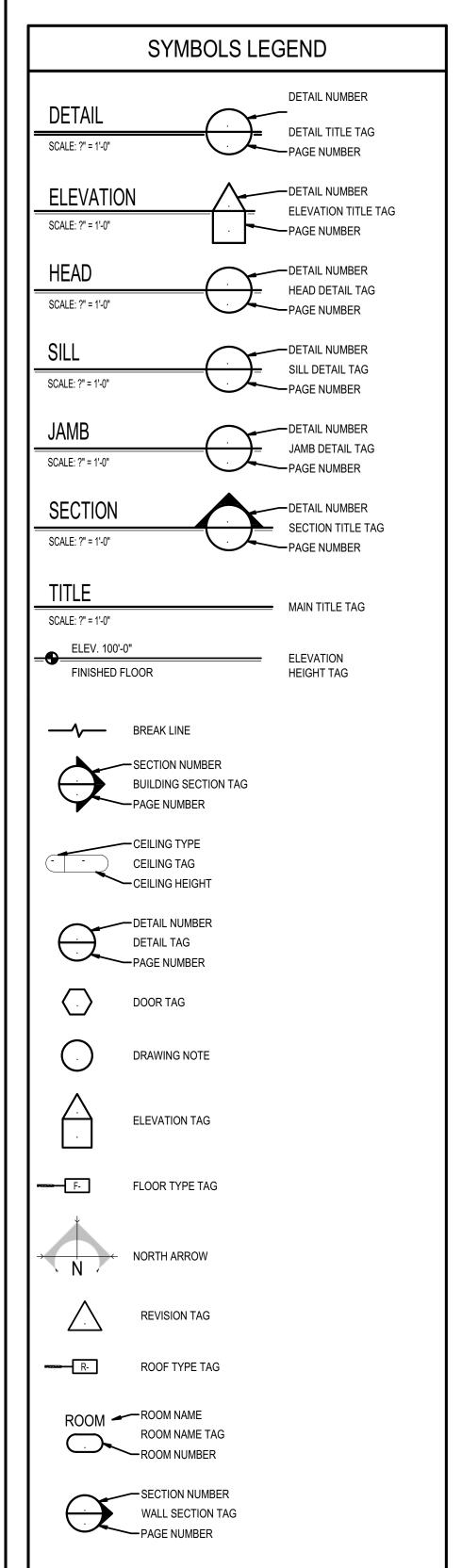
DPW PROJECT NO. 20-232

ISU CUSTODIAL OFFICE REMODEL - PHASE 1

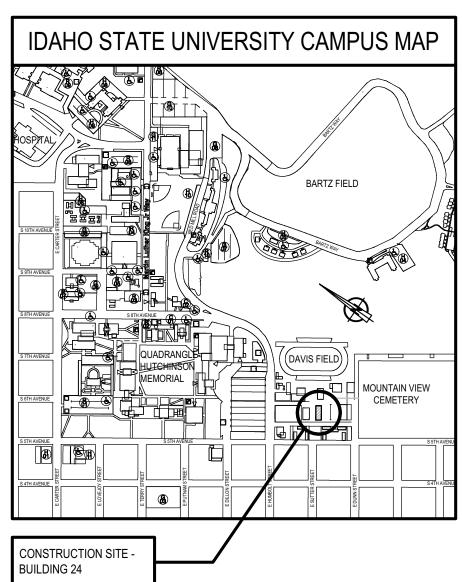
IDAHO STATE UNIVERSITY POCATELLO, IDAHO

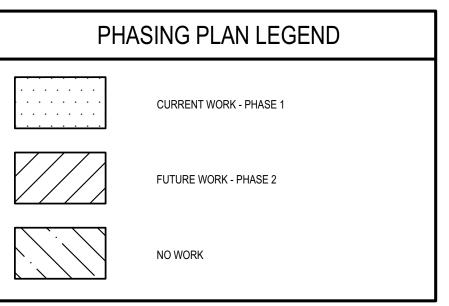


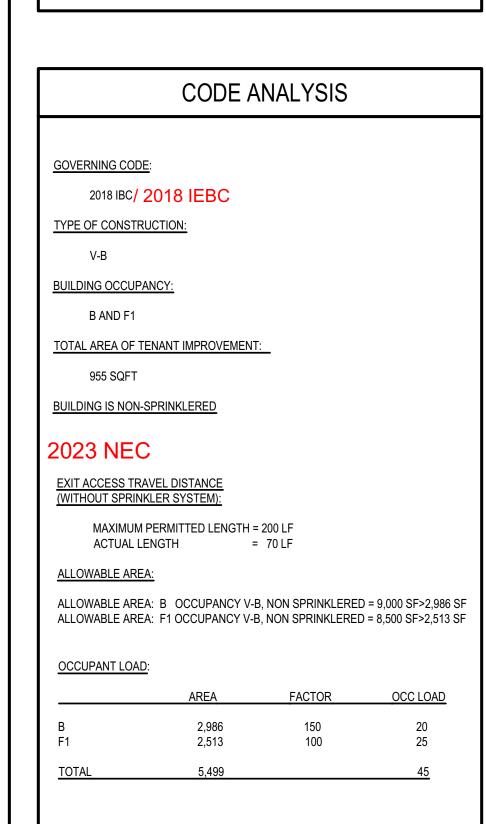
W-

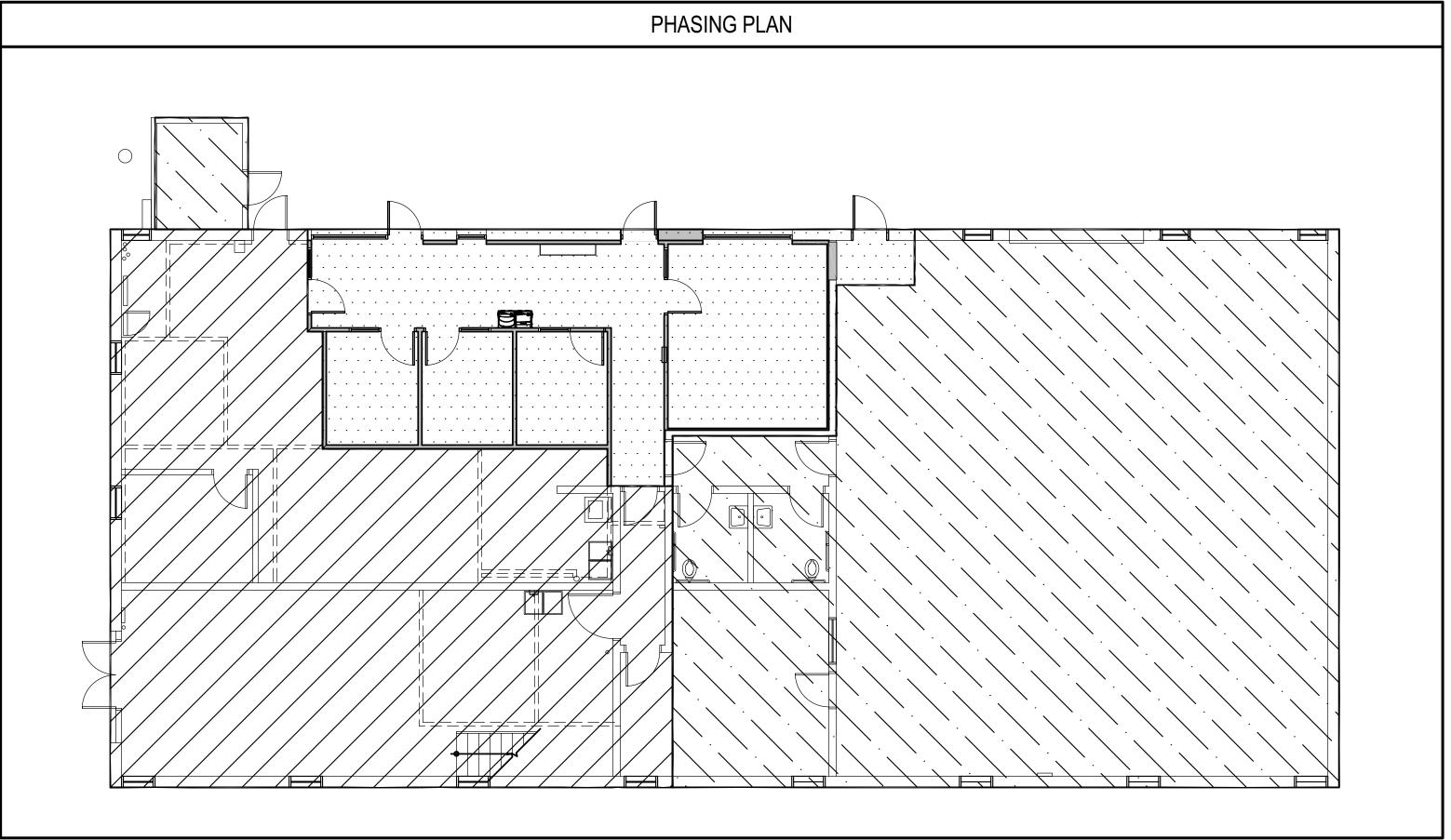
WALL TYPE TAG

WINDOW TAG









	PHONE (208) 758-4626
	The installation/removal of walls may affect fire sprinkler and/or fire alarm performance. Necessary modifications of these systems was require submission of plans to the State Fire Marshal Office for review.
,	These plans have been reviewed for code co sheets, and have been found, to be, substant requirements shall be completed through field

FOR ANY WORK INVOLVING THE NEW ROOF CONTACT:

THOMAS D. ROBISON ROOFING

536 S. BROADWAY STREET

BLACKFOOT, ID 83221

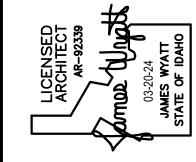
NOTE:

ompliance based on the submitted documents and plar tially code compliant, all other code compliance d inspections, verifications, and approvals by the field building inspector.

NEW ROOF WAS PLACED IN SERVICE ON 1/24/2024 AND IS STILL UNDER ROOFING CONTRACTOR WARRANTY.

See Plan Review notes: The plan review notes shall always be attached to the stamped approved and documents. These are part of the plans and shall be a permanent record with the plans. Inspe shall not take place without a complete set of the Idaho Division of Occupational and Professional Licenses (IDOPL) plan review notes and approved, stamped plans on site.

Re-Bid 2



PHASE

NO. 20-232
REMODEL
AIVERSITY
IDAHO

CONSULTANTS

ENGINEERED SYSTEMS ASSOCIATES

ELECTRICAL ENGINEER:

Agency Construction Approval #1 for Agency Construction Approval 2020232 - 2020232 ISU: Custodial Building, TBD, Pocatello, ID TBD USA Wednesday, Jul 10, 2024

Approved Feb 27, 2024 05:15 PM MST

Approved Feb 29, 2024 02:55 PM MST

May 20, 2024 10:34 AM MST

Pat Donaldson (DPW Administrato Approved May 20, 2024 04:23 PM MST

Margie Kennedy (SR PM) (Project Manager Senio

Approval (Approved)

MECHANICAL ENGINEER:

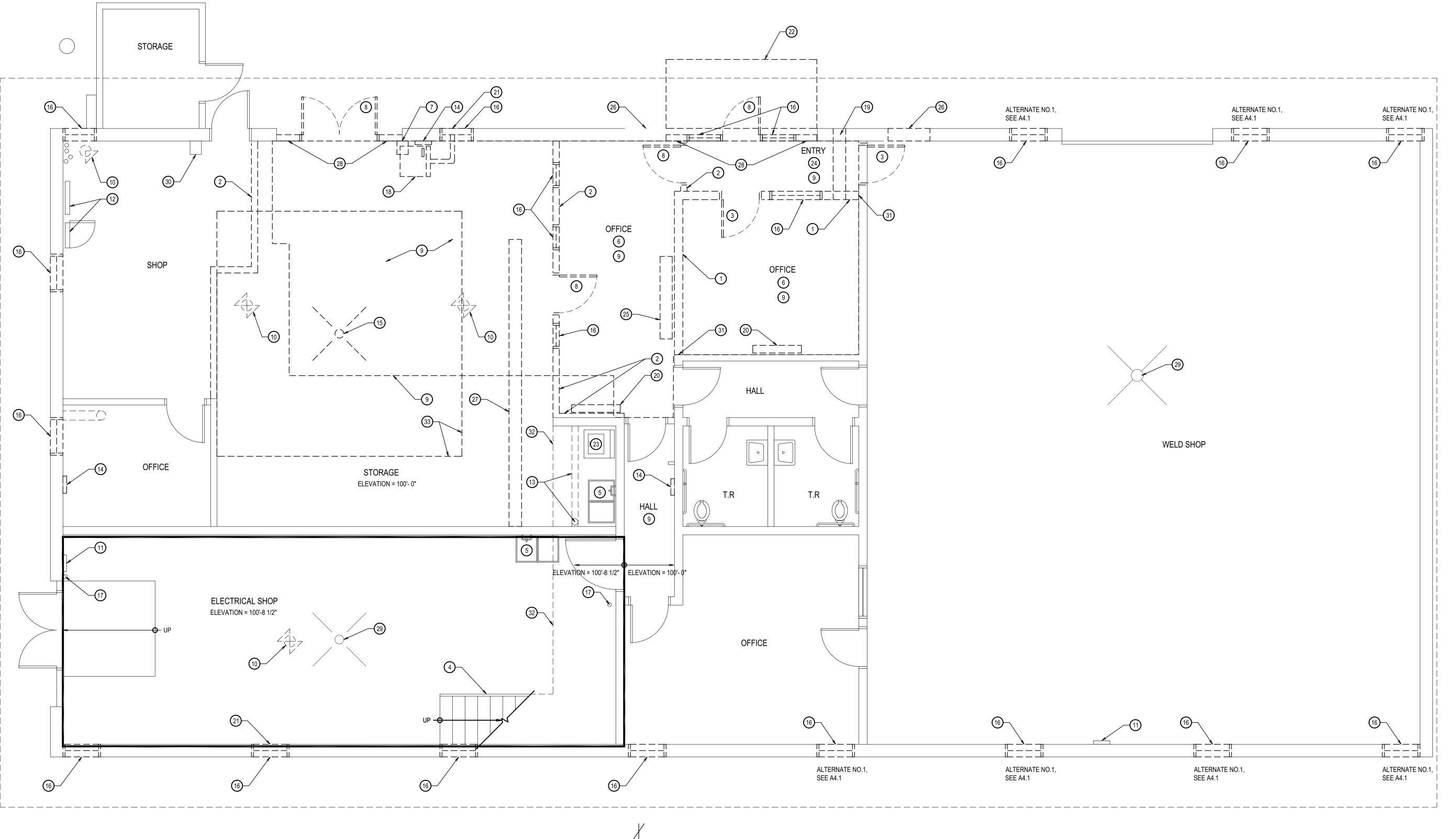
645 W 25TH STREET IDAHO FALLS, IDAHO 83402 TELEPHONE: (208) 523-2862

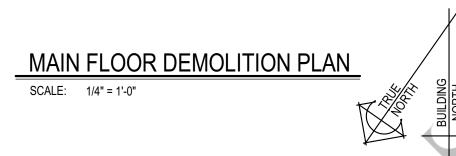
	DRAWING INDEX										
	ARCHITECTURAL										
A0.1	TITLE SHEET AND INDEX										
A1.0	MAIN FLOOR DEMOLITION PLAN										
A1.1	MEZZANINE DEMOLITION PLAN										
A1.2	NEW MAIN FLOOR PLAN										
A1.3	WALL TYPES AND ROOM FINISH SCHEDULE										
A1.4	NEW MEZZANINE PLAN										
A2.1	EXTERIOR ELEVATIONS										
A2.2	EXTERIOR ELEVATIONS										
A3.1	WALL SECTIONS										
A4.1	DOOR AND WINDOW SCHEDULES AND DETAILS										
A5.1	REFLECTED CEILING PLAN										
	MECHANICAL										
M1.1	MECHANICAL PLAN AND SCHEDULES										
M2.1	MECHANICAL DETAILS										
	PLUMBING										
P1.1	MAIN LEVEL PLUMBING FLOOR PLAN										
P2.1	PLUMBING DETAILS AND SCHEDULES										
	ELECTRICAL										
E0.1	ELECTRICAL COVER SHEET										
DE1.1	MAIN LEVEL LIGHTING DEMOLITION PLAN										
DE1.2	MEZZANINE LEVEL LIGHTING DEMOLITION PLAN										
DE2.1	MAIN LEVEL POWER DEMOLITION PLAN										
DE2.2	MEZZANINE LEVEL POWER DEMOLITION PLAN										
E1.1	MAIN LEVEL LIGHTING INSTALLATION PLAN										
E2.1	MAIN LEVEL POWER INSTALLATION PLAN										
E3.1	MAIN LEVEL MECHANICAL POWER INSTALLATION PLAN										
E4.1	MAIN LEVEL SPECIAL SYSTEMS INSTALLATION PLAN										
E5.1	PANEL SCHEDULES AND SINGLE LINE DIAGRAM										
E6.1	ELECTRICAL DETAILS										
E7.1	LIGHTING DETAILS										

S REVISIONS NBW PROJECT NO.:

CUSTODIA

MARCH 2024 CHECKED BY:





GENERAL NOTES

- SEE ELECTRICAL DRAWINGS FOR ALL LIGHTING AND ELECTRICAL
- SEE MECHANICAL DRAWINGS FOR ALL MECHANICAL CEILING PENETRATIONS AND MECHANICAL WORK.
- SEE PLUMBING DRAWINGS FOR ALL PLUMBING WORK.
- RESOLVE ALL DISCREPANCIES WITH ARCHITECT PRIOR TO DEMOLITION.
- ALL WORK TO BE IN ACCORDANCE WITH ALL CODES AND ACCESSIBILITY REQUIREMENTS.
- CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
- GENERAL CONTRACTOR IS REQUIRED TO PATCH AND REPAIR (WHETHER SO NOTED OR NOT) ALL EXISTING SURFACE AREAS AS REQUIRED BY DEMOLITION AND/OR TO COORDINATE SUCH REPAIR
- WORK WITH SUB-CONTRACTORS.

PROTECT EXISTING EXTERIOR CONCRETE / ASPHALT FROM DAMAGE

- DURING CONSTRUCTION. REPLACE DAMAGED MATERIALS TO MATCH
- PROTECT ALL EXISTING-TO REMAIN ITEMS (WHETHER SO NOTED OR NOT) AND PROTECT ITEMS TO BE REMOVED AND REINSTALLED. REPAIR/REPLACE THESE ITEMS IF DAMAGED DURING CONSTRUCTION.
- ALL ITEMS NOTED TO BE REMOVED / REPLACED INCLUDING ALL DEMOLISHED CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE AND BE DISPOSED OF AS PER CURRENT CODES, LAWS AND REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION AGENCY (EPA).
- REMOVE EXISTING LIGHT FIXTURES COMPLETE AND RE-INSTALL NEW LIGHT FIXTURES PER ELECTRICAL DRAWINGS.

- REMOVE EXISTING CMU WALL AS REQUIRED FOR NEW CONSTRUCTION.
- REMOVE EXISTING WOOD STUD WALL
- REMOVE EXISTING WOOD DOOR & FRAME.
- 4. EXISTING WOOD STAIRS TO REMAIN 5. EXISTING SINK TO REMAIN
- - REMOVE EXISTING COMPRESSED AIR

 - 9. GRIND AND PREP CONCRETE FLOOR TO RECEIVE NEW FINISHES
 - 10. EXISTING UNIT HEATER TO REMAIN 11. EXISTING ELECTRICAL PANEL TO REMAIN
 - 12. EXISTING DATA PANEL TO REMAIN

KEYNOTES

- 13. EXISTING STEEL COLUMN AND WOOD BEAM TO REMAIN
- 14. REMOVE EXISTING ELECTRICAL PANEL

- 6. REMOVE CARPET AND BASE INCLUDING ALL ADHESIVES.
- REMOVE EXISTING H.M. DOOR AND FRAME

- 15. REMOVE EXISTING FLOOR DRAIN
- 16. REMOVE WINDOW 17. EXISTING FIRE EXTINGUISHER TO REMAIN
- 18. UNINSTALL DRYER / WASHER AND STORE FOR RE-INSTALLATION IN NEW
- 19. REMOVE MECHANICAL DUCT
- 20. UNINSTALL WALL MOUNTED ELECTRICAL HEATING AND COOLING UNIT AND SAVE FOR RE-INSTALLATION IN NEW LOCATION
- 21. UNINSTALL AIR CONDITIONING UNIT AND RETURN TO OWNER
- 22. REMOVE CANOPY ABOVE
- 23. EXISTING DRYER / WASHER TO REMAIN

24. REMOVE VCT TILE AND BASE INCLUDING ALL ADHESIVES.

- 25. UNINSTALL TIME CLOCK MACHINE AND LOCKABLE KEY CABINET. STORE FOR RE-INSTALLATION IN NEW LOCATION
- 26. SAW CUT NEW OPENING IN CMU WALL TO ACCOMMODATE NEW HEADER AND DOOR. CUT BACK ANY RE-BAR AS REQUIRED. GRIND SMOOTH.
- 27. SAW CUT CONCRETE SLAB, SEE PLUMBING DRAWINGS
- 28. REMOVE EXISTING DOOR SURROUND
- 29. EXISTING FLOOR DRAIN TO REMAIN
- 30. EXISTING COMPRESSED AIR TO REMAIN
- GRIND SMOOTH EXISTING CMU WALL/ CONCRETE FLOOR WHERE ABUTTING CMU WALL HAS BEEN REMOVED, TYPICAL.
- 32. LINE OF EXISTING MEZZANINE ABOVE
- 33. EXISTING CONCRETE FLOOR SLOPED TO DRAIN. INSTALL SELF-LEVELING FLOOR PATCH

Construction Safeguards

Construction safeguards shall be required for any and all demolition and or

construction to ensure public safety.

Required exits, existing structural elements, fire protection devices and sanitary safeguards shall be maintained at all times during alterations, repairs

or additions to any building or structure. All applicable construction safeguards from chapter 31 and 33 shall be in place and maintained while any demolition or construction activities are being

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GENERAL	NOTES

- SEE ELECTRICAL DRAWINGS FOR ALL LIGHTING AND ELECTRICAL
- MECHANICAL DRAWINGS FOR ALL MECHANICAL CEILING
- PENETRATIONS AND MECHANICAL WORK. SEE PLUMBING DRAWINGS FOR ALL PLUMBING WORK.
- RESOLVE ALL DISCREPANCIES WITH CONTRACTOR AND/OR ARCHITECT PRIOR TO DEMOLITION.
- ALL WORK TO BE IN ACCORDANCE WITH ALL CODES AND
- ACCESSIBILITY REQUIREMENTS.
- CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD. GENERAL CONTRACTOR IS REQUIRED TO PATCH AND REPAIR (WHETHER SO NOTED OR NOT) ALL EXISTING SURFACE AREAS AS
- REQUIRED BY DEMOLITION AND/OR TO COORDINATE SUCH REPAIR WORK WITH SUB-CONTRACTORS. PROTECT EXISTING EXTERIOR CONCRETE / ASPHALT FROM DAMAGE
- DURING CONSTRUCTION. REPLACE DAMAGED MATERIALS TO MATCH EXISTING.
- PROTECT ALL EXISTING-TO REMAIN ITEMS (WHETHER SO NOTED OR NOT) AND PROTECT ITEMS TO BE REMOVED AND REINSTALLED. REPAIR/REPLACE THESE ITEMS IF DAMAGED DURING CONSTRUCTION.
- ALL ITEMS NOTED TO BE REMOVED / REPLACED INCLUDING ALL DEMOLISHED CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE PROJECT SITE AND BE DISPOSED OF AS PER CURRENT CODES, LAWS AND REQUIREMENTS OF THE ENVIRONMENTAL PROTECTION AGENCY (EPA).
- SAW CUT AND PATCH EXISTING CONCRETE FLOOR AS REQUIRED TO INSTALL NEW UNDERSLAB UTILITIES.

- 11. EXISTING WOOD STUD WALL ON CMU WALL TO REMAIN

○ KEYNOTES												
EXISTING WOOD STUD WALL TO REMAIN	12. EXISTING SHELVING UNITS TO REMAIN											
REMOVE EXISTING WOOD STUD WALL TO EXTENT SHOWN												
EXISTING WOOD STUD PONY WALL TO REMAIN												
EXISTING WOOD STAIRS TO REMAIN												
REMOVE EXISTING WINDOW			MEZZANINE TO BE REMOVED									
REMOVE EXISTING CANOPY												
EXISTING WATER HEATER TO REMAIN												
PORTION OF EXISTING MEZZANINE TO REMAIN			MEZZANINE TO REMAIN. THE MAIN FLOOR									
PORTION OF EXISTING MEZZANINE TO BE DEMOLISHED			CEILINGS ARE ATTACHED TO MEZZANINE STRUCTURE AND ARE TO REMAIN INTACT.									
. REMOVE EXISTING SHELVING UNITS			OTTOGROUP THE POTTERN HINTOG.									

