AN ADDITION FOR:

KIMBERLY SCHOOL DISTRICT

3682 N 3450 E, Kimberly, ID 83341

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GENERAL NOTES:

1. ALL WORK SHALL MEET CURRENT ADOPTED STATE, LOCAL CODES, ORDINANCES, & 2018 IBC
2. ALL MECHANICAL, ELECTRICAL, & PLUMBING WORK SHALL MEET ALL CURRENT APPLICABLE STATE & LOCAL CODES.
3. ALL UTILITIES SHALL BE PROPERLY IDENTIFIED & LOCATED BEFORE WORK BEGINS ON PROJECT.
4. CONTRACTOR SHALL VERIFY ALL CONDITIONS & DIMENSIONS AT THE JOB SITE & NOTIFY THE ARCHITECT OF ANY DIMENSIONAL ERRORS, OMISSIONS, OR DISCREPANCIES BEFORE BEGINING OR FABRICATING ANY WORK.
5. DO NOT SCALE DRAWINGS.
6. ALL DOOR HANDLES SHALL BE LEVER TYPE, ALL DOOR HARDWARE SHALL BE A.D.A COMPLIANT AS PER CURRENT ANSI 117.1
7. AT MAIN ENTRANCE DOOR SHALL HAVE SINGLE ACTION LOCKING DEVICE &/ OR SIGNED "THIS DOOR TO REMAIN UNLOCKED WHEN BUILDING IS OCCUPIED."

FIRE DEPARTMENT NOTES:

1. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INSURE THAT ALL DEFERRED SUBMITTALS REQUIRED BY THE FIRE DEPARTMENT **HAVE BEEN APPROVED BY THE STATE PRIOR TO THE INSTALLATION OF A FIRE ALARM AND/OR FIRE SPRINKLER SYSTEM.** IT SHALL ALSO BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO VERIFY THAT ALL APPROPRIATE TESTING AND/OR INSPECTIONS HAVE BEEN PERFORMED BEFORE COVERING OR CALLING FOR A FINAL INSPECTION.
2. FIRE SPRINKLER UNDERGROUND PIPING
   THE UNDERGROUND FIRE SPRINKLER LINE MUST MEET NFPA 24 AND THE CITY OF KIMBERLY STANDARDS. THE INSPECTION AND TESTING OF THE UNDERGROUND FIRE SPRINKLER LINE SHALL BE OVERSEEN BY THE FIRE MARSHALL.
3. SPRINKLER SYSTEM(S)
   SPRINKLER SYSTEM PLANS SHALL BE SENT TO THE STATE FIRE MARSHAL OFFICE AND DESIGNED IN ACCORDANCE WITH CURRENT NFPA 13 STANDARDS.
   IDAHO STATE FIRE MARSHAL
   700 WEST STATE STREET, 3RD FLOOR
   BOISE, IDAHO 83720
   PLANS SHALL MEET CURRENT IFC, NFPA 13R AND IDAHO STATE PLUMBING CODES, AND BE APPROVED PRIOR TO INSTALLATION.
4. FDC VISUAL ALARM A VISUAL ALARM DEVICE (EXTERIOR HORN/STROBE) SHALL BE PROVIDED IN THE AREA OF THE FDC.
5. APPROVED SIGNS SHALL BE INSTALLED ON THE FIRE RISER ROOM DOOR AND ON THE FIRE DEPARTMENT CONNECTION.

ABBREVIATIONS

AC	ACOUSTICAL CEILING	DIA	DIAMETER	GYP BD	GYPSUM BOARD	PL	PLATE, PLASTIC LAMINATE	T	THREAD
ADJ	ADJUSTABLE - ADJACENT	DIM	DIMENSION	HB	HOSE BIB	P-LAM	PLASTIC LAMINATE	TBB	TILE BACKER BOARD
AFF	ABOVE FINISH FLOOR	DF	DRINKING FOUNTAIN	HC	HANDICAPPED	PLWD	PLYWOOD	T&G	TONGUE AND GROOVE
AL	ALUMINUM	DP	DEEP	HDR	HEADER	PNL	PANEL	TO	TO OF
ALT	ALTERNATE	DR	DOOR	HM	HOLLOW METAL	PORC. TILE	PORCELAIN TILE	TOW	TOP OF WALL
ANOD	ANODIZED	DS	DOWNSPOUT	HORIZ	HORIZONTAL	PR	PAIR	TPD	TOILET PAPER DISPENSER
AP	ACOUSTICAL WALL PANEL	DWG	DRAWING	HT	HEIGHT	PSF	POUNDS PER SQUARE FOOT	TSCD	TOILET SEAT COVER DISPENSER
APPROX	APPROXIMATE	E	EAST	HVAC	HEATING/VENTILATING/ AIR CONDITIONING	PSI	POUNDS PER SQUARE INCH	TT	TIRE TREAD
ARCH	ARCHITECT (-URAL)	(E)	EXISTING			PT	PAINT, PRESSURE TREATED	TYP	TYPICAL
AW	ACOUSTICAL WALL	EA	EACH	ILO	IN LIEU OF	PTD	PAPER TOWEL DISPENSER	UNO	UNLESS NOTED OTHERWISE
AWF	ACOUSTICAL WALL FABRIC	EJ	EXPANSION JOINT	INSUL	INSULATION	QT	QUARTZ TILE	U/S	UNDERSIDE
BLDG	BUILDING	EL	ELEVATION	INT	INTERIOR	R	RISER, RADIUS	VB	VAPOR BARRIER
BM	BEAM	ELEC	ECLECTRIC (-AL)	JNT	JOINT	RB	RESILIENT BASE	VCT	VINYL COMPOSITION TILE
BOD	BOTTOM OF DECK	EP	ENAMEL PAINT	KD	KNOCK DOWN	RD	ROOF DRAIN	VERT	VERTICAL
BOT	BOTTOM	EQ	EQUAL	LAV	LAVATORY	RO	ROUGH OPENING	VGF	VINYL GYM FLOORING
BTWN	BETWEEN	EW	EACH WAY	MCFP	MULTI-COLORED FINISH	RR	RESTROOM	VIF	VINYL INDUSTRIAL FLOORING
CB	CATCH BASIN	EXG	EXISTING		PAINT SYSTEM	RSF	RUBBER SHEET FLOORING	VR	VAPOR RETARDER
CBT	CABINET	EXP	EXPANSION	MDO	MEDIUM DENSITY OVERLAY PLYWOOD	S	SOUTH	VT	VINYL TILE
CG	CORNER GUARD	EXT	EXTERIOR			SC	SOLID CORE	VWF	VINYL WALL FABRIC
CJ	CONTROL JOINT	FA	FIRE ALARM	MECH	MECHANIC (-AL)	SCU	STRUCTURAL CLAY UNIT	W	WEST
CL	CENTERLINE	FD	FLOOR DRAIN	MFR	MANUFACTURE (-R)	SD	SOAP DISPENSER	W/C	WATER CLOSET
CLG	CEILING	FE	FIRE EXTINGUISHER	MIN	MINIMUM	SDSV	STATIC DISIPATIVE SHEET VINYL	WD	WOOD
CLR	CLEAR (-ANCE)	FEC	FIRE EXTINGUISHER CABINET	MISC	MISCELLANEOUS	SF	SPECIALTY FINISH	W/D	WASHER & DRYER
CMT	CERAMIC MOSAIC TILE	FF	FACTORY FINISH, FINISH FLOOR	MRGB	MOISTURE RESISTANT GYPSUM BOARD	SFGL	SAFETY GLASS	WDO	WINDOW
CMU	CONCRETE MASONRY UNIT	FIN	FINISH (-ED)			SHTG	SHEATHING	WF	WALL FABRIC
CO	CLEAN OUT	FLR	FLOOR (-ING)	MTL	METAL	SIM	SIMILAR	WFV	WOOD FACE VENEER
COL	COLUMN	FND	FOUNDATION	N	NORTH	SL	SLOPE	WG	WIRE GUARD
CONC	CONCRETE	FOC	FACE OF CONCRETE	(N)	NEW	SND	SANITARY NAPKIN DISPENSER	WGL	WIRED GLASS
CONT	CONTINUOUS, CONTINUE	FRP	FIBERGLASS REINFORCED PLASTIC PANEL	NA, N/A	NOT APPLICABLE	SP	SPACE (-S)	WM	WIRE MESH
CORR	CORRIDOR			NIC	NOT IN CONTRACT	SPEC	SPECIFICATION	W/O	WITHOUT
CP	CARPET	FRVR	FLAME RESISTANT VAPOR BARRIER	NDU	SANITARY NAPKIN DISPOSAL UNIT	SQ	SQUARE	WOC	WALK-OFF CARPET
CS	CONCRETE SLAB, SEALED	FT	FOOT, FEET			S/S	STAINLESS STEEL	WP	WATERPROOFING
CT	CERAMIC TILE	FTG	FOOTING	NOM	NOMINAL	ST	STAIN	WPS	WALL PROTECTION SYSTEM
CTJ	CONTROL JOINT	FWC	FABRIC WALL COVERING	NTS	NOT TO SCALE	STL	STEEL	WR	WATER RESISTANT
CTR	COUNTER (-TOP)	GA	GAUGE	OC	ON CENTER	STR	STRUCTURE (-AL)	WRGB	WATER RESISTANT GYPSUM WALLBOARD
DBL	DOUBLE	GALV	GALVANIZED	OD	OUTSIDE DIAMETER	STRG	STORAGE		
DET	DETAIL	GH	GARMENT HOOK	OPP	OPPOSITE	SV	SHEET VINYL FLOORING	WWF	WELDED WIRE FABRIC
		GMM	GLASS MESH MORTAR BOARD	PCMU	PRE-FACED CMU			W/	WITH

PLAN ANALYSIS
Based on 2018 Edition of I.B.C

Architect of Record: Laughlin Ricks Architecture, L.L.C.

Engineer:

Job Address:

Legal Description:

Occupancy Classification: E — Occupant Load Per Area:

Occupancy Use: AG SHOP & CLASSROOMS

Allowable Stories Per Code: 2 — Provided: 1 (IBC Table 505.4) — Total: 250 OCCUPANTS, SEE OVERALL FLOOR PLAN

Floor Area: Basement: — 1st: 12,775 SF (E) 3,948 SF (ADDITION) — Exits Required: Basement: — 1st: 2

Mezzanine: — 3rd: — Total: 16,723 SF — 2nd: — 3rd: — 4th:

Total Required Exits Per Occupant Load: 2, 10 PROVIDED (IBC Table 1006.3.2)

Actual furthest travel distance to exit: 85' (IBC Table 1017.2 & 1006.2.1)

Penetrations? Show Approved Listed Products on Plans: N/A

Type of Construction: VB — Allowable Building Height: 60'

Seismic Design Category: C — Allowable Area Calc's: 38,000

Automatic Sprinkler System: Yes: X No: — (IBC Table 506.2)

Maximum Floor Area Allowed: 38,000 — Exit Signs: Yes: X No:

Special Inspections Required? Yes: — No: X — Emergency Lights: Yes: X No:

Firewalls Required? (Specify Type & Rating) Yes: — No: X — Fire Extinguishers Shown: Yes: X No: (IFC Section 906)

Occupancy Separation Use? Yes: — No: X — Fire Hydrant Locations Shown: Yes: X No:

Areas of Refuge Required? (IBC Section 1009.2,3,4) Yes: — No: X — Vestibule Required: Yes: (E) No:

Area Separation Required? Yes: — No: X — Classified Areas? (Show on plans & Show Areas) Yes: — No: X

Fire Resistance Ratings of BLDG Elements : 0 (IBC Table 601) (Specify Rating)

Minimum Roof Class: C (IBC Table 1505.1) — Exterior Wall Openings: N/A (IBC 705.8)

Fire Doors: N/A (IBC Table 716.1.2) — Fire Alarm System: YES (IBC 907.2)

Fire Flow and Duration: — Corridor Width: 72" (IBC Table 1020.2)

Rated Structural Frame: (Roof Supports Only) Yes: — No: X — Rated Corridors: (IBC Section 1020.1) Yes: — No: X

Rated Bearing Walls-Exterior: Yes: — No: X — Rated Bearing Walls-Interior: Yes: — No: X

Rated Nonbearing Walls-Exterior: (>30' Fire Separation) Yes: — No: X — Rated Bearing Walls-Interior: (Roof Supports Only) Yes: — No: X

Rated Nonbearing Walls-Exterior: (10'-30' Fire Separation) Yes: — No: X — Rated Nonbearing Walls-Interior: Yes: — No: X

Rated Floor Construction: Yes: — No: X — Rated Roof Construction: Yes: — No: X

Lighting Layout and COM Check? Yes: X No:

Comments:

1 PLAN ANALYSIS
1/4" = 1'-0"

FIRE SPRINKLER SYSTEM SHALL BE MODIFIED AS REQUIRED.

FIRE ALARM & DETECTION SYSTEM SHALL BE MODIFIED AS REQUIRED.

LICENSED ARCHITECT AR-985708
R. COLBY RICKS STATE OF IDAHO
10/8/2024

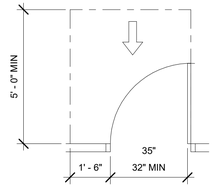
DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
TITLE SHEET

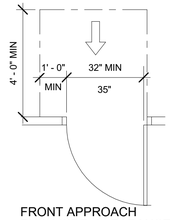
Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/8/2024
NM Drawn — RCR Checked
#23067 PROJECT #

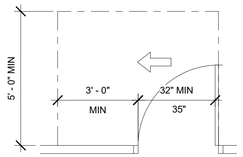
A0-0



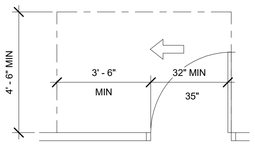
FRONT APPROACH
PULL SIDE, CLEARANCE



FRONT APPROACH
PUSH SIDE, CLEARANCE



HINGE APPROACH
PULL SIDE, CLEARANCE



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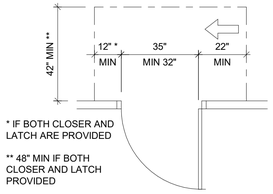
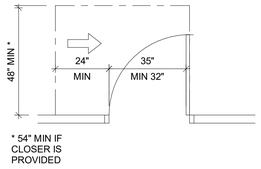
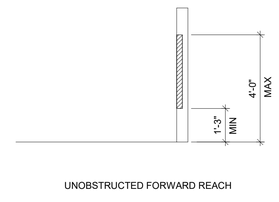


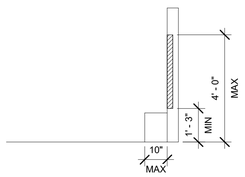
HINGE APPROACH
PUSH SIDE, CLEARANCE



LATCH APPROACH
PULL SIDE, CLEARANCE



UNOBSTRUCTED FORWARD REACH



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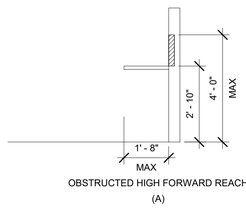
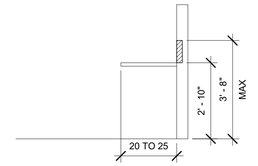
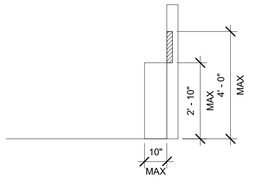


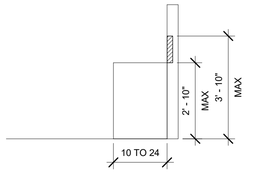
OBSTRUCTED HIGH FORWARD REACH
(A)



OBSTRUCTED HIGH FORWARD REACH
(B)

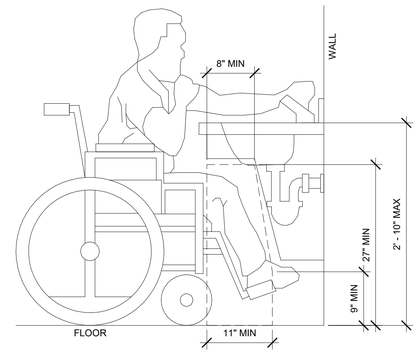


OBSTRUCTED HIGH SIDE REACH
(A)

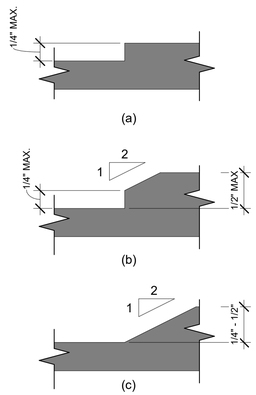


OBSTRUCTED HIGH SIDE REACH
(B)

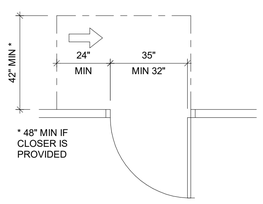
4 OPERABLE PARTS & REACH RANGES
3/8" = 1'-0"



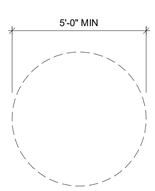
5 LAVATORY CLEARANCE
1" = 1'-0"



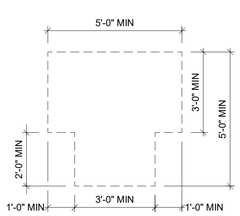
6 VERTICAL CHANGES IN LEVEL
12" = 1'-0"



LATCH APPROACH
PUSH SIDE, CLEARANCE

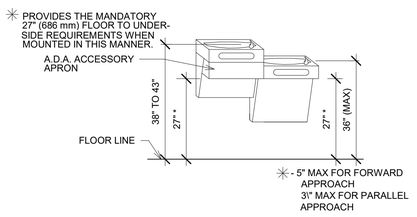


CIRCULAR
TURNING SPACE

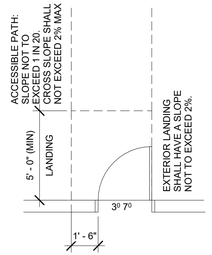


T-SHAPED
TURNING SPACE

1 DOOR CLEARANCE REQUIREMENTS
3/8" = 1'-0"



2 DRINKING FOUNTAIN DETAIL
1/4" = 1'-0"



3 ACCESSIBLE ENTRANCE
1/4" = 1'-0"

LICENSED
ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

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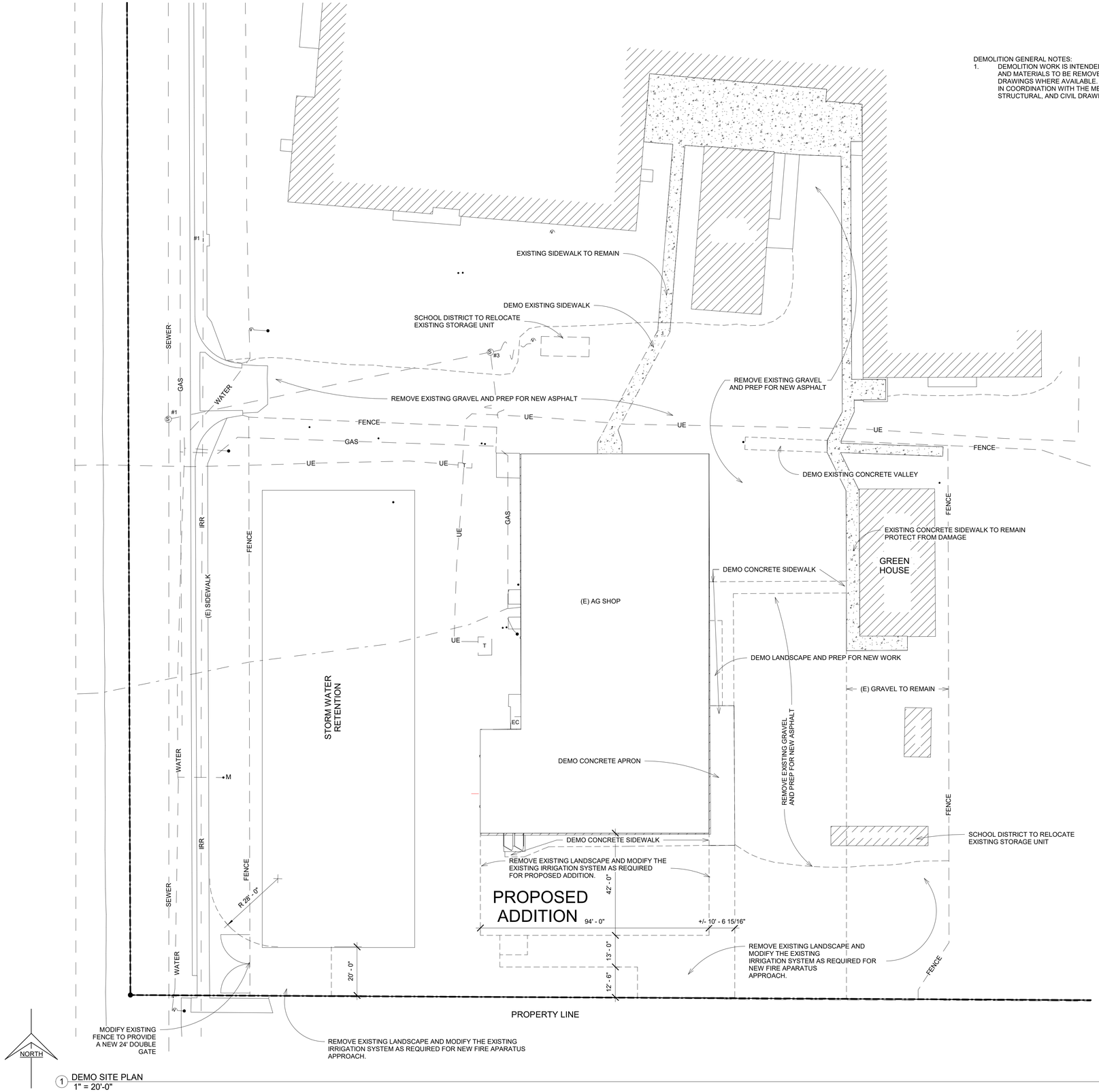
A0-1

DEMOLITION GENERAL NOTES:

1. DEMOLITION WORK IS INTENDED AS A GENERAL GUIDE. AREAS AND MATERIALS TO BE REMOVED ARE TAKEN FROM EXISTING DRAWINGS WHERE AVAILABLE. THIS DRAWING MUST BE USED IN COORDINATION WITH THE MECHANICAL, ELECTRICAL, STRUCTURAL, AND CIVIL DRAWINGS.



1 DEMO SITE PLAN
1" = 20'-0"

LICENSED ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

DATE

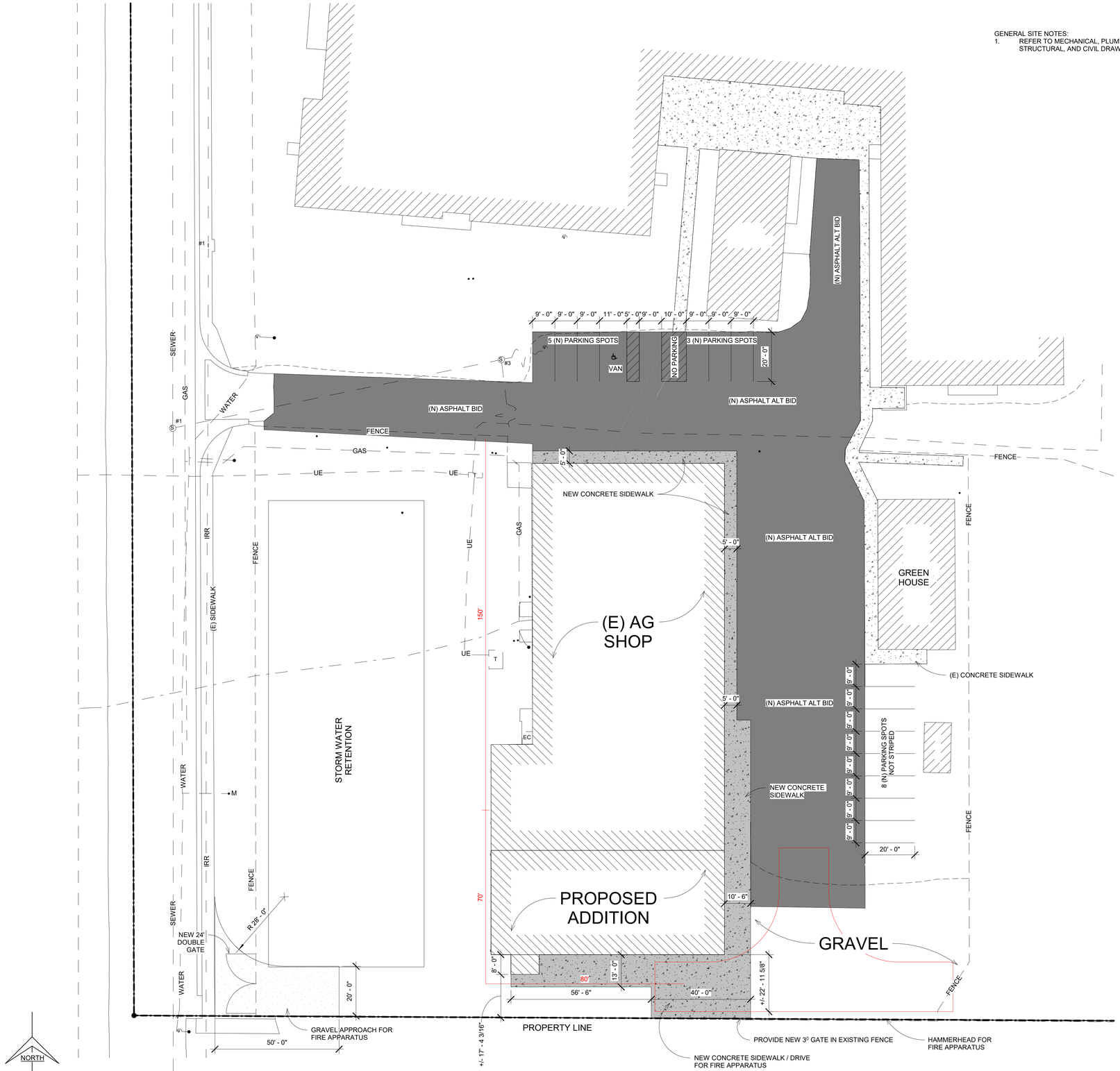
AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
DEMOLITION SITE PLAN

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/8/2024
NM Drawn
RCR Checked
#23067 PROJECT #

A0-2

GENERAL SITE NOTES:
1. REFER TO MECHANICAL, PLUMBING, ELECTRICAL, STRUCTURAL, AND CIVIL DRAWINGS FOR ADDITIONAL WORK.



1 NEW SITE PLAN
1" = 20'-0"

LICENSED ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3882 N 3450 E, Kimberly, ID 83341
NEW SITE PLAN

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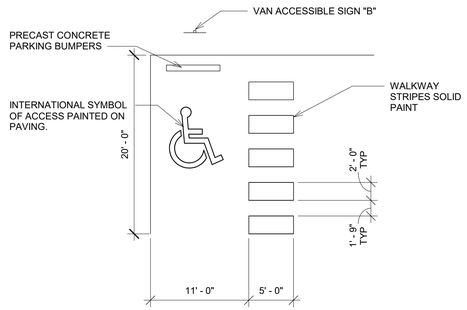
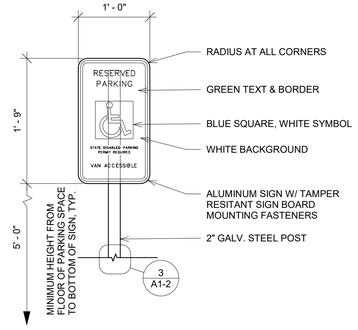
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/8/2024
NM Drawn
RCR Checked
#23067 PROJECT #

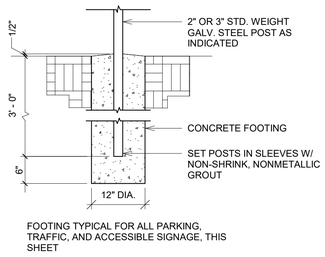
A1-1



1 ACCESSIBLE PARKING STALLS
1/8" = 1'-0"

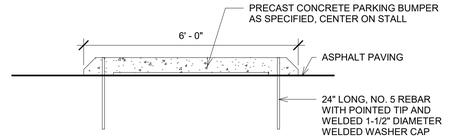


2 VAN ACCESSIBLE - SIGN "B"
1" = 1'-0"

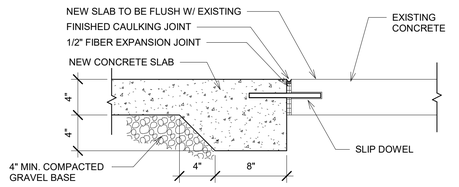


FOOTING TYPICAL FOR ALL PARKING, TRAFFIC, AND ACCESSIBLE SIGNAGE, THIS SHEET

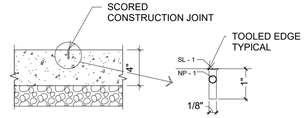
3 SIGN POST DETAIL
3/4" = 1'-0"



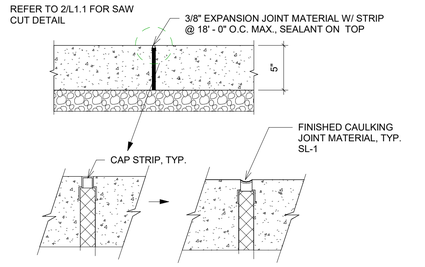
4 PRE-CAST CONC. BUMPER DETAIL
1/2" = 1'-0"



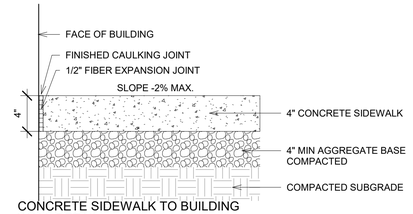
5 NEW CONCRETE TO EXISTING
1 1/2" = 1'-0"



6 CONCRETE CONTROL JOINT
1 1/2" = 1'-0"



7 CONCRETE EXPANSION JOINT
1 1/2" = 1'-0"



8 CONCRETE SIDEWALK TO BUILDING WALL DETAIL
1 1/2" = 1'-0"

LICENSED ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

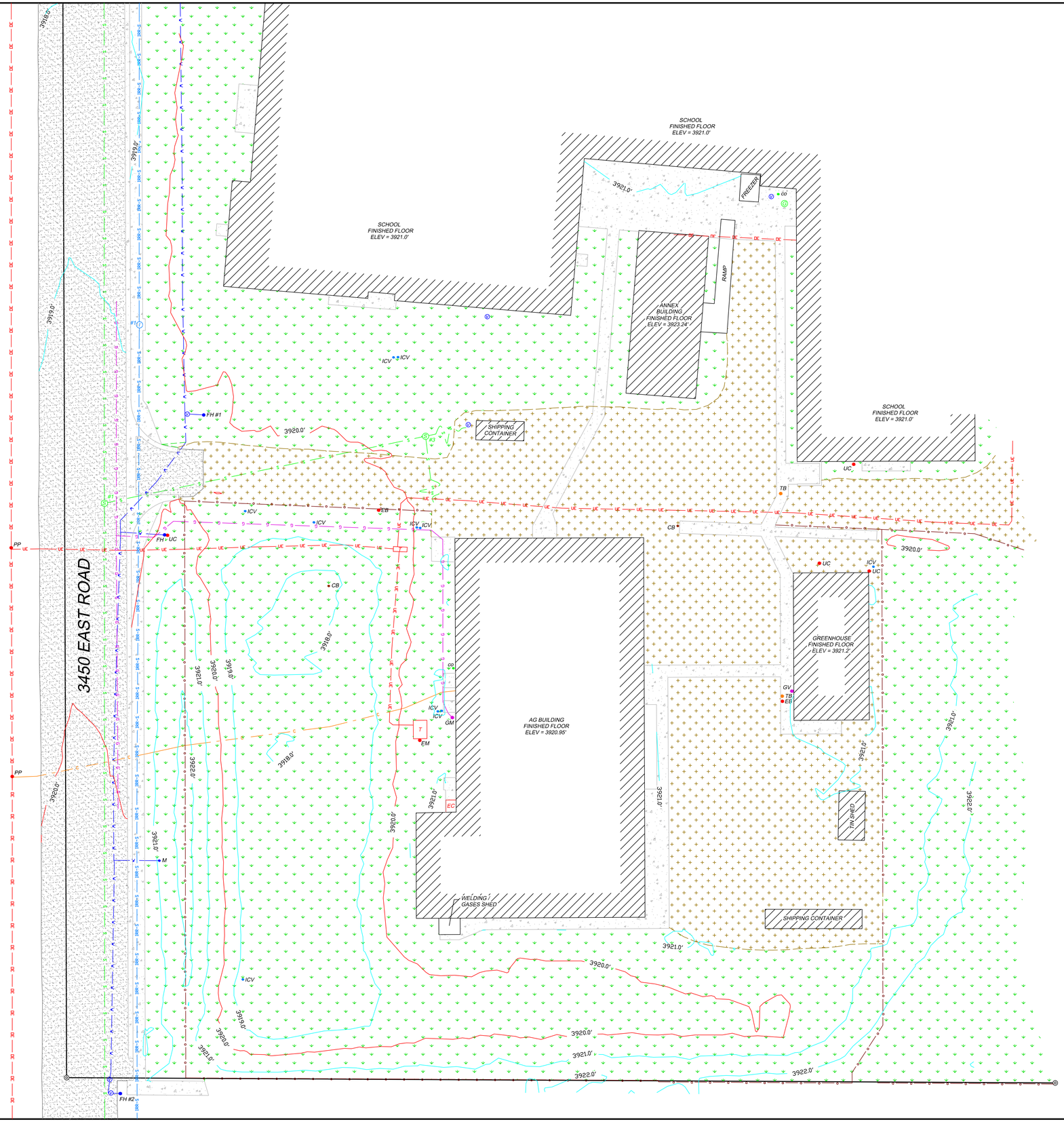
DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
SITE DETAILS

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/8/2024
NM Drawn
RCR Checked
#23067 PROJECT #

A1-2



UNDERGROUND UTILITY NOTE (North Portion)

UNDERGROUND UTILITY LOCATES WERE PERFORMED BY IDAHO DIG LINE UTILITY LOCATES BY MARCH 13, 2024. MARKINGS BY SAID UTILITY LOCATE COMPANIES ARE SHOWN HEREON.

Information from the sources checked above was combined with observed evidence of utilities to develop a view of the underground utilities. However, lacking excavation, the exact location of underground features cannot be accurately, completely, and reliably depicted. In addition, in some jurisdictions, Idaho Dig Line utility locate requests from surveyors may be ignored or result in an incomplete response. Where additional or more detailed information is required, the client is advised that excavation may be necessary.

The following companies were contacted by Idaho DigLine:
CableOne: No Response
CenturyLink: Fiber Optic markings shown hereon
City of Kimberly: Water, Sanitary Sewer & Irrigation markings shown hereon
Fatbeam LLC: No Response
Idaho Power: Ungerground Electric markings shown hereon
Intermountain Gas: Natural Gas markings shown hereon

0 20 40

SCALE 1" = 20'

LEGEND

- PROPERTY BOUNDARY LINES
- CHAIN LINK FENCE
- FOUND ⅝" DIAMETER REBAR
- IRRIGATION MANHOLE
- ICV - IRRIGATION CONTROL VALVE
- SANITARY SEWER MANHOLE
- co - SANITARY SEWER CLEANOUT
- GREASE TRAP MANHOLE
- CB - CATCH BASIN
- GV - NATURAL GAS VALVE
- GM - NATURAL GAS METER
- TB - TELECOMMUNICATIONS BOX
- FH #1 - FIRE HYDRANT
- M - WATER METER
- WATER VALVE
- PP - POWER POLE
- UC - UNDERGROUND CONDUIT (ROUTE UNKNOWN)
- EM - ELECTRIC METER (WITH UNDERGROUND CONDUIT)
- EC - ELECTRICAL CABINET
- T - TRANSFORMER
- CONCRETE
- ASPHALT
- GRAVEL
- GRASS
- BUILDING

IRRIGATION MANHOLE

IRMH #1 Lid Elevation = 3919.40'
12" Invert To South
Elevation = 3916.95'
12" Invert To North
Elevation = 3916.95'

SANITARY SEWER MANHOLES

SSMH #1 Lid Elevation = 3919.40'
12"? Invert From South
Elevation = 3903.75'
12"? Invert To North
Elevation = 3903.75'
6"? Invert From East
Elevation = 3904.75'

SSMH #2 Lid Elevation = 3921.03'
12"? Invert From South
Elevation = 3904.63'
12"? Invert To North
Elevation = 3904.63'

SSMH #3 Lid Elevation = 3920.24'
6"? Invert From Northeast
Elevation = 3911.64'
6"? Invert From South
Elevation = 3911.64'
6"? Invert to Southwest
Elevation = 3911.61'

BENCH MARKS

BM#1
Northeast Bolt on
Fire Hydrant #1
Labeled "Bury 4-6"
N: 9219.87'
E: 10060.57'
EL: 3921.22'

BM#1
Northeast Bolt on
Fire Hydrant #2
Labeled "Bury 4-0"
N: 8940.16'
E: 10026.25'
EL: 3922.13'

VERTICAL DATUM NOTE

The Vertical Datum used on this project is NAVD88.
Elevation Benchmark Utilized: T 422
PID: NV0867
Elevation: 3827.86'

SECTION 29

T. 10 S., R. 18 E., B.M.

TWIN FALLS COUNTY, IDAHO

LIMITED TOPOGRAPHIC SURVEY
for
LAUGHLIN - RICKS ARCHITECTURE

NINGYAN MOOSMAN
KIMBERLY HS AG SHOP

DESERT WEST LAND SURVEYS, P.C.

2020 OVERLAND AVENUE BURLEY, IDAHO 83318 208-678-7112

JOB NO: 16203-24D1 | DRAWN BY: T. RENO

DATE: MARCH 15, 2024

PROFESSIONAL LAND SURVEYOR
LICENSED
MARCH 15, 2024
15351
STATE OF IDAHO
TREVOR RENO

CIVIL IMPROVEMENT DRAWINGS FOR

AN ADDITION FOR
KIMBERLY SCHOOL DISTRICT

LOCATED IN A PORTION OF THE NW 1/4 OF THE NE 1/4
OF SECTION 29, T.10S, R.18E, B.M.
CITY OF KIMBERLY, TWIN FALLS COUNTY, IDAHO

GENERAL CONSTRUCTION NOTES

1. THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INFORM ALL UTILITY COMPANIES OF THE CONSTRUCTION SCHEDULE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. THE CONTRACTOR IS RESPONSIBLE FOR ANY AND ALL DAMAGE WHICH MAY OCCUR BY FAILURE TO EXACTLY LOCATE AND PROTECT ALL UTILITIES. CALL DIGLINE INC AT 811 OR 208-342-1585. BEFORE COMMENCING UNDERGROUND WORK.
2. ALL WORK SHALL CONFORM TO THE CURRENT EDITION OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPWC).
3. THE CONTRACTOR(S) SHALL REMOVE ALL OBSTRUCTIONS ABOVE AND BELOW GROUND REQUIRED FOR THE CONSTRUCTION OF THE PROPOSED IMPROVEMENTS. THIS WORK INCLUDES CLEARING AND GRUBBING, WHICH INCLUDES CLEARING THE GROUND SURFACE OF ALL TREES, STUMPS, BRUSH, UNDERGROWTH, HEDGES, HEAVY GROWTH OF GRASS AND/OR WEEDS, FENCES, STRUCTURES, DEBRIS, RUBBISH, AND OTHER MATERIAL NOT SUITABLE FOR THE FOUNDATION OF PAVEMENTS AND OTHER STRUCTURES. ALL MATERIAL NOT SUITABLE FOR FUTURE USE ON-SITE SHALL BE DISPOSED OF OFF-SITE AT AN APPROVED LOCATION.
4. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE FACILITIES WITHIN THE CONSTRUCTION AREA UNTIL THE DRAINAGE IMPROVEMENTS ARE IN PLACE AND APPROVED.
5. ALL CONTRACTORS WORKING WITHIN THE PROJECT BOUNDARIES ARE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES AND TRAFFIC CONTROL AROUND AND WITHIN THE CONSTRUCTION AREA. THE CONTRACTOR SHALL SUBMIT A TRAFFIC CONTROL PLAN THAT IS IN CONFORMANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
6. ALL MATERIALS FURNISHED ON OR FOR THE PROJECT MUST MEET THE MINIMUM REQUIREMENTS OF THE APPROVING AGENCY OR AS SET FORTH WITHIN, WHICHEVER IS MOST RESTRICTIVE. PROOF THAT ALL MATERIALS USED ON THE PROJECT MEET THE REQUIREMENTS ABOVE MUST BE PROVIDED AT THE REQUEST OF THE AGENCY AND/OR THE ENGINEER.
7. ALL UNDERGROUND UTILITIES AND SERVICE LINES SHALL BE INSTALLED PRIOR TO SITE PAVING OR STREET CONSTRUCTION.
8. ALL COSTS OF RETESTING FOR PREVIOUSLY FAILED TESTS, IF REQUIRED, SHALL BE BACK CHARGED TO THE RESPONSIBLE CONTRACTOR BY THE OWNER.
9. ALL COSTS INCURRED BY THE CONTRACTOR FOR CORRECTING DEFICIENT WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR WHO PERFORMED THE WORK. FAILURE TO CORRECT DEFICIENT WORK WILL BE CAUSE FOR ISSUANCE OF A STOP WORK ORDER AND POSSIBLE TERMINATION.
10. ALL WORK SUBJECT TO APPROVAL BY ANY POLITICAL AGENCY OR GOVERNING AGENCY MUST BE APPROVED PRIOR TO (I) PLACING OF CONCRETE, (II) PLACING OF AGGREGATE BASE, (III)PLACING OF ASPHALT PAVING, (IV) BACKFILLING TRENCHES. WORK PERFORMED WITHOUT SUCH APPROVAL SHALL NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY OF PERFORMING THE WORK TO THE REQUIRED STANDARDS.
11. ONLY PLANS APPROVED FOR CONSTRUCTION BY THE CITY AND SIGNED BY THE ENGINEER SHALL BE USED FOR PROJECT CONSTRUCTION. THE CONTRACTOR IS TO ENSURE THAT THE LATEST REVISIONS OF CONSTRUCTION DRAWINGS ARE USED. CONTACT ENGINEER AT 208-466-8181 FOR VERIFICATION PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL HAVE THE COMPLETE SET OF APPROVED PLANS ON SITE AT ALL TIMES DURING ACTIVE CONSTRUCTION.
12. WHEN DISCREPANCIES OCCUR BETWEEN THE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER. UNTIMELY NOTIFICATION SHALL NULLIFY ANY CONTRACTOR'S CLAIM FOR ADDITIONAL COMPENSATION.
13. THE CONTRACTOR SHALL FIELD VERIFY TEMPORARY BENCHMARKS & PAVEMENT MATCH LOCATIONS. NOTIFY ENGINEER OF ANY CONFLICTS.
14. CONTRACTOR SHALL REPAVE TO EXISTING GRADES ANY PAVED AREAS DISTURBED BY CONSTRUCTION.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COMPACTION TESTS FOR SUBGRADE AND PAVEMENT.
16. CONTRACTOR SHALL OBTAIN ALL APPLICABLE CONSTRUCTION PERMITS.
17. TOPOGRAPHICAL SURVEY AND SITE LAYOUT INFORMATION PROVIDED BY DESERT WEST LAND SURVEYS (2024).
18. PROPOSED AND EXISTING ELEVATIONS ARE BASED UPON INFORMATION OBTAINED FROM THE TOPOGRAPHIC SURVEY.
19. ALL CONTRACTORS WORKING WITHIN THE PROJECT BOUNDARIES ARE RESPONSIBLE FOR COMPLIANCE WITH ALL APPLICABLE SAFETY LAWS OF ANY JURISDICTIONAL BODY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL BARRICADES, SAFETY DEVICES, AND SAFETY WITHIN AND AROUND THE CONSTRUCTION AREA.
20. ALL OWNERS AND CONTRACTORS INTENDING TO DISTURB ONE ACRE OR MORE OF GROUND AS PART OF CONSTRUCTION ACTIVITIES SHALL DO THE FOLLOWING:
    - A. FILE A NOTICE OF INTENT (NOI) WITH EPA'S CONSTRUCTION GENERAL PERMIT (CGP).
    - B. PREPARE A STORM WATER POLLUTION PREVENTION PLAN (SWPPP).
    - C. INSTALL SIGNAGE PER THE CGP.
    - D. MAINTAIN ON-SITE COPIES OF THE NOI, CGP, AND SWPPP.
    - E. COMPLY WITH REQUIREMENTS OF CGP AND SWPPP INCLUDING DOCUMENTING THAT ALL INSPECTIONS AND MONITORING HAVE BEEN PERFORMED.
    - F. FILE A NOTICE OF TERMINATION (NOT) WHEN ON-SITE WORK IS COMPLETE AND PERMANENT EROSION AND SEDIMENTATION CONTROL MEASURES ARE IN PLACE AND FUNCTIONING.

WATER NOTES

1. THERE ARE NO PROPOSED CHANGES TO THE EXISTING WATER SERVICES TO THE BUILDING.
2. THE HORIZONTAL SEPARATION OF POTABLE WATER MAINS AND NON-POTABLE WATER MAINS (SANITARY SEWER, STORM DRAIN, AND IRRIGATION) SHALL BE A MINIMUM OF TEN (10) FEET. WHERE IT IS NECESSARY FOR A POTABLE WATER MAIN AND NON-POTABLE WATER MAIN TO CROSS WITH LESS THAN EIGHTEEN (18) INCHES OF VERTICAL SEPARATION, THE CROSSING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 542.07 OF THE IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS (IDAPA 58.01.08) AND SECTION 430.02 OF THE WASTEWATER RULES (IDAPA 58.01.16).
3. THE HORIZONTAL SEPARATION OF NON-POTABLE SERVICES AND POTABLE WATER SERVICES OR POTABLE WATER MAINS SHALL BE A MINIMUM OF SIX (6) FEET. WHERE IT IS NECESSARY FOR A POTABLE WATER MAIN AND NON-POTABLE WATER MAIN TO CROSS WITH LESS THAN EIGHTEEN (18) INCHES OF VERTICAL SEPARATION, THE CROSSING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 542.07 OF THE IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS (IDAPA 58.01.08) AND SECTION 430.02 OF THE WASTEWATER RULES (IDAPA 58.01.16).

SEWER NOTES

1. ALL WORK SHALL CONFORM TO THE LATEST EDITION OF THE IDAHO STANDARDS FOR PUBLIC WORKS CONSTRUCTION (ISPWC).
2. FINAL APPROVAL AND ACCEPTANCE OF ALL SEWER CONSTRUCTION WILL BE BY THE CITY.
3. SEWER PIPE WITH COVER OF GREATER THAN 3 FEET, SHALL BE BELL AND SPIGOT, POLYVINYL CHLORIDE (PVC), SDR 35, ASTM D-3034. A RUBBER RING IS TO BE INSTALLED WHERE THE PIPE IS IN CONTACT WITH THE MANHOLE BASE AND/OR ITS CHANNEL, IN ORDER TO ENSURE A WATERTIGHT SEAL.
4. THE CONTRACTOR SHALL NOTIFY THE CITY (OR APPLICABLE PLUMBING INSPECTOR) PRIOR TO CONSTRUCTION AND FOR SCHEDULING INSPECTIONS. PLEASE ALLOW A MINIMUM OF 48 HOURS TO SCHEDULE INSPECTIONS.
5. SEWER SERVICES SHALL BE CONNECTED TO NEW MAINS USING A TEE OR WYE IN ACCORDANCE WITH ISPWC. SEWER SERVICE LINES SHALL BE INSTALLED PRIOR TO PAVING IMPROVEMENTS.
6. THE HORIZONTAL SEPARATION OF POTABLE WATER MAINS AND NON-POTABLE WATER MAINS (SANITARY SEWER, STORM DRAIN, AND IRRIGATION) SHALL BE A MINIMUM OF TEN (10) FEET. WHERE IT IS NECESSARY FOR A POTABLE WATER MAIN AND NON-POTABLE WATER MAIN TO CROSS WITH LESS THAN EIGHTEEN (18) INCHES OF VERTICAL SEPARATION, THE CROSSING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 542.07 OF THE IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS (IDAPA 58.01.08) AND SECTION 430.02 OF THE WASTEWATER RULES (IDAPA 58.01.16).
7. THE HORIZONTAL SEPARATION OF NON-POTABLE SERVICES AND POTABLE WATER SERVICES OR POTABLE WATER MAINS SHALL BE A MINIMUM OF SIX (6) FEET. WHERE IT IS NECESSARY FOR A POTABLE WATER MAIN AND NON-POTABLE WATER MAIN TO CROSS WITH LESS THAN EIGHTEEN (18) INCHES OF VERTICAL SEPARATION, THE CROSSING SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 542.07 OF THE IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS (IDAPA 58.01.08) AND SECTION 430.02 OF THE WASTEWATER RULES (IDAPA 58.01.16).
8. GROUNDWATER LEVELS SHALL BE MAINTAINED BELOW THE BOTTOM OF THE TRENCH DURING PIPE LAYING AND THE PIPE JOINING OPERATIONS AND WHILE MAKING SEWER TAPS. THE DEWATERING METHOD SHALL BE DISCUSSED WITH THE ENGINEER AND APPROVED PRIOR TO CONSTRUCTION. DITCHES AND STORM DRAIN FACILITIES THAT ARE SILTED DUE TO THE CONTRACTOR'S DEWATERING SHALL BE CLEANED AND RESTORED TO THEIR ORIGINAL STATE.
9. TRENCH EXCAVATION AND TRENCH BACKFILL SHALL BE PERFORMED IN ACCORDANCE WITH ISPWC SECTION 300.
10. THE CONTRACTOR MUST OBTAIN ALL REQUIRED PERMITS BEFORE BEGINNING WORK.

STORM DRAIN NOTES

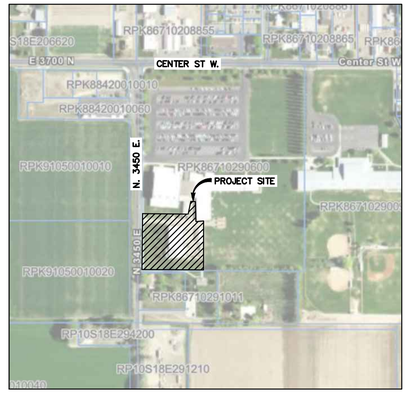
1. THE CONTRACTOR SHALL HAVE PLANS THAT WERE APPROVED FOR CONSTRUCTION BY CITY ON SITE AT ALL TIMES.
2. ANY CHANGE FROM THE PLANS SHALL BE APPROVED BY THE DESIGN ENGINEER AND THE CITY.
3. STORMWATER RUNOFF WILL CONTINUE TO BE MANAGED IN THE EXISTING SWALE LOCATED ON THE WEST SIDE OF THE EXISTING BUILDING.

Know what's **below.**
Call before you dig.

DATUM AND BENCHMARKS

1. TOPOGRAPHIC SURVEY AND MAPPING PREPARED BY DESERT WEST LAND SURVEYS (2024).
2. VERTICAL DATUM IS THE NAVD 88 DATUM.
3. TEMPORARY BENCHMARK LOCATIONS AND ELEVATIONS FOR THE SITE INCLUDE THE FOLLOWING:

TBM	Northing	Easting	Elevation	Description
1	9219.87	10060.57	3921.22	NE BOLT ON FH
2	8940.16	10026.25	3922.13	NE BOLT OF FH



VICINITY MAP
3682 N. 3450 E. – KIMBERLY, IDAHO
N.T.S.

SITE INFORMATION

PROJECT:	AN ADDITION FOR KIMBERLY SCHOOL DISTRICT
ADDRESS:	3682 N. 3450 E. KIMBERLY, IDAHO 83341
PARCEL NO:	RPK86710290600
LEGAL:	LOCATED IN A PORTION OF THE NW 1/4 OF THE NE 1/4 OF SECTION 29, T.10S, R.18E, BOISE MERIDIAN CITY OF KIMBERLY, TWIN FALLS COUNTY, IDAHO.

