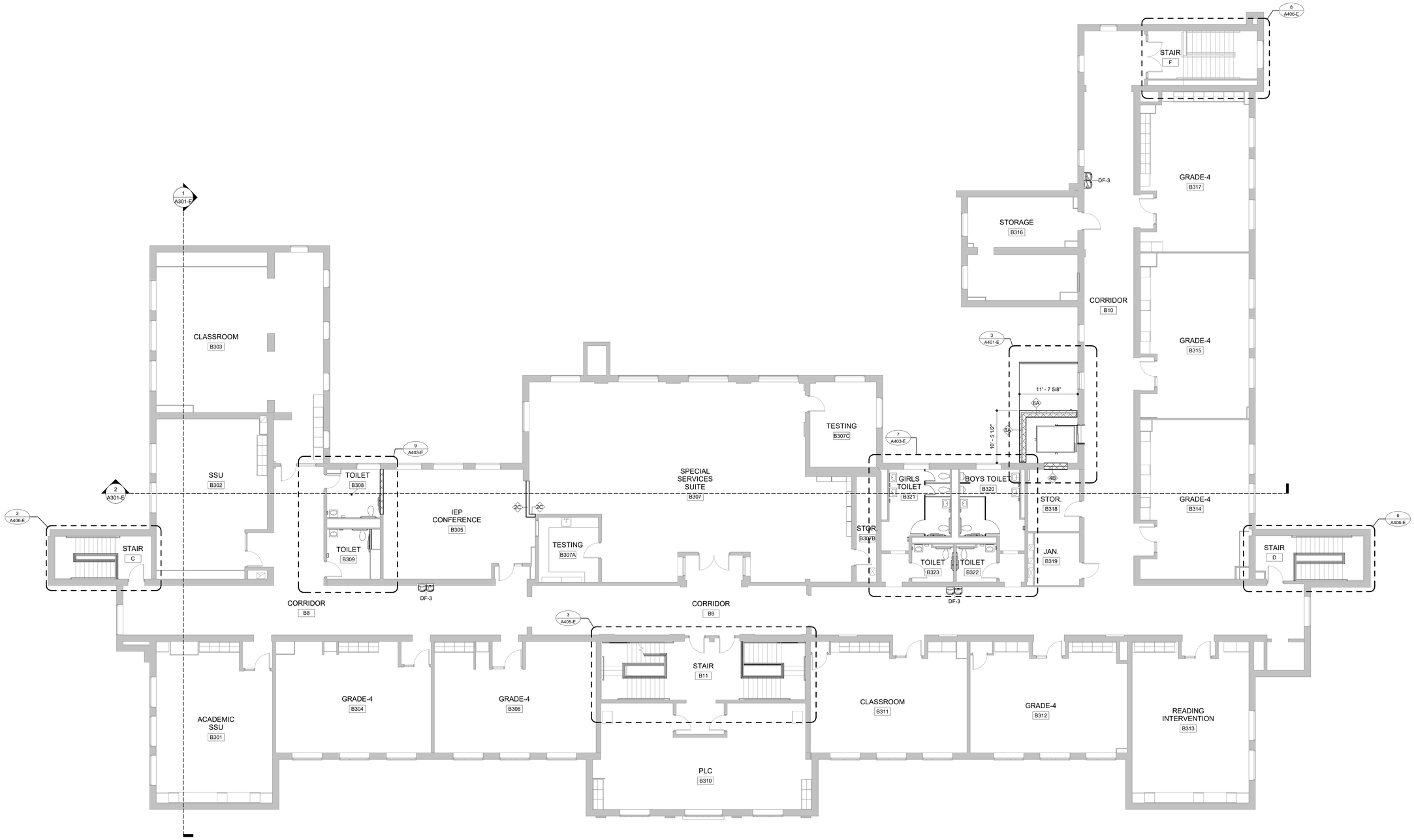

1 THIRD FLOOR - AREA B

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

PLAN NORTH

N

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

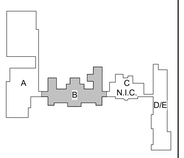
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

THIRD FLOOR PLAN - AREA B



0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

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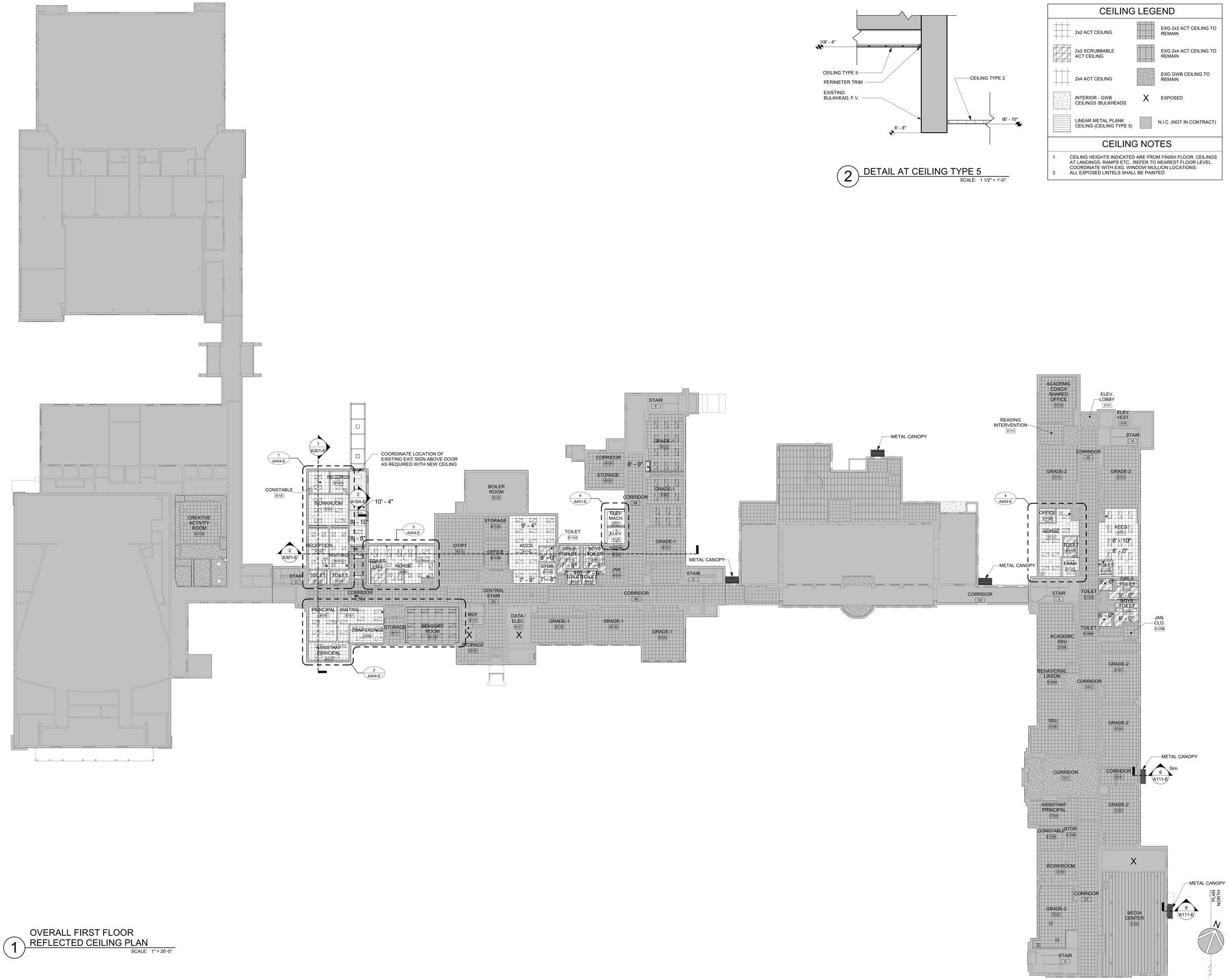

1 OVERALL FIRST FLOOR REFLECTED CEILING PLAN

SCALE: 1" = 20'-0"

2 DETAIL AT CEILING TYPE 5

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

CEILING LEGEND

2x2 ACT CEILING	EXG 2x2 ACT CEILING TO REMAIN
2x2 SCRUBBABLE ACT CEILING	EXG 2x4 ACT CEILING TO REMAIN
2x4 ACT CEILING	EXG GWB CEILING TO REMAIN
INTERIOR - GWB CEILINGS /BULKHEADS	X EXPOSED
LINEAR METAL PLANK CEILING (CEILING TYPE 5)	N.I.C. (NOT IN CONTRACT)

CEILING NOTES

1. CEILING HEIGHTS INDICATED ARE FROM FINISH FLOOR. CEILINGS AT LANDINGS, RAMPS ETC., REFER TO NEAREST FLOOR LEVEL. COORDINATE WITH EXG. WINDOW MULLION LOCATIONS.
2. ALL EXPOSED LINTELS SHALL BE PAINTED.

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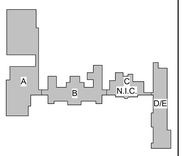
SHEET TITLE

OVERALL FIRST FLOOR REFLECTED CEILING PLAN



0' 10' 20' 40'
SCALE: 1" = 20'

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: CES	PROJ MGR: BAH

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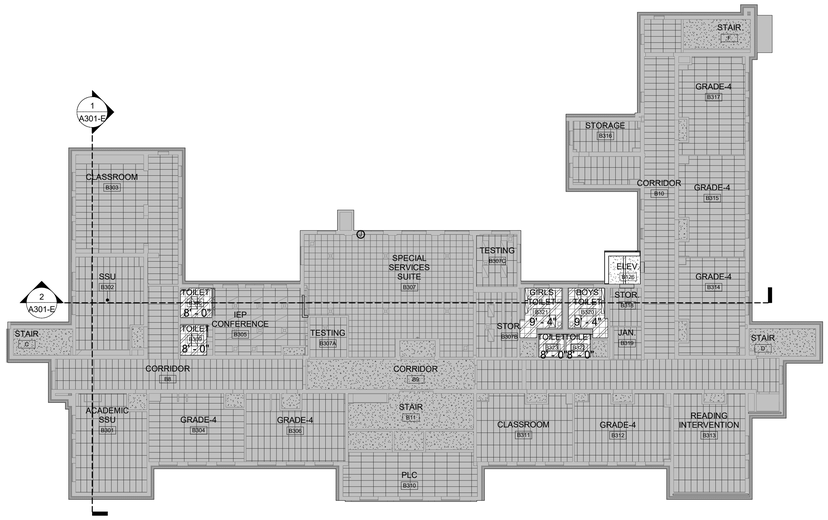
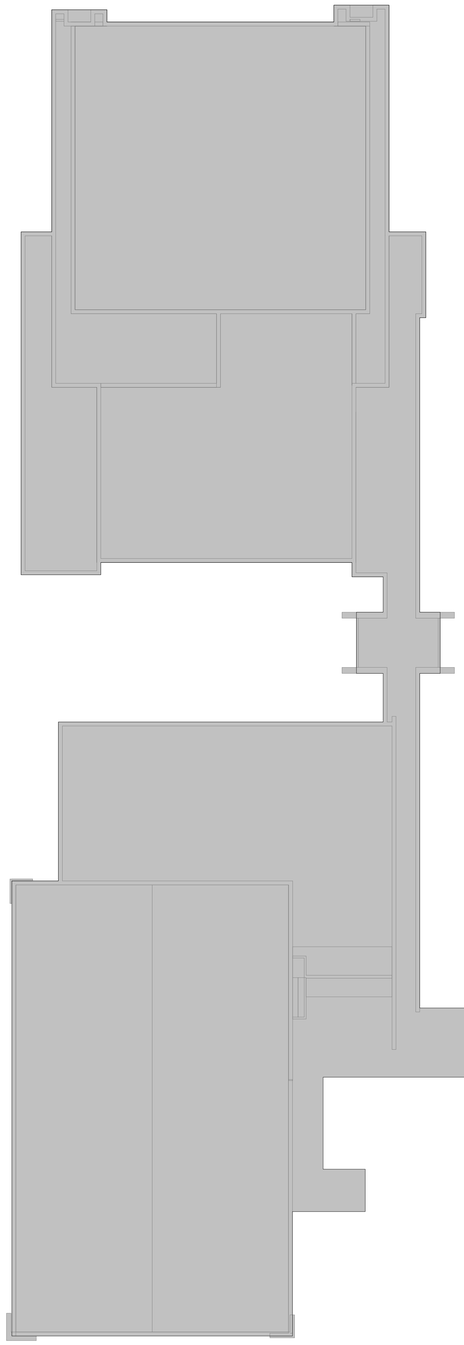
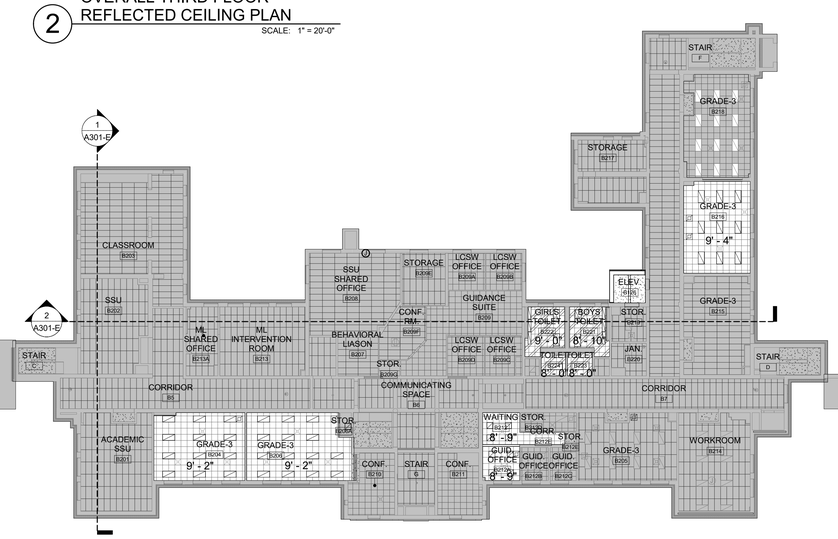


2 OVERALL THIRD FLOOR REFLECTED CEILING PLAN

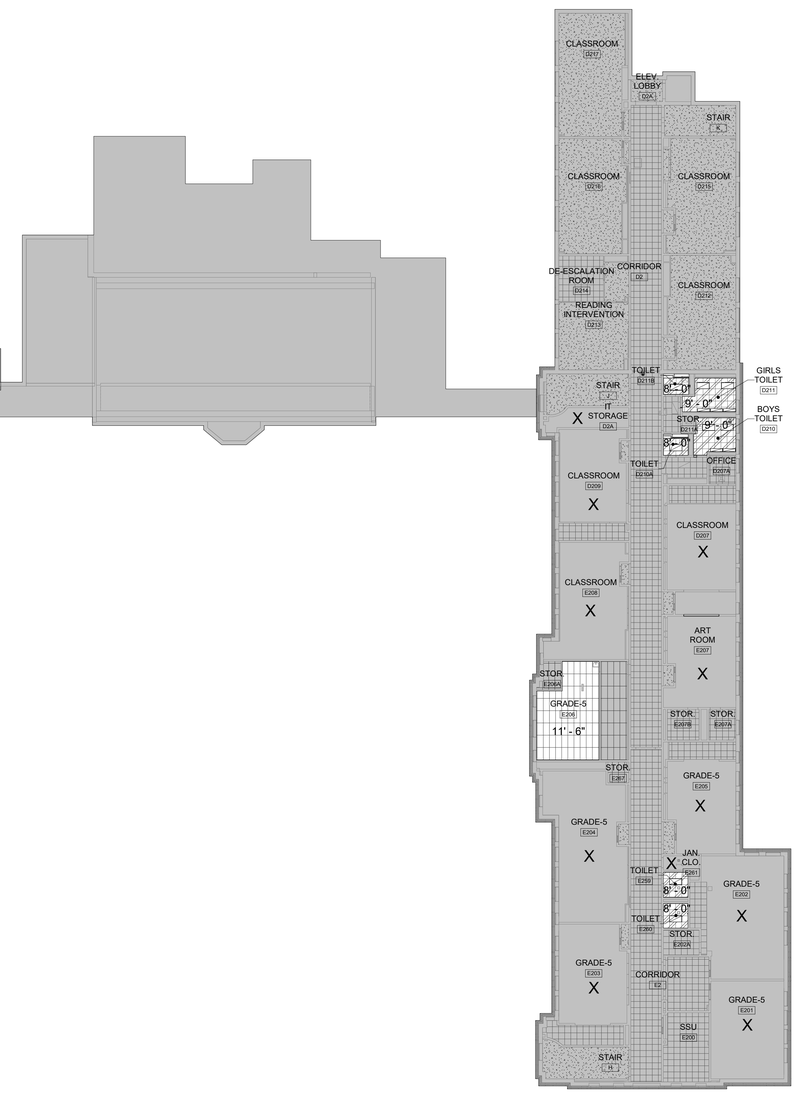
SCALE: 1" = 20'-0"





1 OVERALL SECOND FLOOR REFLECTED CEILING PLAN

SCALE: 1" = 20'-0"



CEILING LEGEND

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	2x2 SCRUBBABLE ACT CEILING		EXG 2x4 ACT CEILING TO REMAIN
	2x4 ACT CEILING		EXG GWB CEILING TO REMAIN
	INTERIOR - GWB CEILINGS /BULKHEADS	X	EXPOSED
	LINEAR METAL PLANK CEILING (CEILING TYPE 5)		N.I.C. (NOT IN CONTRACT)

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RICHARD Y. JOHNSON & SON, INC.
CONSTRUCTION MANAGER
18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

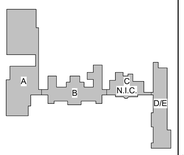
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

OVERALL SECOND AND THIRD FLOOR REFLECTED CEILING PLANS



0' 10' 20' 40'
SCALE: 1" = 20'

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	20211101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: CES	PROJ MGR: BAH

A105-E

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9/17/2024 10:01:23 AM

GENERAL FINISH NOTES

1. REFER TO A106-E FOR MATERIAL FINISH LEGEND.
2. REVIEW ALL FIELD CONDITIONS AND PLANNED WORK. RESOLVE ALL DISCREPANCIES IN A MANNER APPROVED BY THE ARCHITECT THAT COULD AFFECT THE FINISHES OR TRANSITIONS PRIOR TO PROCEEDING WITH WORK AFFECTED BY DISCREPANCIES.
3. ALL FINISHES SHALL BE TYPE 1/ CLASS A FLAME AND SMOKE SPREAD. REFER TO FINISH AND MATERIAL SCHEDULES.
4. REFER TO ELEVATIONS, REFLECTED CEILING PLANS AND DETAILS FOR ADDITIONAL INFORMATION REGARDING FINISHES, PATTERNS, ORIENTATIONS AND TRANSITIONS.
5.PREPARE SURFACES PER FINISH MANUFACTURERS' INSTRUCTIONS PRIOR TO APPLICATIONS OF FINISHES, CONFIRM SURFACES TO RECEIVE FINISHES ARE CLEAN, TRUE AND FREE OF IRREGULARITIES.
6. PREPARE SLAB TO RECEIVE NEW FINISHES, INCLUDING STRUCTURALLY BONDED HYDRAULIC CEMENT UNDERLAYS AND FLASH PATCHING REQUIRED TO LEVEL AND SMOOTH FLOOR TO 1/8" IN 20'-0" NON-CUMULATIVE, UNLESS OTHERWISE INDICATED AS FLATTER AND MORE LEVEL. CONCRETE FLOORS SHALL BE FREE FROM SCALING AND IRREGULARITIES AND SHALL EXHIBIT NEUTRALITY RELATIVE TO ACIDITY AND ALKALINITY. REMOVE GREASE, DIRT CURING COMPOUNDS AND OTHER MATERIALS THAT WILL IMPAIR THE PERFORMANCE AND/OR ADHESION OF THE SCHEDULED FLOORING.
7. LOCATE FLOOR FINISH TRANSITIONS AT CENTERLINE OF DOOR, UNLESS OTHERWISE NOTED.
8. PROVIDE COMPLETE EXTRUDED REVEALS IN ALL REVEAL LOCATIONS. FINISH TO MATCH ADJACENT SURFACE FINISH, UNLESS NOTED OTHERWISE.
9. PAINT AND FINISH EXPOSED SURFACES UNLESS OTHERWISE NOTED. PAINT SURFACES BEHIND REMOVABLE EQUIPMENT/FURNITURE. PAINT BEHIND NON-REMOVABLE ITEMS WITH PRIME COAT ONLY.
10. LAY RESILIENT FLOORING DIRECTIONAL PATTERNS OR GRAINS AS NOTED, OR IF NOT NOTED AS DIRECTED BY THE ARCHITECT.
11. GRILLES, PLATES, DIFFUSERS AND OTHER ITEMS OCCURRING IN WALLS OR CEILING SHALL BE FACTORY FINISHED IN PAINT OF COLOR AND SHEEN TO MATCH SURFACES ON WHICH THEY OCCUR UNLESS OTHERWISE NOTED.
12. PRIME ALL MATERIAL PRIOR TO PAINTING.
13. SEALANT TO BE APPLIED BETWEEN BASE OF ALL DOOR FRAMES AND TILE FLOORING. SEALANT TO MATCH COLOR OF DOOR FRAMES.
14. EXTEND FLOORING INTO ALL TOE KICKS, KNEE SPACES AND EXPOSED AREAS UNDER ANY EXISTING CASEWORK. FLOORING AS SCHEDULED SHALL BE INSTALLED UNDER ALL NEW CASEWORK.
15. MOLD- AND MOISTURE-RESISTANT GYPSUM BOARD SHALL BE USED AT ALL KITCHEN AREAS, TOILET ROOMS, AND CUSTODIAN SERVICE CLOSETS SCHEDULED TO HAVE GYPSUM BOARD FINISHES. THIS INCLUDES UNDER ALL CASEWORK AND APPLIANCES.
16. PLAN WALL TYPES TAKE PRECEDENCE OVER SCHEDULED WALL FINISH. PROVIDE APPROPRIATE WALL FINISH TO CORRESPOND TO WALL TYPES.
17. PT-# OR HPC-# IDENTIFIES COLOR AND SHEEN ONLY. REFER TO INTERIOR PAINTING SPECIFICATION TO COORDINATE PAINT PRODUCT WITH SUBSTRATE.
18. PROVIDE SEALANT/CAULK AT INTERSECTIONS OF DISSIMILAR MATERIALS AND AS RECOMMENDED BY MANUFACTURERS' GUIDELINES.
18. CAFETERIA TO RECEIVE NEW WALL AND DOOR FRAME PAINT ONLY. (NOT SHOWN ON PLANS.)

AREA N.I.C.

GENERAL SYMBOL LEGEND

FINISH TAG:

XX-1 — SEE FINISH LEGEND

ACCENT WALL LOCATION

TRANSITION STRIP BETWEEN MATERIALS - SEE A606

FLOOR FINISH PATTERNS (BASE BID):

CONC-1, CPT-1, CPT-2, EXG, RES-1, RES-2, RSF-1, RUB-1, VCT - MATCH EXG, PATCH & REPAIR EXG

NOTE: HATCH PATTERNS REPRESENT MATERIAL ONLY, NOT INSTALLATION PATTERN.

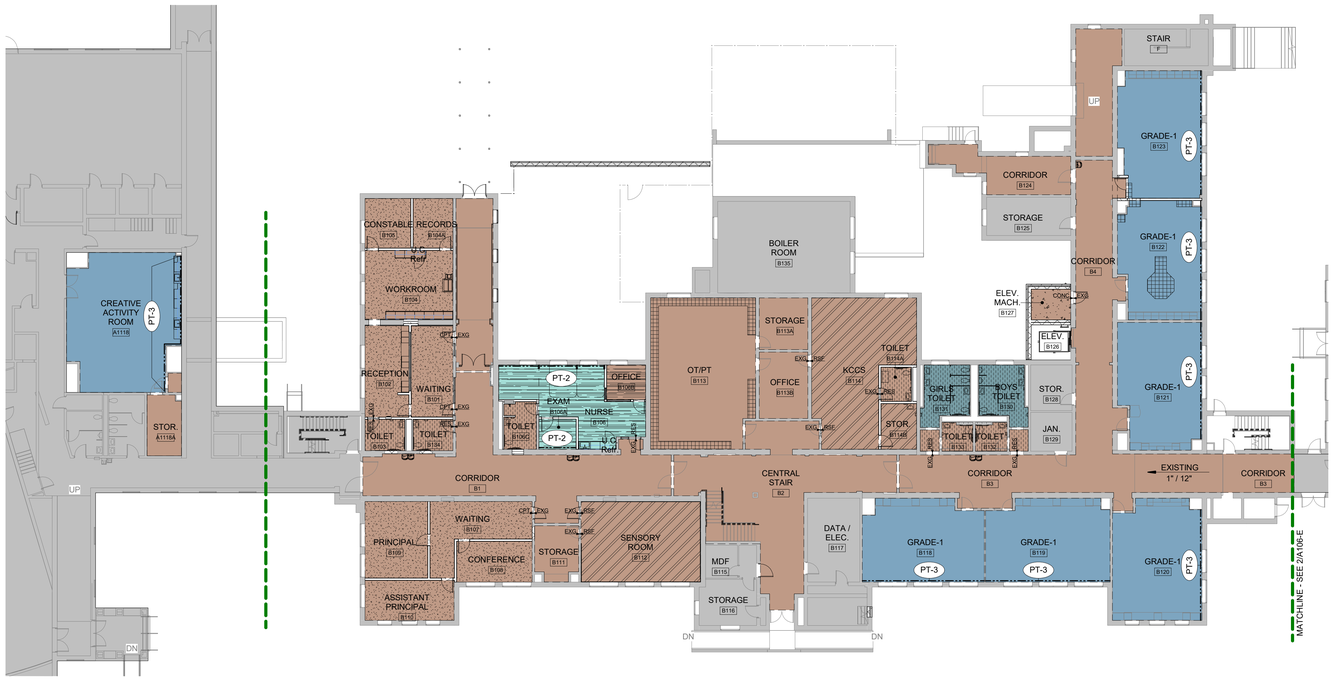
PAINT LEGEND:

PT-1 ONLY, PT-1 + PT-2, PT-1 + PT-3, PT-1 + PT-4, PT-5 ONLY, EXG

NOTES:
1. FLOOR PATTERN + SOLID COLOR = FLOORING AND PAINT IN ROOM
2. SOLID COLOR ONLY = PAINT ONLY

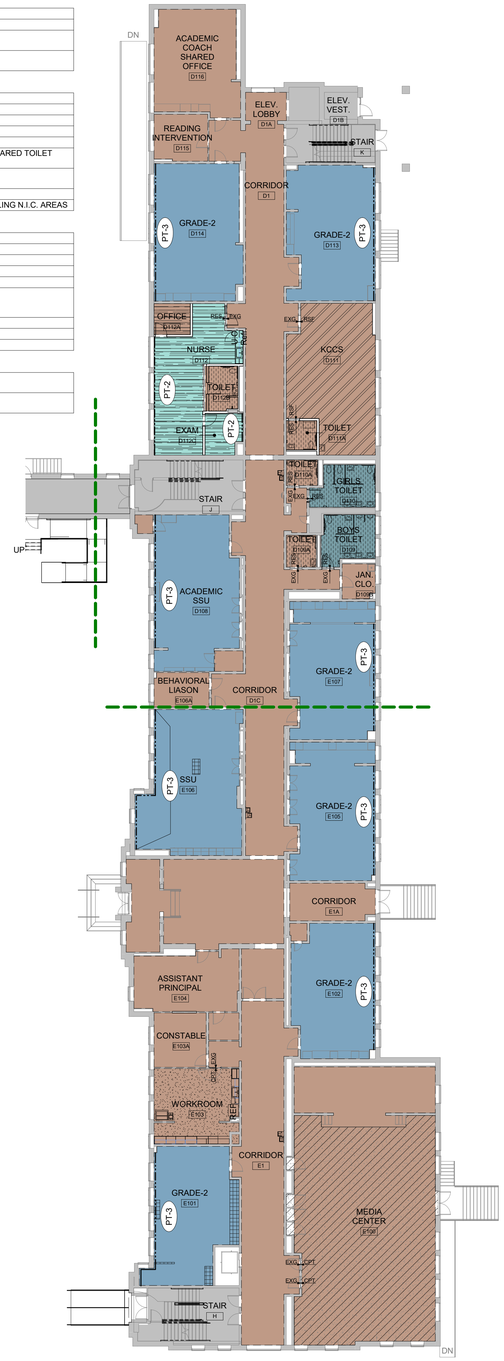
MATERIAL FINISH LEGEND

MARK	DESCRIPTION	MANUFACTURER	PRODUCT	COLOR / FINISH	SIZE	COMMENTS	LOCATION
BASE BID							
FLOOR							
-	NO FINISH / NOT APPLICABLE						
CONC-1	CONCRETE WITH SEALER/HARDENER						
CPT-1	CARPET TILE	TARKETT	OFFSET 11338	INK FILM 30807	18"X36"	TYPICAL	
CPT-2	CARPET TILE	TARKETT	SUEDE TONES 11531	GHOST WRITER 57204	18"X36"	MEDIA CENTER	
RES-1	RESINOUS FLOORING	STONHARD	STONEBLEND FE	CRUSHED SLATE		TOILET ROOMS	
RES-2	RESINOUS FLOORING	STONHARD	STONBLEND HDF	CRUSHED SLATE		NURSE SUITE	
RSF-1	RUBBER SHEET FLOORING	ECOSURFACES	NADA RX	BLUE ICE 3310	57" ROLL	SENSORY ROOM & KCCS	
VCT	VINYL COMPOSITION TILE	MATCH EXISTING	MATCH EXISTING	MATCH EXISTING		MATCH EXISTING PATTERN AND COLORS	WHERE INDICATED ON DRAWINGS
ALTERNATE FLOOR							
RFT-1	RUBBER FLOORING TILE	NORA RUBBER FLOORING	NORAPLAN ENVIRONCARE	FROM FULL MFRS RANGE		INSTALLED OVER EXISTING VCT	
RFT-2	RUBBER FLOORING TILE	NORA RUBBER FLOORING	NORAPLAN ENVIRONCARE	FROM FULL MFRS RANGE		INSTALLED OVER EXISTING VCT	
SVT-1	VINYL COMPOSITION TILE	PATCRAFT	ADMIX	FROM FULL MFRS RANGE		INSTALLED OVER EXISTING VCT	
SVT-2	VINYL COMPOSITION TILE	PATCRAFT	ADMIX	FROM FULL MFRS RANGE		INSTALLED OVER EXISTING VCT	
BASE BID							
BASE							
-	NO FINISH / NOT APPLICABLE						
RB-1	RESILIENT WALL BASE	TARKETT	BASEWORKS	NAVY BLUE 18	4"H	TYPICAL	
RES-1	RESINOUS FLOORING INTEGRAL COVE BASE	STONHARD	STONEBLEND FE	CRUSHED SLATE	6"H	TOILET ROOMS	
RES-2	RESINOUS FLOORING INTEGRAL COVE BASE	STONHARD	STONBLEND HDF	CRUSHED SLATE	6"H	NURSE SUITE	
BASE BID							
WALL							
-	NO FINISH / NOT APPLICABLE						
EXG	EXISTING TO REMAIN						
GWB	GYPSUM WALLBOARD						
HPC-1	HIGH PERFORMANCE COATING	SHERWIN WILLIAMS		SW7570 EGRET WHITE			
PT-1	FIELD PAINT	SHERWIN WILLIAMS	PROMAR 200 EGGSHELL	SW7570 EGRET WHITE		FIELD	
PT-2	ACCENT PAINT	SHERWIN WILLIAMS	PROMAR 200 EGGSHELL	SW6227 MEDITATIVE		ACCENT	NURSE ACCENT & SHARED TOILET ROOMS
PT-3	ACCENT PAINT	SHERWIN WILLIAMS	PROMAR 200 EGGSHELL	SW6519 HINTING BLUE / EGGSHELL		ACCENT	GRADES 1, 2 & 3
PT-4	ACCENT PAINT	SHERWIN WILLIAMS	PROMAR 200 EGGSHELL	SW7064 PASSIVE		ACCENT	GRADES 4 & 5
PT-5	DOOR FRAME PAINT	SHERWIN WILLIAMS	PROMAR 200 GLOSS	TBD		TYPICAL	THROUGHOUT, INCULING N.I.C. AREAS
BASE BID							
CEILING							
-	NO FINISH / NOT APPLICABLE						
ACT-1	ACOUSTICAL TILE CEILING	ARMSTRONG	ULTIMA	WHITE	24"X24"	TYPICAL	
ACT-2	ACOUSTICAL TILE CEILING	ARMSTRONG	ULTIMA HIGH NRC	WHITE	24"X24"	SCRUBABLE	
ACT-3	ACOUSTICAL TILE CEILING	ARMSTRONG			24"X48"		
EXG	EXISTING TO REMAIN						
EXPO	EXPOSED STRUCTURE, FIRE PROTECTION, PLUMBING, MECHANICAL, ELECTRICAL, TECHNOLOGY, ETC.		SHERWIN WILLIAMS DRYFALL	SW7570 EGRET WHITE			
GWB	GYPSUM BOARD CEILING						
HPC-3	HIGH PERFORMANCE COATING	SHERWIN WILLIAMS		SW7570 EGRET WHITE			
PT-6	CEILING PAINT	SHERWIN WILLIAMS	PROMAR 200 FLAT	SW7570 EGRET WHITE			
BASE BID							
MILLWORK, CASEWORK, DOORS, MISC. FINISHES							
PLAM-1	PLASTIC LAMINATE	WILSONART	HPL	MONTICELLO MAPLE 7925-38		CASEWORK	
SCWD	SOLID CORE WOOD DOOR W/ PREFINISH VENEER	MASONITE ARCHITECTURAL	ASPIRO SERIES	WHITE OAK - CLEAR		PLAIN SLICED	



1 FIRST FLOOR FINISH PLAN - AREA B BASE BID

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



2 FIRST FLOOR FINISH PLAN - AREA D/E BASE BID

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

PLAN NORTH

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

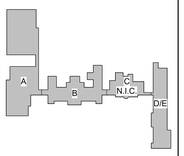
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR FINISH PLAN - AREAS B, D/E (BASE BID)



0' 8' 16' 32'
SCALE: 1/16" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
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A106-E

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GENERAL FINISH NOTES

1. REFER TO A106-E FOR MATERIAL FINISH LEGEND.
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17. PT-# OR HPC-# IDENTIFIES COLOR AND SHEEN ONLY. REFER TO INTERIOR PAINTING SPECIFICATION TO COORDINATE PAINT PRODUCT WITH SUBSTRATE.
18. PROVIDE SEALANT/CAULK AT INTERSECTIONS OF DISSIMILAR MATERIALS AND AS RECOMMENDED BY MANUFACTURERS' GUIDELINES.
18. CAFETERIA TO RECEIVE NEW WALL AND DOOR FRAME PAINT ONLY. (NOT SHOWN ON PLANS.)

AREA N.I.C.

GENERAL SYMBOL LEGEND

FINISH TAG:

- XX-1 — SEE FINISH LEGEND
- ACCENT WALL LOCATION
- TRANSITION STRIP BETWEEN MATERIALS - SEE A606

FLOOR FINISH PATTERNS (BASE BID):

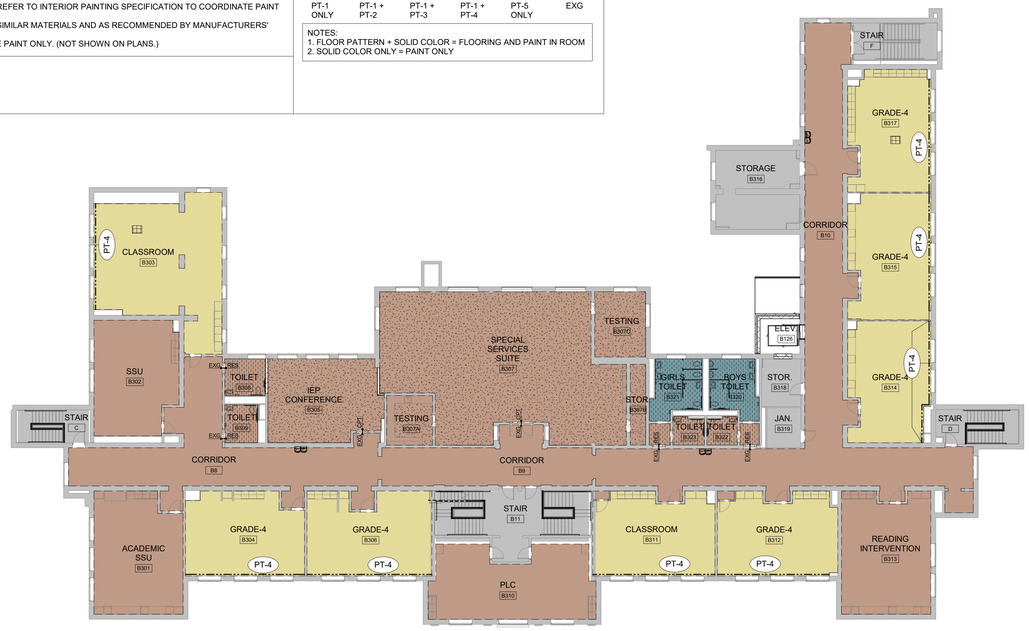
CONC-1, CPT-1, CPT-2, EXG, RES-1, RES-2, RSF-1, RUB-1, VCT - MATCH EXG, PATCH & REPAIR EXG

NOTE: HATCH PATTERNS REPRESENT MATERIAL ONLY, NOT INSTALLATION PATTERN.

PAINT LEGEND:

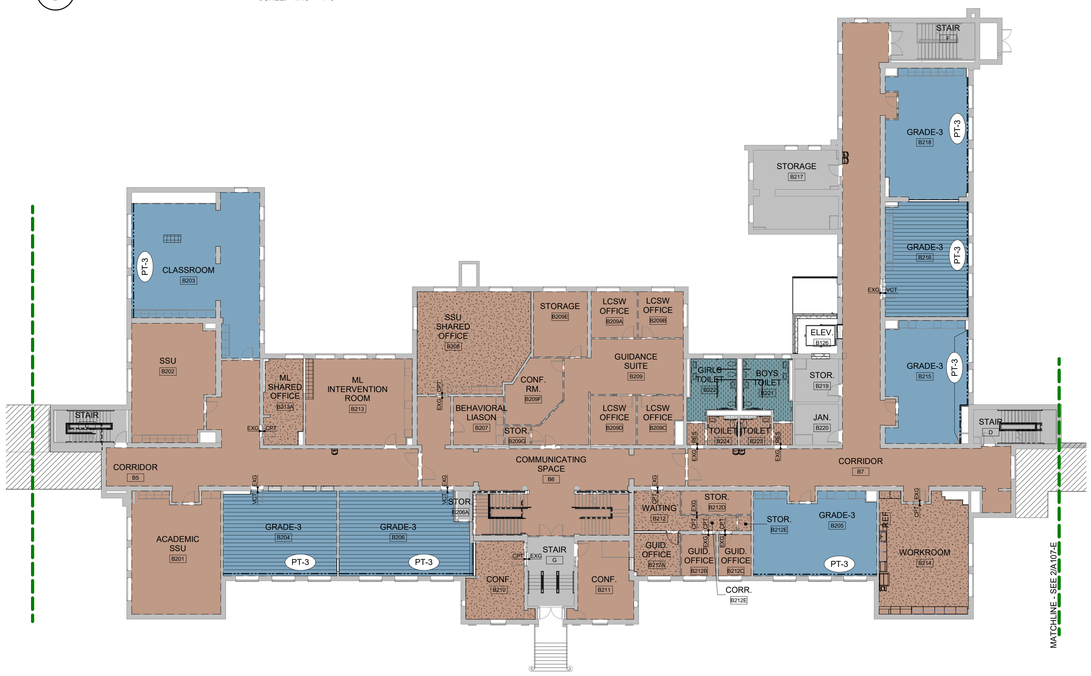
PT-1 ONLY, PT-1 + PT-2, PT-1 + PT-3, PT-1 + PT-4, PT-5 ONLY, EXG

NOTES:
1. FLOOR PATTERN + SOLID COLOR = FLOORING AND PAINT IN ROOM
2. SOLID COLOR ONLY = PAINT ONLY



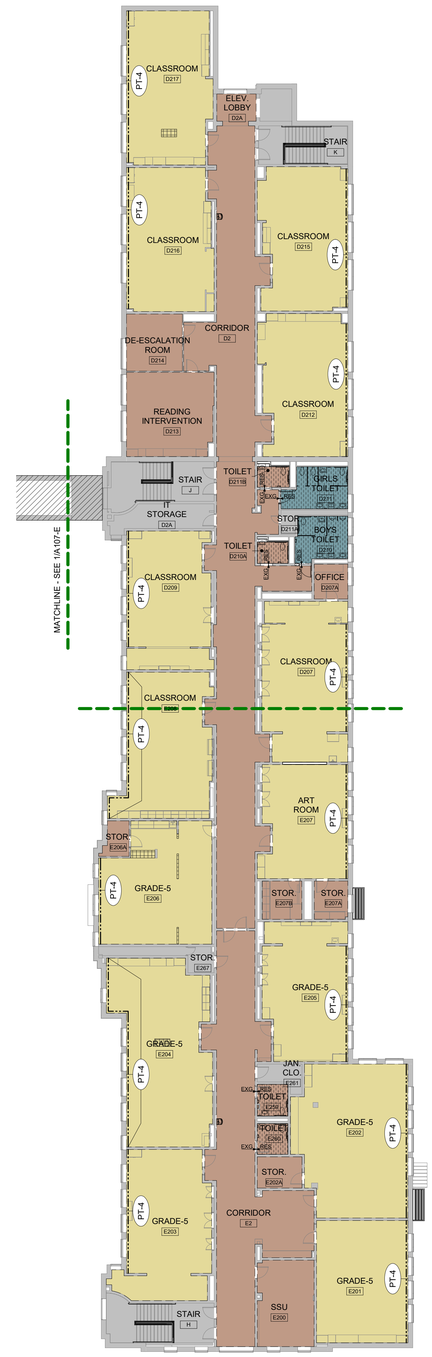
3 THIRD FLOOR FINISH PLAN - AREA B BASE BID

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



1 SECOND FLOOR FINISH PLAN - AREA B BASE BID

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



2 SECOND FLOOR FINISH PLAN - AREA D/E BASE BID

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

PLAN NORTH

BECKER MORGAN GROUP

ARCHITECTURE ENGINEERING

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

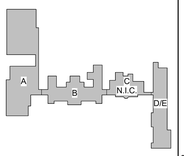
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

SECOND AND THIRD FLOOR FINISH PLANS - AREAS B, D/E (BASE BID)



0' 8' 16' 32'
SCALE: 1/16" = 1'-0"

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DRAWN BY: MNS	PROJ MGR: BAH

A107-E

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GENERAL FINISH NOTES

1. REFER TO A108-E FOR MATERIAL FINISH LEGEND.
2. REVIEW ALL FIELD CONDITIONS AND PLANNED WORK. RESOLVE ALL DISCREPANCIES IN A MANNER APPROVED BY THE ARCHITECT THAT COULD AFFECT THE FINISHES OR TRANSITIONS PRIOR TO PROCEEDING WITH WORK AFFECTED BY DISCREPANCIES.
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5.PREPARE SURFACES PER FINISH MANUFACTURERS' INSTRUCTIONS PRIOR TO APPLICATIONS OF FINISHES, CONFIRM SURFACES TO RECEIVE FINISHES ARE CLEAN, TRUE AND FREE OF IRREGULARITIES.
6. PREPARE SLAB TO RECEIVE NEW FINISHES, INCLUDING STRUCTURALLY BONDED HYDRAULIC CEMENT UNDERLAYS AND FLASH PATCHING REQUIRED TO LEVEL AND SMOOTH FLOOR TO 1/8" IN 20'-0" NON-CUMULATIVE, UNLESS OTHERWISE INDICATED AS FLATTER AND MORE LEVEL. CONCRETE FLOORS SHALL BE FREE FROM SCALING AND IRREGULARITIES AND SHALL EXHIBIT NEUTRALITY RELATIVE TO ACIDITY AND ALKALINITY. REMOVE GREASE, DIRT CURING COMPOUNDS AND OTHER MATERIALS THAT WILL IMPAIR THE PERFORMANCE AND/OR ADHESION OF THE SCHEDULED FLOORING.
7. LOCATE FLOOR FINISH TRANSITIONS AT CENTERLINE OF DOOR, UNLESS OTHERWISE NOTED.
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12. PRIME ALL MATERIAL PRIOR TO PAINTING.
13. SEALANT TO BE APPLIED BETWEEN BASE OF ALL DOOR FRAMES AND TILE FLOORING. SEALANT TO MATCH COLOR OF DOOR FRAMES.
14. EXTEND FLOORING INTO ALL TOE KICKS, KNEE SPACES AND EXPOSED AREAS UNDER ANY EXISTING CASEWORK. FLOORING AS SCHEDULED SHALL BE INSTALLED UNDER ALL NEW CASEWORK.
15. MOLD- AND MOISTURE-RESISTANT GYPSUM BOARD SHALL BE USED AT ALL KITCHEN AREAS, TOILET ROOMS, AND CUSTODIAN SERVICE CLOSETS SCHEDULED TO HAVE GYPSUM BOARD FINISHES. THIS INCLUDES UNDER ALL CASEWORK AND APPLIANCES.
16. PLAN WALL TYPES TAKE PRECEDENCE OVER SCHEDULED WALL FINISH. PROVIDE APPROPRIATE WALL FINISH TO CORRESPOND TO WALL TYPES.
17. PT-# OR HPC-# IDENTIFIES COLOR AND SHEEN ONLY. REFER TO INTERIOR PAINTING SPECIFICATION TO COORDINATE PAINT PRODUCT WITH SUBSTRATE.
18. PROVIDE SEALANT/CAULK AT INTERSECTIONS OF DISSIMILAR MATERIALS AND AS RECOMMENDED BY MANUFACTURERS' GUIDELINES.
19. ALTERNATE 3A/3B TO BE INSTALLED OVER EXISTING VCT FLOORING.

AREA N.I.C.

GENERAL SYMBOL LEGEND

FINISH TAG:

- XX-1 — SEE FINISH LEGEND
- ACCENT WALL
- TRANSITION STRIP BETWEEN MATERIALS - SEE A606

FLOOR FINISH PATTERNS (ALTERNATE):

CPT-1, CPT-2, EXG, RES-1, RES-2, RSF-1

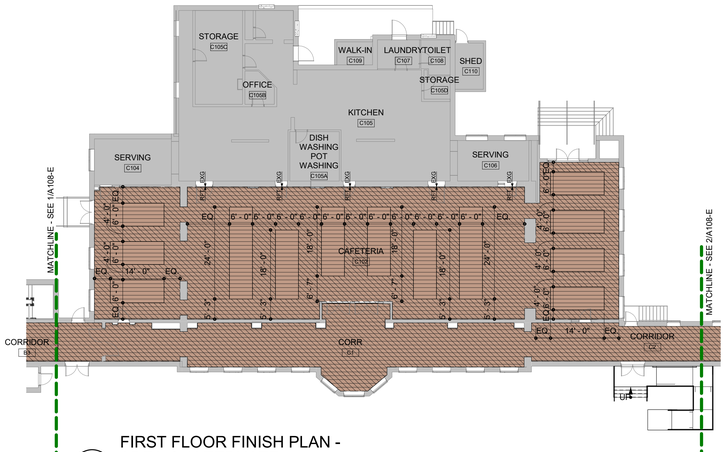
RFT-1 (ALT 3A), RFT-2 (ALT 3A), SVT-1 (ALT 3B), SVT-2 (ALT 3B)

NOTE: HATCH PATTERNS REPRESENT MATERIAL ONLY NOT INSTALLATION PATTERN.

PAINT LEGEND:

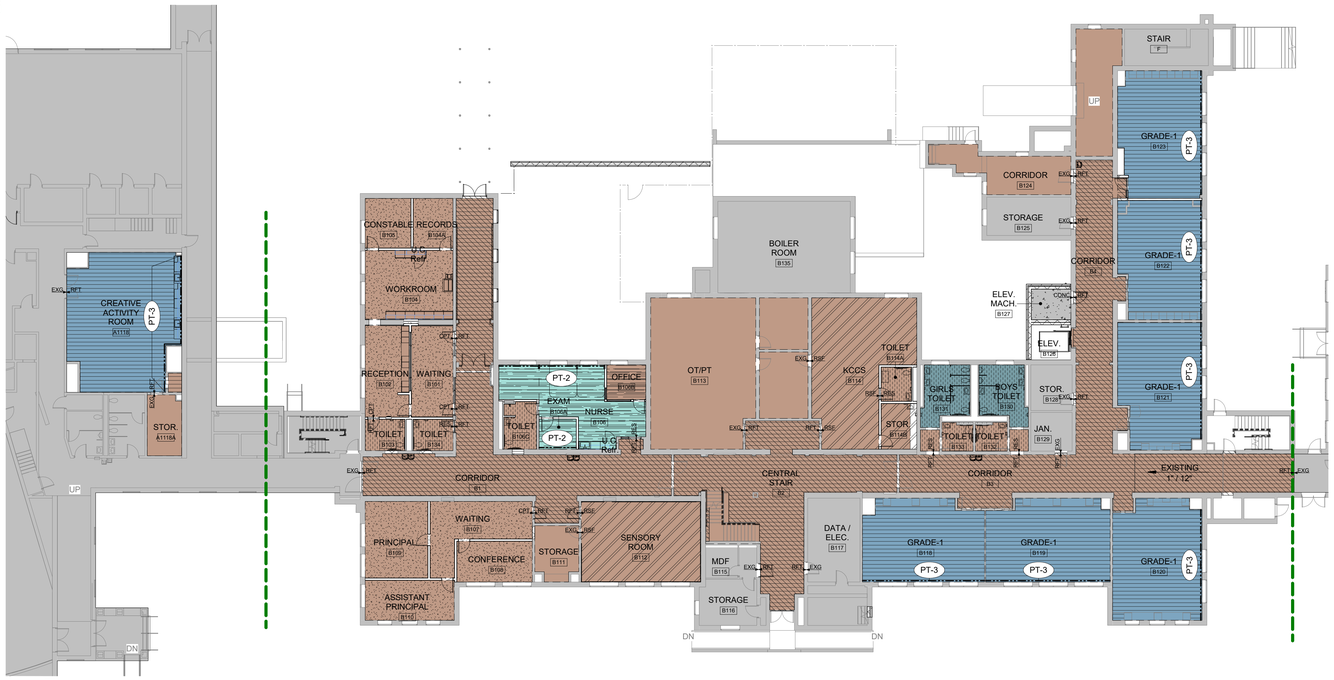
PT-1 ONLY, PT-1 + PT-2, PT-1 + PT-3, PT-1 + PT-4, PT-5 ONLY, EXG

NOTES:
1. FLOOR PATTERN + SOLID COLOR = FLOORING AND PAINT IN ROOM
2. SOILD COLOR ONLY = PAINT ONLY



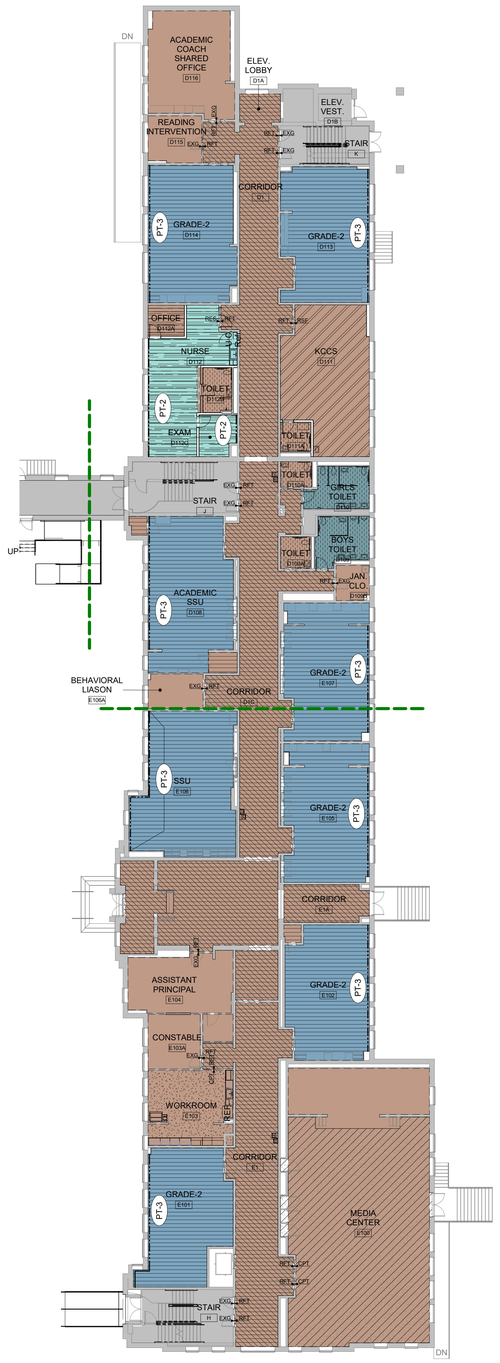
3 FIRST FLOOR FINISH PLAN - AREA C ALTERNATE

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



1 FIRST FLOOR FINISH PLAN - AREA B ALTERNATE

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



2 FIRST FLOOR FINISH PLAN - AREA D/E ALTERNATE

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

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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

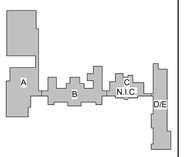
CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

OVERALL FIRST FLOOR FINISH PLAN (ALTERNATE)



0' 8' 16' 32'
SCALE: 1/16" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: MNS	PROJ MGR: BAH

A108-E

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GENERAL FINISH NOTES

1. REFER TO A108-E FOR MATERIAL FINISH LEGEND.
2. REVIEW ALL FIELD CONDITIONS AND PLANNED WORK. RESOLVE ALL DISCREPANCIES IN A MANNER APPROVED BY THE ARCHITECT THAT COULD AFFECT THE FINISHES OR TRANSITIONS PRIOR TO PROCEEDING WITH WORK AFFECTED BY DISCREPANCIES.
3. ALL FINISHES SHALL BE TYPE 1/ CLASS A FLAME AND SMOKE SPREAD. REFER TO FINISH AND MATERIAL SCHEDULES.
4. REFER TO ELEVATIONS, REFLECTED CEILING PLANS AND DETAILS FOR ADDITIONAL INFORMATION REGARDING FINISHES, PATTERNS, ORIENTATIONS AND TRANSITIONS.
5.PREPARE SURFACES PER FINISH MANUFACTURERS' INSTRUCTIONS PRIOR TO APPLICATIONS OF FINISHES, CONFIRM SURFACES TO RECEIVE FINISHES ARE CLEAN, TRUE AND FREE OF IRREGULARITIES.
6. PREPARE SLAB TO RECEIVE NEW FINISHES, INCLUDING STRUCTURALLY BONDED HYDRAULIC CEMENT UNDERLAYS AND FLASH PATCHING REQUIRED TO LEVEL AND SMOOTH FLOOR TO 1/8" IN 20'-0" NON-CUMULATIVE, UNLESS OTHERWISE INDICATED AS FLATTER AND MORE LEVEL. CONCRETE FLOORS SHALL BE FREE FROM SCALING AND IRREGULARITIES AND SHALL EXHIBIT NEUTRALITY RELATIVE TO ACIDITY AND ALKALINITY. REMOVE GREASE, DIRT CURING COMPOUNDS AND OTHER MATERIALS THAT WILL IMPAIR THE PERFORMANCE AND/OR ADHESION OF THE SCHEDULED FLOORING.
7. LOCATE FLOOR FINISH TRANSITIONS AT CENTERLINE OF DOOR, UNLESS OTHERWISE NOTED.
8. PROVIDE COMPLETE EXTRUDED REVEALS IN ALL REVEAL LOCATIONS. FINISH TO MATCH ADJACENT SURFACE FINISH, UNLESS NOTED OTHERWISE.
9. PAINT AND FINISH EXPOSED SURFACES UNLESS OTHERWISE NOTED. PAINT SURFACES BEHIND REMOVABLE EQUIPMENT/FURNITURE. PAINT BEHIND NON-REMOVABLE ITEMS WITH PRIME COAT ONLY.
10. LAY RESILIENT FLOORING DIRECTIONAL PATTERNS OR GRAINS AS NOTED, OR IF NOT NOTED AS DIRECTED BY THE ARCHITECT.
11. GRILLES, PLATES, DIFFUSERS AND OTHER ITEMS OCCURRING IN WALLS OR CEILING SHALL BE FACTORY FINISHED IN PAINT OF COLOR AND SHEEN TO MATCH SURFACES ON WHICH THEY OCCUR UNLESS OTHERWISE NOTED.
12. PRIME ALL MATERIAL PRIOR TO PAINTING.
13. SEALANT TO BE APPLIED BETWEEN BASE OF ALL DOOR FRAMES AND TILE FLOORING. SEALANT TO MATCH COLOR OF DOOR FRAMES.
14. EXTEND FLOORING INTO ALL TOE KICKS, KNEE SPACES AND EXPOSED AREAS UNDER ANY EXISTING CASEWORK. FLOORING AS SCHEDULED SHALL BE INSTALLED UNDER ALL NEW CASEWORK.
15. MOLD- AND MOISTURE-RESISTANT GYPSUM BOARD SHALL BE USED AT ALL KITCHEN AREAS, TOILET ROOMS, AND CUSTODIAN SERVICE CLOSETS SCHEDULED TO HAVE GYPSUM BOARD FINISHES. THIS INCLUDES UNDER ALL CASEWORK AND APPLIANCES.
16. PLAN WALL TYPES TAKE PRECEDENCE OVER SCHEDULED WALL FINISH. PROVIDE APPROPRIATE WALL FINISH TO CORRESPOND TO WALL TYPES.
17. PT-#/ OR HPC-# IDENTIFIES COLOR AND SHEEN ONLY. REFER TO INTERIOR PAINTING SPECIFICATION TO COORDINATE PAINT PRODUCT WITH SUBSTRATE.
18. PROVIDE SEALANT/CAULK AT INTERSECTIONS OF DISSIMILAR MATERIALS AND AS RECOMMENDED BY MANUFACTURERS' GUIDELINES.
19. ALTERNATE 3A/3B TO BE INSTALLED OVER EXISTING VCT FLOORING.

AREA N.I.C.

GENERAL SYMBOL LEGEND

FINISH TAG:

- XX-1 — SEE FINISH LEGEND
- ACCENT WALL
- TRANSITION STRIP BETWEEN MATERIALS - SEE A606

FLOOR FINISH PATTERNS (ALTERNATE):

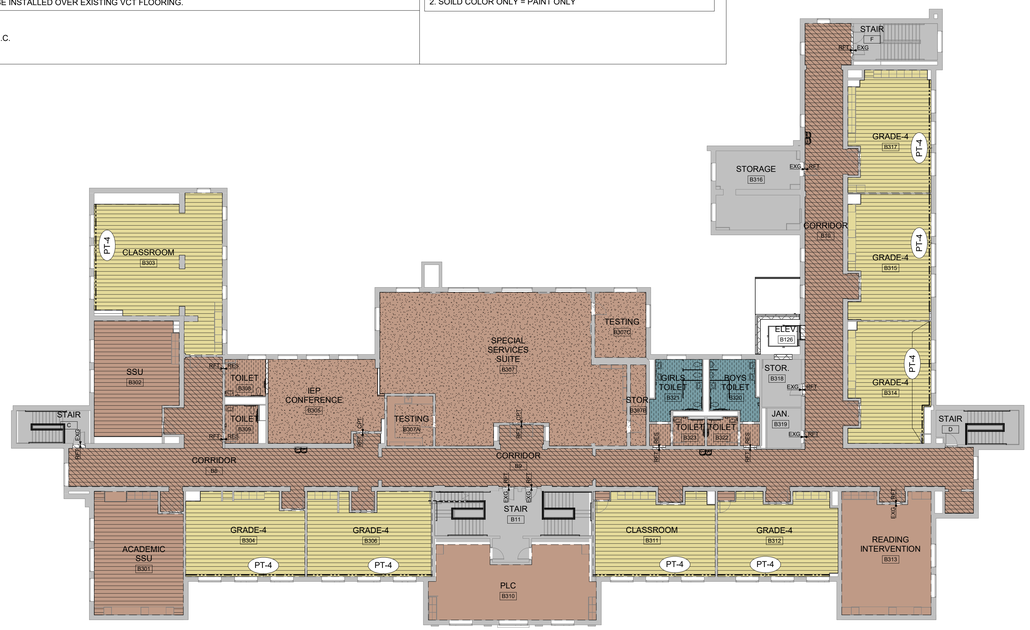
CPT-1, CPT-2, EXG, RES-1, RES-2, RSF-1, RFT-1 (ALT 3A), RFT-2 (ALT 3A), SVT-1 (ALT 3B), SVT-2 (ALT 3B)

NOTE: HATCH PATTERNS REPRESENT MATERIAL ONLY NOT INSTALLATION PATTERN.

PAINT LEGEND:

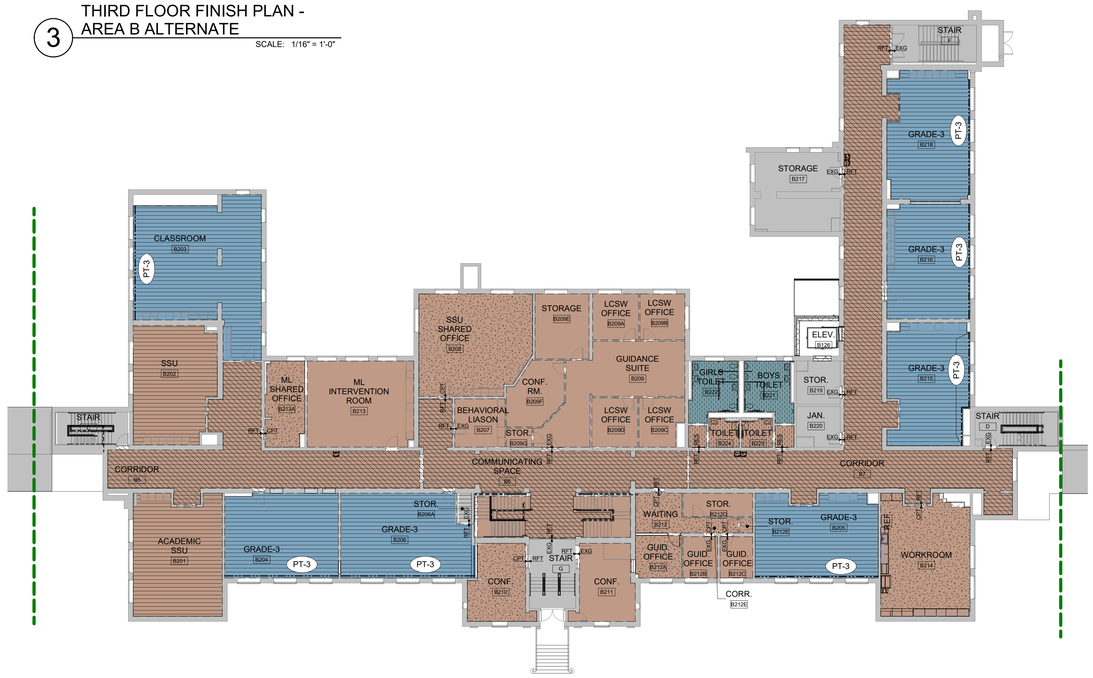
PT-1 ONLY, PT-1 + PT-2, PT-1 + PT-3, PT-1 + PT-4, PT-5 ONLY, EXG

NOTES:
1. FLOOR PATTERN + SOLID COLOR = FLOORING AND PAINT IN ROOM
2. SOILD COLOR ONLY = PAINT ONLY



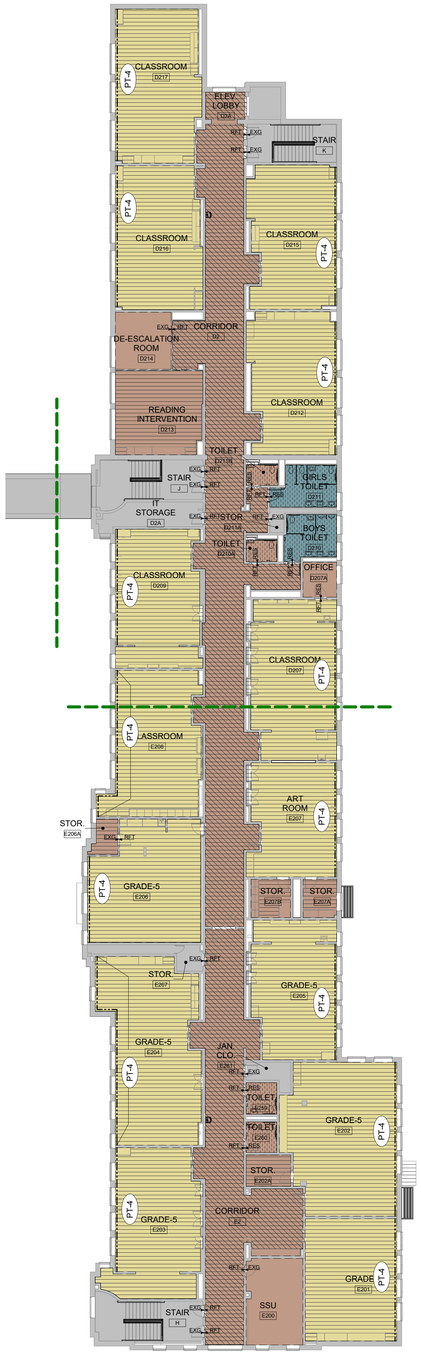
3 THIRD FLOOR FINISH PLAN - AREA B ALTERNATE

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



1 SECOND FLOOR FINISH PLAN - AREA B ALTERNATE

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



2 SECOND FLOOR FINISH PLAN - AREA D/E ALTERNATE

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

PLAN NORTH

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302-422-3732 fax 302-422-4696

PROJECT TITLE

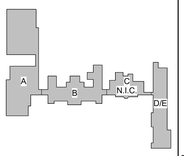
CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

OVERALL SECOND AND THIRD FLOOR FINISH PLANS (ALTERNATE)



0' 8' 16' 32'
SCALE: 1/16" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
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DRAWN BY: MNS	PROJ MGR: BAH

A109-E

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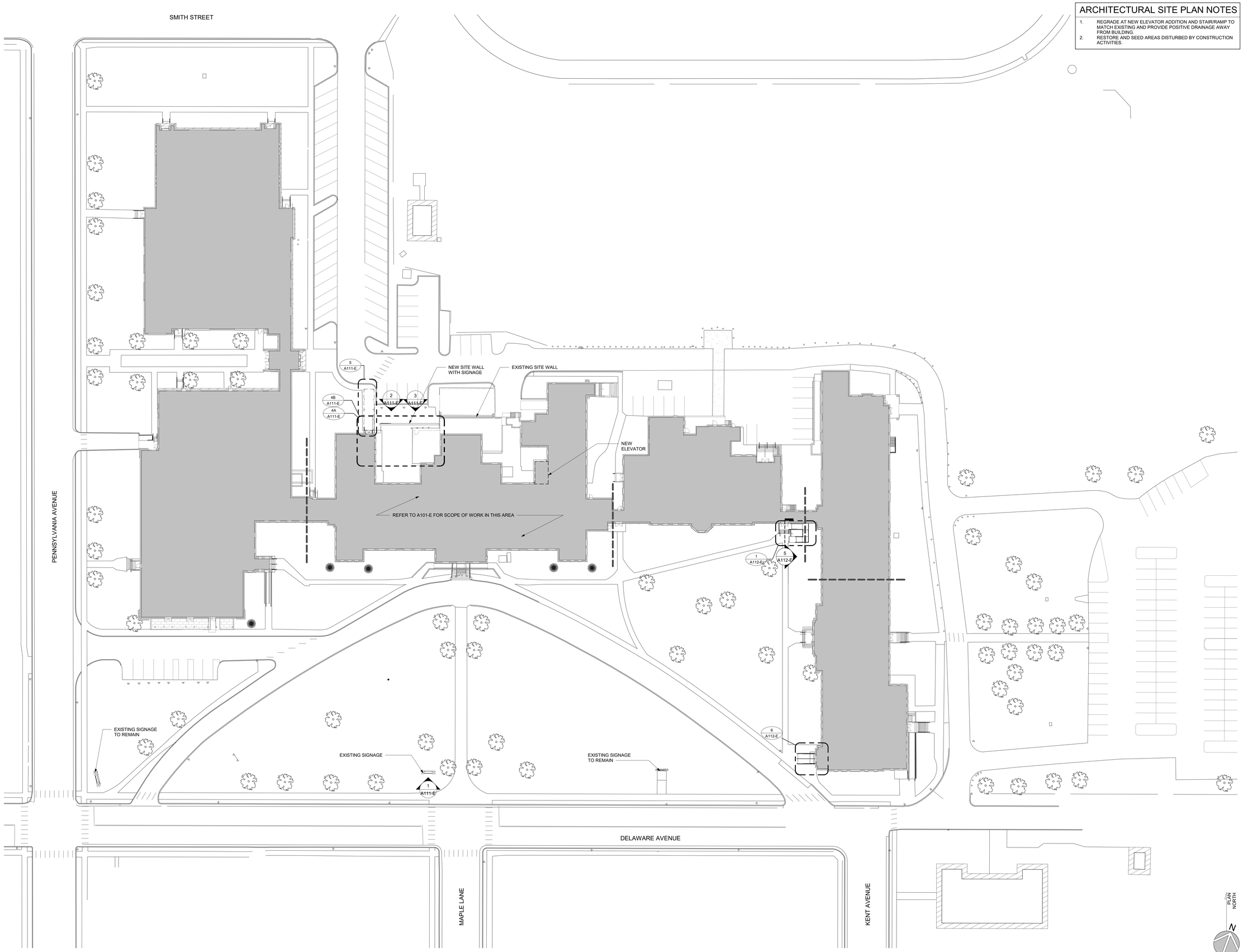
ARCHITECTURAL SITE PLAN NOTES

1. REGRADE AT NEW ELEVATOR ADDITION AND STAIR/RAMP TO MATCH EXISTING AND PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING.
2. RESTORE AND SEED AREAS DISTURBED BY CONSTRUCTION ACTIVITIES.



1 ARCHITECTURAL SITE PLAN
SCALE: 1" = 30'-0"

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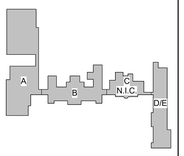
ISSUED: 09/13/2024

SHEET TITLE

ARCHITECTURAL SITE PLAN



0' 15' 30' 60'
SCALE: 1" = 30'

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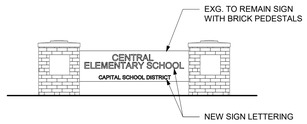
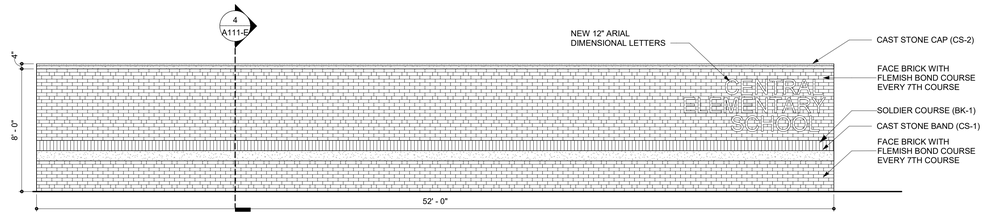
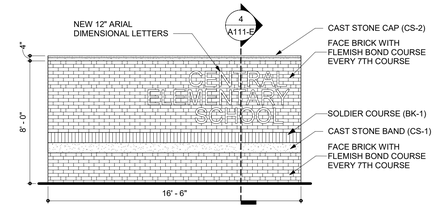


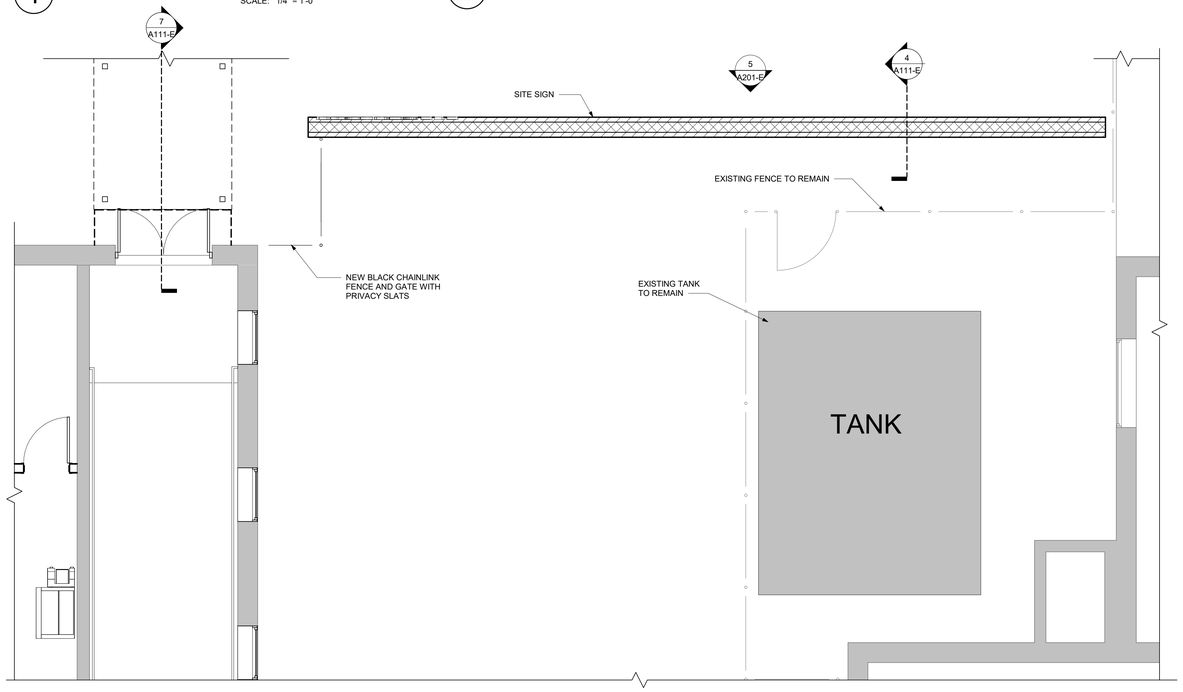
1 EXISTING SIGNAGE ELEVATION
SCALE: 1/4" = 1'-0"



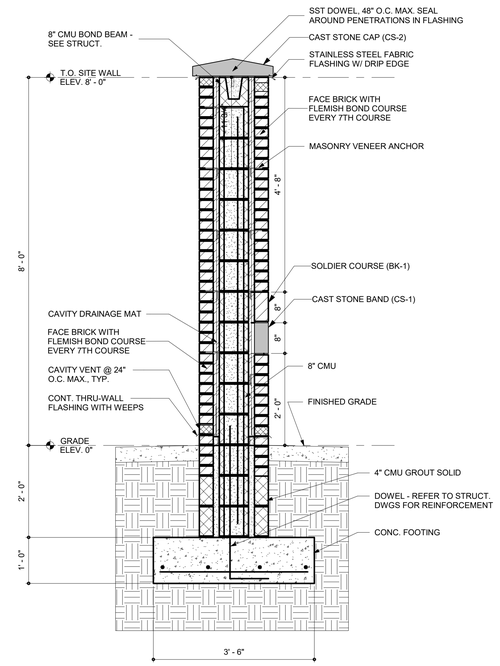
2 SITE WALL ELEVATION - BASE BID
SCALE: 1/4" = 1'-0"



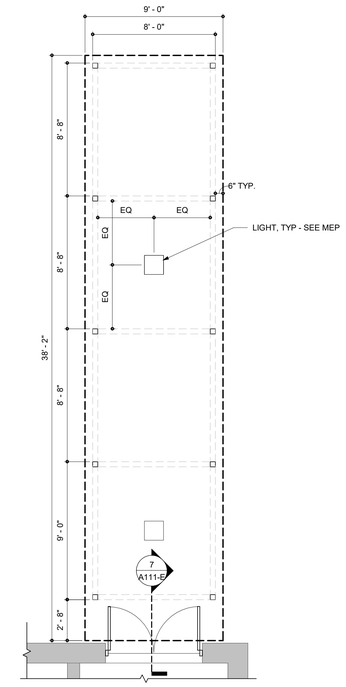
3 SITE WALL ELEVATION - ALTERNATE
SCALE: 1/4" = 1'-0"



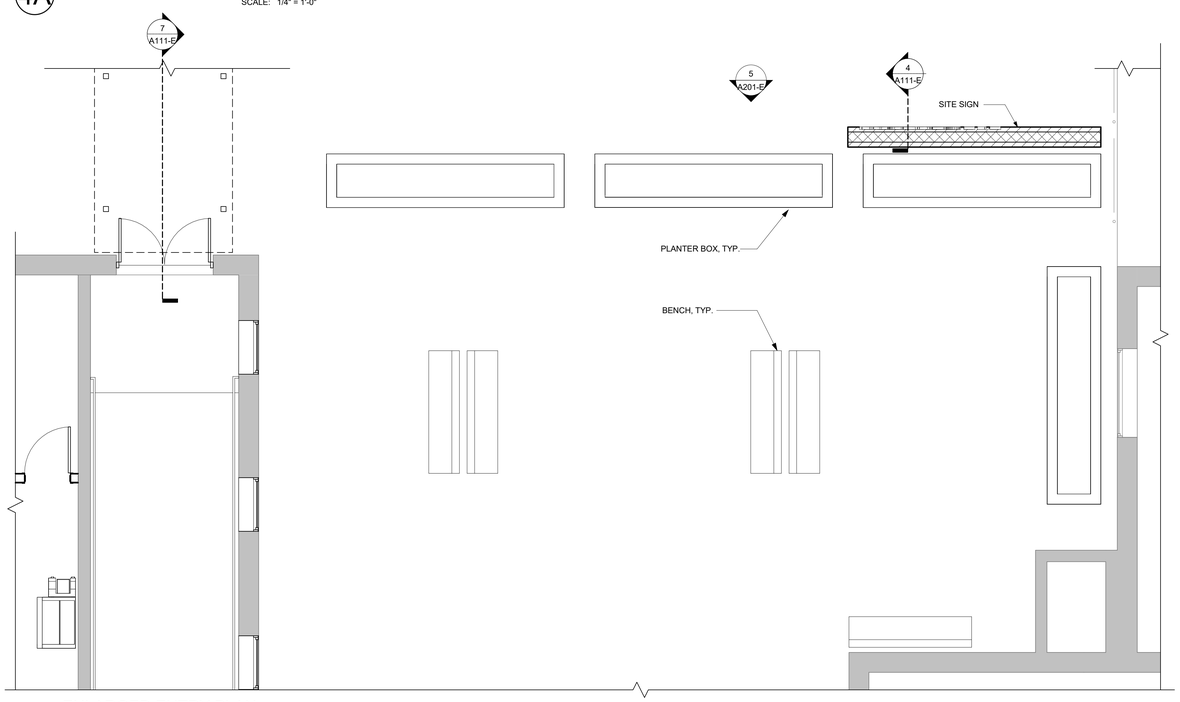
4A ENLARGED ENTRY PLAN - BASE BID
SCALE: 1/4" = 1'-0"



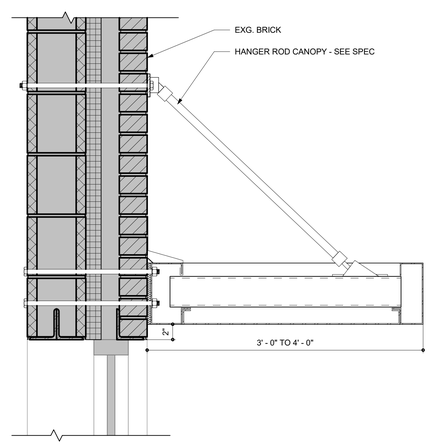
4 SITE WALL SECTION
SCALE: 3/4" = 1'-0"



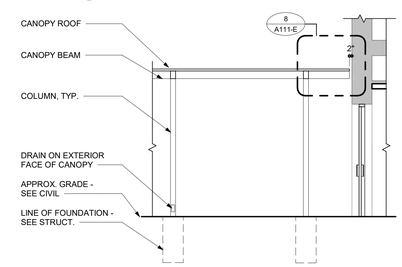
5 NEW CANOPY AT ENTRANCE
SCALE: 1/4" = 1'-0"



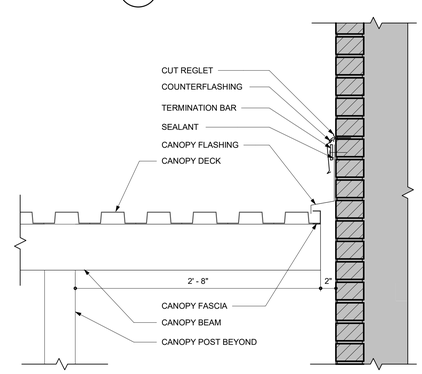
4B ENLARGED ENTRY PLAN - ALTERNATE
SCALE: 1/4" = 1'-0"



6 TYPICAL SECTION AT NEW HANGER ROD CANOPY
SCALE: 1 1/2" = 1'-0"



7 SECTION THRU CANOPY
SCALE: 1/4" = 1'-0"



8 CANOPY FLASHING DETAIL
SCALE: 1 1/2" = 1'-0"

PLAN NORTH
N

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

ARCHITECTURAL SITE DETAILS

0' 3" 6" 12" 18"
SCALE: 1-1/2" = 1'-0"
0' 2' 4' 8'
SCALE: 1/4" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
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DRAWN BY: CES	PROJ MGR: BAH

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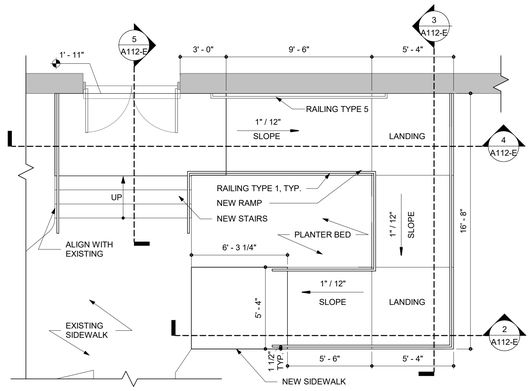
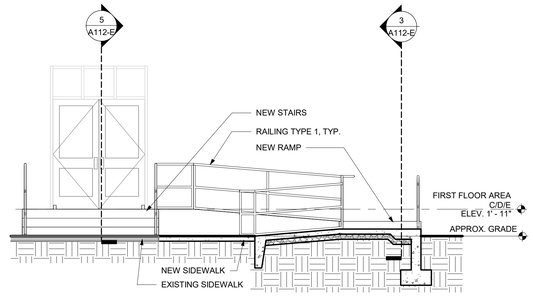


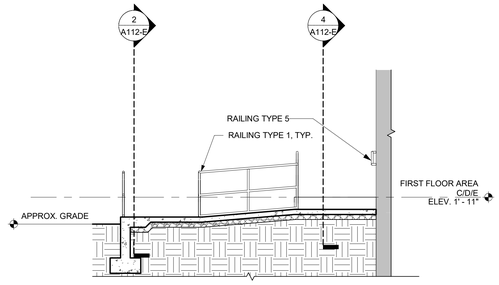
1 ARCHITECTURAL SITE PLAN - NEW RAMP

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



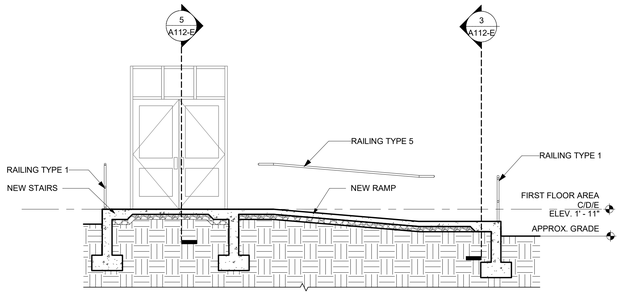
2 SECTION THROUGH LOWER RAMP PORTION

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



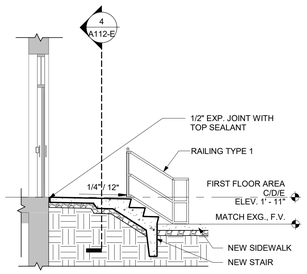
3 SECTION THROUGH MIDDLE RAMP PORTION

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



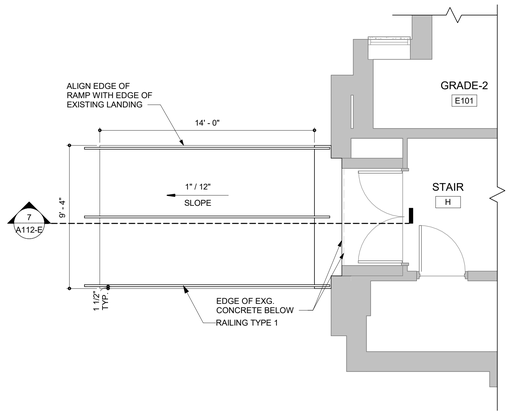
4 SECTION THROUGH UPPER RAMP PORTION

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



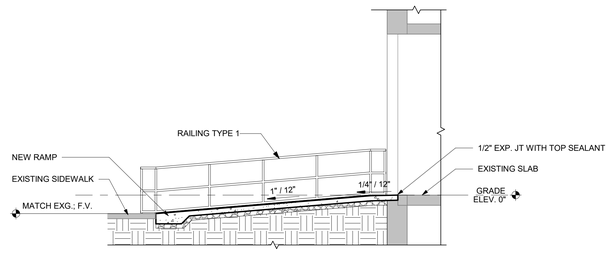
5 SECTION AT NEW STAIR RAMP

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



6 ARCHITECTURAL SITE PLAN - NEW RAMP EAST

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



7 SECTION THROUGH NEW RAMP EAST

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

PLAN NORTH

N

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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

ARCHITECTURAL SITE DETAILS

0' 2' 4' 8'
SCALE: 1/4" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/4" = 1'-0"
DRAWN BY: WA	PROJ MGR: BAH

