



# Van Buren Public Schools

# RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111

#### List of Drawings

### First Floor Demolition Plan First Floor New Work Plan

Room Finish Schedule Door Schedule and Details Sections and Details First Floor Finish Plan First Floor Furniture Plan

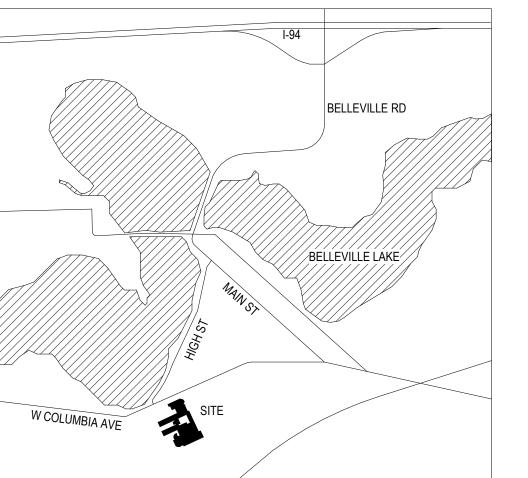
MR.0 Mechanical Reference Information M1.1U First Floor Underground Demolition Plan First Floor Underground Plumbing Plan

#### ELECTRICAL & TECHNOLOGY Enlarged Plan

First Floor Plumbing and HVAC Piping Plan M6.1 Details, Schedules, and Mechanical System Controls

#### **Enlarged Plans** Diagrams and Details TR.0 Technology Reference Information T4.1 Enlarged Plans T7.1 Details

Code Information



Signature Date Date

ī **D** S Project Number 24167-1000

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Issued for

Design Development 07-03-2024

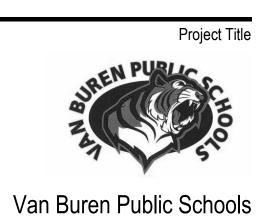
Issue Date

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RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111

THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARD INFORMATION SHOWN ON THIS SHEET

> Project Administrator A. Maurer

Project Designer A. Pelfrey Project Architect / Engineer C. King Drawn By C. King Q.M. Review Drawing Scale No Scale Issue Date Issued for

Design Development 07-03-2024

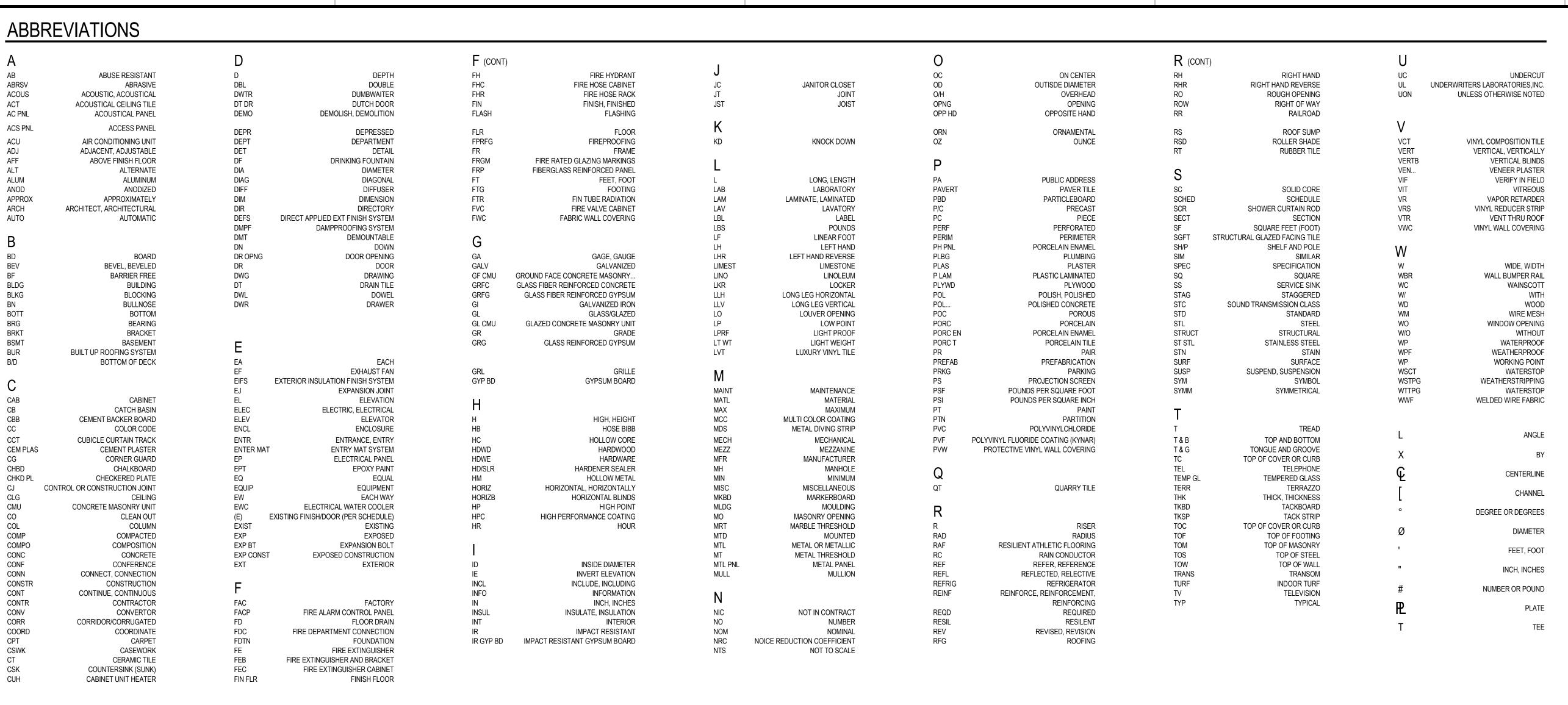
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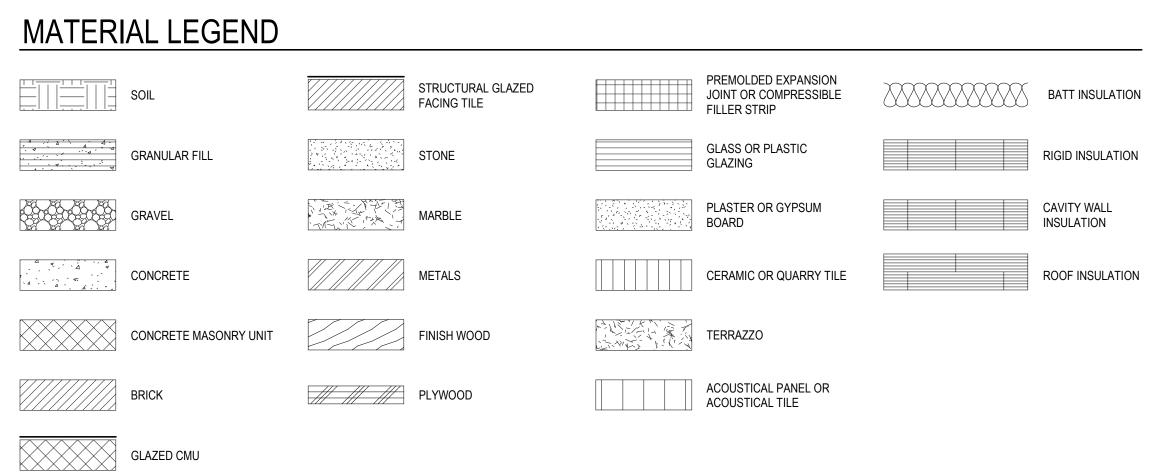
Architectural Reference Information

Drawing Number

AR.0

ī**D**§ Project Number



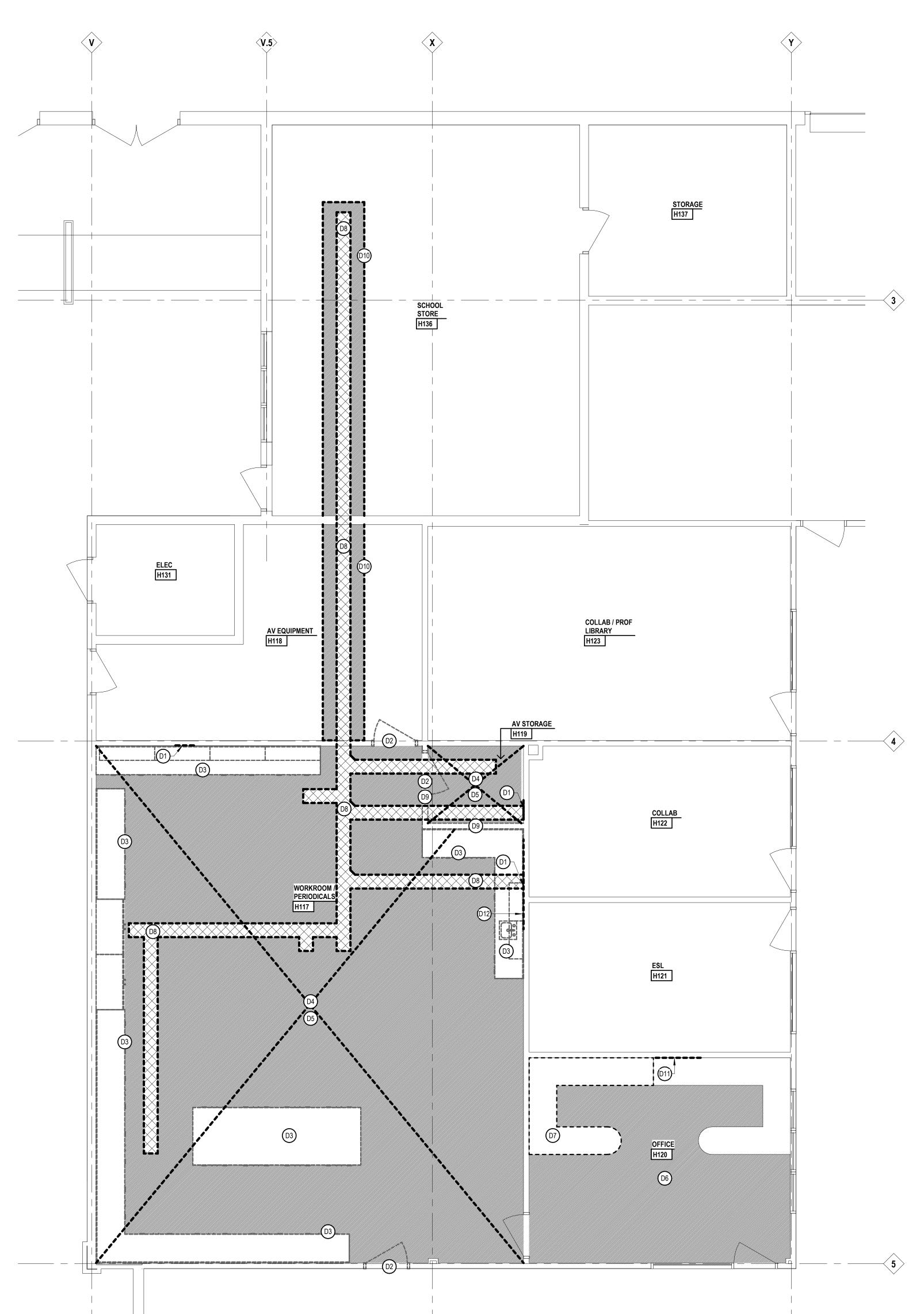


SYMBOL LEGEND BUILDING SECTION LOCATOR SECTION OR DETAIL TITLE MATERIAL KEYNOTE - SECTION OR DETAIL IDENTIFICATION **BUILDING SECTION IDENTIFICATION** PROJECT MANUAL SECTION IDENTIFICATION SECTION OR DETAIL SHEET WHERE BUILDING SECTION IS DRAWN ROOM NAME AND NUMBER - SHEET WHERE DETAIL IS REFERENCED OR CUT EXTERIOR WALL SECTION LOCATOR WALL SECTION IDENTIFICATION — BUILDING OR UNIT (IF ANY) SECTION OR DETAIL IDENTIFICATION SHEET WHERE WALL SECTION IS DRAWN A9.1 LARGE SCALE PLAN OR DETAIL PARTITION TYPE IDENTIFICATION (REFER TO FLOOR PLAN) PLAN OR DETAIL SHEET WHERE SECTION OR DETAIL INTERIOR ELEVATION SYMBOL DOOR NUMBER BUILDING OR UNIT (IF ANY) - ELEVATION IDENTIFICATION SHEET WHERE PLAN OR DETAIL IS DRAWN SHEET WHERE ELEVATION COLUMN DESIGNATION/CENTERLINE EXTERIOR ELEVATION SYMBOL - ELEVATION IDENTIFICATION **EXISTING** EXISTING DOOR **NEW DOOR** (1) -----SHEET WHERE ELEVATION

MOUNTING HEIGHTS MOUNTING HEIGHTS SHOWN ARE BASED UPON RECOGNIZED DESIGN STANDARDS AND/OR BARRIER FREE CODE REQUIREMENTS. IT IS INTENDED THAT LIKE DEVICES ALL BE MOUNTED AT THE SAME HEIGHT THROUGHOUT THE ENTIRE PROJECT. RECESSED DEVICES IN MASONRY WALLS MAY DICTATE A DEVIATION (± 2") FROM THESE HEIGHTS (WHEN PERMITTED BY CODE) SO AS TO ALLOW THE BOTTOM OR THE TOP OF THE DEVICE RECESS TO ALIGN WITH MASONRY COURSING. COORDINATE THESE DEVIATIONS WITH THE ARCHITECT'S/OWNER'S REPRESENTATIVE. MOUNTING HEIGHTS ARE TYPICAL UNLESS OTHERWISE --6" MAX NOTED ON DRAWINGS. BF ROLL-IN SHOWER WITH BENCH BACK WALL / CONTROL WALL AMBULATORY STALL AMBULATORY STALL SIDE WALL BF TRANSFER SHOWER SIDE WALL / CONTROL WALL

**BACK WALL** 

24167-1000



#### **DEMOLITION PLAN**

- A. ALL DEMOLITION WORK REQUIRED IS NOT NECESSARILY LIMITED TO WHAT IS SHOWN ON THE DEMOLITION PLAN. THE INTENT IS TO REMOVE ALL MECHANICAL, ELECTRICAL, AND ARCHITECTURAL ITEMS AS REQUIRED TO FACILITATE NEW CONSTRUCTION.
- B. CONTRACTOR SHALL PROVIDE TEMPORARY DUSTPROOF PARTITIONS WITH DOORS AT LOCATIONS INDICATED AND/OR AS REQUIRED TO ADEQUATELY SEPARATE OCCUPIED AREAS FROM CONSTRUCTION HAZARDS, NOISE AND/OR DUST. REFER TO SPECIFICATIONS FOR

ADDITIONAL INFORMATION. COORDINATE ALL LOCATIONS WITH

C. CONTRACTOR SHALL PROVIDE DUST MATS AT ALL CONSTRUCTION AREA ENTRANCES AND EXIT LOCATIONS. COORDINATE ALL LOCATION'S WITH ARCHITECT'S/OWNER'S REPRESENTATIVES.

ARCHITECT'S/OWNER'S REPRESENTATIVE.

- D. CONTRACTOR SHALL CONTINUOUSLY MAINTAIN ALL MEANS OF EGRESS AND ALL FIRE PROTECTION FEATURES FOR PORTIONS OF THE BUILDING THAT REMAIN OCCUPIED DURING CONSTRUCTION.
- E. COORDINATE SCOPE AND EXTENT OF DEMOLITION WITH NEW WORK PLANS AND DETAILS.
- F. REFER TO MECHANICAL AND ELECTRICAL DEMOLITION SHEETS FOR ADDITIONAL INFORMATION.

### **LEGEND**

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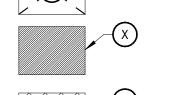
#### **DEMOLITION PLAN** NOTE: NOT ALL SYMBOLS MAY BE USED

EXISTING TO BE REMOVED

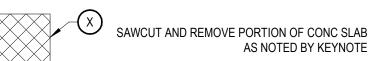
EXISTING TO REMAIN

AS NOTED BY KEYNOTE

EXISTING CEILING TO BE REMOVED



EXISTING FLOOR/FINISH TO BE REMOVED AS NOTED BY KEYNOTE



### **KEYNOTES**

#### **DEMOLITION PLAN** SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS NOTE: NOT ALL KEYNOTES MAY BE USED

#### # LEGEND SYMBOL INDICATOR

- D1 REMOVE PORTION OF GYPSUM BOARD. COORDINATE WITH NEW WORK PLANS.
- D2 REMOVE DOOR, FRAME, AND SILL IN ITS ENTIRETY
- D3 REMOVE BASE CABINETS, COUNTERTOP, BACKSPLASH AND/OR WALL MOUNTED CABINETS IN THEIR ENTIRETY
- D4 REMOVE ACOUSTIC CEILING TILES, GRID, AND SUSPENSION SYSTEM IN ITS ENTIRETY
- D5 REMOVE VCT / LINOLEUM FLOORING, BASE, AND ADHESIVE DOWN TO STRUCTURAL SLAB
- D6 REMOVE CARPET, WALL BASE, AND ADHESIVE DOWN TO STRUCTURAL
- D7 REMOVE FURNITURE AND RETURN TO OWNER
- D8 SAW CUT AND REMOVE PORTION OF CONCRETE FLOOR SLAB. COORDINATE WITH NEW WORK PLANS.
- D9 REMOVE GYPSUM BOARD / METAL STUD PARTITION. COORDINATE WITH NEW WORK PLANS.
- D10 REMOVE CARPET AS REQUIRED FOR FLOOR TRENCHING SALVAGE, PROTECT AND STORE CARPET FOR REINSTALLATION
- D11 REMOVE MARKERBOARD / TACKBOARD / WHITEBOARD IN ITS
- ENTIRETY. RETURN TO OWNER.

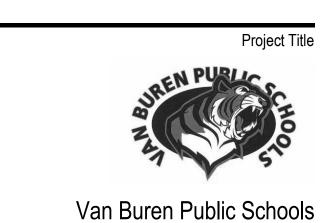
D12 REMOVE AND SALVAGE WALL MOUNTED PAPER TOWEL DISPENSER

AND SOAP DISPENSER AND RETURN TO OWNER.

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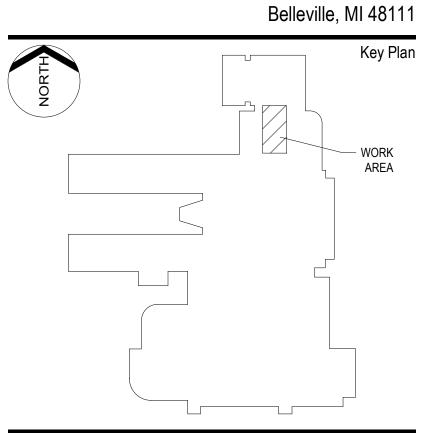
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### RAHS Belleville High School

501 W Columbia Ave

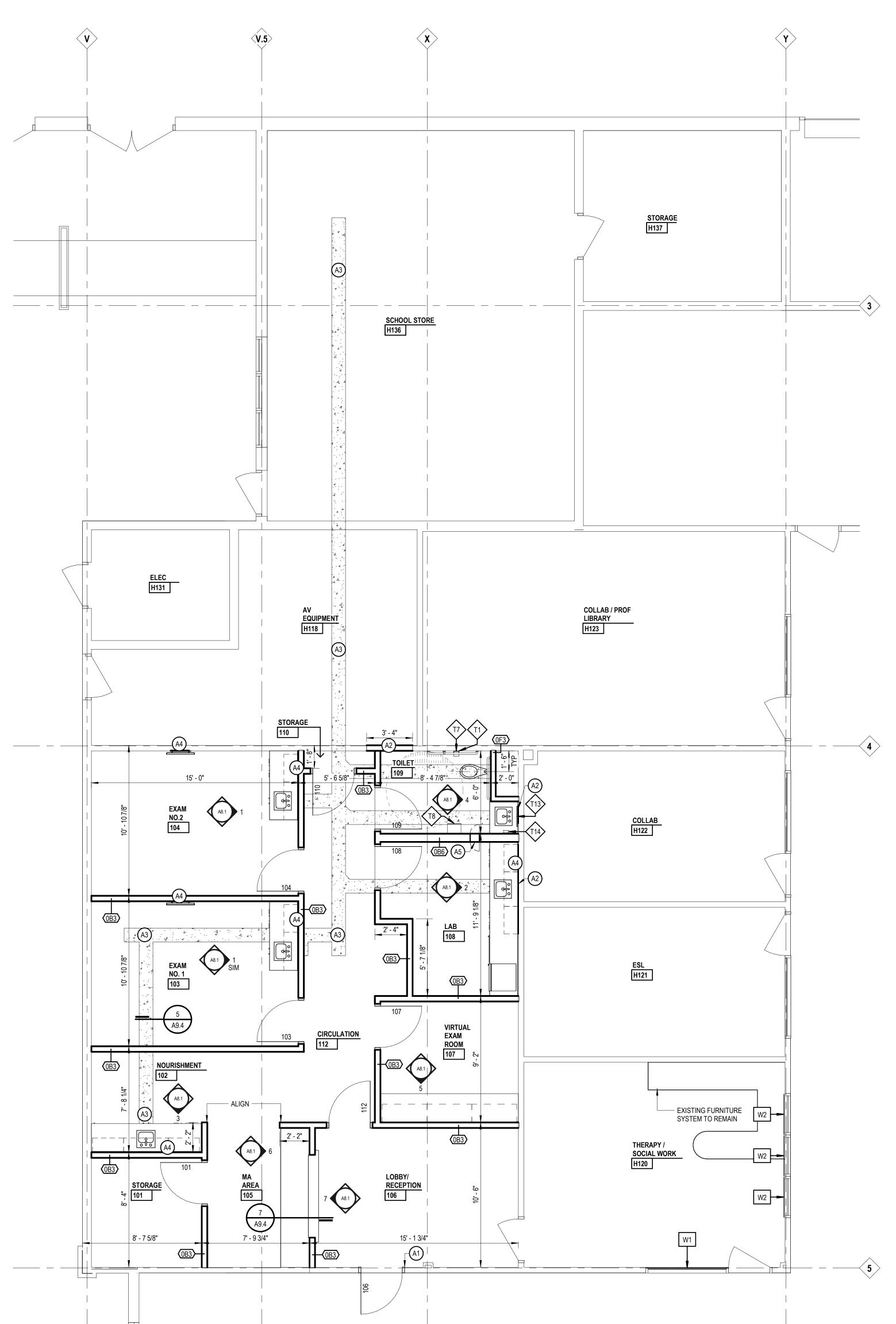


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	Project Designer
	A. Pelfrey
Project	Architect / Engineer
	C. King
	Drawn By
	A. Pelfrey
	Q.M. Review
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	Drawing Scale
	1/4" = 1' - 0"
Issued for	Issue Date
Design Development	07-03-2024

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First Floor Demolition Plan

ī **D** s Project Number



- NEW WORK PLAN
- A. REFER TO SHEET A9.2 FOR DOOR SCHEDULE AND COLORS.
- B. REFER TO SHEET A9.1 FOR FINISH SCHEDULE AND COLORS.C. REFER TO LIFE SAFETY PLANS FOR PARTITION RATINGS.
- D. PARTIAL WALL POCHEING IS SHOWN THROUGHOUT THIS PLAN AND THE TERMINATION OF SAME SHALL NOT BE CONSTRUED TO REPRESENT A CHANGE IN WALL MATERIAL. VERIFY WALL MATERIALS WITH PARTITION TYPES AND SCHEDULES.
- E. PATCH AND/OR REPAIR ALL EXISTING FLOOR, WALL AND OR CEILING FINISHES AS REQUIRED TO MATCH EXISTING OR TO ACCEPT NEW FINISHES AS SCHEDULED AT ALL AREAS AFFECTED BY THE DEMOLITION WORK. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL SCOPE OF WORK.
- F. INFILL ALL OPENINGS IN EXISTING WALLS ABOVE CEILINGS THAT ARE THE RESULT OF MECHANICAL OR ELECTRICAL DEMOLITION.

  OPENINGS IN MASONRY WALLS SHALL BE FILLED WITH MASONRY OF SIMILAR TYPES AND THICKNESS AS EXISTING. OPENINGS IN OTHER TYPES OF WALL CONSTRUCTION SHALL MATCH EXISTING MATERIALS, FINISHES AND WALL THICKNESS. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR SCOPE OF WORK.
- G. PROVIDE POSITIVE SLOPE TO ALL FLOOR DRAINS WHILE KEEPING FLOOR LEVEL AT WALL BASE.
- H. COORDINATE SIZE AND LOCATION OF ALL ACCESS DOORS WITH TRADES REQUIRING SAME. QUANTITIES SHOWN DO NOT NECESSARILY REPRESENT ALL ACCESS DOORS REQUIRED FOR ACCESSIBILITY.

### LEGEND

#### NEW WORK PLAN NOTE: NOT ALL SYMBOLS MAY BE USED

PARTITION TYPE - REFER TO PARTITION DETAILS SHEET A9.3

SHALL COMPLY WITH BARRIER FREE REQUIREMENTS

CASEWORK/ MILLWORK TAG

10 1100 VISUAL DISPLAY SURFACE

MK= MARKERBOARD, TK=TACKBOARD

XXXX INDICATES BOARD SIZE

12 2413 ROLLER WINDOW SHADE

CORNER GUARD

### **KEYNOTES**

### NEW WORK FLOOR PLAN SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS

#### NOTE: NOT ALL KEYNOTES MAY BE USED

# LEGEND SYMBOL INDICATOR

AT BOTH SIDES OF DOOR PATCH & REPAIR 09 2900 GYPSUM BOARD JAMBS TO MATCH ADJACENT CONSTRUCTION - REINSTALL EXISTING WALL BASE AS REQUIRED.

- A2 PATCH/REPAIR GYPSUM BOARD/ PARTITION TO MATCH ADJACENT CONSTRUCTION.
- A3 03 3000 PATCH AND REPAIR CONCRETE FLOOR SLAB AT LOCATION OF REMOVED WALL OR SLAB PORTION. REFER TO TYPICAL DETAIL 5/A9.4
- A4 REINFORCE PARTITION WITH 06 1000 WOOD BLOCKING AS REQUIRED TO ACCOMODATE MILLWORK, TELEVISIONS, AND ACCESSORIES. REFER TO TYPICAL DETAIL 6/A9.4
- A5 10 2800 SAMPLE PASS THRU WINDOW

### LEGEND TO LET ACCESSORIES

TOILET ACCESSORIES

SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
NOTE: NOT ALL KEYNOTES MAY BE USED

REFER TO SPECIFICATION SECTION 10 2800 FOR ADDITIONAL INFORMATION ALL TOILET ACCESSORIES ARE CONTRACTOR FURNISHED AND INSTALLED UON (OF/OI): OWNER FURNISHED/OWNER INSTALLED (OF/CI): OWNER FURNISHED/CONTRACTOR INSTALLED REFER TO DRAWING AR.0 FOR TYPICAL MOUNTING HEIGHTS

- EGEND SYMBOL INDICATOR
- T1 GRAB BAR SET 1 (1) GRAB BAR TYPE 1, (1) GRAB BAR TYPE 2, (1) GRAB BAR TYPE 3 (CF/CI)
- T7 TOILET PAPER DISPENSER (OF/CI)T8 PAPER TOWEL DISPENSER (OF/CI)
- T13 MIRROR (CF/CI)
  T14 SOAP DISPENSER (OF/CI)

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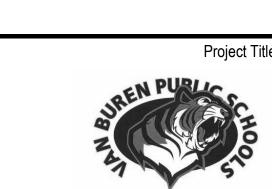
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Van Buren Public Schools

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### RAHS Belleville High School

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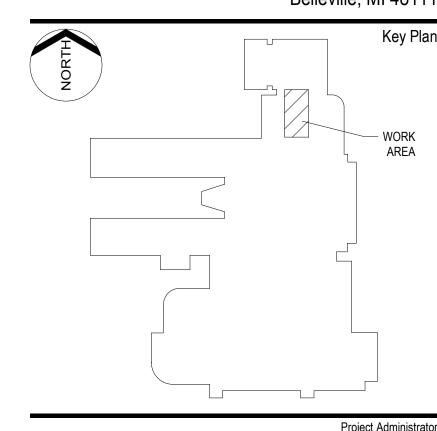
A. Maurer

Project Designer

Project Architect / Engineer

A. Pelfrey

C. King



Drawn By
C. King
Q.M. Review

Approved

Drawing Scale
1/4" = 1' - 0"

Issued for Issue Date

Design Development 07-03-2024

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First Floor New Work Plan

ī**D**§ Project Number

Drawing Number

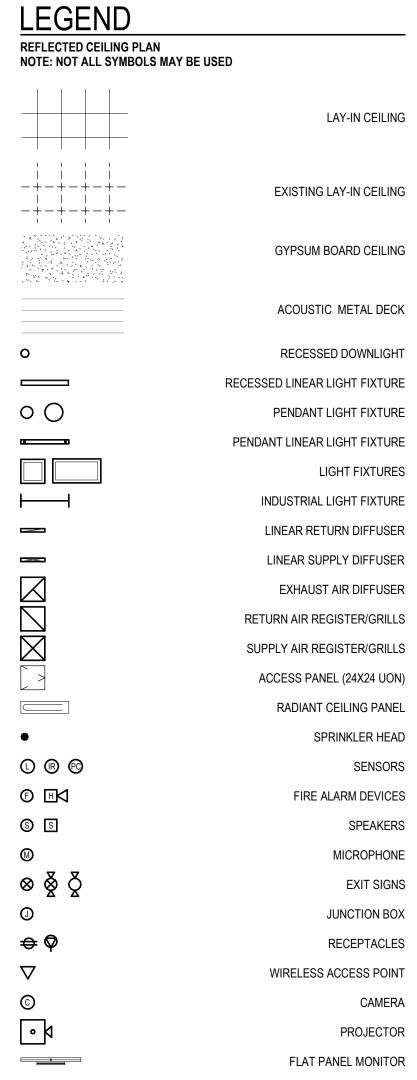
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A2.1

#### REFLECTED CEILING PLAN

- A. CEILING HEIGHT 9'-0" AFF UNLESS OTHERWISE NOTED.
- B. ACOUSTICAL CEILING PANELS AND/OR TILES SHALL BE CENTERED WITHIN THE ROOM OR BORDER UNLESS OTHERWISE NOTED.
- C. REFER TO FLOOR PLANS FOR PARTITION TYPE DESIGNATION.
- D. COORDINATE CEILING SUSPENSION SYSTEMS WITH OTHER CEILING SPACE EQUIPMENT SUPPORTING DEVICES.
- E. UNLESS OTHERWISE NOTED LOCATION OF ITEMS SHOWN IN AREAS WITHOUT FINISH CEILINGS IS APPROXIMATE. COORDINATE EXACT LOCATION BETWEEN TRADES.
- F. COORDINATE SIZE AND LOCATION OF ALL ACCESS DOORS WITH TRADES REQUIRING SAME. QUANTITIES SHOWN DO NOT NECESSARILY REPRESENT ALL ACCESS DOORS REQUIRED FOR ACCESSIBILITY.





