# **NORTHERN HIGH SCHOOL - BID PACKAGE 2: DISTRICT WIDE ACCESS CONTROL**

YES

605 SQ. FT.

## **PORTAGE PUBLIC SCHOOLS** Portage, Michigan **CONSTRUCTION DOCUMENTS**

**DESIGN TEAM** 

ARCHITECT/ENGINEER **TowerPinkster** Architecture · Engineering · Interiors

242 E. KALAMAZOO AVE, SUITE 100 KALAMAZOO, MICHIGAN 49007 PHONE: 269.343.6133 FAX: 269.343.6633

SITE ADDRESS

PORTAGE NORTHERN HIGH SCHOOL 1000 IDAHO AVENUE PORTAGE, MI 49024

## **REFERENCED CODES**

BUILDING: MICHIGAN BUILDING CODE AND 2012 NFPA 101 LIFE SAFETY CODE ENERGY: 2015 MICHIGAN ENERGY CODE PLUMBING: 018 MICHIGAN PLUMBING CODE MECHANICAL 2015 MICHIGAN MECHANICAL CODE FUEL GAS: (IFGC) 2015 INTERNATIONAL FUEL GAS CODE 2017 NATIONAL ELECTRICAL CODE WITH MICHIGAN AMENDMENTS ELECTRICAL: BARRIER-FREE 2015 MICHIGAN BUILDING CODE AND 2009 ICC & C A117. USE GROUP: CONSTRUCTION TYPE: II-B

**PROJECT AREA** TOTAL FINISHED PROJECT:

AUTOMATIC SPRINKLERS:

## ALTERNATES

ALTERNATE 1: SECURITY RESOURCE OFFICER OFFICE

## **DRAWING INDEX GENERAL**

G 001 COVER SHEET

ARCHITECTURAL GENERAL AG 001 GENERAL ARCHITECTURAL NOTES, INTERIOR PARTITION TYPES, DEVICE ALIGNMENT GUIDELINES, & ABBREVIATIONS

ARCHITECTURAL DEMOLITION AD 101 LOWER LEVEL DEMOLITION PLAN & REFLECTED CEILING DEMOLITION PLAN

ARCHITECTURAL

INTERIORS GENERAL IG 001 TYPICAL SYMBOLS & GENERAL NOTES

INTERIORS I 101B LOWER LEVEL FINISH PLAN - UNIT B, MATERIAL SELECTION SCHEDULE, AND TYPICAL DETAILS I 501 ENLARGED MILLWORK FINISH PLANS AND DETAILS

MECHANICAL & PLUMBING GENERAL MG 001 MECHANICAL & PLUMBING GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS

MECHANICAL DEMOLITION MD 101 LOWER LEVEL MECHANICAL DEMOLITION PLAN

MECHANICAL M 101 LOWER LEVEL MECHANICAL PLAN

ELECTRICAL - GENERAL EG 001 ELECTRICAL SYMBOLS AND GENERAL NOTES

ELECTRICAL E 101 LOWER LEVEL PLAN

A 101 LOWER LEVEL FLOOR PLAN & REFLECTED CEILING PLAN



Architecture · Engineering · Interiors



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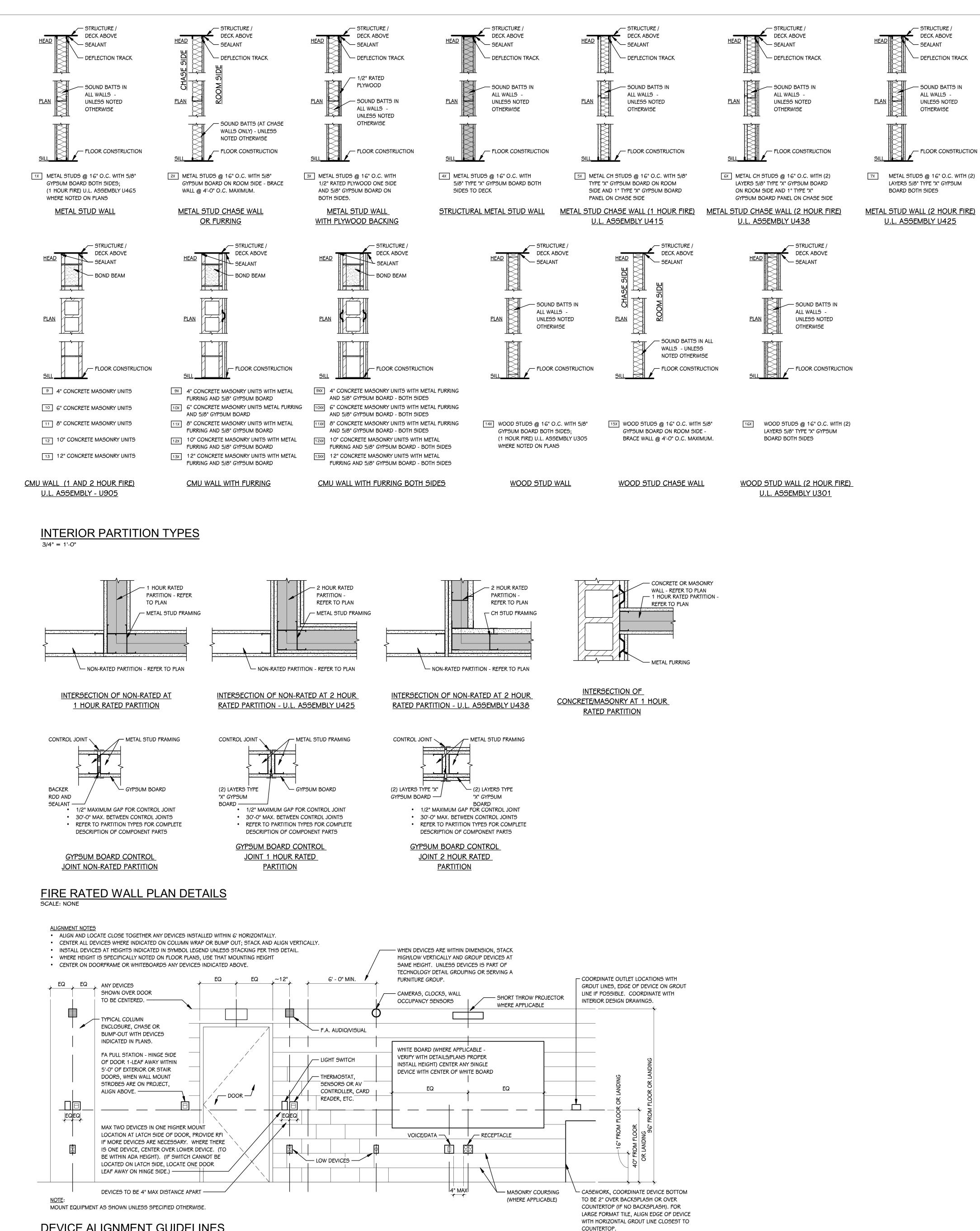
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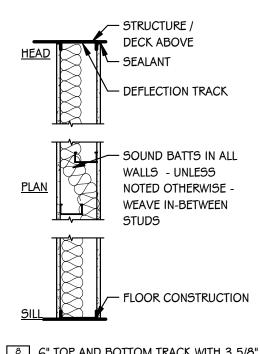
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date FEBRUAR









- STRUCTURE /

— SEALANT

DECK ABOVE

- DEFLECTION TRACK

- SOUND BATTS IN

UNLESS NOTED

- FLOOR CONSTRUCTION

ALL WALLS -

OTHERWISE

**GENERAL NOTES - ARCHITECTURAL - PARTITIONS** 

<sup>8</sup> 6" TOP AND BOTTOM TRACK WITH 3 5/8" METAL STUD FRAMING @ 16" O.C. (OFFSET) WITH 5/8" GYPSUM BOARD BOTH SIDES METAL STUD SOUND WALL

1	NOT ALL WALL TYPES MAY BE USED ON PROJECT.	1 CONTRACTORS ARE REQUIRED TO INSPECT/REVIEW THE EXISTIN
2	REFER TO CODE COMPLIANCE PLANS FOR LOCATIONS OF SMOKE AND FIRE-RATED PARTITIONS.	RELATED DEMOLITION WORK. UNLESS NOTED OTHERWISE, REM FLOOR OR CEILING INCLUDES ALL GENERAL MECHANICAL AND EI ARE A PART OF, OR ATTACHED TO IT.
3	ALL PARTITIONS EXTEND TO BOTTOM OF STRUCTURE, UNLESS NOTED OTHERWISE.	2 CONTRACTOR SHALL VERIFY ALL EXISTING JOB SITE CONDITION BE RESPONSIBLE FOR THE SAME ADVISE CONSTRUCTION MAN
4	LINE OF STRUCTURE/DECK AS SHOWN AT THE HEAD CONDITION OF EACH PARTITION TYPE IS DIAGRAMMATIC ONLY AND DOES NOT INDICATE EXACT CONSTRUCTION CONDITIONS. TERMINATE RATED PARTITIONS AT UNDERSIDE OF STRUCTURAL DECK TO MAINTAIN RATING. PROVIDE APPROPRIATE FRAMING AND GYPSUM BOARD TO OFFSET	<ul> <li>DISCREPANCIES.</li> <li>PATCH FLOORS, WALLS AND CEILINGS DAMAGED DURING CONS DEMOLITION AS REQUIRED. FINISH TO MATCH EXISTING.</li> </ul>
	AROUND STRUCTURE OR OTHER OBSTRUCTIONS, SUCH AS PIPING OR DUCTWORK.	4 ACCOMMODATE NEW CONSTRUCTION IF NOT INDICATED.
5	OR EQUAL THE PARTITION, PROVIDED THAT RATING IS CONTINUOUS TO STRUCTURAL	5 PROTECT ALL EXISTING FINISHES THROUGHOUT PROJECT.
6	DECK ABOVE. NON-RATED PARTITIONS THAT EXTEND TO STRUCTURE SHALL TERMINATE AT UNDERSIDE OF STRUCTURAL DECK TO MAINTAIN A CONTINUOUS PLANE OF GYPSUM BOARD AS A	6 REFER TO DEMOLITION ELEVATIONS, SECTIONS AND DETAILS FO INFORMATION.
н	NOISE, SMOKE OR OTHER TYPE OF BARRIER.	7 REFER TO STRUCTURAL, MECHANICAL, PLUMBING AND ELECTRIC ADDITIONAL DEMOLITION NOTES.
7	ALL PARTITIONS EXTENDING TO STRUCTURE ABOVE SHALL TERMINATE WITH DEFLECTION TRACK - REFER TO INTERIOR PARTITION TYPE DETAIL ON THIS SHEET.	8 SALVAGE ALL UNISTRUT AND PROTECT FOR RE-USE IN NEW CON REQUIRED.
8	ALL GYPSUM BOARD PARTITIONS NOT EXTENDING TO THE STRUCTURE MUST BE BRACED.	9 AT LOCATIONS OF REMOVED WALLS, ALL ASSOCIATED ITEMS AT ARE TO BE REMOVED. SUCH AS: DOORS, WINDOWS, FRAMES
9	UL DESIGN NUMBERS REFER TO THE FIRE RESISTANCE DIRECTORY; UNDERWRITERS LABORATORY, LATEST EDITION.	TACKBOARDS, TACK STRIPS, ETC.
1	0 MISCELLANEOUS NON-RATED CHASES TO BE 5/8" GYPSUM BOARD ON 3 5/8" METAL STUD FRAMING AT 16" O.C., UNLESS NOTED OTHERWISE.	GENERAL NOTES - ARCHITECTURAL - NEW CONSTRUCT 1 THE OWNER RESERVES THE RIGHT TO REMOVE ANY ITEM FROM CONMENCEMENT OF CONTRACTED DEMOUTION WORK
1	1 MISCELLANEOUS FURRING AROUND COLUMNS TO BE 5/8" GYPSUM BOARD ON 11/2" STUDS, UNLESS NOTED OTHERWISE.	2 ALL EXISTING CONDITIONS SHOULD BE FIELD VERIFIED BEFORE V
1	2 FIRE-RATED PARTITIONS TO HAVE FIRE-STOPPING SEALANTS AT HEAD, SILL JUNCTURE	3 DIMENSIONS GIVEN ARE ACTUAL AND ARE TO THE FACE OF MAS
	WITH DISSIMILAR MATERIALS, ETC. AND AROUND ALL PENETRATIONS AND OPENINGS. 3 CONSTRUCT ALL PARTITIONS WITH SOUND ATTENUATION BATTS WITH THE FOLLOWING	FACE OF STUD FRAMING, UNLESS NOTED OTHERWISE. 4 DETAILS SHOWN ILLUSTRATE DESIGN INTENT, NOT ALL POSSIBLE
	SOUND BATT THICKNESS: 2 1/2" OR LESS METAL STUD - 1 1/2" THICKNESS, 3 5/8" OR LARGER METAL STUD - 3" THICKNESS. UNLESS NOTED OTHERWISE.	CONDITIONS NOT SHOWN, USE DETAILS CLOSEST TO CONDITION
P	ARTITION STUD KEY - METAL, CH, AND WOOD	5 EXTEND ALL INTERIOR WALL PARTITIONS FROM FLOOR TO STRUC UNLESS NOTED OR DETAILED OTHERWISE.
	METAL STUD/FURRING         DESIGNATION       SIZE         A       GYPSUM BOARD DIRECT APPLIED TO CMU	6 WITHIN BUILDING INTERIOR PROVIDE BULLNOSE BLOCK IN CMU N ALL EXPOSED OUTSIDE CORNERS, INCLUDING WINDOW AND DOO NOTES OR DETAILED OTHERWISE. PROVIDE SQUARE CORNERS A FINISHED WITH WALL TILE, REFER TO FINISH PLANS (1100 SHEETS
	B 7/8" C 1 1/2"	7 TOOTH-IN MASONRY AT NEW OPENINGS IN EXISTING WALLS.
	D 1 5/8" E 2 1/2" E 3 1/2"	8 TOOTH-IN NEW MASONRY INFILL INTO EXISTING OPENINGS AT AL LOCATIONS.
	F 3 1/2" G 3 5/8" H 4	9 STUD WALLS SPANNING OVER 12'-0" IN HEIGHT SHALL BE A MINI
	J 5 1/2" K 6"	10 STUD WALL SUPPORTING WALL CABINETS SHALL BE A MINIMUM
	L 8" M 10" N 12"	11 DOORS ARE TO BE 4" FROM CORNER OF ROOM, UNLESS NOTED OTHERWISE.
	P OPEN Q OPEN	12 FIRESTOP ALL INTERCONNECTIONS BETWEEN VERTICAL AND HOR CONCEALED WALL SPACES AT CEILING, FLOOR AND ROOF LEVELS
	METAL STUD/FURRING DESIGNATION SIZE R 2 1/2"	13 FIRESEAL ALL PENETRATIONS, SUCH AS, PIPES, DUCTS, CONDUN AND/OR SMOKE RATED ASSEMBLIES.
	5 4" T 6"	14 FOR CONTROL JOINT (C.J.) LOCATIONS REFER TO EXTERIOR ELEV
	METAL STUD/FURRING DESIGNATION SIZE	PLANS. 15 PAINT ALL ELECTRICAL PANEL COVERS AND ACCESS PANELS TO
	U 2"x4" V 2"x6" W 2"x8"	FINISHES. USING OIL-BASED PAINT, NOT LATEX WALL PAINT.
	PARTITION TYPE TAG (REFER TO FLOOR PLANS)	16 PROVIDE WOOD BLOCKING IN WALLS THAT REQUIRE WALL MOUN ACCESSORIES. COORDINATE WITH EQUIPMENT OR ACCESSORY
	PARTITION TYPE NUMBER - STUD SIZE DESIGATION	17 ROVIDE ALL ASSOCIATED CURBS FOR ROOF TOP EQUIPMENT AN TOP UNITS. LARGE VOIDS BELOW THE AIR HANDLING UNITS SHA INSULATION AS SPECIFIED FOR NOISE CONTROL.
		18 ALL EXISTING ROOF TOP PENETRATIONS BEING REMOVED REQUI MATCH EXISTING ADJACENT.
L		LIST OF ABBREVIATIONS
		ACPACOUSTICAL PANEL CEILINGAFFABOVE FINISH FLOORALUMALUMINUMANODANODIZEDCFMFCOLD FORMED METAL FRAMINGCMUCONCRETE MASONRY UNITCONCCONCRETEDCMUDECOTATIVE CONCRETE MASONRY UNITEIFSEXTERIOR INSULATION AND FINISH SYSTEMFEFIRE EXTINGUISHERFECFIRE EXTINGUISHER CABINET

FRT

FV

НМ

LVL

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PNT

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55M

TYP

VIF

WD

MCM

FIRE RESISTANT TREATED

LAMINATED VENEER LUMBER

PRESERVATIVE TREATED

SOLID SURFACE MATERIAL

STAINLESS STEEL

VERIFY IN FEILD

METAL COMPOSITE MATERIAL WALL PANEL

FIELD VERIFY

HOLLOW METAL

ON CENTER

PAINT

TYPICAL

WOOD

GYP BD GYPSUM BOARD

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ECTRICAL ITEMS WHICH

ONS AND DIMENSIONS AND ANAGER OF ANY AND ALL

NSTRUCTION AND

**GENERAL NOTES - ARCHITECTURAL - DEMOLITION** 

FOR ADDITIONAL

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ATTACHED TO THE WALL ES, MARKERBOARDS,

CTION M THE PROJECT PRIOR TO

E WORK BEGINS.

ASONRY UNITS OR TO THE

BLE CONDITIONS. FOR TION IN QUESTION. UCTURE/DECK ABOVE

WALL ASSEMBLIES AT DOOR JAMBS, UNLESS 3 AT ALL LOCATIONS EETS) FOR LOCATIONS.

ALL BULLNOSE BLOCK

INIMUM OF 20 GAGE.

M OF 20 GAGE.

TED OR DIMENSIONED

ORIZONTAL SPACES AND

DUITS, ETC. THROUGH FIRE

LEVATIONS AND/OR FLOOR

O MATCH ADJACENT

UNTED EQUIPMENT OR RY MANUFACTURER.

