ADDENDUM NO. 1

December 22, 2025

Smoky Row Elementary Additions & Renovations 900 West 136th Street Carmel, IN 46032

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications and the Drawings dated November 20, 2025, by Fanning/Howe Associates. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 1-1 through ADD 1-4, 00 20 00C Modular Classroom Reference Drawings, and 01 32 00d Guideline Schedule, and attached Fanning/Howey Addendum No. 1, dated December 19, 2025, consisting of 8 items, 3 pages, New Project Manual Section: 23 81 23 – Computer-Room Air-Conditioners and 27 51 21 – Music Room Sound System Revised Project Manual Section: 06 42 00 – Wood Paneling, 23 09 00 – HVAC Direct Digital Controls, and 27 41 17 – Integrated AV Control System and Equipment, and Revised Drawing Sheets: GD1.1, GD1.2, G1.1, G1.2, G1.3, SU1.3, CTE-GD1.0, CTE-L1.0, CTE-L1.1, CTEL1.2, CTE-L1.3, CTE-L1.4, SRE-L1.00, SRE-L1.10, SRE-L1.20, SRE-L1.30, SRE-L1.40, S1.01, S1.04, AD0.03, AD0.04, A1.02, A1.03, A1.05, A2.01, A5.04, A5.08, A6.01, A7.01, A7.03, A7.07, A7.09, A7.10, A7S.01, A8.01, A8.02, A8.03, A8.06, A8.07, A8.08, A8.09, A8.10, A8.11, A8S.01, A9.03, A9.04, K1.03, K4.02, PD.04, P2.02, P2.03, P2.05, P2.07, P3.01, P4.02, MD1.01, MD1.02, MD1.03, MD1.04, M5.03, M5.05, ED.01, ED.02, ED.03, E3.03, E5.01, E5.02, E5.03, E8.01, and T1.01

A. SPECIFICATION SECTION 00 20 00 AVAILABLE PROJECT INFORMATION

1. Add the following:

00 20 00C Modular Classroom Reference Drawings

B. SPECIFICATION SECTION 01 12 00 Multiple Contract Summary

A. Bid Category No 1 General Trades

Add the following Clarification:

23. The Bid Category No 7 Flooring contractor is required to walk each phase with the Bid Category No 1 General Trades contractor and the construction manager to sign off on the floor demo immediately after floor demo is completed. This is to ensure that the glue was removed to an acceptable level for future floor prep assumed and included within the flooring contractor's bid.

B. Bid Category No 2 – Masonry

Add the following Clarification:

4. Miscellaneous clips, anchors, supports, lintels and other accessories that interface between masonry and structural steel shall be furnished by the structural steel contractor and installed by the masonry contractor. Flexible masonry ties that interface with the steel shall be provided and installed by the mason.

C. Bid Category No 3 – Structural Steel

Revise the following Clarification:

3. Miscellaneous clips, anchors, supports, lintels and other accessories that interface between masonry and structural steel shall be furnished by the structural steel contractor and installed by the masonry contractor. Flexible masonry ties that interface with the steel shall be provided and installed by the mason.

D. Bid Caategory No 4 – Roofing

Add the following Clarifications:

- 4. Responsible for any spray foam insulation as shown but not limited to A2.02 Detail 1 that interfaces between the deck and roofing system.
- 5. All wood blocking and counter flashing that interfaces with the gutters are the responsibility of the Bid Category No 4 Roofing contractor.

E. Bid Category No 5 – Metal Studs, Drywall, and Ceilings

Add the following Clarifications:

- 6. Contractor responsible to walk each phase with the Bid Category No. 9 Painting contractor along with the construction manager for sign off on acceptance of GWB finish immediately following primer coat. Any GWB touch up required prior to 1st coat of paint is the responsibility of the Bid Category No. 5 Metal Stud, Drywall, and Ceiling contractor.
- 7. All wood blocking and counter flashing that interfaces with the gutters are the responsibility of the Bid Category No 4 Roofing contractor.

G. Bid Category No 7 – Flooring

Add the following Clarifications:

2. The Bid Category No 7 Flooring contractor is to walk each phase with the Bid Category No 1 General Trades contractor and the construction manager to sign off on the floor demo. This is to ensure that the glue was removed to an acceptable level for future floor prep.

H. Revise to say Bid Category No. 8 - Casework

I. Bid Category No. 9 Painting

Add the following Clarification:

1. Contractor responsible to walk each phase with the Bid Category No. 5 – Metal Stud, Drywall, and Ceiling contractor along with the construction manager for sign off on acceptance of GWB finish immediately following primer coat. Any GWB touch up required prior to 1st coat of paint is the responsibility of the Bid Category No. 5 Metal Stud, Drywall, and Ceiling contractor. This GWB touch up is to be completed immediately following the walkthrough as to not impact the Painter's schedule.

K. Bid Category 11 Mechanical and Plumbing

Add the following Specification Section:

23 81 23 – Computer-Room-Air-Conditioners

Add the following Clarification:

9. In Phase 2B this contractor is responsible for supporting any existing hydronic lines, duct, and or roof drains during the roof deck demo in the corridors.

Bid Category 12 Electrical

Add the following Specification Section

27 51 21 – Music Room Sound System

Add the following Clarifications:

- In regards the fire alarm replacement, it is acceptable to install the new fire alarm panel while the existing is still operational adding to the new fire alarm panel as phases are completed. In an alarm a relay will be required to ensure the alarm is triggered from the existing panel to the new.
- 12. In Phase 2B this contractor is responsible for supporting existing electrical conduits and low voltage cabling as applicable during the existing roof deck removal in the corridors.
- 13. In regard to the modular classrooms, this contractor is responsible for all power, data, paging, access control, fire alarm, and technology shown in the bid documents. The added allowance "Modular Classrooms" is for unknowns or additional scope required to establish these classrooms not currently identified.

C. SPECIFICATION SECTION 01 21 00 ALLOWANCES

1.3.01 Product Allowance

Revise the following Allowances:

В.	Bid Category 01 – General Trades – Interior Temporary Partitions	\$125,000
D.	Bid Category 12 – Electrical/Technology – Modular Classroom	\$25,000

D. SPECIFICATION SECTION 01 32 00 SCHEDULES

- 1 Replace Sheet Date Correction for Phase 3 on CM1.1 within 01 32 00c
- 2. Add the following Guideline Schedule:

Specification Section 01 32 00d - Guideline Schedule

11274 O/A MODULAR CLASSROOM

110'-7" x 70'-0" ACTUAL SIZE

DRAWING INDEX

DRAWING NUMBER	DESCRIPTION
#1	SPECIFICATIONS
#2	ELEVATIONS
#3	FLOOR PLAN
#4	ELECTRICAL PLAN
#5	HVAC LAYOUT
#6	CROSS SECTION
#7	CONSTRUCTION DETAILS
#8	PLUMBING SUPPLY SCHEMATICS
#9	PLUMBING DWV SCHEMATICS
#10	FOUNDATION PLAN

INDIANA DESIGN CODES

2012 INTERNATIONAL BUILDING CODE W/ IN AMENDMENTS
2012 INTERNATIONAL MECHANICAL CODE W/ IN AMENDMENTS
2012 INTERNATIONAL PLUMBING CODE W/ IN AMENDMENTS
2011 NATIONAL ELECTRICAL CODE W/ IN AMENDMENTS

NOTE:
THE CODES LISTED ABOVE ARE THE CODES IN EFFECT AT THE DATE
OF MANUFACTURE

DESIGN LIVE LOADS

OCCUPANT LOAD:..... 257

FLOOR:	50 PSF LIVE LOAD 10 PSF DEAD LOAD	
CORRIDOR FLOOR:	100 PSF DEAD LOAD	
ROOF:	25 PSF GROUND SNOW LOAD 20 PSF LIVE LOAD 10 PSF DEAD LOAD	
CONSTRUCTION TYPE: OCCUPANCY/USE GROUP: BUILDING AREA: MINIMUM BUILDING	E	THE SOLE PUR CLASSROOM IN JURISDICTION
	GREATER THAN 10 FEET TO A COMMON OR ASSUMED PROPERTY LINE	CLASSROOM P
SEISMIC ZONE: MAXIMUM WIND LOAD:	GROUP I, CATEGORY C 115 MPH ULTIMATE WIND SPEED, CATEGORY III, E	EXPOSURE C



THE SOLE PURPOSE OF THIS DETAIL IS SHOW THE PROPOSED LOCATION OF THE MODULAR CLASSROOM IN RELATIONSHIP TO THE EXISTING BUILDING. THE LOCAL OFFICIAL HAVING JURISDICTION SHALL REVIEW AND APPROVE THE LOCATION OF THE PROPOSED MODULAR CLASSROOM PRIOR TO INSTALLATION OF THE BUILDING.

Not in Contract For Reference Only

SERIAL NUMBERS:

IN-039760, IN-039761, IN-039762, IN-039763, IN-039764, IN-039765, IN-039766 IN-039767

SITE LOCATION:
ELSIE WASDSWORTH ELEM. SCHOOL
600 N. JAY AVENUE
GRIFFITH, INDIANA 46319

SPECIFICATIONS		
	FRAMES	
ITEM	DESCRIPTION	
	40" + 5544 W (40" + 5544 V + 1550 0 40" 0 0	
PERIMETER	12" I-BEAM W/ 10" I-BEAM X-MBRS @ 48" O.C. W/ 3" HANGERS & 2" TUBE SPACERS	
NOTE	SHIFT AXLES,	
HITCH TYPE	DETACHABLE	
AXLE	5 AXLES (MODS A-F, 6 AXLES MOD "G", 7 AXLES MODULE "H")	
NOTE NOTE	AXLES W/ 99 1/2" SPRING CENTERS AXLES TO BE UNDER SLUNG	
MISCELLANEOUS	22' SISTER BEAM	
	FLOORS	
ITEM	DESCRIPTION	
BOTTOM BOARD	ROLL TYPE	
FLOOR JOISTS	2X6, 16" O.C., (LONGITUDINAL), (SPF GRADE #2)	
INSULATION	R-24C FIBERGLASS, UNFACED (5 1/2") SINGLE LAYER, 3/4" NOMINAL, PLYWOOD, T & G	
DECKING	(SPAN RATING 24" O.C.)	
DECKING	1/4" HARDIE BACKER UNDERLAYMENT	
COVERING	© RESTROOMS, MECH./JAN. CLOSETS, & CORRIDORS ONLY 1/8" VINYL COMPOSITION TILE	
	7	
	30"X30" FLOOR HATCH (BILCO, TYPE T)	
MISCELLANEOUS	INSULATED & GASKETED	
	EXTERIOR WALLS	
ITEM	DESCRIPTION	
FRAMING	2X6, 16" O.C., (SPF GRADE #2)	
WALL HEIGHT NOTE	9'-6 1/4" @ SIDEWALLS; 9'-7" @ ENDWALLS DOUBLE STUDS @ 4'-0" O.C.	
TOP PLATE	DOUBLE STODS @ 4 -0 O.C. DOUBLE 2X (SPF GRADE #2)	
BOTTOM PLATE	SINGLE 2X (SPF GRADE #2)	
MISCELLANEOUS	2X WALL TAPERS,	
INSULATION	R-24C FIBERGLASS, KRAFT FACED (5 1/2")	
WALL SUBSTRATE	5/8" TYPE-X GYPSUM BOARD, UNFINISHED (F.S. RATING: CLASS I OR A (0-25)), @ FIRE RATED WALL	
WALL COVERING	1/2" VINYL GYPSUM, (F.S. RATING: CLASS OR A (0-25))	
	, , , , , , , , , , , , , , , , , , , ,	
WALL SHEATHING	7/16" OSB (SPAN RATING 24"/16")	
WALL SHEATHING	5/8" TYPE-X SHEATHING GRADE GYPSUM, @ FIRE RATED WALL (F.S. RATING: CLASS OR A (0-25))	
BARRIER	SIMPLEX BARRICADE BUILDING WRAP	
SIDING	3/8" HARDI PANEL, STUCCO, O/E W/ T-MOLD (ESR-1844 APPROVED, EXT. 16" O.C.)	
SKIRTING	4'X9', 3/8" HARDI PANEL, O/E W/ 1X4 CORNERS SHIPPED LOOSE & INSTALLED BY OTHERS @ SITE	
TOUL	(NER-405 APPROVED, EXT. 16" O.C.)	
TRIM TRIM	WINDOWS, 1X4 ROUGH SAWN CEDAR TOP, 1X6 ROUGH SAWN CEDAR	
TRIM	BOTTOM, 1X6 ROUGH SAWN CEDAR	
TRIM	CORNER, 1X4 ROUGH SAWN CEDAR	
TRIM	DOOR, 1X4 ROUGH SAWN CEDAR	
TRIM	MATE LINE, 1X4 ROUGH SAWN CEDAR	
ENTRY	RECESSED FOR DOUBLE DOOR	
	,	
	1	

	INTERIOR WALLS		
ITEM	DESCRIPTION		
FRAMING FRAMING	2X4, 16" O.C., (SPF GRADE #2) 2X6, 16" O.C., (SPF GRADE #2), @ CORRIDORS		
FALSE WALL	NYAC UNIT, INSULATED, GYPSUM LINED		
CHASE FRAMING	2X4, 16" O.C., (SPF GRADE STUD)		
WALL HEIGHT (STANDARD)	8'-8"		
WALL HEIGHT (MATE LINE)	9'-6 1/4"		
WALL HEIGHT	10'-2 3/8"		
(CORRIDOR WALLS) TOP PLATE	DOUBLE 2X (SPF GRADE #2)		
BOTTOM PLATE	SINGLE 2X (SPF GRADE #2)		
INSULATION	R-11 FIBERGLASS, UNFACED (3 1/2")		
	5/8" TYPE-X GYPSUM BOARD, UNFINISHED		
WALL SUBSTRATE	(F.S. RATING: CLASS I OR A (0-25)), @ FIRE RATED AREAS		
WALL COVERING	1/2" VINYL GYPSUM, (F.S. RATING: CLASS OR A (0-25))		
	.030" GLASSBOARD ON 1/4" LUAN		
WALL COVERING	(F.S. RATING: CLASS C (76-200)) 48" HIGH AS REQUIRED BY CODE		
WALL COVERING	3/4" FIRE TREATED PLYWOOD, PAINTED, @ CLOSETS		
	INTERIOR TRIM		
ITEM	DESCRIPTION		
1 1 L1VI	DEGOTAL HOLK		
CEILING	SUSPENDED CEILING WALL ANGLE		
WALL SEAMS	2 PIECE H-MOLD, @ RESTROOMS		
INSIDE CORNER	MATCHING VINYL WRAPPED BATTEN		
INSIDE CORNER	J-CHANNEL, @ RESTROOMS		
OUTSIDE CORNER WINDOW TRIM	IN-PRO W/ METAL TRACK 2 1/4" IMPERIAL OAK CASING		
WINDOW JAMB	5/8" IMPERIAL OAK CASING		
BASE MOLDING	4" VINYL COVE BASE		
BASE MOLDING	6" VINYL COVE BASE		
DAGE MICEDING	@ RESTROOMS, MECH./JAN. CLOSETS, & TECH CLOSETS		
	+		
	ROOF		
ITEM			
ITEM	DESCRIPTION		
	2X10, 16" O.C., (SPF GRADE #2)		
RAFTER			
MATE BEAM	• 4 LAYERS OF 3/4" APA PLYWOOD RIDGE BEAM, 24" HIGH,		
	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE		
	LINE (MATELINES A/B, C/D, E/F) • 2 LAYERS OF 3/4" APA PLYWOOD RIDGE BEAM, 24" HIGH,		
	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE		
	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H)		
MOOFILANTOUS	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G)		
MISCELLANEOUS	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM,		
INSULATION	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4")		
	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE		
INSULATION	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING		
INSULATION INSULATION CEILING	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED)		
INSULATION INSULATION	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25))		
INSULATION INSULATION CEILING	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED)		
INSULATION INSULATION CEILING CEILING	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25)) SUSPENDED 2X4 PANELS, INSTALLED @ 8'-6" AFF		
INSULATION INSULATION CEILING CEILING CEILING NOTE	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25)) SUSPENDED 2X4 PANELS, INSTALLED @ 8'-6" AFF (F.S. RATING: CLASS I OR A (0-25))		
INSULATION INSULATION CEILING CEILING CEILING NOTE SHEATHING	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25)) SUSPENDED 2X4 PANELS, INSTALLED @ 8'-6" AFF (F.S. RATING: CLASS I OR A (0-25)) 7/16" OSB, (SPAN RATING 24"/16")		
INSULATION INSULATION CEILING CEILING NOTE SHEATHING SHEATHING	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25)) SUSPENDED 2X4 PANELS, INSTALLED @ 8'-6" AFF (F.S. RATING: CLASS I OR A (0-25)) 7/16" OSB, (SPAN RATING 24"/16") 1/4" DENS-DECK OVER INSULATION		
INSULATION INSULATION CEILING CEILING CEILING NOTE SHEATHING SHEATHING ROOFING	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25)) SUSPENDED 2X4 PANELS, INSTALLED @ 8'-6" AFF (F.S. RATING: CLASS I OR A (0-25)) 7/16" OSB, (SPAN RATING 24"/16") 1/4" DENS-DECK OVER INSULATION .060" EPDM, FULLY ADHERED		
INSULATION INSULATION CEILING CEILING NOTE SHEATHING SHEATHING	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25)) SUSPENDED 2X4 PANELS, INSTALLED @ 8'-6" AFF (F.S. RATING: CLASS I OR A (0-25)) 7/16" OSB, (SPAN RATING 24"/16") 1/4" DENS-DECK OVER INSULATION .060" EPDM, FULLY ADHERED .060" EPDM, FULLY ADHERED 30" HIGH, HARDI-PANEL, STUCCO		
INSULATION INSULATION CEILING CEILING CEILING NOTE SHEATHING SHEATHING ROOFING	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25)) SUSPENDED 2X4 PANELS, INSTALLED @ 8'-6" AFF (F.S. RATING: CLASS I OR A (0-25)) 7/16" OSB, (SPAN RATING 24"/16") 1/4" DENS-DECK OVER INSULATION .060" EPDM, FULLY ADHERED .060" EPDM, FULLY ADHERED		
INSULATION INSULATION CEILING CEILING CEILING NOTE SHEATHING SHEATHING ROOFING MATE LINE MANSARD	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25)) SUSPENDED 2X4 PANELS, INSTALLED @ 8'-6" AFF (F.S. RATING: CLASS I OR A (0-25)) 7/16" OSB, (SPAN RATING 24"/16") 1/4" DENS-DECK OVER INSULATION .060" EPDM, FULLY ADHERED .060" EPDM, FULLY ADHERED 30" HIGH, HARDI-PANEL, STUCCO W/ 1 1/2" OVERHANG FULL PERIMETER		
INSULATION INSULATION CEILING CEILING CEILING NOTE SHEATHING SHEATHING ROOFING MATE LINE	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25)) SUSPENDED 2X4 PANELS, INSTALLED @ 8'-6" AFF (F.S. RATING: CLASS I OR A (0-25)) 7/16" OSB, (SPAN RATING 24"/16") 1/4" DENS-DECK OVER INSULATION .060" EPDM, FULLY ADHERED .060" EPDM, FULLY ADHERED 30" HIGH, HARDI-PANEL, STUCCO		
INSULATION INSULATION CEILING CEILING CEILING NOTE SHEATHING SHEATHING ROOFING MATE LINE MANSARD MANSARD TRIM	48/24 SPAN INDEX RATING LOCATED EACH SIDE OF MATE LINE (MATELINES G/H) • 2x10 ROOF RAIL (MATELINES B/C, D/E, F/G) 2X TAPER ABOVE MATE BEAM, R-38C FIBERGLASS, KRAFT FACED (10 1/4") R-8.5 ACFOAM II (1 1/2") OVER SHEATHING SE (2) LAYERS 5/8" TYPE-X GYPSUM, @ FIRE RATED CORRIDOR 5/8" GYPSUM (UNFINISHED) (F.S. RATING: CLASS I OR A (0-25)) SUSPENDED 2X4 PANELS, INSTALLED @ 8'-6" AFF (F.S. RATING: CLASS I OR A (0-25)) 7/16" OSB, (SPAN RATING 24"/16") 1/4" DENS-DECK OVER INSULATION .060" EPDM, FULLY ADHERED .060" EPDM, FULLY ADHERED 30" HIGH, HARDI-PANEL, STUCCO W/ 1 1/2" OVERHANG FULL PERIMETER		
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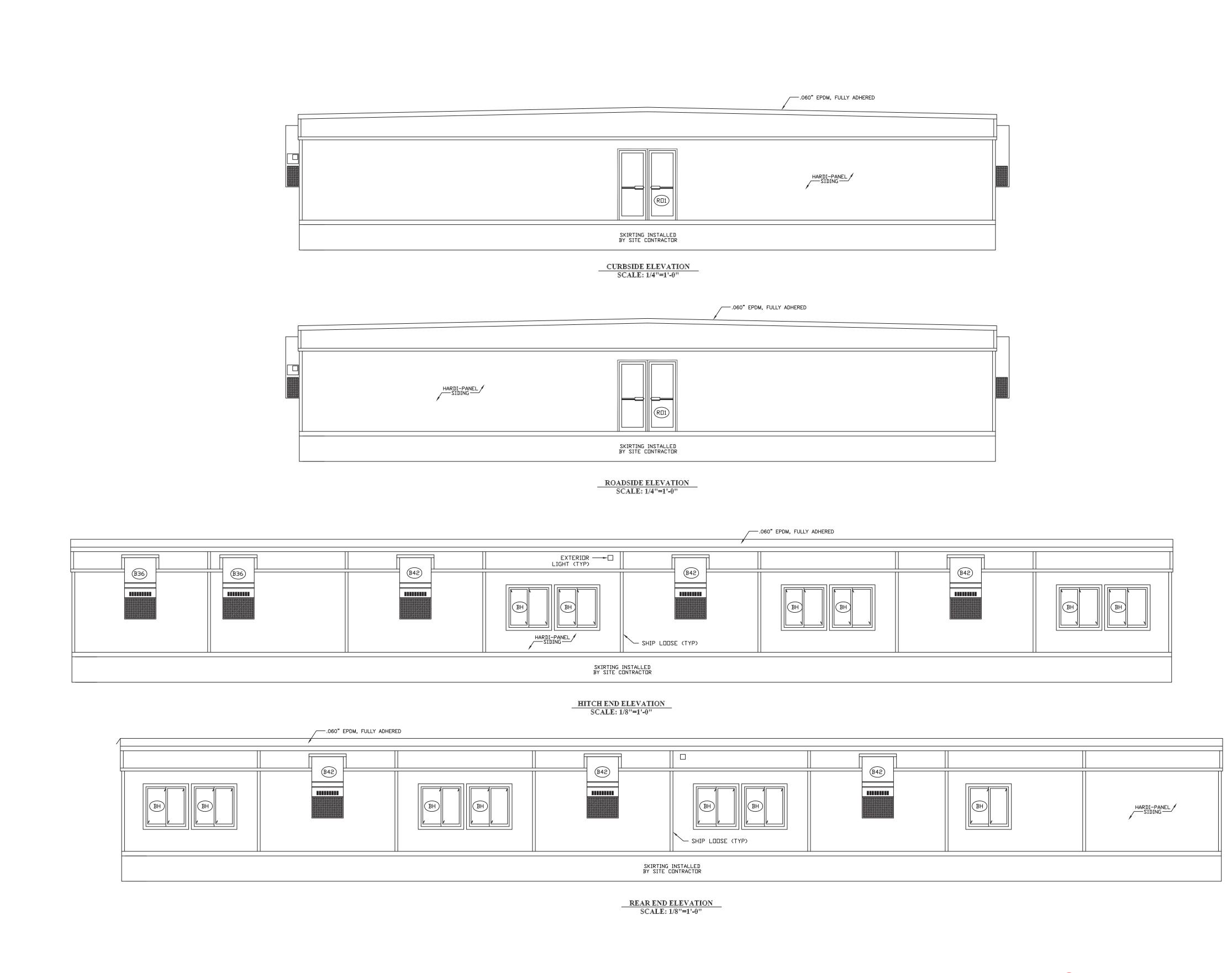
ITEM	DESCRIPTION
NOTE NOTE	SEE DOOR & DOOR HARDWARE SCHEDULE ALL CLOSERS TO BE ON CLASSROOM SIDE
NOTE	ALL CLOSERS TO BE ON CLASSROOM SIDE
	WINDOWS
ITEM	DESCRIPTION
	DIL HODIZONTAL CHIPER OLEAR IO CLASS
48"X48"	BH, HORIZONTAL SLIDER, CLEAR IG GLASS W/ VINYL FRAME
	W/ LOW "E" GLASS
	W/ SCREENS
	W/ EGRESS, ONE LATCH W/ MINI BLINDS
	ELECTRICAL
ITEM	DESCRIPTION
11 LIVI	DESCINI NON
SERVICE	120/208 VOLT, SINGLE PHASE, 3 WIRE, 60 HZ. W/ GROUND
LOAD CENTER	150 AMP (16 SPACES) W/ MAIN, SINGLE PHASE W/ EMT CONDUIT THRU FLOOR
LOAD CENTER	225 AMP (42 SPACES) W/ MAIN, SINGLE PHASE
NOTE	W/ EMT CONDUIT THRU FLOOR ELECTRICAL PANELS TO BE KEYED ALIKE (2 KEYS PER PANEL)
NOTE	(2) 1" CONDUIT RUNS FROM TOP & BOTTOM OF ELECTRICAL
RACEWAY	PANEL FOR FUTURE ROUGH-IN MIN. #12 MC CABLE
	DIFFUSED, LAY-IN, 4', 2 TUBE, FLUORESCENT
LIGHT	W/ INTERNAL DISCONNECT & T-8 BULBS (49) W/ EMERGENCY BALLAST
	DIFFUSED, LAY-IN, 4', 3 TUBE, SINGLE BALLAST FLUORESCENT W/ INTERNAL DISCONNECT & T-8 BULBS
LIGHT	W/ INTERNAL DISCONNECT & T-0 BULBS
	DIFFUSED, LAY-IN, 4', 3 TUBE, (2) BALLAST FLUORESCENT
LIGHT	W/ INTERNAL DISCONNECT & T-8 BULBS
LIGHT	(46) W/ EMERGENCY BALLAST EXTERIOR, LED WALL PACK W/ PHOTO EYE
LIGHT	EXIT, DUAL FACE W/ BATTERY BACK UP, LED
LIGHT	SHIPPED LOOSE & INSTALLED @ SITE BY OTHERS EMERGENCY, DUAL HEAD W/ EXIT SIGN & BATTERY BACKUP, LED
LIGHT	EMERGENCY, REMOTE HEAD, EXTERIOR, WEATHERPROOF, LED
RECEPT	20 AMP, 120 VOLT, DUPLEX, SPECIFICATION GRADE 20 AMP, 120 VOLT, QUADPLEX, SPECIFICATION GRADE
RECEPT	(90) COMPUTER RECEPTS
RECEPT	20 AMP, 120 VOLT, DUPLEX, GFCI TYPE
RECEPT	20 AMP, 120 VOLT, SINGLE, FOR RECIRCULATION PUMP 20 AMP, 120 VOLT, DUPLEX, FLOOR, RECESSED
RECEPT	SPECIFICATION GRADE, @ COMPUTER NETWORKS ROOM 20 AMP, 120 VOLT, DUPLEX, FLOOR, RECESSED, GFCI TYPE
RECEPT	SPECIFICATION GRADE
RECEPT	20 AMP, 120 VOLT, DUPLEX, EXTERIOR WEATHER RESISTANT GFCI TYPE W/ BUBBLE COVER
RECEPT	20 AMP, 120 VOLT, DUPLEX, WEATHER RESISTANT, GFCI W/ WEATHERPROOF COVER
RECEPT	50 AMP, 120/240 VOLT, SINGLE, RANGE TYPE, NEMA 14-50R
EPT	30 AMP, 120 VOLT, SINGLE, GROUNDING TYPE, NEMA 5-30
EPT	30 AMP, 120/240 VOLT, SINGLE, DRYER RECEPT NEMA 14-30R (4 WIRE, GROUNDING)
RECCUIT	20 AMP, DEDICATED W/ SINGLE DUPLEX RECEPT
RECTCH	SPECIFICATION GRADE 20 AMP, 120 VOLT, SILENT TOGGLE TYPE, SPECIFICATION GRADE
TCH	20 AMP, 120 VOLT, 3-WAY, KEYED TYPE, SPECIFICATION GRADE
CIR _{TCH}	120 VOLT, SINGLE LEVEL OCCUPANCY SENSOR SWITCH
SWCUPANCY SENSOR SWCUPANCY SENSOR	CEILING MOUNTED CEILING MOUNTED @ RESTROOMS
SWI	4"X4"X2" J-BOX W/ SINGLE GANG MUD RING
OC CELLANEOUS	W/ 3/4" EMT CONDUIT TO SUSPENDED CEILING CAVITY (4) FOR CARD READER, (4) FOR EL DEVICE, (4) FOR CLOSURE
OC .	4"X4"X3 1/4" J-BOX W/ SINGLF GANG MUD RING
MISCELLANEOUS	W/ 1" EMT CONDUIT TO SUSPENDED CEILING CAVITY (44) FOR WIRELESS ACCESS POINT
	(6) FOR TELEPHONE/DATA
MISCELLANEOUS	4"X4"X3 1/4" J-BOX W/ DOUBLE GANG MUD RING W/ 1" EMT CONDUIT TO SUSPENDED CEILING CAVITY
	FÓR DATA
MICCELLANEOUS	4"X4"X3 1/4" J-BOX W/ SINGLE GANG MUD RING W/ 1 1/4" EMT CONDUIT TO SUSPENDED CEILING CAVITY
MISCELLANEOUS	& BELOW TO 4"X"4"X3 1/4" J-BOX FOR PA SPEAKER
	4"X4"X3 1/4" J-BOX W/ DOUBLE GANG MUD RING
MISCELLANEOUS	W/ 1 1/4" EMT CONDUIT TO SUSPENDED CEILING CAVITY FOR DATA
	4"X4"X3 1/4" J-BOX W/ DOUBLE GANG MUD RING
MISCELLANEOUS	W/ 1 1/4" EMT CONDUIT TO SUSPENDED CEILING CAVITY (2) FOR TV MONITOR HIGH, (2) FOR TV MONITOR LOW
	(10) FOR DATA & COAX
MISCELLANEOUS	4"X4"X3 1/4" J-BOX W/ DOUBLE GANG MUD RING W/ (2) 1 1/4" EMT CONDUIT TO SUSPENDED CEILING CAVITY
IVIIOULLLAINLUUS	FÓR PROJECTOR
MISCELLANEOUS	(2) 4"X4"X3 1/4" J-BOX W/ NO MUD RING W/ 2" EMT CONDUIT TO SUSPENDED CEILING CAVITY
	FÓR NETWORKS CABINET
MISCELLANEOUS	2" CONDUIT ABOVE SUSP. CEILING FROM ROOMS TO CORRIDOR
MISCELLAINEOUS	
MISCELLANEOUS	

ITEM	PLUMBING DESCRIPTION
SUPPLY LINES SUPPLY LINES	COPPER, HARD TYPE "L" INSULATED ABOVE SUSPENDED CEILING
WASTE LINES	ABS OR PVC SCHEDULE 40
WATER CLOSET	AMERICAN STANDARD MADERA 3451.001 (ASME A112.19.2) SLOAN ROYAL III-1.28 FLUSH VALVE W/ SEAT (1955 SSFR) (6) W/ LEFT SIDE HANDLE & (10) W/ RIGHT SIDE HANDLE
WATER CLOSET	AMERICAN STANDARD MADERA 3461.001 (HANDICAP) (ASME A112.19.2) SLOAN ROYAL III-1.28 FLUSH VALVE W/ SEAT (1955 SSFR) (5) W/ LEFT SIDE HANDLE & (5) W/ RIGHT SIDE HANDLE
URINAL	AMERICAN STANDARD WASHBROOK 6590.001 (ASME A112.19.2)
LAVATORY	SLOAN ROYAL FLUSH VALVE 186-0.S. AMERICAN STANDARD LUCERNE 0355.012 (ASME A112.19.2)
	CHICAGO FAUCET 802-V1000ABCF
	SERVICE, 24"X24", MOLDED STONE MOP BASIN (MS-2424)
SINK	(ANSI Z124.6) Z8431 M1-RC FAUCET W/ WALL BRACE, PAIL HOOK & 6" SPONS2437 MOP HANGER, MS2405 HOSE & HOSE HOLDER, 2 PC. 24" S/S WALL GUARD, 24X24
DRINKING FOUNTAIN	COOLED, BARRIER FREE, BI-LEVEL (ELKAY, EZS8L) (ASME A112.19.3)
	/
WATER HEATER	30 GALLON, 240V ELECTRIC W/ T&P VALVE (ELSF-30)
MISCELLANEOUS	PLASTIC PAN FOR WATER HEATER
MISCELLANEOUS	GUARDIAN TEMPERING VALVE (LFUSE-B) WATER TEMPERING DEVICES & SERVING HANDWASHING SINKS
NOTE	SHALL COMPLY W/ ASSE 1070
MISCELLANEOUS MISCELLANEOUS	BACKFLOW PREVENTORS BALANCING VALVES
MISCELLANEOUS	RECIRCULATION PUMP, 120V, (GRUNDFOS #UPS 15-55))
NOTE	W/ UNIONS & 6-15 PLUG CHROME RISERS & SHUT-OFF VALVES
MISCELLANEOUS	EXPANSION TANK, 2.1 GAL.
NOTE	RECIRCULATION LINES TO HAVE 1" INSULATION
FLOOR DRAIN MISCELLANEOUS	PVC, 3" W/ TRAP PRIMER & GUARD TRAP PRIMERS (PRIME PERFECT/SIOUX CHIEF #695-01)
MISCELLANEOUS	TAPPED P-TRAP ADAPTER
	(PRECISION PLUMBING PRODUCTS PPA-3P625) STEEL W/ DOOR, STANDARD
MODESTY PARTITION MODESTY PARTITION	STEEL W/ DOOR, STAINDARD STEEL W/ DOOR, HANDICAP
URINAL SCREEN	STEEL WALL HUNG, 24" DEEP
ACCEPCADIFIC	GRAB BARS, SET, STAINLESS STEEL
ACCESSORIES ACCESSORIES ACCESSORIES	(1) 36", (1) 42", & (1) 18" VERTICAL
ACCESSORIES	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (
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ACCESSORIES ACCESSORIES NOTE	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES
ACCESSORIES ACCESSORIES NOTE HEATING-VENTII	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION-AIR CONDITIONING (HVAC)
ACCESSORIES ACCESSORIES NOTE	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES
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ACCESSORIES ACCESSORIES NOTE HEATING-VENTII ITEM HEAT/COOL	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION-AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING
ACCESSORIES ACCESSORIES NOTE HEATING-VENTII ITEM HEAT/COOL	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION-AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV
ACCESSORIES ACCESSORIES NOTE HEATING-VENTII ITEM HEAT/COOL	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION-AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV
ACCESSORIES ACCESSORIES NOTE HEATING-VENTII ITEM HEAT/COOL	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK DUCTWORK	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM SMOKE DEVELOPED INDEX OF 50
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK DUCTWORK DUCTWORK	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM SMOKE DEVELOPED INDEX OF 50 FIBERGLASS, CEILING RETURN (R-4.3) CLASS 1
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK DUCTWORK DUCTWORK NOTE	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM SMOKE DEVELOPED INDEX OF 50
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK DUCTWORK DUCTWORK NOTE DUCTWORK	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM SMOKE DEVELOPED INDEX OF 50 FIBERGLASS, CEILING RETURN (R-4.3) CLASS 1 GALVANIZED STEEL, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 25
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM SMOKE DEVELOPED INDEX OF 50 FIBERGLASS, CEILING RETURN (R-4.3) CLASS 1 GALVANIZED STEEL, CEILING RETURN
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK DUCTWORK DUCTWORK NOTE DUCTWORK DUCTWORK DUCTWORK DUCTWORK NOTE	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 G WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM SMOKE DEVELOPED INDEX OF 50 FIBERGLASS, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 55 GALVANIZED STEEL, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 55 GALVANIZED STEEL, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 50 24"X24" LAY—IN W/ ADJUSTABLE DAMPER STRAIGHT FOR FLEX DUCT W/ ADJUSTABLE DAMPER
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK SUPPLY AIR DIFFUSER	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM SMOKE DEVELOPED INDEX OF 50 FIBERGLASS, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM FLAME SPREAD INDEX OF 55 GALVANIZED STEEL, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 55 MAXIMUM SMOKE DEVELOPED INDEX OF 50 24"X24" LAY—IN W/ ADJUSTABLE DAMPER
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM SMOKE DEVELOPED INDEX OF 50 FIBERGLASS, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 55 GALVANIZED STEEL, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 55 MAXIMUM SMOKE DEVELOPED INDEX OF 50 ZA"X24" LAY-IN W/ ADJUSTABLE DAMPER STRAIGHT FOR FLEX DUCT W/ ADJUSTABLE DAMPER @ CRAWL SPACE SUPPLY ANGLED (AT62WD—8) FOR HARD DUCT W/ ADJUSTABLE DAMPER @ CRAWL SPACE SUPPLY DUCT TYPE, VERTICAL THRU WALL, TYPE B
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK DUCTWORK DUCTWORK NOTE DUCTWORK DUCTWORK NOTE SUPPLY AIR DIFFUSER TAKE OFF	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM SMOKE DEVELOPED INDEX OF 50 FIBERGLASS, CEILING RETURN (R-4.3) CLASS 1 GALVANIZED STEEL, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 50 AMAIMUM SMOKE DEVELOPED INDEX OF 50 STRAIGHT FOR FLEX DUCT W/ ADJUSTABLE DAMPER STRAIGHT FOR HARD DUCT W/ ADJUSTABLE DAMPER STRAIGHT FOR HARD DUCT W/ ADJUSTABLE DAMPER © CRAWL SPACE SUPPLY ANGLE MARNEY BUCT TYPE, VERTICAL THRU WALL, TYPE B (BLADES OUT OF AIRSTREAM) W/ BREAKAWAY CONNECTIONS FROM DAMPER TO DUCT
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK THERMOSTAT DUCTWORK DUCTWORK DUCTWORK DUCTWORK THERMOSTAT DUCTWORK DUCTWORK THERMOSTAT DUCTWORK DUCTWORK THERMOSTAT DUCTWORK THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT DUCTWORK THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 25 MAXIMUM SMOKE DEVELOPED INDEX OF 50 FIBERGLASS, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 55 GALVANIZED STEEL, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 50 24"X24" LAY—IN W/ ADJUSTABLE DAMPER STRAIGHT FOR FLEX DUCT W/ ADJUSTABLE DAMPER STRAIGHT FOR HARD DUCT W/ ADJUSTABLE DAMPER STRAIGHT FOR HARD DUCT W/ ADJUSTABLE DAMPER © CRAWL SPACE SUPPLY ANGLED (AT62WD—8) FOR HARD DUCT W/ ADJUSTABLE DAMPER @ UNIT KM CRAWL SPACE SUPPLY DUCT TYPE, VERTICAL THRU WALL, TYPE B (BLADES OUT OF AIRSTREAM)
ACCESSORIES ACCESSORIES NOTE HEATING—VENTII ITEM HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL HEAT/COOL THERMOSTAT DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK DUCTWORK THERMOSTAT DUCTWORK DUCTWORK DUCTWORK DUCTWORK THERMOSTAT DUCTWORK DUCTWORK THERMOSTAT DUCTWORK THERMOSTAT DUCTWORK THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT THERMOSTAT THERMOSTAT THERMOSTAT THERMOSTAT DUCTWORK THERMOSTAT DUCTWORK THERMOSTAT THERMOST	(1) 36", (1) 42", & (1) 18" VERTICAL MIRROR, 18"X36" W/ STAINLESS STEEL FRAME, B-165-1836 (WASHER BOX FOR CLOTHES WASHER TRAP WRAP ON EXPOSED LINES LATION—AIR CONDITIONING (HVAC) DESCRIPTION B30, WALL HUNG, 2 1/2 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B36, WALL HUNG, 3 TON COOLING W/ 15 KW HEAT (11.25 KW @ 208V) & CRV B42, WALL HUNG, 3 1/2 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B48, WALL HUNG, 4 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV B60, WALL HUNG, 5 TON COOLING W/ 20 KW HEAT (15 KW @ 208V) & CRV DIGITAL PROGRAMMABLE AUTO CHANGE OVER FIBERGLASS, CEILING SUPPLY (R-4.3) CLASS 1 INSULATED GALVANIZED STEEL, CEILING SUPPLY, @ CORRIDORS DUCT STACK FOR CRAWL SUPPLY MAXIMUM FLAME SPREAD INDEX OF 50 FIBERGLASS, CEILING RETURN (R-4.3) CLASS 1 GALVANIZED STEEL, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 50 FIBERGLASS, CEILING RETURN (R-4.3) CLASS 1 GALVANIZED STEEL, CEILING RETURN MAXIMUM FLAME SPREAD INDEX OF 50 24"X24" LAY-IN W/ ADJUSTABLE DAMPER STRAIGHT FOR FLEX DUCT W/ ADJUSTABLE DAMPER © CRAWL SPACE SUPPLY ANGLED (AT62WD-8) FOR HARD DUCT W/ ADJUSTABLE DAMPER © UNIT KM CRAWL SPACE SUPPLY DUCT TYPE, VERTICAL THRU WALL, TYPE B (BLADES OUT OF AIRSTREAM) W/ BREAKAWAY CONNECTIONS FROM DAMPER TO DUCT DUCT TYPE, THRU WALL, CLASS II LEAKAGE RATING W/ INTEGRAL SLEEVE, 120V EXTERNAL ACTUATOR,

ITEM	DESCRIPTION	
I I CIVI	DESCRIPTION	
NOTE	FIRE & FIRE/SMOKE DAMPER ACTUATION & SMOKE DETECTION PER OBC 716.3.3.1 & 716.3.3.2(4)	
NOTE	SMOKE DAMPER TO BE WIRED TO FIRE ALARM SYSTEM @ SITE BY OTHERS	
MISCELLANEOUS	DUCT ACCESS DOOR, 12"X12" W/ 1/2" MIN. HIGH IDENTIFICATION LETTERS	
RETURN AIR GRILLE	24"X24" LAY-IN	
TAKE OFF	STRAIGHT FOR FLEX DUCT	
TAKE OFF	STRAIGHT FOR HARD DUCT @ CRAWL SPACE SUPPLY	
RETURN AIR GRILLE	30"X16" THRU WALL @ UNIT W/ FILTER GRILLE	
EXHAUST FAN	100 CFM STANDARD CEILING FAN	
EXHAUST FAN	200 CFM STANDARD CEILING FAN	
EXHAUST FAN	300 CFM STANDARD CEILING FAN	
MISCELLANEOUS	IN-LINE EXHAUST FAN (GRAINGER #4YM44) © CRAWL SPACE VENT W/ SPEED CONTROLLER,	
MISCELLANEOUS	ADJUSTABLE DAMPER, @ CRAWL SPACE SUPPLY RE: DTL. "E" SHT. "D5"	
NOTE	CONDUIT & WIRE FOR OPPOSITE END HVAC DUCTWORK, FLEXIBLE AIR DUCT & CONNECTORS HAVE BEEN SI PER ASHRAE HANDBOOK OF FUNDAMENTALS	
MISCELLANEOUS		
	SPECIAL EQUIPMENT	
ITEM	DESCRIPTION	
FIRE EXTINGUISHER	10#, A:B:C, DRY CHEMICAL	
FIRE EXTINGUISHER WALL CABINET	#FE, FIRE RATED, METAL, SEMI RECESSED, 10#	
MISCELLANEOUS	DOUBLE GANG ACCESS BOX W/ 3/4" EMT CONDUIT TO SUSPENDED CEILING CAVITY (10) FOR FIRE ALARM PULL STATIONS W/ SINGLE MUD RING (73) FOR FIRE ALARM AUDIOS W/ NO MUD RING (10) FOR FIRE ALARM VISUALS W/ NO MUD RING (8) FOR FIRE ALARM SMOKE DETECTORS W/ DOUBLE MUD R	

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TITLE: SPECIFICATIONS	DRAWN BY: R.M.	SATELLITE SHELTERS, INC.
MODEL: 11274 O/A CLASSROOM	REV:	27711 S. FRONTAGE RD., CHANNAHON, II



RECESSED FIRE EXTINGUISHER CABINET, RATED
R.O. 12 1/2"x26 1/8", 36" AFF (UNLESS NOTED)

16"x10" THRU WALL FIRE/SMOKE DAMPER

16"x10" THRU WALL FIRE DAMPER R.D. 19 3/4"x14 3/4", 3" DN

48"x48" HORIZONTAL SLIDER WINDOW R.D. 48 1/4"×48 1/4", 30" AFF

72"x84" INTERIOR SLIDING DOOR

999A MATE LINE OPENING FOR INTERIOR DOOR
R.O. 46"x89"

B30 | 2 1/2 TON BARD CENTRAL HVAC UNIT R.D. 30 3/8"x16 1/2", 15" DN

B42 3 1/2 TON BARD CENTRAL HVAC UNIT R.O. 32 3/8"x18", 27 1/2" DN

B48 4 TON BARD CENTRAL HVAC UNIT R.O. 32 3/8"×18", 27 1/2" DN

B60 5 TON BARD CENTRAL HVAC UNIT R.D. 32 3/8"x18", 27 1/2" DN

| B36 | 3 IUN BARD CERTIFICATION | R.D. 30 3/8"x16 1/2", 15" DN

3 TON BARD CENTRAL HVAC UNIT

120"x84" FINISHED OPENING FOR EXTERIOR WALL

72"x84" EXT. STEEL DOOR w/ STL. JAMB (CENTER MULLION)
R.O. 76 3/4"x86 1/4"

36"x84" INT. IMPERIAL DAK S.C. DOOR, (20 MIN), STL. JAMB

36"x84" INT. IMPERIAL DAK S.C. DOOR w/ STEEL JAMB

36"x84" INT. IMPERIAL DAK S.C. DOOR, (45 MIN), STL. JAMB

DESCRIPTION

OPENING SCHEDULE

20"x16" RETURN AIR FILTER GRILLE
R.□. 30 3/8"x16 3/8", @ UNIT

ROUGH OPENING FOR DOOR

| FD1 | 16°x10° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100° | 100°

R.D. 76"x86 1/4"

R.D. 38"x85 1/4"

(605) | 36°x84° 1111° 1.

72"x84" INTERV

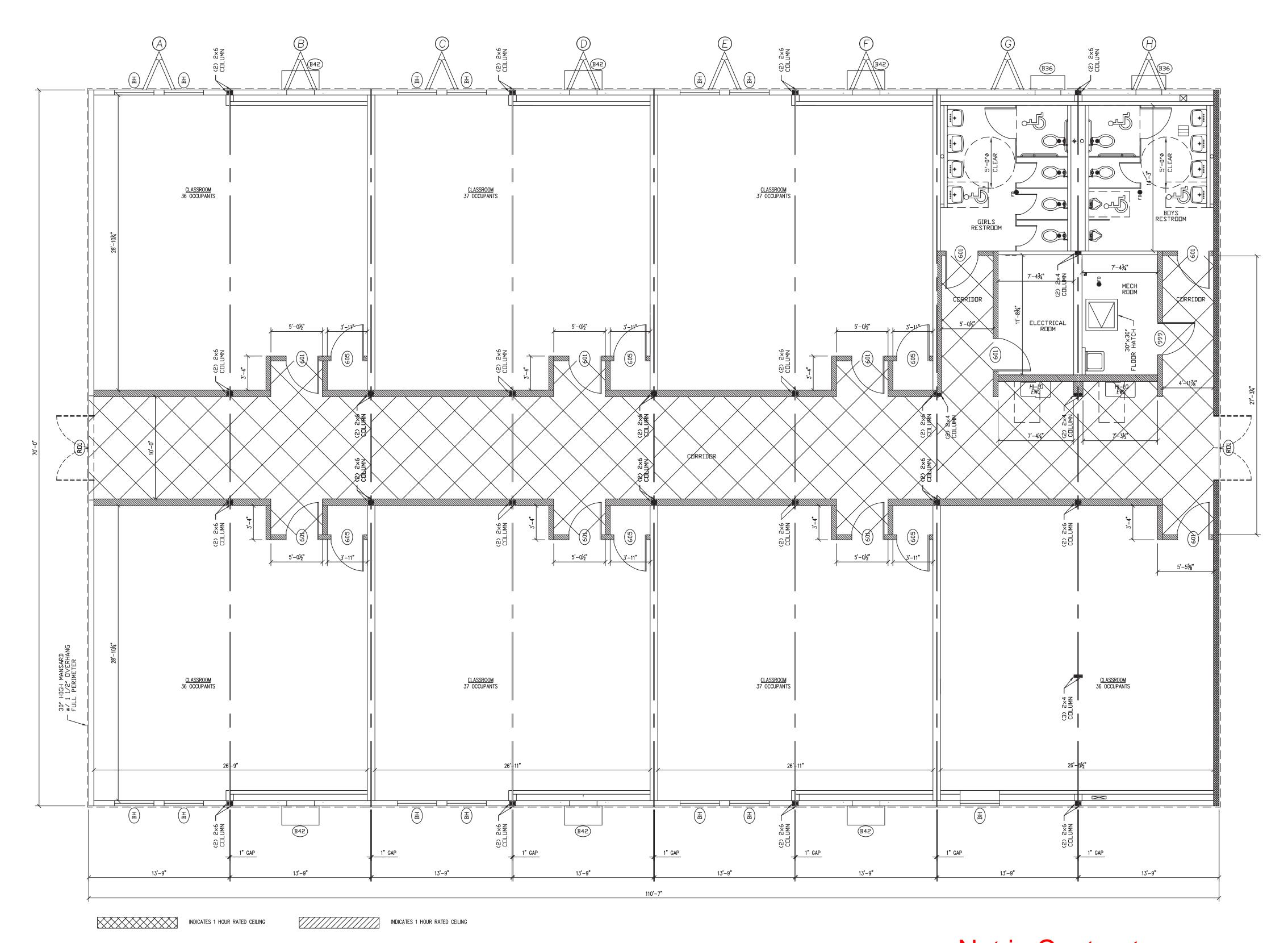
| (999) | 36 x 04 1.... | R.D. 38"x 85"

| FD1 | 120 x 84 | 13130 | 122 1/4" x 84 1/2"

Not in Contract For Reference Only DRAWN ELEVATIONS

FRONTAGE

7

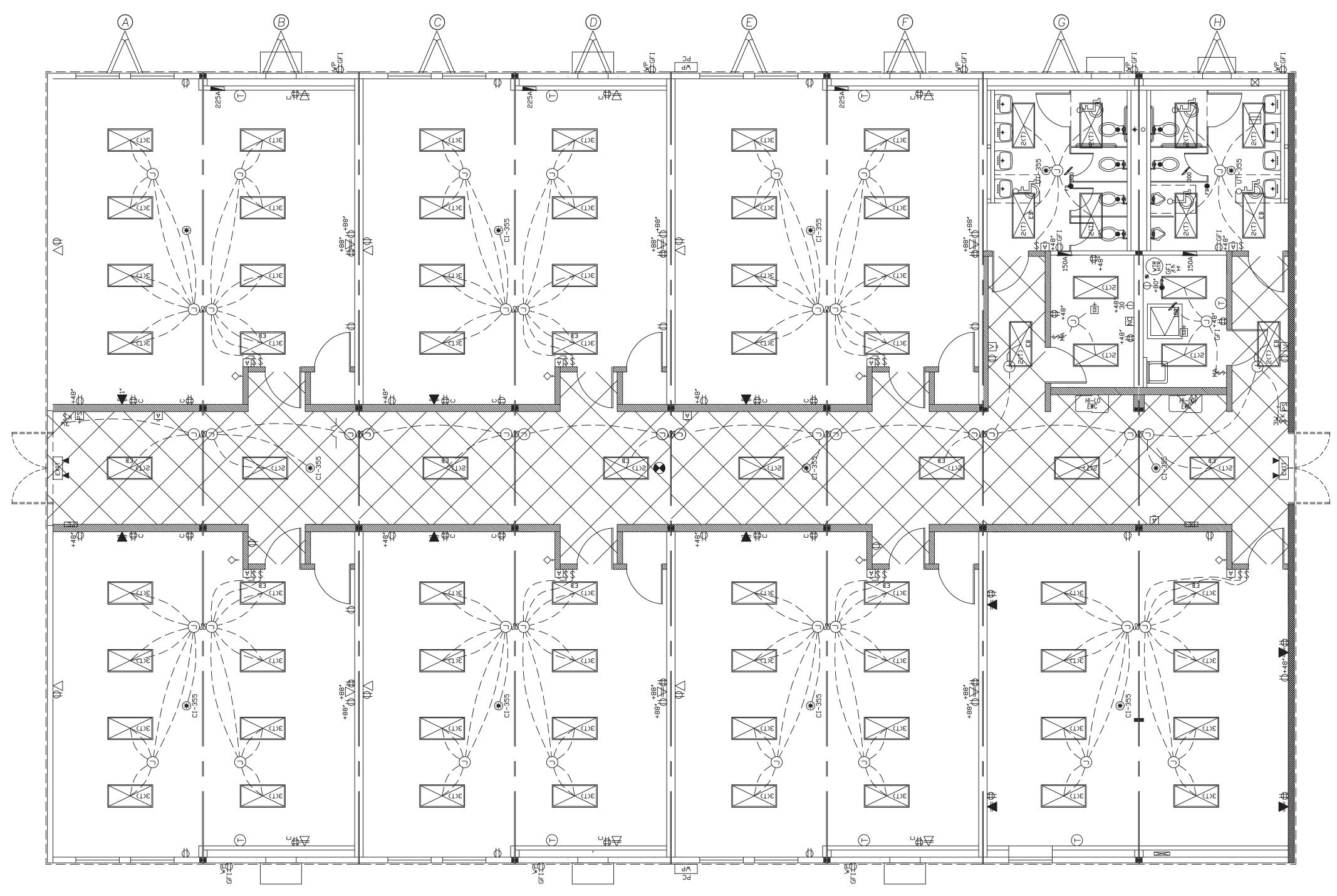


RECESSED FIRE EXTINGUISHER CABINET, RATED
R.O. 12 1/2"x26 1/8", 36" AFF (UNLESS NOTED) 20″x16″ RETURN AIR FILTER GRILLE
R.D. 30 3/8″x16 3/8″, @ UNIT 16"x10" THRU WALL FIRE/SMOKE DAMPER R.D. 19 3/4"x14 3/4", 3" DN 16"x10" THRU WALL FIRE DAMPER R.D. 19 3/4"x14 3/4", 3" DN 48"×48" HORIZONTAL SLIDER WINDOW R.D. 48 1/4"×48 1/4", 30" AFF ROUGH OPENING FOR DOOR R.D. 76"x86 1/4" 120"x84" FINISHED OPENING FOR EXTERIOR WALL R.D. 122 1/4"x84 1/2" 72"x84" EXT. STEEL DOOR w/ STL. JAMB (CENTER MULLION) 303) |/C xo- L/... |R.D. 76 3/4*x86 1/4* 36"x84" INT. IMPERIAL DAK S.C. DODR, (20 MIN), STL. JAMB R.D. 38"x85 1/4" 36"x84" INT. IMPERIAL DAK S.C. DOOR w/ STEEL JAMB
R.O. 38"x85" 989 72"x84" INTERIOR SLIDING DOOR
R.O. 74"x85" 999 36"x84" INT. IMPERIAL DAK S.C. DODR, (45 MIN), STL. JAMB R.D. 38"x85" 999A MATE LINE OPENING FOR INTERIOR DOOR R.O. 46"x89" B30 2 1/2 TON BARD CENTRAL HVAC UNIT R.O. 30 3/8"x16 1/2", 15" DN B36 3 TON BARD CENTRAL HVAC UNIT R.O. 30 3/8"x16 1/2", 15" DN B42 3 1/2 TON BARD CENTRAL HVAC UNIT R.O. 32 3/8"x18", 27 1/2" DN B48 4 TON BARD CENTRAL HVAC UNIT R.O. 32 3/8"x18", 27 1/2" DN B60 5 TON BARD CENTRAL HVAC UNIT R.D. 32 3/8"x18", 27 1/2" DN **DESCRIPTION**

OPENING SCHEDULE

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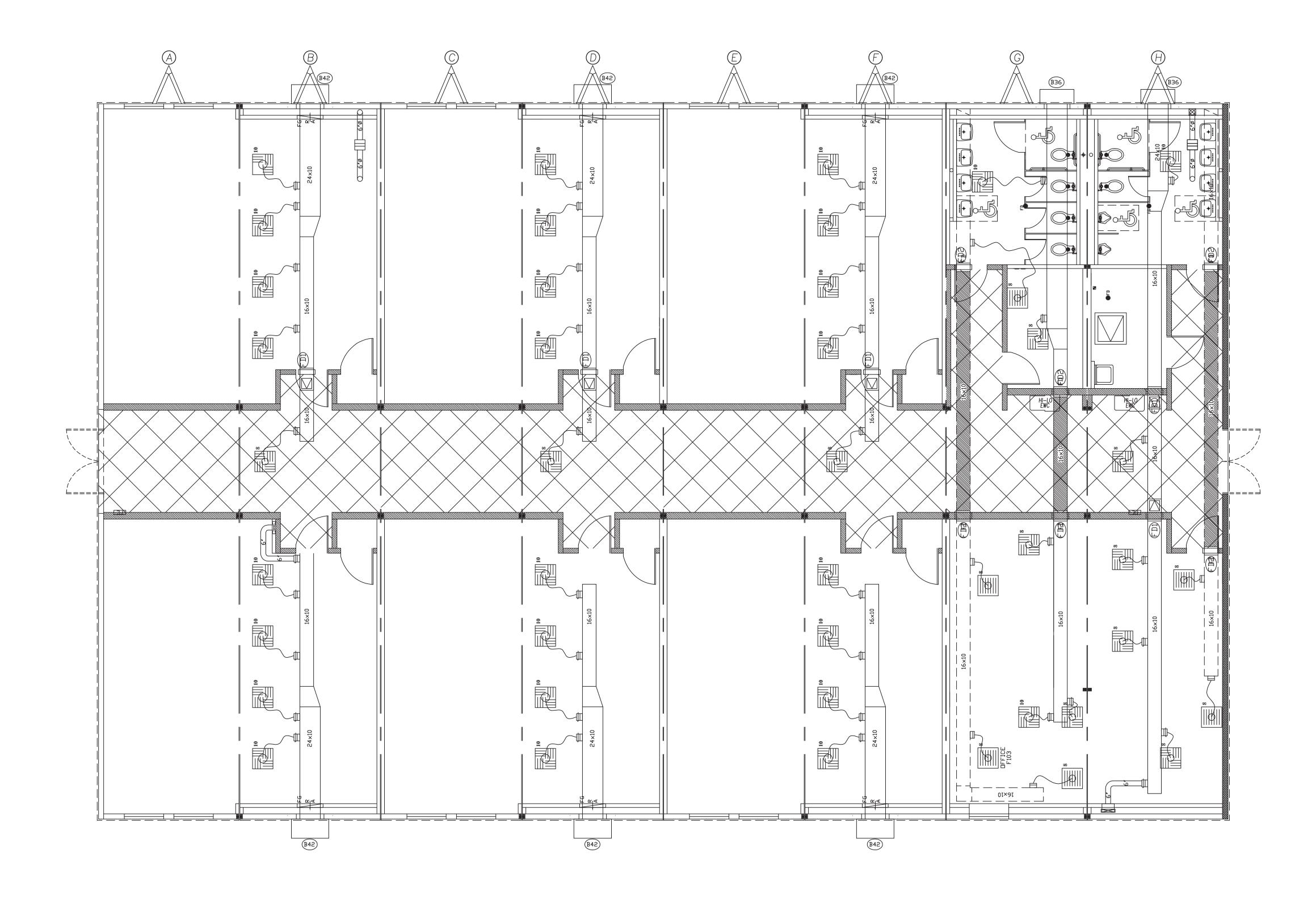
	J-BOX w/ CONDUIT FOR FIRE ALARM SIGNAL		J-BOX w/ CONDUIT FOR FIRE ALARM	
Ŷ	VISUAL, 82" AFF (UNLESS NOTED)	PS PS	PULL STATION, 42" AFF (UNLESS NOTED)	
Â	J-BOX w/ CONDUIT FOR FIRE ALARM SIGNAL	TD+	J-BOX w/ CONDUIT FOR SMOKE DETECTOR	
	AUDIO, 82" AFF (UNLESS NOTED)		(CEILING MOUNTED)	
	SINGLE GANG POWERED J-BOX w/ CONDUIT 108" AFF (UNLESS NOTED)	T	THERMOSTAT, 42" AFF	
AC	SINGLE GANG J-BOX w/ 3/4" CONDUIT		2'x2' SUPPLY AIR GRILLE	
	FOR ACTUATOR, 48" AFF (UNLESS NOTED)		IN CEILING GRID	
CR	SINGLE GANG J-BOX w/ 3/4" CONDUIT FOR CARD READER, 42" AFF (UNLESS NOTED)		2'x2' RETURN AIR GRILLE IN CEILING GRID	
+96"	J-BOX w/ 1 1/4" CONDUIT		RETURN TAKE OFF	
TV	FOR TV DUTLET HIGH			
+18″ TV	J-BOX w/ 1 1/4" CONDUIT FOR TV OUTLET LOW	\blacksquare	SUPPLY TAKE OFF w/ DAMPER	
lacksquare	J-BOX w/ 1" CONDUIT FOR		12"×12" DUCT ACCESS DOOR	
	DATA & TELEPHONE, 48" AFF (UNLESS NOTED)			
1"	J-BOX w/ 1" CONDUIT FOR DATA, 18" AFF (UNLESS NOTED)		CEILING EXHAUST FAN (CFM AS NOTED)	
1_1/4"	J-BOX w/ 1 1/4" CONDUIT FOR		WATER INLET LOCATION	
*	DATA, 18" AFF (UNLESS NOTED)		DILIMBING MENT TUDIL DEFE	
NC	J-BOX w/ (2) 2" CONDUIT FOR NETWORKS CABINET, 24" AFF	0	PLUMBING VENT THRU ROOF	
$\overline{\nabla}$	J-BOX w/ 1" CONDUIT	.	MAIN DRAIN LOCATION	
	FOR WAP, 108" AFF (UNLESS NOTED) J-BOX w/ (2) 1 1/4" CONDUIT	Y	ELEED DOATH	
	FOR PROJECTOR, 18" AFF (UNLESS NOTED)	● FD	FLOOR DRAIN	
DC	J-BOX w/ 1 1/4" CONDUIT FOR	WTR	WATER HEATER	
*	DATA & COAX, 18" AFF (UNLESS NOTED) J-BOX w/ 1 1/4" CONDUIT	HTR	WASHER BOX @ 42" AFF (UNLESS NOTED)	F = \
\downarrow	FOR PA SPEAKER, 48" AFF (UNLESS NOTED)		WHSTIER DUN E TE HIT CONCESS NOTED/	\
(J)	J-BOX FOR TROFFER LIGHT CONNECTION			/
	J-BOX FOR MATE LINE CROSSOVER			/ / ==
	ABOVE SUSPENDED CEILING			
*	OCCUPANCY SENSOR, CEILING MOUNTED			
	(MODEL AS NOTED) 20 AMP, SWITCH			
\$	42" AFF (UNLESS NOTED)			
MA\$	20 AMP, MOTION ACTIVATED SWITCH			
3 ¹ M	42" AFF (UNLESS NOTED) 20 AMP, KEYED SWITCH, 3-WAY			
3,W \$K	42" AFF (UNLESS N□TED)			
□FLR GFI	20 AMP, GFI DUPLEX RECEPT IN FLOOR			
#	240 VOLT, 50 AMP, SINGLE RECEPT			
	0" AFF (UNLESS NOTED)			
эоФ	30 AMP, SINGLE RECEPT, 18" AFF (UNLESS NOTED)			
\bigcirc	20 AMP, SINGLE RECEPT FOR RECIRC. PUMP			
	80" AFF (UNLESS NOTED) 20 AMP, GFI RECEPT			
GFI(T)	(BELOW FLOOR)			
GFI ()WP	20 AMP, DUPLEX GFI RECEPT			
- ''	WEATHERPROOF, 24" AFF (UNLESS NOTED) 20 AMP, QUADPLEX RECEPT			
	18" AFF (UNLESS NOTED)			
⊕ c	20 AMP, QUADPLEX COMPUTER RECEPT			
	18" AFF (UNLESS NOTED) 20 AMP, DUPLEX RECEPT			
Φ	18" AFF (UNLESS NOTED)			
□ GFI	20 AMP, DUPLEX GFI RECEPT	ELECTRI		
IWP	42" AFF (UNLESS NOTED) SINGLE HEAD REMOTE EMERGENCY LIGHT	2. ALL V	RECEPTACLES TO BE GROUNDING TYPE. WIRING TO BE PER THE EDITION OF THE NEC LISTED ON	
	WEATHERPROOF, 80" AFF	THE 3. MAIN	COVER PAGE, TYPE NM ROMEX (CU) W/ GROUND. PANEL TO BE MARKED "SUITABLE FOR USE AS	
EXIT	DUAL HEAD EMER, LIGHT W/ LIGHTED EXIT		CE EQUIPMENT", AND BE EQUIPPED W/ KER/FUSE TYPE OVERCURRENT PROTECTION.	
	SIGN & BATTERY PACK, 88" AFF (UN. NOTED) DOUBLE FACE EXIT SIGN w/ BATTERY		ER THERMAL OVERLOAD PROTECTION TO BE IDED FOR ALL MOTORS.	
	BACK UP, CEILING MOUNT (UNLESS NOTED)		NNECTING MEANS WITHIN SIGHT IRED FOR ALL MOTORS.	
WP	LED WALL PACK EXTERIOR LIGHT W/ PC	LIGHT	HERPROOF PROTECTION REQUIRED FOR ALL OUTDOOR S, RECEPTACLES AND DISCONNECTS.	
	WEATHERPROOF LIGHT, 111" AFF 2'x4' (2) TUBE FLUORESCENT	ABOU	ER WORKING CLEARANCES TO BE PROVIDED AND MAINTAIN T ALL ELECTRICAL EQUIPMENT.	
2(T)	TROFFER LIGHT w/ DIFFUSER	PROP	FLUORESCENT FIXTURES REQUIRE THERMAL PRO— TECTION ER CLEARANCES FROM INSULATION, ALSO APPLICABLE FOR IDESCENT FIXTURES.	
2(T) E.B	2'x4' (2) TUBE FLUORESCENT TROFFER LIGHT w/ DIFFUSER & EMERGENCY BALLAST	9. СОМВ	INATION EXHAUST FAN/LIGHT AND ALL RECESSED INCAND	ESCENT
	2'x4' (3) TUBE FLUORESCENT TROFFER	10. EXIT	RES TO BE WITH THERMAL PROTECTION. LIGHTS (IF ELECTRIC) MUST BE FED FROM AN APPROVED	
3(T)	TROFFER LIGHT w/ DIFFUSER	DISCO	CE CONNECTED AHEAD OF, BUT NOT WITHIN MAIN SERVICE INNECTION MEANS ENCLOSURE, AND INSTALLED AS PER SI IREMENTS, OR BE BATTERY BACKUP TYPE UNITS.	
3(T) EB	2'x4' (3) TUBE FLUORESCENT TROFFER LIGHT w/ DIFFUSER & EMERGENCY BALLAST	11. SERVI	CE CONDUCTORS, LOCATED WITHIN THE PERIMETER OF TH	
	LOAD CENTER	EDITIO	L BE INSTALLED IN ACCORDANCE WITH ARTICLE 230—6, PI DN OF THE NEC LISTED ON THE COVER PAGE.	LIX TITE
		CIRCL	MUM 15 (2) TUBE FLOURESCENT LIGHTS ON 15A IIT, MAXIMUM 10 RECEPTS ON 15A CIRCUIT, MAXIMUM 7 UBE FLOURESCENT LIGHTS ON 15A CIRCUIT.	
SYMBOL		13. MAXIN	MUM 20 (2) TUBE FLOURESCENT LIGHTS ON 20A CIRCUIT, MUM 13 RECEPTS ON 20A CIRCUIT, MAXIMUM 10 (4)	
	PRAWING LEGEND		FLOURESCENT LIGHTS ON 20A CIRCUIT.	



Not	in Contract	
For	Reference	Only

FRONTAGE

SYMBOL	14 1 # 1 # N # #N/#1# # N T	MARK	DESCRIPTION
	DESCRIPTION	(B60)	R.D. 32 3/8"x18", 27 1/2" DN
_ FR	LIGHT w/ DIFFUSER & EMERGENCY BALLAST LOAD CENTER	B48	R.D. 32 3/8"x18", 27 1/2" DN 5 TON BARD CENTRAL HVAC UNIT
3(T) EB	2'x4' (3) TUBE FLUORESCENT TROFFER	(B42)	R.D. 32 3/8"x18", 27 1/2" DN 4 TON BARD CENTRAL HVAC UNIT
3(T)	2'x4' (3) TUBE FLUDRESCENT TROFFER TROFFER LIGHT w/ DIFFUSER	(B36)	R.D. 30 3/8"x16 1/2", 15" DN 3 1/2 TDN BARD CENTRAL HVAC UNIT
2(T) EB	LIGHT w/ DIFFUSER & EMERGENCY BALLAST	(B30)	R.D. 30 3/8"x16 1/2", 15" DN 3 TON BARD CENTRAL HVAC UNIT
	TROFFER LIGHT w/ DIFFUSER 2'x4' (2) TUBE FLUORESCENT TROFFER	(999A)	R.D. 46"x89" 2 1/2 TON BARD CENTRAL HVAC UNIT
2(T)	2'x4' (2) TUBE FLUORESCENT	(999)	R.D. 38"x85" MATE LINE OPENING FOR INTERIOR DOOR
WP	LED WALL PACK EXTERIOR LIGHT W/ PC WEATHERPROOF LIGHT, 111" AFF	(989)	72"x84" INTERIOR SLIDING DOOR R.O. 74"x85" 36"x84" INT. IMPERIAL DAK S.C. DOOR, (45 MIN), STL. JAMB
	BACK UP, CEILING MOUNT (UNLESS NOTED)		R.D. 38"x85"
	SIGN & BATTERY PACK, 88" AFF (UN. NOTED) DOUBLE FACE EXIT SIGN w/ BATTERY	(601)	R.D. 38"x85 1/4" 36"x84" INT. IMPERIAL DAK S.C. DODR w/ STEEL JAMB
EXIT	DUAL HEAD EMER. LIGHT W/ LIGHTED EXIT	303)	R.D. 76 3/4"x86 1/4" 36"x84" INT. IMPERIAL DAK S.C. DOOR, (20 MIN), STL. JAMB
Tw F	WEATHERPROOF, 80" AFF	(FD1)	R.O. 122 1/4"x84 1/2" 72"x84" EXT. STEEL DOOR w/ STL. JAMB (CENTER MULLION)
 WP	42" AFF (UNLESS NOTED) SINGLE HEAD REMOTE EMERGENCY LIGHT		R.D. 76"x86 1/4" 120"x84" FINISHED OPENING FOR EXTERIOR WALL
⊕ ^{GFI}	20 AMP, DUPLEX GFI RECEPT	(RD1)	R.O. 48 1/4"x48 1/4", 30" AFF ROUGH OPENING FOR DOOR
\bigcirc	18" AFF (UNLESS NOTED)	BH	48"x48" HORIZONTAL SLIDER WINDOW
	18" AFF (UNLESS NOTED) 20 AMP, DUPLEX RECEPT	FD2)	16"x10" THRU WALL FIRE DAMPER R.D. 19 3/4"x14 3/4", 3" DN
⊕ c	20 AMP, QUADPLEX COMPUTER RECEPT	FD1	16"x10" THRU WALL FIRE/SMOKE DAMPER R.O. 19 3/4"x14 3/4", 3" DN
P	18" AFF (UNLESS NOTED)	FG A	30"x16" RETURN AIR FILTER GRILLE R.D. 30 3/8"x16 3/8", @ UNIT
	20 AMP, QUADPLEX RECEPT	FE .	R.O. 12 1/2'x26 1/8', 36" AFF (UNLESS NOTED)
GFI ()WP	20 AMP, DUPLEX GFI RECEPT WEATHERPROOF, 24" AFF (UNLESS NOTED)		RECESSED FIRE EXTINGUISHER CABINET, RATED
GFI(1)	(BELOW FLOOR)		
GF1/IN	80" AFF (UNLESS NOTED) 20 AMP, GFI RECEPT		
\bigoplus	20 AMP, SINGLE RECEPT FOR RECIRC, PUMP		
30 T	(UNLESS NOTED)		
	0" AFF (UNLESS NOTED) 30 AMP, SINGLE RECEPT, 18" AFF		
	240 VOLT, 50 AMP, SINGLE RECEPT		
GFI	IN FLOOR		
' 	20 AMP, GFI DUPLEX RECEPT		
3.W \$K	20 AMP, KEYED SWITCH, 3-WAY 42" AFF (UNLESS NOTED)		
ма\$	42" AFF (UNLESS N□TED)		
4	20 AMP, MOTION ACTIVATED SWITCH		
\$	20 AMP, SWITCH 42" AFF (UNLESS NOTED)		
**	(MODEL AS NOTED)		
*	OCCUPANCY SENSOR, CEILING MOUNTED		
	ABOVE SUSPENDED CEILING		
	J-BOX FOR MATE LINE CROSSOVER		
J	J-BOX FOR TROFFER LIGHT CONNECTION		
<u></u>	FOR PA SPEAKER, 48" AFF (UNLESS NOTED)		1
	J-BOX w/ 1 1/4" CONDUIT		WASHER BOX @ 42" AFF (UNLESS NOTED)
DC	J-BOX w/ 1 1/4" CONDUIT FOR DATA & COAX, 18" AFF (UNLESS NOTED)	WTR HTR	WATER HEATER
	FOR PROJECTOR, 18" AFF (UNLESS NOTED)		
	J-BOX w/ (2) 1 1/4" CONDUIT	(F)	FLOOR DRAIN
$\overline{\sum}$	FOR WAP, 108" AFF (UNLESS NOTED)	•	HUTIA DIVUTIA FUCULTUIA
	FOR NETWORKS CABINET, 24" AFF J-BOX w/ 1" CONDUIT		MAIN DRAIN LOCATION
NC	J-BOX w/ (2) 2" CONDUIT	0	PLUMBING VENT THRU ROOF
1 1/4"	DATA, 18" AFF (UNLESS NOTED)		WATER INLET LOCATION
1 1/4"	DATA, 18" AFF (UNLESS NOTED)		VATED TAILET LECATION
1"	J-BOX w/ 1" CONDUIT FOR	•	CEILING EXHAUST FAN (CFM AS NOTED)
lacksquare	J-BOX w/ 1" CONDUIT FOR DATA & TELEPHONE, 48" AFF (UNLESS NOTED)		12"×12" DUCT ACCESS DOOR
TV	FOR TV OUTLET LOW		
+18"	J-BOX w/ 1 1/4" CONDUIT		SUPPLY TAKE OFF w/ DAMPER
+96″ [T∨]	J-BOX w/ 1 1/4" CONDUIT FOR TV OUTLET HIGH		RETURN TAKE OFF
CR	FOR CARD READER, 42" AFF (UNLESS NOTED)		IN CEILING GRID
	SINGLE GANG J-BOX w/ 3/4" CONDUIT		2'x2' RETURN AIR GRILLE
AC	SINGLE GANG J-BOX w/ 3/4" CONDUIT FOR ACTUATOR, 48" AFF (UNLESS NOTED)		2'x2' SUPPLY AIR GRILLE IN CEILING GRID
	108" AFF (UNLESS NOTED)		1
\triangle	SINGLE GANG POWERED J-BOX w/ CONDUIT	(T)	THERMOSTAT, 42" AFF
Â	J-BOX w/ CONDUIT FOR FIRE ALARM SIGNAL AUDIO, 82" AFF (UNLESS NOTED)	+[12]	J-BOX w/ CONDUIT FOR SMOKE DETECTOR (CEILING MOUNTED)
Ŷ	VISUAL, 82" AFF (UNLESS NOTED)	PS PS	PULL STATION, 42" AFF (UNLESS NOTED)

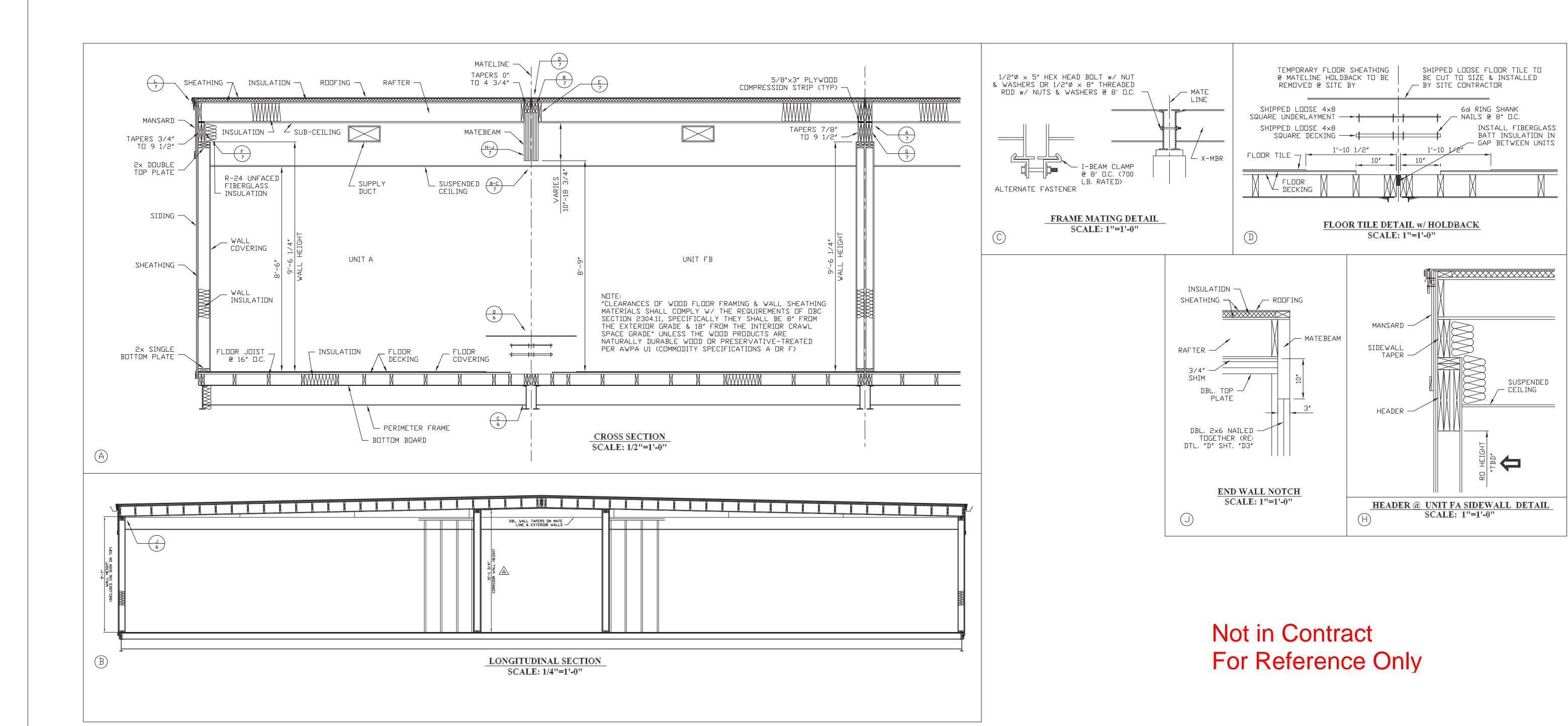


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<u>MECHANICAL</u>

- EXHAUST FANS AND VENTING EQUIPMENT TO BE DUCTED TO EXTERIOR AND TERMINATE AT AN APPROVED VENT CAP.
 MECHANICAL VENTILATION", USE 75% OF RECIRCULATED AIR VIA HVAC UNIT.
 DUCT EXPOSED TO NON-CONDITIONED SPACES SHALL BE INSULATED TO PROVIDE A THERMAL RESISTANCE.
 FLOOR AND WALL REGISTERS: THE LOWER EDGE SHALL NOT BE LESS THAN 1/2" FROM THE FLOOR IN TOILET ROOMS, LAUNDRY ROOMS OR UTILITY ROOMS
- 5. METAL CHIMNEYS SHALL EXTEND AT LEAST 3 FT. ABOVE THE HIGHEST POINT WHERE THEY PASS THROUGH THE ROOM AND 2 FT. MINIMUM HIGHER THAN OTHER PORTIONS OF A BUILDING WITHIN 10 FT.

DRAWN		REV:		
1TLE:	HVAC PLAN	ODEL:	11274 O/A CLASSROOM	



BUILDING CODE

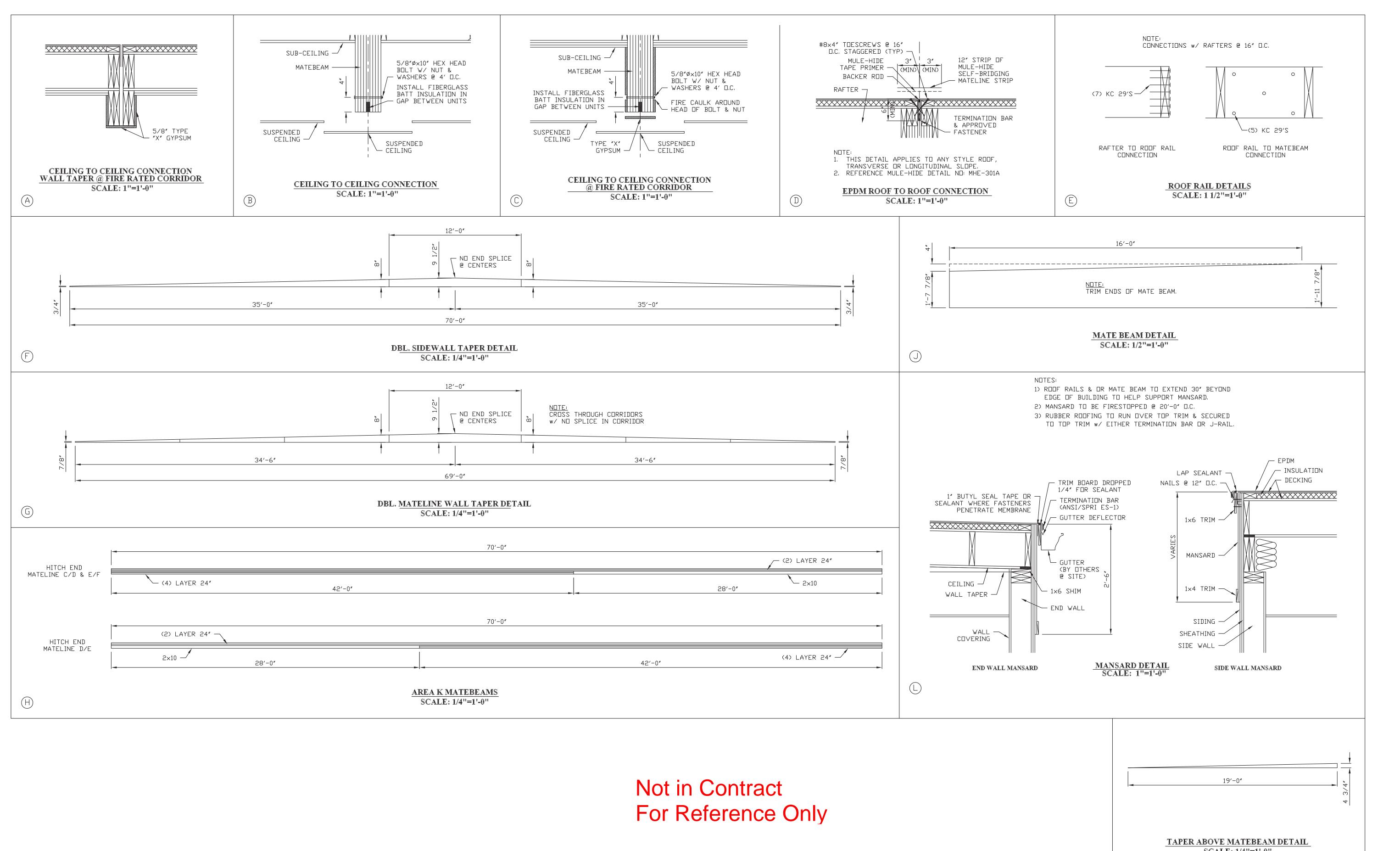
- 1. ATTIC VENTILATION SHALL NOT BE LESS THAN 1/150th
- OF THE HORIZONTAL AREA TO BE VENTILATED. 2. THE BUILDING EXTERIOR AND ALL FACILITIES WITHIN THE BUILDING SHALL BE IDENTIFIED WITH THE INTERNATIONAL
- SYMBOL OF ACCESSIBILITY. 3. BUILDER/DEALER SHALL BE RESPONSIBLE FOR ON SITE BARRIER FREE PROVISIONS: STEPS, RAMPS, PARKING SIGNS, ETC. - BUILDING APPROACH (WALK OR RAMP) WITH A MINIMUM WIDTH OF 5' AND A GRADIENT OF NOT MORE THAN 1 FOOT IN 20 FEET.
- 4. ALL LOCKS TO BE UNLOCKABLE FROM THE INTERIOR

"SAFTEY GLAZED" AND SO MARKED.

- WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.
- 5. CORROSION RESISTANT FLASHING AT TOP AND SIDES OF DOORS, WINDOWS AND AT ROOF PENETRATIONS. 6. ALL GLAZING WITHIN 24" OF EXTERIOR PASSAGE DOORS AND IN PASSAGE DOORS, OR WITHIN 18" OF FLOOR TO BE

DATE: 3,	SCALE:
SATELLITE SHELTERS, INC.	27711 S. FRONTAGE RD., CHANNAHON, IL 60410
DRAWN BY: R.M.	REV:
TITLE: CROSS SECTIONS	MODEL: 11274 O/A CLASSROOM

2022-NO:



BUILDING CODE

1. ATTIC VENTILATION SHALL NOT BE LESS THAN 1/150th OF THE HORIZONTAL AREA TO BE VENTILATED.

 THE BUILDING EXTERIOR AND ALL FACILITIES WITHIN THE BUILDING SHALL BE IDENTIFIED WITH THE INTERNATIONAL SYMBOL OF ACCESSIBILITY.
 BUILDER/DEALER SHALL BE RESPONSIBLE FOR ON SITE BARRIER FREE PROVISIONS: STEPS, RAMPS, PARKING SIGNS, ETC. — BUILDING APPROACH (WALK OR RAMP) WITH A MINIMUM WIDTH OF 5' AND A GRADIENT OF NOT MORE THAN

4. ALL LOCKS TO BE UNLOCKABLE FROM THE INTERIOR WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE.

5. CORROSION RESISTANT FLASHING AT TOP AND SIDES OF DOORS, WINDOWS AND AT ROOF PENETRATIONS.

6. ALL GLAZING WITHIN 24" OF EXTERIOR PASSAGE DOORS

AND IN PASSAGE DOORS, OR WITHIN 18" OF FLOOR TO BE "SAFTEY GLAZED" AND SO MARKED.

1 FOOT IN 20 FEET.

TAPER ABOVE MATEBEAM
SCALE: 1/4"=1'-0"

LE: CONSTRUCTION DETAILS
DEL: REV:

В Y:

2022-NO:

3/30/

6041

ANNAHON,

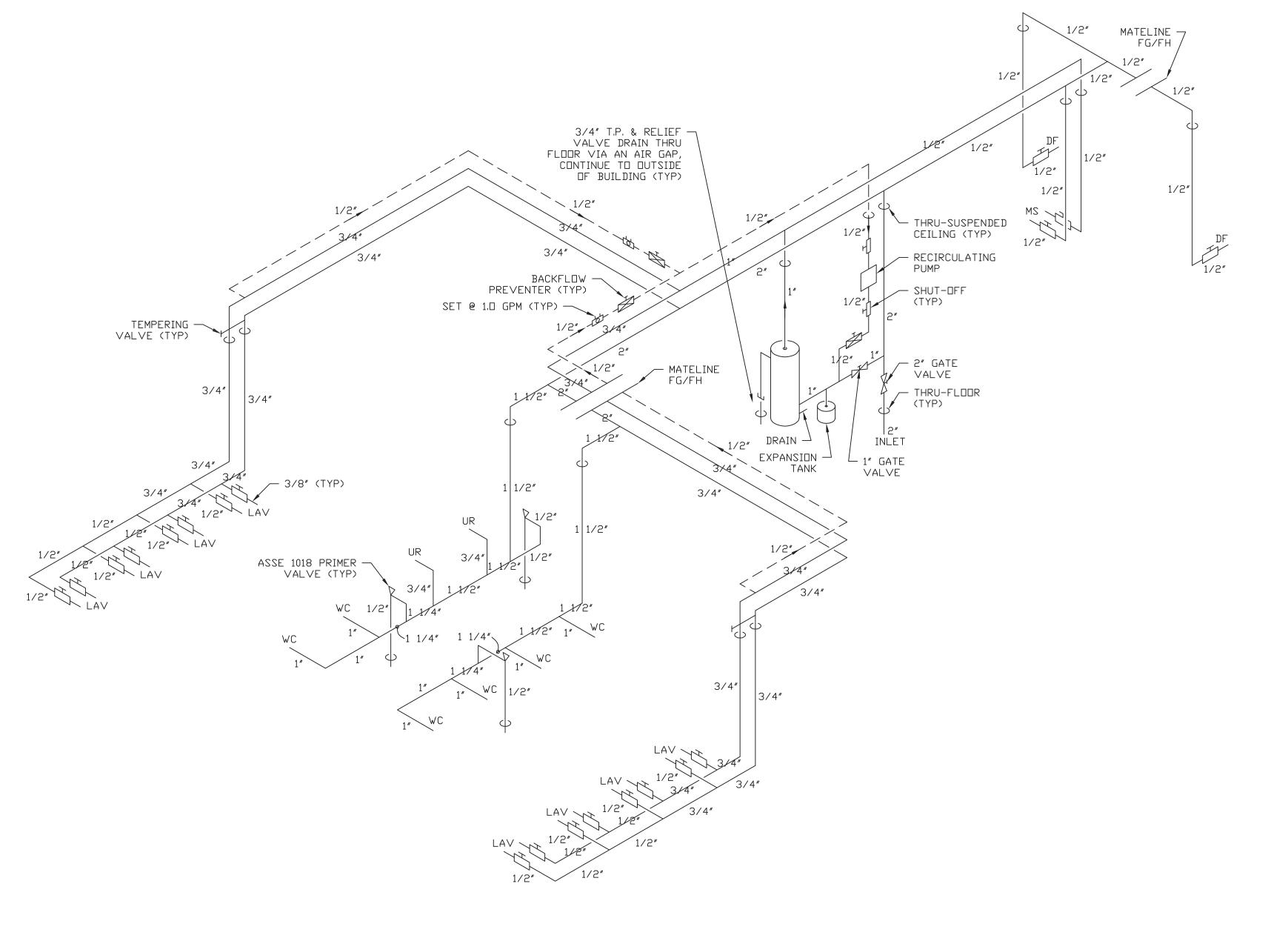
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FRONT

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DATE:



WATER SUPPLY SCHEMATIC SCALE: NOT TO SCALE

WATER HEATER

SCALE: NTS

CHECK VALVES

CIRCULATION - PUMP

HOT WATER

SHUT-OFF VALVE (TYP)—/

CONTROL— BOX

DRAIN-

T&P RELIEF — VALVE

WATER SUPPLY

HOT WATER RETURN

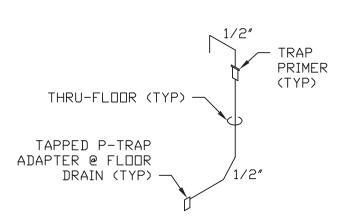
_ SHUT OFF

VALVES (TYP)

1. WATER SUPPLY LINE MATERIALS TO BE PER SPECIFICATIONS

- 2. COPPER OR GALVANIZED WATER PIPING TO BE
- SUPPORTED AT 4' O.C., POLYBUTYLENE AT 3' O.C.
- 3. WATER TEMPERATURE FACTORY SET AT 110°F, CONTROLS LOCATED BEHIND COVER PANEL.
- 4. A SHUT OFF VALVE SHALL BE REQUIRED FOR EACH FIXTURE. 5. WATER HAMMER ARRESTORS PROVIDED, OR IF AIR CHAMBERS, TO BE MIN. 15" LONG AND NOT LESS THAN THE DIAMETER OF
- PIPE SERVED. 6. WATER HEATER EQUIPPED WITH DRAIN COCK.
- 7. DIELECTRIC UNIONS TO BE USED AT CONNECTIONS OF
- WATER LINES TO WATER HEATER. 8. COLD WATER INLET TO BE PROVIDED WITH A SHUT-OFF
- VALVE ABOVE FLOOR AT THE WATER HEATER. 9. T&P VALVE, 210°F, 125PSI, WITH A 3/4" DISCHARGE
- PIPE TO THE EXTERIOR VIA A 4" AIR GAP.
- 10. FULL-SIZED SHUT OFF VALVE TO BE PROVIDED BETWEEN THE BUILDING AND WATER MAIN (METER).
- 11. 1/2" WATER SUPPLY SHALL SUPPLY ONLY ONE FIXTURE.

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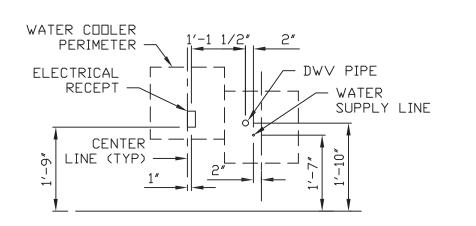
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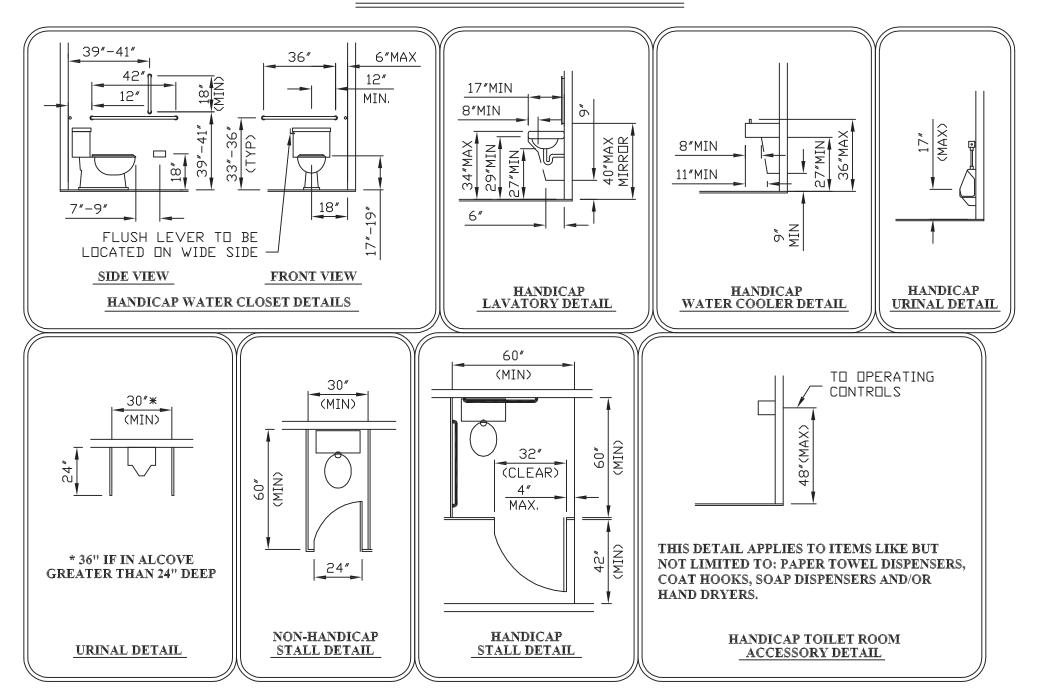
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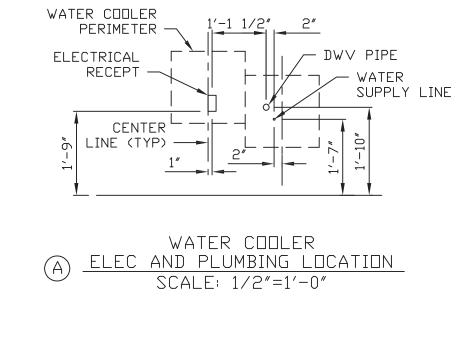


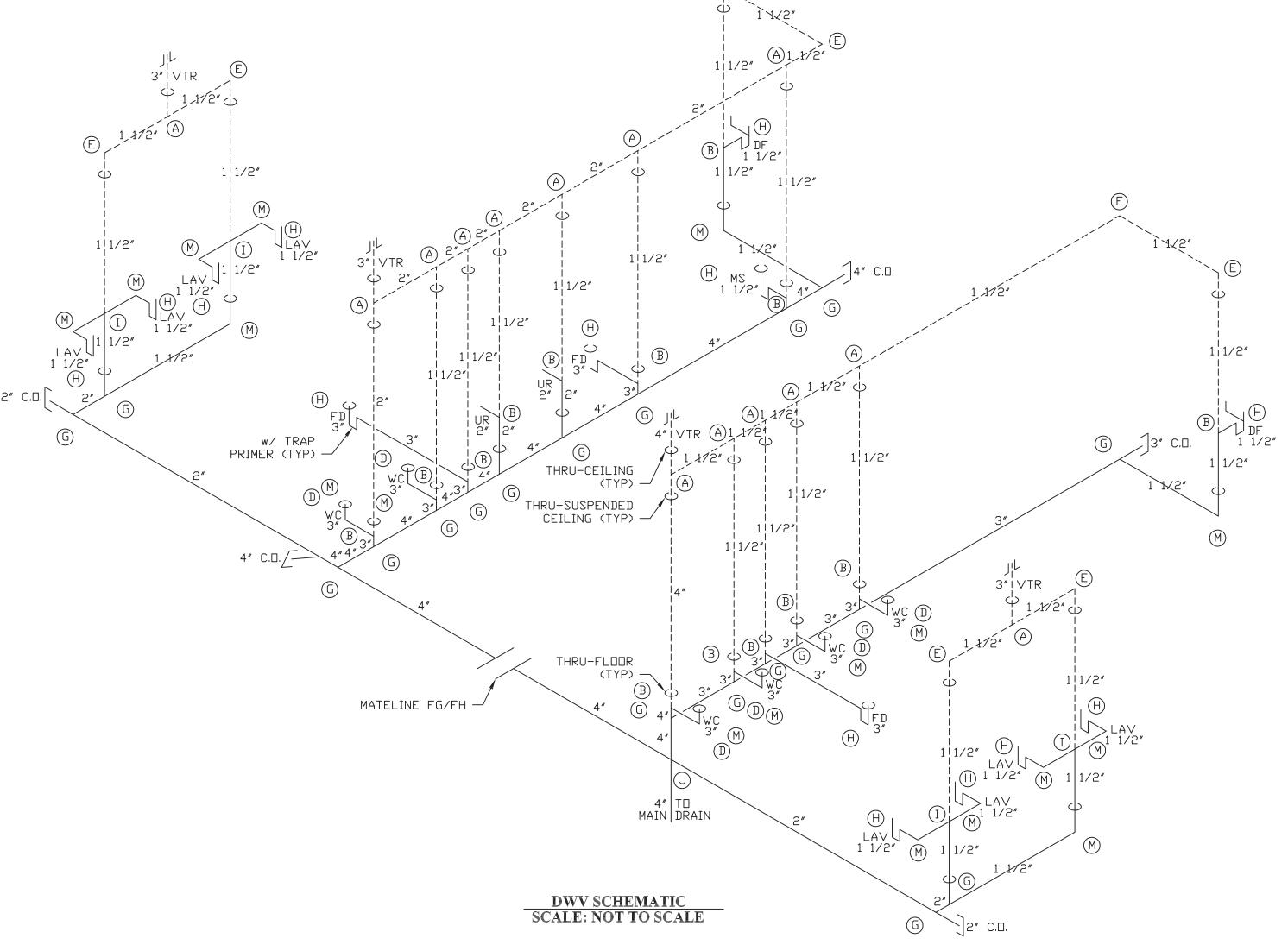
WATER COOLER © ELEC AND PLUMBING LOCATION SCALE: 1/2"=1'-0"

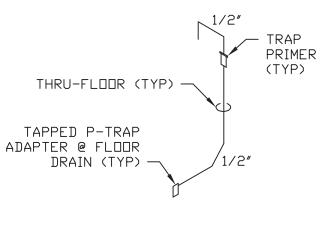
PLUMBING FIXTURES



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RONT,

B TRAP PRIMER DETAIL
SCALE: NTS

MARK	DESCRIPTION
А	VENT TEE
В	SANITARY TEE
С	
D	CLOSET FLANGE
E	VENT ELBOW
F	1/4 BEND ELBOW
G	LONG TURN TEE WYE
Н	P-TRAP
I	DOUBLE SANITARY TEE
J	DOUBLE LONG TURN TEE WYE
K	
1	FLBOW

LONG TURN 1/4 BEND

DWV FITTINGS

D	W	V	

1. DWV MATERIAL TO BE PER MATERILS LISTED IN THE SPECIFICATIONS

ALL PIPES TO BE SECURED AT 4' O.C.
 ALL CLEAN OUTS SHALL BE ACCESSIBLE. CLEAN OUTS
 TO BE PROVIDED AT THE BASE OF ALL WASTE AND SOIL
 STACKS, AND PLACED SO THAT ALL HORIZONTAL PIPING CAN BE

THAN 45° OF TURNS.

4. 1/4" PER 1' SLOPE PROVIDED ON ALL HORIZONTAL BRANCHES.

5. VENTS SHALL BE 3"ø, 12" ABOVE AND BELOW ROOF AND SHALL NOT

REACHED W/ A CLEANOUT TOOL W/O PASSING THROUGH MORE

BE LOCATED WITHIN 10' OF OTHER VENT OPENINGS.

6. ALL VERTICAL TO HORIZONTAL OR HORIZONTAL TO HORIZONTAL CHANGES OF DIRECTION SHALL BE THROUGH A LONG TURN TEE—WYE

OR COMBINATION WYE AND 1/8 BEND.

7. ALL HORIZONTAL TO VERTICAL CHANGES OF DIRECTION SHALL BE THROUGH A SANITARY TEE, OR IF AT THE SAME LEVEL ON VERTICAL STACK, THROUGH AN APPROVED DOUBLE FIXTURE FITTING.

Schedule

Exterior Site work Start-May 2026 End-August 2027

Phase 1 Start-May 2026 End-August 2026

Phase 2A Start-June 2026 End-June 2027

Phase 2B Start-June 2026 End-January 2027

Phase 3 Start-February 2027 End-April 2027 Phase 4 Start-April 2027 End-July 2027

Phase 5 Start- July 2027 End-September 2027

Phase 6 Start-August 2027 End-April 2028

Phase 7 Start-September 2027 End-December 2027 Phase 8
Start-December
2027
End-March 2028

Phase 9 Start-March 2028 End-June 2028

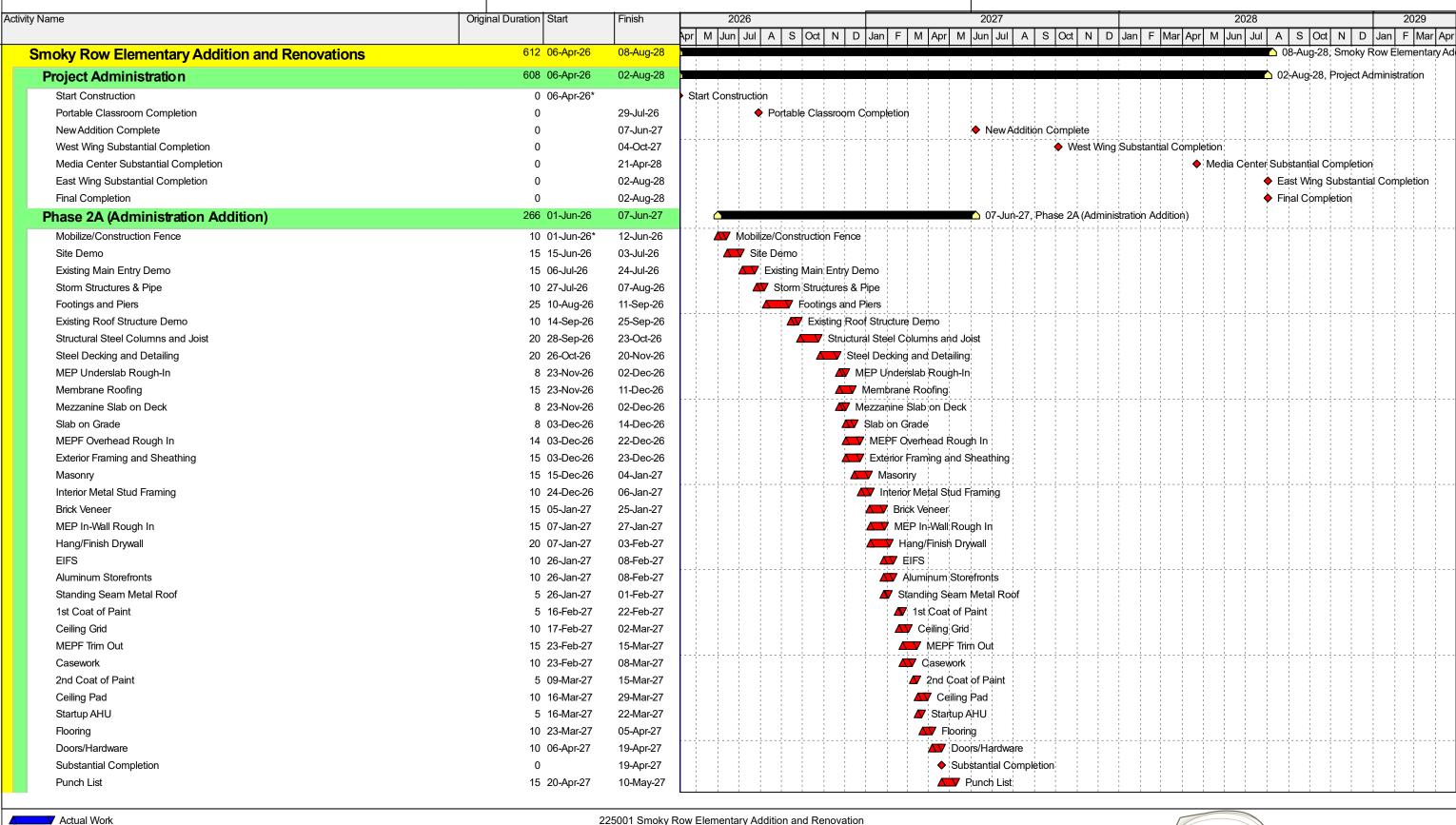
Phase 10 Start-May 2028 End-August 2028

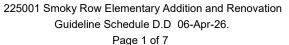
Phase 11 Start-May 2026 End-August 2028

West Playground Start-May 2027 End-August 2027

East Playground Start-May 2028 End-August 2028







Remaining Work

♦ Milestone
Summary

Critical Remaining Work





Guideline Schedule D.D 06-Apr-26.

Page 2 of 7

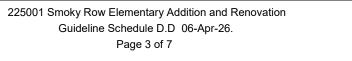


✓ Remaining Work

Critical Remaining Work

Activity N	ame	Original Duration Start	Finish	2026	2027	2028		2029	
	Owner Move In	3 04-Aug-26	06 445 20	Apr M Jun Jul A S Oct N D Jan F M Apr M	Jun Jul A S Oct N	D Jan F Mar Apr M Jun Jul A	S Oct N D	Jan F Mar	Apr
	Owner move in Phase 3	3 04-Aug-26 59 01-Feb-27	06-Aug-26 22-Apr-27		Apr-27, Phase 3				:
	Owner Move Out	3 01-Feb-27		Z Owner Move Ou					:
			03-Feb-27	L	1	·			<u> </u>
	Temporary Partitions	3 04-Feb-27	08-Feb-27						:
	MEPF Demo	5 09-Feb-27	15-Feb-27	△ MEPF Demo					:
	Selective Demo	5 16-Feb-27	22-Feb-27	ℤ Selective Del	mo				: 1
	Framing	6 23-Feb-27	02-Mar-27	Framing					:
	MEPF Rough-In	10 23-Feb-27	08-Mar-27	△ MEPF Rou	/T				<u> </u>
	Hang/Finish Drywall	6 23-Feb-27	02-Mar-27	A Hang/Finish					:
	1st Coat of Paint	3 09-Mar-27	11-Mar-27	✓ 1st Coat o					:
	Ceiling Grid	4 12-Mar-27	17-Mar-27	✓ Ceiling G					:
	MEPF Trim Out	5 12-Mar-27	18-Mar-27	△ MEPF Tri					: /
	Casework	5 18-Mar-27	24-Mar-27	△ Casewo	ork				:
	Ceiling Pad	5 19-Mar-27	25-Mar-27	✓ Ceiling I	Pad				
	2nd Coat of Paint	3 26-Mar-27	30-Mar-27	ℤ 2nd Co	oat of Paint				1
	Tackboards/Markerboards	5 31-Mar-27	06-Apr-27	△ Tackbo	oards/Markerboards				
	Flooring	6 07-Apr-27	14-Apr-27	⊿ Floor	ring				:
	Projectors/Monitors Technology Trim Out	3 15-Apr-27	19-Apr-27	⊿ Proj	ectors/Monitors Technology T	Trim Out	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
	Substantial Completion	0 20-Apr-27		♦ ;Sub	stantial Completion				
	Punch List	3 20-Apr-27	22-Apr-27	⊠ Pur	nch List				
	Owner Move In	2 20-Apr-27	21-Apr-27	▼ Owr	ner Move In				:
	Phase 4	60 20-Apr-27	12-Jul-27		12-Jul-27, Phase 4				
	Owner Move Out	1 20-Apr-27	20-Apr-27		ner Move Out				:
	Temporary Partitions	5 22-Apr-27	28-Apr-27	⊿ Tel	mporary Partitions				
	Selective Demo	9 29-Apr-27	11 - May-27		Selective Demo				
	MEPF Demo	5 29-Apr-27	05-May-27		/IEPF Demo				:
	Framing	5 12-May-27	18-May-27		Framing		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1
	MEPF Rough-In	7 12-May-27	20-May-27		MEPF Rough-In				:
	Hang/Finish Drywall	5 12-May-27	18-May-27		Hang/Finish Drywall				
	Hollow Metal Frames	3 12-May-27	14-May-27		Hollow Metal Frames				:
	1st Coat of Paint	3 21-May-27	25-May-27		1 1st Coat of Paint		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		i
	Ceiling Grid	5 26-May-27	01-Jun-27		Ceiling Grid				
	MEPF Trim Out	7 26-May-27	03-Jun-27		MEPF Trim Out				1
	Casework	5 02-Jun-27	08-Jun-27	 	Casework	i			; /
	Ceiling Pad	5 04-Jun-27	10-Jun-27		Ceiling Pad				:
	2nd Coat of Paint	3 11-Jun-27	15-Jun-27		✓ 2nd Coat of Paint				1 1
	Tackboards/Markerboards	3 16-Jun-27	18-Jun-27		✓ Tackboards/Markerboar				:
						ids			1
	Flooring	10 21-Jun-27	02-Jul-27	<u> </u>	Flooring				;
	Doors / Hardware	3 21-Jun-27	23-Jun-27		■ Doors / Hardware	<u> </u>			!
	Projectors/Monitors Technology Trim Out	2 05-Jul-27	06-Jul-27						1
	Substantial Completion		06-Jul-27*		Substantial Completi	tion			
	Punch List	2 07-Jul-27	08-Jul-27		Punch List				
	Owner Move In	2 09-Jul-27	12-Jul-27		Owner Move In				
	Phase 5	60 13-Jul-27	04-Oct-27		△ 04-Oct	t-27, Phase 5	1 1 1 1 1 1 1 1 1 1 1 1	1 1 1	1







ie	Original Duration Start	Finish	2026	2027	2028	
			Apr M Jun Jul A S Oct N E	D Jan F M Apr M Jun Jul A S Oct N D Jan	F Mar Apr M Jun Jul A S Oct N D Jan F	
Owner Move Out	3 13-Jul-27	15-Jul-27				
Temporary Partitions	5 13-Jul-27	19-Jul-27		Temporary Partitions		
Selective Demo	7 20-Jul-27	28-Jul-27		Selective Demo		
MEPF Demo	7 20-Jul-27	28-Jul-27		M EPF Demo		
Framing	5 29-Jul-27	04-Aug-27		// Framing		
MEPF Rough-In	7 29-Jul-27	06-Aug-27		MEPF Rough-In		
Hang/Finish Drywall	5 29-Jul-27	04-Aug-27		Hang/Finish Drywall		
Hollow Metal Frames	5 29-Jul-27	04-Aug-27		Mollow Metal Frames		
1st Coat of Paint	3 09-Aug-27	11-Aug-27		✓ 1st Coat of Paint		
Ceiling Grid	5 12-Aug-27	18-Aug-27		⊿ Ceiling Grid		
MEPF Trim Out	7 12-Aug-27	20-Aug-27		MEPF Trim Out		
Casework	5 19-Aug-27	25-Aug-27		✓ Casework		
Ceiling Pad	5 23-Aug-27	27-Aug-27		⊿ Ceiling Pad		
2nd Coat of Paint	3 30-Aug-27	01-Sep-27		☑ 2nd Coat of Paint		
Tackboards/Markerboards	4 02-Sep-27	07-Sep-27		✓ Tackboards/Markerb	bards	
Flooring	10 08-Sep-27	21-Sep-27		Flooring		
Doors / Hardware	3 08-Sep-27	10-Sep-27		Z Doors / Hardware		
Projectors/Monitors Technology Trim Out	2 22-Sep-27	23-Sep-27			s Technology Trim Out	
Substantial Completion	2 22-3ep-21	23-Sep-27*		◆ Substantial Comp		
Punch List	5 24-Sep-27	30-Sep-27		✓ Substantial Comp	ICION	
Owner Move In	5 24-5eμ-27 2 01-Oct-27	04-Oct-27				
Phase 6	2 01-0ct-27 229 08-Jun-27	21-Apr-28		Zy Owner wove in	21-Apr-28, Phase 6	
Move Out / Construction Area Set Up	10 08-Jun-27	21-Api-28 21-Jun-27		Move Out / Construction Area Se		
Make Safe / MEP Demo	10 00-3un-27 10 22-Jun-27	21-3un-27 05-Jul-27		Make Safe / MEP Demo	ж ор:	
Selective Demo	30 06-Jul-27	16-Aug-27		Selective Demo		
MEP Underslab Rough	50 00-3di-27 5 17-Aug-27	23-Aug-27		✓ Selective Dento		
Patch Floors	5 17-Aug-27 5 24-Aug-27	=		■ MEF Ortuelsiab Rough		
CMU / Metal Stud Walls	30 31-Aug-27	30-Aug-27		Patch Floors CMU / Metal S	4. d Mollo	
MEP Rough	30 31-Aug-27 15 12-Oct-27	11-Oct-27		MEP Rough		
-	10 02-Nov-27	01-Nov-27			Finish Drywalt / Patch Holes	
Hang and Finish Drywall / Patch Holes Prime / Block Fill	5 16-Nov-27	15-Nov-27 22-Nov-27		△V Prime /		
Full Phase Clean Up	5 16-Nov-27 5 16-Nov-27	22-Nov-27 22-Nov-27			se Clean Up	
1st Coat of Paint	0 23-Nov-27	22-Nov-27 23-Nov-27		▼ 1st Coa		
Wall Touch Up	5 23-Nov-27	29-Nov-27		△ Wal To	-	
2nd Coat of Paint	10 30-Nov-27	13-Dec-27			Coat of Paint	
Ceiling Grid	15 14-Dec-27	03-Jan-28			eiling Grid MEPF Trim Out	
MEPF Trim Out	15 04-Jan-28 10 04-Jan-28	24-Jan-28				
Casework		17-Jan-28			Casework	
Ceiling Pad	8 25-Jan-28	03-Feb-28			Ceiling Pad	
Flooring	15 04-Feb-28	24-Feb-28			Flooring:	
Tackboards/Markerboards	5 25-Feb-28	02-Mar-28				
Projectors/Monitors Technology Trim Out	5 25-Feb-28	02-Mar-28			Projectors/Monitors Technology Trim Out	
Construction Clean	5 25-Feb-28	02-Mar-28			△ Construction Clean	
Skillman Punch	10 03-Mar-28	16-Mar-28			Skillman Punch	

225001 Smoky Row Elementary Addition and Renovation

Guideline Schedule D.D 06-Apr-26.