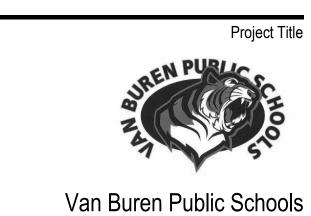
### **KEYNOTES**

REFLECTED CEILING PLAN
SHADED ITEMS HAVE BEEN REVISED FROM PREVIOUS
NOTE: NOT ALL KEYNOTES MAY BE USED

NOTE: NOT ALL KEYNOTES MAY BE USED

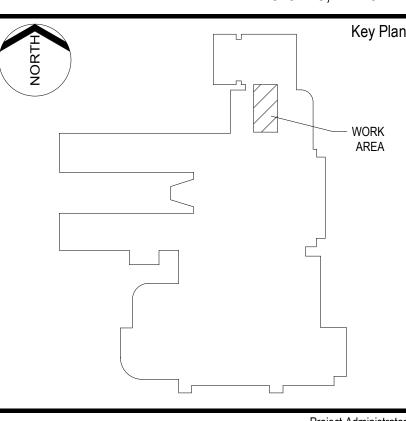
# LEGEND SYMBOL INDICATOR

C1 GYPSUM BOARD/METAL STUD SOFFIT ABOVE. REFER TO TYPICAL DETAIL 9/A9.4



### RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111



Pro	oject Administrator
	A. Maurer
	Project Designer
	A. Pelfrey
Project A	rchitect / Engineer
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	Drawn By
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	Q.M. Review
	_
	Approved
	-
	Drawing Scale
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Design Development	07-03-2024

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First Floor Reflected Ceiling Plan

ī **D** Project Number

**GENERAL NOTES** INTERIOR ELEVATIONS A. ALL DIMENSIONS ARE TO FACE OF GYP BOARD UON. B. COORDINATE THE INTERFACING OF ALL TRADES WITH RESPECT TO DELIVERY AND INSTALLATION OF ALL FIXTURES AND EQUIPMENT C. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BEFORE INSTALLATION. CONSULT ARCHITECT WHEN ACTUAL FIELD INTEGRATED design SOLUTIONS architecture engineering interiors & technology CONDITIONS VARY FROM THOSE SHOWN ON CONSTRUCTION DOCUMENTS. D. COORDINATE LOCATIONS OF ALL REQUIRED UTILITIES WITH THE TRADE PROVIDING THE SAME. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION. E. FASTEN ALL TALL CASES TO THE ADJOINING WALL THROUGH THE BACK OR SIDE OF THE UNIT. F. ALL COUNTERTOPS INSTALLED ALONG A WALL OR EQUIPMENT ARE TO HAVE 4" BACKSPLASH AND SIDE SPLASH UON. G. FINISH ALL EXPOSED ENDS AND BACKS OF FREESTANDING CASEWORK/ MILLWORK. H. PROVIDE LOCKS ON ALL CABINET DOORS AND DRAWERS UON. ALL LOCKS SHOULD BE KEYED ALIKE BY ROOM, PROVIDE MASTER I. REFER TO A9.1 ROOM FINISH SCHEDULE FOR COLORS AND FINISHES OF MATERIALS J. REFER TO PLANS, SECTIONS AND DETAILS FOR CASEWORK DEPTH. K. PROVIDE CABINET FILLERS AS NEEDED. L. FURNITURE AND SPECIALTY EQUIPMENT BY OTHERS SHOWN FOR REFERENCE ONLY

M. FURNITURE SHOWN AT HALFTONE BY OWNER

O. NOT ALL SIGN LOCATIONS ARE ELEVATED

NOTE: NOT ALL SYMBOLS MAY BE USED

ELEVATION MATERIALS NOTE: NOT ALL SYMBOLS MAY BE USED

AT EXISTING PARTITIONS.

**LEGEND** 

XXXX

XXXX

XXXX

**LEGEND** 

INTERIOR ELEVATIONS

N. PROVIDE PARTITION REINFORCEMENT AT LOCATIONS OF WALL MOUNTED EQUIPMENT. REFER TO DETAIL X/AX.X FOR TYPICAL REQUIREMENTS AT NEW CONSTRUCTION. CONDITIONS MAY VARY

P. COORDINATE LOCATIONS OF ALL REQUIRED UTILITY CONNECTIONS AND/OR REQUIREMENTS WITH THE TRADE PROVIDING THE SAME

06 4023 CASEWORK / MILLWORK TAG

TECHNOLOGY PACKAGES

09 2900 GYP BOARD

10 1100 VISUAL DISPLAY SURFACE MK= MARKERBOARD, TK=TACKBOARD XXXX INDICATES BOARD SIZE

SPECIALTY EQUIPMENT BY OTHERS REFER TO FF&E OR

ACCENT MATERIAL, REFER TO COLOR CODES

Van Buren Public Schools

### RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111

> A. Maurer Project Designer A. Pelfrey

> > Drawn By D. Sandle Q.M. Review

Drawing Scale As Noted

Issue Date

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Design Development 07-03-2024

Project Architect / Engineer C. King

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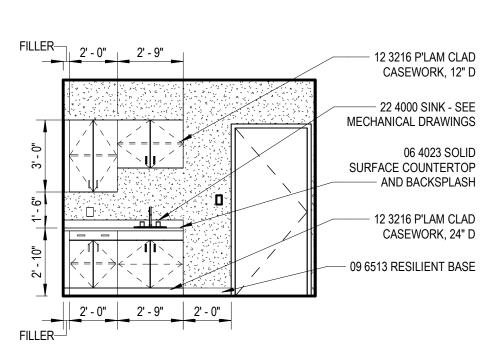
troy, michigan 48098

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- 06 4023 SOLID SURFACE COUNTERTOP — 06 4023 COUNTERTOP SUPPORT BRACKET

- 09 6513 RESILIENT BASE



EXAM ROOM A2.1 / 1/4" = 1'-0"

7 LOBBY
A2.1 1/4" = 1'-0" 6 MA AREA
1/4" = 1'-0" FILLER 2' - 0" 2' - 9" - 12 3216 P'LAM CLAD CASEWORK, 12" D - 22 4000 SINK - SEE MECHANICAL DRAWINGS 06 4023 SOLID SURFACE COUNTERTOP - AND BACKSPLASH NIC UNDER COUNTER REFRIGERATOR 12 3216 P'LAM CLAD CASEWORK, 24" D - 09 6513 RESILIENT BASE 2' - 0" 2' - 9" 2' - 0" FILLER

06 4023 SOLID SURFACE COUNTERTOP

- 09 6513 RESILIENT BASE

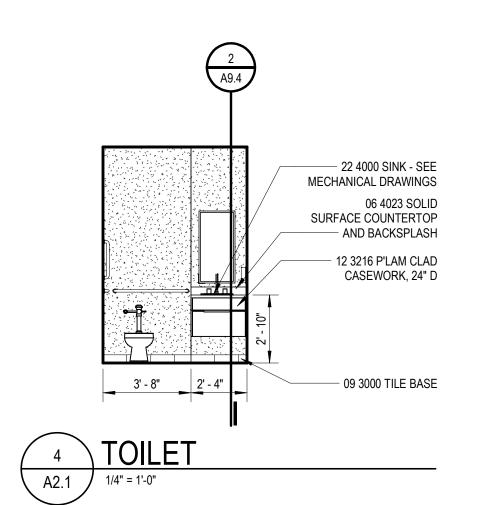
- AND BACKSPLASH

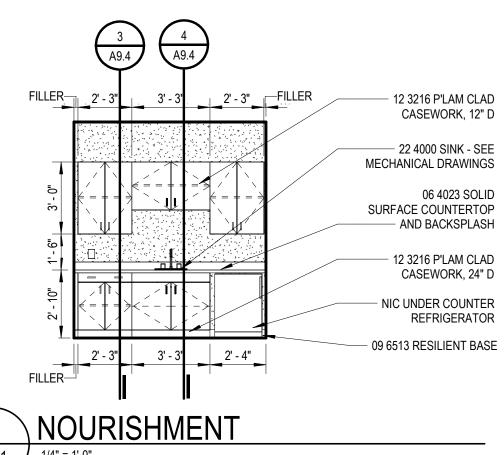
- 12 3216 PLASTIC

Interior Elevations CASEWORK, 24" D - 09 6513 RESILIENT BASE

> ī **D** S Project Number Drawing Number

PROVIDED BY OTHERS 06 4023 SOLID SURFACE \_ COUNTERTOP 06 4023 COUNTERTOP SUPPORT BRACKET 09 6513 RESILIENT BASE -10' - 0" VIRTUAL EXAM ROOM





- 12 3216 P'LAM CLAD CASEWORK, 12" D ——— 22 4000 SINK - SEE MECHANICAL DRAWINGS 06 4023 SOLID SURFACE COUNTERTOP - AND BACKSPLASH 12 3216 P'LAM CLAD CASEWORK, 24" D - 09 6513 RESILIENT BASE

2' - 3" 3' - 3' 2' - 4" A2.1 / 1/4" = 1'-0"

2 LAB
A2.1 1/4" = 1'-0"

24167-1000

A8.1

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	SCHEDULE - ROOM FINISH									
NUMBER	NAME	FLOOR	BASE	WALL	CEILING	REMARKS				
101	STORAGE	LVT-01	B-01	PT-01	AC-01	4				
102	NOURISHMENT	LVT-01	B-01	PT-01	AC-01	1,4				
103	EXAM NO. 1	LVT-01	B-01	PT-01,PT-02	AC-01,GYP-01,PT- 04	1,4				
104	EXAM NO.2	LVT-01	B-01	PT-01,PT-02	AC-01,GYP-01,PT- 04	1,4				
105	MA AREA	LVT-01	B-01	PT-01	AC-01	1,4				
106	LOBBY/ RECEPTION	LVT-01	B-01	PT-01	AC-01	4,5				
107	VIRTUAL EXAM ROOM	LVT-01	B-01	PT-01,PT-02	AC-01	1,4				
108	LAB	LVT-01	B-01	PT-01,PT-02	AC-01,GYP-01,PT- 04	1,4				
109	TOILET	FT-01	B-02	PT-01,PT-02	GYP-01,PT-04	4,6				
110	STORAGE	LVT-01	B-01	PT-01	GYP-01	1				
111	PATIENT INTAKE	LVT-01	B-01	PT-01,PT-02	AC-01					
112	CIRCULATION	LVT-01	B-01	PT-01	AC-01	1				
H118	AV EQUIPMENT	CPT-02, (E)	(E)	PT-03	(E)	2				
H120	THERAPY / SOCIAL WORK	CPT-01	B-01	PT-01	AC-01	4,5,8				
H136	SCHOOL STORE	CPT-02,(E)	(E)	(E)	(E)	2				

		9	SCHEDULE - COI	OR CODES			
COLOR CODES	PRODUCT / MATERIAL	MANUFACTURER	PRODUCT NAME / NUMBER	COLOR NAME / NUMBER	SIZE	FINISH	NOTES
(E)	EXISTING FINISH						
AC-01	ACOUSTICAL PANEL						
B-01	RESILIENT BASE						
B-02	TILE BASE						
CG-01	CORNER GUARD						
CPT-01	CARPET (TILE/ BROADLOOM)						
CPT-02	CARPET (TILE/ BROADLOOM)			MATCH EXISTING			
FT-01	FLOOR TILE						
GYP-01	GYPSUM BOARD						
LVT-01	LUXURY VINYL TILE						
PL-01	PLASTIC LAMINATE						
PT-01	PAINT					FIEI	_D
PT-02	PAINT					ACC	CENT
PT-03	PAINT			MATCH EXISTING			
PT-04	PAINT					CEI	LING
SC-01	SHADE CLOTH	DRAPER	FLEXSHADE ASCEND			MO	UNTING: FASCIA WITH ENDCAPS
SS-01	SOLID SURFACE MATERIAL						
WD-01	WOOD						

### **ABBREVIATIONS**

**ROOM FINISH SCHEDULE** AC PANEL ACOUSTICAL PANEL ACT ACOUSTICAL CEILING TILE COLOR CODE CORNER GUARD CMU CONCRETE MASONRY UNIT CERAMIC TILE CEM PLAS CEMENT PLASTER CONC DEFS CONCRETE DIRECT APPLIED EXTERIOR FINISH SYSTEM EXISTING FINISH EXTERIOR INSULATION FINISH SYSTEM EIFS **EPOXY PAINT** E TERR EPOXY TERRAZZO ENTR MAT ENTRY MAT SYSTEM EXP CONST EXPOSED CONSTRUCTION FWC FABRIC WALL COVERING GF CMU GL CMU GROUND FACE CONCRETE MASONRY UNIT GLAZED CONCRETE MASONRY UNIT GYP BD HD/SLR GYPSUM BOARD HARDENER/ SEALER IR GYP BD IMPACT RESISTANT GYPSUM BOARD LIMEST LIMESTONE LINO LINOLEUM MULTI-COLORED COATING MCC METAL MTL PNL METAL PANEL P LAM PLASTIC LAMINATE PAVER T PAVER TILE PLAS PLASTER POL CONC POLISHED CONCRETE PORC T PORCELAIN TILE QUARRY TILE RAISED ACCESS FLOORING **RUBBER TILE** RESIN FLR RESINOUS FLOORING RESILIENT RESIL STRUCTURAL GLAZED FACING TILE SGFT SHT V SHEET VINYL SOLID SURFACE MATERIAL SSM ST STL STAINLESS STEEL TRAFFIC COATING TERR TERRAZZO VCT VINYL COMPOSITION TILE VINYL WALLCOVERING VEN PLAS VENEER PLASTER WD WOOD

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**GENERAL NOTES** 

ROOM FINISH SCHEDULE

\* REFER TO ABBREVIATIONS LIST FOR MATERIAL CODE DESCRIPTIONS A. "ROOM NUMBER AND ROOM NAME" CORRESPOND TO THE NUMBER AND NAMES INDICATED ON THE SHEETS.

B. "MATERIAL/FINISH" INDICATE THE SPECIFIC MATERIALS AND FINISHES TO BE USED TO CONSTRUCT AND FINISH THE FLOORS, BASE, WALLS AND CEILINGS.

C. "CC" INDICATES THE COLOR CODE FOR EACH MATERIAL AND/OR FINISH, REFER TO "COLOR CODES".

D. "REMARKS" INDICATES ANY SPECIAL REQUIREMENTS FOR THE MATERIAL AND FINISH IN A ROOM - SEE "ROOM FINISH SCHEDULE REMARKS".

E. "CEILING" IS THE MATERIAL AND FINISH AT THE UNDERSIDE OF THE FLOOR OR ROOF ABOVE. "SOFFIT" IS THE MATERIAL AND FINISH AT THE UNDERSIDE OF THE STAIR RUN.

F. REFER TO A10 SERIES FOR FLOOR TILE PATTERNS AND MATERIALS.

G. REFER TO A8 SERIES FOR INTERIOR ELEVATIONS.

H. "E" PREFIX TO THE "PT" CODE REFER TO EPOXY PAINT MATERIAL (E PT-XX).

### REMARKS

ROOM FINISH SCHEDULE

1. PL-01 PLASTIC LAMINATE, SS-01 SOILD SURFACE 2. CPT-02 AT AREAS EFFECTED BY FLOOR TRENCHING

3. PT-03 AT DOOR INFILL LOCATIONS

CLEAR ANODIZED

4. TOUCH UP PAINT REQUIRED. PATCH/REPAIR/PAINT ALL LOCATIONS WHERE WALL MOUNTED ITEMS ARE REMOVED, INCLUDING BUT NOT LIMITED TO CLOCKS, ALARMS, WIREWAYS, ETC. OR WHERE SELECTIVE DEMOLITION OCCURS - COORDINATE EXTENTS WITH DEMO AND NEW

5. TRANSITION AT CARPET TO LVT OR CARPET TO EXISTING TO BE SCHLUTER RENO U AEU 100 IN SATIN ANODIZED ALUMINUM

6. GROUT AT FLOOR TILE TO BE XXX. TRANSITION AT CERAMIC FLOOR TILE TO BE MARBLE THRESHOLD

7. SC-01 TO BE MOUNTED WITH FASCIA WITH ENDCAPS IN THE COLOR

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Key Plan

Project Administrator A. Maurer Project Designer A. Pelfrey Project Architect / Engineer C. King Drawn By D. Sandle Q.M. Review Approved Drawing Scale As Noted Issue Date Issued for Design Development 07-03-2024

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Room Finish Schedule

ī**D**§ Project Number

SCHEDULE - WINDOW SHADES								
TYPE	LENGTH	WIDTH	HOUSING	MANUFACTURER	MATERIAL	MECHANISM	MOUNTING	
W1	4' - 0"	6' - 0"	0"	DRAPER	SC-01	MANUAL- SINGLE ROLLER	OUTSIDE TOP MOUNT, SMALL HEADBOX	
W1: 1								
W2	4' - 0"	3' - 0"	0"	DRAPER	SC-01	MANUAL - SINGLE ROLLER	OUTSIDE TOP MOUNT, SMALL HEADBOX	

08 1113 HM FRAME -

 $\left\langle \text{DR SCHED} \right\rangle 3" = 1'-0"$ 

08 1113 HM FRAME -

NOTE: LOCATE GLASS ON

THE SIDE OF THE FRAME

NUMBERED THE SAME AS THE FRAME/DOOR

FACING THE ROOM

08 1113 HM GLASS

08 8000 GLASS -REFER

DR SCHED 3" = 1'-0"

08 8000 GLASS -REFER TO FRAME TYPES

AND/OR SCHEDULE

08 1113 HM GLASS

08 1113 HM FRAME -

FACING THE ROOM

NOTE: LOCATE GLASS ON THE SIDE OF THE FRAME

NUMBERED THE SAME AS THE FRAME/DOOR

NOTE: LOCATE GLASS ON THE SIDE OF THE FRAME

FACING THE ROOM NUMBERED THE SAME AS THE FRAME/DOOR

08 1113 HM GLASS

08 8000 GLASS -REFER TO FRAME TYPES AND/OR SCHEDULE ——

DR SCHED 3" = 1'-0"

STOP -

08 1113 HM FRAME ——

STOP —

TO FRAME TYPES AND/OR SCHEDULE

STOP —

										OOR	SCHE	DULE							
					DO	OR					FRAME			DETAILS			DOOR		
DOOR		5	SIZE													HARDWARE		WALL	
NUMBER	WIDTH	LEAF 1	LEAF 2	HEIGHT	TYPE	MATERIAL	FINISH/ CC	FRGM	TYPE	MATERIAL	FINISH / CC	FRGM	HEAD	JAMB	SILL	SET	RATING	RATING	REMARKS
101	3' - 0"	3' - 0"		7' - 0"	F	WD			Α	HM			4/A9.2	4/A9.2					
103	3' - 0"	3' - 0"		7' - 0"	F	WD			Α	HM			4/A9.2	4/A9.2					
104	3' - 0"	3' - 0"		7' - 0"	F	WD			Α	HM			4/A9.2	4/A9.2					
106	3' - 0"	3' - 0"		7' - 0"	G	WD			Α	HM			4/A9.2	4/A9.2					
107	3' - 0"	3' - 0"		7' - 0"	N	WD			Α	HM			4/A9.2	4/A9.2					
108	3' - 0"	3' - 0"		7' - 0"	N	WD			Α	HM			4/A9.2	4/A9.2					
109	3' - 0"	3' - 0"		7' - 0"	F	WD			Α	HM			4/A9.2	4/A9.2					
110	3' - 0"	3' - 0"		7' - 0"	F	WD			Α	HM			4/A9.2	4/A9.2					
112	3' - 0"	3' - 0"		7' - 0"	G	WD			Α	HM			4/A9.2	4/A9.2					

### **GENERAL NOTES**

#### DOOR SCHEDULE

OTHERWISE NOTED.

A. REFER TO THE DRAWINGS FOR DOOR LOCATIONS

B. "DOOR NUMBER" CORRESPONDS TO THE DOOR NUMBER INDICATED ON THE DRAWINGS. NOTE: AT EXISTING WALL OPENINGS, FIELD VERIFY SIZE OF DOORS AND FRAMES.

C. (DOOR) "SIZE" INDICATES THE NOMINAL WIDTH AND HEIGHT OF THE DOOR IN FEET AND INCHES. ALL DOORS ARE 1 3/4" THICK UNLESS

D. "DOOR AND FRAME TYPE/MATL/FINISH" INDICATES THE CODES FOR TYPE (INDICATED ON THE DRAWINGS), MATERIAL AND FINISH.

E. "CC" INDICATES THE COLOR CODE FOR FINISHES OF DOORS AND FRAMES, SEE "SCHEDULE - COLOR CODES".

F. "DETAILS HEAD- JAMB-SILL" INDICATES THE DETAIL NUMBER INDICATED ON THE DRAWINGS.

G. "HARDWARE SET" INDICATES HARDWARE SET NUMBERS SPECIFIED IN 08 7100 - DOOR HARDWARE.

H. "DOOR ASSEMBLY RATING" INDICATES THE MINIMUM FIRE RESISTANCE RATING FOR FIRE DOORS AND/OR SIDELITES. I. "WALL RATING" INDICATES THE FIRE RESISTANCE RATING OF THE

J. "FRGM" INDICATES FIRE-RATED GLAZING MARKINGS.

WALL CONTAINING THE DOOR.

K. "REMARKS" INDICATES ANY SPECIAL REQUIREMENTS FOR A DOOR AND FRAME - SEE "DOOR SCHEDULE - REMARKS".

### REMARKS

DOOR SCHEDULE ACCESS CONTROL SYSTEM

REMOVABLE MULLION 3. LOW ENERGY POWER OPERATED DOOR

4. POWER OPERATED DOOR PACKAGE DOOR ASSEMBLY (ALL HARDWARE BY DOOR MANUFACTURER)

HOLLOW METAL ASTRAGAL

FIRE-RATED GLAZING ASSEMBLIES MARKING W MEETS WALL ASSEMBLY CRITERIA

OH MEETS FIRE WINDOW ASSEMBLY CRITERIA INCLUDING THE HOSE STREAM TEST

MEETS FIRE DOOR ASSEMBLY CRITERIA MEETS FIRE DOOR ASSEMBLY "HOSE STREAM" TEST MEETS 450 DEG F TEMPERATURE RISE CRITERIA FOR 30 MINUTES

NT DOES NOT MEET 450 DEG F TEMPERATURE RISE CRITERIA FOR 30 XXX TIME IN MINUTES OF THE FIRE RESISTANCE OR FIRE PROTECTION RATING OF THE GLAZING ASSEMBLY

#### **ABBREVIATIONS**

ADDIXE A 1	ATIONS
DOOR SCHEDULE	
ALUM	ALUMINUM
ANOD	ANODIZED
CC	COLOR CODES
(E)	EXISTING
FBR	FIBERGLASS
FRP	FIBERGLASS REINFORCED PANEI
FAC	FACTOR)
GL	GLASS
180	180 MINUTES (3 HOUR
90	90 MINUTES (1 1/2 HOUR
60	60 MINUTES (1HOUR
45	45 MINUTES (3/4 HOUR
20	20 MINUTES (1/3 HOUR
HM	HOLLOW METAI
HDWE	HARDWARI
MATL	MATERIAI
P LAM	PLASTIC LAMINATE
PT PV T	PAIN'
PVF	POLYVINYL FLUORIDE COATING (KYNAR
STN	STAIN
ST STL	STAINLESS STEEL
STL	STEEI
WD	WOOL

WIRE MESH



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Belleville, MI 48111

A. Maurer Project Designer A. Pelfrey

> Drawn By A. Pelfrey

Q.M. Review

Drawing Scale

As Noted

Issue Date

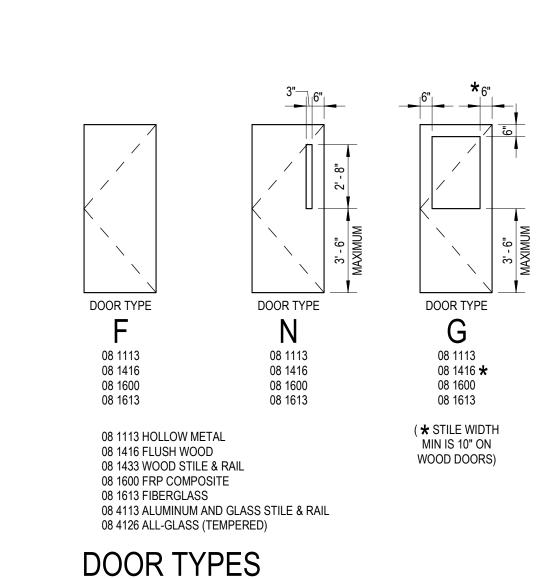
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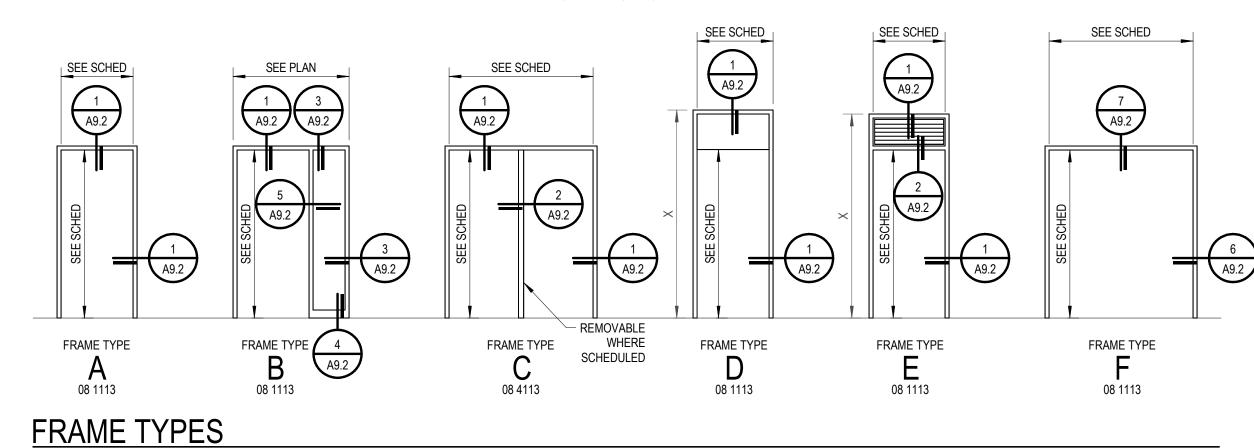
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Door Schedule and Details

