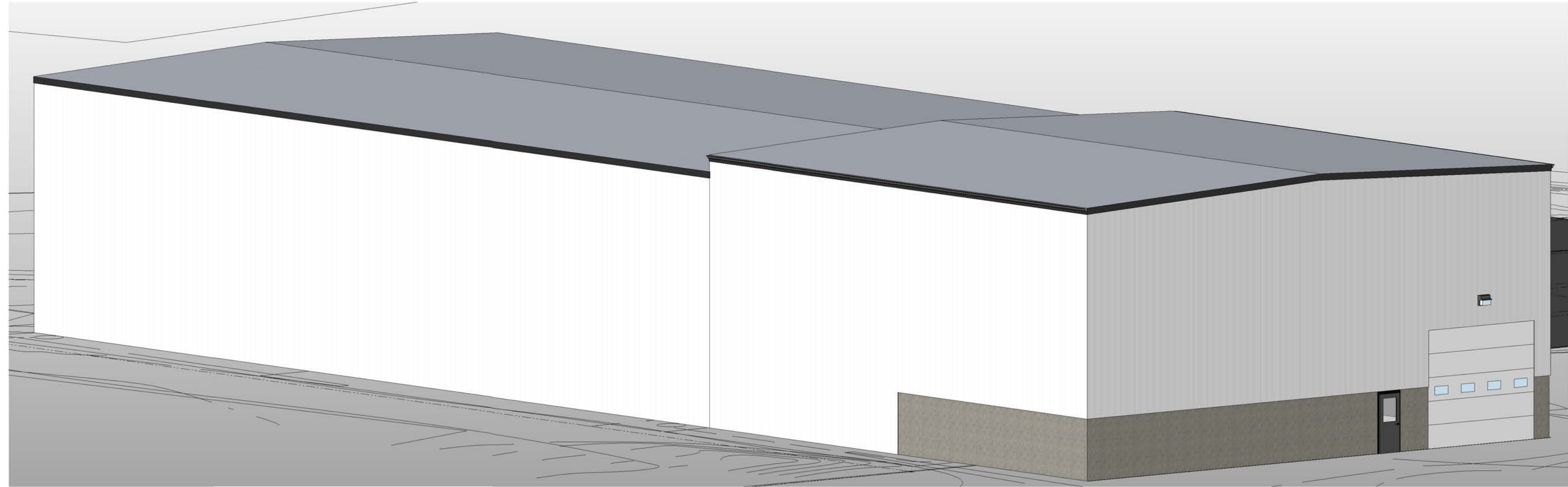


# Atlas Metals ADDITION

521 Biddle Street  
Waukesha, WI 53186

NOT FOR CONSTRUCTION



ALL DRAWINGS AND WRITTEN MATERIAL APPEARING HEREIN CONSTITUTE ORIGINAL AND UNPUBLISHED WORK OF THE DESIGN PROFESSIONAL AND MAY NOT BE DUPLICATED, USED OR DISCLOSED WITHOUT WRITTEN CONSENT OF STRUCRITE, INC.

## Atlas Metals ADDITION

521 Biddle Street  
Waukesha, WI 53186

### DESIGNER/ SUPERVISING PROFESSIONAL

StrucRite, Inc.  
Boyd E. Coleman, P.E.  
President, Engineer  
805 Clinton Street  
Waukesha, WI 53186  
262.549.3222

### OWNER

Atlas Metal Parts  
Thomas Magnor  
521 Biddle St  
Waukesha, WI

### Contractor

Ford Construction  
Robert Ford  
1419 Poplar Dr  
Waukesha, WI  
262-896-9370

### ABBREVIATIONS

AC	AIR CONDITIONING	FGL	FIBERGLASS	PREFAB	PREFABRICATED
ACS	ACCESS PANEL	FHC	FIRE HOSE CABINET	PRELIM	PRELIMINARY
ACT	ACOUSTICAL CEILING TILE	FN	FINISH	PRKG	PARKING
ADDUM	ADDENDUM	FX	FIXTURE	PSF	POUNDS PER SQUARE FOOT
ADJ	ADJUSTABLE	FL	FLOOR LINE	PT	PAINT
ADD	AUTOMATIC DOOR OPERATOR	FLR	FLOOR	PTD	PAPER TOWEL DISPENSER
AFF	ABOVE FINISH FLOOR	FLUOR	FLUORESCENT	PTDR	PAPER TOWEL DISPENSER WITH RECEPTACLE
ATL	ALTERNATE	FO	FACE OF (ITEM)	PTM	PAINT TO MATCH
ALUM	ALUMINUM	FOF	FACE OF FINISH	QT	QUARRY TILE
ANOD	ANODIZED	FOM	FACE OF MASONRY	R	RADIUS
APPROX	APPROXIMATE	FP	FIRE PROOF, FIRE PROTECTION	R	RISER
ARCH	ARCHITECT	FR	FRAME	RA	RETURN AIR
AUX	AUXILIARY	FT	FOOT OR FEET	RD	ROOF DRAIN
AVG	AVERAGE	FTG	FOOTING	REF	REFLECTED
		FURG	FURRING	REFR	REFRIGERATOR
		FV	FIELD VERIFY	REFL	REFLECTED
		G	GAGE	REIN	REINFORCED
		GAL	GALVANIZED	REQD	REQUIRED
		GA	GAB	RFI	REQUEST FOR INFORMATION
		GB	GRAB BAR	RM	ROOM
		GC	GENERAL CONTRACTOR	RO	ROUGH OPENING
		GL	GLASS	ROW	RIGHT OF WAY
		GYP BD	GYPSPUM BOARD	RTU	ROOF TOP UNIT
		HB	HOSE BIB	SAB	SOUND ATTENUATION BATT
		HDW	HARDWARE	SAG	SUPPLY AIR GRILL
		HM	HOLLOW METAL	SC	SOLID CORE
		HORZ	HORIZONTAL	SCHED	SCHEDULE
		HP	HORSE POWER	SD	SOAP DISPENSER
		HR	HOUR	SECT	SECTION
		HTR	HEATER	SHR	SHOWER
		HVAC	HEATING, VENTILATION & AIR CONDITIONING	SHT	SHEET
		ID	INSIDE DIAMETER	SHT MTL	SHEET METAL
		IN	INCH	SHV	SHELF, SHELVING
		INCL	INCLUDE, INCLUDING	SIM	SIMILAR
		INT	INTERIOR	S&P	SHELF & POLE
		JAN	JANITOR	SPEC	SPECIFICATION
		JNT	JOINT	SPKR	SPEAKER
		KO	KNOCK OUT	SS	SQUARE
		KS	KNEE SPACE	SO	SOLID SURFACE
		L	LENGTH, LONG	SSK	SERVICE SINK
		LAV	LAVATORY	STC	SOUND TRANSMISSION COEFFICIENT
		LBS	POUNDS	STD	STANDARD
		LKR	LOCKER	STL	STEEL
		LT WT	LIGHT WEIGHT	STOR	STORAGE
		MAS	MASONRY	STRUCT	STRUCTURAL
		MATL	MATERIAL	SUSP	SUSPENDED
		MAX	MAXIMUM	T	TREAD
		MECH	MECHANICAL	TEMP	TEMPORARY
		MED	MEDIUM	T&G	TON & GROOVE
		MFR	MANUFACTURER	THK	THICKNESS
		MH	MANHOLE	TLT	TOILET
		MID	MIDDLE	TO	TO OF (ITEM)
		MIN	MINIMUM	TOC	TOP OF CONCRETE
		MIR	MIRROR	TOF	TOP OF FOOTING
		MISC	MISCELLANEOUS	TOP	TOP OF PAVEMENT
		MSONRY	MASONRY OPENING	TOS	TOP OF STEEL
		MSB	MOP SERVICE BASIN	TOW	TOP OF WALL
		MTD	MOUNTED	TPD	TOILET PAPER DISPENSER
		MTL	METAL	TRP	TYPICAL
		NOT IN CONTRACT	NO NUMBER	UCR	UNDERCOUNTER
		NOM	NOMINAL	UL	UNDERWRITERS LABORATORY
		NMS	NOT TO SCALE	UNO	UNLESS NOTED OTHERWISE
		OV	OVER	UR	URINAL
		OVERALL	OVERALL	VAV	VARIABLE AIR VOLUME
		ON CENTER	ON CENTER	VB	VAPOR BARRIER
		OD	OUTSIDE DIAMETER	VCT	VINYL COMPOSITE TILE
		OC/CI	OWNER FURNISHED/ CONTRACTOR INSTALLED	VERT	VERTICAL
		OFD	OVERFLOW DRAIN	VEST	VESTIBULE
		OH	OVERHEAD	VER	VERIFY IN FIELD
		OPNG	OPENING	VR	VAPOR RETARDER
		OPP	OPPOSITE	VWC	VINYL WALL COVERING
		PERIM	PERIMETER	W	WITH
		PL	PLATE	WC	WATERCLOSET
		PL	PROPERTY LINE	WD	WOOD
		PLAM	PLASTIC LAMINATE	WF	WIDE FLANGE
		PLBG	PLUMBING	WH	WATER HEATER
		PLYWD	PLYWOOD	WO	WITHOUT
		PNL JNT	PANEL JOINT	WS	WORKSTATION
		POC	POINT OF CONNECTION	WWF	WELDED WIRE FABRIC
		PR	PAIR	WWM	WEEDED WIRE MESH
				YD	YARD(S)

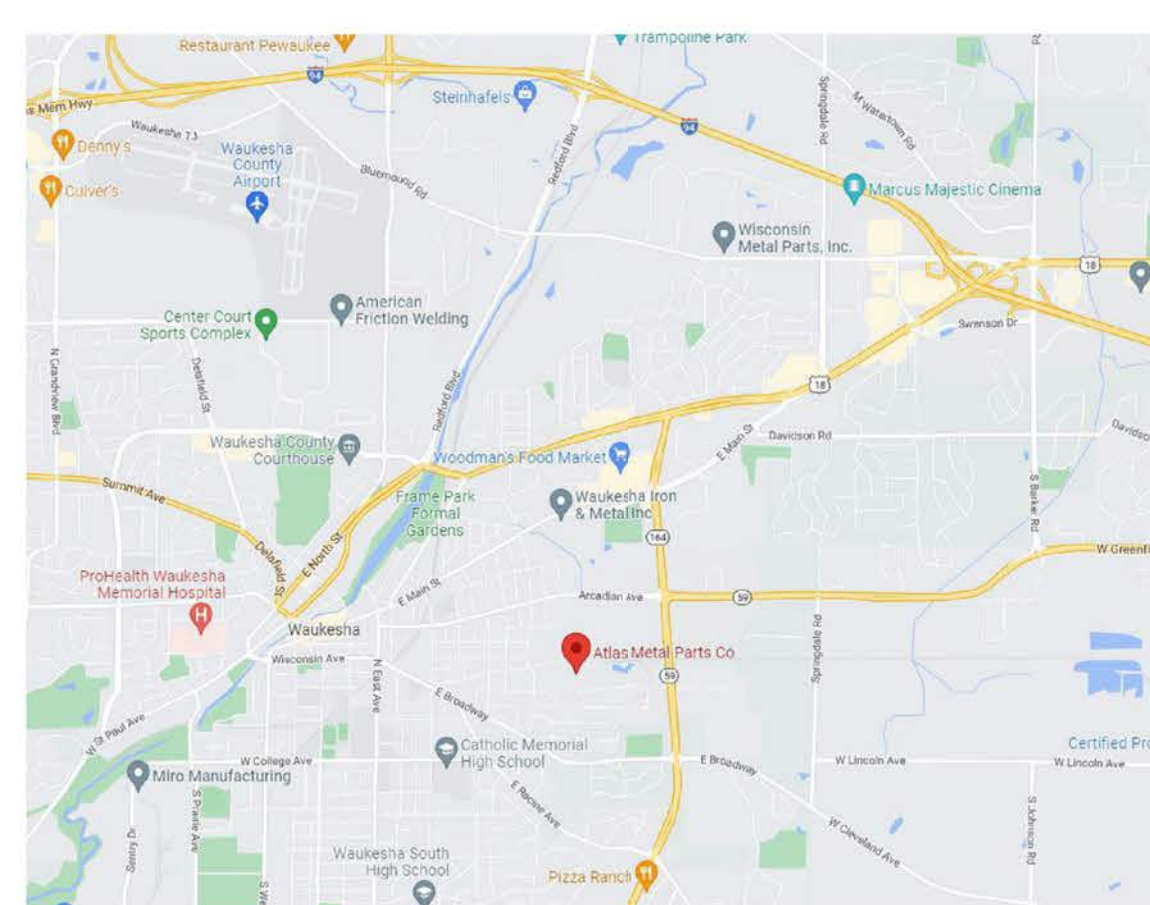
### SYMBOLS LEGEND

	101	DOOR TAG
	Ta	WINDOW TAG
	W	WALL TAG
	?	PROJECT KEYED NOTE
		EMERGENCY EXIT SIGN
		FIRE EXTINGUISHER
		EXISTING CONSTRUCTION
		NEW CONSTRUCTION
	6"	TYPICAL DIMENSION
	(6")	DIMENSION SHOWING FINISH TO FINISH

### GENERAL NOTES

- ALL WORK SHALL COMPLY WITH ALL LOCAL, STATE & NATIONAL CODES HAVING JURISDICTION OVER THIS PROJECT.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH BUILDING REGULATIONS AND IN A QUALITY WORKMANSHIP MANNER.
- DO NOT SCALE DRAWINGS.
- SEE GENERAL CONDITIONS OF THE CONTRACT FOR FULL SCOPE OF PROJECT.
- UNLESS NOTED OTHERWISE, ALL DETAILS, SECTION AND NOTES ON THE DRAWINGS ARE INTENDED TO BE TYPICAL FOR SIMILAR SITUATIONS ELSEWHERE.
- THE PLANS AND SPECIFICATIONS ARE INTENDED TO GIVE A DESCRIPTION OF THE WORK. NO DEVIATION FROM THE PLANS AND SPECIFICATIONS SHALL BE MADE WITHOUT THE WRITTEN CONSENT OF STRUCRITE, INC.
- ANY DISCREPANCIES WITHIN THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF STRUCRITE, INC. IN WRITING.
- THE TERMS "NOT IN CONTRACT" OR "BY OWNER" OR "BY OTHERS" DO NOT PRECLUDE OTHER WORK ASSOCIATED WITH THE CONTRACT WHICH MUST OCCUR IN THE VICINITY OF THE AREA OR THROUGH THE SPACE.
- BEFORE COMMENCING WORK, THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS IN THE FIELD. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF STRUCRITE, INC. PRIOR TO BIDDING.
- IF FIELD CONDITIONS NECESSITATE ANY CHANGES OR MODIFICATIONS, THE CHANGES OR MODIFICATIONS MUST BE APPROVED BY STRUCRITE, INC. PRIOR TO PROCEEDING WITH WORK.
- ALL CHANGE ORDERS MUST BE APPROVED BY THE OWNER PRIOR TO PROCEEDING WITH ANY WORK. FAILURE TO FOLLOW THIS STEP MIGHT RESULT IN NON-PAYMENT.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL CLEAN-UP.
- GENERAL AND SUB CONTRACTORS SHALL EXERCISE ALL REASONABLE PRECAUTIONS FOR THE PROTECTION OF PERSONS AND PROPERTY ON THE SITE. ALL SAFETY PROVISIONS AND APPLICABLE LAWS FOR BUILDING AND CONSTRUCTION CODES SHALL BE OBSERVED.
- GENERAL CONTRACTOR SHALL SUBMIT SHOP DRAWINGS TO STRUCRITE INC. FOR APPROVAL BEFORE PROCEEDING WITH ANY FABRICATION OR INSTALLATION.
- MANUFACTURERS DIRECTIONS FOR APPLICATION, INSTALLATION AND METHODS SHALL BE FOLLOWED ARE HEREWIT MADE PART OF THE CONSTRUCTION DOCUMENTS.
- ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY TO BE PRESSURE TREATED.

### LOCATION MAP



### VICINITY MAP



### ARCHITECTURAL SPECIFICATIONS

#### GYPSPUM BOARD

- ALL GYPSPUM BOARD SHALL BE AS MANUFACTURED BY U.S. GYPSPUM, NATIONAL GYPSPUM OR EQUAL. PROVIDE JOINT TAPE, JOINT COMPOUND, TEXTURE MATERIALS, AND INSTALLATION ACCESSORIES AS REQUIRED FOR COMPLETE INSTALLATION IN ACCORDANCE WITH ASTM C840, GA201, GA216, GA600, AND U.S.G. "GYPSPUM CONSTRUCTION HANDBOOK."
- PROVIDE CONTROL JOINTS PER THESE REQUIREMENTS.
- GYPSPUM BOARD SHALL CONFORM TO THE FOLLOWING STANDARDS WHERE REQUIRED:
  - FIRE RATED: ASTM C88, TYPE X OR C, UL RATED, 48 INCH BY 58 INCH THICK, MAXIMUM PERMISSIBLE LENGTH.
  - MOISTURE RESISTANT: ASTM C630, TYPE X OR C, UL RATED, 48 INCH BY 58 INCH THICK, MAXIMUM PERMISSIBLE LENGTH.
- ERECT BOARD VERTICALLY, WITH ENDS AND EDGES OCCURRING OVER FIRM BEARING. STAGGER END JOINTS TO OCCUR AT DIFFERENT LOCATIONS ON OPPOSITE SIDES OF WALL. ERECT EXTERIOR SHEATHING HORIZONTALLY.
- PROVIDE M.R. DRYWALL AT ALL FRP, CERAMIC WALL TILE, PORCELAIN WALL TILE, COOLER PANEL, FREEZER PANEL AND DAMPWET LOCATIONS.
- USE SCREWS WHEN FASTENING TO METAL FRAMING AND SCREWS OR NAILS TO WOOD STUDDING. STAGGER FASTENERS OPPOSITE EACH OTHER ON ADJACENT ENDS AND EDGES, SPACED AS RECOMMENDED IN "GYPSPUM CONSTRUCTION HANDBOOK." DO NOT ATTACH TO TOP TRACK ON PARTITIONS EXTENDING FROM FLOOR TO STRUCTURE ABOVE.
- ON FIRE RATED ASSEMBLIES, SEAL PENETRATIONS AND MAKE AIR-TIGHT.
- MAXIMUM TOLERANCE FROM TRUE FLATNESS: 1/8 INCH IN 10 FEET IN ANY DIRECTION.

#### SEALANTS

- CAULK AROUND ALL WINDOWS, DOORS, VENT OPENINGS, WHERE DIFFERENT MATERIALS MEET, ROOF OPENINGS, EAVES, SOFFITS, JOINTS, COUNTERTOPS, DOOR FRAMES, ETC. AND AS REQUIRED FOR A WATERTIGHT CONNECTION. PROVIDE CAULK PER MANUFACTURERS RECOMMENDATIONS. CAULK TO BE TREMO DYMERIC FOR FOOD PROCESSING FACILITIES OR FOOD PREP/FOOD STORAGE AREAS. CAULK TO BE INSTALLED AFTER FINISH IS APPLIED TO SURFACES PER MANUFACTURER.

#### FIRE EXTINGUISHERS

- REQUIREMENTS
  - CONTRACTOR TO FURNISH AND INSTALL EXTINGUISHERS PER LOCAL, STATE, AND FEDERAL CODES, AND N.F.P.A. NO. 10-1978.
  - MOUNT FIRE EXTINGUISHER NOT HIGHER THAN 48" ABOVE FINISH FLOOR UNLESS LOCAL REGULATIONS REQUIRE DIFFERENT HEIGHT.
  - ALL FIRE EXTINGUISHERS AND CABINETS TO MEET THE REQUIREMENTS OF THE A.D.A.

#### HEATING AND VENTILATION WORK (design by others)

- REQUIREMENTS
  - ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES.
  - SEPARATE PLANS AND CALCULATIONS SHALL BE SUBMITTED BY CONTRACTOR FOR APPROVAL AS THE HEATING AND VENTILATING WORK IS NOT A PART OF THIS PLAN.
  - ALL PENETRATIONS THROUGH RATED CONSTRUCTION SYSTEMS SHALL BE OF U.L. APPROVED METHODS.

#### PLUMBING WORK (design by others)

- REQUIREMENTS
  - ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES.
  - SEPARATE PLANS SHALL BE SUBMITTED BY CONTRACTOR FOR APPROVAL AS THE PLUMBING WORK IS NOT A PART OF THIS PLAN.
  - ALL PENETRATIONS THROUGH RATED CONSTRUCTION SYSTEMS SHALL BE A U.L. APPROVED METHODS.

#### ELECTRICAL WORK (design by others)

- REQUIREMENTS
  - ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH STATE AND LOCAL CODES.
  - SEPARATE PLANS AND CALCULATIONS SHALL BE SUBMITTED TO STATE AND LOCAL AGENCIES BY CONTRACTOR FOR APPROVAL AS THE ELECTRICAL WORK IS NOT A PART OF THIS PLAN.
  - ALL PENETRATIONS THROUGH RATED CONSTRUCTION SYSTEMS SHALL BE OF U.L. APPROVED METHODS.
- AUTOMATIC SMOKE DETECTION SYSTEM (NOTE: DO NOT INCLUDE UNLESS REQUIRED)
  - SMOKE DETECTION SYSTEM SHALL COMPLY WITH LOCAL, STATE, AND FEDERAL CODES, AND N.F.P.A. STANDARDS 71, 72B, 72C, 72D, 72E.
  - AUTOMATIC DETECTION PRODUCTS SHALL BE AN APPROVED SYSTEM, MEETING FEDERAL, STATE AND LOCAL CODES.
  - ALL SMOKE DETECTORS SHALL BE BOTH AUDIBLE AND VISUAL AS REQUIRED BY THE A.D.A.

#### FIRE PROTECTION WORK (design by others)

- REQUIREMENTS
  - ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH STATE, LOCAL AND APPLICABLE NFPA CODES.
  - SEPARATE PLANS AND CALCULATIONS SHALL BE SUBMITTED BY CONTRACTOR FOR APPROVAL AS THE FIRE PROTECTION WORK IS NOT A PART OF THIS PLAN.
  - ALL PENETRATIONS THROUGH RATED CONSTRUCTION SYSTEMS SHALL BE OF U.L. APPROVED METHODS.

### SHEET INDEX

1-GENERAL	
G1.0	COVER PAGE
G1.1	BUILDING AREAS
2-CIVIL	
C100	GRADING & PAVING PLAN
C200	DETAIL PLAN
3-ARCHITECTURAL	
A1.1	FLOOR PLAN
A1.3	ROOF PLAN
A2.0	EXTERIOR ELEVATIONS
S1.0	FOUNDATION PLAN
S1.1	FOUNDATION DETAILS
S1.2	FOUNDATION DETAILS
S2.0	1st LEVEL FRAMING
S3.0	DETAILS
S4.0	SPECIFICATIONS

### REVISIONS

No.	DATE	DESCRIPTION
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### NOT FOR CONSTRUCTION

SHEET TITLE:	COVER PAGE
JOB NUMBER:	22070
ISSUED DATE:	09.23.2022
DRAWN BY:	ks
SHEET NUMBER:	G1.0

**G1.0**

10/25/2022 10:46:46 AM



**COMcheck Software Version COMcheckWeb**  
**Envelope Compliance Certificate**

**Project Information**  
 Energy Code: 90.1 (2013) Standard  
 Project Title: Atlas Metals Addition 70x70  
 Location: Waukesha, Wisconsin  
 Climate Zone: 6a  
 Project Type: Addition  
 Performance Sim. Specs: EnergyPlus 8.1.0.009 (EPW: USA\_WI\_Milwaukee-Mitchell.Intl.AP.726400\_TMY3.epw)

Construction Site:  
 521 Biddle  
 Waukesha, WI 53186

Owner/Agent:  
 Atlas Metals  
 521 Biddle  
 Waukesha, WI 53186

Designer/Contractor:  
 Boyd Coleman  
 StrucRite, Inc.  
 707 N Grand  
 Waukesha, WI 53186

Building Area	Floor Area
1-Manufacturing Facility - Nonresidential	4990

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor <sup>(a)</sup>
Roof 1: Other Metal Building Roof, [Bldg. Use 1 - Manufacturing Facility] (b)	4900	---	---	0.031	0.031
Floor 1: Slab-On-Grade-Unheated, Vertical 4 ft., [Bldg. Use 1 - Manufacturing Facility] (c)	210	---	10.0	0.480	0.510
<b>NORTH</b>					
Exterior Wall 1: Other Metal Building Wall, [Bldg. Use 1 - Manufacturing Facility] (b)	1727	---	---	0.052	0.050
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Manufacturing Facility]	513	13.0	10.0	0.055	0.049
<b>EAST</b>					
Exterior Wall 2: Other Metal Building Wall, [Bldg. Use 1 - Manufacturing Facility] (b)	1727	---	---	0.052	0.050
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Manufacturing Facility]	513	13.0	10.0	0.055	0.049
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Manufacturing Facility]	21	---	---	0.450	0.500
Door: Insulated Metal, Non-Swinging, [Bldg. Use 1 - Manufacturing Facility]	224	---	---	0.200	0.500
<b>SOUTH</b>					
Exterior Wall 3: Other Metal Building Wall, [Bldg. Use 1 - Manufacturing Facility] (b)	1984	---	---	0.052	0.050
Ext. Wall: Steel-Framed, 16in. o.c., [Bldg. Use 1 - Manufacturing Facility]	256	13.0	10.0	0.055	0.049
<b>WEST</b>					
Ext. Wall: Other Metal Building Wall, [Bldg. Use 1 - Manufacturing Facility] (b)	140	---	---	0.052	0.050

Project Title: Atlas Metals Addition 70x70  
 Data filename: \_\_\_\_\_  
 Report date: 09/23/22  
 Page: 1 of 9

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.  
 (b) "Other" components require supporting documentation for proposed U-factors.  
 (c) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

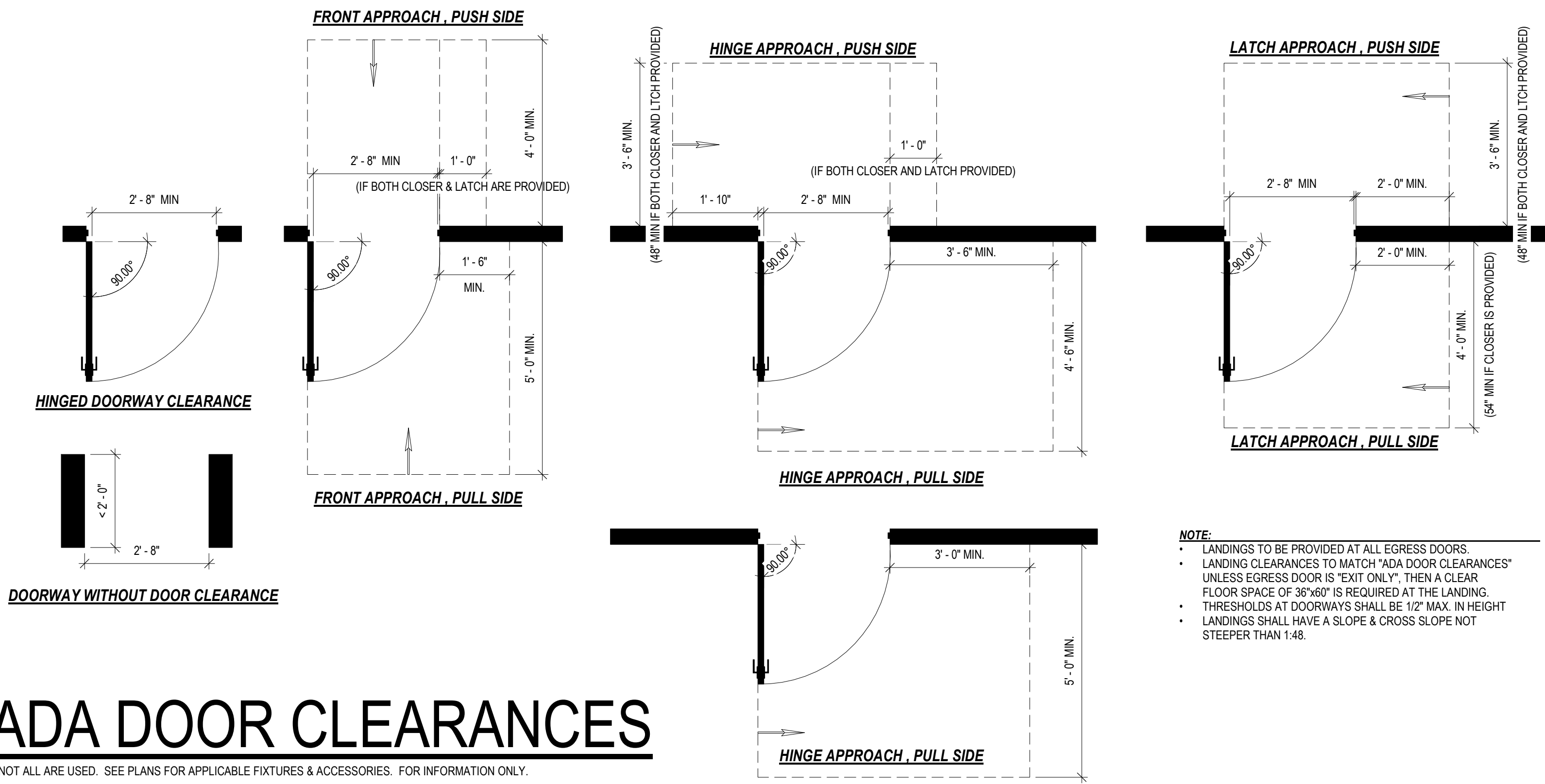
**Envelope PASSES: Design 1% better than code**

**Envelope Compliance Statement**

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2013) Standard requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Name - Title \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

Project Title: Atlas Metals Addition 70x70  
 Data filename: \_\_\_\_\_  
 Report date: 09/23/22  
 Page: 2 of 9



**NOTE:**  
 • LANDINGS TO BE PROVIDED AT ALL EGRESS DOORS.  
 • LANDING CLEARANCES TO MATCH "ADA DOOR CLEARANCES"  
 UNLESS EGRESS DOOR IS "EXIT ONLY", THEN A CLEAR FLOOR SPACE OF 36"x60" IS REQUIRED AT THE LANDING.  
 • THRESHOLDS AT DOORWAYS SHALL BE 1/2" MAX. IN HEIGHT  
 • LANDINGS SHALL HAVE A SLOPE & CROSS SLOPE NOT STEEPER THAN 1:48.