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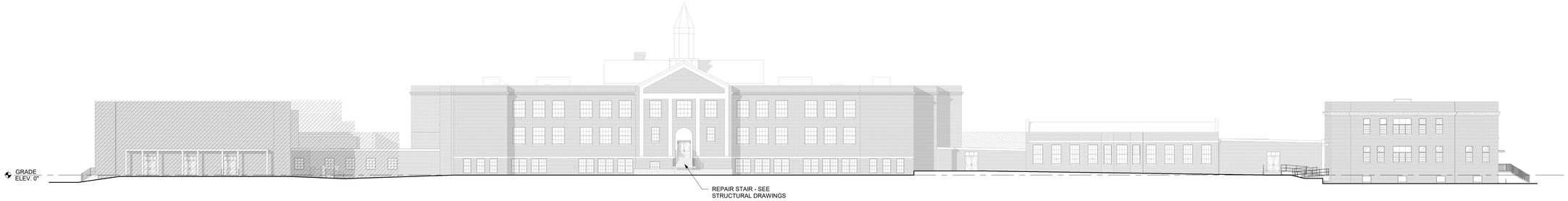
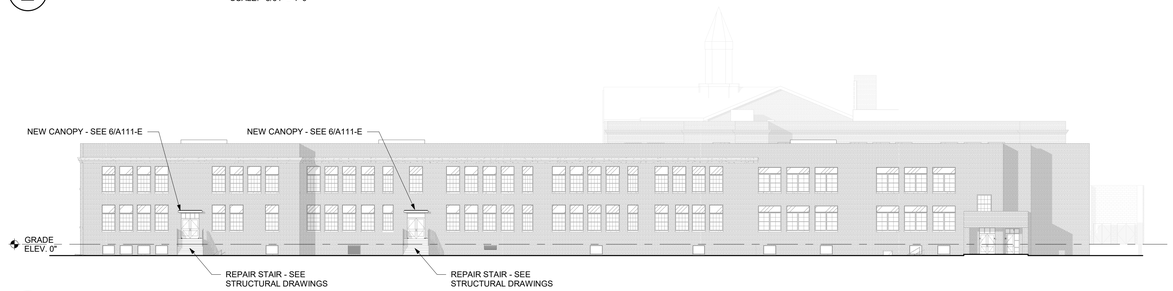
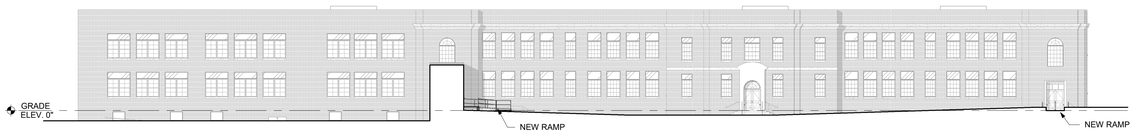


1 OVERALL SOUTH ELEVATION
SCALE: 3/64" = 1'-0"

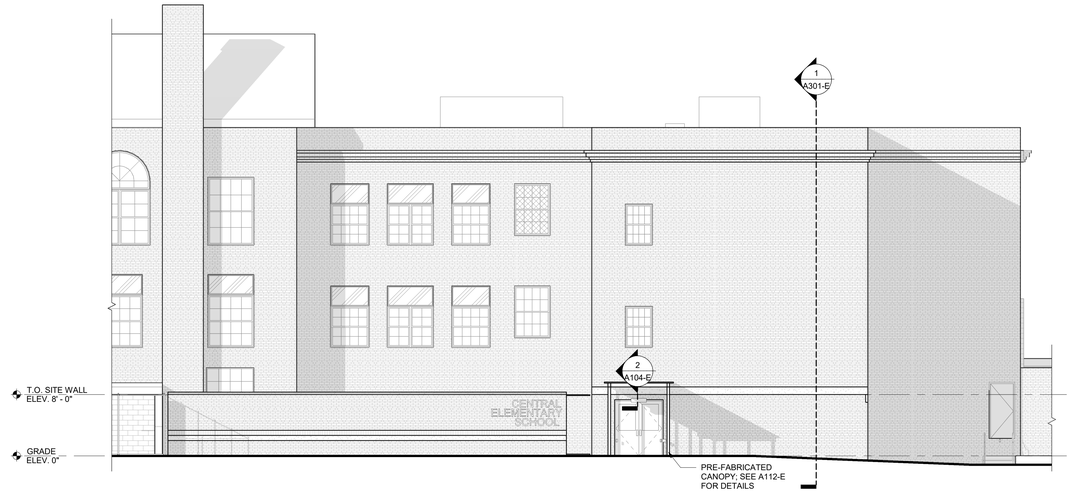
2 OVERALL NORTH ELEVATION
SCALE: 3/64" = 1'-0"



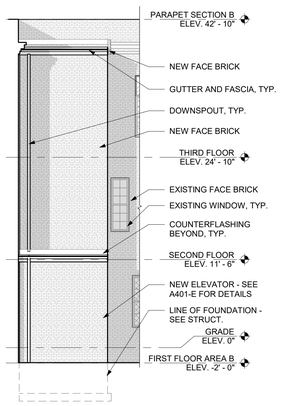
3 OVERALL EAST ELEVATION
SCALE: 3/64" = 1'-0"



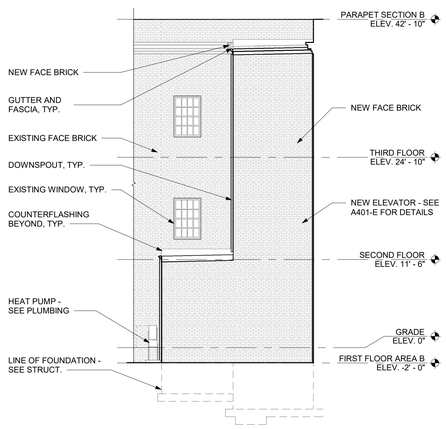
4 OVERALL WEST ELEVATION
SCALE: 3/64" = 1'-0"



5 EXTERIOR ELEVATION - NEW FRONT ENTRANCE
SCALE: 1/8" = 1'-0"



6 ELEVATOR NORTH ELEVATION
SCALE: 1/8" = 1'-0"



7 ELEVATOR WEST ELEVATION
SCALE: 1/8" = 1'-0"

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

EXTERIOR ELEVATIONS

0' 8' 16' 32' 48'
SCALE: 3/64" = 1'-0"

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: CES	PROJ MGR: BAH

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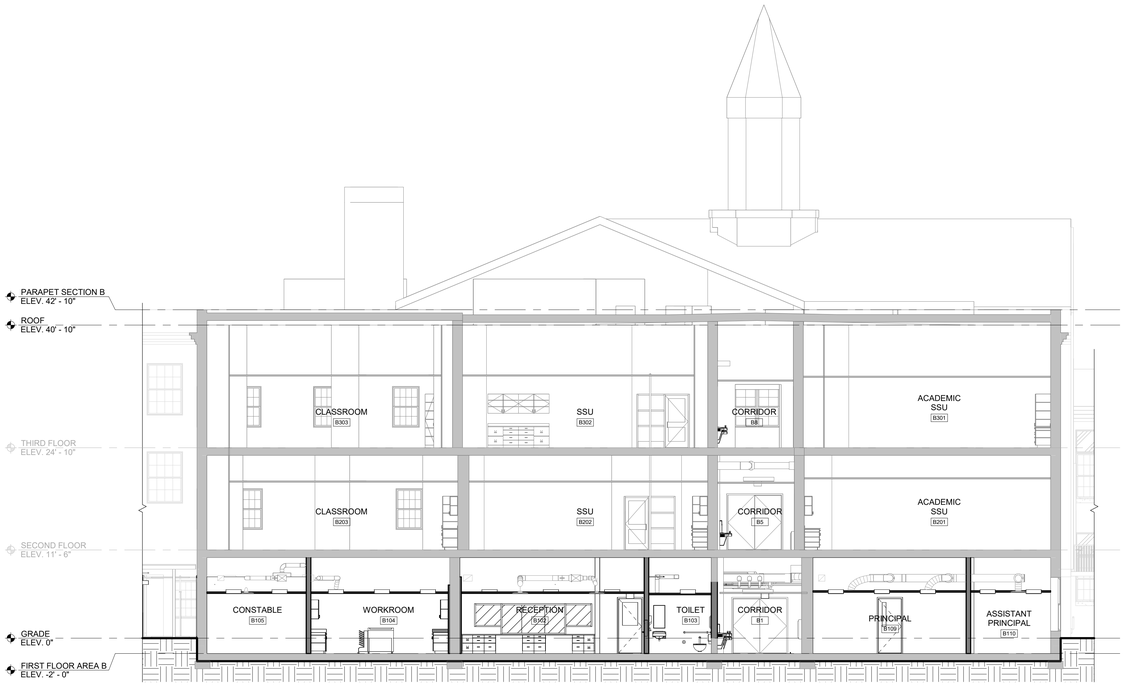
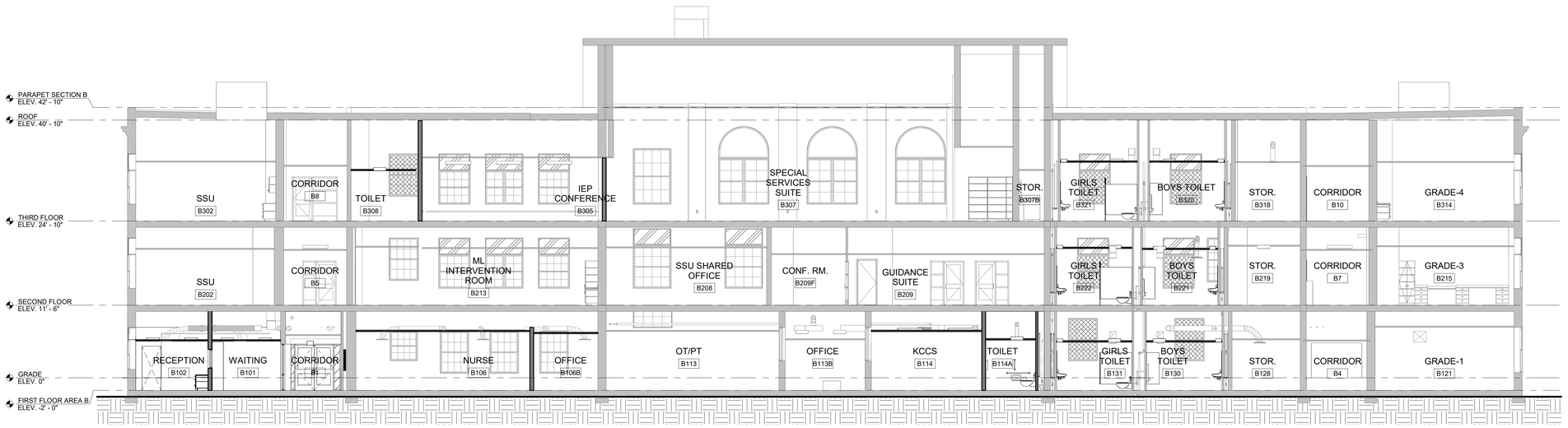


1 BUILDING SECTION 1

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



2 BUILDING SECTION 2

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

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

BUILDING SECTIONS

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
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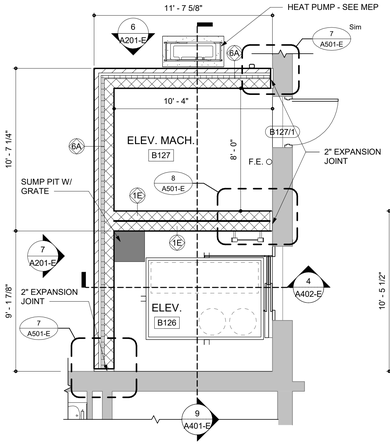
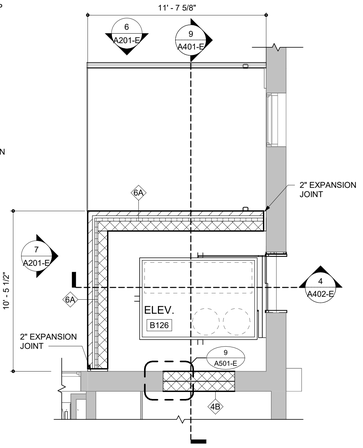


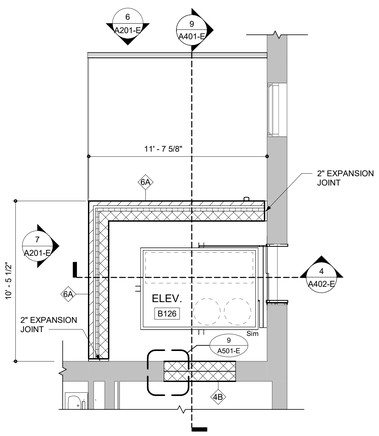
1 ENLARGED ELEVATOR PLAN - FIRST FLOOR

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



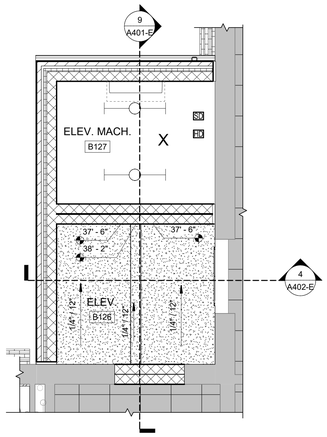
2 ENLARGED ELEVATOR PLAN - SECOND FLOOR

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



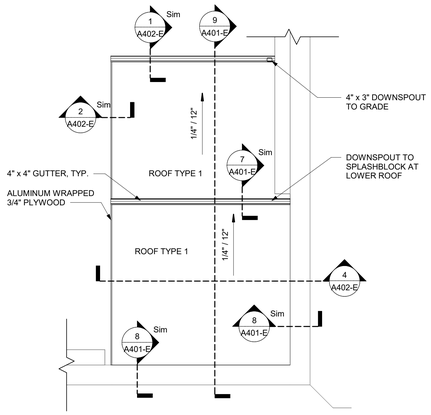
3 ENLARGED ELEVATOR PLAN - THIRD FLOOR

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



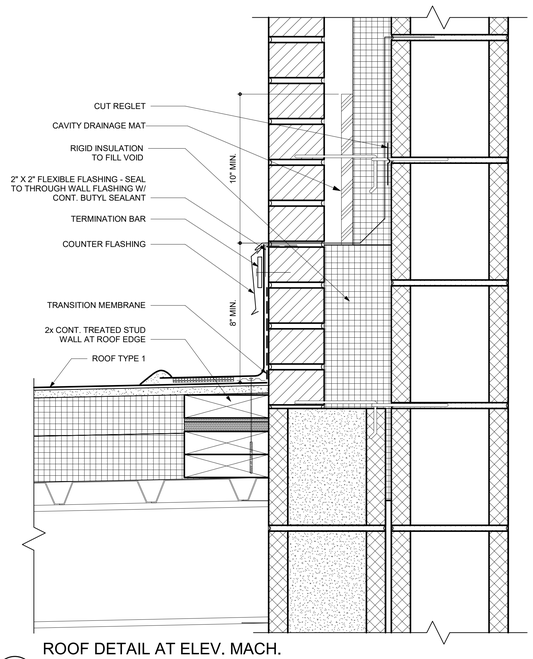
4 ELEVATOR REFLECTED CEILING PLAN

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



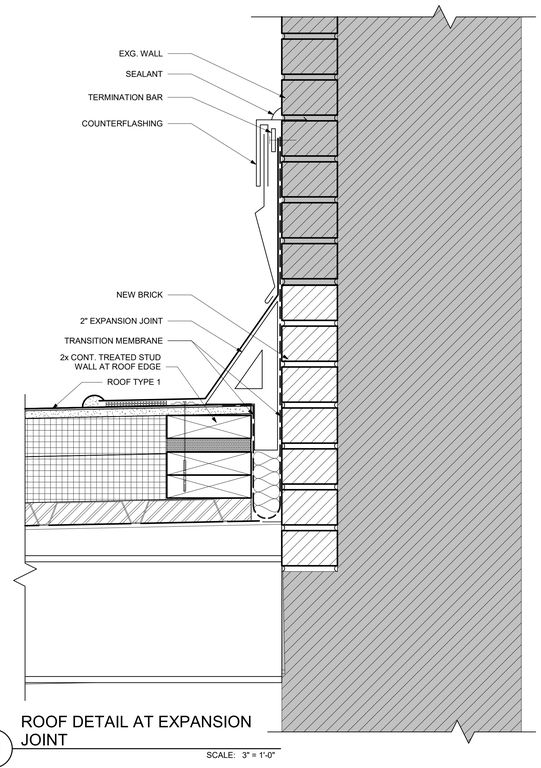
5 ELEVATOR ROOF PLAN

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



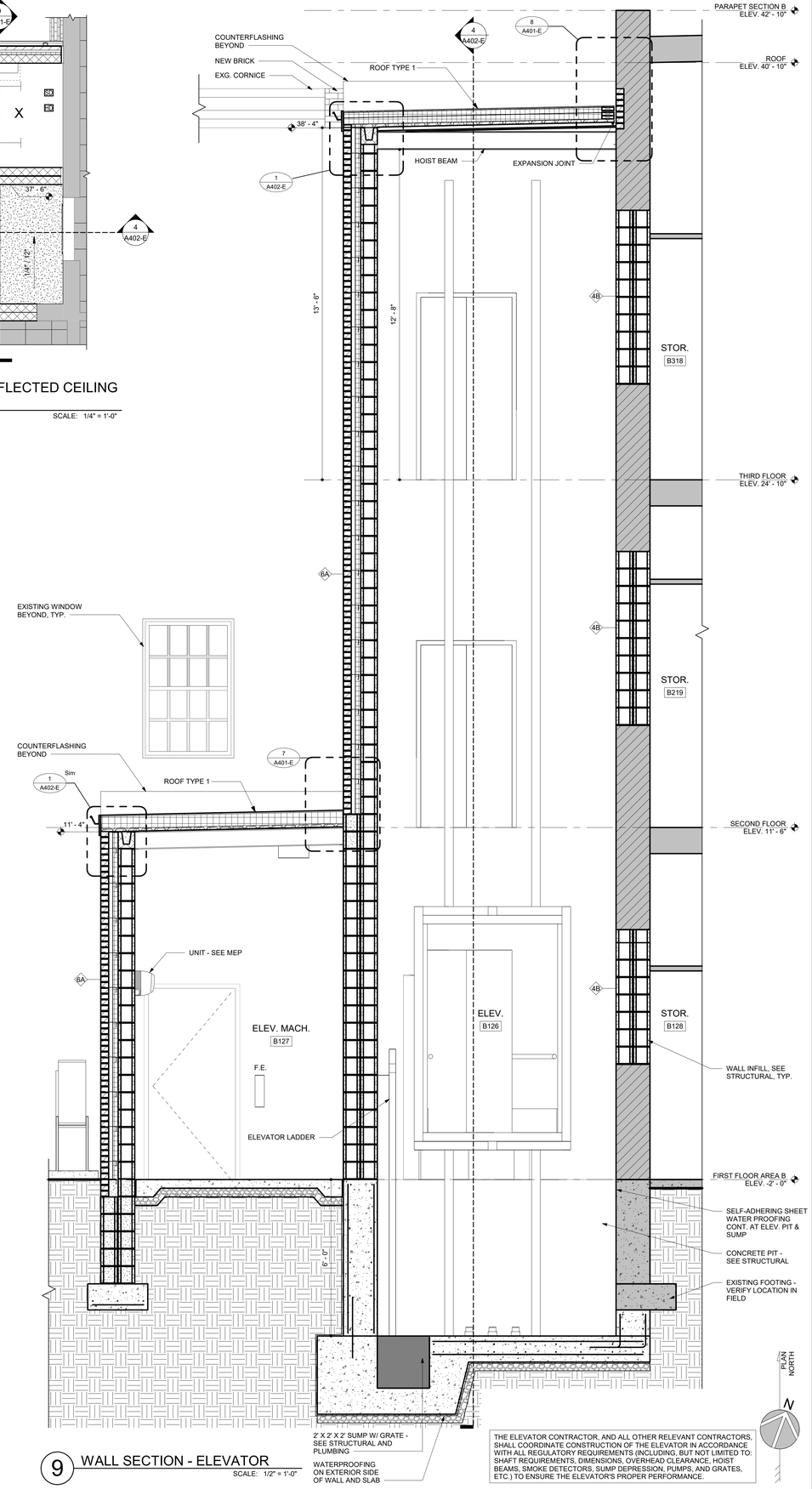
7 ROOF DETAIL AT ELEV. MACH. B127

SCALE: 3" = 1'-0"



8 ROOF DETAIL AT EXPANSION JOINT

SCALE: 3" = 1'-0"



THE ELEVATOR CONTRACTOR, AND ALL OTHER RELEVANT CONTRACTORS, SHALL COORDINATE CONSTRUCTION OF THE ELEVATOR IN ACCORDANCE WITH ALL REGULATORY REQUIREMENTS (INCLUDING, BUT NOT LIMITED TO: SHAFT REQUIREMENTS, DIMENSIONS, OVERHEAD CLEARANCE, HOIST BEAMS, SMOKE DETECTORS, SUMP DEPRESSION, PUMPS, AND GRATES, ETC.) TO ENSURE THE ELEVATOR'S PROPER PERFORMANCE.

9 WALL SECTION - ELEVATOR

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

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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

ELEVATOR ENLARGED PLANS AND SECTIONS

0' 1' 2' 4'
SCALE: 1/2" = 1'-0"

0' 2' 4' 8'
SCALE: 1/4" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
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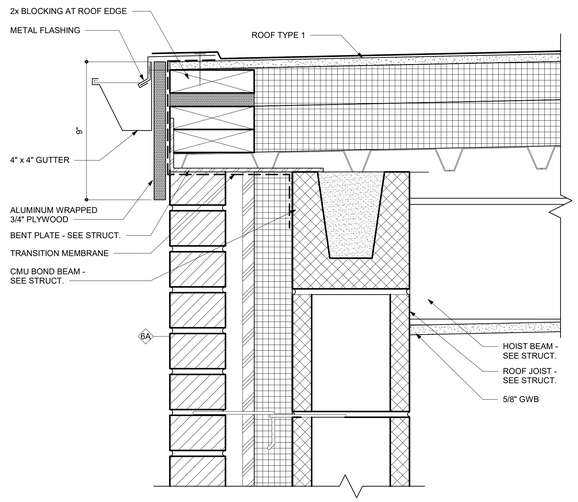
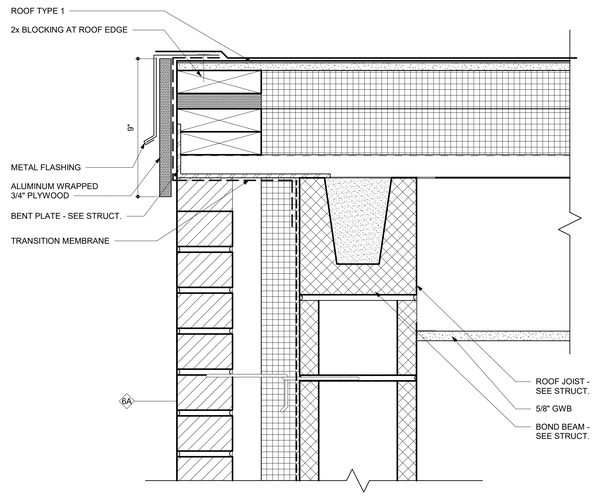


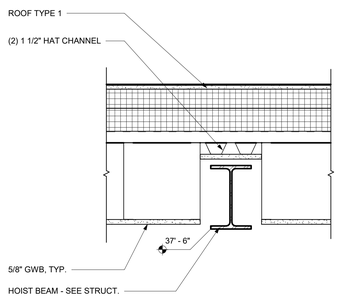
1 ROOF DETAIL - ROOF EAVE CONDITION

SCALE: 3" = 1'-0"



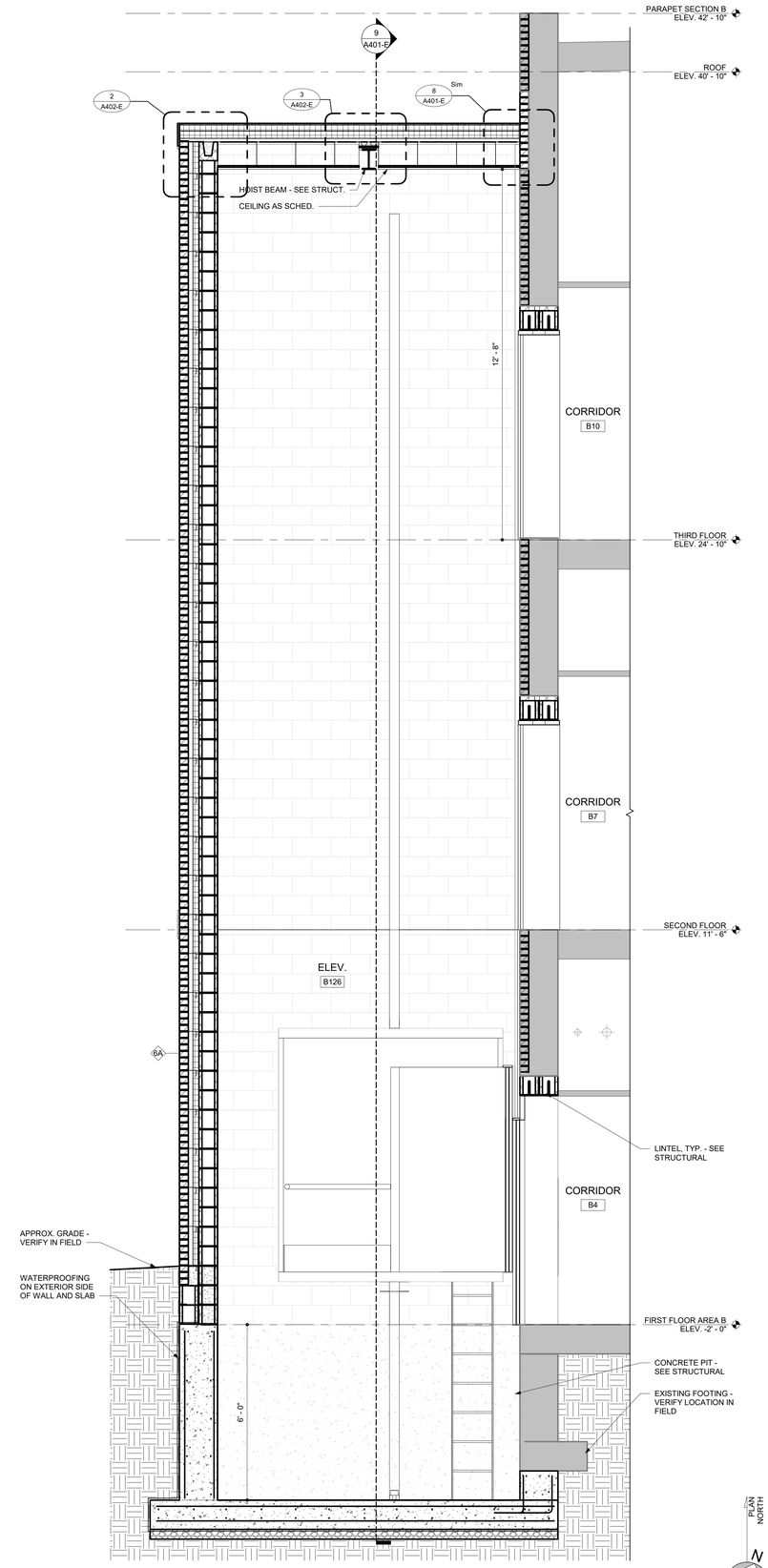
2 ROOF DETAIL - ROOF RAKE CONDITION

SCALE: 3" = 1'-0"



3 CEILING DETAIL AT HOIST BEAM

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



4 SECTION THROUGH NEW ELEVATOR

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

THE ELEVATOR CONTRACTOR, AND ALL OTHER RELEVANT CONTRACTORS, SHALL COORDINATE CONSTRUCTION OF THE ELEVATOR IN ACCORDANCE WITH ALL REGULATORY REQUIREMENTS (INCLUDING, BUT NOT LIMITED TO: SHAFT REQUIREMENTS, DIMENSIONS, OVERHEAD CLEARANCE, HOIST BEAMS, SMOKE DETECTORS, SUMP DEPRESSION, PUMPS, AND GRATES, ETC.) TO ENSURE THE ELEVATOR'S PROPER PERFORMANCE.

PLAN NORTH

N

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

ELEVATOR ENLARGED SECTIONS AND DETAILS

0' 1' 2' 4'
SCALE: 1/2" = 1'-0"

0' 2' 4' 8'
SCALE: 1/4" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
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DRAWN BY: CES	PROJ MGR: BAH

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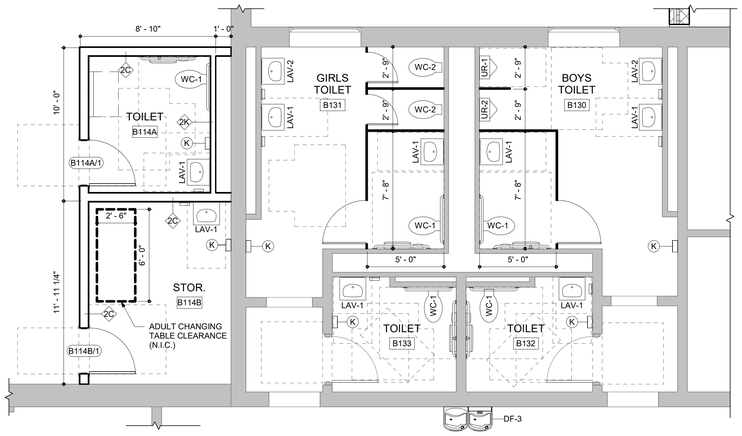
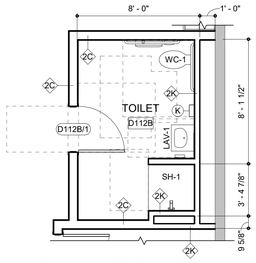


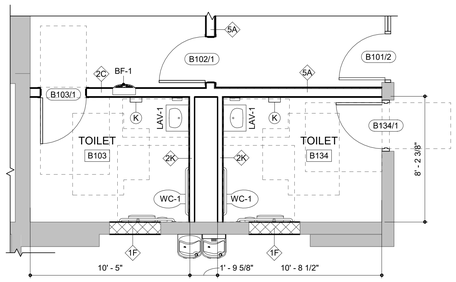
1 ENLARGED TOILET PLAN - AREA B - FIRST FLOOR

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



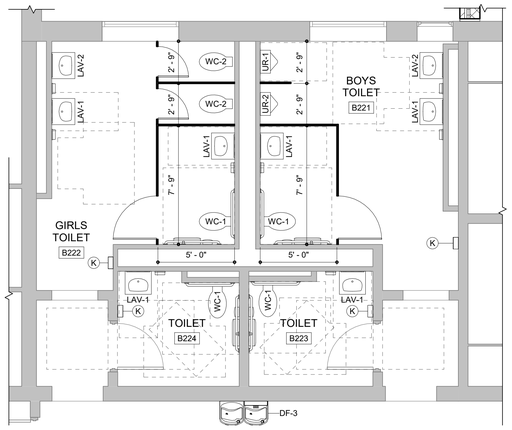
2 ENLARGED TOILET PLAN - AREA D/E NURSE'S SUITE

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



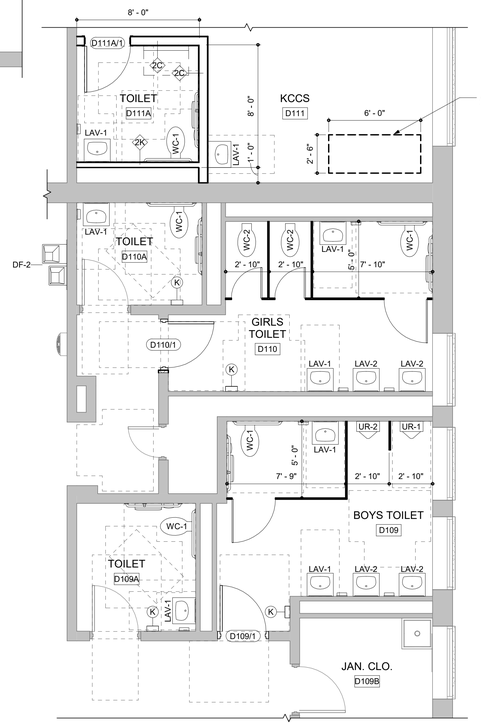
3 ENLARGED TOILET PLAN - ENTRANCE SUITE

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



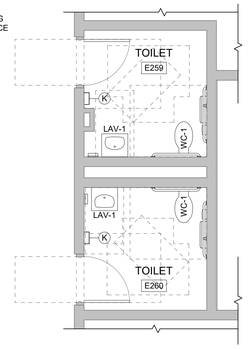
4 ENLARGED TOILET PLAN - AREA B - SECOND FLOOR

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



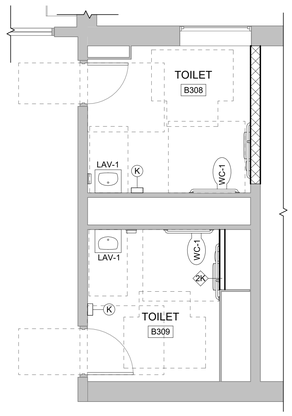
5 ENLARGED TOILET PLAN - AREA D/E - FIRST FLOOR

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



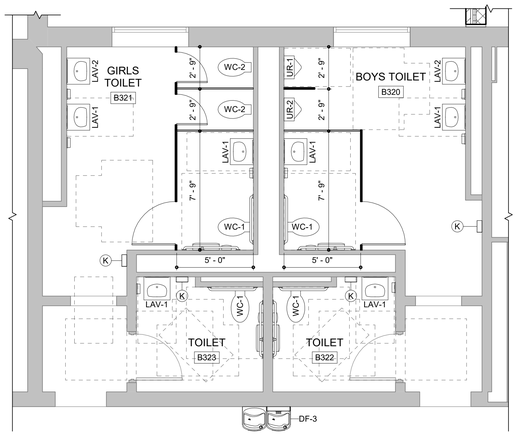
6 ENLARGED TOILET PLAN

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



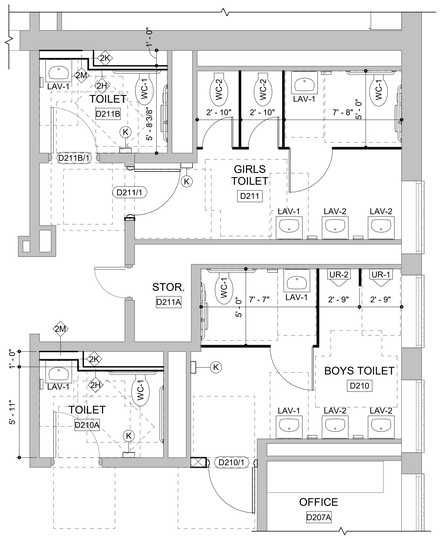
9 ENLARGED TOILET PLAN - AREA B - THIRD FLOOR

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



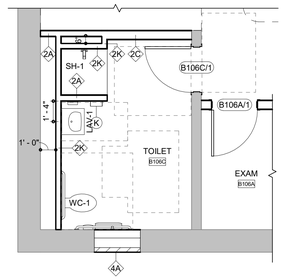
7 ENLARGED TOILET PLAN - AREA B - THIRD FLOOR

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



8 ENLARGED TOILET PLAN - AREA D/E - SECOND FLOOR

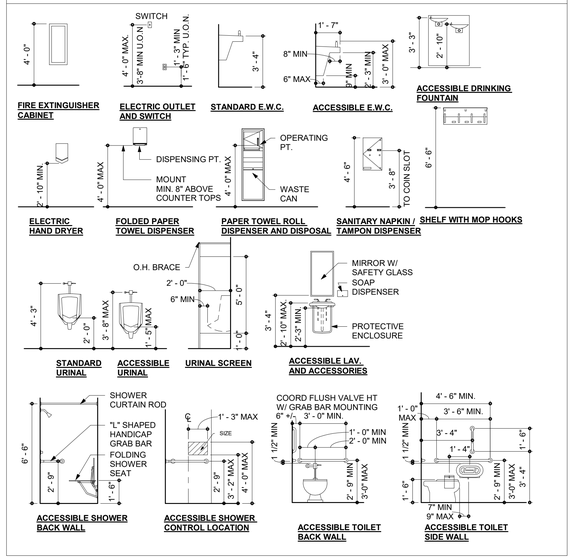
SCALE: 1/4" = 1'-0"



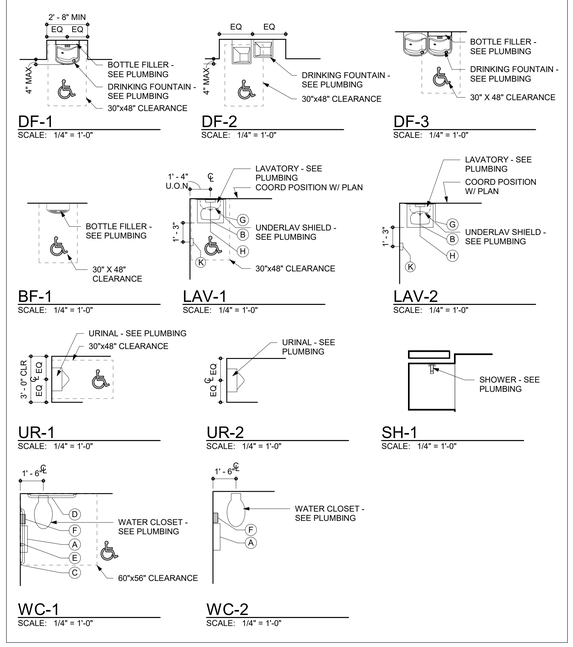
10 ENLARGED TOILET PLAN - AREA B

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

STANDARD MOUNTING HEIGHTS



PLUMBING FIXTURES TYPES



TOILET ACCESSORY SCHEDULE

KEY	ACCESSORY DESCRIPTION
A	TOILET PAPER DISPENSER
B	SOAP DISPENSER
C	42" HORIZONTAL GRAB BAR
D	36" HORIZONTAL GRAB BAR
E	18" VERTICAL GRAB BAR
F	SANITARY NAPKIN DISPENSER
G	MIRROR
K	HAND DRYER

*COORDINATE MASONRY INFILL AS REQUIRED TO PATCH AND REPAIR DEMOLITION OPENINGS

**ALL EXISTING ACCESSORIES WILL BE REPLACED

***VERIFY DOOR CLEARANCES IN FIELD

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

ENLARGED TOILET PLANS

0' 2' 4' 8'
SCALE: 1/4" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO: 2021101.00
DATE: 09.13.2024
SCALE: 1/4" = 1'-0"
DRAWN BY: CES PROJ MGR: BAH

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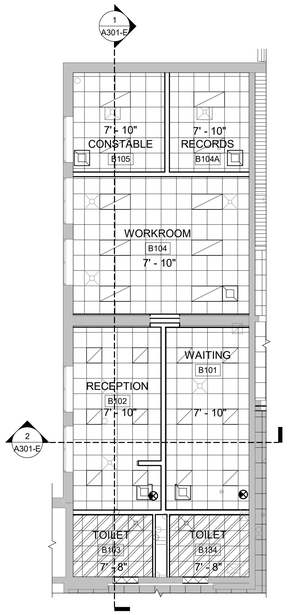
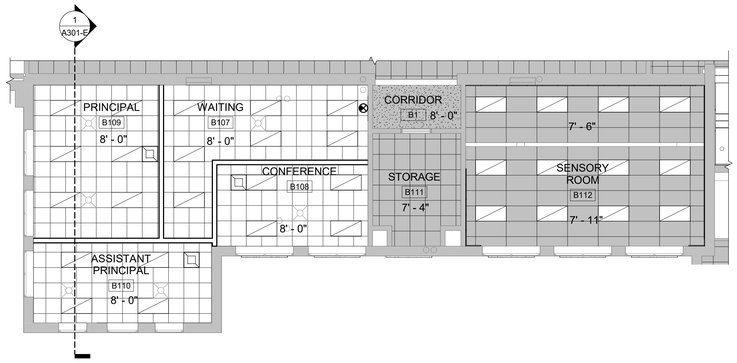


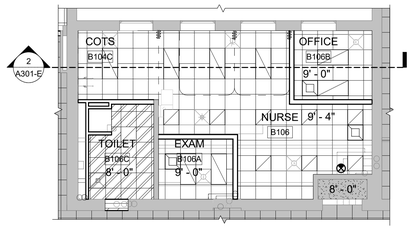
1 ENLARGED REFLECTED CEILING PLAN - ENTRANCE SUITE

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



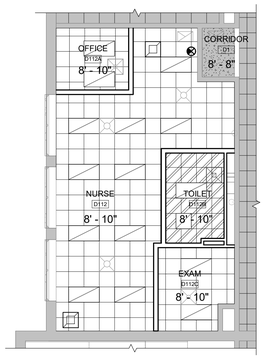
2 ENLARGED REFLECTED CEILING PLAN - ADMIN SUITE

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



3 ENLARGED REFLECTED CEILING PLAN - NURSE SUITE AREA B

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



4 ENLARGED REFLECTED CEILING PLAN - NURSE SUITE AREA D

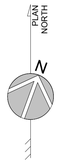
SCALE: 1/8" = 1'-0"

CEILING LEGEND

2x2 ACT CEILING	EXG 2x2 ACT CEILING TO REMAIN
2x2 SCRUBBABLE ACT CEILING	EXG 2x4 ACT CEILING TO REMAIN
2x4 ACT CEILING	EXG GWB CEILING TO REMAIN
INTERIOR - GWB CEILINGS /BULKHEADS	X EXPOSED
LINEAR METAL PLANK CEILING (CEILING TYPE 5)	N.I.C. (NOT IN CONTRACT)

CEILING NOTES

1. CEILING HEIGHTS INDICATED ARE FROM FINISH FLOOR. CEILINGS AT LANDINGS, RAMPS ETC., REFER TO NEAREST FLOOR LEVEL. COORDINATE WITH EXG. WINDOW MULLION LOCATIONS.
2. ALL EXPOSED LINTELS SHALL BE PAINTED.



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PROJECT TITLE

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211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

ENLARGED NEW WORK REFLECTED CEILING PLANS

0' 4' 8' 16'
SCALE: 1/8" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
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SCALE:	As indicated
DRAWN BY: CES	PROJ MGR: BAH

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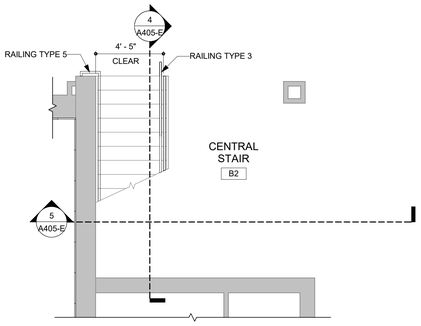
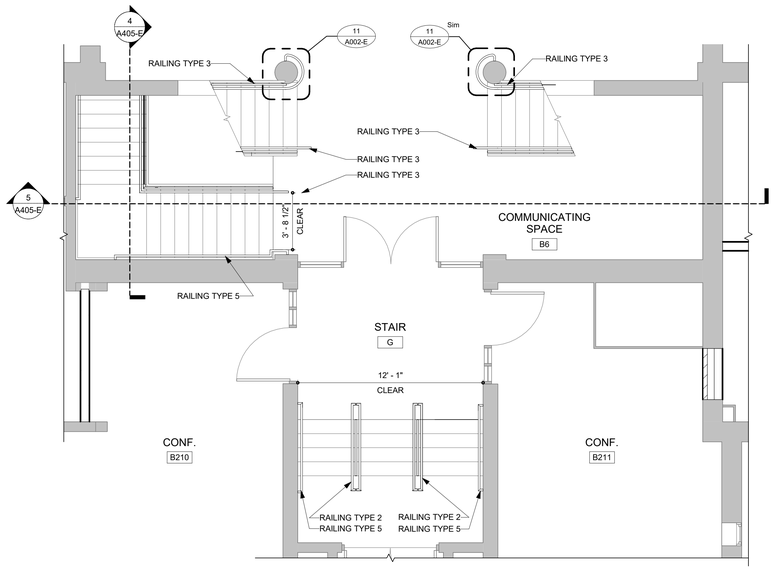


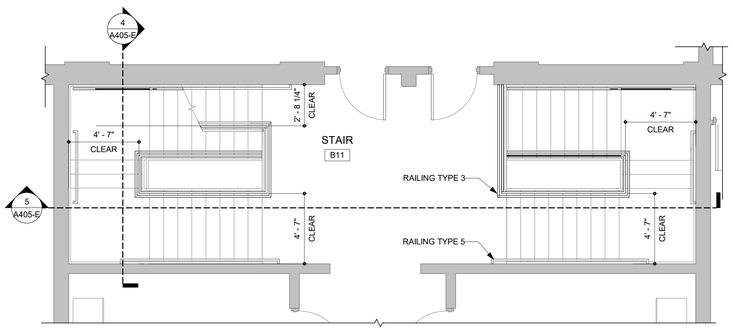
1 ENLARGED STAIR PLAN - CENTRAL STAIR - FIRST FLOOR

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



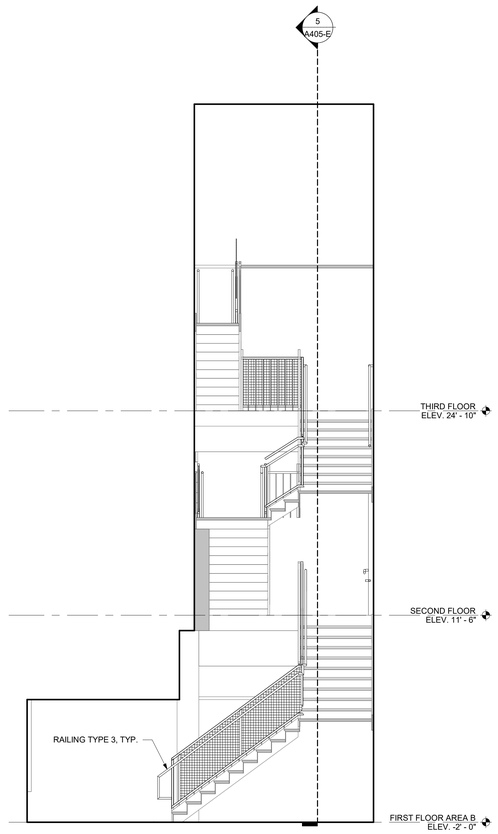
2 ENLARGED STAIR PLAN - CENTRAL STAIR / G - SECOND FLOOR

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



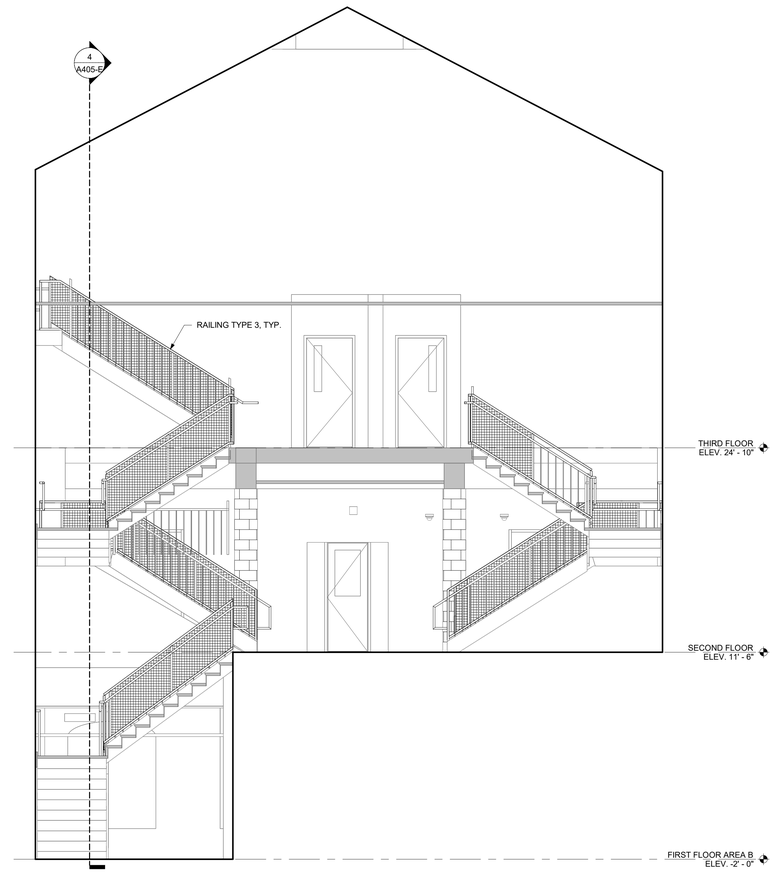
3 ENLARGED STAIR PLAN - CENTRAL STAIR - THIRD FLOOR

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



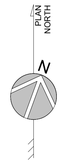
4 SECTION THROUGH CENTRAL STAIR

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



5 LONGITUDINAL SECTION THROUGH CENTRAL STAIR

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

ENLARGED STAIR PLANS AND SECTIONS - MONUMENTAL STAIR

0' 2' 4' 8'
SCALE: 1/4" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
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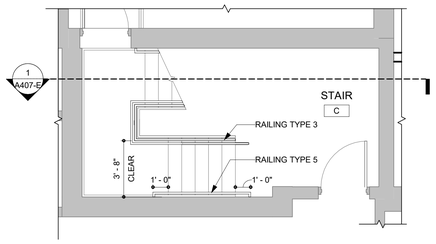
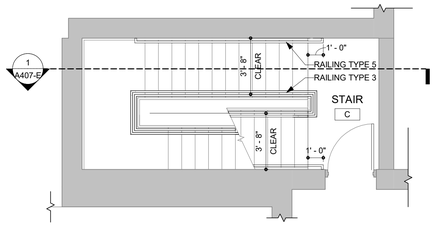


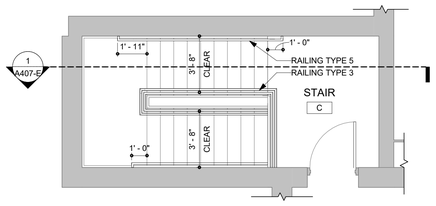
1 ENLARGED STAIR PLAN - STAIR C - FIRST FLOOR

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



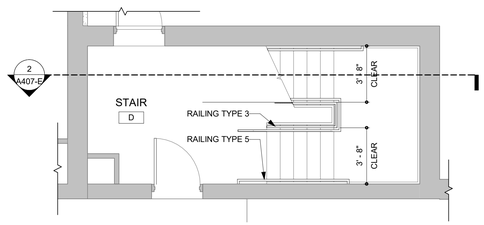
2 ENLARGED STAIR PLAN - STAIR C - SECOND FLOOR

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



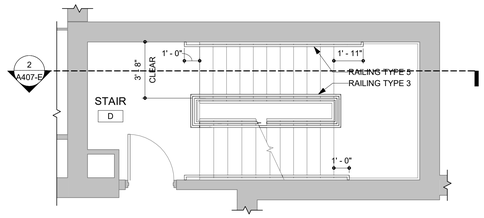
3 ENLARGED STAIR PLAN - STAIR C - THIRD FLOOR

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



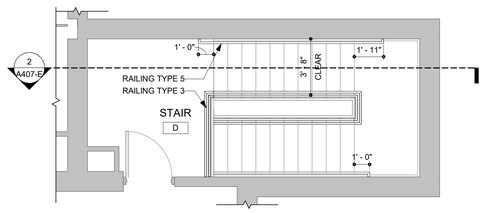
4 ENLARGED STAIR PLAN - STAIR D - FIRST FLOOR

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



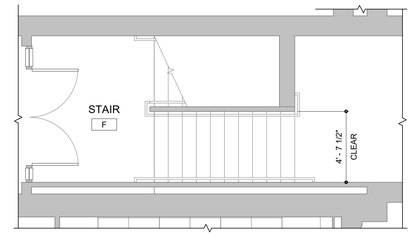
5 ENLARGED STAIR PLAN - STAIR D - SECOND FLOOR

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



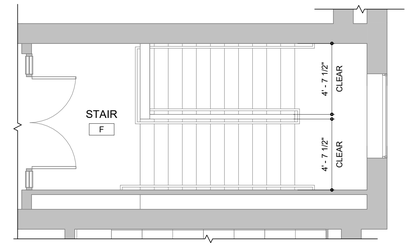
6 ENLARGED STAIR PLAN - STAIR D - THIRD FLOOR

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



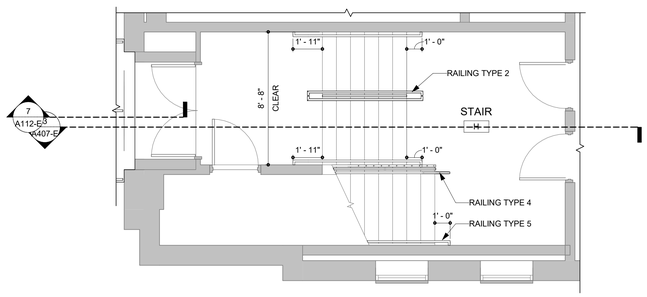
7 ENLARGED STAIR PLAN - STAIR F - SECOND FLOOR

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



8 ENLARGED STAIR PLAN - STAIR F - THIRD FLOOR

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



9 ENLARGED STAIR PLAN - STAIR H - FIRST FLOOR

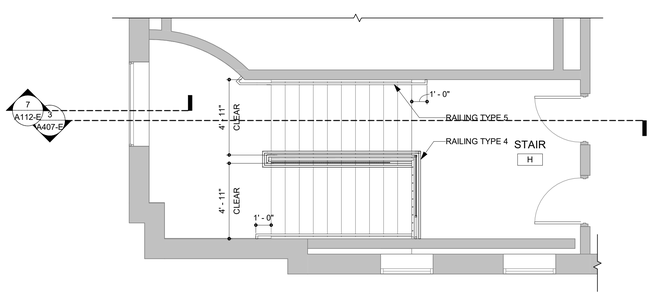
SCALE: 1/4" = 1'-0"

11 ENLARGED STAIR PLAN - STAIR J - FIRST FLOOR

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

13 ENLARGED STAIR PLAN - STAIR K - FIRST FLOOR

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



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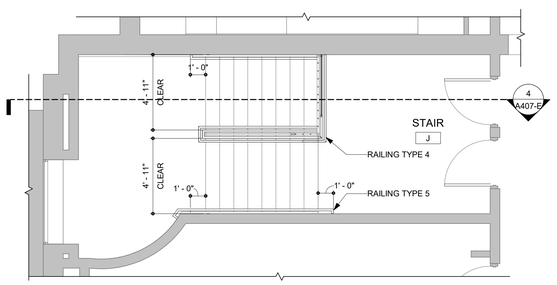
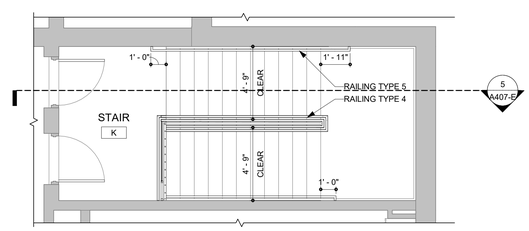
SCALE: 1/4" = 1'-0"



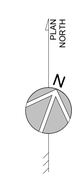
12 ENLARGED STAIR PLAN - STAIR J - SECOND FLOOR

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



14 ENLARGED STAIR PLAN - STAIR K - SECOND FLOOR

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



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PROJECT TITLE

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211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

ENLARGED STAIR PLANS

0' 2' 4' 8'
SCALE: 1/4" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
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SCALE:	1/4" = 1'-0"
DRAWN BY: CES	PROJ MGR: BAH

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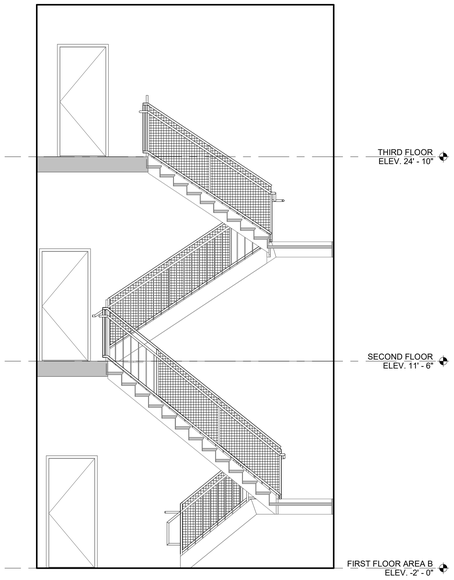
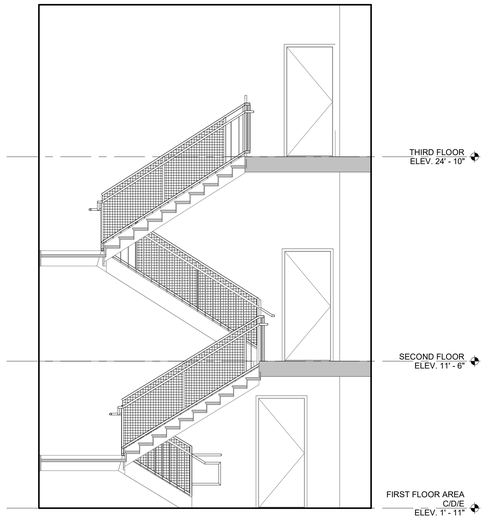
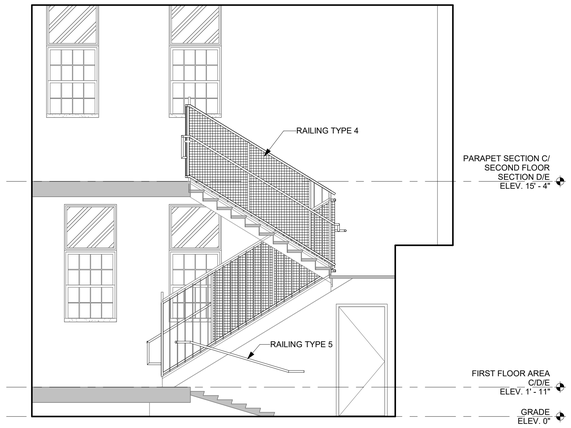


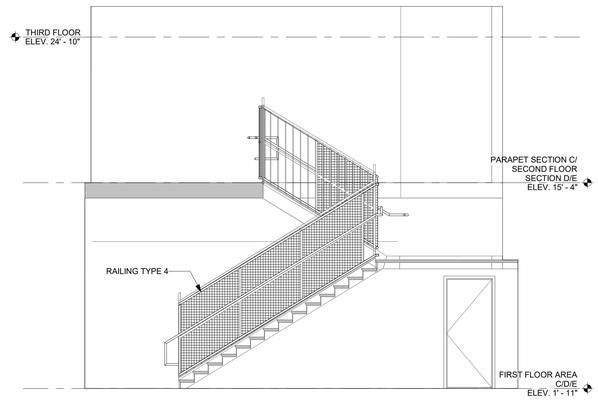
1 SECTION THROUGH STAIR C
SCALE: 1/4" = 1'-0"



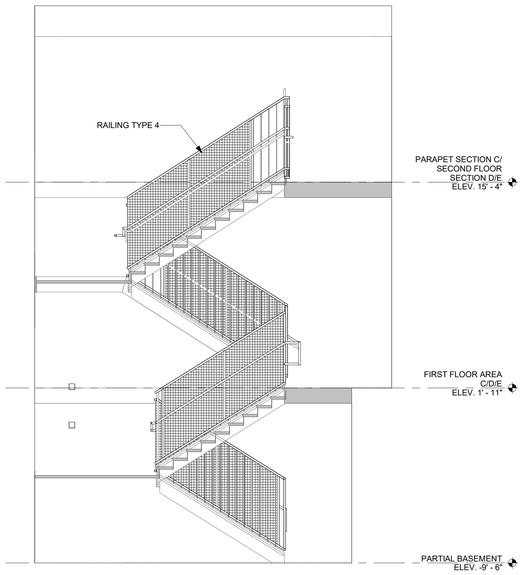
2 SECTION THROUGH STAIR D
SCALE: 1/4" = 1'-0"



3 SECTION THROUGH STAIR H
SCALE: 1/4" = 1'-0"



4 SECTION THROUGH STAIR J
SCALE: 1/4" = 1'-0"



5 SECTION THROUGH STAIR K
SCALE: 1/4" = 1'-0"

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RICHARD Y. JOHNSON & SON, INC.
CONSTRUCTION MANAGER
18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

ENLARGED STAIR SECTIONS

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/4" = 1'-0"
DRAWN BY: WA	PROJ MGR: BAH

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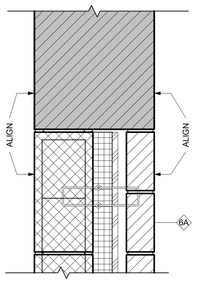
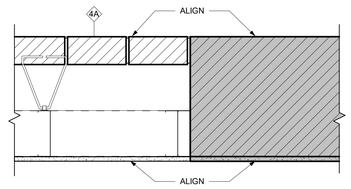


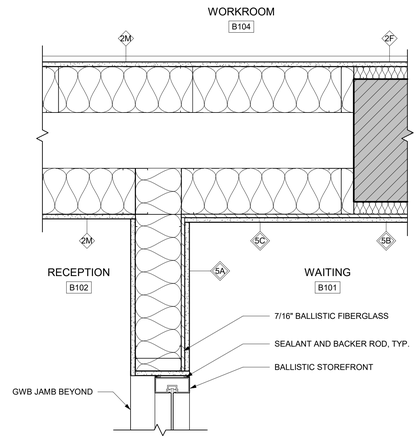
1 TYPICAL DETAIL AT EXTERIOR WALL INFILL

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



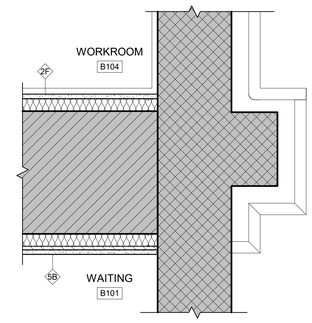
2 TYPICAL DETAIL AT INTERIOR WALL INFILL

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



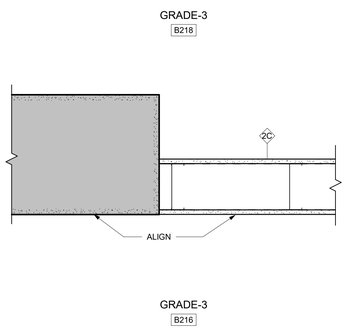
3 PLAN DETAIL AT RECEPTION B102

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



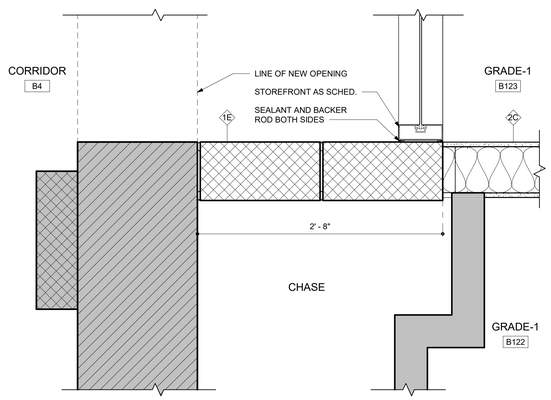
4 PLAN DETAIL AT WAITING B101

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



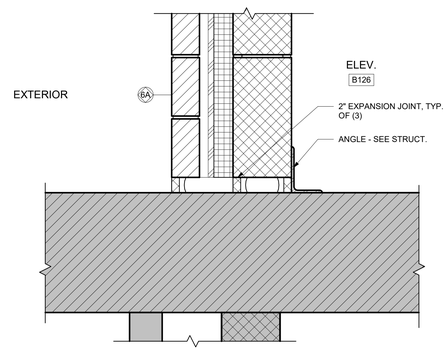
5 PLAN DETAIL AT GRADE-3 B218

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



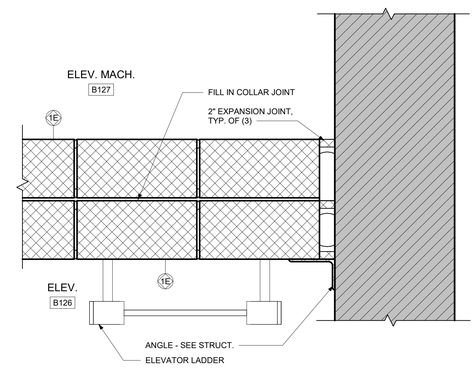
6 PLAN DETAIL AT GRADE-1 B123

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



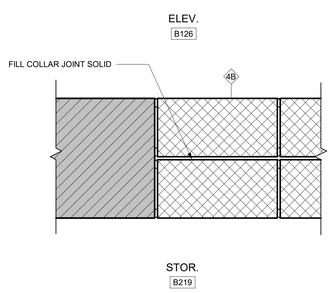
7 PLAN DETAIL AT ELEV. B126 EXPANSION JOINT

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



8 PLAN DETAIL AT ELEV. MACH. B127

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



9 PLAN DETAIL AT ELEVATOR INFILL

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

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

PLAN DETAILS

0' 3" 6" 12" 18"
SCALE: 1-1/2" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1 1/2" = 1'-0"
DRAWN BY: WA	PROJ MGR: BAH

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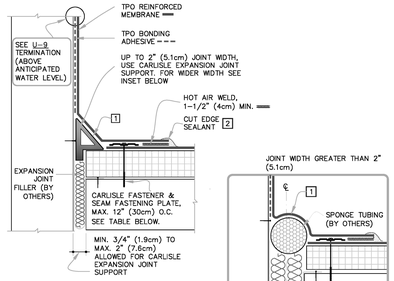
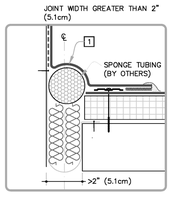
THERMOPLASTIC ROOF MEMBRANE — TPO

WHEN A WARRANTY WIND SPEED GREATER THAN 90MPH IS SPECIFIED, CARLISLE FASTENERS AND SEAM FASTENING PLATES SHALL NOT EXCEED 6" (15cm) ON CENTER FOR ADHERED MEMBRANE ASSEMBLIES.





NOTES:

1. MEMBRANE FLASHING SHALL NOT BE ADHERED OVER THE EXPANSION JOINT SUPPORT OR SPONGE TUBING.
2. APPROXIMATELY 1/8" (0.5cm) DIAMETER BEAD OF CUT-EDGE SEALANT IS REQUIRED ON CUT EDGES OF REINFORCED TPO MEMBRANE. PLATES.

FASTENER & PRESSURE PLATE TYPES FOR DIFFERENT ROOF DECKS

DECK TYPE	OPTION	FASTENER	PLATE
STEEL OR WOOD	A	HP-X	PIRANHA
	B	HP-XTRA	PIRANHA XTRA
STRUCTURAL CONCRETE	A	CD-10	PIRANHA
	B	HD 14-10	PIRANHA

CARLISLE SYNTEC SYSTEMS — DECK-TO-WALL EXPANSION JOINT — DETAIL NO. U-3B

MAXIMUM WARRANTY: 30 YEARS

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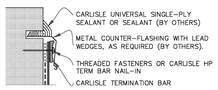
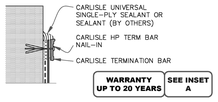
THERMOPLASTIC ROOF MEMBRANE — TPO

9A	MECHANICAL TERMINATION WITH COUNTER FLASHING



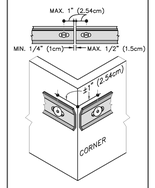
WARRANTY UP TO 30 YEARS — SEE INSET A

9B	MECHANICAL TERMINATION



WARRANTY UP TO 20 YEARS — SEE INSET A

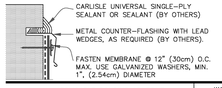
INSET A



NOTES:

1. APPLY ON HARD SMOOTH SURFACE ONLY; NOT FOR USE ON EXPOSED WOOD.
2. DO NOT WRAP TERMINATION BAR AROUND CORNERS.
3. DETAIL 9D MUST BE USED AT VERTICAL JOINTS IN PANEL WALLS.

9C	COUNTER FLASHING TERMINATION



NOTE:

1. WHEN MECHANICAL FASTENERS ARE USED TO PENETRATE THE METAL COUNTER-FLASHING, USE EPDM WASHER. APPLY WATER CUT-OFF MASTIC UNDER THE COUNTER-FLASHING OR CAULK THE FASTENER HEADS.

WARRANTY UP TO 10 YEARS

APPLICABLE BONDING ADHESIVE — XXX WATER CUT-OFF MASTIC- MUST BE HELD UNDER CONSTANT COMPRESSION.

CARLISLE SYNTEC SYSTEMS — MEMBRANE TERMINATIONS (PAGE 1 OF 3) — WARRANTY AS NOTES FOR EACH DETAIL — DETAIL NO. U-9

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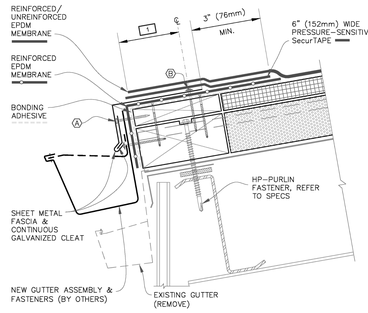
METAL RETROFIT — EPDM



NOTES:

1. FASCIA HORIZONTAL FLANGE MUST BE TOTALLY COVERED, MINIMUM 2" (51mm) BEYOND THE NAIL.
2. REFER TO MR Z1.1 & MR Z1.2 AT THE END OF THIS SECTION.

(A) 1-1/2" (38mm) RING SHANK NAILS @ 6" (152mm) O.C. MAXIMUM

(B) HP FASTENERS @ 12" (305mm) O.C. OR RING-SHANK NAILS @ 4" (102mm) O.C. & STAGGERED 3/4" (19mm) O.C.

GUTTER WITH FASCIA

HIGH DENSITY RECOVER BOARD — ROOF MEMBRANE — WOOD NAILER (BY OTHERS) — IN-FILL INSULATION — (A) (B) SEE DRAWING NOTE(S)

SHEET NO. MR1 E1.3

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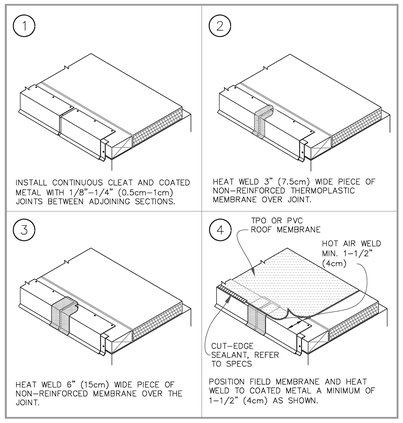
METAL RETROFIT — PVC/TPO



EAVE/RAKE EDGE (COATED METAL FASCIA)

HIGH DENSITY RECOVER BOARD — ROOF MEMBRANE — WOOD NAILER (BY OTHERS) — IN-FILL INSULATION — (A) SEE DRAWING NOTE(S)

SHEET NO. MR1T1.1B — PAGE 2 OF 2

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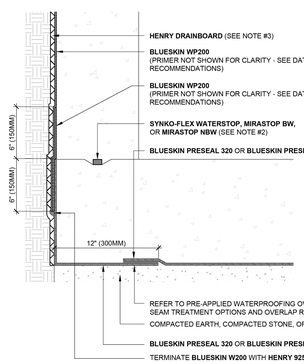


NOTES:

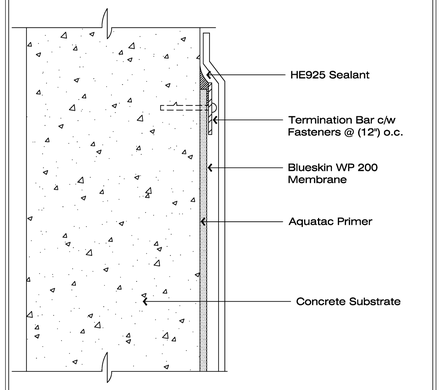
1. DETAIL SHOWS HENRY PRE-APPLIED WATERPROOFING SYSTEM FOR APPLICATIONS USING HENRY **BLUESKIN PRESEAL 320** OR **BLUESKIN PRESEAL 435**. **SUBSTRATE SHOWN IS FOR REFERENCE ONLY.**
2. APPLICATIONS USING SWELLABLE WATERSTOPS: 3" (75MM) MINIMUM CONCRETE COVERAGE ON ALL SIDES.
3. HENRY RECOMMENDS THE USE OF A DRAINBOARD IN NON-HYDROSTATIC CONDITIONS, OR AS A PRE-APPLIED WATERPROOFING SUBSTRATE PREPARATION.
4. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET AND GUIDE SPECIFICATION FOR INSTALLATION PROCEDURES.

MANUFACTURER GUIDE DETAILS ARE FOR REFERENCE ONLY. HENRY DOES NOT ASSUME RESPONSIBILITY FOR ERRORS OR DEVIATIONS IN DESIGN OR ENGINEERING. PROJECT SPECIFIC VERIFICATION IS RECOMMENDED PRIOR TO INSTALLATION.

HENRY PRE-APPLIED WATERPROOFING SYSTEM

SLAB TO WALL TRANSITION — SCALE: N.T.S. — 11-06-2023

BLUESKIN PRESEAL 320 OR BLUESKIN PRESEAL 435 TRANSITION TO BLUESKIN WP200 ON VERTICAL WALL — BSPS-1A.2



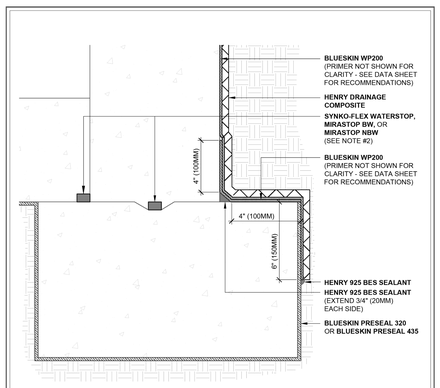
Notes:

1. Counter flashing, reglet and termination bar details are acceptable.
2. A termination bar must be used on all deck-to-wall expansion joint details.
3. See Technical Data Sheets for requirements of membrane protection.

BLUESKIN WP-200 — SCALE: N.T.S.

SELF-ADHERED WATERPROOFING SYSTEM

TERMINATION BAR DETAIL — ES-H107



NOTES:

1. DETAIL SHOWS HENRY PRE-APPLIED WATERPROOFING SYSTEM FOR APPLICATIONS USING HENRY **BLUESKIN PRESEAL 320** OR **BLUESKIN PRESEAL 435**. **SUBSTRATE SHOWN IS FOR REFERENCE ONLY.**
2. APPLICATIONS USING SWELLABLE WATERSTOPS: 3" (75MM) MINIMUM CONCRETE COVERAGE ON ALL SIDES.
3. HENRY RECOMMENDS THE USE OF A DRAINBOARD IN NON-HYDROSTATIC CONDITIONS, OR AS A SUBSTRATE PREPARATION.
4. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET AND GUIDE SPECIFICATION FOR INSTALLATION PROCEDURES.

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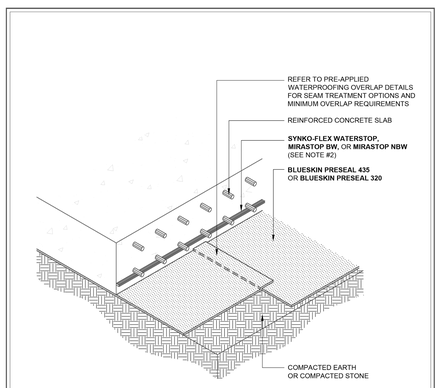
HENRY PRE-APPLIED WATERPROOFING SYSTEM

SLAB TO WALL TRANSITION — SCALE: N.T.S. — 11-06-2023

BLUESKIN PRESEAL 320 OR BLUESKIN PRESEAL 435 TRANSITION WITH BLUESKIN WP200 AT FOOTING — BSPS-1C.1A



NOTES:

1. DETAIL SHOWS HENRY PRE-APPLIED WATERPROOFING SYSTEM FOR APPLICATIONS USING HENRY **BLUESKIN PRESEAL 320** OR **BLUESKIN PRESEAL 435**. **SUBSTRATE SHOWN IS FOR REFERENCE ONLY.**
2. APPLICATIONS USING SWELLABLE WATERSTOPS: 3" (75MM) MINIMUM CONCRETE COVERAGE ON ALL SIDES.
3. REFER TO PRODUCT SPECIFIC TECHNICAL DATA SHEET AND GUIDE SPECIFICATION FOR INSTALLATION PROCEDURES.

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HENRY PRE-APPLIED WATERPROOFING SYSTEM

ASSEMBLY AT UNDER SLAB — SCALE: N.T.S. — 11-6-2023

BLUESKIN PRESEAL 320 OR BLUESKIN PRESEAL 435 DOUBLE REINFORCED SLAB ON COMPACTED EARTH — BSPS-0B.2A

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

MANUFACTURER DETAILS - TPO ROOFING / WATERPROOFING

ISSUE BLOCK

Mark	Date	Description

PROJECT NO: 2021101.00
DATE: 09.13.2024
SCALE:
DRAWN BY: WA — PROJ MGR: BAH

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DOOR SCHEDULE

MARK	DOOR SIZE WIDTH	DOOR SIZE HT	DOOR SIZE THICK	DOOR MATL	DOOR TYPE	DOOR FIN	DOOR GLAZ	DOOR UNDER CUT	FRAME MATL	FRAME TYPE	FRAME FIN	FRAME DETAIL HEAD	FRAME DETAIL JAMB	FRAME DETAIL SILL	FIRE RATING	HDWE SET	COMMENTS
FIRST FLOOR AREA B																	
B1/1	6' - 0"	7' - 2"	1 3/4"	ALUM	D	-	TEMP	0"	ALUM	BF-1	-	H2	J4	S3	-	14	BALLISTIC DOOR AND GLASS IN BALLISTIC FRAME
B101/1	3' - 0"	7' - 2"	1 3/4"	ALUM	D	-	TEMP	0"	ALUM	BF-2	-	H6	J4, J6	S3	-	15	BALLISTIC DOOR AND GLASS IN BALLISTIC FRAME
B101/2	3' - 0"	7' - 2"	1 3/4"	ALUM	D	-	TEMP	0"	ALUM	BF-3	-	H6	J4, J6	S3	-	17	BALLISTIC DOOR AND GLASS IN BALLISTIC FRAME
B102/1	3' - 0"	7' - 2"	1 3/4"	SCWD	C	-	TEMP	0"	HM	HM-1	PT	H4	J3	-	-	16	
B103/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H3	J2	-	-	08	
B104A/1	3' - 0"	7' - 2"	1 3/4"	SCWD	C	-	TEMP	0"	HM	HM-1	PT	H3	J2	-	-	02	
B106/1	3' - 0"	6' - 10"	1 3/4"	HM	D	PT	TEMP	0"	HM	HM-2	PT	H6	J4	S7	-	06	
B106A/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H3	J2	-	-	10	
B106B/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H3	J2	-	-	06	
B106C/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H7	J5	-	-	08	
B107/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H7	J5	S10	-	04	
B108/1	3' - 0"	7' - 2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H3	J2	-	-	11	
B109/1	3' - 0"	7' - 2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H3	J2	-	-	02	
B110/1	3' - 0"	7' - 2"	1 3/4"	SCWD	B	-	TEMP	0"	HM	HM-1	PT	H3	J2	-	-	02	
B112/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H7	J5	S9	-	04	
B114A/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H3	J2	-	-	08	
B114B/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H3	J2	-	-	12	
B115/1	3' - 4"	7' - 2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H7	J5	-	20 MIN	03	
B123/1	3' - 0"	7' - 2"	1 3/4"	SCWD	C	-	TEMP	0"	HM	HM-2	PT	H5	J6, 6/A501-E	-	-	07	
B127/1	3' - 0"	7' - 2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H7	J5	-	60 MIN	13	
B134/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H7	J5	S7	-	05	
GRADE																	
A107/1	6' - 0"	7' - 2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H7	J5	-	-	01	
A1127/1	6' - 0"	7' - 2"	1 3/4"	HM	A	PT	-	0"	HM	HM-1	PT	H7	J5	-	-	01	
B152/1	5' - 11 3/4"	7' - 2"	1 3/4"	ALUM	C	-	IG	0"	ALUM	SF-2	-	H9	J8	S5	-	18	BALLISTIC DOOR AND GLASS IN BALLISTIC FRAME
FIRST FLOOR AREA C/D/E																	
D109/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H7	J5	S7	-	09	
D110/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H7	J5	S7	-	09	
D111A/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H3	J2	-	-	08	
D112/1	3' - 0"	6' - 10"	1 3/4"	HM	D	PT	TEMP	0"	HM	HM-2	PT	H6	J4, J6	S7	-	01	
D112A/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H3	J2	-	-	02	
D112B/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H3	J2	-	-	08	
D112C/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H3	J2	-	-	10	
SECOND FLOOR																	
B212A/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H3	J2	-	-	02	
PARAPET SECTION C/ SECOND FLOOR SECTION D/E																	
D210/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H7	J5	S7	-	09	
D211/1	3' - 0"	7' - 2"	1 3/4"	SCWD	A	-	-	0"	HM	HM-1	PT	H7	J5	S7	-	09	

RATED GLAZING & ASSEMBLY SCHEDULE

LOCATION	WALL ASSEMBLY RATING	DOOR RATING	DOOR GLAZ TYPE	DOOR GLAZ RATING	SIDELITE / TRANSOM ASSEMBLY RATING	SIDELITE / TRANSOM GLAZ TYPE	SIDELITE / TRANSOM GLAZ RATING	WINDOW ASSEMBLY RATING	WINDOW GLAZ RATING
FIREWALL	3 HR	180 MIN	NONE	N/A	4 HR	FG-FR	W-180	FG-FR	W-180
FIRE BARRIER: STAIRWAYS	1 HR	60 MIN	FG-FP <= 100 SQ IN FG-FR >100 SQ IN	D-H-60 D-H-T-60 OR D-H-T-W-60	1 HR	FG-FR	W-60	FG-FR	W-60
FIRE BARRIER: OTHER (INCIDENTAL & MIXED USE)	1 HR	45 MIN	FG-FP	D-H-NT-45	3/4 HR	FG-FP	D-H	FG-FP	OH-45 OR W-60
SMOKE BARRIER	1 HR	20 MIN	FG-FP	D-20	3/4 HR	FG-FP	D-H-OH-45	FG-FP	OH-45 OR W-60
EXTERIOR WALL, RATED	1 HR	45 MIN	FG-FR	D-H-45	3/4 HR	FG-FP	D-H-45	FG-FP	OH-45 OR W-60

NOTES:
1. PROVIDE FIRE GLAZING PER IBC SECTION 716, PER SPECIFICATIONS, AND AS NOTED ABOVE
2. PROVIDE SAFETY GLAZING PER IBC SECTION 2406.
3. REFER TO DOOR SCHEDULE, DOOR AND FRAME TYPES, STOREFRONT CURTAINWALL, AND H.M. FRAME TYPES.
4. REFER TO LIFE SAFETY PLANS FOR LOCATIONS OF RATED WALLS.

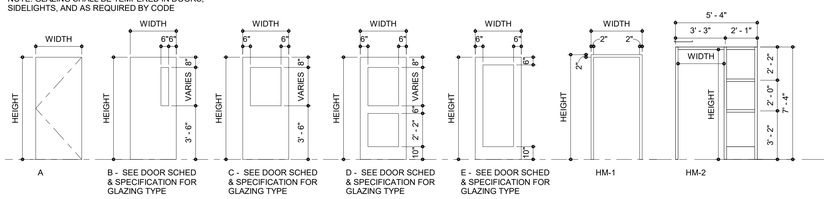
LEGEND:
FG-FR = FIRE RESISTANCE RATED GLAZING
FG-FP = FIRE PROTECTION RATED GLAZING

GLAZING LEGEND

1. GLAZING SHALL BE TEMPERED IN DOORS, BORROW LIGHTS, SIDE LIGHTS, AND AS REQUIRED BY CODE, AND AS INDICATED
2. GLAZING SHALL BE SAFETY LAMINATED AS REQUIRED BY CODE, AND AS INDICATED.
3. PROVIDE FIRE-PROTECTION AND FIRE-RESISTANCE RATED GLAZING AS REQUIRED BY CODE.
4. EXTERIOR GLAZING SHALL BE INSULATED.