Page 4 of 7

Remaining Work

♦ Milestone

Summary

Critical Remaining Work



lame	Original Duration Start	Finish 2026	2026	2027	2028	
			Apr M Jun Jul A S Oct N D Ja	an F M Apr M Jun Jul A S Oct N D	Jan F Mar Apr M Jun Jul A S Oct N	D Jan F
Substantial Completion (Tied to Start Phase 9)	0	16-Mar-28*			 Substantial Completion (Tied to Start F 	
Final Clean	5 17-Mar-28	23-Mar-28			△ Final Clean	
Punch List	15 24-Mar-28	13-Apr-28			Punch List	
Owner Move In	6 14-Apr-28	21-Apr-28			△ ✓ Owner Move (n	
Phase 7	60 05-Oct-27	27-Dec-27			27-Dec-27, Phase 7	
Move Out / Construction Area Set Up	5 05-Oct-27	11-Oct-27		△ Move Out	/ Construction Area Set Up	
Make Safe / MEP Demo	5 12-Oct-27	18-Oct-27		∆ Make Sat	e / MEP Demo	
Selective Demo	8 12-Oct-27	21-Oct-27		∆ Selective	Demo	
MEP Underslab Rough	4 19-Oct-27	22-Oct-27		⊿ MEP Un	derslab Rough	
Patch Floors	2 25-Oct-27	26-Oct-27		⊠ Patch Fl		
CMU / Metal Stud Walls	6 27-Oct-27	03-Nov-27		Δ∇ CMU/	Metal Stud Walls	
MEP Rough	6 27-Oct-27	03-Nov-27		∆ MEP R	ough	1 1 1
Hang and Finish Drywall / Patch Holes	5 04-Nov-27	10-Nov-27			and Finish Drywall / Patch Holes	
Prime / Block Fill	3 11-Nov-27	15-Nov-27			e / Block Fill	
Full Phase Clean Up	1 11-Nov-27	11-Nov-27			hase Clean Up	
1st Coat of Paint	0 12-Nov-27	12-Nov-27			pat of Paint	
Wall Touch Up	1 12-Nov-27	12-Nov-27		∑ Wal1		
2nd Coat of Paint	3 15-Nov-27	17-Nov-27			Coat of Paint	
Ceiling Grid	3 18-Nov-27	22-Nov-27		<u>A</u> √ Ceil		
Casework	4 18-Nov-27	23-Nov-27		△ Casi		
Tackboards/Markerboards	2 18-Nov-27	19-Nov-27			ework boards/Markerboards	
MEPF Trim Out	3 23-Nov-27	25-Nov-27			PF Trim Out	1 1 1
Projectors/Monitors Technology Trim Out	3 23-Nov-27 3 23-Nov-27	25-Nov-27 25-Nov-27			ectors/Monitors Technology Trim Out	
	4 24-Nov-27	29-Nov-27				
Flooring				∆7 Flo	oring iling Pad	
Ceiling Pad Construction Clean	3 26-Nov-27	30-Nov-27				
	1 30-Nov-27	30-Nov-27			nstruction Clean	
Skillman Punch	2 01-Dec-27	02-Dec-27			illman Punch	
Substantial Completion (Tied to Start Phase 9)	U 5 00 D 07	02-Dec-27			bstantial Completion (Ted to Start Phase 9)	
Final Clean	5 03-Dec-27	09-Dec-27			nal Clean	
Punch List	7 10-Dec-27	20-Dec-27			Punch List	! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! ! !
Owner Move In	5 21-Dec-27	27-Dec-27			Owner Move In	
Phase 8	60 28-Dec-27	20-Mar-28			20-Mar-28, Phase 8	
Owner Move Out	5 28-Dec-27	03-Jan-28			7 Owner Move Out	
Temporary Partitions	3 04-Jan-28	06-Jan-28			Temporary Partitions	
MEPF Demo	5 07-Jan-28	13-Jan-28			△ MEPF Demo	: : : : : : : : : : : : : : : : : : :
Selective Demo	5 14-Jan-28	20-Jan-28			✓ Selective Demo	
Framing	5 21-Jan-28	27-Jan-28			△ Framing	1 1 1
MEPF Rough-In	6 21-Jan-28	28-Jan-28			MEPF Rough-In	
Hang/Finish Drywall	5 21-Jan-28	27-Jan-28			△▼ Hang/Finish Drywall	1 1 1 1 1 1 1 1 1
1st Coat of Paint	4 31-Jan-28	03-Feb-28			☑ 1st Coat of Paint	
Ceiling Grid	6 04-Feb-28	11-Feb-28			△▼ Ceiling Grid	1 1 1 1 1 1 1 1 1
MEPF Trim Out	7 04-Feb-28	14-Feb-28			△▼ MEPF Trim Out	
Casework	5 14-Feb-28	18-Feb-28				1 1 1 1 1 1 1 1 1
Ceiling Pad	5 15-Feb-28	21-Feb-28			△ Ceiling Pad	

Actual Work

A Pemaining Work

Critical Remaining Work

Milestone

△ Summary

225001 Smoky Row Elementary Addition and Renovation Guideline Schedule D.D 06-Apr-26. Page 5 of 7



ity Name	Original Duration Start	Finish	2026	2027	2028 2029
., ,	- Ongaran Daranon Otan			Jun Jul A S Oct N D	
2nd Coat of Paint	5 22-Feb-28	28-Feb-28	**************************************		☑ 2nd Coat of Paint
Tackboards/Markerboards	3 29-Feb-28	02-Mar-28			
Flooring	5 03-Mar-28	09-Mar-28			△ Flooring
Projectors/Monitors Technology Trim Out	2 10-Mar-28	13-Mar-28			
Substantial Completion	0	13-Mar-28			♦ Substantial Completion
Punch List	3 14-Mar-28	16-Mar-28			
Owner Move In	2 17-Mar-28	20-Mar-28			
Phase 11 Boiler	54 01-Jun-26	13-Aug-26	13-Aug-26, Phase 11 Boiler		
Boiler Demo	10 01-Jun-26*	12-Jun-26	Boiler Demo		
Boiler Install	30 15-Jun-26	24-Jul-26	Boiler Install		
Pump Demo	10 15-Jun-26	26-Jun-26	Pump Demo		
Pump Install	10 27-Jul-26	07-Aug-26	Pump Install		
Electrial/TC Connections	5 27-Jul-26	31-Jul-26	✓ Electrial/TC Connections		
Test/Balance/Commissioning	4 10-Aug-26	13-Aug-26*	✓ Test/Balance/Commissioning	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Phase 9 (Art/Music/Kitchen)	83 10-Apr-28	02-Aug-28			02-Aug-28, Phase 9 (Art/Music/Kitch
Owner Move Out / Temp Walls	5 10-Apr-28*	14-Apr-28			
Selective Demo	15 17-Apr-28	05-May-28			△▽ Selective Demo
MEPF Demo	15 17-Apr-28	05-May-28			△ MEPF Demo
Interior CMU Walls	10 08-May-28	19-May-28			△▼ Interior CMU Walls
	·	_			
MEPF Rough-In	15 08-May-28	26-May-28			ΔΣ MEPF Rough-In
1st Coat of Paint	5 08-May-28	12-May-28			√⊠ 1st Coat of Paint
Concrete Slab for Walk In	7 08-May-28	16-May-28			△▼ Concrete Slab for Walk In
Ceiling Grid	5 15-May-28	19-May-28			△ Ceilling Grid
MEPF Trim Out	10 15-May-28	26-May-28			△▼ MEPF Trim Out
Wak In Box Instal	10 17-May-28	30-May-28			△ Wak In Box Instal
Kitchen Flooring	5 22-May-28	26-May-28			
Ceiling Pad	5 29-May-28	02-Jun-28			Ø Cèiling Pad
2nd Coat of Paint	5 05-Jun-28	09-Jun-28		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Resinous Flooring	10 12-Jun-28	23-Jun-28			△▼ Resinous Flooring
Acoustic Treatments	5 12-Jun-28	16-Jun-28			
Division 10-12 Specialties	5 12-Jun-28	16-Jun-28			
Kitchen Equiupment Install/Connections	15 26-Jun-28	14-Jul-28			Kitchen Equiupment Install/Connection
Technology Trim Out	3 26-Jun-28	28-Jun-28			
Substantial Completion	0	14-Jul-28			◆ Substantial Completion
Punch List	10 17-Jul-28	28-Jul-28			ANY Punch List
Owner Move In	3 31-Jul-28	02-Aug-28		1 1 1 1 1 1	☑ Owner Move In
Phase 10 (Existing Corridors/ Gym)	57 22-May-28	08-Aug-28			08-Aug-28, Phase 10 (Existing Con
Owner Move Out	2 22-May-28*	23-May-28			Owner Move Out
Selective Demo	8 24-May-28	02-Jun-28			△▼ Selective Demo
MEPF Demo	8 24-May-28	02-Jun-28			MEPF Demp
MEPF Rough-In	10 05-Jun-28	16-Jun-28			MEPF Rough-In
1st Coat of Paint	5 05-Jun-28	09-Jun-28			✓ 1st Coat of Paint
Ceiling Grid	5 12-Jun-28	16-Jun-28			✓ Ceiling Grid
MEPF Trim Out	10 12-Jun-28	23-Jun-28			△■▼ MEPF Trim Out

Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

225001 Smoky Row Elementary Addition and Renovation Guideline Schedule D.D 06-Apr-26. Page 6 of 7



ame	Original Duration Start	Finish	2026 2027 2028	2029
			Apr M Jun Jul A S Oct N D Jan F M Apr M Jun Jul A S Oct N D Jan F Mar Apr M Jun Jul A S Oct N D Ja	n F Ma
Ceiling Pad	10 26-Jun-28	07-Jul-28	△ Ceiling Pad	
2nd Coat of Paint	5 10-Jul-28	14-Jul-28	ℤ 2nd Coat of Paint	
Flooring	10 17-Jul-28	28-Jul-28	△ Flobring	
Division 10-12 Specialties	2 17-Jul-28	18-Jul-28	ℤ Division 10-12 Specialties	1 1
Technology Trim Out	2 31-Jul-28	01-Aug-28	▼ Technology Trim Out	1 1
Substantial Completion	0	01-Aug-28*	◆ Substantial Completion	
Punch List	5 02-Aug-28	08-Aug-28	☑ Punch List	
Owner Move In	5 02-Aug-28	08-Aug-28*	✓ Owner Move In:	
Phase 2B	175 01-Jun-26	29-Jan-27	29-Jan-27, Phase 2B	
Owner Move Out	15 01-Jun-26*	19-Jun-26	Owner Move Out	1 1
Temporary Partitions	10 22-Jun-26	03-Jul-26	▲▼ Temporary Partitions	1 1
MEPF Demo	15 06-Jul-26	24-Jul-26	△▼ MEPF Demo	
Selective Demo	20 27-Jul-26	21-Aug-26	Selective Demo	
Framing	10 24-Aug-26	04-Sep-26	△ Framing	
MEPF Rough-In	10 24-Aug-26	04-Sep-26	MEPF Rough-In	
Hang/Finish Drywall	15 24-Aug-26	11-Sep-26	Hang/Finish Drywall	
1st Coat of Paint	8 14-Sep-26	23-Sep-26	1st Coat of Paint	1 1
Ceiling Grid	15 24-Sep-26	14-Oct-26	Ceiling Grid	
MEPF Trim Out	10 24-Sep-26	07-Oct-26	△▼ MEPF Trim Out	: :
Ceiling Pad	10 08-Oct-26	21-Oct-26	Celling Pad	
Casework	5 15-Oct-26	21-Oct-26	I Casework	1 1
2nd Coat of Paint	10 22-Oct-26	04-Nov-26	2nd Coat of Paint	
Tackboards/Markerboards	3 05-Nov-26	09-Nov-26	☑ Tackboards/Markerboards	
Flooring	10 10-Nov-26	23-Nov-26	/ Flooring	1 1
Projectors/Monitors Technology Trim Out	10 24-Nov-26	07-Dec-26	Projectors/Monitors Te chnology Trim Out	
Cooridor Ceilings/Flooring/Finishes/MEPF Trim Out	20 30-Nov-26	25-Dec-26	Cooridor Ceilings/Flooring/Finishes/MEPF Trim Out	1 1
Substantial Completion	0	07-Dec-26*	◆ Substantial Completion	
Punch List	15 08-Dec-26	28-Dec-26	Punch List	
Doors/Hardware	10 28-Dec-26	08-Jan-27	△ Doors/Hardware	1 1
Final Cleaning	5 11-Jan-27	15-Jan-27	Final Cleaning	
Owner IT Move In	5 18-Jan-27	22-Jan-27	✓ Owner IT Move In	
Owner Move In	5 25-Jan-27	29-Jan-27	™ Owner Move In	





ADDENDUM NO. 1

Smoky Row Elementary School Additions and Renovations

Carmel Clay Schools Carmel, Indiana

Project No. 222033.00

Index of Contents

Addendum No. 1, 8 items, 3 pages

New Project Manual Section: 23 81 23 – Computer-Room Air-Conditioners and 27 51 21 – Music Room Sound System

Revised Project Manual Section: 06 42 00 – Wood Paneling, 23 09 00 – HVAC Direct Digital Controls, and 27 41 17 – Integrated AV Control System and Equipment

Revised Drawing Sheets: GD1.1, GD1.2, G1.1, G1.2, G1.3, SU1.3, CTE-GD1.0, CTE-L1.0, CTE-L1.1, CTE-L1.2, CTE-L1.3, CTE-L1.4, SRE-L1.00, SRE-L1.10, SRE-L1.20, SRE-L1.30, SRE-L1.40, S1.01, S1.04, AD0.03, AD0.04, A1.02, A1.03, A1.05, A2.01, A5.04, A5.08, A6.01, A7.01, A7.03, A7.07, A7.09, A7.10, A7S.01, A8.01, A8.02, A8.03, A8.06, A8.07, A8.08, A8.09, A8.10, A8.11, A8S.01, A9.03, A9.04, K1.03, K4.02, PD.04, P2.02, P2.03, P2.05, P2.07, P3.01, P4.02, MD1.01, MD1.02, MD1.03, MD1.04, M5.03, M5.05, ED.01, ED.02, ED.03, E3.03, E5.01, E5.02, E5.03, E8.01, and T1.01

December 19, 2025

I hereby certify that this Addendum was prepared by me or under my direct supervision and that I am a duly registered Architect/Engineer under the Laws of the State of Indiana.

FANNING/HOWEY ASSOCIATES, INC. ARCHITECTS/ENGINEERS/CONSULTANTS



Paul A. Miller, License No. AR10800161 Expiration Date: 12/31/2025

TO: ALL BIDDERS OF RECORD

ADDENDUM NO. 1 to Drawings and Project Manual, dated November 20, 2025, for the Smoky Row Elementary School Additions and Renovations for Carmel Clay Schools, 5201 E. Main St., Carmel, Indiana 46033; as prepared by Fanning/Howey Associates, Inc., Indianapolis, Indiana.

This Addendum shall hereby be and become a part of the Contract Documents the same as if originally bound thereto.

The following clarifications, amendments, additions, revisions, changes, and modifications change the original Contract Documents only in the amount and to the extent hereinafter specified in this Addendum.

Each bidder shall acknowledge receipt of this Addendum in his proposal or bid.

NOTE: Bidders are responsible for becoming familiar with every item of this Addendum. (This includes miscellaneous items at the very end of this Addendum.)

RE: ALL BIDDERS

ITEM NO. 1. PROJECT MANUAL, TABLE OF CONTENTS

- A. Book 3, DIVISION 23: Change name of 23 09 00 Instrumentation and Control for HVAC to "23 09 00 HVAC Direct Digital Controls".
- B. Book 3, DIVISION 23: Add Section 23 81 23 Computer-Room Air-Conditioners.
- C. Book 3, DIVISION 27: Add Section 27 51 21 Music Room Sound System.

ITEM NO. 2. NEW PROJECT MANUAL SECTIONS

A. New Project Manual Sections 23 81 23 – Computer-Room Air-Conditioners and 27 51 21 – Music Room Sound System are included with and hereby made a part of this Addendum.

ITEM NO. 3. REVISED PROJECT MANUAL SECTIONS

A. 06 42 00 – Wood Paneling, 23 09 00 – HVAC Direct Digital Controls, and 27 41 17 – Integrated AV Control System and Equipment have been revised, dated 12/19/25, and are included with and hereby made a part of this Addendum.

ITEM NO. 4. PROJECT MANUAL, SECTION 10 14 19 - DIMENSIONAL LETTER SIGNAGE

- A. Add 2.3, A., 8., as follows:
 - "8. Location: Exterior."
- B. Add 2.3, B., 6., as follows:
 - "6. Location: Interior."

ITEM NO. 5. PROJECT MANUAL, SECTION 10 28 00 - TOILET, BATH, AND LAUNDRY ACCESSORIES

A. Delete 2.4, C., in its entirety.

ITEM NO. 6. PROJECT MANUAL, SECTION 11 40 00 - FOOD SERVICE EQUIPMENT

A. Article 3.09, Item No. 1: Replace Floor Construction Paragraph with the following:

"Floor Construction: Floor panel construction shall be prefabricated, insulated sections. General Contractor to install and level 4 inch concrete floor topping over prefabricated insulated floor panels to be flush with kitchen floor slab. Finish interior of cooler/freezer to be sealed concrete. KEC is to provide and install a stainless-steel coved base."

ITEM NO. 7. PROJECT MANUAL, SECTION 12 93 00 - SITE FURNISHINGS AND AMENITIES

- A. Add 1.2, 6., as follows:
 - "6. Removal of existing wood seating and table tops and installation of new polyurethane plank boards on existing steel bench and picnic table frames."
- B. Add Article 2.10 and 2.11 as follows:

"2.10 POLYURETHANE PLANKS

- A. Material: Solid polyurethane or polyurethane-based composite formulated for exterior exposure. Uv-stabilized, non-chalking, non-splintering, and resistant to rot, decay, insects, and moisture.
 - 1. Water absorption:</= 1% by weight (24 hours).
 - 2. Compressive Strength: Suitable for seating applications as recommended by manufacturer.
 - 3. Size: Thickness and width to match existing wood slats, minimum, or as indicated on Drawings. Lengths to match existing spans with minimal joints.
 - 4. Color: As selected by Owner from manufacturer's standard color range.
 - 5. Finish: Slightly textured, slip-resistant, edges eased or radiused for comfort.

2.11 EXISTING STEEL FRAMES

- A. Existing steel bench and picnic table frames shall remain and reused where indicated on Drawings.
- B. Repair and surface preparation:
 - 1. Rust-inhibitive primer compatible with existing coatings.
 - 2. Provide matching topcoat system for spot repairs, color to match existing as approved by Owner."
- C. Add 3.2, F., G., H., I., J., K., and L., as follows:
 - "F. Remove existing wood table tops, bench seats, and back slats, including all fasteners and hardware.
 - G. Clean steel frames, remove loose rust, peeling paint, and debris.
 - H. Spot prime exposed bare metal and touch-up with matching topcoat in accordance with paint manufacturer's recommendations.
 - I. Install boards in accordance with manufacturer's written instructions and approved shop drawings.
 - J. Align boards with consistent overhangs and uniform gaps between boards, typicallys 1/8 inch to 1/4 inch, unless otherwise recommended by manufacturer.

K. Fastening:

- 1. Pre-drill all fastener holes in boards where required by manufacturer.
- 2. Attach boards to existing steel frames with specified stainless steel through-bolts, lock washers, and lock nuts.
- 3. Tighten fasteners to secure boards firmly without distorting the material.

L. Tolerances:

- 1. Surface Deviation: Maximum 1/8 inch in 4 feet in any direction.
- 2. Maintain consistent seating and table heights across all retrofitted units."

ITEM NO. 8. REVISED DRAWING SHEETS

A. Drawing Sheets: GD1.1, GD1.2, G1.1, G1.2, G1.3, SU1.3, CTE-GD1.0, CTE-L1.0, CTE-L1.1, CTE-L1.2, CTE-L1.3, CTE-L1.4, SRE-L1.00, SRE-L1.10, SRE-L1.20, SRE-L1.30, SRE-L1.40, S1.01, S1.04, AD0.03, AD0.04, A1.02, A1.03, A1.05, A2.01, A5.04, A5.08, A6.01, A7.01, A7.03, A7.07, A7.09, A7.10, A7S.01, A8.01, A8.02, A8.03, A8.06, A8.07, A8.08, A8.09, A8.10, A8.11, A8S.01, A9.03, A9.04, K1.03, K4.02, PD.04, P2.02, P2.03, P2.05, P2.07, P3.01, P4.02, MD1.01, MD1.02, MD1.03, MD1.04, M5.03, M5.05, ED.01, ED.02, ED.03, E3.03, E5.01, E5.02, E5.03, E8.01, and T1.01 have been revised, dated 12/19/25, and is included with and hereby made a part of this Addendum. These Drawings supersede the original documents.

END OF ADDENDUM

SECTION 23 81 23 - COMPUTER-ROOM AIR-CONDITIONERS

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following types of computer-room air-conditioning units:
 - 1. Floor-mounting units 6 tons and larger.
 - 2. Floor-mounting units 5 tons and smaller.
 - 3. Ceiling-mounting units.
 - 4. Console units.

1.2 ACTION SUBMITTALS

- A. Product Data: Include rated capacities, operating characteristics, furnished specialties, and accessories.
- B. Shop Drawings: Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 1. Wiring Diagrams: Power, signal, and control wiring.

1.3 INFORMATIONAL/QUALITY ASSURANCE/CONTROL SUBMITTALS

- A. Manufacturer Seismic Qualification Certification: Submit certification that computer-room air-conditioning units, accessories, and components will withstand seismic forces defined in Division 23 Section "Vibration and Seismic Controls for HVAC Piping and Equipment." Include the following:
 - 1. Basis for Certification: Indicate whether withstand certification is based on actual test of assembled components or on calculation.
 - a. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified."
 - b. The term "withstand" means "the unit will remain in place without separation of any parts from the device when subjected to the seismic forces specified and the unit will be fully operational after the seismic event."
 - 2. Dimensioned Outline Drawings of Equipment Unit: Identify center of gravity and locate and describe mounting and anchorage provisions.
 - 3. Detailed description of equipment anchorage devices on which the certification is based and their installation requirements.
- B. Field quality-control test reports.
- C. Warranties: Special warranties specified in this Section.

1.4 CLOSEOUT DOCUMENTS

- A. General: Closeout Submittals are to be submitted with O and M Manuals only. Do not submit with other ACTION and INFORMATIONAL Submittals:
 - 1. Operation and Maintenance Data: For computer-room air-conditioning units to include in emergency, operation, and maintenance manuals.

1.5 QUALITY ASSURANCE

- A. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- B. Fabricate and label refrigeration system to comply with ASHRAE 15, "Safety Code for Mechanical Refrigeration."

- C. Energy-Efficiency Ratio: Equal to or greater than prescribed by ASHRAE/IESNA 90.1, "Energy Efficient Design of New Buildings except Low-Rise Residential Buildings."
- D. Coefficient of Performance: Equal to or greater than prescribed by ASHRAE/IESNA 90.1, "Energy Efficient Design of New Buildings except Low-Rise Residential Buildings."
- E. ASME Compliance: Fabricate and label water-cooled condenser shell to comply with ASME Boiler and Pressure Vessel Code: Section VIII, "Pressure Vessels," Division 01.
- F. Units shall be designed to operate with HCFC-free refrigerants.

1.6 COORDINATION

- A. Coordinate layout and installation of computer-room air-conditioning units and suspension system with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression system, and partition assemblies.
- B. Coordinate installation of computer-room air-conditioning units with computer-room access flooring Installer.
- C. Coordinate installation of roof curbs, equipment supports, and roof penetrations. These items are specified in Division 07 Section "Roof Accessories."

1.7 WARRANTY

- A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of computer-room air-conditioning units that fail in materials or workmanship within specified warranty period.
- B. Warranty Period for Unit: Manufacturer's standard, but not less than five years from date of Substantial Completion.

1.8 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Fan Belts: One set for each belt-drive fan.
 - 2. Filters: One set of filters for each unit.

PART 2 - PRODUCTS

2.1 FLOOR-MOUNTING UNITS 5 TONS AND SMALLER

- A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
 - 1. Carrier Corp.
 - 2. Compu-Aire, Inc.
 - 3. Data Aire Inc.
 - 4. IPAC. Inc.
 - Koldwave/Mestek.
 - 6. Liebert Corporation.
 - 7. McQuay International.
 - 8. Pomona Air.
 - 9. Stulz Investment Corp. of America.
 - 10. Trane Company (The); North American Commercial Group.
 - 11. Samsung
- B. Basis-of-Design Product: Subject to compliance with requirements, provide the product indicated on Drawings or a comparable product by one of the following:
 - Carrier Corp.

- 2. Compu-Aire, Inc.
- 3. Data Aire Inc.
- 4. IPAC. Inc.
- Koldwave/Mestek.
- 6. Liebert Corporation.
- 7. McQuay International.
- 8. Pomona Air.
- 9. Stulz Investment Corp. of America.
- 10. Trane Company (The); North American Commercial Group.
- 11. Samsung
- C. Description: Self-contained, factory assembled, prewired, and prepiped; consisting of cabinet, fan, filters, and controls; for vertical floor mounting in upflow or downflow configuration.
- D. Cabinet: Welded tubular-steel frame with removable steel panels with baked-enamel finish, insulated with 1-inch thick duct liner.
 - Floor Stand: Welded tubular steel.
- E. Evaporator Fan: Forward curved, centrifugal, with adjustable V-belt drive.
 - 1. Motor: Comply with requirements in Division 23 Section "Common Motor Requirements for HVAC Equipment."
 - a. Noise Rating: Quiet.
- F. Compressor: Hermetic, with oil strainer, internal motor overload protection, resilient suspension system, and crankcase heater.
 - 1. Refrigeration Circuit: Low-pressure switch, manual-reset high-pressure switch, thermalexpansion valve with external equalizer, sight glass with moisture indicator, service shutoff valves, charging valves, and charge of refrigerant.
- G. Evaporator Coil: Direct-expansion cooling coil of seamless copper tubes expanded into aluminum fins, with two circuits, each with solenoid valve. Mount coil assembly over stainless-steel drain pan having a condensate pump unit with integral float switch, pump-motor assembly, and condensate reservoir.
- H. Air-Cooled Condenser: Integral copper-tube aluminum-fin coil with centrifugal fan, direct driven.
 - Split system shall have suction- and liquid-line compatible fittings and refrigerant piping for field interconnection.
- I. Glycol Cooling Coil: Seamless copper tubes expanded into aluminum fins with three-way control valve.
- J. Electric-Resistance Heating Coil: Finned-tube electric elements with contactor and high-temperature-limit switches.
- K. Filter: 2-inch thick, disposable, glass-fiber media with 30 percent dust-spot efficiency.
- L. Infrared Humidifier: High-intensity quartz lamps mounted above stainless-steel evaporator pan, serviceable without disconnecting water, drain, or electrical connections; prepiped and located in bypass airstream; with flush-cycle timer and solenoid drain valve.
- M. Electrode Steam Humidifier: Self-contained, microprocessor-controlled unit with disposable, polypropylene-plastic cylinders and having field-adjustable steel electrodes and stainless-steel steam dispersion tube.
 - 1. Plumbing Components and Valve Bodies: Plastic, linked by flexible rubber hosing, with water fill with air gap and solenoid valve incorporating built-in strainer, pressure-reducing and flow-regulating orifice, and drain with integral air gap on drain.
 - 2. Control: Fully modulating to provide gradual 0 to 100 percent capacity with field-adjustable maximum capacity; with high-water probe.
 - 3. Drain Cycle: Field-adjustable drain duration and drain interval.

- N. Remote Glycol Cooler: Corrosion-resistant cabinet, copper-tube aluminum-fin coil, direct-drive propeller fan with fan guards, and single-phase motors with internal overload protection.
- O. Glycol Pump Package: Weatherproof and vented enclosure of enameled, galvanized steel on structural base frame containing centrifugal pump with mechanical seal.
 - 1. Piping: Interconnecting piping, from suction to discharge, with shutoff valves, flow switches, unions, and pressurized expansion tank with air purge vent and system-charging connection.
- P. Control System: Unit-mounted panel with main fan contactor, compressor contactor, compressor start capacitor, control transformer with circuit breaker, solid-state temperature- and humidity-control module, humidity contactor, time-delay relay, reheat contactor, and high-temperature thermostat. Provide solid-state, wall-mounting control panel with start-stop switch, adjustable humidity set point, and adjustable temperature set point.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install computer-room air-conditioning units level and plumb, maintaining manufacturer's recommended clearances. Install according to ARI Guideline B.
- B. Curb Support: Install and secure roof-mounting units on curbs and coordinate roof penetrations and flashing with roof construction. Secure units to curb support with anchor bolts.
- C. Install suspended components level. Coordinate wall penetrations and flashing with wall construction. Secure units to structural support with anchor bolts.
- D. Install air-cooled condenser on rubber-in-shear vibration isolators.
- E. Install remote glycol cooler on rubber-in-shear vibration isolators.
- F. Install glycol pump package on rubber-in-shear vibration isolators.
- G. Install floor-mounting units on bases designed to withstand, without damage to equipment, seismic forces required by code.
- H. Support suspended units from structure using threaded steel rods and elastomeric or spring hanger having 1-inch deflection. Vibration-control devices and installation requirements are specified in Division 23 Section "Vibration and Seismic Controls for HVAC Piping and Equipment."

3.2 CONNECTIONS

- A. Piping installation requirements are specified in other Division 23 Sections. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Install piping adjacent to machine to allow service and maintenance.
- C. Water and Drainage Connections: Comply with applicable requirements in Division 23 Section "Domestic Water Piping." Provide adequate connections for water-cooled units, condensate drain, and humidifier flushing system.
- D. Hot-Water Heating Piping: Comply with applicable requirements in Division 23 Section "Hydronic Piping." Provide shutoff valves in inlet and outlet piping to reheat coils.
- E. Steam and Condensate Piping: Comply with applicable requirements in Division 23 Section "Steam and Condensate Heating Piping." Provide shutoff valves in steam inlet and steam trap in condensate outlet piping to heating coils.

- F. Condenser-Water Piping: Comply with applicable requirements in Division 23 Section "Hydronic Piping." Provide shutoff valves in water inlet and outlet piping on water-cooled units.
- G. Refrigerant Piping: Comply with applicable requirements in Division 23 Section "Refrigerant Piping." Provide shutoff valves and piping.
- H. Electrical System Connections: Comply with applicable requirements in Division 26 Sections for power wiring, switches, and motor controls.
- I. Ground equipment according to Division 26 Section "Grounding and Bonding for Electrical Systems."
- J. Tighten electrical connectors and terminals according to manufacturer's published torquetightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

3.3 FIELD QUALITY CONTROL

- A. Manufacturer's Field Service: Engage a factory-authorized service representative to inspect, test, and adjust field-assembled components and equipment installation, including connections, and to assist in field testing. Report results in writing.
- B. Perform the following field tests and inspections and prepare test reports:
 - 1. Inspect for and remove shipping bolts, blocks, and tie-down straps.
 - 2. After installing computer-room air-conditioning units and after electrical circuitry has been energized, test for compliance with requirements.
 - 3. Operational Test: After electrical circuitry has been energized, start units to confirm proper motor rotation and unit operation.
 - 4. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

3.4 STARTUP SERVICE

- A. Engage a factory-authorized service representative to perform startup service.
- B. Verify that computer-room air-conditioning units are installed and connected according to manufacturer's written instructions and the Contract Documents.
- C. Verify that electrical wiring installation complies with manufacturer's submittal and installation requirements in Division 26 Sections.
- D. Complete installation and startup checks according to manufacturer's written instructions.
- E. After startup service and performance test, change filters and flush humidifier.

3.5 ADJUSTING

- A. Adjust initial temperature and humidity set points.
- B. Set field-adjustable switches and circuit-breaker trip ranges as indicated.

3.6 DEMONSTRATION

A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain computer-room air-conditioning units. Refer to Division 01 Section "Demonstration and Training."

END OF SECTION 23 81 23

SECTION 27 51 21 – MUSIC ROOM AUDIO SYSTEM

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This section includes, but is not limited to:
 - 1. Mic/Audio Input Panel
 - 2. Media Player
 - 3. Mixer/Amplifier
 - 4. Audio Processor
 - 5. Amplifier
 - 6. Speakers
 - 7. Miscellaneous items such as cables, brackets, connectors, etc.
- B. Related sections include the following:
 - 1. Division 01, General Requirements
 - 2. Division 27. Communications

1.3 QUALITY ASSURANCE

- A. The Projector Audio System Contractor shall have minimum of 2 years experience in the installation of this type of system.
- B. Provide labeling per ANSI/EIA/TIA-606 requirement and in accordance with the Owner and Technology Consultant.

1.4 CODE

- A. Must meet Federal Communications standards.
- B. Must meet National Fire Protection Association standards.
- C. Must meet National Electrical Code.
- D. Must be UL listed.
- E. Americans with Disabilities Act.
- F. Latest edition of the Telecommunications Distribution Methods Manual (TDMM).

1.5 WARRANTY

- A. Components, parts, and assemblies supplied by the Projector Audio System Contractor shall be warranted against defects in materials and workmanship for a period as specified in Specification Section 270111 - Demonstration, Training and Warranty for Communications Systems.
- B. All repairs shall be completed by a Factory-Trained Certified Service Technician.

1.6 SUBMITTALS

- A. Provide product data and drawings for the following:
 - 1. Mic/Audio Input Panel
 - 2. Media Player
 - 3. Mixer/Amplifier
 - 4. Audio Processor
 - 5. Amplifier
 - 6. Speakers
 - 7. Miscellaneous items such as cables, brackets, connectors, etc.
 - 8. Cabling interconnection drawings
- B. See front end submittals section for more information.
- C. See Specification Section 270500 Common Work Results for Communications Section for additional submittal requirements.

1.7 OWNER INSTRUCTION

A. Provide training and operating instructions as required in Specification Section 270111 – Demonstration, Training and Warranty of Communications Systems.

1.8 RECORD/OPERATION AND MAINTENANCE MANUAL

A. Provide record drawings and operation and maintenance manuals, as required in Specification Section 270100 – Operation and Maintenance of Communications Systems and Specification Section 270500 - Common Work Results for Communications Systems.

PART 2 - PRODUCTS

- 2.1 MIC/AUDIO INPUT PANEL
 - A. 1 RU 8-Channel Rack Panel
 - B. 8 Neutrik panel connectors custom configured
 - C. Approved Manufacturer:
 - 1. Liberty
 - 2. Pro Audio LA
 - 3. Approved Equal

2.2 MEDIA PLAYER WITH BLUETOOTH

- A. Bluetooth 5.0 pairing
- B. Slot-loading CD transport
- C. USB host port for file playback
- D. 3.5mm AUX input for playback from portable players
- E. Compact IR remote control included
- F. Balanced (XLR) and unbalanced (RCA) outputs
- G. Basis of Design:
 - 1. Denon DN-500CB

2.3 MICROPHONE AND AUDIO MIXER

- A. 6 HDHQ™ Combination inputs with MIC, Phantom and Line selector switches
- B. 6 mono (3 stereo) RCA Inputs
- C. Mic monitor 1/4" output for private listening of all mic inputs
- D. Balanced XLR line outputs
- E. Mono 1/4" line output can be used to feed audio to external recording device
- F. Basis of Design:
 - 1. Denon DN-312X.

2.4 AUDIO PROCESSOR

- A. Analog Input Channels: 2
- B. Analog Output Channels: 6
- C. AD Converters: 24 Bit @ 48 kHz 118 dBA Dynamic Range
- D. DA Converters: 24 Bit @ 48 kHz 118 dBA Dynamic Range
- E. Internal Precision: 32 Bit, 64 Bits Double Precision
- F. Latency: 1 MS
- G. Delay: 50ms per input / 135ms per output
- H. Equalizer: Bell, Lo/Hi-Shelving, Hos
- I. Basis of Design:
 - 1. D.A.S. Audio INTEGRAL-M26X

2.5 AUDIO AMPLIFIER

- A. Extremely low noise, convection cooled
- B. Extensive protection circuitry including output overcurrent protection,
- C. DC output protection, main supply rail overvoltage protection,
- D. internal chassis temperature monitoring, in-rush limiting and mains fuse
- E. Level attenuators with level control
- F. Signal present and clip alert status LEDs
- G. 2-channel versions have a stereo headphone jack
- H. Basis of Design:
 - 1. Ashly SRA-4150

- 2.6 CEILING LOUDSPEAKERS (Provide Quantity Shown on Drawings)
 - A. Full range ceiling loudspeaker for installation applications
 - B. 90 Watts continuous, 360 Watts peak power
 - C. Next generation 8" Dual Concentric driver featuring Omni magnet technology
 - D. UL 1480 certified for general signaling systems
 - E. UL 2043 certified for air-handling spaces
 - F. Multiple transformers taps for 70 V and 100 V line systems or 16 Ohm direct input when used with the optional CMS 603 PI BACKCAN.
 - G. Basis of Design:
 - 1. Tannoy CMS-803DC-PI

2.7 CABLES

- A. Speaker cable shall be #20 AWG, unshielded, UL listed, ASTM bare copper, polymer alloy insulation, with a flexible plenum rated jacket.
- B. Approved Manufacturer:
 - 1. West Penn Model 25226B
 - 2. Belden
 - 3. Ortronic
 - 4. Berktek

2.8 LOOSE MATERIAL

- A. Ensemble Microphone (Quantity 2)
 - Approved Manufacturer:
 - a. Shure Model SM81 series.
 - b. AKG Acoustics C1000S-series.
 - c. Electro-Voice, Inc. RE510 series
 - d. Sennheiser Electronic Corporation.
 - e. Audio-Technicam AE5100 series
 - 2. Provide ensemble microphone, as follows:
 - a. Unidirectional condenser microphone.
 - b. Steel construction with stainless steel hardware.
 - c. Balanced, transformer coupled, male XLR-type connector.
 - d. Frequency Response: 20 to 20,000 Hz.
 - e. Rated Impedance: 150 ohms.
 - f. Signal-to-Noise Ration: 78 dB at 98 dB SPL.
 - g. Sensitivity at 1000 Hz: Minus 45 dBV per Pascal.
 - h. Clipping Level at 1000 Hz: Minus 4 dBV into 800 ohm load.
 - i. Total Harmonic Distortion: Less than 0.5 percent (131 dB SPL at 250 Hz into 800 ohm load.)
 - j. Storage case.
 - 3. Accessories
 - a. Windscreen
 - b. Cable
 - c. Snap in stand clamp.
 - d. Floor stand with boom arm

2.9 WIRELESS MICROPHONES

- A. Approved Manufacturer:
 - 1. Shure Model ULXS124/85 series
 - 2. Audio Technica, 3000 series
 - 3. Sennheiser Electronic Corporation, G2 300 series
 - 4. Telex Communications, Inc. FMR500L w/WT60 belt packs etc.
 - 5. EVI FMR-500HL/FMR-500 series
- B. Provide combination wireless systems as follows:
 - Professional wireless receivers.
 - 2. Wireless body pack transmitter.
 - 3. Cardioids microphone.
 - 4. Lavaliere condenser microphone.
 - 5. Provide one receiver and transmitter for each microphone.
 - 6. Systems in the 600 MHz service band are not acceptable.

2.10 MOBILE EQUIPMENT RACK

- A. Depth 27.37 in (69.5 cm)
- B. Height 26.95-42.03 in (68.45-106.76 cm)
- C. Panel Width 19 in (48.3 cm)
- D. Rack Units 12 RU
- E. UL Load Capacity 250 lbs (113.4 kg)
- F. Usable Depth 23.19 in (58.9 cm)
- G. Usable Height 21.16-35.16 in (53.75-89.31 cm)
- H. Width 22.63 in (57.5 cm)
- I. Basis of Design:
 - Middle Atlantic MFR-1227GE

PART 3 - EXECUTION

3.1 INSTALLATION

- A. The classroom projector shall be integrated into the audio system and shall be installed by a trained technician.
- B. The audio system shall be installed in accordance with the manufacturer's recommendations.
- C. The audio system shall be connected to the video display devices in the room with patch cords furnished by this contractor.
- D. Tap the speakers at 4 watts or as recommended by the manufacturer.
- E. Provide surface raceways, junction boxes, fittings, patch cords, conduits required for a complete installation.
- F. This Contractor shall be responsible for cutting ceiling tile to install the projector audio system speakers. Coordinate with the Ceiling Contractor.
- G. Provide audio system in the Music Room as shown on the drawings.

3.2 CLEANUP

A. After the audio system is installed and tested, all the unused material and debris must be removed from the area.

END OF SECTION 27 51 21

SECTION 06 42 00 - WOOD PANELING

PART 1 - GENERAL

1.1 SUMMARY

- A. This Section includes the following Wood Walls:
 - 1. Tongue and Groove Wood Cladding System
 - a. Wood trim and accessories.
 - b. Installation on walls and millwork assemblies.
 - 2. Shop finishing of wood panels.
 - 3. Wood furring, blocking, shims, and hanging strips for installing flush wood paneling unless concealed within other construction before paneling installation.
- B. Related Sections include the following:
 - 1. Division 06 Section "Rough Carpentry" for wood furring, blocking, shims, and hanging strips required for installing paneling and that are concealed within other construction before paneling installation.

1.2 DEFINITIONS

A. Paneling includes wood furring, blocking, and shims for installing paneling, unless concealed within other construction before paneling installation.

1.3 COORDINATION

A. Coordinate sizes and locations of framing, blocking, furring, reinforcements, and other related units of Work specified in other Sections to ensure that paneling can be installed as indicated.

1.4 PREINSTALLATION MEETINGS

A. Preinstallation Meeting: Conduct meeting at Project site.

1.5 ACTION SUBMITTALS

- A. Product Data: For panel products, trim, installation accessories, and finishing materials and processes.
- B. Shop Drawings: Show location of paneling, large-scale details, attachment devices, and other components. Include dimensioned plans and elevations.
 - Show details full size.
 - 2. Show locations and sizes of furring and blocking, including concealed blocking specified in other Sections.
 - 3. For paneling produced from premanufactured sets, show finished panel sizes, set numbers, sequence numbers within sets, and method of cutting panels to produce indicated sizes.
 - 4. For paneling veneered in fabrication shop, show veneer leaves with dimensions, grain direction, exposed face, and identification numbers indicating the flitch and sequence within the flitch for each leaf.

C. Samples for Verification:

- 1. Lumber with or for transparent finish, not less than 5 inches wide by 8 inches long, for each species and cut, finished on 1 side and 1 edge.
- 2. Veneer-faced panel products with or for transparent finish, 8 by 10 inches, for each species and cut. Include at least one face-veneer seam and finish as specified.

1.6 QUALITY ASSURANCE

- A. Source Limitations: Engage a qualified woodworking firm to assume undivided responsibility for production of paneling and interior architectural wood work.
- B. Quality Standard: Unless otherwise indicated, comply with AWI's "Architectural Woodwork Quality Standards" for grades of paneling indicated for construction, finishes, installation, and other requirements.
- C. Composite wood products shall be labeled or show compliance with the Toxic Substances Control Act (TSCA) Title VI.
- D. Mockups: Build mockups to verify selections made under sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver paneling until painting and similar operations that could damage paneling have been completed in installation areas. If paneling must be stored in other than installation areas, store only in areas where environmental conditions comply with requirements specified in "Project Conditions" Article.

1.8 FIELD CONDITIONS

- A. Environmental Limitations: Do not deliver or install paneling until building is enclosed, wet work is complete, and HVAC system is operating and will maintain temperature and relative humidity at occupancy levels during the remainder of the construction period.
- B. Field Measurements: Where paneling is indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication and indicate measurements on Shop Drawings. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
 - 1. Locate concealed framing, blocking, and reinforcements that support paneling by field measurements before being enclosed and indicate measurements on Shop Drawings.
 - 2. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating paneling without field measurements. Provide allowance for trimming at site, and coordinate construction to ensure that actual dimensions correspond to established dimensions.
- C. Do not install materials that are wet, moisture damaged, or mold damaged.
 - 1. Indications that materials are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that materials are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. In other Part 2 articles where titles below introduce lists, the following requirements apply to product selection:
 - 1. **Tongue and Groove Wood Cladding System Manufacturers**: Subject to compliance with requirements, provide products by one of the following:
 - a. Windfall Architectural Products

B. Products of other manufacturers will be considered for acceptance provided they equal or exceed the material requirements and functional qualities of the specified product. The "Substitution Request Form" and complete technical data for evaluation must accompany requests for A/E's approval. All materials for evaluation must be received by the Project Manager and Specification Department at least 10 days prior to bid due date. Additional approved manufacturers will be issued by Addendum.

2.2 MATERIALS

- A. General: Provide materials that comply with requirements of AWI's quality standard for quality grade specified, unless otherwise indicated.
 - 1. Provide from AWI certification program indicating that paneling, including installation, complies with requirements of grades specified.
 - 2. The Contract Documents may contain selections chosen from options in the quality standard and additional requirements beyond those of the quality standard. Comply with those selections and requirements in addition to the quality standard.
- B. Wood Products: Comply with the following:
 - 1. Medium-Density Fiberboard: ANSI A208.2, Grade 130.
 - 2. Particleboard: ANSI A208.1, Grade M-2.
 - 3. Softwood Plywood: DOC PS 1, Medium Density Overlay.
 - 4. Veneer-Faced Panel Products (Hardwood Plywood): HPVA HP-1, made with adhesive containing no urea formaldehyde.
- C. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with applicable rules of any rules-writing agency certified by the American Lumber Standard Committee's (ALSC) Board of Review. Grade lumber by an agency certified by the ALSC's Board of Review to inspect and grade lumber under the rules indicated.
 - NeLMA: Northeastern Lumber Manufacturer's Association, "Standard Grading Rules for Northeastern Lumber".
 - 2. NHLA: National Hardwood Lumber Association, "Rules for the Measurement and Inspection of Hardwood and Cypress".
 - 3. NLGA: National Grades Authority, "Standing Grading Rules for Canadian Lumber".
 - 4. SPIB: The Southern Pine Inspection Bureau, "Standard Grading Rules for Southern Pine Lumber"
 - 5. WCLIB: West Coast Lumber Inspection Bureau, Standard No. 17, "Grading Rules".
 - 6. WWPA: Western Wood Products Association, "Western Lumber Grading Rules".
- D. Provide solid wood boards or wood veneer boards.
- E. Adhesives: Do not use adhesives that contain urea formaldehyde.

2.3 INSTALLATION MATERIALS

- A. Furring, Blocking, Shims, *and Hanging Strips*: Fire-retardant-treated softwood lumber, kiln dried to less than 15 percent moisture content.
- B. Anchors: Select material, type, size, and finish required for each substrate for secure anchorage. Provide nonferrous-metal or hot-dip galvanized anchors and inserts on inside face of exterior walls and elsewhere as required for corrosion resistance. Provide toothed-steel or lead expansion sleeves for drilled-in-place anchors.
- C. Spline-Mounting Accessories: Manufacturer's standard concealed, extruded-aluminum connecting splines designed and fabricated for screw attachment to walls, with other moldings and trim for interior and exterior corners, leveling and base support with factory-applied finish on exposed items.
 - 1. Spline mounting accessories shall be fully concealed.
 - 2. Corner splines configured for application of decorative wood corner.

- D. Back-Mounting Devices: Concealed on backside of panel, recommended to support weight of panel, with base-support bracket system where recommended by manufacturer for additional support of panels, and as follows:
 - 1. Metal "Z" Clips: Two-part panel clips, with one part of each clip mechanically attached to back of panel and the other part to wall substrate, designed to allow for panel removal.
 - 2. As recommended by manufacturer.

2.4 TONGUE AND GROOVE WOOD CLADDDING SYSTEMS (WDW-1)

- A. Tongue and Groove Wood Cladding: Hardwood cladding, Western Maple.
 - 1. Fire Rating: Class C minimum.
 - 2. Size: Manufacturer's standard for the selection noted on List of Finishes.
 - 3. Thickness: 9/16 inch.
 - 4. Edge: Square with micro-bevel and tongue and grove profile.
 - 5. Length: Manufacturer's standard random lengths.
 - 6. Lumber Trim and Edges: At paneling fabricator's option, trim and edges indicated as solid wood (except moldings) may be either lumber or veneered construction of same species and cut as panel faces and compatible with grain and color of panel faces.
 - 7. Finish: Manufacturer's standard or matt water based lacquer.
 - 8. Basis of Design Product, Species, and Color: Refer to List of Finishes.

2.5 FABRICATION, GENERAL

- A. Paneling Grade: Provide Custom grade paneling complying with referenced quality standard.
- B. Wood Moisture Content: Comply with requirements of referenced quality standard for wood moisture content in relation to ambient relative humidity during fabrication and in installation areas.
- C. Sand fire-retardant-treated wood lightly to remove raised grain on exposed surfaces before fabrication.
- D. Complete fabrication, including assembly and finishing, to maximum extent possible, before shipment to Project site. Disassemble components only as necessary for shipment and installation. Where necessary for fitting at site, provide ample allowance for scribing, trimming, and fitting.
 - Trial fit assemblies at fabrication shop that cannot be shipped completely assembled. Install dowels, screws, bolted connectors, and other fastening devices that can be removed after trial fitting. Verify that various parts fit as intended and check measurements of assemblies against field measurements indicated on approved Shop Drawings before disassembling for shipment.
- E. Shop cut openings, to maximum extent possible, to receive hardware, appliances, plumbing fixtures, electrical work, and similar items. Locate openings accurately and use templates or roughing-in diagrams to produce accurately sized and shaped openings. Sand edges of cutouts to remove splinters and burrs.
- F. Decorative Wood Corners: Solid wood in matching species configured for installation with concealed corner splines with hidden fasteners. Provide at vertical and horizontal outside corners.

2.6 SHOP FINISHING

- A. Grade: Provide finishes of same grades as paneling to be finished.
- B. Shop Priming: Shop apply the prime coat including backpriming, if any, for transparent-finished paneling specified to be field finished. Refer to Division 09 painting Sections for material and application requirements.

- C. Preparation for Finishing: Comply with referenced quality standard for sanding, filling countersunk fasteners, sealing concealed surfaces, and similar preparations for finishing paneling, as applicable to each unit of work.
 - 1. Backpriming: Apply two coats of sealer or primer, compatible with finish coats, to concealed surfaces of paneling.

D. Transparent Finish:

- 1. Grade: Custom.
- 2. AWI Finish System: 5, Conversion varnish.
- 3. Staining: Match A/E's sample.
- 4. Wash Coat for Stained Finish: Apply wash-coat sealer to woodwork made from closed-grain wood before staining and finishing.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before installation, condition paneling to average prevailing humidity conditions in installation areas.
- B. Before installing paneling, examine shop-fabricated work for completion and complete work as required, including removal of packing and backpriming.

3.2 INSTALLATION, GENERAL

- A. Grade: Install paneling to comply with requirements for same grade specified in Part 2 for fabrication of type of paneling involved.
- B. Install boards and paneling level, plumb, true, and straight with no distortions. Shim as required with concealed shims. Install level and plumb to a tolerance of 1/8 inch in 96 inches. Install with no more than 1/16 inch in 96-inch vertical cup or bow and 1/8 inch in 96-inch horizontal variation from a true plane.
 - 1. For tongue and groove cladding install with nails and adhesive in compliance with manufacturer's written installation instructions.
 - Installation via manufactured panels is acceptable if recommended by manufacturer.
 - 2. Countersink fasteners, fill surface flush, and sand where face fastening is unavoidable.
- C. Scribe and cut paneling to fit adjoining work, refinish cut surfaces, and repair damaged finish at cuts.
- D. Anchor paneling to supporting substrate with concealed panel hanger clips. Do not use face fastening unless covered by trim.
- E. Complete finishing work specified in this Section to extent not completed at shop or before installation of paneling. Fill nail holes with matching filler where exposed. Apply specified finish coats, including stains and paste fillers if any, to exposed surfaces where only sealer/prime coats are applied in shop.
- F. Wood Paneling: Select and arrange panels on each wall to minimize noticeable variations in grain character and color between adjacent panels. Leave 1/4-inch gap to be covered with trim at top, bottom, and openings. Install with uniform tight joints between panels.
 - 1. Attach panels to supports with manufacturer's recommended fasteners. Space fasteners as recommended by panel manufacturer.
 - 2. Conceal fasteners.
 - 3. Install according to manufacturer's written instructions. Arrange in random-width pattern suggested by manufacturer unless boards or planks are of uniform width.
 - 4. Install in full lengths without end joints.
 - 5. Stagger end joints in random pattern to uniformly distribute joints on each wall.

6. Select and arrange boards on each wall to minimize noticeable variations in grain character and color between adjacent boards. Install with uniform tight joints between boards.

3.3 ADJUSTING AND CLEANING

- A. Repair damaged and defective paneling, where possible, to eliminate functional and visual defects; where not possible to repair, replace paneling. Adjust for uniform appearance.
- B. Clean paneling on exposed surfaces. Touch up shop-applied finishes to restore damaged or soiled areas.

END OF SECTION 06 42 00

SECTION 23 09 00 - HVAC DIRECT DIGITAL CONTROLS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Provisions of the General Conditions, Supplementary Conditions, Sections included under Division 01, General Requirements, and Section 230500 of this Division are included as a part of this Section as though bound herein.
- B. Specifications throughout all Divisions of the Project Manual are directly applicable to this Section, and this Section is directly applicable to them.
- C. Refer to the details and schedules on the Drawings for additional requirements.

1.2 SUMMARY

- A. Contractor shall integrate existing engagement inputs from the existing control system to allow for continuous operation of the existing building from the new DDC heating and cooling controllers
- B. The contractor shall furnish and install a fully integrated building automation system, incorporating direct digital control (DDC) for energy management, equipment monitoring and control, and subsystems as herein specified. The installation of the control system shall be performed under the direct supervision of the controls manufacturer with the shop drawings, flow diagrams, bill of materials, component designation or identification number, and sequence of operation all bearing the name of the manufacturer. The installing contractor shall certify, in writing, that the shop drawings have been prepared by the equipment manufacturer and that the equipment manufacturer shall certify, in writing, that the shop drawings were prepared by their company and that all temperature control equipment was installed under their direct supervision.
 - 1. Temperature Control System Contractor shall provide hardware and system software based on server/thin-client architecture for replacement of existing buildings systems with fully programmable, customized installations as described herein, and for a current open design of secured standards web based technology. Temperature Control System shall provide an open protocol framework with fully programmable BACnet Master-Slave / Token-Pass (MS/TP) and Internet Protocol (IP) field level controllers for complete, interoperable operability via single web based Graphical User Interface. Additionally, system shall offer concurrent support over the same data-link of the following protocols: MODBUS, and SNMP. Server shall be accessed using a common web browser via customer intranet and/or standard Internet access point.
 - a. Intent of the thin-client architecture is to provide operator(s) complete access to Temperature Control System via common internet web browser. Thin-client web browser Graphical User Interface (GUI) shall be browser and operating system agnostic, meaning it will support current versions of common internet web browsers, such as but not limited to (in alphabetical order) Google ChromeTM, Microsoft EdgeTM, Mozilla FoxfireTM, OperaTM, and SafarTMi; Microsoft WindowsTM as well as non-Microsoft operating systems. No special software, (active-x components or fat java clients) shall be required to be installed on the PC's / PDA's used to access Temperature Control System via internet web browser.
 - b. Temperature Control System server software shall support, but is not limited to the most current versions of the following server platforms (in alphabetical order) Linux, Microsoft Windows, and Sun Microsystems Solaris. Temperature Contractor is responsible to confirm and conform to building owner server platform. Temperature Control System server software shall be developed and

- tested by the manufacturer of the system standalone controllers and network controllers/routers. Third party manufactured and developed Temperature Control System software is not acceptable.
- c. The web browser GUI shall provide a completely interactive user interface and must offer the following features as a minimum:
 - 1) Building floor layouts with zoned thermal graphic representation of space conditions and areas of alarm.
 - 2) Real time animated graphics of dynamic equipment operation.
 - 3) Scheduling of independent system and zone operation usage conditions.
 - 4) System alarm signaling via operator selectable real time on screen browser, e-mail, pager, mobile smartphone, or personal digital assistant (PDA).
 - 5) Multi-level, zone specific, password secured user authority configurations for an unlimited number of continuous operators.
 - 6) Owner modifiable system/sequence programs.
 - 7) Downloading/uploading information to/from field control devices.
 - 8) Global and unitary command, parameter, property, and set point adjustable.
 - 9) Operator selectable software tree navigation.
- 2. Temperature Control System Contractor or otherwise indicated as Contractor herein shall furnish and install a fully integrated Temperature Control System comprised of a network of interoperable stand-alone digital controllers communicating on an open protocol communication network accessible computer via secure internet connection.
- 3. All materials and equipment used shall be standard components, regularly manufactured for the specified system. All systems and components shall have been thoroughly tested and proven in actual use of at least 5 years.
- 4. Contractor shall be responsible to:
 - a. Provide a complete electronic direct digital control system consisting of BACnet application specific controllers able to provide automated heating, ventilation and air conditioning systems sequencing and control for building comfort, energy efficiency, and health related purposes.
 - b. Provide control of heating, ventilating and air-conditioning (HVAC) equipment including, but not limited to chillers, boilers, air-handlers, fans, terminal units, heaters, pumps, control damper and valve actuators, etc; as are denoted on drawings.
 - c. Provide Application Specific Controllers (ASCs) and Programmable Control Units (PCUs) as specified herein. Provide I/O and ancillary devices as specified herein, and as necessary to perform the sequences of operation. Provide BACnet Framework-based certified products that communicate on MS/TP channels to meet the functional specifications including, but not limited to actuators for dampers and valves, relay/starter switches, measurement devices, limit switches, etc. and other control point related devices described herein to meet the system sequence requirements as described in section.
 - d. Provide power and communication wiring to control devices.
 - e. Provide wiring and interlock wiring for control devices as required for operation.
 - f. Provide control device mounting hardware as required for control device installations in the pipe and duct installations such as, but not limited to, thread-olets, thermo-wells, and etc.
 - g. Provide supervision of related work performed by others to insure proper installation and operation of the completed product.
 - h. Installation verification and functionality testing of completed installation.
 - i. Install code compliant control panel(s) with electrical power and/or data connection(s). Coordinate work with the Division 26 Contractor.
 - Provide low voltage step-down transformers, power supplies and power/communication/input/output cabling necessary for the control system.

- 2) Install conduit, junction boxes, fittings, panels, enclosures, and hardware as specified herein and on the drawings.
- j. Provide a 5 year Service Maintenance Agreement (SMA) for software upgrades for all software and hardware contained within this specification. Include all time, material, and labor costs associated with the SMA.
- 5. Contractor shall read all other Drawings and Specifications, become familiar with requirements and Project Scope, and include such coordination work as may be required.
- 6. Related Sections include the following:
 - a. List below only products, construction, and equipment that the reader might expect to find in this Section but are specified elsewhere.
 - b. Division 23 Section "Meters and Gauges for HVAC Piping" for measuring equipment that relates to this Section.
 - c. Division 23 Section "Sequence of Operations for HVAC Controls" for requirements that relate to this Section.
 - d. Division 23 Section "HVAC Systems Control Points Lists" for requirements that relate to this Section.

1.3 DEFINITIONS

- A. General Terminology:
 - DDC: Direct digital control.
 - 2. IP: Internet Protocol.
 - 3. I/O: Input/output.
 - 4. MS/TP: Master-slave/token-passing.
 - 5. PC: Personal computer.
 - 6. PID: Proportional plus integral plus derivative.
 - 7. RTD: Resistance temperature detector.

1.4 SYSTEM ARCHITECTURE

- A. System shall provide and incorporate hardware and software resources sufficient to meet the functional requirements of these Specifications. Facility Local Area Network and Device Level Network shall be based on industry standard open platforms as specified herein and utilize commonly available operation, management and application software. All software packages and databases shall be licensed to the Owner to allow unrestricted maintenance and operation of the Temperature Control System. Contractor shall include all items not specifically itemized in these Specifications that are necessary to implement, maintain, and operate the system in compliance with the functional intent of these Specifications.
- B. System architecture shall expand on the existing and implement new building Temperature Control System based on BACnet Protocol and consists of an Ethernet-based, wide area network, a single Local Area Network that supports Network Controllers (NCs), Programmable Control Units (PCUs), Application Specific Controllers (ASCs), Operator Workstations (OWS), Smart Devices (SD), and Remote Communication Devices (RCDs) as applicable.
 - WAN: Internet-based network connecting multiple facilities with a central data warehouse and server, accessible via standard web-browser. This is an existing infrastructure and Contractor is not required to configure any components the WAN.
 - 2. Facility Local Area Network (FAC LAN): FAC LAN shall be an Ethernet-based, 10/100/1000 Ethernet LAN connecting Local NCs, Temperature Control System Server and OWSs. FAC LAN serves as the backbone for the NCs communications path. Contractor shall provide a FAC LAN as a dedicated LAN for control system. LAN shall be IEEE 802.3 Ethernet Category 6 cable with switches and routers that support 1000base-T gigabit Ethernet throughput.
 - 3. ARCnet and/or Token-Ring based FAC LANs and DLNs are not acceptable.

- C. Remote Data Access: System shall support the Internet Browser-based remote access to the building data. Temperature Control System Contractor shall coordinate with the Owner's IT department to insure all remote browser access (if desired by the owner) is protected with the latest Software updates and a VPN (Virtual Private Network) must be installed to protect the owner's network from cyber attacks.
- D. Browser-based access: A remote/local user using a standard browser will be able access all control system facilities and graphics via the WAN or direct connection, with proper username and password. Only native Internet browser-based user interfaces (HTML5, Java, XML, CCS3 JAVA Script, etc.) that do not require plug-ins (thin clients) are acceptable. The system shall be capable of supporting an unlimited number of clients using a standard Web browser.
- E. Communication speed between controllers, LAN interface devices, CSS, and operator interface devices shall be sufficient to ensure fast system response time under any loading condition.
- F. Control Systems Server (CSS): Server that maintains systems configuration and programming database. It shall allow secure multiple-access to the control information.
- G. Systems Configuration Database: The system architecture shall support maintaining the systems configuration database on a server that resides on the FAC LAN. User tools for DLN and FAC LAN management shall be provided and licensed to the Owner and shall allow unrestricted configuring, updating, maintaining, and expanding of all current devices, configurations and settings.
- H. Database Schema shall be published and provided to the Owner to facilitate easy access to DLN and FAC LAN data.

1.5 SYSTEM PERFORMANCE

- A. Comply with the following performance requirements:
 - 1. Graphic Display: Display graphic with minimum 20 dynamic points with current data within five (5) seconds.
 - 2. Graphic Refresh: Update graphic with minimum 20 dynamic points with current data within three (3) seconds.
 - 3. Object Command: Reaction time of less than one (1) second between operator command of a binary object and device reaction.
 - 4. Object Scan: Transmit change of state and change of analog values to control units or workstation within six seconds.
 - 5. Alarm Response Time: Annunciate alarm at workstation within thirty (30) seconds. Multiple workstations must receive alarms within five seconds of each other.
 - 6. Program Execution Frequency: Run capability of applications as often as five seconds, but selected consistent with mechanical process under control.
 - 7. Performance: Programmable controllers shall execute DDC PID control loops, and scan and update process values and outputs at least once per second.
 - 8. Reporting Accuracy and Stability of Control: Report values and maintain measured variables within tolerances as follows:
 - a. Water Temperature: +/-1 deg F
 - b. Water Flow: +/-3 percent of full scale.
 - c. Water Pressure: +/-2 percent of full scale.
 - d. Space Temperature: +/-1 deg F
 - e. Ducted Air Temperature: +/-1 deg F
 - f. Outside Air Temperature: +/-1 deg F
 - g. Dew Point Temperature: +/-1 deg F
 - h. Temperature Differential: +/-0.25 deg F
 - i. Relative Humidity: +/-2 percent.

- j. Airflow (Pressurized Spaces): +/-3 percent of full scale.
- k. Airflow (Measuring Stations): +/-5 percent of full scale.
- I. Airflow (Terminal): +/-5 percent of full scale.
- m. Air Pressure (Space): +/-0.01-inch wg
- n. Air Pressure (Ducts): +/-0.1-inch wg
- o. Carbon Monoxide: +/-5 percent of reading.
- p. Carbon Dioxide: +/-50 ppm.
- q. Electrical: +/-5 percent of reading.

1.6 SUBMITTALS

- A. Product Data: Include manufacturer's technical literature for each control device. Indicate dimensions, capacities, performance characteristics, electrical characteristics, finishes for materials, and installation and startup instructions for each type of product indicated.
 - 1. Retain three subparagraphs below for DDC systems.
 - 2. DDC System Hardware: Bill of materials of equipment indicating quantity, manufacturer, and model number. Include technical data for operator workstation equipment, interface equipment, control units, transducers/transmitters, sensors, actuators, valves, relays/switches, control panels, and operator interface equipment.
 - 3. Control System Software: Include technical data for operating system software, operator interface, color graphics, and other third-party applications.
 - 4. Controlled Systems: Instrumentation list with element name, type of device, manufacturer, model number, and product data. Include written description of sequence of operation including schematic diagram.
- B. Shop Drawings: Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of each field connection.
 - 1. Bill of materials of equipment indicating quantity, manufacturer, and model number.
 - 2. Schematic flow diagrams showing equipment, dampers, valves, and control devices.
 - 3. Wiring Diagrams: Power, signal, and control wiring.
 - 4. Details of control panel faces, including controls, instruments, and labeling.
 - 5. Schedule of dampers including size, leakage, and flow characteristics.
 - 6. Schedule of valves including flow characteristics.
 - 7. DDC System Hardware:
 - a. Wiring diagrams for control units with termination numbers.
 - b. Schematic diagrams and floor plans for field sensors and control hardware.
 - c. Schematic diagrams for control, communication, and power wiring, showing trunk data conductors and wiring between operator workstation and control unit locations.
 - 8. Control System Software: Graphical lists indicating monitored systems, data (connected & calculated) point addresses, output schedules, and operator notations.
 - 9. Controlled Systems:
 - a. Schematic diagrams of each controlled system with control points labeled and control elements graphically shown, with wiring.
 - b. Scaled drawings showing mounting, routing, and wiring of elements including bases and special construction.
 - c. Written operational sequences including schematic diagram.
 - d. Points listing.
- C. Data Communications Protocol Certificates: Certify that each proposed DDC system component complies with ASHRAE 135.
- D. Software and Firmware Operational Documentation: Include the following:
 - 1. Software operating and upgrade manuals.
 - 2. Program Software Backup: On DVD disc, complete with data files.

- 3. Device address list.
- 4. Printout of software application and graphic screens.
- 5. Software license required by and installed for DDC workstations and control systems.
- E. Software Upgrade Kit: For Owner to use in modifying software to suit future systems revisions or monitoring and control revisions.
- F. Coordinate paragraph below with qualification requirements in Division 01 Sections.
- G. Operation and Maintenance Data: For HVAC instrumentation and control system to include in emergency, operation, and maintenance manuals. In addition to items specified in Division 01 Section "Operation and Maintenance Data," include the following:
 - 1. Interconnection wiring diagrams identified with system components and devices.
 - 2. Keyboard illustrations and step-by-step procedures indexed for each operator function.
 - 3. Inspection period, cleaning methods, cleaning materials, and calibration tolerances.
 - 4. Calibration records and list of set points.

1.7 QUALITY ASSURANCE

A. General Conditions:

- Electrical components shall be UL listed.
- 2. Energy management components shall comply with NEMA EMCI.
- 3. Electrical requirements shall meet NFPA 70.
- 4. Installation as a part of the HVAC system shall comply with NFPA 90A.
- 5. System installation shall allow for application of the "BACnet" protocol to meet requirements of ASHRAE 135.
- 6. Control systems shall meet the requirements of ASHRAE Standard 90.1.

1.8 CONTRACTOR RESPONSIBILITIES

- A. Temperature Control Contractor shall be responsible to:
 - 1. Provide submission of drawings, component lists, specification sheets and sequences of operation to the Engineer for approval before start of installation.
 - 2. Provide final design drawings, installation of all control wiring and control devices in accordance with National Electric Code. The temperature control contractor shall also be responsible for startup and complete checkout of the systems.
 - 3. Provide electronic sets of drawings, parts lists, product specification, operation and maintenance manuals to the mechanical contractor for delivery to the Owner.
 - 4. Provide DDC logic diagrams for "as-builts" and included in the Operation and Maintenance Manuals for the Owner.
 - 5. Use all room numbers developed and approved by the school district in the development of the Temperature Control System for this building.
 - 6. The Contractor is to provide sufficient memory and network capacity in the building controller to support a 25 percent expansion of the control system.
 - 7. The Contractor is responsible to label all temperature control system sensors, control panels, control dampers and operators, and control valves and operators. Label names shall match the point names of the control system and on the as-built drawings.
 - 8. The Contractor shall provide the Owner with all necessary software and licenses so the Owner has the ability to change all set points, schedules, and programs for the life of the system even if it is a completely independent piece of software.
 - 9. Contractor shall be responsible for the accurate location of their Work and for informing themselves of the nature and arrangement of the materials, equipment, and construction to which their Work attaches or passes through.
 - 10. In general, work shall be concealed in walls in conduit and above ceilings in wire management systems, conduit in chases, and in equipment rooms, insofar as is

practical; so that such work will not interfere with the proper coordinated installation work of other trades or Contractors.

1.9 EXTRA MATERIALS

- A. Furnish extra materials described below that match products installed and that are packaged with protective covering for storage and identified with labels describing contents.
 - 1. Combination Temperature/CO2 Sensors: Qty of 6/building.
 - 2. Flat Plate Temperature Sensors: Qty of 2/building.
 - 3. Terminal/Unitary Equipment 1/2" Valve Actuator: Qty of 2/building.
 - 4. Terminal/Unitary Equipment 3/4" Valve Actuator: Qty of 2/building.
 - 5. Terminal/Unitary Equipment 1" Valve Actuator: Qty of 2/building.
 - 6. Sensor Guards: Qty of 6/building.
 - 7. Wall Mounted Humidity Sensors: Qty of 2/building.
 - 8. Wall Mounted Pressure Sensors: Qty of 2/building.
 - 9. Liquid Temperature Sensor: Qty of 2/building.
 - 10. Duct Temperature Sensor: Qty of 1/building.
 - 11. Low voltage transformers: 1 of each installed size per building.

1.10 PROJECT CONDITIONS

- A. Contractor shall be responsible for:
 - 1. Accurately locating installation components and coordination with other trades for the appropriate installation of their materials.
 - 2. Concealment of cable within conduit or wire management systems; so that installation will fully function without interference from other services.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

- A. Temperature Control Contractor shall have 15-years minimum experience with same size, or larger, and type of control system installations.
- B. Manufacturers: Subject to required compliance, provide products by one of the following manufactures and installed by that manufacturer's authorized installer:
 - 1. Grantham
 - 2. Siemens Factory Branch.

2.2 DAMPERS

A. Dampers intended for automatic control, unless part of a factory made unit, shall be furnished by the temperature control contractor. Automatic dampers installed in unitary equipment furnished by the manufacturer shall be checked for proper size and design by the Contractor. Should any features of these dampers appear to be unsatisfactory, full details shall be given to the Engineer, in writing, and suggestions made for necessary corrections.

B. Return Air Dampers

- 1. Return air dampers, unless otherwise specified, shall be "low leakage" dampers, and shall be designed for tight shut-off such that for a 1500 FPM damper, leakage does not exceed 1.7 CFM at 1 inch W.G. differential static pressure.
- 2. Damper frame shall be 4" deep constructed of extruded aluminum (6063T5) not less than .080 (2.03mm) inches thick.
- 3. Damper Blades shall be constructed of extruded aluminum (6063T5) and airfoil design. Aluminum end caps shall be press fitted to the blade ends.

- 4. Silent closing replaceable silicone seals shall be provided on each blade and on all four sides of the frame. Louver linkage to be concealed in frame channel outside of the air stream. Bearings shall be constructed of a celcon inner bearing fixed to a 7/16" aluminum hexagon type blade pin rotating within a polycarbonate outer bearing inserted in the frame, resulting in no metal to metal contact or metal to plastic contact.
- 5. Blade and frame seals shall be secured in an integral slot within the aluminum extrusions.
- 6. Linkage hardware shall be installed in the frame side and constructed of aluminum and corrosion resistant, zinc-plated steel, complete with cup-point trunnion screws for a slipproof grip.
- 7. Modulating dampers shall be opposed blade type.
- 8. Whenever practicable, damper size shall be based on 1000 to 1500 FPM air velocity.
- 9. Dampers shall be designed to operate in temperature ranges from –40 degrees F and 212 degrees F.

C. Outside Air and Relief Air Dampers

- Automatic dampers used for outside air and relief air applications shall have similar type of construction as described above for return air dampers, but shall include extruded aluminum blade shell internally insulated with expanded polyurethane foam and thermally broken.
- 2. Damper frame shall be extruded aluminum, minimum 4" deep and insulated with Styrofoam on all four sides of the damper.
- 3. Blade and frame seals shall be extruded silicone and secured in an integral slot within the aluminum extrusions.
- 4. Dampers shall not exceed 4 cfm per sq. ft. against 4" w.g. and shall be AMCA Rated.
- 5. Standard control dampers are not acceptable in outside air and relief air applications to avoid possible freeze conditions.

2.3 PRESSURE DEPENDENT CONTROL VALVES

- A. Valves shall be as indicated on the project drawings and/or within Section 230993 for the purposes of coil capacity modulation control at the specifically identified coil locations.
- B. Manufacturers: Subject to compliance with requirements, provide a product by one of the following:
 - Siemens.
- C. Two-Way Valves for Modulating Control: Low Capacity.
 - 1. Typical Applications, unless otherwise indicated:
 - a. Non-Critical Applications: Air Handler Reheat Coils and Terminal Unit Coils.
 - b. <u>Critical Applications</u>: Air Handler Heating Coils, Cabinet Heaters, and Unit Heater Coils.
 - 2. Description: Pressure dependent; Reduced port ball with characterized ball or disc.
 - a. Rating: Class 150; Service; 150 PSIG and 250°F operation.
 - b. Body Material: AMETAL, brass, bronze.
 - c. Connections: Threaded.
 - d. Body Design: Two/Three piece design to allow seat replacement.
 - e. Seats: PTFE or TFE with EDPM O-ring backing.
 - f. Stem: Stainless Steel.
 - g. Ball: Stainless Steel.
 - h. Port: Reduced with characterized ball or disc.
 - i. Operating and Close-Off Pressure: Subject to selection by installer; selection shall be suited to purpose and location with installation.

- 3. Sizing: Control valve shall be selected to provide the scheduled flow rates at a minimal, yet suitable pressure loss to facilitate control of flow, typically 2 to 3 PSI.
- 4. Actuator: Compliant with valve manufacturer operating and connection requirements. Actuator input/powered conditions shall be as selected by the Contractor from manufacturers standard components.
 - a. Non-critical Applications: Actuator failure in last position.
 - b. <u>Critical Applications</u>: Actuators failure in open position.
- D. Two-Way Valves for Modulating Control: High Capacity.
 - 1. Typical Applications, unless otherwise indicated:
 - a. Non-Critical Applications: Air Handler Cooling and Reheat Coils
 - b. Critical Applications: Air Handler Heating Coils
 - 2. Description: Butterfly style, lug design, ASTM A 126 cast-iron or ASTM A 536 ductile-iron body and bonnet, extended neck, stainless-steel stem, field-replaceable EPDM sleeve and stem seals.
 - a. Standard: MSS SP-67, Type I.
 - b. CWP Rating: Class 300, rated to no less than 200 psig close-off pressure.
 - c. Body Material: Coated, ductile iron.
 - d. Stem: Two-piece stainless steel, with insulation extension.
 - 3. Stem shall be offset from disc centerline to provide full 360 degree circumferential seating.
 - a. Disc: Coated, ductile iron, aluminum-bronze, or stainless steel.
 - b. Seal: EPDM.
 - 4. Sizing: Control valve shall be selected to provide the scheduled flow rates at a minimal, yet suitable pressure loss to facilitate control of flow, typically 3 to 5 PSI.
 - 5. Actuator: Compliant with valve manufacturer operating and connection requirements. Actuator input/powered conditions shall be as selected by the Contractor from manufacturers standard components.
 - a. Non-critical Applications: Actuator failure in last position.
 - b. <u>Critical Applications</u>: Actuators failure in open position.

2.4 VALVE & DAMPER OPERATORS

- A. Coordination: Contractor shall coordinate and confirm with equipment manufactures for factory installed devices requiring actuators, for compliance of contractor provided actuators with factory installed devices; such as but not limited to factory installed air handler dampers. Contractor is responsible to field install actuators for field installed components and when necessary for factory installed components for a complete and functional installation.
- B. Electronic Damper and Valve Actuators (Operators): Electronic Direct-coupled type designed for minimum 100,000 full-stroke cycles at rated torque. Actuator manufacturer shall provide a minimum two-year unconditional warranty from date of substantial completion.
 - 1. Valves: Size for torque required for valve close-off at maximum pump differential pressure (regardless of water loop system pressures).
 - a. Actuators Failure (Fail-Safe) Operation: Spring-return or electronic capacitance mechanism for failure operation, and with external, manual gear release.
 - 1) Non-Critical Applications: Failure in last position.
 - 2) Critical Applications: Failure in normally-open or -closed position identified herein, such as the below typical applications, unless otherwise indicated:
 - a) Normally-Open: Heating Valves.
 - b) Normally-Closed: OA and Relief Dampers.
 - b. Valve actuators shall provide a minimum performance of 100:1 or 100 equally linear positions of operation between the fully open and closed positions.
 - 2. <u>Position Feedback</u>: Where designated, provide actuators with analog feedback signal for confirmation of position control.

- a. Critical Applications: Identified herein, such as the below typical applications, unless otherwise indicated:
 - 1) Roof Vent Dampers (All Installations).
 - 2) Air Handler Outside Air Dampers (All Installations).
- 3. Dampers: Size for running torque calculated as follows:
 - a. Parallel-Blade Damper with Edge Seals: 7 inch-pounds/sq. ft. of damper.
 - b. Opposed-Blade Damper with Edge Seals: 5 inch-pounds/sq. ft. of damper.
 - c. For dampers with 2 to 3 Inches wg. of pressure drop, or face velocities of 1000 to 2500 FPM, multiply minimum full-stroke cycles above by 1.5.
 - d. For dampers with 3 to 4 Inches wg. of pressure drop, or face velocities of 2500 to 3000 FPM, multiply minimum full-stroke cycles above by 2.0.
- 4. Coupling: V-bolt and V-shaped, toothed cradle.
- 5. Overload Protection: Electronic overload or digital rotation-sensing circuitry.
- Power Requirements: Low Voltage; 24VAC, properly sized so as to stroke the damper smoothly and efficiently throughout its range. Actuator response shall be linear in response to sensed load.
 - a. Operators shall have ample torque to overcome friction, sized for not less than 200 percent of the expected torque.

2.5 ELECTRONIC RELAYS & SWITCHES

- A. Electric Relays Automatic Electronic Engagement/Disengagement Switches
 - 1. Where required, provide relays for energizing or re-energizing equipment operation, in response to Temperature Control System digital output. Relays shall be UL labeled and sized for not less than 140 percent of the connected amperage load. Relays shall be rated for the system voltage and have proper throw and poles.
- B. Electronic Switches Manual Electronic Engagement/Disengagement Switches
 - Install push-button style switches to manually engage devices intended for timed operation.
 - a. Push-button style wall mounted switch to manually energized or de-energized equipment shall be temporary contact style mechanism with LED status indicator while engaged in timed sequence. Switch shall be UL labeled and selected for use with Temperature Control System for 24V operation.
 - 2. Install toggle style switches to manually engage devices intended for continuous or uninterrupted operation.
 - a. Toggle style wall or equipment mounted switch to manually energize or deenergize equipment shall be toggle continuous contact style mechanism. Switch shall be UL labeled and selected for use with Temperature Control System for 24V operation.
- C. Emergency Shut-Down Operator Station
 - Boilers: Mushroom-head style push-button with pull reset. Station shall be highly visible; UL listed for Category NISD Emergency Stop Devices. Surface mounted NEMA 3R metal enclosure with 40mm mushroom head; Kele ESM-M3S-PP0-BS, or reviewed equivalent.

2.6 ELECTRONIC SENSING DEVICES

- A. All field mounted sensors shall be field labeled/tagged with common identification terminology as to their system identification and function.
- B. Air Temperature Sensors
 - 1. Thermistor temperature sensors shall be 10,000 ohm at 77 F with Precon Type-2 material. Accuracy shall be +/-0.36 F between the range of 32.0 158.0 F.

- 2. Temperature sensors shall allow Temperature Control System to convert resistive input signal form element into digital signal for Temperature Control System.
- 3. Air-temperature sensors shall be equipped with watertight and solar protected fittings.
 - a. Outside air temperature sensors are intended to be located as indicated on Project Documents. If located on an exterior wall of the building, sensor shall be mounted at north facing wall not susceptible to other heat emitting or absorbent materials.

C. Non-Adjustable Flat Plate Temperature Measurement Device

- Temperature sensor shall be Precon Type-2 or equal thermistors utilizing a 10K ohm thermistor with stainless steel flat plate cover. Plate shall protect element; Install cover with tamperproof screws.
- 2. Install wall mounted devices as indicated on Project Drawings, typically 48" AFF.

D. Multifunctional Temperature & Carbon Dioxide Measurement and Control Device

- 1. Install wall mounted sensors as indicated on the construction documents. Controller shall be low profile, unobtrusive design.
 - a. Temperature adjustment and mounting/wiring sub-base. Configure adjustment to allow for +/-2 degree deadband operating range.
 - b. Temperature sensor shall accurate within +/- 1 percent of reading.
 - c. Carbon dioxide sensor shall be a non-dispersive infrared (NDIR) absorption sensor calibrated for measurements within 0 to 2000 ppm range, +/- 5% of reading. Self-calibrating drift compensation algorithm shall employ Automatic Background Calibration (ABC) logic to eliminate manual routine calibration under normal usage; manufacturer shall provide lifetime calibration guarantee.
 - d. Humidity sensor shall be capacitive polymer sensor type; sensor span shall be 10% to 90% (non-condensing) relative humidity and shall be accurate within +/- 5 percent of reading; where indicated.
 - e. Install wall mounted devices as indicated on Project Drawings, typically 48" AFF.
 - f. Manufacturer/Model: GE Telaire T8100, or equivalent.

E. Wall and Duct Mounted Relative Humidity Sensor

- 1. Sensor shall be a "Current Type" humidity transducer producing a linear 4-20mA current representing the span of the sensor. Current convertor shall be supplied with the sensor for use the Temperature Control System.
- 2. Locate outdoor air-humidity sensor in a weathertight enclosure located to provide best representative measurement. Sensor span shall be 10 to 90 percent relative humidity, accurate within +/- 2 percent of span.

F. Thermostat Guards

1. Clear Lexan wall mounted guard with tamperproof screws.

G. Duct Air-Temperature Sensors

- 1. All duct sensors shall be true averaging type sensors with capillary lengths not less than 20 feet long. The only exceptions will be return air and outdoor air sensors.
- 2. All duct sensors shall be installed within an enclosure suitable for the application.

H. Electronic Room Temperature Sensors

- Temperature sensors shall be Precon type-3 or equal thermistors utilizing a 10K ohm thermistor. Sensors shall be manufactured in a durable epoxy housing and shall be enclosed for protection from elements when installed in the sensors operating environment. The sensor cover shall be provided with tamperproof screws. Room temperature sensors shall be provided with temperature adjustment and LCD temperature display. Temperature adjustment shall be programmed to have an allowable user adjustment of 3 degrees (adj.).
- I. Air-Temperature Low Limit Switch; Automatic Reset Type

- 1. Safety low limit switches with flexible sensing elements shall serpentine full length of duct or coil. Instrument to be sensitive to lowest temperature at any 12 inch increment on its 20 foot length. Thermostat shall have a range of 20 degrees F. to 60 degrees F. with a fixed 5 degrees F. differential.
 - a. Low limit controller shall be automatically reset at the controller, but sequenced through the temperature control system to only allow a limited number of resets prior to locking out the affected equipment.
- 2. Manufacturer/Model: Johnson Controls A70GA-1, or equivalent.

J. Current Sensing Status Switches

- 1. Shall be capable of detecting changes in flow of current to motors in determining accurate and reliable equipment operational status. All fans and pumps shall be equipped with a device to indicate the operation of the attached device.
- 2. Ampere rating for 0 135 amps continuous.
- 3. Sensor supply voltage shall be included from monitor conductor.
- 4. Minimum current required is 1 amp.
- 5. Trip set point shall be adjustable to +/- 1 percent of range.
- 6. Manufacturer/Model: Veris Industries, Inc. Model No. 705 (Hawkeye).

K. Duct Mounted Carbon Dioxide Sensor

- Carbon dioxide sensor shall be a non-dispersive infrared (NDIR) absorption sensor calibrated for measurements within 0 to 2000 ppm range, +/- 5% of reading. Selfcalibrating drift compensation algorithm shall employ Automatic Background Calibration (ABC) logic to eliminate manual routine calibration under normal usage; manufacturer shall provide lifetime calibration guarantee.
- L. Duct Mounted Air Differential Pressure Sensor For Variable Air Volume Duct System
 - 1. Differential Pressure Transmitters provided by the Temperature Control System contractor to be completely self-contained, variable capacitance type gauge pressure transmitters with a range of +/-10-inches W.C. Wiring terminals and electronics shall be in separate compartments, so the electronics remain sealed during installation. Reverse polarity protection shall be included to keep wiring mishaps from damaging transmitter.
 - 2. Minimum accuracy shall be 0.50% of calibrated span external zero and span adjustments, over pressure to 10 PSIG and no humidity effects. Includes combined effects of linearity, hysteresis and repeatability. Stability shall be +/-0.50% of upper range limit for 12-months. No internal mechanical linkages shall be used in the transmitter. Sensors shall be selected for individual applications such that the normal operation conditions are mid scale and the maximum operating condition is within scale.
 - 3. Manufacturer/Model: Ashcroft CXLdp Series or equivalent.
- M. Air Static Differential Automatically Reset Pressure Switch; High or Low Pressure Operation
 - 1. Differential pressure switch shall be installed to avoid unsafe or destructive conditions. Switches shall be located upstream and downstream of each air handler to provide electronic disable output if excessively low or high pressure conditions develop.
 - a. Service: Air and non-combustible gases.
 - b. Temperature Limits: Ambient from -40 to 180-Deg F.
 - c. Operating Range: 0.05 to 12.0-inches W.C.
 - d. Switch type: Single-pole double-throw (SPDT).
 - e. Mechanical Working Life: Over 106 switching operations.
 - 2. Manufacture/Model: Cleveland Controls AFS Series or equivalent.

N. Building Static Zone Pressure Sensors

- Remote building static pressure sensors provided by the temperature control system contractor shall be constructed of stainless steel. Sensors shall be mounted within space or within above ceiling plenum area for communication and control of local roof vents relief damper(s).
- O. Current Sensing Status Switch

- 1. Shall be capable of detecting changes in flow of current to motors in determining accurate and reliable equipment status.
- 2. Ampere rating for 0 135 amps continuous.
- 3. Sensor supply voltage shall be included from monitor conductor.
- 4. Minimum current required is 1 amp.
- 5. Trip setpoint shall be adjustable to +/- 1 percent of range.

P. Air Flow Measuring Station

- Provide Tek-Air, Paragon Controls, Air Monitoring Corporation, or Ebtron air flow measuring system including microprocessor panel and air flow measuring sensor struts as required to measure outside air intake flow as denoted on the Drawings.
- 2. DDC air flow measuring system shall have velocity range from 200 to 6000 ft./min. with duct measurement accuracy (including repeatability, zero offset, and temperature compensation) of plus or minus 5 percent.
- 3. Pitot tube arrays and differential pressure arrays are not acceptable.
- 4. Air flow air measuring system shall be installed as indicated on the Drawings and consist of fan inlet velocity pressure probes, remote transducer in a NEMA-4 enclosure and a microprocessor based monitor to generate a 4-20 m a signal linear to cfm. Contractor shall manifold pressure signals and connect to transducer with pneumatic tubing.
- 5. Air flow traverse probes shall be suitable for mounting in the inlet bell(s) of the indicated fans. Probes shall utilize multiple total and static pressure measurement points located along the length of the probe surface in accordance with ASHRAE recommendations for traversing. They shall be provided with the appropriate end support brackets for mounting. Where fans are of dual-inlet type, two sets of inlet probes must be provided. Probes shall be of cylindrical cross section and shall be provided with the appropriate fittings to allow for the connection of control tubing to the probe assemblies and shall be constructed of extruded aluminum.
- 6. Remote transducer shall be mounted in a NEMA-4 enclosure and have an operating range of -40 to 120 degrees F. Transducer shall be heated to maintain constant temperature, have auto zero of differential pressure to eliminate drift and transmit temperature and pressure information via waterproof cable to the monitor.
- 7. The microprocessor monitor shall transmit a 4-20 m a signal linear with cfm and have density correction to convent cfm measurement to room conditions. Monitor shall have digital display and push-button keys for ease of custom set-up and ability to alarm. Monitor shall be in a NEMA-4 enclosure and have an operating range of 40 to 110 degrees F and requires a 24 VAC power source.
- 8. Contractor shall verify CFM measurement with equipment supplier and coordinate setpoints.

Q. Remote Differential Pressure Transmitter (DPT)

- Differential Pressure Transmitters shall be provided by the Contractor to be completely self-contained, variable capacitance type gauge pressure transmitters. Wiring terminals and electronics shall be in separate compartments, so the electronics remain sealed during installation. Reverse polarity protection shall be included to keep wiring mishaps from damaging the transmitter. The 4-20mA DC signal shall be transmitted over a pair of No. 22 gauge or larger wire directly to the control enclosure.
- 2. Design range shall be as required by system. External zero and span adjustments, over pressure to 2,000 PSI and no humidity effects.
- 3. Minimum accuracy shall be +/-0.25 percent of calibrated span. Includes combined effects of linearity, hysteresis and repeatability. Stability shall be +/-0.25 percent of upper range limit for 6 months. No internal mechanical linkages shall be used in the transmitter.

R. Flow Transducers (FT)

- 1. Flow meters with transducers shall be installed where indicated on the Drawings and wired by the Contractor.
- 2. The flow transducers shall utilize a nonmagnetic sensing mechanism with a forward swept rotating impeller to produce a frequency signal proportional to flow. The flow transducers shall have an achievable accuracy of +/-1 percent of flow rate with flow velocities of 1 to 30 fps.

- 3. The flow meter shall be constructed of brass with a glass reinforced impeller, tungsten carbide shaft and glass reinforced polyphenylene sulfide housing. The unit shall be both insertable and removable through a gate type valve when the pipe is under pressure.
 - 1. Provide minimum of 10 straight pipe diameters upstream and 5 diameters downstream for each field installed flow transducer.
 - 2. Provide an insertion/extraction tool to allow removal and replacement of flow transducer while the system is under pressure.

2.7 CARBON MONOXIDE MONITOR

- A. Description: Carbon monoxide detector shall be installed the vicinity of any domestic water heater or heating hot water boiler. The carbon monoxide monitor shall be fully self-contained in a NEMA 1 enclosure suitable for wall mounting. Enclosure shall be factory finished with a hinged access door. Enclosure shall house an integrated metal oxide solid state carbon monoxide sensor that is accurate to 5% of full scale and having an average operating life of 5-7 years. A power indicator light located on the face of the unit shall indicate power status. In addition, a sensor fail, warning and alarm light shall be located on the face of the unit.
 - 1. Range of output reading shall be from 0-200 ppm of carbon monoxide. Unit shall have an LED readout that is visible from the face of the enclosure that constantly displays the concentration of carbon monoxide level at the location of the unit.
 - 2. A factory mounted relay shall be furnished for connection to an emergency ventilation system to activate should the system go into alarm.
 - 3. Unit shall have an audible and visible alarm mounted on the unit. A manual reset button shall be mounted on the face of the enclosure.
 - 4. Unit shall have an analog 4-20mA output and a RS-485 digital output for interface to BMS System for alarm and concentration readings at the operator's workstation if desired.
 - 5. Provide a sensor status feature that provides an indication if ether the integral sensor fails to communicate properly. Provide one spare sensor with each unit.
 - 6. Provide remote sensors as indicated on Project Documents, remote sensor shall be of the same manufacture and fully compatible with the base unit. Remote sensor shall have powered indication/status LED to inform of appropriate operating condition.
 - 7. Unit shall be powered by 120 volt electrical connection by Division 26 Contractor.
 - 8. Manufacturer shall provide factory calibration and start-up for each unit.
 - 9. Unit shall be certified per CSA Certificate of Compliance No. LR51078-5.
- B. Unit shall have 2 year parts and labor warranty.
- C. Acceptable Manufacturer: MSA Z Gard Combo Gas Monitor with remote DS sensor, or reviewed comparable product.

2.8 VARIABLE FREQUENCY DRIVES

A. Provide direct communication between the Temperature Control System and the variable frequency controller (VFC). VFC fan/pump control data as well as drive power data (minimum voltage, current, and frequency) shall be available for data collection and trending at the Temperature Control System Operator Workstation.

2.9 CONTROL CABINETS/ENCLOSURES

A. Control cabinet/enclosure shall be extruded aluminum, galvanized steel or factory-hardened plastic with key locks and hinged doors. Panels of code steel construction with UL label.

- Control cabinet/enclosure shall be required to house devices not enclosed as a part of Temperature Control System panels. Pre-wire with internal wiring terminated at labeled terminal strips. Thermometers and switches shall be mounted on the cover of panel. Relays, transformers, and components shall be mounted inside panel. Devices, whether interior or exterior, provide with legend plates of engraved Formica or equivalent.
- 2. Local type panels need not contain graphic representations or symbols, unless specified below, but must contain approved nameplates, legends, etc., for each device.
- 3. Where panels contain any wiring, panels shall be UL approved.

2.10 TEMPERATURE CONTROL SYSTEM

- A. General: Configure Temperature Control System with a network of interoperable, stand-alone digital controllers, a computer system, graphical user interface software, network devices and other devices as specified herein. System shall provide password authority protected secure access to all features, functions and data contained in overall Temperature Control System.
- B. Open, Interoperable, Integrated Architectures
 - Specification intent is to provide peer-to-peer networked, stand-alone, distributed control system with the capability to integrate the ANSI/ASHRAE Standard 135-1995 BACnet MS/TP and/or IP technology communication protocols in one open, interoperable system.
 - 2. Software shall employ object-oriented technology (OOT) for representation of all data and control devices within the system. In addition, adherence to industry standards including ANSI / ASHRAE™ Standard 135-1995, BACnet to assure interoperability between all system components is required. For each BACnet device, the device supplier must provide a PICS document showing the installed device's compliance level. Minimum compliance is Level 3; with the ability to support data read and write functionality. Physical connection of BACnet devices shall be via Ethernet.
 - 3. System must incorporate the ability to access all data using Java enabled browsers without requiring proprietary operator interface and configuration programs. An Open Database Connectivity (ODBC) or Structured Query Language (SQL) compliant server database is required for all system database parameter storage. This data shall reside on a supplier-installed server for all database access. Systems requiring proprietary database and user interface programs shall not be acceptable.
 - 4. Hierarchical topology is required for reasonable system response times and to manage flow and sharing of data without unduly burdening the customer's internal Intranet network. Systems employing a "flat" single tiered architecture shall not be acceptable.
 - a. Maximum acceptable response time from any alarm occurrence (at the point of origin) to point of annunciation shall not exceed 10 seconds to user interfaces.

C. Networks

- Local Area Network (LAN) shall be either a 10 or 100 Megabits/sec Ethernet network supporting BACnet, Java, XML, HTTP, or CORBA IIOP for maximum flexibility for integration of building data with enterprise information systems and providing support for multiple NACs, user workstations and, if specified, a local host computer system.
- 2. Local area network minimum physical and media access requirements:
 - a. Ethernet; IEEE standard 802.3
 - b. Cable; 10 base-T, UTP-8 wire, category 6
 - c. Minimum throughput; 10 Mbps, with ability to increase to 100 Mbps

D. Network Access

- Remote Access.
 - a. For Local Area Network installations, provide access to the LAN from a remote location, via the Internet. The owner shall provide a connection to the Internet to enable this access via high speed cable modem, asynchronous digital subscriber line (ADSL) modem, ISDN line, T1 Line or via the customer's Intranet to a corporate server providing access to an Internet Service Provider (ISP). Owner agrees to pay monthly access charges for connection and ISP.
 - b. Where no Local Area Network exists, Temperature Control System supplier shall provide the following:
 - 1) 8 Port Ethernet hub (3Com, or equal)
 - 2) Ethernet router (Cisco or equal)
- 2. Owner shall provide a connection to the Internet to enable this access via high-speed cable modem, asynchronous digital subscriber line (ADSL) modem, ISDN line or T1 Line. Owner agrees to pay monthly access charges for connection and ISP

E. Network Area Controller (NAC)

- NAC shall provide the interface between the Web Supervisor and field control devices. It shall be capable of executing application control programs to provide:
 - a. Calendar functions
 - b. Scheduling
 - c. Trending
 - d. Alarm monitoring and routing
 - e. Time synchronization
 - f. Integration of BACnet controller data
 - g. System operating analytics
 - h. Security
- 2. NAC must provide the following hardware features as a minimum:
 - a. TI AM3352: 1000MHz ARM® Cortex™-A8
 - b. 1GB DDR3 SDRAM
 - c. Removable micro-SD card with 4GB flash total storage/2GB user storage
 - d. Wi-Fi (Client or WAP)
 - 1) IEEE802.11a/b/g/n
 - 2) IEEE802.11n HT20 @ 2.4GHz
 - 3) IEEE802.11n HT20/HT40 @ 5GHz
 - 4) Configurable radio (Off, WAP, or Client)
 - 5) WPAPSK/WPA2PSK supported
 - e. USB type A connector for back-up and restore support.
 - f. Two isolated RS-485 with selectable bias and termination.
 - g. Two 10/100MB Ethernet ports.
 - h. Real-time clock.
 - Secure Reboot.
- 3. NAC Operating Conditions:
 - a. Temperature range of 0 to 55°C.
 - b. Humidity range of 5 to 95% RH, non-condensing.
- 4. Event Alarm Notification and actions
 - NAC shall provide alarm recognition, storage; routing, management, and analysis
 to supplement distributed capabilities of equipment or application specific
 controllers.
 - b. NAC shall be able to route any alarm condition to any defined user location whether connected to a local network or wide-area network.
 - c. Alarm generation shall be selectable for annunciation type and acknowledgement requirements including but limited to Alarm, Return to Normal, and Fault.
 - d. Allow for an unlimited number of alarm classes for the purpose of routing types and or classes of alarms, i.e.: security, HVAC, Fire, etc.
 - e. Provide timed (schedule) routing of alarms by class, object, group, or node.

- f. Provide alarm generation from binary object "runtime" and /or event counts for equipment maintenance. User shall be able to reset runtime or event count values with appropriate password control.
- 5. Control equipment and network failures shall be treated as alarms and annunciated.
- 6. Alarms shall be annunciated in all of the following manners as defined by the user:
 - Locally, by screen message text
 - b. Locally, by graphics with flashing alarm object(s)
 - c. Remotely, by e-mail, text, and/or phone:
 - 1) Day of week
 - 2) Time of day
 - 3) Alarm Type
 - 4) Recipient
- 7. NAC shall record each alarm with the following information, at a minimum:
 - a. Time and date
 - b. Location (building, floor, zone, office number, etc.)
 - c. Equipment (tag, location, etc.)
 - d. Acknowledge time, date, and user who issued acknowledgement.
 - e. Number of occurrences since last acknowledgement.
- 8. Alarm log shall be maintained by the NAC.
- 9. Provide a "query" feature to allow review of specific alarms by user defined parameters.

F. Interoperable BACnet Controller (IBC) or Approved Equivalent

- 1. Controls shall be microprocessor based Interoperable BACnet Controllers (IBC) in accordance with the ANSI/ASHRAE Standard 135-1995 or approved equivalent. IBCs shall be provided for Unit Ventilators, Fan Coils, Variable Air Volume and Temperature Terminals Units and other applications as shown on the drawings. The application control program shall be resident within the same enclosure as the input/output circuitry, which translates the sensor signals. System supplier must provide PICS document showing installed systems compliance level to the ANSI/ASHRAE Standard 135-1995. Minimum compliance is Level 3.
- 2. IBCs shall communicate with the Web Supervisor via Ethernet connection at a baud rate of not less than 10 Mbps.
- 3. IBC Sensor shall connect directly to the IBC and shall not utilize any of the I/O points of the controller. IBC Sensor shall provide a two-wire connection to the controller that is polarity and wire type insensitive. The IBC Sensor shall provide a communications jack for connection to the BACnet communication trunk to which the IBC controller is connected. The IBC Sensor, the connected controller, and all other devices on the BACnet bus shall be accessible by the POT.
- 4. All IBCs shall be fully application programmable and shall at all times maintain their BACnet Level 3 compliance. Controllers offering application selection only (non-programmable), require a 10% spare point capacity to be provided for all applications. All control sequences within or programmed into the IBC shall be stored in non-volatile memory, which is not dependent upon the presence of a battery, to be retained.
- 5. System software shall include a Graphic Programming Language (GPL) for all DDC control algorithms resident in standalone control modules. Any system that does not use a drag and drop method of graphical icon programming as described herein is NOT acceptable. GPL is a method used to create a sequence of operations by assembling graphic microblocks that represent each of the commands or functions necessary to complete a control sequence. Microblocks represent common logical control devices used in conventional control systems, such as relays, switches, high signal selectors, etc., in addition to the more complex DDC and energy management strategies such as PID loops and optimum start. Each microblock shall be interactive and contain the programming necessary to execute the function of the device it represents.

- 6. Graphic programming shall be performed while on screen and using a mouse; each microblock shall be selected from a microblock library and assembled with other microblocks necessary to complete the specified sequence. Microblocks are then interconnected on screen using graphic "wires," each forming a logical connection. Once assembled, each logical grouping of microblocks and their interconnecting wires then forms a graphic function block which may be used to control any piece of equipment with a similar point configuration and sequence of operation.
 - a. Graphic Sequence: Clarity of the graphic sequence must be such that operator has the ability to verify that system programming meets the specifications, without having to learn or interpret a manufacturer's unique programming language. The graphic programming must be self-documenting and provide the operator with an understandable and exact representation of each sequence of operation.
 - b. Simulation: Full simulation capability shall be provided with the graphic programming. Operator shall be able to fully simulate the constructed control sequence prior to downloading into field control modules. Simulation capabilities shall include step-by-step, accelerated time, and operator defined simulation criteria like outside weather, demand, and communication status. Multiple graphic programs shall be simulated and displayed in split screens at the same time.
 - c. GPL Capabilities: Following is a minimum definition of capabilities of the Graphic Programming software:
 - Function Block (FB): Shall be a collection of points, microblocks and wires which have been connected together for the specific purpose of controlling a piece of HVAC equipment or a single mechanical system.
 - 2) Logical I/O: Input/Output points shall interface with the control modules in order to read various signals and/or values or to transmit signal or values to controlled devices.
 - 3) BACnet Points: Shall be points that comply with the BACnet structure as defined in the BIBB's Addendum B1/B2, and the BACnet standard.
 - 4) Microblocks: Shall be software devices that are represented graphically and may be connected together to perform a specified sequence. A library of microblocks shall be submitted with the control contractors bid.
 - 5) Wires: Shall be Graphical elements used to form logical connections between microblocks and between logical I/O. Different wires types shall be used depending on whether the signal they conduct is analog or digital.
 - 6) Labels: Labels shall be similar to wires in that they are used to form logical connections between two points. Labels shall form a connection by reference instead of a visual connection, i.e. two points labeled 'A' on a drawing are logically connected even though there is no wire between them.
 - 7) Parameter: Parameter shall be a value that may be tied to microblock input.
 - 8) Properties: Dialog boxes shall appear after a microblock has been inserted which has editable parameters associated with it. Default parameter dialog boxes shall contain various editable and non-editable fields and shall contain 'push buttons' for the purpose of selecting default parameter settings.
 - 9) Icon: An icon shall be graphic representation of a software program. Each microblock has an icon associated with it that graphically describes function.
 - 10) Menu-bar Icon: Shall be an icon that is displayed on the menu bar on the GPL screen, which represents its associated graphic microblock.
 - 11) Live Graphical Programs: The Graphic Programming software must support a 'live' mode, where all input/output data, calculated data, and set points shall be displayed in a 'live' real-time mode.

7. For each piece of HVAC equipment, the entire graphic program shall be displayed through the Web Browser GUI. Operator must have the ability to scroll through the entire 'live' graphic program as necessary. Piecemeal graphic programs that only show one part of HVAC equipment program at any one time are NOT acceptable. For example, when viewing an AHU live graphic program, the operator shall see the entire AHU graphic program, not just the Heating Coil control.

G. Graphical User Interface Software

- 1. Operating System:
 - a. GUI shall run on Microsoft Windows 10 Pro.
- 2. GUI shall employ browser-like functionality for ease of navigation. It shall include a tree view (similar to Windows Explorer) for quick viewing of, and access to, the hierarchical structure of the database. In addition, menu-pull downs, and toolbars shall employ buttons, commands and navigation to permit the operator to perform tasks with a minimum knowledge of the HVAC Control System and basic computing skills. These shall include, but are not limited to, forward/backward buttons, home button, and a context sensitive locator line (similar to a URL line), that displays the location and the selected object identification.
- 3. Real-Time Displays. GUI, shall at a minimum, support graphical features and functions:
 - a. Color thermal graphic floor plan displays for each floor and zone controlled as well as system schematics for each piece of mechanical equipment, including air handling units, fan coil units, exhaust fans, chilled water systems and hot water boiler systems, shall be provided by the contractor to optimize system performance analysis and speed alarm recognition.
 - b. The operator interface shall allow users to access the various system schematics and floor plans via a graphical penetration scheme, menu selection or text-based commands. Dynamic temperature values, flow values and status indication shall be shown in their actual respective locations and shall automatically update to represent current conditions without operator intervention.
 - c. Graphic screens shall be developed using any drawing package capable of generating a GIF, BMP, or JPG file format. Use of proprietary graphic file formats shall not be acceptable. In addition to, or in lieu of a graphic background, GUI shall support the use of scanned pictures.
 - d. Graphic screens shall have the capability to contain objects for text, real-time values, animation, color spectrum objects, logs, graphs, HTML or XML document links, schedule objects, hyperlinks to other URL's, and links to other graphic screens.
 - e. Graphics shall support layering and each graphic object shall be configurable for assignment to a layer. A minimum of six layers shall be supported.
 - f. Modifying common application objects, such as schedules, calendars, and set points shall be accomplished in a graphical manner.
 - 1) Schedule times will be adjusted using a graphical slider, without requiring any keyboard entry from the operator.
 - 2) Holidays shall be set by using a graphical calendar, without requiring any keyboard entry from the operator.
 - g. Commands to start and stop binary objects shall be done by right-clicking the selected object and selecting the appropriate command from the pop-up menu. No entry of text shall be required.
 - h. Adjustments to analog objects, such as set points, shall be done by right-clicking the selected object and using a graphical slider to adjust the value. No entry of text shall be required.
- 4. System Configuration. At a minimum, GUI shall permit the operator to perform the following tasks, with proper password access:
 - a. Create, delete or modify control strategies.
 - b. Add/delete objects to the system.
 - c. Tune control loops through the adjustment of control loop parameters.

- d. Enable or disable control strategies.
- e. Generate hard copy records or control strategies on a printer.
- f. Select points to be alarmable and define the alarm state.
 - Select points to be trended over a time period and automatically initiate recording.
- 5. On-Line Help. Provide a context sensitive, on-line help system to assist the operator in operation and editing of the system. On-line help shall be available for all applications and shall provide the relevant data for that particular screen. Additional help information shall be available through the use of hypertext. All system documentation and help files shall be in HTML format.
- 6. Security. Each operator shall be required to log on to that system with a user name and password in order to view, edit, add, or delete data. System security shall be selectable for each operator. The system administrator shall have the ability to set passwords and security levels for all other operators. Each operator password shall be able to restrict the operators' access for viewing and/or changing each system application, full screen editor, and object. Each operator shall automatically be logged off of the system if no keyboard or mouse activity is detected. All system security data shall be stored in an encrypted format.
- 7. System Diagnostics. System shall automatically monitor the operation of all workstations, printers, modems, network connections, building management panels, and controllers. Failure of any device shall be annunciated to the operator.
- 8. Alarm Console:
 - a. System will be provided with a dedicated alarm window or console. Window will notify the operator of an alarm condition, and allow the operator to view details of the alarm and acknowledge the alarm. Use of the Alarm Console can be enabled or disabled by the system administrator.
 - b. When the Alarm Console is enabled, a separate alarm notification window will supersede all other windows on the desktop and shall not be capable of being minimized or closed by the operator. This window will notify the operator of new alarms and un-acknowledged alarms. Alarm notification windows or banners that can be minimized or closed by the operator shall not be acceptable.

H. Server Functions and Hardware

- 1. A central integrated server to NAC shall be provided. Server shall support all Network Area Controllers (NAC) connected to the customer's network whether local or remote.
- 2. Local connections shall be via an Ethernet LAN.
- 3. Provide access to all Network Area Controllers via a single connection to the server. In this configuration, each Network Area Controller can be accessed from Graphical User Interface (GUI) or from standard Web browser (WBI) by connecting to server.
- 4. Server shall provide the following functions, at a minimum:
 - a. Global Data Access: Server shall provide access to distributed data.
 - b. Distributed Control: Server shall provide ability to execute global control strategies based on control and data objects in any NAC in the network, local or remote.
 - c. Server shall include a master clock service for its subsystems and provide time synchronization for all Network Area Controllers (NAC).
 - d. Server shall accept time synchronization messages from trusted precision Atomic Clock Internet sites and update its master clock based on this data.
 - e. Server shall provide scheduling for all Network Area Controllers and their underlying field control devices.
 - f. Server shall provide demand limiting that operates across all Network Area Controllers. Server must be capable of multiple demand programs for sites with multiple meters and or multiple sources of energy. Each demand program shall be capable of supporting separate demand shed lists for effective demand control
 - g. Server shall implement the BACnet Command Prioritization scheme (16 levels) for safe and effective contention resolution of all commands issued to Network Area Controllers.

- h. All Network Area Controllers shall have the ability to archive its log data, alarm data and database to the server, automatically.
- Server either external or integral to the NAC shall provide central alarm management for all Network Area Controllers supported by the server. Alarm management shall include:
 - 1) Routing of alarms to screen display, e-mail, pages, text messaging, and through operator controlled printing.
 - 2) View and acknowledge of alarms
 - 3) Query alarm logs based on user-defined parameters
- j. Server shall provide central management of log data for all Network Area Controllers supported by the server. Log data shall include process logs, runtime and event counter logs, audit logs and error logs. Log data management shall include:
 - 1) Viewing and printing log data
 - 2) Exporting log data to other software applications
 - 3) Query log data based on user-defined parameters
- k. Server Hardware Requirements: Server hardware platform shall be installed in an owner approved location and have the following minimum operating requirements:
 - 1) Intel Quad-Core 64 bit Processor.
 - 2) 1 TB Ultra ATA/72K RPM Hard Drive.
 - 3) One Ethernet Port: 10/100 Mb; 8-pin RJ-45 Connector.
 - 4) Two RS-232-C serial ports; 9-pin sub-D connectors.
 - 5) Four USB serial ports; standard USB connectors.
 - 6) 64 GB, DDR2 SDRAM FBD Memory.

I. System Programming

- Graphical User Interface software (GUI) shall provide the ability to perform system
 programming and graphic display engineering as part of a complete software package.
 Access to the programming functions and features of GUI shall be through password
 access as assigned by the system administrator.
- 2. Library of control, application, and graphic objects shall be provided to enable the creation of all applications and user interface screens. Applications are to be created by selecting the desired control objects from the library, dragging or pasting them on the screen, and linking them together using a built in graphical connection tool. Completed applications may be stored in the library for future use. Graphical User Interface screens shall be created in the same fashion. Data for the user displays is obtained by graphically linking the user display objects to the application objects to provide "real-time" data updates. Any real-time data value or object property may be connected to display its current value on a user display. Systems requiring separate software tools or processes to create applications and user interface display shall not be acceptable.
- 3. Programming Methods
 - a. Provide the capability to copy objects from the supplied libraries, or from a user-defined library to the user's application. Objects shall be linked by a graphical linking scheme by dragging a link from one object to another. Object links will support one-to-one, many-to-one, or one-to-many relationships. Linked objects shall maintain their connections to other objects regardless of where they are positioned on the page and shall show link identification for links to objects on other pages for identification. Links will vary in color depending on the type of link; i.e., internal, external, hardware, etc.
 - b. Configuration of each object will be done through the object's property sheet using fill-in the blank fields, list boxes, and selection buttons. Use of custom programming, scripting language, or a manufacturer-specific procedural language for configuration is not acceptable.

- c. Software shall provide the ability to view the logic in a monitor mode. When online, the monitor mode shall provide the ability to view the logic in real time for easy diagnosis of the logic execution. When off-line (debug), the monitor mode shall allow the user to set values to inputs and monitor the logic for diagnosing execution before it is applied to the system.
- d. All programming shall be done in real-time. Systems requiring the uploading, editing, and downloading of database objects shall not be allowed.
- e. System shall support object duplication within a customer's database. An application, once configured, can be copied and pasted for easy re-use and duplication. All links, other than to the hardware, shall be maintained during duplication.

J. Trended/Logged Information

- Information logged by the Temperature Control System shall be automatically archived to the Web Supervisor each calendar month and able to be recalled through the Temperature Control System and shall not be automatically overwritten without the consent of operator.
 - a. Information shall be archived in a dedicated directory indicating its contents, with the archive files saved with a dated designation, such as "TCS Trend (YEAR)(MONTH)(DATE).*", where the "(YEAR)" designates the numerical 4 digit year, the "(MONTH)" indicates the numerical 2 digit month and "(DATE)" indicated the numerical 2 digit day of the month.
 - b. At option of operator, individual archived files must be able extracted from the computer as needed to view remotely, using the system interface on any connected computer. Extraction from the local computer shall be done via portable memory device, such as a flash drive.

