

**ONTARIO BUILDING CODE DATA MATRIX**
**PART 9 - HOUSING AND SMALL BUILDINGS**

OBC REFERENCE [1]							
9.00 BUILDING CODE VERSION	O.Reg. 332/12	LAST AMENDMENT O.Reg. 209/20					
9.01 PROJECT TYPE	NEW CONSTRUCTION	[A] 1.1.2.					
ELECTRICAL ENGINEERING OFFICE AND WAREHOUSE							
9.02 OCCUPANCY CLASSIFICATION	OCCUPANCY	USE	9.10.2.				
	F3	LOW HAZARD INDUSTRIAL	WAREHOUSE				
	D	BUSINESS & PERSONAL SERVICES	OFFICE				
9.03 SUPERIMPOSED MAJOR OCCUPANCIES	NO		9.10.2.3.				
9.04 BUILDING AREA (m <sup>2</sup> )	DESCRIPTION	EXISTING	NEW	TOTAL	[A] 1.4.1.2.		
	ENTIRE BUILDING	0.0	418.1	418.1			
9.05 MEZZANINE AREA (m <sup>2</sup> )	DESCRIPTION	EXISTING	NEW	TOTAL	9.10.4.1.		
	WAREHOUSE	0.0	28.0	28.0			
9.06 GROSS AREA (m <sup>2</sup> )	DESCRIPTION	EXISTING	NEW	TOTAL	[A] 1.4.1.2.		
	ENTIRE BUILDING	0.00	446.10	446.1			
9.07 BUILDING HEIGHT	1	STOREYS ABOVE GRADE	7.90	(m) ABOVE GRADE	[A] 1.4.1.2. &		
	0	STOREYS BELOW GRADE			9.10.4.		
9.08 NUMBER OF STREETS/ FIRE FIGHTER ACCESS	1	STREET(S)			9.10.20.		
9.09 SPRINKLER SYSTEM	NOT REQUIRED	Provided:	NONE		9.10.8.2-4.		
9.10 FIRE ALARM SYSTEM	NOT REQUIRED	TYPE PROVIDED	N/A		9.10.18.		
9.11 WATER SUPPLY IS ADEQUATE	YES	DRILLED WELL					
9.12 CONSTRUCTION TYPE	RESTRICTIONS	COMBUSTIBLE PERMITTED			9.10.6.		
	ACTUAL	COMBUSTIBLE	EAVY TIMBER CONSTRUCTION	NO			
9.12 POST-DISASTER BUILDING	NO				[A] 1.1.2.2.(2)		
9.13 OCCUPANT LOAD	FLOOR LEVEL/AREA	OCCUPANCY TYPE	BASED ON	OCCUPANT LOAD (PERSONS)	3.1.17.		
	GROUND FLOOR	WAREHOUSE	m <sup>2</sup> PER PERSON	8			
	GROUND FLOOR	OFFICE	m <sup>2</sup> PER PERSON	20			
	TOTAL			28			
9.14 BARRIER-FREE DESIGN	YES				9.5.2.		
9.15 HAZARDOUS SUBSTANCES	NO				9.10.13.		
9.16 REQUIRED FIRE RESISTANCE RATINGS	HORIZONTAL ASSEMBLY		FIRE RESISTANCE RATING (H)	SUPPORTING ASSEMBLY (H)	9.10.8.		
	FLOORS EXCEPT CRAWLSPACE		0.75	0.75			
	MEZZANINE		0	N/A			
	ROOF		0	N/A			
9.17 SPATIAL SEPARATION	WALL	EBF LIMITING AREA DISTANCE (m <sup>2</sup> )	MAX. AREA OF UPO (%)	REQUIRED FRR (H)	CONSTRUCTION TYPE	CLADDING TYPE	9.10.14.
	NORTH	55.7	35.0	100.0 -	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED	
	EAST NORTHERN	73.4	15.2	100.0 -	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED	
	EAST SOUTHERN	55.1	15.2	100.0 -	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED	
	SOUTH	55.7	39.8	100.0 -	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED	
	WEST NORTHERN	73.4	50.4	100.0 -	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED	
	WEST SOUTHERN	55.1	50.4	100.0 -	COMBUSTIBLE PERMITTED	COMBUSTIBLE PERMITTED	
9.18 PLUMBING FIXTURE REQUIREMENTS	FLOOR LEVEL/AREA	OCC. LOAD	OBC REF.	FIXTURES REQUIRED FIXTURES PROVIDED 9.31. & 3.7.4.			
				FEMALE MALE FEMALE MALE			
	WAREHOUSE	8.00	3.7.4.9.(2)	1 UNISEX	1 UNV. WR		
	OFFICE (14 PERSONS/m <sup>2</sup> )	14.00	3.7.4.7.(1)	1.00	1.00	1.00	1.00
9.19 ENERGY EFFICIENCY	NONRESIDENTIAL	COMPLIANCE OPTION:	SB-10, PRESCRIPTIVE, DIV.3				12.2.1.
	CLIMATIC ZONE		ZONE 2 (≥ 5000 DEGREE DAYS)				
	CLASSIFICATION		NON-RESIDENTIAL				
	OPAQUE ELEMENTS		MAX. U / MIN. R (I-P)		PROVIDED U-VALUE (I-P)		
	ROOF W/ ATTIC		R-71		R-71		
	WALLS, ABOVE GRADE		U-0.046		U-0.046		
	SLAB-ON-GRADE FLOORS - HEATED		R-10, FULL SLAB		R-10, FULL SLAB		
	WINDOWS		U-0.29		U-0.29		
9.20 NOTES	1	ALL REFERENCES ARE TO DIVISION B OF THE OBC UNLESS PRECEDED BY [A] FOR DIVISION A AND [C] FOR DIVISION C					

 Ontario Building Code Data Matrix, Part 9  
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 October 2016  
 R01

DOOR SCHEDULE:					
MARK:	QTY:	SIZE:	DESCRIPTION:	LOCATION:	LINTEL:
A	14	38"X84"	INTERIOR DOOR	OFFICES, CONFERENCE ROOM, FILING ROOM, STORAGE ROOM, PARTS ROOM, WASHROOMS, MECHANICAL ROOM	2PLY 2X6
B	1	72"X84"	EXTERIOR DOUBLE DOOR	FRONT ENTRANCE	3PLY 2X10
C	3	38"X84"	EXTERIOR DOOR	NORTH WALL, EAST WALL, WEST WALL	LVL 2900FB-2.0E 5½"X9½" C/W 4 JACK STUDS EACH SIDE
D	1	38"X84"	FIRE DOOR	WAREHOUSE ENTRANCE	2PLY 2X10
E	2	144"X144"	OVERHEAD DOOR	WAREHOUSE	3PLY 2X10

VERIFY ALL WINDOW AND DOOR ROUGH OPENINGS WITH OWNER PRIOR TO CONSTRUCTION. ALL WINDOW LINTELS TO HAVE 1 JACK STUD EACH SIDE UNLESS NOTED OTHERWISE

WINDOW SCHEDULE:					
MARK:	QTY:	SIZE (WxH):	DESCRIPTION:	LINTEL:	
1	2	60"X60"	DOUBLE PANE, ARGON FILLED, LOW-E, CASEMENT MAX U-VALUE TO BE 0.29 (I-P)	2PLY 2X10	
2	6	60"X60"	DOUBLE PANE, ARGON FILLED, LOW-E, AWNING MAX U-VALUE TO BE 0.29 (I-P)	LVL 2900FB-2.0E 5½"X9½" C/W 4 JACK STUDS EACH SIDE	
3	6	72"X24"	DOUBLE PANE, ARGON FILLED, LOW-E, FIXED MAX U-VALUE TO BE 0.29 (I-P)	LVL 2900FB-2.0E 5½"X9½" C/W 4 JACK STUDS EACH SIDE	

VERIFY ALL WINDOW AND DOOR ROUGH OPENINGS WITH OWNER PRIOR TO CONSTRUCTION. ALL WINDOW LINTELS TO HAVE 1 JACK STUD EACH SIDE UNLESS NOTED OTHERWISE

WALL SCHEDULE:			
MARK:	DESCRIPTION:	CONSTRUCTION:	DRAWING:
W1	EXTERIOR	-METAL CLADDING -1X4 STRAPPING @ 24" O.C. -1" EXPANDED POLYSTYRENE INSUL. -WEATHER-RESISTIVE BARRIER -7/16" OSB WALL SHEATHING FASTENED WITH 8d NAILS @ 6" O.C. -2X8 @ 16" O.C. C/W HORIZONTAL BLOCKING @ 48" O.C. -R20 BATT INSULATION -6MM POLY VAPOUR BARRIER -1/2" GYPSUM BOARD	
W2	INTERIOR 2X6 3/4H FRR MMAH SB-3 W1B	-1/2" TYPE "X" GYPSUM BOARD -2X6 @ 16" O.C. C/W BLOCKING @ 48" O.C. -R20 BATT INSULATION -1/2" TYPE "X" GYPSUM BOARD	
W3	INTERIOR 2X4	-1/2" GYPSUM BOARD -2X4 @ 16" O.C. C/W BLOCKING @ 48" O.C. -1/2" GYPSUM BOARD	
W4	INTERIOR 2X4 3/4H FRR MMAH SB-3 W1E	-1/2" TYPE "X" GYPSUM BOARD -2X4 @ 16" O.C. C/W BLOCKING @ 48" O.C. -1/2" TYPE "X" GYPSUM BOARD	

**WASHROOM ACCESSORIES**

- ADULT CHANGE TABLE.
- WASHROOM SIGNAGE.
- "ASSISTANCE REQUIRED" LED ANNUNCIATION C/W SOUNDER
- "ASSISTANCE REQUIRED" DOME LIGHT WITH SOUNDER
- "PUSH FOR ASSISTANCE" BUTTON
- EMERGENCY SIGN
- SOAP DISPENSER
- NAPKIN DISPOSAL
- TOILET PAPER DISPENSER
- DOOR ACTIVATION SWITCH
- GRAB BAR "L" SHAPED, 30" HORIZONTAL & VERTICAL
- GRAB BAR HORIZONTAL 24" LONG 6" ABOVE TANK
- WASTE RECEPTACLE
- COAT HOOK
- MIRROR
- SHELF
- TOILET
- LAVATORY
- PUSH TO LOCK BUTTON

**NOTES:**
**DESIGN NOTES:**

- ALL DIMENSIONS ARE IN FEET AND INCHES.
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH ARCHITECTURAL, MECHANICAL AND ELECTRICAL DRAWINGS PRIOR TO FABRICATION.
- THE USE OF THESE DRAWINGS IS LIMITED TO THAT IDENTIFIED IN THE REVISION COLUMN. DO NOT CONSTRUCT FROM THESE DRAWINGS UNLESS MARKED "ISSUED FOR CONSTRUCTION".
- READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH SPECIFICATIONS AND ALL OTHER CONTRACT DOCUMENTS.
- UNDER NO CIRCUMSTANCES ARE THESE DRAWINGS TO BE SCALED, INCLUDING FOR PREPARATION OF SHOP DRAWINGS, CONSTRUCTION LAYOUT, OR BIDDING PURPOSES. ERRORS MADE BY PERSONS SCALING THESE DRAWINGS SHALL NOT BE THE RESPONSIBILITY OF ALPHA ENGINEERING.
- CONTRACTOR SHALL SUBMIT ANY SHOP DRAWINGS FOR REVIEW BY THE CONSULTANT PRIOR TO FABRICATION.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CURRENT VERSION OF THE ONTARIO BUILDING CODE (2012).
- REINFORCING STEEL MUST BE INSPECTED BY ENGINEER PRIOR TO POURING CONCRETE, GIVE 48 HOURS NOTICE.