Project Architect / Engineer C. King



NOTE: ALL GLASS TO BE 1/4" SAFETY GLASS EXCEPT USE FIRE RATED GLASS AT FIRE RATED DOORS, SIDELITES, ETC., UON



NOTE: ALL GLASS TO BE 1/4" SAFETY GLASS EXCEPT USE FIRE RATED GLASS AT FIRE RATED DOORS, SIDELITES, ETC., UON

DOOR STOP -09 6543 EDGE STRIP 09 6816 CARPET OR 09 6813 CARPET TILE -DOOR STOP -09 3000 TILE AS SCHEDULED 09 3000 MORTAR SETTING BED -DOOR STOP -09 6816 CARPET OR 09 6813 CARPET TILE

INTERSECTING WALL

08 1113 FLOOR ANCHOR

JAMB(HEAD SIM)
3" = 1'-0"

CLIP (BELOW) -

CONDITION —

WIDTH - SEE PLAN

- PARTITION TYPE-

REFER TO PLAN

07 9200 SEALANT

FRAME PROFILE)

ANCHOR CLIP-GROUT

SEE NOTES BELOW

- DOOR AND FRAME AS

09 6516/6519 RESILIENT

EXISTING CONCRETE

SEE NOTES BELOW

- DOOR AND FRAME AS SCHEDULED

TOP OF FLOOR SLAB

FLOORING

09 6516/6519 RESILIENT

- 09 3000 METAL EDGE STRIP

SEE NOTES BELOW

- DOOR AND FRAME AS SCHEDULED

09 6513 RESILIENT

- 09 6816 CARPET OR

09 6813 CARPET TILE

TOP OF FLOOR SLAB

EDGE STRIP

SCHEDULED

**FLOORING** 

- 08 1113 HOLLOW METAL FRAME

(BOTH SIDES)

7/16"——PARTITION
7/16"—WIDTH - SEE PLAN
4 7/8" AT CMU 08 1113 HM FRAME ———

PARTITION 7/16" WIDTH - SEE PLAN 4 7/8" AT CMU

FRAME - DOUBLE EGRESS HEAD

7/16" WIDTH - SEE PLAN 7/16"

4 7/8" AT CMU

10 FRAME - DOUBLE EGRESS JAMB

FRAME - HM W/ GLASS

1 15/16" 2 1/4"

7/16" PARTITION WIDTH - SEE PLAN 4 7/8" AT CMU

PARTITION
7/16"—WIDTH - SEE PLAN
4 7/8" AT CMU
7/16"

FRAME - HM W/ GLASS

5 FRAME - HM

DR SCHED 3" = 1'-0"

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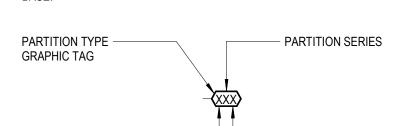
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Drawing Number

A9.2

2 = 2-HR FIRE RATED

- INTERIOR PARTITIONS
- "WALL" AND "PARTITION" ARE USED TO DENOTE EITHER WALLS OR PARTITIONS INTERCHANGEABLY. 2. REFER TO SHEET AR.0 - ARCHITECTURAL REFERENCE INFORMATION
- FOR ABBREVIATIONS, SYMBOLS, AND GRAPHIC INDICATIONS.
- 3. REFER TO COMPOSITE LIFE SAFETY PLANS FOR PARTITION FIRE RATINGS.
- 4. REFER TO ROOM FINISH SCHEDULE FOR WALL FINISHES AND WALL



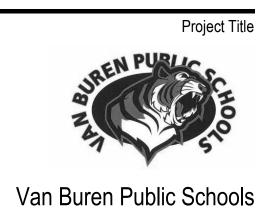
 SIZE DESIGNATOR ASSEMBLY RATING — S = SMOKE PARTITION (SEE TABLE BELOW) 0 = NON-RATED 1 = 1-HR FIRE RATED

MATERIAL	DESIGNATION SIZE	ACTUAL SIZE	SPACING
MASONRY	4	3 5/8 "	N/A
	6	5 5/8 "	
	8	7 5/8 "	
	12	11 5/8 "	
STEEL STUDS	1	1 5/8 "	16" OC
	2	2 1/2 "	
	3	3 5/8 "	
	4	4"	
	6	6"	
FURRING	0	7/8 "	16" OC
	1	1 5/8 "	
	2	2 1/2 "	
	3	3 5/8 "	
SHAFTWALL	2	2 1/2 "	24" OC
C-H STUDS	4	4"	1
	6	6"	

- SUBSTITUTE 09 2900 TILE BACKING BOARD AT LOCATIONS TO RECEIVE A TILE WALL FINISH.
- 6. ALL NON-LOAD BEARING METAL WALL FRAMING SHALL BE BASED ON TOTAL STUD HEIGHT. REFER TO SPECIFICATION SECTIONS 05 4000 -COLD-FORMED METAL FRAMING, 09 2116 - GYPSUM BOARD SHAFT WALL ASSEMBLIES AND 09 2216 - NON-STRUCTURAL METAL FRAMING FOR ADDITIONAL REQUIREMENTS.
- 7. WHERE ROOMS WITH DIFFERENT PARTITION REQUIREMENTS ARE ADJACENT, THE PARTITION WITH THE GREATER FIRE-RATING AND/OR STC SHALL BE USED BETWEEN THEM.
- 8. AT INTERSECTIONS OF DIS-SIMILAR PARTITON TYPES, THE HIGHEST RATED PARTITION IS TO RUN THROUGH THE INTERSECTION TO MAINTAIN ENCLOSURE. MAINTAIN RATING OF RATED PARTITION AT INTERSECTION WITH COLUMN ENCLOSURES BY EXTENDING RATED CLOSURE AS REQUIRED.
- 9. FIRE-RATED PARTITIONS SHALL BE CONSTRUCTED ACCORDING TO THE FIRE TEST INDICATED. NO SUBSTITUTIONS OF MATERIALS OR DEVIATIONS FROM CONSTRUCTION ARE ALLOWED. ADDITIONAL LAYERS MAY BE REQUIRED FOR ACOUSTICAL OR OTHER REASONS AND MUST BE EXECUTED AS SHOWN.
- 10. STC RATINGS ARE MINIMUM ACOUSTICAL PERFORMANCE REQUIREMENT. SPECIFIC ACOUSTICAL TESTS ARE GIVEN FOR REFERENCE ONLY. SOUND ATTENUATION BLANKET THICKNESS
- SHALL BE AS FOLLOWS: A. 1 1/2 " FOR PARTITIONS WITH 1 5/8 " AND 2 1/2 " STUDS (INCLUDING SHAFTWALLS).
- B. 3" FOR PARTITIONS WITH 3 5/8 ", 4" OR 6" STUDS. C. 3" FOR SHAFTWALLS WITH 4" OR 6" STUDS UNO. D. AS REQUIRED FOR FIRE RATING.
- 11. DETAILS ARE DIAGRAMMATIC PRECISE REQUIREMENTS OF TESTS ASSEMBLIES SHALL GOVERN.

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Project Administrator A. Maurer Project Designer A. Pelfrey Project Architect / Engineer C. King A. Pelfrey Q.M. Review Drawing Scale As Noted Issue Date Issued for Design Development 07-03-2024

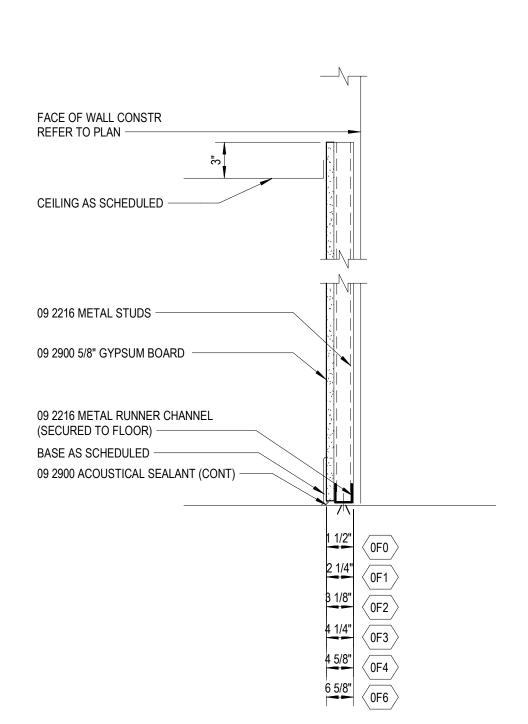
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Partition Types

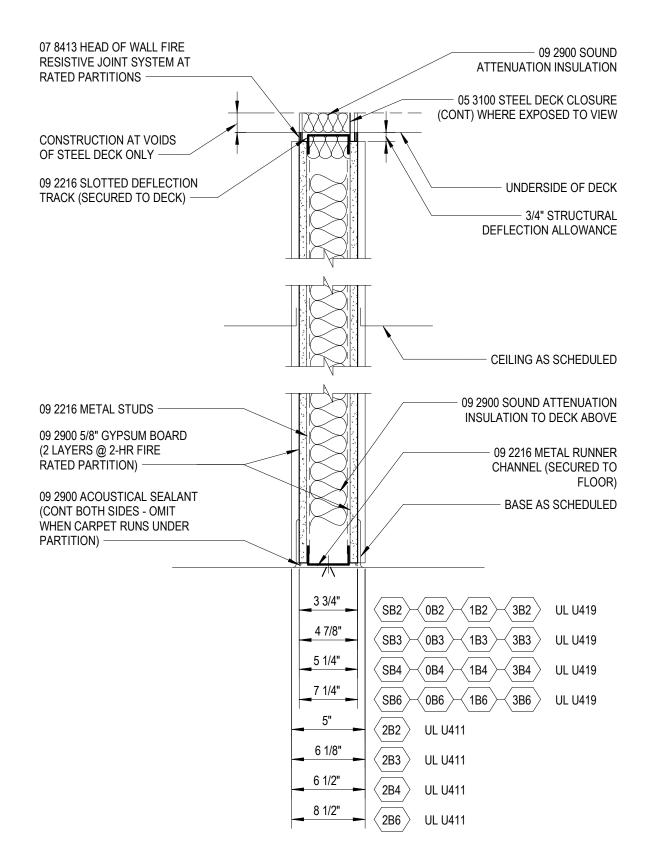
A9.3

Drawing Number

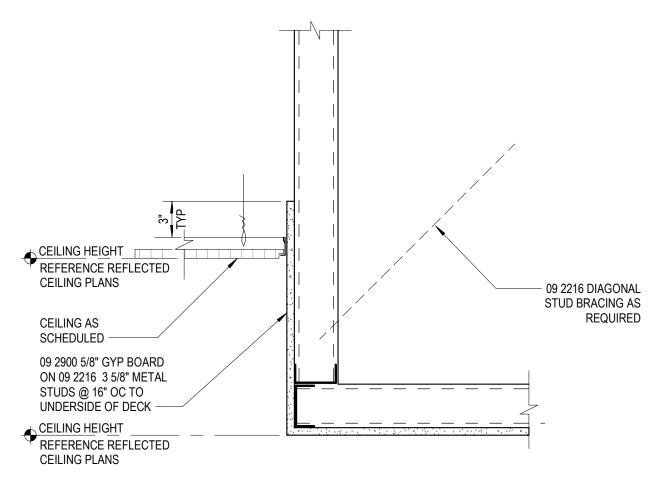
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PARTITION SERIES 'F'

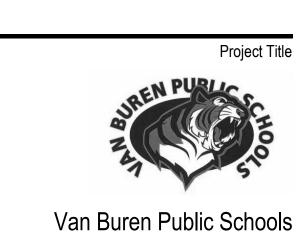


PARTITION SERIES 'B'



9 CEILING DROP

A3.1 1/2" = 1'-0"



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> A. Maurer Project Designer A. Pelfrey

> > C. King Drawn By A. Pelfrey Q.M. Review

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Issue Date

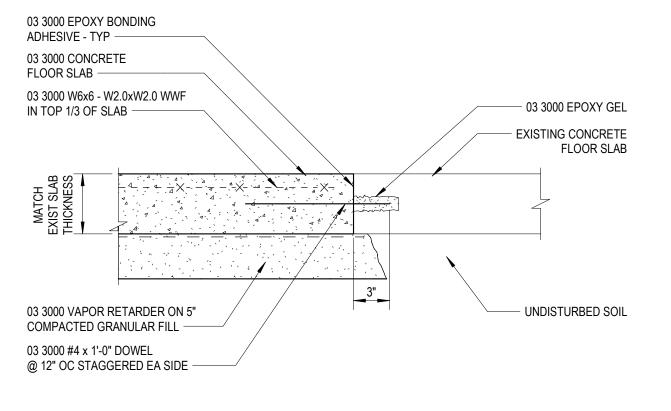
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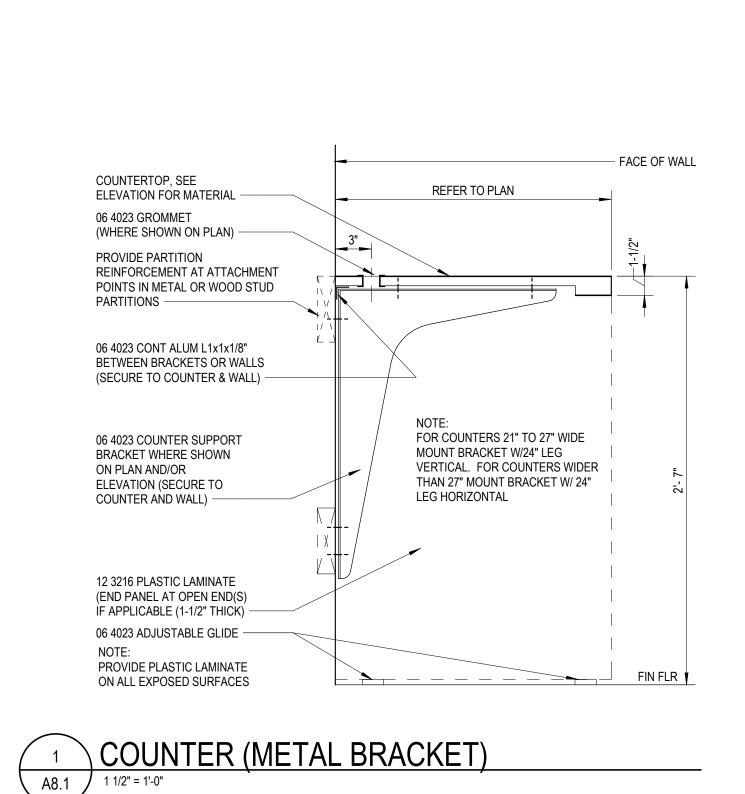
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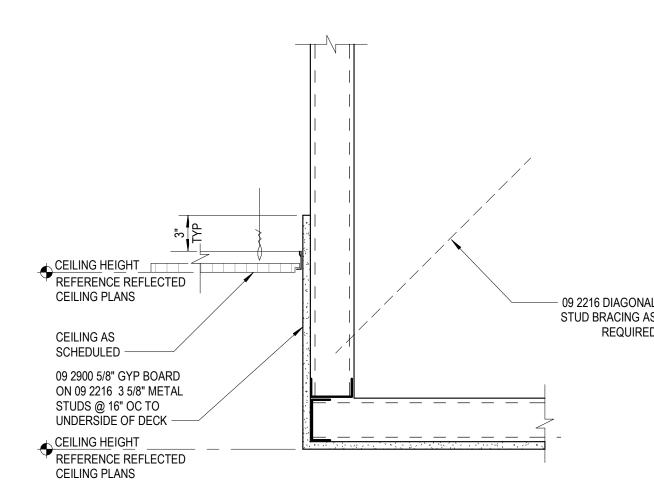
Sections and Details

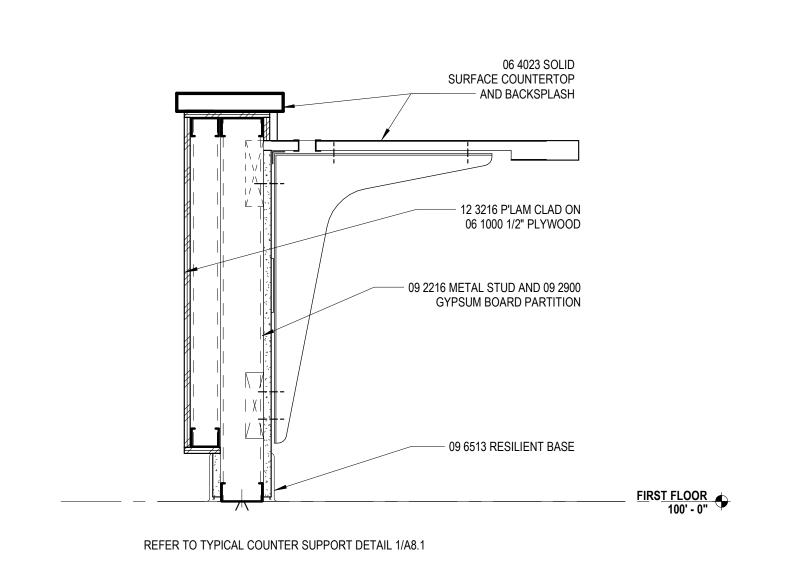
Project Architect / Engineer



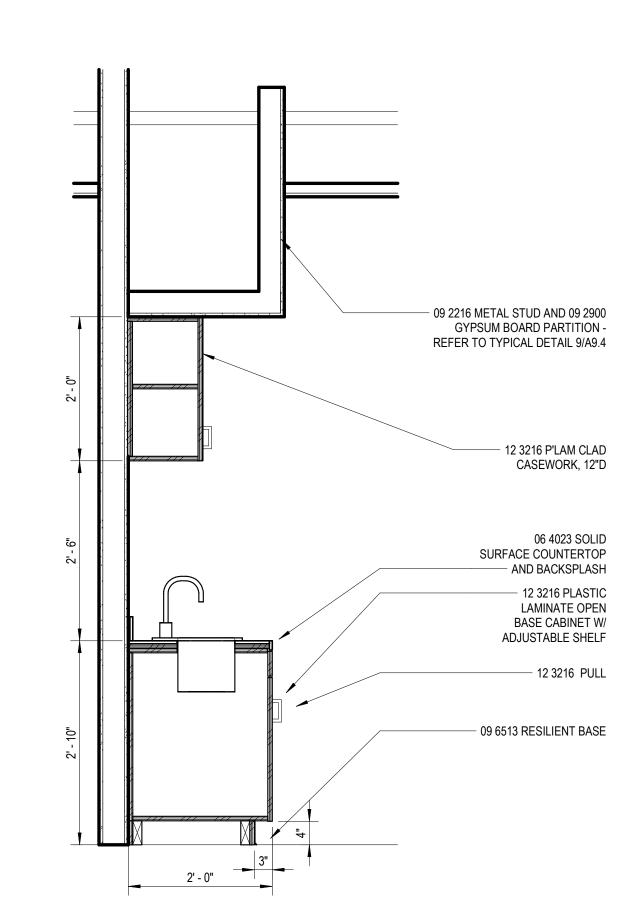
CONCRETE FLOOR SLAB INFILL







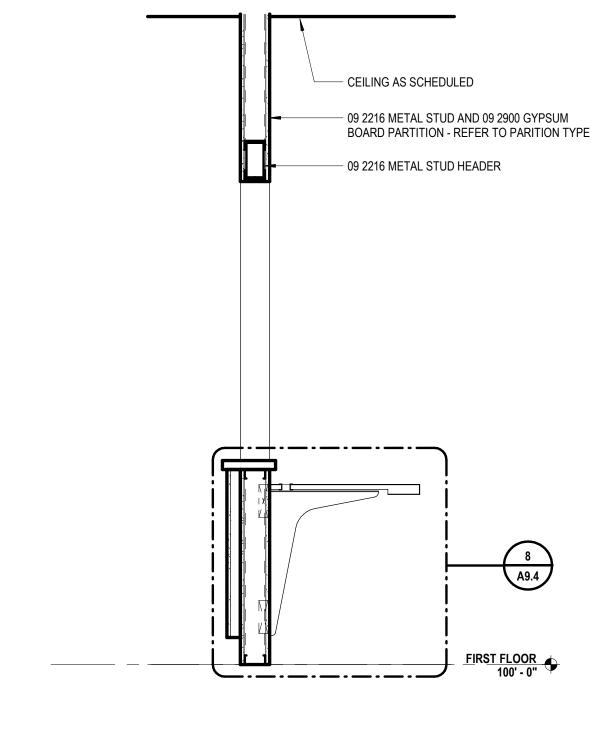
**8 WALL SECTION DETAIL** A9.4 1 1/2" = 1'-0"



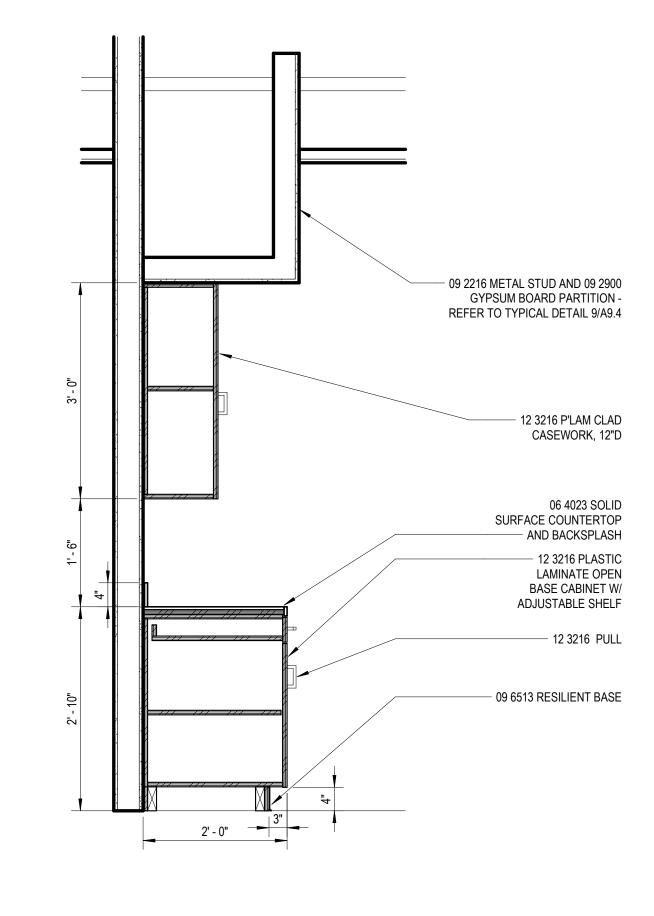
BASE CABINET - SECTION DETAIL

A8.1

3/4" = 1'-0"

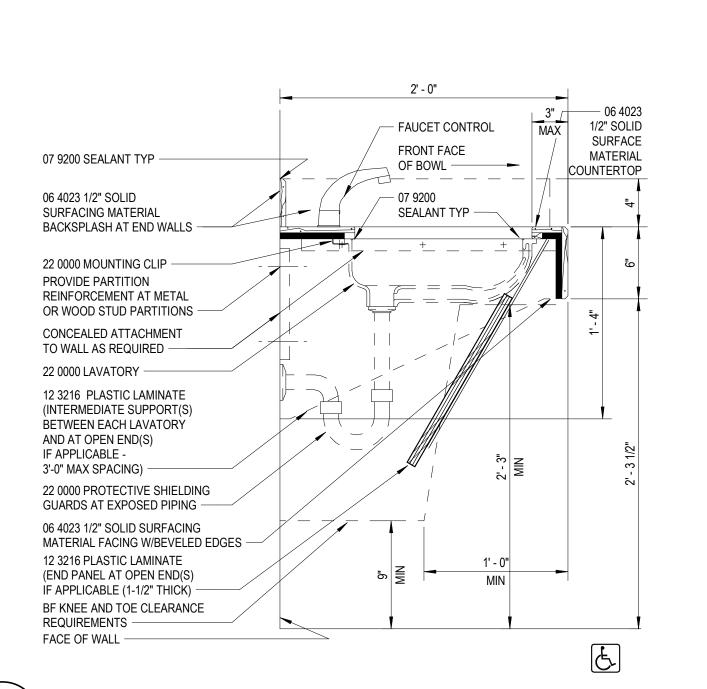


WALL SECTION



BASE CABINET - SECTION DETAIL

3
3/4" = 1'-0"



REINF ONE SIDE ONLY FULL LENGTH OF PARTITION SEE PLAN

FIN FLR LINE

06 1000 2x8 TREATED WOOD BLOCKING (SECURE TO FACE OF METAL STUDS) —

CENTER LINE & LOCATION OF WOOD

TYP PTN REINFORCEMENT

BLOCKING (SEE ELEVATION) -

METAL STUD PARTITION -REFER TO PLANS —

SECTION DETAL @ADA SINK

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**GENERAL NOTES** 

A. REFER TO ROOM FINISH SCHEDULE AND COLOR CODES FOR MORE INFORMATION.

09 3000 PORC FLOOR TILE FT-01

09 6813 CARPET TILE CPT-01

09 6813 CARPET TILE CPT-02

09 6516/6519 RESILIENT TILE LVT-01

FLOORING INSTALLATION DIRECTION

ACCENT MATERIAL, REFER TO COLOR CODES

FLOORING INSTALLATION METHOD - ASHLAR

FLOORING INSTALLATION METHOD - MONOLITHIC

FLOORING INSTALLATION METHOD - QUARTER TURN

FLOORING INSTALLATION METHOD - NON-DIRECTIONAL

FLOORING INSTALLATION METHOD - HERINGBONE

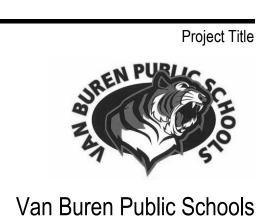
NOTE: FINISHES INDICATED IN ROOM FINISH TAGS ARE GENERAL OVERALL FINISHES FOR

REMARK, DETAIL AND/OR ELEVATION

ROOM UNLESS OTHERWISE INDICATED BY NOTE,

ROOM SPECIFIC FINISH REMARKS, REFER TO REMARKS LEGEND FOR ADDITIONAL INFORMATION

FLOOR MATERIAL TRANSITION TAG REFER TO A.9.2 FOR TRANSITION/ SILL DETAILS



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Project Administrator
A. Maurer Project Architect / Engineer
C. King
Drawn By
D. Sandle
Q.M. Review

> 1/4" = 1' - 0" Issue Date Issued for Design Development 07-03-2024

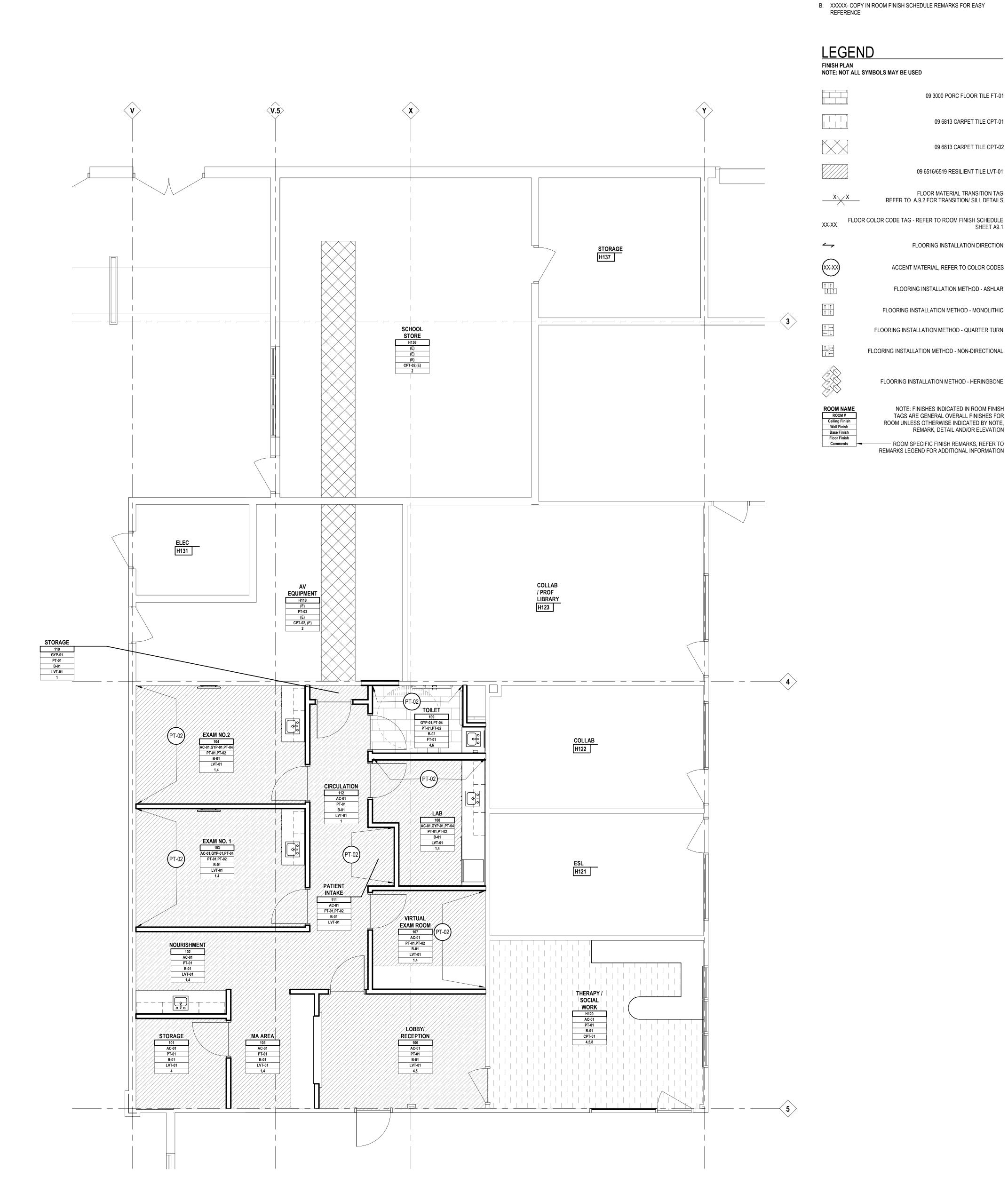
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First Floor Finish Plan

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A10.1

Drawing Number



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- FURNITURE FIXTURE AND EQUIPMENT PLAN

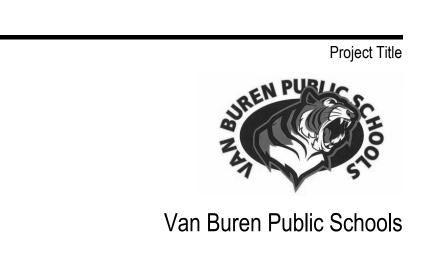
  A. ITEMS SHOWN IN GRAYSCALE ARE FOR REFERENCE ONLY.
- B. COORDINATE THE INTERFACING OF ALL TRADES WITH RESPECT TO DELIVERY AND INSTALLATION OF ALL FURNITURE, FIXTURES AND EQUIPMENT
- C. CONTRACTOR TO FIELD VERIFY EXISTING CONDITIONS BEFORE INSTALLATION. CONSULT ARCHITECT WHEN ACTUAL FIELD CONDITIONS VARY FROM THOSE SHOWN ON CONSTRUCTION DOCUMENTS.
- D. COORDINATE LOCATIONS OF ALL REQUIRED UTILITIES WITH THE TRADE PROVIDING THE SAME. REFER TO MECHANICAL AND ELECTRICAL SHEETS FOR ADDITIONAL INFORMATION.