AND MECHANICAL ROOF HALL BE FILLED WITH

UIRE ROOF PATCHING TO



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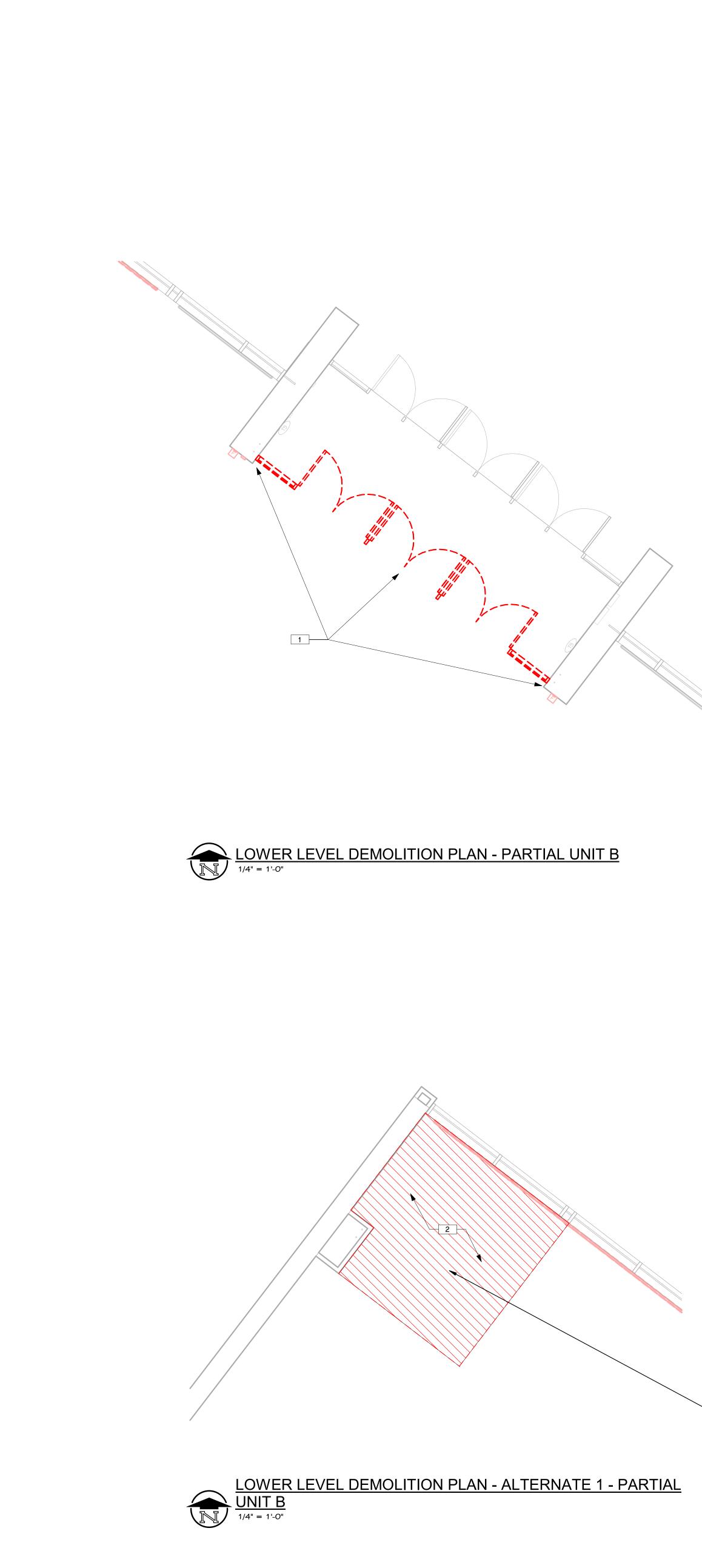
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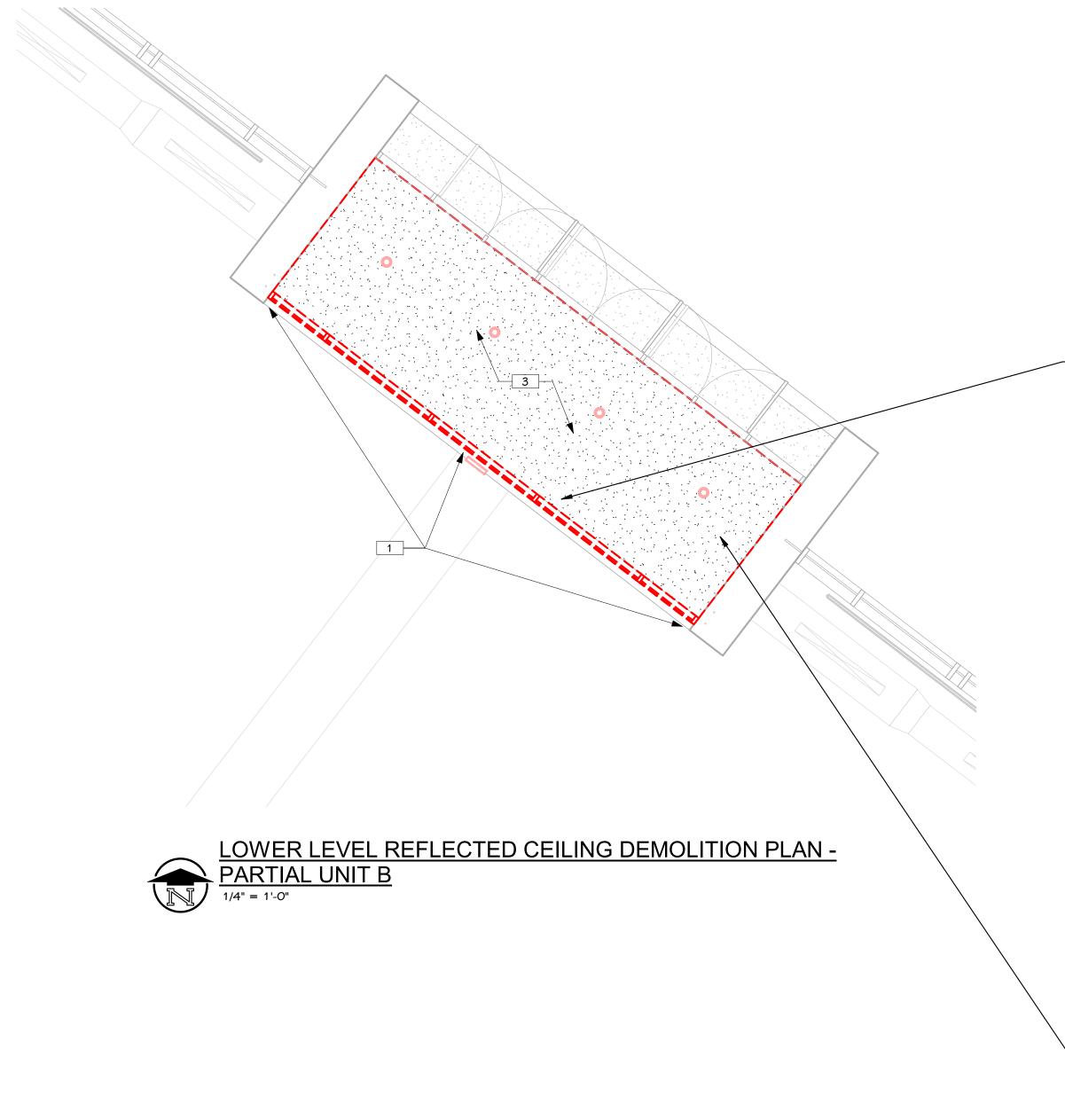
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ALIGNMENT GUIDELINES. &	ALIGNMENT GUIDELINES. &
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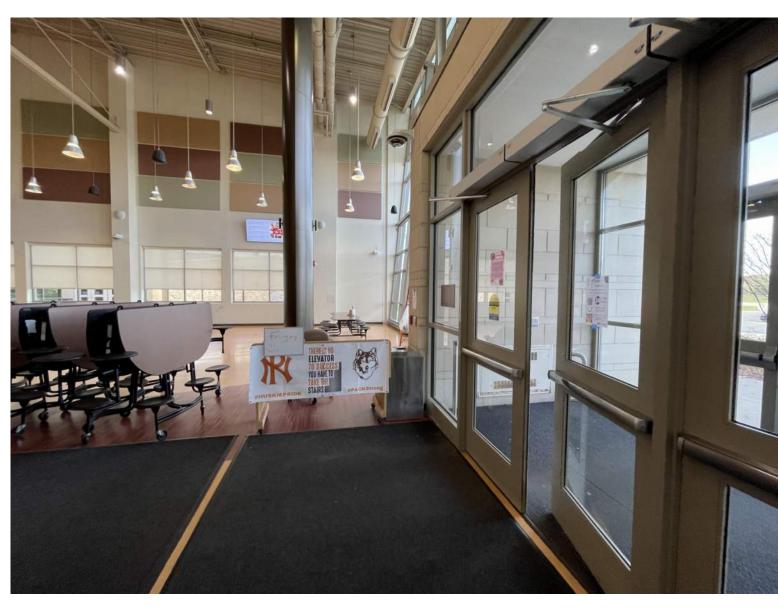
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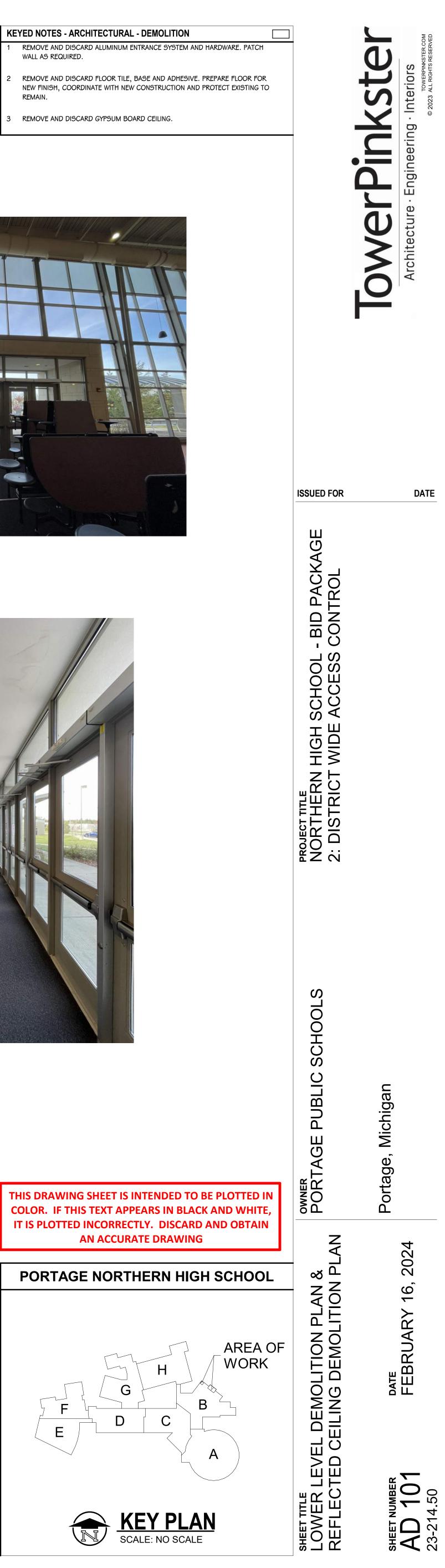


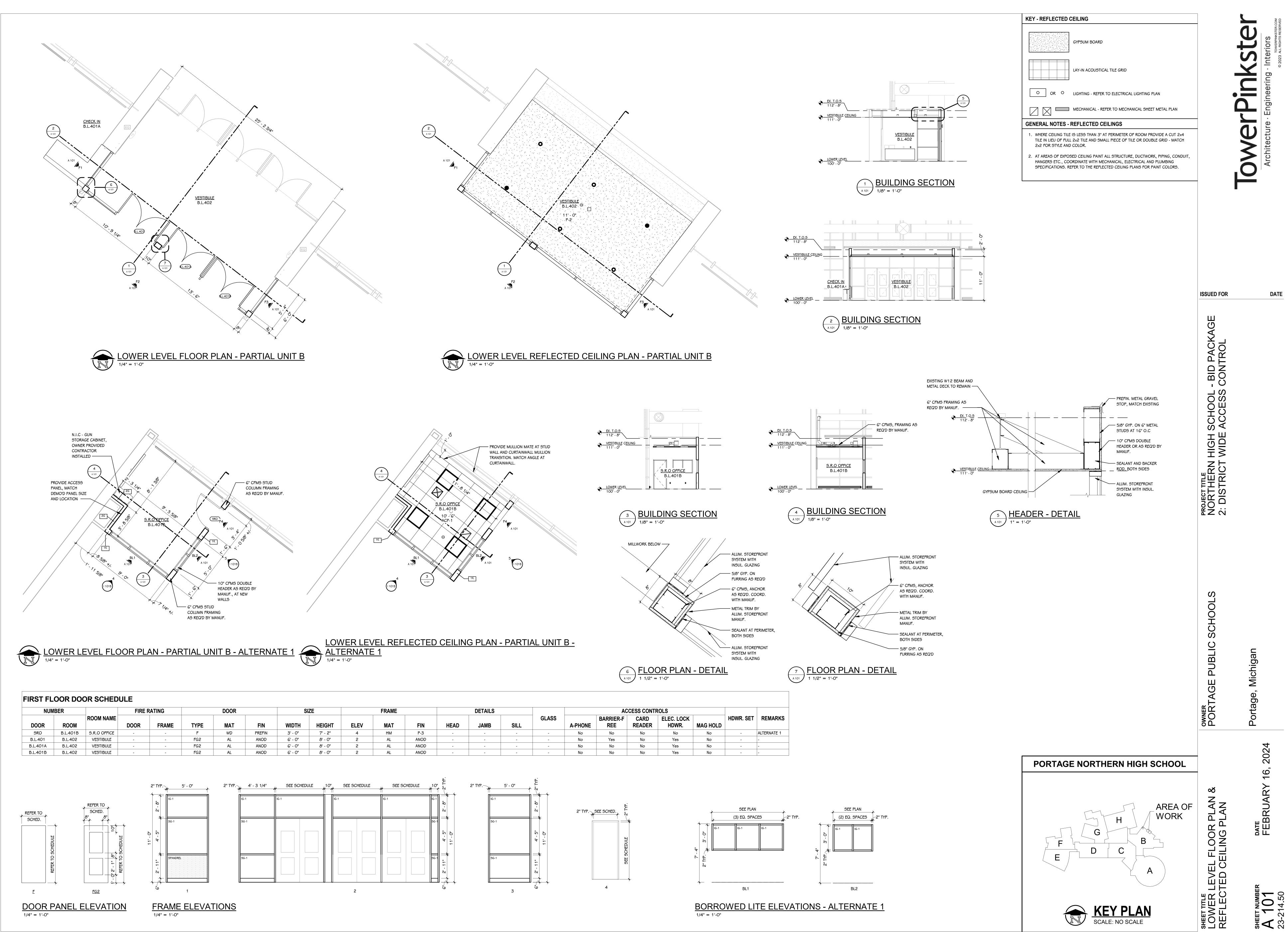




- CAFETERIA - NORTH ENTRANCE







INT	ERIOR - TYPI	CAL SYMBOLS AND REFERENCES	
	X-# -	- INDICATES MATERIAL TYPE - INDICATES CORRESPONDING SELECTION IN	MA
		SCHEDULE	
<	X-#	- INDICATES WALL FINISH - INDICATES BASE FINISH - INDICATES FLOOR FINISH	
<		VE O' - O" A.F.F.	det Val Wal
(	X-# X-#	- INDICATES COUNTERTOP FINISH - INDICATES CABINET FINISH (BASE AND UPPE	ER)
~	X-# -⁄ -	- INDICATES EXTENT OF ATYPICAL FINISH (WA	LL, I
	X . X -	- INDICATES DISSIMILAR FLOOR MATERIAL FIN REFER TO TYPICAL FLOOR TRANSITION DETA	
	MULTI	- INDICATES MULTIPLE MATERIALS, REFER TO ELEVATIONS	ENL
	X-P(A)	- INDICATES PATTERNED INSTALLATION OF A S REFER TO DETAIL OR ELEVATION - INDICATES PATTERN INTENT, REFER TO DETA	
	XB-# -	- INDICATES VISUAL DISPLAY BOARD, REFER SCHEDULES	то
	CG-#	- INDICATES CORNER GUARD, REFER TO MAT	ERI
	XX-# -	- INDICATES WINDOW TREATMENT, REFER TO SCHEDULE	WIN
	<b>_</b>	- INDICATES INSTALLATION OF GRAIN	
	TES - INTERIO	פר	
1		ERIAL SELECTION SCHEDULE FOR FINISH INFO	ORN
2		HITECTURAL FLOOR PLANS AND SPECIFICATION ON CONSTRUCTION MATERIALS.	NC
3		HITECTURAL ENLARGED STAIR PLANS FOR RA IY PAINTED METALS. COORDINATE STAIR DET FINISH PLANS.	
4	REFER TO ARCI	HITECTURAL FLOOR PLANS FOR LOCKER LOC	ATI
5		HITECTURAL GENERAL SHEETS FOR BARRIER- AND CODE-REQUIRED SIGNAGE.	FRE
6	REFER TO ARCH PARTITIONS, ET	HITECTURAL ENLARGED TOIELT ROOM PLANS TC.	FO
7	REFER TO REFL	ECTED CEILING PLANS FOR CEILING FINISH A	ND
8		D DIFFUSERS, GRILLES, ACCESS PANELS, ELE WITH AN OIL-BASED PAINT TO MATCH THE A	
9	PAINTED, COOP	EXPOSED CEILING WHERE DUCTWORK AND DI RDINATE WITH MECHANICAL SPECIFICATIONS LING PLANS FOR PAINT COLORS.	
10	CEILING ACCES	IS PANELS ARE TO BE PAINTED TO MATCH AL	JA
11		OR SCHEDULE FOR FINISH ON DOORS AND FR	
12 13		OH PLANS FOR VISUAL DISPLAY BOARD LOCA RIOR ELEVATION SHEETS FOR REQUIREMENT	
14	ABBREVIATION	S, AND HARDWARE/ACCESSORY SELECTIONS	6 FC
4.5	TRANSITIONS,	WAINSCOT DETAILS, AND TYPICAL TILE PATTE	ERN
15		PPORTED STORAGE RACKS, CABINETS, BOOI THE WALL SHALL BE FASTENED TO BOTH THE	
16		KING AS REQUIRED FOR ATTACHMENT OF CA JIPMENT, SPEACILITY FINISHES, ETC.	4SE
17		'N ILLUSTRATE DESIGN INTENT, NOT ALL POS OT SHOWN USE DETAILS CLOSEST TO COND	
DE	FINITIONS/AB	BREVIATIONS - INTERIORS	
	F. ABOVE FINIS		
BF CL	BARRIER FR CENTER LIN		
		NGION	
HOL MIN		NSION CODE ALLOWABLE DIMENSION	
ос	ON CENTER		
	OPPOSITE SIMILAR		

THIS DRAWING SHEET IS INTENDED TO BE PLOTTED IN COLOR. IF THIS TEXT APPEARS IN BLACK AND WHITE, IT IS PLOTTED INCORRECTLY. DISCARD AND OBTAIN AN ACCURATE DRAWING

TYP. TYPICAL V.I.F. VERIFY IN FIELD

e not indicated Detail or elevation ALL FINISH ALL FINISH ISH ISH

L, BASE, OR FLOOR)

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NLARGED PLANS OR

BINGLE MATERIAL TYPE, IL OR ELEVATION

O VISUAL DISPLAY BOARD

TERIAL SELECTION SCHEDULE ISSUED FOR

/INDOW TREATMENT

MATION.