**WOOD:**

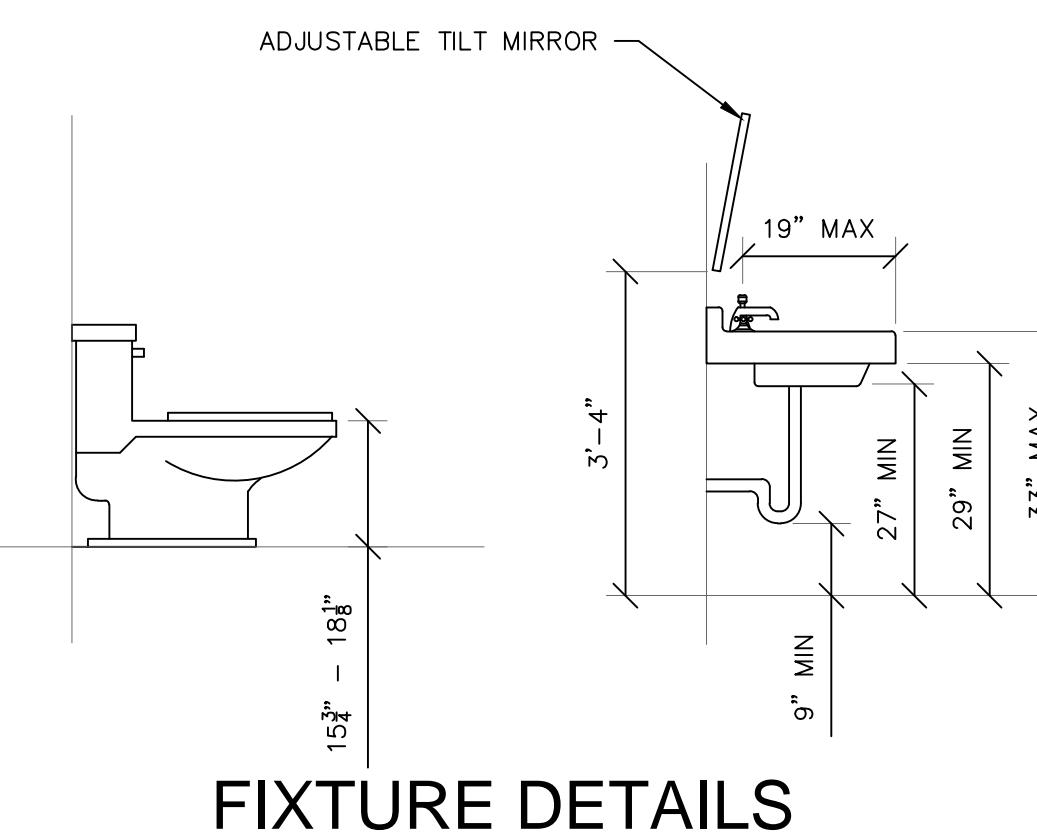
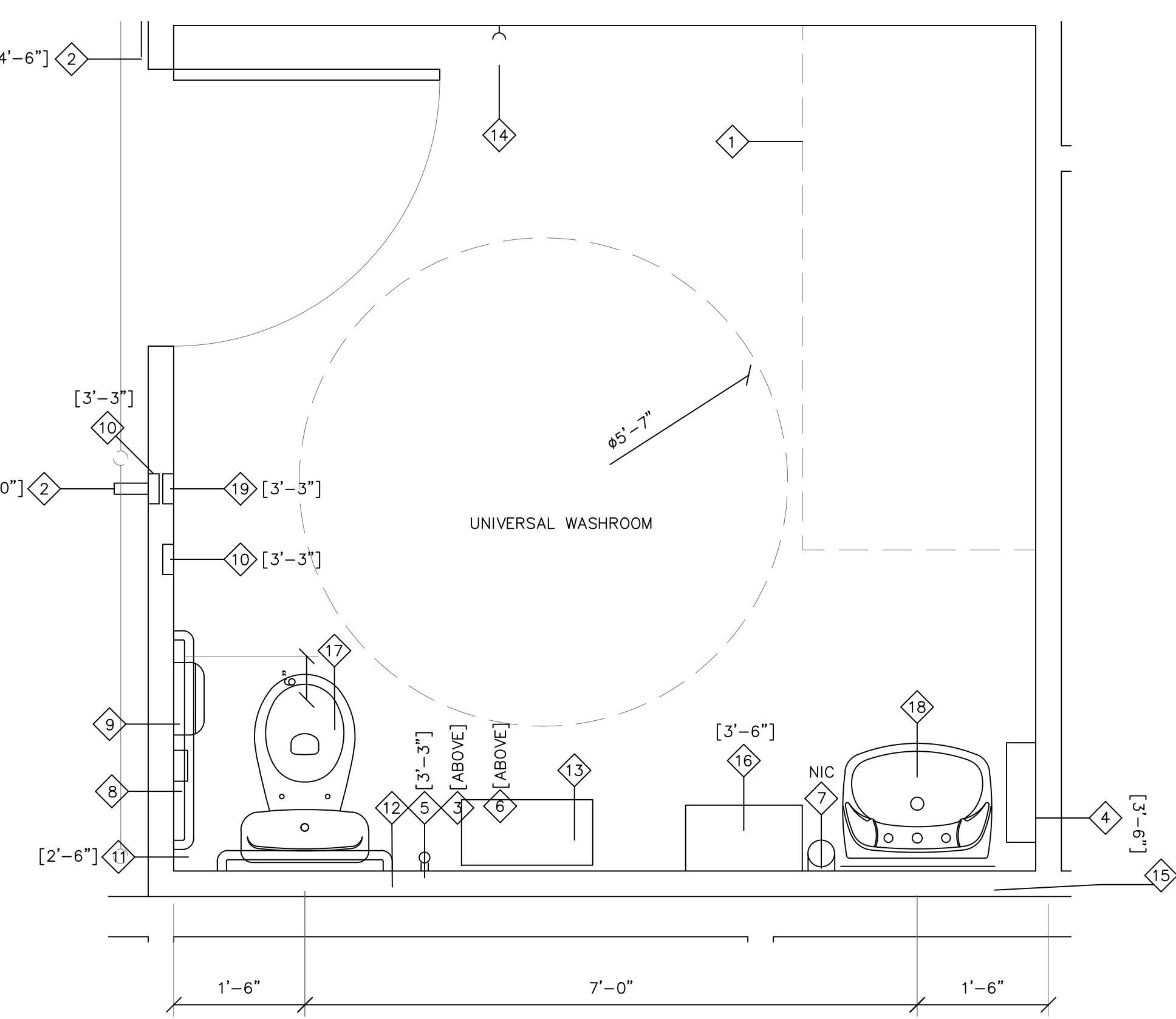
- ALL FRAMING LUMBER SHALL COMPLY WITH PERTINENT PROVISIONS OF CSA 086 AND CSA 0141, AND TO THE NATIONAL LUMBER GRADES AUTHORITY, STANDARD GRADING RULE.
- FRAMING MATERIAL, UNLESS OTHERWISE NOTED, SHALL BE KILN DRIED LUMBER.
- ALL WOOD MEMBERS SHALL BE SPF GRADE NO. 2 OR BETTER.

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE ONTARIO BUILDING CODE AND LOCAL BY-LAWS.

- ENGINEER TO REVIEW ALL SHOP DRAWINGS. LVL, TRUSSES ETC.

**SITE PREPARATION:**

- EXCAVATION SHALL BE CLEAR OF ALL DELETERIOUS MATERIALS.
- BACK FILL UNDERNEATH THE FOOTINGS SHALL BE GRANULAR B; TYPE 1 ONTARIO PROVINCIAL STANDARD SPECIFICATIONS (OPSS) COMPACTED TO 98% OF STANDARD PROCTOR MAXIMUM DRY DENSITY (SPMDD). BACKFILL SHALL BE PLACED IN 12" LIFTS.
- COMPACTATION TESTING SHALL BE PERFORMED TO ENSURE COMPACTATION HAS BEEN ACHIEVED PRIOR TO PLACEMENT OF THE NEXT LIFT.
- FOUNDATION DESIGN IS BASED ON AN ALLOWABLE BEARING CAPACITY OF 100kPa. OWNER SHALL BE RESPONSIBLE FOR PROVIDING CONFIRMATION OF ALL COMPACTATION TESTING REQUIRED TO ACHIEVE THE DESIGN BEARING CAPACITY.
- PROTECT ALL SOIL FROM FREEZING ADJACENT TO AND BELOW ALL FOUNDATIONS.


**FIXTURE DETAILS**

**UNIVERSAL WASHROOM**

\*PROVIDE SOLID BACKING FOR ALL ACCESSORIES AND FIXTURES

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

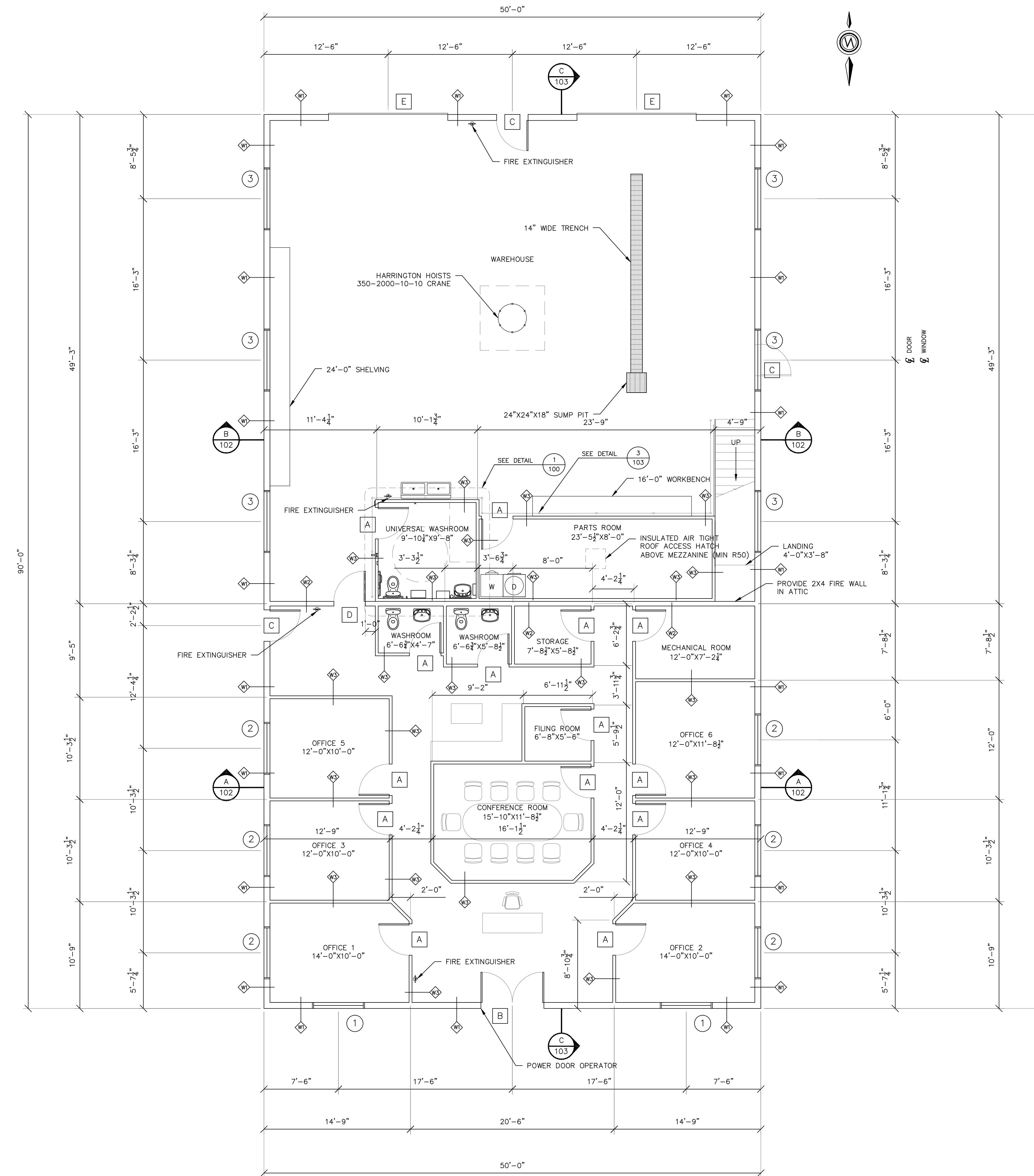
\*ALL AUDIO AND VISUAL SIGNALS SHALL BE IN ACCORDANCE WITH THE LATEST VERSION OF THE OBC

**OBC MATRIX  
GENERAL NOTES  
AND UNIVERSAL WASHROOM**

DRAWN: SWG      CHECKED: RJF  
 DATE: 26/5/2020      SCALE: 3/4"=1'-0"  
 DWG No: AE-20079-100

**PROPOSED OLIVER PAIPOONGE  
BUILDING**

**ALPHA ENGINEERING  
CIVIL, STRUCTURAL, PROJECT MANAGEMENT  
121 McKellar St S  
Thunder Bay, ON P7E 1H4  
Ph. (807) 345-6221  
Email.: b.fogolin@alphaeng.ca**



## NOTES:

AND TOLERANCES SHALL CONFORM TO CSA-A23.1.

SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 28 DAYS.

PLACING, CURING AND TESTING SHALL CONFORM TO CSA-A23.1

REINFORCING BARS SHALL CONFORM TO THE LATEST CSA STANDARD  
HAVING A MINIMUM YIELD STRENGTH OF 400MPa.

AND PLACING OF ALL REINFORCING STEEL SHALL BE IN  
CONFORMITY WITH THE REINFORCING STEEL INSTITUTE OF CANADA "MANUAL  
PRACTICE".

CONCRETE COVER TO REINFORCING STEEL SHALL BE:  
POURED AGAINST EARTH: 3"  
EXPOSED TO EARTH OR WEATHER: 1½"  
WALLS NOT EXPOSED TO EARTH OR WEATHER: 3/4"

KEEP A MINIMUM OF 48 HRS NOTICE PRIOR TO POURING CONCRETE,  
FOR REINFORCING STEEL INSPECTION IN WALLS AND FOOTINGS. DO  
NOT POUR CONCRETE WITHOUT APPROVAL FROM ENGINEER.

SPACING OF SLABS IS RECOMMENDED AT 20'-0" INTERVALS, HOWEVER;  
YOU SHOULD DISCUSS THIS WITH CONCRETE CONTRACTOR.

VARIES SEE SNOW LOAD DIAGRAM  
AD: 1kPa  
4.8 KPa  
95  
057  
026  
008

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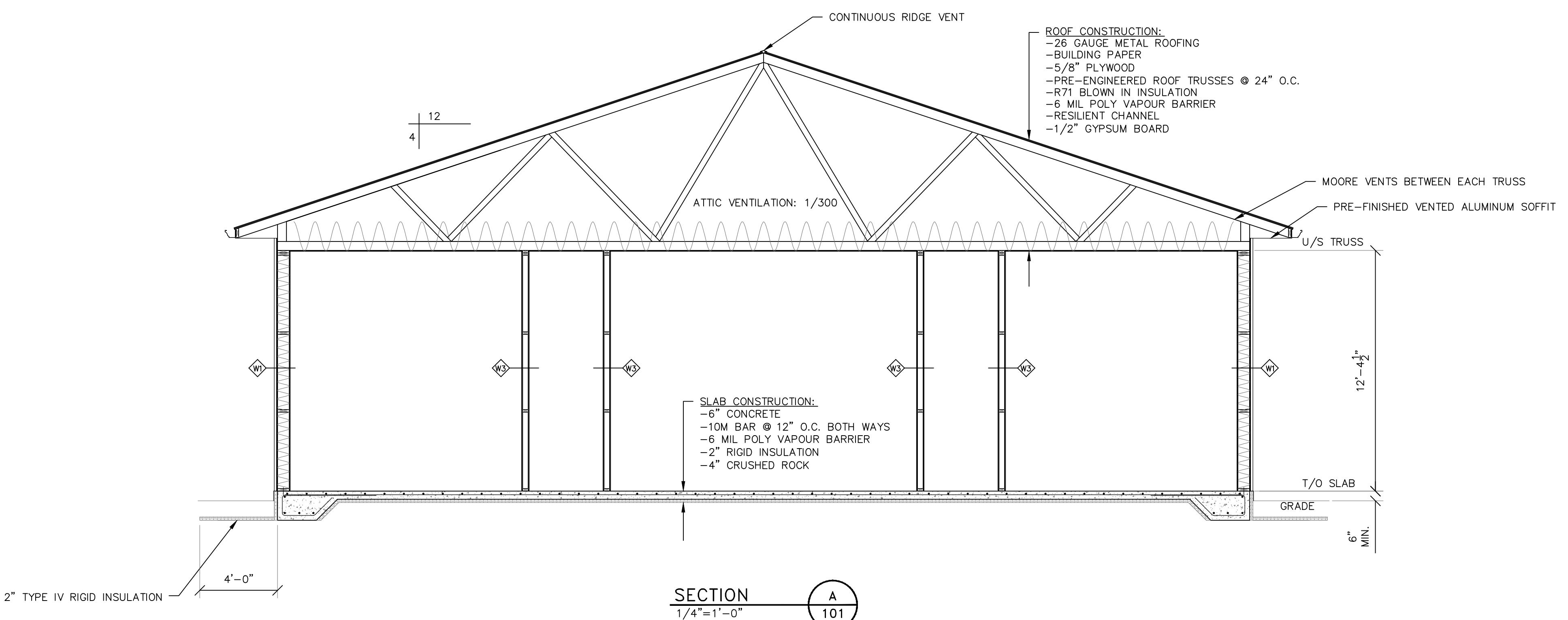
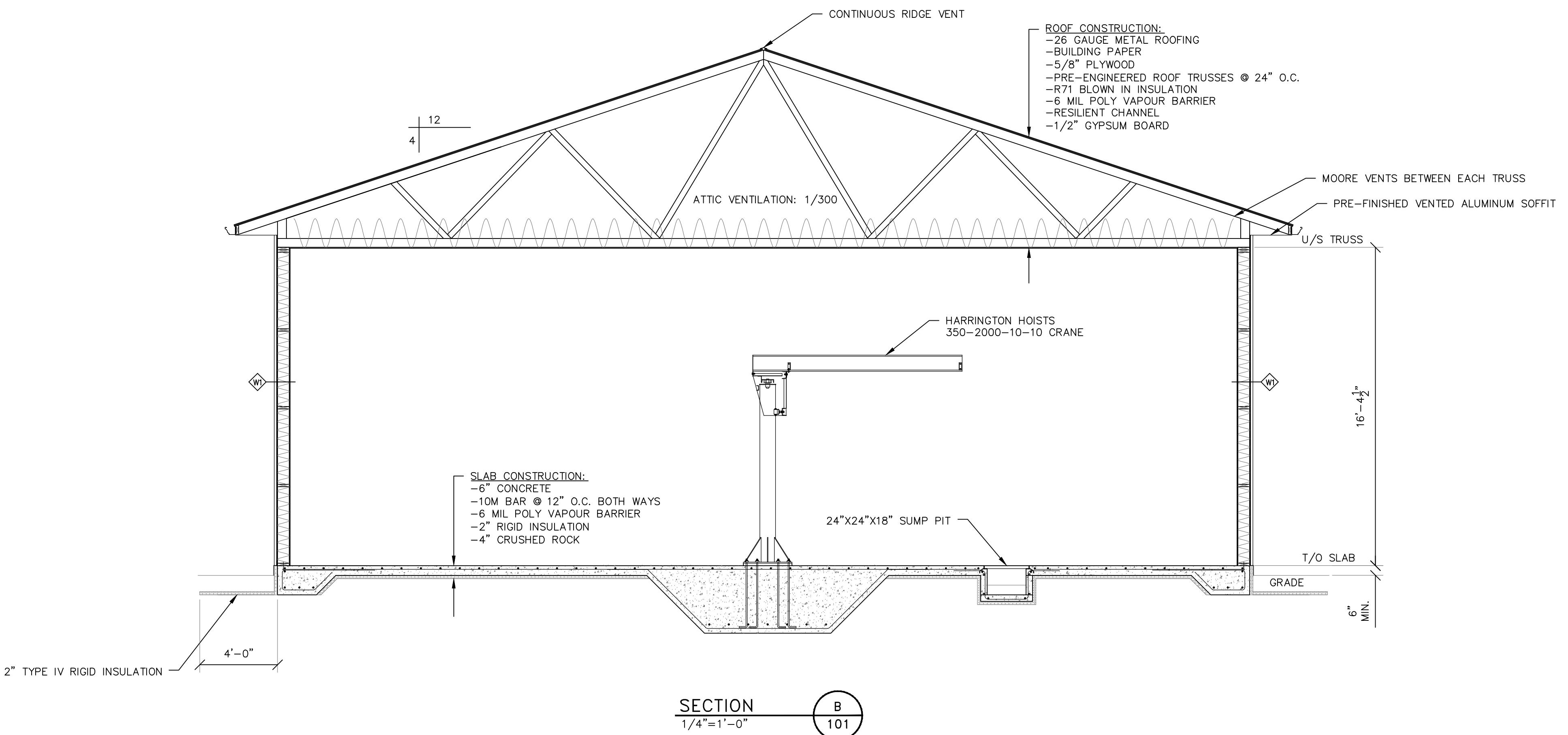
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# PROPOSED OLIVER PAIPOONGE BUILDING

## PLAN VIEW

AWN: SWG	CHECKED: RJF
TE: 26/5/2020	SCALE: 3/16"=1'-0"
WG No: AE-20079-101	0

NOTES:



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No.	DATE	REVISION

*R. J. FOGOLIN*

LICENSED PROFESSIONAL ENGINEER  
PROVINCE OF ONTARIO

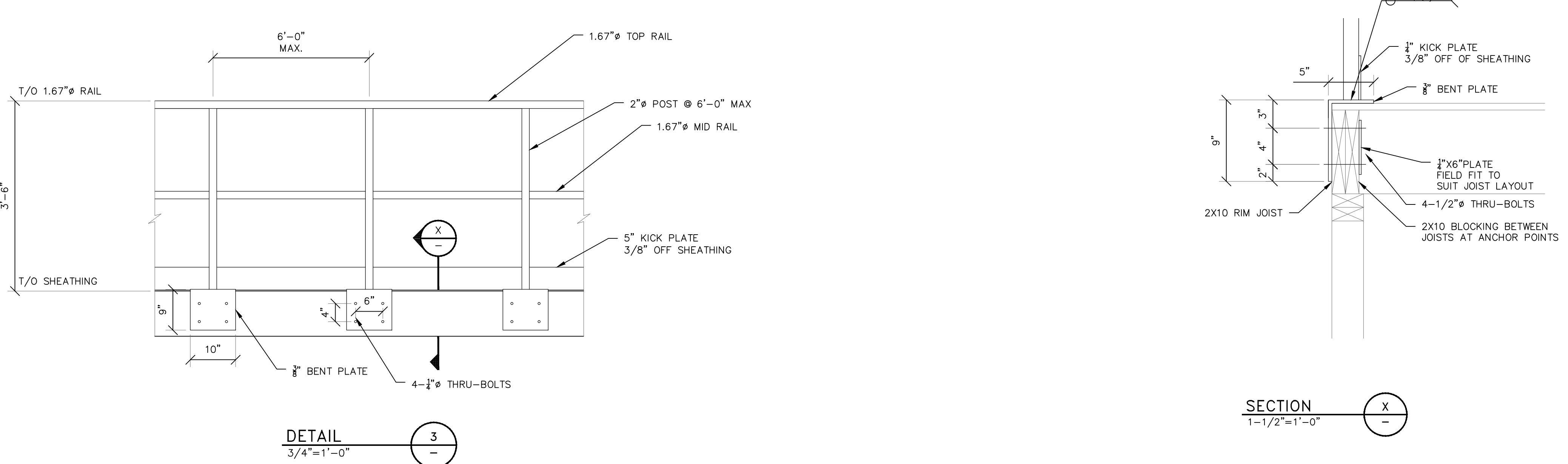
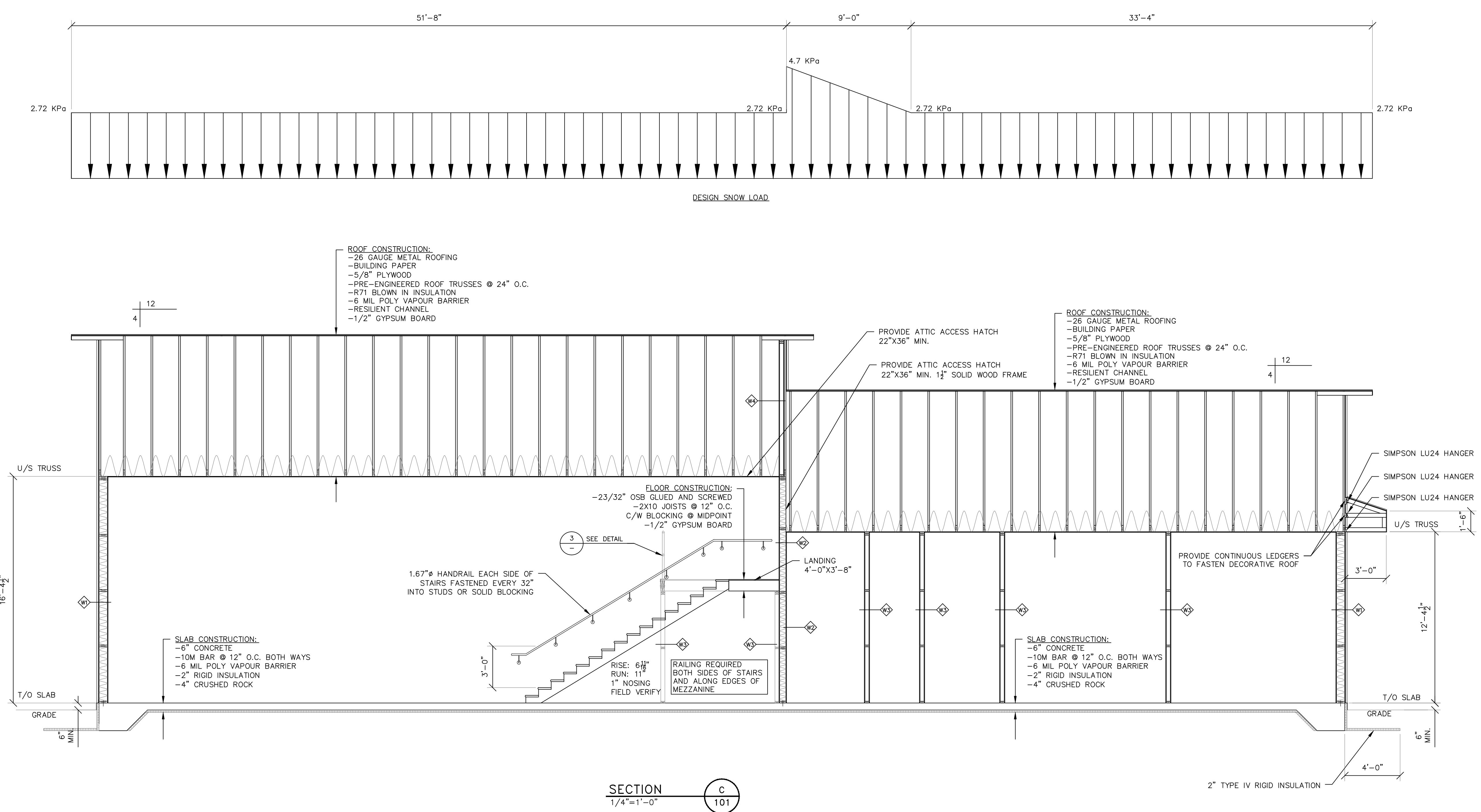
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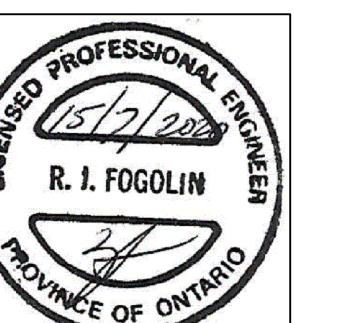
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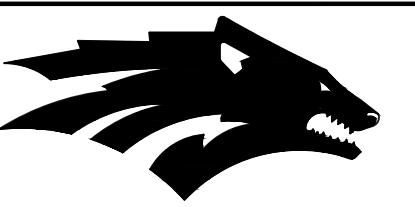
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DATE: 26/5/2020	SCALE: 1/4"=1'-0"
DWG No: AE-20079-102	0



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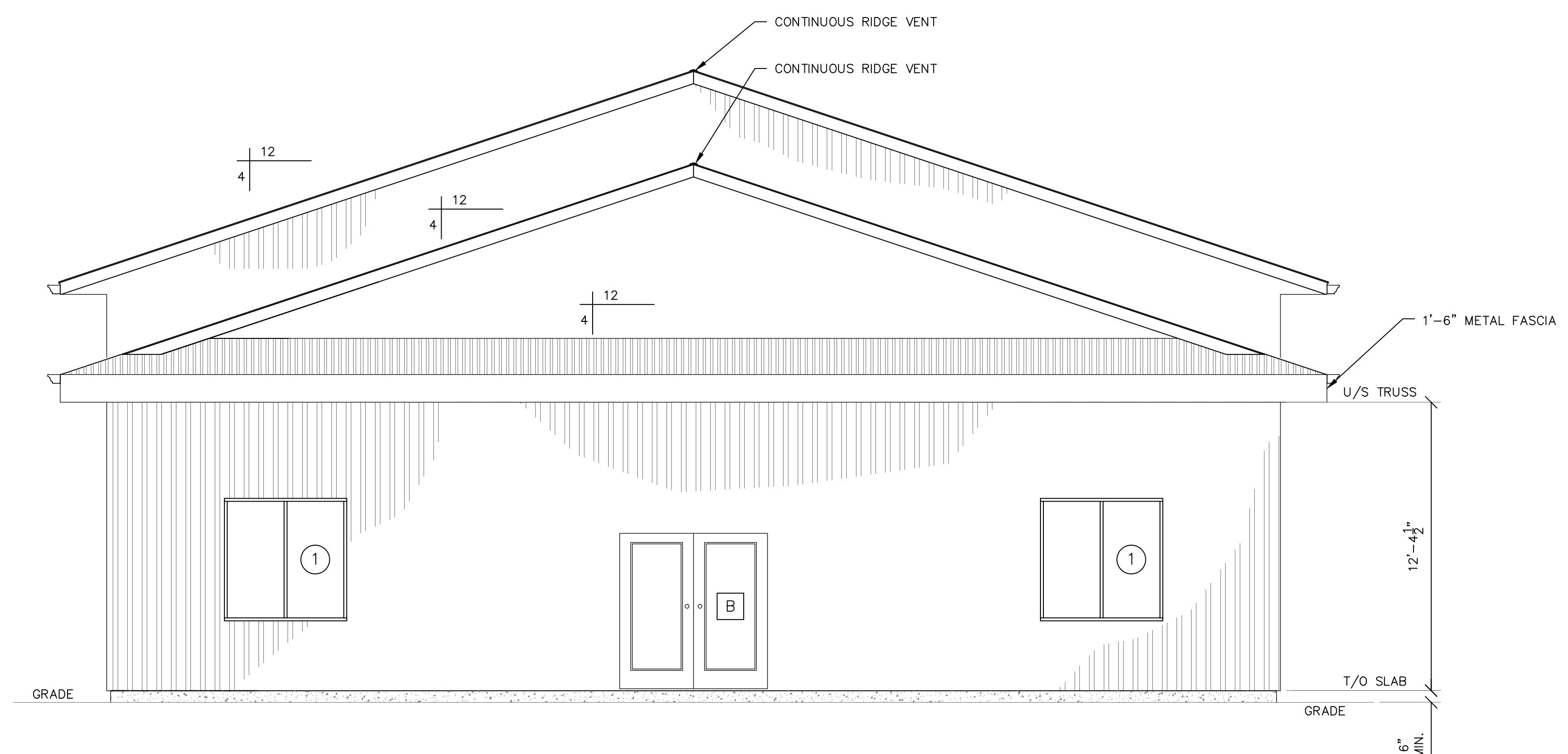
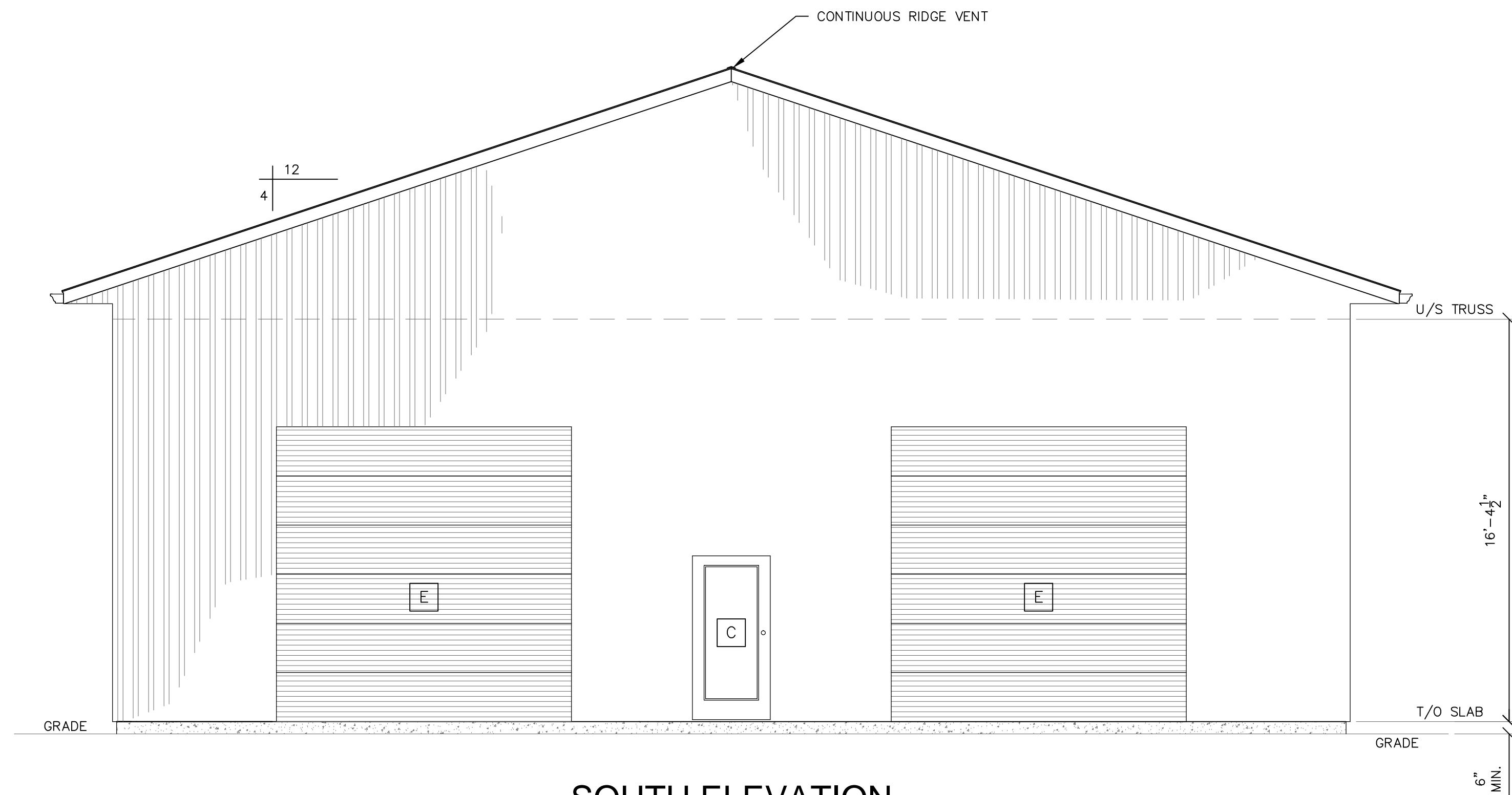
## PROPOSED OLIVER PAIPOONGE BUILDING