PHASE

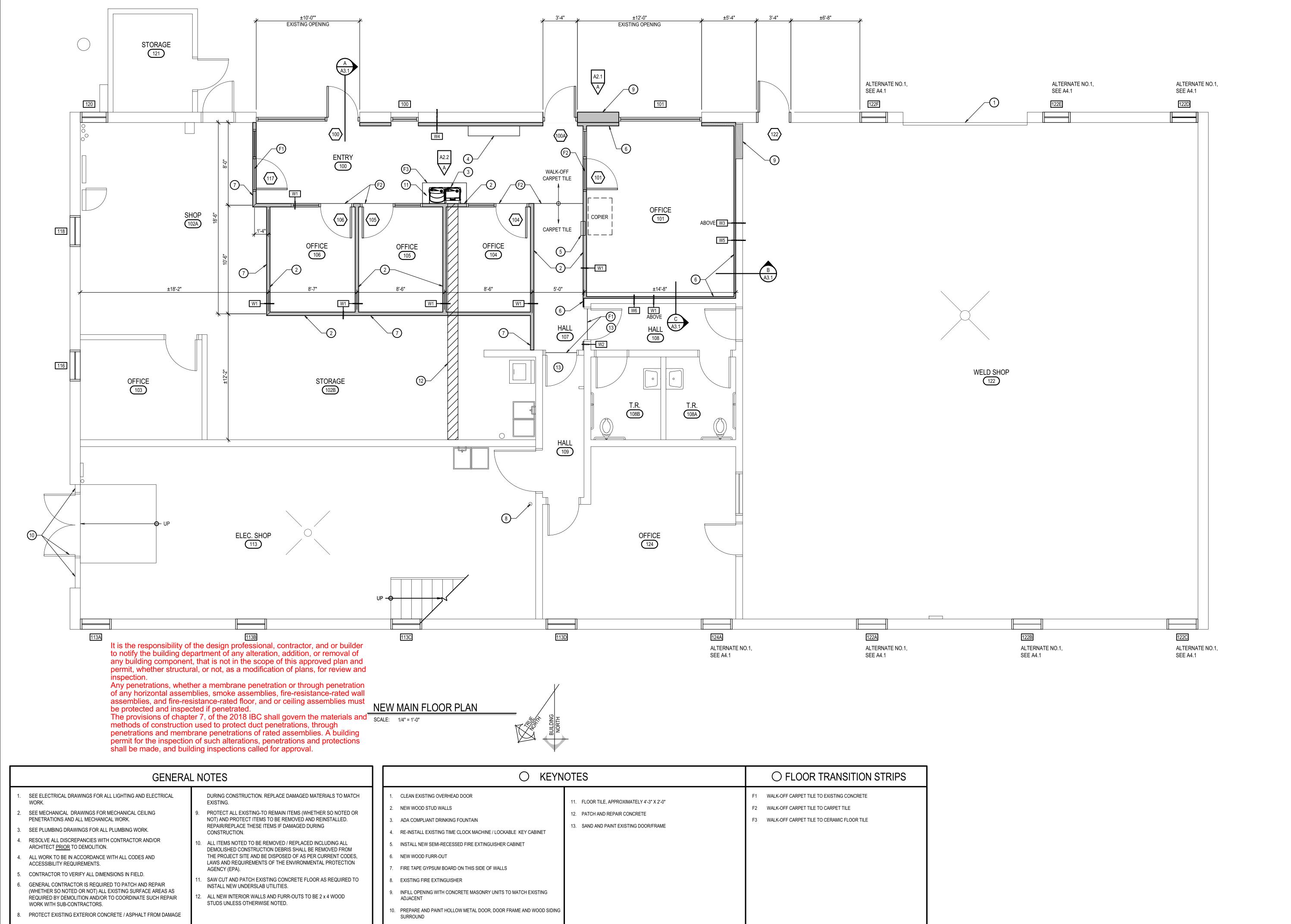
NO. 20-232

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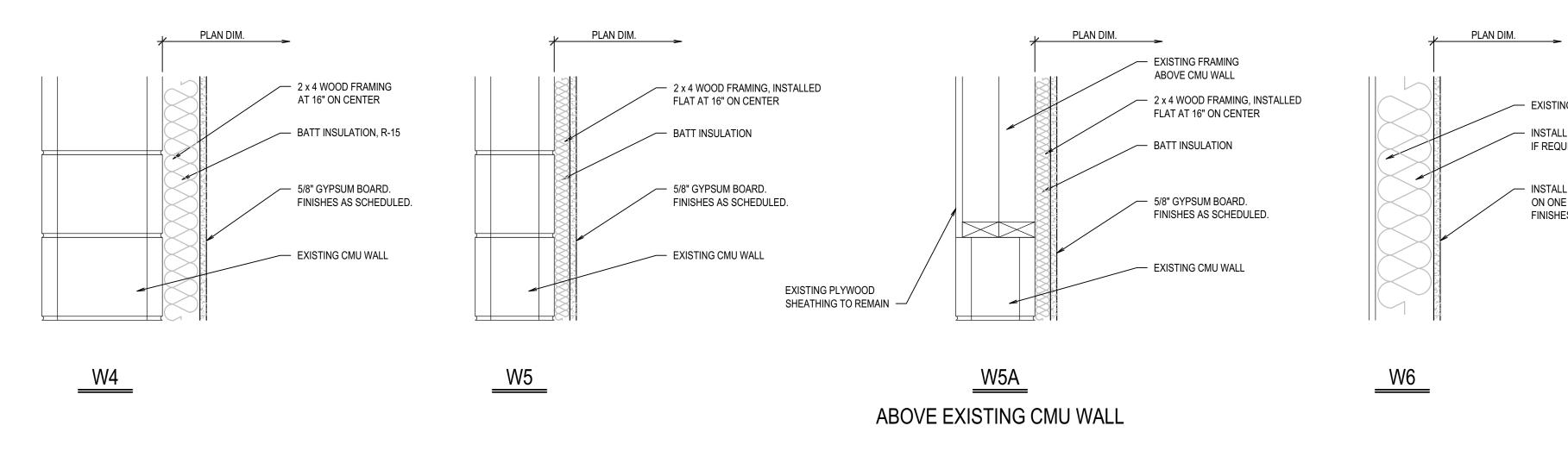
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DRAWING NO.:

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

CERAMIC FLOOR TILE WALK-OFF CARPET TILE COVED RUBBER BASE SEE DESIGNATED KEYNOTE COVED RUBBER BASE SEE DESIGNATED KEYNOTE EXISTING CMU, PAINT TEXTURED/PAINTED GYP. BOARD SEE DESIGNATED KEYNOTE EXISTING CMU, PAINT TEXTURED/PAINTED GYP. BOARD SEE DESIGNATED KEYNOTE EXISTING CMU, PAINT TEXTURED/PAINTED GYP. BOARD SEE DESIGNATED KEYNOTE EXISTING CMU, PAINT TEXTURED/PAINTED GYP. BOARD SEE DESIGNATED KEYNOTE EXISTING CMU, PAINT TEXTURED/PAINTED GYP. BOARD SEE DESIGNATED KEYNOTE EXISTING CMU, PAINT TEXTURED/PAINTED GYP. BOARD SEE DESIGNATED KEYNOTE EXISTING CMU, PAINT TEXTURED/PAINTED GYP. BOARD SEE DESIGNATED KEYNOTE EXISTING CMU, PAINT TEXTURED/PAINTED GYP. BOARD SEE DESIGNATED KEYNOTE EXISTING CMU, PAINT TEXTURED/PAINTED GYP. BOARD SEE DESIGNATED KEYNOTE		AREA	┡	L L		OR		SE	+						ALLS					_	C	ILIN	VC-
MAIN LEVEL 100 ENTRY 101 OFFICE 104 OFFICE	NO.	NAME	4						N(ORT	Н	E	<u>AS</u>	Τ	S	TUC	H	V	<u>VES</u>	T			
100 ENTRY			CERAMIC FLOOR TILE	WALK-OFF CARPET TILE	CARPET TILE	SEE DESIGNATED KEYNOTE	COVED RUBBER BASE	SEE DESIGNATED KEYNOTE	EXISTING CMU, PAINT	TEXTURED/PAINTED GYP. BOARD	SEE DESIGNATED KEYNOTE	EXISTING CMU, PAINT	TEXTURED/PAINTED GYP. BOARD	SEE DESIGNATED KEYNOTE	EXISTING CMU, PAINT	TEXTURED/PAINTED GYP. BOARD	SEE DESIGNATED KEYNOTE	EXISTING CMU, PAINT	TEXTURED/PAINTED GYP. BOARD	SEE DESIGNATED KEYNOTE		2 x 2 LAY-IN PANELS	
101 OFFICE	100	FNTDV			<u> </u>		N	/AI	N	LE	_	L											
104 OFFICE			┞			U			-		⊘												
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	105	OFFICE	╁																				
106 OFFICE	106	OFFICE	t																				
107 HALL	107	HALL	t			1																Ť	

LOCATION OF FIELD AND ACCENT PAINT COLORS TO BE DETERMINED.

- EXISTING 2 x WOOD FRAMING

✓ INSTALL NEW 5/8" GYPSUM BOARD

ON ONE SIDE. FINISHES AS SCHEDULED.

— INSTALL BATT INSULATION

IF REQUIRED

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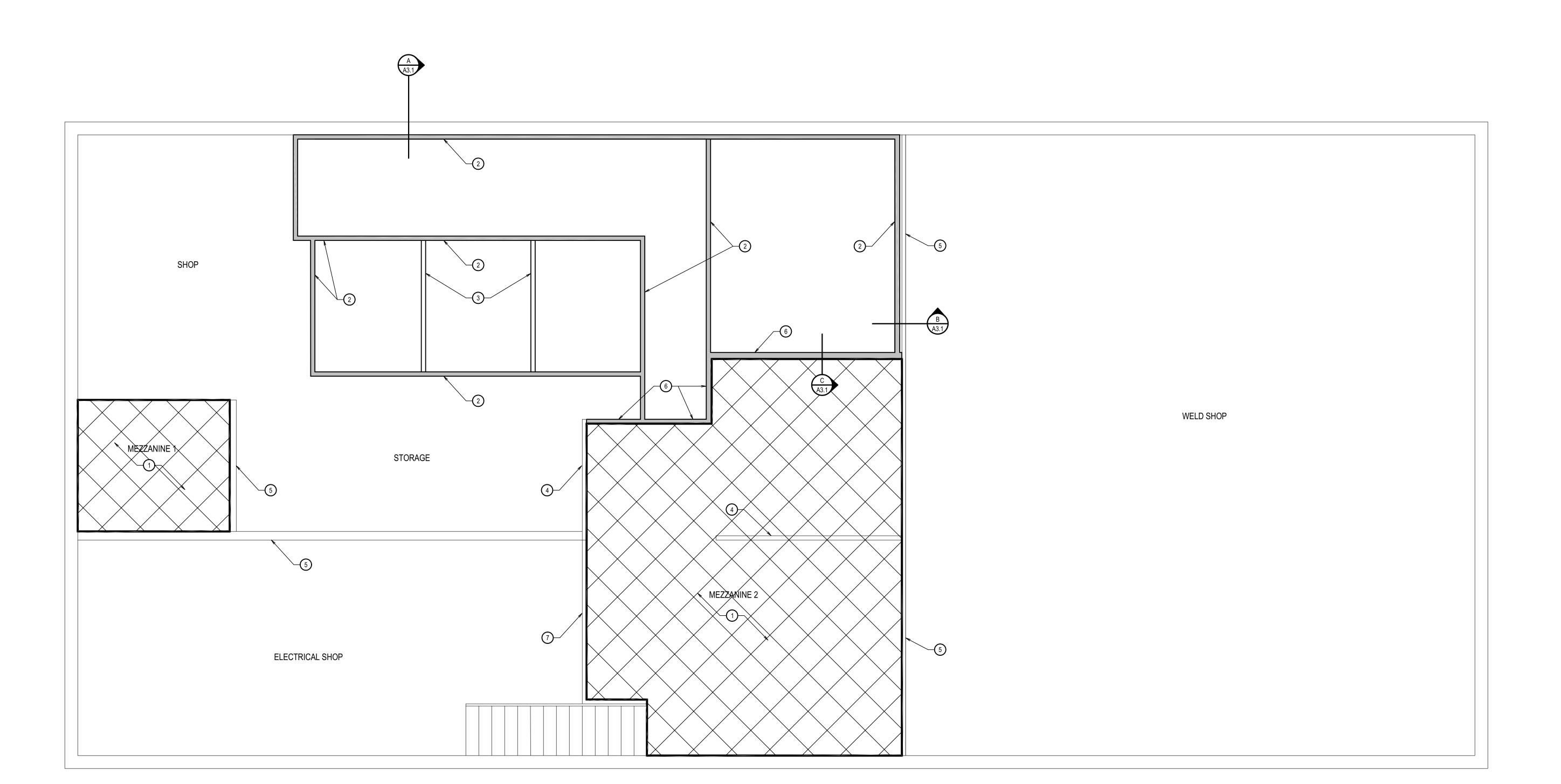
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INIVERSITY
, IDAHO

ARCHITECTURE/PLANNING/INTERIORS
990 JOHN RORMS PARKWAY / P.O. BOX 2212 / IDRHO FALLS, IDRHO 83403-2212
[P] 208.522.8779 [F] 208.522.8785 [W] nbwarchitects.com

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NBW PROJECT NO.: 19032 DATE: MARCH 2024 CHECKED BY: JHW





GENERAL NOTES

- SEE ELECTRICAL DRAWINGS FOR ALL LIGHTING AND ELECTRICAL WORK. MECHANICAL DRAWINGS FOR ALL MECHANICAL CEILING PENETRATIONS
- SEE PLUMBING DRAWINGS FOR ALL PLUMBING WORK.

AND MECHANICAL WORK.

- RESOLVE ALL DISCREPANCIES WITH CONTRACTOR AND/OR ARCHITECT $\underline{\text{PRIOR}}$ TO DEMOLITION.
- ALL WORK TO BE IN ACCORDANCE WITH ALL CODES AND ACCESSIBILITY REQUIREMENTS.
- CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
- SEE SHEET A1.2 AND A1.3 FOR WALL TYPES
- INFILL OPENING ABOVE DOOR WITH MASONRY CONCRETE UNITS TO MATCH EXISTING ADJACENT.

KEYNOTES

- 1. EXISTING MEZZANINE TO REMAIN
- 2. NEW MAIN FLOOR WALL 13'-4" TALL
- 3. NEW MAIN FLOOR WALL 9'-2" TALL
- 4. EXISTING MEZZANINE WALL TO REMAIN
- 5. EXISTING FULL HEIGHT WALL TO REMAIN
- 6. NEW MEZZANINE WALL
- 7. EXISTING MEZZANINE RAILING TO REMAIN



MEZZANINE TO REMAIN. THE CEILINGS ON THE MAIN FLOOR ARE ATTACHED TO MEZZANINE STRUCTURE AND ARE TO REMAIN INTACT.

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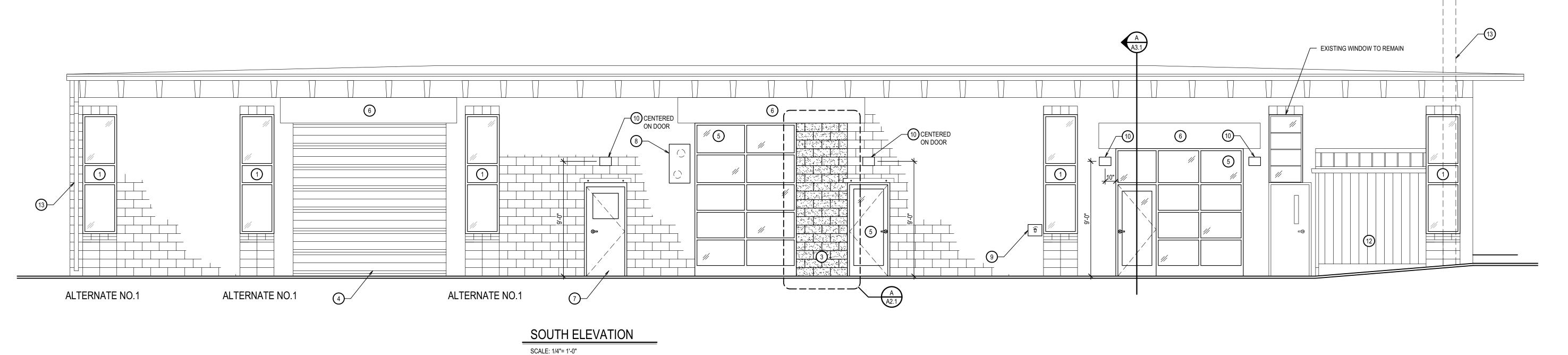
NE PLAN

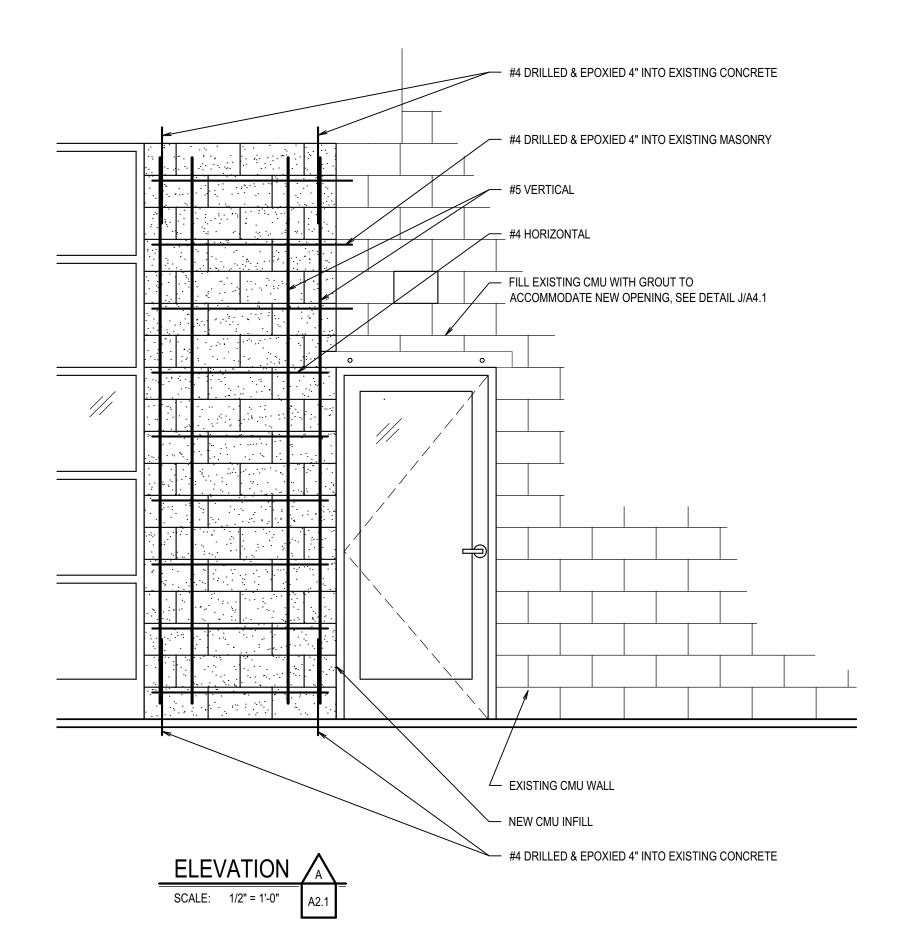
REVISIONS

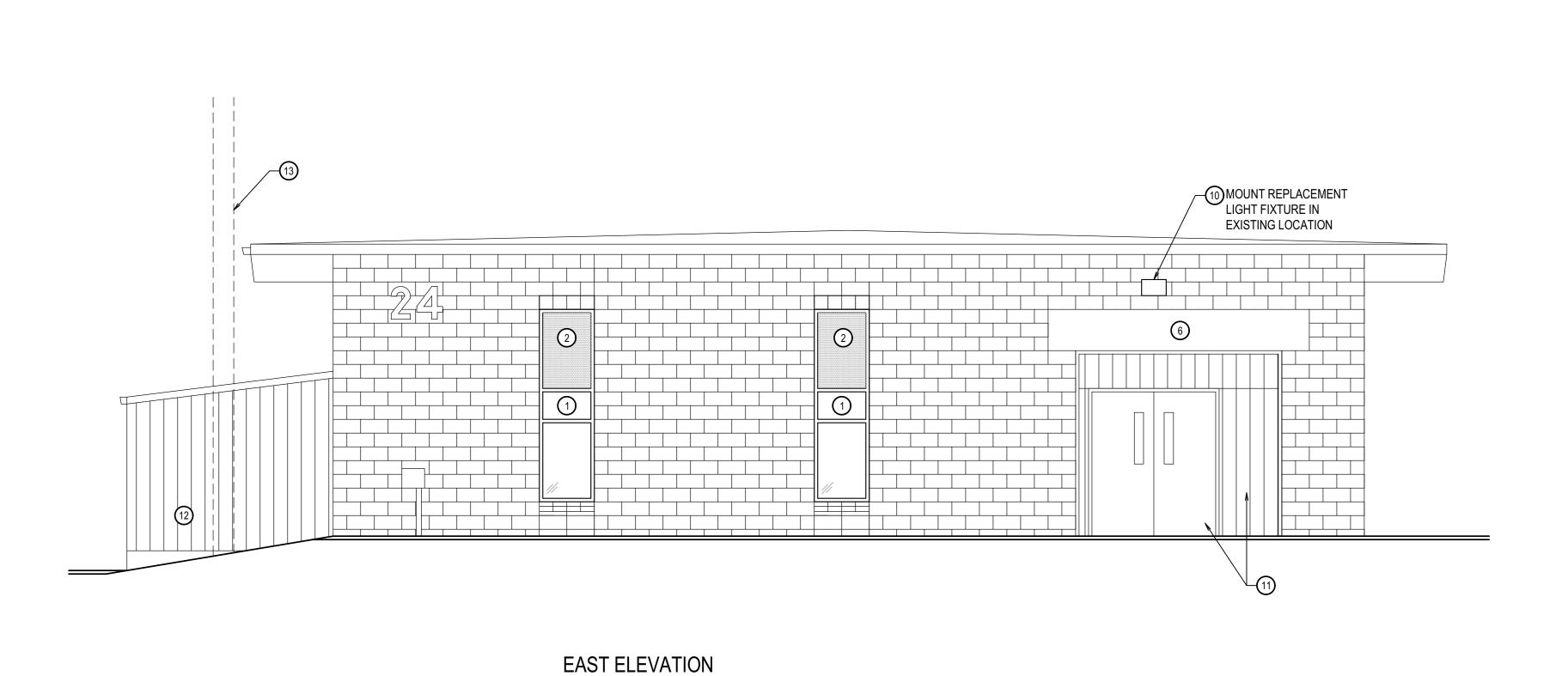
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SCALE: 1/4"= 1'-0"

	○ KEY	NOTES
1 2 3 4 5 6 7 8 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	CMU INFILL. MATCH EXISTING ADJACENT CMU. POWER WASH EXISTING OVERHEAD DOOR. EXTERIOR ONLY NEW ALUMINUM STOREFRONT SYSTEM EXISTING CONCRETE HEADER NEW HOLLOW METAL DOOR AND FRAME, SEE DETAIL D/A4.1. PAINT. REMOVE EXISTING METAL COVERS AND DUCTS. PATCH CMU WALL PENETRATIONS BY INSTALLING BATT INSULATION IN CAVITY AND GALVANIZED SHEET METAL COVER OVER THE TOP OF HOLES. REMOVE EXISTING HOSE BIB. FILL HOLE WITH INSULATION AND COVER WITH STAINLESS STEEL PLATE	 SAND, PREPARE AND PAINT EXISTING HOLLOW METAL DOOR, FRAME AND WOOD SIDING EXISTING LEAN-TO STRUCTURE. EXCLUDED FROM WORK. EXISTING POWER POLE, PROTECT DURING CONSTRUCTION

HE DDWarchitects D.a.

RRCHITECTURE/PLANNING/INTERIORS

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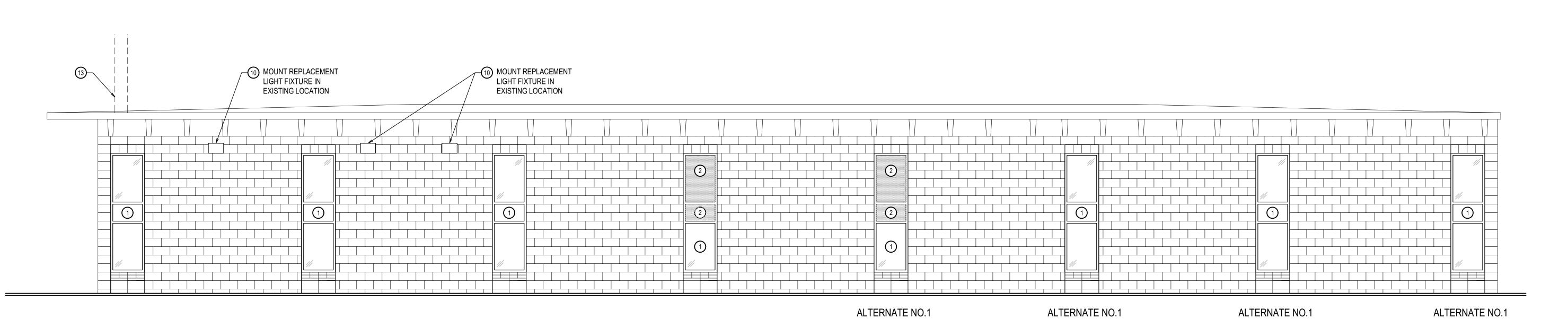
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NBW PROJECT NO.:
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MARCH 2024
DRAWN BY:
KP
CHECKED BY:
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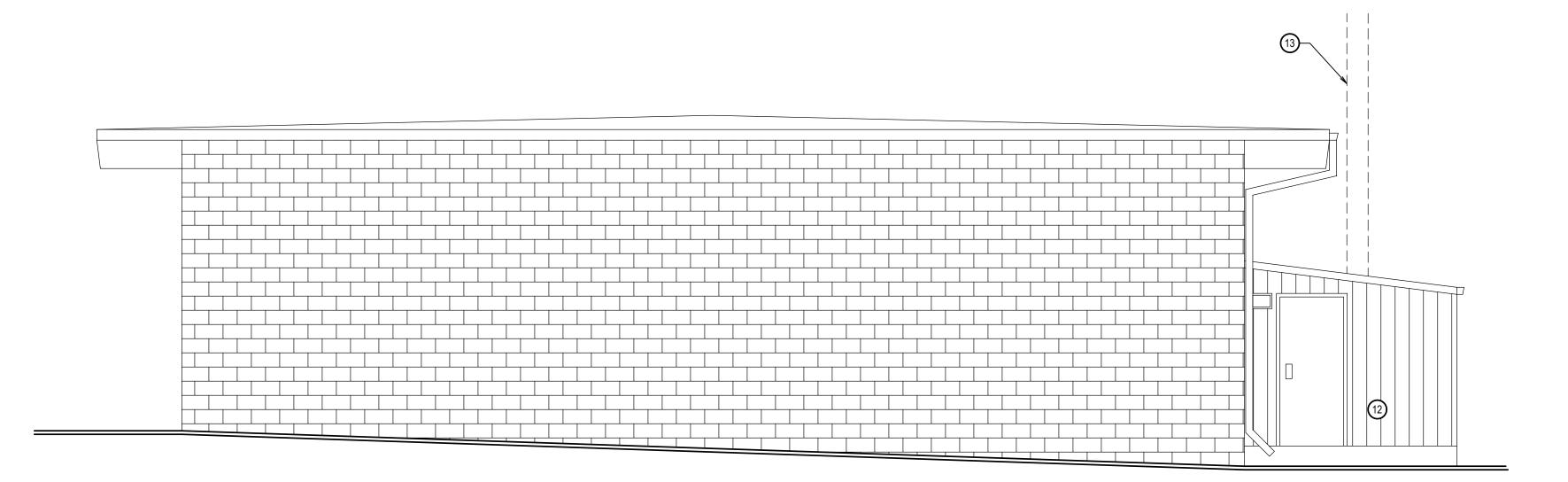
A2.1