ON FOR ADDITIONAL

ILINGS, GUARD RAILS, FINISH TAILS WITH FLOORING TYPES

TIONS AND QUANTITIES.

FREE MOUNTING HEIGHT

FOR TOILET ACCESSORIES,

d heights.

CTRICAL PANELS, ETC. ARE

FFUSERS ARE TO BE AND REFER TO THE

JACENT CEILING FINISH. MES.

DNS.

5, GENERAL NOTES, FOR CASEWORK.

DETAILS, FLOORING N REQUIREMENTS.

CASES, ETC. WHEN Loor and wall.

SEWORK, MILLWORK,

BIBLE CONDITIONS. FOR ITION IN QUESTION.



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## MATERIAL SELECTION SCHEDULE

ABBREV	ITEM	MANUFACTURER	PATTERN	COLOR	PRODUCT NO.	SIZE	SINGLE SOURCE	BASIS OF DESIGN	ADDITIONAL MANUFACTURERS	REMARKS
ACP-1	ACOUSTIC CEILING PANEL	USG	MARS	WHITE	86785	24" X 24"		Х	ARMSTRONG CEILINGS	.70 NRC 35 CAC
ECPTL-1	ENTRYWAY CARPET TILE	MILLIKEN	OBEX CUTX/GRAIN	GREY	GRX235-27	25CM X 1M	X			ASHLAR INSTALLATION
IRWP-1	IMPACT RESISTANT WALL PROTECTION	INPRO	PALLADIUM RIGID SHEET	MONTEREY	0110	4' X 8' X .040 THICKNESS	X			MANUFACTURERS STANDARD TOP AND END CAPS TO MATCH WALL PROTECTION
IRWP-2	IMPACT RESISTANT WALL PROTECTION	INPRO	PALLADIUM RIGID SHEET	ANTIQUE WHITE	0104	4' X 8' X .040 THICKNESS				MANUFACTURERS STANDARD TOP AND END CAPS TO MATCH WALL PROTECTION
P-1	PAINT	SHERWIN WILLIAMS		WOOL SKEIN	SW6148		X			
P-2	PAINT	SHERWIN WILLIAMS		DOVER WHITE	SW6385		X			
P-3	PAINT	SHERWIN WILLIAMS		MATCH EXISTING DOOR FRAMES			X			DOOR FRAME COLOR FOR S.R.O OFFICE
PL-1	PLASTIC LAMINATE	WILSONART		CLASSIC LINEN	4943-38		X			
PL-2	PLASTIC LAMINATE	WILSONART		MONTICELLO MAPLE	7925-38		X			
RB-1	RUBBER BASE	JOHNSONITE/TARKETT	TRADITIONAL DURACOVE - WITH TO	DE BROWN	47	4" HIGH BASE		Х	ROPPEE, FLEXCO, MANNINGTON	
ICF-1	TEXTILE COMPOSITE FLOORING	J ∉ J FLOORING	DOWNTOWN	BOURBON	1850-3156	24" X 24"	X			ASHLAR INSTALLATION

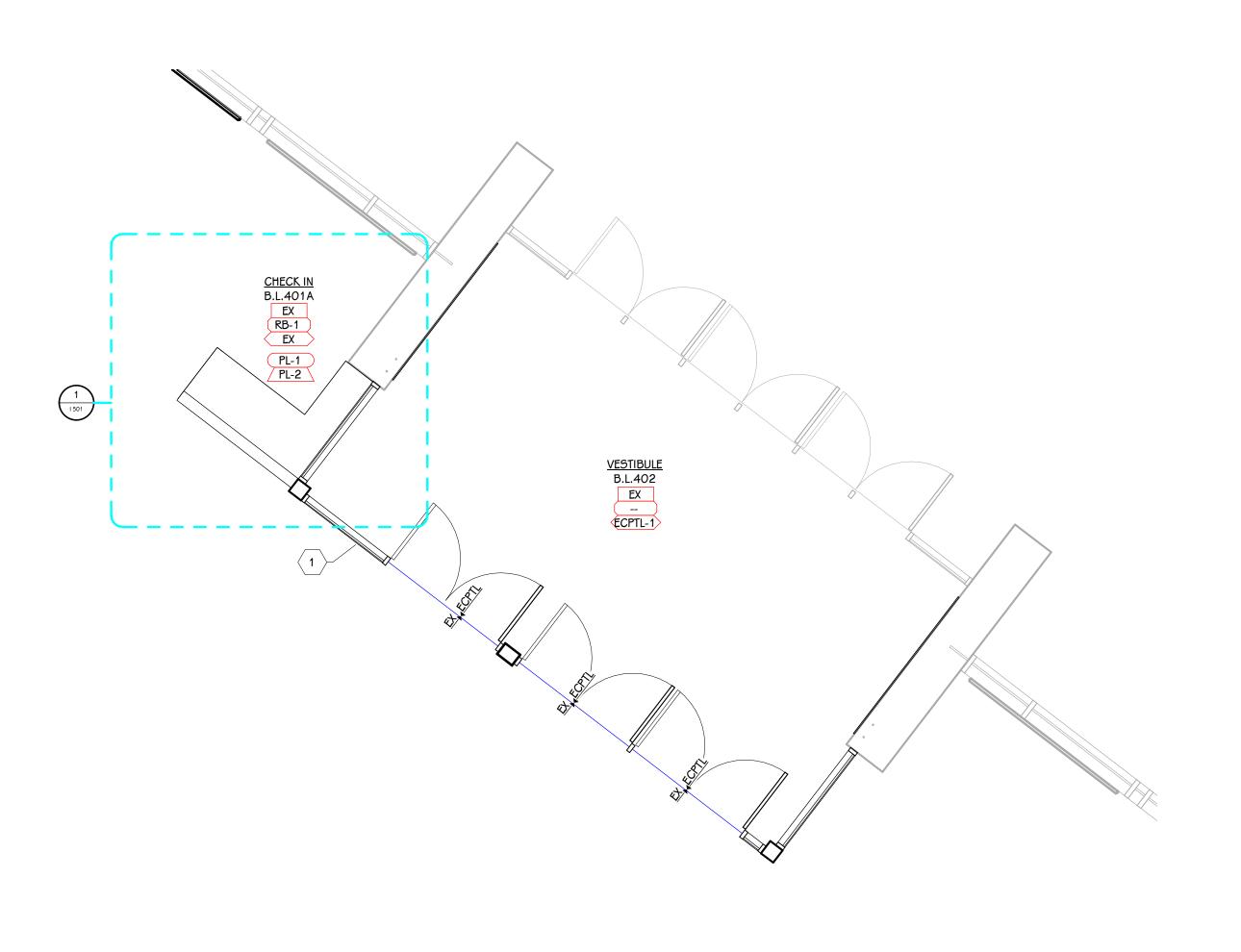
- NO COMPARABLE PRODUCTS OR PRODUCT SUBSTITUTIONS WILL BE REVIEWED FOR PRODUCTS DESIGNATED AS SINGLE SOURCE. COMPARABLE PRODUCTS WILL BE REVIEWED FOR ITEMS LISTED AS BASIS OF DESIGN. COMPARABLE PRODUCTS ARE REQUIRED TO MEET ANY MINIMUM PERFORMANCE REQUIREMENTS LISTED IN REMARKS AND APPERANCE OF SPECIFIED PRODUCT.
- REFER TO TYPICAL DETAILS AND PRODUCT SPECIFICATION FOR TRIMS AND ACCESSORIES ASSOCIATED WITH SPECIFIED PRODUCTS ABOVE.

VCT TO CARPET TILE OR TEXTILE COMPOSITE FLOORING

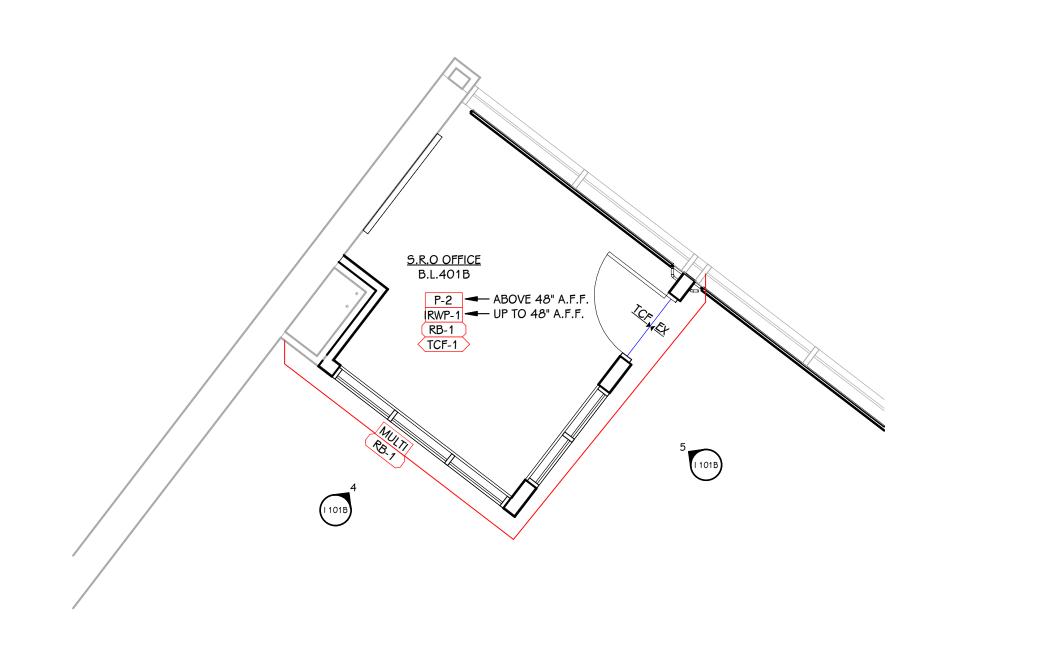
- JOHNSONITE ADAPTER CTA-40 

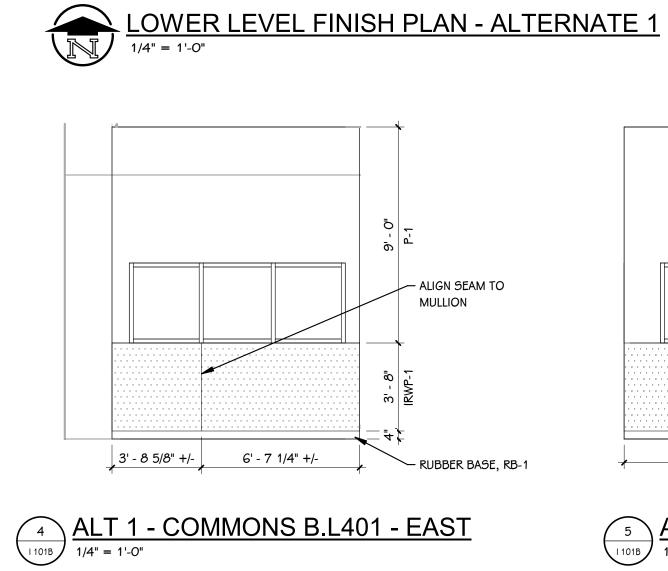
- ENTRYWAY CARPET TILE

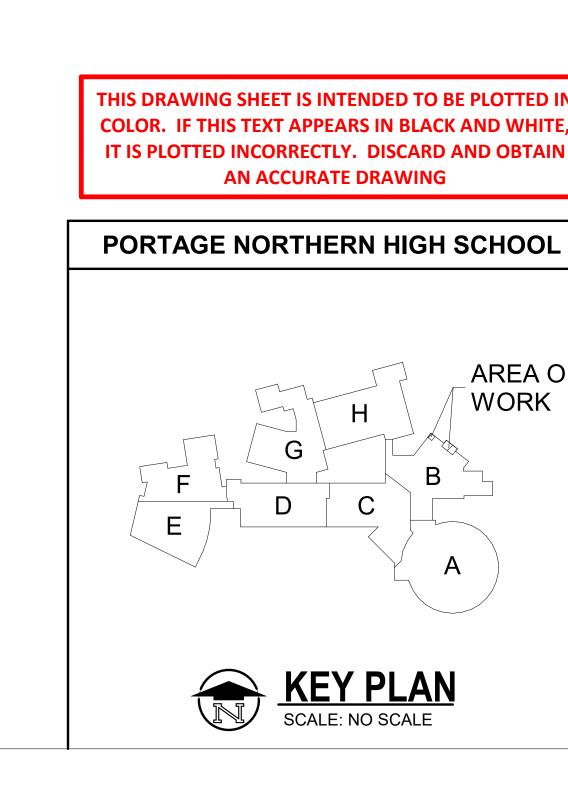
## $\underbrace{1}_{1 \text{ 101B}} \underline{\text{TYPICAL FLOORING TRANSTIONS}}_{3" = 1"-0"}$





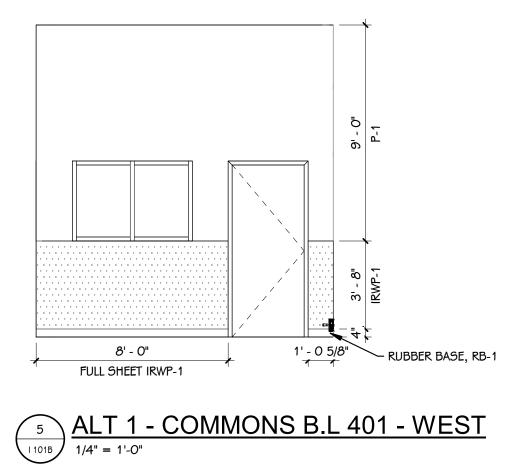


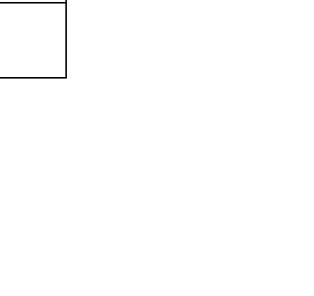




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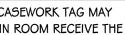
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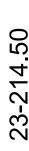
OTHERWISE NOTED. **KEYED NOTES - INTERIOR - FINISH PLAN** PAINT GYP ABOVE STORFRONT P-1, TYPICAL

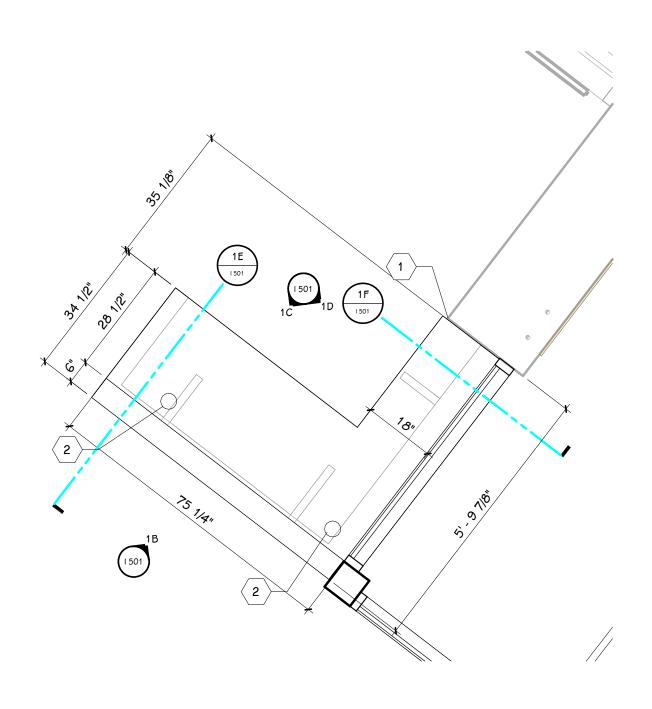
- WHERE NO FINISH TAG IS SHOWN ALL EXISTING FINISHES ARE TO REMAIN, UNLESS
- 4 DASHED LINE INDICATES LINE OF CEILING ABOVE, REFER TO REFLECTED CEILING PLANS.
- REFER TO ENLARGED FINISH PLANS AND PATTERN PLANS FOR ADDITIONAL FINISH DETAILS.
- CASEWORK FINISH TAGS DO NOT APPLY TO CUSTOM MILLWORK PIECES. REFER TO ENLARGED MILLWORK DETAILS FOR FINISH MATERIALS.
- **NOTES FINISH PLANS** FINISH TAGS APPLY TO LIKE MATERIALS IN ENTIRE ROOM. I.E. CASEWORK TAG MAY ONLY CALLOUT ONE RUN OF CASEWORK, BUT ALL CASEWORK IN ROOM RECEIVE THE SAME FINISHES, UNLESS TAGGED DIFFERENTLY.