### SECTION

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DATE: 26/5/2020 SCALE: 1/4"=1'-0"

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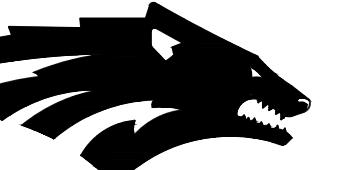
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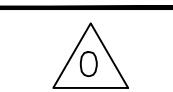
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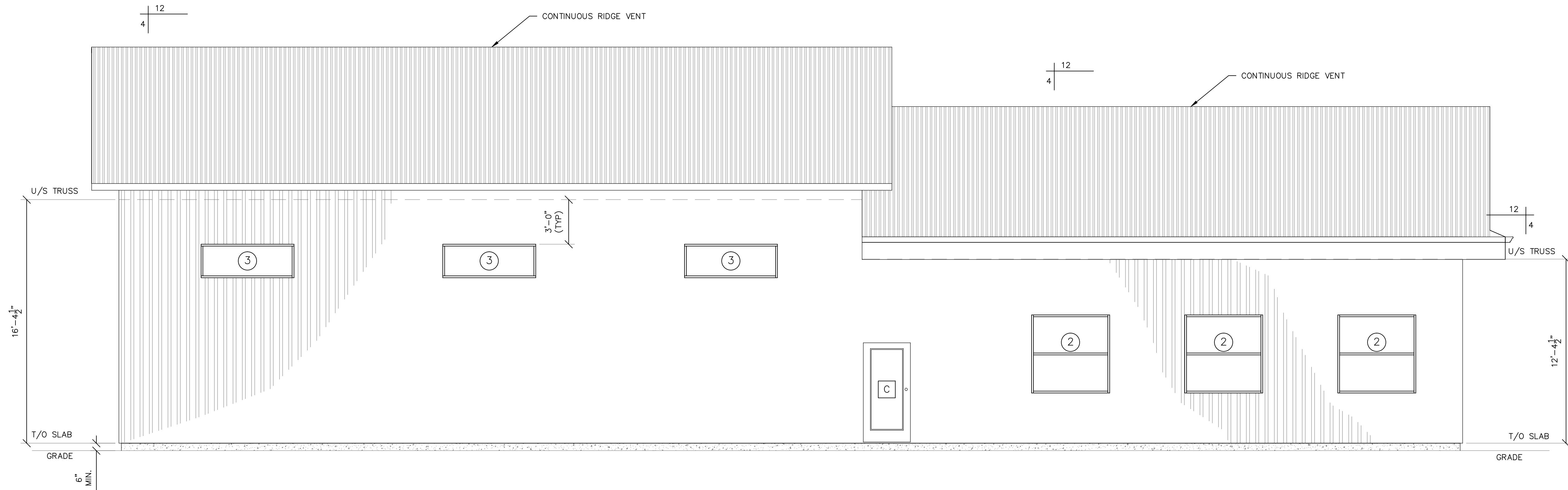


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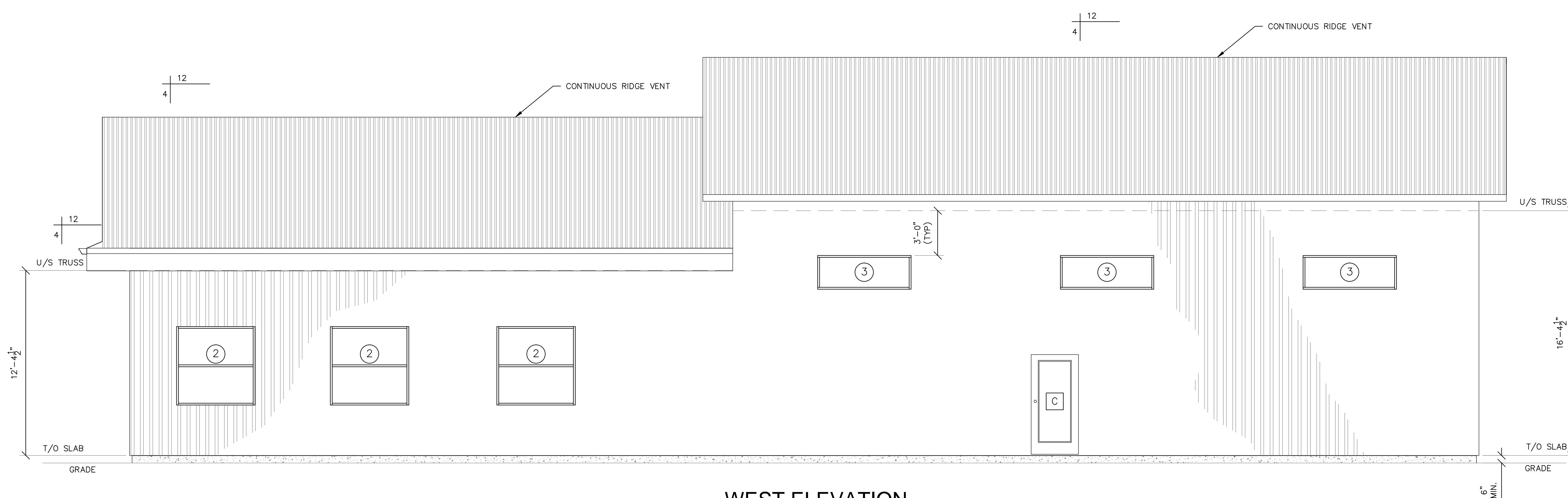
**NORTH AND SOUTH ELEVATIONS**

DRAWN: SWG	CHECKED: RJF
DATE: 26/5/2020	SCALE: 1/4"=1'-0"
DWG No: AE-20079-104	



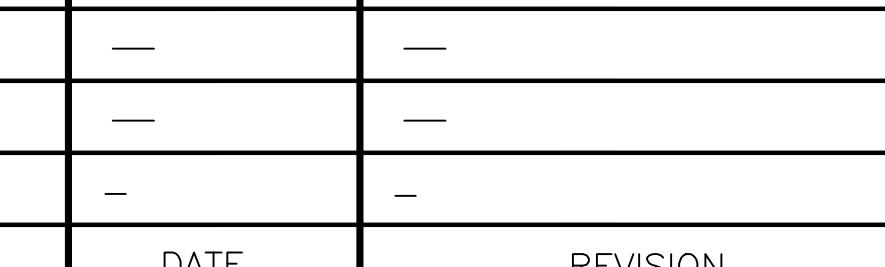


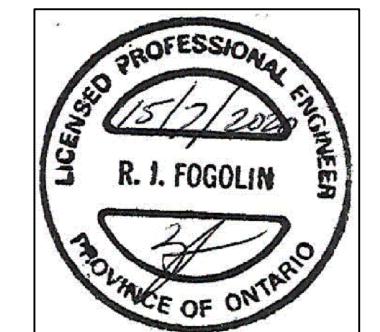
## EAST ELEVATION



## WEST ELEVATION

## NOTES:

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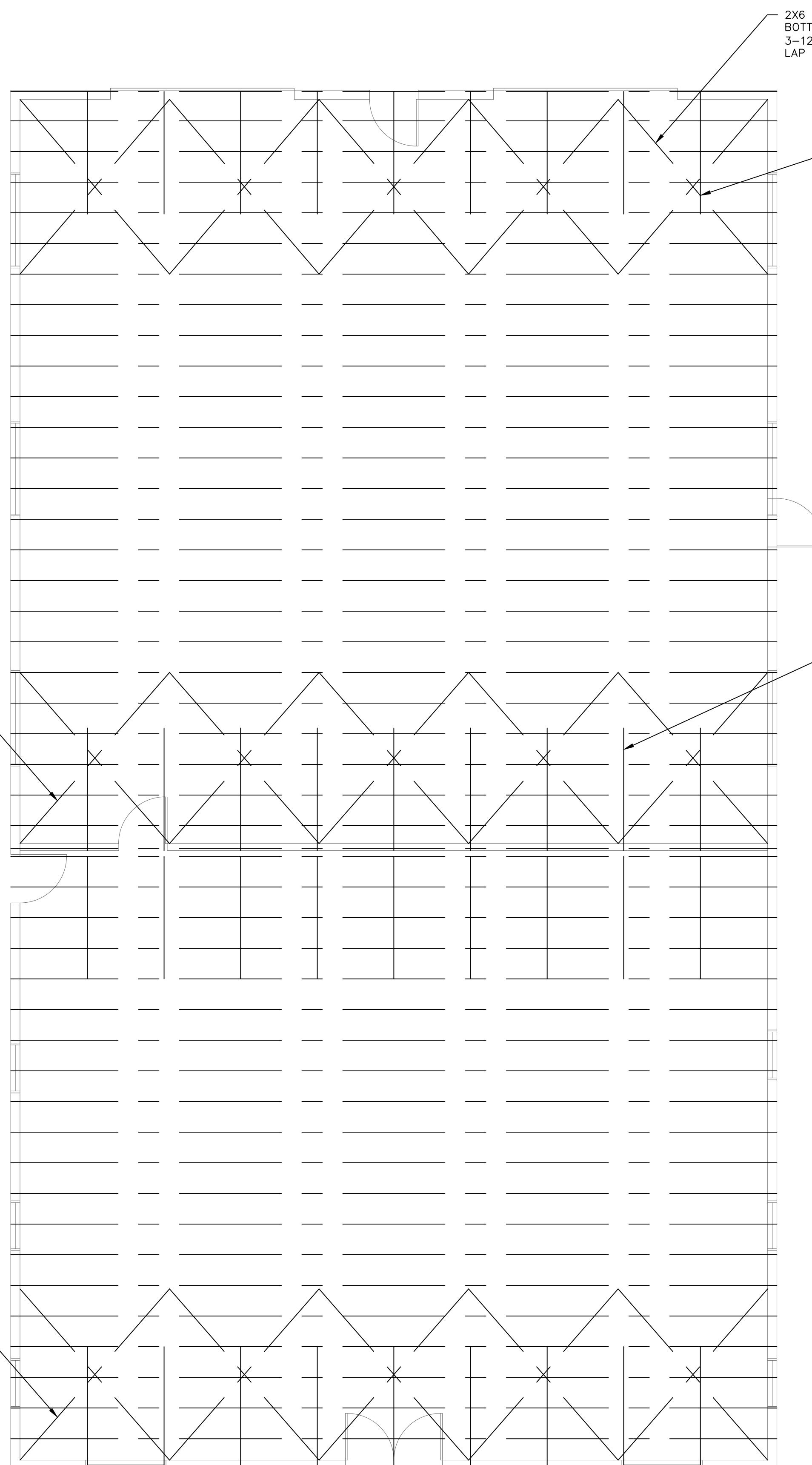