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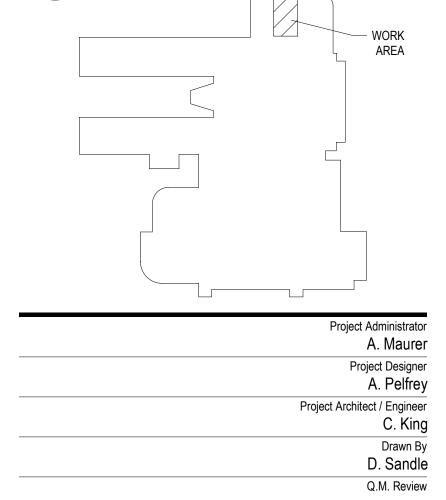
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Design Development	07-03-20
-	

Design Development 07-03-202

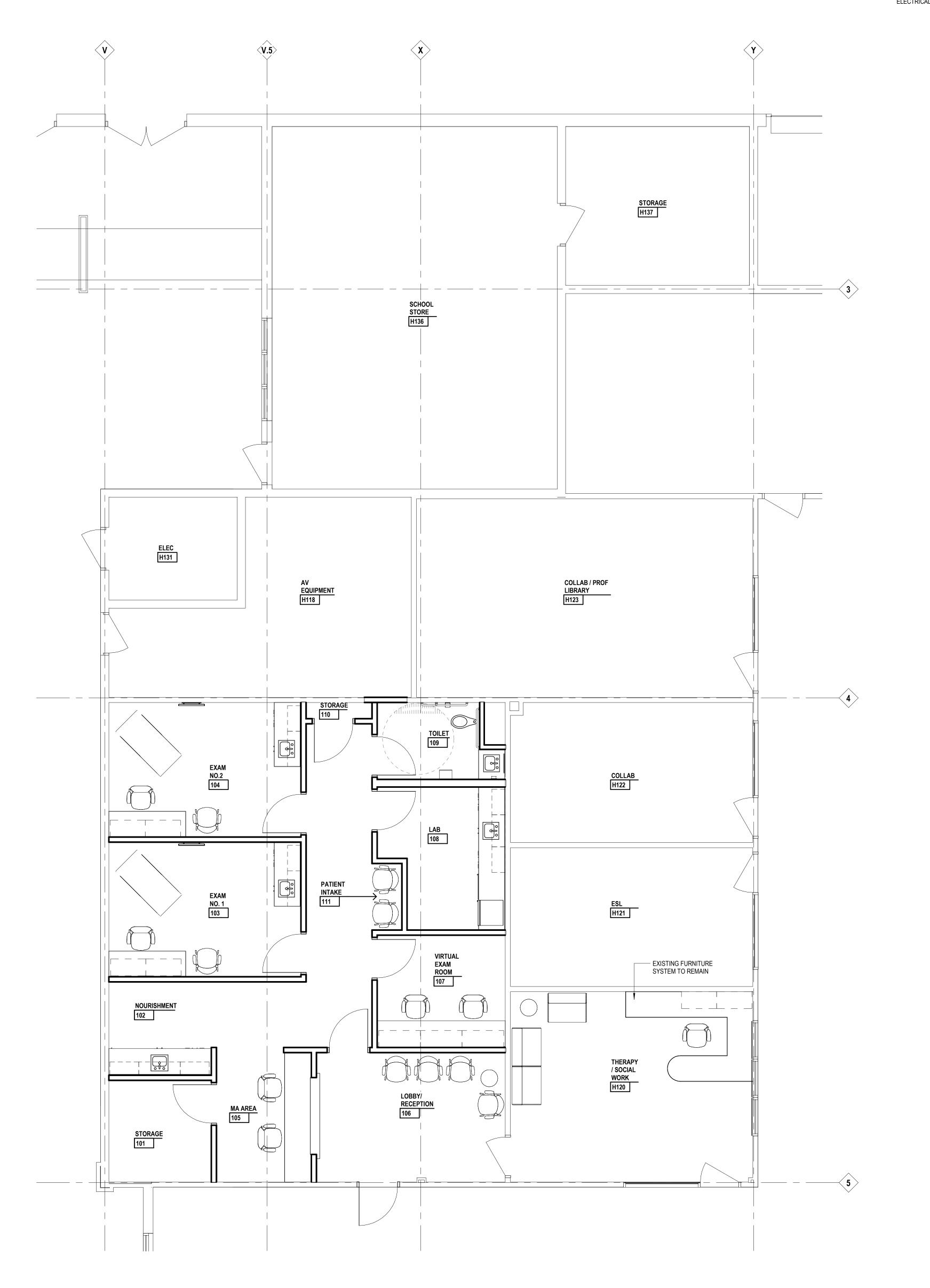
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IDS Drawing Title
First Floor Furniture Plan

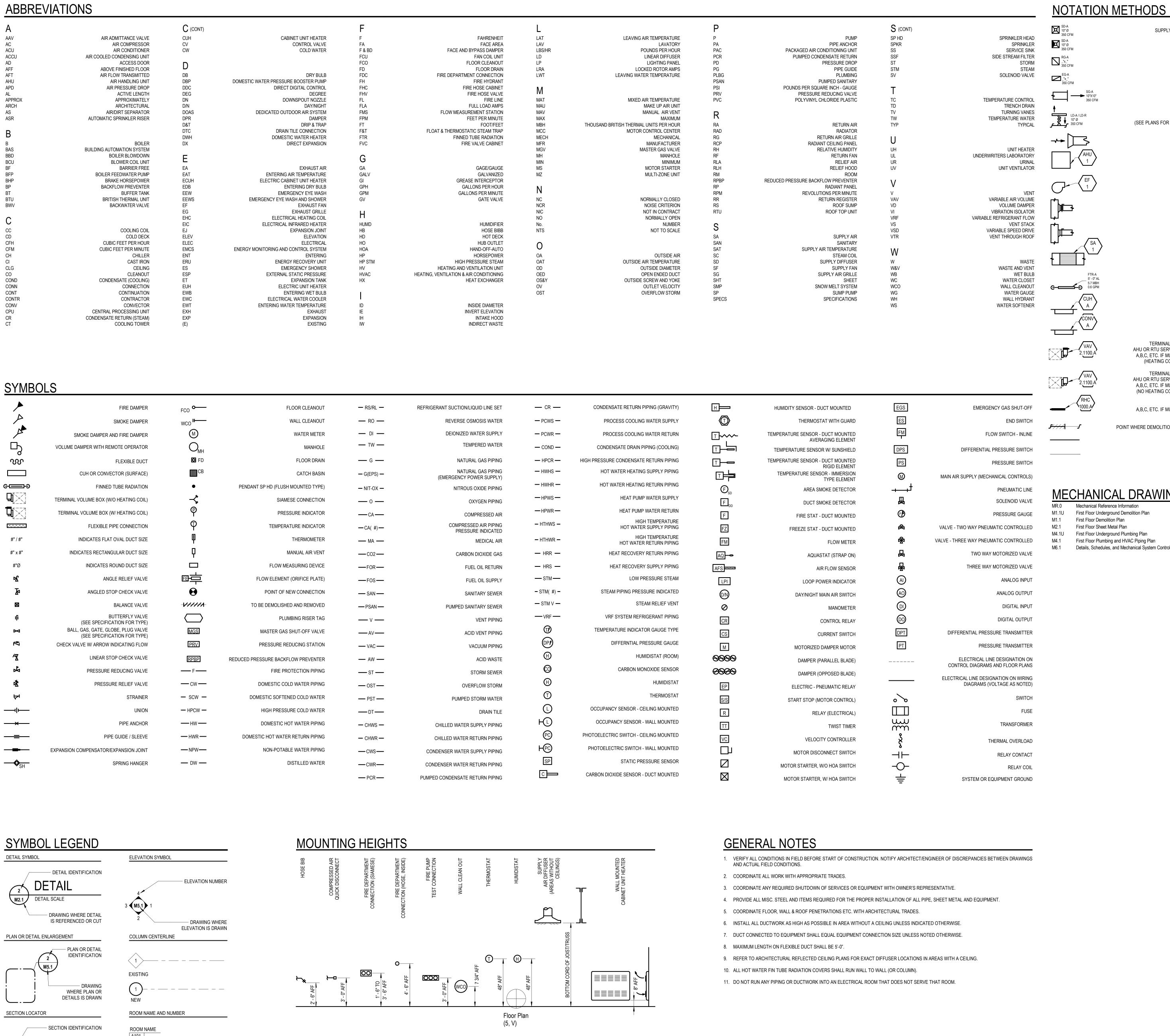
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F2.1





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SUPPLY AIR BRANCH CONNECTION

EXHAUST FAN No. 1

CONNECTION WITH VOLUME DAMPER SOUND ATTENUATOR

RETURN AIR/EXHAUST AIR BRANCH

SPIN-IN FITTING WITH VOLUME DAMPER

SUPPLY DIFFUSER, TYPE 'A', 10" NECK, 350 CFM

SUPPLY DIFFUSER (3-WAY)

RETURN GRILLE, TYPE 'A', 350 CFM

EXHAUST GRILLE, TYPE 'A', 350 CFM

SUPPLY GRILLE, TYPE 'A', 350 CFM

LINEAR DIFFUSER, TYPE 'A' WITH

BELL MOUTH AIR INLET AREA SHALL

BE EQUAL TO '2' TIMES DUCT AREA

(SEE PLANS FOR ARROWS INDICATING FLOW DIRECTION)

FLEXIBLE DUCT CONNECTION

AIR HANDLING UNIT No. 1

CABINET UNIT HEATER, TYPE 'A'

TYPE 'A', 5'-0" ELEMENT, 5.7 TOTAL MBH

(REFER TO EQUIPMENT SCHEDULES)

CONVECTOR, TYPE 'A' TERMINAL VARIABLE OR CONSTANT VOLUME BOX

FINNED TUBE RADIATION

TERMINAL VARIABLE OR CONSTANT VOLUME BOX AHU OR RTU SERVIING THE VAV OR CAV. ROOM NUMBER. A,B,C, ETC. IF MULTIPLE COILS SERVE THE SAME SPACE (NO HEATING COIL, REFER TO EQUIPMENT SCHEDULES) REHEAT COIL, ROOM NUMBER

AHU OR RTU SERVIING THE VAV OR CAV. ROOM NUMBER. A,B,C, ETC. IF MULTIPLE COILS SERVE THE SAME SPACE (HEATING COIL, REFER TO EQUIPMENT SCHEDULES)

A,B,C, ETC. IF MULTIPLE COILS SERVE THE SAME SPACE (REFER TO EQUIPMENT SCHEDULES) POINT WHERE DEMOLITION ENDS/POINT OF NEW CONSTRUCTION

NEW MECHANICAL

#### MECHANICAL DRAWING INDEX

- First Floor Demolition Plan
- First Floor Underground Plumbing Plan
- First Floor Plumbing and HVAC Piping Plan Details, Schedules, and Mechanical System Controls

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THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARD INFORMATION SHOWN ON THIS

> Project Administrato A. Maurer Project Designer N. Moeggenborg Project Architect / Engineer N. Moeggenborg N. Moeggenborg Q.M. Review

> > J. Schwartz Drawing Scale No Scale Issue Date Issued for

Design Development 07-03-2024

 $\circ$  2024 Integrated  $ext{design}$  solutions, LL

Mechanical Reference Information

ī**D**§ Project Number

**Drawing Number** 

MR.0

24167-1000

M5.1

- DRAWING WHERE PLAN OR DETAILS IS DRAWN — BUILDING OR UNIT (IF ANY)

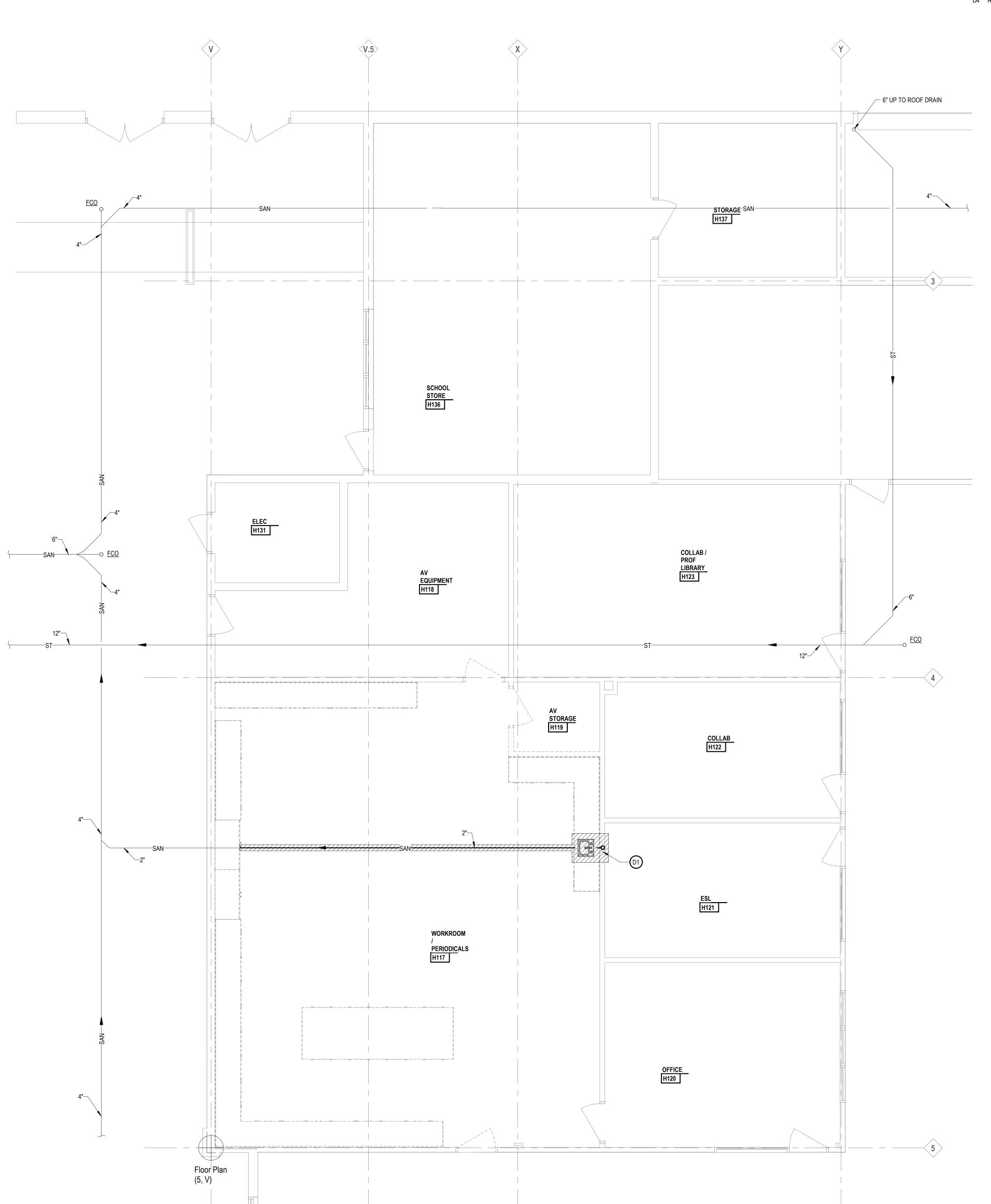
# KEYNOTES DEMOLITION

NOTE: NOT ALL KEYNOTES MAY BE USED # LEGEND SYMBOL INDICATOR

D1 REMOVE SANITARY PIPING AND CAP 2'-0" FROM WALL.

- D2 REMOVE SINK, COLD WATER, HOT WATER, SANITARY, AND VENT PIPING.
- D3 REMOVE SUPPLY DIFFUSER, ASSOCIATED DUCT WORK, AND COMPONENTS BACK TO MAIN
- D4 REMOVE RETURN GRILLE.

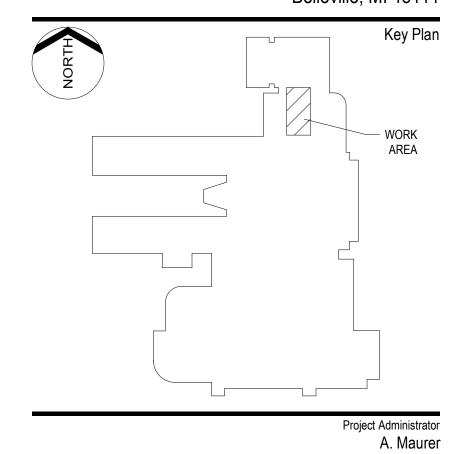






RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111



Project Designer
N. Moeggenborg
Project Architect / Engineer
N. Moeggenborg Drawn By
N. Moeggenborg Approved
J. Schwartz
Drawing Scale 1/4" = 1'-0" Issue Date Issued for Design Development 07-03-2024

 $\circ$  2024 Integrated design solutions, LLC IDS Drawing Title

First Floor Underground Demolition Plan

ī**D**§ Project Number

Drawing Number

M1.1U

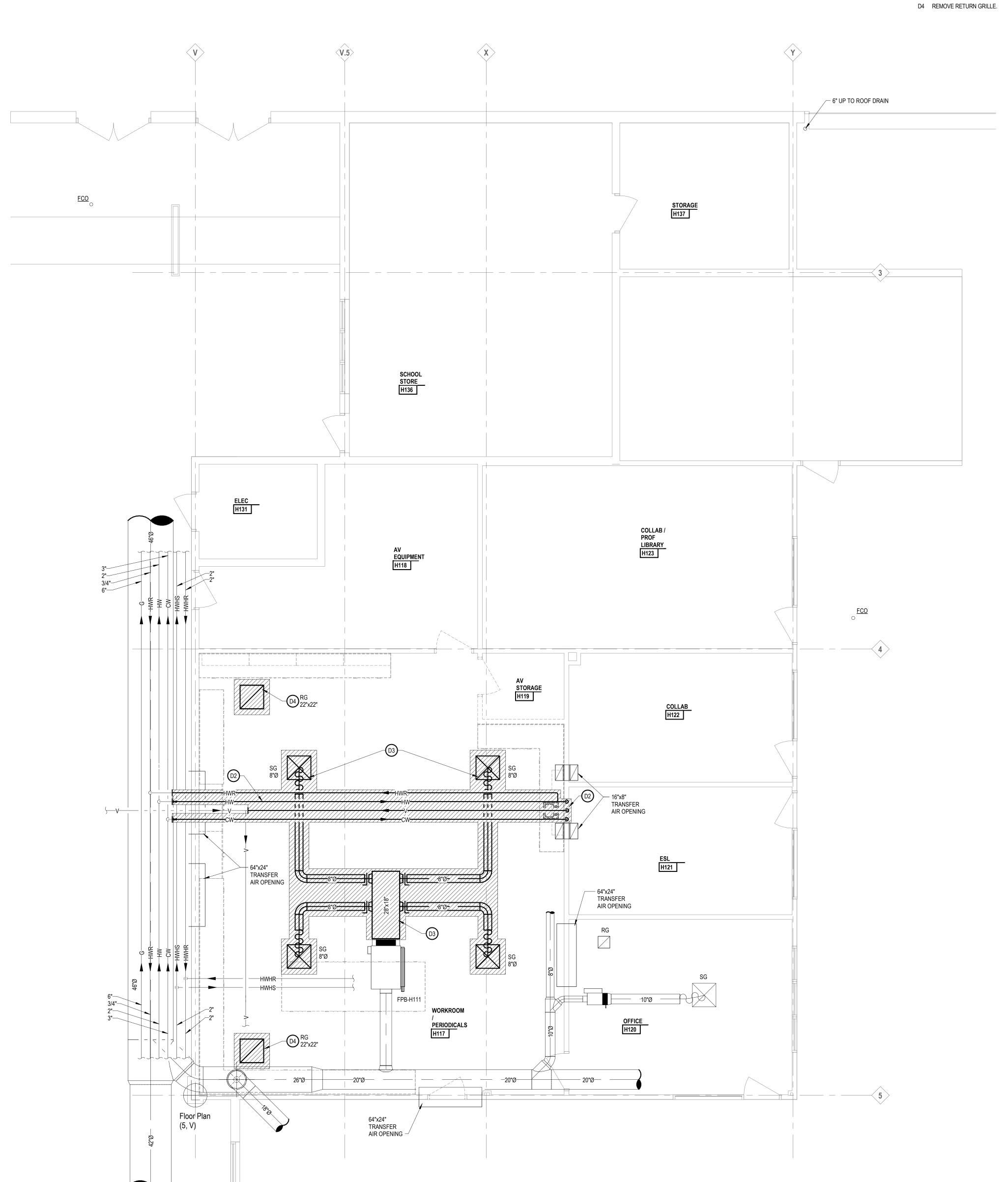
# KEYNOTES DEMOLITION

NOTE: NOT ALL KEYNOTES MAY BE USED

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- D2 REMOVE SINK, COLD WATER, HOT WATER, SANITARY, AND VENT PIPING.
- D3 REMOVE SUPPLY DIFFUSER, ASSOCIATED DUCT WORK, AND COMPONENTS BACK TO MAIN



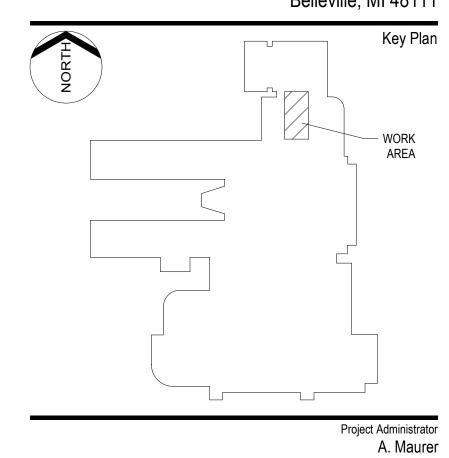




### RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111

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N. Moeggenborg
Project Architect / Engineer
N. Moeggenborg



N. Moeggenborg Approved J. Schwartz Drawing Scale 1/4" = 1'-0" Issue Date Issued for Design Development 07-03-2024

First Floor Demolition Plan

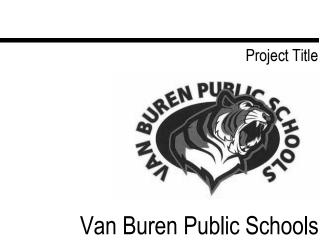
 $^{\circ}$  2024 integrated  $ext{design}$  solutions, LLC

ī**D**§ Project Number

1441 west long lake, suite 200 troy, michigan 48098

248.823.2100 www.ids-michigan.com

5211 cascade road SE, suite 300 grand rapids, michigan 49546



### RAHS Belleville High School

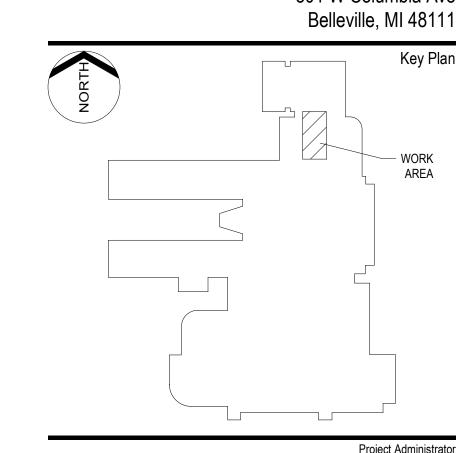
501 W Columbia Ave Belleville, MI 48111

A. Maurer

Project Designer
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Project Architect / Engineer
N. Moeggenborg