**LIFE SAFETY GENERAL NOTES:**

- MEANS OF EGRESS ILLUMINATION SHALL BE PROVIDED TO MEET CURRENT CODES. ELECTRICAL CONTRACTOR RESPONSIBLE FOR DESIGN AND SUBMITTAL TO STATE.
- AN EXTERIOR LIGHT SHALL BE PROVIDED AT EXIT DOORS AND BE PROVIDED WITH EMERGENCY POWER PER CURRENT CODES AND BE INCLUDED IN EGRESS ILLUMINATION PLANS.
- FIRE EXTINGUISHERS SHALL BE INSTALLED IN LOCATIONS AS NOTED ON PLANS BELOW. EXTINGUISHERS ARE TO BE MOUNTED TO ADJACENT WALL OR COLUMN USING STANDARD MANUFACTURERS BRACKETS OR EQUIVALENT. FOR WALL MOUNT LOCATIONS ATTACH BRACKET TO STUDS OR BLOCKING ONLY. EXTINGUISHERS TO MEET CURRENT BUILDING CODE AND NFPA 10.

**EGRESS PLAN DRAWING KEY:**

EGRESS PATH	ACCESSIBLE ROUTE
EXIT SIGN	FIRE EXTINGUISHER
FIRE WALL, 4-HOUR ASSEMBLY RATING	FIRE WALL, 3-HOUR ASSEMBLY RATING
FIRE BARRIER, 4-HOUR ASSEMBLY RATING	FIRE BARRIER, 3-HOUR ASSEMBLY RATING
SHAFT ENCLOSURE, 2-HOUR ASSEMBLY RATING	SHAFT ENCLOSURE, 1-HOUR ASSEMBLY RATING
FIRE PARTITION, 1-HOUR ASSEMBLY RATING	FIRE PARTITION, 0.5-HOUR ASSEMBLY RATING
NON-RATED WALL	

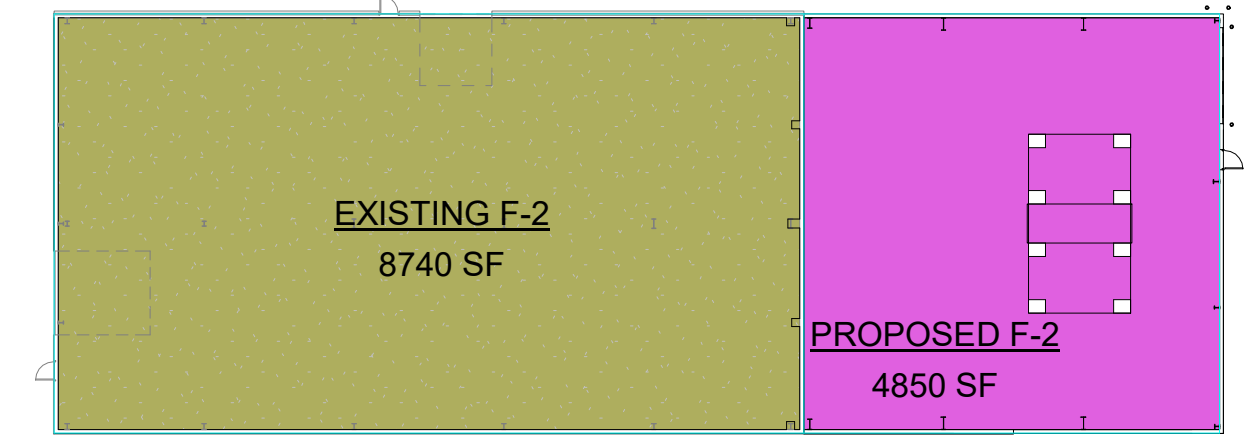
**ADA DOOR CLEARANCES**

NOT ALL ARE USED. SEE PLANS FOR APPLICABLE FIXTURES & ACCESSORIES. FOR INFORMATION ONLY.

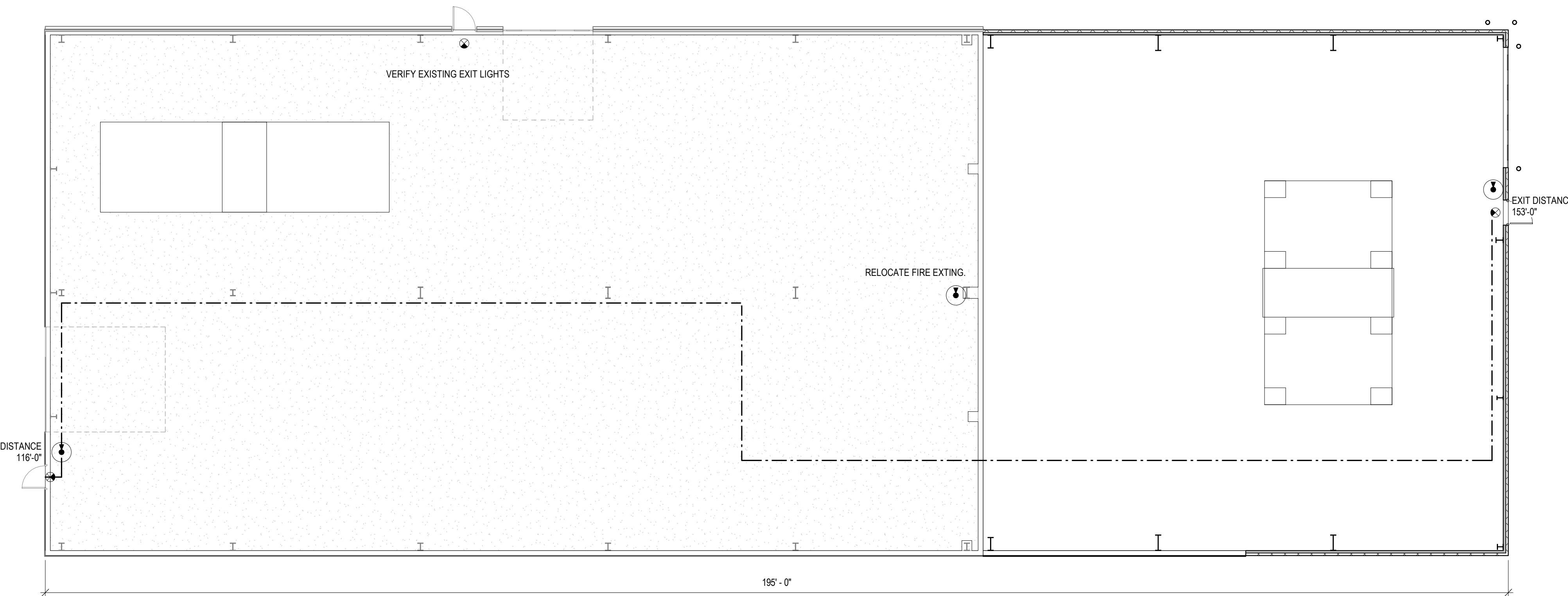
**LIFE SAFETY ANALYSIS**

SUBMITTAL TYPE	ADDITION	MAXIMUM EXIT DISTANCE	MAXIMUM COMMON PATH	MAXIMUM NUMBER OF STORIES	SPRINKLED	SPRINKLER TYPE	FIRE SUPPRESSION	FIRE ALARM	ALARM TYPE	WATER CLOSET-MALE	WATER CLOSET-FEMALE	LAVATORIES	TUBS/SHOWERS	DRINKING FOUNTAINS	OTHER		
TYPE OF CONSTRUCTION	IIB	300'-0"	100'-0"	1	YES	NFPA-13	NO			REQUIRED 4	PROVIDED 4*	REQUIRED 4	PROVIDED 4*	REQUIRED -	PROVIDED -	REQUIRED	
MAXIMUM DEAD-END CORRIDOR		20'-0"	20'-0"														
TOTAL NUMBER OF EXITS		REQUIRED 2	ACTUAL 3														
REQUIRED STAIR WIDTH		REQUIRED NA	ACTUAL NA														
REQUIRED EGRESS WIDTH		REQUIRED 36	ACTUAL 108														
MAIN OCCUPANCY TYPE		F-2		ALL OCCUPANCY TYPES		F-2		OCCUPANCY SEPARATIONS		-		INCIDENTAL USES		-		ALLOWABLE AREA	
92,000 SQ. FT.		ACTUAL AREA FOR		F-2 = 4,850 SQ. FT. PROPOSED		ACTUAL AREA FOR		TOTAL ACTUAL AREA		13,590 SQ. FT.		TOTAL OCCUPANT LOAD		PER IBC 2015 = 136			

\* MAX TRAVEL DISTANCE TO FIXTURES 455 FT < 500 FT



2 Occupancy Areas - Main Level  
 1/32" = 1'-0"



1 1st Level - Life Safety Plan  
 1" = 10'-0"

**Atlas Metals Addition**  
 521 Biddle Street  
 Waukesha, WI 53186

**REVISIONS**

No.	DATE	DESCRIPTION
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**NOT FOR CONSTRUCTION**

SHEET TITLE: BUILDING AREAS  
 JOB NUMBER: 22070  
 ISSUED DATE: 09.23.2022  
 DRAWN BY: ks  
 SHEET NUMBER: G1.1

9/30/2022 2:41:44 PM



THE BOUNDARY & TOPOGRAPHIC SURVEY WAS PROVIDED BY Jahnke & Jahnke Associates. UNDERGROUND UTILITY INFORMATION AS SHOWN HEREON IS BASED, IN PART, UPON INFORMATION FURNISHED BY UTILITY COMPANIES AND THE LOCAL MUNICIPALITY. WHILE THIS INFORMATION IS BELIEVED TO BE RELIABLE, ITS ACCURACY AND COMPLETENESS CANNOT BE GUARANTEED NOR CERTIFIED TO.



SCALE: 1" = 40'



**GENERAL CONSTRUCTION NOTES:**

- All work shall be in accordance with the Standard Specifications for Highway and Structure Construction, State of Wisconsin, Latest Edition; the State of Wisconsin Plumbing Code AND the City of Waukesha Ordinances, unless otherwise called for on the plans, specifications or special provisions.
- Contractor shall obtain all local, state or federal permits prior to commencing any construction on the site. Any Work within the right of way will require additional permits from the City. Contractor is required to contact all agencies for applicable permits.
- All erosion control measures specified on this plan shall meet the design criteria, standards and specifications as set forth in the Department of Natural Resources Wisconsin Technical Standards.
- All erosion control devices (i.e., silt fence, etc.), shall be installed prior to commencing any site work on the property.
- All activities on the site shall be conducted in a logical sequence to minimize the area of bare soil exposed at any one time.
- The owner will provide all surveying and construction staking for this contract. The contractor shall exercise care and diligence in protecting the same.
- The contractor shall notify Diggers Hotline, all utilities City Departments, and government units whose property may be affected by the contractor's operations at least three (3) days before breaking ground. Diggers Hotline number is 811.
- Public roads shall not be closed to traffic at any time. All ingress and egress traffic to the project shall be limited East Park Avenue.
- Contractor shall be responsible for maintaining the public roadways. The Roadways shall be kept free of silt or dirt tracked from areas under construction by sweeping within 24hrs.
- Upon completion of the work as specified, respread four (4") inches of salvaged topsoil over all disturbed areas and provide seed, fertilizer and mulch per the WDNR Technical Standards.
- All disturbed areas that remain inactive for more than 7 days shall be revegetated. Highway mix #40 shall be used for seeding with an application rate of 4.0 lbs/1000 sf; unless otherwise specified on the plan.
- All erosion control devices shall be routinely inspected every seven days or within 24 hours of a rainfall greater than 0.5 inches. INSPECTION BY GENERAL CONTRACTOR.

**CONSTRUCTION PHASING SEQUENCING:**

- THE GENERAL CONTRACTOR MUST OBTAIN ALL APPLICABLE LOCAL, STATE AND FEDERAL PERMITS PRIOR TO PROCEEDING WITH THE FOLLOWING CONSTRUCTION SEQUENCE AS REQUIRED BY THE WDNR AND THE CITY OF WAUKESHA:
- INSTALL SILT FENCE & INLET PROTECTION ON NEARBY INLETS; AS NEEDED.
  - DEMO EXISTING CONCRETE AND PAVEMENT AREAS AND HAUL OFFSITE.
  - CONSTRUCT BUILDING ADDITION, NEW CONCRETE RAMP AND PAVEMENT MATCH AREAS, AS SHOWN.
  - RESTORE ALL DISTURBED AREAS IN LESS THAN 7 DAYS AS SPECIFIED ON THE PLAN AND NOTES.
  - LANDSCAPE, REVEGETATE AND STABILIZE ALL REMAINING DISTURBED AREAS PER PLANS.
  - FOLLOWING FINAL INSPECTION BY THE CITY AND FULL SITE STABILIZATION; REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.

RELOCATE ELECTRIC (BY OTHERS)

NOTE: SEE SHEET C200 FOR DETAILS.

PROPOSED ASPHALT PAVEMENT TO MATCH 5" ASPHALT (2 LIFTS) 10" STONE BASE REMOVE EXISTING ASPHALT TO CHANGE GRADE WITH STONE

NOTE: THIS PLAN MUST BE REVIEWED AND APPROVED BY THE CITY OF WAUKESHA.

DESCRIPTION	DATE

**EEC**  
**ELLENA ENGINEERING CONSULTANTS, LLC**  
 SITE CIVIL ENGINEERING & STORMWATER MANAGEMENT  
 700 Pilgrim Parkway - Suite 100 Elm Grove, WI 53122  
 Phone: 262-719-6183 Email: mellenat@eeceng.com

**ATLAS METALS ADDITION**  
 521 BIDDLE STREET  
 CITY OF WAUKESHA, WI  
**GRADING & PAVING PLAN**

WISCONSIN  
 MARK R. ELLENA  
 E-24090  
 WAUKESHA, WI  
 PROFESSIONAL ENGINEER  
*Mark R. Ellena*

DATE: 10-05-22  
 DESIGNED BY: MARK R. ELLENA, PE

**SHEET NUMBER**  
**C100**







DOOR SCHEDULE											
MARK	LOCATION	WIDTH	HEIGHT	FIRE RATING	DOOR PANEL			DOOR FRAME		COMMENTS	HARDWARE SET
					TYPE	MATERIAL	FINISH	MATERIAL	FINISH		
100		3'-0"	7'-0"		B	STEEL	PAINT				
101		16'-0"	14'-0"								
2											

**DOOR & DOOR FRAME NOTES:**

- INSULATE ALL HOLLOW METAL DOOR FRAMES WITH FIBERGLASS INSULATION.
- PROVIDE ALL HOLLOW METAL FRAMES w/ (1) COAT PRIMER & (2) COATS PAINT.
- ALL HOLLOW METAL FRAMES TO BE REINFORCED & PREPARED FOR HARDWARE.
- ALL WELDED FRAMES SHALL BE 16ga (MIN.)
- ALL HOLLOW METAL DOORS SHALL BE 18ga (MIN.)
- ALL EXTERIOR DOORS SHALL BE PROVIDED WITH WEATHERSTRIPPING.
- ALL DOOR THRESHOLDS SHALL NOT EXCEED 1/2" IN HEIGHT.
- ALL DOORS SHALL MEET A.D.A. REQUIREMENTS.
- PROVIDE LEVER TYPE HANDLES ON ALL DOORS.
- PROVIDE CAULKING AT ALL DOOR FRAMES, WINDOWS & WHERE NOTED ON PLANS.
- PROVIDE DOOR COORDINATORS ON PAIRS OF DOORS AS REQUIRED.
- VERIFY w/ H.V.A.C. CONTRACTOR FOR DOOR UNDERCUTS & GRILLES.
- ALL SIGNAGE TO BE MOUNTED AT A.D.A. HEIGHT (SEE GENERAL SPECIFICATIONS).
- O.H. DOORS TO BE PROVIDED w/ ELECTRIC DOOR OPERATOR w/ 3-BUTTON CONTROLS.
- UNLESS NOTED OTHERWISE, ALL OVERHEAD DOORS SHALL HAVE A U-FACTOR OF 0.2 OR BETTER.
- UNLESS NOTED OTHERWISE, ALL EXTERIOR WALK DOORS SHALL HAVE A U-FACTOR OF 0.45 OR BETTER.

**DOOR HARDWARE TYPES:**

SPECIFIED BRANDS MAY BE SUBSTITUTED WITH AN EQUIVALENT WITH OWNER & ARCHITECT APPROVAL.  
ALL HARDWARE FINISHES TO BE:  
#619 SATIN NICKEL

- 102 - SCHLAGE AL SERIES LEVER, SATURN DESIGN, FUNCTION: ENTRANCE LOCK
- 104 - SCHLAGE AL SERIES LEVER, SATURN DESIGN, FUNCTION: EXIT LOCK

- 200 - LCN 1260 SERIES, DOOR CLOSER (FACTORYWAREHOUSE USES)
- 204 - ELECTRIC ACCESSIBLE PUSH BUTTON DOOR OPERATOR

- 210 - DOOR SEALS
- 211 - DOOR SWEEP
- 212 - LOW PROFILE THRESHOLD, MEETS ANSI-117.1-2003 STANDARDS
- 213 - KICKPLATE
- 214 - LATCH GUARD
- 215 - RAIN DRIP

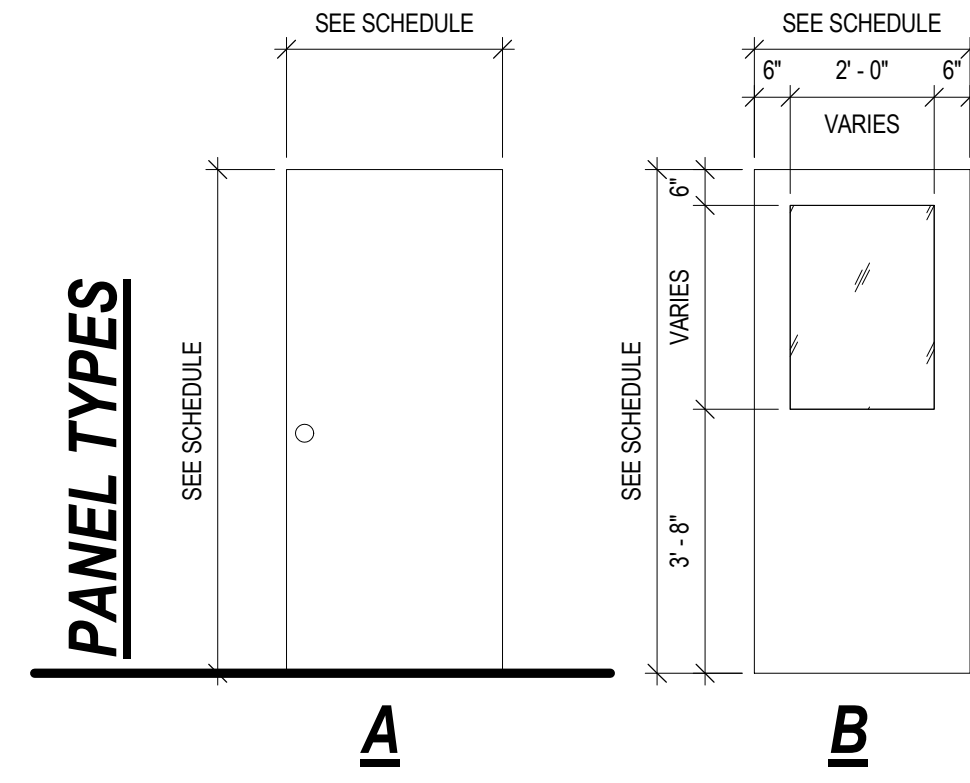
- 300 - O.H. DOOR ELECTRIC VERTICAL LIFT

**DOOR HARDWARE NOTES:**

- ALL HANDLES, PULLS, LATCHES, LOCKS, & OTHER PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND & DOES NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE. SUCH HARDWARE SHALL BE 34 INCHES MINIMUM TO 48 INCHES MAXIMUM ABOVE THE FLOOR OR GROUND. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERATING HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.
- DOOR CLOSERS SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 90 DEGREES, THE TIME TO MOVE THE DOOR TO AN OPEN POSITION OF 12 DEGREES SHALL BE 5 SECONDS MINIMUM.
- DOOR SWING HINGES SHALL BE ADJUSTED SO THAT THE OPEN POSITION OF 70 DEGREES, THE DOOR SHALL MOVE TO THE CLOSED POSITION IN 1.5 SECONDS MINIMUM, MEASURED UNDER AMBIENT CONDITIONS.
- FIRE DOORS SHALL HAVE THE MINIMUM OPENING FORCE ALLOWABLE BY THE APPROPRIATE AUTHORITY. THE MAXIMUM FORCE FOR PUSHING OPEN OR PULLING OPEN DOORS OTHER THAN FIRE DOORS SHALL BE AS FOLLOWS:
  - A. INTERIOR HINGED DOOR: 5.0 POUNDS (22.2N)
  - B. SLIDING OR FOLDING DOOR: 5.0 POUNDS (22.2N)
 THESE FORCES DO NOT APPLY TO THE FORCE REQUIRED TO RETRACT LATCH BOLTS OR DISENGAGE OTHER DEVICES THAT HOLD THE DOOR IN A CLOSED POSITION.
- DOOR SURFACE WITHIN 10 INCHES OF THE FLOOR OR GROUND MEASURED VERTICALLY SHALL BE A SMOOTH SURFACE ON THE PUSH SIDE EXTENDING THE FULL WIDTH OF THE DOOR. PARTS CREATING HORIZONTAL OR VERTICAL JOINTS IN SUCH SURFACE SHALL BE WITHIN 1/16 INCH OF THE SAME PLANE AS THE OTHER. CAVITIES CREATED BY ADDED KICK PLATE SHALL BE CAPPED.
  - A. SLIDING DOORS
  - B. TEMPERED GLASS DOORS WITHOUT STILES & HAVING A BOTTOM RAIL OR SHOE WITH THE TOP LEADING EDGE TEMPERED AT NO LESS THAN 60 DEGREES FROM THE HORIZONTAL SHALL NOT BE REQUIRED TO MEET THE 10 INCH BOTTOM RAIL HEIGHT REQUIREMENT.
  - C. DOORS WHICH DO NOT EXTEND TO WITHIN 10 INCHES OF THE FLOOR OR GROUND.
- DOOR & SIDELIGHTS ADJACENT TO DOORS CONTAINING ONE OR MORE GLAZING PANELS THAT PERMIT VIEWING THROUGH THE PANELS SHALL HAVE THE BOTTOM OF AT LEAST ONE PANEL 43 INCHES MAXIMUM ABOVE THE FLOOR OR GROUND.

**GENERAL PLAN NOTES:**

- SEE SHEET AS.0 FOR ALL TYPICAL MOUNTING HEIGHTS AND DOOR CLEARANCES.
- NOT USED



**GENERAL DEMOLITION NOTES:**

ALL DEMOLITION BY GENERAL CONTRACTOR UNLESS OTHERWISE NOTED.

GENERAL CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS. LOCATIONS OF WALLS, DOORS, AND OTHER ITEMS HAVE BEEN FIELD MEASURED FOR GENERAL LAYOUT ONLY. REPORT ANY DISCREPANCIES TO STRUC RITE DESIGN FOR CLARIFICATION PRIOR TO THE START OF WORK.