K. Object Libraries

- 1. A standard library of objects shall be included for development and setup of application logic, user interface displays, system services, and communication networks.
- 2. Objects in this library shall be capable of being copied and pasted into the user's database and shall be organized according to their function. In addition, the user shall have the capability to group objects created in their application and store the new instances of these objects in a user-defined library.
- 3. In addition to the standard libraries specified here, the supplier of the system shall maintain an on-line accessible (over the Internet) library, available to all registered users to provide new or updated objects and applications as they are developed.
- 4. All control objects shall conform to the control objects specified in the BACnet specification or approved equivalent.
- 5. Library shall include applications or objects for the following functions, at a minimum:
 - a. Scheduling Object. The schedule must conform to the schedule object as defined in the BACnet specification, providing 7-day plus holiday & temporary scheduling features and a minimum of 10 on/off events per day. Data entry to be by graphical sliders to speed creation and selection of on-off events.
 - b. Calendar Object. The calendar must conform to the calendar object as defined in the BACnet specification, providing 12-month calendar features to allow for holiday or special event data entry. Data entry to be by graphical "point-and-click" selection. This object must be "linkable" to any or all scheduling objects for effective event control.
 - c. Duty Cycling Object. Provide a universal duty cycle object to allow repetitive on/off time control of equipment as an energy conserving measure. Any number of these objects may be created to control equipment at varying intervals
 - d. Temperature Override Object. Provide a temperature override object that is capable of overriding equipment turned off by other energy saving programs (scheduling, duty cycling etc.) to maintain occupant comfort or for equipment freeze protection.

- e. Start-Stop Time Optimization Object. Provide a start-stop time optimization object to provide the capability of starting equipment just early enough to bring space conditions to desired conditions by the scheduled occupancy time. Also, allow equipment to be stopped before the scheduled un-occupancy time just far enough ahead to take advantage of the building's "flywheel" effect for energy savings. Provide automatic tuning of all start/stop time object properties based on the previous day's performance.
- f. Demand Limiting Object. Provide a comprehensive demand-limiting object that is capable of controlling demand for any selected energy utility (electric, oil, and gas). The object shall provide the capability of monitoring a demand value and predicting (by use of a sliding window prediction algorithm) the demand at the end of the user defined interval period (1-60 minutes). This object shall also accommodate a utility meter time sync pulse for fixed interval demand control. Upon a prediction that will exceed the user defined demand limit (supply a minimum of 6 per day), the demand limiting object shall issue shed commands to either turn off user specified loads or modify equipment set points to effect the desired energy reduction. If the list of sheddable equipment is not enough to reduce the demand to below the set point, a message shall be displayed on the users screen (as an alarm) instructing the user to take manual actions to maintain the desired demand. The shed lists are specified by the user and shall be selectable to be shed in either a fixed or rotating order to control which equipment is shed the most often. Upon suitable reductions in demand, the demand-limiting object shall restore the equipment that was shed in the reverse order in which it was shed. Each sheddable object shall have a minimum and maximum shed time property to effect both equipment protection and occupant comfort.
- 6. Library shall include control objects for the following functions. All control objects shall conform to the objects as specified in the BACnet specification or approved equivalent.
 - a. Analog Input Object Minimum requirement is to comply with the BACnet standard for data sharing. Allow high, low and failure limits to be assigned for alarming. Also, provide a time delay filter property to prevent nuisance alarms caused by temporary excursions above or below the user defined alarm limits.
 - b. Analog Output Object Minimum requirement is to comply with the BACnet standard for data sharing.
 - c. Binary Input Object Minimum requirement is to comply with the BACnet standard for data sharing. The user must be able to specify either input condition for alarming. This object must also include the capability to record equipment runtime by counting the amount of time the hardware input is in an "on" condition. The user must be able to specify either input condition as the "on" condition.
 - d. Binary Output Object Minimum requirement is to comply with the BACnet standard for data sharing. Properties to enable minimum on and off times for equipment protection as well as start delay must be provided. The BACnet Command Prioritization priority scheme shall be incorporated to allow multiple control applications to execute commands on this object with the highest priority command being invoked. Provide sixteen levels of priority as a minimum. Systems not employing the BACnet method of contention resolution shall not be acceptable.
 - e. PID Control Loop Object Minimum requirement is to comply with the BACnet standard for data sharing. Each individual property must be adjustable as well as to be disabled to allow proportional control only, or proportional with integral control, as well as proportional, integral and derivative control.
 - f. Comparison Object Allow a minimum of two analog objects to be compared to select either the highest, lowest, or equality between the two linked inputs. Also, allow limits to be applied to the output value for alarm generation.
 - g. Math Object Allow a minimum of four analog objects to be tested for minimum or maximum, or sum, difference, or average of linked objects. Also, allow limits to be applied to output value for alarm generation.

- h. Custom Programming Objects Provide a blank object template for the creation of new custom objects to meet specific user application requirements. This object must provide a simple Temperature Control System IC-like programming language that is used to define object behavior. Provide a library of functions including math and logic functions, string manipulation, and e-mail as a minimum. Also, provide a comprehensive on-line debug tool to allow complete testing of the new object. Allow new objects to be stored in the library for re-use.
- i. Interlock Object Provide an interlock object that provides a means of coordination of objects within a piece of equipment such as an Air-handler or other similar types of equipment. An example is to link the return fan to the supply fan such that when the supply fan is started, the return fan object is also started automatically without the user having to issue separate commands or to link each object to a schedule object. In addition, the control loops, damper objects, and alarm monitoring (such as return air, supply air, and mixed air temperature objects) will be inhibited from alarming during a user-defined period after startup to allow for stabilization. When the air-handler is stopped, the interlocked return fan is also stopped, the outside air damper is closed, and other related objects within the air-handler unit are inhibited from alarming thereby eliminating nuisance alarms during the off period.
- j. Temperature Override Object Provide an object whose purpose is to provide the capability of overriding a binary output to an "On" state in the event a user specified high or low limit value is exceeded. This object is to be linked to the desired binary output object as well as to an analog object for temperature monitoring, to cause the override to be enabled. This object will execute a Start command at the Temperature Override level of start/stop command priority unless changed by the user.
- k. Composite Object Provide a container object that allows a collection of objects representing an application to be encapsulated to protect the application from tampering, or to more easily represent large applications. This object must have the ability to allow the user to select the appropriate parameters of the "contained" application that are represented on the graphical shell of this container.

2.11 GUI DISPLAY FRAMES

- A. Dynamic Graphic portion of this GUI shall allow the operator to access any system information via a "system penetration" method. "System penetration" shall allow the operator to penetrate into the facility until the detailed color graphic display of a specific area of the facility is represented. All system travel shall be 100% accessible via the mouse, no keyboard commands shall be necessary to edit dynamic data.
- B. Ability to import background images for the display frames shall include as a minimum, photos, digital images, bitmaps and standard image formats. Systems that utilize a proprietary background image format are not acceptable.
- C. As a minimum, a graphic display shall be provided for overall site, for each subsystem within the site and for all individual locations associated with each subsystem. All graphics shall be logically linked to allow the operator to traverse through the overall system and at any time return immediately to the associated subsystem, or overall site plan, via a graphic element.
- D. System must be set up to have at least 3 access levels: guest, user and administrator. Guest privileges shall be limited to view only. Users shall be able to make set point and schedule changes. Administrators shall have all privileges as users in addition to being able to assign passwords.

- E. Graphic displays shall have an HTML tree on the left side of the screen and the currently viewed graphic on the right side. Tree views shall be different based on access level and the tree must only show screens that are available based on access privileges.
- F. Each AHU, heating water system and cooling system shall have a minimum of 5 graphic screens available from the tree view. One screen shall display the airflow pattern with all dampers, coils and fans shown in their correct schematic location and dynamic data for all input values shown. This main graphic screen shall show the control devices in mechanical flow diagram format with directional arrows to indicate normal flow arrangement. These screens shall be available to anyone with access to the system, and therefore shall be view only. Another screen shall display text information with the following primary categories: Unit status, temperatures, heating, cooling, economizer, static pressure, supply fan, exhaust fan including set screen shall also be furnished for each control loop, so that people with the appropriate access can change loop tuning parameters from PCs without needing individual programming tools. Override screens shall be furnished for each controller to permit overriding control points without the need for vendor specific software. An alarm screen shall also be furnished each AHU. The Heating systems and Cooling systems shall have similar screens as the AHUs. Each VAV shall have a graphics screen and a text screen. Systems that won't permit creating these customized screens as described herein will not be acceptable. Systems that use controllers that won't permit overrides of inputs and outputs from a browser based graphic screen will not be acceptable.
- G. All shapes shall be 3-D with a common perspective. All dampers shall have a minimum of 4 animation levels to show partially open, half open, mostly open, fully open, and closed position of dampers. All analog inputs shall show the actual value and engineering units on the graphic screen. Binary inputs shall be linked to flashing animated displays. Safety alarms will flash when in alarm. Filter status shall be indicated when value indicates that they are dirty. To prevent clutter on the graphic displays, symbols will only be shown for equipment that is controlled or monitored by the DDC system. Also, normal status for safeties will not be indicated, and normal status for safeties will be indicated by an image of a clean filter. Pumps and fans shall rotate when flow is proven by a monitoring device. Coils shall change color when valves are open to permit water flow through the coils.
- H. Graphics shall use common color schemes to make the overall system easy to understand. All overall backgrounds shall be white. All text shall be black. Any value that is in alarm shall have a red background. Any value that is overridden shall have a blue background. All like sensors shall be the same color. For example, all temperature devices shall be yellow, all pressure devices shall be purple, all humidity devices shall be teal, all fire alarm devices shall be red, and all CO2 devices shall be green.
- I. Current set points and occupancy status shall be shown at the bottom of each graphic screen.
- J. Floor plan drawings shall be provided and permit access to each zone's individual floor plan sections. On the individual floor plan sections, room numbers and room temperatures shall be displayed. Values that are out of the acceptable range shall appear in a different background color and / or flash. Each VAV shall have its own graphic that contains the points from within its controller including the box flow set point, room temperature set point, maximum cooling flow set point, minimum cooling flow set point, and minimum heating flow set point, plus the discharge air temperature from the AHU supplying the unit. The VAV text screen shall have the same information as the graphic screen plus high and low flow calibration values, damper rotation adjustment (CW or CCW), and air balance set-up features. GUI shall permit operator the ability to enable, set or disable high and low occupied and unoccupied limits for each room temperature reading.
- K. Text Screens shall be available for all levels of access. Set point and output values are changeable from the text screen for users with appropriate access privileges and

administrators, but not guests. When a value can be overridden or edited, a red box shall appear around it when the cursor is position on it. A single click of the mouse shall bring up pop up menu that provide options to make a permanent override, change set point, or release a previous override of an output point. Analog inputs shall have pop up menus that allow setting high and low alarm limits and the ability to enable and disable alarm limits as appropriate for the sensing device. Pop up menus must be customized to include a description of the point that is being modified. Generic override menus are not permitted because they would not describe to an operator what is about to be modified. The Control Contractor shall set up all initial alarms as indicated in the point matrix.

- L. Text screens shall include schedule information including current state and date and time of next scheduled event. Positioning the mouse over the current state shall permit single click access to the schedule. The schedule screen shall allow the operator to edit a yearly, weekly, daily, holiday or special event schedule for the system being viewed. Temperature values and set points shall be displayed below the schedule information, and shall have a minimum of 1 decimal place. Heating, cooling and damper out puts shall be displayed next. The OA temperature for economizer switchover shall be displayed and adjustable from the text screen. Air flow readings shall be shown with set point and actual readings. Fan information shall be shown next, followed by static pressure readings and set points, which shall have a minimum of 2 decimal places. Miscellaneous set points including night setback cooling and heating, average zone temperature, return air warm-up and cool-down, dehumidification, and unoccupied mixed air temperature set points shall all be shown and adjustable. All safeties shall be shown, followed by coil pump control information.
- M. Each system shall have its own specific alarm screen available to all operators but only editable by operators with user and administration access privileges. From the alarm screen, users and administrators shall be able to enable and disable alarms. Points that are in alarm shall have an alarm symbol highlighted in red. Points that are not in alarm shall be shown in gray. Alarms that are disabled shall have a way to indicate this on the alarm screen graphic.
- N. Loop tuning screens shall be available through the web browser interface to save the owner the cost and time associated with using vendor specific software for tuning loops. Access to these screens shall not be provided to guests. Air handling units shall have dedicated screens for discharge air temperature, static pressure, and outside air control loops. Loop tuning screen for discharge air temperature shall include the discharge air temperature, discharge air temperature set point, cooling loop throttling range, I-gain and ramp time, heating loop throttling range, I-gain and ramp time, unoccupied heating loop throttling range, I-gain and ramp time, cooling valve output, heating valve output, and damper control output. Screens shall also have graphs that show 5 minutes of live data for the discharge air temperature, set point, cooling valve, heating valve and mixed air dampers. Each loop tuning screen shall include the appropriate throttling range, I-gain and ramp time.
- O. Each non-unitary controller shall have an override screen. These screens shall be available on-site for use during point-to-point check-out and commissioning. The override screen shall show the inputs and outputs for each controller with the points in their wired location. Unused points shall be shown as spares. Points that are in alarm shall have a red background, and points that are overridden shall have a blue background just as on other screens. These screens shall show the actual values that come back from the controller, not the values that may have been typed in for override at GUI if the controller software is not accepting the override value. The override screen shall also permit timed overrides.
- P. Each central plant variable air volume (VAV) air-handler (AHU) shall also have a overview screen listing every associated terminal unit's coils data in a text format that includes occupancy mode, room temperature, room set point, box flow, flow set point, temperature leaving Fan coil, % cooling and % heating. Also, each VAV AHU shall have an air balance

- screen that will permit balancing the system through a computer connected to the Ethernet or directly to the appropriate BC without vendor specific software. Air balancing screens shall permit at least 8 manual override commands: normal, position (%), flow value, flow percent, open, close, min flow, and max flow.
- Q. Although only one outside air temperature sensor is needed per building, GUI shall use independent outside air temperature points, so that during check-out and commissioning, the outside air temperature for a system can be changed without changing the outside air temperature for the whole building. GUI shall also have a global outside air temperature point that can be overridden from the screen for the controller where the point is physically connected. Overriding this outside air temperature value will change it for all systems, except when outside air temperature has been overridden for an individual system.
- R. System shall allow for the easy development and editing of dynamic graphics. Wizards shall be utilized to assist the operator with their manipulation of the graphic system. The operator shall be able to, through a single mouse function, select between the dynamic display mode and the graphic edit mode for the currently viewed graphic frame, assuming appropriate access level is provided to the operator. Systems requiring multiple mouse or operator keyboard commands to enter the graphic edit mode are not desirable and require thorough definition of steps involved to accomplish function.
- S. Animation of system data shall be provided via graphic elements on the display frames. Standard graphic element library shall be provided to assist the operator with their implementation. The ability to define and add new animated graphic elements shall be provided. As a minimum, the ability to move, size, draw, arrange, align, layer, space, rotate, invert, duplicate, cut, copy, paste, erase any animated element shall be provided. System parameters and set points shall be assignable and modifiable by the animated graphic elements, relieving the need for keyboard commands for system manipulation.
- T. Ability to simultaneously display a dynamic X/Y chart of selected points, shall be provided. The chart shall be an element of the graphic display and shall automatically update with the display data. The chart shall allow for dynamic manipulation to modify the range, rate, and timeframe of view, in both a real-time as well as historical configuration. A minimum of 4 values shall be included on any chart display element. There shall not be a limit to the quantity of chart elements displayed on a graphic frame. Trace colors and X values shall be User configurable. Systems not providing this capability are required to provide an equivalent charting package with GUI offering.
- U. Full on-line system documentation shall be provided. It shall not be necessary to maintain printed copies of user or programming manuals. Context sensitive help files shall be provided for all applications within the FMCS area of GUI. The ability to update on-line documentation must be provided via electronic updates, definition of update procedure shall be provided. Electronic O&M manual information shall be installed in the web server(s), so that information can be retrieved by logging on to the building's FMCS from any web browser. PDF files for control drawings, sequences of operations and product cut sheets shall be loaded on the web server(s), so they can also be remotely accessed.
- V. By pointing and clicking on any individual graphic element, the following shall be available for display or modification, but not be limited to the current value or state may be edited. A self-prompting pop-up window shall be displayed providing the ability to modify the selected point value. Instructions assisting the operator in their use of the pop-up window shall be provided.
- W. Graphically displayed global scheduling and editing functions shall be provided. The ability to link these functions to the associated equipment or zone frames shall be a standard feature. A calendar shall be provided for display and modification of the SDC time clock functions. The User shall be able to view a daily, weekly, monthly, annual, special or holiday schedule from a

defined display frame. A list of served areas shall be displayed on the same screen, this list shall be displayed at all times, pull down menus or other means of accessing these areas shall not be acceptable. The system shall have a master override screen that will allow an operator to change the schedule for every piece of equipment in every building by changing the master schedule. This is often referred to as a "Snow Day" command and does not require the operator to log onto each building's Subordinate Server and Building Controllers.

X. All analog values shall be trended every 15 minutes. The trend samples shall be saved in the BC for at least 36 hours. Access to trended data shall be available by the single click of a mouse on the analog value. Systems that open other windows and require a selection of the desired data are not acceptable.

2.12 GUI ALARMING

- A. GUI shall provide, as standard, alarm annunciation of system data. On every display frame, the ability to view, acknowledge, delete and manipulate real-time and historical alarms shall be provided. The ability to provide a unique and custom alarm display for every display frame shall be provided. The ability to continuously or upon request, view the alarm display, shall be provided.
- B. Alarm conditions shall be capable of invoking, as a minimum; a display frame, an email message, a text message sent to a pager or cellular phone.
- C. Alarm logging shall be provided in a user definable configuration. All alarms shall be displayed and/or routed as follows, as a minimum; GUI display frame, local printer, server printer, client printer, logged to file, and archived in standard format for information management. Alarm groupings shall be hierarchical in nature allowing up to 8 alarm groups and 16 sub-groups. GUI shall not possess any limits on the quantity of alarms that can be logged, including historical data archiving. Systems possessing limits must define the restrictions and may not be acceptable.
- D. Alarm shall provide up to 999 alarm priorities with up to 5 alarm color changes, per priority, according to alarm status.

2.13 TEMPERATURE CONTROL CABLING

- A. Cabling in air plenums shall be open wired UL listed plenum cable or shall be installed in conduit.
- B. Conduit shall be 1/2-inch minimum size and shall be furnished and installed by the temperature control contractor. Run all control wiring exposed in mechanical rooms and similar spaces in conduit, in a neat, workmanlike manner. Provide bushings on any open end of conduit. Conduit construction and sizing shall be in accordance with Project Manual Section 260533, Raceway and Boxes for Electrical Systems.
- C. Concealed wiring and wiring in non-plenum ceiling cavities, which is operating under 100 volts, may be open wired if in compliance with Article 725, NFPA-70 (NEC). Open wiring shall be supported as denoted below.
- D. Terminations shall be performed by the Temperature Control Contractor.
- E. Wire and conduit not indicated on the Drawings or in the Specifications, but required by the controls supplier, shall be paid for by the Temperature Control Contractor at no additional cost to the Owner.
- F. Cable Supports

- 1. Provide cable supports that meet UL, NEC and TIA/EIA requirements for structured cabling systems.
- 2. Cable support system shall provide support for various types of low voltage cables, fiber optic cables, innerduct, and temperature control cabling.
- 3. Support system shall attach to the building structural elements or be wall mounted.
- 4. Supports shall be made of fire retardant and low smoke emission products, which meet UL 2034 requirements for air plenum spaces.
- 5. Support products shall have a minimum of a 1 inch wide platform for the cable to rest. Bridle rings or bridle rings with 1" inserts are not acceptable.
- 6. Individual supports shall be installed at intervals not greater than 60 inches.
- 7. Cable supports shall be installed a minimum of 6 inches above lay-in ceiling system. Cable sags shall not allow the cable to touch ceiling grid or tiles.
- 8. Minimum clearances from sources of EMI and RFI must be as specified in TIA/EIA-568C, TIA/EIA-569 and the latest version of the BICSI TDMM.
- 9. Approved Manufacturers:
 - a. Caddy by Erico
 - b. Siemon
 - c. CPI
 - d. Panduit
 - e. Garvin Industries
 - f. B-line

G. Cable Ties

- 1. Provide plenum rated cable ties for cables in/or above ceiling.
- 2. Cable ties shall be of appropriate length to loosely bundle and secure the low-voltage cables. Cable ties are not to be pulled so tight that they damage or distort the cables in the bundles. Trim cable tie loose ends.
- 3. Cable ties shall meet UL 94V-O.
- 4. Approved Manufacturers:
 - a. Panduit
 - b. Hubbell
 - c. Leviton

H. Cable Hook and Loop Fasteners

- 1. Provide cable hook and loop fasteners to secure cable bundle at equipment cabinets, panels, and controllers.
- 2. Hook and loop fasteners may be used above ceiling if they are plenum rated.
- 3. UL listed.
- 4. Approved Manufacturers:
 - a. Panduit
 - b. Hubbell
 - c. Leviton

I. Innerduct (Indoor)

- Provide 1.0 inch I.D. plenum rated corrugated innerduct above ceiling for all nonarmored fiber optic cable.
- 2. Innerduct shall be UL listed and plenum rated.
- 3. Approved Manufacturers:
 - a. Endot-Endocor
 - b. Carlon
 - c. Pyramid Industries
 - d. Eastern

J. Innerduct (Outdoor)

1. Provide 1.0 inch I.D. non-plenum polyethylene-type, ribbed inside tube, innerduct in the conduit as shown on the Drawings.

- Innerduct shall be UL listed.
- 3. Provide a nylon pull string in all empty innerduct runs.
- 4. Approved Manufacturers:
 - a. Enduct Ribbed (for outside applications)
 - b. Carlon
 - c. Pyramid Industries
 - d. Eastern
- K. Temperature Control Contractor shall refer to all Divisions 23 and 26 Project Manual sections for unique requirements for each piece of equipment.

PART 3 - PART 3 EXECUTION

3.1 INSTALLATION

- A. Refer to Project Drawings, Section 230900 and 230993 for listing of expected control points. Contractor is responsible to review Project Documents to realize/confirm all necessary points for compliance with Project Documents.
- B. Automatic control and/or monitoring of all HVAC equipment and system described by Project Documents shall be with this direct digital control (DDC) system, unless otherwise noted.
- C. Temperature Control System control panels for network control and system interface shall be installed as necessary by the Temperature Controls Contractor. Power wiring for control panels and devices shall be the responsibility of the Temperature Control Contractor, who is responsible to coordinated with the Division 26 Contractor to provide all the necessary services to power the Temperature Control System control panels, components, and devices. Power shall be obtained from the various Division 26 panels located throughout the building, spares circuiting in these panels shall be utilized for the Temperature Control System installation.
- D. Temperature Control System Primary/Central Server shall be rack-mounted server within the building's Main Distribution Frame, MDF, electronic data service room. This server shall provide system access, data acquisition and collective data storage.
 - Mechanical room temperature control panels shall provide local equipment control functionality, data storage, etc. These control panels shall communicate to the central server via BACnet MS/TP and IP communication standard.
 - a. Local BACnet IP Controllers:
 - 1) Temperature Control Systems Panels.
 - 2) Air Handler Panels.
 - 3) Boilers.
 - 4) Dedicated outside air unit
 - 5) Pool dehumidification unit
 - b. Local BACnet MS/TP Controllers:
 - 1) Fan Coil Unit
 - 2) Energy recover unit.
 - 3) Packaged Air Handlers.
 - 4) Terminal Units.
 - 5) Heaters.
 - 6) Variable Frequency Controllers.
 - 7) Fans.
 - 8) Pumps.
 - 9) Control Dampers.
- E. Operational Verification: All motorized components of the building heating, cooling and ventilation systems shall be monitored with a field installed current sensor to verify and monitor operation of the motor.

- F. Local Comfort Control Sensors: Refer to below direction and/or project drawings for precise locations of various local comfort control sensors, however if a location is not shown, contractor is responsible to coordination precise mounting location with owner's representative. Wall mounted devices for existing building being renovated are expected to be with surface mounted sub-base and raceway, unless otherwise noted; otherwise all devices shall be installed with flush mounted wall boxes and having concealed in-wall wiring. Devices shall be as follows:
 - 1. <u>Combination/Multipurpose Thermostat</u>: Wall mounted combination temperature, carbon dioxide, and humidity sensor as designated below, or multiple sensors, shall be installed at a mounting height of 48-inches near the room entry doorway from an adjacent interior corridor, or as otherwise shown on the project drawings. Final location shall be determined and coordinated by the Temperature Control Contractor to best suit each specific area of installation. If contractor chooses to use multiple sensors, the contractor is responsible for the additional cost and the coordination of such devices. Devices shall be installed for each of the following types of equipment, for each independent thermal zone served unless otherwise indicated.
 - a. Single-zone Air Handlers; Temperature/CO2/Humidity
 - b. Variable Temperature Air Handlers; Temperature/CO2/Humidity
 - c. VAV Terminal Units Single Duct & Fan-Powered; Temperature/CO2.
 - d. Fan Coil Thermal Zones at LECC; Temperature/CO2.
 - 2. Flat Plate Thermistor: Wall mounted flat plate temperature sensor shall be installed at a mounting height of 48-inches near room entry doorway from an adjacent interior corridor, or as otherwise shown on project drawings. Final location shall be determined and coordinated by Temperature Control Contractor to best suit each specific area of installation. Devices shall be installed for each of the following types of equipment, for each independent thermal zone served unless otherwise indicated.
 - a. Heaters: Cabinet, Unit, Convector, Finned-Tube, and Radiant Panels.
 - b. Fans Identified for Temperature Limiting Operation.
 - c. Self-Contained & Independent Systems.
 - 3. On/Off Electronic Switch:
 - a. Fans Identified for Manual Operation.

3.2 SEQUENCE OF OPERATION

A. Refer to Specification Sections 230993 for equipment operation sequences and listing of control points.

3.3 OCCUPIED/UNOCCUPIED SYSTEMS & ZONES

- A. Each air handler shall be considered a single system and each temperature sensing and/or time dependent device considered a single thermal zone. Each system may typically be comprised of multiple zones. Equipment serving more than one system and/or zone, such as restroom exhaust fans and heaters, shall be automatically engaged when either associated system is engaged to operate for occupied conditions. Unitary equipment not dedicated to a specific system, such building entry heaters, shall be independently scheduled, but also engaged into occupied operation when adjacent systems or zones engaged into scheduled occupied operation. Equipment associations shall be configurable through the Temperature Control System. System engagement shall be controlled through the Temperature Control System. Zone engagement shall be controlled through the Temperature Control System or the local room thermostat or sensor.
- B. Air handlers shall be scheduled to provide system ventilation during occupied periods only, strictly through the building automation through secure system authority. Individual zone override control to reset zone set point temperatures shall be available through the Temperature Control System or from zone thermostats and sensors shall not allow for system outside air ventilation or sequence the central air-handler into occupied mode.

C. Manual Overrides: Manual push buttons override switches shall be an integral part of occupied room, wall mounted temperature sensors with adjustable temperature set-point control. Pressing of override button will place the zone in which the sensor is located into a preprogrammed non-occupied condition allowing for more comfortable room set point temperature conditions.

3.4 NETWORK MANAGEMENT FUNCTIONAL REQUIREMENTS

- A. Contractor shall thoroughly and completely configure Temperature Control System devices, software, supplemental software, application programming, network communications, control system server, operator workstations, remote operator workstations, portable operator's terminal, and network communications to permit the functional requirements of the IAS herein specified. Setup shall include as a minimum the following network management procedures:
 - 1. Automatic backup of the DDC System database to appropriate media.
 - 2. Program, load and debug all software installations, including integration of third party applications (e.g. analytics and energy management).
 - 3. Network user auditing routine.

3.5 GUARANTEE

- A. Contractor shall include three (3) year control system operational warranty and three (3) year guarantee of workmanship, material, and devices from the date of Substantial Completion as part of base bid cost. Any material proving defective shall be repaired or replaced during that period. This shall not, apply to material that has been damaged due to willful vandalism or negligence.
- B. Software support includes upgrading of software during warranty period such that system is updated, with latest available version loaded at the end of five (5) year warranty period.
- C. Support shall also include Owner training for system operation system, as outlined in this Specification. Explicitly included is the training necessary to analyze building operation to minimizing energy costs.

3.6 OWNERSHIP OF PROPRIETARY MATERIAL

- A. Owner shall sign a copy of the manufacturer's standard software and firmware licensing agreement as a condition of this contract. Such license shall grant use of all programs and application software to owner as defined by the manufacturer's license agreement, but shall protect manufacturer's rights to disclosure of trade secrets contained within such software. All project developed software and documentation shall become the property of the owner. These include, but are not limited to project graphic images, record drawings, project database, project specific application programming code, and all other associated documentation.
- B. Owner shall be able to add or remove user and passwords to access control system.

3.7 DEMONSTRATION

- A. Engage a factory-authorized service representative to train Owner's maintenance personnel to adjust, operate, and maintain control systems and components.
 - 1. Train Owner's maintenance personnel on procedures and schedules for starting and stopping, troubleshooting, servicing, and maintaining equipment and schedules.
 - 2. Provide operator training on data display, alarm and status descriptors, requesting data, executing commands, calibrating and adjusting devices, resetting default values, and requesting logs. Include a minimum of 20 hours dedicated instructor time on-site.
 - 3. Schedule training with Owner/CxA, through Architect, with at least seven days' advance notice.

3.8 TRAINING OF SCHOOL OPERATOR

- A. Temperature Controls Contractor shall provide 40 hours of basic control system training within 3-months of date of substantial completion. Hours may be utilized consecutively or separated into multiple sessions, the date and time(s) of these sessions will be at the school district's discretion.
- B. In addition to the initial training, a total quantity of 5, 4-hour training sessions at building shall be given quarterly during the first 18-months after substantial completion to familiarize maintenance personnel on the operation of the mechanical and control systems through the host computer. Contractor should make arrangements to accommodate multiple school district attendees at each training session. No limit shall be set on number of school district attendees. At least one week notice shall be given to district to schedule training session, at the school districts discretion.
- C. Obtain a receipt acknowledging completion of each item of instruction.
 - 1. Without sign in sheet, copies of instructional material, recordings of sessions, etc., the training session will not be deemed as an acceptable training session.

3.9 ON-SITE ASSISTANCE

- A. Seasonal Adjustments: Within the first 2 years after substantial completion, the Temperature Controls Contractor shall provide no less than 7 Project site(s) visits (minimum of 4 hours per site(s) visit), when requested by Owner/CxA, to adjust and calibrate components and to assist Owner's personnel in making program changes and in adjusting sensors and controls to suit actual conditions.
 - 1. If the above site visits are not utilized by the owner, the contractor is to visit each building during the first heating or cooling season to make repairs and adjustments to provide uniform conditions throughout.
 - 2. Prepare and submit a report for each visit documenting conditions found and corrective action taken. Report to be signed by owner for documentation.
- B. Contractor and Owner/CxA to review electrical demand trended data in order to determine the electrical demand limit, which triggers the demand limiting sequence, for each building.

3.10 COMPLETION

- A. Prior to final inspection, this Contractor shall perform the following service work, including, but not limited to, the following items:
 - 1. Check mechanical mechanisms; lubricate, adjust and tighten as necessary.
 - 2. Calibrate control instruments and devices.
 - 3. Observe and Confirm Functionality; schedule, fine-tune operation, set-point adjustments.
- B. When the work is completed, and at a time directed by the Owner, Commissioning Agent (CxA) and the Architect/Engineer, the Contractor shall carefully adjust all parts of the equipment and systems. This includes adjustment of automatic controls and safety devices, proper setting of adjustable devices, dampers and valves, and other necessary operations so the systems are fully operable and automatic in operation. Upon completion of the Work, notify the Owner/CxA, and Architect/Engineer that system is ready for final tests and inspection.
- C. At the time of final inspection, this Contractor shall be represented by a person with the proper authority, who shall demonstrate, as directed by the Owner/CxA and Architect/Engineer, Work shall fully complies with the purpose and intent of the Specifications and Drawings. Labor, services, instruments, and tools necessary for demonstrations and tests shall be provided by the Contractor.

- D. Contractor shall test and adjust each instrument specialty and equipment furnished by him, prior to final acceptance. Contractor shall demonstrate, for approval by the Project Engineer, that subsystems operate as a coordinated and properly functioning, integrated system.
- E. Contractor shall furnish labor, provide adjustments, and incidentals to obtain desired results.

END OF SECTION 23 09 00

SECTION 27 41 17 - INTEGRATED A/V CONTROL SYSTEMS AND EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this section.

1.2 SUMMARY

- A. This section includes but is not limited to the minimum requirements for the installation, configuration and training of the audio-visual components in the LGI, Steam shown on sheet T1.05 and Gym/Cafe as depicted on sheet T1.06 of the Drawings and required by these specifications. The Gym/Café A/V system shall be capable of being used independently as well as together as one system.
- B. These Specifications, together with the Drawings accompanying them, are intended to depict the installation requirements necessary to support this Project. Contractor shall furnish materials shown and/or called for on the Drawings but not mentioned in the Specifications, or vice versa, that are necessary for the installation and support of communications cabling, whether specifically called for in both. In addition, Contractor shall provide incidental equipment and materials required for the completion of systems included in this contract whether specified or shown on the drawings.
- C. All required back boxes and conduit to support the AV systems are provided and installed by others. Contractor is required to provide, install, test, and configure all cabling, equipment, and AV systems as described within this specification and as shown on the Tech drawings.
- D. This section includes minimum requirements for the following:
 - 1. Audio Transmitter Type 1
 - 2. Audio Transmitter Type 2
 - 3. Matrix Transmitter Type 1
 - 4. Matrix Transmitter Type 2
 - Matrix Receiver
 - 6. LGI & STEAM Projectors
 - 7. Rack Mounted Mixer
 - 8. AV Switcher Type 1
 - 9. AV Switcher Type 2
 - 10. AV Switcher Type 3
 - 11. Classroom Audio System
 - 12. Control Panel
 - 13. AV Network Switch
 - 14. Touch Panel Type 1
 - 15. Touch Panel Type 2
 - 16. Digital Signal Processor Type 1
 - 17. Digital Signal Processor Type 2
 - 18. Digital Signal Processor Type 3
 - 19. Power Amplifier Type 1
 - 20. Power Amplifier Type 2
 - 21. Power Amplifier Type 3
 - 22. Wireless Microphone Receiver Type 1
 - 23. Wireless Microphone Receiver Type 2
 - 24. Antenna Distribution

- 25. Digital Mixing Console
- 26. Hearing Assist Transmitter
- 27. Gymnasium/Cafe Loudspeakers
- 28. Loudspeaker Rigging Components
- 29. AV Equipment Stage Rack Reuse Existing Gym/Cafe
- 30. AV Equipment Stage Mobile Rack Reuse Existing Gym/Cafe
- 31. AV Equipment Rack Blanks
- 32. AV Equipment Rack Vents
- 33. Microphone/Line Level Cabling
- 34. 12 AWG Loudspeaker Cabling
- 35. 16 AWG Loudspeaker Cabling
- 36. UTP Cabling
- 37. STP Cabling
- 38. HDMI Cabling
- 39. RS-232 Cabling
- 40. Relay Cabling
- 41. RF Cabling
- 42. Custom Faceplates
- 43. Grommeted Faceplates
- 44. XLR Panel Mount Connectors
- 45. RCA Panel Mount Connectors
- 46. BNC Panel Mount Connectors
- 47. Ethernet Panel Mount Connectors
- 48. HDMI Panel Mount Connectors
- 49. RS-232 Panel Mount Connectors
- 50. XLR Cable Connectors
- 51. RCA Male Cable Connectors
- 52. BNC Cable Connectors

1.3 QUALITY ASSURANCE

- A. The following industry Standards are the basis for the audio-visual system described herein. The list is incorporated by this reference to them.
 - 1. ANSI American National Safety Institute
 - 2. ASTM American Society of Testing and Materials
 - 3. EIA Electronics Industries Association
 - 4. FCC Federal Communications Commission
 - 5. NEMA National Electrical Manufacturer's Association
 - 6. OSHA Occupational Safety and Health Administration
 - 7. NEC National Electric Code.
 - 8. NFPA National Fire Protection Association.
 - 9. IEEE Institute of Electrical and Electronics Engineers.
 - 10. ISO International Standards Organization.
 - 11. UL Underwriters Laboratories
 - 12. Davis and Davis, Sound System Engineering (2nd Edition), Howard W. Sams, 1987
 - 13. Giddings, Audio System Design and Installation (ASDI), Howard W. Sams, 1990
- B. All cable and equipment shall be installed in a neat and skillful manner. Equipment and materials shall be of the quality and manufacturer indicated. The equipment specified is based upon the acceptable manufacturers listed. Where "Or equal" is stated, equipment shall be equivalent in every way to that of the equipment specified and subject to approval.
- C. Materials and work specified herein shall comply with the requirements of the local Authority Having Jurisdiction.

- D. Contractor should have the following qualifications:
 - 1. Experienced in the installation of systems similar in complexity and scale to those included within the scope of work. If requested, the Contractor shall provide the names, locations, and points of contact for at least three installations of the type and complexity specified herein.
 - 2. Within the last two (2) years, installed an audio-visual system with similar equipment and functionality.
 - 3. Have at least one (1) person on staff with CTS-I certification.

1.4 SUBMITTALS

- A. Provide update one line drawing/detail for each system for approval.
- B. See front end submittals section for more information.
- C. See Common Work Results For Communications section 270500 for more submittal requirements.

1.5 RECORD DRAWINGS / OPERATION AND MAINTENANCE MANUALS

A. Provide record drawings and operation and maintenance manuals, as described in Sections – "Operation and Maintenance of Communications Systems" and Common Work Results for Communications Systems".

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Equipment and components shall arrive onsite properly protected and undamaged with containers, packaging, and labels intact.
- B. Store, handle and protect materials and equipment in accordance with Manufacturer's recommendations.
- C. Store materials and equipment in dry, environmentally controlled space. Do not install equipment and materials until spaces are enclosed, watertight, and dry. Protect equipment from dust and other airborne materials.
- D. Provide additional protection during handling as necessary to prevent breaking, scraping, marring, or otherwise damaging products or surrounding areas.
- E. Protect all equipment and components that are to be installed within this project from theft, vandalism, and exposure to rain, freezing temperatures and direct sunlight.
- F. Protect installed equipment and components from damage and prevent use by unauthorized persons.

1.7 WARRANTY

A. The integrated audio video system and equipment for classrooms shall carry a warranty as specified in Section – "Demonstration and Training of Communications Systems". The warranty shall include all labor and material to replace all components that fail and or do not comply with the performance specifications.

- B. Contractor shall repair, adjust, and/or replace, whichever the Owner determines to be in its best interests, any defective equipment, materials, or workmanship, as well as such parts of the work damaged or destroyed by such defect, during the warranty period, at the Contractor's sole cost and expense. If parts or components need to be repaired, then a loaner will be supplied and installed until the part or component can be repaired and reinstalled.
- C. Manufacturer certified technicians shall perform all service work.
- D. At the end of the warranty period, the Contractor shall complete one (1) site visit to evaluate the status of the audio-visual systems. All equipment within this scope of work found to be defective shall be replaced at no cost to the Owner.
- E. Guarantees of material, equipment, and workmanship running in favor of the Contractor shall be transferred and assigned to the Owner on completion of the work and acceptance of said work by the Owner.

PART 2 - PRODUCTS

2.1 AUDIO TRANSMITTER TYPE 1

- A. Shall meet or exceed the following specifications:
 - 1. Shall include two (2) channels of stereo audio.
 - 2. Shall include balanced audio outputs on XLR connectors.
 - 3. Shall have a frequency response of 10 20,000 Hz.
 - 4. Shall support Bluetooth 5.0, WAV, MP3, AAC.
 - 5. Shall be rack mountable.
 - 6. Acceptable Manufacturers:
 - a. Denon Pro DN-500CB
 - b. Or Equal

2.2 AUDIO TRANSMITTER TYPE 2

- A. Shall meet or exceed the following specifications:
 - 1. Shall include two (2) channels of stereo audio.
 - 2. Shall include balanced audio outputs on XLR connectors.
 - 3. Shall have a frequency response of 20 Hz 18 kHz.
 - 4. Shall support Bluetooth 4.0, SBC, MP3, AAC.
 - 5. Shall be rack mountable.
 - 6. Acceptable Manufacturers:
 - a. Denon Pro DN-300BR
 - b. Or Equal

2.3 MATRIX TRANSMITTER TYPE 1

- A. Shall meet or exceed the following specifications:
 - 1. Shall be capable of accepting digital video input.
 - 2. Shall be capable of transmitting audio and video over UTP cabling.
 - 3. Shall have a minimum of one (1) HDMI input and one (1) 3.5mm audio input.
 - 4. Shall have a minimum of one (1) DTP output.
 - 5. Shall support resolutions up to and including 1920x1200p.
 - 6. Shall be HDCP compliant.
 - Shall be wall mountable.

- 8. Acceptable Manufacturers:
 - a. Extron DTP T HWP 4K 231 D
 - b. Or Equal

2.4 MATRIX TRANSMITTER TYPE 2

- A. Shall meet or exceed the following specifications:
 - 1. Shall be capable of accepting digital video input.
 - 2. Shall be capable of transmitting audio and video over UTP cabling.
 - 3. Shall have a minimum of one (1) HDMI input.
 - 4. Shall have a minimum of one (1) STP output.
 - 5. Shall support resolutions up to and including 1920x1200p or higher.
 - 6. Shall be HDCP compliant.
 - 7. Acceptable Manufacturers:
 - a. Extron DTP HDMI 4K 230 TX
 - b. Or Equal

2.5 MATRIX RECEIVER

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a STP cabling input.
 - 2. Shall have a minimum of one (1) HDMI output with stereo audio output.
 - 3. Shall support resolutions of up to and including 1920x1200 or higher.
 - 4. Shall be HDCP compliant.
 - 5. Acceptable Manufacturers:
 - a. Extron DTP HDMI 4K 230 Rx
 - b. Or Equal

2.6 PROJECTORS

- A. Shall meet or exceed the following specifications:
 - 1. Install and program the full A/V systems as shown on drawing T1-05 technology details as turnkey systems with no existing equipment provided by the owner.
 - 2. Provide and install two ceiling mounted projectors with mounts in the LGI room 221.
 - a. Brightness of 10,000 ISO Lumens
 - b. WUXGA (1920 x 1200) Native Resolution
 - c. 1.36-2.10:1 Standard Throw Lens Included
 - d. 25.000:1 Evolved Dynamic Contrast
 - e. 1 x DisplayPort & 2 x HDMI Inputs
 - f. Expandable with Intel SDM-Ready Slot
 - g. 360° Orientation Support
 - h. 21:9 Aspect Ratio Support
 - i. Controllable via LAN & RS-232
 - j. Support for Crestron, PJLink & Others
 - k. Basis of Design:
 - Panasonic PT-REZ10WU7 10,000-Lumen WUXGA DLP Laser Projector (White)
 - Peerless-AV® Heavy Duty Universal Projector Mount with Adjustable Length Extension Columns and Ceiling Plate Accessories

- 3. Provide and Install two short throw wall mounted projectors in the Steam Lab room 235.
 - a. 3-chip 3LCD technology; 5,000 lumens of color/white brightness2
 - b. 1080p with 4K Enhancement1 for stunning image clarity
 - c. Up to 160" diagonal image; 4.5x larger than a 75" flat panel
 - d. Easy integration with native 16:9 aspect ratio, supports 16:10, 21:9, 16:6
 - e. Up-to-30,000-hour virtually maintenance-free laser light source
 - f. Basis of Design:
 - PowerLite 810E 3LCD Extreme Short Throw Lamp-Free Laser Display with 4K Enhancement
 - Extreme Short Throw Wall Mount (ELPMB75)
- 4. Both rooms projector locations shall be marked up and coordinated with all other trades for location, drop and full screen coverage before installation

2.7 RACK MOUNTED MIXER

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a minimum of four (4) balanced mic/line level inputs.
 - 2. Shall have a minimum of one (1) balanced stereo input.
 - 3. Shall have a minimum of one (1) balanced mono output.
 - 4. Shall have a minimum of one (1) balanced stereo output.
 - 5. Shall be 1RU rack mountable.
 - 6. Acceptable Manufacturers:
 - a. Denon Pro DN-312X
 - b. Or equal

2.8 AV SWITCHER TYPE 1

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a minimum of two (2) HDMI inputs.
 - 2. Shall have a minimum of two (2) STP inputs.
 - 3. Shall have a minimum of two (2) HDMI outputs.
 - 4. Shall have a minimum of two (2) STP outputs.
 - 5. Shall have a minimum of one (1) balanced stereo audio output.
 - 6. Shall have a minimum of one (1) RS-232 and one (1) relay control input.
 - 7. Shall support resolutions up to and including 4096x2160.
 - 8. Shall be HDCP compliant.
 - 1. Acceptable Manufacturers:
 - a. Extron DTP2 Crosspoint 82 IPCP SA
 - b. Or Equa

2.9 AV SWITCHER TYPE 2

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a minimum of two (2) HDMI inputs.
 - 2. Shall have a minimum of two (2) STP inputs.
 - 3. Shall have a minimum of two (2) HDMI outputs.
 - 4. Shall have a minimum of two (2) STP outputs.
 - 5. Shall have a minimum of one (1) balanced stereo audio output.
 - 6. Shall have a minimum of one (1) RS-232 and one (1) relay control input.
 - 7. Shall support resolutions up to and including 1920x1080p.
 - 8. Shall be HDCP compliant.

- 9. Acceptable Manufacturers:
 - a. Extron DTP Crosspoint 86 4K IPCP SA
 - b. Or Equal

2.10 AV SWITCHER TYPE 3

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a minimum of three (3) HDMI inputs.
 - 2. Shall have a minimum of one (1) HDMI outputs.
 - 3. Shall support resolutions up to and including 1920x1080p.
 - 4. Shall be HDCP compliant.
 - 5. Acceptable Manufacturers:
 - a. Extron SW4 HD 4K
 - b. Or Equal

2.11 CLASSROOM AUDIO SYSTEMS

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a minimum of four (4) audio inputs.
 - 2. Shall have a frequency response of 120 Hz 7 kHz.
 - 3. Shall have a wireless range up to 200 ft.
 - 4. Shall have individual volume controls for each source.
 - 5. Provide all necessary hardware to wall mount at locations.
 - 6. Acceptable Manufacturers:
 - a. LightSpeed 955 Access STEAM LAB
 - b. SHURE QLXD4-50 LGI ROOM

2.12 CONTROL PANEL

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a minimum of one (1) LAN port.
 - 2. Shall have a minimum of one (1) RS-232 control port.
 - 3. Shall include six buttons for control.
 - 4. Shall provide for control of AV system including, but not limited to, system power, source selection, and audio volumes.
 - 5. Acceptable Manufacturers:
 - a. Extron MLC 55 RS
 - b. Or Equal

2.13 AV NETWORK SWITCH

- A. Shall meet or exceed the following specifications:
 - 1. Shall have quantity of Ethernet ports required.
 - 2. Shall be manageable.
 - 3. Shall be 1RU rack mountable.
 - 4. Acceptable Manufacturers:
 - a. Cisco SG350 Series
 - b. Or equal

2.14 TOUCH PANEL TYPE 1

A. Shall meet the following specifications:

- 1. Shall have Ethernet monitoring and control.
- 2. Shall have a capacitive touch screen interface.
- 3. Shall have a resolution of 1024x600.
- 4. Shall be 7" diagonal.
- 5. Shall have a contrast ratio of 700:1
- 6. Provide all necessary hardware and brackets required for installation.
- 7. Confirm final color with owner prior to procurement & installation.
- 8. Acceptable Manufacturers:
 - a. Extron TLP Pro 725M
 - b. Or Equal

2.15 TOUCH PANEL TYPE 2

A. Shall meet the following specifications:

- 1. Shall have Ethernet monitoring and control.
- 2. Shall have a capacitive touch screen interface.
- 3. Shall have a resolution of 1280x800.
- 4. Shall be 10" diagonal.
- 5. Shall have a contrast ratio of 800:1
- 6. Provide all necessary hardware and brackets required for installation.
- 7. Confirm final color with owner prior to procurement & installation.
- 8. Acceptable Manufacturers:
 - a. Extron TLP Pro 1025M
 - b. Or Equal

2.16 DIGITAL SIGNAL PROCESSOR TYPE 1

- A. Shall meet or exceed the following specifications:
 - 1. Shall have two (2) mic/line inputs and two (2) line outputs.
 - 2. Shall provide a fixed architecture for signal routing.
 - 3. Control software to include, but not limited to matrix mixers, limiters, gain adjustment, delay, parametric equalizers, crossovers, and compressors.
 - 4. Acceptable Manufacturers:
 - a. JBL CSMA 280
 - b. Or equal

2.17 DIGITAL SIGNAL PROCESSOR TYPE 2

- A. Shall meet or exceed the following specifications:
 - 1. Shall have four (4) mic/line inputs and four (4) line outputs.
 - 2. Shall provide for analog and digital input/outputs.
 - 3. Shall provide an open architecture for signal routing.
 - 4. Shall have twelve (12) control ports and 6 logic ports.
 - 5. Control software to include, but not limited to: matrix mixers, limiters, gain adjustment, delay, parametric equalizers, crossovers, and compressors.
 - 6. Shall have proprietary audio transport.
 - 7. Acceptable Manufacturers:

- a. BSS Audio BLU-50
- b. Or equal

2.18 DIGITAL SIGNAL PROCESSOR TYPE 3

- A. Shall meet or exceed the following specifications:
 - 1. Shall have four (4) card slots for configurable input/output quantities
 - 2. Shall provide for analog and digital input/outputs.
 - 3. Shall provide an open architecture for signal routing.
 - 4. Shall have twelve (12) control ports and 6 logic ports
 - 5. Control software to include, but not limited to: matrix mixers, limiters, gain adjustment, delay, parametric equalizers, crossovers, and compressors.
 - 6. Shall be DANTE capable.
 - 7. Acceptable Manufacturers:
 - a. BSS Audio BLU-806DA with required IO cards
 - b. Or equal

2.19 POWER AMPLIFIER TYPE 1

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a continuous power rating of a minimum of 150 watts at 4 ohms per channel.
 - 2. Shall provide four channels of amplification.
 - 3. Shall be bridged to provide 300W at 8 ohms per channel.
 - 4. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
 - 5. Shall have a maximum of 0.5% THD at 1kHz.
 - 6. Shall have a signal to noise ratio of at least 103dB.
 - 7. Shall have a maximum input level of +21dBu.
 - 8. Acceptable Manufacturers:
 - a. Ashly Audio SRA4150
 - b. Or equal

2.20 POWER AMPLIFIER TYPE 2

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a continuous power rating of a minimum of 200 watts into 70V load per channel.
 - 2. Shall provide two channels of amplification.
 - 3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
 - 4. Shall have a maximum of 0.1% THD at 1kHz.
 - 5. Shall have a signal to noise ratio of at least 100dB.
 - 6. Shall have a maximum input level of +20dBu.
 - 7. Acceptable Manufacturers:
 - a. Extron XPA 2002
 - b. Or equal

2.21 POWER AMPLIFIER TYPE 3

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a continuous power rating of a minimum of 600 watts into 8 ohm or 70V load per channel.

- 2. Shall provide four channels of amplification.
- 3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
- 4. Shall have a maximum of 0.35% THD from 20Hz 20000Hz.
- 5. Shall have a signal to noise ratio of at least 108dB.
- 6. Shall have a maximum input level of +20dBu.
- 7. Acceptable Manufacturers:
 - a. Crown Audio DCi 4|600
 - b. Or equal

2.22 WIRELESS MICROPHONE RECEIVER TYPE 1

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a minimum frequency response of 20-20000Hz ± 1dB.
 - 2. Shall utilize a 64 MHz bandwidth.
 - 3. Shall provide automatic frequency scanning.
 - 4. Transmitters and receivers shall utilize a metal housing.
 - 5. Shall have a minimum dynamic range of 120dB.
 - 6. Coordinate operating frequency with local RF environment.
 - 7. Provide and install remote antennae and antenna distribution as required.
 - 8. Acceptable Manufacturers:
 - a. Shure QLXD124/85
 - b. Or equal

2.23 WIRELESS MICROPHONE RECEIVER TYPE 2

- A. Shall meet or exceed the following specifications:
 - 1. Shall utilize a 64 MHz bandwidth.
 - 2. Shall provide digital predictive switching for true diversity.
 - 3. Shall have up to 60 frequency presets available.
 - 4. Shall provide automatic frequency scanning.
 - 5. Transmitters and receivers shall utilize a metal housing.
 - 6. Coordinate operating frequency with local RF environment.
 - 7. Acceptable Manufacturers:
 - a. Shure ULXD4Q
 - b. Or equal

2.24 ANTENNA DISTRIBUTION

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a frequency range of 174 to 1805 MHz.
 - 2. Shall support up to five wireless receivers.
 - 3. Shall have rack mounting capabilities.
 - 4. Acceptable Manufacturers:
 - a. Shure UA844+
 - b. Or equal

2.25 DIGITAL MIXING CONSOLE

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a minimum of forty (40) mono and two (2) stereo mixing channels.

- 2. Shall have a minimum of sixteen (16) analog inputs on XLR connectors.
- 3. Shall have a minimum of sixteen (16) analog outputs on XLR connectors.
- 4. Shall be DANTE capable.
- 5. Shall have integrated processing including high-pass filters, parametric EQs, and compressors.
- 6. Shall incorporate a touchscreen for control or be controlled via an iPad app.
- 7. Acceptable Manufacturers:
 - a. Yamaha TF1 with Yamaha Ri8-D
 - b. Or equal

2.26 HEARING ASSIST TRANSMITTER

- A. Shall meet or exceed the following specifications:
 - 1. Shall have a minimum of two (2) balanced audio inputs on XLR and/or RCA connectors.
 - 2. Shall have an internal audio compressor.
 - 3. Shall have an operating frequency of 216MHz.
 - 4. Shall have a maximum output power of 100mW.
 - 5. Provide remote antenna as shown on the TAV-series drawings.
 - 6. Provide quantity and type of receivers to meet ADA requirements.
 - 7. Provide charging carrying case to accommodate all receivers.
 - 8. Acceptable Manufacturers:
 - a. Listen Tech LT-800-216
 - b. Listen Tech LA-122
 - c. Listen Tech LT-400-216
 - d. Listen Tech LA-164
 - e. Listen Tech LA-165
 - f. Listen Tech LA-166

2.27 GYMNASIUM LOUDSPEAKERS

- A. Shall meet or exceed the following specifications:
 - 1. Shall be a two-way configuration with a 12" LF driver and 1.5" HF compression driver.
 - 2. Shall have a coverage pattern of 90°H x 50°H, rotatable.
 - 3. Shall have a power rating of no less than 300W.
 - 4. Shall have a peak SPL of 122dB.
 - 5. Shall have a frequency response of 43Hz 20000Hz ±3dB.
 - 6. Provide all necessary hardware and brackets required for installation.
 - 7. Verify color with Architect.
 - 8. Acceptable Manufacturers:
 - a. JBL Pro AM5212/95
 - b. Or equal

2.28 LOUDSPEAKER RIGGING COMPONENTS

- A. Contractor shall provide and install speaker rigging components as necessary to mount main loudspeakers as shown on the drawings.
- B. Structural support members to have a safety factor of at least 5. Mounting hardware and wire rope to have a safety factor of 8. All fasteners to be graded and certified for use in the intended applications. Overhead suspension hardware shall comply with ASME B30.20 standards and all applicable local building and safety codes.
- C. Overhead suspension hardware must be of a type that includes product traceability controls.

- D. Once the systems are installed, the engineer shall physically inspect the methods and means used to verify compliance with the original design.
- E. Loudspeaker Rigging Components shall meet or exceed the following specifications:
 - 1. Loudspeaker Rigging Components shall be made of guenched or tempered forged steel.
 - 2. Loudspeaker Rigging Components shall meet or exceed all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements.
 - 3. Loudspeaker Rigging Components shall be hot dip galvanized or self-colored.
 - 4. Shackles shall meet the performance requirements of Federal Specification RR-C-271D Type IVA, Grade A, Class1.
 - 5. Turnbuckles shall meet the performance requirements of Federal Specifications FF-T-791b, Type 1 Form 1 CLASS 4, and ASTM F-1145.
 - 6. Wire rope thimble shall meet the performance requirements of Federal Specification FF-T-276b Type II.
 - 7. Wire rope shall be sized as 7x19 utility cable.
 - 8. Provide all screw pin type shackles with mouse wire.
 - 9. All end fittings shall be moused to the body with mousing cable.
 - 10. Select size of product based working load limits required.
 - 11. Acceptable product:
 - a. Chicago Hardware Company
 - b. Crosby Group
 - c. Wire Rope Corporation of America (WRCA)

2.29 AV EQUIPMENT STAGE RACK – EXISTING TO BE REMAIN

- A. Shall meet or exceed the following specifications:
 - 1. Shall have 44 units of available rack space.
 - 2. Shall have 16-gauge steel construction with black textured powder coat finish.
 - 3. Shall have side panels and fans for proper cooling.
 - 4. Shall have an overall depth of 31.4" and useable depth of 29".
 - 5. Acceptable Manufacturers:
 - a. Middle Atlantic MRK-4431
 - b. Or Equal

2.30 AV EQUIPMENT STAGE MOBILE RACK – EXISTING TO BE REMAIN

- A. Shall meet or exceed the following specifications:
 - 1. Shall have 12 units of available rack space on bottom and 12 units of slanted rack space on top for digital mixing console
 - 2. Shall be constructed of 9mm plywood construction with laminated exterior.
 - 3. Shall have 3.2mm thick front rack rails
 - 4. Shall have integrated twist latches and spring-loaded rubber-gripped handles.
 - 5. Shall have an overall depth of 37.5".
 - 6. Acceptable Manufacturers:
 - a. Gator Cases G-TOUR-GRC12X12
 - b. Or Equal

2.31 EQUIPMENT RACK BLANKS

- A. Contractor to provide equipment rack blanks where required.
- B. Shall meet or exceed the following specifications:
 - 1. Shall have a flanged construction.
 - 2. Shall be made of 1/16" thick aluminum.
 - 3. Shall have a black brushed and anodized finish.
 - 4. Provide rack blank sizes as required.
 - 5. Acceptable Manufacturers:
 - a. Middle Atlantic BL Series
 - b. Or Equal

2.32 EQUIPMENT RACK VENTS

- A. Contractor to provide equipment rack vents where required.
- B. Equipment rack vents shall meet or exceed the following specifications:
 - 1. Shall have a flanged construction.
 - 2. Shall be made of 1/16" thick aluminum.
 - 3. Shall have a black brushed and anodized finish.
 - 4. Provide rack vent sizes as required.
 - 5. Acceptable Manufacturers:
 - a. Middle Atlantic VTP Series
 - b. Or Equal

2.33 MICROPHONE/LINE LEVEL CABLING

- A. Contractor shall provide and install microphone/line level cabling as required.
 - 1. Provide cabling meeting the following specifications:
 - a. Minimum shielded 22 AWG, 7x30 stranded cabling
 - b. Nominal conductor to conductor capacitance: 114 pF/m
 - c. Tinned copper drain wire
 - d. Cable to be PVC jacketed.
 - 2. Acceptable Manufacturers
 - a. Belden 9451
 - b. Or Equal

2.34 12AWG LOUDSPEAKER CABLING

- A. Contractor shall provide and install 12AWG loudspeaker cabling as required.
 - 1. Provide speaker cabling meeting the following specifications:
 - a. Minimum unshielded 12 AWG, 65x30 stranded cabling
 - b. Nominal conductor to conductor capacitance: 32 pF/ft
 - c. Cable to be PVC jacketed.
 - 2. Acceptable Manufacturers
 - a. Belden 5000UP
 - b. Or Equal

2.35 16AWG LOUDSPEAKER CABLING

- A. Contractor shall provide and install 16AWG loudspeaker cabling as required.
 - 1. Provide speaker cabling meeting the following specifications:
 - a. Minimum unshielded 16 AWG, 65x34 stranded cabling
 - b. Nominal conductor to conductor capacitance: 98 pF/ft
 - c. Cable to be PVC jacketed.
 - 2. Acceptable Manufacturers
 - a. Belden 5200UP
 - b. Or Equal

2.36 UTP CABLING

- A. Contractor shall provide and install UTP cabling as required per manufacturer's recommendations.
 - 1. Provide UTP cabling meeting the following specifications.
 - a. Minimum 24 AWG, eight (8) conductor cable
 - b. Nominal conductor to conductor capacitance: 15 pF/ft
 - 2. Acceptable Manufacturers
 - a. Belden
 - b. Commscope
 - c. General Cable
 - d. Superior Essex
 - e. Or Equal

2.37 STP CABLING

- A. Contractor shall provide and install STP cabling as required per manufacturer's recommendations.
 - 1. Acceptable Manufacturers
 - a. Crestron
 - b. Or Equal

2.38 HDMI CABLING

- A. Contractor shall provide and install HDMI cabling as required.
 - 1. Provide pre-molded cables in lengths as required.
 - 2. Shall support HDMI signal transmission up to 328 ft. via optical cabling.

27 41 17

- 3. Shall support up to 4k 60Hz 4:4:4 HDR video.
- 4. Shall meet HDMI 2.0/HDCP 2.2 testing standards.
- 5. Shall be plenum rated.
- 6. Shall not require external power.
- 7. Acceptable Manufacturers
 - a. FSR HDMI 2.0 Digital Ribbon Cables
 - b. Or Equal

2.39 RS-232 CABLING

- A. Contractor shall provide and install RS-232 cabling as required.
 - 1. Provide pre-molded cables in lengths as required.
 - 2. Acceptable Manufacturers
 - a. Crestron
 - b. Or Equal

2.40 RELAY CABLING

- A. Contractor shall provide and install audio video control cabling as required.
 - 1. Provide control cabling meeting the following specifications:
 - a. Minimum unshielded 22 AWG, 26x34 stranded cabling
 - b. Nominal conductor to conductor capacitance: 98 pF/m
 - c. Provide number of conductors as required.
 - 2. Acceptable Manufacturers
 - a. Belden
 - b. Or Equal

2.41 RF CABLING

- A. Contractor shall provide and install RF cabling as required.
 - 1. Provide RF cabling meeting the following specifications:
 - a. Provide RG-8X type cable.
 - b. Center conductor 16 AWG solid.
 - c. Gas-injected FPE insulation
 - d. Cable to be PVC jacketed.
 - 2. Acceptable Product:
 - a. Belden 9258
 - b. Or Equal

2.42 CUSTOM FACEPLATE

- A. Contractor shall provide plates as required by the T-series drawings. Engrave as shown on the drawings.
- B. Contractor shall coordinate plate finish and color with the Owner. Plastic plates are not acceptable.
- C. On dark plates, letters shall be white; on stainless steel or brushed natural aluminum plates, letters shall be black.
- D. Custom and/or engraved plates/panels:
 - 1. Custom panels constructed of 1/8-inch brushed aluminum
 - 2. Finish: Black Anodized.

- 3. Acceptable Manufacturer:
 - a. ProCo
 - b. Or Equal

2.43 GROMMETED FACEPLATES

- A. Contractor shall provide grommet faceplates as needed by audio and video locations as shown on the T-series drawings.
- B. Grommet faceplates shall provide a minimum of 1.5" Diameter opening for cable pass-through unless otherwise noted.
- C. Contractor shall coordinate plate finish and color with the Owner. Plastic plates are not acceptable.
- D. Grommeted plates/panels:
 - 1. Custom panels constructed of 1/8-inch brushed aluminum
 - 2. Finish: Black Anodized.
 - 3. Acceptable Manufacturer:
 - a. ProCo
 - b. Or Equal

2.44 XLR PANEL MOUNT CONNECTORS

- A. Contractor shall provide the quantity of XLR jacks as needed.
- B. Provide XLR jack meeting the following specifications:
 - 1. XLR jack shall be panel mounted with metal shell.
 - 2. XLR jack shall utilize gold contact solder terminations.
 - 3. Shell color shall match plate finish.
 - 4. Acceptable Manufacturers:
 - a. Neutrik
 - b. Switchcraft
 - c. Or Equal

2.45 RCA PANEL MOUNT CONNECTORS

- A. Contractor shall provide the quantity of RCA jacks as needed.
- B. Provide RCA jack meeting the following specifications:
 - 1. RCA jack shall be panel mounted with metal shell.
 - 2. RCA jack shall utilize gold contact solder terminations.
 - 3. Shell color shall match plate finish.
 - 4. Each RCA jack shall have correct color code depending on input (i.e. left or right).
 - 5. Acceptable Manufacturers:
 - a. Neutrik
 - b. Switchcraft
 - c. Or Equal

2.46 BNC PANEL MOUNT CONNECTORS

- A. Contractor shall provide the quantity of BNC jacks as needed.
- B. Provide BNC jack meeting the following specifications:
 - 1. BNC jack shall be panel mounted with metal shell.
 - 2. BNC jack shall utilize an RF protector.
 - 3. BNC jack shall utilize a feed-through connector.
 - 4. Acceptable Manufacturers:
 - a. Neutrik
 - b. Switchcraft
 - c. Or Equal

2.47 ETHERNET PANEL MOUNT CONNECTORS

- A. Contractor shall provide the quantity of Ethernet jacks as needed.
- B. Provide Ethernet jack meeting the following specifications:
 - 1. Ethernet jack shall be panel mounted with metal shell.
 - 2. Ethernet jack shall utilize bronze contact terminations.
 - 3. Acceptable Manufacturers:
 - a. Neutrik
 - b. Switchcraft
 - c. Or Equal

2.48 HDMI PANEL MOUNT CONNECTORS

- A. Contractor shall provide the quantity of HDMI jacks as needed.
- B. Provide HDMI jack meeting the following specifications:
 - 1. Shall be compatible with telecom faceplate.
 - 2. Shall meet HDMI 1.4 standards.
 - 3. Shall utilize a Type A female port.
 - 4. Color shall match telecom faceplate.
 - 5. Acceptable Manufacturers:
 - a. Panduit CMHDMIXX
 - b. Or Equal

2.49 RS-232 PANEL MOUNT CONNECTORS

- A. Contractor shall provide the quantity of RS-232 jacks as needed.
- B. Provide RS-232 jack meeting the following specifications:
 - 1. Shall be compatible with telecom faceplate.
 - 2. Shall provide RS-232 female port.
 - 3. Color shall match telecom faceplate.
 - 4. Acceptable Manufacturers:
 - a. Panduit CMD15HDXXX
 - b. Or Equal

2.50 XLR CABLE CONNECTORS

A. Contractor shall provide the quantity of XLR cable connectors as needed.

- B. Provide XLR cable connector meeting the following specifications:
 - 1. XLR cable connector shall have black die-cast shell.
 - 2. XLR cable connector shall utilize gold contact solder terminations.
 - 3. XLR cable connector shall include strain relief.
 - 4. Acceptable Manufacturers:
 - a. Neutrik
 - b. Switchcraft
 - c. Or Equal

2.51 RCA MALE CABLE CONNECTORS

- A. Contractor shall provide the quantity of RCA male cable connectors as needed.
- B. Provide RCA cable connector meeting the following specifications:
 - 1. RCA cable connector shall have a silver die-cast shell.
 - 2. XLR jack shall utilize silver contact solder terminations.
 - 3. Acceptable Manufacturers:
 - a. Neutrik
 - b. Switchcraft
 - c. Or Equal

2.52 BNC CABLE CONNECTORS

- A. Contractor shall provide the quantity of BNC cable connectors as shown on the T-series drawings.
- B. Provide BNC cable connector meeting the following specifications:
 - 1. BNC cable connector shall have brass or copper contacts.
 - 2. BNC cable connector shall utilize a crimp termination.
 - 3. BNC cable connector shall provide the proper impedance.
 - 4. Acceptable Manufacturers:
 - a. Kings
 - b. Amphenol
 - c. Canare

PART 3 - EXECUTION

3.1 GENERAL

- A. Coordinate incorporation of the Work specified herein with other project work to facilitatea cohesive final product.
- B. The installation recommendations contained within ASDI and Telecommunications Distribution Methods Manual are mandatory minimum standards and requirements.
- C. Mount equipment and enclosures plumb and level.
- D. Permanently installed equipment to be firmly and safely held in place. Design equipment supports to support loads imposed with a safety factor of at least five.
- E. Seismic bracing shall be installed on appropriate equipment where local codes require such installation.
- F. Verify all locations of equipment in all rooms with Owner's Representative, Owner, and

Consultant.

G. Follow all manufacturer requirements and recommendations for the installation of all AV equipment.

3.2 CEILING MOUNTED SPEAKERS

- A. Shall be wired in parallel according to Manufacturer specifications.
- B. All speaker cabling shall be supported above the ceiling and may not rest on ceiling tiles or other structural devices.
- C. A minimum five (5) foot service loop shall be provided and secured above each speaker.

3.3 RACK MOUNT POWER SEQUENCER

A. Contractor to ensure all equipment is powered in the correct order to avoid audible pops or click from the audio-video system in response to the power sequencing.

3.4 AUDIO VIDEO CONTROL SYSTEM

- A. Control system shall be programmed to at a minimum switch between available AV sources, power on/off video projector and control audio source and system volume.
- B. Contractor to provide iterations of the touchscreen layout and programming for review by the Owner and Consultant. The first phase will involve only the layout and proposed operation. Once reviewed, the Contractor will utilize this information to begin programing the touch panels. The touch panels will be reviewed again after the programming has been implemented in the field. Any changes from this phase shall be incorporated into the work. Final review will occur at the one-year walk-through.

3.5 CABLING

- A. All cable routing shall meet Owner's standards.
- B. Run wire with conduit, exposed above accessible ceilings, below accessible floors, cable trays and in riser rooms.
- C. Provide plenum cabling where required.
- D. J-hooks shall be used so cables are supported at a maximum of 4 feet intervals. Cables shall not rest on light fixtures, ceiling tiles, conduits, sprinkler pipes, HVAC ducting, or any other building structure. Provide appropriate support for all horizontal to vertical transitions to keep weight of cable from damaging the point of transition.
- E. Horizontal cabling shall be in groups of no more than 60 cables when supported by J-hooks.
- F. Cable runs shall be continuous from device location to the point of termination. Properly installed transition points are acceptable.
- G. Provide plastic cable ties or Velcro straps to bundle cabling. Electrical tape or adhesive backed cable ties are not acceptable.
- H. Isolate cabling of different signals to minimize crosstalk. Separate wiring between

microphone/line level circuits, loudspeaker circuits, and power circuits.

- I. Dress, lace, and/or harness all wiring and cabling to prevent mechanical stress on electrical connections. Neatly tie cabling in bundles with cable lengths cut to minimize excess slack.
- J. Provide adequate service loops to allow equipment racks to be pulled out for servicing.
- K. To prevent against electrostatic hum, on unused shields, fold back shield over cable jacket and cover with heat-shrink tubing. Do not cut off unused shield.
- L. Provide grommets and strain relief material where necessary to avoid abrasion of wire and excess tension on wire and cable.

3.6 COMPONENT CONNECTIONS

- A. Prepare wire ends for attachment to components in accordance with manufacturer recommendations.
- B. Wire nuts shall not be an acceptable means of connecting wire or cable.

3.7 LABELING

- A. Cables, jacks, system components, etc. shall be labeled according to ANSI/EIA/TIA-606 specifications and in coordination with the District/Technology Consultant.
- B. All Audio-Video cables shall be equipped with a self-laminating, wrap-around machine printed label at both ends of the cable and wiring label permanently affixed for easy identification.
- C. Cover labels with clear heat-shrink tubing.
- D. Hand-written labels are not acceptable.
- E. Locate the cable designator at the origination and destination of each circuit within 3 inches of the termination.

3.8 AUDIO VIDEO PLATE INSTALLATION

- A. Install plate mounted connectors rigidly attached to plates, plumb and level.
- B. Install XLR type connectors in accordance with IED-268 standard.

3.9 TESTING

- A. Prior to turning on the system, verify all electronic devices are properly grounded and each audio video AC receptacle has the proper hot, neutral, and ground connections.
- B. Audio Testing:
 - 1. Verify each amplifier channel is correctly wired by providing a test signal to each channel and verify the correct speakers are operating.
 - 2. Adjust the input and output gain of each device to properly set the system gain.
 - 3. Adjust the output level of each amplifier channel and/or speaker tap settings to achieve 85 dB ± 2 dB in the area covered by the respective speaker zone when the output of the

- sound reinforcement system is set to 0 dBu.
- 4. Equalize all loudspeakers to provide an acceptable frequency response based on the specifications of the provided loudspeakers.
- 5. Verify no hum or buzz is present in the system at all operating levels. If present, propose a resolution and correct the issue at no cost to the Owner.

C. Video Testing:

- 1. Using a video signal generator, verify performance of all equipment meets manufacturer's specifications.
- 2. Verify correct operation of all inputs and outputs through audio video matrix switcher.

3.10 TRAINING

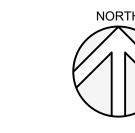
- A. After final completion, provide instruction to Owner designated personnel.
- B. Provide a minimum of twenty-four (24) hours of training to the Owner. Plan for multiple training trips to the site. Training session(s) shall cover the following topics at a minimum:
 - 1. System Equipment Connectivity
 - 2. Device Configurations
 - 3. Operation, maintenance, and upgrade procedures.
- C. Training to be arranged with Owner personnel and be coordinated with Owner personnel and their needs.
- D. Training plan, timeline, and agenda shall be provided to and signed off by Owner.
- E. Warranty certificate and agreement shall be provided to Owner at initial training session.
- F. Provide a digital video copy of the training sessions.
- G. Contractor to be present at first two (2) uses of the facility.

3.11 SYSTEM ACCEPTANCE

- A. Contractor shall demonstrate to the Owner that all systems have been installed per the plans and specifications and that all programming functions, display functions, control functions and all interfaced equipment operate as expected.
- B. Contractor shall demonstrate to the Owner that all the end user staff has a working knowledge of how to operate the installed equipment and that the facilities staff also has a working knowledge of the troubleshooting methods for non-critical service problems.
- C. Contractor shall collaborate with the General Contractor to complete all punch lists and work required to allow the General Contractor to close out his project in a timely manner. This will include but not limited to any work that would impact any final inspection for turnover of the building.

END OF SECTION

ALL CONSTRUCTION.





GENERAL NOTES

- 1. SEE DRAWING G0.1 FOR GENERAL NOTES AND ADDITIONAL LEGEND.
- TOPOGRAPHIC CONDITIONS AND EXISTING UTILITIES SHOWN WERE PROVIDE GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.
- CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE PROJECT AREA INCLUDING UNDERGROUND UTILITY CONDITIONS, LOCATION AND DEPTH PRIOR TO ANY OTHER SITE CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE
- 4. SEE SHEET GD1.1, GD1.2 & GD1.3 FOR ADDITIONAL SITE DEMOLITION
- 5. THE PROPOSED STORM SEWER SYSTEM FOR THIS PROJECT WILL BE PRIVATE
- 6. FLOOD ROUTING PATH FROM BUILDING ADDITION AND PARKING LOT WHEN 100 YEAR FLOOD IS EXCEEDED DRAINS TO 136TH STREET.
- NO EARTH DISTURBING ACTIVITY MAY COMMENCE WITHOUT AN APPROVED
- 8. UTILITY RELOCATIONS REQUIRED BY THE PROJECT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. UTILITY LINE RELOCATIONS REQUIRED FOR ROAD PROJECTS THAT RESULT IN A CONFLICT WITH PROPOSED DEVELOPMENT SHALL BE THE DEVELOPERS RESPONSIBILITY TO RESOLVE WITH THE UTILITY. EXISTING POLE LINES REQUIRED TO BE RELOCATED TO WITHIN
- DAMAGE TO THE EXISTING RIGHT-OF-WAY SHALL BE RESTORED/REPAIRED TO THE SATISFACTION OF THE CITY AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR IS ENCOURAGED TO INSPECT THE RIGHT-OF-WAY WITH THE CITY PRIOR TO THE START OF CONSTRUCTION TO DOCUMENT THE EXISTING CONDITION OF THE RIGHT-OF-WAY.
- 10. ALL EXISTING PERIMETER ROAD DRAINAGE STRUCTURES AND BRIDGES ACROSS THE FRONTAGE OF THIS DEVELOPMENT ARE INDICATED ON THE PLANS. PROVISIONS HAVE BEEN MADE TO IMPROVE OR REPLACE ANY DRAINAGE STRUCTURES AND BRIDGES AS NECESSARY OR AS REQUESTED BY MULTI-USE PATH, AND ANY OTHER REQUIRED IMPROVEMENTS TO THE PROPERTY OR THE ROADWAY. THE COST TO IMPROVE OR REPLACE ANY DRAINAGE STRUCTURES AND BRIDGES WILL BE BORNE BY THE DEVELOPER.
- CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING TO REQUIRED INSPECTIONS FOR CERTAIN STAGES OF THE WORK AND TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED RIGHT-OF-WAY.

DEMOLITION LEGEND

EXISTING BUILDING APPROXIMATE LIMITS OF CONCRETE REMOVAL

APPROXIMATE LIMITS OF ASPHALT PAVEMENT REMOVAL APPROXIMATE LIMITS OF ASPHALT MILLING

APPROXIMATE LIMITS OF PLAYGROUND MULCH REMOVAL

EXISTING CONCRETE

APPROXIMATE LIMITS OF UTILITY LINE REMOVAL

TREE PROTECTION REQUIRED

*** SEE TOPOGRAPHIC SURVEY FOR ADDITIONAL LEGEND SYMBOLS.

□ DEMOLITION KEYNOTES

- 1. REMOVE CONCRETE SIDEWALK
- SAWCUT EXISTING PAVEMENT
- 3. PROTECT CONCRETE TO REMAIN 4. REMOVE 4", 6" & 10" DIA. STORM SEWER LINES
- 5. REMOVE EXISTING STORM INLET AREA DRAINS
- 7. REMOVE PLANTINGS
- 8. REMOVE BENCH
- 9. REMOVE LIGHT BOLLARDS AND FOUNDATIONS
- 10. PROTECT WATER LINE TO REMAIN
- 11. REMOVE MONOLITHIC CURB AND SIDEWALK
- 12. PROTECT STORM LINE AND STRUCTURE TO REMAIN
- 13. PROTECT EXISTING TREE TO REMAIN
- 14. REMOVE EXISTING TREE AS REQUIRED TO INSTALL IMPROVEMENTS 15. REMOVE DOWNSPOUT BOOT AND ASSOCIATED PIPING, REFER TO SITE
- 16. REMOVE BUILDING AND FOUNDATIONS, SEE ARCHITECTURAL/STRUCTURAL
- 17. PROTECT LIGHT POLE AND LINE TO REMAIN
- 19. PROTECT SANITARY STRUCTURE AND LINE TO REMAIN
- 20. REMOVE CONCRETE ADA RAMP
- 21. REMOVE CONCRETE RAMP
- 22. REMOVE ASPHALT PAVEMENT
- 23. MILL ASPHALT SURFACE, SEE G1.0 OVERALL SITE PLAN FOR EXTENTS OF
- 24. REMOVE ASPHALT PAVEMENT SEE DWGS SREL1.10 SREL1.40
- 25. PROTECT PLAYGROUND SURFACING AND EQUIPMENT TO REMAIN
- 26. PROTECT LANDSCAPING TO REMAIN
- 31. REMOVE EXISTING FENCE FABRIC, HARDWARE, ACCESSORIES AND GATES -EXISTING POSTS AND CONCRETE CURBING TO REMAIN - DISPOSE OF ALL WASTE MATERIALS LEGALLY OFF SITE - SEE DWG SREL1.40
- 33. REMOVE CONCRETE STEPS AND FOUNDATIONS
- 34. REMOVE CONCRETE GREASE TRAP AND CASTING FULL DEPTH. PROTECT EXISTING UPSTREAM AND DOWNSTREAM LINES FOR RECONNECTION TO NEW

44. PIP REPAIR - REFER TO DWG SREL1.40 48. REMOVE BUILDING AND CONCRETE PAD

SMOKY ROW ELEMENTARY SCHOOL **ADDITIONS AND** RENOVATION

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900 WEST 136TH STREET CARMEL, IN 46032

CARMEL CLAY SCHOOLS





350 E NEW YORK ST# 300, INDIANAPOLIS, IN 46204

CONSULTANT



3901 WEST 86TH STREET, ST# 200, INDIANAPOLIS, IN 46268



PROJECT MANAGER: PMR

DRAWN BY: ARS PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11.20.2025		
REV.		
NO	DESCRIPTION	DATE
1	90% DD ESTIMATE SET	07-31-2025
2	100% DD ESTIMATE SET	08-21-2025
3	TAC SUBMITTAL	08-21-2025
4	CD QAQC SET	10-16-2025
5	100% CD SET	10-23-2025
6	BID SET	11-20-2025
7	TAC RESPONSE	12-9-2025
8	ADDENDUM #1	12-19-2025

DEMOLITION PLAN (SOUTH)

DEMOLITION LEGEND

DEMOLITION PLAN (NORTH)

EXISTING BUILDING

APPROXIMATE LIMITS OF CONCRETE REMOVAL

APPROXIMATE LIMITS OF ASPHALT PAVEMENT REMOVAL

APPROXIMATE LIMITS OF ASPHALT MILLING

+ + +
APPROXIMATE LIMITS OF PLAYGROUND MULCH REMOVAL

APPROXIMATE LIMITS OF UTILITY LINE REMOVAL

TREE PROTECTION REQUIRED

EXISTING CONCRETE

CONSTRUCTION LIMITS

*** SEE TOPOGRAPHIC SURVEY FOR ADDITIONAL LEGEND SYMBOLS.

○ DEMOLITION KEYNOTES

- REMOVE CONCRETE SIDEWALK
- 2. SAWCUT EXISTING PAVEMENT
- 3. PROTECT CONCRETE TO REMAIN6. REMOVE & REUSE GAGA PIT, SEE SITE PLAN FOR NEW LOCATION
- 10. PROTECT WATER LINE TO REMAIN
- 11. REMOVE MONOLITHIC CURB AND SIDEWALK
- 12. PROTECT STORM LINE AND STRUCTURE TO REMAIN
- 13. PROTECT EXISTING TREE TO REMAIN
- 15. REMOVE DOWNSPOUT BOOT AND ASSOCIATED PIPING, REFER TO SITE

14. REMOVE EXISTING TREE AS REQUIRED TO INSTALL IMPROVEMENTS

- UTILITY PLAN

 17. PROJECT LIGHT POLE AND LINE TO REMAIN
- 18. BASKETBALL GOALS TO REMAIN SEE DV
- 18. BASKETBALL GOALS TO REMAIN SEE DWG SREL1.3020. REMOVE CONCRETE ADA RAMP
- 23. MILL ASPHALT SURFACE, SEE G1.0 OVERALL SITE PLAN FOR EXTENTS OF MILLING
- 24. REMOVE ASPHALT PAVEMENT SEE DWGS SREL1.10 SREL1.40
- 26. PROTECT LANDSCAPING TO REMAIN27. REMOVE 8" PLAYGROUND MULCH, 8" OF STONE & UNDERDRAINS WITHIN
- PLAYGROUND AREA

 28. PROTECT CURB/CONTAINMENT EDGING TO REMAIN
- 29. REMOVE SHELTER STRUCTURE AND FOUNDATIONS FULL DEPTH (SALVAGE SHELTER STRUCTURE RETURN TO OWNER)
- 30. REMOVE BENCH, IF BENCH HAS A MEMORIAL PLAQUE, REMOVE PLAQUE AND
- GIVE TO OWNER FOR REUSE
- 32. REMOVE PLAYGROUND EQUIPMENT & FOUNDATIONS FULL DEPTH
- 35. REMOVE BIKE RACKS
- 43. REMOVE LIGHT POLE AND CONCRETE FOOTING, REFER TO ELECTRICAL PLANS45. REMOVE CONCRETE CURB
- 46. RELOCATE TREE TO LOCATION SHOWN ON LANDSCAPE PLAN
- 47. REMOVE CONCRETE, ROCKET, STARS AND CONCRETE FOOTINGS

GENERAL NOTES

- SEE DRAWING G0.1 FOR GENERAL NOTES AND ADDITIONAL LEGEND.
- 2. TOPOGRAPHIC CONDITIONS AND EXISTING UTILITIES SHOWN WERE PROVIDED BY WEIHE ENGINEERS DATED 05/01/2025. THE ENGINEER MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.
- 3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE PROJECT AREA INCLUDING UNDERGROUND UTILITY CONDITIONS, LOCATION AND DEPTH PRIOR TO ANY OTHER SITE CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE
- 4. SEE SHEET GD1.1, GD1.2 & GD1.3 FOR ADDITIONAL SITE DEMOLITION INFORMATION.
- 5. THE PROPOSED STORM SEWER SYSTEM FOR THIS PROJECT WILL BE PRIVATE OWNED.
- 6. FLOOD ROUTING PATH FROM BUILDING ADDITION AND PARKING LOT WHEN 100 YEAR FLOOD IS EXCEEDED DRAINS TO 136TH STREET.
- 7. NO EARTH DISTURBING ACTIVITY MAY COMMENCE WITHOUT AN APPROVED STORM WATER MANAGEMENT PERMIT.
- 8. UTILITY RELOCATIONS REQUIRED BY THE PROJECT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER. UTILITY LINE RELOCATIONS REQUIRED FOR ROAD PROJECTS THAT RESULT IN A CONFLICT WITH PROPOSED DEVELOPMENT SHALL BE THE DEVELOPERS RESPONSIBILITY TO RESOLVE WITH THE UTILITY. EXISTING POLE LINES REQUIRED TO BE RELOCATED TO WITHIN ONE FOOT OF PROPOSED RIGHT-OF-WAY LINE.
- 9. DAMAGE TO THE EXISTING RIGHT-OF-WAY SHALL BE RESTORED/REPAIRED TO THE SATISFACTION OF THE CITY AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR IS ENCOURAGED TO INSPECT THE RIGHT-OF-WAY WITH THE CITY PRIOR TO THE START OF CONSTRUCTION TO DOCUMENT THE EXISTING CONDITION OF THE RIGHT-OF-WAY.
- 10. ALL EXISTING PERIMETER ROAD DRAINAGE STRUCTURES AND BRIDGES ACROSS THE FRONTAGE OF THIS DEVELOPMENT ARE INDICATED ON THE PLANS. PROVISIONS HAVE BEEN MADE TO IMPROVE OR REPLACE ANY DRAINAGE STRUCTURES AND BRIDGES AS NECESSARY OR AS REQUESTED BY THE CITY TO ACCOMMODATE THE PAVEMENT WIDENING, AUXILIARY LANES, MULTI-USE PATH, AND ANY OTHER REQUIRED IMPROVEMENTS TO THE PROPERTY OR THE ROADWAY. THE COST TO IMPROVE OR REPLACE ANY DRAINAGE STRUCTURES AND BRIDGES WILL BE BORNE BY THE DEVELOPER.
- 11. ALL PAVING WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF ENGINEERING. THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE DEPARTMENT'S CONSTRUCTION REQUIREMENTS, STAFF NOTIFICATION REQUIREMENTS, REQUIRED INSPECTIONS FOR CERTAIN STAGES OF THE WORK AND TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED RIGHT-OF-WAY.

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ELEMENTARY
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ADDITIONS AND
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CARMEL CLAY SCHOOLS





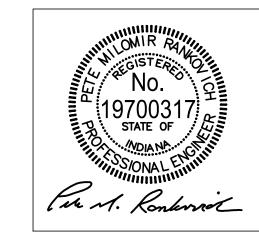
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CONSULTANT



3901 WEST 86TH STREET, ST# 200, INDIANAPOLIS, IN 46268

BID SET



PROJECT MANAGER: PMR

DRAWN BY: ARS

110.	DESCRIPTION	DAIL
1	90% DD ESTIMATE SET	07-31-2025
2	100% DD ESTIMATE SET	08-21-2025
3	TAC SUBMITTAL	08-21-2025
4	CD QAQC SET	10-16-2025
5	100% CD SET	10-23-2025
6	BID SET	11-20-2025
7	TAC RESPONSE	12-9-2025
8	ADDENDUM #1	12-19-2025

DEMOLITION PLAN (NORTH)

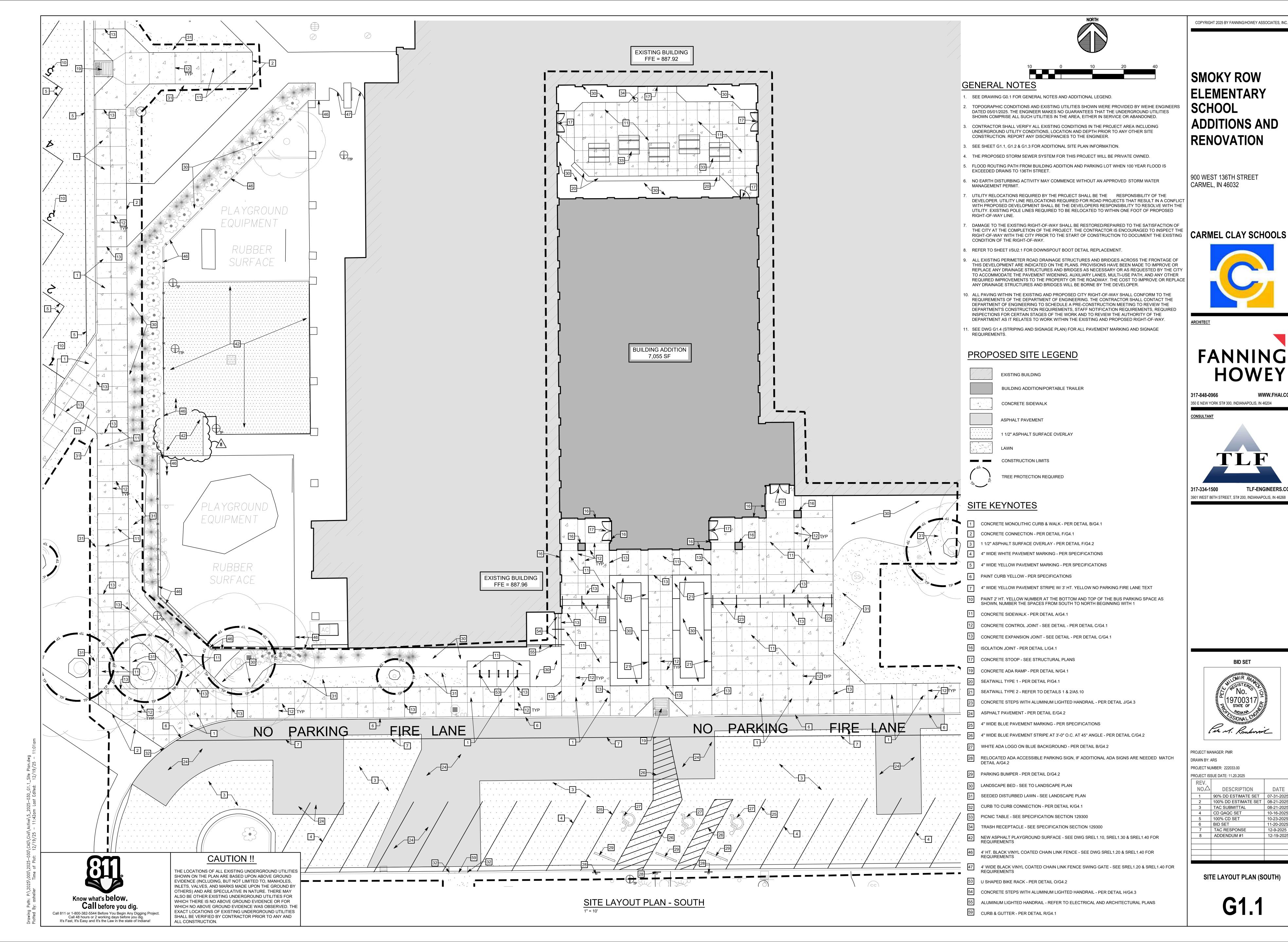
GD1.2



CAUTION!!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, VALVES, AND MARKS MADE UPON THE GROUND BY OTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AND

ALL CONSTRUCTION.



SMOKY ROW

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ELEMENTARY SCHOOL **ADDITIONS AND** RENOVATION

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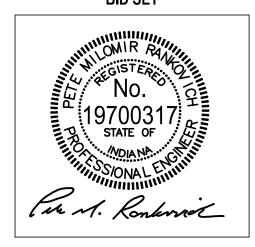
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350 E NEW YORK ST# 300, INDIANAPOLIS, IN 46204

CONSULTANT

3901 WEST 86TH STREET, ST# 200, INDIANAPOLIS, IN 46268



PROJECT MANAGER: PMR

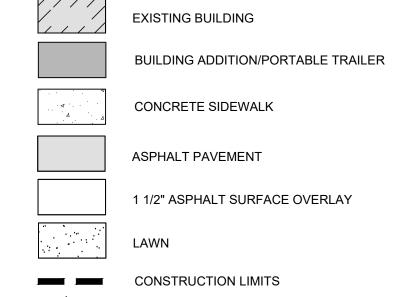
DRAWN BY: ARS PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11.20.2025

EV.		
10.\(\triangle \)	DESCRIPTION	DATE
1	90% DD ESTIMATE SET	07-31-2025
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7	TAC RESPONSE	12-9-2025
8	ADDENDUM #1	12-19-2025
		_

SITE LAYOUT PLAN (SOUTH)

PROPOSED SITE LEGEND



TREE PROTECTION REQUIRED

- 2 CONCRETE CONNECTION PER DETAIL F/G4.1
- 1 1/2" ASPHALT SURFACE OVERLAY PER DETAIL F/G4.2
- 4" WIDE WHITE PAVEMENT MARKING PER SPECIFICATIONS
- 4" WIDE YELLOW PAVEMENT MARKING PER SPECIFICATIONS
- 6 PAINT CURB YELLOW PER SPECIFICATIONS
- 4" WIDE YELLOW PAVEMENT STRIPE AT 3'-0" O.C. AT 45° ANGLE W/ NO PARKING TEXT - PER DETAIL C/G4.2

PAINT 2' HT. YELLOW NUMBER AT THE BOTTOM AND TOP OF THE BUS PARKING SPACE AS SHOWN, NUMBER THE SPACES FROM SOUTH TO NORTH BEGINNING WITH 1

11 CONCRETE SIDEWALK - PER DETAIL A/G4.1

- 12 CONCRETE CONTROL JOINT SEE DETAIL PER DETAIL C/G4.1
- CONCRETE EXPANSION JOINT SEE DETAIL PER DETAIL C/G4.1
- 16 ISOLATION JOINT PER DETAIL L/G4.1
- CONCRETE ADA RAMP PER DETAIL N/G4.1
- 4" WIDE BLUE PAVEMENT MARKING PER SPECIFICATIONS
- 4" WIDE BLUE PAVEMENT STRIPE AT 3'-0" O.C. AT 45° ANGLE PER DETAIL C/G4.2
- 27 WHITE ADA LOGO ON BLUE BACKGROUND PER DETAIL B/G4.2 RELOCATED ADA ACCESSIBLE PARKING SIGN, IF ADDITIONAL ADA SIGNS ARE
- NEEDED MATCH DETAIL A/G4.2
- 29 PARKING BUMPER PER DETAIL D/G4.2 SEEDED DISTURBED LAWN - SEE LANDSCAPE PLAN
- CURB TO CURB CONNECTION PER DETAIL K/G4.1
- NEW ASPHALT PLAYGROUND SURFACE SEE DWGS SREL1.10 SREL1.30 FOR REQUIREMENTS
- BASKETBALL GOAL SEE DWG SREL1.10 & SREL1.30 FOR REQUIREMENTS
- PROVIDE NEW PLAYGROUND SURFACE (POURED IN PLACE & TURF) SEE DWGS SREL1.10 SREL1.30 FOR REQUIREMENTS CONCRETE BANDING/CURBING AROUND NEW SURFACE - SEE DWGS SREL1.10 & SREL1.30 FOR REQUIREMENTS
- 4' HT. BLACK VINYL COATED CHAIN LINK FENCE SEE DWG SREL1.20 & SREL1.40 FOR REQUIREMENTS
- 4' WIDE BLACK VINYL COATED CHAIN LINK FENCE SWING GATE SEE DWG SREL1.20 & SREL1.40 FOR REQUIREMENTS
- BENCH SEE DWG SREL1.10 SREL1.30 FOR REQUIREMENTS
- 52 RELOCATED GAGA PIT
- U SHAPED BIKE RACK PER DETAIL O/G4.2
- 4" WIDE BLUE PAVEMENT STRIPE AT 3'-0" O.C. AT 45° ANGLE W/ NO PARKING TEXT - PER DETAIL C/G4.2
- 60 SHADE STRUCTURE REFER TO DWG SREL1.10
- 61 6' WIDE BLACK VINYL COATED CHAIN LINK FENCE DOUBLE SWING GATE
- 69 THICKENED CONCRETE EDGE PER DETAIL 7/L4.01
- 70 CONCRETE/ASPHALT CONNECTION PER DETAIL G/G4.1



GENERAL NOTES

STORM WATER MANAGEMENT PERMIT.

- 1. SEE DRAWING G0.1 FOR GENERAL NOTES AND ADDITIONAL LEGEND.
- 2. TOPOGRAPHIC CONDITIONS AND EXISTING UTILITIES SHOWN WERE PROVIDED BY WEIHE ENGINEERS DATED 05/01/2025. THE ENGINEER MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.
- 3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE PROJECT AREA INCLUDING UNDERGROUND UTILITY CONDITIONS, LOCATION AND DEPTH PRIOR TO ANY OTHER SITE CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE
- 3. SEE SHEET G1.1, G1.2 & G1.3 FOR ADDITIONAL SITE PLAN INFORMATION.
- 4. THE PROPOSED STORM SEWER SYSTEM FOR THIS PROJECT WILL BE PRIVATE
- 5. FLOOD ROUTING PATH FROM BUILDING ADDITION AND PARKING LOT WHEN 100 YEAR FLOOD IS EXCEEDED DRAINS TO 136TH STREET.
- 6. NO EARTH DISTURBING ACTIVITY MAY COMMENCE WITHOUT AN APPROVED
- RESPONSIBILITY OF THE DEVELOPER. UTILITY LINE RELOCATIONS REQUIRED FOR ROAD PROJECTS THAT RESULT IN A CONFLICT WITH PROPOSED DEVELOPMENT SHALL BE THE DEVELOPERS RESPONSIBILITY TO RESOLVE WITH THE UTILITY. EXISTING POLE LINES REQUIRED TO BE RELOCATED TO WITHIN ONE FOOT OF PROPOSED RIGHT-OF-WAY LINE.

UTILITY RELOCATIONS REQUIRED BY THE PROJECT SHALL BE THE

- DAMAGE TO THE EXISTING RIGHT-OF-WAY SHALL BE RESTORED/REPAIRED TO THE SATISFACTION OF THE CITY AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR IS ENCOURAGED TO INSPECT THE RIGHT-OF-WAY WITH THE CITY PRIOR TO THE START OF CONSTRUCTION TO DOCUMENT THE EXISTING CONDITION OF THE RIGHT-OF-WAY.
- 8. REFER TO SHEET I/SU2.1 FOR DOWNSPOUT BOOT DETAIL REPLACEMENT.
- 9. ALL EXISTING PERIMETER ROAD DRAINAGE STRUCTURES AND BRIDGES ACROSS THE FRONTAGE OF THIS DEVELOPMENT ARE INDICATED ON THE PLANS. PROVISIONS HAVE BEEN MADE TO IMPROVE OR REPLACE ANY DRAINAGE STRUCTURES AND BRIDGES AS NECESSARY OR AS REQUESTED BY THE CITY TO ACCOMMODATE THE PAVEMENT WIDENING, AUXILIARY LANES, MULTI-USE PATH, AND ANY OTHER REQUIRED IMPROVEMENTS TO THE PROPERTY OR THE ROADWAY. THE COST TO IMPROVE OR REPLACE ANY DRAINAGE STRUCTURES AND BRIDGES WILL BE BORNE BY THE DEVELOPER.
- 10. ALL PAVING WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF ENGINEERING. THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE DEPARTMENT'S CONSTRUCTION REQUIREMENTS, STAFF NOTIFICATION REQUIREMENTS, REQUIRED INSPECTIONS FOR CERTAIN STAGES OF THE WORK AND TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED RIGHT-OF-WAY.
- 11. SEE DWG G1.4 (STRIPING AND SIGNAGE PLAN) FOR ALL PAVEMENT MARKING AND SIGNAGE REQUIREMENTS.

SMOKY ROW ELEMENTARY SCHOOL **ADDITIONS AND** RENOVATION

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CARMEL CLAY SCHOOLS



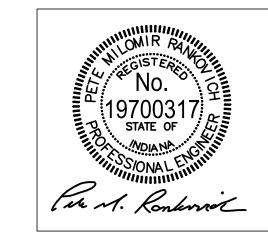


350 E NEW YORK ST# 300, INDIANAPOLIS, IN 46204

CONSULTANT



3901 WEST 86TH STREET, ST# 200, INDIANAPOLIS, IN 46268



PROJECT MANAGER: PMR

DRAWN BY: ARS

PROJECT NUMBER: 222033.00 PROJECT ISSUE DATE: 11.20.2025

REV.		
NO.	DESCRIPTION	DATE
1	90% DD ESTIMATE SET	07-31-2025
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3	TAC SUBMITTAL	08-21-2025
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5	100% CD SET	10-23-2025
6	BID SET	11-20-2025
7	TAC RESPONSE	12-9-2025
8	ADDENDUM #1	12-19-2025

SITE LAYOUT PLAN (NORTH)

Know what's below. Call before you dig. Call 811 or 1-800-382-5544 Before You Begin Any Digging Project. Call 48 hours or 2 working days before you dig. It's Fast, It's Easy and It's the Law in the state of Indiana!

CAUTION!!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, INLETS, VALVES, AND MARKS MADE UPON THE GROUND BY OTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AND

ALL CONSTRUCTION.

1. SEE DRAWING G0.1 FOR GENERAL NOTES AND ADDITIONAL LEGEND.

UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.

YEAR FLOOD IS EXCEEDED DRAINS TO 136TH STREET.

STORM WATER MANAGEMENT PERMIT.

FOOT OF PROPOSED RIGHT-OF-WAY LINE.

CONDITION OF THE RIGHT-OF-WAY.

2. TOPOGRAPHIC CONDITIONS AND EXISTING UTILITIES SHOWN WERE PROVIDED BY WEIHE ENGINEERS DATED 05/01/2025. THE ENGINEER MAKES NO

3. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS IN THE PROJECT AREA

4. THE PROPOSED STORM SEWER SYSTEM FOR THIS PROJECT WILL BE PRIVATE

5. FLOOD ROUTING PATH FROM BUILDING ADDITION AND PARKING LOT WHEN 100

6. NO EARTH DISTURBING ACTIVITY MAY COMMENCE WITHOUT AN APPROVED

FOR ROAD PROJECTS THAT RESULT IN A CONFLICT WITH PROPOSED

PRIOR TO THE START OF CONSTRUCTION TO DOCUMENT THE EXISTING

THE FRONTAGE OF THIS DEVELOPMENT ARE INDICATED ON THE PLANS.

PROVISIONS HAVE BEEN MADE TO IMPROVE OR REPLACE ANY DRAINAGE

8. REFER TO SHEET I/SU2.1 FOR DOWNSPOUT BOOT DETAIL REPLACEMENT.

RESPONSIBILITY OF THE DEVELOPER. UTILITY LINE RELOCATIONS REQUIRED

DEVELOPMENT SHALL BE THE DEVELOPERS RESPONSIBILITY TO RESOLVE WITH

THE UTILITY. EXISTING POLE LINES REQUIRED TO BE RELOCATED TO WITHIN ONE

7. UTILITY RELOCATIONS REQUIRED BY THE PROJECT SHALL BE THE

3. SEE SHEET G1.1, G1.2 & G1.3 FOR ADDITIONAL SITE PLAN INFORMATION.

GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH

INCLUDING UNDERGROUND UTILITY CONDITIONS, LOCATION AND DEPTH PRIOR TO ANY OTHER SITE CONSTRUCTION. REPORT ANY DISCREPANCIES TO THE

GENERAL NOTES



EXISTING BUILDING **BUILDING ADDITION**

CONCRETE SIDEWALK/PAVEMENT

GRAVEL DRIVE

1 1/2" ASPHALT SURFACE OVERLAY

CONSTRUCTION LIMITS

SITE KEYNOTES

- 2 CONCRETE CONNECTION PER DETAIL F/G4.1
- 3 1 1/2" ASPHALT SURFACE OVERLAY PER DETAIL F/G4.2
- 4" WIDE WHITE PAVEMENT MARKING PER SPECIFICATIONS
- 11 CONCRETE SIDEWALK PER DETAIL A/G4.1

SUPPORTS FOR RAMP SYSTEM

- 12 CONCRETE CONTROL JOINT SEE DETAIL PER DETAIL C/G4.1
- CONCRETE EXPANSION JOINT SEE DETAIL PER DETAIL C/G4.1
- SEEDED DISTURBED LAWN SEE LANDSCAPE PLAN RAMP SYSTEM WITH HANDRAIL MAXIMUM RAMP SLOPE SHALL BE 8.33%,
- 36 STAIR WITH HANDRAIL, CONTRACTOR TO PROVIDE FOUNDATIONS AND SUPPORTS FOR STAIRS

MAXIMUM RAMP LENGTH 30', CONTRACTOR TO PROVIDE FOUNDATIONS AND

- 4'-0" SWING GATE, FENCE FABRIC AND HEIGHT TO MATCH ADJACENT FENCE. PROVIDE AND INSTALL 1/4" STEEL PLATE, 3' TALL BY 4' WIDE PAINTED BLACK AND ATTACHED TO GATE TO MOUNT EXTERIOR PANIC BAR. PROVIDE DETEX EXTERIOR PANIC BAR WITH LOCAL ALARM AND LOCKING HARDWARE
- 39 SANITARY WASTE HDPE HOLDING TANK (1000 GALLONS) PROVIDE 12" DEEP X 10'-0" X 12'-0" STONE FOUNDATION PAD - SEE DETAIL A/G4.3

4'-0" SWING GATE, FENCE FABRIC AND HEIGHT TO MATCH ADJACENT FENCE.

4'-0" SWING GATE, FENCE FABRIC AND HEIGHT TO MATCH ADJACENT FENCE.

PROVIDE LOCKING HARDWARE AND LATCHES AS REQUIRED BY CONTRACTOR

- 40 GRAVEL DRIVE SEE EROSION CONTROL PLAN
- 49 TEMPORARY BARRIER RAILING

FOR THEIR USE.

- "SIDEWALK CLOSED" SIGN, "DETOUR RIGHT" SIGN
- 51 "SIDEWALK CLOSED" SIGN, "DETOUR LEFT" SIGN

STRUCTURES AND BRIDGES AS NECESSARY OR AS REQUESTED BY THE CITY TO ACCOMMODATE THE PAVEMENT WIDENING, AUXILIARY LANES, MULTI-USE PATH, 7' HT. CONSTRUCTION FENCE W/ FENCE SCREEN & 20' WIDE SWING GATE AND ANY OTHER REQUIRED IMPROVEMENTS TO THE PROPERTY OR THE ROADWAY. THE COST TO IMPROVE OR REPLACE ANY DRAINAGE STRUCTURES AND BRIDGES WILL BE BORNE BY THE DEVELOPER. 10. ALL PAVING WITHIN THE EXISTING AND PROPOSED CITY RIGHT-OF-WAY SHALL CONFORM TO THE REQUIREMENTS OF THE DEPARTMENT OF ENGINEERING. THE CONTRACTOR SHALL CONTACT THE DEPARTMENT OF ENGINEERING TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE DEPARTMENT'S CONSTRUCTION REQUIREMENTS, STAFF NOTIFICATION REQUIREMENTS, REQUIRED INSPECTIONS FOR CERTAIN STAGES OF THE WORK AND TO REVIEW THE AUTHORITY OF THE DEPARTMENT AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED RIGHT-OF-WAY.

> 11. SEE DWG G1.4 (STRIPING AND SIGNAGE PLAN) FOR ALL PAVEMENT MARKING AND SIGNAGE REQUIREMENTS.

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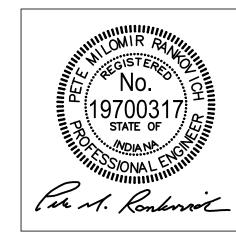


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DAMAGE TO THE EXISTING RIGHT-OF-WAY SHALL BE RESTORED/REPAIRED TO PROJECT MANAGER: PMR THE SATISFACTION OF THE CITY AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR IS ENCOURAGED TO INSPECT THE RIGHT-OF-WAY WITH THE CITY DRAWN BY: ARS

PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11.20.2025 9. ALL EXISTING PERIMETER ROAD DRAINAGE STRUCTURES AND BRIDGES ACROSS NO PERCEIPTION NATE

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5	100% CD SET	10-23-20
6	BID SET	11-20-20
7	TAC RESPONSE	12-9-202
8	ADDENDUM #1	12-19-20

SITE LAYOUT PLAN (TEMPORARY CLASSROOM)

Know what's below. Call before you dig.

Call 811 or 1-800-382-5544 Before You Begin Any Digging Project. Call 48 hours or 2 working days before you dig. It's Fast, It's Easy and It's the Law in the state of Indiana!

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ALL CONSTRUCTION.





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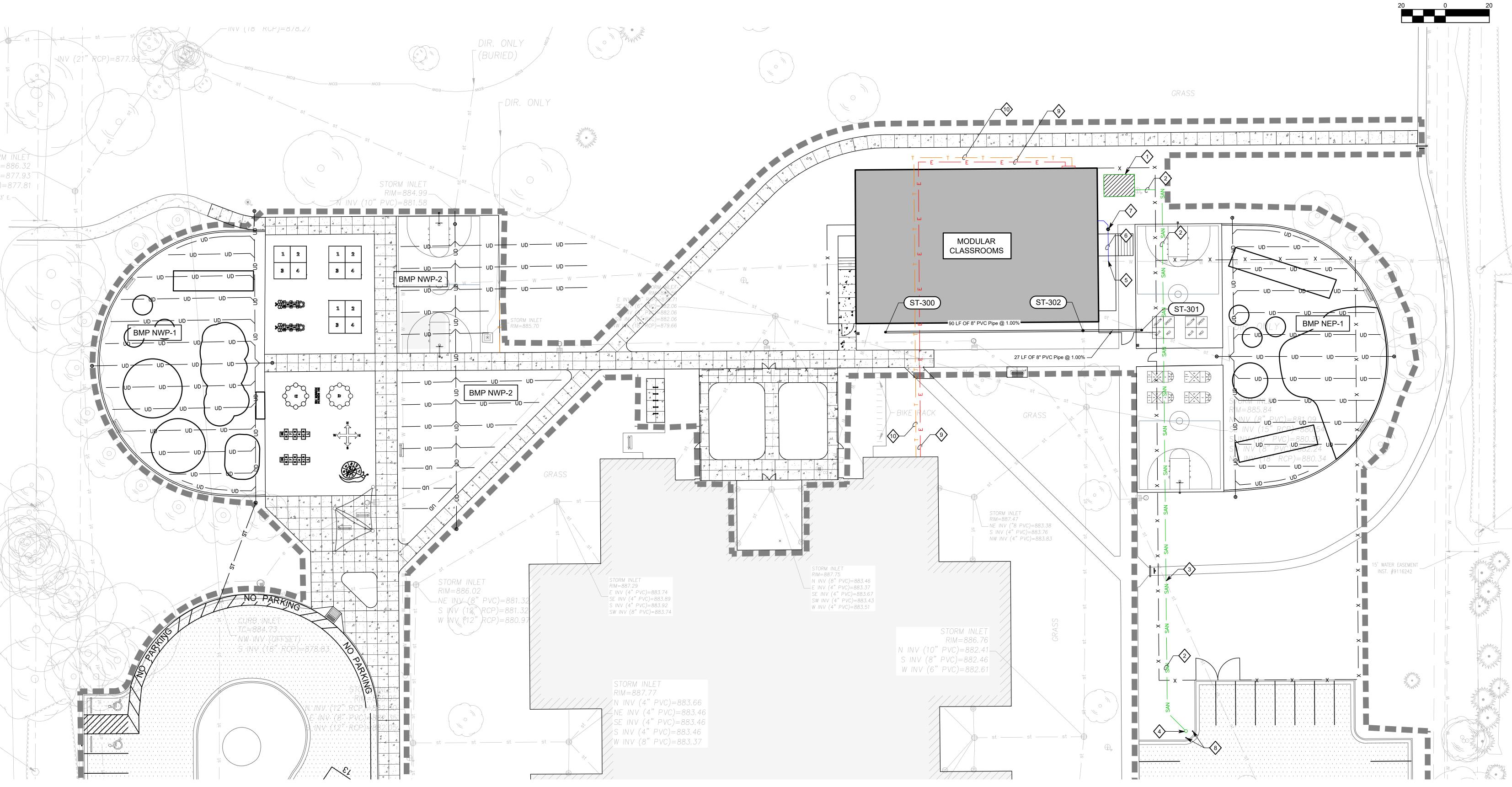
PROJECT MANAGER: PMR

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SITE UTILITY PLAN (TEMPORARY CLASSROOMS)



SITE UTILITY PLAN - TEMPORARY CLASSROOMS

♦ UTILITY KEYNOTES

- 4. TEMPORARY SANITARY WASTE VACUUM NOZZLE PEDESTAL, PER DETAIL G/G4.3 SIMILAR
- 7. NEW DOMESTIC WATER LINE METER PIT
- 8. 6" DIA. BOLLARDS, PER DETAIL J/G4.2

1. SANITARY BLADDER ENCLOSURE, PER DETAIL D/SU4.3

- 2. 3" DIA. SANITARY DISCHARGE PIPE AT T/PIPE ELEV. = 883.00'±
- 3. EXISTING 15" STORM PIPE AT -3.5' DEPTH. VERIFY LOCATION AND DEPTH.
- 5. TAP EXISTING 6" WATER LINE FOR NEW DOMESTIC WATER (FIELD VERIFY SIZE, LOCATION AND DEPTH)

GENERAL NOTES

DISCREPANCIES TO THE ENGINEER.

CARMEL'S PAVING AND CURB POLICIES.

AND PRIVATE UTILITIES PRIOR TO CONSTRUCTION.

1. SEE DRAWING G0.1 FOR GENERAL NOTES AND ADDITIONAL LEGEND.

TOPOGRAPHIC CONDITIONS AND EXISTING UTILITIES SHOWN WERE PROVIDED BY WEIHE ENGINEERS DATED 05/01/2025. THE ENGINEER MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN

4. CONTRACTOR SHALL RETAIN THE SERVICES OF A UTILITY LOCATE COMPANY TO LOCATE BOTH PUBLIC

6. FLOOD ROUTING PATH FROM BUILDING ADDITION AND PARKING LOT WHEN 100 YEAR FLOOD IS EXCEEDED.

7. NO EARTH DISTURBING ACTIVITY MAY COMMENCE WITHOUT AN APPROVED STORM WATER MANAGEMENT

8. UTILITY RELOCATIONS REQUIRED BY THE PROJECT SHALL BE THE RESPONSIBILITY OF THE DEVELOPER.

PROPOSED DEVELOPMENT SHALL BE THE DEVELOPERS RESPONSIBILITY TO RESOLVE WITH THE UTILITY.