N. Moeggenborg



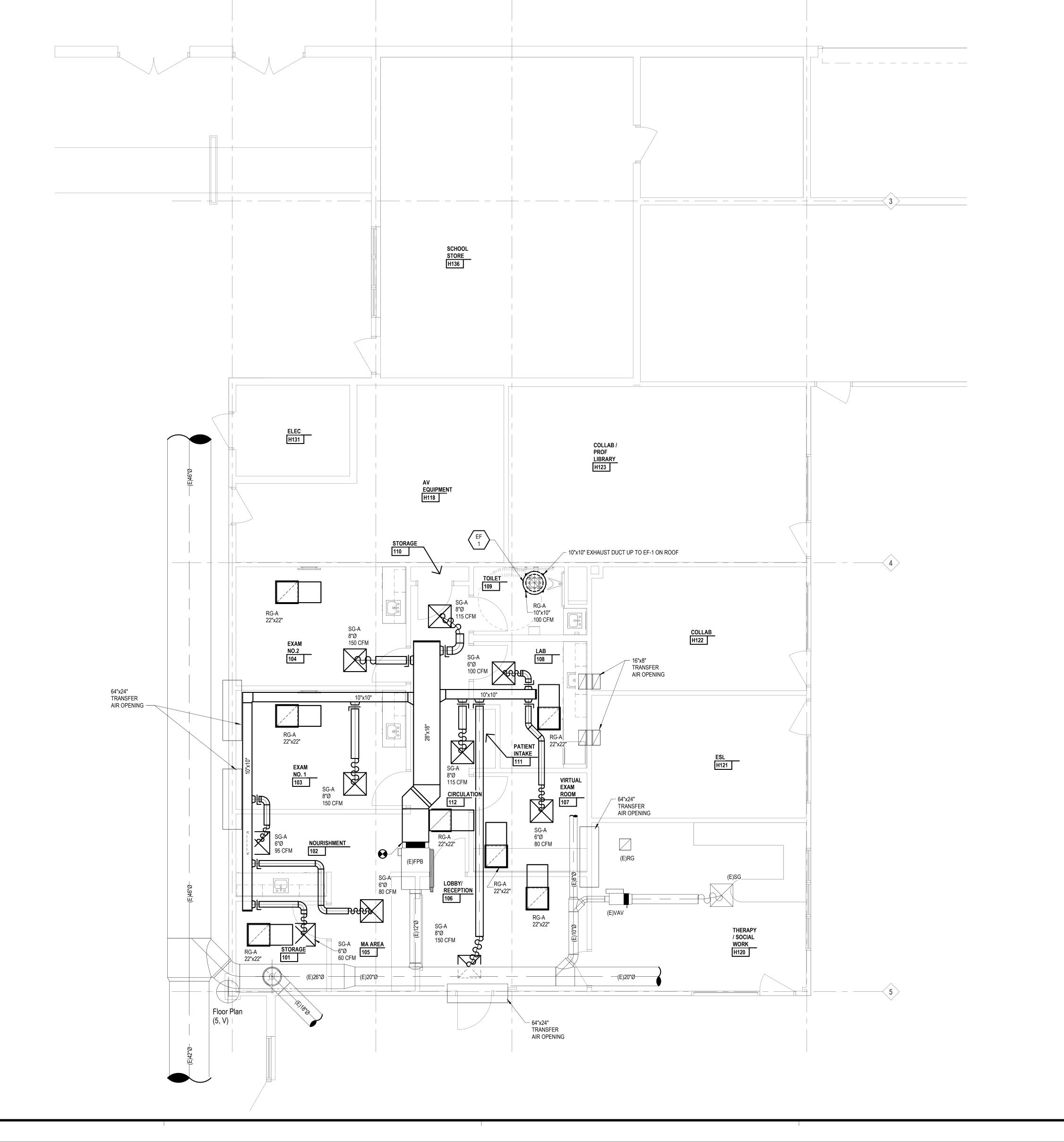
Approved J. Schwartz Drawing Scale 1/4" = 1'-0" Issue Date Issued for Design Development 07-03-2024

 $\circ$  2024 Integrated  $ext{design}$  solutions, LLC

First Floor Sheet Metal Plan

ī**D**§ Project Number

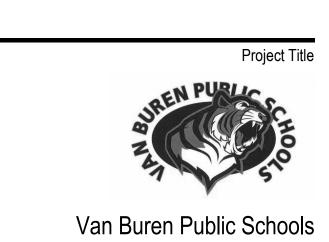
24167-1000



1441 west long lake, suite 200 troy, michigan 48098

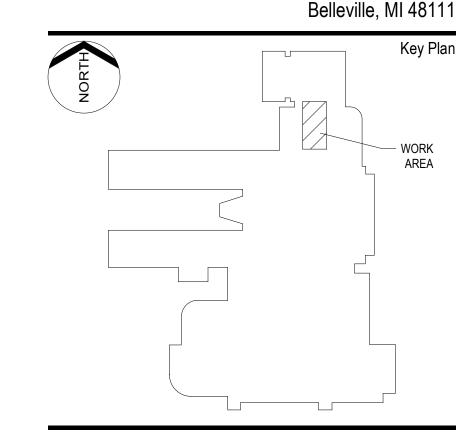
> 248.823.2100 www.ids-michigan.com

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### RAHS Belleville High School

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Drawn By
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Q.M. Review
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Approved
J. Schwartz
Drawing Scale
1/4" = 1'-0"
Issued for Issue Date
Design Development 07-03-2024

Project Designer
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Project Architect / Engineer
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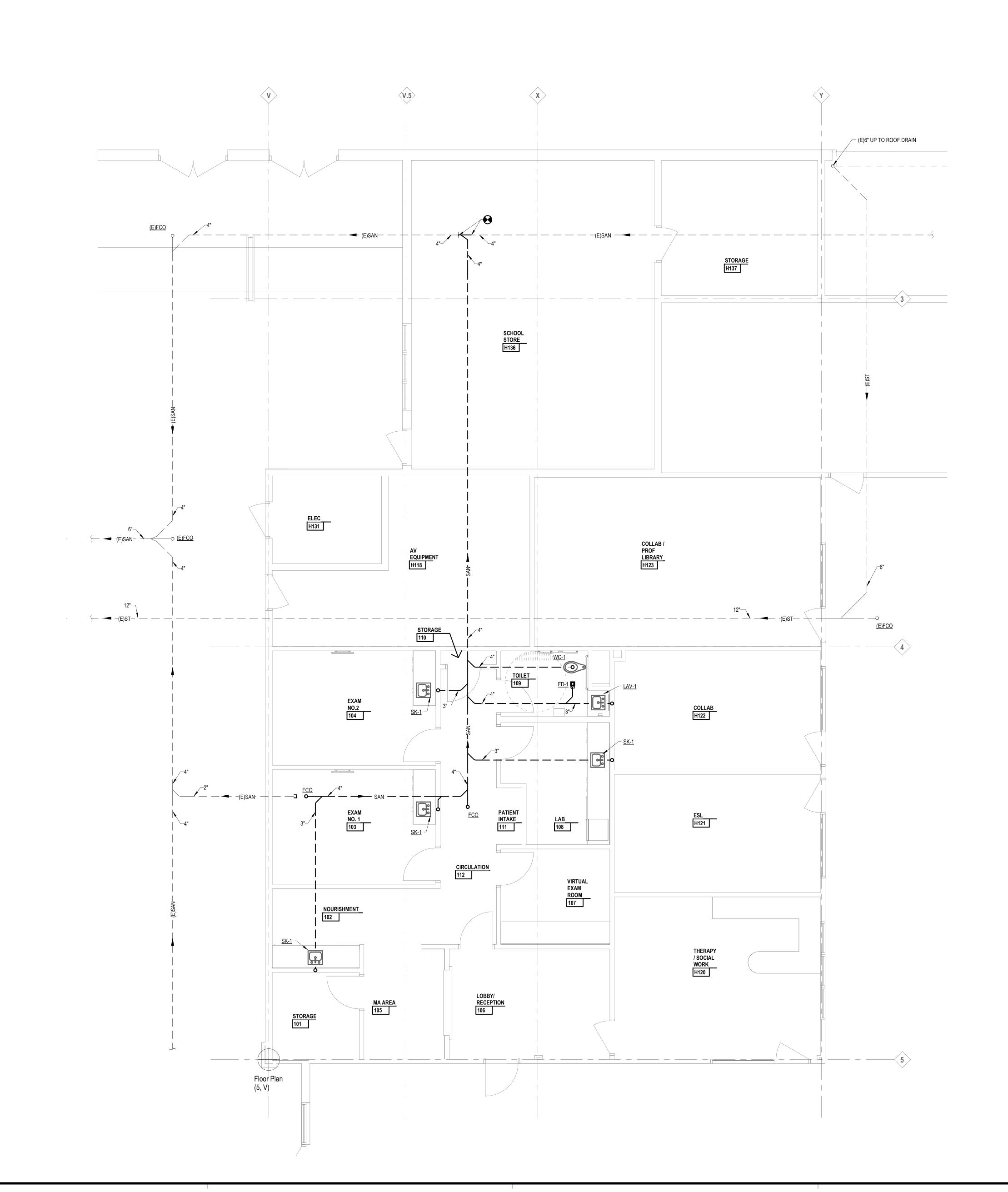
First Floor Underground Plumbing Plan

ī**D**§ Project Number

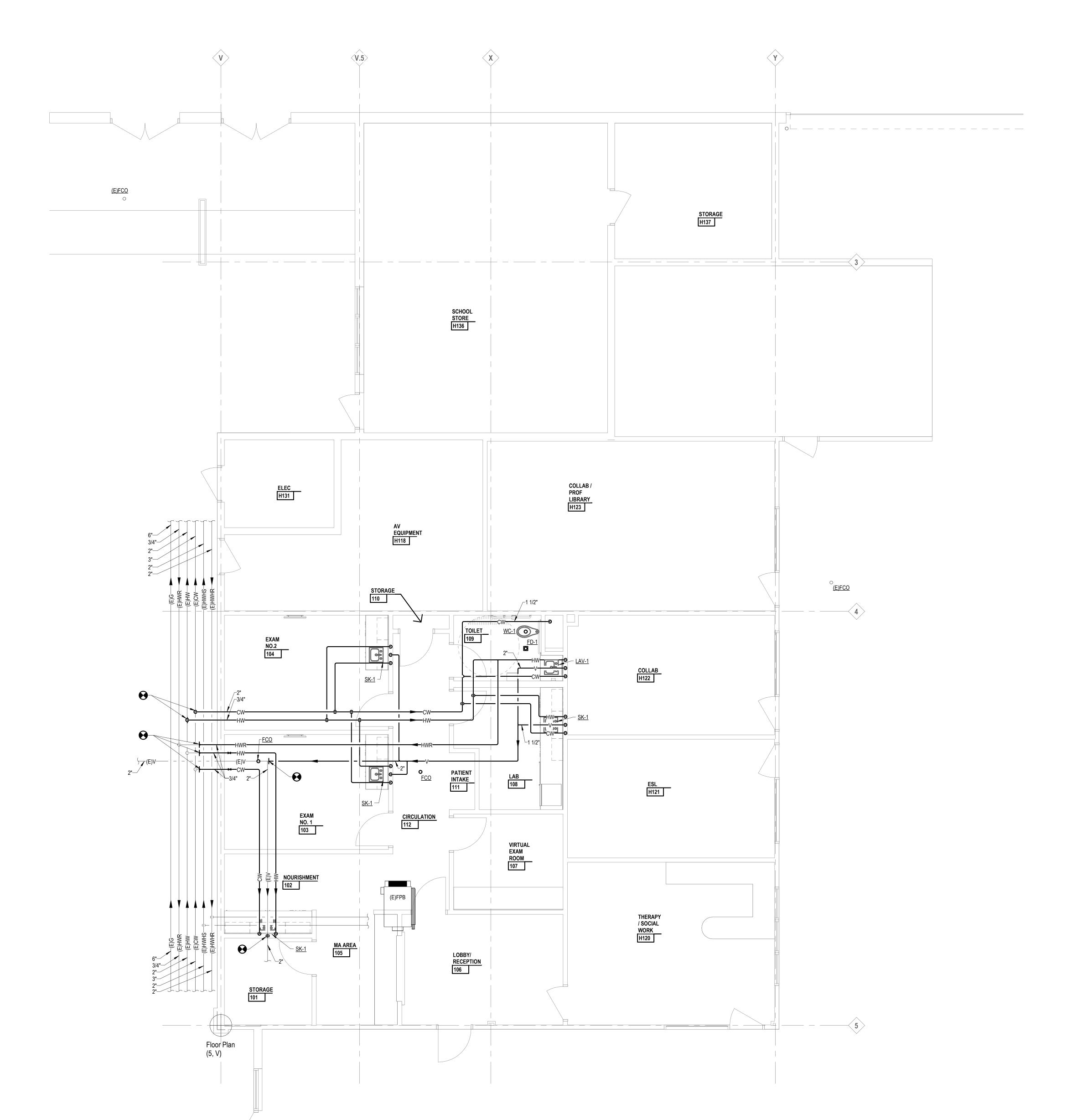
M4.1U

Drawing Number

24167-1000





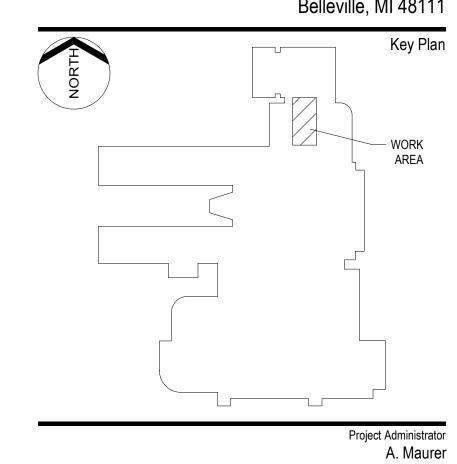


Project In

Van Buren Public Schools

### RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111



Project Designer
N. Moeggenborg
Project Architect / Engineer
N. Moeggenborg
Drawn By
N. Moeggenborg
Q.M. Review
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Approved
J. Schwartz
Drawing Scale
1/4" = 1'-0"
Issued for Issue Date
Design Development 07-03-2024

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First Floor Plumbing and HVAC Piping Plan

ī**D**§ Project Number

Drawing Number

M4.1

24167-1000

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Van Buren Public Schools

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Drawing Scale

Issue Date

Issued for

Design Development 07-03-2024

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No Scale

Project Architect / Engineer N. Moeggenborg

A. Maurer

Project Designer

RAHS Belleville High School

GRILLE, REGISTER AND DIFFUSER SCHEDULE								
MARK	CORE STYLE	BORDER FRAME TYPE	MODULE SIZE	FINISH	ACCESSORY	CONSTRUCTION	"PRICE" MODEL No.	REMARKS
SD-A	PANEL	NOTE 1	24"x24"	WHITE	NONE	STEEL	SPD	
RG-A	PERFORATED	NOTE 1	24"x24"	WHITE	NONE	STEEL	PDDR	

24"x24"

1. COORDINATE MOUNTING FRAMES WITH REFLECTED CEILING PLANS.

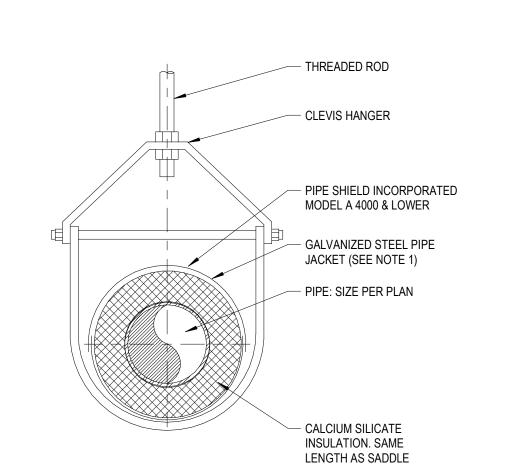
2. ALL WALL AND DUCT MOUNTED GRILLES SHALL HAVE COUNTER-SUNK SCREWS.

EG-A PERFORATED NOTE 1

3. SG-B & SG-C FRONT BLADES PARALLEL TO SHORT DIMENSION. 4. COORDINATE LENGTH OF ALL LINEAR SUPPLIES AND RETURNS WITH ARCHITECTURAL FLOOR PLANS AND REFLECTED CEILING PLANS.

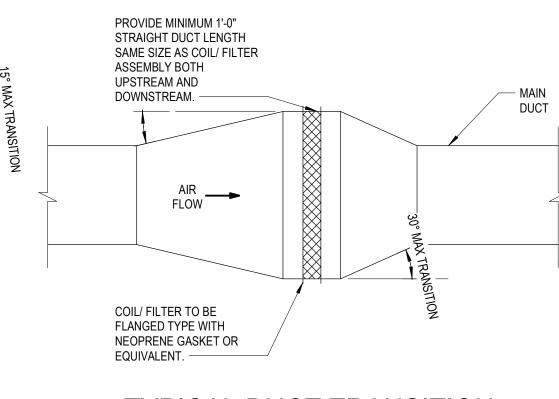
WHITE

NONE

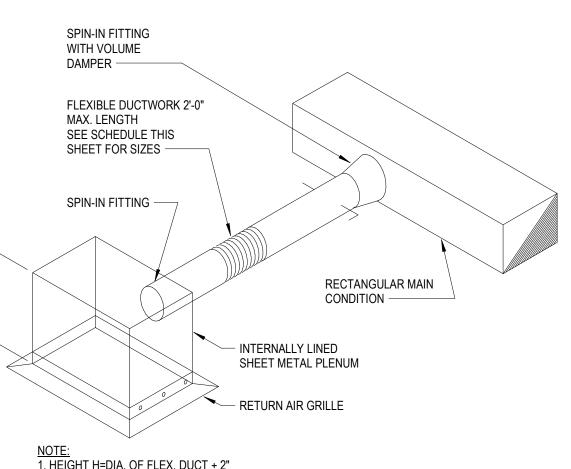


### SINGLE PIPE SUPPORT (LESS THAN 4")

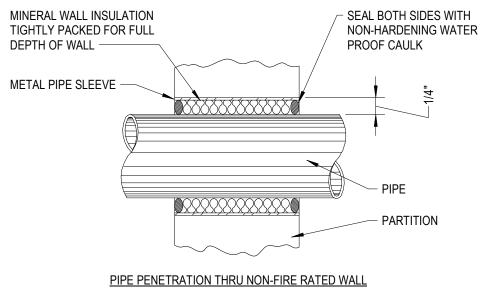
NOTES: 1. PROVIDE GALVANIZED SHEET METAL INSULATION JACKET AS FOLLOWS: GAUGE: 2" TO 4"



## TYPICAL DUCT TRANSITION

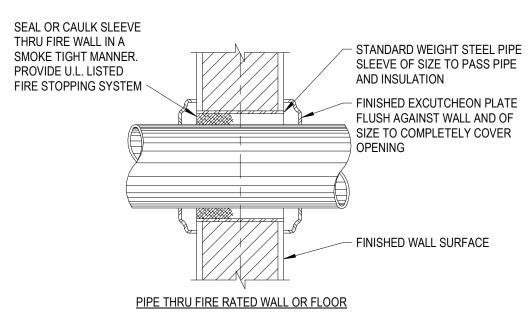


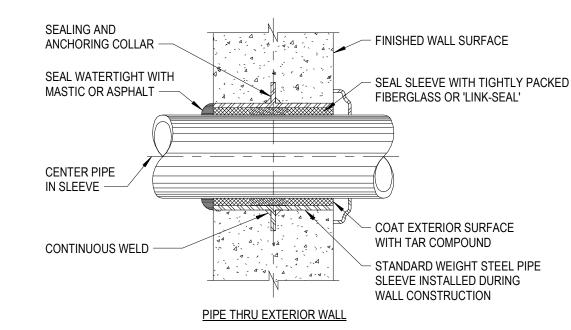
# **BRANCH CONNECTION DETAIL**



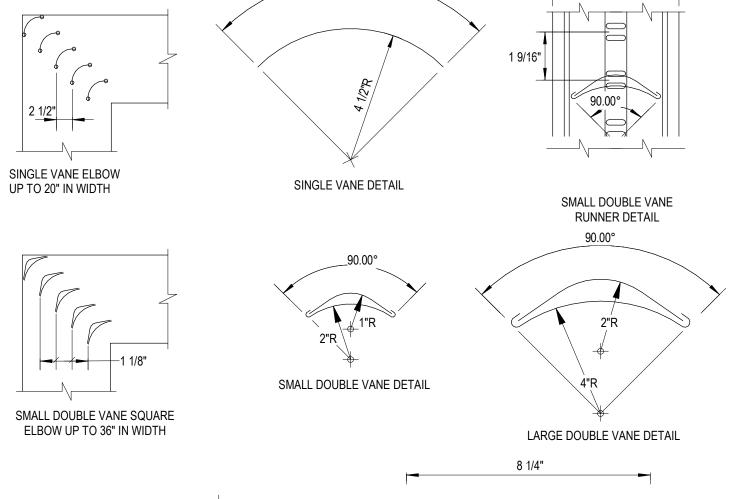
PDDR

STEEL





## PIPE PENETRATIONS



LARGE DOUBLE VANE SQUARE ELBOW LARGE DOUBLE VANE RUNNER DETAIL MORE THAN 36" IN WIDTH

**VELOCITY** 

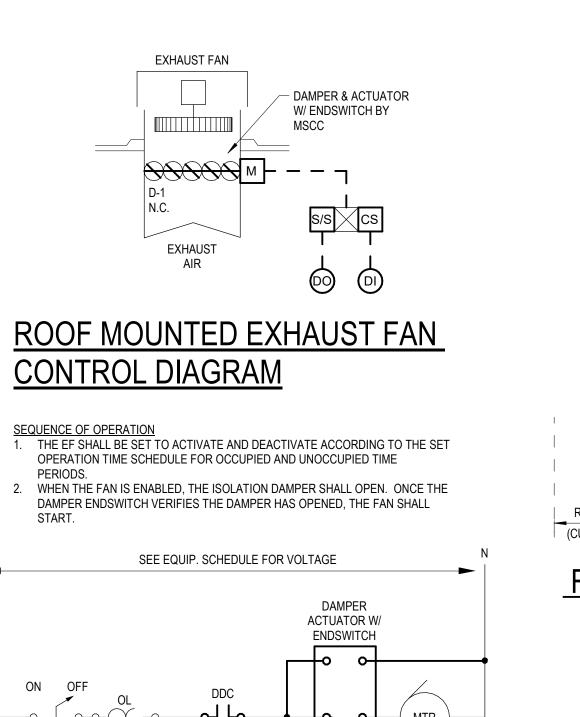
SQUARE AND RECTANGULAR ELBOWS - LOW

Details, Schedules, and Mechanical System

24167-1000

NOTES

1. THE MECHANICAL SYSTEMS CONTROLS CONTRACTOR (MSCC) SHALL PROVIDE A NEW BUILDING AUTOMATION SYSTEM (BAS) JACE CONTROLLER TYPICAL CEILING RETURN AND/OR GATEWAY/INTEGRATION DEVICE OR DEVICES, POWER SUPPLIES, AND NEMA 1 ENCLOSURES AS NECESSARY TO INTEGRATE ALL FIELD DEVICES AIR GRILLE SOUND TRAP AND DEVICE NETWORKS TO THE COMMON VAN BUREN SCHOOLS TRIDIUM BUILDING AUTOMATION SYSTEM (BAS) FRONT END SERVER. PROVIDE ETHERNET IP DATA CONNECTION(S) AND LOCATE DEVICE(S) AS NECESSARY IN COORDINATION WITH THE ELECTRICAL/TECHNOLOGY CONTRACTOR AND