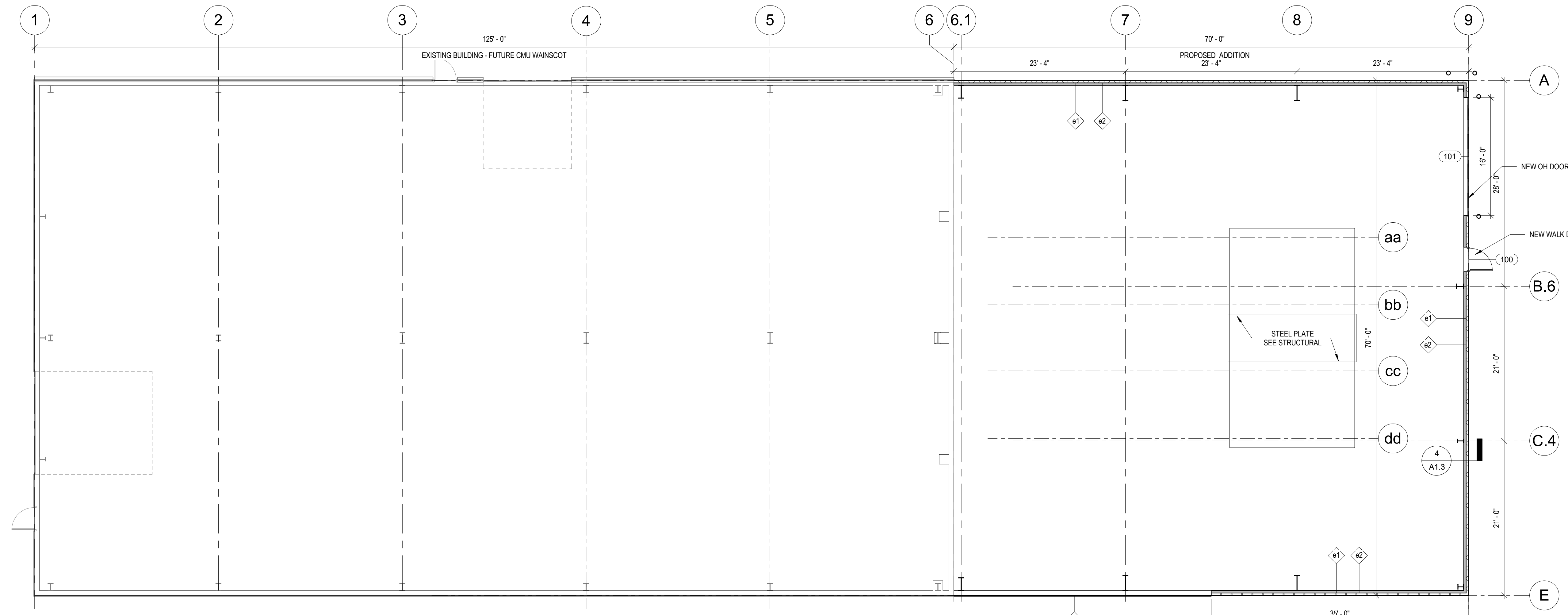
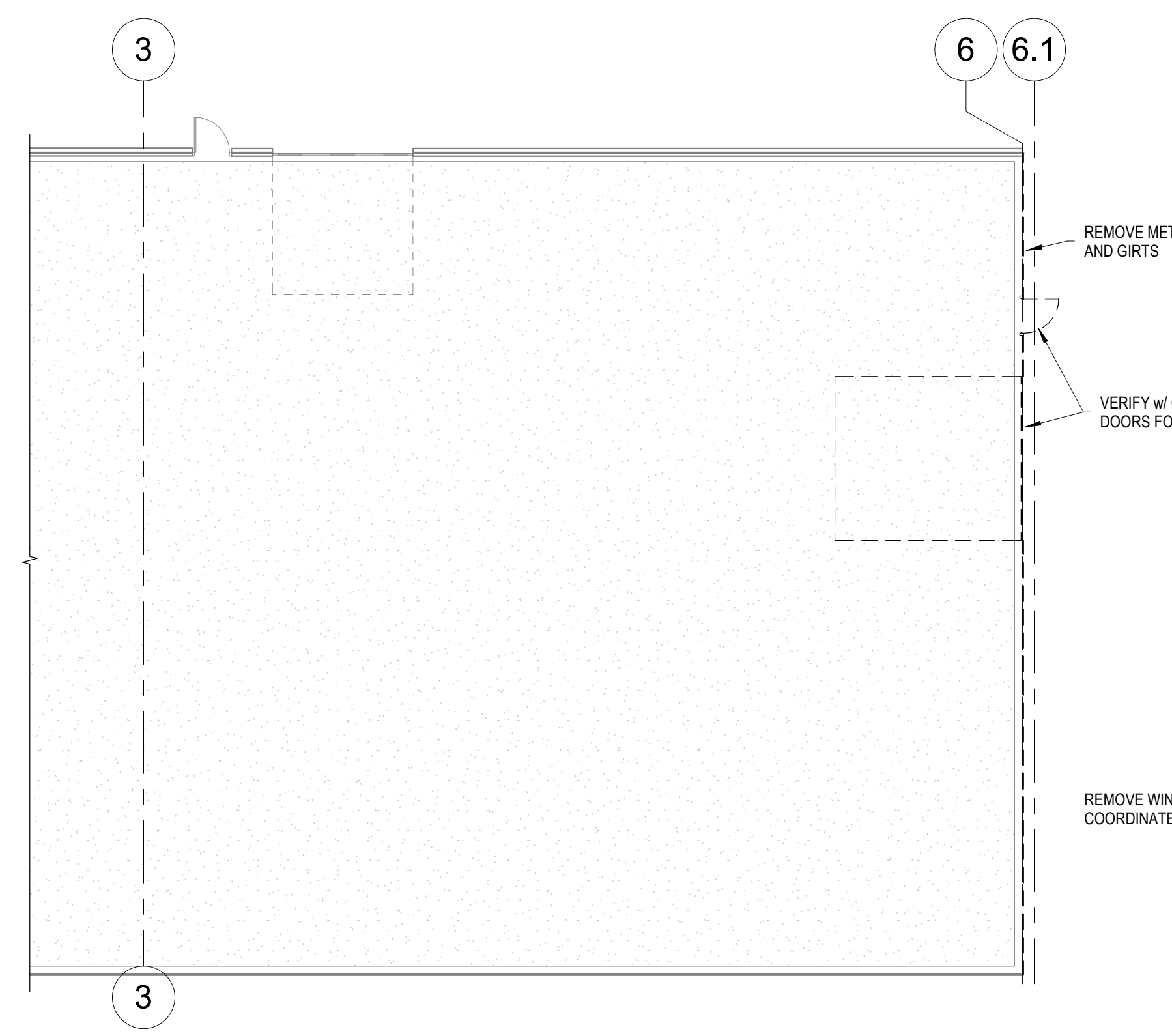
IF FLOORS, WALLS, OR CEILINGS ARE DAMAGED DURING REMOVAL, THE CONTRACTOR RESPONSIBLE SHALL PATCH / REPAIR AS REQUIRED TO MATCH EXISTING OR NEW MATERIAL SURFACES.

AT ALL REMOVAL WORK, INCLUDING FLOORS, WALLS, DOORS, CEILINGS, ETC., PATCH ALL WORK AT REMOVAL & NEW CONNECTION: PAINT AS REQUIRED.

AT MECHANICAL WORK, WHERE REMOVAL OF PIPES, CONDUIT, DUCTWORK, ETC. HAS LEFT AN OPENING OR HOLD THROUGH THE WALL, FLOOR, OR CEILING, FILL & PATCH OPENING TO MATCH THE ADJACENT CONSTRUCTION AND FINISH AS REQUIRED.

BEFORE COMMENCING WITH DEMOLITION WORK, REVIEW W/ OWNER WHICH ITEMS ARE TO BE SALVAGED AND TURNED OVER THE OWNER. IN ADDITION TO THOSE LISTED ON THE PLANS, ANY ITEM NOT WANTED BY THE OWNER SHALL BE REMOVED FROM THE JOB SITE BY THE GENERAL CONTRACTOR AND DISPOSED OF IN THE PROPER AND LEGAL MANNER.

SEE MECHANICAL DRAWINGS FOR DESCRIPTION OF REQUIRED MECHANICAL DEMOLITIONS.



**Atlas Metals ADDITION**  
521 Biddle Street  
Waukesha, WI 53186

**REVISIONS**

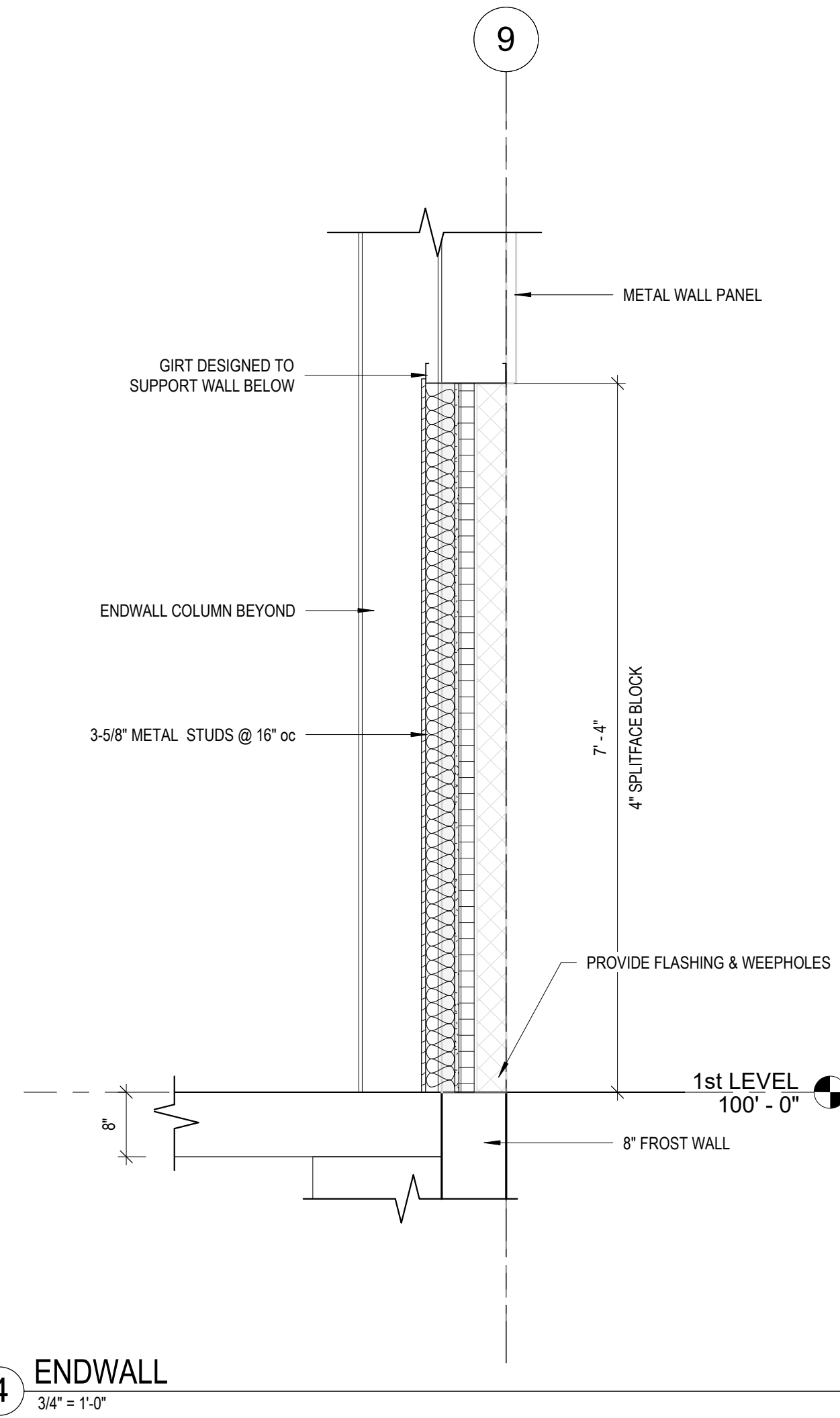
No.	DATE	DESCRIPTION
<p><b>THESE DOCUMENTS REFLECT INTENT AND MAY BE SUBJECT TO CHANGE. THESE ARE NOT FINAL CONSTRUCTION DOCUMENTS AND SHOULD NOT BE USED FOR FINAL BIDDING OR CONSTRUCTION-RELATED PURPOSES.</b></p>		

**NOT FOR CONSTRUCTION**

SHEET TITLE:	FLOOR PLAN
JOB NUMBER:	22070
ISSUED DATE:	09.23.2022
DRAWN BY:	ks
SHEET NUMBER:	A1.1

**A1.1**

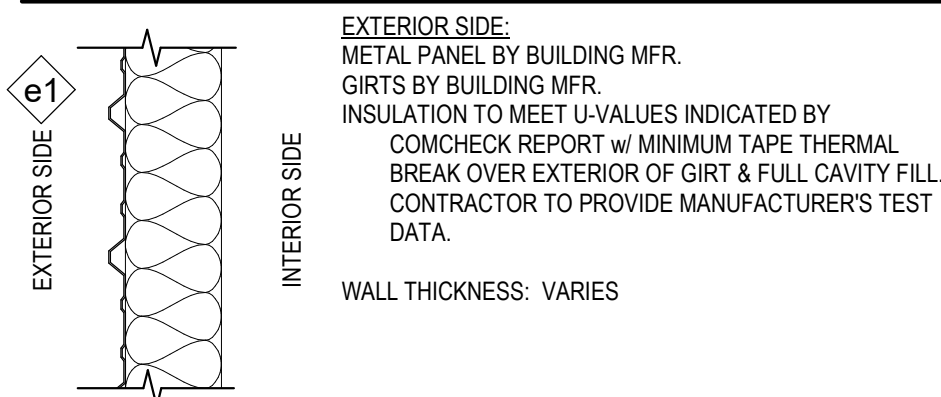
**Atlas Metals ADDITION**  
521 Biddle Street  
Waukesha, WI 53186



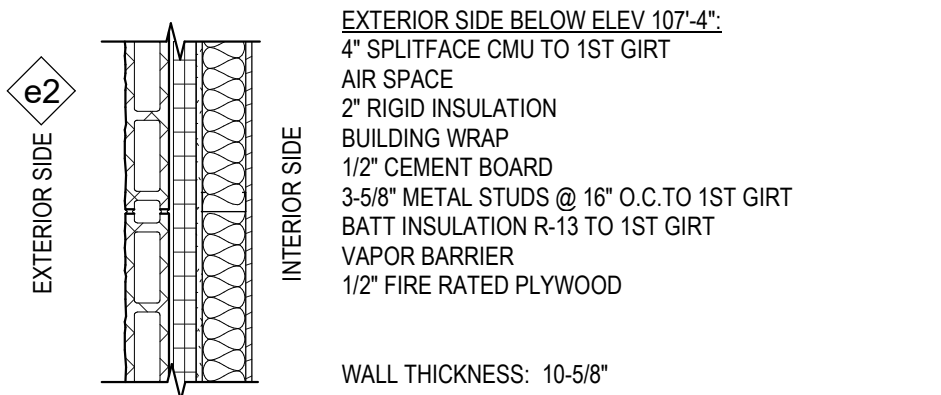
4 ENDWALL  
3/4" = 1'-0"

**WALL & ROOF ASSEMBLIES:**

**EXTERIOR WALLS**



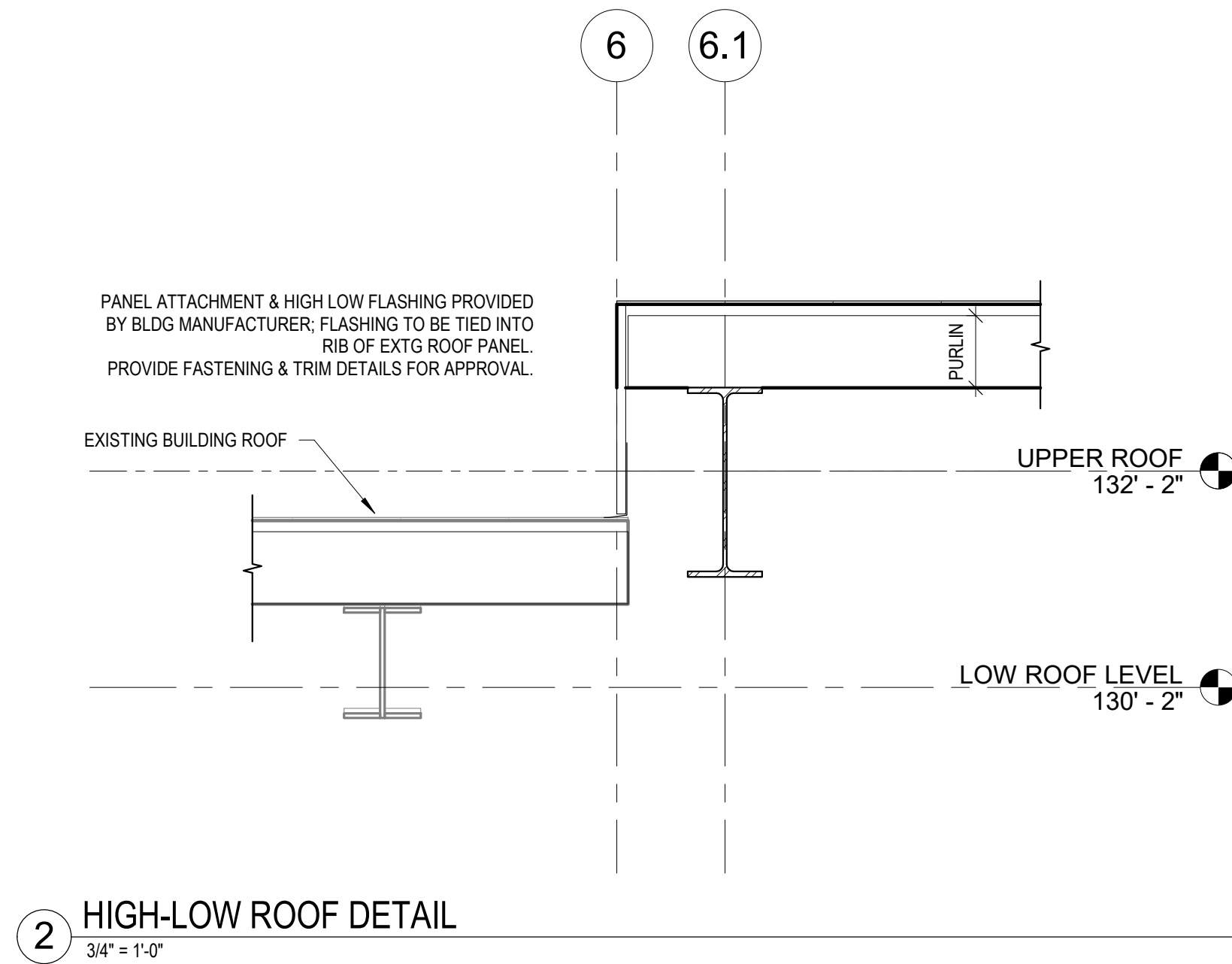
EXTERIOR SIDE:  
METAL PANEL BY BUILDING MFR.  
GIRTS BY BUILDING MFR.  
INSULATION TO MEET U-VALUES INDICATED BY COMCHECK REPORT W/ MINIMUM TAPE THERMAL BREAK OVER EXTERIOR OF GIRT & FULL CAVITY FILL. CONTRACTOR TO PROVIDE MANUFACTURER'S TEST DATA.  
WALL THICKNESS: VARIES



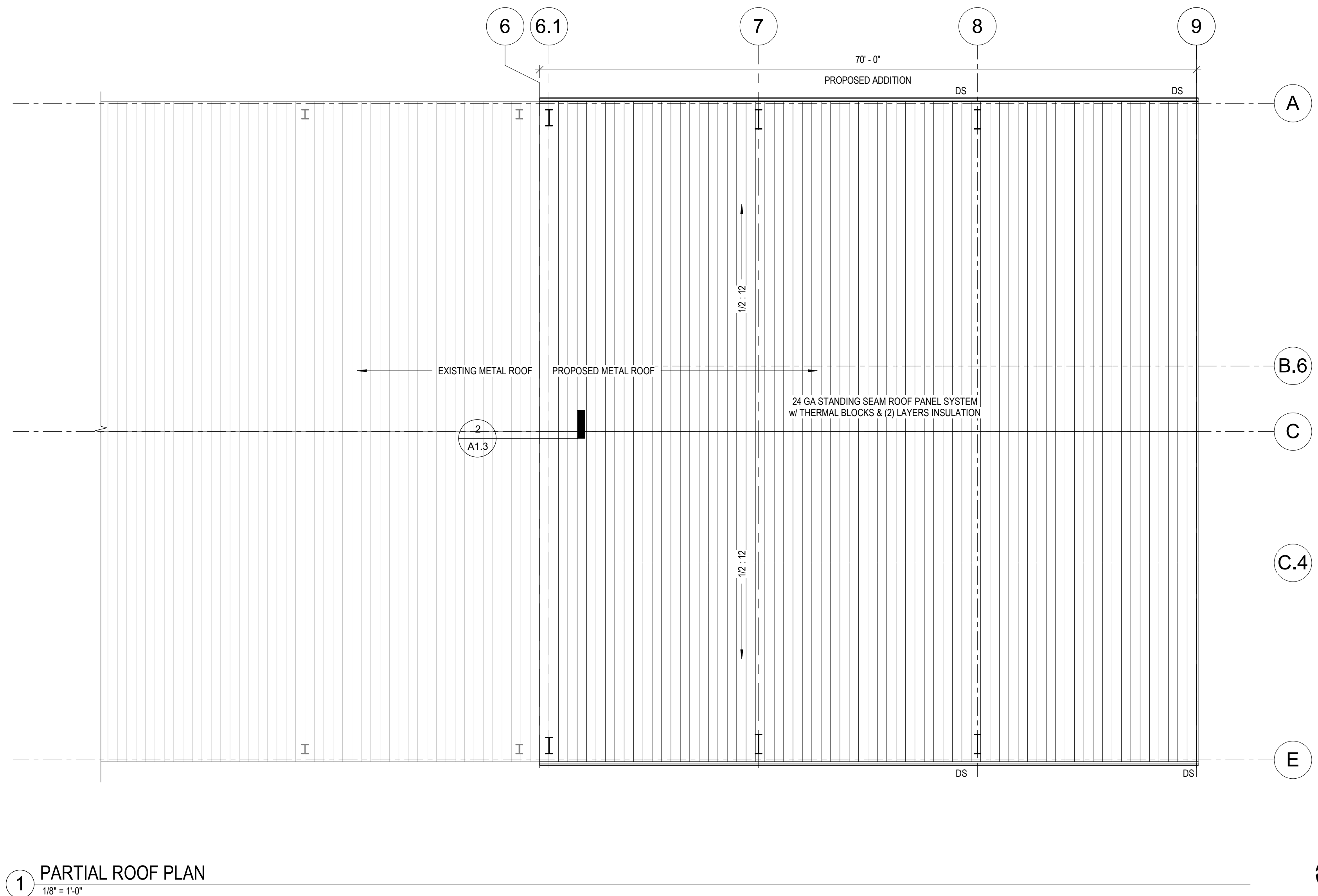
EXTERIOR SIDE BELOW ELEV. 107'-4":  
4" SPLITFACE CMU TO 1ST GIRT  
AIR SPACE  
2" RIGID INSULATION  
BUILDING WRAP  
1/2" CEMENT BOARD  
3x6" METAL STUDS @ 16" O.C. TO 1ST GIRT  
BATT INSULATION R-13 TO 1ST GIRT  
VAPOR BARRIER  
1/2" FIRE RATED PLYWOOD  
WALL THICKNESS: 10-5/8"

**GENERAL ROOF PLAN NOTES:**

- ROOFING CONTRACTOR TO INSTALL ALL ROOFING AND INSULATION PER MANUFACTURER'S DETAILS AND SPECIFICATIONS (TYP). PROVIDE ALL REQUIRED MATERIALS AND ACCESSORIES FOR A COMPLETE, WATER-TIGHT SYSTEM.
  - ROOFING CONTRACTOR TO PROVIDE AND INSTALL MEMBRANE FROM FLASHING FOR ALL ROOF PENETRATIONS PER ROOF MEMBRANE MANUF. REQUIREMENTS.
  - ROOF PENETRATIONS TO BE PAINTED TO MATCH ROOF COLOR.
  - SEE MECHANICAL DRAWINGS FOR LOCATIONS AND SIZE OF ALL ROOF PENETRATIONS AND CURBS REQUIRED FOR MECH. EQUIPMENT.
  - ALL TAPERED INSULATION TO BE EPS @ 14% FT SLOPE.
  - TAPERED FIBER EDGE STRIP TYPICAL @ ENTIRE PERIMETER.
- DS = SCUPPER / DOWNSPOUT LOCATION
- COORDINATE ALL ROOF OPENINGS AND PENETRATIONS WITH PLUMBING, MECHANICAL, AND ELECTRICAL CONTRACTORS.
- ROOF-TOP EQUIPMENT SHOWN FOR REFERENCE. SEE MECHANICAL FOR ACTUAL EQUIPMENT AND LOCATIONS, TYPICAL.



2 HIGH-LOW ROOF DETAIL  
3/4" = 1'-0"



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

**REVISIONS**

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**NOT FOR CONSTRUCTION**

SHEET TITLE:	ROOF PLAN
JOB NUMBER:	22070
ISSUED DATE:	09.23.2022
DRAWN BY:	ks
SHEET NUMBER:	A1.3



**A1.3**



**Atlas Metals ADDITION**  
521 Biddle Street  
Waukesha, WI 53186

**REVISIONS**

No.	DATE	DESCRIPTION
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**NOT FOR CONSTRUCTION**

SHEET TITLE: **EXTERIOR ELEVATIONS**

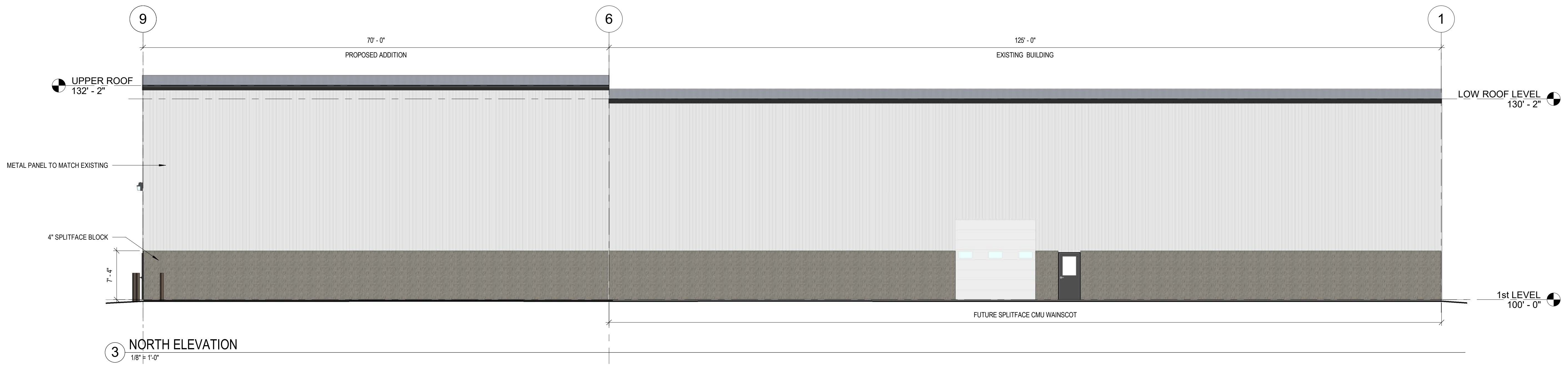
JOB NUMBER: 22070

ISSUED DATE: 09.23.2022

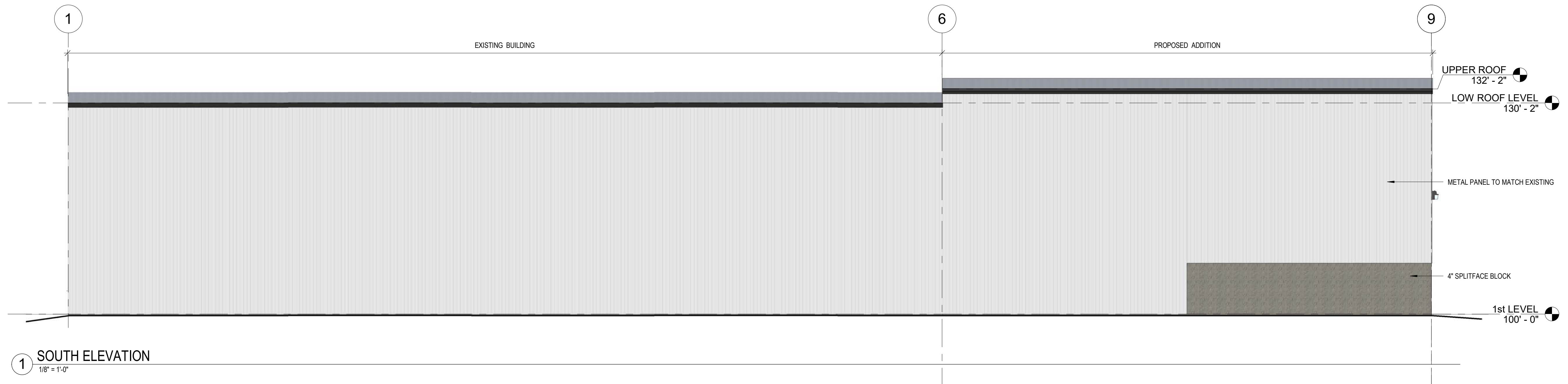
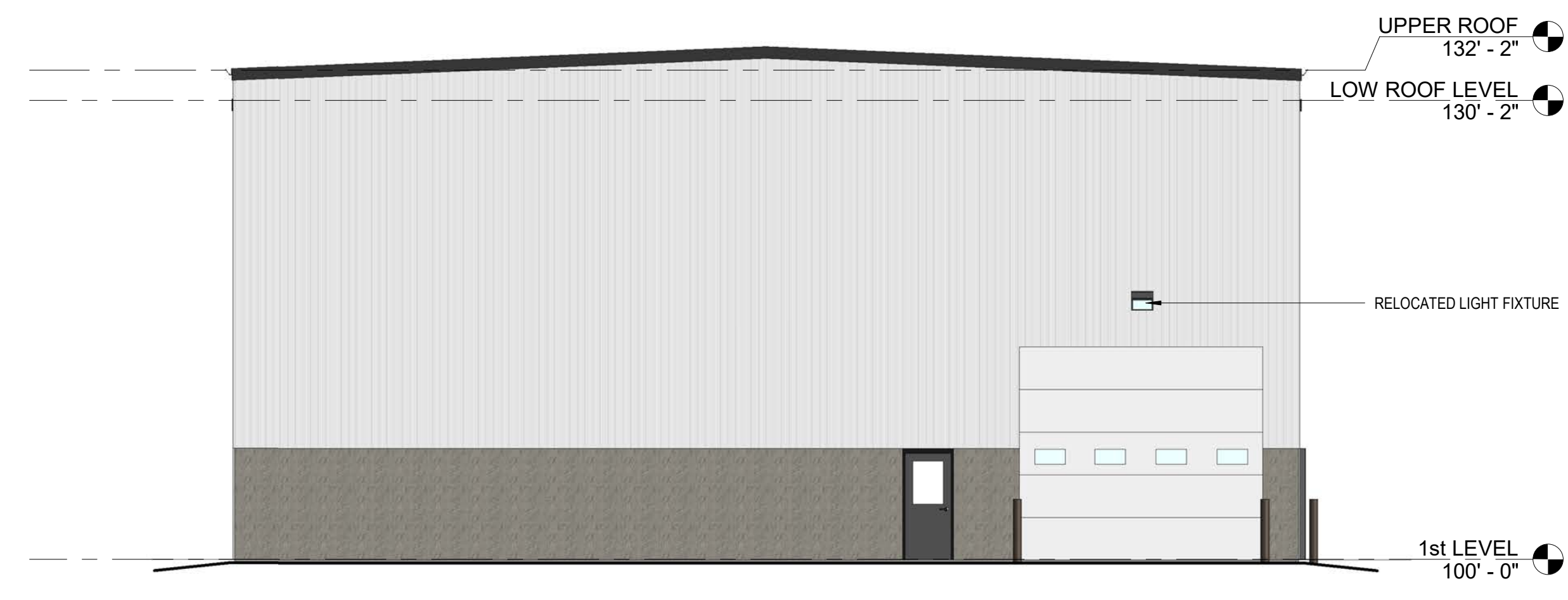
DRAWN BY: ks