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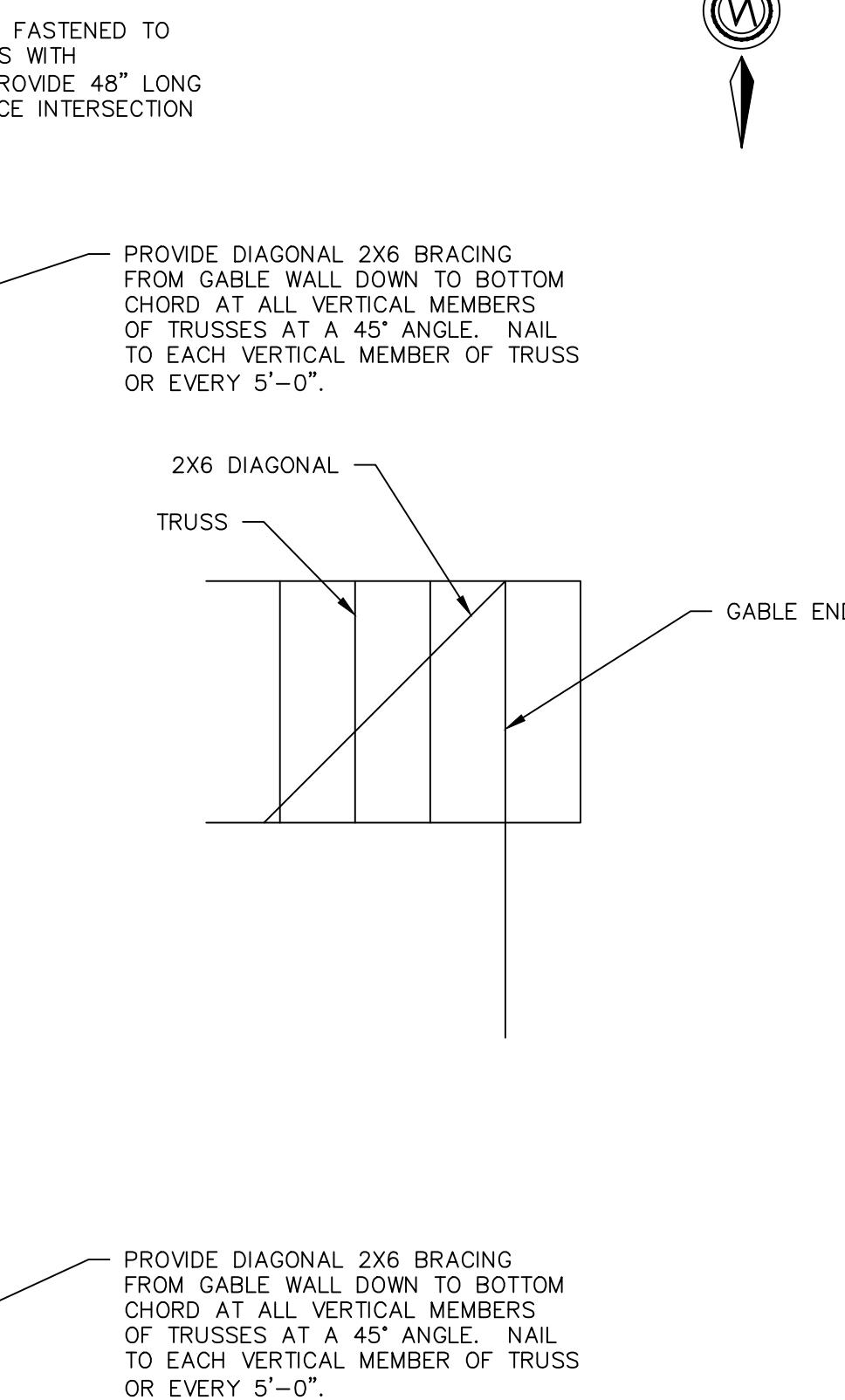
## EAST AND WEST ELEVATIONS

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DWG No: AE-20079-105	0

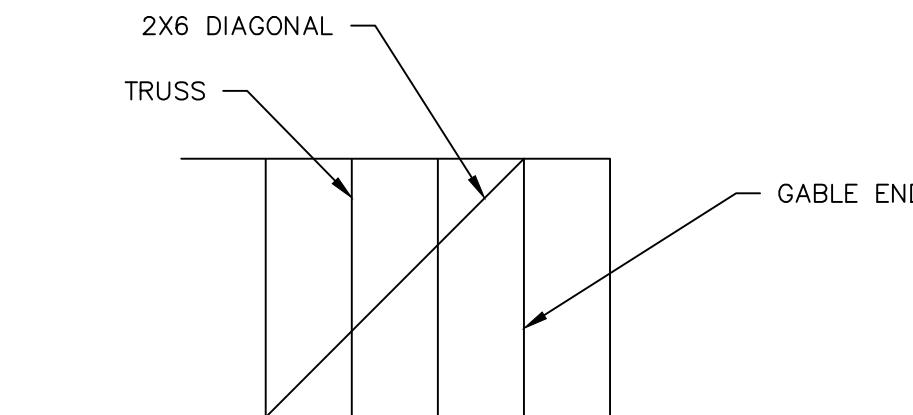
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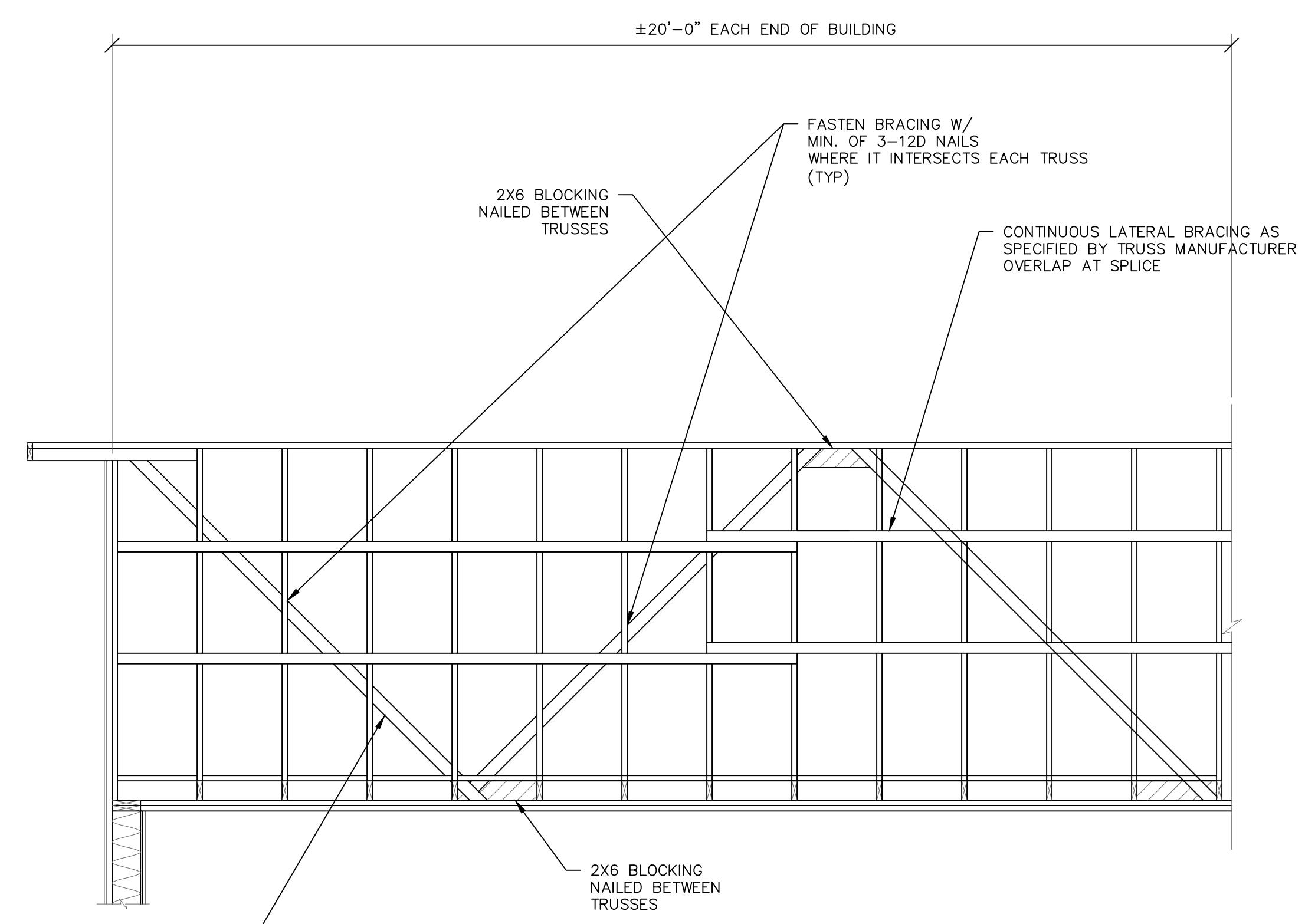
BOTTOM CHORD TRUSS BRACING



PROVIDE DIAGONAL 2X6 BRACING FROM GABLE WALL DOWN TO BOTTOM CHORD AT ALL VERTICAL MEMBERS OF TRUSSES AT A 45° ANGLE. NAIL TO EACH VERTICAL MEMBER OF TRUSS OR EVERY 5'-0".



PROVIDE DIAGONAL 2X6 BRACING FROM GABLE WALL DOWN TO BOTTOM CHORD AT ALL VERTICAL MEMBERS OF TRUSSES AT A 45° ANGLE. NAIL TO EACH VERTICAL MEMBER OF TRUSS OR EVERY 5'-0".

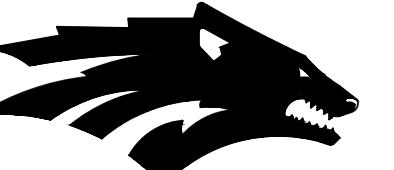


INSTALL DIAGONAL 2X6 BRACING @ 45° @ LATERALLY BRACED WEB MEMBER INDICATED ON CROSS SECTION, FASTENED TO THE UNDERSIDE OF THE DIAGONAL TRUSS MEMBERS THAT HAVE CONTINUOUS LATERAL BRACING. REPEAT AT GABLE ENDS