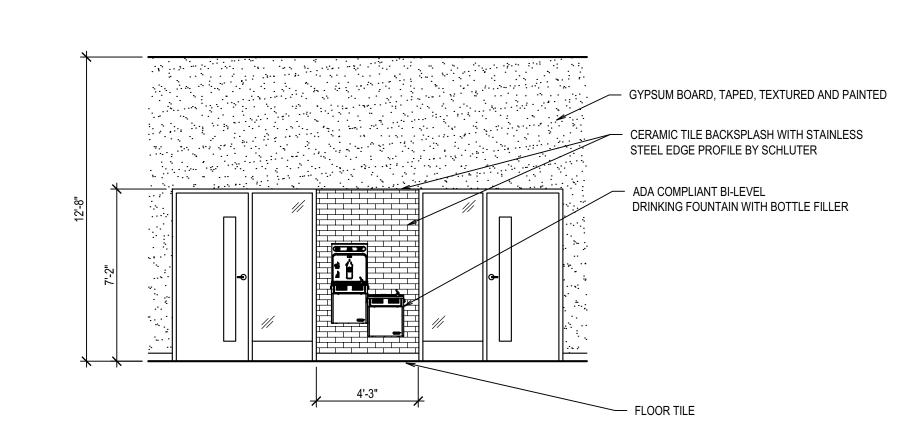
NORTH ELEVATION

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



WEST ELEVATION

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



ELEVATION 🛕

	○ KEY	'NOTES
1. 2. 3. 4. 5. 6. 7. 8. 9.	NEW WINDOW 1" THICK SPANDREL GLAZING CMU INFILL. MATCH EXISTING ADJACENT CMU POWER WASH EXISTING OVERHEAD DOOR. EXTERIOR ONLY NEW ALUMINUM STOREFRONT SYSTEM EXISTING CONCRETE HEADER NEW HOLLOW METAL DOOR AND FRAME, SEE DETAIL D/A4.1. PAINT. REMOVE EXISTING METAL COVERS AND DUCTS. PATCH CMU WALL PENETRATIONS BY INSTALLING BATT INSULATION IN CAVITY AND GALVANIZED SHEET METAL COVER OVER THE TOP OF HOLES. REMOVE EXISTING HOSE BIB. FILL HOLE WITH INSULATION AND COVER WITH STAINLESS STEEL PLATE	 11. SAND, PREPARE AND PAINT EXISTING HOLLOW METAL DOOR, FRAME AND WOOD SIDING 12. EXISTING LEAN-TO STRUCTURE. EXCLUDED FROM WORK. 13. EXISTING POWER POLE, PROTECT DURING CONSTRUCTION

A R C H I T E C T U R E / P L R N N I N G / I N T E R I O R S

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[P] 208.522.8779 [F] 208.522.8785 [W] nbwarchitects.com $\overline{}$ **PHASE**

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ISU CUSTODIAL

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NBW PROJECT NO.: 19032 MARCH 2024 DRAWN BY: CHECKED BY: JHW

KEYNOTES

03 CONCRETE

3a CONCRETE SLAB

3b CONCRETE - TEE ROOF STRUCTURE

04 MASONRY

4a 8" CMU 4b 12" CMU

6a FLOOR JOIST

6b 2 x 4 6c 2 x NAILER

6d 2 x BLOCKING

07 THERMAL & MOISTURE PROTECTION

7a PRE-FINISHED METAL FLASHING

7b BATT INSULATION

08 DOORS & WINDOWS

8a ALUMINUM WINDOW / STOREFRONT SYSTEM

8b HOLLOW METAL DOOR FRAME ASSEMBLY

9a) 5/8" GYPSUM BOARD, TYPE "X"

9b 24" x 24" LAY-IN CEILING TILE AND SUSPENSION GRID SYSTEM

PHASE NO. 20-232

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JNIVERSITY

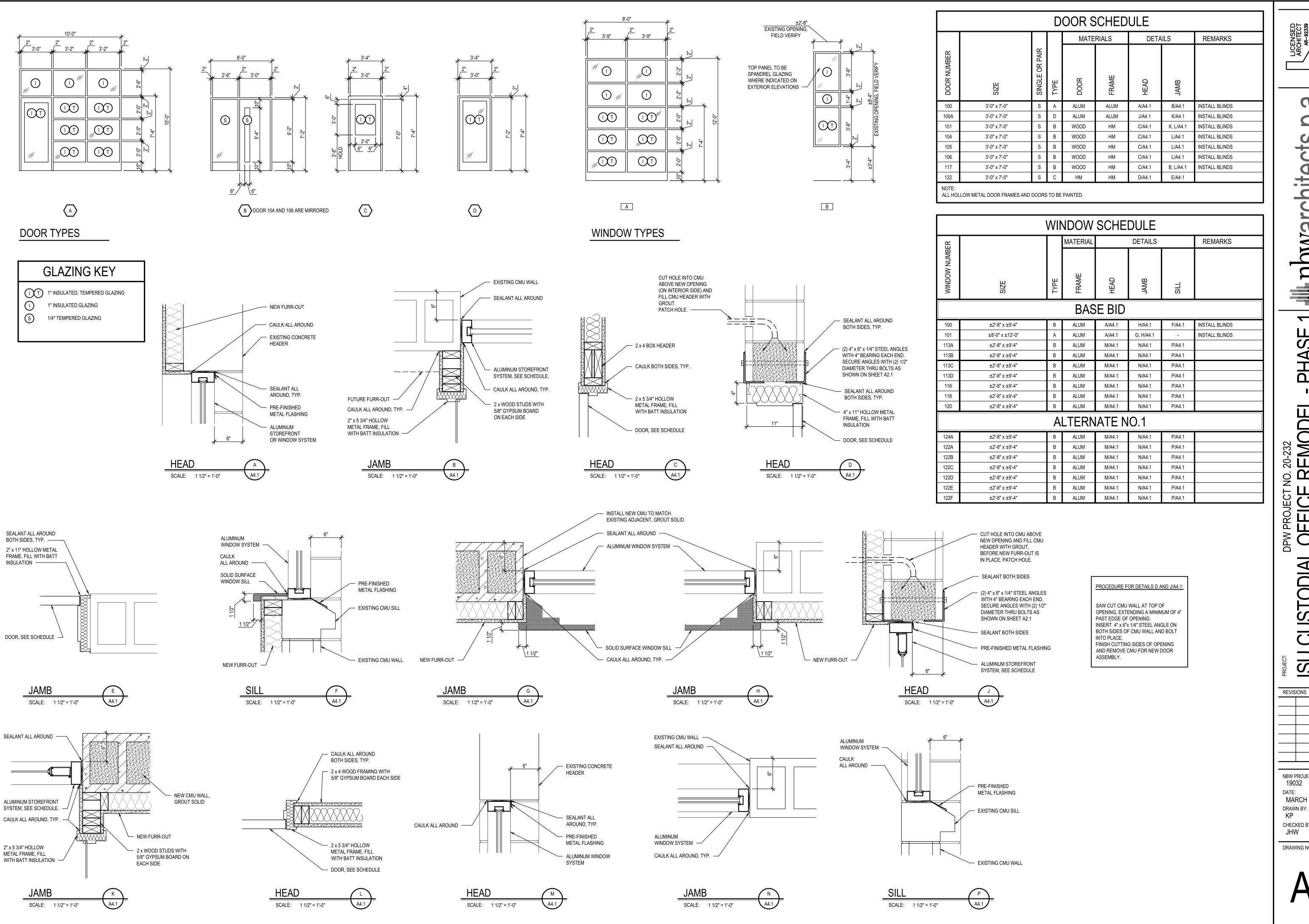
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POCATELLO, II ISU CUSTODIAL

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REVISIONS

NBW PROJECT NO.: 19032 DATE: MARCH 2024 DRAWN BY: CHECKED BY: JHW



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CTS D. A. G. / I. N. T. E. R. I. O. R. S. O. FRLLS, 108HD 83403-2212

PHA NO. 20-232

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DULES AND DETAIL

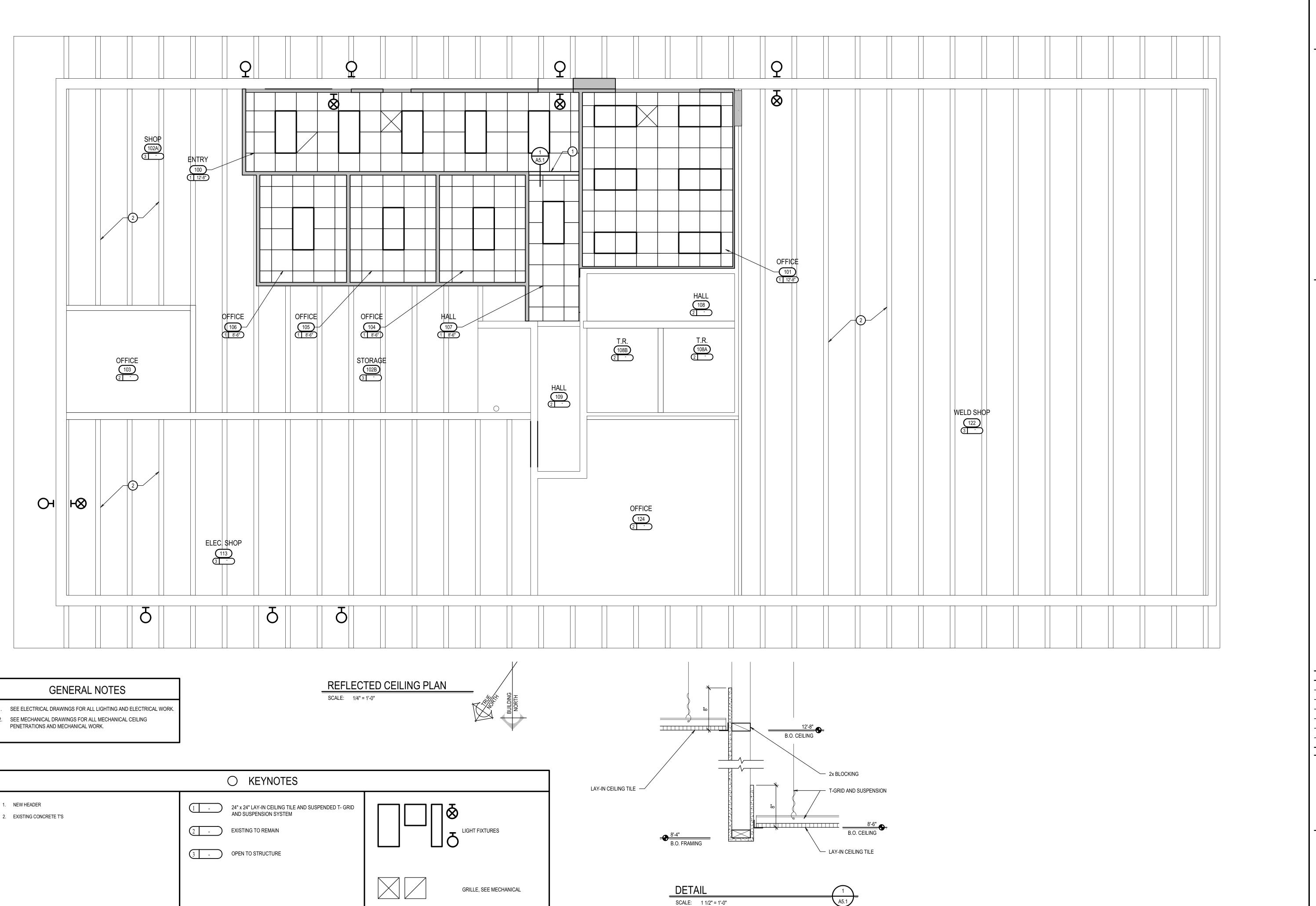
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NBW PROJECT NO.: 19032 DATE:

MARCH 2024 DRAWN BY: KP CHECKED BY: JHW





LICENSED ARCHITECT AR-92339

AR-92339

03-20-24

JAMES WYATT STATE OF IDAHO

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JOHN ROAMS PARKWAY / P.O. BOX 2212 / IDRHO FALLS, IDRHO 8340

DPW PROJECT NO. 20-232

L OFFICE REMODEL - PHASE
IDAHO STATE UNIVERSITY
POCATELLO, IDAHO

ISU CUSTODIAI

SHEET TITLE:

NBW PROJECT NO.:
19032

NBW PROJECT NO.:
19032

DATE:
MARCH 2024

DRAWN BY:
KP
CHECKED BY:
JHW

DRAWING NO.:

A5.1



	AIR HANDLER (STEAM)																		
SYM.	TYPE	CFM	OA CFM	CHAR.	MOCP	MCA	H.P.	E.D.R.	E.A.T.	STEAM PRESS	VALVE	TRAP	WEIGHT	STE SUPPLY	EAM PIPING CONDENSATE	RE LIQUID	FRIGERANT P	PIPING TYPE	REMARKS
AH 1	STEAM	800	150	208/60/1	20	12	1/2	90	60	5 PSI	3/4"	3/4"	90#	1-1/2"	1"	3/8"	3/4"	D /1101	MAGIC AIR MODEL HCA08 STANDARD STEAM WITH DX COOLING COIL TO MATCH.

	CONDENSING UNIT SCHEDULE												
SYM.	BTU	EAT	CHAR.	MCOP	MCA	SEER	REFR.	PIPE SIZING* LIQUID SUCTION		REMARKS			
CU 1	24,000	95°F	208/60/1	25	14.7	14.0	R-410A	3/8"	5/8"	LENNOX MODEL ML14XC1 WITH 0°F LOW AMBIENT HARD START KIT.			

* CONTRACTOR RESPONSIBLE TO SIZE REFRIGERANT LINES BASED ON MANUFACTURE SIZING AND FIELD INSTALLED LENGTH

EXISITING TO BE DEMOLISHED

EXISTING TO REMAIN (E)

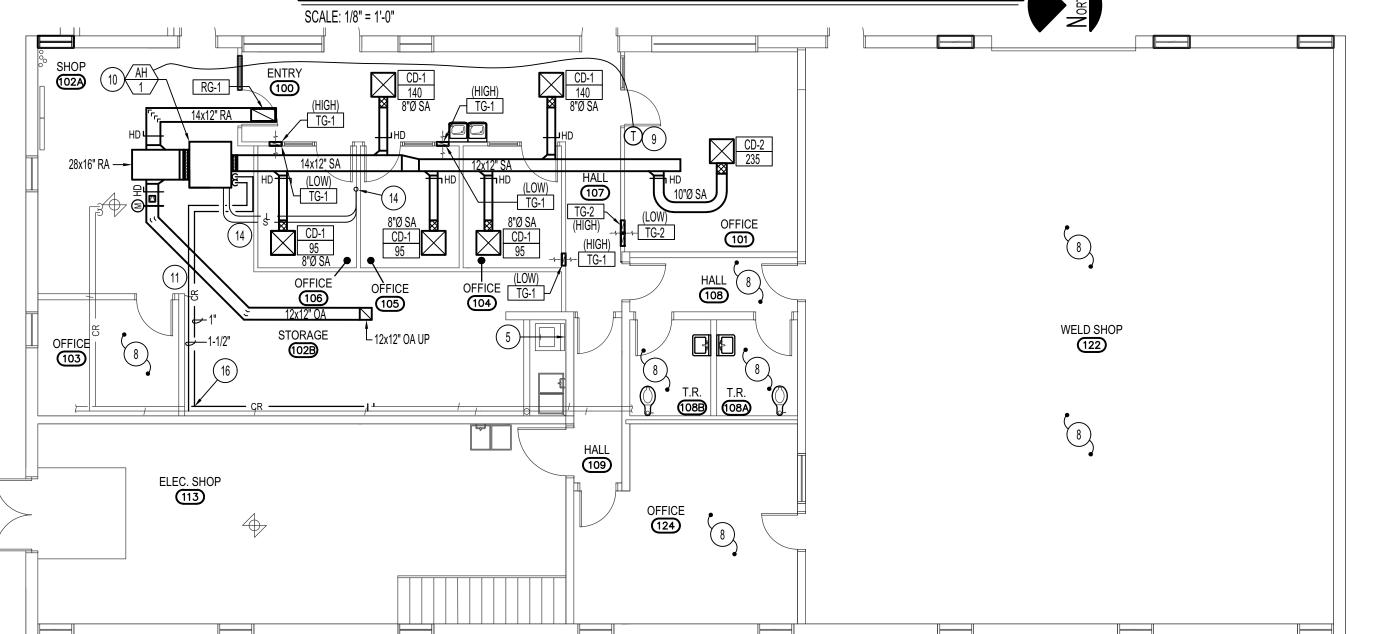
NEW EQUIPMENT

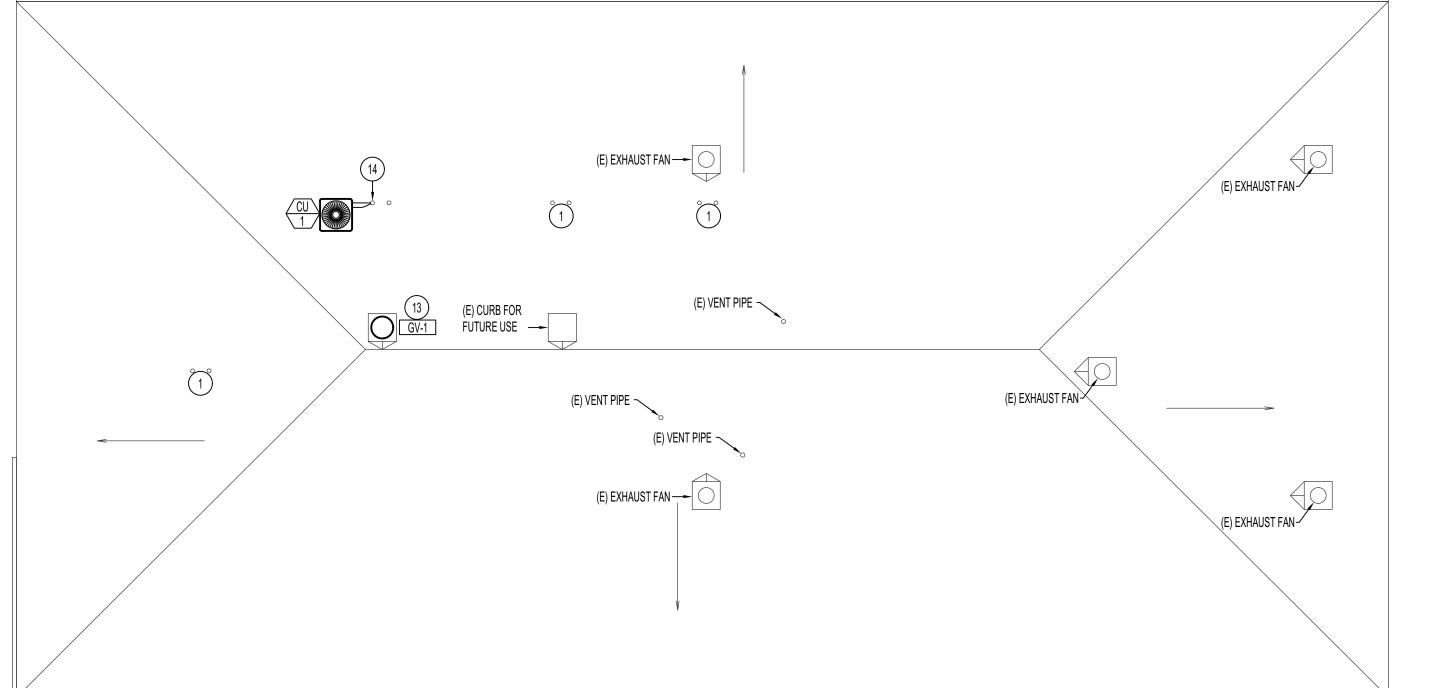
CONDENSATE RETURN

			GRILL	E AND	REGIS	ΓER SC	HEDUL	E		
SYM.	TYPE	SIZE	CFM RANGE	THROW PATTERN	CONSTR.	FINISH	BRANCH DUCT	BALANCING DAMPER	FIRE DAMPER	REMARKS
CD-1 CFM	CEILING	24x24	75-150		STEEL	WHITE	8"Ø	NO	NO	PRICE MODEL SMD IN LAY-IN CEILING
CD-2 CFM	CEILING	24x24	235		STEEL	WHITE	10"Ø	NO	NO	PRICE MODEL SMD IN LAY-IN CEILING
GV-1	GRAVITY VENTILATLATOR	22.5x22.5" CURB SIZE	800	NA	STEEL	WHITE	12"Ø	NO	NO	TWIN CITY 120B
RG-1	RETURN GRILLE	24x12	800	NA	STEEL	WHITE	14x12"	NO	NO	PRICE MODEL 10 IN LAY-IN CEILING
TG-1	TRANSFER GRILLE	12x6	95	N/A	STEEL	WHITE	12x3.5	NO	NO	PRICE MODEL 535L
TG-2	TRANSFER GRILLE	26x6	235	N/A	STEEL	WHITE	QTY (2) 12x3.5	NO	NO	PRICE MODEL 535L

	MECHAN	NICAL LEGEND	MAIN LEVEL MECHANICAL FLOOR PLAN
.dwg	SYMBOL	DESCRIPTION	SCALE: 1/8" = 1'-0"
IAL.d	T	ELECTRONIC THERMOSTAT	
CUSTODIAL	(\$)	ELECTRONIC SENSOR	
ISU CU	\overline{FC}	EQUIPMENT SYMBOL	
	0	SMOKE DETECTOR	
232\19085	CO2	CARBON DIOXIDE DETECTOR	(E) EXHAUST FAN—
20	(E)	EXISTING	
24 DPW	₩ HD	HAND DAMPER	
Bldg 2	CHD CHD	CONCEALED HAND DAMPER	(E) VENT PIPE (SE) FUTURE USE
ISU		ROUND BRANCH DUCT WITH HAND DAMPER	
\19085		INSULATED FLEXIBLE DUCT	(E) VENT PIPE
rive\19		RETURN AIR OR EXHAUST GRILLE	(E) VENT PIPE
local\F-Drive\19\1		CEILING DIFFUSER	(E) EXHAUST FAN
a.loca		ROOF MOUNTED UPBLAST EXHAUST FAN	

3 4 0 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		PL (1)
LHCA08 STANDARD COOLING COIL TO SHOP		2
OFFICE EXISTING FAN COIL		3
	8	4
STORAGE EXISTING FAN COIL BY		5
OFFICE T.R T.R Q		6 7
HALL		8
		9
ELEC. SHOP		10
MAIN LEVEL DEMO MECHANICAL FLOOR PLAN		11)
SCALE: 1/8" = 1'-0"	N S S S S S S S S S S S S S S S S S S S	12
SHOP 10 AH ENTRY CD-1 140 (HIGH) TG-1 140 8"Ø SA TG-1 TG-1 TG-1 TG-1 TG-1 TG-1 TG-1 TG-1		13)





ROOF MECHANICAL PLAN

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

LAN NOTES:

-) EXISTING 4" GALVANIZED GOOSENECK PIPING THRU ROOF. PROTECT DURING
- CONSTRUCTION.) EXISTING STEAM UNIT HEATER TO BE REMOVED & REPLACED WITH NEW STEAM AIR HANDLER. ISOLATE STEAM AND CONDENSATE LINES DURING SWITCH OVER. FIELD VERIFY EXACT SIZE AND LOCATION OF EXISTING SHUT
 - DIAGRAM ON SHEET SHEET M2.1.) EXISTING WINDOW AC UNITS TO BE REMOVED AND RETURNED TO OWNER
 - DURING CONSTRUCTION. REMOVE AND DISPOSE OF EXISTING DUCT, EXHAUST FAN, AND GRILLE IN THIS LOCATION, REMOVE CORRESPONDING & ABANDONED DUCTWORK IN CEILING

SPACE NOT SHOWN ON PLANS. COORDINATE WITH GENERAL CONTRACTORS

OFF VALVES AND REPLACE WITH NEW FOR NEW UNIT. SEE STEAM COIL PIPING

- EXISTING DRYER TO REMAIN. PROTECT DURING CONSTRUCTION.
-) EXISTING STEAM UNIT HEATER TO REMAIN. PROTECT DURING CONSTRUCTION.
- EXISTING FAN COIL TO BE REMOVED AND DISPOSED OF. REMOVE AND
- DISPOSE OF CORRISPONDING REFRIGERANT LINES.
- NO WORK TO BE DONE IN THIS ROOM. PROTECT DURING CONSTRUCTION.

AROUND FOOT TRAFFIC.

-) TIE NEW AIR HANDLER TO EXISTING CAMPUS DDC SYSTEM. SEE SPECIFICATION.
-) NEW STEAM AIR HANDLER TO BE INSTALLED AS HIGH AS POSSIBLE. DUCTWORK TO BE RUN IN CEILING SPACE AS MUCH AS POSSIBLE. RUN 3/4" CONDENSATE DRAINS TO EXISTING MEZZANINE FLOOR DRAIN AND ROUTE
-) RUN NEW STEAM AND CONDENSATE LINES TO NEW STEAM AIR HANDLERS AS HIGH AS POSSIBLE. SEE MINIMUM STEAM LINES TO NEW EQUIPMENT ON THE SCHEDULES. SEE SUPPORT AND CONNECTION DETAILS FOR NEW STEAM LINES ON SHEET M2.1.
-) DRYER TO BE REMOVED PRIOR TO CONSTRUCTION BY OWNER. REMOVE AND DISPOSE OF CORRESPONDING DRYER DUCT AND WINDOW TERMINATION.
-) INSTALL NEW GRAVITY VENTILATOR THRU EXISTING CAPPED ROOF CURB. GRAVITY VENTILATOR CURB SIZE OPENING TO MATCH EXISTING CONDITIONS. FIELD VERIFY EXISTING CONDITIONS PRIOR TO SUBMITTALS.
- (14) ROUTE REFRIGERANT LINES THRU EXISTING 4" GOOSENECK THRU ROOF. ROUTE REFRIGERANT LINES AS HIGH AS POSSIBLE. SEE DETAIL ON SHEET
- (15) EXISTING STEAM UNIT HEATER TO BE REMOVED & DISPOSED OF. REMOVE & CAP STEAM AND CONDENSATE BRANCH PIPING BACK TO MAIN.
- (16) CONNECT STEAM AND CONDENSATE LINES IN SAME LOCATION AS DEMOLISHED STEAM UNIT HEATER.