SHEET NUMBER: **A2.0**

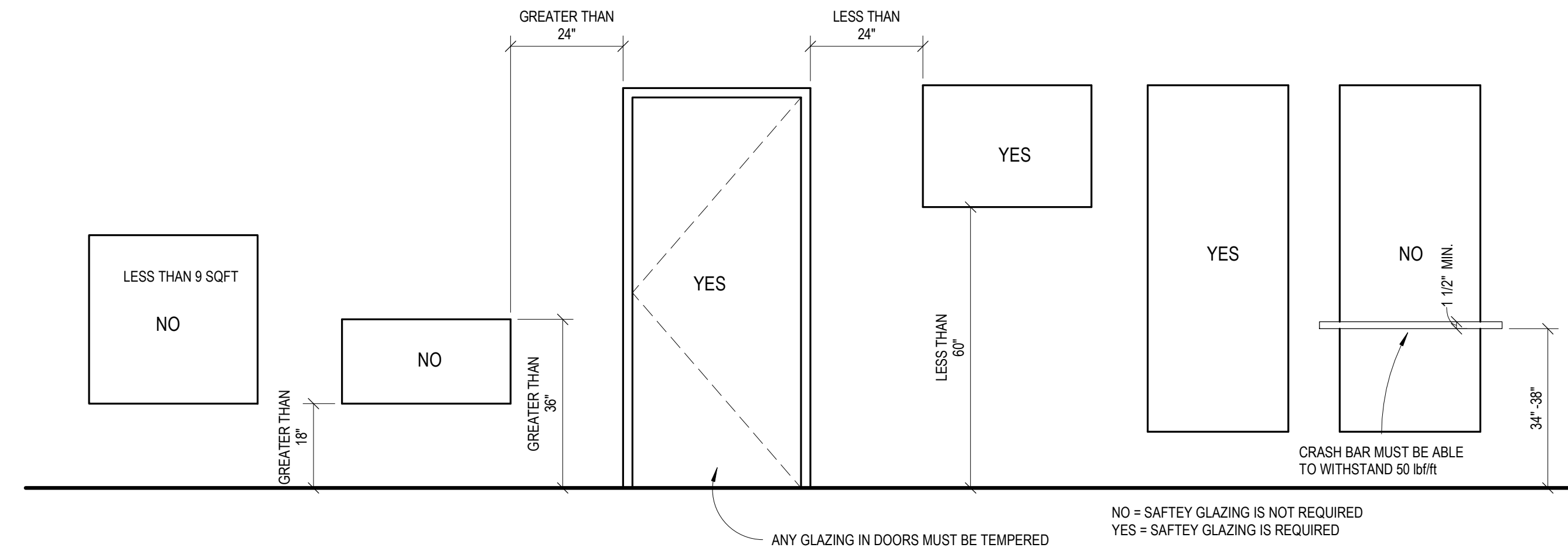
**A2.0**



EXISTING BUILDING - WEST ELEVATION

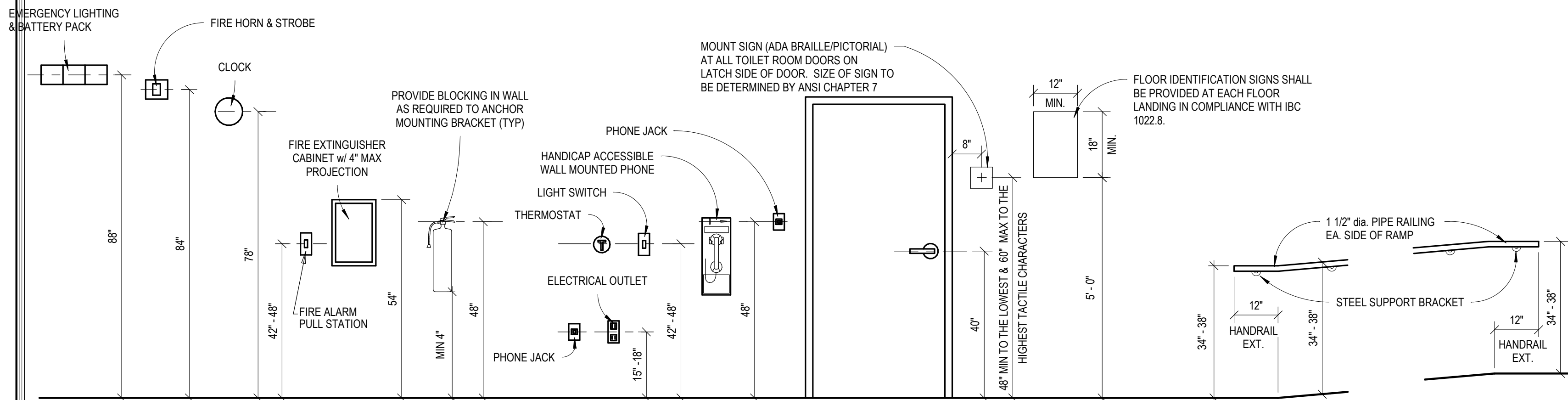






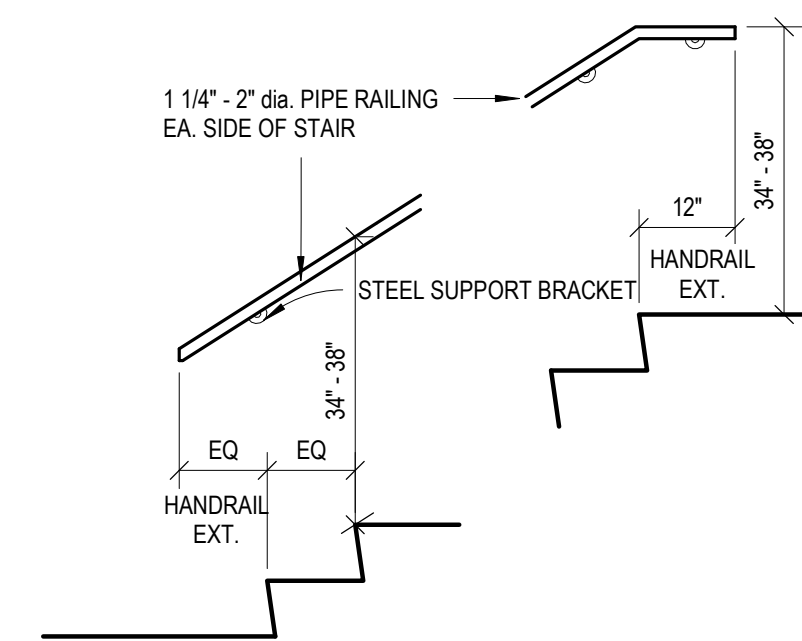
**SAFETY GLAZING**

NOT ALL ARE USED.



**STANDARD MOUNTING HEIGHTS**

NOT ALL ARE USED. SEE PLANS FOR APPLICABLE FIXTURES & ACCESSORIES. FOR INFORMATION ONLY.



**STANDARD MOUNTING HEIGHT NOTES:**

1. ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF ADA AND ANSI A117.1 SEC. 703.
2. SIGN SHALL BE MOUNTED WHERE INDICATED. WHERE THERE IS NO WALL SPACE ADJACENT TO LATCH SIDE OF DOOR, SIGN SHALL BE MOUNTED ON NEAREST ADJACENT WALL.
3. MOUNTING LOCATION FOR SIGNAGE SHALL BE SO THAT A PERSON MAY APPROACH WITHIN 9\"/>

**TOILET ROOM NOTES:**

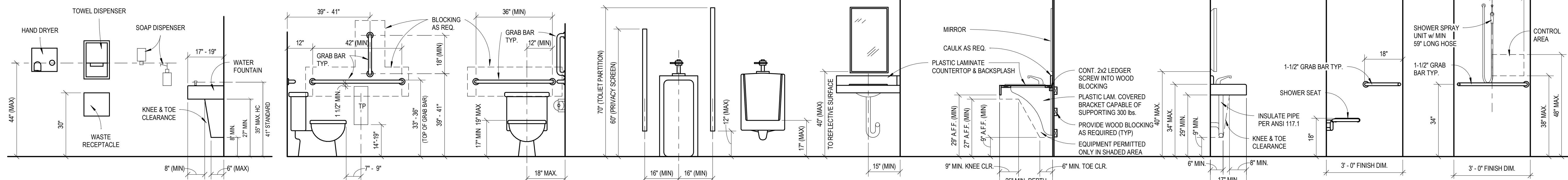
1. 6-12\"/>

**DRINKING FOUNTAIN NOTES:**

1. CONTROLS MUST BE MOUNTED IN FRONT OR SIDE MOUNTED NEAR FRONT EDGE.
2. PROVIDE 30\"/>

**STAIRWAY WALK SURFACE:**

1. THE WALKING SURFACE OF TREADS AND LANDINGS OF A STAIRWAY SHALL NOT BE SLOPED STEEPER THAN ONE UNIT VERTICAL IN 48 UNITS HORIZONTAL (2% SLOPE) IN ANY DIRECTION.
2. OPENINGS IN STAIR WALKING SURFACES SHALL BE A SIZE THAT DOES NOT PERMIT THE PASSAGE OF 1/2\"/>



**TYP. TOILET ROOM A.D.A. ACCESSORY ELEVATIONS**

NOT ALL ARE USED. SEE PLANS FOR APPLICABLE FIXTURES & ACCESSORIES. FOR INFORMATION ONLY.

**REVISIONS**

No.	DATE	DESCRIPTION
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**NOT FOR CONSTRUCTION**

SHEET TITLE:	STANDARD DETAILS
JOB NUMBER:	22070
ISSUED DATE:	09.23.2022
DRAWN BY:	JJR
SHEET NUMBER:	A5.0

**A5.0**



**GENERAL FOUNDATION NOTES:**

- FOUNDATION EXCAVATIONS SHALL BE KEPT FREE OF LOOSE MATERIAL & STANDING WATER & SHALL BE CHECKED & APPROVED BY THE GEOTECHNICAL ENGINEER BEFORE PLACEMENT OF ANY CONCRETE.
- ELEVATION 100'-0" ON STRUCTURAL DRAWINGS CORRESPONDS TO F.F. ELEVATION SHOWN ON SITE PLAN.
- TOP OF FOUNDATION WALL ELEVATION + 100'-0", UNLESS NOTED OTHERWISE.
- FOUNDATION WALLS SHALL BE 8" THICK UNLESS NOTED OTHERWISE.
- WALL FOOTINGS ARE CONTINUOUS POURED CONCRETE WITH CONTINUOUS REINF. PLACED 3" CLEAR OF BOTTOM & SIDES
- PERIMETER INSULATION TO BE 2" RIGID INSULATION AGAINST INTERIOR FACE OF WALL. U.N.O. SEE FOUNDATION DETAILS.
- CONTRACTOR TO VERIFY ALL CONCRETE FLOOR FINISHES w/ OWNER.
- CONTRACTOR TO VERIFY ALL UNDERGROUND WORK PRIOR TO SLAB POURING.
- SEE SITE PLAN FOR ADDITIONAL CONCRETE WORK.
- SEE GEN. BLDG. SPEC'S. FOR CONCRETE REQUIREMENTS.
- PROVIDE ISOLATION JOINTS TO ISOLATE COLUMNS, BOLLARDS, & OTHER FLOOR PENETRATIONS
- SEE DETAILS FOR CONTROL JOINT AT POURED CONCRETE WALLS.
- BOX-OUT FLOOR, PRIOR TO POURING, AT ALL COLUMN LOCATIONS.
- REFER TO ARCHITECTURAL DRAWINGS FOR ANY REQUIRED FLOOR DRAINS / SLAB PITCHES.
- ALL FOOTINGS ARE CENTERED ON COLUMN PIERS, UNLESS DIMENSIONED OTHERWISE.

**GENERAL FOUNDATION NOTES FOR METAL BUILDINGS:**

- PRE-ENGINEERED BUILDING ANCHOR BOLTS TO BE LOCATED PER PRE-ENGINEERED BUILDING ANCHOR BOLT PLAN IN CONJUNCTION WITH STRUCTURAL FOUNDATION PLAN AS SHOWN ON SHEET S1.0.
- VERIFY PIER LOCATION W/ COLUMN LOCATIONS FROM PRE-ENGINEERED BUILDING SUPPLIER.

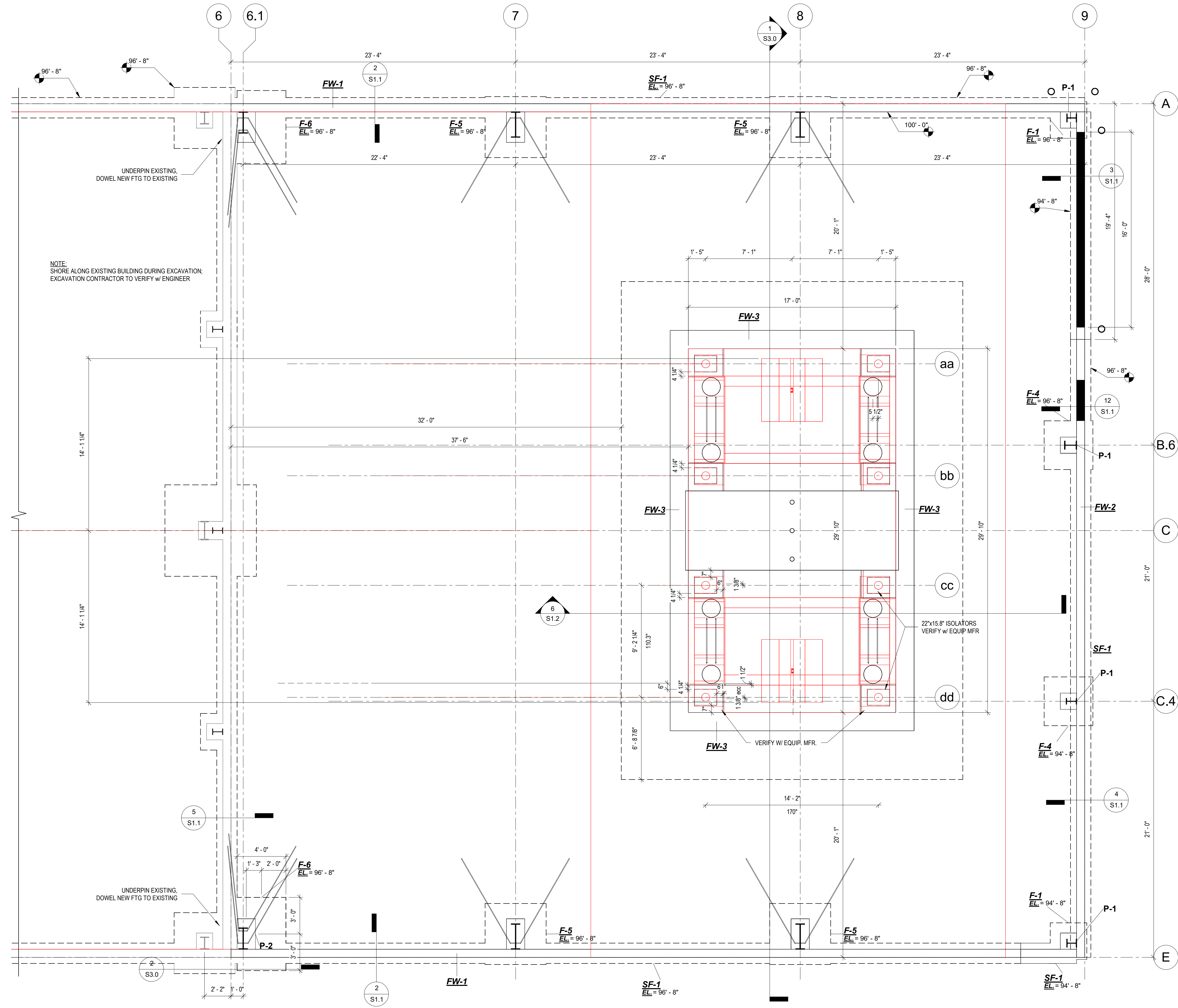
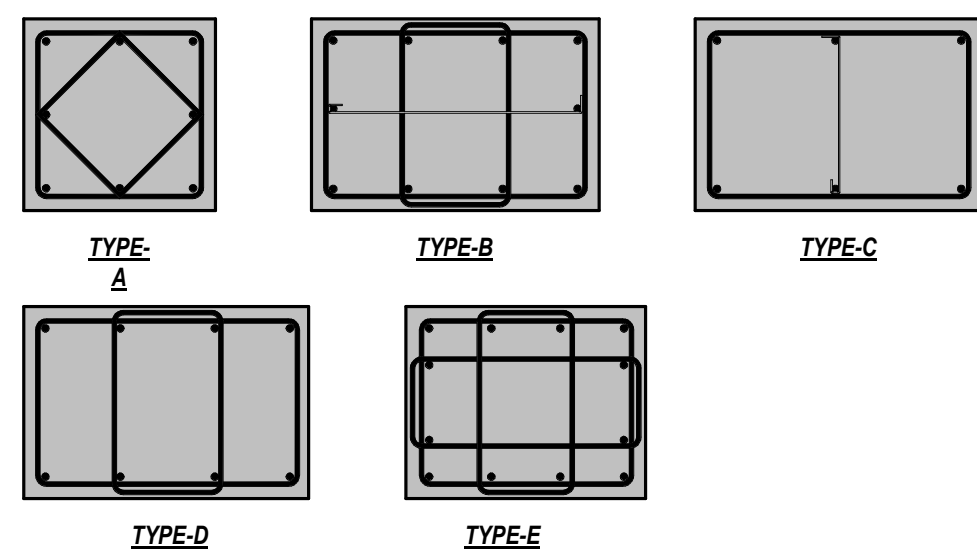
FOUNDATION WALL SCHEDULE		
MARK	WIDTH	REINFORCEMENT
FW-1	8"	#4 VERT. @ 48"oc; (2) #5 T&B
FW-2	8"	#5 @ 16"oc EACH WAY; (2) #5 T&B
FW-3	1'-6"	#6 @ 8" VERT EA. FACE, HOOK DOWELS; #6 @ 18" HORIZ EA. FACE

STRIP FOOTING SCHEDULE			
MARK	WIDTH	DEPTH	REINFORCEMENT
SF-1	1'-8"	1'-0"	(2) #5 CONTINUOUS

FOOTING SCHEDULE				
MARK	WIDTH	LENGTH	DEPTH	REINFORCEMENT
F-1	3'-0"	3'-0"	1'-0"	(3) #5 EACH WAY, BOTTOM
F-4	4'-0"	4'-0"	1'-0"	(4) #5 EACH WAY, BOTTOM
F-5	5'-0"	5'-0"	1'-6"	(5) #5 EACH WAY, T&B
F-6	4'-0"	6'-0"	1'-0"	(6) #5 SHORT WAY, (4) #5 LONG WAY; SEE DETAIL

PIER SCHEDULE				
MARK	WIDTH	LENGTH	COMMENTS	REINFORCEMENT
P-1	1'-4"	1'-4"	TYPE A	(8) #6 DOWELS; #3 TIES @ 10"; (2) @ TOP
P-2	1'-6"	2'-6"	TYPE D	(14) #6 DOWELS; #3 TIES 10"; (2) @ TOP
P-3	2'-3"	2'-10"	TYPE E	(12) #8 DOWELS; #4 TIES @ 12"; (2) @ TOP

**CONC. PIER LEGEND**



1 FND-T.O.F.  
1/4" = 1'-0"

**Atlas Metals ADDITION**  
521 Biddle St  
Waukesha, WI 53186

**REVISIONS**

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**NOT FOR CONSTRUCTION**

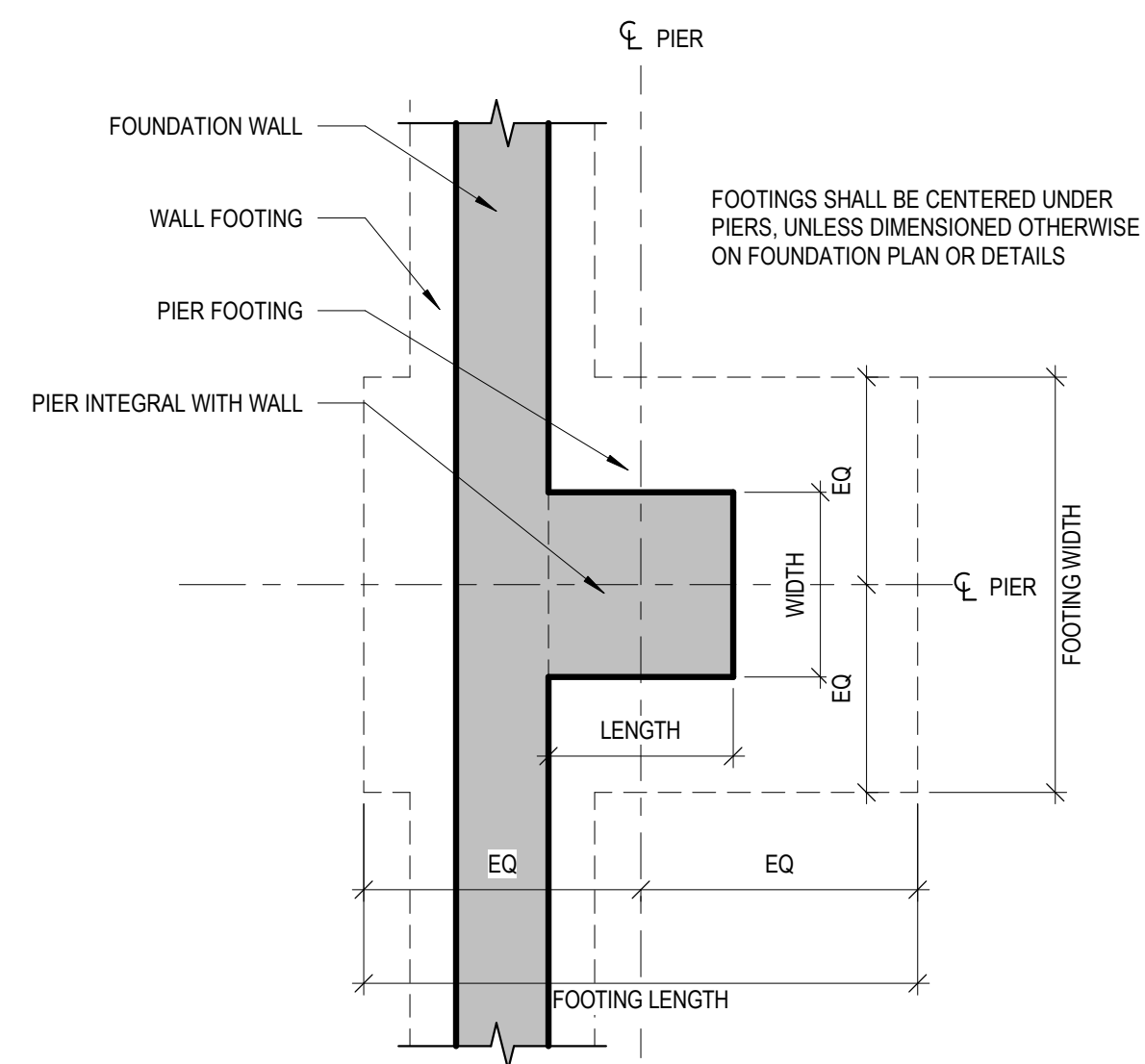
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JOB NUMBER:	22070
ISSUED DATE:	09.23.2022
DRAWN BY:	ks
SHEET NUMBER:	S1.0