1 TRUSS ANCHOR BRACING  
LOCATED AT EACH END OF UPPER AND LOWER ROOF  
NOT SHOWN IN PLAN VIEW FOR CLARITY

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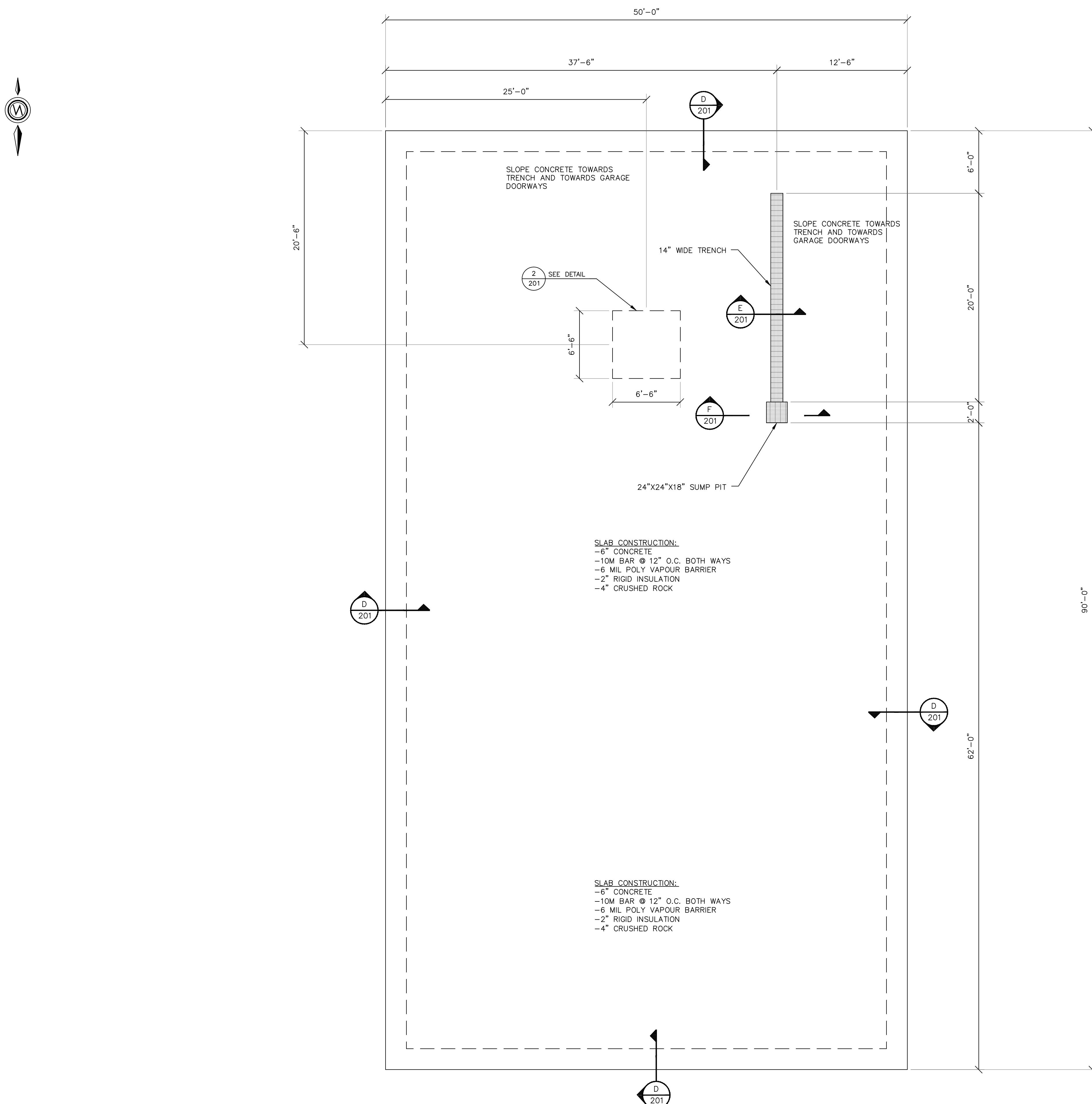
PROPOSED OLIVER PAIPOONGE  
BUILDING

BOTTOM CHORD TRUSS BRACING

DRAWN: SWG CHECKED: RJF

DATE: 26/5/2020 SCALE: 3/16"=1'-0"

DWG No: AE-20079-106



# FOUNDATION PLAN VIEW

## NOTES:

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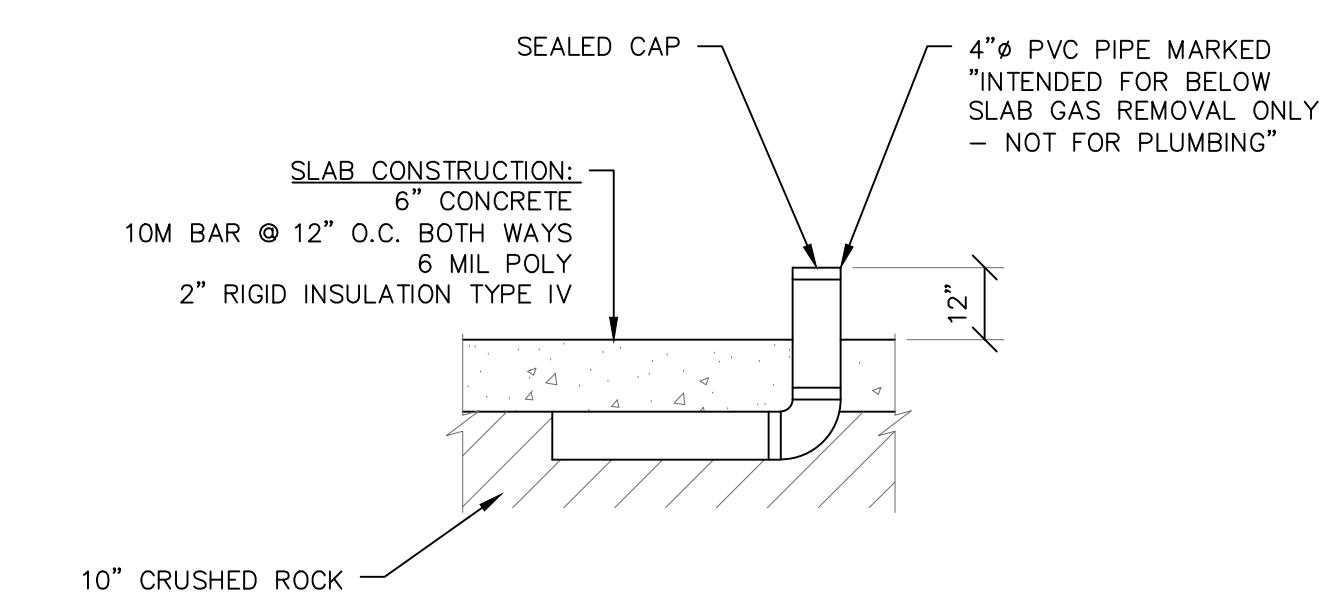
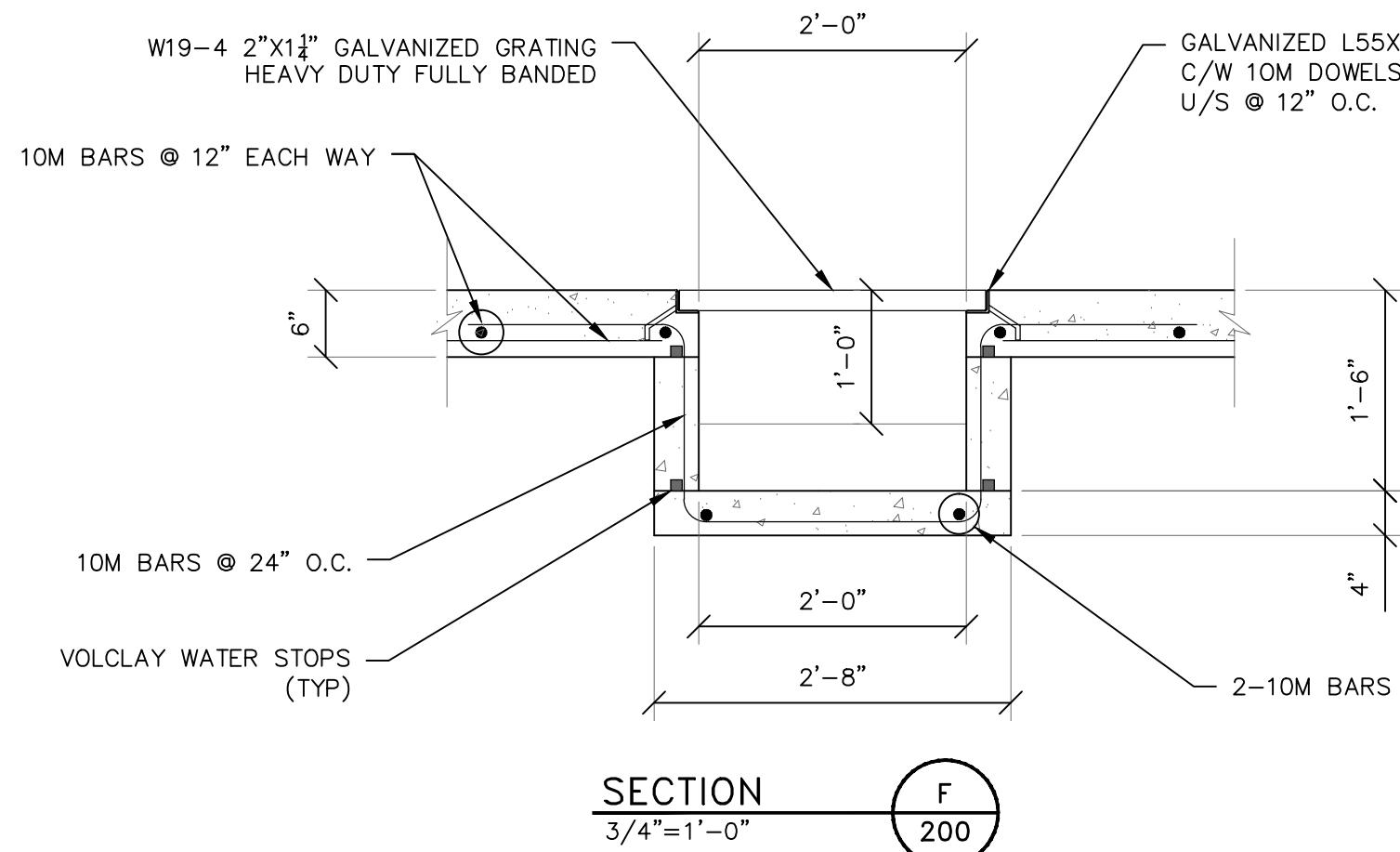
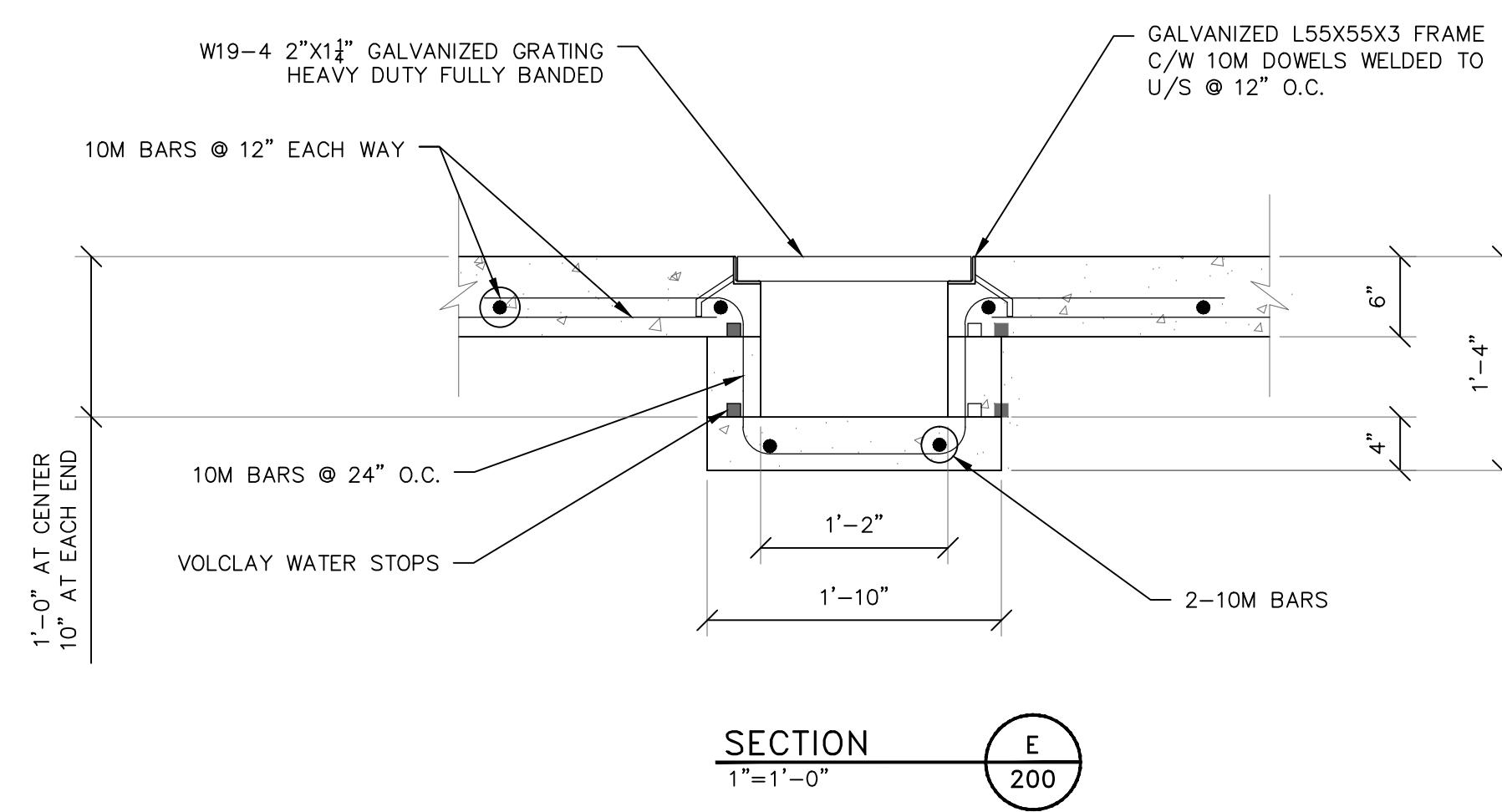