EXISTING POLE LINES REQUIRED TO BE RELOCATED TO WITHIN ONE FOOT OF PROPOSED RIGHT-OF-WAY

UTILITY LINE RELOCATIONS REQUIRED FOR ROAD PROJECTS THAT RESULT IN A CONFLICT WITH

9. DAMAGE TO THE EXISTING RIGHT-OF-WAY SHALL RESTORED/REPAIRED TO THE SATISFACTION OF THE CITY AT THE COMPLETION OF THE PROJECT. THE CONTRACTOR IS ENCOURAGED TO INSPECT THE RIGHT-OF-WAY WITH THE CITY PRIOR TO THE START OF CONSTRUCTION TO DOCUMENT THE EXISTING

CONDITION OF THE RIGHT-OF-WAY. SEE SHEET G0.1 FOR ADDITIONAL INFORMATION ON THE CITY OF

10. SEE STORM STRUCTURE TABLE ON CIVIL SHEET SU1.2 FOR PIPE SIZES, MATERIAL AND INVERTS OF STORM

11. ALL EXISTING PERIMETER ROAD DRAINAGE STRUCTURES AND BRIDGES ACROSS THE FRONTAGE OF THIS

ANY DRAINAGE STRUCTURES AND BRIDGES AS NECESSARY OR AS REQUEST BY THE CITY OT

12. ALL PAVING WITHIN THE EXISTING AND PROPOSED CITY RIGHT -OF-WAY SHALL CONFORM TO THE

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AS IT RELATES TO WORK WITHIN THE EXISTING AND PROPOSED RIGHT-OF-WAY.

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DEPARTMENT'S CONSTRUCTION REQUIREMENTS, STAFF NOTIFICATION REQUIREMENTS, REQUIRED

INSPECTIONS FOR CERTAIN STAGES OF THE WORK AND TO REVIEW THE AUTHORITY OF THE DEPARTMENT

DEPARTMENT OF ENGINEERING TO SCHEDULE A PRE-CONSTRUCTION MEETING TO REVIEW THE

DEVELOPMENT ARE INDICATED ON THE PLANS. PROVISIONS HAVE BEEN MADE TO IMPROVE OR REPLACE

PATH TRAVELS IN A SOUTHERLY DIRECTION TO EXISTING INLETS LOCATED THE NORTH SIDE OF 136TH

STREET. THESE INLETS FLOW TO HENLEY CREEK, ULTIMATELY DISCHARGING TO THE WILLIAMS CREEK.

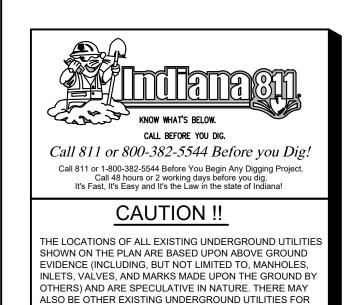
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COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED.

5. THE PROPOSED STORM SEWER SYSTEM FOR THIS PROJECT WILL BE PRIVATE OWNED.

- 6. DOMESTIC WATER LINE
- 9. ELECTRICAL / POWER FEED SEE ELECTRICAL SITE PLAN
- 10. TELECOMMUNICATIONS FEED SEE ELECTRICAL SITE PLAN

UTILITY LEGEND



WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR

WHICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. TH **EXACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES** SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AND

ALL CONSTRUCTION.

PROPOSED BUILDING ADDITION

EXISTING BUILDING ——— ST ——— EXISTING STORM SEWER ——— s ——— EXISTING SANITARY SEWER — w — EXISTING WATER LINE

----- UD ------ PROPOSED UNDERDRAIN

EXISTING ELECTRIC LINE PROPOSED STORM SEWER

PROPOSED STORM / SANITARY CLEANOUT ——— SAN ———— PROPOSED SANITARY SEWER PROPOSED SANITARY MANHOLE CONSTRUCTION LIMIT LINE PROPERTY LINE

PROPOSED STORM MANHOLE

PROPOSED NYLOPLAST STRUCTURE

SEE SURVEY SHEET FOR ADDITIONAL LEGEND INFORMATION

- 1. ALL CONTRACTORS BUT NOT LIMITED TO THE EXCAVATING CONTRACTOR OR CONTRACTORS MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND LOCATED EITHER BY THE REPRESENTATIVE OF THE UTILITY COMPANY OR BY A PRIVATE UNDERGROUND UTILITY LOCATING COMPANY PRIOR TO THE START OF EXCAVATING. VERIFY MINIMUM COVER REQUIREMENTS BY THE UTILITY CONTRACTOR OR CONTRACTORS OR UTILITY COMPANIES OR AGENCIES WHOMEVER HAS JURISDICTION SO NOT TO CAUSE DAMAGE.
- 2. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- 3. EXISTING PAVEMENT, SIDEWALKS CURBS DRIVEWAYS, ELECTRICAL TRANSFORMER, DITCHES, DRAINAGE PIPES AND STRUCTURES, FENCES, LAWNS. TREES. BUSHES. MAILBOXES, SIGNS, POWER POLES ETC., TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGE DURING CONSTRUCTION SHALL BE RESTORED, RECONSTRUCTED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ALL DAMAGES SHALL BE RESTORED OR REPLACED TO AT LEAST THEIR ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- 4. ALL AREAS WHERE THE EXISTING PAVEMENT OR PAVEMENTS ARE DAMAGED DURING CONSTRUCTION FROM HEAVY TRAFFIC OR EQUIPMENT, FUEL OIL, OIL, GASOLINE. ETC.. BY THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIERS, SHALL BE RECONSTRUCTED TO IT'S ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES. THIS RECONSTRUCTION AND REPAIR SHALL TAKE PLACE AT THE END OF THE PROJECT CONSTRUCTION OR DURING THE SCHEDULED GRADING AND PAVING OF THOSE AREA.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BEAR ALL EXPENSES TO REMOVE, RELOCATE AND OR MODIFY ALL UTILITIES, PRIVATE, PUBLIC, UNLESS NOTED OTHERWISE ON PLANS. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH EACH UTILITY COMPANY AND OR AGENT TO WHO IS RESPONSIBLE TO REMOVE, RELOCATE AND OR MODIFY SUCH UTILITIES EXISTING OR PROPOSED. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY IF ANY FUTURE UTILITIES ARE PLANNED AND HOW IT MAY EFFECT THIS PROJECT AND ITS OWNER AS TO THEIR RESPONSIBILITIES.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AT HIS EXPENSE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES.

- 7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND SEDIMENT CONTROL IF REQUIRED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES UNLESS OTHERWISE NOTED BY THE CONTRACT OR SPECIFICATIONS.
- 8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL THE UTILITY COMPANIES AND DEPARTMENTS 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY ANY UTILITIES THAT MAY BE PRESENT ON SITE. ALL VERIFICATIONS, LOCATIONS, SIZE AND DEPTHS SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES OR DEPARTMENTS. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THE UTILITY CAN BE PRESENT DURING THE EXCAVATION TO INSTRUCT AND OBSERVE DURING THE EXCAVATION. CONTRACTOR TO CALL 811 OR 800-382-5544 BEFORE DIGGING.
- 9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT EACH DAY AND REMOVE ALL MUD, DIRT, GRAVEL AND LOOSE MATERIALS TRACKED, DUMPED. SPILLED OR WIND BLOWN FROM THIS SITE ONTO OTHER SITES, RIGHT OF WAY, PUBLIC OR PRIVATE STREETS OR ROADS, DRIVEWAYS, YARDS OR SIDEWALKS, THE CONTRACTOR MUST CLEAN OR PICK UP DAILY IF NECESSARY. THE CONTRACTOR SHALL REDUCE THE AIRBORNE DUST DURING THE ENTIRE CONSTRUCTION SCHEDULE. WATER MAY BE USED AS A REDUCER.
- 10. THE UTILITIES INDICATED ON THESE PLANS MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THIS SITE. THE LOCATIONS AND SIZE OF THESE UTILITIES ARE APPROXIMATE. THIS INFORMATION WAS GATHERED OR SUPPLIED FROM OTHERS AND USED BY THE ARCHITECT AND OR ENGINEER AND MAY NOT BE ACTUAL. THE ARCHITECT AND / OR ENGINEER MAY NOT BE HELD LIABLE FOR ANY INCORRECT OR MISLEADING UTILITY INFORMATION INDICATED, IMPLIED OR NOT INDICATED ON THESE PLANS.
- 11. ALL LISTED SQ. FT TOTALS ARE ESTIMATES AND NOT FINAL GIVEN TOTALS SHOULD BE CONFIRMED ON SITE PRIOR TO BIDDING AND START OF

- EXISTING CONCRETE PAVING TO REMAIN PROTECT DURING CONSTRUCTION. EX. GAGA PIT TO BE RELOCATED AND SECUTRED TO NEW CONC. PAVING PER MANUF. WRITTEN RECOMMENDATIONS - SEE CTE-L1.3 FOR FURTHER INFORMATION - CONTRACTOR IS TO COORDINATE SAFE STORAGE OF EX. GAGA PIT ON SITE WITH CM PRIOR TO THE START OF
- REMOVE EXISTING BENCHES IN THEIR ENTIRETY INCLUDING FOUNDATIONS AND DISPOSE OF OFFSITE.
- 3. REMOVE EXISTING BIKE RACKS IN THEIR ENTIRETY INCLUDING FOUNDATIONS AND DISPOSE OF OFFSITE.
- 4. REMOVE EXISTING TREE IN ITS ENTIRETY INCLUDING COMPLETE ROOTBALL AND DISPOSE OF OFFSITE. BE MINDFUL OF EX. UTILITIES AROUND EX. TREE ROOTBALL - REFER TO CIVIL PLANS FOR SITE UTILITIES
- 5. MILL EXISTING ASPHALT SURFACE AND INTERMEDIATE COURSES AS INDICATED BY DOUBLE CROSSHATCHING TO TOP OF EXISTING COMPACTED AGGREGATE BASE AND DISPOSE OF OFFSITE AS APPROVED BY GOVERNING AGENCIES. PROTECT EXISTING STONE BASE AND SUPPLEMENT WITH ADDITIONAL STONE AS REQUIRED TO PROVIDE 6" COMPACTED CRUSHED STONE AGGREGATE BASE. INSTALL NEW 3" INTERMEDIATE BASE ASPHALT COURSE AND 2" SURFACE COURSE OVER GRADED AND COMPACTED STONE BASE TO PROVIDE POSITIVE SURFACE DRAINAGE AND MEET EXISTING ADJACENT SURFACES FLUSH.
- REMOVE EXISTING WOOD SAFETY SURFACE IN ITS ENTIRETY IN HATCHED AREAS AS INDICATED AND DISPOSE OF OFFSITE. PROTECT AND REPAIR EXISTING DRAINAGE SYSTEM AND OUTLET, REGRADE SUBGRADE TO DRAIN AND INSTALL FILTER FABRIC AND FLATPIPE UNDERDRAIN SYSTEM AND TIE INTO EXISTING UNDERDRAIN OUTLET. INSTALL AND COMPACT ADDITIONAL STONE DRAINAGE BASE AS REQUIRED TO PROVIDE POSITIVE SURFACE DRAINAGE OF POURED IN PLACE AND SYNTHETIC TURF SURFACES.
- REMOVE RUBBER TILE SAFETY SURFACE AND UNDERLYING CONCRETE PAVING BASE AND DISPOSE OF OFFSITE AS APPROVED BY GOVERNING
- REMOVE EXISTING FREESTANDING PLAYGROUND PIECES IN THEIR ENTIRETY INCLUDING FOUNDATIONS AND DISPOSE OF OFFSITE. REMOVE ALL PIECES SHOWN NOT TO REMAIN IN NEW IMROVEMENTS.
- REMOVE EXISTING TURF, PLANTINGS AND DISPOSE OF OFF SITE. REMOVE EXISTING TOPSOIL AND SUBSOIL TO REQUIRED SUBGRADE . GRADE SUBGRADE TO DRAIN AND INSTALL UNDERDRAIN AND TIE INTO NEAREST DRAIN STRUCTURE. INSTALL 6" MIN. INSTALL COMPACTED GRAVEL DRAINAGE AGGREGATE THAT WILL PROVIDE FINAL FINISH SURFACES THAT HAVE POSITIVE DRAINAGE.
- 10. REMOVE EXISTING WOOD TABLE TOPS AND SEAT BOARDS AND DISPOSE OF OFFSITE. INSTALL NEW POLY BOARDS WITH WOOD GRAIN IN COLOR AS SELECTED BY ARCHITECT. REPAINT EXISTING TABLE AND SEAT FRAMES PRIOR TO POLY BOARD INSTALLATION.
- 11. GRIND DOWN UNEVEN AREAS ALONG CRACKED CONCRETE SURFACES PRIOR TO INSTALLATION OF SELF LEVELING URETHANE CRACK SEALER. SEAL CONCRETE PAVEMENT FOLLOWING INSTALLATION OF CRACK
- 12. PROTECT AND REPAIR DAMAGED CONCRETE CURBING.
- 13. EX. BASKETBALL GOALS TO REMAIN EX. POST TO REMAIN/PROTECT -REMOVE EX GOALS . STORE/PROTECT DURING CONSTRUCTION AND RE-INSTALL PRIOR TO THE COMPLETION OF CONSTRUCTION TYP.
- 14. EXISTING CONCRETE TO REMAIN. PROTECT DURING CONSTRUCTION AND REPAIR ANY CONSTRUCTION DAMAGE.
- 15. ALL EXISTING LANDSCAPING TO REMAIN UNLESS NOTED OTHERWISE. PROTECT DURING CONSTRUCTION TYP.
- 16. EXISTING SITE UTILITIES. PROTECT DURING CONSTRUCTION.
- 17. EXISTING ASPHALT TO REMAIN. PROTECT DURING CONSTRUCTION AND
- 18. EX. PLAYGROUND STRUCTURES TO REMAIN PROTECT DURING CONSTRUCTION TYP: NOTED EX. PLAY EQUIPMENT IS TO REMAIN: EXCEPT ACCESSORY PLAY EQUIPMENT NOTED; ROPE CLIMBER AND ROPE ELEMENTS, ARE TO BE REPLACED FULLY WITH NEW. ALL EX. EQUIPMENT TO STRUCTURES PRIOR TO COMPLETION OF CONSTRUCTION. ALL EQUIPMENT
- DISPOSE OF ALL WASTE MATERIALS LEGALLY OFF SITE. SLEEVE EX. FENCE POST (PVC COATED) BLACK TO MATCH EX. FENCING PRIOR TO INSTALLING NEW CHAIN-LINK FENCE FABRIC, NEW HARDWARE/ ACCESSORIES AND GATES - SEE LAYOUT NOTE FOR FURTHER INFORMATION

SITE DEMOLITION KEYNOTES

CHERRY TREE **ELEMENTARY** SCHOOL **PLAYGROUND**

RENOVATION

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CARMEL CLAY SCHOOLS 5201 EAST MAIN STREET



ARCHITECT

CARMEL, IN 46033 317-844-9961

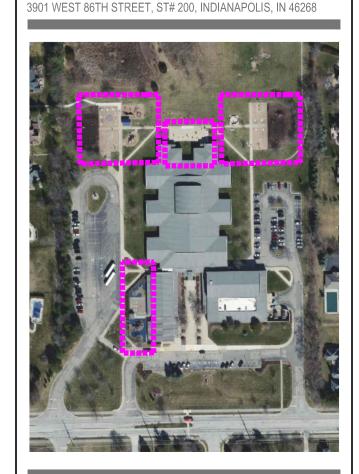


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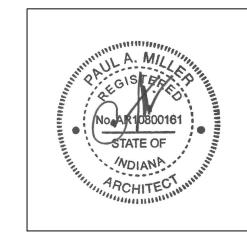
CONSULTANT

350 E NEW YORK ST# 300, INDIANAPOLIS, IN 46204





BID SET



PROJECT MANAGER: KS DRAWN BY: JB, EB

PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11- 20- 2025 REV. DATE DESCRIPTION ADDENDUM 1 12/19/2025

OVERALL SITE DEMOLITION PLAN-CTE

OVERALL SITE DEMOLITION PLAN-CTE

Know what's below. Call before you dig.

HE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITII HOWN ON THE PLAN ARE BASED UPON ABOVE GROUND VIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, LETS, VALVES, AND MARKS MADE UPON THE GROUNDS, BTHERS) AND ARE SPECULATIVE IN NATURE. THERE MAY

GENERAL LAYOUT NOTES

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OVERALL PLAYGROUND SITE LAYOUT PLAN - CTE

8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL THE UTILITY COMPANIES AND DEPARTMENTS 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY ANY UTILITIES THAT MAY BE PRESENT ON SITE. ALL VERIFICATIONS, LOCATIONS, SIZE AND DEPTHS SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES OR DEPARTMENTS. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THE UTILITY CAN BE PRESENT DURING THE EXCAVATION TO INSTRUCT AND OBSERVE DURING THE EXCAVATION. CONTRACTOR TO CALL 811 OR 800–382–5544 BEFORE DIGGING.

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SCALE: 1" = 40' - 0"

CAUTION !!

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SHOWN ON THE PLAN ARE BASED UPON ABOVE GROUND
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CHERRY TREE
ELEMENTARY
SCHOOL
PLAYGROUND
RENOVATION

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CARMEL CLAY SCHOOLS
5201 EAST MAIN STREET
CARMEL, IN 46033
317-844-9961



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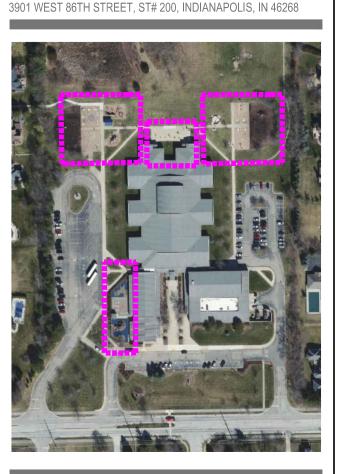


317-848-0966 WWW.FHAI.C(350 E NEW YORK ST# 300, INDIANAPOLIS, IN 46204

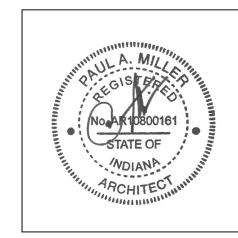
CONSULTANT



1-1500 TLF-ENGINEERS.C



BID SET



PROJECT MANAGER: KS DRAWN BY: JB, EB

PROJECT NUMBER: 222033.00

REV.
NO. DESCRIPTION

1 ADDENDUM 1 12/19/2025

OVERALL PLAYGROUND SITE LAYOUT PLAN - CTE

CTE-L1.0



ENLARGED NW PLAYGROUND SITE LAYOUT PLAN - CTE

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SITE LAYOUT KEYNOTES

- EXISTING CONCRETE PAVING TO REMAIN PROTECT DURING CONSTRUCTION TYP
- 2. ALL EX. SITE LANDSCAPING TO REMAIN UNLESS NOTED OTHERWISE PROTECT DURING CONSTRUCTION TYP
- 3. EX. SITE LIGHTING TO BE REMOVED IN NOTED LOCATIONS PROVIDE NEW LIGHT POLES BASES, POLE AND HEAD WHERE NOTED ON ELECTRICAL
- 4. EX. PRE-K PLAYGROUND FENCING AND GATE (SINGLE MAN GATE 2 TOTAL)
 REPLACEMENT: SLEEVE EX. POST AND PROVIDE NEW CHAIN-LINK FABRIC,
 HARDWARE AND ALL ACCESSORIES NEEDED FOR PROPER INSTALL MATCH
 EX. STYLE AND COLOR EX. SOUTH SLIDE GATE TO REMAIN (REPAINT TO
 LOOK LIKE NEW), PROTECT DURING CONSTRUCTION
- 5. FOLLOWING EXISTING ASPHALT REMOVAL. REGRADE EXISTING AGGREGATE BASE COURSE TO REMAIN. PROVIDE ADDITIONAL COMPACTED AGGREGATE TO MAINTAIN 6" MIN. COMPACTED AGGREGATE BASE- PROOF ROLL PROVIDE NEW 3" INTERMEDIATE COURSE, WITH 2" SURFACE COURSE. FINAL SURFACE TO BE PAVED TO PROVIDE POSITIVE DRAINAGE. NO FERROUS MATERIAL TO BE USED IN ASPHALT SURFACE COURSE AND RAP ACCEPTABLE FOR INTERMEDIATE COURSE BASE ONLY. NEW PAVEMENT MARKINGS TO MATCH EX. FOUND ON SITE SITE VERIFY AND DOCUMENT EX. CONDITIONS/LAYOUT PRIOR TO BIDDING AND START OF CONSTRUCTION TYP. SEE DETAILS 9,10,11,16 CTE-L4.01 AND CIVIL DETAILS.
- EX. BASKETBALL GOALS TO REMAIN EX. POST TO REMAIN/PROTECT -REMOVE EX GOALS , STORE/PROTECT DURING CONSTRUCTION AND RE-INSTALL PRIOR TO THE COMPLETION OF CONSTRUCTION TYP. 17 CTF-I 4 01
- NEW GOOSE NECK BASKETBALL GOALS MATCH EXISTING ON SITE -PROVIDE REDUCED HEIGHT HOOPS FOR KIDS TYP. SEE DETAIL 17 CTE-L4.01.
- 8. KINDERFGARTEN HARD PAVEMENT GAME AREA: POUR NEW 4" THICK REINFORCED CONCRETE PAVING ON EXISTING AGGREGATE BASE COURSE. PROVIDE NEW PAVEMENT GAMES WITHIN AREA MATCHING EXISTING FOUND ON SITE SITE VERIFY EX. CONDITIONS AND DOCUMENT LAYOUTS PRIOR TO BIDDING AND START OF CONSTRUCTION. SEE DETAIL 4,5,6 CTE-L4.01 AND CIVIL DETAILS.
- 9. EXISTING PLAYGROUND STRUCTURES TO REMAIN EXCEPT THE ACCESSORY PLAY EQUIPMENT NOTED ARE TO BE REMOVED AND OR REPLACED WITH NEW; ROPE CLIMBERS, ALL ROPE ELEMENTS TO BE REPLACED FULLY, CONICAL CLIMBERS WITHIN ALL LOCATIONS ARE TO BE FULLY REMOVED SEE LAYOUT PLANS FOR PROPOSED PLAY EQUIPMENT WITHIN THE NOTED LOCATIONS FOR REMOVAL.
- 10. INSTALL NEW (PROTECHS BASIS OF DESIGN) ALPHATIC POURED IN PLACE (PIP) SURFACING TO BE INSTALLED PER MANUF. WRITTEN RECOMMENDATIONS PROVIDED PIP SURFACING DEPTHS PER MANUF., LOCAL AND STATE REGULATIONS TYP. MANUF. REP IS TO BE ON SITE DURING INSTALLATION. PROVIDE NO MORE THAN 1% SLOPE TO SURFACE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE AND TIE INTO EXISTING UNDERDRAIN OUTLET SEE SITE CIVIL DRAWINGS FOR FURTHER INFORMATION. INSTALL NEW POURED IN PLACE PLAYGROUND SURFACING PER CCS STANDARDS. INSTALL COLORS AS NOTED ON PLAN (BLUE, RED). PROVIDE MANUF. STANDARD COLORS AS SHOWN ON PLANS TERRACOTTA / BLACK (50/50MIX), BLUE/BLACK (50/50MIX) WITHIN NOTED AREAS. SEE DETAILS 3,8,10,16 CTE-L4.01 AND CIVIL DETAILS.
- 11. INSTALL NEW SYNTHETIC TURF SYNPRO 65 OR APPROVED EQUAL WITH THATCH LAYER AND INFILL SYSTEM ON AGGREGATE OR BUFFING BASE COURSE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE AND TIE INTO EXISTING UNDERDRAIN OUTLET. INSTALL TURF IN COLOR AS SELECTED BY ARCHITECT (MEDIUM GREEN). SEE DETAIL 2 CTE-L4.01 AND CIVIL DETAILS.
- GATES IN EARLY LEARNING CENTER IN LOCATIONS SHOWN. SEE DETAILS 12,13,14,15 CTE-L4.01 AND CIVIL DETAILS.

12. INSTALL NEW 4' HIGH CHAIN-LINK FENCING WITH (2) DOUBLE WIDE MAN

- 13. RELOCATED GAGA PIT: SECURE EX. GAGA PIT TO NEW CONC. PAD PER MANUF. WRITTEN RECOMMENDATIONS
- 14. CONCRETE STOOP SEE ARCHITECTURAL SHEETS FOR FURTHER INFORMATION
- 15. NEW BENCH SEATING: DEMO EX. BENCHES PROVIDE NEW BENCHES MATCHING CCS STANDARDS SECURE NEW BENCH TO NEW 4" THICK REINFORCED CONC. BASE OVER 6" COMPACTED 1" DIA. AGGREGATE PER MANUFACTURERS RECOMMENDATIONS. EX. CONC. PAVING TO REMAIN PROTECT DURING CONSTRUCTION. SEE DETAIL 8 CTE-L4.00.
- 16. NEW ASPHALT PAVING: INSTALL NEW COMPACTED
 AGGREGATE SUB-BASE, INTERMEDIATE ASPHALTIC BASE WITH
 SURFACE COURSE PROVIDE POSITIVE SURFACE DRAINAGE TO EX. STORM
 DRAINS TYP. NO RAP AGGREGATE TO BE USED IN SURFACE ASPHALT LAYER.
 SEE DETAILS 9,10,11,16 CTE-L4.01 AND CIVIL DETAILS.
- 17. RENOVATED TABLES AND BENCHES: REMOVE EXISTING WOOD TABLE TOPS AND SEAT BOARDS FROM EXIST. TABLES (7) AND BENCHES. THOROUGHLY CLEAN AND REPAINT EXISTING TABLE AND BENCH FRAMING AND INSTALL NEW 2" THICK POLY STYLE PLANKS (WOOD TEXTURE) TO EX. METAL FRAMING. SECURE PER. MANUF. WRITTEN INSTRUCTIONS TYP
- 18. NEW 20' SHADE CANOPIES (2) BY LANDSCAPE STRUCTURES BASIS OF DESIGN SEE PROJECT MANUAL FOR APPROVED MANUFACTURES NO OTHER MANUF. WILL BE CONSIDERED TYP. INSTALL PER MANUF. WRITTEN RECOMMENDATION. PROVIDE FOOTINGS PER MANUF. LOCAL AND STATE GUIDELINES, EXISTING CONCRETE PAVING WITHIN HIGHLIGHTED (PURPLE) SPACE IS TO BE FULLY REPLACED PROVIDE NEW FOOTINGS FOR SHADE STRUCTURE PER LOCAL CODES AND PER MANUF. WRITTEN RECOMMENDATIONS CONTRACTOR IS TO OBTAIN STAMPED DRAWINGS FROM MANUF. FOR ALL CANOPY STRUCTURES AND FOOTING PRIOR TO THE START OF CONSTRUCTION TYP.
- 19. EX. CONC. CRACK REPAIR: GRIND DOWN UNEVEN AREAS ALONG CRACKED CONC. SURFACE PRIOR TO INSTALLING SELF LEVELING POLYURETHANE CRACK FILLER SEAL PAVEMENT SURFACES AFTER CRACK FILLING.
- 20. BASKETBALL MARKINGS SHALL MEET NFHS STANDARD DIMENSIONS .SEE DETAIL 6 CTE-L4.00
- 21. PAINT GAME MARKINGS ON EXISTING CONCRETE PAVING. SEE DETAILS 1,4,5 CTE-L4.00 AND 18,19,20 CTE-L4.01
- 22. INSTALL LANDSCAPE STRUCTURES / PLAYWORLD (ELC PLAYGROUND) FREESTANDING PLAY EQUIPMENT IN LOCATIONS NOTED ON PLAN.
- 23. PAINT TOT TRACK ON NEW CONCRETE PAVING. SEE DETAIL 7 CTE-L4.00
- 24. INSTALL TETHER BALL COURT MARKINGS AND EQUIPMENT IN LOCATIONS NOTED. SEE DETAIL 3 CTE-L4.00

25. INSTALL 4" MIN. TOPSOIL, FINE GRADE, SEED AND HYDROMULCH AREAS

- DISTURBED BY CONSTRUCTION..

 26. POUR REINFORCED CONCRETE SLAB IN SHADED AREAS AS NOTED OVER 6" COMPACTED CRUSHED 1" DIA. AGGREGATE. ACCEPTABLE 'POLY'
- FIBER MAY BE USED IN LIEU OF WIRE MESH REINFORCEMENT.
 SEE DETAILS 4,5,6 CTE-L4.01 AND CIVIL DETAILS.

 27. POUR THICKENED CONCRETE EDGE FOR NAILER BOARD ATTACHMENT FOR NEW SYNTHETIC TURF INSTALLATION.
- SEE DETAIL 7 CTE-L4.01 AND CIVIL DETAILS.

 28. BOLT 2X4" COMPOSITE NAILER BOARD FOR SYNTHETIC TURF INSTALLATION TO EXISTING BUILDING FOUNDATION. GRIND AND SMOOTH ANY IMPERFECTIONS FROM FOUNDATION TO ALLOW NAILER
- 29. EXISTING TO NEW CONCRETE TRANSITION. SEE DETAIL 21 CTE-L4.01 AND CIVIL DETAILS

BOARD INSTALLATION.

- 30. PROTECT EXISTING CURB AND REPAIR ANY CONSTRUCTION DAMAGE
- 31. NEW NEW 4" THICK REINFORCED CONC. PAD WITHIN NOTED AREA OVER 6"
 COMPACTED 1" DIA. AGGREGATE BASE COURSE. USE POLYURETHANE
 FIBERS WITHIN CONC. MIX IN PLACE OF USING WIRE MESH.AND COMPACTED
 SUB-BASE. PROVIDE NEW CONTROL AND EXPANSION JOINT LAYOUT
 MATCHING EX. CONC. PAVING TO REMAIN ADJACENT TO NEW PAD SITE
 VERIFY EX. CONDITIONS AND DOCUMENT LAYOUTS PRIOR TO BIDDING AND
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 FOR FURTHER INFORMATION.

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CAUTION !!

LE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES HOWN ON THE PLAN ARE BASED UPON ABOVE GROUND BY INDERCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, LETS, VALVES, AND MARKS MADE UPON THE GROUND BY THERS) AND ARE SPECULATIVE IN NATURE. THERE MAY SO BE OTHER EXISTING UNDERGROUND UTILITIES FOR HICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR HICH NO ABOVE GROUND EVIDENCE OR FOR HICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE KACT LOCATIONS GIVEN ARE APPROXIMATE AND ARE TO BE SITE VERIFIED PRIOR TO THE START OF CONSTRUCTION. ALL CONCRETE AND ASPHALT PAVING NOT NOTED FOR WORK IS TO REMAIN — PROTECT DURING CONSTRUCTION TYP

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CHERRY TREE
ELEMENTARY
SCHOOL
PLAYGROUND
RENOVATION

CARMEL CLAY SCHOOLS

5201 EAST MAIN STREET CARMEL, IN 46033 317-844-9961



ARCHITECT



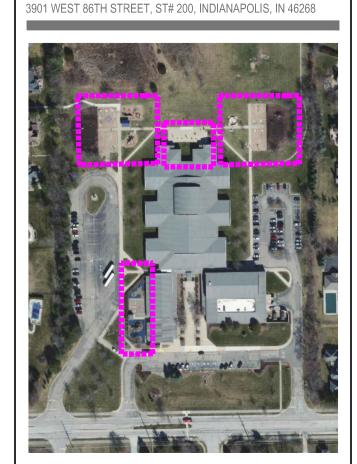
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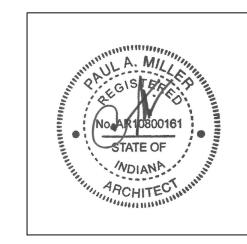
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I-1500 TLF-ENGINEERS.COM



BID SET



PROJECT MANAGER: KS DRAWN BY: JB, EB

PROJECT NUMBER: 222033.00

REV.
NO. DESCRIPTION

1 ADDENDUM 1 12/19/2025

ENLARGED NW PLAYGROUND SITE LAYOUT PLAN - CTE

CTE- L1.1

ENLARGED EARLY LEARNING PLAYGROUND SITE LAYOUT PLAN - CTE

GENERAL LAYOUT NOTES

STATE, COUNTY, CITY OR LOCAL AGENCIES.

- 1. ALL CONTRACTORS BUT NOT LIMITED TO THE EXCAVATING CONTRACTOR OR CONTRACTORS MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. ACTUAL FIELD LOCATIONS OF ALL THE EXISTING UTILITIES ARE THE CONTRACTORS RESPONSIBILITY AND MUST BE LOCATED EITHER BY THE REPRESENTATIVE OF THE UTILITY COMPANY OR BY A PRIVATE UNDERGROUND UTILITY LOCATING COMPANY PRIOR TO THE START OF EXCAVATING. VERIFY MINIMUM COVER REQUIREMENTS BY THE UTILITY CONTRACTOR OR CONTRACTORS OR UTILITY COMPANIES OR AGENCIES WHOMEVER HAS JURISDICTION SO NOT TO CAUSE DAMAGE.
- 2. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- 3. EXISTING PAVEMENT, SIDEWALKS CURBS DRIVEWAYS, ELECTRICAL TRANSFORMER, DITCHES, DRAINAGE PIPES AND STRUCTURES, FENCES, LAWNS, TREES, BUSHES, MAILBOXES, SIGNS, POWER POLES ETC., TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR, ANY DAMAGE DURING CONSTRUCTION SHALL BE RESTORED, RECONSTRUCTED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ALL DAMAGES SHALL BE RESTORED OR REPLACED TO AT LEAST THEIR ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- 4. ALL AREAS WHERE THE EXISTING PAVEMENT OR PAVEMENTS ARE DAMAGED DURING CONSTRUCTION FROM HEAVY TRAFFIC OR EQUIPMENT, FUEL OIL, OIL, GASOLINE, ETC., BY THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIERS, SHALL BE RECONSTRUCTED TO IT'S ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES. THIS RECONSTRUCTION AND REPAIR SHALL TAKE PLACE AT THE END OF THE PROJECT CONSTRUCTION OR DURING THE SCHEDULED GRADING AND PAVING OF THOSE AREA.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BEAR ALL EXPENSES TO REMOVE, RELOCATE AND OR MODIFY ALL UTILITIES, PRIVATE, PUBLIC, UNLESS NOTED OTHERWISE ON PLANS. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH EACH UTILITY COMPANY AND OR AGENT TO WHO IS RESPONSIBLE TO REMOVE, RELOCATE AND OR MODIFY SUCH UTILITIES EXISTING OR PROPOSED. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY IF ANY FUTURE UTILITIES ARE PLANNED AND HOW IT MAY EFFECT THIS PROJECT AND ITS OWNER AS TO THEIR RESPONSIBILITIES.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AT HIS EXPENSE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL,
- 7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND ALL WORK REQUIRED UNLESS OTHERWISE NOTED. THIS INCLUDES THE SUBMITTAL FOR LAND DISTURBANCE AND THE SUBMITTAL FOR SOIL EROSION AND SEDIMENT CONTROL IF REQUIRED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES UNLESS OTHERWISE NOTED BY THE CONTRACT OR SPECIFICATIONS.
- 8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL THE UTILITY COMPANIES AND DEPARTMENTS 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY ANY UTILITIES THAT MAY BE PRESENT ON SITE. ALL VERIFICATIONS, LOCATIONS, SIZE AND DEPTHS SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES OR DEPARTMENTS. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THE UTILITY CAN BE PRESENT DURING THE EXCAVATION TO INSTRUCT AND OBSERVE DURING THE EXCAVATION. CONTRACTOR TO CALL 811 OR 800-382-5544 BEFORE DIGGING.
- 9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT EACH DAY AND REMOVE ALL MUD, DIRT, GRAVEL AND LOOSE MATERIALS TRACKED, DUMPED. SPILLED OR WIND BLOWN FROM THIS SITE ONTO OTHER SITES, RIGHT OF WAY, PUBLIC OR PRIVATE STREETS OR ROADS, DRIVEWAYS, YARDS OR SIDEWALKS. THE CONTRACTOR MUST CLEAN OR PICK UP DAILY IF NECESSARY. THE CONTRACTOR SHALL REDUCE THE AIRBORNE DUST DURING THE ENTIRE CONSTRUCTION SCHEDULE. WATER MAY BE USED AS A REDUCER.
- 10. THE UTILITIES INDICATED ON THESE PLANS MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THIS SITE. THE LOCATIONS AND SIZE OF THESE UTILITIES ARE APPROXIMATE. THIS INFORMATION WAS GATHERED OR SUPPLIED FROM OTHERS AND USED BY THE ARCHITECT AND OR ENGINEER AND MAY NOT BE ACTUAL. THE ARCHITECT AND / OR ENGINEER MAY NOT BE HELD LIABLE FOR ANY INCORRECT OR MISLEADING UTILITY INFORMATION INDICATED, IMPLIED OR NOT INDICATED ON THESE PLANS.

11. ALL LISTED SQ. FT TOTALS ARE ESTIMATES AND NOT FINAL - GIVEN TOTALS SHOULD BE CONFIRMED ON SITE PRIOR TO BIDDING AND START OF CONSTRUCTION

PROPOSED SITE LEGEND NEW ASPHALT PAVEMENT NEW CONC. PADS NEW (PIP) PLAYGROUND SURFACING NEW (PIP) PLAYGROUND SURFACING NEW (TURF) PLAYGROUND SURFACING NEW CONC. PAVING AT SHELTER NEW BASKETBALL COURT

EQUIPMENT BREAKDOWN:

Playground Area ELC — Equipment List & Descriptions

Playworld® Buccaneer with Modifications – Model 350-1924

Multi-level themed play structure designed to simulate a pirate ship environment. Provides climbing, sliding, balancing, and imaginative play opportunities appropriate for elementary-age children (5–12). Structure supports group interaction and varied play paths at multiple elevations.

varied descent experiences and primary exits from elevated play platforms.

- Glide Slides (multiple): Rotationally molded slides integrated at different deck heights to provide
- Rock Climber: Molded climbing surface providing vertical access to elevated decks while promoting upper-body strength, coordination, and balance.
- alternative access routes and additional climbing challenge.

• Silo Climber: Vertical cylindrical climbing element integrated into the play structure to provide

- Climbing Squares Climber: Angled climbing element extending from the main structure to support strength development, coordination, and varied movement patterns.
- Arch Bridge: Curved bridge element connecting play decks, encouraging balance, transitional movement, and circulation between activity zones.
- Post-Mounted Drum Panel: Interactive percussion play element mounted to the structure to support sensory engagement and cooperative play.
- Activity Panel with Magical Music Insert (Deck-Mounted): Interactive play panel providing auditory and tactile engagement at deck level to support imaginative and sensory play.
- ADA Driver Panel (Ground-Mounted): Ground-accessible interactive panel providing inclusive play opportunities for users who remain at grade level.
- Transfer Station with Step: Accessible entry point allowing users to transfer onto the play structure in compliance with ADA accessibility guidelines.
- NUVO™ Swirl Roof: Overhead canopy element providing shade and visual identity while enhancing the thematic character of the structure.

Gas Station Play Panels (2 locations): Ground-level dramatic play elements positioned adjacent to the turf area to support role-play, social interaction, and inclusive play.

3.5" Arch Swing Set with (2) Belt Seat: Independent swing structure providing traditional swinging motion to support vestibular development, balance, and gross-motor activity.

According to the manufacturer's configuration, the play area provides:

- Multiple elevated play activities with varied access routes

Multiple ground-level interactive play components

- Combination of physical, sensory, and imaginative play experiences

- Inclusive access via transfer station and ground-level panels

SITE LAYOUT KEYNOTES

- 1. EXISTING CONCRETE PAVING TO REMAIN PROTECT DURING CONSTRUCTION TYP
- 2. ALL EX. SITE LANDSCAPING TO REMAIN UNLESS NOTED OTHERWISE PROTECT DURING CONSTRUCTION TYP
- 3. EX. SITE LIGHTING TO BE REMOVED IN NOTED LOCATIONS PROVIDE NEW LIGHT POLES BASES, POLE AND HEAD WHERE NOTED ON ELECTRICAL
- 4. EX. PRE-K PLAYGROUND FENCING AND GATE (SINGLE MAN GATE 2 TOTAL) REPLACEMENT: SLEEVE EX. POST AND PROVIDE NEW CHAIN-LINK FABRIC, HARDWARE AND ALL ACCESSORIES NEEDED FOR PROPER INSTALL - MATCH EX. STYLE AND COLOR - EX. SOUTH SLIDE GATE TO REMAIN (REPAINT TO LOOK LIKE NEW), PROTECT DURING CONSTRUCTION
- FOLLOWING EXISTING ASPHALT REMOVAL, REGRADE EXISTING AGGREGATE BASE COURSE TO REMAIN. PROVIDE ADDITIONAL COMPACTED AGGREGATE TO MAINTAIN 6" MIN. COMPACTED AGGREGATE BASE- PROOF ROLL - PROVIDE NEW 3" INTERMEDIATE COURSE , WITH 2" SURFACE COURSE. FINAL SURFACE TO BE PAVED TO PROVIDE POSITIVE DRAINAGE. NO FERROUS MATERIAL TO BE USED IN ASPHALT SURFACE COURSE AND RAP ACCEPTABLE FOR INTERMEDIATE COURSE BASE ONLY. NEW PAVEMENT MARKINGS TO MATCH EX. FOUND ON SITE - SITE VERIFY AND DOCUMENT EX. CONDITIONS/LAYOUT PRIOR TO BIDDING AND START OF CONSTRUCTION TYP. SEE DETAILS 9,10,11,16 CTE-L4.01 AND CIVIL DETAILS.
- 6. EX. BASKETBALL GOALS TO REMAIN EX. POST TO REMAIN/PROTECT REMOVE EX GOALS, STORE/PROTECT DURING CONSTRUCTION AND RE-INSTALL PRIOR TO THE COMPLETION OF CONSTRUCTION TYP. 17
- 7. NEW GOOSE NECK BASKETBALL GOALS MATCH EXISTING ON SITE -PROVIDE REDUCED HEIGHT HOOPS FOR KIDS TYP. SEE DETAIL 17 CTE-L4.01.
- 8. KINDERFGARTEN HARD PAVEMENT GAME AREA: POUR NEW 4" THICK REINFORCED CONCRETE PAVING ON EXISTING AGGREGATE BASE COURSE. PROVIDE NEW PAVEMENT GAMES WITHIN AREA MATCHING EXISTING FOUND ON SITE - SITE VERIFY EX. CONDITIONS AND DOCUMENT LAYOUTS PRIOR TO BIDDING AND START OF CONSTRUCTION. SEE DETAIL 4,5,6 CTE-L4.01 AND CIVIL DETAILS.
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PROTECT DURING CONSTRUCTION. SEE DETAIL 8 CTE-L4.00.

FRAMING. SECURE PER. MANUF. WRITTEN INSTRUCTIONS TYP

INFORMATION

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CHERRY TREE **ELEMENTARY** SCHOOL **PLAYGROUND** RENOVATION

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CARMEL CLAY SCHOOLS 5201 EAST MAIN STREET CARMEL, IN 46033





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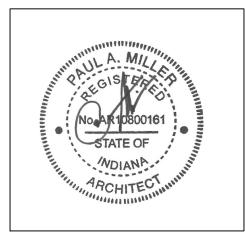
CONSULTANT



317-334-1500



BID SET



PROJECT MANAGER: KS

DRAWN BY: JB, EB PROJECT NUMBER: 222033.00 PROJECT ISSUE DATE: 11-20-2025 REV.

DATE DESCRIPTION ADDENDUM 1 12/19/2025

ENLARGED EARLY LEARNING PLAYGROUND SITE LAYOUT PLAN-CTE

ENLARGED SW PLAYGROUND SITE LAYOUT PLAN - CTE

GENERAL LAYOUT NOTES

- 1. ALL CONTRACTORS BUT NOT LIMITED TO THE EXCAVATING CONTRACTOR OR CONTRACTORS MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. ACTUAL FIELD LOCATIONS OF ALL THE EXISTING UTILITIES ARE THE CONTRACTORS RESPONSIBILITY AND MUST BE LOCATED EITHER BY THE REPRESENTATIVE OF THE UTILITY COMPANY OR BY A PRIVATE UNDERGROUND UTILITY LOCATING COMPANY PRIOR TO THE START OF EXCAVATING. VERIFY MINIMUM COVER REQUIREMENTS BY THE UTILITY CONTRACTOR OR CONTRACTORS OR UTILITY COMPANIES OR AGENCIES WHOMEVER HAS JURISDICTION SO NOT TO CAUSE DAMAGE.
- 2. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- 3. EXISTING PAVEMENT, SIDEWALKS CURBS DRIVEWAYS, ELECTRICAL TRANSFORMER, DITCHES, DRAINAGE PIPES AND STRUCTURES, FENCES, LAWNS, TREES, BUSHES, MAILBOXES, SIGNS, POWER POLES ETC., TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGE DURING CONSTRUCTION SHALL BE RESTORED, RECONSTRUCTED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ALL DAMAGES SHALL BE RESTORED OR REPLACED TO AT LEAST THEIR ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- 4. ALL AREAS WHERE THE EXISTING PAVEMENT OR PAVEMENTS ARE DAMAGED DURING CONSTRUCTION FROM HEAVY TRAFFIC OR EQUIPMENT, FUEL OIL, OIL, GASOLINE, ETC., BY THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIERS, SHALL BE RECONSTRUCTED TO IT'S ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES. THIS RECONSTRUCTION AND REPAIR SHALL TAKE PLACE AT THE END OF THE PROJECT CONSTRUCTION OR DURING THE SCHEDULED GRADING AND PAVING OF THOSE AREA.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BEAR ALL EXPENSES TO REMOVE, RELOCATE AND OR MODIFY ALL UTILITIES, PRIVATE, PUBLIC, UNLESS NOTED OTHERWISE ON PLANS. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH EACH UTILITY COMPANY AND OR AGENT TO WHO IS RESPONSIBLE TO REMOVE, RELOCATE AND OR MODIFY SUCH UTILITIES EXISTING OR PROPOSED. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY IF ANY FUTURE UTILITIES ARE PLANNED AND HOW IT MAY EFFECT THIS PROJECT AND ITS OWNER AS TO THEIR RESPONSIBILITIES.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AT HIS EXPENSE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES.

- 7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND ALL WORK REQUIRED UNLESS OTHERWISE NOTED. THIS INCLUDES THE SUBMITTAL FOR LAND DISTURBANCE AND THE SUBMITTAL FOR SOIL EROSION AND SEDIMENT CONTROL IF REQUIRED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES UNLESS OTHERWISE NOTED BY THE CONTRACT OR SPECIFICATIONS.
- 8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL THE UTILITY COMPANIES AND DEPARTMENTS 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY ANY UTILITIES THAT MAY BE PRESENT ON SITE. ALL VERIFICATIONS, LOCATIONS, SIZE AND DEPTHS SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES OR DEPARTMENTS. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THE UTILITY CAN BE PRESENT DURING THE EXCAVATION TO INSTRUCT AND OBSERVE DURING THE EXCAVATION. CONTRACTOR TO CALL 811 OR 800–382–5544 BEFORE DIGGING.
- 9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT EACH DAY AND REMOVE ALL MUD, DIRT, GRAVEL AND LOOSE MATERIALS TRACKED, DUMPED, SPILLED OR WIND BLOWN FROM THIS SITE ONTO OTHER SITES, RIGHT OF WAY, PUBLIC OR PRIVATE STREETS OR ROADS, DRIVEWAYS, YARDS OR SIDEWALKS. THE CONTRACTOR MUST CLEAN OR PICK UP DAILY IF NECESSARY. THE CONTRACTOR SHALL REDUCE THE AIRBORNE DUST DURING THE ENTIRE CONSTRUCTION SCHEDULE. WATER MAY BE USED AS A REDUCER.
- 10. THE UTILITIES INDICATED ON THESE PLANS MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THIS SITE. THE LOCATIONS AND SIZE OF THESE UTILITIES ARE APPROXIMATE. THIS INFORMATION WAS GATHERED OR SUPPLIED FROM OTHERS AND USED BY THE ARCHITECT AND OR ENGINEER AND MAY NOT BE ACTUAL. THE ARCHITECT AND / OR ENGINEER MAY NOT BE HELD LIABLE FOR ANY INCORRECT OR MISLEADING UTILITY INFORMATION INDICATED, IMPLIED OR NOT INDICATED ON THESE PLANS.
- 11. ALL LISTED SQ. FT TOTALS ARE ESTIMATES AND NOT FINAL GIVEN TOTALS SHOULD BE CONFIRMED ON SITE PRIOR TO BIDDING AND START OF CONSTRUCTION

NEW ASPHALT PAVEMENT NEW CONC. PADS NEW (PIP) PLAYGROUND SURFACING NEW (PIP) PLAYGROUND SURFACING NEW (TURF) PLAYGROUND SURFACING NEW CONC. PAVING AT SHELTER NEW BASKETBALL COURT

SITE LAYOUT KEYNOTES

- EXISTING CONCRETE PAVING TO REMAIN PROTECT DURING CONSTRUCTION TYP
- 2. ALL EX. SITE LANDSCAPING TO REMAIN UNLESS NOTED OTHERWISE PROTECT DURING CONSTRUCTION TYP
- 3. EX. SITE LIGHTING TO BE REMOVED IN NOTED LOCATIONS PROVIDE NEW LIGHT POLES BASES, POLE AND HEAD WHERE NOTED ON ELECTRICAL
- 4. EX. PRE-K PLAYGROUND FENCING AND GATE (SINGLE MAN GATE 2 TOTAL)
 REPLACEMENT: SLEEVE EX. POST AND PROVIDE NEW CHAIN-LINK FABRIC,
 HARDWARE AND ALL ACCESSORIES NEEDED FOR PROPER INSTALL MATCH
 EX. STYLE AND COLOR EX. SOUTH SLIDE GATE TO REMAIN (REPAINT TO
 LOOK LIKE NEW), PROTECT DURING CONSTRUCTION
- 5. FOLLOWING EXISTING ASPHALT REMOVAL. REGRADE EXISTING AGGREGATE BASE COURSE TO REMAIN. PROVIDE ADDITIONAL COMPACTED AGGREGATE TO MAINTAIN 6" MIN. COMPACTED AGGREGATE BASE- PROOF ROLL PROVIDE NEW 3" INTERMEDIATE COURSE, WITH 2" SURFACE COURSE. FINAL SURFACE TO BE PAVED TO PROVIDE POSITIVE DRAINAGE. NO FERROUS MATERIAL TO BE USED IN ASPHALT SURFACE COURSE AND RAP ACCEPTABLE FOR INTERMEDIATE COURSE BASE ONLY. NEW PAVEMENT MARKINGS TO MATCH EX. FOUND ON SITE SITE VERIFY AND DOCUMENT EX. CONDITIONS/LAYOUT PRIOR TO BIDDING AND START OF CONSTRUCTION TYP. SEE DETAILS 9,10,11,16 CTE-L4.01 AND CIVIL DETAILS.
- 6. EX. BASKETBALL GOALS TO REMAIN EX. POST TO REMAIN/PROTECT REMOVE EX GOALS, STORE/PROTECT DURING CONSTRUCTION AND RE-INSTALL PRIOR TO THE COMPLETION OF CONSTRUCTION TYP. 17 CTE-I. 4.01
- 7. NEW GOOSE NECK BASKETBALL GOALS MATCH EXISTING ON SITE PROVIDE REDUCED HEIGHT HOOPS FOR KIDS TYP. SEE DETAIL 17 CTE-L4.01.
- 8. KINDERFGARTEN HARD PAVEMENT GAME AREA: POUR NEW 4" THICK REINFORCED CONCRETE PAVING ON EXISTING AGGREGATE BASE COURSE. PROVIDE NEW PAVEMENT GAMES WITHIN AREA MATCHING EXISTING FOUND ON SITE SITE VERIFY EX. CONDITIONS AND DOCUMENT LAYOUTS PRIOR TO BIDDING AND START OF CONSTRUCTION. SEE DETAIL 4,5,6 CTE-L4.01 AND CIVIL DETAILS.
- 9. EXISTING PLAYGROUND STRUCTURES TO REMAIN EXCEPT THE ACCESSORY PLAY EQUIPMENT NOTED ARE TO BE REMOVED AND OR REPLACED WITH NEW; ROPE CLIMBERS, ALL ROPE ELEMENTS TO BE REPLACED FULLY, CONICAL CLIMBERS WITHIN ALL LOCATIONS ARE TO BE FULLY REMOVED SEE LAYOUT PLANS FOR PROPOSED PLAY EQUIPMENT WITHIN THE NOTED LOCATIONS FOR REMOVAL.
- 10. INSTALL NEW (PROTECHS BASIS OF DESIGN) ALPHATIC POURED IN PLACE (PIP) SURFACING TO BE INSTALLED PER MANUF. WRITTEN RECOMMENDATIONS PROVIDED PIP SURFACING DEPTHS PER MANUF., LOCAL AND STATE REGULATIONS TYP. MANUF. REP IS TO BE ON SITE DURING INSTALLATION. PROVIDE NO MORE THAN 1% SLOPE TO SURFACE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE AND TIE INTO EXISTING UNDERDRAIN OUTLET SEE SITE CIVIL DRAWINGS FOR FURTHER INFORMATION. INSTALL NEW POURED IN PLACE PLAYGROUND SURFACING PER CCS STANDARDS. INSTALL COLORS AS NOTED ON PLAN (BLUE, RED). PROVIDE MANUF. STANDARD COLORS AS SHOWN ON PLANS TERRACOTTA / BLACK (50/50MIX), BLUE/BLACK (50/50MIX) WITHIN NOTED AREAS. SEE DETAILS 3,8,10,16 CTE-L4.01 AND CIVIL DETAILS.
- COURSE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE AND TIE INTO EXISTING UNDERDRAIN OUTLET. INSTALL TURF IN COLOR AS SELECTED BY ARCHITECT (MEDIUM GREEN). SEE DETAIL 2 CTE-L4.01 AND CIVIL DETAILS.

 12. INSTALL NEW 4' HIGH CHAIN-LINK FENCING WITH (2) DOUBLE WIDE MAN

11. INSTALL NEW SYNTHETIC TURF SYNPRO 65 OR APPROVED EQUAL WITH THATCH LAYER AND INFILL SYSTEM ON AGGREGATE OR BUFFING BASE

- GATES IN EARLY LEARNING CENTER IN LOCATIONS SHOWN. SEE DETAILS 12,13,14,15 CTE-L4.01 AND CIVIL DETAILS.
- 13. RELOCATED GAGA PIT: SECURE EX. GAGA PIT TO NEW CONC. PAD PER MANUF. WRITTEN RECOMMENDATIONS
- 14. CONCRETE STOOP SEE ARCHITECTURAL SHEETS FOR FURTHER
- 15. NEW BENCH SEATING: DEMO EX. BENCHES PROVIDE NEW BENCHES MATCHING CCS STANDARDS SECURE NEW BENCH TO NEW 4" THICK REINFORCED CONC. BASE OVER 6" COMPACTED 1" DIA. AGGREGATE PER MANUFACTURERS RECOMMENDATIONS. EX. CONC. PAVING TO REMAIN PROTECT DURING CONSTRUCTION. SEE DETAIL 8 CTE-L4.00.
- 16. NEW ASPHALT PAVING: INSTALL NEW COMPACTED AGGREGATE SUB-BASE, INTERMEDIATE ASPHALTIC BASE WITH SURFACE COURSE PROVIDE POSITIVE SURFACE DRAINAGE TO EX. STORM DRAINS TYP. NO RAP AGGREGATE TO BE USED IN SURFACE ASPHALT LAYER. SEE DETAILS 9,10,11,16 CTE-L4.01 AND CIVIL DETAILS.
- 17. RENOVATED TABLES AND BENCHES: REMOVE EXISTING WOOD TABLE TOPS AND SEAT BOARDS FROM EXIST. TABLES (7) AND BENCHES. THOROUGHLY CLEAN AND REPAINT EXISTING TABLE AND BENCH FRAMING AND INSTALL NEW 2" THICK POLY STYLE PLANKS (WOOD TEXTURE) TO EX. METAL FRAMING. SECURE PER. MANUF. WRITTEN INSTRUCTIONS TYP
- 18. NEW 20' SHADE CANOPIES (2) BY LANDSCAPE STRUCTURES BASIS OF DESIGN SEE PROJECT MANUAL FOR APPROVED MANUFACTURES NO OTHER MANUF. WILL BE CONSIDERED TYP. INSTALL PER MANUF. WRITTEN RECOMMENDATION. PROVIDE FOOTINGS PER MANUF. LOCAL AND STATE GUIDELINES, EXISTING CONCRETE PAVING WITHIN HIGHLIGHTED (PURPLE) SPACE IS TO BE FULLY REPLACED PROVIDE NEW FOOTINGS FOR SHADE STRUCTURE PER LOCAL CODES AND PER MANUF. WRITTEN RECOMMENDATIONS CONTRACTOR IS TO OBTAIN STAMPED DRAWINGS FROM MANUF. FOR ALL CANOPY STRUCTURES AND FOOTING PRIOR TO THE START OF CONSTRUCTION TYP.
- 19. EX. CONC. CRACK REPAIR: GRIND DOWN UNEVEN AREAS ALONG CRACKED CONC. SURFACE PRIOR TO INSTALLING SELF LEVELING POLYURETHANE CRACK FILLER SEAL PAVEMENT SURFACES AFTER CRACK FILLING.
- 20. BASKETBALL MARKINGS SHALL MEET NFHS STANDARD DIMENSIONS
- 21. PAINT GAME MARKINGS ON EXISTING CONCRETE PAVING. SEE DETAILS 1,4,5 CTE-L4.00 AND 18,19,20 CTE-L4.01

.SEE DETAIL 6 CTE-L4.00

- 22. INSTALL LANDSCAPE STRUCTURES / PLAYWORLD (ELC PLAYGROUND) FREESTANDING PLAY EQUIPMENT IN LOCATIONS NOTED ON PLAN.
- 23. PAINT TOT TRACK ON NEW CONCRETE PAVING. SEE DETAIL 7 CTE-L4.00
- INSTALL TETHER BALL COURT MARKINGS AND EQUIPMENT IN LOCATIONS NOTED. SEE DETAIL 3 CTE-L4.00
- 25. INSTALL 4" MIN. TOPSOIL, FINE GRADE, SEED AND HYDROMULCH AREAS DISTURBED BY CONSTRUCTION..
 26. POUR REINFORCED CONCRETE SLAB IN SHADED AREAS AS NOTED OVER 6" COMPACTED CRUSHED 1" DIA. AGGREGATE. ACCEPTABLE 'POLY'

FIBER MAY BE USED IN LIEU OF WIRE MESH REINFORCEMENT.

- SEE DETAILS 4,5,6 CTE-L4.01 AND CIVIL DETAILS.

 27. POUR THICKENED CONCRETE EDGE FOR NAILER BOARD ATTACHMENT FOR NEW SYNTHETIC TURF INSTALLATION.
 SEE DETAIL 7 CTE-L4.01 AND CIVIL DETAILS.
- 28. BOLT 2X4" COMPOSITE NAILER BOARD FOR SYNTHETIC TURF INSTALLATION TO EXISTING BUILDING FOUNDATION. GRIND AND SMOOTH ANY IMPERFECTIONS FROM FOUNDATION TO ALLOW NAILER BOARD INSTALLATION.
- 29. EXISTING TO NEW CONCRETE TRANSITION. SEE DETAIL 21 CTE-L4.01 AND CIVIL DETAILS
- 30. PROTECT EXISTING CURB AND REPAIR ANY CONSTRUCTION DAMAGE.

 31. NEW NEW 4" THICK REINFORCED CONC. PAD WITHIN NOTED AREA OVER 6" COMPACTED 1" DIA. AGGREGATE BASE COURSE. USE POLYURETHANE FIBERS WITHIN CONC. MIX IN PLACE OF USING WIRE MESH.AND COMPACTED SUB-BASE. PROVIDE NEW CONTROL AND EXPANSION JOINT LAYOUT MATCHING EX. CONC. PAVING TO REMAIN ADJACENT TO NEW PAD SITE VERIFY EX. CONDITIONS AND DOCUMENT LAYOUTS PRIOR TO BIDDING AND START OF CONSTRUCTION. SEE DETAIL 4,5,6 CTE-L4.01 AND CIVIL DETAILS FOR FURTHER INFORMATION.

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Call 48 hours or 2 working days before you dig.

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ALL CONSTRUCTION

CAUTION!

HE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES
HOWN ON THE PLAN ARE BASED UPON ABOVE GROUND
MODENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES,
LETS, VALVES, AND MARKS MADE UPON THE GROUND BY
THERS) AND ARE SPECULATIVE IN NATURE. THERE MAY
SO BE OTHER EXISTING UNDERGROUND UTILITIES FOR
HICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR
HICH NO ABOVE GROUND EVIDENCE WAS OBSERVED. THE
KACT LOCATIONS GIVEN ARE APPROXIMATE

AND ARE TO BE SITE VERIFIED PRIOR
TO THE START OF CONSTRUCTION. ALL
CONCRETE AND ASPHALT PAVING NOT
NOTED FOR WORK IS TO REMAIN —
PROTECT DURING CONSTRUCTION TYP

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CHERRY TREE
ELEMENTARY
SCHOOL
PLAYGROUND
RENOVATION

CARMEL CLAY SCHOOLS

5201 EAST MAIN STREET CARMEL, IN 46033 317-844-9961



ARCHITECT



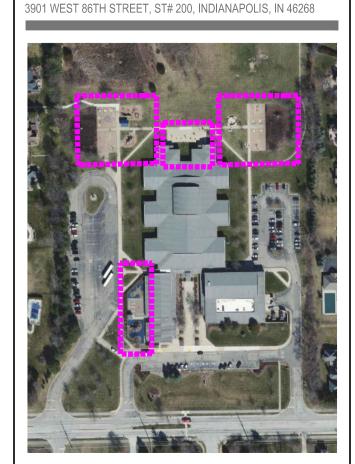
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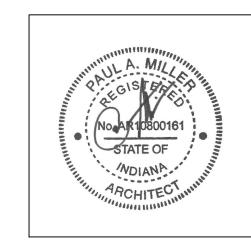
CONSULTANT



4-1500 TLF-ENGINEERS.COM



BID SET



PROJECT MANAGER: KS DRAWN BY: JB, EB

PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11- 20- 2025					
REV. NO.△	DESCRIPTION	DATE			
1	ADDENDUM 1	12/19/2025			

ENLARGED SW PLAYGROUND SITE LAYOUT PLAN - CTE

CTE- L1.3



ENLARGED KINDERGARTEN PLAYGROUND SITE LAYOUT PLAN - CTE

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- 11. INSTALL NEW SYNTHETIC TURF SYNPRO 65 OR APPROVED EQUAL WITH THATCH LAYER AND INFILL SYSTEM ON AGGREGATE OR BUFFING BASE COURSE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE AND TIE INTO EXISTING UNDERDRAIN OUTLET. INSTALL TURF IN COLOR AS SELECTED BY ARCHITECT (MEDIUM GREEN). SEE DETAIL 2 CTE-L4.01 AND CIVIL DETAILS.
- 12. INSTALL NEW 4' HIGH CHAIN-LINK FENCING WITH (2) DOUBLE WIDE MAN GATES IN EARLY LEARNING CENTER IN LOCATIONS SHOWN. SEE DETAILS 12,13,14,15 CTE-L4.01 AND CIVIL DETAILS.
- 12,13,14,15 CTE-L4.01 AND CIVIL DETAILS.

 13. RELOCATED GAGA PIT: SECURE EX. GAGA PIT TO NEW CONC. PAD PER
- 14. CONCRETE STOOP SEE ARCHITECTURAL SHEETS FOR FURTHER INFORMATION

MANUF. WRITTEN RECOMMENDATIONS

- 15. NEW BENCH SEATING: DEMO EX. BENCHES PROVIDE NEW BENCHES MATCHING CCS STANDARDS SECURE NEW BENCH TO NEW 4" THICK REINFORCED CONC. BASE OVER 6" COMPACTED 1" DIA. AGGREGATE PER MANUFACTURERS RECOMMENDATIONS. EX. CONC. PAVING TO REMAIN PROTECT DURING CONSTRUCTION. SEE DETAIL 8 CTE-L4.00.
- 16. NEW ASPHALT PAVING: INSTALL NEW COMPACTED AGGREGATE SUB-BASE, INTERMEDIATE ASPHALTIC BASE WITH SURFACE COURSE PROVIDE POSITIVE SURFACE DRAINAGE TO EX. STORM DRAINS TYP. NO RAP AGGREGATE TO BE USED IN SURFACE ASPHALT LAYER. SEE DETAILS 9,10,11,16 CTE-L4.01 AND CIVIL DETAILS.
- 17. RENOVATED TABLES AND BENCHES: REMOVE EXISTING WOOD TABLE TOPS AND SEAT BOARDS FROM EXIST. TABLES (7) AND BENCHES. THOROUGHLY CLEAN AND REPAINT EXISTING TABLE AND BENCH FRAMING AND INSTALL NEW 2" THICK POLY STYLE PLANKS (WOOD TEXTURE) TO EX. METAL

FRAMING. SECURE PER. MANUF. WRITTEN INSTRUCTIONS TYP

- 18. NEW 20' SHADE CANOPIES (2) BY LANDSCAPE STRUCTURES BASIS OF DESIGN SEE PROJECT MANUAL FOR APPROVED MANUFACTURES NO OTHER MANUF. WILL BE CONSIDERED TYP. INSTALL PER MANUF. WRITTEN RECOMMENDATION. PROVIDE FOOTINGS PER MANUF. LOCAL AND STATE GUIDELINES, EXISTING CONCRETE PAVING WITHIN HIGHLIGHTED (PURPLE) SPACE IS TO BE FULLY REPLACED PROVIDE NEW FOOTINGS FOR SHADE STRUCTURE PER LOCAL CODES AND PER MANUF. WRITTEN RECOMMENDATIONS CONTRACTOR IS TO OBTAIN STAMPED DRAWINGS FROM MANUF. FOR ALL CANOPY STRUCTURES AND FOOTING PRIOR TO THE START OF CONSTRUCTION TYP.
- 19. EX. CONC. CRACK REPAIR: GRIND DOWN UNEVEN AREAS ALONG CRACKED CONC. SURFACE PRIOR TO INSTALLING SELF LEVELING POLYURETHANE CRACK FILLER SEAL PAVEMENT SURFACES AFTER CRACK FILLING.
- 20. BASKETBALL MARKINGS SHALL MEET NFHS STANDARD DIMENSIONS .SEE DETAIL 6 CTE-L4.00
- 21. PAINT GAME MARKINGS ON EXISTING CONCRETE PAVING. SEE DETAILS 1,4,5 CTE-L4.00 AND 18,19,20 CTE-L4.01
- 22. INSTALL LANDSCAPE STRUCTURES / PLAYWORLD (ELC PLAYGROUND) FREESTANDING PLAY EQUIPMENT IN LOCATIONS NOTED ON PLAN.
- 23. PAINT TOT TRACK ON NEW CONCRETE PAVING. SEE DETAIL 7 CTE-L4.00

24. INSTALL TETHER BALL COURT MARKINGS AND EQUIPMENT IN LOCATIONS

- NOTED. SEE DETAIL 3 CTE-L4.00

 25. INSTALL 4" MIN. TOPSOIL, FINE GRADE, SEED AND HYDROMULCH AREAS
- 26. POUR REINFORCED CONCRETE SLAB IN SHADED AREAS AS NOTED OVER 6" COMPACTED CRUSHED 1" DIA. AGGREGATE. ACCEPTABLE 'POLY' FIBER MAY BE USED IN LIEU OF WIRE MESH REINFORCEMENT. SEE DETAILS 4,5,6 CTE-L4.01 AND CIVIL DETAILS.
- 27. POUR THICKENED CONCRETE EDGE FOR NAILER BOARD ATTACHMENT FOR NEW SYNTHETIC TURF INSTALLATION.
 SEE DETAIL 7 CTE-L4.01 AND CIVIL DETAILS.
- 28. BOLT 2X4" COMPOSITE NAILER BOARD FOR SYNTHETIC TURF INSTALLATION TO EXISTING BUILDING FOUNDATION. GRIND AND SMOOTH ANY IMPERFECTIONS FROM FOUNDATION TO ALLOW NAILER BOARD INSTALLATION.
- 29. EXISTING TO NEW CONCRETE TRANSITION. SEE DETAIL 21 CTE-L4.01 AND CIVIL DETAILS

DISTURBED BY CONSTRUCTION..

- 30. PROTECT EXISTING CURB AND REPAIR ANY CONSTRUCTION DAMAGE.
- 31. NEW NEW 4" THICK REINFORCED CONC. PAD WITHIN NOTED AREA OVER 6" COMPACTED 1" DIA. AGGREGATE BASE COURSE. USE POLYURETHANE FIBERS WITHIN CONC. MIX IN PLACE OF USING WIRE MESH.AND COMPACTED SUB-BASE. PROVIDE NEW CONTROL AND EXPANSION JOINT LAYOUT MATCHING EX. CONC. PAVING TO REMAIN ADJACENT TO NEW PAD SITE VERIFY EX. CONDITIONS AND DOCUMENT LAYOUTS PRIOR TO BIDDING AND START OF CONSTRUCTION. SEE DETAIL 4,5,6 CTE-L4.01 AND CIVIL DETAILS FOR FURTHER INFORMATION.

Know what's below.
Call before you dig.

Il 811 or 1-800-982-5544 Before You Begin Any Digging Project.
Call 48 hours or 2 working days before you dig.

If 5Eat! It's Fassy and It's the Law in the state of Indignal

CAUTION !!

HE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES HOWN ON THE PLAN ARE BASED UPON ABOVE GROUND MIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, LETS, VALVES, AND MARKS MADE UPON THE GROUND BY THERS) AND ARE SPECULATIVE IN NATURE. THERE MAY SO BE OTHER EXISTING UNDERGROUND UTILITIES FOR HICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR HICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR HICH THO ABOVE GROUND EVIDENCE TO THE VACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES

LOCATIONS GIVEN ARE APPROXIMATE
AND ARE TO BE SITE VERIFIED PRIOR
TO THE START OF CONSTRUCTION. ALL
CONCRETE AND ASPHALT PAVING NOT
NOTED FOR WORK IS TO REMAIN —
PROTECT DURING CONSTRUCTION TYP

CHERRY TREE
ELEMENTARY
SCHOOL
PLAYGROUND

RENOVATION

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CARMEL CLAY SCHOOLS
5201 EAST MAIN STREET



ARCHITECT



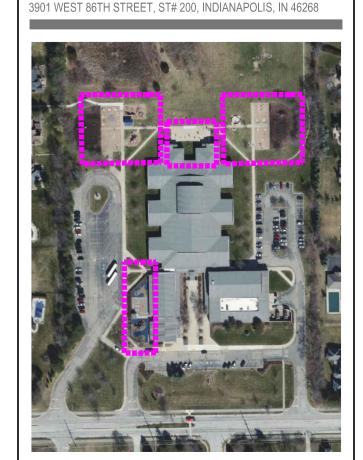
317-848-0966 WWW.FHAI.COM

350 E NEW YORK ST# 300, INDIANAPOLIS, IN 46204

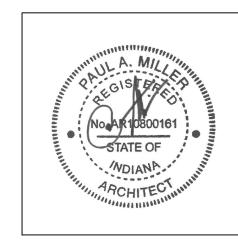
CONSULTANT



THE ENGINEERS OF



BID SET



PROJECT MANAGER: KS DRAWN BY: JB, EB

PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11-20-2025

REV.
NO. DESCRIPTION

1 ADDENDUM 1 12/19/2025

PLAYGROUND SITE LAYOUT PLAN-CTE

ENLARGED KINDERGARTEN

CTE- L1.4

OVERALL SITE LAYOUT PLAN: SRE

SCALE: 1" = 40'-0"

GENERAL LAYOUT NOTES

- 1. ALL CONTRACTORS BUT NOT LIMITED TO THE EXCAVATING CONTRACTOR OR CONTRACTORS MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND LOCATED EITHER BY THE REPRESENTATIVE OF THE UTILITY COMPANY OR BY A PRIVATE UNDERGROUND UTILITY LOCATING COMPANY PRIOR TO THE START OF EXCAVATING. VERIFY MINIMUM COVER REQUIREMENTS BY THE UTILITY CONTRACTOR OR CONTRACTORS OR UTILITY COMPANIES OR AGENCIES WHOMEVER HAS JURISDICTION SO NOT TO CAUSE DAMAGE.
- 2. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL
- 3. EXISTING PAVEMENT, SIDEWALKS CURBS DRIVEWAYS, ELECTRICAL TRANSFORMER, DITCHES, DRAINAGE PIPES AND STRUCTURES, FENCES, LAWNS, TREES, BUSHES, MAILBOXES, SIGNS, POWER POLES ETC., TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGE DURING CONSTRUCTION SHALL BE RESTORED, RECONSTRUCTED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ALL DAMAGES SHALL BE RESTORED OR REPLACED TO AT LEAST THEIR ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- 4. ALL AREAS WHERE THE EXISTING PAVEMENT OR PAVEMENTS ARE DAMAGED DURING CONSTRUCTION FROM HEAVY TRAFFIC OR EQUIPMENT, FUEL OIL, OIL, GASOLINE, ETC., BY THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIERS, SHALL BE RECONSTRUCTED TO IT'S ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES. THIS RECONSTRUCTION AND REPAIR SHALL TAKE PLACE AT THE END OF THE PROJECT
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BEAR ALL EXPENSES TO REMOVE, RELOCATE AND OR MODIFY ALL UTILITIES, PRIVATE, PUBLIC, UNLESS NOTED OTHERWISE ON PLANS. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH EACH UTILITY COMPANY AND OR AGENT TO WHO IS RESPONSIBLE TO REMOVE, RELOCATE AND OR MODIFY SUCH UTILITIES EXISTING OR PROPOSED. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AT HIS EXPENSE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL,

7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND SEDIMENT CONTROL IF REQUIRED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES UNLESS OTHERWISE NOTED BY THE CONTRACT OR SPECIFICATIONS.

8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL THE UTILITY COMPANIES AND DEPARTMENTS 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY ANY UTILITIES THAT MAY BE PRESENT ON SITE. ALL VERIFICATIONS, LOCATIONS, SIZE AND DEPTHS SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES OR DEPARTMENTS. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES. THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THE UTILITY CAN BE PRESENT DURING THE EXCAVATION TO INSTRUCT AND OBSERVE DURING THE EXCAVATION. CONTRACTOR TO CALL 811 OR 800-382-5544 BEFORE DIGGING.

9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT EACH DAY AND REMOVE ALL MUD. DIRT. GRAVEL AND LOOSE MATERIALS TRACKED. DUMPED, SPILLED OR WIND BLOWN FROM THIS SITE ONTO OTHER SITES, RIGHT OF WAY, PUBLIC OR PRIVATE STREETS OR ROADS, DRIVEWAYS, YARDS OR SIDEWALKS. THE CONTRACTOR MUST CLEAN OR PICK UP DAILY IF NECESSARY. THE CONTRACTOR SHALL REDUCE THE AIRBORNE DUST DURING THE ENTIRE CONSTRUCTION SCHEDULE. WATER MAY BE USED AS A REDUCER.

10. THE UTILITIES INDICATED ON THESE PLANS MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THIS SITE. THE LOCATIONS AND SIZE OF THESE UTILITIES ARE APPROXIMATE. THIS INFORMATION WAS GATHERED OR SUPPLIED FROM OTHERS AND USED BY THE ARCHITECT AND OR ENGINEER AND MAY NOT BE ACTUAL. THE ARCHITECT AND / OR ENGINEER MAY NOT BE HELD LIABLE FOR ANY INCORRECT OR MISLEADING UTILITY INFORMATION INDICATED, IMPLIED OR NOT INDICATED ON THÉSE PLANS.

11. ALL LISTED SQ. FT TOTALS ARE ESTIMATES AND NOT FINAL — GIVEN TOTALS SHOULD BE CONFIRMED ON SITE PRIOR TO BIDDING AND START OF CONSTRUCTION

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SMOKY ROW ELEMENTARY SCHOOL **BUILDING** / **PLAYGROUND** RENOVATION

CARMEL CLAY SCHOOLS 5201 EAST MAIN STREET CARMEL, IN 46033 317-844-9961

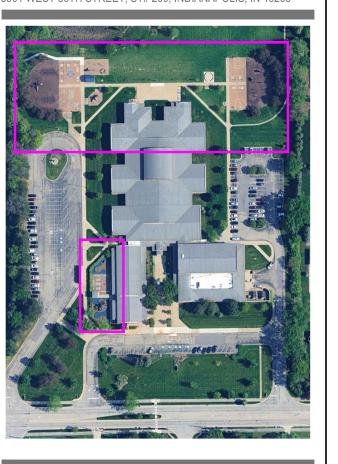


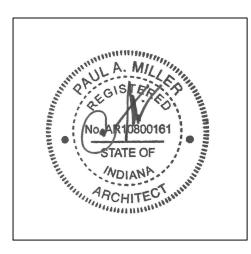


317-848-0966 350 E NEW YORK ST# 300, INDIANAPOLIS, IN 46204

CONSULTANT







PROJECT MANAGER: KS

DRAWN BY: EB PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025				
REV. NO.△	DESCRIPTION	DATE		
1	ADDENDUM 1	12/19/2025		

OVERALL SITE PLAN

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES HOWN ON THE PLAN ARE BASED UPON ABOVE GROUND VIDIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES, NLETS, VALVES, AND MARKS MADE UPON THE GROUND BY STREED, AND ARE SPECULATIVE IN NATURE. THERE MAY LASO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE OR FOR WHICH HOADOVE GROUND EVIDENCE WAS OBSERVED. THE XACT LOCATIONS OF EXISTING UNDERGROUND UTILITIES SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AND NALCONSTRUCTION.

Know what's below. Call before you dig.

PROPOSED SITE LEGEND

ASPHALT PAVEMENT

NEW CONC. PADS

FULL REPLACEMENT OF EX.

NEW (PIP) PLAYGROUND SURFACING

NEW (PIP) PLAYGROUND SURFACING

NEW (TURF) PLAYGROUND SURFACING

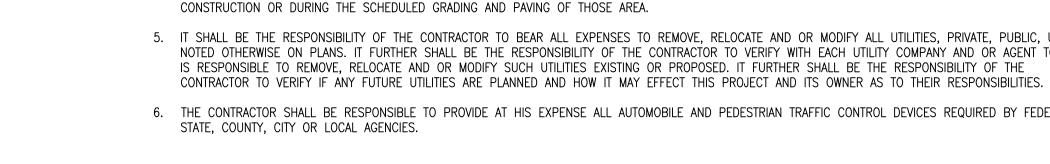
OF EX. GAGA PIT - POST CONSTRUCTION

TEMPORARY RELOCATED GAGA PIT

NEW BASKETBALL COURT

NEW GAGA PIT / CONC. PAD - FINAL LOCATION

LOCATIONS GIVEN ARE APPROXIMATE AND ARE TO BE SITE VERIFIED PRIOR TO THE START OF CONSTRUCTION. ALL CONCRETE AND ASPHALT PAVING NOT NOTED FOR WORK IS TO REMAIN -PROTECT DURING CONSTRUCTION TYP



SITE LAYOUT KEYNOTES

1. CONCRETE PAVING - SEE CIVIL DRAWINGS GD1.0-GD1.3

AND G1.0-G1.3 FOR FURTHER INFORMATION

- 2. ALL EX. SITE LANDSCAPING TO REMAIN UNLESS NOTED OTHERWISE
- SEE SITE LANDSCAPING PLANS FOR FURTHER INFORMATION 3. EX. SITE LIGHTING TO BE REMOVED IN NOTED LOCATIONS - PROVIDE NEW
- LIGHT POLES BASES, POLE AND HEAD WHERE NOTED ON ELECTRICAL

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SMOKY ROW

CARMEL CLAY SCHOOLS

FANNING

50 E NEW YORK ST# 300, INDIANAPOLIS, IN 46204

901 WEST 86TH STREET, ST# 200, INDIANAPOLIS, IN 46268

BID SET

STATE OF

CONSULTANT

5201 EAST MAIN STREET

CARMEL, IN 46033

317-844-9961

- 4. EX. KINDERGARTEN PLAYGROUND FENCING AND GATE (SINGLE MAN GATE TOTAL) REPLACEMENT: SLEEVE EX. POST AND PROVIDE NEW CHAIN-LINK FABRIC, HARDWARE AND ALL ACCESSORIES NEEDED FOR PROPER INSTALL - MATCH EX. STYLE AND COLOR - SEE DETAILS 12,13,14,15 SRE-L4.01.
- 5. FOLLOWING EXISTING ASPHALT REMOVAL. RE-GRADE EXISTING AGGREGATE BASE COURSE TO REMAIN. PROVIDE ADDITIONAL COMPACTED AGGREGATE TO MAINTAIN 6" MIN. COMPACTED AGGREGATE BASE- PROOF ROLL - PROVIDE NEW 3" INTERMEDIATE COURSE, WITH 2" SURFACE COURSE. FINAL SURFACE TO BE PAVED TO PROVIDE POSITIVE DRAINAGE. NO FERROUS MATERIAL TO BE USED IN ASPHALT SURFACE COURSE AND RAP ACCEPTABLE FOR INTERMEDIATE COURSE BASE ONLY. NEW PAVEMENT MARKINGS TO MATCH EX. FOUND ON SITE - SITE VERIFY AND DOCUMENT EX. CONDITIONS/LAYOUT PRIOR TO BIDDING AND START OF CONSTRUCTION TYP. PROVIDE PRICING FOR SEALCOATING APPLICATION (1 YEAR) AND PVMT MARKINGS AFTER INSTALL - SEE DETAILS 9,10,11,16 SRE-L4.0
- 6. EX. BASKETBALL GOALS TO REMAIN EX. POST TO REMAIN/PROTECT REMOVE EX GOALS, STORE/PROTECT DURING CONSTRUCTION AND RE-INSTALL PRIOR TO THE COMPLETION OF CONSTRUCTION TYP. 17 SRE-L4.01
- 7. NEW GOOSE NECK BASKETBALL GOALS MATCH EXISTING BRAND AND STYLE FOUND ON SITE - PROVIDE REDUCED HEIGHT HOOPS FOR 3-5 AGE GROUP KIDS TYP. SEE DETAIL 17 SRE-L4.01.
- KINDERGARTEN HARD PAVEMENT GAME AREA: SEE CIVIL DRAWINGS FOR FURTHER INFORMATION PERTAINING TO DEMO AND PUT BACK
- GAGA PIT: EX. PLAY STRUCTURE FOUND ON SITE. POUR NEW 4" THICK REINFORCED CONC. PAD WITHIN NOTED AREA OVER 6" COMPACTED 1" DIA. AGGREGATE BASE COURSE / SUB-BASE. USE POLYURETHANE FIBERS WITHIN CONC. MIX IN PLACE OF USING WIRE MESH. SECURE NEW GAGA PIT TO NEW CONC. PAD PER MANUF. WRITTEN RECOMMENDATIONS
- 10. INSTALL NEW (PROTECHS BASIS OF DESIGN) ALPHATIC POURED IN PLACE (PIP) SURFACING TO BE INSTALLED PER MANUF. WRITTEN RECOMMENDATIONS - PROVIDED PIP SURFACING DEPTHS PER MANUF. LOCAL AND STATE REGULATIONS TYP. MANUF. REP IS TO BE ON SITE DURING INSTALLATION. PROVIDE NO MORE THAN 1% SLOPE TO SURFACE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE OVER FILTER FABRIC AT 15' MAX. O.C. AND TIE INTO EXISTING UNDERDRAIN OUTLET - SEE SITE CIVIL DRAWINGS FOR FURTHER INFORMATION. INSTALL NEW POURED IN PLACE PLAYGROUND SURFACING PER CCS STANDARDS. INSTALL COLORS AS NOTED ON PLAN (BLUE, RED). PROVIDE MANUF. STANDARD COLORS AS SHOWN ON PLANS - TERRACOTTA / BLACK (50/50MIX) , BLUE/BLACK (50/50MIX) WITHIN NOTED AREAS. SEE DETAILS 3,8,10,16 SREL4.01
- . INSTALL NEW SYNTHETIC TURF SYNPRO 65 OR APPROVED EQUAL WITH THATCH LAYER AND INFILL SYSTEM ON AGGREGATE OR BUFFING BASE COURSE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE OVER FILTER FABRIC AT 15' MAX. O.C. AND TIE INTO EXISTING UNDERDRAIN OUTLET. INSTALL TURF IN COLOR AS SELECTED BY ARCHITECT (MEDIUM GREEN). SEE DETAIL 2 SRE-L4.01.
- 12. INSTALL NEW 4' HIGH CHAIN-LINK FENCING WITH (2) DOUBLE WIDE MAN GATES IN EARLY LEARNING CENTER IN LOCATIONS SHOWN. SEE DETAILS 12,13,14,15 SRE-L4.01.
- 13. RELOCATED GAGA PIT (IN LAWN): RELOCATE BACK TO EX. LOCATION PRIOR TO THE COMPLETION OF CONSTRUCITON - SEE PLAN NOTE #9 SRE-L1.10
- 14. U SHAPED BIKE RACK: PER DETAIL O G4.2
- 15. NEW BENCH SEATING : DEMO EX. BENCHES PROVIDE NEW BENCHES MATCHING CCS STANDARDS (BASIS-OF-DESIGN; SITESCAPES CITYVIEW BENCH IN QUANTITIES AND SIZES AS SHOWN IN PLANS SECURE NEW BENCH TO NEW 4" THICK REINFORCED CONC. BASE OVER 6" COMPACTED 1" DIA. AGGREGATE PER MANUFACTURERS RECOMMENDATIONS. EX. CONC. PAVING TO REMAIN -PROTECT DURING CONSTRUCTION - SEE DETAIL #8 SRE-L4.00
- 16. NEW ASPHALT PAVING: INSTALL NEW 6" DEEP LAYER COMPACTED 1" DIA. AGGREGATE SUB-BASE, 3" INTERMEDIATE ASPHALTIC BASE WITH 2" SURFACE COURSE - PROVIDE POSITIVE SURFACE DRAINAGE TO EX. STORM DRAINS TYP. NO RAP AGGREGATE TO BE USED IN SURFACE ASPHALT LAYER. PROVIDE PRICING FOR SEALCOATING APPLICATION (1 YEAR) AFTER INSTALL - SEE DETAILS 9,10,11,16 SRE-L4.01.
- 17. EX. LAWN TO REMAIN PROTECT DURING CONSTRUCTION
- 18. NEW 20' SHADE CANOPIES (3) BY LANDSCAPE STRUCTURES BASIS OF DESIGN SEE PROJECT MANUAL FOR APPROVED MANUFACTURES - NO OTHER MANUF. WILL BE CONSIDERED TYP. INSTALL PER MANUF. WRITTEN RECOMMENDATION. PROVIDE FOOTINGS PER MANUF. LOCAL AND STATE GUIDELINES, EXISTING CONCRETE PAVING WITHIN HIGHLIGHTED (PURPLE) SPACE IS TO BE FULLY REPLACED - PROVIDE NEW FOOTINGS FOR SHADE STRUCTURE PER LOCAL CODES AND PER MANUF. WRITTEN RECOMMENDATIONS - CONTRACTOR IS TO OBTAIN STAMPED DRAWINGS FROM MANFU. FOR ALL CANOPY STRUCTURES AND FOOTING PRIOR TO TH START OF CONSTRUCTION TYP.
- 19. CONCRETE STOOP SEE ARCHITECTURAL PLANS
- 20. BASKETBALL MARKINGS SHALL MEET NFHS STANDARD DIMENSIONS REPAINT LINES AFTER SEALCOATING OPERATIONS THE FOLLOWING YEAR - SEE DETAIL 6 SRE-L4.00
- 21. PAINT GAME MARKINGS SEE PLAN FOR LAYOUTS NOT PROVIDED WITHIN DETAILS - SEE DETAILS 1,4,5 SREL4.00 AND 18,19,20 SREL4.01
- 22. INSTALL PLAYWORLD FREESTANDING PLAY EQUIPMENT IN LOCATIONS NOTED ON PLAN. INSTALL PER MANUF. WRITTEN DIRECTIONS SEE PLANS FOR PLAY EQUIPMENT NAMES AND LAYOUT TYP
- 23. PAINT TOT TRACK ON NEW CONCRETE PAVING. SEE DETAIL 7 SRE-L4.00 24. FENCE MOUNTED COMMUNICATION BOARD (DOUBLE SIDED): SECURE BOARD TO NEW CHAIN-LINK FENCING PER SIGN MANUF. WRITTEN RECOMMENDATIONS
- 25. SEED DISTURBED LAWN AREAS DISTURBED DURING CONSTRUCTION REFER TO LANDSCAPE PLANS L1.0-L1.3
- 26. NEW CONC. PAVING SEE CIVIL DRAWINGS GD1.2,GD1.3 AND LAYOUT PLANS G1.2, G1.3 FOR FURTHER INFORMATION SEE DETAILS 4,5,6 SRE-L4.01 FOR CIVIL DETAIL CALL OUTS.
- 27. POUR THICKENED CONCRETE EDGE FOR NAILER BOARD ATTACHMENT FOR NEW SYNTHETIC TURF INSTALLATION. SEE DETAIL 7 SRE-L4.01.
- 28. BOLT 2X4" COMPOSITE NAILER BOARD FOR SYNTHETIC TURF INSTALLATION TO EXISTING BUILDING FOUNDATION. GRIND AND SMOOTH ANY INPERFECTIONS FROM FOUNDATION TO ALLOW NAILER BOARD INSTALLATION.
- 29. EXISTING TO NEW CONCRETE TRANSITION SEE DETAIL F SRE-G4.1
- 30. PROTECT EXISTING CURB AND REPAIR ANY CONSTRUCTION DAMAGE.

- 33. REMOVED EX. SEESAW IN IT'S ENTIRETY PRIOR TO INSTALLING NEW EQUIP. INSTALL NEW SYNTHETIC TURF AND NEW PLAYWORLD / BERLINGER FREESTANDING PLAY IN LOCATIONS SHOWN - SEE DETAIL 2 SRE-L4.1 INSTALL AND SECURE TO EX. SURFACE PER TURF MAUF. RECOMMENDATIONS 34. TRANSPLANTED TREE -
- SEE DETAIL #9 SRE-L4.00 35. PROVIDE NEW ADA SWINGS (1)- MATCH EX. FOUND ON SITE
- INSTALL PER EX. SWING MANUF. WRITTEN RECOMMENDATIONS 36. EXISTING PIP PLAYGROUND SURFACING / PLAY EQUIP. TO REMAIN
- NOT MARKED FORE REMOVAL PROTECT DURING CONSTRUCTION TYP

PROJECT MANAGER: KS

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12/19/2025

PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

ENLARGED SITE PLAN PLAYGROUND A & C

IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND

8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL THE UTILITY COMPANIES AND DEPARTMENTS 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY ANY UTILITIES THAT MAY BE PRESENT ON SITE. ALL VERIFICATIONS, LOCATIONS, SIZE AND DEPTHS SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES OR DEPARTMENTS. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THE UTILITY CAN BE PRESENT DURING THE EXCAVATION TO INSTRUCT AND OBSERVE DURING THE EXCAVATION. CONTRACTOR TO

9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT EACH DAY AND REMOVE ALL MUD, DIRT, GRAVEL AND LOOSE MATERIALS TRACKED, DUMPED, SPILLED OR WIND BLOWN FROM THIS SITE ONTO OTHER SITES, RIGHT OF WAY, PUBLIC OR PRIVATE STREETS OR ROADS, DRIVEWAYS, YARDS OR SIDEWALKS. THE CONTRACTOR MUST CLEAN OR PICK UP DAILY IF NECESSARY. THE CONTRACTOR SHALL REDUCE THE AIRBORNE DUST DURING THE ENTIRE

SITE. THE LOCATIONS AND SIZE OF THESE UTILITIES ARE APPROXIMATE. THIS INFORMATION WAS GATHERED OR SUPPLIED FROM OTHERS AND USED BY THE ARCHITECT AND OR ENGINEER AND MAY NOT BE ACTUAL. THE ARCHITECT AND / OR ENGINEER MAY NOT BE HELD LIABLE FOR ANY INCORRECT OR MISLEADING UTILITY INFORMATION INDICATED, IMPLIED OR NOT INDICATED ON THESE PLANS.

11. ALL LISTED SQ. FT TOTALS ARE ESTIMATES AND NOT FINAL - GIVEN TOTALS SHOULD BE CONFIRMED ON SITE PRIOR TO BIDDING AND START OF

ALL WORK REQUIRED UNLESS OTHERWISE NOTED. THIS INCLUDES THE SUBMITTAL FOR LAND DISTURBANCE AND THE SUBMITTAL FOR SOIL EROSION ANI SEDIMENT CONTROL IF REQUIRED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES UNLESS OTHERWISE NOTED BY THE CONTRACT OR SPECIFICATIONS.

CALL 811 OR 800-382-5544 BEFORE DIGGING.

CONSTRUCTION SCHEDULE. WATER MAY BE USED AS A REDUCER. 10. THE UTILITIES INDICATED ON THESE PLANS MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THIS

Know what's below. Call before you dig.

CT LOCATIONS OF EXISTING UNDERGROUND UTILIT LL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AN

PROTECT DURING CONSTRUCTION TYP

CONSTRUCTION OR DURING THE SCHEDULED GRADING AND PAVING OF THOSE AREA. 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BEAR ALL EXPENSES TO REMOVE, RELOCATE AND OR MODIFY ALL UTILITIES, PRIVATE, PUBLIC, UNLESS NOTED OTHERWISE ON PLANS. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH EACH UTILITY COMPANY AND OR AGENT TO WHO IS RESPONSIBLE TO REMOVE, RELOCATE AND OR MODIFY SUCH UTILITIES EXISTING OR PROPOSED. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY IF ANY FUTURE UTILITIES ARE PLANNED AND HOW IT MAY EFFECT THIS PROJECT AND ITS OWNER AS TO THEIR RESPONSIBILITIES.

GENERAL LAYOUT NOTES

JURISDICTION SO NOT TO CAUSE DAMAGE.

REQUIREMENTS, WHICHEVER HAS JURISDICTION.

6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AT HIS EXPENSE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES.

1. ALL CONTRACTORS BUT NOT LIMITED TO THE EXCAVATING CONTRACTOR OR CONTRACTORS MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND

EXISTING UTILITY LINES AND EQUIPMENT. ACTUAL FIELD LOCATIONS OF ALL THE EXISTING UTILITIES ARE THE CONTRACTORS RESPONSIBILITY AND MUST BE

LOCATED EITHER BY THE REPRESENTATIVE OF THE UTILITY COMPANY OR BY A PRIVATE UNDERGROUND UTILITY LOCATING COMPANY PRIOR TO THE START OF

EXCAVATING. VERIFY MINIMUM COVER REQUIREMENTS BY THE UTILITY CONTRACTOR OR CONTRACTORS OR UTILITY COMPANIES OR AGENCIES WHOMEVER HAS

2. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL

EXISTING PAVEMENT, SIDEWALKS CURBS DRIVEWAYS, ELECTRICAL TRANSFORMER, DITCHES, DRAINAGE PIPES AND STRUCTURES, FENCES, LAWNS, TREES, BUSHES, MAILBOXES, SIGNS, POWER POLES ETC., TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGE DURING CONSTRUCTION SHALL BE

GASOLINE, ETC., BY THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIERS, SHALL BE RECONSTRUCTED TO IT'S ORIGINAL CONDITION OR AS REQUIRED OR

RESTORED, RECONSTRUCTED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ALL DAMAGES SHALL BE RESTORED OR REPLACED TO AT LEAST THEIR

ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.

4. ALL AREAS WHERE THE EXISTING PAVEMENT OR PAVEMENTS ARE DAMAGED DURING CONSTRUCTION FROM HEAVY TRAFFIC OR EQUIPMENT, FUEL OIL, OIL,

DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES. THIS RECONSTRUCTION AND REPAIR SHALL TAKE PLACE AT THE END OF THE PROJECT

GENERAL LAYOUT NOTES

JURISDICTION SO NOT TO CAUSE DAMAGE.

STATE, COUNTY, CITY OR LOCAL AGENCIES.

REQUIREMENTS, WHICHEVER HAS JURISDICTION.

CONSTRUCTION OR DURING THE SCHEDULED GRADING AND PAVING OF THOSE AREA.

1. ALL CONTRACTORS BUT NOT LIMITED TO THE EXCAVATING CONTRACTOR OR CONTRACTORS MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND

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LOCATED EITHER BY THE REPRESENTATIVE OF THE UTILITY COMPANY OR BY A PRIVATE UNDERGROUND UTILITY LOCATING COMPANY PRIOR TO THE START OF

EXCAVATING. VERIFY MINIMUM COVER REQUIREMENTS BY THE UTILITY CONTRACTOR OR CONTRACTORS OR UTILITY COMPANIES OR AGENCIES WHOMEVER HAS

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ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.

4. ALL AREAS WHERE THE EXISTING PAVEMENT OR PAVEMENTS ARE DAMAGED DURING CONSTRUCTION FROM HEAVY TRAFFIC OR EQUIPMENT, FUEL OIL, OIL,

RESTORED, RECONSTRUCTED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ALL DAMAGES SHALL BE RESTORED OR REPLACED TO AT LEAST THEIR

DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES. THIS RECONSTRUCTION AND REPAIR SHALL TAKE PLACE AT THE END OF THE PROJECT

IS RESPONSIBLE TO REMOVE, RELOCATE AND OR MODIFY SUCH UTILITIES EXISTING OR PROPOSED. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY IF ANY FUTURE UTILITIES ARE PLANNED AND HOW IT MAY EFFECT THIS PROJECT AND ITS OWNER AS TO THEIR RESPONSIBILITIES

6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AT HIS EXPENSE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL

5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BEAR ALL EXPENSES TO REMOVE, RELOCATE AND OR MODIFY ALL UTILITIES, PRIVATE, PUBLIC, UNLESS

GASOLINE, ETC., BY THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIERS, SHALL BE RECONSTRUCTED TO IT'S ORIGINAL CONDITION OR AS REQUIRED OR

NOTED OTHERWISE ON PLANS. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH EACH UTILITY COMPANY AND OR AGENT TO WHO

ENLARGED SITE LAYOUT PLAN: SRE

UNLESS OTHERWISE NOTED BY THE CONTRACT OR SPECIFICATIONS.

CONSTRUCTION SCHEDULE. WATER MAY BE USED AS A REDUCER.

MISLEADING UTILITY INFORMATION INDICATED, IMPLIED OR NOT INDICATED ON THESE PLANS.

CALL 811 OR 800-382-5544 BEFORE DIGGING.

EQUIPMENT BREAKDOWN:

Playground Area ELC — Equipment List & Descriptions

Playworld® Buccaneer with Modifications – Model 350-1924

Multi-level themed play structure designed to simulate a pirate ship environment. Provides climbing, sliding, balancing, and imaginative play opportunities appropriate for elementary-age children (5–12). Structure supports group interaction and varied play paths at multiple elevations.

- Glide Slides (multiple): Rotationally molded slides integrated at different deck heights to provide varied descent experiences and primary exits from elevated play platforms.
- Rock Climber: Molded climbing surface providing vertical access to elevated decks while promoting upper-body strength, coordination, and balance.
- Silo Climber: Vertical cylindrical climbing element integrated into the play structure to provide alternative access routes and additional climbing challenge.
- Climbing Squares Climber: Angled climbing element extending from the main structure to support strength development, coordination, and varied movement patterns.
- Arch Bridge: Curved bridge element connecting play decks, encouraging balance, transitional movement, and circulation between activity zones.
- **Post-Mounted Drum Panel:** Interactive percussion play element mounted to the structure to support sensory engagement and cooperative play.
- Activity Panel with Magical Music Insert (Deck-Mounted): Interactive play panel providing auditory and tactile engagement at deck level to support imaginative and sensory play.
- ADA Driver Panel (Ground-Mounted): Ground-accessible interactive panel providing inclusive
- Transfer Station with Step: Accessible entry point allowing users to transfer onto the play structure in compliance with ADA accessibility guidelines.
- **NUVO™ Swirl Roof:** Overhead canopy element providing shade and visual identity while enhancing the thematic character of the structure.

Gas Station Play Panels (2 locations): Ground-level dramatic play elements positioned adjacent to the

turf area to support role-play, social interaction, and inclusive play.

3.5" Arch Swing Set with (2) Belt Seat: Independent swing structure providing traditional swinging motion to support vestibular development, balance, and gross-motor activity.

According to the manufacturer's configuration, the play area provides:

play opportunities for users who remain at grade level.

Multiple elevated play activities with varied access routes

Multiple ground-level interactive play components

Combination of physical, sensory, and imaginative play experiences

Inclusive access via transfer station and ground-level panels

PROPOSED SITE LEGEND

FULL REPLACEMENT OF EX. **ASPHALT PAVEMENT**

NEW CONC. PADS

NEW (PIP) PLAYGROUND SURFACING

NEW (PIP) PLAYGROUND SURFACING

NEW (TURF) PLAYGROUND SURFACING

NEW GAGA PIT / CONC. PAD - FINAL LOCATION OF EX. GAGA PIT - POST CONSTRUCTION

TEMPORARY RELOCATED GAGA PIT

NEW BASKETBALL COURT

7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND

ALL WORK REQUIRED UNLESS OTHERWISE NOTED. THIS INCLUDES THE SUBMITTAL FOR LAND DISTURBANCE AND THE SUBMITTAL FOR SOIL EROSION AND

SEDIMENT CONTROL IF REQUIRED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES

START TO VERIFY ANY UTILITIES THAT MAY BE PRESENT ON SITE. ALL VERIFICATIONS, LOCATIONS, SIZE AND DEPTHS SHALL BE MADE BY THE APPROPRIATE

UTILITY COMPANIES OR DEPARTMENTS. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO

8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL THE UTILITY COMPANIES AND DEPARTMENTS 72 HOURS BEFORE CONSTRUCTION IS TO

A REPRESENTATIVE OF THE UTILITY CAN BE PRESENT DURING THE EXCAVATION TO INSTRUCT AND OBSERVE DURING THE EXCAVATION. CONTRACTOR TO

9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT EACH DAY AND REMOVE ALL MUD, DIRT, GRAVEL AND LOOSE MATERIALS TRACKED,

DUMPED, SPILLED OR WIND BLOWN FROM THIS SITE ONTO OTHER SITES, RIGHT OF WAY, PUBLIC OR PRIVATE STREETS OR ROADS, DRIVEWAYS, YARDS OR

10. THE UTILITIES INDICATED ON THESE PLANS MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THIS

ARCHITECT AND OR ENGINEER AND MAY NOT BE ACTUAL. THE ARCHITECT AND / OR ENGINEER MAY NOT BE HELD LIABLE FOR ANY INCORRECT OR

11. ALL LISTED SQ. FT TOTALS ARE ESTIMATES AND NOT FINAL — GIVEN TOTALS SHOULD BE CONFIRMED ON SITE PRIOR TO BIDDING AND START OF

SITE. THE LOCATIONS AND SIZE OF THESE UTILITIES ARE APPROXIMATE. THIS INFORMATION WAS GATHERED OR SUPPLIED FROM OTHERS AND USED BY THE

SIDEWALKS. THE CONTRACTOR MUST CLEAN OR PICK UP DAILY IF NECESSARY. THE CONTRACTOR SHALL REDUCE THE AIRBORNE DUST DURING THE ENTIRE

SEE DETAIL #9 SRE-L4.00

28. BOLT 2X4" COMPOSITE NAILER BOARD FOR SYNTHETIC TURF INSTALLATION TO EXISTING BUILDING FOUNDATION. GRIND AND BOARD INSTALLATION.

29. EXISTING TO NEW CONCRETE TRANSITION - SEE DETAIL F SRE-G4.1

30. PROTECT EXISTING CURB AND REPAIR ANY CONSTRUCTION DAMAGE.

32. NOT USED

33. REMOVED EX. SEESAW IN IT'S ENTIRETY PRIOR TO INSTALLING NEW EQUIP. INSTALL NEW SYNTHETIC TURF AND NEW PLAYWORLD / BERLINGER FREESTANDING PLAY IN LOCATIONS SHOWN - SEE DETAIL 2 SRE-L4.1 INSTALL AND SECURE TO EX. SURFACE PER TURF MAUF. RECOMMENDATIONS 34. TRANSPLANTED TREE

SITE LAYOUT KEYNOTES

1. CONCRETE PAVING - SEE CIVIL DRAWINGS GD1.0-GD1.3

, AND G1.0-G1.3 FOR FURTHER INFORMATION

- 2. ALL EX. SITE LANDSCAPING TO REMAIN UNLESS NOTED OTHERWISE -
- SEE SITE LANDSCAPING PLANS FOR FURTHER INFORMATION 3. EX. SITE LIGHTING TO BE REMOVED IN NOTED LOCATIONS - PROVIDE NEW LIGHT POLES BASES, POLE AND HEAD WHERE NOTED ON ELECTRICAL
- 4. EX. KINDERGARTEN PLAYGROUND FENCING AND GATE (SINGLE MAN GATE 1 TOTAL) REPLACEMENT: SLEEVE EX. POST AND PROVIDE NEW CHAIN-LINK FABRIC, HARDWARE AND ALL ACCESSORIES NEEDED FOR PROPER INSTALL - MATCH EX. STYLE AND COLOR - SEE DETAILS 12,13,14,15 SRE-L4.01.
- 5. FOLLOWING EXISTING ASPHALT REMOVAL. RE-GRADE EXISTING AGGREGATE BASE COURSE TO REMAIN. PROVIDE ADDITIONAL COMPACTED AGGREGATE TO MAINTAIN 6" MIN. COMPACTED AGGREGATE BASE- PROOF ROLL - PROVIDE NEW 3" INTERMEDIATE COURSE, WITH 2" SURFACE COURSE. FINAL SURFACE TO BE PAVED TO PROVIDE POSITIVE DRAINAGE. NO FERROUS MATERIAL TO BE USED IN ASPHALT SURFACE COURSE AND RAP ACCEPTABLE FOR INTERMEDIATE COURSE BASE ONLY. NEW PAVEMENT MARKINGS TO MATCH EX. FOUND ON SITE - SITE VERIFY AND DOCUMENT EX. CONDITIONS/LAYOUT PRIOR TO BIDDING AND START OF CONSTRUCTION TYP. PROVIDE PRICING FOR SEALCOATING APPLICATION (1 YEAR) AND PVMT MARKINGS AFTER INSTALL - SEE DETAILS 9,10,11,16 SRE-L4.01
- EX. BASKETBALL GOALS TO REMAIN EX. POST TO REMAIN/PROTECT -REMOVE EX GOALS, STORE/PROTECT DURING CONSTRUCTION AND RE-INSTALL PRIOR TO THE COMPLETION OF CONSTRUCTION TYP. 17 SRE-L4.01
- NEW GOOSE NECK BASKETBALL GOALS MATCH EXISTING BRAND AND STYLE FOUND ON SITE - PROVIDE REDUCED HEIGHT HOOPS FOR 3-5 AGE GROUP KIDS TYP. SEE DETAIL 17 SRE-L4.01.
- KINDERGARTEN HARD PAVEMENT GAME AREA: SEE CIVIL DRAWINGS FOR FURTHER INFORMATION PERTAINING TO DEMO AND PUT BACK
- GAGA PIT: EX. PLAY STRUCTURE FOUND ON SITE. POUR NEW 4" THICK REINFORCED CONC. PAD WITHIN NOTED AREA OVER 6" COMPACTED 1" DIA. AGGREGATE BASE COURSE / SUB-BASE. USE POLYURETHANE FIBERS WITHIN CONC. MIX IN PLACE OF USING WIRE MESH. SECURE NEW GAGA PIT TO NEW CONC. PAD PER MANUF. WRITTEN RECOMMENDATIONS
- 0. INSTALL NEW (PROTECHS BASIS OF DESIGN) ALPHATIC POURED IN PLACE (PIP) SURFACING TO BE INSTALLED PER MANUF. WRITTEN RECOMMENDATIONS - PROVIDED PIP SURFACING DEPTHS PER MANUF., LOCAL AND STATE REGULATIONS TYP. MANUF. REP IS TO BE ON SITE DURING INSTALLATION. PROVIDE NO MORE THAN 1% SLOPE TO SURFACE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE OVER FILTER FABRIC AT 15' MAX. O.C. AND TIE INTO EXISTING UNDERDRAIN OUTLET - SEE SITE CIVIL DRAWINGS FOR FURTHER INFORMATION. INSTALL NEW POURED IN PLACE PLAYGROUND SURFACING PER CCS STANDARDS. INSTALL COLORS AS NOTED ON PLAN (BLUE, RED). PROVIDE MANUF. STANDARD COLORS AS SHOWN ON PLANS - TERRACOTTA / BLACK (50/50MIX) BLUE/BLACK (50/50MIX) WITHIN NOTED AREAS. SEE DETAILS 3,8,10,16 SREL4.01
- INSTALL NEW SYNTHETIC TURF SYNPRO 65 OR APPROVED EQUAL WITH THATCH LAYER AND INFILL SYSTEM ON AGGREGATE OR BUFFING BASE COURSE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE OVER FILTER FABRIC AT 15' MAX. O.C. AND TIE INTO EXISTING UNDERDRAIN OUTLET. INSTALL TURF IN COLOR AS SELECTED BY ARCHITECT (MEDIUM GREEN). SEE DETAIL 2 SRE-L4.01. 12. INSTALL NEW 4' HIGH CHAIN-LINK FENCING WITH (2) DOUBLE WIDE MAN
- GATES IN EARLY LEARNING CENTER IN LOCATIONS SHOWN. SEE DETAILS 12,13,14,15 SRE-L4.01. 13. RELOCATED GAGA PIT (IN LAWN): RELOCATE BACK TO EX. LOCATION PRIOR

14. U SHAPED BIKE RACK: PER DETAIL O G4.2

- 15. NEW BENCH SEATING: DEMO EX. BENCHES PROVIDE NEW BENCHES MATCHING CCS STANDARDS (BASIS-OF-DESIGN; SITESCAPES CITYVIEW BENCH IN QUANTITIES AND SIZES AS SHOWN IN PLANS SECURE NEW BENCH TO NEW 4" THICK REINFORCED CONC. BASE OVER 6" COMPACTED 1" DIA. AGGREGATE PER MANUFACTURERS RECOMMENDATIONS, EX. CONC. PAVING TO REMAIN -PROTECT DURING CONSTRUCTION - SEE DETAIL #8 SRE-L4.00
- 16. NEW ASPHALT PAVING: INSTALL NEW 6" DEEP LAYER COMPACTED 1" DIA. AGGREGATE SUB-BASE, 3" INTERMEDIATE ASPHALTIC BASE WITH 2" SURFACE COURSE - PROVIDE POSITIVE SURFACE DRAINAGE TO EX. STORM DRAINS TYP. NO RAP AGGREGATE TO BE USED IN SURFACE ASPHALT LAYER. PROVIDE PRICING FOR SEALCOATING APPLICATION (1 YEAR) AFTER INSTALL - SEE DETAILS 9,10,11,16 SRE-L4.01.
- 17. EX. LAWN TO REMAIN PROTECT DURING CONSTRUCTION
- 18. NEW 20' SHADE CANOPIES (3) BY LANDSCAPE STRUCTURES BASIS OF DESIGN SEE PROJECT MANUAL FOR APPROVED MANUFACTURES - NO OTHER MANUF. WILL BE CONSIDERED TYP. INSTALL PER MANUF. WRITTEN RECOMMENDATION. PROVIDE FOOTINGS PER MANUF. LOCAL AND STATE GUIDELINES, EXISTING CONCRETE PAVING WITHIN HIGHLIGHTED (PURPLE) SPACE IS TO BE FULLY REPLACED - PROVIDE NEW FOOTINGS FOR SHADE STRUCTURE PER LOCAL CODES AND PER MANUF. WRITTEN RECOMMENDATIONS - CONTRACTOR IS TO OBTAIN STAMPED DRAWINGS FROM MANFU. FOR ALL CANOPY STRUCTURES AND FOOTING PRIOR TO THE START OF CONSTRUCTION TYP.
- 19. CONCRETE STOOP SEE ARCHITECTURAL PLANS
- 20. BASKETBALL MARKINGS SHALL MEET NFHS STANDARD DIMENSIONS REPAINT LINES AFTER SEALCOATING OPERATIONS THE FOLLOWING YEAR - SEE DETAIL 6 SRE-L4.00
- 21. PAINT GAME MARKINGS SEE PLAN FOR LAYOUTS NOT PROVIDED WITHIN DETAILS - SEE DETAILS 1,4,5 SREL4.00 AND 18,19,20 SREL4.01
- 22. INSTALL PLAYWORLD FREESTANDING PLAY EQUIPMENT IN LOCATIONS NOTED ON PLAN. INSTALL PER MANUF. WRITTEN DIRECTIONS SEE PLANS FOR PLAY EQUIPMENT NAMES AND LAYOUT TYP 23. PAINT TOT TRACK ON NEW CONCRETE PAVING. SEE DETAIL 7 SRE-L4.00 24. FENCE MOUNTED COMMUNICATION BOARD (DOUBLE SIDED): SECURE
- BOARD TO NEW CHAIN-LINK FENCING PER SIGN MANUF. WRITTEN RECOMMENDATIONS 25. SEED DISTURBED LAWN AREAS DISTURBED DURING CONSTRUCTION REFER TO LANDSCAPE PLANS L1.0-L1.3
- 26. NEW CONC. PAVING SEE CIVIL DRAWINGS GD1.2,GD1.3 AND LAYOUT PLANS G1.2, G1.3 FOR FURTHER INFORMATION SEE DETAILS 4,5,6 SRE-L4.01 FOR CIVIL DETAIL CALL OUTS.
- 27. POUR THICKENED CONCRETE EDGE FOR NAILER BOARD ATTACHMENT FOR NEW SYNTHETIC TURF INSTALLATION. SEE DETAIL 7 SRE-L4.01.
- SMOOTH ANY INPERFECTIONS FROM FOUNDATION TO ALLOW NAILER
- 31. NOT USED
- 35. PROVIDE NEW ADA SWINGS (1)- MATCH EX. FOUND ON SITE INSTALL PER EX. SWING MANUF. WRITTEN RECOMMENDATIONS
- 36. EXISTING PIP PLAYGROUND SURFACING / PLAY EQUIP. TO REMAIN NOT MARKED FORE REMOVAL - PROTECT DURING CONSTRUCTION TYP

CATIONS OF ALL EXISTING UNDERGROUND U Know what's below. Call before you dig.