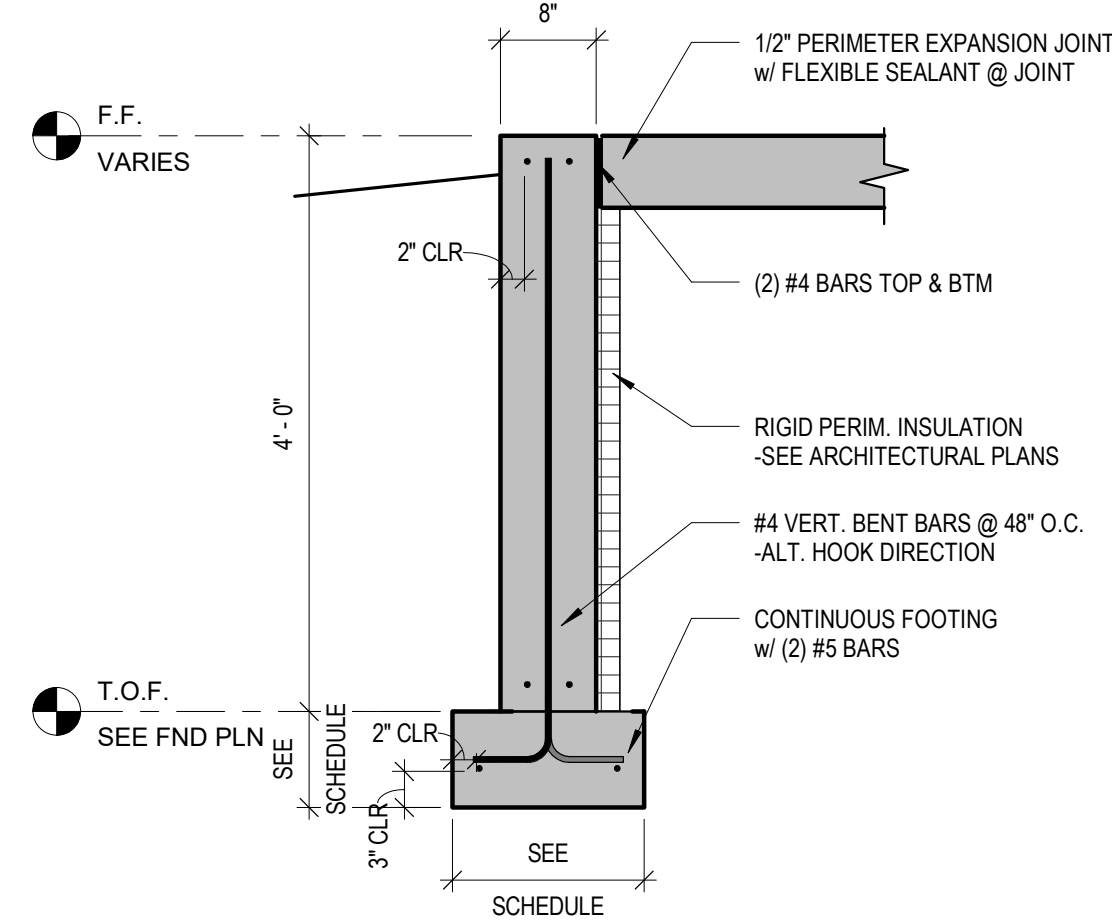
**S1.0**



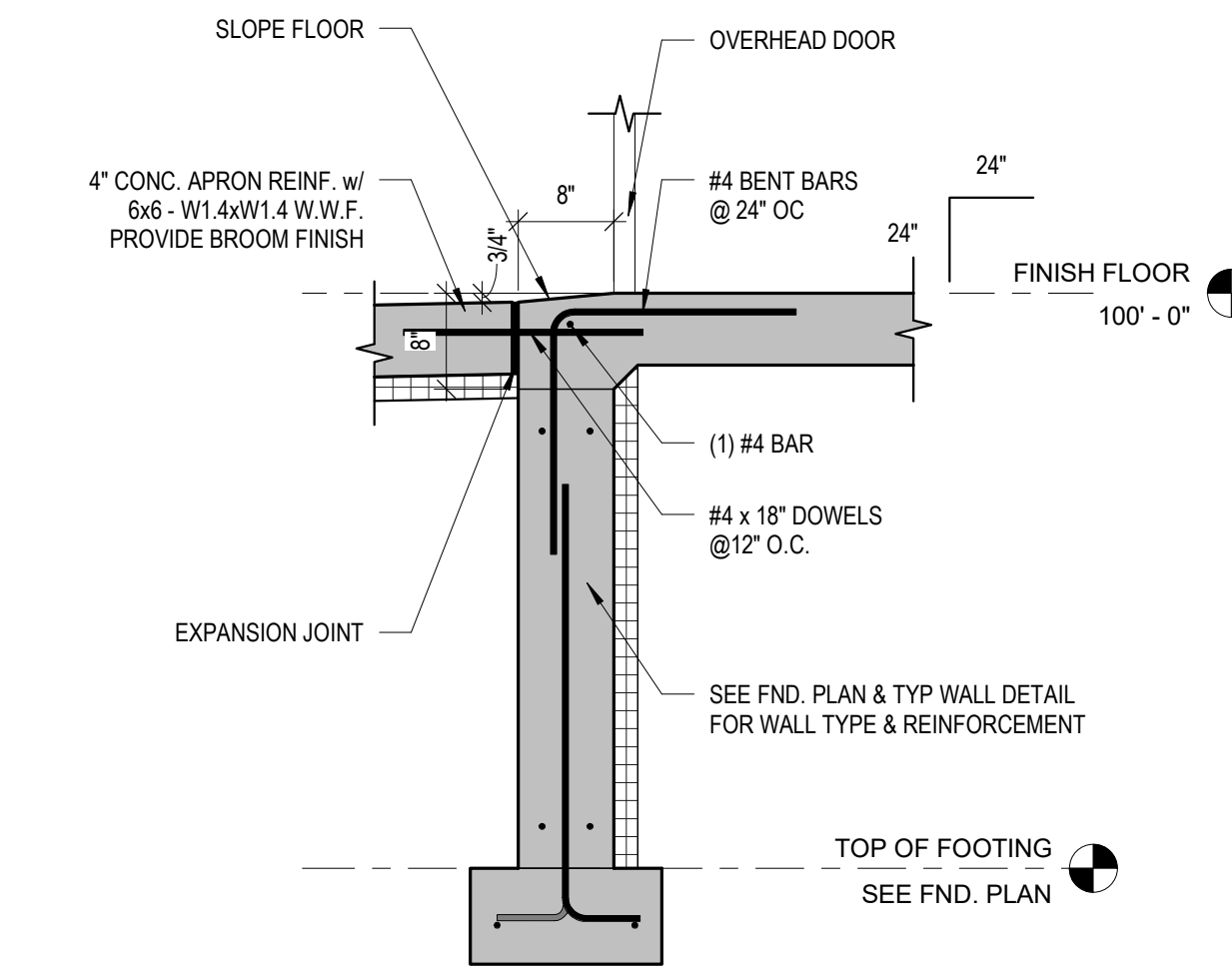
**Atlas Metals ADDITION**  
521 Biddle St  
Waukesha, WI 53186



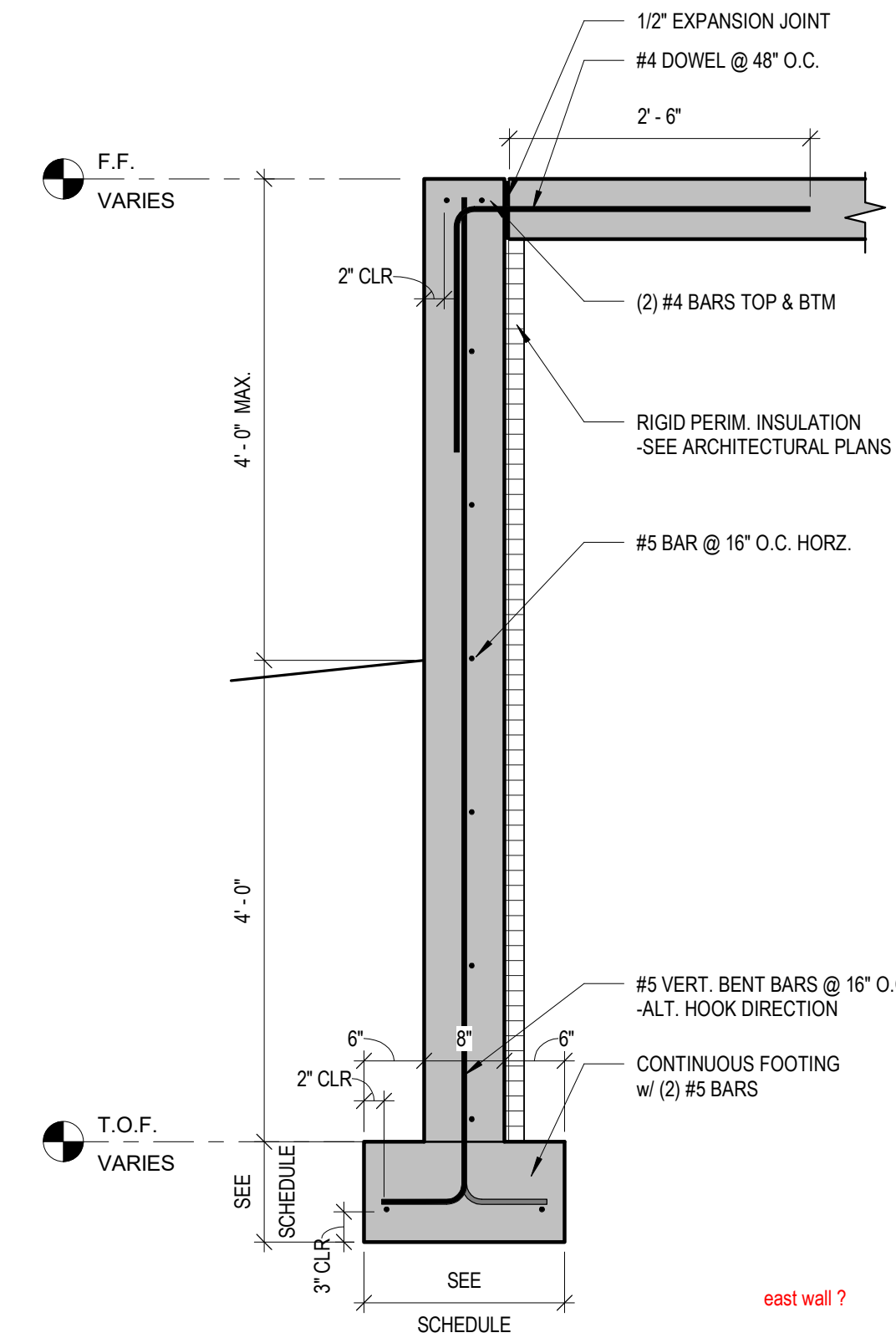
\*SEE FOUNDATION SCHEDULE FOR SIZES & REINFORCEMENT FOR ALL FOOTINGS, WALLS AND PIERS.



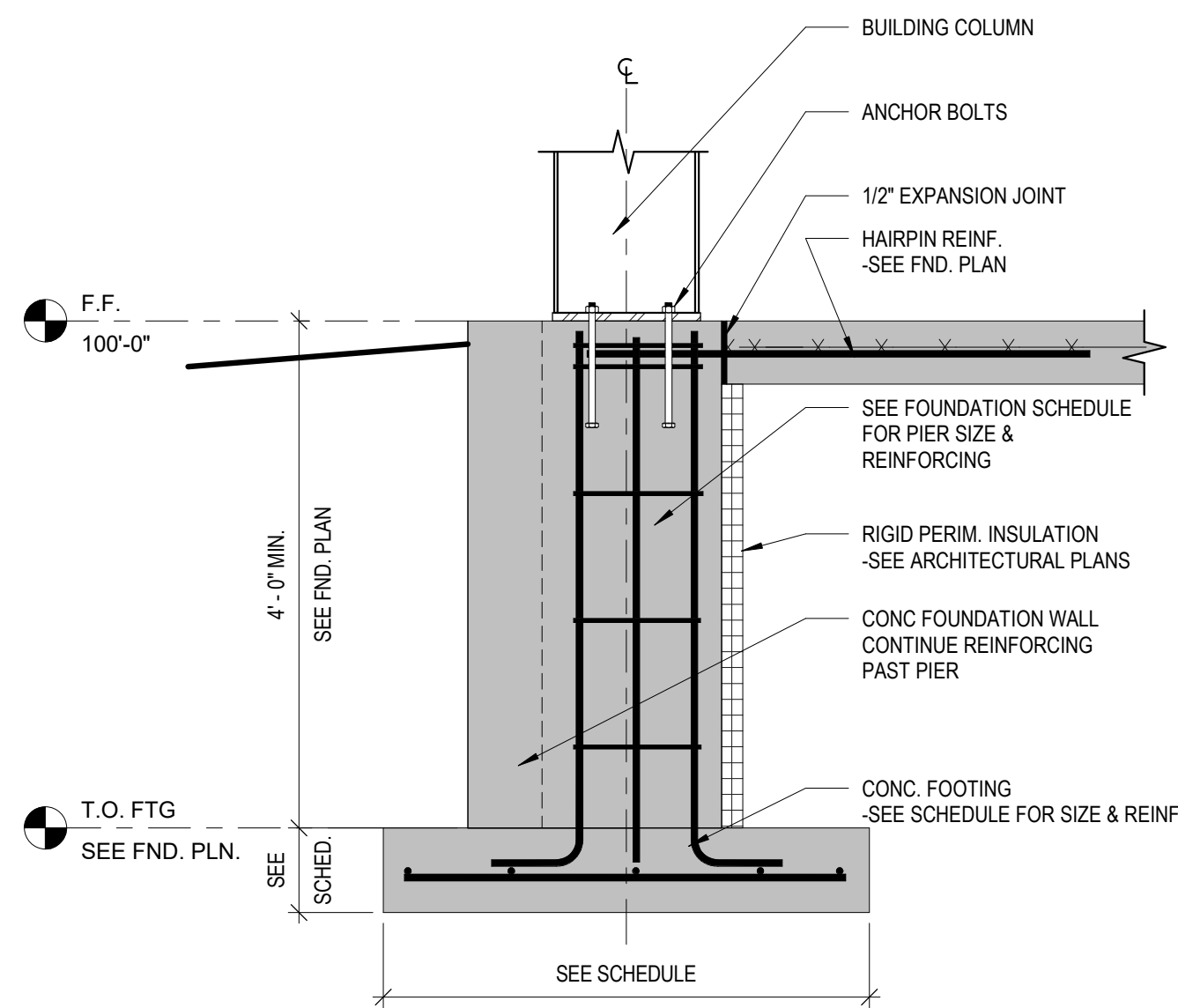
2 8" FROST WALL  
3/4" = 1'-0"



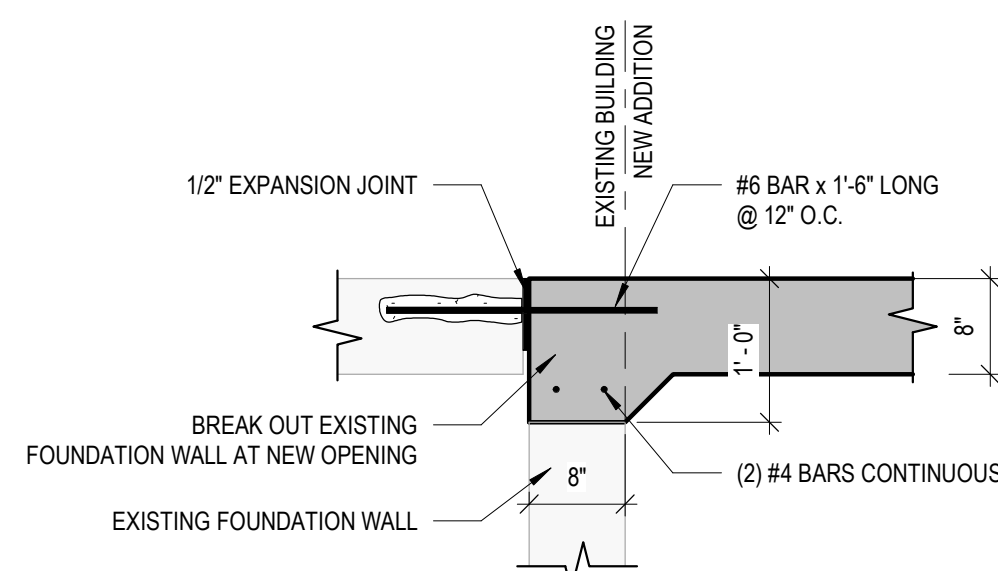
3 TYP. O.H. DOOR DETAIL  
3/4" = 1'-0"



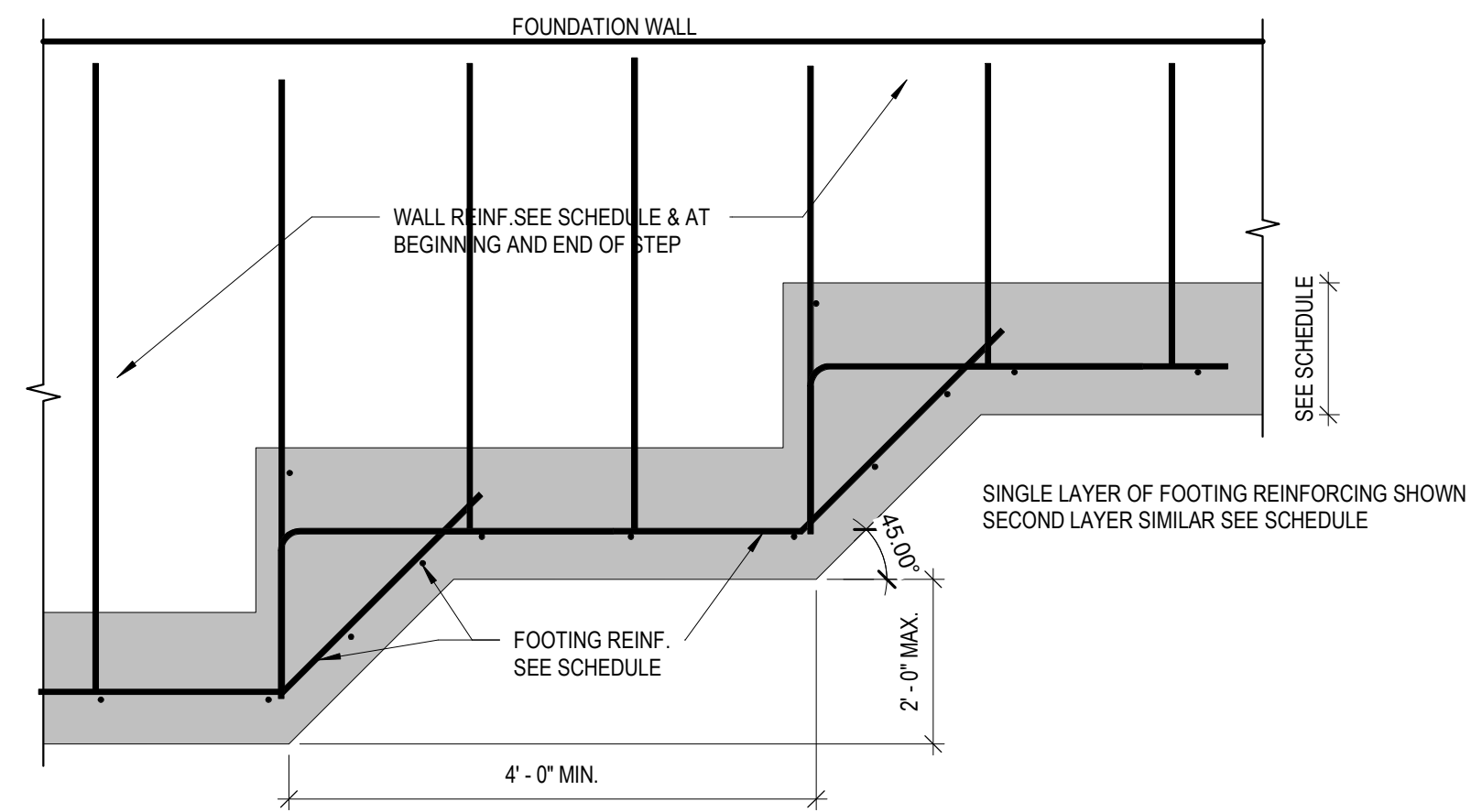
4 8" FND. WALL  
3/4" = 1'-0"



5 THICKEND SLAB @ EXISTING  
3/4" = 1'-0"

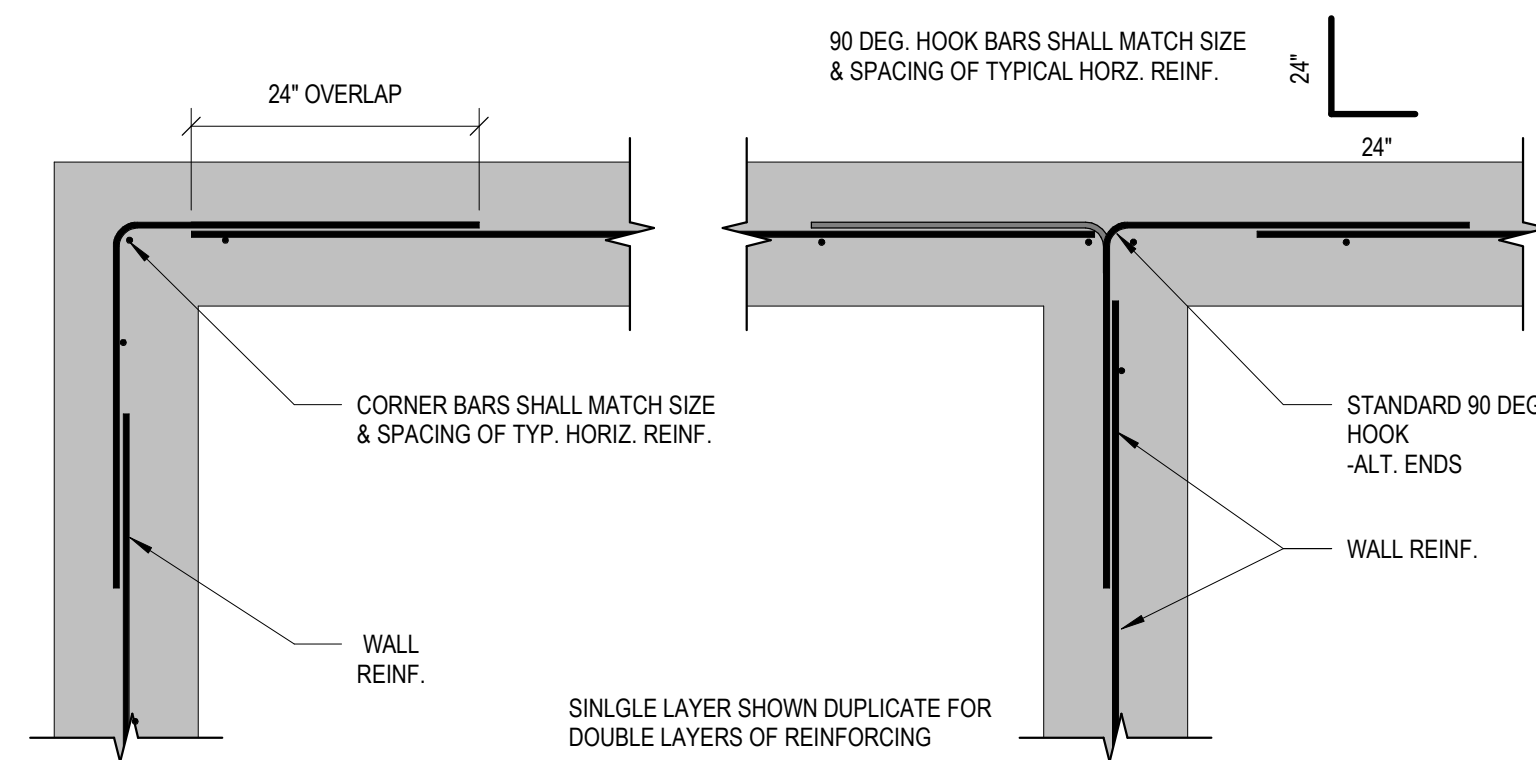


6 TYP. A.B. EMBEDMENT DETAIL  
NOT TO SCALE

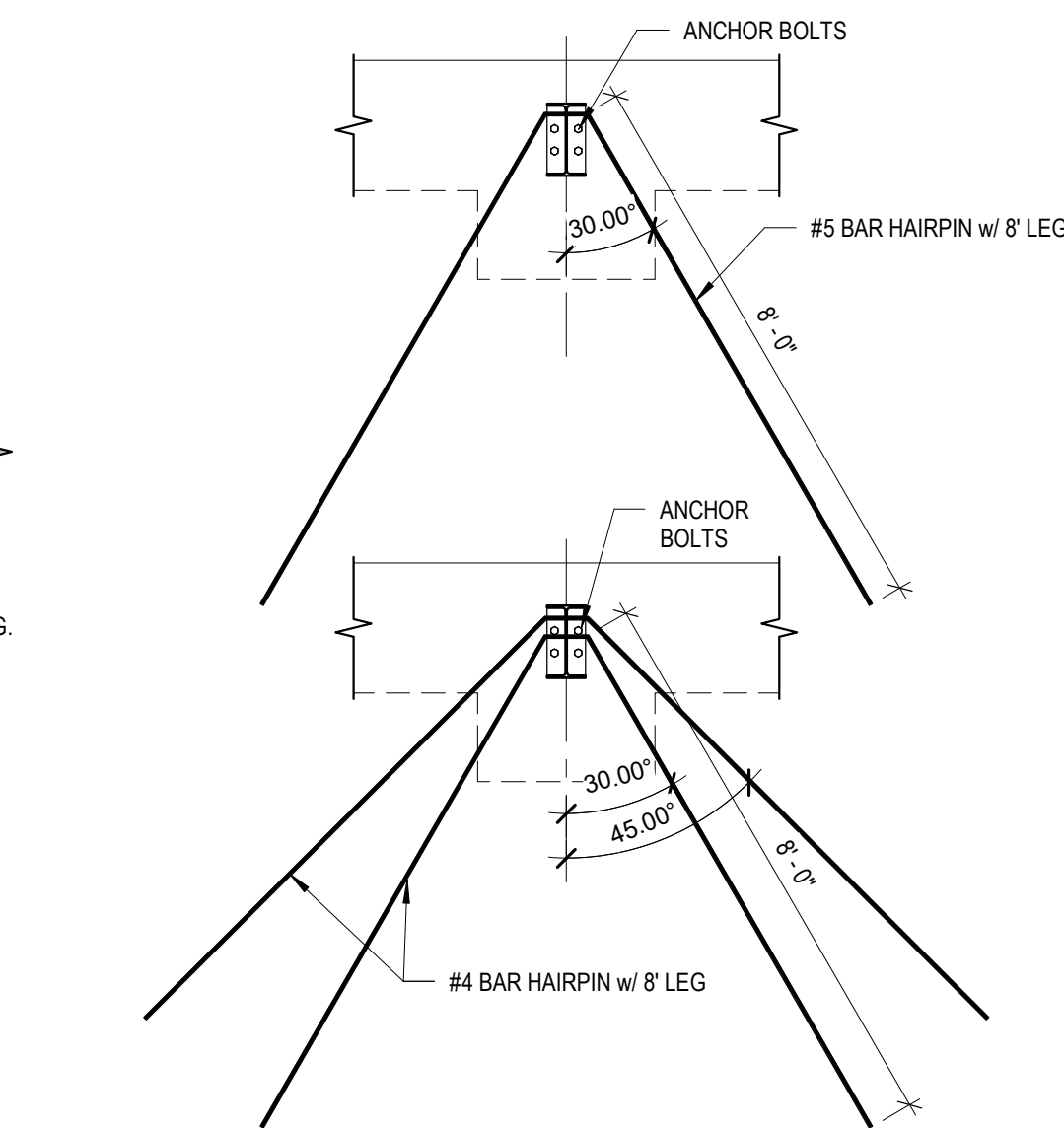


7 TYP. STEP FOOTING DETAIL  
NOT TO SCALE

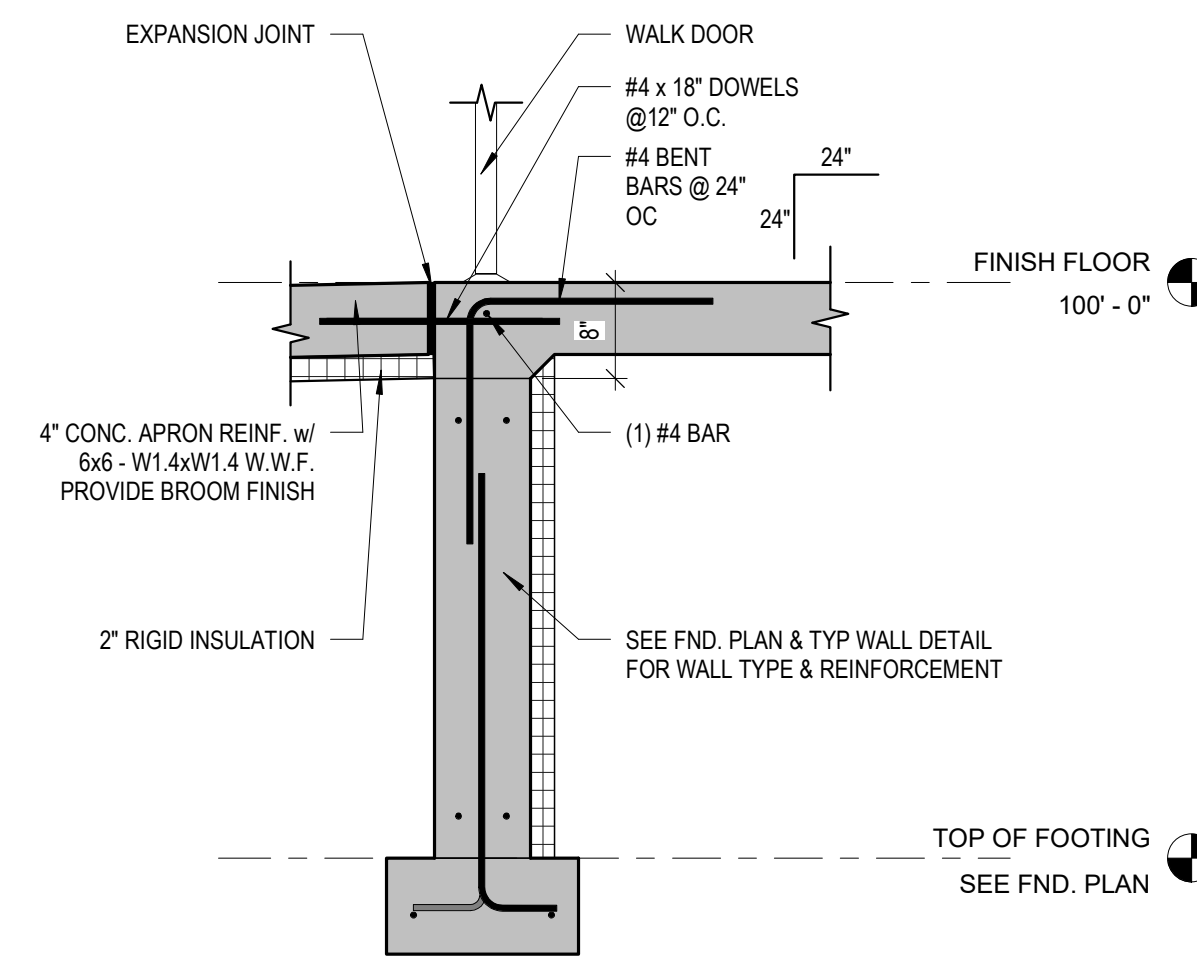
1 TYP. PIER & FOOTING (OUTSET)  
3/4" = 1'-0"