TYPICAL SINGLE PHASE EXHAUST FAN WIRING DETAIL

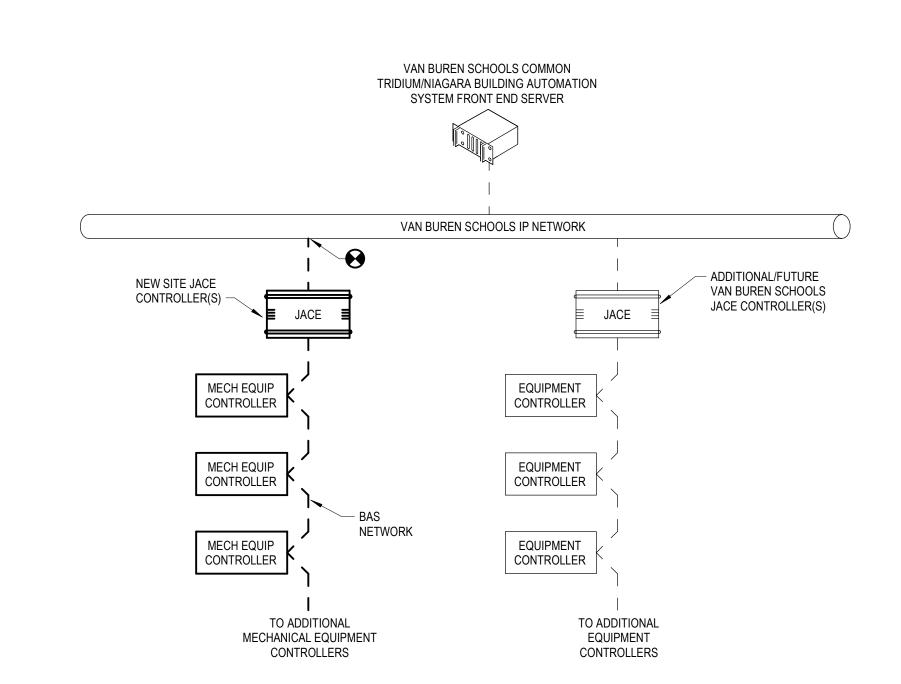
SEE EQUIP. SCHEDULE FOR VOLTAGE

EXHAUST FAN

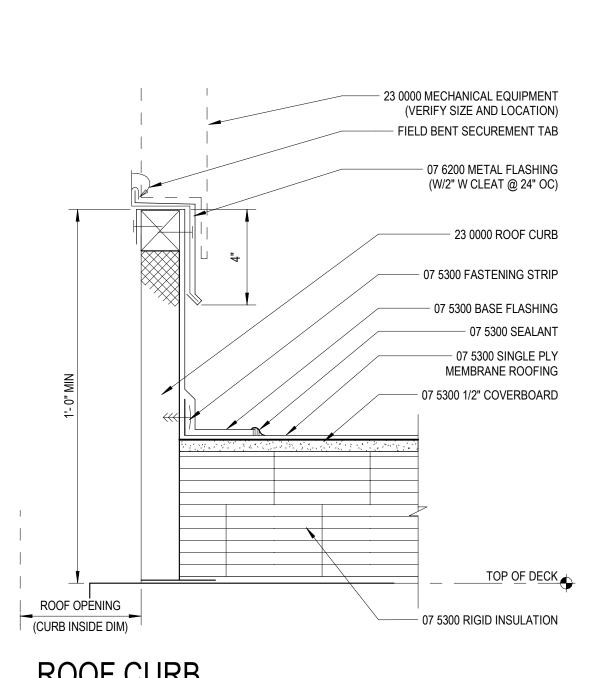
EXHAUST AIR

**CONTROL DIAGRAM** 

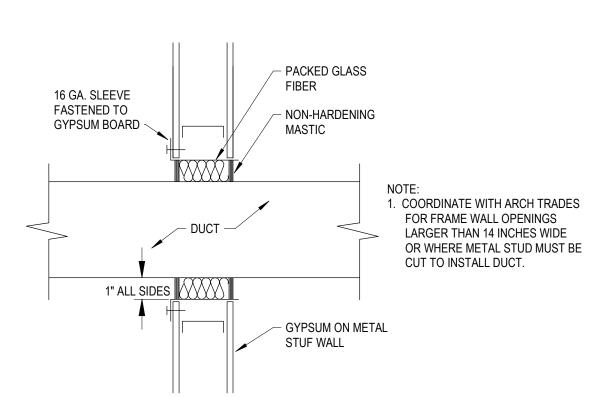
MSCC



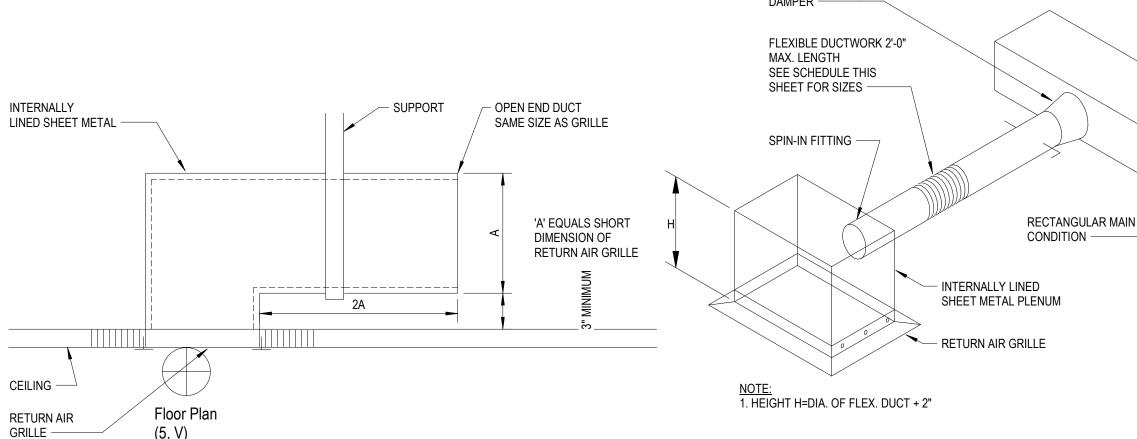
### BUILDING AUTOMATION SYSTEM NETWORK RISER DIAGRAM



ROOF CURB SINGLE PLY MEMBRANE ROOFING



## **DUCT SEAL AT NON-RATED WALLS**



RETURN & EXHAUST AIR GRILLE

ī**D**§ Project Number

AUXILIARY SYSTEMS

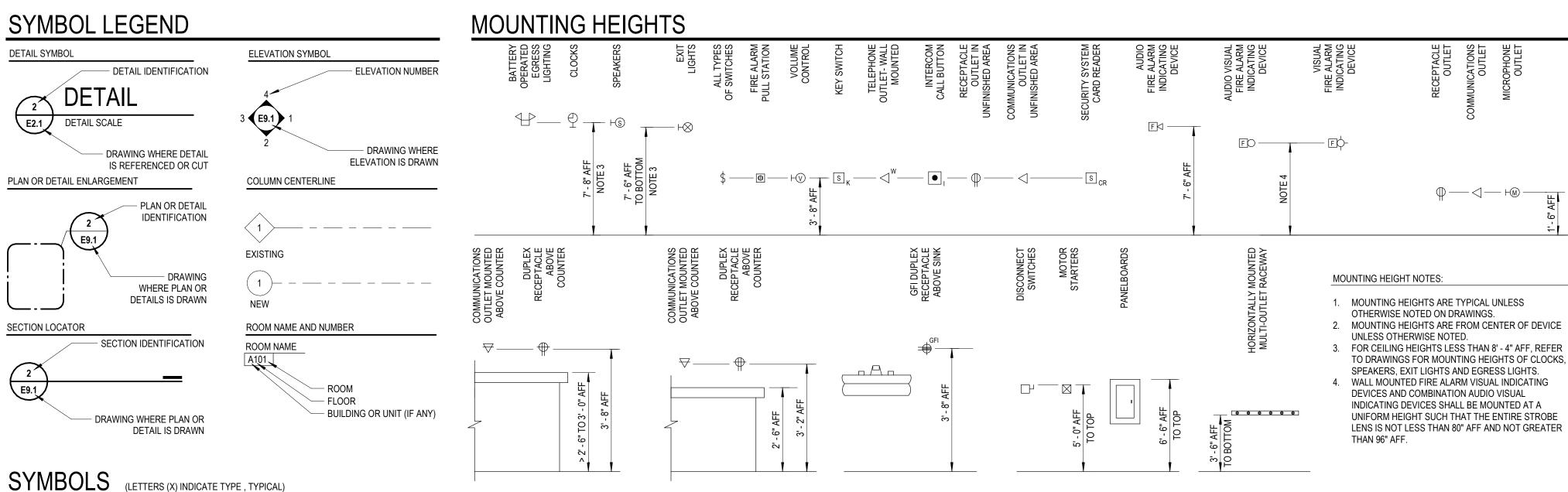
SINGLE PHASE MOTOR

THREE PHASE MOTOR

MAGNETIC MOTOR STARTER

COMBINATION MAGNETIC MOTOR STARTER & FUSED

DISCONNECT SWITCH - SWITCH SIZE / FUSE SIZE



LINE VOLTAGE SINGLE POLE SWITCH LIGHTING FIXTURE; RECESSED OR SURFACE MOUNTED POWER FLOOR BOX LINE VOLTAGE DOUBLE POLE SWITCH DUPLEX RECEPTACLE OUTLET MOUNTED LIGHTING FIXTURE; RECESSED OR SURFACE MOUNTED ABOVE COUNTER 30/30A ON NIGHT LIGHT OR EMERGENCY CIRCUIT LINE VOLTAGE THREE WAY SWITCH DUPLEX RECEPTACLE OUTLET WITH INTEGRAL GROUND LINE VOLTAGE FOUR WAY SWITCH GFI LIGHTING FIXTURE; PENDANT MOUNTED \$ FAULT CIRCUIT INTERRUPTER PROTECTION LINE VOLTAGE KEY OPERATED SWITCH LIGHTING FIXTURE; PENDANT MOUNTED ON NIGHT DUPLEX RECEPTACLE OUTLET CONNECTED TO UPSTREAM GROUND FAULT CIRCUIT INTERRUPTER VSD LIGHT OR EMERGENCY CIRCUIT LINE VOLTAGE 'WALL BOX' DIMMER SWITCH PROTECTION DEVICE STRIP LIGHTING FIXTURE LINE VOLTAGE WALL SWITCH OCCUPANCY SENSOR DUPLEX RECEPTACLE OUTLET WITH INTEGRAL SURGE WITH ON/OFF PUSHBUTTONS = ss STRIP LIGHTING FIXTURE SUPPRESSION LINE VOLTAGE WALL SWITCH OCCUPANCY SENSOR ON NIGHT LIGHT OR EMERGENCY CIRCUIT \$ DUPLEX RECEPTACLE OUTLET CONNECTED TO PH WITH ON/OFF & DIMMING PUSHBUTTONS  $\Longrightarrow$ ss UPSTREAM SURGE SUPPRESSION DEVICE LIGHTING FIXTURE; RECESSED AIMABLE OR WALL LINE VOLTAGE WALL SWITCH OCCUPANCY SENSOR 😀 DUPLEX RECEPTACLE OUTLET SPLIT WIRED WITH 2 ZONE ON/OFF PUSHBUTTONS DUPLEX RECEPTACLE OUTLET WITH ISOLATED GROUND LIGHTING FIXTURE; RECESSED OR PENDANT MTD & LINE VOLTAGE SWITCH WITH PILOT LIGHT QUAD RECEPTACLE OUTLET LIGHTING FIXTURE; RECESSED OR PENDANT MTD \$\_ LINE VOLTAGE SWITCH WITH TIMER ON NIGHT LIGHT OR EMERGENCY CIRCUIT QUAD RECEPTACLE OUTLET MOUNTED ABOVE COUNTER LINE VOLTAGE SINGLE POLE SWITCHES QUAD RECEPTACLE OUTLET WITH ONE (1) INTEGRAL FOR DUAL LEVEL LIGHTING CONTROL LIGHTING FIXTURE; SURFACE MOUNTED SURGE SUPPRESSION TYPE RECEPTACLE AND ONE (1) LINE VOLTAGE THREE WAY SWITCHES

SS SS SURGE SUPPRESSION PROTECTED RECEPTACLE LIGHTING FIXTURE; SURFACE MOUNTED \$30 \$50 FOR DUAL LEVEL LIGHTING CONTROL SPECIAL RECEPTACLE AS INDICATED ON NIGHT LIGHT OR EMERGENCY CIRCUIT LOW VOLTAGE PUSHBUTTON STATION LV - 1 ZONE ON/OFF POWER/COMMUNICATIONS POLE TRACK LIGHTING LVD - 1 ZONE ON/OFF & DIMMING SPECIAL POWER CONNECTION LV2 - 2 ZONE ON/OFF LIGHTING FIXTURE; WALL MOUNTED LV2D - 2 ZONE ON/OFF & DIMMING CD CORD DROP (C) W - LOW VOLTAGE WIRELESS LIGHTING FIXTURE: WALL MOUNTED CORD REEL CO ON NIGHT LIGHT OR EMERGENCY CIRCUIT CEILING MOUNTED OCCUPANCY SENSOR POKE THROUGH ASSEMBLY LIGHTING FIXTURE; UNDERCABINET MOUNTED HOS WALL MOUNTED OCCUPANCY SENSOR LIGHTING FIXTURE; COVE MOUNTED SILVX CEILING MOUNTED LINE VOLTAGE OCCUPANCY SENSOR JUNCTION BOX - CEILING MOUNTED EXIT SIGN LIGHTING FIXTURE; FACES INDICATED BY WALL MOUNTED LINE VOLTAGE OCCUPANCY SENSOR JUNCTION BOX - WALL MOUNTED SHADING, DIRECTIONAL ARROWS AS INDICATED LC LIGHTING CONTACTOR PUSHBUTTON STATION - EMERGENCY - CEILING OR PENDANT MOUNTED POWER SHUTDOWN DIG TIME SWITCH EXIT SIGN LIGHTING FIXTURE; FACES INDICATED BY HORIZONTALLY MOUNTED MULTI-OUTLET RACEWAY SHADING, DIRECTIONAL ARROWS AS INDICATED LIGHTING CONTROL PANEL VERTICALLY MOUNTED MULTI-OUTLET RACEWAY - WALL MOUNTED, END OR BACK PHOTOELECTRIC SWITCH \ PHOTOCELL - CEILING MOUNTED BUS DUCT FS PHOTOELECTRIC SWITCH \ PHOTOCELL - WALL MOUNTED COMBO EXIT SIGN LIGHTING FIXTURE AND EMERGENCY Ю LIGHTING UNIT; FACES INDICATED BY SHADING, EQUIPMENT MOUNTING BACKBOARD DIRECTIONAL ARROWS AS INDICATED BRANCH CIRCUIT EMERGENCY LIGHTING TRANSFER SWITCH - CEILING OR PENDANT MOUNTED PANELBOARD (250V AND LESS) LIGHTING CONTROL PRESET STATION OR TOUCHSCREEN COMBO EXIT SIGN LIGHTING FIXTURE AND EMERGENCY PANELBOARD (GREATER THAN 250V) LIGHTING UNIT; FACES INDICATED BY SHADING, DISTRIBUTION OR POWER PANELBOARD HO DIRECTIONAL ARROWS AS INDICATED - WALL MOUNTED, END OR BACK

SINGLE RECEPTACLE OUTLET

DUPLEX RECEPTACLE OUTLET

CEILING

DUPLEX RECEPTACLE OUTLET FLUSH MOUNTED IN

MOUNTED ABOVE COUNTER (PROTECTION OF DOWNSTREAM CONNECTED DEVICES)

DEAD-FRONT GROUND FAULT CIRCUIT INTERRUPTER

(PROTECTION OF DOWNSTREAM CONNECTED DEVICES) DEAD-FRONT GROUND FAULT CIRCUIT INTERRUPTER

CEILING MOUNTED SELF-CONTAINED EMERGENCY

WALL MOUNTED SELF-CONTAINED EMERGENCY

POLE MOUNTED AREA LIGHTING FIXTURE; QUANTITY

POST TOP POLE MOUNTED AREA LIGHTING FIXTURE

SITE LIGHTING FIXTURE; ADJUSTABLE FLOOD

LIGHTING UNIT

LIGHTING UNIT

SITE LIGHTING; BOLLARD — GFI

OF LUMINARIES AS INDICATED -GFI

CEILING MOUNTED HORN SPEAKER NON-FUSED DISCONNECT SWITCH HA -SWITCH SIZE SECURITY SYSTEM CARD READER FUSED DISCONNECT SWITCH -SWITCH SIZE/FUSE SIZE SECURITY SYSTEM DOOR CONTACT ENCLOSED CIRCUIT BREAKER SECURITY SYSTEM ELECTRIC STRIKE -CB RATING SECURITY SYSTEM ELECTRIFIED HARDWARE VARIABLE SPEED DRIVE SECURITY SYSTEM LOCKDOWN READER\BUTTON MAGNETIC CONTACTOR S K SECURITY SYSTEM KEY SWITCH N MANUAL MOTOR STARTER SECURITY SYSTEM MOTION DETECTOR HORSEPOWER RATED SWITCH © CEILING MOUNTED SECURITY CAMERA H> PACKAGED EQUIPMENT WITH INTEGRALLY **H**© WALL MOUNTED SECURITY CAMERA 7 MOUNTED PREWIRED CONTROL PANEL FIRE ALARM PULL STATION H FURNISHED AS INTEGRAL PART OF EQUIPMENT, OR AS INDICATED **EO** WALL MOUNTED A/V FIRE ALARM INDICATING DEVICE TRANSFORMER CEILING MOUNTED A/V FIRE ALARM INDICATING DEVICE WALL MOUNTED VISUAL FIRE ALARM INDICATING DEVICE LIGHTNING PROTECTION AIR TERMINAL CEILING MOUNTED VISUAL FIRE ALARM INDICATING DEVICE  $\mathbf{q}_{\mathsf{x}}$ GROUND BUS BAR AS INDICATED WALL MOUNTED AUDIO FIRE ALARM INDICATING DEVICE © CEILING MOUNTED AUDIO FIRE ALARM INDICATING DEVICE WALL MOUNTED VISUAL EMERGENCY MASS NOTIFICATION INDICATING DEVICE CEILING MOUNTED SINGLE FACED CLOCK CEILING MOUNTED VISUAL EMERGENCY MASS NOTIFICATION INDICATING DEVICE CEILING MOUNTED DOUBLE FACED CLOCK WALL MOUNTED SINGLE FACED CLOCK WALL MOUNTED AREA SMOKE DETECTOR CEILING MOUNTED AREA SMOKE DETECTOR

(A) (V) COMBINATION WALL MOUNTED SPEAKER/CLOCK 🕞 CEILING MOUNTED COMBINATION AREA SMOKE & CARBON MONOXIDE DETECTOR CEILING MOUNTED COMBINATION SPEAKER/CLOCK WALL MOUNTED TEMPERATURE DETECTOR WALL MOUNTED DIGITAL CLOCK  $_{\mathfrak{G}_{_{\mathcal{T}}}}$ CEILING MOUNTED TEMPERATURE DETECTOR CEILING MOUNTED SPEAKER DUCT SMOKE DETECTOR •• CEILING MOUNTED SPEAKER CLUSTER WALL MOUNTED MAGNETIC DOOR HOLDER/RELEASE WALL MOUNTED SPEAKER WATER FLOW SWITCH CEILING MOUNTED MICROPHONE OUTLET TAMPER SWITCH COM WALL MOUNTED MICROPHONE OUTLET MONITOR MODULE WALL MOUNTED AUXILIARY OUTLET CONTROL MODULE OLS WALL MOUNTED VOLUME CONTROL FIRE FIGHTER TELEPHONE JACK WALL MOUNTED BELL FIRE ALARM CONTROL PANEL WALL MOUNTED CHIME WALL MOUNTED HORN SPEAKER SINGLE BED STATION - NURSE CALL

DOUBLE BED STATION - NURSE CALL

BATHROOM STATION - NURSE CALL \_\_ BATHROOM STATION PULL CORD - NURSE CALL CODE BLUE PUSHBUTTON - NURSE CALL NURSE CALL DUTY STATION NURSE CALL EMERGENCY STATION NURSE CALL MASTER STATION \_\_ \_ \_ NURSE CALL POWER SUPPLY NURSE CALL STAFF STATION NURSE CALL WALL MOUNTED DOME LIGHT NURSE CALL CEILING MOUNTED DOME LIGHT NURSE CALL WALL MOUNTED DOME LIGHT WITH CODE NURSE CALL CEILING MOUNTED DOME LIGHT WITH CODE BLUE WALL MOUNTED COMMUNICATIONS OUTLET —HP— WALL MOUNTED COMMUNICATIONS OUTLET — C— MOUNTED ABOVE COUNTER —HC— CEILING MOUNTED COMMUNICATIONS OUTLET COMMUNICATIONS FLOOR BOX POWER & COMMUNICATIONS FLOOR BOX INTERCOM CALL BUTTON HH INTERCOM CALL BUTTON WITH PRIVACY — E — <u>—с—</u> ANALOG AMPERE\VOLT METER ANALOG ENERGY USAGE METER — L — DIGITAL MULTI-FUNCTION METER KIRK KEY INTERLOCK CIRCUIT BREAKER SWITCH FUSE TRANSFORMER TRANSFER SWITCH THERMAL OVERLOAD CONTACTS XXXNG INDICATES WIRE SIZE AND CONDUIT SIZE DRAWOUT CIRCUIT BREAKER

AIR-MAG / VACUUM CIRCUIT BREAKER

**ENGINE GENERATOR** 

SYSTEM OR EQUIPMENT GROUND

EXOTHERMIC WELD OR BRAZED

CONDUIT IN OR BELOW FLOOR SLAB

HAZARDOUS LOCATION CONDUIT SEALING FITTING

CONNECTION

CABLE TRAY

OR BELOW GRADE

RACEWAY TURNED UP

RACEWAY TURNED DOWN

UNDERFLOOR DUCT - POWER

UNDERFLOOR DUCT - COMM

FLUSH IN-GRADE HAND HOLE

UNDERGROUND ELECTRICAL

UNDERGROUND FIBER OPTIC

UNDERGROUND LIGHTING

COMMUNICATIONS

UNDERGROUND COMMUNICATIONS

EMERGENCY "CODE BLUE" BOLLARD

UNDERFLOOR HEADER DUCT - POWER

UNDERFLOOR HEADER DUCT - COMM

<u>MISC</u>

ELECTRICAL DRAWING INDEX

Electrical Reference Information Enlarged Plan

E4.2 Enlarged Plans Diagrams and Details

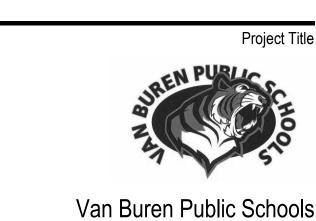
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#### PROJECT GENERAL NOTES

- 1. ALL ITEMS SHOWN HATCHED SHALL BE DISCONNECTED AND REMOVED. LIGHT LINE WEIGHT INDICATES EXISTING ITEMS TO REMAIN. HEAVY LINE WEIGHT INDICATES NEW ITEMS.
- 2. ITEMS DENOTED BY THE LETTER "R" INDICATE EXISTING ITEMS TO BE RELOCATED. THESE ITEMS SHALL BE DISCONNECTED, REMOVED AND STORED FOR REINSTALLATION IN NEW LOCATIONS AS INDICATED ON NEW WORK PLANS.
- 3. WHERE APPLICABLE AND NOT SPECIFICALLY INDICATED OTHERWISE EXISTING IN PLACE CONDUITS, JUNCTION BOXES, PULL BOXES AND HANGERS MAY BE REUSED FOR NEW WORK PROVIDING THAT THE INSTALLATION IS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND THE EXISTING ITEMS DO NOT INTERFERE WITH DEMOLITION OR NEW WORK OF ANY TRADES.
- 4. WHERE CONDUITS ARE ROUTED CONCEALED IN WALL CAVITIES FOR ELECTRICAL ITEMS INDICATED TO BE REMOVED, ABANDON THE CONDUIT CONCEALED IN THE WALL CAVITY, REMOVE THE CONDUIT EXITING THE WALL CAVITY INTO THE CEILING SPACE BEYOND THE FIRST FITTING OR JUNCTION BOX. REMOVE ALL SURFACE MOUNTED OUTLET BOXES ASSOCIATED WITH THE CONDUIT SYSTEM. ABANDON ALL FLUSH MOUNTED OUTLET BOXES ASSOCIATED WITH THE CONDUIT SYSTEM IN PLACE AND PROVIDE NEW BLANK COVER PLATES.
- 5. DISCONNECT AND REMOVE ALL ELECTRICAL EQUIPMENT AS INDICATED INCLUDING HANGERS, PULL BOXES, JUNCTION BOXES, CONDUIT AND WIRING FROM THE POWER SOURCE TO THE UTILIZATION EQUIPMENT.
- 6. WHERE REMOVAL OF CONDUIT AND WIRING AFFECTS THE OPERATION OF "UPSTREAM" AND/OR "DOWNSTREAM" UTILIZATION EQUIPMENT WHICH WAS NOT INDICATED TO BE REMOVED, PROVIDE ADDITIONAL CONDUIT AND WIRING TO RESTORE THE "UPSTREAM" AND "DOWNSTREAM" UTILIZATION EQUIPMENT TO ITS NORMAL OPERATION.
- 7. FURNISH ALL LABOR, MATERIALS, EQUIPMENT, AND SUPERVISION REQUIRED TO COMPLETE ALL DEMOLITION OF EXISTING ELECTRICAL EQUIPMENT AS SPECIFIED OR INDICATED. DISCONNECT, REMOVE AND RELOCATE ALL ITEMS AS REQUIRED TO FACILITATE THE NEW CONSTRUCTION, COORDINATE THE DEMOLITION REQUIREMENTS WITH ALL OTHER TRADES AND THE NEW WORK
- 8. NEW FIRE ALARM DEVICES SHALL BE COMPATIBLE WITH EXISTING FIRE ALARM SYSTEM. EXISTING FIRE ALARM SYSTEM IS MANUFACTURED BY NATIONAL TIME & SIGNAL. COORDINATE ALL SYSTEM REQUIREMENTS WITH MANUFACTURER.
- 9. PROVIDE A DEDICATED NEUTRAL CONDUCTOR WITHIN THE RACEWAY ALONG WITH THE PHASE CONDUCTORS FOR ALL FEEDERS AND BRANCH CIRCUITS.
- 10. PROVIDE AN EQUIPMENT GROUNDING CONDUCTOR WITHIN THE RACEWAY ALONG WITH THE PHASE CONDUCTORS FOR ALL FEEDERS AND BRANCH
- 11. ALL 120 VOLT, 20 AMPERE BRANCH CIRCUITS EXCEEDING 100'-0" IN LENGTH SHALL BE INSTALLED USING #10 AWG CONDUCTORS UNLESS OTHERWISE
- 12. ALL ELECTRICAL DEVICES AND ASSOCIATED OUTLET BOXES SHALL BE FLUSH MOUNTED UNLESS NOTED OTHERWISE. ALL CONDUIT AND WIRING SHALL BE CONCEALED. SURFACE METAL RACEWAY SHALL BE PERMITTED ONLY WHERE
- 13. MOUNTING HEIGHT OF RECESSED JUNCTION OR OUTLET BOXES IN BLOCK OR BRICK MAY BE ADJUSTED TO THE NEAREST HORIZONTAL COURSING AS LONG AS THE SPECIFIED MOUNTING HEIGHT IS NOT EXCEEDED. COVER PLATE TO CONCEAL GROUT LINE.
- 14. FOR ALL ROOF MOUNTED MECHANICAL EQUIPMENT WHERE ASSOCIATED DISCONNECT SWITCHES OR RECEPTACLES ARE INSTALLED BY THE ELECTRICAL CONTRACTOR, FURNISH AND INSTALL ADDITIONAL HORIZONTAL AND VERTICAL UNISTRUT WITH LATERAL BRACING FROM THE ROOF CURB SUPPORTING THE MECHANICAL UNIT FOR MOUNTING OF THE DISCONNECT SWITCHES OR RECEPTACLES. DISCONNECT SWITCH SHALL BE MOUNTED 48" ABOVE THE FINISH ROOF. ALL UNISTRUT AND ASSOCIATED HARDWARE, FASTENERS, ETC., SHALL BE GALVANIZED.
- 15. ALL WORK AND EQUIPMENT SHALL COMPLY WITH THE NEC INCLUDING ANY MODIFICATIONS BY THE LOCAL JURISDICTION. THE MEANS AND METHODS USED BY THIS CONTRACTOR SHALL CONFORM TO NEC SECTION 110.3.
- 16. FIRE ALARM SHOP DRAWINGS SHALL BE SUBMITTED TO THE FIRE MARSHAL FOR APPROVAL PRIOR TO SUBMITTING FOR ENGINEER APPROVAL.





### RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111

Project Administrator

Project Architect / Engineer

A. Maurer

T. Morgan

Project Designer

THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS, MATERIALS, ABBREVIATIONS AND STANDARDS INFORMATION SHOWN ON THIS SHEET

i Toject A	Torritoct / Engineer
	T. Morgan
	Drawn By
	T. Morgan
	Q.M. Review
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	Approved
	-
	Drawing Scale
	No Scale
 Issued for	Issue Date
Design Development	07-03-2024
2 001g.11 2 0 1 010 p.1110111	<u> </u>

**Electrical Reference Information** 

 $\circ$  2024 Integrated  $ext{design}$  solutions, LL

ī**D**§ Project Number

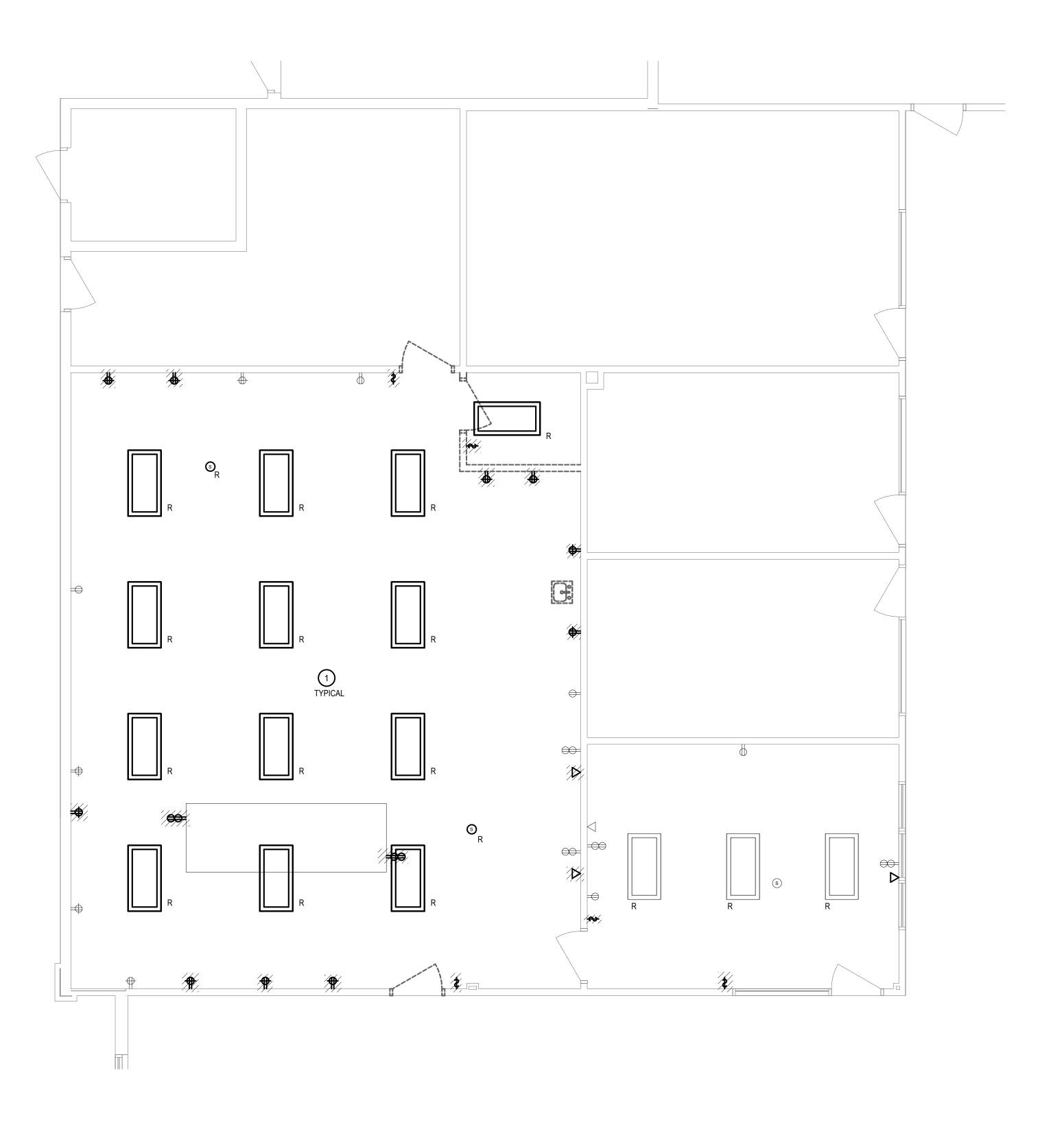
**Drawing Number** 

24167-1000

ER.0

INTEGRATED design solutions architecture engineering interiors & technology

1441 west long lake, suite 200 troy, michigan 48098 5211 cascade road SE, suite 300 grand rapids, michigan 49546 248.823.2100 www.ids-michigan.com



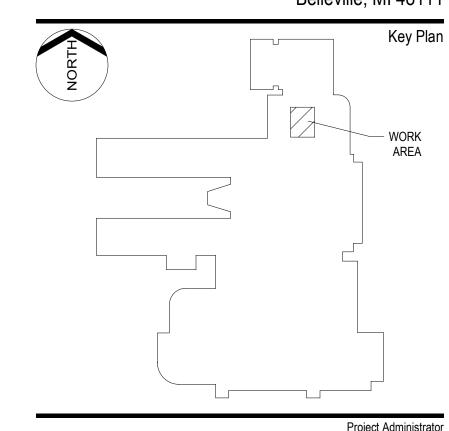
1 FIRST FLOOR ELECTRICAL DEMOLITION PLAN



### RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111

Van Buren Public Schools



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Issued for	Issue Dat
Design Development	07-03-202