LOCATIONS GIVEN ARE APPROXIMATE AND ARE TO BE SITE VERIFIED PRIOR TO THE START OF CONSTRUCTION. ALL CONCRETE AND ASPHALT PAVING NOT NOTED FOR WORK IS TO REMAIN -PROTECT DURING CONSTRUCTION TYP

SMOKY ROW ELEMENTARY SCHOOL **BUILDING** / **PLAYGROUND** RENOVATION

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CARMEL CLAY SCHOOLS 5201 EAST MAIN STREET CARMEL, IN 46033



ARCHITECT

317-844-9961



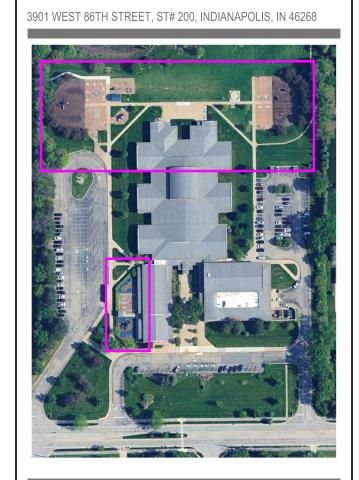
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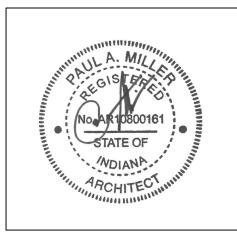
CONSULTANT



317-334-1500



BID SET



PROJECT MANAGER: KS DRAWN BY: EB

PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

DESCRIPTION ADDENDUM 1 12/19/2025

> **ENLARGED SITE PLAN** ELC PLAYGROUND

ENLARGED SITE LAYOUT PLAN: SRE

GENERAL LAYOUT NOTES

- 1. ALL CONTRACTORS BUT NOT LIMITED TO THE EXCAVATING CONTRACTOR OR CONTRACTORS MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. ACTUAL FIELD LOCATIONS OF ALL THE EXISTING UTILITIES ARE THE CONTRACTORS RESPONSIBILITY AND MUST BE LOCATED EITHER BY THE REPRESENTATIVE OF THE UTILITY COMPANY OR BY A PRIVATE UNDERGROUND UTILITY LOCATING COMPANY PRIOR TO THE START OF EXCAVATING. VERIFY MINIMUM COVER REQUIREMENTS BY THE UTILITY CONTRACTOR OR CONTRACTORS OR UTILITY COMPANIES OR AGENCIES WHOMEVER HAS JURISDICTION SO NOT TO CAUSE DAMAGE.
- 2. ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- 3. EXISTING PAVEMENT, SIDEWALKS CURBS DRIVEWAYS, ELECTRICAL TRANSFORMER, DITCHES, DRAINAGE PIPES AND STRUCTURES, FENCES, LAWNS, TREES, BUSHES, MAILBOXES, SIGNS, POWER POLES ETC., TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGE DURING CONSTRUCTION SHALL BE RESTORED, RECONSTRUCTED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ALL DAMAGES SHALL BE RESTORED OR REPLACED TO AT LEAST THEIR ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
- 4. ALL AREAS WHERE THE EXISTING PAVEMENT OR PAVEMENTS ARE DAMAGED DURING CONSTRUCTION FROM HEAVY TRAFFIC OR EQUIPMENT, FUEL OIL, OIL, GASOLINE, ETC., BY THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIERS, SHALL BE RECONSTRUCTED TO IT'S ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES. THIS RECONSTRUCTION AND REPAIR SHALL TAKE PLACE AT THE END OF THE PROJECT CONSTRUCTION OR DURING THE SCHEDULED GRADING AND PAVING OF THOSE AREA.
- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BEAR ALL EXPENSES TO REMOVE, RELOCATE AND OR MODIFY ALL UTILITIES, PRIVATE, PUBLIC, UNLESS NOTED OTHERWISE ON PLANS. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH EACH UTILITY COMPANY AND OR AGENT TO WHO IS RESPONSIBLE TO REMOVE. RELOCATE AND OR MODIFY SUCH UTILITIES EXISTING OR PROPOSED. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY IF ANY FUTURE UTILITIES ARE PLANNED AND HOW IT MAY EFFECT THIS PROJECT AND ITS OWNER AS TO THEIR RESPONSIBILITIES.
- 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AT HIS EXPENSE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES.

- 7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND ALL WORK REQUIRED UNLESS OTHERWISE NOTED. THIS INCLUDES THE SUBMITTAL FOR LAND DISTURBANCE AND THE SUBMITTAL FOR SOIL EROSION AND SEDIMENT CONTROL IF REQUIRED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES UNLESS OTHERWISE NOTED BY THE CONTRACT OR SPECIFICATIONS.
- 8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL THE UTILITY COMPANIES AND DEPARTMENTS 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY ANY UTILITIES THAT MAY BE PRESENT ON SITE, ALL VERIFICATIONS, LOCATIONS, SIZE AND DEPTHS SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES OR DEPARTMENTS. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES. THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THE UTILITY CAN BE PRESENT DURING THE EXCAVATION TO INSTRUCT AND OBSERVE DURING THE EXCAVATION. CONTRACTOR TO
- CALL 811 OR 800-382-5544 BEFORE DIGGING. 9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT EACH DAY AND REMOVE ALL MUD. DIRT, GRAVEL AND LOOSE MATERIALS TRACKED. DUMPED, SPILLED OR WIND BLOWN FROM THIS SITE ONTO OTHER SITES, RIGHT OF WAY, PUBLIC OR PRIVATE STREETS OR ROADS, DRIVEWAYS, YARDS OR SIDEWALKS. THE CONTRACTOR MUST CLEAN OR PICK UP DAILY IF NECESSARY. THE CONTRACTOR SHALL REDUCE THE AIRBORNE DUST DURING THE ENTIRE

CONSTRUCTION SCHEDULE. WATER MAY BE USED AS A REDUCER.

10. THE UTILITIES INDICATED ON THESE PLANS MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THIS SITE. THE LOCATIONS AND SIZE OF THESE UTILITIES ARE APPROXIMATE. THIS INFORMATION WAS GATHERED OR SUPPLIED FROM OTHERS AND USED BY THE ARCHITECT AND OR ENGINEER AND MAY NOT BE ACTUAL. THE ARCHITECT AND / OR ENGINEER MAY NOT BE HELD LIABLE FOR ANY INCORRECT OR MISLEADING UTILITY INFORMATION INDICATED, IMPLIED OR NOT INDICATED ON THESE PLANS.

11. ALL LISTED SQ. FT TOTALS ARE ESTIMATES AND NOT FINAL — GIVEN TOTALS SHOULD BE CONFIRMED ON SITE PRIOR TO BIDDING AND START OF CONSTRUCTION

EQUIPMENT BREAKDOWN:

AREA B

The customer asked that equipment be specified within Area B that does not require transfer from a wheel chair. Note, Fanning Howey has selected a post and platform style structure, allowing wheelchair access to the AeroGlider - creating a space where all abilities are able to play in challenging ways on the same structure. Modern climbers and net climbers were chosen giving the proposed structure a modern look.

Large Integrated Play Structure (main composite structure shown in turf):

- · AeroGlider Suspended/transfer glider element providing dynamic movement play and coordination • Scavenger Hunt Panel – Interactive activity panel supporting cognitive/visual engagement and group play • Steering Wheel – Dramatic-play steering element for imaginative and social play. Tic-Tac-Toe – Ground/deck interactive game panel for inclusive cognitive play. Kaleido Climber – Climbing element encouraging upper-body strength, coordination, and varied access
- Access Gate Controlled entry element into the structure's internal circulation path. Accessible Stairs – Stair access component to reach elevated portions of the structure. ADA Stair - Accessible stair/transfer component called out separately on plan (inclusive access route). • 12" Rise Ramp - Ramp segment providing accessible circulation with indicated rise.
- Spiral Slide Spiral slide exit element providing active descent from elevated play area. Dynamic Descent (2 locations) – Labeled descent elements providing slide/exit points on both sides of the

• 6" Rise Ramp – Additional ramp segment providing accessible circulation with indicated rise.

Round the Corner – Curved path/feature element encouraging circulation and movement through the

Double Dynamic Terrace – Elevated terrace platform element (as labeled) supporting group gathering

- Bells Interactive musical/sensory play element. Steppers – Stepping pod elements promoting balance, coordination, and sequencing. Disco Spinner – Rotating play component integrated into/adiacent to the structure for vestibular play
- Stand-Alone Equipment (outside the large structure):

and circulation on the structure.

Cozy Cocoon® (3 total) – Quiet/sensory retreat pods providing calming space and inclusive programming

Double-Decker Cone Spinner – Standalone rotating spinner providing vestibular stimulation and dynamic

Chinning Bar – Overhead bar element supporting upper-body engagement (hanging/chinning exercise play). Swing Sets (as labeled on plan):

5' Arch Swings – 4 Bays – (8) Belt Seats

5' Arch Swings – 3 Bays – (5) Belt Seats + (1) ADA Seat

PROPOSED SITE LEGEND

FULL REPLACEMENT OF EX. ASPHALT PAVEMENT

NEW (PIP) PLAYGROUND SURFACING

NEW (PIP) PLAYGROUND SURFACING

NEW (TURF) PLAYGROUND SURFACING NEW GAGA PIT / CONC. PAD - FINAL LOCATION

OF EX. GAGA PIT - POST CONSTRUCTION

TEMPORARY RELOCATED GAGA PIT

NEW BASKETBALL COURT

SITE LAYOUT KEYNOTES

- CONCRETE PAVING SEE CIVIL DRAWINGS GD1.0-GD1.3 AND G1.0-G1.3 FOR FURTHER INFORMATION
- 2. ALL EX. SITE LANDSCAPING TO REMAIN UNLESS NOTED OTHERWISE

SEE SITE LANDSCAPING PLANS FOR FURTHER INFORMATION

- 3. EX. SITE LIGHTING TO BE REMOVED IN NOTED LOCATIONS PROVIDE NEW LIGHT POLES BASES, POLE AND HEAD WHERE NOTED ON ELECTRICAL
- 4. EX. KINDERGARTEN PLAYGROUND FENCING AND GATE (SINGLE MAN GATE 1 TOTAL) REPLACEMENT: SLEEVE EX. POST AND PROVIDE NEW CHAIN-LINK FABRIC, HARDWARE AND ALL ACCESSORIES NEEDED FOR PROPER INSTALL - MATCH EX. STYLE AND COLOR - SEE DETAILS 12,13,14,15 SRE-L4.01.

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SMOKY ROW

ELEMENTARY

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SCHOOL

BUILDING

- FOLLOWING EXISTING ASPHALT REMOVAL. RE-GRADE EXISTING AGGREGATE BASE COURSE TO REMAIN. PROVIDE ADDITIONAL COMPACTED AGGREGATE TO MAINTAIN 6" MIN. COMPACTED AGGREGATE BASE- PROOF ROLL - PROVIDE NEW 3" INTERMEDIATE COURSE , WITH 2" SURFACE COURSE. FINAL SURFACE TO BE PAVED TO PROVIDE POSITIVE DRAINAGE. NO FERROUS MATERIAL TO BE USED IN ASPHALT SURFACE COURSE AND RAP ACCEPTABLE FOR INTERMEDIATE COURSE BASE ONLY. NEW PAVEMENT MARKINGS TO MATCH EX. FOUND ON SITE - SITE VERIFY AND DOCUMENT EX. CONDITIONS/LAYOUT PRIOR TO BIDDING AND START OF CONSTRUCTION TYP. PROVIDE PRICING FOR SEALCOATING APPLICATION (1) YEAR) AND PVMT MARKINGS AFTER INSTALL - SEE DETAILS 9,10,11,16 SRE-L4.01
- 6. EX. BASKETBALL GOALS TO REMAIN EX. POST TO REMAIN/PROTECT -REMOVE EX GOALS , STORE/PROTECT DURING CONSTRUCTION AND RE-INSTALL PRIOR TO THE COMPLETION OF CONSTRUCTION TYP. 17 SRE-L4.01
- NEW GOOSE NECK BASKETBALL GOALS MATCH EXISTING BRAND AND STYLE FOUND ON SITE - PROVIDE REDUCED HEIGHT HOOPS FOR 3-5 AGE GROUP KIDS TYP. SEE DETAIL 17 SRE-L4.01.
- KINDERGARTEN HARD PAVEMENT GAME AREA: SEE CIVIL DRAWINGS FOR FURTHER INFORMATION PERTAINING TO DEMO AND PUT BACK
- GAGA PIT: EX. PLAY STRUCTURE FOUND ON SITE. POUR NEW 4" THICK REINFORCED CONC. PAD WITHIN NOTED AREA OVER 6" COMPACTED 1" DIA. AGGREGATE BASE COURSE / SUB-BASE. USE POLYURETHANE FIBERS WITHIN CONC. MIX IN PLACE OF USING WIRE MESH. SECURE NEW GAGA PIT

TO NEW CONC. PAD PER MANUF. WRITTEN RECOMMENDATIONS

- 10. INSTALL NEW (PROTECHS BASIS OF DESIGN) ALPHATIC POURED IN PLACE (PIP) SURFACING TO BE INSTALLED PER MANUF. WRITTEN RECOMMENDATIONS - PROVIDED PIP SURFACING DEPTHS PER MANUF.. LOCAL AND STATE REGULATIONS TYP. MANUF. REP IS TO BE ON SITE DURING INSTALLATION. PROVIDE NO MORE THAN 1% SLOPE TO SURFACE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE OVER FILTER FABRIC AT 15' MAX. O.C. AND TIE INTO EXISTING UNDERDRAIN OUTLET - SEE SITE CIVIL DRAWINGS FOR FURTHER INFORMATION. INSTALL NEW POURED IN PLACE PLAYGROUND SURFACING PER CCS STANDARDS. INSTALL COLORS AS NOTED ON PLAN (BLUE, RED). PROVIDE MANUF. STANDARD COLORS AS SHOWN ON PLANS - TERRACOTTA / BLACK (50/50MIX) BLUE/BLACK (50/50MIX) WITHIN NOTED AREAS. SEE DETAILS 3,8,10,16 SREL4.01
- 11. INSTALL NEW SYNTHETIC TURF SYNPRO 65 OR APPROVED EQUAL WITH THATCH LAYER AND INFILL SYSTEM ON AGGREGATE OR BUFFING BASE COURSE. REGRADE EXISTING SUBGRADE AND INSTALL FLAT PIPE DRAINAGE OVER FILTER FABRIC AT 15' MAX. O.C. AND TIE INTO EXISTING UNDERDRAIN OUTLET. INSTALL TURF IN COLOR AS SELECTED BY ARCHITECT (MEDIUM GREEN). SEE DETAIL 2 SRE-L4.01.
- 12. INSTALL NEW 4' HIGH CHAIN-LINK FENCING WITH (2) DOUBLE WIDE MAN GATES IN EARLY LEARNING CENTER IN LOCATIONS SHOWN. SEE DETAILS 12,13,14,15 SRE-L4.01.
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- 15. NEW BENCH SEATING : DEMO EX. BENCHES PROVIDE NEW BENCHES MATCHING CCS STANDARDS (BASIS-OF-DESIGN; SITESCAPES CITYVIEW BENCH IN QUANTITIES AND SIZES AS SHOWN IN PLANS SECURE NEW BENCH TO NEW 4" THICK REINFORCED CONC. BASE OVER 6" COMPACTED 1" DIA. AGGREGATE PER MANUFACTURERS RECOMMENDATIONS. EX. CONC. PAVING TO REMAIN -
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- 19. CONCRETE STOOP SEE ARCHITECTURAL PLANS

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- 22. INSTALL PLAYWORLD FREESTANDING PLAY EQUIPMENT IN LOCATIONS NOTED ON PLAN. INSTALL PER MANUF. WRITTEN DIRECTIONS SEE PLANS FOR PLAY EQUIPMENT NAMES AND LAYOUT TYP 23. PAINT TOT TRACK ON NEW CONCRETE PAVING. SEE DETAIL 7 SRE-L4.00
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27. POUR THICKENED CONCRETE EDGE FOR NAILER BOARD ATTACHMENT FOR NEW SYNTHETIC TURF INSTALLATION. SEE DETAIL 7 SRE-L4.01.

- 28. BOLT 2X4" COMPOSITE NAILER BOARD FOR SYNTHETIC TURF INSTALLATION TO EXISTING BUILDING FOUNDATION. GRIND AND SMOOTH ANY INPERFECTIONS FROM FOUNDATION TO ALLOW NAILER
- 29. EXISTING TO NEW CONCRETE TRANSITION SEE DETAIL F SRE-G4.1
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BOARD INSTALLATION.

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- 33. REMOVED EX. SEESAW IN IT'S ENTIRETY PRIOR TO INSTALLING NEW EQUIP. FREESTANDING PLAY IN LOCATIONS SHOWN - SEE DETAIL 2 SRE-L4.1 INSTALL AND SECURE TO EX. SURFACE PER TURF MAUF. RECOMMENDATIONS
- 34. TRANSPLANTED TREE -SEE DETAIL #9 SRE-L4.00
- 35. PROVIDE NEW ADA SWINGS (1)- MATCH EX. FOUND ON SITE INSTALL PER EX. SWING MANUF. WRITTEN RECOMMENDATIONS
- 36. EXISTING PIP PLAYGROUND SURFACING / PLAY EQUIP. TO REMAIN NOT MARKED FORE REMOVAL - PROTECT DURING CONSTRUCTION TYP

DATE DESCRIPTION ADDENDUM 1 12/19/2025

PROJECT MANAGER: KS

PROJECT NUMBER: 222033.00 PROJECT ISSUE DATE: 11/20/2025

DRAWN BY: EB

REV.

PLAYGROUND B.

ENLARGED SITE PLAN

Know what's below. Call before you dig.

CATIONS OF ALL EXISTING UNDERGROUND UT O BE OTHER EXISTING UNDERGROUND UTILITIES I CH THERE IS NO ABOVE GROUND EVIDENCE OR FI CH NO ABOVE GROUND EVIDENCE WAS OBSERVE ACT LOCATIONS OF EXISTING UNDERGROUND UTILIT. ILL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AN

LOCATIONS GIVEN ARE APPROXIMATE AND ARE TO BE SITE VERIFIED PRIOR TO THE START OF CONSTRUCTION. ALL CONCRETE AND ASPHALT PAVING NOT NOTED FOR WORK IS TO REMAIN -PROTECT DURING CONSTRUCTION TYP

INVIOLOGY OF THE PLAN ARE BASED UPON ABOVE GROUND SENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES TS, VALVES, AND MARKS MADE UPON THE GROUND BERS) AND ARE SPECULATIVE IN NATURE. THERE MAY

ENLARGED SITE LAYOUT PLAN: SRE

GENERAL LAYOUT NOTES

STATE, COUNTY, CITY OR LOCAL AGENCIES.

CONSTRUCTION OR DURING THE SCHEDULED GRADING AND PAVING OF THOSE AREA.

- 1. ALL CONTRACTORS BUT NOT LIMITED TO THE EXCAVATING CONTRACTOR OR CONTRACTORS MUST TAKE PARTICULAR CARE WHEN EXCAVATING IN AND AROUND EXISTING UTILITY LINES AND EQUIPMENT. ACTUAL FIELD LOCATIONS OF ALL THE EXISTING UTILITIES ARE THE CONTRACTORS RESPONSIBILITY AND MUST BE LOCATED EITHER BY THE REPRESENTATIVE OF THE UTILITY COMPANY OR BY A PRIVATE UNDERGROUND UTILITY LOCATING COMPANY PRIOR TO THE START OF EXCAVATING. VERIFY MINIMUM COVER REQUIREMENTS BY THE UTILITY CONTRACTOR OR CONTRACTORS OR UTILITY COMPANIES OR AGENCIES WHOMEVER HAS JURISDICTION SO NOT TO CAUSE DAMAGE.
- ALL CONSTRUCTION METHODS AND MATERIALS MUST CONFORM TO CURRENT STANDARDS AND SPECIFICATIONS OF THE FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.
 EXISTING PAVEMENT, SIDEWALKS CURBS DRIVEWAYS, ELECTRICAL TRANSFORMER, DITCHES, DRAINAGE PIPES AND STRUCTURES, FENCES, LAWNS, TREES, BUSHES, MAILBOXES, SIGNS, POWER POLES ETC., TO REMAIN SHALL BE PROTECTED FROM DAMAGE BY THE CONTRACTOR. ANY DAMAGE DURING CONSTRUCTION SHALL BE
- ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL REQUIREMENTS, WHICHEVER HAS JURISDICTION.

 4. ALL AREAS WHERE THE EXISTING PAVEMENT OR PAVEMENTS ARE DAMAGED DURING CONSTRUCTION FROM HEAVY TRAFFIC OR EQUIPMENT, FUEL OIL, OIL, GASOLINE, ETC., BY THE GENERAL CONTRACTOR, SUBCONTRACTOR, OR SUPPLIERS, SHALL BE RECONSTRUCTED TO IT'S ORIGINAL CONDITION OR AS REQUIRED OR DICTATED BY FEDERAL, STATE, COUNTY, CITY OR LOCAL AGENCIES. THIS RECONSTRUCTION AND REPAIR SHALL TAKE PLACE AT THE END OF THE PROJECT

RESTORED, RECONSTRUCTED OR REPLACED BY THE CONTRACTOR AT HIS EXPENSE. ALL DAMAGES SHALL BE RESTORED OR REPLACED TO AT LEAST THEIR

- 5. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO BEAR ALL EXPENSES TO REMOVE, RELOCATE AND OR MODIFY ALL UTILITIES, PRIVATE, PUBLIC, UNLESS NOTED OTHERWISE ON PLANS. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY WITH EACH UTILITY COMPANY AND OR AGENT TO WHO IS RESPONSIBLE TO REMOVE, RELOCATE AND OR MODIFY SUCH UTILITIES EXISTING OR PROPOSED. IT FURTHER SHALL BE THE RESPONSIBILITY OF THE
- CONTRACTOR TO VERIFY IF ANY FUTURE UTILITIES ARE PLANNED AND HOW IT MAY EFFECT THIS PROJECT AND ITS OWNER AS TO THEIR RESPONSIBILITIES.

 6. THE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE AT HIS EXPENSE ALL AUTOMOBILE AND PEDESTRIAN TRAFFIC CONTROL DEVICES REQUIRED BY FEDERAL,
- 7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR OR CONTRACTORS TO OBTAIN ALL FEDERAL, STATE, COUNTY, CITY OR LOCAL PERMITS FOR ANY AND ALL WORK REQUIRED UNLESS OTHERWISE NOTED. THIS INCLUDES THE SUBMITTAL FOR LAND DISTURBANCE AND THE SUBMITTAL FOR SOIL EROSION AND SEDIMENT CONTROL IF REQUIRED. THE CONTRACTOR OR CONTRACTORS ARE RESPONSIBLE TO PAY FOR ALL REQUIRED PERMITS BY ANY OR ALL AGENCIES UNLESS OTHERWISE NOTED BY THE CONTRACT OR SPECIFICATIONS.
- 8. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL THE UTILITY COMPANIES AND DEPARTMENTS 72 HOURS BEFORE CONSTRUCTION IS TO START TO VERIFY ANY UTILITIES THAT MAY BE PRESENT ON SITE. ALL VERIFICATIONS, LOCATIONS, SIZE AND DEPTHS SHALL BE MADE BY THE APPROPRIATE UTILITY COMPANIES OR DEPARTMENTS. WHEN EXCAVATING AROUND OR OVER EXISTING UTILITIES, THE CONTRACTOR MUST NOTIFY THE UTILITY COMPANY SO A REPRESENTATIVE OF THE UTILITY CAN BE PRESENT DURING THE EXCAVATION TO INSTRUCT AND OBSERVE DURING THE EXCAVATION. CONTRACTOR TO CALL 811 OR 800–382–5544 BEFORE DIGGING.
- 9. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSPECT EACH DAY AND REMOVE ALL MUD, DIRT, GRAVEL AND LOOSE MATERIALS TRACKED, DUMPED, SPILLED OR WIND BLOWN FROM THIS SITE ONTO OTHER SITES, RIGHT OF WAY, PUBLIC OR PRIVATE STREETS OR ROADS, DRIVEWAYS, YARDS OR SIDEWALKS. THE CONTRACTOR MUST CLEAN OR PICK UP DAILY IF NECESSARY. THE CONTRACTOR SHALL REDUCE THE AIRBORNE DUST DURING THE ENTIRE CONSTRUCTION SCHEDULE. WATER MAY BE USED AS A REDUCER.
- 10. THE UTILITIES INDICATED ON THESE PLANS MAY NOT BE A COMPLETE INVENTORY OF ALL THE EXISTING UTILITIES PRESENT ON AND AROUND THIS SITE. THE LOCATIONS AND SIZE OF THESE UTILITIES ARE APPROXIMATE. THIS INFORMATION WAS GATHERED OR SUPPLIED FROM OTHERS AND USED BY THE ARCHITECT AND OR ENGINEER AND MAY NOT BE ACTUAL. THE ARCHITECT AND / OR ENGINEER MAY NOT BE HELD LIABLE FOR ANY INCORRECT OR MISLEADING UTILITY INFORMATION INDICATED, IMPLIED OR NOT INDICATED ON THESE PLANS.
- 11. ALL LISTED SQ. FT TOTALS ARE ESTIMATES AND NOT FINAL GIVEN TOTALS SHOULD BE CONFIRMED ON SITE PRIOR TO BIDDING AND START OF CONSTRUCTION

PROPOSED SITE LEGEND FULL REPLACEMENT OF EX. ASPHALT PAVEMENT NEW CONC. PADS NEW (PIP) PLAYGROUND SURFACING NEW (PIP) PLAYGROUND SURFACING

NEW (TURF) PLAYGROUND SURFACING

NEW GAGA PIT / CONC. PAD - FINAL LOCATION
OF EX. GAGA PIT - POST CONSTRUCTION

OF EX. GAGA PIT - POST CONSTRUCTION

TEMPORARY RELOCATED GAGA PIT

NEW BASKETBALL COURT

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- 1. CONCRETE PAVING SEE CIVIL DRAWINGS GD1.0-GD1.3 , AND G1.0-G1.3 FOR FURTHER INFORMATION
- 2. ALL EX. SITE LANDSCAPING TO REMAIN UNLESS NOTED OTHERWISE SEE SITE LANDSCAPING PLANS FOR FURTHER INFORMATION
- 3. EX. SITE LIGHTING TO BE REMOVED IN NOTED LOCATIONS PROVIDE NEW LIGHT POLES BASES, POLE AND HEAD WHERE NOTED ON ELECTRICAL
- 4. EX. KINDERGARTEN PLAYGROUND FENCING AND GATE (SINGLE MAN GATE 1 TOTAL) REPLACEMENT: SLEEVE EX. POST AND PROVIDE NEW CHAIN-LINK FABRIC, HARDWARE AND ALL ACCESSORIES NEEDED FOR PROPER INSTALL MATCH EX. STYLE AND COLOR SEE DETAILS 12,13,14,15 SRE-L4.01.
- 5. FOLLOWING EXISTING ASPHALT REMOVAL. RE-GRADE EXISTING AGGREGATE BASE COURSE TO REMAIN. PROVIDE ADDITIONAL COMPACTED AGGREGATE TO MAINTAIN 6" MIN. COMPACTED AGGREGATE BASE- PROOF ROLL PROVIDE NEW 3" INTERMEDIATE COURSE, WITH 2" SURFACE COURSE. FINAL SURFACE TO BE PAVED TO PROVIDE POSITIVE DRAINAGE. NO FERROUS MATERIAL TO BE USED IN ASPHALT SURFACE COURSE AND RAP ACCEPTABLE FOR INTERMEDIATE COURSE BASE ONLY. NEW PAVEMENT MARKINGS TO MATCH EX. FOUND ON SITE SITE VERIFY AND DOCUMENT EX. CONDITIONS/LAYOUT PRIOR TO BIDDING AND START OF CONSTRUCTION TYP. PROVIDE PRICING FOR SEALCOATING APPLICATION (1 YEAR) AND PVMT MARKINGS AFTER INSTALL SEE DETAILS 9,10,11,16 SRE-L4.01
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- 16. NEW ASPHALT PAVING: INSTALL NEW 6" DEEP LAYER COMPACTED

 1" DIA. AGGREGATE SUB-BASE, 3" INTERMEDIATE ASPHALTIC BASE WITH 2"

 SURFACE COURSE PROVIDE POSITIVE SURFACE DRAINAGE TO EX. STORM

 DRAINS TYP. NO RAP AGGREGATE TO BE USED IN SURFACE ASPHALT LAYER.

 PROVIDE PRICING FOR SEALCOATING APPLICATION (1 YEAR) AFTER
- 17. EX. LAWN TO REMAIN PROTECT DURING CONSTRUCTION

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- 20. BASKETBALL MARKINGS SHALL MEET NFHS STANDARD DIMENSIONS .REPAINT LINES AFTER SEALCOATING OPERATIONS THE FOLLOWING YEAR SEE DETAIL 6 SRE-L4.00
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 23. PAINT TOT TRACK ON NEW CONCRETE PAVING. SEE DETAIL 7 SRE-L4.00
- BOARD TO NEW CHAIN-LINK FENCING PER SIGN MANUF. WRITTEN RECOMMENDATIONS

 25. SEED DISTURBED LAWN AREAS DISTURBED DURING CONSTRUCTION REFER TO LANDSCAPE PLANS L1.0-L1.3

24. FENCE MOUNTED COMMUNICATION BOARD (DOUBLE SIDED): SECURE

- 26. NEW CONC. PAVING SEE CIVIL DRAWINGS GD1.2,GD1.3 AND LAYOUT PLANS G1.2, G1.3 FOR FURTHER INFORMATION SEE DETAILS 4,5,6 SRE-L4.01 FOR CIVIL DETAIL CALL OUTS.
- FOR NEW SYNTHETIC TURF INSTALLATION. SEE DETAIL 7 SRE-L4.01.

 28. BOLT 2X4" COMPOSITE NAILER BOARD FOR SYNTHETIC TURF INSTALLATION TO EXISTING BUILDING FOUNDATION. GRIND AND

27. POUR THICKENED CONCRETE EDGE FOR NAILER BOARD ATTACHMENT

BOARD INSTALLATION.

SMOOTH ANY INPERFECTIONS FROM FOUNDATION TO ALLOW NAILER

- 29. EXISTING TO NEW CONCRETE TRANSITION SEE DETAIL F SRE-G4.1
 30. PROTECT EXISTING CURB AND REPAIR ANY CONSTRUCTION DAMAGE.
- 31. NOT USED
- 32. NOT USED
- 33. REMOVED EX. SEESAW IN IT'S ENTIRETY PRIOR TO INSTALLING NEW EQUIP.
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CAUTION !!

THE LOCATIONS OF ALL EXISTING UNDERGROUND UTILIT SHOWN ON THE PLAN ARE BASED UPON ABOVE GROUND EVIDENCE (INCLUDING, BUT NOT LIMITED TO, MANHOLES INLETS, VALVES, AND MARKS MADE UPON THE GROUND INLETS, VALVES, AND MARKS MADE UPON THE GROUND EVIDENCE WAS DESCRIBED AND ARE SPECULATIVE IN NATURE. THERE MAY ALSO BE OTHER EXISTING UNDERGROUND UTILITIES FOR WHICH THERE IS NO ABOVE GROUND EVIDENCE WAS OBSERVED. TO SHALL BE VERIFIED BY CONTROLOR ONLY AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AND SHALL BE VERIFIED BY CONTRACTOR PRIOR TO ANY AND

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CT LOCATIONS GIVEN ARE APPROXIMATE
AND ARE TO BE SITE VERIFIED PRIOR
TO THE START OF CONSTRUCTION. ALL
CONCRETE AND ASPHALT PAVING NOT
NOTED FOR WORK IS TO REMAIN —
PROTECT DURING CONSTRUCTION TYP

SMOKY ROW
ELEMENTARY
SCHOOL
BUILDING /
PLAYGROUND

RENOVATION

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CARMEL CLAY SCHOOLS
5201 EAST MAIN STREET



ARCHITECT

CARMEL, IN 46033



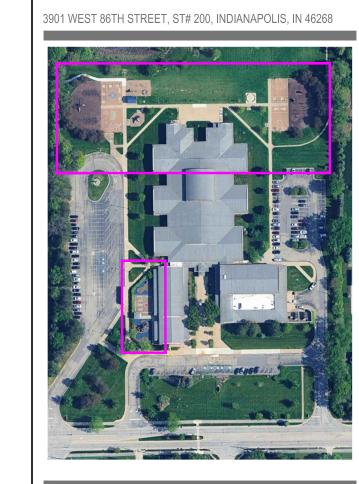
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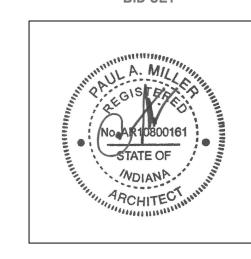
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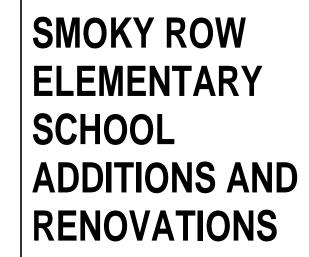
PROJECT MANAGER: KS
DRAWN BY: EB

PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025					
REV. NO.△	DESCRIPTION	DATE			
1	ADDENDUM 1	12/19/2025			

ENLARGED SITE PLAN KINDERGARTEN PLAYGROUND

SREL1.40



900 West 136th Street Carmel, IN 46032





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SEE SLAB AND MASONRY PLANS FOR SLAB INFORMATION. SEE 6-S3.03 FOR TYPICAL SLAB ON GRADE DETAILS.

SEE 7-S3.03 FOR SLAB ISOLATIONS.

F.T. INDICATES FOOTING TRANSITION. SEE 11-S3.01. F.S. INDICATES STEPPED FOOTING. SEE S3.01 FOR DETAILS

INDICATES CONCRETE PIER. SEE TYPICAL PIER DETAIL ON \$3.01.

INDICATES UNDERGROUND PLUMBING OR UTILITY LINE. VERIFY LOCATION AND ELEVATIONS. SEE S3.02 FOR REQUIREMENTS WHEN PLUMBING LINES CROSS FOUNDATIONS AT ALL ELEVATIONS.

SHADED AREA INDICATE EXTENTS OF EXISTING SLAB AND FOUNDATIONS.

CARMEL CLAY SCHOOLS



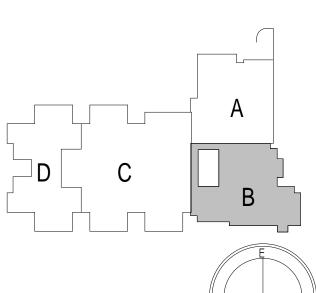


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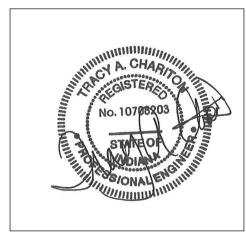


3901 West 86th Street, Suite 200 Indianapolis, Indiana 46268 317-334-1500 317-334-1552 TLF Job No: 2025-030



BID SET

KEY PLAN



PROJECT MANAGER: TAC DRAWN BY: TLF PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

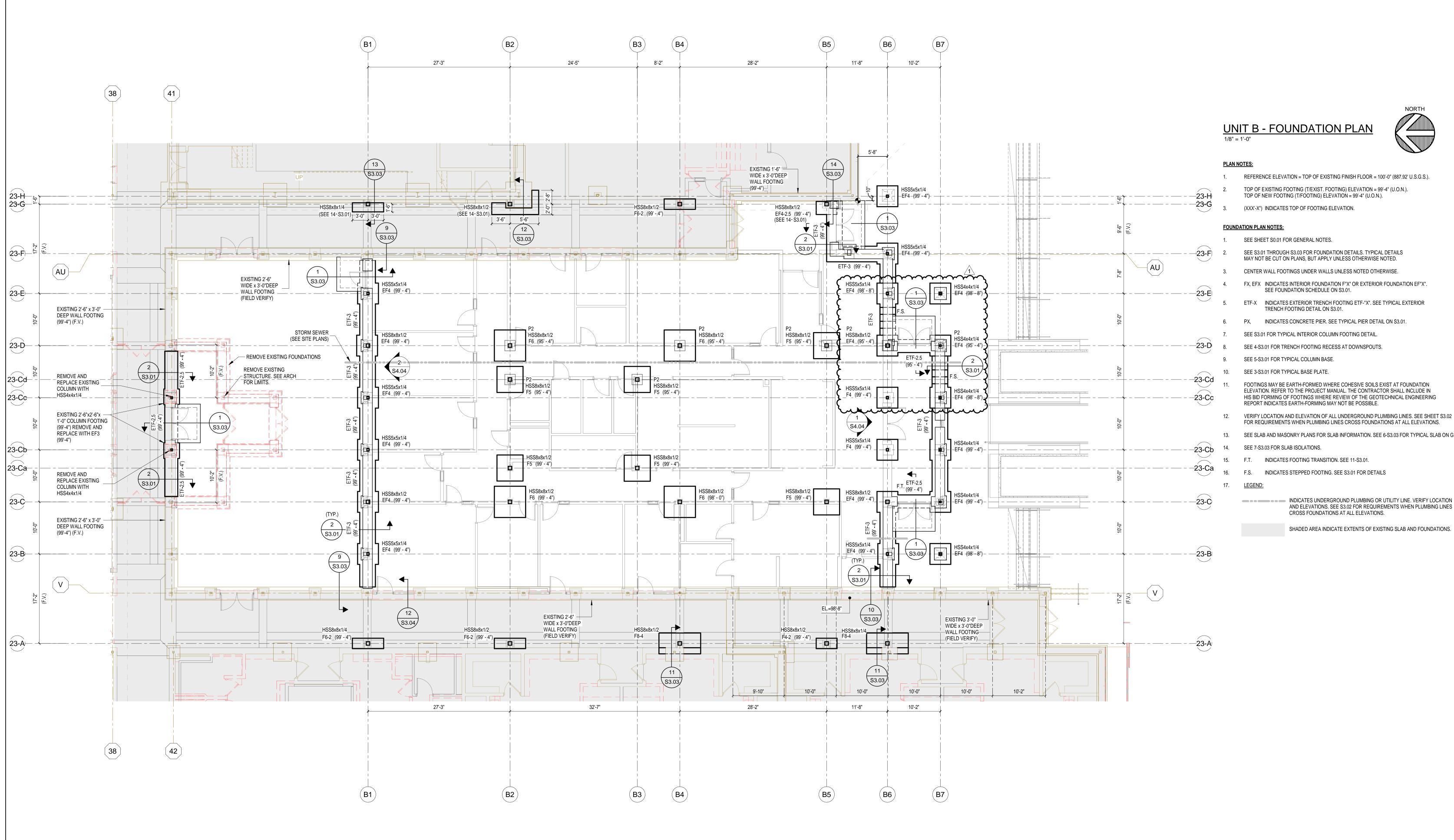
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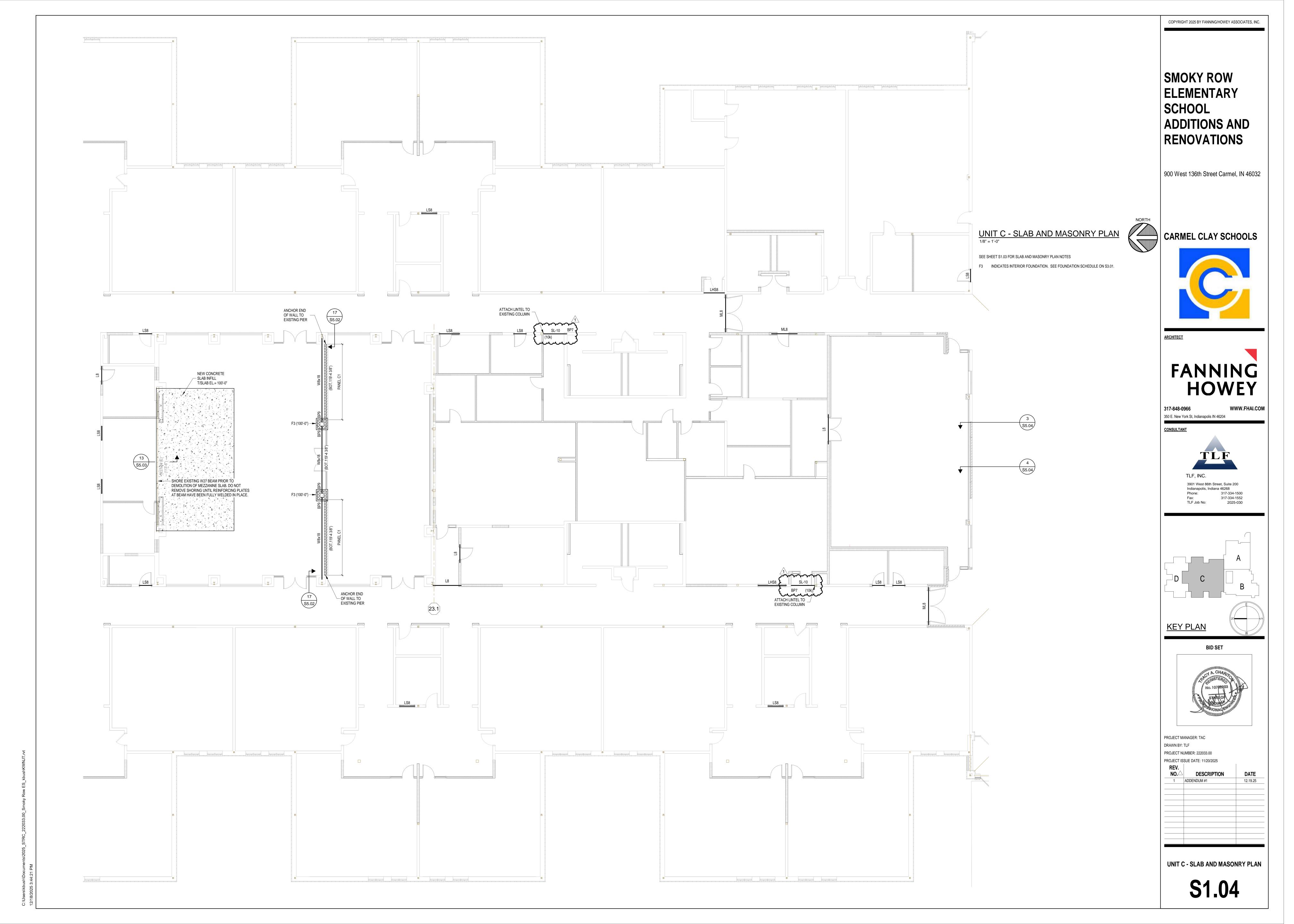
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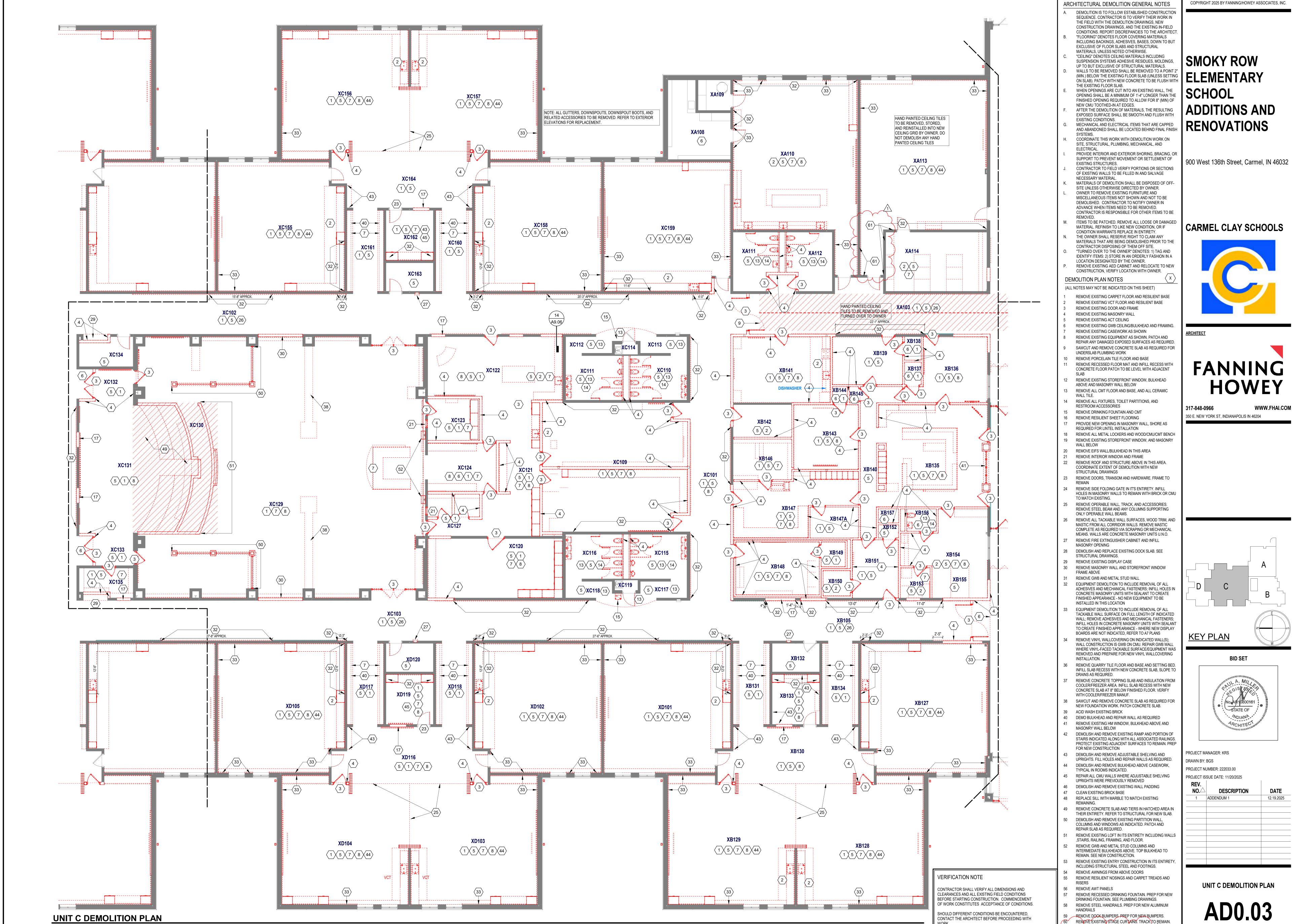
12.19.25

UNIT B - FOUNDATION PLAN

S1.01

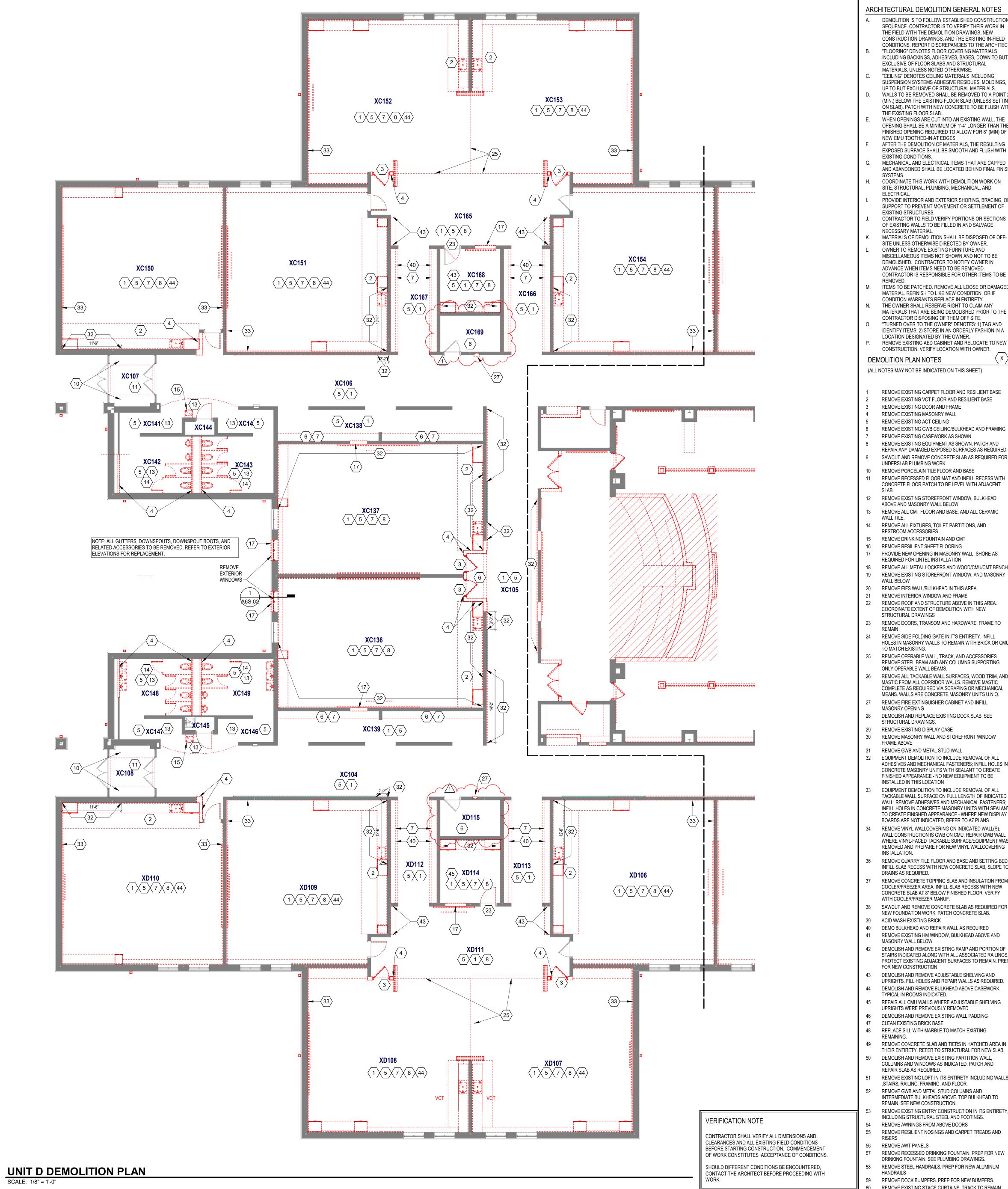






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61 INDICATED WALLS HAVE SAND FILLED CORES



ARCHITECTURAL DEMOLITION GENERAL NOTES

- DEMOLITION IS TO FOLLOW ESTABLISHED CONSTRUCTION SEQUENCE. CONTRACTOR IS TO VERIFY THEIR WORK IN THE FIELD WITH THE DEMOLITION DRAWINGS, NEW CONSTRUCTION DRAWINGS, AND THE EXISTING IN-FIELD CONDITIONS. REPORT DISCREPANCIES TO THE ARCHITECT "FLOORING" DENOTES FLOOR COVERING MATERIALS
- INCLUDING BACKINGS, ADHESIVES, BASES, DOWN TO BUT EXCLUSIVE OF FLOOR SLABS AND STRUCTURAL MATERIALS, UNLESS NOTED OTHERWISE. "CEILING" DENOTES CEILING MATERIALS INCLUDING
- SUSPENSION SYSTEMS ADHESIVE RESIDUES, MOLDINGS, UP TO BUT EXCLUSIVE OF STRUCTURAL MATERIALS. WALLS TO BE REMOVED SHALL BE REMOVED TO A POINT 2 (MIN.) BELOW THE EXISTING FLOOR SLAB (UNLESS SETTING ON SLAB). PATCH WITH NEW CONCRETE TO BE FLUSH WITH THE EXISTING FLOOR SLAB.
- WHEN OPENINGS ARE CUT INTO AN EXISTING WALL, THE OPENING SHALL BE A MINIMUM OF 1'-4" LONGER THAN THE FINISHED OPENING REQUIRED TO ALLOW FOR 8" (MIN) OF NEW CMU TOOTHED-IN AT EDGES.
- AFTER THE DEMOLITION OF MATERIALS, THE RESULTING EXPOSED SURFACE SHALL BE SMOOTH AND FLUSH WITH EXISTING CONDITIONS. MECHANICAL AND ELECTRICAL ITEMS THAT ARE CAPPED AND ABANDONED SHALL BE LOCATED BEHIND FINAL FINISH
- COORDINATE THIS WORK WITH DEMOLITION WORK ON SITE, STRUCTURAL, PLUMBING, MECHANICAL, AND ELECTRICAL. PROVIDE INTERIOR AND EXTERIOR SHORING, BRACING, OR SUPPORT TO PREVENT MOVEMENT OR SETTLEMENT OF EXISTING STRUCTURES.
- CONTRACTOR TO FIELD VERIFY PORTIONS OR SECTIONS OF EXISTING WALLS TO BE FILLED IN AND SALVAGE NECESSARY MATERIAL. MATERIALS OF DEMOLITION SHALL BE DISPOSED OF OFF-SITE UNLESS OTHERWISE DIRECTED BY OWNER. OWNER TO REMOVE EXISTING FURNITURE AND
- MISCELLANEOUS ITEMS NOT SHOWN AND NOT TO BE DEMOLISHED. CONTRACTOR TO NOTIFY OWNER IN ADVANCE WHEN ITEMS NEED TO BE REMOVED. CONTRACTOR IS RESPONSIBLE FOR OTHER ITEMS TO BE
- ITEMS TO BE PATCHED. REMOVE ALL LOOSE OR DAMAGED MATERIAL. REFINISH TO LIKE NEW CONDITION, OR IF CONDITION WARRANTS REPLACE IN ENTIRETY. THE OWNER SHALL RESERVE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE
- CONTRACTOR DISPOSING OF THEM OFF SITE. "TURNED OVER TO THE OWNER" DENOTES: 1) TAG AND IDENTIFY ITEMS: 2) STORE IN AN ORDERLY FASHION IN A LOCATION DESIGNATED BY THE OWNER. REMOVE EXISTING AED CABINET AND RELOCATE TO NEW CONSTRUCTION, VERIFY LOCATION WITH OWNER.

DEMOLITION PLAN NOTES (ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

- REMOVE EXISTING CARPET FLOOR AND RESILIENT BASE REMOVE EXISTING VCT FLOOR AND RESILIENT BASE REMOVE EXISTING DOOR AND FRAME REMOVE EXISTING MASONRY WALL REMOVE EXISTING ACT CEILING
- REMOVE EXISTING GWB CEILING/BULKHEAD AND FRAMING. REMOVE EXISTING CASEWORK AS SHOWN REMOVE EXISTING EQUIPMENT AS SHOWN. PATCH AND REPAIR ANY DAMAGED EXPOSED SURFACES AS REQUIRED. SAWCUT AND REMOVE CONCRETE SLAB AS REQUIRED FOR
- UNDERSLAB PLUMBING WORK REMOVE PORCELAIN TILE FLOOR AND BASE REMOVE RECESSED FLOOR MAT AND INFILL RECESS WITH
- CONCRETE FLOOR PATCH TO BE LEVEL WITH ADJACENT REMOVE EXISTING STOREFRONT WINDOW, BULKHEAD ABOVE AND MASONRY WALL BELOW
- REMOVE ALL CMT FLOOR AND BASE, AND ALL CERAMIC REMOVE ALL FIXTURES, TOILET PARTITIONS, AND
- RESTROOM ACCESSORIES REMOVE DRINKING FOUNTAIN AND CMT
- REMOVE RESILIENT SHEET FLOORING PROVIDE NEW OPENING IN MASONRY WALL, SHORE AS REQUIRED FOR LINTEL INSTALLATION 18 REMOVE ALL METAL LOCKERS AND WOOD/CMU/CMT BENCH
- 20 REMOVE EIFS WALL/BULKHEAD IN THIS AREA REMOVE INTERIOR WINDOW AND FRAME REMOVE ROOF AND STRUCTURE ABOVE IN THIS AREA. COORDINATE EXTENT OF DEMOLITION WITH NEW

STRUCTURAL DRAWINGS

- 23 REMOVE DOORS, TRANSOM AND HARDWARE. FRAME TO 24 REMOVE SIDE FOLDING GATE IN IT'S ENTIRETY. INFILL
- HOLES IN MASONRY WALLS TO REMAIN WITH BRICK OR CMU TO MATCH EXISTING. REMOVE OPERABLE WALL, TRACK, AND ACCESSORIES. REMOVE STEEL BEAM AND ANY COLUMNS SUPPORTING ONLY OPERABLE WALL BEAMS.
- REMOVE ALL TACKABLE WALL SURFACES, WOOD TRIM, AND MASTIC FROM ALL CORRIDOR WALLS. REMOVE MASTIC COMPLETE AS REQUIRED VIA SCRAPING OR MECHANICAL MEANS. WALLS ARE CONCRETE MASONRY UNITS U.N.O. REMOVE FIRE EXTINGUISHER CABINET AND INFILL
- MASONRY OPENING DEMOLISH AND REPLACE EXISTING DOCK SLAB. SEE STRUCTURAL DRAWINGS.
- 29 REMOVE EXISTING DISPLAY CASE REMOVE MASONRY WALL AND STOREFRONT WINDOW FRAME ABOVE
- REMOVE GWB AND METAL STUD WALL EQUIPMENT DEMOLITION TO INCLUDE REMOVAL OF ALL ADHESIVES AND MECHANICAL FASTENERS; INFILL HOLES IN CONCRETE MASONRY UNITS WITH SEALANT TO CREATE FINISHED APPEARANCE - NO NEW EQUIPMENT TO BE INSTALLED IN THIS LOCATION
- EQUIPMENT DEMOLITION TO INCLUDE REMOVAL OF ALL TACKABLE WALL SURFACE ON FULL LENGTH OF INDICATED WALL; REMOVE ADHESIVES AND MECHANICAL FASTENERS; INFILL HOLES IN CONCRETE MASONRY UNITS WITH SEALANT TO CREATE FINISHED APPEARANCE - WHERE NEW DISPLAY BOARDS ARE NOT INDICATED, REFER TO A7 PLANS REMOVE VINYL WALLCOVERING ON INDICATED WALL(S);
- WHERE VINYL-FACED TACKABLE SURFACE/EQUIPMENT WAS REMOVED AND PREPARE FOR NEW VINYL WALLCOVERING INSTALLATION. REMOVE QUARRY TILE FLOOR AND BASE AND SETTING BED. INFILL SLAB RECESS WITH NEW CONCRETE SLAB, SLOPE TO

WALL CONSTRUCTION IS GWB ON CMU. REPAIR GWB WALL

- DRAINS AS REQUIRED. REMOVE CONCRETE TOPPING SLAB AND INSULATION FROM COOLER/FREEZER AREA. INFILL SLAB RECESS WITH NEW CONCRETE SLAB AT 8" BELOW FINISHED FLOOR. VERIFY WITH COOLER/FREEZER MANUF.
- 38 SAWCUT AND REMOVE CONCRETE SLAB AS REQUIRED FOR NEW FOUNDATION WORK. PATCH CONCRETE SLAB. 39 ACID WASH EXISTING BRICK
- 40 DEMO BULKHEAD AND REPAIR WALL AS REQUIRED 41 REMOVE EXISTING HM WINDOW, BULKHEAD ABOVE AND MASONRY WALL BELOW DEMOLISH AND REMOVE EXISTING RAMP AND PORTION OF
- STAIRS INDICATED ALONG WITH ALL ASSOCIATED RAILINGS. PROTECT EXISTING ADJACENT SURFACES TO REMAIN. PREP FOR NEW CONSTRUCTION 43 DEMOLISH AND REMOVE ADJUSTABLE SHELVING AND
- UPRIGHTS. FILL HOLES AND REPAIR WALLS AS REQUIRED. DEMOLISH AND REMOVE BULKHEAD ABOVE CASEWORK, TYPICAL IN ROOMS INDICATED.
- REPAIR ALL CMU WALLS WHERE ADJUSTABLE SHELVING UPRIGHTS WERE PREVIOUSLY REMOVED 46 DEMOLISH AND REMOVE EXISTING WALL PADDING 47 CLEAN EXISTING BRICK BASE 48 REPLACE SILL WITH MARBLE TO MATCH EXISTING REMAINING.
- 49 REMOVE CONCRETE SLAB AND TIERS IN HATCHED AREA IN THEIR ENTIRETY. REFER TO STRUCTURAL FOR NEW SLAB. 50 DEMOLISH AND REMOVE EXISTING PARTITION WALL, COLUMNS AND WINDOWS AS INDICATED. PATCH AND REPAIR SLAB AS REQUIRED.
- REMOVE EXISTING LOFT IN ITS ENTIRETY INCLUDING WALLS ,STAIRS, RAILING, FRAMING, AND FLOOR. REMOVE GWB AND METAL STUD COLUMNS AND INTERMEDIATE BULKHEADS ABOVE. TOP BULKHEAD TO REMAIN. SEE NEW CONSTRUCTION. REMOVE EXISTING ENTRY CONSTRUCTION IN ITS ENTIRETY, INCLUDING STRUCTURAL STEEL AND FOOTINGS.
- REMOVE AWNINGS FROM ABOVE DOORS REMOVE RESILIENT NOSINGS AND CARPET TREADS AND 56 REMOVE AWT PANELS

HANDRAILS

61 INDICATED WALLS HAVE SAND FILLED CORES

REMOVE RECESSED DRINKING FOUNTAIN. PREP FOR NEW DRINKING FOUNTAIN. SEE PLUMBING DRAWINGS. 58 REMOVE STEEL HANDRAILS. PREP FOR NEW ALUMINUM

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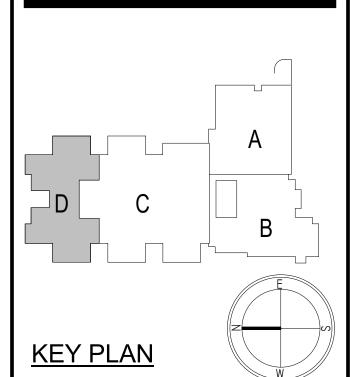
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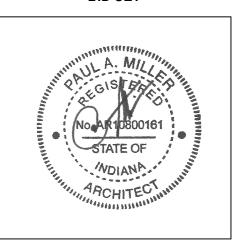


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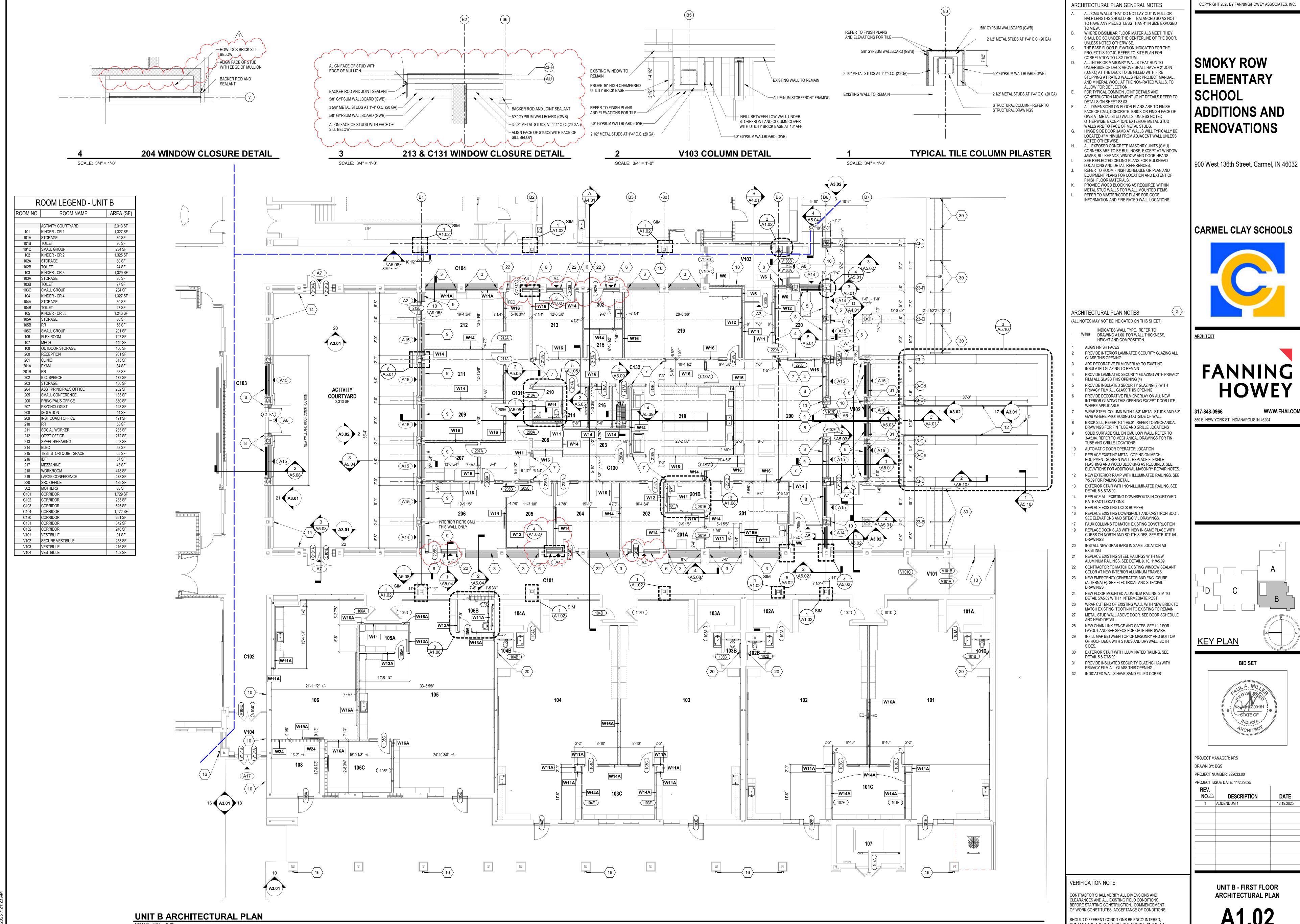


PROJECT MANAGER: KRS DRAWN BY: BGS

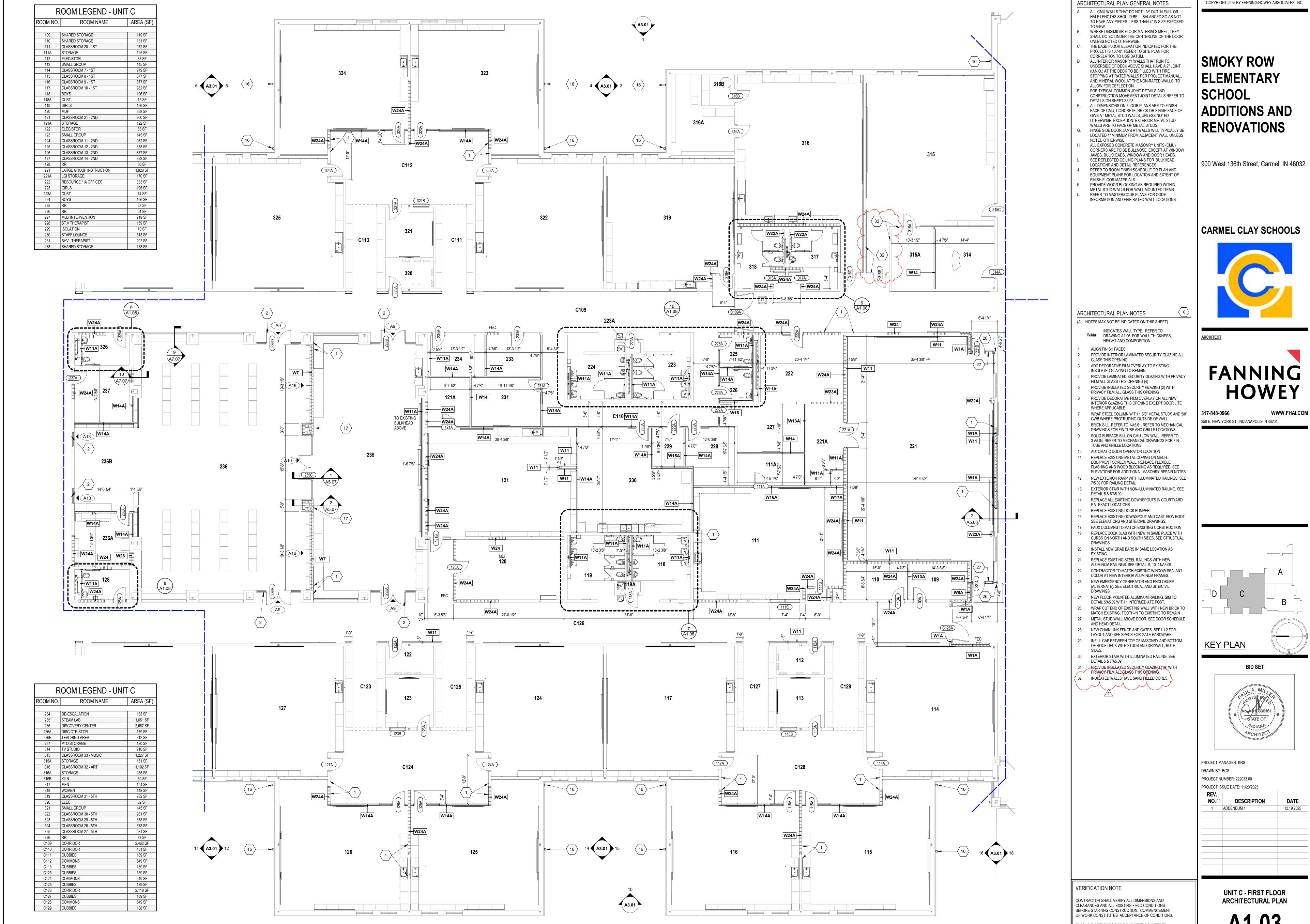
PROJECT NUMBER: 222033.00 PROJECT ISSUE DATE: 11/20/2025 NO.

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.19.2025
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UNIT D DEMOLITION PLAN

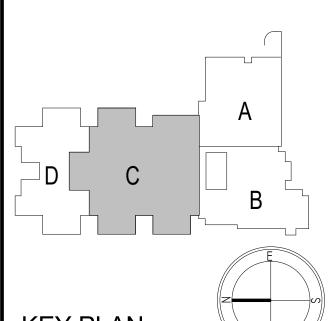


SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

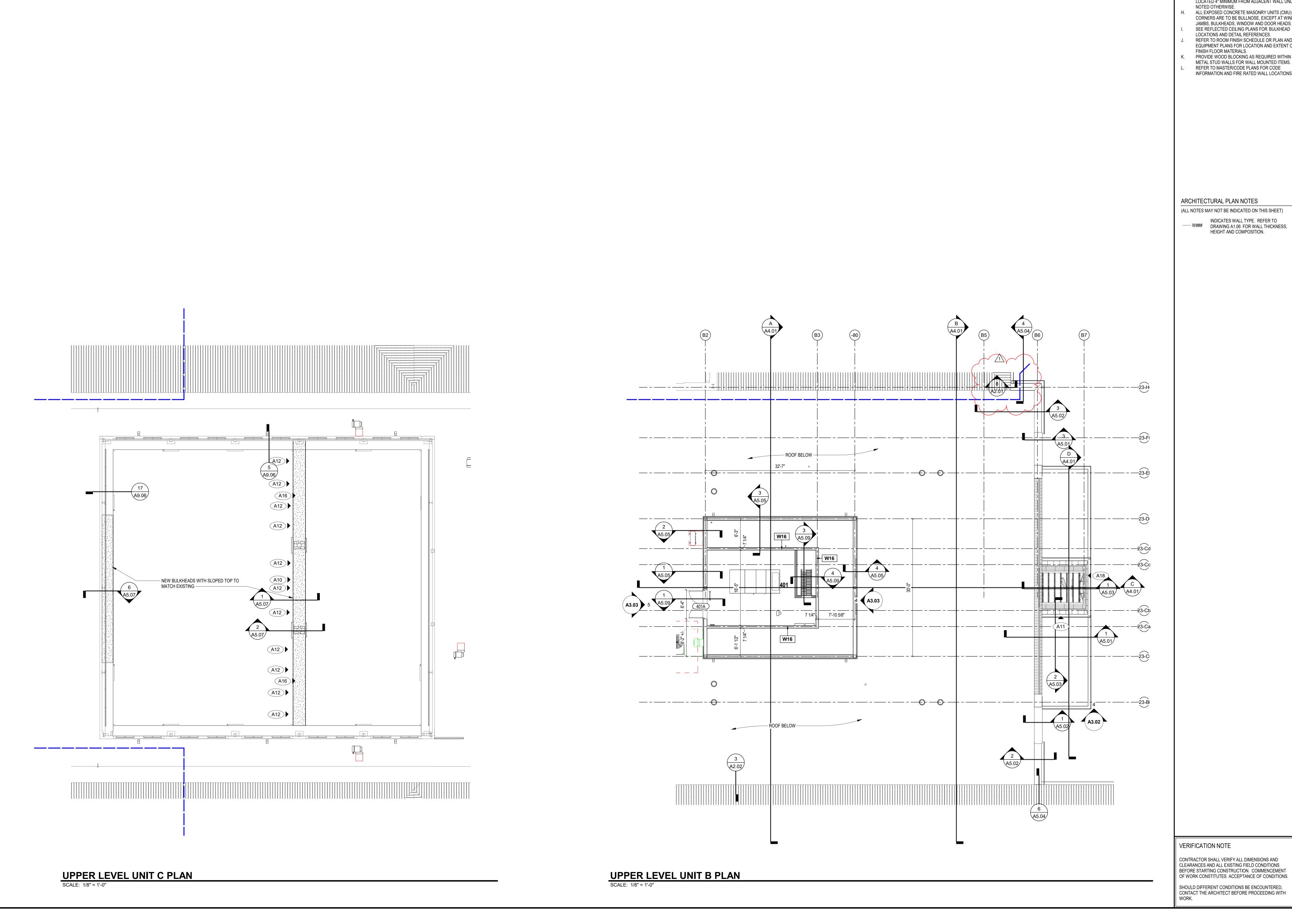


UNIT C ARCHITECTURAL PLAN

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SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH



ARCHITECTURAL PLAN GENERAL NOTES

- A. ALL CMU WALLS THAT DO NOT LAY OUT IN FULL OR HALF LENGTHS SHOULD BE BALANCED SO AS NOT TO HAVE ANY PIECES LESS THAN 4" IN SIZE EXPOSED
- WHERE DISSIMILAR FLOOR MATERIALS MEET, THEY
- SHALL DO SO UNDER THE CENTERLINE OF THE DOOR, UNLESS NOTED OTHERWISE. THE BASE FLOOR ELEVATION INDICATED FOR THE
- PROJECT IS 100'-0". REFER TO SITE PLAN FOR CORRELATION TO USG DATUM. ALL INTERIOR MASONRY WALLS THAT RUN TO UNDERSIDE OF DECK ABOVE SHALL HAVE A 2" JOINT (U.N.O.) AT THE DECK TO BE FILLED WITH FIRE
- STOPPING AT RATED WALLS PER PROJECT MANUAL., AND MINERAL WOOL AT THE NON-RATED WALLS, TO ALLOW FOR DEFLECTION. FOR TYPICAL COMMON JOINT DETAILS AND CONSTRUCTION MOVEMENT JOINT DETAILS REFER TO DETAILS ON SHEET S3.03.
- ALL DIMENSIONS ON FLOOR PLANS ARE TO FINISH FACE OF CMU, CONCRETE, BRICK OR FINISH FACE OF GWB AT METAL STUD WALLS, UNLESS NOTED OTHERWISE. EXCEPTION: EXTERIOR METAL STUD
- WALLS ARE TO FACE OF METAL STUDS. HINGE SIDE DOOR JAMB AT WALLS WILL TYPICALLY BE LOCATED 4" MINIMUM FROM ADJACENT WALL UNLESS
- ALL EXPOSED CONCRETE MASONRY UNITS (CMU)
 CORNERS ARE TO BE BULLNOSE, EXCEPT AT WINDOW JAMBS, BULKHEADS, WINDOW AND DOOR HEADS. SEE REFLECTED CEILING PLANS FOR BULKHEAD LOCATIONS AND DETAIL REFERENCES. REFER TO ROOM FINISH SCHEDULE OR PLAN AND EQUIPMENT PLANS FOR LOCATION AND EXTENT OF
- FINISH FLOOR MATERIALS. PROVIDE WOOD BLOCKING AS REQUIRED WITHIN METAL STUD WALLS FOR WALL MOUNTED ITEMS. REFER TO MASTER/CODE PLANS FOR CODE INFORMATION AND FIRE RATED WALL LOCATIONS.

INDICATES WALL TYPE. REFER TO

SMOKY ROW ELEMENTARY SCHOOL ADDITIONS AND

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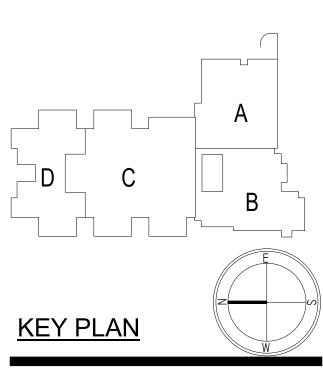
CARMEL CLAY SCHOOLS



<u>ARCHITECT</u>

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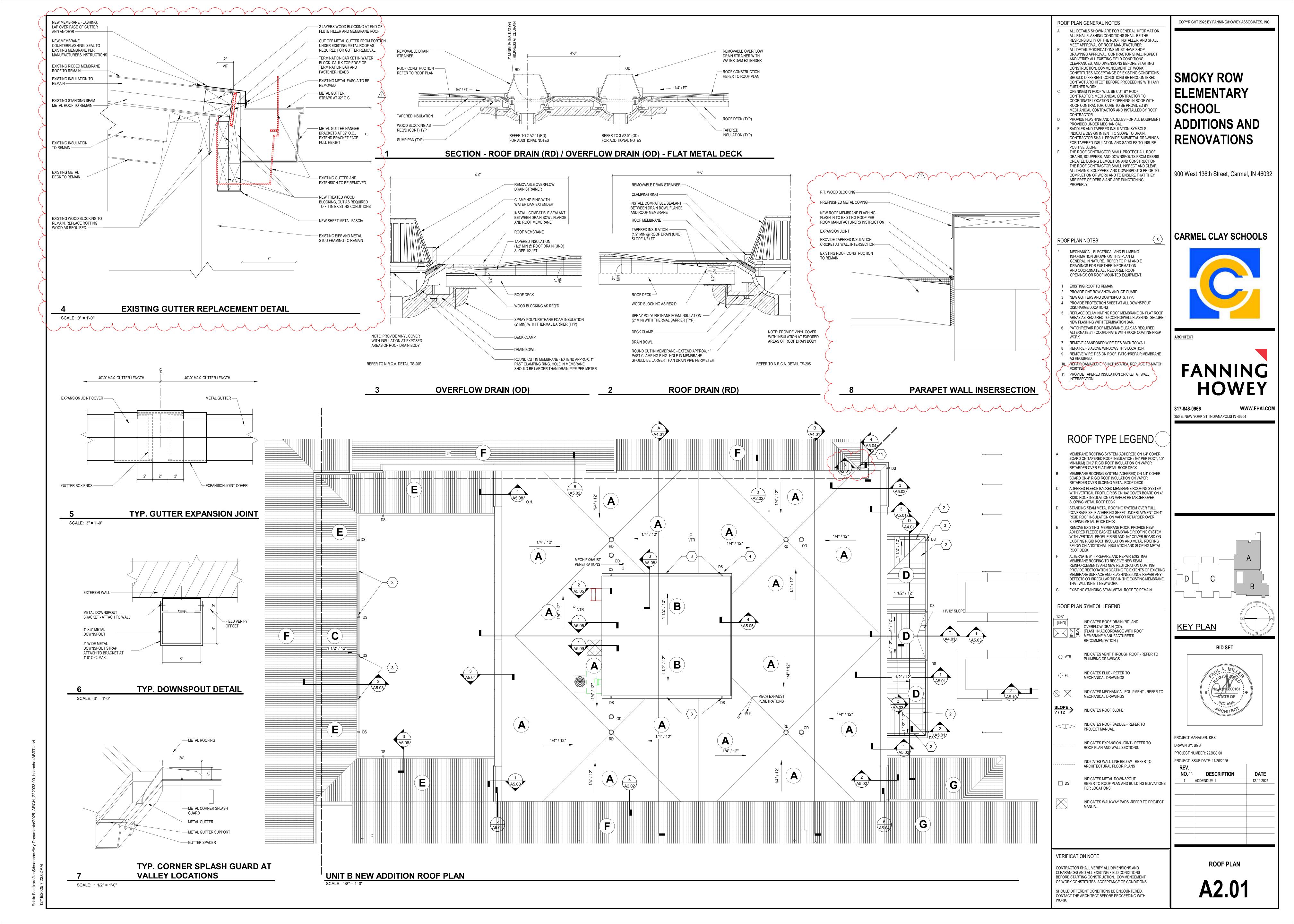
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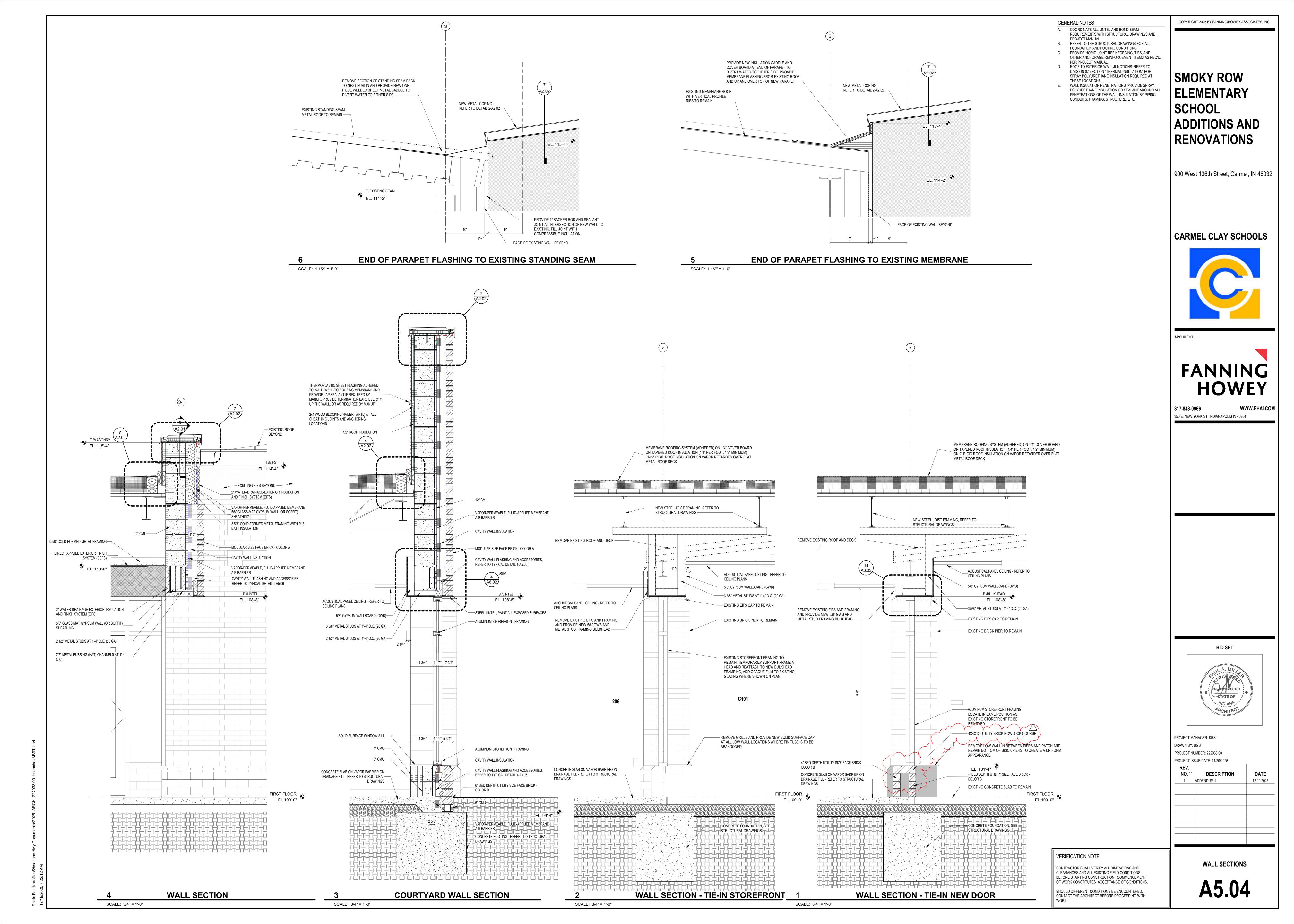
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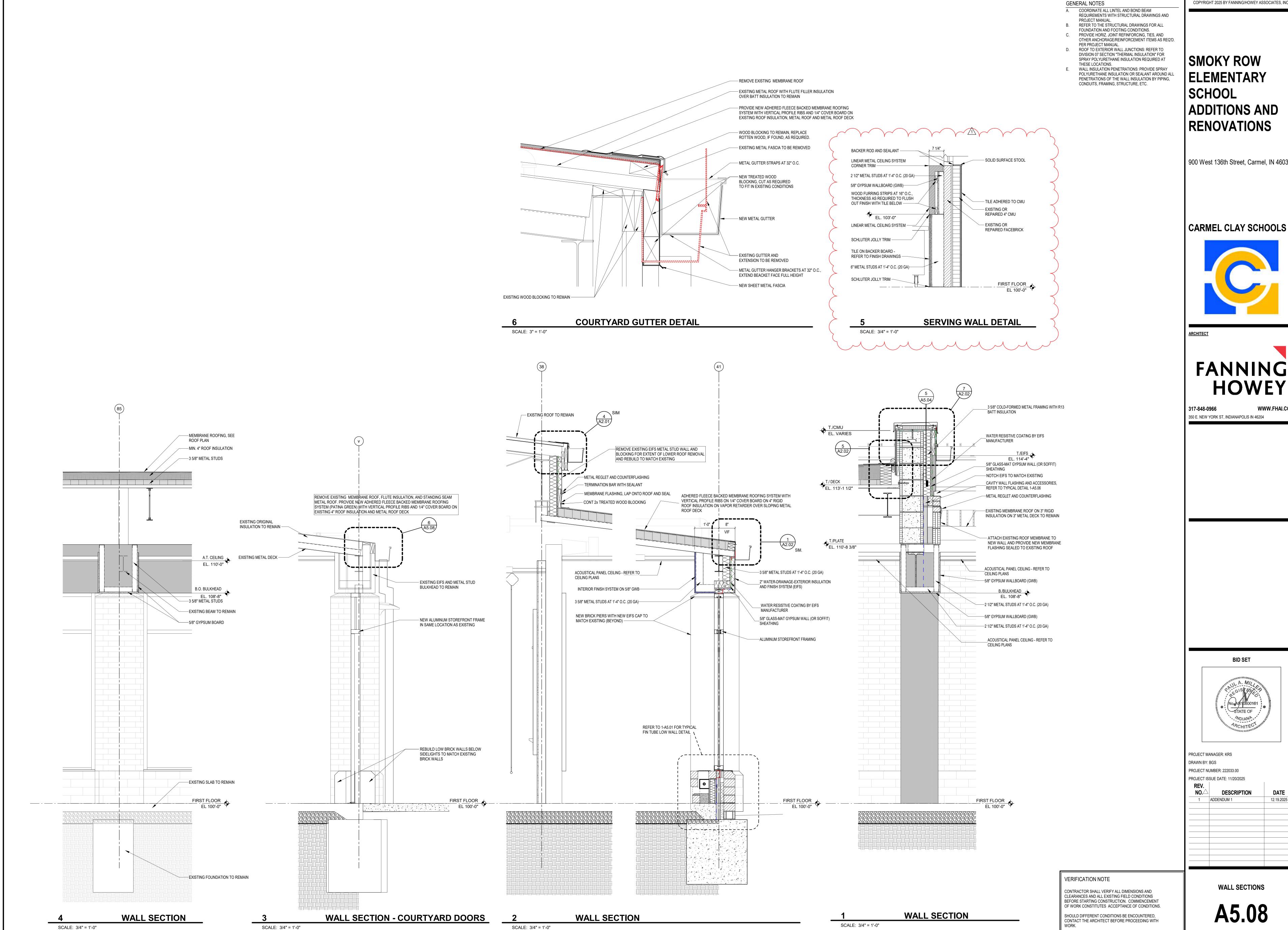
CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

UPPER LEVEL FLOOR PLANS

A1.05







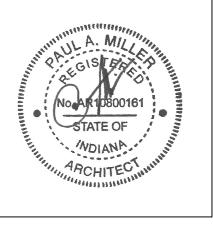
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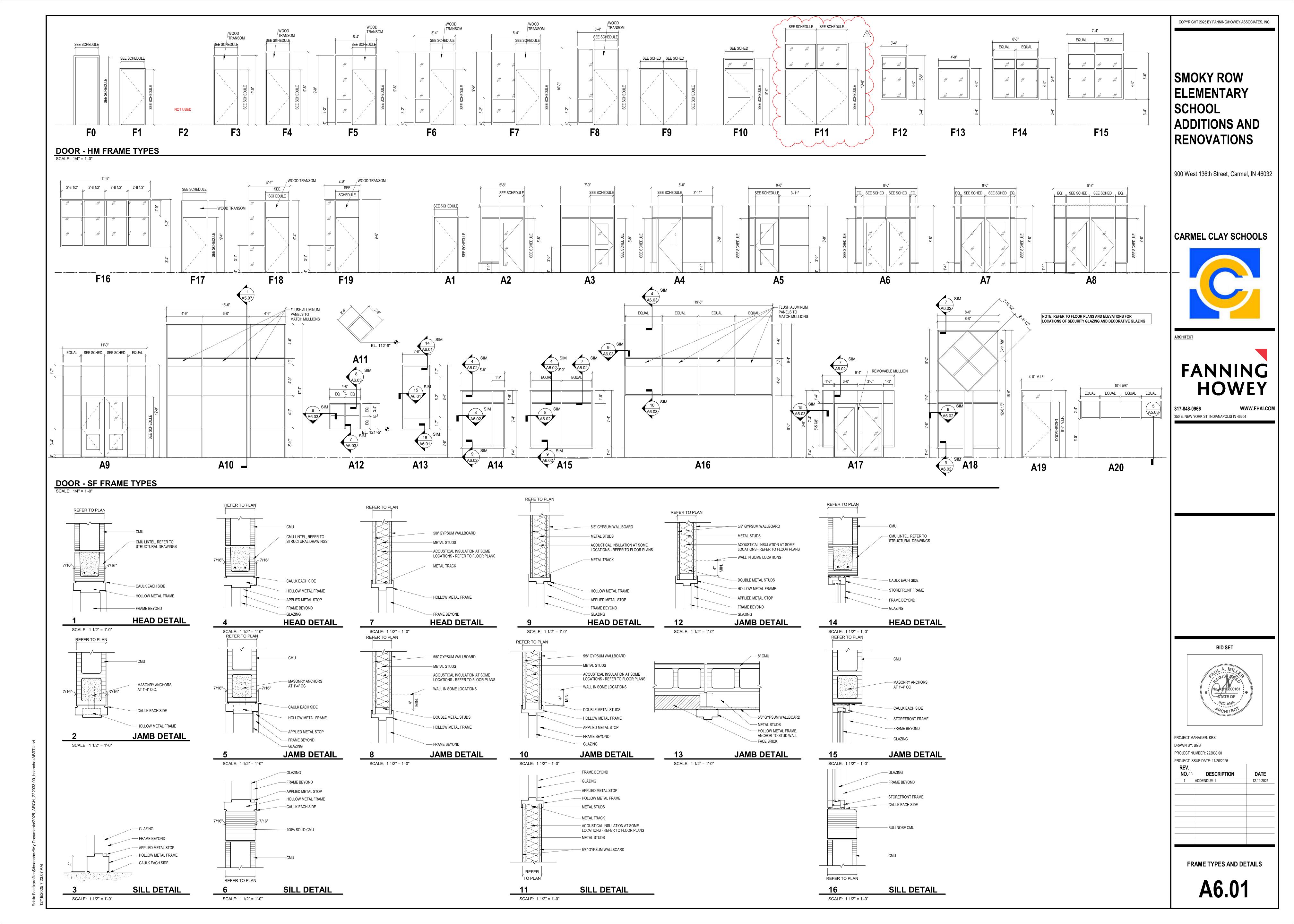
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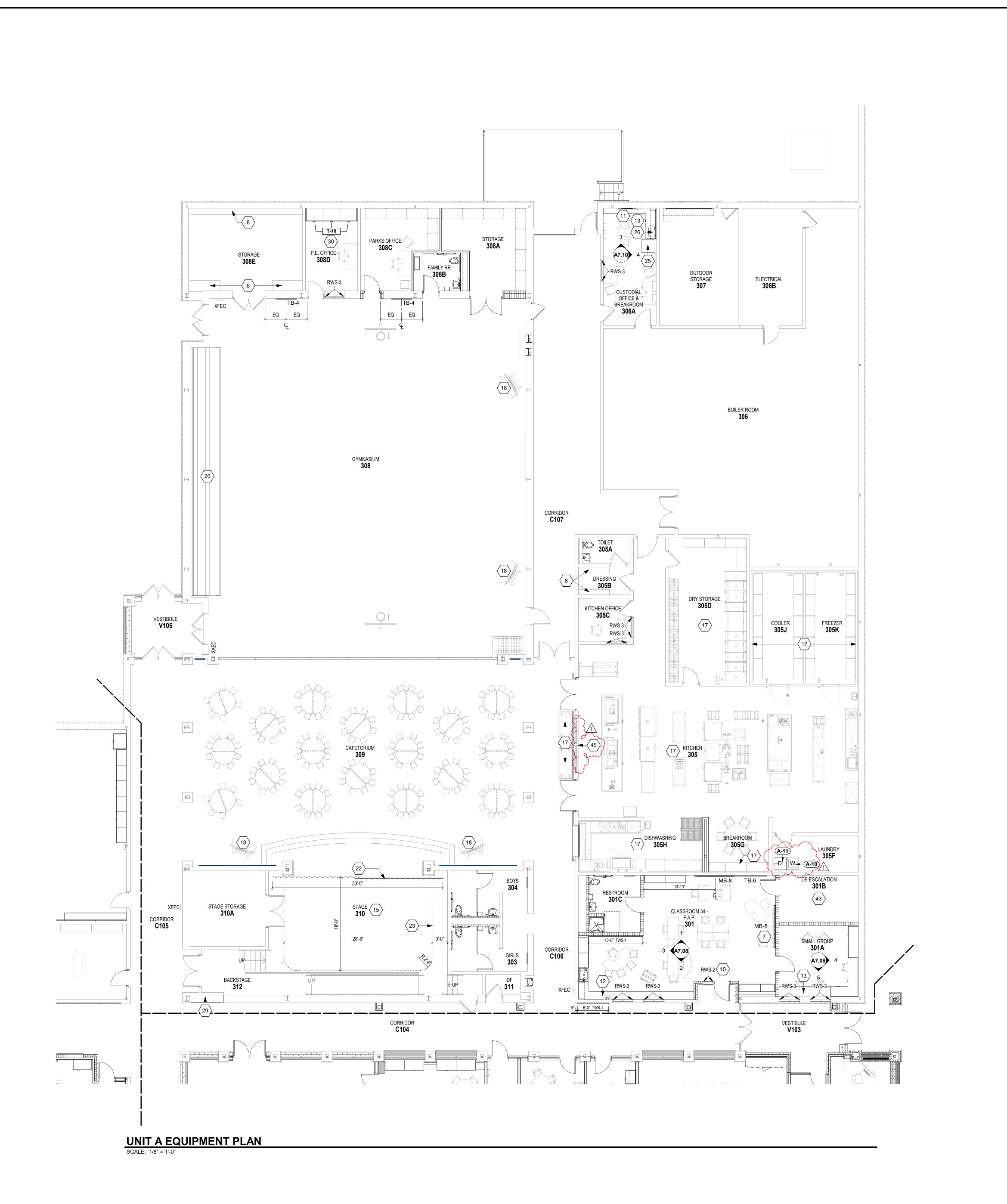


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1	ADDENDUM 1	12.19.2025





ROOM LEGEND - UNIT A ROOM NO. **ROOM NAME** AREA (SF) 301 CLASSROOM 34 - F.A.P. 301A SMALL GROUP 213 SF 301B DE-ESCALATION 139 SF 301C RESTROOM 109 SF 105 SF 1,688 SF 305B DRESSING 54 SF 305C KITCHEN OFFICE 305D DRY STORAGE 422 SF Not Placed 305F LAUNDRY 117 SF 305G BREAKROOM 124 SF 305H DISHWASHING 305K FREEZER 235 SF 306 BOILER ROOM 2,210 SF 306A CUSTODIAL OFFICE & BREAKROOM 231 SF 306B ELECTRICAL 307 OUTDOOR STORAGE 308 GYMNASIUM 308A STORAGE 308B FAMILY RR 66 SF 308C PARKS OFFICE 203 SF 308D P.E. OFFICE 161 SF 308E STORAGE 353 SF 309 CAFETORIUM 1,019 SF 312 BACKSTAGE 313 STORAGE 987 SF C105 CORRIDOR 761 SF C106 CORRIDOR 642 SF

C107 CORRIDOR

V105 VESTIBULE

c———

c———

EQUIPMENT GENERAL NOTES

A. ALL COUNTERTOPS TO HAVE CONTINUOUS 4" HIGH BACKSPLASHES AND ENDSPLASHES UNLESS NOTED

B. HIDDEN LINES (----) INDICATE ITEMS TO BE PART OF LOOSE EQUIPMENT PACKAGE OR BY OWNER, NOT INCLUDED IN CONSTRUCTION CONTRACTS. DASHED LINES (---) INDICATE OVERHEAD ITEMS (INCLUDED IN CONSTRUCTION CONTRACTS).

C. (TB) INDICATES 4' HIGH TACK BOARD; LENGTH AS INDICATED. REFER TO MOUNTING HEIGHT DRAWING.
D. (MB) INDICATES 4' HIGH MARKER BOARD; LENGTH AS INDICATED. REFER TO MOUNTING HEIGHT DRAWING.
E. (TWS) INDICATES TACKABLE WALL SURFACE; LENGTH AS DIMENSIONED. REFER TO ELEVATIONS FOR HEIGHTS.
F. PROVIDE FILLER STRIPS BETWEEN CASEWORK UNITS AND WALL OR BETWEEN ANY UNIT AS REQUIRED. EXTEND COUNTER TO FACE OF WALL OR ADJACENT TALL CABINET.
G. ALL CASEWORK DOORS AND DRAWERS WILL NOT BE LOCKABLE UNLESS NOTED OTHERWISE.

ALL CASEWORK DOORS AND DRAWERS <u>WILL NOT</u> BE LOCKABLE UNLESS NOTED OTHERWISE.
ALL EXPOSED ENDS AND BACKS OF CASEWORK SHALL BE FINISHED; ALL EXPOSED BOTTOMS OF CUBBY CABINETS SHALL BE FINISHED.
CASEWORK INSTALLER SHALL CUT CASEWORK AS REQUIRED FOR PLUMBING/ELECTRICAL LINES.
CASEWORK INSTALLER SHALL CAULK BETWEEN

COUNTERS, BACKSPLASHES, AND WALLS.
ALL WALL-MOUNTED CASEWORK SHALL BE MOUNTED WITH
THE TOP AT 7'-0" AFF UNLESS OTHERWISE NOTED; WC-01 IS
MOUNTED WITH THE TOP AT 7'-3" AFF.
(CG) INDICATES CORNER GUARD, REFER TO
SPECIFICATIONS FOR ADDITIONAL DETAILS AND A7S.01 FOR
COLOR SELECTIONS.
(XFEC) INDICATES EXISTING FIRE EXTINGUISHER CABINET
TO REMAIN.

(FEC) INDICATES NEW FIRE EXTINGUISHER CABINET.

O. (RWŚ) INDICATES ROLLER WINDOW SHADE.
P. REFER TO A7S.01 LIST OF FINISHES FOR EQUIPMENT COLOR SELECTIONS; REFER TO A8S.01 FOR ALL SELECTIONS NOT NOTED ON THIS SHEET.
Q. INTERIOR PANEL SIGNAGE TO BE PROVIDED BY ALLOWANCE.

EQUIPMENT NOTES

1,055 SF

151 SF

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

1 42"H DOUBLE-SIDED MOBILE UNITS (MBC-01), REFER TO DETAIL ON A7.06 AND MEDIA CENTER CASEWORK

SCHEDULE ON A7S.01

42"H SINGLE-SIDED BOOKSHELVES (MC-2) WITH
CONTINUOUS MATCHING PL-3 COUNTERTOP; REFER TO
DETAIL 9/A7.07

60"H SINGLE-SIDED BOOKSHELVES (MC-4 OR 5, REFER TO
ELEVATIONS)

4 OPEN KNEESPACE BELOW COUNTERTOP, REFER TO DETAIL ON A7.06
5 BUILT-IN WOOD SHELVING AND NOOK WITH UPHOLSTERED SEAT, REFER TO ELEVATION 3/A8.07 & DETAIL 10/A7.07
6 RECESSED CEILING-MOUNTED ELECTRIC PROJECTION

DIAGONAL SCREEN
WALL-MOUNTED MANUAL PROJECTION SCREEN; B.O.D. IS
DRAPER LUMA 2 NTSC FORMAT 10' DIAGONAL SCREEN WITH
6" EXTENSION MOUNTING BRACKET
EXISTING EQUIPMENT TO REMAIN IN THIS ROOM

SOLID SURFACE KNEE WALL CAP, SSM-2, REFER TO DETAIL

SCREEN; B.O.D. IS DRAPER LUMA 2 NTSC FORMAT 150"

10 RWS HOUSING TO BE RECESSED INTO CEILING, REFER TO DETAIL ON A7.06
 11 MONITOR, BY OWNER
 12 PL-1 CABINETRY WITH SSM-1 COUNTERTOP/BACKSPLASH

13 PL-1 CABINETRY WITH PL-2 COUNTERTOP
14 WALL-MOUNTED MANUAL PROJECTION SCREEN; B.O.D. IS
DRAPER LUMA 2 NTSC FORMAT 150" DIAGONAL SCREEN

EXISTING PROJECTION SCREEN AND PROJECTOR TO REMAIN
 ALL CASEWORK IN THIS ROOM TO BE PL-1 CABINETRY WITH SSM-1 COUNTERTOP/BACKSPLASH

17 REFER TO FOOD SERVICE DRAWINGS FOR KITCHEN EQUIPMENT SCOPE AND INFORMATION
 18 MOBILE MONITOR, BY OWNER
 19 A-8 & A-9: SLIDE-IN ELECTRIC RANGE WITH RECIRCULATING

A-8 & A-9: SLIDE-IN ELECTRIC RANGE WITH RECIRCULATING HOOD ABOVE; REFER TO APPLIANCE SCHEDULE ON A7S.01
 EXISTING BLEACHERS TO REMAIN

20 EXISTING BLEACHERS TO REMAIN
21 NEW MILLWORK RECEPTION DESK, REFER TO A7.07 FOR DETAILS AND ELEVATIONS
22 INSTALL NEW BI-PARTING STAGE CURTAIN (SC-1) ON

ON EXISTING TRACKS IN EXISTING CONFIGURATION;
APPROX. 19'-0"H, VERIFY IN FIELD

24 A-6 & A-7: UNDER-COUNTER ICE MAKER WITH RO SYSTEM;
HOUSE RO SYSTEM IN ADJACENT BASE CABINET; REFER TO

EXISTING TRACK; APPROX. 19'-0"H, VERIFY IN FIELD

13 INSTALL (5) NEW TRAVELING BACK STAGE CURTAINS (SC-2)

APPLIANCE SCHEDULE ON A7S.01

25 A-1: REFRIGERATOR, REFER TO APPLIANCE SCHEDULE ON A7S.01

26 A-3: MICROWAVE, REFER TO APPLIANCE SCHEDULE ON A7S.01
27 A-5: ADA-COMPLIANT UNDER-COUNTER REFRIGERATOR,

REFER TO APPLIANCE SCHEDULE ON A7S.01

28 A-4: UNDER-COUNTER REFRIGERATOR, REFER TO APPLIANCE SCHEDULE ON A7S.01

EXISTING DISPLAY CASE TO REMAIN, REFER TO FINISH PLANS FOR ADDITIONAL INFORMATION
 PL-1 CABINETRY, REFER TO A7S.01 FOR CASEWORK

30 PL-1 CABINETRY, REFER TO A7S.01 FOR CASEWORK SCHEDULE
31 PL-1 PLASTIC LAMINATE CUBBIES (WC-01) WITH HOOKS MOUNTED BELOW; REFER TO TYPICAL ELEVATION 8/A7.09 AND DETAILS ON A7.07

9"H DIMENSIONAL LETTERS, REFER TO ELEVATIONS FOR DESIGNATION
 CUBICLE CURTAINS AND TRACK, REFER TO A7.06 FOR TRACK DETAIL

TRACK DETAIL

34 RECESSED CEILING-MOUNTED ELECTRIC PROJECTION SCREEN; B.O.D. IS DRAPER LUMA 2 NTSC FORMAT 10'

DIAGONAL SCREEN - INCLUDE 30" DROP

35 EXISTING ROLLER WINDOW SHADES TO REMAIN

36 EXISTING SCOREBOARD TO REMAIN

37 A.2: REEDIGERATOR REFER TO APPLIANCE SCHEDUL

37 A-2: REFRIGERATOR, REFER TO APPLIANCE SCHEDULE ON A7S.01
 38 VENDING MACHINE, BY OWNER
 39 60"H SINGLE-SIDED BOOKSHELVES (MC-3) BUILT IN TO

RECESS, REFER TO ELEVATIONS

40 ALL CASEWORK IN THIS ROOM TO BE PL-1 CABINETRY WITH SSM-3 COUNTERTOP/BACKSPLASH

41 WALL-MOUNTED, HEIGHT-ADJUSTABLE FOLDING CHANGING TABLE; OWNER-FURNISHED AND CONTRACTOR INSTALLED.

BASIS OF DESIGN IS PRESSALIT MODEL R8972000

42 FIRST MAKER SPACE VEX IQ TABLE, PROVIDED AND INSTALLED BY OWNER

43 LOCATION OF CEILING STRUCTURE FOR OWNER-PROVIDED SENSORY SWING: PEEER TO STRUCTURAL DRAWINGS

SENSORY SWING; REFER TO STRUCTURAL DRAWINGS

44 INSTALL NEW MARBLE WINDOW SILL

45 SOLID SURFACE SILL, SSM-1, REFER TO DETAIL 5/A5.08

GENERAL NOTES

BACKSPLASHES AND ENDSPLASHES UNLESS NOTED
OTHERWISE.
HIDDEN LINES (----) INDICATE ITEMS TO BE PART OF
LOOSE EQUIPMENT PACKAGE OR BY OWNER, NOT

SMOKY RC

ELEMENTARY
SCHOOL
ADDITIONS AND
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CARMEL CLAY SCHOOLS



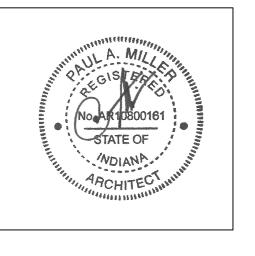
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KEY PLAN

BID SET



PROJECT MANAGER: KRS

DRAWN BY: AML

PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

NO.△	DESCRIPTION	DATE
1	ADDENDUM 1	12.19.202
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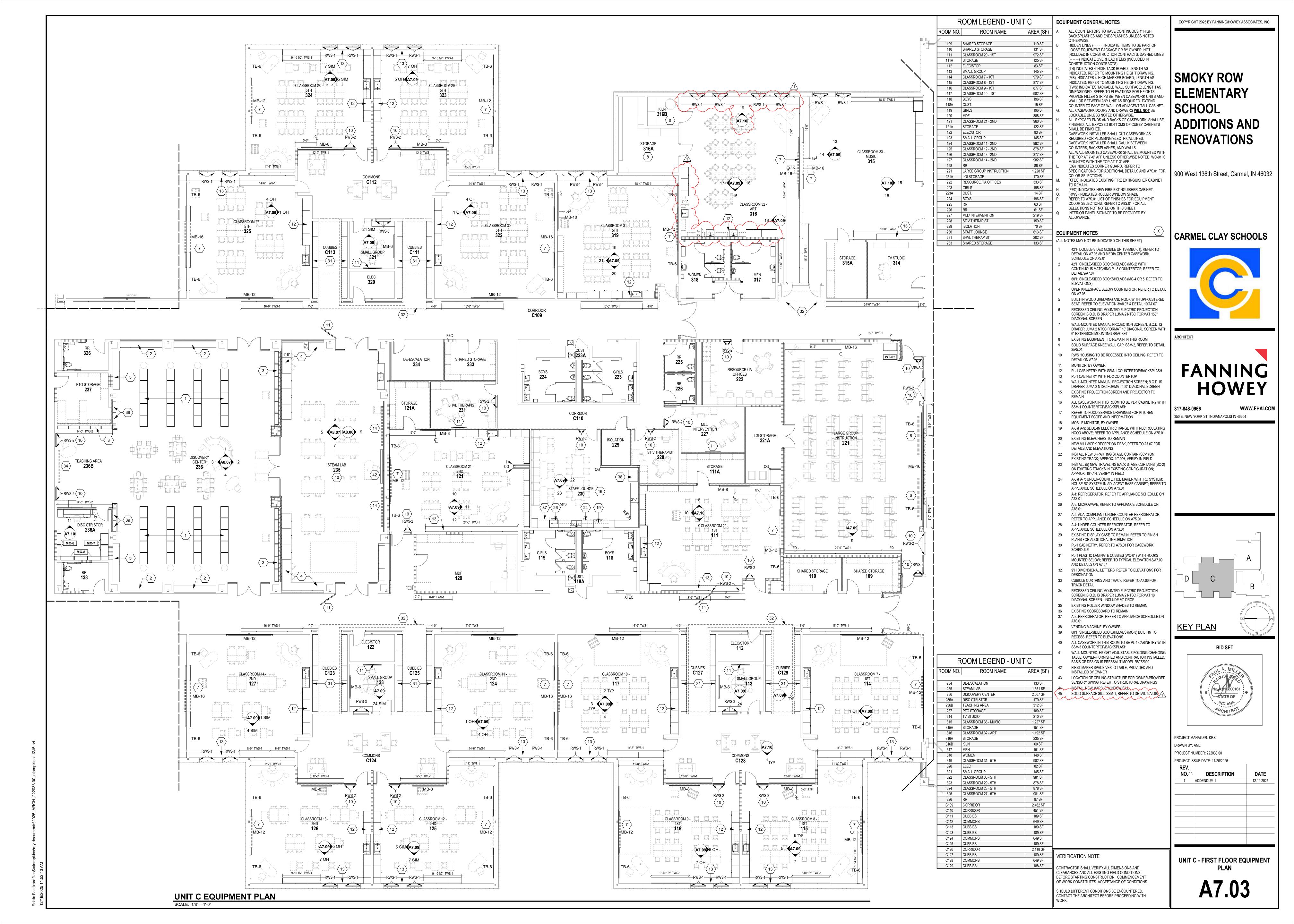
VERIFICATION NOTE

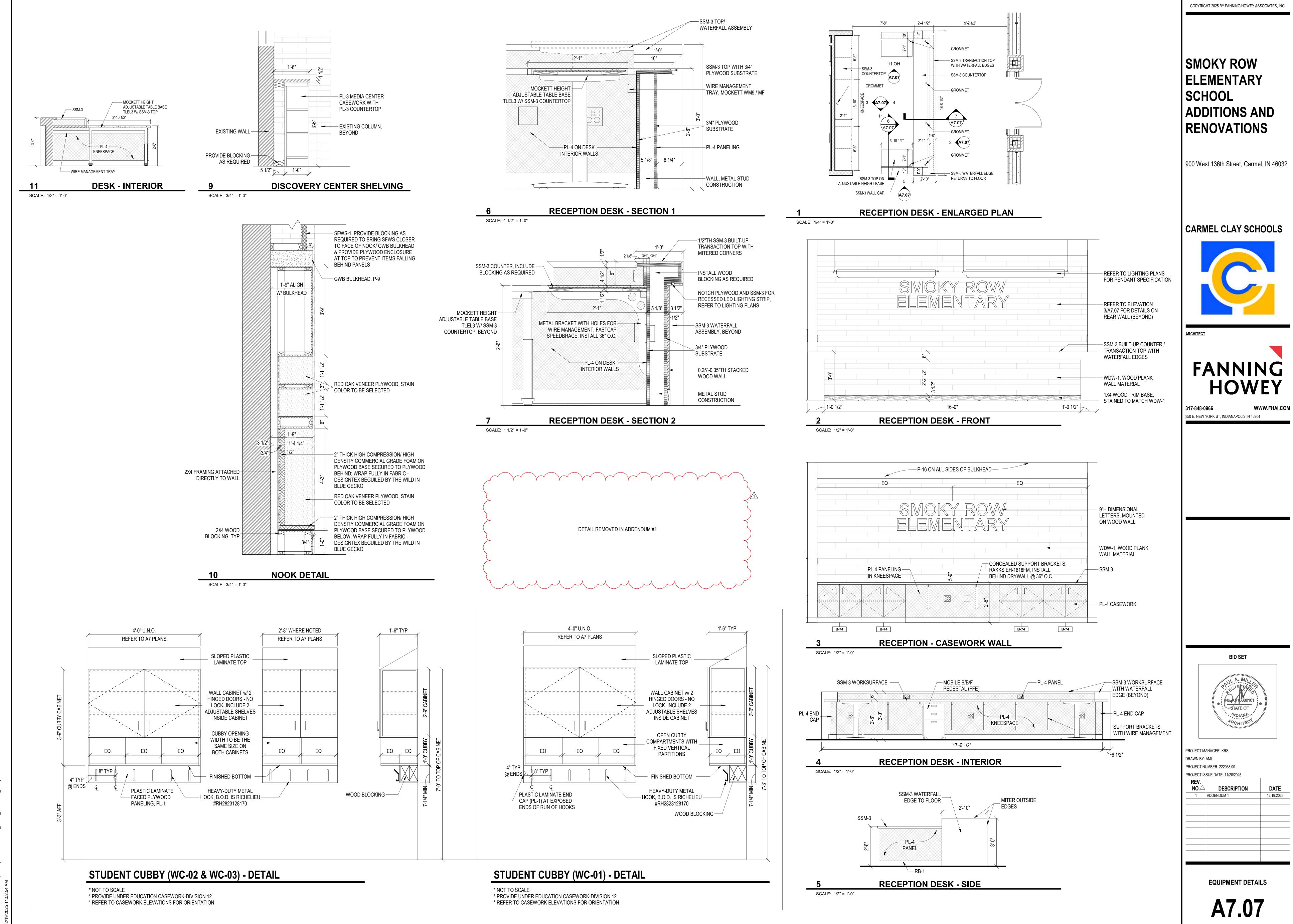
CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

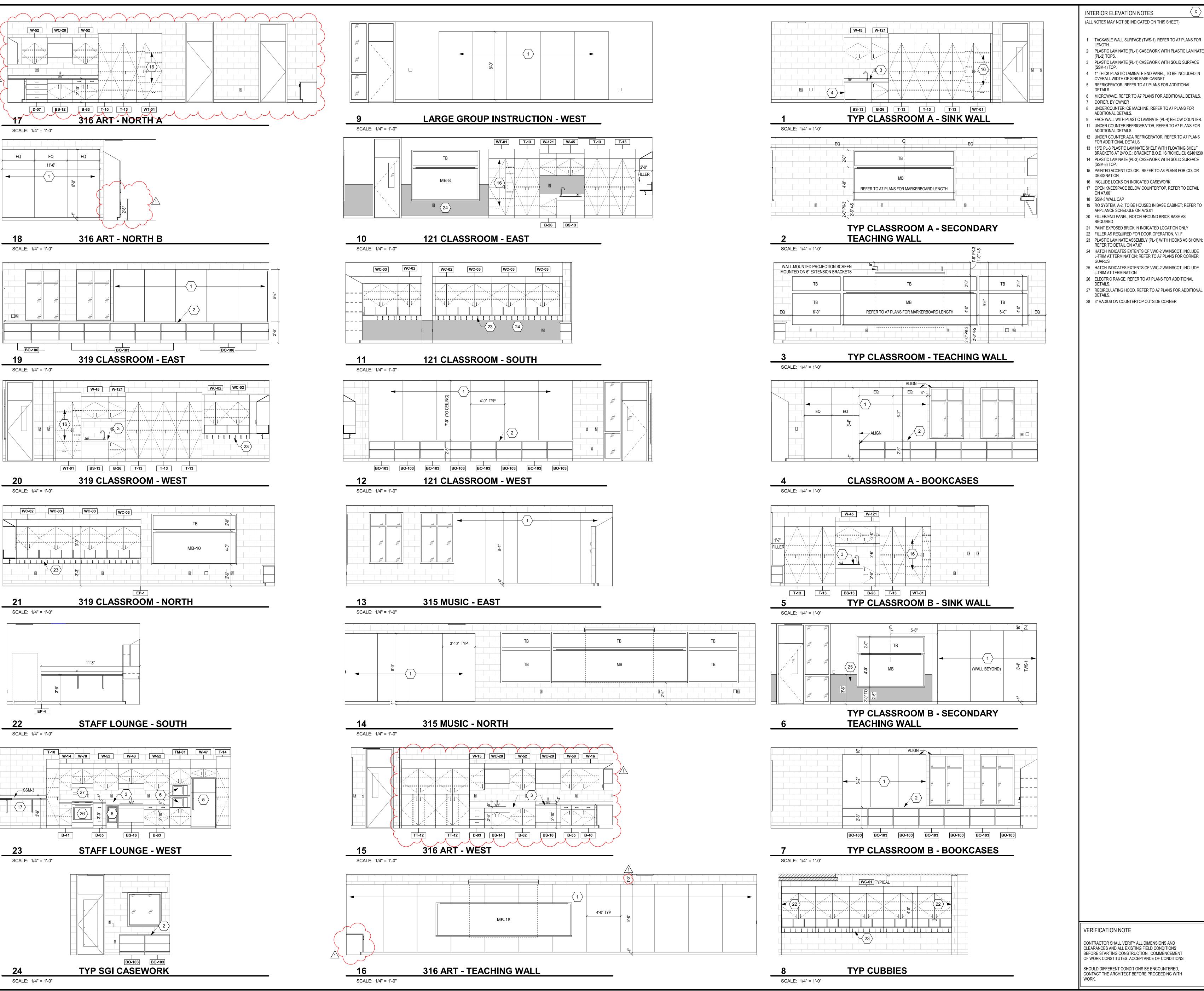
UNIT A - FIRST FLOOR EQUIPMENT PLAN

A7.01





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INTERIOR ELEVATION NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

TACKABLE WALL SURFACE (TWS-1), REFER TO A7 PLANS FOR

PLASTIC LAMINATE (PL-1) CASEWORK WITH PLASTIC LAMINATE

PLASTIC LAMINATE (PL-1) CASEWORK WITH SOLID SURFACE **SMOKY ROW**

1" THICK PLASTIC LAMINATE END PANEL, TO BE INCLUDED IN OVERALL WIDTH OF SINK BASE CABINET REFRIGERATOR, REFER TO A7 PLANS FOR ADDITIONAL

MICROWAVE, REFER TO A7 PLANS FOR ADDITIONAL DETAILS COPIER, BY OWNER

FACE WALL WITH PLASTIC LAMINATE (PL-4) BELOW COUNTER UNDER COUNTER REFRIGERATOR, REFER TO A7 PLANS FOR ADDITIONAL DETAILS. UNDER COUNTER ADA REFRIGERATOR, REFER TO A7 PLANS

BRACKETS AT 24"O.C.; BRACKET B.O.D. IS RICHELIEU 62401230 14 PLASTIC LAMINATE (PL-3) CASEWORK WITH SOLID SURFACE (SSM-3) TOP.