ENGINEER OF RECORD INFORMATION

ASPEN ENGINEERS, CHARTERED
1619 N. LINDER RD, SUITE 110
KUNA, IDAHO 83634

CONTACT:
LANCE WARNICK, PE
208-466-8181
lance@AspenEngineers.com

CIVIL DRAWING INDEX

LEGEND

EXISTING	PROPOSED	
		PROPERTY LINE
		LOT LINE
		CENTERLINE
		SECTION LINE
		EASEMENT
EP	EP	EDGE OF PAVEMENT
EG	EC	EDGE OF GRAVEL
GAS	G	UNDERGROUND GAS LINE
W	W	WATER LINE
WS	WS	WATER SERVICE LINE
S	S	SEWER MAIN LINE
SS	SS	SEWER SERVICE LINE
SD	SD	STORM DRAIN LINE
OHP	OHP	OVERHEAD POWER
UP	UP	UNDERGROUND POWER
UT	UT	UNDERGROUND TELEPHONE
		FLOW LINE
GB	GB	GRADE BREAK
GC	GC	GRADE CHANGE
TB	TB	TOP OF BANK
TOE	TOE	TOE OF SLOPE
PI	PI	PRESSURE IRRIGATION LINE
IRR	IRR	GRAVITY IRRIGATION LINE
		CHAIN LINK FENCE
		WOOD FENCE
		VINYL FENCE
X	X	WIRE FENCE
2601		CONTOUR
SSMH		SEWER MANHOLE
S		WATER BIBB/FAUCET
SS		SEWER SERVICE MARKER
		CLEANOUT
		FIRE HYDRANT
W		WATER WELL
W		WATER METER
W		WATER SERVICE
WV		WATER VALVE
		BLOW-OFF ASSEMBLY & VAULT
		TEMPORARY BLOW-OFF
		PRESSURE IRRIGATION DRAIN
		PIPE END CAP
	JI	PIPE ADAPTER
		FITTINGS W/THRUST BLOCK
		STORM MANHOLE
		STORM DRAIN CATCH BASIN
		STORM DRAIN DROP INLET
		SAND AND GREASE TRAP
PIV		AIR RELEASE VALVE
IRR		IRRIGATION BOX
		IRRIGATION MANHOLE
		UTILITY POLE
		POLE ANCHOR
		ELECTRICAL BOX
		LIGHT POLE
		TELEPHONE RISER
		GAS METER/MARKER
		GAS RISER
		CABLE TV RISER
		MAILBOX
		SIGN
		BARRICADE
		DECIDUOUS/CONIFER TREE
	1	LOT NUMBER
		DETAIL NUMBER SHEET NUMBER
	0.40%	GRADE & DIRECTION OF FLOW

NOTE: THIS IS A TYPICAL LINE AND SYMBOL LEGEND AND MAY NOT APPLY TO ALL PROJECTS.

ABBREVIATIONS

AC	ASPHALT ELEVATION	H	HEIGHT	ROW	RIGHT-OF-WAY
BFF	BELOW FINISH FIOOR	IE	INVERT ELEVATION	SDR	STD DIMENSION RATIO
BGS	BELOW GROUND SURFACE	L	LENGTH	STA	STATION
BOW	BACK OF WALK	LF	LINEAR FEET	STD	STANDARD
CB	CATCH BASIN	LIP	LIP OF GUTTER	TB	THRUST BLOCK
CF	CUBIC FEET	MDD	MODIFIED DRY DENSITY	TBC	TOP BACK ROLLED CURB
CON	CONCRETE ELEVATION	ME	MATCH EXISTING	TBM	TEMPORARY BENCHMARK
CFS	CUBIC FEET PER SECOND	MIN	MINIMUM	TBVC	TOP BACK VERTICAL CURB
DIA	DIAMETER	MJ	MECHANICAL JOINT	TOC	TOP OF CURB
EG	EXISTING GRADE	NTS	NOT TO SCALE	TOG	TOP OF GRATE
EP	EDGE OF PAVEMENT	PC	POINT OF CURVATURE	TOW	TOP OF WALK
FL	FLOW LINE	PRC	POINT OF REVERSE CURV	TYP	TYPICAL
FLG	FLANGE	PT	POINT OF TANGENCY	W	WIDTH
GB	GRADE BREAK	PUE	PUBLIC UTILITY EASEMENT	WALL	TOP OF RETAINING WALL
GC	GRADE CHANGE	PVI	POINT OF VERTICAL INTER		
GWT	GROUNDWATER TABLE	R	RADIUS		

PROFESSIONAL ENGINEER
REGISTERED
Lance Warnick
10077
10/07/2024
STATE OF IDAHO
LANCE WARNICK

ASPEN ENGINEERS
1619 N. Linder Rd, Suite 110 · Kuna, Idaho 83634
Phone: 208-466-8181 · AspenEngineers.com

ASPEN JOB: 24010

DATE 10/07/2024 REVIEW

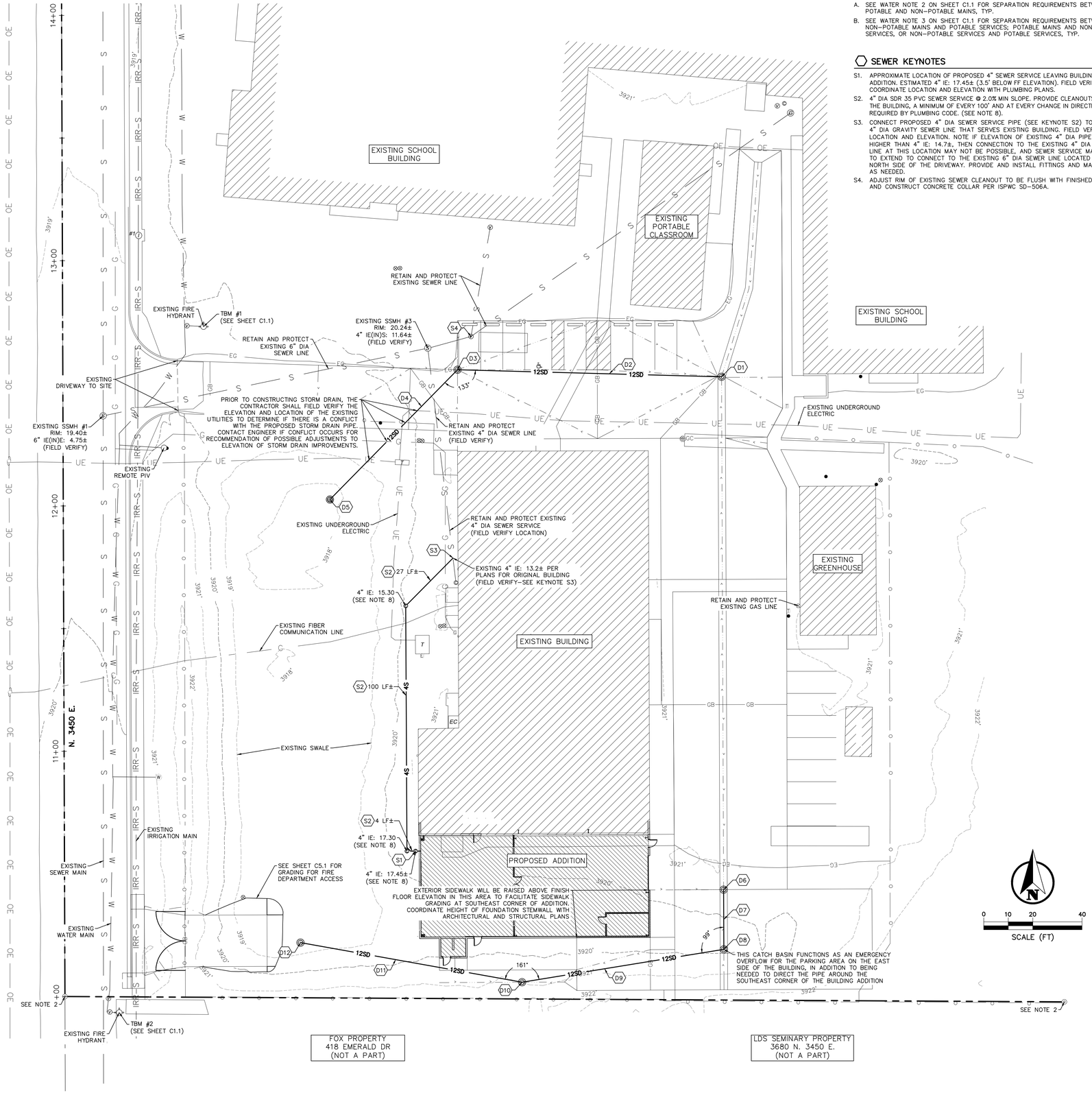
AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E. KIMBERLY, ID 83341
CIVIL NOTES AND LEGEND

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/07/2024
BRW Drawn | LBW Checked

C1.1
1 of 6

P:\2024\24010\Drawings\Civil\Rev4\24010_C1.1 Civil Notes and Legend.dwg - Lance - Oct 04, 2024 - 3:02pm



POTABLE/NON-POTABLE SEPARATION KEYNOTES

A. SEE WATER NOTE 2 ON SHEET C1.1 FOR SEPARATION REQUIREMENTS BETWEEN POTABLE AND NON-POTABLE MAINS, TYP.

B. SEE WATER NOTE 3 ON SHEET C1.1 FOR SEPARATION REQUIREMENTS BETWEEN NON-POTABLE MAINS AND POTABLE SERVICES; POTABLE MAINS AND NON-POTABLE SERVICES, OR NON-POTABLE SERVICES AND POTABLE SERVICES, TYP.

SEWER KEYNOTES

S1. APPROXIMATE LOCATION OF PROPOSED 4" SEWER SERVICE LEAVING BUILDING ADDITION. ESTIMATED 4" IE: 17.45± (3.5' BELOW FF ELEVATION). FIELD VERIFY AND COORDINATE LOCATION AND ELEVATION WITH PLUMBING PLANS.

S2. 4" DIA SDR 35 PVC SEWER SERVICE @ 2.0% MIN SLOPE. PROVIDE CLEANOUTS OUTSIDE THE BUILDING, A MINIMUM OF EVERY 100' AND AT EVERY CHANGE IN DIRECTION REQUIRED BY PLUMBING CODE. (SEE NOTE 8).

S3. CONNECT PROPOSED 4" DIA SEWER SERVICE PIPE (SEE KEYNOTE S2) TO EXISTING 4" DIA GRAVITY SEWER LINE THAT SERVES EXISTING BUILDING. FIELD VERIFY LOCATION AND ELEVATION. NOTE IF ELEVATION OF EXISTING 4" DIA PIPE IS HIGHER THAN 4" IE: 14.7±, THEN CONNECTION TO THE EXISTING 4" DIA SEWER LINE AT THIS LOCATION MAY NOT BE POSSIBLE, AND SEWER SERVICE MAY NEED TO EXTEND TO CONNECT TO THE EXISTING 6" DIA SEWER LINE LOCATED ON THE NORTH SIDE OF THE DRIVEWAY. PROVIDE AND INSTALL FITTINGS AND MATERIALS AS NEEDED.

S4. ADJUST RIM OF EXISTING SEWER CLEANOUT TO BE FLUSH WITH FINISHED GRADE AND CONSTRUCT CONCRETE COLLAR PER ISPWC SD-506A.

NOTES

1. SEE SHEET C1.1 FOR ADDITIONAL NOTES, LEGEND AND TEMPORARY BENCHMARK LOCATIONS AND ELEVATIONS.
2. CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTS DURING CONSTRUCTION. ANY MONUMENT DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED BY A PROFESSIONAL LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
3. COORDINATE WITH LANDSCAPERS AND LANDSCAPE PLAN FOR LOCATION OF SLEEVES FOR ONSITE PRESSURE IRRIGATION DISTRIBUTION SYSTEM. CONTRACTOR SHALL INSTALL SLEEVES PRIOR TO PAVING AND CONCRETE.
4. COORDINATE ROUTING OF DRY UTILITIES (POWER, GAS, PHONE, CABLE, ETC) WITH CONTRACTOR AND APPLICABLE UTILITY COMPANIES.
5. SEE ARCHITECTURAL PLANS FOR HORIZONTAL CONTROL / DIMENSIONED SITE PLAN.
6. SEE ARCHITECTURAL PLANS FOR SITE DEMOLITION PLAN. CONTRACTOR SHALL REMOVE AND DISPOSE ALL SITE FEATURES THAT CONFLICT WITH PROPOSED IMPROVEMENTS.
7. ABANDONED TEST PITS, STORM DRAINS OR ANY OTHER DISTURBED EXCAVATION LOCATED UNDER THE PROPOSED BUILDING OR STREET SHALL BE RE-EXCAVATED TO NATIVE SOIL AND BACKFILLED WITH STRUCTURAL FILL PER ISPWC SPECIFICATIONS. CONTRACTOR SHALL PROVIDE SOILS DATA TO VERIFY NATIVE MATERIAL OR ANY SOURCE USED FOR BACKFILL MEETS THE REQUIREMENTS OF ENGINEERED FILL PER ISPWC AND PROVIDE A COPY OF ALL COMPACTION TESTS TO THE CITY, UPON REQUEST.
8. ALL CLEANOUTS IN CONCRETE AND ASPHALT PAVED AREAS SHALL HAVE A TRAFFIC RATED COVER IN A CONCRETE COLLAR SET FLUSH WITH FINISHED GRADE PER ISPWC SD-506A. LIDS OF CLEANOUTS IN LANDSCAPE AREAS SHALL BE SET FLUSH WITH FINISHED GRADE TO PROTECT FROM DAMAGE FROM MOWERS, TRIMMERS, ETC.
9. THERE ARE NOT ANY PROPOSED CHANGES TO THE WATER SERVICE LINE SERVING THE EXISTING BUILDING.
10. STORMWATER RUNOFF WILL CONTINUE TO BE MANAGED IN THE EXISTING SWALE LOCATED ON THE WEST SIDE OF THE EXISTING BUILDING.
11. ADD 3900' TO TRUNCATED SITE ELEVATIONS TO CONVERT TO THE PROJECT DATUM.
12. CONTRACTOR SHALL RESTORE EXISTING LANDSCAPING AND LANDSCAPE IRRIGATION LINES DISTURBED BY SEWER, STORM DRAIN, BUILDING, DRIVEWAY, AND PARKING LOT CONSTRUCTION.
13. SEE SHEET C3.1 FOR STORM DRAIN DETAILS.

STORM DRAIN KEYNOTES

D1. INLET #N1
30" DIA TRAFFIC RATED CONCRETE CATCH BASIN WITH: 24" DIA TRAFFIC RATED FRAME PER ISPWC SD-617; GRATED MANHOLE LID; AND CONCRETE COLLAR PER ISPWC SD-616 (SEE DETAIL A/C3.1)
TOG: 19.80± (SEE SHEET C5.1)
12" IE(OUT)W: 17.70

D2. 108 LF± OF 12" DIA SDR 35 PVC STORM DRAIN PIPE PER ISPWC 601.2.2 @ 0.37% SLOPE.

D3. INLET #N2
30" DIA TRAFFIC RATED CONCRETE CATCH BASIN WITH: 24" DIA TRAFFIC RATED FRAME PER ISPWC SD-617; GRATED MANHOLE LID; AND CONCRETE COLLAR PER ISPWC SD-616 (SEE DETAIL A/C3.1)
TOG: 19.80± (SEE SHEET C5.1)
12" IE(IN)E: 17.30
12" IE(OUT)SW: 16.30 (THIS PIPE IS INTENTIONALLY LOWER THAN INLET PIPE)

D4. 74 LF± OF 12" DIA SDR 35 PVC STORM DRAIN PIPE PER ISPWC 601.2.2 @ 0.81% SLOPE.

D5. OUTLET #N3
30" DIA TRAFFIC RATED CONCRETE CATCH BASIN WITH: 24" DIA TRAFFIC RATED FRAME PER ISPWC SD-617; GRATED MANHOLE LID; AND OPEN BOTTOM TO DRAIN INTO SUBSURFACE (SEE DETAIL B/C3.1)
TOG: 17.80± (SEE SHEET C5.1)
12" IE(IN)NE: 15.70

D6. INLET #S1
30" DIA TRAFFIC RATED CONCRETE CATCH BASIN WITH: 24" DIA TRAFFIC RATED FRAME PER ISPWC SD-617; GRATED MANHOLE LID; AND CONCRETE COLLAR PER ISPWC SD-616 (SEE DETAIL A/C3.1)
TOG: 19.88± (SEE SHEET C5.1)
12" IE(OUT)S: 17.70

D7. 24 LF± OF 12" DIA SDR 35 PVC STORM DRAIN PIPE PER ISPWC 601.2.2 @ 0.42% SLOPE.

D8. INLET #S2
30" DIA TRAFFIC RATED CONCRETE CATCH BASIN WITH: 24" DIA TRAFFIC RATED FRAME PER ISPWC SD-617; GRATED MANHOLE LID; AND CONCRETE COLLAR PER ISPWC SD-616 (SEE DETAIL A/C3.1)
TOG: 20.51± (SEE SHEET C5.1)
12" IE(IN)N: 17.60
12" IE(OUT)W: 17.50

D9. 83 LF± OF 12" DIA SDR 35 PVC STORM DRAIN PIPE PER ISPWC 601.2.2 @ 0.48% SLOPE.

D10. INLET #S3
30" DIA TRAFFIC RATED CONCRETE CATCH BASIN WITH: 24" DIA TRAFFIC RATED FRAME PER ISPWC SD-617 AND GRATED MANHOLE LID (SEE DETAIL C/C3.1)
TOG: 20.20± (SEE SHEET C5.1)
12" IE(IN)E: 17.10
12" IE(OUT)W: 17.00

D11. 92 LF± OF 12" DIA SDR 35 PVC STORM DRAIN PIPE PER ISPWC 601.2.2 @ 0.54% SLOPE.

D12. OUTLET #S4
30" DIA TRAFFIC RATED CONCRETE CATCH BASIN WITH: 24" DIA TRAFFIC RATED FRAME PER ISPWC SD-617; GRATED MANHOLE LID; AND OPEN BOTTOM TO DRAIN INTO SUBSURFACE (SEE DETAIL B/C3.1)
TOG: 18.60± (SEE SHEET C5.1)
12" IE(IN)E: 16.50

DATE 10/07/2024 REVIEW

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E KIMBERLY, ID 83341
SEWER SERVICE AND STORM DRAIN PLAN

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East * Twin Falls, Idaho 83301
(208) 736-8050

PROFESSIONAL ENGINEER REGISTERED 10077 STATE OF IDAHO LANCE WARNICK 10/07/2024

ASPEN ENGINEERS
1619 N. Linder Rd, Suite 110 · Kuna, Idaho 83634
Phone: 208-466-8181 · AspenEngineers.com

DATE: 10/07/2024
BRW Drawn | LBW Checked

C2.1
2 of 6

ASPEN JOB: 24010

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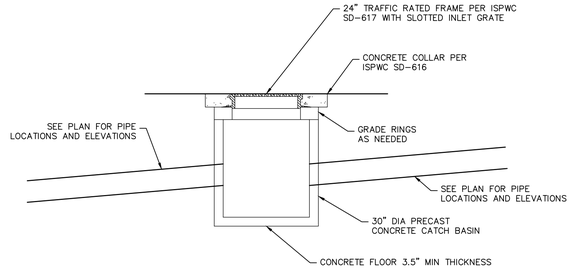
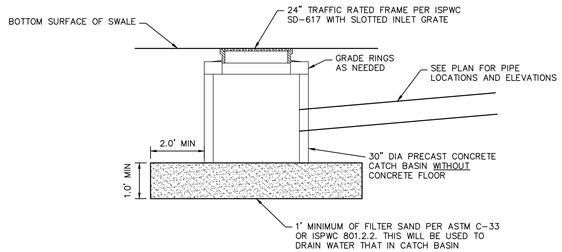
NOTES

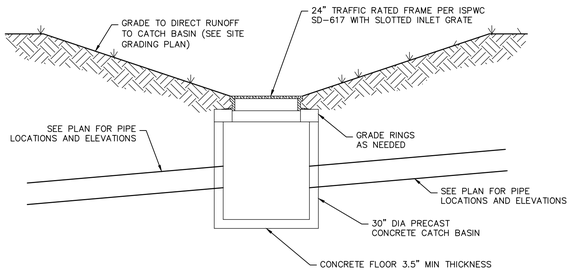
1. SEE SHEET C2.1 FOR STORM DRAIN PLAN.
2. STORMWATER RUNOFF WILL CONTINUE TO BE MANAGED IN THE EXISTING SWALE LOCATED ON THE WEST SIDE OF THE EXISTING BUILDING.



CATCH BASIN WITH CONCRETE COLLAR (A / C3.1)
SCALE: N.T.S.



CATCH BASIN USED AS OUTLET IN SWALE (B / C3.1)
SCALE: N.T.S.



CATCH BASIN WITHOUT CONCRETE COLLAR (C / C3.1)
SCALE: N.T.S.

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DATE 10/07/2024 REVIEW

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, KIMBERLY, ID 83341
STORM DRAIN DETAILS

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East * Twin Falls, Idaho 83301
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PROFESSIONAL ENGINEER REGISTERED 10077 10/01/2024 STATE OF IDAHO LANCE WARNICK

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DATE: 10/07/2024
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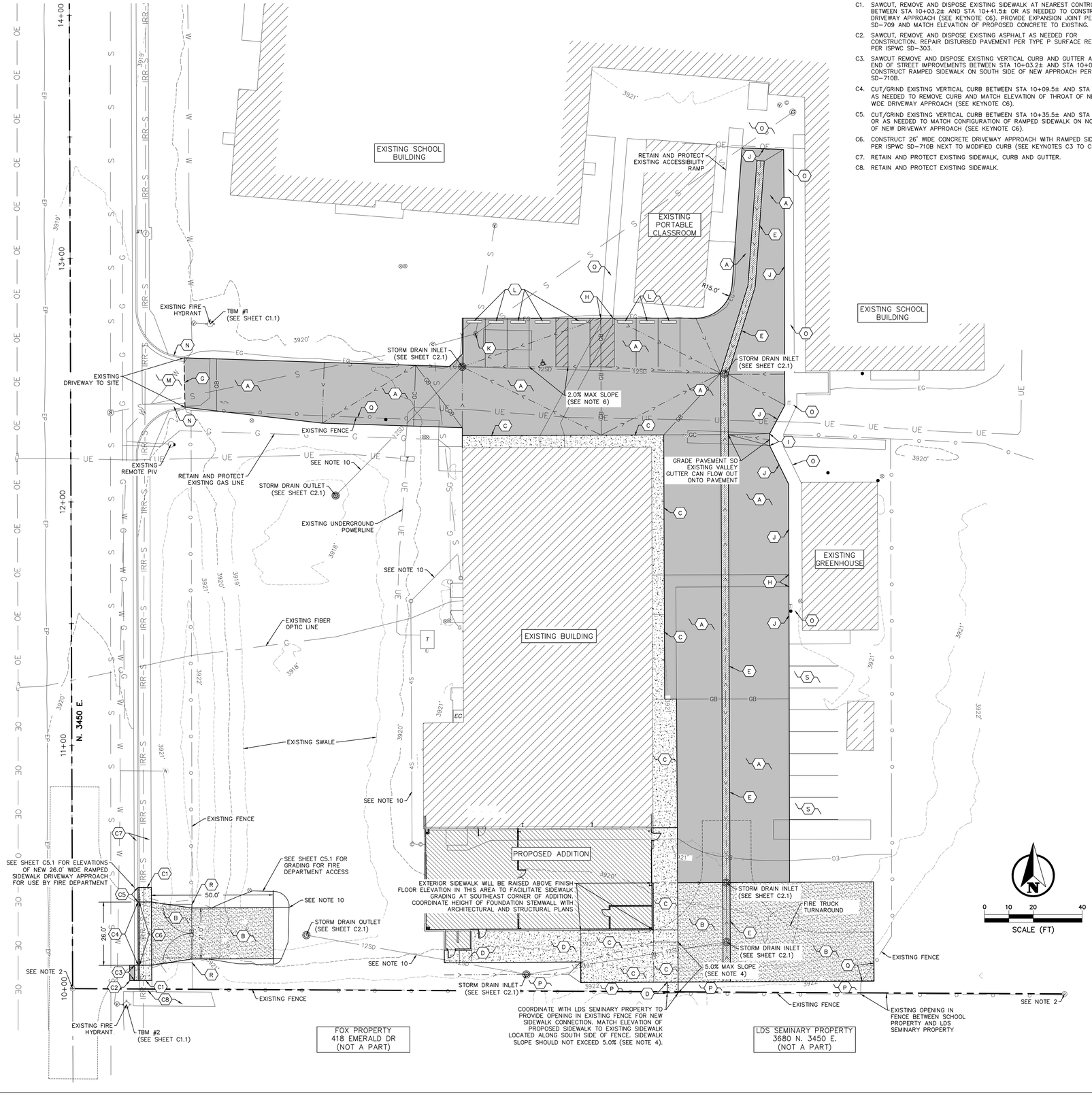
C3.1



STREET KEYNOTES

C1. SAWCUT, REMOVE AND DISPOSE EXISTING SIDEWALK AT NEAREST CONTROL JOINT BETWEEN STA 10+03.2± AND STA 10+41.5± OR AS NEEDED TO CONSTRUCT NEW DRIVEWAY APPROACH (SEE KEYNOTE C6). PROVIDE EXPANSION JOINT PER ISPWC SD-709 AND MATCH ELEVATION OF PROPOSED CONCRETE TO EXISTING.

C2. SAWCUT, REMOVE AND DISPOSE EXISTING ASPHALT AS NEEDED FOR CONSTRUCTION. REPAIR DISTURBED PAVEMENT PER TYPE P SURFACE RESTORATION PER ISPWC SD-303.

C3. SAWCUT REMOVE AND DISPOSE EXISTING VERTICAL CURB AND GUTTER AT SOUTH END OF STREET IMPROVEMENTS BETWEEN STA 10+03.2± AND STA 10+09.5±. CONSTRUCT RAMPED SIDEWALK ON SOUTH SIDE OF NEW APPROACH PER ISPWC SD-710B.

C4. CUT/GRIND EXISTING VERTICAL CURB BETWEEN STA 10+09.5± AND STA 10+35.5± AS NEEDED TO REMOVE CURB AND MATCH ELEVATION OF THROAT OF NEW 26' WIDE DRIVEWAY APPROACH (SEE KEYNOTE C6).

C5. CUT/GRIND EXISTING VERTICAL CURB BETWEEN STA 10+35.5± AND STA 10+41.5± OR AS NEEDED TO MATCH CONFIGURATION OF RAMPED SIDEWALK ON NORTH SIDE OF NEW DRIVEWAY APPROACH (SEE KEYNOTE C6).

C6. CONSTRUCT 26' WIDE CONCRETE DRIVEWAY APPROACH WITH RAMPED SIDEWALKS PER ISPWC SD-710B NEXT TO MODIFIED CURB (SEE KEYNOTES C3 TO C5).

C7. RETAIN AND PROTECT EXISTING SIDEWALK, CURB AND GUTTER.

C8. RETAIN AND PROTECT EXISTING SIDEWALK.

NOTES

1. SEE SHEET C1.1 FOR ADDITIONAL NOTES, LEGEND AND TEMPORARY BENCHMARK LOCATIONS AND ELEVATIONS.
2. CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTS DURING CONSTRUCTION. ANY MONUMENT DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED BY A PROFESSIONAL LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
3. COORDINATE WITH LANDSCAPERS AND LANDSCAPE PLAN FOR LOCATION OF SLEEVES FOR ONSITE PRESSURE IRRIGATION DISTRIBUTION SYSTEM. CONTRACTOR SHALL INSTALL SLEEVES PRIOR TO PAVING AND CONCRETE.
4. ADA ACCESSIBLE SIDEWALKS SHALL NOT EXCEED 2.0% CROSS SLOPE OR 5.0% GRADE IN ACCORDANCE TO ADA AND ANSI STANDARDS AND ARCHITECTURAL PLAN. CONTRACTOR SHALL FIELD VERIFY SLOPE PRIOR TO PLACING CONCRETE OR PAVING.
5. ADA RAMPS SHALL NOT EXCEED 1:12 SLOPE AND SHALL BE SIZED BY THE CONTRACTOR TO MEET ADA AND ANSI STANDARDS (E.G., 2.0% MAX LANDING AND 4.0' MIN. WIDTH).
6. ADA ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION AND BE IN ACCORDANCE TO ADA AND ANSI STANDARDS. CONTRACTOR SHALL FIELD VERIFY SLOPE PRIOR TO PLACING PAVING.
7. SEE ARCHITECTURAL PLANS FOR HORIZONTAL CONTROL / DIMENSIONED SITE PLAN.
8. SEE ARCHITECTURAL PLANS FOR SITE DEMOLITION PLAN. CONTRACTOR SHALL REMOVE AND DISPOSE ALL SITE FEATURES THAT CONFLICT WITH PROPOSED IMPROVEMENTS.
9. ABANDONED TEST PITS, STORM DRAINS OR ANY OTHER DISTURBED EXCAVATION LOCATED UNDER THE PROPOSED BUILDING OR PARKING LOT SHALL BE RE-EXCAVATED TO NATIVE SOIL AND BACKFILLED WITH STRUCTURAL FILL PER ISPWC SPECIFICATIONS. CONTRACTOR SHALL PROVIDE SOILS DATA TO VERIFY NATIVE MATERIAL OR ANY SOURCE USED FOR BACKFILL MEETS THE REQUIREMENTS OF ENGINEERED FILL PER ISPWC AND PROVIDE A COPY OF ALL COMPACTION TESTS TO THE CITY, UPON REQUEST.
10. RESTORE LANDSCAPING AND LANDSCAPING IRRIGATION DISTURBED BY CONSTRUCTION AS NEEDED.
11. STORMWATER RUNOFF WILL CONTINUE TO BE MANAGED IN THE EXISTING SWALE LOCATED ON THE WEST SIDE OF THE EXISTING BUILDING.
12. SEE SHEET C5.1 FOR SITE GRADING PLAN.
13. SEE SHEET C6.1 FOR SITE GRADING DETAILS.

SITE KEYNOTES

A. ASPHALT PAVING (SEE DETAIL A/C6.1), TYP.

B. GRAVEL FIRE DEPARTMENT ACCESS (SEE DETAIL B/C6.1), TYP.

C. FLUSH CONCRETE SIDEWALK/APRON (SEE DETAIL C/C6.1), TYP.

D. NON-TRAFFIC RATED SIDEWALK (SEE DETAIL D/C6.1), TYP.

E. 3' WIDE CONCRETE VALLEY GUTTER (SEE DETAIL E/C6.1), TYP.

F. RESERVED (KEYNOTE NOT CURRENTLY USED).

G. SAWCUT, REMOVE AND DISPOSE EXISTING ASPHALT PAVING AS NEEDED FOR CONSTRUCTION AND GRADING. TACKCOAT AND MATCH ELEVATION OF PROPOSED ASPHALT PAVING TO EXISTING, TYP.

H. SAWCUT, REMOVE AND DISPOSE EXISTING CONCRETE SIDEWALK AS NEEDED TO MATCH CONFIGURATION OF PROPOSED PARKING LOT. TACKCOAT AND MATCH ELEVATION OF PROPOSED ASPHALT PAVING TO EXISTING CONCRETE, TYP.

I. SAWCUT, REMOVE AND DISPOSE EXISTING CONCRETE VALLEY GUTTER AS NEEDED TO MATCH CONFIGURATION OF PROPOSED PARKING LOT. TACKCOAT AND MATCH ELEVATION OF PROPOSED ASPHALT PAVING TO EXISTING CONCRETE, AND GRADE PAVEMENT SO EXISTING VALLEY GUTTER CAN FLOW OUT ONTO PAVEMENT, TYP.

J. TACKCOAT ALONG OUTER EDGE OF CONCRETE SIDEWALK AND MATCH ELEVATION OF PROPOSED ASPHALT PAVING TO EXISTING CONCRETE, TYP.

K. ADJUST RIM OF EXISTING SEWER CLEANOUT TO BE FLUSH WITH FINISHED GRADE AND CONSTRUCT CONCRETE COLLAR PER ISPWC SD-506A (SEE SHEET C2.1).

L. CONCRETE WHEEL STOP ANCHORED TO PAVEMENT PER MANUFACTURER'S RECOMMENDATIONS, QTY 8±.

M. RETAIN AND PROTECT EXISTING ASPHALT PAVING, TYP.

N. RETAIN AND PROTECT EXISTING VERTICAL CURB AND GUTTER, TYP.

O. RETAIN AND PROTECT EXISTING SIDEWALK, TYP.

P. REGRADE AREA BETWEEN PROPERTY LINE AND PROPOSED IMPROVEMENTS AS SHOWN ON SHEET C5.1. RESTORE LANDSCAPING AND LANDSCAPING IRRIGATION AS NEEDED, TYP.

Q. RELOCATE/RECONSTRUCT EXISTING FENCE AS NEEDED TO AVOID PROPOSED DRIVEWAY AND PARKING LOT IMPROVEMENTS, TYP.

R. SEE ARCHITECTURAL PLANS FOR NEW 24' WIDE GATE.

S. PROVIDE AND INSTALL COMPACTED 3/4"-MINUS GRAVEL ON EAST SIDE OF PROPOSED ASPHALT PARKING LOT AS NEEDED TO GRADE TO PROVIDE SMOOTH TRANSITION TO EXISTING GRADE, TYP.

DATE 10/07/2024 REVIEW

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E. KIMBERLY, ID 83341
CIVIL SITE PLAN

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/07/2024
BRW Drawn | LBW Checked

C4.1
4 of 6

PROFESSIONAL ENGINEER REGISTERED 10077 10/07/2024 STATE OF IDAHO LANCE WARNICA

ASPEN ENGINEERS
1619 N. Linder Rd, Suite 110 · Kuna, Idaho 83634
Phone: 208-466-8181 · AspenEngineers.com

ASPEN JOB: 24010

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STREET KEYNOTES

SEE SHEET C4.1 FOR KEYNOTES FOR STREET IMPROVEMENTS FOR DRIVEWAY FOR FIRE DEPARTMENT ACCESS LOCATED IN SOUTHWEST CORNER OF SITE.

NOTES

1. SEE SHEET C1.1 FOR ADDITIONAL NOTES, LEGEND AND TEMPORARY BENCHMARK LOCATIONS AND ELEVATIONS.
2. CONTRACTOR SHALL PROTECT ALL SURVEY MONUMENTS DURING CONSTRUCTION. ANY MONUMENT DISTURBED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED BY A PROFESSIONAL LAND SURVEYOR AT THE EXPENSE OF THE CONTRACTOR.
3. COORDINATE WITH LANDSCAPERS AND LANDSCAPE PLAN FOR LOCATION OF SLEEVES FOR ONSITE PRESSURE IRRIGATION DISTRIBUTION SYSTEM. CONTRACTOR SHALL INSTALL SLEEVES PRIOR TO PAVING AND CONCRETE.
4. ADA ACCESSIBLE SIDEWALKS SHALL NOT EXCEED 2.0% CROSS SLOPE OR 5.0% GRADE IN ACCORDANCE TO ADA AND ANSI STANDARDS AND ARCHITECTURAL PLAN. CONTRACTOR SHALL FIELD VERIFY SLOPE PRIOR TO PLACING CONCRETE OR PAVING.
5. ADA RAMPS SHALL NOT EXCEED 1:12 SLOPE AND SHALL BE SIZED BY THE CONTRACTOR TO MEET ADA AND ANSI STANDARDS (E.G., 2.0% MAX LANDING AND 4.0' MIN. WIDTH).
6. ADA ACCESSIBLE PARKING SPACES SHALL NOT EXCEED 2.0% SLOPE IN ANY DIRECTION AND BE IN ACCORDANCE TO ADA AND ANSI STANDARDS. CONTRACTOR SHALL FIELD VERIFY SLOPE PRIOR TO PLACING PAVING.
7. SEE ARCHITECTURAL PLANS FOR HORIZONTAL CONTROL / DIMENSIONED SITE PLAN.
8. SEE ARCHITECTURAL PLANS FOR SITE DEMOLITION PLAN. CONTRACTOR SHALL REMOVE AND DISPOSE ALL SITE FEATURES THAT CONFLICT WITH PROPOSED IMPROVEMENTS.
9. ABANDONED TEST PITS, STORM DRAINS OR ANY OTHER DISTURBED EXCAVATION LOCATED UNDER THE PROPOSED BUILDING OR PARKING LOT SHALL BE RE-EXCAVATED TO NATIVE SOIL AND BACKFILLED WITH STRUCTURAL FILL PER ISPWC SPECIFICATIONS. CONTRACTOR SHALL PROVIDE SOILS DATA TO VERIFY NATIVE MATERIAL OR ANY SOURCE USED FOR BACKFILL MEETS THE REQUIREMENTS OF ENGINEERED FILL PER ISPWC AND PROVIDE A COPY OF ALL COMPACTION TESTS TO THE CITY, UPON REQUEST.
10. RESTORE LANDSCAPING AND LANDSCAPING IRRIGATION DISTURBED BY CONSTRUCTION AS NEEDED.
11. STORMWATER RUNOFF WILL CONTINUE TO BE MANAGED IN THE EXISTING SWALE LOCATED ON THE WEST SIDE OF THE EXISTING BUILDING.
12. SEE SHEET C4.1 FOR SITE GRADING PLAN.
13. SEE SHEET C6.1 FOR SITE GRADING DETAILS.
14. ADD 3900' TO TRUNCATED SITE ELEVATIONS TO CONVERT TO THE PROJECT DATUM.
15. FINISHED CONTOUR LINES ARE SHOWN AT AN INTERVAL OF 0.5'.

SITE KEYNOTES

SEE SHEET C4.1 FOR KEYNOTES FOR SITE IMPROVEMENTS.

EXISTING SCHOOL BUILDING
RETAIN AND PROTECT EXISTING ACCESSIBILITY RAMP
EXISTING PORTABLE CLASSROOM
EXISTING SCHOOL BUILDING
EXISTING FIRE HYDRANT
TBM #1 (SEE SHEET C1.1)
EXISTING DRIVEWAY TO SITE
EXISTING REMOTE PIV
2.0% MAX SLOPE (SEE NOTE 6)
GRADE PAVEMENT SO EXISTING VALLEY GUTTER CAN FLOW OUT ONTO PAVEMENT
EXISTING GREENHOUSE
EXISTING BUILDING FF ELEV 3920.95± (FIELD VERIFY)
EXISTING SWALE
PROPOSED ADDITION FF ELEV 3920.95± (MATCH EXISTING)
HEIGHT OF FOUNDATOIN STEMWALL IN THIS LOCATION SHALL BE 8" HIGHER, TO ALLOW SIDEWALK TO BE RAISED UP ABOVE FINISH FLOOR ELEVATION. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL PLANS
SEE SHEET C4.1 FOR KEYNOTES FOR NEW 26.0' WIDE RAMPED SIDEWALK DRIVEWAY APPROACH FOR USE BY FIRE DEPARTMENT
SEE NOTE 2
TBM #2 (SEE SHEET C1.1)
EXISTING FIRE HYDRANT
5.0% MAX SLOPE (SEE NOTE 4)
EXISTING FENCE
SEE NOTE 2
N. 3450 E.
FOX PROPERTY 418 EMERALD DR (NOT A PART)
LDS SEMINARY PROPERTY 3680 N. 3450 E. (NOT A PART)

0 10 20 40
SCALE (FT)

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DATE 10/07/2024 REVIEW

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, KIMBERLY, ID 83341
SITE GRADING PLAN

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East * Twin Falls, Idaho 83301
(208) 736-8050

PROFESSIONAL ENGINEER REGISTERED 10077 10/07/2024 STATE OF IDAHO LANCE WARNICA

ASPEN ENGINEERS
1619 N. Linder Rd, Suite 110 · Kuna, Idaho 83634
Phone: 208-466-8181 · AspenEngineers.com

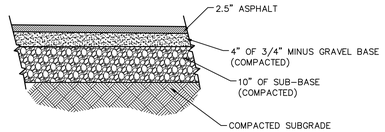
ASPEN JOB: 24010

DATE: 10/07/2024
BRW Drawn LBW Checked

C5.1
5 of 6

NOTES

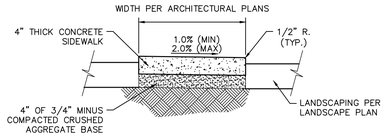
1. THESE DETAILS APPLY ONLY TO THE ON-SITE IMPROVEMENTS ON THE PROPERTY AND DO NOT APPLY TO IMPROVEMENTS IN THE PUBLIC RIGHT-OF-WAY.
2. SUBGRADE IN PAVED AREAS SHALL COMPACTED TO AT LEAST 95% MDD, OR PROOF ROLLED TO THE SATISFACTION OF THE 3RD PARTY GEOTECHNICAL TESTING FIRM HIRED BY THE CONTRACTOR TO DEMONSTRATE COMPLIANCE WITH ISPWC REQUIREMENTS.
3. SUB-BASE AREAS SHALL BE COMPACTED TO AT LEAST 95% MDD. CONTRACTOR SHALL HIRE A 3RD PARTY GEOTECHNICAL TESTING FIRM TO DEMONSTRATE COMPLIANCE WITH COMPACTION REQUIREMENTS AND TESTING FREQUENCY PER ISPWC 801.
4. 3/4" MINUS GRAVEL BASE SHALL BE COMPACTED TO AT LEAST 95% MDD. CONTRACTOR SHALL HIRE A 3RD PARTY GEOTECHNICAL TESTING FIRM TO DEMONSTRATE COMPLIANCE WITH COMPACTION REQUIREMENTS AND TESTING FREQUENCY PER ISPWC 802.
5. ASPHALT PAVING SHALL BE COMPACTED IN ACCORDANCE WITH ISPWC 810. CONTRACTOR SHALL HIRE A 3RD PARTY GEOTECHNICAL TESTING FIRM TO DEMONSTRATE WITH COMPACTION REQUIREMENTS AND TESTING FREQUENCY PER ISPWC 810.



NOTES:

1. ASPHALT PAVING SHALL BE CLASS III PLANT MIX PAVEMENT PER ISPWC 810 WITH 1/2" AGGREGATE PER ISPWC 803.
2. 3/4" MINUS BASE SHALL BE TYPE I CRUSHED AGGREGATE BASE PER ISPWC 802.2.2.
3. SUB-BASE SHALL BE 6"-MINUS UNCRUSHED AGGREGATE PER ISPWC 801.2.2.
4. THE CONTRACTOR SHALL COORDINATE WITH OWNER IF ALTERATIVE PAVEMENT THICKNESS IF DESIRED DUE TO POTENTIAL MAINTENANCE ISSUES OR ANTICIPATED TRAFFIC INDEX.

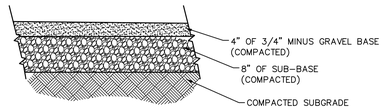
ASPHALT PAVEMENT SECTION (A / C6.1)
SCALE: N.T.S.



NOTES:

1. SEE ISPWC SD-709 FOR MORE INFORMATION.
2. CONCRETE SHALL BE 3,000 PSI PORTLAND CEMENT CONCRETE PER ISPWC 703.
3. 3/4" MINUS BASE SHALL BE TYPE I CRUSHED AGGREGATE BASE PER ISPWC 802.2.2.
4. SCORE AT INTERVALS TO MATCH WIDTH OF WALK, BUT DO NOT EXCEED 5' SPACING.
5. SIDEWALK CROSS-SLOPE SHALL BE TARGETED TO BE 1.1% TO 1.8% AND NO GREATER THAN 2.0% TO COMPLY WITH ADA STANDARDS. ADA DOES NOT ALLOW TOLERANCES IN EXCESS OF THIS STANDARD
6. THIS DETAIL APPLIES TO SIDEWALKS IN LANDSCAPE AREAS ONLY.

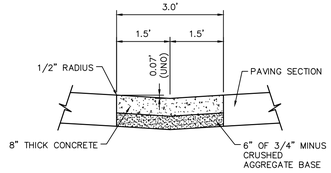
CONCRETE SIDEWALK SECTION (NON-TRAFFIC RATED) (D / C6.1)
SCALE: N.T.S.



NOTES:

1. 3/4" MINUS BASE SHALL BE TYPE I CRUSHED AGGREGATE BASE PER ISPWC 802.2.2.
2. SUB-BASE SHALL BE 6"-MINUS UNCRUSHED AGGREGATE PER ISPWC 801.2.2.
3. THE CONTRACTOR SHALL COORDINATE WITH OWNER IF ALTERATIVE GRAVEL THICKNESS IF DESIRED DUE TO POTENTIAL MAINTENANCE ISSUES OR ANTICIPATED TRAFFIC INDEX.

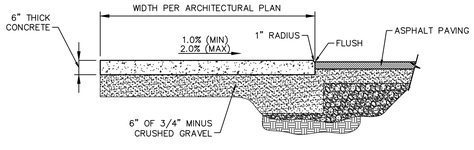
GRAVEL FIRE DEPARTMENT ACCESS SECTION (B / C6.1)
SCALE: N.T.S.



NOTES:

1. SEE ISPWC SD-708 FOR MORE INFORMATION.
2. CONCRETE SHALL BE 3,000 PSI PORTLAND CEMENT CONCRETE PER ISPWC 703.
3. 3/4" MINUS BASE SHALL BE PER ISPWC 802.2.2.
4. SCORE GUTTER AT MAXIMUM INTERVAL OF 8'.

CONCRETE VALLEY GUTTER (3' WIDE) SECTION (E / C6.1)
SCALE: N.T.S.



NOTES:

1. SEE ISPWC SD-709 FOR MORE INFORMATION.
2. CONCRETE SHALL BE 3,000 PSI PORTLAND CEMENT CONCRETE PER ISPWC 703.
3. 3/4" MINUS BASE SHALL BE TYPE I CRUSHED AGGREGATE BASE PER ISPWC 802.2.2.
4. SCORE AT INTERVALS TO MATCH WIDTH OF WALK, BUT DO NOT EXCEED 5' SPACING.
5. SIDEWALK CROSS-SLOPE SHALL BE TARGETED TO BE 1.1% TO 1.8% AND NO GREATER THAN 2.0% TO COMPLY WITH ADA STANDARDS. ADA DOES NOT ALLOW TOLERANCES IN EXCESS OF THIS STANDARD.

FLUSH CONCRETE APRON (C / C6.1)
SCALE: N.T.S.

P:\2024\24010\Drawings\Civil\Rev\24010_C6.1 Site Grading Details.dwg — Lance — Oct 04, 2024 — 3:30pm

DATE 10/07/2024 REVIEW

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, KIMBERLY, ID 83341
SITE GRADING DETAILS

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East * Twin Falls, Idaho 83301
(208) 736-8050

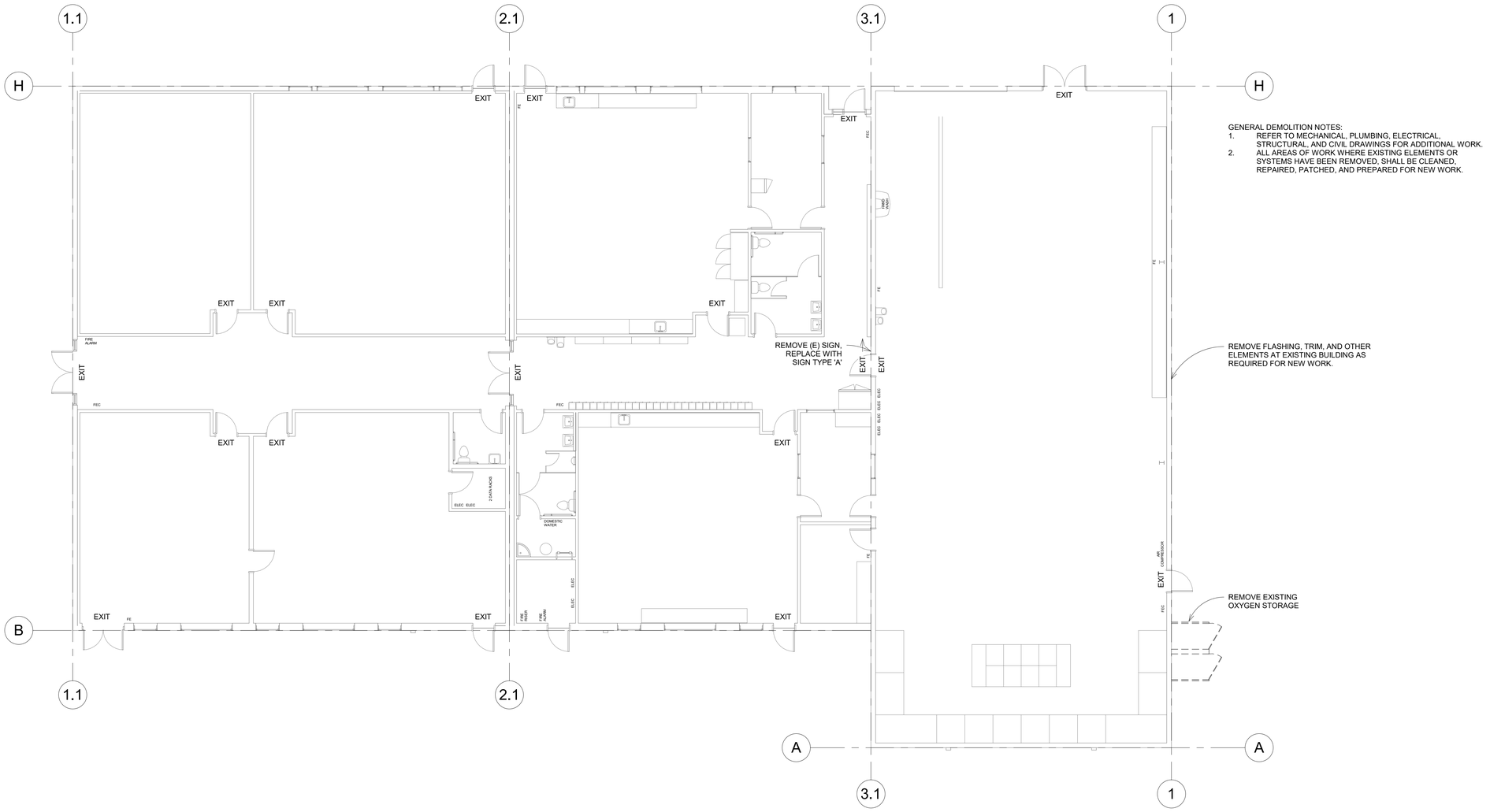
PROFESSIONAL ENGINEER REGISTERED 10077 10/07/2024 STATE OF IDAHO LANCE WARNICK

ASPEN ENGINEERS
1619 N. Linder Rd, Suite 110 · Kuna, Idaho 83634
Phone: 208-466-8181 · AspenEngineers.com

ASPEN JOB: 24010

DATE: 10/07/2024
BRW Drawn | LBW Checked

C6.1
6 of 6



GENERAL DEMOLITION NOTES:

1. REFER TO MECHANICAL, PLUMBING, ELECTRICAL, STRUCTURAL, AND CIVIL DRAWINGS FOR ADDITIONAL WORK.
2. ALL AREAS OF WORK WHERE EXISTING ELEMENTS OR SYSTEMS HAVE BEEN REMOVED, SHALL BE CLEANED, REPAIRED, PATCHED, AND PREPARED FOR NEW WORK.