LAMINATED GLAZING — BALLISTIC GLAZING

NOTE: GLAZING SHALL BE TEMPERED IN DOORS, SIDELIGHTS, AND AS REQUIRED BY CODE

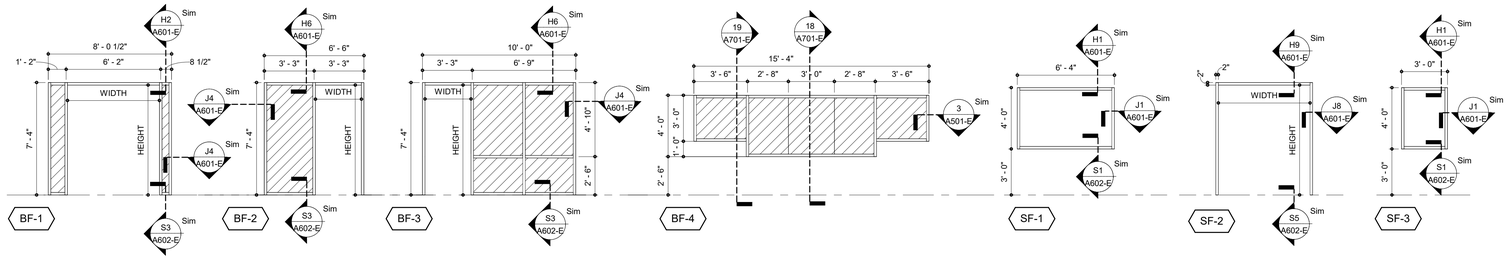


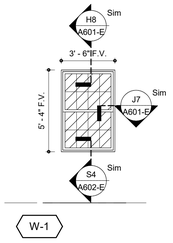
DOOR SCHEDULE LEGEND

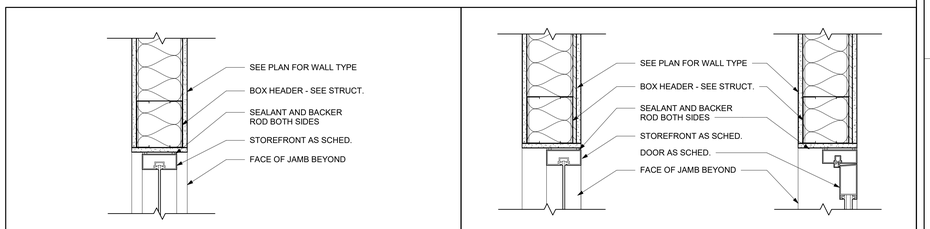
-	NONE (IE., NOT APPLICABLE OR FACTORY FINISHED)
ALUM, AL	ALUMINUM
FG	FIRE PROTECTION/FIRE-RESISTANCE RATED GLAZING
HM	HOLLOW METAL
IG	INSULATED GLAZING
LAM	LAMINATED GLAZING
PT	PAINTED
SCWD	SOLID CORE WOOD DOOR
SF	STOREFRONT
SST	STAINLESS STEEL
STL	STEEL
TEMP	TEMPERED GLAZING

DOOR SCHEDULE NOTES

1. SEE A601-E FOR WINDOW, STOREFRONT AND DOOR DETAILS.
2. REFER TO GLAZING LEGEND FOR ADDITIONAL GLAZING INFORMATION.
3. INTENT IS FOR NEW DOORS AND FRAMES TO FILL EXISTING MASONRY/ROUGH OPENINGS. FIELD VERIFY EXISTING CONDITIONS.
4. REFER TO HARDWARE SPECIFICATION FOR EXISTING DOOR TO REMAIN HARDWARE REPLACEMENT AND NEW DOOR HARDWARE.

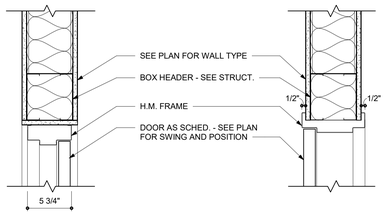




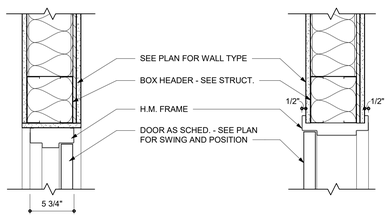


H1 TYPICAL STOREFRONT AT METAL STUD - HEAD DETAIL
SCALE: 1 1/2" = 1'-0"

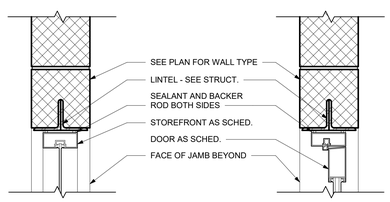
H2 TYPICAL STOREFRONT AT BALLISTIC METAL STUD - HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



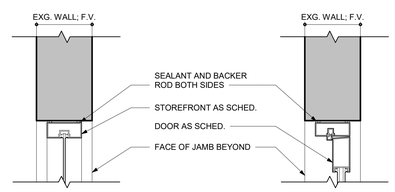
H3 TYPICAL H.M. FRAME AT METAL STUD - HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



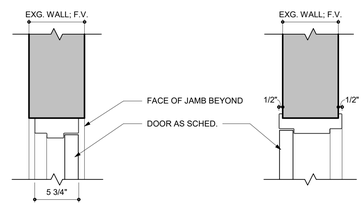
H4 TYPICAL H.M. FRAME AT BALLISTIC METAL STUD - HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



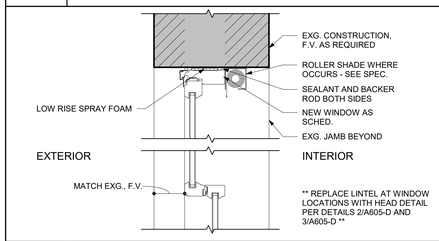
H5 TYPICAL STOREFRONT AT CMU - HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



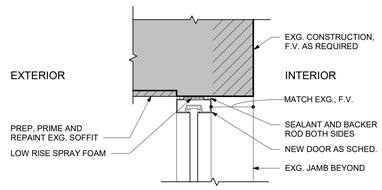
H6 TYPICAL STOREFRONT AT EXISTING WALL - HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



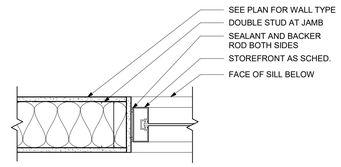
H7 TYPICAL H.M. FRAME AT EXISTING WALL - HEAD DETAIL
SCALE: 1 1/2" = 1'-0"



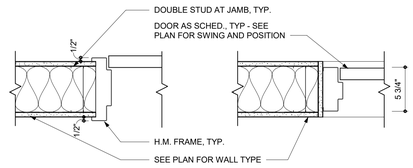
H8 EXTERIOR HEAD DETAIL @ WINDOW
SCALE: 1 1/2" = 1'-0"



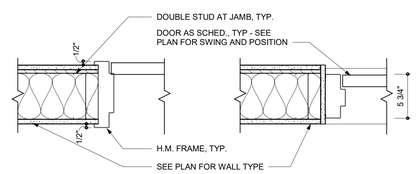
H9 SOFFIT HEAD DETAIL @ EXTERIOR DOOR
SCALE: 1 1/2" = 1'-0"



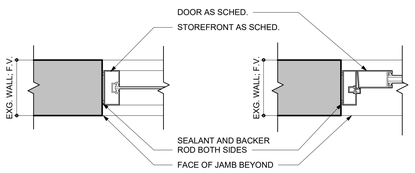
J1 TYPICAL STOREFRONT AT METAL STUD - JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



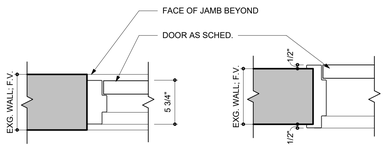
J2 TYPICAL H.M. FRAME AT METAL STUD - JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



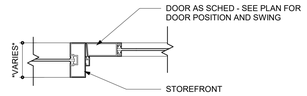
J3 TYPICAL H.M. FRAME AT BALLISTIC METAL STUD - JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



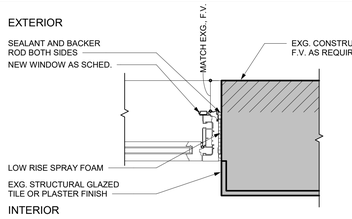
J4 TYPICAL STOREFRONT AT EXISTING WALL - JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



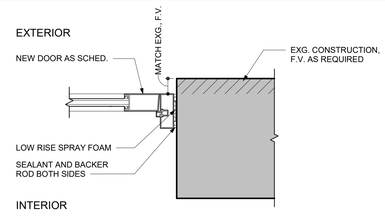
J5 TYPICAL H.M. FRAME AT EXISTING WALL - JAMB DETAIL
SCALE: 1 1/2" = 1'-0"



J6 TYPICAL ALUM. FRAME JAMB AT SIDELITE
SCALE: 1 1/2" = 1'-0"



J7 EXTERIOR JAMB DETAIL WITH GWB @ WINDOW
SCALE: 1 1/2" = 1'-0"



J8 TYPICAL JAMB DETAIL @ EXTERIOR STOREFRONT DOOR
SCALE: 1 1/2" = 1'-0"

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RICHARD Y. JOHNSON & SON, INC.
CONSTRUCTION MANAGER
18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE
CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE
DOOR TYPES AND SCHEDULE

SCALE: 1-1/2" = 1'-0"
SCALE: 1/4" = 1'-0"

ISSUE BLOCK

Mark	Date	Description
DB	04.03.2024	ADDENDUM 2

PROJECT NO: 2021101.00
DATE: 09.13.2024
SCALE: As indicated
DRAWN BY: CES PROJ MGR: BAH

A601-E

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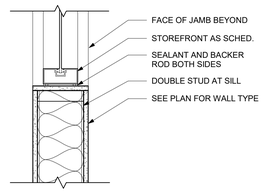
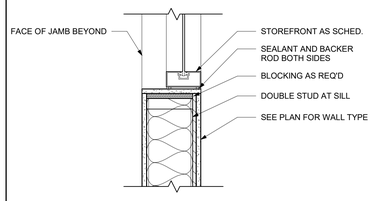
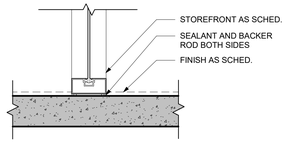
9/17/2024 10:02:18 AM Autodesk Docs://Central Middle School Renovations/2021101.rvt



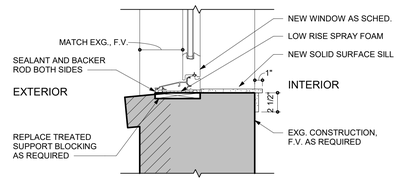
S1 TYPICAL STOREFRONT AT METAL STUD - SILL DETAIL
SCALE: 1 1/2" = 1'-0"



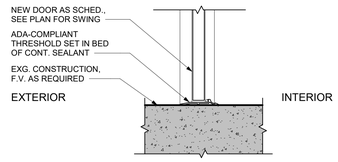
S2 TYPICAL STOREFRONT AT BALLISTIC METAL STUD - SILL DETAIL
SCALE: 1 1/2" = 1'-0"



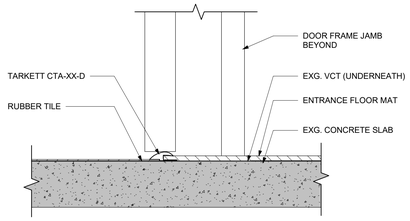
S3 TYPICAL INTERIOR STOREFRONT - SILL DETAIL
SCALE: 1 1/2" = 1'-0"



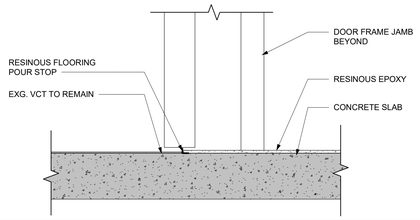
S4 EXTERIOR SILL DETAIL @ WINDOW
SCALE: 1 1/2" = 1'-0"



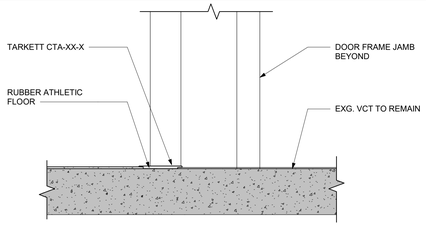
S5 EXTERIOR THRESHOLD DETAIL
SCALE: 1 1/2" = 1'-0"



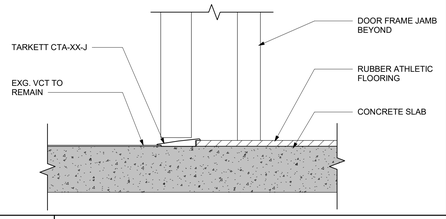
S6 FINISH TRANSITION - RUBBER TILE TO ENTRANCE FLOOR MAT
SCALE: 3" = 1'-0"



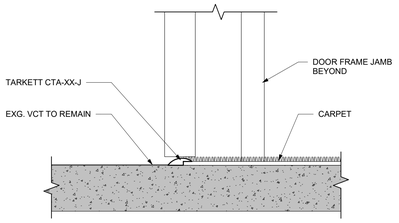
S7 FINISH TRANSITION - EXISTING VCT TO RESINOUS EPOXY
SCALE: 3" = 1'-0"



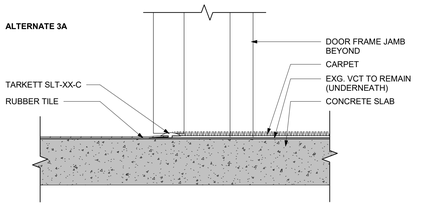
S8 FINISH TRANSITION - RUBBER ATHLETIC FLOORING TO EXISTING VCT
SCALE: 3" = 1'-0"



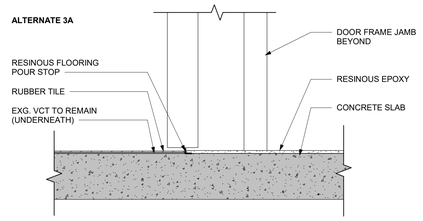
S9 EXISTING VCT TO RUBBER ATHLETIC FLOORING
SCALE: 3" = 1'-0"



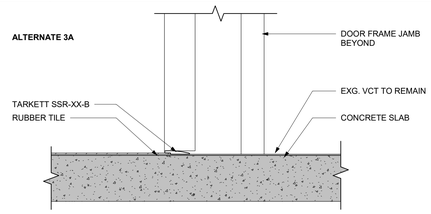
S10 FINISH TRANSITION - EXISTING VCT TO CARPET
SCALE: 3" = 1'-0"



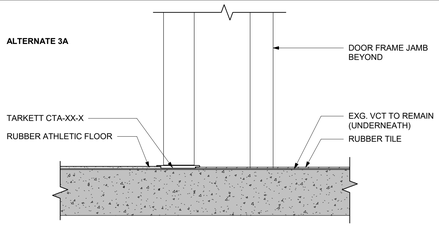
S11 FINISH TRANSITION - RUBBER TILE TO CARPET
SCALE: 3" = 1'-0"



S12 FINISH TRANSITION - RUBBER TILE TO RESINOUS EPOXY
SCALE: 3" = 1'-0"



S13 FINISH TRANSITION - RUBBER TILE TO EXISTING VCT
SCALE: 3" = 1'-0"



S14 FINISH TRANSITION - RUBBER ATHLETIC FLOORING TO RUBBER TILE
SCALE: 3" = 1'-0"

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

INTERIOR FLOORING TRANSITION DETAILS

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: MNS	PROJ MGR: BAH

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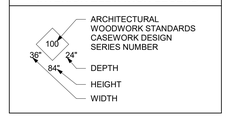
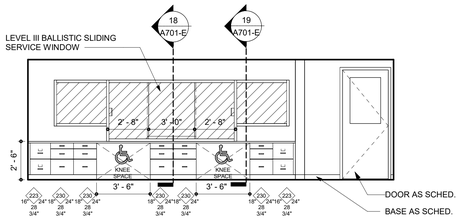
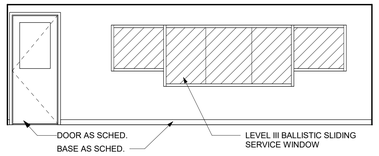
INTERIOR ELEVATION LEGEND





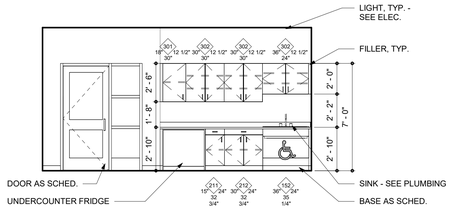
1 EAST ELEVATION AT RECEPTION B102

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



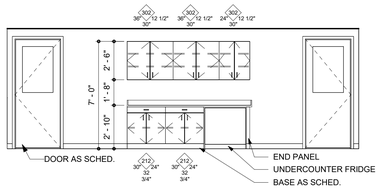
2 WEST ELEVATION AT WAITING B101

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



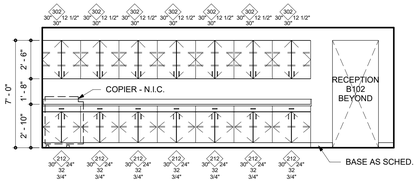
3 SOUTH ELEVATION AT NURSE'S SUITE B106

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



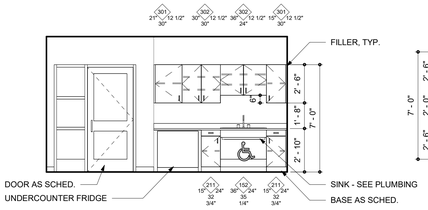
4 NORTH ELEVATION AT WORKROOM B104

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



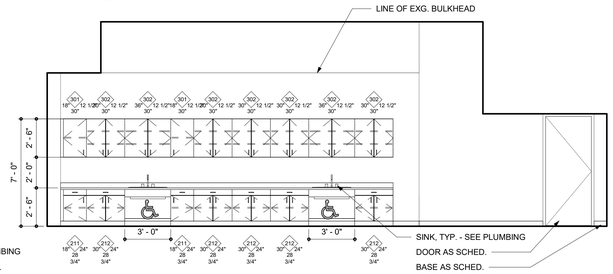
5 SOUTH ELEVATION AT WORKROOM B104

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



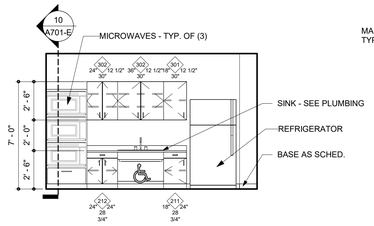
6 EAST ELEVATION AT NURSE E101

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



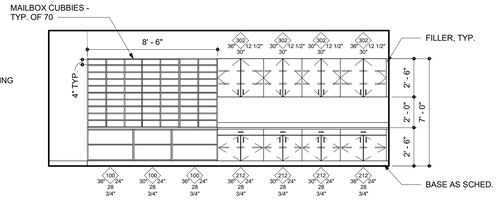
7 EAST ELEVATION AT CREATIVE ACTIVITY ROOM A1118

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



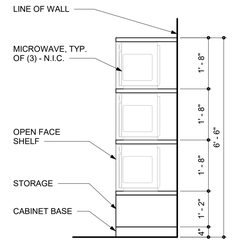
8 EAST ELEVATION AT WORKROOM E103

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



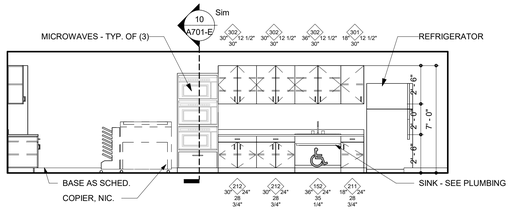
9 SOUTH ELEVATION AT WORKROOM E103

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



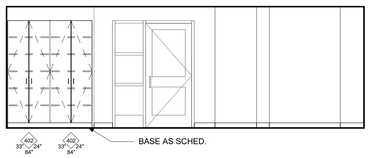
10 SECTION DETAIL - MICROWAVE CABINET

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



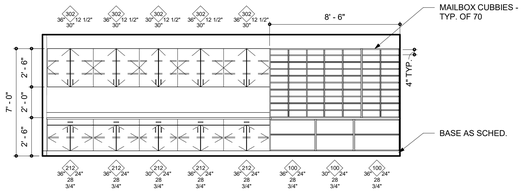
11 WEST ELEVATION AT WORKROOM B214

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



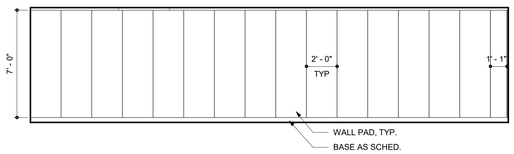
12 NORTH ELEVATION AT WORKROOM B214

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



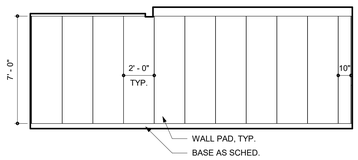
13 SOUTH ELEVATION AT WORKROOM B214

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



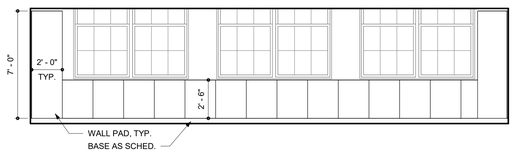
14 NORTH ELEVATION AT SENSORY ROOM B112

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



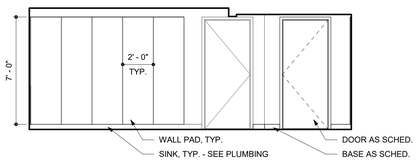
15 EAST ELEVATION AT SENSORY ROOM B112

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



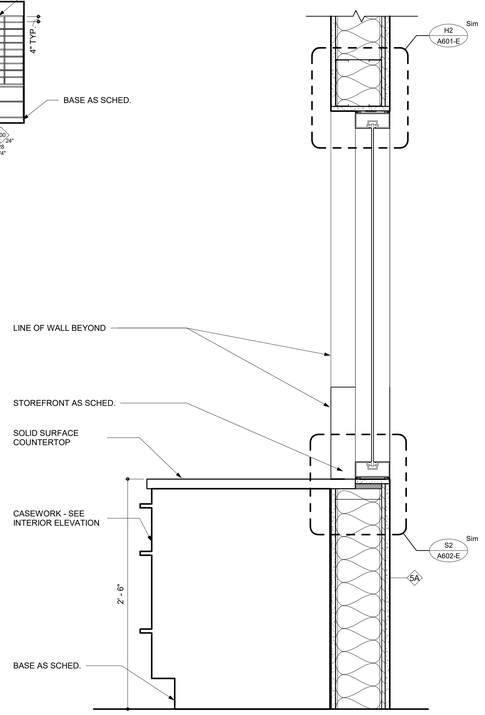
16 SOUTH ELEVATION AT SENSORY ROOM B112

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



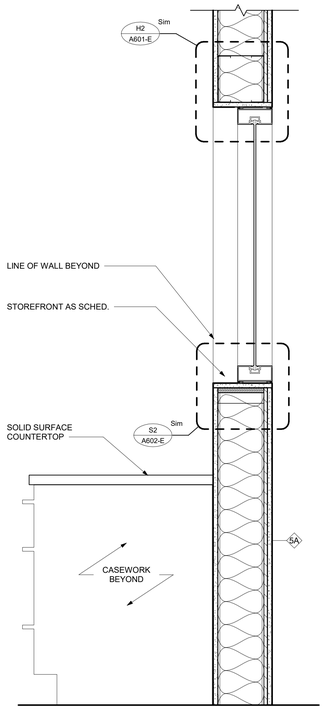
17 WEST ELEVATION AT SENSORY ROOM B112

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



18 SECTION AT RECEPTION DESK BASE CABINETS

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



19 SECTION AT RECEPTION DESK COUNTER

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

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18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

INTERIOR ELEVATIONS

0' 3" 6" 12" 18"
SCALE: 1-1/2" = 1'-0"

0' 1' 2' 4'
SCALE: 1/2" = 1'-0"

0' 2' 4' 8'
SCALE: 1/4" = 1'-0"

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: WA	PROJ MGR: BAH

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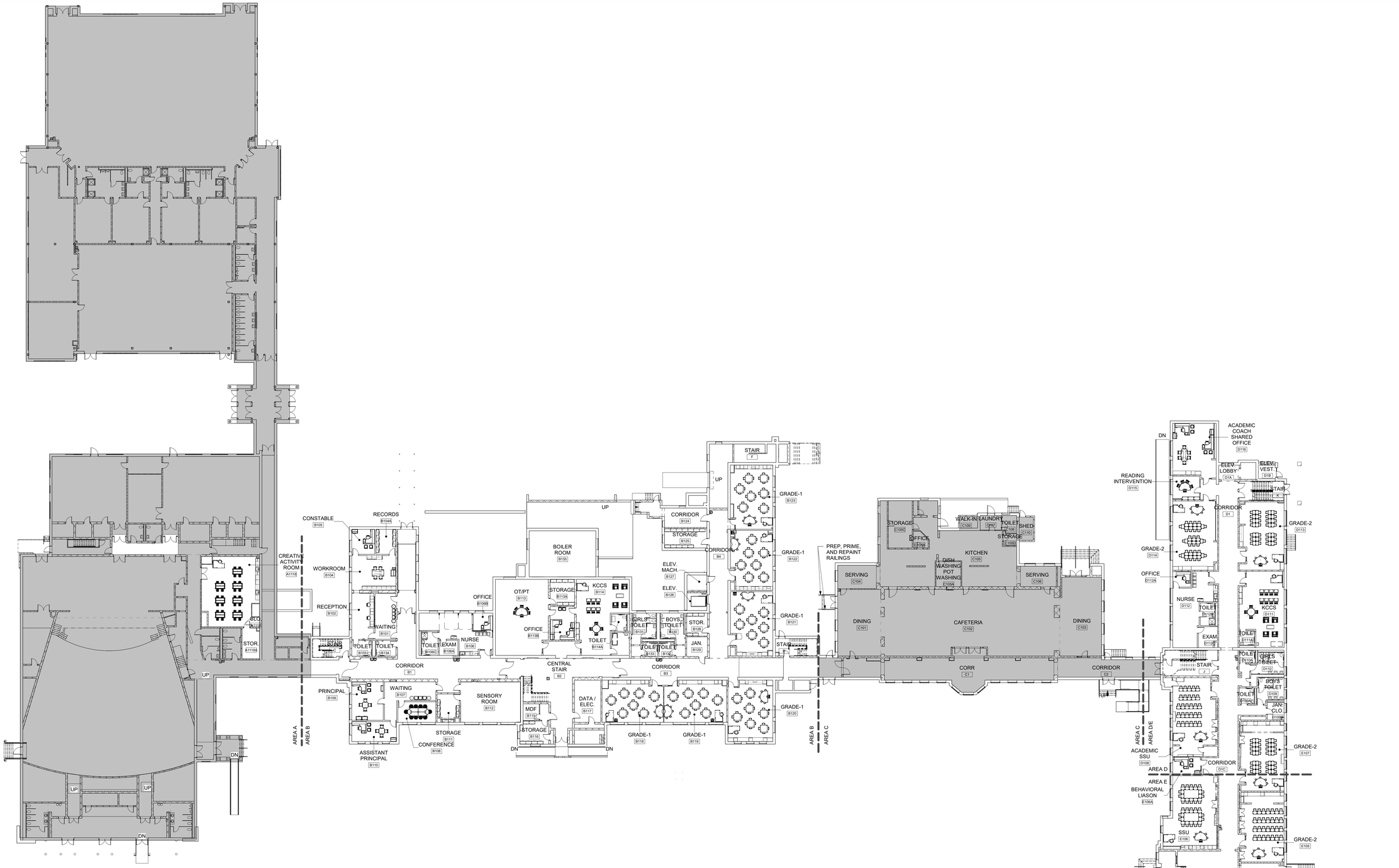

1 OVERALL FIRST FLOOR PLAN

SCALE: 1" = 20'-0"

(FOR REFENCE ONLY)

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

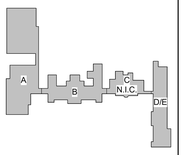
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

OVERALL FIRST FLOOR FURNITURE PLAN



0' 10' 20' 40'
SCALE: 1" = 20'

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1" = 20'-0"
DRAWN BY: MNS	PROJ MGR: BAH

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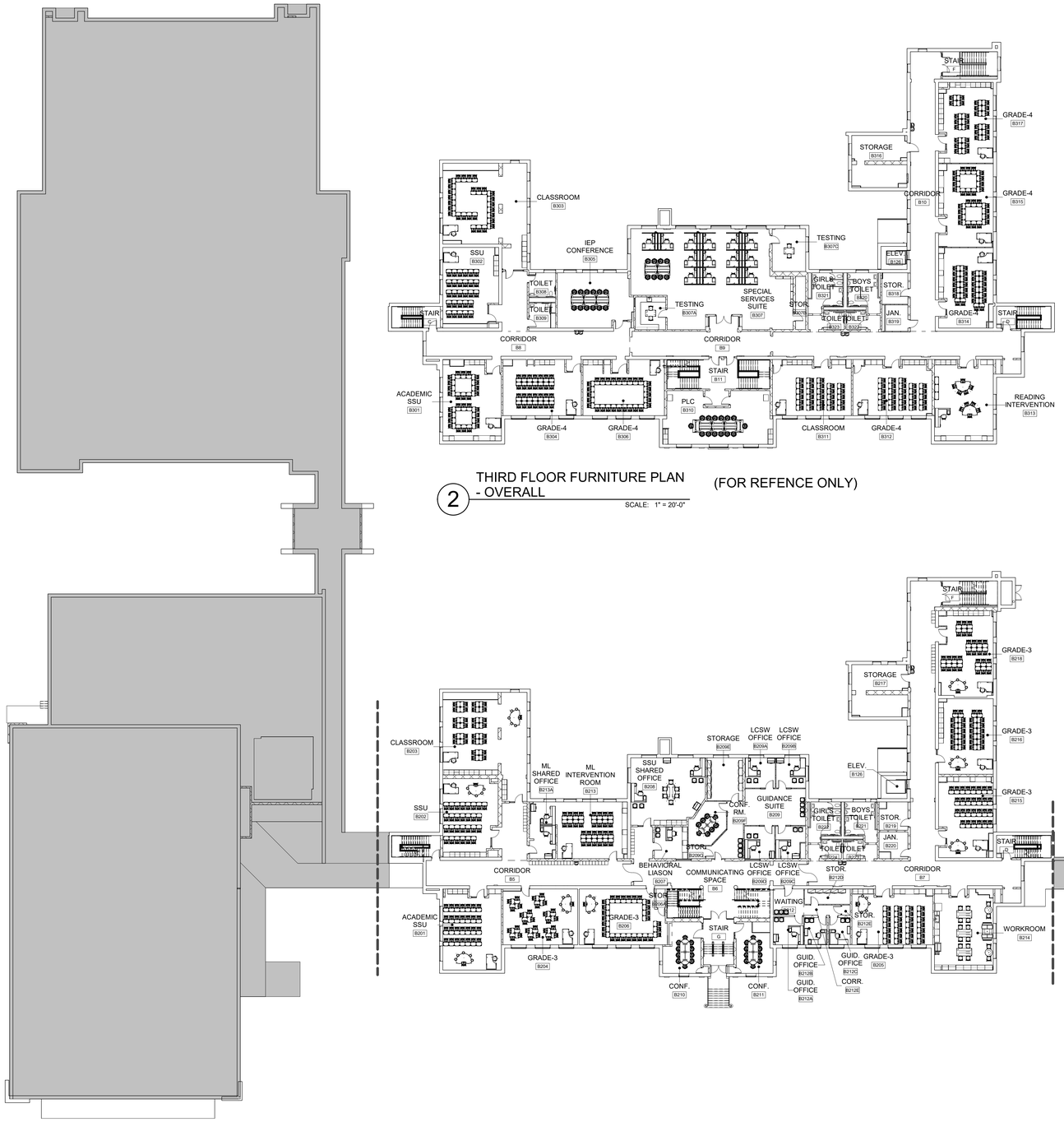

2 THIRD FLOOR FURNITURE PLAN - OVERALL

SCALE: 1" = 20'-0"

(FOR REFENCE ONLY)

1 SECOND FLOOR FURNITURE PLAN - OVERALL

SCALE: 1" = 20'-0"

(FOR REFENCE ONLY)

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

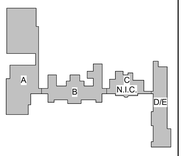
211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

OVERALL SECOND AND THIRD FLOOR FURNITURE PLAN



0' 10' 20' 40'
SCALE: 1" = 20'

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1" = 20'-0"
DRAWN BY: MNS	PROJ MGR: BAH

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PLUMBING GENERAL NOTES

A. EXISTING BUILDING IS FULLY SPRINKLERED AND THE CONTRACTOR SHALL MODIFY EXISTING SPRINKLER SYSTEM AND FIRE HOSE VALVE LOCATIONS IN SCOPE OF WORK AREA AS REQUIRED PER NFPA AND LOCAL FIRE CODE TO ACCOMMODATE NEW ARCHITECTURAL LAYOUT. NEW SPRINKLER HEADS AND PIPING SHALL MATCH EXISTING SYSTEM AND COORDINATED IN THE NEW CEILING. REFER TO ARCHITECTURAL PLANS FOR FULL SCOPE OF WORK AREA.
B. THE INTEGRITY OF THE EXISTING SPRINKLER SYSTEM SHALL NOT BE COMPROMISED AT ANY TIME DURING THE CONSTRUCTION PERIOD - SPRINKLERS SHOULD BE TURNED UP IN AREAS WHERE EXISTING CEILINGS ARE DEMOLISHED, ETC. PERIODS WHERE THE EXISTING SYSTEM WILL BE OUT OF SERVICE SHALL BE COORDINATED WITH THE LOCAL FIRE OFFICIAL. THE BUILDING SHALL EITHER BE EVACUATED OR PROVIDED WITH AN APPROVED FIRE WATCH UNTIL SYSTEM OPERATION IS RESTORED.
C. COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC., PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE CONTRACTOR.
D. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC., OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
E. WHERE WORK IS REQUIRED ABOVE EXISTING LAY-IN, PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL CEILING OR TILE AND GRID MEMBERS NECESSARY TO PERFORM HIS WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.
F. ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.
G. COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS.
H. PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNER'S STANDARDS) EXISTING WALLS, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
I. OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, STATE OF DELAWARE, ETC.)
J. CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION THEN FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE ENGINEERS TO REVIEW THE ROUTING.
K. IF AREA OF CONSTRUCTION HAS A POST TENSION FLOOR SLAB. CONTRACTOR SHALL USE ULTRA SOUND OR OTHER APPROVED METHODS TO SURVEY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND ALL FLOOR PENETRATIONS.
L. WHERE FIRE PROOFING IS SPRAYED ON EXISTING STRUCTURE ALL EXISTING CONDUITS, WATER, HYDRONIC, STEAM, CHILLED WATER, FIRE PROTECTION LINES, MED GAS, ETC. SHALL BE LOWERED TO BE BELOW FULL THICKNESS OF FIRE PROOFING WITH NO INTERFERENCE.
M. ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL BE APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS.
N. ALL WORK REQUIRING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES.
O. ALL PIPING IN ROOMS WITH CEILINGS SHALL BE ABOVE CEILING EXCEPT AS NOTED.
P. LOCATIONS OF PIPING AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.
Q. ALL OFFSETS IN PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.
R. THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES OR OTHER COSTS THAT ANY UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK. (GAS, SEWER, WATER, ETC.).
S. WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE DOCUMENTS.
T. ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.
U. DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT USED AS BASIS OF DESIGN SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
V. VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY, ALL SUCH ITEMS SHALL NOT BE LOCATED AN UNREASONABLE DISTANCE ABOVE THE CEILINGS. IN GENERAL, ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.
W. WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.

PHASING NOTES

A. THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAIN GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES, STEAM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT AND HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL SAID WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

PLUMBING DEMOLITION NOTES

A. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR AREAS IN WHICH THE CEILING IS REMAINING. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING CEILING AS REQUIRED AND REINSTALLATION. TEMPORARILY SUPPORT LIGHTS, DIFFUSERS, CEILING ETC. REPLACE BROKEN CEILING TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. FIELED VERIFY EXACT REQUIREMENTS.
B. ALL OUTAGES SHALL BE SCHEDULED THROUGH THE PROJECT REPRESENTATIVE FOR PROPER COORDINATION. A REQUEST FOR AN OUTAGE SHALL BE SUBMITTED IN WRITING A MINIMUM OF TWO WEEKS IN ADVANCE.
C. ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL RATED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MAINTAIN RATING.
D. ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.
E. HEAVY DASHED LINES INDICATE ITEMS FOR REMOVAL (U.O.N) AND LIGHT SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
F. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH THE OWNER.

HAZARDOUS MATERIAL NOTES

A. THE CONTRACTOR IT IS HEREBY ADVISED THAT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THIS BUILDING(S). ANY WORKER, OCCUPANT, VISITOR, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. FURTHERMORE, THE CONTRACTOR SHALL INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.
B. CMTA, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CMTA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, CMTA NOR ANY AFFILIATE HEREOF WILL NOT OFFER OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.
C. IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM IMMEDIATELY.
D. THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO BRING NO CLAIM RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENCE, BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH ITEM AGAINST CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS AND CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.
E. THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

ABBREVIATIONS LIST

AC	ALTERNATING CURRENT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE (AMP, AMPS)
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APD	AIR PRESSURE DROP
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR-CONDITIONING ENGINEERS
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BHP	BREAK HORSEPOWER
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
C.I.	CAST IRON
CLG	CEILING
CLR	CLEAR
CO	CLEANOUT
COND	CONDENS (-ER, -ING, -ATION, -ATE)
CONT	CONTINU (-ED, -OUS)
CU FT	CUBIC FEET
CU IN	CUBIC INCHES
CV	VALVE FLOW COEFFICIENT
dB	DECIBEL
DB	DRY BULB
DC	DIRECT CURRENT
DD	DUCT SMOKE DETECTOR
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREE (-S)
DIA	DIAMETER (-S)
DN	DOWN
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVA (-TION, -TOR)
ENGR	ENGINEER
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EVAP	EVAPORAT (-E, -ING, -ED, -OR, -ION)
EWT	ENTERING WATER TEMPERATURE
EXP	EXPANSION
EXT	EXTERIOR
FA	FREE AREA
FCO	FLOOR CLEANOUT
FL	FLOOR
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPC	FIRE PROTECTION CONTRACTOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET **OR** FOOT
FUT	FUTURE
FV	FACE VELOCITY
GA	GAGE/GAUGE
GAL	GALLON (-S)

ABBREVIATIONS LIST (CONTINUED)

GC	GENERAL CONTRACTOR
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRAINS
H	HUMIDITY
HD	HEAD
HG	MERCURY
HORIZ	HORIZONTAL
HP	H (-ORSEPOWER, -EAT PUMP)
HR	HOUR (-S)
HVAC	HEATING, VENTILATING, & AIR-CONDITIONING
Hz	HERTZ
ID	I (-DENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)
IN	INCH (-ES)
INSUL	INSULAT (-ED, -ION)
INT	INTER (-IOR, -ERVAL)
IPS	IRON PIPE SIZE
kW	KILOWATT
kWh	KILOWATT HOUR
LBS	POUNDS
LF	LINEAR FEET/FOOT
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	BTU PER HOUR [THOUSANDS]
MCA	MINIMUM CIRCUIT AMPS
MFG	MANUFACTURER
MIN	MIN (-IMUM, -UTE)
MISC	MISCELLANEOUS
MOCP	MAXIMUM OVERCURRENT PROTECTION [AMPS]
MTG	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA **OR** NORMALLY CLOSED
NEBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN **OR** NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DI (-AMETER, -MENSION)
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OR	OPEN RECEPTACLE
OZ	OUNCE (-S)
PC	PLUMBING CONTRACTOR
PD	PRESSURE (DROP, DISCHARGE)
PH	PHASE [ELECTRICAL]
PLBG	PLUMBING
PPM	PARTS PER MILLION
PRS	PRESSURE REDUCING STATION
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	PPSI GAUGE
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SQ	SQUARE
SQ FT	SQUARE FEET **OR** FOOT

ABBREVIATIONS LIST (CONTINUED)

SQ IN	SQUARE INCH **OR** INCHES
TAB	TESTING AND BALANCING
TBD	TO BE DETERMINED
TE	TOP ELEVATION
TEMP	TEMPERATURE
TPA	TRAP PRIMER ADAPTER
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLT (-AGE, -S)
VAR	VARI (-ABLE, -IES)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FEQUENCY DRIVE
W	WATT (-AGE, -S)
WB	WET BULB
WBT	WET BULB TEMPERATURE
WCO	WALL CLEANOUT
WPD	WATER PRESSURE DROP
WT	WEIGHT
W/	WITH
W/O	WITHOUT
%	PERCENT
ΔP	DIFFERENTIAL PRESSURE
ΔT	TEMPERATURE DIFFERENCE
℄	CENTERLINE

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED ON THIS PROJECT

VALVE SYMBOL LEGEND

	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	AUTOMATIC AIR VENT (AAV)
	MANUAL AIR VENT (MAV)
	MANUAL BALANCING VALVE (BV)
	BALL VALVE
	BUTTERFLY VALVE
	TRIPLE DUTY VALVE (TDV)
	STRAINER
	MANUAL ISOLATION VALVE
	GLOBE VALVE
	OS&Y (GATE) VALVE
	PRESSURE REDUCING VALVE
	AUTO-FLOW CONTROL VALVE
	CHECK VALVE
	DOUBLE CHECK VALVE ASSEMBLY

PLUMBING SYMBOL LEGEND

	FLEXIBLE PIPE CONNECTION
	FLOW METER (VENTURI)
	PIPING UNION
FS	FLOW SWITCH
PS	PRESSURE SWTICH
TS	TAMPER SWITCH
	THERMOMETER
	PETE'S PLUG; TEMPERATURE/PRESSURE PORT

GENERAL SYMBOLS

7	TAGGED NOTE DESIGNATOR
3	REVISION TRIANGLE
ROOM NAME 101 F.1	ROOM TAG
MARK XX-## INSTANCE ###	EQUIPMENT TAG
	POINT OF CONNECTION / CONNECT TO EXISTING
	POINT OF DEMOLITION
XX ##	DOMESTIC WATER RISER TAG
XX ##	SANITARY, WASTE, & VENT RISER TAG
XX ##	FIRE SUPPRESSION RISER TAG
(D)	PIPING TO BE DEMOLISHED
(E)	EXISTING PIPING
(A)	ABANDONED IN PLACE PIPING

PLUMBING PIPING LEGEND

	PIPE ELBOW TURNING UP
	PIPE ELBOW TURNING DOWN
	PIPE TEE; CONNECTION ON TOP
	PIPE TEE; CONNECTION ON BOTTOM
	PIPE CAP
CW	DOMESTIC COLD WATER (CW)
HW	DOMESTIC HOT WATER (HW)
HWR	RECIRCULATED DOMESTIC HOT WATER (HWR)
HWS/R	HEATING WATER SUPPLY/RETURN
S	SANITARY
V	SANITARY VENT
PD	PRESSURE DISCHARGE
CD	CONDENSATE DRAIN

APPLICABLE BUILDING CODES

- INTERNATIONAL PLUMBING CODE (IPC) - STATE EDITION [2021]
- INTERNATIONAL MECHANICAL CODE (IMC) - STATE EDITION [2015]
- INTERNATIONAL ENERGY CONSERVATION CODE (IECC) - STATE EDITION [2018]
- INTERNATIONAL BUILDING CODE (IBC) - STATE EDITION [2015]
- INTERNATIONAL EXISTING BUILDING CODE (IEBC) - STATE EDITION [2015]
- INTERNATIONAL FUEL GAS CODE (IFGC) - STATE EDITION [2015]
- ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES (ANSI A117.1) - STATE EDITION [2017]
- NATIONAL ELECTRICAL CODE (NFPA 70) - STATE EDITION [2020]
- LIFE SAFETY CODE (NFPA 101) - STATE EDITION [2021]
- FIRE CODE (NFPA 01) - STATE EDITION [2021]
- FIRE SPRINKLER CODE (NFPA 13) - STATE EDITION [2019]
- FIRE ALARM CODE (NFPA 72) - STATE EDITION [2019]

PLUMBING SHEET LIST

SHEET #	SHEET NAME
P-001	PLUMBING LEGEND
PD-100B	UNDER SLAB PLUMBING DEMOLITION PLAN - AREA B
PD-101B	FIRST FLOOR PLUMBING DEMOLITION PLAN - AREA B
PD-101D/E	FIRST FLOOR PLUMBING DEMOLITION PLAN - AREA D/E
PD-102B	SECOND FLOOR PLUMBING DEMOLITION PLAN - AREA B
PD-102D/E	SECOND FLOOR PLUMBING DEMOLITION PLAN - AREA D/E
PD-103B	THIRD FLOOR PLUMBING DEMOLITION PLAN - AREA B
P-100A	BASEMENT PLUMBING PLAN - AREA A
P-100B	UNDER SLAB PLUMBING PLAN - AREA B
P-100D/E	CRAWL SPACE PLUMBING PLAN - AREA D/E
P-101A	FIRST FLOOR PLUMBING PLAN - AREA A
P-101B	FIRST FLOOR PLUMBING PLAN - AREA B
P-101D/E	FIRST FLOOR PLUMBING PLAN - AREA D/E
P-102B	SECOND FLOOR PLUMBING PLAN - AREA B
P-102D/E	SECOND FLOOR PLUMBING PLAN - AREA D/E
P-103B	THIRD FLOOR PLUMBING PLAN - AREA B
P-401	AREA B PLUMBING ENLARGED PLANS
P-402	AREA D/E PLUMBING ENLARGED PLANS
P-501	PLUMBING DETAILS AND SCHEDULES
P-601	PLUMBING DOMESTIC RISER DIAGRAMS
P-602	PLUMBING SANITARY RISER DIAGRAMS

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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

PLUMBING LEGEND

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	NOT TO SCALE
DRAWN BY: JMC	PROJ MGR: MEO

P-001

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GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. EXISTING CONDITIONS ARE BASED ON LIMITED SITE SURVEY. VERIFY ALL EXISTING SITE CONDITIONS BEFORE WORK BEGINS.

C. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

D. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

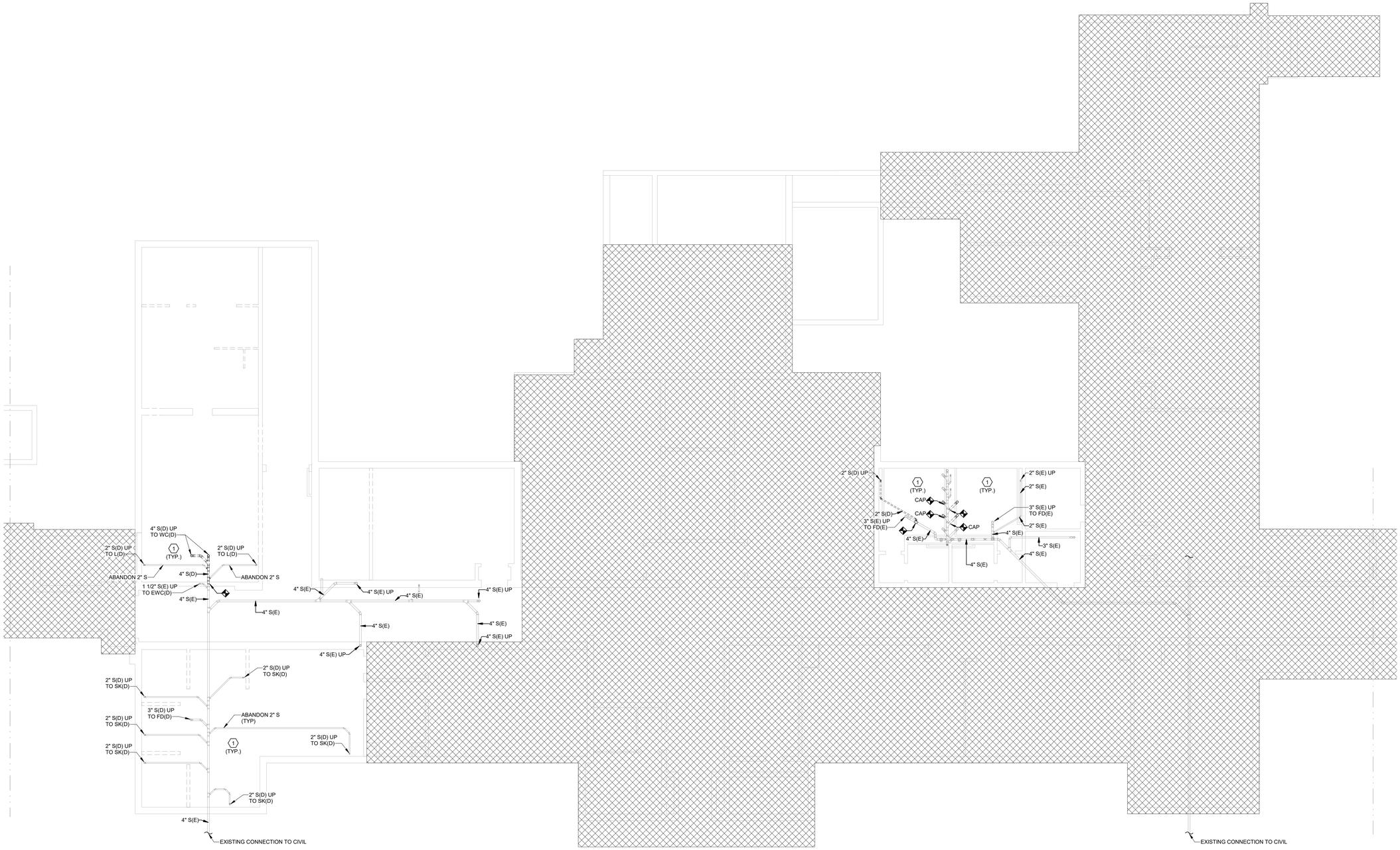
E. PRIOR TO DEMOLITION THE CONTRACTOR SHALL SCOPE AND VIDEO RECORD THE EXISTING BELOW SLAB DRAINAGE PIPING TO DETERMINE THE PIPE CONDITION AND IDENTIFY BLOCKAGES.

F. ALL SLAB PENETRATIONS MUST BE APPROVED BY THE OWNER AND INCLUDE A 3D GPR (GROUND PENETRATING RADAR) OR X-RAY. ALL LOCATIONS WILL BE EVALUATED AND STAMP APPROVED BY THE BUILDING'S STRUCTURAL ENGINEER OR APPROVED EQUAL IN WRITING. IF READINGS ARE OBSCURE, CONTRACTOR SHALL REVERT TO X-RAY AND REVIEW RADIOGRAPHS WITH BUILDINGS STRUCTURAL ENGINEER. CONTRACTOR SHALL INCLUDE ALL ASSOCIATED COSTS WITH THIS IN THEIR BID AND THE STRUCTURAL ENGINEER SHALL PERFORM WORK AS A SUB-CONTRACTOR.

G. CONTRACTOR SHALL MEET WITH OWNER TO COORDINATE FINAL ROUTES AND MATERIALS USED FOR ALL PLUMBING SLAB PENETRATIONS. NO WORK SHALL BE PERFORMED WITHOUT NOTIFICATION.

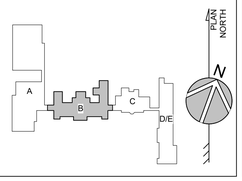
KEY NOTES:

1 REFER TO SHEET PD-101B FOR CONNECTION ABOVE.



1 UNDER SLAB PLUMBING DEMOLITION PLAN - AREA B

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

UNDER SLAB PLUMBING DEMOLITION PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

PD-100B

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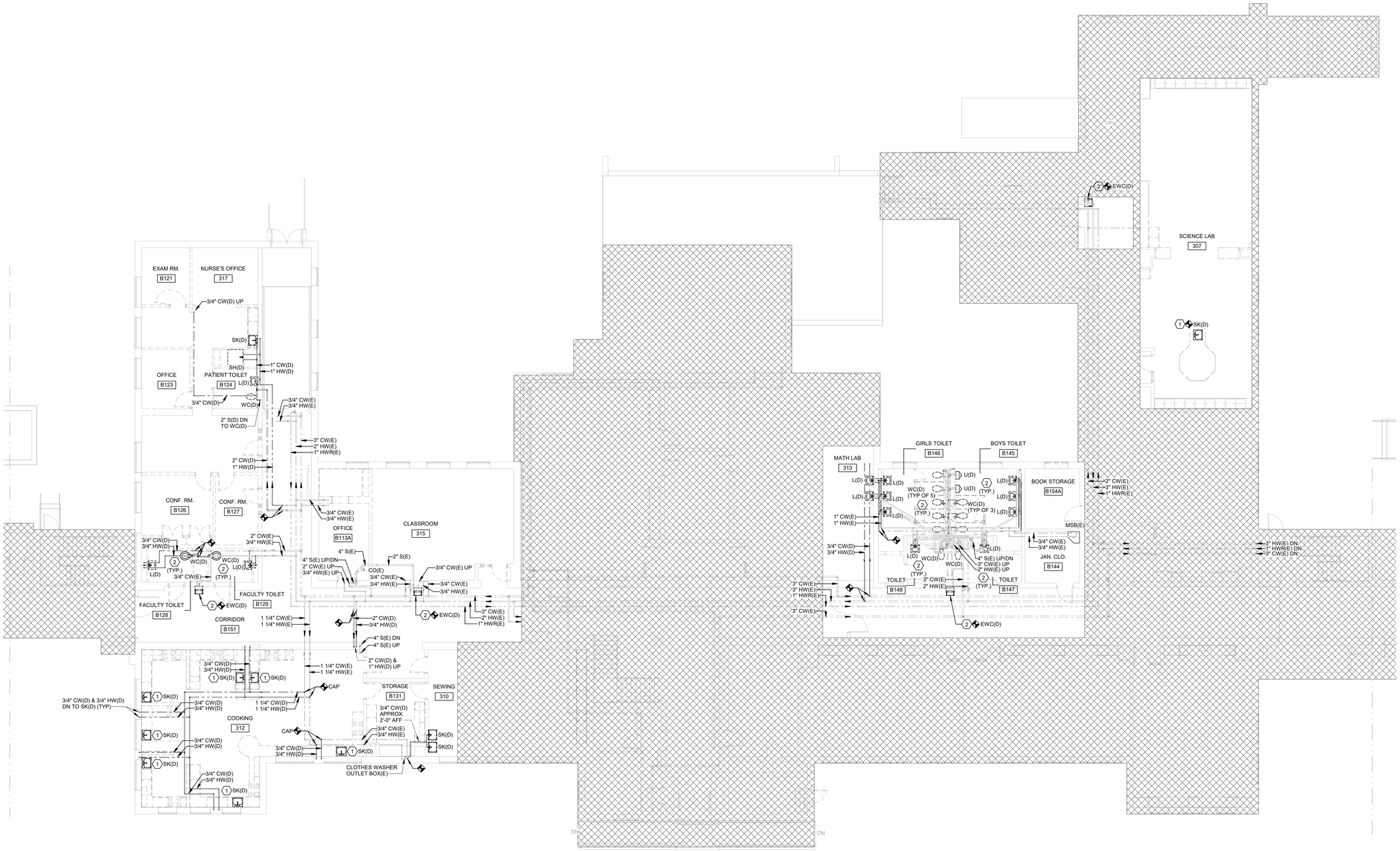
C. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

D. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

KEY NOTES:

1 REMOVE EXISTING SINK AND ACCESSORIES. REMOVE EXISTING DOMESTIC AND SANITARY PIPES AND CAP BENEATH FLOOR.

2 REMOVE EXISTING FIXTURE. PREPARE EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS FOR NEW FIXTURE UNDER NEW WORK SCOPE.



1 FIRST FLOOR PLUMBING DEMOLITION PLAN - AREA B

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

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR PLUMBING DEMOLITION PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

PD-101B

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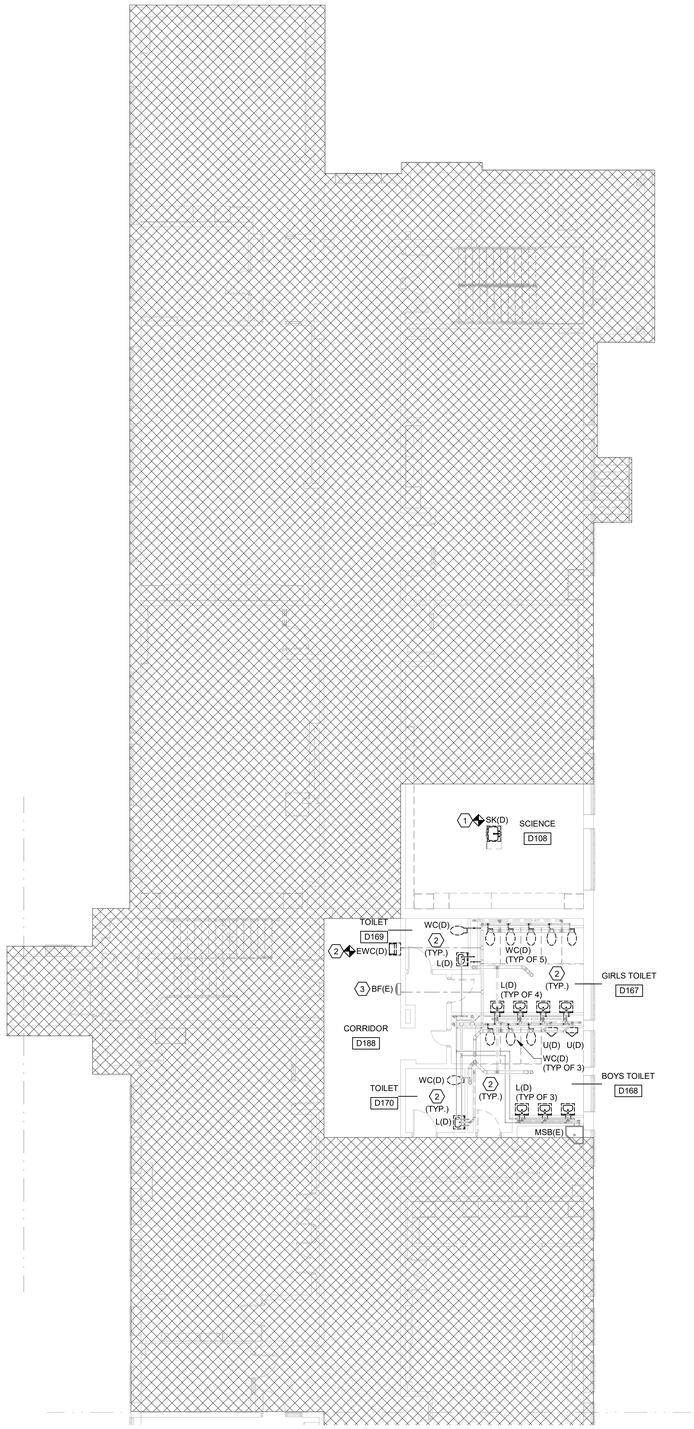
KEY NOTES:

1 REMOVE EXISTING SINK AND ACCESSORIES. REMOVE EXISTING DOMESTIC AND SANITARY PIPES AND CAP BENEATH FLOOR.

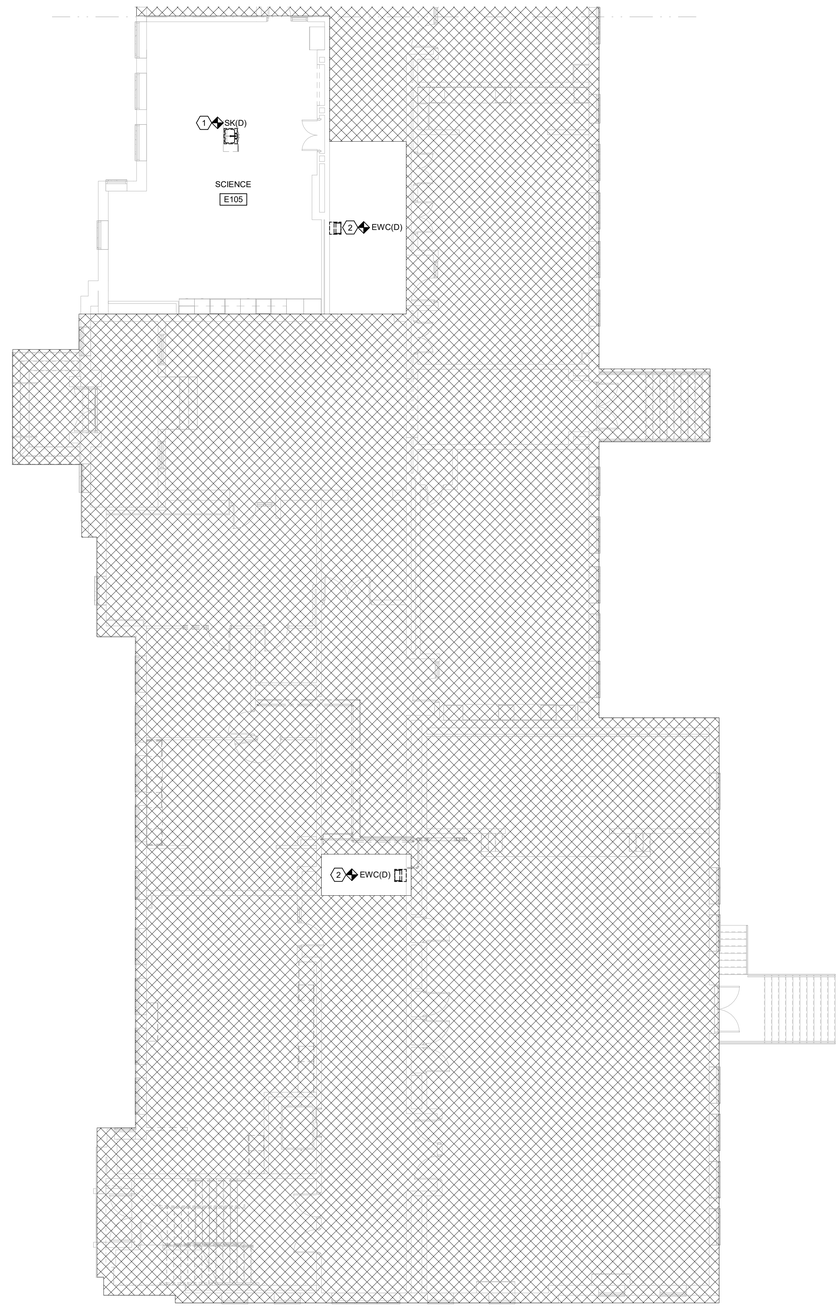
2 REMOVE EXISTING FIXTURE. PREPARE EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS FOR NEW FIXTURE UNDER NEW WORK SCOPE.

3 VERIFY EXISTING FIXTURE IS FUNCTIONAL. REFURBISH OR REPLACE FIXTURE AS NEEDED TO RESTORE USABILITY.



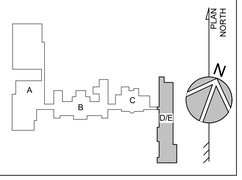
1 FIRST FLOOR PLUMBING DEMOLITION PLAN - AREA D

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



2 FIRST FLOOR PLUMBING DEMOLITION PLAN - AREA E

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



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RICHARD Y. JOHNSON & SON, INC.
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18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR PLUMBING DEMOLITION PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

PD-101D/E

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GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. EXISTING CONDITIONS ARE BASED ON LIMITED SITE SURVEY. VERIFY ALL EXISTING SITE CONDITIONS BEFORE WORK BEGINS.

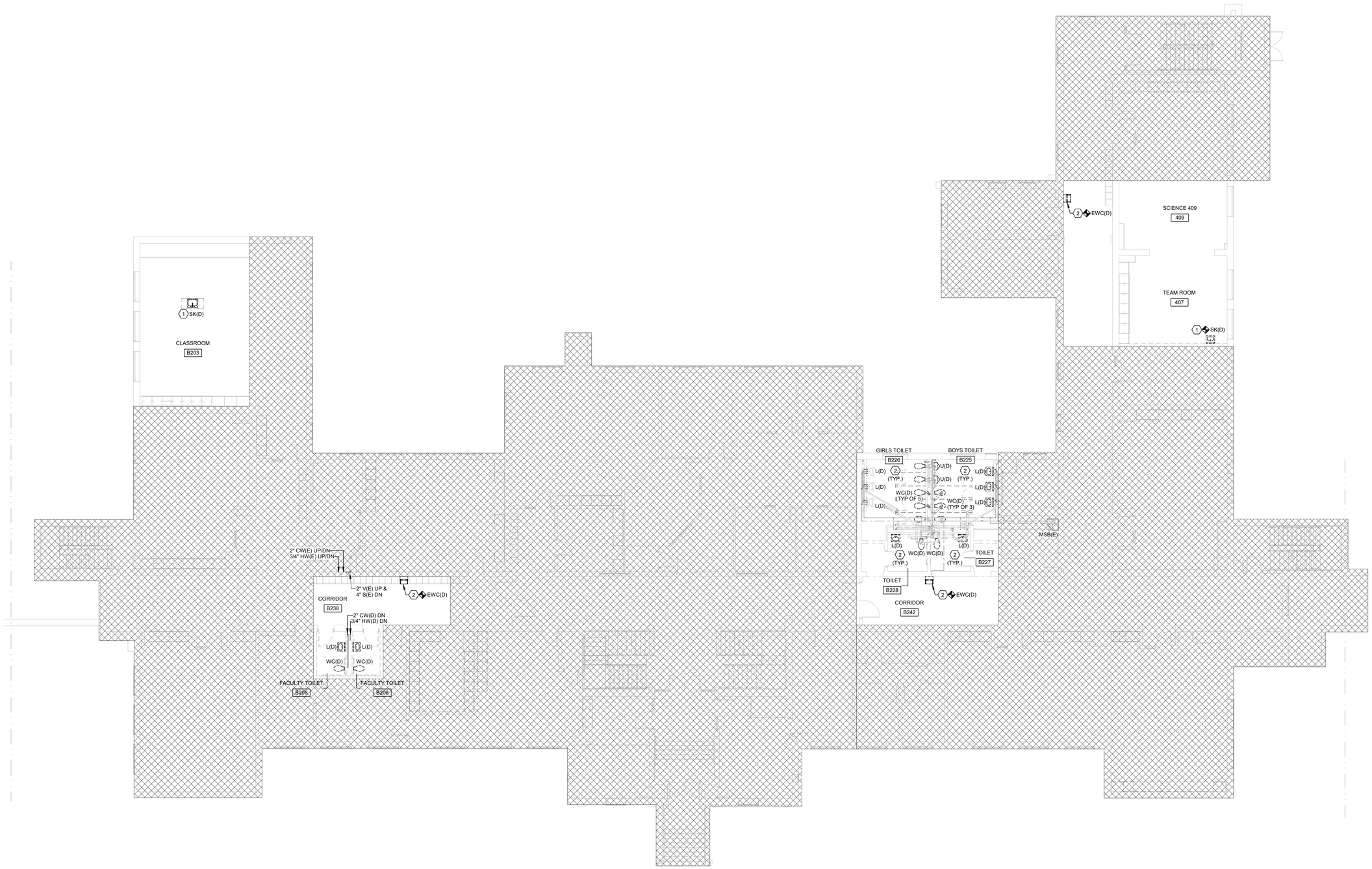
C. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

D. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

KEY NOTES:

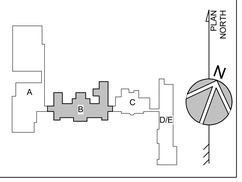
1 REMOVE EXISTING SINK AND ACCESSORIES.

2 REMOVE EXISTING FIXTURE. PREPARE EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS FOR NEW FIXTURE UNDER NEW WORK SCOPE.



1 SECOND FLOOR PLUMBING DEMOLITION PLAN - AREA B

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



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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR PLUMBING DEMOLITION PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

PD-102B

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GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. EXISTING CONDITIONS ARE BASED ON LIMITED SITE SURVEY. VERIFY ALL EXISTING SITE CONDITIONS BEFORE WORK BEGINS.

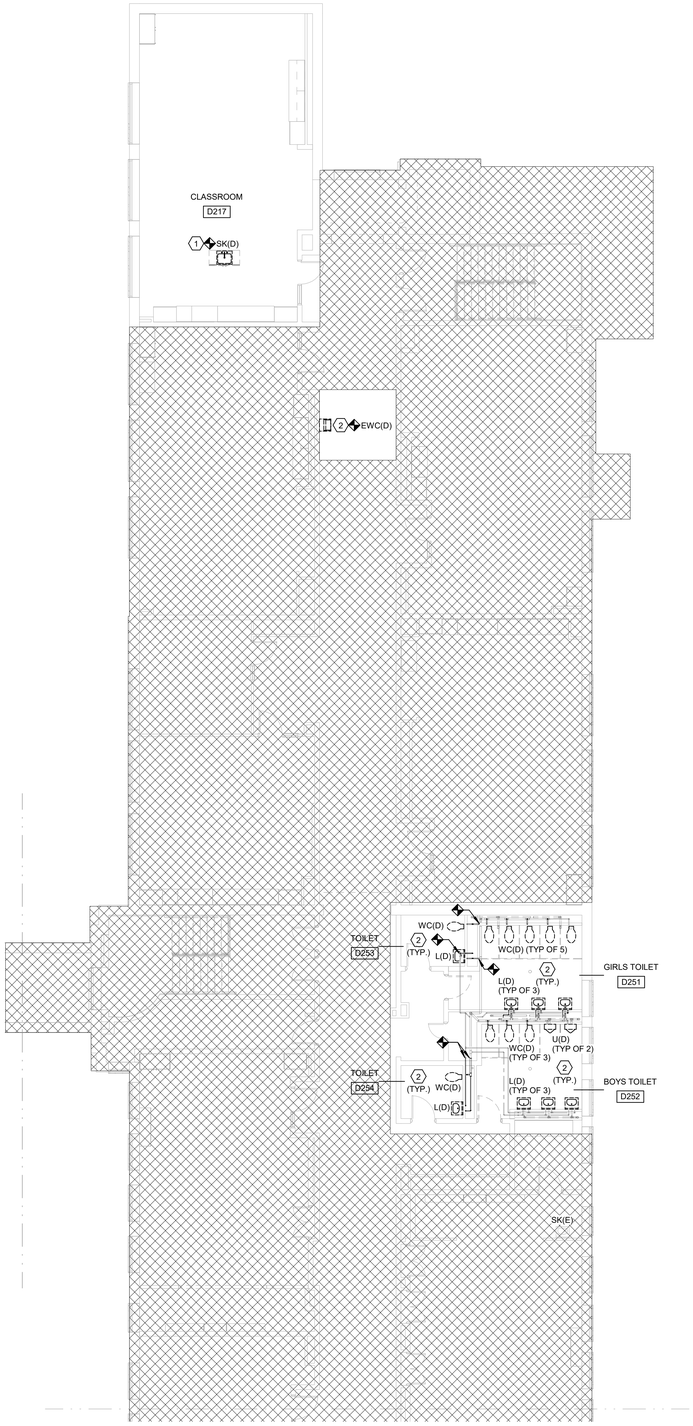
C. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

D. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

KEY NOTES:

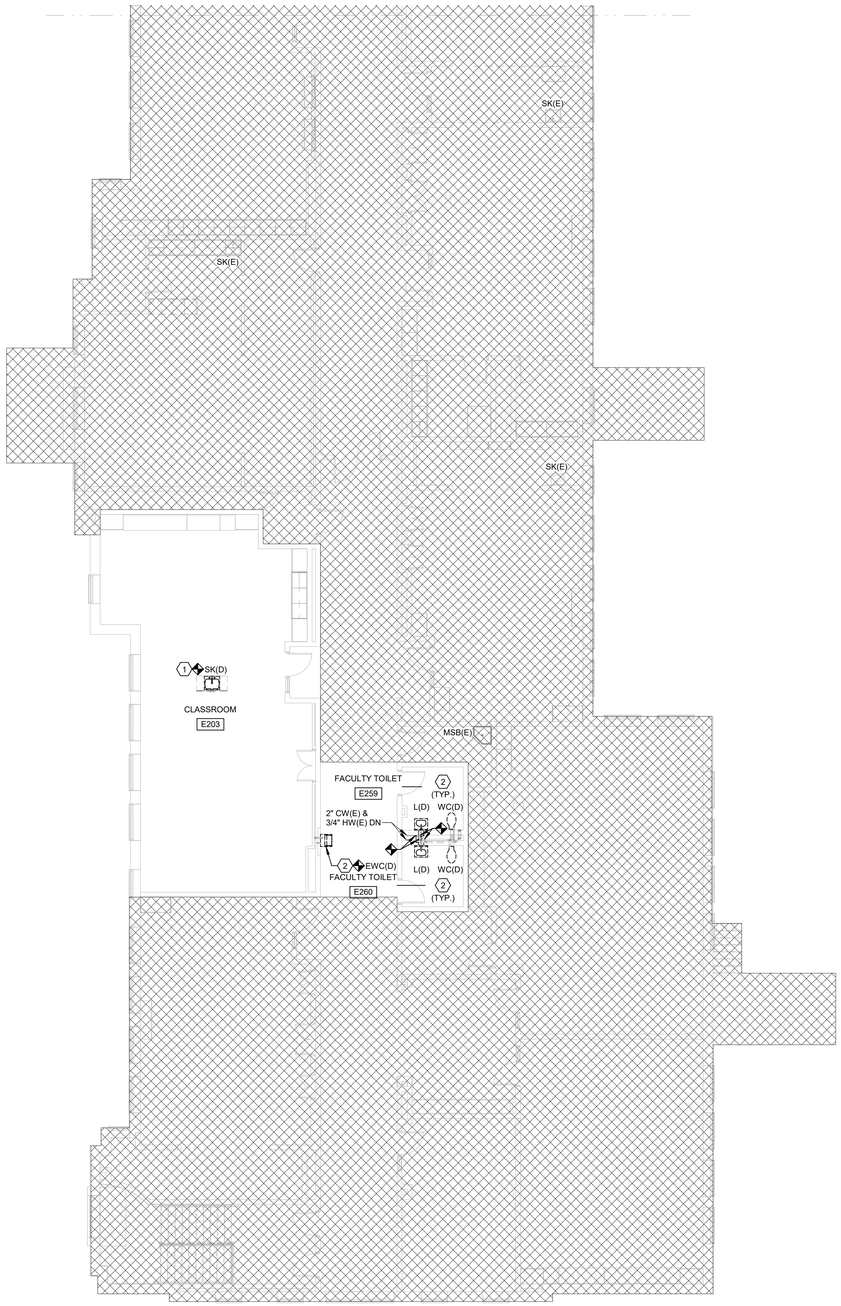
1 REMOVE EXISTING SINK AND ACCESSORIES. REMOVE EXISTING DOMESTIC AND SANITARY PIPES AND CAP BENEATH FLOOR.

2 REMOVE EXISTING FIXTURE. PREPARE EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS FOR NEW FIXTURE UNDER NEW WORK SCOPE.



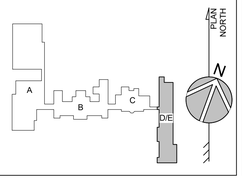
1 SECOND FLOOR PLUMBING DEMOLITION PLAN - AREA D

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



2 SECOND FLOOR PLUMBING DEMOLITION PLAN - AREA E

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR PLUMBING DEMOLITION PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

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GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. EXISTING CONDITIONS ARE BASED ON LIMITED SITE SURVEY. VERIFY ALL EXISTING SITE CONDITIONS BEFORE WORK BEGINS.

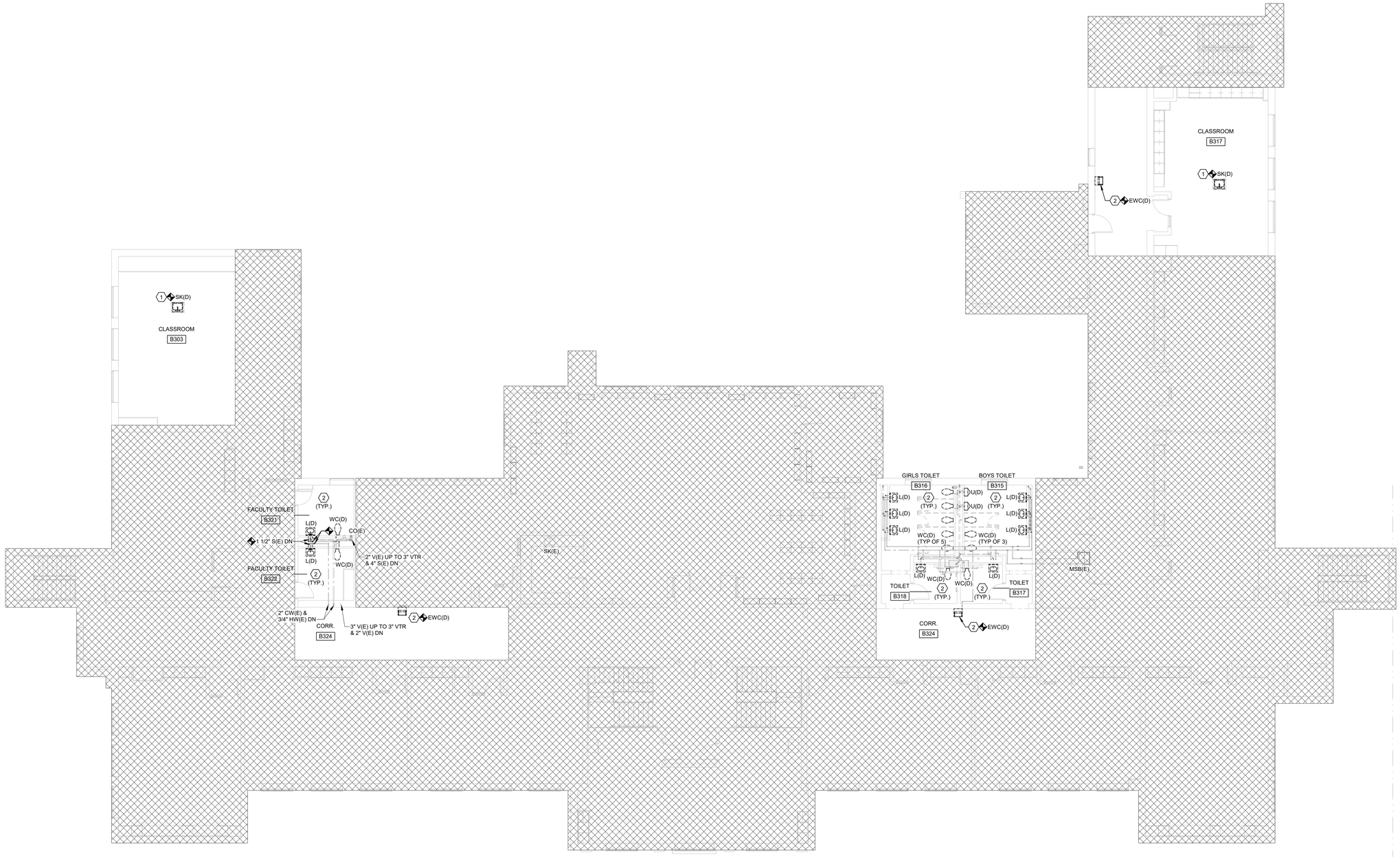
C. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

D. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

KEY NOTES:

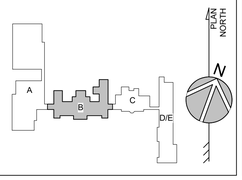
1 REMOVE EXISTING SINK AND ACCESSORIES. REMOVE EXISTING DOMESTIC AND SANITARY PIPES AND CAP BENEATH FLOOR.

2 REMOVE EXISTING FIXTURE. PREPARE EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS FOR NEW FIXTURE UNDER NEW WORK SCOPE.



1 THIRD FLOOR PLUMBING DEMOLITION PLAN - AREA B

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



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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

THIRD FLOOR PLUMBING DEMOLITION PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

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GENERAL NOTES:

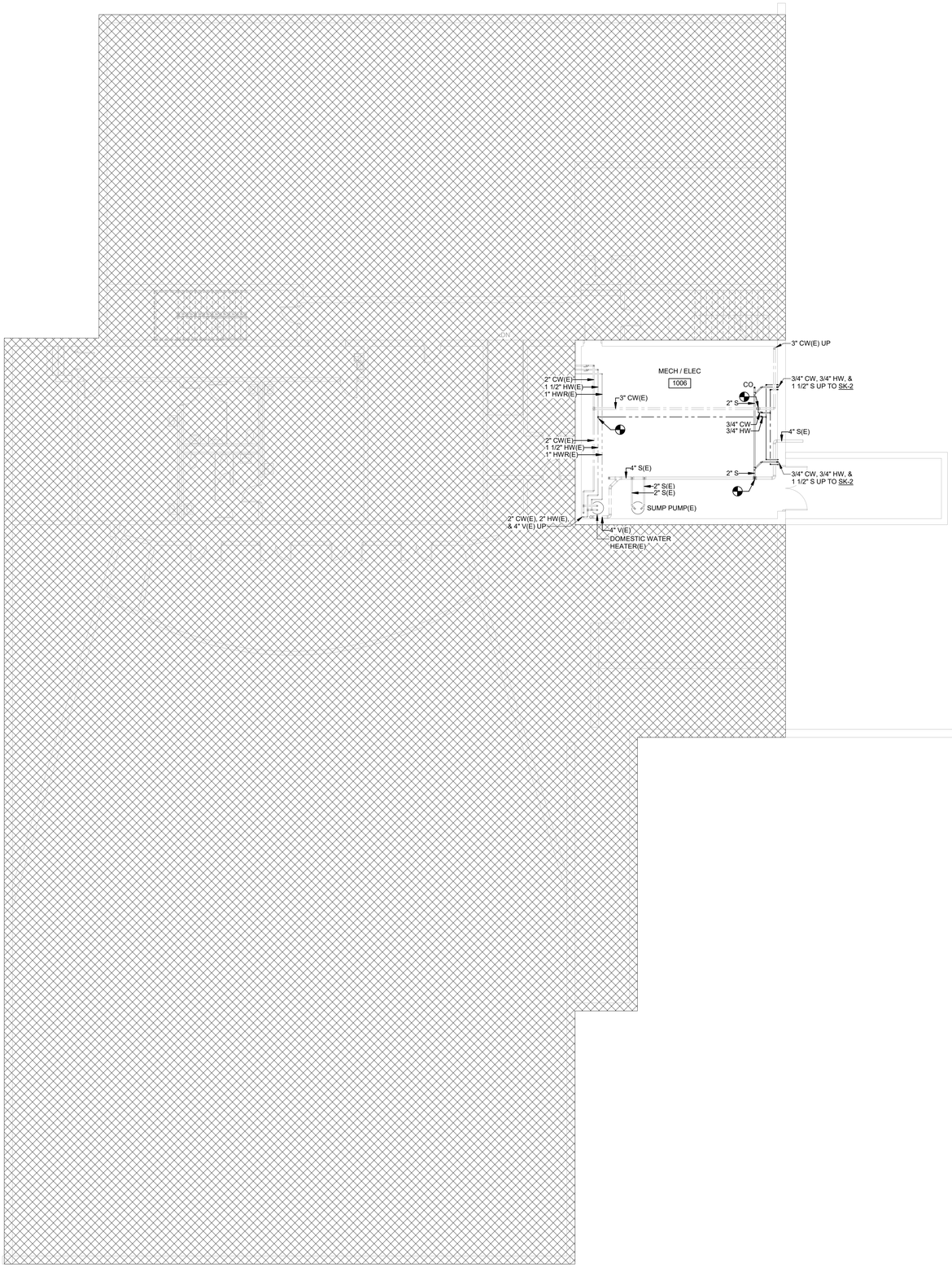
A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. REFER TO P-601 FOR EQUIPMENT AND ACCESSORY SCHEDULES.

C. ALL PIPING SHALL BE CONCEALED ABOVE CEILING OR WITHIN CHASE UNLESS OTHERWISE NOTED. SOME PIPING WITHIN CHASES IS SHOWN OFFSET FOR CLARITY.

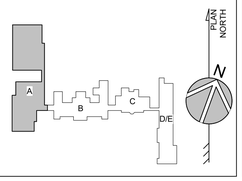
D. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

E. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.



1 BASEMENT PLUMBING PLAN - AREA A

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

BASEMENT PLUMBING PLAN - AREA A

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

P-100A

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GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. REFER TO P-601 FOR EQUIPMENT AND ACCESSORY SCHEDULES.

C. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

D. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

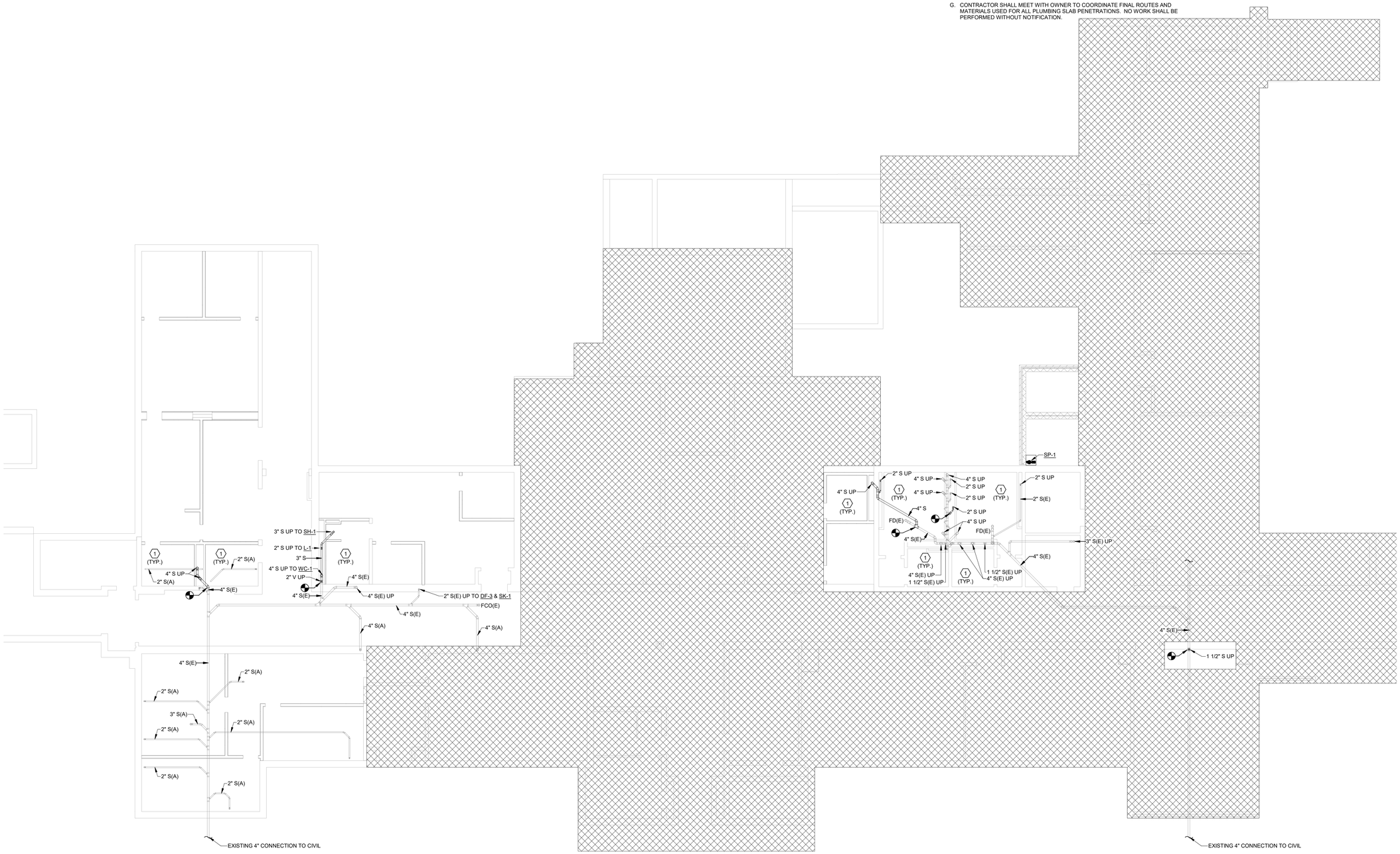
E. PRIOR TO DEMOLITION THE CONTRACTOR SHALL SCOPE AND VIDEO RECORD THE EXISTING BELOW SLAB DRAINAGE PIPING TO DETERMINE THE PIPE CONDITION AND IDENTIFY BLOCKAGES.