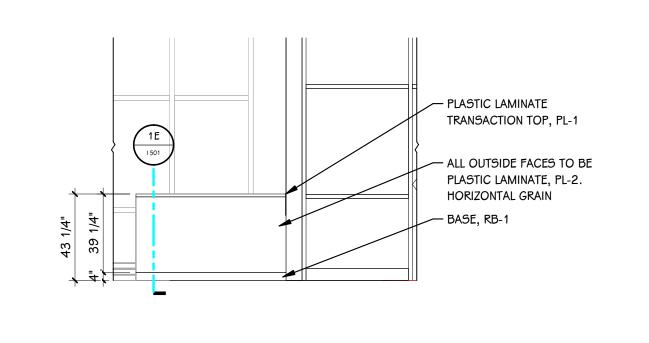




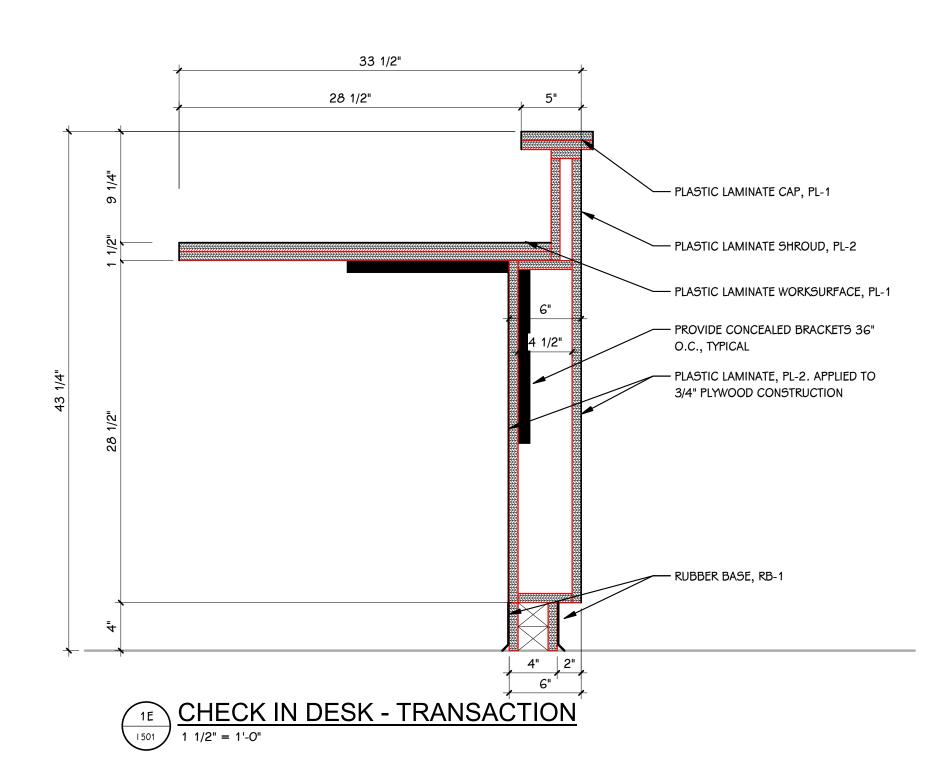


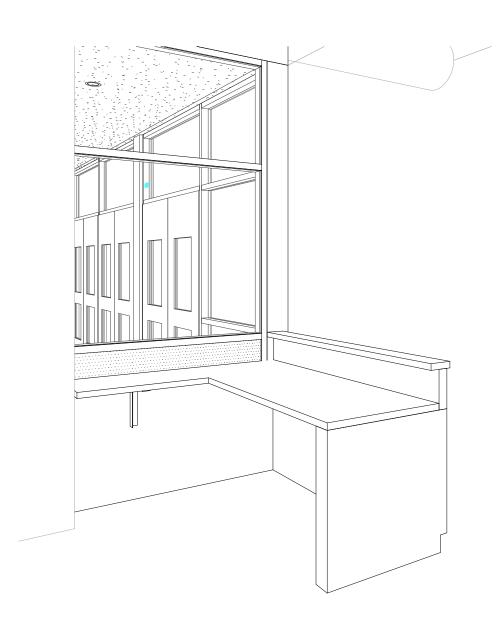


1 1501 ENLARGED MILLWORK PLAN - CHECK IN DESK 1/2" = 1'-0"

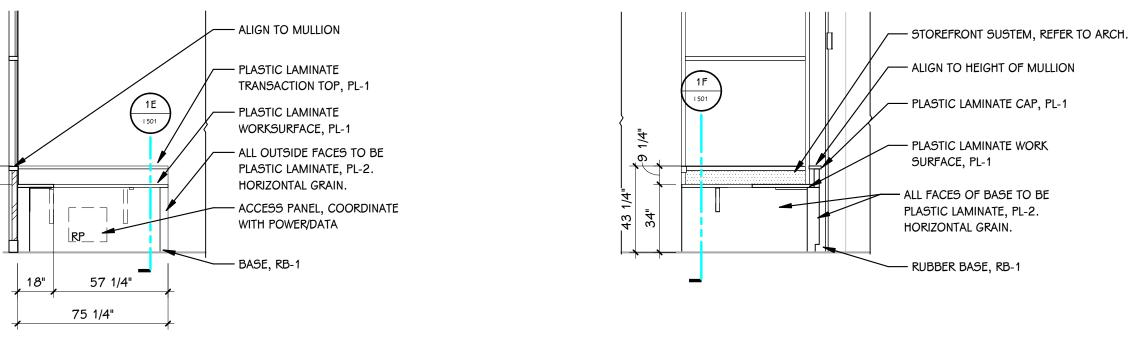








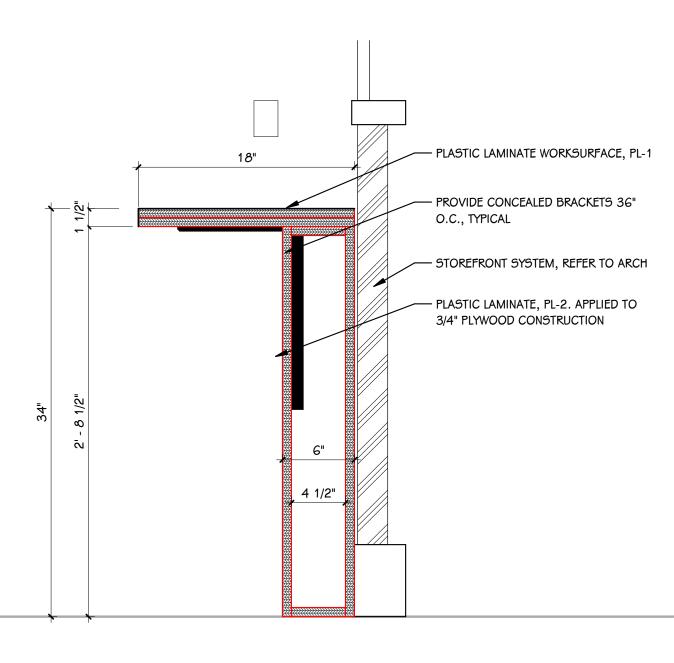
1A <u>3D - CHECK IN DESK</u>



1C 1501 CHECK IN DESK - INTERIOR FRONT 1/4" = 1'-0"

 $\mathbf{x}$ 





1F 1 1/2" = 1'-0"

#### NOTES - MILLWORK

<ul> <li>NOTES - MILLWORK</li> <li>VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION.</li> <li>ALL DIMENSIONS ARE FROM FINISH FACE UNLESS NOTED OTHERWISE.</li> <li>CASEWORK FINISH TAGS DO NOT APPLY TO MILLWORK. REFER TO ELEVATIONS AND DETAILS FOR MILLWORK FINISHES.</li> <li>CABINETRY WITHIN MILLWORK SCOPE MUST BE FURNISHED FROM SAME VENDOR AND MANUFACTURER AS ADJACENT MILLWORK DIEWALLS AND PANELS.</li> <li>WIREWAYS AND ACCESS PANELS FOR MILLWORK MOUNTED DEVICES AND TECHNOLOG' MUST BE COORDINATED WITH MECHANICAL, ELECTRICAL, TECHNOLOGY, AND SECURIT CONTRACTORS.</li> <li>FILLER PANELS SHALL BE NO LESS THAN 2" WIDE, UNLESS NOTED OTHERWISE.</li> <li>FILLER PANELS SHALL BE NO LESS THAN 2" WIDE, UNLESS NOTED OTHERWISE.</li> <li>FINISH ANY EXPOSED END PANELS, UNDERSIDE OF CABINETS OR OPEN CABINETS, WITI MATERIAL SPECIFIED FOR FRONTS IN THAT ROOM.</li> <li>ALL VERTICAL AND HORIZONTAL EXPOSED AND SEMI-EXPOSED SURFACES TO BE FINISHED WITH BODY MATERIAL.</li> <li>SUPPORT BRACKETS ARE REQUIRED EVERY 3G" O.C. AT AREAS WHERE COUNTERTOP IS OPEN UNDERNEATH. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING BRACKETS APPROPRIATELY SIZED BASED ON DEPTH OF COUNTER.</li> <li>PATTERN OR GRAIN DIRECTION TO BE VERTICAL ON DOORS AND HORIZONTAL ON DRAWERS - PER AWI STANDARDS, UNLESS NOTED OTHERWISE.</li> <li>ILOCKS: ALL CABINETS KEYED ALIKE, PER ROOM. SEE ELEVATIONS FOR LOCK LOCATIONS.</li> <li>GROMMET LOCATIONS SHALL BE VERIFIED IN THE FIELD WITH THE OWNER PRIOR TO INSTALLATION - COORDINATE WITH POWER &amp; DATA LOCATIONS FOR ANY ADDITIONAL WIRE MANAGEMENT REQUIREMENTS.</li> <li>SLABSMITHING' WILL BE REQUIRED IN INSTANCES WHERE A PATTERNED QUARTZ, NATURAL STONE, OR SOLID SURFACE IS SPECIFIED.</li> <li>WHERE MILLWORK IS INDICATED TO RECIEVE RESIDENTIAL APPLIANCES, FURNITURE, OR ON THER FUNDIENE INDICATED TO RECIEVE RESIDENTIAL APPLIANCES, FURNITURE, OR ONDER FUNDRED IN DICATED TO RECIEVE RESIDENTIAL APPLIANCES, FURNITURE, OR ONDER STORED ON RECIEVE RESIDENTIAL APPLIANCES, FURNITURE, OR ONDER STORED ON RECIEVE RESIDENTIAL APPLIANCES, FU</li></ul>	Y H Đ	TowerPhyperplace       Second Strends         Achitecture - Engineering - Interiors       COMMENDATE         SC03 ALIGHTR RESERVED
OWNER-FURNISHED EQUIPMENT, COORDINATE WITH FINAL OWNER-PROVIDED SELECTIONS.	ISSUED FOR	DATE
<b>KEYED NOTES - ENLARGED MILLWORK PLANS</b> 1 CAULK JOINT BETWEEN EXISTING WALL AND MILLWORK 2 GROMMET LOCATIONS TO BE COORDINATED WITH ELECTRICAL		
<ul> <li>MILLWORK HARDWARE &amp; ACCESSORY SELECTIONS</li> <li>GROMMETS TYPE &amp; FINISH: MOCKET BRAVA @BRV1, SATIN CHROME FINISH.</li> <li>SUPPORT BRACKET TYPES &amp; FINISH: A AND M HARDWARE HEAVY DUTY HYBRID BRACKETS. SIZED AS REQUIRED. FINISH TO BE BLACK POWDERCOAT UNLESS OTHERWISE NOTED.</li> <li>PVC EDGEBANDING TO BE SELECTED</li> </ul>	BID PACKAGE	
STANDARD ABBREVIATIONS - CASEWORK         ADJ       ADJUSTABLE       P/O       PULL-OUT DRAWER	- I - I - I - I - I - I - I - I - I - I	
	PROJECT TITLE NORTHERN HIGH 2: DISTRICT WIDE	
	OWNER PORTAGE PUBLIC SCHOOLS	Portage, Michigan
	MILLWORK FINISH PLANS	date FEBRUARY 16, 2024
THIS DRAWING SHEET IS INTENDED TO BE PLOTTED IN COLOR. IF THIS TEXT APPEARS IN BLACK AND WHITE, IT IS PLOTTED INCORRECTLY. DISCARD AND OBTAIN AN ACCURATE DRAWING	SHEET TITLE ENLARGED MI AND DETAILS	sheet number <b>1501</b> 23-214.50

<b>NO</b>	TES - MILLWORK VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION.	_	TER.COM
2	ALL DIMENSIONS ARE FROM FINISH FACE UNLESS NOTED OTHERWISE.		PAL RIGHTS RE
3	CASEWORK FINISH TAGS DO NOT APPLY TO MILLWORK. REFER TO ELEVATIONS AND DETAILS FOR MILLWORK FINISHES.		© 2023 ALL
4	CABINETRY WITHIN MILLWORK SCOPE MUST BE FURNISHED FROM SAME VENDOR AND MANUFACTURER AS ADJACENT MILLWORK DIEWALLS AND PANELS.		
5	WIREWAYS AND ACCESS PANELS FOR MILLWORK MOUNTED DEVICES AND TECHNOLOGY MUST BE COORDINATED WITH MECHANICAL, ELECTRICAL, TECHNOLOGY, AND SECURITY CONTRACTORS.		Engineeri
6 7	FILLER PANELS SHALL BE NO LESS THAN 2" WIDE, UNLESS NOTED OTHERWISE. FINISH ANY EXPOSED END PANELS, UNDERSIDE OF CABINETS OR OPEN CABINETS, WITH		· ·
8	ALL VERTICAL AND HORIZONTAL EXPOSED AND SEMI-EXPOSED SURFACES TO BE		<b>VOI</b>
9	FINISHED WITH BODY MATERIAL. SUPPORT BRACKETS ARE REQUIRED EVERY 36" O.C. AT AREAS WHERE COUNTERTOP IS OPEN UNDERNEATH. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING BRACKETS APPROPRIATELY SIZED BASED ON DEPTH OF COUNTER.		<b>S</b>
10	PATTERN OR GRAIN DIRECTION TO BE VERTICAL ON DOORS AND HORIZONTAL ON DRAWERS - PER AWI STANDARDS, UNLESS NOTED OTHERWISE.		
11	LOCKS: ALL CABINETS KEYED ALIKE, PER ROOM. SEE ELEVATIONS FOR LOCK LOCATIONS.		
12	GROMMET LOCATIONS SHALL BE VERIFIED IN THE FIELD WITH THE OWNER PRIOR TO INSTALLATION - COORDINATE WITH POWER & DATA LOCATIONS FOR ANY ADDITIONAL WIRE MANAGEMENT REQUIREMENTS.		
13	SLABSMITHING' WILL BE REQUIRED IN INSTANCES WHERE A PATTERNED QUARTZ, NATURAL STONE, OR SOLID SURFACE IS SPECIFIED.		
14	WHERE MILLWORK IS INDICATED TO RECIEVE RESIDENTIAL APPLIANCES, FURNITURE, OR OWNER-FURNISHED EQUIPMENT, COORDINATE WITH FINAL OWNER-PROVIDED SELECTIONS.		
<b>KE</b> `	YED NOTES - ENLARGED MILLWORK PLANS       O         CAULK JOINT BETWEEN EXISTING WALL AND MILLWORK       O	ISSUED FOR	DATE
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<b>MIL</b> 1	LWORK HARDWARE & ACCESSORY SELECTIONS GROMMETS TYPE & FINISH: MOCKET BRAVA @BRV1, SATIN CHROME FINISH.	PACKAGE ITROL	
2	SUPPORT BRACKET TYPES & FINISH: A AND M HARDWARE HEAVY DUTY HYBRID BRACKETS. SIZED AS REQUIRED. FINISH TO BE BLACK POWDERCOAT UNLESS	PAC ROI	
3	OTHERWISE NOTED. PVC EDGEBANDING TO BE SELECTED		
STA	NDARD ABBREVIATIONS - CASEWORK		
ADJ FP RP	ADJUSTABLEP/OPULL-OUT DRAWERFILLER PANELBFBARRIER_FREEREMOVABLE PANELCLRCLEAR OPENING	RN HIGH SCHOO	
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		OWNER PORTAGE PUBLIC SCHOOLS	Portage, Michigan
	THIS DRAWING SHEET IS INTENDED TO BE PLOTTED IN	LE RGED MILLWORK FINISH PLANS ETAILS	MBER MBER FEBRUARY 16, 2024 50
	COLOR. IF THIS TEXT APPEARS IN BLACK AND WHITE, IT IS PLOTTED INCORRECTLY. DISCARD AND OBTAIN AN ACCURATE DRAWING	SHEET TITLE ENLARG AND DET	знеет иимвек   501 23-214.50