15 PAINTED ACCENT COLOR. REFER TO A8 PLANS FOR COLOR DESIGNATION 16 INCLUDE LOCKS ON INDICATED CASEWORK

17 OPEN KNEESPACE BELOW COUNTERTOP, REFER TO DETAIL ON A7.06 18 SSM-3 WALL CAP

19 RO SYSTEM, A-2, TO BE HOUSED IN BASE CABINET; REFER TO APPLIANCE SCHEDULE ON A7S.01 20 FILLER/END PANEL, NOTCH AROUND BRICK BASE AS

21 PAINT EXPOSED BRICK IN INDICATED LOCATION ONLY 22 FILLER AS REQUIRED FOR DOOR OPERATION, V.I.F.

REFER TO DETAIL ON A7.07 24 HATCH INDICATES EXTENTS OF VWC-2 WAINSCOT, INCLUDE J-TRIM AT TERMINATION; REFER TO A7 PLANS FOR CORNER

25 HATCH INDICATES EXTENTS OF VWC-2 WAINSCOT, INCLUDE J-TRIM AT TERMINATION 26 ELECTRIC RANGE, REFER TO A7 PLANS FOR ADDITIONAL

27 RECIRCULATING HOOD, REFER TO A7 PLANS FOR ADDITIONAL 28 3" RADIUS ON COUNTERTOP OUTSIDE CORNER

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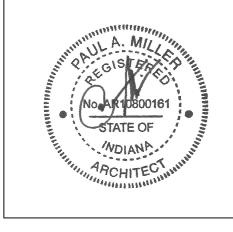
SCHOOL



ARCHITECT



350 E. NEW YORK ST, INDIANAPOLIS IN 46204



PROJECT MANAGER: KRS PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.19.2025

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CASEWORK & EQUIPMENT ELEVATIONS

A7.09



INTERIOR ELEVATION NOTES X

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

- TACKABLE WALL SURFACE (TWS-1), REFER TO A7 PLANS FOR LENGTH.
 PLASTIC LAMINATE (PL-1) CASEWORK WITH PLASTIC LAMINATE
 - (PL-2) TOPS.

 PLASTIC LAMINATE (PL-1) CASEWORK WITH SOLID SURFACE
 - 3 PLASTIC LAMINATE (PL-1) CASEWORK WITH SOLID SURFACE (SSM-1) TOP.
 - 1" THICK PLASTIC LAMINATE END PANEL, TO BE INCLUDED IN OVERALL WIDTH OF SINK BASE CABINET
 REFRIGERATOR, REFER TO A7 PLANS FOR ADDITIONAL
 - DETAILS.

 6 MICROWAVE, REFER TO A7 PLANS FOR ADDITIONAL DETAILS.

 7 COPIER, BY OWNER

8 UNDERCOUNTER ICE MACHINE, REFER TO A7 PLANS FOR

- ADDITIONAL DETAILS.

 FACE WALL WITH PLASTIC LAMINATE (PL-4) BELOW COUNTER.

 UNDER COUNTER REFRIGERATOR, REFER TO A7 PLANS FOR ADDITIONAL DETAILS.
- FOR ADDITIONAL DETAILS.

 13 15"D PL-3 PLASTIC LAMINATE SHELF WITH FLOATING SHELF BRACKETS AT 24"O.C.; BRACKET B.O.D. IS RICHELIEU 62401230

 14 PLASTIC LAMINATE (PL-3) CASEWORK WITH SOLID SURFACE

UNDER COUNTER ADA REFRIGERATOR, REFER TO A7 PLANS

- (SSM-3) TOP.15 PAINTED ACCENT COLOR. REFER TO A8 PLANS FOR COLOR DESIGNATION
- 16 INCLUDE LOCKS ON INDICATED CASEWORK
 17 OPEN KNEESPACE BELOW COUNTERTOP, REFER TO DETAIL ON A7.06
- 18 SSM-3 WALL CAP
 19 RO SYSTEM, A-2, TO BE HOUSED IN BASE CABINET; REFER TO APPLIANCE SCHEDULE ON A7S.01
- 20 FILLER/END PANEL, NOTCH AROUND BRICK BASE AS REQUIRED
- 21 PAINT EXPOSED BRICK IN INDICATED LOCATION ONLY
 22 FILLER AS REQUIRED FOR DOOR OPERATION, V.I.F.
 23 PLASTIC LAMINATE ASSEMBLY (PL-1) WITH HOOKS AS SHOWN;
- REFER TO DETAIL ON A7.07

 24 HATCH INDICATES EXTENTS OF VWC-2 WAINSCOT, INCLUDE J-TRIM AT TERMINATION; REFER TO A7 PLANS FOR CORNER
- GUARDS

 25 HATCH INDICATES EXTENTS OF VWC-2 WAINSCOT, INCLUDE
 J-TRIM AT TERMINATION
- 26 ELECTRIC RANGE, REFER TO A7 PLANS FOR ADDITIONAL DETAILS.
- 27 RECIRCULATING HOOD, REFER TO A7 PLANS FOR ADDITIONAL DETAILS.
 28 3" RADIUS ON COUNTERTOP OUTSIDE CORNER

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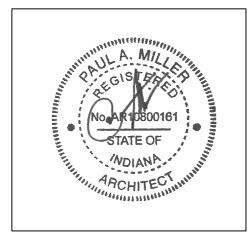


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BID SET



PROJECT MANAGER: KRS
DRAWN BY: AML
PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

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REV. NO.△	DESCRIPTION	DATE
1	ADDENDUM 1	12.19.2025

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SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

CASEWORK & EQUIPMENT ELEVATIONS

47.10

RESIDENTIAL EQUIPMENT SCHEDULE

ITEM NO.	ITEM DESCRIPTION	ELEC. FIELD CONNECTION	MECH. FIELD CONNECTION				
(A-1)	REFRIGERATOR WITH TOP FREEZER 18.3 CU.FT. REVERSIBLE HINGES DOES NOT INCLUDE ICE MAKER ADA-COMPLIANT AND ENERGY STAR CERTIFIED BASIS OF DESIGN IS FRIGIDAIRE FFHT1835VS 66.375"H x 30"W x 30.375"D COLOR: STAINLESS STEEL	15AMPS					
(A-2)	REFRIGERATOR WITH BOTTOM FREEZER 28.8 CU.FT. DOUBLE DOOR FRIDGE INCLUDES ICE MAKER ENERGY STAR CERTIFIED BASIS OF DESIGN IS FRIGIDAIRE FRFN2823AS 70"H x 36"W x 35.75"D COLOR: STAINLESS STEEL	15AMPS	X				
(A-3)	MICROWAVE 2.0 CU.FT. EXTRA-LARGE TURNTABLE ELECTRONIC DIGITAL DISPLAY WITH CLOCK ENERGY STAR QUALIFIED BASIS OF DESIGN IS GE JES2051SNSS 24.125"W x 13.625"H X 19.25"D COLOR: STAINLESS STEEL	1200W					
(A-4)	UNDER-COUNTER REFRIGERATOR - STANDARD HEIGHT • 5.6 CU.FT. • SMALL FREEZER AREA • REVERSIBLE HINGES • ENERGY STAR QUALIFIED • BASIS OF DESIGN IS GE GCE06GSHSB • 34.125"H x 23.625"W x 23.75"D • COLOR: STAINLESS STEEL						
(A-5)	UNDER-COUNTER REFRIGERATOR - ADA HEIGHT 3.87 CU.FT. REVERSIBLE HINGES INCLUDES VISIBLE TEMPERATURE GAUGE ENERGY STAR QUALIFIED BASIS OF DESIGN IS HOSHIZAKI HR24C 31.5"H x 23.375"W x 26.5"D (INCLUDING HANDLE) COLOR: STAINLESS STEEL	115V/60/1					
(A-6)	UNDER-COUNTER ICE MAKER - ADA HEIGHT • 55LB MAX ICE PRODUCTION PER 24 HOURS • INCLUDES 22LB STORAGE CAPACITY • AIR-COOLED ADA-COMPLIANT ICE MAKER • INCLUDE DOOR REVERSAL PART • BASIS OF DESIGN IS HOSHIZAKI AM-50BAJ-AD • 31.5"H x 14.875"W x 22.625"D • COLOR: STAINLESS STEEL						
(A-7)	REVERSE OSMOSIS SYSTEM FOR ICE MAKER INTEGRATED NON-ELECTRIC PUMP FILTERS WATER TO AID IN ICE MAKER OPERATION QUICK CHANGE CARTRIDGE SYSTEM BASIS OF DESIGN IS 3M WATER FILTRATION PRODUCT SGLP-RO OVERALL SIZE: 15.375"H x 9.375"W x 12.25"D COLOR: STAINLESS STEEL		X				
(A-8)	SLIDE-IN ELECTRIC RANGE 5.3CU FT SELF-CLEANING SLIDE IN ELECTRIC RANGE FOUR GLASS-TOP ELECTRIC BURNERS ADA-COMPLIANT KNOBS AT FRONT OF COOKTOP BOTTOM STORAGE DRAWER BASIS OF DESIGN IS GE JS645SLSS 36"H x 29.875"W x 25.875"D COLOR: STAINLESS STEEL	208V OR 240V 40AMPS					
(A-9)	RECIRCULATING HOOD UNDER-CABINET, RECIRCULATING DUCTLESS HOOD ADA-COMPLIANT CONTROLS BASIS OF DESIGN IS BROAN BXT130SS OVERALL SIZE: 6"H x 29.875"W x 18"D COLOR: STAINLESS STEEL	120V/60Hz					
(A-10)	WASHER HIGH-EFFICIENCY, TOP-LOADING ELECTRIC WASHER EXTRA-LARGE UNIT, 5.2CU FT REMOVABLE 2-PIECE AGITATOR INCLUDE NEW DRAIN, COLD WATER SUPPLY, AND HOT WATER SUPPLY HOSES BASIS OF DESIGN IS WHIRLPOOL WTW6157PW OVERALL SIZE: 27.375"W x 28"D x 42"H OVERALL COLOR: WHITE	120V/60Hz	·				
(A-11)	DRYER • VENTED ELECTRIC DRYER WITH STEAM CYCLE • 7CUFT • BASIS OF DESIGN IS WHIRLPOOL WED6150PW • OVERALL SIZE: 29"W x 28.375"D x 40.5"H OVERALL • COLOR: WHITE						

	CASEWORK SCHEDULE					
TYPE	NO.	W	SIZE D	Н	DESCRIPTION	
В	10	<varies></varies>	<varies></varies>	<varies></varies>	BASE UNIT WITH ONE ADJUSTABLE SHELF AND ONE HINGED DOOR.	
В	15	2'-9"	2'-6"	2'-10"	BASE UNIT WITH TWO DRAWERS, ONE ADJUSTABLE SHELF AND TWO HINGED DOORS.	
B B	18 26	1'-9" 2'-0"	2'-0" 2'-0"	2'-6" 2'-6"	BASE UNIT WITH ONE ADJUSTABLE SHELF AND ONE HINGED DOOR. BASE UNIT WITH ONE ADJUSTABLE SHELF AND ONE HINGED DOOR.	
B B	27 31	2'-0" 3'-0"	2'-0" 2'-0"	2'-10" 2'-10"	BASE UNIT WITH TWO ADJUSTABLE SHELVES AND ONE HINGED DOOR. BASE UNIT WITH TWO ADJUSTABLE SHELVES AND TWO HINGED DOORS.	
В	38 40	2'-6" 1'-6"	2'-0" 2'-0"	3'-0" 2'-10"	BASE UNIT WITH TWO DRAWERS, ONE ADJUSTABLE SHELF AND TWO HINGED DOORS. BASE UNIT WITH ONE DRAWER, ONE ADJUSTABLE SHELF AND ONE HINGED DOOR.	
В	41	1'-6"	2'-0"	3'-0"	BASE UNIT WITH ONE DRAWER, ONE ADJUSTABLE SHELF AND ONE HINGED DOOR.	
В	43 47	1'-6" 1'-9"	2'-6" 2'-0"	2'-10" 3'-0"	BASE UNIT WITH ONE DRAWER, ONE ADJUSTABLE SHELF AND ONE HINGED DOOR. BASE UNIT WITH ONE DRAWER, ONE ADJUSTABLE SHELF AND ONE HINGED DOOR.	
B B	52 55	2'-0" 2'-6"	2'-0" 2'-0"	2'-10" 2'-10"	BASE UNIT WITH ONE DRAWER, ONE ADJUSTABLE SHELF AND ONE HINGED DOOR. BASE UNIT WITH TWO DRAWERS AND TWO HINGED DOORS. DO NOT INCLUDE SHELVES.	
В	63	3'-0"	2'-0"	2'-10"	BASE UNIT WITH TWO DRAWERS, ONE ADJUSTABLE SHELF AND TWO HINGED DOORS.	
B B	67 74	2'-6" 2'-9"	2'-0" 2'-0"	2'-10" 2'-6"	BASE UNIT WITH TWO ADJUSTABLE SHELVES AND TWO HINGED DOORS. BASE UNIT WITH ONE ADJUSTABLE SHELF AND TWO HINGED DOORS.	
B B	75 80	2'-9" 3'-0"	2'-0" 2'-0"	2'-10" 2'-6"	BASE UNIT WITH ONE ADJUSTABLE SHELF AND TWO HINGED DOORS. BASE UNIT WITH ONE ADJUSTABLE SHELF AND TWO HINGED DOORS. INCLUDE CUTOUT FOR TECH/ELEC, COORDINATE IN FIELD	
В	82	3'-0" 2'-6"	2'-0" 1'-1"	2'-6" 2'-10"	BASE UNIT WITH ONE ADJUSTABLE SHELF AND TWO HINGED DOORS.	
BO BO	101 102	3'-0"	1'-11"	2'-6"	OPEN BASE UNIT WITH ONE ADJUSTABLE SHELF. OPEN BASE UNIT WITH ONE ADJUSTABLE SHELF.	
BO BO	103 104	3'-0" 2'-9"	1'-5" 1'-5"	2'-6" 2'-6"	OPEN BASE UNIT WITH ONE ADJUSTABLE SHELF. OPEN BASE UNIT WITH ONE ADJUSTABLE SHELF.	
BO BO	105 106	3'-6" 3'-3"	1'-5" 1'-5"	2'-6" 2'-6"	OPEN BASE UNIT WITH ONE VERTICAL DIVIDER AND TWO ADJUSTABLE SHELVES. OPEN BASE UNIT WITH ONE ADJUSTABLE SHELF.	
ВО	110	2'-9"	1'-1"	2'-10"	OPEN BASE UNIT WITH ONE ADJUSTABLE SHELF.	
BS BS	10 11	3'-0" 3'-6"	2'-0" 2'-0"	2'-6" 2'-2"	SINK BASE UNIT WITH TWO HINGED DOORS. SINK BASE UNIT WITH TWO HINGED DOORS AND ONE BLANK DRAWER PANEL.	
BS BS	12 13	3'-0" 3'-3"	2'-0" 2'-0"	2'-10" 2'-0"	SINK BASE UNIT WITH TWO HINGED DOORS AND ONE BLANK DRAWER PANEL. CHILD ADA SINK BASE UNIT WITH A REMOVABLE ACCESS PANEL. WHERE CABINET IS INDICATED WITH END PANEL, INCLUDE END	
					PANEL IN WIDTH OF CABINET.	
BS BS	14 15	3'-0" 3'-0"	2'-0" /1	2'-6" 2'-0"	SINK BASE UNIT WITH TWO HINGED DOORS AND ONE BLANK DRAWER PANEL. CHILD ADA SINK BASE UNIT WITH A REMOVABLE ACCESS PANEL.	
BS D	16 02	3'-0" 1'-6"	2'-0" 2'-0"	2'-0" 2'-10"	ADULT ADA SINK BASE UNIT WITH A REMOVABLE ACCESS PANEL. DRAWER UNIT WITH THREE EQUAL DRAWERS. 6-1/2 INCHES DEEP INSIDE.	
D	03	1'-9"	2'-0"	2'-6"	DRAWER UNIT WITH THREE EQUAL DRAWERS. 5-1/2 INCHES DEEP INSIDE.	
D D	04 05	3'-0" 1'-6"	2'-0" 2'-0"	2'-10" 3'-0"	DRAWER UNIT WITH THREE EQUAL DRAWERS. 6-1/2 INCHES DEEP INSIDE. DRAWER UNIT WITH THREE EQUAL DRAWERS. 7-1/2 INCHES DEEP INSIDE.	
D D	06 07	2'-0" 2'-6"	2'-0" 2'-0"	2'-10" 2'-10"	DRAWER UNIT WITH FOUR EQUAL DRAWERS. 4-1/2 INCHES DEEP INSIDE. DRAWER UNIT WITH FOUR EQUAL DRAWERS. 4-1/2 INCHES DEEP INSIDE.	
DF	2	1'-4"	2'-0"	2'-10"	FILE DRAWER UNIT WITH FOLLOWERS, TWO EQUAL DRAWERS AND HANGER CHANNEL INTEGRAL WITH DRAWER SIDES FOR BOTH LEGAL AND LETTER FILING. INCLUDE LOCKS ON THIS CABINET.	
DF	3	1'-3"	2'-6"	2'-10"	FILE DRAWER UNIT WITH FOLLOWERS, TWO EQUAL DRAWERS (INSIDE SIDES TO BE 9-3/4 INCHES HIGH), AND HANGER CHANNEL INTEGRAL WITH DRAWER SIDES FOR BOTH LEGAL AND LETTER FILING.	
EP	1	3/4"	1'-5"	2'-9"	3/4" THICK END PANEL TO COVER DISTANCE FROM FLOOR TO BOTTOM OF CUBBY CABINET	
EP EP	3	3/4"	2'-0" 2'-0"	7'-0" 2'-10"	3/4" THICK END PANEL TO COVER SIDES OF REFRIGERATOR 3/4" THICK END PANEL TO COVER DISTANCE FROM FLOOR TO BOTTOM OF COUNTERTOP	
EP EP	4 5	3/4" 3/4"	2'-0" 2'-0"	3'-6" 2'-6"	3/4" THICK END PANEL TO COVER DISTANCE FROM FLOOR TO BOTTOM OF COUNTERTOP 3/4" THICK END PANEL TO COVER DISTANCE FROM FLOOR TO BOTTOM OF COUNTERTOP	
FX	01	3'-0"	1'-0 3/4"	2'-6"	MAILBOX UNIT WITH 33 OPENINGS, REFER TO DETAIL ON A7.06	
T	10 11	1'-6" 2'-6"	2'-0" 2'-0"	7'-0" 7'-0"	TALL UNIT WITH FIVE ADJUSTABLE SHELVES AND ONE HINGED DOOR. INCLUDE SLOPED TOP. TALL UNIT WITH FIVE ADJUSTABLE SHELVES AND TWO HINGED DOORS. INCLUDE SLOPED TOP.	
T	12 13	2'-9" 3'-0"	2'-0" 2'-0"	7'-0" 7'-0"	TALL UNIT WITH FIVE ADJUSTABLE SHELVES, TWO HINGED DOORS, AND SLOPED TOP. TALL UNIT WITH FIVE ADJUSTABLE SHELVES, TWO HINGED DOORS, AND SLOPED TOP.	
T	14	1'-6"	2'-6"	7'-0"	TALL UNIT WITH FIVE ADJUSTABLE SHELVES AND ONE HINGED DOOR.	
T	16 18	3'-9" 3'-3"	2'-0" 2'-6"	7'-0" 7'-0"	TALL UNIT WITH FIVE ADJUSTABLE SHELVES AND TWO HINGED DOORS. INCLUDE SLOPED TOP. TALL UNIT WITH FIVE ADJUSTABLE SHELVES AND TWO HINGED DOORS. INCLUDE SLOPED TOP.	
T	30	2'-6" 3'-0"	2'-3"	7'-0"	TALL DOOR/DRAWER UNIT WITH A FIXED SHELF ABOVE DRAWERS. PROVIDE THREE ADJUSTABLE SHELVES, REMOVABLE COAT ROD, AND TWO HINGED DOORS AT UPPER CABINET AND THREE DRAWERS BELOW WITH BOTTOM DRAWER AT GREATER DEPTH. INCLUDE LOCKS ON THIS CABINET. TALL UNIT WITH FIVE ADJUSTABLE SHELVES AND TWO HINGED DOORS.	
TM	511 01	2'-6"	2'-0"	7'-0"	TALL SPLIT DOOR STORAGE WITH ONE FIXED SHELF. AT THE UPPER CABINET, PROVIDE THREE ADJUSTABLE SHELVES AND TWO HINGED DOORS. AT THE LOWER CABINET, PROVIDE ONE ADJUSTABLE SHELF AND TWO HINGED DOORS. REFER TO DETAIL 18/A7.10.	
ТО	02	3'-0"	1'-5"	7'-0"	OPEN TALL UNIT WITH FIVE ADJUSTABLE SHELVES. INCLUDE SLOPED TOP.	
TO TO	03 05	1'-6" 3'-6"	1'-2" 1'-5"	7'-0" 7'-0"	OPEN TALL UNIT WITH FIVE ADJUSTABLE SHELVES. INCLUDE SLOPED TOP. OPEN TALL UNIT WITH FIVE ADJUSTABLE SHELVES, INCLUDE SLOPED TOP.	
TO TO	06 111	2'-6" 2'-6"	1'-2" 1'-5"	7'-0" 7'-0"	OPEN TALL UNIT WITH FIVE ADJUSTABLE SHELVES. INCLUDE SLOPED TOP. OPEN TALL UNIT WITH FIVE ADJUSTABLE SHELVES. INCLUDE SLOPED TOP.	
TS	1	3'-0"	2'-6"	7'-0"	TALL SOUND RACK CABINET WITH ONE FIXED SHELF. AT THE UPPER CABINET, PROVIDE THREE ADJUSTABLE SHELVES AND TWO	
ТТ	10	4'-0"	2'-6"	7'-0"	HINGED DOORS. AT THE LOWER CABINET, PROVIDE TWO HINGED DOORS. OPEN TOE KICK. REFER TO DETAIL ON A7.06 TOTE TRAY UNIT WITH TWO VERTICAL DIVIDERS TWO HINGED DOORS. FLAT TOP.	
TT W	12 11	4'-0" 1'-9"	2'-0" 1'-2"	7'-0" 2'-0"	TOTE TRAY UNIT WITH TWO VERTICAL DIVIDERS TWO HINGED DOORS. INCLUDE SLOPED TOP. WALL UNIT WITH ONE ADJUSTABLE SHELF AND ONE HINGED DOOR. INCLUDE SLOPED TOP.	
W	13	1'-3"	1'-2"	2'-6"	WALL UNIT WITH ONE ADJUSTABLE SHELVES, ONE HINGED DOOR AND SLOPED TOP.	
W	14 15	1'-9"	1'-2"	2'-6"	WALL UNIT WITH ONE ADJUSTABLE SHELF, ONE HINGED DOOR, AND SLOPED TOP. WALL UNIT WITH ONE ADJUSTABLE SHELF AND ONE, HINGED DOOR. INCLUDE SLOPED TOP.	
W	16 43	2'-0" 3'-0"	1'-2"	2'-6" 1'-9"	WALL UNIT WITH ONE ADJUSTABLE SHELF, ONE HINGED DOOR, AND SLOPED TOP. WALL UNIT WITH ONE ADJUSTABLE SHELF, TWO HINGED DOORS, AND SLOPED TOP.	
W	44 45	3'-0" 3'-3"	1'-2" 1'-2"	2'-0" 2'-0"	WALL UNIT WITH ONE ADJUSTABLE SHELF, TWO HINGED DOORS, AND SLOPED TOP. WALL UNIT WITH ONE ADJUSTABLE SHELF AND TWO HINGED DOORS	
W	46	3'-6"	1'-2"	2'-0"	WALL UNIT WITH ONE VERTICAL DIVIDER, TWO ADJUSTABLE SHELVES AND TWO HINGED DOORS. INCLUDE SLOPED TOP.	
W	47 50	3'-0" 2'-6"	2'-0" 1'-2"	1'-0" 2'-6"	WALL UNIT WITH TWO HINGED DOORS AND SLOPED TOP. WALL UNIT WITH TWO ADJUSTABLE SHELVES, TWO HINGED DOORS, AND SLOPED TOP.	
W	52 56	3'-0" 4'-0"	1'-2" 1'-2"	2'-6" 2'-6"	WALL UNIT WITH ONE ADJUSTABLE SHELF, TWO HINGED DOORS, AND SLOPED TOP. WALL UNIT WITH ONE VERTICAL DIVIDER, TWO ADJUSTABLE SHELVES AND TWO HINGED DOORS. INCLUDE SLOPED TOP.	
W	70	2'-6"	1'-2"	1'-9"	WALL UNIT WITH ONE ADJUSTABLE SHELF AND TWO HINGED DOORS. INCLUDE SLOPED TOP.	
W	88 121	2'-9" 2'-0"	1'-2" 1'-2"	2'-6" 2'-0"	WALL UNIT WITH TWO ADJUSTABLE SHELVES, TWO HINGED DOORS, AND SLOPED TOP. WALL UNIT WITH ONE ADJUSTABLE SHELF AND ONE HINGED DOOR. INCLUDE SLOPED TOP.	
	01	4'-0"	1'-6"	3'-0"	WALL UNIT WITH UPPER COMPARTMENT THAT INCLUDES A CENTER DIVIDER WITH TWO ADJUSTABLE SHELVES ON EACH SIDE AND TWO HINGED DOORS; LOWER COMPARTMENT INCLUDES 3 OPEN CUBBIES BELOW; INCLUDE SLOPED TOP AND HOOK ASSEMBLY. REFER TO DETAIL ON A7.07.	
WC WC	02	2'-8" 4'-0"	1'-3"	2'-9"	WALL UNIT WITH ONE ADJUSTABLE SHELF AND TWO HINGED DOORS ON UPPER COMPARTMENT; 2 OPEN CUBBIES BELOW; INCLUDE SLOPED TOP AND HOOK ASSEMBLY. REFER TO DETAIL ON A7.07. WALL UNIT WITH UPPER COMPARTMENT THAT INCLUDES A CENTER DIVIDER WITH TWO ADJUSTABLE SHELVES ON EACH SIDE AND	
WDT	6	1'-6"	2'-0"	7'-0"	TWO HINGED DOORS; LOWER COMPARTMENT INCLUDES 3 OPEN CUBBIES BELOW; INCLUDE SLOPED TOP AND HOOK ASSEMBLY. REFER TO DETAIL ON A7.07. TALL UNIT WITH FIVE ADJUSTABLE SHELVES AND ONE HINGED DOOR; INCLUDE REMOVABLE COAT ROD AND MIRROR MOUNTED TO	
1		2'-6"	1'-2"	1'-4"	BACKSIDE OF DOOR. MICROWAVE CABINET WITH 2 UPPER DOORS AND 22"D OPEN SHELF BELOW. INCLUDE SLOPED TOP AND CUTOUT FOR OUTLET.	
WO	20 01	3'-0" 3'-0"	1'-2" 2'-0"	7'-9" \ 1	OPEN WALL UNIT WITH SLOPED TOP. TALL TEACHER WARDROBE/TECHNOLOGY CABINET WITH ONE FIXED VERTICAL PANEL; INCLUDE 5 ADJUSTABLE SHELVES.	
[[[. ,	REMOVABLE COAT ROD, MIRROR, AND FILING DRAWERS; INCLUDE SLOPED TOP PANEL. REFER TO DETAIL ON A7.06. INCLUDE LOCK ON THIS CABINET.	
WT	02	3'-6"	2'-0"	7'-0"	TALL TEACHER WARDROBE/TECHNOLOGY CABINET WITH ONE FIXED VERTICAL PANEL; INCLUDE 5 ADJUSTABLE SHELVES, REMOVABLE COAT ROD, MIRROR, AND FILING DRAWERS; INCLUDE SLOPED TOP PANEL. REFER TO DETAIL ON A7.06. INCLUDE LOCK ON THIS CABINET.	
WT	03	3'-0"	1'-9"	7'-0"	TALL TEACHER WARDROBE/TECHNOLOGY CABINET WITH ONE FIXED VERTICAL PANEL; INCLUDE 5 ADJUSTABLE SHELVES, REMOVABLE COAT ROD, MIRROR, AND FILING DRAWERS; INCLUDE SLOPED TOP PANEL. REFER TO DETAIL ON A7.06. INCLUDE LOCK ON THIS CABINET.	
WT	04	2'-6"	2'-0"	7'-0"	TALL WARDROBE CABINET WITH ONE FIXED VERTICAL PANEL; INCLUDE 5 ADJUSTABLE SHELVES, REMOVABLE COAT ROD, AND MIRROR. DO NOT INCLUDE FILING DRAWERS. INCLUDE SLOPED TOP PANEL. INCLUDE LOCK ON THIS CABINET.	

LIBRARY STACK SYSTEMS SCHEDULE					
			SIZE		
TYPE	NO. W D H		Н	DESCRIPTION	
MBC	1	3'-0"	2'-0"	3'-6"	DOUBLE-SIDED MOBILE BOOKCASE WITH FIXED CENTER DIVIDER AND 1 SHELF ON EACH SIDE.
MC	2	2'-8 1/2"	1'-0"	3'-6"	SINGLE-SIDED BOOKCASE WITH 2 ADJUSTABLE SHELVES.
MC	3	3'-0"	1'-0"	5'-0"	SINGLE-SIDED BOOKCASE WITH 3 ADJUSTABLE SHELVES.
MC	4	2'-10"	1'-0"	5'-0"	SINGLE-SIDED BOOKCASE WITH 3 ADJUSTABLE SHELVES.
MC	5	3'-3"	1'-0"	5'-0"	SINGLE-SIDED BOOKCASE WITH 3 ADJUSTABLE SHELVES.
MC	6	3'-0"	1'-0"	7'-0"	SINGLE-SIDED BOOKCASE WITH 5 ADJUSTABLE SHELVES AND SLOPED TOP.
MC	7	3'-0"	2'-0"	7'-0"	SINGLE-SIDED BOOKCASE WITH 5 ADJUSTABLE SHELVES AND SLOPED TOP.
МС	8	3'-6"	1'-0"	7'-0"	SINGLE-SIDED BOOKCASE WITH 5 ADJUSTABLE SHELVES AND SLOPED TOP.

LIST OF FINISHES

REFER TO A7 ARCH. DWG. SHEETS

EQUIPMENT MATERIALS

CORNER GUARDS

MATERIAL ABBREVIATION MATERIAL/MANUFACTURER **COLOR SELECTION** TO BE SELECTED / 2" LEGS X 48"H CS ACROVYN / SM-20

REFER TO MISCELLANEOUS FINISHES FOR J-TRIM INFORMATION

CUBICLE CURTAIN

MATERIAL/MANUFACTURER **COLOR SELECTION** MATERIAL ABBREVIATION MAYER FABRICS / SEAQUAL / SERENE TO BE SELECTED

DISCOVERY CENTER NOOK UPHOLSTERY

NOOK SEAT PADDING TO BE UPHOLSTERED IN DESIGNTEX BEGUILED BY THE WILD IN BLUE GECKO 3043-409

HP PLASTIC LAMINATE

MATERIAL/MANUFACTURER **COLOR SELECTION** HANDSPUN CHESTNUT 5036-38 PEARL SOAPSTONE 4866-38 PL-1 (CR CASEWORK) WILSONART PL-2 (CR BOOKCASE TOPS) WILSONART PL-3 (DC/STEAM) WILSONART CASUAL LINEN 4944-38 PL-4 (RECEPTION) NEVAMAR EASY ELEGANCE VA5002T

KICKPLATES

STAINLESS STEEL

MARKERBOARD

PLASTIC TOILET PARTITIONS/COMPARTMENTS **COLOR SELECTION** MATERIAL ABBREVIATION MATERIAL/MANUFACTURER REFER TO SPECIFICATIONS STANDARD COLOR TO BE SELECTED

SHOWER CURTAINS

SOLID SURFACE MATERIAL

MATERIAL ABBREVIATION MATERIAL/MANUFACTURER **COLOR SELECTION** SSM-1 (COUNTERTOPS) ARTISTA DUST SSM-2 (BRICK KNEE WALL CAPS) CORIAN / MEGANITE / LX HAUSYS GROUP 3, TO BE SELECTED STUCCO EARTH NE945 SSM-3 (RECEPTION COUNTERTOPS) STARON

STAGE CURTAIN

COLOR SELECTION MATERIAL ABBREVIATION MATERIAL/MANUFACTURER

REFER TO SPECIFICATIONS MATCH KM CHARISMA IN NAVY 1118 REFER TO SPECIFICATIONS BLACK

TACKABLE WALL SURFACE

MATERIAL ABBREVIATION MATERIAL/MANUFACTURER **COLOR SELECTION** TWS-1 (FIELD) MOMENTUM / SYMPHONY / PULSE SILENT SILVER AZ52590 TWS-2 (DISC ĆTR) CARNEGIE XOREL / STRIE 6423-840

TACKBOARDS MATERIAL/MANUFACTURER **COLOR SELECTION** MATERIAL ABBREVIATION

REFER TO SPECIFICATIONS MANUFACTURER'S STANDARD, TO BE SELECTED

MISCELLANEOUS FINISHES

J-TRIM AT VWC-2 WAINSCOT CAP TO BE CS ACROVYN WC75WTT, SAME COLOR/MANUFACTURER AS CORNER GUARDS

ROLLER WINDOW SHADES

MATERIAL ABBREVIATION MATERIAL/MANUFACTURER **COLOR SELECTION** REFER TO SPECIFICATIONS MFR STANDARD COLOR / 5% OPEN RWS-2 REFER TO SPECIFICATIONS MFR STANDARD COLOR / OPAQUE REFER TO SPECIFICATIONS MFR STANDARD COLOR / OPAQUE

EQUIPMENT MATERIAL & FINISH GEN. NOTES

- A. COLOR SELECTION OF ALL FINISHES FOR INTERIOR PLASTIC LAMINATE FACED ARCHITECTURAL CABINETS/ CUSTOM CASEWORK ITEMS
- ARE NOTED ON CASEWORK ELEVATIONS AND DETAIL DRAWINGS. EDUCATIONAL CASEWORK FINISHES ARE AS FOLLOWS (UNLESS OTHERWISE NOTED): HIGH PRESSURE PLASTIC LAMINATE COUNTERTOPS AND WORKSURFACES ARE TO BE PL-2, UNLESS OTHERWISE NOTED.
- 3MM AND 1MM PVC EDGES ON COUNTERTOPS AND WORKSURFACES ARE TO MATCH PL-2. PLASTIC LAMINATE SURFACES AT BOOKCASES, TYPICAL. HIGH PRESSURE PLASTIC LAMINATE CABINETS/VERTICAL SURFACES ARE TO BE PL-1 UNLESS OTHERWISE NOTED. INTERIOR
- MELAMINE TO BE WHITE. 3MM AND 1MM PVC EDGES ON CASEWORK ARE TO MATCH SPECIFIED LAMINATE.
- HANDLES TO BE SILVER METALLIC POWDERCOAT. HINGES TO BE SILVER METALLIC POWDERCOAT.
- GROMMETS TO BE SELECTED. SOLID SURFACE COUNTERTOPS AND WORKSURFACES ARE TO BE SSM-1, UNLESS OTHERWISE NOTED.
- 1. SOLID SURFACE COUNTERTOPS LOCATED AT SINK LOCATIONS, TYPICAL. C. LIBRARY STACK SYSTEMS TO BE PLASTIC LAMINATE WITH PLASTIC LAMINATE SHELVES, TYPICAL.

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SMOKY ROW ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

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CARMEL CLAY SCHOOLS

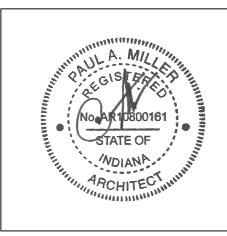


<u>ARCHITECT</u>



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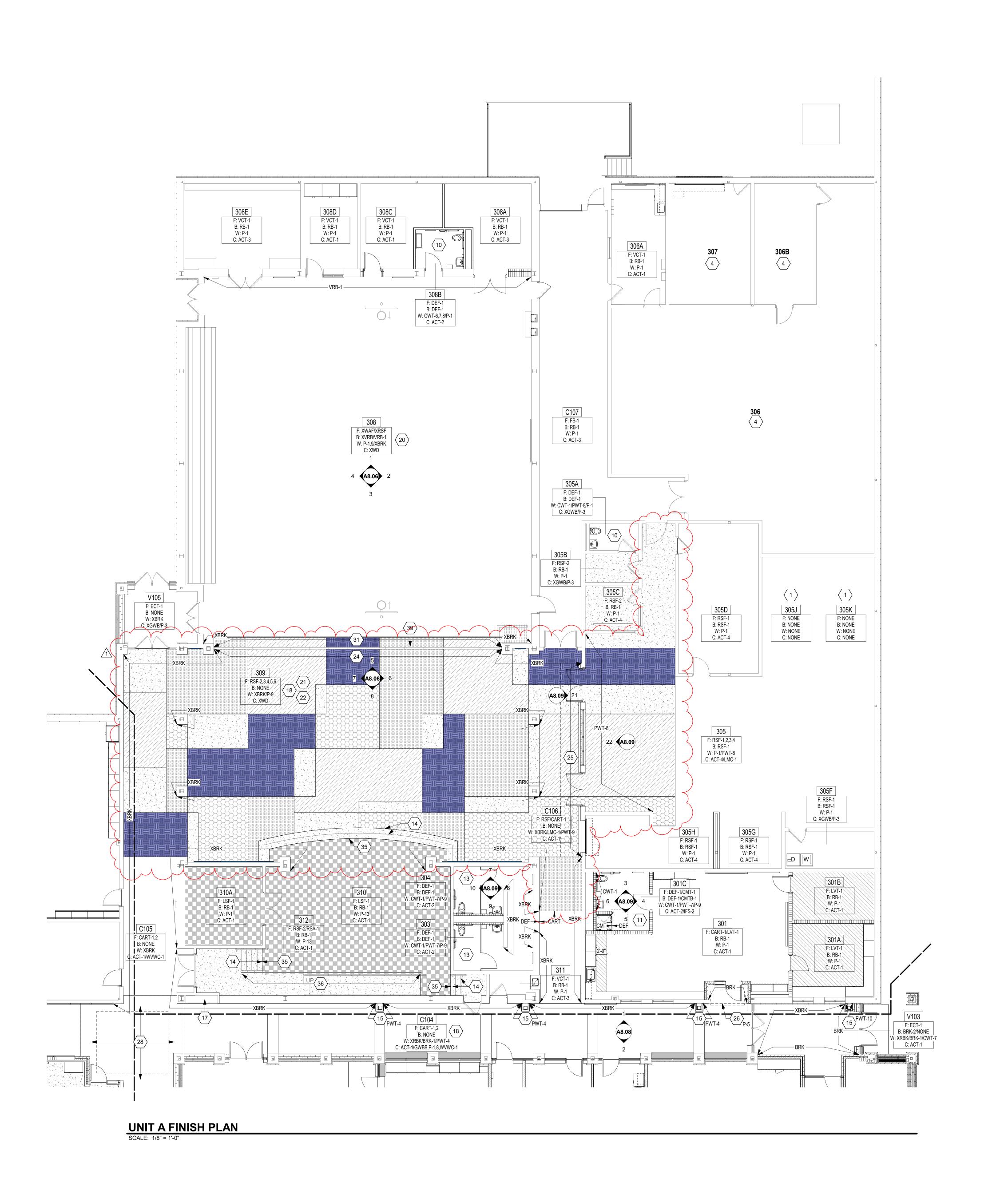


PROJECT MANAGER: KRS DRAWN BY: AML PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

REV. NO.△	DESCRIPTION	DATE
1	ADDENDUM 1	12.19.2025
		1

EDUCATIONAL CASEWORK SCHEDULES



ROOM LEGEND - UNIT A ROOM NO. **ROOM NAME** AREA (SF 301 CLASSROOM 34 - F.A.P. 301A SMALL GROUP 213 SF 301B DE-ESCALATION 139 SF 301C RESTROOM 109 SF 105 SF 1,688 SF 46 SF 305B DRESSING 54 SF 305C KITCHEN OFFICE 305D DRY STORAGE 422 SF Not Placed BREAKROOM 305H DISHWASHING 305K FREEZER 235 SF 306 BOILER ROOM 2,210 SF 306A CUSTODIAL OFFICE & BREAKROOM 231 SF 306B ELECTRICAL 307 OUTDOOR STORAGE 308 GYMNASIUM 308A STORAGE 308B FAMILY RR 308C PARKS OFFICE 308D P.E. OFFICE 308E STORAGE 309 CAFETORIUM 312 BACKSTAGE 313 STORAGE C105 CORRIDOR C106 CORRIDOR 642 SF C107 CORRIDOR 1,055 SF V105 VESTIBULE 151 SF

GENERAL FINISH NOTES

SEALANT SHALL BE APPLIED AT ALL MATERIAL TRANSITIONS, BACKSPLASHES, AND DOOR FRAMES. ALL LOCATIONS WHERE NEW FINISH ABUTS A DISSIMILAR

REMOVE AND REINSTALL EXISTING DEVICE FACEPLATES, SWITCH FACEPLATES, TECHNOLOGY FACEPLATES, AND EXISTING ITEMS TO REMAIN AND NEW FINISHES APPLIED AROUND INCLUDE BUT NOT LIMITED TO THERMOSTATS, AND FIRE EXTINGUISHER CABINETS (UNO).

PROVIDE RESILIENT TRANSITION STRIPS BETWEEN FLOOR FINISH TYPES PAINT ALL SIDES (VERT. AND HORZ.) OF BULKHEAD/SOFFIT COLOR INDICATED (UNO). EXISTING INTERIOR DOORS AND DOOR FRAMES ARE TO REMAIN UNLESS NOTED OTHERWISE. DOOR FRAMES TO

BE REPAINTED AND WOOD DOORS TO BE REPAIRED AS REQUIRED. PATCH AND REPAIR ALL HOLES AND IMPERFECTIONS AT AREAS THAT ARE TO RECEIVE NEW FINISHES. (XBRK) INDICATES EXISTING BRICK, TO REMAIN UNPAINTE UNLESS NOTED OTHERWISE. (BRK) INDICATES NEW BRICK, TO REMAIN UNPAINTED.

PRE-FABRICATED FREEZER/COOLER, NO FINISH ITEMS

ACCENT WALL. REFER TO 1/A8.10 FOR TILE DETAILS.

INSTALL CWT ON JAMB WITH SCHLUTER QUADEC TRIM ON

OUTSIDE CORNERS. CWT COLOR AS NOTED ON ADJACENT

INSTALL CWT ON WALLS. PAINT GWB BULKHEAD ABOVE. AND

INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO TEXT

NOTE FOR TILE & ACCENT PAINT COLORS. REFER TO 15/A8.09 FOR

TYPICAL ELEVATION, 1/A8.10 FOR TILE DETAILS, & 1-7/A9.04 FOR

INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO 16/A8.09

PAINT EXISTING GWB BULKHEAD AND INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO TEXT NOTE FOR ACCENT COLOR. REFER TO 17/A8.09 FOR TYPICAL ELEVATION & 4/A9.05 FOR

FOR TYPICAL ELEVATION AND 2/A9.05 FOR CEILING FEATURE

PAINT EXISTING GWB BULKHEAD, P-7, AND INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO 17/A8.09 FOR TYPICAL

INSTALL TILE ON ALL WALLS, REFER TO ELEVATIONS 11-14/A8.09 FOR TILE LOCATIONS AND DETAILS; REFER TO TILE TERMINATION, OUTSIDE CORNER, AND BASE DETAILS ON A8.10; PAINT CMU WALI

INSTALL FULL HEIGHT TILE ON ALL WALLS; INSTALL CWT-1 ON INDICATED WALL IN HORIZONTAL STRAIGHT LAY AND PWT-7 IN VERTICAL STRAIGHT LAY ON ALL OTHERS. REFER TO 5/A8.10 &

) INSTALL TILE ON ALL WALLS, REFER TO ELEVATIONS 19-20/A8.09 FOR TILE LOCATIONS AND DETAILS; REFER TO TILE TERMINATION OUTSIDE CORNER, AND BASE DETAILS ON A8.10; PAINT CMU WALI

INSTALL TILE ON ALL WALLS, REFER TO ELEVATIONS FOR TILE HEIGHTS AND LOCATIONS; REFER TO TILE TERMINATION,

OUTSIDE CORNER, AND BASE DETAILS ON A8.10; INCLUDE IFS

CEILING OVER SHOWER AND CMT/CMTB INSIDE SHOWER; PAINT

INSTALL FULL HEIGHT TILE WITH SCHLUTER QUADEC OUTSIDE

INSTALL TILE ON ALL WALLS, REFER TO ELEVATIONS 7-10/A8.09

FOR TILE LOCATIONS AND DETAILS; REFER TO TILE TERMINATION.

OUTSIDE CORNER, AND BASE DETAILS ON A8.10; PAINT CMU WAL

5 INSTALL FULL HEIGHT PWT (TILE COLORS NOTED ON PLAN) WITH

DECORATIVE FILM OVERLAY (DFO-1) INSTALLED ON GLAZING,

INSTALL CART-3 ON FLOOR OF EXISTING DISPLAY CASE AND TWS-7 ON ALL OTHER SURFACES. INSTALL NEW MATERIALS ON

O AR-AWT IN THIS ROOM, REFER TO ELEVATIONS FOR DESIGN AND

APPLY AFF-1 ON EXISTING LAMINATE ACCENT ON COLUMNS. REFER TO ELEVATIONS FOR ADDITIONAL INFORMATION

INSTALL FULL HEIGHT PWT-1 ON LAV WALL AND PARTIAL HEIGHT

CWT-6 ON ALL OTHER WALLS, WITH P-1 ABOVE TO CEILING; SEE

11-14/A8.09 FOR SIMILAR ELEVATIONS. INCLUDE SCHLUTER TRIM

AT TILE TERMINATIONS AND OUTSIDE CORNERS, REFER TO A8.09

RECOVER EXISTING OPERABLE WALL WITH NEW WALLCOVERING

INSTALL PWT-2 WAINSCOT WITH LMC-1 ASSEMBLY ABOVE, REFER

6 PAINT NEW GWB BULKHEAD AND INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO TEXT NOTE FOR ACCENT COLOR.

REFER TO 17/A8.09 FOR TYPICAL ELEVATION & 6/A9.05 FOR

INSTALL VWC-2 UP TO 42"AFF, WITH CS ACROVYN J-TRIM

9 INSTALL VWC-2 UP TO 48"AFF, WITH CS ACROVYN J-TRIM

WAINSCOT CAP; REFER TO A7 SERIES FOR CORNER GUARD (CG)

) INSTALL VWC-2 WAINSCOT ON INDICATED WALL(S), REFER TO

RECOVER EXISTING OPERABLE WALL WITH NEW ACOUSTICAL

CARPET WALLCOVERING AND WALL PROTECTION, REFER TO

2 ALIGN FLOORING TRANSITION TO WALL IN B121 AS SHOWN 3 INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO 16/A8.09

VWC-1; REFER TO ELEVATOIN 5/A8.06

28 INSTALL WVWC-1 WRAP ON GWB BULKHEADS

ELEVATIONS FOR HEIGHTS AND TRIMS

TO ELEVATION & DETAIL 5/A8.10

WAINSCOT CAP

ELEVATION 3/A8.06

EXISTING RSF

FLOOR PATTERN LEGEND

ACOUSTICAL PANELS (SFWS) IN THIS ROOM, REFER TO ELEVATIONS FOR DESIGN AND DESIGNATIONS

CORNER TRIM; REFER TO 11-14/A8.09 FOR TILE INFORMATION AND DETAIL ON A8.10 FOR DEF-1 BASE WITH TILE ABOVE. PAINT

FLOOR PATTERN/FINISH KEY NOTES

CEILING DETAILS

NO FINISH WORK IN THIS AREA.

ELEVATION & 7/A9.05 FOR DETAIL.

ABOVE TO CEILING, P-1

A8.10 FOR BASE DETAIL.

ABOVE TO CEILING, P-1

CMU WALL ABOVE TO CEILING, P-9

CUSTODIAL DOOR AND FRAME, P-10

SCHLUTER QUADEC OUTSIDE CORNER TRIM

8 REFER TO 1/A8.11 FOR FLOOR PATTERN DETAILS 9 REFER TO 2/A8.11 FOR FLOOR PATTERN DETAILS

REFER TO ELEVATION FOR EXTENTS

TOP OF EXISTING MATERIALS.

ABOVE TO CEILING, P-9

ELEMENTARY SCHOOL **ADDITIONS AND** RENOVATIONS

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FOR TYPICAL ELEVATION AND 3/A9.05 FOR CEILING FEATURE 34 INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO 5/A9.05 FOR CEILING FEATURE DETAIL. 5 INSTALL LSF-1 ON STAGE WITH RSA-1 NOSING AND RSF-2

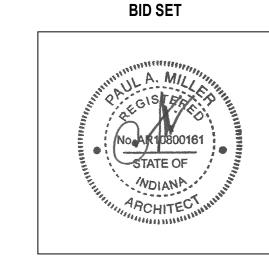
SURFACE, P-13 7 INSTALL FULL HEIGHT VWC-2 ON GWB WALLS, PAINT P-1 ON CMU 38 PAINT EXISTING BRICK AND UTILITY BRICK BASE, P-1

RSF TO CONTINUE UNDER OPERABLE WALL TO EXTENTS OF

36 INSTALL LSF-1 ON STAGE WITH RSA-1 NOSING; PAINT VERTICAL

MATERIAL ON RISER, REFER TO DETAIL 6/A8.10

KEY PLAN



PROJECT MANAGER: KRS DRAWN BY: AML

CART-1 (BRICK LAY) (MONOLITHIC) CART-3 (MONOLITHIC) RSF-5 RSF-6

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

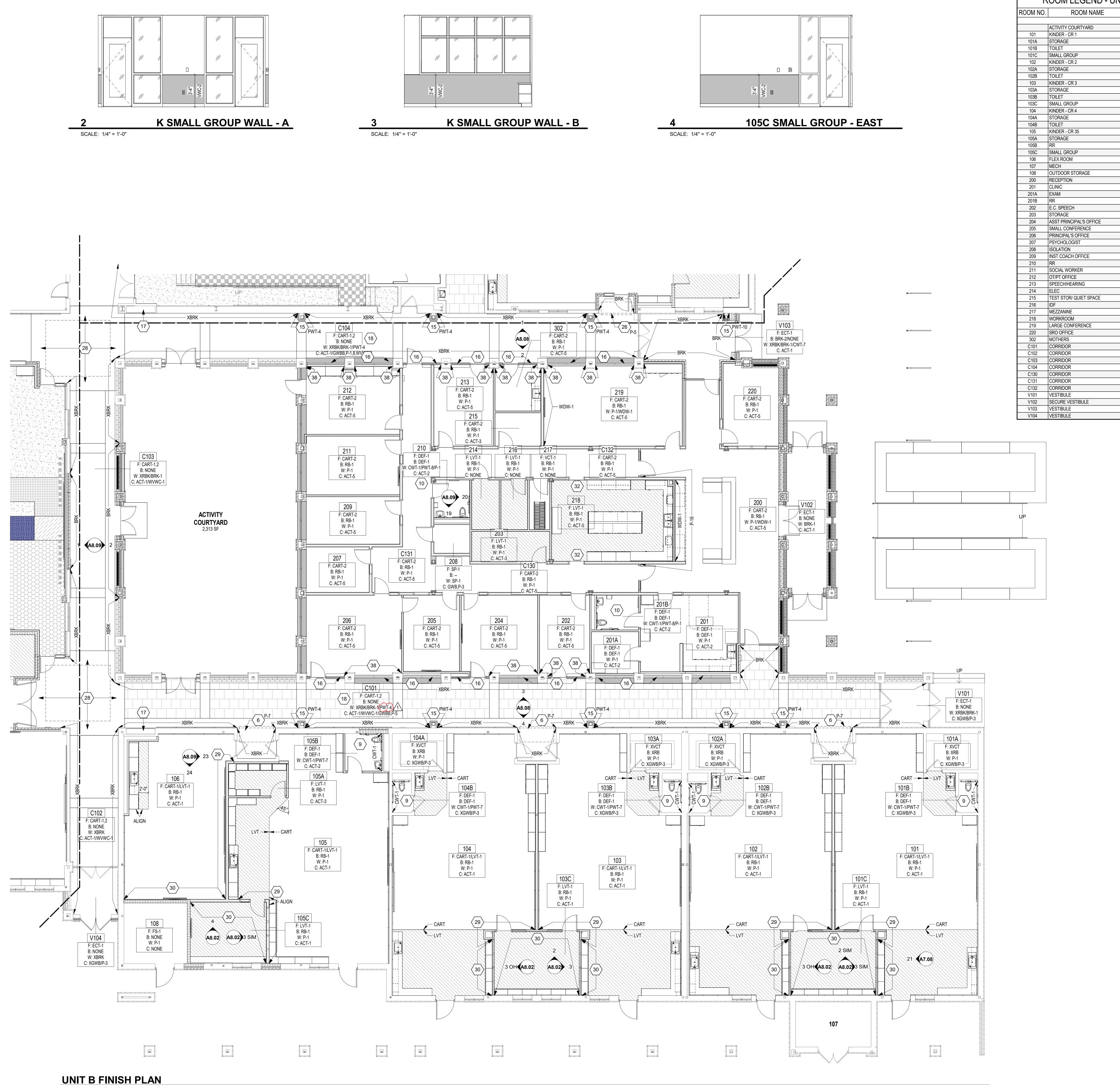
SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

DESCRIPTION DATE 1 ADDENDUM 1 12.19.2025

PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

UNIT A - FIRST FLOOR FLOOR FINISH PLAN



ROOM LEGEND - UNIT B GENERAL FINISH NOTES SEALANT SHALL BE APPLIED AT ALL MATERIAL AREA (SF TRANSITIONS, BACKSPLASHES, AND DOOR FRAMES. ALL 1,327 SF 80 SF 234 SF 1,325 SF FINISH TYPES 1,329 SF COLOR INDICATED (UNO). 234 SF UNLESS NOTED OTHERWISE. 58 SF 201 SF 149 SF FLOOR PATTERN/FINISH KEY NOTES 315 SF 100 SF TYPICAL ELEVATION, 1/A8.10 FOR TILE DETAILS, & 1-7/A9.04 FOR CEILING DETAILS 191 SF NO FINISH WORK IN THIS AREA. PAINT EXISTING GWB BULKHEAD AND INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO TEXT NOTE FOR ACCENT COLOR. REFER TO 17/A8.09 FOR TYPICAL ELEVATION & 4/A9.05 FOR PAINT EXISTING GWB BULKHEAD, P-7, AND INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO 17/A8.09 FOR TYPICAL ELEVATION & 7/A9.05 FOR DETAIL. 478 SF INSTALL TILE ON ALL WALLS, REFER TO ELEVATIONS 11-14/A8.09 FOR TILE LOCATIONS AND DETAILS; REFER TO TILE TERMINATION OUTSIDE CORNER, AND BASE DETAILS ON A8.10; PAINT CMU WALL ABOVE TO CEILING, P-1 INSTALL FULL HEIGHT TILE ON ALL WALLS; INSTALL CWT-1 ON INDICATED WALL IN HORIZONTAL STRAIGHT LAY AND PWT-7 IN VERTICAL STRAIGHT LAY ON ALL OTHERS. REFER TO 5/A8.10 & A8.10 FOR BASE DETAIL. INSTALL TILE ON ALL WALLS, REFER TO ELEVATIONS 19-20/A8.09 FOR TILE LOCATIONS AND DETAILS; REFER TO TILE TERMINATION OUTSIDE CORNER, AND BASE DETAILS ON A8.10; PAINT CMU WALL ABOVE TO CEILING, P-1

216 SF

103 SF

LOCATIONS WHERE NEW FINISH ABUTS A DISSIMILAR REMOVE AND REINSTALL EXISTING DEVICE FACEPLATES, SWITCH FACEPLATES, TECHNOLOGY FACEPLATES, AND EXISTING ITEMS TO REMAIN AND NEW FINISHES APPLIED AROUND INCLUDE BUT NOT LIMITED TO THERMOSTATS, AND FIRE EXTINGUISHER CABINETS (UNO). PROVIDE RESILIENT TRANSITION STRIPS BETWEEN FLOOR PAINT ALL SIDES (VERT. AND HORZ.) OF BULKHEAD/SOFFIT ELEMENTARY EXISTING INTERIOR DOORS AND DOOR FRAMES ARE TO REMAIN UNLESS NOTED OTHERWISE. DOOR FRAMES TO BE REPAINTED AND WOOD DOORS TO BE REPAIRED AS SCHOOL PATCH AND REPAIR ALL HOLES AND IMPERFECTIONS AT AREAS THAT ARE TO RECEIVE NEW FINISHES. **ADDITIONS AND** (XBRK) INDICATES EXISTING BRICK, TO REMAIN UNPAINTE (BRK) INDICATES NEW BRICK, TO REMAIN UNPAINTED. RENOVATIONS 900 West 136th Street, Carmel, IN 46032 PRE-FABRICATED FREEZER/COOLER, NO FINISH ITEMS INSTALL CWT ON JAMB WITH SCHLUTER QUADEC TRIM ON OUTSIDE CORNERS. CWT COLOR AS NOTED ON ADJACENT ACCENT WALL. REFER TO 1/A8.10 FOR TILE DETAILS. INSTALL CWT ON WALLS, PAINT GWB BULKHEAD ABOVE, AND INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO TEXT NOTE FOR TILE & ACCENT PAINT COLORS. REFER TO 15/A8.09 FO

INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO 16/A8.09
FOR TYPICAL FLEVATION AND 2/A9 05 FOR CEILING FEATURE

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INSTALL TILE ON ALL WALLS, REFER TO ELEVATIONS FOR TILE

OUTSIDE CORNER. AND BASE DETAILS ON A8.10: INCLUDE IFS

CEILING OVER SHOWER AND CMT/CMTB INSIDE SHOWER; PAINT

CORNER TRIM; REFER TO 11-14/A8.09 FOR TILE INFORMATION ANI

INSTALL TILE ON ALL WALLS, REFER TO ELEVATIONS 7-10/A8.09

FOR TILE LOCATIONS AND DETAILS; REFER TO TILE TERMINATION

OUTSIDE CORNER, AND BASE DETAILS ON A8.10; PAINT CMU WALL

15 INSTALL FULL HEIGHT PWT (TILE COLORS NOTED ON PLAN) WITH

16 DECORATIVE FILM OVERLAY (DFO-1) INSTALLED ON GLAZING,

INSTALL CART-3 ON FLOOR OF EXISTING DISPLAY CASE AND

20 AR-AWT IN THIS ROOM, REFER TO ELEVATIONS FOR DESIGN AND

1 ACOUSTICAL PANELS (SFWS) IN THIS ROOM, REFER TO ELEVATIONS FOR DESIGN AND DESIGNATIONS

22 APPLY AFF-1 ON EXISTING LAMINATE ACCENT ON COLUMNS,

REFER TO ELEVATIONS FOR ADDITIONAL INFORMATION

3 INSTALL FULL HEIGHT PWT-1 ON LAV WALL AND PARTIAL HEIGHT CWT-6 ON ALL OTHER WALLS, WITH P-1 ABOVE TO CEILING; SEE

RECOVER EXISTING OPERABLE WALL WITH NEW WALLCOVERING

5 INSTALL PWT-2 WAINSCOT WITH LMC-1 ASSEMBLY ABOVE, REFER

6 PAINT NEW GWB BULKHEAD AND INSTALL WVWC-1 WRAP ON

REFER TO 17/A8.09 FOR TYPICAL ELEVATION & 6/A9.05 FOR

27 INSTALL VWC-2 UP TO 42"AFF, WITH CS ACROVYN J-TRIM

29 INSTALL VWC-2 UP TO 48"AFF, WITH CS ACROVYN J-TRIM

28 INSTALL WVWC-1 WRAP ON GWB BULKHEADS

ELEVATIONS FOR HEIGHTS AND TRIMS

CEILING FEATURE. REFER TO TEXT NOTE FOR ACCENT COLOR.

WAINSCOT CAP; REFER TO A7 SERIES FOR CORNER GUARD (CG)

30 INSTALL VWC-2 WAINSCOT ON INDICATED WALL(S), REFER TO

RECOVER EXISTING OPERABLE WALL WITH NEW ACOUSTICAL

CARPET WALLCOVERING AND WALL PROTECTION, REFER TO

33 INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO 16/A8.09

FOR TYPICAL ELEVATION AND 3/A9.05 FOR CEILING FEATURE

34 INSTALL WVWC-1 WRAP ON CEILING FEATURE. REFER TO 5/A9.05

36 INSTALL LSF-1 ON STAGE WITH RSA-1 NOSING; PAINT VERTICAL

37 INSTALL FULL HEIGHT VWC-2 ON GWB WALLS, PAINT P-1 ON CMU

39 RSF TO CONTINUE UNDER OPERABLE WALL TO EXTENTS OF

35 INSTALL LSF-1 ON STAGE WITH RSA-1 NOSING AND RSF-2 MATERIAL ON RISER, REFER TO DETAIL 6/A8.10

38 PAINT EXISTING BRICK AND UTILITY BRICK BASE, P-1

32 ALIGN FLOORING TRANSITION TO WALL IN B121 AS SHOWN

11-14/A8.09 FOR SIMILAR ELEVATIONS. INCLUDE SCHLUTER TRIM AT TILE TERMINATIONS AND OUTSIDE CORNERS, REFER TO A8.09

TWS-7 ON ALL OTHER SURFACES. INSTALL NEW MATERIALS ON

INSTALL FULL HEIGHT TILE WITH SCHLUTER QUADEC OUTSIDE

DETAIL ON A8.10 FOR DEF-1 BASE WITH TILE ABOVE. PAINT

HEIGHTS AND LOCATIONS; REFER TO TILE TERMINATION,

CMU WALL ABOVE TO CEILING, P-9

CUSTODIAL DOOR AND FRAME, P-10

SCHLUTER QUADEC OUTSIDE CORNER TRIM

18 REFER TO 1/A8.11 FOR FLOOR PATTERN DETAILS

19 REFER TO 2/A8.11 FOR FLOOR PATTERN DETAILS

VWC-1; REFER TO ELEVATOIN 5/A8.06

TO ELEVATION & DETAIL 5/A8.10

WAINSCOT CAP

ELEVATION 3/A8.06

SURFACE, P-13

EXISTING RSF

FLOOR PATTERN LEGEND

(MONOLITHIC)

(MONOLITHIC)

CART-1 (BRICK LAY)

FOR CEILING FEATURE DETAIL.

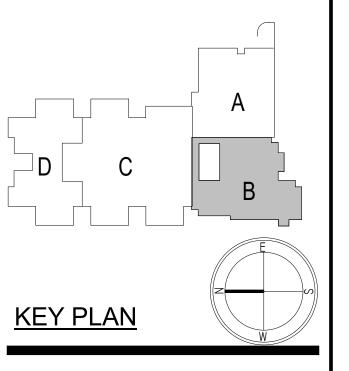
REFER TO ELEVATION FOR EXTENTS

TOP OF EXISTING MATERIALS.

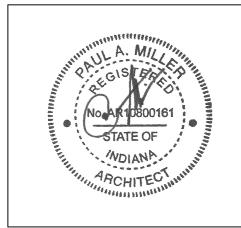
ABOVE TO CEILING, P-9



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BID SET



PROJECT MANAGER: KRS DRAWN BY: AML PROJECT NUMBER: 222033.00 PROJECT ISSUE DATE: 11/20/2025 1 ADDENDUM 1

DESCRIPTION 12.19.2025

VERIFICATION NOTE

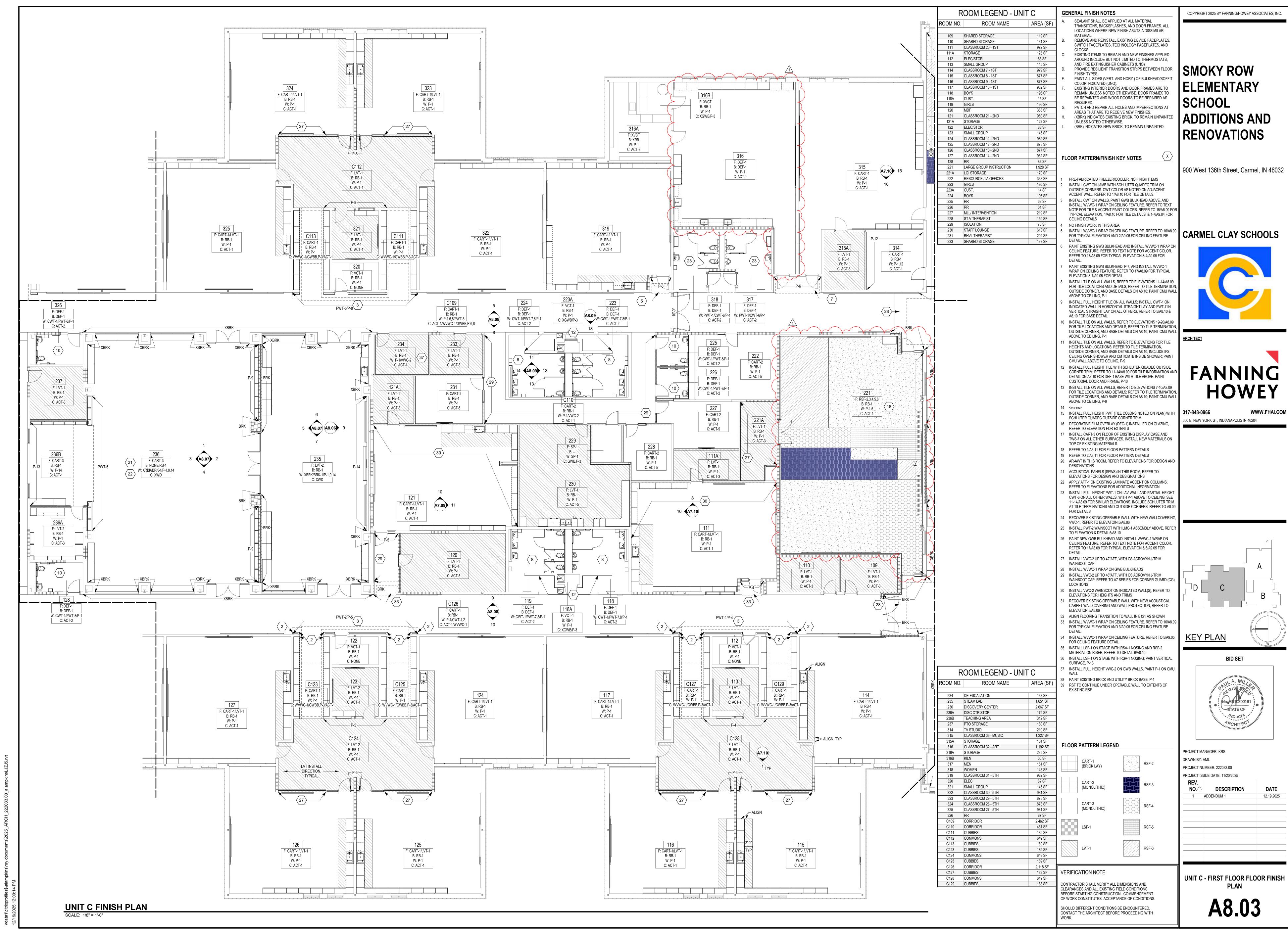
CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

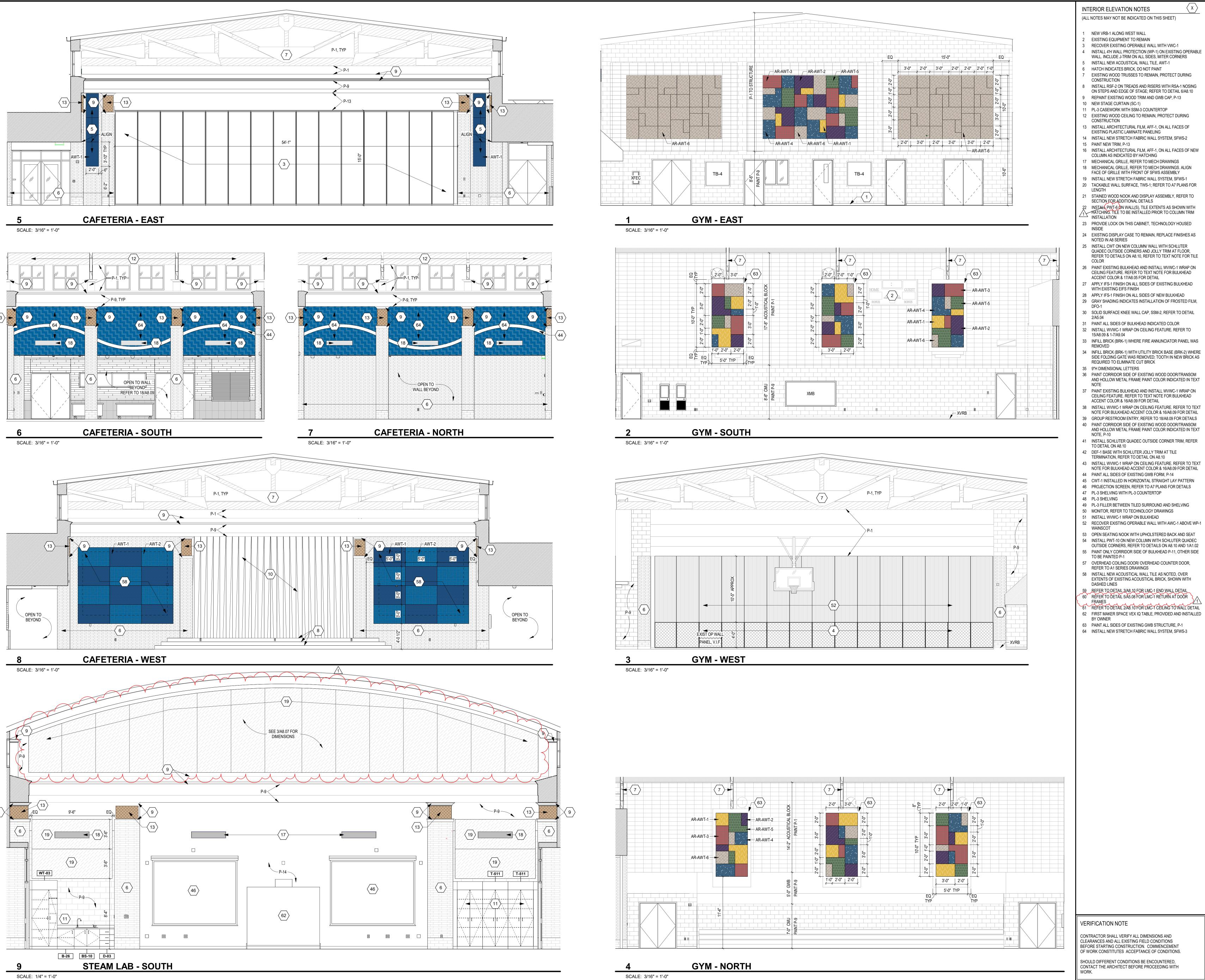
RSF-5

RSF-6

UNIT B - FIRST FLOOR FLOOR FINISH PLAN



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> **SMOKY ROW ELEMENTARY** SCHOOL **ADDITIONS AND** RENOVATIONS

> > 900 West 136th Street, Carmel, IN 46032

CARMEL CLAY SCHOOLS





WWW.FHAI.COM 350 E. NEW YORK ST, INDIANAPOLIS IN 46204

47 PL-3 SHELVING WITH PL-3 COUNTERTOP

49 PL-3 FILLER BETWEEN TILED SURROUND AND SHELVING 50 MONITOR, REFER TO TECHNOLOGY DRAWINGS 51 INSTALL WVWC-1 WRAP ON BULKHEAD 52 RECOVER EXISTING OPERABLE WALL WITH AWC-1 ABOVE WP-1

53 OPEN SEATING NOOK WITH UPHOLSTERED BACK AND SEAT 54 INSTALL PWT-10 ON NEW COLUMN WITH SCHLUTER QUADEC OUTSIDE CORNERS, REFER TO DETAILS ON A8.10 AND 1/A1.02

55 PAINT ONLY CORRIDOR SIDE OF BULKHEAD P-11, OTHER SIDE TO BE PAINTED P-1 OVERHEAD COILING DOOR/ OVERHEAD COUNTER DOOR, REFER TO A1 SERIES DRAWINGS

58 INSTALL NEW ACOUSTICAL WALL TILE AS NOTED, OVER EXTENTS OF EXISTING ACOUSTICAL BRICK, SHOWN WITH DASHED LINES

59 REFER TO DETAIL 3/A8,10 FOR LMC-1 END WALL DETAIL 60 REFER TO DETAIL 5/A5.08 FOR LMC-1 RETURN AT DOOR 61 REFER TO DETAIL 2/A8.10 FOR LMC-1 CEILING TO WALL DETAIL

63 PAINT ALL SIDES OF EXISTING GWB STRUCTURE, P-1 64 INSTALL NEW STRETCH FABRIC WALL SYSTEM, SFWS-3

BID SET

PROJECT MANAGER: KRS DRAWN BY: AML PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

REV.

10.△	DESCRIPTION	DATE
1	ADDENDUM 1	12.19.2025

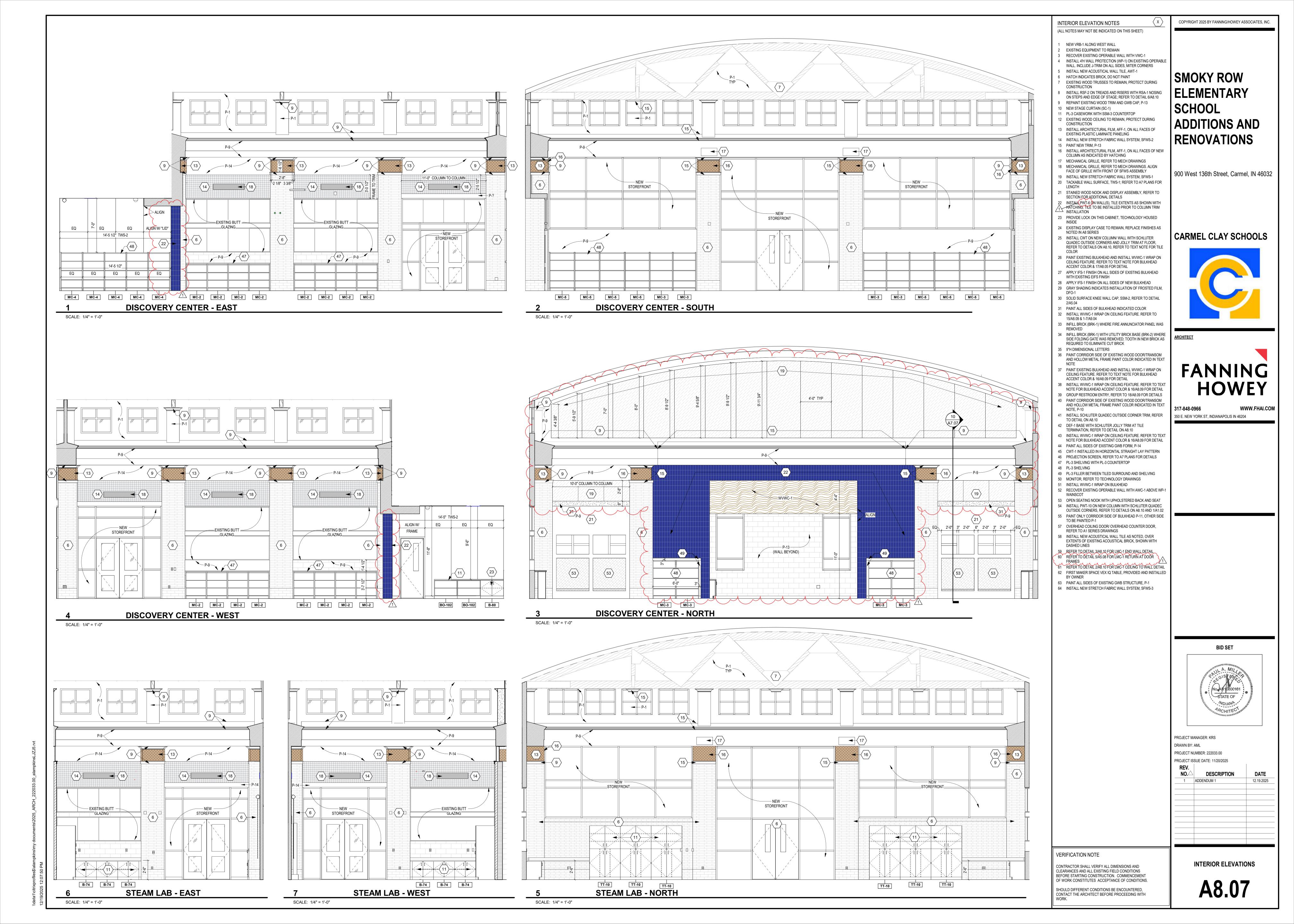
VERIFICATION NOTE

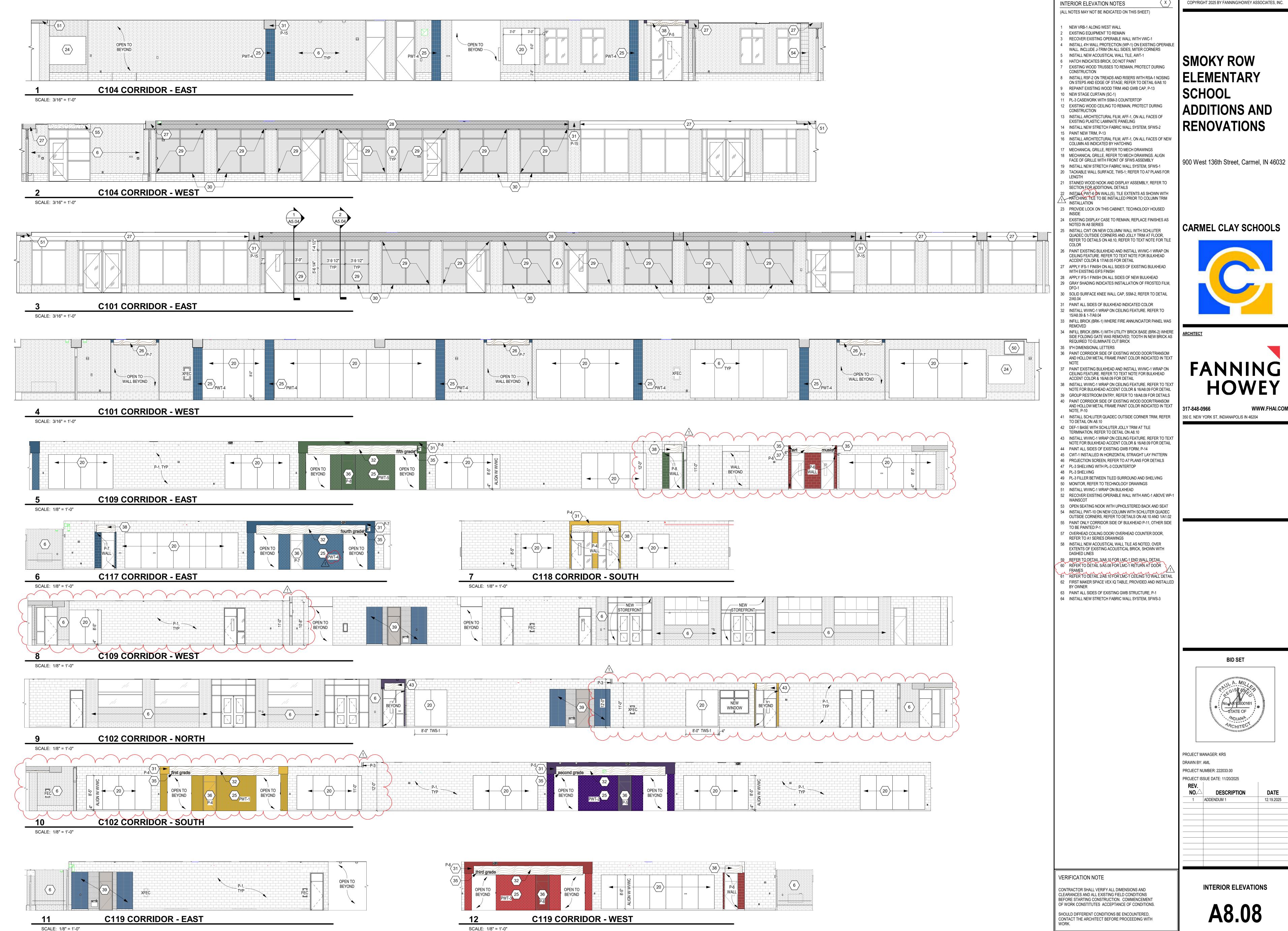
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SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

INTERIOR ELEVATIONS

A8.06





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

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NO.	DESCRIPTION	DAIL
1	ADDENDUM 1	12.19.2025



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49 PL-3 FILLER BETWEEN TILED SURROUND AND SHELVING

50 MONITOR, REFER TO TECHNOLOGY DRAWINGS 51 INSTALL WVWC-1 WRAP ON BULKHEAD 52 RECOVER EXISTING OPERABLE WALL WITH AWC-1 ABOVE WP-1

53 OPEN SEATING NOOK WITH UPHOLSTERED BACK AND SEAT 54 INSTALL PWT-10 ON NEW COLUMN WITH SCHLUTER QUADEC OUTSIDE CORNERS, REFER TO DETAILS ON A8.10 AND 1/A1.02 55 PAINT ONLY CORRIDOR SIDE OF BULKHEAD P-11, OTHER SIDE TO BE PAINTED P-1

57 OVERHEAD COILING DOOR/ OVERHEAD COUNTER DOOR, REFER TO A1 SERIES DRAWINGS

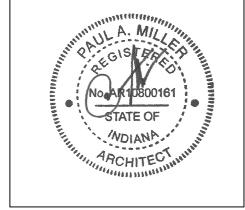
58 INSTALL NEW ACOUSTICAL WALL TILE AS NOTED, OVER EXTENTS OF EXISTING ACOUSTICAL BRICK, SHOWN WITH

59 REFER TO DETAIL 3/A8.10 FOR LMC-1 END WALL DETAIL 60 REFER TO DETAIL 5/A5.08 FOR LMC-1 RETURN AT DOOR

62 FIRST MAKER SPACE VEX IQ TABLE, PROVIDED AND INSTALLED

63 PAINT ALL SIDES OF EXISTING GWB STRUCTURE, P-1 64 INSTALL NEW STRETCH FABRIC WALL SYSTEM, SFWS-3

BID SET



PROJECT MANAGER: KRS DRAWN BY: AML PROJECT NUMBER: 222033.00

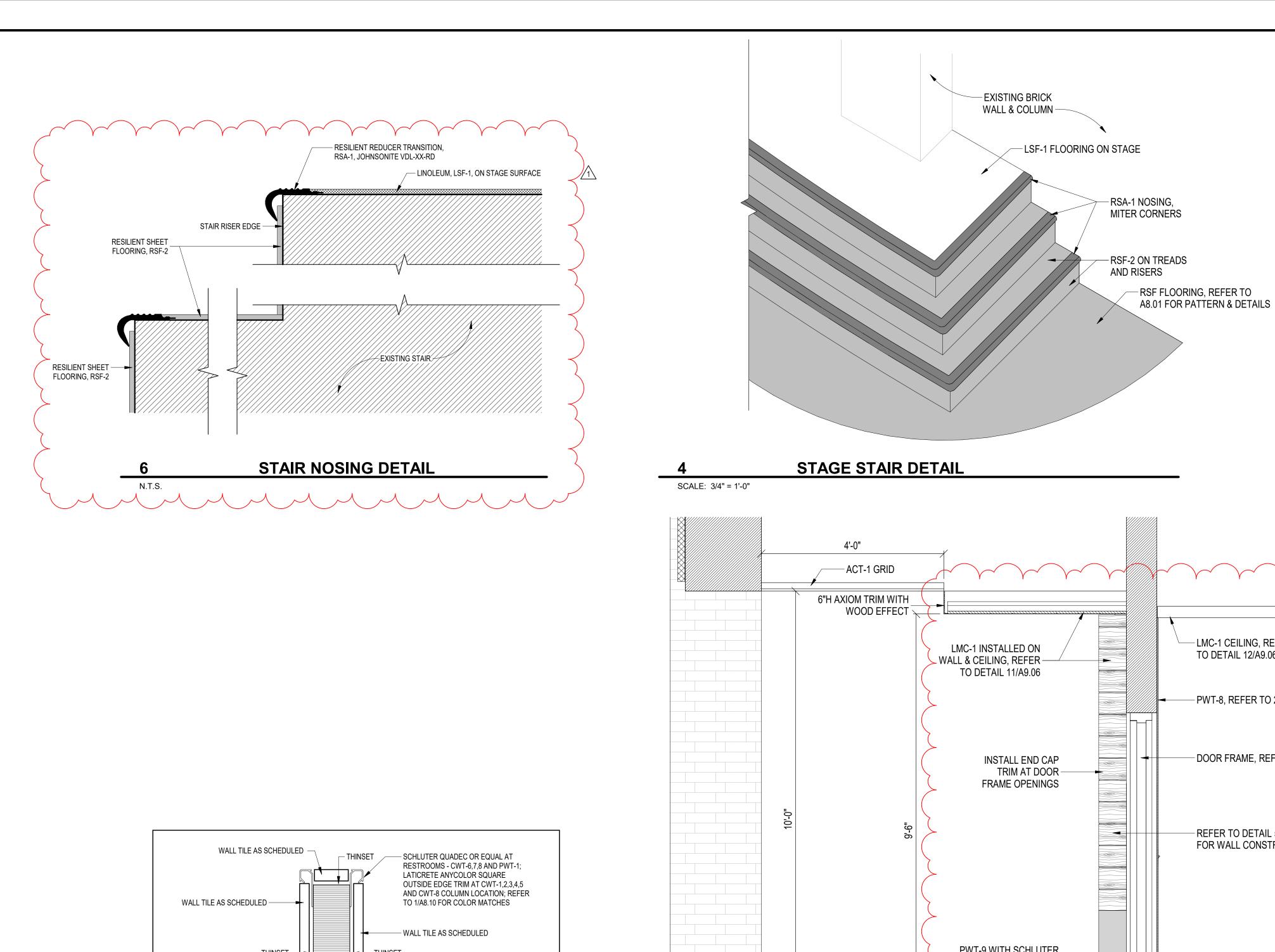
PROJECT ISSUE DATE: 11/20/2025

REV.

NO.	DESCRIPTION	DATE
1	ADDENDUM 1	12.19.2025
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CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

INTERIOR ELEVATIONS



— WALL AS SCHEDULED, REFER TO

A1 SERIES DRAWINGS

CERAMIC WALL TILE DETAIL - CORNER

REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION

REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION

REFER TO A8 SERIES DRAWINGS FOR COLOR SELECTION(S) AND LOCATIONS

- PAINTED WALL, P-10

A1 SERIES DRAWINGS

COLOR TO BE SELECTED

- THINSET PLANS/ ELEVATIONS

CERAMIC TILE DETAIL - TERMINATION AT PARTIAL HEIGHT TILED WALL - RESTROOMS

- 4-1/4" X 12-7/8" CERAMIC WALL TILE, COLOR AS INDICATED ON

- WALL AS SCHEDULED, REFER TO

— SCHLUTER JOLLY CAP AT TERMINATION OF CWT, FINISH TO BE POWDERED COATED,

- CARPET AS SCHEDULED, TO BE

INSTALLED AFTER WALL TILE

- 3"X9" CERAMIC WALL TILE,

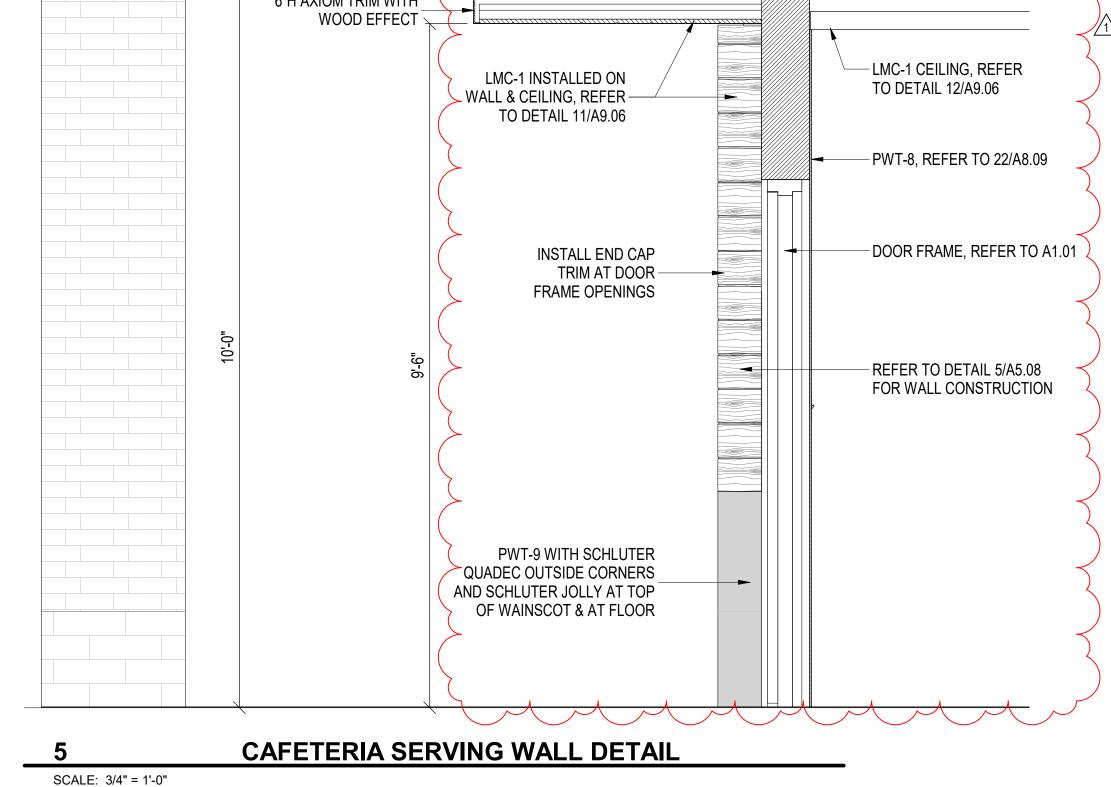
COLOR AS INDICATED ON PLANS/ ELEVATIONS

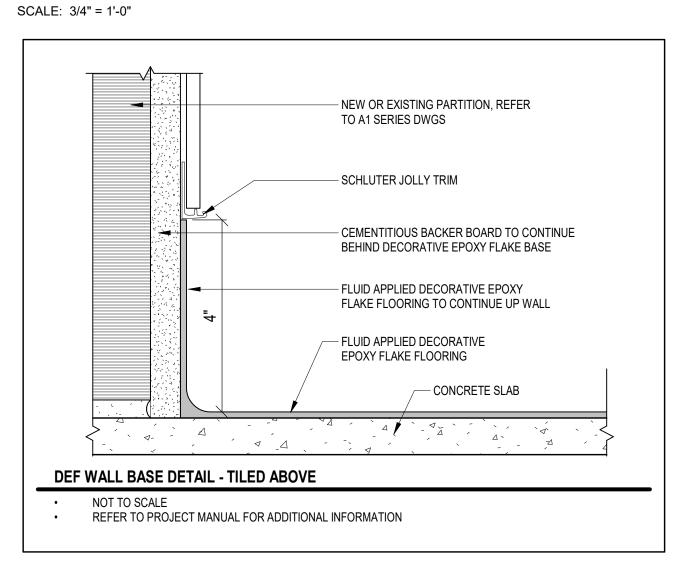
COLOR TO BE SELECTED

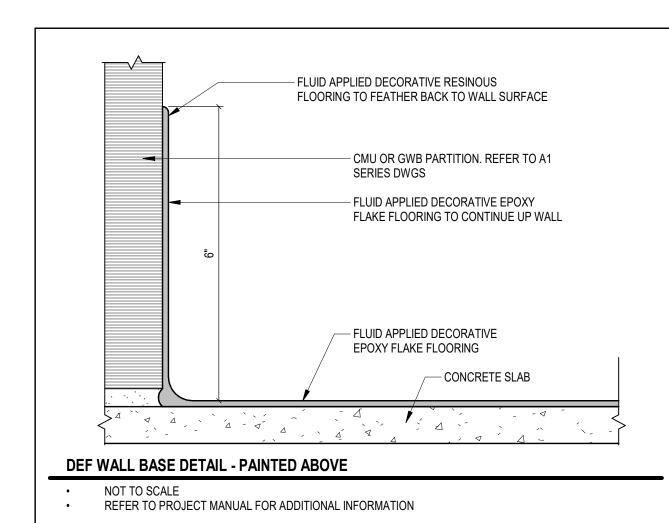
– WALL AS SCHEDULED, REFER TO

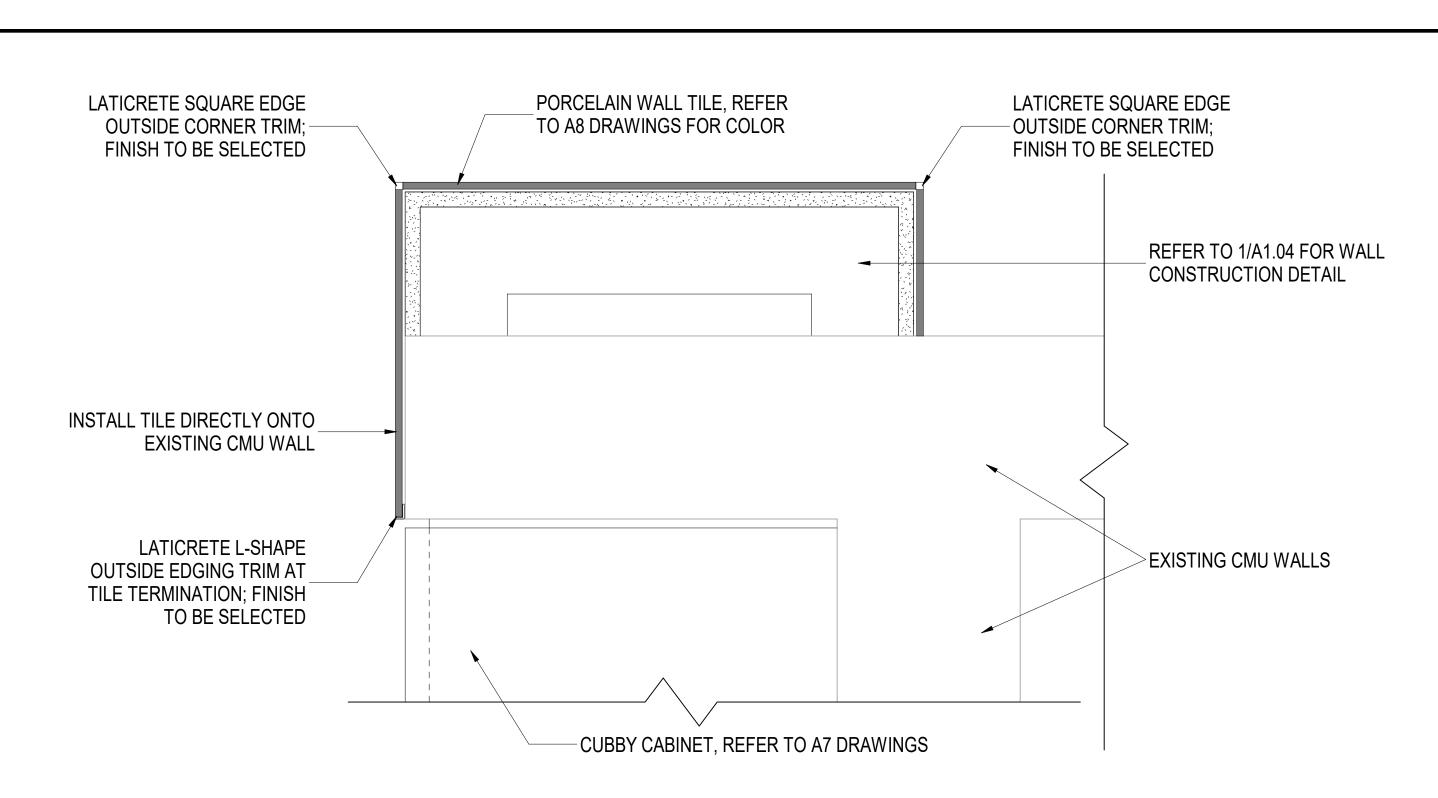
- SCHLUTER JOLLY CAP AT TERMINATION OF CWT, FINISH TO BE POWDERED COATED,

NOT TO SCALE

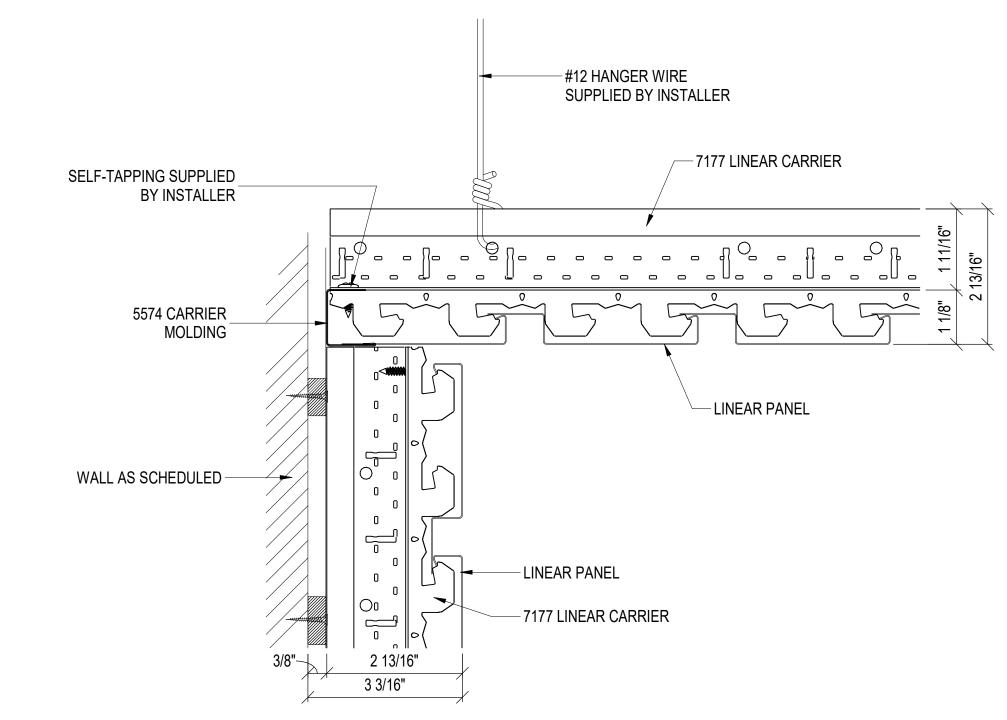




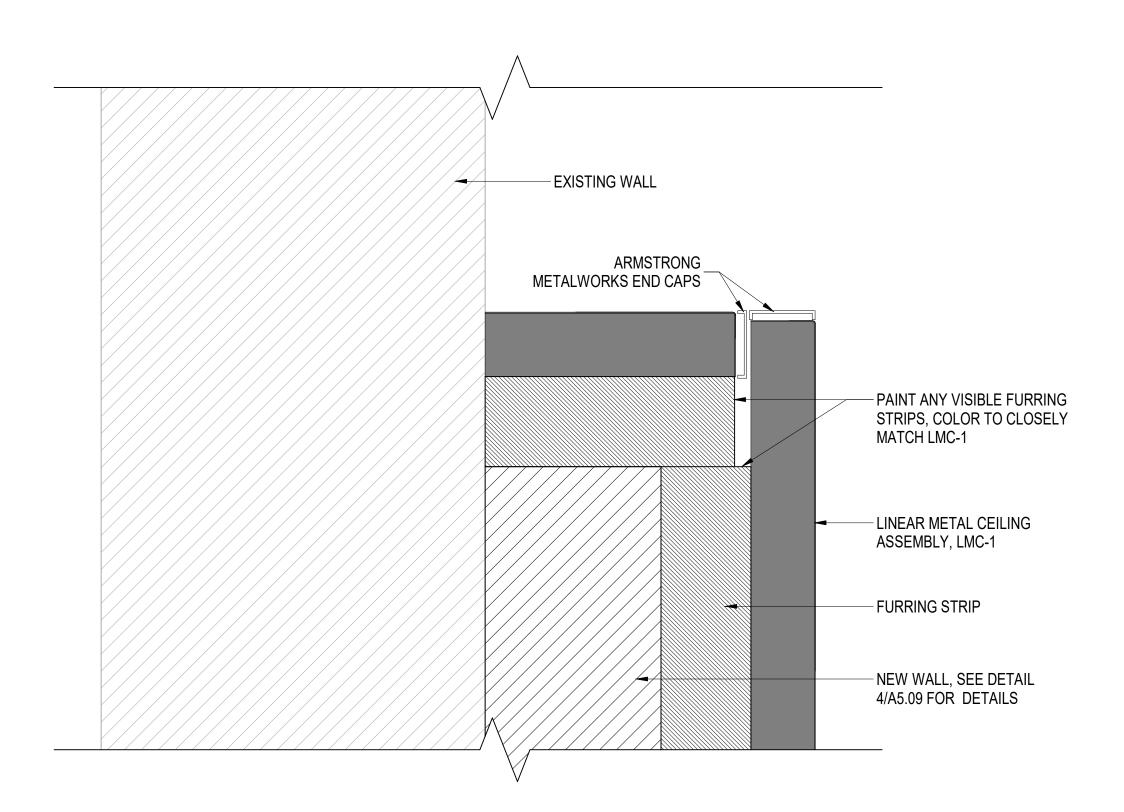








LMC-1 CEILING TO WALL DETAIL SCALE: 6" = 1'-0"



LMC-1 CORNER DETAIL SCALE: 6" = 1'-0"

SCHOOL **ADDITIONS AND** RENOVATIONS

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SMOKY ROW

ELEMENTARY

CARMEL CLAY SCHOOLS

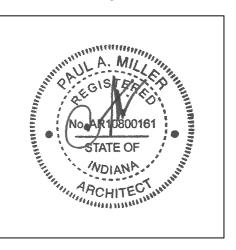


ARCHITECT



WWW.FHAI.COM 317-848-0966 350 E. NEW YORK ST, INDIANAPOLIS IN 46204

BID SET



PROJECT MANAGER: KRS DRAWN BY: AML PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

NO. DESCRIPTION DATE 1 ADDENDUM 1 12.19.2025

INTERIOR DETAILS

REFER TO A8 SERIES DRAWINGS FOR COLOR SELECTION(S) AND LOCATIONS CERAMIC TILE DETAIL - TERMINATION AT FLOOR - COLUMNS & NEIGHBORHOOD ENTRIES REFER TO PROJECT MANUAL FOR ADDITIONAL INFORMATION REFER TO A8 SERIES DRAWINGS FOR COLOR SELECTION(S) AND LOCATIONS



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SMOKY ROW
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CARMEL CLAY SCHOOLS

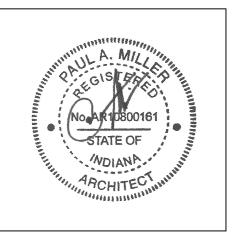


APCHITECT



317-848-0966 WWW.FHAI.COM350 E. NEW YORK ST, INDIANAPOLIS IN 46204

BID S



PROJECT MANAGER: KRS

DRAWN BY: AML

PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025					
REV.					
NO.∠	DESCRIPTION	DATE			
1	ADDENDUM 1	12.19.2025			
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FLOORING DETAILS

A8.11

FLOOR MATERIALS

CARPET TILE		
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CART-1 (FIELD) CART-2 (ACCENT)	MANNINGTON/ NEW COMPOSITION/ SUBLIME STATE MANNINGTON/ NEW COMPOSITION/ TRANCE END	NOTION 14172 / 24"X24"
CART-3 (DISC. CTR.)	TARKETT / DYNAMIC EDIT / EDGE EDIT	WIND TURBINE 22411 / 24"X24"

REFER TO MATERIAL & FINISH GENERAL NOTES FOR INSTALLATION METHOD INFORMATION. SUBMIT INSTAULATION DRAWINGS INDICATING DIRECTION & LAYOUT OF CARPET THE PRIOR TO INSTAULATION FOR APPROVAL

CERAMIC MOSAIC TILE		
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CMT-1	DALTILE / KEYSTONES AMERICAN OLEAN / UNGLAZED COLORBODY	GROUP 2, TO BE SELECTED / 2"X2" GROUP 2, TO BE SELECTED / 2"X2"
DECORATIVE EPOXY FLA	KE FLOORING	
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
DEF-1	REFER TO SPECIFICATIONS	TORGINOL COLORS - 20% F1820 WHITE, 20% F995 TAUPE, 20% F9958 ALPACA WHITE, 20% F9959 ANTIQUE WHITE, 10% F9961 FUNCTIONAL GRAY, 5% F1130 DARK BLUE, 5% F9969 NAVY
ENTRANCE CARPET TILE		
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
ECT-1	INTERFACE / SR899	TO BE SELECTED
EGI-I		
LINOLEUM SHEET FLOOR		
		COLOR SELECTION

LVT-2 (STEAM) RESILIENT SHEET FLOO	MANNINGTON / AMTICO / STONE RING	STRIA BASALT AROSMS43 / 18"X18"
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
RSF-1 (KITCHEN)	ALTRO STRONGHOLD 30	TUNDRA-K30500
RSF-2	ECORE / ECOSURFACES CLASSIC	ACTION! 1213
RSF-3	ECORE / ECOSURFACES CLASSIC	MONDAY BLUES 2614
RSF-4	ECORE / ECOSURFACES CLASSIC	RAIDERS OF THE LOST ARCHITECT 1212
RSF-5	ECORE / ECOSURFACES CLASSIC	MRS. DOUBTFIREPLACE 1209
RSF-6	ECORE / ECOSURFACES CLASSIC	BLUE HIGHWAY 2620

COLOR SELECTION

ROTTERDAM OAK AR0W8440 / 7.25"X48"

MATERIAL/MANUFACTURER

MANNINGTON / AMTICO / WOODS

RSF-6	ECORE / ECOSURFACES CLASSIC	BLUE HIGHWAY 2620
RESILIENT STAIR NOSIN	G	
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
RSA-1	JOHNSONITE / VDL-XX-RD	TO BE SELECTED
VINYL COMPOSITION TIL	E	
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
VCT-1	TARKETT VCT II	TO BE SELECTED / 12"X12"

BASE MATERIALS

LUXURY VINYL TILE

MATERIAL ABBREVIATION

LVT-1 (FIELD)

CERAMIC MOSAIC TILE E	BASE	BUILT-UP COVE BAS
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CMTB-1	DALTILE / KEYSTONES AMERICAN OLEAN / UNGLAZED COLORBODY	GROUP 2, TO BE SELECTED / 2"X2" / MB5A GROUP 2, TO BE SELECTED / 2"X2" / MT6A
DECORATIVE EPOXY FLA	AKE FLOORING	
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
DEF-1	REFER TO SPECIFICATIONS	TORGINOL COLORS - 20% F1820 WHITE, 20% F995 TAUPE, 20% F9958 ALPACA WHITE, 20% F9959 ANTIQUE WHITE, 10% F9961 FUNCTIONAL GRAY, 5% F1130 DARK BLUE, 5% F9969 NAVY
RESILIENT BASE		4" COVE BAS
RESILIENT BASE MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	4" COVE BAS
	MATERIAL/MANUFACTURER JOHNSONITE	
MATERIAL ABBREVIATION RB-1	JOHNSONITE	COLOR SELECTION
MATERIAL ABBREVIATION RB-1 RESILIENT SHEET FLOOI	JOHNSONITE	COLOR SELECTION
MATERIAL ABBREVIATION	JOHNSONITE	COLOR SELECTION BURNT UMBER 63
MATERIAL ABBREVIATION RB-1 RESILIENT SHEET FLOOI MATERIAL ABBREVIATION	JOHNSONITE RING MATERIAL/MANUFACTURER	COLOR SELECTION BURNT UMBER 63 COLOR SELECTION

JOHNSONITE

WALL FINISHES

ABUSE-RESISTANT ACOUSTICAL WALL TILES				
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION		
AR-AWT-1 AR-AWT-2 AR-AWT-3 AR-AWT-4 AR-AWT-5 AR-AWT-6	ARMSTRONG / TECTUM	PPG1209-6 BRASS MESH / 2" THICK PPG1174-7 ROYAL INDIGO / 2" THICK PPG13-16 BLAZE / 2" THICK PPG1160-6 CHINESE PORCELAIN / 2" THICK SW6453 CILANTRO / 2" THICK PPG15-28 GREAT GRAY / 2" THICK		
ACOUSTICAL WALL TILE				

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
AWT-1 (CAFE) AWT-2 (CAFE)	DESIGNTEX / BILLIARD CLOTH DESIGNTEX / ROCKET	INDIGO 3549-402 CADET 2693-405
CERAMIC WALL TILE		

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
CWT-1 (RR)	DNA TILES / PLINTO	BLUE GLOSS / 4.2" X 21.3"
PAINT		
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
P-1 (FIELD)	PPG PAINTS	PPG0999-1 IN THE CLOUD
P-2 (DOOR FRAMES)	SHERWIN WILLIAMS	SW7069 IRON ORE
P-3 (CEILINGS)	SHERWIN WILLIAMS	SW7757 HIGH REFLECTIVE WHITE
P-4 (1ST ACCENT)	PPG PAINTS	PPG1209-6 BRASS MESH
P-5 (2ND ACCENT)	PPG PAINTS	PPG1174-7 ROYAL INDIGO
P-6 (3RD ACCENT)	PPG PAINTS	PPG13-16 BLAZE
P-7 (4TH ACCENT)	PPG PAINTS	PPG1160-6 CHINESE PORCELAIN
P-8 (5TH ACCENT)	SHERWIN WILLIAMS	SW6453 CILANTRO
P-9 (DC/GYM/CAFE)	PPG PAINTS	PPG15-28 GREAT GRAY
P-10 (PWT-8 MATCH)	PPG PAINTS	PPG1000-3 FIELDSTONE
P-11 (BRICK MATCH)	SHERWIN WILLIAMS	SW6060 MOROCCAN BROWN
P-12 (GREEN SCREEN)	BENJAMIN MOORE	2032-20 TRAFFIC LIGHT GREEN / FLAT
P-13 (WOOD TRIM)	PPG PAINTS	1022-4 ROCK SLIDE
P-14 (DC/CAFE)	PPG PAINTS	PPG1169-7 ROYAL HYACINTH
P-15 (ACCENT)	PPG PAINTS	PPG1024-3 CRUSHED SILK
P-16 (ACCENT)	SHERWIN WILLIAMS	SW6243 DISTANCE

MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
PWT-1 (1ST)	DALTILE / NATURAL HUES	DIJON NH73 / 4"X8"
PWT-2 (2ND)	DALTILE / NATURAL HUES	GRAPE NH54 / 4"X8"
PWT-3 (3RD)	DALTILE / NATURAL HUES	VALENTINE NH13 / 4"X8"
PWT-4 (ATH)	DALTILE / NATURAL HUES	ATLANTIS NH43 / 4"X8"
PWT-5 (STH)	DALTILE / NATURAL HUES	SPRING GREEN NH29 / 4"X8"
PWT-6 (D.C.)	DALTILE / NATURAL HUES	BLUEBERRY NH46 / 4"X8"
PWT-7 (RR)	PORTOBELLO AMERICA / KREA 2.0	NUAGE STATION - MATTE / 4"X16"
PWT-8 (RR)	PORTOBELLO AMERICA / KREA 2.0	STORM STATION - MATTE / 4"X16"
PWT-9 (CAFE)	FLORIDA TILE / TEMPO	DARK GRAY MATTE / 12"X24"
PWT-10	DALTILE / NATURAL HUES	MUSHROOM NH16 / 4"X8"

SFWS-3 (CAFE) DESIGNTEX / ROCKET CADET 2693-405	MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
SFWS-2 (D.C./STEAM) MAHARAM / METAPHOR PARACHUTE 466553-010 SFWS-3 (CAFE) DESIGNTEX / ROCKET CADET 2693-405	SFWS-1 (D.C./STEAM)	DESIGNTEX / BRUSHED FLANNEL	TO BE SELECTED
SFWS-3 (CAFE) DESIGNTEX / ROCKET CADET 2693-405 VINYL WALLCOVERING	SFWS-2 (D.C./STEAM)	MAHARAM / METAPHOR	PARACHUTE 466553-010
VINYL WALLCOVERING	SFWS-3 (CAFE)	DESIGNTEX / ROCKET	CADET 2693-405
MATERIAL ABBREVIATION MATERIAL/MANUFACTURER COLOR SELECTION	JINVI WALLCOVEDING		
/VVC-11UP VVALLI	MATERIAL ABBREVIATION		
vWC-2 (WAINSCOT) KOROSEAL / FLEX DECORATIVE WALL TO BE SELECTED	MATERIAL ABBREVIATION VWC-1 (OP WALL)	MOMENTUM / ALTO	TIRAMISU LLN-AT-04

WOOD VENEER WALLCOVERING		
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
VVWC-1	MOMENTUM / SOURCE ONE / WOODS	BROWN BIRCH SWS-62

RUSSET

WINDFALL / HARDWOOD CLADDING

WDW-1

MISCELLANEOUS FINISHES

MATERIAL ABBREVIATION MATERIAL/MANUFACTURER COLOR SELECTION					
AWC-1	SURFACE MATERIALS / CROSSPOINT / TIARA II	PELICAN 00103			
ARCHITECTURAL FINISH FILM					
MATERIAL ABBREVIATION MATERIAL/MANUFACTURER COLOR SELECTION					
AFF-1 (DISC CTR)	DESIGNTEX - 3M / DI-NOC	LEATHER / LE-1109			
BRICK					
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION			
BRK-1 BRK-2	ENDICOTT CLAY PRODUCTS ENDICOTT CLAY PRODUCTS	ROSE BLEND VELOUR MODULAR COPPER CANYON VELOUR UTILITY			
DECORATIVE FILM OVER	RLAY				
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION			
DFO-1	3M FASARA	TO BE SELECTED			

TERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
A (OMT A DIMT O)	DEEED TO ODECIFICATIONS	TO BE CELECTED
WT-1,PWT-8)	REFER TO SPECIFICATIONS	TO BE SELECTED
WT-1)	REFER TO SPECIFICATIONS	TO BE SELECTED
PWT-2)	REFER TO SPECIFICATIONS	TO BE SELECTED
PWT-3)	REFER TO SPECIFICATIONS	TO BE SELECTED
WT-4)	REFER TO SPECIFICATIONS	TO BE SELECTED
WT-5) →	REFER TO SPECIFICATIONS	TO BE SELECTED
WT-6)	REFER TO SPECIFICATIONS	TO BE SELECTED
PWT-7)	REFER TO SPECIFICATIONS	TO BE SELECTED
(PWT-9)	REFER TO SPECIFICATIONS	TO BE SELECTED ✓
) (PWT-10)	REFER TO SPECIFICATIONS	TO BE SELECTED

INTERIOR WOOD DOORS/ INTERIOR WOOD TRIM

- EXISTING WOOD DOORS, TRANSOMS, AND TRIM TO REMAIN. NEW WOOD DOORS, AND TRANSOMS TO MATCH EXISTING. ROTARY CUT RED OAK TO BE WOOD SPECIES FOR NEW DOORS AND TRANSOMS. STAIN TO MATCH EXISTING DOORS.
- PROVIDE STAIN SAMPLES FOR VERIFICATION. • DISCOVERY CENTER NOOK ASSEMBLY TO BE STAINED RED OAK, COLOR TO MATCH MINWAX SMOKEWOOD MW-407

RESILIENT MOLDING ACCESSORIES

_	MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION	
	RMA-1	JOHNSONITE	TO BE SELECTED	
	SAFETY PADDING			
	MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION	
	SP-1	REFER TO SPECIFICATIONS FOR ADD	ITIONAL INFORMATION	

CEILING FINISHES

L	ACOUSTICAL CEILING TILES		
_	MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECT
	ACT-1 (FIELD)	ARMSTRONG / SCHOOL ZONE FINE FISSURED HIGH NRC #1713	WHITE / 2'X2'
	ACT-2 (RESTROOMS)	ARMSTRONG / TUNDRA #301	WHITE / 2'X2'
	ACT-3 (STORAGE)	ARMSTRONG / FINE FISSURED #1810	WHITE / 2'X2'
	ACT-4 (KITCHEN)	ARMSTRONG / CLEAN ROOM VL #868	WHITE / 2'X2'
	ACT-5 (OFFICES)	ARMSTRONG / OPTIMA #3354	WHITE / 2'X2'

INTERIOR FINISH SYSTEM		
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION
IFS-1 IFS-2	REFER TO SPECIFICATIONS REFER TO SPECIFICATIONS	TO BE SELECTED (MATCH P-15) TO BE SELECTED (WHITE)

LINEAR METAL CEILII	N(
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LINEAR METAL CEILING			
MATERIAL ABBREVIATION	MATERIAL/MANUFACTURER	COLOR SELECTION	
LMC-1	ARMSTRONG / METALWORKS LINEAR CLASSICS	EFFECTS OAK / 4"X96"	

MATERIAL & FINISH GENERAL NOTES

GENERAL

A. REFER TO FINISH PLAN DRAWINGS AND DETAILS (A8 SERIES) FOR MATERIALS, PATTERNS AND COLORS. B. REFER TO A7S.01 LIST OF FINISHES FOR ADDITIONAL FINISHES NOT NOTED ON THIS SHEET.