F. ALL SLAB PENETRATIONS MUST BE APPROVED BY THE OWNER AND INCLUDE A 3D GPR (GROUND PENETRATING RADAR) OR X-RAY. ALL LOCATIONS WILL BE EVALUATED AND STAMP APPROVED BY THE BUILDING'S STRUCTURAL ENGINEER OR APPROVED EQUAL IN WRITING. IF READINGS ARE OBSCURE, CONTRACTOR SHALL REVERT TO X-RAY AND REVIEW RADIOGRAPHS WITH BUILDINGS STRUCTURAL ENGINEER. CONTRACTOR SHALL INCLUDE ALL ASSOCIATED COSTS WITH THIS IN THEIR BID AND THE STRUCTURAL ENGINEER SHALL PERFORM WORK AS A SUB-CONTRACTOR.

G. CONTRACTOR SHALL MEET WITH OWNER TO COORDINATE FINAL ROUTES AND MATERIALS USED FOR ALL PLUMBING SLAB PENETRATIONS. NO WORK SHALL BE PERFORMED WITHOUT NOTIFICATION.

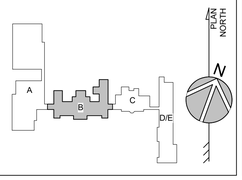
KEY NOTES:

1 REFER TO SHEET P-401 FOR CONNECTIONS ABOVE.



1 UNDER SLAB PLUMBING PLAN - AREA B

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



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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

UNDER SLAB PLUMBING PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

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GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. REFER TO P-601 FOR EQUIPMENT AND ACCESSORY SCHEDULES.

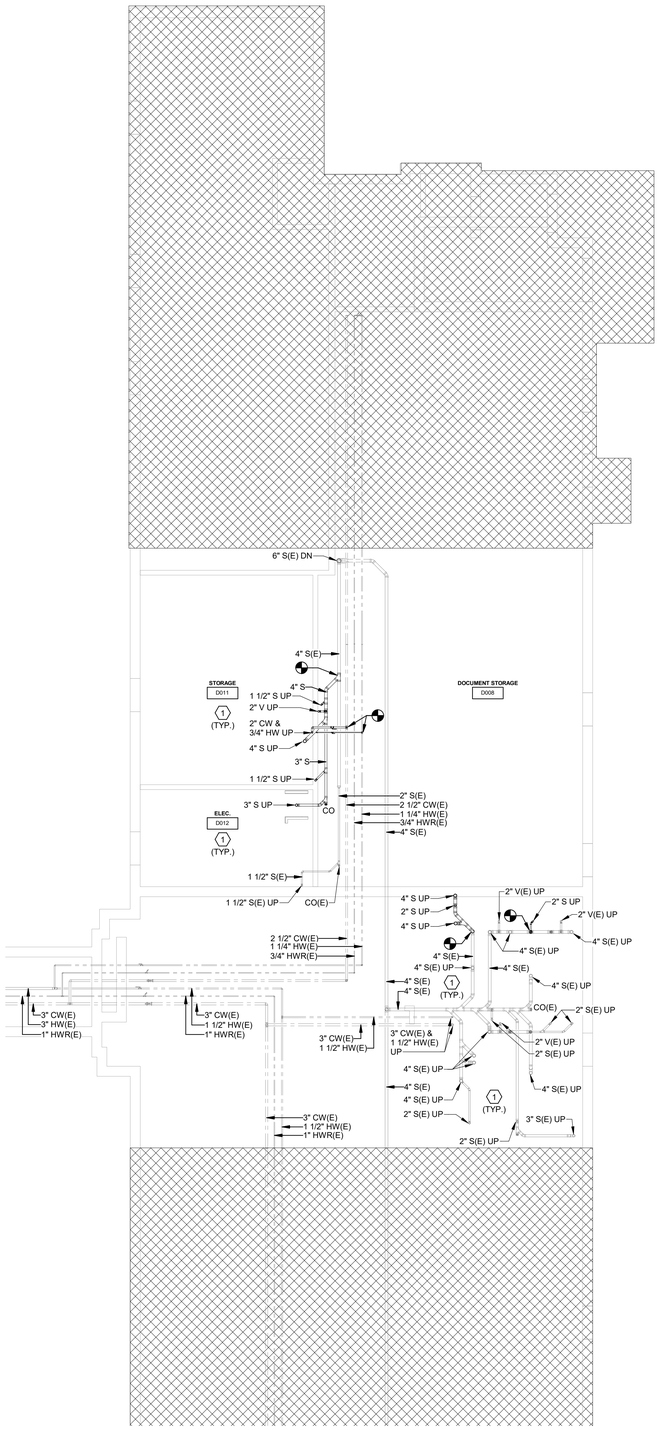
C. ALL PIPING SHALL BE CONCEALED ABOVE CEILING OR WITHIN CHASE UNLESS OTHERWISE NOTED. SOME PIPING WITHIN CHASES IS SHOWN OFFSET FOR CLARITY.

D. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

E. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

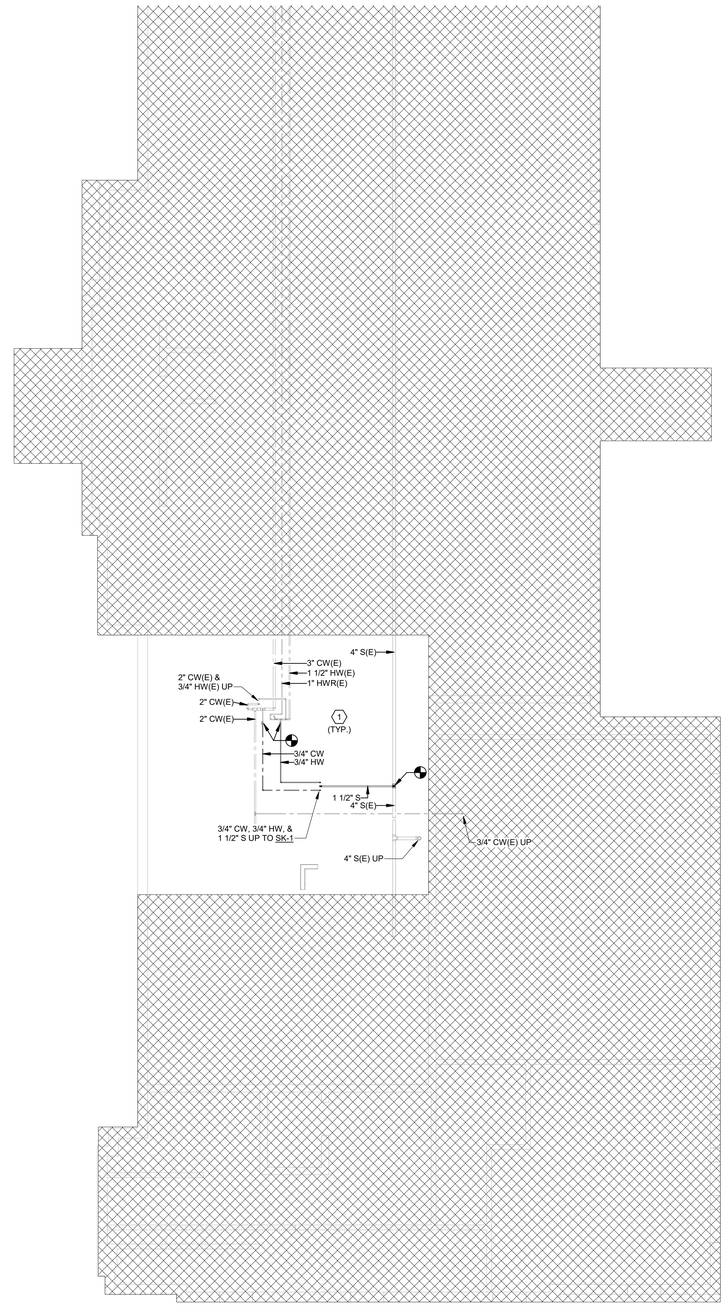
KEY NOTES:

1 REFER TO SHEET P-402 FOR CONNECTIONS ABOVE.



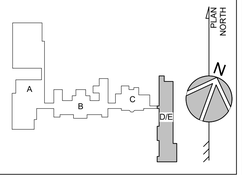
1 CRAWL SPACE PLUMBING PLAN - AREA D

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



2 CRAWL SPACE PLUMBING PLAN - AREA E

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

CRAWL SPACE PLUMBING PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

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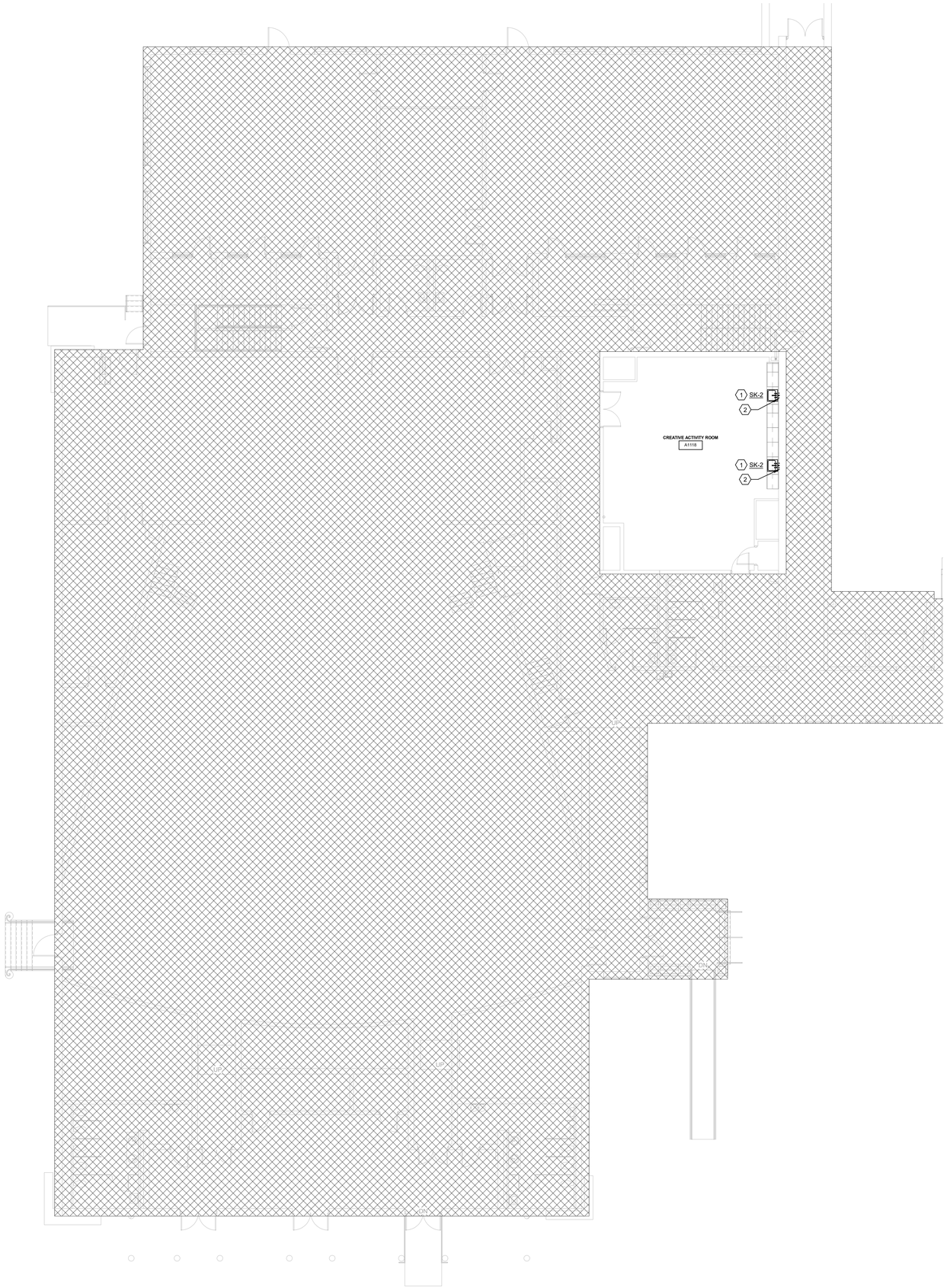

1 FIRST FLOOR PLUMBING PLAN - AREA A

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

GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. REFER TO P-601 FOR EQUIPMENT AND ACCESSORY SCHEDULES.

C. ALL PIPING SHALL BE CONCEALED ABOVE CEILING OR WITHIN CHASE UNLESS OTHERWISE NOTED. SOME PIPING WITHIN CHASES IS SHOWN OFFSET FOR CLARITY.

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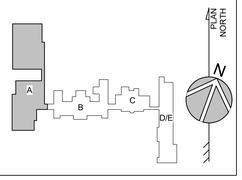
E. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

KEY NOTES:

1 INSTALL ASSE 1051 AIR ADMITTANCE VALVE BELOW COUNTER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

2 3/4" CW, 3/4" HW, & 1 1/2" S DN TO MECHANICAL ROOM BELOW. REFER TO SHEET P-100A FOR CONTINUATION.



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18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR PLUMBING PLAN - AREA A

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

P-101A

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GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. REFER TO P-601 FOR EQUIPMENT AND ACCESSORY SCHEDULES.

C. ALL PIPING SHALL BE CONCEALED ABOVE CEILING OR WITHIN CHASE UNLESS OTHERWISE NOTED. SOME PIPING WITHIN CHASES IS SHOWN OFFSET FOR CLARITY.

D. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

E. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

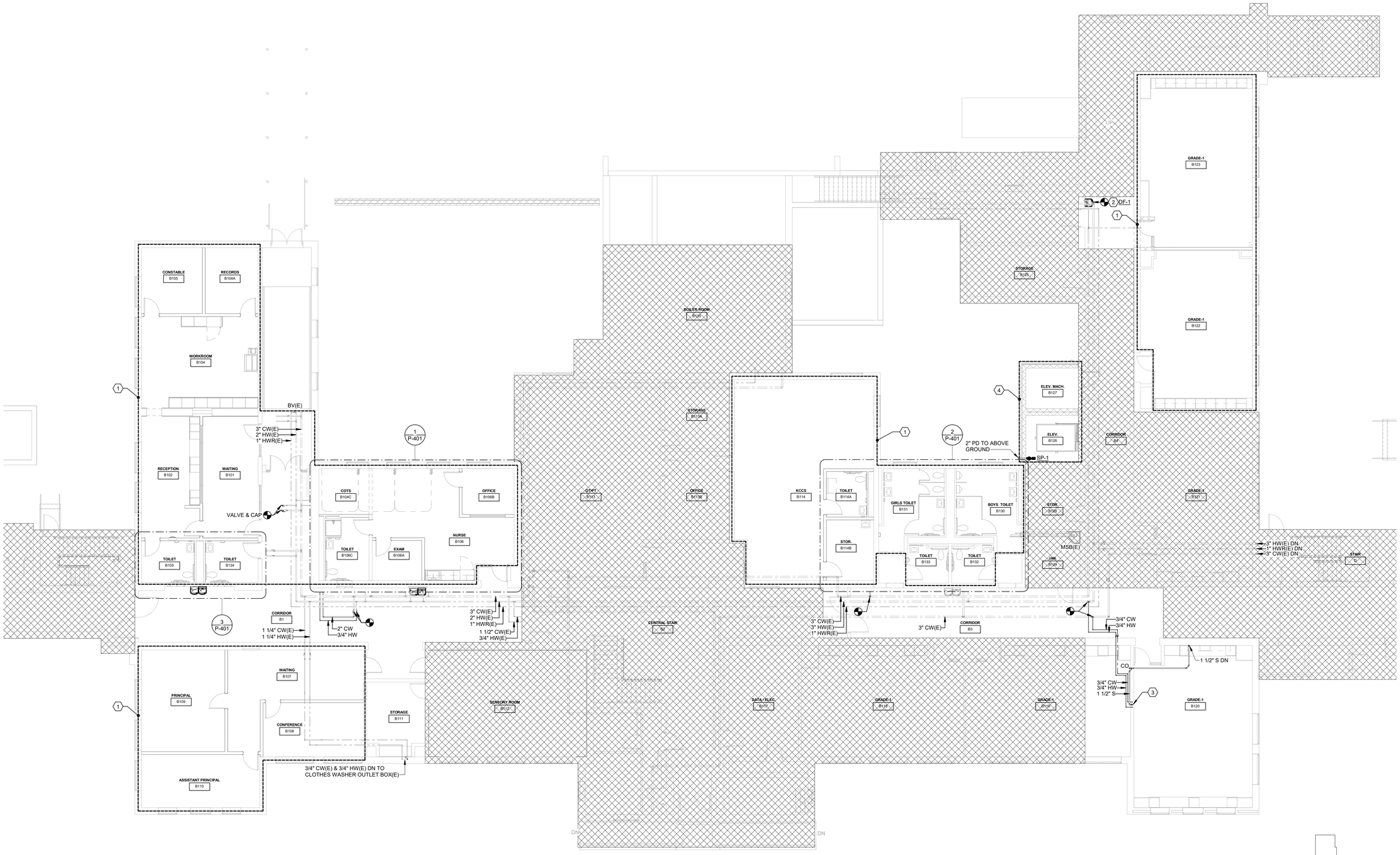
KEY NOTES:

1 EXISTING BUILDING IS FULLY SPRINKLERED. MODIFY EXISTING SPRINKLER SYSTEM AS REQUIRED PER NFPA AND LOCAL FIRE CODE TO ACCOMMODATE NEW ARCHITECTURAL LAYOUT. NEW SPRINKLER HEADS AND PIPING SHALL MATCH EXISTING SYSTEM. NEW SPRINKLER HEADS IN FINISHED CEILINGS SHALL BE QUICK RESPONSE CONCEALED TYPE WITH WHITE FINISH AND COORDINATED WITH NEW CEILINGS.

2 CONNECT FIXTURE TO EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS.

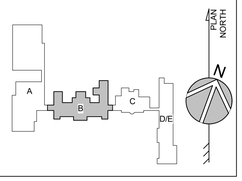
3 3/4" CW, 3/4" HW, & 1 1/2" S UP TO SK-1. REFER TO SHEET P-401 FOR CONTINUATION.

4 PROVIDE AUTOMATIC WET-TYPE SPRINKLER SYSTEM IN ELEVATOR PIT AND ELEVATOR MACHINE ROOM AS REQUIRED PER NFPA AND LOCAL FIRE CODE. CONNECT TO EXISTING BASE BUILDING SPRINKLER AND STANDPIPE SYSTEM AS REQUIRED. FIELD VERIFY AND COORDINATE TIE-IN CONNECTION WITH OWNER.



1 FIRST FLOOR PLUMBING PLAN - AREA B

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



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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR PLUMBING PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

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GENERAL NOTES:

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D. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

E. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

KEY NOTES:

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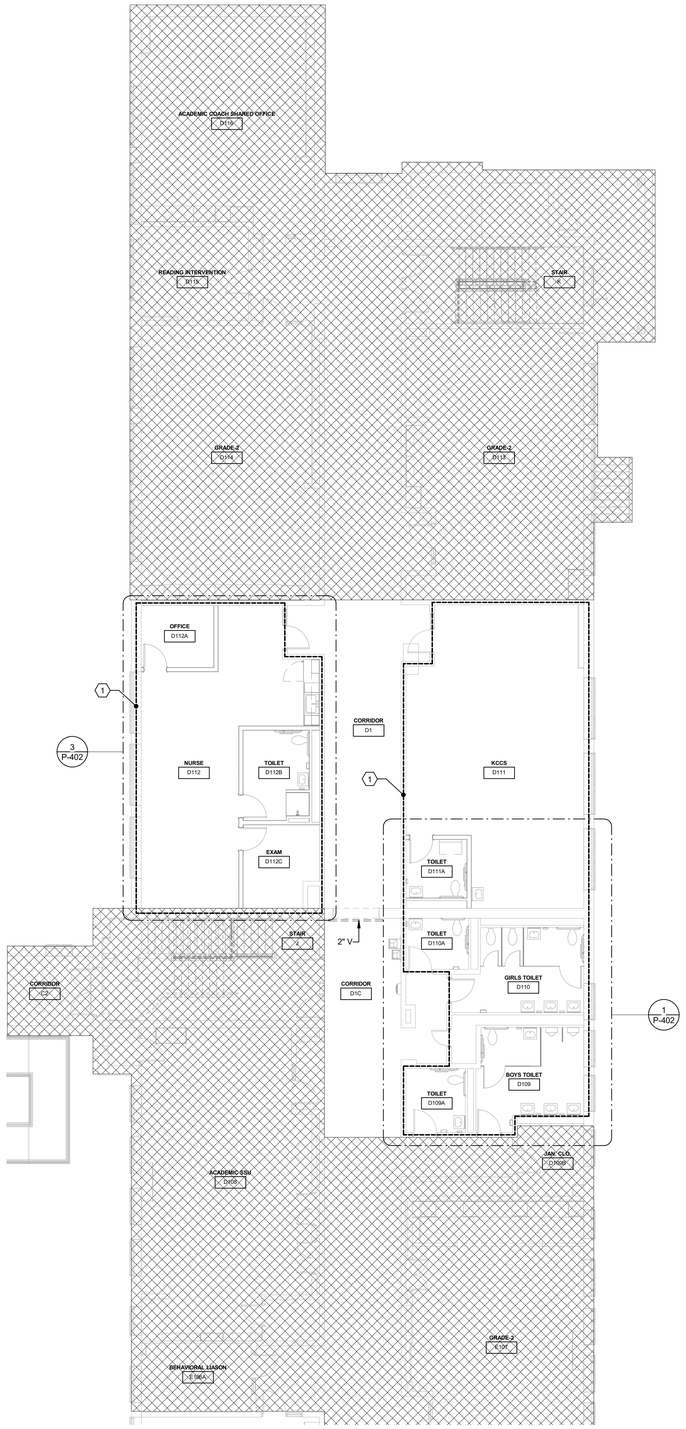
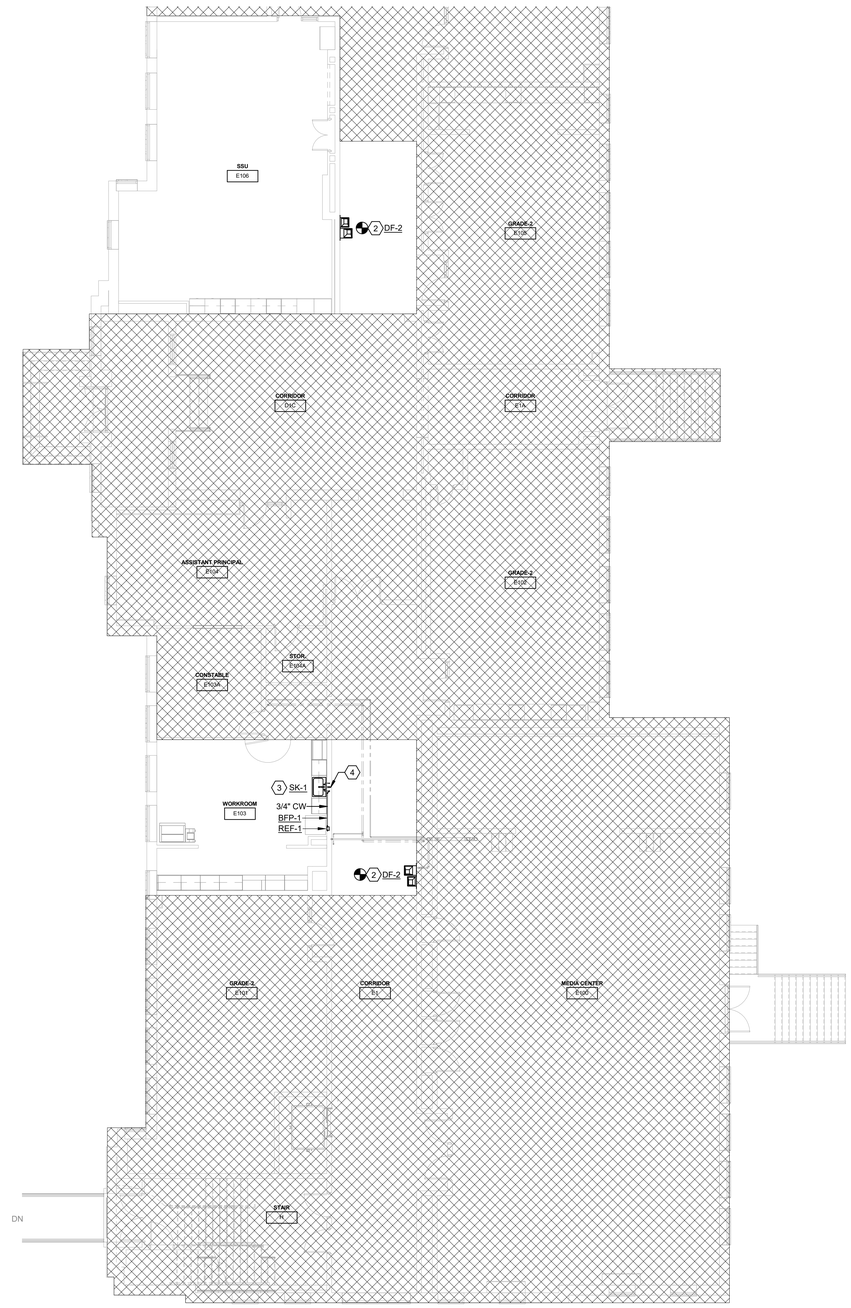
2. CONNECT FIXTURE TO EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS.
3. INSTALL ASSE 1051 AIR ADMITTANCE VALVE BELOW COUNTER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
4. 3/4" CW, 3/4" HW, & 1 1/2" S DN TO CRAWL SPACE BELOW. REFER TO SHEET P-100D/E FOR CONTINUATION.



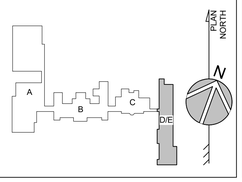
1 FIRST FLOOR PLUMBING PLAN - AREA D

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



2 FIRST FLOOR PLUMBING PLAN - AREA E

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



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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR PLUMBING PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

P-101D/E

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GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. REFER TO P-601 FOR EQUIPMENT AND ACCESSORY SCHEDULES.

C. ALL PIPING SHALL BE CONCEALED ABOVE CEILING OR WITHIN CHASE UNLESS OTHERWISE NOTED. SOME PIPING WITHIN CHASES IS SHOWN OFFSET FOR CLARITY.

D. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

E. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

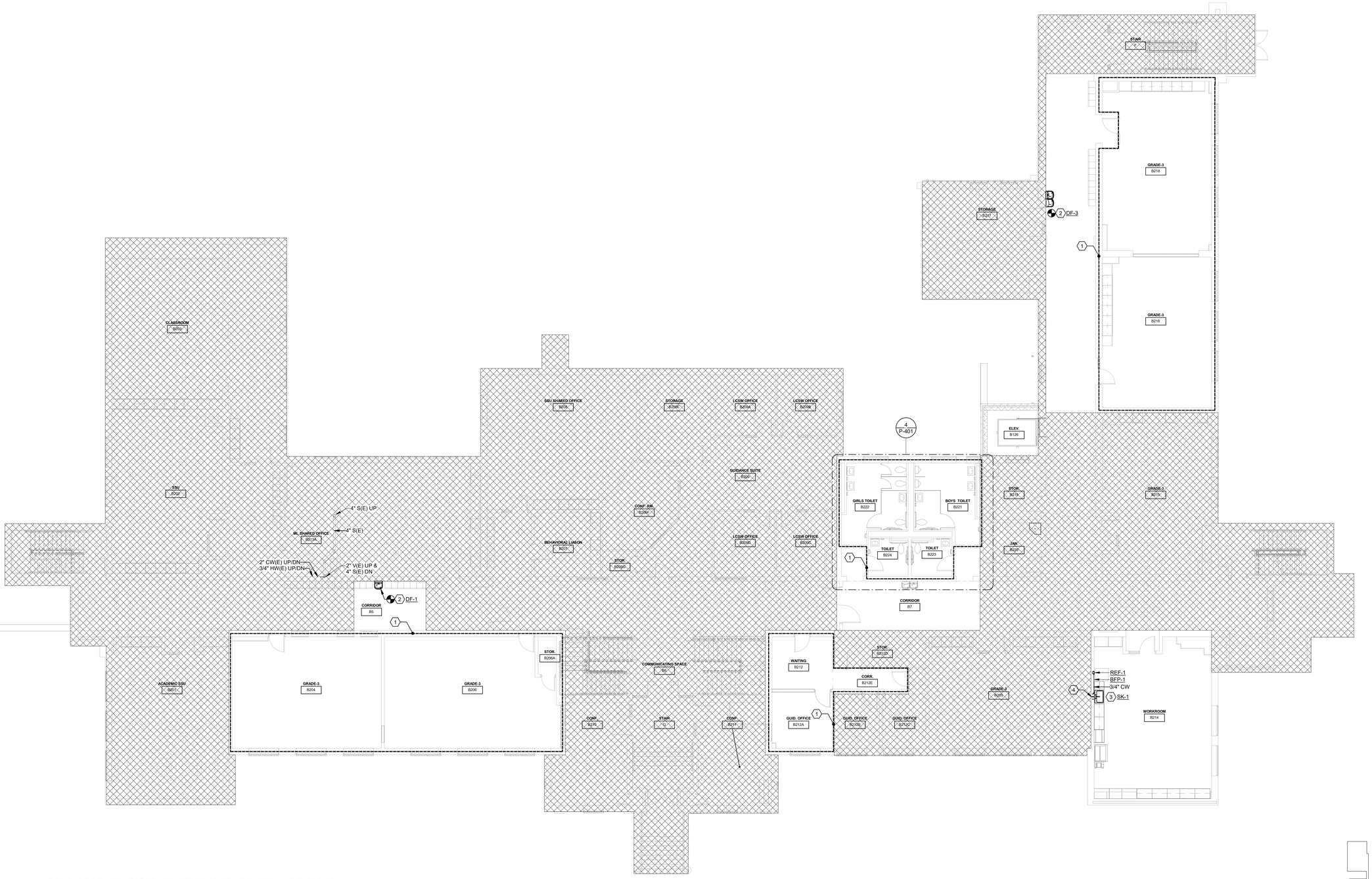
KEY NOTES:

1 EXISTING BUILDING IS FULLY SPRINKLERED. MODIFY EXISTING SPRINKLER SYSTEM AS REQUIRED PER NFPA AND LOCAL FIRE CODE TO ACCOMMODATE NEW ARCHITECTURAL LAYOUT. NEW SPRINKLER HEADS AND PIPING SHALL MATCH EXISTING SYSTEM. NEW SPRINKLER HEADS IN FINISHED CEILINGS SHALL BE QUICK RESPONSE CONCEALED TYPE WITH WHITE FINISH AND COORDINATED WITH NEW CEILINGS.

2 CONNECT FIXTURE TO EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS.

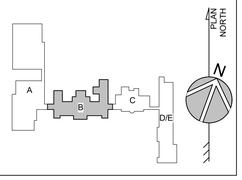
3 INSTALL ASSE 1051 AIR ADMITTANCE VALVE BELOW COUNTER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

4 3/4" CW, 3/4" HW, & 1 1/2" S DN.



1 SECOND FLOOR PLUMBING PLAN - AREA B

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



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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR PLUMBING PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

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GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

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D. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

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KEY NOTES:

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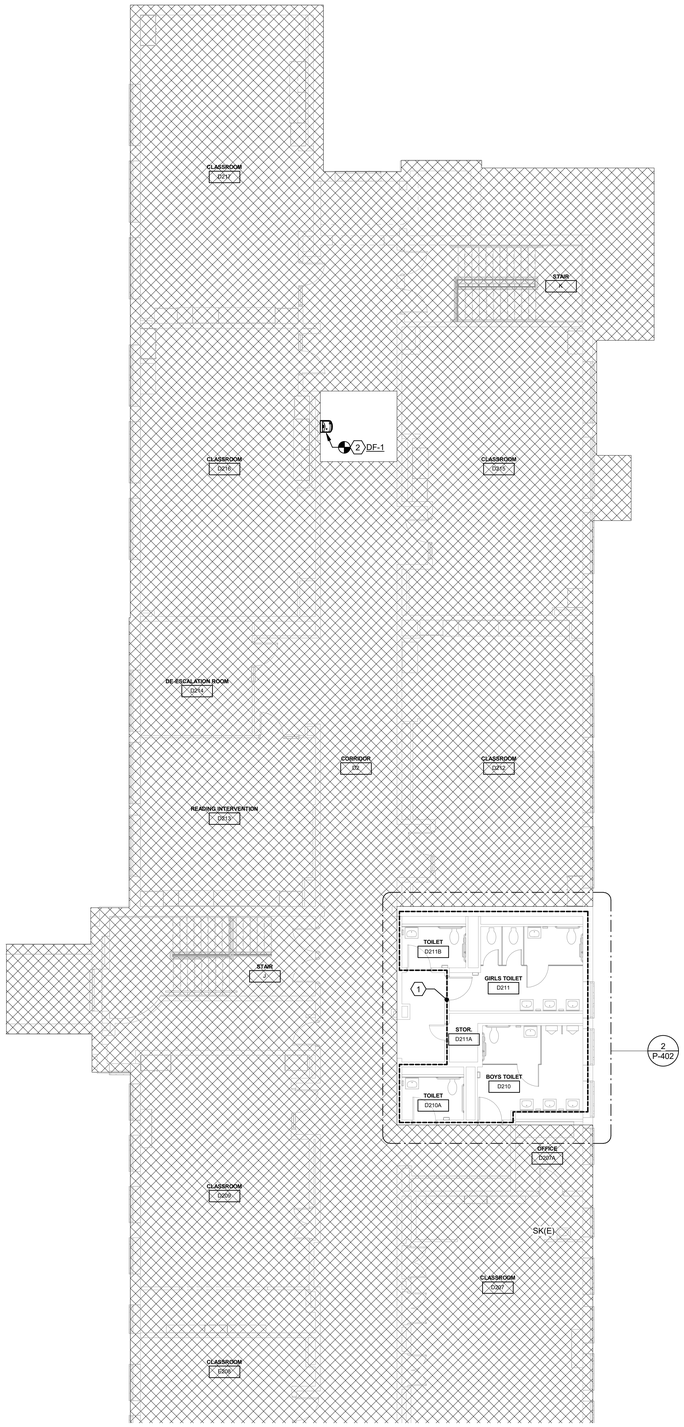
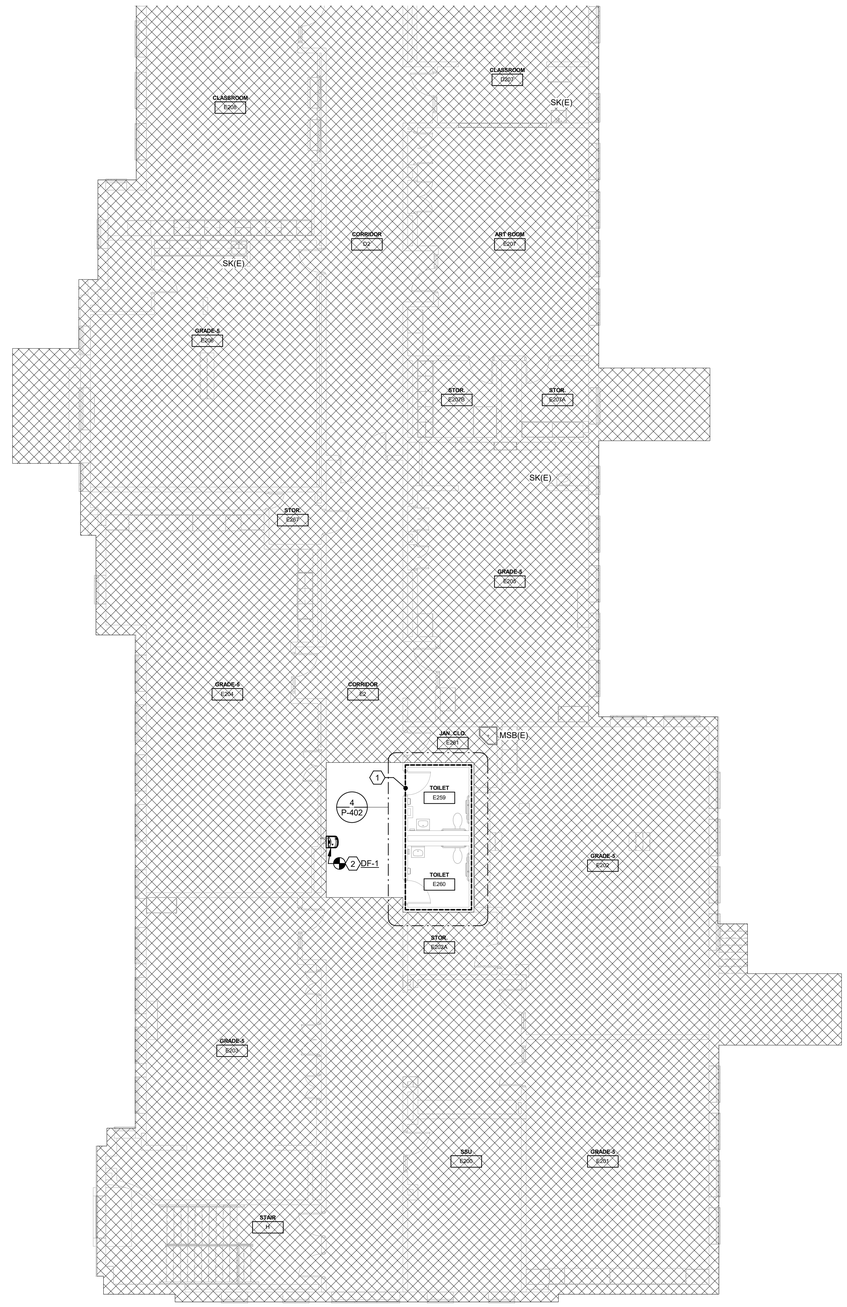
2 CONNECT FIXTURE TO EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS.



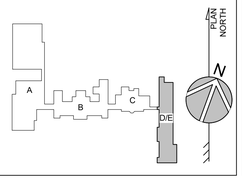
1 SECOND FLOOR PLUMBING PLAN - AREA D

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



2 SECOND FLOOR PLUMBING PLAN - AREA E

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR PLUMBING PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

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GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

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E. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

KEY NOTES:

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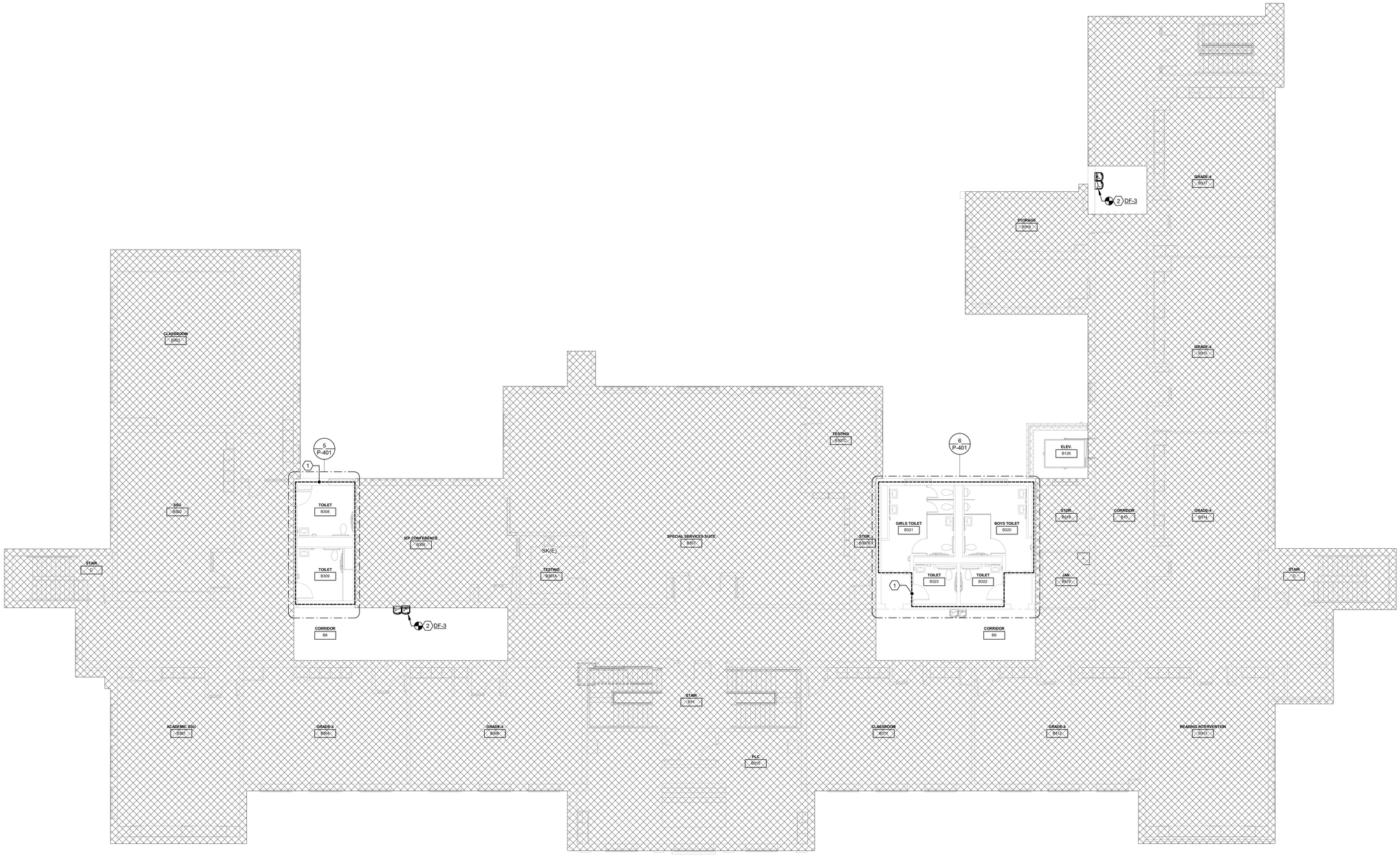
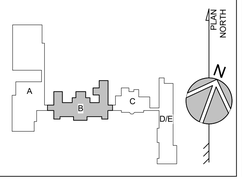
2 CONNECT FIXTURE TO EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS.



1 THIRD FLOOR PLUMBING PLAN - AREA B

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

THIRD FLOOR PLUMBING PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

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GENERAL NOTES:

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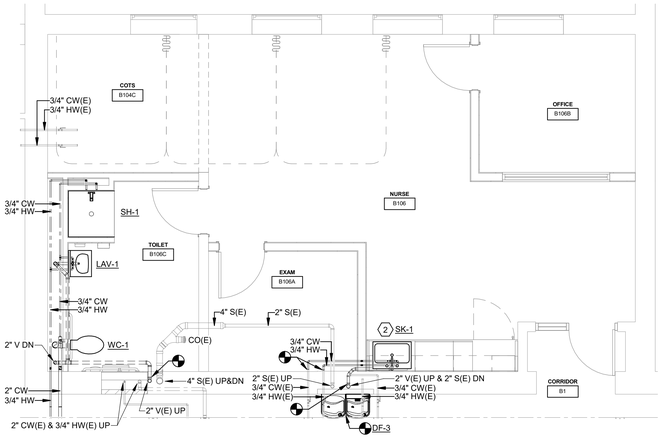
KEY NOTES:

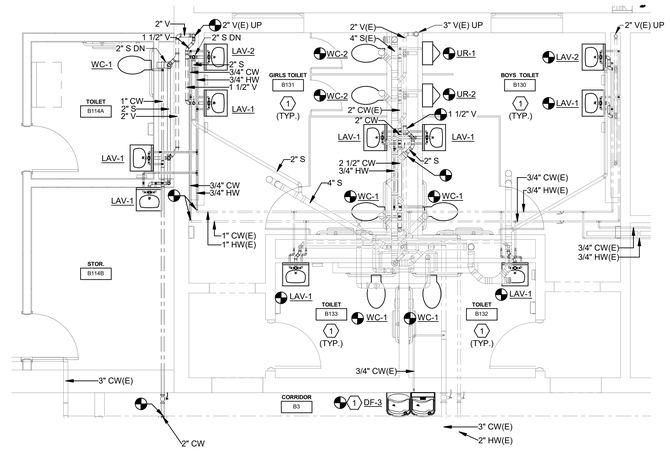
1 CONNECT FIXTURE TO EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS.

2 INSTALL ASSE 1051 AIR ADMITTANCE VALVE BELOW COUNTER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.



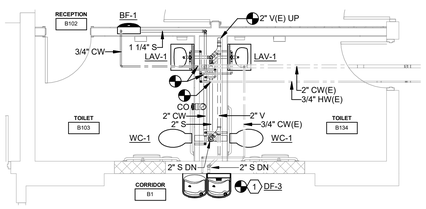
1 NURSES SUITE B106

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



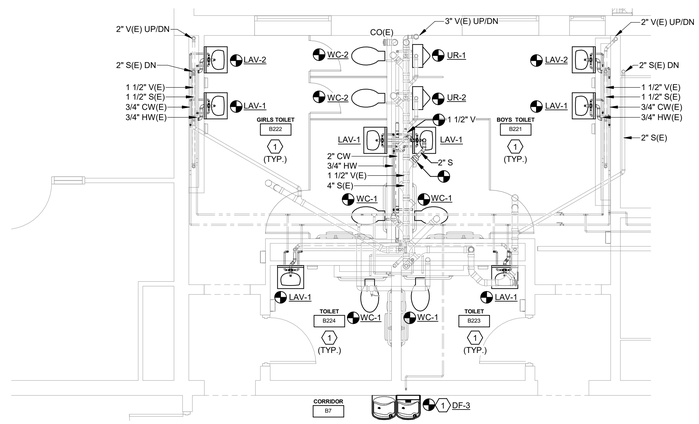
2 1ST FLOOR LARGE TOILET ROOM GROUP

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



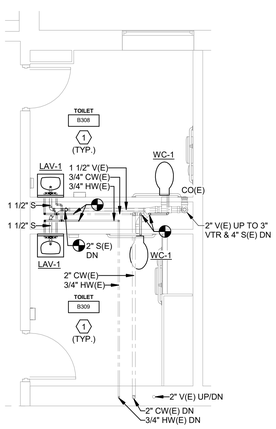
3 TOILET ROOMS B103 & B134

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



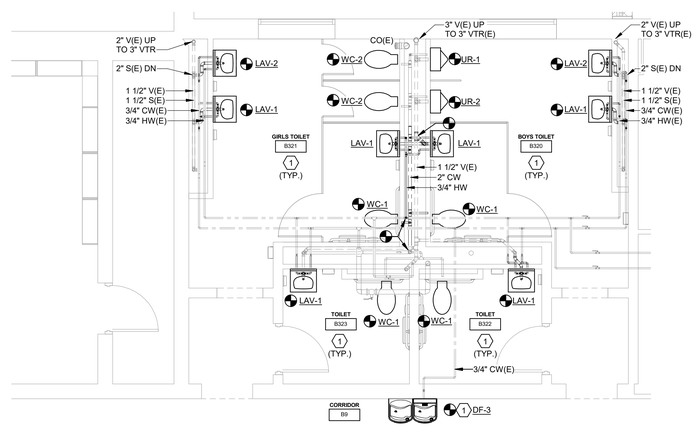
4 2ND FLOOR LARGE TOILET ROOM GROUP

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



5 TOILET ROOMS B308 AND B309

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



6 3RD FLOOR LARGE TOILET ROOM GROUP

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

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RICHARD Y. JOHNSON & SON, INC.
CONSTRUCTION MANAGER
18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

AREA B PLUMBING ENLARGED PLANS

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/4" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

PLAN NORTH

P-401

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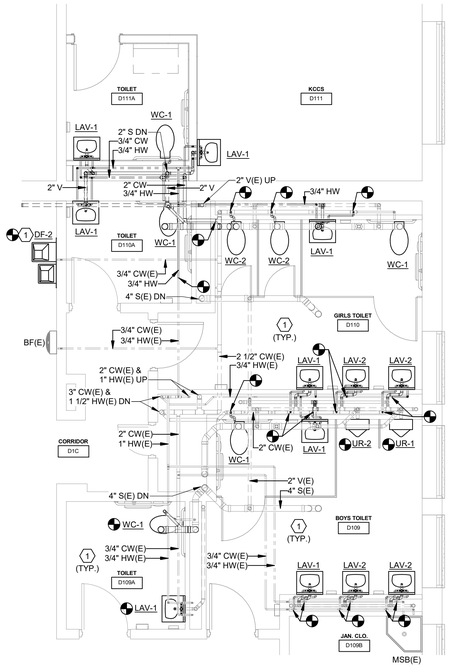
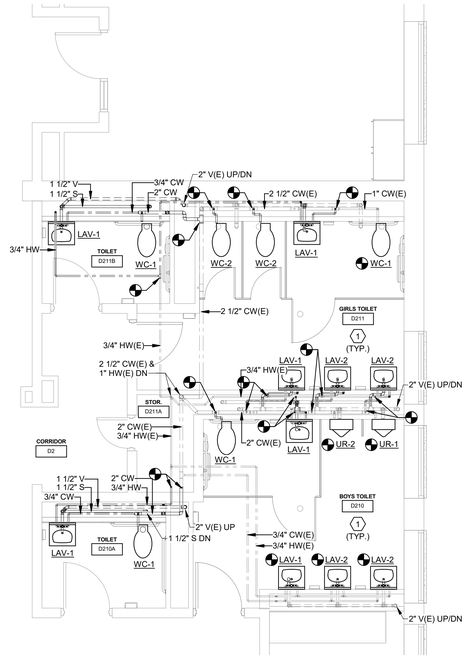


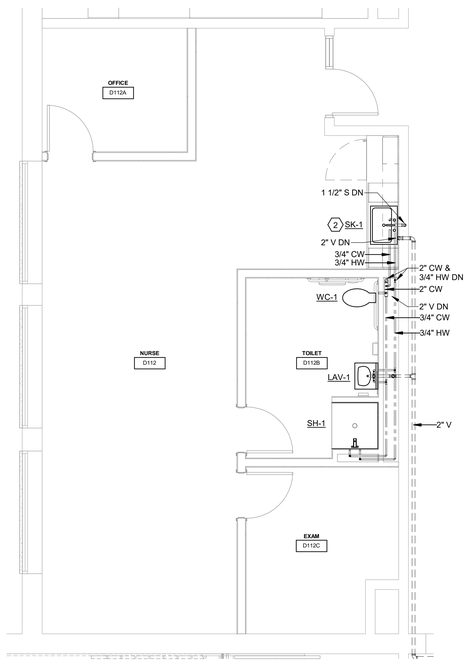
1 1ST FLOOR LARGE TOILET ROOM GROUP

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



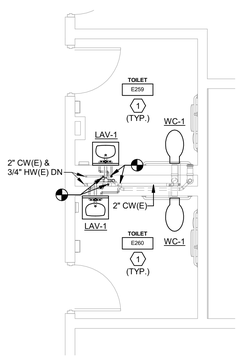
2 2ND FLOOR LARGE TOILET ROOM GROUP

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



3 NURSES SUITE D112

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



4 TOILET ROOMS E259 & E260

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

GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. REFER TO P-601 FOR EQUIPMENT AND ACCESSORY SCHEDULES.

C. ALL PIPING SHALL BE CONCEALED ABOVE CEILING OR WITHIN CHASE UNLESS OTHERWISE NOTED. SOME PIPING WITHIN CHASES IS SHOWN OFFSET FOR CLARITY.

D. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

E. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

KEY NOTES:

1 CONNECT FIXTURE TO EXISTING DOMESTIC AND SANITARY PIPE CONNECTIONS.

2 INSTALL ASSE 1051 AIR ADMITTANCE VALVE BELOW COUNTER IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

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PROJECT TITLE

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DOVER, DE 19901

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FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

AREA D/E PLUMBING ENLARGED PLANS

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/4" = 1'-0"
DRAWN BY: JMC	PROJ MGR: MEO

PLAN NORTH

P-402

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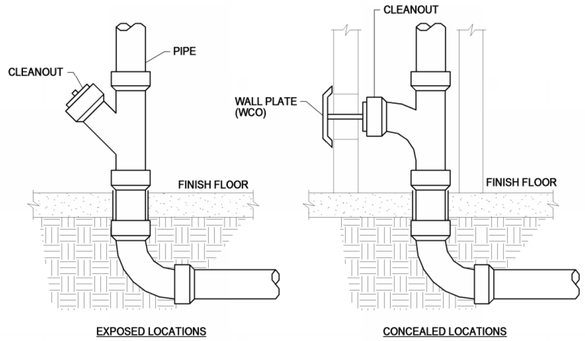
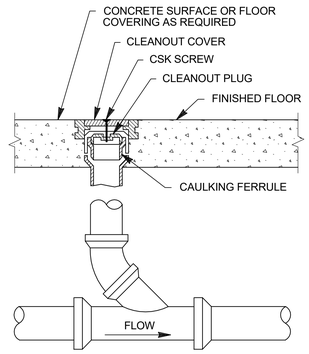


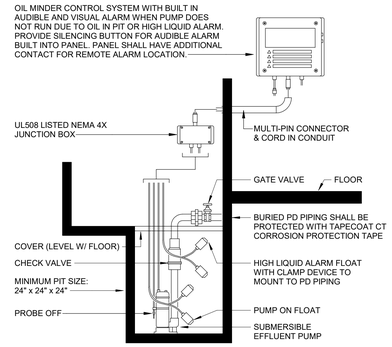
1 CLEANOUT NEAR BASE OF STACKS DETAIL

NO SCALE



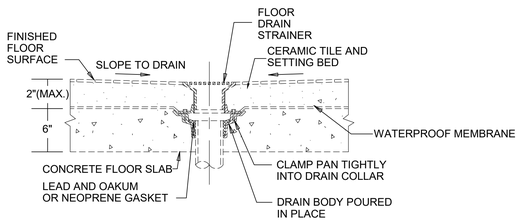
2 FLOOR CLEANOUT DETAIL

NO SCALE



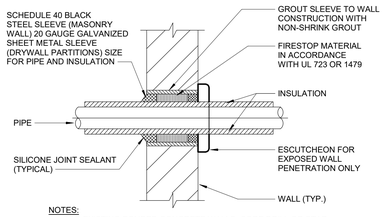
3 ELEVATOR SUMP PUMP DETAIL

NO SCALE



4 FLOOR DRAIN DETAIL

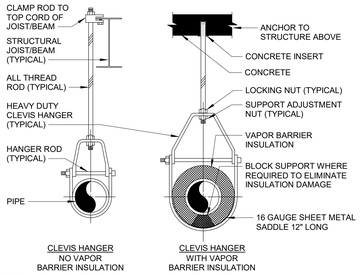
NO SCALE



NOTES:
1) FOR EXISTING POURED CONCRETE WALLS, CORE DRILL OR STAR DRILL OPENING THROUGH EXISTING WALL FOR PIPE SLEEVES AS DIRECTED.
2) GALVANIZED SLEEVE SHALL BE CAST INTO NEW CONCRETE WALL POURS.

5 INSULATED PIPE THROUGH WALL DETAIL

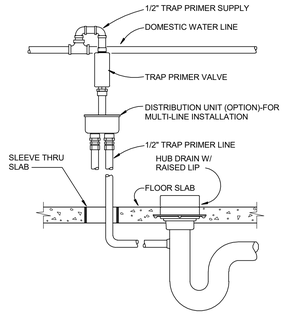
NO SCALE



NOTE:
1) ALL HANGERS FOR COPPER PIPING SHALL BE COPPER COATED.

6 PIPE HANGER DETAIL

NO SCALE



7 TRAP PRIMER DETAIL

NO SCALE

PLUMBING FIXTURE SCHEDULES

FIXTURE TAG	TYPE	CONNECTION SIZE				CAPACITY & LOAD VALUE									REMARKS
						FLOW [GPM]	PRESSURE [PSI]	CWFU	HWFU	TOTAL	DCW	FU	DHW	SAN	VT	
BF-1	BOTTLE FILLER	1/2"		1 1/2"	1 1/2"	0.8	8	0.5	0	0.5	0.5					UNIT SHALL BE AN ADA COMPLIANT WALL MOUNTED BOTTLE FILLER WITH 20-SECOND SHUT-OFF TIMER. BASIS OF DESIGN FIXTURE: ELKAY MODEL LZWSSM. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
DF-1	ELECTRIC WATER COOLER W/ BOTTLE FILLER	1/2"		1 1/2"	1 1/2"	0.8	8	0.5	0	0.5	0.5					UNIT SHALL BE AN ADA COMPLIANT WALL MOUNTED ELECTRIC WATER COOLER WITH BOTTLE FILLER AND 20-SECOND SHUT-OFF TIMER. BASIS OF DESIGN FIXTURE: ELKAY MODEL LZS8WSLP. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
DF-2	BI-LEVEL ELECTRIC WATER COOLER	1/2"		1 1/2"	1 1/2"	0.8	8	0.5	0	0.5	0.5					UNIT SHALL BE AN ADA COMPLIANT BI-LEVEL WALL MOUNTED ELECTRIC WATER COOLER WITH 20-SECOND SHUT-OFF TIMER. BASIS OF DESIGN FIXTURE: ELKAY MODEL LZSTL8LC. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
DF-3	BI-LEVEL ELECTRIC WATER COOLER W/ BOTTLE FILLER	1/2"		1 1/2"	1 1/2"	0.8	8	0.5	0	0.5	0.5					UNIT SHALL BE AN ADA COMPLIANT BI-LEVEL WALL MOUNTED ELECTRIC WATER COOLER WITH BOTTLE FILLER AND 20-SECOND SHUT-OFF TIMER. BASIS OF DESIGN FIXTURE: ELKAY MODEL LZSTL8WSLP. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
LAV-1	LAVATORY (ADA)	1/2"	1/2"	1 1/4"	1 1/4"	0.35	8	1.5	1.5	2	1					UNIT SHALL BE AN ADA AND WATERSENSE COMPLIANT, RECTANGULAR WALL-MOUNTED LAVATORY (WHITE) WITH GRID STRAINER, AND 0.35GPM DECK-MOUNTED SINGLE HOLE FAUCET (CHROME) WITH HARDWIRED ELECTRONIC INFRARED SENSOR OPERATION. THERMOSTATIC MIXING VALVE SHALL BE ASSE 1070 COMPLIANT W/ SETPOINT AT 105°F, SIMILAR TO LAWLER MODEL 570 (TMV-1). PROVIDE MCGUIRE PW2125 PROWRAP INSULATION KIT AND MCGUIRE BV2165 CONVERTIBLE 1/4 TURN SUPPLY STOPS. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. BASIS OF DESIGN: LAVATORY: KOHLER MODEL K-2031; FAUCET: SLOAN OPTIMA MODEL EAF-200.
LAV-2	LAVATORY	1/2"	1/2"	1 1/4"	1 1/4"	0.35	8	1.5	1.5	2	1					UNIT SHALL BE A WATER SENSE COMPLIANT, RECTANGULAR WALL-MOUNTED LAVATORY (WHITE) WITH GRID STRAINER, AND 0.35GPM DECK-MOUNTED SINGLE HOLE FAUCET (CHROME) WITH HARDWIRED ELECTRONIC INFRARED SENSOR OPERATION. THERMOSTATIC MIXING VALVE SHALL BE ASSE 1070 COMPLIANT W/ SETPOINT AT 105°F, SIMILAR TO LAWLER MODEL 570 (TMV-1). PROVIDE MCGUIRE PW2125 PROWRAP INSULATION KIT AND MCGUIRE BV2165 CONVERTIBLE 1/4 TURN SUPPLY STOPS. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. BASIS OF DESIGN: LAVATORY: KOHLER MODEL K-2031; FAUCET: SLOAN OPTIMA MODEL EAF-200.
REF-1	ICE MAKER OUTLET BOX	1/2"				0.5	8									UNIT SHALL BE AN ICE MAKER WATER OUTLET BOX AND ASSE 1024 COMPLIANT BACKFLOW PREVENTER. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. REFRIGERATOR WITH ICE MAKER TO BE PROVIDED BY OWNER.
SH-1	SHOWER	3/4"	3/4"	2"	1 1/4"	2.5	20	1.5	1.5	2	1					UNIT SHALL BE A COMBINATION STANDARD (POLISHED CHROME) COMBINATION 1.75GPM SHOWERHEAD AND HAND SHOWER UNIT WITH HOSE. PROVIDE SINGLE LEVER HANDLE ANTI-SCALD BALANCED PRESSURE AND THERMOSTATIC SHOWER VALVE WITH INTEGRAL SERVICE STOPS (110°F SETPOINT), TRANSFER VALVE, LEVER HANDLE TRIM, IN-LINE VACUUM BREAKER, SLIDE BAR, SUPPLY MOUNT, AND 1.75GPM FLOW RESTRICTOR. BASIS OF DESIGN: DELTA. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT.
SK-1	WORKROOM SINK	3/4"	3/4"	1 1/2"	1 1/2"	1.5	8	1.5	1.5	2	2					UNIT SHALL BE A SINGLE BOWL, UNDER MOUNT, STAINLESS STEEL SINK WITH CENTER REAR DRAIN AND SINGLE HOLE GOOSENECK FAUCET. PROVIDE WITH 3/4HP INSINKERATOR MODEL EVOLUTION COMPACT GARBAGE DISPOSAL. REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE AND EQUIPMENT SELECTION. BASIS OF DESIGN: FIXTURE: ELKAY MODEL ECTSRAD25226TBG1; FAUCET HANSGROHE TALIS N MODEL.
SK-2	ART ROOM SINK	3/4"	3/4"	1 1/2"	1 1/2"	1.5	8	1.5	1.5	2	2					UNIT SHALL BE A SINGLE BOWL, UNDER MOUNT, STAINLESS STEEL SINK WITH CENTER REAR DRAIN, SOLIDS INTERCEPTOR, AND SINGLE HOLE GOOSENECK FAUCET. REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE AND EQUIPMENT SELECTION. BASIS OF DESIGN: FIXTURE: ELKAY MODEL ECTSRAD25226TBG1; FAUCET HANSGROHE TALIS N MODEL.
UR-1	URINAL (ADA)	3/4"		2"	1 1/2"	25	35	5	0	5	2					UNIT SHALL BE AN ADA AND WATER SENSE COMPLIANT, WALL-HUNG, VITREOUS CHINA, TOP SPUD, 0.125GPF WASHOUT URINAL (WHITE) WITH EXTENDED RIM AND 0.125GPF AUTOMATIC INFRARED SENSOR ACTIVATED, BATTERY-POWERED, PISTON TYPE FLUSH VALVE W/ OVERRIDE (CHROME FINISH). REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. BASIS OF DESIGN FIXTURE: KOHLER "BARDON" MODEL K-4991-ET-0; FLUSHVALVE: KOHLER "TRIPOINT" MODEL K-10949-CP.
UR-2	URINAL	3/4"		2"	1 1/2"	25	35	5	0	5	2					UNIT SHALL BE A WATER SENSE COMPLIANT, WALL-HUNG, VITREOUS CHINA, TOP SPUD, 0.125GPF WASHOUT URINAL (WHITE) WITH EXTENDED RIM AND 0.125GPF AUTOMATIC INFRARED SENSOR ACTIVATED, BATTERY-POWERED, PISTON TYPE FLUSH VALVE W/ OVERRIDE (CHROME FINISH). REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. BASIS OF DESIGN FIXTURE: KOHLER "BARDON" MODEL K-4991-ET-0; FLUSHVALVE: KOHLER "TRIPOINT" MODEL K-10949-CP.
WC-1	WATER CLOSET (ADA)	1"		4"	2"	25	35	10	0	10	4					UNIT SHALL BE AN ADA AND WATER SENSE COMPLIANT, WALL-MOUNTED, VITREOUS CHINA, ELONGATED, TOP SPUD, 1.28GPF SIPHON JET WATER CLOSET (WHITE) WITH HEAVY DUTY OPEN FRONT SEAT LESS COVER AND 1.28GPF AUTOMATIC INFRARED SENSOR ACTIVATED PISTON TYPE FLUSH VALVE (CHROME FINISH). REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. BASIS OF DESIGN FIXTURE: KOHLER "KINGSTON ULTRA" MODEL K-84325-0; SEAT: KOHLER MODEL K-4731-GC; FLUSHVALVE: KOHLER "TRIPOINT" MODEL K-7531-CP.
WC-2	WATER CLOSET	1"		4"	2"	25	35	10	0	10	4					UNIT SHALL BE A WATER SENSE COMPLIANT, WALL-MOUNTED, VITREOUS CHINA, ELONGATED, TOP SPUD, 1.28GPF SIPHON JET WATER CLOSET (WHITE) WITH HEAVY DUTY OPEN FRONT SEAT LESS COVER AND 1.28GPF AUTOMATIC INFRARED SENSOR ACTIVATED PISTON TYPE FLUSH VALVE (CHROME FINISH). REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. BASIS OF DESIGN FIXTURE: KOHLER "KINGSTON ULTRA" MODEL K-84325-0; SEAT: KOHLER MODEL K-4731-GC; FLUSHVALVE: KOHLER "TRIPOINT" MODEL K-7531-CP.

PLUMBING EQUIPMENT SCHEDULE

TAG	LOCATION	DESCRIPTION	CAPACITY	ELECTRICAL VOLTS	ELECTRICAL PHASE	ELECTRICAL FREQ. (Hz)	BASIS OF DESIGN	REMARKS	NOTES
SP-1	ELEVATOR	ELEVATOR SUMP PUMP	50 GPM	115	1	60	STANCOR MODEL SE-50 WITH CONTROLS	UNIT SHALL BE SIMPLEX ELEVATOR PIT SUMP PUMP RATED 50 GPM @ 20' TDH, ½ hp, 115/1/60 WITH 2" DISCHARGE, CONTROLS, FLOATS, WATER ALARM. BASIN SHALL BE 24"x24"x24" DEEP.	

PIPE ACCESSORY SCHEDULE

EQUIPMENT	PROTOTYPE	ACCESSORIES/OPTIONS
BFP-1	BACKFLOW PREVENTER	UNIT SHALL BE AN ASSE 1024 COMPLIANT DUAL CHECK BACKFLOW PREVENTER.
TMV-1	THERMOSTATIC MIXING VALVE	UNIT SHALL BE AN ASSE 1070 COMPLIANT THERMOSTATIC MIXING VALVE WITH A MAX. PRESS. DROP OF 5 PSI @ 4GPM AND 105°F SETPOINT.

NOTES:
1. REFER TO THE MANUFACTURER'S DOCUMENTATION AND PIPING DIAGRAMS FOR INSTALLATION INSTRUCTIONS.

WATER HAMMER ARRESTER SCHEDULE

P.D.I. UNIT RATING	A	B	C	D	E	F
FIXTURE UNIT RATING	1-11	12-22	33-60	61-113	114-154	155-301

NOTES:
1. WATER HAMMER ARRESTORS SHALL BE PROVIDED FOR QUICK CLOSING VALVES, I.E. FLUSH VALVES AND AUTOMATIC FAUCETS/DISPENSERS IN ACCORDANCE WITH IPC SECTION 604.9 "WATER HAMMER" AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

BECKER MORGAN GROUP

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FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

PLUMBING DETAILS AND SCHEDULES

ISSUE BLOCK

Mark	Date	Description

PROJECT NO: 2021101.00
DATE: 09.13.2024
SCALE: As indicated
DRAWN BY: JMC PROJ MGR: MEO

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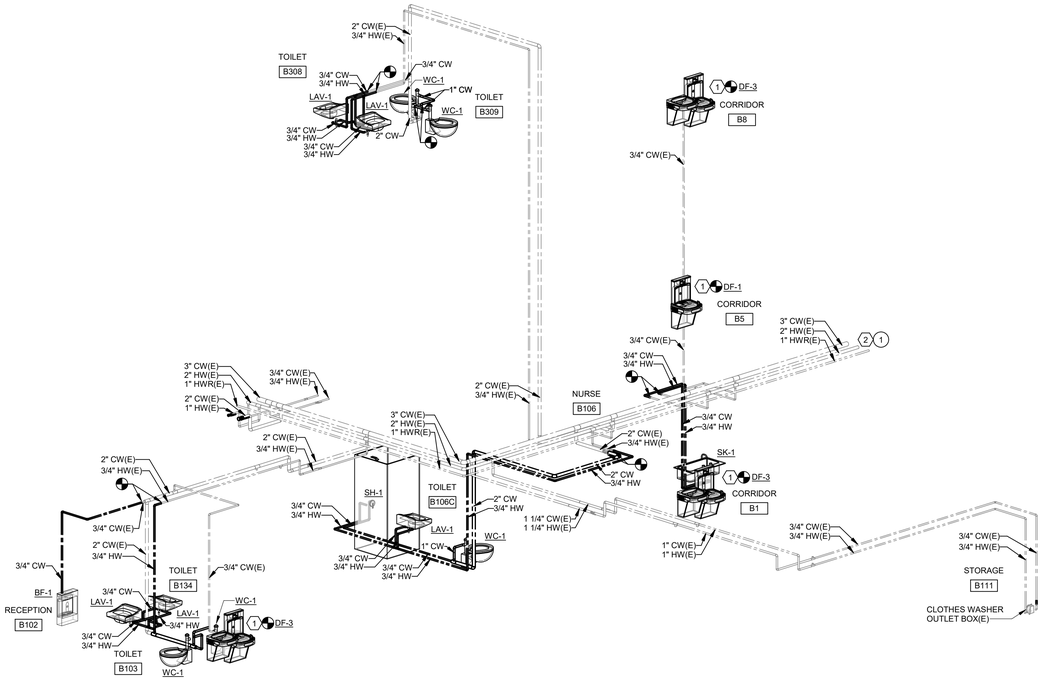
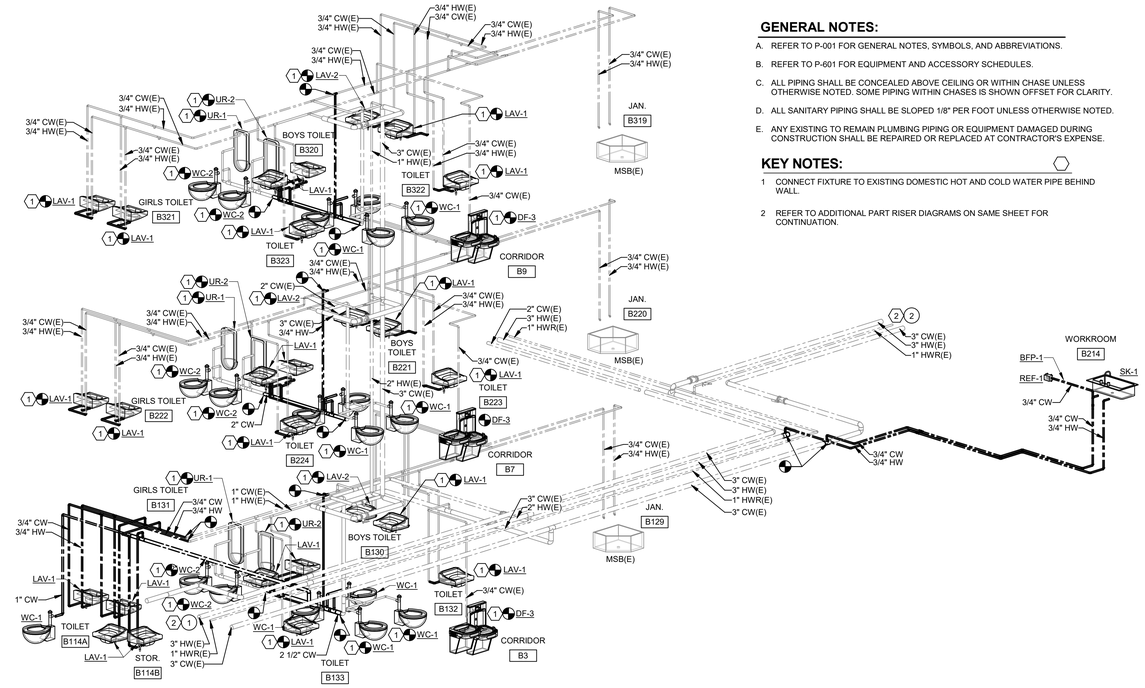


1 DOMESTIC RISER DIAGRAM - AREA B - EAST

NO SCALE



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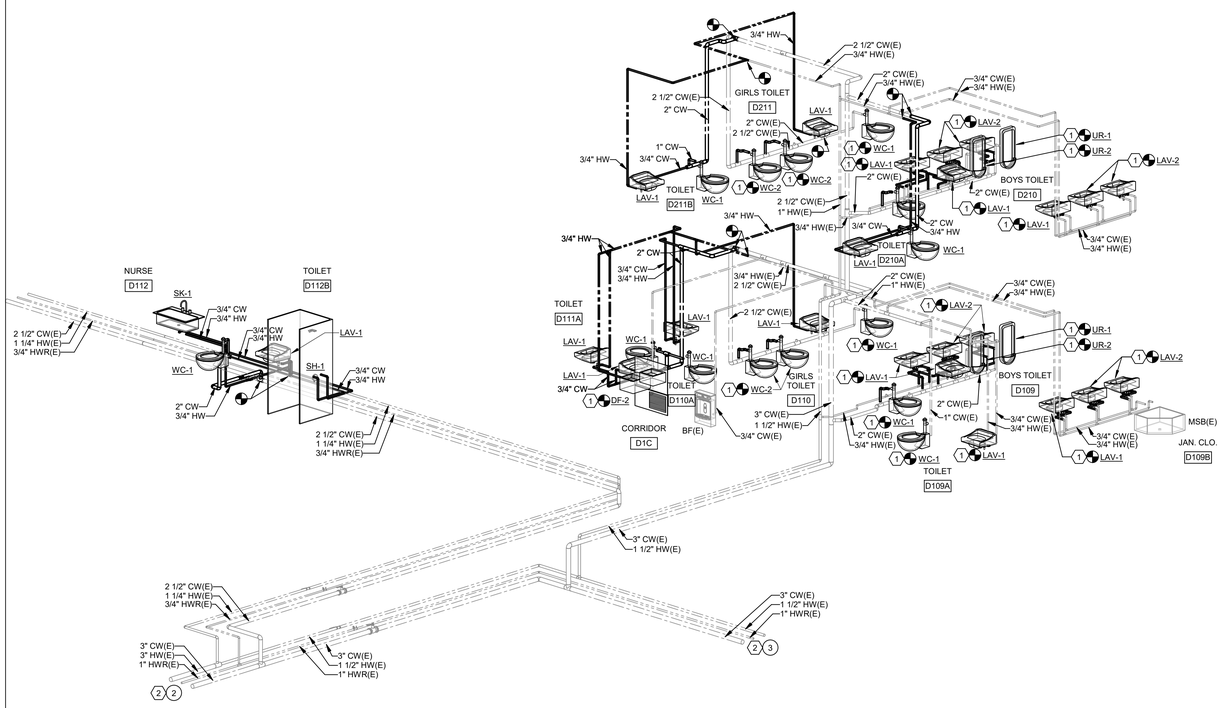
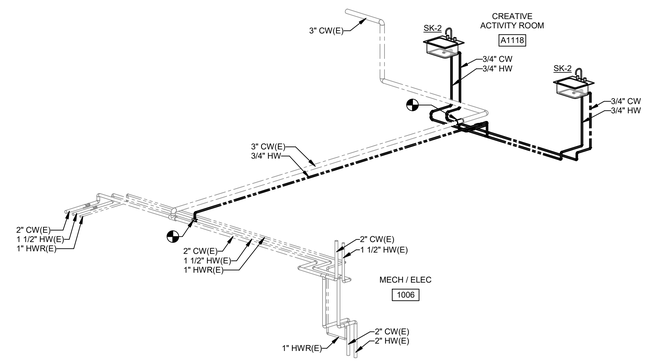


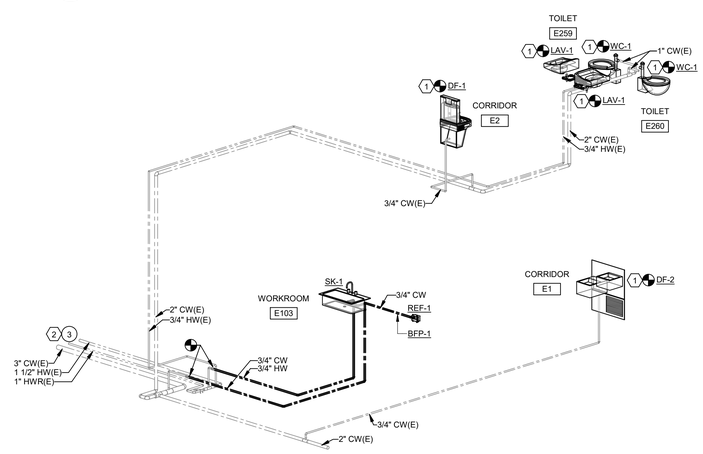
3 DOMESTIC RISER DIAGRAM - AREA D

NO SCALE



4 DOMESTIC RISER DIAGRAM - AREA A

NO SCALE



5 DOMESTIC RISER DIAGRAM - AREA E

NO SCALE

GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. REFER TO P-601 FOR EQUIPMENT AND ACCESSORY SCHEDULES.

C. ALL PIPING SHALL BE CONCEALED ABOVE CEILING OR WITHIN CHASE UNLESS OTHERWISE NOTED. SOME PIPING WITHIN CHASES IS SHOWN OFFSET FOR CLARITY.

D. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

E. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

KEY NOTES:

1 CONNECT FIXTURE TO EXISTING DOMESTIC HOT AND COLD WATER PIPE BEHIND WALL.

2 REFER TO ADDITIONAL PART RISER DIAGRAMS ON SAME SHEET FOR CONTINUATION.

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

PLUMBING DOMESTIC RISER DIAGRAMS

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	
DRAWN BY: JMC	PROJ MGR: MEO

P-601

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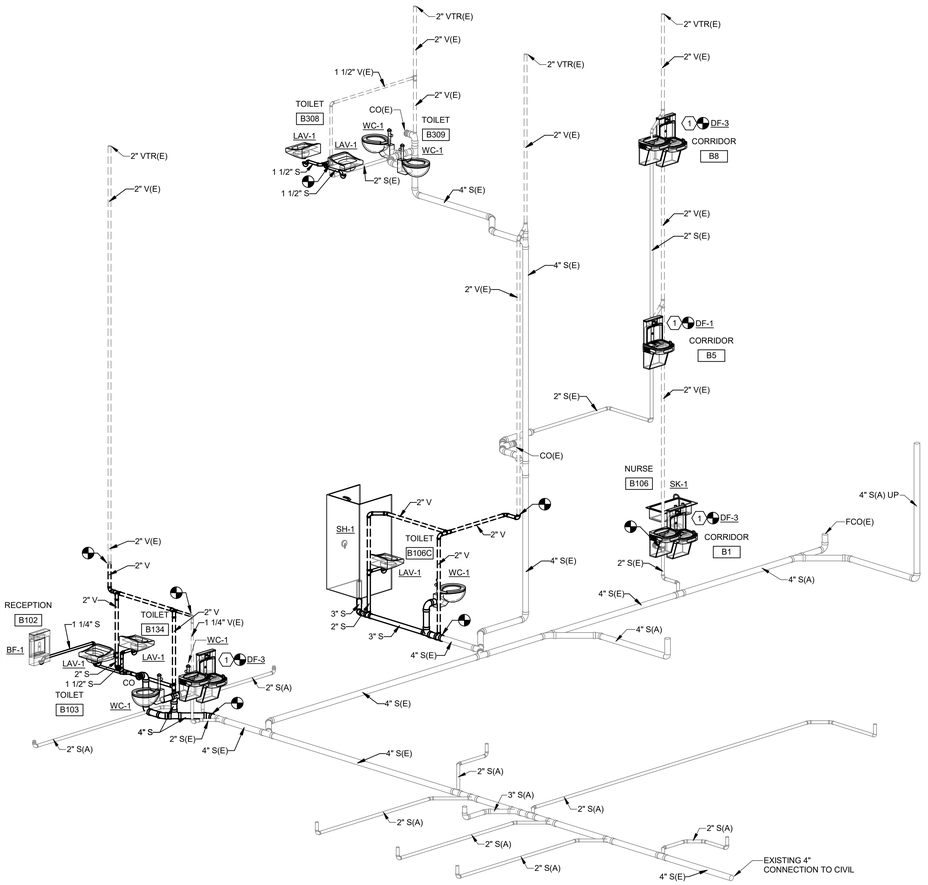
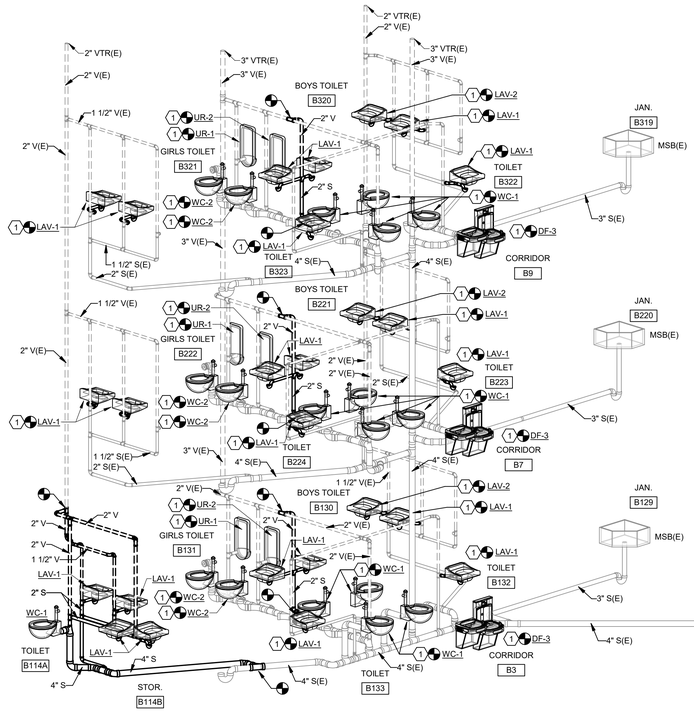


1 SANITARY RISER DIAGRAM - AREA B - EAST

NO SCALE



2 SANITARY RISER DIAGRAM - AREA B - WEST

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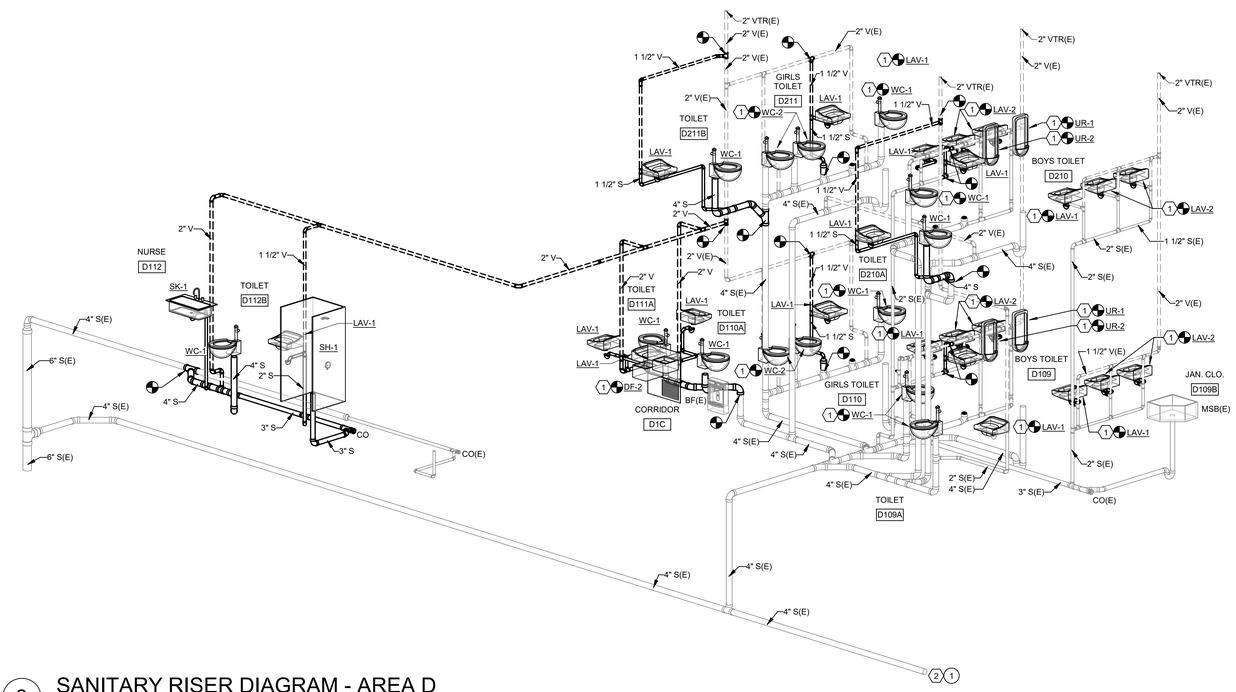

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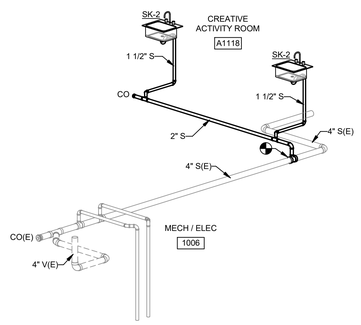

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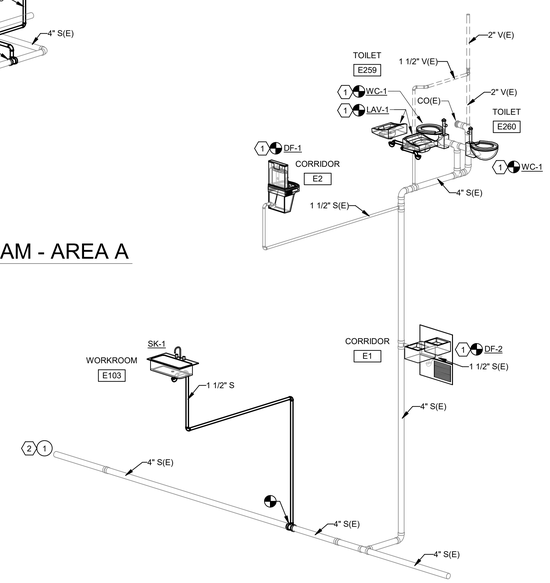
NO SCALE



5 SANITARY RISER DIAGRAM - AREA E

NO SCALE

GENERAL NOTES:

A. REFER TO P-001 FOR GENERAL NOTES, SYMBOLS, AND ABBREVIATIONS.

B. REFER TO P-601 FOR EQUIPMENT AND ACCESSORY SCHEDULES.

C. ALL PIPING SHALL BE CONCEALED ABOVE CEILING OR WITHIN CHASE UNLESS OTHERWISE NOTED. SOME PIPING WITHIN CHASES IS SHOWN OFFSET FOR CLARITY.

