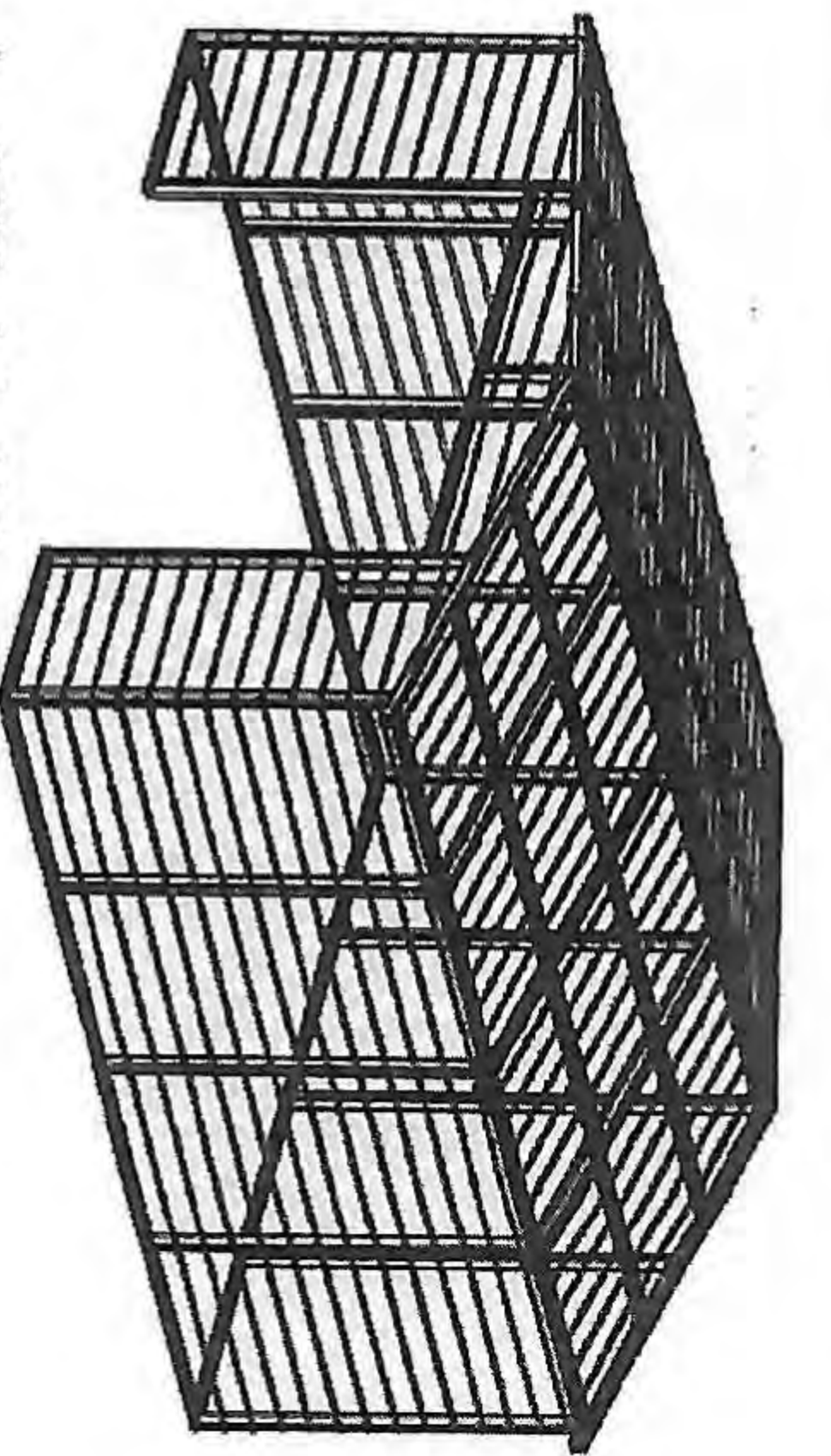
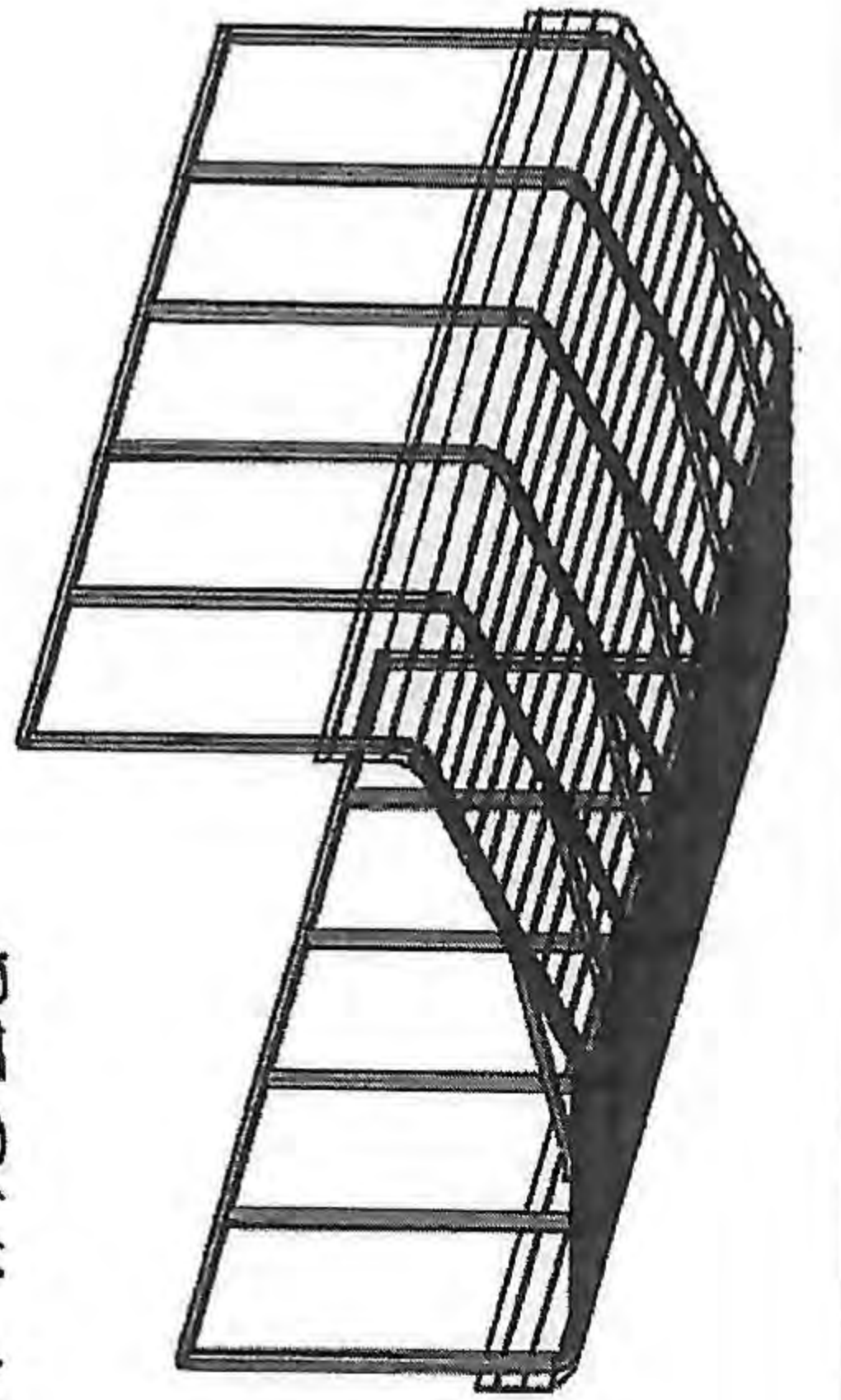




Structures
Location

Cars enter here
from State Ave.



REGULAR / A-FRAME 12'-0" WIDE CARPORT STYLE BUILDINGS

DESIGN NOTES

1. ALL CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH IBC 2019, OSHA, AISC 360, AISI 100, ASCE 7-16, AWS D1.3 CODES AND ALL APPLICABLE LOCAL REQUIREMENTS.
2. BASE CONNECTIONS SHALL BE PROVIDED AS SHOWN ON FOUNDATION DETAILS SHEET.
3. ALL MATERIALS IDENTIFIED BY MANUFACTURER NAME MAY BE SUBSTITUTED WITH MATERIAL EQUAL OR EXCEEDING ORIGINAL.
4. ALL SHOP CONNECTIONS SHALL BE WELDED CONNECTIONS.
5. ALL FIELD CONNECTIONS SHALL BE #12"x1" SDS (ESR-2196 OR EQ).
6. STEEL SHEATHING SHALL BE 29GA CORRUGATED GALV. OR PAINTED STEEL - MAIN RIB HT. 3/4" (FY=80KSI) OR EQ.
7. ALL STRUCTURAL LIGHT GAUGE TUBING AND CHANNELS SHALL BE GRADE 50 STEEL.
8. STRUCTURAL TUBE T52 1/2"x2 1/2" - 14GA IS EQUIVALENT TO T52 1/4"x2 1/4" - 12GA AND EITHER ONE MAY BE USED IN LIEU OF THE OTHER.
9. ALL DESIGN CRITERIA MUST BE INCREASED TO THE NEXT HIGHER INCREMENT BASED ON THE TABLES ON PAGE 4. NO INTERPOLATION IS ALLOWED.

DESIGN CRITERIA

PREVAILING CODE: WSBBC (IBC 2018)
USE GROUP: U (CARPORTS, BARNIS)
RISK CATEGORY: I

DRAWING INDEX

1. DEAD LOAD (D)	D = 4 PSF	COVER SHEET	1
2. ROOF LIVE/SNOW LOAD (Lr)	Lr = 20 - 61 PSF (AS PER SNOW LOAD SEE TABLE 4)	SCHEDULES & MEMBER SECTIONS	2
3. SNOW LOAD (S)	S = 20 - 90 PSF	FRAME SECTIONS & DETAILS	3
4. IMPORTANCE FACTOR	Ib = 0.8	SPACING SCHEDULES - & ENCLOSURE NOTES	4
5. THERMAL FACTOR	Ct = 12	PURLIN & GIRT SCHEDULES	5
6. EXPOSURE FACTOR	Ce = 10	SHEATHING OPTIONS	6
7. ROOF SLOPE FACTOR	Cs = 10	SIDE WALL FRAMING & OPENINGS	7
8. WIND LOAD (W)	Vw = 105 - 180 MPH	END WALL FRAMING & OPENINGS	8-A, 8-B
9. BASIC WIND SPEED	C = 105	CORNER BRACING DETAILS	9
10. SEISMIC LOAD (E)	D	OPTIONAL LEAN-TO ADDITION	10
11. DESIGN CATEGORY	D	FOUNDATION OPTIONS	11-A TO 11-D
12. IMPORTANCE FACTOR	Ib = 1.00		

CUSTOMER INFORMATION

OWNER:
ADDRESS:

DESIGN LOADS

GROUND SNOW:
ROOF LIVE LOAD:
BASIC WIND SPEED:

BUILDING INFORMATION

WIDTH:
LENGTH:
HEIGHT:

FRAME TYPE:

ENCLOSURE TYPE:
☐ FULL
☐ PARTIAL
☐ OPEN

CERTIFICATION VALIDITY NOTICE

DATE OF PLANS EXPIRATION: **AUG 13, 2021**
CERTIFICATION ON THESE DRAWINGS IS VALID FOR ONE YEAR FROM DATE OF ISSUE

MANUFACTURED BY:



**NORTHSIDE
METAL CARPORTS, LLC**

110 Avery Rd E
Chehalis, WA 98532
360-262-9354

ENGINEERED BY:



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Tel: 419-292-1993 • Fax: 419-292-4055
www.a-a-engineers.com

DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:

COVER SHEET

SHEET NO.: 1 / 11
DRAWN BY: AW DATE: 4/30/21
CHECKED BY: OAA DATE: 4/30/21

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: **NOV 09, 2022**
DATE SIGNED: **APR 30, 2021**

TABLE 2.1: MEMBER PROPERTIES

1	2	3	4	5	6	7	8	9	9A	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2	3	4	5	6	7	8	9	9A	10	11	12	13	14	15	16	17	18	19	20	21	22	23
COLUMN POST	ROOF BEAM	BASE RAIL	PEAK BRACE	KNEE BRACES	CONNECTOR SLEEVE	BASE ANGLE	PURLIN	GIRT	OPT. END WALL GIRT	SHEATHING	END WALL POST	DOOR POST	SINGLE HEADER	DOUBLE HEADER	SERVICE DOOR / WINDOW FRAMING	ANGLE BRACKET	STRAIGHT BRACKET	PB SUPPORT	DIAGONAL BRACE	GABLE BRACE	DB BRACKET	TRUSS SPACER	ALL FASTENERS
2.5" X 2.5" X 14GA TUBE	2.5" X 2.5" X 14GA TUBE	2.5" X 2.5" X 14GA TUBE	2.5" X 2.5" X 14GA TUBE	2.5" X 1.5" X 14GA CHANNEL	2.25" X 2.25" X 12GA TUBE	2" X 2" X 3" LG. 3/16" ANGLE	4.25" X 1.5" X 14GA / 18GA HAT CHANNEL	4.25" X 1.5" X 14GA / 18GA HAT CHANNEL	2.5" X 1.5" X 14GA CHANNEL	29 GA CORRUGATED SHEET	2.5" X 2.5" X 14GA TUBE	2.5" X 2.5" X 14GA TUBE	2.5" X 2.5" X 14GA TUBE	2.5" X 2.5" X 14GA TUBE	2.5" X 2.5" X 14GA TUBE	2" X 2" X 2" LG. 14GA ANGLE	2" X 2" X 4" LG. 14GA PLATE	2.5" X 2.5" X 14GA TUBE	2" X 2" X 14 GA TUBE	2" X 2" X 14 GA TUBE	2.25" X 2.25" X 6" LG. 14GA ANGLE	2.5" X 2.5" X 14GA TUBE	#12 X 1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER
1	1	1	1	4	2	10	5	5	1	8	1	1	1	1	1	7	6	1	3	3	9	1	

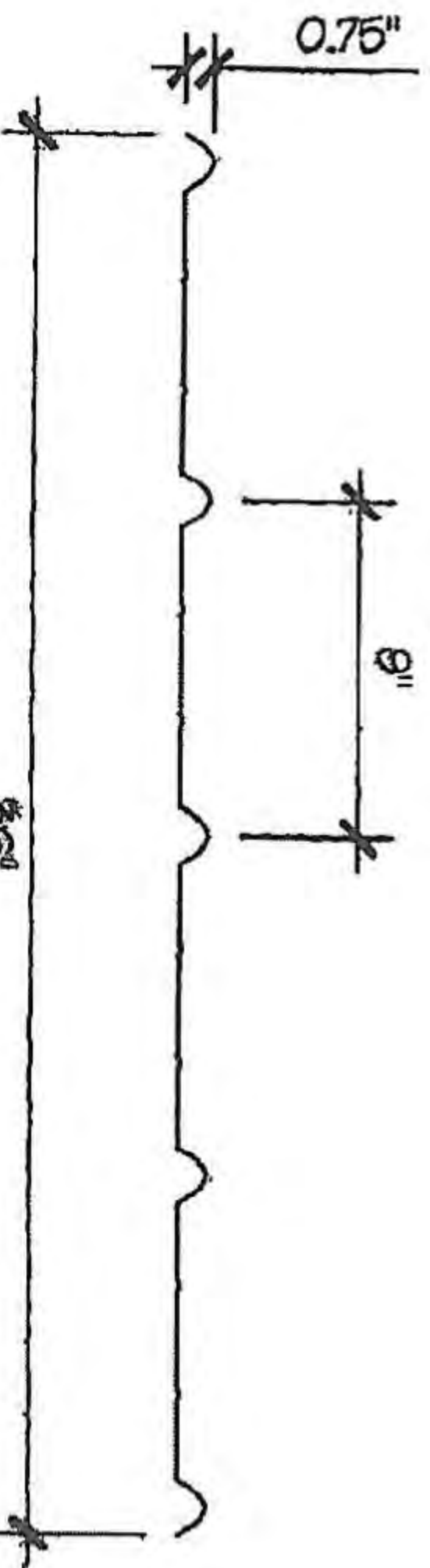
TABLE 2.2: SHEATHING FASTENER SCHEDULE

LOCATION	CORNER PANELS	SIDE LAPS	EDGE LAPS	ELSEWHERE
FASTENER TYPE: #12X1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER	9" C/C	MIN 1	4 1/2" C/C	9" C/C

FASTENER TYPE: #12X1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER
*SEE TYP. SHEATHING FASTENER SCHEDULE DIAGRAM ON PAGE 6.

TABLE 2.3: GAUGE THICKNESS

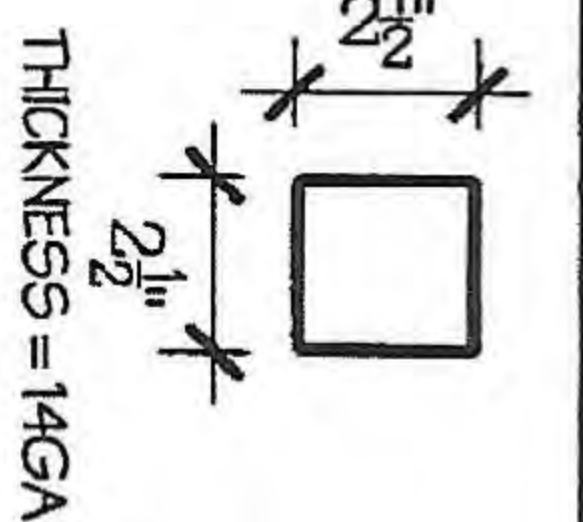
GAUGE	29	18	14	12
THICKNESS (in)	0.0135	0.049	0.083	0.109



THICKNESS = 29GA

29 GA CORRUGATED SHEATHING

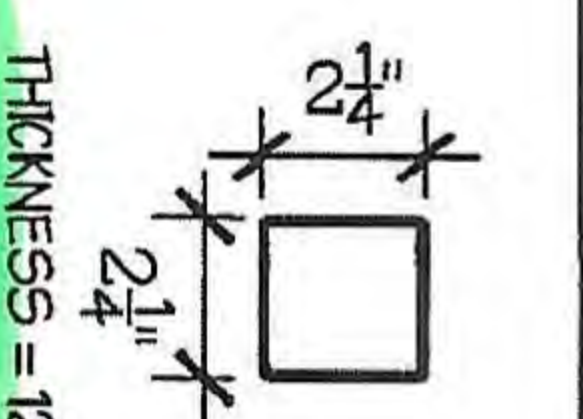
SCALE: NTS



THICKNESS = 14GA

2.5" X 2.5" 14GA TUBE

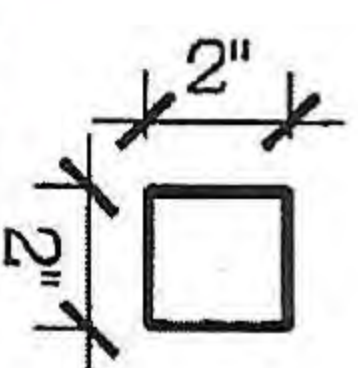
SCALE: NTS



THICKNESS = 12GA

2.25" X 2.25" 12GA TUBE

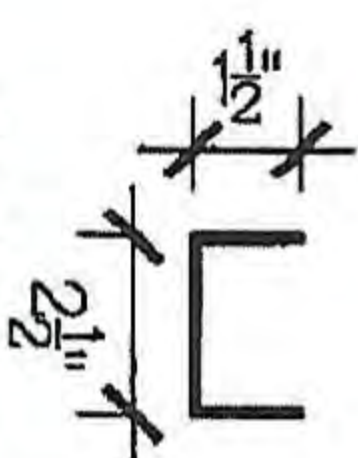
SCALE: NTS



THICKNESS = 14GA

2" X 2" 14GA TUBE

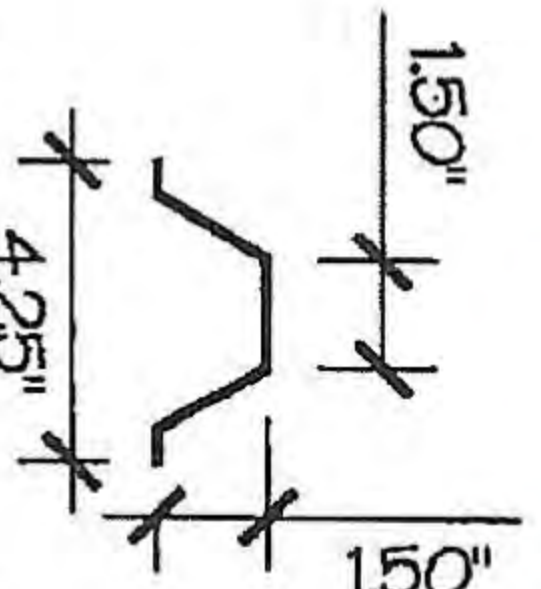
SCALE: NTS



THICKNESS = 14GA

2.5" X 1.5" 14GA CHANNEL

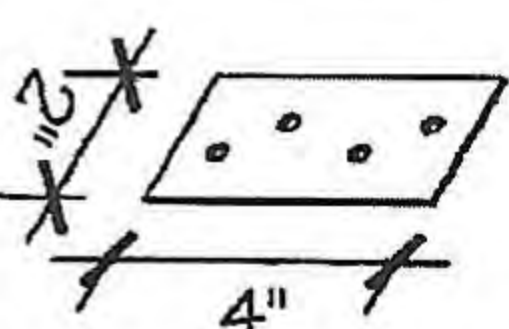
SCALE: NTS



THICKNESS = 14GA / 18GA

4.25" X 1.5" X 18GA HAT CHANNEL

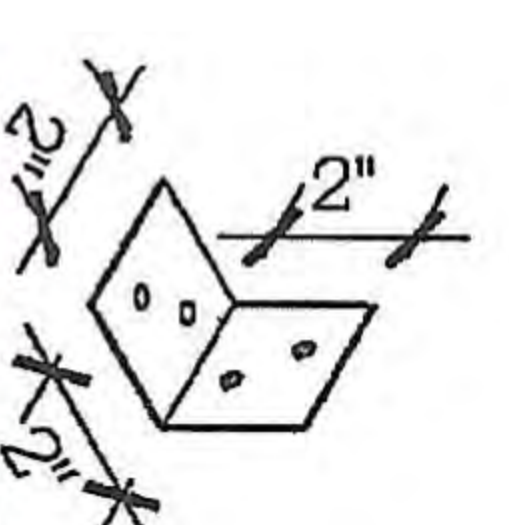
SCALE: NTS



THICKNESS = 14GA

STRAIGHT BRACKET

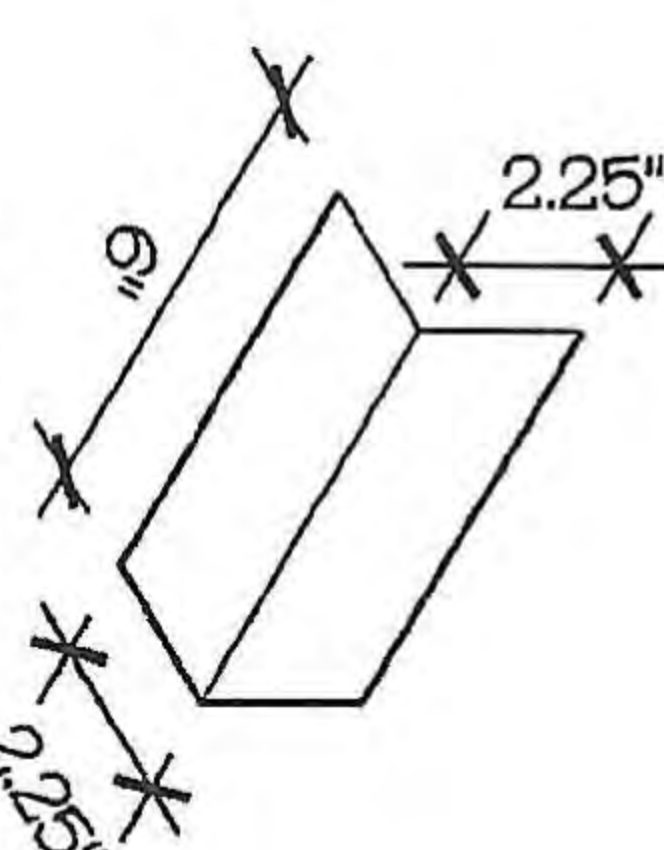
SCALE: NTS



THICKNESS = 14GA

ANGLE BRACKET

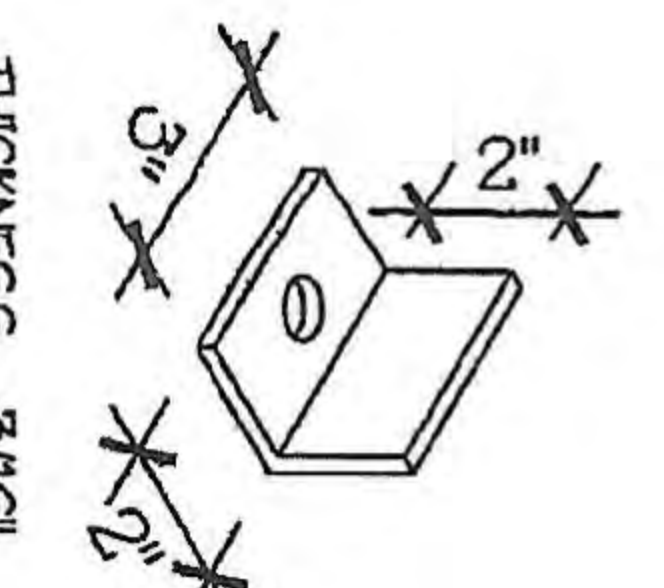
SCALE: NTS



THICKNESS = 14GA

DB BRACKET

SCALE: NTS



THICKNESS = 3/16"

BASE ANGLE

SCALE: NTS

MANUFACTURED BY:



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www.a-a-engineers.com

DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

SCHEDULES &

MEMBER SECTIONS

SHEET NO.: 2 / 11

DRAWN BY: AW DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

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- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 11/09/2020

DATE SIGNED: AUG 13 2020

MANUFACTURED BY:



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www.aan-engineers.com

DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

FRAME SECTIONS &
DETAILS

SHEET NO.: 3 / 11

DRAWN BY: AW DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

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- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 11/09/2020