Enlarged Plan

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Drawing Number

 $\circ$  2024 Integrated  ${f design}$  solutions, LLC

24167-1000

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Van Buren Public Schools

501 W Columbia Ave Belleville, MI 48111

A. Maurer

Project Designer Designer

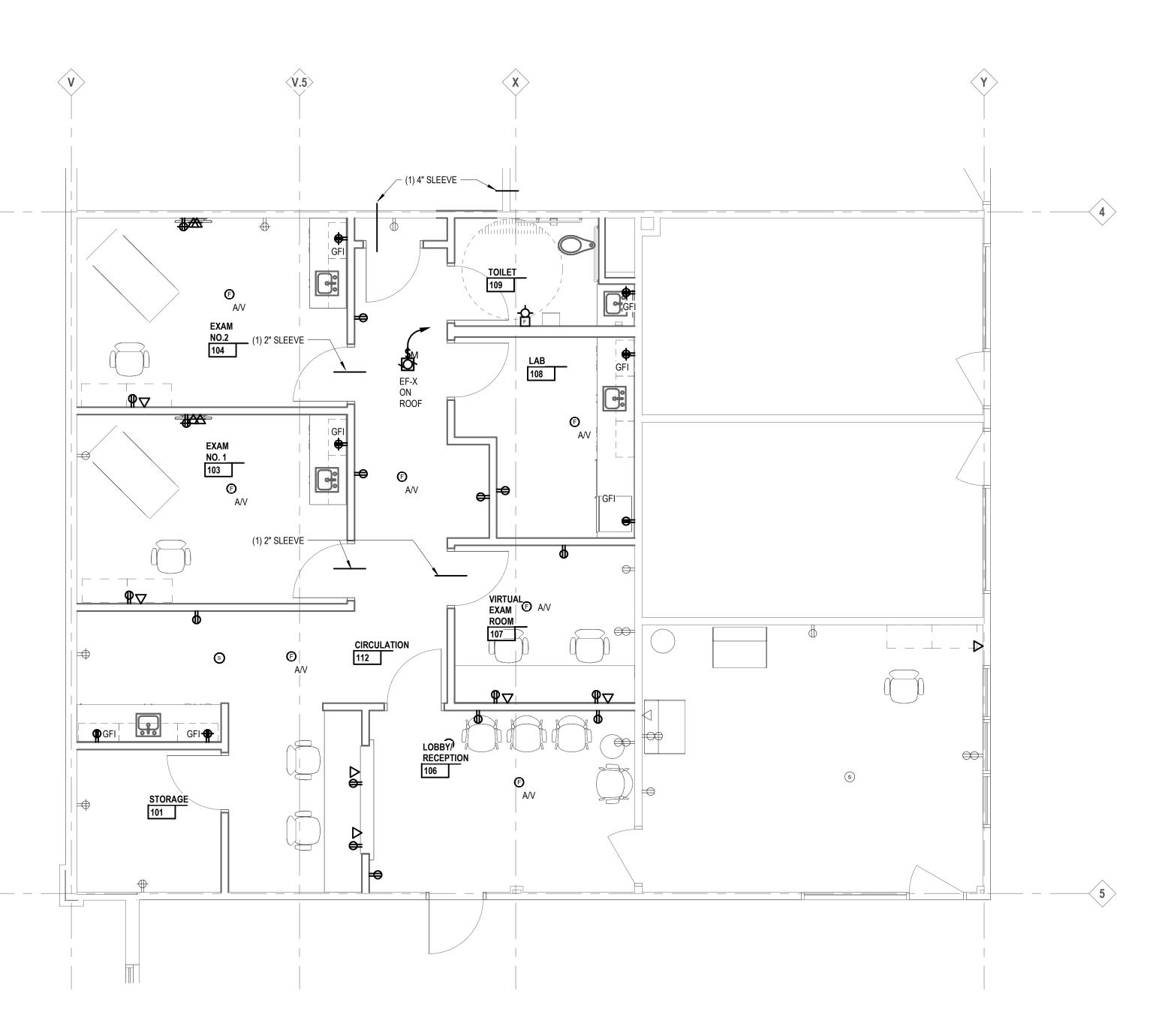
T. Morgan

Issue Date

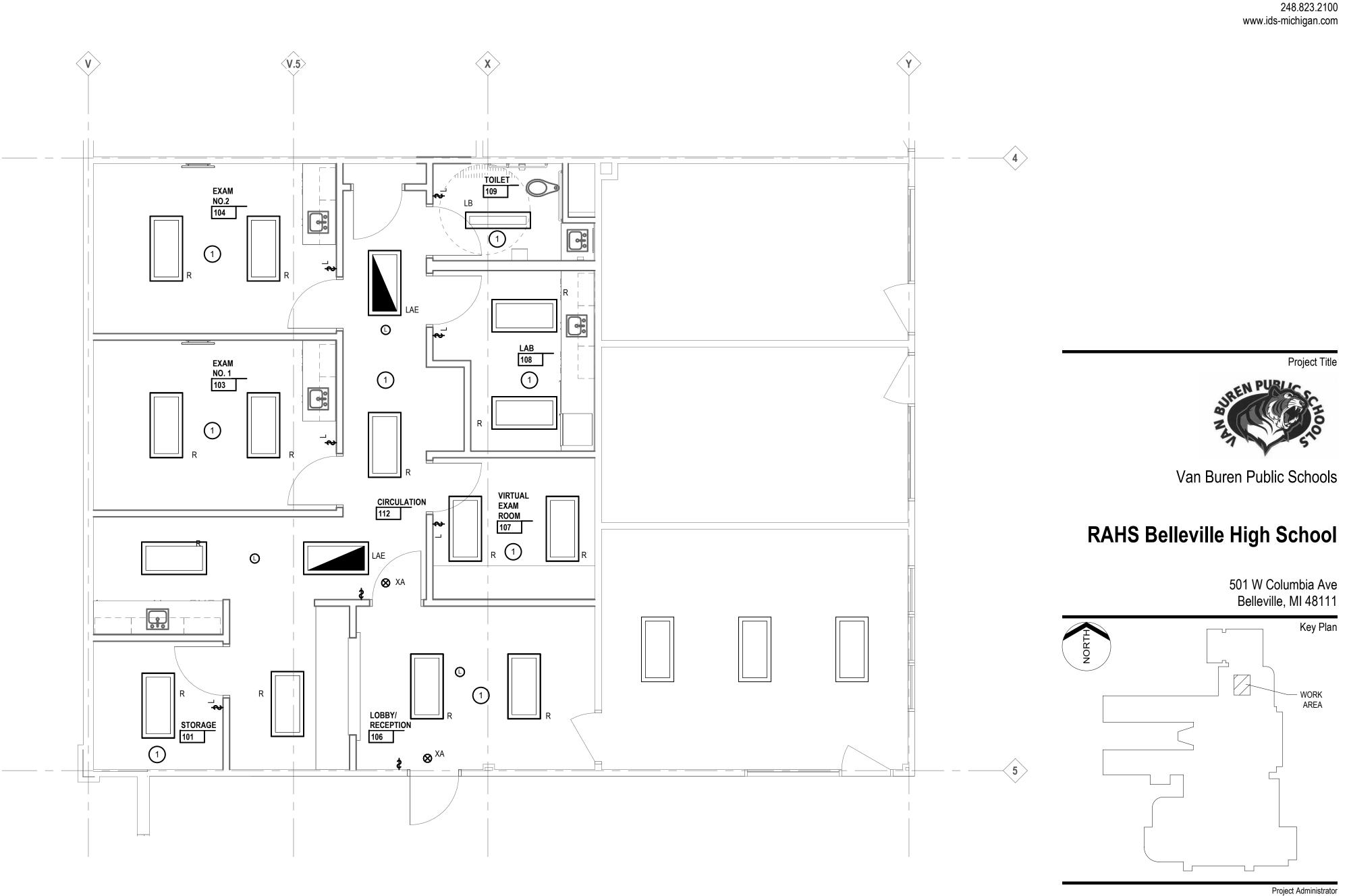
Issued for

Author Q.M. Review

Project Architect / Engineer



FIRST FLOOR POWER & AUXILIARY SYSTEMS PLAN



# 1 FIRST FLOOR LIGHTING PLAN

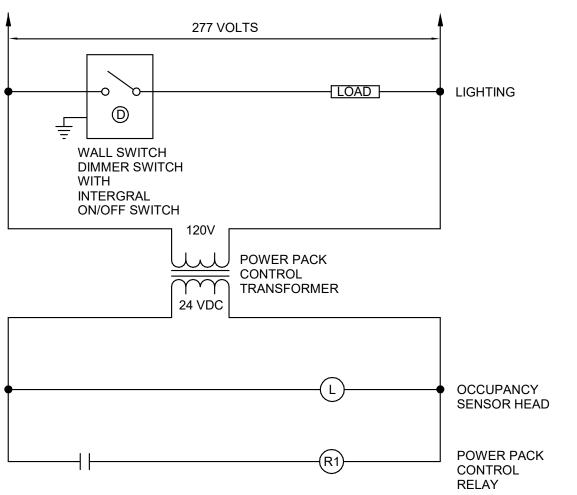
### LIGHTING FIXTURE SCHEDULE

2' x 4' RECESSED LED BACK-LIT FLAT PANEL WITH: 4800 NOMINAL LUMEN PACKAGE, 3" MAXIMUM THICKNESS, POST-PAINTED GALVANIZED STEEL HOUSING, WHITE PAINTED ALUMINUM OR 20 GA. STEEL FRAME CONSTRUCTION, FACTORY INSTALLED DIE-FORMED DRIVER BOX ACCESSIBLE ABOVE, 0.125" THICK (MIN) PMMA OPAL FORSTED LENS, 100 LPW MIN EFFICACY, INTEGRAL SURGE PROTECTION, DRIVER DISCONNECT, L70 PROJECTED LIFE OF >90K HOURS AT 25 DEGREES CELCIUS AMBIENT TEMPERATURE, 120 VOLTAGE REPLACEABLE POWER SUPPLY WITH FLICKER FREE 10% MINIMUM DIMMING, T-BAR CLIPS FOR INSTALLATION IN A LAY-IN CEILING, DLC LISTED AND UL DAMP LOCATION LISTING. MANUFACTURER: ACUITY: SPX SERIES MINIMUM 80 CRI, 3500K CCT, 4800 LUMENS SOURCE: INPUT WATTS: SAME AS TYPE "LA", EXCEPT PROVIDE INTEGRAL EMERGENCY BATTERY RATED FOR 1541 LUMENS AT 10-14 W PROVIDING CONTINUOUS RATED LIGHT OUTPUT FOR 90 MINUTES. MANUFACTURER: ACUITY: SPX SERIES MINIMUM 80 CRI, 3500K CCT INPUT WATTS: 43 LB DESCRIPTION: SAME AS TYPE "LA" EXCEPT 1' X 4'; MOUNTED IN GYMSUM CEILING MANUFACTURER: ACUITY: SPX SERIES SOURCE: MINIMUM 80 CRI, 4800 DELIVERED LUMENS, 3500K CCT MAX INPUT WATTS: 39 WATTS MAXIMUM DESCRIPTION: SINGLE FACE, UNIVERSAL WALL MOUNT LED EMERGENCY EXIT LUMINAIRE WITH: DIE-CAST ALUMINUM FRAME, BACK PLATE AND MOUNTING CANOPY, WHITE DIE-CAST ALUMINUM (HOUSING), DIE-CAST ALUMINUM WHITE FACE; RED

MANUFACTURER: LITHONIA: LE SERIES SOURCE: FURNISHED WITH FIXTURE INPUT WATTS: 1.2W (SINGLE)

24167-1000

 $\circ$  2024 integrated  $ext{design}$  solutions, LLC IDS Drawing Title STENCIL STYLE LETTERS; DIRECTIONAL ARROWS AS INDICATED ON PLAN; LED LAMPS WITH DIFFUSE POLYCARBONATE LENS; SEALED MAINTENANCE FREE NICKEL CADMIUM BATTERY; LOW VOLTAGE DISCONNECT; SOLID STATE/FULLY AUTOMATIC AND CURRENT LIMITED CHARTER; BOTTOM MOUNTED TEST-SWITCH/PILOT LIGHT; BROWNOUT PROTECTION, FILTERED POWER SUPPLY TO PROTECT LED'S FROM SURGES, AND FULL SELF-DIAGNOSTICS, DUAL 120/277 VOLT NORMAL OPERATION AND UL LISTED. PROVIDE WIRE GUARD WHERE INDICATED ON PLANS ī **D** S Project Number Drawing Number

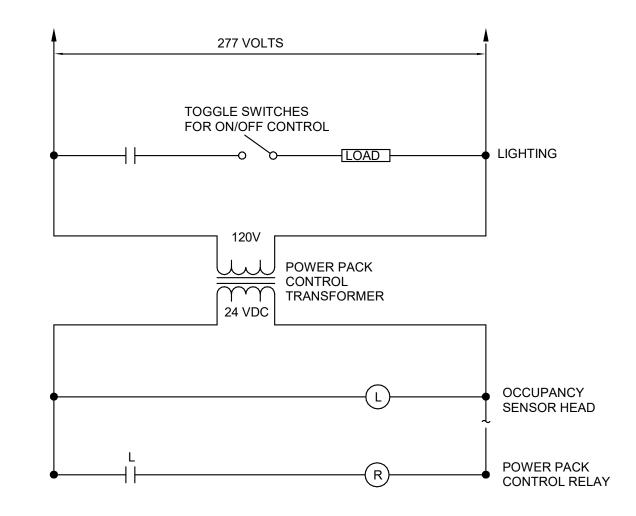


### CEILING OCCUPANCY SENSOR WITH DIMMER LIGHTING CONTROL

NO SCALE

1. ALL LOW VOLTAGE WIRING SHALL BE #18 AWG MINIMUM. 2. MULTIPLE SENSORS AND RELAY CONTROL PANEL OPERATING ONE LOAD.

CEILING OCCUPANCY SENSOR WITH DIMMER LIGHTING **CONTROL** 

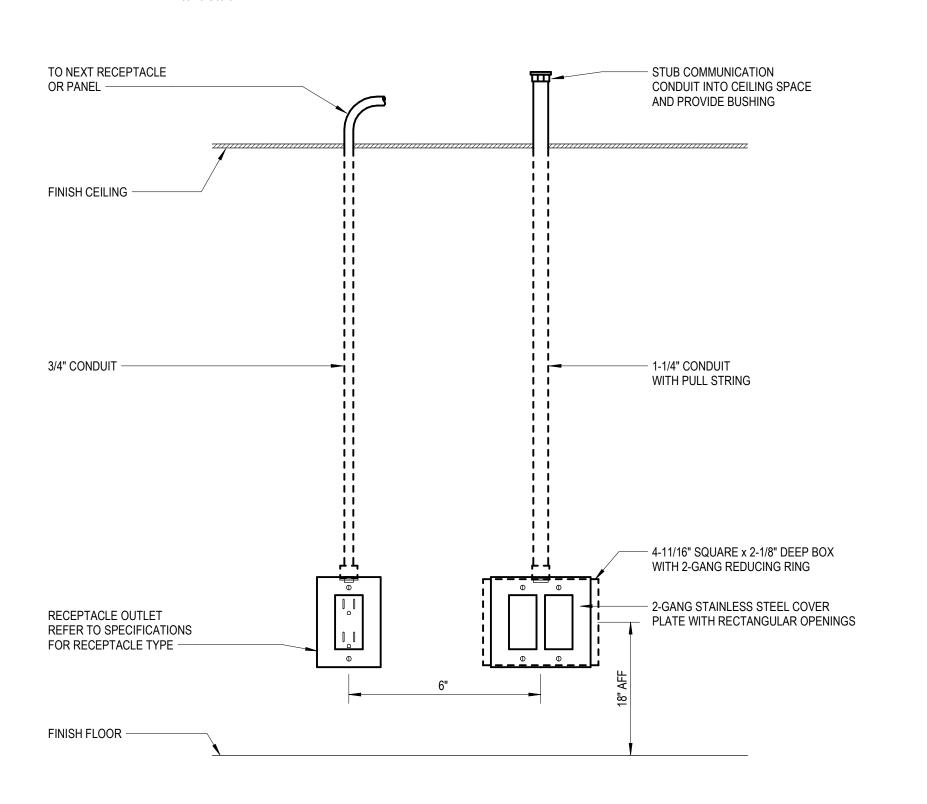


### CEILING OCCUPANCY SENSOR SINGLE HEAD SINGLE LEVEL LIGHTING CONTROL

NO SCALE

1. ALL LOW VOLTAGE WIRING SHALL BE #18 AWG MINIMUM. 2. SINGLE SENSOR AND RELAY CONTROL PANEL OPERATING ONE LOAD.

CEILING OCCUPANCY SENSOR SINGLE HEAD SINGLE LEVEL LIGHTING CONTROL



TYPICAL WALL MOUNTED POWER AND COMMUNICATION **OUTLET DETAIL** 

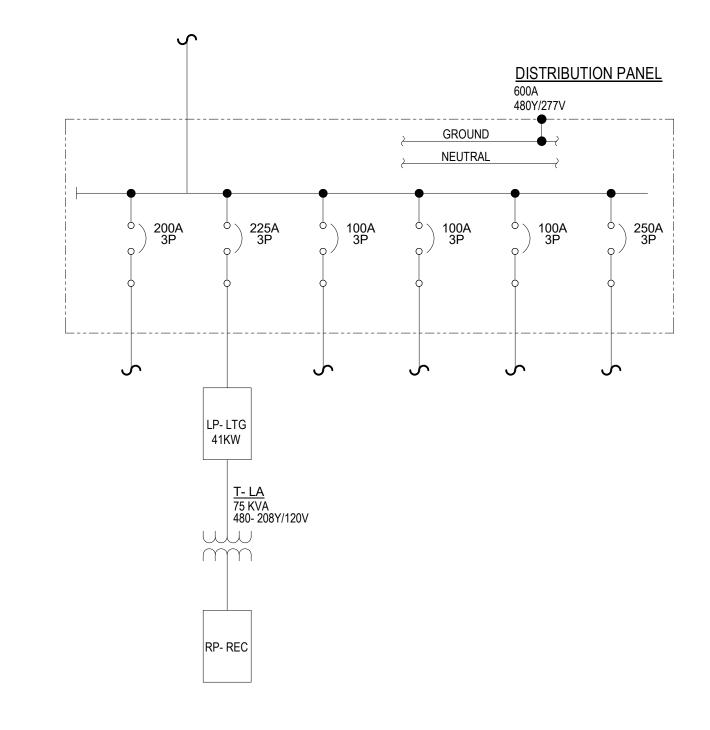
TAG 20G 3#12, 1# 30G 3#10, 1# 40G 3#8, 1#1 55G 3#6, 1#10 70G 3#4, 1#8 95G 3#2, 1#8 110G 3#1, 1#6 150G 3#1/0, 1# 175G 3#2/0, 1# 200G 3#3/0, 1# 230G 3#4/0, 1# 255G 3#250 K 285G 3#300 K 310G 3#350 K 380G 3#500 KCMIL, 1#3 GRD - 3"C 380NG 4#500 KCMIL, 1#3 GRD - 3 1/2"C 420G 3#600 KCMIL, 1#3 GRD - 3"C 420NG 4#600 KCMIL, 1#3 GRD - 3 1/2"C 510G 2@[3#250 KCMIL, 1#2 GRD - 2 1/2"C] 510NG 2@[4#250 KCMIL, 1#2 GRD - 2 1/2"C] 620NG 2@[4#350 KCMIL, 1#1 GRD - 3"C] 620G 2@[3#350 KCMIL, 1#1 GRD - 2 1/2"C] 760G 2@[3#500 KCMIL, 1#1/0 GRD - 3"C] 760NG 2@[4#500 KCMIL, 1#1/0 GRD - 3 1/2"C] 800G 2@[3#600 KCMIL, 1#1/0 GRD-3"C] 800NG 2@[4#600 KCMIL, 1#1/0 GRD-3 1/2"C] 1000G 3@[3#500 KCMIL, 1#2/0 GRD - 3"C] 1000NG 3@[4#500 KCMIL, 1#2/0 GRD - 3 1/2"C] 1200G 3@[3#600 KCMIL, 1#3/0 GRD - 3 1/2"C] 1200NG 3@[4#600 KCMIL, 1#3/0 GRD - 3 1/2"C] 1600NG 4@[4#600 KCMIL, 1#4/0 GRD - 3 1/2"C] 1600G 4@[3#600 KCMIL, 1#4/0 GRD - 3 1/2"C] 2000G 5@[3#600 KCMIL, 1#250 KCMIL GRD - 3 1/2"C] 2000NG 5@[4#600 KCMIL, 1#250 KCMIL GRD - 4"C]

CONDUIT AND WIRE SCHEDULE

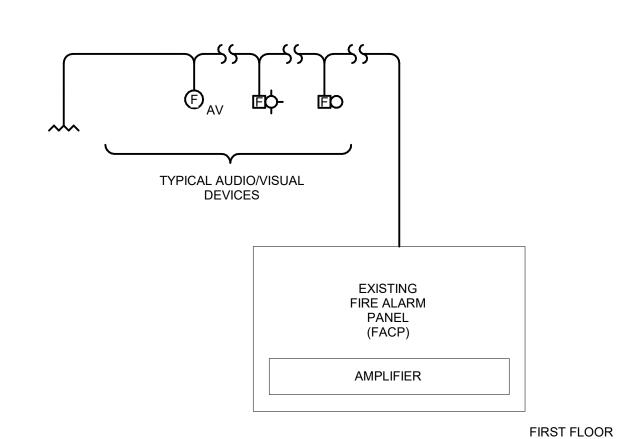
cc	OPPER CONDUCTORS				COPP	PER CONDUCTORS
3 PHASE, 3 WIRE WITH GROUND		3 PHASE, 4 WIRE WITH GROUND	480-208/120V		3 PI	HASE, 4 WIRE WITH SUPPLY SIDE BONDING JUMPER
FILL	TAG	FILL	XMFR KVA	OCP	TAG	FILL
1#12 GRD - 3/4"C	20NG	4#12, 1#12 GRD - 3/4"C	15	60A	70NG	4#4, 1#8 GRD - 1 1/4"C
1#10 GRD - 3/4"C	30NG	4#10, 1#10 GRD - 3/4"C	30	100A OR 110A	110NG	4#1, 1#6 GRD - 2"C
#10 GRD - 3/4"C	40NG	4#8, 1#10 GRD - 1"C	45	175A	175NX	4#2/0, 1#4 GRD - 2"C
#10 GRD - 1"C	55NG	4#6, 1#10 GRD - 1 1/4"C	75	250A	255NX	4#250 KCMIL, 1#2 GRD - 2 1/2"C
#8 GRD - 1 1/4"C	70NG	4#4, 1#8 GRD - 1 1/4"C	13	300A	310NX	4#350 KCMIL, 1#2 GRD - 3"C
#8 GRD - 1 1/4"C	85NG	4#3, 1#8 GRD - 1 1/4"C	112.5	400A	420NX	4#600 KCMIL, 1#1/0 GRD - 3 1/2"C
#8 GRD - 1 1/4"C	95NG	4#2, 1#8 GRD - 1 1/2"C	150	400A	420NX	4#600 KCMIL, 1#1/0 GRD - 3 1/2"C
#6 GRD - 1 1/2"C	110NG	4#1, 1#6 GRD - 2"C	150	500A	510NX	2@[4#250 KCMIL, 1#1/0 GRD - 2 1/2"C]
, 1#6 GRD - 1 1/2"C	150NG	4#1/0, 1#6 GRD - 2"C	225	600A	620NX	2@[4#350 KCMIL, 1#2/0 GRD - 3"C]
, 1#6 GRD - 2"C	175NG	4#2/0, 1#6 GRD - 2"C	223	800A	800NX	2@[4#600 KCMIL, 1#3/0 GRD - 3 1/2"C]
, 1#6 GRD - 2"C	200NG	4#3/0, 1#6 GRD - 2 1/2"C	300	800A	800NX	2@[4#600 KCMIL, 1#3/0 GRD - 3 1/2"C]
, 1#4 GRD - 2"C	230NG	4#4/0, 1#4 GRD - 2 1/2"C	300	1000A	1000NX	3@[4#500 KCMIL, 1#4/0 GRD - 3 1/2"C]
) KCMIL, 1#4 GRD - 2"C	255NG	4#250 KCMIL, 1#4 GRD - 2 1/2"C				
) KCMIL, 1#4 GRD - 2 1/2"C	285NG	4#300 KCMIL, 1#4 GRD - 3"C				
) KCMIL, 1#3 GRD - 2 1/2"C	310NG	4#350 KCMIL, 1#3 GRD - 3"C				
NAME 442 ODD 240	20010	4#500 KOMII 4#2 ODD 2 4/0#0				

TRANSFORMER SECONDARY WIRE SCHEDULE

- 1. GROUND WIRES SHOWN IN CONDUIT AND WIRE SCHEDULE ARE EQUIPMENT GROUNDING CONDUCTORS SIZED PER NEC 250.122.
- 2. GROUNDING ELECTRODE CONDUCTORS FOR SERVICE ENTRANCE AND FOR TRANSFORMER NEUTRALS SHALL BE SIZED PER NEC TABLE 250.66.
- 3. MAIN BONDING JUMPER AND SYSTEM BONDING JUMPER FOR MAIN SERVICE AND SEPARATELY DERIVED SYSTEMS SHALL BE SIZED PER NEC 250.28(D) AND TABLE 250.102(C)(1).
- 4. CONDUIT FILL BASED ON CONDUCTOR INSULATION TYPES AS INDICATED. CONDUIT FILL BASED ON EMT, IMC, RMC, FMC, LFMC, AND PVC SCHEDULE 40 CONDUIT TYPES. ALL OTHER CONDUIT TYPES, INCLUDING PVC SCHEDULE 80, SHALL BE SIZED PER NEC CHAPTER 9.
- 5. CONDUCTOR AMPACITY IS BASED ON TEMPERATURE RATING INDICATED AND NEC TABLE 310.15(B)(16).



### PARTIAL ONE LINE DIAGRAM



- 1. ELECTRICAL CONTRACTOR SHALL VERIFY ALL REQUIRED WIRE SIZES AND QUANTITIES WITH THE FIRE ALARM SYSTEM MANUFACTURER. ALL WIRING SHALL BE COLOR CODED AND CLEARLY
- 2. ALL WIRING INSULATION SHALL BE TYPE AS APPROVED PER THE FIRE ALARM CODE
- REQUIREMENTS. 3. SCHEMATIC DIAGRAM INDICATES GENERAL LAYOUT & INTENT OF SYSTEM DESIGN. REFER TO POWER & AUXILLIARY SYSTEMS PLANS FOR EXACT QUANTITIES AND LOCATIONS OF DEVICES.
- 4. NEW FIRE ALARM DEVICES CONNECTED TO EXISTING FIRE ALARM SYSTEM. EXISTING SYSTEM IS NATIONAL TIME AND SIGNAL.
- 5. ALL SURFACE MOUNTED FIRE ALARM DEVICES SHALL BE INSTALLED IN WIREMOLD.

Fire Alarm Schematic Diagram



Van Buren Public Schools

### RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111

T. Morgan Issue Date Issued for Design Development 07-03-2024

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Diagrams and Details

ī **D** Project Number

Drawing Number

24167-1000

OWNER FURNISHED EQUIPMENT

OCCUPANCY SENSOR

MOUNTING HEIGHT NOTES:

NOTED ON DRAWINGS.

LIGHTS MOUNTING HEIGHTS.