D. ALL SANITARY PIPING SHALL BE SLOPED 1/8" PER FOOT UNLESS OTHERWISE NOTED.

E. ANY EXISTING TO REMAIN PLUMBING PIPING OR EQUIPMENT DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED OR REPLACED AT CONTRACTOR'S EXPENSE.

KEY NOTES:

1 CONNECT FIXTURE TO EXISTING SANITARY WASTE AND/OR VENT PIPE BEHIND WALL.

2 REFER TO ADDITIONAL PART RISER DIAGRAMS ON SAME SHEET FOR CONTINUATION.

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ISSUED: 09/13/2024

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ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
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P-602

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MECHANICAL GENERAL NOTES

A. COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC., PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE CONTRACTOR.
B. THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC., OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.
C. WHERE WORK IS REQUIRED ABOVE EXISTING LAY-IN, PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL CEILING OR TILE AND GRID MEMBERS NECESSARY TO PERFORM HIS WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.
D. ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.
E. COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS.
F. PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNER'S STANDARDS) EXISTING WALLS, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.
G. OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, STATE OF DELAWARE, ETC.)
H. CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING, HVAC AND ELECTRICAL WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION THEN FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE ENGINEERS TO REVIEW THE ROUTING.
I. IF AREA OF CONSTRUCTION HAS A POST TENSION FLOOR SLAB. CONTRACTOR SHALL USE ULTRA SOUND OR OTHER APPROVED METHODS TO SURVEY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND ALL FLOOR PENETRATIONS.
J. WHERE FIRE PROOFING IS SPRAYED ON EXISTING STRUCTURE ALL EXISTING CONDUITS, WATER, HYDRONIC, STEAM, CHILLED WATER, FIRE PROTECTION LINES, MED GAS, ETC. SHALL BE LOWERED TO BE BELOW FULL THICKNESS OF FIRE PROOFING WITH NO INTERFERENCE.
K. ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL BE APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS.
L. ALL WORK REQUIRING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES.
M. ALL DUCTWORK, PIPING, CONDUITS, ETC. IN ROOMS WITH CEILINGS SHALL BE ABOVE CEILING EXCEPT AS NOTED.
N. INSTALL AIR VENTS AT HIGH POINTS IN PIPING AND DRAINS IN LOW POINTS. USE CARE TO AVOID FREEZING OF EXTERIOR VENTS.
O. LOCATIONS OF PIPING, DUCTS AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.
P. ALL OFFSETS IN DUCTS AND PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.
Q. COORDINATE ALL HVAC WORK WITH ELECTRICAL, PLUMBING AND OTHER TRADES TO AVOID INTERFERENCE WITH PIPING, DUCTS, CONDUIT AND OTHER EQUIPMENT.
R. INSTALL ALL PIPING, DUCTWORK AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTION. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECOMMENDED ACCESS AND SERVICE CLEARANCES FOR ALL EQUIPMENT.
S. SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH WALLS, FLOORS AND ROOF. PROVIDE FIRE STOPPING IN FIRE PARTITION.
T. SEAL ALL NEW DUCTWORK JOINTS WITH UNITED MCGILL, IRONGRIP 6O1 OR EQUAL WATER BASED SEALANT.
U. ALL MOTOR DRIVEN EQUIPMENT SHALL BE INSTALLED WITH FLEXIBLE CONNECTIONS TO DUCTWORK, PIPING, ETC., UNLESS OTHERWISE NOTED.
V. THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK.
W. WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE DOCUMENTS.
X. DOUBLE WIDTH TURNING VANES SHALL BE INSTALLED IN ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ELBOWS. TURNING VANES NOT REQUIRED FOR KITCHEN EXHAUSTS.
Y. ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.
Z. DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT USED AS BASIS OF DESIGN SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.
AA. VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY ALL SUCH ITEMS SHALL NOT BE LOCATED AN UNREASONABLE DISTANCE ABOVE THE CEILINGS. IN GENERAL ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.
BB. ALL MANHOLES, VAULTS AND SIMILAR UNDERGROUND STRUCTURES SHALL HAVE THE TOP ELEVATION SET FLUSH WITH FINISHED GRADE UNLESS SPECIFICALLY NOTED OTHERWISE.
CC. WHEN RUNNING ANY TYPE OF PIPING BELOW A FOOTER, OR IN THE ZONE OF INFLUENCE THE PIPING SHALL BE BACKFILLED WITH CEMENTITIOUS FLOWABLE FILL PER SPECIFICATIONS. WHENEVER POSSIBLE, LOCATE PIPING OUTSIDE OF THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A 45 DEGREE ANGLE PROJECTING DOWN FROM THE BOTTOM EDGE OF THE FOOTER OF ALL SIDES OF THE FOOTER. ADDITIONALLY, GREASE TRAPS, MANHOLES, VAULTS AND OTHER UNDERGROUND STRUCTURES SHALL BE HELD AWAY FROM BUILDING WALLS FAR ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.
DD. WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.
EE. THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAIN GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES, STEAM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT AND HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL SAID WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

MECHANICAL DEMOLITION NOTES

A. PRIOR TO DEMOLITION, THE TAB CONTRACTOR SHALL MEASURE EXISTING AIRFLOWS FOR ROOTOP MECHANICAL EQUIPMENT SERVING THE AREAS OF SCOPE. REFER TO M-002 FOR EXISTING ROOFTOP EQUIPMENT LOCATIONS.
B. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR AREAS IN WHICH THE CEILING IS REMAINING. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING CEILING AS REQUIRED AND REINSTALLATION. TEMPORARILY SUPPORT LIGHTS, DIFFUSERS, CEILING ETC. REPLACE BROKEN CEILING TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. FIELED VERIFY EXACT REQUIREMENTS.
C. DURING SPRINKLER SYSTEM OUTAGES THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTAGES.
D. ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL RATED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MAINTAIN RATING.
E. ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.
F. HEAVY DASHED LINES INDICATE ITEMS FOR REMOVAL (UON) AND LIGHT SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
G. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, REFRIGERANTS ETC. (INDICATED FOR DEMOLITION) WITH THE OWNER.
H. ADHERE TO ALL ENVIRONMENTAL REGULATIONS AND GUIDELINES CONCERNING REFRIGERANTS, EMISSIONS, AND WASTE DISPOSAL. UTILIZE ENVIRONMENTALLY FRIENDLY PRACTICES AND MATERIALS WHENEVER POSSIBLE.
I. ALL OUTAGES SHALL BE SCHEDULED THROUGH THE FCPS PROJECT REPRESENTATIVE FOR PROPER COORDINATION. A REQUEST FOR AN OUTAGE SHALL BE SUBMITTED IN WRITING A MINIMUM OF TWO WEEKS IN ADVANCE.

HAZARDOUS MATERIAL NOTES

A. THE CONTRACTOR IT IS HEREBY ADVISED THAT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THIS BUILDING(S). ANY WORKER, OCCUPANT, VISITOR, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. FURTHERMORE, THE CONTRACTOR SHALL INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.
B. CMTA, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CMTA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, CMTA NOR ANY AFFILIATE HEREOF WILL NOT OFFER OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.
C. IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM IMMEDIATELY.
D. THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO BRING NO CLAIM RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENCE, BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH ITEM AGAINST CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS AND CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.
E. THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

ABBREVIATIONS

AC	ALTERNATING CURRENT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE (AMP, AMPS)
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APD	AIR PRESSURE DROP
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR-CONDITIONING ENGINEERS
ATU	AIR TERMINAL UNIT
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BHP	BREAK HORSEPOWER
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
C.I.	CAST IRON
CLG	CEILING
CLR	CLEAR
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COND	CONDENS (-ER, -ING, -ATION, -ATE)
CONT	CONTINU (-ED, -OUS)
CU FT	CUBIC FEET
CU IN	CUBIC INCHES
CV	VALVE FLOW COEFFICIENT
dB	DECIBEL
DB	DRY BULB
DBT	DRY BULB TEMPERATURE
DC	DIRECT CURRENT
DD	DUCT SMOKE DETECTOR
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREE (-S)
DIA	DIAMETER (-S)
DN	DOWN
DWG	DRAWING
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVA (-TION, -TOR)
ENGR	ENGINEER
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EVAP	EVAPORAT (-E, -ING, -ED, -OR, -ION)
EWT	ENTERING WATER TEMPERATURE
EXP	EXPANSION
EXT	EXTERIOR
FA	FREE AREA

ABBREVIATIONS (CONTINUED)

FD	FIRE DAMPER
FL	FLOOR
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPC	FIRE PROTECTION CONTRACTOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET **OR** FOOT
FUT	FUTURE
FV	FACE VELOCITY
GA	GAGE/GAUGE
GAL	GALLON (-S)
GC	GENERAL CONTRACTOR
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRAINS
H	HUMIDITY
HD	HEAD
HG	MERCURY
HORIZ	HORIZONTAL
HP	H (-ORSEPOWER, -EAT PUMP)
HR	HOUR (-S)
HVAC	HEATING, VENTILATING, & AIR-CONDITIONING
Hz	HERTZ
ID	I (-DENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)
IN	INCH (-ES)
INSUL	INSULAT (-ED, -ION)
INT	INTER (-IOR, -ERVAL)
IPS	IRON PIPE SIZE
kW	KILOWATT
kWh	KILOWATT HOUR
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LF	LINEAR FEET/FOOT
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	BTU PER HOUR [THOUSANDS]
MCA	MINIMUM CIRCUIT AMPS
MFG	MANUFACTURER
MIN	MIN (-IMUM, -UTE)
MISC	MISCELLANEOUS
MOCP	MAXIMUM OVERCURRENT PROTECTION [AMPS]
MTG	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA **OR** NORMALLY CLOSED
NEBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU
NIC	NOT IN CONTRACT

ABBREVIATIONS (CONTINUED)

NO	NORMALLY OPEN **OR** NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DI (-AMETER, -MENSION)
OED	OPEN ENDED DUCT
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OZ	OUNCE (-S)
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PH	PHASE [ELECTRICAL]
PLBG	PLUMBING
PPM	PARTS PER MILLION
PRS	PRESSURE REDUCING STATION
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	PPSI GAUGE
RH	RELATIVE HUMIDITY [%]
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SD	SMOKE DAMPER
SL	SOUND LINER
SP	STATIC PRESSURE
SQ FT	SQUARE FEET **OR** FOOT
SQ IN	SQUARE INCH **OR** INCHES
TAB	TESTING AND BALANCING
TBD	TO BE DETERMINED
TE	TOP ELEVATION
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLT (-AGE, -S)
VAR	VARI (-ABLE, -IES)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FEQUENCY DRIVE
W	WATT (-AGE, -S)
WB	WET BULB
WBT	WET BULB TEMPERATURE
WPD	WATER PRESSURE DROP
WT	WEIGHT
W/	WITH
W/O	WITHOUT
%	PERCENT
ΔP	DIFFERENTIAL PRESSURE
ΔT	TEMPERATURE DIFFERENCE
℄	CENTERLINE

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED ON THIS PROJECT

GENERAL SYMBOLS

#	TAGGED NOTE DESIGNATOR
X	REVISION TRIANGLE
ROOM NAME RM #	ROOM TAG
TAG XX-## INSTANCE ###	EQUIPMENT TAG
	POINT OF CONNECTION / CONNECT TO EXISTING
	POINT OF DEMOLITION

HVAC LEGEND

	SUPPLY AIR DIFFUSER
	RETURN AIR DIFFUSER
	EXHAUST AIR DIFFUSER
	TRANSFER AIR DIFFUSER W/ SOUND ATTENUATING BOOT
	SIDEWALL DIFFUSER/GRILLE
	SIDEWALL DIFFUSER/GRILLE
TAG X-XX AIRFLOW XXXX	AIR DEVICE TAG (REGISTER, GRILLE, DIFFUSER,LOUVER)
##x##	RECTANGULAR DUCT
#ø	ROUND/SPIRAL DUCT
##/##	FLAT OVAL DUCT
SA	SUPPLY AIR DUCT
RA	RETURN AIR DUCT
EA	EXHAUST AIR DUCT
OA	OUTSIDE AIR DUCT
TA	TRANSFER AIR DUCT
CAE	COMBUSTION AIR EXHAUST DUCT
CAI	COMBUSTION AIR INTAKE DUCT
SA	SA AIR DUCT TURNING UP
SA	SA AIR DUCT TURNING DOWN
RA	RA AIR DUCT TURNING UP
RA	RA AIR DUCT TURNING DOWN
EA	EA AIR DUCT TURNING UP
EA	EA AIR DUCT TURNING DOWN
XXX(E)	EXISTING DUCT
XXX(D)	DUCT TO BE DEMOLISHED
XXX(A)	DUCT TO BE ABANDONED IN PLACE
	MITERED ELBOW WITH TURNING VANES
	FLEXIBLE DUCT
T	THERMOSTAT
TS	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
C	CARBON DIOXIDE SENSOR
TC	TEMPERATURE & CARBON DIOXIDE SENSOR
VERT. HORIZ.	MANUAL BALANCING/VOLUME DAMPER
VERT. HORIZ.	MOTORIZED DAMPER
VERT. HORIZ.	FIRE DAMPER
VERT. HORIZ.	SMOKE DAMPER
VERT. HORIZ.	COMBINATION FIRE & SMOKE DAMPER

MECHANICAL PIPING LEGEND

	PIPE ELBOW TURNING UP
	PIPE ELBOW TURNING DOWN
	PIPE TEE; CONNECTION ON TOP
	PIPE TEE; CONNECTION ON BOTTOM
	PIPE CAP
BFW	BOILER FEEDWATER
CAI/E	COMBUSTION AIR INTAKE/EXHAUST
CBS/R	CHILLED BEAM SUPPLY/RETURN
CD	CONDENSATE DRAIN
CHWS/R	CHILLED WATER SUPPLY/RETURN
CST	CLEAN STEAM PIPING
CWS/R	CONDENSER WATER SUPPLY/RETURN
DTS/R	DUAL TEMP. WATER SUPPLY/RETURN
GS/R	GEOTHERMAL WATER SUPPLY/RETURN
HPC	HIGH PRESSURE STEAM CONDENSATE
HPS(#)	HIGH PRESSURE STEAM; (#) DENOTES PRESSURE
HPS/R	HEAT PUMP WATER SUPPLY/RETURN
HRS/R	HEAT RECOVERY SUPPLY/RETURN PIPING
HWS/R	HEATING WATER SUPPLY/RETURN
LPC	LOW PRESSURE STEAM CONDENSATE
LPS(#)	LOW PRESSURE STEAM; (#) DENOTES PRESSURE
MPC	MEDIUM PRESSURE STEAM RETURN
MPS(#)	MEDIUM PRESSURE STEAM; (#) DENOTES PRESSURE
SPD	STEAM CONDENSATE PUMPED DISCHARGE
SVT	STEAM VENT PIPING
XXX(D)	PIPING TO BE DEMOLISHED
XXX(E)	EXISTING PIPING
XXX(A)	ABANDONED IN PLACE PIPING
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	AUTOMATIC AIR VENT (AAV)
	MANUAL AIR VENT (MAV)
	MANUAL BALANCING VALVE (BV)
	BALL VALVE
	BUTTERFLY VALVE
	TRIPLE DUTY VALVE (TDV)
	STRAINER
	MANUAL ISOLATION VALVE
	GLOBE VALVE
	OS&Y (GATE) VALVE
	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
	AUTO-FLOW CONTROL VALVE
	CHECK VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	FLEXIBLE PIPE CONNECTION
	FLOW METER (VENTURI)
	PIPING UNION
FS	FLOW SWITCH
PS	PRESSURE SWTICH
TS	TAMPER SWITCH
	THERMOMETER
	PETE'S PLUG; TEMPERATURE/PRESSURE PORT

PHASING NOTES

A. THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAIN GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES, STEAM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT AND HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL SAID WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

APPLICABLE BUILDING CODES

- INTERNATIONAL PLUMBING CODE (IPC) - STATE EDITION [2021]
- INTERNATIONAL MECHANICAL CODE (IMC) - STATE EDITION [2015]
- INTERNATIONAL ENERGY CONSERVATION CODE (IECC) - STATE EDITION [2018]
- INTERNATIONAL BUILDING CODE (IBC) - STATE EDITION [2015]
- INTERNATIONAL EXISTING BUILDING CODE (IEBC) - STATE EDITION [2015]
- INTERNATIONAL FUEL GAS CODE (IFGC) - STATE EDITION [2015]
- ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES (ANSI A117.1) - STATE EDITION [2017]
- NATIONAL ELECTRICAL CODE (NFPA 70) - STATE EDITION [2020]
- LIFE SAFETY CODE (NFPA 101) - STATE EDITION [2021]
- FIRE CODE (NFPA 01) - STATE EDITION [2021]
- FIRE SPRINKLER CODE (NFPA 13) - STATE EDITION [2019]
- FIRE ALARM CODE (NFPA 72) - STATE EDITION [2019]

MECHANCIAL SHEET LIST

SHEET #	SHEET NAME
M-001	MECHANICAL LEGEND
M-002	EXISTING ROOFTOP MECHANICAL EQUIPMENT
MD-101B	FIRST FLOOR MECHANICAL DEMOLITION PLAN - AREA B
MD-101D/E	FIRST FLOOR MECHANICAL DEMOLITION PLAN - AREA D/E
MD-102B	SECOND FLOOR MECHANICAL DEMOLITION PLAN - AREA B
MD-102D/E	SECOND FLOOR MECHANICAL DEMOLITION PLAN - AREA D/E
MD-103B	THIRD FLOOR MECHANICAL DEMOLITION PLAN - AREA B
M-101A	FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA A
M-101B	FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA B
M-101D/E	FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA D/E
M-102B	SECOND FLOOR MECHANICAL NEW WORK PLAN - AREA B
M-102D/E	SECOND FLOOR MECHANICAL NEW WORK PLAN - AREA D/E
M-103B	THIRD FLOOR MECHANICAL NEW WORK PLAN - AREA B
M-501	MECHANICAL DETAILS AND SCHEDULES

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

MECHANICAL LEGEND

ISSUE BLOCK

Mark	Date	Description

PROJECT NO: 2021101.00
DATE: 09/13/2024
SCALE: NOT TO SCALE
DRAWN BY: MO | PROJ MGR: MO

M-001

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GENERAL NOTES:

A. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

B. PRIOR TO DEMOLITION, TAB CONTACTOR SHALL MEASURE, RECORD AND REPORT THE EXISTING AIRFLOWS FOR EXISTING MECHANICAL EQUIPMENT AS DESCRIBED ON THIS SHEET. SEND REPORT TO ENGINEER FOR REVIEW AND COMMENT.

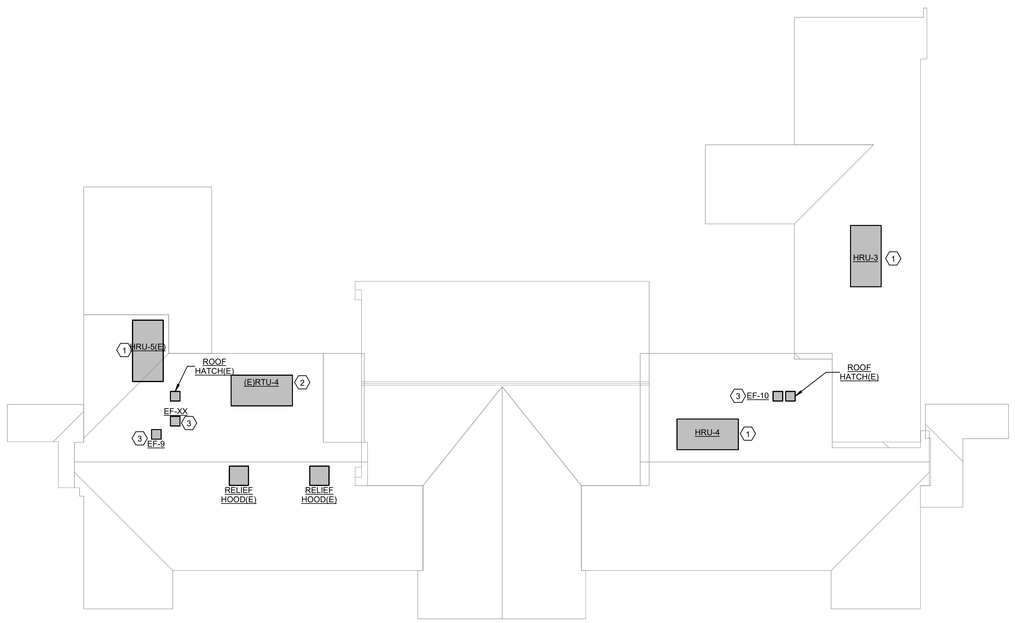
C. INSPECT AND TEST ALL EXISTING ROOFTOP EQUIPMENT SERVING AREAS OF SCOPE TO VERIFY FUNCTIONALITY. REPORT ANY DEFICIENCIES TO GC AND ENGINEER.

KEY NOTES:

1 MEASURE AND RECORD EXISTING OUTDOOR AIR SUPPLY CFM AND EXHAUST AIR RETURN CFM FOR EXISTING HRU.

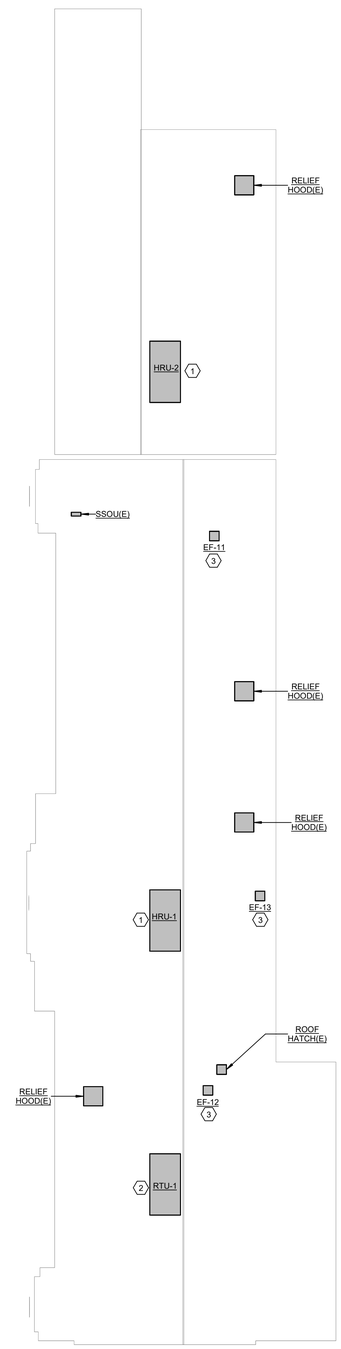
2 MEASURE AND RECORD EXISTING OUTDOOR AIR CFM, SUPPLY AIR CFM AND RETURN AIR CFM FOR EXISTING RTU

3 MEASURE AND RECORD EXISTING EXHAUST AIR CFM FOR EXISTING ROOFTOP EXHAUST FAN.



1 AREA B ROOF - EXISTING ROOFTOP MECHANICAL EQUIPMENT LOCATIONS

NO SCALE



2 AREA E/D ROOF - EXISTING ROOFTOP MECHANICAL EQUIPMENT LOCATIONS

NO SCALE

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PROJECT TITLE

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211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

EXISTING ROOFTOP MECHANICAL EQUIPMENT

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09/13/2024
SCALE:	1/16" = 1'-0"
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M-002

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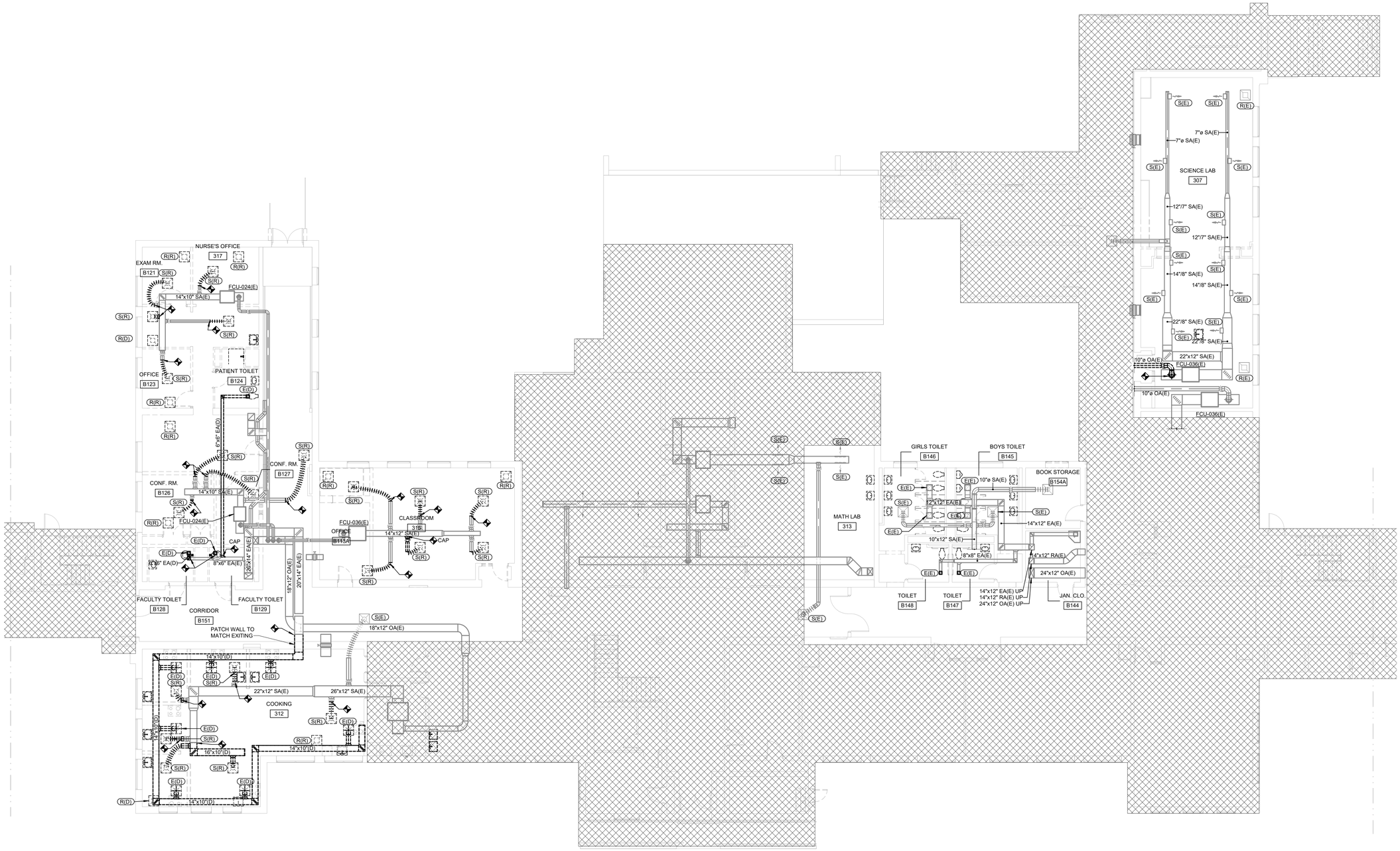
GENERAL NOTES:

A. PRIOR TO DEMOLITION, TAB CONTACTOR SHALL MEASURE, RECORD AND REPORT THE EXISTING AIRFLOWS FOR EXISTING MECHANICAL EQUIPMENT AS DESCRIBED ON SHEET M-002.

B. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

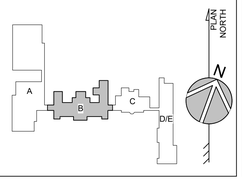
C. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAMGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.

D. PROTECT ALL EXISTING THERMOSTATS DURING DEMOLITION. REFER TO NEW WORK PLANS FOR NEW THERMOSTAT LOCATIONS.



1 FIRST FLOOR MECHANICAL DEMOLITION PLAN - AREA B

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR MECHANICAL DEMOLITION PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09/13/2024
SCALE:	1/8" = 1'-0"
DRAWN BY: MO	PROJ MGR: JC

MD-101B

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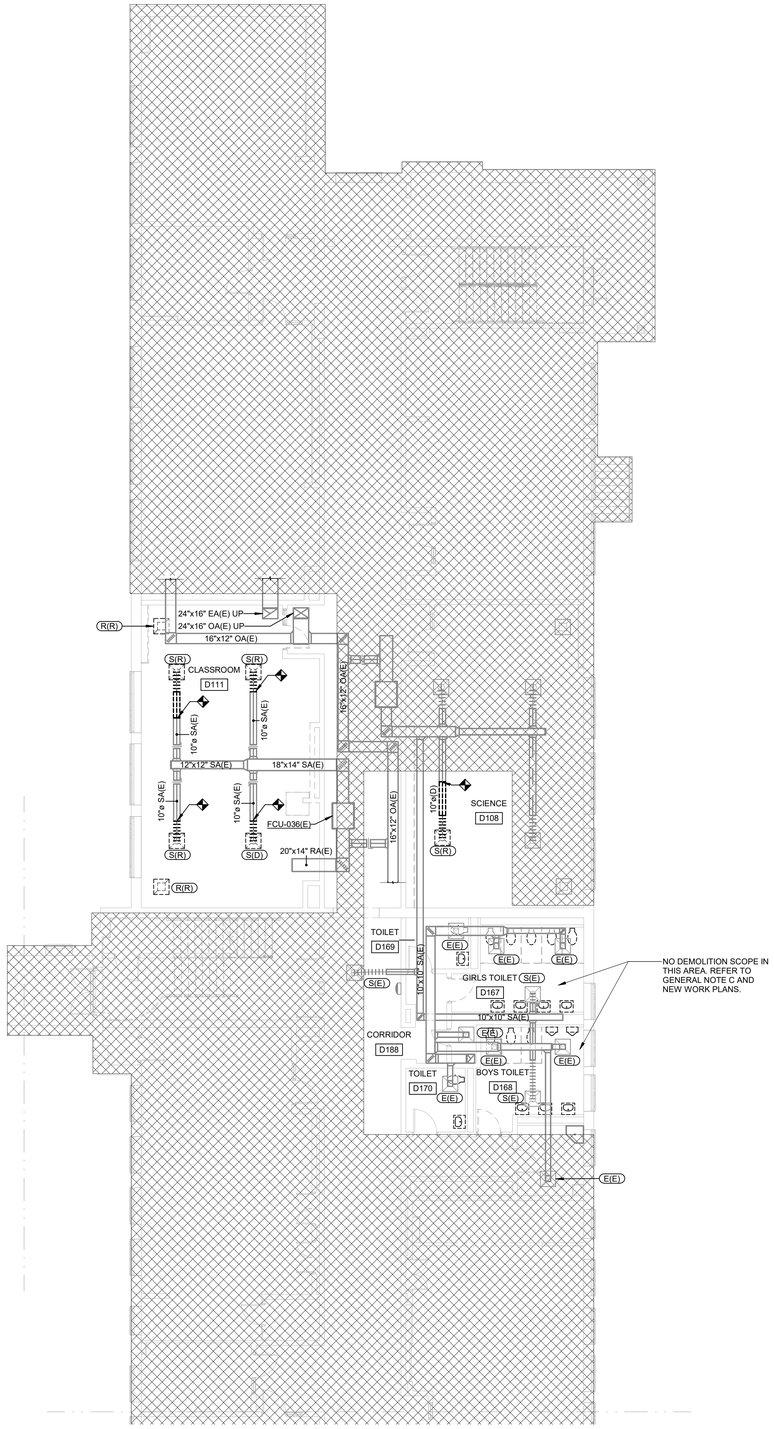
GENERAL NOTES:

A. PRIOR TO DEMOLITION, TAB CONTACTOR SHALL MEASURE, RECORD AND REPORT THE EXISTING AIRFLOWS FOR EXISTING MECHANICAL EQUIPMENT AS DESCRIBED ON SHEET M-002.

B. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

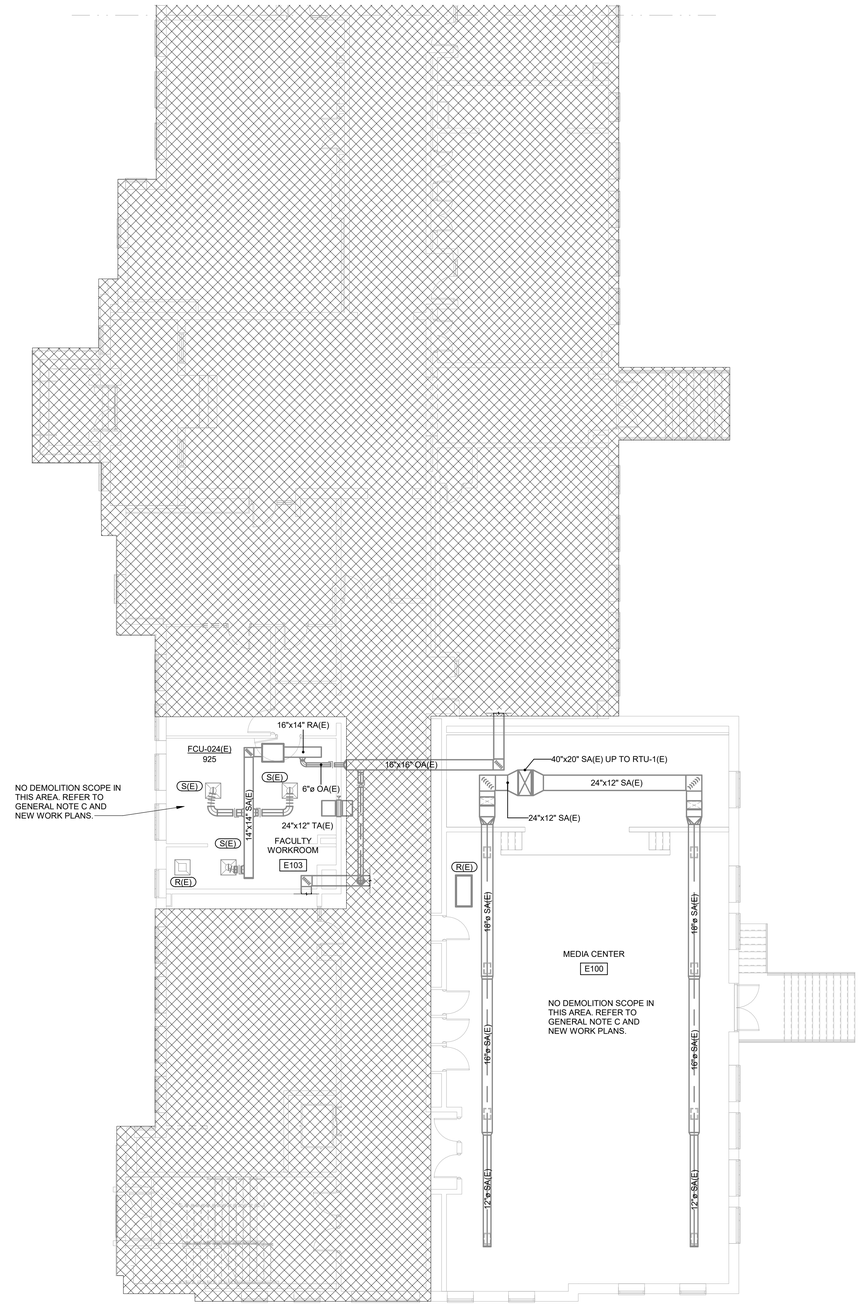
C. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAMGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.

D. PROTECT ALL EXISTING THERMOSTATS DURING DEMOLITION. REFER TO NEW WORK PLANS FOR NEW THERMOSTAT LOCATIONS.



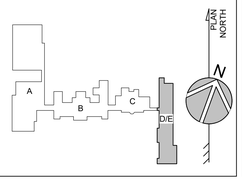
1 FIRST FLOOR MECHANICAL DEMOLITION PLAN - AREA D

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



2 FIRST FLOOR MECHANICAL DEMOLITION PLAN - AREA E

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
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ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR MECHANICAL DEMOLITION PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
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KEY NOTES:

1 RELOCATE EXISTING TRANSFER DUCT AND FIRE/SMOKE DAMPER. INSPECT AND TEST COMBINATION FIRE/SMOKE DAMPER. MALFUNCTIONING DAMPERS AND DUCT DETECTORS SHALL BE REPLACED. DETECTORS OLDER THAN 8 YEARS OLD SHALL BE REPLACED REGARDLESS OF FUNCTIONALITY.REFER TO NEW WORK PLANS FOR NEW LOCATION. INFILL EXISTING WALL PENETRATION.

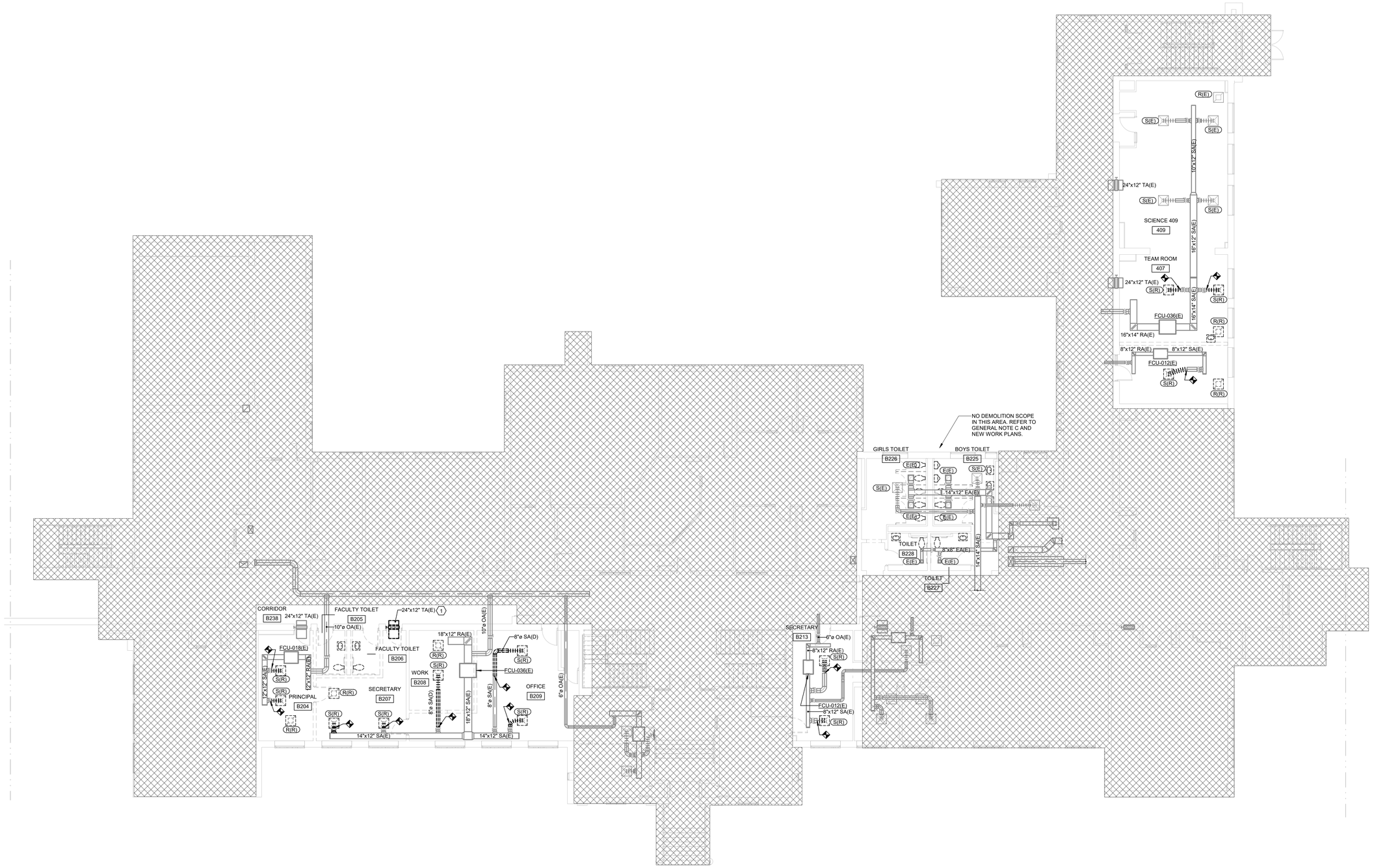
GENERAL NOTES:

A. PRIOR TO DEMOLITION, TAB CONTACTOR SHALL MEASURE, RECORD AND REPORT THE EXISTING AIRFLOWS FOR EXISTING MECHANICAL EQUIPMENT AS DESCRIBED ON SHEET M-002.

B. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

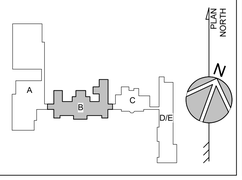
C. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAMGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.

D. PROTECT ALL EXISTING THERMOSTATS DURING DEMOLITION. REFER TO NEW WORK PLANS FOR NEW THERMOSTAT LOCATIONS.



1 SECOND FLOOR MECHANICAL DEMOLITION PLAN - AREA B

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



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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR MECHANICAL DEMOLITION PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09/13/2024
SCALE:	1/8" = 1'-0"
DRAWN BY: MO	PROJ MGR: JC

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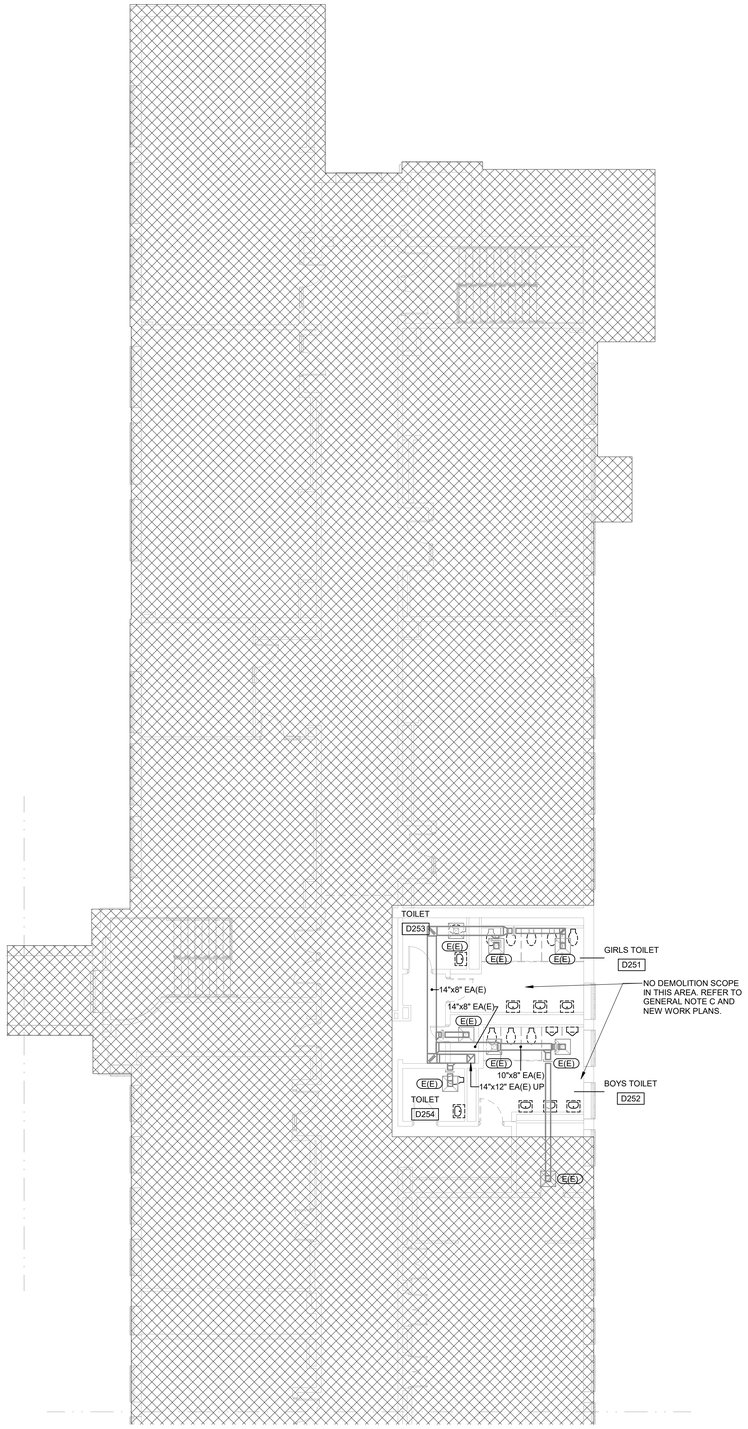
GENERAL NOTES:

A. PRIOR TO DEMOLITION, TAB CONTACTOR SHALL MEASURE, RECORD AND REPORT THE EXISTING AIRFLOWS FOR EXISTING MECHANICAL EQUIPMENT AS DESCRIBED ON SHEET M-002.

B. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

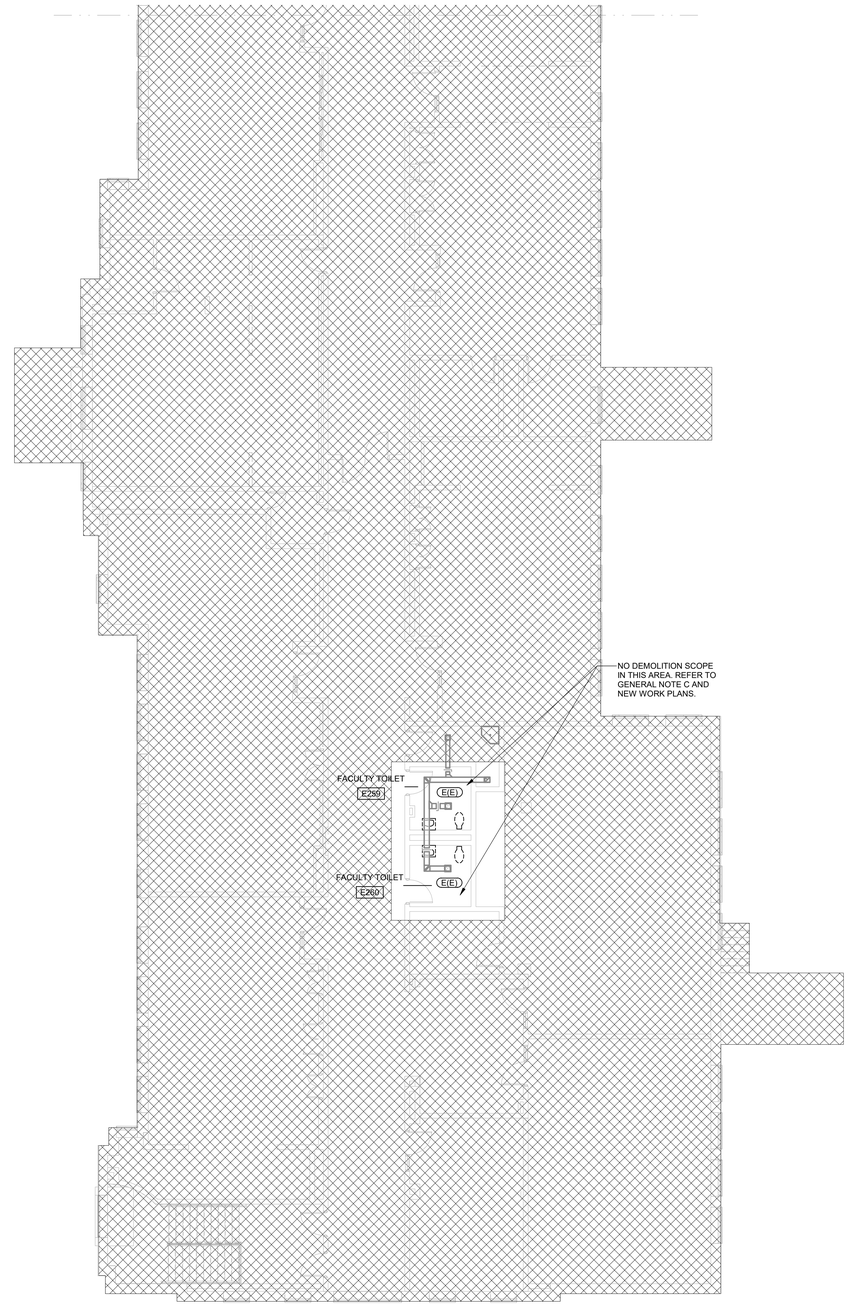
C. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAMGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.

D. PROTECT ALL EXISTING THERMOSTATS DURING DEMOLITION. REFER TO NEW WORK PLANS FOR NEW THERMOSTAT LOCATIONS.



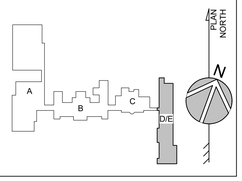
1 SECOND FLOOR MECHANICAL DEMOLITION PLAN - AREA D

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



2 SECOND FLOOR MECHANICAL DEMOLITION PLAN - AREA E

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR MECHANICAL DEMOLITION PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09/13/2024
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KEY NOTES:

1 COORDINATE EXISTING AIR DEVICES WITH CEILING REPLACEMENT.

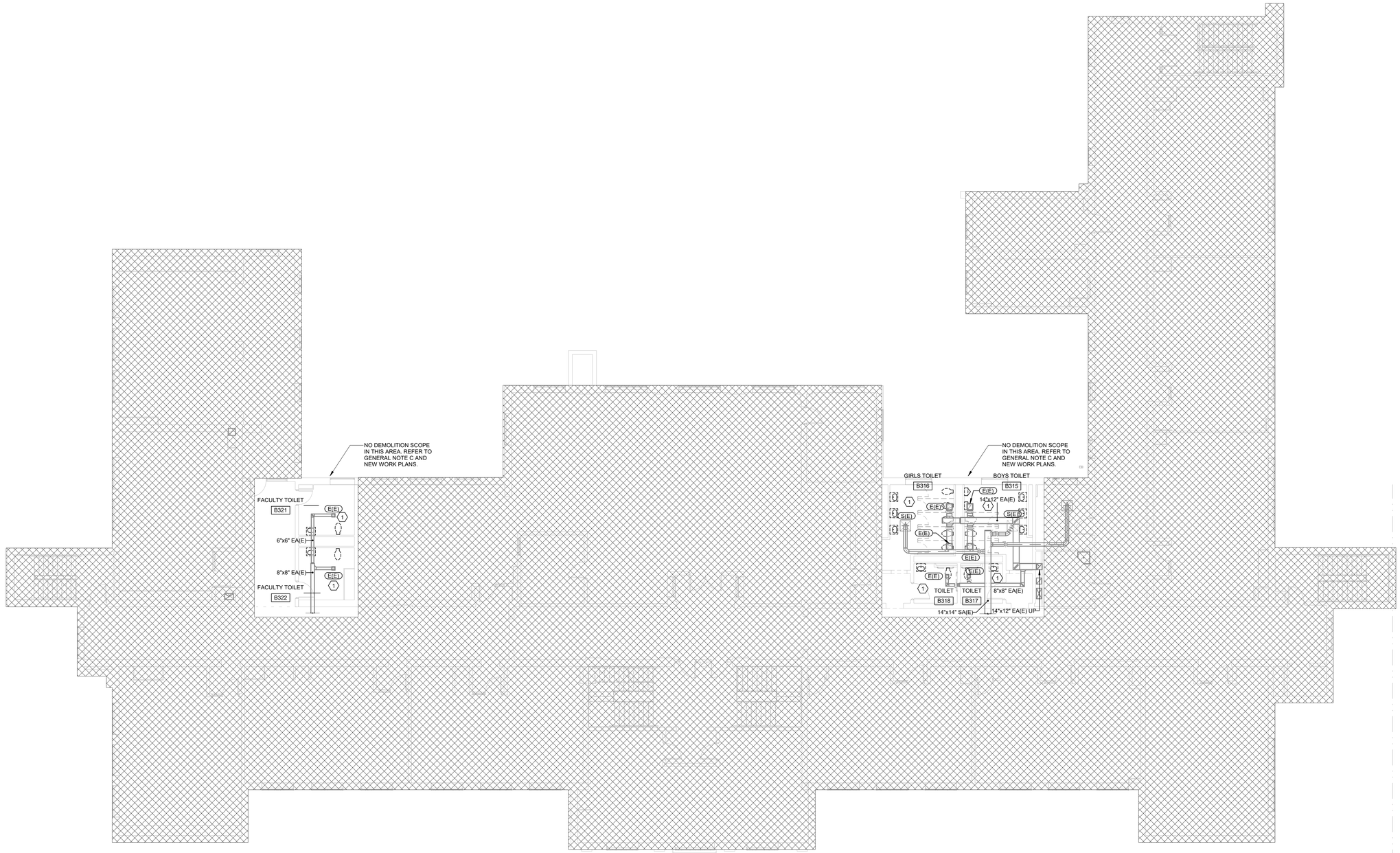
GENERAL NOTES:

A. PRIOR TO DEMOLITION, TAB CONTACTOR SHALL MEASURE, RECORD AND REPORT THE EXISTING AIRFLOWS FOR EXISTING MECHANICAL EQUIPMENT AS DESCRIBED ON SHEET M-002.

B. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

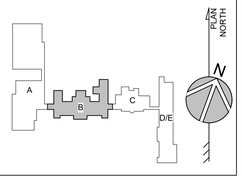
C. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAMGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.

D. PROTECT ALL EXISTING THERMOSTATS DURING DEMOLITION. REFER TO NEW WORK PLANS FOR NEW THERMOSTAT LOCATIONS.



1 THIRD FLOOR MECHANICAL DEMOLITION PLAN - AREA B

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



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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

THIRD FLOOR MECHANICAL DEMOLITION PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09/13/2024
SCALE:	1/8" = 1'-0"
DRAWN BY: MO	PROJ MGR: JC

MD-103B

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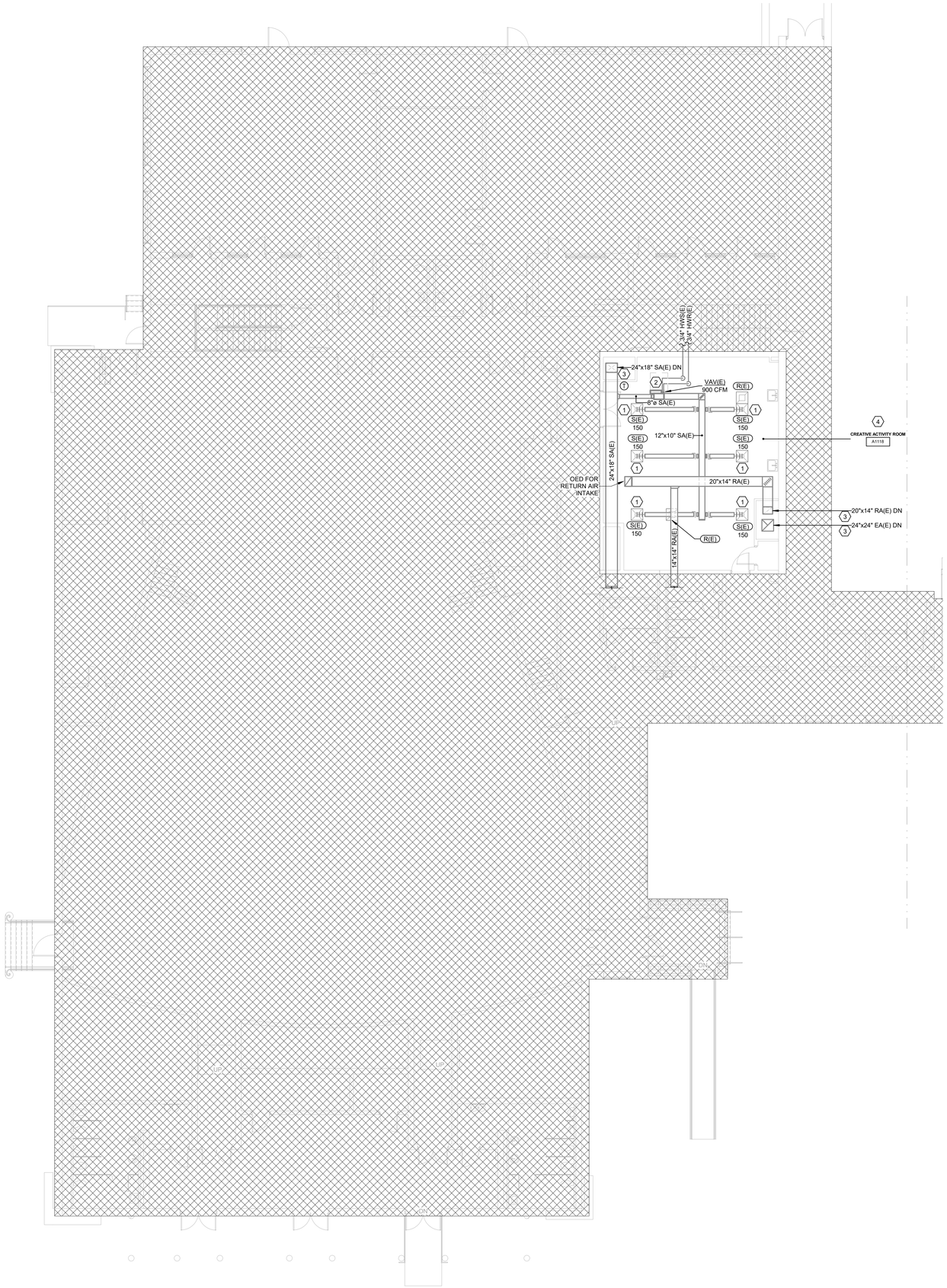

1 FIRST FLOOR MECHANCIAL NEW WORK PLAN - AREA A

NO SCALE

KEY NOTES:

ID	Note Text
1	BALANCING EXISTING AIR DEVICE TO VALUE INDICATED.
2	BALANCING EXISTING VAV BOX TO VALUE INDICATED.
3	DUCT DOWN TO EXISTING AIR HANDLING UNIT IN MECHANICAL ROOM BELOW. TAB CONTACTOR TO MEASURE THE EXISTING OUTDOOR AIR CFM VALUE AND EXISTING SUPPLY AIR CFM VALUE. REPORT MEASUREMENTS TO ENGINEER FOR REBALANCING INSTRUCTIONS.
4	CREATIVE ACTIVITY ROOM SHALL BE SUPPLIED WITH 900 CFM OF SUPPLY AIR. THE EXISTING AIR HANDLING UNIT OA DAMPER SHALL BE ADJUSTED TO PROVIDE A MINIMUM OF 40% OA.

GENERAL NOTES:

A. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

B. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA A

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09/13/2024
SCALE:	1/8" = 1'-0"
DRAWN BY: MO	PROJ MGR: JC

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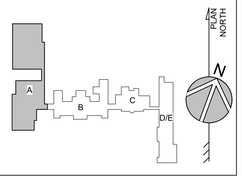

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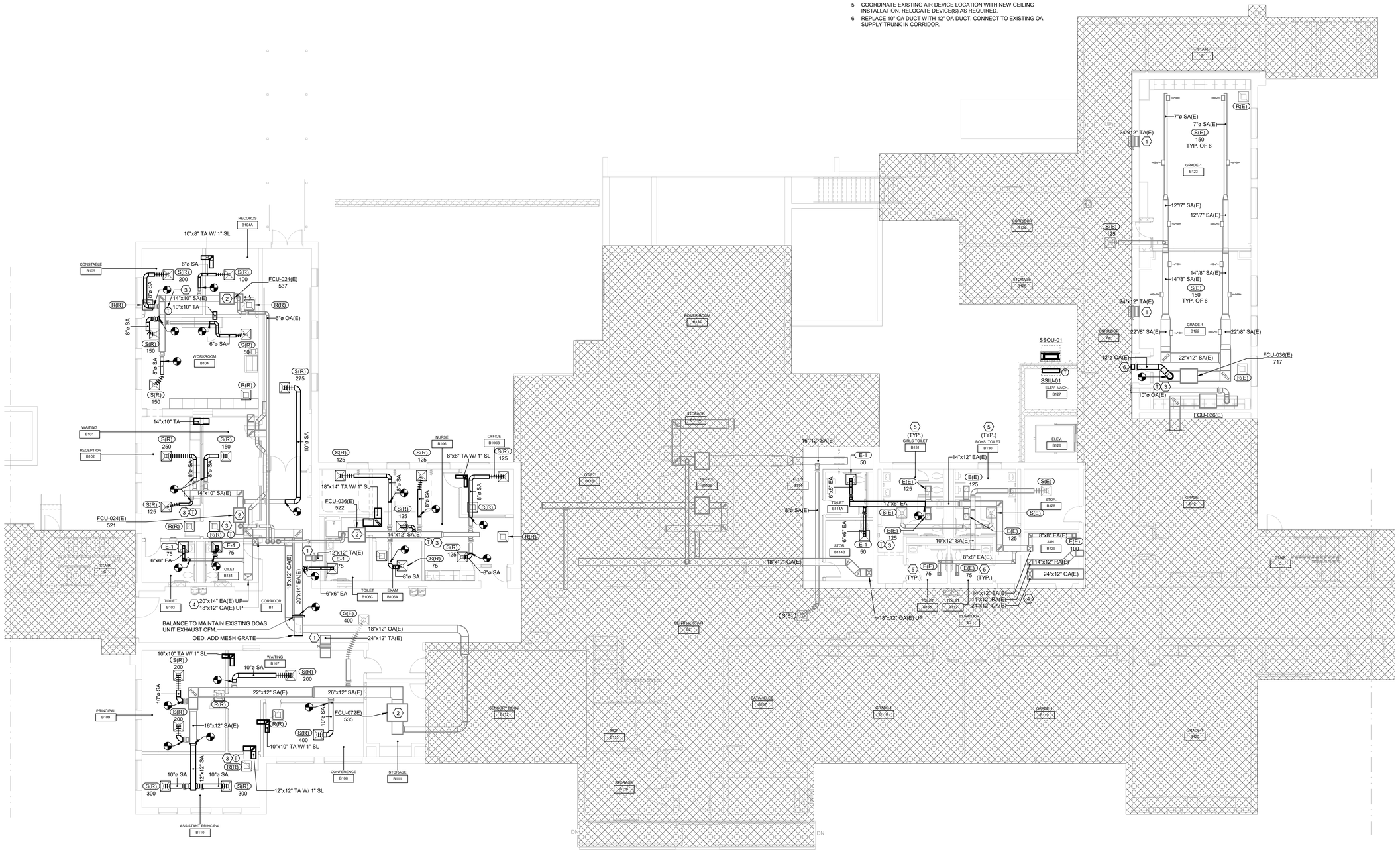
KEY NOTES:

1. INSPECT AND TEST COMBINATION FIRE/SMOKE DAMPER. MALFUNCTIONING DAMPERS AND DUCT DETECTORS SHALL BE REPLACED. DETECTORS OLDER THAN 8 YEARS OLD SHALL BE REPLACED REGARDLESS OF FUNCTIONALITY.
2. REBALANCE FAN COIL UNIT TO NEW AIRFLOW AND GPM AS INDICATED ON EXISTING EQUIPMENT SCHEDULE. SEE SHEET M-501.
3. RELOCATE EXISTING THERMOSTAT TO LOCATION SHOWN. EXTEND CONTROL WIRING AS REQUIRED.
4. REBALANCE EXISTING DOAS UNIT ON ROOF TO ACCOUNT FOR NEW AIRFLOWS.
5. COORDINATE EXISTING AIR DEVICE LOCATION WITH NEW CEILING INSTALLATION. RELOCATE DEVICE(S) AS REQUIRED.
6. REPLACE 10" OA DUCT WITH 12" OA DUCT. CONNECT TO EXISTING OA SUPPLY TRUNK IN CORRIDOR.

GENERAL NOTES:

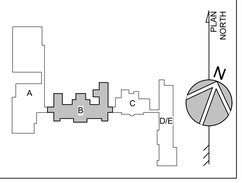
A. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

B. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.



1 FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA B

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



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302-422-3732 fax 302-422-4696

PROJECT TITLE

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211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
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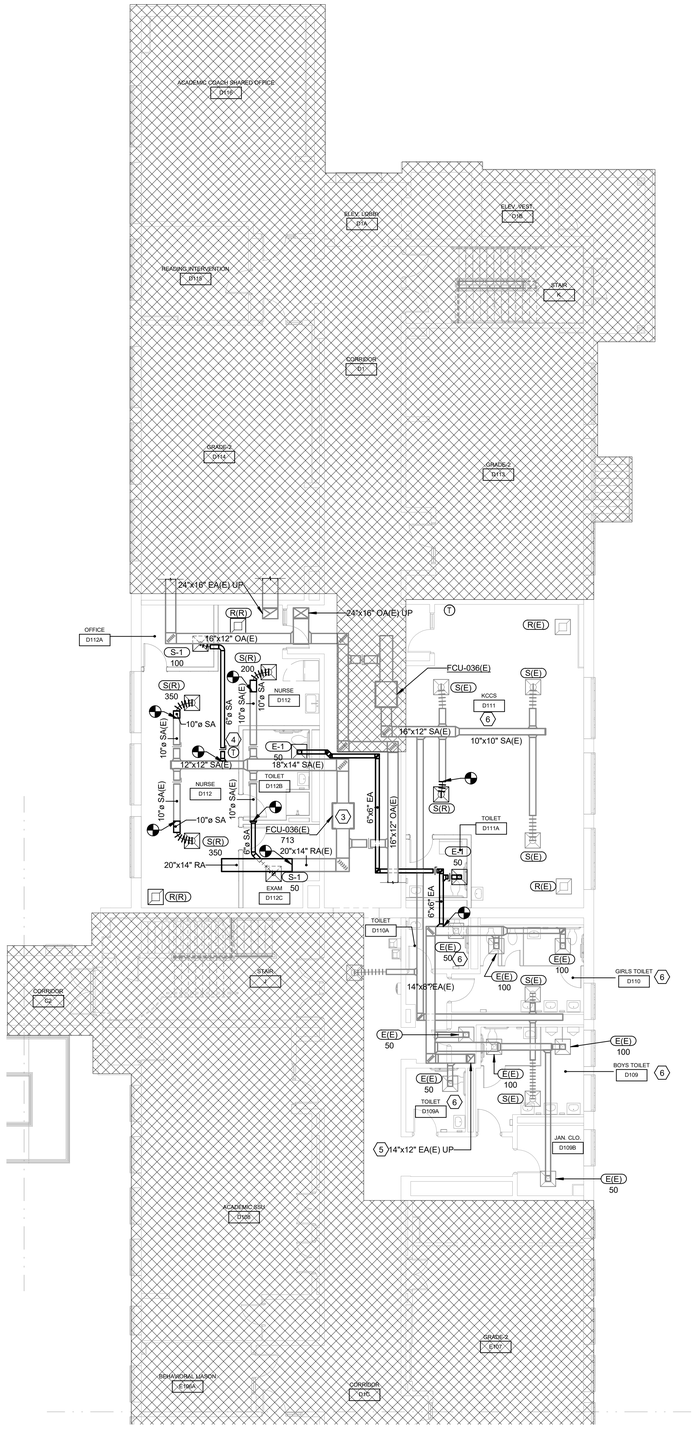
KEY NOTES:

1. INSPECT AND TEST COMBINATION FIRE/SMOKE DAMPER. MALFUNCTIONING DAMPERS AND DUCT DETECTORS SHALL BE REPLACED. DETECTORS OLDER THAN 8 YEARS OLD SHALL BE REPLACED REGARDLESS OF FUNCTIONALITY.
2. REBALANCE RTU-1(E) OA DAMPER TO PROVIDE A MINIMUM OF 600 CFM OF OUTSIDE AIR. MAINTAIN EXISTING CFM VALVE FOR ALL SUPPLY AIR DEVICES.
3. REBALANCE FAN COIL UNIT TO NEW AIRFLOW AND GPM AS INDICATED ON EXISTING EQUIPMENT SCHEDULE. SEE SHEET M-501.
4. RELOCATE EXISTING THERMOSTAT TO LOCATION SHOWN. EXTEND CONTROL WIRING AS REQUIRED.
5. REBALANCE EXISTING EXHAUST FAN ON ROOF TO ACCOUNT FOR NEW AIRFLOWS.
6. COORDINATE EXISTING AIR DEVICE LOCATION WITH NEW CEILING INSTALLATION. RELOCATE DEVICE(S) AS REQUIRED.

GENERAL NOTES:

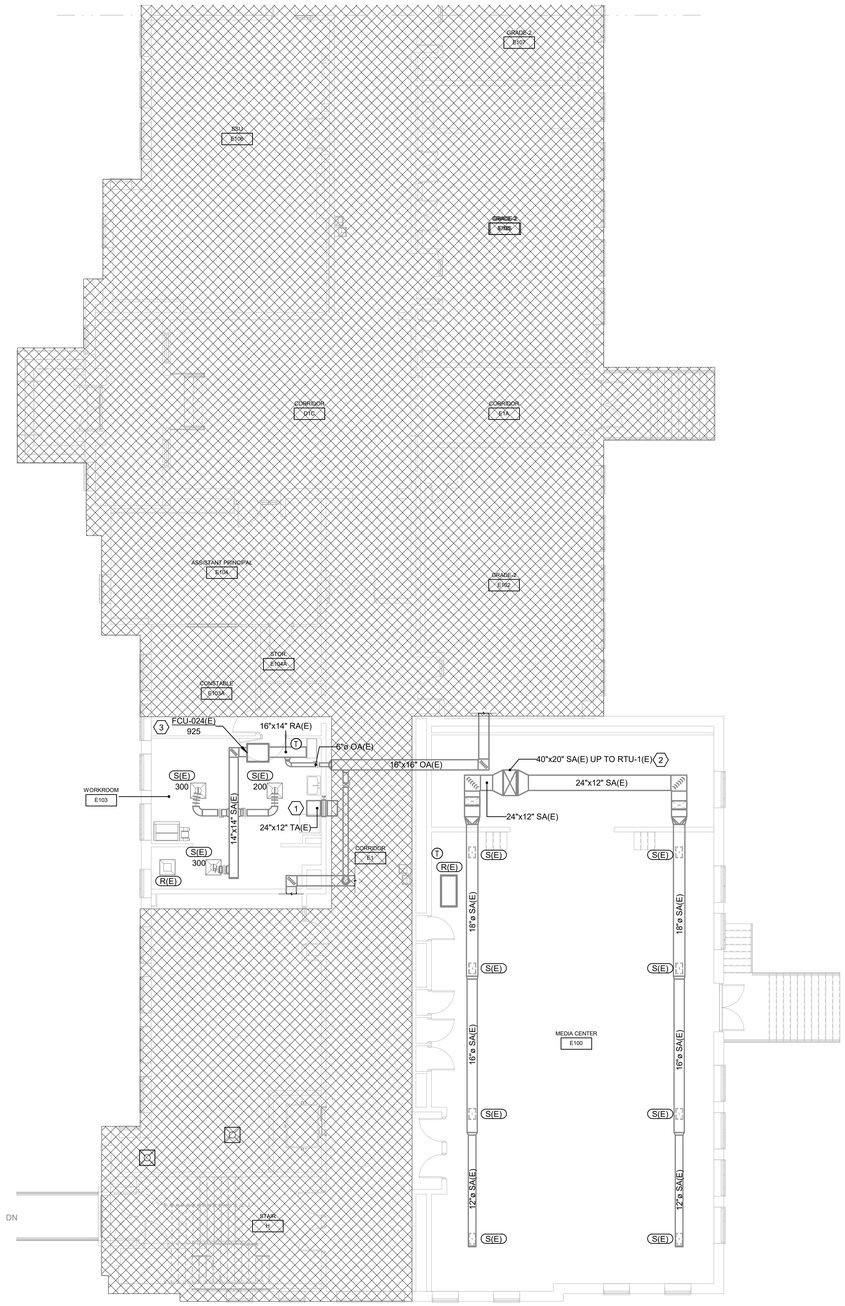
A. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

B. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.



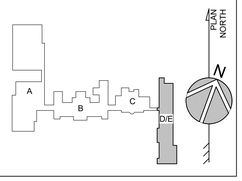
1 FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA D

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



2 FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA E

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
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ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR MECHANICAL NEW WORK PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
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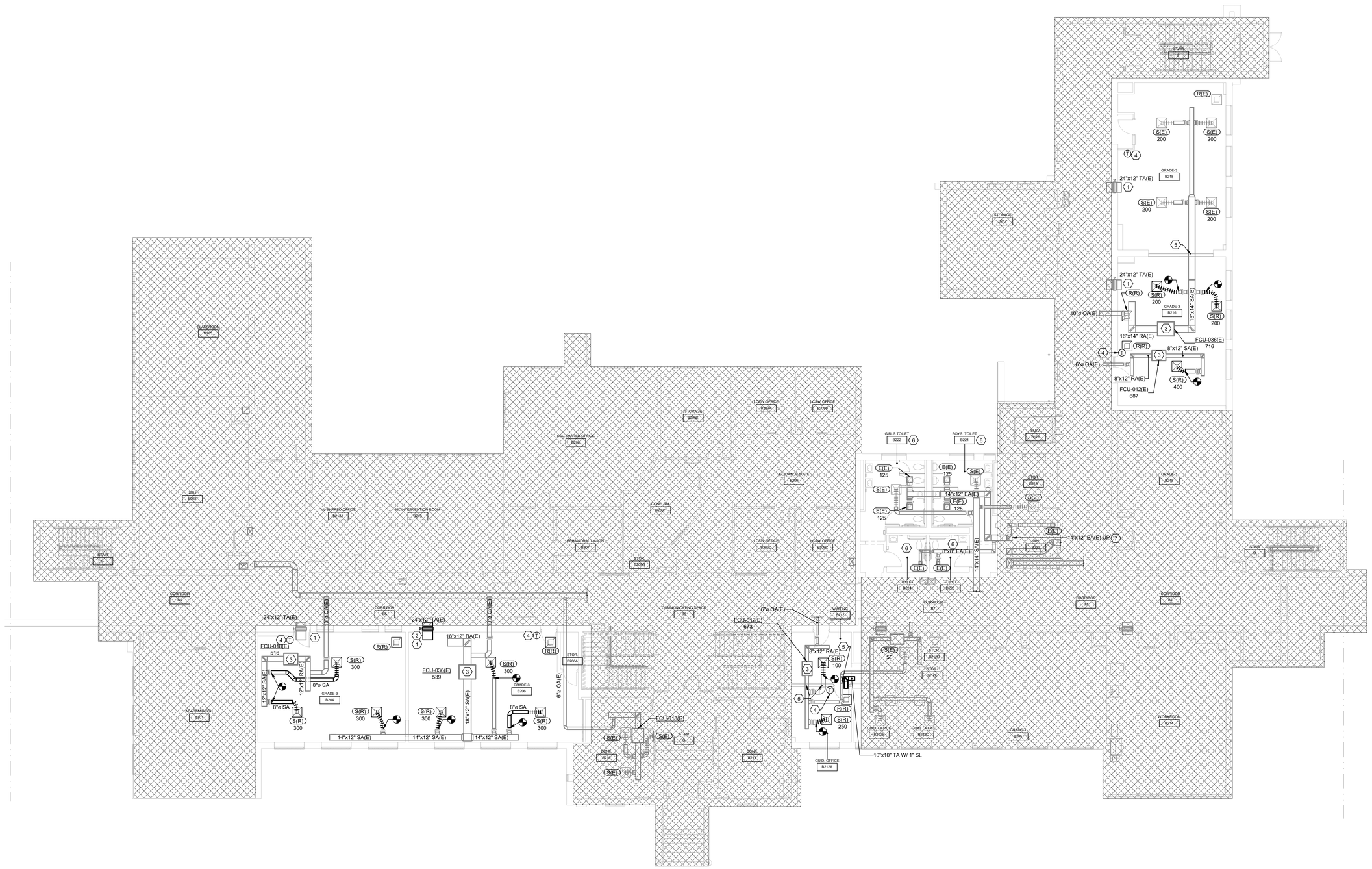
KEY NOTES:

1. INSPECT AND TEST COMBINATION FIRE/SMOKE DAMPER. MALFUNCTIONING DAMPERS AND DUCT DETECTORS SHALL BE REPLACED. DETECTORS OLDER THAN 8 YEARS OLD SHALL BE REPLACED REGARDLESS OF FUNCTIONALITY.
2. RELOCATE EXISTING TRANSFER DUCT AND FIRE/SMOKE DAMPER TO LOCATION SHOWN.
3. REBALANCE FAN COIL UNIT TO NEW AIRFLOW AND GPM AS INDICATED ON EXISTING EQUIPMENT SCHEDULE. SEE SHEET M-501.
4. RELOCATE EXISTING THERMOSTAT TO LOCATION SHOWN. EXTEND CONTROL WIRING AS REQUIRED.
5. COORDINATE EXISTING DUCTWORK WITH NEW WALL CONSTRUCTION.
6. COORDINATE EXISTING AIR DEVICE LOCATION WITH NEW CEILING INSTALLATION. RELOCATE DEVICE(S) AS REQUIRED.
7. REBALANCE EXISTING EXHAUST FAN ON ROOF TO ACCOUNT FOR NEW AIRFLOWS.

GENERAL NOTES:

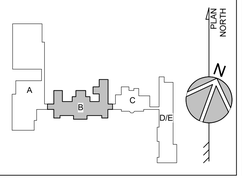
A. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

B. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.



1 SECOND FLOOR MECHANICAL NEW WORK PLAN - AREA B

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



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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
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ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR MECHANICAL NEW WORK PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09/13/2024
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KEY NOTES:

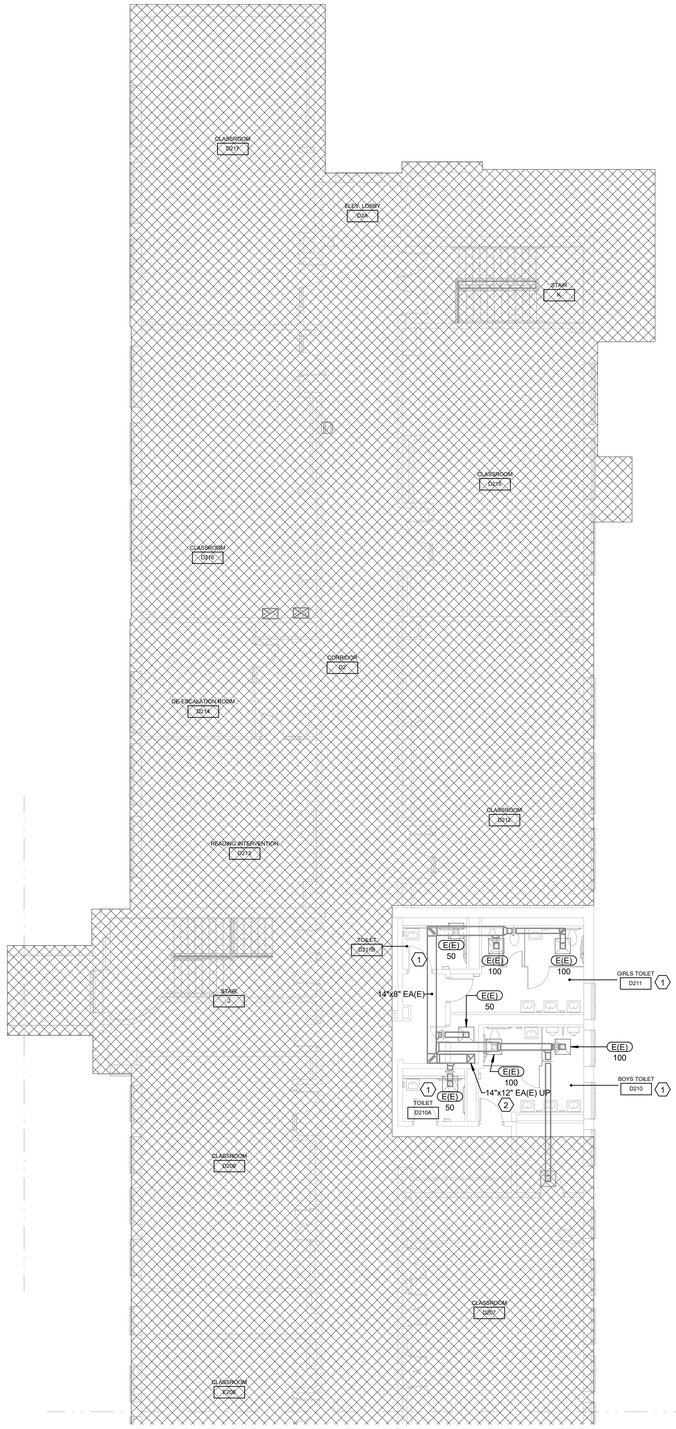
1 COORDINATE EXISTING AIR DEVICE LOCATION WITH NEW CEILING INSTALLATION. RELOCATE DEVICE(S) AS REQUIRED.

2 REBALANCE EXISTING EXHAUST FAN ON ROOF TO ACCOUNT FOR NEW AIRFLOWS.

GENERAL NOTES:

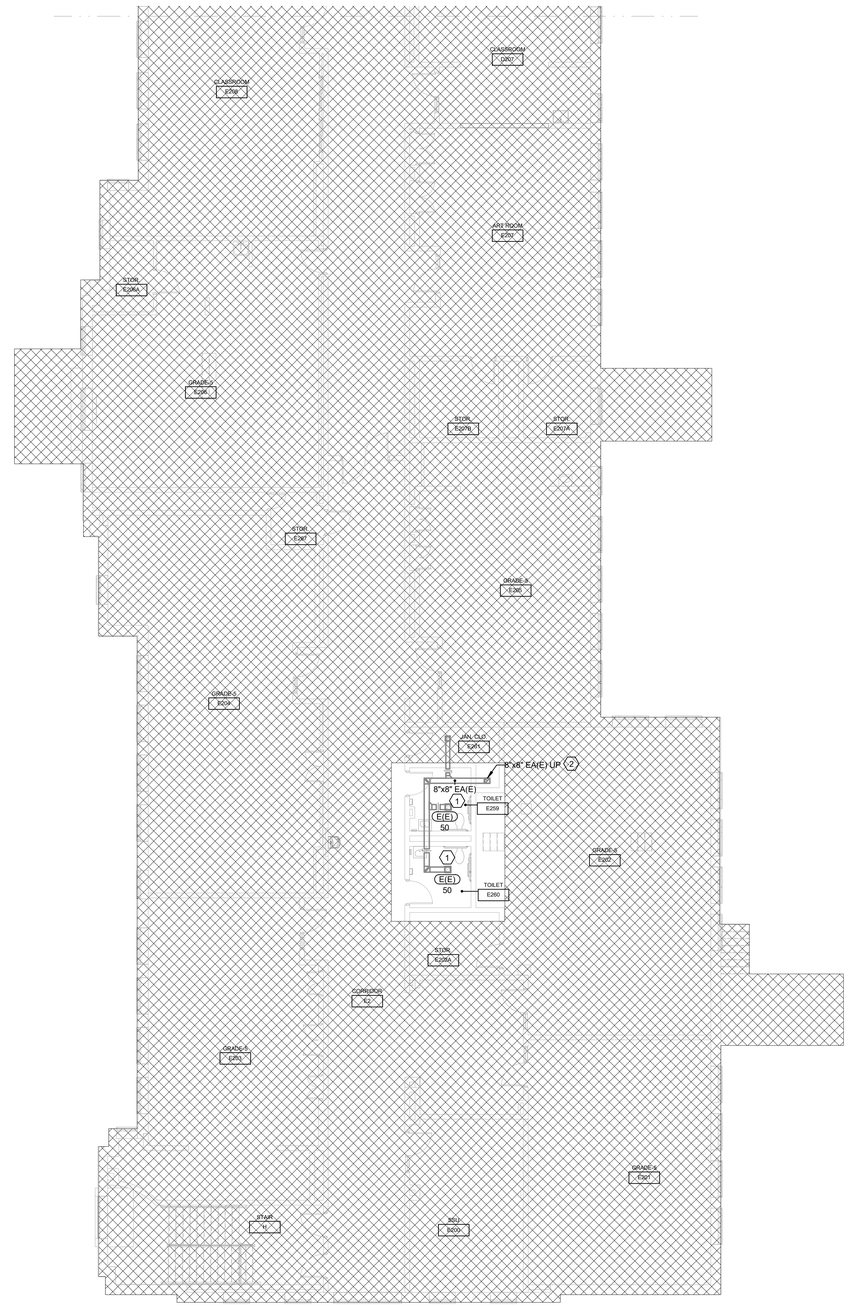
A. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

B. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.