1 DEMO FLOOR PLAN
1/8" = 1'-0"

LICENSED ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
DEMO FLOOR PLAN

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#23067 PROJECT #

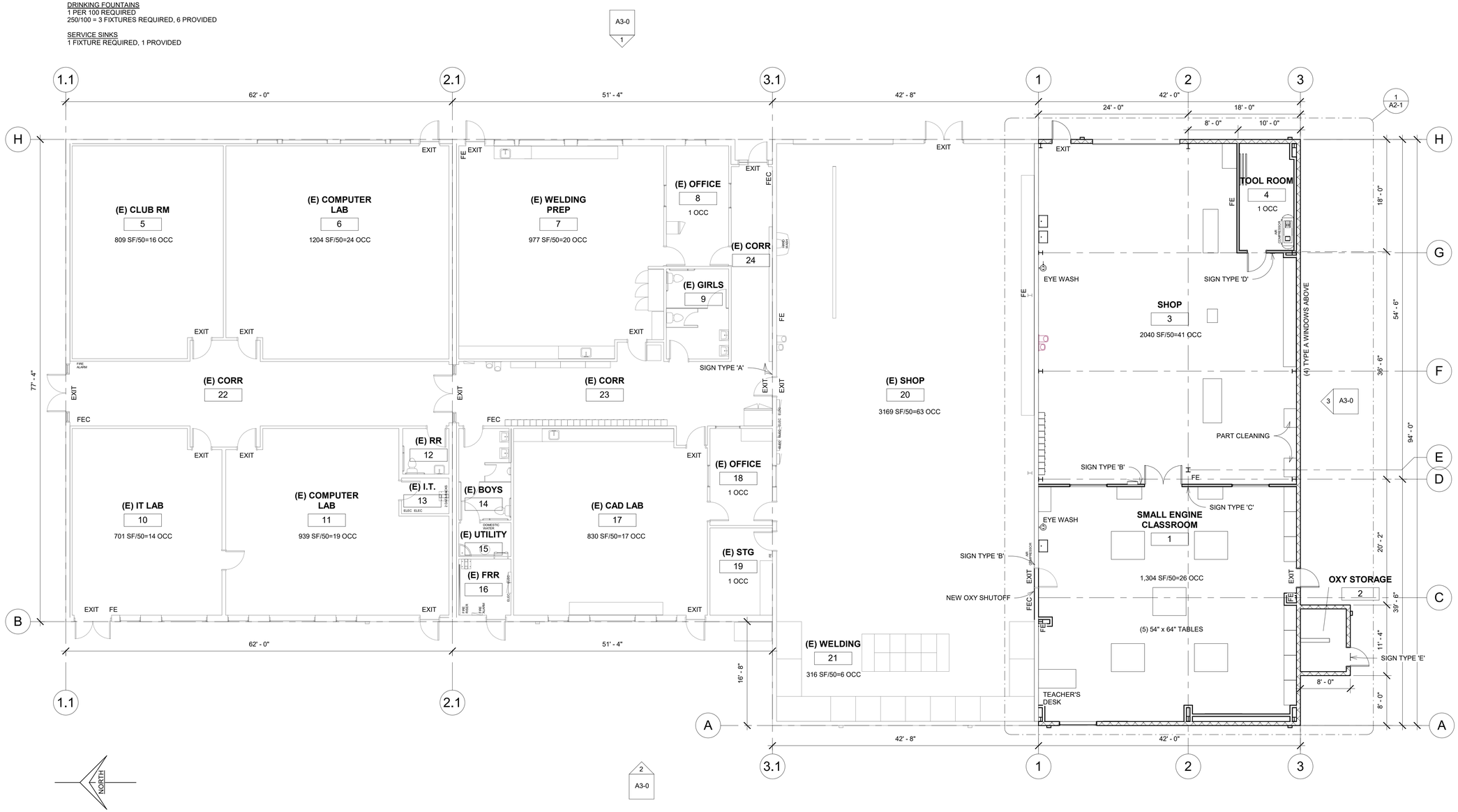
A1-3

PLUMBING FIXTURE COUNT
250 TOTAL OCCUPANTS
1 PER 50 REQUIRED
250/50 = 5 FIXTURES REQUIRED, 5 PROVIDED

LAVATORIES
MALE/FEMALE 1 PER 50 REQUIRED
250/50 = 5 FIXTURES REQUIRED, 9 PROVIDED

DRINKING FOUNTAINS
1 PER 100 REQUIRED
250/100 = 3 FIXTURES REQUIRED, 6 PROVIDED

SERVICE SINKS
1 FIXTURE REQUIRED, 1 PROVIDED



1 ROTATED NEW FLOOR PLAN
1/8" = 1'-0"

LICENSED ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
ROTATED OVERALL FLOOR PLAN

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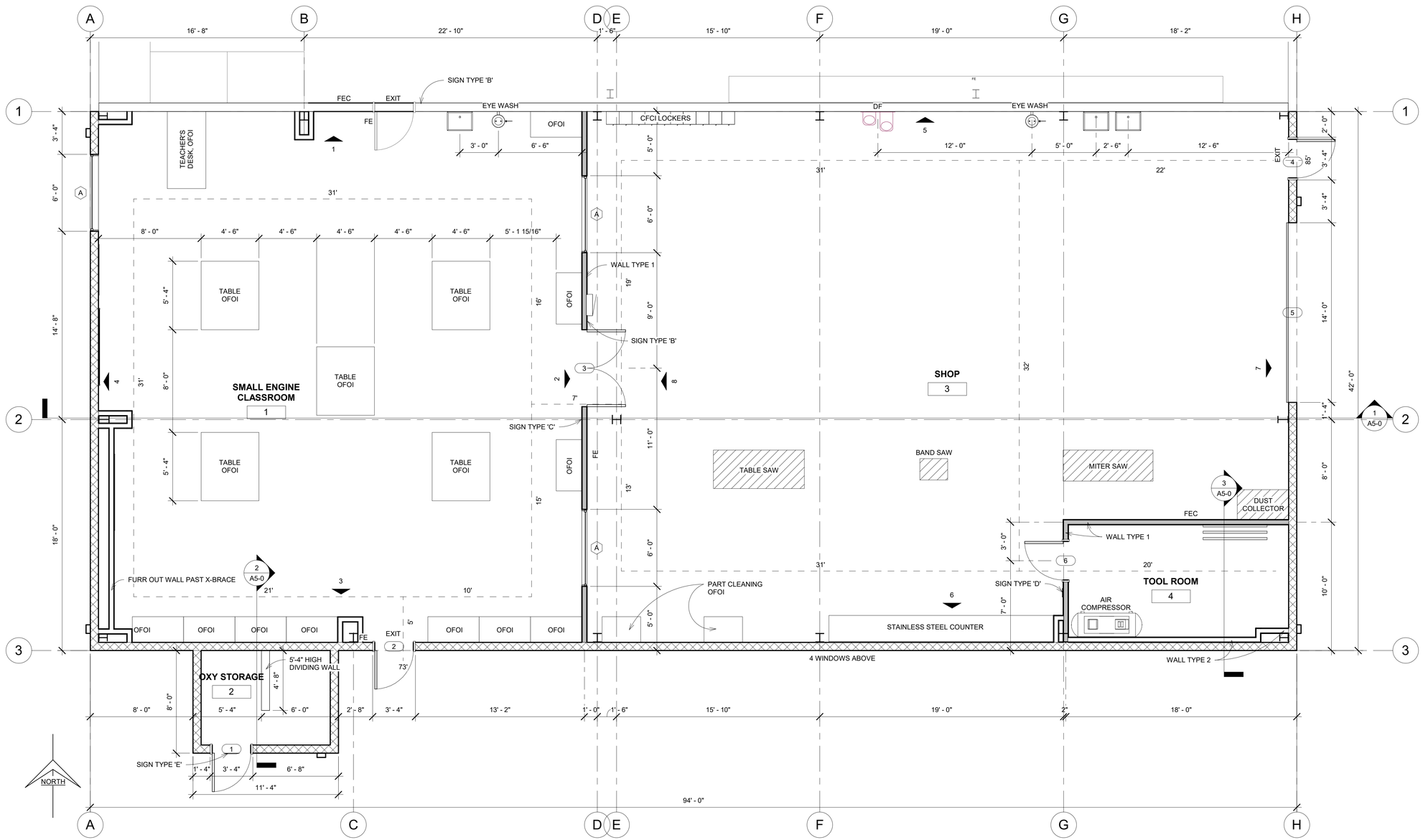
#23067 PROJECT #

A2-0

1. ALL NEW INTERIOR WALLS SHALL BE WALL TYPE 1: 3 5/8" METAL STUDS W/ 5/8" GYP BD EA. SIDE U.N.O.
2. ALL FURRING WALLS @ COLUMNS SHALL BE WALL TYPE 2: 3 5/8" METAL STUDS W/ 5/8" GYP BD ON THE EXT SIDE
3. ALL NEW INTERIOR WALLS SHALL HAVE SOUND BATT INSULATION

GENERAL NOTES
1/4" = 1'-0"



1 ENLARGED FLOOR PLAN
1/4" = 1'-0"

LICENSED ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
ENLARGED FLOOR PLAN

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East * Twin Falls, Idaho 83301
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#23067 PROJECT #

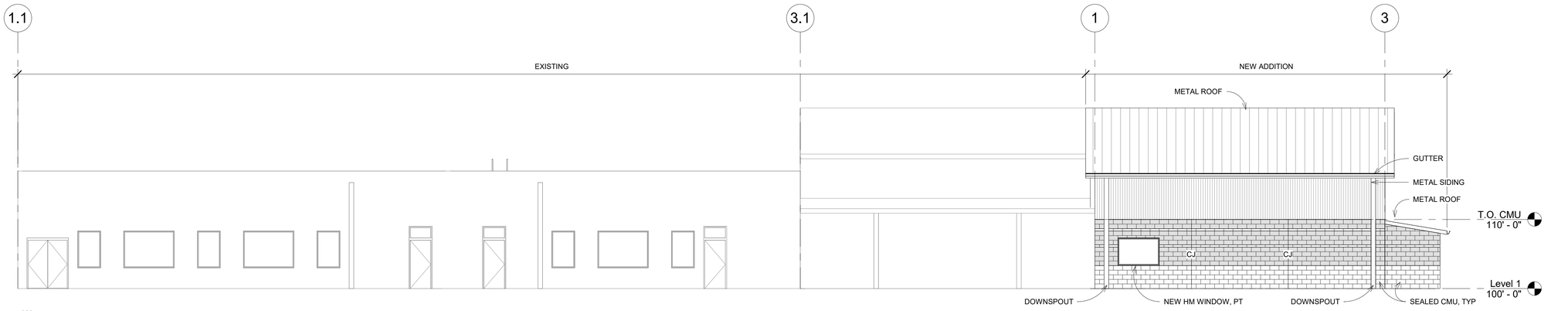
A2-1

ALL EXTERIOR CMU SHALL HAVE FOAM-IN-PLACE INSULATION EXCEPT FOR THE 3 OXY STORAGE WALLS

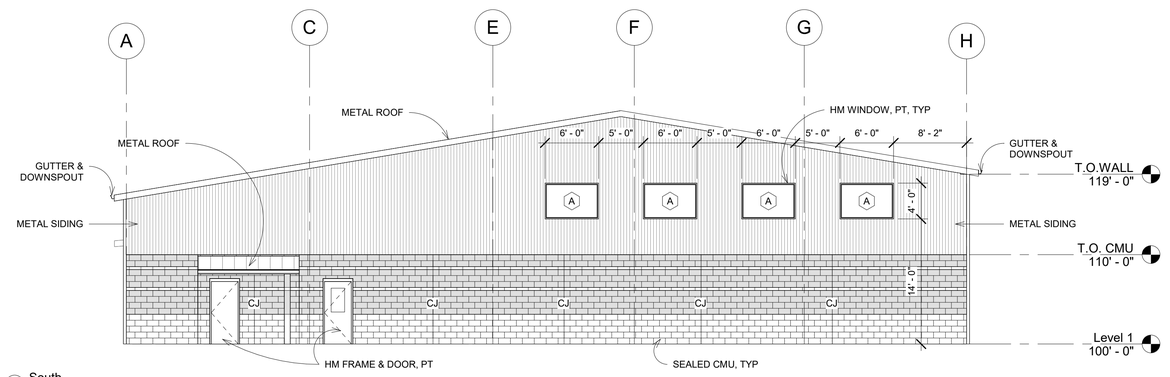
SMOOTH FACE CMU - CHESTNUT, VERIFY COLOR TO MATCH (E)

(ALL OTHER EXT CMU)
SPLIT FACE CMU - PYRAMID, VERIFY COLOR TO MATCH (E)

1 East
1/8" = 1'-0"



2 West
1/8" = 1'-0"



3 South
1/8" = 1'-0"

LICENSED ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3882 N 3450 E, Kimberly, ID 83341
EXTERIOR ELEVATIONS

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architecture/planning
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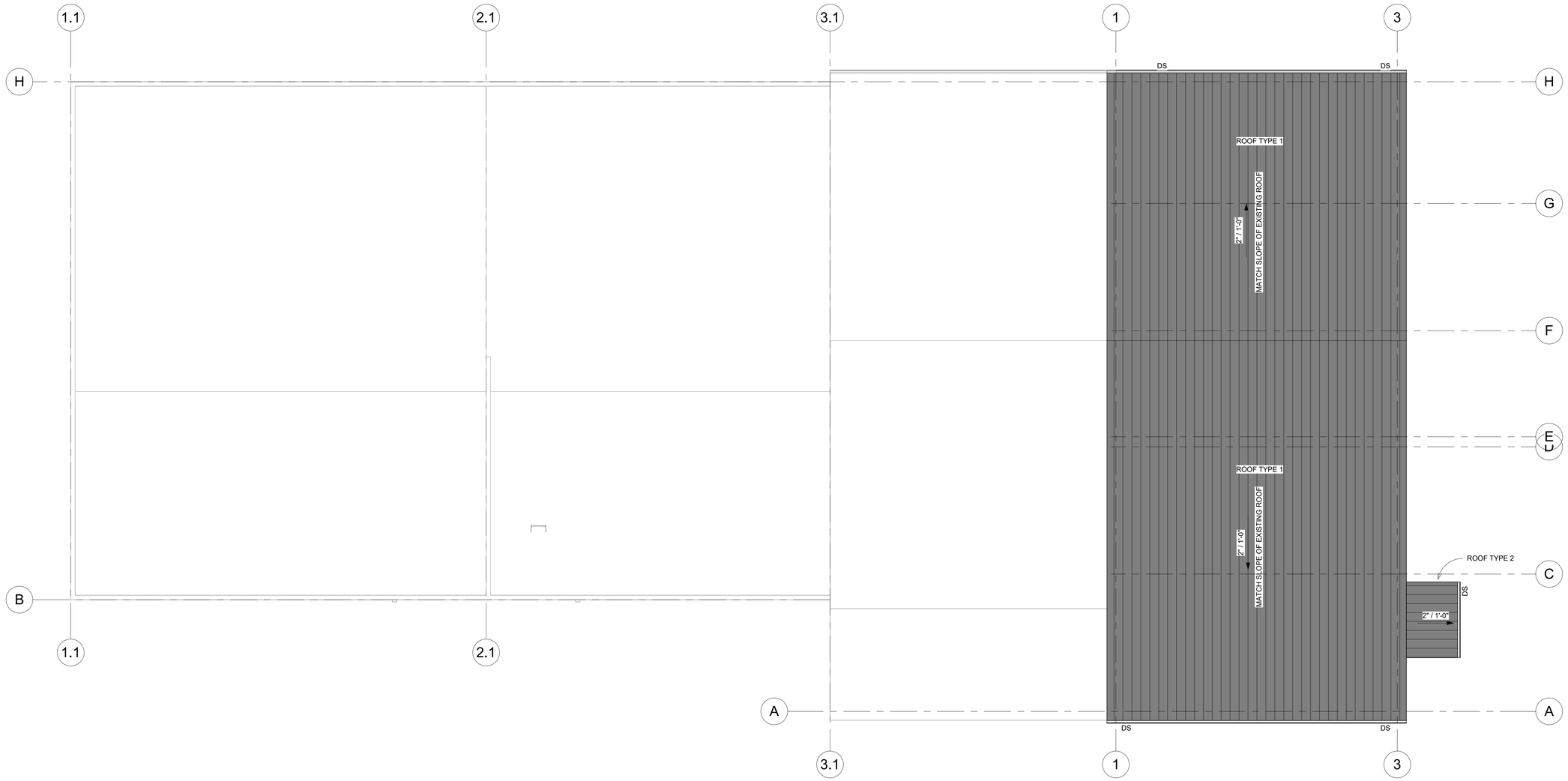
#23067 PROJECT #

A3-0

ROOF TYPE 1:
METAL ROOF OVER
PEMB INSULATION & STRUCTURE

ROOF TYPE 2:
METAL ROOF OVER
METAL STUD ROOF JOISTS



1 NEW ROOF PLAN
1/8" = 1'-0"

LICENSED
ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3882 N 3450 E, Kimberly, ID 83341
NEW ROOF PLAN

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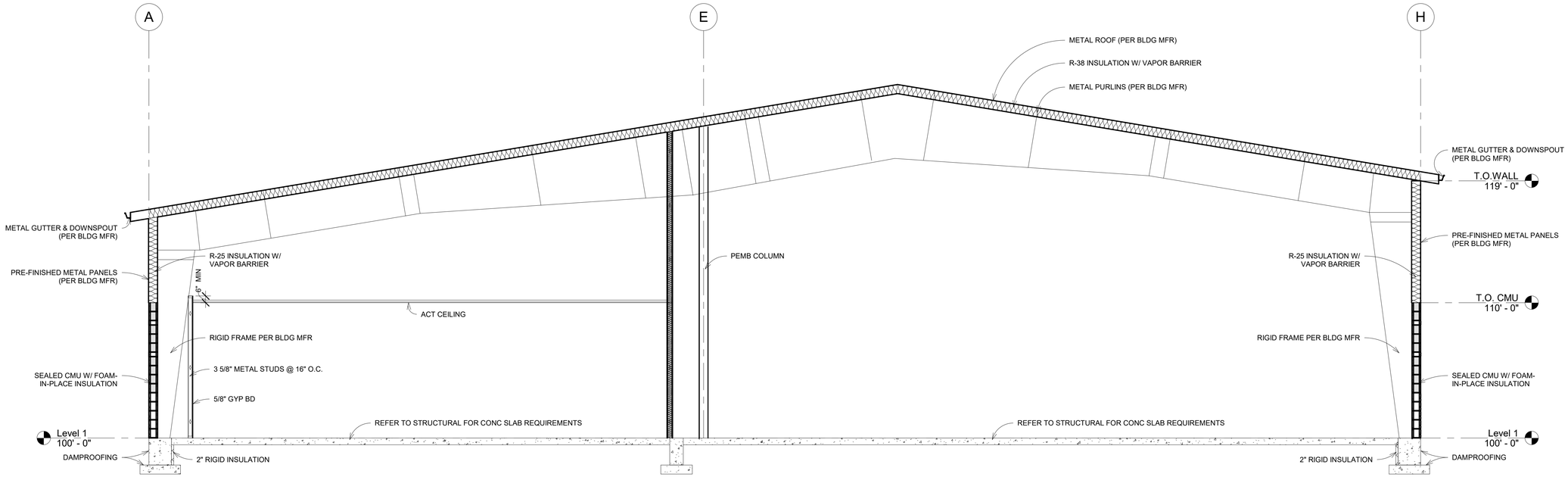
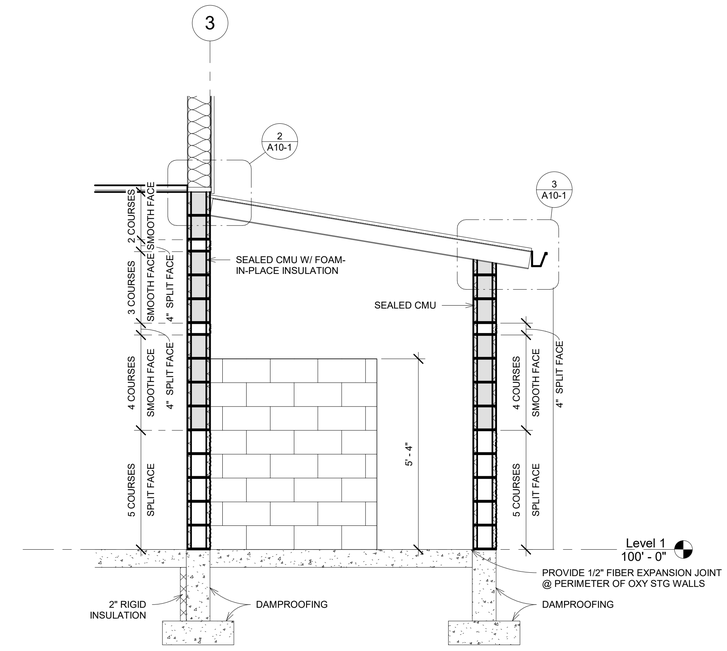
#23067 PROJECT #

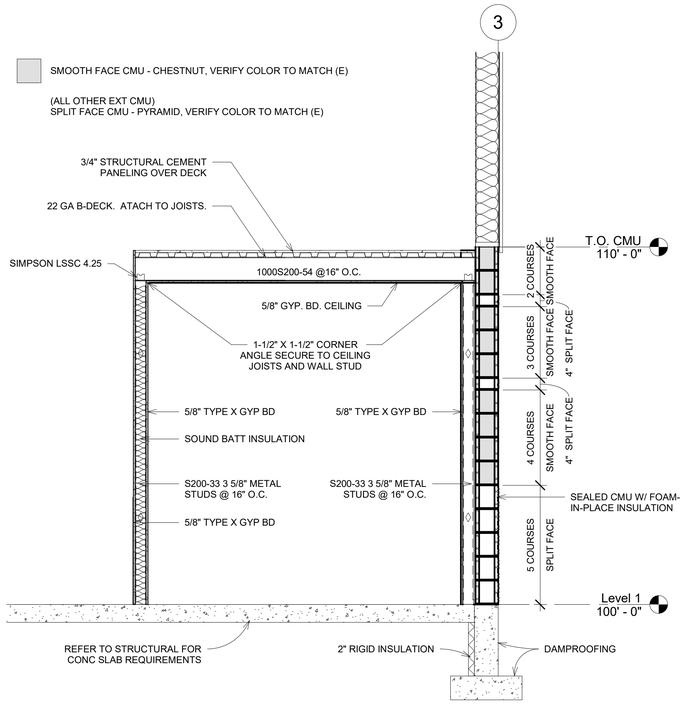
A4-0



1 BLDG SECTION
1/4" = 1'-0"



2 OXY STORAGE
1/2" = 1'-0"



3 TOOL ROOM CEILING
1/2" = 1'-0"

LICENSED ARCHITECT AR-985708
R. COLBY RICKS STATE OF IDAHO
10/8/2024

DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
BLDG SECTIONS

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architecture/planning
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(208) 736-8050

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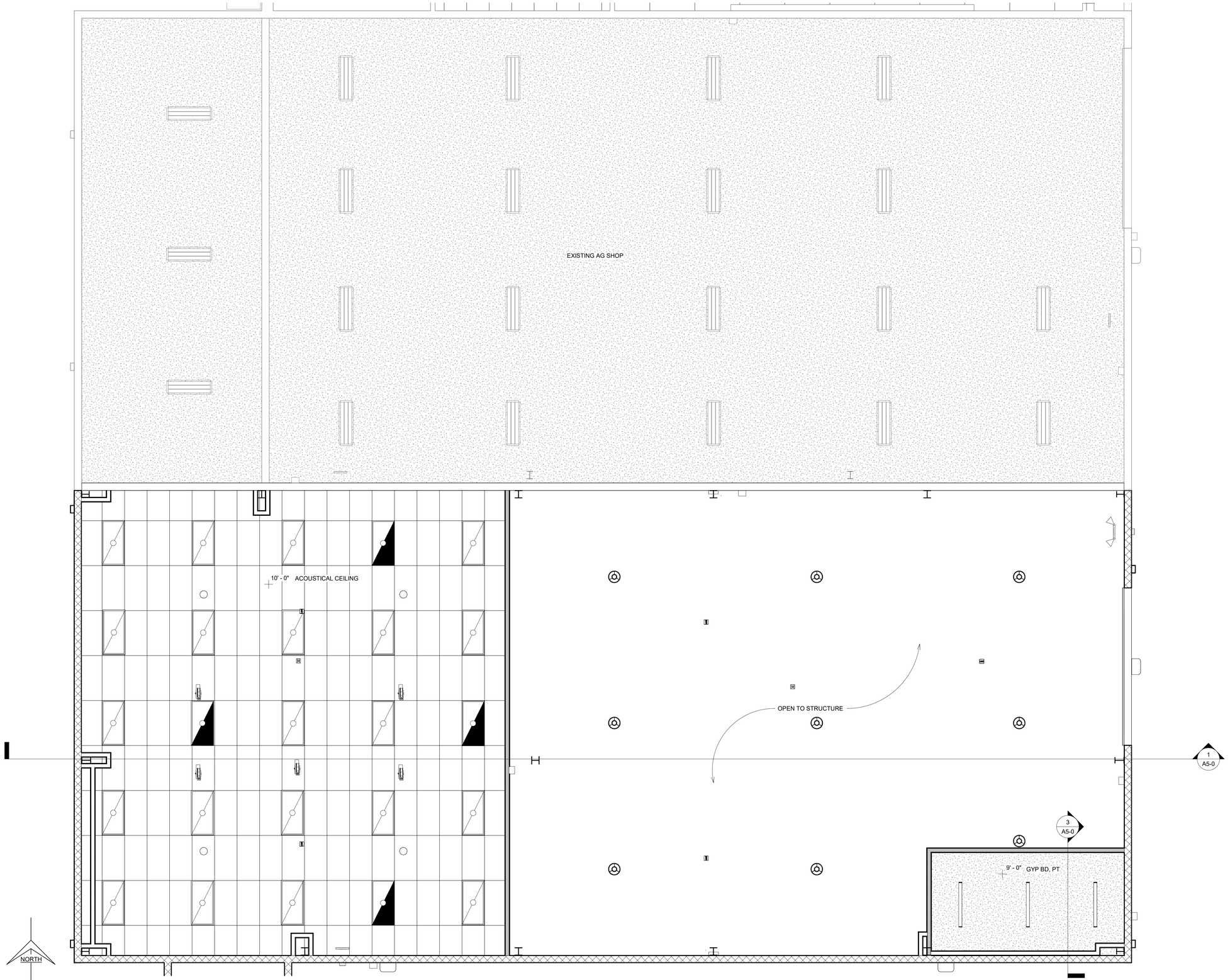
#23067 PROJECT #

A5-0



1 NEW CEILING PLAN
1/4" = 1'-0"

LICENSED
ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E. Kimberly, ID 83341
NEW CEILING PLAN

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architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
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DATE: 10/8/2024
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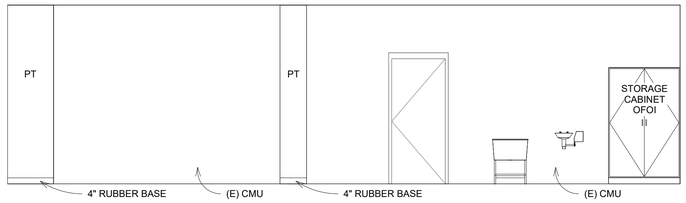
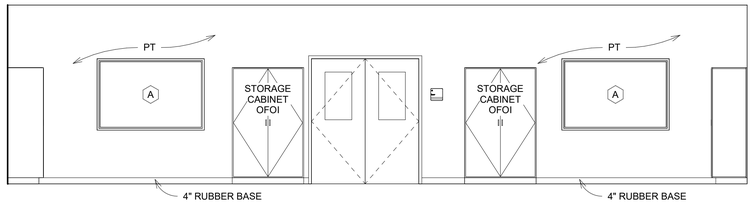
RCR Checked
#23067 PROJECT #

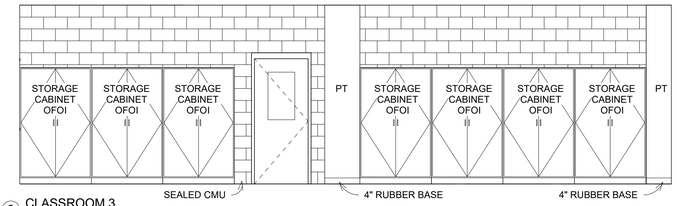
A7-0



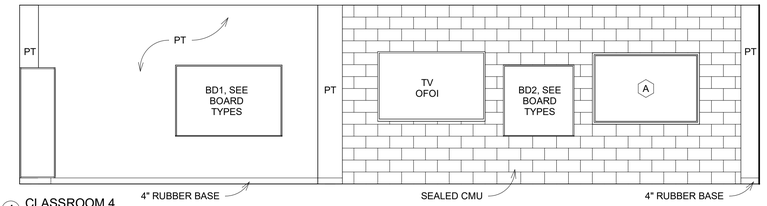
1 CLASSROOM 1
1/4" = 1'-0"



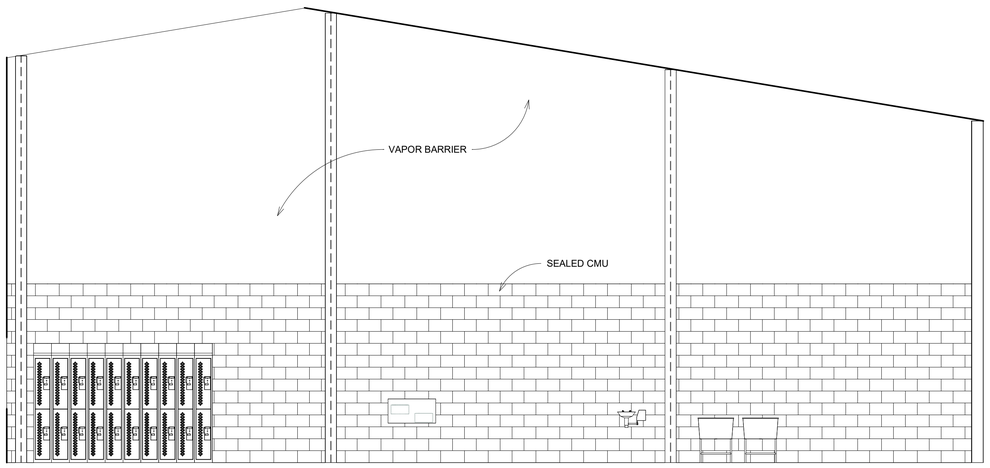
2 CLASSROOM 2
1/4" = 1'-0"



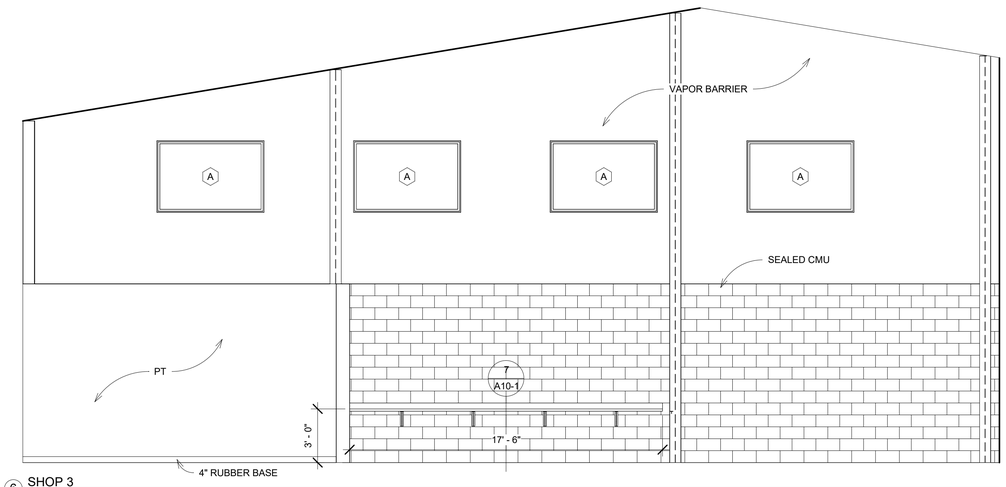
3 CLASSROOM 3
1/4" = 1'-0"



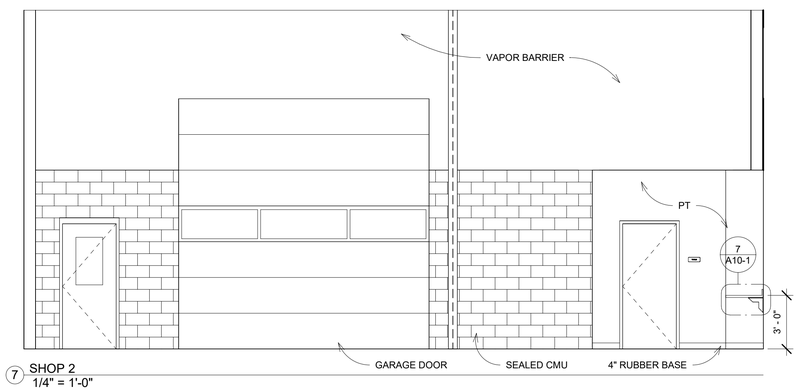
4 CLASSROOM 4
1/4" = 1'-0"



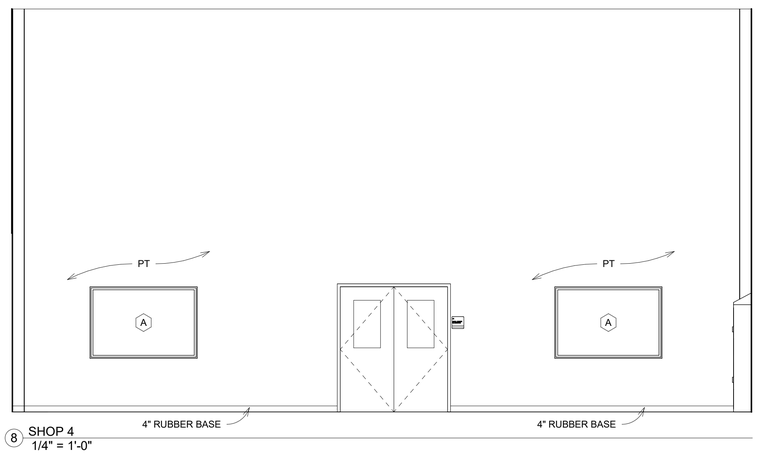
5 SHOP 1
1/4" = 1'-0"



6 SHOP 3
1/4" = 1'-0"



7 SHOP 2
1/4" = 1'-0"



8 SHOP 4
1/4" = 1'-0"

LICENSED ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
INTERIOR ELEVATIONS

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/8/2024
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A8-0

Door Schedule													
						DOOR			ACCESS	FRAME			
DOOR	ROOM	EL	Width	Height	Thickness	Material	Finish	Accessories	CONTROL	Material	Finish	Door Glass	Comments
1	OXY STORAGE	d	3' - 0"	7' - 0"	2"	HM	PT	ENTRY LEVER/ STORAGE/ CLOSER/ WEATHER-STRIP/ THRESHOLD		HM	PT		
2	SMALL ENGINE CLASSROOM	e	3' - 0"	7' - 0"	2"	HM	PT	ENTRY LEVER/ CLOSER/ WEATHER-STRIP/ THRESHOLD		HM	PT	TEMPERED	
3	SMALL ENGINE CLASSROOM	b	6' - 0"	7' - 0"	2"	HM	PT	CLASSROOM		HM	PT	TEMPERED	
4	SHOP	e	3' - 0"	7' - 0"	2"	HM	PT	ENTRY LEVER/ CLOSER/ WEATHER-STRIP/ THRESHOLD		HM	PT	TEMPERED	
5	SHOP	a	14' - 0"	14' - 0"	1 1/2"	STEEL	FF	PER MANUF		STEEL	FF	TEMPERED	OVERHEAD DOOR 592 SERIES
6	TOOL ROOM	c	3' - 0"	7' - 0"	2"	HM	PT	STORAGE		HM	PT		

CLASSROOM: LEVER. DOOR CAN BE LOCKED FROM THE INSIDE. LEVER ALWAYS OPENS FROM THE INSIDE.

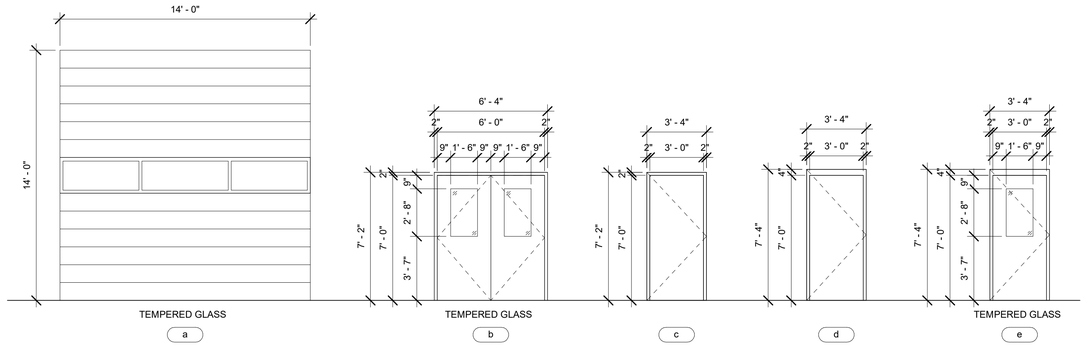
ENTRY: LEVER. KEY REQUIRED. DOOR CAN BE LOCKED FROM THE INSIDE. LEVER ALWAYS OPENS FROM THE INSIDE.

PASSAGE: LEVER. ALWAYS UNLOCKED. LEVER OPENS FROM EITHER SIDE.

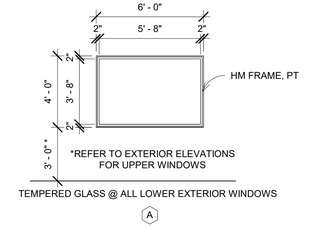
PRIVACY: LEVER. DOOR CAN BE LOCKED FROM THE INSIDE. LEVER DEACTIVATES LOCK IN SINGLE MOTION.

STORAGE: LEVER. KEY REQUIRED. THE OUTSIDE LEVER IS ALWAYS LOCKED. LEVER ALWAYS OPENS FROM THE INSIDE.

DOOR HARDWARE GENERAL NOTES
1/4" = 1'-0"

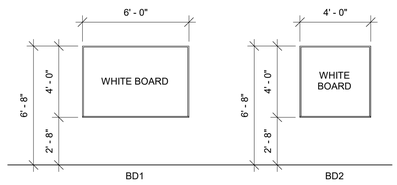


DOOR TYPES
1/4" = 1'-0"

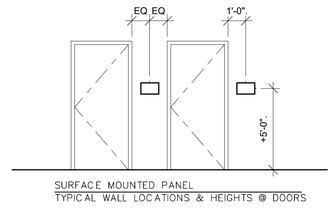


WINDOW TYPES
1/4" = 1'-0"

Room Finish Schedule														
				Materials				Finishes				Ceiling		
Number	Name	Base Finish	Floor Finish	North	East	South	West	North	East	South	West	Material	Ceiling Finish	Remarks
1	SMALL ENGINE CLASSROOM	4" RUBBER @ GYP BD	SEALED CONC	(E) CMU	GYP BD	CMU	CMU/GYP BD	SEALED	PT	SEALED	SEALED/ PT GYP BD	2X4 ACT	FF	
2	OXY STORAGE	-	SEALED CONC	CMU	CMU	CMU	CMU	SEALED	SEALED	SEALED	SEALED	OPEN TO STRUCTURE	-	
3	SHOP	4" RUBBER @ GYP BD	SEALED CONC	(E) CMU	CMU, GYP BD	CMU, GYP BD	GYP BD	SEALED	PT GYP BD	PT GYP BD	PT GYP BD	OPEN TO STRUCTURE	-	
4	TOOL ROOM	4" RUBBER @ GYP BD	SEALED CONC	GYP BD	CMU	GYP BD	GYP BD	PT	SEALED	PT	PT	GYP BD	PT	

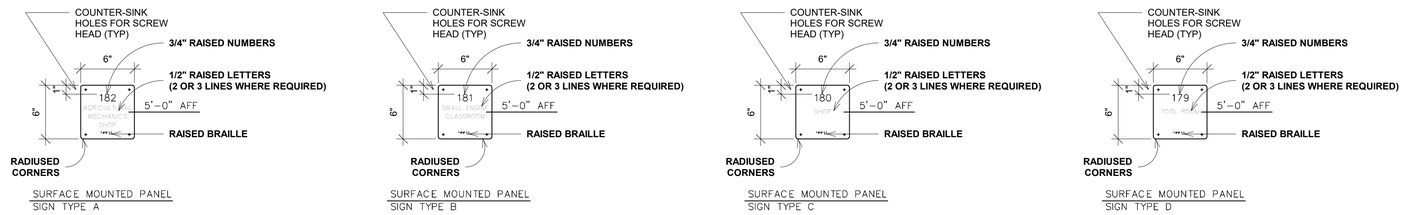


BOARD TYPES
1/4" = 1'-0"

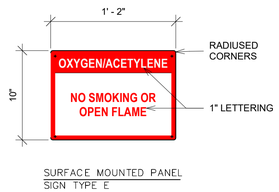


1 SURFACE MOUNTED PANEL
1 1/2" = 1'-0"

SIGNAGE SHALL BE BLACK W/ WHITE LETTERING TO MATCH (E)



2 SIGNAGE - SIGNAGE TYPES
1 1/2" = 1'-0"



1. SHALL BE FABRICATED FROM .080 ALUMINUM SHEET WITH MIN. OF .75" RADIUS CORNERS
2. FONT STYLE IS HANDEL GOTHIC BT CAPITAL FONTS WITH ADDITIONAL KERNING BETWEEN LETTERS
3. THE SIGN FACE SHALL HAVE A WHITE 3M DIAMOND GRADE REFLECTIVE SHEETING (3990 SERIES VIP TYPE IX) APPLIED AS A BACKGROUND
4. LETTERING/GRAPHICS SHALL BE ONE OF THE FOLLOWING:
   A. 3M ELECTROCUT FILM RED 1172 OR ORACAL 8300 TRANSPARENT CAL 201C RED OR EQUIVELANT IN DURABILITY, INVERSE CUT TO ALLOW REFLECTIVE BACKGROUND TO SHOW THROUGH LETTERING.
   B. SCREEN PRINTED USING 3M 8801 SERIES TRAFFIC SIGN RED TRANSLUCENT INK
5. SIGNS USED IN BUILDING INTERIORS ARE NOT REQUIRED TO USE A REFLECTIVE BACKGROUND.
6. ALL SIGNAGE AND CHANGES MUST BE PRE-APPROVED BY THE FIRE MARSHAL

3 SIGNAGE - SIGNAGE TYPES - RED
1 1/2" = 1'-0"

LICENSED ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
10/8/2024

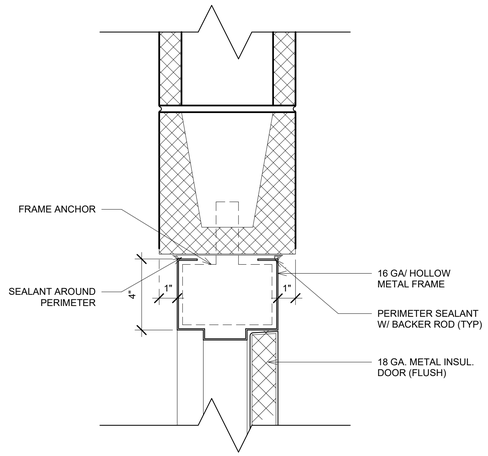
DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E. Kimberly, ID 83341
DOOR, WINDOW, & SIGNAGE TYPES

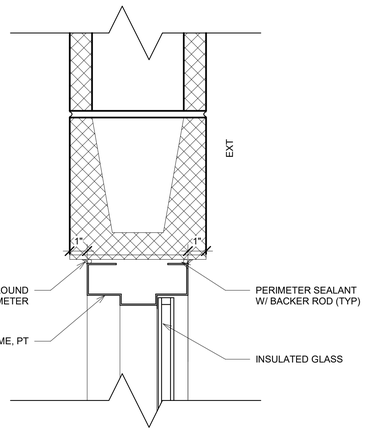
Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/8/2024
NM Drawn
RCR Checked
#23067 PROJECT #

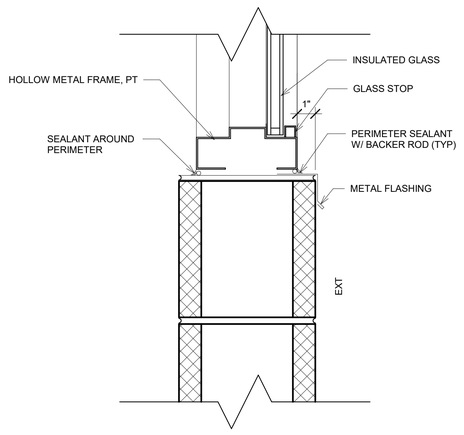
A9-0



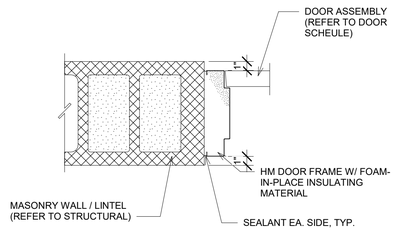
1 EXTERIOR DOOR HEAD DETAIL
3" = 1'-0"



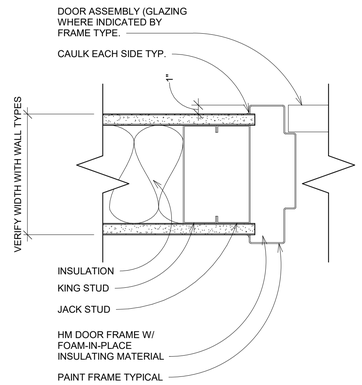
EXTERIOR WINDOW HEAD @ CMU DETAIL
2 3" = 1'-0"



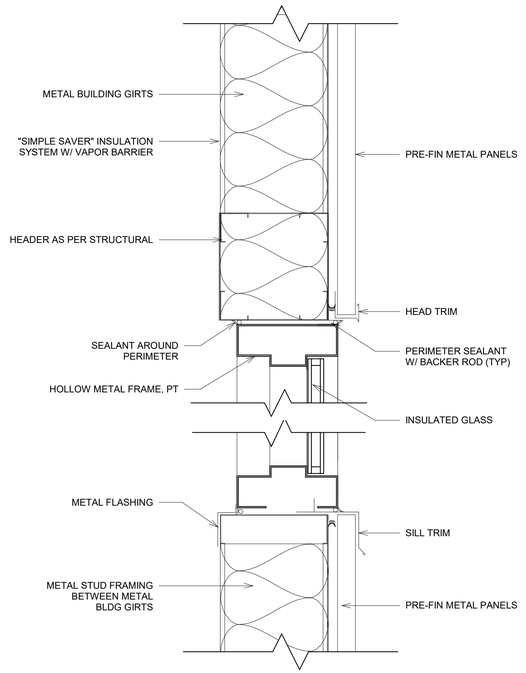
3 EXTERIOR WINDOW SILL @ CMU DETAIL
3" = 1'-0"



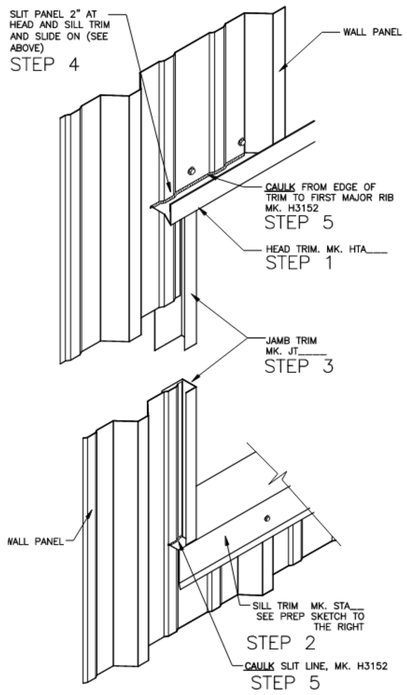
4 HM DOOR JAMB/HEAD @ CMU
1 1/2" = 1'-0"

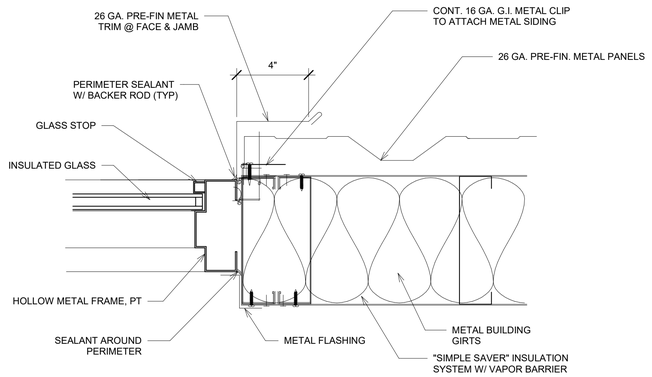


5 HM INTERIOR DOOR JAMB DETAIL
3" = 1'-0"

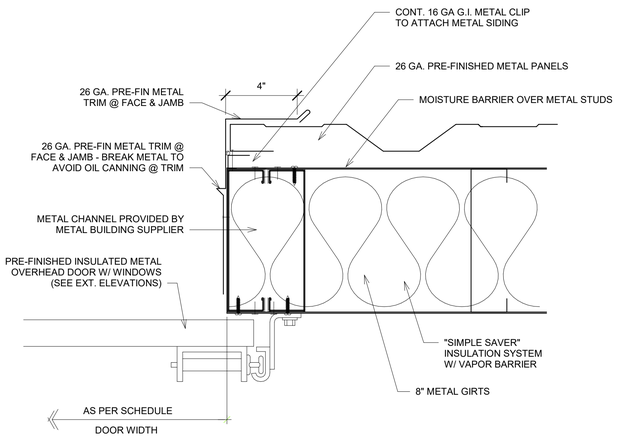


HM WINDOW HEAD & SILL @ METAL BLDG
6 3" = 1'-0"





7 EXTERIOR WINDOW JAMB @ METAL
3" = 1'-0"



8 OVERHEAD DOOR JAMB @ METAL
3" = 1'-0"

LICENSED ARCHITECT AR-985708
R. COLBY RICKS STATE OF IDAHO
10/8/2024

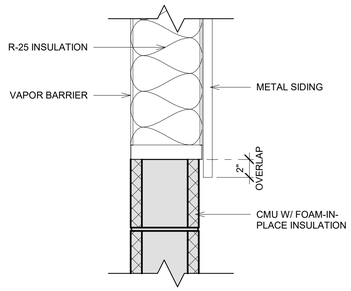
DATE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
DOOR & WINDOW DETAILS

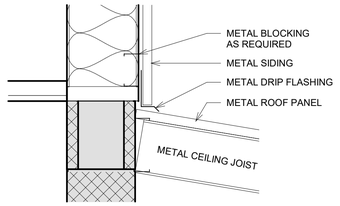
Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/8/2024
NM Drawn
RCR Checked
#23067 PROJECT #

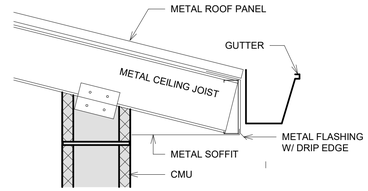
A10-0



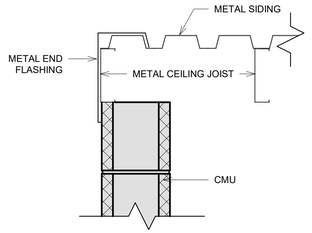
1 CMU WALL TO PEMB
1 1/2" = 1'-0"



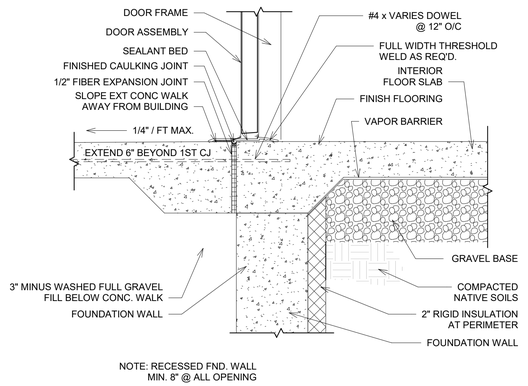
2 ROOF TRANSITION
1 1/2" = 1'-0"



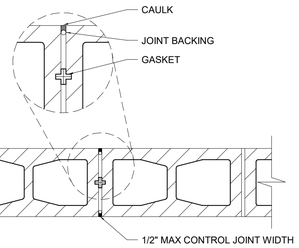
3 ROOF OVERHANG
1 1/2" = 1'-0"



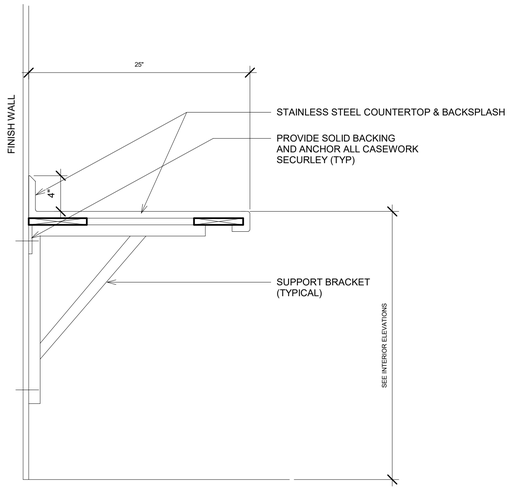
4 ROOF SIDE FLASHING
1 1/2" = 1'-0"



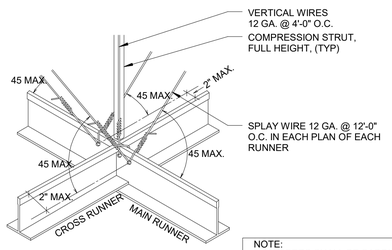
5 DOOR THRESHOLD DETAIL
1 1/2" = 1'-0"



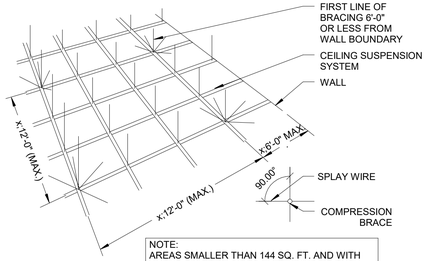
6 CMU CONTROL JOINT DETAIL
1 1/2" = 1'-0"



7 COUNTERTOP CASEWORK
1 1/2" = 1'-0"

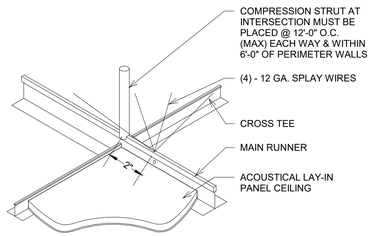


NOTE:
1. HANGERS SHALL BE SADDLE-TIED AROUND MAIN RUNNERS.
2. LOWER ENDS OF FLAT HANGERS SHALL BE BOLTED WITH 3/8" BOLTS TO RUNNER CHANNELS.
3. SPLAY WIRES MUST BE AT 90 DEGREE ANGLES TO EACH ADJACENT WIRE.

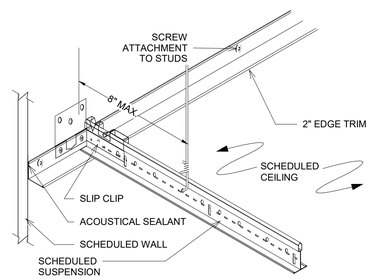


NOTE:
AREAS SMALLER THAN 144 SQ. FT. AND WITH WALLS ON FOUR SIDES EXTENDING TO THE STRUCTURE NEED NOT BE BRACED. NOTE: BOUNDARY WALLS MUST BE BRACED TOP AND BOTTOM INDEPENDENT OF CEILING TO QUALIFY.