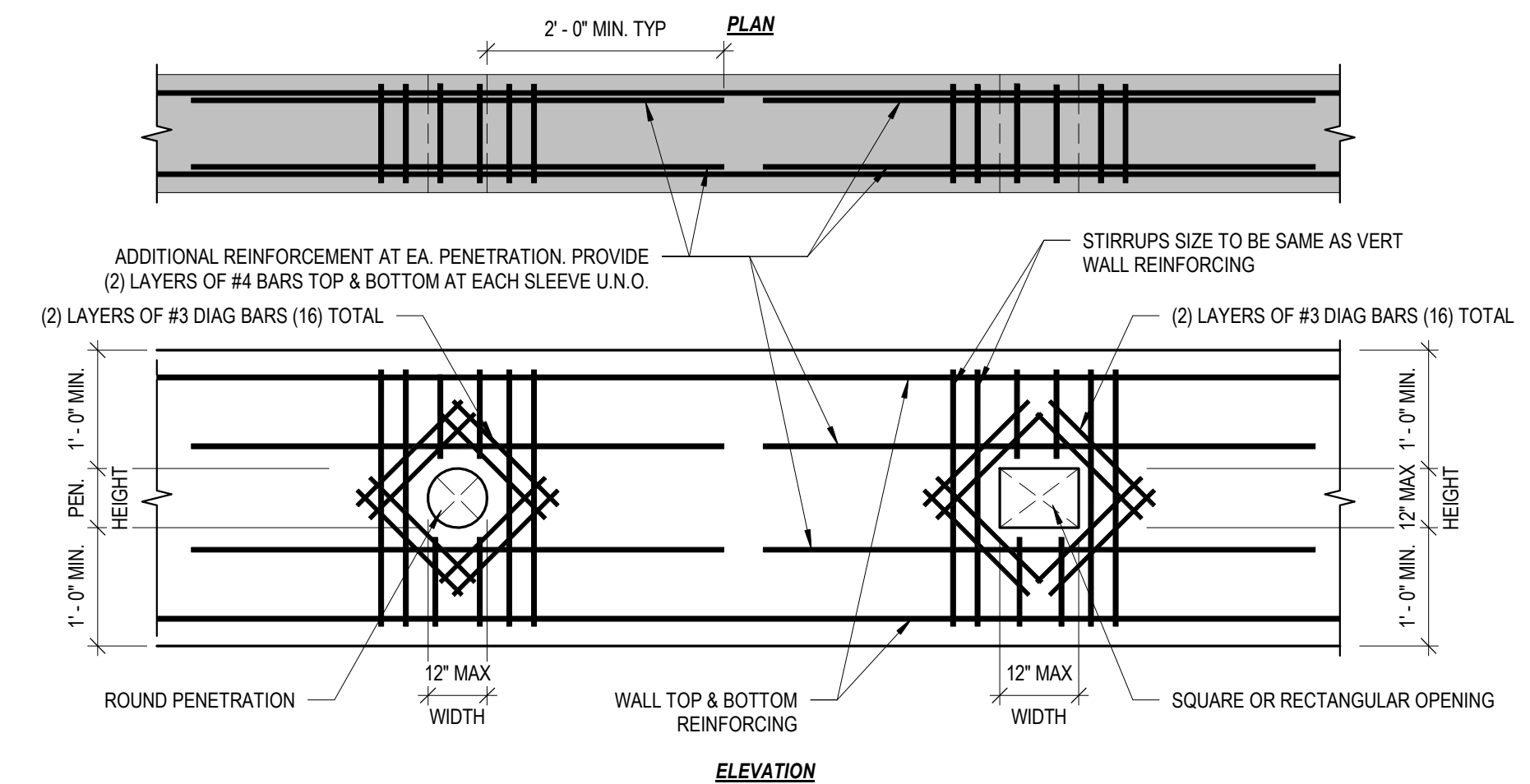
8 TYP. CONC WALL CORNER REINF  
NOT TO SCALE



9 TYP. HAIRPIN DETAIL  
NOT TO SCALE



10 TYP. STOOP DETAIL  
3/4" = 1'-0"



11 REINFORCING @ CONC. OPENINGS  
NOT TO SCALE

**NOTES:**  
1. GENERAL CONTRACTOR TO COORDINATE LOCATION, SIZE & ELEVATION & INCLUDE HIS CONTRACT PRICE. ALL REQUIRED HORIZONTAL PENETRATIONS THROUGH CONCRETE WALLS WHETHER SHOWN ON STRUCTURAL DRAWINGS OR NOT WHERE WALL PENETRATIONS ARE REQUIRED BUT ARE NOT SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS, SUBMIT DRAWINGS, SHOWING DIMENSIONS & LOCATIONS OF ALL REQUIRED PENETRATIONS FOR REVIEW & APPROVAL. CLEAR SPACING BETWEEN PENETRATIONS SHALL BE 24" MINIMUM UNLESS DESIGNED OTHERWISE BY ENGINEER.  
2. FOR LOCATIONS & OR SIZES OF PENETRATIONS NOT CONFORMING TO THE ABOVE CRITERIA & NOT OTHERWISE DETAILED ON THE STRUCTURAL DRAWINGS, CONTRACTOR SHALL COORDINATE REQUIRED ADDITIONAL REINFORCEMENT WITH THE ENGINEER ON THE SHOP DRAWINGS.

**REVISIONS**

No.	DATE	DESCRIPTION
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**THESE DOCUMENTS REFLECT INTENT AND MAY BE SUBJECT TO CHANGE. THESE ARE NOT FINAL CONSTRUCTION DOCUMENTS AND SHOULD NOT BE USED FOR FINAL BIDDING OR CONSTRUCTION RELATED PURPOSES.**

**NOT FOR CONSTRUCTION**

SHEET TITLE: FOUNDATION DETAILS

JOB NUMBER: 22070

ISSUED DATE: 09.23.2022

DRAWN BY: ks

SHEET NUMBER: S1.1

10/5/2022 10:22:32 AM



**Atlas Metals ADDITION**  
521 Biddle St  
Waukesha, WI 53186

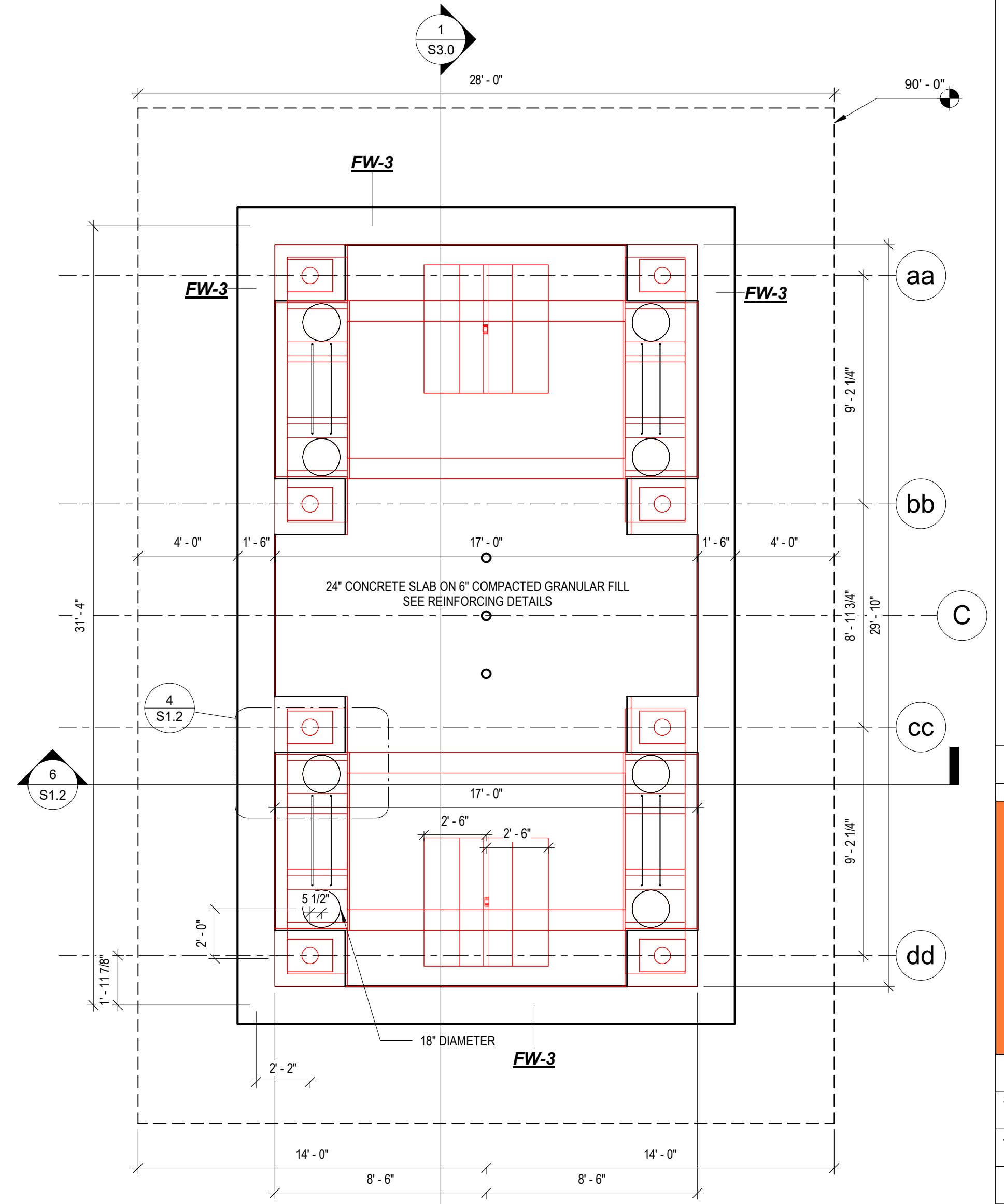
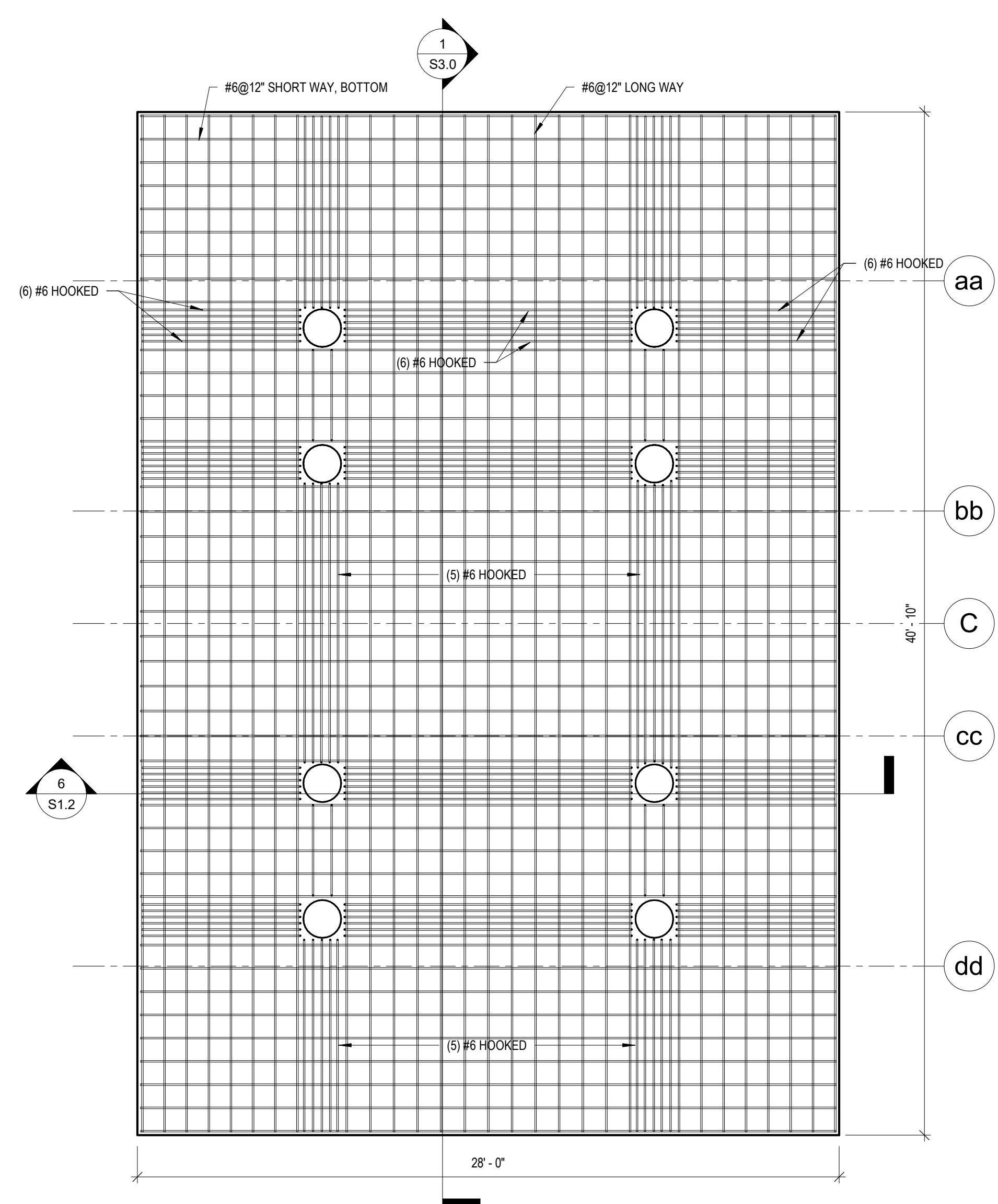
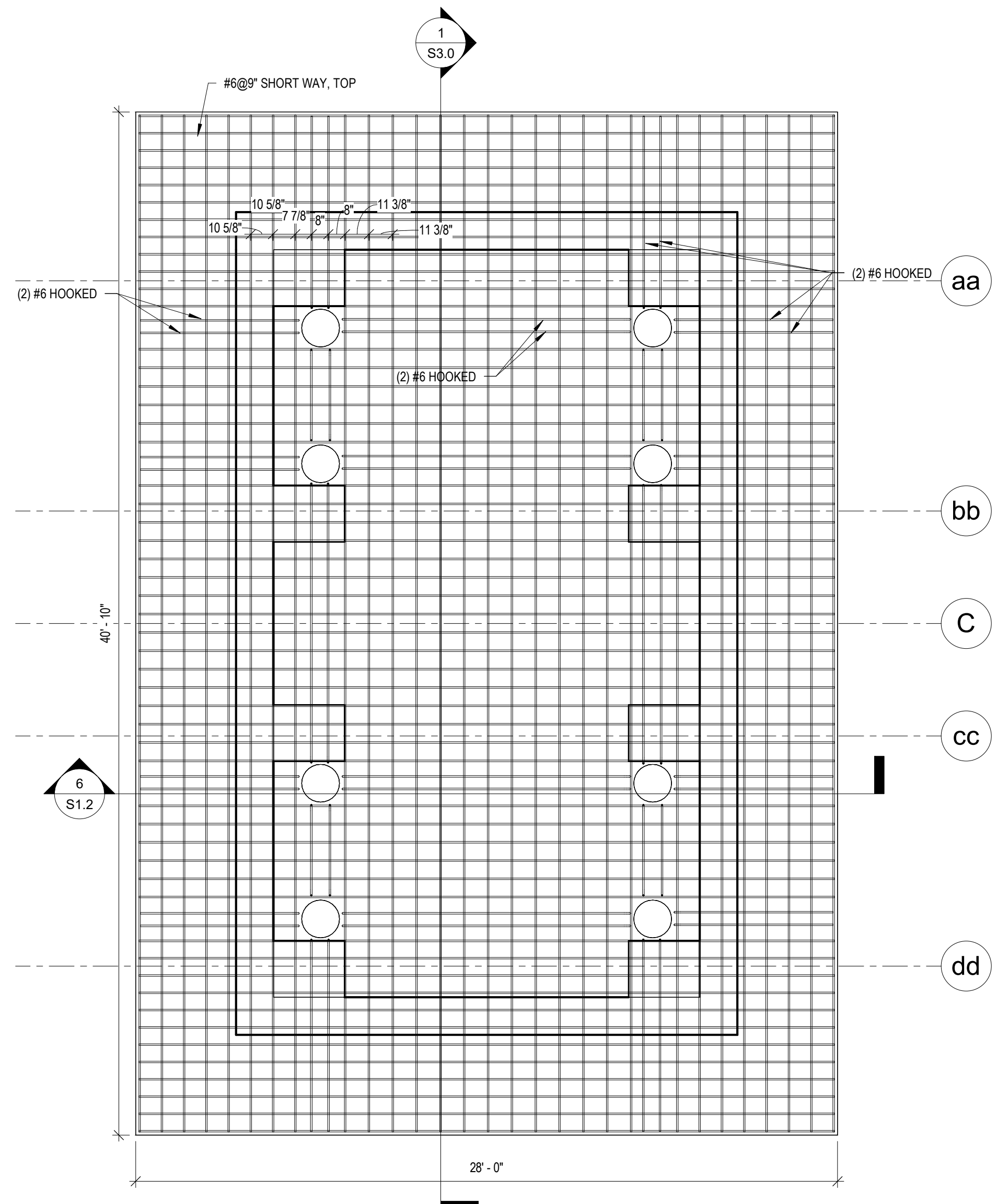
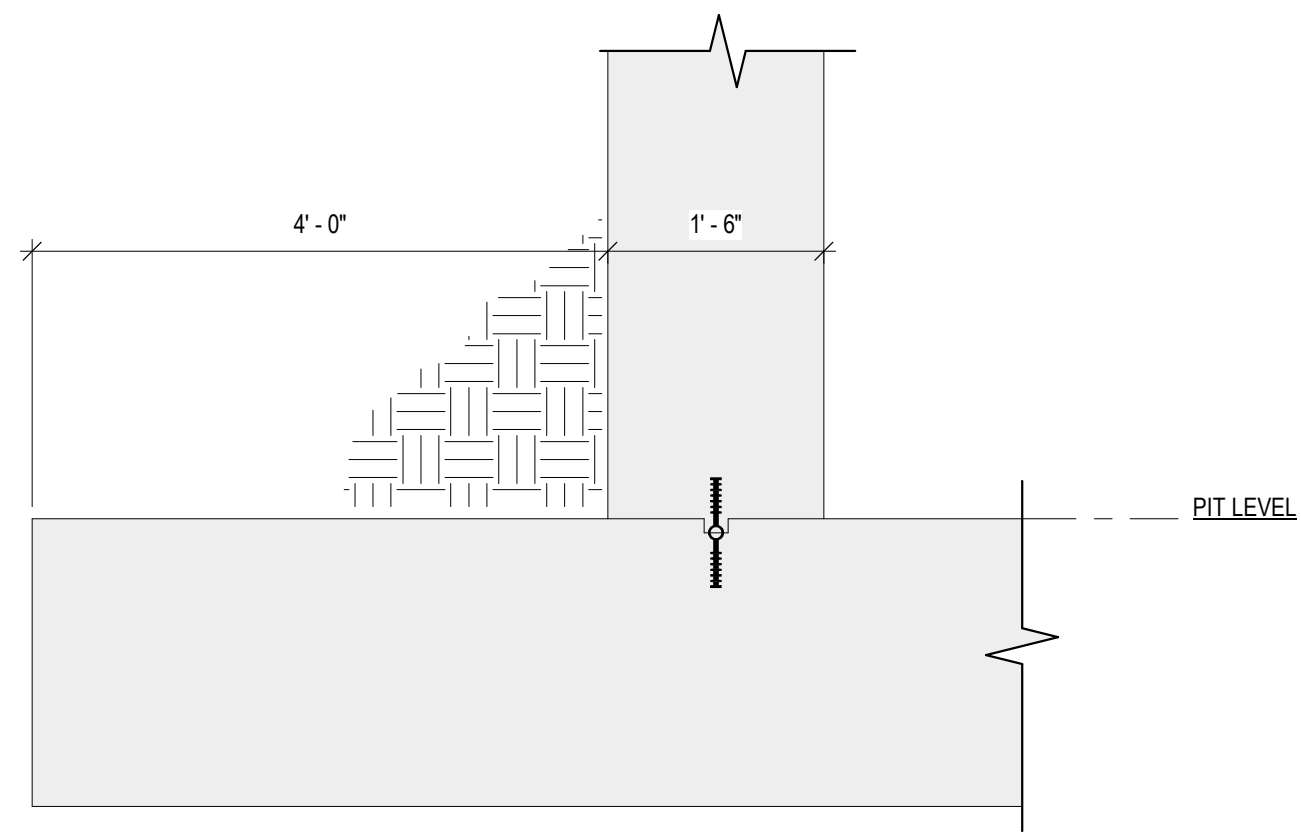
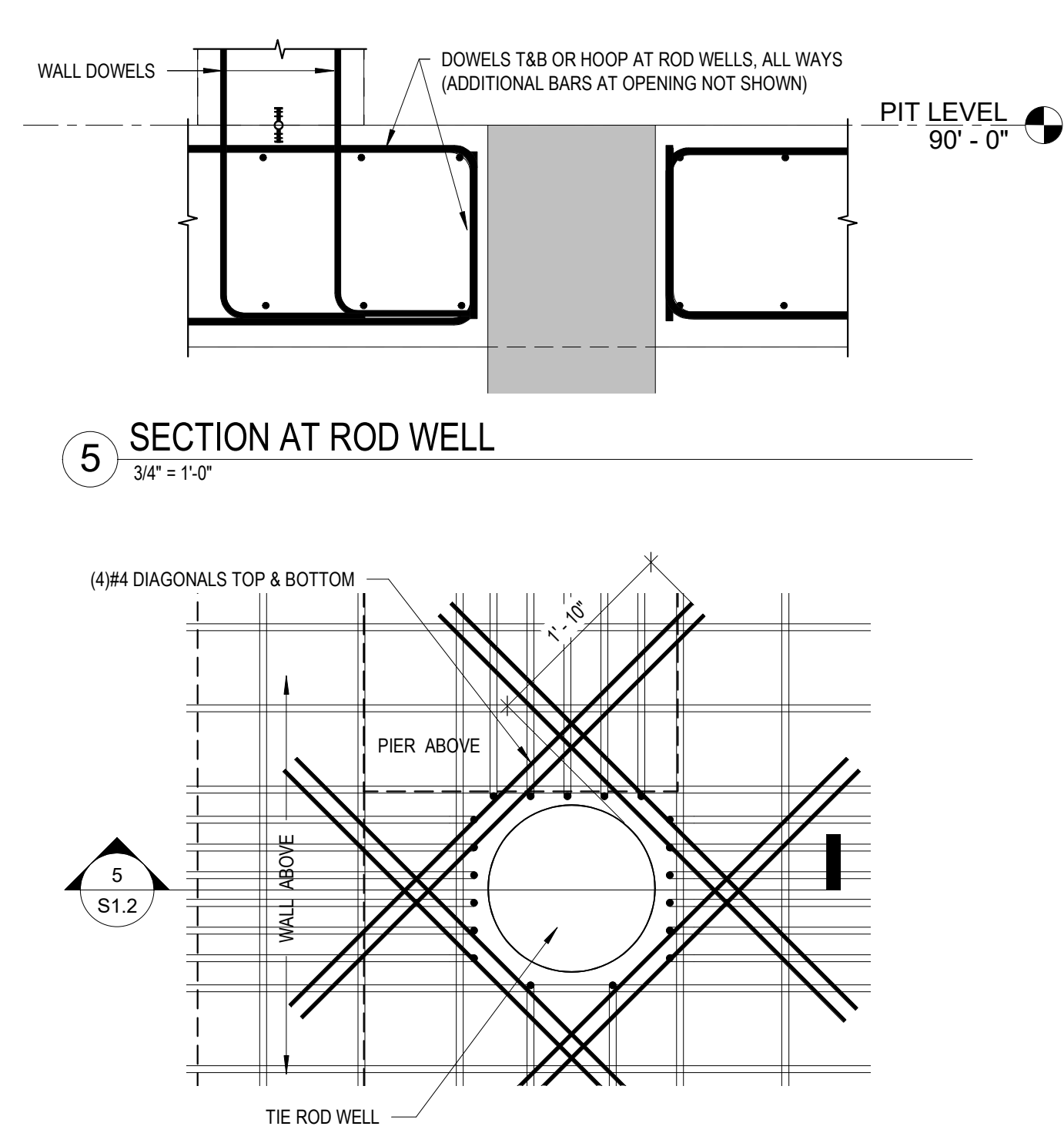
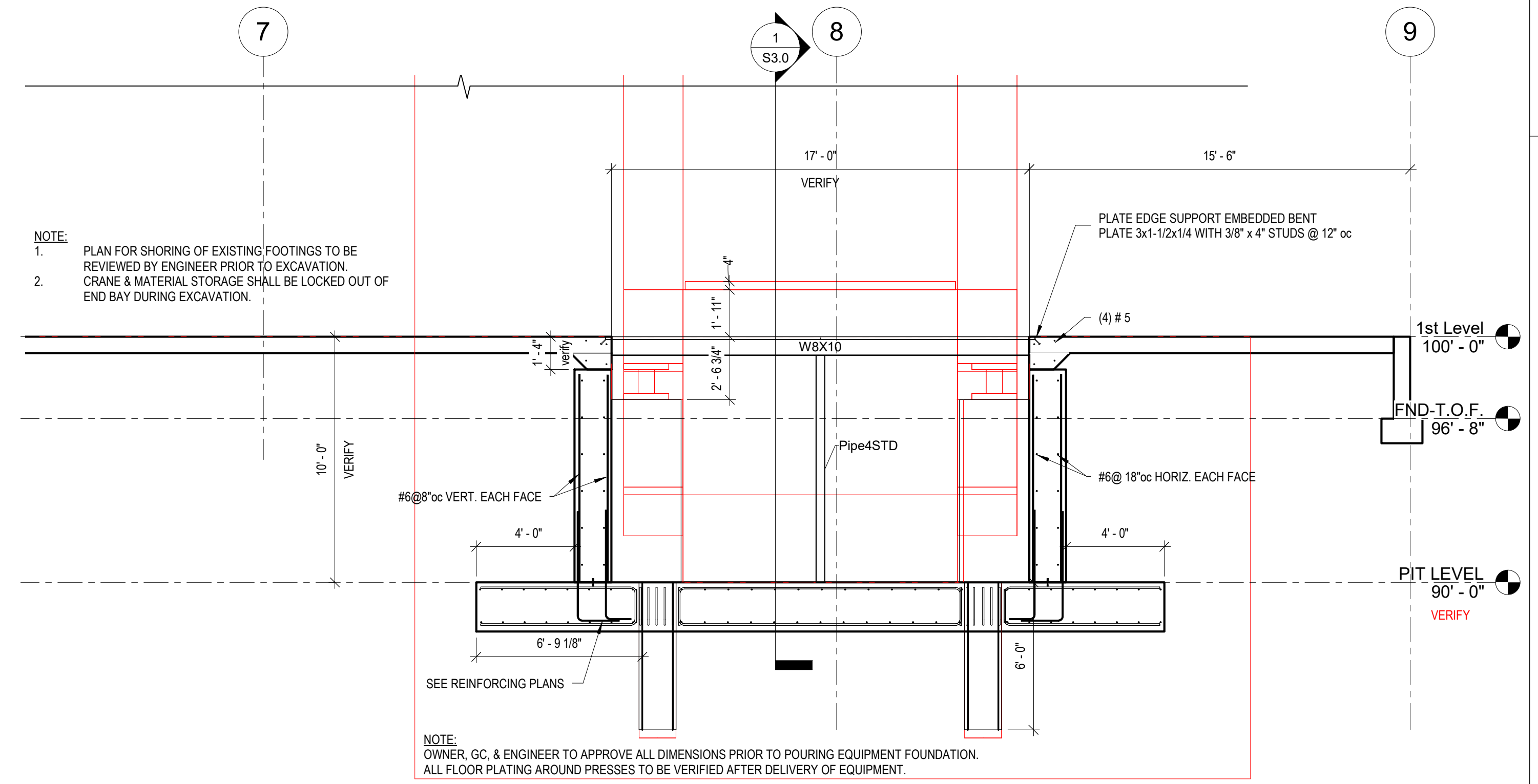
**REVISIONS**