A. CENTER FLOORING TILE AND PATTERN IN ROOM UNLESS OTHERWISE INDICATED ON FINISH PLANS.

- ALIGN EDGE OF FINISHED FLOOR MATERIAL WITH EDGE OF WALL OR CASEWORK. FLOOR FINISH MATERIAL TRANSITIONS SHALL OCCUR UNDER THE CENTER OF THE DOOR UNLESS OTHERWISE INDICATED, WHERE THE FLOORING MATERIAL CHANGES FROM ROOM TO ROOM.
- EXTEND FLOOR MATERIAL AND PATTERN UNDER ALL OPEN TO THE FLOOR CASEWORK AND FURNITURE. COORDINATE CONTROL JOINTS IN CONCRETE SLAB WITH STRUCTURAL DRAWINGS AND FINISH FLOORING INSTALLER.
- REFER TO FLOOR PLANS, RESTROOM ENLARGED PLANS, PLUMBING DRAWINGS, ETC. FOR FLOOR DRAIN LOCATIONS. AT BUILDING EXPANSION JOINTS (IF APPLICABLE) PROVIDE PRE-FABRICATED MOVEMENT PROFILE SYSTEM IN MORTAR BED. PROVIDE SCHLUTER DILEX-EDP OR APPROVED EQUAL. TYPICAL AT ALL LOCATIONS.

EXISTING MATERIALS (X) A. (XBRK) INDICATES EXISTING BRICK TO REMAIN. DO NOT PAINT.

- (XWAF) INDICATES EXISTING WOOD ATHLETIC FLOOR TO REMAIN. DO NOT PAINT.
- (XVRB) INDICATES EXISTING VENTED RESILIENT BASE TO REMAIN. (XGWB) INDICATES EXISTING GYPSUM WALLBOARD CEILING TO REMAIN. REPAINT AS SCHEDULED. (XWD) INDICATES EXISTING WOOD CEILING TO REMAIN. DO NOT PAINT.

D. LVT-2 INSTALLATION METHOD TO BE ASHLAR.

- LUXURY VINYL TILE (LVT)

 A. ALL LVT PATTERNS BASED ON PLANK SIZE INCREMENTS PER MANUFACTURER.
- ALL LVT TO HAVE SQUARE EDGE, NOT BEVEL. LVT-1 INSTALLATION METHOD TO BE 1/3 OVERLAP.

VINYL COMPOSITION TILE (VCT) A. ALL VCT TO BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.

CARPET TILE (CART) A. CART-1& 3 TO BE LAID IN ASHLAR INSTALLATION METHOD.

CART-2 TO BE LAID IN BOTH BRICK AND MONOLITHIC INSTALLATION METHODS, REFER TO A8.11 FOR FLOORING DETAIL. PRIOR TO INSTALLATION, CONTRACTOR TO SUBMIT INSTALLATION DRAWINGS INDICATING DIRECTION/LAYOUT OF CARPET TILE TO ENSURE THAT DESIGN INTENT HAS BEEN IMPLEMENTED.

WALL TILE A. SHOWER ENCLOSURE LOCATED IN ROOM 301C IS TO HAVE FLOOR TO CEILING CERAMIC WALL TILE INSTALLED ON ALL THREE WALLS

- CERAMIC WALL TILE TO BE INSTALLED IN VERTICAL STRAIGHT LAY UNLESS NOTED OTHERWISE. CERAMIC WALL TILE ACCENT WALLS IN SINGLE RESTROOMS TO BE INSTALLED IN BASKETWEAVE PATTERN AS NOTED.

PORCELAIN WALL TILE TO BE INSTALLED IN VERTICAL STRAIGHT LAY.

A. RUBBER BASE (RB-1) TO BE INSTALLED AT ALL LVT, VCT, CART, AND SVF LOCATIONS UNLESS OTHERWISE INDICATED. ALL RB BASE TO

PROVIDE PREFORMED BASE TO MATCH 1"RADIUS AT ALL LOCATIONS WHERE BASE COVERS MASONRY BULLNOSE. REFER TO FINISH SCHEDULE FOR BASE MATERIAL TYPE. TYPICAL AT ALL LOCATIONS. AT RB LOCATIONS PROVIDE PREFORMED OUTSIDE CORNERS, AND USE MANUFACTURER'S RECOMMENDED ADHESIVE (CONTACT CEMENT) FOR PROPER ADHESION WITH NO GAPS.

- PAINT & STAIN

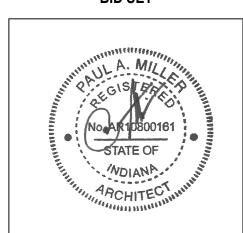
 A. PAINT ALL WALLS UNLESS OTHERWISE INDICATED ON FINISH PLANS. PAINT ONE MOCK-UP CLASSROOM TO RECEIVE ARCHITECT'S APPROVAL PRIOR TO ORDERING PAINT FOR THE ENTIRE BUILDING.
- REPAINT ALL EXISTING DOOR FRAMES. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION. REFER TO "MISCELLANEOUS MATERIALS" SECTION FOR INFORMATION ON WOOD SPECIES AND STAIN.

PAINT TYPE GENERAL NOTES

- A. UNDER SECTION 099123 INTERIOR PAINTING, PAINT EXPOSED PIPES, DUCTWORK, BREACHING, CONDUIT, INSULATED PIPES, CONDUIT HANGERS, SUPPORTS, BRACING, ETC., WHICH OCCURS IN SPACES DESIGNATED TO BE PAINTED IN PART OR WHOLE.
- PAINTING AND FINISHING OF EXTERIOR SURFACES AS DESIGNATED. DETAILS SHALL BE UNDER THE WORK SECTION 0991113 EXTERIOR
- ALL WALLS ARE TO RECEIVE A SEMI-GLOSS FINISH AND ALL CEILINGS/BULKHEADS ARE TO RECEIVE A FLAT FINISH.
- ALL GYPSUM BOARD WALLS SHALL BE PAINTED WITH INTERIOR PAINT TYPE #9.23 (SEMI-GLOSS) UNLESS OTHERWISE INDICATED. ALL GYPSUM BOARD CEILINGS AND SOFFITS SHALL BE PAINTED WITH PAINT TYPE #9.21 (FLAT) UNLESS OTHERWISE INDICATED. PAINT ALL NON-INTEGRALLY COLORED CMU WALLS WITH INTERIOR PAINT TYPE #4.14 (SEMI-GLOSS), UNLESS OTHERWISE INDICATED.
- IN THE FOLLOWING ROOMS PAINT CMU WITH PAINT CODE #4.223 (EPOXY-SEMI-GLOSS). REFER TO SECTION 099600 HIGH PERFORMANCE COATING: <u>ALL CORRIDORS, NEIGHBORHOOD CUBBY AND COMMONS AREAS, GYMNASIUM, STEAM LAB, LARGE</u>
- H. IN THE FOLLOWING ROOMS PAINT GWB WITH PAINT CODE #9.212 (EPOXY-SEMI-GLOSS). REFER TO SECTION 099600 HIGH
- PERFORMANCE COATING: <u>ADMIN CORRIDORS</u> ALL EXPOSED STEEL COLUMNS SHALL BE PAINTED WITH PAINT CODE #5.223 (EPOXY SEMI-GLOSS). REFER TO SECTION 099600 - HIGH PERFORMANCE COATINGS.
- ALL FERROUS METAL (EXCLUDING STRUCTURE) SHALL BE PAINTED INTERIOR PAINT TYPE #5.12. ALL GALVANIZED METAL (EXCLUDING STRUCTURE) SHALL BE PAINTED INTERIOR PAINT TYPE #5.32.
- ALL EXPOSED STEEL (FERROUS) STRUCTURE SHALL BE PAINTED INTERIOR PAINT TYPE #5.11. ALL EXPOSED GALVANIZED-METAL STRUCTURE SHALL BE PAINTED INTERIOR PAINT TYPE #5.31.
- ALL GALVANIZED STEEL TRIM SHALL BE PAINTED INTERIOR PAINT TYPE #5.322. ALL ABUSE RESISTANT ACOUSTICAL WALL PANELS (AR-AWT) SHALL BE PAINTED WITH INTERIOR PAINT CODE #11.0.
- ALL WOOD DOORS AND TRANSOMS THAT ARE SCHEDULED TO BE PAINTED SHALL BE PAINTED INTERIOR PAINT TYPE #6.31. ALL WOOD PANELS THAT ARE SCHEDULED TO BE PAINTED SHALL BE PAINTED INTERIOR PAINT TYPE #6.41.
- ALL EXPOSED MECHANICAL INSULATION SHALL BE PAINTED INTERIOR PAINT TYPE #10.11.

PAINT COLOR GENERAL NOTES

- ALL INTERIOR WALLS SHALL BE PAINTED P-1, UNLESS OTHERWISE INDICATED ON FINISH PLANS OR INTERIOR ELEVATIONS.
- PAINT ALL GWB SOFFITS P-3 UNLESS OTHERWISE NOTED ON FINISH PLANS OR INTERIOR ELEVATIONS.
- PAINT ALL PAINTED EXPOSED CEILINGS AND GYPSUM BOARD CEILINGS P-3 UNLESS OTHERWISE NOTED ON FINISH PLANS, CEILING
- ALL INTERIOR HOLLOW METAL FRAMES AND DOOR FRAMES TO BE PAINTED P-2 UNLESS OTHERWISE NOTED.
- PAINT ALL EXPOSED STEEL ON STAIRS, RAILS, AND STRINGERS P-2.
- PAINT ALL SIDES (HORIZ. AND VERT.) OF SOFFIT INDICATED COLOR, UNLESS OTHERWISE NOTED.
- ALL EXPOSED INTERIOR STEEL COLUMNS SHALL BE PAINTED P-1 UNLESS OTHERWISE INDICATED ON INTERIOR ELEVATIONS OR FINISH



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CARMEL CLAY SCHOOLS

ARCHITECT

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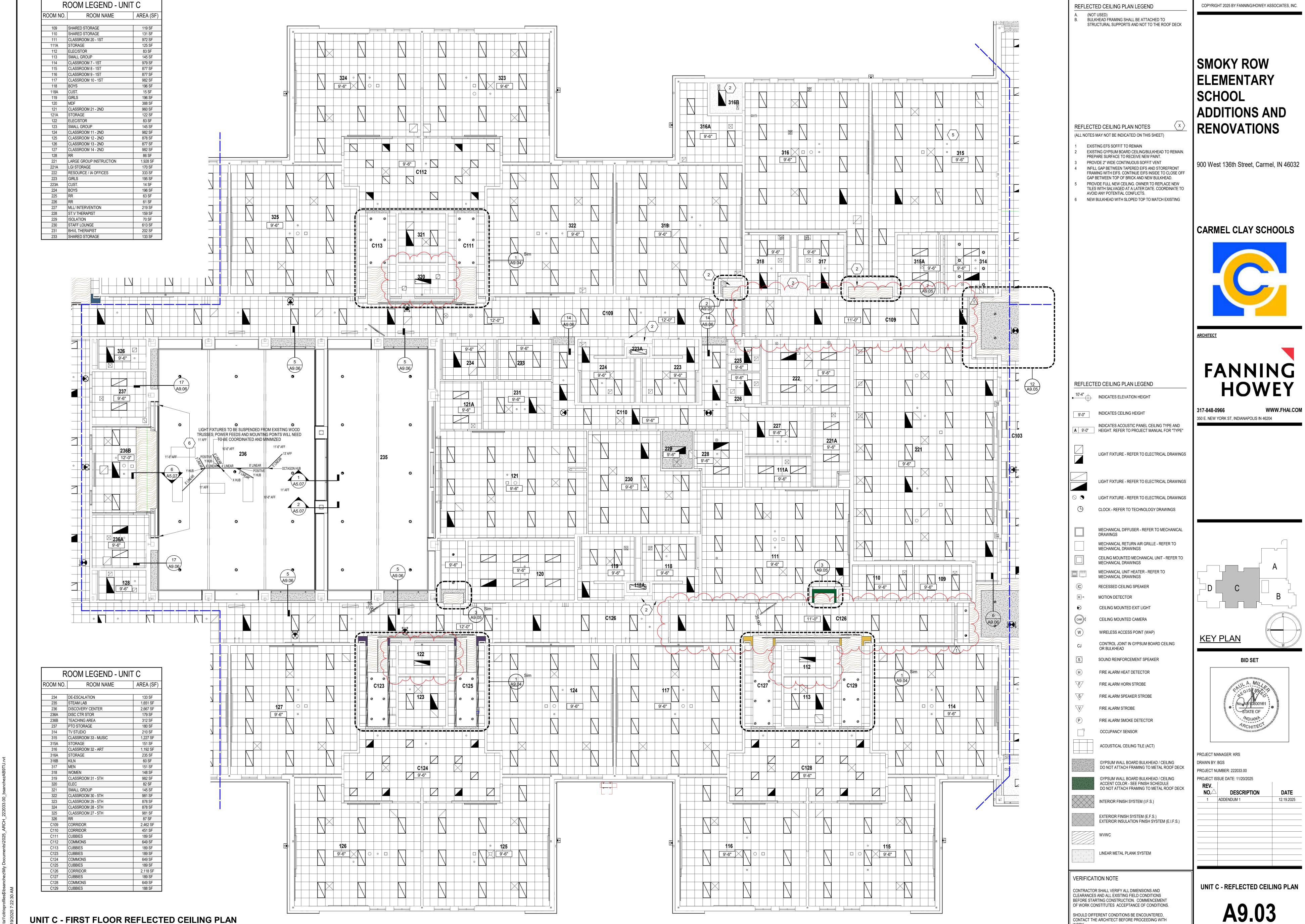
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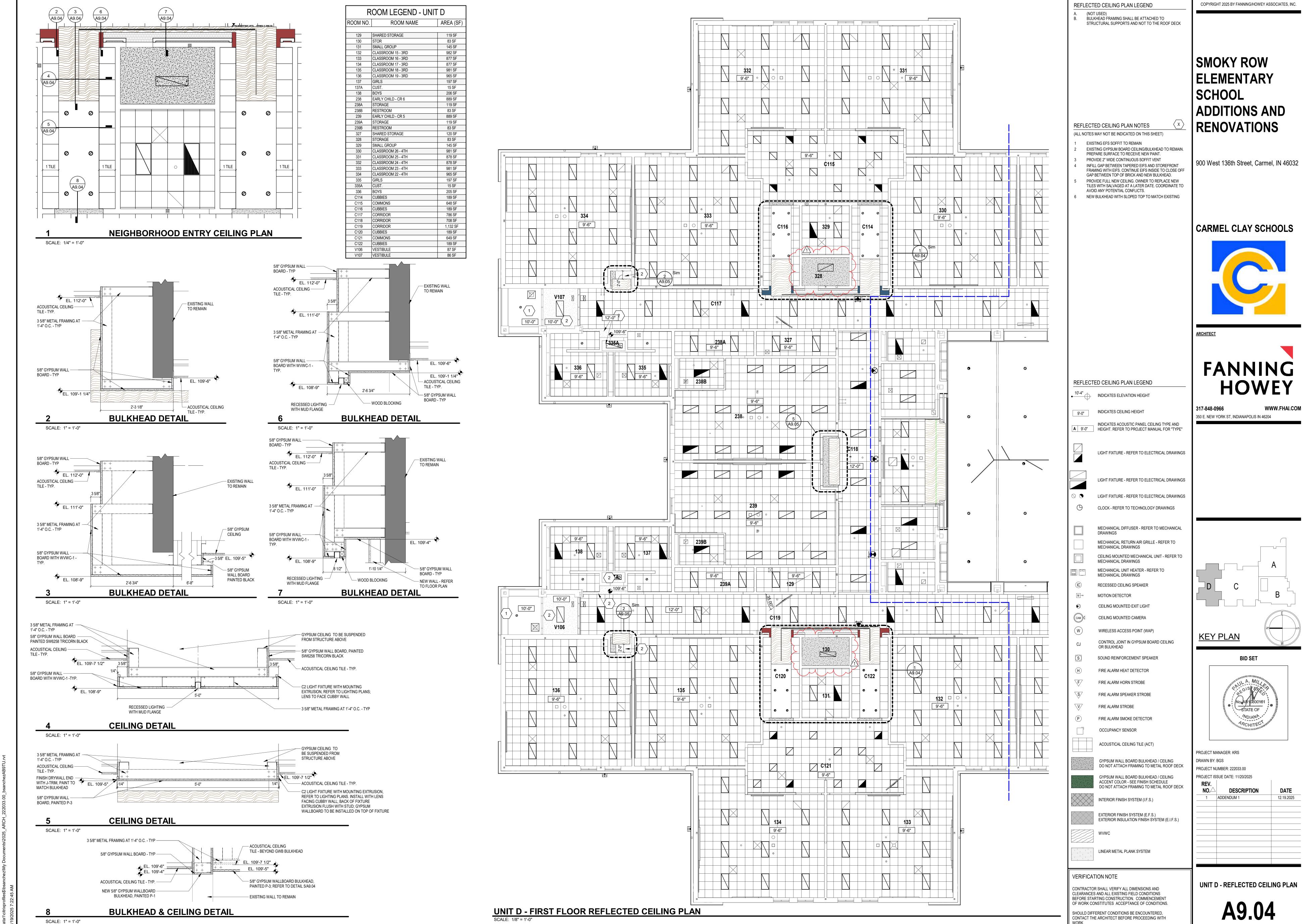
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1	ADDENDUM 1	12.19.2025
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LIST OF FINISHES



A9.03



SPECIAL CONDITIONS LAYOUT NOTES

- 1. NOT IN USE.
- 2. (BY GENERAL DIVISION) RECESS AND TRANSIT LEVEL ENTIRE WALK-IN COOLER/FREEZER AREA TO A DEPTH OF 8" TO RECEIVE WALK-IN COOLER/FREEZER INSULATED FLOOR PANELS. DEPRESSION TO BE CONSTRUCTED AS TO PROVIDE A LEVEL TRANSITION FROM FLOOR FINISH IN KITCHEN AREA TO THE FLOOR FINISH IN WALK-IN COOLER/FREEZER. (VERIFY REQUIRED DEPRESSION THICKNESS WITH WALK-IN MANUFACTURER'S SHOP DRAWING AND ARCHITECTURAL FLOOR FINISH SCHEDULE)
- 3. (BY GENERAL DIVISION) PROPERLY REINFORCE ALL WALLS AND/OR CEILINGS TO SUPPORT ALL WALL AND/OR CEILING SUPPORTED EQUIPMENT. ALL WALL BLOCKING TO BE MINIMUM 3/4" MARINE GRADE PLYWOOD. WALL BLOCKING LENGTHS SHOWN ARE MINIMUM AND WALL BLOCKING SHALL ALWAYS EXTEND TO NEXT STUD OVER IN EACH DIRECTION.
- 4. (BY GENERAL DIVISION) PROVIDE BOX OUT IN CEILING GRID LAYOUT FOR EXHAUST SYSTEM HOODS AS SHOWN. (REFER TO EXHAUST VENTILATION SYSTEM DRAWINGS FOR MORE INFORMATION)
- 5. NOT IN USE.
- 6. (BY ELECTRICAL DIVISION) PROVIDE RACEWAY FOR RUN OF COMPUTER GRADE CONDUIT FROM POINT OF SALE SYSTEMS IN SERVERY AREA TO COMPUTER LOCATED IN KITCHEN MANAGER'S OFFICE FOR COMMUNICATION PURPOSES.
- 7. (BY MECHANICAL DIVISION) COOL, HEAT &/OR VENTILATE FOOD SERVICE DRY STORAGE ROOM TO MAINTAIN A TEMPERATURE OF 68 DEGREES TO 72 DEGREES YEAR AROUND.

COOLER CONDENSING UNIT

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COOLER CONDENSING UNIT

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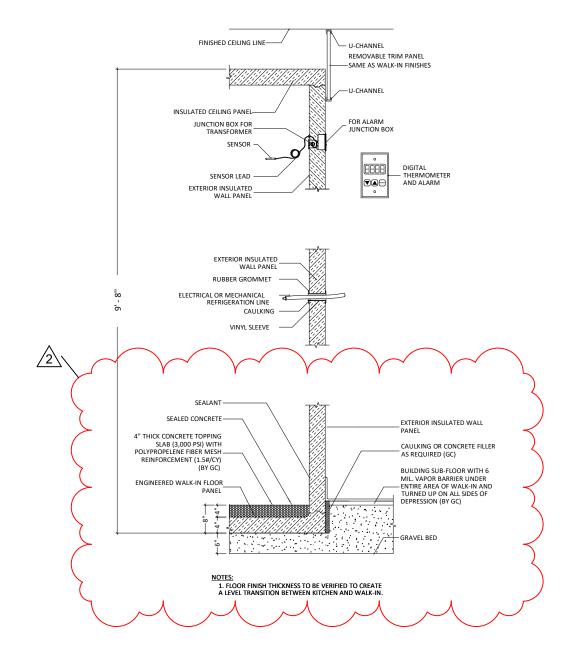
CONDENSING UNIT

CONDENSING UNIT

MAKE-UP AIR UNIT

WALK-IN COOLER/FREEZER CONDENSING UNITS TO BE CURB MOUNTED ON ROOFTOP ABOVE WALK-IN COOLER/FREEZER. EXACT LOCATION TO BE COORDINATED WITH ARCHITECTURAL DRAWING SET.

WALK-IN WALL SECTION DETAIL



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KEY PLAN

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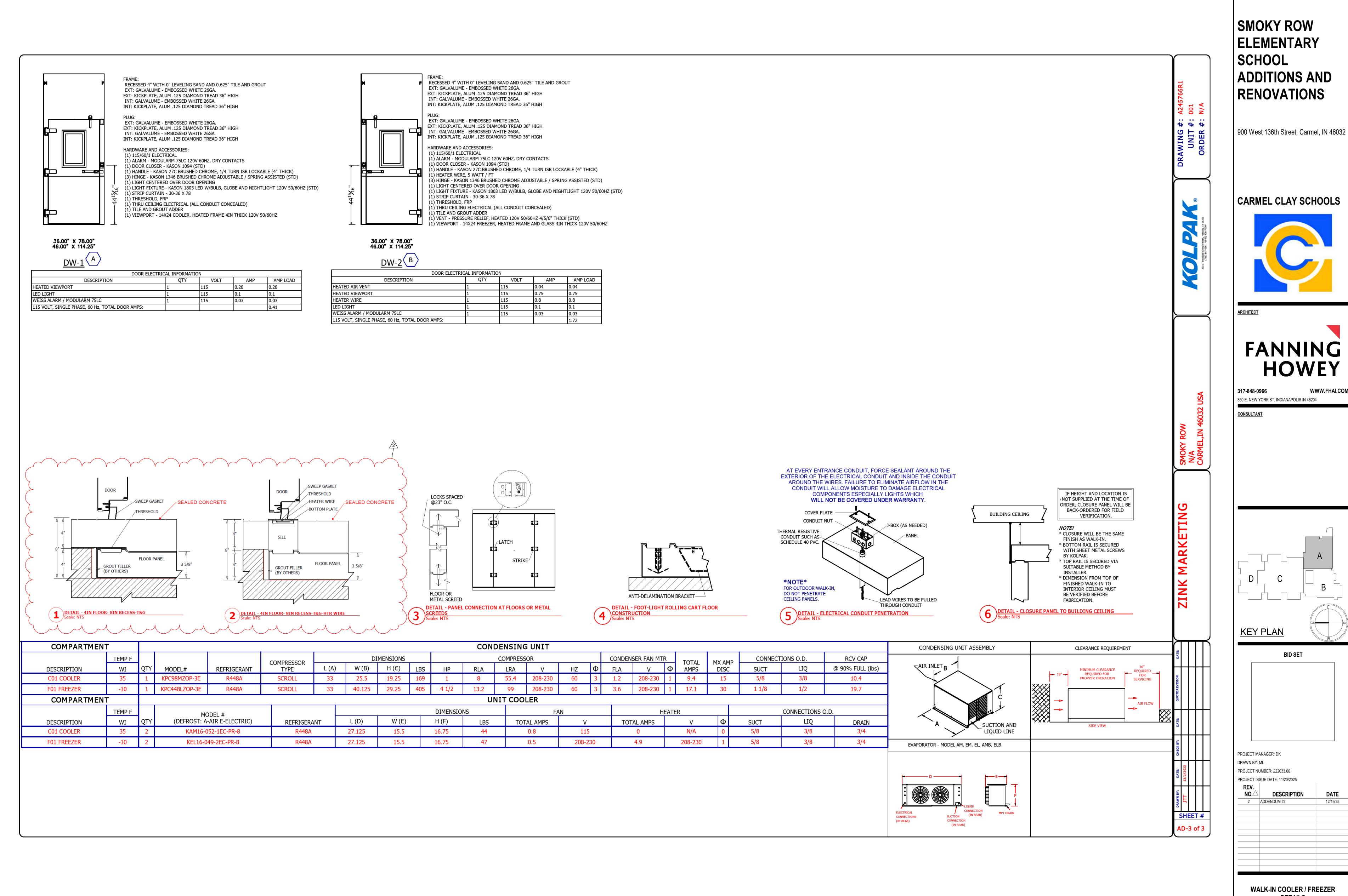
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PROJECT NUMBER: 222033.00

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FOODSERVICE SPECIAL CONDITIONS LAYOUT

K1.03



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WALK-IN COOLER / FREEZER DETAILS

UNIT A - FIRST FLOOR PLUMBING DEMOLITION PLAN SCALE: 1/8" = 1'-0"

GENERAL CONSTRUCTION NOTE

NEW PIPING INSTALLATIONS.

CONTRACTOR SHALL BE RESPONSIBLE FOR CEILING REMOVAL AND REPLACEMENT AS REQUIRED THROUGHOUT EXISTING AREAS TO ACCOMMODATE

UNIT A FIRST FLOOR DEMO PLAN NOTES 1 REMOVE PLUMBING FIXTURE AND ALL ASSOCIATED PIPING COMPLETE.

REMOVE FLOOR DRAIN GRATE AND BODY COMPLETE. CAP OR PLUG WASTE OUTLET.
PATCH CONCRETE SLAB TO MATCH EXISTING FINISHES.

REMOVE ALL PIPING WITHIN CHASE COMPLETE REMOVE ALL CARRIERS AND SUPPORTS COMPLETE. REMOVE 4" WASTE THRU FLOOR BELOW CONCRETE SLAB AND CAP. PATCH CONCRETE SLAB TO MATCH EXISTING FINISHES

REMOVE SHOWER DRAIN GRATE, SHOWER PAN AND BODY COMPLETE. CAP OR PLUG WASTE OUTLET. PATCH CONCRETE SLAB TO MATCH EXISTING FINISHES.

> REMOVE 2" VENT UP INTO CEILING SPACE. EXISTING 4" VENT THRU ROOF TO REMAIN. PREPARE REMAINING PIPING FOR CONNECTION REMOVE PLUMBING FIXTURE AND ALL

ASSOCIATED PIPING COMPLETE. EXISTING WATER AND WASTE ROUGH-INS TO REMAIN. PREPRARE EXISTING ROUGH-INS FOR CONNECTION TO NEW. REMOVE COLD WATER, HOT WATER AND HOT

WATER RETURN PIPING BACK TO THIS POINT. PREPARE REMAINING PIPING FOR CONNECTION CARMEL CLAY SCHOOLS REMOVE 2" VENT UP INTO CEILING SPACE.

EXISTING 3" VENT THRU ROOF TO REMAIN. PREPARE REMAINING PIPING FOR CONNECTION REMOVE COLD WATER, HOT WATER AND HOT

WATER RETURN PIPING BACK TO THIS POINT 10 REMOVE FLOOR CLEANOUT COMPLETE.

11 REMOVE PLUMBING FIXTURE AND ALL ASSOCIATED PIPING COMPLETE. REMOVE WASTE AND WATER ROUGH-INS BACK INTO CHASE AND CAP. PATCH WALL TO MATCH EXISTING FINISHES.

12 REMOVE PIPING BACK TO THIS POINT AND PREPARE REMAINING PIPING FOR CONNECTION TO NEW.

13 REMOVE PIPING BACK TO THIS POINT AND CAP. 14 REMOVE FLOOR TROUGH, BODY AND GRATE COMPLETE. REMOVE WASTE PIPING TO BELOW SLAB AND CAP. PATCH CONCRETE SLAB TO

MATCH EXISTING FINISHES.

15 REMOVE WALK-IN COOLER/FREEZER EVAPORATOR COILS COMPLETE. PRESERVE EXISTING MECHANICAL ROOM WALL PENETRATION FOR ROUTING OF NEW DRAIN LINES. SEE NEW PLUMBING PLANS FOR MORE INFORMATION.

16 REMOVE ALL PIPING AND VALVES ASSOCIATED WITH UTILITY DISTRIBUTION SYSTEM. REMOVE WATER AND GAS PIPING UP TO ABOVE CEILING AND PREPARE REMAINING PIPE FOR CONNECTION TO NEW.

17 REMOVE STAINLESS STEEL UTILITY CHASE. REMOVE WATER AND VENT PIPING UP TO ABOVE CEILING. REMOVE WASTE DOWN TO BELOW SLAB AND CAP.

18 REMOVE PLUMBING FIXTURE AND ALL

REMOVE WATER ROUGH-INS COMPLETE. REMOVE WASTE BACK INTO WALL AND CAP. PATCH WALL TO MATCH EXISTING FINISHES.

19 REMOVE P-TRAP ASSEMBLY AND ASSOCIATED PIPING COMPLETE. REMOVE WASTE ROUGH-IN BACK INTO WALL AND CAP. PATCH WALL TO MATCH EXISTING FINISHES.

ASSOCIATED VALVES AND TRIM COMPLETE.

20 REMOVE PLUMBING FIXTURE AND ALL ASSOCIATED VALVES AND TRIM COMPLETE. EXISTING WATER AND DRAIN ROUGH-INS TO REMAIN. PREPARE ROUGH-INS FOR CONNECTION TO NEW.

21 REMOVE PIPING COMPLETE.

22 REMOVE FLOOR SINK GRATE AND BODY COMPLETE. CAP OR PLUG WASTE OUTLET. PATCH CONCRETE SLAB TO MATCH EXISTING

23 REMOVE STAINLESS STEEL KITCHEN CASEWORK AND ALL ASSOCIATED VALVES, PIPING AND EQUIPMENT COMPLETE. REMOVE WATER ROUGH-INS BACK INTO WALL AND CAP. REMOVE WASTE ROUGH-INS BACK INTO WALL FINISHES.

AND CAP. PATCH WALL TO MATCH EXISTING 24 REMOVE THERMOSTATIC MIXING VALVE AND ASSOCIATED SHUTOFF VALVES COMPLETE.

PREPARE REMAINING PIPING FOR CONNECTION 25 DISCONNECT NATURAL GAS AND LP FROM EXISTING BOILER. PREPARE REMAINING PIPING FOR CONNECTION TO NEW. mmmmm

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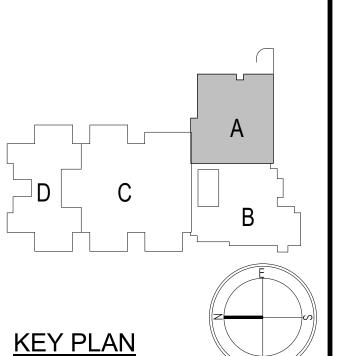
SMOKY ROW ELEMENTARY SCHOOL

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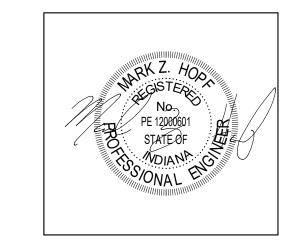




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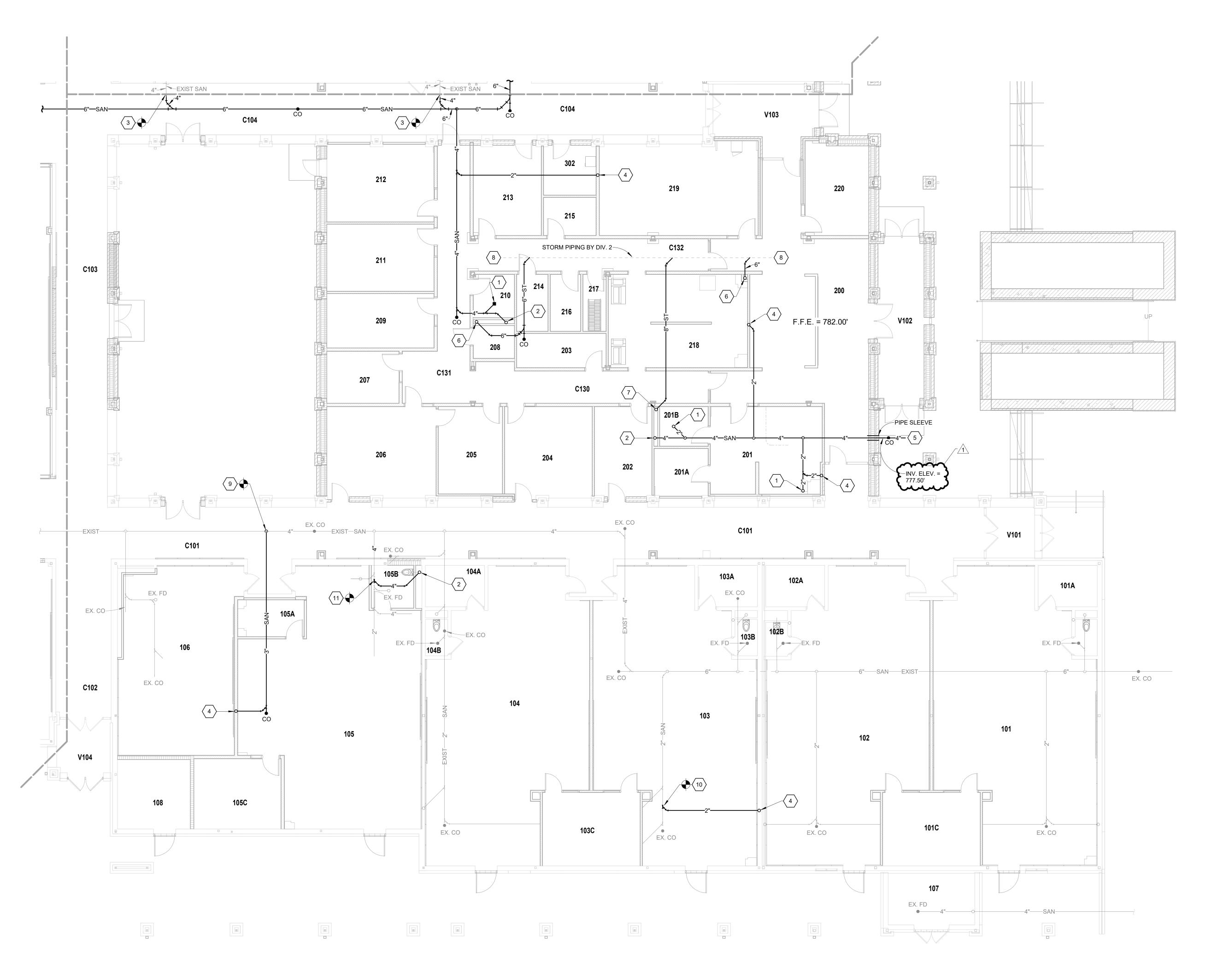
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VERIFICATION NOTE

WITH WORK.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING

UNIT A - FIRST FLOOR PLUMBING DEMOLITION PLAN



UNIT B - FOUNDATION PLUMBING PLAN SCALE: 1/8" = 1'-0"

	ROOM LEGEND - UNIT	В	COPYRIGHT 2025 BY FANNING/HOWEY ASSOCIATES, INC.
ROOM		AREA	
NO.	ROOM NAME	(SF)	
	ACTIVITY COURTYARD	2313 SF	
101	KINDER - CR 1	1327 SF	
101A	STORAGE	80 SF	
101B	TOILET	26 SF	
101C	SMALL GROUP	234 SF	CMOKY DOM
102	KINDER - CR 2	1325 SF	ISMOKY ROW
102A	STORAGE	80 SF	
102B	TOILET	24 SF	I ELEMENTARY
103	KINDER - CR 3	1329 SF	
103A	STORAGE	80 SF	
103B	TOILET SMALL GROUP	27 SF 234 SF	SCHOOL
103C 104	KINDER - CR 4	1327 SF	
104 104A	STORAGE	80 SF	ADDITIONS AND
104A 104B	TOILET	27 SF	UADUITIONS AND
1045	KINDER - CR 35	1243 SF	
105A	STORAGE	80 SF	RENOVATIONS
105R	RR	58 SF	
105C	SMALL GROUP	201 SF	
106	FLEX ROOM	707 SF	
107	MECH	149 SF	
108	OUTDOOR STORAGE	166 SF	
200	RECEPTION	901 SF	900 West 136th Street, Carmel, IN 46032
201	CLINIC	315 SF	
201A	EXAM	84 SF	
201B	RR	63 SF	
202	E.C. SPEECH	172 SF	
203	STORAGE	100 SF	
204	ASST PRINCIPAL'S OFFICE	262 SF	
205	SMALL CONFERENCE	183 SF	
206	PRINCIPAL'S OFFICE	330 SF	
207	PSYCHOLOGIST	123 SF	
208	ISOLATION	44 SF	
209	INST COACH OFFICE	191 SF 58 SF	I CARMEL CLAY SCHOOLS
210 211	SOCIAL WORKER	235 SF	
212	OT/PT OFFICE	272 SF	
213	SPEECH/HEARING	203 SF	The second secon
214	ELEC	58 SF	
215	TEST STOR/ QUIET SPACE	65 SF	
216	IDF	57 SF	
217	MEZZANINE	43 SF	
218	WORKROOM	418 SF	
219	LARGE CONFERENCE	478 SF	
220	SRO OFFICE	189 SF	
302	MOTHERS	88 SF	
C101	CORRIDOR	1729 SF	
C102	CORRIDOR	283 SF	
C103	CORRIDOR	625 SF	
C104	CORRIDOR	1172 SF	
C130	CORRIDOR	261 SF	
C131	CORRIDOR	342 SF	<u>ARCHITECT</u>
C132	CORRIDOR	248 SF	ARCHITECT.
V101	VESTIBULE	91 SF	
V102	SECURE VESTIBULE	253 SF	
V103	VESTIBULE VESTIBULE	216 SF	II 🔻
V104		103 SF	· -

GENERAL CONSTRUCTION NOTE CONTRACTOR SHALL PROVIDE CUTTING AND PATCHING OF EXISTING CONCRETE SLAB AS REQUIRED TO ACCOMMODATE INSTALLATION OF UNDERSLAB PIPING SYSTEMS. PATCH CONCRETE

SLAB TO MATCH EXISTING FINISHES.

UNIT B FOUNDATION PLAN NOTES 1 2" WASTE WITH DEEP SEAL P-TRAP FROM FLOOR

DRAIN ABOVE. 2 4" WASTE FROM ABOVE.

3 CONNECT 4" WASTE TO EXISTING 4" WASTE MAIN AT THIS LOCATION.

4 2" WASTE FROM ABOVE.

5 REFER TO SITE/CIVIL DRAWINGS FOR CONTINUATION.

6 6" STORM FROM ABOVE.

7 8" STORM FROM ABOVE.

8 STORM DRAIN PIPE BY DIVISION 2 CONTRACTOR. REFER TO SITE/CIVIL DRAWINGS FOR EXACT SIZE, LOCATION AND MORE INFORMATION.

9 CONNECT 3" WASTE TO EXISTING 4" WASTE MAIN AT THIS LOCATION.

10 CONNECT 2" WASTE TO EXISTING 2" WASTE AT THIS LOCATION.

11 CONNECT 3" WASTE TO EXISTING 4" WASTE MAIN AT THIS LOCATION.

KEY PLAN

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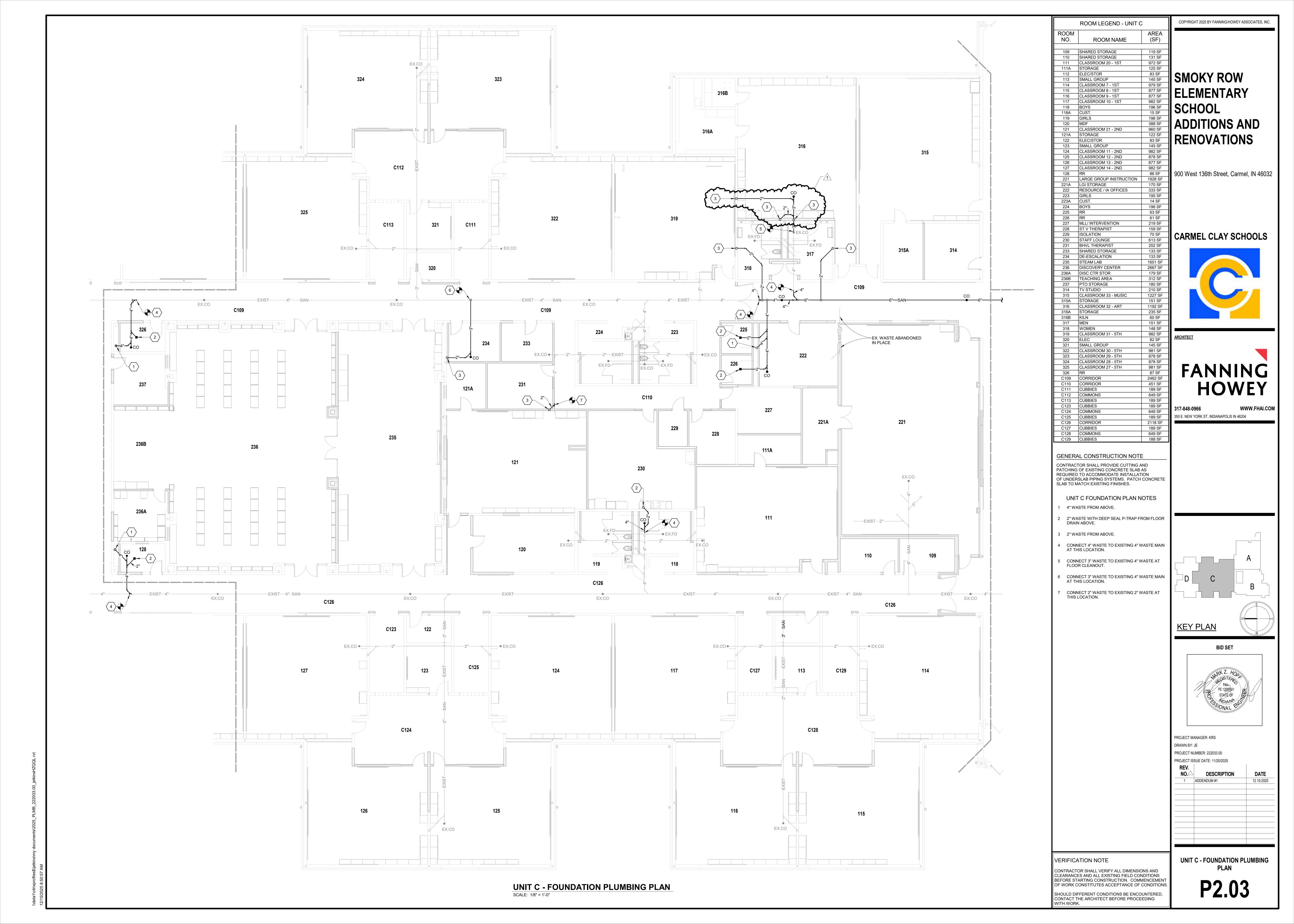
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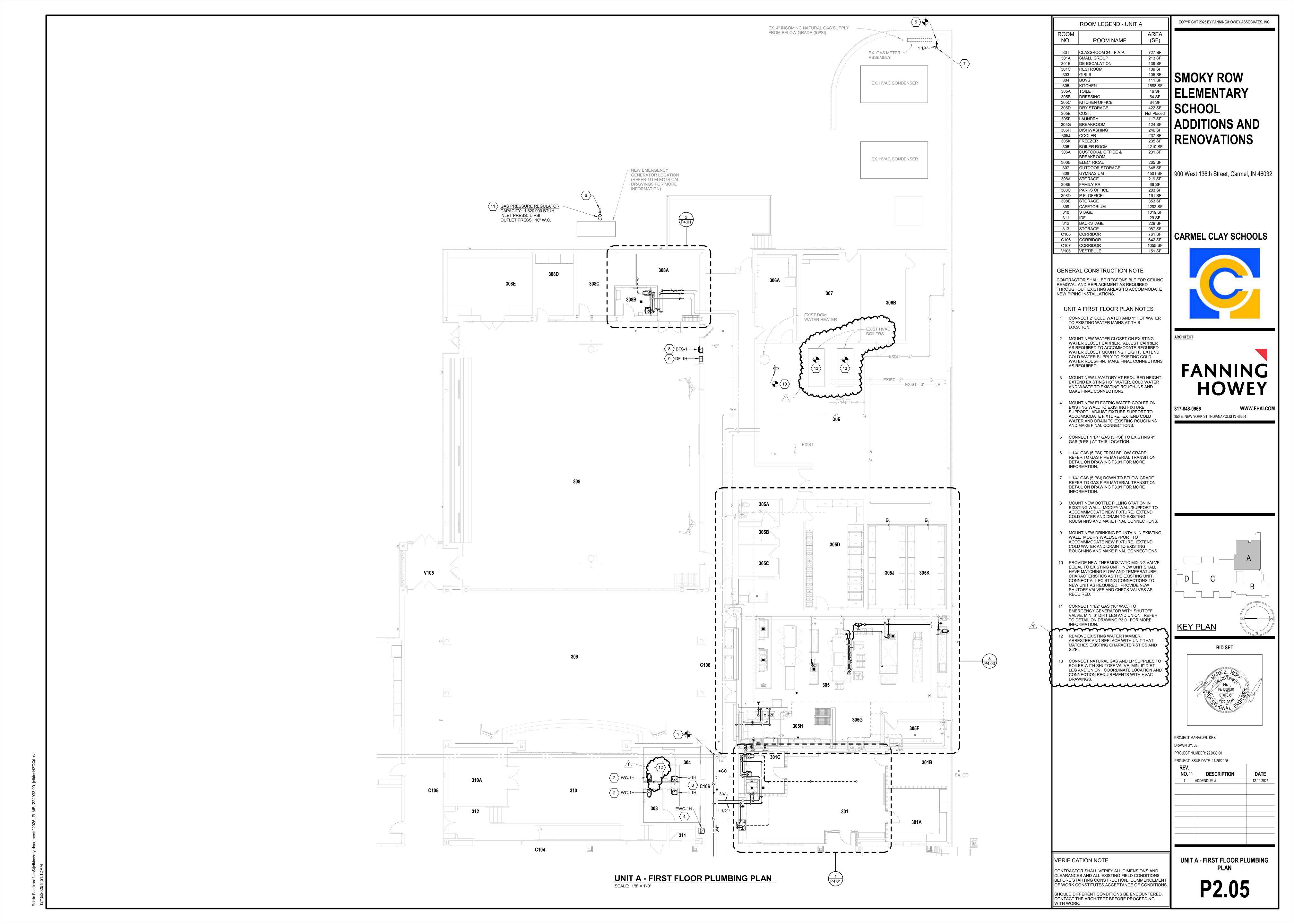
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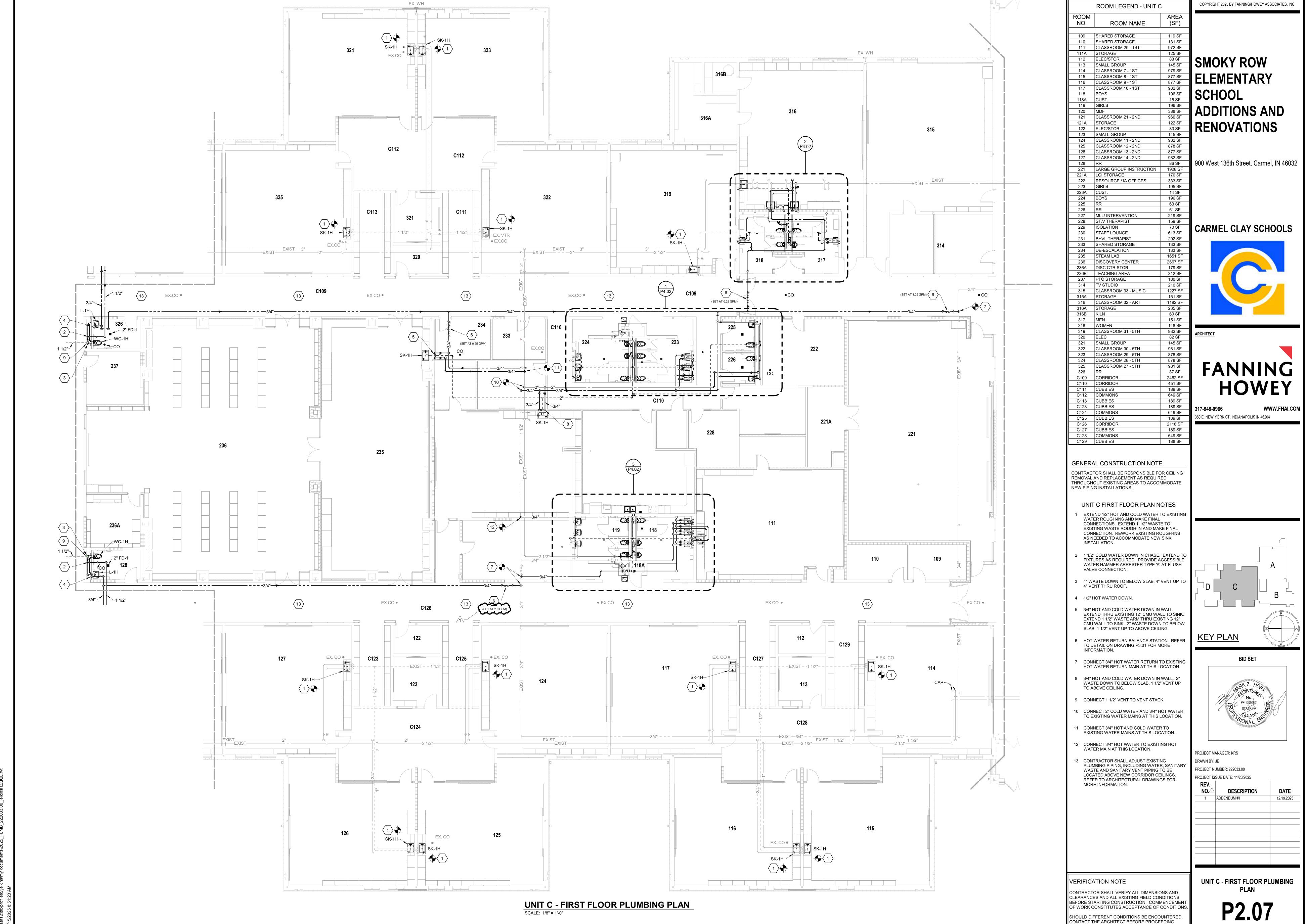
VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

UNIT B - FOUNDATION PLUMBING

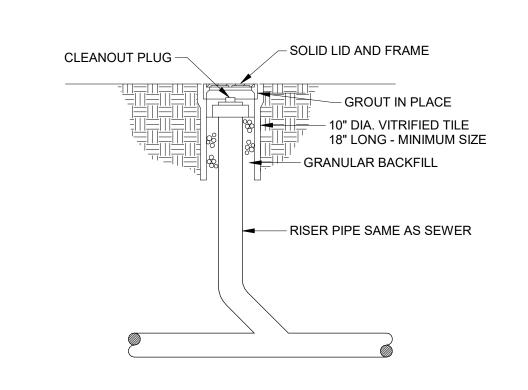






WITH WORK.

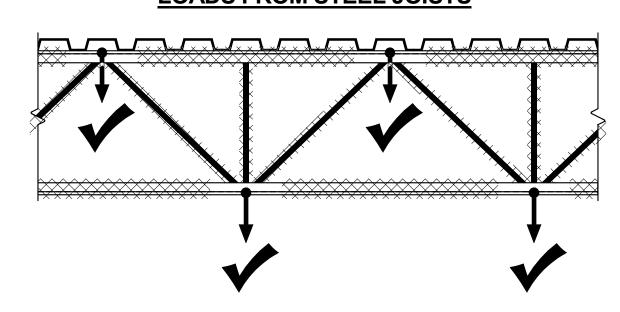
							PLUMBIN	IG FIXTURE SC	CHEDULE							
	FIXTURE						TRIM		ACCESSORIES			CONNECTIONS				
MARK	ITEM	MFGR	MODEL	MATERIAL	TYPE	COLOR	ITEM	MFGR	MODEL	ITEM	MFGR	MODEL	CW	HW	W	V COMMENTS
BFS-1	RECESSED BOTTLE FILLING STATION	ELKAY	LMASMB	STAINLESS	SURFACE MOUNTED								1/2"		1 1/2"	BATTERY POWERED; UNIT SUPPLIED WITH IN-LINE WATER FILTER AND (SAAA BATTERIES FROM MANUFACTURER
DF-1H	RECESSED DRINKING FOUNTAIN - ADA	ELKAY	EDFB12C	STAINLESS	RECESSED IN WAL	L				IN-LINE WATER FILTER	PENTAIR	IN-10NS5	1/2"		1 1/2"	
EWC-1H	ELECTRIC WATER COOLER W/BOTTLE FILLER - ADA	ELKAY	LZS8WSSK	STAINLESS	WALL MOUNTED	-	BUBBLER	-	-	-	-	-	1/2"		2"	1 1/2"
GI-1	GREASE INTERCEPTOR	SCHIER	GB-500	POLYPROPYLENE	BELOW GRADE / EXTERIOR					SAMPLING PORT	SCHIER	SV-10			6"	4" 6" INLET / OUTLET; PROVIDE FIELD CUT RISER MODEL FCR2 TO ELEVATE ACCESS LIDS TO GRADE
HB-1	HOSE BIBB	CHICAGO	387-E27CP	ROUGH BRONZE	WALL MOUNTED	-	-	-	-	-	-	-	3/4"			MOUNT AT 24" ABOVE FINISHED FLOOR
IB-1	ICE MAKER SUPPLY BOX	GUY GRAY	MIB 1	STAINLESS	WALL MOUNTED	-	-	-	-	-	-	-	1/2"			
L-1	LAVATORY	AMERICAN STANDARD	0355.012	VIT. CHINA	WALL MOUNTED	WHITE	FAUCET	CHICAGO	802-VE34VPABCP	POINT-OF-USE TMV	POWERS	LFG480	1/2"	1/2"	1 1/2"	1 1/2" PROVIDE 0.5 GPM FLOW AERATOR; SET OUTLET TEMPERATURE OF TMV AT 105 DEG. F., SIZE TMV FOR MIN. 0.25 GPM.
L-1H	LAVATORY - ADA	AMERICAN STANDARD	0355.012	VIT. CHINA	WALL MOUNTED	WHITE	FAUCET	SLOAN	EAF350-ISM-0.5	POINT-OF-USE TMV	POWERS	LFG480	1/2"	1/2"	1 1/2"	1 1/2" PROVIDE 0.5 GPM FLOW AERATOR; SET OUTLET TEMPERATURE OF TMV AT 105 DEG. F., SIZE TMV FOR MIN. 0.25 GPM.
PT-1	PLASTER TRAP	MIFAB	M-SOLID-S	CAST IRON	CASEWORK	-	-	-	-	-	-	-			2"	
SH-1H	SHOWER - ADA	SYMMONS	1-902S-FSB	STAINLESS	WALL MOUNTED	SATIN	-	-	-	-	-	-	3/4"	3/4"	2"	1 1/2"
SK-1H	SINGLE COMPARTMENT SINK - ADA WITH BUBBLER	ELKAY 1	DRKAD222055	STAINLESS	COUNTERTOP	-	FAUCET	ELKAY	LKD2439C	BUBBLER	ELKAY	LK1141A	1/2"	1/2"	2"	1 1/2" PROVIDE REAR CENTER DRAIN OUTLET TO ACCOMMMODATE ADA ACCESSIBILITY
SK-2	SINGLE COMPARTMENT SINK	ELKAY	DLR252210PD	STAINLESS	COUNTERTOP	-	FAUCET	CHICAGO	786-E3-369ABCP	-	-	-	1/2"	1/2"	2"	1 1/2" 8" DEEP BOWL
SK-2H	SINGLE COMPARTMENT SINK - ADA	ELKAY	LNAD25245.5	STAINLESS	COUNTERTOP	-	FAUCET	CHICAGO	786-E3-369ABCP	-	-	-	1/2"	1/2"	2"	1 1/2" PROVIDE REAR CENTER DRAIN OUTLET TO ACCOMMODATE ADA ACCESSIBILITY; 5.5" DEEP BOWL
SK-3H	DOUBLE COMP. SINK - ADA	ELKAY	LRAD332255	STAINLESS	COUNTERTOP	-	FAUCET	CHICAGO	201-RSGN8AE3VXKAE	B -	-	-	1/2"	1/2"	2"	1 1/2" PROVIDE REAR CENTER DRAIN OUTLET TO ACCOMMODATE ADA ACCESSIBILITY; 5.5" DEEP BOWL
SK-4H	DOUBLE COMP. SINK - ADA (CLINIC SINK)	ELKAY	LRAD332255	STAINLESS	COUNTERTOP	-	FAUCET	CHICAGO	201-RSGN8AE3VXKAE	B FAUCET MOUNTED EMERG. EYE WASH		G1100	1/2"	1/2"	2"	1 1/2" PROVIDE REAR CENTER DRAIN OUTLET TO ACCOMMODATE ADA ACCESSIBILITY; 5.5" DEEP BOWL
SP-1	SANITARY WASTE SAMPLING PORT	SCHIER	SV-10	POLYPROPYLENE											6"	FIELD MODIFIABLE TO 6" INLET AND OUTLET. PROVIDE FIELD CUT RISEF TO ELEVATE ACCESS LID TO GRADE.
UR-1	URINAL	AMERICAN STANDARD	6590.001	VIT. CHINA	WALL MOUNTED	WHITE	FLUSH VALVE	SLOAN	186-0.5 DFB	-	-	-	3/4"		2"	1 1/2"
UR-1H	URINAL - ADA	AMERICAN STANDARD	6590.001	VIT. CHINA	WALL MOUNTED	WHITE	FLUSH VALVE	SLOAN	186-0.5 DFB	-	-	-	3/4"		2"	1 1/2"
WC-1	WATER CLOSET	AMERICAN STANDARD	2257.101	VIT. CHINA	WALL MOUNTED	WHITE	FLUSH VALVE	SLOAN	111-1.6	SEAT	BEMIS	1955SSCT	1"		4"	2"
WC-1H	WATER CLOSET - ADA	AMERICAN STANDARD	2257.101	VIT. CHINA	WALL MOUNTED	WHITE	FLUSH VALVE	SLOAN	111-1.6	SEAT	BEMIS	1955SSCT	1"		4"	2"
WH-1	NON-FREEZE WALL HYDRANT	J.R. SMITH	5509QT	ROUGH BRONZE	WALL MOUNTED	-	-	-	-	-	-	-	3/4"			MOUNT COURTYARD WALL HYDRANT HEIGHT CENTERED BETWEEN WINDOW LEDGE AND FINISHED GRADE



EXTERIOR CLEANOUT DETAIL

N.T.S.

ACCEPTABLE LOCATIONS TO HANG LOADS FROM STEEL JOISTS

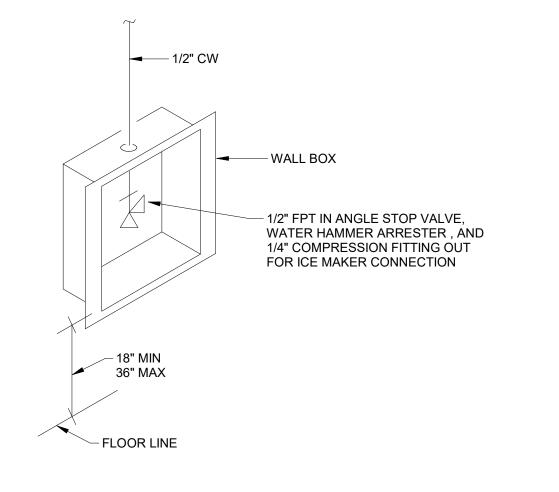


- 1. LOADS IN EXCESS OF 100 LBS ARE ONLY TO BE HUNG FROM STEEL JOISTS AT THE LOCATIONS INDICATED WITH A CHECKMARK.
- 2. DO NOT HANG LOADS IN EXCESS OF 100 LBS FROM LOCATIONS AND/OR MEMBERS INDICATED WITH DIAGONAL HATCHING UNLESS ADDITIONAL REINFORCING ANGLES ARE INSTALLED PER THE STRUCTURAL DRAWINGS.
- 3. LOADS LESS THAN 100 LBS MAY BE HUNG ANYWHERE ALONG THE HORIZONTAL MEMBERS. DO NOT HANG ANY LOADS FROM THE DIAGONAL NOR VERTICAL MEMBERS.
- 4. THIS SECTIONS APPLIES TO LOADS HANGING FROM BOTH NEW AND EXISTING JOISTS.
- 5. SPACE HANGERS OUT SO THAT NOT ALL LOADS ARE HANGING FROM THE SAME JOIST.

HANGING FROM JOIST DETAIL N.T.S.



HWR BALANCING STATION DETAIL GAS DIRT LEG PIPING DETAIL (WITH PRESSURE REGULATOR)



ICE MAKER BOX DETAIL

N.T.S.

N.T.S.

GAS PIPE TRANSITION AT EQUIPMENT DETAIL N.T.S.

REDUCER AS REQUIRED

N.T.S.

PROVIDE WELDED—

UV RESISTANT PVC— PIPE SLEEVE SEALED

BETWEEN PIPE AND

CONNECTION

SLEEVE

GROUND JOINT UNION

TO HVAC EQUIPMENT

—GAS PRESSURE REGULATOR

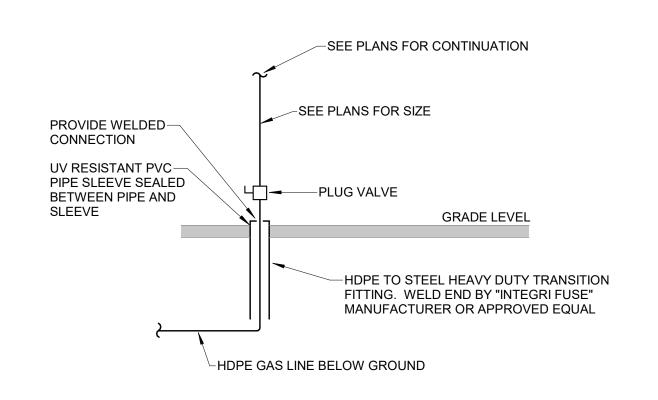
GRADE LEVEL

—HDPE TO STEEL HEAVY DUTY TRANSITION FITTING. WELD END BY "INTEGRI FUSE" MANUFACTURER OR APPROVED EQUAL

GAS DIRT LEG

PLUG VALVE

HDPE GAS LINE BELOW GROUND



GAS PIPE TRANSITION DETAIL N.T.S.

SMOKY ROW **ELEMENTARY** SCHOOL ADDITIONS AND RENOVATIONS

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CARMEL CLAY SCHOOLS



<u>ARCHITECT</u>



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BID SET

PROJECT MANAGER: KRS DRAWN BY: JE PROJECT NUMBER: 222033.00 PROJECT ISSUE DATE: 11/20/2025

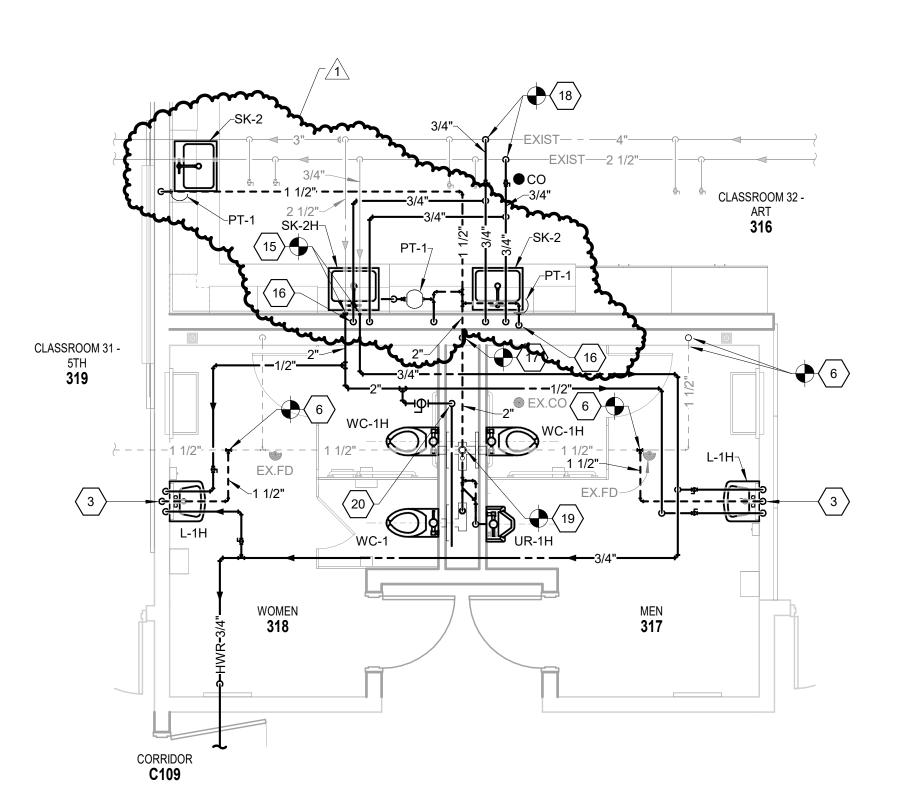
REV.

NO. DESCRIPTION DATE 1 ADDENDUM #1 12.19.2025

PLUMBING SCHEDULES AND **DETAILS**

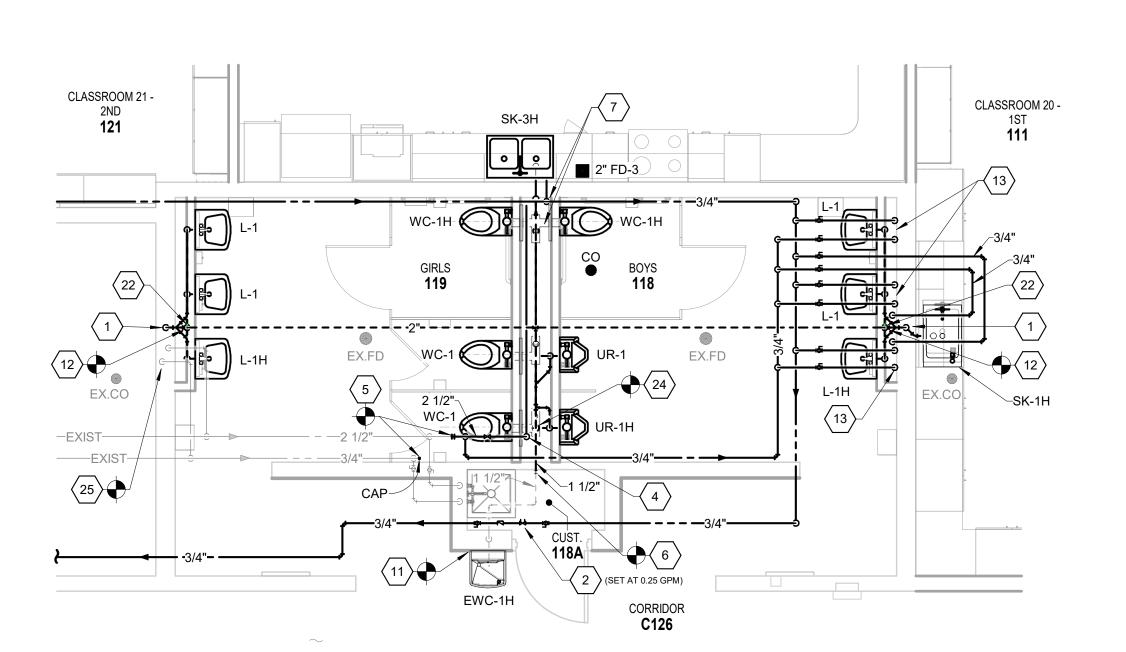
UNIT C - ENLARGED RESTROOMS C150 AND C152 PLUMBING PLAN

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



UNIT C - ENLARGED
RESTROOMS C109 AND C110
PLUMBING PLAN

N.T.S.



UNIT C - ENLARGED
RESTROOMS C127 AND C129
PLUMBING PLANS

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

GENERAL CONSTRUCTION NOTE

CONTRACTOR SHALL BE RESPONSIBLE FOR CEILING REMOVAL AND REPLACEMENT AS REQUIRED THROUGHOUT EXISTING AREAS TO ACCOMMODATE NEW PIPING INSTALLATIONS.

PLUMBING PLAN NOTES P402

1 3/4" HOT AND COLD WATER DOWN. EXTEND TO SINK FAUCET AS REQUIRED. 2" WASTE DOWN TO

INFORMATION.

WITHIN CHASE.
 HOT WATER RETURN BALANCE STATION. REFER TO DETAIL ON DRAWING P3.01 FOR MORE

BELOW SLAB. CONNECT 1 1/2" VENT TO VENT

1/2" HOT AND COLD WATER DOWN. 2" WASTE DOWN TO BELOW SLAB, 1 1/2" VENT UP TO ABOV CEILING.

4 2 1/2" COLD WATER DOWN IN CHASE. ROUTE COLD WATER HEADER FULL SIZE THRU ENTIRE LENGTH OF CHASE. EXTEND TO FIXTURES AS REQUIRED. PROVIDE ACCESSIBLE WATER HAMMER ARRESTER TYPE 'C' AT LAST FLUSH VALVE CONNECTION.

CONNECT 2 1/2" COLD WATER TO EXISTING WATER MAIN AT THIS LOCATION. CAP HOT WATER PIPE.

CONNECT 1 1/2" VENT TO EXISTING 1 1/2" VENT AT THIS LOCATION.

3/4" HOT WATER DOWN IN CHASE. EXTEND THRU EXISTING WALL TO SINK. EXTEND 3/4" COLD WATER FROM CHASE THRU EXISTING WALL TO SINK. MAKE FINAL CONNECTIONS AS REQUIRED. EXTEND 1/2" COLD WATER FROM SINK SUPPLY TO UNDERCOUNTER ICE MACHINE THRU ACCESSIBLE IN-LINE WATER FILTER. MAKE FINAL CONNECTION AS REQUIRED. TERMINATE INDIRECT WASTE OVER FLOOR DRAIN. EXTEND 1 1/2" WASTE AND VENT THRU EXISTING WALL AND INTO CHASE. CONNECT TO WASTE AND VENT HEADERS AS REQUIRED.

8 CONNECT 2" VENT TO EXISTING 4" VENT AT THIS

9 2" VENT UP FROM CHASE.

10 CONNECT 4" WASTE TO EXISTING 4" WASTE THRU SLAB

11 MOUNT NEW ELECTRIC WATER COOLER ON EXISTING WALL AND ATTACH TO EXISTING FIXTURE SUPPORT. ADJUST FIXTURE SUPPORT TO ACCOMMODATE FIXTURE. EXTEND COLD WATER AND DRAIN TO EXISTING ROUGH-INS AND MAKE FINAL CONNECTIONS.

12 CONNECT 2" WASTE TO EXISTING WASTE THRU FLOOR AT THIS LOCATION.

13 1/2" HOT AND COLD WATER DOWN. 1 1/2" WASTE AND VENT.

14 1/2" HOT AND COLD WATER DOWN. 1 1/2" WASTE. 2" VENT UP TO ABOVE CEILING.

15 CONNECT 2" COLD WATER AND 3/4" HOT WATER TO EXISTING WATER MAINS AT THIS LOCATION.

16 3/4" HOT AND COLD WATER DOWN IN EXISTING WALL. EXTEND TO SINK FAUCET AND MAKE FINAL CONNECTIONS AS REQUIRED. 2" WASTE FROM PLASTER TRAP DOWN TO BELOW SLAB, 1 1/2" VENT UP TO ABOVE CEILING.

17 CONNECT 1 1/2" VENT AND 2" VENT TO EXISTING 2" VENT AT THIS LOCATION.

18 CONNECT 3/4" HOT AND COLD WATER TO EXISTING WATER MAINS AT THIS LOCATION.

19 CONNECT 4" WASTE TO EXISTING 4" WASTE THRU SLAB. CONNECT 4" VENT TO EXISTING 4" VENT THRU ROOF.

2" COLD WATER DOWN IN CHASE. ROUTE COLD WATER HEADER FULL SIZE THRU ENTIRE LENGTH OF CHASE. EXTEND TO FIXTURES AS REQUIRED. PROVIDE ACCESSIBLE WATER HAMMER ARRESTER TYPE 'C' AT LAST FLUSH VALVE CONNECTION.

21 1/2" HOT WATER DOWN IN CHASE. EXTEND TO FIXTURE AS REQUIRED.

22 2" VENT UP TO ABOVE CEILING.

REQUIRED.

23 CONNECT 2" VENT TO EXISTING 4" VENT STACK AT THIS LOCATION.

24 CONNECT 4" VENT TO EXISTING 4" VENT STACK AT THIS LOCATION.

25 EXTEND 1/2" HOT AND COLD WATER TO EACH LAVATORY AND MAKE FINAL CONNECTIONS. CONNECT WASTE AND VENT FROM EACH

LAVATORY AND DROP TO EXISTING WASTE THRU FLOOR AND MAKE FINAL CONNECTION AS

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CARMEL CLAY SCHOOLS



ARCHITECT



317-848-0966 WWW.FHAI.COM 350 E. NEW YORK ST, INDIANAPOLIS IN 46204

BID SET



PROJECT MANAGER: KRS
DRAWN BY: JE
PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

DESCRIPTION	DATE
ADDENDUM #1	12.19.202

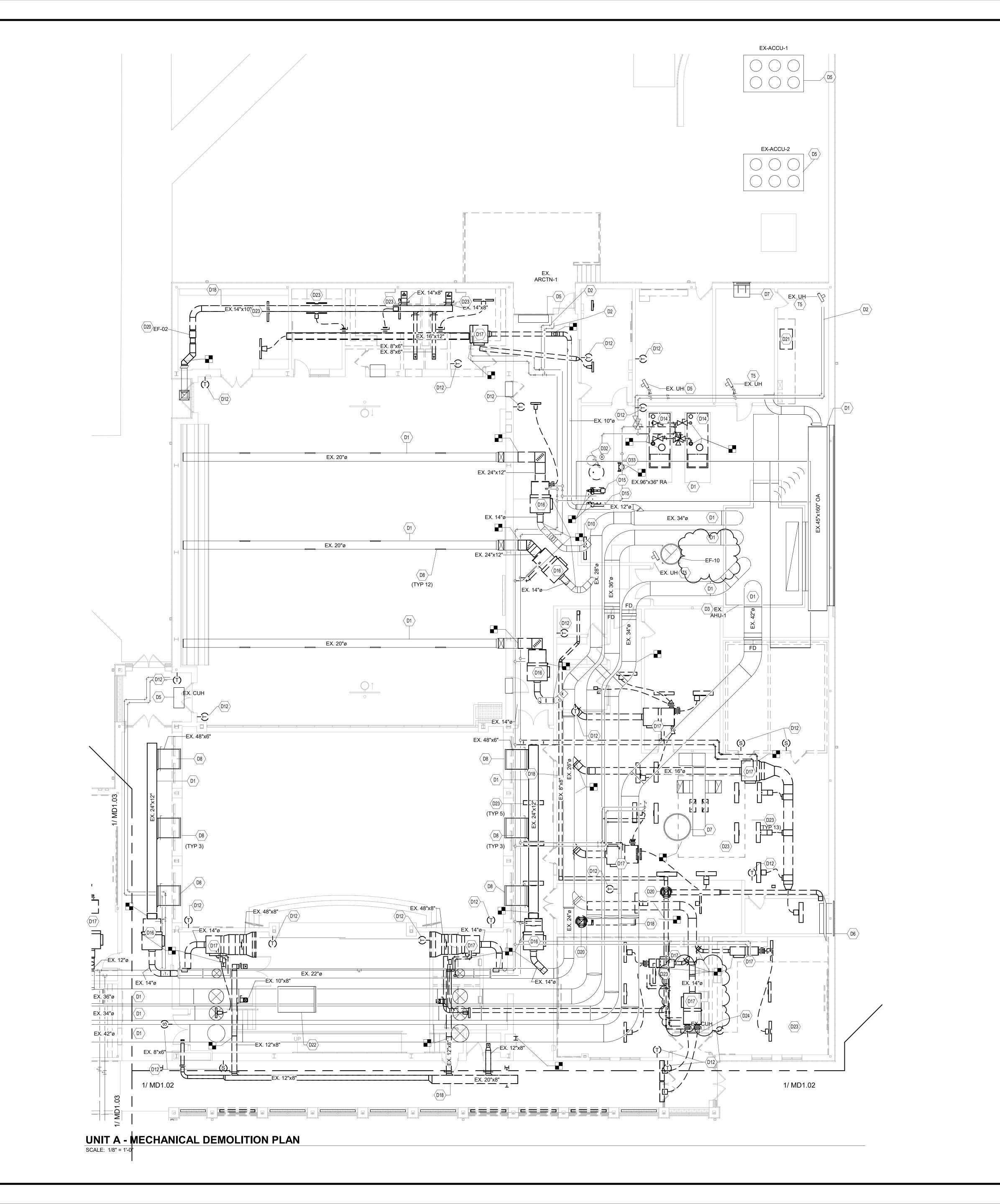
VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ENLARGED PLUMBING PLANS

²4.02



MECHANICAL DEMOLITION PLAN GENERAL NOTES

- THE DIVISION 23 CONTRACTOR SHALL VISIT THE PROJECT AND DETERMINE THE EXACT EXTENT OF THE DEMOLITION WORK REQUIRED BEFORE BIDDING THE PROJECT. WHERE BUILDING SURFACES ARE DAMAGED BY THE
- REMOVAL OF OLD WORK, SAME SHALL BE PATCHED TO MATCH THE ADJACENT SURFACES BY THIS CONTRACTOR. EXISTING OPENINGS WHICH ARE TO BE REUSED SHALL
- NOT BE REMOVED AND SHALL BE MODIFIED OR ENLARGED AS NEED BE TO SUIT THE NEW SYSTEMS. PROVIDE ALL REQUIRED CUTTING AND PATCHING TO MATCH ADJACENT SURFACES. IF ASBESTOS IS PRESENT CONTACT THE CONSTRUCTION
- MANAGER, IT WILL BE REMOVED OR RENDERED HARMLESS UNDER SEPERATE CONTRACT BY THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXISTING DUCTWORK HEIGHT, LOCATION
- THE OWNER SHALL HAVE THE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE CONTRACTOR DISPOSING OF THEM OFF SITE. CONTRACTOR IS REQUIRED TO VERIFY THAT THE OWNER DOES NOT WANT TO CLAIM AN ITEM BEFORE DISPOSING
- THEM OFF SITE. ALL FLOOR, WALL AND ROOF CUTTING WORK TO BE DONE BY DIVISION 23-HVAC CONTRACTOR UNLESS OTHERWISE NOTED. PATCH ALL FLOOR, WALL AND ROOF OPENINGS THAT ARE NOT REUSED TO MATCH ADJACENT CONSTRUCTION. DIVISION 23 CONTRACTOR IS RESPONSIBLE TO REMOVE

WORK. IF ANY CEILING PADS OR GRIDS ARE DAMAGED, THIS CONTRACTOR SHALL REPLACE WITH NEW.

EXISTING CEILINGS TO DO WORK ABOVE THE CEILINGS AND REINSTALL THOSE CEILINGS AFTER COMPLETION OF

ELEMENTARY SCHOOL

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MECHANICAL DEMOLITION PLAN NOTES

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

DESCRIPTION

- D1 EXISTING DUCTWORK SHALL REMAIN UNLESS NOTED OTHERWISE.
- PIPING, VALVES, INSULATION, SUPPORTS, HANGERS, ETC. SHALL REMAIN UNLESS NOTED OTHERWISE. EXISTING AIR HANDLING UNIT TO REMAIN.

D2 EXISTING HOT WATER PIPING, REFRIGERANT

- INSTALL NEW FILTERS AND CLEAN THE INSIDE OF THE UNITS TO ENSURE PROPER OPERATION.
- D6 EXISTING RELIEF AIR WALL LOUVER TO BE EXISTING EXHAUST FAN TO REMAIN. EXISTING

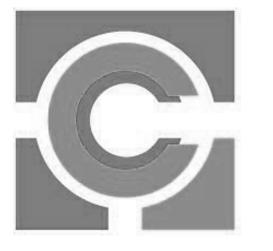
D5 EXISTING MECHANICAL EQUIPMENT TO REMAIN.

- DUCTWORK AND DIFFUSERS TO REMAIN UNLESS NOTED OTHERWISE. D8 EXISTING DIFFUSERS / GRILLES TO REMAIN.
- CLEAN TO LIKE NEW CONDITION. D10 EXISTING CONTROL PANELS TO BE REMOVED. DISPOSE OF ALL MATERIAL OFF SITE. D12 DISCONNECT AND REMOVE EXISTING
- PNUEMATIC THERMOSTAT AND ALL ASSOCATED TUBING, ETC. DISPOSE OF ALL MATERIAL OFF SITE. D14 REMOVE BOILER COMPLETELY INCLUDING PIPING, CONTROLS, VALVES, INSULATION, HANGERS, SUPPORTS, ANCHORS,
- COMBUSTION AIR/FLUE DUCTWORK, ETC. AND DISPOSE OF ALL MATERIALS OFFSITE. EXISTING BASE TO BE REMOVED. REPAIR/PATCH EXISTING ROOF TO MATCH ADJACENT CONSTRUCTION IN SUCH A MANNER THAT IT DOES NOT VOID ANY ROOFING WARRANTIES THE OWNER MAY HAVE.
- D15 REMOVE BASE MOUNTED PUMP COMPLETELY INCLUDING PIPING, VALVES, INSULATION, COORDINATE ALL DISCONNECT REQUIREMENTS WITH ELECTRICAL

COORDINATE ALL DISCONNECT

- D16 REMOVE FAN POWERED VARIABLE AIR VOLUME BOX COMPLETELY INCLUDING CONTROLS, VALVES, INSULATION, HANGERS, SUPPORTS, ETC. REMOVE DUCTWORK BACK TO POINT INDICATED. REMOVE PIPING BACK TO THE MAIN AND CAPPED WATER-TIGHT. DISPOSED OF ALL MATERIAL OFF SITE. REFER
- 017 REMOVE FAN POWERED VARIABLE AIR VOLUME BOX COMPLETELY INCLUDING CONTROLS, VALVES, INSULATION, HANGERS, SUPPORTS, ETC. REMOVE DUCTWORK BACK TO POINT INDICATED. EXISTING DIFFUSERS AND RIDGED/FLEX DUCTWORK ASSOCIATED WITH FPB SHALL BE REMOVED. REMOVE RETURN GRILLES IN ROOM SERVED. REMOVE PIPING BACK TO THE MAIN AND CAPPED WATER-TIGHT. DISPOSE OF ALL MATERIAL OFF SITE. REFER TO
- GRILLES SHALL BE REMOVED. DISPOSE OF MATERIAL OFF SITE.
- D20 REMOVE EXHAUST FAN COMPLETELY INCLUDING CONTROLS. DISPOSE OF ALL
- ENTIRETY AND DISPOSED OF OFF-SITE. DISPOSE OF ALL MATERIAL OFF SITE. VENTILATOR TO REMAIN.
- PIPING, VALVES, INSULATION, HANGERS,
- OF ALL MATERIAL OFF SITE
- OF ALL MATERIAL OFF SITE EXISTING UNIT HEATER EQUIPMENT TO REMAIN. ALL EXISTING TEMPERATURE CONTROLS, VALVES, SENSORS, ETC. SHALL BE REMOVED AND REPLACED WITH NEW DDC

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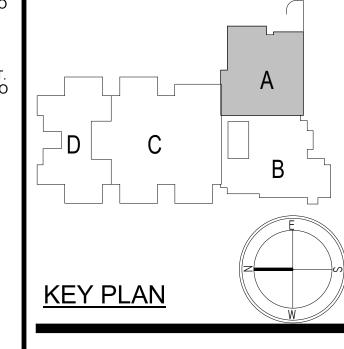
350 E. NEW YORK ST, INDIANAPOLIS IN 46204

CONSULTANT

REQUIREMENTS WITH ELECTRICAL CONTRACTOR PRIOR TO REMOVAL HANGERS, SUPPORTS, ANCHORS, ETC. AND DISPOSE OF ALL MATERIALS OFFSITE. EXISTING CONCRETE BASE TO REMAIN IF APPLICABLE.

CONTRACTOR PRIOR TO REMOVAL. TO NEW WORK PLAN.

- NEW WORK PLAN.
- D18 EXISTING DUCTWORK, FLEX DUCTWORK AND
- MATERIALS OFFSITE. D21 EXISTING AIR COMPRESSOR SERVING PNUEMATIC CONTROLS TO BE REMOVED. ALL PNEUMATIC TUBING TO BE REMOVED IN ITS
- D22 EXISTING ROOF MOUNTED INTAKE/REFLIEF D23 EXISTING DIFFUSERS / GRILLES TO BE REMOVED. DISPOSE OF ALL MATERIAL OFF
- D24 REMOVE CABINET UNIT HEATER INCLUDING SUPPORTS, ANCHORS, ETC. DISPOSED OF OFF SITE. REMOVE PIPING BACK TO THE MAIN AND CAPPED WATER-TIGHT. REFER TO NEW WORK
- D32 REMOVE EXISTING EXPANSION TANK. DISPOSE D33 REMOVE EXISTING AIR SEPERATOR. DISPOSE
- CONTROLS, VALVES, SENSORS, ETC.



BID SET



PROJECT MANAGER: KRS DRAWN BY: CMS PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

NO.△	DESCRIPTION	DATE
	DESCRIPTION	DATE
1	ADDENDUM #1	12/18/2025
·-		

1ST FLR DEMOLITION PLAN - UNIT A

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

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- THE DIVISION 23 CONTRACTOR SHALL VISIT THE PROJECT AND DETERMINE THE EXACT EXTENT OF THE DEMOLITION WORK REQUIRED BEFORE BIDDING THE PROJECT. WHERE BUILDING SURFACES ARE DAMAGED BY THE
- REMOVAL OF OLD WORK, SAME SHALL BE PATCHED TO MATCH THE ADJACENT SURFACES BY THIS CONTRACTOR. EXISTING OPENINGS WHICH ARE TO BE REUSED SHALL NOT BE REMOVED AND SHALL BE MODIFIED OR

ENLARGED AS NEED BE TO SUIT THE NEW SYSTEMS.

- PROVIDE ALL REQUIRED CUTTING AND PATCHING TO MATCH ADJACENT SURFACES. IF ASBESTOS IS PRESENT CONTACT THE CONSTRUCTION MANAGER, IT WILL BE REMOVED OR RENDERED HARMLESS UNDER SEPERATE CONTRACT BY THE
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXISTING DUCTWORK HEIGHT, LOCATION
- THE OWNER SHALL HAVE THE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE CONTRACTOR DISPOSING OF THEM OFF SITE. CONTRACTOR IS REQUIRED TO VERIFY THAT THE OWNER DOES NOT WANT TO CLAIM AN ITEM BEFORE DISPOSING THEM OFF SITE.
- ALL FLOOR, WALL AND ROOF CUTTING WORK TO BE DONE BY DIVISION 23-HVAC CONTRACTOR UNLESS OTHERWISE NOTED. PATCH ALL FLOOR, WALL AND ROOF OPENINGS THAT ARE NOT REUSED TO MATCH ADJACENT CONSTRUCTION. DIVISION 23 CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILINGS TO DO WORK ABOVE THE CEILINGS AND REINSTALL THOSE CEILINGS AFTER COMPLETION OF

WORK. IF ANY CEILING PADS OR GRIDS ARE DAMAGED, THIS CONTRACTOR SHALL REPLACE WITH NEW.

ADDITIONS AND

SMOKY ROW

ELEMENTARY

SCHOOL

900 W 136th St, Carmel, IN 46032

MECHANICAL DEMOLITION PLAN NOTES (X) (ALL NOTES MAY NOT BE INDICATED ON THIS SHEET)

DESCRIPTION

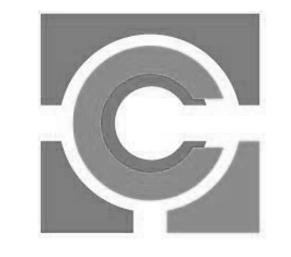
- D1 EXISTING DUCTWORK SHALL REMAIN UNLESS NOTED OTHERWISE. D3 EXISTING AIR HANDLING UNIT TO REMAIN. INSTALL NEW FILTERS AND CLEAN THE INSIDE OF THE UNITS TO ENSURE PROPER
- D5 EXISTING MECHANICAL EQUIPMENT TO REMAIN. D6 EXISTING RELIEF AIR WALL LOUVER TO BE
- D10 EXISTING CONTROL PANELS TO BE REMOVED. DISPOSE OF ALL MATERIAL OFF SITE. D12 DISCONNECT AND REMOVE EXISTING PNUEMATIC THERMOSTAT AND ALL
- MATERIAL OFF SITE. D17 REMOVE FAN POWERED VARIABLE AIR VOLUME BOX COMPLETELY INCLUDING CONTROLS, VALVES, INSULATION, HANGERS, SUPPORTS, ETC. REMOVE DUCTWORK BACK TO POINT INDICATED. EXISTING DIFFUSERS AND RIDGED/FLEX DUCTWORK ASSOCIATED WITH FPB SHALL BE REMOVED. REMOVE RETURN GRILLES IN ROOM SERVED. REMOVE PIPING

BACK TO THE MAIN AND CAPPED WATER-TIGHT DISPOSE OF ALL MATERIAL OFF SITE. REFER TO

ASSOCATED TUBING, ETC. DISPOSE OF ALL

- NEW WORK PLAN. D20 REMOVE EXHAUST FAN COMPLETELY
- INCLUDING CONTROLS. DISPOSE OF ALL MATERIALS OFFSITE. D23 EXISTING DIFFUSERS / GRILLES TO BE
- REMOVED. DISPOSE OF ALL MATERIAL OFF D24 REMOVE CABINET UNIT HEATER INCLUDING PIPING, VALVES, INSULATION, HANGERS, SUPPORTS, ANCHORS, ETC. DISPOSED OF OFF SITE. REMOVE PIPING BACK TO THE MAIN AND CAPPED WATER-TIGHT. REFER TO NEW WORK
- D26 EXISTING FINNED TUBE TO REMAIN. REFER TO
- NEW WORK FOR RECONNECTION INTO HEATING HOT WATER SYSTEM.
- D27 EXISTING FINNED TUBE TO BE ABANDONED IN
- D28 EXISTING FINNED TUBE TO REMOVED AND DISPOSED OF OFFSITE.
- D29 EXISTING ELECTRIC DUCT HEATER AND ASSOCIATED DUCTWORK SHALL BE REMOVED.
 DISPOSE OF ALL MATERIAL OFF SITE. COORDINATE ALL DISCONNECT REQUIREMENTS WITH ELECTRICAL
- CONTRACTOR PRIOR TO REMOVAL. D30 EXISTING ELECTRIC DUCT HEATER AND ASSOCIATED DICTWORK TO REMAIN

CARMEL CLAY SCHOOLS



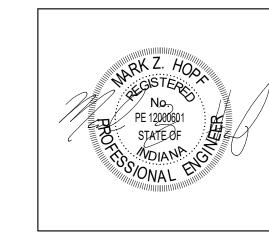


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KEY PLAN

BID SET



PROJECT MANAGER: KRS DRAWN BY: CMS PROJECT NUMBER: 222033.00

REV.

PROJECT ISSUE DATE: 11/20/2025

NO.△	DESCRIPTION	DATE
1	ADDENDUM #1	12/18/2025

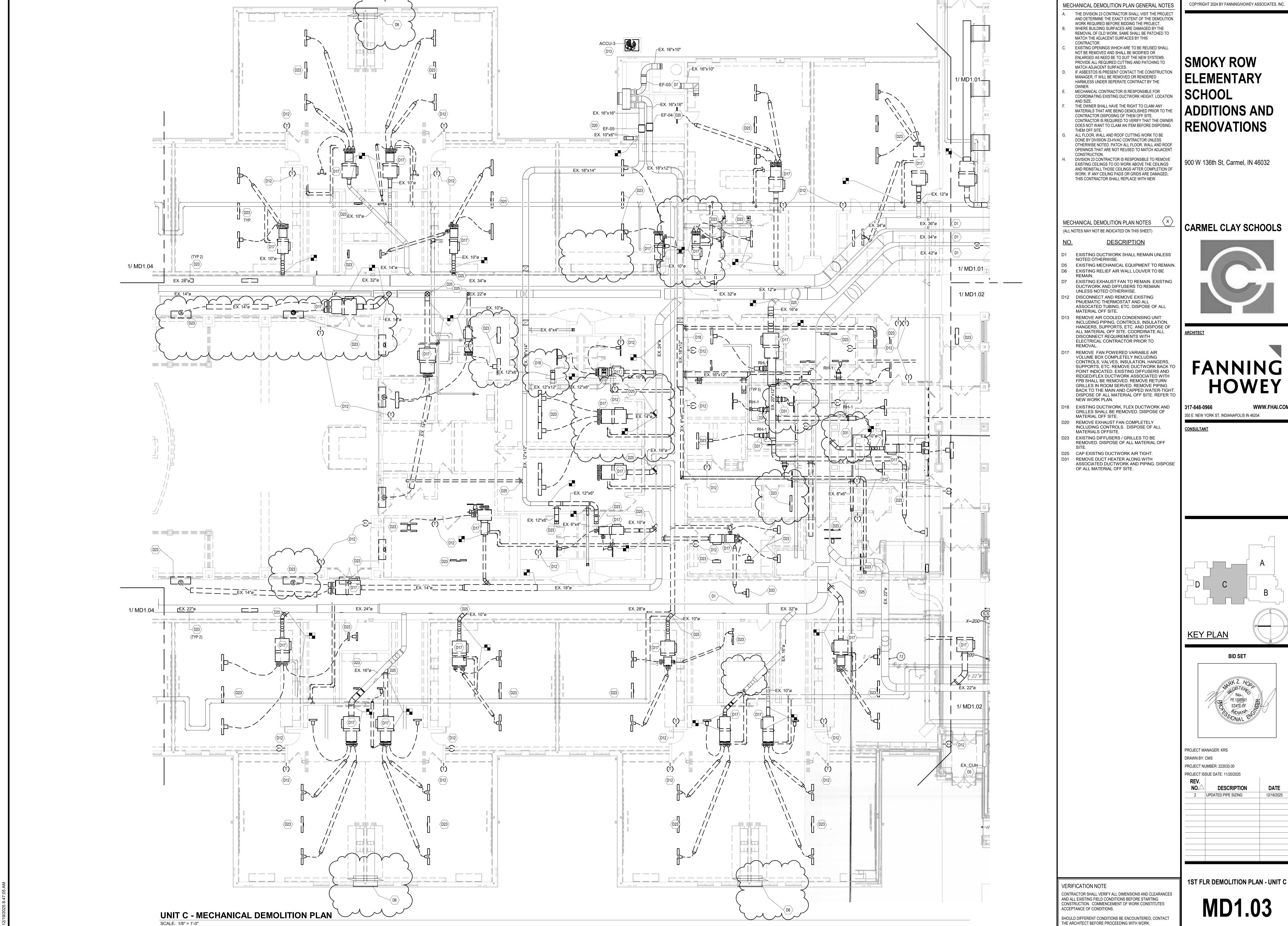
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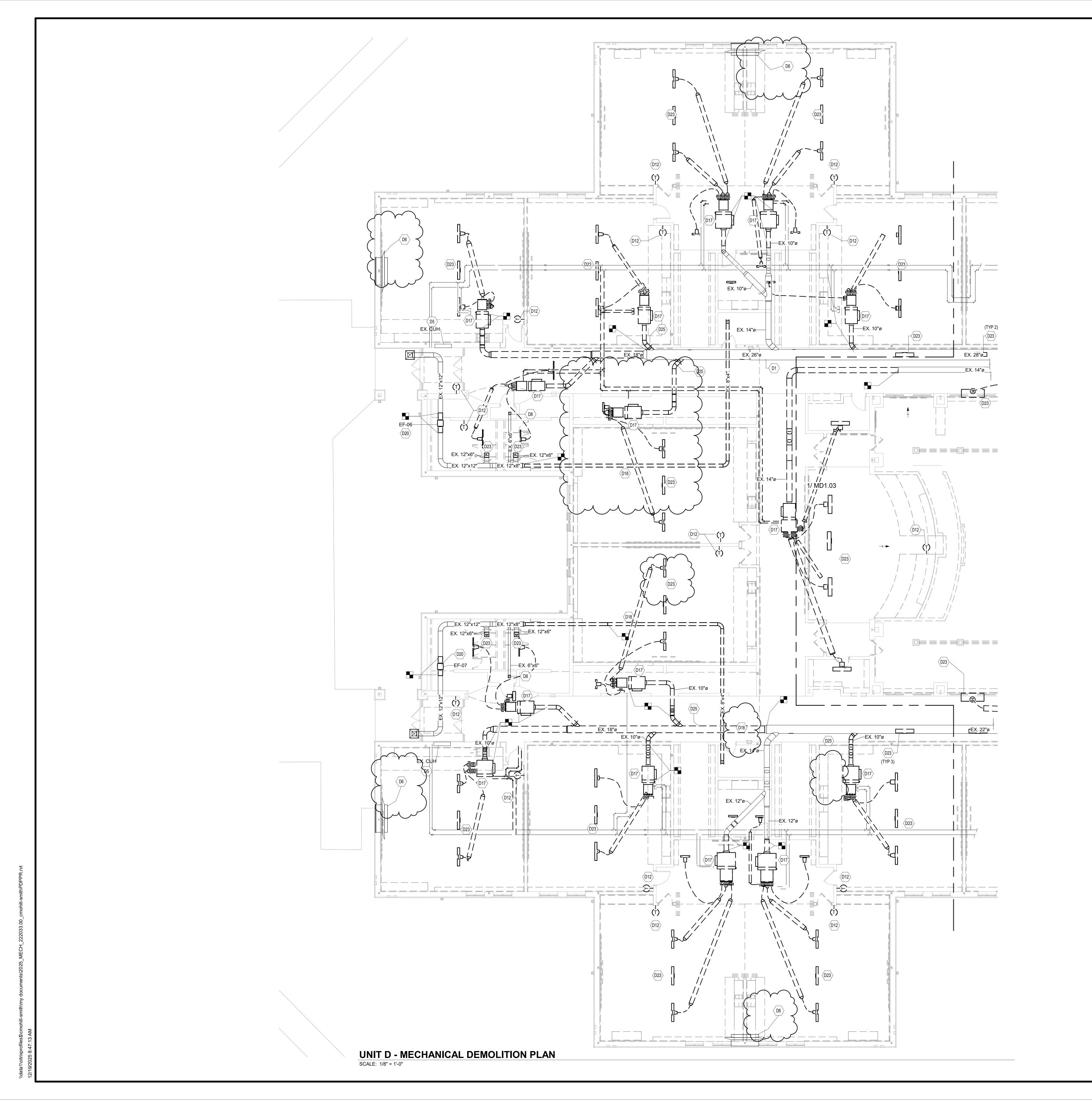
SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

1ST FLR DEMOLITION PLAN - UNIT B

UNIT B - MECHANICAL DEMOLITION PLAN







MECHANICAL DEMOLITION PLAN GENERAL NOTES

- THE DIVISION 23 CONTRACTOR SHALL VISIT THE PROJECT AND DETERMINE THE EXACT EXTENT OF THE DEMOLITION WORK REQUIRED BEFORE BIDDING THE PROJECT.
- WHERE BUILDING SURFACES ARE DAMAGED BY THE REMOVAL OF OLD WORK, SAME SHALL BE PATCHED TO MATCH THE ADJACENT SURFACES BY THIS CONTRACTOR.
- EXISTING OPENINGS WHICH ARE TO BE REUSED SHALL NOT BE REMOVED AND SHALL BE MODIFIED OR ENLARGED AS NEED BE TO SUIT THE NEW SYSTEMS. PROVIDE ALL REQUIRED CUTTING AND PATCHING TO MATCH ADJACENT SURFACES.
- IF ASBESTOS IS PRESENT CONTACT THE CONSTRUCTION MANAGER, IT WILL BE REMOVED OR RENDERED HARMLESS UNDER SEPERATE CONTRACT BY THE
- MECHANICAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING EXISTING DUCTWORK HEIGHT, LOCATION THE OWNER SHALL HAVE THE RIGHT TO CLAIM ANY MATERIALS THAT ARE BEING DEMOLISHED PRIOR TO THE CONTRACTOR DISPOSING OF THEM OFF SITE. CONTRACTOR IS REQUIRED TO VERIFY THAT THE OWNER DOES NOT WANT TO CLAIM AN ITEM BEFORE DISPOSING
- THEM OFF SITE. ALL FLOOR, WALL AND ROOF CUTTING WORK TO BE DONE BY DIVISION 23-HVAC CONTRACTOR UNLESS OTHERWISE NOTED. PATCH ALL FLOOR, WALL AND ROOF OPENINGS THAT ARE NOT REUSED TO MATCH ADJACENT CONSTRUCTION.
- DIVISION 23 CONTRACTOR IS RESPONSIBLE TO REMOVE EXISTING CEILINGS TO DO WORK ABOVE THE CEILINGS AND REINSTALL THOSE CEILINGS AFTER COMPLETION OF WORK. IF ANY CEILING PADS OR GRIDS ARE DAMAGED.

THIS CONTRACTOR SHALL REPLACE WITH NEW.

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MECHANICAL DEMOLITION PLAN NOTES (X)

(ALL NOTES MAY NOT BE INDICATED ON THIS SHEET) **DESCRIPTION**

- D1 EXISTING DUCTWORK SHALL REMAIN UNLESS NOTED OTHERWISE. D5 EXISTING MECHANICAL EQUIPMENT TO REMAIN. D6 EXISTING RELIEF AIR WALL LOUVER TO BE
- D8 EXISTING DIFFUSERS / GRILLES TO REMAIN. CLEAN TO LIKE NEW CONDITION. D12 DISCONNECT AND REMOVE EXISTING PNUEMATIC THERMOSTAT AND ALL
- MATERIAL OFF SITE. D17 REMOVE FAN POWERED VARIABLE AIR VOLUME BOX COMPLETELY INCLUDING CONTROLS, VALVES, INSULATION, HANGERS, SUPPORTS, ETC. REMOVE DUCTWORK BACK TO POINT INDICATED. EXISTING DIFFUSERS AND RIDGED/FLEX DUCTWORK ASSOCIATED WITH FPB SHALL BE REMOVED. REMOVE RETURN GRILLES IN ROOM SERVED. REMOVE PIPING BACK TO THE MAIN AND CAPPED WATER-TIGHT DISPOSE OF ALL MATERIAL OFF SITE. REFER TO

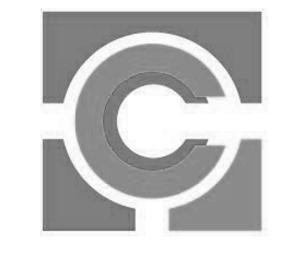
ASSOCATED TUBING, ETC. DISPOSE OF ALL

D18 EXISTING DUCTWORK, FLEX DUCTWORK AND GRILLES SHALL BE REMOVED. DISPOSE OF MATERIAL OFF SITE. REMOVE EXHAUST FAN COMPLETELY

NEW WORK PLAN.

- INCLUDING CONTROLS. DISPOSE OF ALL MATERIALS OFFSITE.
- D23 EXISTING DIFFUSERS / GRILLES TO BE REMOVED. DISPOSE OF ALL MATERIAL OFF
- D25 CAP EXISTNG DUCTWORK AIR TIGHT.

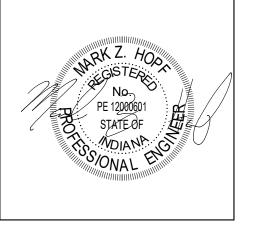
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KEY PLAN



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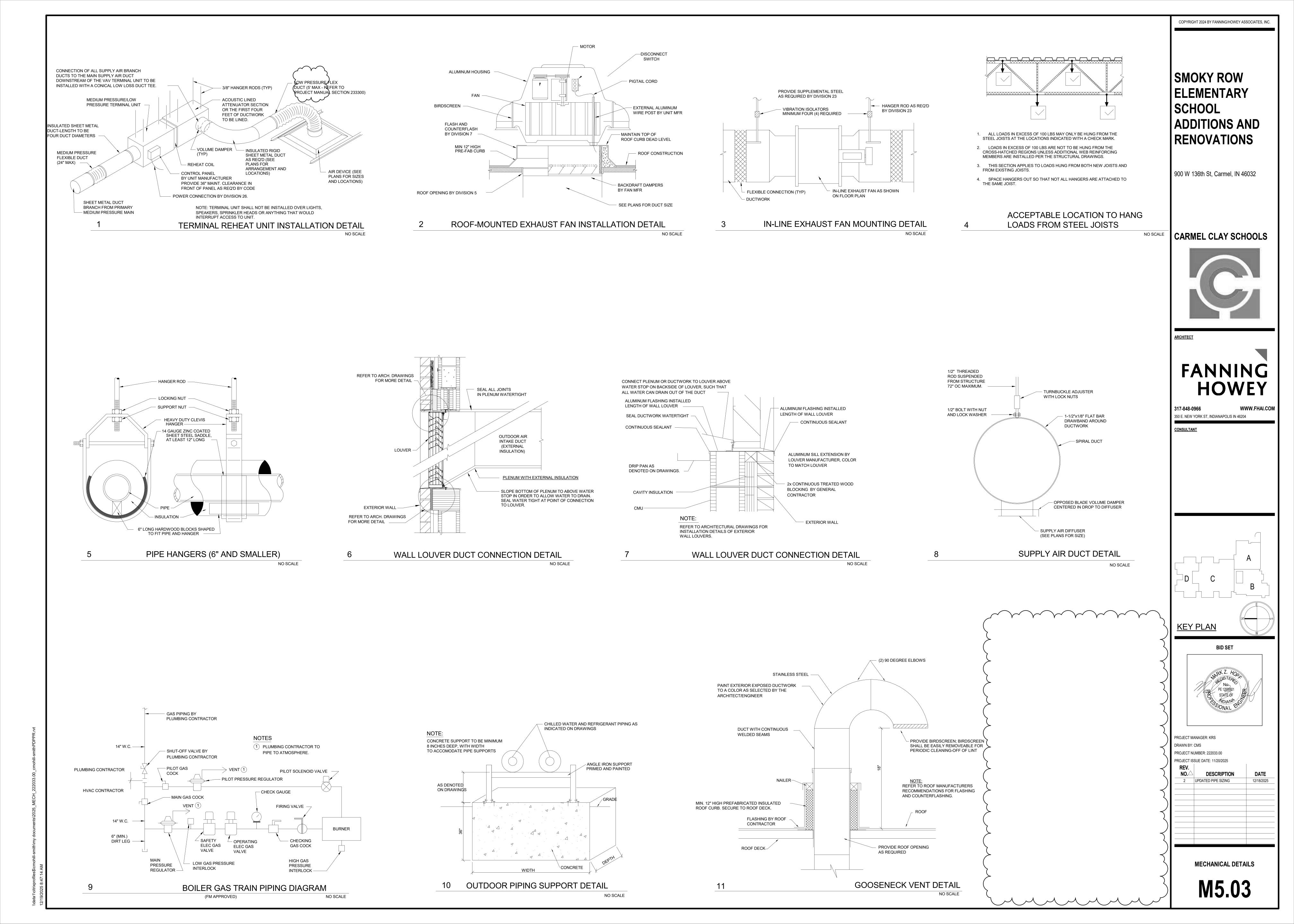
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1ST FLR DEMOLITION PLAN - UNIT D VERIFICATION NOTE

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK.

ACCEPTANCE OF CONDITIONS.

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES

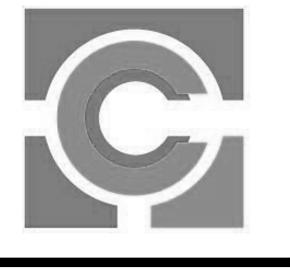


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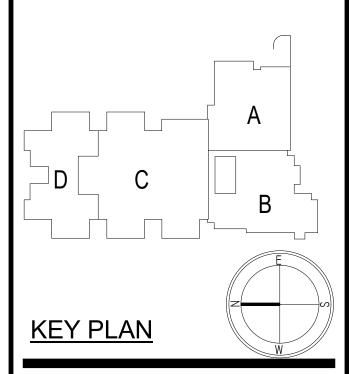


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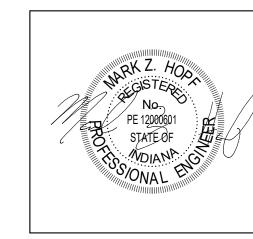


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DATE 12/18/2025
12/18/2025

HEATING WATER SCHEMATIC

M5.05

UNIT A - FIRST FLOOR ELECTRICAL DEMOLITION PLAN

GENERAL NOTES - DEMOLITION

- REFER TO ELECTRICAL SPECIFICANTS SECTIONS 260005 "ELECTRICAL DEMOLITION" FOR ADDITIONAL REQUIREMNETS THAT APPLY TO THIS DRAWING SHEET.
- REMOVE ELECTRICAL EQUIPMENT COMPLETE. ALL EXISTING FIRE ALARM DEVICES ARE TO BE DISCONNECTED AND REMOVED.
- DISCONNECT AND REMOVE ALL EXISTING EXIT SIGNS AND DISPOSE OF PROPERLY PER ALL EXISTING DUPLEX RECEPTACLES INSIDE AND OUTSIDE THE BUILDING THAT ARE
- NOT PART OF THE NEW CONSTRUCTION OR RENOVATED AREAS ARE TO BE REPLACED WITH NEW DEVICES AND COVER PLATES. ALL EXISTING DUPLEX RECEPTACLES AND ELECTRICAL WORK IN EXISTING WALLS TO BE DEMOLISHED SHALL BE REMOVED AND REWORKED TO MAINTAIN CIRCUITRY

KEYNOTES

D1 EXISTING ELECTRICAL EQUIPMENT TO REMAIN IN PLACE. D2 DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES AND LIGHT SWITCHES IN THIS ROOM, EXISTING LIGHTING CIRCUITS ARE TO REMAIN IN PLACE FOR NEW LIGHTING. REFER TO THE "E4" DRAWING SHEETS FOR THE ADDITIONAL REQUIREMENTS. DISCONNECT AND REMOVE EXISTING EXTERIOR LIGHT FIXTURE AT THIS LOCATION. REFER TO ELECTRICAL SITE PLAN SHEET "E2.01" AND THE "E4"

DRAWING SHEETS FOR ADDITIONAL REQUIREMENTS. D7 DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL DEVICES MOUNTED IN THE WALLS OF THIS ROOM.