DATE SIGNED: AUG 13 2020

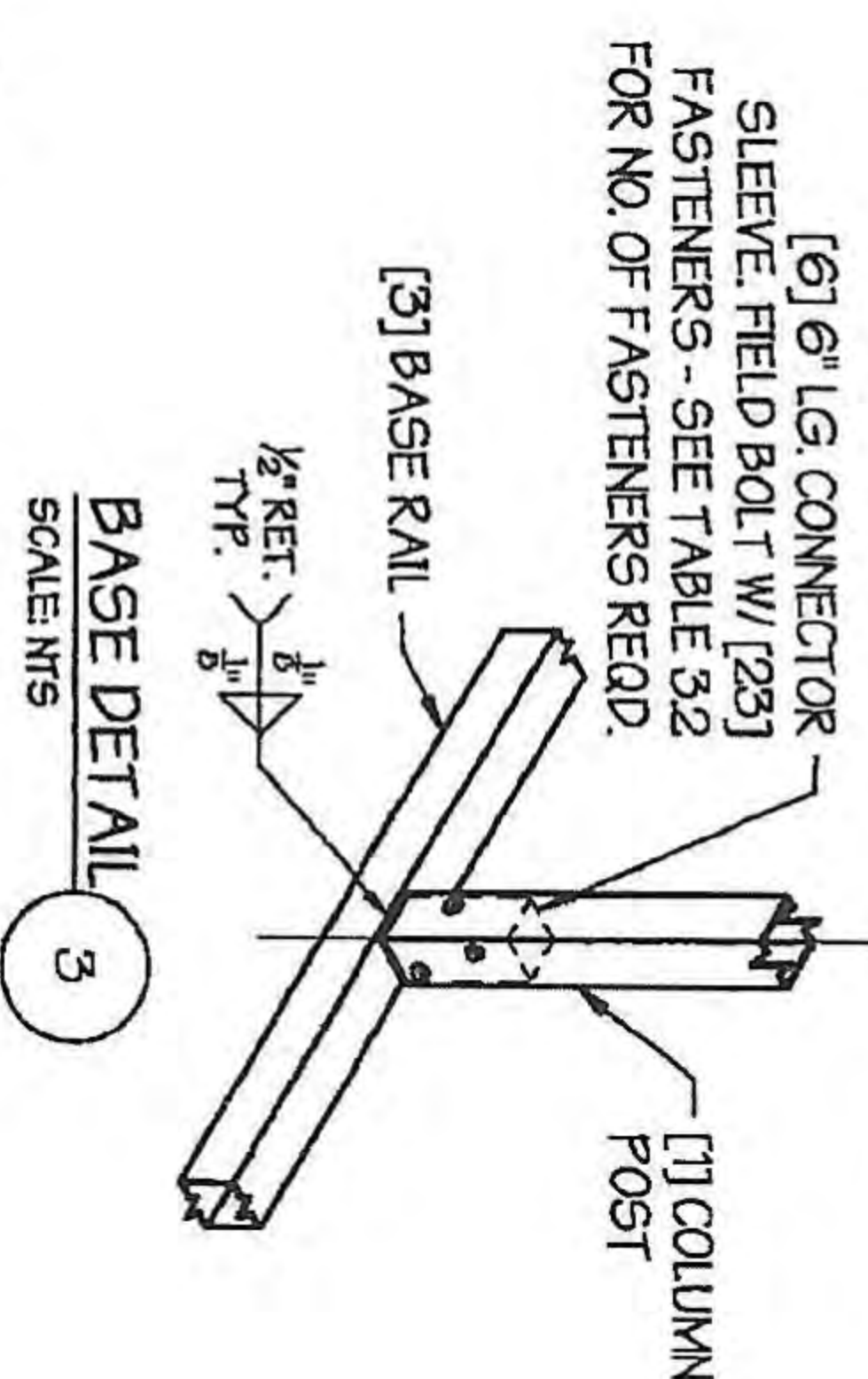
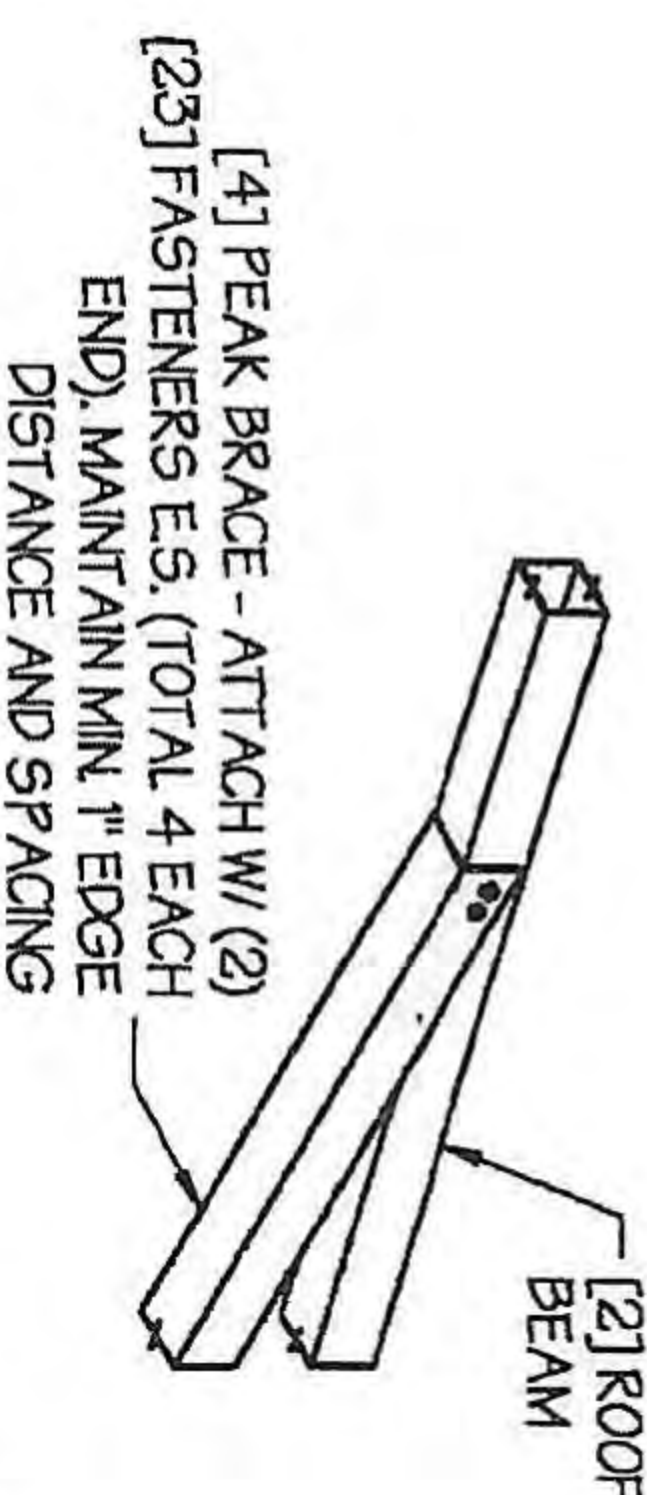
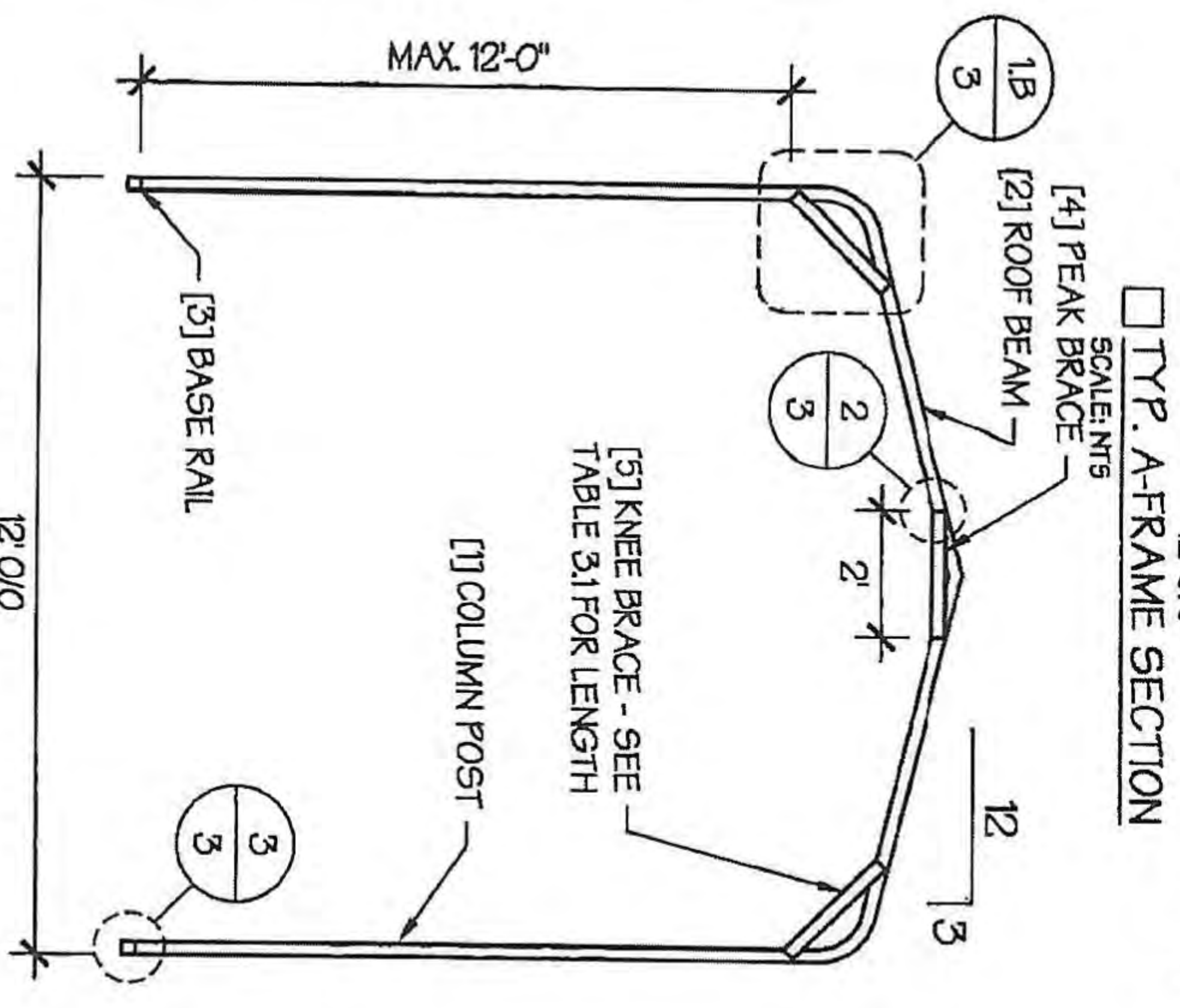
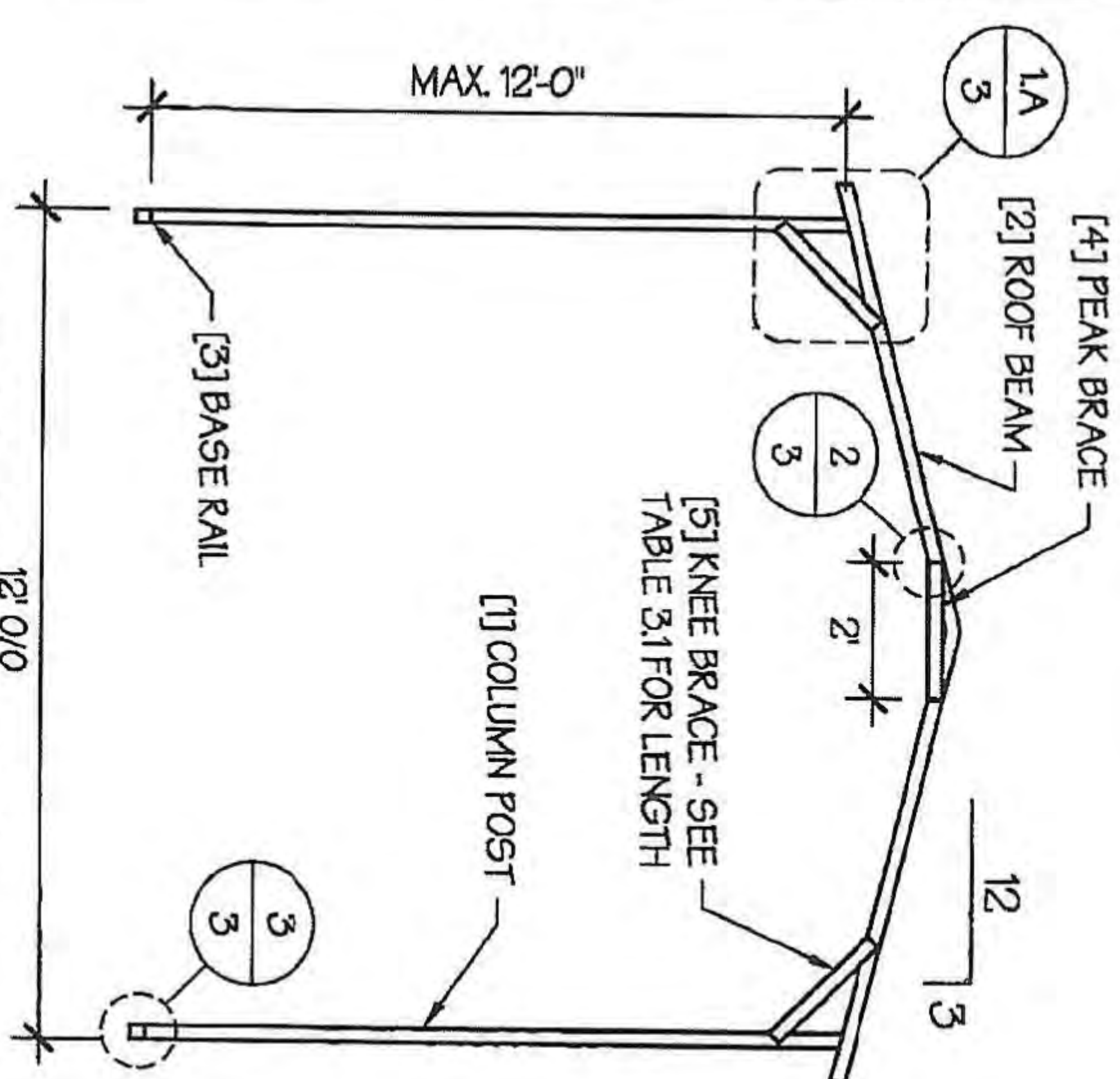
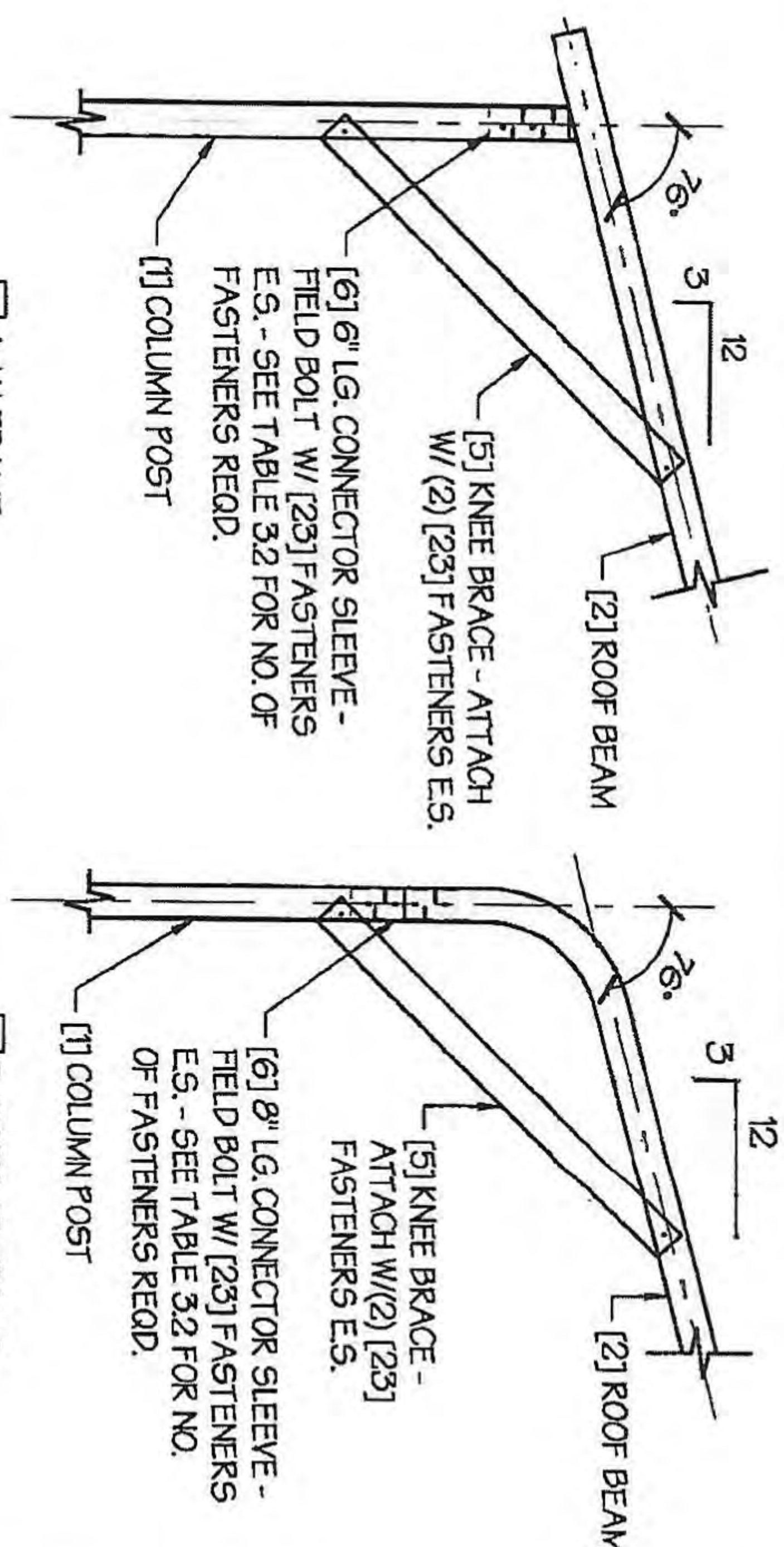


TABLE 3.1: KNEE BRACE SCHEDULE

EAVE HEIGHT	KNEE BRACE LENGTH
□ UP TO 8'	24"
□ 9' TO 12'	36"

TABLE 3.2 FASTENER SCHEDULE

WIND SPEED (MPH)	NO. OF FASTENERS
□ 105 TO 125	4
□ 130 TO 155	6
□ 160 TO 180	8

NOTE: COLUMN POST MAY BE ADJUSTED ±1" FOR LEVELING.
MANUFACTURER IS NOT RESPONSIBLE FOR LEVELING OF GROUND
AND/OR CONCRETE SURFACE PROVIDED BY OTHERS.

TABLE 4: FRAME SPACING CHART / SCHEDULE

GROUND SNOW / ROOF LIVE LOAD (PSF)		■ ENCLOSED BUILDINGS										■ OPEN BUILDINGS									
		WIND SPEED (MPH)										WIND SPEED (MPH)									
		□105	□115	□130	□140	□155	□165	□180	□105	□115	□130	□140	□155	□165	□180						
EAVE HEIGHT = UP TO 6'-0"		□30 / 20	60	60	54/60	54	42	42	36	60	54/60	48/60	42/54	36/42	36/42	36					
		□40 / 27	48/60	48/60	42/60	42/54	42	42	36	48/60	48/60	42/60	42/54	36/42	36/42	36					
		□50 / 34	40/54	40/54	40/54	40/54	40/42	40/42	36	40/54	40/54	40/54	40/54	36/42	36/42	36					
		□60 / 41	36/48	36/48	36/48	36/48	36/42	36/42	36	36/48	36/48	36/48	36/48	36/42	36/42	36					
		□70 / 47	32/42	32/42	32/42	32/42	32/42	32/42	32/36	32/42	32/42	32/42	32/42	32/42	32/42	32/36					
		□80 / 54	30/42	30/42	30/42	30/42	30/36	30/36	30/36	30/42	30/42	30/42	30/42	30/36	30/36	30/36					
		□90 / 61	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36					
EAVE HEIGHT = 7'-0" TO 9'-0"		□30 / 20	60	60	54/60	54	48	42/48	42	60	54/60	48/60	42/54	36/48	36/48	36/42					
		□40 / 27	48/60	48/60	42/60	42/54	42/48	42/48	42	48/60	48/60	42/60	42/54	36/48	36/48	36/42					
		□50 / 34	40/54	40/54	40/54	40/54	40/48	40/48	40/42	40/54	40/54	40/54	40/54	36/48	36/48	36/42					
		□60 / 41	36/48	36/48	36/48	36/48	36/48	36/48	36/42	36/48	36/48	36/48	36/48	36/48	36/48	36/42					
		□70 / 47	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42					
		□80 / 54	30/42	30/42	30/42	30/42	30/36	30/36	30/36	30/42	30/42	30/42	30/42	30/36	30/36	30/36					
		□90 / 61	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36					
EAVE HEIGHT = 10'-0" TO 12'-0"		□30 / 20	60	60	54/60	54	48	42/48	42	60	54/60	48/60	42/54	36/48	36/48	36/42					
		□40 / 27	48/60	48/60	42/60	42/54	42/48	42/48	42	48/60	48/60	42/60	42/54	36/48	36/48	36/42					
		□50 / 34	40/54	40/54	40/54	40/54	40/48	40/48	40/42	40/54	40/54	40/54	40/54	36/48	36/48	36/42					
		□60 / 41	36/48	36/48	36/48	36/48	36/48	36/48	36/42	36/48	36/48	36/48	36/48	36/48	36/48	36/42					
		□70 / 47	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42	32/42					
		□80 / 54	30/42	30/42	30/42	30/42	30/36	30/36	30/36	30/42	30/42	30/42	30/42	30/36	30/36	30/36					
		□90 / 61	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36	30/36					

NOTES:

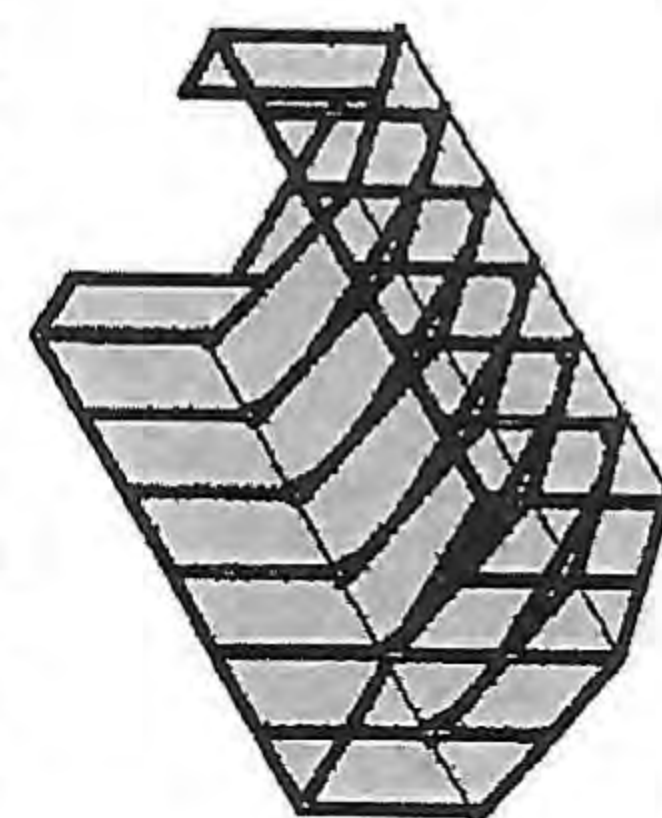
1. FRAME SPACINGS ARE IN UNITS OF INCHES (IN).
2. WHERE TWO VALUES ARE SHOWN, THE HIGHER VALUE CAN ONLY BE USED FOR VERTICAL SHEATHING.
3. SNOW LOADS AND ROOF LIVE LOADS ARE IN POUNDS PER SQUARE FOOT (PSF). WIND SPEED IS 3 SEC. GUST IN MILES PER HOUR (MPH).
4. FOR VALUES THAT LIE BETWEEN TWO CELLS, THE HIGHER (MORE STRINGENT) VALUE HAS TO BE USED. INTERPOLATION BETWEEN CELLS IS NOT ALLOWED.

ENCLOSURE CLASSIFICATION:

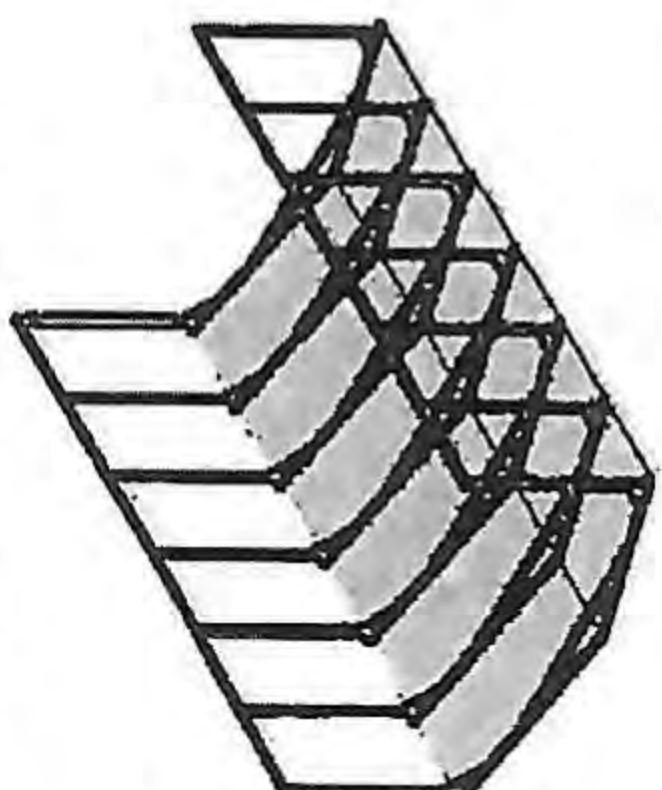
1. ENCLOSED BUILDING = ALL 4 WALLS FULLY ENCLOSED WITH DOORS/WINDOWS = USE ENCLOSED BUILDING SPACING CHART.
2. OPEN BUILDING = ALL 4 WALLS FULLY OPEN = USE OPEN BUILDING SPACING CHART.
3. 3FT PARTIALLY ENCLOSED = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ONLY 3FT ENCLOSED = USE OPEN BUILDING SPACING CHART.
4. PARTIALLY ENCLOSED = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ENCLOSED MORE THAN 3FT = START WITH OPEN BUILDING SPACING CHART AND THEN REDUCE SPACING BY 6".
5. 3 SIDED ENCLOSED = ALL WALLS ARE ENCLOSED EXCEPT FOR 1 END-WALL = START WITH ENCLOSED BUILDING SPACING + THE OPEN END FRAME MUST HAVE EITHER A GABLED END OR HAVE DOUBLED WELDED LEGS.
6. FOR ALL SHEATHING ENCLOSURES NOT LISTED ABOVE, REFER TO SHEET 5 FOR SPACING AND DESIGN REQUIREMENTS.

GENERAL NOTES:

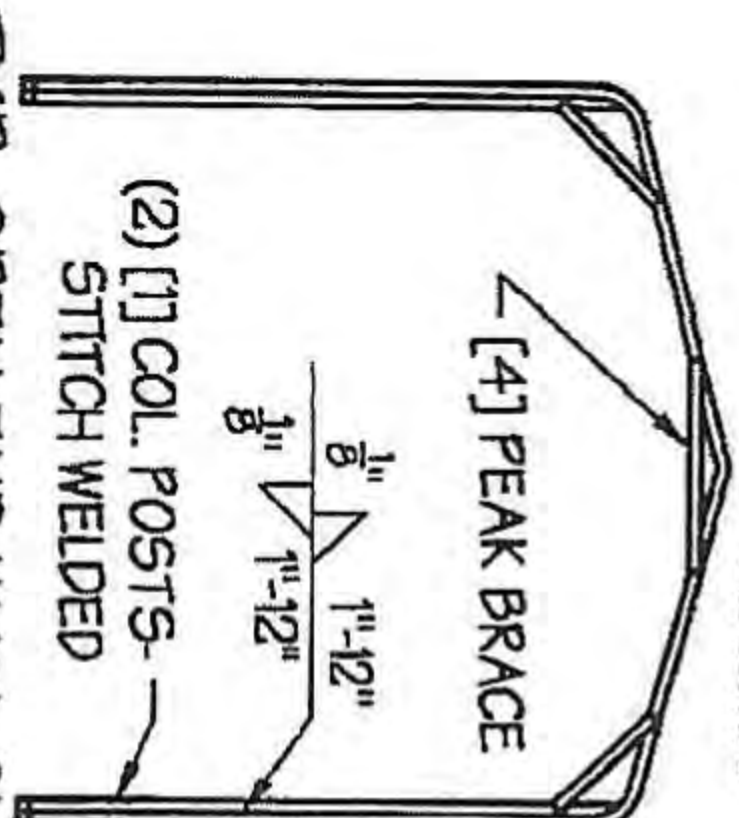
1. THE MAX. BUILDING LENGTH FOR ENCLOSED BUILDINGS IS 50'-0". THIS CAN BE INCREASED BY ADDING A DOUBLE FRAME AT THE CENTER TO BREAK THE LENGTH OF THE BUILDING.
2. BUILDINGS WITH PARTIALLY ENCLOSED END WALLS NEED TO HAVE SIDE WALL BRACING TO SUPPORT THE PARTIALLY ENCLOSED END WALL. (SEE FIGURE A ON SHEET 5).



TY.P. ENCLOSED BUILDING
SCALE: NTS



TY.P. OPEN BUILDING
SCALE: NTS



TY.P. OPEN END WALL ON 3
SIDE ENCLOSED BUILDING
SCALE: NTS

MANUFACTURED BY:



NORTHSIDE
METAL CARPORTS LLC
110 Avery Rd E
Chehalis, WA 98532
360-262-9354

ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6036 Renaissance Place, Toledo, OH 43628
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www.a-a-engineering.com

DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:

SPACING SCHEDULES
& ENCLOSURE NOTES

SHEET NO.: 4 / 11

DRAWN BY: AW DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW. - DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 11/09/2020
DATE SIGNED: AUG 13 2020

TABLE 5.1: PURLIN SPACING SCHEDULE

GROUND SNOW / ROOF LIVE LOAD (PSF)		■ 14GA. HAT CHANNEL PURLIN										■ 18GA. HAT CHANNEL PURLIN									
		WIND SPEED (MPH)										WIND SPEED (MPH)									
		105	115	130	140	155	165	180	105	115	130	140	155	165	180						
■ 30/20		54	48	42	36	30	24	24	36	30	24	18	18	12	12						
■ 40/27		42	42	42	36	30	24	24	30	30	24	18	18	12	12						
■ 50/34		40	40	40	36	30	24	24	24	24	24	18	18	12	12						
■ 60/41		36	36	36	36	30	24	24	18	18	18	18	18	12	12						
■ 70/47		32	32	32	32	30	24	24	18	18	18	18	18	12	12						
■ 80/54		30	30	30	30	30	24	24	18	18	18	18	18	12	12						
■ 90/61		24	24	24	24	24	24	24	12	12	12	12	12	12	12						
■ 30/20		54	48	42	42	36	30	30	48	36	30	24	18	18	12						
■ 40/27		42	42	42	42	36	36	30	42	36	30	24	18	18	12						
■ 50/34		40	40	40	40	36	36	30	40	40	36	30	24	24	18						
■ 60/41		36	36	36	36	36	36	30	36	36	36	36	30	30	30						
■ 70/47		32	32	32	32	32	32	30	32	32	32	32	32	30	30						
■ 80/54		32	32	32	32	32	32	30	32	32	32	32	32	30	30						
■ 90/61		30	30	30	30	30	30	30	24	24	24	24	24	24	18						
■ 30/20		54	48	42	42	36	36	30	54	48	42	42	36	30	30						
■ 40/27		42	42	42	42	36	36	30	42	42	42	42	36	30	30						
■ 50/34		40	40	40	40	36	36	30	40	40	40	40	36	30	30						
■ 60/41		36	36	36	36	36	36	30	36	36	36	36	36	30	30						
■ 70/47		32	32	32	32	32	32	30	32	32	32	32	32	30	30						
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■ 80/54		32	32	32	32	32	32	30	32	32	32	32	32								

NOTES:

- PURLIN SPACING UNITS ARE IN INCHES.
- FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE 4.

IRREGULAR BUILDING NOTES:

- FIGURES A, B, C & D ON THE RIGHT INDICATE EXAMPLES OF IRREGULAR BUILDINGS.
- FOR IRREGULAR BUILDINGS, FRAME SPACING MUST BE REDUCED BY 12" FROM OPEN BUILDING SPACING TABLE SEE SHEET 4 FOR OPEN BUILDING TABLE.
- SITE SPECIFICS MAY ALLOW FOR ALTERNATIVE SPACING.

TABLE 5.2: GIRT SPACING SCHEDULE

FRAME SPACING	WIND SPEED (MPH)													
	105	115	120	140	155	165	180	105	115	120	140	155	165	180
□ 5'-0"	60	48	36	30	24	24	18	60	48	36	30	24	24	18
□ 4'-6"	60	60	48	42	36	30	24	60	60	48	42	36	30	24
□ 4'-0"	60	60	54	54	42	36	30	60	60	54	54	42	36	30
□ 3'-6"	60	60	54	54	48	42	42	60	60	54	54	48	42	42
□ 2'-0" TO 3'-0"	60	60	54	54	48	42	42	60	60	54	54	48	42	42

NOTES:

- GIRT SPACING UNITS ARE IN INCHES.
- THIS SCHEDULE IS TO BE USED FOR BOTH 14GA AND 18 GA PURLIN.
- FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE 4.

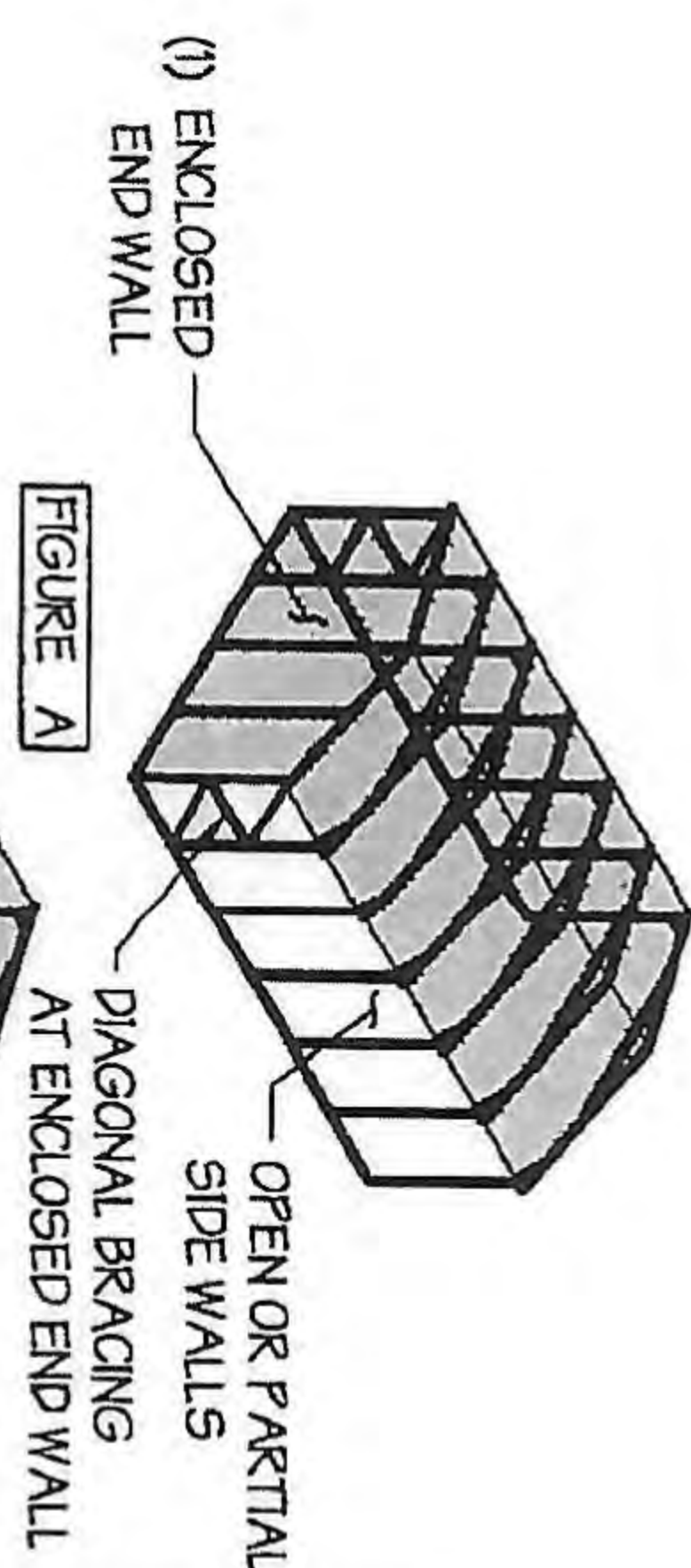


FIGURE A

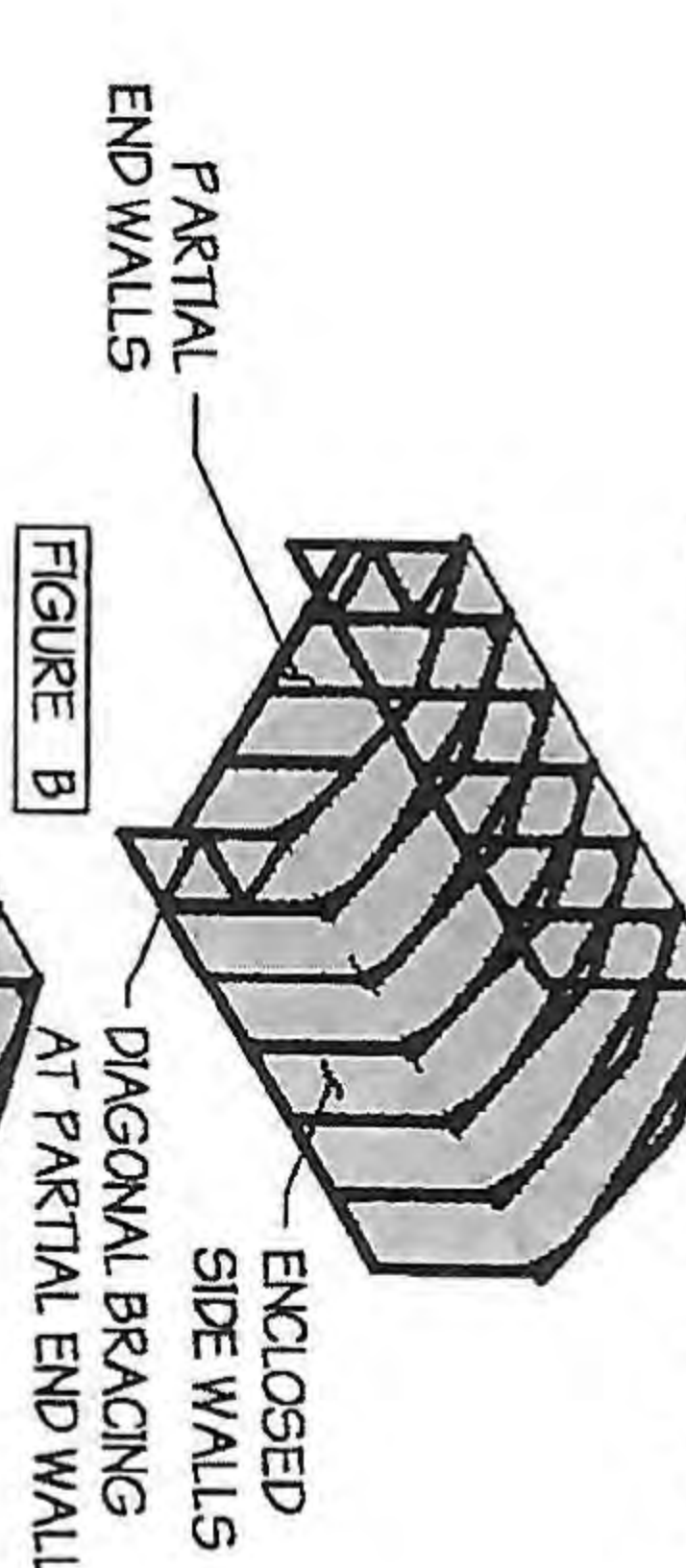


FIGURE B

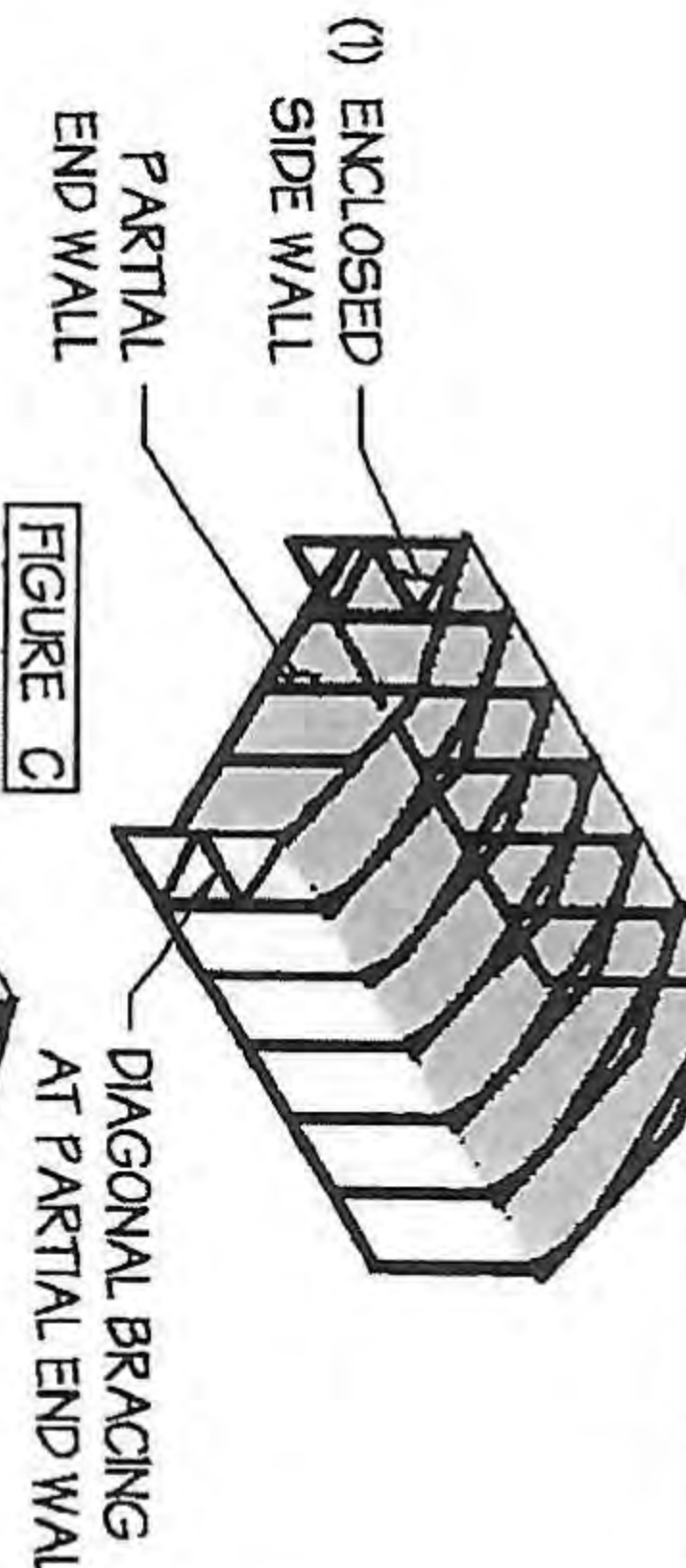


FIGURE C

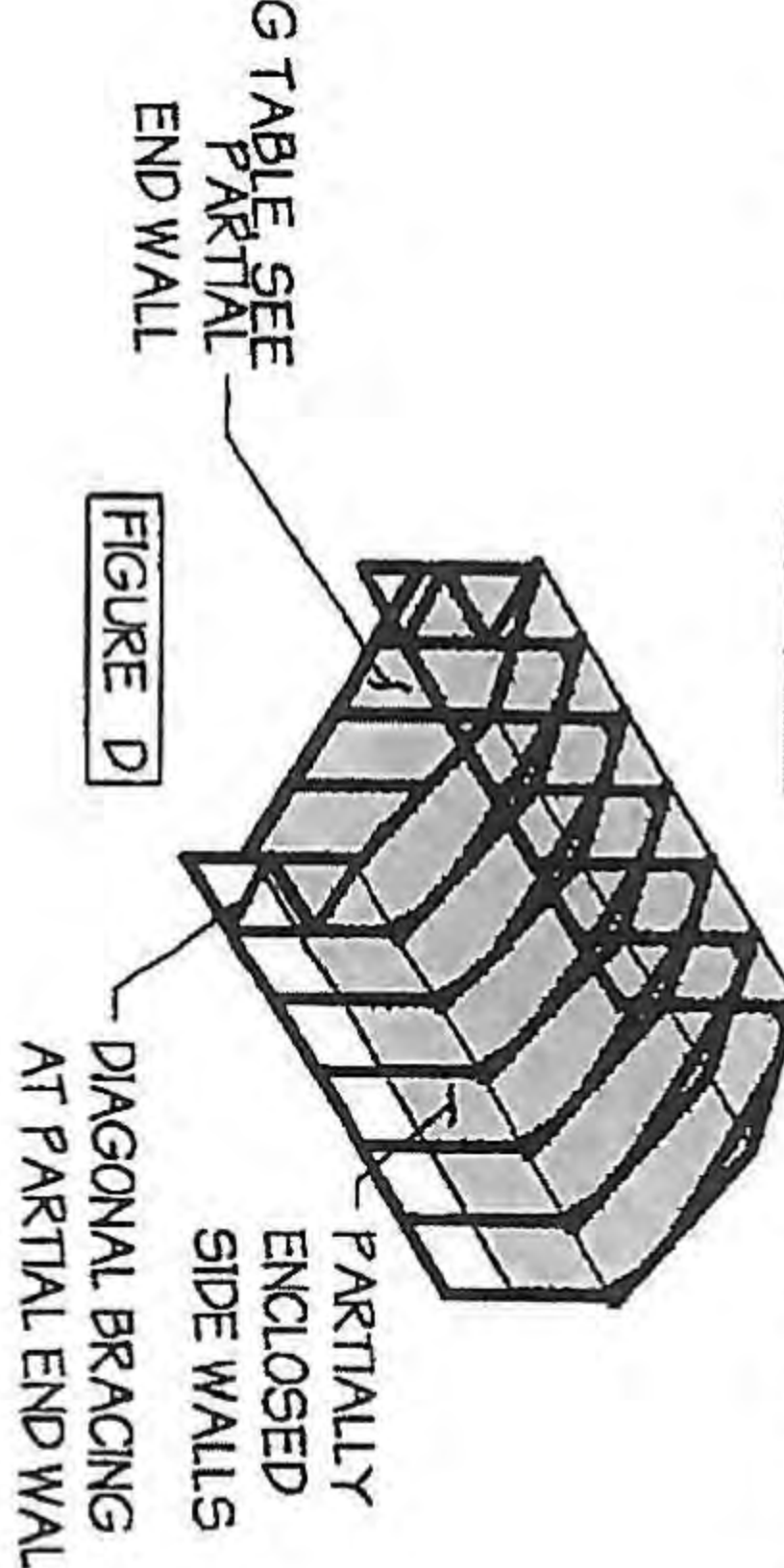


FIGURE D

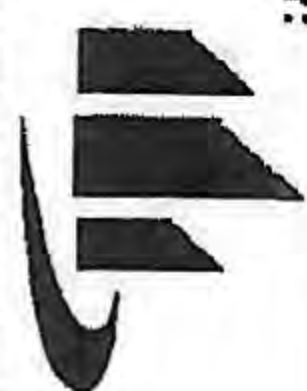
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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