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<p><b>THESE DOCUMENTS REFLECT INTENT AND MAY BE SUBJECT TO CHANGE. THESE ARE NOT FINAL CONSTRUCTION DOCUMENTS AND SHOULD NOT BE USED FOR FINAL BIDDING OR CONSTRUCTION-RELATED PURPOSES.</b></p>		

**NOT FOR CONSTRUCTION**

SHEET TITLE:	FOUNDATION DETAILS
JOB NUMBER:	22070
ISSUED DATE:	09.23.2022
DRAWN BY:	ks
SHEET NUMBER:	S1.2

**S1.2**



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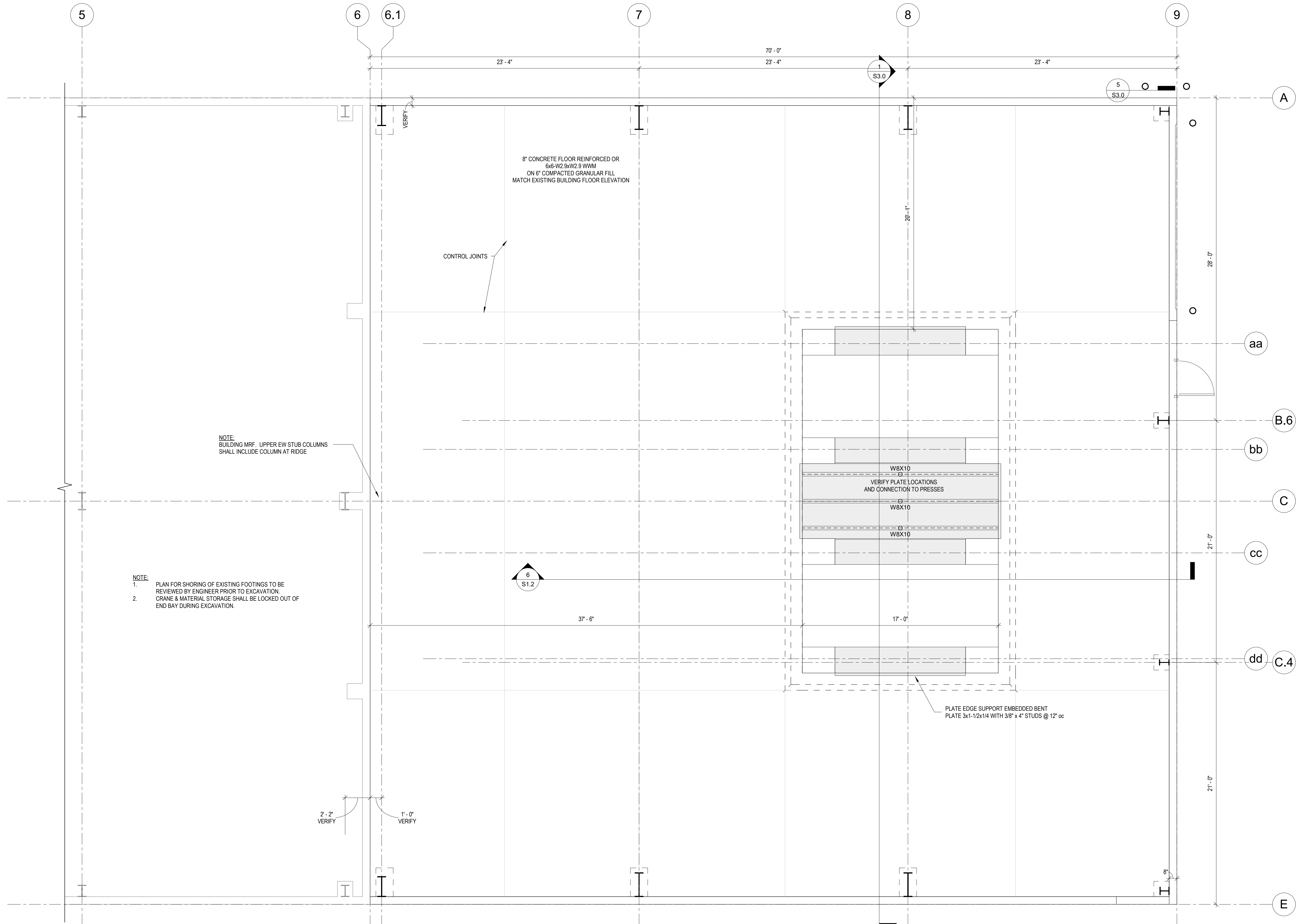


NORTH



# Atlas Metals ADDITION

521 Biddle St  
Waukesha, WI 53186



NOTE:  
1. PLAN FOR SHORING OF EXISTING FOOTINGS TO BE REVIEWED BY ENGINEER PRIOR TO EXCAVATION.  
2. CRANE & MATERIAL STORAGE SHALL BE LOCKED OUT OF END BAY DURING EXCAVATION.

NOTE:  
BUILDING MRF. UPPER EW STUB COLUMNS SHALL INCLUDE COLUMN AT RIDGE

8" CONCRETE FLOOR REINFORCED OR  
6x6-W2.9xW2.9 WWM  
ON 6" COMPACTED GRANULAR FILL  
MATCH EXISTING BUILDING FLOOR ELEVATION

CONTROL JOINTS

W8x10  
VERIFY PLATE LOCATIONS  
AND CONNECTION TO PRESSES  
W8x10  
W8x10

PLATE EDGE SUPPORT EMBEDDED BENT  
PLATE 3x1-1/2x1/4 WITH 3/8" x 4" STUDS @ 12" oc

1 1st Level  
1/4" = 1'-0"

### REVISIONS

No.	DATE	DESCRIPTION
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### NOT FOR CONSTRUCTION

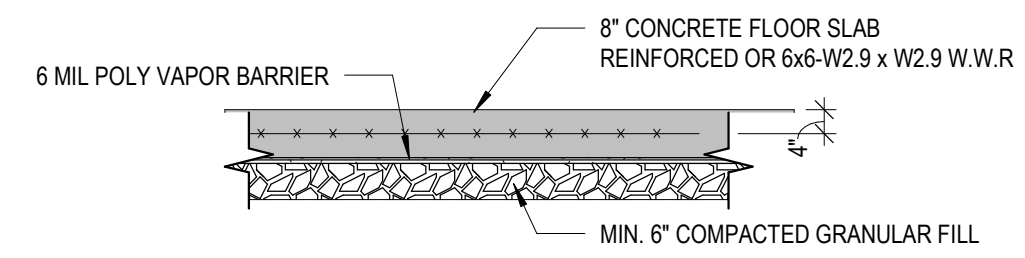
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JOB NUMBER: 22070  
ISSUED DATE: 09.23.2022  
DRAWN BY: ks  
SHEET NUMBER:

# S2.0

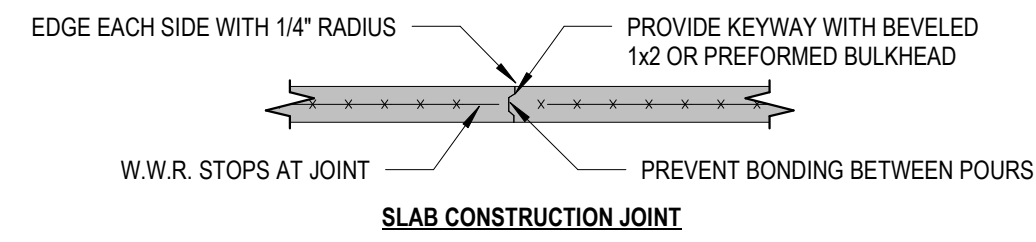


# Atlas Metals ADDITION

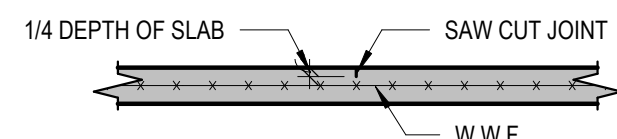
521 Biddle St  
Waukesha, WI 53186



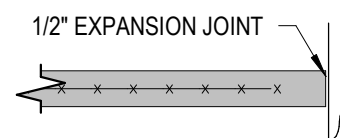
TYP. FLOOR SLAB



SLAB CONSTRUCTION JOINT



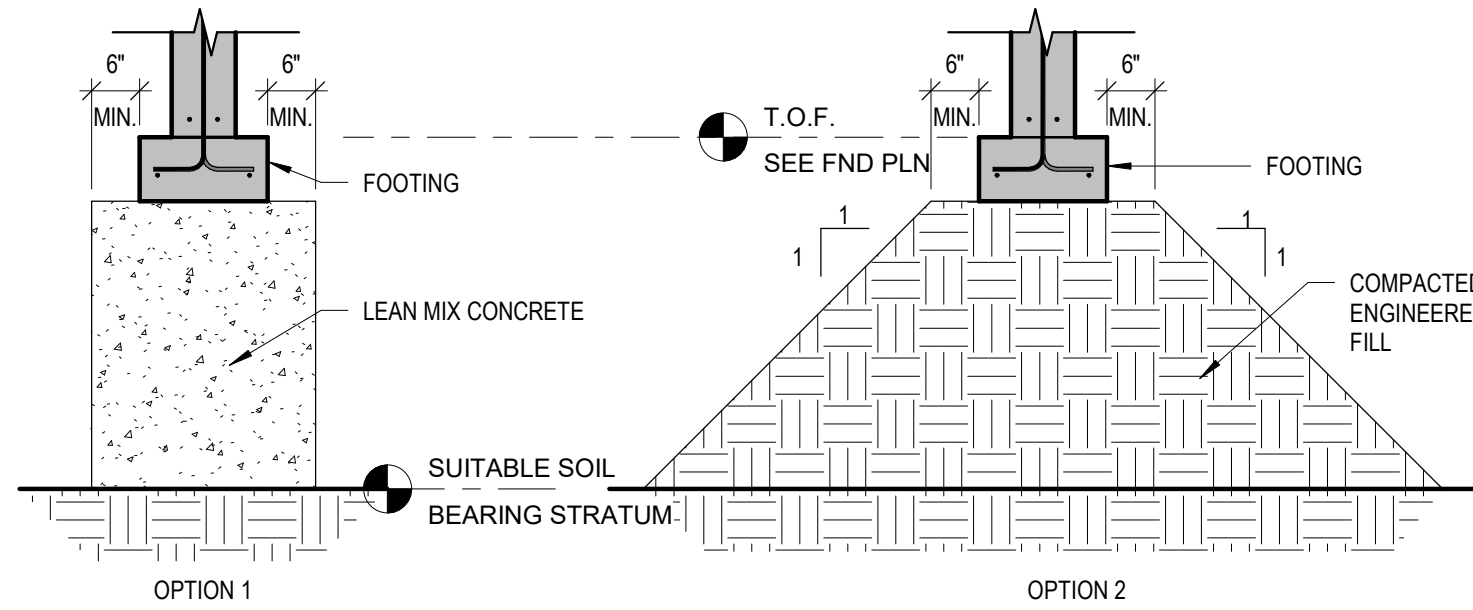
SLAB CONTROL JOINT



SLAB ISOLATION JOINT

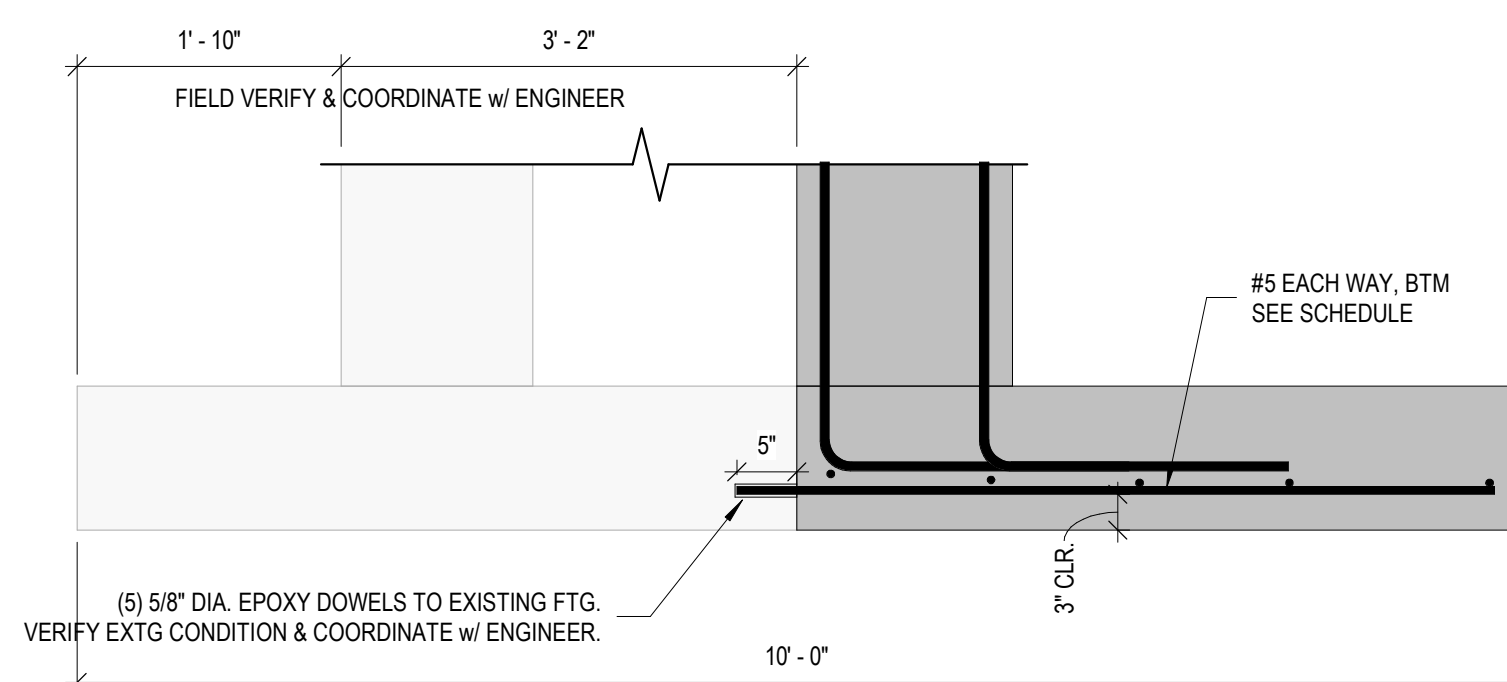
NOTES:  
1. LAP ALL WELDED WIRE REINFORCEMENT 8".

4 INTERIOR SLAB ON GRAD CONST. JOINTS  
3/8" = 1'-0"

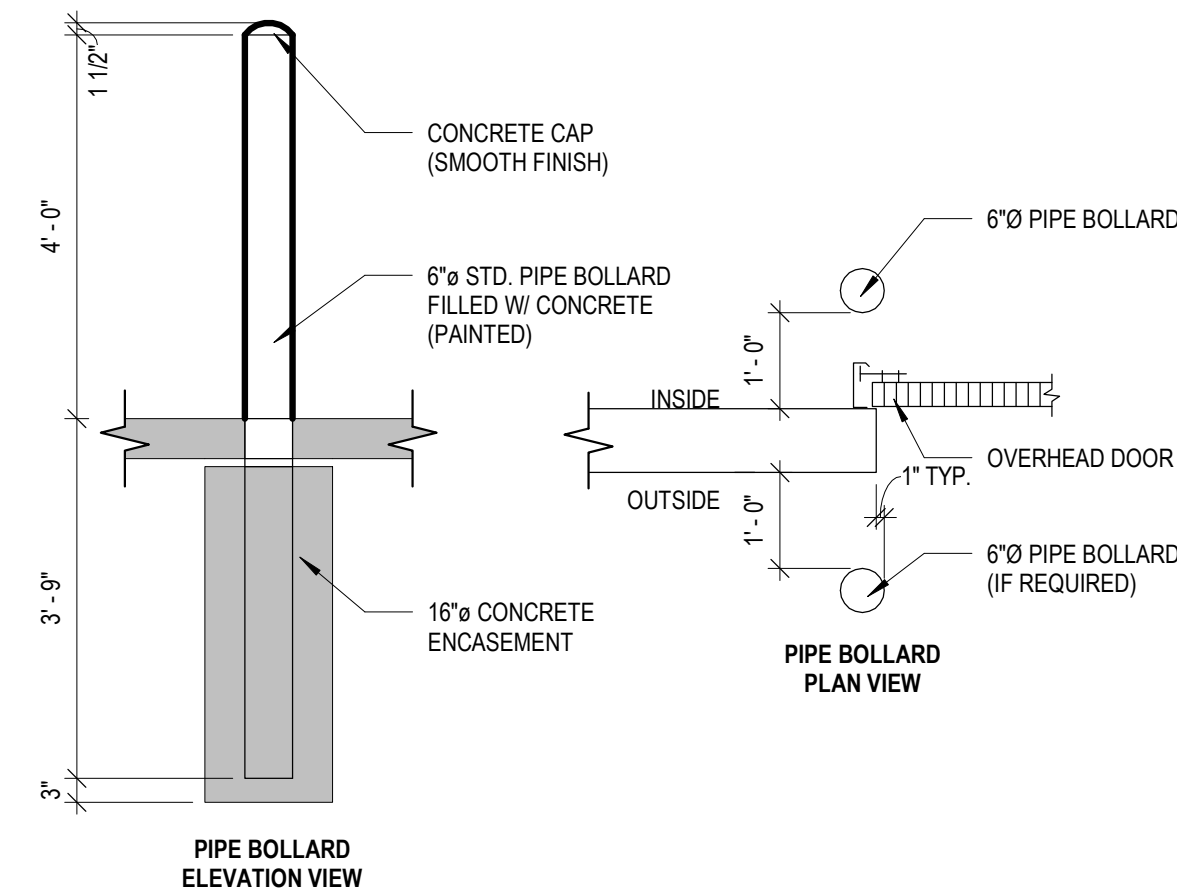


- SUITABLE SOIL BEARING STRATUM TO BE DETERMINED BY GEOTECHNICAL ENGINEER IN FIELD.  
- LEAN MIX CONCRETE  $f_c = 1000$  PSI @ 28 DAYS MINIMUM.  
- COMPACTED ENGINEERED FILL TO BE PLACED IN 5' LIFTS MAXIMUM AND COMPACTED TO 95% MODIFIED PROCTOR.  
- SEE GEOTECHNICAL REPORT FOR ADDITIONAL INFORMATION.  
- DETAILS APPLY TO CONTINUOUS STRIP FOOTINGS AND TO ISOLATED SPREAD FOOTINGS INCLUDING INTERIOR FOOTINGS.

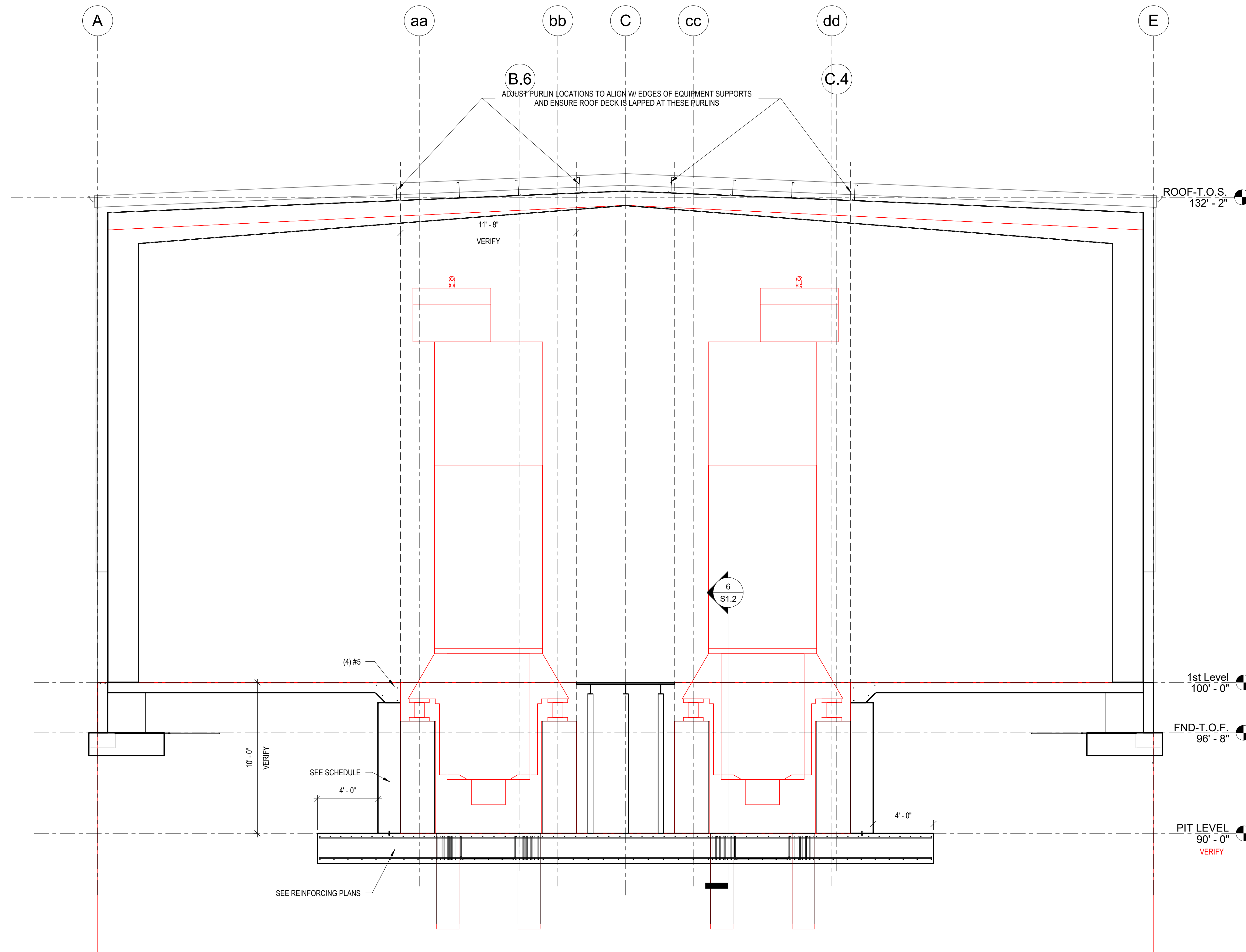
3 TYP. FILL BELOW FOOTING  
1/2" = 1'-0"



2 COMBINED FOOTING  
3/4" = 1'-0"



5 PIPE BOLLARD  
1/2" = 1'-0"



1 NORTH-SOUTH SECTION  
1/4" = 1'-0"

**REVISIONS**

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**NOT FOR CONSTRUCTION**

SHEET TITLE:	DETAILS
JOB NUMBER:	22070
ISSUED DATE:	09.23.2022
DRAWN BY:	ks
SHEET NUMBER:	

**S3.0**



**GENERAL REQUIREMENTS**

- A. NOTES & DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER THESE GENERAL NOTES.
  - B. ALL MATERIALS AND WORK PERFORMED SHALL CONFORM TO THE REQUIREMENTS OF THE WISCONSIN ADMINISTRATIVE CODE INCLUDING LOCAL ORDINANCES AND AMENDMENTS.
  - C. NO CHANGES ARE TO BE MADE TO THESE PLANS WITHOUT THE KNOWLEDGE AND WRITTEN CONSENT OF THE ARCHITECT AND ENGINEER.
- DESIGN CRITERIA
- A. IBC 2015
  - B. ASCE 7-10
- DESIGN METHOD
- A. NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (NDS-2015)
  - B. BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI-318-2014);
  - C. SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (AISC 13TH EDITION);
  - D. SPECIFICATION FOR DESIGN OF COLD FORMED STRUCTURAL MEMBERS (AISI 2012);
  - E. BUILDING CODE REQUIREMENTS AND SPECIFICATIONS FOR MASONRY STRUCTURES (TNS 402-13/ACI 530-13)

**DESIGN LOADS**

ROOF	30.0 PSF	GROUND SNOWLOAD
	21.0 PSF	ROOF SNOWWC=1.0
	3 PSF	DEAD LOAD + FRAMES
	5 PSF	COLLATERAL LOAD
WIND	115 MPH	EXP B PER ASCE 7-10
		PARTIALLY ENCLOSED BUILDINGS
SEISMIC	D	SITE CLASS
	II	SEISMIC GROUP
	SDS	8.10 %
	SD1	7.70%
B	SEISMIC USE GROUP	

**EROSION CONTROL NOTES**

- A. GRADING AND DEVELOPMENT SITE DISTURBANCE SHALL CONFORM TO PLANS AND SPECIFICATIONS. TEMPORARY EROSION CONTROL METHODS AND SCHEDULE FOR IMPLEMENTATION SHALL BE REVIEWED BY THE ENGINEER PRIOR TO COMMENCING WORK.
- B. TEMPORARY EROSION CONTROL MEASURES SHALL CONFORM TO PRACTICES AND RECOMMENDATIONS OF THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES AND BEST MANAGEMENT PRACTICES.
- C. EXPOSED SOIL FROM GRADING OPERATIONS SHALL BE RESEEDED WITHIN 7 DAYS. USE COMMON 65% KENTUCKY BLUEGRASS 20% FINE FESCUES 15% RYEGRASS SEED MIXTURE AT THE RATE 7 POUNDS PER 1000 SQUARE FEET AREA WITH STRAW OR BURLAP COVERING TO RETAIN SURFACE MOISTURE UNTIL NEW GRASS IS ESTABLISHED.
- D. PROPOSED ALTERNATE EROSION CONTROL MEASURES FROM THOSE DESCRIBED IN THE PLANS SHALL BE REVIEWED AND APPROVED BY THE ENGINEER.
- E. SOIL OR MUD TRACKED ONTO PUBLIC STREETS SHALL BE CLEANED AT THE END OF EACH WORK DAY.
- F. CONTRACTOR SHALL CONTACT DIGGERS HOTLINE AT LEAST 7 DAYS PRIOR TO ANY GRADING OR EXCAVATION TO LOCATE AND FLAG ALL EXISTING UNDERGROUND UTILITIES.
- G. UTILITIES IMPACTING THE CONSTRUCTION PLANS SHALL REQUIRE ADDITIONAL DESIGN WORK. REVIEW IMPACTS WITH THE ENGINEER.
- H. LOCATION OF ALL KNOWN UTILITIES SHALL BE RECORDED IN AS-BUILT PLANS AT COMPLETION OF WORK.
- I. GEOTEXTILE FABRIC USE MIRAFI FILTERWEAVE OR EQUIVALENT TO LINE TRENCHES. FABRIC SHALL BE CONTINUOUS, OVERLAP 12" MINIMUM FOR CONTINUITY. ADD A SEPARATE GEOTECH FABRIC COVER OVER THE TRENCH OVERLAPPING THE SIDE OF THE TRENCH 12". COVER FABRIC WITH 1-1/2" GRAVEL 3" - 6" DEEP.
- J. CHECKDAMS WHERE SHOWN IN PLAN SHALL BE CONSTRUCTED OF 2 LAYERS 90 MIL PLASTIC SHEET. WRAP THE SIDES AND BOTTOM OF THE TRENCH 12". SEE DETAIL.