ABBREVI	ATIONS
A.C.D.	
A.F.F.	ABOVE FINISHED FLOOR
A.G.	ABOVE GRADE
A.G. A.P.D. B.D.	AIR PRESSURE DROP BALANCING DAMPER
B.D.D. B.F.	
BTUH	BRITISH THERMAL UNIT PER HOUR
B.V.	BALANCING VALVE
C.B.	CATCH BASIN
C.B.V. C.F.H.	CUBIC FEET PER HOUR
C.F.M.	CUBIC FEET PER MINUTE
C.H.	CABINET HEATER
C.I.	CAST IRON
C.M.	CEILING MOUNTED
C.O.	CLEAN OUT
C.V.	CONTROL VALVE
C.V. D.F. DN.	DRINKING FOUNTAIN DOWN
D.S. E.A.	
E.A.T.	ENTERING AIR TEMPERATURE
E.F.	ENTERING DRY BULB EXHAUST FAN
E.S.P. E.W.B.	ENTERING WET BULB
E.W.C.	ELECTRIC WATER COOLER
E.W.T.	ENTERING WATER TEMPERATURE
EXIST.	EXISTING
E.T.R.	EXISTING TO REMAIN
F.C.	FLEXIBLE CONNECTION
F.D.	FLOOR DRAIN
(FD) F.H.C.	FIRE DAMPER
F.I.	FIELD INSTALLED
F.M.	FLOOR MOUNTED
F.P.M.	FEET PER MINUTE
F.R.	FIN RADIATION
G.P.M.	GALLONS PER MINUTE
H.B.	HOSE BIBB
HP	HORSE POWER
I.E.	INVERT ELEVATION
L.A.T.	LEAVING AIR TEMPERATURE
LAV.	LAVATORY
L.D.B.	LEAVING DRY BULB
LOUV.	LOUVER
L.W.B	LEAVING WET BULB
L.W.T.	LEAVING WATER TEMPERATURE
M.A.	MIXED AIR
M.A.T.	MIXED AIR TEMPERATURE
MAX.	MAXIMUM
M.B.	MOP BASIN
MBH	BRITISH THERMAL UNIT PER HOUR (THOUSANDS)
MFR.(S)	MANUFACTURER(S)
M.H.	MANHOLE
MIN.	MINIMUM
MTG.	MOUNTING
M.V.	MANUAL AIR VENT
N.C.	NORMALLY CLOSED
N.F.W.H.	NON-FREEZE WALL HYDRANT
N.I.C.	NOT IN CONTRACT
N.O.	NORMALLY OPEN
O.A.	OUTSIDE AIR
O.A.I.	OUTSIDE AIR INTAKE
OCT.	OCTAVE
P.A.	PIPE ANCHOR
P.D.	PRESSURE DROP
P.I.V	POST INDICATOR VALVE
P.R.V.	PRESSURE REDUCING VALVE
P.T.	PRESSURE / TEMPERATURE TAPPING
R.A.	RETURN AIR
R.D.	ROOF DRAIN
R.H.	RELATIVE HUMIDITY
R.I.O.	ROUGH IN ONLY
r.p.m.	REVOLUTIONS PER MINUTE
Rppbp	REDUCED PRESSURE PRINCIPAL
R.V.	BACKFLOW PREVENTER RELIEF VALVE
S.A.	SUPPLY AIR
SENS.	SENSIBLE
SHR.	SHOWER
SK.	SINK
5.0.V.	SHUT-OFF VALVE
5.P.	STATIC PRESSURE
S.SK.	SERVICE SINK
TEMP.	TEMPERATURE
TOT.	TOTAL
T.R.	TEMPERATURE RISE
T.S.	TIP SPEED
T.S.P.	TOTAL STATIC PRESSURE
T.U.	TERMINAL UNIT BOX
T.W.C.	TEPID WATER CONNECTION
U.H.	UNIT HEATER
URN.	URINAL
V.	VENT
VEL.	VELOCITY
V.I.	VIBRATION ISOLATORS
V.I.F.	VERIFY IN FIELD
V.S.	VENT STACK
V.T.R.	VENT THRU ROOF
W.	WASTE
W.C.	WATER CLOSET
W.M.	WALL MOUNTED
W.P.D.	WATER PRESSURE DROP
W.SK.	WASH SINK
	_ SYMBOLS
_	
逸	CONTROL VALVE
仔	FLOW METER (PROBE TYPE)
⊔ &	THREE-WAY CONTROL VALVE
F	FREEZE STAT

R	CONTROL VALVE
Ъ	FLOW METER (PROBE TYPE)
密	THREE-WAY CONTROL VALVE
F	FREEZE STAT
Μ	MOTORIZED ACTUATOR
HS	HUMIDITY SENSOR
(TS)	TEMPERATURE SENSOR
CO2	CARBON DIOXIDE SENSOR
DP	DIFFERENTIAL PRESSURE SENSOR
AS	AIRFLOW SENSOR
MS	MOISTURE SENSOR
DS	DUCT SMOKE SENSOR

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NICAL SYMBOLS V — ACID WASTE V — ACID WASTE VENT BALANCING VALVE BUTTERFLY VALVE CALIBRATED BALANCING VALVE \_\_\_\_\_\_ CAP 2 CARBON DIOXIDE J CHECK VALVE R — CHILLER RETURN 6 CHILLER SUPPLY R — CHILLED WATER RETURN 6 — CHILLED WATER SUPPLY ——— COLD WATER (DOMESTIC) ------ COMPRESSED AIR ND — CONDENSATE D — CONDENSATE DRAIN CONTROL VALVE R — COOLING TOWER RETURN 6 — COOLING TOWER SUPPLY DEIONIZED WATER FIRE DAMPER (HORIZONTAL) 「ふ FIRE DAMPER (VERTICAL) FIRE/SMOKE DAMPER FIRE PROTECTION FLOW METER (PROBE TYPE) ------- FLOW METER (WAFER TYPE) FLOW SWITCH FOOTING DRAIN R — FUEL OIL RETURN S — FUEL OIL SUPPLY GAS GAS COCK GROUND LOOP WATER RETURN GROUND LOOP WATER SUPPLY HEATING HOT WATER RETURN HEATING HOT WATER SUPPLY R HEAT PUMP RETURN 6 — HEAT PUMP SUPPLY - ---- HOT WATER RETURN (DOMESTIC) - ---- HOT WATER SUPPLY (DOMESTIC) HUMIDISTAT A \_\_\_\_\_ MEDICAL AIR MEDICAL VACUUM ----- NITROGEN D ----- NITROUS OXIDE OUTSIDE STEM AND YOKE VALVE 2 OXYGEN PRESSURE GAUGE PRESSURE REDUCING VALVE PRESSURE RELIEF VALVE PRESSURE / TEMPERATURE TAPPING R PRIMARY HEATING HOT WATER RETURN B — PRIMARY HEATING HOT WATER SUPPLY C — PUMPED CONDENSATE REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER JID \_\_\_\_\_ REFRIGERANT LINE (LIQUID) ION— REFRIGERANT LINE (SUCTION) SANITARY SEWER (ABOVE FLOOR) - — – SANITARY SEWER (BELOW FLOOR) SHUT-OFF VALVE SMOKE DAMPER N \_\_\_\_\_ SOFT COLD WATER V \_\_\_\_\_ SOFT HOT WATER /R \_\_\_\_\_ SOFT HOT WATER RETURN 1 SPRING CHECK VALVE (#) — STEAM STEAM TRAP STORM SEWER (ABOVE FLOOR) OF) — STORM SEWER (OVERFLOW SYSTEM) ------ STORM (BELOW FLOOR) \_\_\_\_\_ STRAINER R — SNOWMELT RETURN SNOWMELT SUPPLY TEMPERATURE SENSOR V — TEPID WATER R — TEPID WATER RETURN — THERMOMETER THERMOSTAT THREE-WAY CONTROL VALVE 一一成<sup>、</sup> TRIPLE DUTY VALVE (ANGLE) TRIPLE DUTY VALVE (STRAIGHT) UNION C — VACUUM V – VENT

**GENERAL NOTES - MECHANICAL - NEW CONSTRUCTION** DETAILS SHOWN ILLUSTRATE DESIGN INTENT, NOT ALL POSSIBLE CONDITIONS. DRAWINGS ARE NOT TO BE CONSIDERED FABRICATION DRAWINGS.

- IF THE CONTRACTOR ELECTS TO PROVIDE EQUIPMENT OTHER THAN BASIS OF DESIGN, THE CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE THE LAYOUT AND CLEARANCE REQUIREMENTS IN ALL SPACES CONTAINING EQUIPMENT AND PROVIDE EQUIPMENT MEETING THE SPECIFICATIONS AND ACHIEVING CODE REQUIRED CLEARANCES WITHIN THE SPACE PROVIDED. CONTRACTOR IS REQUIRED TO COVER ALL ELECTRICAL COSTS FOR OTHER THAN BASIS OF DESIGN PRODUCTS SUCH AS DIFFERENT VOLTAGE OR DIFFERENT SIZE MOTER.
- COORDINATE ALL NEW CONSTRUCTION WORK OR ACTIVITY WITH THAT WHICH IS REQUIRED BY OTHER TRADES OR INSTALLERS IN ORDER TO PROVIDE A COMPLETE SYSTEM INCLUDING ALL NECESSARY COMPONENTS, FITTINGS, AND OFFSETS.
- INSTALLER SHALL VERIFY ALL EXISTING JOBSITE CONDITIONS AND DIMENSIONS AND BE RESPONSIBLE FOR THE SAME. NOTIFY THE ENGINEER OF DISCREPANCIES PRIOR TO COMMENCING WORK.
- FIRE SEAL ALL PENETRATIONS, SUCH AS PIPES, DUCTS, CONDUIT, ETC. THROUGH FIRE AND/OR SMOKE RATED ASSEMBLIES.
- MECHANICAL INSTALLER IS RESPONSIBLE FOR PATCHING OF WALLS, CEILINGS, AND FLOORS WHERE FIXTURES, MECHANICAL EQUIPMENT, SHEET METAL, OR PIPING HAS BEEN REMOVED, RELOCATED, OR INSTALLED.
- ALL PIPING AND DUCTWORK SHALL AVOID LOCATIONS DIRECTLY ABOVE ALL ELECTRICAL EQUIPMENT. COORDINATE WITH ELECTRICAL.
- ALL LOW VOLTAGE CABLING SHALL BE RUN IN CONDUIT BETWEEN DEVICE AND CABLE TRAY OR TECHNOLOGY RACK. NO CABLING SHALL BE VISIBLE IN EXPOSED CEILING SPACES AND SHALL BE ROUTED IN CONDUIT THAT IS PAINTED TO MATCH SURFACE IT IS SUPPORTED FROM. CABLING THAT IS ROUTED ABOVE AN ACCESSIBLE CEILING SPACE CAN BE INDEPENDENTLY SUPPORTED WITH COMM HOOKS OR RINGS.
- COORDINATE ALL TEMPERATURE SENSOR LOCATIONS WITH "ELECTRICAL DEVICES ALIGNMENT GUIDELINES" DETAIL ON SHEET G 001.
- 10 WHERE SPACE PERMITS, ALL HYDRONIC BRANCH PIPING SHALL TAP OFF OF BOTTOM OR SIDE OF PIPING MAINS PER BRANCH PIPING TAKE-OFF PIPING DETAIL THIS SHEET. MANUAL AIR VENTS SHALL BE INSTALLED AT THE TOP OF ALL HYDRONIC SYSTEMS.
- 11 ALL EXISTING CLOSED SYSTEMS SHALL BE ISOLATED AND FLUSHED/CLEANED PRIOR TO CONNECTION TO NEW SYSTEMS.
- 12 ALL BRANCH PIPING SHALL BE FURNISHED WITH SHUT-OFF VALVES IN AN ACCESSIBLE LOCATION NEAR MAIN CONNECTION.

### **GENERAL NOTES - MECHANICAL - DEMOLITION**

- ALL DUCTWORK, PIPING AND EQUIPMENT SHOWN DASHED SHALL BE REMOVED. PROTECT EXISTING WORK WHICH IS TO REMAIN IN PLACE FOR REUSE WITH TEMPORARY COVERS, SHORING, BRACING AND SUPPORTS. VERIFY LOCATIONS OF AND PROTECT EXISTING INTERIOR ELECTRICAL AND MECHANICAL UTILITIES AND SERVICES EXCEPT WHERE INDICATED OTHERWISE. ALL MATERIALS AND EQUIPMENT REMOVED AND NOT REUSED SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE. THE OWNER RESERVES THE RIGHT TO KEEP, OR TO SALVAGE PARTS FROM, ANY EQUIPMENT PRIOR TO BEING REMOVED FROM SITE. ALL MATERIALS AND EQUIPMENT REQUIRING REMOVAL AND RELOCATION FOR REUSE SHALL BE CAREFULLY REMOVED AND STORED TO PREVENT DAMAGE AND REINSTALLED AS THE WORK PROGRESSES.
- CONTRACTOR SHALL PROTECT ALL WALLS, CEILINGS, FLOORS, LIGHTS AND OTHER FINISHED SURFACES NOT BEING DEMOED. IF DAMAGED, THE CONTRACTOR SHALL REPAIR TO MATCH EXISTING CONDITIONS.
- MODIFICATIONS TO THE ROOFING SYSTEM FOR DEMOLITION, OR INSTALLATION OF NEW EQUIPMENT, SHALL BE DONE IN A MANNER TO MAINTAIN OWNER'S ROOFING WARRANTY.
- FOR ALL EXISTING ROOF CURBS WHICH ARE NOT BEING REUSED AND ARE RECEIVING NEW ROOF CAPS, IF THE MAXIMUM DIMENSIONS OF THE CURB EXCEED 30" IN EITHER DIRECTION THEN PROVIDE AND INSTALL 1.1/2" x 1.1/2" x 1/4" SUPPORT ANGLES TO SPAN ACROSS TOP OF ROOF CURB OPENING BELOW ROOF CAP. SPACING BETWEEN ANGLES SHALL NOT EXCEED 24" ON CENTER.
- PERFORM PRE-DEMOLITION TESTS. MEASURE AND RECORD VALUES INDICATED, SUBMIT REPORT TO THE ENGINEER. ALL MEASUREMENTS SHALL BE TAKEN WITH THE EQUIPMENT OPERATING AT FULL DESIGN CAPACITY. MEASURE AND RECORD GRILLE, REGISTER, OR DIFFUSER AIRFLOW AND NECK SIZE. MEASURE AND RECORD AIRFLOW, INLET STATIC PRESSURE, SUPPLY AIR TEMPERATURE, GPM, AND EWT/LWT OF ASSOCIATED TERMINAL UNIT. MEASURE AND RECORD OA AND SA CFM OF THE ASSOCIATED AIR HANDLING UNIT. MEASURE AND RECORD SPACE AND OUTDOOR TEMPERATURE AND HUMIDITY.