GENERAL NOTES:

- A- THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND CONNECTIONS ON THE JOB SITE. ALL WORK SHALL BE EXECUTED FROM MEASUREMENTS TAKEN AT THE SITE.
- THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO INSURE PROPER CODE CLEARANCES FOR ELECTRICAL AND MECHANICAL ACCESS WHEN INSTALLING ANY EQUIPMENT SUPPLIED BY THE MECHANICAL CONTRACTOR.
- IT IS CRITICAL THAT THIS CONTRACTOR COORDINATE EQUIPMENT LOCATIONS WITH PIPING, DUCTWORK, ELECTRICAL CONDUIT AND BUILDING STRUCTURE
- D- CEILING DIFFUSERS ARE SHOWN IN APPROXIMATE LOCATIONS. REFER TO LIGHTING PLANS AND REFLECTED CEILING PLAN FOR EXACT LOCATIONS.
- DUCT DIMENSIONS CALLED OUT ON DRAWINGS ARE INSIDE FREE AREA DIMENSIONS. ACOUSTICAL DUCT LINER ARE TO BE ADDED TO OVERALL MEASUREMENTS.
- ALL DUCTWORK AND PIPING WHICH PASSES THRU FIRE RATED WALLS TO BE FIRE STOPPED WITH APPROVED FOAM OR SEALANT. REFER TO

Engineered **Systems** Associates

POCATELLO, IDAHO 83201 PHONE: (208) 233-0501 FAX: (208) 233-0529 EMAIL: esa@engsystems.com

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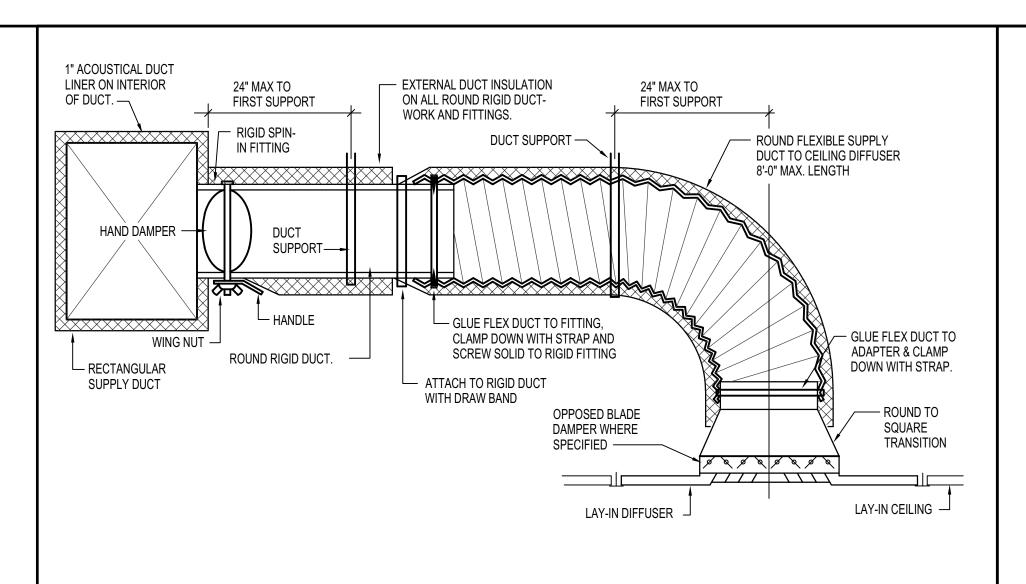
MECHANICAL PLAN

TO INSURE CODE COMPLIANCE.

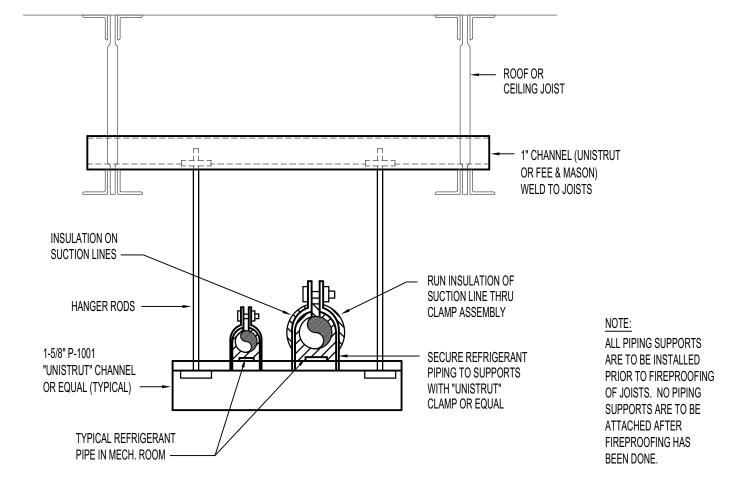
SPECIFICATIONS FOR APPROVED MANUFACTURES.

ESA JOB NUMBER: 19085

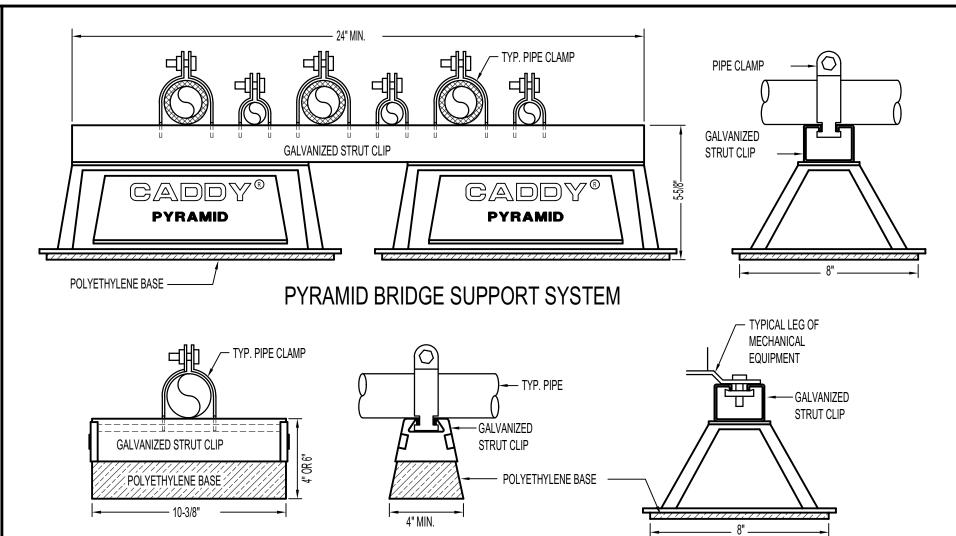
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CEILING DIFFUSER DETAIL WITH FLEXIBLE DUCT



PIPE SUPPORT DETAIL



PYRAMID FOAM-BASED SUPPORT

ANCHOR RODS TO ROOF

UNIVERSAL PYRAMID SUPPORT

EQUIPMENT AND PIPING ON ROOF SUPPORT DETAILS

NO SCALE

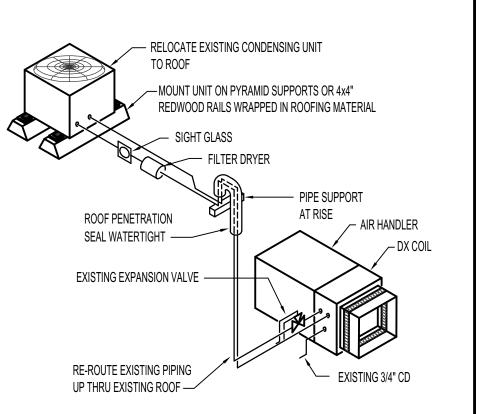
TRANSVERSE REINFORCING (1) AT JOINTS MINIMUM REINFORCING ್ರಾ ANGLE SIZE DRIVE AND MAXIMUM DIMENSION SHEET SLIP METAL LONGITUDINAL REIN-LONGEST GAUGE SPACING SIDE, (ALL BETWEEN INCHES FOUR TRANSVERSE PLAIN HEMMED ALTERNATE FORCED JOINTS &/OR SIDES) S SLIP S SLIP BAR SLIP BAR SLIP INTERMEDIATE RECOM-RECOM-RECOM-RECOM-REINFORCING MENDED MENDED MENDED MENDED GAUGE GAUGE GAUGE GAUGE UP THRU 12 NONE REQUIRED 13-18 NONE REQUIRED 24 24 19-30 1"x1"x1/8" @ 60 IN 31-42 1"x1"x1/8" @ 60 IN 22

DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED. **DUCT CONSTRUCTION DETAIL**

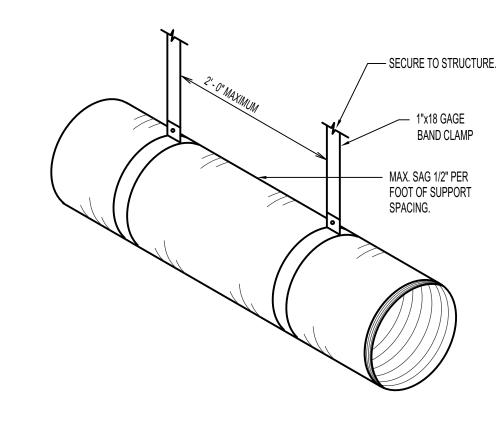
NO SCALE

(1) TRANSVERSE REINFORCING SIZE IS DETERMINED BY

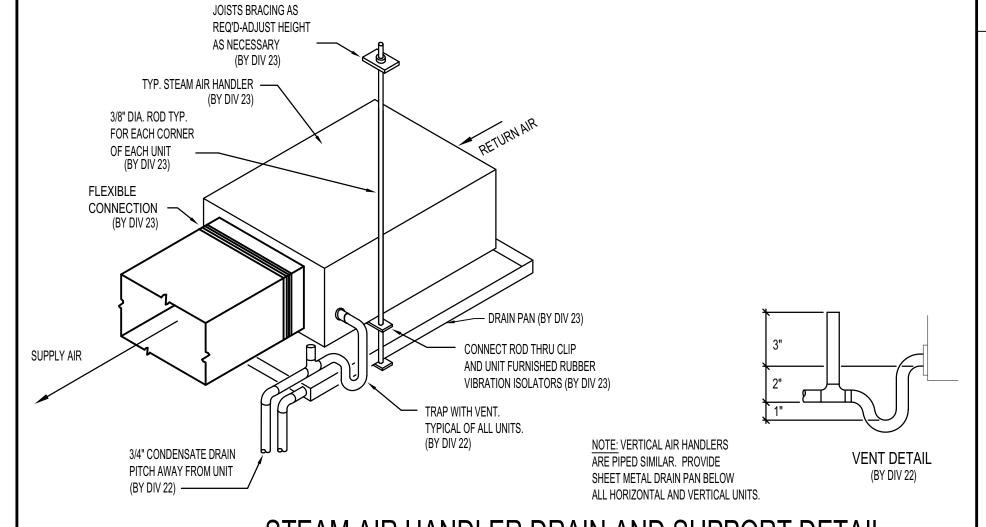
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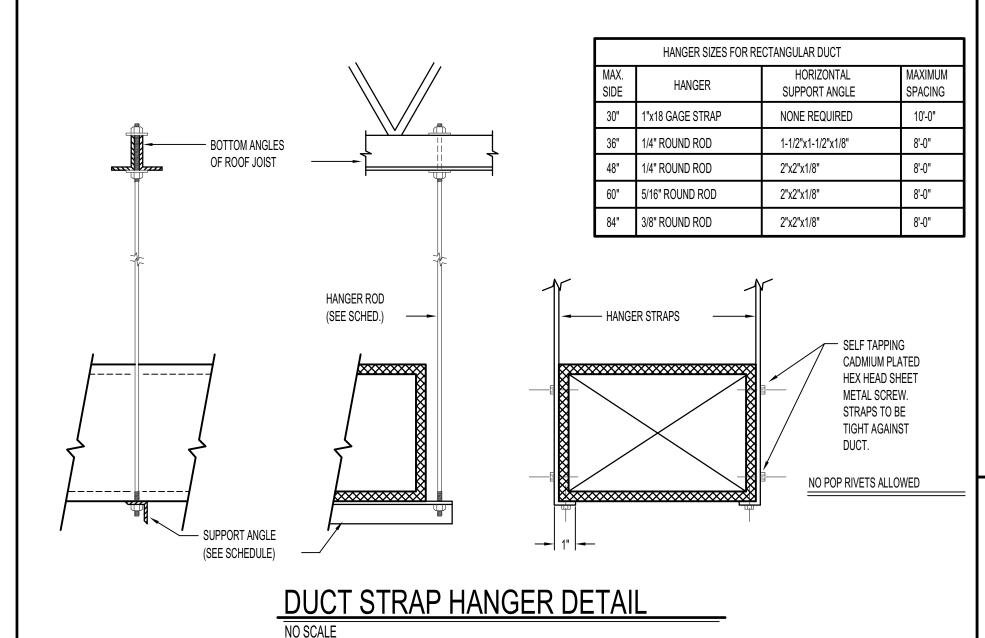
REFRIGERANT PIPING DIAGRAM NO SCALE

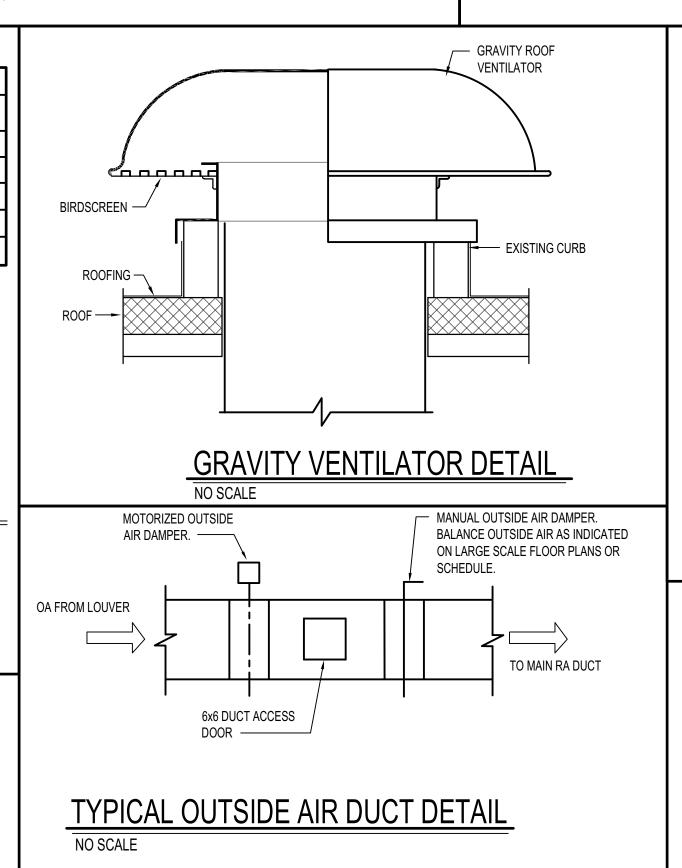


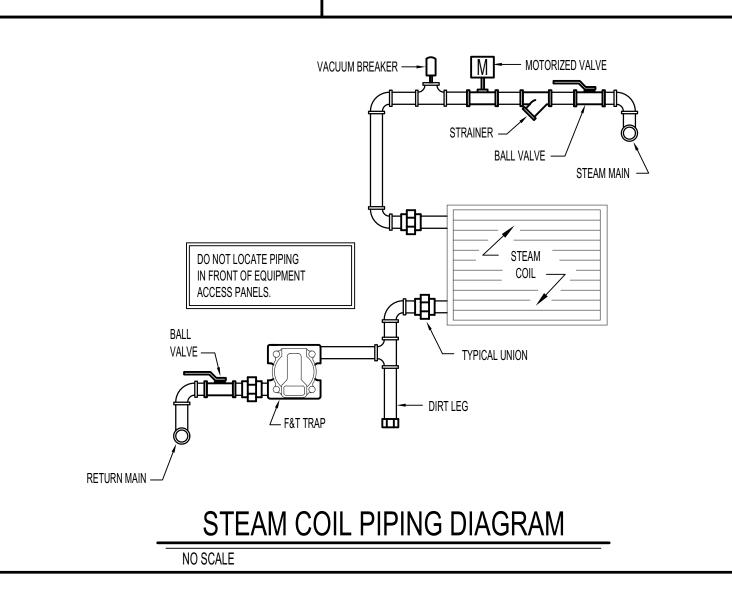
FLEXIBLE DUCT SUPPORT DETAIL

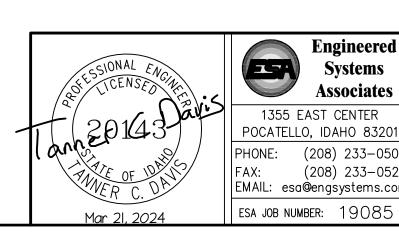


STEAM AIR HANDLER DRAIN AND SUPPORT DETAIL











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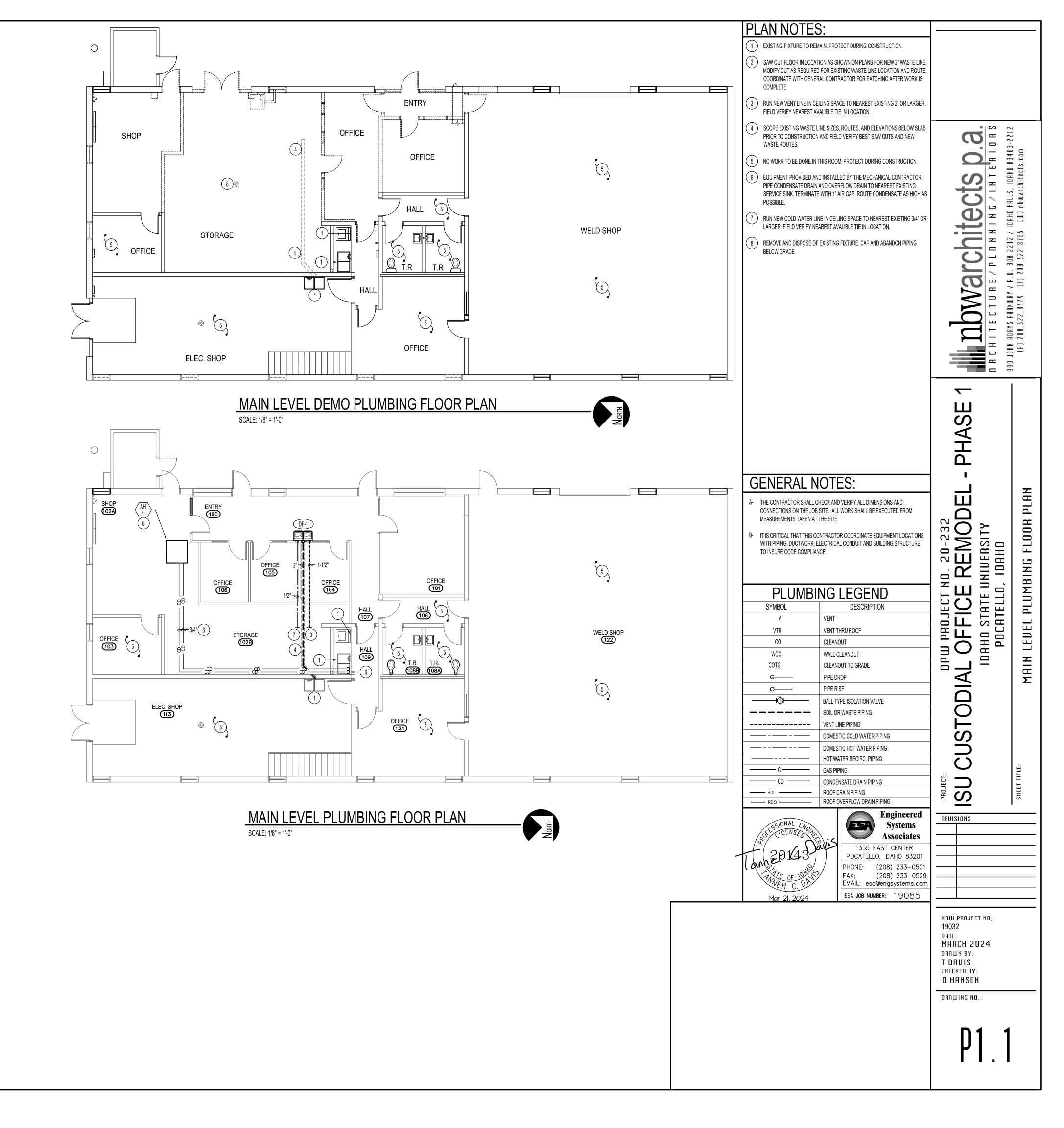
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DETAILS

MECHANICAL



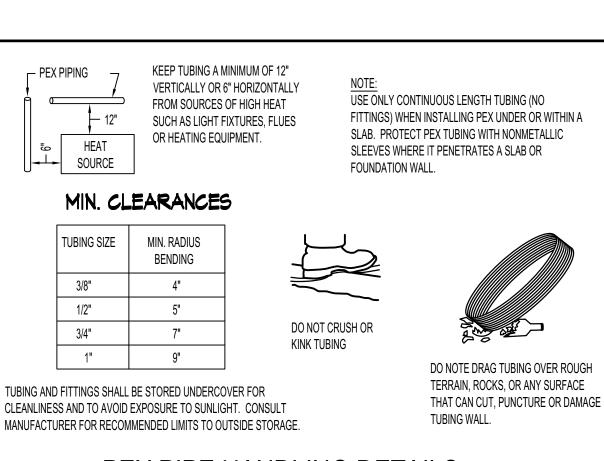


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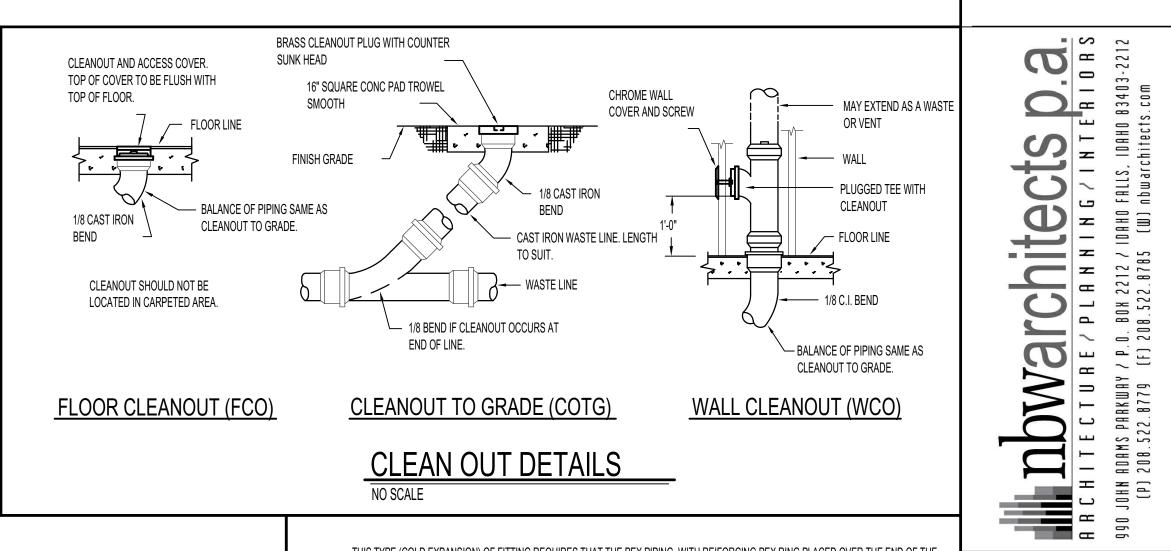




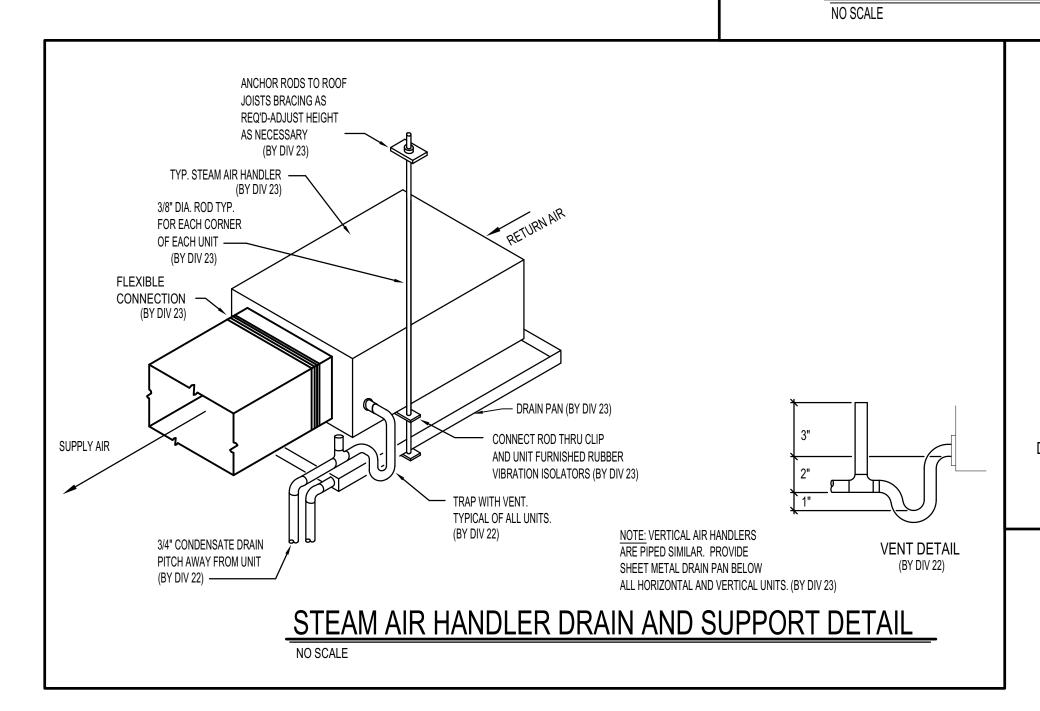


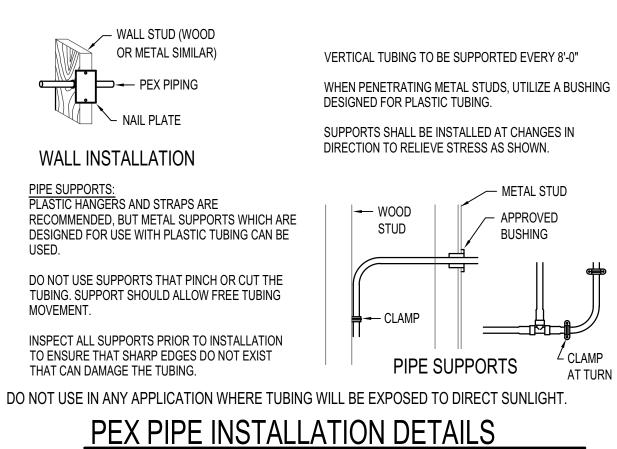


NO SCALE



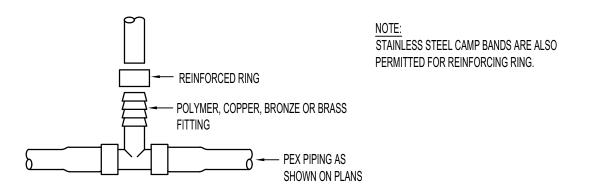
CLEAN OUT DETAILS





THIS TYPE (COLD EXPANSION) OF FITTING REQUIRES THAT THE PEX PIPING, WITH REIFORCING PEX RING PLACED OVER THE END OF THE END OF THE PIPE, IS EXPANDED BEFORE THE FITTING IS INSERTED INTO THE PIPE END. THE EXPANDED PIPE END IS ALLOWED TO RETRACT ONTO THE FITTING TO FORM THE SEAL. THE MEMORY OF THE PIPE ALLOWS IT TO TIGHTEN OVER THE FITTING. AN EXPANDER TOOL IS REQUIRED TO EXPAND THE PIPE AND THE PEX RING TOGETHER.

ALL JOINTS (TEES. ELBOWS, COUPLINGS, ETC.) ARE JOINTED SIMILARLY.