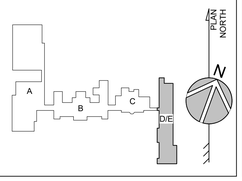
1 SECOND FLOOR MECHANICAL NEW WORK PLAN - AREA D

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



2 SECOND FLOOR MECHANICAL NEW WORK PLAN - AREA E

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR MECHANICAL NEW WORK PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09/13/2024
SCALE:	1/8" = 1'-0"
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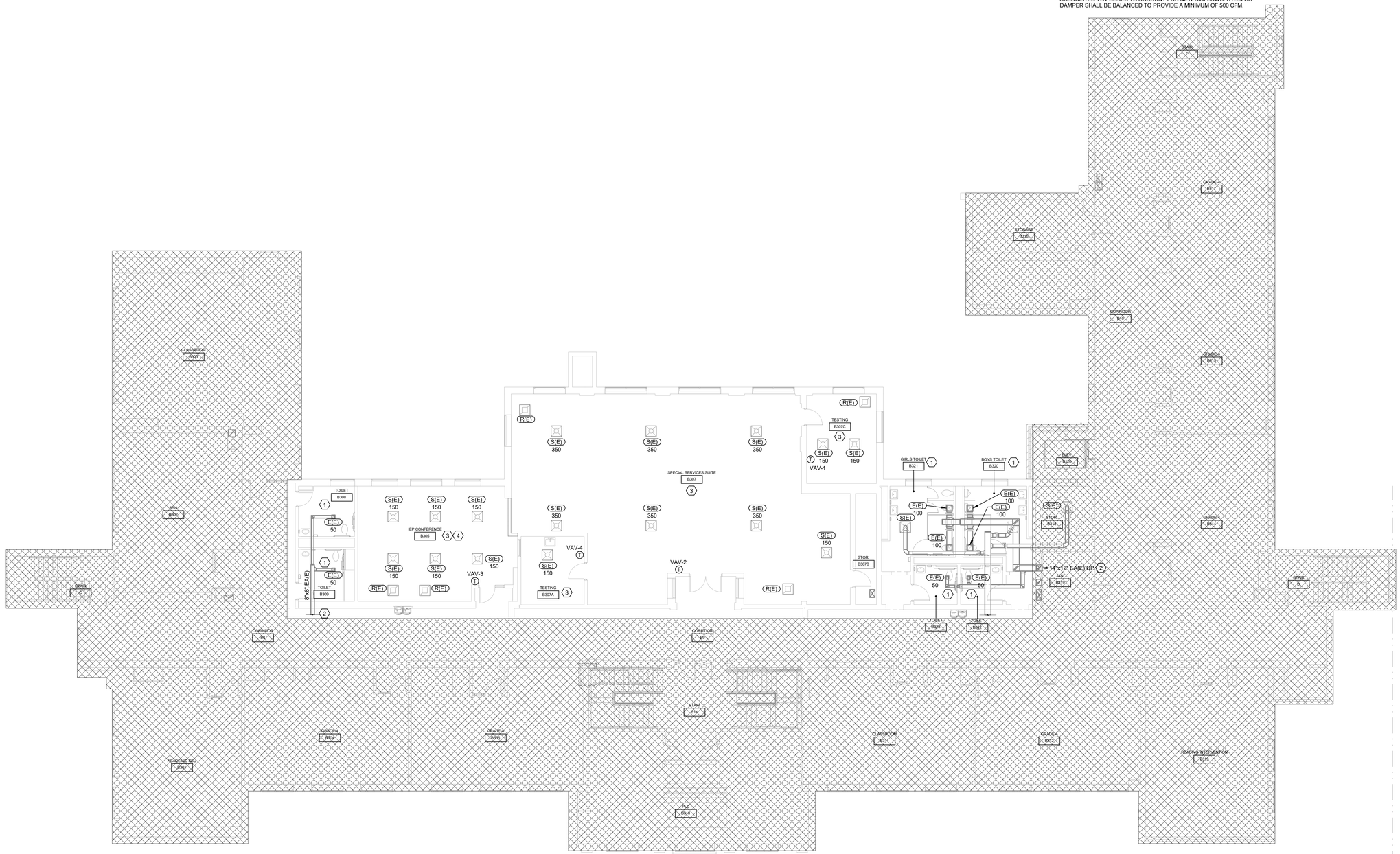
KEY NOTES:

1. COORDINATE EXISTING AIR DEVICE LOCATION WITH NEW CEILING INSTALLATION. RELOCATE DEVICE(S) AS REQUIRED.
2. REBALANCE EXISTING EXHAUST FAN ON ROOF TO ACCOUNT FOR NEW AIRFLOWS.
3. ABOVE CEILING WAS NOT ACCESSIBLE DURING ENGINEERING SURVEY. AREA IS SERVED BY RTU-4(E) ON ROOF VIA VAV BOXES LOCATED IN ATTIC SPACE ABOVE B305. THE VAV BOX ZONE IS INDICATED NEXT TO THE THERMOSTAT.
4. RTU-4 IS LOCATED ON THE ROOF ABOVE B305. BALANCE RTU-4 AND ASSOCIATED VAV BOXES TO ACCOUNT FOR NEW AIRFLOWS. RTU-4 OA DAMPER SHALL BE BALANCED TO PROVIDE A MINIMUM OF 500 CFM.

GENERAL NOTES:

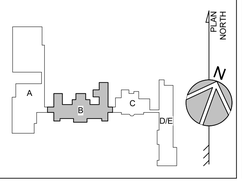
A. REFER TO M-001 FOR GENERAL NOTES, ABBREVIATIONS AND SYMBOLS.

B. ALL RELOCATED AND EXISTING AIR DEVICES WITHIN AREAS OF SCOPE SHALL BE REMOVED AND CLEANED BEFORE REINSTALLATION. REFER TO ARCHITECTURAL RCP PLANS FOR CEILING DETAILS. ANY DAMAGED OR OTHERWISE UNUSEABLE AIR DEVICES SHALL BE REPLACED IN-KIND UNDER THE BID ALLOWANCE AS SPECIFIED IN DIVISION 01.



1 THIRD FLOOR MECHANICAL NEW WORK PLAN - AREA B

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



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PROJECT NO:	2021101.00
DATE:	09/13/2024
SCALE:	1/8" = 1'-0"
DRAWN BY: MO	PROJ MGR: JC

M-103B

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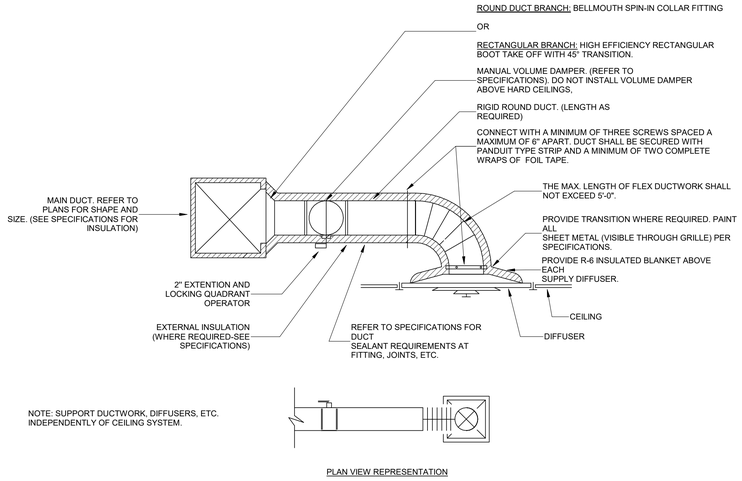
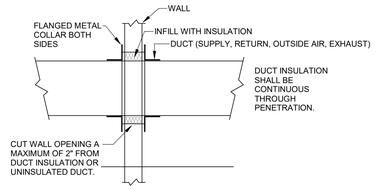


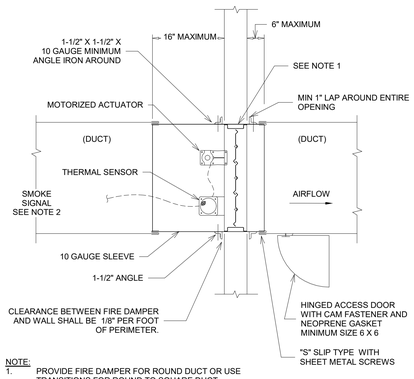
1 TYPICAL BRANCH DUCT DETAIL(SUPPLY, RETURN, AND EXHAUST)

NO SCALE



2 DUCT PENETRATION THROUGH NON-RATED WALL DETAIL

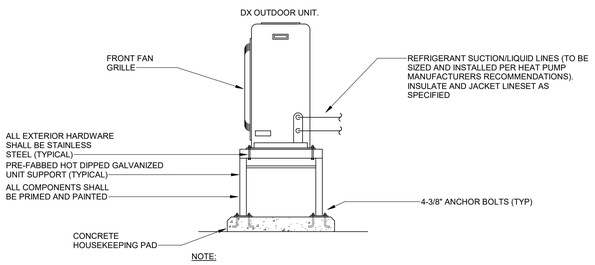
NO SCALE



NOTE:
1. PROVIDE FIRE DAMPER FOR ROUND DUCT OR USE TRANSITIONS FOR ROUND TO SQUARE DUCT.
2. PROVIDE SMOKE DETECTOR (DUCT OR SPACE-MOUNTED AS REQUIRED) WIRED TO BUILDING FIRE ALARM SYSTEM RELAY TO SIGNAL SMOKE DAMPER.

3 FIRE/SMOKE DAMPER DETAIL

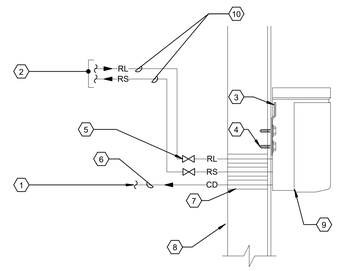
NO SCALE



NOTE:
1. BOTTOM OF UNIT SHALL BE MOUNTED A MINIMUM OF [2'-0"] ABOVE GRADE.
2. UNIT AND MOUNTING SUPPORT SYSTEM MATERIALS SHALL BE TREATED AND/OR SUITABLE FOR SEA-COAST ENVIRONMENT.

4 OUTDOOR SPLIT SYSTEM UNIT DETAIL

NO SCALE



DETAIL NOTES:

1. DISCHARGE CONDENSATE TO SPLASH BLOCK ON GRADE.
2. TO OUTDOOR UNIT. INSULATE AND JACKET LINSET AS SPECIFIED.
3. MOUNTING WALL BRACKET AS SUPPLIED BY MANUFACTURER.
4. 3/8" GALVANIZED BOLTS (TYP.).
5. REFRIGERATION SHUTOFF VALVES (TYP.).
6. FOR CONTINUATION SEE FLOOR PLANS.
7. PIPE SLEEVE (TYPICAL).
8. EXTERIOR WALL OF ELEVATOR MACHINE ROOM.
9. HEAT PUMP WALL MOUNTED INDOOR UNIT (MOUNT UNIT AS SCHEDULED).
10. REFRIGERANT SUCTION/LIQUID LINES TO BE SIZED AND INSTALLED PER HEAT PUMP UNIT MANUFACTURER'S RECOMMENDATIONS.

5 DUCTLESS SPLIT SYSTEM INDOOR WALL MOUNTED UNIT DETAIL

NO SCALE

SPLIT SYSTEM INDOOR UNIT SCHEDULE

MARK	MODEL #	MANUF.	TYPE	DIMENSIONS (IN.) LENGTH	WIDTH	HEIGHT	WEIGHT (LBS)	AIRFLOW (CFM)	ELECTRICAL VOLTAGE	PHASE	MCA	MOCP	FLA	REMARKS
SSIU-01	FAQ18	DAIKIN	WALL MOUNT	41	9	11	31.00 lbf	400	230 V	1	0.5 A	15	0.4 A	SEPARATE POWER SUPPLY REQUIRED

SPLIT SYSTEM OUTDOOR UNIT SCHEDULE

MARK	MANUF.	MODEL #	DIMENSIONS (IN.) LENGTH	WIDTH	HEIGHT	WEIGHT (LBS)	REFRIGERANT	COOLING MODE NOMINAL CAPACITY	SUMMER AMBIENT DB	HEATING MODE NOMINAL CAPACITY	WINTER AMBIENT DB	LOW AMBIENT COOLING KIT	AHRI EFFICIENCY MINIMUM SEER	MINIMUM HSPF	ELECTRICAL MCA	MOCP	VOLTAGE	PHASE	REMARKS
SSOU-01	DAIKIN	RZQ18TVJU	37	13	39	172.00 lbf	R-410A	1.50 ton	95.0 °F	13800 Btu/h	17.0 °F	Yes	11.2	7.6	17 A	20	230 V	1	

EXISTING FAN COIL SCHEDULE

MARK	SERIAL #	MANUFACTURER	MODEL #	OUTDOOR AIRFLOW	SUPPLY AIRFLOW	COOLING COIL LAT DB (°F)	LAT WB (°F)	EWT (°F)	LWT (°F)	GPM	HEATING COIL LAT DB (°F)	EWT (°F)	LWT (°F)	GPM	REMARKS
FCU-012(E)	673	TRANE	BCHB012	75 CFM	400 CFM	55 °F	54 °F	45 °F	55 °F	3 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-012(E)	687	TRANE	BCHB012	150 CFM	400 CFM	55 °F	54 °F	45 °F	55 °F	3 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-018(E)	516	TRANE	BCHB018	275 CFM	600 CFM	55 °F	54 °F	45 °F	55 °F	4 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-024(E)	521	TRANE	BCHB024	130 CFM	800 CFM	55 °F	54 °F	45 °F	55 °F	6 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-024(E)	537	TRANE	BCHB024	130 CFM	650 CFM	55 °F	54 °F	45 °F	55 °F	6 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-024(E)	925	TRANE	BCHB024	75 CFM	800 CFM	55 °F	54 °F	45 °F	55 °F	6 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-036(E)	522	TRANE	BHCB036	100 CFM	700 CFM	55 °F	54 °F	45 °F	55 °F	8 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-036(E)	539	TRANE	BHCB036	500 CFM	1200 CFM	55 °F	54 °F	45 °F	55 °F	8 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-036(E)	717	TRANE	BHCB036	800 CFM	1600 CFM	55 °F	54 °F	45 °F	55 °F	8 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-036(E)	713	TRANE	BHCB036	100 CFM	1050 CFM	55 °F	54 °F	45 °F	55 °F	8 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-036(E)	716	TRANE	BHCB036	500 CFM	1200 CFM	55 °F	54 °F	45 °F	55 °F	8 GPM	85 °F	160 °F	140 °F	2 GPM	
FCU-072E)	535	TRANE	BHCB072	300 CFM	2000 CFM	55 °F	54 °F	45 °F	55 °F	12 GPM	85 °F	160 °F	140 °F	2 GPM	

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18404 JOHNSON AVENUE
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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

MECHANICAL DETAILS AND SCHEDULES

ISSUE BLOCK

Mark	Date	Description

PROJECT NO: 2021101.00
DATE: 09/13/2024
SCALE: As indicated
DRAWN BY: MO PROJ MGR: JC

M-501

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ABBREVIATIOINS

A	AMPERE
AC	ALTERNATING CURRENT
AFF	ABOVE FLOOR FINISH
AHU	AIR HANDLING UNIT
BKR	BREAKER
C, CND	CONDUIT
C/B	CIRCUIT BREAKER
EM	EMERGENCY
FLA	FULL LOAD AMPS
FSS	FUSED SAFETY SWITCH
GND, G	GROUND
GFCI	GROUND FAULT CURRENT INTERRUPTER
HP	HORSEPOWER
KAIC	1000 AMPERES INTERRUPTING CAPACITY
KCMIL	1000 CIRCULAR MILS
KV	KILOVOLTS
KVA	KILOVOLT AMPERES
KW	KILOWATT
LTG	LIGHTING
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUG ONLY
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
NETA	NATIONAL ELECTRICAL TESTING AGENCY
NFSS	NON-FUSED SAFETY SWITCH
NIC	NOT IN CONTRACT
NTS	NOT TO SCALE
EPO	EMERGENCY POWER OFF
P	POLE
PNL	PANEL
RLA	RUNNING LOAD AMPERE
S, SW	SWITCH
SWBD	SWITCHBOARD
S/N	SOLID NEUTRAL
THRU	THROUGH
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLT
VA	VOLT-AMPERE
W	WATT
WP	WEATHER PROOF

GENERAL ANNOTATION SYMBOLS

XX	KEYED SHEET NOTE (XX = NOTE NUMBER)
X	REVISION TAG
XX	FEEDER SIZE TAG (FEEDER SCHEDULE NUMBER)
	LEADER - ARROW
	LEADER - LOOP

DISPOSITION ABBREVIATIONS & LINETYPES

TYPICAL DISPOSITION ABBREVIATIONS:
(D), D = EXISTING TO BE DEMOLISHED
(E), E = EXISTING TO REMAIN
(N), N = NEW TO BE PROVIDED
(R), R = EXISTING TO BE RELOCATED

	EXISTING TO REMAIN
	EXISITING TO BE DEMOLISHED UON
	NEW TO BE PROVIDED UON

POWER SYMBOLS

	NEW BRANCH CIRCUIT CONDUIT CONCEALED IN WALL OR CEILING.
	BRANCH CIRCUIT HOMERUN, NUMBER OF ARROWS INDICATES THE NUMBER OF CIRCUITS. ALL CIRCUITS SHALL HAVE A SEPARATE GREEN COLORED INSULATED GROUND WIRE.
	CONDUIT TURNED UP
	CONDUIT TURNED DOWN
	UNDERGROUND DIRECT BURIAL CABLE
	UNDERGROUND DUCT LINE
P/B X	PULLBOX X = SIZE
CL	DIGITAL CLOCK
LP-1	CIRCUIT NUMBER LP = PANEL 1 = CIRCUIT
	GROUND; NEC 250
	120/208V MAIN DISTRIBUTION PANEL
	277/480V MAIN DISTRIBUTION PANEL
	120/277V BRANCH PANELBOARD
	277/480V BRANCH PANELBOARD
	TRANSFORMER
WP *A / 3P F:'X'	FUSED SAFETY SWITCH. SUBSCRIPTS DENOTE THE FOLLOWING: WP = WEATHER PROOF IN NEMA 3R ENCLOSURE 3P = DENOTES 3 POLES *A = DENOTES SAFETY SWITCH SIZE F:'X' = DENOTES FUSE SIZE (IF APPLICABLE)
WP *A / 3P	NON FUSED SAFETY SWITCH. SUBSCRIPTS DENOTE THE FOLLOWING: WP = WEATHER PROOF AND GFCI IN NEMA 3R ENCLOSURE 3P = DENOTES 3 POLES *A = DENOTES SAFETY SWITCH SIZE
	MAGNETIC MOTOR STARTER. RATING AS INDICATED. MOUNTING HEIGHT = 54" UON
	COMBINATION MAGNETIC MOTOR STARTER WITH DISCONNECT SWITCH. RATING AS INDICATED. MOUNTING HEIGHT = 54" UON
	ENCLOSED CIRCUIT BREAKER. RATING AS INDICATED. MOUNTING HEIGHT = 54" UON
	MOTOR CONNECTION
EPO	EMERGENCY POWER OFF
VFD	VARIABLE FREQUENCY DRIVE - BY DIVISION 23
	WALL MOUNTED 20A (UON), 125V, 3W SIMPLEX RECEPTACLE. MOUNTING HEIGHT = 18" A.F.F. UON
X #	WALL MOUNTED 20A (UON), 125V, 3W DUPLEX RECEPTACLE. MOUNTING HEIGHT = 18" A.F.F. UON SUBSCRIPTS DENOTE THE FOLLOWING: # = CIRCUIT NUMBER C = COPIER DF = DRINKING FOUNTAIN DW = DISHWASHER EWC = ELECTRIC WATER COOLER H = HOSPITAL MW = MICROWAVE PR = PRINTER REF = REFRIGERATOR UREF = UNDERCOUNTER REFRIGERATOR SS = SURGE SUPRESSION T = TAMPER RESISTANT TV = TELEVISION. MOUNT +54" A.F.F. UON V = VENDING MACHINE. BREAKER FEEDING VENDING MACHINE SHALL BE PERSONAL GROUND FAULT TYPE.
	GROUND FAULT INTERRUPTING, WALL MOUNTED 20A (UON), 125V, 3W DUPLEX RECEPTACLE. MOUNTING HEIGHT = 18" A.F.F. UON
	UNIVERSAL SERIAL BUS (USB), WALL MOUNTED 20A (UON), 125V, 3W DUPLEX RECEPTACLE. MOUNTING HEIGHT = 18" A.F.F. UON
	CONTROLLED, WALL MOUNTED 20A (UON), 125V, 3W DUPLEX RECEPTACLE. MOUNTING HEIGHT = 18" A.F.F. UON
	CEILING MOUNTED 20A (UON), 125V, 3W DUPLEX RECEPTACLE
	FLOOR MOUNTED 20A (UON), 125V, 3W DUPLEX RECEPTACLE
	WALL MOUNTED 20A (UON), 125V, 3W DOUBLE DUPLEX RECEPTACLE. MOUNTING HEIGHT = 18" A.F.F. UON
	WALL MOUNTED 20A (UON), 125V, 3W DUPLEX RECEPTACLE. MOUNTING HEIGHT = 6" ABOVE COUNTER. UON
	SURFACE MOUNTED 20A (UON), 125V, 3W DUPLEX RECEPTACLE. MOUNTING HEIGHT =18" A.F.F. UON
	CEILING MOUNTED 20A (UON), 125V, 3W DOUBLE DUPLEX RECEPTACLE
	FLOOR MOUNTED 20A (UON), 125V, 3W DOUBLE DUPLEX RECEPTACLE
	WALL MOUNTED SPECIAL RECEPTACLE. AMERAGE STATED ON DRAWING
	CEILING MOUNTED SPECIAL RECEPTACLE. AMERAGE STATED ON DRAWING
	FLOOR MOUNTED SPECIAL RECEPTACLE. AMERAGE STATED ON DRAWING
	WALL MOUNTED WIREMOLD.
P	SURFACE MOUNTED WALL ELECTRICAL POWER CONNECTION FOR ELECTRIFIED FURNITURE
P	FLOOR ELECTRICAL POWER CONNECTION FOR ELECTRIFIED FURNITURE
J	CEILING MOUNTED JUNCTION BOX
J	WALL MOUNTED JUNCTION BOX
J	FLOOR MOUNTED JUNCTION BOX
J P	CEILING MOUNTED PROJECTOR CONNECTION
J S	CEILING MOUNTED PROJECTOR SCREEN CONNECTION

LIGHTING SYMBOLS

A(EM) a #	TYPICAL SUBSCRIPTS DENOTE THE FOLLOWING: A = LIGHT FIXTURE TYPE. REFER TO LIGHTING FIXTURE SCHEDULE FOR SPECIFICATIONS. (EM) = ON EMERGENCY CIRCUIT a = CONTROL ZONE # = CIRCUIT NUMBER REFER TO LIGHTING FIXTURE SCHEDULE FOR ADDITIONAL INFORMATION
	2X4 RECESSED FIXTURE
	2X4 SURFACE MOUNTED FIXTURE
	2X2 RECESSED FIXTURE
	2X2 SURFACE MOUNTED FIXTURE
	1X4 RECESSED FIXTURE
	1X4 SURFACE MOUNTED FIXTURE
	RECESSED ROUND DOWNLIGHT
	SURFACE MOUNTED ROUND DOWNLIGHT
	STRIP FIXTURE
	TRACK LIGHT HEAD
	UNDERCABINET FIXTURE
	WASHER FIXTURE
	BOLLARD FIXTURE
	OUTDOOR POLE FIXTURE
	EMERGENCY BATTERY PACK
	DOUBLE/SINGLE FACED WALL MOUNTED EXIT LIGHT
	DOUBLE/SINGLE FACED CEILING MOUNTED EXIT LIGHT
	SINGLE FACED EXIT LIGHT WITH BUG EYES
	DOUBLE/SINGLE FACED EXIT LIGHT DIRECTIONAL ARROW

SWITCHING SYMBOLS

X $a	SWITCH. MOUNTING HEIGHT = 44" A.F.F. UON SUBSCRIPTS DENOTE THE FOLLOWING: a = CONTROL ZONE 3 = THREE-WAY 4 = FOUR-WAY D = DIMMER EF = EXHAUST FAN. MOUNTED ABOVE CABINET UON F = CEILING FAN CONTROL SENSOR G = GRAPHIC LIGHTING CONTROLLER K = KEY OPERATED LV = LOW-VOLTAGE - MOMENTARY CONTACT LV/3 = THREE-WAY LOW-VOLTAGE LV/3/D = THREE-WAY LOW-VOLTAGE DIMMMER LV/D = LOW-VOLTAGE DIMMMER M = MANUAL MOTOR STARTER WITH THERMAL OVERLOAD PROTECTION; MOUNT AS INDICATED ON DRAWINGS MC = MOMENTARY CONTACT MS = MOTORIZED SCREEN CONTROL OL = SWITCH WITH OVERLOAD PROTECTION FOR SINGLE PHASE MOTOR OS = OCCUPANCY SENSOR T = TIMER TC = TIME CLOCK TW = TUNABLE WHITE U = UNDER CABINENT V = VOLUME CONTROL VS = VACANCY SENSOR VS/D = DIMMMER WITH VACANCY/OCCUPANCY SENSOR
VS/OS/PP	VACANCY/OCCUPANCY SENSOR AND ASSOCIATED POWERPACK/ROOM CONTROLLER FOR LIGHTING CONTROL
P	PHOTO-ELECTRIC SENSOR
ER	EMERGENCY UL924 LIGHTING RELAY DEVICE
	DAYLIGHT CONTROL ZONE. ALL LIGHTING FIXTURES WITHIN THIS ZONE SHALL BE CONTROLLED BY THE LOCAL DAYLIGHT SENSOR.

COMMUNICATION SYMBOLS

	WALL MOUNTED TELEPHONE OUTLET. MOUNTING HEIGHT = 18" A.F.F. UON
	DATA OUTLET. MOUNTING HEIGHT = 18" A.F.F. UON
	COMBINATION TELEPHONE/DATA OUTLET. MOUNTING HEIGHT = 18" A.F.F. UON
	FLOOR, FLUSH MOUNTED TELEPHONE/DATA OUTLET
	FLOOR, FLUSH MOUNTED DATA OUTLET
	CEILING MOUNTED DATA OUTLET
WAP	CEILING MOUNTED WIRELESS ACCESS POINT
C	WALL COMMUNICATION CONNECTION FOR SYSTEMS FURNITURE
C	FLOOR COMMUNICATION CONNECTION FOR SYSTEMS FURNITURE

FIRE ALARM SYMBOLS

FAAP	FIRE ALARM ANNUNCIATOR PANEL
FACP	FIRE ALARM CONTROL PANEL
FTC	FIRE ALARM TERMINAL CABINET
DH	MAGNETIC DOOR HOLDER. MAGNETIC HOLDING DOOR SHALL RELEASE DURING FIRE ALARM.
F	FIRE ALARM PULL STATION. ANNUNCIATING DEVICE. DEVICE SHALL BE MOUNTED WITHIN 5 FEET OF EXIT. MOUNTING HEIGHT = 48" A.F.F UON
FP	FIREMAN'S PHONE
F	WALL MOUNTED COMBINATION FIRE ALARM STROBE LIGHT AND SPEAKER. WALL MOUNTING HEIGHT = 80" A.F.F. UON OR 6" BELOW CEILING, WHICHEVER IS LOWER
V	WALL MOUNTED VISUAL FIRE ALARM STROBE LIGHT. WALL MOUNTING HEIGHT = 80" A.F.F. UON OR 6" BELOW CEILING, WHICHEVER IS LOWER
B	WALL MOUNTED FIRE ALARM BELL. MOUNTING HEIGHT = 80" A.F.F. UON OR 6" BELOW CEILING, WHICHEVER IS LOWER
HD	CEILING MOUNTED HEAT DETECTOR
HD F	CEILING MOUNTED FUSED TEMPERATURE HEAT DETECTOR
FID	FIRE ALARM INTERFACE DEVICE
TS	FIRE PROTECTION SPRINKLER TAMPER SWITCH
FS	FIRE PROTECTION SPRINKLER FLOW SWITCH
PA	FIRE PROTECTION PRESSURE ALARM SWITCH
PS	FIRE PROTECTION SPRINKLER PRESSURE SWITCH
SD	CEILING MOUNTED SMOKE DETECTOR
DD	DUCT MOUNTED SMOKE DETECTOR

SECURITY SYMBOLS

CR	SECURE ACCESS CARD READER
KP	SECURE ACCESS KEYPAD
RTES	MOTION ACTIVATED REQUEST TO EXIT SWITCH
PP	PUSH BUTTON REQUEST TO EXIT SWITCH
EP	EMERGENCY PUSH BUTTON REQUEST TO EXIT SWITCH
DCR	DOOR CONTROL RELAY
MS	MOTION DETECTOR
DR	WALL MOUTED DURESS ALARM BUTTON
SCP	SECURITY SYSTEM CONTROL PANEL
CPS	VIDEO SURVEILLANCE POWER SUPPLY
### / ###	CEILING/WALL MOUNTED VIDEO SURVEILLANCE CAMERA. SUBSCRIPTS DENOTE THE FOLLOWING: TYPICAL SECURITY CAMERA ANNOTATIONS: F = FIXED P = PAN PTZ = PAN/TILT/ZOOM
	EMERGENCY INTRUDER BUTTON

ELECTRICAL GENERAL NOTES

1. THE FOLLOWING NOTES ARE GENERAL IN NATURE AND PERTAIN TO THE ENTIRE PROJECT. WHERE THERE ARE EXCEPTIONS, ADDITIONS OR REVISIONS TO THESE NOTES SUCH ARE SO NOTED ON THE PARTICULAR DRAWING WHERE THEY OCCUR. REFER TO SPECIFICATIONS FOR GENERAL REQUIREMENTS OF ALL WORK.
2. THE CONTRACTOR SHALL FABRICATE AND INSTALL ALL WORK IN STRICT ACCORDANCE WITH OSHA, ALL APPLICABLE STATE, COUNTY, AND LOCAL CODES, AND THE GENERAL AND SUPPLEMENTARY CONDITIONS OF THE CONTRACT.
3. PRIOR TO BID, THE CONTRACTOR SHALL EXAMINE ALL PROJECT DRAWINGS, AND SHALL VISIT THE SITE, AND VERIFY ALL CONDITIONS TO DEVELOP A COMPLETE UNDERSTANDING OF THE PROJECT SCOPE. FAILURE TO DO SO SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM ALL WORK REQUIRED. THE CONTRACTOR SHALL, UPON REVIEW OF THE DOCUMENTS, ADVISE THE ENGINEER OF ANY DISCREPANCIES WHICH WILL AFFECT THE WORK REQUIRED.
4. PRIOR TO COMMENCING ANY WORK, THE CONTRACTOR SHALL COORDINATE WITH OTHER TRADES. CONFLICTS ARISING FROM FAILURE TO DO SO SHALL BE RECTIFIED BY THE CONTRACTORS AT NO ADDITIONAL COST TO THE CONTRACT.
5. DRAWINGS ARE DIAGRAMMATIC; THEREFORE, THE CONTRACTOR SHALL MAKE ADJUSTMENTS AS REQUIRED FOR A COMPLETE INSTALLATION. CONTRACTOR SHALL CLOSELY EXAMINE ALL PROJECT DRAWINGS TO UNDERSTAND WORK REQUIRED AND TO AVOID INTERFERENCE WITH EXISTING AND NEW WORK SUCH AS DUCTS, PIPING, LIGHTING FIXTURES, STRUCTURAL BEAMS, RAIN LEADERS, ETC.. THESE DRAWINGS ARE BASED ON DOCUMENTS MADE AVAILABLE BY THE CLIENT, THE CONTRACTOR SHALL FIELD VERIFY ALL LAYOUTS AND MAKE NECESSARY ADJUSTMENTS AT NO ADDITIONAL COST TO THE CONTRACT.
6. ALL WORK SHALL BE EXECUTED IN ACCORDANCE WITH THE BEST ACCEPTED TRADE PRACTICES AND AS PER MANUFACTURER'S RECOMMENDATIONS (HIGHEST STANDARD, LOWEST TOLERANCE TO RULE).
7. THE CONTRACTOR SHALL PROTECT ALL EQUIPMENT AND FIXTURES STORED OR SET IN PLACE IN THE JOB.
8. ALL EXISTING ELECTRICAL EQUIPMENT TO REMAIN IS TO BE PROTECTED DURING THE CONSTRUCTION PROCESS. CONTRACTOR TO PROVIDE ENGINEER WITH PUNCH LIST OF ALL EXISTING DAMAGE AND NON FUNCTIONING EQUIPMENT PRIOR TO THE START OF CONSTRUCTION.
9. ANY DAMAGE TO THE NEW OR EXISTING CONSTRUCTION CAUSED BY THE CONTRACTOR'S NEGLIGENCE OR INADEQUATE PROTECTION OR SECURITY MEASURES DURING CONSTRUCTION ARE TO BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
10. THE CONTRACTOR SHALL INSTALL ALL EQUIPMENT AND DEVICES SO THEY ARE READILY ACCESSIBLE. PRIOR TO INSTALLING EQUIPMENT, DISCONNECTS, STARTERS, ETC., THE CONTRACTOR SHALL VERIFY EQUIPMENT SERVICE CLEARANCES AS REQUIRED BY THE CURRENT NATIONAL ELECTRIC CODE AND SHALL REPORT ANY INADEQUACIES TO THE ENGINEER.
11. THE CONTRACTOR SHALL PROVIDE ALL TOOLS, MATERIALS, EQUIPMENT AND NECESSARY FACILITIES, AND PERFORM ALL LABOR AND SERVICES OF EVERY DESCRIPTION AS MAY BE NECESSARY TO COMPLETE THE SCOPE OF WORK DEFINED IN THE DRAWINGS.
12. ALL CONTRACTORS AND SUBCONTRACTORS SHALL BE RESPONSIBLE FOR THE PROPER PERFORMANCE OF THEIR WORK, COORDINATE WITH OTHER TRADES, MEANS AND METHODS OF CONSTRUCTION, SAFETY AND SECURITY ON SITE.
13. UNLESS ITEMS OF MATERIAL, EQUIPMENT OR WORK ARE SPECIFICALLY NOTED TO BE PROVIDED OR FURNISHED BY OTHERS, THEY SHALL BE PROVIDED UNDER THIS CONTRACT.
14. WORK INDICATED AS HAVING MINOR DETAILS OBVIOUSLY OMITTED FOR CLARITY SHALL BE INCLUDED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
15. THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS AT THE SITE, AND SHALL VERIFY ALL ROUGH-IN REQUIREMENTS FOR ELECTRICALLY-OPERATED EQUIPMENT. VERIFICATIONS SHALL BE MADE WITH THE EQUIPMENT SUPPLIERS.
16. FIRE STOPPING WITH A FIRE RESISTANT RATING IN ACCORDANCE WITH ASTM E119 SHALL BE PROVIDED BY THE CONTRACTOR FOR ANY REQUIRED OR THOSE DUE TO DEMOLITION WORK PENETRATIONS OF FIRE RATED ASSEMBLIES. THE CONTRACTOR SHALL ADVISE THE OWNER 24 HOURS IN ADVANCE OF COMMENCING FIRE STOPPING WORK.
17. ALL SUPPORTS SHALL BE DESIGNED AND INSTALLED IN COMPLIANCE WITH THE SEISMIC PROVISIONS OF IBC.
18. THE CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS STEEL SHAPES, HANGER RODS, STRAPS, ETC. REQUIRED FOR ALL ELECTRICAL SYSTEM INSTALLATIONS.
19. THE CONTRACTOR SHALL MAINTAIN A MINIMUM OF 6'-8" CLEARANCE TO THE UNDERSIDE OF CONDUITS, SUSPENDED EQUIPMENT, ETC., THROUGHOUT ACCESS ROUTES IN MECHANICAL AND ELECTRICAL EQUIPMENT ROOMS.
20. ALL NEW WORK SHALL BE CONCEALED IN FINISHED AREAS. NO SURFACE MOUNTED CONDUIT, OUTLET BOXES, RACEWAYS, OR DEVICES WILL BE PERMITTED UNLESS SPECIFICALLY SHOWN ON THE CONTRACT DOCUMENTS.
21. THE CONTRACTOR SHALL PLACE ALL EQUIPMENT INTO OPERATION AND ADJUST ALL EQUIPMENT FOR PROPER OPERATION. THE CONTRACTOR SHALL EXPLAIN THE SYSTEM OPERATION AND MAINTENANCE PROCEDURES TO THE OWNER.
22. ALL COLORS OF EXPOSED EQUIPMENT SHALL BE APPROVED BY THE ENGINEER, ARCHITECT, AND OWNER PRIOR TO ORDERING.
23. REFER TO ARCHITECTURAL ELEVATIONS AND REFLECTED CEILING PLANS WHERE SUCH ARE SHOWN FOR EXACT LOCATION OF ALL WALL AND CEILING MOUNTED ELECTRICAL WORK.
24. THE CONTRACTOR SHALL COORDINATE FINAL LOCATIONS OF LIGHTING FIXTURES, SPEAKERS, SMOKE DETECTORS, AND OTHER ITEMS WITH THE REFLECTED CEILING PLAN(S). LIGHTING FIXTURES SHALL BE MOUNTED SQUARELY AND CENTERED WITHIN ACOUSTIC CEILING PANELS.
25. LETTER DESIGNATION DIRECTLY ADJACENT TO LIGHTING FIXTURE SYMBOL INDICATED THE TYPE OF LIGHTING FIXTURE.
26. LOCATE LIGHT SWITCHES APPROXIMATELY 4 TO 6 INCHES FROM THE LATCH SIDE OF DOOR FRAME WHERE POSSIBLE EXCEPT AS NOTED OTHERWISE.
27. LOCATE LIGHT SWITCHES DIRECTLY BENEATH THERMOSTATS WHERE THEY ARE SHOWN IN CLOSE PROXIMITY. SEE MECHANICAL DRAWINGS FOR LOCATIONS OF THERMOSTATS.
28. LOCATE WALL BOXES APPROXIMATELY AS SHOWN, EXACTLY AS DIRECTED OR AS NECESSARY TO ACHIEVE SYMMETRY AND COORDINATION WITH THE BUILDING FINISHES AND EQUIPMENT.
29. LOCATE ALL PULL BOXES SUCH THAT THEY ARE ACCESSIBLE.
30. MOUNT FLUSH BOXES WITH THEIR FRONT EDGE EVEN WITH THE FINISH SURFACE. SINGLE GANG BOXES SHALL BE MOUNTED WITH LONGER DIMENSION VERTICAL UNLESS NOTED OTHERWISE. MOUNT ALL BOXES AND PLATES PLUMB.
31. BOXES SHALL NOT BE INSTALLED BACK TO BACK ON BOTH SIDES OF A WALL. OFFSET BOXES A MINIMUM OF 6 INCHES.
32. COORDINATE OUTLET LOCATIONS AND CIRCUIT RATINGS WITH EQUIPMENT SHOWN ON MECHANICAL AND PLUMBING DRAWINGS AND WITH ALL EQUIPMENT AND FURNISHINGS SHOWN ON ARCHITECTURAL AND INTERIORS DRAWINGS.
33. BRANCH CIRCUIT AND FEEDER NUMBERS ARE INDICATED BY NUMBER DESIGNATION ONLY. SEE BRANCH CIRCUIT AND FEEDER SCHEDULES FOR SIZE.
34. INDICATED BRANCH CIRCUIT CONDUCTOR SIZES ARE BASED ON NO MORE THAT 3 CURRENT CARRYING CONDUCTORS AND A NON-CURRENT CARRYING CONDUCTOR IN EACH RACEWAY. WHERE THE NUMBER OF CONDUCTORS EXCEED THIS AMOUNT, ADJUST CONDUCTOR SIZES IF AND AS NECESSARY TO ACCOUNT FOR DERATING THEIR AMPACITY AS IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE ARTICLE 310.
35. FOR EACH INDICATED CONNECTION TO EQUIPMENT, PROVIDE AN OUTLET BOX AND FLEXIBLE CONDUIT AS APPROPRIATE FOR ASSOCIATED EQUIPMENT. FOR EXTERIOR EQUIPMENT, BOX SHALL BE NEMA-3R AND CONDUIT SHALL BE FLEXIBLE LIQUIDTIGHT. FOR INTERIOR EQUIPMENT, BOX SHALL BE GENERAL PURPOSE AND CONDUIT SHALL BE FLEXIBLE METALLIC. WHERE THE EQUIPMENT COMES WITH A CORD AND PLUG, PROVIDE A COMPATIBLE RECEPTACLE. WHERE REQUIRED BY CODE PROVIDE AND INSTALL A SAFETY DISCONNECT SWITCH ADJACENT TO EQUIPMENT.
36. PROVIDE TIME CLOCK AND CONTROL UNITS IN ELECTRICAL ROOM. PROVIDE AUTOMATIC LIGHT CONTROLS AS INDICATED. PROVIDE ASSOCIATED RELAYS AND CONTACTORS AS NECESSARY FOR REQUIRED CONTACT QUANTITIES AND RATINGS. LOCATE CONTACTORS AND RELAYS IN MECHANICAL SPACES OR ABOVE ACCESSIBLE CEILINGS.
37. EACH RECEPTACLE CIRCUIT SHALL HAVE AN INDIVIDUAL GROUND WIRE. ISOLATED GROUND RECEPTACLES SHALL HAVE (2) GROUND WIRES.
38. WHERE (2) OR MORE WIRING DEVICES ARE SHOWN IN CLOSE PROXIMITY, USE A MULTI-GANG BOX AND FACEPLATE. PROVIDE AND INSTALLED DIVIDER AS REQUIRED.
39. BRANCH CIRCUIT VOLTAGE DROP SHALL NOT EXCEED 3%. FEEDER VOLTAGE DROP SHALL NOT EXCEED 5%. ADJUST CABLE SIZE ACCORDINGLY.
40. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR X-RAYING SLABS IN AREAS WHERE CORE DRILLING IS TO TAKE PLACE. E.C. SHALL VERIFY THAT SLAB IS FREE OF CONFLICTING WITH EXISTING SYSTEMS AND STRUCTURES PRIOR TO DRILLING.
41. ALL WORK SHALL BE COMPLETED IN A MANNER TO MINIMIZE INTERRUPTIONS OF BUILDING SERVICES. IN THE EVENT THAT SERVICES MUST BE INTERRUPTED, NOTIFY OWNER AND GET WRITTEN APPROVAL, MINIMUM OF 5 DAYS PRIOR TO INTERRUPTION.
42. CONTRACTOR SHALL VERIFY EXACT ELECTRICAL CHARACTERISTICS REQUIRED WITH MECHANICAL EQUIPMENT SHOP DRAWINGS PRIOR TO INSTALLATION OF FEEDERS AND BRANCH CIRCUITS TO ASSURE CORRECT SIZE WITH FINAL EQUIPMENT BEING SUPPLIED. MECHANICAL EQUIPMENT CHARACTERISTICS MAY VARY FROM NOTES AND PANEL SCHEDULE INDICATED.
43. ALL EMERGENCY LIGHTING FIXTURES SHALL CONTAIN AN INTEGRAL EMERGENCY BATTERY UNIT, CONSISTING OF NICKEL-CADMIUM BATTERY AND AN AUTOMATIC SOLID STATE CHARGER WITH VISIBLE CHARGING LED. UNIT SHALL ILLUMINATE (1) ONE LAMP PER FIXTURE AT A NORMAL LAMP LUMEN OUTPUT OF 30% MINIMUM RATED LUMEN OUTPUT FOR A MINIMUM OF 90 MINUTES. BATTERY PACKS SHALL BE CONNECTED TO UNSWITCHED LEG OF LIGHTING CIRCUIT SERVING ROOM.

ELECTRICAL DEMOLITION NOTES

1. IN GENERAL, THESE DRAWINGS ARE DIAGRAMMATIC ONLY, AND ONLY REPRESENT THE GENERAL SCOPE OF THE WORK. IT IS THE INTENT OF THIS CONTRACT TO REMOVE ALL UNUSED EXISTING CONDUCTORS, CONDUIT, SUPPORTS, DEVICES, ELECTRICAL EQUIPMENT, CONTROLS, AND OTHER RELATED APPURTENANCES ON EXISTING WALLS/CEILINGS TO BE REMOVED UNLESS SPECIFICALLY NOTED OTHERWISE. THE CONTRACTOR SHALL BE REQUIRED TO INVESTIGATE, AND VERIFY ALL CONDITIONS AT THE SITE, PRIOR TO HIS BIDDING, TO DETERMINE THE EXTENT OF THE DEMOLITION.
2. ALL EXISTING ELECTRICAL WORK TO BE REMOVED WILL BECOME THE PROPERTY OF THE ELECTRICAL CONTRACTOR AND SHALL BE PROMPTLY REMOVED FROM THE PREMISES, EXCEPT AS OTHERWISE NOTED.
3. REMOVE AS IT ACCUMULATES, ALL DEBRIS RESULTING FROM CONSTRUCTION AND DEMOLITION OPERATIONS. DO NOT STORE OR PERMIT DEBRIS TO ACCUMULATE ON SITE. IF CONTRACTOR FAILS TO REMOVE EXCESS DEBRIS PROPERLY OR PROMPTLY, OWNER RESERVES RIGHT TO CAUSE SAME TO BE REMOVED AT CONTRACTOR'S EXPENSE.
4. ALL AREAS OF EGRESS SHALL BE KEPT OPEN AND FREE OF DEBRIS AT ALL TIMES.
5. REMOVAL OF ANY MATERIAL AND EQUIPMENT SHALL INCLUDE ALL ASSOCIATED ITEMS SUCH AS SUPPORTS, FASTENINGS, CONDUITS, FLASHING, ADHESIVE, ETC.
6. WHERE ELECTRICAL WORK IS REMOVED, PATCH EXISTING CONSTRUCTION IN ACCORDANCE WITH UL CLASSIFICATIONS TO MAINTAIN REQUIRED FIRE, SMOKE, AND ACOUSTIC SEPARATIONS. FINISHES IN PUBLIC AREAS SHALL BE PATCHED AND FINISHED SO THAT THE APPEARANCE OF DEMOLITION WORK IS COMPLETELY REMOVED.
7. ALL HOLES IN SLABS ABOVE AND BELOW ARE TO BE FILLED WITH CONCRETE AS REQUIRED.
8. ALL WORK SHALL BE EXECUTED IN AN ORDERLY AND CAREFUL MANNER WITH DUE CONSIDERATION FOR PUBLIC SAFETY, AND IN CONFORMANCE WITH OSHA STANDARDS.
9. PROCEED WITH DEMOLITION FROM TOP TO BOTTOM. DO NOT REMOVE ITEMS SUPPORTING OTHER MEMBERS WITHOUT PROVIDING TEMPORARY OR PERMANENT BRACING AS REQUIRED. SEE DRAWINGS FOR AREAS AND EXTENT OF DEMOLITION.
10. IF EXISTING CONDITIONS ARE DIFFERENT THAN WHAT IS INDICATED ON CONTRACT DOCUMENTS, THE CONTACTORS SHALL NOTIFY THE DEPARTMENT, ARCHITECT, OR ENGINEER.
11. PROTECT REMOVED ITEMS WHICH ARE TO BE REUSED ON SITE TO MINIMIZE POST-CONSTRUCTION REPAIRS. ANY ITEMS WHICH ARE DAMAGED SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST.
12. PROPERLY SUPPORT EXISTING LIGHTING, CONDUIT, RACEWAY, AND CABLE TRAY TO REMAIN. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING REQUIRED SUPPORTS FOR WORK AFFECTING ANY OF THESE ITEMS.
13. EQUIPMENT INDICATED FOR REMOVAL SHALL BE REVIEWED BY THE OWNER. ELECTRICAL CONTRACTOR SHALL REMOVE EQUIPMENT OWNER WISHES TO RETAIN AND DELIVER TO THE LOCATION DESIGNATED BY OWNER. ELECTRICAL CONTRACTOR SHALL REMOVE PROMPTLY FROM THE SITE MATERIALS AND EQUIPMENT INDICATED FOR REMOVAL WHICH ARE NOT SPECIFIED FOR REUSE, STORAGE, OR RETENTION BY OWNER.
14. LIGHTING FIXTURE REMOVAL: WHERE INDICATED ON THE DRAWINGS, DISCONNECT ALL EXISTING LIGHTING FIXTURES FROM THE POWER SUPPLY AND REMOVE FIXTURES. REMOVE ALL BOXES, SUPPORTS, AND SWITCHES ASSOCIATED WITH EACH FIXTURE AS WELL AS ALL ASSOCIATED CONDUCTORS AND CONDUIT BACK TO THE PANELBOARD. IF FIXTURE IS BEING REMOVED FROM A CONTINUING LIGHTING CIRCUIT; CONTRACTOR SHALL SPLICE CIRCUIT TO ALLOW NORMAL OPERATION OF REMAINING LIGHTING FIXTURES.
15. POWER DEVICE REMOVAL: WHERE INDICATED ON THE DRAWINGS, DISCONNECT ALL EXISTING POWER DEVICES FROM THE POWER SUPPLY AND REMOVE DEVICES. REMOVE ALL BOXES, ENCLOSURES, RACEWAY, AND SUPPORTS ASSOCIATED WITH EACH DEVICE AS WELL AS ALL ASSOCIATED CONDUCTORS AND CONDUIT BACK TO THE PANELBOARD. IF DEVICE IS BEING REMOVED FROM A CONTINUING CIRCUIT; CONTRACTOR SHALL SPLICE CIRCUIT TO ALLOW NORMAL OPERATION OF REMAINING WIRING DEVICES.
16. TELECOM REMOVAL: WHERE INDICATED ON THE DRAWINGS, DISCONNECT ALL EXISTING TELECOMMUNICATIONS JACKS FROM CABLING AND REMOVE JACK. REMOVE BOXES, RACEWAY, AND SUPPORTS ASSOCIATED WITH EACH DEVICE AS WELL AS CABLES AND CONDUIT BACK TO PATCH PANEL. WHERE APPLICABLE, COORDINATE WORK WITH TELECOMMUNICATIONS CONTRACTOR.
17. ELECTRICAL CONTRACTOR SHALL PERFORM ALL CUTTING AND ROUGH PATCHING REQUIRED FOR DEMOLITION WORK IN ACCORDANCE WITH THE ARCHITECT. FINAL PATCHING AND SURFACE PREPARATION SHALL BE PERFORMED BY THE GENERAL CONTRACTOR.
18. ELECTRICAL CONTRACTOR SHALL DISCONNECT AND REMOVE ALL SWITCHES, CONTROLLERS, RECEPTACLES, TELE/DATA OUTLETS, ETC. ON EXISTING WALLS TO BE REMOVED. SEE NOTES ABOVE FOR EXTENT OF REMOVAL.

APPLICABLE BUILDING CODES

- INTERNATIONAL PLUMBING CODE (IPC) - STATE EDITION [2021]
- INTERNATIONAL MECHANICAL CODE (IMC) - STATE EDITION [2015]
- INTERNATIONAL ENERGY CONSERVATION CODE (IECC) - STATE EDITION [2018]
- INTERNATIONAL BUILDING CODE (IBC) - STATE EDITION [2015]
- INTERNATIONAL EXISTING BUILDING CODE (IEBC) - STATE EDITION [2015]
- INTERNATIONAL FUEL GAS CODE (IFGC) - STATE EDITION [2015]
- ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES (ANSI A117.1) - STATE EDITION [2017]
- NATIONAL ELECTRICAL CODE (NFPA 70) - STATE EDITION [2020]
- LIFE SAFETY CODE (NFPA 101) - STATE EDITION [2021]
- FIRE CODE (NFPA 01) - STATE EDITION [2021]
- FIRE SPRINKLER CODE (NFPA 13) - STATE EDITION [2019]
- FIRE ALARM CODE (NFPA 72) - STATE EDITION [2019]

ELECTRICAL SHEET LIST

SHEET #	SHEET NAME
E-001	ELECTRICAL LEGEND
ED-101B	FIRST FLOOR ELECTRICAL DEMOLITION PLAN - AREA B
ED-101D/E	FIRST FLOOR ELECTRICAL DEMOLITION PLAN - AREA D/E
ED-102B	SECOND FLOOR ELECTRICAL DEMOLITION PLAN - AREA B
ED-102D/E	SECOND FLOOR ELECTRICAL DEMOLITION PLAN - AREA D/E
ED-103B	THIRD FLOOR ELECTRICAL DEMOLITION PLAN - AREA B
E-101B	FIRST FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B
E-101D/E	FIRST FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA D/E
E-102B	SECOND FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B
E-102D/E	SECOND FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA D/E
E-103B	THIRD FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B
E-201B	FIRST FLOOR ELECTRICAL LIGHTING PLAN - AREA B
E-201D/E	FIRST FLOOR ELECTRICAL LIGHTING PLAN - AREA D/E
E-202B	SECOND FLOOR ELECTRICAL LIGHTING PLAN - AREA B
E-202D/E	SECOND FLOOR ELECTRICAL LIGHTING PLAN - AREA D/E
E-203B	THIRD FLOOR ELECTRICAL LIGHTING PLAN - AREA B
E-501	ELECTRICAL DETAILS
E-601	ELECTRICAL RISER DIAGRAM
E-701	ELECTRICAL PANEL SCHEDULES
E-702	ELECTRICAL PANEL SCHEDULES

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

ELECTRICAL LEGEND

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	NOT TO SCALE
DRAWN BY: JHA	PROJ MGR: MO

E-001

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KEY NOTES

1. HAND DRYER TO BE DEMOLISHED. MAINTAIN CIRCUIT FOR REUSE FOR NEW HAND DRYER UNDER NEW WORK.
2. FIRE ALARM DEVICE TO BE RELOCATED TO NEW WALL UNDER NEW WORK.
3. FIRE ALARM DEVICE TO BE RELOCATED TO ACCOMMODATE CEILING HEIGHT ADJUSTMENT UNDER NEW WORK.

GENERAL NOTES (DEMOLITION):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. DASHED-BOLD LINES INDICATE ITEMS TO BE DEMOLISHED (UON). GRAY SOLID LINES INDICATE EXISTING ITEMS TO REMAIN. REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES / FIXTURES / ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UON). CONTRACTOR SHALL PATCH AND REPAIR ANY EXISTING WALLS, FLOORS OR CEILINGS WHERE DEVICES ARE SHOWN TO BE REMOVED (PATCH AND REPAIR TO RECEIVE NEW FINISHES - SEE ARCHITECTURAL PLANS). DO NOT ABANDON CABLING OR SUPPORT DEVICES IN PLACE. REFER TO ELECTRICAL DEMOLITION NOTES ON E-001 FOR FURTHER INFORMATION.

C. MAINTAIN EXISTING NORMAL AND EMERGENCY LIGHTING CIRCUITS FOR REUSE FOR NORMAL AND EMERGENCY LIGHTS, RESPECTIVELY, UNDER NEW WORK (UON).

D. DEVICES INDICATED WITH AN "R" SHALL BE RELOCATED. REMOVE, PROTECT, AND REINSTALL IN NEW LOCATION INDICATED ON NEW WORK PLANS. INTERCEPT AND EXTEND ALL EXISTING CABLING TO NEW LOCATION. CLEAN AND RE-LAMP RELOCATED LUMINAIRES.

E. THE CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT CONTAIN DEVICES OR EQUIPMENT THAT ARE TO REMAIN. WHEN DEMOLITION OF AN ELECTRICAL DEVICE (OR CIRCUIT) IS INDICATED ON THE DRAWINGS: THE CONTRACTOR SHALL ENSURE THAT OTHER DEVICES OR EQUIPMENT "UPSTREAM" OR "DOWNSTREAM" ON THE CIRCUITS SHALL REMAIN IN "PRE- DEMOLITION" WORKING ORDER. "LEFT-OVER" CIRCUIT BREAKERS SHALL REMAIN, BE SWITCHED TO OFF POSITION, AND BE LABELED AS SPARES IN THEIR PANELS. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS AFFECTED.

F. LOCATIONS OF DEVICES, CONNECTIONS, ETC., INDICATED ON THIS DRAWING WERE TAKEN FROM VARIOUS SOURCES. THEY ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO VARIATION FROM EXISTING CONDITIONS. CERTAIN EXISTING ELEMENTS MAY NOT BE INDICATED AT ALL. THE CONTRACTOR PROPOSING TO DO ANY PART OF THE WORK INDICATED HEREON SHALL VISIT THIS SITE AND DETERMINE TO HIS SATISFACTION THAT THEY MAY COMPLETE ALL WORK REQUIRED FOR THE BID WHICH HE PROPOSES.

G. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.

H. COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.

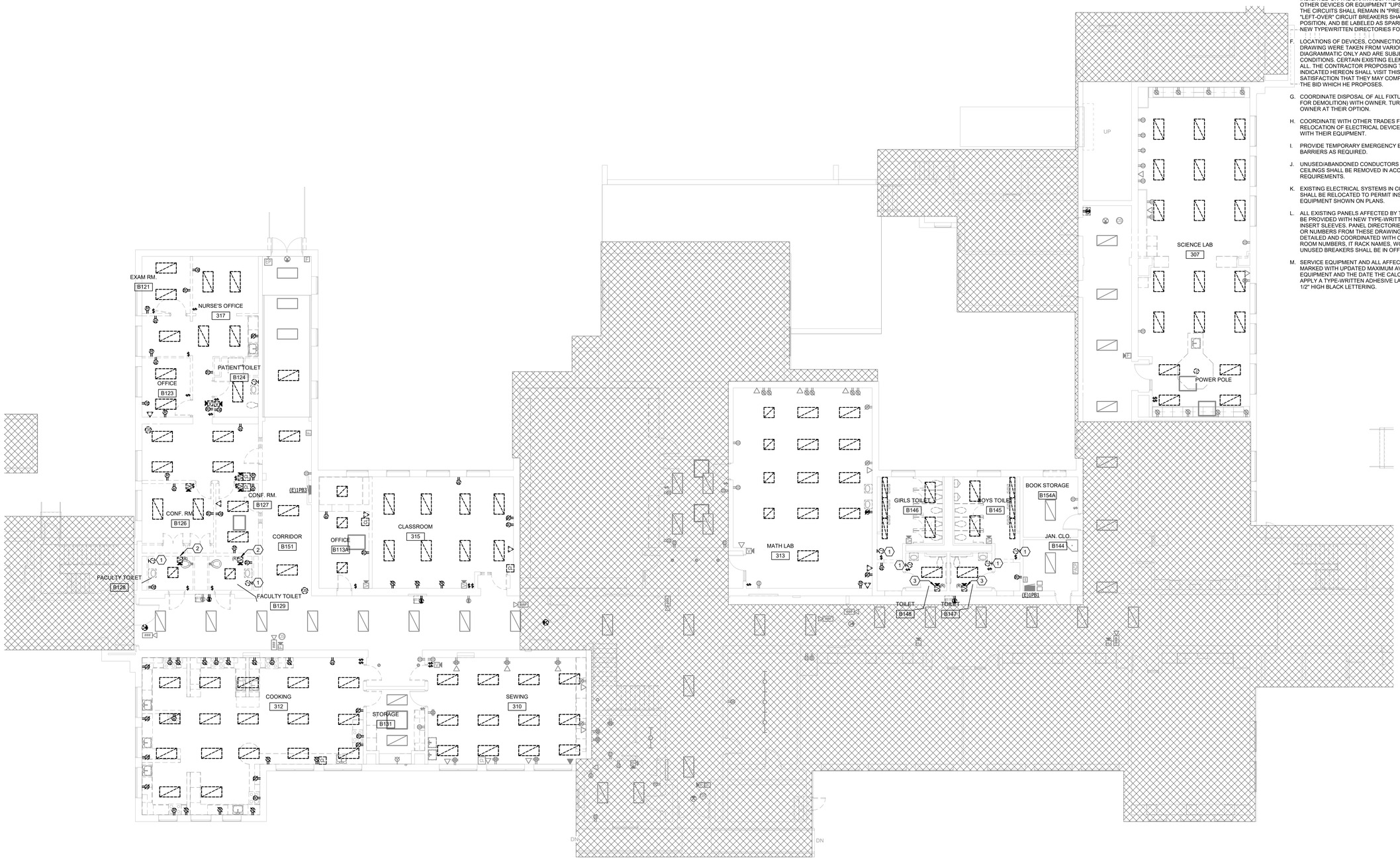
I. PROVIDE TEMPORARY EMERGENCY EXIT LIGHTS AT CONSTRUCTION BARRIERS AS REQUIRED.

J. UNUSED/ABANDONED CONDUCTORS DISCOVERED ABOVE ACCESSIBLE CEILINGS SHALL BE REMOVED IN ACCORDANCE WITH NEC REQUIREMENTS.

K. EXISTING ELECTRICAL SYSTEMS IN CONFLICT WITH CONSTRUCTION SHALL BE RELOCATED TO PERMIT INSTALLATION OF DEVICES AND EQUIPMENT SHOWN ON PLANS.

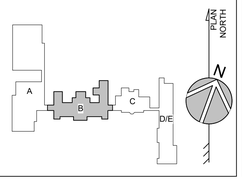
L. ALL EXISTING PANELS AFFECTED BY THIS CONTRACTOR'S WORK SHALL BE PROVIDED WITH NEW TYPE-WRITTEN PANEL DIRECTORIES AND INSERT SLEEVES. PANEL DIRECTORIES SHALL NOT USE ROOM NAMES OR NUMBERS FROM THESE DRAWINGS. DIRECTORIES SHALL BE DETAILED AND COORDINATED WITH OWNER'S SUITE NUMBERS, FINAL ROOM NUMBERS, IT RACK NAMES, WORKSTATION DESIGNATIONS, ETC. UNUSED BREAKERS SHALL BE IN OFF POSITION.

M. SERVICE EQUIPMENT AND ALL AFFECTED PANELBOARDS SHALL BE MARKED WITH UPDATED MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING.



1 FIRST FLOOR ELECTRICAL DEMOLITION PLAN - AREA B

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



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PROJECT TITLE

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211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR ELECTRICAL DEMOLITION PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

ED-101B

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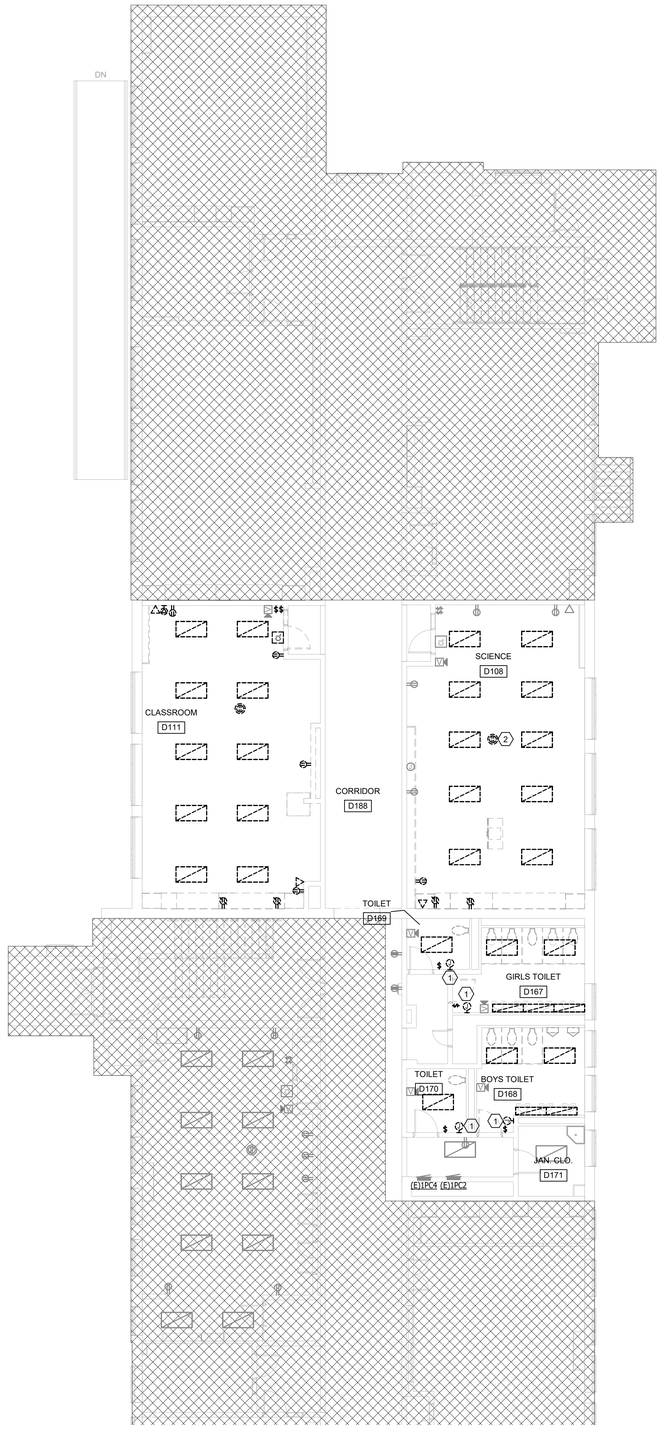
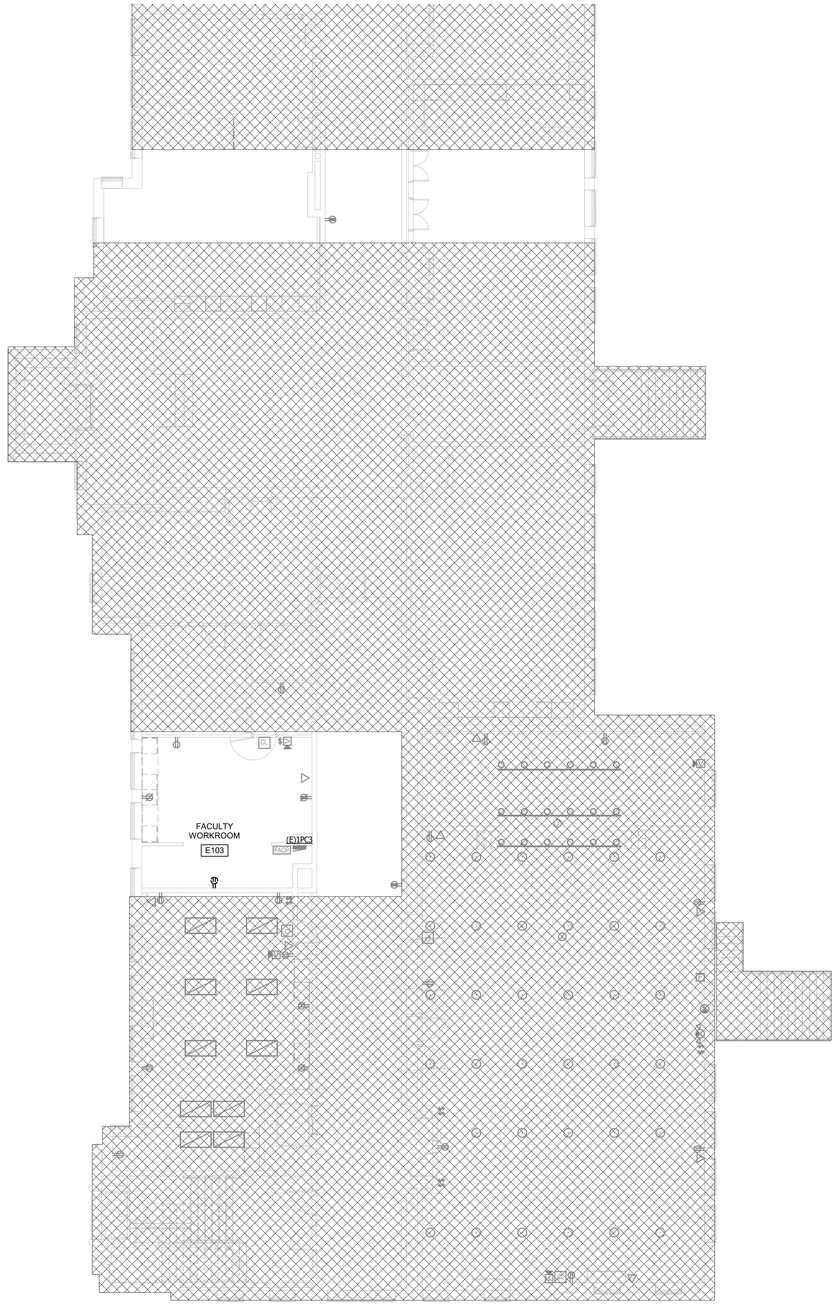


1 FIRST FLOOR ELECTRICAL DEMOLITION PLAN - AREA D

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



2 FIRST FLOOR ELECTRICAL DEMOLITION PLAN - AREA E

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

GENERAL NOTES (DEMOLITION):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. DASHED-BOLD LINES INDICATE ITEMS TO BE DEMOLISHED (UON). GRAY SOLID LINES INDICATE EXISTING ITEMS TO REMAIN. REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES / FIXTURES / ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UON). CONTRACTOR SHALL PATCH AND REPAIR ANY EXISTING WALLS, FLOORS OR CEILINGS WHERE DEVICES ARE SHOWN TO BE REMOVED (PATCH AND REPAIR TO RECEIVE NEW FINISHES - SEE ARCHITECTURAL PLANS). DO NOT ABANDON CABLING OR SUPPORT DEVICES IN PLACE. REFER TO ELECTRICAL DEMOLITION NOTES ON E-001 FOR FURTHER INFORMATION.

C. MAINTAIN EXISTING NORMAL AND EMERGENCY LIGHTING CIRCUITS FOR REUSE FOR NORMAL AND EMERGENCY LIGHTS, RESPECTIVELY, UNDER NEW WORK (UON).

D. DEVICES INDICATED WITH AN "R" SHALL BE RELOCATED. REMOVE, PROTECT, AND REINSTALL IN NEW LOCATION INDICATED ON NEW WORK PLANS. INTERCEPT AND EXTEND ALL EXISTING CABLING TO NEW LOCATION. CLEAN AND RE-LAMP RELOCATED LUMINAIRES.

E. THE CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT CONTAIN DEVICES OR EQUIPMENT THAT ARE TO REMAIN. WHEN DEMOLITION OF AN ELECTRICAL DEVICE (OR CIRCUIT) IS INDICATED ON THE DRAWINGS: THE CONTRACTOR SHALL ENSURE THAT OTHER DEVICES OR EQUIPMENT "UPSTREAM" OR "DOWNSTREAM" ON THE CIRCUITS SHALL REMAIN IN "PRE- DEMOLITION" WORKING ORDER. "LEFT-OVER" CIRCUIT BREAKERS SHALL REMAIN, BE SWITCHED TO OFF POSITION, AND BE LABELED AS SPARES IN THEIR PANELS. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS AFFECTED.

F. LOCATIONS OF DEVICES, CONNECTIONS, ETC., INDICATED ON THIS DRAWING WERE TAKEN FROM VARIOUS SOURCES. THEY ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO VARIATION FROM EXISTING CONDITIONS. CERTAIN EXISTING ELEMENTS MAY NOT BE INDICATED AT ALL. THE CONTRACTOR PROPOSING TO DO ANY PART OF THE WORK INDICATED HEREON SHALL VISIT THIS SITE AND DETERMINE TO HIS SATISFACTION THAT THEY MAY COMPLETE ALL WORK REQUIRED FOR THE BID WHICH HE PROPOSES.

G. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.

H. COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.

I. PROVIDE TEMPORARY EMERGENCY EXIT LIGHTS AT CONSTRUCTION BARRIERS AS REQUIRED.

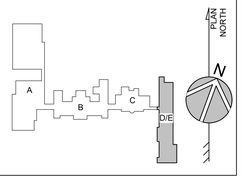
J. UNUSED/ABANDONED CONDUCTORS DISCOVERED ABOVE ACCESSIBLE CEILINGS SHALL BE REMOVED IN ACCORDANCE WITH NEC REQUIREMENTS.

K. EXISTING ELECTRICAL SYSTEMS IN CONFLICT WITH CONSTRUCTION SHALL BE RELOCATED TO PERMIT INSTALLATION OF DEVICES AND EQUIPMENT SHOWN ON PLANS.

L. ALL EXISTING PANELS AFFECTED BY THIS CONTRACTOR'S WORK SHALL BE PROVIDED WITH NEW TYPE-WRITTEN PANEL DIRECTORIES AND INSERT SLEEVES. PANEL DIRECTORIES SHALL NOT USE ROOM NAMES OR NUMBERS FROM THESE DRAWINGS. DIRECTORIES SHALL BE DETAILED AND COORDINATED WITH OWNER'S SUITE NUMBERS, FINAL ROOM NUMBERS, IT RACK NAMES, WORKSTATION DESIGNATIONS, ETC. UNUSED BREAKERS SHALL BE IN OFF POSITION.

M. SERVICE EQUIPMENT AND ALL AFFECTED PANELBOARDS SHALL BE MARKED WITH UPDATED MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING. WORK.

1 MAINTAIN EXISTING RECEPTACLE CIRCUIT IN NEW CEILING TO BE REUSED UNDER NEW WORK.



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR ELECTRICAL DEMOLITION PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

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KEY NOTES

1. RELOCATE EXISTING FIRE ALARM ANNUNCIATOR PANEL ALONG WITH THE FIRE ALARM CONTROL PANEL TO BE REUSED IN NEW LOCATION.
2. HAND DRYER TO BE DEMOLISHED. MAINTAIN CIRCUIT FOR REUSE FOR NEW HAND DRYER UNDER NEW WORK.
3. THERE IS NO CHANGE IN THE EXISTING POWER LAYOUT IN THIS AREA. CONTRACTOR TO MAINTAIN POWER CONNECTIONS AND DEVICES AND TO ADJUST LOCATIONS OF DEVICES AS NEEDED PER NEW WALLS.

GENERAL NOTES (DEMOLITION):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. DASHED-BOLD LINES INDICATE ITEMS TO BE DEMOLISHED (UON). GRAY SOLID LINES INDICATE EXISTING ITEMS TO REMAIN. REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES / FIXTURES / ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UON). CONTRACTOR SHALL PATCH AND REPAIR ANY EXISTING WALLS, FLOORS OR CEILINGS WHERE DEVICES ARE SHOWN TO BE REMOVED (PATCH AND REPAIR TO RECEIVE NEW FINISHES - SEE ARCHITECTURAL PLANS). DO NOT ABANDON CABLING OR SUPPORT DEVICES IN PLACE. REFER TO ELECTRICAL DEMOLITION NOTES ON E-001 FOR FURTHER INFORMATION.

C. MAINTAIN EXISTING NORMAL AND EMERGENCY LIGHTING CIRCUITS FOR REUSE FOR NORMAL AND EMERGENCY LIGHTS, RESPECTIVELY, UNDER NEW WORK (UON).

D. DEVICES INDICATED WITH AN "R" SHALL BE RELOCATED. REMOVE, PROTECT, AND REINSTALL IN NEW LOCATION INDICATED ON NEW WORK PLANS. INTERCEPT AND EXTEND ALL EXISTING CABLING TO NEW LOCATION. CLEAN AND RE-LAMP RELOCATED LUMINAIRES.

E. THE CONTRACTOR SHALL MAINTAIN THE CONTINUITY OF EXISTING CIRCUITS THAT CONTAIN DEVICES OR EQUIPMENT THAT ARE TO REMAIN. WHEN DEMOLITION OF AN ELECTRICAL DEVICE (OR CIRCUIT) IS INDICATED ON THE DRAWINGS: THE CONTRACTOR SHALL ENSURE THAT OTHER DEVICES OR EQUIPMENT "UPSTREAM" OR "DOWNSTREAM" ON THE CIRCUITS SHALL REMAIN IN "PRE- DEMOLITION" WORKING ORDER. "LEFT-OVER" CIRCUIT BREAKERS SHALL REMAIN, BE SWITCHED TO OFF POSITION, AND BE LABELED AS SPARES IN THEIR PANELS. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS AFFECTED.

F. LOCATIONS OF DEVICES, CONNECTIONS, ETC., INDICATED ON THIS DRAWING WERE TAKEN FROM VARIOUS SOURCES. THEY ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO VARIATION FROM EXISTING CONDITIONS. CERTAIN EXISTING ELEMENTS MAY NOT BE INDICATED AT ALL. THE CONTRACTOR PROPOSING TO DO ANY PART OF THE WORK INDICATED HEREON SHALL VISIT THIS SITE AND DETERMINE TO HIS SATISFACTION THAT THEY MAY COMPLETE ALL WORK REQUIRED FOR THE BID WHICH HE PROPOSES.

G. COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.

H. COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.

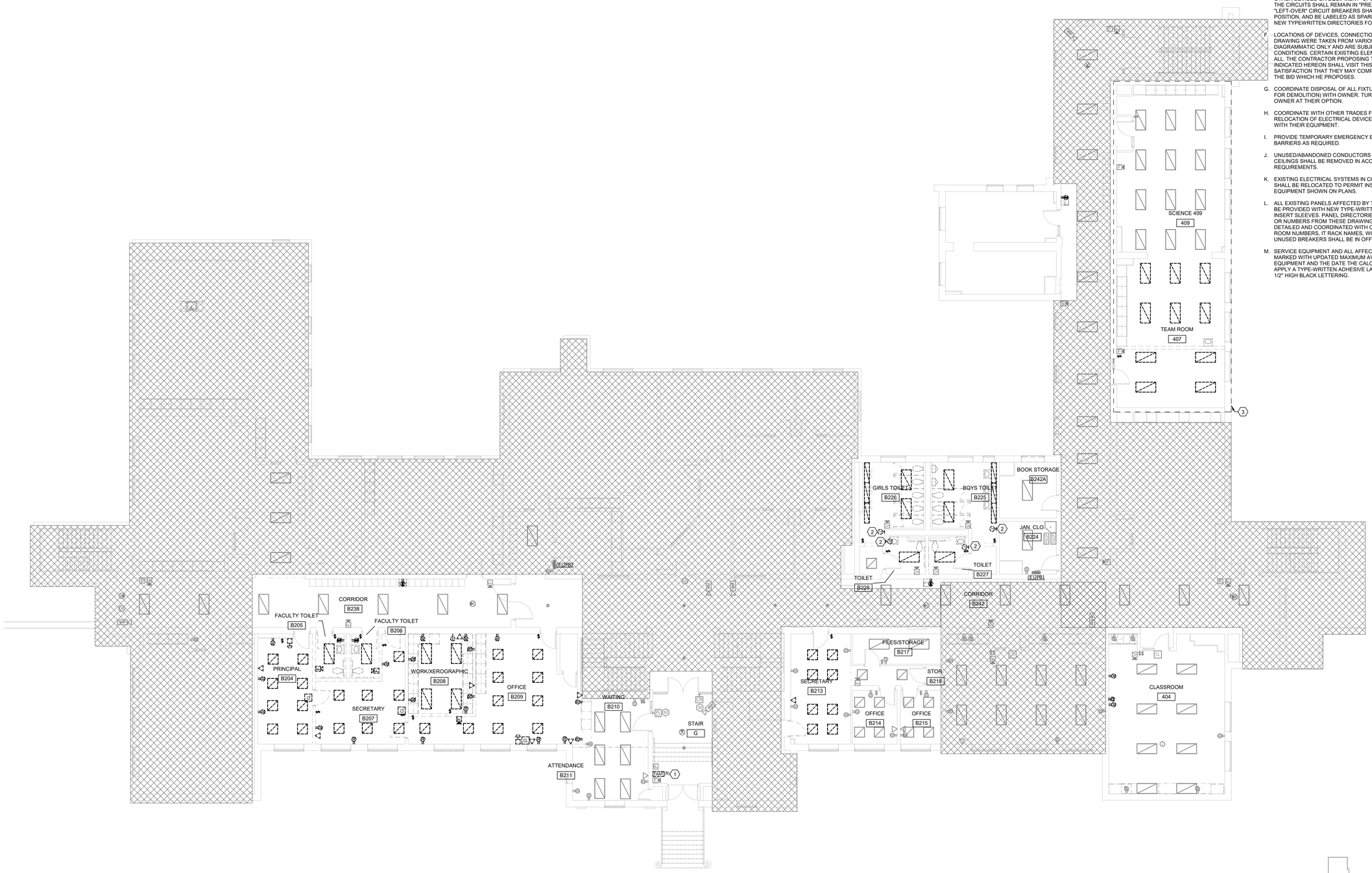
I. PROVIDE TEMPORARY EMERGENCY EXIT LIGHTS AT CONSTRUCTION BARRIERS AS REQUIRED.

J. UNUSED/ABANDONED CONDUCTORS DISCOVERED ABOVE ACCESSIBLE CEILINGS SHALL BE REMOVED IN ACCORDANCE WITH NEC REQUIREMENTS.

K. EXISTING ELECTRICAL SYSTEMS IN CONFLICT WITH CONSTRUCTION SHALL BE RELOCATED TO PERMIT INSTALLATION OF DEVICES AND EQUIPMENT SHOWN ON PLANS.

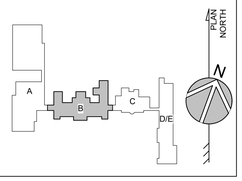
L. ALL EXISTING PANELS AFFECTED BY THIS CONTRACTOR'S WORK SHALL BE PROVIDED WITH NEW TYPE-WRITTEN PANEL DIRECTORIES AND INSERT SLEEVES. PANEL DIRECTORIES SHALL NOT USE ROOM NAMES OR NUMBERS FROM THESE DRAWINGS. DIRECTORIES SHALL BE DETAILED AND COORDINATED WITH OWNER'S SUITE NUMBERS, FINAL ROOM NUMBERS, IT RACK NAMES, WORKSTATION DESIGNATIONS, ETC. UNUSED BREAKERS SHALL BE IN OFF POSITION.

M. SERVICE EQUIPMENT AND ALL AFFECTED PANELBOARDS SHALL BE MARKED WITH UPDATED MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING.



1 SECOND FLOOR ELECTRICAL DEMOLITION PLAN - AREA B

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



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PROJECT TITLE

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211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR ELECTRICAL DEMOLITION PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

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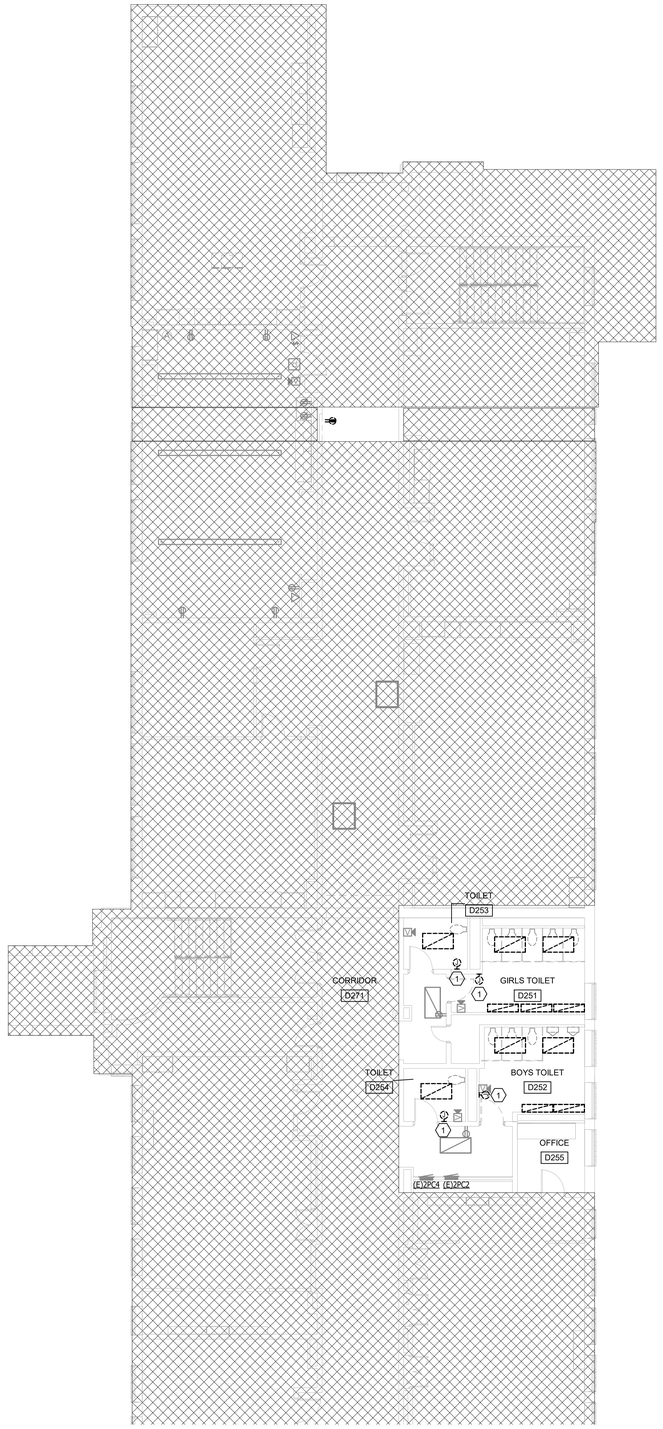
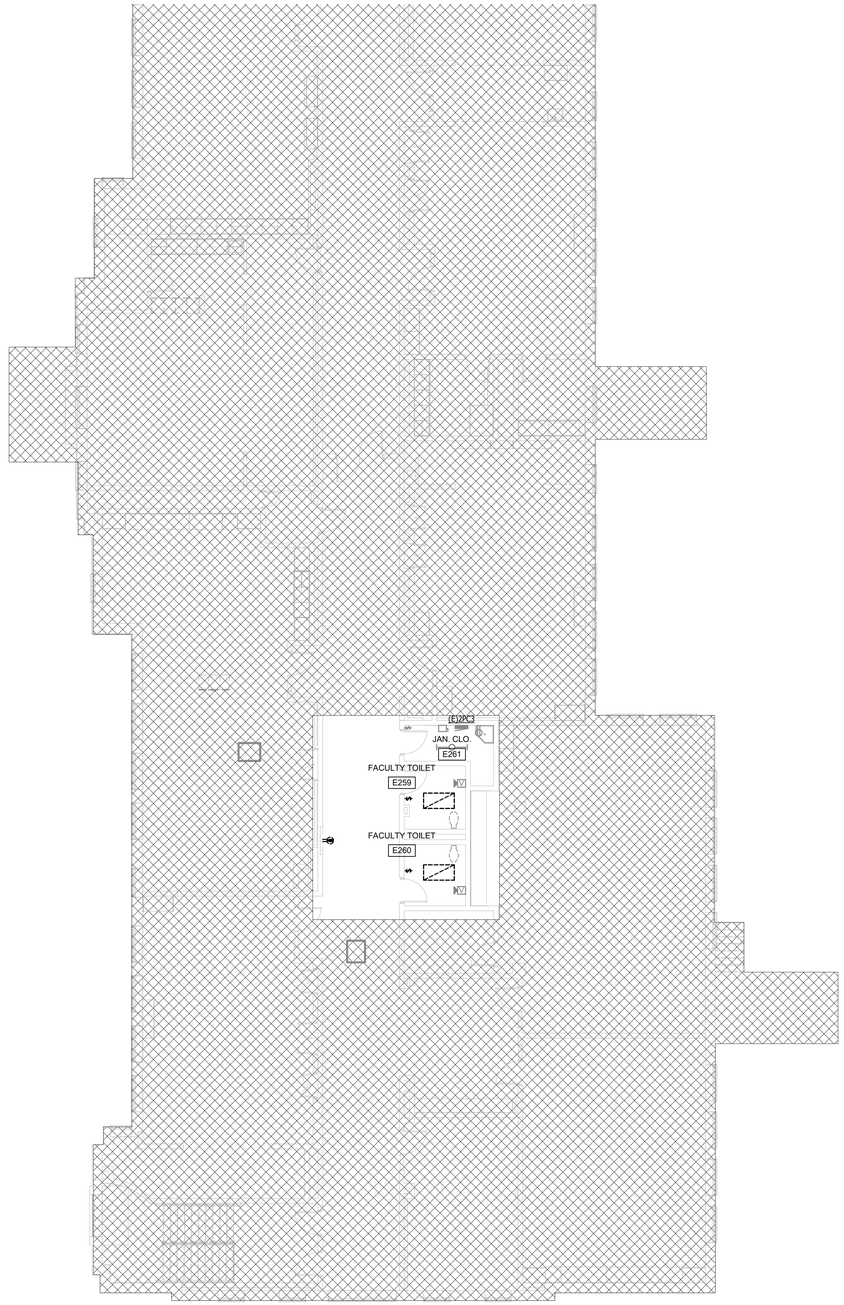


1 SECOND FLOOR ELECTRICAL DEMOLITION PLAN - AREA D

NO SCALE



2 SECOND FLOOR ELECTRICAL DEMOLITION PLAN - AREA E

NO SCALE

GENERAL NOTES (DEMOLITION):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. DASHED-BOLD LINES INDICATE ITEMS TO BE DEMOLISHED (UON). GRAY SOLID LINES INDICATE EXISTING ITEMS TO REMAIN. REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES / FIXTURES / ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UON). CONTRACTOR SHALL PATCH AND REPAIR ANY EXISTING WALLS, FLOORS OR CEILINGS WHERE DEVICES ARE SHOWN TO BE REMOVED (PATCH AND REPAIR TO RECEIVE NEW FINISHES - SEE ARCHITECTURAL PLANS). DO NOT ABANDON CABLING OR SUPPORT DEVICES IN PLACE. REFER TO ELECTRICAL DEMOLITION NOTES ON E-001 FOR FURTHER INFORMATION.