PURLIN & GIRT
SPACING SCHEDULES

SHEET NO.: 5 / 11

DRAWN BY: AW DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

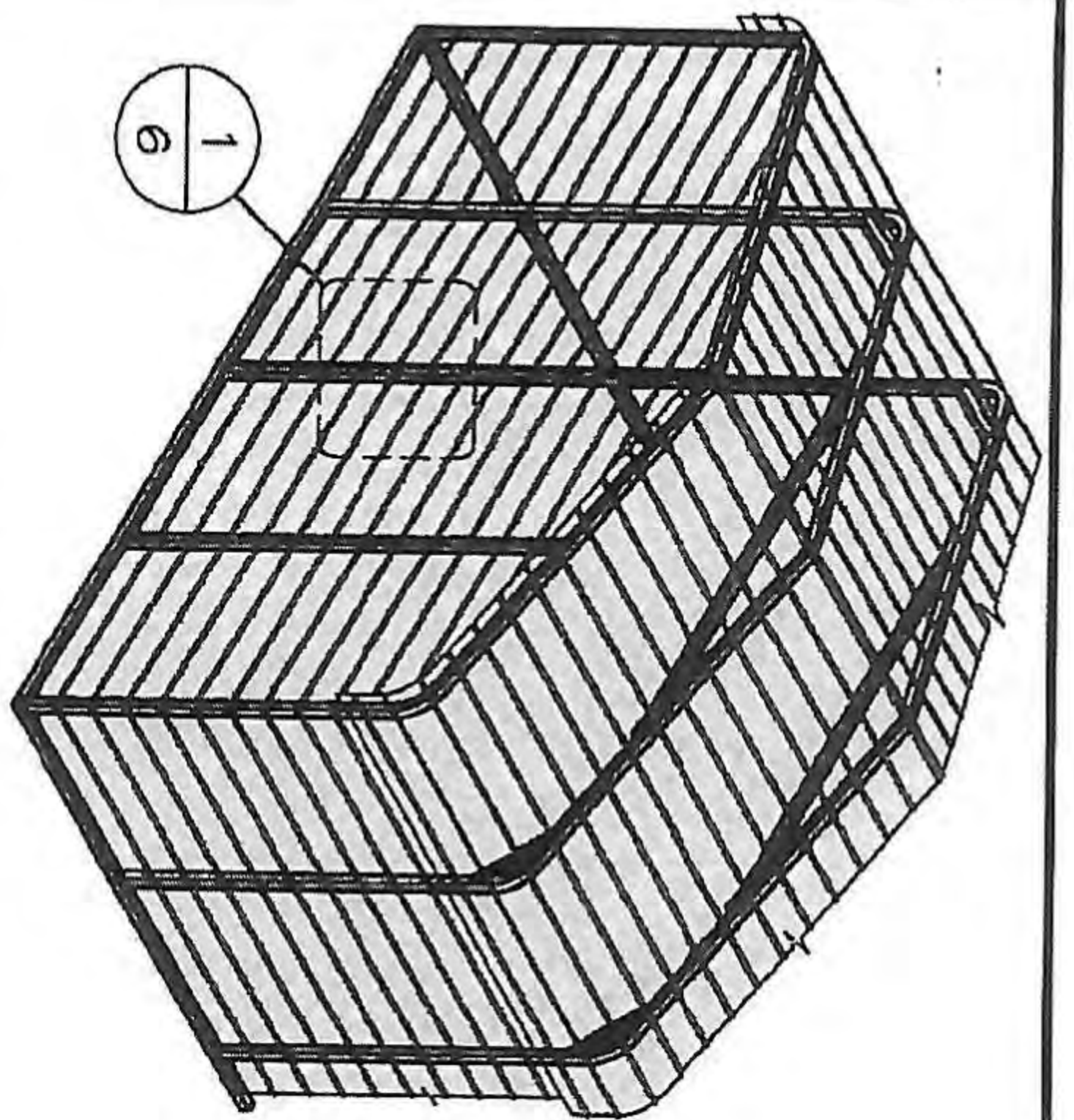
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SEAL:

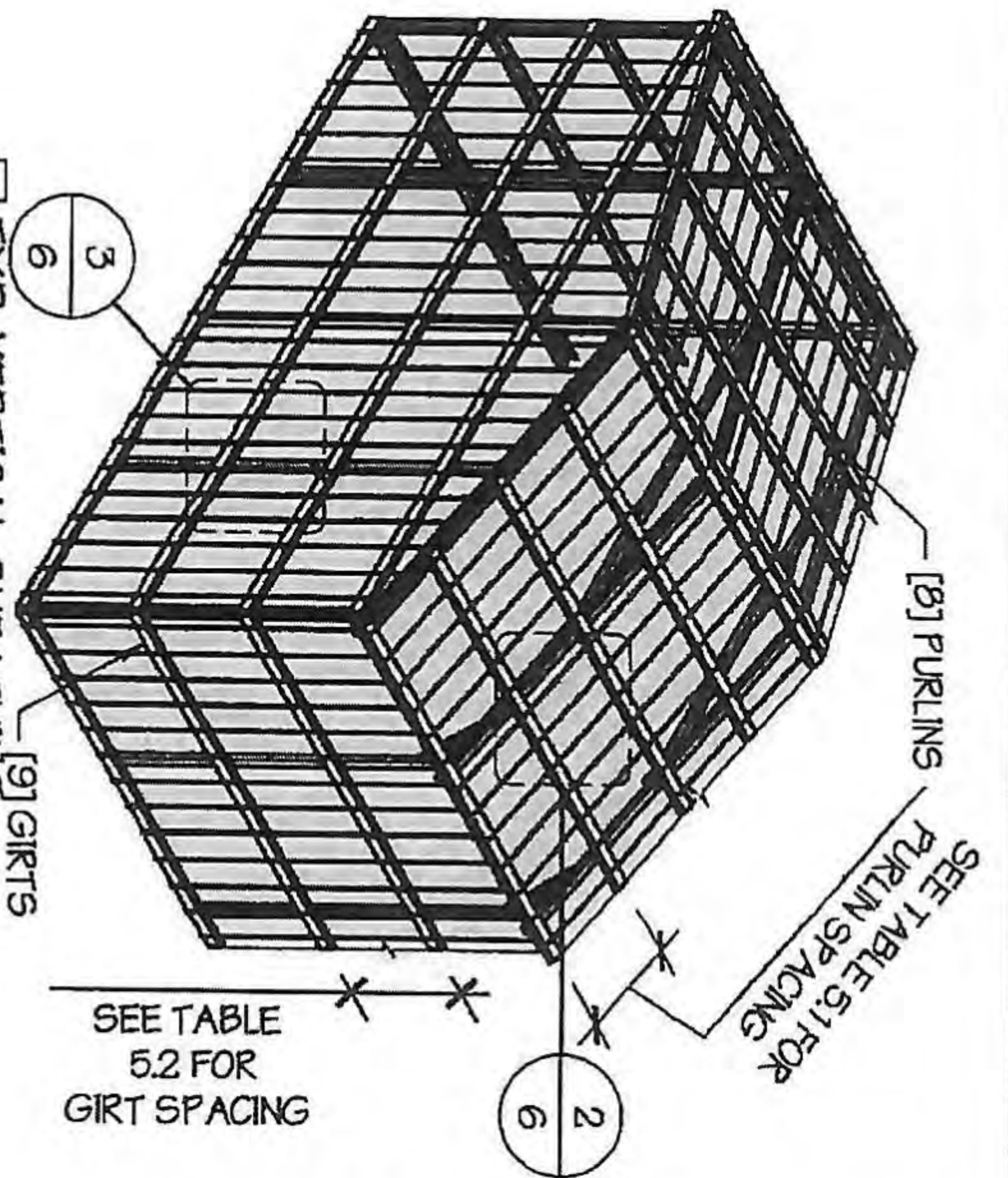


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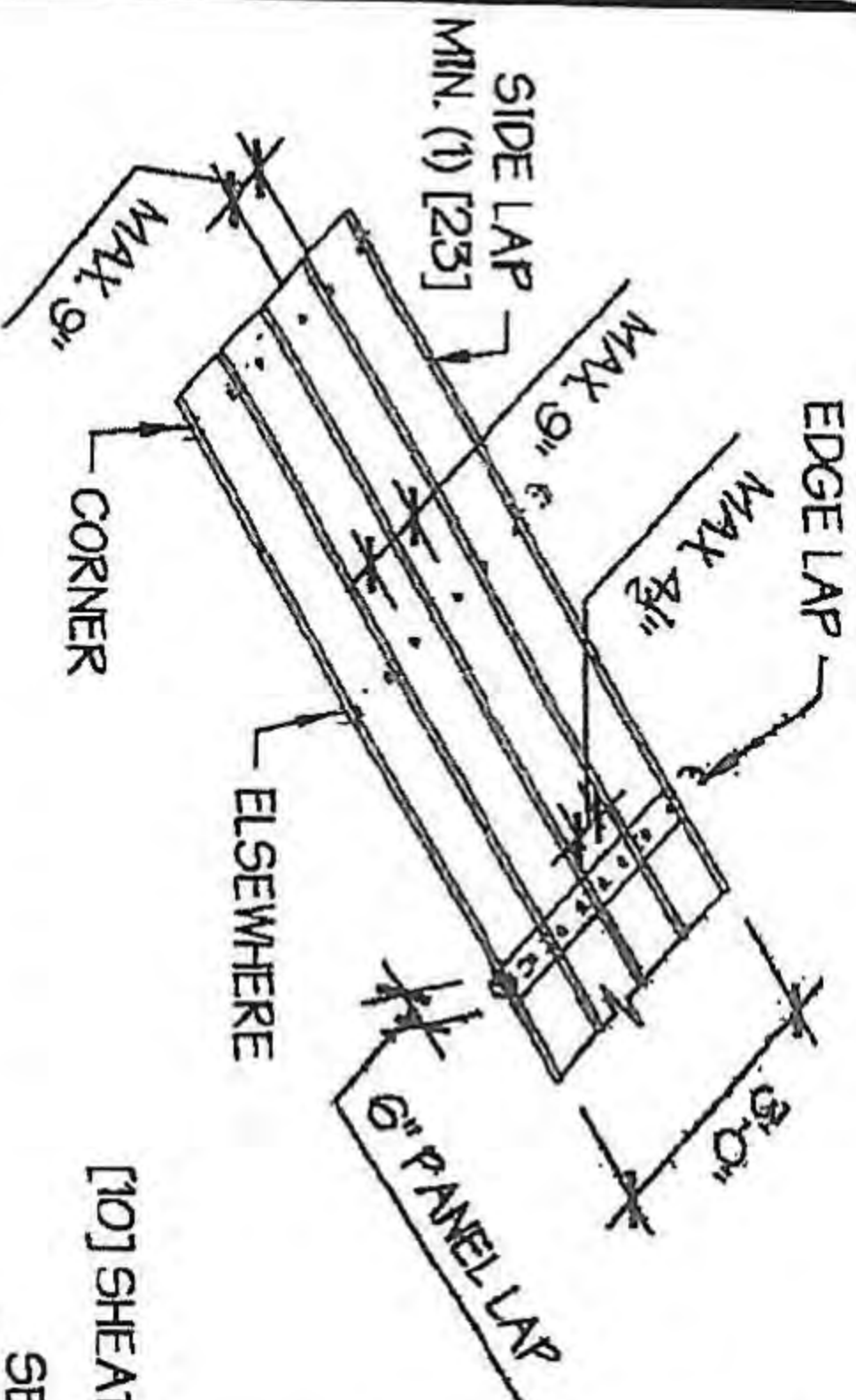
☐ TYP. HORIZONTAL SHEATHING
SCALE: NTS



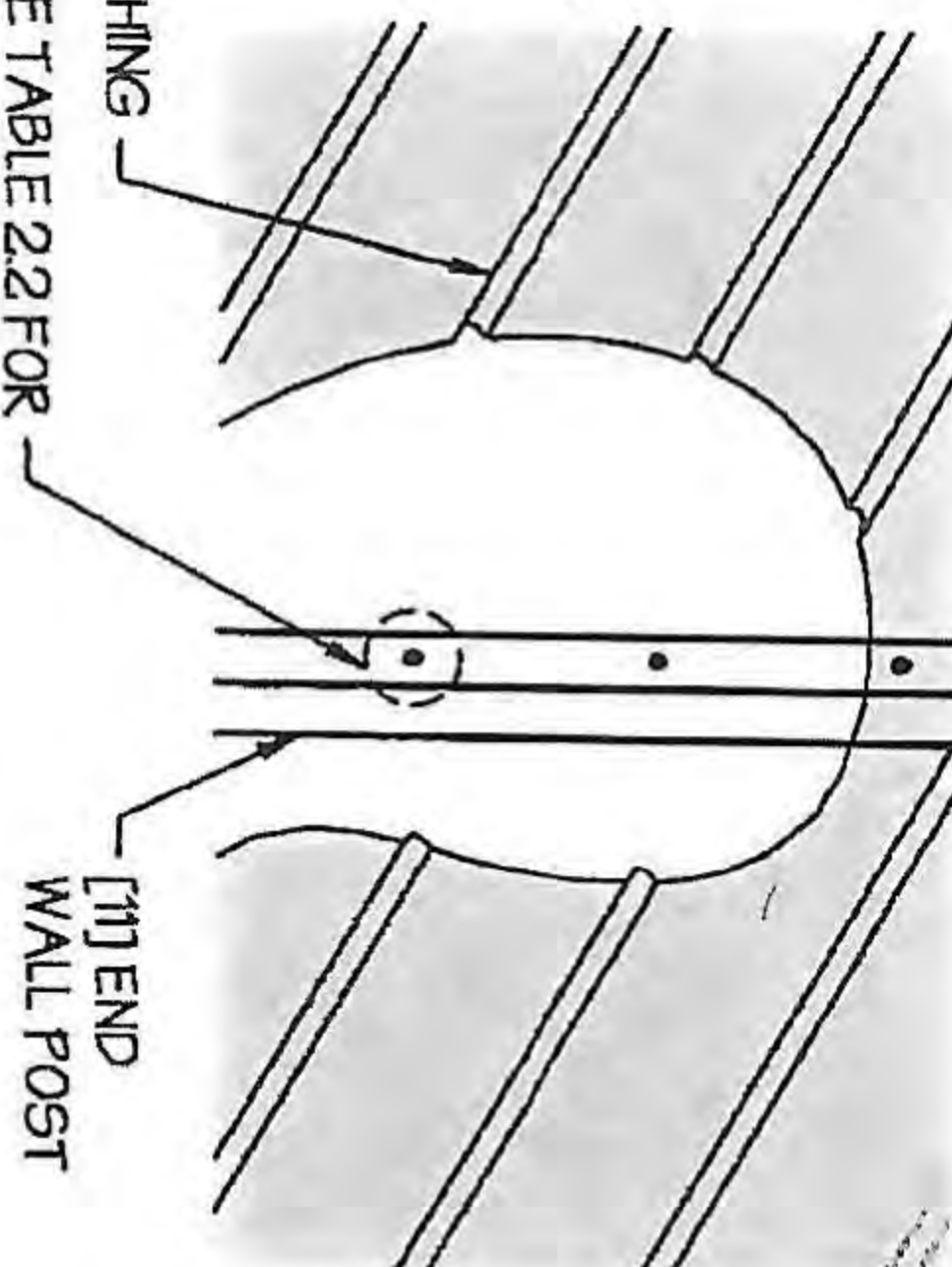
☐ TYP. VERTICAL SHEATHING
SCALE: NTS

GENERAL SHEATHING NOTES:

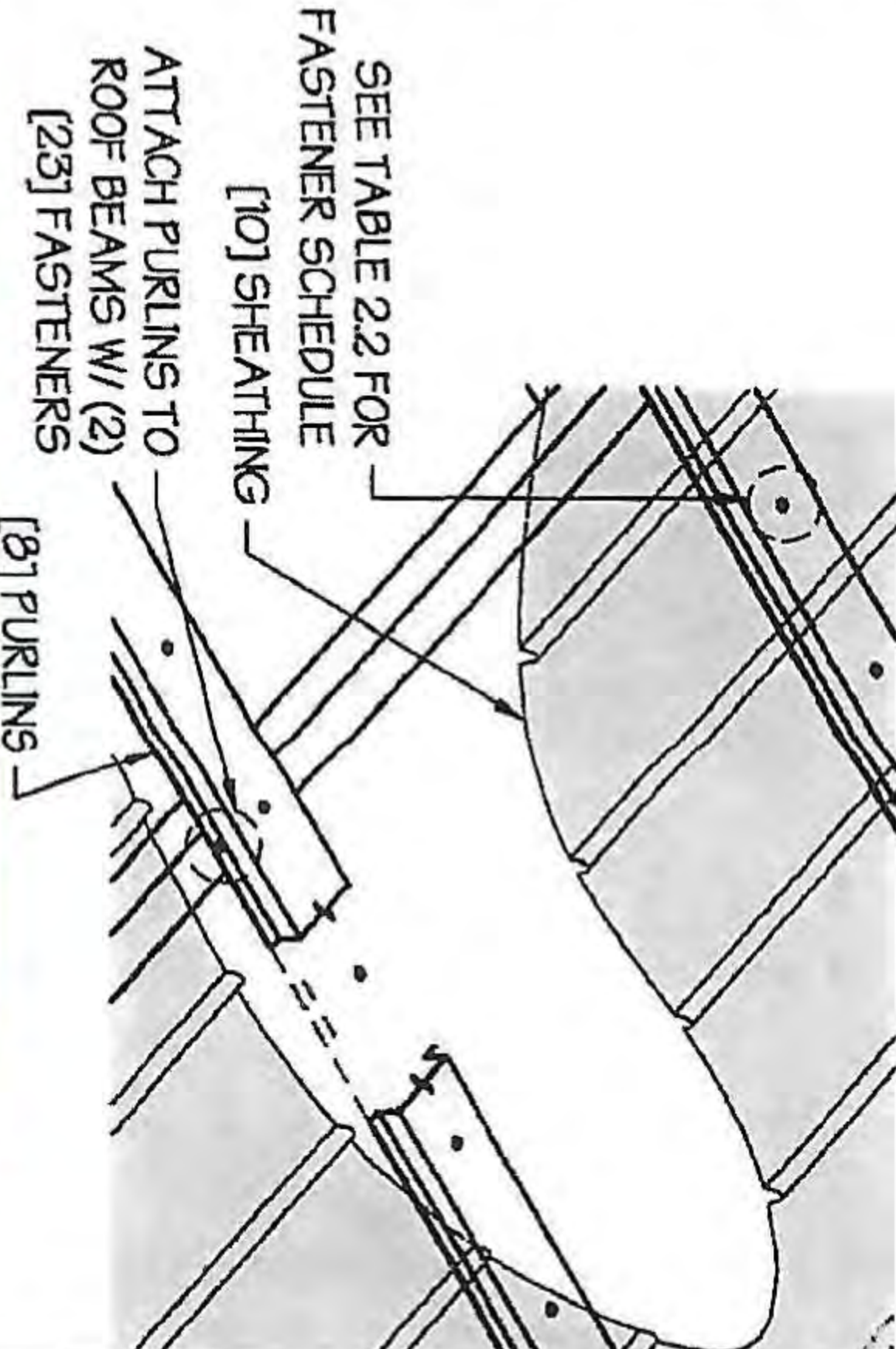
1. REGULAR STYLE BUILDINGS CAN ONLY HAVE HORIZONTAL SHEATHING ON ROOF AND WALLS. A-FRAME STYLE BUILDINGS CAN HAVE ANY COMBINATION OF HORIZONTAL OR VERTICAL SHEATHING ON ROOFS AND WALLS. BOTH HORIZONTAL AND VERTICALS ROOF SHEATHING CAN HAVE MAX. 6" OVERHANG.
2. USING VERTICAL SHEATHING MAY ALLOW FOR GREATER FRAME SPACING. SEE NOTE 2 UNDER TABLE 4.
3. VERTICAL SHEATHING RECOMMENDED FOR BUILDINGS 30' OR LONGER



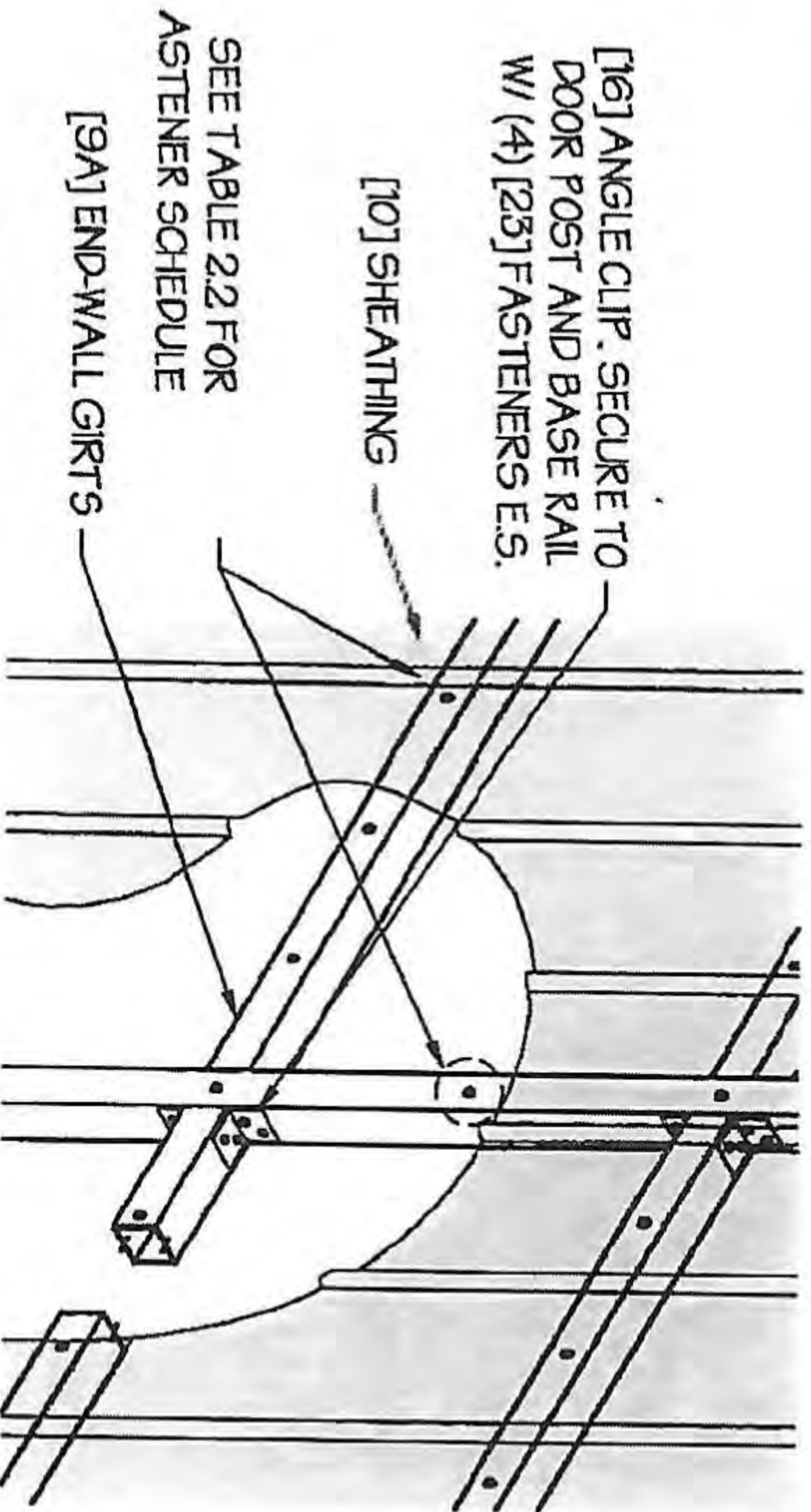
TYP. SHEATHING FASTENER SCHEDULE
SCALE: NTS



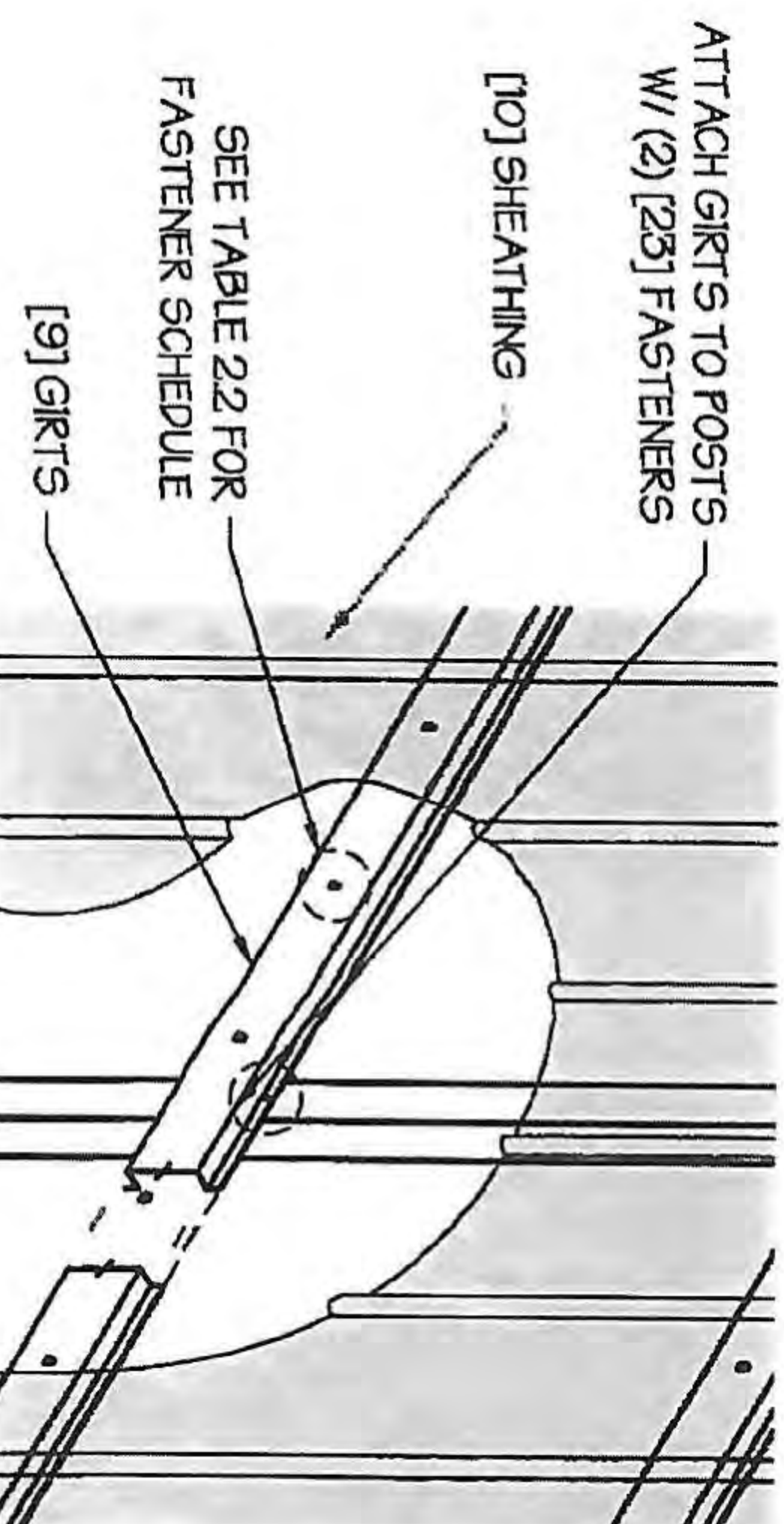
TYP. HORIZONTAL SHEATHING DETAIL
SCALE: NTS



ROOF VERTICAL SHEATHING DETAIL
SCALE: NTS



☐ WALL VERTICAL SHEATHING - TUBE DETAIL
SCALE: NTS



☐ WALL VERTICAL SHEATHING - HAT CHANNEL DETAIL
SCALE: NTS

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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 33-20-1753
SHEET TITLE:
SHEATHING OPTIONS
& DETAILS

SHEET NO.: 6 / 11

DRAWN BY: AW DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:
**SIDE WALL FRAMING
& OPENINGS**