PEX PIPE FITTING DETAILS

PHA 20-232 EMODEI UERSITY CUSTODIAL ISU

AND SCHEDULES

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PLUMBING DETAIL

ERIORS HD 83403-2212

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Engineered **Systems Associates** 1355 EAST CENTER POCATELLO, IDAHO 83201 PHONE: (208) 233-0501 FAX: (208) 233-0529 EMAIL: esa@engsystems.com

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/ IDAHO FALLS, IDAHO 83403-2212
(W) nbwarchitects.com

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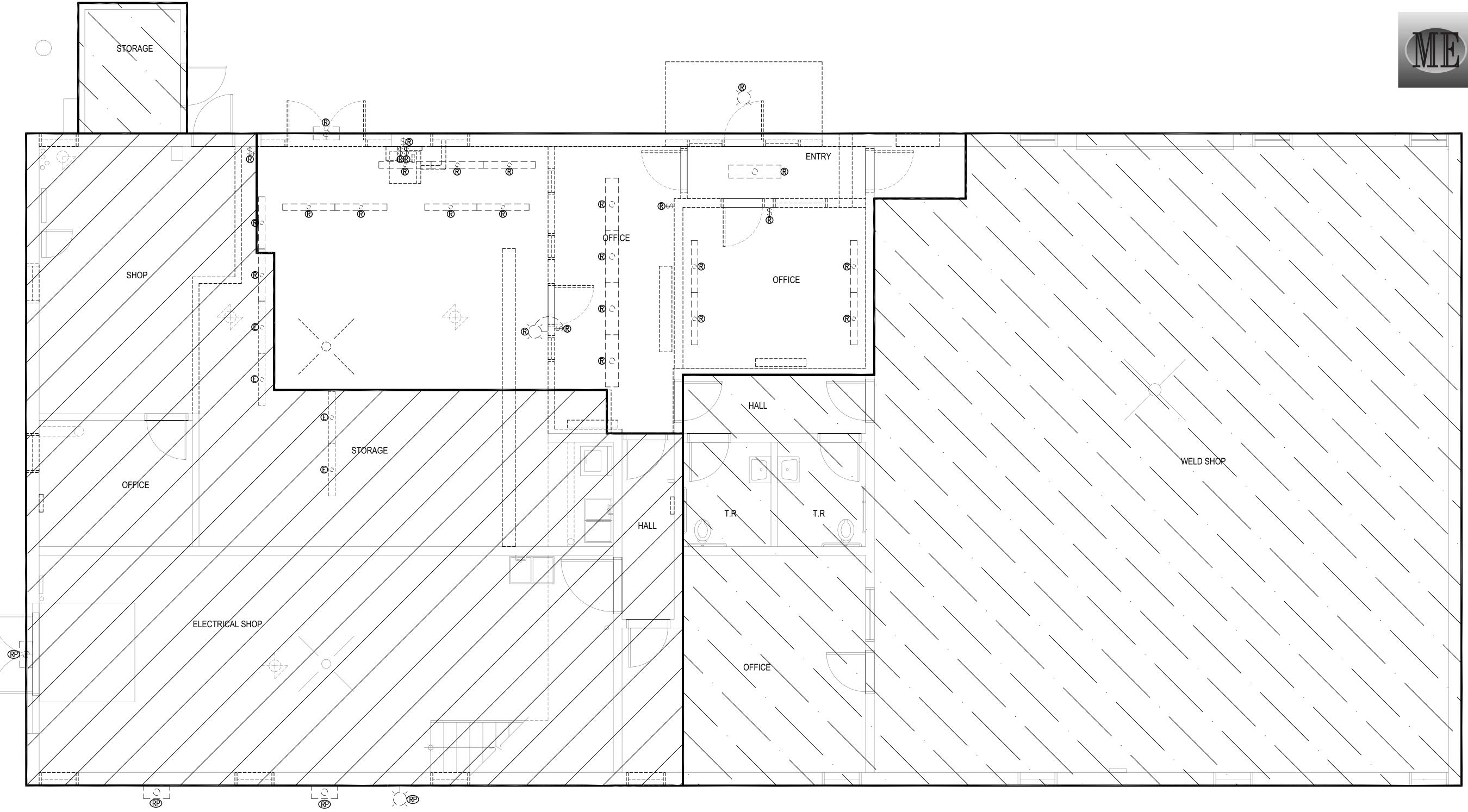
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DEMOLITION SYMBOL NOTES:

- 1. (E) INDICATES EXISTING DEVICE TO REMAIN.
- 2. ® INDICATES DEVICE TO BE RELOCATED.
- 3. P INDICATES FIXTURE DEVICE TO BE REPLACED IN PLACE. CIRCUITING AND CONDUIT TO REMAIN INTACT. PROTECT DURING CONSTRUCTION.
- 4. ® INDICATES ITEMS TO BE REMOVED.

<u>REMOVE</u> DEVICE AND ALL CONDUCTORS PERTAINING TO THE DEVICE. THE ELECTRICAL CONTRACTOR SHALL REMOVE AND DISPOSE OF EQUIPMENT AND PROVIDE COVER PLATES AS REQUIRED.

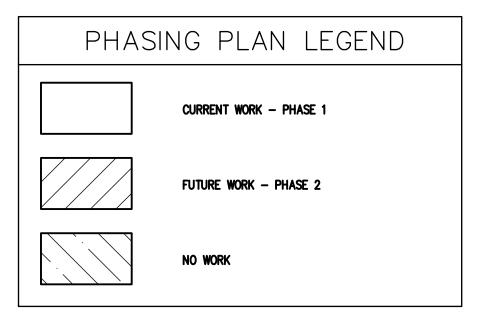
DEMOLITION KEY NOTES:

① REMOVE SWITCH AND BELL.

GENERAL ELECTRICAL DEMOLITION NOTES:

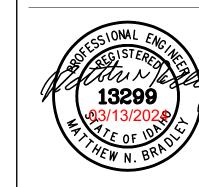
- 1. DESIGN IS BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS TO DETERMINE STATUS OF ACTUAL CONDITIONS AS THEY RELATE TO THE SCOPE OF WORK AS SHOWN ON THESE PLANS. LACK OF CONTRACTOR VERIFICATION WILL NOT CONSTITUTE REQUEST FOR CHANGE ORDERS.
- 2. ELECTRICAL CONTRACTOR TO MAINTAIN POWER TO ALL DOWN STREAM DEVICES AND CIRCUITS THAT ARE TO REMAIN DURING COMPLETION OF THE WORK INDICATED ON THESE PLANS.
- 3. ELECTRICAL CONTRACTOR TO COORDINATE ALL WORK WITH RELATED TRADES.
- 4. ELECTRICAL CONTRACTOR SHALL PROVIDE NEW TYPE WRITTEN UPDATED PANEL SCHEDULES FOR ALL PANELS.
- 5. ELECTRICAL CONTRACTOR TO DISPOSE OF ALL REMOVED ELECTRICAL DEVICES AND ALL RELATED ELECTRICAL PARTS BACK TO SOURCE UNLESS NOTED OTHERWISE.
- 6. ELECTRICAL CONTRACTOR HAS THE OPTION TO REUSE EXISTING RACEWAY OR PROVIDE NEW.
- 7. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING CIRCUITING PRIOR TO ANY WORK.
- 8. REFER TO ANY SPECIFICATIONS PROVIDED FOR MATERIALS AND INSTALLATION INSTRUCTIONS.













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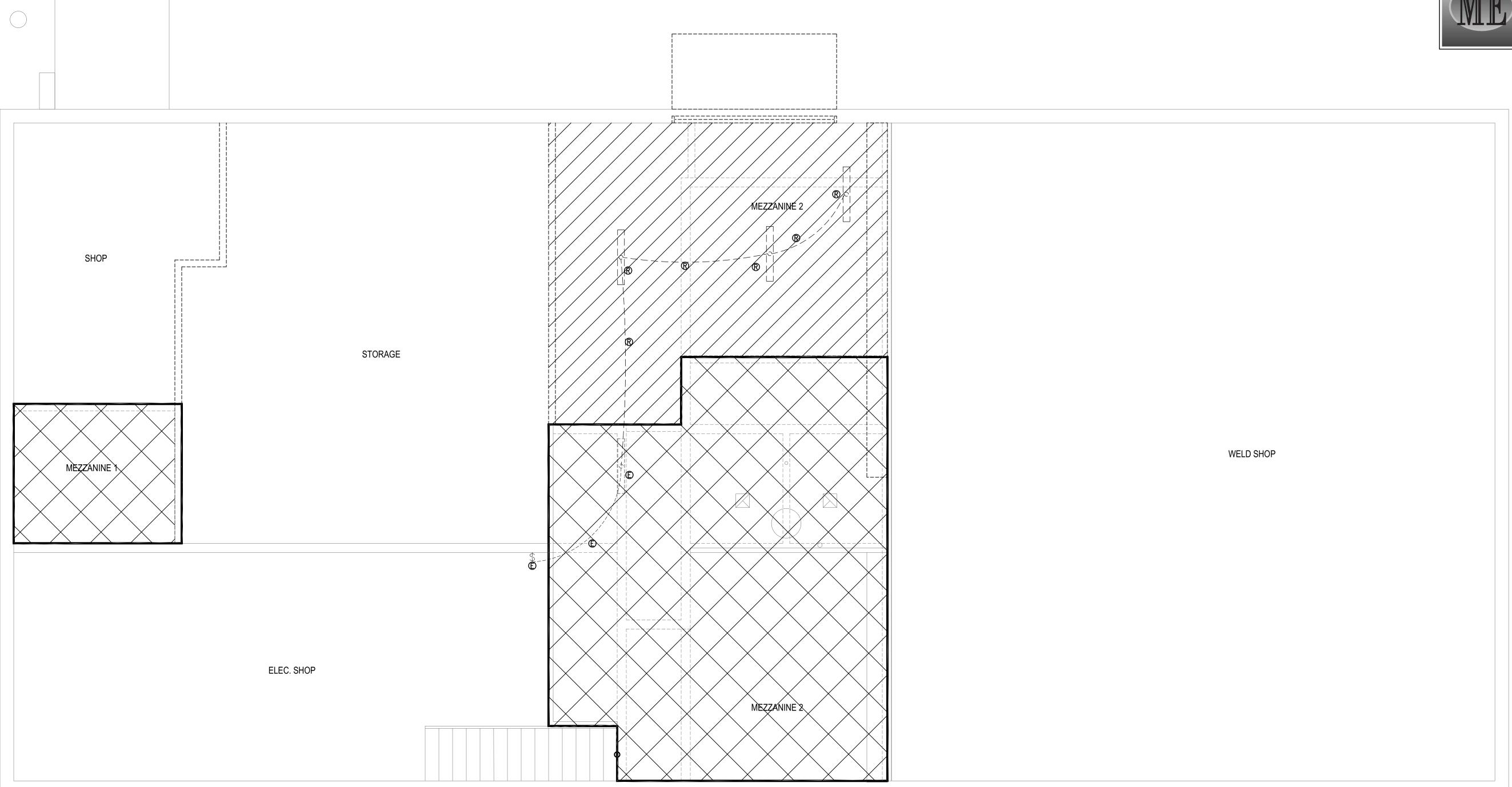
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DEMOLITION SYMBOL NOTES:

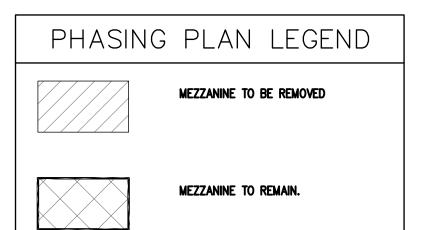
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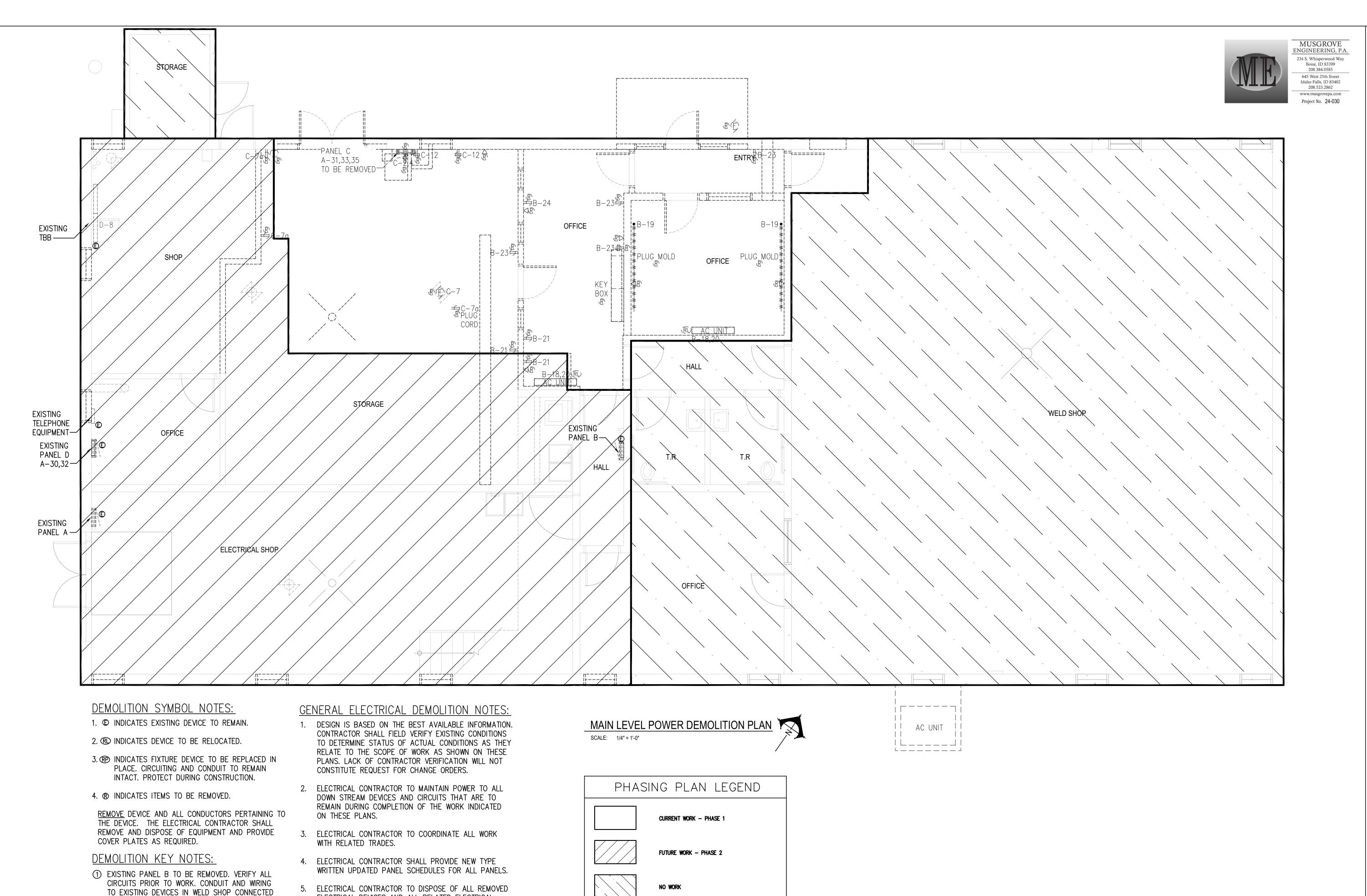
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MEZZANINE LEVEL LIGHTING DEMOLITION PLAN SCALE: 1/4" = 1'-0"







ELECTRICAL DEVICES AND ALL RELATED ELECTRICAL

6. ELECTRICAL CONTRACTOR HAS THE OPTION TO REUSE

7. ELECTRICAL CONTRACTOR SHALL VERIFY EXISTING

8. REFER TO ANY SPECIFICATIONS PROVIDED FOR MATERIALS AND INSTALLATION INSTRUCTIONS.

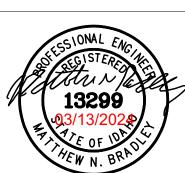
EXISTING RACEWAY OR PROVIDE NEW.

CIRCUITING PRIOR TO ANY WORK.

PARTS BACK TO SOURCE UNLESS NOTED OTHERWISE.

TO EXISTING PANEL B ARE TO REMAIN FOR REUSE.

SEE MAIN LEVEL POWER INSTALLATION PLAN



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SHOP _____ STORAGE WELD SHOP ELEC. SHOP MEZZANINE 2

DEMOLITION SYMBOL NOTES:

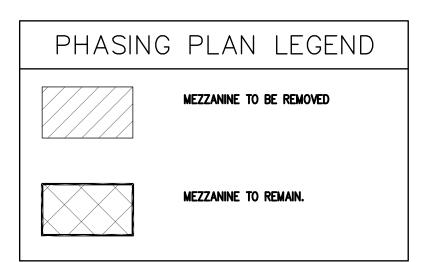
- 1. © INDICATES EXISTING DEVICE TO REMAIN.
- 2. ® INDICATES DEVICE TO BE RELOCATED.
- 3. P INDICATES FIXTURE DEVICE TO BE REPLACED IN PLACE. CIRCUITING AND CONDUIT TO REMAIN INTACT. PROTECT DURING CONSTRUCTION.
- 4. ® INDICATES ITEMS TO BE REMOVED.
- REMOVE DEVICE AND ALL CONDUCTORS PERTAINING TO THE DEVICE. THE ELECTRICAL CONTRACTOR SHALL REMOVE AND DISPOSE OF EQUIPMENT AND PROVIDE COVER PLATES AS REQUIRED.

GENERAL ELECTRICAL DEMOLITION NOTES:

- 1. DESIGN IS BASED ON THE BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS TO DETERMINE STATUS OF ACTUAL CONDITIONS AS THEY RELATE TO THE SCOPE OF WORK AS SHOWN ON THESE PLANS. LACK OF CONTRACTOR VERIFICATION WILL NOT CONSTITUTE REQUEST FOR CHANGE ORDERS.
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MEZZANINE LEVEL POWER DEMOLITION PLAN

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



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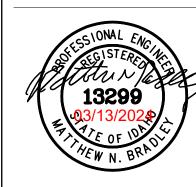
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MUSGROVE ENGINEERING, P.A 234 S. Whisperwood Way 208.384.0585 645 West 25th Street Idaho Falls, ID 83402 208.523.2862 www.musgrovepa.com Project No. 24-030



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ELECTRICAL LEGEND - LIGHTING REFERENCE FIXTURE SCHEDULE FOR MOUNTING TYPE, MOUNTING HEIGHT, AND FIXTURE TYPE.

- DOUBLE FACE EXIT SIGN, CEILING MOUNTED, PROVIDE UNSWITCHED CONDUCTOR. WALL MOUNTED DOUBLE FACE EXIT SIGN PROVIDE UNSWITCHED
- CONDUCTOR. MOUNT AT +8'-0" UNO. SINGLE FACE EXIT SIGN, CEILING MOUNTED PROVIDE UNSWITCHED
- WALL MOUNTED SINGLE FACE EXIT SIGN PROVIDE UNSWITCHED CONDUCTOR. MOUNT AT +8'-0" UNO.
- ARROW INDICATES DIRECTION TO BE SHOWN ON SIGN. 1'X1' LIGHT FIXTURE.
- 1'X1' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
- TRACK LIGHT
- 1'X4' LIGHT FIXTURE. 1'X4' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP
- 2'X4' LIGHT FIXTURE.
- 2'X4' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
- 2'X2' LIGHT FIXTURE.
- 2'X2' LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR. DIRECT/INDIRECT LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH
- DIRECT/INDIRECT LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR
- STRIP LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH. STRIP LIGHT FIXTURE. SEE SCHEDULE FOR LENGTH. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED
- WALL MOUNTED LIGHT FIXTURE. WALL MOUNTED LIGHT FIXTURE, PROVIDE EMERGENCY BATTERY
- BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR. RECESSED LIGHT FIXTURE RECESSED LIGHT FIXTURE. PROVIDE EMERGENCY BATTERY BACKUP
- CONNECTED TO AN UNSWITCHED CONDUCTOR.
- ROUND EMERGENCY LIGHT FIXTURE. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
- WALL MOUNTED LIGHT FIXTURE. WALL MOUNTED EMERGENCY LIGHT FIXTURE. PROVIDE EMERGENCY BATTERY BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR.
- POLE LIGHT 1 HEAD WITH POLE
- TIME CLOCK
- PHOTO CONTROL CELL LOCATED 12" ABOVE ROOF FACING NORTH. OCCUPANCY SENSOR. PROVIDE RELAYS AND POWER PACKS AS REQUIRED.
- **o**
- EMERGENCY EGRESS LIGHTING WITH OUT FIXTURE HEADS. CONNECT TO AN UNSWITCHED CONDUCTOR. EMERGENCY EGRESS LIGHTING. CONNECT TO AN UNSWITCHED

CEILING MOUNTED. SINGLE FACE EXIT SIGN WITH EMERGENCY

- WALL MOUNTED SINGLE FACE EXIT SIGN WITH EMERGENCY EGRESS LIGHTING. PROVIDE UNSWITCHED CONDUCTOR. MOUNT AT +8'-0" UNO.
- EGRESS LIGHTING. PROVIDE UNSWITCHED CONDUCTOR. CEILING MOUNTED. DOUBLE FACE EXIT SIGN WITH EMERGENCY
- EGRESS LIGHTING. PROVIDE UNSWITCHED CONDUCTOR. INDICATES FIXTURE TYPE. REFER TO FIXTURE SCHEDULE.
- EXTERIOR WALL PACK EMERGENCY EXTERIOR WALL PACK. PROVIDE EMERGENCY BATTERY
- BACKUP CONNECTED TO AN UNSWITCHED CONDUCTOR

UNMARKED CIRCUIT IS CONCEALED IN -----

CONDUIT UP

CONDUIT, STUBBED, CAPPED AND MARKED

WITH PULL CORD AS SPECIFIED

CONCEALED IN

FLOOR OR

UNDERGROUND

DESIGNATES CIRCUIT ON -

CEILING OR WALL. MAINTAIN

CONDUIT AND CONDUCTOR SIZE THROUGHOUT ENTIRE CIRCUIT.

BEGINNING OF INDIVIDUAL -

CONDUIT DOWN (

INDICATED.

EXISTING -

CIRCUIT(S), CIRCUIT NUMBER(S)

EMERGENCY SOURCE

DEVICES

SX SWITCH, TYPE AS INDICATED. +46"AFF DOUBLE POLE 3-WAY 4-WAY

KEYED

- PILOT LIGHT DIMMER HORSEPOWER RATED
- TO THERMAL OVERLOAD LV LOW VOLTAGE OS OCCUPANCY SENSOR
- OR LOW VOLTAGE, MOMENTARY OVERRIDE VS VACANCY SENSOR SUPERSCRIPT INDICATES LIGHTS
- TO BE SWITCHED TOGETHER DUAL LEVEL SWITCHING, INSIDE AND OUTSIDE LAMPS OF FIXTURE TO BE SWITCHED SEPARATELY.
- DUAL LEVEL SWITCHING WITH OCCUPANCY SENSOR, INSIDE AND OUTSIDE LAMPS OF FIXTURE TO BE SWITCHED SEPARATELY. OCCUPANCY SENSOR WITH MANUAL DIMMING, SET FOR 50%
- AUTOMATIC ON, AUTOMATIC OFF, WITH MANUAL DIMMING. SINGLE CONVENIENCE OUTLET, +18" AFF UNO
- FLOOR MOUNT SINGLE CONVENIENCE OUTLET
- DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
- FLOOR MOUNT DUPLEX CONVENIENCE OUTLET EMERGENCY DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
- SWITCHED DUPLEX CONVENIENCE OUTLET, +18" AFF UNO FLOOR MOUNTED SWITCHED DUPLEX CONVENIENCE OUTLET
- USB DUPLEX CONVENIENCE OUTLET, +18" AFF UNO
- USB FOURPLEX CONVENIENCE OUTLET, +18" AFF UNO FOURPLEX CONVENIENCE OUTLET. +18"AFF UNO
- FLOOR MOUNT FOURPLEX CONVENIENCE OUTLET CONNECTION POINT TO EQUIPMENT SPECIFIED, ELECTRICAL CONTRACTOR TO SUPPLY RACEWAY AND CONDUCTORS AND MAKE FINAL CONNECTION TO EQUIPMENT UNDER THIS SECTION. UNO
- FLOOR MOUNTED CONNECTION POINT, SEE NOTE ABOVE FOR REQUIREMENTS
- FLOOR MOUNTED JUNCTION BOX JUNCTION BOX WALL MOUNTED PUSH BUTTON, MOUNT AT SWITCH HEIGHT UNO
- HOHC WALL MOUNTED PUSH BUTTON, HANDICAPPED MOUNT AT SWITCH HEIGHT UNO WALL MOUNTED PUSH BUTTON, MOUNT AT SWITCH HEIGHT UNO
- MOTOR STARTER/CONTACTOR, SIZE/POLES NEMA 1 UNO AS INDICATED COMBINATION STARTER AND DISCONNECT, SIZE/POLES, STARTER SIZE AS INDICATED, NEMA 1 UNO
- FUSED DISCONNECT SWITCH, SIZE/POLES, FUSE SIZES AS INDICATED, NEMA 1 UNO NON-FUSED DISCONNECT SIZE/ POLES AS INDICATED, NEMA 1 UNO
- THERMOSTAT. +46" AFF PROVIDE CONDUIT, J-BOX, CONDUCTORS AS REQUIRED TO CONTROL ASSOCIATED UNITS. UNO COORDINATE WITH
- HUMIDISTAT, +46" AFF PROVIDE CONDUIT, J-BOX, CONDUCTORS AS REQUIRED TO CONTROL ASSOCIATED UNITS. POWER POLE - DUAL CHANNEL
- REB RECESSED ENTERTAINMENT BOX П TRANSFORMER
- PANELBOARD. SEE SCHEDULE FOR TYPE. EQUIPMENT CABINET, SURFACE MOUNTED EQUIPMENT CABINET FLUSH MOUNTED
- SURFACE MULTI-OUTLET RACEWAY
- MECHANICAL EQUIPMENT CALL OUT

CIRCUITING SYMBOLS

KITCHEN EQUIPMENT CALLOUT

PANEL HOMERUN. (3/4"-2#12,1#12G CONDUCTORS UNO)

EDISON STYLE SHARED NEUTRAL CONDUCTORS ARE NOT ALLOWED

EACH 1 POLE BREAKER SHALL BE FURNISHED WITH AN INDIVIDUAL

DEDICATED NEUTRAL CONDUCTOR.