8 CEILING DETAILS
1" = 1'-0"



STRUT SIZE	MAXIMUM LENGTH
3/4" DIAMETER CONDUIT (EMT)	8'-6"
1" DIAMETER CONDUIT (EMT)	10'-0"
SINGLE 2 1/2"x20 GA. METAL STUD (Imin = 0.18 in4)	11'-6"
BACK TO BACK 2 1/2"x20 GA. METAL STUDS SCREWED TOGETHER @ 24" O.C.	15'-0"



9 CEILING GRID DETAILS
3" = 1'-0"

LICENSED
ARCHITECT
AR-985708
R. COLBY RICKS
STATE OF IDAHO
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A10-1

STRUCTURAL NOTES :

A. GENERAL

1. THE STRUCTURAL NOTES ARE INTENDED TO COMPLEMENT THE PROJECT SPECIFICATIONS WHICH ARE PART OF THE CONSTRUCTION DOCUMENTS. SPECIFIC NOTES AND DETAILS ON THE DRAWINGS SHALL GOVERN OVER THE STRUCTURAL NOTES AND TYPICAL DETAILS.
2. THESE DRAWINGS (AND, WHERE APPLICABLE, ACCOMPANYING WRITTEN SPECIFICATIONS) ARE THE ONLY CONTRACT DOCUMENTS PROVIDED BY ARW ENGINEERS FOR THE PROJECT REPRESENTED HEREIN. NOTHING IN ANY DIGITAL MODEL OR DIGITAL FILE RELATED TO THIS PROJECT SHALL BE TAKEN TO SUPERSEDE ANY INFORMATION SHOWN IN THESE DRAWINGS (INCLUDING, BUT NOT LIMITED TO, DIMENSIONS, SIZES, ETC).
3. THE ARCHITECTURAL DRAWINGS ARE THE PRIME CONTRACT DRAWINGS. THE STRUCTURAL DRAWINGS ARE SUPPLEMENTARY TO AND MUST BE USED IN CONJUNCTION WITH THE ARCHITECTURAL DRAWINGS AND OTHER CONSULTANTS DRAWINGS. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN CASE OF CONFLICT, FOLLOW THE MOST STRINGENT REQUIREMENT AS DIRECTED BY THE ARCHITECT AT NO ADDITIONAL COST TO THE OWNER.
4. SEE SPECIFICATIONS FOR REQUIRED SUBMITTALS. SUBMITTALS SHALL BE MADE IN A TIMELY MANNER AS INDICATED IN SPECIFICATIONS. REVIEW OF SUBMITTALS BY ARW ENGINEERS IS FOR GENERAL COMPLIANCE ONLY AND IS NOT INTENDED AS APPROVAL. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL SIZES, DIMENSIONS, AND ELEVATIONS ON SUBMITTALS AS RELATED TO DESIGN DOCUMENTS. PREPARATION OF SHOP DRAWINGS FOR STRUCTURAL ELEMENTS WILL REQUIRE INFORMATION (I.E. DIMENSIONS, ETC.) FOUND IN THE ARCHITECTURAL, STRUCTURAL, AND OTHER CONSULTANTS DRAWINGS.
5. THE CONTRACTOR SHALL VERIFY ALL CONDITIONS AND DIMENSIONS AT THE SITE. IF ACTUAL CONDITIONS DIFFER FROM THOSE SHOWN ON CONTRACT DOCUMENTS, CONTRACTOR SHALL NOTIFY ARCHITECT PRIOR TO FABRICATION OR CONSTRUCTION OF ANY AFFECTED ELEMENTS.
6. THE CONTRACTOR SHALL COORDINATE AND VERIFY ALL LOCATIONS AND SIZES OF MECHANICAL EQUIPMENT OR OTHER EQUIPMENT BEFORE FABRICATING AND ERECTING STRUCTURAL ELEMENTS. SIZES AND LOCATIONS THAT DIFFER FROM THOSE SHOWN ON THE CONTRACT DOCUMENTS SHALL BE REPORTED TO THE ARCHITECT.
7. THE CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE ARCHITECT FOR ARCHITECT AND/OR ENGINEER APPROVAL BEFORE PROCEEDING WITH ANY CHANGES, MODIFICATIONS, OR SUBSTITUTIONS.
8. OBSERVATION VISITS TO THE SITE BY ARW ENGINEERS FIELD REPRESENTATIVES SHALL NEITHER BE CONSTRUED AS INSPECTION NOR APPROVAL OF CONSTRUCTION.
9. DURING AND AFTER CONSTRUCTION, BUILDER AND/OR OWNER SHALL KEEP LOADS ON STRUCTURE WITHIN THE LIMITS OF DESIGN LOADS AS NOTED IN THESE DOCUMENTS.
10. TYPICAL OR SIMILAR DETAILS AND SECTIONS SHALL APPLY WHERE SPECIFIC DETAILS ARE NOT SHOWN. TYPICAL OR SIMILAR DETAILS REFER TO THE CONDITION ADDRESSED AND ARE NOT NECESSARILY DETAILS LABELED “TYPICAL” OR “SIMILAR” IN THE PLANS AND DOCUMENTS.
11. DRAWINGS AND DETAILS HAVE BEEN PREPARED WITH THE INTENT TO VISUALLY REPRESENT INFORMATION PROVIDED IN SCALED FORM; HOWEVER CONTRACTOR/SUPPLIERS SHOULD NOT SCALE PLANS OR DETAILS FOR DIMENSIONAL INFORMATION.
12. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DESIGN AND INSTALL ADEQUATE TEMPORARY SHORING AND BRACING FOR ALL STRUCTURAL ELEMENTS UNTIL THE ENTIRE STRUCTURAL SYSTEM IS COMPLETED.
13. ENGINEER SHALL NOT BE RESPONSIBLE FOR ACTIVITIES UNDER CONTROL OF THE CONTRACTOR SUCH AS CONSTRUCTION SITE SAFETY, MEANS, METHODS AND SEQUENCING OF CONSTRUCTION. ENGINEER SHALL NOT BE RESPONSIBLE FOR FABRICATION, ERECTION AND CONSTRUCTION REQUIREMENTS AS PRESCRIBED BY OSHA OR OTHER REGULATORY AGENCIES REGARDLESS OF INDICATIONS IN THESE DOCUMENTS.
14. NOTICE OF COPYRIGHT: THESE STRUCTURAL DRAWINGS ARE HEREBY COPYRIGHTED BY ARW ENGINEERS, ALL RIGHTS RESERVED. THESE DOCUMENTS DEFINE A STRUCTURE AND ARE INSTRUMENTS OF SERVICE, FOR ONE USE ONLY. REPRODUCTION AND DISTRIBUTION OF THESE DRAWINGS IS ONLY ALLOWED AS REQUIRED FOR REGULATORY AGENCIES AND FOR CONVEYANCE OF INFORMATION TO PARTIES INVOLVED IN THE CONSTRUCTION OF THIS PROJECT. THESE DOCUMENTS SHALL NOT BE REPRODUCED OR COPIED, IN PART OR WHOLE BY ANY PARTY FOR USE IN PREPARATION OF SHOP DRAWINGS OR OTHER SUBMITTALS.
15. WHERE THE WORD "SHALL" OCCURS IN THESE DRAWINGS AND ANY ACCOMPANYING SPECIFICATIONS, IT IS CONSIDERED A MANDATORY OBLIGATION AND SYNONYMOUS WITH THE PHRASE "HAS DUTY TO".

B. STATEMENT OF SPECIAL INSPECTIONS AND SPECIAL INSPECTIONS

1. THE DESIGNATED SEISMIC/WIND SYSTEMS AND SEISMIC/WIND-FORCE-RESISTING SYSTEMS THAT ARE SUBJECT TO SPECIAL INSPECTIONS IN ACCORDANCE WITH IBC SECTION 1705.11 AND 1705.12 ARE IDENTIFIED ON THESE DOCUMENTS WITH A CIRCLE “L”. ALL OTHER ITEMS REQUIRING SPECIAL INSPECTION ARE IDENTIFIED IN THE SPECIAL INSPECTION SCHEDULE ON SHEET S012.
2. SPECIAL INSPECTIONS AND TESTING ARE TO BE PROVIDED AS REQUIRED BY IBC SECTIONS 1704 THROUGH 1705 AND OTHER APPLICABLE SECTIONS OF THE IBC. THE TYPE AND FREQUENCY OF TESTING AND SPECIAL INSPECTIONS SHALL BE AS NOTED IN THE SPECIAL INSPECTION SCHEDULE, JOB SPECIFICATIONS, AND ACCORDANCE WITH IBC SECTION 110 AND CHAPTER 17. CONTRACTOR SHALL COORDINATE AND COOPERATE WITH REQUIRED INSPECTIONS.
3. ALL TESTING AND SPECIAL INSPECTION SHALL BE PROVIDED BY A QUALIFIED INDEPENDENT SPECIAL INSPECTION AGENCY IN ACCORDANCE WITH IBC 1704 AND AS OUTLINED IN THE JOB SPECIFICATIONS. REPORTS OF FINDINGS OR DISCREPANCIES SHALL BE NOTED AND FORWARDED TO THE CONTRACTOR, ARCHITECT, ENGINEERS, AND BUILDING OFFICIAL IN A TIMELY MANNER.
4. STRUCTURAL OBSERVATION VISITS SHALL BE PERFORMED BY A REPRESENTATIVE FROM ARW ENGINEERS IN ACCORDANCE WITH THE CONTRACT AS NEEDED TO OBSERVE THE CONSTRUCTION OF CRITICAL BUILDING ELEMENTS (I.E. FOOTINGS, BRACED FRAMES, MOMENT FRAMES, DRAG STRUTS AND THEIR CONNECTIONS, COLLECTORS, AND ROOF AND FLOOR DIAPHRAGMS). STRUCTURAL OBSERVATION REPORTS FOR EACH VISIT SHALL BE SENT DIRECTLY TO THE ARCHITECT FOR DISTRIBUTION TO THE CONTRACTOR AND BUILDING OFFICIAL. STRUCTURAL OBSERVATION VISITS SHALL NEITHER BE CONSTRUED AS SPECIAL INSPECTION NOR APPROVAL OF COMPLETED CONSTRUCTION.
5. IN ACCORDANCE WITH IBC 1704.4, THE CONTRACTOR SHALL SUBMIT A WRITTEN CONTRACTOR’S STATEMENT OF RESPONSIBILITY TO THE BUILDING OFFICIAL AND OWNER. THE STATEMENT SHALL BE SUBMITTED PRIOR TO THE CONSTRUCTION OF ANY SEISMIC/WIND-FORCE-RESISTING SYSTEM, DESIGNATED SEISMIC/WIND SYSTEM, OR COMPONENT IDENTIFIED IN THESE DOCUMENTS WITH A CIRCLE “L”.

C. BASIS OF DESIGN

1. GOVERNING BUILDING CODE : INTERNATIONAL BUILDING CODE (IBC) 2018
   RISK CATEGORY : III
2. ROOF LOADS
   a. FLAT-ROOF SNOW LOAD, P_f : 23.1 PSF
      1. GROUND SNOW LOAD, P_g : 30 PSF
      2. SNOW EXPOSURE FACTOR, C_e : 1.0
      3. SNOW LOAD IMPORTANCE FACTOR, I_s : 1.1
      4. THERMAL FACTOR, C_t : 1.0
      5. SLOPE FACTOR, C_S : 1.0
      6. SNOW DRIFT : SHOWN ON PLANS WHERE APPLICABLE.
   b. LIVE LOAD = 20 PSF
   c. DEAD LOAD = 20 PSF
   d. RAIN INTENSITY, i : 1.21 IN/HR
3. WIND DESIGN
   a. BASIC WIND SPEED (3 SECOND GUST) : 109 MPH
   b. ALLOWABLE STRESS DESIGN WIND SPEED, V_{ASD} : 85 MPH
   c. WIND EXPOSURE : C
   d. INTERNAL PRESSURE COEFFICIENT, GC_{PI} : ± 0.18
   e. COMPONENT AND CLADDING DESIGN WIND PRESSURE SHALL BE AS REQUIRED PER ASCE 7-16.
4. SEISMIC DESIGN :
   a. SEISMIC IMPORTANCE FACTOR, I_E : 1.25
   b. SITE CLASS : D, DEFAULT
   c. MAPPED SPECTRAL RESPONSE ACCELERATIONS : $S_S = 0.194$, $S_1 = 0.083$
   d. SPECTRAL RESPONSE COEFFICIENTS : $S_{DS} = 0.207$, $S_{D1} = 0.132$
   e. SEISMIC DESIGN CATEGORY : B
   f. BASIC SEISMIC-FORCE-RESISTING SYSTEM : SPECIAL REINFORCED MASONRY SHEAR WALLS
   g. DESIGN BASE SHEAR : $V_{N\text{-}S} = C_S{*}W$, $V_{E\text{-}W} = C_S{*}W$
   h. SEISMIC RESPONSE COEFFICIENT, C_S : 0.052
   i. RESPONSE MODIFICATION FACTOR, R : 5
   j. ANALYSIS PROCEDURE : EQUIVALENT LATERAL FORCE

D. FOUNDATION

1. GENERAL
   a. DESIGN SOIL PRESSURE : 1500 PSF
   b. ALL FOOTINGS SHALL BE PLACED ON MECHANICALLY COMPACTED FILL COMPACTED TO NOT LESS THAN 95% OF MODIFIED PROCTOR DENSITY (ASTM D-1557).
   c. UNLESS NOTED OTHERWISE, ALL CONCRETE SLABS ON EARTH SHALL BEAR ON STRUCTURAL FILL COMPACTED TO 90% OF MODIFIED PROCTOR DENSITY (ASTM D-1557).
   d. TOP OF FOOTING ELEVATIONS SHOWN ON THE FOOTING AND FOUNDATION PLAN ARE BASED ON PRELIMINARY GRADING INFORMATION AND SHALL BE VERIFIED PRIOR TO CONSTRUCTION. STEPS WHERE SHOWN ARE AT APPROXIMATE LOCATIONS. ACTUAL STEP LOCATIONS SHALL BE AT THE CONTRACTOR’S DISCRETION BASED UPON FIELD CONDITIONS. ALL EXTERIOR FOUNDATIONS SHALL BEAR A MINIMUM OF 24 INCHES BELOW LOWEST ADJACENT FINAL GRADE.
   e. ALL WALLS (EXCEPT CANTILEVERED RETAINING WALLS) SHALL BE ADEQUATELY BRACED AGAINST LATERAL MOVEMENT PRIOR TO BACKFILLING. DESIGN AND ERECTION OF BRACING/SHORING SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. BRACING SHALL REMAIN IN PLACE UNTIL SUPPORTING STRUCTURAL ELEMENTS ARE IN PLACE AND HAVE ATTAINED FULL STRENGTH.
   f. UNLESS NOTED OTHERWISE, ALL FOOTINGS AT COLUMNS SHALL BE CENTERED BELOW COLUMNS.
   g. UNLESS NOTED OTHERWISE, ALL FOOTINGS SHALL HAVE VERTICAL FACES FORMED WITH STANDARD FORMING MATERIALS (WOOD, METAL, ETC.). WITH PRIOR APPROVAL OF ARCHITECT AND ENGINEER, CONCRETE FOR FOOTINGS CAN BE PLACED IN EXCAVATED SOIL “FORMS” PROVIDED THAT THE DIMENSIONS ARE INCREASED 3” ON ALL SIDE.
   h. UNLESS NOTED AND DETAILED OTHERWISE, NO PIPES, DUCTS, CONDUITS, NON-STRUCTURAL ITEMS, ETC. SHALL BE BURIED BELOW OR EMBEDDED IN FOOTINGS / FOUNDATION WALLS. SEE TYPICAL DETAIL FOR CONDITIONS WHERE THESE ITEMS CROSS OR RUN PARALLEL TO FOOTINGS / FOUNDATION WALLS.

E. CONCRETE

1. ALL CONCRETE MIX DESIGNS SHALL COMPLY WITH THE PROJECT SPECIFICATIONS AND THE REQUIREMENTS LISTED BELOW :
   a. FOOTINGS, GRADE BEAMS, FOUNDATION WALLS :
      1. WHERE THE TOP OF THE ELEMENT IS EXPOSED OR IS LOCATED WITHIN 24" OF THE LOWEST ADJACENT GRADE (EXPOSURE CATEGORY F2) :
         a. 28 DAY COMPRESSIVE STRENGTH : 4500 PSI
         b. MAXIMUM W/C RATIO : 0.45
         c. MAXIMUM AGGREGATE SIZE : 1”
         d. AIR CONTENT : SEE SCHEDULE BELOW
      2. WHERE THE TOP OF THE ELEMENT IS NOT EXPOSED OR IS NOT LOCATED WITHIN 24" OF THE LOWEST ADJACENT GRADE (EXPOSURE CATEGORY F0) :
         a. 28 DAY COMPRESSIVE STRENGTH : 3000 PSI
   b. RETAINING WALLS (EXPOSURE CATEGORY F2) :
      1. 28 DAY COMPRESSIVE STRENGTH : 4500 PSI
      2. MAXIMUM W/C RATIO : 0.45
      3. MAXIMUM AGGREGATE SIZE : 1"
      4. AIR CONTENT : SEE SCHEDULE BELOW
   c. INTERIOR SLABS ON GRADE (EXPOSURE CATEGORY F0) :
      1. 28 DAY COMPRESSIVE STRENGTH : 4000 PSI
   d. EXTERIOR SLABS (DOCKS, ETC.) (EXPOSURE CATEGORY F2) :
      1. 28 DAY COMPRESSIVE STRENGTH : 4500 PSI
      2. MAXIMUM W/C RATIO : 0.45
      3. MAXIMUM AGGREGATE SIZE : 1”
      4. MINIMUM AIR CONTENT : SEE SCHEDULE BELOW
   e. TOTAL AIR CONTENT FOR CONCRETE EXPOSED TO CYCLES OF FREEZING AND THAWING SHALL BE DETERMINED IN ACCORDANCE WITH THIS SCHEDULE. TOLERANCE ON AIR CONTENT AS DELIVERED SHALL BE +/- 1.5 PERCENT.

NOMINAL MAXIMUM AGGREGATE SIZE, IN.	TARGET AIR CONTENT, PERCENT F1	F2 AND F3
3/8	6	7.5
1/2	5.5	7
3/4	5	6
1	4.5	6
1-1/2	4.5	5.5
2	4	5
3	3.5	4.5

2. WATER USED IN MIXING CONCRETE SHALL CONFORM TO ASTM C1602.
3. NO CONDUIT, PIPES, DUCTS, SLEEVES, ETC. SHALL BE PLACED IN STRUCTURAL CONCRETE UNLESS SPECIFICALLY DETAILED OR APPROVED BY THE STRUCTURAL ENGINEER. NO ALUMINUM PRODUCTS SHALL BE EMBEDDED IN CONCRETE. PENETRATIONS THRU STRUCTURAL CONCRETE ELEMENTS MUST BE APPROVED BY THE ENGINEER AND SHALL BE BUILT INTO THE ELEMENT PRIOR TO CONCRETE PLACEMENT.
4. REFER TO ARCHITECTURAL DRAWINGS FOR MOLDS, GROOVES, ORNAMENTS, ETC. TO BE CAST IN TO CONCRETE, AND FOR EXTENT AND LOCATION OF DEPRESSIONS, CURBS, RAMPS, ETC.
5. UNLESS NOTED OTHERWISE, MINIMUM REINFORCING IN ALL CONCRETE FOUNDATION WALLS SHALL BE AS FOLLOWS:

THICKNESS	TOP & BOTTOM BARS	VERTICAL	HORIZONTAL
8”	(2) #5	#5 AT 18”O.C.	#4 AT 12”O.C.

   UNLESS NOTED OTHERWISE, CONCRETE SLABS ON EARTH SHALL BE REINFORCED AS FOLLOWS:
   6” THICK - #4 AT 18”O.C. EACH WAY
   REINFORCING SHALL BE CONTINUOUSLY SUPPORTED AT 36”O.C. MAXIMUM SPACING.
6. UNLESS NOTED OTHERWISE, FOR NON-DETAILED OPENINGS IN CONCRETE WALLS LARGER THAN 12” AND SMALLER THAN 24” IN ANY DIRECTION ADD (2) #5 BARS ON ALL SIDES IN ADDITION TO REGULAR WALL REINFORCING AND EXTEND 24” EACH WAY BEYOND OPENING. IF 24” IS NOT AVAILABLE ON EVERY SIDE, NOTIFY STRUCTURAL ENGINEER FOR FURTHER DIRECTION. OPENINGS SHALL HAVE A MINIMUM OF 12" OF CONCRETE ABOVE THE OPENING, TYP.
7. CONSTRUCTION JOINTS NOT SHOWN ON THE PLANS SHALL BE MADE AND LOCATED SO AS TO NOT IMPAIR THE STRENGTH OF THE STRUCTURE AND AS APPROVED BY THE STRUCTURAL ENGINEER. PROVIDE 2 X 4 (SHAPED) KEYWAY IN ALL VERTICAL AND HORIZONTAL JOINTS UNLESS NOTED OR DETAILED OTHERWISE. ALL STEEL REINFORCING SHALL BE CONTINUOUS THROUGH COLD JOINTS UNLESS NOTED OTHERWISE. SEE TYPICAL DETAILS FOR COLD/CONSTRUCTION JOINTS FOR SLABS ON GRADE.
8. WHERE NEW CONCRETE IS PLACED AGAINST PREVIOUSLY HARDENED CONCRETE, THE JOINT SHALL BE CLEAN AND FREE OF LAITANCE. IMMEDIATELY BEFORE NEW CONCRETE IS PLACED, CONSTRUCTION JOINTS SHALL BE PREWETTED AND STANDING WATER REMOVED. WHERE NOTED IN SPECIFIC DETAILS, HARDENED CONCRETE SHALL BE ROUGHENED TO 1/4” AMPLITUDE AND A BONDING AGENT SHALL BE APPLIED TO THE JOINT PRIOR TO PLACING NEW CONCRETE.
9. FOOTINGS AND FOUNDATION WALLS HAVE BEEN DESIGNED USING A 28-DAY COMPRESSIVE STRENGTH OF 2500 PSI. SPECIAL INSPECTIONS ARE NOT REQUIRED.
10. WHERE GRADE BEAMS, HAIRPINS, OR SLAB REINFORCING IS DOWELED TO THE FOUNDATION WALLS IN PRE-ENGINEERED METAL BUILDINGS, THE GRADE BEAMS, HAIRPINS, OR SLAB REINFORCING SHALL BE INSTALLED AND THE CONCRETE THAT ENCASES THEM SHALL BE PLACED PRIOR TO THE ERECTION OF THE METAL BUILDING.

F. ANCHOR BOLTS/EMBEDDED BOLTS

1. ALL ANCHOR BOLTS SHALL HAVE ASTM A-563 HEAVY HEX NUT AND ASTM F-436 WASHERS AT STANDARD OR OVERSIZED HOLES PER AISC SPECIFICATION TABLE J3.3. WHERE HOLE SIZES DO NOT COMPLY WITH THE LIMITATIONS FOR OVERSIZED HOLES THE STRUCTURAL ENGINEER SHALL BE NOTIFIED TO DETERMINE STEEL PLATE WASHER REQUIREMENTS. ANCHOR BOLTS SHALL COMPLY WITH THE FOLLOWING :
   a. AT ALL ANCHOR BOLTS (UNLESS NOTED OTHERWISE) - ASTM F1554 GRADE 55 HEADED BOLTS. (ASTM A36 THREADED ROD MAY BE USED WITH DOUBLE NUT AND WASHER.)
2. EMBEDDED BOLTS IN MASONRY SHALL BE (UNLESS NOTED OTHERWISE) ASTM A-307 GRADE HEADED BOLTS.
3. SEE TYPICAL ANCHOR BOLT DETAIL FOR DEFINITIONS OF EMBEDMENT LENGTH, ETC.
4. FURNISH TEMPLATES AND OTHER DEVICES AS NECESSARY FOR PRESETTING ALL BOLTS PRIOR TO PLACING CONCRETE AND/OR GROUT.
5. IF THREADED RODS ARE USED AS PERMITTED ABOVE, THEY SHALL BE CLEAR OF SOIL AND DIRT.
6. WHERE REQUIRED FOR ERECTION, HOLES LARGER THAN OVERSIZED MAY BE PERMITTED WITH THE USE OF STEEL PLATE WASHERS AT THE DISCRETION OF THE STRUCTURAL ENGINEER.

G. ADHESIVE/MECHANICAL ANCHORS

1. WITHOUT WRITTEN APPROVAL OF THE ENGINEER, CONTRACTOR SHALL NOT SUBSTITUTE POST-INSTALLED ANCHORS WHERE CAST-IN-PLACE ANCHORS ARE SPECIFIED IN THE DRAWINGS.
2. WHERE STRUCTURAL DETAILS SPECIFY SPECIFIC BRANDS AND/OR TYPES OF ADHESIVES OR ANCHORS, SUBSTITUTIONS OF OTHER BRANDS AND/OR TYPES IS NOT ALLOWED, WITHOUT WRITTEN APPROVAL OF THE ENGINEER.
3. SUBSTITUTION REQUESTS FOR ALTERNATE PRODUCTS SHALL BE APPROVED IN WRITING BY THE STRUCTURAL ENGINEER OF RECORD PRIOR TO USE. SUBSTITUTION REQUESTS SHALL INCLUDE AN ICC ESR OR IAPMO REPORT AND SUPPORTING CALCULATIONS INDICATING COMPLIANCE WITH DESIGN INTENT.
4. ALL ADHESIVE/MECHANICAL ANCHORS SHALL BE INSTALLED, INCLUDING HOLE DRILLING AND PREPARATION, IN ACCORDANCE WITH AN APPROVED INDEPENDENT EVALUATION REPORT (ICC-ES, IAPMO, OR APPROVED EQUAL), AS INDICATED BELOW, AND IN ACCORDANCE WITH ALL MANUFACTURER’S PRINTED INSTALLATION INSTRUCTIONS (MPII).
5. INSTALLERS SHALL BE, AT A MINIMUM, TRAINED FOR THE SPECIFIC APPLICATION INSTALLATION TECHNIQUE FOR THE SPECIFIC PRODUCT BY THE PRODUCT MANUFACTURERS FIELD EMPLOYEE OR SHALL POSSESS A TRAINING CARD OBTAINED BY THE MANUFACTURERS ONLINE TRAINING PROGRAM.
6. ADHESIVE ANCHORS SHALL BE INSTALLED IN CONCRETE HAVING A MINIMUM AGE OF 21 DAYS AT TIME OF ANCHOR INSTALLATION. ADHESIVE ANCHORS SHALL NOT BE FULLY LOADED UNTIL CONCRETE HAS REACHED DESIGN STRENGTH.
7. ADHESIVE ANCHORS SHALL CONSIST OF REINFORCING BAR OR THREADED RODS AS INDICATED IN THESE DOCUMENTS.
8. UNLESS APPROVED BY THE ENGINEER OF RECORD, CONCRETE AND DRILLED ANCHOR HOLES SHALL BE DRY AND FREE OF WATER FOR 14 DAYS PRIOR TO ADHESIVE INSTALLATION. CONTACT THE ENGINEER OF RECORD FOR GUIDANCE IF THE CONTRACTOR CHOOSES TO INSTALL IN DAMP, WATER-SATURATED, OR WATER-FILLED HOLES.
9. CONCRETE TEMPERATURE AT THE TIME OF INSTALLATION SHALL BE MONITORED BY THE CONTRACTOR. CONTRACTOR SHALL COMPLY WITH ALL MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII) RELATIVE TO SUBSTRATE TEMPERATURE.
10. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY AN APPLICABLE CERTIFICATION PROGRAM. CERTIFICATION SHALL INCLUDE WRITTEN AND PERFORMANCE TESTS IN ACCORDANCE WITH THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM, OR EQUIVALENT IN ACCORDANCE WITH ACI 318-14 17.8.2.2. PROOF OF CURRENT CERTIFICATION SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTALLATION. CONTINUOUS SPECIAL INSPECTION SHALL BE PROVIDED FOR THESE ANCHORS.
11. UNLESS NOTED OTHERWISE, ALL ADHESIVE ANCHORS INTO CONCRETE SHALL BE:
    a. HILTI HIT-RE 500V3 (ESR-3814), OR HILTI HIT-HY 200-V3 (ESR-4868).
    b. SIMPSON SET-3G (ESR-4057), OR AT-XP (ER-263).
    c. DEWALT PURE 110+ (ESR-3298), OR AC200+ GOLD (ESR-4027-COLD WEATHER).
12. UNLESS NOTED OTHERWISE, ALL ADHESIVE ANCHORS INTO GROUTED MASONRY (CMU) SHALL BE:
    a. HILTI HIT-HY 270 (ESR-4143).
    b. SIMPSON SET-3G (ESR-4844), OR AT-XP (ER-281).
    c. DEWALT AC100+ GOLD (ESR-3200).
13. UNLESS NOTED OTHER WISE, ALL MECHANICAL ANCHORS INTO CONCRETE SHALL BE:
    a. HILTI KWIK BOLT-TZ2 (ESR-4266).
    b. SIMPSON STRONG-BOLT 2 (ESR-3037).
14. UNLESS NOTED OTHERWISE, ALL MECHANICAL ANCHORS INTO GROUTED MASONRY (CMU) SHALL BE:
    a. HILTI KWIK BOLT-TZ2 (ESR-4561).
    b. SIMPSON STRONG BOLT 2 (ER-240).
    c. DEWALT SCREWBOLT+ (ESR-4042).
15. UNLESS NOTED OTHERWISE, ALL SCREW ANCHORS INTO CONCRETE SHALL BE:
    a. SIMPSON TITEN HD (ESR-2713).
    b. DEWALT SCREWBOLT+ (ESR-3889).
    c. HILTI KH-EZ (ESR-3027).
16. UNLESS NOTED OTHERWISE, ALL SCREW ANCHORS INTO GROUTED MASONRY (CMU) SHALL BE:
    a. SIMPSON TITEN HD (ESR-1056).
    b. DEWALT SCREWBOLT+ (ESR-1678).
    c. HILTI KH EZ (ESR-3056).
17. ALL MASONRY CELLS WITHIN 8” OF THE ANCHOR SHALL BE SOLID GROUTED.
18. THE TESTING LABORATORY WILL PERFORM VISUAL INSPECTION OF ANCHORS AND DOWELS AS SPECIFIED IN THE SPECIAL INSPECTION SCHEDULE AND THE APPROVED INDEPENDENT EVALUATION REPORT. TENSION TESTING CAN BE REQUIRED AT THE DIRECTION OF THE STRUCTURAL ENGINEER OF RECORD OR THE SPECIAL INSPECTOR.
19. IF REINFORCEMENT IS ENCOUNTERED DURING DRILLING, ABANDON THAT HOLE AND SHIFT THE ANCHOR LOCATION TO AVOID THE REINFORCEMENT. PROVIDE A MINIMUM SPACE OF (2) ANCHOR HOLE DIAMETERS OR 2 INCHES, WHICH EVER IS LARGER, OF SOUND CONCRETE/MASONRY BETWEEN THE ANCHOR AND THE ABANDONED HOLE. FILL THE ABANDONED HOLE WITH NON-SHRINK GROUT OR AN APPROVED ANCHORING ADHESIVE. AT CONTRACTORS OPTION, LOCATE EXISTING REINFORCEMENT PRIOR TO DRILLING/CORING. IF THE ANCHOR OR DOWEL CANNOT BE SHIFTED AS NOTED ABOVE, THE ENGINEER WILL DETERMINE A NEW LOCATION.
20. LOCATE REINFORCEMENT AND CONFIRM FINAL ANCHOR LOCATIONS PRIOR TO FABRICATING PLATES, MEMBERS, OR OTHER STEEL ASSEMBLIES ATTACHED WITH MECHANICAL ANCHORS.

H. REINFORCING STEEL

1. REINFORCING BAR STRENGTH REQUIREMENTS:
   a. ALL REINFORCING BARS SHALL CONFORM TO ASTM STANDARD A-615 GRADE 60 AND ALL WELDED WIRE FABRIC SHALL CONFORM TO ASTM STANDARD A-1064 AND SHALL BE SUPPLIED IN FLAT SHEETS. ADEQUATELY TIE AND SUPPORT ALL REINFORCING STEEL AS SPECIFIED BY ACI 117, TO MAINTAIN EXACT REQUIRED POSITION.
2. HEADED SHEAR STUD ASSEMBLIES SHALL CONFORM TO ASTM A1044.
3. STEEL DISCONTINUOUS FIBER REINFORCEMENT SHALL BE DEFORMED AND CONFORM TO ASTM A820 AND SHALL HAVE A LENGTH TO DIAMETER RATIO NOT SMALLER THAN 50 AND NOT GREATER THAN 100.
4. HEADED DEFORMED BARS SHALL CONFORM TO ASTM A970. OBSTRUCTIONS OR INTERRUPTIONS OF THE BAR DEFORMATIONS, IF ANY, SHALL NOT EXTEND MORE THAN 2 BAR DIAMETERS FROM THE BEARING FACE OF THE HEAD.
5. ALL REINFORCING STEEL SHALL BE TIED IN PLACE AND ADEQUATELY SUPPORTED PRIOR TO PLACING CONCRETE. WET STABBING OF ANY REINFORCING STEEL IS NOT PERMITTED, UNLESS SPECIFICALLY DETAILED OTHERWISE OR APPROVED BY THE ENGINEER.
6. ALL FIELD BENT DOWELS SHALL BE GRADE 40 WITH SPACING INDICATED REDUCED BY 1/3.
7. UNLESS NOTED OTHERWISE, REINFORCEMENT SHALL HAVE THE FOLLOWING CONCRETE COVERAGE :
   a. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH ….. 3”
   b. EXPOSED TO EARTH OR WEATHER :
      1. #6 & LARGER ….. 2”
      2. #5 & SMALLER …..1-1/2”
   c. NOT EXPOSED TO WEATHER OR EARTH :
      1. SLABS, WALLS, JOISTS, #11 & SMALLER ….. 3/4”
      2. BEAMS, COLUMNS: MAIN REINFORCING OR TIES ….. 1-1/2”
   d. SLAB ON GRADE :
      1. PLACE REINFORCING AT CENTER OF SLAB UNLESS INDICATED OTHERWISE.
8. EXCEPT WHERE NOTED ON PLANS OR DETAILS CONTINUOUS REINFORCEMENT SHALL BE SPLICED AT POINTS OF MINIMUM STRESS BY LAPPING PER THE REBAR LAP SCHEDULE.
9. REINFORCING STEEL MAY BE SPLICED WITH MECHANICAL COUPLERS THAT HAVE A TENSION CAPACITY OF AT LEAST 125% OF THE STRENGTH OF THE BAR. MECHANICAL COUPLERS SHALL BE A POSITIVE CONNECcoTING TYPE COUPLER, AND SHALL BE INSTALLED IN ACCORDANCE WITH AN APPROVED ICC RESEARCH REPORT. WHERE THESE ARE USED, SPLICES ON ADJACENT BARS SHALL BE STAGGERED AT LEAST 24 INCHES ALONG THE LENGTH OF THE BARS.
10. ALL VERTICAL REINFORCING IN STRUCTURAL ELEMENTS ABOVE SHALL BE SPLICED WITH MATCHING DOWELS EMBEDDED WITHIN THE FOOTINGS OR STRUCTURE BELOW. SPLICE LENGTHS SHALL COMPLY WITH REBAR LAP SCHEDULE. DOWELS INTO FOOTINGS SHALL TERMINATE WITH A STANDARD HOOK, AND SHALL EXTEND TO WITHIN 4” OF THE BOTTOM OF THE FOOTING, BUT NEED NOT EXTEND MORE THAN 20” INTO FOOTING. FOR MASONRY CONSTRUCTION SEE STRUCTURAL NOTE L.6.A.
11. DO NOT WELD REINFORCING EXCEPT AS NOTED ON PLANS, WHERE REINFORCING IS WELDED, USE ASTM A-706 REINFORCING.
12. REINFORCING BARS, TIES, AND TENDONS SHALL BE SUPPORTED BY NYLON CONES, PLASTIC-COATED TIE-WIRES, OR PLASTIC-COATED CHAIRS. REINFORCING IN FOOTINGS IS PERMITTED TO BE SUPPORTED ON CONCRETE DOBIES.
13. UNLESS NOTED OTHERWISE, HOOKS, STIRRUPS, TIES, AND OTHER BENDS IN REINFORCING STEEL SHALL MEET THE STANDARDS SET FORTH IN ACI 318/318R-14. UNLESS OTHERWISE PERMITTED BY THE ENGINEER, ALL REINFORCEMENT SHALL BE BENT COLD. REINFORCEMENT PARTIALLY EMBEDDED IN CONCRETE SHALL NOT BE FIELD BENT, EXCEPT AS SHOWN ON THESE DRAWINGS OR OTHERWISE PERMITTED BY THE ENGINEER.
14. UNLESS SPECIFICALLY NOTED AND/OR DETAILED IN THE STRUCTURAL DRAWINGS CONDUIT SHALL NOT BE IN CONTACT WITH REINFORCING STEEL.

STRUCTURAL NOTES CONTINUED ON SHEET S002

LEGEND OF SYMBOLS AND ABBREVIATIONS

AB = ANCHOR BOLT
ABV = ABOVE
ARCH = ARCHITECT
BLW = BELOW
BN = BOUNDARY NAILING
BS = BOUNDARY SCREW
BRB = BUCKLING RESTRAINED BRACE
BRBF = BUCKLING RESTRAINED BRACE FRAME
CJP = COMPLETE JOINT PENETRATION
CL = CENTERLINE
CMU = CONCRETE MASONRY UNIT
COL = COLUMN
CONC = CONCRETE
CP = CONCRETE PIER
DC = DEMAND CRITICAL
DIA / Ø = DIAMETER
DBA = DEFORMED BAR ANCHOR
DBE = DECK BEARING ELEVATION
ELEV = ELEVATION
EN = EDGE NAILING
EOD = EDGE OF DECK
FDN = FOUNDATION
FTG = FOOTING
FFE = FINISHED FLOOR ELEVATION
GB = CONCRETE GRADE BEAM
HSA = HEADED STUD ANCHOR
JBE = JOIST BEARING ELEVATION
KB = KICKER BRACE
MAX = MAXIMUM
MB = MASONRY BEAM
MC = MASONRY COLUMN
MECH = MECHANICAL
MEZZ = MEZZANINE
MIN = MINIMUM
MJ = MASONRY JAMB
MW = MASONRY WALL
NS, FS = NEAR SIDE, FAR SIDE
OAE = OR APPROVED EQUAL
OPP = OPPOSITE
PAF = POWDER ACTUATED FASTENER
PL = PLATE
REINF = REINFORCING
REQ'D = REQUIRED
SIM = SIMILAR
SSH = STEEL STUD HEADER
SSJ = STEEL STUD JAMB
SSS = STEEL STUD SILL
SSW = STEEL STUD WALL
TOB = TOP OF BEAM ELEVATION
TOC = TOP OF CONCRETE SLAB
TOF = TOP OF FOOTING
TOG = TOP OF GIRDER ELEVATION
TOM = TOP OF MASONRY
TOS = TOP OF STEEL ELEVATION
TYP = TYPICAL
UNO = UNLESS NOTED OTHERWISE

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S210	FOUNDATION DETAILS
S220	ROOF FRAMING DETAILS

PROFESSIONAL ENGINEER LICENSED 10/8/24 16183 STATE OF IDAHO ROBERT M. MOYLE
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DATE: 10/08/24
BLP Drawn
ANB Checked
#23067 PROJECT #

S001

J. STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE LATEST EDITION OF THE FOLLOWING:
   a. ANSI/AISC 360-16 "SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS", WITH "COMMENTARY" AND "SUPPLEMENTS" AS REQUIRED BY BUILDING CODE.
   b. AISC 303-16 "CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES" EXCLUDING THE FOLLOWING SECTIONS: 4.4, 4.4.1, AND 4.4.2.
   c. AISI "SPECIFICATIONS FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS".
   d. AISC "SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS".
   e. AWS D1.1 AND 1.3, "STRUCTURAL WELDING CODE" (EXCEPT SPECIFIC ITEMS DO NOT APPLY IF THEY CONFLICT WITH AISC).
   f. ANSI/AISC 341-16 "SEISMIC PROVISIONS FOR STRUCTURAL STEEL BUILDINGS".
   g. AWS D1.8, "STRUCTURAL WELDING CODE - SEISMIC".
2. STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING:
   a. WIDE FLANGE SHAPES, CHANNELS, AND WT SHAPES - ASTM A992 (Fy = 50 ksi)
   b. OTHER SHAPES, PLATES, ANGLES, AND BARS - ASTM A572 (Fy = 50 ksi) (UNO)
   c. HOLLOW STRUCTURAL SECTIONS (HSS) - ASTM A500, GRADE C (Fy = 50 ksi)
   d. STAINLESS STEEL SHAPES, PLATES, AND FASTENERS – ASTM 304
   e. DEFORMED BAR ANCHORS (DBA) - ASTM A-496, WELDED IN ACCORDANCE WITH AWS D1.1
   f. HEADED STUD ANCHORS (HSA) - ASTM A-108, GRADE 1015 STEEL AND WELDED IN ACCORDANCE WITH AWS D1.1 FOR TYPE "B". USE 3/4" DIAMETER STUDS, UNLESS NOTED OTHERWISE.
   g. THREADED ROD - ASTM A-449.
   h. NON-SHRINK GROUT - ASTM C1107. NON-SHRINK GROUT SHALL BE PRE-PACKAGED, NON-METALLIC, WITH A 28-DAY COMPRESSIVE STRENGTH OF 6,000 PSI.
3. CONNECTIONS SHALL COMPLY WITH THE STRUCTURAL DRAWINGS UNLESS WRITTEN APPROVAL TO CHANGE IS GIVEN BY THE STRUCTURAL ENGINEER.
4. ALL SHOP FABRICATIONS SHALL BE PERFORMED BY AN APPROVED FABRICATOR IN ACCORDANCE WITH SECTIONS 1702 AND 1704 OF THE IBC FOR WITH SHOP INSPECTION BY AN INDEPENDENT AGENCY IN ACCORDANCE WITH SECTION 1704.2.5 OF THE IBC.
5. WELDING
   a. ALL WELDING AND CUTTING SHALL BE PERFORMED BY AWS QUALIFIED WELDERS IN ACCORDANCE WITH ANSI/AWS D1.1 (LATEST EDITION).
   b. USE E-70XX ELECTRODES UNLESS NOTED OTHERWISE. E-60XX MAY BE USED FOR WELDING STEEL DECKS.
   c. ALL INTERSECTING STEEL SHAPES WHICH ARE NOT CONNECTED WITH BOLTS SHALL BE WELDED TOGETHER WITH A FILLET WELD ALL AROUND UNLESS NOTED OTHERWISE. WHERE WELD SIZES ARE NOT SHOWN, USE THE FOLLOWING:
      1. WHERE THE THICKNESS OF THE CONNECTED PARTS IS EQUAL TO OR THICKER THAN 1/4", WELD SIZE SHALL BE 1/16" LESS THAN THE THICKNESS OF THE THINNEST PART.
      2. WHERE ANY OF THE CONNECTED PARTS IS LESS THAN 1/4" THICK, WELD SIZE SHALL BE THE SAME AS THE THICKNESS OF THE THINNEST PART.
   d. WELDING OF HSA'S (HEADED STUD ANCHORS) AND DBA'S (DEFORMED BAR ANCHORS) SHALL CONFORM TO THE MANUFACTURER'S SPECIFICATIONS AND AWS D1.1 REINFORCING BARS SHALL NOT BE SUBSTITUTED FOR HSA'S OR DBA'S.
   e. WHEREVER POSSIBLE, WELDS SHALL BE SHOP WELDS. SPECIAL CONSIDERATIONS, SUCH AS ITEMS WHICH MAY NEED ADJUSTMENT AT THE SITE, REQUIRE THAT SOME WELDS BE FIELD WELDS. WHERE QUESTIONS OR DISCREPANCIES OCCUR THE CONTRACTOR SHALL COORDINATE THE WORK BETWEEN THE SHOP FABRICATOR AND THE STEEL ERECTOR.
   f. SPECIAL PROVISIONS FOR SFRS (SEISMIC FORCE RESISTING SYSTEM):
      1. ALL WELDS DESIGNATED AS DEMAND CRITICAL WELDS SHALL BE MADE WITH FILLER METALS MEETING THE REQUIREMENTS SPECIFIED IN CLAUSES 6.1, 6.2, AND 6.3 OF AWS D1.8.
      2. ALL OTHER WELDS THAT ARE PART OF THE SFRS SHALL BE MADE WITH FILLER METALS MEETING THE REQUIREMENTS SPECIFIED IN CLAUSE 6.1 OF AWS D1.8.
      3. BUTT WELDS IN MEMBERS WITH DIFFERENT THICKNESSES, SUCH AS COLUMN SPLICES, SHALL BE TAPERED AND MADE IN SUCH A MANNER THAT THE TRANSITION DOES NOT EXCEED 1 IN 2-1/2 INCHES. THE TRANSITION SHALL BE ACCOMPLISHED BY CHAMFERING THE THICKER PART, TAPERING THE WIDER PART, SLOPING THE WELD METAL OR BY A COMBINATION OF THESE
6. BOLTING
   a. UNLESS NOTED OTHERWISE, ALL STRUCTURAL STEEL TO STEEL CONNECTIONS SHALL USE HIGH STRENGTH BOLTS CONFORMING TO ASTM F3125 GR. A325.
   b. UNLESS NOTED OTHERWISE, ALL BOLTING IS CLASSIFIED AS NON-SLIP CRITICAL BEARING TYPE CONNECTIONS WITH THREADS INCLUDED IN SHEAR PLANE. TIGHTEN BOLTS TO A SNUG TIGHT CONDITION, WITH ALL PLIES OF THE JOINT IN FIRM CONTACT.
   c. WHERE OVERSIZED OR SLOTTED HOLES OCCUR IN THE OUTER PLY, AN ASTM F436 WASHER OR 5/16" THICK COMMON PLATE WASHER SHALL BE USED AS REQUIRED TO COMPLETELY COVER THE HOLE.
   d. BOLTS SHALL BE CENTERED IN SLOTTED HOLES, UNLESS NOTED OTHERWISE.
   e. WHERE A STEEL BEAM TO BEAM CONNECTION IS NOT SHOWN, PROVIDE AN AISC STANDARD FRAMED CONNECTION SIZED FOR 1/2 OF THE TOTAL LOAD CAPACITY OF THE BEAM FOR THE SPAN AND STEEL SPECIFIED.
7. METAL DECKING
   a. UNLESS NOTED OTHERWISE, METAL ROOF DECK SHALL BE 22 GAUGE TYPE B GALVANIZED STEEL DECK. SEE ROOF DECK SCHEDULE FOR ATTACHMENTS.
   b. ALL DECK SHALL BE CONTINUOUS OVER 3-SPANS. WHERE NOT POSSIBLE, THE DECK SUPPLIER/CONTRACTOR SHALL PROVIDE HEAVIER GAUGE DECK AS NEEDED TO PROVIDE THE EQUIVALENT PERFORMANCE OF THE SPECIFIED DECK WITH 3-SPAN CONTINUITY.
   c. SEE TYPICAL DETAILS FOR SUPPORT OF DECK AT OPENINGS.
   d. PROVIDE L2"x2"x3/16" FOR DECK SUPPORT AT LOCATIONS WHERE COLUMNS EXTEND THROUGH DECK.
   e. PAINTED STEEL DECK SHALL CONFORM TO EITHER ASTM A1008 OR A1039, GRADE 50 STEEL AND GALVANIZED STEEL DECK SHALL CONFORM TO EITHER ASTM A653 OR A1063, GRADE 50 STEEL, WITH A ZINC COATING DESIGNATION OF G60.
   f. BUILDING ELEMENTS MAY BE SUPPORTED BY HANGING DIRECTLY FROM METAL DECKING, PROVIDED THAT THE TOTAL WEIGHT PER CONNECTION IS LESS THAN 50 LBS AND THAT THE ATTACHMENT TO THE DECKING IS DISTRIBUTED ACROSS AT LEAST TWO RIBS AND SPACED AT LEAST 6 FEET APART IN ANY DIRECTION.
8. PROVIDE FULL DEPTH WEB STIFFENER PLATES AT EACH SIDE OF STEEL BEAMS AT ALL BEARING (EXCEPT SECONDARY FRAMING) POINTS. STIFFENER PLATES SHALL BE THICKNESS SHOWN UNLESS NOTED OTHERWISE AND SHALL BE WELDED BOTH SIDES WITH FILLET WELDS ALL AROUND.

FLANGE WIDTH	STIFFENER THICKNESS	WELD THICKNESS
< 8 1/4"	1/4"	3/16"
8 1/4" < BF < 12 1/2"	3/8"	1/4"
12 1/2" < BF < 18"	1/2"	5/16"

9. FABRICATORS AND SUPPLIERS SHALL COORDINATE PAINT/FINISHES WITH REQUIREMENTS FOR DIRECT APPLIED INSULATION, FIREPROOFING, ETC. AS NOTED IN THE PROJECT SPECIFICATIONS.
10. WHEN DETERMINING THE FIRE RESISTANCE OF ASSEMBLIES, USE THE FOLLOWING: STEEL ROOF MEMBERS ARE CONSIDERED UN-RESTRAINED AND STEEL FLOOR FRAMING MEMBERS ARE CONSIDERED RESTRAINED.
11. UNLESS NOTED OTHERWISE, ALL HORIZONTAL FRAMING MEMBERS SHALL BE ERECTED WITH THE NATURAL CROWN UP.
12. UNLESS OTHERWISE SHOWN OR DETAILED IN THE PLANS, ALL STEEL COLUMNS, BEAMS, BRACES, STRUTS, ETC. SHALL BE CONTINUOUS BETWEEN CONNECTIONS OR SUPPORTS. SPLICES IN MEMBERS SHALL NOT BE PERMITTED WITHOUT WRITTEN APPROVAL BY THE ENGINEER OF RECORD.

K. COLD-FORMED STEEL

1. LIGHT GAUGE STEEL FRAMING
   a. STEEL FRAMING SIZE DESIGNATORS USED IN THE DRAWINGS FOLLOW THE CONVENTION ESTABLISHED BY THE STEEL STUD MANUFACTURERS' ASSOCIATION (SSMA) AND THE NORTH AMERICAN STEEL FRAMING ALLIANCE (NASFA). FRAMING MEMBERS PROVIDED SHALL MEET OR EXCEED ALL SSMA AND NASFA STANDARDS AND DESIGN PROPERTIES.
   b. ALL LOAD BEARING STUDS (AND/OR) JOIST FRAMING MEMBERS ALONG WITH ALL RUNNERS, BRIDGING, AND END-TRACKS SHALL BE OF THE DESIGNATION SHOWN ON THE PLANS. ALL OF THE ABOVE ELEMENTS SHALL BE FORMED FROM STEEL MEETING REQUIREMENTS OF ASTM A1011/A1011M-04. ALL COMPONENTS SHALL BE GALVANIZED. ALL COMPONENTS SHALL HAVE THE FOLLOWING YIELD STRESSES :

COMPONENT	BASE METAL THICKNESS	YIELD STRESS
STUDS, JOISTS & TRACKS	33 & 43 MIL	33,000 PSI
	54, 68 & 97 MIL	50,000 PSI
END CLOSURES & BRIDGING	33, 43, 54 & 68 MIL	33,000 PSI

   c. FOLLOW ALL MANUFACTURERS' RECOMMENDATIONS FOR THE USE OF THESE PRODUCTS.
   d. UNLESS NOTED OTHERWISE, ALL WELDED CONNECTIONS SHALL BE IN ACCORDANCE WITH AWS D1.3 AND THE STRUCTURAL DETAILS. ALL WELDS SHALL BE COMPLETED USING E60XX ELECTRODES.
2. CONNECTIONS, FASTENERS
   a. ALL SCREWS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES :

SCREW SIZE	SHANK DIAMETER	HEAD DIAMETER
NO. 6	0.138"	0.272"
NO. 8	0.164"	0.272"
NO. 10	0.190"	0.340"
NO. 12	0.216"	0.340"

   b. UNLESS NOTED OTHERWISE, ALL FRAMING ANCHORS, CLIPS, HOLD DOWNS, STRAPS, ETC. TO BE PROVIDED BY THE STEEL NETWORK OR APPROVED EQUAL.
3. UNLESS NOTED OTHERWISE, ALL STEEL STUD JOISTS AND BOX HEADER COMPONENTS SHALL BE CONTINUOUS WITH NO SPLICES BETWEEN BEARING SUPPORTS.
4. SEE TYPICAL DETAIL FOR REINFORCEMENT OF KNOCK OUT HOLES AT BEARING AND POINT LOAD LOCATIONS ON STEEL JOISTS AND BOX HEADERS.
5. UNLESS NOTED OTHERWISE, ALL COLD FORM STEEL JOISTS SHALL BE AS INDICATED ON THE PLAN.
6. PREFABRICATED SYSTEMS: SUBMIT COMPLETE SHOP DRAWINGS AND CALCULATIONS OF ALL ELEMENTS FOR REVIEW. SUBMITTALS SHALL BEAR THE STAMP OF A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT OCCURS.