SHEET NO.: 7 / 11

DRAWN BY: AW DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

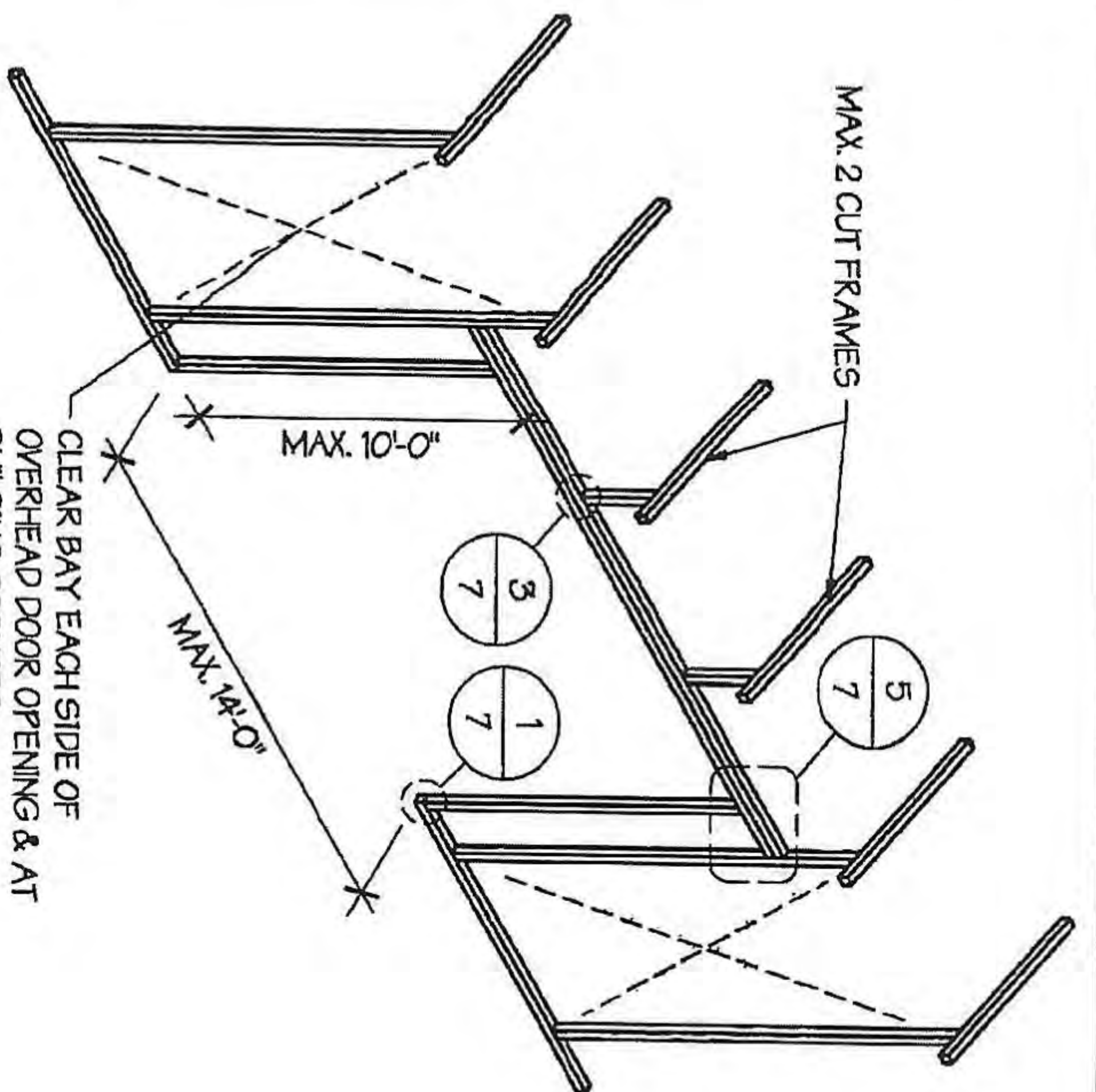
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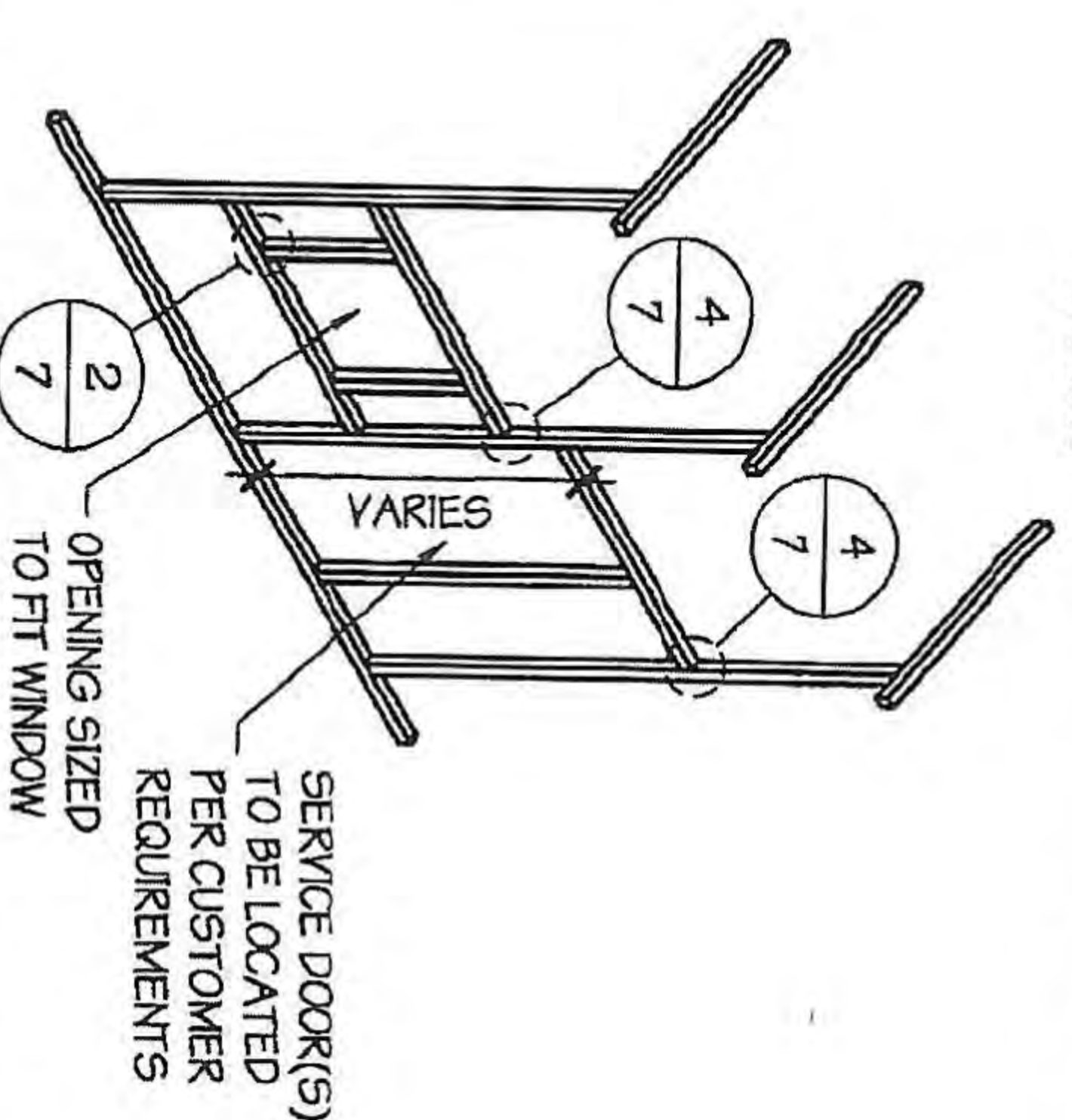
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SIDE WALL OVERHEAD DOOR OPENINGS

SCALE: NTS

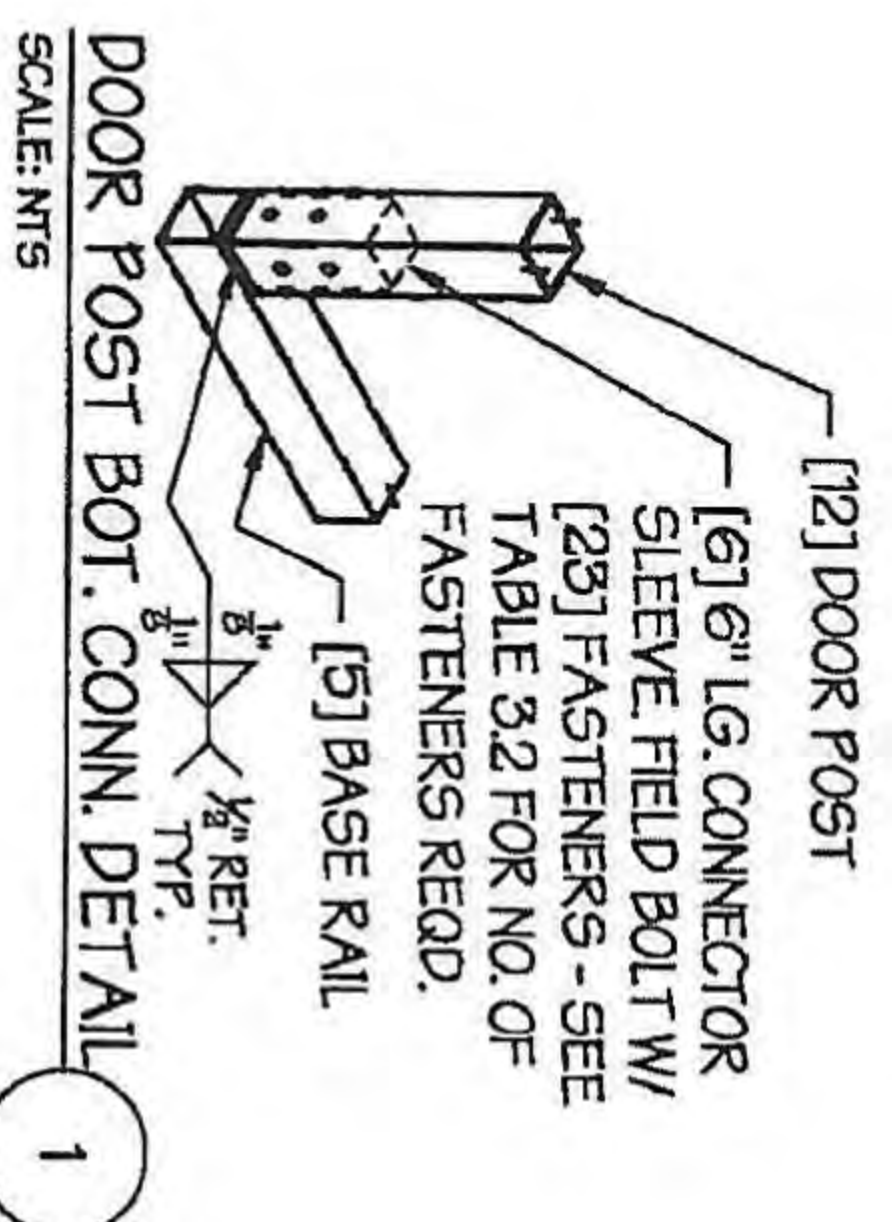


SIDE WALL SERVICE DOOR / WINDOW OPENINGS

SCALE: NTS

SIDE WALL FRAMING NOTES:

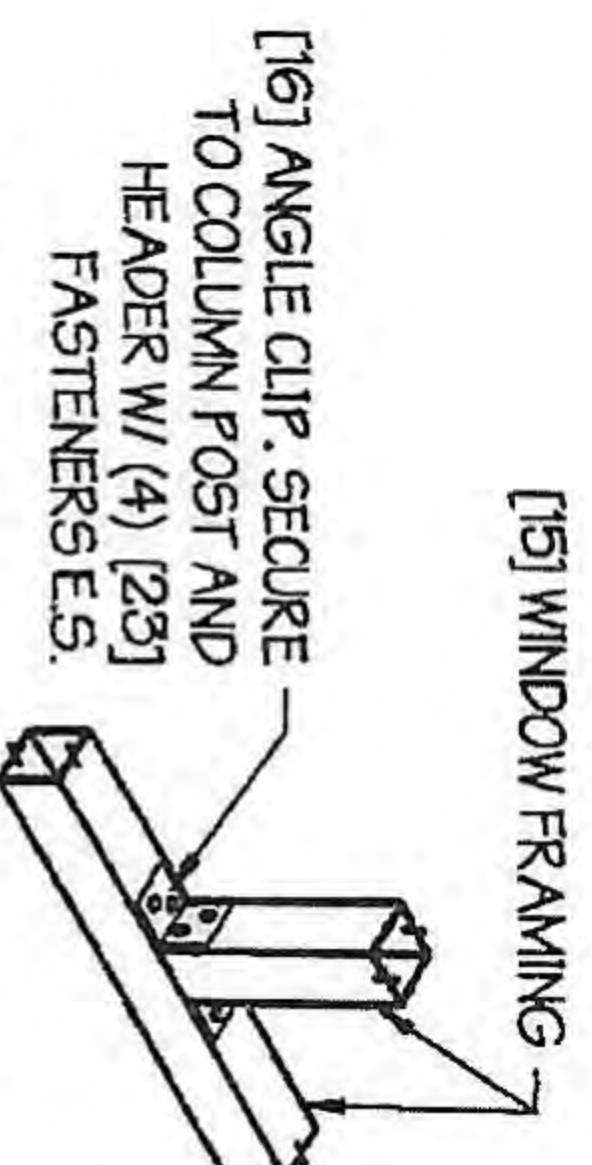
1. DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
2. MAX. HEIGHT OF SIDE WALL OVERHEAD DOOR OPENINGS IS 2 FT LESS THAN THE EAVE HEIGHT.
3. OVERHEAD DOOR OPENINGS CANNOT CUT THROUGH MORE THAN 2 FULL FRAMES.
4. MIN. 1 CLEAR BAY MUST BE MAINTAINED BETWEEN ANY 2 OVERHEAD DOOR OPENINGS. A CLEAR BAY IS A SPACE BETWEEN TWO FRAMES THAT HAS NO OVERHEAD DOOR OPENINGS.
5. MIN. 1 CLEAR BAY MUST ALSO BE MAINTAINED FROM THE BUILDING CORNERS.
6. SERVICE DOORS AND WINDOWS CAN BE PLACED IN CLEAR BAYS OR ANY WHERE ELSE AS NEEDED.



SCALE: NTS

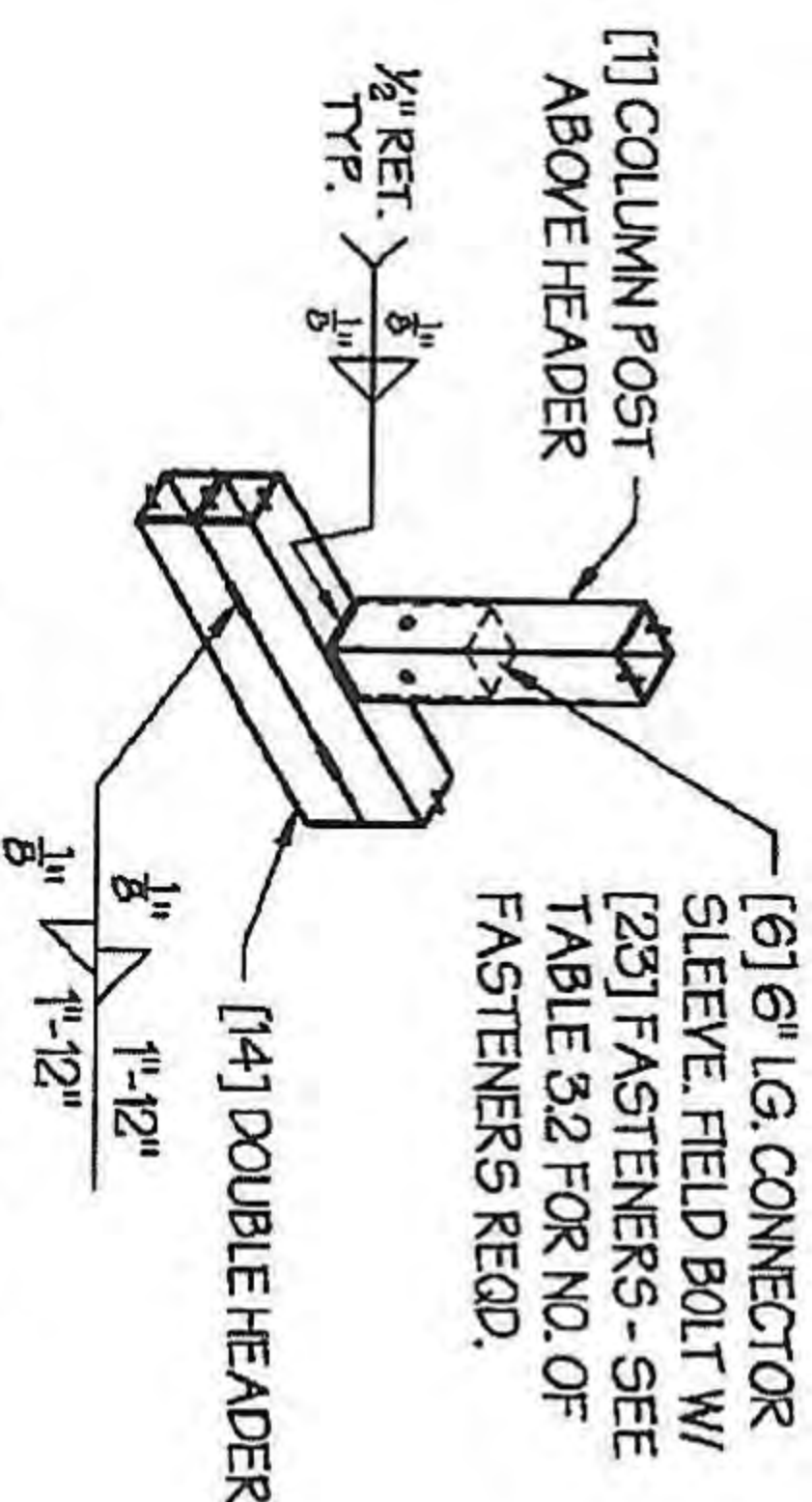
**TYP. WINDOW FRAMING
CONN. DETAIL**

SCALE: NTS



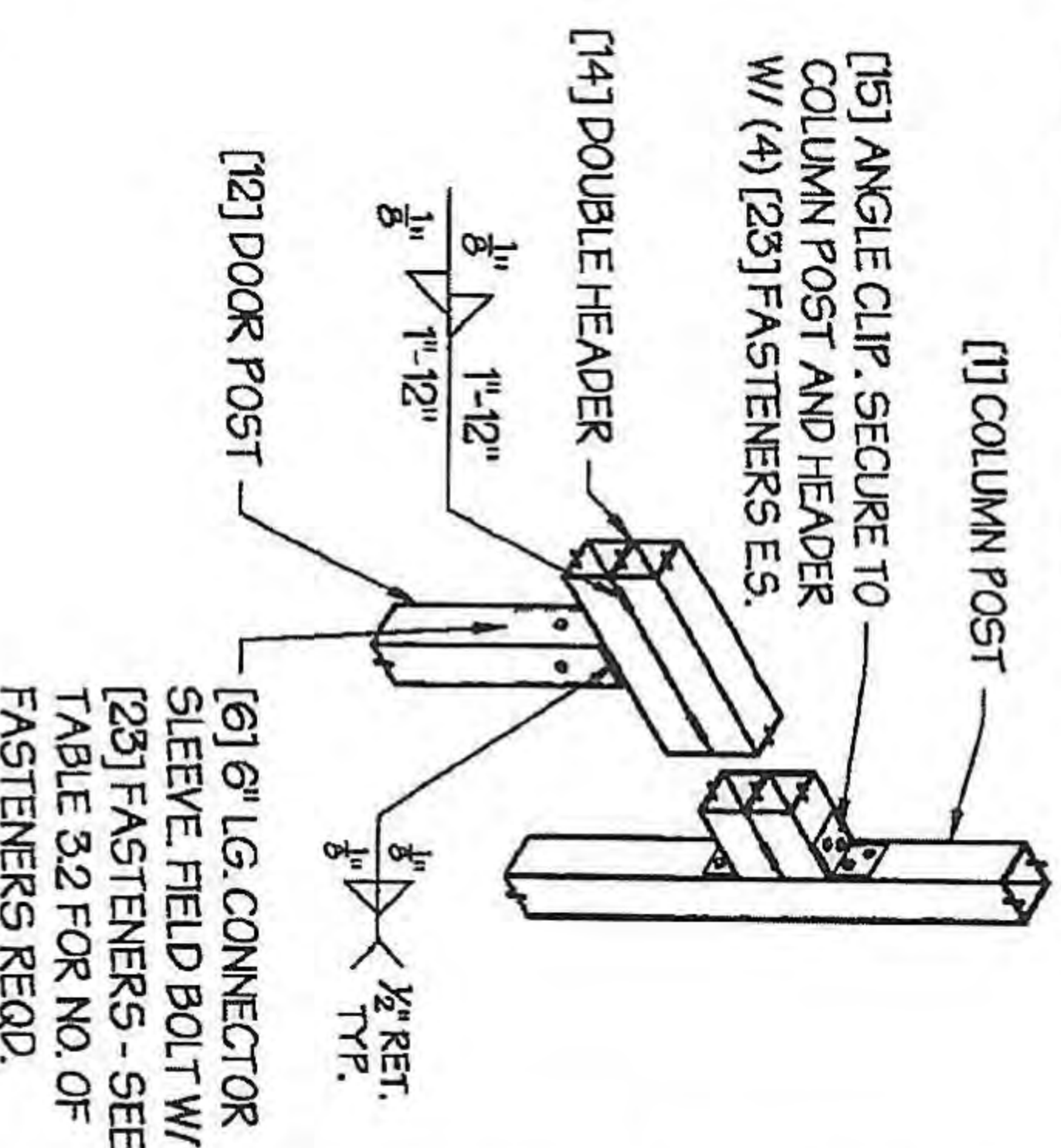
**COLUMN POST ABOVE DOOR
HEADER CONN. DETAIL**

SCALE: NTS



**COLUMN POST ABOVE DOOR
HEADER CONN. DETAIL**

SCALE: NTS



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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:

END WALL FRAMING

SHEET NO.: B-A / 11

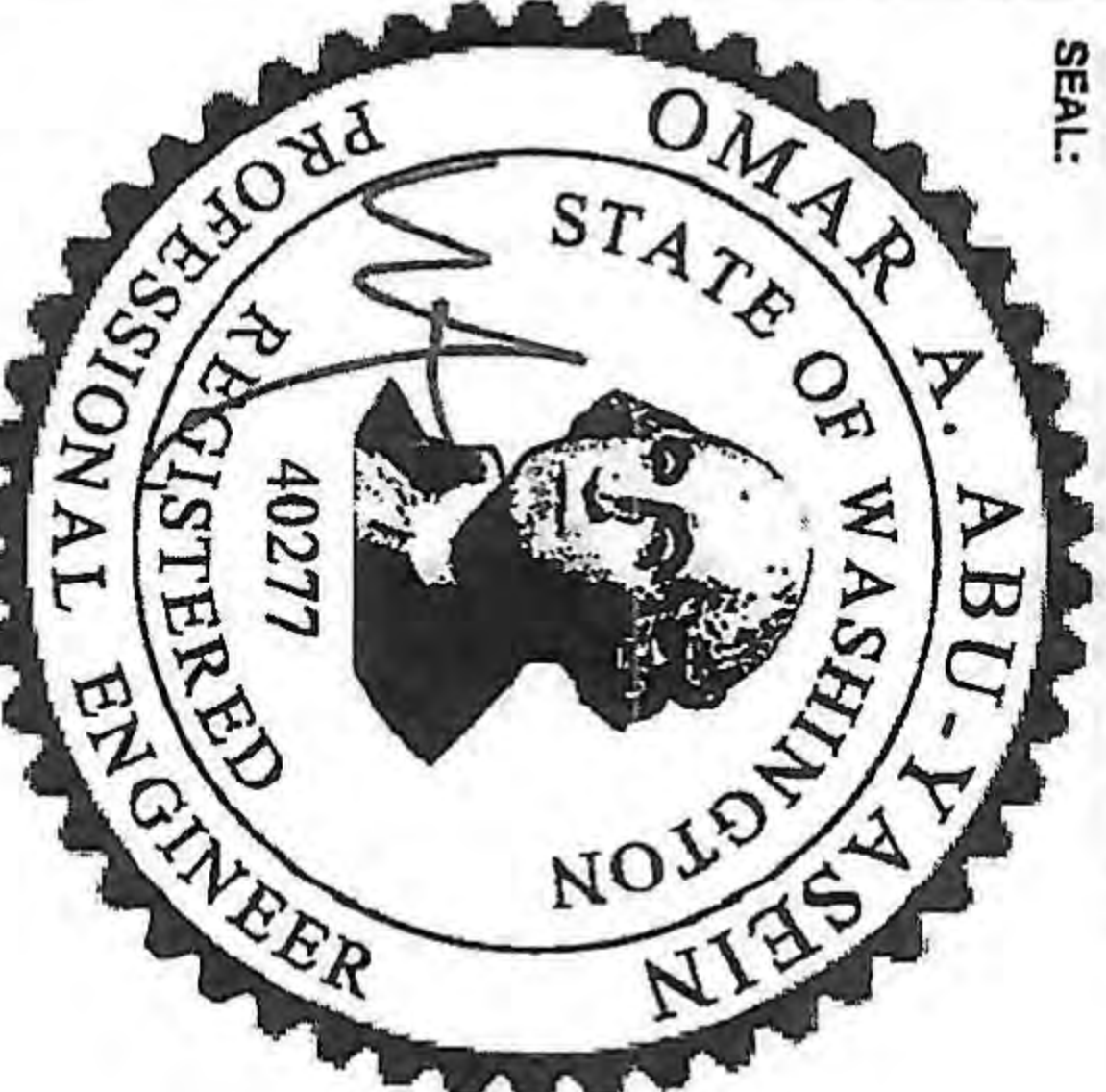
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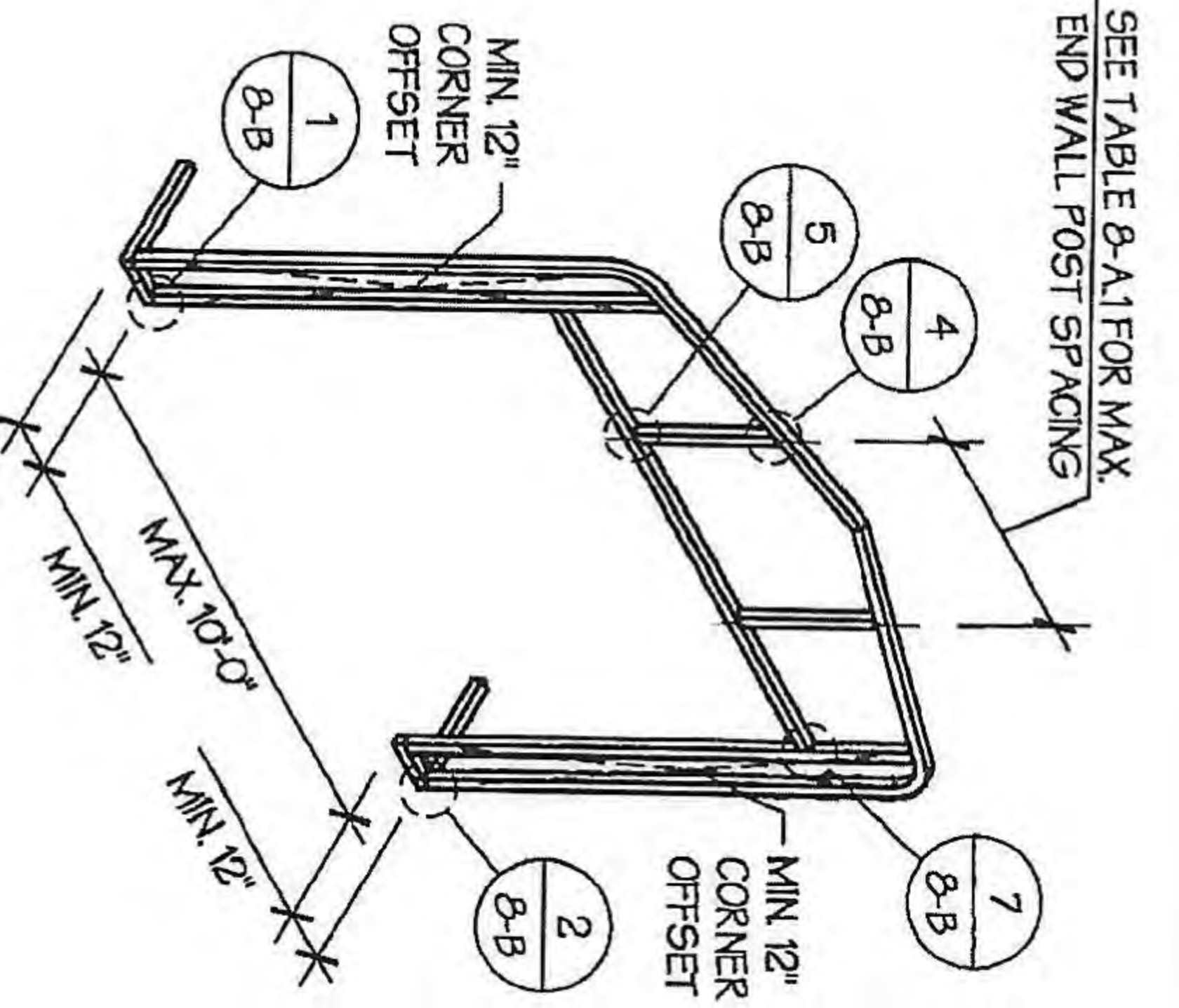


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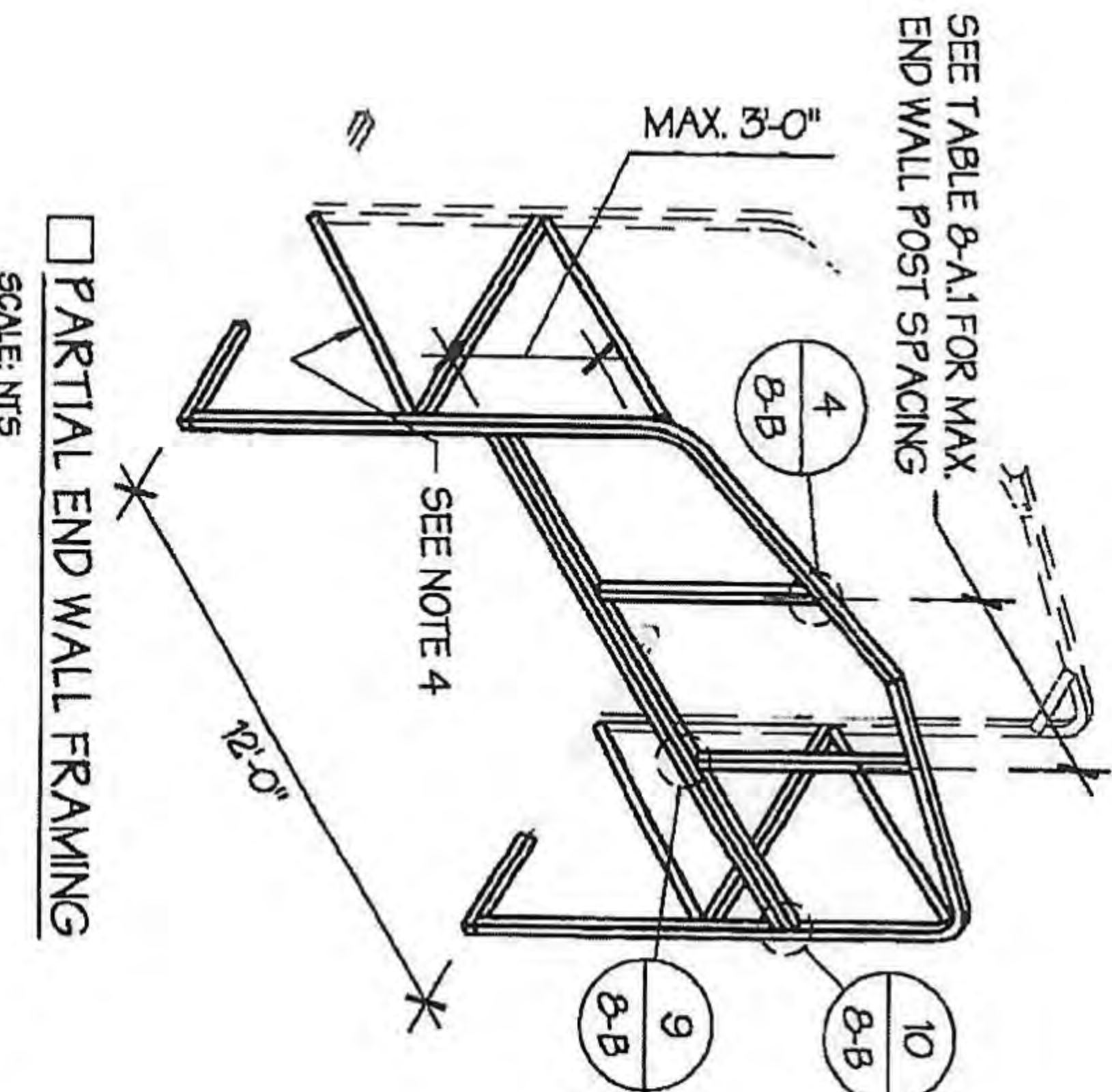
DATE SIGNED: AUG 13 2020



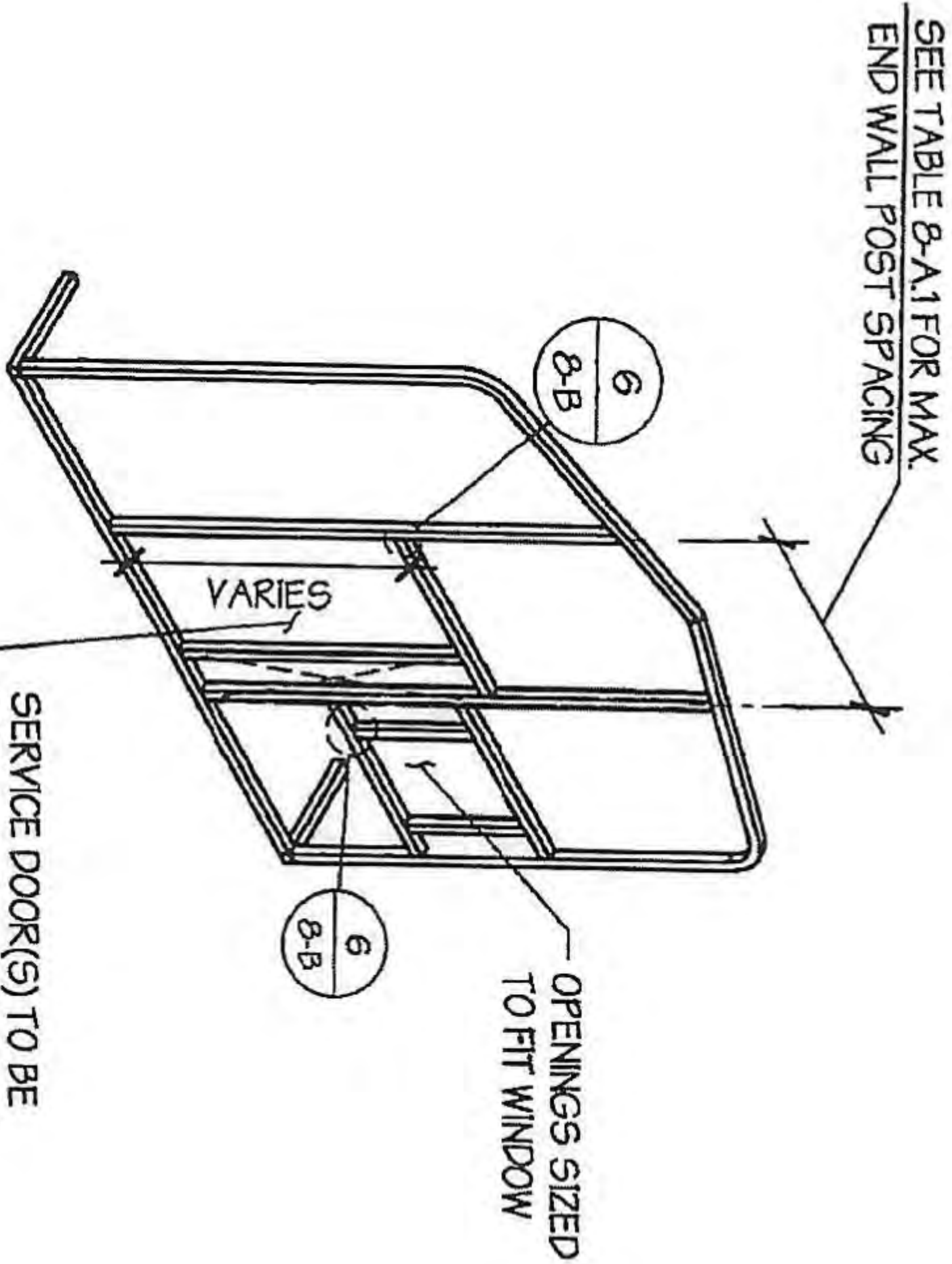
☐ END WALL GABLES
SCALE: NTS



☐ END WALL OVER HEAD DOOR OPENINGS
SCALE: NTS



☐ PARTIAL END WALL FRAMING
SCALE: NTS



☐ END WALL SERVICE DOOR AND WINDOW OPENINGS
SCALE: NTS

END WALL FRAMING NOTES:

1. DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
2. MIN. 12" CLEARANCE MUST BE MAINTAINED BETWEEN ANY TWO OPENINGS (OVERHEAD DOOR OR SERVICE DOOR) AND FROM CORNERS.
3. SERVICE DOORS AND WINDOWS CAN BE PLACED AS NEEDED.
4. DIAGONAL BRACES NEED TO BE ADDED FOR PARTIAL END WALL ENCLOSURES. SEE SHEET 9 FOR DIAGONAL BRACE CONNECTION DETAILS.