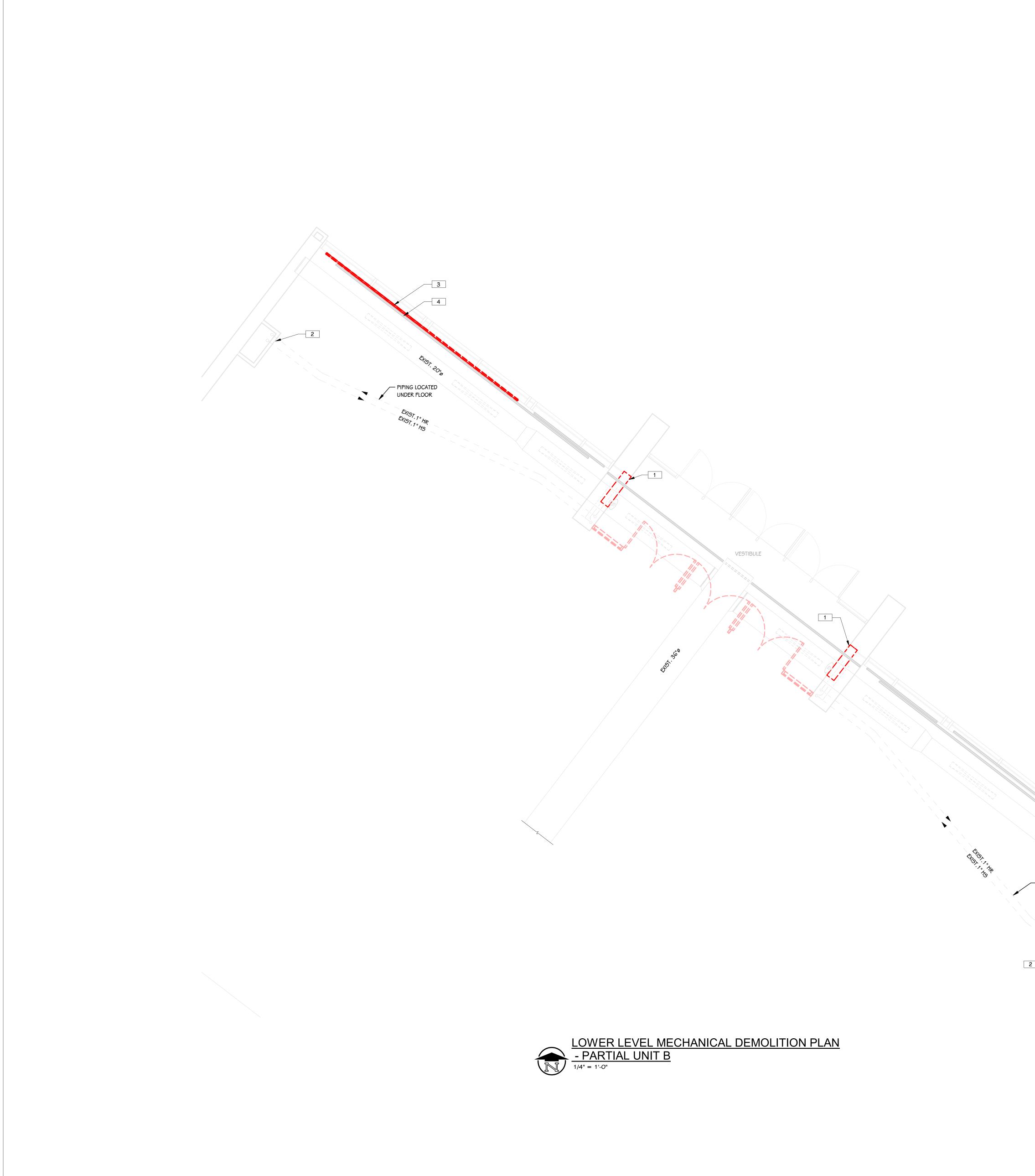


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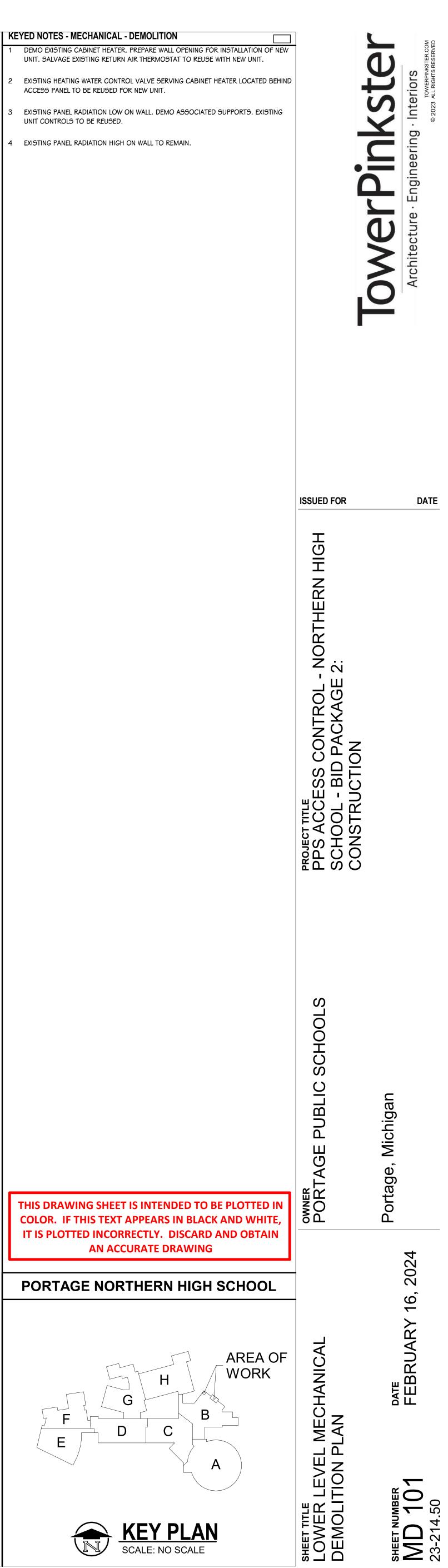
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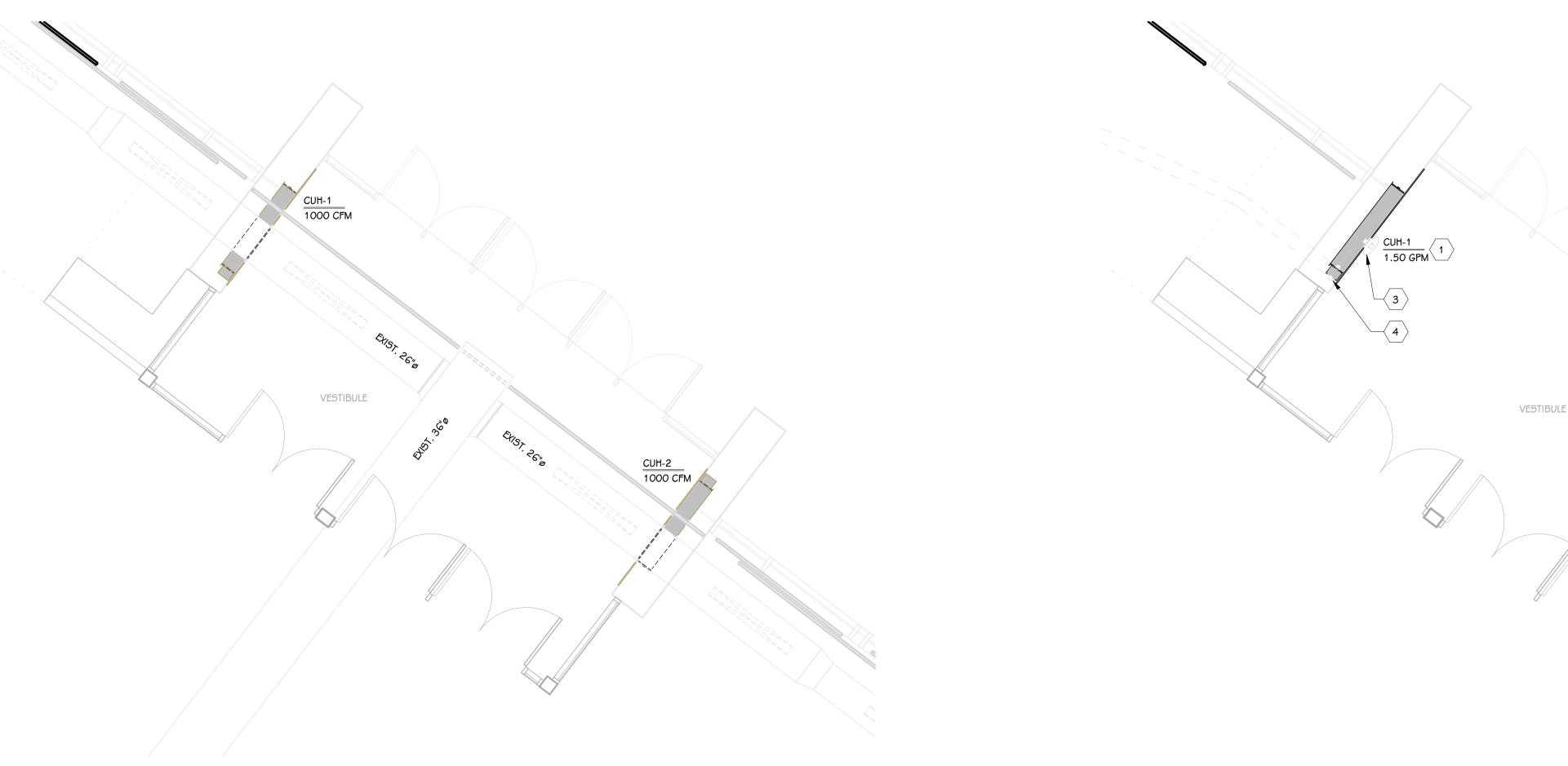
C) Ē O SCH BLIC ш C POF Ω S ERAL YMBOI 02, Ñ 0 N Z  $\overline{}$ ШО DATE FEBRUAR SHEET TITLE MECHANICAL & PLUMBING G NOTES, ABBREVIATIONS, ANI SHEET NUMBER MG 001 23-214.50



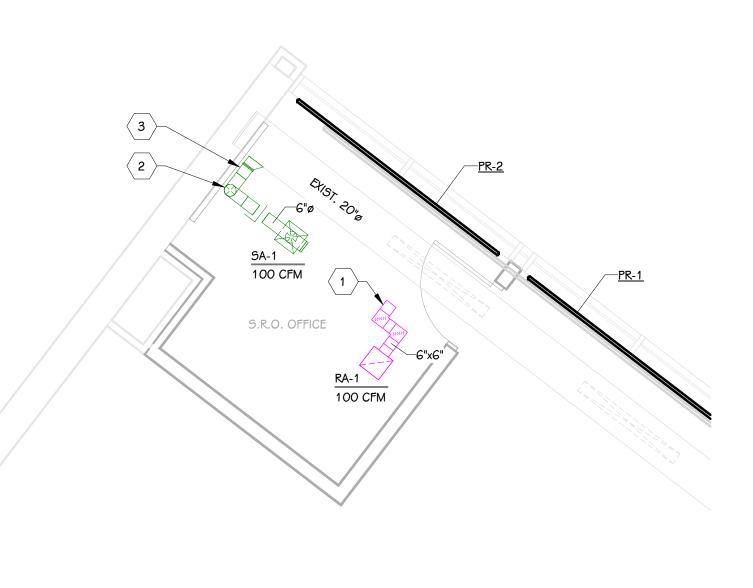
- ACCESS PANEL TO BE REUSED FOR NEW UNIT.
- UNIT CONTROLS TO BE REUSED.

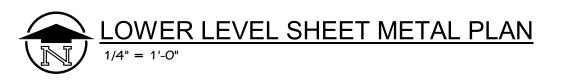
PIPING LOCATED UNDER FLOOR 2











GRILLES, REGISTERS, & DIFFUSERS									BASED ON PRICE		
MARK	PANEL SIZE	FACE SIZE	NECK SIZE	MODEL	CFM RANGE	VCD	THROW	MATERIAL	FINISH	INSTALLATION	REMARKS
SA-1	24"x24"	12"x12"	6" Ø	ASCDA	75-125	NO	5-10-20	ALUMINUM	WHITE	LAY-IN	
RA-1	24"x24"	12"x12"	-	80	0 - 500	NO	-	ALUMINUM	WHITE	LAY-IN	

### **CABINET HEATERS - WATER**

		MOUNTING	AIRFLOW	, HEATING COIL			-		MOTOR DATA				
MARK MODEL	MODEL	TYPE		CAPACITY (MBH)	FLOW (GPM)	WPD (FT)	EWT (°F)	LWT (°F)	QUANTITY	HP	RPM	VOLTAGE	REMARKS
CUH-1	FFHB100	WALL RECESSED	1000	60.0	1.5	0.83	180 °F	160 °F		0.1	1100	120/1/60	
CUH-2	FFHB100	WALL RECESSED	1000	60.0	1.5	0.83	180 °F	160 °F		0.1	1100	120/1/60	
NOTEG									•				

NOTES: 1. BASED ON 10°F EAT, 65°F LAT.

## PANEL RADIATION

		ADIATION								
	MARK MODEL		HEATING	ELEMENT		MOUNT				
		MODEL	ROWS	LENGTH (FT-IN)	CAPACITY (BTUH/FT)	FLOW (GPM)	ТҮРЕ	HEIGHT	FINISH	
	PR-1	R2F-2	2	11' - 6"	827	0.50	FLOOR MOUNTED	(5)	(3)	(1), (2), (3
	PR-2	R2F-2	2	11' - 6"	827	0.50	FLOOR MOUNTED	(5)	(3)	(1), (2), (3

NOTES: 1. BASED ON 160°F AWT AND 65° F EAT.

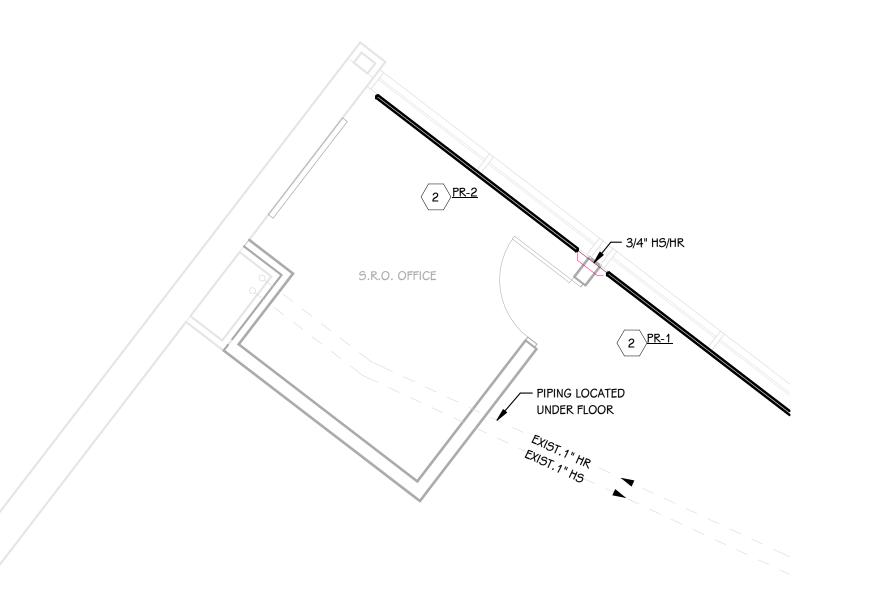
2. VERIFY ALL LENGTHS IN FIELD. 3. FINAL COLOR SELECTION BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF STANDARD COLORS.

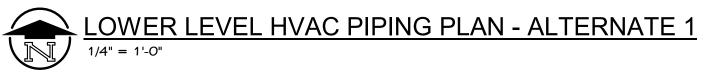
4. PROVIDE WITH END CAP.

5. PROVIDE WITH HARDWARE FOR PEDESTAL MOUNTING TO FLOOR.

6. HEATING SYSTEM CONTAINS 30% PROPYLENE GLYCOL.







## **BASED ON TRANE**

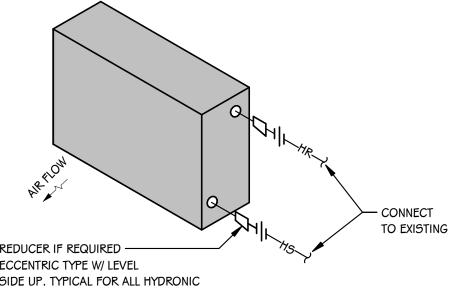
## **BASED ON RUNTAL**

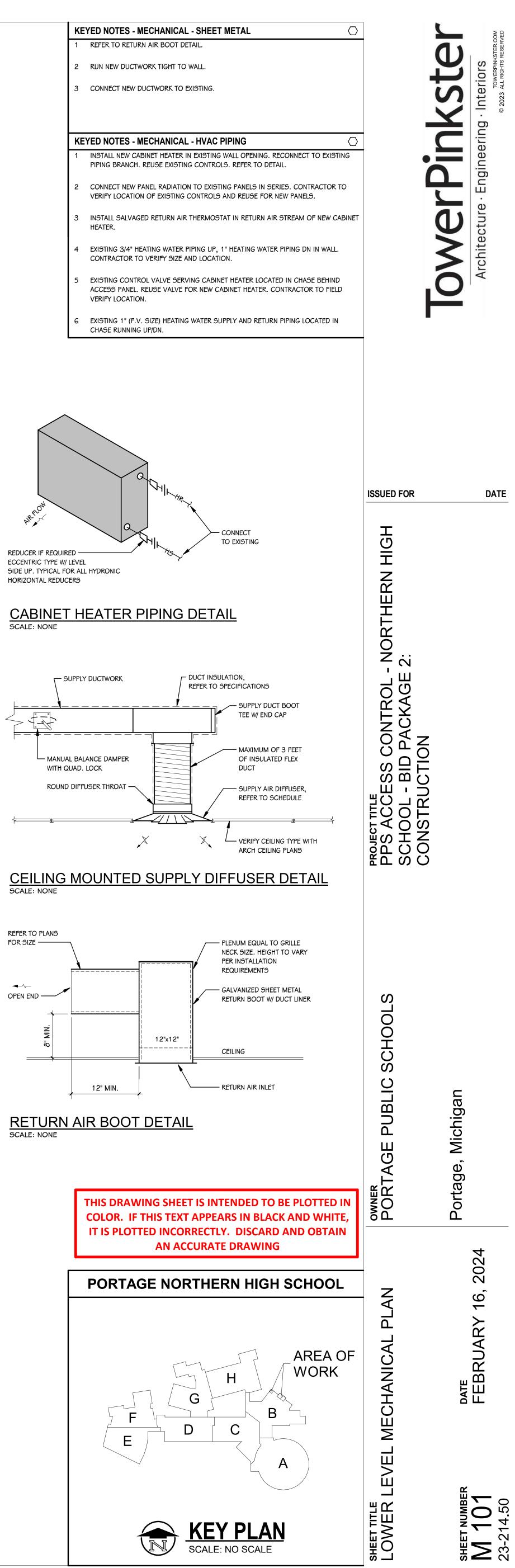
REMARKS

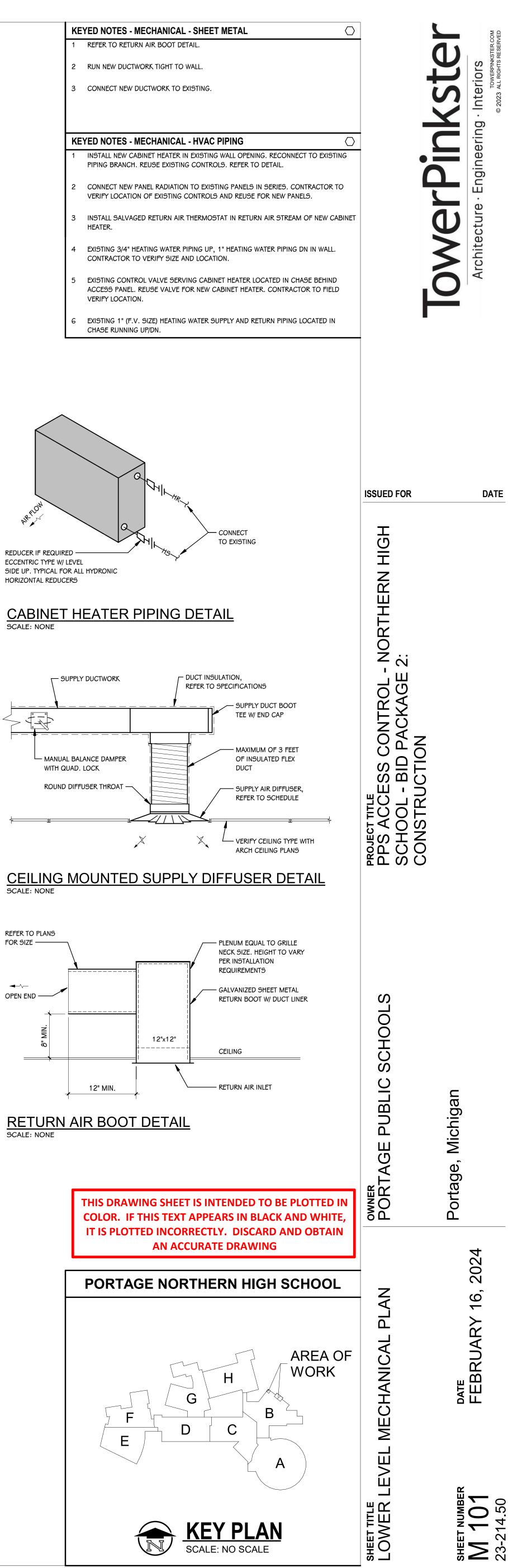
2), (3), (4), (5), (6) , (3), (4), (5), (6)