L. MASONRY

1. ALL HOLLOW MASONRY UNITS SHALL CONFORM TO ASTM C-90.
   f'm (MINIMUM, FACTORED) 2,000 PSI
   MINIMUM UNIT STRENGTH 2,000 PSI (TESTED IN ACCORDANCE WITH ASTM C-140)
   ACCEPTABLE RANGE OF UNIT WEIGHT : 105 PCF TO 125 PCF
2. ALL GROUT (SITE MIXED OR PRE-MIXED) SHALL CONFORM TO ASTM C-476 OR SECTION 2.2A OF TMS 602-16. GROUT SHALL BE PLACED WITH SUFFICIENT WATER FOR POURING WITHOUT SEGREGATION. DO NOT USE MORTAR FOR GROUT. MECHANICALLY VIBRATE ALL GROUT.
3. GROUT STOPS SHALL BE AN APPROVED PRODUCT DESIGNED AND MANUFACTURED FOR USE AS A GROUT STOP. GROUT STOP SUBMITTALS SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR REVIEW. OTHER GROUT STOP MATERIALS SUCH AS ASPHALT IMPREGNATED MATERIALS ARE NOT PERMITTED.
4. MORTAR SHALL BE TYPE S AND SHALL CONFORM TO ASTM C 270.
5. ALL MASONRY WORK SHALL CONFORM TO CHAPTER 21 OF THE IBC.
6. UNLESS NOTED OTHERWISE, MINIMUM REINFORCING IN ALL 8" MASONRY WALLS SHALL BE AS FOLLOWS :
   a. VERTICAL : #5 BARS IN GROUTED CELLS ADJACENT TO ALL OPENINGS GREATER THAN 24 INCHES WIDE, ON EACH SIDE OF CONTROL JOINTS, AT ENDS OF WALL, AND AT A MAXIMUM SPACING OF 32" THROUGHOUT THE WALL. AT CORNERS, PROVIDE A MINIMUM OF (4) VERTICAL BARS AT "T" JOINTS AND (3) VERTICAL BARS AT "L" JOINTS. SEE THE TYPICAL DETAIL / SCHEDULE FOR MORE INFORMATION. ALL VERTICAL REINFORCEMENT SHALL BE DOWELED INTO THE FOUNDATION WALL UNLESS SPECIFICALLY DETAILED OTHERWISE.
   b. HORIZONTAL : (2) #4 BARS IN 8" DEEP "H" BLOCK BOND BEAM UNITS AT 48"O.C. AND AT FLOORS, ROOF, BELOW OPENINGS, AND TOP OF WALL. BOND BEAMS AT ROOF SHALL SLOPE TO MATCH SLOPING ROOF. SEE THE MASONRY REINFORCING SCHEDULE FOR MASONRY BEAMS ABOVE OPENINGS.
7. SEE THE MASONRY REINFORCING SCHEDULE FOR OPENINGS WHICH EXCEED 32 INCHES IN EITHER DIRECTION.
8. ALL BLOCK CELLS CONTAINING REINFORCING, BOLTS, OR ANCHORS SHALL BE GROUTED SOLID.
9. PROVIDE (1) #5 (MINIMUM), IN GROUTED SPACE, ON ALL SIDES AND ADJACENT TO EVERY OPENING WHICH EXCEEDS 24" IN EITHER DIRECTION. HORIZONTAL BARS SHALL EXTEND 24" BEYOND THE CORNERS OF THE OPENING AND VERTICAL BARS SHALL EXTEND TO TOP OF WALL. VERTICAL REINFORCING SHALL BE PROVIDED AT ENDS, CORNERS AND EACH SIDE OF CONTROL JOINTS. SEE TYPICAL DETAILS FOR OPENINGS WHICH EXCEED 32" IN EITHER DIRECTION.
10. SOLID GROUTING OF MASONRY IS UNACCEPTABLE EXCEPT AS SPECIFICALLY NOTED ON PLANS AND SCHEDULES.
11. WHERE WALLS ARE NOT GROUTED SOLID, EACH GROUT POUR SHALL TERMINATE FLUSH WITH THE TOP OF THE UPPERMOST UNIT EXCEPT AT CELLS WITH VERTICAL REINFORCING WHERE GROUT SHALL BE 1-1/2" BELOW TOP OF UNIT TO PROVIDE CONSTRUCTION KEY. WHERE WALLS ARE GROUTED SOLID, EACH GROUT POUR SHALL TERMINATE 1-1/2" BELOW TOP OF UNIT.
12. GROUT POURS SHALL NOT EXCEED 5'-0" UNLESS HIGH LIFT GROUTING PROCEDURES ARE FOLLOWED.
13. THE USE OF HIGH LIFT GROUTING PROCEDURES REQUIRE THE APPROVAL OF THE ARCHITECT AND ENGINEER AND SHALL NOT EXCEED THE MAXIMUM HEIGHTS GIVEN IN TABLE 3.2.1 OF TMS 402-16. GROUT DEMONSTRATION PANELS, AS PRESCRIBED BY THE ARCHITECT AND ENGINEER, SHALL BE REQUIRED WHERE REQUESTED GROUTING PROCEDURES DO NOT MEET THE LIMITS OF TABLE 3.2.1. ADDITIONALLY, ALL HIGH LIFT GROUTING SHALL REQUIRE SPECIAL INSPECTION PROCEDURES NEEDED TO VERIFY GROUT PLACEMENT DURING CONSTRUCTION. DURING THE SUBMITTAL FOR APPROVAL PROCESS, SUBMITTAL SHALL INCLUDE, BUT NOT BE LIMITED TO: STATEMENT OF PROCEDURE FOR MECHANICAL VIBRATION OF HIGH LIFT GROUT; NEW MIX DESIGNS FOR HIGH SLUMP, HIGH LIFT GROUT; FOR SELF-CONSOLIDATING GROUT, SUBMIT MIX DESIGNS, SLUMP FLOW RATES, VISUAL STABILITY INDEX (VSI), AND QUANTITIES OF ADMIXTURES BEING USED.
14. ALL MASONRY BEAMS SHALL BE BUILT INTEGRAL WITH SUPPORT. NO TOOTHING OR DOWELING PERMITTED. UNITS WITH ONE END OPEN SHALL BE USED FOR ALL MASONRY BEAMS.
15. PROVIDE VERTICAL CONTROL JOINTS AT MAXIMUM SPACINGS NOTED BELOW UNLESS NOTED OTHERWISE IN THE SPECIFICATIONS AND/OR ON ARCHITECTURAL ELEVATIONS AND AT ALL CHANGES IN WALL ELEVATION AND MASONRY THICKNESS. CONTROL JOINTS SHALL NOT BE LOCATED DIRECTLY OVER OR CLOSER THAN 24" TO WALL OPENINGS (DOORS, WINDOWS, MECHANICAL OPENINGS, ETC.), OR WITHIN MASONRY JAMBS.
    REINFORCED MASONRY : 40 FT
    VENEER : 30 FT AND AT INTERFACE BETWEEN VENEER SUPPORTED BY FOUNDATIONS AND SUSPENDED STRUCTURAL ELEMENTS.
16. HORIZONTAL REINFORCEMENT SHALL TERMINATE AT EACH SIDE OF CONTROL JOINTS EXCEPT AT FLOOR AND ROOF LEVEL BOND BEAMS AND AT TOP OF PARAPET.
17. CONTROL JOINTS SHALL BE PROVIDED AT THE MASONRY SIDE OF EMBEDDED STEEL COLUMNS TO CONTROL CRACKING OF FACE SHELLS.
18. SUPPORT NON-BEARING, NON-STRUCTURAL WALLS AT TOP OF MASONRY AS PER TYPICAL DETAILS AT LOCATIONS WHERE INTERSECTING OR PERPENDICULAR WALLS ARE 12'-0" OR MORE APART OR WHERE END OF WALL OCCURS 6'-0" OR MORE FROM INTERSECTING WALL.
19. EMBED CHANNELS AND PLATES TO BE PLACED SO AS TO CREATE FLUSH SURFACE WITH FACE OF MASONRY. FLANGES ON CHANNEL EMBEDS SHALL BE HORIZONTAL.
20. ALL VERTICAL REINFORCING SHALL BE SECURED IN PLACE PRIOR TO GROUTING USING WIRE POSITIONERS OR OTHER ACCEPTABLE DEVICES. REINFORCING SHALL BE SECURED AT BAR-SPLICE LOCATIONS AND AT A SPACING NOT MORE THAN 120 BAR DIAMETERS.
21. UNLESS NOTED OTHERWISE, MASONRY WALLS SHALL BE CONSTRUCTED UTILIZING COMMON RUNNING-BOND WITH FULLY MORTARED BED JOINTS AROUND GROUTED CELLS.
22. MASONRY VENEER SHALL BE ANCHORED USING THE HOHMANN AND BARNARD VENEER ANCHOR ASSEMBLY SYSTEM, OR AN APPROVED EQUAL, REGARDLESS OF BACK-UP SYSTEM, PROVIDE A CONTINUOUS HORIZONTAL 9 GAUGE WIRE AT 16"O.C. IN VENEER MORTAR JOINTS FOR ANCHOR ATTACHMENT. POSITIVE ANCHORAGE TO THE WIRE USING THE SEISMICLIP INTERLOCK SYSTEM SHALL BE PROVIDED TO SUPPORT NOT MORE THAN 2 SQUARE FEET OF WALL, WITH A HORIZONTAL SPACING NOT EXCEEDING 18".
    a. WOOD AND METAL STUDS; USE HOHMANN AND BARNARD HB-213 S.I.S. (SEISMICLIP INTERLOCK SYSTEM) HEAVY DUTY ANCHORS OR AN APPROVED EQUAL. THE HB-213 ASSEMBLY SHALL BE ATTACHED TO WOOD STUDS USING A # 12 X 2" WOOD SCREWS OR TO METAL STUDS USING #10 SCREWS.
    b. BRICK AND BLOCK WALLS; USE HOHMANN AND BARNARD 270-ML-S.I.S. (SEISMICLIP INTERLOCK SYSTEM) MIGHTY-LOK SEISMIC ANCHORS OR AN APPROVED EQUAL, AT SPACINGS NOTED ABOVE. INSTALL A 2 WIRE 9 GAUGE LADDER TYPE JOINT REINFORCEMENT AT 16"O.C. IN THE BACK-UP WALL FOR ANCHORAGE ATTACHMENT.
    c. CONCRETE WALLS; USE HOHMANN AND BARNARD HB 303SV SEISMIC NOTCH DOVE TAIL ANCHOR SYSTEM OR AN APPROVED EQUAL AT SPACINGS NOTED ABOVE.
23. ELECTRICAL CONDUIT SHALL NOT BE PLACED IN CELLS THAT CONTAIN REBAR. CONDUIT IS ALLOWED TO PASS THROUGH REINFORCED CELLS WHEN IT OCCURS PERPENDICULAR TO THE REBAR. CONDUIT SHALL NOT CONTACT REBAR AS IT PASSES. THERE SHALL BE 1" CLEAR BETWEEN CONDUIT AND REBAR.

M. TIMBER

1. WOOD GRADES (UNLESS NOTED OTHERWISE)
   a. ALL FRAMING LUMBER SHALL BE DOUGLAS FIR/LARCH CLEARLY MARKED WITH A STAMP BY WWPA APPROVED AGENCY AND SHALL BE GRADED AS FOLLOWS:
      1. HORIZONTAL MEMBERS: JOISTS & RAFTERS: NO. 2, BEAMS & STRINGERS: NO. 2.
   b. ALL FRAMING IN CONTACT WITH FOOTINGS, FOUNDATIONS OR SLABS ON GRADE SHALL BE PRESSURE TREATED OR TIMBERSTRAND LSL TREATED LUMBER WITH EQUIVALENT STRESS GRADES TO TYPICAL FRAMING MEMBERS.
   c. UNLESS NOTED OTHERWISE, ALL ENGINEERED LUMBER SHALL BE FURNISHED BY TRUS-JOIST CORPORATION OR APPROVED EQUAL AND SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES :

	MODULUS OF ELASTICITY	FLEXURAL STRESS RATING
LVL :	2,000,000 PSI	2,600 PSI
PSL :	2,000,000 PSI	2,900 PSI
LSL :	1,0,000 PSI	2,250 PSI

   d. ALL WOOD "I" JOISTS AND BRIDGING SHALL BE FURNISHED BY TRUS-JOIST CORPORATION OR APPROVED EQUAL.
2. SHEATHING SHALL BE APA RATED SHEATHING, EXPOSURE I, EXTERIOR GLUE AND PANEL INDEX RATING AS NOTED BELOW UNLESS NOTED OTHERWISE :

LOCATION	THICKNESS	PANEL INDEX
WALLS :	7/16"	24/0
FLOORS :	23/32"	48/24
ROOFS :	19/32"	32/16

3. INDIVIDUAL PIECES OF SHEATHING AT ROOF, FLOOR, AND SHEAR WALLS SHALL NOT BE SMALLER THAN 24" IN EITHER DIRECTION AND SHALL SPAN A MINIMUM OF TWO FRAMING SPACES, UNO.
4. ALL 23/32" FLOOR SHEATHING SHALL BE TONGUE AND GROOVE UNLESS NOTED OTHERWISE.
5. CONNECTIONS, FASTENERS, AND ADHESIVE
   a. ALL BOLTS THRU WOOD SHALL BE ASTM A307 AND SHALL HAVE HARDENED WASHERS UNDER ASTM A563 HEAVY HEX NUT AND BOLT HEADS.
   b. NAILS SHALL BE GALVANIZED OR STAINLESS STEEL AT EXPOSED LOCATIONS OR IN TREATED WOOD (SEE NOTE BELOW FOR FASTENERS CONNECTED TO OR IN CONTACT WITH TREATED WOOD). THE HEAD OF ALL NAILS SHALL BE DRIVEN FLUSH WITH THE SURFACE OF THE SHEATHING.
   c. UNLESS NOTED OTHERWISE, ALL NAILS SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES :

COMMON NAIL SIZE	SHANK DIAMETER	HEAD DIAMETER	LENGTH	MIN. PENETRATION INTO SUPPORT MEMBER
6d	0.113"	0.266"	2"	1.25"
8d	0.131"	0.281"	2-1/2"	1.375"
10d	0.148"	0.312"	3"	1.50"
12d	0.148"	0.312"	3-1/4"	1.50"
16d	0.162"	0.344"	3-1/2"	1.62"

   d. A CONTINUOUS BEAD OF PERMANENT BOND TIMBER/WOOD ADHESIVE COMPOUND SHALL BE USED TO FASTEN ALL FLOOR SHEATHING TO FLOOR JOISTS IN ACCORDANCE WITH MANUFACTURERS' SPECIFICATIONS.
   e. ALL FRAMING ANCHORS, POST CAPS, HOLD DOWNS, COLUMN BASES ETC. TO BE PROVIDED BY SIMPSON OR APPROVED EQUAL AND SHALL BE ATTACHED IN ACCORDANCE WITH MANUFACTURERS' PUBLISHED DATA, UNLESS NOTED OTHERWISE.
   f. FASTENERS CONNECTED TO OR IN CONTACT WITH PRESERVATIVE-TREATED AND/OR FIRE-RETARDANT-TREATED WOOD (EXCEPT FOR TIMBERSTRAND LSL TREATED LUMBER AND BORATE BASED TREATMENTS) SHALL BE OF G-185 HOT-DIP GALVANIZED STEEL OR 304 OR 316 STAINLESS STEEL. STAINLESS STEEL AND GALVANIZED STEEL SHALL NEVER BE USED IN CONTACT WITH EACH OTHER.
   g. EXCEPT WHERE NOTED OTHERWISE, THE NUMBER AND SIZE OF NAILS CONNECTING WOOD MEMBERS SHALL NOT BE LESS THAN THAT SET FORTH IN IBC TABLE 2304.10.1. MULTIPLE PLIES OF ENGINEERED LUMBER SHALL BE FASTENED TOGETHER IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS.
6. PROVIDE SOLID 2" (NOMINAL) FULL DEPTH BLOCKING AT ENDS AND SUPPORT LOCATIONS FOR ALL JOISTS AND RAFTERS. BLOCKING SHALL BE ATTACHED TO SUPPORT FRAMING WITH A MINIMUM OF (1) SIMPSON A35 FRAMING ANCHOR BETWEEN JOISTS UNLESS NOTED OTHERWISE.
7. UNLESS NOTED OTHERWISE, ALL HORIZONTAL FRAMING MEMBERS SHALL BE INSTALLED WITH THE NATURAL CROWN UP.

N. EXISTING BUILDING NOTES

1. ARW ENGINEERS EXPRESSLY DISCLAIMS RESPONSIBILITY FOR ANY PORTION OF THE EXISTING BUILDING NOT SPECIFICALLY ADDRESSED IN THESE DRAWINGS.
2. DRAWINGS AND DETAILS HAVE BEEN PREPARED TO REFLECT THE EXISTING CONDITIONS AND CONFIGURATIONS OF STRUCTURAL ELEMENTS. HOWEVER, THE CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR VERIFYING ALL EXISTING CONDITIONS AND ALERTING THE ENGINEER OF ANY DISCREPANCIES FOUND PRIOR TO FABRICATING OR INSTALLING STRUCTURAL ELEMENTS.
3. THE CONTRACTOR IS RESPONSIBLE FOR MAKING SURE THAT THE BUILDING AND ELEMENTS WITHIN THE BUILDING REMAIN STABLE UNTIL CONSTRUCTION IS COMPLETE. AT NO ADDITIONAL COST TO THE OWNER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING SHORING OR OTHER TEMPORARY SUPPORT OF STRUCTURAL MEMBERS UNTIL THE FINAL CONFIGURATION HAS BEEN COMPLETED.

PROFESSIONAL ENGINEER LICENSED 10/8/24 16183 STATE OF IDAHO ROBERT M. MOORE
10/08/24

DATE

ARW ENGINEERS
1765 W. 400 N. JEROME, IDAHO 83338 (208) 644-2760

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
STRUCTURAL NOTES

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/08/24
BLP Drawn
ANB Checked
#23067 PROJECT #

S002

VIEW AND PRINT THIS DRAWING IN COLOR

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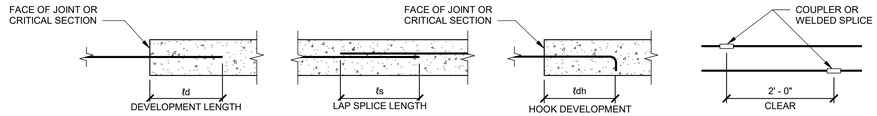
2018 IBC CONCRETE REBAR LAP SPLICE SCHEDULE

FOR CONCRETE APPLICATIONS (ACI 318 - 14)



BAR LOCATION	CONCRETE		CONCRETE REINFORCING & SPLICE LENGTHS (IN)																												COMMENTS
			BAR SIZE																												
	TYPE	STRENGTH	#3			#4			#5			#6			#7			#8			#9			#10			#11			
			ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	
VERT. WALL BARS, FILL ON METAL DECK	NWC	3000 PSI	17	22	8	22	29	8	28	36	10	33	43	12	48	62	13	55	72	15	62	81	17	69	90	19	76	99	30		
HORIZ. WALL BARS, FOOTING TOP BARS	NWC	3000 PSI	22	29	8	29	38	11	36	47	14	43	56	16	63	82	19	72	94	22	81	105	25	90	117	27	98	127	30		
BEAM BOTTOM BARS, COLUMN BARS	NWC	3000 PSI	17	22	8	22	29	11	28	36	14	33	43	16	48	62	19	55	72	22	62	81	25	69	90	27	76	99	30		
FOOTING BOTTOM BARS	NWC	3000 PSI	12	16	8	14	18	8	17	22	10	20	26	12	29	38	13	33	43	15	37	48	17	42	55	19	46	60	30		
SLAB TOP BARS[5] BEAM TOP BARS	NWC	3000 PSI	22	29	8	29	38	11	36	47	14	43	56	16	63	82	19	72	94	22	81	105	25	90	117	27	98	127	30		
SLAB ON GRADE	NWC	3000 PSI	12	16	8	14	18	8	17	22	10	20	26	12	32	42	13	42	55	15	53	69	17	69	90	19	76	99	30		

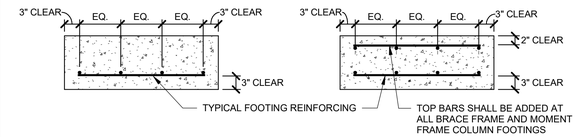
BAR LOCATION	CONCRETE		CONCRETE REINFORCING & SPLICE LENGTHS (IN)																												COMMENTS
			BAR SIZE																												
	TYPE	STRENGTH	#3			#4			#5			#6			#7			#8			#9			#10			#11			
			ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	
VERT. WALL BARS, FILL ON METAL DECK	NWC	4000 PSI	15	20	7	19	25	7	24	31	8	29	38	10	42	55	12	48	62	13	54	70	15	60	78	17	66	86	26		
HORIZ. WALL BARS, FOOTING TOP BARS	NWC	4000 PSI	19	25	7	25	33	9	31	40	12	37	48	14	54	70	17	62	81	19	70	91	21	78	101	24	85	111	26		
BEAM BOTTOM BARS, COLUMN BARS	NWC	4000 PSI	15	20	7	19	25	9	24	31	12	29	38	14	42	55	17	48	62	19	54	70	21	60	78	24	66	86	26		
FOOTING BOTTOM BARS	NWC	4000 PSI	12	16	7	12	16	7	15	20	8	18	23	10	25	33	12	29	38	13	33	43	15	36	47	17	40	52	26		
SLAB TOP BARS[5] BEAM TOP BARS	NWC	4000 PSI	19	25	7	25	33	9	31	40	12	37	48	14	54	70	17	62	81	19	70	91	21	78	101	24	85	111	26		
SLAB ON GRADE	NWC	4000 PSI	12	16	7	12	16	7	15	20	8	18	23	10	28	36	12	36	47	13	46	60	15	60	78	17	66	86	26		

BAR LOCATION	CONCRETE		CONCRETE REINFORCING & SPLICE LENGTHS (IN)																												COMMENTS
			BAR SIZE																												
	TYPE	STRENGTH	#3			#4			#5			#6			#7			#8			#9			#10			#11			
			ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	ℓd	ℓs	ℓdh	
VERT. WALL BARS, FILL ON METAL DECK	NWC	4500 PSI	14	18	7	18	23	6	23	30	8	27	35	9	40	52	11	45	59	13	51	66	14	56	73	16	62	81	25		
HORIZ. WALL BARS, FOOTING TOP BARS	NWC	4500 PSI	18	23	7	24	31	9	30	39	11	35	46	13	51	66	16	59	77	18	66	86	20	73	95	22	80	104	25		
BEAM BOTTOM BARS, COLUMN BARS	NWC	4500 PSI	14	18	7	18	23	9	23	30	11	27	35	13	40	52	16	45	59	18	51	66	20	56	73	22	62	81	25		
FOOTING BOTTOM BARS	NWC	4500 PSI	12	16	7	12	16	6	14	18	8	17	22	9	24	31	11	27	35	13	31	40	14	34	44	16	37	48	25		
SLAB TOP BARS[5] BEAM TOP BARS	NWC	4500 PSI	18	23	7	24	31	9	30	39	11	35	46	13	51	66	16	59	77	18	66	86	20	73	95	22	80	104	25		
SLAB ON GRADE	NWC	4500 PSI	12	16	7	12	16	6	14	18	8	17	22	9	27	35	11	34	44	13	44	57	14	56	73	16	62	81	25		

NOTES :
1. MECHANICAL COUPLERS MAY BE USED IN LIEU OF LAP SPLICES SHOWN. SEE STRUCTURAL NOTES FOR MINIMUM COUPLER CAPACITY. WHERE MECHANICAL COUPLERS ARE USED, STAGGER ADJACENT SPLICES A MINIMUM OF 24" AS INDICATED ABOVE.
2. LENGTHS INDICATED IN THIS SCHEDULE SHALL BE INCREASED BY 50% FOR STRAIGHT BAR DEVELOPMENT AND 20% FOR HOOKED BARS WHERE EPOXY COATING IS USED.
3. WHEN SPLICING BARS OF DIFFERENT SIZES, USE LAP SPLICE LENGTH OF LARGER BARS UNO.
4. SPLICE BARS LARGER THAN #11 USING MECHANICAL COUPLERS.
5. SLAB TOP BARS ONLY FOR SLABS 12" OR GREATER IN THICKNESS.

FOOTING SCHEDULE

MARK	WIDTH	LENGTH	THICK	LENGTHWISE REINF.		CROSSWISE REINF.			REMARKS
				NO.	SIZE	NO.	SIZE	SPA.	
FC2	2'-0"	CONT.	12"	(2)	#5	--	--	--	
FC3	3'-0"	CONT.	14"	(3)	#5	--	#5	12"o.c.	REINF. TOP & BOTTOM
F3	3'-0"	3'-0"	12"	(3)	#5	(3)	#5	--	
F3.5	3'-6"	3'-6"	12"	(3)	#5	(3)	#5	--	
F4	4'-0"	4'-0"	12"	(4)	#5	(4)	#5	--	REINF. TOP & BOTTOM
F4.5	4'-6"	4'-6"	12"	(4)	#5	(4)	#5	--	
F5	5'-0"	5'-0"	12"	(5)	#5	(5)	#5	--	REINF. TOP & BOTTOM
F5.5	5'-6"	5'-6"	12"	(5)	#5	(5)	#5	--	
F6	6'-0"	6'-0"	12"	(6)	#5	(6)	#5	--	REINF. TOP & BOTTOM
F6.5	6'-6"	6'-6"	14"	(7)	#5	(7)	#5	--	REINF. TOP & BOTTOM
F7	7'-0"	7'-0"	14"	(7)	#6	(7)	#6	--	
F7.5	7'-6"	7'-6"	14"	(7)	#6	(7)	#6	--	
F8	8'-0"	8'-0"	16"	(8)	#6	(8)	#6	--	
F8.5	8'-6"	8'-6"	16"	(8)	#6	(8)	#6	--	
F9	9'-0"	9'-0"	18"	(9)	#6	(9)	#6	--	
F9.5	9'-6"	9'-6"	18"	(10)	#6	(10)	#6	--	
F10	10'-0"	10'-0"	20"	(10)	#6	(10)	#6	--	
F10.5	10'-6"	10'-6"	20"	(10)	#7	(10)	#7	--	
F11	11'-0"	11'-0"	22"	(11)	#7	(11)	#7	--	
F11.5	11'-6"	11'-6"	22"	(11)	#7	(11)	#7	--	
F12	12'-0"	12'-0"	22"	(12)	#7	(12)	#7	--	

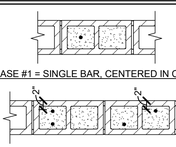


TYP. FOOTING SECTION

TYP. FOOTING SECTION W/ TOP & BOTTOM REINF.

2018 IBC MASONRY REBAR LAP SPLICE SCHEDULE

FOR MASONRY APPLICATIONS (TMS 402/602 - 16)



CASE #1 = SINGLE BAR, CENTERED IN CELL

CASE #2 = WHEN REINFORCING BAR IS PLACED ADJACENT TO FACE SHELL

BAR LOCATION	MASONRY REINFORCING & SPLICE LENGTHS (IN) (f'm = 2000psi)									
	BAR SIZE									
	#3		#4		#5		#6		#7	
	CASE #		CASE #		CASE #		CASE #		CASE #	
	1	2	1	2	1	2	1	2	1	2
BEAM / WALL HORIZONTAL	19"		26"		32"		38"		45"	
WALL VERTICAL COLUMN AND JAMB	12"	14"	12"	25"	19"	40"	37"	54"	51"	63"

NOTES :
1. MECHANICAL COUPLERS MAY BE USED IN LIEU OF LAP SPLICES SHOWN. SEE STRUCTURAL NOTES FOR MINIMUM COUPLER CAPACITY. WHERE MECHANICAL COUPLERS ARE USED, STAGGER ADJACENT SPLICES A MINIMUM OF 24" AS INDICATED ABOVE.
2. DEVELOPMENT LENGTHS SHALL BE INCREASED BY 50% WHERE EPOXY COATED REBAR IS USED.
3. WHEN SPLICING BARS OF DIFFERENT SIZES, USE LAP SPLICE LENGTH OF LARGER BARS UNO.
4. ALL REBAR #8 AND LARGER IN MASONRY SHALL BE SPLICED USING MECHANICAL SPLICES. SEE STRUCTURAL NOTES FOR MINIMUM COUPLER CAPACITY.

PROFESSIONAL ENGINEER LICENSED 10/8/24 16183 STATE OF IDAHO ROBERT M. MOHME
10/08/24

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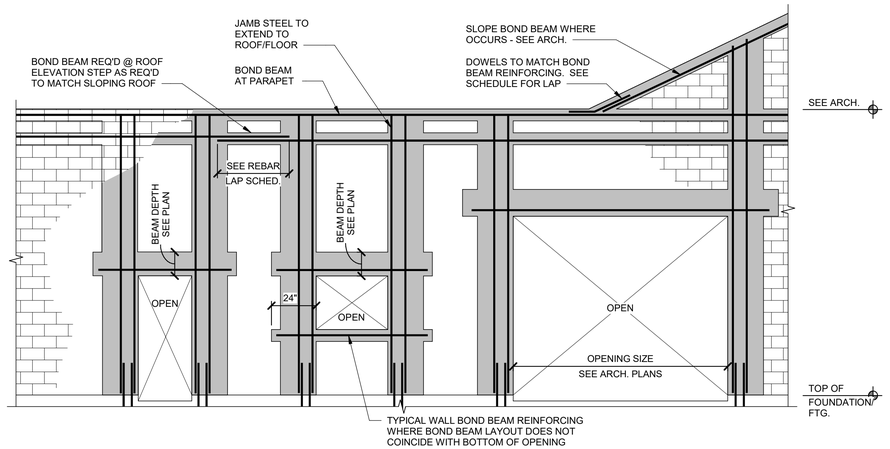
TYPICAL MASONRY / JAMB REINFORCING SCHEDULE



NOTES:
1. USE OPEN-END UNITS AT INTERSECTIONS OF BEAMS AND JAMBS.
2. TYPICAL HORIZONTAL BOND BEAMS MAY BE ADJUSTED UP OR DOWN BY ONE COURSE PROVIDED THE OVERALL NUMBER OF REQUIRED BOND BEAMS ARE INSTALLED.
3. TYPICAL HORIZONTAL AND VERTICAL WALL REINFORCING NOT SHOWN FOR CLARITY, SEE PLAN AND SCHEDULE FOR TYPICAL WALL REINFORCING.
4. JAMB REINFORCING SHOWN IS SCHEMATIC. SEE SCHEDULE & DETAILS FOR ACTUAL JAMB REINFORCING.
5. ALL VERTICAL WALL REINFORCING SHALL BE CONTINUOUS BETWEEN THE LEVELS IN WHICH THE WALL OCCURS.

MASONRY BEAM SCHEDULE

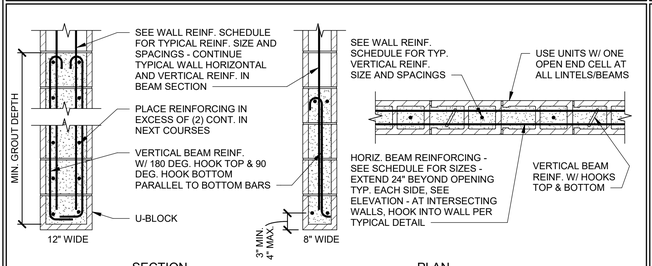
MARK	NOMINAL THICKNESS	BOTTOM REINF.	TOP REINF.	VERTICAL REINF.	MIN. GROUT DEPTH	OPENING ① SIZE	COMMENTS
MB-1	8"	(2) #4	---	#4 @ 8"o.c.	12"	---	
MB-2	8"	(4) #5	---	#4 @ 8"o.c.	24"	3'-6" TO 6'-0"	

NOTES:
1. WHERE SPECIFIC BEAMS ARE NOT NOTED ON THE PLANS - REFER TO OPENING SIZE FOR REQUIRED BEAM DEPTH AND REINFORCING.
2. FIRST VERTICAL BAR TO BE WITHIN 8" OF END OF BEAM.
3. SEE TYPICAL ELEVATION - VIEW OF BEAM.
4. VERTICAL REINFORCING SHALL HAVE HOOKS TOP AND BOTTOM.

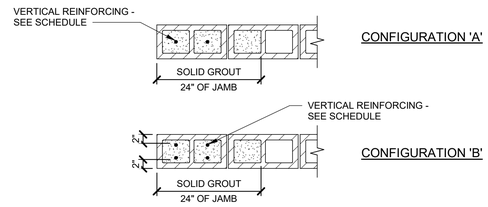
MASONRY JAMB SCHEDULE

MARK	NOMINAL THICKNESS	VERTICAL REINF.	TIES	CONFIG.	OPENING ① SIZE	COMMENTS
MJ-1	8"	(2) #5	---	A	2'-8" TO 4'-0"	
MJ-2	8"	(4) #5	---	B	4'-1" TO 6'-0"	

NOTES:
1. WHERE SPECIFIC JAMBS ARE NOT NOTED ON THE PLANS - REFER TO OPENING SIZE FOR REQUIRED REINFORCING AND CONFIGURATION.
2. ALL VERTICAL REINFORCING SHALL HAVE MATCHING DOWELS CAST INTO FOUNDATIONS.
3. HORIZONTAL REINFORCING NOT SHOWN.
4. JAMBS TO BE GROUTED SOLID.



NOTE: SEE TYPICAL DETAIL FOR LINTELS W/ BRICK VENEER



MASONRY WALL SCHEDULE

MARK	THICK.	VERT. REINF. SIZE	VERT. REINF. SPACE	HORIZ. BOND BEAM REINF. NO.	HORIZ. BOND BEAM REINF. SIZE	HORIZ. BOND BEAM REINF. SPACE	HORIZ. BOND BEAM REINF. @ ROOF	COMMENTS
MW-8A	8"	#5	32"	(2)	#4	48"	(2) #5	
MW-8B	8"	#5	24"	(2)	#4	48"	(2) #5	

NOTES:
1. FOR ANY CMU WALLS NOT SPECIFICALLY CALLED OUT IN PLANS, USE MW-8A
2. VERTICAL REINFORCING TO BE @ CENTERLINE OF WALL UNLESS OTHERWISE NOTED.
3. SOLID GROUTING OF WALLS IS UNACCEPTABLE EXCEPT WHERE SPECIFICALLY NOTED.
4. SEE STRUCTURAL NOTES FOR ADDITIONAL INFORMATION.
5. A BOND BEAM SHALL BE LOCATED IN THE FIRST COURSE ABOVE THE FOUNDATION IF VERTICAL DOWELS HAVE BEEN BENT TO ALIGN WITH VERTICAL CELLS, WHETHER OR NOT MASONRY WEBS HAVE BEEN CUT.

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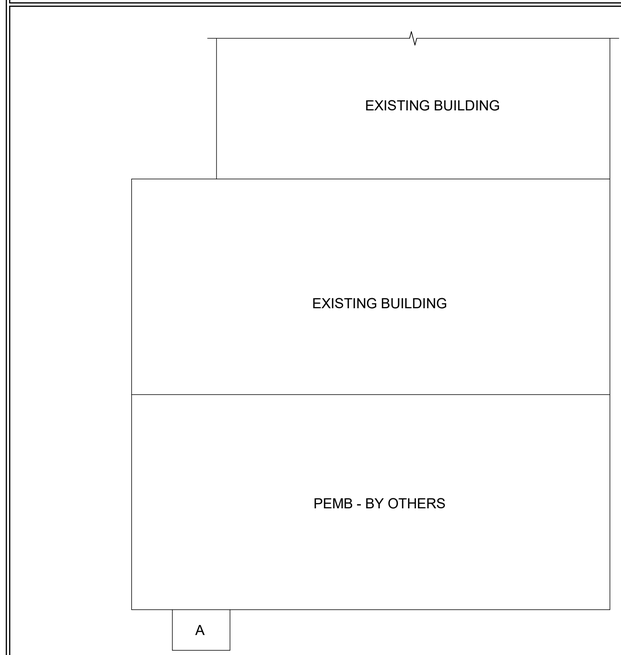
ROOF DECK SCHEDULE

AREA	DECK			ATTACHMENT						MIN. SHEAR CAPACITY, lb/ft (ASD)	MIN. SHEAR STIFFNESS G' (kip/in)	COMMENTS
				SUPPORTS		SIDE SEAMS		SUPPORTS PARALLEL TO FLUTES				
	DEPTH	TYPE	GA.	TYPE[2]	PATTERN	TYPE[2]	SPACING	TYPE[2]	SPACING			
A	1 1/2	B	22	#10 SCREW	36/4	#10 SCREW	18"o.c.	#10 SCREW	12"o.c.	300 PLF	143	---

FASTENING PATTERNS

PATTERN : 36/4

NOTES :
1. ALL ROOF DECKING TO BE SUPPLIED BY VERCO, OR APPROVED EQUAL. ALTERNATE DECKING SHALL BE SUBMITTED WITH CURRENT ICC APPROVAL TO ENGINEER FOR REVIEW AND APPROVAL. ALTERNATE DECKING SYSTEMS SHALL MEET OR EXCEED THE MINIMUM SHEAR CAPACITY AND SHALL PROVIDE GREATER THAN OR EQUAL TO THE MINIMUM SHEAR STIFFNESS LISTED IN THE SCHEDULE.
2. PAF = HILTI X-HSN 24 POWDER ACTUATED FASTENERS, VSC2 = VERCO SIDELAP CONNECTION WITH PUNCHLOK TOOL, SCREWS = SELF DRILLING SCREW PER ASTM C1513, SPOT WELD = 3/4" VISIBLE DIAMETER SPOT WELD.
3. USE NESTABLE (OVERLAPPING) SIDE SEAMS AT SCREW ATTACHMENTS AND INTERLOCKING SIDE SEAMS AT WELDS.
4. IF N DECK IS NOT NESTABLE, N DECK END BUTT JOINTS OVER STEEL JOISTS SHALL USE 16 GA. x 6" CONTINUOUS SHEET BETWEEN DECK AND JOIST TOP CHORD ANGLES. DECK WELDS TO PENETRATE SHEET AND ENGAGE JOIST CHORD.
5. ALL DECK WITH A PROFILE DEPTH OF 2" OR LESS SHALL HAVE NESTED OR TELESCOPED END LAPS.
6. WHERE WELDS ARE USED, SUPPORT WELDS AT INTERLOCKING SIDELAPS MAY BE 3/8" x 1-1/4" ARC SEAM WELDS IN LIEU OF ARC SPOT WELDS.



KEY PLAN

SPECIAL INSPECTION SCHEDULE [1, 2]

ESTABLISHED PER 2018 IBC SECTION 110 AND CHAPTER 17

ITEM	CONTINUOUS[3]	PERIODIC[3]	REFERENCE	COMMENTS
CONCRETE CONSTRUCTION (IBC 1705.3)			SEE IBC TABLE 1705.3 - REF. NOTE C1	C 1. SPECIAL INSPECTION IS NOT REQUIRED FOR CONC. ISOLATED SPREAD FOOTINGS, CONTINUOUS FOOTINGS, NON-STRUCTURAL SLABS, FOUNDATION WALLS, PATIOS, DRIVEWAYS, AND SIDEWALKS PROVIDED THE REQUIREMENTS OF IBC 1705.3 ARE MET.
REINFORCING STEEL PLACEMENT		●		C.2. PERIODIC SPECIAL INSPECTION IS ALLOWED FOR VERIFICATION OF THE WELDABILITY OF REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS, AND SHEAR REINFORCEMENT. PERIODIC SPECIAL INSPECTION IS ALLOWED FOR WELDING OF OTHER ASTM A 706 REINFORCING STEEL NOT INCLUDED IN THE CONTINUOUS SPECIAL INSPECTION REQUIREMENTS NOTED ABOVE.
WELDING OF REINFORCING STEEL	●	●	REFERENCE NOTE C2	
EMBEDDED BOLTS & PLATES	●			
VERIFYING REQUIRED DESIGN MIX		●		C 3. EPOXY AND EXPANSION ANCHORS INTO MASONRY OR CONCRETE MAY BE USED ONLY WHEN APPROVED BY ARCHITECT. AND/OR ENGINEER USING AN APPROVED PRODUCT WITH CURRENT PUBLISHED ICC RESEARCH REPORT NUMBERS. COORDINATE CONTINUOUS/PERIODIC SPECIAL INSPECTION REQUIREMENTS WITH ICC REPORT.
EPOXY / EXPANSION ANCHOR PLACEMENT	●	●	REFERENCE NOTE C3	
MASONRY CONSTRUCTION (IBC 1705.4)			SEE TMS 402/ACI 550 TABLE 1.19.2 (NON-ESSENTIAL)	M 1. PERIODIC SPECIAL INSPECTION IS ALLOWED FOR VERIFICATION OF THE WELDABILITY OF REINFORCING STEEL OTHER THAN ASTM A 706 IN ACCORDANCE WITH ANSI / AWS D1.4. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR REINFORCING STEEL RESISTING FLEXURAL AND AXIAL FORCES IN INTERMEDIATE AND SPECIAL MOMENT FRAMES, BOUNDARY ELEMENTS OF SPECIAL REINFORCED CONCRETE SHEAR WALLS, AND SHEAR REINFORCEMENT. PERIODIC SPECIAL INSPECTION IS ALLOWED FOR WELDING OF OTHER ASTM A 706 REINFORCING STEEL NOT INCLUDED IN THE CONTINUOUS SPECIAL INSPECTION REQUIREMENTS NOTED ABOVE.
AS MASONRY CONSTRUCTION BEGINS, VERIFY:				M 2. CONTINUOUS SPECIAL INSPECTION IS REQUIRED FOR ESSENTIAL FACILITIES (TMS 602-16/ACI 530.1 TABLE 3).
SITE PREPARED MORTAR		●		M 3. EPOXY AND EXPANSION ANCHORS INTO MASONRY OR CONCRETE MAY BE USED ONLY WHEN APPROVED BY ARCHITECT AND/OR ENGINEER USING AN APPROVED PRODUCT WITH CURRENT PUBLISHED ICC RESEARCH REPORT NUMBERS. COORDINATE CONTINUOUS/PERIODIC SPECIAL INSPECTION REQUIREMENTS WITH ICC REPORT.
MORTAR JOINTS		●		
REINFORCEMENT / CONNECTORS		●		
PRE-STRESSING TECHNIQUES		●		
GRADE & SIZE OF TENDONS & ANCHORAGES		●		
INSPECTION SHALL VERIFY:				
SIZE & LOCATION OF STRUCTURAL ELEMENTS		●		
TYPE, SIZE, & LOCATION OF ANCHORS		●	REFERENCE NOTE M2	
SIZE, GRADE & TYPE OF REINFORCEMENT		●		
WELDING OF REINFORCING BARS	●		REFERENCE NOTE M1	
HOT OR COLD WEATHER PROTECTION		●		
MEASUREMENT OF PRE-STRESSING FORCE		●	REFERENCE NOTE M2	
PRIOR TO GROUTING, VERIFY:				
CLEAN GROUT SPACE		●	REFERENCE NOTE M2	
PLACEMENT OF REINFORCEMENT CONNECTORS, TENDONS AND ANCHORS.		●		
PROPORTIONS OF SITE PREPARED GROUT		●		
CONSTRUCTION OF MORTAR JOINTS		●		
GROUT PLACEMENT	●			
GROUTING OF PRE-STRESSING BONDED TENDONS	●			
PREPARATION OF TEST SPECIMENS / PRISMS	●			
COMPLIANCE W/ CONST. DOCS. / SUBMITTALS		●		
EPOXY / EXPANSION ANCHOR PLACEMENT	●	●	REFERENCE NOTE M3	
VERIFICATION OF f'm AND f'aac		●		
SELF CONSOLIDATING GROUT:				
VERIFY SLUMP FLOW AND VSI	●			
COLD FORMED FRAMING (IBC 1705.11.2 & 1705.12.3)				CF 1. SPECIAL INSPECTION IS NOT REQUIRED FOR COLD-FORMED STEEL LIGHT-FRAME SHEAR WALLS, BRACES, DIAPHRAGMS, COLLECTORS (DRAG STRUTS) AND HOLDDOWNS WHERE SHEATHING IS WOOD STRUCTURAL PANEL OR STEEL SHEETS ON ONLY ONE SIDE OF THE SHEAR WALL, SHEAR PANEL OR DIAPHRAGM ASSEMBLY AND THE FASTENER SPACING OF THE SHEATHING IS MORE THAN 4"o.c.
LIGHT GAUGE METAL FRAMING WELDING		●		
SHEAR WALL & DIAPHRAGM ATTACHMENTS		●		
DRAG STRUT & BRACE INSTALLATION		●		
SOILS (IBC 1705.6)			REFERENCE NOTE F1	F 1. SPECIAL INSPECTION OF SOILS SHALL REFERENCE THE APPROVED SOILS REPORT TO DETERMINE COMPLIANCE.
VERIFY ADEQUATE MATERIALS BELOW FOOTINGS		●	REFERENCE NOTE F1	F 2. WHERE SOILS REPORT IS NOT PROVIDED SPECIAL INSPECTIONS ARE REQUIRED TO VERIFY THAT THE IN-PLACE DRY DENSITY OF THE COMPACTED FILL IS NOT LESS THAN 90 PERCENT OF THE MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT DETERMINED IN ACCORDANCE WITH ASTM D 1557.
EXCAVATIONS EXTEND TO PROPER DEPTH AND REACH PROPER MATERIAL		●	REFERENCE NOTE F2	
CLASSIFY & TEST CONTROLLED FILL MATERIALS		●	REFERENCE NOTE F2	
PERFORM MATERIALS, DENSITIES, AND LIFT THICKNESSES DURING PLACEMENT AND COMPACTION OF CONTROLLED FILL.	●		REFERENCE NOTE F1	
PROPERLY PREPARED SITE AND SUB-GRADE PRIOR TO FILL.		●	REFERENCE NOTE F1	

GENERAL SPECIAL INSPECTION NOTES :

1. THE ITEMS MARKED WITH A "●" IN THE SPECIAL INSPECTION SCHEDULE SHALL BE INSPECTED IN ACCORDANCE WITH IBC CHAPTER 17 BY A CERTIFIED SPECIAL INSPECTOR FROM AN ESTABLISHED TESTING AGENCY. FOR MATERIAL SAMPLING AND TESTING REQUIREMENTS, REFER TO THE MATERIAL SAMPLING AND TESTING SECTION, THE PROJECT SPECIFICATIONS, AND THE SPECIFIC GENERAL NOTES SECTIONS. THE TESTING AGENCY SHALL SEND COPIES OF ALL STRUCTURAL TESTING AND INSPECTION REPORTS DIRECTLY TO THE ARCHITECT, ENGINEER, CONTRACTOR, AND BUILDING OFFICIAL. ANY ITEMS WHICH FAIL TO COMPLY WITH THE APPROVED CONSTRUCTION DOCUMENTS SHALL IMMEDIATELY BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF DISCREPANCIES ARE NOT CORRECTED, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE BUILDING OFFICIAL, ARCHITECT, AND ENGINEER PRIOR TO COMPLETION OF THAT PHASE OF WORK. SPECIAL INSPECTION TESTING REQUIREMENTS APPLY EQUALLY TO ALL BIDDER DESIGNED COMPONENTS.
2. ANY CONSTRUCTION OR MATERIAL THAT HAS FAILED INSPECTION SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT.
3. CONTINUOUS SPECIAL INSPECTION MEANS THE FULL-TIME OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. PERIODIC SPECIAL INSPECTION MEANS THE PART-TIME OR INTERMITTENT OBSERVATION OF WORK REQUIRING SPECIAL INSPECTION BY AN APPROVED SPECIAL INSPECTOR WHO IS PRESENT IN THE AREA WHERE THE WORK HAS BEEN OR IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK. (IBC SECTION 202)

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COLD-FORMED STEEL DECK SPECIAL INSPECTION SCHEDULE

ESTABLISHED PER 2018 IBC SECTION 1705.2.2

INSPECTION TASKS PRIOR TO DECK PLACEMENT (TABLE 1.1)	INSTALLER QUALITY CONTROL		SPECIAL INSPECTOR QUALITY ASSURANCE	
	CONTINUOUS	PERIODIC	CONTINUOUS	PERIODIC
VERIFY COMPLIANCE OF MATERIALS (DECK AND ALL DECK ACCESSORIES) WITH CONSTRUCTION DOCUMENTS, INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE METAL THICKNESS	●		●	
DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES	●		●	
INSPECTION TASKS AFTER DECK PLACEMENT (TABLE 1.2)	**CONTINUOUS**	**PERIODIC**	**CONTINUOUS**	**PERIODIC**
VERIFY COMPLIANCE OF DECK AND ALL DECK ACCESSORIES INSTALLATION WITH CONSTRUCTION DOCUMENTS	●		●	
VERIFY DECK MATERIALS ARE REPRESENTED BY THE MILL CERTIFICATIONS THAT COMPLY WITH THE CONSTRUCTION DOCUMENTS	●		●	
DOCUMENT ACCEPTANCE OR REJECTION OF INSTALLATION OF DECK AND DECK ACCESSORIES	●		●	
INSPECTION TASKS PRIOR TO WELDING (TABLE 1.3)	**CONTINUOUS**	**PERIODIC**	**CONTINUOUS**	**PERIODIC**
WELDING PROCEDURE SPECIFICATIONS (WPSs) AVAILABLE		●		●
MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES AVAILABLE		●		●
MATERIAL IDENTIFICATION (TYPE/GRADE)		●		●
CHECK WELDING EQUIPMENT		●		●
INSPECTION TASKS DURING WELDING (TABLE 1.4)	**CONTINUOUS**	**PERIODIC**	**CONTINUOUS**	**PERIODIC**
USE OF QUALIFIED WELDERS				
CONTROL AND HANDLING OF WELDING CONSUMABLES		●		●
ENVIRONMENTAL CONDITIONS (WIND SPEED, MOISTURE, TEMPERATURE)		●		●
WPS FOLLOWED		●		●
INSPECTION TASKS AFTER WELDING (TABLE 1.5)	**CONTINUOUS**	**PERIODIC**	**CONTINUOUS**	**PERIODIC**
VERIFY SIZE AND LOCATIONS OF WELDS, INCLUDING SUPPORT, SIDELAP, AND PERIMETER WELDS	●		●	
WELDS MEET VISUAL ACCEPTANCE CRITERIA	●		●	
VERIFY REPAIR ACTIVITIES	●		●	
DOCUMENT ACCEPTANCE OR REJECTION OF WELDS	●		●	
INSPECTION TASKS PRIOR TO MECHANICAL FASTENING (TABLE 1.6)	**CONTINUOUS**	**PERIODIC**	**CONTINUOUS**	**PERIODIC**
MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS		●		●
PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION		●		●
PROPER STORAGE FOR MECHANICAL FASTENERS		●		●
INSPECTION TASKS DURING MECHANICAL FASTENING (TABLE 1.7)	**CONTINUOUS**	**PERIODIC**	**CONTINUOUS**	**PERIODIC**
FASTENERS ARE POSITIONED AS REQUIRED		●		●
FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS		●		●
INSPECTION TASKS AFTER MECHANICAL FASTENING (TABLE 1.8)	**CONTINUOUS**	**PERIODIC**	**CONTINUOUS**	**PERIODIC**
CHECK SPACING, TYPE, AND INSTALLATION OF SUPPORT FASTENERS	●		●	
CHECK SPACING, TYPE, AND INSTALLATION OF SIDELAP FASTENERS	●		●	
CHECK SPACING, TYPE, AND INSTALLATION OF PERIMETER FASTENERS	●		●	
VERIFY REPAIR ACTIVITIES	●		●	
DOCUMENT ACCEPTANCE OR REJECTION OF MECHANICAL FASTENERS	●		●	

NOTES

1. PERIODIC - INSPECT THESE ITEMS ON AN INTERMITTENT BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS. FREQUENCY OF OBSERVATIONS SHALL BE ADEQUATE TO CONFIRM THAT THE WORK HAS BEEN PERFORMED IN ACCORDANCE WITH THE APPLICABLE DOCUMENTS. ADDITIONAL INSPECTIONS SHALL BE PERFORMED TO DETERMINE THE EXTENT OF NON-CONFORMANCE.
2. CONTINUOUS - PERFORM THESE TASKS PRIOR TO FINAL ACCEPTANCE FOR EACH ITEM OR ELEMENT.
3. WITHIN THE LISTED TASKS, "DOCUMENT" SHALL MEAN THE INSPECTOR SHALL PREPARE REPORTS OR OTHER APPROPRIATE WRITTEN DOCUMENTATION INDICATING THAT THE WORK HAS OR HAS NOT BEEN PERFORMED IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.