**TABLE B-A.1: END WALL POST
SPACING SCHEDULE**

WIND SPEED (MPH)	UP TO 7'	8' TO 9'	10' TO 12'
105	5'	5'	5'
115	5'	5'	4.5'
130	4.5'	4.5'	4'
140	4.5'	4.5'	3'
155	4'	4'	2.5'
165 - 180	3.5'	3'	2'

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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:
END WALL FRAMING
DETAILS

SHEET NO.: 8-B / 11

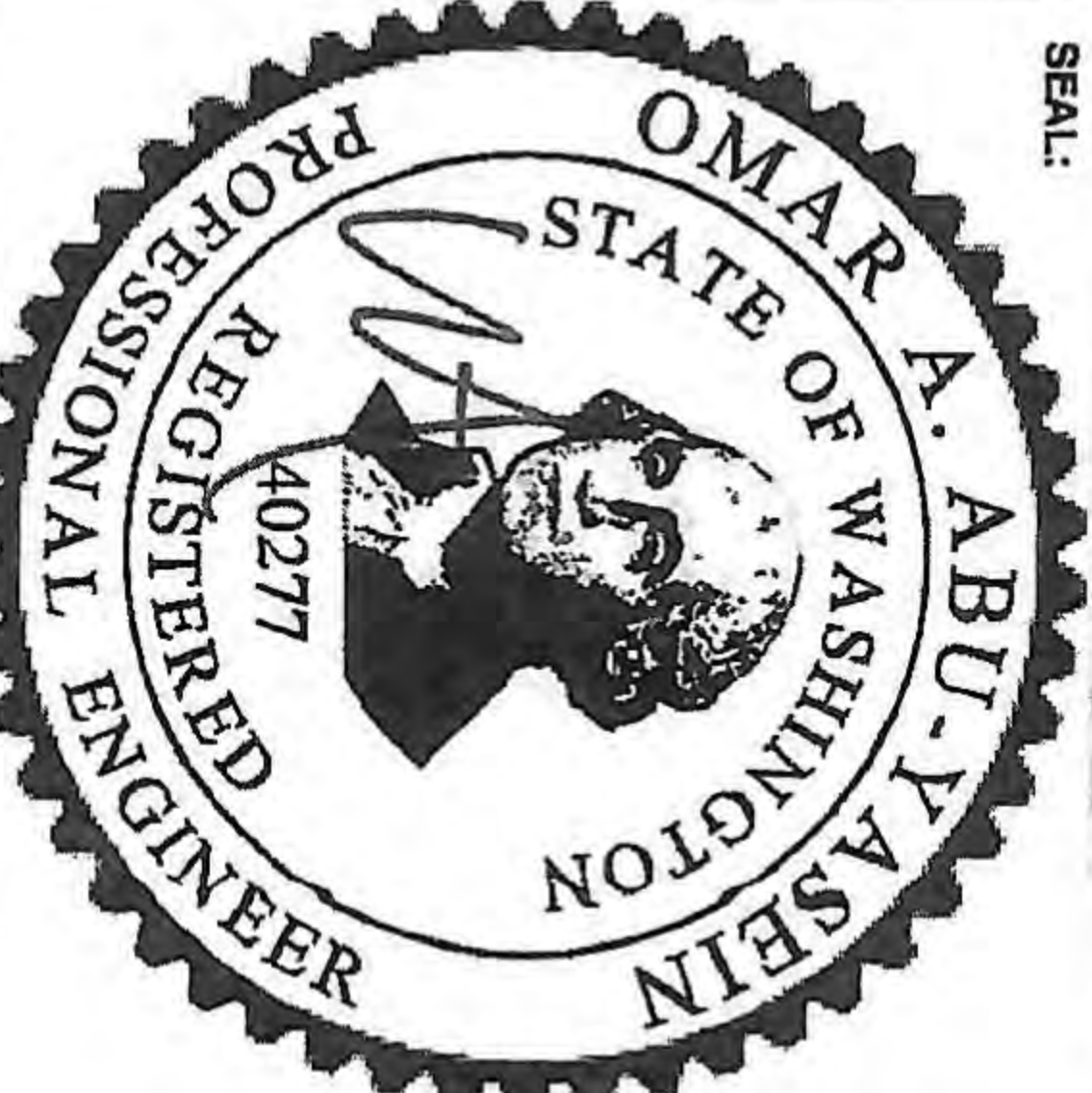
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CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

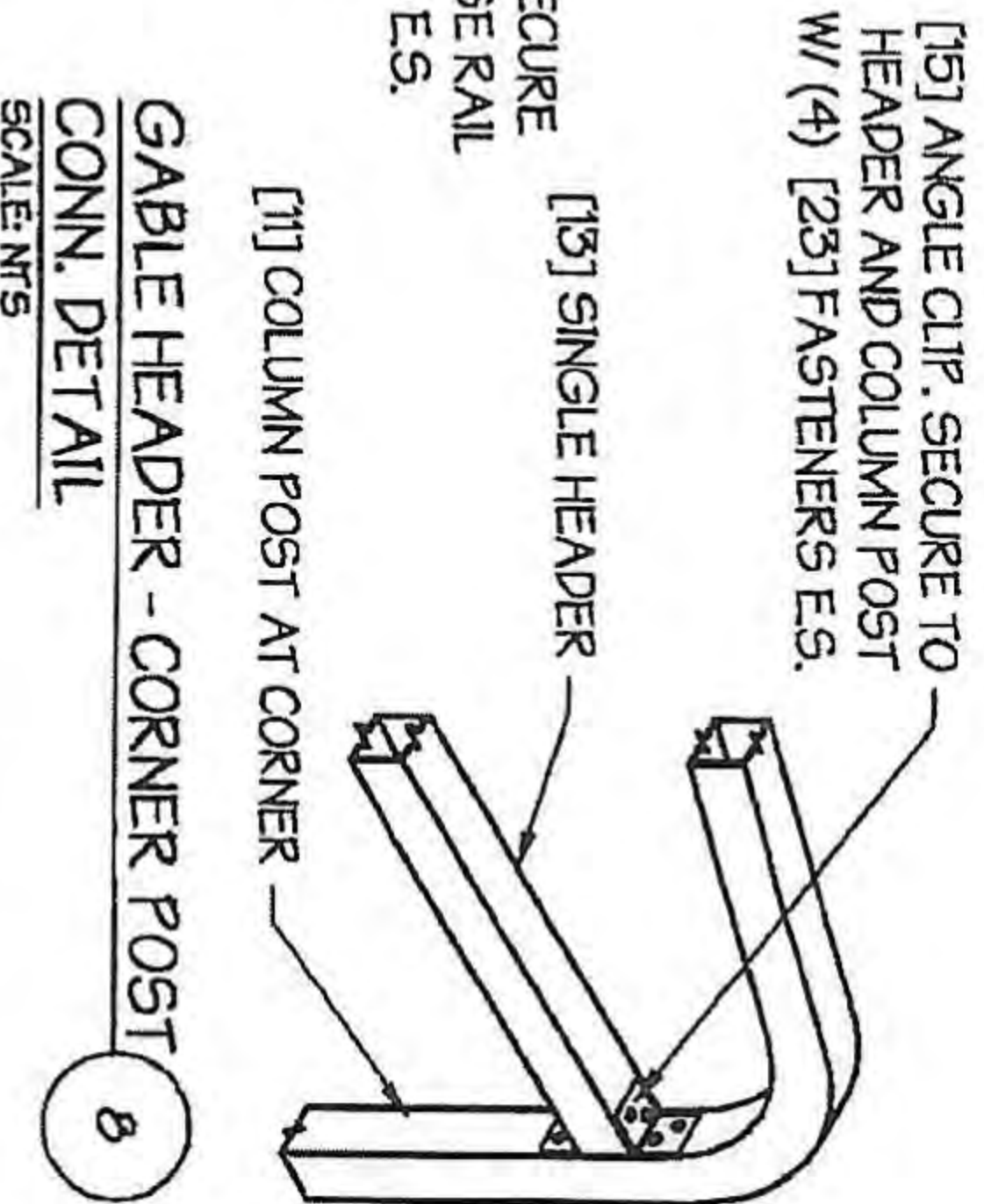
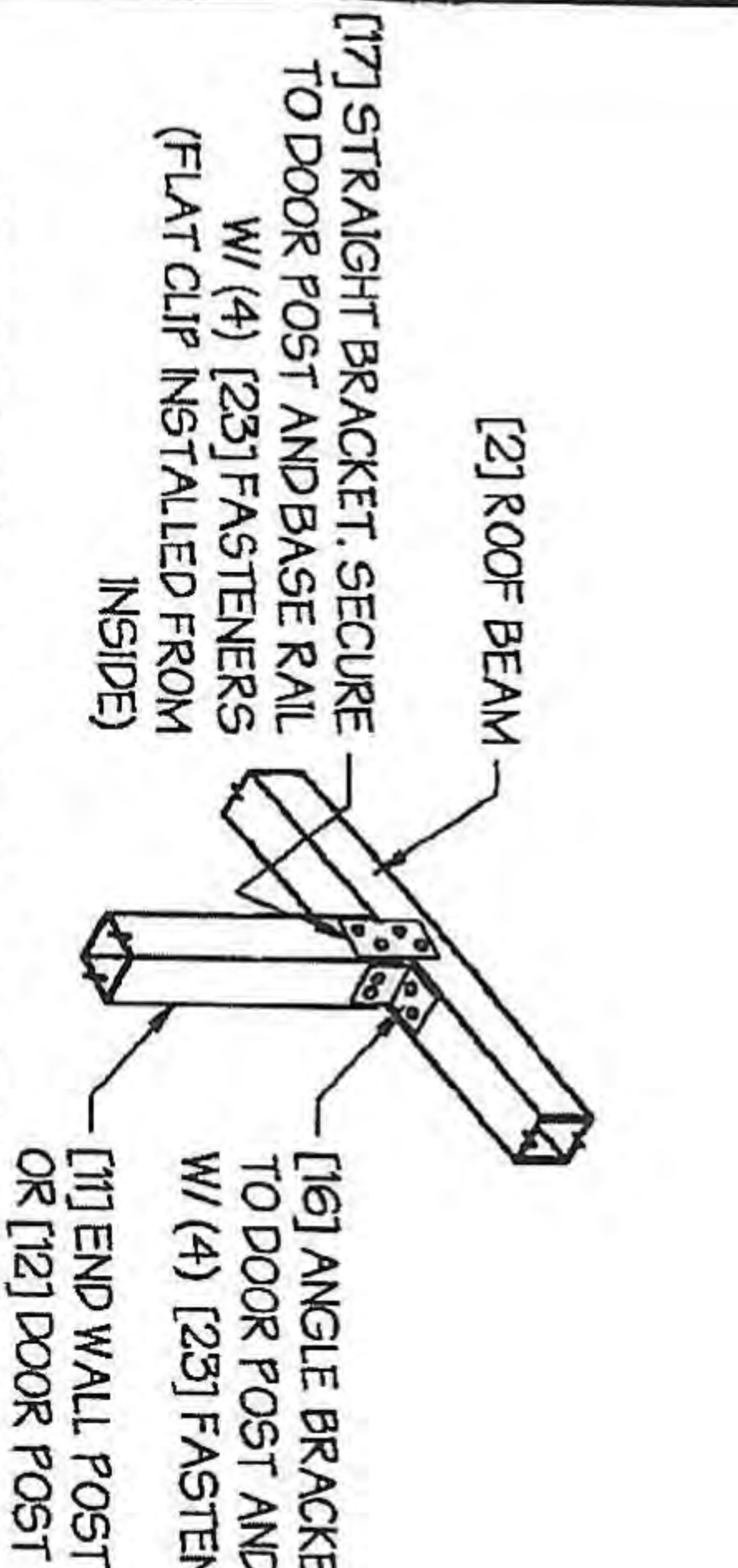
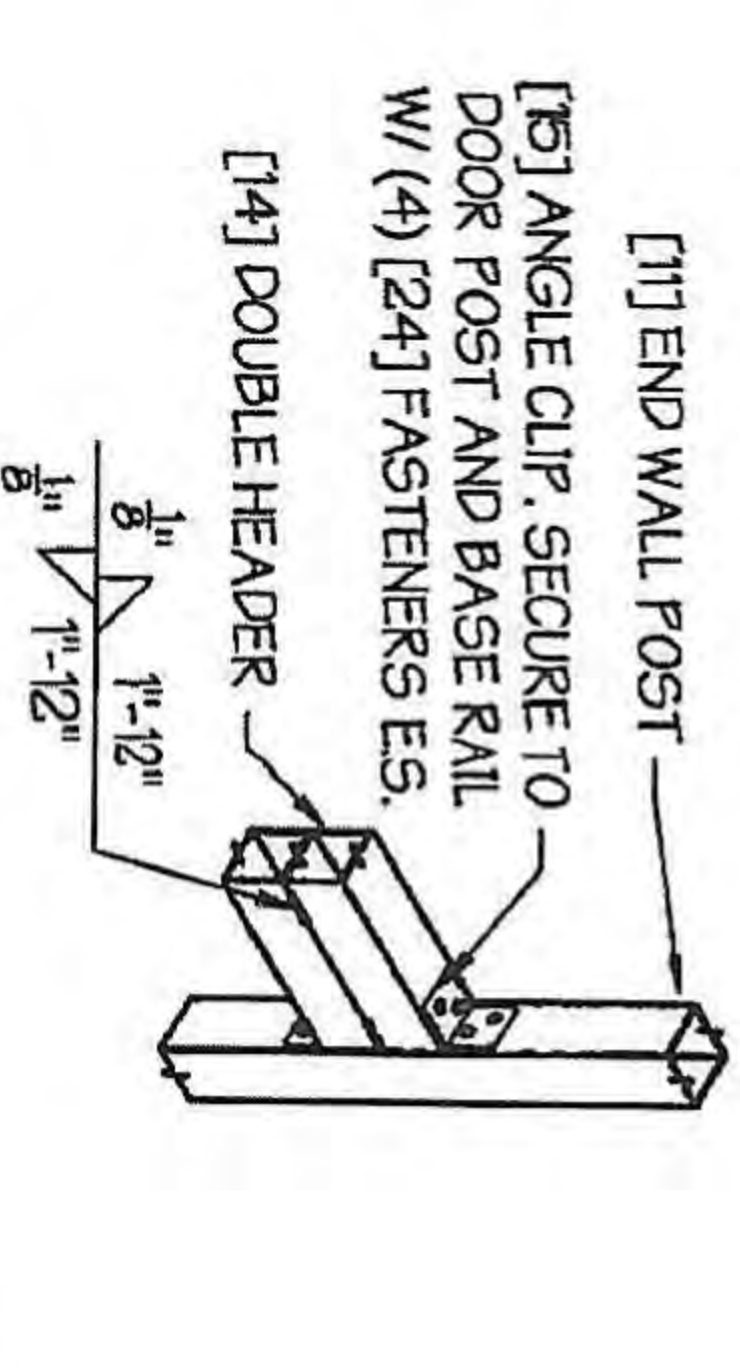
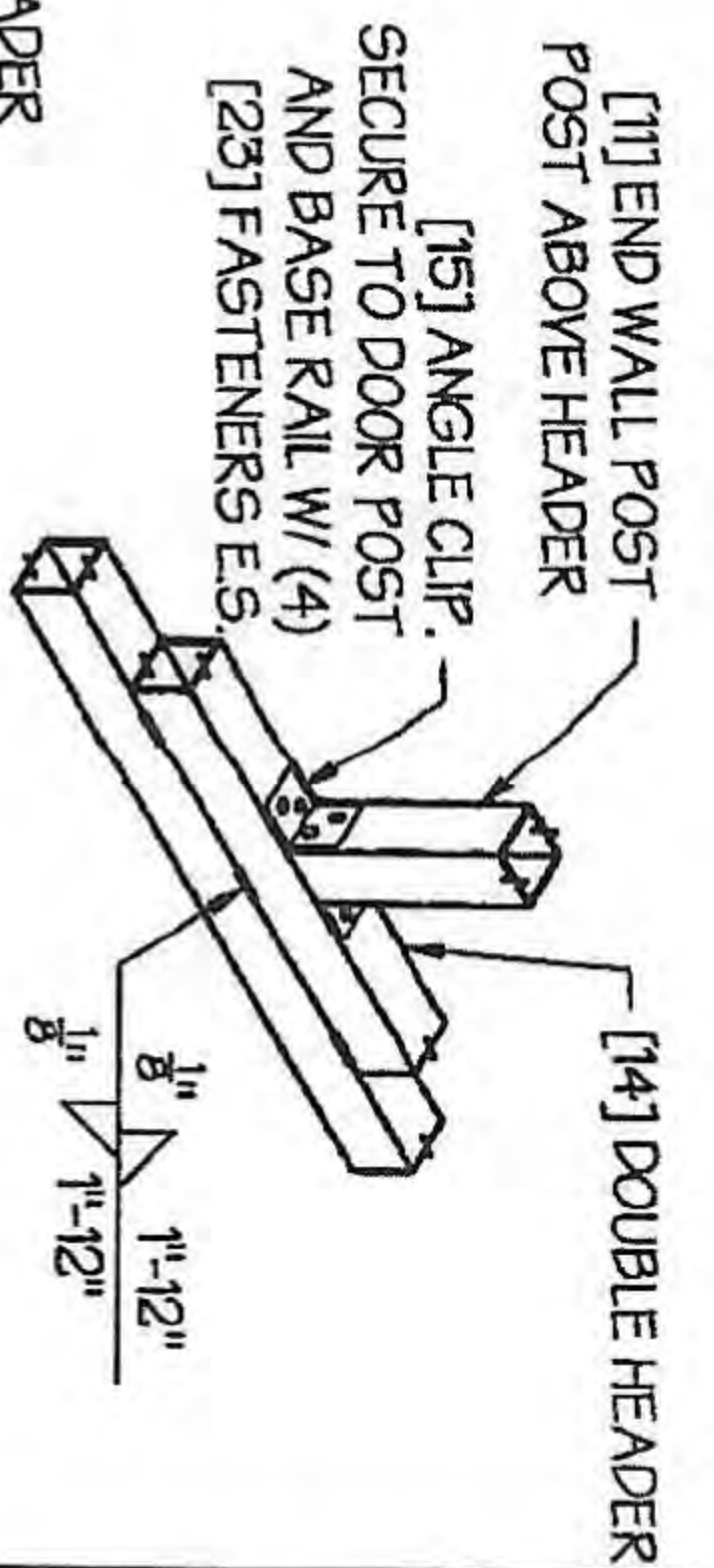
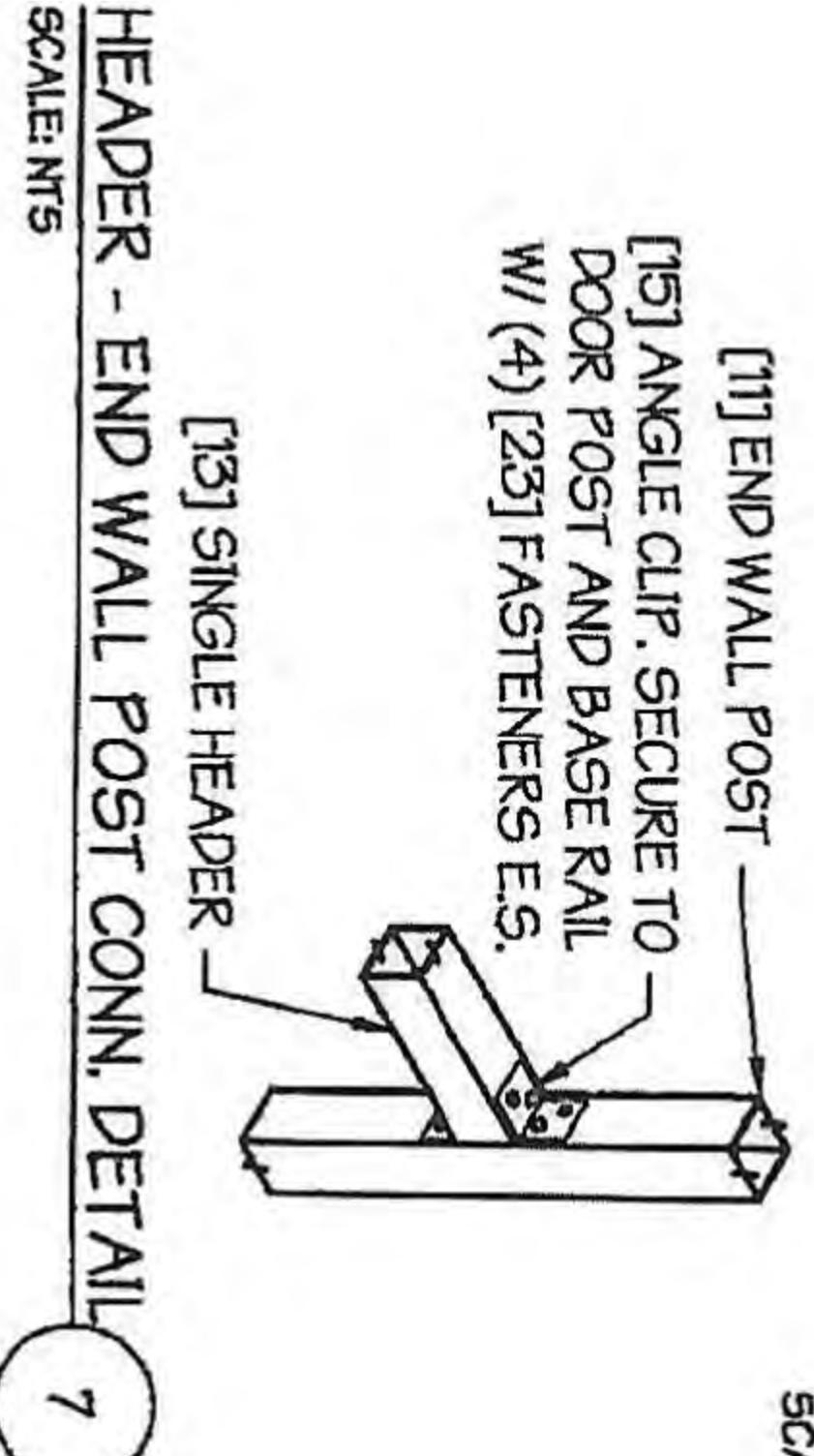
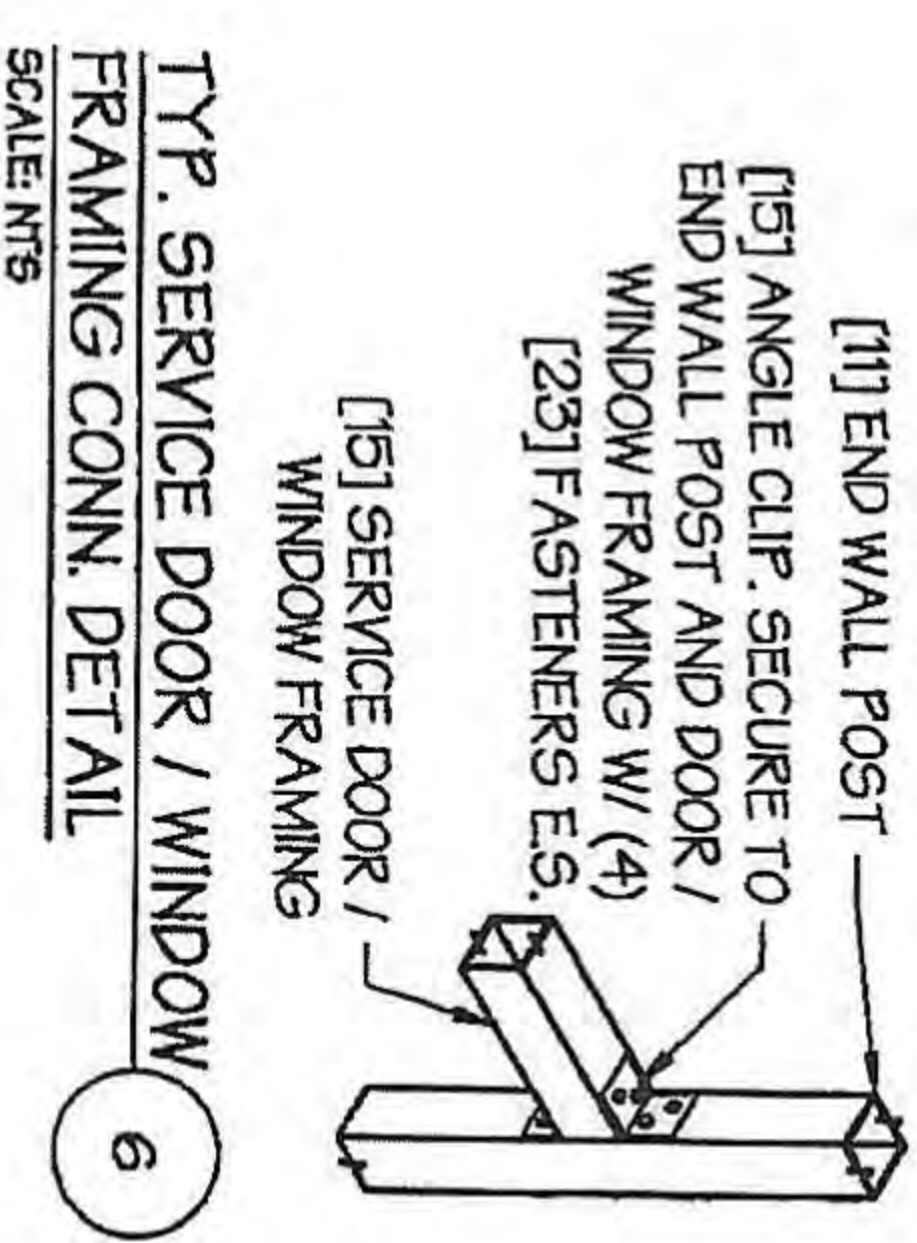
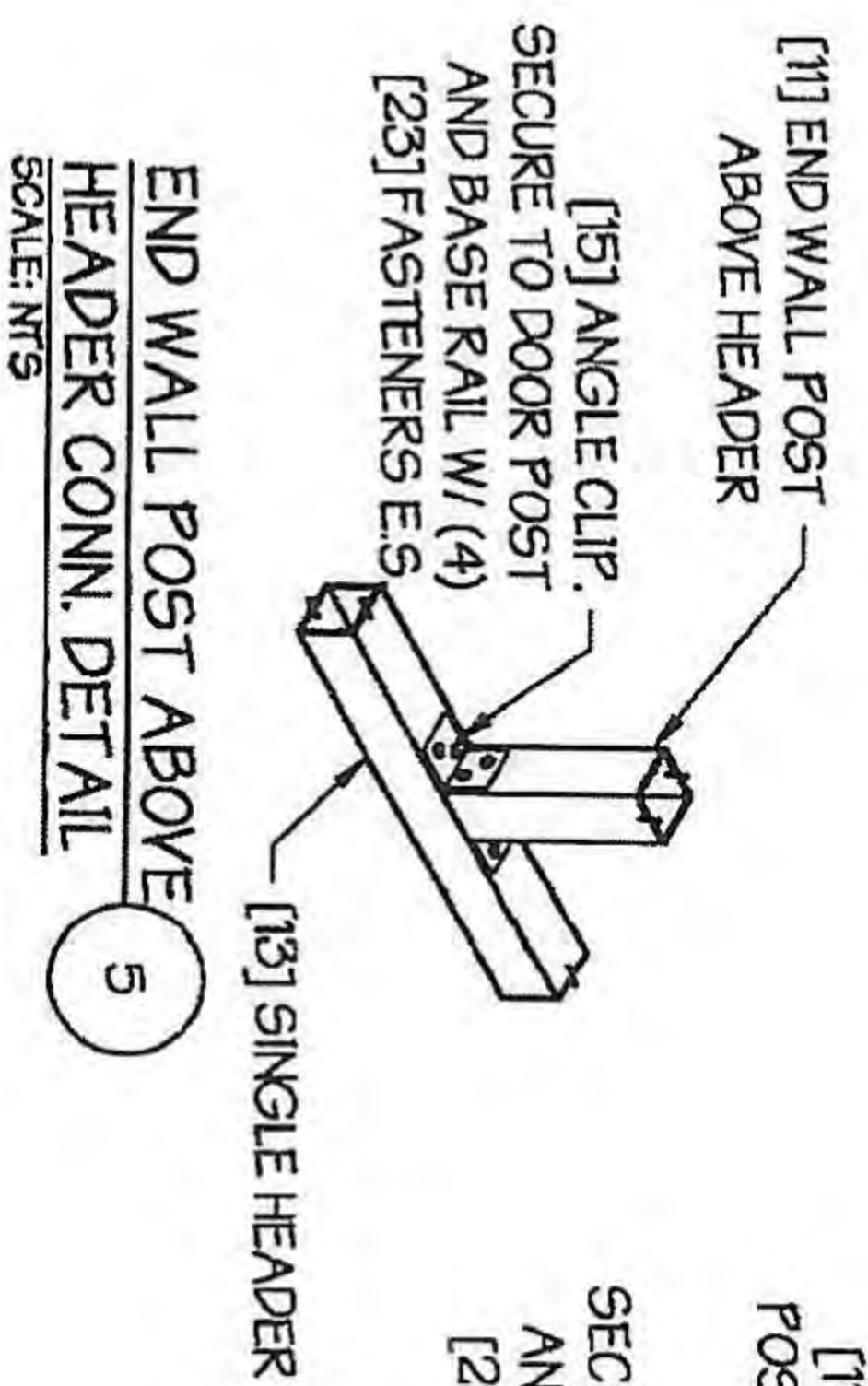
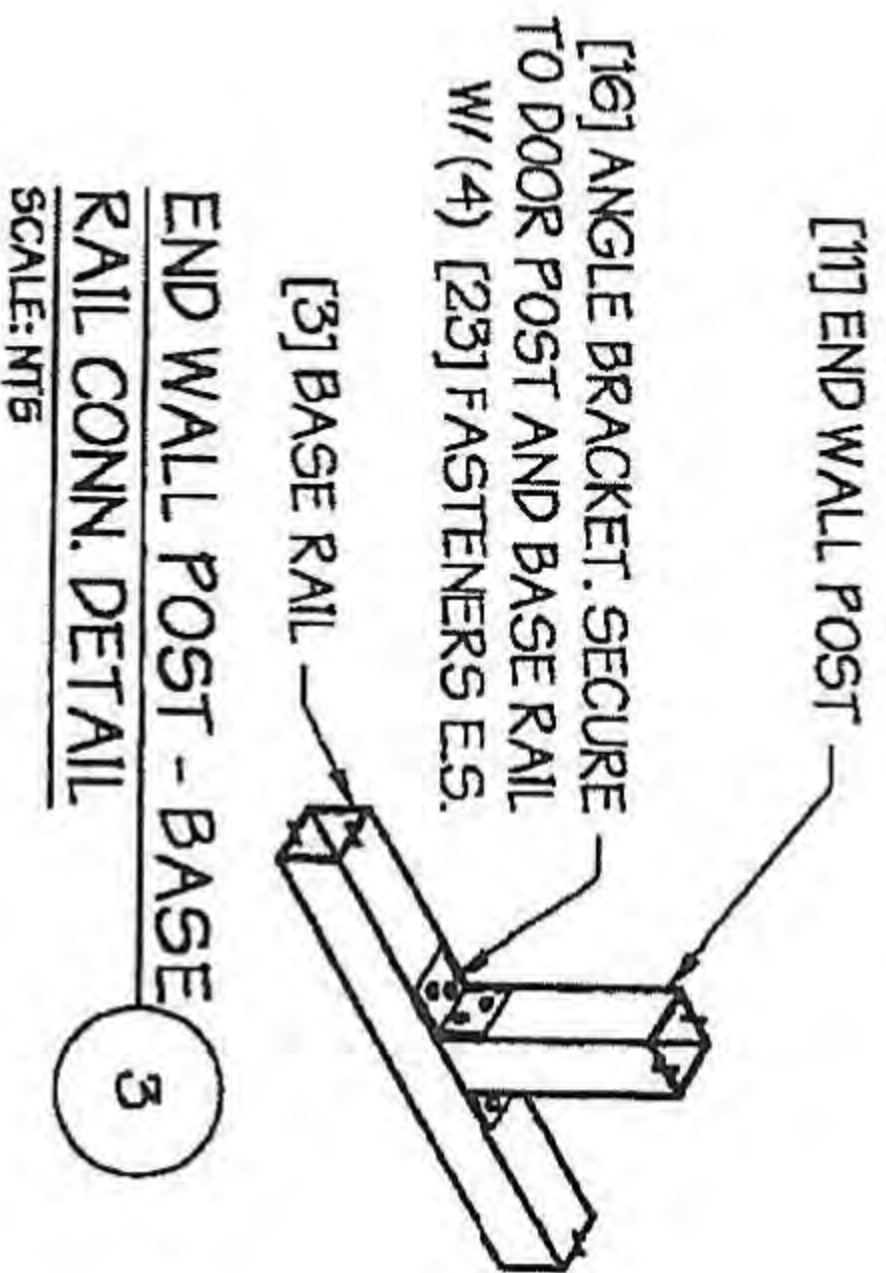
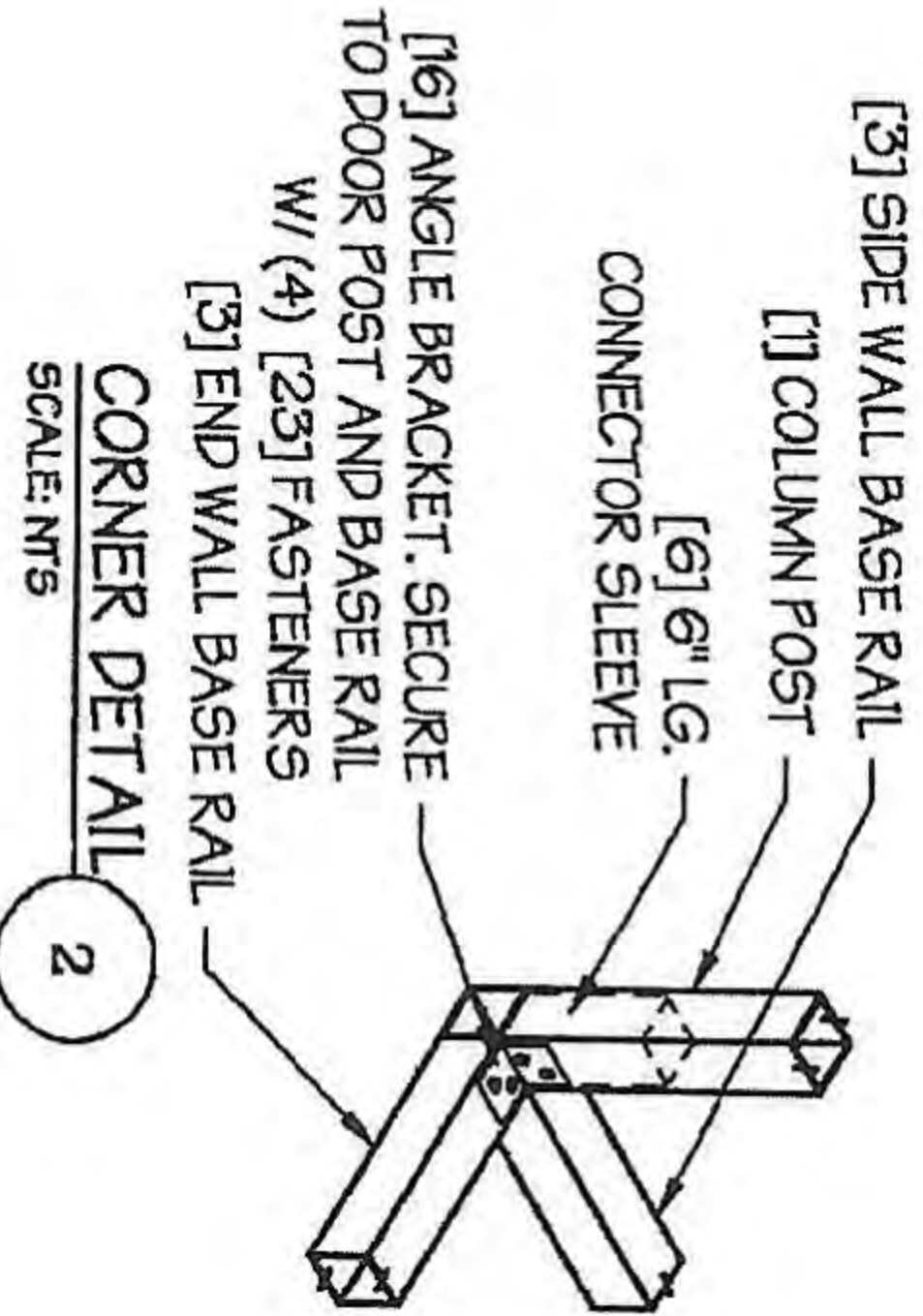
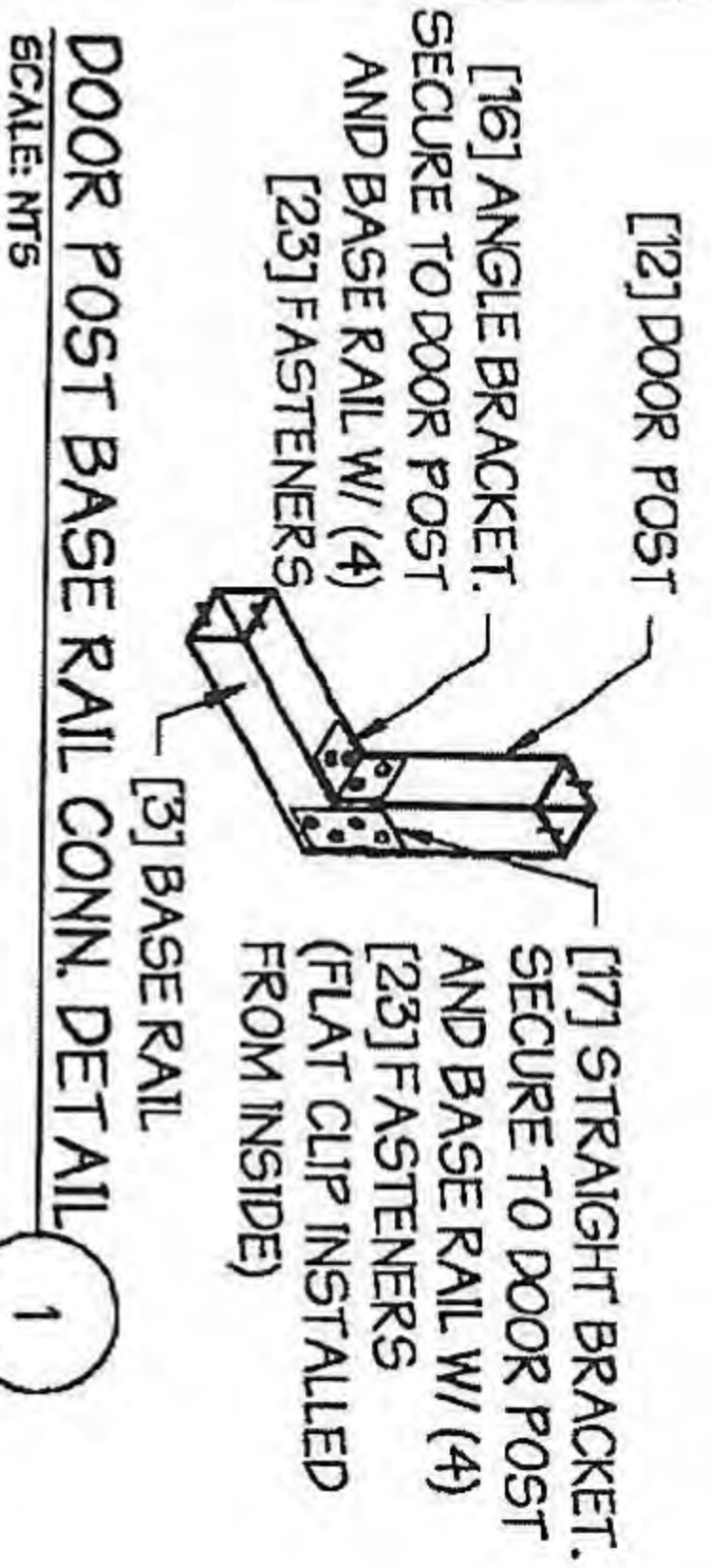
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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:
CORNER BRACING
DETAILS