C. MAINTAIN EXISTING NORMAL AND EMERGENCY LIGHTING CIRCUITS FOR REUSE FOR NORMAL AND EMERGENCY LIGHTS, RESPECTIVELY, UNDER NEW WORK (UON).

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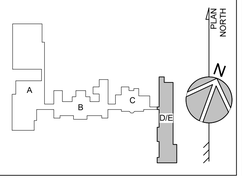

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR ELECTRICAL DEMOLITION PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

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KEY NOTES

1 HAND DRYER TO BE DEMOLISHED. MAINTAIN CIRCUIT FOR REUSE FOR NEW HAND DRYER UNDER NEW WORK.

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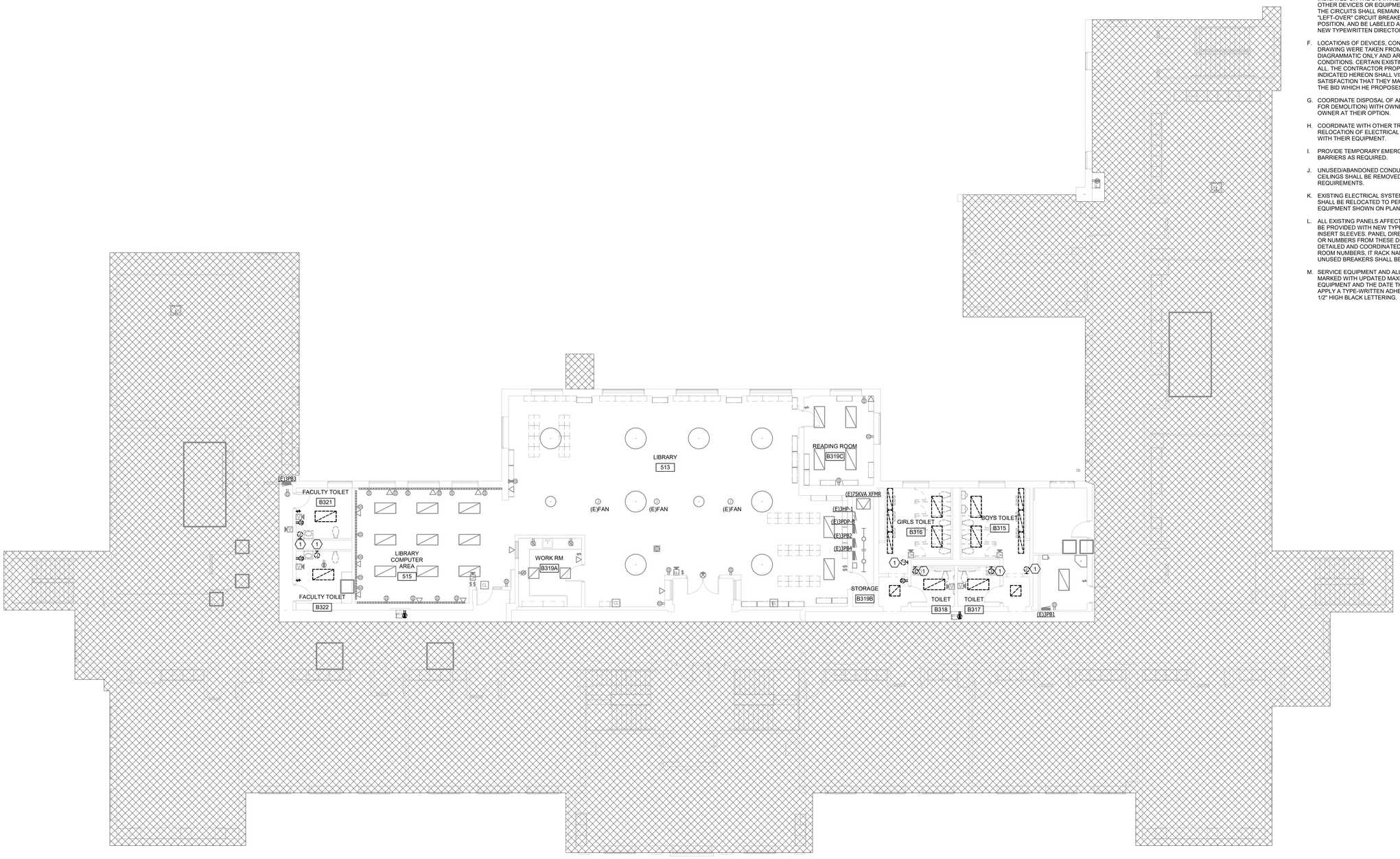
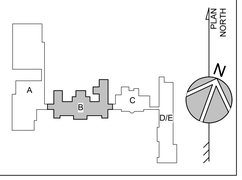


1 THIRD FLOOR ELECTRICAL DEMOLITION PLAN - AREA B

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



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PROJECT TITLE

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211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

THIRD FLOOR ELECTRICAL DEMOLITION PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

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KEY NOTES

1. REUSE EXISTING FIRE ALARM ANNUNCIATOR PANEL ALONG WITH THE LOW VOLTAGE FIRE ALARM CONTROL PANEL CIRCUIT. PROVIDE A NEW GRAPHICS DETAIL BASED ON THE NEW SCHOOL ENTRANCE.
2. REUSE EXISTING HAND DRYER CIRCUIT MAINTAINED DURING DEMOLITION.
3. ALL 120/208V CIRCUITS WITHING DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 1PB3 U.O.N.
4. ALL 120/208V CIRCUITS WITHING DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 1PB1 U.O.N.
5. CONNECT TO EXISTING 20A/120V CIRCUIT SERVING THIS AREA. ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23].
6. CONNECT TO EXISTING 120V CIRCUITS BECAME AVAILABLE AFTER DEMOLITION. VERIFY THAT CIRCUIT VOLTAGES ARE COMPATIBLE AND ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23].
7. ALL 120/208V CIRCUITS WITHIN DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 2PDP-B IN THE MAIN ELECTRICAL ROOM BASEMENT AREA B, U.O.N.
8. REUSE EXISTING WATER FOUNTAIN CIRCUIT MAINTAINED DURING DEMOLITION. CONTRACTOR SHALL VERIFY EXISITING BREAKER FEEDING WATER FOUNTAIN TO BE GFCI PROTECTED. IF NOT, PROVIDE GFCI RATED CIRCUIT BREAKER.

GENERAL NOTES (POWER):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

C. ALL BOLDED/SOLID WORK SHOWN ON THIS PLAN SHALL BE NEW U.O.N.

D. REFER TO RISER DIAGRAM AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS/SLABS AS REQUIRED WHERE DEVICES ARE INSTALLED. PATCHES SHALL MEET OR EXCEED THE FIRE RATING OF THE WALLS/SLAB BEING PATCHED. SEAL ALL PENETRATIONS OF THE BUILDING ENVELOPE WATER-TIGHT AS APPROVED BY THE ARCHITECT AND ENGINEER.

F. ALL NEW SWITCHES, POWER, AND TELE/DATA RECEPTACLES DEVICE/ COVERPLATE COLOR SHALL MATCH EXISTING (OR BE WHITE DECORA STYLE).

G. ALL RELOCATED MECHANICAL/PLUMBING EQUIPMENT INCLUDING VAV BOXES, WHICH REQUIRE ELECTRICAL POWER CONNECTION SHALL BE CONNECTED TO THE EXISTING CIRCUIT THAT PREVIOUSLY SERVED THEM. EXTEND THE EXISTING CIRCUIT TO THE NEW EQUIPMENT LOCATION AS NECESSARY AND CONNECT VIA THE RELOCATED DISCONNECT SWITCH. COORDINATE WORK WITH MECHANICAL/PLUMBING PLANS.

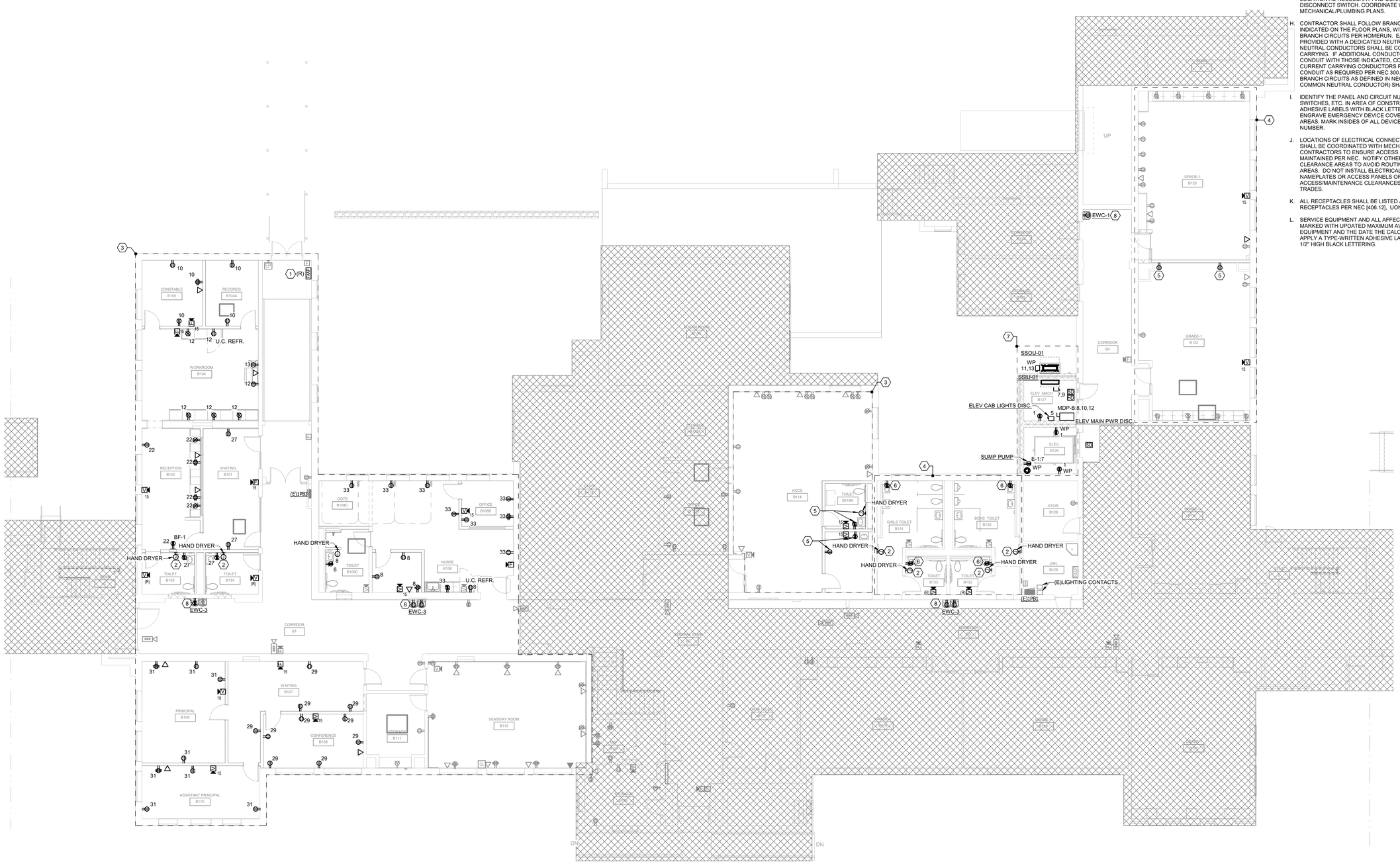
H. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

I. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.

J. LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER TRADES.

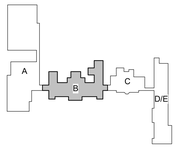
K. ALL RECEPTACLES SHALL BE LISTED AS TAMPER RESISTANT RECEPTACLES PER NEC [406.12], UON.

L. SERVICE EQUIPMENT AND ALL AFFECTED PANELBOARDS SHALL BE MARKED WITH UPDATED MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING.



1 FIRST FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B

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



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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

E-101B

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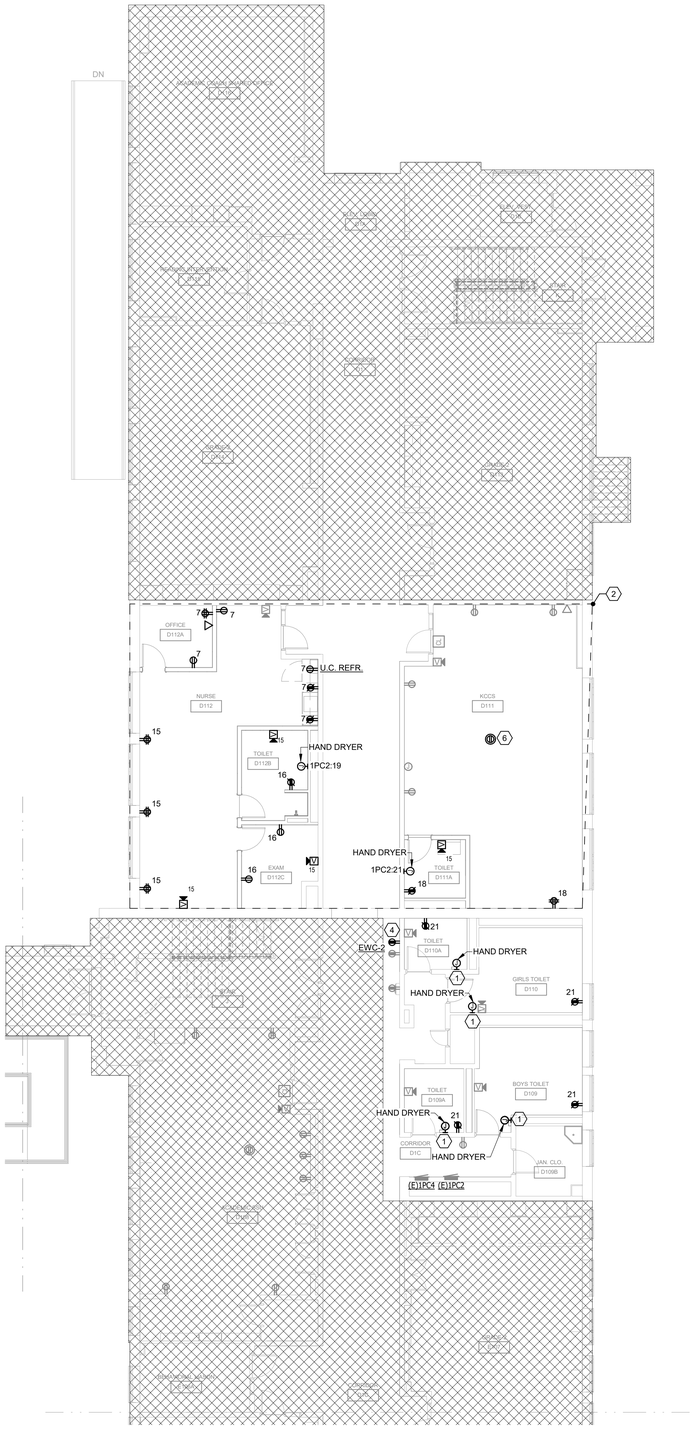
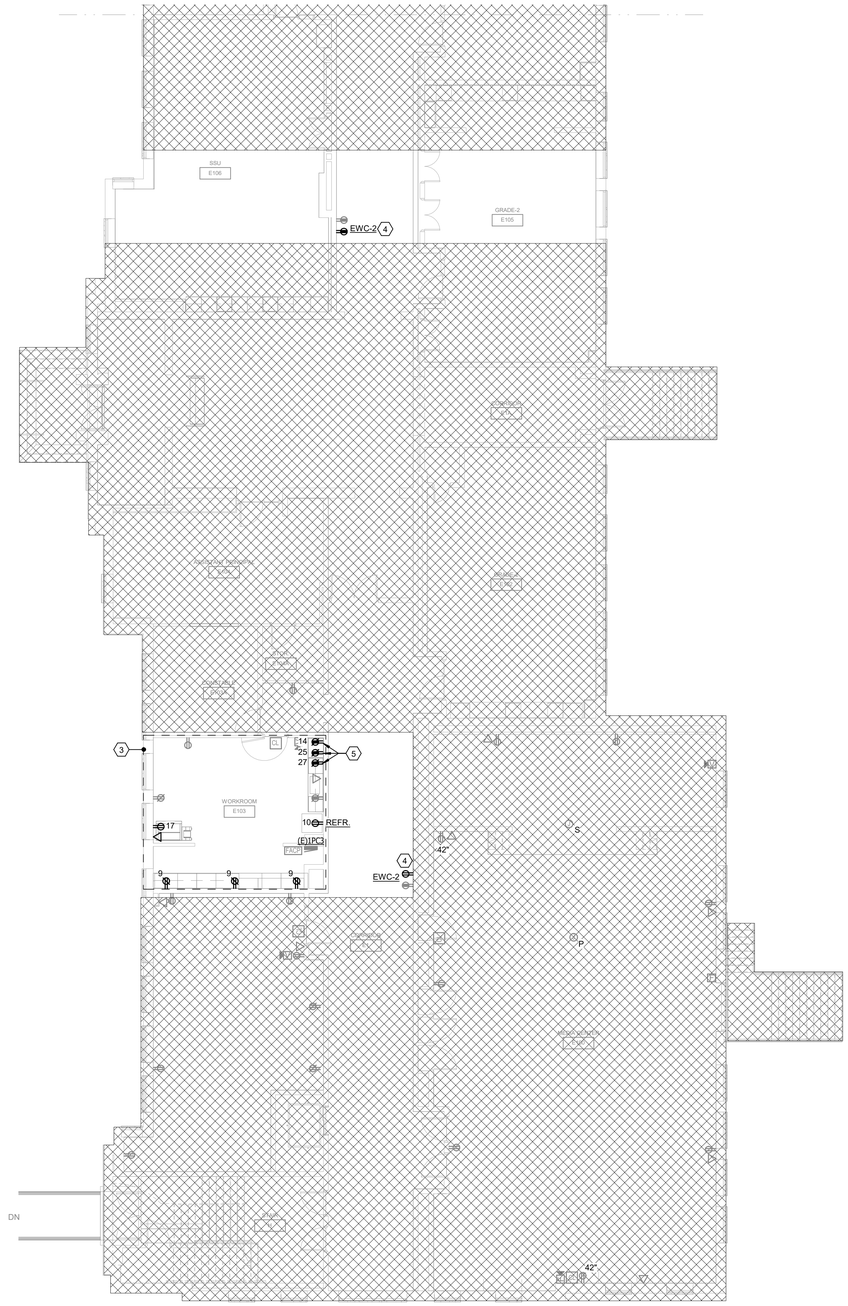


1 FIRST FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA D

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



2 FIRST FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA E

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

GENERAL NOTES (POWER):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

C. ALL BOLDED/SOLID WORK SHOWN ON THIS PLAN SHALL BE NEW U.O.N.

D. REFER TO RISER DIAGRAM AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS/SLABS AS REQUIRED WHERE DEVICES ARE INSTALLED. PATCHES SHALL MEET OR EXCEED THE FIRE RATING OF THE WALL/SLAB BEING PATCHED. SEAL ALL PENETRATIONS OF THE BUILDING ENVELOPE WATER-TIGHT AS APPROVED BY THE ARCHITECT AND ENGINEER.

F. ALL NEW SWITCHES, POWER, AND TELE/DATA RECEPTACLES DEVICE/ COVERPLATE COLOR SHALL MATCH EXISTING (OR BE WHITE DECORA STYLE).

G. ALL RELOCATED MECHANICAL/PLUMBING EQUIPMENT INCLUDING VAV BOXES, WHICH REQUIRE ELECTRICAL POWER CONNECTION SHALL BE CONNECTED TO THE EXISTING CIRCUIT THAT PREVIOUSLY SERVED THEM. EXTEND THE EXISTING CIRCUIT TO THE NEW EQUIPMENT LOCATION AS NECESSARY AND CONNECT VIA THE RELOCATED DISCONNECT SWITCH. COORDINATE WORK WITH MECHANICAL/PLUMBING PLANS.

H. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

I. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.

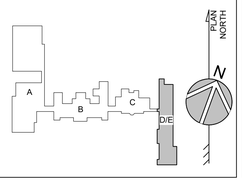
J. LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER TRADES.

K. ALL RECEPTACLES SHALL BE LISTED AS TAMPER RESISTANT RECEPTACLES PER NEC [406.12], UON.

L. SERVICE EQUIPMENT AND ALL AFFECTED PANELBOARDS SHALL BE MARKED WITH UPDATED MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING.

KEY NOTES

1. REUSE EXISTING HAND DRYER CIRCUIT MAINTAINED DURING DEMOLITION.
2. ALL 120/208V CIRCUITS WITHIN DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 1PC4 U.O.N.
3. ALL 120/208V CIRCUIT WITHIN DASHED BOUNDARY S SHALL HOMERUN TO EXISTING PANEL 1PC3 U.O.N.
4. REUSE EXISTING WATER FOUNTAIN CIRCUIT MAINTAINED DURING DEMOLITION. CONTRACTOR SHALL VERIFY EXISITING BREAKER FEEDING WATER FOUNTAIN TO BE GFCI PROTECTED. IF NOT, PROVIDE GFCI RATED CIRCUIT BREAKER.
5. STACK RECEPTACLES MOUNT EACH BEHIND A MICROWAVE. REFER TO ARCHITECTURAL DRAWINGS FOR LAYOUT AND ELEVATIONS.
6. REUSE EXISTING CIRCUIT MAINTAINED DURING DEMOLITION.



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

E-101D/E

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GENERAL NOTES (POWER):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

C. ALL BOLDED/SOLID WORK SHOWN ON THIS PLAN SHALL BE NEW U.O.N.

D. REFER TO RISER DIAGRAM AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS/SLABS AS REQUIRED WHERE DEVICES ARE INSTALLED. PATCHES SHALL MEET OR EXCEED THE FIRE RATING OF THE WALL/SLAB BEING PATCHED. SEAL ALL PENETRATIONS OF THE BUILDING ENVELOPE WATER-TIGHT AS APPROVED BY THE ARCHITECT AND ENGINEER.

F. ALL NEW SWITCHES, POWER, AND TELE/DATA RECEPTACLES DEVICE/ COVERPLATE COLOR SHALL MATCH EXISTING (OR BE WHITE DECORA STYLE).

G. ALL RELOCATED MECHANICAL/PLUMBING EQUIPMENT INCLUDING VAV BOXES, WHICH REQUIRE ELECTRICAL POWER CONNECTION SHALL BE CONNECTED TO THE EXISTING CIRCUIT THAT PREVIOUSLY SERVED THEM. EXTEND THE EXISTING CIRCUIT TO THE NEW EQUIPMENT LOCATION AS NECESSARY AND CONNECT VIA THE RELOCATED DISCONNECT SWITCH. COORDINATE WORK WITH MECHANICAL/PLUMBING PLANS.

H. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

I. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.

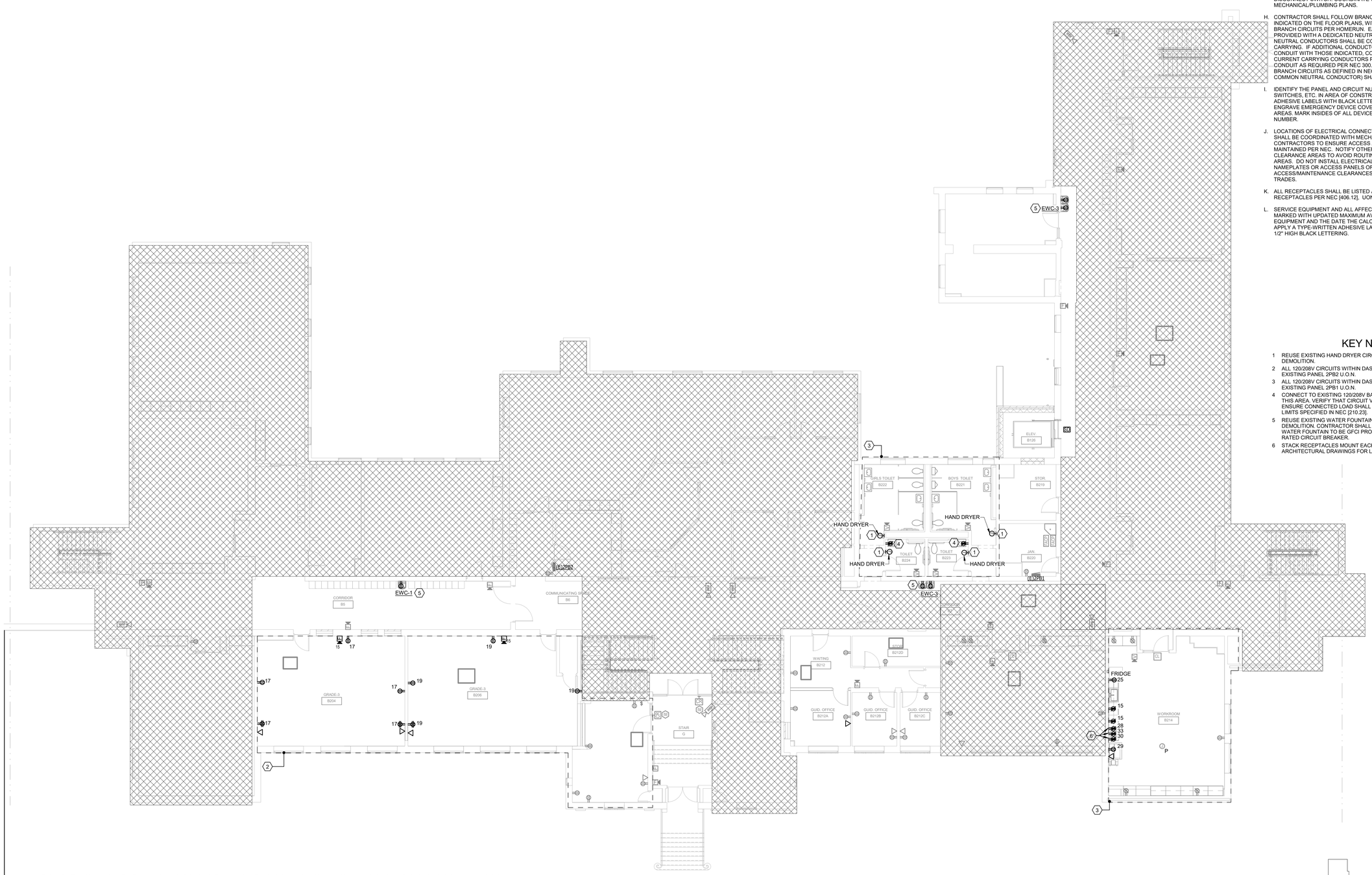
J. LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER TRADES.

K. ALL RECEPTACLES SHALL BE LISTED AS TAMPER RESISTANT RECEPTACLES PER NEC [406.12], UON.

L. SERVICE EQUIPMENT AND ALL AFFECTED PANELBOARDS SHALL BE MARKED WITH UPDATED MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING.

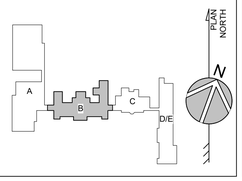
KEY NOTES

1. REUSE EXISTING HAND DRYER CIRCUIT MAINTAINED DURING DEMOLITION.
2. ALL 120/208V CIRCUITS WITHIN DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 2PB2 U.O.N.
3. ALL 120/208V CIRCUITS WITHIN DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 2PB1 U.O.N.
4. CONNECT TO EXISTING 120/208V BATHROOM DRYER CIRCUIT SERVING THIS AREA. VERIFY THAT CIRCUIT VOLTAGES ARE COMPATIBLE AND ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23].
5. REUSE EXISTING WATER FOUNTAIN CIRCUIT MAINTAINED DURING DEMOLITION. CONTRACTOR SHALL VERIFY EXISITING BREAKER FEEDING WATER FOUNTAIN TO BE GFCI PROTECTED. IF NOT, PROVIDE GFCI RATED CIRCUIT BREAKER.
6. STACK RECEPTACLES MOUNT EACH BEHIND A MICROWAVE. REFER TO ARCHITECTURAL DRAWINGS FOR LAYOUT AND ELEVATIONS.



1 SECOND FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B

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



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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

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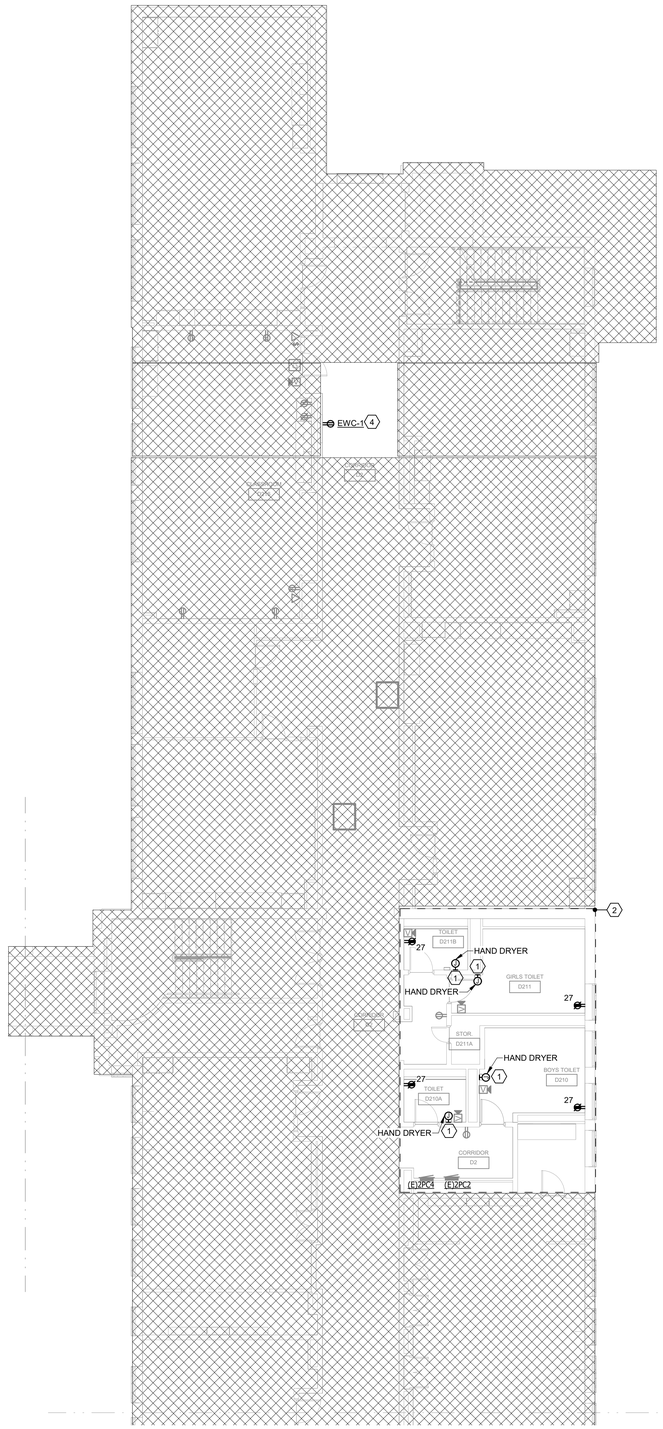
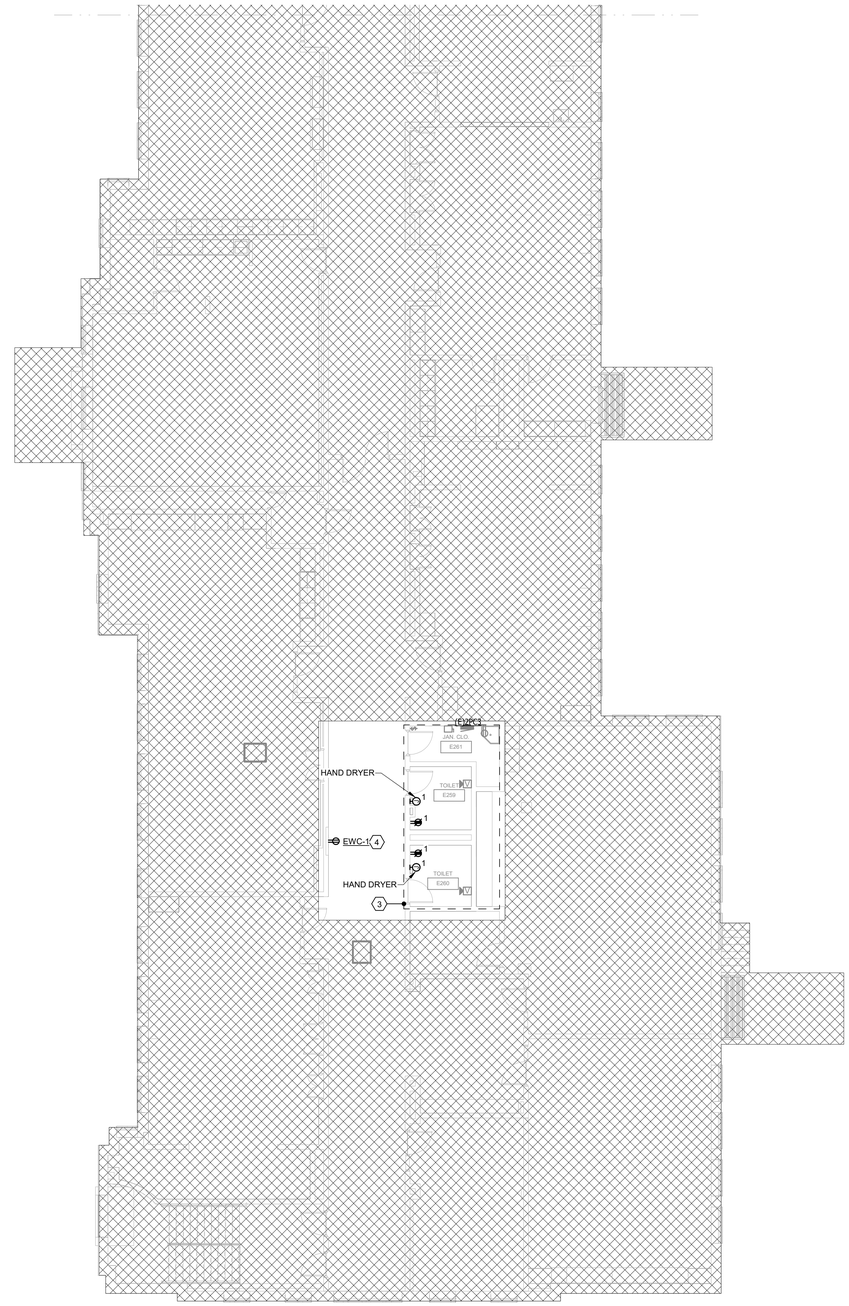


1 SECOND FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA D

NO SCALE



2 SECOND FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA E

NO SCALE

GENERAL NOTES (POWER):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

C. ALL BOLDED/SOLID WORK SHOWN ON THIS PLAN SHALL BE NEW U.O.N.

D. REFER TO RISER DIAGRAM AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS/SLABS AS REQUIRED WHERE DEVICES ARE INSTALLED. PATCHES SHALL MEET OR EXCEED THE FIRE RATING OF THE WALL/SLAB BEING PATCHED. SEAL ALL PENETRATIONS OF THE BUILDING ENVELOPE WATER-TIGHT AS APPROVED BY THE ARCHITECT AND ENGINEER.

F. ALL NEW SWITCHES, POWER, AND TELE/DATA RECEPTACLES DEVICE/ COVERPLATE COLOR SHALL MATCH EXISTING (OR BE WHITE DECORA STYLE).

G. ALL RELOCATED MECHANICAL/PLUMBING EQUIPMENT INCLUDING VAV BOXES, WHICH REQUIRE ELECTRICAL POWER CONNECTION SHALL BE CONNECTED TO THE EXISTING CIRCUIT THAT PREVIOUSLY SERVED THEM. EXTEND THE EXISTING CIRCUIT TO THE NEW EQUIPMENT LOCATION AS NECESSARY AND CONNECT VIA THE RELOCATED DISCONNECT SWITCH. COORDINATE WORK WITH MECHANICAL/PLUMBING PLANS.

H. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

I. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.

J. LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER TRADES.

K. ALL RECEPTACLES SHALL BE LISTED AS TAMPER RESISTANT RECEPTACLES PER NEC [406.12], UON.

L. SERVICE EQUIPMENT AND ALL AFFECTED PANELBOARDS SHALL BE MARKED WITH UPDATED MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING.

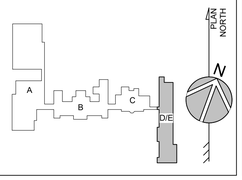
KEY NOTES

1 REUSE EXISTING HAND DRYER CIRCUIT MAINTAINED DURING DEMOLITION.

2 ALL 120/208V CIRCUITS WITHIN DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 2PC2 U.O.N.

3 ALL 120/208V CIRCUITS WITHIN DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 2PC3 U.O.N.

4 REUSE EXISTING WATER FOUNTAIN CIRCUIT MAINTAINED DURING DEMOLITION. CONTRACTOR SHALL VERIFY EXISTING BREAKER FEEDING WATER FOUNTAIN TO BE GFCI PROTECTED. IF NOT, PROVIDE GFCI RATED CIRCUIT BREAKER.



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

E-102D/E

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KEY NOTES

1. REUSE EXISTING HAND DRYER CIRCUIT MAINTAINED DURING DEMOLITION.
2. ALL 120/208V CIRCUITS WITHIN DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 3PB1 U.O.N.
3. ALL 120/208V CIRCUITS WITHIN DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 3PB2 U.O.N.
4. ALL 120/208V CIRCUITS WITHIN DASHED BOUNDARY SHALL HOMERUN TO EXISTING PANEL 3PB3 U.O.N.
5. REUSE EXISTING WATER FOUNTAIN CIRCUIT MAINTAINED DURING DEMOLITION. CONTRACTOR SHALL VERIFY EXISITING BREAKER FEEDING WATER FOUNTAIN TO BE GFCI PROTECTED. IF NOT, PROVIDE GFCI RATED CIRCUIT BREAKER.
6. THREE-CIRCUIT TYPE, 8-WIRE SYSTEMS FURNITURE HAS BEEN USED AS BASIS OF DESIGN UNDER THIS SCOPE OF WORK. CONTRACTOR SHALL COORDINATE WORK WITH THE SYSTEMS FURNITURE VENDOR TO CONFIRM FINAL SELECTION AND TYPE OF FURNITURE BEFORE STARTING NEW WORK. INFORM ENGINEER OF ANY DISCREPANCIES IN FURNITURE CIRCUITING OPTIONS.

GENERAL NOTES (POWER):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

C. ALL BOLDED/SOLID WORK SHOWN ON THIS PLAN SHALL BE NEW U.O.N.

D. REFER TO RISER DIAGRAM AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. CONTRACTOR SHALL PATCH AND REPAIR ALL EXISTING WALLS/SLABS AS REQUIRED WHERE DEVICES ARE INSTALLED. PATCHES SHALL MEET OR EXCEED THE FIRE RATING OF THE WALL/SLAB BEING PATCHED. SEAL ALL PENETRATIONS OF THE BUILDING ENVELOPE WATER-TIGHT AS APPROVED BY THE ARCHITECT AND ENGINEER.

F. ALL NEW SWITCHES, POWER, AND TELE/DATA RECEPTACLES DEVICE/ COVERPLATE COLOR SHALL MATCH EXISTING (OR BE WHITE DECORA STYLE).

G. ALL RELOCATED MECHANICAL/PLUMBING EQUIPMENT INCLUDING VAV BOXES, WHICH REQUIRE ELECTRICAL POWER CONNECTION SHALL BE CONNECTED TO THE EXISTING CIRCUIT THAT PREVIOUSLY SERVED THEM. EXTEND THE EXISTING CIRCUIT TO THE NEW EQUIPMENT LOCATION AS NECESSARY AND CONNECT VIA THE RELOCATED DISCONNECT SWITCH. COORDINATE WORK WITH MECHANICAL/PLUMBING PLANS.

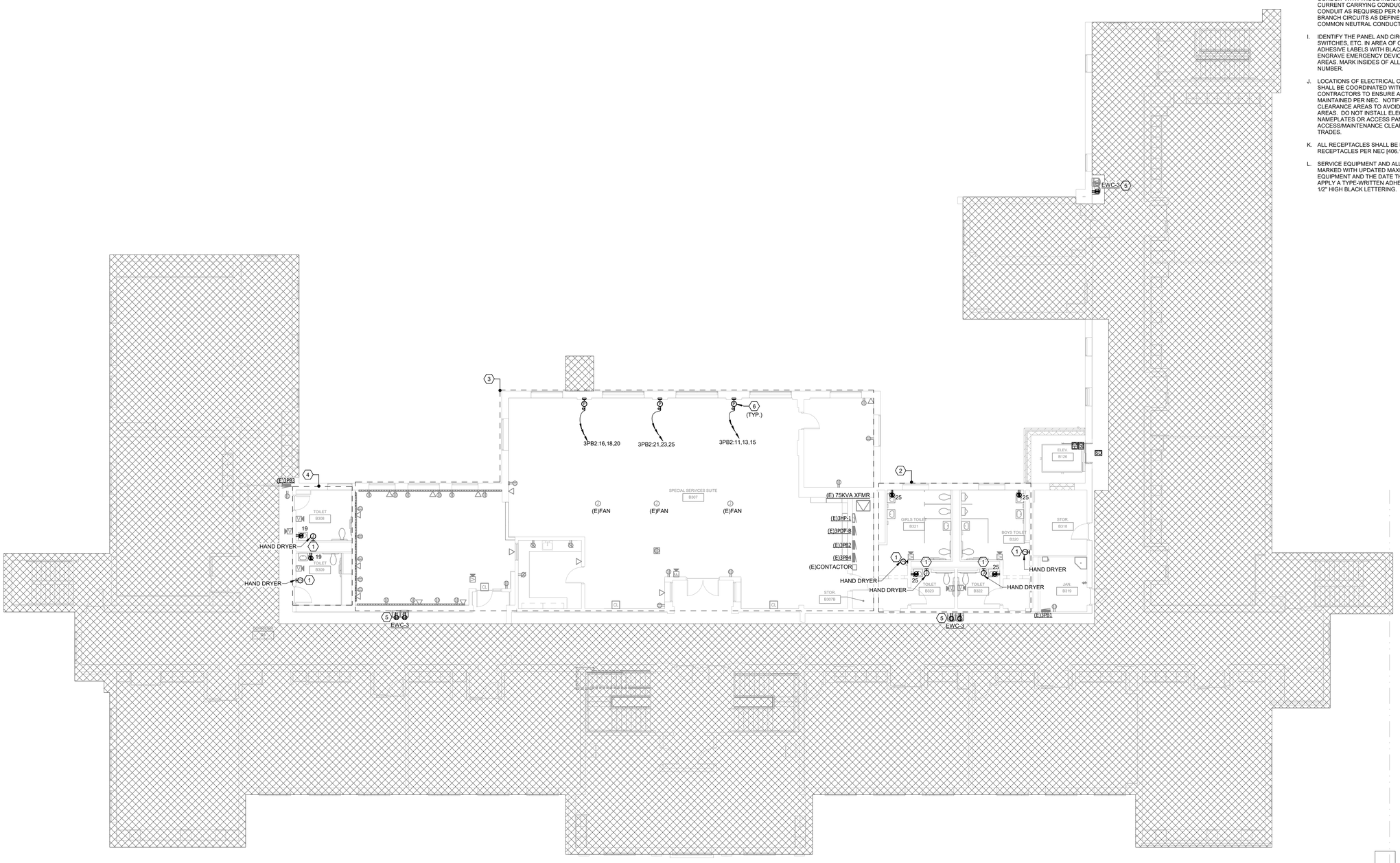
H. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER NEC 310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER NEC 300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN NEC 100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

I. IDENTIFY THE PANEL AND CIRCUIT NUMBER FOR ALL RECEPTACLES, SWITCHES, ETC. IN AREA OF CONSTRUCTION. PROVIDE CLEAR ADHESIVE LABELS WITH BLACK LETTERING. IN HEALTHCARE FACILITIES, ENGRAVE EMERGENCY DEVICE COVERPLATES IN PATIENT CARE AREAS. MARK INSIDES OF ALL DEVICE BOXES WITH PANEL AND CIRCUIT NUMBER.

J. LOCATIONS OF ELECTRICAL CONNECTIONS AND LOCAL DISCONNECTS SHALL BE COORDINATED WITH MECHANICAL AND PLUMBING CONTRACTORS TO ENSURE ACCESS AND WORKING CLEARANCE IS MAINTAINED PER NEC. NOTIFY OTHER TRADES OF REQUIRED CLEARANCE AREAS TO AVOID ROUTING OF OTHER SYSTEMS IN THESE AREAS. DO NOT INSTALL ELECTRICAL EQUIPMENT OVER EQUIPMENT NAMEPLATES OR ACCESS PANELS OR THROUGH ACCESS/MAINTENANCE CLEARANCES OF EQUIPMENT BY OTHER TRADES.

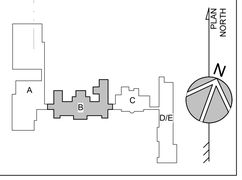
K. ALL RECEPTACLES SHALL BE LISTED AS TAMPER RESISTANT RECEPTACLES PER NEC [406.12], UON.

L. SERVICE EQUIPMENT AND ALL AFFECTED PANELBOARDS SHALL BE MARKED WITH UPDATED MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING.



1 THIRD FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B

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



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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

THIRD FLOOR ELECTRICAL POWER AND FIRE ALARM PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

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KEY NOTES

1 P1(EM) FIXTURES SHALL BE CONTROLLED BY NEW EXTERIOR PHOTOCELL. PHOTOCELL MANUFACTURER: PACLIGHTS (MODEL # SE-PC-SP) OR EQUIVALENT.

GENERAL NOTES (LIGHTING):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. ALL BOLDED/SOLID WORK SHOWN ON THIS PLAN SHALL BE NEW U.O.N.

C. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

D. REFER TO RISER DIAGRAM AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. REFER TO SHEET E-501 ELECTRICAL DETAILS FOR ADDITIONAL INFORMATION ABOUT LIGHTING FIXTURES, WIRING, AND DEVICES.

F. CONNECT ALL NORMAL LIGHTING FIXTURES TO EXISTING NORMAL LIGHTING CIRCUIT MAINTAINED DURING DEMOLITION SERVING THAT AREA.

G. (EM) INDICATES FIXTURES CONNECTED TO EMERGENCY POWER SOURCE. VERIFY THAT CIRCUIT AND FIXTURE OPERATING VOLTAGES ARE COMPATIBLE AND ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23].

H. ALL EXIT SIGNS AND EMERGENCY LIGHTING FIXTURES SHALL BE CONNECTED TO CLOSEST EXISTING EMERGENCY CIRCUIT SERVING THAT AREA MAINTAIN DURING DEMOLITION. VERIFY THAT CIRCUIT AND FIXTURE OPERATING VOLTAGES ARE COMPATIBLE AND ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23]. CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTOR TO ALL EXIT SIGNS, EMERGENCY LIGHT FIXTURES, AND NIGHT LIGHTS AS REQUIRED.

I. LIGHTS IN INDIVIDUAL OFFICES OR ENCLOSED AREAS SHALL BE CONTROLLED BY ASSOCIATED WALL BOX OCCUPANCY/VACANCY SENSOR OR SWITCH AS SHOWN.

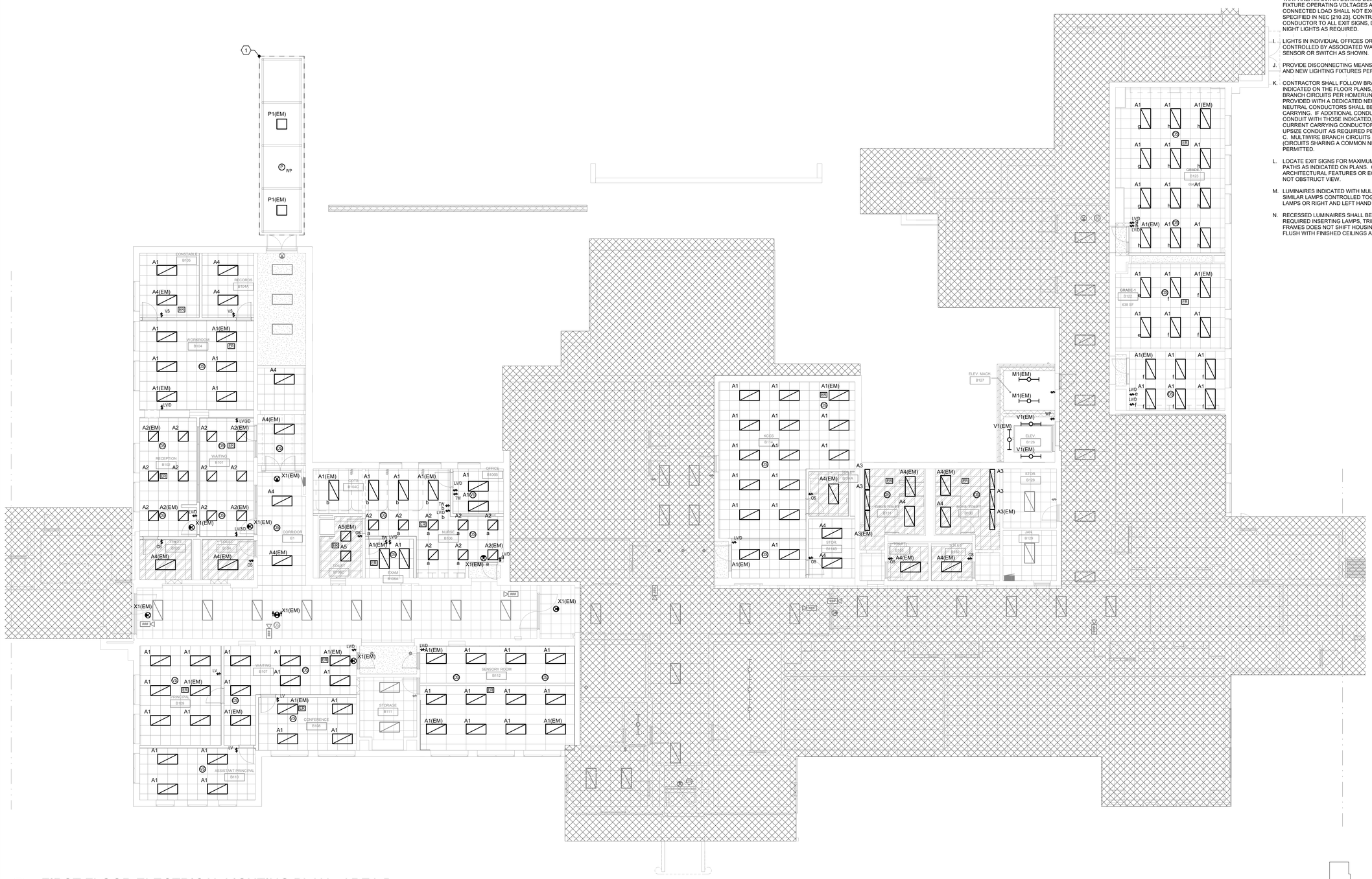
J. PROVIDE DISCONNECTING MEANS FOR DRIVERS FOR ALL RELOCATED AND NEW LIGHTING FIXTURES PER NEC [410.130(G)(1)].

K. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER N.E.C. #310.15(B)(3), AND UPSIZE CONDUIT AS REQUIRED PER N.E.C. #300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN N.E.C #100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

L. LOCATE EXIT SIGNS FOR MAXIMUM VIEWING AREA TO IDENTIFY EGRESS PATHS AS INDICATED ON PLANS. COORDINATE LOCATIONS SUCH THAT ARCHITECTURAL FEATURES OR EQUIPMENT FROM OTHER TRADES DO NOT OBSTRUCT VIEW.

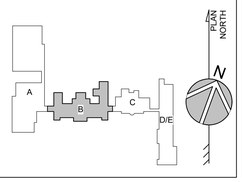
M. LUMINAIRES INDICATED WITH MULTI-LEVEL SWITCHING SHALL HAVE SIMILAR LAMPS CONTROLLED TOGETHER, I.E. INBOARD AND OUTBOARD LAMPS OR RIGHT AND LEFT HAND LAMPS.

N. RECESSED LUMINAIRES SHALL BE SECURED SUCH THAT THE FORCE REQUIRED INSERTING LAMPS, TRIMS, LENSES, LOUVERS, OR DOOR FRAMES DOES NOT SHIFT HOUSING. ALL TRIMS SHALL BE COMPLETELY FLUSH WITH FINISHED CEILINGS AT COMPLETION OF CONSTRUCTION.



1 FIRST FLOOR ELECTRICAL LIGHTING PLAN - AREA B

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR ELECTRICAL LIGHTING PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

E-201B

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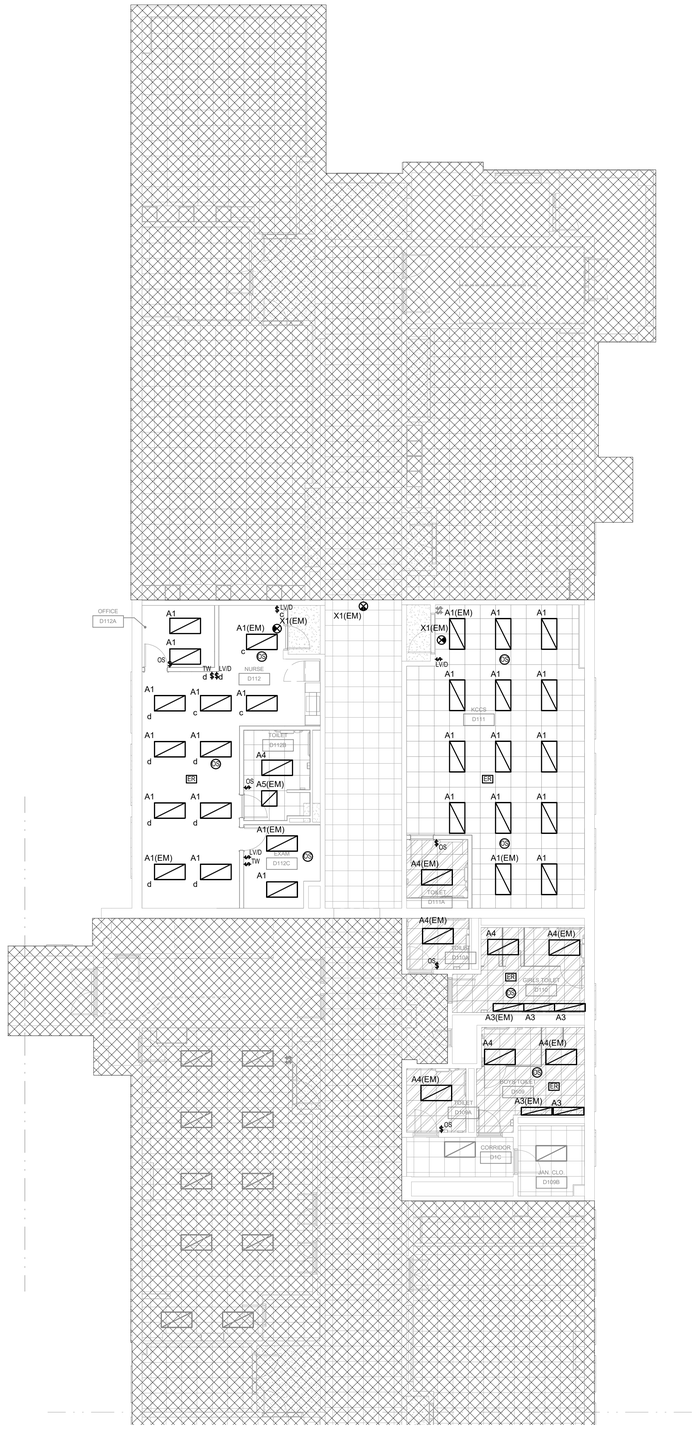
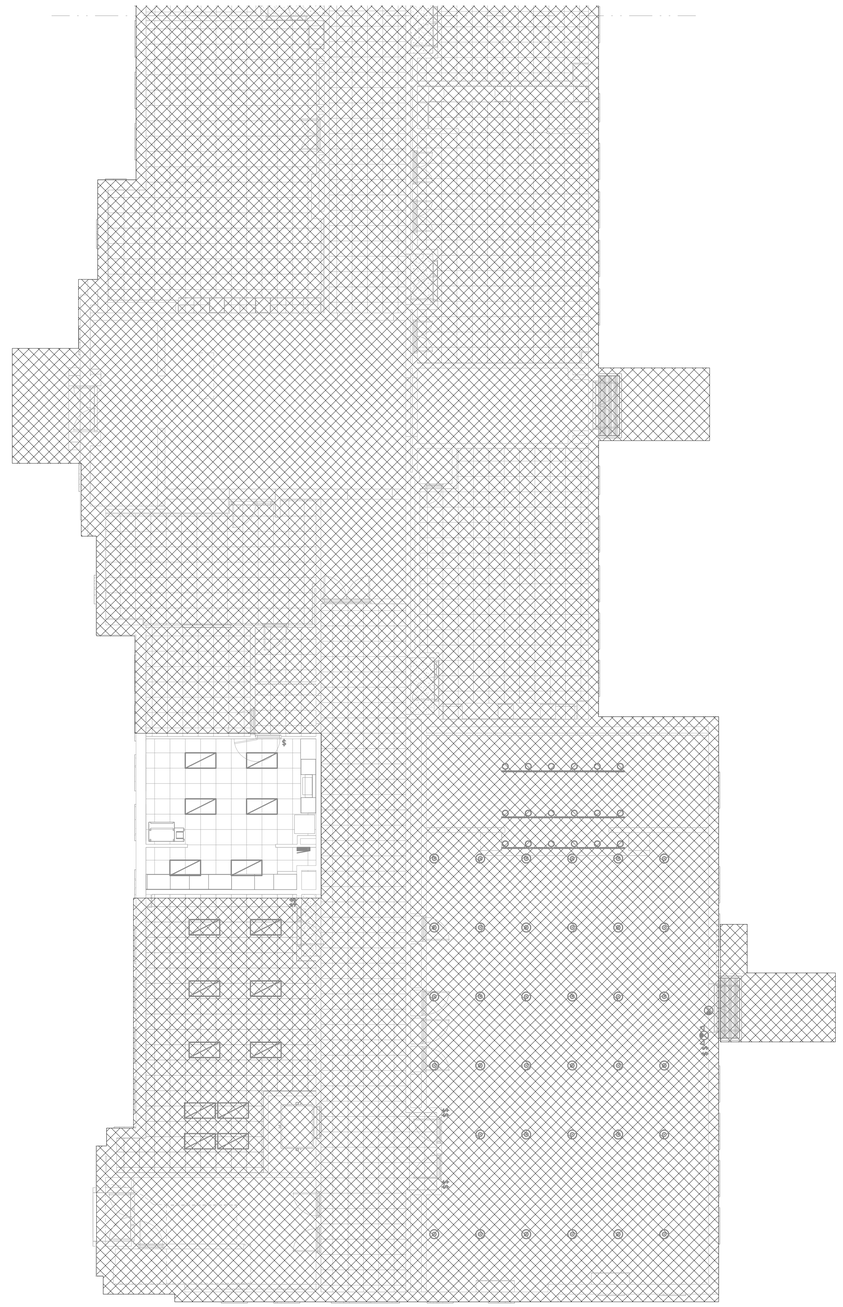


1 FIRST FLOOR ELECTRICAL LIGHTING PLAN - AREA D

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



2 FIRST FLOOR ELECTRICAL LIGHTING PLAN - AREA E

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

GENERAL NOTES (LIGHTING):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. ALL BOLDED/SOLID WORK SHOWN ON THIS PLAN SHALL BE NEW U.O.N.

C. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

D. REFER TO RISER DIAGRAM AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. REFER TO SHEET E-501 ELECTRICAL DETAILS FOR ADDITIONAL INFORMATION ABOUT LIGHTING FIXTURES, WIRING, AND DEVICES.

F. CONNECT ALL NORMAL LIGHTING FIXTURES TO EXISTING NORMAL LIGHTING CIRCUIT MAINTAINED DURING DEMOLITION SERVING THAT AREA.

G. (EM) INDICATES FIXTURES CONNECTED TO EMERGENCY POWER SOURCE. VERIFY THAT CIRCUIT AND FIXTURE OPERATING VOLTAGES ARE COMPATIBLE AND ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23].

H. ALL EXIT SIGNS AND EMERGENCY LIGHTING FIXTURES SHALL BE CONNECTED TO CLOSEST EXISTING EMERGENCY CIRCUIT SERVING THAT AREA MAINTAIN DURING DEMOLITION. VERIFY THAT CIRCUIT AND FIXTURE OPERATING VOLTAGES ARE COMPATIBLE AND ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23]. CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTOR TO ALL EXIT SIGNS, EMERGENCY LIGHT FIXTURES, AND NIGHT LIGHTS AS REQUIRED.

I. LIGHTS IN INDIVIDUAL OFFICES OR ENCLOSED AREAS SHALL BE CONTROLLED BY ASSOCIATED WALL BOX OCCUPANCY/VACANCY SENSOR OR SWITCH AS SHOWN.

J. PROVIDE DISCONNECTING MEANS FOR DRIVERS FOR ALL RELOCATED AND NEW LIGHTING FIXTURES PER NEC [410.130(G)(1)].

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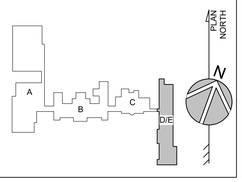

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LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

FIRST FLOOR ELECTRICAL LIGHTING PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

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GENERAL NOTES (LIGHTING):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. ALL BOLDED/SOLID WORK SHOWN ON THIS PLAN SHALL BE NEW U.O.N.

C. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

D. REFER TO RISER DIAGRAM AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. REFER TO SHEET E-501 ELECTRICAL DETAILS FOR ADDITIONAL INFORMATION ABOUT LIGHTING FIXTURES, WIRING, AND DEVICES.

F. CONNECT ALL NORMAL LIGHTING FIXTURES TO EXISTING NORMAL LIGHTING CIRCUIT MAINTAINED DURING DEMOLITION SERVING THAT AREA.

G. (EM) INDICATES FIXTURES CONNECTED TO EMERGENCY POWER SOURCE. VERIFY THAT CIRCUIT AND FIXTURE OPERATING VOLTAGES ARE COMPATIBLE AND ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23].

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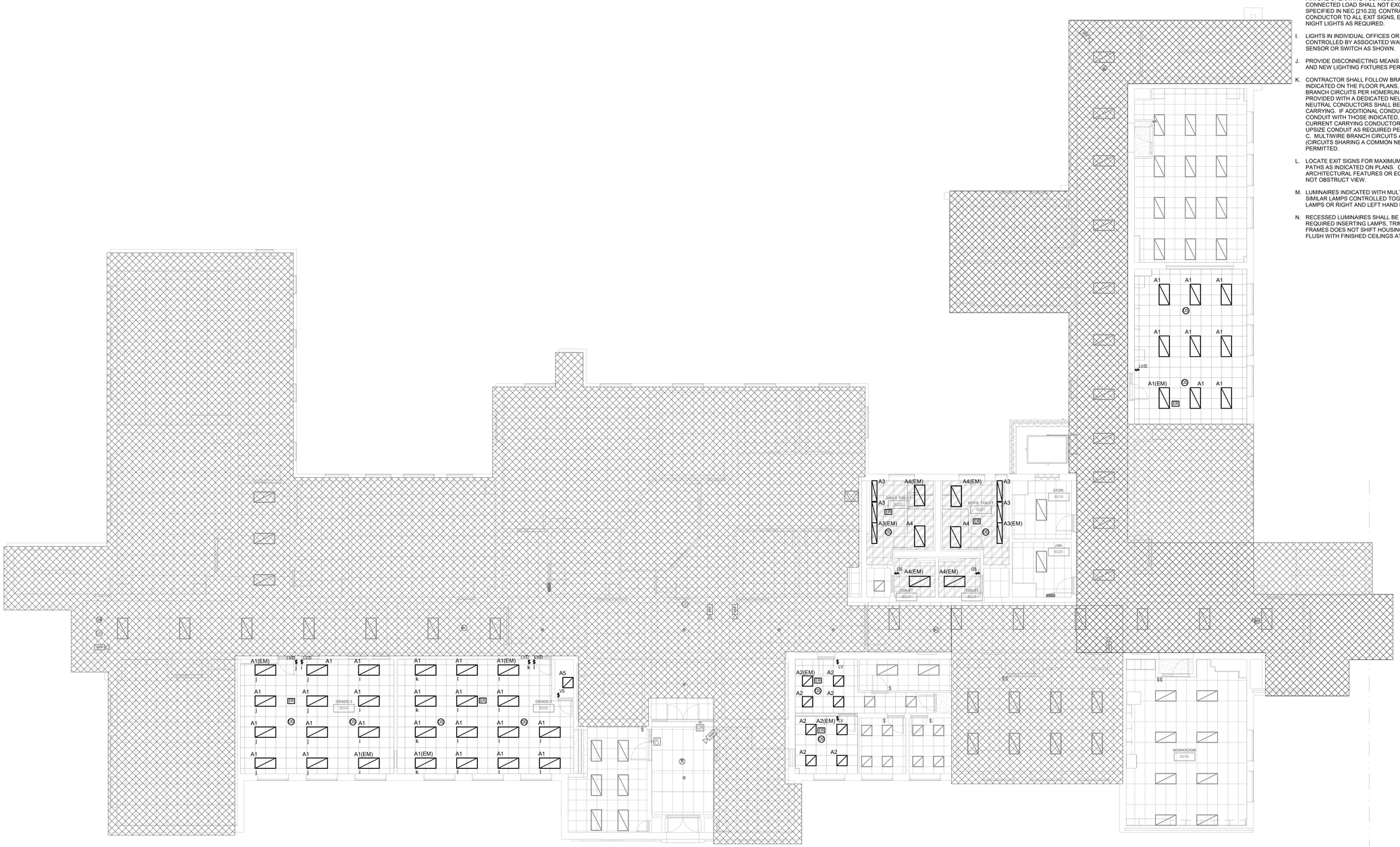
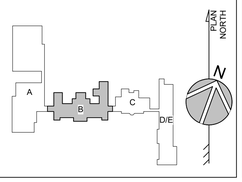


1 SECOND FLOOR ELECTRICAL LIGHTING PLAN - AREA B

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR ELECTRICAL LIGHTING PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

E-202B

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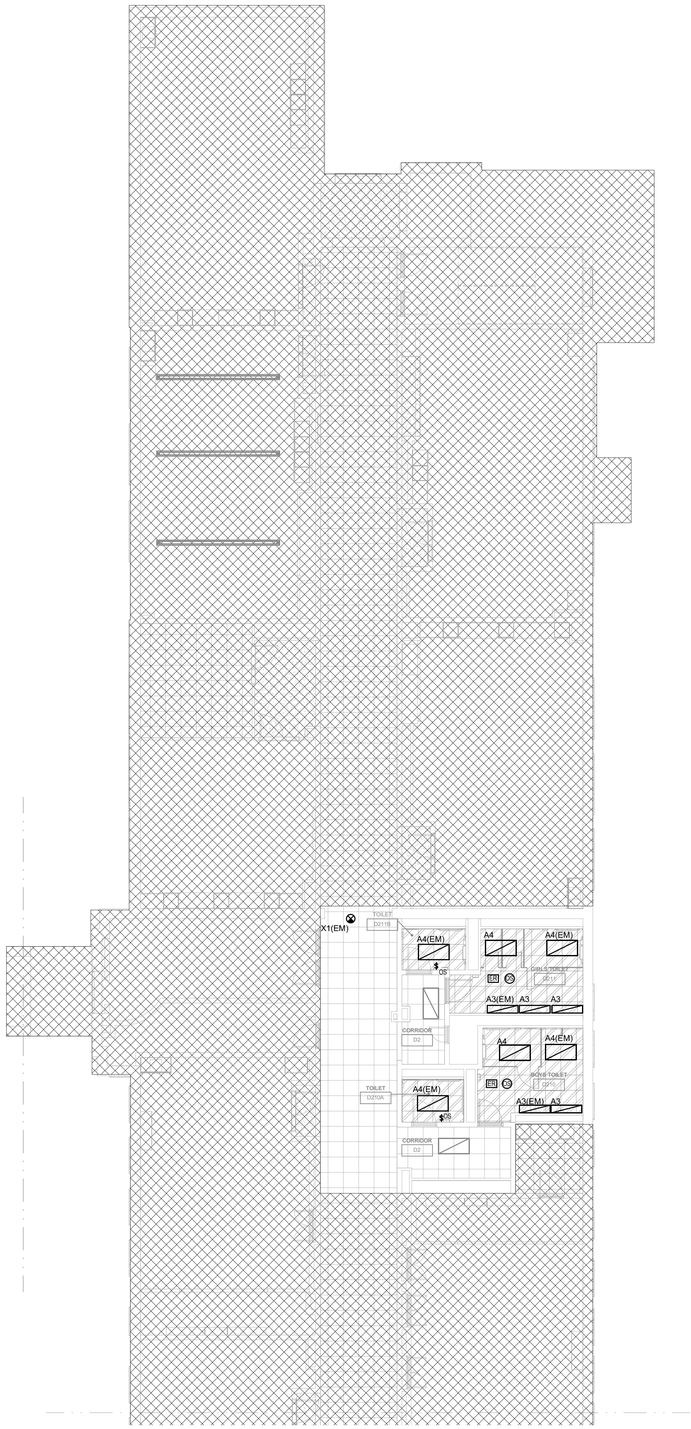
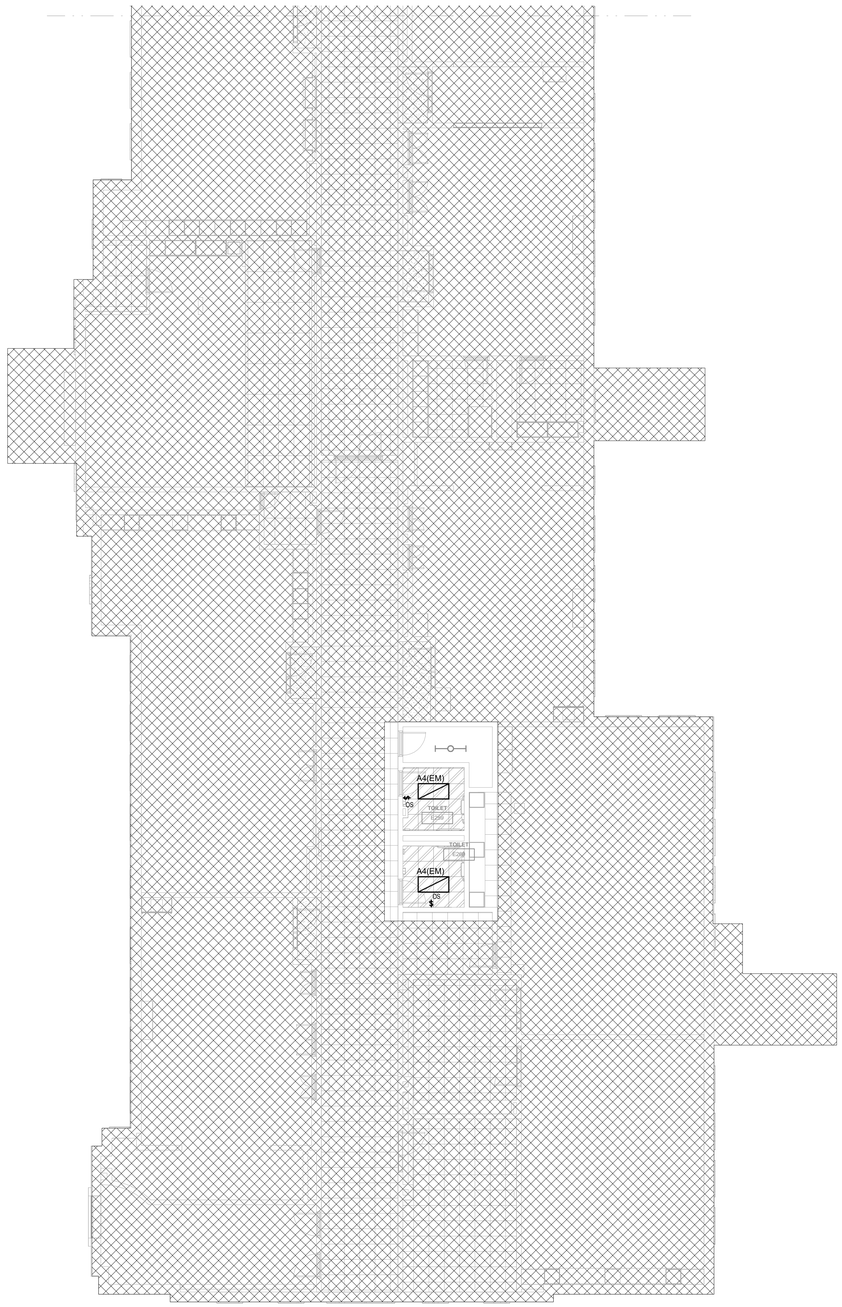


1 SECOND FLOOR ELECTRICAL LIGHTING PLAN - AREA D

NO SCALE



2 SECOND FLOOR ELECTRICAL LIGHTING PLAN - AREA E

NO SCALE

GENERAL NOTES (LIGHTING):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. ALL BOLDED/SOLID WORK SHOWN ON THIS PLAN SHALL BE NEW U.O.N.

C. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

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F. CONNECT ALL NORMAL LIGHTING FIXTURES TO EXISTING NORMAL LIGHTING CIRCUIT MAINTAINED DURING DEMOLITION SERVING THAT AREA.

G. (EM) INDICATES FIXTURES CONNECTED TO EMERGENCY POWER SOURCE. VERIFY THAT CIRCUIT AND FIXTURE OPERATING VOLTAGES ARE COMPATIBLE AND ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23].

H. ALL EXIT SIGNS AND EMERGENCY LIGHTING FIXTURES SHALL BE CONNECTED TO CLOSEST EXISTING EMERGENCY CIRCUIT SERVING THAT AREA MAINTAIN DURING DEMOLITION. VERIFY THAT CIRCUIT AND FIXTURE OPERATING VOLTAGES ARE COMPATIBLE AND ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23]. CONTRACTOR SHALL PROVIDE UNSWITCHED CONDUCTOR TO ALL EXIT SIGNS, EMERGENCY LIGHT FIXTURES, AND NIGHT LIGHTS AS REQUIRED.

I. LIGHTS IN INDIVIDUAL OFFICES OR ENCLOSED AREAS SHALL BE CONTROLLED BY ASSOCIATED WALL BOX OCCUPANCY/VACANCY SENSOR OR SWITCH AS SHOWN.

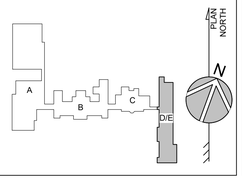
J. PROVIDE DISCONNECTING MEANS FOR DRIVERS FOR ALL RELOCATED AND NEW LIGHTING FIXTURES PER NEC [410.130(G)(1)].

K. CONTRACTOR SHALL FOLLOW BRANCH CIRCUITING LAY-OUT, AS INDICATED ON THE FLOOR PLANS, WITH A MAXIMUM OF THREE (3) BRANCH CIRCUITS PER HOMERUN. EACH BRANCH CIRCUIT SHALL BE PROVIDED WITH A DEDICATED NEUTRAL CONDUCTOR. DEDICATED NEUTRAL CONDUCTORS SHALL BE CONSIDERED CURRENT CARRYING. IF ADDITIONAL CONDUCTORS ARE RAN IN THE SAME CONDUIT WITH THOSE INDICATED, CONTRACTOR SHALL DERATE ALL CURRENT CARRYING CONDUCTORS PER N.E.C. #310.15(B)(3). AND UPSIZE CONDUIT AS REQUIRED PER N.E.C. #300.17 AND ANNEX C. MULTIWIRE BRANCH CIRCUITS AS DEFINED IN N.E.C #100 / 210.4 (CIRCUITS SHARING A COMMON NEUTRAL CONDUCTOR) SHALL NOT BE PERMITTED.

L. LOCATE EXIT SIGNS FOR MAXIMUM VIEWING AREA TO IDENTIFY EGRESS PATHS AS INDICATED ON PLANS. COORDINATE LOCATIONS SUCH THAT ARCHITECTURAL FEATURES OR EQUIPMENT FROM OTHER TRADES DO NOT OBSTRUCT VIEW.

M. LUMINAIRES INDICATED WITH MULTI-LEVEL SWITCHING SHALL HAVE SIMILAR LAMPS CONTROLLED TOGETHER, I.E. INBOARD AND OUTBOARD LAMPS OR RIGHT AND LEFT HAND LAMPS.

N. RECESSED LUMINAIRES SHALL BE SECURED SUCH THAT THE FORCE REQUIRED INSERTING LAMPS, TRIMS, LENSES, LOUVERS, OR DOOR FRAMES DOES NOT SHIFT HOUSING. ALL TRIMS SHALL BE COMPLETELY FLUSH WITH FINISHED CEILINGS AT COMPLETION OF CONSTRUCTION.



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CONSTRUCTION MANAGER
18404 JOHNSON AVENUE
LINCOLN, DELAWARE 19960
302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

SECOND FLOOR ELECTRICAL LIGHTING PLAN - AREA D/E

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

E-202D/E

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GENERAL NOTES (LIGHTING):

A. REFER TO SHEET E-001 FOR SYMBOLS AND ABBREVIATIONS.

B. ALL BOLDED/SOLID WORK SHOWN ON THIS PLAN SHALL BE NEW U.O.N.

C. REFER TO THE ARCHITECT'S REFLECTED CEILING PLANS, ELEVATIONS, AND CASEWORK DETAILS FOR EXACT LOCATIONS OF ALL WALL AND CEILING MOUNTED ELECTRICAL DEVICES.

D. REFER TO RISER DIAGRAM AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. REFER TO SHEET E-501 ELECTRICAL DETAILS FOR ADDITIONAL INFORMATION ABOUT LIGHTING FIXTURES, WIRING, AND DEVICES.

F. CONNECT ALL NORMAL LIGHTING FIXTURES TO EXISTING NORMAL LIGHTING CIRCUIT MAINTAINED DURING DEMOLITION SERVING THAT AREA.

G. (EM) INDICATES FIXTURES CONNECTED TO EMERGENCY POWER SOURCE. VERIFY THAT CIRCUIT AND FIXTURE OPERATING VOLTAGES ARE COMPATIBLE AND ENSURE CONNECTED LOAD SHALL NOT EXCEED ALLOWABLE LOAD LIMITS SPECIFIED IN NEC [210.23].

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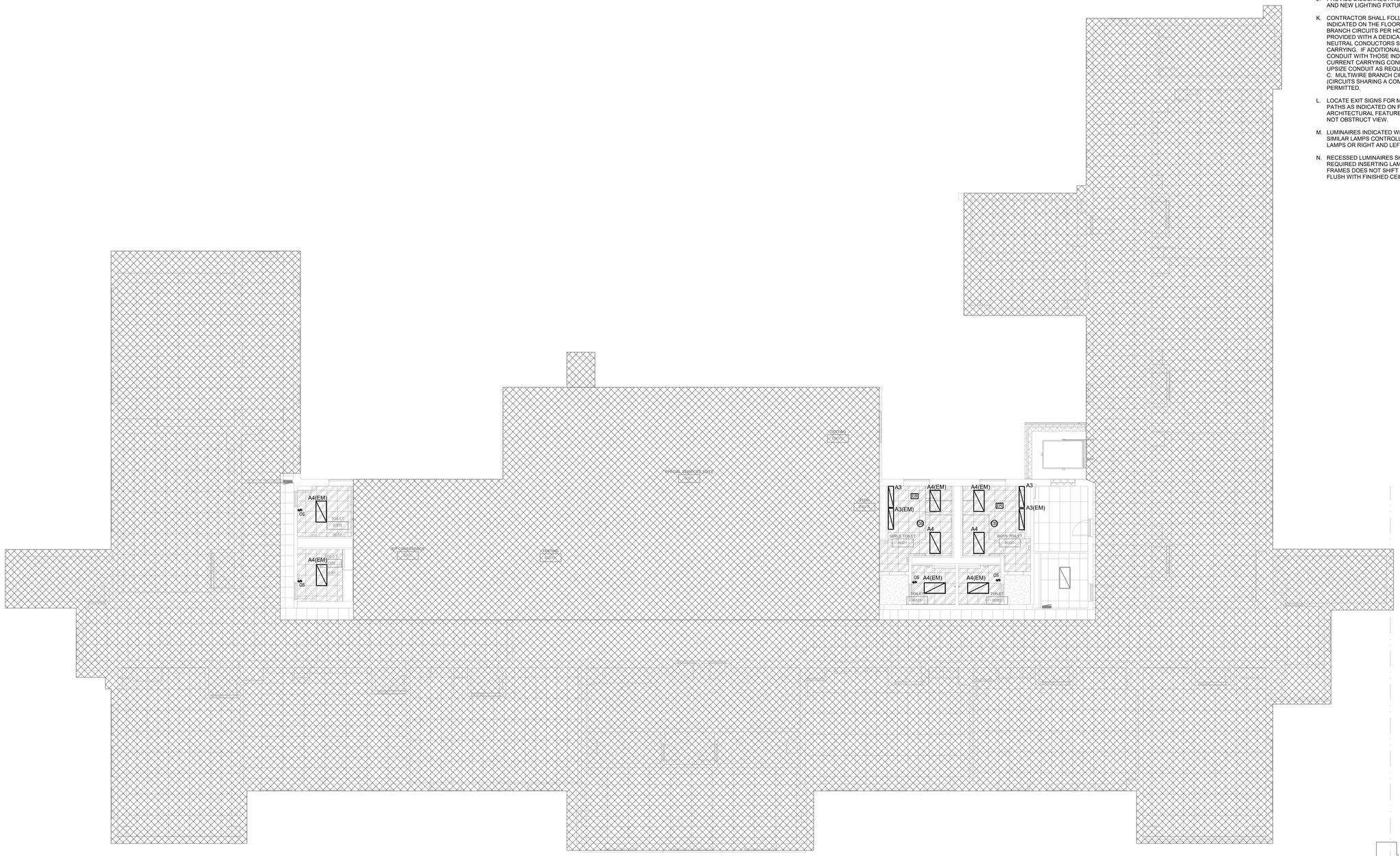
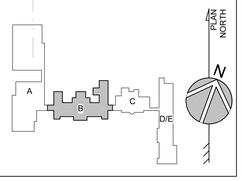


2 THIRD FLOOR ELECTRICAL LIGHTING PLAN - AREA B

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



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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING

ISSUED: 09/13/2024

SHEET TITLE

THIRD FLOOR ELECTRICAL LIGHTING PLAN - AREA B

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

E-203B

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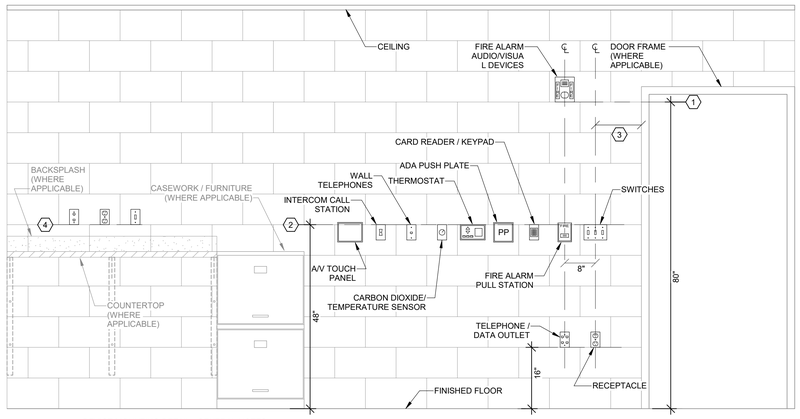


DEVICE MOUNTING DETAIL - GENERAL NOTES:

A. WHERE DEVICES OF ANY DISCIPLINE ARE LOCATED IN THE SAME GENERAL AREA ON THE PLANS AND ARE SHOWN TO BE MOUNTED AT A SIMILAR HEIGHT, ALIGN HORIZONTALLY ALONG TOP OF DEVICE BACKBOX (AS SHOWN IN DETAIL AND DESCRIBED IN KEY NOTE #2).