GENERAL STEEL DECK SPECIAL INSPECTION NOTES :

1. QUALITY CONTROL TASKS SHALL BE PERFORMED BY THE INSTALLER'S QUALITY CONTROL INSPECTOR (QCI).
2. FOR QUALITY CONTROL INSPECTION, THE CONSTRUCTION DOCUMENTS, INSTALLATION DRAWINGS, SHOP DRAWINGS, DESIGN DOCUMENTS AND THE APPLICABLE REFERENCED STANDARDS SHALL BE UTILIZED.
3. QUALITY ASSURANCE INSPECTION OF THE DECK SHALL BE MADE AT THE PROJECT SITE. THE OWNER'S DESIGNATED REPRESENTATIVE FOR CONSTRUCTION SHALL SCHEDULE THIS WORK WITH THE QUALITY ASSURANCE INSPECTOR (QAI) AND THE INSTALLER TO MINIMIZE INTERRUPTIONS TO THE WORK OF THE INSTALLER.
4. THE QAI SHALL REVIEW THE MATERIALS TEST REPORTS AND CERTIFICATIONS LISTED IN SECTION 2.2 OF SDI QA/QC FOR COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS.
5. QUALITY ASSURANCE TASKS SHALL BE PERFORMED BY THE QAI.
6. WHERE A TASK IS TO BE PERFORMED BY BOTH QA AND QC, IT SHALL BE PERMITTED TO COORDINATE INSPECTION FUNCTIONS BETWEEN THE QCI AND QAI SO THAT THE INSPECTIONS ARE PERFORMED BY ONLY ONE PARTY WHEN APPROVED IN ADVANCE BY THE OWNER, DESIGNER , AND AHJ. WHEN QA TASKS ARE PERFORMED ONLY BY THE QCI, EACH INSPECTION IS TO BE DOCUMENTED IN A REPORT AND THE QAI SHALL PERIODICALLY REVIEW THE WORK OF THE QCI AT AN INTERVAL ACCEPTABLE TO THE OWNER, DESIGNER, AND THE AHJ.
7. IN THE EVENT THAT THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS CONFLICT WITH THE INSTALLATION DRAWINGS OR SHOP DRAWINGS, THE REQUIREMENTS OF THE CONSTRUCTION DOCUMENTS SHALL GOVERN.
8. IDENTIFICATION AND REJECTION OF MATERIALS AND WORKMANSHIP NOT IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS SHALL BE PERMITTED AT ANY TIME DURING PROGRESS OF OR FOLLOWING THE COMPLETION OF THE WORK. HOWEVER, THIS PROVISION SHALL NOT RELIEVE THE OWNER OR THE INSPECTOR OF THE OBLIGATION FOR TIMELY, IN-SEQUENCE INSPECTIONS. NONCOMFORMING MATERIAL OR WORKMANSHIP SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE OWNERS DESIGNATED REPRESENTATIVE FOR CONSTRUCTION AND THE DECK INSTALLER. NONCONFORMING MATERIAL OR WORKMANSHIP SHALL BE BROUGHT IN CONFORMANCE, OR MADE SUITABLE FOR ITS INTENDED PURPOSE AS DETERMINED BY THE DESIGNER.

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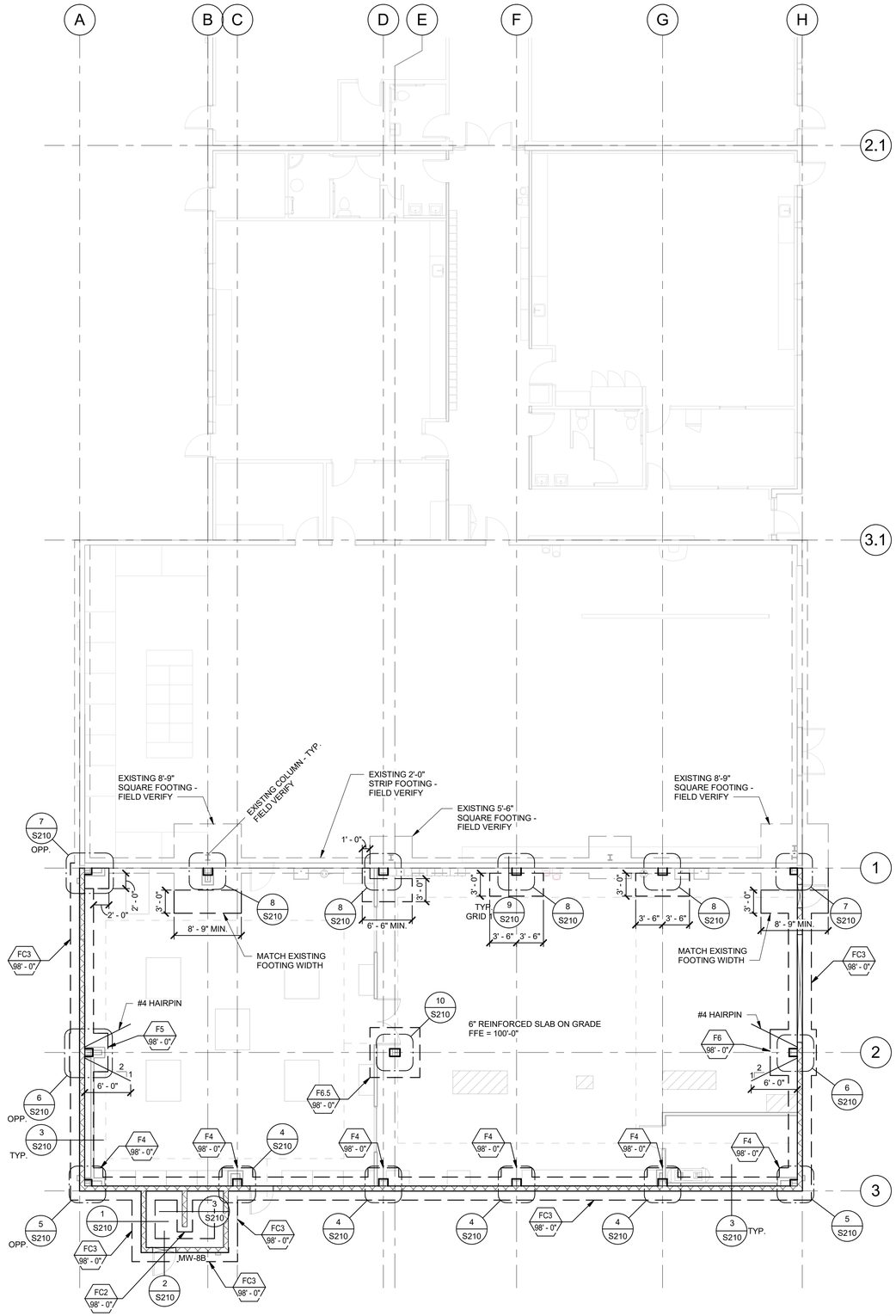

FOOTING & FOUNDATION PLAN

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

A S101

FOOTING & FOUNDATION NOTES :

1. SEE SHEET S001 FOR GENERAL STRUCTURAL NOTES.
2. ALL FOOTINGS SHALL BE PLACED ON SOIL WHICH HAS BEEN PREPARED FOR THE BEARING PRESSURE SHOWN IN THE STRUCTURAL NOTES.
3. VERIFY ALL DIMENSIONS WITH DRAWINGS AND NOTIFY ENGINEER OF ANY DISCREPANCIES FOUND.
4. SOLID GROUT ALL MASONRY COURSES BELOW FINISHED FLOOR OR EXTERIOR GRADE (WHICHEVER IS HIGHER).
5. SEE SHEET S010 FOR FOOTING SCHEDULE.
6. PROVIDE DOWELS IN FOOTINGS / FOUNDATIONS TO MATCH VERTICAL WALL REINFORCING U.N.O.
7. SEE SHEET S201 FOR TYPICAL FOOTING AND FOUNDATION DETAILS.
8. ALL EXTERIOR WALL FOOTINGS TO BEAR A MINIMUM DIMENSION BELOW EXTERIOR GRADE AS NOTED IN GENERAL STRUCTURAL NOTES.
9. FOUNDATION WALLS ARE DESIGNED AND DETAILED FOR THE COMPLETED CONDITION. CONTRACTOR IS RESPONSIBLE FOR MEANS AND METHODS OF CONSTRUCTION. BACKFILLED WALLS SHALL BE ADEQUATELY BRACED DURING CONSTRUCTION AND BACKFILLING TO PRODUCE PLUMB AND TRUE FINISHED WALLS.
10. ALL ANCHORS, HOLDOWNS, ANCHOR BOLTS, DOWELS, EMBEDDED ITEMS, ETC. SHALL BE HELD IN PLACE PRIOR TO AND DURING CONCRETE AND/OR GROUT PLACEMENT.
11. COORDINATE ALL FOOTING DEPTHS (INTERIOR AND EXTERIOR) WITH DRAINS, CONDUITS, ETC. THAT MAY INTERFERE WITH FOOTINGS.

CONCRETE SLAB NOTES :

1. SLAB ON GRADE SHALL BE 6" THICK CONCRETE U.N.O. SLAB SHALL BE UNDERLAIN BY 4" OF FREE DRAINING MATERIAL.
2. SEE SHEET S201 FOR CONTROL AND CONSTRUCTION JOINT INFORMATION.

PROFESSIONAL ENGINEER LICENSED 10/8/24 16183 STATE OF IDAHO ROBERT M. MOORE

10/08/24

DATE

ARW ENGINEERS

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
FOOTING & FOUNDATION PLAN

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
(208) 736-8050

DATE: 10/08/24
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#23067 PROJECT #

S101

VIEW AND PRINT THIS DRAWING IN COLOR

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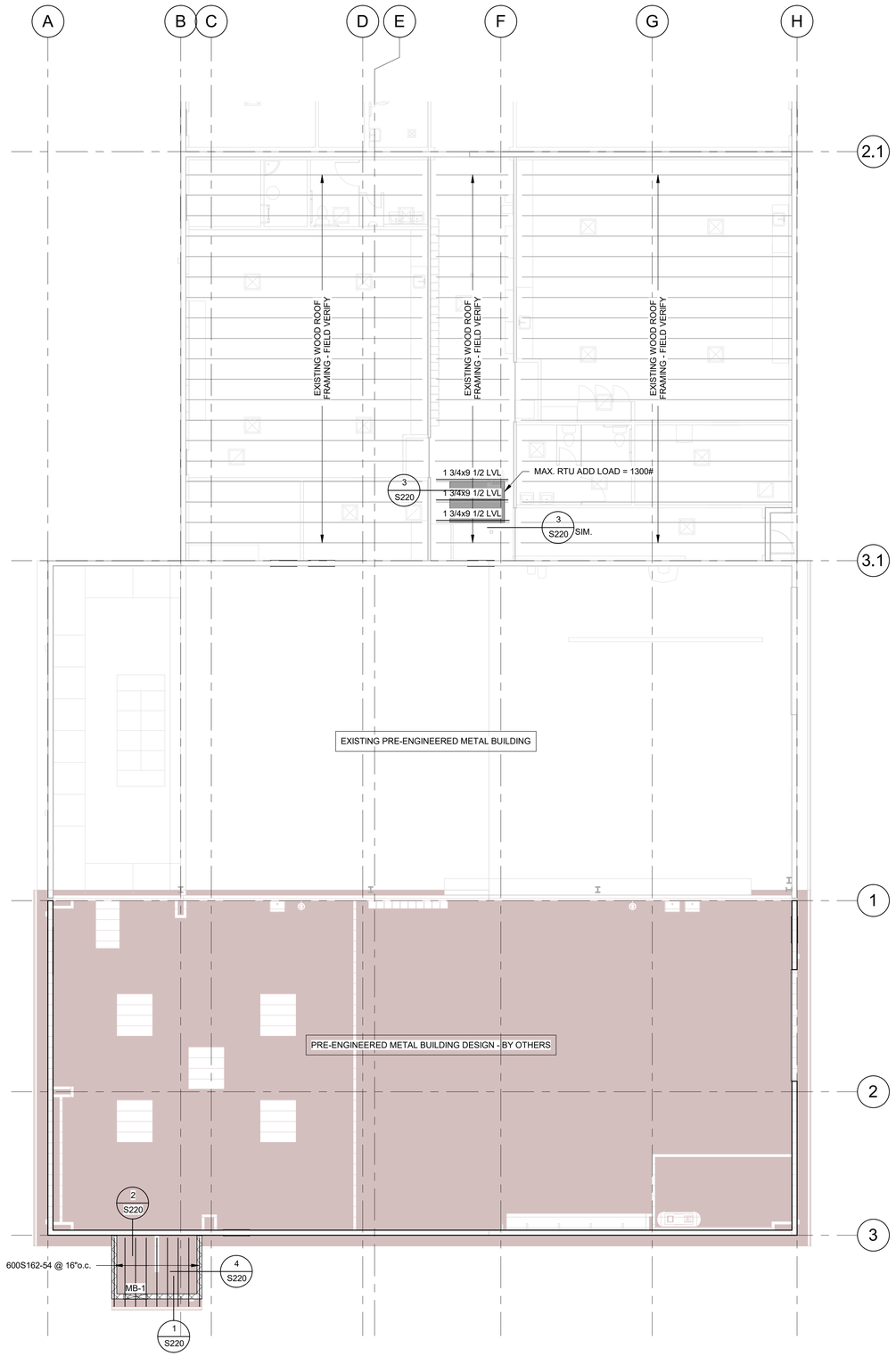

ROOF FRAMING PLAN

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

A
S102

ROOF FRAMING NOTES :

1. SEE SHEET S001 FOR GENERAL STRUCTURAL NOTES.
2. SEE ROOF DECK SCHEDULE FOR REQUIRED DECK AND ATTACHMENTS.
3. SEE SHEET S201 FOR OPENINGS IN ROOF DECK. SEE MECHANICAL AND ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS.
4. CONTRACTOR SHALL ERECT AND MAINTAIN ADEQUATE TEMPORARY BRACING UNTIL ALL ROOF FRAMING AND DECK ATTACHMENTS ARE COMPLETE.
5. CONCENTRATED LOADS FROM EQUIPMENT, PIPING, ETC., SHALL NOT BE HUNG FROM JOISTS EXCEPT AT PANEL POINTS AND AS APPROVED BY THE ENGINEER.

PROFESSIONAL ENGINEER
LICENSED
10/8/24
16183
STATE OF IDAHO
ROBERT M. MOHME

10/08/24

DATE

ARW ENGINEERS
1470 W. Broadway, Suite 201
Idaho Falls, ID 83402
208.542.1100

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
ROOF FRAMING PLAN

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
(208) 736-8050

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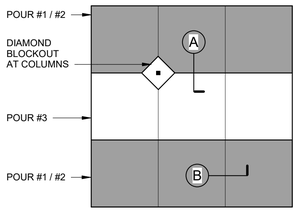
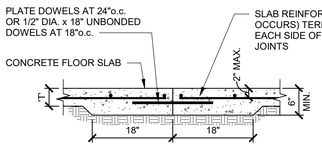


NOTES:
1. JOINTS SHALL OCCUR AT MAIN COLUMN / GRID LINES W/ 10'-0" MAX. SPACING BETWEEN JOINTS AT 4" SLABS; 12'-0" MAX. AT 5" SLABS, AND 15'-0" MAX. AT 6" SLABS.
2. SEE PLAN FOR SLAB THICKNESS 'T' AND REINFORCING SIZE AND SPACING.

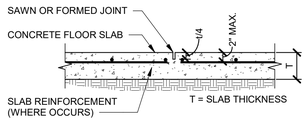


NOTE: THICKENING OF SLAB NOT REQUIRED FOR SLABS WITH T = 6" OR GREATER

T = SLAB THICKNESS

CONSTRUCTION JOINT (A)

SCALE : NONE

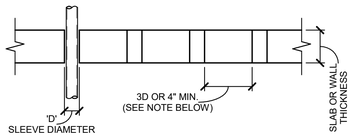


CONTROL JOINT (B)

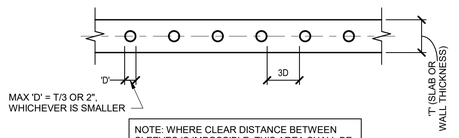
SCALE : NONE

TYPICAL CONCRETE SLAB JOINTS — 1 / S201

SCALE : NONE



PIPING / CONDUIT THRU SLAB OR WALL

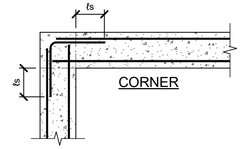


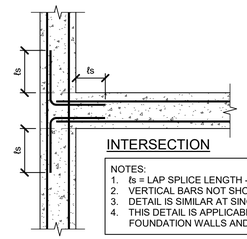
NOTE: WHERE CLEAR DISTANCE BETWEEN SLEEVES IS IMPOSSIBLE, THIS AREA SHALL BE TREATED AS AN OPENING PER REINFORCING AT STRUCTURAL CONCRETE SLAB OPENINGS, SEE TYPICAL DETAIL.

PIPING / CONDUIT IN SLAB OR WALL

TYPICAL PIPING/CONDUIT AT SLAB OR WALL — 2 / S201

SCALE : NONE



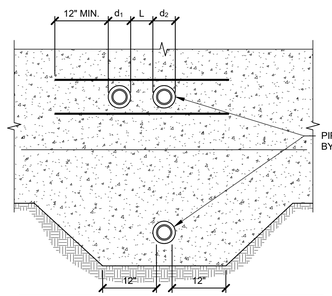


INTERSECTION

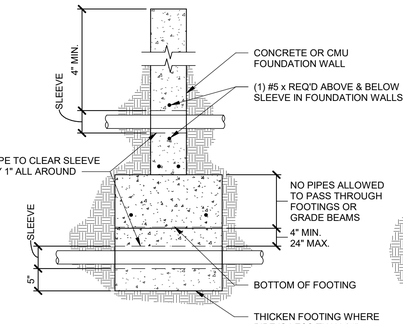
NOTES:
1. fs = LAP SPLICE LENGTH - SEE REBAR LAP SCHEDULE.
2. VERTICAL BARS NOT SHOWN.
3. DETAIL IS SIMILAR AT SINGLE CURTAIN OF REINFORCING.
4. THIS DETAIL IS APPLICABLE AT ALL FOOTINGS, FOUNDATION WALLS AND MASONRY WALLS.

TYPICAL HORIZONTAL REINFORCING DETAIL — 3 / S201

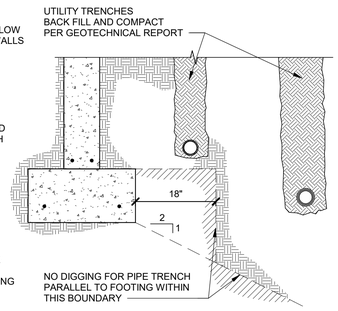
SCALE : NONE



NOTES :
1. TYPICAL FOUNDATION WALL REINFORCING NOT SHOWN FOR CLARITY.
2. FOR OPENINGS LARGER THAN 12" IN ANY DIRECTION. SEE STRUCTURAL NOTE E-7.
3. DETAIL IS SIMILAR AT MASONRY FOUNDATION WALLS.
4. DISTANCE 'L' SHALL BE THE GREATER OF (d1 +d2)/2 OR 4".



PIPE CROSSING FOOTING / FOUNDATION WALL



PIPE PARALLEL TO FOOTING

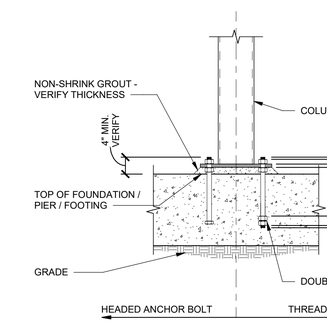
ALLOWABLE PIPING LOCATIONS @ FOOTING DETAIL — 4 / S201

SCALE : NONE

NOTES:
1. ALL VERTICAL REINFORCING SHALL HAVE MATCHING DOWELS CAST INTO FOUNDATIONS / FOOTINGS.
2. HORIZONTAL REINFORCING NOT SHOWN FOR CLARITY.
3. TYP. WALL VERTICAL REINFORCING NOT SHOWN - SEE PLAN FOR SIZE AND SPACING

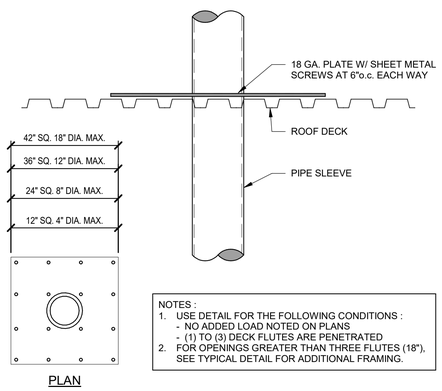
TYPICAL VERTICAL REINFORCING DETAIL — 5 / S201

SCALE : NONE



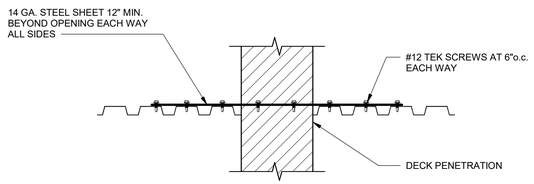
TYPICAL ANCHOR BOLT EMBEDMENT DETAIL — 6 / S201

SCALE : NONE



PLAN

NOTES :
1. USE DETAIL FOR THE FOLLOWING CONDITIONS :
   - NO ADDED LOAD NOTED ON PLANS
   - (1) TO (3) DECK FLUTES ARE PENETRATED
2. FOR OPENINGS GREATER THAN THREE FLUTES (18"), SEE TYPICAL DETAIL FOR ADDITIONAL FRAMING.

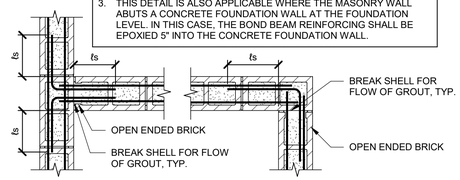


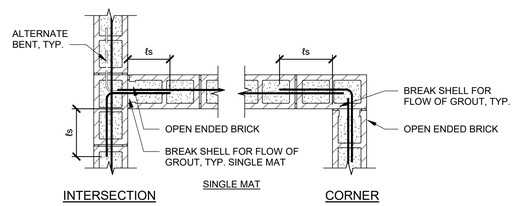
NOTES :
1. USE DETAIL FOR FOLLOWING CONDITIONS :
   - NO ADDED LOAD NOTED ON PLANS.
   - (1) TO (3) DECK FLUTES ARE PENETRATED.
2. FOR OPENINGS GREATER THAN THREE FLUTES (18") - SEE TYPICAL DETAIL.

TYPICAL FRAMING @ SMALL ROOF OPENINGS DETAIL — 7 / S201

SCALE : NONE

NOTES :
1. fs = LAP SPLICE LENGTH - SEE REBAR LAP SCHEDULE.
2. VERTICAL BARS NOT SHOWN.
3. THIS DETAIL IS ALSO APPLICABLE WHERE THE MASONRY WALL ABUTS A CONCRETE FOUNDATION WALL AT THE FOUNDATION LEVEL. IN THIS CASE, THE BOND BEAM REINFORCING SHALL BE EPOXIED 5" INTO THE CONCRETE FOUNDATION WALL.





TYP. REINF. AT INTERSECTIONS IN MASONRY DETAIL — 8 / S201

SCALE : NONE

PROFESSIONAL ENGINEER LICENSED 10/8/24 16183 STATE OF IDAHO ROBERT M. MOORE

10/08/24

DATE

ARW ENGINEERS

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
TYPICAL DETAILS

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
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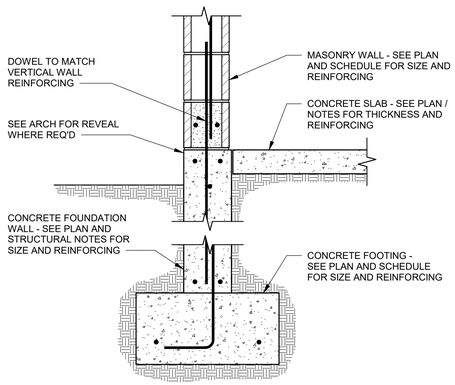
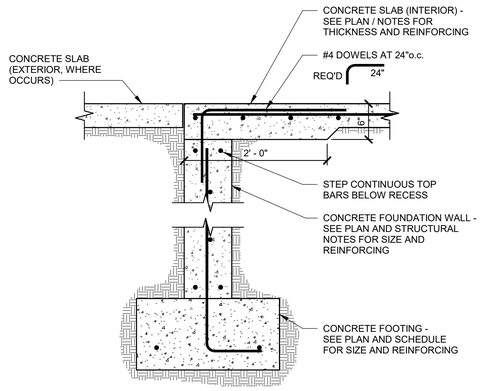


TYP. MASONRY ON CONCRETE FOUNDATION WALL DETAIL

SCALE : NONE

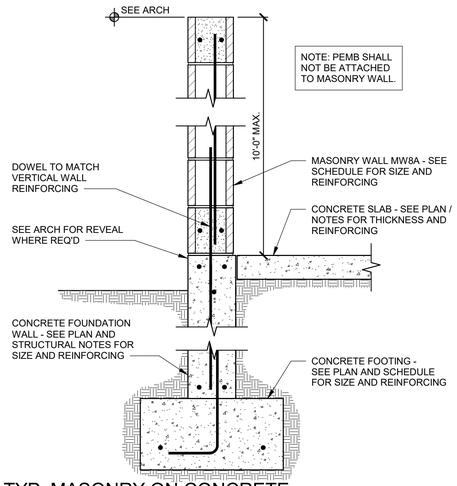
1 S210



CONCRETE FOUNDATION @ OPENING

SCALE : NONE

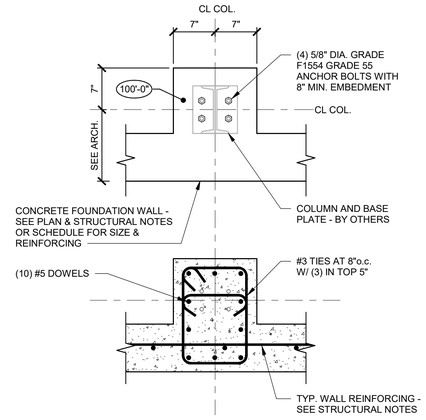
2 S210



TYP. MASONRY ON CONCRETE FOUNDATION WALL DETAIL

SCALE : NONE

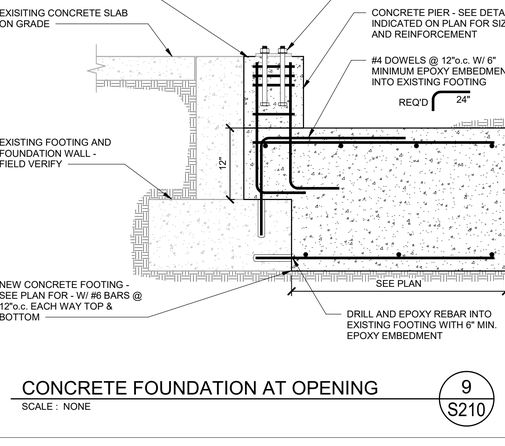
3 S210



DETAIL

SCALE : NONE

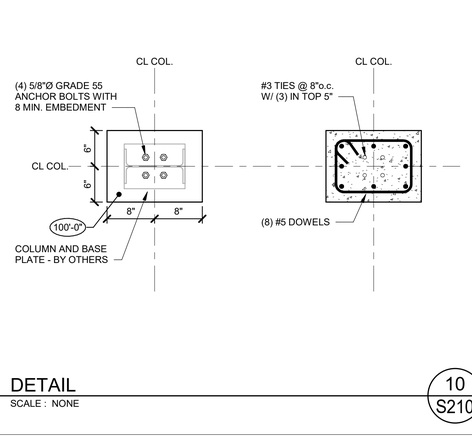
4 S210



DETAIL

SCALE : NONE

5 S210



DETAIL

SCALE : NONE

6 S210

DETAIL

SCALE : NONE

7 S210

DETAIL

SCALE : NONE

8 S210

CONCRETE FOUNDATION AT OPENING

SCALE : NONE

9 S210

DETAIL

SCALE : NONE

10 S210

PROFESSIONAL ENGINEER
LICENSED
10/8/24
16183
STATE OF IDAHO
ROBERT M. MOORE
10/08/24

DATE

ARW ENGINEERS
ARW ENGINEERS, LLC
1470 N. WOODRUFF AVE.
IDAHO FALLS, IDAHO 83415
208.522.8069

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
FOUNDATION DETAILS

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
(208) 736-8050

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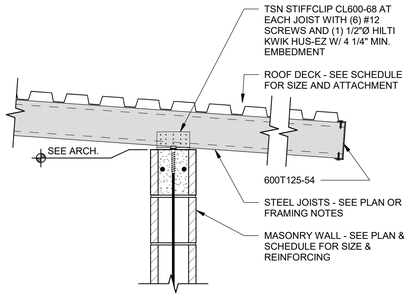

DETAIL 1 / S220
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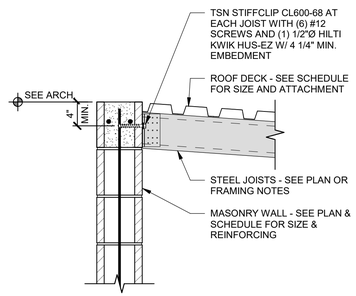

DETAIL 2 / S220
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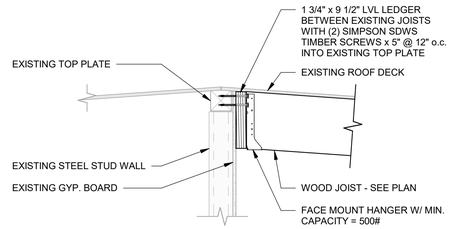

DETAIL 3 / S220
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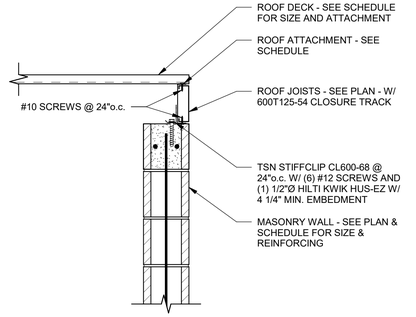

DETAIL 4 / S220
SCALE : NONE

PROFESSIONAL ENGINEER
LICENSED
10/8/24
16183
STATE OF IDAHO
ROBERT M. MOORE
10/08/24

DATE

ARW ENGINEERS
CIVIL • STRUCTURAL • MECHANICAL
ELECTRICAL • PLUMBING • FIRE PROTECTION
TWIN FALLS, IDAHO

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
3682 N 3450 E, Kimberly, ID 83341
ROOF FRAMING DETAILS

Laughlin Ricks Architecture
architecture/planning
134 3RD Ave East, * Twin Falls, Idaho 83301
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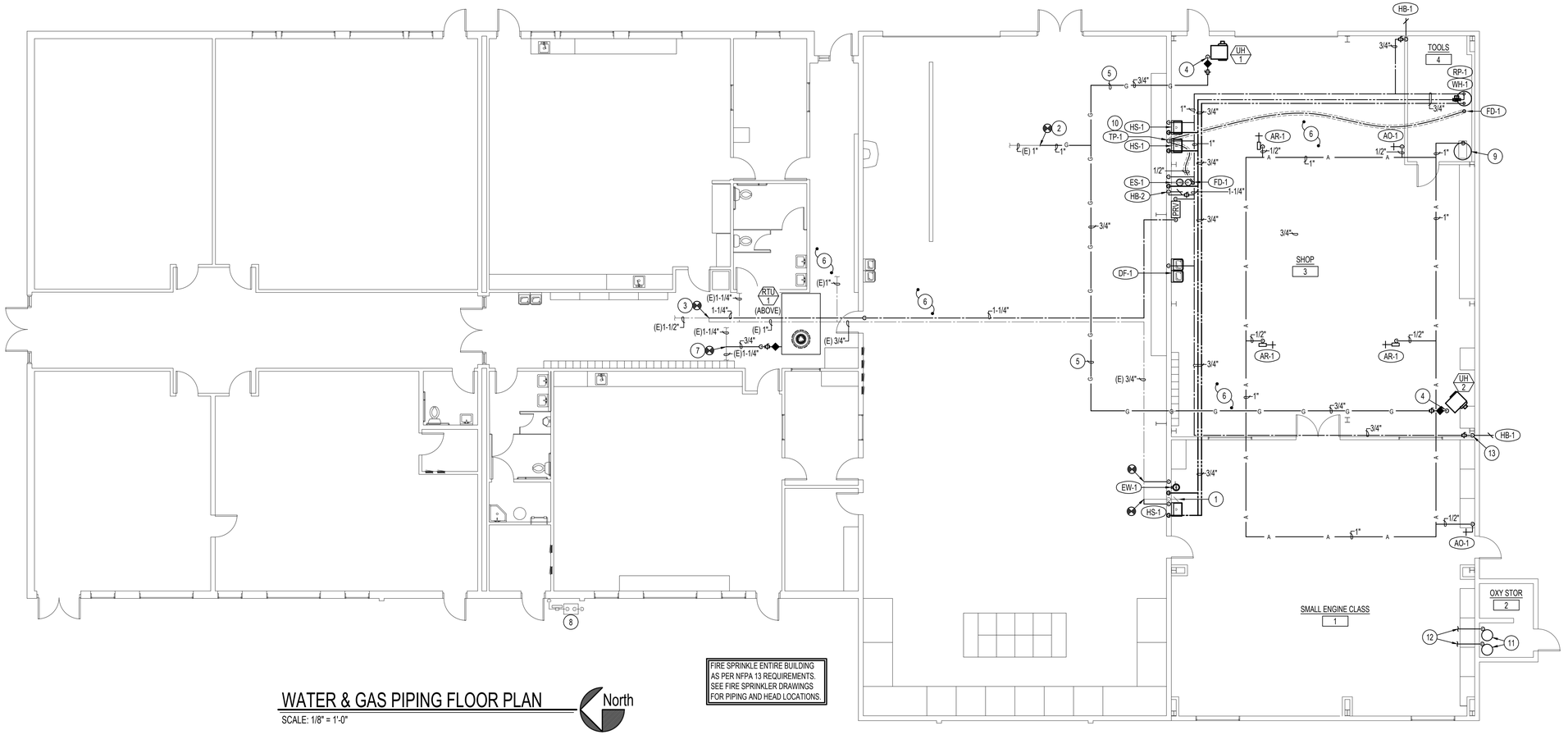


FIRE SPRINKLE ENTIRE BUILDING AS PER NFPA 13 REQUIREMENTS. SEE FIRE SPRINKLER DRAWINGS FOR PIPING AND HEAD LOCATIONS.

WATER & GAS PIPING FLOOR PLAN

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

North

PLAN NOTES:

1. EXISTING HOSE BIBB TO REMAIN. PROTECT IN PLACE DURING CONSTRUCTION.
2. CONNECT NEW 1" (2 PSI) GAS LINE TO EXISTING 1" (2 PSI) GAS LINE IN THIS LOCATION. FIELD VERIFY EXISTING CONDITIONS.
3. CONNECT NEW 1-1/2" COLD WATER LINE TO EXISTING COLD WATER IN THIS LOCATION. FIELD VERIFY EXISTING CONDITIONS.
4. DROP 3/4" (2 PSI) GAS LINE DOWN TO UNIT HEATER. INSTALL 2 PSI TO 0.5 PSI REGULATOR ON 2 PSI LINE. SIZE REGULATOR TO ACTUAL BTU LOAD OF UNIT SUPPLIED. VENT REGULATOR TO THE EXTERIOR. CONNECT 3/4" (0.5 PSI) GAS LINE TO UNIT HEATER COMPLETE WITH SHUT-OFF VALVE, DIRT LEG AND FLEXIBLE CONNECTION. SEE DETAIL ON SHEET P2.1.
5. RUN 3/4" GAS LINE AS HIGH AS POSSIBLE TO EQUIPMENT AS SHOWN. COORDINATE PIPING ROUTES WITH DUCTWORK, LIGHT FIXTURES, AND BUILDING STRUCTURE. PAINT EXPOSED PIPING SAME COLOR AS CEILING.
6. RUN WATER, AIR AND GAS PIPING AS HIGH AS POSSIBLE. COORDINATE PIPING ROUTES WITH DUCTWORK, LIGHT FIXTURES, AND BUILDING STRUCTURE. PAINT EXPOSED PIPING SAME COLOR AS CEILING.
7. CONNECT 3/4" (2 PSI) GAS LINE TO EXISTING 1-1/4" (2 PSI) GAS MAIN. RISE 3/4" (2 PSI) GAS LINE UP THRU ROOF AND CONNECT TO ROOFTOP UNIT. INSTALL 2 PSI TO 0.5 PSI REGULATOR ON 2 PSI LINE. SIZE REGULATOR FOR ACTUAL BTU OF UNIT SUPPLIED COMPLETE WITH SHUT-OFF VALVE, FLEXIBLE CONNECTION AND DIRT LEG. SEE DETAIL ON SHEET P2.1. SEAL ROOF PENETRATION WEATHERTIGHT.
8. EXISTING GAS METER TO REMAIN. COORDINATE WITH LOCAL GAS COMPANY TO ACCOMMODATE ADDITIONAL 300,000 BTU/H.
9. AIR COMPRESSOR FURNISHED BY OWNER. CONTRACTOR TO ROUGH IN AND CONNECT 1" COMPRESSED AIR PIPING. SEE DETAIL ON SHEET P2.1.
10. INSTALL TRAP PRIMER BOX 2 FT ABOVE FINISHED FLOOR. PEX PIPING TO FLOOR DRAIN TO BE CONTINUOUS WITHOUT ELBOWS OR JOINTS. SEE DETAIL ON SHEET P2.1.
11. RELOCATE EXISTING GAS CYLINDERS AND RESPECTIVE GAS MANIFOLDS TO NEW GAS STORAGE ROOM.
12. EXTEND GAS LINES FROM RELOCATED MANIFOLDS TO EXISTING SHOP. FIELD VERIFY EXISTING LOCATION AND MATCH EXISTING PIPING MATERIAL AND SIZE.
13. INSTALL HOSE BIBB DROP TIGHT TO COLUMN.

PLUMBING LEGEND

SYMBOL	DESCRIPTION
V	VENT
VTR	VENT THRU ROOF
CO	CLEANOUT
WCO	WALL CLEANOUT
COTG	CLEANOUT TO GRADE
G	PIPE DROP
	PIPE RISE
	BALL TYPE ISOLATION VALVE
	SOIL OR WASTE PIPING
	VENT LINE PIPING
	DOMESTIC COLD WATER PIPING
	DOMESTIC HOT WATER PIPING
	HOT WATER RECIRC. PIPING
G	NATURAL GAS PIPING
A	COMPRESSED AIR PIPING
	POINT OF CONNECTION

KEY PLAN

PROFESSIONAL ENGINEER REGISTERED STATE OF IDAHO DAVID L HANSEN

09/23/24

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

ESA JOB NUMBER: 24018

DATE

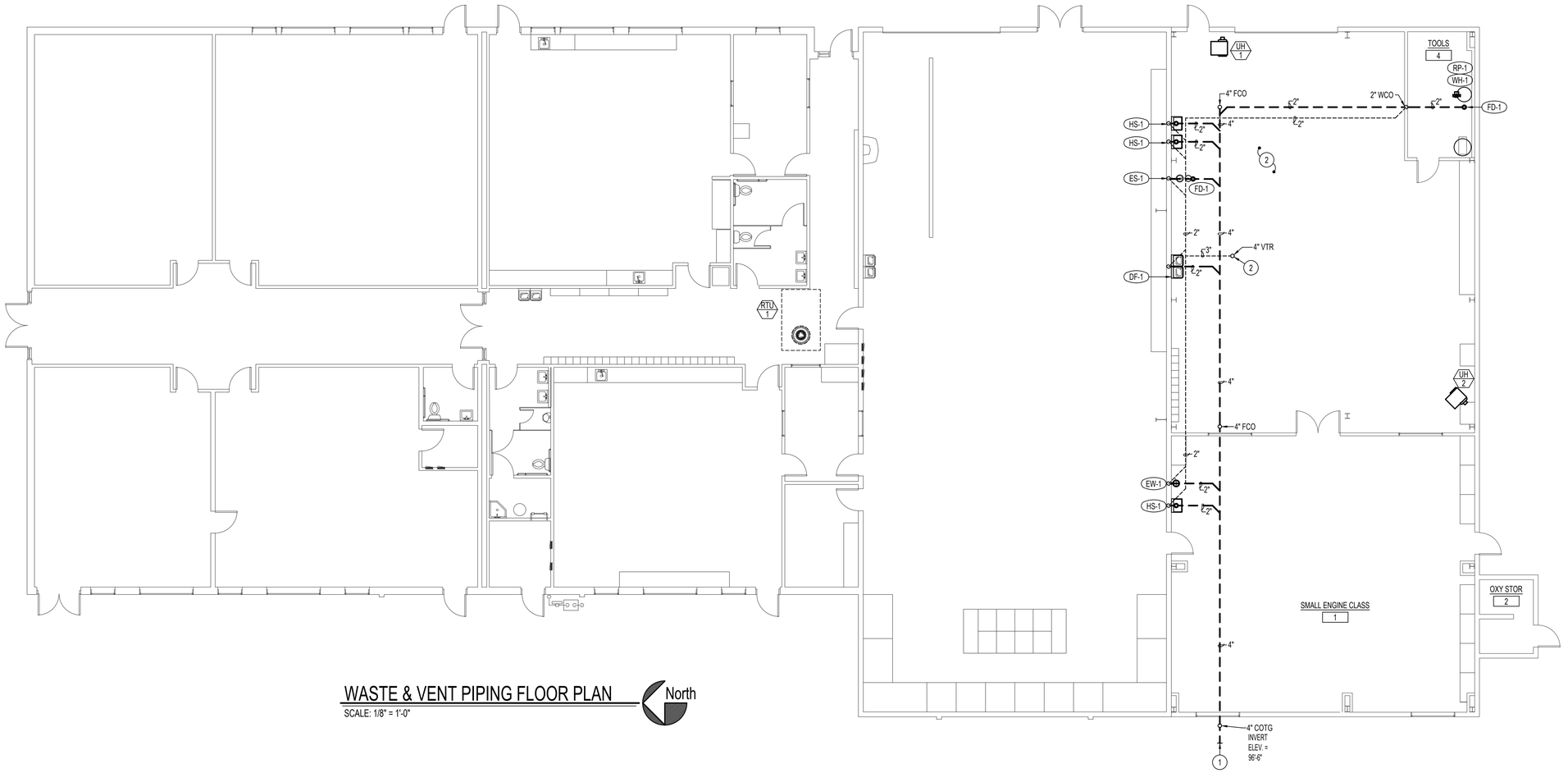
AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
885 CENTER ST W, KIMBERLY, ID 83341
WATER & GAS PLUMBING FLOOR PLAN

Laughlin Ricks Architecture
architecture/planning
134 3RD AVE. E. * Twin Falls, Idaho 83301
(208) 736-8050 Fax: (208) 733-0950

DATE: 9/23/2024

JS Drawn | DLH Checked

P1.1



WASTE & VENT PIPING FLOOR PLAN

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

North

PLAN NOTES:

1. SEE SITE PLAN FOR CONTINUATION.
2. RUN VENT PIPING AS HIGH AS POSSIBLE IN SHOP AREA. COORDINATE PIPING ROUTES WITH DUCTWORK, LIGHT FIXTURES, AND BUILDING STRUCTURE. PAINT EXPOSED PIPING SAME COLOR AS CEILING. PAINT EXTERIOR VENT THRU ROOF SAME COLOR AS ROOF.

KEY PLAN

PROFESSIONAL ENGINEER REGISTERED STATE OF IDAHO DAVID L HANSEN

09/23/24

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PHONE: (208) 233-0501
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EMAIL: esa@engsystems.com

ESA JOB NUMBER: 24018

DATE

AN ADDITION FOR:

KIMBERLY SCHOOL DISTRICT

885 CENTER ST W, KIMBERLY, ID 83341

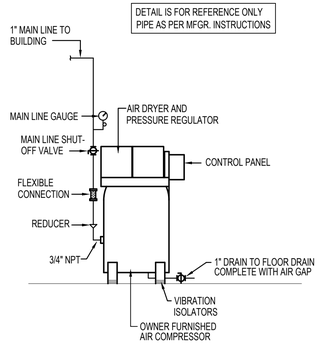
WASTE & VENT PIPING FLOOR PLAN

Laughlin Ricks Architecture
architecture/planning
134 3RD AVE. E. * Twin Falls, Idaho 83301
(208) 736-8050 Fax: (208) 733-0950

DATE: 9/23/2024

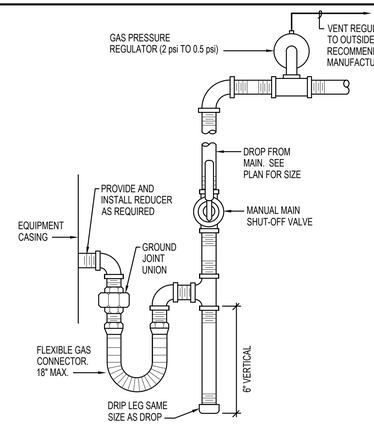
JS Drawn DLH Checked

P1.2



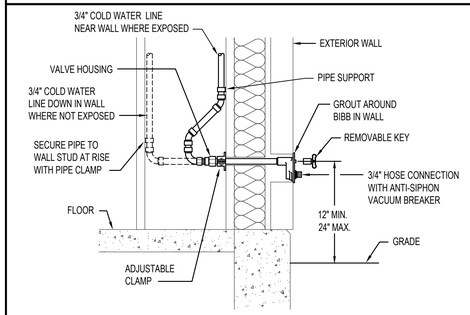
AIR COMPRESSOR PIPING DETAIL

NO SCALE



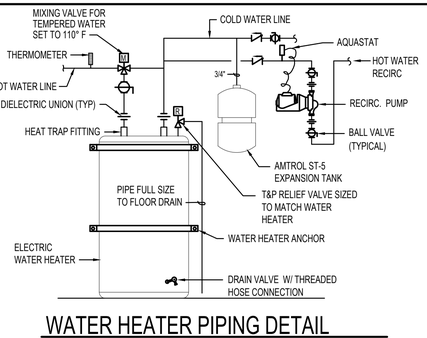
GAS LINE CONNECTION DETAIL

NO SCALE



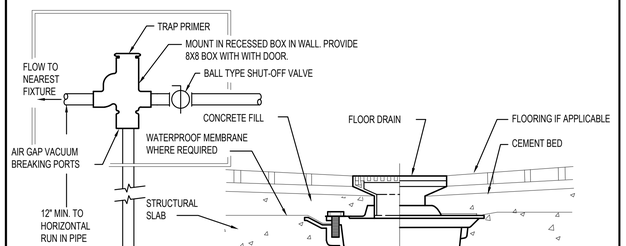
EXTERIOR HOSE BIBB DETAIL

NO SCALE



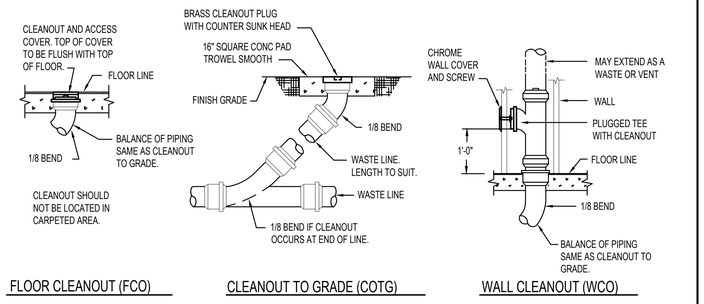
WATER HEATER PIPING DETAIL

NO SCALE



TRAP PRIMER DETAIL

NO SCALE



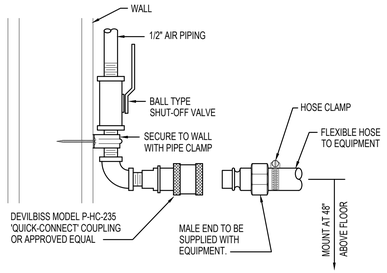
FLOOR CLEANOUT (FCO)

CLEANOUT TO GRADE (COTG)

WALL CLEANOUT (WCO)

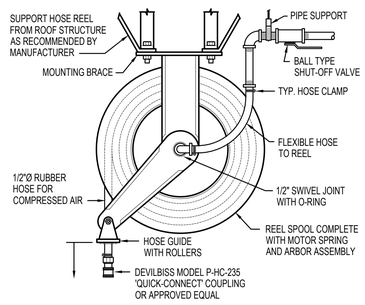
CLEAN OUT DETAILS

NO SCALE



COMPRESSED AIR OUTLET DETAIL

NO SCALE



COMPRESSED AIR OUTLET DETAIL

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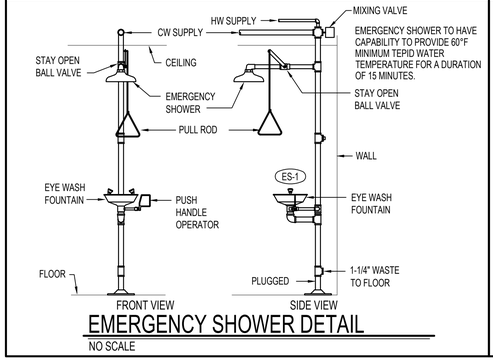
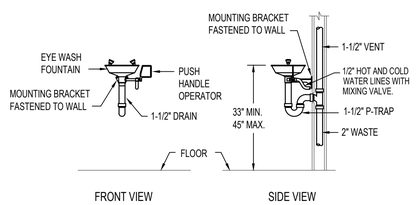


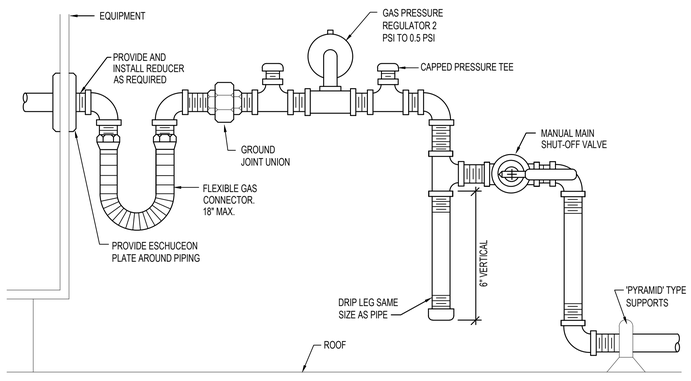
EMERGENCY SHOWER DETAIL

NO SCALE



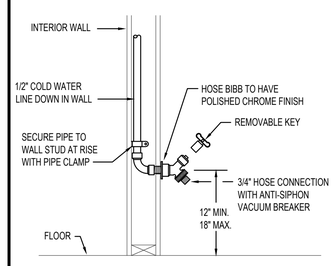
EMERGENCY EYEWASH DETAIL

NO SCALE



ROOF TOP GAS PRESSURE REGULATOR DETAIL

NO SCALE



INTERIOR HOSE BIBB DETAIL

NO SCALE

FIXTURE SCHEDULE

SYM.	DESCRIPTION	HOT	COLD	WASTE	VENT
AO-1	INTERIOR AIR OUTLET - MILTON M-STYLE QUICK CONNECT FEMALE HOSE COUPLING WITH 1/2" SUPPLY LINE AND SHUT-OFF VALVE. REFER TO DETAIL ON THIS SHEET FOR TYPICAL INSTALLATION. MOUNT AT 48" ABOVE FINISHED FLOOR.				
AR-1	OVERHEAD MOUNTED AIR HOSE REEL - REELCRAFT HOSE REEL ASSEMBLY WITH SPRING RETURN. SEE DETAIL ON THIS SHEET. PROVIDE 50 FT OF FLEXIBLE HOSE RATED FOR COMPRESSED AIR AND MILTON M-STYLE QUICK-CONNECT COUPLING, 1/2" SUPPLY LINE AND SHUT-OFF VALVE. CONFIRM MOUNTING HEIGHT AND LOCATION WITH OWNER.				
DF-1	BI-LEVEL DRINKING FOUNTAIN - ELKAY MODEL LZSTLBWSLP AND EZH20 BOTTLE FILLER COMPLETE WITH FILTER, HANDS FREE FILL VALVE, 1/2" STOP, 1-1/2" P-TRAP AND FLEX-GUARD SAFETY BUBBLER VALVE. (120/60/1)	---	1/2"	1-1/2"	1-1/2"
ES-1	EMERGENCY SHOWER AND EYEWASH - HAWS 8320-8325 WITH GREEN ABS PLASTIC SHOWER HEAD WITH INTEGRAL FLOW CONTROL, ABS PLASTIC BOWL, CHROME PLATED BRASS IN-LINE WATER STRAINER, STAY-OPEN SHOWER AND EYEWASH BALL VALVES. POWDER COATED CAST IRON FLOOR FLANGE. PROVIDE MIXING VALVE FOR HW & CW PIPING (1" x 1" INLETS x 1-1/4" OUTLET) . VALVE TO BE COMPLIANT WITH OSHA NATIONAL CODES AND ANSI Z.358.1. SET DISCHARGE TEMPERATURE TO 65°F WITH A 20 GPM MINIMUM FLOW RATE.	1-1/4" MIXED		---	---
EW-1	EMERGENCY EYEWASH - HAWS 7260B-7270B WITH GREEN ABS PLASTIC BOWL. PROVIDE MIXING VALVE FOR HW & CW PIPING (1/2" OUTLET) . VALVE TO BE COMPLIANT WITH OSHA NATIONAL CODES AND ANSI Z.358.1. SET DISCHARGE TO A 3.7 GPM MINIMUM FLOW RATE.	1/2"	1/2"	---	---
FD-1	2" FLOOR DRAIN WITH TRAP PRIMER - ZURN Z-415B WITH 5"Ø NICKEL-BRONZE STRAINER AND 2" DEEP SEAL P-TRAP WITH TRAP PRIMER. SEE DETAIL ON THIS SHEET. A TRAP SEAL CAN BE USED IN PLACE OF TRAP PRIMER IF ALLOWED BY INSPECTOR.	---	---	2"	2"
HB-1	EXTERIOR HOSE BIBB - ZURN Z-1310 "ECOLOTROL" WITH REMOVABLE KEY, VACUUM BREAKER AND AUTOMATIC DRAIN. LENGTH TO SUIT WALL THICKNESS. REFER TO DETAIL ON THIS SHEET FOR TYPICAL INSTALLATION.	---	3/4"	---	---
HB-2	INTERIOR HOSE BIBB - WOODFORD MODEL 24P-1/2 WITH VACUUM BREAKER AND REMOVABLE CHROME TEE HANDLE.	---	1/2"	---	---
HS-1	HAND WASH SINK - ELKAY MODEL E1CX20-0X STAINLESS STEEL SINK WITH SUPPORT LEGS, (1) CHICAGO 445-DJ13ABCP DOUBLE-JOINTED SWING ARM SPOUT, (3) LK18B STRAINERS, 1/2" STOPS AND SINGLE 2" P-TRAP.	1/2"	1/2"	1-1/2"	1-1/2"
RP-1	HOT WATER RECIRC. PUMP - B&G SERIES LR-208F 'LITTLE RED' WITH 2 GPM FLOW AT 8' HEAD AND 3/4" LINE CONNECTIONS. MOUNT NEAR WATER HEATER. REFER TO DETAIL ON THIS SHEET FOR TYPICAL PIPE CONNECTION. 120V/1PH	3/4"	---	---	---
TP-1	TRAP PRIMER - JAY R. SMITH MODEL 2711M-04-13-120 ELECTRONIC TRAP SEAL PRIMER WITH AIR GAP, 24 HOUR TIME TIMER WITH RELAY AND ADJUSTABLE DELAY, STEEL CABINET ENCLOSURE WITH PADDLE LATCH ACCESS DOOR, STAINLESS STEEL SLOW-CLOSING SOLENOID VALVE, AND 1/2" WATER CONNECTION. (120/60/1 - 5A)	---	1/2"	---	---
WH-1	ELECTRIC WATER HEATER - A.O. SMITH MODEL HNT-50 WITH 50 GALLON CAPACITY, (2) 4.5 KW NON- SIMULTANEOUS ELEMENTS (208/60/1), 3/4" SUPPLIES AND T&P RELIEF VALVE, THERMAL EXPANSION TANK, HEAT TRAP NIPPLES AND SYMMONS 7-200 MIXING VALVE.	3/4"	3/4"	---	---