DISCONNECT AND REMOVE ANY EXISTING ELECTRICAL DEVICES IN THIS PORTION OF THE WALL THAT IS TO BE REMOVED. D12 DISCONNECT EXISTING KITCHEN EQUIPMENT THAT IS TO BE REMOVED. EXISTING WIRING AND CONDUIT MAY REMAIN IN PLACE FOR NEW EQUIPMENT. REFER TO THE FOOD SERVICE DRAWING AND THE ELECTRICAL KITCHEN PLAN DRAWING SHEET "E5.05" FOR ADDITIONAL REQUIREMENTS.

D14 DISCONNECT EXISTING MECHANICAL UNIT AT THIS LOCATION. EXISTING CIRCUITRY IS TO REMAIN IN PLACE FOR THE NEW MECHANICAL UNIT. REFER TO THE "E5" POWER PLAN DRAWING SHEETS FOR ADDITIONAL REQUIREMENTS. D15 DISCONNECT EXISTING MECHANICAL UNIT AT THIS LOCATION. REMOVE WIRING BACK TO ITS SOURCE.

D16 DISCONNECT EXISTING MECHANICAL CONTROL PANEL AT THIS LOCATION. REMOVE WIRING BACK TO ITS SOURCE. EXISTING CIRCUITY IS TO REMAIN.

D17 DISCONNECT AND REMOVE EXISTING PUMP DISCONNECT SWITCH AT THIS LOCATION. EXISTING CIRCUITY MAY REMAIN IN PLACE FOR NEW PUMP VFC. REFER TO THE "E5" POWER PLAN DRAWING SHEETS FOR ADDITIONAL REQUIREMENTS.

D18 DISCONNECT AND REMOVE EXISTING DUPLEX RECEPTACLE MOUNTED UP HIGH FOR THE TELEVISION MONITOR. REMOVE WIRING BACK TO ITS SOURCE. D23 DISCONNECT AND REMOVE EXISTING DISPLAY CASE LIGHT FIXTURE AND LIGHT SWITCH. EXISTING CIRCUIT IS TO REMAIN FOR NEW LIGHT FIXTURE. REFER TO THE "E4" DRAWING SHEETS FOR ADDITIONAL REQUIREMENTS.

D24 DISCONNECT AND REMOVE POWER FROM EXISTING TECHNOLOGY RACKS IN THIS ROOM. EXISTING TECHNOLOGY RACKS ARE TO BE REWIRED TO NEW STANDBY PANELBOARD. REFER TO THE "E5" SERIES DRAWINGS FOR ADDITIONAL D27 DISCONNECT EXISTING AIR COMPRESSOR AT THIS LOCATION. REMOVE WIRING

BACK TO ITS SOURCE. D28 DISCONNECT AND REMOVE POWER FOR HAND DRYER AT THIS LOCATION. D29 EXISTING THEATRICAL LIGHTING AND SURFACE RACEWAY ASSOCIATED WITH THE THEATRICAL LIGHTING IN THIS ROOM IS TO BE DISCONNECTED, REMOVED, AND STORED WHILE THE OLD CEILING IS BEING REMOVED, THEN REINSTALLED IN THE SAME LOCATION AFTER THE NEW CEILING IS INSTALLED.

D30 DISCONNECT EXISTING KITCHEN HOOD MOTORS AT THIS LOCATON. REMOVE / WIRING BACK TO ITS SOURCE. D32 EXISTING MECHANICAL VFC IS TO REMAIN. REFER TO DRAWING SHEET "E5.01" FOR NEW WIRING REQUIREMENTS FROM EXISTING VFC TO NEW/EXISTING PUMP.

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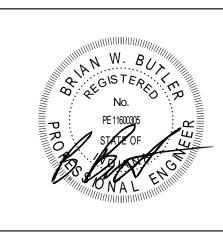
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KEY PLAN



PROJECT MANAGER: KRS PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

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UNIT A - FIRST FLOOR ELECTRICAL **DEMOLITION PLAN**

VERIFICATION NOTE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND

CLEARANCES AND ALL EXISTING FIELD CONDITIONS

BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

UNIT B - FIRST FLOOR ELECTRICAL DEMOLITION PLAN SCALE: 1/8" = 1'-0"

GENERAL NOTES - DEMOLITION

- REFER TO ELECTRICAL SPECIFICANTS SECTIONS 260005 "ELECTRICAL DEMOLITION" FOR ADDITIONAL REQUIREMNETS THAT APPLY TO THIS DRAWING SHEET.
- REMOVE ELECTRICAL EQUIPMENT COMPLETE. ALL EXISTING FIRE ALARM DEVICES ARE TO BE DISCONNECTED AND REMOVED.
- DISCONNECT AND REMOVE ALL EXISTING EXIT SIGNS AND DISPOSE OF PROPERLY PER ALL EXISTING DUPLEX RECEPTACLES INSIDE AND OUTSIDE THE BUILDING THAT ARE NOT PART OF THE NEW CONSTRUCTION OR RENOVATED AREAS ARE TO BE REPLACED
- WITH NEW DEVICES AND COVER PLATES. ALL EXISTING DUPLEX RECEPTACLES AND ELECTRICAL WORK IN EXISTING WALLS TO BE DEMOLISHED SHALL BE REMOVED AND REWORKED TO MAINTAIN CIRCUITRY

KEYNOTES

- D1 EXISTING ELECTRICAL EQUIPMENT TO REMAIN IN PLACE. D2 DISCONNECT AND REMOVE ALL EXISTING LIGHT FIXTURES AND LIGHT SWITCHES IN THIS ROOM. EXISTING LIGHTING CIRCUITS ARE TO REMAIN IN PLACE FOR NEW LIGHTING. REFER TO THE "E4" DRAWING SHEETS FOR THE ADDITIONAL
- D3 DISCONNECT AND REMOVE EXISTING EXTERIOR LIGHT FIXTURE AT THIS LOCATION. REFER TO ELECTRICAL SITE PLAN SHEET "E2.01" AND THE "E4" DRAWING SHEETS FOR ADDITIONAL REQUIREMENTS. D5 DISCONNECT AND REMOVE EXISTING STEP LIGHT FIXTURE AT THIS LOCATION..
- D6 DISCONNECT AND REMOVE EXISTING FIRE ALARM PANEL AT THIS LOCATION AS WELL AS ALL FIRE ALARM DEVICES AND CABLING BEING FED FROM THIS PANEL. D7 DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL DEVICES MOUNTED IN THE WALLS OF THIS ROOM.
- D8 DISCONNECT AND REMOVE ANY EXISTING ELECTRICAL DEVICES IN THIS PORTION OF THE WALL THAT IS TO BE REMOVED. D9 DISCONNECT AND REMOVE EXISTING EXTERIOR LIGHT BOLLARD AT THIS
- LOCATION, AS WELL AS CONCRETE BASE, CONDUIT AND WIRING BACK TO THE PANELBOARD. D10 DISCONNECT AND REMOVE EXISTING ELECTRICAL DEVICE AT THIS LOCATION, AS
- WELL AS CONDUIT AND WIRING.

 D13 EXISTING DUPLEX RECEPTACLE MOUNTED IN THE CEILING FOR THE VIDEO
- PROJECTOR IS TO BE REMOVED FROM THE CEILING FOR THE VIDEO PROJECTOR IS TO BE REMOVED FROM THE CEILING TILE AND SUPPORTED ABOVE UNTIL THE NEW CEILING IS IN PLACE, THEN IS TO BE REMOUNTED IN THE NEW CEILING IN THE APPROXIMATE SAME LOCATION. D14 DISCONNECT EXISTING MECHANICAL UNIT AT THIS LOCATION. EXISTING
- CIRCUITRY IS TO REMAIN IN PLACE FOR THE NEW MECHANICAL UNIT. REFER TO THE "E5" POWER PLAN DRAWING SHEETS FOR ADDITIONAL REQUIREMENTS. D15 DISCONNECT EXISTING MECHANICAL UNIT AT THIS LOCATION. REMOVE WIRING
- BACK TO ITS SOURCE. D16 DISCONNECT EXISTING MECHANICAL CONTROL PANEL AT THIS LOCATION.
- REMOVE WIRING BACK TO ITS SOURCE. EXISTING CIRCUITY IS TO REMAIN. D22 DISCONNECT AND REMOVE DUPLEX RECEPTACLE AT THIS LOCATION. REMOVE WIRING BACK TO ITS SOURCE.
- DISCONNECT AND REMOVE EXISTING DISPLAY CASE LIGHT FIXTURE AND LIGHT SWITCH. EXISTING CIRCUIT IS TO REMAIN FOR NEW LIGHT FIXTURE. REFER TO THE "E4" DRAWING SHEETS FOR ADDITIONAL REQUIREMENTS.
- D25 DISCONNECT AND REMOVE ALL EXISTING FLOOR BOX DEVICES IN THIS ROOM AND PULL EXISTING WIRES AND CABLING BACK TO ITS SOURCE. PROVIDE A BLANK COVER PLATE ON THE EXISTING BACKBOXES THAT ARE TO REMAIN.
- D26 DISCONNECT AND REMOVE POWER FROM EXISTING TECHNOLOGY RACKS AT THIS LOCATION. REMOVE POWER BACK TO ITS SOURCE. D28 DISCONNECT AND REMOVE POWER FOR HAND DRYER AT THIS LOCATION.

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ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

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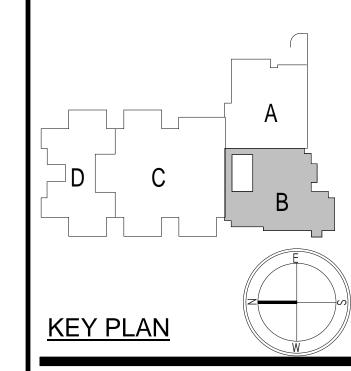


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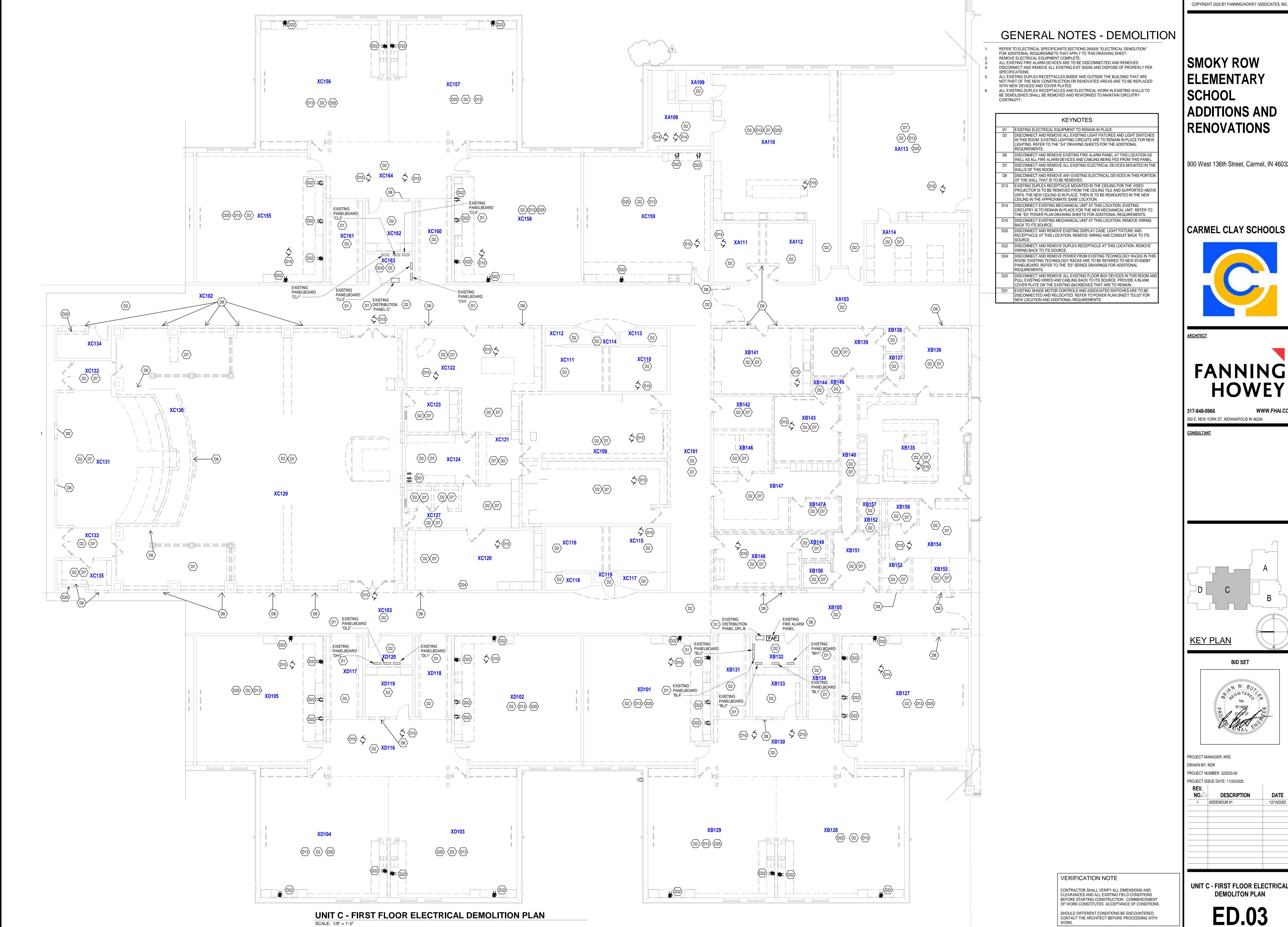
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UNIT B - FIRST FLOOR ELECTRICAL **DEMOLITION PLAN**

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH



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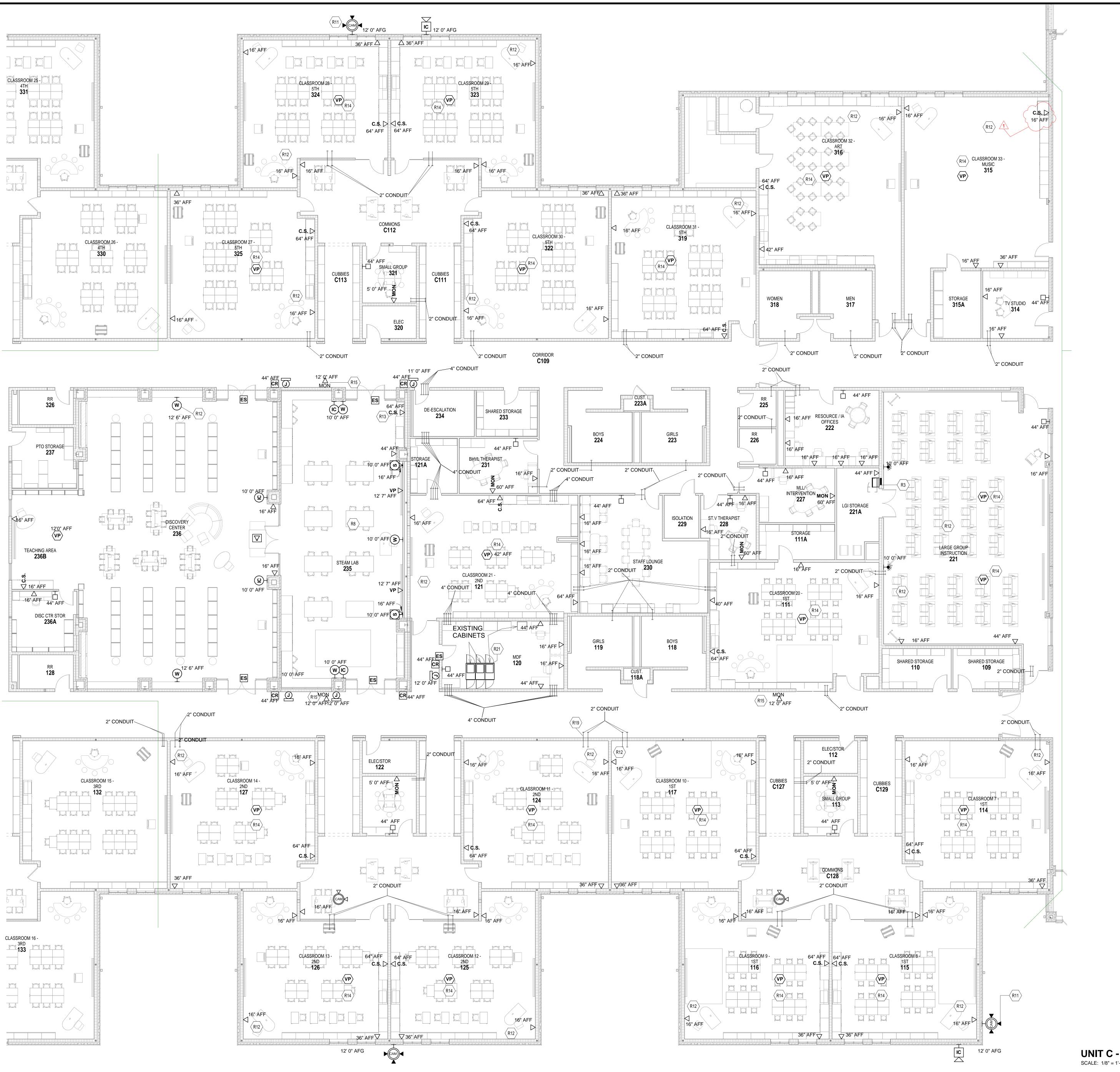






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UNIT C - FIRST FLOOR ELECTRICAL



ROOM LEGEND - FIRST FLOOR UNIT C ROOM NAME AREA (SF) 109 SHARED STORAGE 972 SF CLASSROOM 20 - 1ST 111A STORAGE 125 SF 112 ELEC/STOR 113 SMALL GROUP 979 SF 877 SF 114 CLASSROOM 7 - 1S CLASSROOM 8 - 1S CLASSROOM 9 - 1S CLASSROOM 10 - 1ST 15 SF 196 SF 118A CUST. 119 GIRLS STORAGE SMALL GROUP CLASSROOM 11 - 2ND CLASSROOM 12 - 2ND 878 SF CLASSROOM 13 - 2ND CLASSROOM 14 - 2ND 1928 SF 170 SF LARGE GROUP INSTRUCTION 221A LGI STORAGE
222 RESOURCE / IA
223 GIRLS RESOURCE / IA OFFICES 195 SF 14 SF 196 SF 63 SF MLL/ INTERVENTION ST.V THERAPIST ISOLATION 613 SF 202 SF 230 STAFF LOUNGE 231 BHVL THERAPIST 233 SHARED STORAGE 133 SF 234 DE-ESCALATION
235 STEAM LAB
236 DISCOVERY CENT
236A DISC CTR STOR DISCOVERY CENTER 179 SF 312 SF 180 SF 236B TEACHING AREA 237 PTO STORAGE 314 TV STUDIO 210 SF 315 CLASSROOM 33 - MUSIC STORAGE 315A STORA
316 CLASS
316A STORA
316B KILN CLASSROOM 32 - ART STORAGE 318 WOMEN 148 SF 982 SF 82 SF 145 SF 981 SF 319 CLASSROOM 31 - 5TH SMALL GROUP CLASSROOM 30 - 5TH CLASSROOM 29 - 5TH 878 SF CLASSROOM 28 - 5TH 878 SF CLASSROOM 27 - 5TH 981 SF 87 SF 2462 SF 451 SF 189 SF CUBBIES C112 COMMONS C113 CUBBIES 189 SF C123 CUBBIES 189 SF C124 COMMONS C125 CUBBIES 189 SF C126 CORRIDOR 2118 SF 189 SF CUBBIES COMMONS

TECHNOLOGY PLAN NOTES

- COORDINATE WITH TECH CONTRACTOR TO CONFIRM ELECTRICAL NEEDS.
- SEE DETAILS FOR LGI SOUND/PROJECTOR SYSTEM CONDUIT RISER DIAGRAM.

COORDINATE OUTDOOR CAMERA

LOCATIONS WITH TECHNOLOGY CONTRACTOR BEFORE ROUGH INS TO DETERMINE BEST LOCATIONS BECAUSE OF TREE COVER.

DATA ROUGH IN BOX.

CEILING PLATE.

- REMOVE ALL SURFACE MOUNT RACEWAY DATA PATHS AND REPLACE WITH 1 NEW 1 1/4" MINIMUM FLEX CONDUIT INSIDE EXISTING WALLS TO
- CLASSROOM SOUND/DATA LOCATION TO BE LOCATED AT 64" INSIDE TEACHER
- WARDROBE. PROJECTOR POWER CAN BE COILED ABOVE FOR REUSE IN THE PROJECTOR
- HALLWAY CEILING MOUNTED MONITOR WILL NEED POWER PROVIDED. COORDINATE WITH TECH CONTRACTOR.
- SEE DETAIL 2/E3.17 FOR CLASSROOM SLEEVE ROUGH-IN REQUIREMENTS

PROVIDED BY ELECTRICAL

CONTRACTOR DATA CABINETS WILL REQUIRE 2-30 AMP

PLUGS INSTALLED WITHIN THE MAIN TECH ROOM.

VERIFICATION NOTE CONTRACTOR TO INCLUDE REMOVAL & RELOCATION OF DIVISION 27 & 28 CABLING AND EQUIPMENT IN ACCORDANCE WITH THE PROJECT SCHEDULE IN ORDER TO MAINTAIN BUILDING SERVICES TO AREAS THAT REMAIN

CONTRACTOR SHALL VERIFY ALL DIMENSIONS CLEARANCES AND EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE **ENCOUNTERED CONTACT THE ARCHITECT** BEFORE PROCEEDING WITH ANY WORK.

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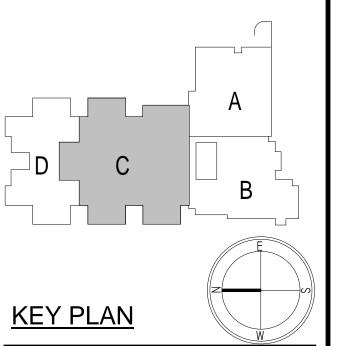
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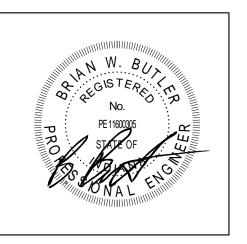
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UNIT C - FIRST FLOOR TECHNOLOGY ROUGH-IN PLAN

E3.03



ROOM LEGEND - FIRST FLOOR UNIT A **AREA** NO. (SF) **ROOM NAME** 301 CLASSROOM 34 - F.A.P. 301B DE-ESCALATION 301C RESTROOM 109 SF 105 SF 305 KITCHEN 1688 SF 305A TOILET 305B DRESSING
305C KITCHEN OFFICE
305D DRY STORAGE 305E CUST. Not Placed 305F LAUNDRY 117 SF 305G BREAKROOM 124 SF 305H DISHWASHING 246 SF COOLER 305K FREEZER 306 BOILER ROOM 306A CUSTODIAL OFFICE & BREAKROOM 306B ELECTRICAL 265 SF 307 OUTDOOR STORAGE 308 GYMNASIUM 348 SF 4501 SF 308A STORAGE 308B FAMILY RR
308C PARKS OFFICE
308D P.E. OFFICE 308E STORAGE
309 CAFETORIUM
310 STAGE 353 SF 2292 SF 1019 SF 29 SF 312 BACKSTAGE 313 STORAGE 228 SF C105 CORRIDOR C106 CORRIDOR 642 SF C107 CORRIDOR 1055 SF

GENERAL NOTES - POWER

PROVIDE REVISED TYPED PANELBOARD DIRECTORIES FOR EACH PANELBOARD ADDED OR MODIFIED DURING CONSTRUCTION. FIELD VERIFY EXISTING CIRCUIT INFORMATION WITH OWNER'S ASSISTANCE TO ENSURE FINAL DIRECTORY IS ACCURATE. UNUSED SPARE BREAKERS SHALL BE IN THE OFF POSITION.
 VIDEO PROJECTOR RECEPTACLE TO BE MOUNTED ABOVE WALL MOUNTED PROJECTOR BRACKET, 96" A.F.F. UNO.
 CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING

V105 VESTIBULE

FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS. SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK. LABEL EACH RECEPTACLE WITH THE PANEL NAME AND CIRCUIT NUMBER ON THE FACE OF EACH COVER PLATE WITH A TYPED LAMINATED LABEL.

PROVIDE "GFCI PROTECTED" LABEL ON COVER PLATE FOR ANY GFCI PROTECTED DEVICE.
 CONTRACTOR SHALL INCREASE CIRCUIT CONDUCTOR SIZE TO COMPENSATE FOR VOLTAGE DROP DUE TO EXCESSIVE CIRCUIT LENGTHS. IN NO CASE SHALL VOLTAGE DROP EXCESS NEDA 70 (N.E.C.) PROLUBEMENTS.

DROP EXCEED NFPA 70 (N.E.C.) REQUIREMENTS.

7. REFER TO MECHANICAL PLANS FOR LOCATION OF MECHANICAL EQUIPMENT. LOCATE DISCONNECT SWITCHES PER NEC.

8. REFER TO "CONTROL SCHEMATICS" MECHANICAL DRAWINGS FOR ADDITIONAL

REFER TO "CONTROL SCHEMATICS" MECHANICAL DRAWINGS FOR ADDITIONAL CONTROL WIRING AND CONTROL CONNECTIONS.
 ALL DEVICES, EQUIPMENT, FIXTURES, AND THE LIKE, SHALL BE BONDED WITH A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR. MAINTAIN

MECHANICAL/ELECTRICAL BONDS OF METALLIC RACEWAY SYSTEM.

10. NEW ELECTRICAL DEVICES THAT ARE TO BE MOUNTED IN EXISTING WALLS ARE TO BE FLUSH MOUNTED BY RECESSING A NEW BACK BOX IN THE WALL, THEN FISHING FLEXIBLE CONDUIT DOWN THE WALL TO THE NEW BACK BOXS OR BY RE-USING AND EXISTING BACK BOX AND CONDUIT IN CLOSE PROXIMITY TO THE NEW ELECTRICAL DEVICE.

ALL EXISTING DUPLEX RECEPTACLES WITH SUFFIX "EX" INSIDE AND OUTSIDE OF THE BUILDING ARE TO BE REPLACED WITH NEW DEVICES AND COVER PLATES, TO MATCH EXISTING CONFIGURATION AND TYPE.
 ALL NEW ELECTRICAL DEVICES MOUNTED IN WALL WITH TACKABLE WALL SURFACE "TWS" ARE TO BE PROVIDED WITH AN EXTENSION RING ON THE BACKBOX.
 ELECTRICAL CONTRACTOR TO COORDINATE ALL THE T.V. MONITOR HEIGHTS WITH THE OWNER PRIOR TO ROUGH-IN.

KEYNOTES

P1 WIRE TO A SPARE 20-AMP, 1-POLE CIRCUIT BREAKER IN EXISTING DESIGNATED PANELBOARD.

P3 SECURITY JUNCTION BOX MOUNTED ABOVE THE CEILING FOR THE DOOR SECURITY DEVICES AND POWER. WIRE TO THE NEAREST DUPLEX RECEPTACLE

SECURITY DEVICES AND POWER. WIRE TO THE NEAREST DUPLEX RECEPTACLE CIRCUIT IN THIS ROOM.

P5 EXISTING DUPLEX RECEPTACLE AT THIS LOCATION IS TO BE REPLACED WITH A NEW DUPLEX RECEPTACLE AND USED FOR NEW WATER COOLER.

P7 NEW CEILING MOUNTED DUPLEX RECEPTACLE FOR VIDEO PROJECTOR. COORDINATE EXACT LOCATION IN THE FIELD WITH VIDEO PROJECTOR LOCATION.

P8 WIRE NEW RECEPTACLE TO THE EXISTING RECEPTACLE CIRCUIT IN THIS ROOM.

P10 ALL NEW POWER RECEPTACLES IN THIS ROOM BELOW 5'-6" ARE TO BE TAMPER RESISTANT TYPE.

P13 THE EXISTING DUPLEX RECEPTACLE AND SINGLE GANG BACKBOX AT THIS LOCATION IS TO BE CHANGED TO A DOUBLE DUPLEX RECEPTACLE WITH A DOUBLE GANG BACKBOX.

P14 PROVIDE A DOUBLE DUPLEX RECPETACLE ADJACENT TO THE TECHNOLOGY DATA BOX MOUNTED AT 66 INCHES A.F.F BEHIND THE TEACHERS WARDROBE/TECHNOLOGY CABINET. REFER TO DETAILS ON DRAWING SHEET A7.06 FOR EXACT MOUNTING LOCATION PRIOR TO ROUGH-IN OF BACKBOX.

P15 TECHNOLOGY RACK (IDF) RECEPTACLES. COORDINATE MOUNTING LOCATIONS AND INSTALLATION REQUIREMENTS WITH THE TECHNOLOGY CONTRACTOR PRIOR TO ROUGH-IN. PROVIDE #10 CONDUCTORS.

P16 TECHNOLOGY RACK (IDF) BACKBOARD RECEPTACLES. REFER TO DETAIL "2/E1.02" FOR MOUNTING LOCATIONS AND INSTALLATION REQUIREMENTS. PROVIDE #10 CONDUCTORS.

P17 AUTOMATIC DOOR OPERATOR MOTOR, PUSH BUTTONS AND KEYED SWITCH BY UNIT MANUFACTURER. CONDUIT, BACKBOXES, AND POWER WIRING ARE PROVIDED BY THE DIVISION 26 CONTRACTOR PER THE MANUFACTURER'S REQUIREMENTS. LOCATIONS SHOWN ON THIS DRAWING ARE FOR REFERENCE ONLY. VERIFY EXACT LOCATIONS OF ALL ROUGH-INS WITH OPERATOR INSTALLER PRIOR TO ROUGH-IN

WIRE NEW MECHANICAL UNIT TO EXISTING CIRCUIT(S) AT THIS LOCATION, FROM THE MECHANICAL UNIT THAT WAS REMOVED.

SMOKY ROW
ELEMENTARY
SCHOOL
ADDITIONS AND
RENOVATIONS

900 West 136th Street, Carmel, IN 46032

CARMEL CLAY SCHOOLS

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ARCHITECT

151 SF



317-848-0966 WWW.FHAI.COM 350 E. NEW YORK ST, INDIANAPOLIS IN 46204

CONSULTANT

KEY PLAN

BID SET



PROJECT MANAGER: KRS
DRAWN BY: MMS
PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

REV.

	NO.	DESCRIPTION	DATE
	1	ADDENDUM #1	12/19/2025
-			

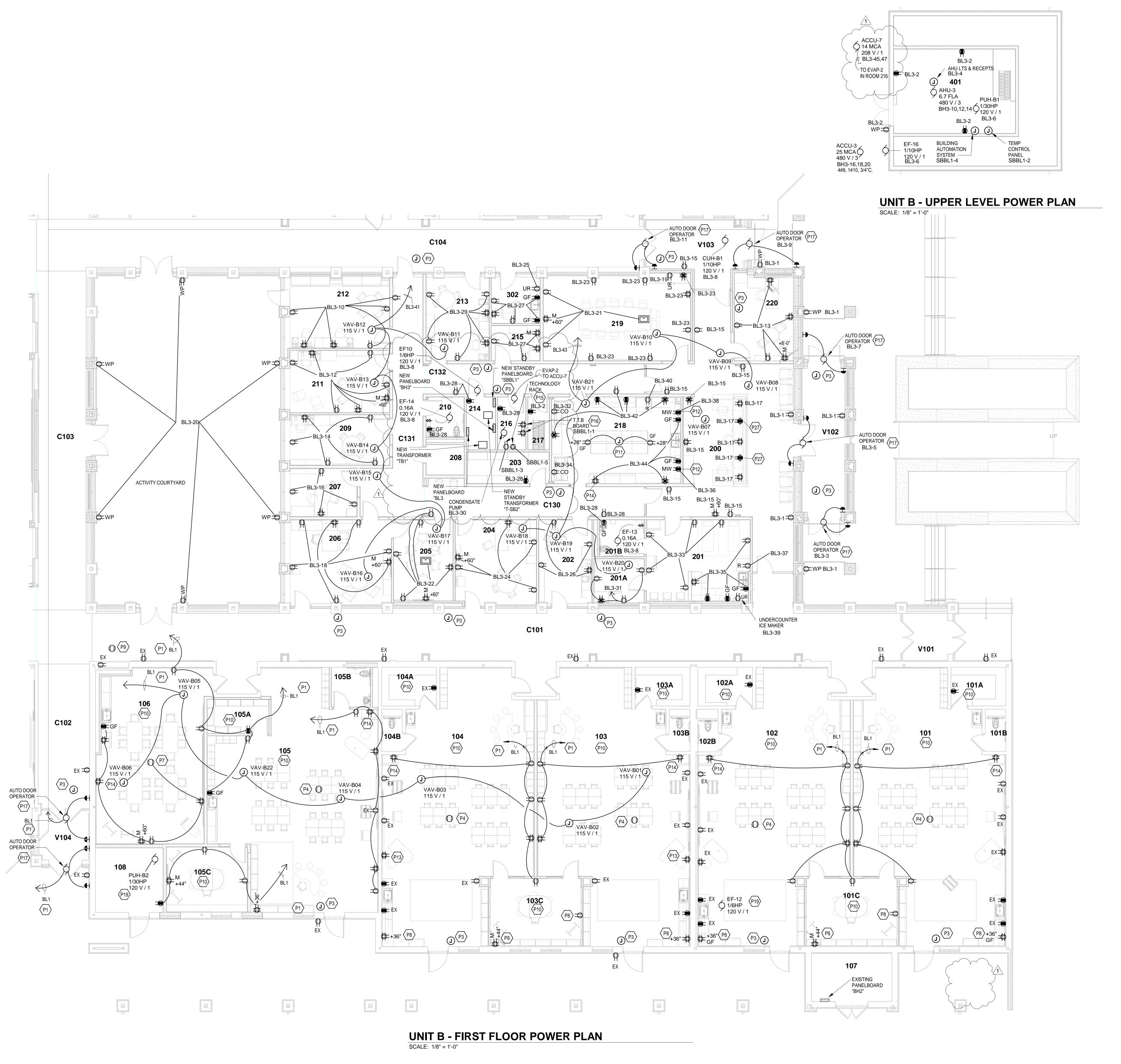
UNIT A - FIRST FLOOR POWER PLAN

E5.01

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH



ROC	OM LEGEND - FIRST FLOOR	UNIT B
ROOM NO.	ROOM NAME	AREA (SF)
	ACTIVITY COURTYARD	2313 SF
101	KINDER - CR 1	1327 SF
101A	STORAGE	80 SF
101B	TOILET	26 SF
101C	SMALL GROUP	234 SF
1010	KINDER - CR 2	1325 SF
102A	STORAGE	80 SF
102A	TOILET	24 SF
1025	KINDER - CR 3	1329 SF
103 103A	STORAGE	80 SF
103B	TOILET SMALL GROUP	27 SF
103C		234 SF
104	KINDER - CR 4	1327 SF
104A	STORAGE	80 SF
104B	TOILET	27 SF
105	KINDER - CR 35	1243 SF
105A	STORAGE	80 SF
105B	RR	58 SF
105C	SMALL GROUP	201 SF
106	FLEX ROOM	707 SF
107	MECH	149 SF
108	OUTDOOR STORAGE	166 SF
200	RECEPTION	901 SF
201	CLINIC	315 SF
201A	EXAM	84 SF
201B	RR	63 SF
202	E.C. SPEECH	172 SF
203	STORAGE	100 SF
204	ASST PRINCIPAL'S OFFICE	262 SF
205	SMALL CONFERENCE	183 SF
206	PRINCIPAL'S OFFICE	330 SF
207	PSYCHOLOGIST	123 SF
208	ISOLATION	44 SF
209	INST COACH OFFICE	191 SF
210	RR	58 SF
211	SOCIAL WORKER	235 SF
212	OT/PT OFFICE	272 SF
213	SPEECH/HEARING	203 SF
214	TEST STOR/ OLUET SPACE	58 SF
215	TEST STOR/ QUIET SPACE	65 SF
216	IDF	57 SF
217	MEZZANINE	43 SF
218	WORKROOM	418 SF
219	LARGE CONFERENCE	478 SF
220	SRO OFFICE	189 SF
302	MOTHERS	88 SF
C101	CORRIDOR	1729 SF
C102	CORRIDOR	283 SF
C103	CORRIDOR	625 SF
C104	CORRIDOR	1172 SF
C130	CORRIDOR	261 SF
C131	CORRIDOR	342 SF
C132	CORRIDOR	248 SF
V101	VESTIBULE	91 SF
V102	SECURE VESTIBULE	253 SF
V103	VESTIBULE	216 SF
V104	VESTIBULE	103 SF

ROOM	LEGEND - SECOND FLOOR	UNIT B
ROOM NO.	ROOM NAME	AREA (SF)
401	MECH. MEZZ.	389 SF

GENERAL NOTES - POWER

PROVIDE REVISED TYPED PANELBOARD DIRECTORIES FOR EACH PANELBOARD ADDED OR MODIFIED DURING CONSTRUCTION. FIELD VERIFY EXISTING CIRCUIT INFORMATION WITH OWNER'S ASSISTANCE TO ENSURE FINAL DIRECTORY IS ACCURATE. UNUSED SPARE BREAKERS SHALL BE IN THE OFF POSITION.
VIDEO PROJECTOR RECEPTACLE TO BE MOUNTED ABOVE WALL MOUNTED PROJECTOR BRACKET, 96" A.F.F. UNO. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS, SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH WORK. LABEL EACH RECEPTACLE WITH THE PANEL NAME AND CIRCUIT NUMBER ON THE FACE OF EACH COVER PLATE WITH A TYPED LAMINATED LABEL. PROVIDE "GFCI PROTECTED" LABEL ON COVER PLATE FOR ANY GFCI PROTECTED CONTRACTOR SHALL INCREASE CIRCUIT CONDUCTOR SIZE TO COMPENSATE FOR VOLTAGE DROP DUE TO EXCESSIVE CIRCUIT LENGTHS. IN NO CASE SHALL VOLTAGE DROP EXCEED NFPA 70 (N.E.C.) REQUIREMENTS. REFER TO MECHANICAL PLANS FOR LOCATION OF MECHANICAL EQUIPMENT. LOCATE DISCONNECT SWITCHES PER NEC. REFER TO "CONTROL SCHEMATICS" MECHANICAL DRAWINGS FOR ADDITIONAL CONTROL WIRING AND CONTROL CONNECTIONS. ALL DEVICES, EQUIPMENT, FIXTURES, AND THE LIKE, SHALL BE BONDED WITH A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR. MAINTAIN MECHANICAL/ELECTRICAL BONDS OF METALLIC RACEWAY SYSTEM. 10. NEW ELECTRICAL DEVICES THAT ARE TO BE MOUNTED IN EXISTING WALLS ARE TO BE FLUSH MOUNTED BY RECESSING A NEW BACK BOX IN THE WALL, THEN FISHING FLEXIBLE CONDUIT DOWN THE WALL TO THE NEW BACK BOXS OR BY RE-USING AND EXISTING BACK BOX AND CONDUIT IN CLOSE PROXIMITY TO THE NEW ELECTRICAL

ALL EXISTING DUPLEX RECEPTACLES WITH SUFFIX "EX" INSIDE AND OUTSIDE OF THE BUILDING ARE TO BE REPLACED WITH NEW DEVICES AND COVER PLATES, TO MATCH EXISTING CONFIGURATION AND TYPE.
 ALL NEW ELECTRICAL DEVICES MOUNTED IN WALL WITH TACKABLE WALL SURFACE "TWS" ARE TO BE PROVIDED WITH AN EXTENSION RING ON THE BACKBOX.
 ELECTRICAL CONTRACTOR TO COORDINATE ALL THE T.V. MONITOR HEIGHTS WITH THE

	KEYNOTES
P1	WIRE TO A SPARE 20-AMP, 1-POLE CIRCUIT BREAKER IN EXISTING DESIGNATED PANELBOARD.
P3	SECURITY JUNCTION BOX MOUNTED ABOVE THE CEILING FOR THE DOOR SECURITY DEVICES AND POWER. WIRE TO THE NEAREST DUPLEX RECEPTACLE CIRCUIT IN THIS ROOM.
P4	CEILING MOUNTED DUPLEX RECEPTACLE FOR VIDEO PROJECTOR. COORDINATE EXACT LOCATION IN THE FIELD WITH VIDEO PROJECTOR LOCATION.
P7	NEW CEILING MOUNTED DUPLEX RECEPTACLE FOR VIDEO PROJECTOR. COORDINATE EXACT LOCATION IN THE FIELD WITH VIDEO PROJECTOR LOCATION.
P8	WIRE NEW RECEPTACLE TO THE EXISTING RECEPTACLE CIRCUIT IN THIS ROOM.
P9	CEILING MOUNTED DUPLEX RECEPTACLE FOR THE CEILING MOUNTED VIDEO MONITOR. COORDINATE EXACT LOCATION IN THE FIELD WITH THE MONITOR LOCATION. WIRE TO NEAREST CORRIDOR DUPLEX RECEPTACLE CIRCUIT.
P10	ALL NEW POWER RECEPTACLES IN THIS ROOM BELOW 5'-6" ARE TO BE TAMPER RESISTANT TYPE.
P11	RUN CONDUIT UP FROM THE FLOOR INTO THE WALL/CHASE BELOW THE COUNTERTOP AND TO THE RECEPTACLE AT EACH END MOUNTED AT +28" A.F.F.
P12	MOUNT MICROWAVE RECEPTACLE ABOVE THE SHELF THAT THE MICROWAVE SITS ON. REFER TO ARCHITECTURAL ELEVATION "7/A7.08".
P13	THE EXISTING DUPLEX RECEPTACLE AND SINGLE GANG BACKBOX AT THIS LOCATION IS TO BE CHANGED TO A DOUBLE DUPLEX RECEPTACLE WITH A

- LOCATION IS TO BE CHANGED TO A DOUBLE DUPLEX RECEPTACLE WITH A DOUBLE GANG BACKBOX.

 P14 PROVIDE A DOUBLE DUPLEX RECPETACLE ADJACENT TO THE TECHNOLOGY DATA BOX MOUNTED AT 66 INCHES A.F.F BEHIND THE TEACHERS WARDROBE/TECHNOLOGY CABINET. REFER TO DETAILS ON DRAWING SHEET A7.06 FOR EXACT MOUNTING LOCATION PRIOR TO ROUGH-IN OF BACKBOX.

 P15 TECHNOLOGY RACK (IDF) RECEPTACLES. COORDINATE MOUNTING LOCATIONS AND INSTALLATION REQUIREMENTS WITH THE TECHNOLOGY CONTRACTOR PRIOR
- TO ROUGH-IN. PROVIDE #10 CONDUCTORS.

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- ONLY. VERIFY EXACT LOCATIONS OF ALL ROUGH-INS WITH OPERATOR INSTALLER PRIOR TO ROUGH-IN.

 P19 WIRE NEW MECHANICAL UNIT TO EXISTING CIRCUIT(S) AT THIS LOCATION, FROM THE MECHANICAL UNIT THAT WAS REMOVED.

 P27 MOUNT RECEPTACLE HORIZONTALLY IN THE BACKSPLASH ABOVE THE COUNTER

REQUIREMENTS. LOCATIONS SHOWN ON THIS DRAWING ARE FOR REFERENCE

VERIFICATION NOTE

CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CLEARANCES AND ALL EXISTING FIELD CONDITIONS BEFORE STARTING CONSTRUCTION. COMMENCEMENT OF WORK CONSTITUTES ACCEPTANCE OF CONDITIONS.

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

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CONSULTANT

KEY PLAN



PROJECT MANAGER: KRS DRAWN BY: MMS

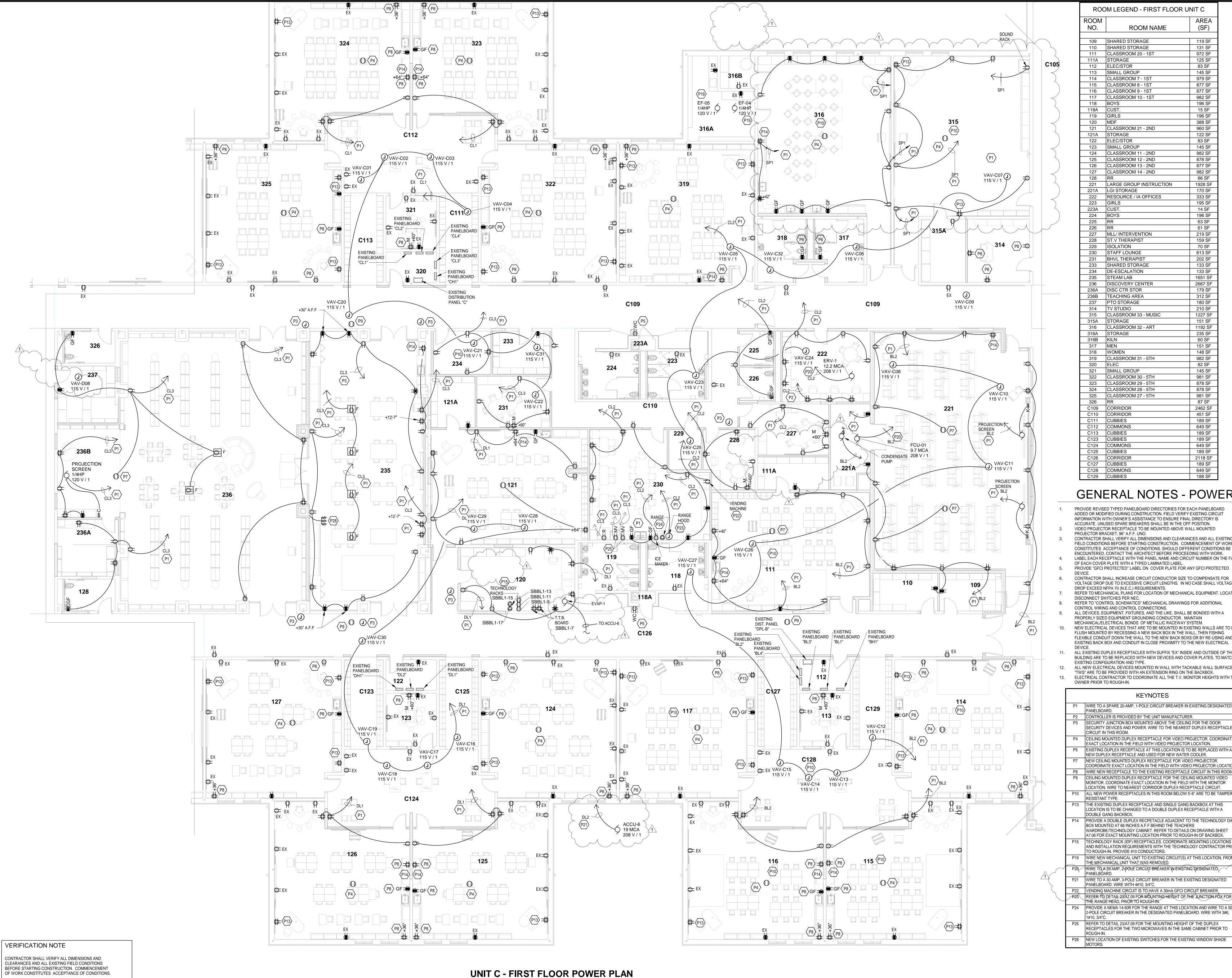
PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025

REV. NO.△	DESCRIPTION	DATE
1	ADDENDUM #1	12/19/2025
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UNIT B - FIRST FLOOR POWER PLAN

5.02



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

SHOULD DIFFERENT CONDITIONS BE ENCOUNTERED. CONTACT THE ARCHITECT BEFORE PROCEEDING WITH

ROOM LEGEND - FIRST FLOOR UNIT C AREA **ROOM NAME** (SF) 131 SF 110 SHARED STORAGE 111 CLASSROOM 20 - 1ST 972 SF 125 SF 111A STORAGE 83 SF 112 ELEC/STOR 145 SF 979 SF 113 SMALL GROUP 114 CLASSROOM 7 - 15 115 CLASSROOM 8 - 1S 877 SF 116 CLASSROOM 9 - 1S 877 SF 117 CLASSROOM 10 - 1ST 982 SF 196 SF 15 SF 196 SF 388 SF 121 CLASSROOM 21 - 2ND 121A STORAGE 122 ELEC/STOR 145 SF 123 SMALL GROUP 124 CLASSROOM 11 - 2ND 982 SF 125 CLASSROOM 12 - 2ND 878 SF 126 CLASSROOM 13 - 2ND 877 SF 127 CLASSROOM 14 - 2ND 221 LARGE GROUP INSTRUCTION 221A LGI STORAGE 222 RESOURCE / IA OFFICES 195 SF 14 SF 196 SF 227 MLL/ INTERVENTION 228 ST.V THERAPIST 159 SF 70 SF 613 SF 229 ISOLATION 230 STAFF LOUNGE 231 BHVL THERAPIST 202 SF 234 DE-ESCALATION STEAM LAB 236 DISCOVERY CENTER 2667 SF 236A DISC CTR STOR 179 SF 236B TEACHING AREA 312 SF 180 SF 237 PTO STORAGE 314 TV STUDIO 315 CLASSROOM 33 - MUSIC STORAGE 316 CLASSROOM 32 - ART 1192 SF 316A STORAGE 235 SF 60 SF 151 SF 318 WOMEN 148 SF 982 SF 82 SF CLASSROOM 31 - 5TH SMALL GROUP 981 SF CLASSROOM 30 - 5TH 878 SF 878 SF CLASSROOM 29 - 5TH 324 CLASSROOM 28 - 5TH 981 SF 325 CLASSROOM 27 - 5TH CORRIDOR CORRIDOR C112 COMMONS C113 CUBBIES 189 SF C123 CUBBIES 189 SF C124 COMMONS 649 SF C125 CUBBIES 189 SF C126 | CORRIDOR C127 CUBBIES 649 SF

GENERAL NOTES - POWER

188 SF

PROVIDE REVISED TYPED PANELBOARD DIRECTORIES FOR EACH PANELBOARD ADDED OR MODIFIED DURING CONSTRUCTION. FIELD VERIFY EXISTING CIRCUIT INFORMATION WITH OWNER'S ASSISTANCE TO ENSURE FINAL DIRECTORY IS ACCURATE. UNUSED SPARE BREAKERS SHALL BE IN THE OFF POSITION. VIDEO PROJECTOR RECEPTACLE TO BE MOUNTED ABOVE WALL MOUNTED PROJECTOR BRACKET, 96" A.F.F. UNO.

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CONTROL WIRING AND CONTROL CONNECTIONS. ALL DEVICES, EQUIPMENT, FIXTURES, AND THE LIKE, SHALL BE BONDED WITH A PROPERLY SIZED EQUIPMENT GROUNDING CONDUCTOR. MAINTAIN MECHANICAL/ELECTRICAL BONDS OF METALLIC RACEWAY SYSTEM. NEW ELECTRICAL DEVICES THAT ARE TO BE MOUNTED IN EXISTING WALLS ARE TO BE FLUSH MOUNTED BY RECESSING A NEW BACK BOX IN THE WALL, THEN FISHING FLEXIBLE CONDUIT DOWN THE WALL TO THE NEW BACK BOXS OR BY RE-USING AND

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KEYNOTES WIRE TO A SPARE 20-AMP, 1-POLE CIRCUIT BREAKER IN EXISTING DESIGNATED

- CONTROLLER IS PROVIDED BY THE UNIT MANUFACTURER. SECURITY JUNCTION BOX MOUNTED ABOVE THE CEILING FOR THE DOOR SECURITY DEVICES AND POWER. WIRE TO THE NEAREST DUPLEX RECEPTACLE
- P4 CEILING MOUNTED DUPLEX RECEPTACLE FOR VIDEO PROJECTOR. COORDINAT EXACT LOCATION IN THE FIELD WITH VIDEO PROJECTOR LOCATION. P5 EXISTING DUPLEX RECEPTACLE AT THIS LOCATION IS TO BE REPLACED WITH A NEW DUPLEX RECEPTACLE AND USED FOR NEW WATER COOLER.
- COORDINATE EXACT LOCATION IN THE FIELD WITH VIDEO PROJECTOR LOCATION WIRE NEW RECEPTACLE TO THE EXISTING RECEPTACLE CIRCUIT IN THIS ROOM CEILING MOUNTED DUPLEX RECEPTACLE FOR THE CEILING MOUNTED VIDEO MONITOR. COORDINATE EXACT LOCATION IN THE FIELD WITH THE MONITOR
- LOCATION. WIRE TO NEAREST CORRIDOR DUPLEX RECEPTACLE CIRCUIT. 10 ALL NEW POWER RECEPTACLES IN THIS ROOM BELOW 5'-6" ARE TO BE TAMPER
- P13 THE EXISTING DUPLEX RECEPTACLE AND SINGLE GANG BACKBOX AT THIS LOCATION IS TO BE CHANGED TO A DOUBLE DUPLEX RECEPTACLE WITH A DOUBLE GANG BACKBOX. P14 PROVIDE A DOUBLE DUPLEX RECPETACLE ADJACENT TO THE TECHNOLOGY DATA
- BOX MOUNTED AT 66 INCHES A.F.F BEHIND THE TEACHERS WARDROBE/TECHNOLOGY CABINET. REFER TO DETAILS ON DRAWING SHEET A7.06 FOR EXACT MOUNTING LOCATION PRIOR TO ROUGH-IN OF BACKBOX. P15 TECHNOLOGY RACK (IDF) RECEPTACLES. COORDINATE MOUNTING LOCATIONS AND INSTALLATION REQUIREMENTS WITH THE TECHNOLOGY CONTRACTOR PRIOR
- TO ROUGH-IN. PROVIDE #10 CONDUCTORS. P19 WIRE NEW MECHANICAL UNIT TO EXISTING CIRCUIT(S) AT THIS LOCATION, FROM THE MECHANICAL UNIT THAT WAS REMOVED.
- P20 WIRE TO A 20 AMP, 2-POLE CIRCUIT BREAKER IN EXISTING DESIGNATED P21 WIRE TO A 30 AMP, 3-POLE CIRCUIT BREAKER IN THE EXISTING DESIGNATED
- VENDING MACHINE CIRCUIT IS TO HAVE A 30mA GFCI CIRCUIT BREAKER. P23\ REFER-TO DETAIL-23/A7.09 FOR-MOUNTING HEIGHT OF THE JUNCTION-FOX FOR THE RANGE HEAD, PRIOR TO ROUGH-IN. 2-POLE CIRCUIT BREAKER IN THE DESIGNATED PANELBOARD. WIRE WITH 3#6,
- P24 PROVIDE A NEMA 14-50R FOR THE RANGE AT THIS LOCATION AND WIRE TO A 50A, P25 REFER TO DETAIL 23/A7.09 FOR THE MOUNTING HEIGHT OF THE DUPLEX RECEPTACLES FOR THE TWO MICROWAVES IN THE SAME CABINET PRIOR TO

P28 NEW LOCATION OF EXISTING SWITCHES FOR THE EXISTING WINDOW SHADE

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SMOKY ROW ELEMENTARY SCHOOL **ADDITIONS AND** RENOVATIONS

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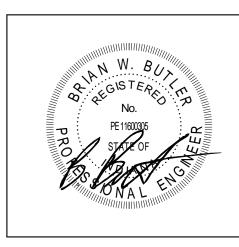


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CONSULTANT

KEY PLAN

BID SET



PROJECT MANAGER: KRS DRAWN BY: MMS PROJECT NUMBER: 222033.00

PROJECT ISSUE DATE: 11/20/2025 DESCRIPTION DATE 1 ADDENDUM #1 12/19/2025

UNIT C - FIRST FLOOR POWER PLAN

LUMINAIRE SCHEDULE - GENERAL NOTES

SEE SPECIFICATIONS FOR DRIVER REQUIREMENTS. FOR ALL DOWNLIGHTING FIXTURES, PROVIDE REQUIRED MOUNTING HARDWARE FOR MOUNTING IN LAY-IN TYPE CEILINGS. . CONTRACTOR TO VERIFY TYPES AND QUANTITY OF LIGHT FIXTURES REQUIRING EMERGENCY BATTERY UNITS AND PROVIDE REQUIRED QUANTITY OF EMERGENCY BATTERY UNITS, LABOR, MATERIAL, ETC. IN THE PROJECT BID FOR FIELD INSTALLATION OF EMERGENCY BATTERY UNITS.

. LIGHT FIXTURE SUBMITTALS TO INCLUDE DATA SHEETS FOR ALL FIXTURE TYPES, INCLUDING ADDITIONAL DATA SHEETS FOR DRIVER COMBINATIONS REQUIRED TO MEET THE INSTALLATION REQUIREMENTS OF THE VARIOUS FIXTURE TYPES INDICATED IN THE REMARKS COLUMN OF THE FIXTURE SCHEDULES OR ON THE DRAWINGS. SUBMITTALS SHALL ALSO INDICATE COLOR FOR ANY CUSTOM COLOR LIGHT FIXTURES.

COLOR TEMPERATURE FOR ALL FIXTURES IS TO BE 4000K UNLESS NOTED OTHERWISE.

	Т		1		1 4445 5			LUMINAIRE SCHEDULE	
PLAN TYPE	MANUFACTURER/CATALOG	MOUNTING	NO.		LAMPS TYPE	LUMENS	APPLIED VOLTAGE	DESCRIPTION	VA LOAD
C1	INSIGHT LIGHTING MX SERIES PINNACLE MOFFAT M SERIES	SURFACE WALL	1	36.0 W	LED	0 lm	277 V	4-FOOT ADJUSTABLE MEDIUM OUTPUT. WALL MOUNTED LED UPLIGHT ASYMMETRIC FIXTURE. TEXTURED WHITE.	36 VA
C2	JESCO LIGHTING DL-AC-FLEXZ-BEAM SERIES CONTECH LIGHTING TLTAC SERIES	COVE	1	5.5 W	LED	314 lm	277 V	FLEXIBLE LINEAR LED STRIP LIGHTING MOUNTED IN COVE.	5.5 VA
C3	LLI ARCHITECTURAL LIGHTING LLI-LAC4.OW SERIES EXTANT HTG-IR-LP SERIES	RECESSED	1	1.8 W	LED	143 lm	277 V	1.5 - INCH APERTURE RECESSED LED TRIMLESS FIXTURE. LENGTH PER DRAWINGS. INTERGRAL DRIVER, MUD RING. WITH	1.8 VA
D1	MARK SL1L SERIES AXIS LIGHTING SCR SERIES A-LIGHT LEAN SERIES ILP ENVI COLLECTION	RECESSED	1	53.0 W	LED	4734 lm		CONTINOUS LIGHTED CORNER PIECES. 2'BY2' INDIRECT RECESSED LAY-IN, WITH ACOUSTIC COLOR TITANIUM GRAY.	53 VA
D1X	VPAN22 SERIES ARON LIGHTING LFT SERIES A-LIGHT LEAN SERIES	RECESSED	1	53.0 W	LED	4734 lm	277 V	2'BY2' INDIRECT RECESSED LAY-IN, WITH ACOUSTIC COLOR TITANIUM GRAY. PROVIDE WITH EMERGENCY TRANSFER DEVICE.	53 VA
D004	ILP ENVI COLLECTION VPAN22 SERIES ARON LIGHTING LFT SERIES	DECENTE		0.014	1.50	4000 las	077.1/	S S INCLUMEDIUM DE AM GO ODI WILLITE DOWNED COAT FIVILIDE (TRIM FINIOLI AND ODTIC CHANNEL FINIOLI	0.)(4
DSC1	FLUXWERX PORTAL TC1 SERIES LUMENWERX CLUP1LR SERIES LUMARK NFFLD-S SERIES LITHONIA ESXF LED SERIES	BRACKET MOUNTED	1	9.0 W 20.0 W	LED	1300 lm 2682 lm		5.5 INCH MEDIUM BEAM, 80 CRI, WHITE POWDER COAT FIXTURE/TRIM FINISH AND OPTIC CHANNEL FINISH. ROOFTOP MOUNTED LED FLOOD LIGHT AIMED TO ILLUMINATE THE ENTRY TOWER.	9 VA <varies></varies>
FL2	STONECO FL20 SERIES BEACON RFL2 SERIES COOPER INVUE VFS SERIES	GROUND	1	46.0 W	LED	4132 lm	277 V	GROUND MOUNTED LED FLOOD LIGHT AIMED TO ILLUMINATE TO THE LETTERS ON THE FACE OF THE BUILDING. WIDE	46 VA
LCD41	LITHONIA DSXF1 SERIES BEACON RFL3 SERIES HALO HCC4 SERIES	MOUNTED	1	12.0 W	LED	1000 lm		SYMMETRIC RECTANGULAR DISTRIBUTION. 4-INCH APERATURE OPEN REFLECTOR LED DOWNLIGHT, SURFACE MOUNTED WITH NO STEM. MEDIUM DISTRIBUTION, CLEAR	12 VA
LD41	LITHONIA LDN4CYL SERIES PRESCOLITE LTC-4RD SERIES LITHONIA LDN4 SERIES	RECESSED	1	14.0 W	LED	900 lm	277 V	SPECULAR REFLECTOR, 0-10VDC DIMMING FIXTURE HOUSING WHITE IN COLOR. 4-INCH ROUND APERTURE OPEN REFLECTOR LED DOWNLIGHT, MEDIUM DISTRIBUTION, CLEAR SPECULAR FINISH,	14 VA
	HALO HC4 SERIES PRESCOLITE LF4-4RD LED SERIES							SELF-FLANGED, 0-10VDC DIMMING, BAR HANGER ACCESSORY.	
LD61	HALO HC6 SERIES LITHONIA LDN6 SERIES PRESCOLITE LF6LED SERIES	RECESSED	1	22.0 W	LED	1500 lm		6-INCH ROUND APERTURE OPEN REFLECTOR LED DOWNLIGHT, MEDIUM DISTRIBUTION, CLEAR SPECULAR FINISH, SELF-FLANGED, 0-10VDC DIMMING, BAR HANGER ACCESSORY. FIXTURES IN SERVING AREA ARE TO BE EITHER 3000K OR 3500K AS NOTED, ALL OTHER INSTANCES TO BE 4000K	
LD61X	HALO HC6 SERIES LITHONIA LDN6 SERIES PRESCOLITE LF6LED SERIES	RECESSED	1	22.0 W	LED	1500 lm		6-INCH ROUND APERTURE OPEN REFLECTOR LED DOWNLIGHT, MEDIUM DISTRIBUTION, CLEAR SPECULAR FINISH, SELF-FLANGED, 0-10VDC DIMMING, BAR HANGER ACCESSORY, WITH EMERGENCY TRANSFER DEVICE.	22 VA
LD62	HALO HC6 SERIES LITHONIA LDN6 SERIES PRESCOLITE LF6LED SERIES	RECESSED	1	22.0 W	LED	2000 lm		6-INCH ROUND APERTURE OPEN REFLECTOR LED DOWNLIGHT, MEDIUM DISTRIBUTION, CLEAR SPECULAR FINISH, SELF-FLANGED, 0-10VDC DIMMING, BAR HANGER ACCESSORY. FIXTURES IN SERVING AREA ARE TO BE EITHER 3000K OR 3500K AS NOTED, ALL OTHER INSTANCES TO BE 4000K	19 VA
LD62X	HALO HC6 SERIES LITHONIA LDN6 SERIES PRESCOLITE LF6LED SERIES	RECESSED	1	22.0 W	LED	2000 lm		6-INCH ROUND APERTURE OPEN REFLECTOR LED DOWNLIGHT, MEDIUM DISTRIBUTION, CLEAR SPECULAR FINISH, SELF-FLANGED, 0-10VDC DIMMING, BAR HANGER ACCESSORY, WITH EMERGENCY TRANSFER DEVICE.	22 VA
LDW61	PORTFOLIO LD6A SERIES GOTHAM EVO SHOWER SERIES PRESCOLITE LF6LEDG4 SERIES	RECESSED	1	15.0 W	LED	1000 lm		6-INCH ROUND APERTURE LED SHOWER LIGHT WITH REGRESSED LENS REFLECTOR, WHITE REFLECTOR AND TRIM, SELF-FLANGED, IP65 WET LOCATION LISTED.	15 VA
LE1	McGRAW-EDISON LIGHTING GARDCO LIGHTING LITHONIA LIGHTING SPAULDING LIGHTING BEACON GEOPAK SERIES	SURFACE WALL	1		LED		277 V	HALF-CYLINDER LED WALL MOUNTED LUMINAIRE WITH DIE CAST ALUMINUM HOUSING, BOTTOM DIFFUSER FLUSH WITH THE DIE CASTING, TYPE 3 DISTRIBUTION, 70 CRI LEDS. LUMINAIRE COLOR: FROM MANUFACTURER STANDARD COLORS. MOUNT ONTO JUNCTION BOX. VANDAL RESISTANT	20 VA
LF1	LITHONIA CPX SERIES COLUMBIA CFP SERIES EATON METALUX CGT SERIES	RECESSED	1	39.0 W	LED	4000 lm	277 V	2 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 10% 0-10V DIMMING.	39 VA
LF1AX	LITHONIA CPX SERIES COLUMBIA CFP SERIES EATON METALUX CGT SERIES	RECESSED	1	39.0 W	LED	4000 lm	277 V	1 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 10% 0-10V DIMMING, EMERGENCY TRANSFER DEVICE.	39 VA
LF1X	LITHONIA CPX SERIES COLUMBIA CFP SERIES EATON METALUX CGT SERIES	RECESSED	1	39.0 W	LED	4000 lm	277 V	2 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 10% 0-10V DIMMING, EMERGENCY TRANSFER DEVICE.	39 VA
LF1XA	LITHONIA CPX SERIES COLUMBIA CFP SERIES EATON METALUX CGT SERIES	RECESSED	1	39.0 W	LED	4000 lm	277 V	1 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 10% 0-10V DIMMING, EMERGENCY TRANSFER DEVICE.	39 VA
LF2	LITHONIA CPX SERIES COLUMBIA CFP SERIES EATON METALUX CGT SERIES	RECESSED	1	47.0 W	LED	4800 lm	277 V	2 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 10% 0-10V DIMMING.	47 VA
LF2X	LITHONIA CPX SERIES COLUMBIA CFP SERIES EATON METALUX CGT SERIES	RECESSED	1	47.0 W	LED	4800 lm	277 V	2 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 10% 0-10V DIMMING, EMERGENCY TRANSFER DEVICE.	47 VA
LF3	LITHONIA CPX SERIES COLUMBIA CFP SERIES EATON METALUX CGT SERIES	RECESSED	1	53.0 W	LED	6000 lm	277 V	2 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 10% 0-10V DIMMING.	53 VA
LF3X	LITHONIA CPX SERIES COLUMBIA CFP SERIES EATON METALUX CGT SERIES	RECESSED	1	53.0 W	LED	6000 lm		2 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 10% 0-10V DIMMING. EMERGENCY TRANSFER DEVICE.	53 VA
LFW2	LITHONIA CPX SERIES COLUMBIA CFP SERIES EATON METALUX CGT SERIES	RECESSED	1	47.0 W	LED	4800 lm		2 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 10% 0-10V DIMMING. DAMP LOCATION.	47 VA
LFW2X	COLUMBIA CPX SERIES EATON METALUX CGT SERIES	RECESSED	1	47.0 W	LED		277 V	2 BY 4-FOOT BACK LIT FLAT PANEL WITH ALUMINUM FRAME, 10% 0-10V DIMMING WITH AN EMERGENCY TRANSFER DEVICE, DAMP LOCATION	47 VA
LN2	METALUX SNX LENSED SERIES LITHONIA ZL1D SERIES COLUMBIA MPS SERIES		1	33.0 W	LED	3900 lm		4-FOOT SURFACE LED STRIP TYPE LIGHT FIXTURE, FROSTED LENS, WIDE DISTRIBUTION, 0-10V DIMMING.	33 VA
LR2	METALUX WNLED SERIES LITHONIA SBL SERIES COLUMBIA LAW SERIES	SUSPENDED	1	48.0 W	LED			4-FOOT LED WRAP AROUND FIXTURE, ACRYLIC PRISMATIC DIFFUSER, 0-10VDC DIMMING, IF SUSPENDED, INSTALL AT 8-FOOT AFF WITH CONDUIT STEMS (UNO).	27 VA
LR2X	METALUX WNLED SERIES LITHONIA SBL SERIES COLUMBIA LAW SERIES	SUSPENDED	1	48.0 W	LED	4000 lm	277 V	4-FOOT LED WRAP AROUND FIXTURE, ACRYLIC PRISMATIC DIFFUSER, 0-10VDC DIMMING, WITH EMERGENCY TRANSFER DEVICE. IF SUSPENDED, INSTALL AT 8-FOOT AFF WITH CONDUIT STEMS (UNO).	27 VA
LR4	METALUX WNLED SERIES LITHONIA SBL SERIES COLUMBIA LAW SERIES	SUSPENDED	1	87.0 W	LED	7000 lm		4-FOOT WRAP LED AROUND FIXTURE, ACRYLIC PRISMATIC DIFFUSER, 0-10VDC DIMMING. IF SUSPENDED, INSTALL AT 8-FOOT AFF WITH CONDUIT STEMS (UNO).	87 VA
LR4X	METALUX WNLED SERIES LITHONIA SBL SERIES COLUMBIA LAW SERIES	SUSPENDED	1	87.0 W	LED	7000 lm		4-FOOT LED WRAP AROUND FIXTURE, ACRYLIC PRISMATIC DIFFUSER, 0-10VDC DIMMING, WITH EMERGENCY TRANSFER DEVICE. IF SUSPENDED, INSTALL AT 8-FOOT AFF WITH CONDUIT STEMS (UNO).	
LS1	LITHONIA RSX2 SERIES LUMARK PREVAIL SERIES BEACON VIPER L SERIES	25'-0 " ROUND TAPERED POLE	1	270.0 W	LED	27301 lm		POLE MOUNTED LED FIXTURE ON A 25'-0" TALL POLE. CLEAR LENS, 70+CRI, 4000K, TYPE 3 DISTRIBUTION.	270 VA
LS2	LITHONIA RSX2 SERIES LUMARK PREVAIL SERIES BEACON VIPER L SERIES	15'-0 " ROUND TAPERED POLE	1	180.0 W	LED	20000 lm		POLE MOUNTED LED FIXTURE ON A 15'-0" TALL POLE. CLEAR LENS, 70+CRI, 4000K, TYPE 3 DISTRIBUTION.	180 VA
LT044H	MARK ARCHITECTURAL SLOT 4 LED SERIES STARTEK LIGHTING AMERICA RBEAM SERIES LITECONTROL MOD 4 LED	RECESSED	1	40.0 W	LED	4000 lm		4" BY 4-FOOT LED SLOT FIXTURE, MOUNTING METHOD PER PLANS, 100% DOWNLIGHT WITH ACRYLIC FLUSH SMOOTH DIFFUSER, 80 CRI, 0-10VDC DIMMING DRIVER.	40 VA
LT044HX	MARK ARCHITECTURAL SLOT 4 LED SERIES STARTEK LIGHTING AMERICA RBEAM SERIES	RECESSED	1	40.0 W	LED	4000 lm		4" BY 4-FOOT LED SLOT FIXTURE, MOUNTING METHOD PER PLANS, 100% DOWNLIGHT WITH ACRYLIC FLUSH SMOOTH DIFFUSER, 80 CRI, 0-10VDC DIMMING DRIVER WITH EMERGENCY TRANSFER DEVICE.	40 VA
LWBS2X	LITECONTROL MOD 4 LED SERIES METALUX SWLED SERIES	SURFACE	1	53.0 W	LED	3800 lm	277 V	4-FOOT WALL BRACKET TYPE LED STAIRWELL FIXTURE, FROSTED ACRYLIC LENS, INTEGRAL OCCUPANCY SENSOR. PROVIDE	53 VA
P1	LITHONIA WL4 SERIES COLUMBIA LBIL SERIES LUXXBOX LX-DA SERIES INSIGHT LIGHTING ADOBE	PENDANT	1	45.0 W	Т8	3495 lm	277 V	WITH DRIVER AS REQUIRED FOR AUTOMATIC DIMMING TO 50% OUTPUT DURING UNOCCUPIED TIMES. PROVIDE WITH EMERGENCY TRANSFER DEVICE. TWO PENDANT MOUNTED 73.5 INCH LONG LED DOWNLIGHT FIXTURES MOUNTED END-TO-END. 0-10VDC DIMMING. DESIGN COLOR TO BE TEXTURED GREY.	45 VA
P2	SERIES GOTHAM EVO SERIES SOLID STATE LUMINAIRES SSC6 SERIES	PENDANT	1	97.1 W	LED	10000 lm	277 V	PENDANT MOUNTED 6-INCH CYLINDER 0-10VDC, DIMMING,WIDE DISTRIBUTION, BRONZE SPECULAR FINISH	97.1 VA
P2X	RRESCOLITE LTC-6RD SERIES GOTHAM EVO SERIES SOLID STATE LUMINAIRES SSC6 SERIES	RENDANT	1	97.1 W	LED	10000 lm	277 V	PENDANT MOUNTED 6-INCH CYLINDER 0-10VDC, DIMMING, WIDE DISTRIBUTION, BRONZE SPECULAR FINISH. PROVIDE WITH EMERGENCY TRANSFER DEVICE.	97.1 VA
P3	PRESCOLITE LTC-6RD SERIES LIGHTOLIER 3DP1HB SERIES BASELIGHT QSD22 SERIES LUMINIS PR2280 SERIES VERSA LED LIGHTING HBLED	PENDANT	1	68.0 W	LED	14000 lm	277 V	DECORATIVE HIGH BAY BELL SHAPED LIGHT FIXTURE, MEDIUM SIZE, CLEAR LOWER SHADE, LAYERED FINE TEXTURE, BRONZE FINISH. 1%, 0-10VD DIMMING	68 VA
РЗХ	SERIES LIGHTOLIER 3DP1HB SERIES BASELIGHT QSD22 SERIES LUMINIS PR2280 SERIES	PENDANT	1	68.0 W	LED	14000 lm		DECORATIVE HIGH BAY BELL SHAPED LIGHT FIXTURE, MEDIUM SIZE, CLEAR LOWER SHADE, LAYERED FINE TEXTURE, BRONZE FINISH. 1%, 0-10VD DIMMING. PROVIDE WITH EMERGENCY TRANSFER DEVICE.	68 VA
P6	VERSA LED LIIGHTING HBLED SERIIES BUZZISPACE BUZZIPLEAT	PENDANT	1	0.0 W	LED	0 lm	277 V	3'-4" DIAMETER PLEATED, ACCUSTICAL PENDANT LIGHT FIXTURE.	0 VA
RL1	SERIES LUMINILKURBA SERIES QTRAIN KURV SERIES	SURFACE		80.0 W	LED	100 lm	277 V	ROPE LIGHT TO BE INSTALLED UNDER THE STONE LIP OF OUTDOOR PLANTER. PROVIDE ALL NECESSARY HARDWARE, DRIVERS ETC. AS REQUIRED FOR A COMPLETE SYSTEM	80 VA
XC	KELVIN SW3 SERIES SURE-LITES CX SERIES CHLORIDE 55 LINE SERIES	SURFACE CEILING	1	3.0 W	RED LED	0 lm	277 V	CAST ALUMINUM AC ONLY EXIT SIGN, SINGLE FACE, DIRECTIONAL ARROWS INDICATED, WHITE HOUSING. REFER TO PROJECT MANUAL FOR ADDITIONAL REQUIREMENTS.	3 VA
XVW	LITHONIA SIGNATURE SERIES DUAL-LITE SEMPRA SERIES SURE-LITES UX SERIES CHLORIDE 60 LINE SERIES	SURFACE WALL	1	3.0 W	RED LED	0 lm	277 V		3 VA
XW	LITHONIA LV SERIES DUAL-LITE SEWL SERIES SURE-LITES CX SERIES	SURFACE	1	3.0 W	RED	0 lm	277 V	CAST ALUMINUM AC ONLY EXIT SIGN, SINGLE FACE, DIRECTIONAL ARROWS INDICATED, WHITE HOUSING. REFER TO PROJECT	3 VA

RED 0 lm 277 V LED

MANUAL FOR ADDITIONAL REQUIREMENTS.

LITHONIA SIGNATURE SERIES DUAL-LITE SEMPRA SERIES

CHLORIDE 55 LINE SERIES WALL

Branch Panel: BH3 Location: ELEC 214 Supply From: MSB-H Mounting: Surface

Notes: INTEGRAL SURGE PROTECTION

Enclosure: Type 1

Phases: 3 Wires: 4

Volts: 480/277 Wye

A.I.C. Rating: 10 kA Mains Type: M.L.O Mains Rating: 200 A

MCB Rating: 200 A

CKT	Circuit Description	Trip	Poles	Α (VA)	В (VA)	C (VA)	Poles	Trip	Circuit Description	CKT
1	Transformer TB1 RM. 214	100 A	3	16398	912					1	20 A	Lighting - RM 200, 215, 219, 220, 302, V102	2
3						17370	0			1	20 A	Spare	4
5								17166	0	1	20 A	Spare	6
7	Lighting - RM. 206-207, 209, 211-213, C130-C132	20 A	1	1312	0					1	20 A	Spare	8
9	Lighting - RM. 201-205, 208, 210, 214, 216-218	20 A	1			1097	1856			3	20 A	AHU-3 6.7 FLA RM 401 (NOTE 1)	10
11	Spare	20 A	1					0	1856				12
13	Spare	20 A	1	0	1856								14
15	Spare	20 A	1			0	5540			3	40 A	ACCU-3 25 MCA ROOFTOP (NOTE 2)	16
17	Spare	20 A	1					0	5540				18
19	Spare	20 A	1	0	5540								20
21	Spare	20 A	1			0	0			1	20 A	Spare	22
23	Spare	20 A	1					0	0	1	20 A	Spare	24
25	Spare	20 A	1	0	0					1	20 A	Spare	26
27	Spare	20 A	1			0	0			1	20 A	Spare	28
29	Spare	20 A	1					0	0	1	20 A	Spare	30
31	Spare	20 A	1	0	0					1	20 A	Spare	32
33	Spare	20 A	1			0	0			1	20 A	Spare	34
35	Spare	20 A	1					0	0	1	20 A	Spare	36
37	Spare	20 A	1	0	0					1	20 A	Spare	38
39	Spare	20 A	1			0	0			1	20 A	Spare	40
41	Spare	20 A	1					0	0	1	20 A	Spare	42
		T	.1.1	0004	0 1/4	0500	0 1/4	0.450	0 1/4				

 Total Load:
 26018 VA
 25863 VA
 24562 VA

 Total Amps:
 95 A
 94 A
 89 A

ad Classification	Connected Load	Demand Factor	Estimated Demand	Panel	Totals
hting	3321 VA	100.00%	3321 VA		
otor	13070 VA	110.65%	14462 VA	Total Conn. Load:	76443 VA
ner	2520 VA	100.00%	2520 VA	Total Est. Demand:	63622 VA
ceptacle - Convenience	28800 VA	67.36%	19400 VA	Total Conn.:	92 A
'AC	19532 VA	90.00%	17579 VA	Total Est. Demand:	77 A
ceptacle - Undercounter Ref.	1200 VA	70.00%	840 VA		
ceptacle - Refrigerator	2000 VA	80.00%	1600 VA		
ceptacle - Microwave	3000 VA	50.00%	1500 VA		
ceptacle - Copy Machine	3000 VA	80.00%	2400 VA		
	hting tor her ceptacle - Convenience AC ceptacle - Undercounter Ref. ceptacle - Refrigerator ceptacle - Microwave	hting 3321 VA stor 13070 VA ner 2520 VA ceptacle - Convenience 28800 VA AC 19532 VA ceptacle - Undercounter Ref. 1200 VA ceptacle - Refrigerator 2000 VA ceptacle - Microwave 3000 VA	hting 3321 VA 100.00% stor 13070 VA 110.65% ner 2520 VA 100.00% ceptacle - Convenience 28800 VA 67.36% AC 19532 VA 90.00% ceptacle - Undercounter Ref. 1200 VA 70.00% ceptacle - Refrigerator 2000 VA 80.00% ceptacle - Microwave 3000 VA 50.00%	hting 3321 VA 100.00% 3321 VA stor 13070 VA 110.65% 14462 VA her 2520 VA 100.00% 2520 VA ceptacle - Convenience 28800 VA 67.36% 19400 VA AC 19532 VA 90.00% 17579 VA ceptacle - Undercounter Ref. 1200 VA 70.00% 840 VA ceptacle - Refrigerator 2000 VA 80.00% 1600 VA ceptacle - Microwave 3000 VA 50.00% 1500 VA	hting 3321 VA 100.00% 3321 VA stor 13070 VA 110.65% 14462 VA Total Conn. Load: ner 2520 VA 100.00% 2520 VA Total Est. Demand: ceptacle - Convenience 28800 VA 67.36% 19400 VA Total Conn.: AC 19532 VA 90.00% 17579 VA Total Est. Demand: ceptacle - Undercounter Ref. 1200 VA 70.00% 840 VA ceptacle - Refrigerator 2000 VA 80.00% 1600 VA ceptacle - Microwave 3000 VA 50.00% 1500 VA

NOTE 1: CONNECT WITH 3#12, #12G IN 3/4"C. NOTE 2: CONNECT WITH 3#8, #10G IN 1"C.

Notes: INTEGRAL SURGE PROTECTION

Receptacle - Refrigerator

Receptacle - Microwave

Receptacle - Copy Machine

Branch Panel: BL3 Location: ELEC 214 Supply From: TB1 Mounting: Surface Enclosure: Type 1

Volts: 208/120 Wye Phases: 3

A.I.C. Rating: 18 kA Mains Type: MCB Mains Rating: 200 A MCB Rating: 200 A

Circuit Description

Trip Poles A B C Poles Trip **Circuit Description** 1 Receptacle - RM - 200, V108 20 A | 1 | 1080 | 900 | 20 A RECEPTS RM - 217, 401 3 AUTOMATIC DOOR RM - V102 20 A 1 1127 0 20 A AHULIGHTS/RECEPTS RM - 401 20 A 1 1127 891 1127 470 5 AUTOMATIC DOOR RM - V102 20 A (EF 16, PUM-B1 RM - 40/1 7 AUTOMATIC DOOR RM - V102 20 A EF-10,13,14,CUH-B1 RM.201B,210,V103,C132 8 20 A 1 1127 1440 1

20 A 1 1127 1440 1

20 A 1 1260 1080 1

20 A 1 2160 720 1

20 A 1 1600 1080 1 20 A RECEPTS/RM - 212 9 AUTOMATIC DOOR RM - V103 11 AUTOMATIC DOOR RM - V103 20 A RECEPTS RM - 211 13 RECEPTS RM - 220 20 A RECEPTS RM - 209 15 RECEPTS RM - 200, V103 20 A RECEPTS RM - 207 17 RECEPTS RM - 200 20 A RECEPTS RM - 206 19 REFRIGERATOR RM - 219 20 A RECEPTS COURTYARD 21 RECEPTS RM - 219 20 A RECEPTS RM - 205 23 RECEPTS RM - 219 20 A RECEPTS RM - 204 25 REFRIGERATOR RM - 302 20 A 1 600 900 20-A RECEPTS RM - 202 20 A RECEPTS RM-201B,203,210,214,216,C130,C132 28 27 RECEPTS RM - 302, 215 20 A 1 1440 506 29 RECEPTS RM - 213 20 A CONDENSATE PUMP RM. 216 20 A 1 540 1500 31 RECEPTS RM - 201A 20 A COPIER RM - 218 20 A COPIER RM 218 33 RECEPTS RM - 201 20 A 1 720 1500 1 35 RECEPTS RM - 201 20 A MICROWAVE RM - 218 37 REFRIGERATOR RM - 201 20 A MICROWAVE RM - 218 20 A 1 180 1000 1 1 20 A REFRIGERATOR RM - 20 A 1 1260 1080 1 20 A RECEPTS RM - 218 20 A 1 1260 1080 1 20 A Spare 39 ICE MAKER RM - 201 20 A REFRIGERATOR RM - 218 41 VAVS - UNIT B 43 VAV'S - UNIT B 20 A 2 1456 0 1456 0 45 ACCU-7 - 14 MCA 1 20 A Spare 1456 0 1 20 A Spare 20 A 1 0 0 0 1 20 A Spare
20 A 1 0 0 0 1 20 A Spare
20 A 1 20 A Spare
20 A 1 20 A Spare
1 20 A Spare
1 20 A Spare
1 20 A Spare 53 Spare

 20 A
 1
 0
 0
 1
 20 A
 Spare

 20 A
 1
 0
 0
 1
 20 A
 Spare

 20 A
 1
 0
 0
 1
 20 A
 Spare

 55 Spare 57 Spare 59 Spare **Total Load:** 16398 VA 17370 VA 17166 VA **Total Amps:** 137 A 146 A 144 A

Legend: **Load Classification** Connected Load **Demand Factor Estimated Demand** Panel Totals 7502 VA 103.76% 7784 VA Total Conn. Load: 50934 VA 2520 VA 100.00% 2520 VA Receptacle - Convenience 19400 VA Total Est. Demand: 38665 VA 28800 VA 67.36% 2912 VA 90.00% 2621 VA Total Conn.: 141 A Receptacle - Undercounter Ref. 1200 VA 70.00% 840 VA Total Est. Demand: 107 A

80.00%

50.00%

80.00%

1600 VA

1500 VA

2400 VA

2000 VA

3000 VA

3000 VA

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SMOKY ROW ELEMENTARY SCHOOL ADDITIONS AND RENOVATIONS

900 West 136th Street, Carmel, IN 46032

CARMEL CLAY SCHOOLS



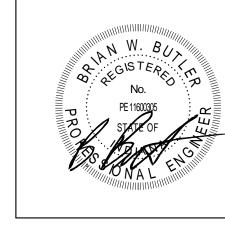
ARCHITECT



WWW.FHAI.COM 317-848-0966 350 E. NEW YORK ST, INDIANAPOLIS IN 46204

CONSULTANT

BID SET



PROJECT MANAGER: KRS DRAWN BY: RDR PROJECT NUMBER: 222033.00 PROJECT ISSUE DATE: 11/20/2025

REV. NO.△	DESCRIPTION	DATE
1	ADDENDUM #1	12/19/2025

LUMINAIRE & PANELBOARD **SCHEDULES**

N.T.S.

NUMBER

10

CAMERA TYPE

PNM-9085RQ2

PNM-9085RQ2

QNV-8080R

QNV-8080R

QNV-8080R

QNV-8080R

PNM-9085RQ2

PNM-7082RVD

PNM-7082RVD

QNV-8080R

						UNLESS NOTED OTHERWIS				
HOOM	I INDICATED WITH C	-x, x = THE QUA	VIDEO SURVEILLANCE CA NTITY OF COMMUNICATION ON TO OTHER CABLES NOTI	S CC						
	PUBL	IC ADDRES	SS AND MASS NOTI	FIC	ATION SY	STEMS				
SYMBOL			DESCRIPTION			WIRING DETAIL(S) UNLESS NOTED OTHERWI				
	ANTENNA			-						
S	CLASSROOM SOUN	D REINFORCEM	ENT SPEAKER - CEILING M	-						
S	CLASSROOM SOUN	D REINFORCEM	ENT SPEAKER - WALL MOL	NTE	D	-				
IC	WALL MOUNTED SP	EAKER				-				
S	WALL MOUNTED AL	IXILIARY RINGER	ROUTLET			-				
	LARGE AUDIO SYST	EM SPEAKERS				-				
IC IC	WALL MOUNTED SP	EAKER OR HOR	N WITH VISUAL STROBE			T1.02				
	WALL MOUNTED IN	TERCOM VOLUM	IE CONTROL			-				
*	WALL MOUNTED CA	AREHAWK INTER	RCOM MASTER STATION			-				
		ACCESS	CONTROL SYMBO	LS	LEGEND					
SYMBOL		WIRING DETAIL(S) UNLESS NOTED OTHERWIS								
CR	CARD READER					T1.02				
EL	ELECTRONIC LATCH	H SET WITH ELE	CTRONIC POWER TRANSFI	ΞR		T1.02				
ES	ELECTRONIC STRIK	E SET WITH ELE	ECTRONIC POWER TRANSF	ER		T1.02				
J _{c-x}		VITH $C-x$, $x = THE$	OOR ACCESS CONTROLLEI E QUANTITY OF COMMUNIC N TO OTHER CABLES NOTE	ATIC		T1.02				
J _{C-X}	ABOVE CEILING WA WHEN INDICATED V HORIZONTAL CABLI THE ELECTRIC STR	VITH C-x, x = THE NG, IN ADDITION	OOR ACCESS AIPHONE CTI E QUANTITY OF COMMUNIC N TO OTHER CABLES NOTE	ATIC	NS COPPER	T1.04				
	PUSH TO RELEASE					T1.02				
ADO	AUTOMATIC DOOR	OPERATOR				T1.02				
LD	LOCKDOWN BUTTO	N				T1.02				
AI	AIPHONE DOOR INT	ERCOM/CAMER	A			T1.04				
MI	AIPHONE MAIN INTE	AIPHONE MAIN INTERCOM/CAMERA CONSOLE DESKPHONE								
K	SECURITY SYSTEM	SECURITY SYSTEM KEYPAD								
DC	DC DOOR MONITORING CONTACT T1.02									
CAN	MERA TYPE	CAMERA NUMBER	CAMERA TYPE		CAMERA NUMBER	CAMERA TYPE				
QNV-8	3080R	31	PNM-9085RQZ		41	PNM-7082RVD				
PNIM-	7082R\/D	32	PNM-7082R\/D		42	PNM-7082R\/D				

PNM-7082RVD

PNM-7082RVD

PNM-7082RVD

PNM-7082RVD

PNM-9085RQZ

QNV-8080R

QNV-8080R

39 | QNV-8080R

40 | QNV-8080R

CAMERA LOCATION MATRIX

SYMBOL	DESCRIPTION	WIRING DETAIL(S) UNLESS NOTED OTHERWISE
HOW	WALL MOUNTED WEATHERPROOF VIDEO SURVEILLANCE CAMERA. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED.	
	PUBLIC ADDRESS AND MASS NOTIFICATION SYS	STEMS
YMBOL	DESCRIPTION	WIRING DETAIL(S) UNLESS NOTED OTHERWISE
	ANTENNA	-
S	CLASSROOM SOUND REINFORCEMENT SPEAKER - CEILING MOUNTED	-
S	CLASSROOM SOUND REINFORCEMENT SPEAKER - WALL MOUNTED	-
IC	WALL MOUNTED SPEAKER	-
S	WALL MOUNTED AUXILIARY RINGER OUTLET	-
	LARGE AUDIO SYSTEM SPEAKERS	-
Z C IC Vs Vs	WALL MOUNTED SPEAKER OR HORN WITH VISUAL STROBE	T1.02
 	WALL MOUNTED INTERCOM VOLUME CONTROL	-
Y	WALL MOUNTED CAREHAWK INTERCOM MASTER STATION	-
	ACCESS CONTROL SYMBOLS LEGEND	
	ACCESS CONTROL STWIDGLS LEGEND	
YMBOL	DESCRIPTION	WIRING DETAIL(S) UNLESS NOTED OTHERWISE
YMBOL CR		
	DESCRIPTION	UNLESS NOTED OTHÈRWISE
CR	DESCRIPTION CARD READER	UNLESS NOTED OTHERWISE T1.02
CR EL	DESCRIPTION CARD READER ELECTRONIC LATCH SET WITH ELECTRONIC POWER TRANSFER	T1.02 T1.02
ES	DESCRIPTION CARD READER ELECTRONIC LATCH SET WITH ELECTRONIC POWER TRANSFER ELECTRONIC STRIKE SET WITH ELECTRONIC POWER TRANSFER ABOVE CEILING WALL MOUNTED DOOR ACCESS CONTROLLER JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED.	T1.02 T1.02 T1.02
CR EL ES O_C-X	DESCRIPTION CARD READER ELECTRONIC LATCH SET WITH ELECTRONIC POWER TRANSFER ELECTRONIC STRIKE SET WITH ELECTRONIC POWER TRANSFER ABOVE CEILING WALL MOUNTED DOOR ACCESS CONTROLLER JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED. ABOVE CEILING WALL MOUNTED DOOR ACCESS AIPHONE CTRL JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED TO RELEASE	T1.02 T1.02 T1.02 T1.02 T1.02
ES JC-X	DESCRIPTION CARD READER ELECTRONIC LATCH SET WITH ELECTRONIC POWER TRANSFER ELECTRONIC STRIKE SET WITH ELECTRONIC POWER TRANSFER ABOVE CEILING WALL MOUNTED DOOR ACCESS CONTROLLER JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED. ABOVE CEILING WALL MOUNTED DOOR ACCESS AIPHONE CTRL JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED TO RELEASE THE ELECTRIC STRIKE.	T1.02 T1.02 T1.02 T1.02 T1.02 T1.04
EL ES JC-X	DESCRIPTION CARD READER ELECTRONIC LATCH SET WITH ELECTRONIC POWER TRANSFER ELECTRONIC STRIKE SET WITH ELECTRONIC POWER TRANSFER ABOVE CEILING WALL MOUNTED DOOR ACCESS CONTROLLER JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED. ABOVE CEILING WALL MOUNTED DOOR ACCESS AIPHONE CTRL JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED TO RELEASE THE ELECTRIC STRIKE. PUSH TO RELEASE BUTTON	T1.02 T1.02 T1.02 T1.02 T1.02 T1.02 T1.02
ES JC-X AL JC-X	DESCRIPTION CARD READER ELECTRONIC LATCH SET WITH ELECTRONIC POWER TRANSFER ELECTRONIC STRIKE SET WITH ELECTRONIC POWER TRANSFER ABOVE CEILING WALL MOUNTED DOOR ACCESS CONTROLLER JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED. ABOVE CEILING WALL MOUNTED DOOR ACCESS AIPHONE CTRL JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED TO RELEASE THE ELECTRIC STRIKE. PUSH TO RELEASE BUTTON AUTOMATIC DOOR OPERATOR	T1.02 T1.02 T1.02 T1.02 T1.02 T1.02 T1.04 T1.02 T1.02
ES S AL JC-X ADO LD	DESCRIPTION CARD READER ELECTRONIC LATCH SET WITH ELECTRONIC POWER TRANSFER ELECTRONIC STRIKE SET WITH ELECTRONIC POWER TRANSFER ABOVE CEILING WALL MOUNTED DOOR ACCESS CONTROLLER JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED. ABOVE CEILING WALL MOUNTED DOOR ACCESS AIPHONE CTRL JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED TO RELEASE THE ELECTRIC STRIKE. PUSH TO RELEASE BUTTON AUTOMATIC DOOR OPERATOR LOCKDOWN BUTTON	T1.02
ES Solve of the control of the cont	CARD READER ELECTRONIC LATCH SET WITH ELECTRONIC POWER TRANSFER ELECTRONIC STRIKE SET WITH ELECTRONIC POWER TRANSFER ABOVE CEILING WALL MOUNTED DOOR ACCESS CONTROLLER JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED. ABOVE CEILING WALL MOUNTED DOOR ACCESS AIPHONE CTRL JUNCTION BOX. WHEN INDICATED WITH C-x, x = THE QUANTITY OF COMMUNICATIONS COPPER HORIZONTAL CABLING, IN ADDITION TO OTHER CABLES NOTED TO RELEASE THE ELECTRIC STRIKE. PUSH TO RELEASE BUTTON AUTOMATIC DOOR OPERATOR LOCKDOWN BUTTON AIPHONE DOOR INTERCOM/CAMERA	T1.02

EXTERIOR VIDEO SURVEILLANCE CAMERA SYMBOLS LEGEND

PROJECT CONTRA	NATE THE EXACT LOCATION OF THE VIDEO TOR WITH THE WHITEBOARD INSTALLATION CTOR AND ELECTRICAL CONTRACTOR TO A FULL AND CLEAR PROJECTION IMAGE.	
COORDIN CLASSRO COMMUN	MMUNICATIONS CABLING CONTRACTOR SHALL NATE RECEIVING THE EXISTING PROJECTOR AND DOM SOUND SYSTEM FROM THE SCHOOL FOR INSTALLATION. NICATIONS CONTRACTOR AND ELECTRICAL CONTRACTOR TO A FULL AND CLEAR PROJECTION IMAGE WHEN COMPLETE.	
TECH	HNOLOGY ABBREVIATIONS	
EVIATION	NS USED ON DRAWINGS IN GENERAL ARE LISTED BELOW.	
R / MDF	ABOVE FINISH GRADE BLANK CONDUIT CABLE ANTENNA TELEVISION JUNCTION BOX MAIN CROSS-CONNECT/EQUIPMENT ROOM / MAIN DISTRIBUTION FRAME INDICATES MOUNTING HEIGHT (N) TO BOTTOM OF DEVICE FROM FINISH FLOOR UNLESS NOTED OTHERWISE NOT IN CONTRACT NOT TO SCALE TEMPERATURE CONTROL PANEL TELECOMMUNICATIONS ROOM / INTERMEDIATE DISTRIBUTION FRAME TELEPHONE TERMINATION BOARD TELEVISION UNLESS NOTED OTHERWISE VERIFY IN FIELD VOLUME CONTROL WALL MOUNTED VIDEO INPUT LOCATION DEMO TABLE WIRE GUARD RELEASE DUAL FACE WEATHER PROOF VIDEO OUTPUT PAN TILT ZOOM EXISTING TO REMAIN VIDEO PROJECTOR SURFACE MOUNTED	

NUMBER

69

70

TECHNOLOGY GENERAL NOTES

THE COMMUNICATIONS CABLING CONTRACTOR(S) IS/ARE

RESPONSIBLE FOR ANY ADDITIONAL CONDUIT SLEEVES,

TRAY, DOUBLE GANG SQUARE PLASTER MUD RINGS, ETC.

THE COMMUNICATIONS CABLING CONTRACTOR(S) IS/ARE

OUTLET/JUNCTION BOXES, SURFACE RACEWAY, CABLE

NOT SHOWN ON THE E3 ROUGH IN DRAWINGS.

ALL THE COMMUNICATIONS RACKS/CABINETS.

PLATES FOR THE DEVICES AS REQUIRED.

RESULT OF THEIR INSTALLATION.

CAMERA TYPE

PNM-7082RVD

PNM-9085RQZ

PNM-7082RVD

QNV-8080R

QNV-8080R

QNV-8080R

QNV-8080R

PNM-9085RQZ

PNM-9085RQZ

PNM-9085RQZ

FLAT PANEL DETAIL1

53

THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR

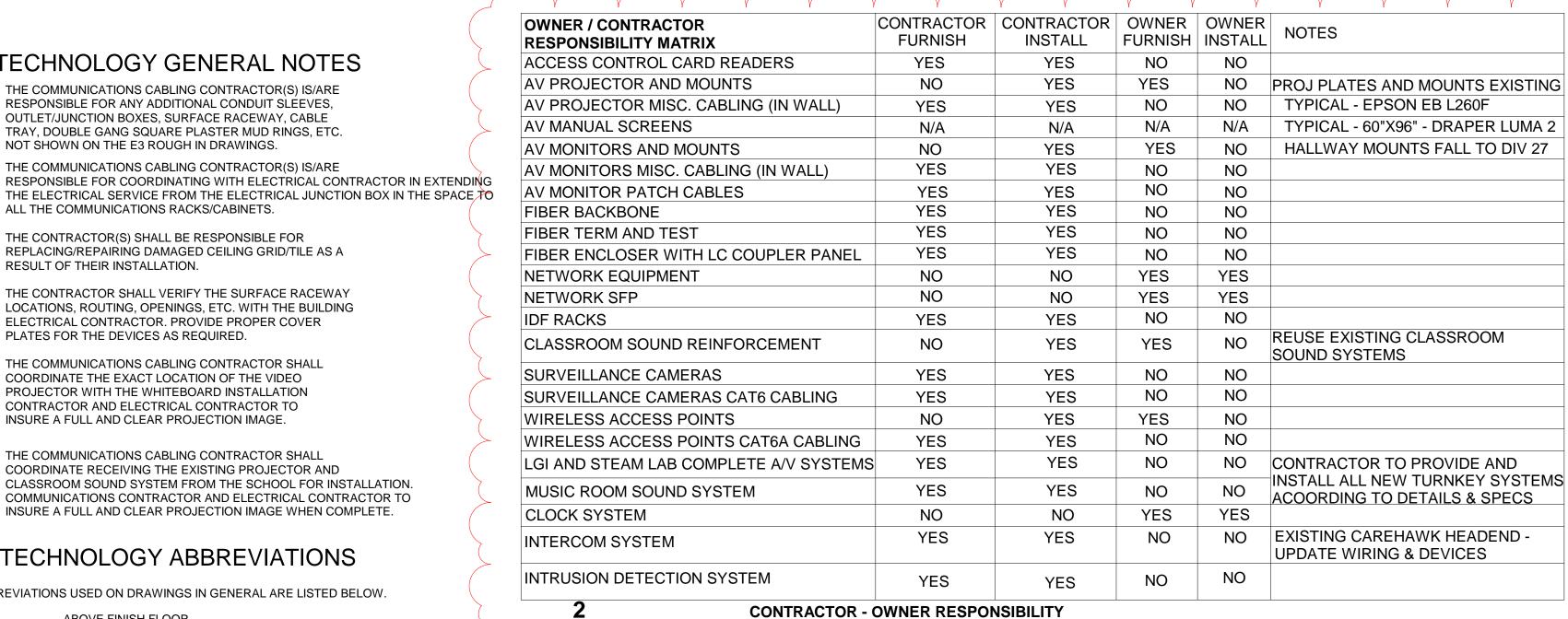
REPLACING/REPAIRING DAMAGED CEILING GRID/TILE AS A

LOCATIONS, ROUTING, OPENINGS, ETC. WITH THE BUILDING

D THE CONTRACTOR SHALL VERIFY THE SURFACE RACEWAY

ELECTRICAL CONTRACTOR. PROVIDE PROPER COVER

THE COMMUNICATIONS CABLING CONTRACTOR SHALL



CONTRACTOR

INSTALL ONLY

48"

55"

55"

55"

65"

65"

65"

65"

75"

WHITE

PURPLE

YELLOW

RED

TECHNOLOGY CABLING/TERMINATION COLOR

TECHNOLOGY CABLING/TERMINATION COLOR LEGEND

TERMINATION (RJ45) CABLE PATCH CABLE - CLOSET END PATCH CABLE - USER END

WHITE

PURPLE

YELLOW

CCS TYPICAL MONITOR SIZING

WHITE

PURPLE

YELLOW

SMOKY ROW ELEMENTARY SCHOOL **ADDITIONS AND** RENOVATIONS 900 W 136th St, Carmel, IN 46032

VERIFICATION NOTE:

RELOCATION OF DIVISION 27 & 28 CABLING AN EQUIPMENT IN ACCORDANCE WITH THE

PROJECT SCHEDULE IN ORDER TO MAINTAIN

BUILDING SERVICES TO AREAS THAT REMAIN

CONTRACTOR SHALL VERIFY ALL DIMENSIONS

COMMENCEMENT OF WORK CONSTITUTES

ENCOUNTERED CONTACT THE ARCHITECT

BEFORE PROCEEDING WITH ANY WORK.

CLEARANCES AND EXISTING FIELD CONDITIONS

CONTRACTOR TO INCLUDE REMOVAL &

BEFORE STARTING CONSTRUCTION.

SHOULD DIFFERENT CONDITIONS BE

ACCEPTANCE OF CONDITIONS.

WHITE

PURPLE

YELLOW

RED

2 PORT PLENUM SURFACE MOUNT BOX

TO TECH ROOMS

- 4PR. UTP CABLE

-25' COILED CABLE

TO TECHNOLOGY DEVICE

15' PLENUM

PATCH CORD

RATED

CARMEL CLAY SCHOOLS

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<u>ARCHITECT</u>



WWW.FHAI.COM 350 E. New York St, Indianapolis IN 46204

N.T.S. OTHER HANWHA CAMERA LOCATION | CAMERA PART NUMBER AND DESCRIPTION GENERAL HALLWAY QNV-8080R - 5M H.265 IR DOME CAMERA PNM-7082RVD - 2MP X 2CH MULTIDIRECTIONAL CAMERA PNM-8082VT - 2MP X 3CH MULTIDIRECTIONAL CAMERA **VESTIBULE** PNM-7082RVD - 2MP X 2CH MULTIDIRECTIONAL CAMERA AI PHONE **OUTDOOR** PNM-9085RQZ - 5MP X 4CH IR PTRX MULTIDIRECTIONAL CAMERA

CAMERA MODEL MATRIX N.T.S.

N.T,S.__/

SRO OFFICE

MOBILE CARTS

PODS

COUNSELOR OFFICE

ADMINISTRATION OFFICES

MAIN CONFERENCE ROOM

SYSTEM

WIRELESS - DUAL 6A

CAMERA / SERVERS

ACCESS CONTROL

DATA / PHONE

CCS TYPICAL MONITOR AREA/SIZING

HALLWAYS - DIV 27 PROVIDE MOUNTS

ADMINISTRATION CONFERENCE ROOM

SMALL POD CONFERENCE ROOM

PNM-7082RVD

QNV-8080R

QNV-8080R

QNV-8080R

QNV-8080R

QNV-8080R

PNM-7082RVD

PNM-7082RVD

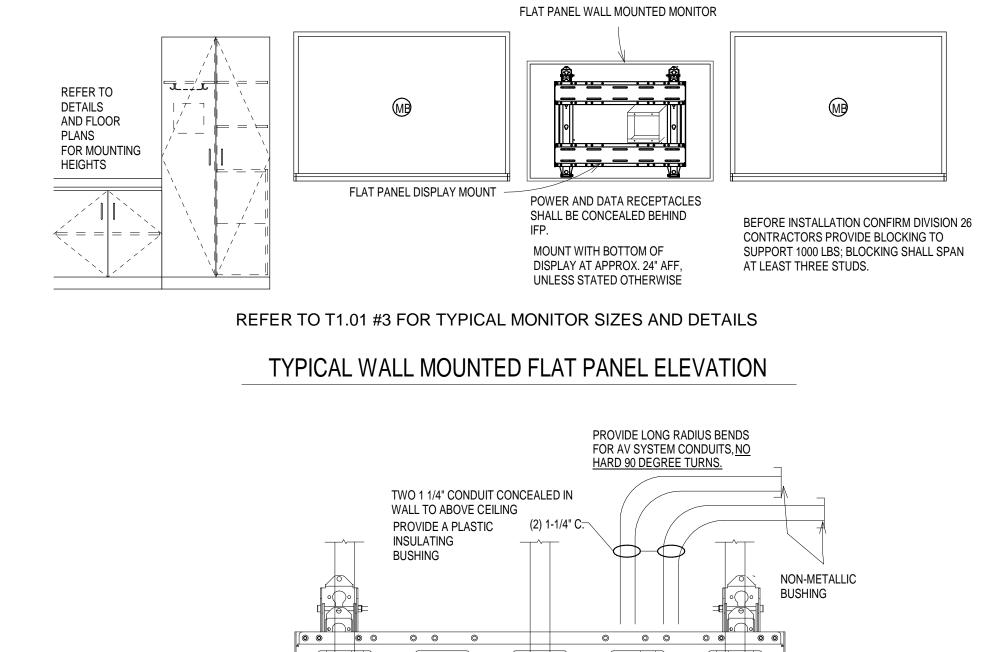
PNM-9085RQZ

REFER TO AV WIRING DETAILS FOR **EXACT CONFIGURATIONS OF VIDEO** INPUT (V.I.), VIDEO OUTPUT (VO), AND AV CABINET LOCATIONS..

C - RJ45 DATA JACK **B - BLANK INSERT** WB - RJ-45 JACK FOR USB INTERACTIVITY HD - RJ45 JACK FOR VIDEO 3.5mm - 3.5mm JACK **HDMI - HDMI CONNECTOR**

WALL PLATE CONFIGURATIONS

NO SCALE

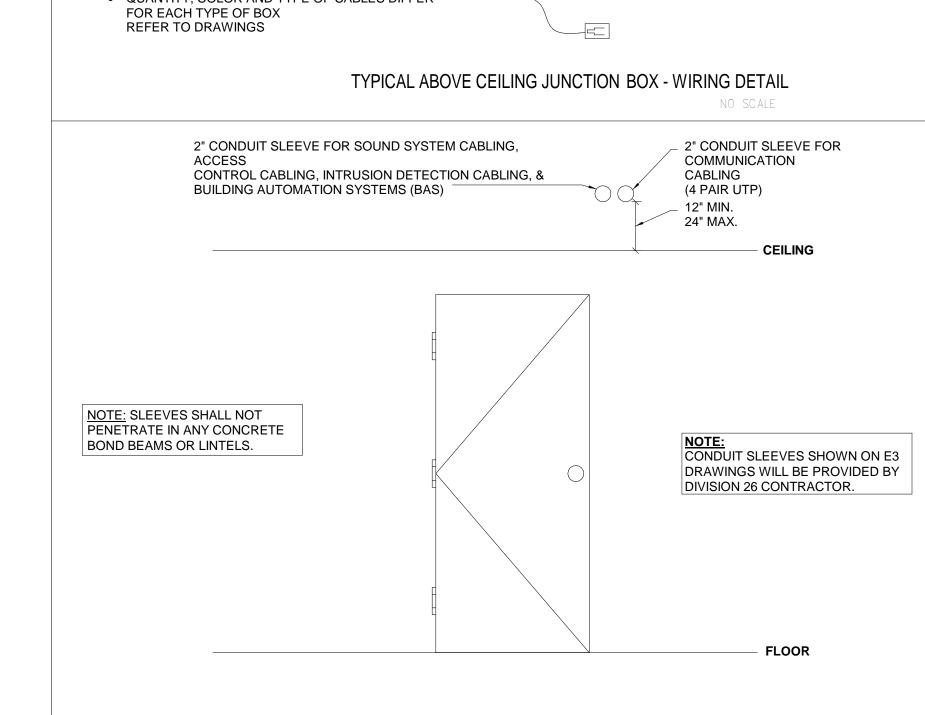


CAMERA TYPE

PNM-7082RVD

PNM-7082RVD

QNV-8080R



CONDUIT SLEEVES DETAIL

NO SCALE

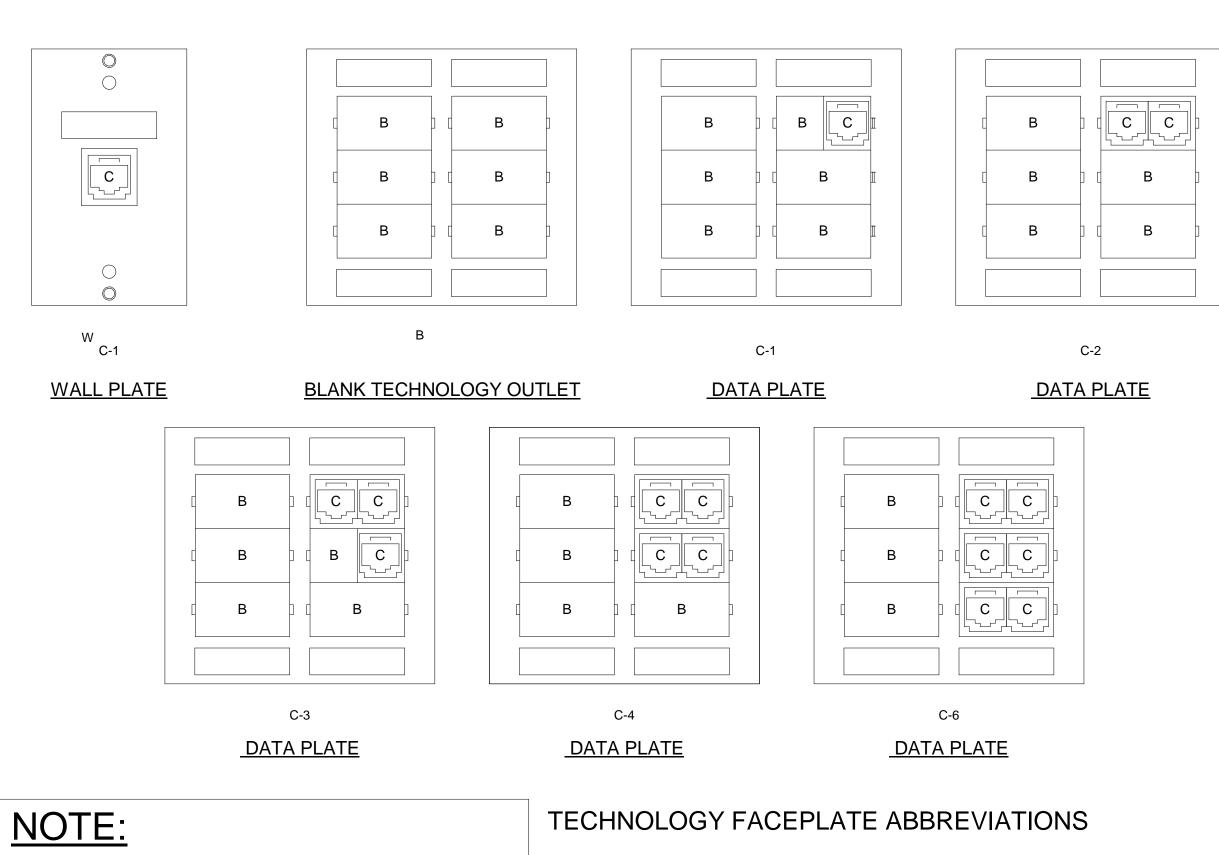
BID SET

PROJECT MANAGER: KRS DRAWN BY: CDT PROJECT NUMBER: 222033.00 PROJECT ISSUE DATE: 11/20/2025

> DESCRIPTION DATE 1 ADDENDUM #1 12-19-25

> > **TECHNOLOGY DETAILS**

T1.01



CAMERA TYPE

PNM-7082RVD

PNM-7082RVD

PNM-9085RQZ

PNM-9085RQZ

QNV-8080R

QNV-8080R

28 QNV-8080R

29 | QNV-8080R

30 | QNV-8080R

N.T.S.

QNV-8080R

PNM-8082V1

QNV-8080R

PNM-8082VT

20 | PNM-7082RVD

14 | QNV-8080R

PNM-9085RQZ

PNM-7082RVD

PNM-7082RVD

PNM-7082RVD

NUMBER