SHEET NO.: 9 / 11

DRAWN BY: AW DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

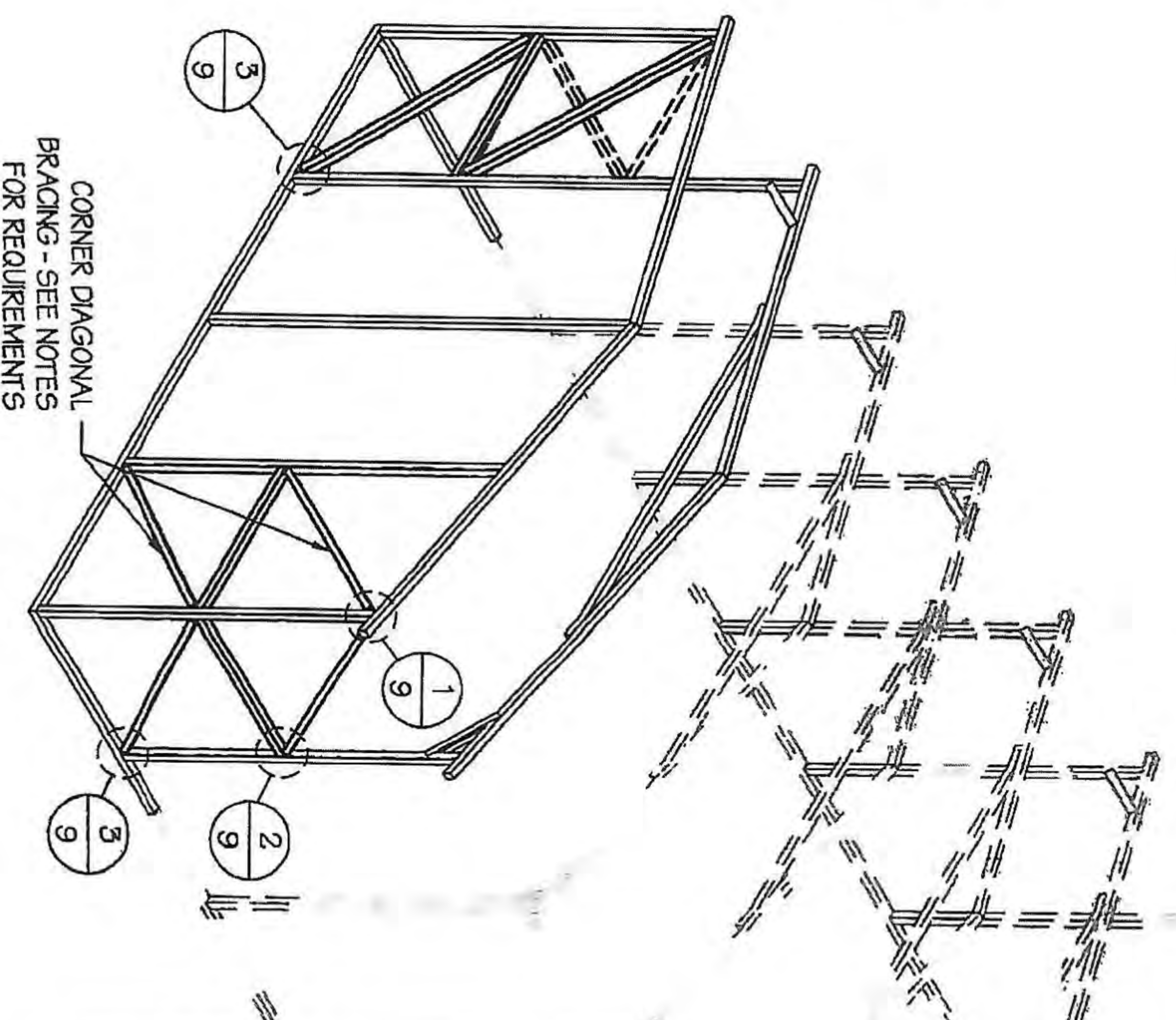
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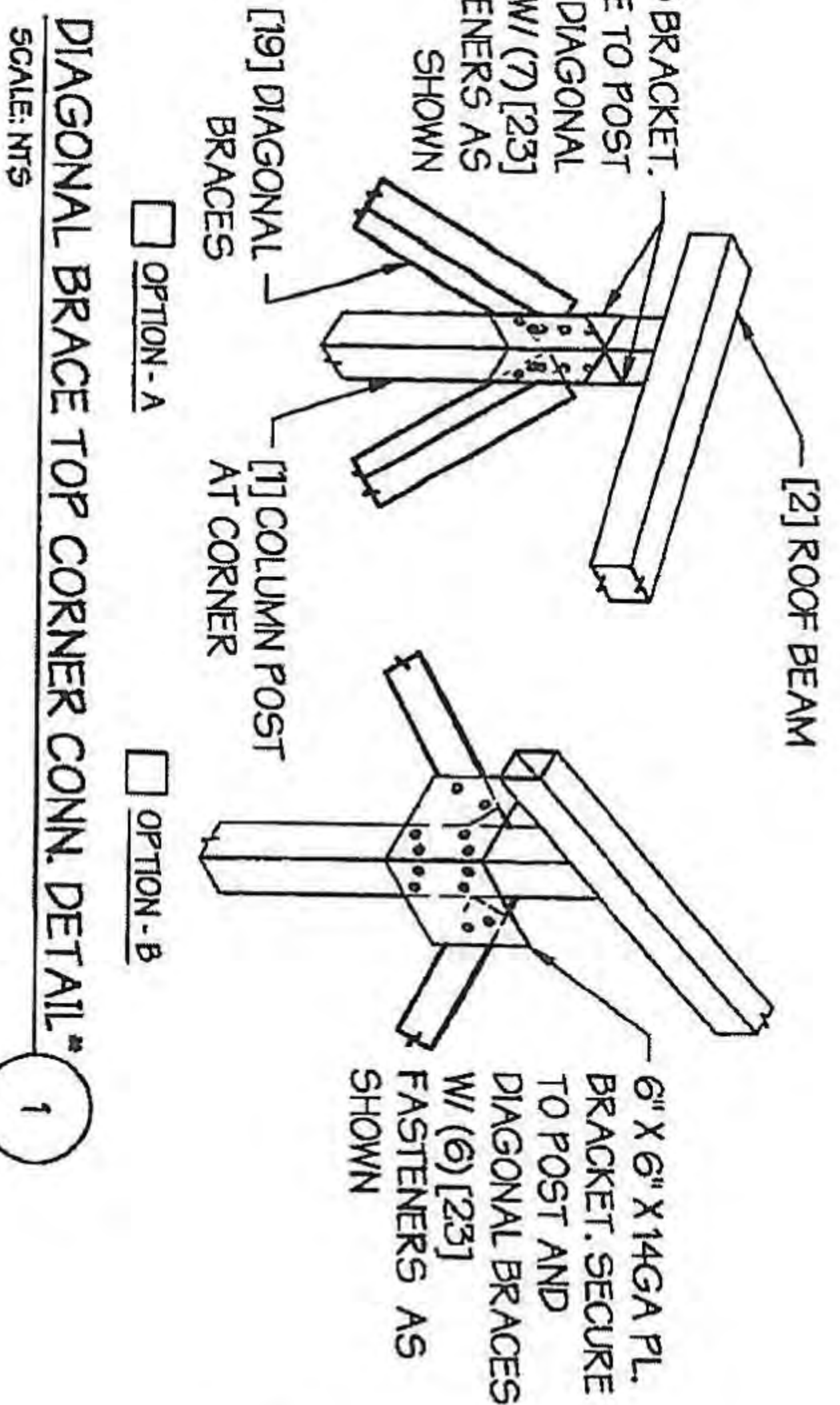


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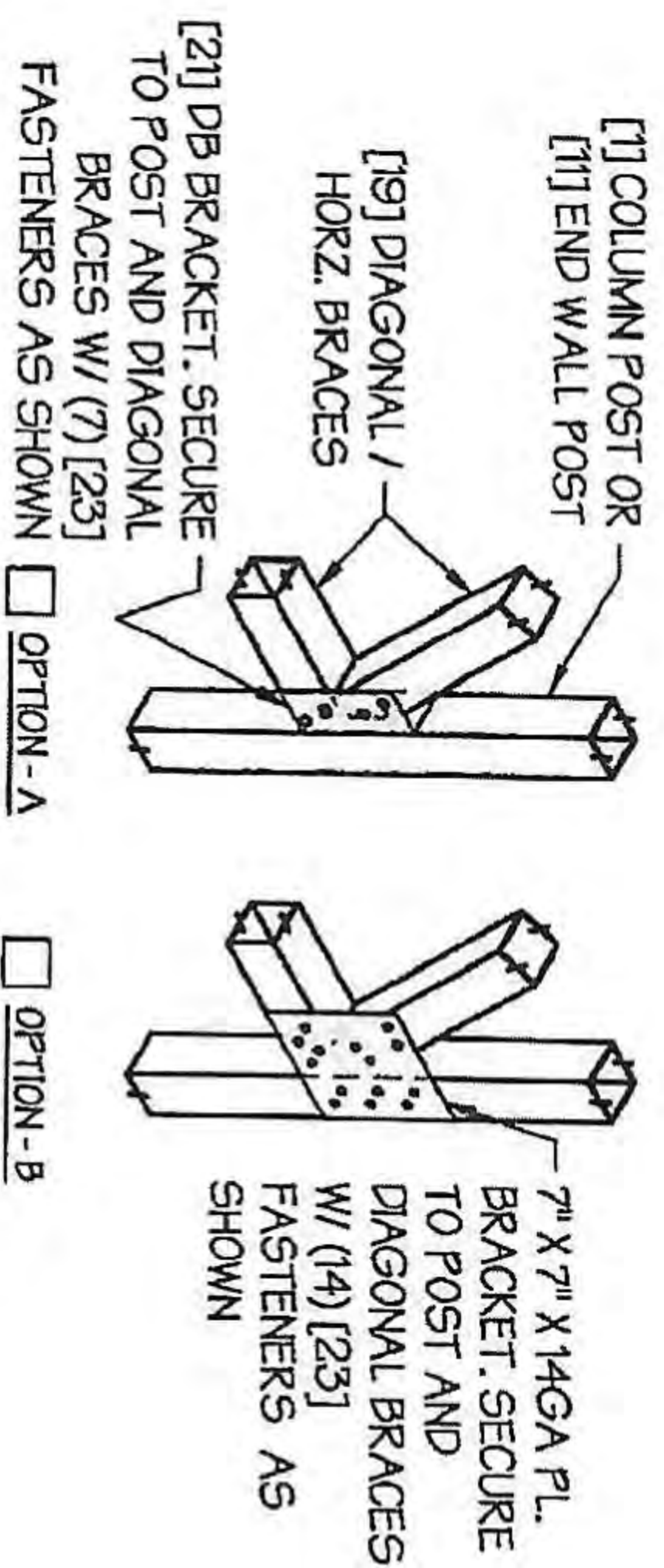
DATE SIGNED: AUG 13 2020



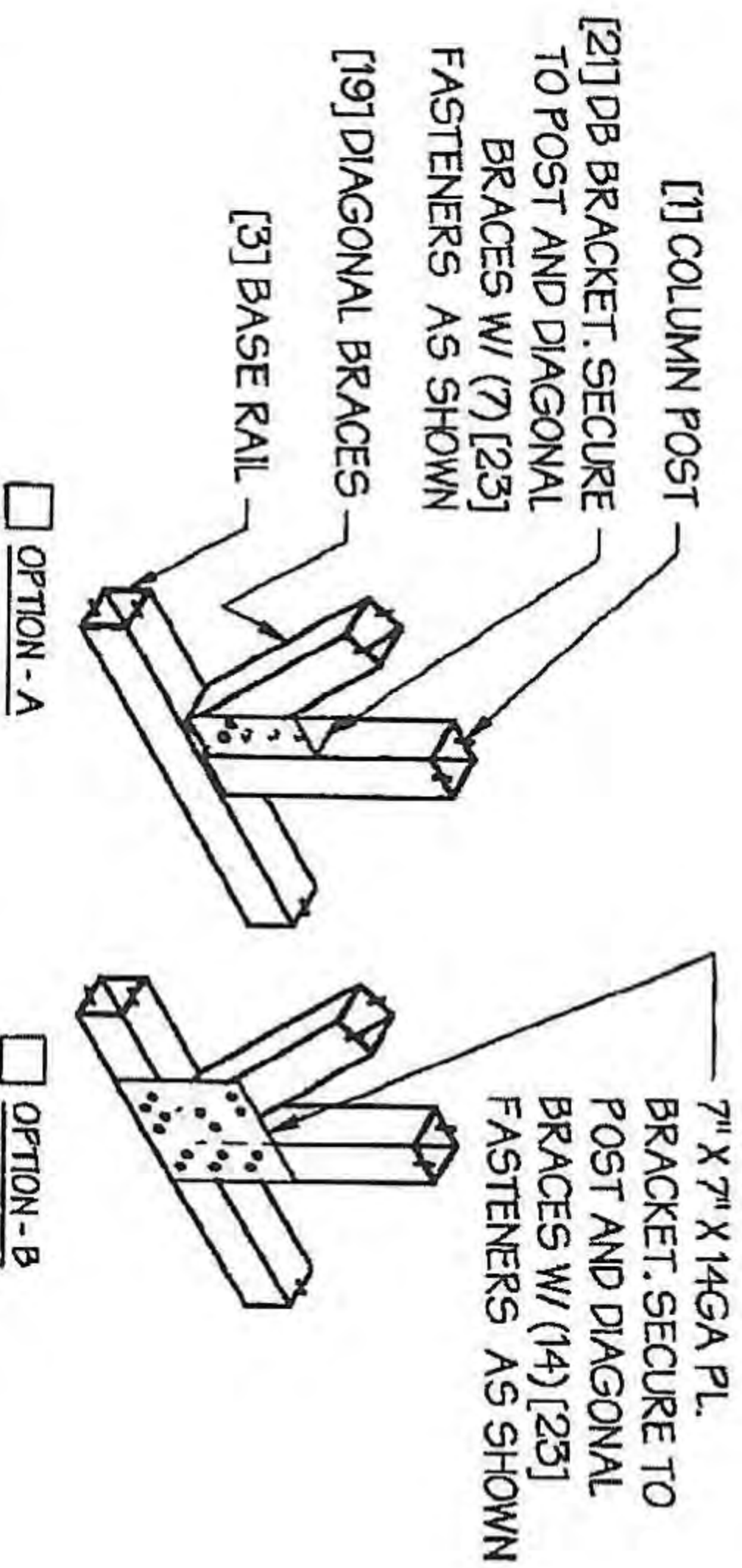
DIAGONAL BRACING AT CORNERS
SCALE: NTS



DIAGONAL BRACE TOP CORNER CONN. DETAIL*
SCALE: NTS



DIAGONAL BRACE - POST CONN. DETAIL*
SCALE: NTS



DIAGONAL BRACE BOT. CORNER CONN. DETAIL*
SCALE: NTS

* INSIDE VIEW SHOWN FOR CLARITY

CORNER BRACING NOTES:

1. DIAGONAL BRACING AT BUILDING CORNERS IS REQUIRED FOR ALL BUILDINGS IN LOCATIONS WHERE WIND SPEED IS 140 MPH OR GREATER.
 - FOR 3 SIDED ENCLOSED BUILDINGS 140 MPH OR GREATER WIND SPEED - THE BUILDING MUST BE DESIGNED WITH OPEN BUILDING SPACING AND DIAGONAL BRACING IS REQUIRED ON ALL ENCLOSED WALLS.
2. SIDE-WALL DIAGONAL BRACING IS REQUIRED WHEN THE ADJACENT END-WALL IS PARTIALLY ENCLOSED.
3. ALL BUILDINGS WITH IRREGULAR ENCLOSURE (SEE SHEET 5) WILL REQUIRE SIDE-WALL BRACING CLOSE TO THE PARTIALLY ENCLOSED END-WALL.

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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

OPTIONAL LEAN-TO
ADDITION

SHEET NO.: 10 / 11

DRAWN BY: AW DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

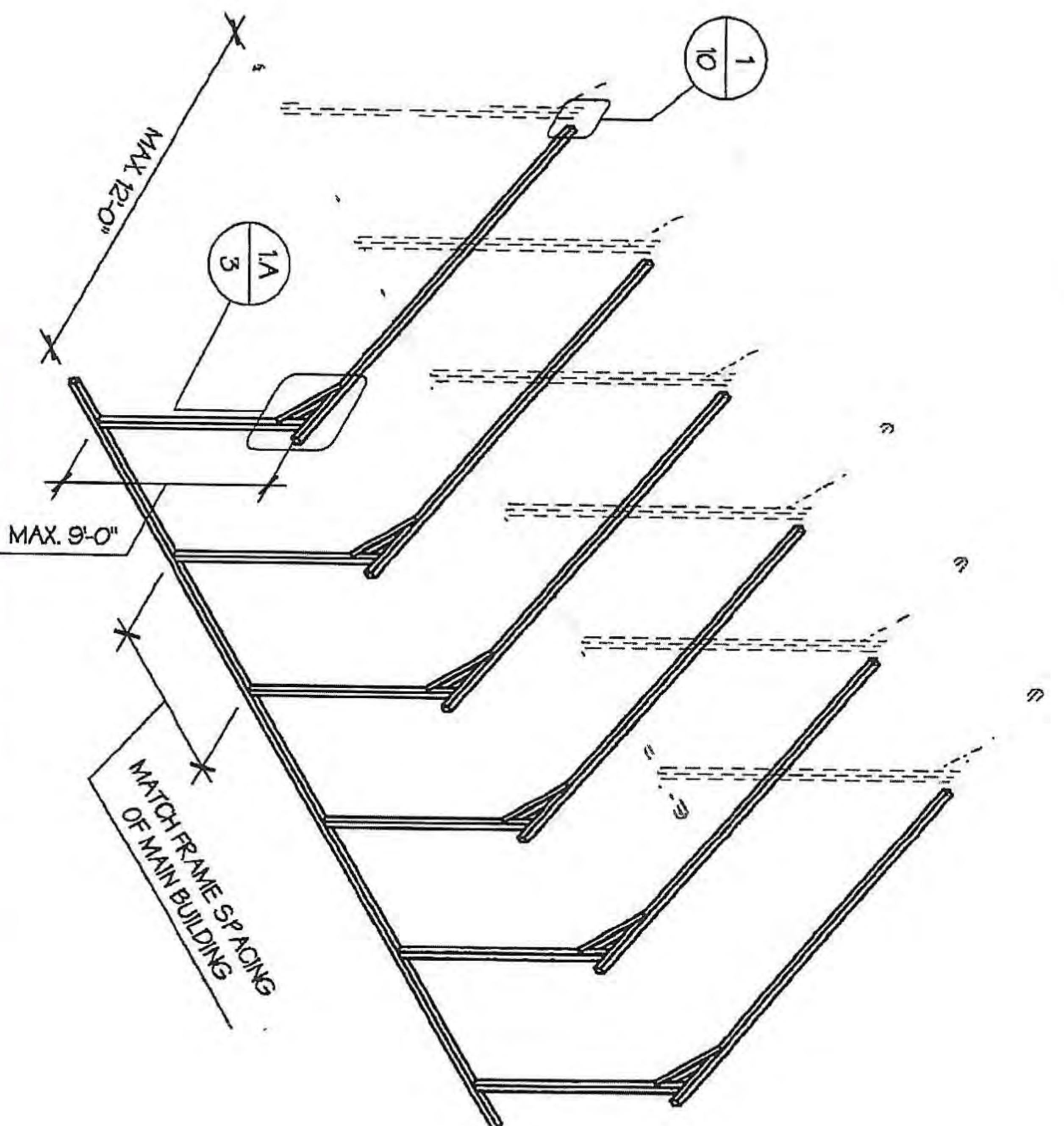
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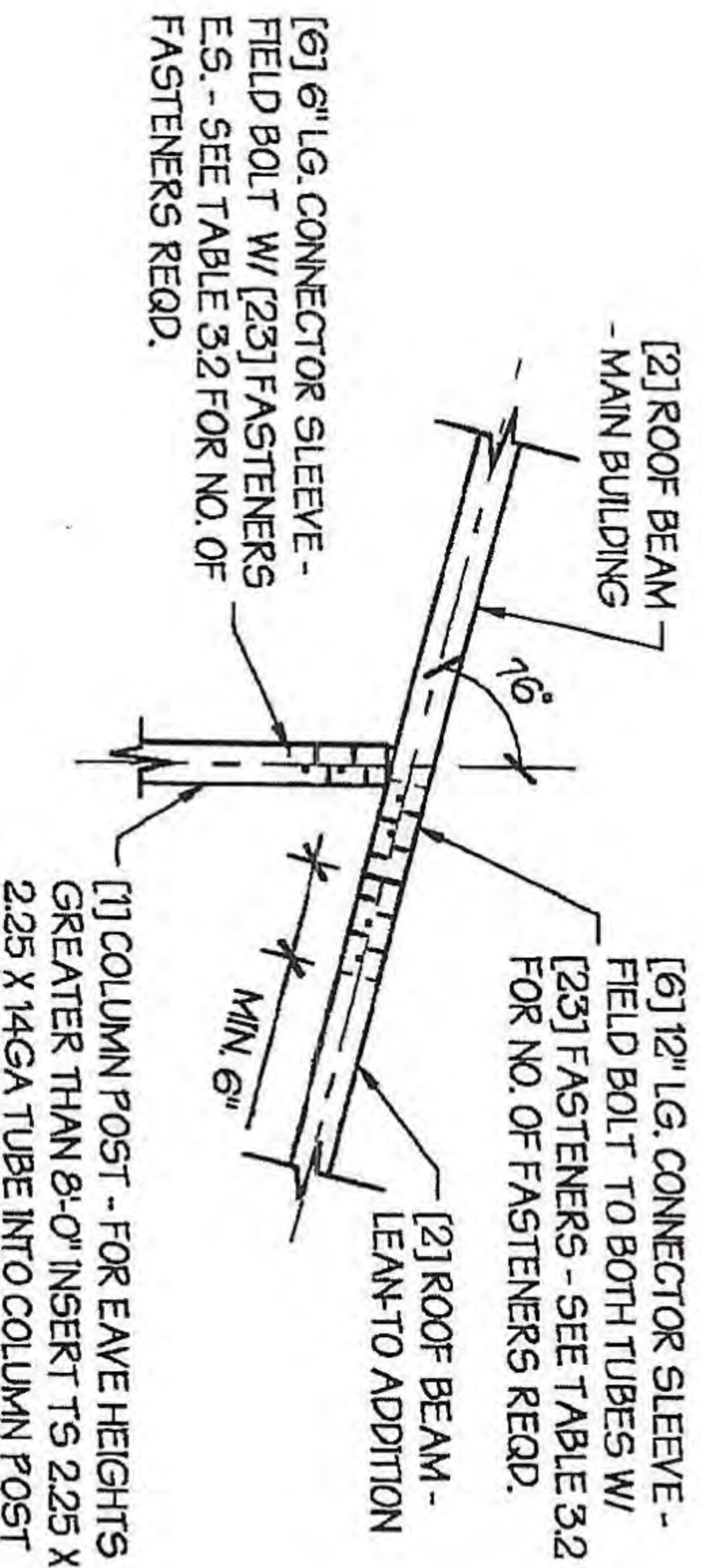
STAMP EXPIRY: 11/09/2020

DATE SIGNED: AUG 13 2020



☐ **OPTIONAL LEAN-TO ADDITION**

SCALE: NTS



LEAN-TO ATTACHMENT DETAIL

SCALE: NTS

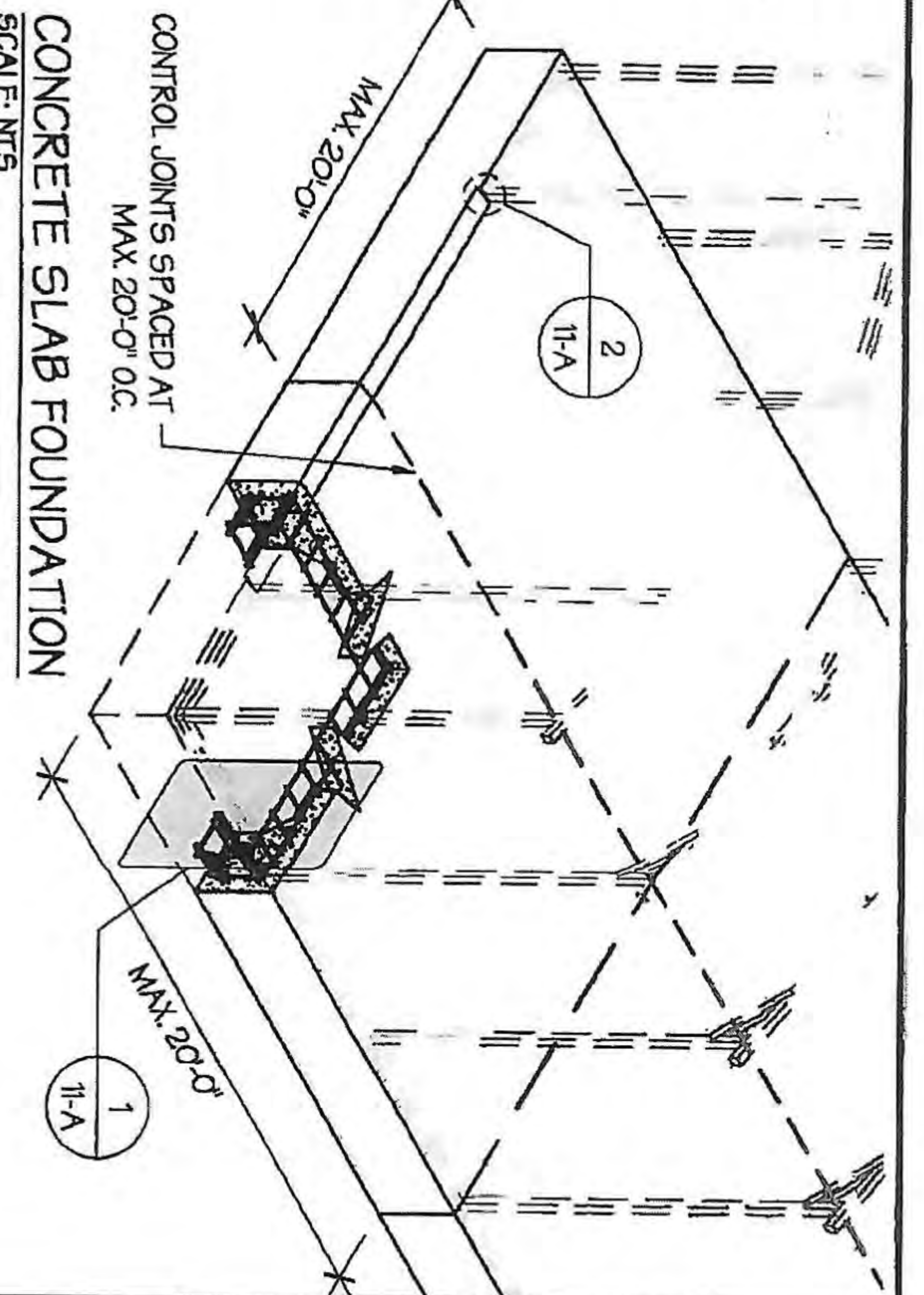
1

LEAN-TO ADDITION NOTES:

1. LEAN-TO ADDITIONS CAN BE ADDED ON EITHER OR BOTH SIDES OF THE BUILDING.
2. ROOF SLOPE, PURLIN, GIRT AND FRAME SPACING OF THE ADDITION HAVE TO MATCH THAT OF THE MAIN STRUCTURE.
3. IF THE LEAN-TO ADDITION IS "OPEN" (BOTH END WALLS OR SIDE WALL IS NOT ENCLOSED), THE DESIGN OF THE MAIN BUILDING HAS TO USE THE FRAME SPACING OF AN OPEN BUILDING FROM TABLE 4.

CONCRETE SLAB FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-A.2.
- THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS 5" FOR 14GA MATERIAL AND 5" FOR 12GA MATERIAL.
- DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- CONTROL JOINTS SHALL BE PLACED 50 AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTION.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.