— CURRENT CARRYING

- NEUTRAL CONDUCTORS

—— GROUNDING CONDUCTOR

PANEL NAME

CONDUCTORS

SECURITY

- CCTV CAMERA POWER SUPPLY CCTV SYSTEM POWER SUPPLY
- ADJUSTABLE CAMERA (PAN/TILT/ZOOM) \Box FIXED CAMERA CAMERA IN OUTDOOR HOUSING
- ADJUSTABLE CAMERA (PAN/TILT/ZOOM) IN OUTDOOR HOUSING
- CCTV OUTLET, +18" UNO CEILING MOUNTED CCTV OUTLET
- SECURITY SYSTEM KEYPAD CONTROLLER COORDINATE BOX SIZE AND MUDRING WITH VENDOR CR CARD READER
- CEILING MOUNTED MOTION SENSOR WALL MOUNTED MOTION SENSOR, MOUNTING HEIGHT INDICATED
- PANIC BUTTON MOUNTED UNDER COUNTER

ONE LINE

- DELTA WYE TRANSFORMER UNO F PULL STATION, +44" AFF WITH PRE-ALARM COVER FIG FIRE ALARM HORN, +84" AFF UNO
- PANEL BOARD, SEE SCHEDULE FOR TYPE AND SIZE
- ##A CIRCUIT BREAKER, SIZE AND POLES INDICATED
- ##A FUSE, SIZE AND TYPE INDICATED, PROVIDE FUSE FOR EACH POLE
- ##A INTERRUPTER SWITCH, SIZE AND POLES INDICATED
- ##A FUSED SWITCH, SIZE/POLES AND FUSE SIZE INDICATED
- ##A DRAW OUT CIRCUIT BREAKER, SIZE AND POLES INDICATED
- INDIVIDUAL BREAKER WITH SHUNT TRIP, SIZE AND POLES INDICATED. NEMA 1 UNO
- INDIVIDUAL BREAKER, SIZE AND POLES INDICATED. NEMA 1 UNO
- GROUND FAULT PROTECTION
- TVSS TRANSIENT VOLTAGE SURGE SUPPRESSION LSIGR — ADJUSTABLE BREAKER SETTINGS (PER SPECIFICATIONS): 'L'-LONG TIME 'S'-SHORT TIME
- 'I'-INSTANTANEOUS 'G'-GROUND FAULT 'R'-ENERGY REDUCING MAINTENANCE SWITCH W/STATUS INDICATOR
 - GROUND SHUNT TRIP COIL

GENERATOR SET, MAIN BREAKER SIZE INDICATED

AUTOMATIC TRANSFER SWITCH (ATS)

METER AND BASE

DRY TYPE TRANSFORMER

PAD MOUNT TRANSFORMER

- DISCONNECT SWITCH, SIZE AND POLES INDICATED. NEMA 1 UNO
- OVERHEAD SERVICE DROP
 - PLATE. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. #D,#T TELEPHONE/DATA OUTLET. MOUNT AT 18" A.F.F. UNO. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING. INSTALL QUANTITY OF DATA (#D) AND TELEPHONE (#T) CABLES INDICATED TO THE NEAREST DATA RACK. PROVIDE (2) DATA CABLES IF A CABLE QUANTITY IS NOT
 - FLOOR MOUNTED BOX FOR FUTURE TELEPHONE/DATA OUTLET.
 - TELEPHONE (#T) CABLES INDICATED TO THE NEAREST DATA RACK. PROVIDE (2) DATA CABLES IF A CABLE QUANTITY IS NOT INDICATED. INTERCOM SYSTEM CALL BUTTON. +46" UNO.
 - CEILING MOUNTED SPEAKER WITH BACKBOX
 - VOLUME CONTROL, +46" UNO
 - NEAREST ACCESSIBLE CEILING SPACE CEILING MOUNTED TELEVISION OUTLET
 - CT-XX CABLE TRAY, 4" DEEP, WIRE BASKET STYLE, 'XX' INDICATES WIDTH PROVIDE ALL FITTINGS AND SUPPORT HARDWARE REQUIRED

- FIRE ALARM STROBE, +84" AFF UNO, STROBE INTENSITY INDICATED. 'C' INDICATES CEILING MOUNTED

FIRE ALARM

- FIRE ALARM HORN/STROBE +84" AFF, UNO, STROBE INTENSITY INDICATED. 'C' INDICATES CEILING MOUNTED FIRE ALARM BELL, +84" AFF UNO. 'C' INDICATES CEILING MOUNTED
- FIRE ALARM CHIME, +84" AFF UNO. 'C' INDICATES CEILING MOUNTED

FIRE ALARM CHIME/STROBE, +84" AFF UNO, STROBE INTENSITY

- INDICATED. 'C' INDICATES CEILING MOUNTED SPEAKER STROBE, +84" AFF UNO. 'C' INDICATES CEILING MOUNTED
- EOL END OF LINE RESISTOR FLOW SWITCH, PROVIDE MONITOR MODULE AS REQUIRED
- TAMPER SWITCH, PROVIDE MONITOR MODULE AS REQUIRED
- PRESSURE SWITCH, PROVIDE MONITOR MODULE AS REQUIRED FIRE SYSTEM ANNUNCIATOR, FLUSH MOUNTED +54"UNO
- POST INDICATOR VALVE, PROVIDE MONITOR MODULE AS REQUIRED
- DH ELECTROMAGNETIC DOOR HOLDER CONTROL MODULE MONITOR MODULE
- FIRE ALARM KNOX BOX FIRE ALARM CONTROL PANEL NAC EXTENDER PANEL
- FIRE/SMOKE DAMPER LED INDICATOR LIGHT, CEILING MOUNTED UNO LED INDICATOR LIGHT WITH TEST SWITCH, CEILING MOUNTED UNO
- DUCT-MOUNTED SMOKE DETECTOR SMOKE DETECTOR, CEILING MOUNTED UNO
- IONIZATION IN DUCT PHOTOELECTRIC RELAY
- WG PROVIDE PROTECTIVE WIRE GUARD BEAM DETECTOR, SENDER & RECEIVER
- COMMUNICATIONS JUNCTION BOX FOR FUTURE TELEPHONE/DATA OUTLET. MOUNT AT 18"
- A.F.F. UNO. PROVIDE SINGLE-GANG MUD RING WITH BLANK COVER
- JUNCTION BOX WITH SINGLE-GANG MUD RING. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING SPACE. PROVIDE BLANK COVER
- FLOOR MOUNTED TELEPHONE/DATA OUTLET. PROVIDE 1" CONDUIT TO NEAREST ACCESSIBLE CEILING. INSTALL QUANTITY OF DATA (#D) AND
- WALL MOUNTED SPEAKER, WITH BACKBOX +80" UNO
- TELEVISION OUTLET, +18" AFF UNO. PROVIDE 1-1/4" CONDUIT TO
- TELEPHONE TERMINAL BOARD

ELECTRICAL ABBREVIATIONS

- AMPERES
- AC 6" ABOVE BACKSPLASH AFF ABOVE FINISHED FLOOR AFG ABOVE FINISHED GRADE
- AMPS INTERRUPTING CAPACITY
 AMP TRIP AUTOMATIC TRANSFER SWITCH
 - AWG AMERICAN WIRE GAUGE BD BOTTOM OF DECK BS BOTTOM OF STRUCTURE CEILING MOUNTED
 - CIRCUIT BREAKER CF COMPACT FLUORESCENT CKT CIRCUIT
 - CO CONDUIT ONLY, PROVIDE PULL-LINE CURRENT TRANSFORMER
 - DEMO DEMOLITION
 DET DETAIL
 DTT DOUBLE TWIN 1 DETAIL DOUBLE TWIN TUBE
 - ELECTRICAL CONTRACTOR EMERGENCY LIGHT
 - FACP FIRE ALARM CONTROL PANEL GROUND FAULT CIRCUIT INTERRUPTER GROUND FAULT INTERRUPTER
 - HID HIGH INTENSITY DISCHARGE HAND-OFF-AUTO HOA HAND-OFF-AUTO HPS HIGH PRESSURE SODIUM HVAC HEATING, VENTILATION, & AIR CONDITIONING
 - IG ISOLATED GROUND IPCO IDAHO POWER COMPANY J-BOX JUNCTION BOX
 - KA KILOAMP KVA KILO VOLT-AMP KWH KILOWATT HOUR
 - LCP LIGHTING CONTROL PANEL MB MAIN BREAKER MAIN DISTRIBUTION PANEL MAIN LUGS ONLY
 - MODULAR METERING CENTER METAL HALIDE MAIN SWITCH BOARD MTG MOUNTING NEUTRAL
 - NORMALLY CLOSED NATIONAL ELECTRICAL CODE NOT IN CONTRACT NIGHT LIGHT NO NORMALLY OPEN
 - NTS NOT TO SCALE OCCUPANCY SENSOR
 - PC PHOTO-CONTROL PVC POLYVINYL CHLORIDE PWR POWER RE: REFERENCE
 - REC RECEPTACLE RELOCATED SF SQUARE FEET
 - TBD TO BE DETERMINED TIME DELAY RELAY TOE KICK TAMPER RESISTANT TSP TWISTED SHIELDED PAIR TRT TRIPLE TUBE
 - TTB TELEPHONE TERMINAL BOARD (TYP.) TYPICAL UC UNDERCABINET JG UNDERGROUND U.N.O. UNLESS NOTED OTHERWISE
 - VA VOLT-AMPERE W WATT PROVIDE WEATHER PROOF/NEMA 3R

INSTALLED/ PROVIDE AND INSTALL / PROVIDED AND

INSTALL INSTALLED BY / PROVIDE AND INSTALL

THIS IS A STANDARD LIST OF COMMONLY USED ELECTRICAL ABBREVIATIONS. SOME OF THE ABBREVIATIONS SHOWN ABOVE MAY NOT BE USED IN THIS DRAWING PACKAGE.

ELECTRICAL GENERAL NOTES **ELECTRICAL SPECIFICATIONS**

- THESE ELECTRICAL DRAWINGS ARE DIAGRAMMATIC IN NATURE; THEREFORE THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL ELECTRICAL EQUIPMENT AND DEVICE LOCATIONS WITH ARCHITECTURAL, MECHANICAL AND PLUMBING DIVISIONS PRIOR TO ROUGH-IN. REFER TO AND COORDINATE OBTAIN ALL PERMITS, COORDINATE, FURNISH, INSTALL, CONNECT AND TEST WITH ARCHITECTURAL, MECHANICAL, AND PLUMBING DRAWINGS FOR ALL ELECTRICAL EQUIPMENT REQUIRED FOR ALL THE SYSTEMS INSTALLED ADDITIONAL WORK THAT IS REQUIRED BY THE ELECTRICAL CONTRACTOR.
- ALL CONDUIT AND JUNCTION BOXES ARE TO BE CONCEALED UNLESS LOCATED WITHIN DEDICATED ELECTRICAL OR MECHANICAL ROOMS. USE OF SURFACE MOUNTED RACEWAYS IN ALL OTHER SPACES MUST BE APPROVED BY THE ARCHITECT FOR EACH LOCATION. WHERE SURFACE RACEWAYS ARE APPROVED. UTILIZE WIREMOLD, OR APPROVED EQUAL, SURFACE MOUNTED RACEWAYS PAINTED TO MATCH SURROUNDING WALLS. INSTALLATION. AS-BUILT SET OF DRAWINGS SHALL BE AVAILABLE AT ALL
- REFER TO ARCHITECTURAL ELEVATIONS FOR OUTLET HEIGHTS WHERE THE SPECIFIC OUTLET HEIGHT IS NOT INDICATED. REFER TO THE ELECTRICAL LEGEND FOR THE DEFAULT OUTLET HEIGHT WHEN NOT INDICATED ON
- ELEVATIONS OR ON AT THE DEVICES PROVIDE PULL-LINE IN ALL EMPTY CONDUITS.
- TERMINATE ALL LOW-VOLTAGE CONDUITS WITH INSULATED THROAT BUSHING MECHANICAL EQUIPMENT INDICATED IS SHOWN IN AN APPROXIMATE LOCATION. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR
- PRIOR TO ROUGH-IN. THE FLECTRICAL DEMOLITION DRAWING(S) PROVIDED ARE INTENDED TO ASSIST THE ELECTRICAL CONTRACTOR IN ESTABLISHING AREAS REQUIRIN DISCONNECTION, REMOVAL, OR RELOCATION OF ELECTRICAL EQUIPMENT OUTLETS, WIRING, DEVICES, FIXTURES, ETC. AND MAY NOT INDICATE ALL DEVICES OR THE FULL EXTENT OF DEMOLITION AND RECONNECTION WHICH MAY BE REQUIRED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY EXAMINE ALL REQUIRED DEMOLITION WORK AND INCLUDE ALL LABOR AND INCIDENTALS THAT WILL BE NECESSARY TO PERFORM DEMOLITION RECONNECTION AND TEMPORARY POWER CONNECTIONS IN THE
- ALL ELECTRICAL DEVICES AND WALLS INDICATED ON THE ELECTRICAL DEMOLITION DRAWING(S) ARE TO REMAIN UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL COORDINATE WITH AN UNDERGROUND LOCATING SERVICE PRIOR TO COMMENCING WORK. SEE CIVIL DRAWINGS FOR
- SITE LIGHTING AND UTILITY EQUIPMENT SHOWN IN APPROXIMATE LOCATION. COORDINATE EXACT LOCATION WITH CIVIL DRAWINGS, PROPERTY LINES, AND UTILITY COMPANIES PRIOR TO ROUGH-IN.

ADDITIONAL SITE INFORMATION. COORDINATE WITH OTHER SITE DISCIPLINES

- REFER TO POLE BASE DETAIL FOR SITE LIGHTING POLE BASE REQUIREMENTS. ROUTE CONDUITS IN COMMON TRENCH WHERE POSSIBLE REFER TO TRENCHING DETAIL.
- M. THE ELECTRICAL DEMOLITION DRAWING(S) PROVIDED ARE INTENDED TO ASSIST THE ELECTRICAL CONTRACTOR IN ESTABLISHING AREAS REQUIRING DISCONNECTION, REMOVAL, OR RELOCATION OF ELECTRICAL EQUIPMENT, OUTLETS, WIRING, DEVICES, FIXTURES, ETC. AND MAY NOT INDICATE ALL DEVICES OR THE FULL EXTENT OF DEMOLITION AND RECONNECTION WHICH MAY BE REQUIRED. THE ELECTRICAL CONTRACTOR SHALL VISIT THE JOB SITE AND THOROUGHLY EXAMINE ALL REQUIRED DEMOLITION WORK AND INCLUDE
- ALL ELECTRICAL DEVICES AND WALLS INDICATED ON THE ELECTRICAL DEMOLITION DRAWING(S) ARE TO REMAIN UNLESS OTHERWISE NOTED.

ALL LABOR AND INCIDENTALS THAT WILL BE NECESSARY TO PERFORM

DEMOLITION RECONNECTION AND TEMPORARY POWER CONNECTIONS IN THE

- ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE LOCALLY ADOPTED ELECTRICAL CODE, ALL LOCAL CODES, AND TO THE FULL ACCEPTANCE OF THE AUTHORITY HAVING JURISDICTION.
- UNDER THIS CONTRACT TO INSURE COMPLETE AND FULLY OPERATIONAL CONTRACTOR SHALL MAINTAIN A COMPLETE SET OF AS-BUILT DRAWINGS. AS-BUILT SET OF DRAWINGS SHALL BE UPDATED DAILY AND SHALL DOCUMENT THE ACTUAL INSTALLED CONDITION OF THE ENTIRE ELECTRICAL

TIMES ON THE SITE FOR INSPECTION BY CODE OFFICIALS, OWNER, ARCHITECT

- PROTECT ALL EXISTING WORK FROM DAMAGE DURING CONSTRUCTION.
- DESIGN IS BASED ON BEST AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS TO DETERMINE STATUS OF ACTUAL CONDITIONS AS THEY RELATE TO THE SCOPE OF WORK AS SHOWN ON THESE F. COORDINATE ALL ELECTRICAL WORK WITH ALL OTHER TRADES.
- EQUIPMENT AND DEVICES WITH THE ARCHITECTURAL ELEVATIONS AND DETAILS PRIOR TO ROUGH-IN. DEMOLITION WORK IS A PART OF THIS PROJECT. SEE DRAWINGS FOR

COORDINATE EXACT LOCATION AND MOUNTING HEIGHTS OF ALL ELECTRICAL

EXISTING ELECTRICAL DEVICES TO BE REMOVED. REMOVE ASSOCIATED BOXES, RACEWAYS AND CONDUCTORS BACK TO SOURCE, AND MAKE SAFE.

ALL ELECTRICAL DEVICES AND TERMINALS SHALL BE RATED 75°C MINIMUM.

ALL MATERIALS AND EQUIPMENT FURNISHED TO THE PROJECT SHALL BE NEW AND SHALL BEAR THE LISTING LABEL OF A NATIONALLY RECOGNIZED TESTING LAB AS DEFINED BY OSHA.

ALL CONDUCTORS SHALL BE STRANDED COPPER, 600 VOLT RATED.

INSULATION TYPE SHALL BE THHN/THWN, FULLY COLOR CODED WITH GAUGE TYPE AND MANUFACTURER MARKED EVERY 24" ALONG. CONDUCTOR COLOR CODE SHALL BE AS FOLLOWS: 208Y/120 VOLT SYSTEM PHASE A - BLACK PHASE A - BROWN PHASE B - RED PHASE B - ORANGE PHASE C - BLUE PHASE C - YELLOW

NEUTRAL - WHITE

GROUND - GREEN GROUND MINIMUM SIZE WIRE FOR POWER AND LIGHTING CIRCUITS SHALL BE #12 AWG ALL POWER AND LIGHTING CONDUCTORS SHALL BE ROUTED IN 3/4" CONDUIT

NEUTRAL - GRAY

- M. EMT OR MC TYPE CABLE IS ALLOWED WHEN CONCEALED IN INTERIOR SPACES.
- MAKE ALL CONNECTIONS TO EQUIPMENT PER MANUFACTURER'S

MC TYPE CABLE IS NOT ALLOWED FOR HOMERUNS.

TO BE ACCESSIBLE AND SHALL BE MOUNTED PLUMB AND SQUARE WITH DEVICES AND RACEWAYS PENETRATING FIRE RATED WALLS AND FLOORS SHALL BE SEALED WITH FIRE RESISTIVE MATERIAL. COMPATIBLE WITH CONSTRUCTION PENETRATED, TO MAINTAIN RATING OF THE WALL. SEALANT SYSTEM SHALL BE A U.L. APPROVED SYSTEM AND INSTALLED PER

ALL EQUIPMENT, SWITCHING DEVICES AND PANELS SHALL BE MOUNTED SO AS

MANUFACTURER'S INSTRUCTIONS.

CONDUIT IN A POSITION THAT CAN BE EASILY READ.

FOR ALL PANELS. DIRECTORIES SHALL BE TYPED.

DIVISION 1 SPECIFICATIONS.

- Q. FURNISH AND INSTALL PULL CORD IN ALL EMPTY CONDUITS. ALL JUNCTION BOX COVERS WITH POWER WIRING SHALL HAVE THE PANEL AND CIRCUIT LABELED ON THE OUTSIDE SURFACE. ALL LABELS FOR EXPOSED JUNCTION BOXES IN "FINISHED AREAS" SHALL BE LABELED UTILIZING SELF ADHESIVE LABELS PRODUCED BY A MECHANICAL LABELING MACHINE. LABELS FOR JUNCTION BOX COVERS IN CONCEALED LOCATIONS SHALL CONSIST OF THE INFORMATION BEING NEATLY HANDWRITTEN ON THE OUTSIDE SURFACE
- OF THE COVER WITH A PERMANENT STYLE MARKER. CLEARLY LABEL ALL ACCESSIBLE CONDUIT STUBS WITH SYSTEM NAME AND LOCATION (ROOM NUMBER) WHERE THE OTHER END OF THE CONDUIT TERMINATES. USE INDELIBLE INK. THE LABELS SHALL BE LOCATED ON THE
- ALL 1 POLE BREAKER CIRCUITS SHALL HAVE AN INDEPENDENT NEUTRAL CONDUCTOR. NO EDISON STYLE SHARED NEUTRAL CONDUCTORS ARE

THE CONTRACTOR SHALL PROVIDE UPDATED CIRCUIT PANEL DIRECTORIES

PROVIDE ELECTRICAL SUBMITTALS FOR EQUIPMENT SHOWN AS REQUIRED BY

SWITCH AND RECEPTACLE LABELING: IDENTIFY PANELBOARD AND CIRCUIT

NUMBER FROM WHICH DEVICES ARE SERVED. USE MACHINE PRINTED LABEL

- . ALL CONDUCTORS IN ELECTRICAL PANELS, CABINETS AND EQUIPMENT SHALL BE NEATLY TRAINED AND LACED.
- ELECTRICAL CONTRACTOR SHALL OBTAIN THE AVAILABLE FAULT CURRENT VALUE FROM THE LOCAL UTILITY OR THE ONE-LINE DIAGRAM AND LABEL THE MAIN BREAKER WITH THAT VALUE.

AND 1/8" TEXT. INSTALL ON THE OUTSIDE OF THE FACEPLATE FOR

RECEPTACLES AND INSIDE THE FACEPLATE FOR SWITCHES.

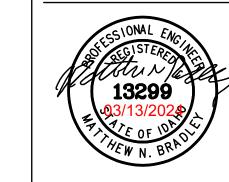
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THIS IS A STANDARD LIST OF COMMONLY USED ELECTRICAL SYMBOLS. SOME OF THE SYMBOLS SHOWN MAY NOT HAVE BEEN USED IN THIS DRAWING PACKAGE.







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— PHASE

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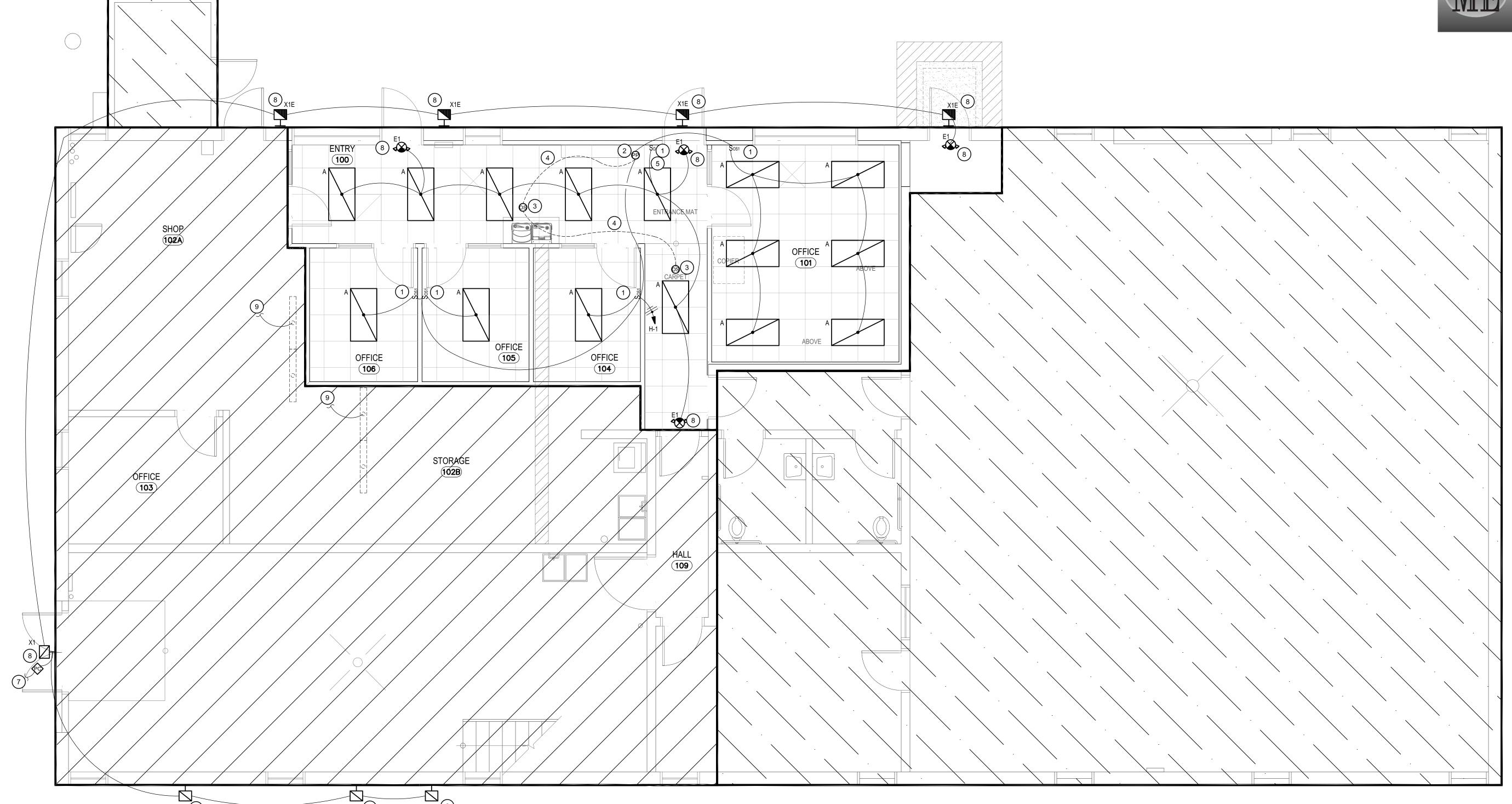
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ISU

NBW PROJECT NO.: 19032 MARCH 2024 DRAWN BY: CJ CHECKED BY:

DRAWING NO.:



KEYED NOTES:

SYMBOL USED FOR NOTE CALLOUT.

- 1. PROVIDE AND INSTALL 0-10V DIMMING CONDUCTORS TO ALL LIGHTS CONTROLLED BY THIS SWITCH.
- 2. PROVIDE AND INSTALL POWER PACK COMPATIBLE WITH CEILING OCCUPANCY SENSOR.
- PROVIDE AND INSTALL DUAL TECHNOLOGY CEILING MOUNT SMALL MOTION OCCUPANCY SENSOR AND CONNECT WITH LOW VOLTAGE CABLE AS RECOMMENDED BY THE MANUFACTURER.
- 4. PROVIDE AND INSTALL LOW VOLTAGE CABLE BETWEEN CEILING MOUNT OCCUPANCY SENSORS, LOW VOLTAGE SWITCH, AND POWER PACK AS RECOMMENDED BY THE MANUFACTURER. 5. PROVIDE AND INSTALL 0-10V DIMMING CONDUCTORS AND 24V LOW

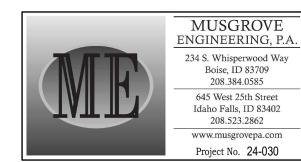
VOLTAGE CABLE BETWEEN POWER PACK AND SWITCH AS

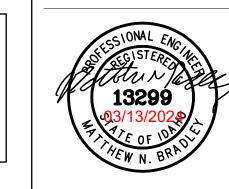
- RECOMMENDED BY THE MANUFACTURER. 6. INSTALL NEW LED FIXTURE AT EXISTING LOCATION.
- 7. INSTALL PHOTOCELL 1FT BELOW EAVE. INSTALL UNSWITCHED HOT CONDUCTOR TO POWER BATTERY PACKS.
- 8. EXIT SIGN, EMERGENCY LIGHT, AND/OR NIGHT LIGHT. CONNECT (ALWAYS HOT) TO LOCAL LIGHTING CIRCUIT AHEAD OF ANY LIGHTING CONTROLS.
- 9. CONNECT TO EXISTING LIGHTING CIRCUIT IN ROOM.