# PROPOSED OLIVER PAIPOONGE BUILDING

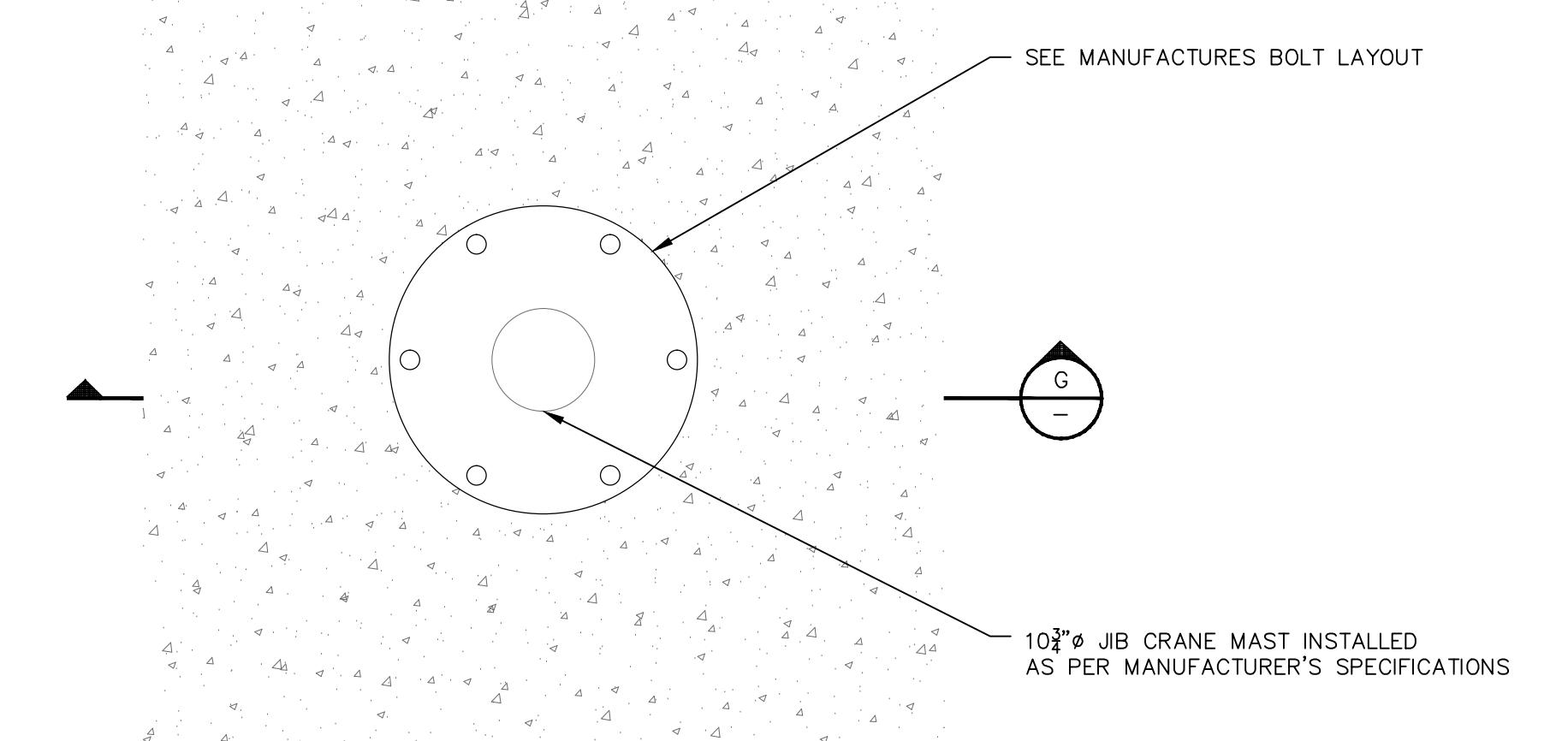
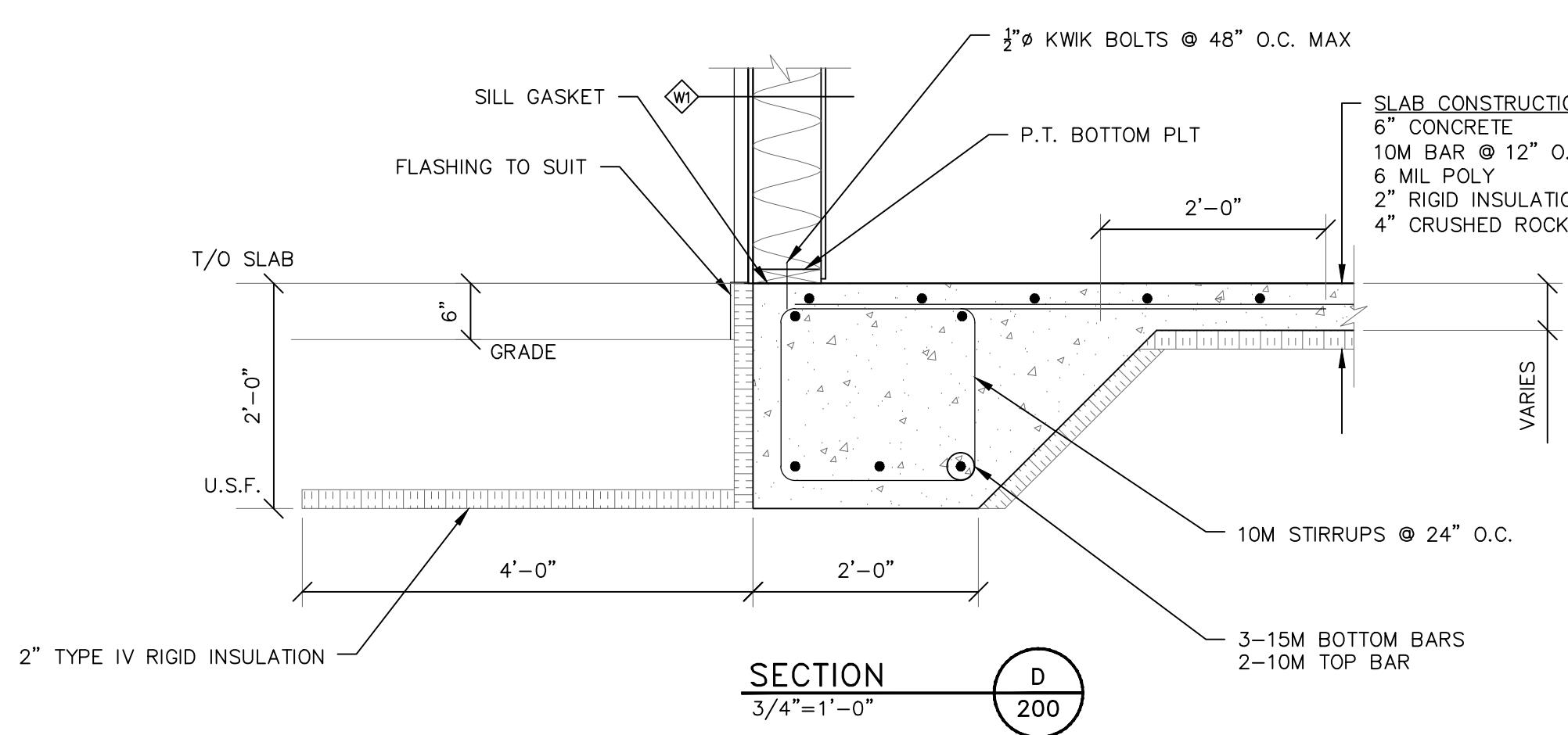
## FOUNDATION PLAN VIEW

RAWN: SWG	CHECKED: RJF
ATE: 26/5/2020	SCALE: 3/16"=1'-0"
DWG No: AE-20079-200	0

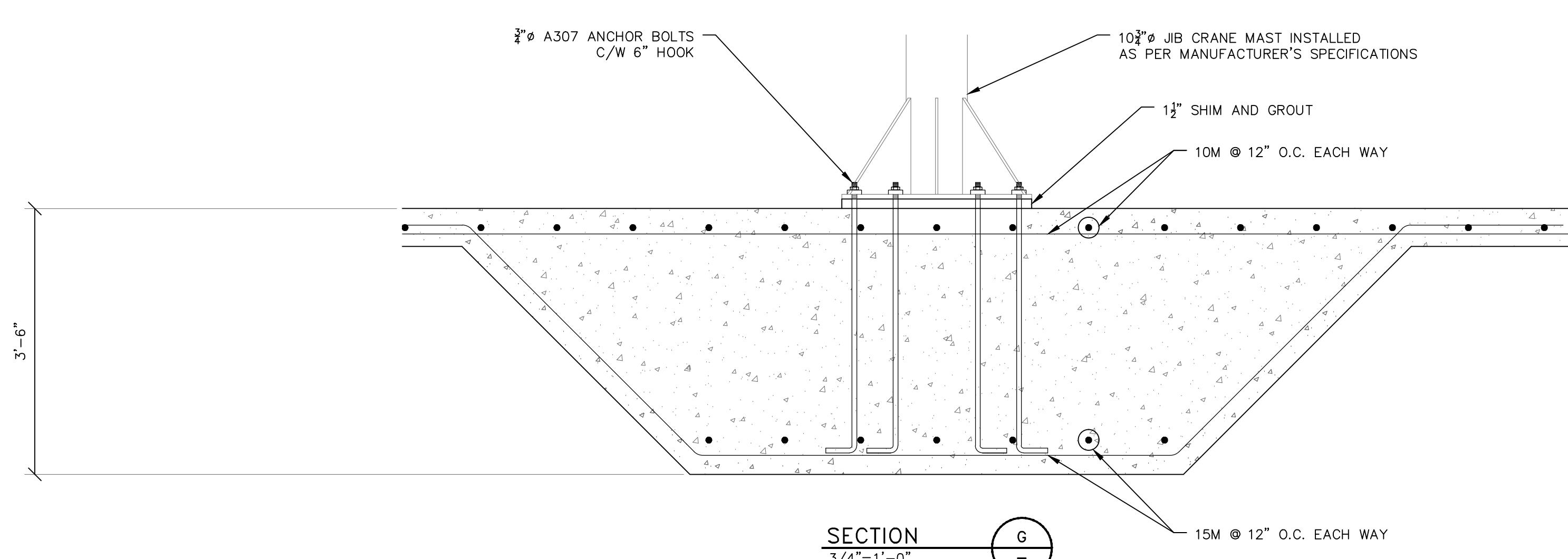
## NOTES:



## **TYPICAL RADON GAS VENT**



DETAIL 2  
3/4"=1'-0" 200



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—	—	—
—	—	—
—	—	—
No.	DATE	REVISION



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# PROPOSED OLIVER PAIPOONGE BUILDING

# FOUNDATION SECTIONS, & DETAILS

DRAWN: SWG	CHECKED: RJF
DATE: 26/5/2020	SCALE: 1"=1'-0"
DWG No: AE-20079-201	