CONCRETE SLAB FOUNDATION

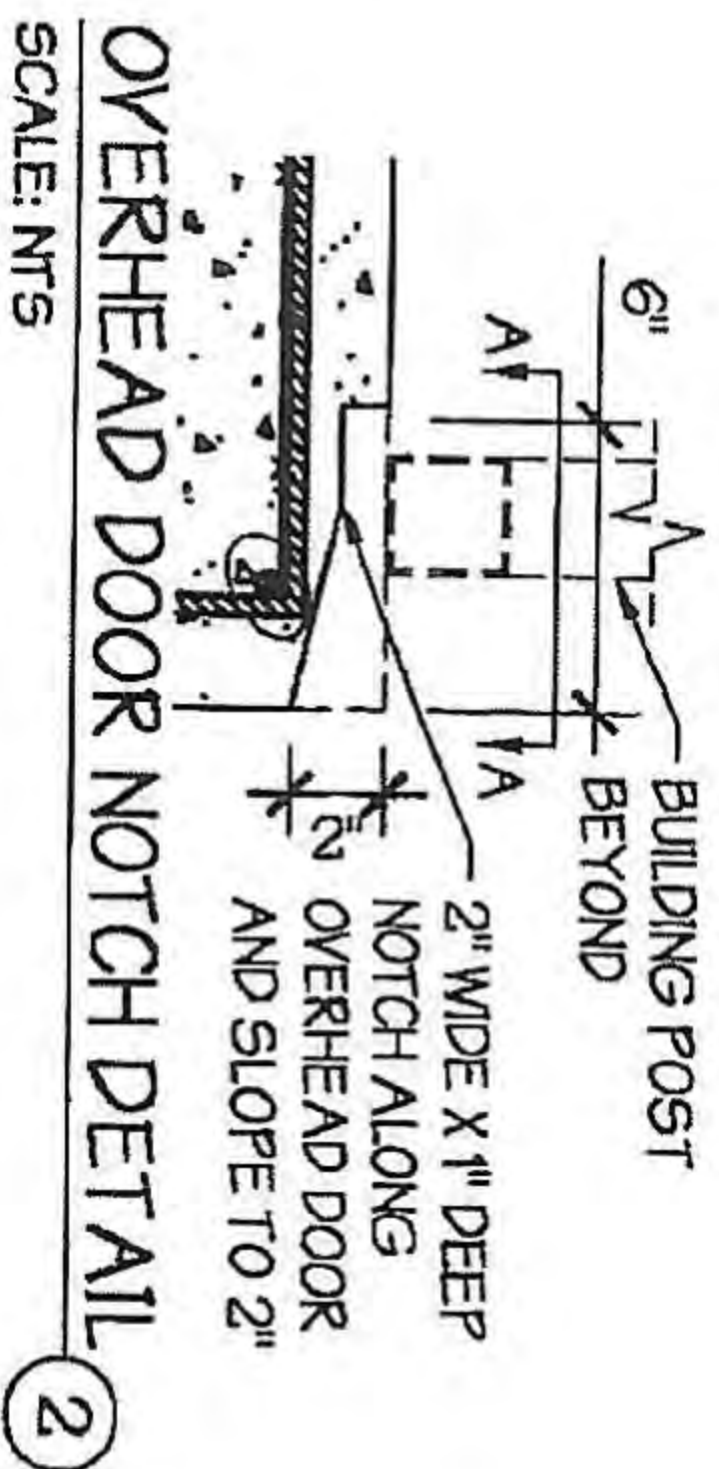
SCALE: NTS

TABLE 11-A.2: CONCRETE SLAB ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 180	(2) 1/2" Ø X 7"
OPEN	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 180	(2) 1/2" Ø X 7"

NOTES:

- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE 28".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.



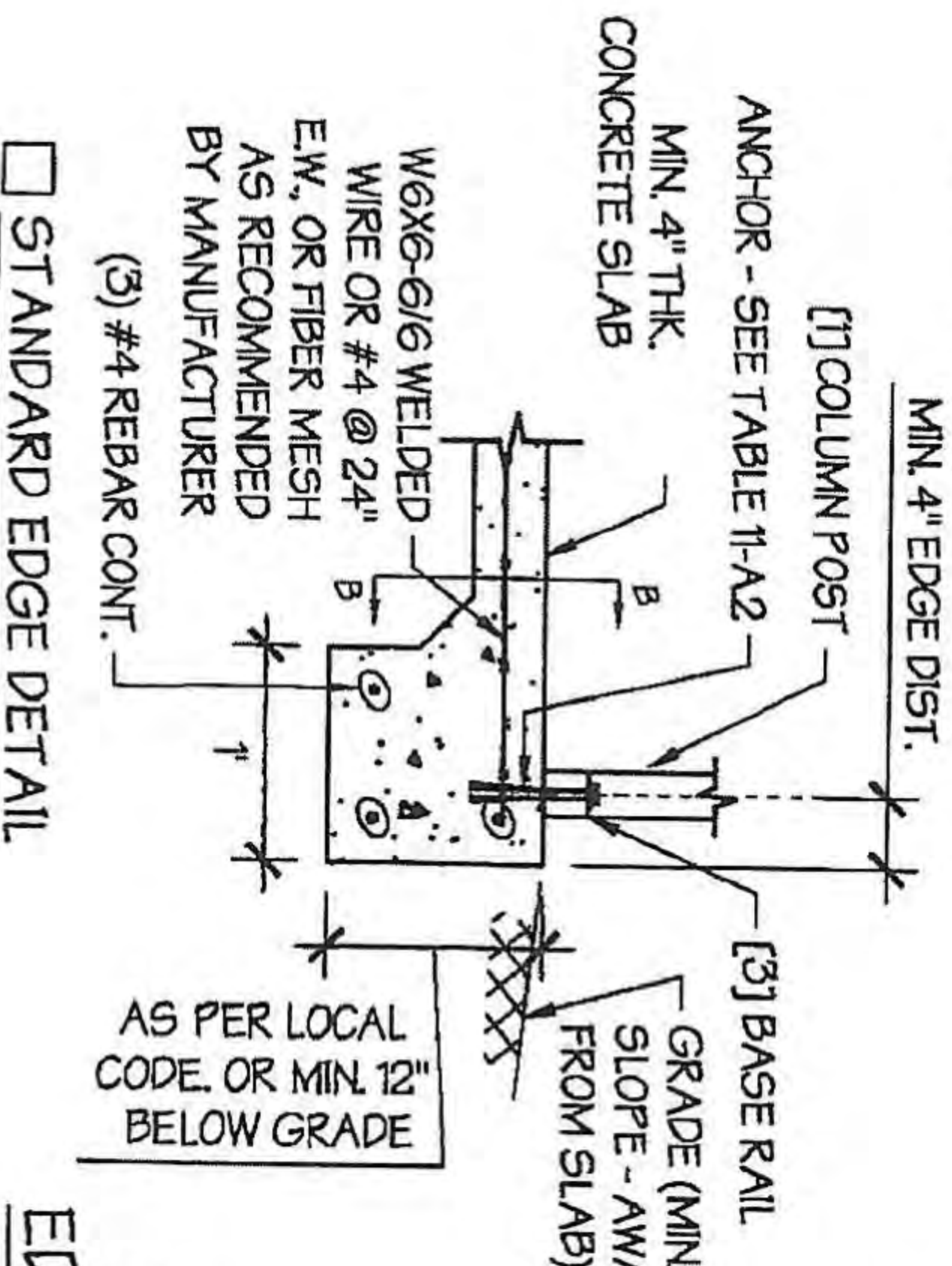
OVERHEAD DOOR NOTCH DETAIL

SCALE: NTS

TABLE 11-A.1: NOTCH WIDTH

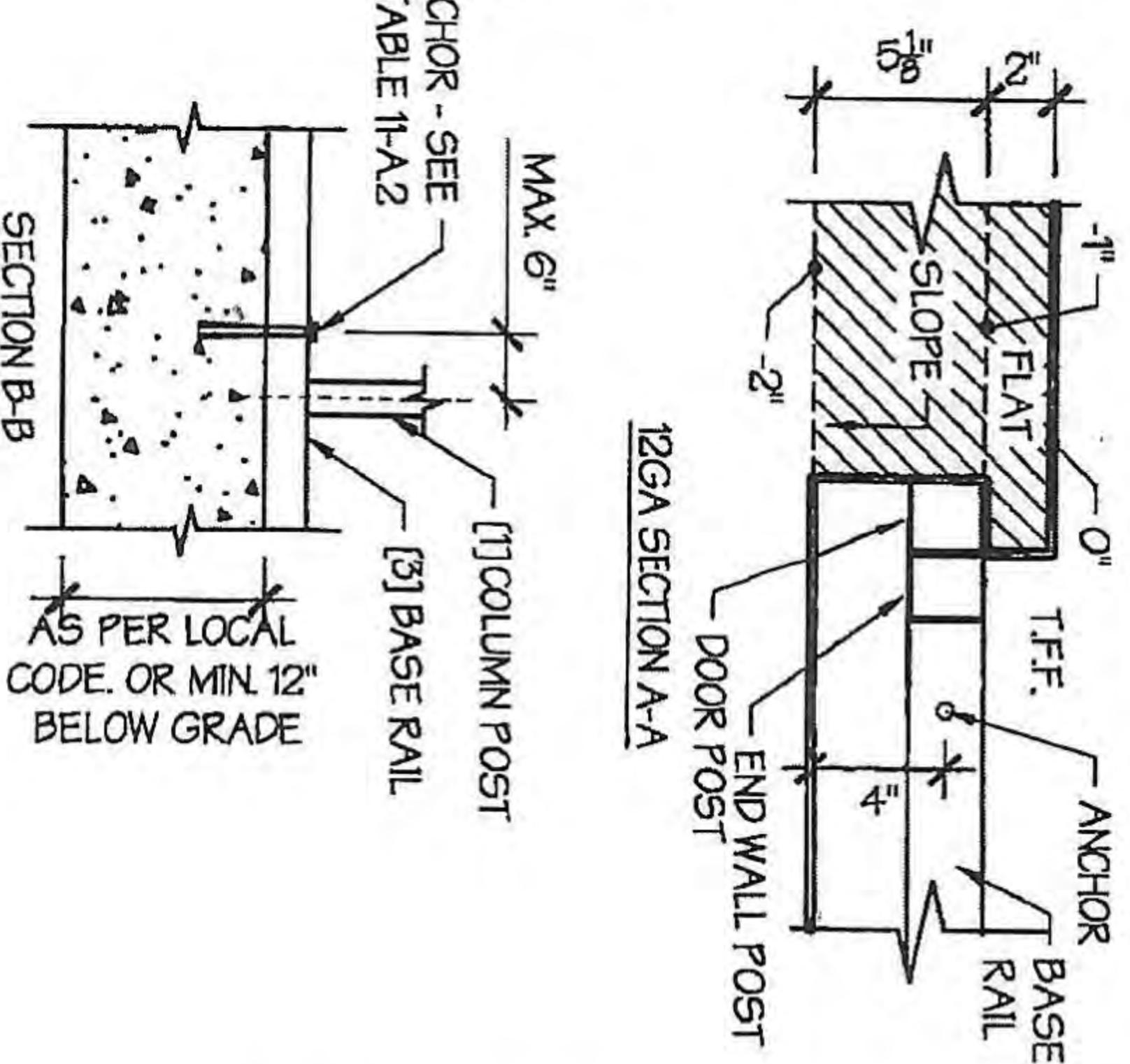
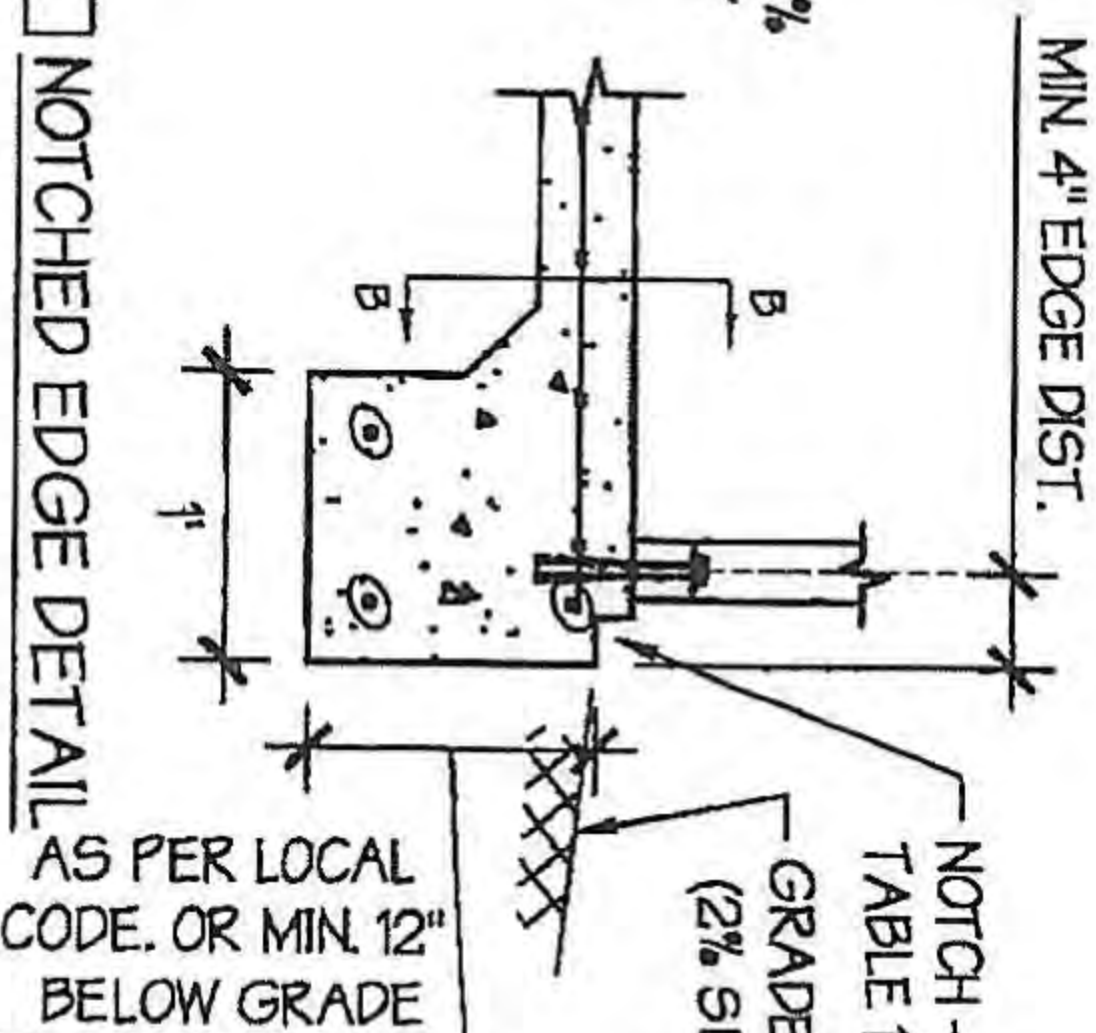
HORIZONTAL/OPEN	VERTICAL
14GA	12GA
12GA	14GA
2 3/4"	2 7/8"
	1 3/4"
	1 7/8"

NOTE: DEPTH IS TO BE 1 1/2"



EDGE OFFSET DETAIL

SCALE: NTS



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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE: FOUNDATION OPTION 1: CONCRETE SLAB

SHEET NO.: 11-A / 11

DRAWN BY: AW DATE: 8/13/20
CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

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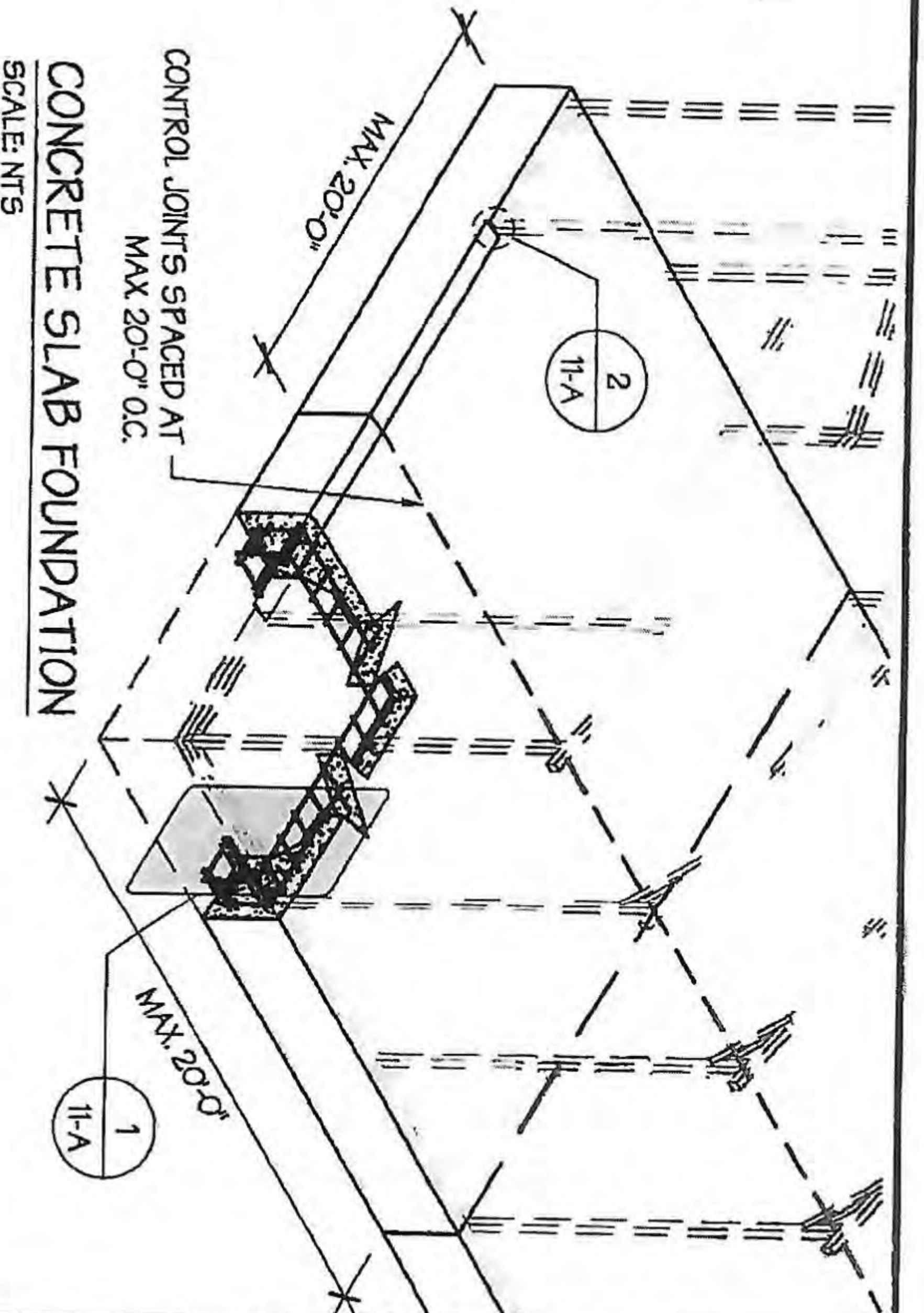
SEAL:



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DATE SIGNED: AUG 13 2020

CONCRETE SLAB FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-A.1.
- THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS $\frac{1}{2}$ " FOR 14GA MATERIAL AND 1" FOR 12GA MATERIAL.
- DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- CONTROL JOINTS SHALL BE PLACED SO AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTION.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.



CONCRETE SLAB FOUNDATION

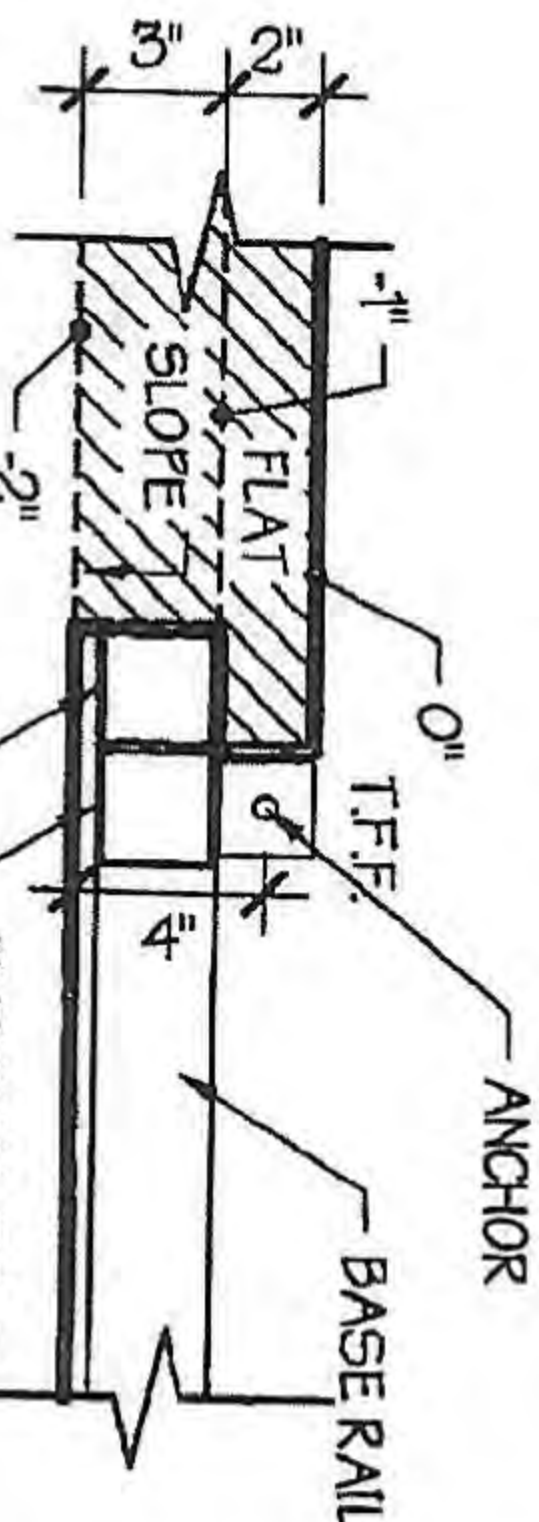
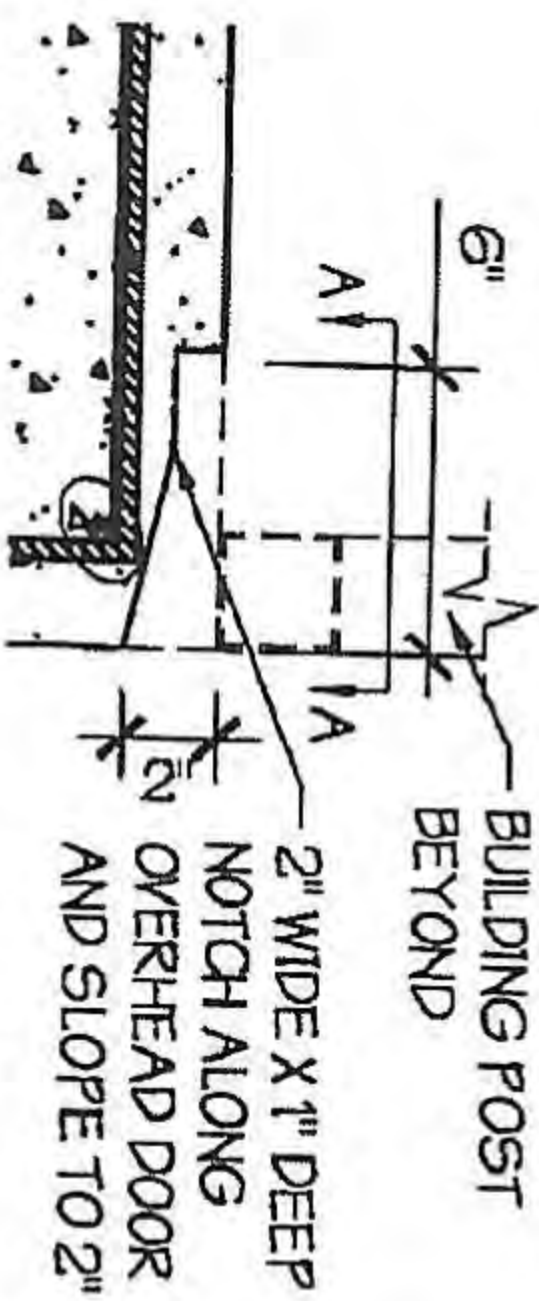
SCALE: NTS

TABLE 11-A.1: CONCRETE SLAB ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2"Ø X 7"
	136 TO 180	(2) 1/2"Ø X 7"
OPEN	105 TO 135	(1) 1/2"Ø X 7"
	136 TO 180	(2) 1/2"Ø X 7"

NOTES:

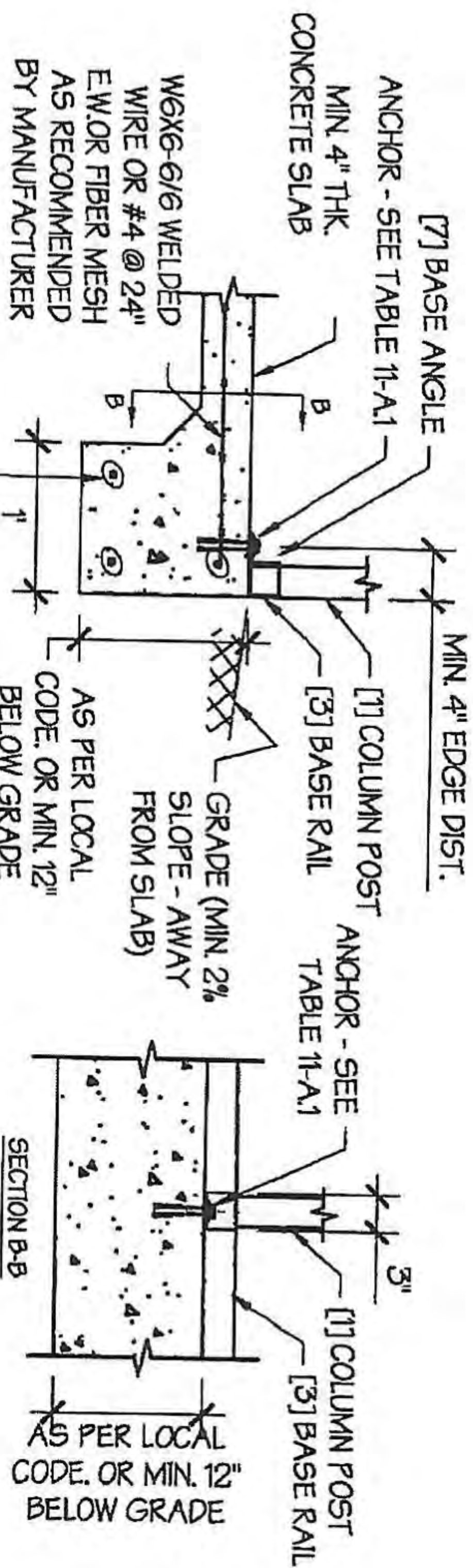
- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
- MIN. EMBEDMENT DEPTH TO BE 2 $\frac{1}{2}$ ".
- ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.



OVERHEAD DOOR NOTCH DETAIL

SCALE: NTS

2



EDGE FLUSH DETAIL

SCALE: NTS

1

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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:

FOUNDATION OPTION 1:
FLUSH CONCRETE SLAB

SHEET NO.: 11-A / 11

DRAWN BY: AW DATE: 8/13/20
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TABLE 11-B.1: ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2"Ø X 7"
	136 TO 180	(2) 1/2"Ø X 7"
OPEN	105 TO 135	(1) 1/2"Ø X 7"
	136 TO 180	(2) 1/2"Ø X 7"

NOTES:

1. ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
2. MIN. EMBEDMENT DEPTH TO BE 2 $\frac{1}{2}$ ".
3. ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

TABLE 11-B.2: CONC. STRIP SCHEDULE

WIND SPEED (MPH)	MIN. SIZE REQD.
105 TO 130	12" X 12"
140 TO 155	18" X 12"
165 TO 180	26" X 12" 21" X 15" 18" X 18"

NOTES:

1. WIDTH AND DEPTH DIMENSIONS CAN BE INTERCHANGED.

FOOTING OPTIONAL AT OPEN
END WALLS AND OVERHEAD
DOOR OPENINGS

1
11-B

CONCRETE STRIP FOUNDATION
SCALE: NTS

1
11-B

[1] COLUMN POST
ANCHOR - SEE
TABLE 11-B.1

GRADE (MIN. 2%
SLOPE - AWAY
FROM SLAB)

[3] BASE RAIL

(4) #4 REBAR
CONT.

EQ. EQ.
SEE TABLE 11-B.2

SEE TABLE 11-B.2

SCALE: NTS

1

SEAL:

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- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

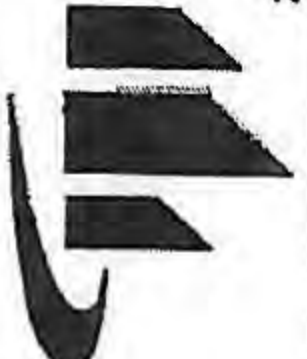
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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

FOUNDATION OPTION 2:
CONCRETE STRIP

SHEET NO.: 11-B / 11

DRAWN BY: AW DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

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CONCRETE STRIP FOUNDATION NOTES:

1. DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE STRIP FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
2. CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
3. MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-B.1.
4. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
5. DEPTH OF CONCRETE STRIP FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
6. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
7. CONCRETE STRENGTH TO BE A MIN. OF 2500 PSI @ 28 DAYS.
8. BUILDING IS TO BE MOUNTED ON THE CENTER OF THE STRIP FOUNDATION.

CONCRETE STRIP FOUNDATION DETAIL

SCALE: NTS

1

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DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:
FOUNDATION OPTION 3:
CONCRETE PIERS

SHEET NO.: 11-C / 11

DRAWN BY: AW DATE: 8/13/20
CHECKED BY: OAA DATE: 8/13/20

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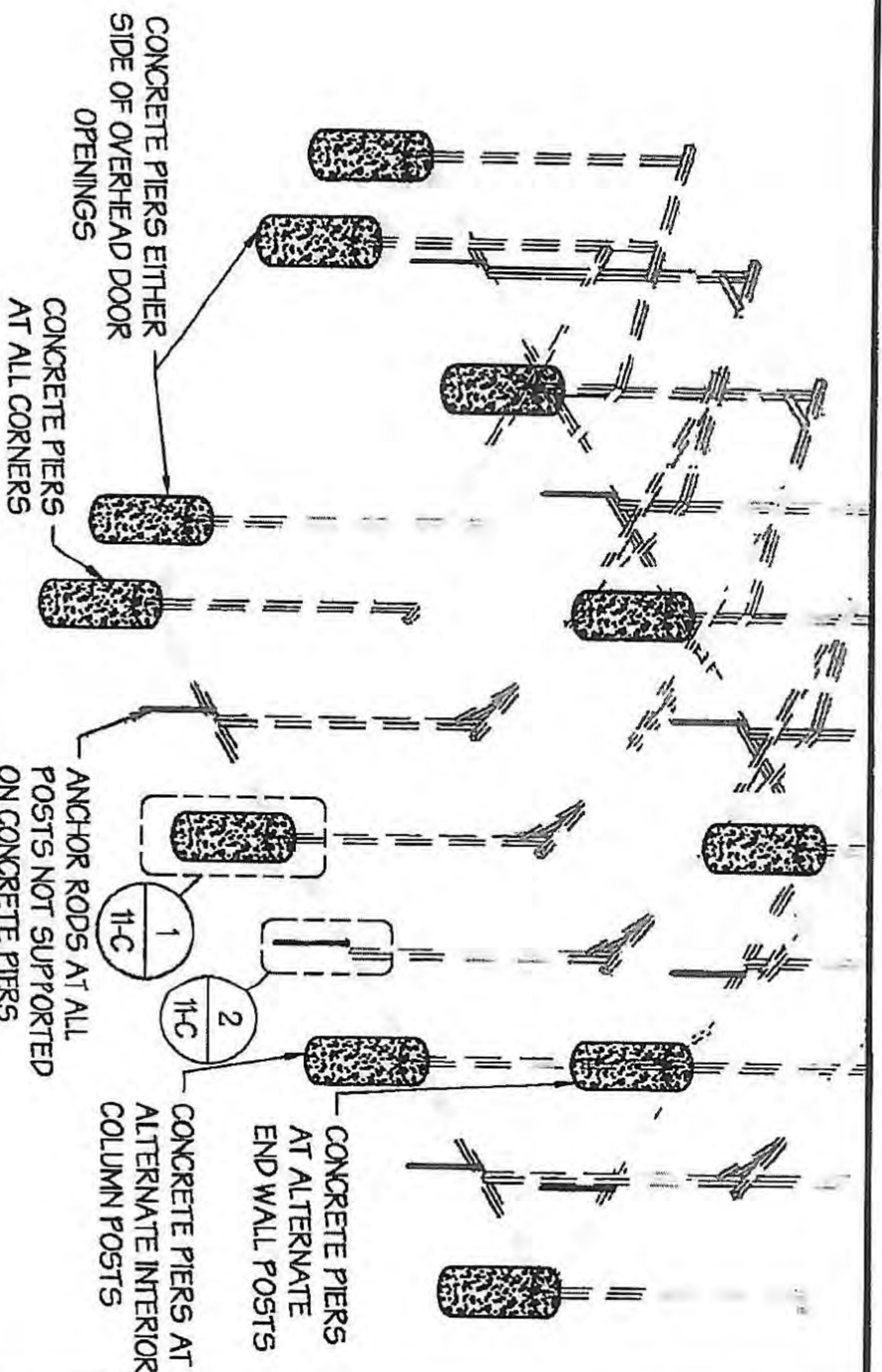


TABLE 11-C.2: ANCHOR SCHEDULE

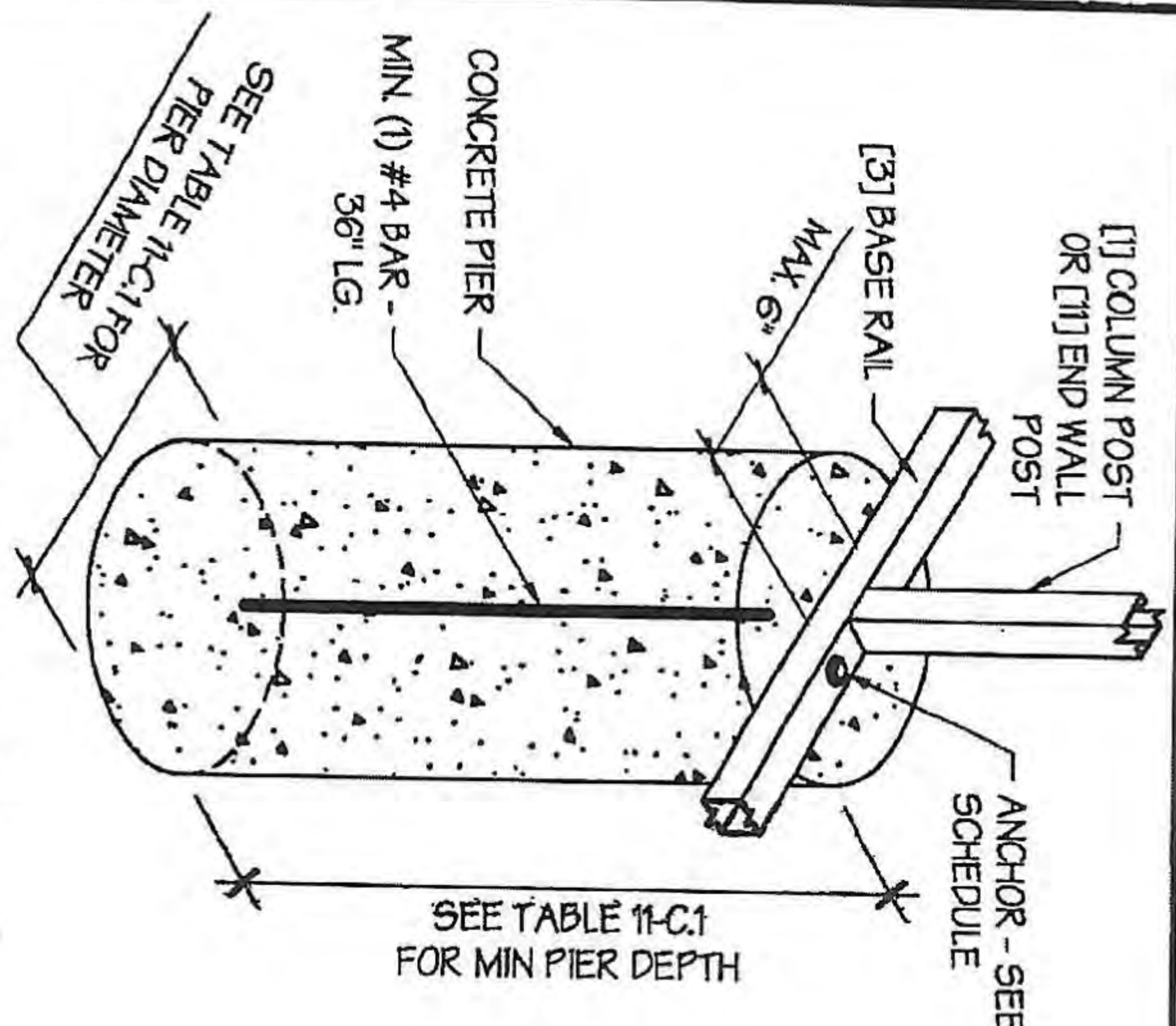
ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 180	(2) 1/2" Ø X 7"
OPEN	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 180	(2) 1/2" Ø X 7"

- NOTES:
- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
 - MIN. EMBEDMENT DEPTH TO BE 2 $\frac{1}{2}$ ".
 - ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

CONCRETE PIER FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE PIER FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- CONCRETE PIERS SHALL BE LOCATED AT ALL 4 CORNERS, ON EACH SIDE OF OVERHEAD DOOR OPENINGS AND ON ALTERNATE INTERIOR COLUMN POSTS AND END WALLS POSTS.
- TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST WITH A PIER.
- ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST WITH A PIER SHALL BE AS SHOWN IN TABLE 11-C.2.
- TWO ANCHORS AND A PIER ARE REQUIRED AT DIAGONAL BRACING LOCATIONS WHEN REQUIRED.
- ALL POSTS NOT SUPPORTED ON CONCRETE PIERS SHALL BE ANCHORED TO THE GROUND WITH A 1/2" X 30" LG. THREADED ROD. RODS WILL HAVE A PRE-FORMED HEAD AT THE TOP AND ONE COAT OF RUST PROOF MATERIAL.
- PIERS SHALL BE FORMED BY DIGGING A HOLE OF THE SAME SIZE AS THE PIER ON LEVEL GRADE AND FILLING IT WITH CONCRETE. THRD. ROD ANCHORS SHOULD BE DROPPED INTO THE PIERS PRIOR TO POURING THE CONCRETE.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.