**FOUNDATION:**

- A. THE SOIL BEARING CAPACITY IS PRESUMED TO BE 3000 PSF. SOIL ENGINEERS TO VERIFY BEARING CAPACITY AND EXPLORE SUBGRADE TO A DEPTH OF 45' FOR UNSTABLE SOIL CONDITIONS.
- B. COMPLETE NORMAL CLEARING AND GRUBBING OPERATIONS OVER THE ENTIRE BUILDING PAD AREA.
- C. REMOVE UNSUITABLE MATERIAL BELOW FOUNDATION. THE DEPTH OF REMOVAL IS DICTATED BY THE UNSUITABLE SOILS ENCOUNTERED SUCH AS SILT, ORGANIC MATTER, ROOTS, VEGETATION AND RANDOM FILL MATERIALS, I.E. WOOD, SCRAP METAL, AND MUCK.
- D. FOUNDATIONS SHALL BEAR ON UNDISTURBED SOIL WITH A CAPACITY OF 3000 PSF, OR ON COMPACTED FILL WITH A BEARING CAPACITY OF NOT LESS THAN 3000 PSF.
- E. FILL MATERIALS REQUIRED SHALL BE PLACED IN LIFTS NOT TO EXCEED 9" AND COMPACTED TO 95% RELATIVE COMPACTION AT OPTIMUM MOISTURE CONTENT WITHIN A DISTANCE OF 5 FEET BEYOND THE BUILDING EDGES.
- F. WHEN USING COMPACTED FILL TO ACHIEVE THE PROPER GRADE FOR FOUNDATIONS, THE COMPACTED FILL SHALL HAVE A SLOPE OF NOT GREATER THAN 2' HORIZONTAL FOR EVERY 1' VERTICAL.
- G. PLACE GRANULAR MATERIAL UNDER FOOTINGS & FLOOR SLABS. MINIMUM 6"
- H. BASEMENT WALLS AND RETAINING WALL DESIGNS ARE PRECATED ON ALL FINAL RESTRAINTS AS SHOWN IN PLANS COMPLETED BEFORE BACKFILLING OPERATIONS ARE FINALIZED.
- I. DIFFERENTIAL BACKFILLING BETWEEN INTERIOR AND EXTERIOR OF WALL WHERE OCCURS, SHALL NOT EXCEED 2 FEET.
- J. MECHANICAL CONTRACTORS ARE RESPONSIBLE TO COORDINATE PLUMBING AND ELECTRICAL SLAB OPENINGS, CONDUIT AND PIPE RUNS, BLOCKOUTS, AND ALL OTHER SLAB ADJUSTMENTS WITH THE CONCRETE CONTRACTOR.
- K. GENERAL CONTRACTOR SHALL REVIEW ALL CHANGES TO FOUNDATION PLANS AND DETAILS WITH THE STRUCTURAL ENGINEER.

**CONCRETE:**

- A. TRANSIT MIXED CONCRETE SHALL CONFORM TO ASTM C94 SPECIFICATION FOR READY-MIXED CONCRETE.
- B. THE WATER CEMENT RATIO SHALL BE KEPT TO A MINIMUM, AND CONCRETE SLUMP SHALL NOT EXCEED 4 INCHES WHEN TESTED IN ACCORDANCE WITH ASTM C143.
- C. CONCRETE SHALL HAVE THE REQUIRED COMPRESSIVE STRENGTH AT 28 DAYS WHEN TESTED ACCORDING TO ASTM C39 AS FOLLOWS:

SLAB	4000 PSI
FOUNDATION	3000 PSI
RETAINING WALLS	3000 PSI
GROUT FOR BASE PLATES	4000 PSI
DOCK WALLS	3000 PSI

- D. PORTLAND CEMENT SHALL CONFORM TO ASTM C150 SPECIFICATION FOR PORTLAND CEMENT.
- E. FINE AND COURSE AGGREGATES SHALL CONSIST OF CLEAN, HARD, STRONG AND DURABLE INERT MATERIAL, FREE OF INJURIOUS AMOUNTS OF DELETERIOUS SUBSTANCES AND CONFORM TO ASTM C33 SPECIFICATION FOR CONCRETE AGGREGATES.
- F. MIXING WATER SHALL BE FREE OF ANY ACID, ALKALI, OIL OR ORGANIC MATERIAL THAT MAY INTERFERE WITH THE SETTING OF THE CEMENT.
- G. ALL EXTERIOR CONCRETE SHALL BE AIR-ENTRAINED. THE ENGINEER SHALL APPROVE ALL ADMIXTURES.
- H. REINFORCING STEEL SHALL BE ASTM A615, GRADE 60, BARS TO BE WELDED SHALL BE IDENTIFIED AS GRADE 60W.
- I. WELDED WIRE FABRIC OR GAGE AND SPACING SPECIFIED SHALL CONFORM TO THE REQUIREMENTS OF ASTM A62
  - 1. MANUFACTURING AND WAREHOUSE AREA SLABS: 6x6-W2.9xW2.9
  - 2. OFFICE AREA SLABS: 6x6-W1.4xW1.4
- J. REINFORCING SHALL HAVE THE MINIMUM COVER REQUIREMENTS AS INDICATED IN ACI-318, LATEST EDITION WITH THE FOLLOWING MINIMUM VALUES:
  - 1. CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH: 3"
  - 2. FORM CAST AND PERMANENTLY EXPOSED TO EARTH OR WEATHER: 1-1/2" FOR #5 BAR AND SMALLER, AND 2" FOR #6 BAR AND LARGER.
- K. DIMENSIONS OF THE FINISHED PRODUCT SHALL BE WITHIN THE TOLERANCES OF ACI 117, LATEST EDITION.
- L. ALL CONCRETE SHALL CURE A MINIMUM OF 7 DAYS. IF FORMS ARE REMOVED BEFORE THE END OF THE CURING PERIOD, COAT NEWLY EXPOSED SURFACES WITH LIQUID CURING COMPOUND.
- M. USE CURE-SEAL-HARDENER: ASHFORD FORMULA, ON THE FLOORS, A WATER-BASED CHEMICALLY REACTIVE PENETRATING SEALER AND HARDENER THAT SEALS BY DENSIFYING CONCRETE SO THAT WATER MOLECULES CANNOT PASS THROUGH BUT AIR AND WATER VAPOR CAN, AND ALLOWS CONCRETE TO ACHIEVE FULL COMPRESSIVE STRENGTH, MINIMIZING SURFACE CRAZING AND ELIMINATING DUSTING. INSTALL PER MANUFACTURES SPECIFICATIONS.
  - 1. ABRASION RESISTANCE TO REVOLVING DISKS: AT LEAST A 32.5% IMPROVEMENT OVER UNTREATED SAMPLES WHEN TESTED IN ACCORDANCE WITH ASTM C779.
  - 2. SURFACE ADHESION: AT LEAST A 22% INCREASE IN ADHESION FOR EPOXY WHEN TESTED IN ACCORDANCE WITH ASTM D3359.
  - 3. HARDENING: AS FOLLOWS WHEN TESTED IN ACCORDANCE WITH ASTM C39:
    - a. AFTER 7 DAYS: AN INCREASE OF AT LEAST 40% OVER UNTREATED SAMPLES.
    - b. AFTER 28 DAYS: AN INCREASE OF AT LEAST 38% OVER UNTREATED SAMPLES.
  - 4. COEFFICIENT OF FRICTION: 0.86 DRY, 0.69 WET, WHEN TESTED IN ACCORDANCE WITH ASTM C1028.
  - 5. REBOUND NUMBER: AN INCREASE OF AT LEAST 13.3% OVER UNTREATED SAMPLES WHEN TESTED IN ACCORDANCE WITH ASTM C805.
  - 6. LIGHT EXPOSURE DEGRADATION: NO EVIDENCE OF ADVERSE EFFECTS ON TREATED SAMPLES WHEN TESTED IN ACCORDANCE WITH ASTM G23.

- A. PROVIDE DOWELS IN WALL FOOTINGS WITH EQUAL SIZE AND SPACING AS VERTICAL WALL, UNLESS NOTED OTHERWISE.
- B. USE NON-SHRINK, NON-METALLIC GROUT UNDER BASE PLATES AS INDICATED ON THE DRAWINGS.
- C. THE CONCRETE CONTRACTOR SHALL COORDINATE ALL OTHER TRADES FOR SIZE AND LOCATION OF OPENINGS IN WALL AND FLOORS. ALL OPENINGS IN STRUCTURAL CONCRETE SHALL BE DETAILED OR APPROVED BY THE ENGINEER.
- D. PLACE STEEL REINFORCEMENT AS PER CRSI STANDARDS.
- E. STEEL DESIGNATED CONTINUOUS (CONT.) #6 BARS OR SMALLER SHALL USE 33 INCH MINIMUM LAP LENGTH.
- F. PROVIDE SAWCUT CONTROL JOINTS AS SHOWN IN FOUNDATION PLANS OR AT SPACING NOT GREATER THAN 3X THE SLAB THICKNESS. SAWCUTS SHALL BE 1/3 THE SLAB DEPTH. PLACE SAWCUTS 1-1/2 HRS TO 4 HRS AFTER FINISHING BEFORE CONCRETE BEGINS TO COOL.
- G. HAND TOOLED CONTROL JOINTS MAY BE SUBSTITUTED FOR SAWCUT CONTROL JOINTS.
- H. ALL CONSTRUCTION & CONTROL JOINTS THAT ARE REQUIRED TO BE SEALED SHALL BE DONE SO IN ACCORDANCE WITH INSTRUCTIONS OF APPROVED MATERIAL MANUFACTURER. ADJUST CONTROL & CONSTRUCTION JOINTS TO ACHIEVE INSTALLATION PER SEALANT MANUFACTURER'S REQUIREMENTS.
- I. ALL ANCHORS THAT WILL BE EPOXY EMBEDDED NEED TO BE INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS AND STANDARDS. INSTALLER IS RESPONSIBLE FOR PROPER CLEAN OUT OF THE HOLE TO ENSURE THE HOLE IS DRY. INSTALLER IS TO NOTIFY ENGINEER IF VOIDS OR CRACKS ARE PRESENT IN THE DRILLED HOLE.

**MASONRY VENEER**

- A. ALL MASONRY VENEER MATERIALS AND INSTALLATION SHALL COMPLY WITH LOCAL AND STATE CODES, AND SPECIFICATIONS OF THE NCM. ALL MASONRY VENEER WORK SHALL BE LAID IN CEMENT AND LIME MORTAR, WITH ALL MASONRY FACES FULL BEDDED IN PLACE HAVING BOTH VERTICAL AND HORIZONTAL JOINTS ON STRAIGHT LINES. MASONRY VENEER SHALL BE TIED TO MASONRY BACK-UP WITH HOHMANN & BARNARD, INC. LADDER TYPE #270 ADJUSTABLE EYE-WIRE REINFORCEMENT AT 16" ON CENTER VERTICALLY. USE HOHMANN & BARNARD 2 SEAL TIE @ 16" ON CENTER VERTICALLY MAX. 16" ON CENTER TO OTHER BACKUP MATERIALS OR AS NOTED ON DRAWINGS (MAX. 1.77 S.F. SPACING).
- B. PROVIDE A 3/8" CONTROL JOINT AT 20'-0" O.C. UNLESS SHOWN OTHERWISE ON PLANS.
- C. INSTALL WEEP VENTS AT TOP AND BOTTOM COURSE OF MASONRY, AND ABOVE ALL OPENINGS IN EXTERIOR WALLS AT 16" ON CENTER OR AS INDICATED. FLASHING SHALL BE PERM-A-BARRIER FLASHING BY W.R. GRACE OR EQUAL. WITH STAINLESS STEEL METAL DRIP EDGE. INSTALL FLASHINGS AT BOTTOM COURSE OF MASONRY AND ABOVE ALL OPENINGS IN EXTERIOR WALLS. INSTALL PER MANUFACTURERS RECOMMENDATIONS.
- D. PREMIUM COLOR MASONRY UNITS AS SELECTED UNLESS COLOR SCHEDULE AND AGGREGATE SHOWN WITHIN PLANS.

**STRUCTURAL STEEL**

- A. PRIME PAINT RED.
- B. ALL STRUCTURAL STEEL SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF ASTM AND SHALL BE FABRICATED AND ERECTED ACCORDING TO AISC SPECIFICATIONS.
- C. ALL SHOP AND FIELD BOLTED CONNECTIONS SHALL USE A325 BOLTS AND NUTS, UNLESS OTHERWISE NOTED. INSTALL BOLTS AND NUTS PER AISC.
- D. STEEL FABRICATOR & SUPPLIER SHALL DESIGN CONNECTION FOR THE LOADS INDICATED ON THE DRAWINGS. CONNECTIONS SHALL BE SHOP WELDED AND FIELD BOLTED.
- E. STEEL FABRICATOR & SUPPLIER SHALL SUBMIT DIGITAL (PDF) ERECTION/SHOP DRAWINGS FOR DESIGN CONCEPT APPROVAL.
- F. WELDING SHALL CONFORM TO THE LATEST EDITION OF AWS D1.1 AND ALL WELDERS ARE TO BE CERTIFIED.
- G. ANY FIELD MODIFICATIONS TO STEEL WILL REQUIRE APPROVAL BY THE ENGINEER OF RECORD.
- H. BASIC BOLTED CONNECTIONS ARE DESIGNED AS TYPE "BEARING N" UNLESS NOTED OTHERWISE.
- I. ALL STRUCTURAL STEEL SECTIONS AND WELDED PLATE MEMBERS ARE DESIGNED IN ACCORDANCE WITH THE AISC "SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL BUILDINGS" ALLOWABLE STRESS DESIGN, NINTH EDITION.
- J. ALL WELDING OF STRUCTURAL STEEL IS BASED ON AWS D1.1 "STRUCTURAL WELDING CODE".
- K. MATERIAL SPECIFICATIONS:

PLATE 1"-12" WIDE AND THROUGH 1/2"	A572 GRADE 50, MODIFIED TO 55 KSI
THICK	A-36
OTHERS	A-36
BUILT-UP STRUCTURAL WEB MATERIAL	A-607 GRADE 55 OR A507 GRADE 50 W/MIN. YIELD OF 55 KSI
HOT-ROLLED STRUCTURAL	A992 GRADE 50
HSS STRUCTURAL TUBE	A500 GR. B (46 KSI RECT/42KSI ROUND)
STRUCTURAL PIPE	A53 GRADE B (35 KSI)
ROD BRACING	A-36
CABLE BRACING	EHS A475
WELDS	AWS/D1.1 E70XX
HIGH-STRENGTH BOLTS	A-325 OR A-490
MACHINE BOLTS	A-307 GRADE A OR SAE J429 GRADE 2

- L. THE GENERAL CONTRACTOR AND/OR ERECTOR IS RESPONSIBLE TO SAFELY AND PROPERLY ERECT THE METAL BUILDING SYSTEM IN CONFORMANCE WITH THESE DRAWINGS, OSHA REQUIREMENTS, AND MBMA STANDARDS PERTAINING TO PROPER ERECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, THE CORRECT USE OF TEMPORARY GUYS AND BRACING WHERE NEEDED FOR SQUARING, PLUMBING, AND SECURING THE STRUCTURAL AND SECONDARY FRAMING. SECONDARY WALL FRAMING MEMBERS (GIRTS) ARE NOT DESIGNED TO FUNCTION AS A WORK PLATFORM OR PROVIDE SAFETY TIE OFF ATTACHMENT IN ACCORDANCE WITH OSHA REQUIREMENTS. SECONDARY ROOF FRAMING MEMBERS (PURLINS OR BAR JOISTS) ARE NOT DESIGNED TO PROVIDE SAFETY TIE OFF ATTACHMENT IN ACCORDANCE WITH OSHA REQUIREMENTS.
- M. ALL HIGH STRENGTH BOLTS ARE TYPE A325 AND ARE TO BE FULLY TIGHTENED BY AN ACCEPTABLE METHOD, SUCH AS "TURN OF THE NUT" METHOD, UNLESS NOTED OTHERWISE. BOLTS IN STANDARD HOLES DO NOT REQUIRE THE USE OF WASHERS, PER ASTM A325, SECTION 5(B).
- N. ALL A307 MACHINE BOLTS ARE TO BE BROUGHT TO A "SNUG TIGHT" CONDITION TO ENSURE THAT THE MATERIALS IN THE JOINT ARE BROUGHT INTO GOOD CONTACT WITH EACH OTHER.
- O. WASHERS ARE REQUIRED AT ALL SLOTTED CONNECTIONS.
  - 1. AT HOLE TO SLOT CONNECTIONS, ONE WASHER IS REQUIRED ON THE SLOTTED SIDE.
  - 2. AT SLOT TO SLOT CONNECTIONS, TWO WASHERS ARE REQUIRED, ONE ON EACH SIDE OF THE CONNECTION.
- P. STRUCRITE, INC. SHALL BE NOTIFIED PRIOR TO ANY FIELD MODIFICATIONS. MODIFICATIONS SHALL BE APPROVED BY STRUCRITE, INC., BEFORE WORK IS UNDERTAKEN.
- Q. ALL WELDING MUST BE PERFORMED BY AWS CERTIFIED WELDERS WHO ARE QUALIFIED FOR THE WELDING PROCESSES AND POSITIONS INDICATED. ALL WORK MUST BE COMPLETED AND INSPECTED IN ACCORDANCE WITH THE APPLICABLE AWS SPECIFICATIONS. WELD ELECTRODES USED FOR THE SMAW (OR STICK) WELD PROCESS MUST BE 70 KSI STEEL AND LOW HYDROGEN CONTENT.

**STEEL ROOF DECK**

- A. USE A MINIMUM 22GA PTD, 1-1/2 INCH WIDE RIB, UNLESS NOTED DIFFERENTLY ON THE DRAWINGS.
- B. PANEL TO SPAN A MINIMUM OF THREE SPANS AND ALLOW FOR A MINIMUM OF 3" OVERLAP AT CENTERLINE OF JOISTS.
- C. DO NOT HANG OR ATTACH EQUIPMENT, MATERIALS, OR ANY LOADS TO THE METAL ROOF DECK. SEE DRAWINGS FOR FASTENER TYPE AND PATTERN.
- D.

**INTERIOR LIGHT GAGE PARTITION WALL:**

- A. ALL LIGHT GAGE STEEL FRAMING SHALL CONFORM TO THE AISI SPECIFICATION 2012 EDITION AND BE WELDED IN ACCORDANCE WITH AWS D1.3, OR SCREWED AS SHOWN. ALL WELDING TO BE DONE BY CERTIFIED WELDERS. SDS SHALL BE GRADE 1018 TO 1022.
- B. ALL STUDS, TRACKS, JOISTS, AND ACCESSORIES 18 GAGE AND LIGHTER SHALL HAVE A MINIMUM YIELD OF 33 KSI.
- C. ALL STUDS, TRACKS, JOISTS, AND ACCESSORIES 16 GAGE AND HEAVIER SHALL HAVE A MINIMUM YIELD OF 50 KSI.
- D. LATERAL PARTITION LOAD = 5 PSF, DEFLECTION LIMIT = L/360.
- E. LATERAL BRIDGING SPACING SHALL BE AT 4' 0".
- F. STUDS, TRACKS, BRIDGING, AND BRACING MEMBERS TO BE OF THE TYPE, SIZE, AND GAGE AS SHOWN ON THE PLANS AND DETAILS.
- G. WALL TOP TRACK BRACED AT 4' 0" O.C. BY KNEE BRACE AND CONNECTED AS SHOWN ON DRAWINGS.
- H. THE WALL BOTTOM TRACK SHALL BE ANCHORED TO FLOOR WITH 1/2" Ø SLEEVE ANCHORS @ ENDS & 48" O.C. MAX OR POWER ACTUATED NAILS @ ENDS & 48" O.C. MAX.
- I. PROVIDE SLIP TRACK AT TOP OF PARTITION WALLS.
- J. STUDS DESIGNED FULL HEIGHT FOR BOTH FLANGES BRACED BY ATTACHED WALL SHEATHING AT 12" O.C.
- K. HOLES IN THE WEBS OF CEILING AND FLOOR JOIST ARE NOT ALLOWED UNLESS REVIEWED AND APPROVED BY ENGINEER PRIOR TO INSTALLATION.

**PRE-ENGINEERED METAL BUILDING**

- 1. PRE-ENGINEERED METAL BUILDING SHALL BE DESIGNED FOR LOADS AS INDICATED IN "DESIGN LOADS" SECTION.
- 2. FURNISH FINAL FOUNDATION LOADS A MINIMUM OF TWO (2) WEEKS AFTER ORDER.
- 3. PRE-ENGINEERED METAL BUILDING MANUFACTURER SHALL FURNISH DIGITAL DRAWINGS AND DIGITAL SET OF COMPLETE DESIGN CALCULATIONS WITH ORIGINAL SIGNATURE AND SEAL BY A WISCONSIN REGISTERED PROFESSIONAL ENGINEER TO STRUCRITE, INC., FOR APPROVAL.
- 4. SUPERVISING PROFESSIONAL WILL REVIEW AND SUBMIT TO WISCONSIN DEPARTMENT OF SAFETY AND PROFESSIONAL SERVICES FOR APPROVAL AND SEND TO THE CONTRACTOR TO HAVE AVAILABLE ON SITE DURING CONSTRUCTION.
- 5. THE METAL BUILDING AS SHOWN SHALL BE MANUFACTURED BY:
  - a. METALLIC BUILDING SYSTEMS
  - b. NUCOR BUILDING SYSTEMS
  - c. FOREMOST BUILDINGS
  - d. KIRBY BUILDING SYSTEMS
  - e. AMERICAN BUILDINGS COMPANY
- 6. THE BUILDING SHALL BE SUPPLIED BY THE CONTRACTOR AS OUTLINED IN THE CONTRACT WITH THE OWNER AND AS SHOWN ON THE DRAWINGS.
- 7. BUILDING WILL BE DESIGNED TO SUPPORT ROOF AND WALL PANELS TYPES AS SHOWN ON THE DRAWINGS.
- 8. THE ERECTION OF THE METAL BUILDING AND THE INSTALLATION OF ACCESSORIES SHALL BE PERFORMED IN ACCORDANCE WITH THE BUILDING MANUFACTURER'S ERECTION DRAWINGS BY A QUALIFIED ERECTOR USING PROPER TOOLS AND EQUIPMENT. ERECTION PRACTICES SHALL, IN ADDITION, CONFORM TO PART IV, MBMA "CODE OF STANDARD PRACTICES." THERE SHALL BE NO FIELD MODIFICATIONS TO PRIMARY STRUCTURAL MEMBERS EXCEPT AS AUTHORIZED AND SPECIFIED BY THE BUILDING MANUFACTURER.

**EPDM ROOFING**

- A. CONFORM TO APPLICABLE CODE FOR ROOF ASSEMBLY WIND UPLIFT AND FIRE HAZARD REQUIREMENTS.
- SUBMITTALS**
- A. PRODUCT DATA FOR EVERY COMPONENT OF THE ROOFING SYSTEM INCLUDING SOURCE MANUFACTURERS FOR ALL COMPONENTS NOT DIRECTLY MANUFACTURED BY THE ROOFING MANUFACTURER.
  - 1. INDICATE MEMBRANE MATERIALS, FLASHING MATERIALS, INSULATION, VAPOR BARRIER, SURFACING, ADHESIVES, SEALANTS AND FASTENERS AND ANY OTHER COMPONENT THAT IS CONSIDERED ESSENTIAL TO MAINTENANCE OF A FULL AND COMPLETE INSTALLATION AND WARRANTY.
- B. SHOP DRAWINGS INDICATING WIND UPLIFT DESIGN, JOINT OR TERMINATION DETAIL CONDITIONS, CONDITIONS OF INTERFACE WITH OTHER MATERIALS.
- C. SUBMIT MANUFACTURER WARRANTY AND ENSURE FORMS HAVE BEEN COMPLETED IN OWNER'S NAME AND REGISTERED WITH MANUFACTURER.
- MANUFACTURERS**
- A. MEMBRANE MATERIALS: UNBALLASTED, ONE PLY EPDM, MECHANICALLY FASTENED OVER INSULATION.
  - 1. VERSICO
  - 2. CARLISLE
- B. INSULATION SHALL BE BY A SINGLE MANUFACTURER AND BE APPROVED FOR USE BY THE ROOFING MANUFACTURER, MINIMUM 2 LAYERS POLYISOCYANURATE.
- C. MEMBRANE COLOR TO BE SELECTED FROM MFR'S STANDARD COLORS.
- D. SEAMING MATERIALS: AS RECOMMENDED BY MEMBRANE MANUFACTURER.
- INSTALLATION**
- A. PROVIDE ALL ACCESSORY ITEMS THAT COMPOSE ANY MATERIAL OR COMPONENT PORTION OF THE ROOFING SYSTEM.
- B. VERIFY THAT SURFACES AND SITE CONDITIONS ARE READY TO RECEIVE WORK. PERFORM WORK IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS & NRCA ROOFING AND WATERPROOFING MANUAL.

**Atlas Metals ADDITION**

521 Biddle St  
Waukesha, WI 53186

**REVISIONS**

No.	DATE	DESCRIPTION
<p><b>THESE DOCUMENTS REFLECT INTENT AND MAY BE SUBJECT TO CHANGE. THESE ARE NOT FINAL CONSTRUCTION DOCUMENTS AND SHOULD NOT BE USED FOR FINAL BIDDING OR CONSTRUCTION-RELATED PURPOSES.</b></p>		

**NOT FOR CONSTRUCTION**

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