AN ADDITION FOR:
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885 CENTER ST W, KIMBERLY, ID 83341

PLUMBING DETAILS & SCHEDULES

DATE

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PROFESSIONAL ENGINEER REGISTERED STATE OF IDAHO DAVID L. HANSEN
09/23/24

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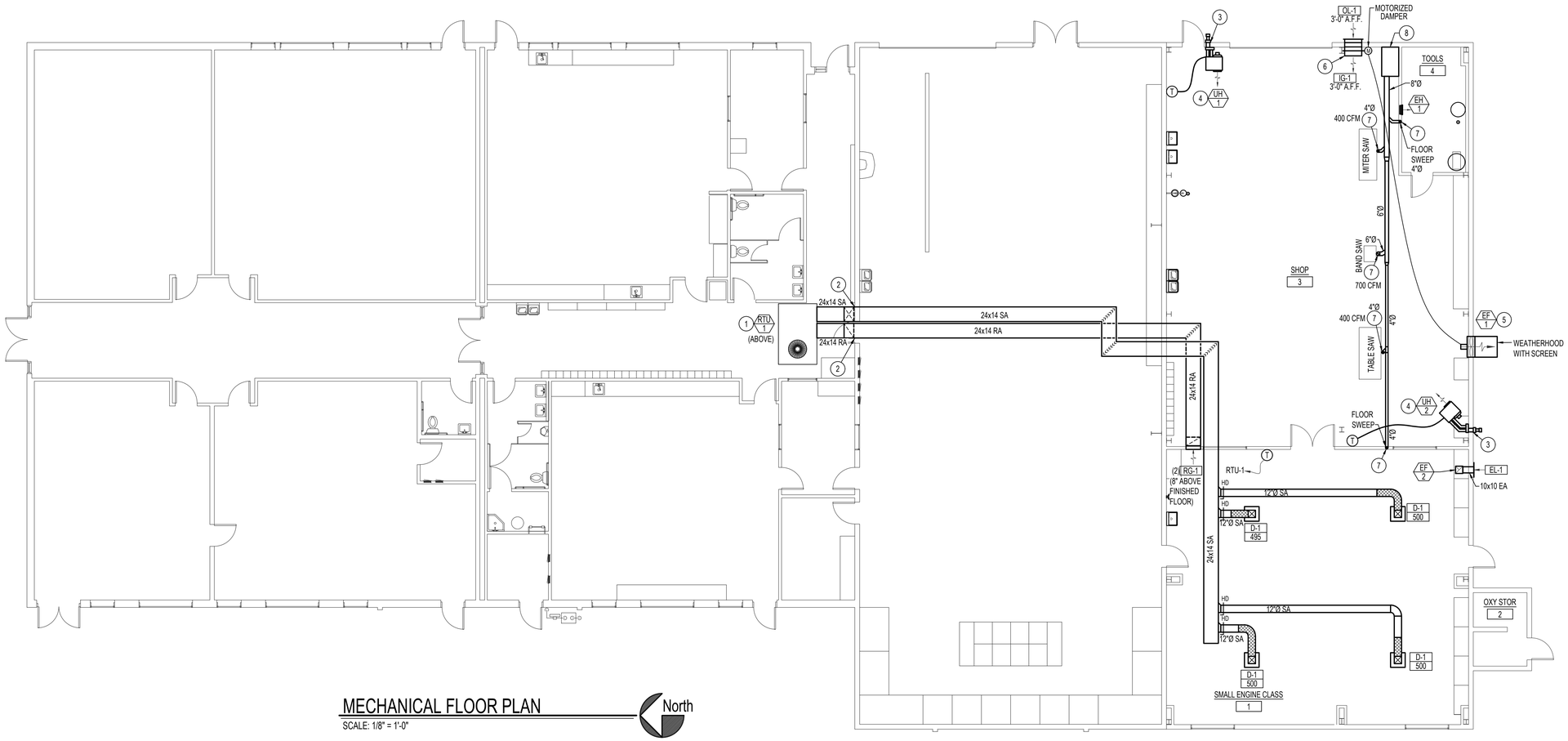
EMAIL: esa@engsystems.com
ESA JOB NUMBER: 24018

DATE: 9/23/2024
JS Drawn
DLH Checked

P2.1



MECHANICAL FLOOR PLAN

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

North

PLAN NOTES:

1. INSTALL ROOFTOP UNIT ON EXISTING ROOF WITH 18" HIGH ROOF CURB. FLASH AND SEAL INTO EXISTING ROOF TO MAINTAIN EXISTING ROOF WARRANTY.
2. INSTALL DUCTWORK THRU EXTERIOR WINDOW. FLASH AND SEAL WALL PENETRATION WEATHERTIGHT. ALL DUCTWORK ON EXTERIOR OF BUILDING TO BE INSULATED AS PER DETAIL ON SHEET M2.1.
3. RUN (2) 4"Ø FLUES FROM GAS FIRED UNIT HEATER TO HORIZONTAL VENT TERMINATION ASSEMBLY THRU WALL. SEE DETAIL ON SHEET M2.1.
4. MOUNT UNIT HEATER AT 12FT ABOVE FINISHED FLOOR, AND AS PER MANUFACTURER RECOMMENDED INSTALL. SEE DETAIL ON SHEET M2.1.
5. MOUNT TOP OF SIDEWALL EXHAUST FAN AT 11'-0" ABOVE FINISHED FLOOR. SEE DETAIL ON SHEET M2.1.
6. INSTALL OUTSIDE AIR LOUVER IN EXTERIOR WALL. PROVIDE WALL SLEEVE, MOTORIZED DAMPER AND INTERIOR GRILLE. SEE DETAIL ON SHEET M2.1.
7. DROP DUCT DOWN AND CONNECT TO EQUIPMENT. REFER TO DETAILS ON SHEET M2.1 FOR TYPICAL DUCT CONNECTION. PROVIDE BLAST GATE IN DUCT AT EACH DROP LOCATION. CONTRACTOR TO FIELD COORDINATE DUCT DROPS WITH ACTUAL EQUIPMENT LOCATIONS.
8. OWNER PROVIDED SAW DUST COLLECTOR. CONTRACTOR TO INSTALL AS SPECIFIED WITH HOPPER BOTTOM AND COLLECTION BARRELS. PROVIDE FLEXIBLE DUCT. REFER TO DETAIL ON SHEET M2.1 FOR TYPICAL INSTALLATION AND DUCT CONNECTIONS. INSTALLATION SHALL BE PER INTERNATIONAL FIRE CODE AND NFPA 70.

MECH. LEGEND

SYMBOL	DESCRIPTION
T	ELECTRONIC THERMOSTAT
FC 1	EQUIPMENT SYMBOL
HD	HAND DAMPER
	ROUND BRANCH DUCT WITH HAND DAMPER
	TURNING VANES
	DUCT TRANSITION
	INSULATED FLEXIBLE DUCT
	RETURN AIR OR EXHAUST GRILLE
	CEILING DIFFUSER

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.

B- 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.

C- IT IS CRITICAL THAT THIS CONTRACTOR COORDINATE EQUIPMENT LOCATIONS WITH PIPING, DUCTWORK, ELECTRICAL CONDUIT AND BUILDING STRUCTURE TO INSURE CODE COMPLIANCE.

D- CEILING DIFFUSERS ARE SHOWN IN APPROXIMATE LOCATIONS. REFER TO LIGHTING PLANS AND REFLECTED CEILING PLAN FOR EXACT LOCATIONS.

E- DUCT DIMENSIONS CALLED OUT ON DRAWINGS ARE INSIDE FREE AREA DIMENSIONS. ACOUSTICAL DUCT LINER ARE TO BE ADDED TO OVERALL MEASUREMENTS.

F- ALL DUCTWORK AND PIPING WHICH PASSES THRU FIRE RATED WALLS TO BE FIRE STOPPED WITH APPROVED FOAM OR SEALANT. REFER TO SPECIFICATIONS FOR APPROVED MANUFACTURES.

KEY PLAN

PROFESSIONAL ENGINEER REGISTERED STATE OF IDAHO DAVID L HANSEN

09/23/24

Engineered Systems Associates

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ESA JOB NUMBER: 24018

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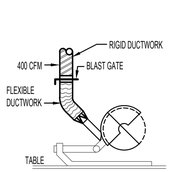
M1.1



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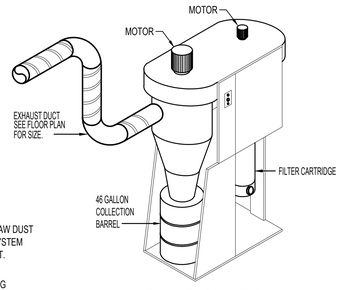
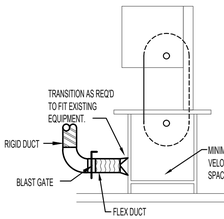
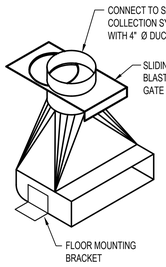


SAWDUST COLLECTOR



BAND SAW



FLOOR SWEEP

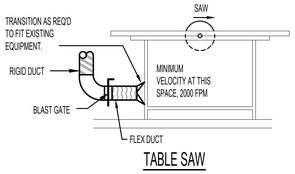
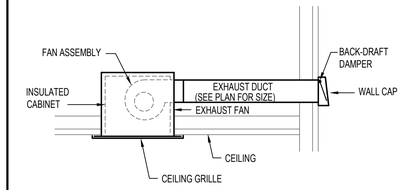


TABLE SAW

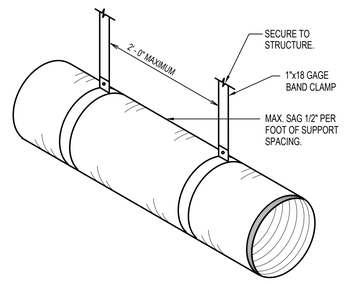
SAWDUST COLLECTION SYSTEM DETAILS

NO SCALE (ALL EQUIPMENT CONNECTED SIMILAR)



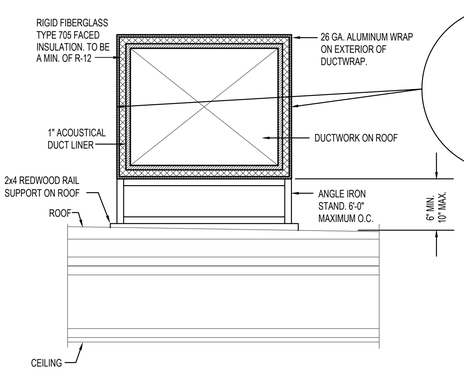
CEILING MOUNTED EXHAUST FAN DETAIL

NO SCALE



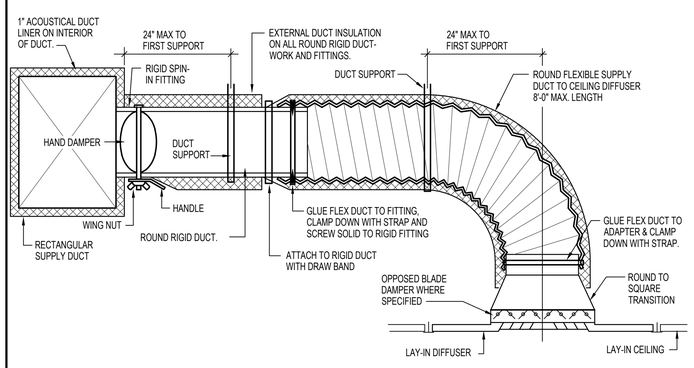
FLEXIBLE DUCT SUPPORT DETAIL

NO SCALE



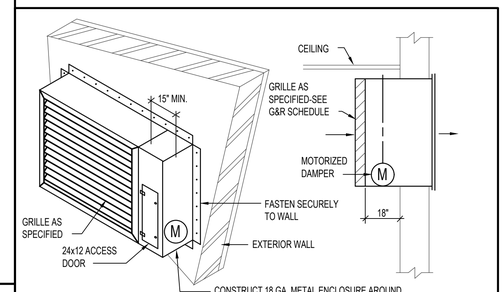
EXTERIOR EXPOSED DUCTWORK DETAIL

NO SCALE



CEILING DIFFUSER DETAIL WITH FLEXIBLE DUCT

NO SCALE



RELIEF AIR LOUVER DETAIL

NO SCALE

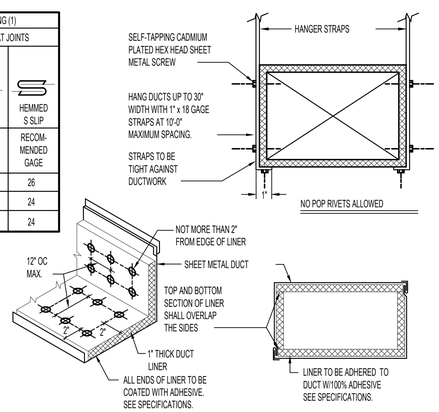
DIMENSION OF LONGEST SIDE, INCHES	SHEET METAL GAGE (ALL FOUR SIDES)	TRANSVERSE REINFORCING (1)		
		MINIMUM REINFORCING ANGLE SIZE AND MAXIMUM LONGITUDINAL SPACING BETWEEN TRANSVERSE JOINTS &/OR INTERMEDIATE REINFORCING	AT JOINTS	
			DRIVE SLIP	HEMMED S SLIP
			RECOM-MENDED GAGE	RECOM-MENDED GAGE
UP THRU 12	26	NONE REQUIRED	26	26
13 - 18	24	NONE REQUIRED	24	24
19 - 30	24	1"x1"x1/8" @ 60 IN	-	24

(1) TRANSVERSE REINFORCING SIZE IS DETERMINED BY DIMENSION OF SIDE TO WHICH ANGLE IS APPLIED.

METAL FASTENERS - OMARK INSULPINS, DURO DYNE FASTENERS OR GRIPNAILS.

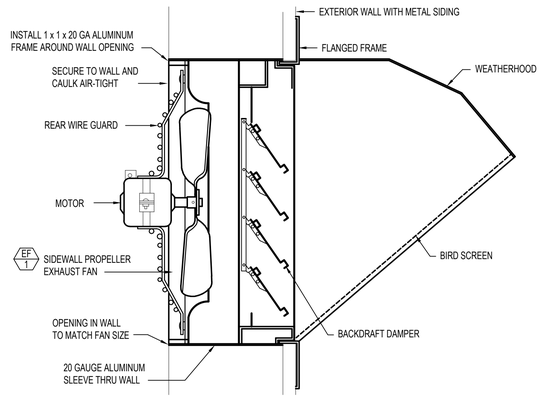
GRIP NAILS SHALL BE INSTALLED BY GRIPNAIL AIR HAMMER OR BY AUTOMATIC FASTENER EQUIP.

ENDS OF LINER SHALL BE BUTTED FIRMLY TOGETHER



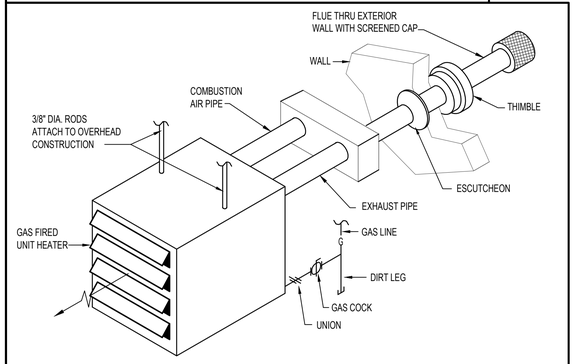
DUCT CONSTRUCTION AND HANGER DETAIL

NO SCALE



WALL MOUNTED PROPELLER FAN DETAIL

NO SCALE



SEAL COMBUSTION GAS FIRED UNIT HEATER DETAIL

NO SCALE

ROOF TOP HEATING & AIR CONDITIONING UNIT SCHEDULE

SYM.	CFM	OUTSIDE AIR REQUIRED	SP$_E$	BLOWER H.P.	CHAR	MCA	MOCP	WEIGHT	GAS CONN	HEATING					COOLING			REMARKS
										BTU IN	BTU OUT	@ ELEV.	EAT	LAT	MBH	EAT	WB	
RT 1	1,995	350	0.5"	1.0	208/60/3	33.0	45.0	913#	3/4"	150,000	120,000	96,000	65°F	104°F	60.0	80°F	62°F	LENNOX LGH060H4B WITH FACTORY ROOF CURB AND ECONOMIZER

GRILLE AND REGISTER SCHEDULE

SYM.	TYPE	SIZE	CFM RANGE	THROW PATTERN	CONSTR.	FINISH	BALANCING DAMPER	MAX NC RATING	BRANCH DUCT	REMARKS
D-1 CFM	CEILING	15x15	450-500	4-WAY	STEEL	BY ARCH	NO	20	12"Ø	PRICE MODEL SMD IN 24x24 LAY-IN MODULE
RG-1	SIDE WALL	20x14	1000	N/A	STEEL	WHITE	NO	25	24x14	PRICE MODEL 535
EL-1	WALL EXHAUST LOUVER	16x16	400	N/A	ALUMINUM	MATCH BLDG.	NO	25	16x16	AMERICAN WARMING LE-31 WITH INSECT SCREEN.
IG-1	SIDEWALL GRILLE	28x24	1600	N/A	STEEL	WHITE	NO	25	28x24	PRICE MODEL 535
OL-1	WALL INTAKE LOUVER	28x24	1600	N/A	ALUMINUM	MATCH BLDG.	NO	25	28x24	AMERICAN WARMING LE-31 WITH INSECT SCREEN.

UNIT HEATER SCHEDULE (GAS)

SYM.	TYPE	CFM	FLA	CHAR.	(NATURAL GAS)			EAT	LAT	SUP.	FUEL TYPE	FLUE	WEIGHT	REMARKS
					INPUT	OUTPUT	@ ELEV.							
UH 1	FAN FORCED NAT. GAS	961	2.4	120/60/1	75 MBH	62.3 MBH	52.5 MBH	60°F	100°F	3/4"	NAT	(2) 4"Ø	95 LBS	REZNOR MODEL UDAS-75 WITH WALL MOUNTED THERMOSTAT AND CC14 COMPACT CONCENTRIC WALL KIT.
UH 2	FAN FORCED NAT. GAS	961	2.4	120/60/1	75 MBH	62.3 MBH	52.5 MBH	60°F	100°F	3/4"	NAT	(2) 4"Ø	95 LBS	REZNOR MODEL UDAS-75 WITH WALL MOUNTED THERMOSTAT AND CC14 COMPACT CONCENTRIC WALL KIT.

EXHAUST FAN SCHEDULE

SYM.	TYPE	C.F.M.	S.P.E.	WATTS	WEIGHT	CHAR.	R.P.M.	CONTROL	REMARKS
EF 1	WALL MOUNTED PROPELLER FAN	1600	0.25	3/4 HP	N/A	120/60/1	860	WALL SWITCH	TWIN CITY MODEL WPD-E-14-B WITH MOTOR GUARD, WALL SLEEVE, AND WEATHER HOOD WITH BIRDSCREEN
EF 2	CEILING MOUNTED	400	0.25	146	N/A	120/60/1	735	WALL SWITCH	TWIN CITY MODEL T400

ELECTRIC HEATER SCHEDULE

SYM.	TYPE	BTU	KW	CHAR	CONTROL	REMARKS
EH 1	WALL MOUNTED	5,120	1.5	208/60/1	INTEGRAL T-STAT	QMARK MODEL CWH1151DSAF WITH RECESSED MOUNT FRAME

DATE

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PROFESSIONAL ENGINEER REGISTERED STATE OF IDAHO DAVID L. HANSEN
09/23/24

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DATE: 9/23/2024
JS Drawn
DLH Checked

M2.1

LIGHTING SYMBOL SCHEDULE

NOTE: ALL SYMBOLS MAY NOT BE USED

SYMBOL	DESCRIPTION
F1	LIGHT FIXTURE TYPE DESIGNATION
	PARKING AREA POLE LIGHT, SINGLE OR DOUBLE HEAD AS INDICATED ON DRAWINGS. REFER TO LIGHT POLE DETAIL FOR POLE INFORMATION.
	EXTERIOR WALL MOUNTED FIXTURE
	2X4 FLUORESCENT OR LED FIXTURE
	2X2 FLUORESCENT OR LED FIXTURE
	SURFACE MOUNTED FLUORESCENT OR LED FIXTURE
	STRIP FLUORESCENT OR LED FIXTURE
	WALL MOUNTED FLUORESCENT OR LED FIXTURE
	ROUND RECESSED FIXTURE
	SURFACE OR PENDANT FIXTURE
	EXIT SIGN, WALL OR CEILING MOUNTING AS REQUIRED (SINGLE OR DOUBLE FACE) DIRECTIONAL CHEVRONS AS INDICATED; CONNECT TO UNSWITCHED LEG OF LIGHTING CIRCUIT THAT IS IN THE SAME AREA AS THE EXIT SIGNS.
	WALL OR CEILING MOUNTED EMERGENCY LIGHTING UNIT W/BATTERY PACK CONNECT TO UNSWITCHED LEG OF LIGHTING CIRCUIT THAT IS IN THE SAME AREA AS THE EMERGENCY LIGHT.
	SHADED FIXTURE INDICATES AN EMERGENCY FIXTURE. PROVIDE WITH EMERG. BATTERY PACK OR CONNECT TO EMERGENCY POWER SYSTEM (WHERE APPLICABLE). CONNECT BATTERY PACK TO UNSWITCHED LEG OF LIGHTING CIRCUIT THAT SERVES THE SAME AREA AS THE EMERGENCY FIXTURE. PROVIDE WITH TEST LIGHT AND SWITCH.
S ###	CEILING MOUNTED OCCUPANCY SENSOR, REFER TO OCCUPANCY SENSOR/SWITCH SCHEDULE FOR SENSOR TYPE AND ADDITIONAL INFORMATION.
###	SWITCH MOUNTED OCCUPANCY SENSOR, LOW VOLTAGE SWITCHPOD OR DIMMER SWITCH, REFER TO OCCUPANCY SENSOR/SWITCH SCHEDULE FOR TYPE AND ADDITIONAL INFORMATION.
$	SINGLE-POLE SWITCH (SEE SUB-SCRIPTS BELOW FOR ADDITIONAL INFORMATION)

LIGHT FIXTURE SUBSCRIPTS

NL NIGHT-LIGHT(CONNECT TO UNSWITCHED LEG OF CIRCUIT)

SWITCH SUBSCRIPTS

3 3-WAY SWITCH
4 4-WAY SWITCH
D DIMMER SWITCH (COMPATIBLE W/ LOAD & LTG TYPES)
F 7-DAY PROGRAMMABLE TIMER SWITCH (INTERMATIC MODEL EI500WC SERIES)
P PILOT LIGHTED SWITCH
LV LOW-VOLTAGE SWITCH (PER DWG'S)
T THERMAL-OVERLOAD SWITCH
M SWITCH SUPPLIED WITH EQUIPMENT, INSTALLED BY E.C.
WP WEATHERPROOF
2P DOUBLE POLE, SINGLE THROW SWITCH

GENERAL LIGHTING NOTES:

A. SYMBOLS SHOWN ABOVE MAY NOT REPRESENT ALL LIGHT FIXTURES USED ON PROJECT, REFER TO LIGHT FIXTURE SCHEDULE FOR ACTUAL FIXTURE INFORMATION INCLUDING FIXTURE TYPE, LAMPING, MOUNTING AND ETC.
B. JUNCTION BOXES FOR LIGHTING CIRCUITING ARE NOT SHOWN FOR CLARITY. THE E.C. IS RESPONSIBLE FOR PROVIDING AND INSTALLING ALL JUNCTION BOXES REQUIRED FOR CIRCUITING OF ALL LIGHT FIXTURES THAT ARE NOT LISTED FOR "THROUGH-BRANCH CIRCUIT WIRING".
C. IN GENERAL ALL SWITCH-LEG CONDUCTORS MAY NOT BE SHOWN ON DRAWINGS; E.C. SHALL PROVIDE AND INSTALL CONDUCTORS AS REQUIRED TO ACHIEVE CONTROL SCHEMES INDICATED AND DESCRIBED ON DRAWINGS. INCLUDING ALL 0 - 10V DIMMING CONTROLS BETWEEN SWITCH AND FIXTURES.
D. ALL BATTERY EXIT SIGNS AND EMERGENCY LIGHTING TO BE CONNECTED TO THE UNSWITCHED LEG OF THE LIGHTING CIRCUIT IN THE AREA.

CIRCUITING & GENERAL SYMBOL SCHEDULE

NOTE: ALL SYMBOLS MAY NOT BE USED

SYMBOL	DESCRIPTION
1	KEYED NOTE REFERENCE
1 / ES101	DETAIL # / SHEET REFERENCE
A-1,3,5 3/4"C.-6#12,1#12G	BRANCH CIRCUIT HOME-RUN TO PANEL INDICATED A-1,3,5 — PANEL AND CIRCUIT DESIGNATIONS 3/4"C.-6#12,1#12G — QTY & SIZE OF EQUIPMENT GROUND CONDUCTOR; QTY & SIZE OF NEUTRAL AND PHASE CONDUCTOR(S); SIZE OF CONDUIT
	TICK MARKS EQUIPMENT GROUNDING CONDUCTOR NEUTRAL CONDUCTOR(S) PHASE AND/OR SWITCH-LEG CONDUCTOR(S)
*25,000A	CALCULATED AVAILABLE FAULT CURRENT AT EQUIPMENT(SEE POWER RISER)
	BRANCH CIRCUIT/FEEDER CONCEALED IN CEILING OR WALL
	BRANCH CIRCUIT/FEEDER CONCEALED UNDERGROUND OR FLOOR
	NEW EQUIPMENT, DEVICES, ETC.
	EXISTING EQUIPMENT, DEVICES, ETC.
	DEMOLITION EQUIPMENT, DEVICES, ETC.

UTILITY LIGHTING REBATES & INCENTIVES:

IT SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR TO PREPARE ALL REQUIRED APPLICATIONS AND INFORMATION REQUIRED TO PROVIDE THE OWNER WITH THE MAXIMUM AMOUNT OF REBATE DOLLARS FROM THE LOCAL UTILITY COMPANY. THE ELECTRICAL CONTRACTOR SHALL SUBMIT VERIFICATION OF THE UTILITY COMPANY PRE-APPLICATION APPROVAL PRIOR TO ORDERING ANY MATERIALS.

VISIT THE FOLLOWING UTILITY CO. WEBSITES FOR INFORMATION:

IDAHO POWER CO.
WWW.IDAHOPOWER.COM
CONTACT:
SHELLEY MARTIN (208) 388-5872
OR DAN KUHL (503) 308-0233
dan.kuhl@evergreen-efficiency.com

ROCKY MOUNTAIN POWER CO.
WWW.ROCKYMOUNTAINPOWER.NET
CONTACT:
DAN KUHL (503) 308-0233
dan.kuhl@evergreen-efficiency.com

POWER SYMBOL SCHEDULE

NOTE: ALL SYMBOLS MAY NOT BE USED

SYMBOL	DESCRIPTION
'MSB'	ELECTRICAL SWITCHBOARD EQUIPMENT, (SEE POWER RISER AND PANEL SCHEDULES FOR ADDITIONAL INFORMATION)
'T##'	DRY-TYPE TRANSFORMER, (SEE POWER RISER FOR ADDITIONAL INFORMATION)
'LA'	ELECTRICAL PANELBOARD, (SEE POWER RISER AND PANEL SCHEDULES FOR ADDITIONAL INFORMATION)
	DISCONNECT SWITCH, SIZE/POLES/TYPE AS INDICATED TYPES: 1=NEMA 1, 3R=NEMA 3R, 4X=NEMA 4X
	FUSED DISCONNECT SWITCH, SIZE/POLES/TYPE AS INDICATED TYPES: 1=NEMA 1, 3R=NEMA 3R, 4X=NEMA 4X
	COMBINATION STARTER & FUSED DISCONNECT SWITCH, SIZE/POLES/TYPE AS INDICATED. TYPES: 1=NEMA 1, 3R=NEMA 3R, 4X=NEMA 4X
J	JUNCTION BOX CR = CORD REEL; SEE DRAWINGS FOR INFORMATION CD = CORD DROP; SEE DRAWINGS FOR INFORMATION
	EQUIPMENT CONNECTION; COORDINATE CONNECTION WITH EQUIPMENT PRIOR TO ROUGH-IN
M	MOTOR CONNECTION
F	EXHAUST FAN CONNECTION
	POWER AND/OR DATA SERVICE POLE
FB#	FLOORBOX (SEE FLOORBOX SCHEDULE FOR ADDITIONAL INFORMATION)
	PUSHBUTTON STATION
	SPECIAL RECEPTACLE (COORDINATE NEMA TYPE WITH EQUIP.) (REFER TO PANEL SCHEDULES FOR AMPS)
	CEILING MOUNTED DUPLEX RECEPTACLE (COORDINATE PLACEMENT WITH CEILING EQUIPMENT PRIOR TO ROUGH-IN)
	DUPLEX RECEPTACLE, UL TAMPER-RESISTANT WHERE MOUNTED BELOW 5FT
	GFCI-TYPE DUPLEX RECEPTACLE, UL TAMPER-RESISTANT WHERE MOUNTED BELOW 5FT
	SPLIT-WIRED RECEPTACLE, HALF OF RECEPT. SHALL BE SWITCHED OTHER HALF SHALL HAVE CONSTANT POWER.
	DOUBLE-DUPLEX RECEPTACLE, UL TAMPER-RESISTANT WHERE MOUNTED BELOW 5FT
	GFCI-TYPE DOUBLE-DUPLEX RECEPTACLE, UL TAMPER-RESISTANT WHERE MOUNTED BELOW 5FT.

RECEPTACLE AND EQUIPMENT SUBSCRIPTS

AC ABOVE COUNTER
WP WEATHERPROOF (UL LISTED WEATHER-RESISTANT)
42" MOUNTING HEIGHT AFF OR AFG
REF REFRIGERATOR
M MICROWAVE
M/R MICROWAVE/RANGE HOOD (LOCATE ABOVE RANGE)
USB DUPLEX RECPT. WITH (2) USB CHARGING PORTS
DW DISHWASHER, INSTALL PER NEC 422.16(B)(2)
D/DW DISPOSAL/DISHWASHER, INSTALL PER NEC 422.16(B)(2)
TV RECEPT. DEDICATED TO TV; FIELD VERIFY HEIGHT W/ TV PRIOR TO ROUGH-IN.
EWC ELECTRIC WATER COOLER; PROVIDE GFCI PROTECTION PER NEC 422.5(A)
D CLOTHES DRYER (NEMA 14-30R)
R ELECTRIC RANGE (NEMA 14-50R)
W WELDER RECEPTACLE 208/240V - NEMA 6-50R

T OR S	HVAC THERMOSTAT OR SENSOR; PROVIDE & INSTALL BACKBOX,3/4" CONDUIT AND CONDUCTORS TO ASSOCIATED HVAC UNIT. COORDINATE EXACT LOCATION & SIZE AND NUMBER OF CONDUCTORS WITH M.C.

GENERAL SPECIAL SYSTEM NOTES:

A. ALL DEVICES SHOWN AT OR NEAR MILLWORK/CASEWORK SHALL BE COORDINATED WITH THE ARCHITECTURAL ELEVATION DRAWINGS AND MILLWORK INSTALLER TO INSURE PROPER MOUNTING HEIGHTS. CONTRACTOR SHALL ADJUST DEVICES AS NECESSARY IN ORDER TO POSITION DEVICES SUCH THAT THEY WILL NOT FALL BEHIND MILLWORK, CABINETS OR BE DIRECTLY ABOVE SINKS OR MIDWAY BETWEEN TILEWORK/WALL OR WAINSCOATING, ETC.
B. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTALL A GFCI TYPE RECEPTACLE FOR ALL RECPTACLES SHOWN IN TOILET RMS, BATHROOMS, KITCHENS/SERVING AREAS, ROOFTOP, OUTDOORS OR WITHIN 6FT OF ANY SINK, BASIN, TUB OR FLOOR SINK AND ALL OTHER AREAS DEFINED BY THE NEC.

PROJECT GENERAL NOTES:

A. E.C. SHALL REFER TO THE MECHANICAL DRAWINGS FOR EXACT LOCATIONS OF ALL MECHANICAL EQUIPMENT AND ELECTRICAL CONNECTIONS.
B. E.C. SHALL PROVIDE MINIMUM WORKING CLEARANCE AS PER NEC BEFORE INSTALLING ANY ELECTRICAL PANELS OR CABINETS. SEE ELECTRICAL EQUIPMENT CLEARANCE DETAIL.
C. INSTALL ALL LIGHT FIXTURES IN MECHANICAL ROOM AFTER THE MECHANICAL EQUIPMENT IS IN PLACE. ADJUST AS NECESSARY. PROVIDE CHAIN SUSPENSION KITS AS REQUIRED.
D. REFER TO ARCHITECTURAL REFLECTED CEILING PLAN(S) FOR EXACT FIXTURE LOCATIONS, CEILING TYPES, ETC.
E. E.C. SHALL PROVIDE ALL CONCRETE PADS AS REQUIRED FOR ALL ELECTRICAL EQUIPMENT.
F. CONFIRM EXACT LOCATIONS OF ALL TELEPHONE/DATA OUTLETS WITH OWNER PRIOR TO ROUGH-IN.
G. LOCATE SWITCHES, OUTLETS, ETC., SHOWN AT ROOM ENTRY DOORWAYS, AS CLOSE TO DOOR FRAME AS POSSIBLE, SO AS NOT RO INTERFERE WITH ROOM CABINETS, ETC.
H. SUPPORT ALL LIGHT FIXTURES INDEPENDENT OF CEILING.
I. ELECTRICAL CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS FOR WORK AND PAY ASSOCIATED FEES.
J. MAINTAIN 24" MIN. CLEARANCE FROM ALL COMMUNICATIONS CABLING AND ELECTRONIC BALLASTS.
K. UNLESS SPECIFICALLY INDICATED OTHERWISE, E.C. SHALL COORDINATE WITH ANY SPECIAL SYSTEMS SUPPLIER/SHOP DRAWINGS; DENTAL, MEDICAL, KITCHEN, SPECIALIZED EQUIPMENT, ETC. FOR THE EXACT ROUGH-IN REQUIREMENTS FOR THEIR EQUIPMENT. ALSO UNLESS INDICATED OTHERWISE, THE E.C. TO BE RESPONSIBLE FOR FINAL ELECTRICAL CONNECTIONS TO ALL SPECIAL EQUIPMENT.
L. ALL CONDUIT/RACEWAY/CABLES TO BE CONCEALED IN WALLS OR ABOVE CEILINGS. IF ANY SURFACE WORK IS NECESSARY, IT SHALL BE APPROVED BY THE ARCHITECT/ENGINEER PRIOR TO INSTALLATION.
M. ELECTRICAL CONTRACTOR SHALL VISIT THE SITE PRIOR TO BID AND THOROUGHLY INVESTIGATE THE EXISTING CONDITIONS, AS THEY RELATE TO THE SCOPE OF WORK DESCRIBED. MAKE NECESSARY PROVISIONS IN THE BASE BID TO ADEQUATELY ACCOMMODATE THESE CONDITIONS.
N. DATA CABLING SYSTEM PRE-INSTALLATION CONFERENCE:
   1. E.C. SHALL SCHEDULE A MEETING A MINIMUM OF FIVE CALENDAR DAYS PRIOR TO BEGINNING DATA CABLING INSTALLATION . ATTENDEES SHOULD INCLUDE OWNER'S REP., ENGINEER, GC, EC AND CABLING SUB. REFER TO SECTION 26 6210(1.4)(E) FOR ADDITIONAL INFORMATION.

SPECIAL SYSTEMS SYMBOL SCHEDULE

NOTE: ALL SYMBOLS MAY NOT BE USED

SYMBOL	DESCRIPTION
D-X	DATA OUTLET; _= # OF DATA CABLES, X=CONDUIT SIZE (SEE NOTES 1,2,3 BELOW)
D-X	CEILING MOUNTED DATA OUTLET; _= # OF DATA CABLES, X=CONDUIT SIZE (SEE NOTES 1,2,3 BELOW)
T-X	TELEPHONE OUTLET; _= # OF TELEPHONE CABLES, X=CONDUIT SIZE (SEE NOTES 1,2,3 BELOW)
_T/_D-X	TELEPHONE/DATA OUTLET; _= # OF TELEPHONE/DATA CABLES, X=CONDUIT SIZE (SEE NOTES 1,2,3 BELOW)
FB# _D-X	ELECTRICAL FLOORBOX REFER TO "ELECTRICAL FLOORBOX SCHEDULE" FOR INFORMATION. _= # OF DATA CABLES, X=CONDUIT SIZE (SEE NOTES 1,2,3 BELOW)
### _D-X	TV AND/OR AV BOX; WITH POWER, DATA AND/OR AV CONNECTIVITY ### = BOX ID: REFER TO "ELECTRICAL AV/TV BOX SCHEDULE" FOR INFORMATION. _= # OF DATA CABLES, X=CONDUIT SIZE (SEE NOTE #2 BELOW) INSTALL CONDUIT (SIZE AS INDICATED) FROM BOX TO NEAREST ACCESSIBLE CEILING SPACE W/ DATA CABLING/TERMINATIONS AS INDICATED ON DRAWINGS.
WALL (qty) ### FLOOR (qty) ###	WALL/FLOOR ELECTRICAL PATHWAY SLEEVE; INSTALL THROUGH WALL OR FLOOR AS INDICATED. SLEEVES SHALL BE ABOVE ACCESSIBLE CEILINGS IN ACCESSIBLE LOCATION, FIELD VERIFY EXACT LOCATION TO AVOID CONFLICT WITH OTHER TRADES AND UTILITIES. IF WALL/FLOOR IS NOT FIRE RATED E.C. MAY UTILIZED EMT CONDUIT SLEEVES OF EQUAL SIZE. REFER TO ARCHITECTURAL DRAWINGS FOR FIRE RATINGS. (qty) = QUANTITY OF SLEEVES AT LOCATION EP2 = 2" HILTI SPEED SLEEVE CP-653-BA EP4 = 4" HILTI SPEED SLEEVE CP-653-BA

SPECIAL SYSTEMS NOTES:

1. UTILIZE 4 11/16" DEEP BOX WITH REQUIRED MUDRING AND CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING OR DATA RACK, TERMINATE WITH INSULATED THROAT BUSHING. PROVIDE QTY OF CABLES INDICATED FROM OUTLET TO NEAREST TELE/DATA ROOM. SEE DWGS FOR ADDITIONAL INFORMATION. UTILIZE J-HOOKS 3FT ON CENTER FOR SUPPORT OF CABLING WHERE CABLE TRAY IS NOT INSTALLED/SPECIFIED.
2. CONDUIT SIZE ('X' FROM ABOVE): 2='1/2", 3='3/4", 4='1", 5='1-1/4", 6='1-1/2"
3. BLANK (NO LABEL) = 4-1/16" DEEP BOX WITH REQUIRED MUDRING AND 1" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING/CABLE TRAY, TERMINATE WITH INSULATED THROAT BUSHING, PROVIDE PULL STRING. (UNLESS OTHERWISE NOTED)

GENERAL SPECIAL SYSTEM NOTES:

A. COMMUNICATIONS CABLES SHALL HAVE BENDS NO GREATER THAN 90 DEG.
B. CONDUITS FOR COMMUNICATIONS CABLING SHALL HAVE A MAXIMUM BEND RADIUS NOT MORE THAN 10X THE DIAMETER OF THE CONDUIT.
C. ALL COMMUNICATIONS CONDUITS SHALL BE TERMINATED WITH AN INSULATED NON-METALLIC BUSHING AT BOTH ENDS.
D. COMMUNICATIONS CONDUITS SHALL HAVE NO MORE THAN (2) 90'S WITHOUT A PULLBOX. PULL BOXES SHALL BE LOCATED IN ACCESSIBLE LOCATIONS AND SHALL BE SIZED AT LEASED 12X THE LARGEST CONDUIT DIAMETER IN LENGTH AND MIN, 4" DEEP AND 8" WIDE.
E. IT SHALL BE THE RESPONSIBILITY OF THE E.C. TO INSURE THAT THE PATHWAY FOR THE DATA CABLING DOES NOT CREATE CABLE LENGTHS TO EXCEEDS THE LENGTH OF 295FT FROM OUTLET TO PATCH PANEL THIS INCLUDES SERVICE LOOPS AND PATCH CORDS.
F. WHERE CABLE TRAY IS UTILIZED IN THE PROJECT. COMMUNICATION CONDUITS ENDING AT THE CABLE TRAY SHALL EXTEND 1" OVER THE SIDE INTO THE TRAY.

PUBLIC ADDRESS/BELL SYSTEM SYMBOL SCHEDULE

NOTE: ALL SYMBOLS MAY NOT BE USED

SYMBOL	DESCRIPTION
SP	CEILING MOUNTED SPEAKER, PROVIDED AND INSTALLED BY E.C. (MATCH EXISTING SPEAKERS AND PROVIDE CABLING TO HEAD-END EQUIPMENT)
SP	WALL MOUNTED SPEAKER, PROVIDED AND INSTALLED BY E.C. (MATCH EXISTING SPEAKERS AND PROVIDE CABLING TO HEAD-END EQUIPMENT)

PUBLIC ADDRESS/BELL SYSTEMS GENERAL NOTES:

- E.C. SHALL BE RESPONSIBLE FOR AND INCLUDE IN BASE BID ALL CONDUIT, CABLING, CONNECTIONS, BACKBOXES, POWER SUPPLIES, HARDWARE, ETC. NECESSARY TO EXPAND EXISTING SYSTEM.
- PROVIDE ALL EQUIPMENT, MATERIALS AND LABOR NECESSARY TO EXPAND THE EXISTING BOGEN PAGINGBELL SYSTEM. THE SYSTEM EXPANSION SHALL BE CONNECTED DIRECTLY TO THE EXISTING HEAD-END EQUIPMENT. THE INSTALLATION SHALL BE AS RECOMMENDED BY THE MANUFACTURER. WHEN THE SYSTEM IS COMPLETE, A CERTIFIED REPRESENTATIVE OF THE SYSTEM SHALL TEST THE SYSTEM, MAKE ADJUSTMENTS AND PLACE THE SYSTEM IN OPERATING ORDER.

  PROVIDE ALL COMPONENTS REQUIRED FOR A COMPETE AND OPERABLE SYSTEM AS REQUIRED BY THE SCHOOL DISTRICT. ALL SYSTEM COMPONENTS SHALL MATCH EXISTING IN APPEARANCE AND FUNCTIONALITY. PROVIDE ALL REQUIRED PROGRAMMING AND COMMINSIONING OF THE SYSTEM, COORDINATE PROGRAMMING FUNCTIONALITY WITH SCHOOL DISTRICT REPRESENTATIVE.

FIRE ALARM SYMBOL SCHEDULE

NOTE: ALL SYMBOLS MAY NOT BE USED

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL (WALL MOUNTED, TOP AT 6'-0" AFF)
NAC	NOTIFICATION DEVICE EXTENDER PANEL. PROVIDE QTY AS REQUIRED BASED ON DEVICE VOLTAGE DROP CALC'S PER NFPA 72 REQUIREMENTS. (WALL MOUNTED, TOP AT 5'-0" AFF)
RA	REMOTE ANNUCIATOR PANEL (FLUSH MOUNTED IN WALL AT 5'-0" AFF)
F	MANUAL PULL STATION (MOUNTING HEIGHT PER ADA & NFPA 72)
H	MAGNETIC DOOR HOLD OPEN
CM	ADDRESSABLE CONTROL/RELAY MODULE
MM	ADDRESSABLE MONITORING MODULE
FS	FIRE ALARM FLOW SWITCH
TS	FIRE ALARM TAMPER SWITCH
SD	FIRE ALARM SMOKE DAMPER
#	ADDRESSABLE DETECTOR WITH BASE
	DETECTOR SUBSCRIPTS P PHOTOELECTRIC SMOKE DETECTOR — D DUCT SMOKE DETECTOR ID IN-DUCT SMOKE DETECTOR — H HEAT DETECTOR M MULTI-STATION SMOKE DETECTOR (120V W/BATTERY BACKUP) M/S MULTI-STATION SMOKE DETECTOR W/VISIBLE STROBE (120V W/BATTERY BACKUP) M/C MULTI-STATION SMOKE / CARBON MONOXIDE DETECTOR (120V W/BATTERY BACKUP)
SD	FIRE/SMOKE DAMPER; COORDINATE LOCATIONS WITH MECH. DRAWINGS
	EXTERIOR 120V FIRE BELL, INSTALL NEXT TO FDC.
	WALL OR CEILING MOUNTED FIRE ALARM HORN ONLY
	WALL MOUNTED FIRE ALARM STROBE OR HORN/STROBE PROVIDE CANDELA RATING AS REQUIRED BY NFPA 72
	CEILING MOUNTED FIRE ALARM STROBE OR HORN/STROBE PROVIDE CANDELA RATING AS REQUIRED BY NFPA 72

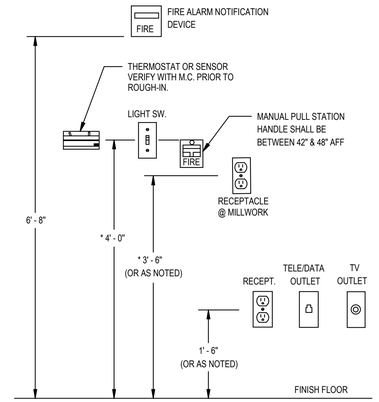
GENERAL FIRE ALARM SYSTEM NOTES

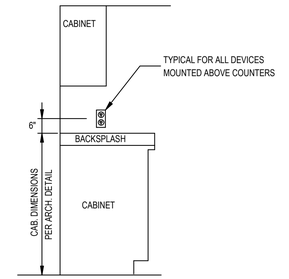
A. DO NOT INSTALL MORE THAN (10) NOTIFICATION APPLIANCES ON ANY SINGLE CLASS "A" SIGNAL CIRCUIT. DO NOT EXCEED 400 FT. OF NO. 14 WIRE IN THE TOTAL LOOP.
B. NFPA ALLOWS NOTIFICATION APPLIANCES TO BE MOUNTED AT A HEIGHT RANGE BETWEEN 80" TO 96" ABOVE FINISH FLOOR. THE PREFERRED HEIGHT IS 80". IF THIS CONFLICTS WITH OTHER TRADES OR ROOM FURNISHINGS, LOCATE AS CLOSE TO 80" AS POSSIBLE, NOT EXCEEDING 96". ALL NOTIFICATION APPLIANCES IN A COMMON ROOM OR LINE OF SIGHT SHALL BE LOCATED AT A COMMON HEIGHT.
C. MOUNT PULL STATIONS AT 46-48" A.F.F. TO THE OPERATING HANDLE TO MEET ADA REQUIREMENTS.
D. DO NOT CONNECT THE FIRE ALARM SYSTEM TO ANY DEVICE WHICH HAS A POWER HELD CONTACTS.(FLOW, TAMPER, HOOD SYSTEM, DUCT DETECTOR, ETC. FALSE ALARM WILL OCCUR.
E. ELECTRICAL CONTRACTOR SHALL SUPPLY AND INSTALL CONDUCTOR QUANTITIES PER FIRE ALARM SYSTEM SUPPLIER, AND AS PER NFPA AND NEC REQUIREMENTS.
F. DO NOT INSTALL ANY SMOKE OR HEAT DETECTORS WITHIN 3 FEET OF ANY AIR DIFFUSER.
G. DO NOT EXCEED 2500 FEET ON ANY ADDRESSABLE DEVICE RUN. DO NOT EXCEED 120 DEVICES ON ANY ONE ADDRESSABLE DEVICE RUN.
H. ALL AIR HANDLING EQUIPMENT 2000 CFM OR MORE MUST BE SHUT DOWN UPON FIRE ALARM AS PER LIFE SAFETY CODES.
I. ALL CLASS "B" INITIATING CIRCUITS WITH ADDRESSABLE DEVICES NEED EOLR. (END OF LINE RESISTORS).
J. IN CORRIDORS, NOTIFICATION APPLIANCES MUST BE LOCATED WITHIN 15' FROM ENDS OF CORRIDORS AND A MAXIMUM OF 100' SPACING.
K. NOTIFICATION APPLIANCES TO BE SYNCHRONIZED TO PROVIDE A 3-3-3 TEMPORAL PATTERN.
L. ALL WIRING AND CONDUIT ROUTING TO BE AS DESCRIBED ON SUPPLIED SHOP DRAWINGS. FIRE ALARM PLAN IS SHOWN FOR GENERAL LOCATION AND LAYOUT ONLY.
M. THE FIRE ALARM SYSTEM TO BE IN COMPLIANCE WITH ALL APPLICABLE LOCAL, STATE AND ADA REQUIREMENTS.
N. ELECT. CONTR. TO CONNECT SPRINKLER SYSTEM TAMPER SWITCHES AND FLOW VALVES TO FIRE ALARM SYSTEM AS REQUIRED. SEE FIRE SPRINKLER SYSTEM DRAWINGS FOR EXACT LOCATIONS AND QUANTITIES.