1. MOUNTING HEIGHTS ARE TYPICAL UNLESS OTHERWISE

2. FOR CEILING HEIGHTS BELOW 8'-4" REFER TO DRAWINGS

FOR CLOCKS, SPEAKERS, EXIT LIGHTS AND EGRESS

### TECHNOLOGY DRAWING INDEX

TR.0 Technology Reference Information **Enlarged Plans** 

T4.1 T7.1 Details INTEGRATED design SOLUTIONS architecture engineering interiors & technology 1441 west long lake, suite 200 troy, michigan 48098 5211 cascade road SE, suite 300 grand rapids, michigan 49546 248.823.2100 www.ids-michigan.com

### **GENERAL NOTES**

- 1. LIGHT LINE WEIGHT INDICATES EXISTING EQUIPMENT TO REMAIN OR EQUIPMENT PROVIDED BY OTHERS. HEAVY LINE WEIGHT INDICATES
- NETWORK DEVICE PLATES AND THE CABLING FOR THESE AREAS SHALL BE PROVIDED BY THE TECHNOLOGY CONTRACTOR.
- 3. TECHNOLOGY CONTRACTOR SHALL COORDINATE DEVICE OUTLET LOCATIONS WITH THE ARCHITECTURAL AND CASEWORK DRAWINGS
- 4. TECHNOLOGY CONTRACTOR SHALL COORDINATE CLOSET ROOM EQUIPMENT/DEVICE LOCATIONS WITH THE GENERAL TRADES.
- 5. TECHNOLOGY CONTRACTOR SHALL NOT PLACE ANY DISTRIBUTION CABLING ALONGSIDE POWERLINES, OR SHARE THE SAME CONDUIT, CHANNEL OR SLEEVE WITH ELECTRICAL APPARATUS.
- 6. ALL CABLES SHALL BE INSTALLED IN "J" HOOKS, CONDUITS, CABLE TRAY OR AN APPROVED RACEWAY SYSTEM. WHERE CABLE TRAY IS NOT AVAILABLE, SUPPORT HORIZONTAL CABLE EVERY FIVE FEET WITH "J" HOOKS SUFFICIENT IN SIZE TO HANDLE ALL BUNDLED CABLES WHILE MINIMIZING CRUSHING. IF CABLE SLACK EXCEEDS TWELVE (12 INCHES BETWEEN SUPPORTS, ADDITIONAL SUPPORTS SHALL BE INSTALLED TO TAKE UP SLACK AND RELIEVE CABLE STRESS. ALL CABLES SHALL BE RUN PARALLEL AND PERPENDICULAR TO BUILDING STEEL. ALL COMMUNICATIONS CABLES SHALL BE LOCATED AND FASTENED TO GUARANTEE THERE SHALL BE NO INTERFERENCE FROM MAGNETIC FIELDS GENERATED FROM FIXTURE BALLASTS,
- CURVATURE AND PROTECT AT BENDS AND CORNERS. MAINTAIN MINIMUM BEND RADUIS AND TENSION LIMITATIONS AS SPECIFIED BY EIA/TIA FOR ALL COMMUNICATION CABLES.
- 8. LOOSELY BUNDLE CABLES WITH VELCRO TIES SUITABLE FOR PLENUM
- COMPLETION OF CABLE INSTALLATION. CABLES ARE FREE FROM TWISTS, KINKS, SHARP BENDS, CUTS, GOUGES OR ANY OTHER PHYSICAL DAMAGE.
- EXTENT OF WORK. THE TECHNOLOGY CONTRACTOR SHALL PROVIDE ALL INCIDENTAL MATERIALS AND LABOR OR A COMPLETE, FULLY FUNCTIONAL SYSTEM AND VERIFING FIELD RACEWAYS.
- 12. ALL WORK AND EQUIPMENT SHALL CONFORM TO NEC. THE MEANS
- 13. SECURITY CAMERAS AND WIRELESS ACCESS POINT LOCATIONS INDICATED ARE FOR NETWORK CABLING ONLY.
- 14. WIRELESS ACCESS POINTS ARE PROVIDED BY OWNER AND INSTALLED BY THIS CONTRACTOR. THIS CONTRACTOR IS TO PROVIDE 10' PATCH CORDS FOR EACH WIRELESS ACCESS POINT.
- 15. SECURITY CAMERAS ARE BY OTHERS. THIS CONTRACTOR IS TO PROVIDE 10' PATCH CORDS FOR EACH SECURITY CAMERA.

- NEW EQUIPMENT.
- PRIOR TO ROUGH-IN. REPORT ANY CONFLICTS TO THE CONSTRUCTION MANAGER FOR RESOLUTION.

- MOTORS OR SIMILAR ELECTRICAL LOADS.
- 7. INSTALL ALL CABLES MAINTAINING CABLE MANUFACTURES RADIUS OF
- ENVIRONMENTS, EVERY TWENTY FEET.
- 9. THE TECHNOLOGY CONTRACTOR SHALL ASSURE THAT THE
- 10. THESE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL
- 11. NOTIFY CM OF ANY CONFLICTS BETWEEN EQUIPMENT SUBMITTALS AND TECHNOLOGY DRAWINGS.
- AND METHODS USED BY TECHNOLOGY CONTRACTOR SHALL CONFORM TO NEC SECTION 110-3.

Van Buren Public Schools

RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111

THIS PROJECT MAY NOT UTILIZE ALL THE SYMBOLS,

MATERIALS, ABBREVIATIONS AND STANDARDS INFORMATION

SHOWN ON THIS SHEET

Project Administrator A. Maurer Project Designer J. Brender, T. Horner Project Architect / Engineer T. Morgan Drawn By T. Horner Q.M. Review Drawing Scale No Scale Issue Date Issued for Design Development 07-03-2024

**Technology Reference Information** 

 $\circ$  2024 Integrated  $ext{design}$  solutions, LL

Drawing Number

24167-1000

UPSTREAM GROUND FAULT PROTECTION DEVICE DUPLEX RECEPTACLE OUTLET WITH INTEGRAL SURGE SUPPRESSION DUPLEX RECEPTACLE OUTLET CONNECTED TO UPSTREAM SURGE SUPPRESSION DEVICE DUPLEX RECEPTACLE OUTLET SPLIT WIRED DUPLEX RECEPTACLE OUTLET WITH ISOLATED GROUND QUAD RECEPTACLE OUTLET QUAD RECEPTACLE OUTLET MOUNTED ABOVE COUNTER QUAD RECEPTACLE OUTLET WITH ONE (1) INTEGRAL SURGE SUPPRESSION TYPE RECEPTACLE AND ONE (1) SURGE SUPPRESSION PROTECTED RECEPTACLE SPECIAL RECEPTACLE AS INDICATED POWER/COMMUNICATIONS POLE CORD DROP POKE THROUGH ASSEMBLY LETTERS INDICATE TYPE (TYP) JUNCTION BOX - CEILING MOUNTED JUNCTION BOX - WALL MOUNTED PUSHBUTTON STATION - EMERGENCY POWER SHUTDOWN lacksquareINTERCOM CALL BUTTON INTERCOM CALL BUTTON WITH PRIVACY 0 0 0 0 HORIZONTALLY MOUNTED MULTI-OUTLET RACEWAY

VERTICALLY MOUNTED MULTI-OUTLET RACEWAY

EQUIPMENT MOUNTING BACKBOARD

**BUS DUCT** 

208/120V PANELBOARD

480/277V PANELBOARD

DISTRIBUTION OR POWER PANELBOARD SINGLE PHASE MOTOR THREE PHASE MOTOR MAGNETIC MOTOR STARTER COMBINATION MAGNETIC MOTOR STARTER - SWITCH SIZE / FUSE SIZE NON-FUSED DISCONNECT SWITCH DIG -SWITCH SIZE FUSED DISCONNECT SWITCH -SWITCH SIZE/FUSE SIZE ENCLOSED CIRCUIT BREAKER -CB RATING MAGNETIC CONTACTOR MANUAL MOTOR STARTER HORSEPOWER RATED SWITCH PACKAGED EQUIPMENT WITH INTEGRALLY MOUNTED PREWIRED CONTROL PANEL FURNISHED AS INTEGRAL PART OF EQUIPMENT TRANSFORMER GROUND ROD LIGHTNING PROTECTION AIR TERMINAL GROUND BUS BAR AS INDICATED

FLOOR

FOOT/FEET

ELEVATION NUMBER

- DRAWING WHERE

**ELEVATION IS DRAWN** 

KVA

KVM

MOUNTING HEIGHTS

KILOVOLT AMPERE

KILOWATT

CATIONS OUNTED OUNTER DUPLEX EPTACLE ABOVE OUNTER

KEYBOARD / VIDEO / MOUSE

FLR

**ELEVATION SYMBOL** 

COLUMN CENTERLINE

ROOM NAME AND NUMBER

NEW

SINGLE RECEPTACLE OUTLET

DUPLEX RECEPTACLE OUTLET

FAULT PROTECTION

**ROOM NAME** 

— – — – — – –

BUILDING OR UNIT (IF ANY)

SYMBOL LEGEND

DETAIL IDENTIFICATION

DRAWING WHERE DETAIL

IS REFERENCED OR CUT

- PLAN OR DETAIL IDENTIFICATION

WHERE PLAN OR

DETAILS IS DRAWN

SECTION IDENTIFICATION

- DRAWING WHERE PLAN OR

DETAIL IS DRAWN

SYMBOLS (LETTERS (X) INDICATE TYPE, TYPICAL. SEE ABBREVIATIONS ABOVE)

DUPLEX RECEPTACLE OUTLET FLUSH MOUNTED IN CEILING

DUPLEX RECEPTACLE OUTLET MOUNTED ABOVE COUNTER

DUPLEX RECEPTACLE OUTLET WITH INTEGRAL GROUND

FLUSH MOUNTED POWER ONLY FLOOR BOX

DUPLEX RECEPTACLE OUTLET CONNECTED TO

DETAIL SYMBOL

T2.1 DETAIL SCALE

PLAN OR DETAIL ENLARGEMENT

SECTION LOCATOR

T9.1

WALL MOUNTED SINGLE FACED CLOCK WALL MOUNTED DOUBLE FACED CLOCK COMBINATION WALL MOUNTED SPEAKER/CLOCK CEILING MOUNTED COMBINATION SPEAKER/CLOCK WALL MOUNTED DIGITAL CLOCK CEILING MOUNTED SPEAKER BIDIRECTIONAL WALL MOUNTED SPEAKER BIDIRECTIONAL CEILING MOUNTED SPEAKER CEILING MOUNTED SPEAKER CLUSTER WALL MOUNTED SPEAKER CEILING MOUNTED MICROPHONE OUTLET WALL MOUNTED MICROPHONE OUTLET WALL MOUNTED VOLUME CONTROL WALL MOUNTED BELL WALL MOUNTED CHIME WALL MOUNTED HORN SPEAKER CEILING MOUNTED HORN SPEAKER SECURITY SYSTEM ELECTRIC LATCH SECURITY SYSTEM CARD READER SECURITY SYSTEM DOOR CONTACT SECURITY SYSTEM KEY SWITCH SECURITY SYSTEM MOTION DETECTOR CEILING MOUNTED SECURITY CAMERA -ARROWS INDICATE FIELD OF VIEW WALL MOUNTED SECURITY CAMERA -ARROWS INDICATE FIELD OF VIEW FIRE ALARM CONTROL PANEL FIRE SUPRESSION SYSTEM CONTROL PANEL

N BC

<u>AUXILIARY</u>

CEILING MOUNTED SINGLE FACED CLOCK

CEILING MOUNTED DOUBLE FACED CLOCK

FIRE ALARM REMOTE ANNUNCIATOR PANEL

BATHROOM STATION PULL CORD - NURSE CALL

SINGLE BED STATION - NURSE CALL

DOUBLE BED STATION - NURSE CALL

BATHROOM STATION - NURSE CALL

NURSE CALL POWER SUPPLY ——— 0

NURSE CALL STAFF STATION TITLE WALL MOUNTED COMMUNICATIONS OUTLET -LETTER INDICATES FACEPLATE TYPE ABOVE COUNTER COMMUNICATIONS OUTLET -LETTER INDICATES FACEPLATE TYPE CEILING MOUNTED COMMUNICATIONS OUTLET -LETTER INDICATES FACEPLATE TYPE COMMUNICATIONS FLOORBOX -LETTER INDICATES FACEPLATE TYPE MULTI-SYSTEM FLOORBOX -LETTER INDICATES FACEPLATE TYPE WALL MOUNTED PROJETION SYSTEM CEILING MOUNTED PROJETION SYSTEM SHORT THROW PROJETION SYSTEM

NURSE CALL WALL MOUNTED DOME LIGHT — P— NURSE CALL CEILING MOUNTED DOME LIGHT —HP— NURSE CALL WALL MOUNTED DOME LIGHT WITH CODE BLUE — C— NURSE CALL CEILING MOUNTED DOME LIGHT WITH CODE BLUE —HC— <u>—Е—</u> —c—

CODE BLUE PUSHBUTTON - NURSE CALL

NURSE CALL DUTY STATION ———

NURSE CALL EMERGENCY STATION ----

NURSE CALL MASTER STATION ———

WLAN

UNDERGOUND COMMUNICATIONS UNDERGROUND FIBER OPTIC COMMUNICATIONS UNDERGROUND LIGHTING

WIRE GUARD

ONE-LINE

SYSTEM OR EQUIPMENT GROUND

RACEWAY TURNED UP

CABLE TRAY

RACEWAY TURNED DOWN

UNDERFLOOR DUCT - POWER

UNDERFLOOR DUCT - COMM

FLUSH IN-GRADE HAND HOLE

UNDERGROUND ELECTRICAL

UNDERFLOOR HEADER DUCT - POWER

UNDERFLOOR HEADER DUCT - COMM

EXOTHERMIC WELD OR BRAZED CONNECTION

CONDUIT IN OR BELOW FLOOR SLAB OR BELOW GRADE

WEATHER PROOF

WIRELESS LOCAL AREA NETWORK

ī**D**§ Project Number

TR.0

1. SEE SHEET T7.1 FOR TECHNOLOGY DETAILS AND DEVICE SCHEDULES.

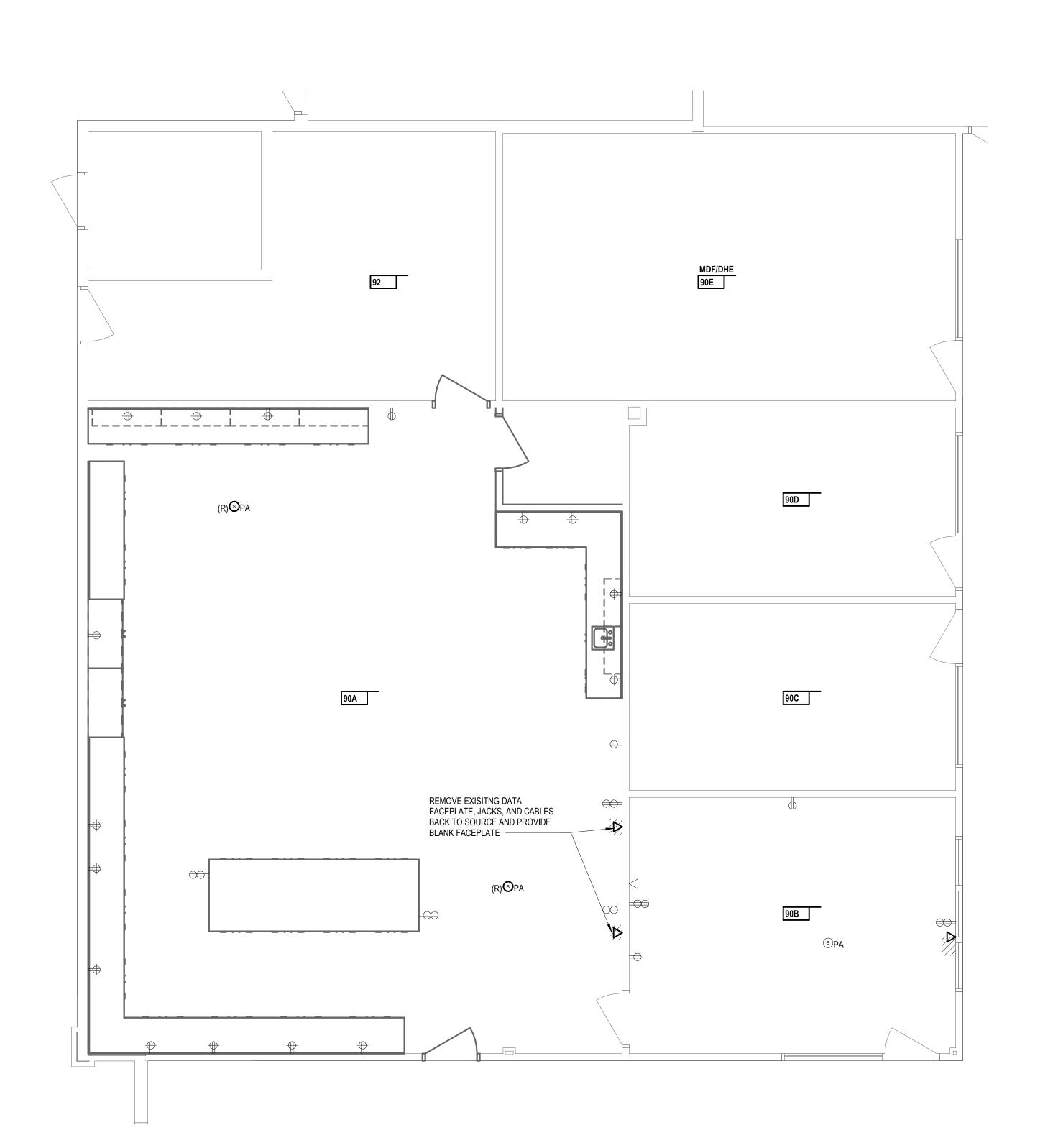
ALL DATA CABLES SHALL BE TERMINATED ON NEW 48 PORT CAT 6 PATCH PANEL LOCATED IN MDF/DHE.



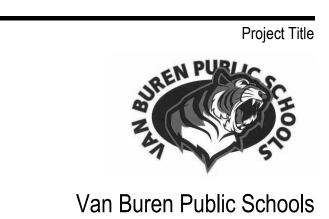
248.823.2100 www.ids-michigan.com



FIRST FLOOR NEW TECHNOLOGY PLAN

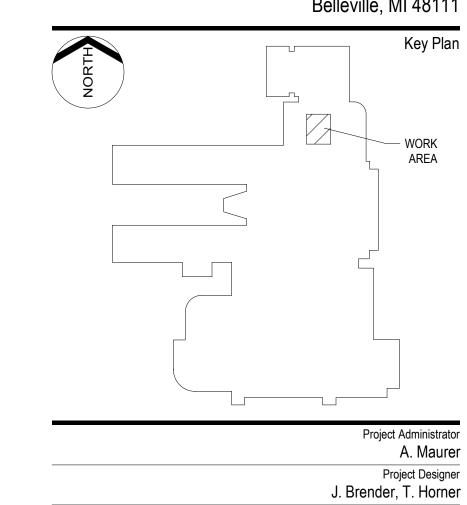


FIRST FLOOR TECHNOLOGY DEMOLITION PLAN



### RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111



	T. Morga
	Drawn I T. Horn
	Q.M. Revie
	Approve
	Drawing Sca
	As Indicate
Issued for	Issue Dat
Design Development	07-03-202

 $\circ$  2024 Integrated  ${f design}$  solutions, LLC

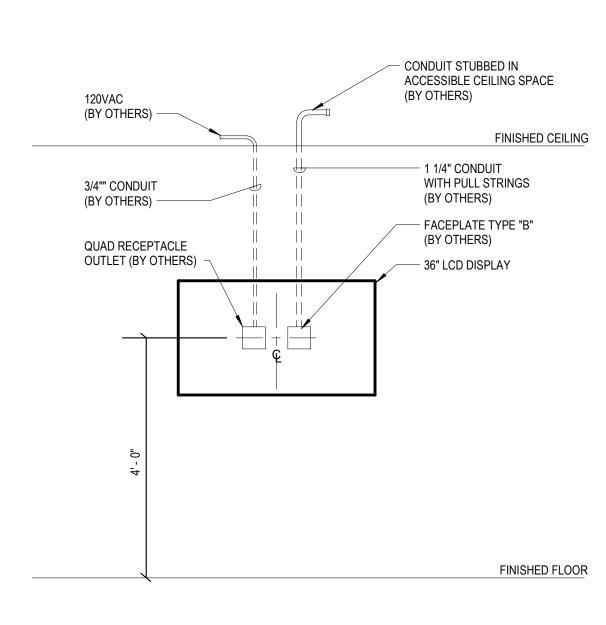
Enlarged Plans

ī**D**§ Project Number

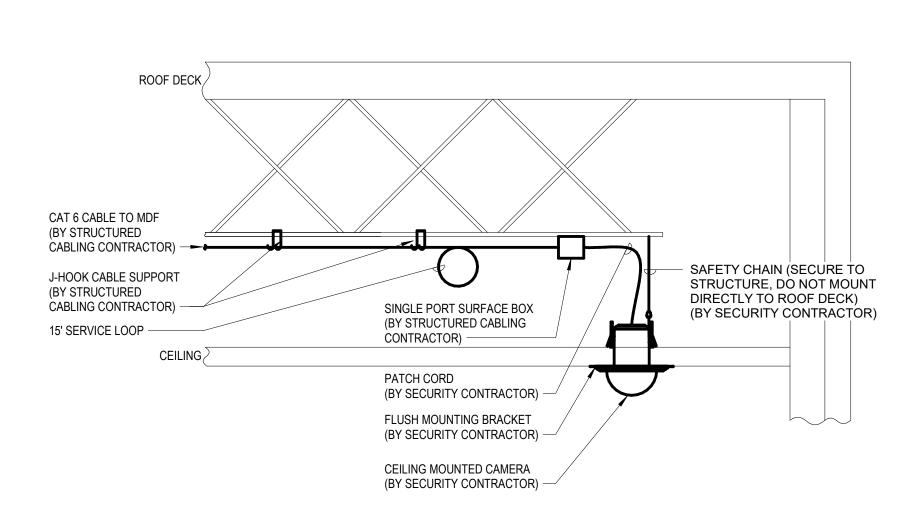
	DATA DEVICE SCHEDULE1				
DROP ID	SOURCE TR	DESCRIPTION	DATA RACK ID	CATEGORY 6 CABLE COUNT	FACEPLATE TYPE
90B-1	MDF/DHE	WALL DROP		2	А
103-1	MDF/DHE	WALL DROP		2	Α
103-2	MDF/DHE	DISPLAY DROP		1	В
104-1	MDF/DHE	WALL DROP		2	А
104-2	MDF/DHE	DISPLAY DROP		1	В
107-1	MDF/DHE	WALL DROP		2	А
107-2	MDF/DHE	WALL DROP		2	Α
112-1	MDF/DHE	WALL DROP		2	Α
112-2	MDF/DHE	WALL DROP		2	Α

		WAP DEVICE SO	CHEDUI	_E	
DROP ID	SOURCE TR	DESCRIPTION	DATA RACK ID	CATEGORY 6 CABLE COUNT	FACEPLATE TYPE
106-1	MDF/DHE	CEILING MOUNTEDE WAP		1	
112-3	MDF/DHE	CEILING MOUNTEDE WAP		1	

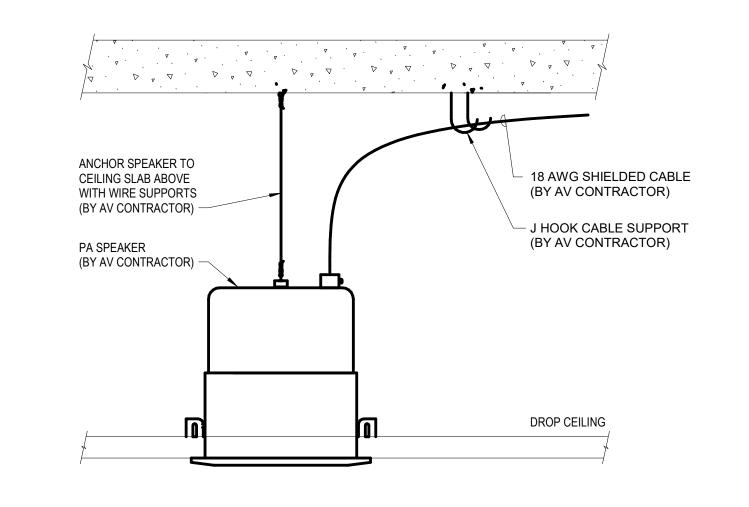
		SECURIT	Y CA	MERA	SCHEDULE	
DROP ID	SOURCE TR	CAMERA DESCRIPTION	CAMERA TYPE	CATEGORY 6 CABLE	CAMERA MODEL	FRAME RATE
CAM-01		INTERIOR CEILING MOUNTED CAMERA	Х	1		



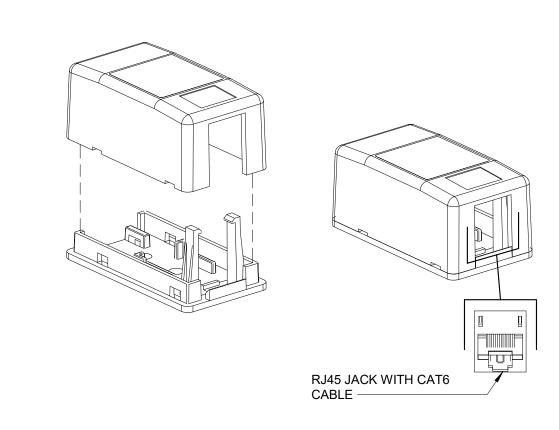




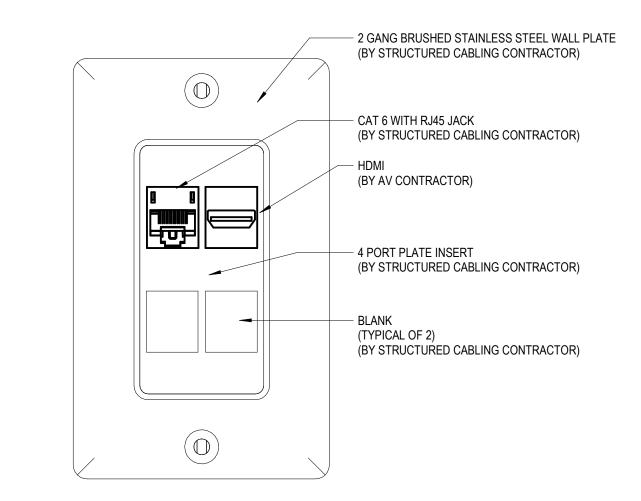




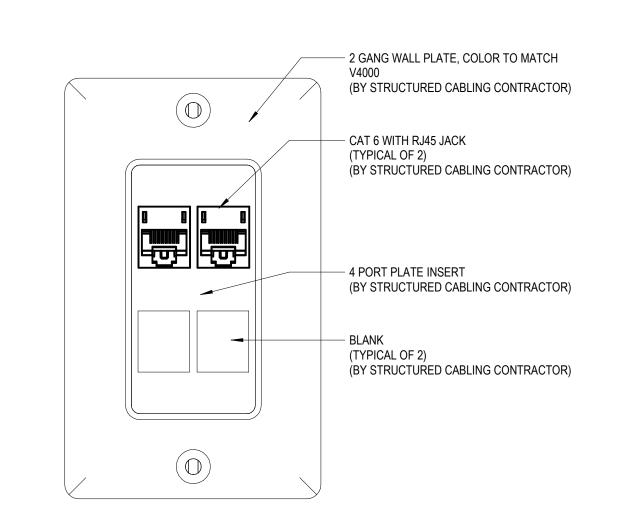
TYPICAL FLUSH CEILING MOUNTED PA SPEAKER DETAIL  $\circ$ PA



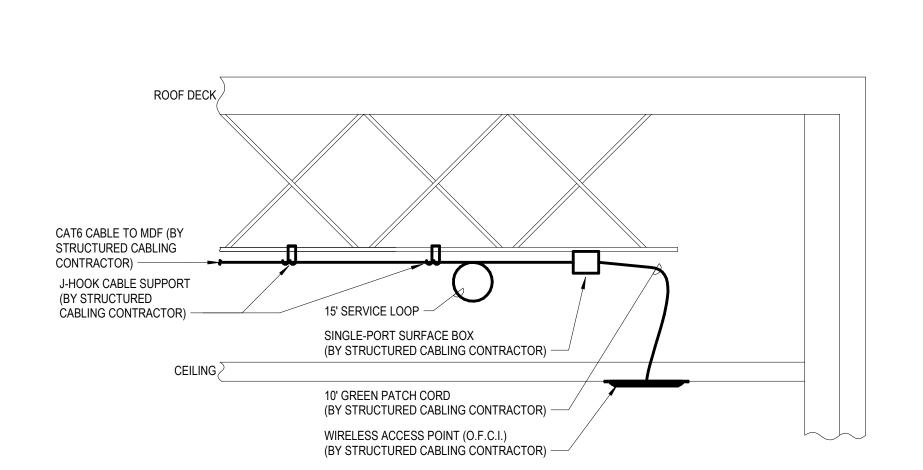
SINGLE PORT SURFACE BOX





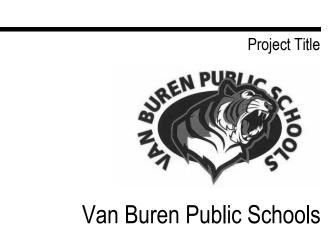






CEILING-MOUNTED WAP DETAIL

INTEGRATED design SOLUTIONS architecture engineering interiors & technology 1441 west long lake, suite 200 troy, michigan 48098 5211 cascade road SE, suite 300 grand rapids, michigan 49546 248.823.2100 www.ids-michigan.com



### RAHS Belleville High School

501 W Columbia Ave Belleville, MI 48111 Key Plan

Pr	oject Administrator
	A. Maurer
	Project Designer
J. Bren	nder, T. Horner
Project A	Architect / Engineer
	T. Morgan
	Drawn By
	T. Horner
	Q.M. Review
	-
	Approved
	-
	Drawing Scale
	As Indicated
Issued for	Issue Date
Design Development	07-03-2024
Boolgh Bovolopinont	01 00 2021

 $\circ$  2024 integrated  $ext{design}$  solutions, LLC

Details

ī **D** Project Number Drawing Number

Project #