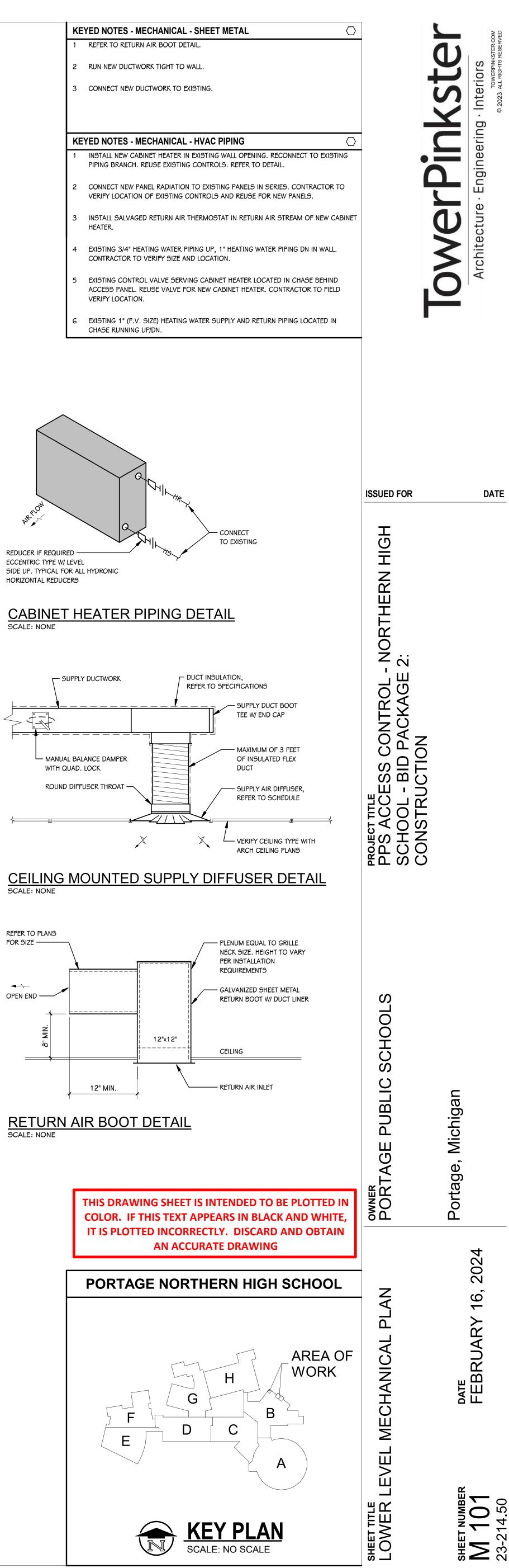


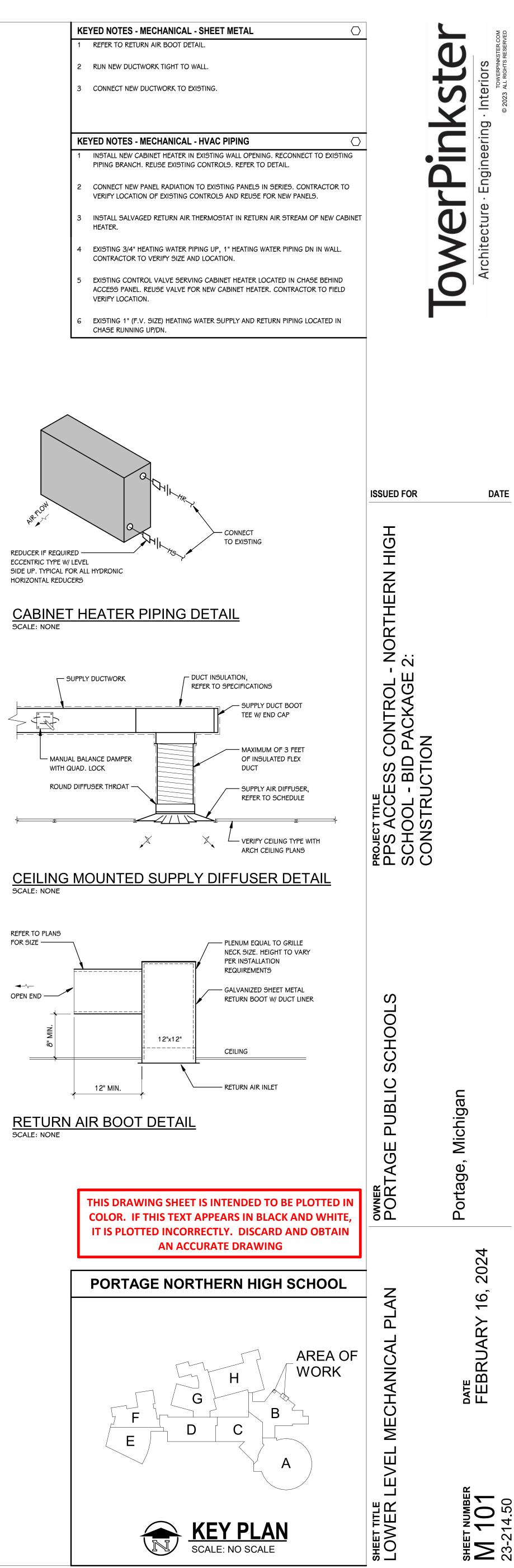
- CONTRACTOR TO VERIFY SIZE AND LOCATION.



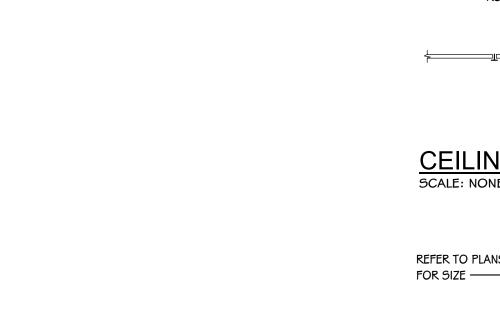














STRUCTU	RED CABLING
$\triangleleft$	DATA/VOICE OUTLET
$\bowtie$	DATA/VOICE OUTLET - SURFAC
◀	DATA/VOICE OUTLET - ABOVE BACKSPLASH
◄	SECURITY CONTROLS PATHWA
WAP	WIRELESS ACCESS POINT
GBB	GROUNDING BUS BAR
	CABLE TRAY
Θ	CLOCK
МСР	MASTER CLOCK PANEL
PAG	PAGING SYSTEM HEAD END
TC#	NETWORK COMMUNICATION F
	4'X8'X3/4" FIRE-RATED PLYWO
E	CONDUIT SLEEVE
AUDIO/VIS	UAL

TV n TV WALL BACKBOX

prj n	PROJECTOR (OUTLET WITHIN 1 OF PROJECTOR LOCATION)
AV n	AV WALL STATION BOXES
TS n	TECHNOLOGY OR TEACHER'S STATION BOXES
MIC	MICROPHONE JACK
СВ	CEILING BOX
BT	BLUETOOTH DEVICE
ANT	ANTENNA
SCR	PROJECTOR SCREEN
<b>(5)</b>	LOUDSPEAKER CEILING MOUN
Hŷ	LOUDSPEAKER WALL MOUNTE
VC	VOLUME CONTROL
SECURI	TY SYMBOLS
Z	SECURITY CAMERA
	SECURITY CAMERA
SCP	SECURITY CABLING PATHWAY
ACP #	ACCESS CONTROL PANEL
(RB)	RELEASE BUTTON
M3	INTERCOM MASTER STATION
ⓓ	LOCKDOWN BUTTON
(DA)	DURESS ALARM PUSH BUTTO
CR	CARD READER
CR M	CARD READER, MULLION MOU
LS	LOCKDOWN STROBE
KP	KEY PAD
IC	INTERCOM
₩n	ACCESS CONTROL DETAIL IND CONTROL DETAILS AND SCHEI

NOTES:	
MOUNT DEVICES AT HEI OTHERWISE ON PLANS.	IGHTS INDICATED UN
OTHERWISE ON PLANS.	HEIGHTS ARE TO B

ELEC	<b>FRICAL ABBREVIATIONS</b>
(#)	# INDICATES QUANTITIES (I.E. (4)
	CONDUITS)
(E)	EXISTING
AFC	ABOVE FINISHED CEILING
AFCI	
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTIO
AIC	AMPERE INTERRUPTING CAPACITY
AL	
AWG BAS	AMERICAN WIRE GAUGE BUILDING AUTOMATION SYSTEM
BMS	BUILDING MANAGEMENT SYSTEM
C	CONDUIT
CT	CURRENT TRANSFORMER
CU	COPPER
DFA	DROP FROM ABOVE
DW	DISHWASHER
EM	EMERGENCY
ET	ELECTRONIC TRIP
EWC	ELECTRIC WATER COOLER
FDS	FUSIBLE DISCONNECT SWITCH
GAP	GENERATOR ANNUNCIATOR PANE
GD	GARBAGE DISPOSAL
GEC	GROUNDING ELECTRODE CONDUC
GFCI	GROUND FAULT CIRCUIT INTERRU
GFP	GROUND FAULT PROTECTION OF
GND	GROUND
IAW	IN ACCORDANCE WITH
IC	INSULATION CONTACT
IDF	INTERMEDIATE DISTRIBUTION FRA
JB	JUNCTION BOX
KCMIL	THOUSANDS OF CIRCULAR MILS
LCP	LIGHTING CONTROL PANEL
MDF	MAIN DISTRIBUTION FRAME
NFDS	NON-FUSIBLE DISCONNECT SWIT
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
NTS	NOT TO SCALE
OC	ON CENTER
PB	PULL BOX
REF	REFRIGERATOR
RT	RAINTIGHT
SPD	SURGE PROTECTIVE DEVICE
TR	TAMPER RESISTANT
TTB	TELECOMMUNICATIONS TERMINA
ТΧ	TRANSFORMER
TYP	TYPICAL
ULSE	UL SERVICE ENTRANCE RATED
UON	UNLESS OTHERWISE NOTED
WP	WEATHERPROOF

URED CABLING	MOUNTING HEIGHTS	POWER S	YMBOLS MOUNTING HEIGI		
DATAVOICE OUTLET		O	PUSH-BUTTON STATION - 1 HOLE	4()" I	ALL CON
DATAVOICE OUTLET - SURFACE DATAVOICE OUTLET - ABOVE			PUSH-BUTTON STATION - 2 HOLE PUSH-BUTTON STATION - 3 HOLE	40" E	BE S ENG
BACKSPLASH			PUSH-BUTTON STATION - 3 HOLE DOOR OPERATOR	40 P	PHA SYS
SECURITY CONTROLS PATHWAY					515
WIRELESS ACCESS POINT	REFER TO TECHNOLOGY DRAWINGS,		SYMBOLS MOUNTING HEIG	E	all Exp(
GROUNDING BUS BAR CABLE TRAY	DETAILS AND PLANS FOR LOCATIONS AND ROUGH-IN DATA.	S	SINGLE POLE SWITCH OCCUPANCY SENSOR (SET TO VACANCY MODE) - SWITCH MC	40" PUNTED 40" 3 A	ALL
CLOCK		Sos SLV-a	LOW VOLTAGE CONTROL SWITCH, REFER TO DETAIL	40" 5	5HA
MASTER CLOCK PANEL		S <sub>3</sub>	THREE-WAY SWITCH		run Dro
PAGING SYSTEM HEAD END		S4	FOUR-WAY SWITCH	v v	elen Visii
NETWORK COMMUNICATION RACK 4'X8'X3/4" FIRE-RATED PLYWOOD		S⊳	DIMMER SWITCH (NON-SYSTEM TYPE) 0-10 ELV DIMMER	40"	
CONDUIT SLEEVE		SP Sĸ	SWITCH AND PILOT LIGHT KEY OPERATED, SINGLE POLE SWITCH		reci Cut
		Зк Ѕзк	KEY OPERATED, THREE-WAY SWITCH	40"	
		S4K	KEY OPERATED, FOUR-WAY SWITCH	40"	
ISUAL		ŝŝ	DUAL SINGLE POLE SWITCH	40" GENE	ER
TV WALL BACKBOX		ର୍ତ୍ତ ଜ୍ର	DUAL THREE-WAY SWITCH OCCUPANCY SENSOR (SET TO VACANCY MODE) CEILING MOL		elec Req
PROJECTOR (OUTLET WITHIN 16" OF PROJECTOR LOCATION)		Ö	DOWNLIGHT FIXTURE		
AV WALL STATION BOXES		O>	DOWNLIGHT WALL WASH FIXTURE		elec Coc
TECHNOLOGY OR TEACHER'S STATION BOXES			DOWNLIGHT FIXTURE - EMERGENCY, SWITCHABLE		Foli Coc
MICROPHONE JACK	REFER TO TECHNOLOGY DRAWINGS,		RECTANGULAR LIGHT FIXTURE RECTANGULAR EMERGENCY LIGHT FIXTURE ON EMERGENCY		SPE
CEILING BOX	DETAILS AND PLANS FOR LOCATIONS AND ROUGH-IN DATA.		POWER, SWITCHABLE	3 P	PAT
BLUETOOTH DEVICE	NOUGH-IN DATA.	I K⊗	EXIT SIGN - CEILING MOUNTED EXIT SIGN - WALL MOUNTED		
ANTENNA PROJECTOR SCREEN					refi Dra
LOUDSPEAKER CEILING MOUNTED		RECEPTA	CLE SYMBOLS		ARE EQU
LOUDSPEAKER WALL MOUNTED		<b>₽</b>	DUPLEX RECEPTACLE	L	LOC. WITH
VOLUME CONTROL		<b>e</b>	DUPLEX RECEPTACLE - 4" ABOVE COUNTER BACKSPLASH	v,	ELEC
Y SYMBOLS		€ <sup>w</sup>	DUPLEX RECEPTACLE - WET LOCATION ENCLOSURE WITH GFI	5 A	ALL
		RECEPTA	CLES VARIATIONS - HEIGHT PER ABOVE UNLESS INDICATED ON	DRAWINGS:	CON
SECURITY CAMERA SECURITY CAMERA		₽	DOUBLE DUPLEX RECEPTACLE	C	SAM OVE
SECURITY CABLING PATHWAY			DUPLEX RECEPTACLE - SURFACE MOUNTED #WM500		DRO
ACCESS CONTROL PANEL					WHE
RELEASE BUTTON	REFER TO SECURITY DRAWINGS, DETAILS		DUPLEX RECEPTACLE - WITH GFI DUPLEX RECEPTACLE - FOR ELECTRIC WATER COOLER, WITH G		ALL (
INTERCOM MASTER STATION	AND PLANS FOR LOCATIONS AND ROUGH-IN INFORMATION.				REM
DURESS ALARM PUSH BUTTON		⊖	DUPLEX RECEPTACLE - HORIZONTAL MOUNTING	8 A	ALL
CARD READER		G=5T	DUPLEX RECEPTACLE - STACK ALIGNED BELOW DEVICE ABOV (DEVICE ALIGNMENT IS NOT LIMITED TO THOSE LABELED, REFI	E ER TO	
CARD READER, MULLION MOUNT			ELECTRICAL DEVICE ALIGNMENT GUIDELINES)		all i Peri
LOCKDOWN STROBE			M SYMBOLS	C	CON
KEY PAD			FIRE ALARM SMOKE DETECTOR - CEILING TYPE	10 T	
INTERCOM		 ⑤ 【 】 】	FIRE ALARM AUDIO/VISUAL ALARM, WALL MTD.	80"	DELE
ACCESS CONTROL DETAIL INDICATO CONTROL DETAILS AND SCHEDULE	DR: REFER TO ACCESS		FIRE ALARM - VISUAL ALARM	00	FIRE
		F	FIRE ALARM AUDIO/VISUAL ALARM, CEILING MTD.		des Coc
				e D	THE MEC SMC DEV NEW
/ICES AT HEIGHTS INDICATED UNLESS ON PLANS. HEIGHTS ARE TO BOTTON				17 A T S F S 18 C	DEV ALL I TRAN SPA FRO SUP CON DAM
ICAL ABBREVIATIONS INDICATES QUANTITIES (I.E. (4) 3" CC ONDUITS) KISTING	ONDUITS MEANS FOUR 3" DIAMETER		NOTE - ELECTRICAL - DEMOLITION	L M C I N	LEAS LOC MEC OF ( DO NOT
BOVE FINISHED CEILING		REMO	ES, DEVICES AND EQUIPMENT SHOWN DASHED OR WITH AN "; 'ED. FIXTURES, DEVICES AND EQUIPMENT SHOWN LIGHTLY OR	WITH AN "E" ARE	PRO EACI
RC FAULT CIRCUIT INTERRUPTER BOVE FINISHED FLOOR		EXISTIN	IG TO REMAIN UNDISTURBED.	A	TECH ACC
UTHORITY HAVING JURISDICTION			S SHOWN WITH AN "R" ARE EXISTING TO BE REPLACED WITH I PLATE. REUSE EXISTING CODE COMPLIANT WIRING.		mini To c
MPERE INTERRUPTING CAPACITY LUMINUM					REC
MERICAN WIRE GAUGE			E ALL LIGHT FIXTURES, DEVICES, WIRING AND EXPOSED COND EILINGS TO BE DEMOLISHED. COORDINATE WITH ARCHITECTU		reci Whe
UILDING AUTOMATION SYSTEM UILDING MANAGEMENT SYSTEM		ABAND	ONED EXPOSED CONDUIT AND ABANDONED WIRING BACK TO		PR∩
ONDUIT			T BREAKER AS A SPARE.	C	сос
URRENT TRANSFORMER OPPER			RARILY SUPPORT EXISTING CEILING DEVICES TO REMAIN IN EX LACED. REINSTALL DEVICES INTO NEW CEILING.	STING CEILINGS TO	req
ROP FROM ABOVE			2.322. NEINOTALE DEVICED INTO INLIV CLILING.		
ISHWASHER MERGENCY			ACTOR SHALL BE RESPONSIBLE FOR PROJECT PHASING. TEM 3 LIGHTING, EXIT SIGNAGE, PULL STATIONS AND BATTERY BAC		
		SHALL	BE PROVIDED AS REQUIRED WHILE BUILDING IS OCCUPIED BE		
LECTRIC WATER COOLER JSIBLE DISCONNECT SWITCH		CONST	RUCTION.		
ENERATOR ANNUNCIATOR PANEL			AND REPAIR ANY MATERIALS TO MATCH ADJACENT FOR ANY E	QUIPMENT OR	
ARBAGE DISPOSAL ROUNDING ELECTRODE CONDUCTOR		LIGITI	INTORES REMIOVED OR MATERIALS DAMAGED IN REMIOVAL.		
ROUND FAULT CIRCUIT INTERRUPTER,					
ROUND FAULT PROTECTION OF EQUIP ROUND	MENT, 30mA				
ACCORDANCE WITH					
ISULATION CONTACT ITERMEDIATE DISTRIBUTION FRAME					
JNCTION BOX					
10USANDS OF CIRCULAR MILS GHTING CONTROL PANEL					
IAIN DISTRIBUTION FRAME					
ON-FUSIBLE DISCONNECT SWITCH OT IN CONTRACT					
IGHT LIGHT					
OT TO SCALE N CENTER					
ULL BOX					
EFRIGERATOR AINTIGHT					
URGE PROTECTIVE DEVICE					
AMPER RESISTANT ELECOMMUNICATIONS TERMINAL BOA	RD				
RANSFORMER					
/PICAL L SERVICE ENTRANCE RATED					