FIRE ALARM SYSTEM EXPANSION NOTES:

A. PROVIDE ALL EQUIPMENT, MATERIALS AND LABOR NECESSARY TO EXPAND THE EXISTING SILENT KNIGHT 5808 FIRE ALARM SYSTEM. THE SYSTEM ADDITION SHALL BE CONNECTED DIRECTLY TO THE EXISTING MAIN FIRE ALARM PANEL. THE INSTALLATION SHALL BE AS RECOMMENDED BY THE MANUFACTURER AND ACCEPTED BY THE LOCAL AHJ. WHEN THE SYSTEM IS COMPLETE, A FACTORY REPRESENTATIVE SHALL TEST THE SYSTEM, MAKE ADJUSTMENTS AND PLACE THE SYSTEM IN OPERATING ORDER.
B. WITHIN 30 DAYS AFTER THE CONTRACT AWARD AND PRIOR TO THE PURCHASE OF ANY EQUIPMENT, THE FIRE ALARM SYSTEM CONTRACTOR SHALL SUBMIT FOR APPROVAL SIX (6) COPIES OF THE FOLLOWING:
   a. A LIST OF MATERIALS THAT ARE TO BE USED ON THE PROJECT, INCLUDING MANUFACTURER, MODEL NUMBER AND TECHNICAL INFORMATION.
   b. PRELIMINARY CIRCUIT DIAGRAMS SHOWING INTERCONNECTION OF ALL MONITORING, NOTIFICATION AND ANNUNCIATION DEVICES, PANELS AND WIRING COUNTS. DIAGRAMS ARE TO BE 11"X17", DONE IN A GOOD WORKMAN LIKE MANNER.
   c. TECHNICAL MANUALS FOR ALL OF THE EQUIPMENT THAT IS TO BE USED ON THE PROJECT.
   d. SUBMIT SHOP DRAWINGS AND REQUIRED CALCULATIONS TO THE LOCAL AHJ.
   e. OBTAIN A WRITTEN LETTER OF ACCEPTANCE OF THE PROPOSED SYSTEM AND INCLUDE WITH THE SHOP DRAWING SUBMITTAL TO THE ENGINEER.
C. CONTRACTOR SHALL PROVIDE AND INSTALL ALL REQUIRED POWER SUPPLIES, ELECTRONICS AND CONNECTIONS TO MODIFY EXISTING SYSTEM TO ACCEPT NEW ADDITION. THE COMPLETE SYSTEM SHALL MAINTAIN A UL LISTING.
D. ELECTRICAL CONTRACTOR SHALL INCLUDE A $2,000.00 CASH ALLOWANCE IN THE BID FOR MISCELLANEOUS ADDITIONS AND/OR REQUIREMENTS IMPOSED BY THE LOCAL AHJ.

TYPICAL DEVICE MOUNTING HEIGHTS:

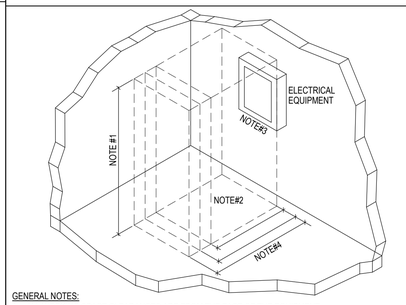




GENERAL DETAIL NOTES:

A. ALL MOUNTING HEIGHTS ARE TYPICAL UNLESS NOTED OTHERWISE
B. E.C. SHALL COORDINATE ALL DEVICES HEIGHTS WITH ARCHITECTS ELEVATION/MILLWORK DWGS. TO INSURE THAT OUTLETS WILL NOT FALL BEHIND CABINETS, BACKSPLASH OR INTERFERE WITH WAINSCOTING, ETC. AND REPORT ANY CONFLICTS TO ARCHITECT "PRIOR TO ROUGH-IN"
C. ALL SWITCHES SHALL BE MOUNTED AS CLOSE TO DOOR JAMS AS POSSIBLE, COORDINATE ALL DEVICE LOCATIONS WITH ARCHITECTURAL PLANS AND DETAILS
D. COORDINATE LIGHT SWITCH AND OUTLET HEIGHTS WITH ARCHITECTURAL WAINSCOTING AND/OR TILE WORK SO AS NOT TO FALL MIDWAY IN THESE FINISHES.

ELECTRICAL EQUIP. CLEARANCE



GENERAL NOTES:

A. ALL WORKING SPACE CLEARANCES ARE FROM THE FACE OF THE EQUIPMENT.

NOTES:

1. THE MINIMUM HEADROOM OF WORKING SPACE SHALL BE 6 1/2FT.
2. THE WIDTH OF THE WORKING SPACE SHALL BE THE WIDTH OF THE EQUIPMENT OR 30", WHICHEVER IS GREATER. THE PANEL DOOR SHALL OPEN AT LEAST 90 DEGREES.
3. ALL CIRCUIT BREAKERS, WHEN IN THIER HIGHEST POSITION, SHALL NOT BE MORE THAN 6FT 7 IN. ABOVE THE FINISHED FLOOR.
4. 3FT CLEARANCE IF 0-150V TO GROUND, 3.5FT CLEARANCE IF 151-600V TO GROUND. 4FT IF EXPOSED LIVE PARTS ON BOTH SIDES OF THE WORKING SPACE.

PROFESSIONAL ENGINEER REGISTERED 13053 9/24/24 STATE OF IDAHO SHAWN A. MEADOR

PROJECT #: 2442

PAYNE Engineering Inc. Consulting Engineers
1823 E. Center
Pocatello, Idaho 83201
tel (208) 232-4439
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AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
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ELECTRICAL SYMBOLS & DETAILS

DATE

Laughlin Ricks Architecture
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134 3RD AVE. E. * Twin Falls, Idaho 83301
PHONE: (208) 736-8050

DATE: 9/24/24
SAM Drawn — TEP Checked
#23067 PROJECT #

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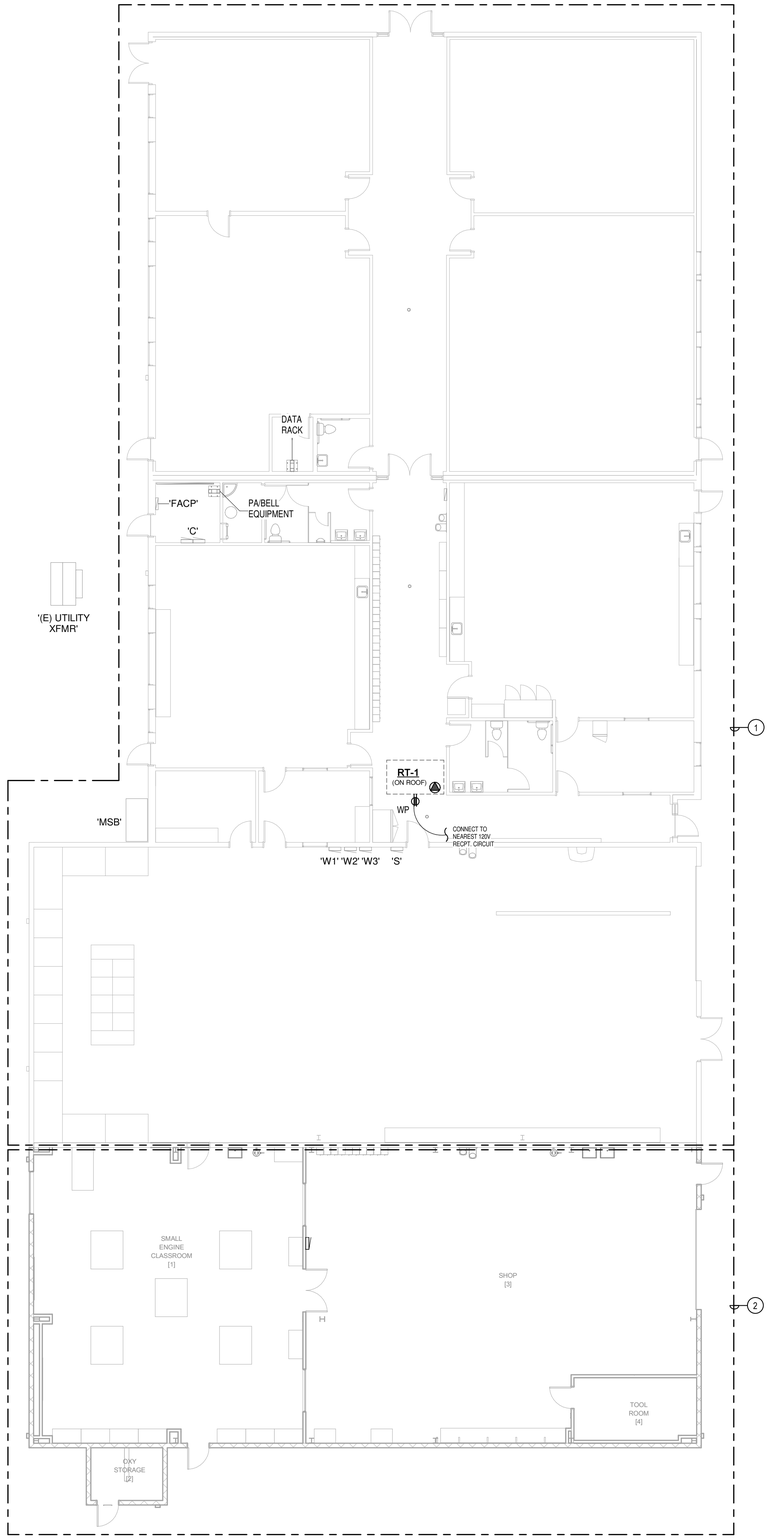
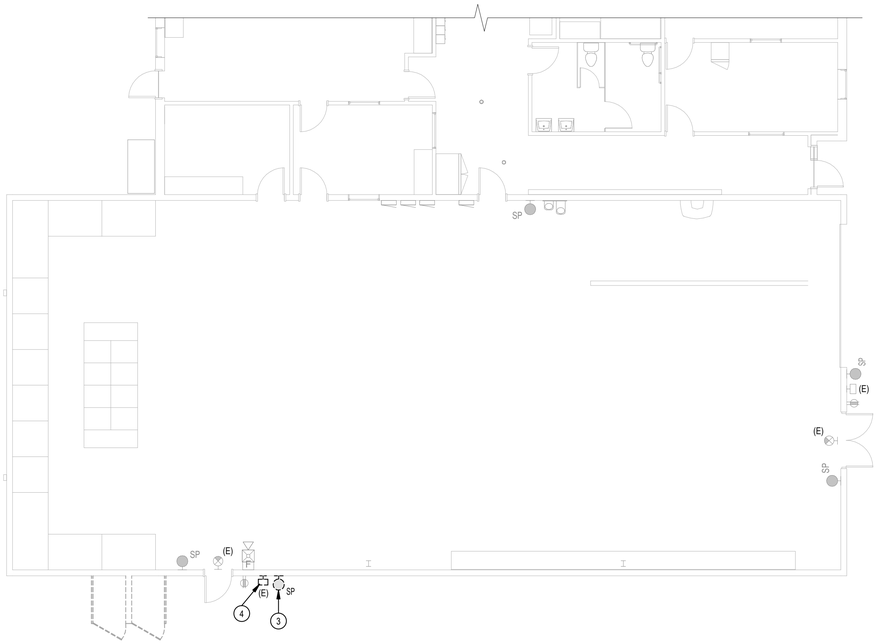


1 OVERALL ELECTRICAL PLAN
SCALE: 1" = 10'-0"

0" 10' 20'
NORTH



2 EXISTING ELECTRICAL PLAN
SCALE: 1/8" = 1'-0"

0" 8' 16'
NORTH

MECH. - ROOFTOP UNIT SCHEDULE

EQUIP. ID	VOLTS / PH.	MCA	MOCP	CIRCUIT	FEEDER	DISCONNECT	NOTES
RT-1	208 V / 3 PH.	33 A	45 A	W3 - 28,30,32	3/4"C, 3#6, #10G	60 A - NONFUSED/3R	3,5

MECH. - EXHAUST FAN SCHEDULE

EQUIP. ID	VOLTS / PH.	HP	WATTS	FLA	CIRCUIT	FEEDER	CONTROL	NOTES
EF-1	120 V / 1 PH.	3/4		14 A	S1 - 29	1/2"C, 1#12, #12N, #12G	WALL SWITCH	2
EF-2	120 V / 1 PH.	1/6		4 A	S1 - 31	1/2"C, 1#12, #12N, #12G	WALL SWITCH	2

MECH. - UNIT HEATER SCHEDULE

EQUIP. ID	VOLTS / PH.	WATTS	FLA	OCP	CIRCUIT	FEEDER	NOTES
UH-1	120 V / 1 PH.	288 W	2.4 A	15 A	S1 - 33	1/2"C, 1#12, #12N, #12G	
UH-2	120 V / 1 PH.	288 W	2.4 A	15 A	S1 - 33	1/2"C, 1#12, #12N, #12G	

MECH. - ELECTRIC HEATER SCHEDULE

EQUIP. ID	VOLTS / PH.	WATTS	FLA	OCP	CIRCUIT	FEEDER	NOTES
EH-1	208 V / 1 PH.	1500 W	7.2 A	15 A	S1 - 39,41	1/2"C, 2#12, #12G	

MECH. - PLUMBING EQUIP. SCHEDULE

EQUIP. ID	VOLTS / PH.	WATTS	FLA	CIRCUIT	FEEDER	DISCONNECT	NOTES
RP-1	120 V / 1 PH.	50 W	0.4 A	S1 - 23	1/2"C, 1#12, #12N, #12G	CORD/PLUG	
WH-1	208 V / 1 PH.	4500 W	21.6 A	S1 - 43,45	1/2"C, 2#10, #10G	30A - NONFUSED/1	3

MECHANICAL SCHEDULE NOTES:

1. CIRCUIT AND CONTROL EXHAUST FAN WITH ROOM LIGHTING CIRCUIT.
2. E.C. SHALL PROVIDE LOCAL DISCONNECT RATED, THERMAL-OVERLOAD SWITCH FOR EQUIPMENT; SWITCH RATING SHALL NOT BE LESS THEN CIRCUIT BREAKER SUPPLYING EQUIPMENT.
3. E.C. SHALL PROVIDE LOCAL DISCONNECT SWITCH FOR EQUIPMENT; SIZE AND TYPE AS INDICATED IN SCHEDULE. IF FUSED DISCONNECT IS SPECIFIED FOR EQUIPMENT, FUSE PER EQUIPMENT NAMEPLATE RATING.
4. EQUIPMENT IS FACTORY SUPPLYED WITH DISCONNECT AND CONVIENENCE OUTLET; E.C. SHALL PROVIDE ALL NECESSARY CONNECTIONS.
5. PROVIDE AND INSTALL NEW CIRCUIT BREAKER (MOCP) IN EXISTING EATON PRL1a PANELBOARD AS INDICATED FOR NEW HVAC EQUIPMENT.

GENERAL NOTES:

A. ALL EXISTING ELECTRICAL MAY NOT APPEAR ON THESE PLANS, HOWEVER THE ABOVE INFORMATION APPLIES.
B. PROVIDE AND INSTALL BLANK COVERS ON ALL UNUSED SWITCH/OUTLET/J-BOXES WHERE REQUIRED.
C. ALL WALL DEVICES THAT ARE EXISTING TO REMAIN, SHALL BE ADAPTED TO NEW WALL COVERINGS, REFER TO ARCHITECTURAL DRAWINGS FOR EXACT WALL LOCATIONS, THICKNESS, ETC.
D. PRIOR TO THE START OF ANY DEMOLITION WORK, DISCONNECTING ANY POWER AND OR TELE/DATA SYSTEMS, THE CONTRACTOR SHALL COORDINATE DOWN-TIME WITH THE OWNER.
E. REFER TO ARCHITECTURAL PLANS FOR EXTENT OF DEMOLITION, DETAILS, ETC.
F. REMOVE OR RELOCATE ELECTRICAL AS NECESSARY FOR NEW WORK.
G. WHERE EXISTING CIRCUITS ARE TO BE RE-USED, EXTEND AS NECESSARY. MAINTAIN ELECTRICAL CONTINUITY TO DOWNSTREAM EQUIPMENT TO REMAIN.
H. EXISTING SHOWN TO REMAIN, MAY NEED TO BE REMOVED AND RE-INSTALLED ONLY AS NECESSARY FOR EXTENDING OR MODIFICATION OF EXISTING CIRCUITS OR WIRING.
I. REFER TO MECHANICAL PLANS FOR EXTENT OF MECHANICAL EQUIPMENT TO BE REMOVED OR RELOCATED.
J. REMOVE ALL UNUSED EQUIPMENT WIRING, CONDUIT AND BOXES IN ALL AREAS. ABANDON ONLY IN CONCEALED AREAS.
K. CONTRACTOR MY UTILIZE ANY EXISTING CONDUIT WHERE COMPATIBLE WITH NEW DESIGN, AND IF IN GOOD CONDITION AND COMPLIES WITH SPECIFICATIONS.
L. WHEN ANY MODIFICATIONS ARE MADE TO ANY EXISTING ELECTRICAL PANEL TO REMAIN, CONTRACTOR TO PROVIDE NEW TYPE WRITTEN INDEX TO REFLECT ALL NEW AND EXISTING LOADS.
M. REMOVE ALL EQUIPMENT, RACEWAYS, CABLES,ETC. NOT USED IN FINISHED AREAS.

(#) KEY NOTES:

1 EXISTING BUILDING TO REMAIN ACTIVE, E.C. SHALL LOCATE AND PROTECT ALL EXISTING ELECTRICAL EQUIPMENT, LIGHTING, DEVICE, ETC WITHIN THIS AREA.
2 NEW ADDITION, REFER TO NEW ELECTRICAL PLANS FOR ADDITIONAL INFORMATION.
3 EXISTING SPEAKER TO BE DISCONNECTED AND REMOVED TO ACCOMMODATE NEW ADDITION, BLANK OFF EXISTING BOX AS REQUIRED. MAINTAINRE-ESTABLISH CONTINUITY TO ALL DOWNSTREAM DEVICES THAT ARE TO REMAIN.
4 EXISTING EXTERIOR LIGHT FIXTURE TO BE DISCONNECTED AND REMOVED TO ACCOMMODATE NEW ADDITION, MAINTAIN/RE-ESTABLISH CONTINUITY TO ALL DOWNSTREAM DEVICES THAT ARE TO REMAIN.

DATE

AN ADDITION FOR:
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OVERALL & EXISTINGS ELECTRICAL PLANS

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DATE: 9/24/24
SAM Drawn
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PROFESSIONAL ENGINEER REGISTERED 13053 9/24/24 STATE OF IDAHO SHAWN A. MEADOR

PROJECT #: 2442

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LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MOUNTING	VOLTS	WATTS	LUMENS	COLOR TEMP.(K)	MFGR.	CATALOG #	APPROVED MFGR'S	NOTES
F1	4FT LED STRIP, FIELD SELECTABLE LUMENS/CCT	SURFACE	120-277	30 W	4000	4000	LITHONIA	CSS-L48-AL03-MVOLT-SWW3-80CRI		
F2S	2X4 LED FLAT PANEL, FIELD SELECTABLE LUMENS/CCT, INTEGRAL WIRELESS OCC. SENSOR	RECESSED	120-277	40 W	4000	4000	LITHONIA	CPX-2X4-AL08-80CRI-SWW7-SWL-MVOLT-NLTAIR2		1
F2SE	2X4 LED FLAT PANEL, FIELD SELECTABLE LUMENS/CCT, INTEGRAL WIRELESS OCC. SENSOR, EM. BATTERY PACK	RECESSED	120-277	45 W	4000	4000	LITHONIA	CPX-2X4-AL08-80CRI-SWW7-SWL-MVOLT-E10WLCP-NLTAIREM2		
F3	HIGHBAY LED, FIELD SELECTABLE LUMENS/CCT, INTEGRAL OCC. SENSOR	SUSPENDED 18FT AFF	120-277	130 W	15000	4000	LITHONIA	CPRB-AL013-MVOLT-SWW9-80CRI-NLTAIR2 RMSOD45-DWH		
FE1	EXTERIOR LED WALL PACK	WALL	120-277	50 W	5000	4000	LITHONIA	DSXW1 LED-20C-700-40-T3M-MVOLT-BBW-SCBA		
FX1	EXIT SIGN W/ 90MIN BATTERY,THERMOPLASTIC, GREEN LED, SINGLE/DOUBLE FACE	WALL OR CEILING	120-277	2 W	N/A	N/A	LITHONIA	LQM-S-W-3-G-20/277-EL N	COOPER	
FX2	EXIT SIGN/EM LIGHT COMBO W/ 90MIN BATTERY,THERMOPLASTIC, GREEN LED, SINGLE/DOUBLE FACE	WALL OR CEILING	120-277	2 W	N/A	N/A	LITHONIA	LHQM LED-G-SD	COOPER	
FX3	WALL MOUNTED LED EMERGENCY LIGHT	WALL AT 7'-6" AFF	120-277	3 W	N/A	N/A	LITHONIA	ELM6L-UVOLT-LTP-SDRT	COOPER	
FX4	WALL MOUNTED EXTERIOR EMERGENCY EGRESS LIGHT, W/HEATER	WALL ABOVE DOOR	120-277	35 W	N/A	N/A	LITHONIA	AFF-OEL-SCBA-UVOLT-LTP-SDRT-WT-CW	DUAL-LITE	

LIGHT FIXTURE SCHEDULE NOTES:

1. REFER TO DRAWINGS FOR FIXTURES REQUIRED TO HAVE 0-10V OR STEP-LEVEL DIMMING CONTROL. PROVIDE FIXTURE(S) WITH LED DRIVER(S) AND REQUIRED DIMMING/SWITCH-LEG CONDUCTORS BETWEEN SWITCH(ES) AND FIXTURE(S) TO PROVIDE CONTROL AS INDICATED ON DRAWINGS.
2. FIXTURE TO BE CONTINUOUS ROW MOUNTED, LENGTH AS INDICATED ON DRAWINGS. PROVIDE REQUIRED ACCESSORIES/CONNECTORS FOR CONTINUOUS ROW MOUNTING.
3. SCBA - STANDARD COLOR BY ARCHITECT/OWNER (COORDINATE COLOR WITH ARCHITECT/OWNER PRIOR TO ORDERING.)
4. FIELD ADJUST PENDANT LENGTH AS REQUIRED, VERIFY LENGTH WITH COUNTER AS DIRECTED BY ARCHITECT.

GENERAL LIGHTING SCHEDULE NOTES:

- LIGHTING FIXTURES INDICATED IN SCHEDULE ARE BASIS OF DESIGN, ALTERNATE MANUFACTURERS SHALL BE PRE-APPROVED BY ADDENDUM. ALTERNATE MANUCATURERS SHALL SUBMIT PER-APPROVALS TO ENGINEER A MINIMUM OF 10 DAYS PRIOR TO PROJECT BID DATE.

LIGHTING CONTROL/OCCUPANCY SENSOR SCHEDULE

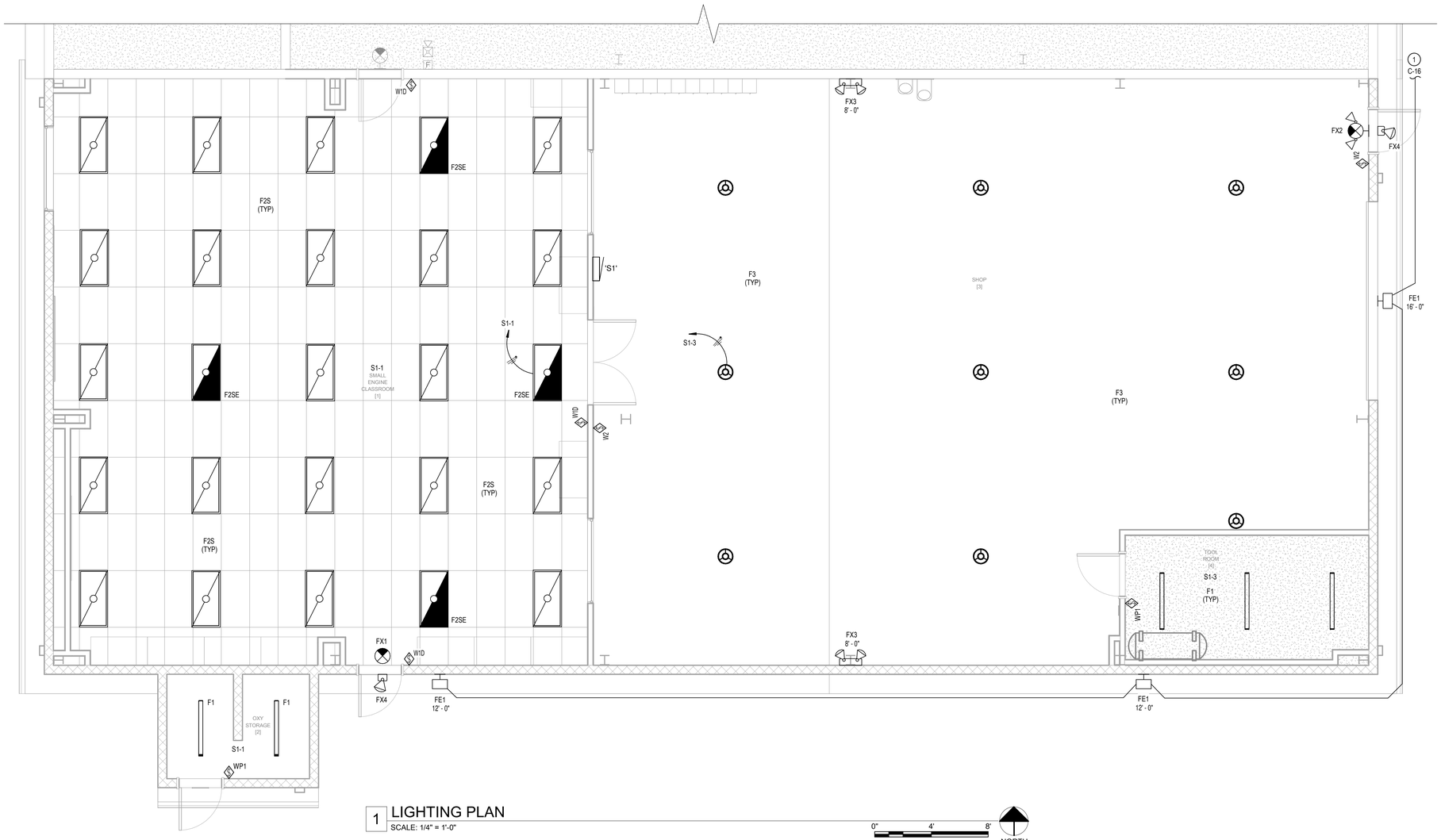
TYPE	DESCRIPTION	MFGR.	CATALOG #	APPROVED EQUALS	NOTES
OCC. SENSORS - WALL MOUNTED					
WP1	PASSIVE-INFRARED, 1-POLE, NEUTRAL REQUIRED	SENSOR SWITCH	WSX-**	COOPER, WATTSTOPPER, HUBBELL	2
WIRELESS CONTROLS					
W1D	nLIGHT AIR, LINE-VOLTAGE WIRELESS WALLSTATION, ON/OFF W/ RAISE/LOWER	ACUITY BRANDS	rPODLA-DX-MVOLT-**		2
W2	nLIGHT AIR, LINE-VOLTAGE WIRELESS WALLSTATION, ON/OFF ONLY	ACUITY BRANDS	rPODLA-MVOLT-**		2

CONTROL & OCCUPANCY SENSOR SCHEDULE NOTES:

1. PROVIDE ADDITIONAL POWER PACKS; SENSOR SWITCH PP20 AS NEED FOR QTY OF OCCUPANCY SENSORS/SWITCHES.
2. DEVICE COLOR SHALL MATCH WIRING DEVICES; REFER TO SPECIFICATIONS.
3. REFER TO MANUFACTURER DOCUMENTATION FOR QTY AND SIZE OF CONDUCTORS BETWEEN LOW VOLTAGE SWITCH, SENSOR(S) AND POWER/RELAY PACKS.
4. PROVIDE SECONDARY RELAY PACK; SENSOR SWITCH SP20 AS NEEDED TO PROVIDE DUAL-LEVEL SWITCHING OF FIXTURES.
5. PROVIDE 0-10V DIMMING CONDUCTORS (GRAY & VIOLET) BETWEEN SWITCH AND LIGHT FIXTURES FOR DIMMING CONTROL.
6. PROGRAM ON/OFF TIMES OF RELAY'S AS DIRECTED BY OWNER. PROVIDE COMMISSIONING AS INDICATED IN GENERAL NOTES BELOW.
7. CUSTOM WALL STATION ENGRAVINGS IS REQUIRED FOR WALL STATION(S) AND SHALL BE SPECIFIED/COORDINATED WITH OWNER AFTER PROGRAMING OF SYSTEM.

GENERAL LIGHTING CONTROL NOTES:

- E.C. SHALL BE RESPONSIBLE FOR THE PROGRAMMING/COMMISSIONING OF THE LIGHTING CONTROL SYSTEMS TO FUNCTION AS INDICATED ON THE DRAWINGS AND SHALL INCLUDE ALL REQUIRED COST IN THE BASE BID. FOR AREAS WITH DAYLIGHTING CONTROL, THE DAYLIGHTING SET-POINTS SHALL BE COORDINATED WITH THE OWNER FOR EACH AREA PRIOR TO FINAL PROGRAMMING OF THE DAYLIGHTING SENSOR(S). ALL PROGRAMMING/COMMISSIONING SHALL BE DONE BY A FACTORY CERTIFIED OR TRAINED PERSON.
- LIGHTING IS SPACES WITH WIRELESS CONTROLS SHALL BE FIELD TUNED TO FOOTCANDLE LEVELS THAT ARE SATISFACTORY TO THE OWNER DURING PROGRAMMING AND COMMISSIONING OF THE WIRELESS CONTROL SYSTEM.



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

0" 4' 8'

NORTH

GENERAL NOTES:

A. REFER TO SYMBOL SCHEDULE SHEET FOR PROJECT GENERAL NOTES AND GENERAL NOTES ASSOCIATED WITH THE INSTALLATION OF EACH SYSTEM, INCLUDINB BUT NOT LIMITED TO; LIGHTING, POWER, FIRE ALARM, SPECIAL SYSTEMS, ETC.

(#) KEY NOTES:

1 CONNECT TO EXISTING EXTERIOR LIGHTING CIRCUIT AND CONTROLS, FIELD VERIFY CIRCUIT LOCATION.

DATE

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LIGHTING PLAN

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PROFESSIONAL ENGINEER REGISTERED 13053 9/24/24 STATE OF IDAHO SHAWN A. MEADOR

PROJECT #: 2442

PAYNE Engineering Inc. Consulting Engineers
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CORD-REEL SCHEDULE

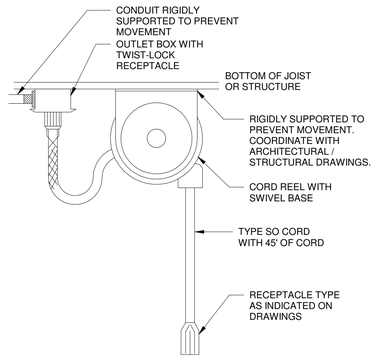
ID	DESCRIPTION	MFG.	PART #	NOTES
CR1	20A, 120V 45FT RETRACTABLE CORD-REEL W/ (2) 20A DUPLEX RECPT. & GFCI MODULE	HUBBELL-WIRING	HBLI45123GF220M1	FIELD LOCATE PER OWNER DIRECTION
CR2	20A, 120V RETRACTABLE CORD-REEL W/ PLENUM RATED ENCLOSURE & (2) 20A DUPLEX RECPT. & GFCI MODULE	HUBBELL-WIRING	CORD-REEL: HBLI45123GF220M1 ENCLOSURE: HBLIPRBOX	FIELD LOCATE PER OWNER DIRECTION

SHOP EQUIPMENT SCHEDULE

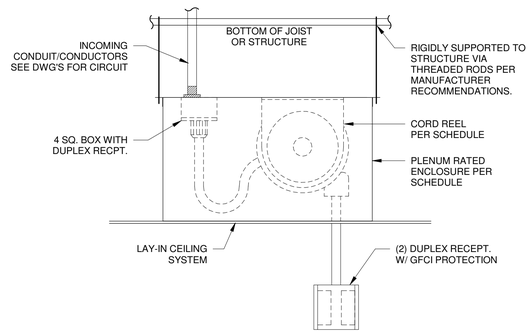
ITEM #	EQUIPMENT DESCRIPTION	VOLTS / PH.	HP	AMPS	CIRCUIT	FEEDER	CONNECTION TYPE	NOTES
AC	AIR COMPRESSOR	240 V / 3PH.	10 HP	24 A	Q-9,11,13		DIRECT	1,3
BS	BAND SAW	240 V / 1PH.	3 HP	10 A	Q-6,8		NEMA 6-15R	1,2
DC	DUST COLLECTOR	240 V / 1PH.	3 HP	22 A	Q-1,3		DIRECT	1,3
MS	COMPOUND MITER SAW	120 V / 1PH.	-	12 A	S1-32		NEMA 5-20R	1,2
TS	TABLE SAW	240 V / 1PH.	5 HP	28 A	Q-2,4		DIRECT	1,2

SHOP EQUIPMENT SCHEDULE NOTES:

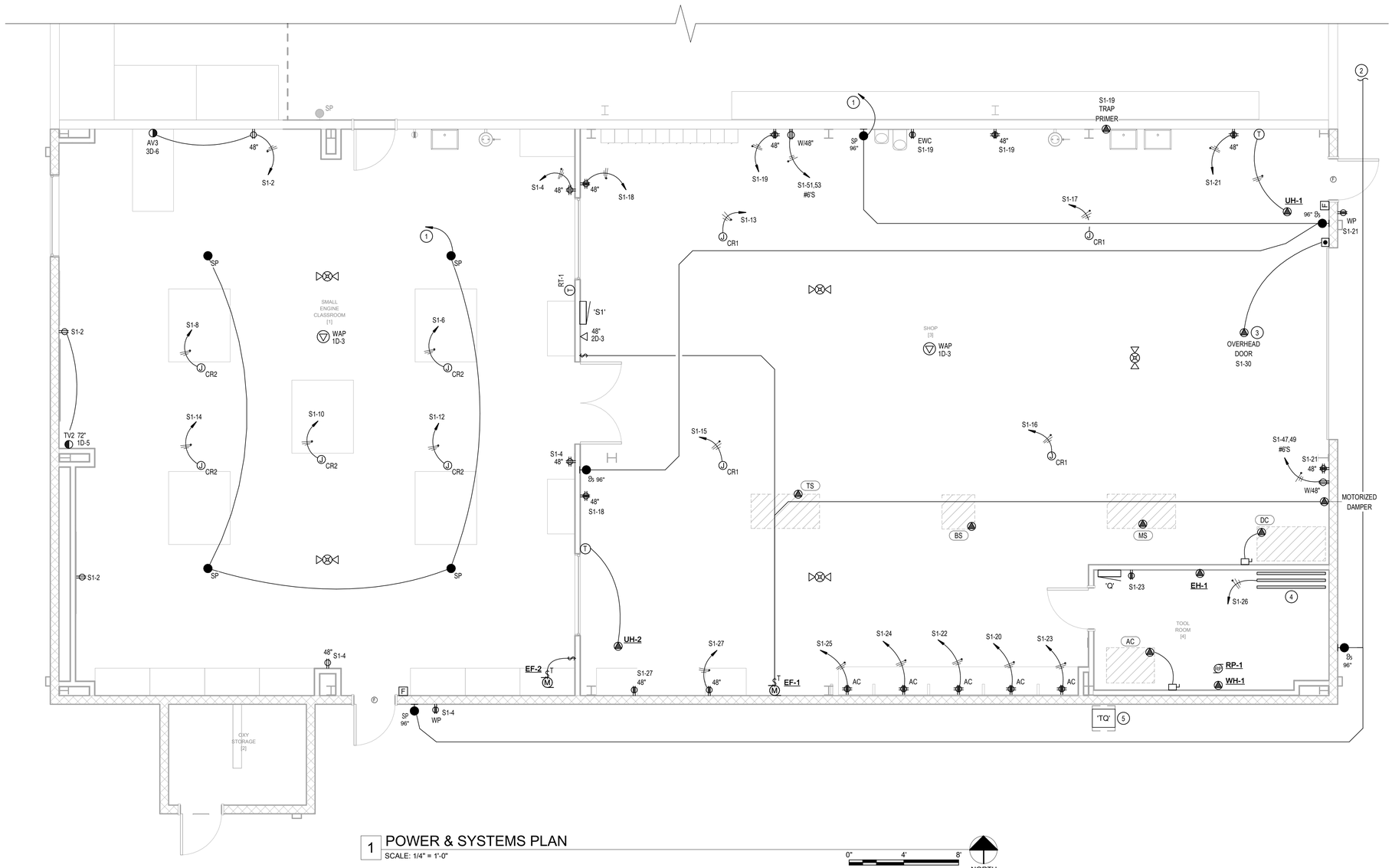
1. FIELD VERIFY CONNECTION REQUIREMENTS AND LOCATION WITH OWNER/EQUIPMENT SUPPLIER PRIOR TO ROUGH-IN.
2. SUPPLY EQUIPMENT VIA CORD DROP FROM CEILING STRUCTURE, UTILIZE CORD GRIPS AT EACH END.
3. E.C. SHALL PROVIDE LOCAL DISCONNECT SWITCH FOR EQUIPMENT; SIZE AND TYPE AS INDICATED. IF FUSED DISCONNECT IS SPECIFIED FOR EQUIPMENT, FUSE PER EQUIPMENT NAMEPLATE RATING.



A 'CR1' CORD REEL DETAIL
SCALE: NONE



B 'CR2' CORD REEL DETAIL
SCALE: NONE



1 POWER & SYSTEMS PLAN
SCALE: 1/4" = 1'-0"

0" 4' 8"
NORTH

GENERAL NOTES:

A. REFER TO SYMBOL SCHEDULE SHEET FOR PROJECT GENERAL NOTES AND GENERAL NOTES ASSOCIATED WITH THE INSTALLATION OF EACH SYSTEM, INCLUDINB BUT NOT LIMITED TO; LIGHTING, POWER, FIRE ALARM, SPECIAL SYSTEMS, ETC.

PAGING/BELL/CLOCK SYSTEM:

PROVIDE ALL EQUIPMENT, MATERIALS AND LABOR NECESSARY TO EXPAND THE EXISTING BOGEN PAGING/BELL SYSTEM. THE SYSTEM EXPANSION SHALL BE CONNECTED DIRECTLY TO THE EXISTING HEAD-END EQUIPMENT. THE INSTALLATION SHALL BE AS RECOMMENDED BY THE MANUFACTURER. WHEN THE SYSTEM IS COMPLETE, A CERTIFIED REPRESENTATIVE OF THE SYSTEM SHALL TEST THE SYSTEM, MAKE ADJUSTMENTS AND PLACE THE SYSTEM IN OPERATING ORDER.

PROVIDE ALL COMPONENTS REQUIRED FOR A COMPETE AND OPERABLE SYSTEM AS REQUIRED BY THE SCHOOL DISTRICT. ALL SYSTEM COMPONENTS SHALL MATCH EXISTING IN APPEARANCE AND FUNCTIONALITY. PROVIDE ALL REQUIRED PROGRAMMING AND COMMINSIONING OF THE SYSTEM, COORDINATE PROGRAMMING FUNCTIONALITY WITH SCHOOL DISTRICT REPRESENTATIVE.

(#) KEY NOTES:

1 PROVIDE AND INSTALL SPEAKER CABLING TO EXISTING PA/BELL HEAD-END EQUIPMENT. INSTALL CABLING IN 1/2" CONDUIT WHERE ROUTED THOUGH INACCESSIBLE AREAS OR AREAS EXPOSED TO STRUCTURE.

2 CONNECT TO EXISTING EXTERIOR SPEAKER ZONE, FIELD VERIFY CONNECTION LOCATION.

3 CONNECTION TO OVERHEAD DOOR MOTOR, COORDINATE CONNECTION WITH EQUIPMENT PRIOR TO ROUGH-IN. PROVIDE CONDUIT AND CONDUCTORS TO PUSH-BUTTON STATION PER MANUFACTURERS REQUIREMENTS.

4 PROVIDE AND INSTALL (3) 5FT ALUMINUM PLUG-TRAKS, EA W/ (10) SINGLE RECEPT. FOR OWNER BATTERY CHARGING EQUIPMENT. MOUNT EACH PLUG-TRAK 6" ABOVE SHELVING, FIELD LOCATE WITH OWNER PRIOR TO ROUGH-IN AND COORDINATE WITH SHELVING SYSTEM. HUBBELL P/N: HBLALU24GB506. PROVIDE ALL COMPONENTS FOR A COMPLETE INSTALLATION.

5 PROVIDE AND INSTALL 208V - 240/120V, 3-PHASE DRY-TYPE TRANSFORMER FOR SHOP EQUIPMENT PANEL 'Q'. MADDOX TRANSFORMERS OR EQUAL.

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POWER & SYSTEMS PLAN

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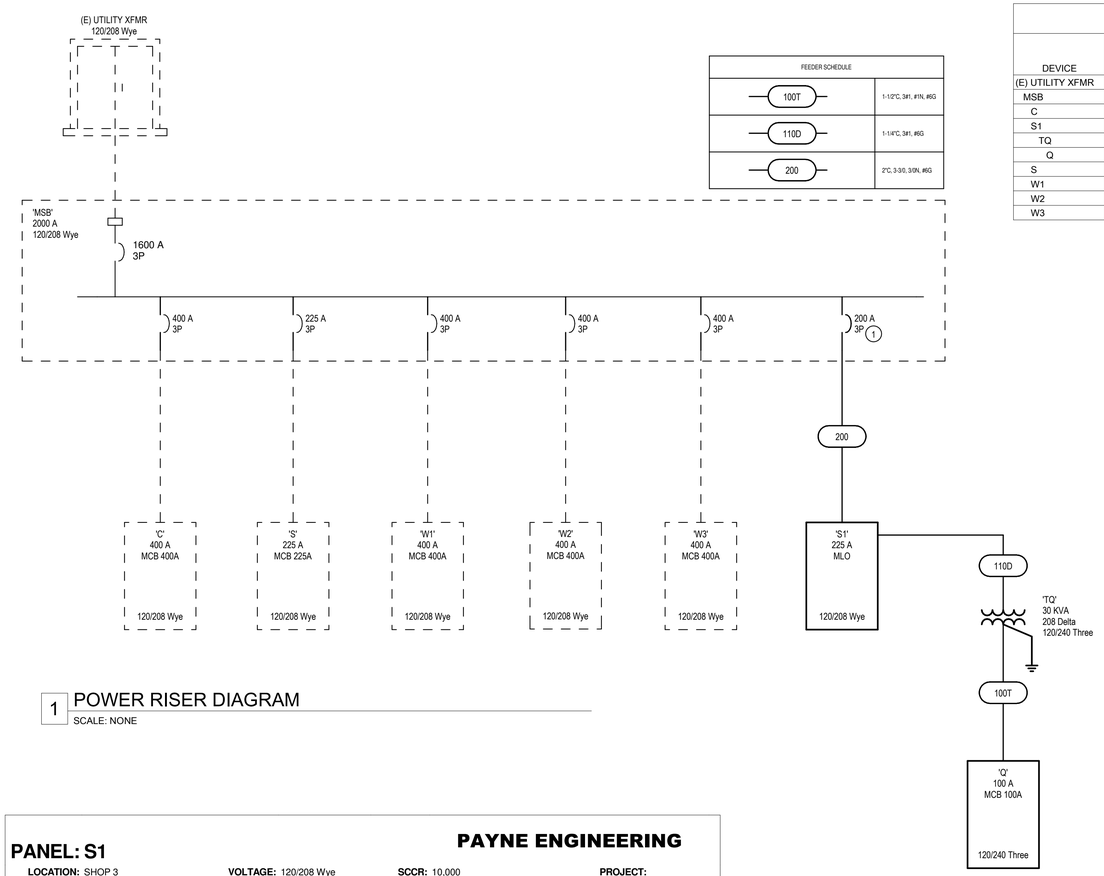


1 POWER RISER DIAGRAM

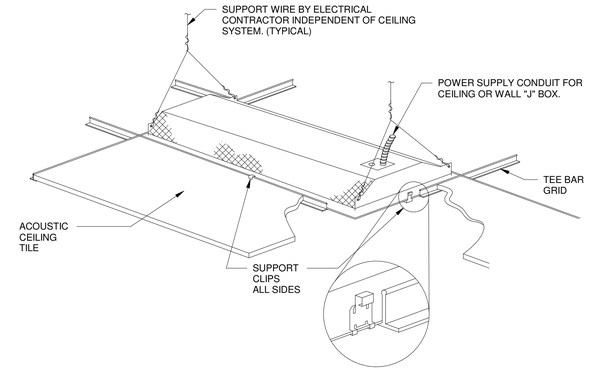
SCALE: NONE

FAULT CURRENT SCHEDULE

DEVICE	FAULT AT DEVICE	AIC RATING	VOLTAGE	TRANSFORMER KVA	TRANSFORMER Z%	TRANSFORMER FAULT AT PRIMARY
(E) UTILITY XFMR	16,674		208V	150	2	
MSB	15,742	65,000	208V			
C	12,416	22,000	208V			
S1	8,173	10,000	208V			
TQ	2,506		208V	30	1.75	4,553
Q	2,351	10,000	240V			
S	11,031	22,000	208V			
W1	13,242	22,000	208V			
W2	13,134	22,000	208V			
W3	13,030	22,000	208V			

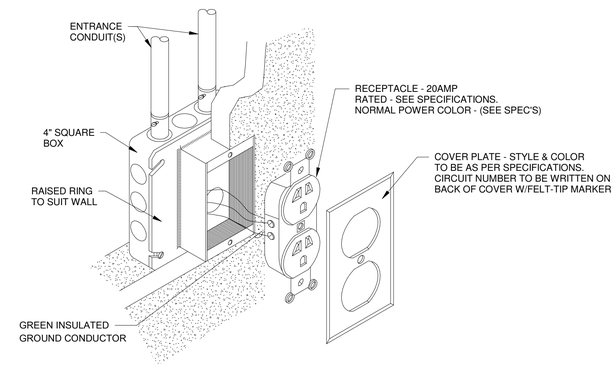
KEY NOTES:

1 PROVIDE AND INSTALL NEW CIRCUIT BREAKER IN EXISTING EATON POW-R-LINE C SWITCHBOARD. SIZE AND TYPE AS INDICATED, PROVIDE ALL REQUIRED FILLER PLATES, ETC.



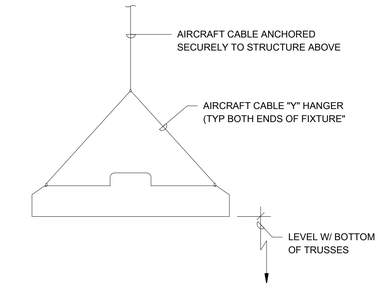
A LIGHT FIXTURE RECESSED DETAIL

SCALE: NONE



B RECEPTACLE MOUNTING DETAIL

SCALE: NONE



C LIGHT FIXTURE HIGHBAY MOUNTING DETAIL

SCALE: NONE

PANEL: S1

PAYNE ENGINEERING

LOCATION: SHOP 3 | **VOLTAGE:** 120/208 Wye | **SCCR:** 10,000 | **PROJECT:** KIMBERLY SCHOOL DISTRICT
FED FROM: MSB | **PHASES:** 3 | **TYPE:** MLO
MOUNTING: SURFACE | **WIRES:** 4 | **BUS AMPS:** 225
ENCLOSURE: NEMA 1 | **BUSSING:** SEE SPEC'S | **FEED:** TOP
MFG/ MODEL: SQ. D/NQ SERIES | **DIMENSIONS:** 20"W x 5.8"D x **"H
NOTES:

CKT	CIRCUIT DESCRIPTION	NOTE	AMPS	P	A	B	C	P	AMPS	NOTE	CIRCUIT DESCRIPTION	CKT
1	Lighting		20 A	1	1080			1	20 A		Receptacle	2
3	Lighting		20 A	1		1260	1080	1	20 A		Receptacle	4
5	SPARE	--	20 A	1			0 360	1	20 A		Cord reel	6
7	SPARE	--	20 A	1	0	360		1	20 A		Cord reel	8
9	SPARE	--	20 A	1		0	360	1	20 A		Cord reel	10
11	SPARE	--	20 A	1			0 360	1	20 A		Cord reel	12
13	Cord reel		20 A	1	360	360		1	20 A		Cord reel	14
15	Cord reel		20 A	1		360	360	1	20 A		Cord reel	16
17	Cord reel		20 A	1			360 720	1	20 A		Receptacle	18
19	Receptacle		20 A	1	1370	360		1	20 A		Receptacle	20
21	Receptacle		20 A	1		900	360	1	20 A		Receptacle	22
23	Receptacle		20 A	1			590 360	1	20 A		Receptacle	24
25	Receptacle		20 A	1	360	540		1	20 A		Battery Charging Plugmold	26
27	Receptacle		20 A	1		360	0	1	20 A	--	SPARE	28
29	Shop Fan		20 A	1			1756 500	1	20 A		Overhead Door	30
31	Hood Fan		20 A	1	528	1440		1	20 A		Miter Saw	32
33	Shop Heaters		15 A	1		576	0	1	20 A	--	SPARE	34
35	SPARE	--	20 A	1			0 0	1	20 A	--	SPARE	36
37	SPARE	--	20 A	1	0	0		1	20 A	--	SPARE	38
39	Elec. Heating		15 A	2		750	0	1	20 A	--	SPARE	40
41							750 0	1	20 A	--	SPARE	42
43	Water Heater		30 A	2	2250	0		1	20 A	--	SPARE	44
45						2250	0	1	20 A	--	SPARE	46
47	Welder		50 A	2			4000 0	1	20 A	--	SPARE	48
49					4000	10501						50
51	Welder		50 A	2		4000	9325	3	110 A		XFMR TQ	52
53							4000 4501					54
			TOTAL LOAD:		24.2 kVA	21.9 kVA	18.3 kVA					
			TOTAL AMPS:		207 A	188 A	152 A					

PANEL LOAD SUMMARY

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	EST. DEMAND	PANEL TOTALS	
Equipment	25818 VA	100.00%	25818 VA		
HVAC	0 VA	0.00%	0 VA	TOTAL CONN. LOAD:	64428 VA
Lighting	2340 VA	100.00%	2340 VA	TOTAL EST. DEMAND:	62412 VA
Motor	2334 VA	117.74%	2748 VA	TOTAL CONN. AMPS.:	179 A
Receptacle	10860 VA	96.04%	10430 VA	TOTAL EST. DEMAND AMPS:	173 A
Welder	16000 VA	87.50%	14000 VA		
Power	500 VA	100.00%	500 VA		
Elec. Heating	6576 VA	100.00%	6576 VA		

BRK NOTES:
A = ARC-FAULT BREAKER | GP = GFEPD BREAKER | LCP = CRKT TO BE ROUTED THROUGH LTG CONTROL PANEL
S = SHUNT-TRIP BREAKER | G = GFCI BREAKER | R = RED HANDLED, LOCK-OUT TYPE

PANEL: Q

PAYNE ENGINEERING

LOCATION: TOOL ROOM 4 | **VOLTAGE:** 120/240 Three | **SCCR:** 10,000 | **PROJECT:** KIMBERLY SCHOOL DISTRICT
FED FROM: TQ | **PHASES:** 3 | **TYPE:** MCB 100A
MOUNTING: SURFACE | **WIRES:** 4 | **BUS AMPS:** 100
ENCLOSURE: NEMA 1 | **BUSSING:** SEE SPEC'S | **FEED:** TOP
MFG/ MODEL: SQ. D/NQ SERIES | **DIMENSIONS:** 20"W x 5.8"D x **"H
NOTES:

CKT	CIRCUIT DESCRIPTION	NOTE	AMPS	P	A	B	C	P	AMPS	NOTE	CIRCUIT DESCRIPTION	CKT
1	Dust Collector		30 A	2	2640	3360		2	40 A		Table Saw	2
3						2640	3360					4
5	SPARE	--	30 A	2			0 1176	2	20 A		Band Saw	6
7					0	1176						8
9	Air Compressor		30 A	3		3325	0	2	20 A	--	SPARE	10
11							3325 0					12
13					3325	0						14
15	PREPARED SPACE	--	--	1		--	0	2	40 A	--	SPARE	16
17	PREPARED SPACE	--	--	1			-- --	1	--	--	PREPARED SPACE	18
			TOTAL LOAD:		10.5 kVA	9.3 kVA	4.5 kVA					
			TOTAL AMPS:		88 A	78 A	38 A					

PANEL LOAD SUMMARY

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	EST. DEMAND	PANEL TOTALS	
Equipment	24328 VA	100.00%	24328 VA		
				TOTAL CONN. LOAD:	24328 VA
				TOTAL EST. DEMAND:	24328 VA
				TOTAL CONN. AMPS.:	59 A
				TOTAL EST. DEMAND AMPS:	59 A

BRK NOTES:
A = ARC-FAULT BREAKER | GP = GFEPD BREAKER | LCP = CRKT TO BE ROUTED THROUGH LTG CONTROL PANEL
S = SHUNT-TRIP BREAKER | G = GFCI BREAKER | R = RED HANDLED, LOCK-OUT TYPE

AN ADDITION FOR:
KIMBERLY SCHOOL DISTRICT
Enter address here
POWER RISER, SCHEDULES & DETAILS

DATE

Laughlin Ricks Architecture
architecture/planning
134 3RD AVE. E. * Twin Falls, Idaho 83301
PHONE: (208) 736-8050

DATE: 9/24/24
SAM Drawn | TEP Checked
#23067 PROJECT #

E3.0

PROJECT #: 2442

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PROFESSIONAL ENGINEER REGISTERED 13053 9/24/24 STATE OF IDAHO SHAWN A. MEADOR