B. WHERE DEVICES OF ANY DISCIPLINE ARE LOCATED IN THE SAME GENERAL AREA ON THE PLANS AND ARE SHOWN MOUNTED AT DIFFERENT HEIGHTS, ALIGN VERTICALLY ALONG THE CENTERLINE OF THE DEVICE BACKBOX (AS SHOWN IN DETAIL).

C. FOR ANY WALL OTHER THAN PAINTED GYPSUM BOARD OR CMU, DEVICE LOCATIONS MUST BE FIELD APPROVED BY ENGINEER OR ARCHITECT PRIOR TO INSTALLATION OF FINISHES.

DEVICE MOUNTING DETAIL - KEY NOTES:

1. MOUNT VISUAL NOTIFICATION APPLIANCES SO THAT ENTIRE LENS IS BETWEEN 80" AND 96" AFF. IF CEILING IS TOO LOW FOR DEVICE TO BE MOUNTED ABOVE 80", MOUNT SO THAT THE LENS IS WITHIN 6" OF FINISHED CEILING.
2. ALIGN BACKBOXES OF DEVICES AT THE MOUNTING HEIGHT INDICATED. MEASURE TO THE TOP OF THE BACKBOX FOR STANDARD OUTLET BOXES. NON-STANDARD BACKBOXES ARE TO BE INSTALLED SUCH THAT THE FINISHED DEVICES ARE ALIGNED ALONG THEIR RESPECTIVE CENTERLINES.
3. MOUNTING HEIGHTS SHOWN ILLUSTRATE DESIGN INTENT AND ARE TO BE FOLLOWED UNLESS CONTRADICTED BY APPLICABLE CODE. WHERE DEVICES ARE SHOWN ADJACENT TO DOOR FRAMES ON PLANS INSTALL 12" FROM FRAME TO AVOID SLUSHED SECTIONS OR BRACING. SPECIFIC DEVICES ARE SHOWN IN RELATIVE ORDER FROM DOOR FRAME; WHERE THESE DEVICES ARE NOT PRESENT AT A PARTICULAR LOCATION, ADJUST LOCATIONS CLOSER TO DOOR ACCORDINGLY.
4. THE CONTRACTOR IS TO COORDINATE ALL ROUGH-INS WITH ANY COUNTERTOPS/BACKSPLASHES TO AVOID CONFLICT. ALIGN DEVICE BACKBOXES IN THE BOTTOM OF THE NEXT FULL BLOCK ABOVE THE BACKSPLASH AS SHOWN. FOR NON-BLOCK WALLS ALIGN BOTTOM OF DEVICE BACKBOXES 4" ABOVE BACKSPLASH. COORDINATE WORK WITH CASEWORK AND KITCHEN SHOP DRAWINGS ACCORDINGLY. IF CONFLICT STILL ARISES CONTACT THE ENGINEER FOR DIRECTION ON HOW TO PROCEED.

1 TYPICAL WALL DEVICE MOUNTING DETAIL

NO SCALE

LUMINAIRE SCHEDULE

TYPE	DESCRIPTION	BASIS OF DESIGN	EQUAL MANUFACTURERS	MOUNTING	LAMPS / CCT	MINIMUM LUMENS	MAXIMUM WATTAGE	VOLTAGE	REMARKS
A1	2X4 RECESSED LED FIXTURE	COLUMBIA LIGHTING LCAT SERIES LCAT24-9-40-MW-G-_-ED1-U	APPROVED EQUIVALENT	RECESSED	4000K/LED	3500 LM	33	120	
A1(EM)	2X4 RECESSED LED FIXTURE - EMERGENCY CIRCUIT CONNECTION	COLUMBIA LIGHTING LCAT SERIES LCAT24-9-40-MW-G-_-ED1-U	APPROVED EQUIVALENT	RECESSED	4000K/LED	3500 LM	33	120	
A2	2X2 RECESSED LED FIXTURE	COLUMBIA LIGHTING LCAT SERIES LCAT22-9-35-LW-G-R-_-ED1-U	APPROVED EQUIVALENT	RECESSED	3500K/LED	2709 LM	23	120	
A2(EM)	2X2 RECESSED LED FIXTURE - EMERGENCY CIRCUIT CONNECTION	COLUMBIA LIGHTING LCAT SERIES LCAT22-9-35-LW-G-R-_-ED1-U	APPROVED EQUIVALENT	RECESSED	3500K/LED	2709 LM	23	120	
A3	1X4 RECESSED LED FIXTURE	COLUMBIA LIGHTING LCAT SERIES LCAT22-9-35-XW-G-R-_-ED-U	APPROVED EQUIVALENT	RECESSED	3500K/LED	2314 LM	19	120	
A3(EM)	1X4 RECESSED LED FIXTURE - EMERGENCY CIRCUIT CONNECTION	COLUMBIA LIGHTING LCAT SERIES LCAT22-9-35-XW-G-R-_-ED-U	APPROVED EQUIVALENT	RECESSED	3500K/LED	2314 LM	19	120	
A4	2X4 RECESSED LED FIXTURE	COLUMBIA LIGHTING LCAT SERIES LCAT24-9-40-MW-G-_-E-U	APPROVED EQUIVALENT	RECESSED	4000K/LED	3500 LM	33	120	
A4(EM)	2X4 RECESSED LED FIXTURE - EMERGENCY CIRCUIT CONNECTION	COLUMBIA LIGHTING LCAT SERIES LCAT24-9-40-MW-G-_-E-U	APPROVED EQUIVALENT	RECESSED	4000K/LED	3500 LM	33	120	
A5	2X2 RECESSED LED FIXTURE	COLUMBIA LIGHTING LCAT SERIES LCAT22-9-35-LW-G-R-_-E-U	APPROVED EQUIVALENT	RECESSED	3500K/LED	2709 LM	23	120	
A5(EM)	2X2 RECESSED LED FIXTURE - EMERGENCY CIRCUIT CONNECTION	COLUMBIA LIGHTING LCAT SERIES LCAT22-9-35-LW-G-R-_-E-U	APPROVED EQUIVALENT	RECESSED	3500K/LED	2709 LM	23	120	
M1(EM)	4' LED STRIP LIGHT FIXTURE	COLUMBIA LIGHTING MPS-4-35-ML-CP-W-ED-U-MPSWG4	APPROVED EQUIVALENT	SURFACE/WALL	3500K/LED	4500 LM	32	120	
P1(EM)	EXTERIOR LED CANOPY LIGHT FIXTURE - EMERGENCY CIRCUIT CONNECTION	PACLIGHTS FCPC-095-50	APPROVED EQUIVALENT	SURFACE	5000K/LED	12555 LM	95	120	
V1(EM)	4' VAPORPROOF LED STRIP LIGHT FIXTURE	COLUMBIA LIGHTING CVT44-LSCS	APPROVED EQUIVALENT	SURFACE/WALL	3500K/LED	5000 LM	38	120	
X1(EM)	EDGE LIT EXIT SIGN - EMERGENCY CIRCUIT CONNECTION	LITHONIA EDGR SERIES EDG-_-FACES-_RMR-X2	APPROVED EQUIVALENT	SURFACE/WALL	RED LED	-	2	120	

GENERAL NOTES (LUMINAIRE SCHEDULE):

A. ALL LUMINAIRES AND COMPONENTS SHALL BE UL LISTED.

B. WHERE LUMINAIRES ARE SHOWN SPLIT-WIRED (HALF EMERGENCY POWER/ HALF NORMAL POWER) ON FLOOR PLANS, LUMINAIRES SHALL BE PROVIDED WITH MULTIPLE ELECTRONIC BALLASTS FOR MULTIPLE POWER CIRCUITS AS INDICATED ON FLOOR PLANS.

C. PROVIDE BALLASTS FOR FIXTURE LAMP SWITCHING AS INDICATED ON LIGHTING FLOOR PLANS. WHERE A SINGLE FIXTURE IS POWERED FROM NORMAL AND EMERGENCY POWER, HALF OF THE LAMPS WITH A MINIMUM OF TWO LAMPS SHALL BE ON EMERGENCY POWER.

D. CONTRACTOR SHALL FOCUS, AIM AND ADJUST LUMINAIRES UNDER THE SUPERVISION AND DIRECTION OF THE ENGINEER AND ARCHITECT. ALLOW LABOR FOR FINAL FOCUS AND ADJUSTMENTS AFTER DARK. LIFTS AND SCAFFOLDING SHALL BE AVAILABLE.

E. ALL LAY-IN FIXTURES SHALL BE PROVIDED WITH SCREW ON HOLD DOWN CLIPS AND MAXIMUM 6'-0" LONG FLEXIBLE CONDUIT WHIPS.

F. EXIT SIGNS AND FIXTURES THAT ARE HATCHED OR WHERE THE FIXTURE TYPE CONTAINS THE SUFFIX "E" FOR EMERGENCY OPERATION SHALL HAVE AN INTEGRAL 90 MINUTE BATTERY INVERTER IF NOT POWERED FROM AN EMERGENCY GENERATOR.

COMcheck Software Version COMcheckWeb

Interior Lighting Compliance Certificate

Project Information

Energy Code: 2018 IECC
Project Title: Central Middle School
Project Type: Alteration

Construction Site:
211 DELAWARE AVENUE
DOVER, Delaware 19901

Owner/Agent:

Designer/Contractor:

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts
1-CLASSROOMS & WORKROOMS (Common Space Types:Classroom/Lecture/Training)	5444	0.96	5226
2-RESTROOMS & TOILETS (Common Space Types:Restrooms)	2954	0.85	2511
3-OFFICES (Common Space Types:Office - Enclosed)	892	0.93	830
4-STORAGE (Common Space Types:Storage >=50 - <=1000 sq.ft.)	399	0.46	184
5-CORRIDOR (Common Space Types:Corridor/Transition >=8 ft wide)	253	0.66	167
6-LOBBY/RECEPTION/WAITING AREA (Common Space Types:Lobby - General)	854	1.00	854
7-NURSE/CONFERENCE (Common Space Types:Conference/Meeting/Multipurpose)	1417	1.07	1516
		Total Allowed Watts =	11287

Proposed Interior Lighting Power

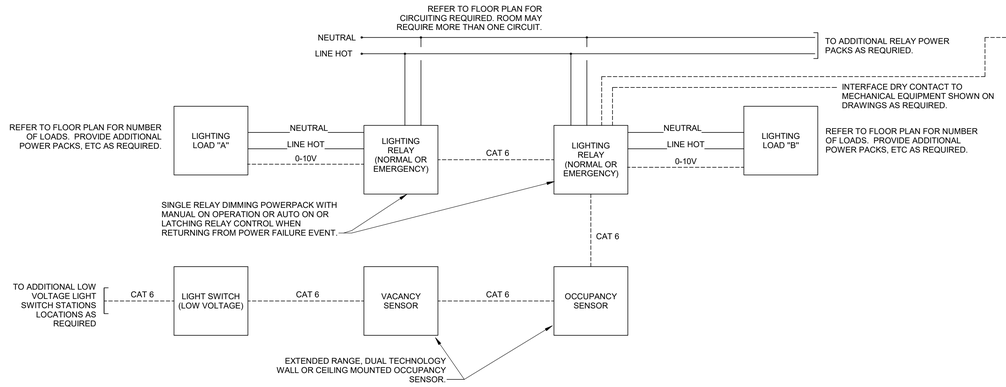
A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixture	D Fixture Watt.	E (C X D)
CLASSROOMS & WORKROOMS (Common Space Types: Classroom/Lecture/Training, 5444 sq.ft.)				
2X4 LED TROFFER: A1: Other:	1	41	33	1353
2X4 LED TROFFER: A4: Other:	1	48	33	1584
RESTROOMS & TOILETS (Common Space Types: Restrooms, 2954 sq.ft.)				
1X4 LED TROFFER: A3: Other:	1	26	19	494
2X4 LED TROFFER: A4: Other:	1	45	33	1485
2X2 LED TROFFER: A5: Other:	1	3	23	69
OFFICES (Common Space Types: Office - Enclosed, 892 sq.ft.)				
2X4 LED TROFFER: A1: Other:	1	4	33	132
2X4 LED TROFFER: A4: Other:	1	12	33	396
STORAGE (Common Space Types: Storage >=50 - <=1000 sq.ft., 399 sq.ft.)				
2X4 LED TROFFER: A4: Other:	1	4	33	132
CORRIDOR (Common Space Types: Corridor/Transition >=8 ft wide, 253 sq.ft.)				
2X4 LED TROFFER: A4: Other:	1	4	33	132
LOBBY/RECEPTION/WAITING AREA (Common Space Types: Lobby - General, 854 sq.ft.)				
2X4 LED TROFFER: A4: Other:	1	7	33	231
2X2 LED TROFFER: A5: Other:	1	12	23	276
NURSE/CONFERENCE (Common Space Types: Conference/Meeting/Multipurpose, 1417 sq.ft.)				
2X4 LED TROFFER: A1: Other:	1	18	33	594
2X2 LED TROFFER: A2: Other:	1	8	23	184
2X4 LED TROFFER: A4: Other:	1	4	33	132
		Total Proposed Watts =		7194

Interior Lighting PASSES

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting alteration project 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 COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title _____ Signature _____ Date _____



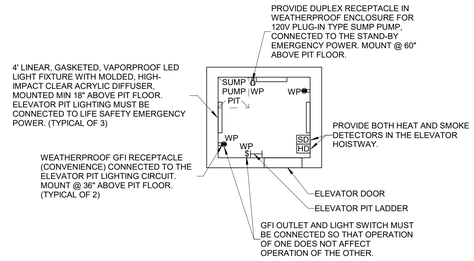
WIRING SCHEMATIC LEGEND	
- - - - - - - -	LOW-VOLTAGE WIRING BY ELECTRICAL CONTRACTOR
————	LINE VOLTAGE WIRING BY ELECTRICAL CONTRACTOR

NOTES:

1. VERIFY ALL WIRING REQUIREMENTS WITH MANUFACTURER OF OCCUPANCY SENSOR PRIOR TO ROUGH-IN. THIS DIAGRAM IS MEANT TO BE ILLUSTRATIVE ONLY.
2. ALL POWER PACKS TO BE LOCATED IN CONCEALED LOCATIONS ABOVE ACCESSIBLE CEILINGS.
3. PROVIDE J-HOOKS ON 4' CENTERS ABOVE CEILING FOR ALL CONTROL CABLING INDICATED BETWEEN RELAYS.
4. CONTRACTOR SHALL PROVIDE AN EXTRA 10' OF CONTROL WIRING COILED UP ABOVE CEILING AT OCCUPANCY SENSOR.
5. WHERE MULTIPLE CIRCUITS SERVE ONE AREA, CONTRACTOR SHALL PROVIDE ADDITIONAL RELAY PACKS AS REQUIRED TO CONTROL ALL CIRCUITS IN ROOM TOGETHER. REFER TO MANUFACTURER'S WIRING DIAGRAMS FOR WIRING REQUIREMENTS.
6. WHERE MULTIPLE SENSORS AND MULTIPLE POWER PACKS ARE REQUIRED IN ONE ROOM, CONTRACTOR SHALL CONNECT SENSORS AND POWER PACKS SUCH THAT MOTION DETECTION BY ANY SENSOR IN THE ROOM SHALL ALLOW ALL CIRCUITS IN THE ROOM TO OPERATE. PROVIDE ALL ACCESSORIES AND WIRE DEVICES PER MANUFACTURER'S REQUIREMENTS FOR OPERATION AS DESCRIBED.
7. SYSTEM SHALL BE SENSOR SWITCH nLIGHT, HUBBELL NX, WATTSTOPPER DLM, OR APPROVED EQUAL. SYSTEM SHALL BE PROVIDED, WIRED AND CONTROLLED AS A COMPLETE AND OPERABLE SYSTEM.
8. **ALL OCC SENSORS TO BE (CEILING/WALL MOUNTED) DUAL TECHNOLOGY/PIR/ULTRASONIC SENSORS WITH POWER PACKS. FOR SECURE/GOVERNMENT SPACES, COORDINATE WITH OWNER IF DUAL TECHNOLOGY SENSORS ARE ACCEPTABLE OR IF PIR SENSORS ARE REQUIRED. WHERE INDICATED AS WALL TYPE, PROVIDE WITH WITH RECESS BACKBOX, STUB-OUT AND GROMMETED COVERPLATE FOR CABLING. PROVIDE WITH ADDITIONAL EMS RELAY FOR BUILDING MANAGEMENT.**
9. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ALL LIGHTING CONTROLS, SHOWING LOCATIONS OF DEVICES OVERLAID ON RELECTED CEILING PLANS. THESE SHOP DRAWINGS SHALL SHOW ALL WIRING REQUIRED FOR THE SITE SPECIFIC APPLICATION.

2 LIGHTING CONTROL WIRING DIAGRAM

NO SCALE

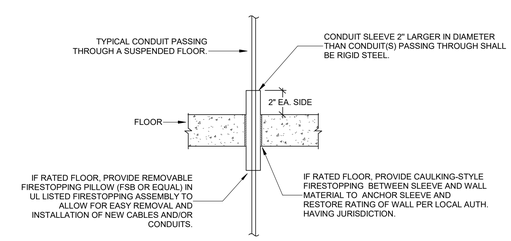


DETAIL NOTES:

1. ALL ELECTRICAL EQUIPMENT LOCATED LESS THAN 4' ABOVE FLOOR SHALL BE WEATHERPROOF (NEMA 4) AND WIRING SHALL BE IDENTIFIED FOR USE IN WET LOCATIONS IN ACCORDANCE WITH THE REQUIREMENTS IN NFPA 70.
2. PIT LIGHTING MUST PROVIDE A MIN. OF 10 FC AT THE PIT FLOOR IN ALL AREAS OF THE PIT.

4 SINGLE CAB ELEVATOR PIT

NO SCALE

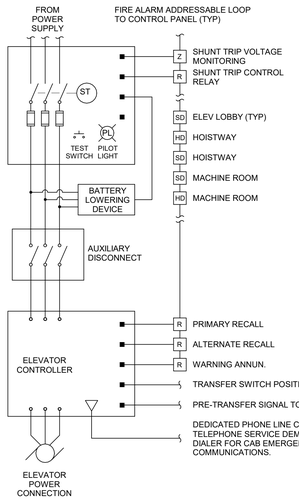


GENERAL FLOOR PENETRATION NOTES :

A. WHERE CONDUITS PENETRATE A FLOOR SLAB AND ARE EXPOSED, PROVIDE SQUARE 4" HIGH CONCRETEPAD AROUND CONDUIT SLEEVE AND EXTEND SLEEVE 4" ABOVE PAD.
B. WHERE CONDUITS OR SLEEVES PENETRATE FLOORS IN GROUPS, THE CONCRETE PAD SHOULD BE CONTINUOUS AROUND ALL CONDUITS OR SLEEVES.

3 CONDUIT PENETRATION SLEEVE INSTALLATION

NO SCALE



NOTES:

1. PERFORM WORK IN ACCORDANCE WITH ALL ADOPTED CODES AND AUTHORITY HAVING JURISDICTION (AHJ) REQUIREMENTS AND SHALL BE COORDINATED WITH ELEVATOR EQUIPMENT MANUFACTURER.
2. PROVIDE LOCKABLE ELEVATOR POWER FUSED DISCONNECT. WHERE HOISTWAY AND/OR MACHINE ROOM SPRINKLERS ARE INSTALLED, PROVIDE INTEGRAL SHUNT TRIP FOR ELEVATOR SHUT DOWN (BUSSMAN POWER MODULE SERIES OR EQUIVALENT). LOCATE IN ELEVATOR MACHINE ROOM. PROVIDE DUAL ELEMENT TIME DELAY FUSES PER ELEVATOR SHOP DRAWINGS.
3. LOCATE HOISTWAY AND MACHINE ROOM/SPACE HEAT DETECTORS WITHIN TWO FEET OF EACH SPRINKLER HEAD WITH TEMPERATURE SETTINGS CONFIGURED TO ALARM BEFORE SPRINKLER HEADS IN ACCORDANCE WITH NFPA REQUIREMENTS.
4. INSTALL SMOKE DETECTORS WITHIN 21 FEET OF EACH ELEVATOR DOOR CENTERLINE ON EACH FLOOR FOR EMERGENCY ELEVATOR RECALL.
5. ELEVATOR CONTROLLER - MAKE ALL REQUIRED CONNECTIONS AT THE LOCATIONS INDICATED BY ELEVATOR SHOP DRAWINGS & ELEVATOR CODE. PROVIDE ADDITIONAL RELAYS, DRY CONTACTS, ETC. AS REQUIRED FOR A COMPLETE SYSTEM.
6. WHERE BATTERY LOWERING DEVICE IS SPECIFIED, PROVIDE AUXILIARY CONTACT AND POWER WIRING.
7. WHERE ELEVATOR IS SUPPLIED FROM EMERGENCY GENERATOR, PROVIDE INTERFACE TO AUTOMATIC TRANSFER SWITCH FOR EMERGENCY POWER TRANSFER AND POWER CHANGE PENDING SIGNALS.
8. WHERE ELEVATOR CONTROLLER IS LOCATED AS PART OF THE ELEVATOR HOISTWAY, LOCATE ELEVATOR DISCONNECTING MEANS IN ELECTRICAL ROOM AND PROVIDE ADDITIONAL NON-FUSED DISCONNECT IN THE HOISTWAY WITHIN SIGHT OF THE CONTROLLER.

CR ACCESS CONTROL CARD READER. COORDINATE WITH ELEVATOR MANUFACTURER TO PROVIDE CONNECTIONS OF IN CAB DEVICES WITH ACCESS CONTROL SYSTEM.

5 ELEVATOR CONNECTION DIAGRAM

NO SCALE

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

ELECTRICAL DETAILS

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	As indicated
DRAWN BY: JHA	PROJ MGR: MO

E-501

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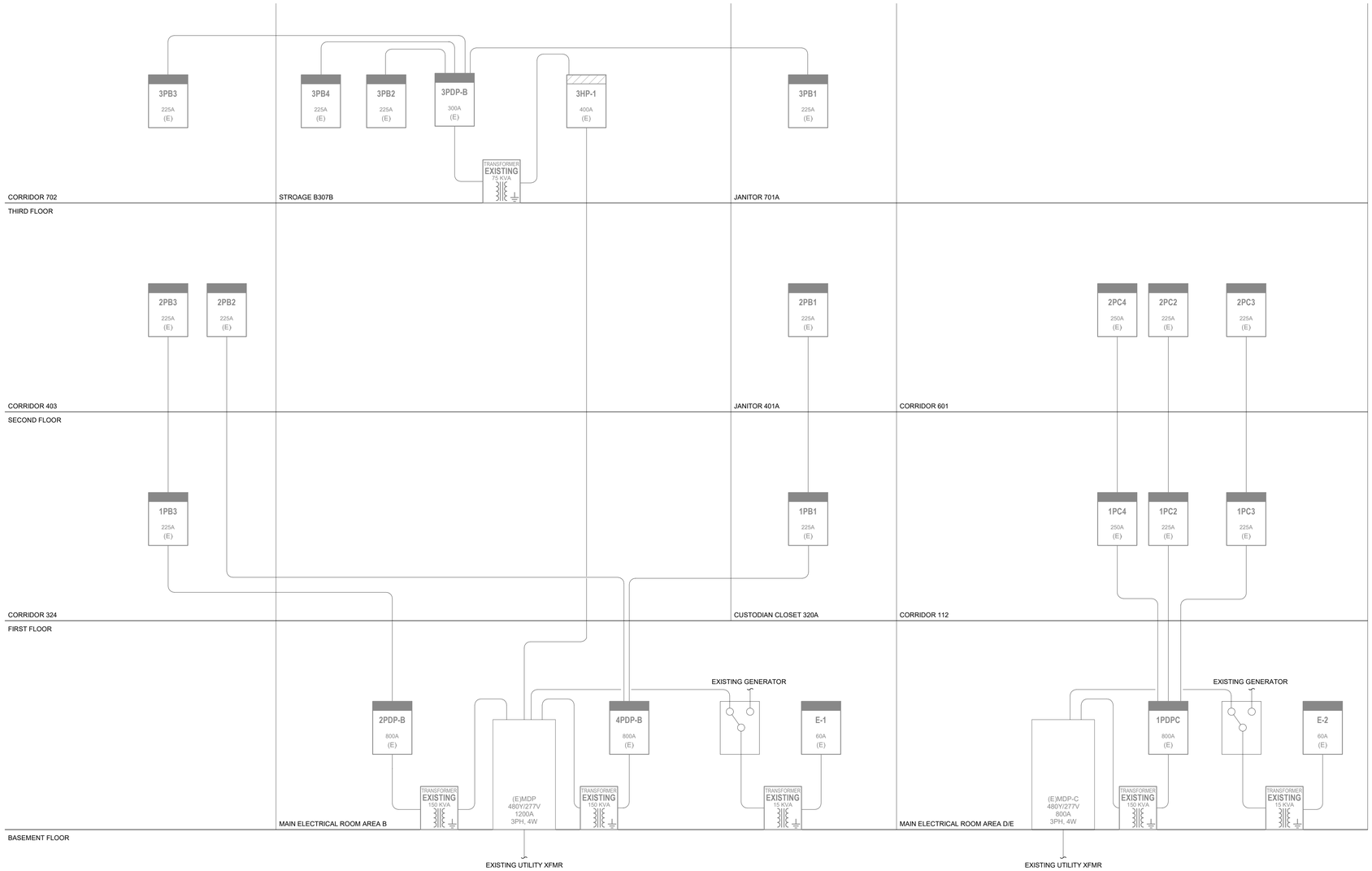

1 PARTIAL RISER DIAGRAM

NO SCALE

ELECTRICAL RISER NOTES

A PROVIDE ENGRAVED LAMACOID LABELS FOR ALL POWER DISTRIBUTION EQUIPMENT FURNISHED OR MODIFIED IN THIS PROJECT, LABELS PER DETAILS AND SPECIFICATIONS.

B SERVICE EQUIPMENT SHALL BE MARKED WITH THE MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING.

C CONTRACTOR SHALL INSTALL SEPARATE CONDUITS, PULL BOXES, ETC. FOR EACH EMERGENCY POWER BRANCH & NORMAL POWER PER NEC FOR COMPLETE SEPARATION OF POWER SERVICES.

D ALL CIRCUIT BREAKERS AND/OR DISCONNECTS SERVING THE PRIMARY SIDE OF A TRANSFORMER WHICH ARE NOT WITHIN SIGHT OF THE TRANSFORMER SHALL BE PROVIDED WITH PERMANENTLY INSTALLED MEANS TO LOCK THE BREAKER IN THE OFF POSITION. SUCH TRANSFORMERS SHALL HAVE THE ROOM NAME AND NUMBER OF THE PRIMARY DISCONNECTING MEANS ENGRAVED ON THE EQUIPMENT NAMEPLATE.

E REFER TO SPECIFICATIONS FOR ARC FLASH AND RELATED POWER SYSTEM STUDY REQURIEMENTS.

BRANCH CIRCUIT SCHEDULE CHART

CIRCUIT TYPE	CIRCUIT BREAKER	CONDUCTORS (COPPER)	CONDUIT
1 POLE - 1 PHASE 2 WIRE + GROUND	20A-1P	2 #12 + 1 #12 GROUND	3/4"
	30A-1P	2 #10 + 1 #10 GROUND	3/4"
	40A-1P	2 #8 + 1 #10 GROUND	3/4"
	50A-1P	2 #6 + 1 #10 GROUND	3/4"
	60A-1P	2 #4 + 1 #10 GROUND	1 1/4"
2 POLE - 1 PHASE 2 WIRE + GROUND	20A-2P	2 #12 + 1 #12 GROUND	3/4"
	30A-2P	2 #10 + 1 #10 GROUND	3/4"
	40A-2P	2 #8 + 1 #10 GROUND	3/4"
	50A-2P	2 #6 + 1 #10 GROUND	3/4"
	60A-2P	2 #4 + 1 #10 GROUND	1 1/4"
2 POLE - 1 PHASE 3 WIRE + GROUND	20A-2P	3 #12 + 1 #12 GROUND	3/4"
	30A-2P	3 #10 + 1 #10 GROUND	3/4"
	40A-2P	3 #8 + 1 #10 GROUND	3/4"
	50A-2P	3 #6 + 1 #10 GROUND	3/4"
	60A-2P	3 #4 + 1 #10 GROUND	1 1/4"
3 POLE - 3 PHASE 3 WIRE + GROUND	20A-3P	3 #12 + 1 #12 GROUND	3/4"
	30A-3P	3 #10 + 1 #10 GROUND	3/4"
	40A-3P	3 #8 + 1 #10 GROUND	3/4"
	50A-3P	3 #6 + 1 #10 GROUND	3/4"
	60A-3P	3 #4 + 1 #10 GROUND	1 1/4"
3 POLE - 3 PHASE 4 WIRE + GROUND	20A-3P	4 #12 + 1 #12 GROUND	3/4"
	30A-3P	4 #10 + 1 #10 GROUND	3/4"
	40A-3P	4 #8 + 1 #10 GROUND	3/4"
	50A-3P	4 #6 + 1 #10 GROUND	1"
	60A-3P	4 #4 + 1 #10 GROUND	1 1/4"

TWO WIRE FEEDER SCHEDULE

FEEDER NAME	AMPS	WIRE SIZE	GROUND WIRE SIZE	CONDUIT SIZE	208V MAX LENGTH	480V MAX LENGTH
51	20	#12	#12	3/4"	98'	227'
52	30	#10	#10	3/4"	109'	250'
53	40	#8	#10	3/4"	123'	285'
54	60	#4	#10	3/4"	128'	295'
55	70	#4	#8	1"	169'	390'
56	100	#1	#8	1 1/4"	176'	406'
57	125	#1	#6	1 1/4"	171'	394'
58	150	#1/0	#6	1 1/2"	182'	420'
59	175	#2/0	#6	1 1/2"	182'	418'
60	200	#3/0	#6	1 1/2"	192'	443'
61	225	#4/0	#4	2"	203'	468'
62	250	#250MCM	#4	2"	202'	466'
63	300	#350MCM	#4	2 1/2"	211'	487'
64	350	#4000MCM	#2	2 1/2"	194'	450'
65	400	#500MCM	#2	2 1/2"	191'	442'
66	450	(2) #4/0	(2) #1	(2) 2"	203'	468'
67	500	(2) #250MCM	(2) #1	(2) 2"	202'	466'
68	600	(2) #350MCM	(2) #1	(2) 2 1/2"	210'	487'
69	700	(2) #500MCM	(2) #1/0	(2) 2 1/2"	219'	505'
70	800	(2) #600MCM	(2) #1/0	(2) 3"	207'	478'
71	1000	(3) #400MCM	(3) #2/0	(3) 2-1/2"	205'	474'
72	1200	(3) #600MCM	(3) #3/0	(3) 3"	207'	478'
73	1600	(4) #600MCM	(4) #4/0	(4) 3"	207'	478'
74	2000	(5) #600MCM	(5) #250MCM	(5) 3"	207'	478'
75	2500	(6) #600MCM	(6) #350MCM	(6) 3"	199'	459'

THREE WIRE FEEDER SCHEDULE

FEEDER NAME	AMPS	WIRE SIZE	GROUND WIRE SIZE	CONDUIT SIZE	208V MAX LENGTH	480V MAX LENGTH
1	20	#12	#12	3/4"	98'	227'
2	30	#10	#10	3/4"	109'	250'
3	40	#8	#10	3/4"	123'	285'
4	60	#4	#10	1"	128'	295'
5	40	#4	#8	1-1/4"	169'	390'
6	100	#1	#8	1-1/4"	176'	406'
7	125	#1	#6	1-1/2"	171'	394'
8	150	#1/0	#6	2"	182'	420'
9	175	#2/0	#6	2"	182'	418'
10	200	#3/0	#6	2"	192'	443'
11	225	#4/0	#4	2-1/2"	203'	468'
12	250	#250MCM	#4	2-1/2"	202'	466'
13	300	#350MCM	#4	2-1/2"	211'	487'
14	350	#400MCM	#2	3"	194'	450'
15	400	#500MCM	#2	3-1/2"	191'	442'
16	450	(2) #4/0	(2) #1	(2) 2-1/2"	203'	468'
17	500	(2) #250MCM	(2) #1	(2) 2-1/2"	202'	466'
18	600	(2) #350MCM	(2) #1	(2) 2-1/2"	210'	487'
19	700	(2) #500MCM	(2) #1/0	(2) 3-1/2"	219'	505'
20	800	(2) #600MCM	(2) #1/0	(2) 3-1/2"	207'	478'
21	1000	(3) #400MCM	(3) #2/0	(3) 3"	205'	474'
22	1200	(3) #600MCM	(3) #3/0	(3) 3-1/2"	207'	478'
23	1600	(4) #600MCM	(4) #4/0	(4) 3-1/2"	207'	478'
24	2000	(5) #600MCM	(5) #250MCM	(5) 3-1/2"	207'	478'
25	2500	(6) #600MCM	(6) #350MCM	(6) 3-1/2"	199'	459'

FOUR WIRE FEEDER SCHEDULE

FEEDER NAME	AMPS	WIRE SIZE	GROUND WIRE SIZE	CONDUIT SIZE	208V MAX LENGTH	480V MAX LENGTH
26	20	#12	#12	3/4"	98'	227'
27	30	#10	#10	3/4"	109'	250'
28	40	#8	#10	1"	123'	285'
29	60	#4	#10	1-1/4"	128'	295'
30	70	#4	#8	1-1/4"	169'	390'
31	100	#1	#8	1-1/4"	176'	406'
32	125	#1	#6	1-1/2"	171'	394'
33	150	#1/0	#6	2"	182'	420'
34	175	#2/0	#6	2"	182'	418'
35	200	#3/0	#6	2"	192'	443'
36	225	#4/0	#4	2-1/2"	203'	468'
37	250	#250MCM	#4	2-1/2"	202'	466'
38	300	#350MCM	#4	3"	211'	487'
39	350	#400MCM	#2	3"	194'	450'
40	400	#500MCM	#2	3-1/2"	191'	442'
41	450	(2) #4/0	(2) #1	(2) 2-1/2"	203'	468'
42	500	(2) #250MCM	(2) #1	(2) 2-1/2"	202'	466'
43	600	(2) #350MCM	(2) #1	(2) 3"	210'	487'
44	700	(2) #500MCM	(2) #1/0	(2) 3-1/2"	219'	505'
45	800	(2) #600MCM	(2) #1/0	(2) 3-1/2"	207'	478'
46	1000	(3) #400MCM	(3) #2/0	(3) 3-1/2"	205'	474'
47	1200	(3) #600MCM	(3) #3/0	(3) 3-1/2"	207'	478'
48	1600	(4) #600MCM	(4) #4/0	(4) 3-1/2"	207'	478'
49	2000	(5) #600MCM	(5) #250MCM	(5) 3-1/2"	207'	478'
50	2500	(6) #600MCM	(6) #350MCM	(6) 3-1/2"	199'	459'

FEEDER NOTES

- CONDUITS SMALLER THAN 3" MAY BE UPGRADED TO THE NEXT LARGER SIZE WHEN USED FOR UNDERGROUND INSTALLATIONS OR LONG RUNS.
- CONDUIT SIZES INDICATED ARE MINIMUM RECOMMENDED SIZES, AND MAY BE INCREASED FOR LONG CIRCUITS, OR WHERE MULTIPLE BENDS ARE NECESSARY.
- THE FEEDER NAME REPRESENTS ITS BASE AMPACITY AND THE NUMBER OF WIRES (NOT INCLUDING GROUND).
- THE BASE AMPACITY INDICATED IN THE FEEDER NAME DOES NOT ACCOUNT FOR VOLTAGE DROP, FAULT CURRENT OR TEMPERATURE.
- ALL FEEDERS FOR 120/208V PANELBOARDS WITH ISOLATED GROUND (IG) BUS SHALL INCLUDE A SEPARATE IG CONDUCTOR TIED TO THE IG BUS.
- THE RATING OF THE OVERCURRENT PROTECTION DEVICE MAY BE LOWER, BUT NOT HIGHER, THAN THE RATING OF THE FEEDER THAT IT PROTECTS.
- MAXIMUM LIMITS ON THE NUMBER OF TURNS AND CONDUIT LENGTH SHOULD BE VERIFIED FOR ALL UNDERGROUND INSTALLATIONS.
- MAXIMUM FEEDER LENGTH IS THE LENGTH THAT PRODUCES A 3% VOLTAGE DROP AT THE SPECIFIED VOLTAGE, WHEN THE LOAD IS AT THE FULL AMPACITY OF THE FEEDER, AND HAS A POWER FACTOR OF 90%.
- MAXIMUM FEEDER LENGTH DOES NOT APPLY IF THE FEEDER IS SIZED FOR VOLTAGE DROP RATHER THAN AMPACITY.

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302-422-3732 fax 302-422-4696

PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

ELECTRICAL RISER DIAGRAM

ISSUE BLOCK

Mark	Date	Description

PROJECT NO:	2021101.00
DATE:	09.13.2024
SCALE:	1/8" = 1'-0"
DRAWN BY: JHA	PROJ MGR: MO

E-601

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PANELBOARD AND WIRING SCHEDULE

PANEL: 1PB1 | **MAINS TYPE:** MLO | **SCCR (kA):** 10
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A | **MOUNTING:** SURFACE | **SUPPLY FROM:** 4PDP-B

CIRCUIT DESCRIPTION	OCP	P	CKT	A	A	B	B	C	C	CKT	P	OCP	CIRCUIT DESCRIPTION
(E) LTNG RM 307	20	1	1	0.9	0.9					2	1	20	(E) LTNG HALLWAY
(E) LTNG RM 305 (TEACHER LOUNGE)	20	1	3			0.9	0.9			4	1	20	(E) LTNG HALLWAY
(E) LTNG RM 304	20	1	5					0.9	0.9	6	1	20	(E) LTNG HALLWAY
(E) RECP TEAM	20	1	7	0.9	0.9					8	1	20	(E) LTNG HALLWAY
(E) RECP SCIENCE ROOM	20	1	9			0.9	0.9			10	1	20	(E) LTNG HALLWAY
(E) RECP 305 (TEACHER LOUNGE)	20	1	11					0.9	0.9	12	1	20	(E) LTNG BATHROOM
(E) RECP RM 306	20	1	13	0.9	0.9					14	1	20	(E) LTNG RM 306-308
(E) RECP RM 304	20	1	15			0.9	0.9			16	1	20	(E) LTNG STORAGE ROOM
(E) RECP RM 308	20	1	17					0.9	0.9	18	1	20	(E) LTNG COMPUTER LAB
(E) RECP HALLWAY	20	1	19	0.9	0.9					20	1	20	(E) H-1
(E) LIGHT CONTACTOR	20	1	21			0.9	0.9			22	1	20	(E) WATER COOLER
(E) RECP COMPUTER LAB	20	1	23					0.9	0.9	24	1	20	(E) WATER COOLER
(E) LAB RECP TABLE.	20	1	25	0.9	0.5					26	1	20	(E) SMOKE DAMPER
(E) LAB TABLE RECP	20	1	27			0.9	2.6			28	2	50	(E) OUTSIDE LITE
(E) SHUNT TRIP	20	1	29					0.9	2.6	30			
(E) FIRE ALARM PANEL	20	1	31	0.5	1.0					32	2	20	(E) ELEVATOR ROOM U_H
(E) EF 15	20	1	33			0.9	1.0			34			
(E) B.C.	20	1	35					0.9	0.9	36	1	20	(E) B.C.
			37	0.9	0.9					38			
(E) B.C.	20	3	39			0.9	0.9			40	3	30	(E) B.C.
			41					0.9	0.9	42			
				11.9 kVA		14.4 kVA		14.3 kVA					
				100 A		123 A		122 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Spare	40680 VA	100.00%	40680 VA	TOTAL CONNECTED LOAD:	41 kVA
				TOTAL ESTIMATED DEMAND:	41 kVA
				TOTAL CONNECTED CURRENT:	113 A
				TOTAL ESTIMATED DEMAND CURRENT:	113 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 1PB3 | **MAINS TYPE:** MLO | **SCCR (kA):** 10
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):** 10
AMPERES: 225 A | **MOUNTING:** FLUSH | **SUPPLY FROM:** 2PDP-B

CIRCUIT DESCRIPTION	OCP	P	CKT	A	A	B	B	C	C	CKT	P	OCP	CIRCUIT DESCRIPTION
(E) LTNG NURSE OFFICE	20	1	1	0.9	0.9					2	1	20	(E) LTNG RM 315
(E) LTNG HOME EC.	20	1	3			0.9	0.9			4	1	20	(E) LTNG SEWING ROOM
(E) LTNG NURSE OFFICE	20	1	5					0.9	0.9	6	1	20	(E) LTNG MATH LAB
(E) RECP SCHOOL STORE	20	1	7	0.9	2.1					8	1	20	**POWER ROOMS B138/139/106C**
(E) MDF RECP	20	1	9			0.9	0.9			10	1	20	**REC ROOM B104A/105**
(E) RECP MATH LAB	20	1	11					0.9	1.4	12	1	20	**REC WORKROOM B104**
REC WORKROOM PRINTER B104	20	1	13	0.2	0.9					14	1	20	(E) WASHER RECP
(E) RECP SEWING ROOM	20	1	15			0.9	1.6			16	2	30	(E) DRYER
(E) RECP SEWING ROOM	20	1	17					0.9	1.6	18			
(E) RECP SEWING ROOM	20	1	19	0.9	0.9					20	1	20	(E) RECP STORAGE ROOM / HAND DRYER
(E) RECP SEWING ROOM	20	1	21			0.9	1.1			22	1	20	**REC RECEPTION B102**
(E) RECP WATER COOLER	20	1	23					0.9	0.9	24	1	20	(E) UH-1
(E) RECP WATER COOLER	20	1	25	0.9	0.5					26	1	20	(E) SMOKE DAMPER
REC ROOMS B/103/101/134	20	1	27			1.1	0.9			28	1	20	(E) HAND DRYER
REC ROOMS B107/108	**20**	1	29					1.8	0.9	30	1	20	(E) HAND DRYER - TEMP
REC ROOMS B110/109	**20**	1	31	1.4	5.2					32	2	100	(E) HAND DRYER - TEMP
REC ROOMS B106D/106C/106A	**20**	1	33			1.6	5.2			34			
ACCESS CONTROL PANEL / B117	**20**	1	35					0.4	1.4	36	1	**20**	**DOOR OPERATOR / B152/1**
			37	0.9	0.9					38			
B.C	20	3	39			0.9	0.9			40	3	20	B.C.
			41					0.9	0.9	42			
				17.5 kVA		18.6 kVA		14.7 kVA					
				150 A		159 A		122 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	2140 VA	100.00%	2140 VA	TOTAL CONNECTED LOAD:	51 kVA
REC	11260 VA	94.40%	10630 VA	TOTAL ESTIMATED DEMAND:	50 kVA
Spare	37420 VA	100.00%	37420 VA	TOTAL CONNECTED CURRENT:	141 A
				TOTAL ESTIMATED DEMAND CURRENT:	139 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

GENERAL NOTES (PANEL SCHEDULES):

A. REFER TO SHEET E-001 SYMBOLS AND ABBREVIATIONS.

B. BOLD TEXT INDICATES NEW WORK U.O.N. ALL BREAKERS IN NEW PANELS ARE NEW U.O.N. REFER TO PARTIAL RISER DIAGRAM FOR MORE INFORMATION.

C. NEW CIRCUIT BREAKERS ADDED TO EXISTING PANEL SHALL MATCH PANEL MANUFACTURER.

D. REFER TO FEEDER AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. PROVIDE NEW UPDATED TYPED CIRCUIT DIRECTORY TO REFLECT MODIFICATIONS UNDER THIS CONTRACT FOR ANY EXISTING PANEL THAT HAS HAD CIRCUIT ADDITIONS OR MODIFICATIONS. ALL CIRCUIT DIRECTORIES SHALL IDENTIFY CIRCUIT NUMBER, AREA NUMBER AND ASSOCIATED LOAD DESCRIPTION.
'*' DENOTES NEW SHUNT TRIP CIRCUIT BREAKER.
'**' DENOTES NEW GFCI CIRCUIT BREAKER.

F. (E) PRECEDING CIRCUIT NAME INDICATES EXISTING LOADS IN EXISTING PANEL AND EXISTING LOADS RECONNECTED TO NEW PANELS. EXISTING LOAD VALUES ARE ESTIMATED BY ENGINEER. CONTRACTOR SHALL VERIFY ACTUAL PANEL LOAD IN THE FIELD.

G. SERVICE EQUIPMENT AND ALL AFFECTED PANELBOARDS SHALL BE MARKED WITH UPDATED MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING.

PANELBOARD AND WIRING SCHEDULE

PANEL: 1PC2 | **MAINS TYPE:** MLO | **SCCR (kA):** 22
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A | **MOUNTING:** FLUSH | **SUPPLY FROM:** 1PDPC

CIRCUIT DESCRIPTION	OCP	P	CKT	A	A	B	B	C	C	CKT	P	OCP	CIRCUIT DESCRIPTION
(E) LTNG RM D164	20	1	1	0.9	0.9					2	1	20	(E) LTNG RM E174
(E) LTNG RM E184, 185	20	1	3			0.9	0.9			4	1	20	(E) LTNG RM E173
(E) RECP RM D164	20	1	5					0.9	0.9	6	1	20	(E) RECP RM E184
(E) RECP RM E172	20	1	7	0.9	0.9					8	1	20	(E) RECP RM E173
(E) RECP CORR	20	1	9			0.9	0.9			10	1	20	(E) RECP RM E185
(E) LTNG CONTRACTOR	20	1	11					0.9	0.9	12	1	20	(E) LAB TABLE RM E184
(E) LAB TABLE RM E184	20	1	13	0.9	0.5					14	1	20	(E) SMOKE DAMPER
(E) RECP EWC	20	1	15			0.9	0.9			16	1	20	(E) LTNG CORR
(E) RECP EWC	20	1	17					0.9	0.9	18	1	20	(E) LTNG CORR
EQUIP HAIR DRYER	20	1	19	0.5	0.9					20	1	20	(E) LTNG TOILET AREA
EQUIP HAIR DRYER	20	1	21			0.2	0.9			22	1	20	(E) LTNG LOBBY
SPARE	20	1	23					0.0	0.9	24	1	20	(E) LTNG CORR
SPARE	20	1	25	0.0	--					26	1	--	SPACE
SPARE	20	1	27			0.0	--			28	1	--	SPACE
SPACE	--	1	29					--	--	30	1	--	SPACE
SPACE	--	1	31	--	--					32	1	--	SPACE
SPACE	--	1	33			--	--			34	1	--	SPACE
(E) BC-C	20	1	35					0.9	--	36	1	--	SPACE
			37	1.2	1.2					38			
BC-T&O	20	3	39			1.2	1.2			40	3	20	(E) BC-T, 0, 0
			41					1.2	1.2	42			
				8.8 kVA		8.9 kVA		9.6 kVA					
				73 A		74 A		80 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	700 VA	100.00%	700 VA	TOTAL CONNECTED LOAD:	27 kVA
Spare	26600 VA	100.00%	26600 VA	TOTAL ESTIMATED DEMAND:	27 kVA
				TOTAL CONNECTED CURRENT:	76 A
				TOTAL ESTIMATED DEMAND CURRENT:	76 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 1PC3 | **MAINS TYPE:** MLO | **SCCR (kA):** 10
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A | **MOUNTING:** SURFACE | **SUPPLY FROM:** 1PDPC

CIRCUIT DESCRIPTION	OCP	P	CKT	A	A	B	B	C	C	CKT	P	OCP	CIRCUIT DESCRIPTION
(E)LTS-E181,180,179	20	1	1	1.2	1.2					2	1	20	(E)LTS-E174
(E)LTS-E178,177	20	1	3			1.2	1.2			4	1	20	(E)LTS-175
(E)LTS-E17	20	1	5					1.2	1.2	6	1	20	(E)LTS-175
(E)LTS-E7	20	1	7	1.2	1.2					8	1	20	(E)LTS-E175
REC WORKROOM E103	20	1	9			0.5	0.2			10	1	**20**	**REC REFR WORKROOM E103****
(E)RECEPT-E181A	20	1	11					0.9	0.9	12	1	20	(E)RECEPT-E179
(E)RECEPT-E178	20	1	13	0.9	0.2					14	1	20	**REC MICROWAVE WORKROOM E103**
(E)RECEPT-E177	20	1	15			0.9	0.9			16	1	20	(E)RECEPT-E174
REC PRINTER WORKROOM E103	20	1	17					0.2	0.9	18	1	20	(E)RECEPT-E175
(E)RECEPT-CORR	20	1	19	0.9	0.9					20	1	20	(E)RECEPT-E175
(E)HTR-1	20	1	21			0.9	0.9			22	1	20	(E)RECEPT-EWC
(E)EXTERIOR LTS.	20	1	23					1.2	0.0	24	1	20	(E)SPARE
REC MICROWAVE WORKROOM E103	20	1	25	0.2	0.5					26	1	20	(E) FIRE PANEL
REC MICROWAVE WORKROOM E103	20	1	27			0.2	--			28	1	--	SPACE
SPACE	--	1	29					--	--	30	1	--	SPACE
SPACE	--	1	31	--	--					32	1	--	SPACE
SPACE	--	1	33			--	--			34	1	--	SPACE
(E)SPARE	20	1	35					0.0	1.2	36	1	20	(E)BC-D
			37	1.2	1.2					38			
(E)BC-K&S	20	3	39			1.2	1.2			40	3	20	(E)BC-E&O
			41					1.2	1.2	42			
				10.8 kVA		9.3 kVA		10.1 kVA					
				91 A		78 A		85 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
REC	1440 VA	100.00%	1440 VA	TOTAL CONNECTED LOAD:	30 kVA
Spare	28700 VA	100.00%	28700 VA	TOTAL ESTIMATED DEMAND:	30 kVA
				TOTAL CONNECTED CURRENT:	84 A
				TOTAL ESTIMATED DEMAND CURRENT:	84 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 1PC4 | **MAINS TYPE:** MLO | **SCCR (kA):** 10
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 250 A | **MOUNTING:** FLUSH | **SUPPLY FROM:** 1PDPC

CIRCUIT DESCRIPTION	OCP	P	CKT	A	A	B	B	C	C	CKT	P	OCP	CIRCUIT DESCRIPTION
(E) RECP RM D160	20	1	1	0.9	0.9					2	1	20	(E) RECP RM D162
(E) RECP RM D161	20	1	3			0.9	0.9			4	1	20	(E) RECP RM D165
(E) RECP RM D161	20	1	5					0.9	0.9	6	1	20	(E) RECP RM D166
REC ROOMS D112/112A/112B	20	1	7	1.4	0.9					8	1	20	(E) RECP RM D164
(E) RECP RM E184	20	1	9			0.9	0.9			10	1	20	(E) RECP RM D177
(E) RECP RM E184	20	1	11					0.9	0.9	12	1	20	(E) RECP RM E174
(E) RECP RM E173	20	1	13	0.9	0.9					14	1	20	(E) RECP RM E176
REC NURSE D112	20	1	15			1.1	0.5			16	1	20	**POWER ROOMS D112B/112C**
SPACE	--	1	17					--	1.0	18	1	20	**POWER ROOMS D111/111A**
(E) TIME CLOCK	20	1	19	1.2	0.9					20	1	20	(E) HAND DRYER
REC TOILETS D109/109A/110/110A	20	1	21			0.7	0.9			22	1	20	(E) HAND DRYER
SPACE	--	1	23					--	0.9	24	1	20	(E) HAND DRYER
SPACE	--	1	25	--	0.0					26	1	20	SPARE
SPACE	--	1	27			--	--			28	1	--	SPACE
SPACE	--	1	29					--	--	30	1	--	SPACE
SPACE	--	1	31	--	--					32	1	--	SPACE
SPACE	--	1	33			--	--			34	1	--	SPACE
SPACE	--	1	35					--	--	36	1	--	SPACE
SPACE	--	1	37	--	--					38	1	--	SPACE
SPACE	--	1	39			--	--			40	1	--	SPACE
SPACE	--	1	41					--	--	42	1	--	SPACE
				8.0 kVA		6.8 kVA		5.5 kVA					
				69 A		59 A		46 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	500 VA	100.00%	500 VA	TOTAL CONNECTED LOAD:	20 kVA
REC	4320 VA	100.00%	4320 VA	TOTAL ESTIMATED DEMAND:	20 kVA
Spare	15600 VA	100.00%	15600 VA	TOTAL CONNECTED CURRENT:	57 A
				TOTAL ESTIMATED DEMAND CURRENT:	57 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 2PB1 | **MAINS TYPE:** MLO | **SCCR (kA):** 10
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A | **MOUNTING:** SURFACE | **SUPPLY FROM:** 4PDP-B

CIRCUIT DESCRIPTION	OCP	P	CKT	A	A	B	B	C	C	CKT	P	OCP	CIRCUIT DESCRIPTION
(E) HAND DRYER	20	1	1	0.9	0.9					2	1	20	(E) LTNG HALLWAY
(E) LTNG HALLWAY	20	1	3			0.9	0.9			4	1	20	(E) LTNG HALLWYA
(E) LTNG BATHROOM	20	1	5					0.9	0.9	6	1	20	(E) HAND DRYER
(E) LTNG RM 409	20	1	7	0.9	0.9					8	1	20	(E) LTNG STORAGE RM
(E) LTNG RM 404 - 406	20	1	9			0.9	0.9			10	1	20	(E) RECP MAINT. OFFICE
(E) CLOCK CIRCUIT	20	1	11					0.9	0.9	12	1	20	(E) RECP 409
(E) RECP RM 407	20	1	13	0.9	0.9					14	1	20	(E) RECP 405
(E) RECP RM 404	20	1	15			0.4	0.9			16	1	20	(E) RECP 406
(E) HALL RECP	20	1	17					0.9	0.9	18	1	20	(E) RECP SOUND ROOM
(E) LTNG CONTACTOR	20	1	19	0.9	0.9					20	1	20	(E) RECP SOUND ROOM
(E) LAB TABLE RM 409	20	1	21			0.9	0.9			22	1	20	(E) LAB TABLE RM 409
(E) WATER COOLER	20	1	23					0.9	0.9	24	1	20	(E) WATER COOLER
REC FRIDGE WORKROOM B214**	**20**	1	25	0.2	0.5					26	1	20	(E) SMOKE DAMPERS
(E) UH STAIRWELL REAR	20	1	27			0.9	0.2			28	1	20	**REC MICROWAVE WORKROOM B214**
REC PRINTER WORKROOM B214	20	1	29					0.2	0.2	30	1	20	**REC MICROWAVE WORKROOM B214**
(E) FIRE ALARM	20	1	31	0.5	0.9					32			
REC MICROWAVE WORKROOM B214	20	1	33			0.2	0.9			34	3	20	(E) B.C.
B.C	20	1	35					1.2	0.9	36			
			37	0.9	0.9					38			
B.C.	20	3	39			0.9	0.9			40	3	20	(E) B.C.
			41					0.9	0.9	42			
				11.1 kVA		10.6 kVA		11.5 kVA					
				93 A		89 A		96 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
REC	1260 VA	100.00%	1260 VA	TOTAL CONNECTED LOAD:	33 kVA
Spare	31900 VA	100.00%	31900 VA	TOTAL ESTIMATED DEMAND:	33 kVA
				TOTAL CONNECTED CURRENT:	92 A
				TOTAL ESTIMATED DEMAND CURRENT:	92 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 2PB2 | **MAINS TYPE:** MLO | **SCCR (kA):** EXISTING
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A | **MOUNTING:** FLUSH | **SUPPLY FROM:** 4PDP-B

CIRCUIT DESCRIPTION	OCP	P	CKT	A	A	B	B	C	C	CKT	P	OCP	CIRCUIT DESCRIPTION
(E) LTNG RM 411	20	1	1	0.9	0.9					2	1	20	(E) LTNG STORAGE
(E) LTNG CONFERENCE RM.	20	1	3			0.9	0.9			4	1	20	(E) LTNG GUIDANCE OFFICE
(E) LTNG ASSOC. PRINCPL. OFC.	20	1	5					0.9	0.9	6	1	20	(E) LTNG CONFERENCE RM.
(E) RECP 411	20	1	7	0.9	0.9					8	1	20	(E) RECP CONFERENCE RM.
(E) RECP TEAM RM.	20	1	9			0.9	0.9			10	1	20	(E) RECP WAITING RM.
(E) RECP CONFERENCE RMS	20	1	11					0.9	0.9	12	1	20	(E) RECP TEAM RM
(E) RECP SECRETARY OFFICE	20	1	13	0.9	0.9					14	1	20	(E) RECP SECRETARY OFFICE
(E) RECP ASSOC. PRINCIPLES	20	1	15			0.9	0.9			16	1	20	(E) RECP ATTENDANCE OFFICE
REC GRADE-3 B204	20	1	17					1.1	0.9	18	1	20	(E) GUIDANCE COPIER
REC GRADE-3 B206	20	1	19	0.7	0.9					20	1	20	(E) MAIN OFFICE COPIER
(E)SPARE	20	1	21			0.0	0.0			22	1	20	(E) SPARE
SPARE	20	1	23					0.0	0.0	24	1	20	(E) SPARE
SPARE	20	1	25	0.0	--					26	1	--	SPACE
SPACE	--	1	27			--	--			28	1	--	SPACE
SPACE	--	1	29					--	--	30	1	--	SPACE
SPACE	--	1	31	--	--					32	1	--	SPACE
SPACE	--	1	33			--	0.9			34	1	20	B.C.
B.C.	20	1	35					0.9	0.9	36	1	20	B.C.
			37	0.9	0.9					38			
B.C.	20	3	39			0.9	0.9			40	3	20	B.C.
			41					0.9	0.9	42			
				8.8 kVA		8.1 kVA		9.2 kVA					
				74 A		68 A		77 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
REC	1800 VA	100.00%	1800 VA	TOTAL CONNECTED LOAD:	26 kVA
Spare	24300 VA	100.00%	24300 VA	TOTAL ESTIMATED DEMAND:	26 kVA
				TOTAL CONNECTED CURRENT:	72 A
				TOTAL ESTIMATED DEMAND CURRENT:	72 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 2PC2 | **MAINS TYPE:** MLO | **SCCR (kA):** EXISTING
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A | **MOUNTING:** FLUSH | **SUPPLY FROM:** 1PDPC

CIRCUIT DESCRIPTION	OCP	P	CKT	A	A	B	B	C	C	CKT	P	OCP	CIRCUIT DESCRIPTION
(E) LTNG CORR	20	1	1	0.9	0.9					2	1	20	(E) LTNG RM D247, D248
(E) LTNG TOILET AREA	20	1	3			0.9	0.9			4	1	20	(E) LTNG RM E256
(E) LTNG CORR	20	1	5					0.9	0.9	6	1	20	(E) LTNG RM E256
(E) LTNG CORR	20	1	7	0.9	0.9					8	1	20	(E) RECP RM D255
(E) RECP RM E257 A/B	20	1	9			0.9	0.9			10	1	20	(E) RECP RM D257
(E) RECP RM E268	20	1	11					0.9	0.9	12	1	20	(E) RECP RM E248
(E) RECP RM E269	20	1	13	0.9	0.9					14	1	20	(E) RECP CORR
(E) RECP RM E256	20	1	15			0.9	0.9			16	1	20	(E) LTNG RM E269
(E) RECP ROOFTOP	20	1	17					0.9	0.9	18	1	20	(E) LTNG RM E268
(E) LAB TABLE RM E269	20	1	19	0.9	0.9					20	1	20	(E) RECP EWC
SMOKE DAMPER	20	1	21			0.5	1.2			22			
SPACE	--	1	23					--	1.2	24	3	40	(E) KILUS MACHINE - ART ROOM
SPACE	--	1	25	--	1.2					26			
REC TOILETS D210/210A/211/211B	20	1	27			0.7	--			28	1	--	SPACE
SPARE	20	1	29					0.0	--	30	1	--	SPACE
			31	0.9	--					32	1	--	SPACE
(E) BC - O, P, U	20	3	33			0.9	0.9			34	2	30	(E) AC - B2
			35					0.9	0.9	36			
			37	0.9	0.9					38			
(E) BC - U & O	20	3	39			0.9	0.9			40	3	20	(E) BC - Q & U
			41					0.9	0.9	42			
				11.1 kVA		11.4 kVA		10.2 kVA					
				94 A		96 A		85 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
REC	720 VA	100.00%	720 VA	TOTAL CONNECTED LOAD:	33 kVA
Spare	32000 VA	100.00%	32000 VA	TOTAL ESTIMATED DEMAND:	33 kVA
				TOTAL CONNECTED CURRENT:	91 A
				TOTAL ESTIMATED DEMAND CURRENT:	91 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

ELECTRICAL PANEL SCHEDULES

ISSUE BLOCK

Mark	Date	Description

PROJECT NO: 2021101.00
DATE: 09.13.2024
SCALE:
DRAWN BY: JHA | PROJ MGR: MO

E-701

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PANELBOARD AND WIRING SCHEDULE

PANEL: 2PC3 | **MAINS TYPE:** MLO | **SCCR (kA):** EXISTING
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A | **MOUNTING:** SURFACE | **SUPPLY FROM:** 1PDPC

CIRCUIT DESCRIPTION	OCP	P	CKT	A		B		C		CKT	P	OCP	CIRCUIT DESCRIPTION
POWER TOILETS E259/260	20	1	1	1.4	0.9					2	1	20	(E) LTNG E266
(E) LTNG E265	20	1	3			0.9	0.9			4	1	20	(E) LTNG E263
(E) LTNG E262	20	1	5					0.9	0.9	6	1	20	(E) LTNG E264,273
(E) LTNG E258	20	1	7	0.9	0.9					8	1	20	(E) RECP E258
(E) RECP E262	20	1	9			0.9	0.9			10	1	20	(E) RECP E263
(E) RECP E265	20	1	11					0.9	0.9	12	1	20	(E) RECP E266
(E) RECP CLOS.	20	1	13	0.9	0.9					14	1	20	(E) RECP CORR
(E) RECP ROOFTOP	20	1	15			0.9	0.9			16	1	20	(E) RECP E264
(E) LAB TABLE E266	20	1	17					0.9	0.9	18	1	20	(E) RECP EWC
(E) LAB TABLE E266	20	1	19	0.9	0.9					20	1	20	(E) LTNG EXTERIOR
SPARE	20	1	21			0.0	0.0			22	1	20	SPARE
SPARE	20	1	23					0.0	0.0	24	1	20	SPARE
SPARE	20	1	25	0.0	0.0					26	1	20	SPARE
SPARE	20	1	27			0.0	0.0			28	1	20	SPARE
SPARE	20	1	29					0.0	0.0	30	1	20	SPARE
			31	0.9	0.9					32	1	20	(E) EF-13
(E) EF-11	20	3	33			0.9	0.9			34	1	20	(E) EF-12
			35					0.9	0.9	36	1	20	(E) BC-J
			37	0.9	0.9					38			
(E) BC-O	20	3	39			0.9	0.9			40	3	20	(E) BC-Q&O
			41					0.9	0.9	42			
				11.3 kVA		9.0 kVA		9.0 kVA					
				94 A		75 A		75 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	1000 VA	100.00%	1000 VA	TOTAL CONNECTED LOAD:	29 kVA
REC	360 VA	100.00%	360 VA	TOTAL ESTIMATED DEMAND:	29 kVA
Spare	27900 VA	100.00%	27900 VA	TOTAL CONNECTED CURRENT:	81 A
				TOTAL ESTIMATED DEMAND CURRENT:	81 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 2PC4 | **MAINS TYPE:** MLO | **SCCR (kA):** EXISTING
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 250 A | **MOUNTING:** FLUSH | **SUPPLY FROM:** 1PDPC

CIRCUIT DESCRIPTION	OCP	P	CKT	A		B		C		CKT	P	OCP	CIRCUIT DESCRIPTION
(E) RECP RM E258	20	1	1	0.9	0.9					2	1	20	(E) RECP RM E262
(E) RECP RM E263	20	1	3			0.9	0.9			4	1	20	(E) RECP RM E265
(E) RECP RM E266	20	1	5					0.9	0.9	6	1	20	(E) RECP RM E266
(E) RECP RM E256, 257	20	1	7	0.9	0.9					8	1	20	(E) RECP RM E269
(E) RECP RM E248	20	1	9			0.9	0.9			10	1	20	(E) RECP RM E250
(E) RECP RM E249	20	1	11					0.9	0.9	12	1	20	(E) RECP RM E244
(E) RECP RM E243	20	1	13	0.9	0.9					14	1	20	(E) HAND DRYER
SPARE	20	1	15			0.0	0.9			16	1	20	(E) HAND DRYER
(E) CLOCK	20	1	17					0.9	0.9	18	1	20	(E) HAND DRYER
(E) RECP COFFEE POT RM 205	20	1	19	0.9	0.9					20	1	20	(E) HAND DRYER
SPACE	--	1	21			--	0.9			22	1	20	(E) MDF ROOM
SPACE	--	1	23					--	--	24	1	--	SPACE
SPACE	--	1	25	--	--					26	1	--	SPACE
SPACE	--	1	27			--	--			28	1	--	SPACE
SPACE	--	1	29					--	--	30	1	--	SPACE
SPACE	--	1	31	--	--					32	1	--	SPACE
SPACE	--	1	33			--	--			34	1	--	SPACE
SPACE	--	1	35					--	--	36	1	--	SPACE
SPACE	--	1	37	--	--					38	1	--	SPACE
SPACE	--	1	39			--	--			40	1	--	SPACE
SPACE	--	1	41					--	--	42	1	--	SPACE
				7.2 kVA		5.4 kVA		5.4 kVA					
				60 A		45 A		45 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
Spare	18000 VA	100.00%	18000 VA	TOTAL CONNECTED LOAD:	18 kVA
				TOTAL ESTIMATED DEMAND:	18 kVA
				TOTAL CONNECTED CURRENT:	50 A
				TOTAL ESTIMATED DEMAND CURRENT:	50 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: E-1 | **MAINS TYPE:** 3P 60A MCB | **SCCR (kA):** 10
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):** EXISITNG
AMPERES: 60 A | **MOUNTING:** SURFACE | **SUPPLY FROM:**

CIRCUIT DESCRIPTION	OCP	P	CKT	A		B		C		CKT	P	OCP	CIRCUIT DESCRIPTION
(E)1ST FLOOR	20	1	1	0.8	0.8					2	1	20	(E)2ND FLOOR
(E)3RD FLOOR	20	1	3			0.8	0.8			4	1	20	(E)BASEMENT (BOILER ROOM)
(E) BAS LEAVE ON	20	1	5					0.8	0.8	6			
REC SUMP PUMP ELEV. B126**	**20**	1	7	0.2	0.8					8	3	30	(E)LOAD
SPACE	--	1	9			--	0.8			10			
SPACE	--	1	11					--	--	12	1	--	SPACE
SPACE	--	1	13	--	--					14	1	--	SPACE
SPACE	--	1	15			--	--			16	1	--	SPACE
SPACE	--	1	17					--	--	18	1	--	SPACE
SPACE	--	1	19	--	--					20	1	--	SPACE
SPACE	--	1	21			--	--			22	1	--	SPACE
SPACE	--	1	23					--	--	24	1	--	SPACE
				2.6 kVA		2.4 kVA		1.6 kVA					
				23 A		21 A		13 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
REC	180 VA	100.00%	180 VA	TOTAL CONNECTED LOAD:	7 kVA
Spare	6400 VA	100.00%	6400 VA	TOTAL ESTIMATED DEMAND:	7 kVA
				TOTAL CONNECTED CURRENT:	18 A
				TOTAL ESTIMATED DEMAND CURRENT:	18 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 3PB1 | **MAINS TYPE:** MLO | **SCCR (kA):** EXISTING
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A | **MOUNTING:** SURFACE | **SUPPLY FROM:** 3PDP-B

CIRCUIT DESCRIPTION	OCP	P	CKT	A		B		C		CKT	P	OCP	CIRCUIT DESCRIPTION
(E) LTNG HALLWAY	20	1	1	0.9	0.9					2	1	20	(E) LTNG HALLWAY
(E) LTNG BATHROOM	20	1	3			0.9	0.9			4	1	20	(E) LTNG HALLWAY
(E) LTNG RM 509/ TEAM ROOM	20	1	5					0.9	0.9	6	1	20	(E) LTNG RM 505
(E) LTNG RM 504-506	20	1	7	0.9	0.9					8	1	20	(E) RECP TEAM ROOM
(E) RECP RM 509	20	1	9			0.9	0.9			10	1	20	(E) RECP RM 507
(E) RECP RM 505	20	1	11					0.9	0.9	12	1	20	(E) RECP RM 504
(E) RECP RM 506	20	1	13	0.9	0.9					14	1	20	(E) RECP HALLWAY
(E) DAMPERS	20	1	15			0.9	0.9			16	1	20	(E) RECP ROOF TOP
(E) WATER COOLER	20	1	17					0.9	0.9	18	1	20	(E) RECP LAB TABLE
(E) WATER COOLER	20	1	19	0.9	0.9					20	1	20	(E) RECP LAB TABLE
(E) TIME CLOCK	20	1	21			0.9	0.9			22	1	20	(E) HAND DRYER
(E) LTNG OUTSIDE	20	1	23					0.9	0.9	24	1	20	(E) HAND DRYER
REC TOILETS B320/321/322/323	20	1	25	0.7	0.9					26	1	20	(E) HAND DRYER
(E) LTNG OUTSIDE	20	1	27			0.9	0.9			28	1	20	(E) HAND DRYER
(E) LTNG OUTSIDE	20	1	29					0.9	0.0	30	1	20	SPARE
SPARE	20	1	31	0.0	0.0					32	1	20	SPARE
SPARE	20	1	33			0.0	0.9			34	1	20	(E) B.C.
(E) B.C.	20	1	35					0.9	0.9	36	1	20	(E) B.C.
			37	0.9	0.9					38			
(E) B.C.	20	3	39			0.9	0.9			40	3	20	(E) B.C.
			41					0.9	0.9	42			
				10.6 kVA		11.7 kVA		11.7 kVA					
				89 A		99 A		99 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
REC	720 VA	100.00%	720 VA	TOTAL CONNECTED LOAD:	34 kVA
Spare	33300 VA	100.00%	33300 VA	TOTAL ESTIMATED DEMAND:	34 kVA
				TOTAL CONNECTED CURRENT:	94 A
				TOTAL ESTIMATED DEMAND CURRENT:	94 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 3PB3 | **MAINS TYPE:** MLO | **SCCR (kA):** EXISTING
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A | **MOUNTING:** FLUSH | **SUPPLY FROM:** 3PDP-B

CIRCUIT DESCRIPTION	OCP	P	CKT	A		B		C		CKT	P	OCP	CIRCUIT DESCRIPTION
(E) LTNG RM 519	20	1	1	0.9	0.9					2	1	20	(E) LTNG RM 512/ STORAGE ROOM
(E) LTNG RM 514-516	20	1	3			0.9	0.9			4	1	20	(E) RECP RM 519
(E) RECP RM 517	20	1	5					0.9	0.9	6	1	20	(E) RECP RM 516
(E) RECP RM 514	20	1	7	0.9	0.9					8	1	20	(E) RECP HALL
(E) RECP RM 512	20	1	9			0.9	0.9			10	1	20	(E) EX FAN
(E) RECP LAB TABLE	20	1	11					0.9	0.9	12	1	20	(E) WATER COOLER
(E) RECP LAB TABLE	20	1	13	0.9	0.5					14	1	20	(E) DAMPERS
(E) HAND DRYER	20	1	15			0.9	0.0			16	1	20	SPARE
(E) HAND DRYER	20	1	17					0.9	--	18	1	--	SPACE
REC TOILETS B308/309	20	1	19	0.4	--					20	1	--	SPACE
SPARE	20	1	21			0.0	--			22	1	--	SPACE
SPACE	--	1	23					--	--	24	1	--	SPACE
SPACE	--	1	25	--	--					26	1	--	SPACE
SPACE	--	1	27			--	--			28	1	--	SPACE
SPACE	--	1	29					--	--	30	1	--	SPACE
			31	0.9	--					32	1	--	SPACE
(E) EF 9	20	3	33			0.9	--			34	1	--	SPACE
			35					0.9	--	36	1	--	SPACE
			37	0.9	0.9					38			
(E) B.C.	20	3	39			0.9	0.9			40	3	20	(E) B.C.
			41					0.9	0.9	42			
				8.1 kVA		7.2 kVA		7.2 kVA					
				67 A		60 A		60 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
REC	360 VA	100.00%	360 VA	TOTAL CONNECTED LOAD:	22 kVA
Spare	22100 VA	100.00%	22100 VA	TOTAL ESTIMATED DEMAND:	22 kVA
				TOTAL CONNECTED CURRENT:	62 A
				TOTAL ESTIMATED DEMAND CURRENT:	62 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 3PB2 | **MAINS TYPE:** MLO | **SCCR (kA):** EXISTING
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 225 A | **MOUNTING:** SURFACE | **SUPPLY FROM:** 3PDP-B

CIRCUIT DESCRIPTION	OCP	P	CKT	A		B		C		CKT	P	OCP	CIRCUIT DESCRIPTION
(E)LIBRARY LITES	20	1	1	1.0	1.0					2	1	20	(E)LITES 508
(E)LIBRARY LITES	20	1	3			1.0	1.0			4	1	20	(E)LIBRARY OFFICE LITES
(E)LIBRARY LITES	20	1	5					1.0	1.0	6	1	20	(E)LITES CONFERENCE ROOM
(E)LIBRARY LITES	20	1	7	1.0	1.0					8	1	20	(E) LIBRARY OFFICE RECP
(E)ATTIC UH	20	1	9			1.0	0.0			10	1	20	SPARE
FURNITURE WHIP SPECIAL SERV, SUITE B307	**20**	1	11					0.7	1.5	12	1	20	(E)VAV
FURNITURE WHIP SPECIAL SERV, SUITE B307 [1]	**20**	1	13	0.7	0.8					14	1	20	(E)LIBRARY RECP
FURNITURE WHIP SPECIAL SERV, SUITE B307	**20**	1	15			0.7	1.0			16	**1**	**20**	**FURNITURE WHIP SPECIAL SERV, SUITE B307**
(E)ATTIC LITES/RECP	20	1	17					1.2	1.0	18	**1**	**20**	**FURNITURE WHIP SPECIAL SERV, SUITE B307** [1]
(E)SPARE	20	1	19	0.0	0.0					20	1	**20**	**FURNITURE WHIP SPECIAL SERV, SUITE B307**
FURNITURE WHIP SPECIAL SERV, SUITE B307	**20**	1	21			1.0	0.0			22	1	20	(E)SPARE
FURNITURE WHIP SPECIAL SERV, SUITE B307 [1]	**20**	1	23					1.0	--	24	1	--	SPACE
FURNITURE WHIP SPECIAL SERV, SUITE B307	**20**	1	25	1.0	--					26	1	--	SPACE
(E)SPARE	**20**	**1**	27			0.0	--			28	1	--	SPACE
(E)SPARE	**20**	1	29					0.0	--	30	1	--	SPACE
(E)B.C	20	1	31	0.9	0.9					32			
(E)B.C	20	1	33			0.9	0.9			34	3	20	(E)EF 10
(E)B.C	20	1	35					0.9	0.9	36			
			37	0.0	--					38	1	--	SPACE
SPARE	20	3	39			0.0	--			40	1	--	SPACE
			41					0.0	--	42	1	--	SPACE
				8.3 kVA		7.4 kVA		9.1 kVA					
				70 A		62 A		77 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	5280 VA	100.00%	5280 VA	TOTAL CONNECTED LOAD:	25 kVA
REC	1680 VA	100.00%	1680 VA	TOTAL ESTIMATED DEMAND:	25 kVA
Spare	17900 VA	100.00%	17900 VA	TOTAL CONNECTED CURRENT:	69 A
				TOTAL ESTIMATED DEMAND CURRENT:	69 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 3PDP-B | **MAINS TYPE:** 3P 400A MCB | **SCCR (kA):** 10
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 300 A | **MOUNTING:** SURFACE | **SUPPLY FROM:** 75KVA XFMR

CIRCUIT DESCRIPTION	OCP	P	CKT	A		B		C		CKT	P	OCP	CIRCUIT DESCRIPTION
			1	10.6	8.1					2			
(E)3PB1	100	3	3			11.7	7.2			4	3	100	(E)3PB3
			5					11.7	7.2	6			
			7	8.3	6.0					8			
(E)3PB2	100	3	9			7.4	6.0			10	3	100	(E)3PB4
			11					9.1	6.0	12			
SPACE	--	1	13	--	--					14	1	--	SPACE
SPACE	--	1	15			--	--			16	1	--	SPACE
SPACE	--	1	17					--	--	18	1	--	SPACE
SPACE	--	1	19	--	--					20	1	--	SPACE
SPACE	--	1	21			--	--			22	1	--	SPACE
SPACE	--	1	23					--	--	24	1	--	SPACE
SPACE	--	1	25	--	--					26	1	--	SPACE
SPACE	--	1	27			--	--			28	1	--	SPACE
SPACE	--	1	29					--	--	30	1	--	SPACE
				33.0 kVA		32.3 kVA		34.0 kVA					
				275 A		270 A		284 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	5280 VA	100.00%	5280 VA	TOTAL CONNECTED LOAD:	99 kVA
REC	2760 VA	100.00%	2760 VA	TOTAL ESTIMATED DEMAND:	99 kVA
Spare	91300 VA	100.00%	91300 VA	TOTAL CONNECTED CURRENT:	276 A
				TOTAL ESTIMATED DEMAND CURRENT:	276 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: MDP-B | **MAINS TYPE:** 1200 A MCB | **SCCR (kA):**
VOLTAGE: 480Y/277V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 1200 A | **MOUNTING:** SURFACE | **SUPPLY FROM:** UTILITY

CIRCUIT DESCRIPTION	OCP	P	CKT	A		B		C		CKT	P	OCP	CIRCUIT DESCRIPTION
			1	41.6	3.5					2			
(E) 1 HP 3RD FLOOR	300	3	3			41.6	3.5			4	3	25	(E) ATS
			5					41.6	3.5	6			
			7	31.2	13.8					8			
(E) 2PDP-B	225	3	9			31.2	13.8			10	**3**	**100**	**ELEV ELEV. MACH. B127**
			11					31.2	13.8	12			
			13	--	--					14			
SPACE	--	3	15			--	--			16	3	--	SPACE
			17					--	--	18			
			19	--	--					20			
SPACE	--	3	21			--	--			22	3	--	SPACE
			23					--	--	24			
			25	--	--					26			
SPACE	--	3	27			--	--			28	3	--	SPACE
			29					--	--	30			
			31	31.2	--					32			
(E) 4PDP-B	225	3	33			31.2	--			34	3	--	SPACE
			35					31.2	--	36			
			37	83.2	--					38			
(E) 1PDP-B	600	3	39			83.2	--			40	3	--	SPACE
			41					83.2	--	42			
			43	--	--					44			
SPACE	--	3	45			--	--			46	3	--	SPACE
			47					--	--	48			
			49	--	--					50			
SPACE	--	3	51			--	--			52	3	--	SPACE
			53					--	--	54			
			55	--	--					56			
SPACE	--	3	57			--	--			58	3	--	SPACE
			59					--	--	60			
			61	--	--					62			
SPACE	--	3	63			--	--			64	3	--	SPACE
			65					--	--	66			
			67	--	--					68			
SPACE	--	3	69			--	--			70	3	--	SPACE
			71					--	--	72			
			73	--	--					74			
SPACE	--	3	75			--	--			76	3	--	SPACE
			77					--	--	78			
				204.5 kVA		204.5 kVA		204.5 kVA					
				738 A		738 A		738 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
ELEV	41431 VA	100.00%	41431 VA	TOTAL CONNECTED LOAD:	614 kVA
Spare	572100 VA	100.00%	572100 VA	TOTAL ESTIMATED DEMAND:	614 kVA
				TOTAL CONNECTED CURRENT:	738 A
				TOTAL ESTIMATED DEMAND CURRENT:	738 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: 2PDP-B | **MAINS TYPE:** 600 A MCB | **SCCR (kA):** EXISTING
VOLTAGE: 208Y/120V,3P,4W | **SPD:** | **AVAIL FAULT CURRENT (kA):**
AMPERES: 600 A | **MOUNTING:** SURFACE | **SUPPLY FROM:** EX XFMR

CIRCUIT DESCRIPTION	OCP	P	CKT	A		B		C		CKT	P	OCP	CIRCUIT DESCRIPTION
REC ELEV. B126**	**20**	1	1	0.5	--					2	1	--	SPACE
			3				--			4	1	--	SPACE
EQUIP CAB LIGHTS ELEV. MACH. B127	**20**	1	5					1.0	--	6	1	--	SPACE
			7	0.1	--					8	1	--	SPACE
SSIU-01 ELEV. MACH. B127	**20**	2	9			0.1	--			10	1	--	SPACE
			11					1.8	--	12	1	--	SPACE
SSOU-01**	**20**	2	13	1.8	--					14	1	--	SPACE
SPACE	--	1	15			--	--			16	1	--	SPACE
SPACE	--	1	17					--	--	18	1	--	SPACE
			19	10.5	--					20	1	--	SPACE
(E) ELEVATOR	175	3	21			10.5	--			22	1	--	SPACE
			23					10.5	--	24	1	--	SPACE
			25	7.5	0.0					26			
(E) 1PD4 BOILER ROOM	125	3	27			7.5	0.0			28	3	100	SPARE
			29					7.5	0.0	30			
			31	12.0	12.0					32			
(E) 1PB3 - 2PB3	200	3	33			12.0	12.0			34	3	200	LTNG PANEL
			35					12.0	12.0	36			
			37	12.0	12.0					38			
(E) 1PB2 - 2PB4	200	3	39			12.0	12.0			40	3	200	1PB5
			41					12.0	12.0	42			
				68.4 kVA		66.1 kVA		68.8 kVA					
				573 A		551 A		576 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS	
EQUIP	1000 VA	100.00%	1000 VA	TOTAL CONNECTED LOAD:	203 kVA
REC	540 VA	100.00%	540 VA	TOTAL ESTIMATED DEMAND:	203 kVA
Spare	198000 VA	100.00%	198000 VA	TOTAL CONNECTED CURRENT:	564 A
HVAC	3716 VA	100.00%	3716 VA	TOTAL ESTIMATED DEMAND CURRENT:	564 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

GENERAL NOTES (PANEL SCHEDULES):

A. REFER TO SHEET E-001 SYMBOLS AND ABBREVIATIONS.

B. BOLD TEXT INDICATES NEW WORK U.O.N. ALL BREAKERS IN NEW PANELS ARE NEW U.O.N. REFER TO PARTIAL RISER DIAGRAM FOR MORE INFORMATION.

C. NEW CIRCUIT BREAKERS ADDED TO EXISTING PANEL SHALL MATCH PANEL MANUFACTURER.

D. REFER TO FEEDER AND BRANCH CIRCUIT SCHEDULE FOR FEEDER AND BRANCH CIRCUIT CONDUCTOR SIZES U.O.N.

E. PROVIDE NEW UPDATED TYPED CIRCUIT DIRECTORY TO REFLECT MODIFICATIONS UNDER THIS CONTRACT FOR ANY EXISTING PANEL THAT HAS HAD CIRCUIT ADDITIONS OR MODIFICATIONS. ALL CIRCUIT DIRECTORIES SHALL IDENTIFY CIRCUIT NUMBER, AREA NUMBER AND ASSOCIATED LOAD DESCRIPTION.
'*' DENOTES NEW SHUNT TRIP CIRCUIT BREAKER.
'**' DENOTES NEW GFCI CIRCUIT BREAKER.

F. (E) PRECEDING CIRCUIT NAME INDICATES EXISTING LOADS IN EXISTING PANEL AND EXISTING LOADS RECONNECTED TO NEW PANELS. EXISTING LOAD VALUES ARE ESTIMATED BY ENGINEER. CONTRACTOR SHALL VERIFY ACTUAL PANEL LOAD IN THE FIELD.

G. SERVICE EQUIPMENT AND ALL AFFECTED PANELBOARDS SHALL BE MARKED WITH UPDATED MAXIMUM AVAILABLE FAULT-CURRENT AT THE EQUIPMENT AND THE DATE THE CALCULATION WAS PERFORMED. APPLY A TYPE-WRITTEN ADHESIVE LABEL WITH WHITE BACKGROUND, 1/2" HIGH BLACK LETTERING.

KEY NOTES

1 AT EACH SET OF 3 CONSECUTIVE SYSTEMS FURNITURE CIRCUIT BREAKERS PROVIDE 3 GANG HANDLE TIES WHICH MECHANICALLY HOLD 3 BREAKERS IN EITHER THE ALL 'ON' OR ALL 'OFF' POSITION.

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PROJECT TITLE

CENTRAL MIDDLE TO ELEMENTARY SCHOOL INTERIOR RENOVATION

211 DELAWARE AVE
DOVER, DE 19901

ISSUED
FOR BIDDING
ISSUED: 09/13/2024

SHEET TITLE

ELECTRICAL PANEL SCHEDULES

ISSUE BLOCK

Mark	Date	Description

PROJECT NO: 2021101.00
DATE: 09.13.2024
SCALE:
DRAWN BY: JHA | PROJ MGR: MO

E-702

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