MAIN LEVEL LIGHTING INSTALLATION PLAN SCALE: 1/4" = 1'-0"

PHASING PLAN LEGEND CURRENT WORK - PHASE 1 FUTURE WORK - PHASE 2 NO WORK





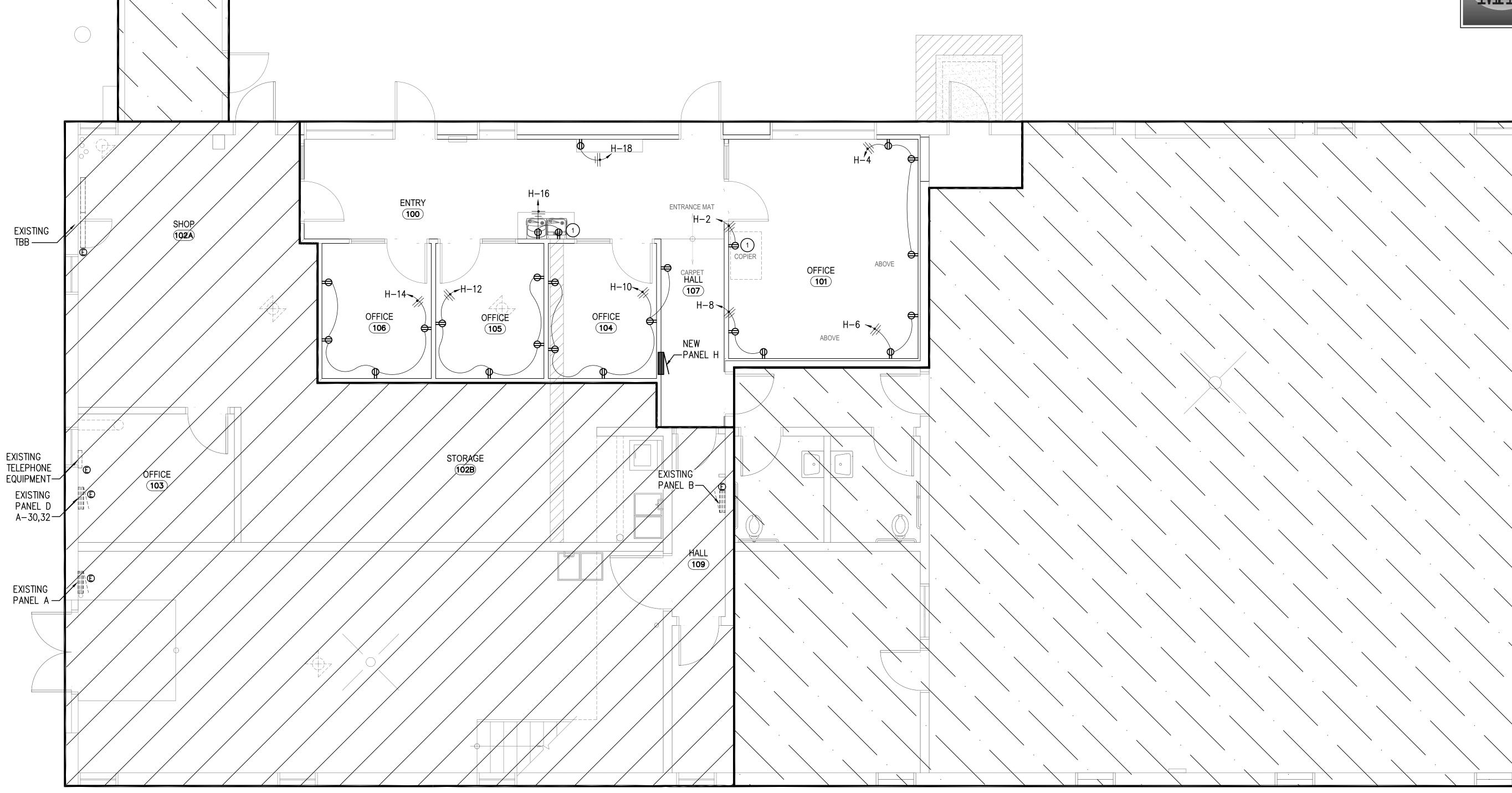


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MAIN LEVEL POWER INSTALLATION PLAN





MAIN LEVEL POWER INSTALLATION PLAN SCALE: 1/4" = 1'-0"

PHASING PLAN LEGEND

CURRENT WORK - PHASE 1

FUTURE WORK - PHASE 2

NO WORK



1. GROUND FAULT INTERRUPTING CIRCUIT BREAKER INSTALLED IN ELECTRICAL PANEL.

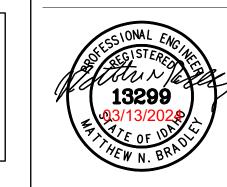
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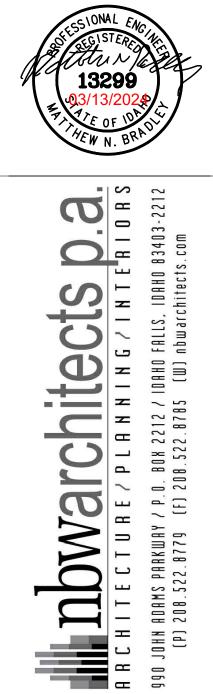


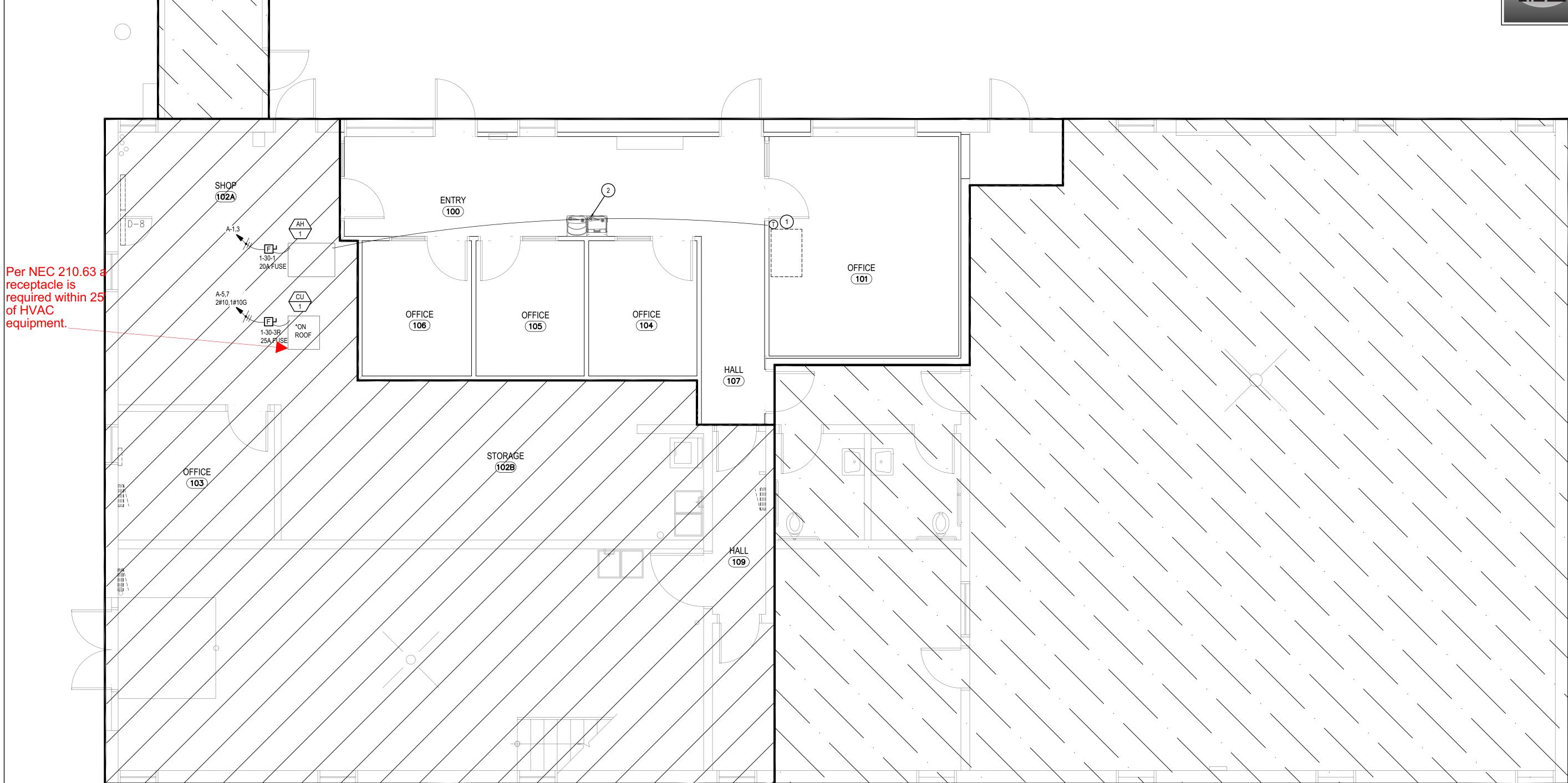




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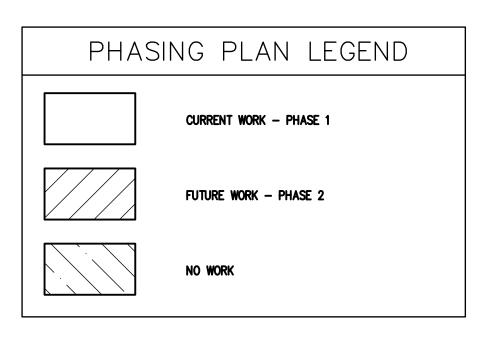
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MAIN LEVEL MECHANICAL POWER INSTALLATION PLAN

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



KEYED NOTES:

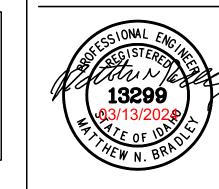
- # SYMBOL USED FOR NOTE CALLOUT.
- 1. SEE E6.1 FOR THERMOSTAT ROUGH-IN DETAIL.
- 2. 3/4"C FOR CONTROL.

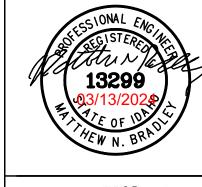
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A R C H I T E C T U R E / P L R N N I N G / I N T E R I O R S

990 JOHN RDAMS PARKWAY / P. D. BOX 2212 / IDAHO FALLS, IDAHO B3403-2212

[P] 208.522.8779 [F] 208.522.8785 [W] nbwarchitects.com

PHASE

SPECIAL SYSTEMS INSTALLATION PLAN

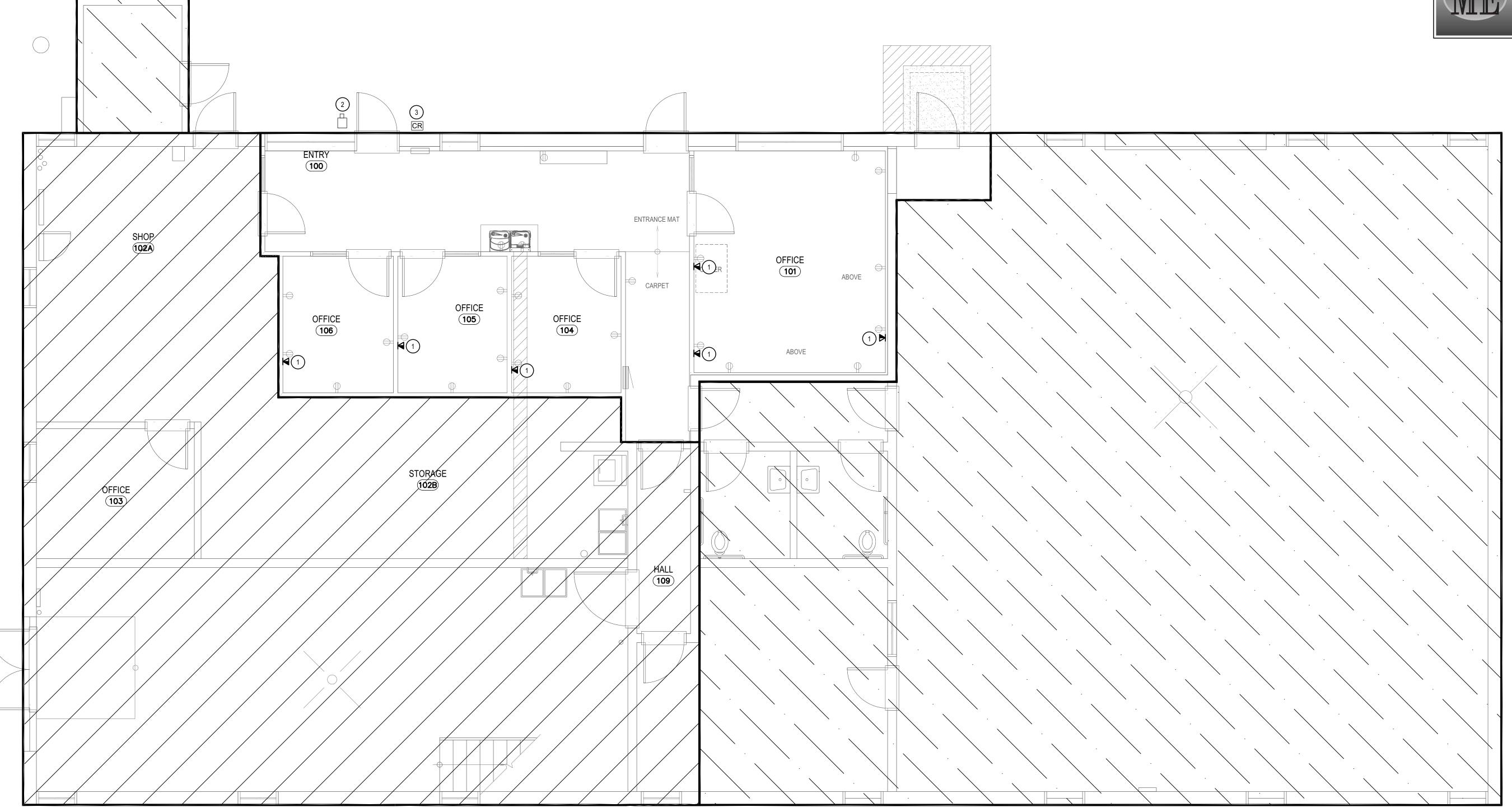
ISU CUSTODIAL OFFICE REMODEL
IDAHO STATE UNIVERSITY
POCATELLO, IDAHO

REVISIONS

NBW PROJECT NO.: 19032 MARCH 2024 DRAWN BY:

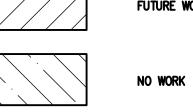
DRAWING NO.:

CHECKED BY: MB



MAIN LEVEL SPECIAL SYSTEMS INSTALLATION PLAN SCALE: 1/4" = 1'-0"

PHASING PLAN LEGEND CURRENT WORK - PHASE 1



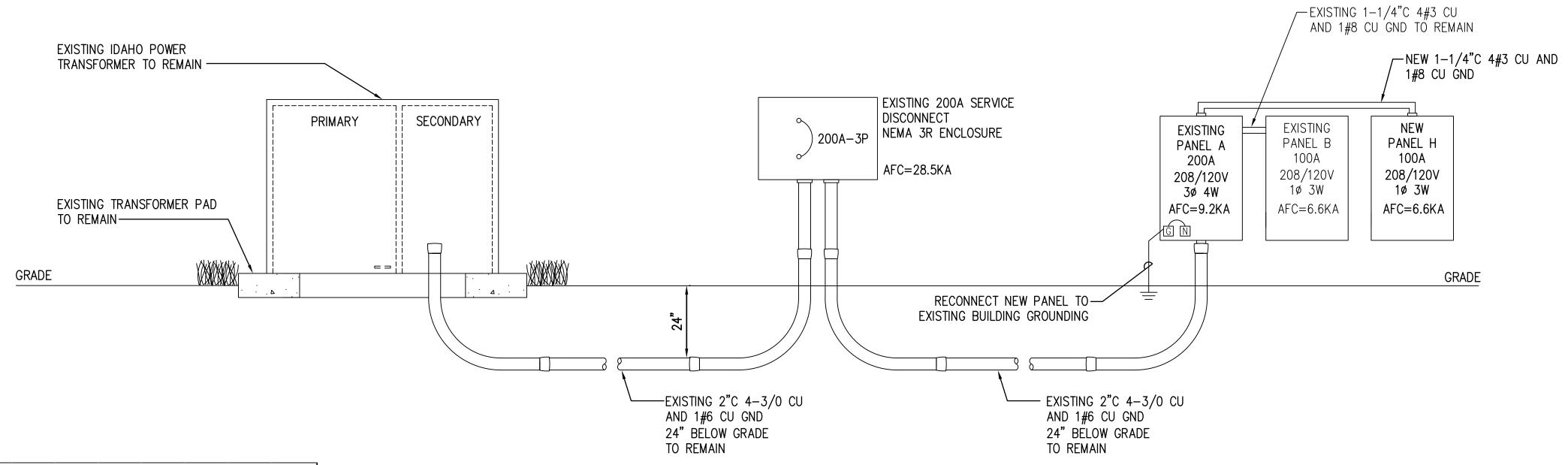
FUTURE WORK - PHASE 2

KEYED NOTES:

SYMBOL USED FOR NOTE CALLOUT.

- 1. SEE SHEET E6.1 FOR DATA ROUGH-IN DETAIL.
- SEE SHEET E6.1 FOR SECURITY CAMERA ROUGH-IN DETAIL.
- 3. SEE SHEET E6.1 FOR CARD READER ROUGH-IN DETAIL.





REVISED POWER RISER SCALE: NTS

			ELEC	CTRIC	AL LO	AD SU	MMAR	RY (PAI	NEL A)				
FEEDER	VOLTACE				CONNEC	CTED LOA	D (KVA)				TO CONNECT			TAL ID LOAD
FEEDER	VOLTAGE	LIGHTIN G	RECEP	MOTORS	KITCHEN	HVAC	ELEC HEAT	WATER HEAT	MISC	EXIST	KVA	AMPS	KVA	AMPS
EXISTING LOAD	120/208Y									21.0	21.0	58.3	21.0	58.3
25% ADDITIONAL LOAD	120/208Y									5.3	5.3	14.6	5.3	14.6
NEW LOAD	120/208Y									61.0	61.0	169.5	61.0	169.5
LOAD REMOVED	120/208Y									-49.0	-49.0	-136.1	-49.0	-136.1
ΤΟΤΔΙ	120/208V	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.3	38 3	106.3	38.3	106.3

PANEL	A (EXIS	TIN	NG)										
VOLTAGE: 208/120V	3PHASE DELT	ΆВ	PHASE I	HIGH LI	EG	DIMEN	SION:	PER NEC	:			LO	CATION: ELEC SHOP
PANEL AMP RATING: 22	5A W	/ITH	200A	СВ		MOUN ⁻	ΓING:	SURFACE	Ξ			NEI	MA ENCLOSURE: 1
WIRES: 3 F	PHASE: 3		FEED:	вотт	ОМ	TYPE:		SQUARE	D QO	LOAD	CENTER		
LOAD DESCRIP	TION	РΗ	LOAD	BKR	СКТ		LOAD		СКТ	BKR	LOAD	PH	LOAD DESCRIPTION
			WATT	AMPS	NO	Α	В	С	NO	AMPS	WATT		
SPACE		Α			1	0			2			Α	SPACE
SPACE		В			3		0		4			В	SPACE
SPACE		С			5			0	6			С	SPACE
SPACE		Α			7	0			8			Α	SPACE
SPACE		В			9		0		10			В	SPACE
SPACE		С			11			0	12			С	SPACE
LIGHTS AND HEATER		Α		20	13	0			14	30		Α	TRASH COMPACTOR
SPACE		В			15		0		16	**		В	
WELDING RECEPT		С		15	17			0	18	**		С	3 POLE
		Α		**	19	0			20	20		Α	EXTERIOR LIGHTING
	3 POLE	В		**	21		0		22	15		В	EAST OS OUT & IN RECEPT
SPARE		С		15	23			0	24	40		С	A/C UNITS
LIGHTS + BENCH		Α		20	25	0			26	**		Α	2 POLE
SPACE		В			27		0		28			В	SPACE
NOISY FAN		C		20	29			0	30	40		С	PANEL D
PANEL C (KEY SHOP)		Α		50	31	0			32	**		Α	2 POLI
		В		**	33		0		34			В	SPACE
	3 POLE	O		**	35			0	36	40		С	PANEL B
PANEL W (WELD SHOP)		Α		100	37	0			38	**		Α	2 POLI
·		В		**	39		0		40			В	SPACE
	3 POLE	O		**	41			0	42	20		С	MAINTENANCE LIGHTS
FEEDER BREAKER	TOTAL LO	AD	PER PHA	SE-W	ATTS	0	0	0		FEED	FROM:		SERVICE
RATING: 200A	TOTAL L					0	0	0	1	PANEI	L AIC RA	TINC	G: 10,000
WIRE SIZE: 4#3/0 CU & 1	#6 CH GND				'				•	COND	UIT SIZE		2 1/2"C

PANEL	A (REVI	SED)										
VOLTAGE: 208/120V	3PHASE DELTA	A B PHASE	HIGH L	EG	DIMEN	SION:	PER NEC	;			LO	CATION: ELEC SHOP
PANEL AMP RATING: 225A	w	ITH 200	A СВ		MOUN	ΠNG:	SURFACE	Ē			NFI	MA ENCLOSURE: 1
WIRES: 3 PHA	ASE: 3	FEED:	вотт	ОМ	TYPE:		SQUARE	D QO	LOAD (
LOAD DESCRIPTIO	DN	PH LOAD WATT	BKR AMPS	1 1	Α	LOAD B	С	1		LOAD WATT	PH	LOAD DESCRIPTION
AIR HANDLER AH-1		A 998	3	1	998			2			Α	SPACE
	2 POLE	В 99	3	3		998		4			В	SPACE
CONDENSING UNIT CU-1		C 122	3	5			1223	6			С	SPACE
	2 POLE	A 122	3	7	1223			8			Α	SPACE
SPACE		В		9		0		10			В	SPACE
SPACE		С		11			0	12			С	SPACE
LIGHTS AND HEATER		Α	20	13	0			14	30		Α	TRASH COMPACTOR
SPACE		В		15		0		16	**		В	
WELDING RECEPT		С	15	17			0	18	**		С	3 POL
		Α	**	19	0			20	20		Α	EXTERIOR LIGHTING
	3 POLE	В	**	21		0		22	15		В	EAST OS OUT & IN RECEPT
SPARE		С	15	23			0	24	40		С	A/C UNITS
LIGHTS + BENCH		Α	20	25	0			26	**		Α	2 POL
SPACE		В		27		0		28			В	SPACE
NOISY FAN		С	20	29			0	30	40		С	PANEL D
PANEL C (KEY SHOP)		Α	50	31	0			32	**		Α	2 POL
		В	**	33		0		34			В	SPACE
	3 POLE	С	**	35			0	36	40		С	PANEL B
PANEL W (WELD SHOP)		Α	100	37	0			38	**		Α	2 POL
		В	**	39		0		40			В	SPACE
T	3 POLE	С	**	41			0	42	20		С	MAINTENANCE LIGHTS
FEEDER BREAKER	TOTAL LO	AD PER PH	ASE-W	ATTS	2221	998	1223		FEED	FROM:		SERVICE
RATING: 200A	TOTAL L	OAD PER P	HASE-A	MPS	19	9	11		PANE	_ AIC RA	TING	G: 10,000

PANEL B (EXI	IITE	NG)											
VOLTAGE: 208/120V 3					DIMENS	SION:	PER NEC				LO	CATION: HALL WAY	
PANEL AMP RATING: 125A	WITH	125A	СВ		MOUNT	ING:	SURFACE	=			NEI	MA ENCLOSURE: 1	
WIRES: 3 PHASE: 3		FEED:	вотт	OM	TYPE:		SQUARE	D QO	LOAD	CENTER			
LOAD DESCRIPTION	PH	LOAD WATT	BKR AMPS	CKT NO	Α	LOAD B	С	CKT NO	BKR AMPS		PH	LOAD DESCRIPTION	
MECH - N WALL	А		20	1	0			2	20		Α	OVERHEAD DOOR	
LIGHTS AND HEATER	В		20	3		0		4	20		В	TOILET AND HALL LIGHTS	
FAN OUTLET WEST	С		20	5			0	6	20		С	OFFICE LIGHTS	
MECH PLUGS AND LIGHTS	Α		20	7	0			8	20		Α	BLANK	
ROOF FAN	В		20	9		0		10	20		В	WATER HEATER	
FIRST ROW SHOP LIGHTS	С		20	11			0	12	**		С		2 POL
SECOND ROW SHOP LIGHTS	Α		20	13	0			14	20		Α	ELECT SHOP	
FAN EXHAUST	В		20	15		0		16	20		В	EXISTING	
OFFICE PLUGS	С		20	17			0	18	20		С	OFFICE AC	
EAST SHOP	Α		20	19	0			20	**		Α		2 POL
PLUMB LIGHTS 3 POL	E B		20	21		0		22	20 A/B		В	BATHROOM / BATHROOM	
WATER COOLER	С		20	23			0	24	20		С	RECEPT	
FEEDER BREAKER TOTAL I	OAD	PER PHA	ASE-W	ATTS	0	0	0		FEED	FROM:		PANLE A	
RATING: 100A TOTAL	LOA) PER PI	HASE-A	MPS	0	0	0		PANE	L AIC RA	TINO	G: 10,000	
WIRE SIZE: 4#3 CU & 1#8 CU GND				,					COND	UIT SIZE	:	1 1/4"C	

PANEL	B (REVI	SE	D)										
VOLTAGE: 208/120V	3					DIMEN	SION:	PER NEC	;			LO	CATION: HALL WAY
PANEL AMP RATING:	125A W	/ITH	125A	СВ		MOUN	TING:	SURFACE	Ē			NEI	MA ENCLOSURE: 1
WIRES: 3	PHASE: 3		FEED:	вотт	OM	TYPE:		SQUARE	D QO	LOAD	CENTER		
LOAD DESCR	IPTION	PH	LOAD WATT	BKR AMPS	CKT NO	Α	LOAD B	С	t	BKR AMPS	LOAD WATT	PH	LOAD DESCRIPTION
MECH - N WALL		Α		20	1	0			2	20		Α	OVERHEAD DOOR
LIGHTS AND HEATER		В		20	3		0		4	20		В	TOILET AND HALL LIGHTS
FAN OUTLET WEST		С		20	5			0	6	20		С	OFFICE LIGHTS
MECH PLUGS AND LIGHTS	3	Α		20	7	0			8	20		Α	BLANK
ROOF FAN		В		20	9		0		10	20		В	WATER HEATER
FIRST ROW SHOP LIGHTS		С		20	11			0	12	**		С	2 POLE
SECOND ROW SHOP LIGH	пѕ	Α		20	13	0			14	20		Α	ELECT SHOP
LIGHTING TEMPORARY		В		20	15		0		16	20		В	EXISTING
HEAT TRACE		С		20	17			0	18	20		С	RECEPT OUTSIDE
HEAT TRACE		Α		20	19	0			20	**		Α	2 POLE
	3 POLE	В		20	21		О		22	20 A/B		В	BATHROOM / BATHROOM
RECEPT OUTSIDE		С		20	23			0	24	20		С	RECEPT SOUTH WALL
FEEDER BREAKER	TOTAL LO	DAD	PER PHA	SE-W	ATTS	0	0	0		FEED	FROM:		PANLE A
RATING: 100A	TOTAL L	OAE	PER PH	IASE-A	MPS	0	0	0		PANEI	_ AIC RA	TING	G: 10,000
WIRE SIZE: 4#3 CU & 1	#8 CU GND									COND	UIT SIZE		1 1/4"C