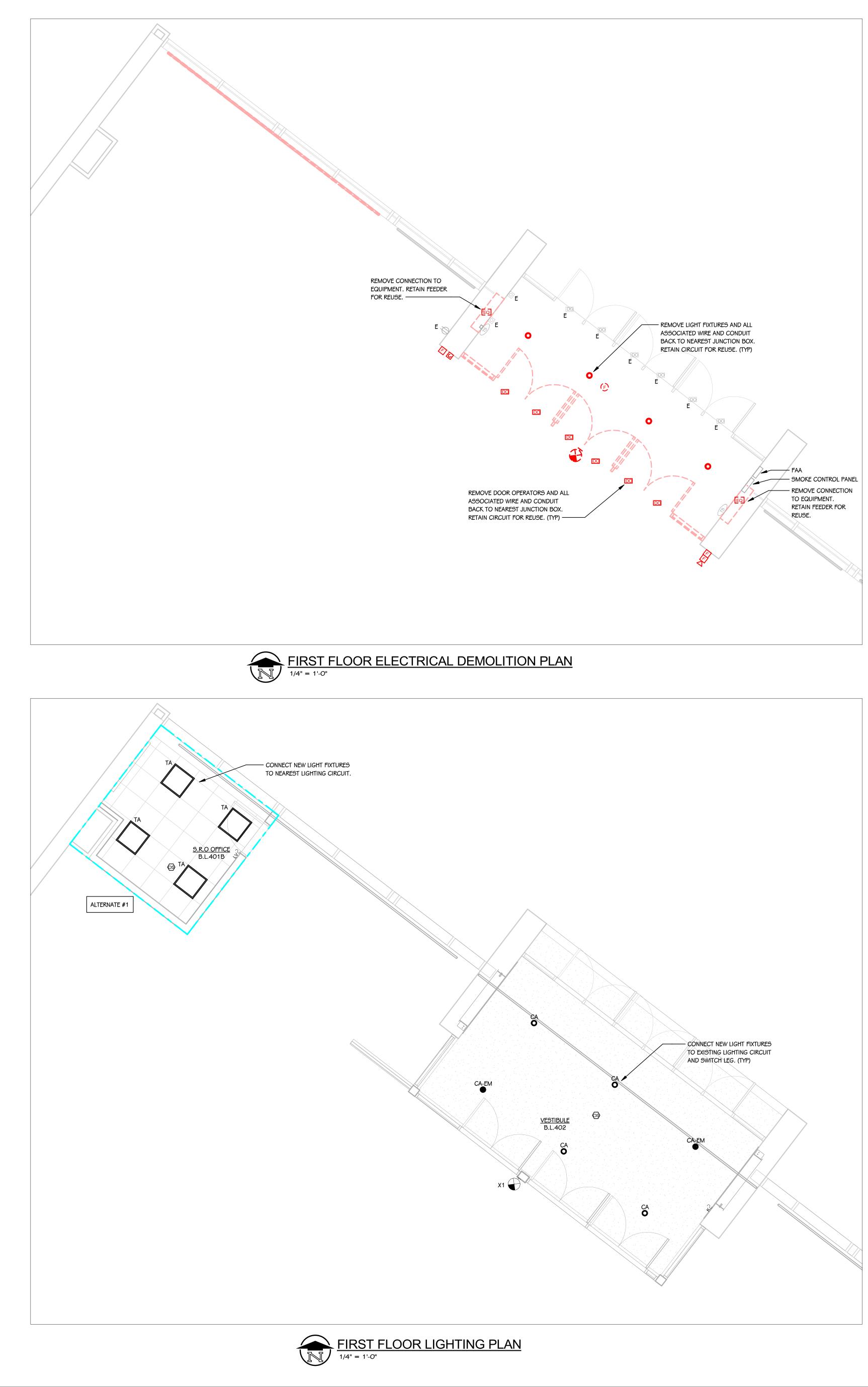
#### RAL NOTES - LIGHTING

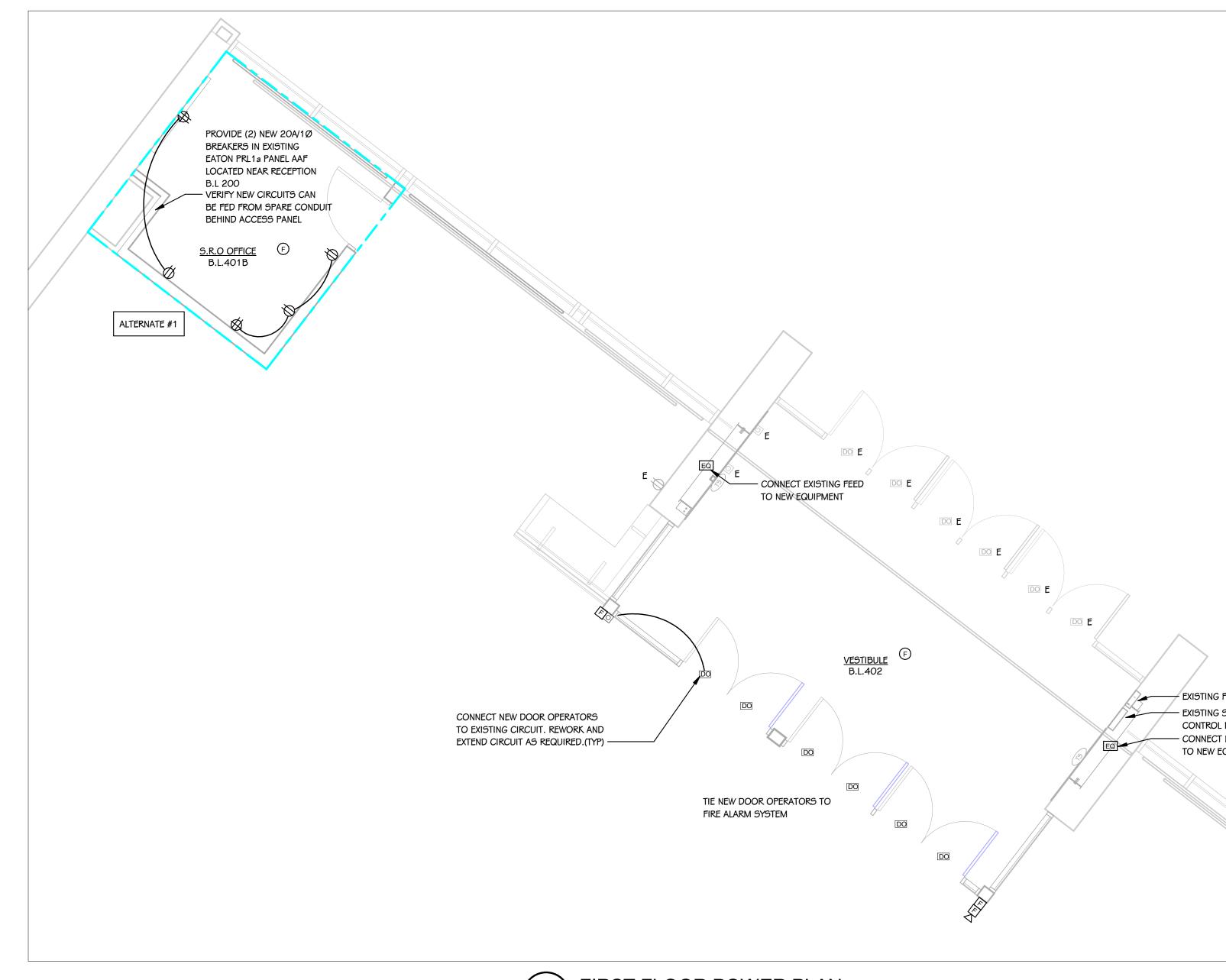
- L OCCUPANCY SENSORS AND PHOTOCELLS MOUNTED IN THE NNECTED TOGETHER AND OPERATE AS ONE SYSTEM. DAYLIG SELF CONTAINED WITHIN EACH ROOM AND SHALL BE FIELD A GINEER. MANUFACTURER SHALL PROVIDE FLOOR PLANS DUR ASE SHOWING EXACT LOCATIONS AND QUANTITIES AS REQUI STEM.
- OCCUPANCY SENSOR WIRING SHALL BE CONCEALED WITHIN OSED. NO LOW VOLTAGE WIRING SHALL BE EXPOSED.
- CONDUITS SHALL RUN AS TIGHT TO DECK AS PERMITTED BY ALL BE RUN IN A NEAT MANNER. MAINTAIN THE SAME SPACIN N TOGETHER. CONCEAL JUNCTION BOXES OVER LAY-IN CEILIN OPS DOWN TO CLOUDS. LOCATE CONDUIT DROPS TO CLOUI MENTS IN LEAST VISIBLE LOCATION. NO MC-CABLE TO LIGHT BLE FROM ANY ANGLE.
- CESS NEW DEVICES AND ASSOCIATED CONDUIT AND BACKBO T AND PATCH AS REQUIRED.

#### RAL NOTES - POWER

- ECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CU QUIRED FOR NEW WORK OR WHERE DEVICES ARE REMOVED /
- CTRICAL CONTRACTOR SHALL COORDINATE WITH G SERIES S ORDINATION DETAIL. DEVICES ARE TO ALIGN VERTICALLY AN LLOW THE RULES OF THIS DETAIL CONSISTENTLY. A PRE-INST ORDINATION MEETING FOR DEVICE FINISHES AND LAYOUT M ECIFICATION FOR THIS PROJECT.
- ICH ALL PENETRATIONS AS REQUIRED TO MAINTAIN FIRE RATI
- ER TO INTERIOR ELEVATIONS, SECTIONS, ARCHITECTURAL E AWINGS FOR EXACT DEVICE LOCATIONS AND MOUNTING HEIG E MOUNTED UNDER OR ABOVE TACK BOARDS, DOORS, WIND UIPMENT, THE ELECTRICAL DEVICE SHALL BE CENTERED AS S CATION OF FURNITURE CONNECTIONS AND/OR RECEPTACLES TH APPROVED FURNITURE SHOP DRAWINGS, FINAL CONNECTION CTRICAL CONTRACTOR.
- CONDUITS SHALL RUN AS NEAR TO DECK AS PERMITTED BY NDUITS WILL BE EXPOSED AND SHALL BE RUN IN A NEAT MAN ME SPACING WHEN CONDUITS ARE RUN TOGETHER. CONCEA YER LAY-IN CEILING AND USE EMT DROPS DOWN TO CLOUDS. OPS TO CLOUDS AND CEILING ELEMENTS IN LEAST VISIBLE LO
- EN CEILINGS ARE REMOVED ELECTRICAL CONTRACTOR SHALL . CONDUIT AND LOW VOLTAGE WIRING AS REQUIRED PER NEC
- EMOVE CEILINGS AND GRID AS REQUIRED. REPLACE ANY DAM/
- FIRE ALARM PULL STATIONS TO HAVE PLASTIC COVERS WITH
- FIRE ALARM CABLING SHALL BE RUN IN CONDUIT. FIRE ALAR RMITTED TO BE IN CABLE TRAY WITH SEPARATION FROM BUILI MMUNICATION CABLING.
- E FIRE ALARM CONTRACTOR SHALL SUBMIT FINAL FIRE ALARM EGATED DESIGN SUBMITTAL TO THE AUTHORITY HAVING JUR
- E ALARM DEVICES SHOWN ON PLANS ARE INDICATED TO ILLL BIGN INTENT TO ASSIST THE CONTRACTOR IN SCOPING, PRIC ORDINATION WITH OTHER SYSTEMS
- E ALARM DEVICES SHOWN ARE NOT INTENDED TO REPRESENT GINEERED FIRE ALARM DESIGN
- E FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE TO PROV VICES AND ACCESSORIES FOR A COMPLETE SYSTEM, COMPL DES AND JURISDICTIONAL REQUIREMENTS, EVEN IF SUCH DE DICATED IN THESE DOCUMENTS
- E FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR CO CHANICAL CONTRACTOR AND ALL OTHER TRADES NECESSARY OKE DAMPERS, DUCT DETECTORS, FLOW / TAMPER SWITCHES VICES
- N FIRE ALARM DEVICES ARE TO BE TIED INTO THE EXISTING FI
- E FIRE ALARM CONTRACTOR SHALL RESPONSIBLE FOR FIELD \ VICES AND CONDITIONS
- LOW VOLTAGE CABLING SHALL BE RUN IN CONDUIT BETWEEN AY OR TECHNOLOGY RACK. NO CABLING SHALL BE VISIBLE IN ACES. EXPOSED CONDUIT SHALL BE PAINTED TO MATCH SUR OM. WIRING ROUTED IN ACCESSIBLE CEILING SPACES SHALL PPORTED WITH COMM HOOKS OR RINGS.
- NNECT POWER TO ALL VAV, TERMINAL UNITS AND MISCELLAN MPERS AND VALVES PROVIDED WITH LOW VOLTAGE TRANSFO AST A CIRCUIT FOR EVERY 4 UNITS TO BE ON A TRANSFORME CATIONS AND TRANSFORMER QUANTITIES WITH BUILDING AUT CHANICAL CONTRACTORS AND REFER TO MECHANICAL CONT OPERATIONS DETAIL. THESE ITEMS ARE NOT SHOWN ON ELE ONOT USE SPARE BREAKERS INDICATED IN PANEL SCHEDULES TIFY PANELBOARD MANUFACTURERS OF QUANTITIES OF THES
- OVIDE MINIMUM 2" CABLE ROUTE (UNLESS OTHERWISE NOTEI CH TECHNOLOGY/DATA DROP INDICATED ON PLANS TO NEARE CHNOLOGY CLOSET. AT ANY DEMISING WALL, PROVIDE 2" SLE CESSIBLE CEILING ABOVE LATCH SIDE OF EACH DOOR INTO R NIMUM 12" ON EACH SIDE OF WALL WITH BUSHINGS. FILL UN COMPLETION OF CONSTRUCTION.
- CESS NEW DEVICES AND ASSOCIATED CONDUITS AND BACKE ERE POSSIBLE. CUT AND PATCH AS REQUIRED.
- OVIDE FINAL CONNECTION TO ALL OWNER/CONTRACTOR PROV ORDINATE RECEPTACLE SIZES AND TYPE WITH EQUIPMENT, QUIRED.

HE SAME ROOM SHALL BE LIGHT HARVESTING SHALL D ADJUSTED WITH URING SHOP DRAWING QUIRED FOR A COMPLETE HIN CONDUIT WHERE BY CODE. CONDUITS CING WHEN CONDUITS ARE EILING AND USE EMT DUDS AND CEILING GHT FIXTURES SHALL BE KBOX IN EXISTING WALL.		Township of the server of the
ELEVATIONS AND RELATED EIGHTS. WHERE DEVICES NDOWS, OR ANY PIECE OF SHOWN. COORDINATE ES AND DATA RACEWAYS CTIONS TO FURNITURE BY BY CODE. SOME MANNER. MAINTAIN THE		
2EAL JUNCTION BOXES S. LOCATE CONDUIT E LOCATION. ALL PROPERLY SUPPORT IEC. AMAGED CEILINGS. /ITH ALARM. LARM CABLING IS UILDING AND ARM SHOP DRAWINGS AS A URISDICTION LLUSTRATE GENERAL RICING, AND ENT A COMPLETE ROVIDE ALL NECESSARY APLIANT WITH APPLICABLE DEVICES ARE NOT COORINDATING WITH ARY FOR DOOR HOLDS, HES AND ANY OTHER G FIRE ALARM SYSTEM D VERIFYING EXISTING EEN DEVICE AND CABLE E IN EXPOSED CEILING SURFACE IT IS SUPPORTED ALL BE INDEPENDENTLY	PROJECT TITLE NORTHERN HIGH SCHOOL - BID PACKAGE 2: DISTRICT WIDE ACCESS CONTROL	
ANEOUS MECHANICAL SFORMERS. PROVIDE AT MER, COORDINATE EXACT AUTOMATION SYSTEM AND INTROLS AND SEQUENCE ELECTRICAL DRAWINGS. JLES FOR THESE CIRCUITS, HESE BREAKERS REQUIRED OTED ON PLANS) FROM AREST CABLE TRAY OR SLEEVE ABOVE O ROOM. SLEEVES TO BE UNUSED CONDUITS PRIOR CKBOX IN EXISTING WALLS ROVIDED EQUIPMENT. , ADJUST CIRCUIT SIZE AS	OWNER PORTAGE PUBLIC SCHOOLS	Portage, Michigan
	SHEET TITLE ELECTRICAL SYMBOLS AND GENERAL NOTES	DATE FEBRUARY 16, 2024
	SHEET TITLE ELECTRICAL NOTES	SHEET NUMBER EG 001 23-214.50





LIGHT F	LIGHT FIXTURE SCHEDULE							
TYPE	SERIES	DESCRIPTION						
CA	CA	RECESSED DOWNLIGHT						
TA	TA	2X2 TROFFER, 2' - O" LONG						
X1	X1	EXIT SIGN - EDGE LIT						
1	SPECIFICATIONS	ES TO HAVE WARRANTY TO MEET OR EXCEED WAR 3 265100 AND 265600 FOR ADDITIONAL REQUI						
2		DESCRIPTION IS GENERAL. REFER TO SHOP DRA						
3	FOR INDIVIDUAL	THE CENTER CIRCLE SHADED SHALL BE CONNECT L FIXTURES DEVICE SHALL BE MOUNTED INTERNAL ENT TO FIXTURE IN ACCESSIBLE CEILING SPACE.						



CRIPTION	MOUNTING	CEILING TYPE	DRIVER	WATTS	MANUFACTURER	NOTES
	RECESSED	GYP DRYWALL	0-10V	30 VA	GOTHAM #EVO6-40/30-AR-L55-MD-277-GZ10	
	RECESSED	ACOUSTIC GRID	0-10V	37 VA	FINELITE #HPR LED-F-2X2-DCO-B-840-277-5C	1, 2
	SURFACE	N/A	N/A	5 VA	EVENLITE #SOV-AC-R-(FACES)M-CC-(MOUNT)-A(ARROW)	1, 2

T OR EXCEED WARRANTY INCLUDED IN BASIS OF DESIGN. FIXTURES LISTED AS EQUALS SHALL MEET DELIVERED LUMENS, CRI, EFFICACY AND OPTIONS OF THAT SPECIFIED. REFER TO DDITIONAL REQUIREMENTS. ER TO SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR SPECIFIC MOUNTING DETAILS.

HALL BE CONNECTED TO EMERGENCY POWER. FIXTURES WITH CENTER CIRCLE SHADED THAT ARE SWITCHED SHALL BE PROVIDED WITH UL924 ELD (EMERGENCY LIGHTING DEVICE). DUNTED INTERNAL TO THE FIXTURE. PROVIDE LABEL ON INSIDE OF FIXTURE INDICATING FED FROM MULTIPLE CIRCUITS. WHERE DEVICE CANNOT BE MOUNTED INSIDE OF FIXTURE,