1) PROVIDE AND INSTALL GROUND FAULT INTERUPTER TYPE CIRCUIT BREAKER 2)CIRCUIT MOVED FROM REMOVED PANEL C

heat trace cables to be GFCI protected per NEC 426.28

PANEL	_	H(N	IEW)													
VOLTAGE:	208/120V							DIMEN	SION:	PER NEC				LO	CATION: ELECTRICAL SHOP	
PANEL AMP	RATING:	100A	W	/ITH	100A	СВ		MOUNT	ΓING:	SURFACE	:			NEI	MA ENCLOSURE: 1	
WIRES:	4	PHASE: 3			FEED:	вотт	ОМ	TYPE:		SQUARE	D NQ					
	LOAD DESC	RIPTION		РΗ	LOAD	BKR	СКТ		LOAD		СКТ	BKR	LOAD	PH	LOAD DESCRIPTION	
					WATT	AMPS	NO	Α	В	С	NO	AMPS	WATT			
LIGHTING				Α	600	20	1	780			2	20	180	Α	RECEPTS - OFFICE 101 COPIER	
SPARE				В		20	3		540		4	20	540	В	RECEPTS - OFFICE 101	
SPARE				С		20	5			360	6	20	360	С	RECEPTS - OFFICE 101	
			2 POLE	Α		**	7	360			8	20	360	Α	RECEPTS - OFFICE 101	
SPARE				В		20	9		900		10	20	900	В	RECEPTS - OFFICE 104, HALL	
			2 POLE	С		**	11			720	12	20	720	С	RECEPTS - OFFICE 105	
SPARE				Α		30	13	720			14	20	720	Α	RECEPTS - OFFICE 106	
				В		**	15		360		16	20	360	В	DRINKING FOUNTAIN	
SPARE				С		20	17			180	18	20	180	С	RECEPT ENTRY	
SPARE				Α		20	19	0			20	20		Α	SPARE	
SPARE				В		20	21		0		22	20		В	SPARE	
SPARE				С		20	23			0	24	20		С	SPARE	
SPARE				Α		20	25	0			26	20		Α	SPARE	
SPARE				В		20	27		0		28	20		В	SPARE	
SPARE				O		20	29			0	30	20		С	SPARE	
SPARE				Α		20	31	0			32	20		Α	SPARE	
SPARE				В		20	33		0		34	20		В	SPARE	
SPARE				O		20	35			0	36	20		С	SPARE	
SPARE				Α		50	37	0			38	20			SPARE	
SPARE			2 POLE	В		**	39		0		40	20		В	SPARE	
SPARE				U		20	41			0	42	20		С	SPARE	
FEEDER BR	EAKER	тс	OTAL LO	AD F	PER PHA	SE-W	ATTS	1860	1800	1260		FEED	FROM:		PANEL A	
RATING:	100A		TOTAL L	OAE	PER PH	IASE-A	MPS	16	15	11		PANE	L AIC RA	TINC	S: 22,000	
WIRE SIZE:	4#3 CU 8	_ ⊾1#8 CU GND)									COND	UIT SIZE		1 1/4"C	

1) PROVIDE AND INSTALL GROUND FAULT INTERUPTER TYPE CIRCUIT BREAKER

PANEL	C(REM	OV	ED)											
VOLTAGE: 208/120V						DIMEN	SION:	PER NEC	;			LOC	CATION: STORAGE	
PANEL AMP RATING:	100A \	WITH	100A	СВ		MOUNT	ΓING:	SURFACI	Ξ			NEN	MA ENCLOSURE: 1	
WIRES: 4	PHASE: 3		FEED:	вотт	OM	TYPE:		SQUARE	D NQ					
LOAD DESCR	RIPTION	PH	LOAD		СКТ		LOAD		СКТ	BKR		PH	LOAD DESCRIPTION	
			WATT	AMPS	NO	Α	В	С	NO	AMPS	WATT			
SERVICE DISCONNECT		Α		50	1	0			2	40		Α	WELDER OUTLET	
		В		**	3		0		4	**		В		2-POLE
	3-POLI	Ξ C		**	5			0	6	20		С	RECEPT OUTSIDE	
FANS, EAST AND SUSPEN	ID RECEPT	Α		20	7	0			8	20		Α	LIGHTS	
HEAT TRACE		В		20	9		0		10	20		В	RECEPT OUTSIDE	
HEAT TRACE		С		20	11			0	12	20		С	RECEPT SOUTH WALL	
BLANK		Α			13	0			14			Α	BLANK	
BLANK		В			15		0		16			В	BLANK	
FEEDER BREAKER	TOTAL L	OAD	PER PHA	SE-WA	ATTS	0	0	0		FEED	FROM:		PANEL A	
RATING: 100A	TOTAL	LOAD	PER PH	IASE-A	MPS	0	0	0		PANEI	_ AIC RA	TING	G: 22,000	
WIRE SIZE: 4#3 CU &	1#8 CU GND									COND	UIT SIZE	:	1 1/4"C	

1) EXISTING CIRCUIT TO BE MOVED TO EXISTING PANEL B

MUSGROVE ENGINEERING, P.A.

234 S. Whisperwood Way Boise, ID 83709

208.384.0585

645 West 25th Street Idaho Falls, ID 83402 208.523.2862

www.musgrovepa.com Project No. 24-030

HE DDWarchitects D.a. BR CHITECTURE / PLANNING / INTERIORS 990 JOHN ROAMS PARKWAY / P.O. BOX 2212 / IDAHO FALLS, IDAHO 83403-2212 (P) 208.522.8779 (F) 208.522.8785 (W) nbwarchitects.com

PHASE

NO. 20-232

REMODEL
JNIVERSITY
, IDAHO ISU CUSTODIAL

NGLE LINE DIAGRAM

REVISIONS

MARCH 2024 CHECKED BY: MB





TOP PLATE ----

- ELECTRIC STRIKE

- HOLLOW STEEL

DOOR FRAME

ELECTRICAL CONTRACTOR RESPONSIBLE FOR

TYPICAL DETAIL - ACTUAL INSTALLATION MAY VARY

INSTALLATION OF CARD READER ROUGH-IN

CR CARD READER ROUGH-IN DETAIL
SCALE: 1" = 1'-0"

SEE ARCHITECTURAL

HARDWARE SCHEDULE

ANTI-SHORT PLASTIC BUSHING ARLINGTON INDUSTRIES EMT75

STUB UP 4"ABOVE CEILING

3/4"C EMT WITH PULLSTRING

SINGLE GANG DEVICE COVER

4-11/16" SQUARE JUNCTION BOX

WITH SINGLE GANG MUDRING

STUB 3/4"C INTO DOOR FRAME

FLOOR PLATE ----

FINISHED FLOOR

RANDL TB55057 OR EQUAL

SEE ARCHITECTURAL

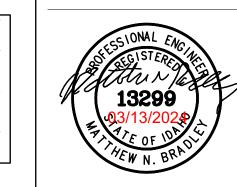
DOOR SCHEDULE —

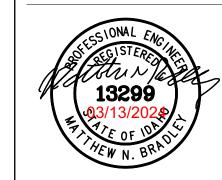
RANDL D-51GO12 OR EQUAL

ACCESSIBLE CEILING

WALL STUD —

OR EQUAL —





4 G / I N T E R I O R S
10 FALLS, 10AHO 83403-2212
3 nbwarchitects.com

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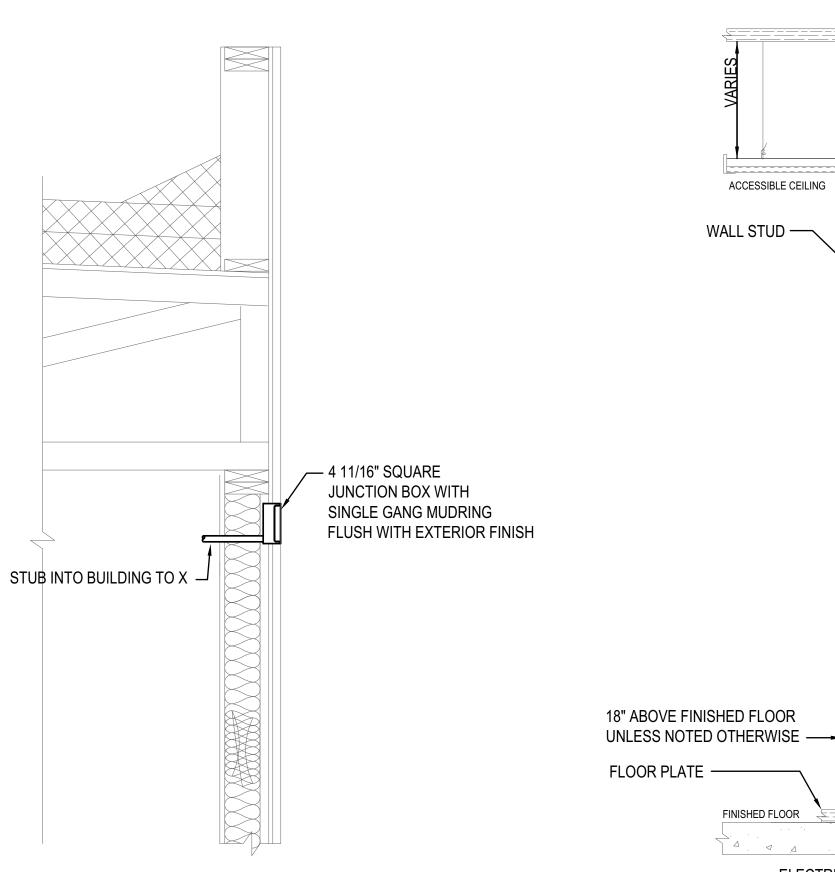
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INIVERSITY
IDAHO DPW PROJECT N

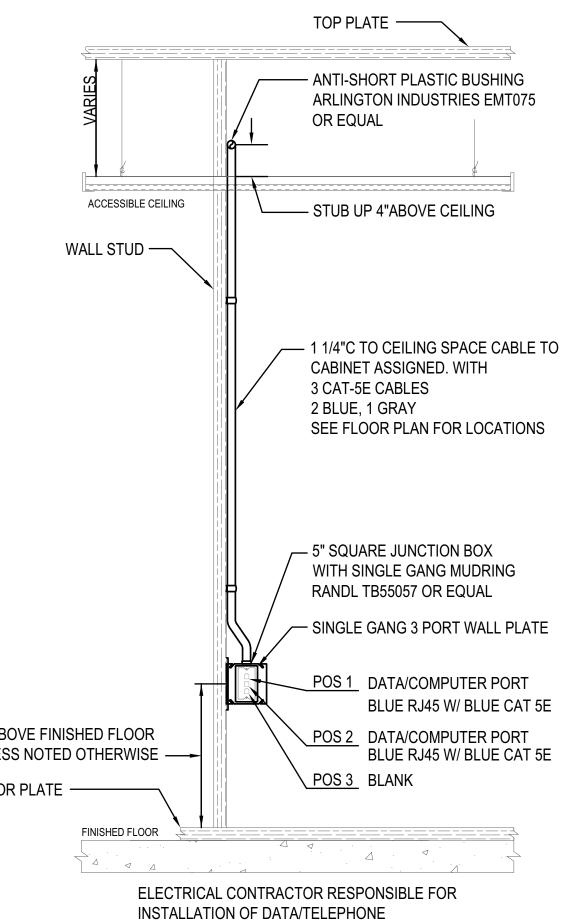
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ISI REVISIONS

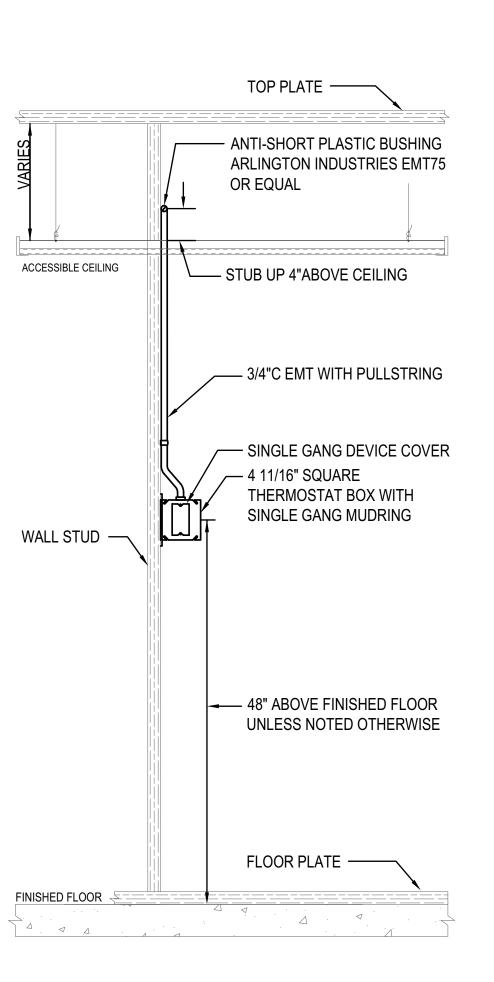
NBW PROJECT NO.: 19032 DATE: MARCH 2024 DRAWN BY: CJ CHECKED BY:



SECURITY CAMERA ROUGH-IN EXTERIOR DETAIL SCALE: 1" = 1'-0"



T DATA INSTALLATION DETAIL SCALE: 1" = 1'-0" TYPICAL DETAIL - ACTUAL INSTALLATION MAY VARY



ELECTRICAL CONTRACTOR RESPONSIBLE FOR (unit-#) INSTALLATION OF THERMOSTAT BOX ROUGH-IN TYPICAL DETAIL - ACTUAL INSTALLATION MAY VARY





LIGHTOLIER

H.E. WILLIAMS

H.E. WILLIAMS

LIGHTOLIER

METALUX

METALUX

MUSGROVE ENGINEERING, P.A. 234 S. Whisperwood Way Boise, ID 83709 208.384.0585 645 West 25th Street Idaho Falls, ID 83402 208.523.2862 www.musgrovepa.com Project No. 24-030



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REVISIONS

NBW PROJECT NO.: 19032 DATE: MARCH 2024 DRAWN BY: CJ

DRAWING NO.:

CHECKED BY:

▲ COM*check* Software Version 4.1.5.5 **Interior Lighting Compliance Certificate Project Information**

Construction Site: Owner/Agent: POCATELLO, ID ISU POCATELLO, ID Additional Efficiency Package(s)

2018 IECC

New Construction

ISU CUSTODIAL OFFICE REMODEL

CLAIRE JORGENSEN MUSGROVE ENGINEERING 645 W 25TH ST IDAHO FALLS, ID 83401 CLAIREJ@MUSGROVEPA.COM

Report date: 02/21/24

Credits: 1.0 Required 1.0 Proposed Reduced Lighting Power, 1.0 credit Allowed Interior Lighting Power Area Category

Energy Code:

Project Title:

Project Type:

Floor Area Allowed Watts Watts / ft2 (B X C) (ft2) Proposed Interior Lighting Power Lamps/ # of Fixture (C X D) Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast

1-School/University 15 36
Total Proposed Watts = LED 1: A: LED Panel 38W: nterior Lighting PASSES: Design 16% better than code

Interior Lighting Compliance Statement Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the Inspection Checklist. 02-21-2024 Claire Jorgensen, Designer

Project Title: ISU CUSTODIAL OFFICE REMODEL Data filename: P:\Files\2024\24030\CALCS\ELEC\24030 Electrical_Compliance.cck

Page 1 of 8

COMcheck Software Version 4.1.5.5 **Inspection Checklist**

Energy Code: 2018 IECC Text in the "Comments/Assumptions" column is provided by the user in the COMcheck Requirements screen. For each requirement, the user certifies that a code requirement will be met and how that is documented, or that an exception is being claimed. Where compliance is itemized in a separate table, a reference to that table is provided.

Section # & Req.ID	Plan Review	Complies?	Comments/Assumptions
C103.2 [PR4] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the interior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include interior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	
C103.2 [PR8] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the exterior lighting and electrical systems and equipment and document where exceptions to the standard are claimed. Information provided should include exterior lighting power calculations, wattage of bulbs and ballasts, transformers and control devices.	□Complies □Does Not □Not Observable □Not Applicable	
C406 [PR9] ¹	Plans, specifications, and/or calculations provide all information with which compliance can be determined for the additional energy	☐Complies ☐Does Not ☐Not Observable	

efficiency package options. Additional Comments/Assumptions:

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3) Project Title: ISU CUSTODIAL OFFICE REMODEL

Data filename: P:\Files\2024\24030\CALCS\ELEC\24030 Electrical Compliance.cck

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3) Project Title: ISU CUSTODIAL OFFICE REMODEL Report date: 02/21/24 Page 3 of 8 Data filename: P:\Files\2024\24030\CALCS\ELEC\24030 Electrical_Compliance.cck

↑ COM*check* Software Version 4.1.5.5

2018 IECC

New Construction

Owner/Agent:

POCATELLO, ID

ISU CUSTODIAL OFFICE REMODEL

2 (Residential mixed use area (LZ2))

Project Information

Energy Code:

Project Type:

Exterior Lighting Zone

Construction Site:

POCATELLO, ID

Allowed Exterior Lighting Power

Pedestrian and vehicular entrances and exits

Proposed Exterior Lighting Power

LED 2: LED Other Fixture Unit 25W:

Exterior Lighting Compliance Statement

equirements listed in the Inspection Checklist.

Project Title: ISU CUSTODIAL OFFICE REMODEL

[EL22]¹ control that allows the occupant to

pattern >= 50 percent.

C405.2.1, Occupancy sensors installed in

Claire Jorgensen, Designer

Walkway < 10 feet wide

Area/Surface Category

(a) Wattage tradeoffs are only allowed between tradable areas/surfaces.

Walkway < 10 feet wide (50 ft of walkway length): Tradable Wattage

terior Lighting PASSES: Design 72% better than code

Data filename: P:\Files\2024\24030\CALCS\ELEC\24030 Electrical_Compliance.cck

Rough-In Electrical Inspection Complies?

control that allows the occupant to reduce the connected lighting load in a reasonably uniform illumination

lighting in aisleways and open areas is controlled with occupant sensors that automatically reduce lighting power

□Complies □Does Not

□Not Observable

C405.2.2. Spaces required to have light-reduction controls have a manual Does Not

a reasonably uniform illumination

conference/meeting/multipurpose

by 50% or more when the areas are unoccupied. The occupant sensors control lighting in each aisleway independently and do not control lighting beyond the aisleway being controlled by the sensor.

zones with floor areas <= 600 sq.ft. within the space, 2) automatically turn off general lighting in all control zones

within 20 minutes after all occupants

have left the space, 3) are configure so that general lighting power in each control zone is reduced by >= 80% of the full zone general lighting power within 20 minutes of all occupants

leaving that control zone, and 4) are configured such that any daylight responsive control will activate space general lighting or control zone general lighting only when occupancy for the same area is detected.

C405.2.2, Each area not served by occupancy C405.2.2. sensors (per C405.2.1) have timeswitch controls and functions detailed in sections C405.2.2.1 and C405.2.2.2. Not Applicable

C405.2.1. Occupant sensor control function in open plan office areas: Occupant sensor controls in open office spaces >= 300 sq.ft. have controls 1) configured so that general lighting can be controlled controlled controlled.

storage rooms, locker rooms, warehouse storage areas, and other spaces <= 300 sqft that are enclosed by floor-to-ceiling height partitions. Reference section language C405.2.1.2 for control function in warehouses and section C405.2.1.3 for open plan office spaces. C405.2.1. Occupancy sensors control function in 2 warehouses: In warehouses, the □Does Not

[EL18]¹ rooms, copy/print rooms, lounges/breakrooms, enclosed offices, open plan office areas, restrooms,

Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast

Pedestrian and vehicular entrances and exits (18 ft of door width): Tradable Wattage

Project Title:

Exterior Lighting Compliance Certificate

50 ft of

(b) A supplemental allowance equal to 400 watts may be applied toward compliance of both non-tradable and tradable areas/surfaces.

Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been

designed to meet the 2018 IECC requirements in COMcheck Version 4.1.5.5 and to comply with any applicable mandatory

Designer/Contractor: CLAIRE JORGENSEN

MUSGROVE ENGINEERING

IDAHO FALLS, ID 83401

Quantity Allowed Tradable Allowed Watts

0.5 Yes

Total Tradable Watts (a) =

Total Allowed Supplemental Watts (b) =

Total Allowed Watts =

Watts / Unit Wattage (B X C)

Lamps/ # of Fixture (C X D) Fixture Fixtures Watt.

Report date: 02/21/24

Comments/Assumptions

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208-523-2862 CLAIREJ@MUSGROVEPA.COM

Report date: 02/21/24 Page 4 of 8

1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3) Project Title: ISU CUSTODIAL OFFICE REMODEL Data filename: P:\Files\2024\24030\CALCS\ELEC\24030 Electrical_Compliance.cck Page 5 of 8

Project Title: ISU CUSTODIAL OFFICE REMODEL Data filename: P:\Files\2024\24030\CALCS\ELEC\24030 Electrical_Compliance.cck

LIGHTING FIXTURE SCHEDULE (24-030) TYPE | DESCRIPTION LAMPS | WATTS | MFG. & CATALOG NUMBER OR EQUAL BY NOTES CONTRACTOR SELECT 2'x4' LED FLAT PANEL, MVOLT LED LITHONIA NO. LIGHTOLIER SWITCHABLE LUMEN OUTPUT SET TO MEDIUM (5000 LUMENS) RECESSED 4000K CPX 2X4 ALO8 SWW7 M2 METALUX SWITCHABLE COLOR TEMPERATURE. 0-10 VOLT DIMMING H.E. WILLIAMS LIGHTOLIER INTEGRATED EXIT/UNIT COMBO FIXTURE SURFACE LED METALUX GREEN EXIT LED 2.32 ECBG LED M6 H.E. WILLIAMS

SURFACE

SURFACE

COLOR BY ARCHITECT LIGHTING FIXTURE SCHEDULE NOTES:

EXTERIOR LED WALL PACK

EXTERIOR LED WALL PACK

X1E 3000 LUMENS, EMERGENCY BATTERY PACK 4 WATTS

COLOR BY ARCHITECT

3000 LUMENS

1 SUBSTITUTIONS WILL BE ALLOWED IF SUBMITTED PRIOR TO BID DATE BY THE GREATER OF: 7 BUSINESS DAYS OR THE TIME PERIOD SPECIFIED BY DIVISION 1 SPECIFICATIONS, AND IF DEEMED EQUAL BY THE ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING SUBSTITUTED FIXTURES MEET OR EXCEED THE SPECIFICATIONS OF THE FIXTURES SPECIFIED.

SWITCH AND OCCUPANCY SENSOR LEGEND
CVIII CIII III COCCII I II CEI CEI E

LED

4000K

LED

4000K

LITHONIA NO.

LITHONIA NO.

WPX1-LED-P2-40K-MVOLT-XXXX

WPX1-LED-P2-40K-MVOLT-E4WH-XXXX

- Sost OCCUPANCY SENSOR WALL MOUNT, SINGLE TECHNOLOGY, DIMMING, 120-277V, SINGLE POLE, MULTI-WAY SENSOR SWITCH WSXA-MWO-D-XX OR EQUAL
- OS OCCUPANCY SENSOR CEILING MOUNT, DUAL TECHNOLOGY, LOW VOLTAGE, SMALL MOTION SENSOR SWITCH CM-PDT-9 OR EQUAL
- POWER PACK 120 VOLT, 15 VDC SENSOR SWITCH PP20 OR EQUAL
- S_D DIMMING SWITCH WALL MOUNT, 120/277V, LED, ON/OFF/SLIDE DIMMER SWITCH SYNERGY ISD-BC-120/277-XX OR EQUAL

XX=VERIFY COLOR WITH ARCHITECT PRIOR TO ORDER

EQUAL PRODUCTS FROM WATTSTOPER, LUTRON, LEGRAND, AND EATON WILL BE ACCEPTED

Section #	Rough-In Electrical Inspection	Complies?	Comments/Assumptions
& Req.ID C405.2.3,	Daylight zones provided with	Complies	
C405.2.3.	individual controls that control the lights independent of general area	□Does Not	
C405.2.3. 2 [EL23] ²	lighting. See code section C405.2.3 Daylight-responsive controls for applicable spaces, C405.2.3.1 Daylight responsive control function and section C405.2.3.2 Sidelit zone.	□Not Observable □Not Applicable	
C405.2.4 [EL26] ¹	Separate lighting control devices for specific uses installed per approved	□Complies □Does Not	
[2220]	lighting plans.	□Not Observable	
		□Not Applicable	
C405.2.4 [EL27] ¹	Additional interior lighting power allowed for special functions per the	□Complies □Does Not	
[2227]	approved lighting plans and is	□Not Observable	
	automatically controlled and separated from general lighting.	□Not Applicable	
C405.2.5 [EL28] ^{null}	Manual controls required by the energy code are in a location with	□Complies □Does Not	
[LLZO]	ready access to occupants and	□Not Observable	
	located where the controlled lights are visible, or identify the area served and their status.		
C405.2.6 [EL30] ^{null}	Automatic lighting controls for exterior lighting installed. Controls will be	□Complies □Does Not	
[2230]	daylight controlled, set based on	□Not Observable	
	business operation time-of-day, or reduce connected lighting > 30%.	□Not Applicable	
C405.3 [EL6] ¹	Exit signs do not exceed 5 watts per face.	□Complies □Does Not	
		□Not Observable □Not Applicable	
C405.6 [EL26] ²	Low-voltage dry-type distribution electric transformers meet the	□Complies □Does Not	
[2220]	minimum efficiency requirements of	□Not Observable	
	Table C405.6.	□Not Applicable	
C405.7 [EL27] ²	Electric motors meet the minimum efficiency requirements of Tables	☐Complies ☐Does Not	
	C405.7(1) through C405.7(4). Efficiency verified through certification	□Not Observable	
	under an approved certification	□Not Applicable	
	program or the equipment efficiency ratings shall be provided by motor		
	manufacturer (where certification programs do not exist).		
	Escalators and moving walks comply	Complies	
C405.8.2. 1	with ASME A17.1/CSA B44 and have automatic controls configured to	□Does Not □Not Observable	
[EL28] ²	reduce speed to the minimum permitted speed in accordance with ASME A17.1/CSA B44 or applicable local code when not conveying	□Not Applicable	
C405.9	passengers. Total voltage drop across the	□Complies	
[EL29] ²	combination of feeders and branch	Does Not	
	circuits <= 5%.	□Not Observable	
		□Not Applicable	

Additional Comments/Assumptions: Report date: 02/21/24 1 High Impact (Tier 1) 2 Medium Impact (Tier 2) 3 Low Impact (Tier 3)

Report date: 02/21/24

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