CONCRETE PIER DETAIL 1
SCALE: NTS



ANCHOR ROD INTO SOIL DETAIL 2
SCALE: NTS

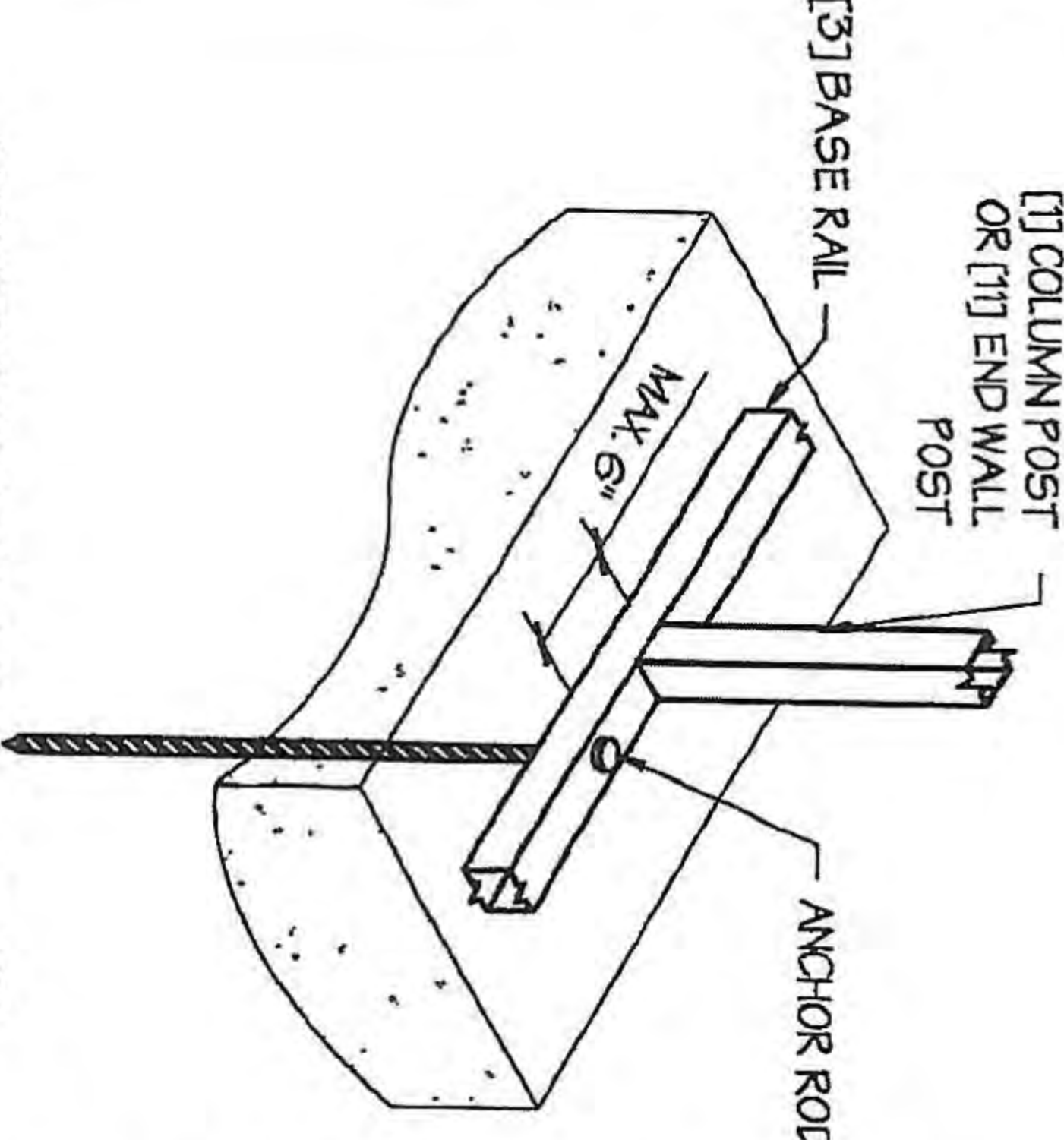


TABLE 11-C.1: CONC. PIER SCHEDULE

WIND SPEED (MPH)	MIN. SIZE REQD.
105 TO 130	18" Ø X 36"
140 TO 155	18" Ø X 42"
165 TO 180	18" Ø X 48"

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www.a-a-engineering.com

DRAWING INFORMATION

PROJECT: 12'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:

FOUNDATION OPTION 4:
SOIL ANCHORS

SHEET NO.: 11-D / 11

DRAWN BY: AW DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

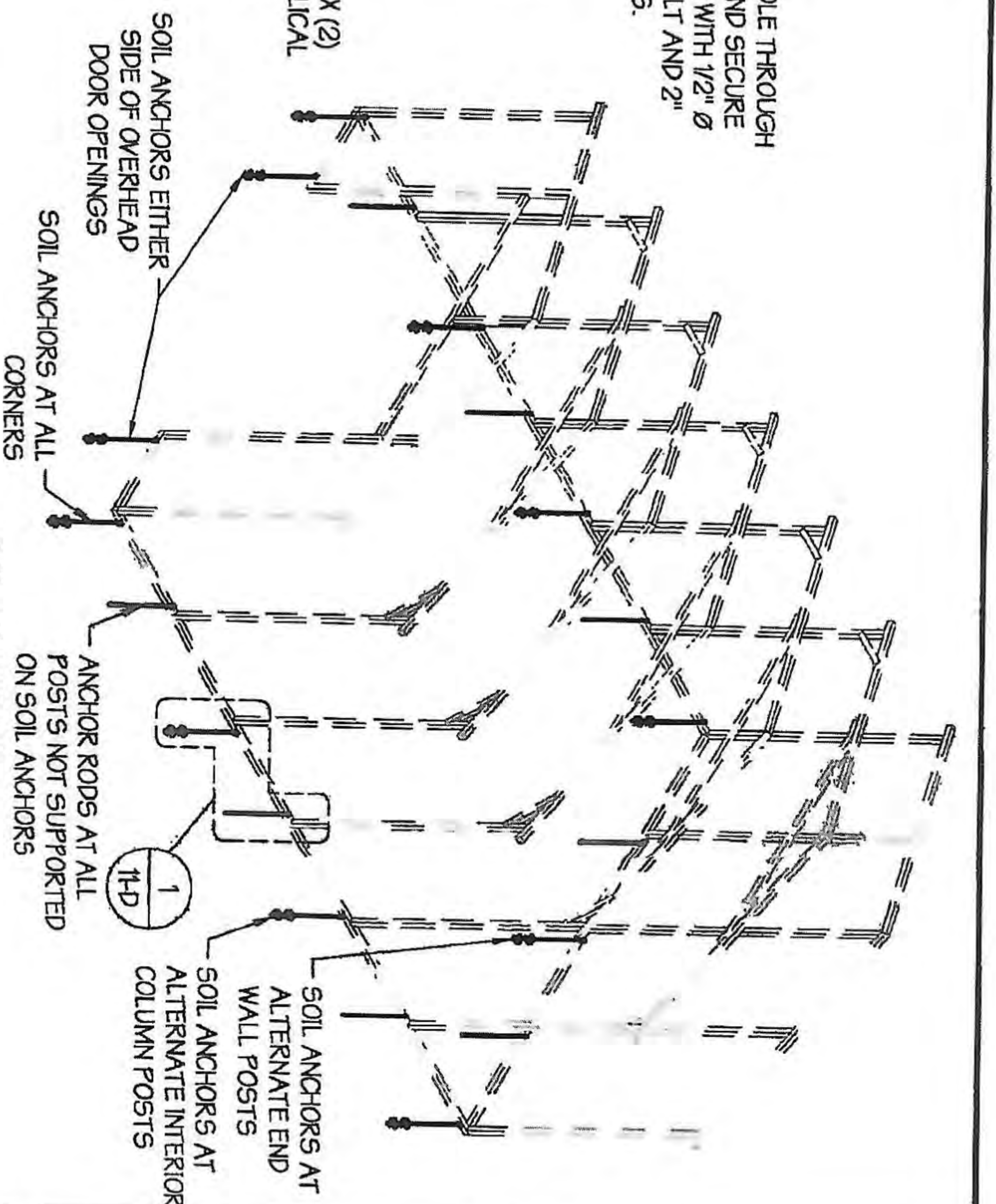
- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN, ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: 11/09/2020

DATE SIGNED: AUG 13 2020

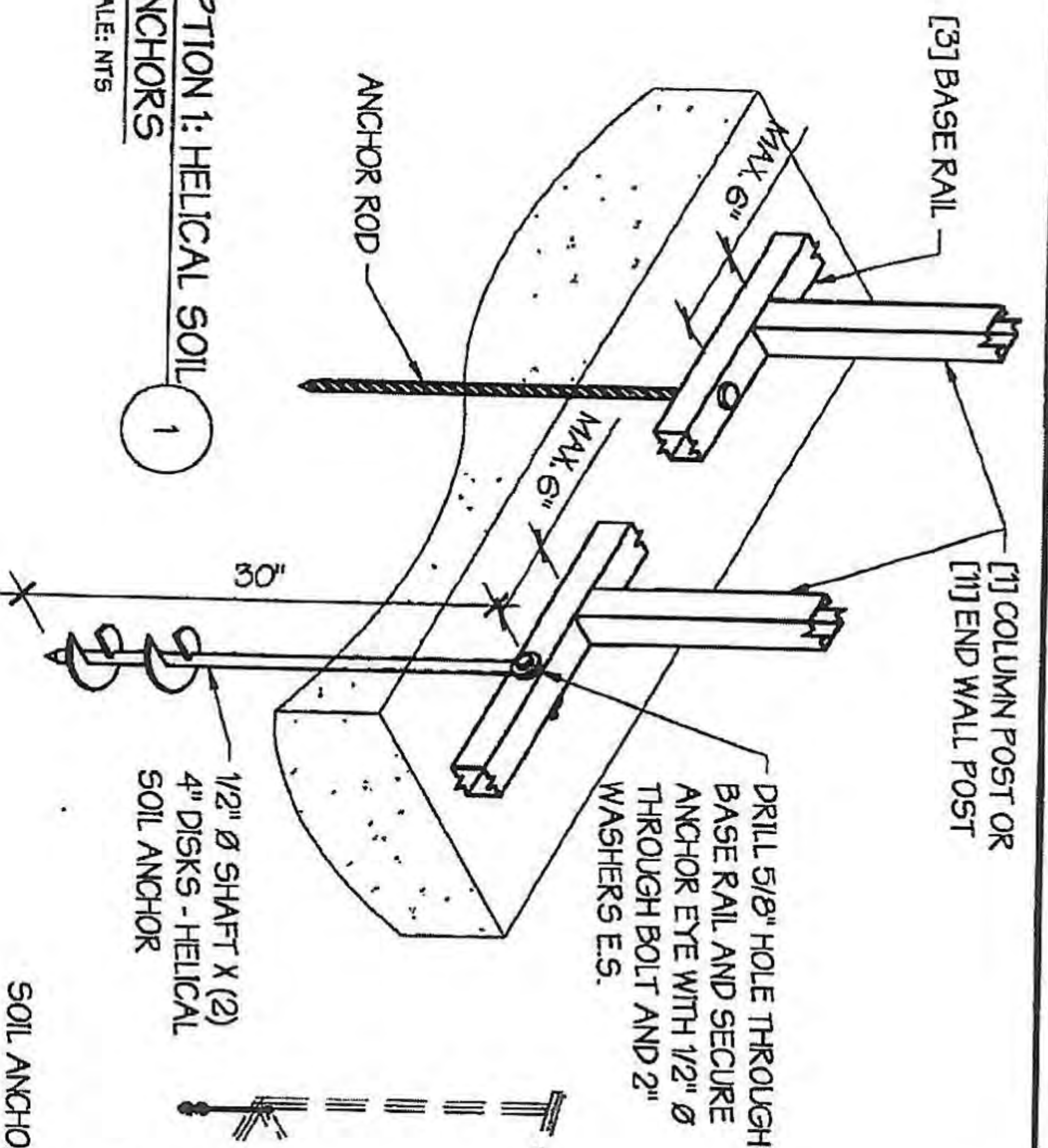


SOIL FOUNDATION

SCALE: NTS

OPTION 1: HELICAL SOIL ANCHORS

SCALE: NTS

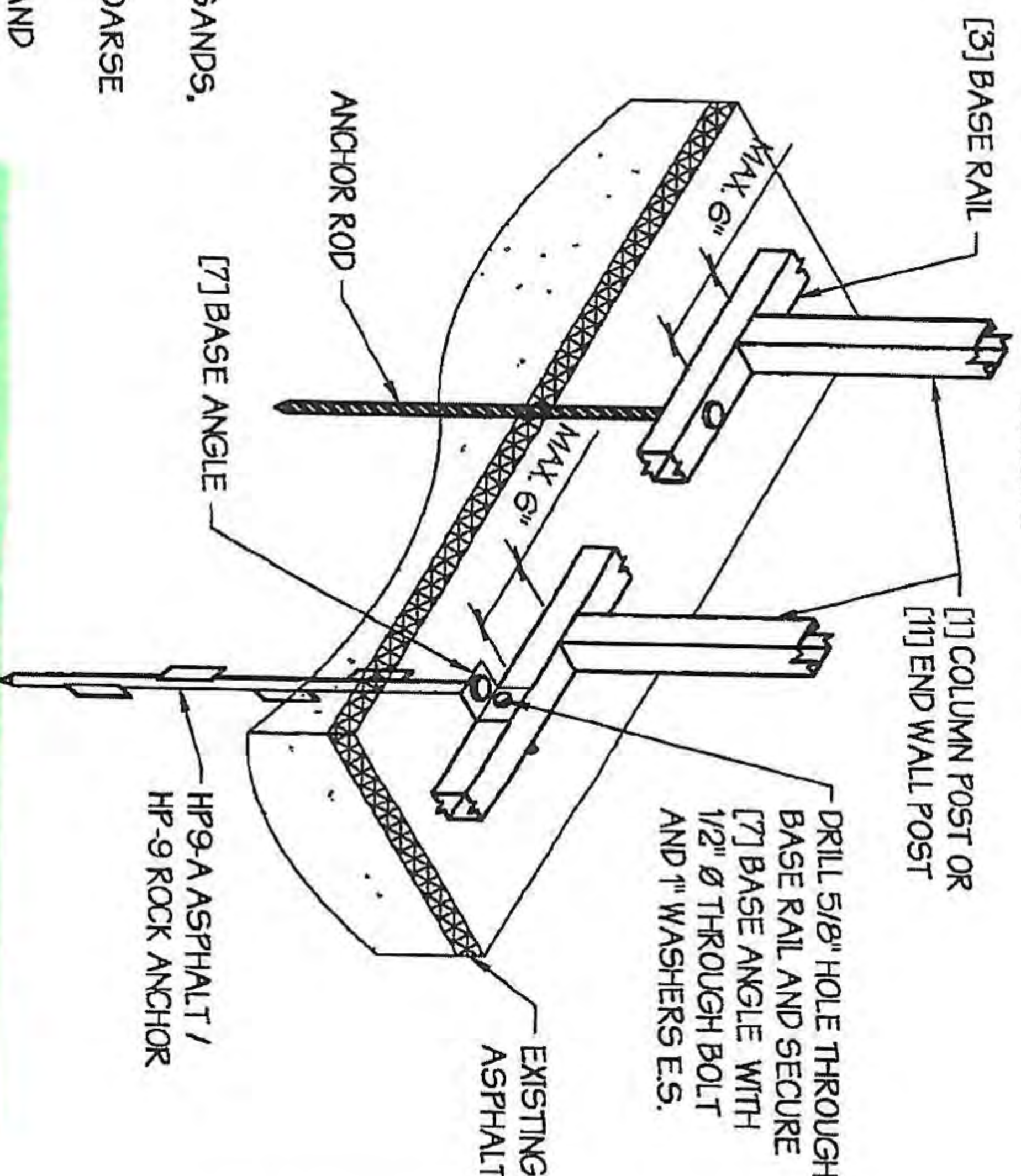


- SOIL FOUNDATION NOTES:**
1. DESIGNS SHOWN ON THIS SHEET ARE FOR SOIL ANCHOR FOUNDATION.
 2. SOIL ANCHORS (HELICAL OR ROCK/ASPHALT) SHALL BE LOCATED AT ALL 4 CORNERS, ON EACH SIDE OF OVERHEAD DOOR OPENINGS, ON POSTS WITH DIAGONAL BRACING IF REQUIRED, AND ON ALTERNATE INTERIOR COLUMN POSTS AND END WALLS POSTS.
 3. HELICAL ANCHORS ARE TO BE USED ONLY IF THE DRIVING TORQUE INTO THE GROUND IS 150 FT-LBS OR GREATER. MANUFACTURER IS NOT RESPONSIBLE FOR SOIL QUALITY AT SITE.
 4. HELICAL ANCHORS CAN ONLY BE USED FOR CLASS 2, 3 & 4 SOILS (SEE SOIL CLASSIFICATIONS THIS PAGE).
 5. ALL POSTS WITH NO ANCHORS ADJACENT SHALL BE ANCHORED TO THE GROUND WITH A 1/2" X 30" LG. ROD. RODS WILL HAVE A PRE-FORMED HEAD AT THE TOP AND ONE COAT OF RUST PROOF MATERIAL.
 6. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.

SOIL CLASSIFICATIONS:

SOIL CLASS	DESCRIPTION
2	SANDY GRAVEL AND GRAVEL, VERY THIN DENSE AND/OR CEMENTED SANDS, COARSE GRAVEL/COBBLES, PRELOADED SILTS, CLAYS AND CORAL.
3	SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL, MEDIUM DENSE COARSE SANDS, SANDY GRAVEL, VERY STIFF SILT AND SANDY CLAYS.
4	LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS AND ALLUVIAL FILLS.

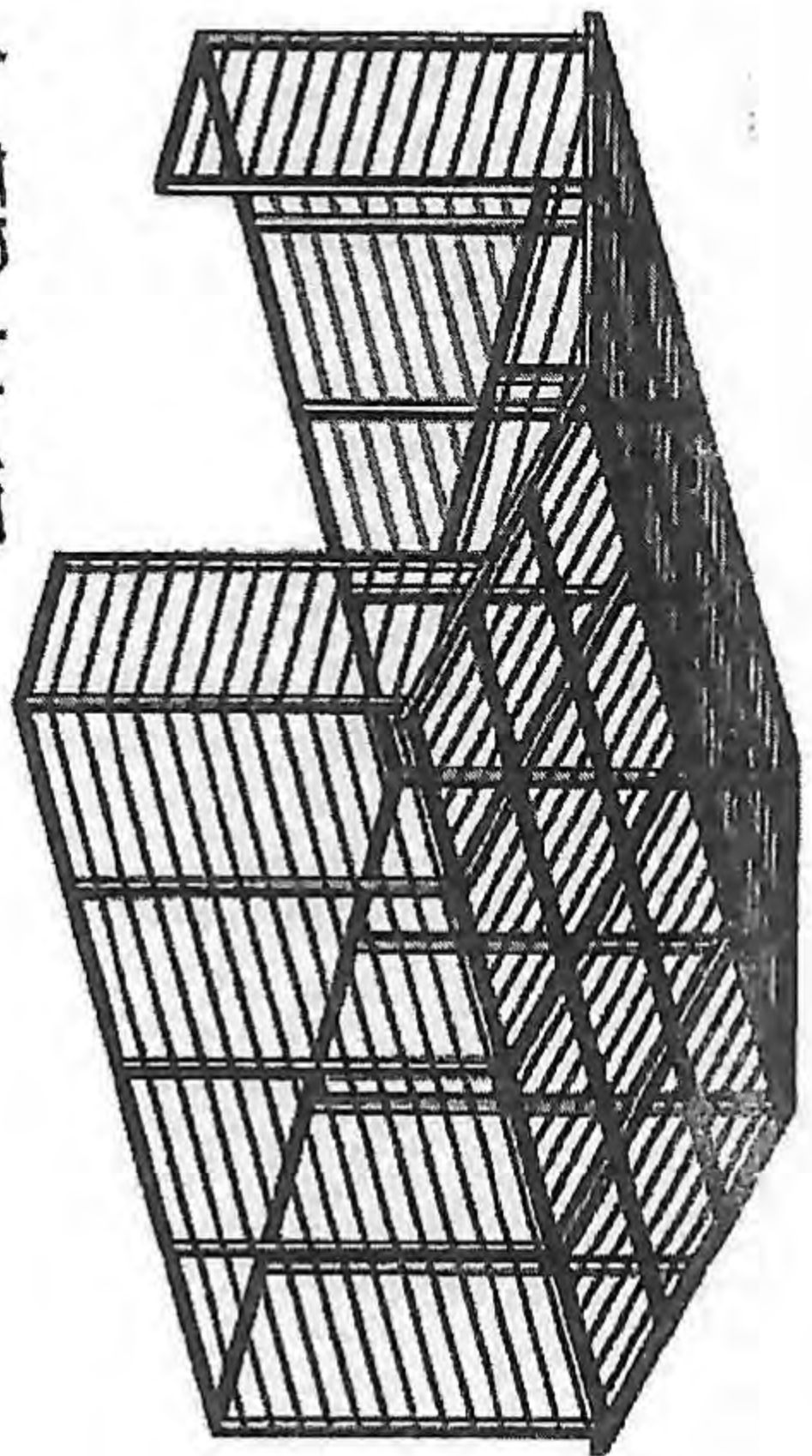
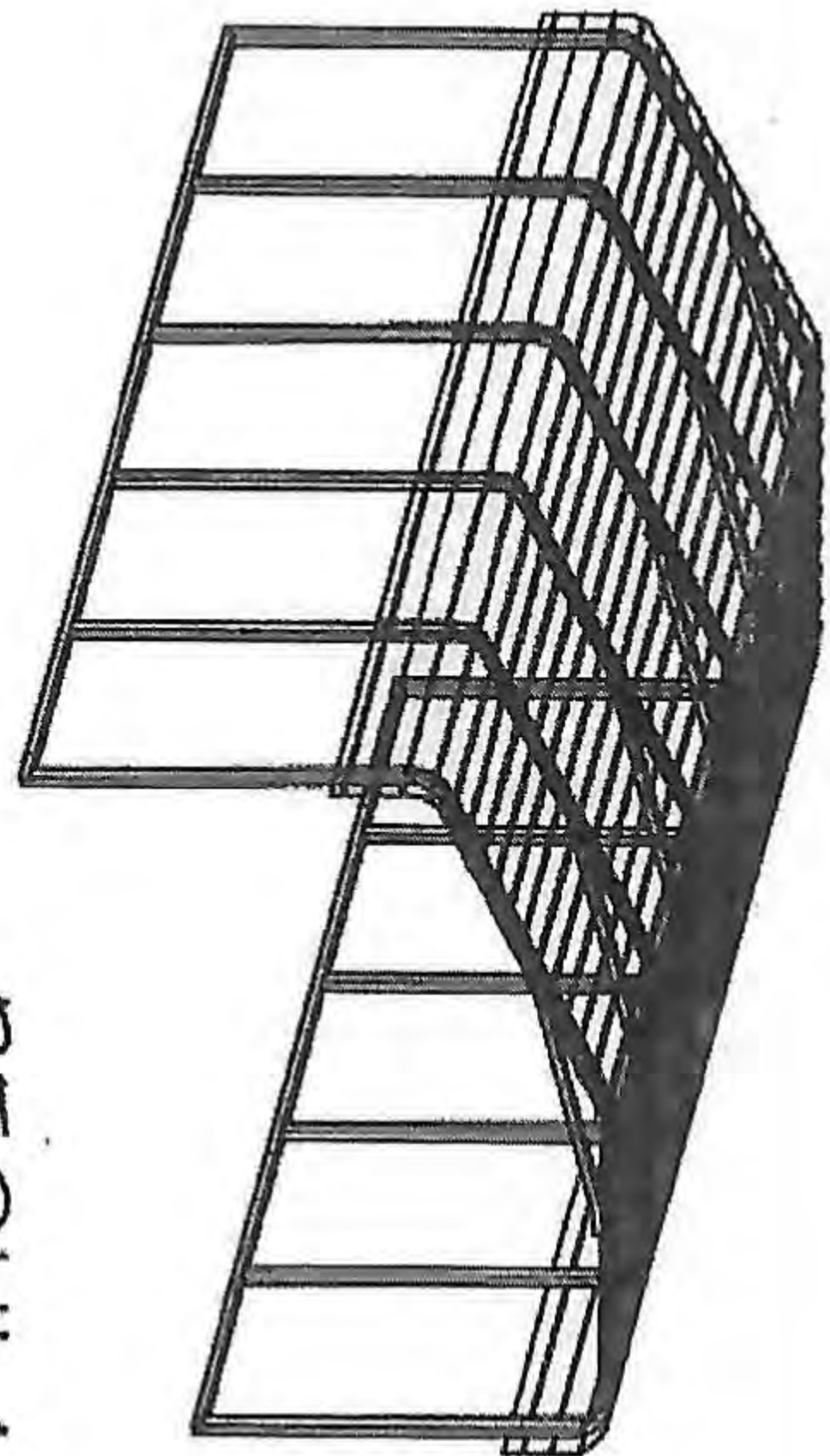
*FROM HUD "MODEL MANUFACTURED HOME INSTALLATION STANDARDS"



OPTION 2: ROCK / ASPHALT ANCHORS

SCALE: NTS

1



REGULAR / A-FRAME 24'-0" WIDE

CARPORT STYLE BUILDINGS

DESIGN NOTES

1. ALL CONSTRUCTION SHALL BE PROVIDED IN ACCORDANCE WITH IBC 2018, OSHA, AISC 360, AISI 100, ASCE 7-16, AWS D1.3 CODES AND ALL APPLICABLE LOCAL REQUIREMENTS.
2. BASE CONNECTIONS SHALL BE PROVIDED AS SHOWN ON FOUNDATION DETAILS SHEET.
3. ALL MATERIALS IDENTIFIED BY MANUFACTURER NAME MAY BE SUBSTITUTED WITH MATERIAL EQUAL OR EXCEEDING ORIGINAL.
4. ALL SHOP CONNECTIONS SHALL BE WELDED CONNECTIONS.
5. ALL FIELD CONNECTIONS SHALL BE #12"x1" SDS (ESR-2196 OR EQ).
6. STEEL SHEATHING SHALL BE 29GA CORRUGATED GALV. OR PAINTED STEEL - MAIN RIB HT. 3/4" (PT=80K5) OR EQ.
7. ALL STRUCTURAL LIGHT GAUGE TUBING AND CHANNELS SHALL BE GRADE 50 STEEL.
8. STRUCTURAL TUBE T52 1/2"x2 1/2" - 14GA IS EQUIVALENT TO T52 1/4"x2 1/4" - 12GA AND EITHER ONE MAY BE USED IN LIEU OF THE OTHER.
9. ALL DESIGN CRITERIA MUST BE INCREASED TO THE NEXT HIGHER INCREMENT BASED ON THE TABLES ON PAGE 4. NO INTERPOLATION IS ALLOWED.

DESIGN CRITERIA

PREVAILING CODE: WSBC (IBC 2018)
USE GROUP: U (CARPORTS, BARN)
RISK CATEGORY: I

DRAWING INDEX

COVER SHEET	1
SCHEDULES & MEMBER - SECTIONS	2
FRAME SECTIONS & DETAILS	3-A, 3-B
SPACING SCHEDULES - & ENCLOSURE NOTES	4
PURLIN & GIRT SCHEDULES	5
SHEATHING OPTIONS	6
SIDE WALL FRAMING & OPENINGS	7-A, 7-B
END WALL FRAMING & OPENINGS	8-A, 8-B
CORNER BRACING DETAILS	9
OPTIONAL LEAN-TO ADDITION	10
FOUNDATION OPTIONS	11-A TO 11-D

- LOAD COMBINATIONS:
1. D + (Lr OR S)
 2. D + (0.6W OR ±0.7E)
 3. D + 0.75 (0.6W OR ±0.7E) + 0.75 (Lr OR S)
 4. 0.6D + (0.6W OR ±0.7E)

CUSTOMER INFORMATION

OWNER: _____
ADDRESS: _____

DESIGN LOADS

GROUND SNOW: _____
ROOF LIVE LOAD: _____
BASIC WIND SPEED: _____

BUILDING INFORMATION

WIDTH: _____
LENGTH: _____
HEIGHT: _____
FRAME TYPE: ☐ A-FRAME ☐ REGULAR ☐ FULL ☐ PARTIAL ☐ OPEN
ENCLOSURE TYPE: ☐ FULL ☐ PARTIAL ☐ OPEN

CERTIFICATION VALIDITY NOTICE

DATE OF PLANS EXPIRATION: **AUG 13, 2021**
CERTIFICATION ON THESE DRAWINGS IS VALID FOR ONE YEAR FROM DATE OF ISSUE

MANUFACTURED BY:



**NORTHSIDE
METAL CARPORTS LLC**
110 Avery Rd E
Chehalis, WA 98532
360-262-9354

ENGINEERED BY:



A&A ENGINEERING
CIVIL • STRUCTURAL
6035 Renaissance Place, Toledo, OH 43623
Tel: 419.252.1583 • Fax: 419.292.4355
www.aandengineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE: COVER SHEET

SHEET NO.: 1 / 11

DRAWN BY: A.W. DATE: 5/5/21

CHECKED BY: OAA DATE: 5/5/21

LEGAL INFORMATION

- ANY DUPLICATION OF THIS DRAWING IN WHOLE OR PART IS STRICTLY FORBIDDEN. ANYONE DOING SO WILL BE PROSECUTED UNDER THE FULL EXTENT OF THE LAW.
- DRAWINGS VALID UP TO 1 YEAR FROM DATE OF ISSUE.

SEAL:



STAMP EXPIRY: **NOV 09, 2022**
DATE SIGNED: **APR 30, 2021**

TABLE 2.1: MEMBER PROPERTIES

NO.	MEMBER	PROPERTIES	DETAIL NO.
1	COLUMN POST	2.5" X 2.5" X 14GA TUBE	1
2	ROOF BEAM	2.5" X 2.5" X 14GA TUBE	1
3	BASE RAIL	2.5" X 2.5" X 14GA TUBE	1
4	PEAK BRACE	2.5" X 2.5" X 14GA CHANNEL	4
5	KNEE BRACES	2.5" X 1.5" X 14GA CHANNEL	4
6	CONNECTOR SLEEVE	2.25" X 2.25" X 12GA TUBE	2
7	BASE ANGLE	2" X 2" X 3" LG. 3/16" ANGLE	10
8	PURLIN	4.25" X 1.5" X 14GA / 18GA HAT CHANNEL	5
9	GIRT	4.25" X 1.5" X 14GA / 18GA HAT CHANNEL	5
9A	OPT. END WALL GIRT	2.5" X 1.5" X 14GA CHANNEL	1
10	SHEATHING	29 GA CORRUGATED SHEET	8
11	END WALL POST	2.5" X 2.5" X 14GA TUBE	1
12	DOOR POST	2.5" X 2.5" X 14GA TUBE	1
13	SINGLE HEADER	2.5" X 2.5" X 14GA TUBE	1
14	DOUBLE HEADER	DBL. 2.5" X 2.5" X 14GA TUBE	1
15	SERVICE DOOR / WINDOW FRAMING	2.5" X 2.5" X 14GA TUBE	1
16	ANGLE BRACKET	2" X 2" X 2" LG. 14GA ANGLE	7
17	STRAIGHT BRACKET	2" X 2" X 4" LG. 14GA PLATE	6
18	PB SUPPORT	2.5" X 2.5" X 14GA TUBE	1
19	DIAGONAL BRACE	2" X 2" X 14 GA TUBE	3
20	GABLE BRACE	2" X 2" X 14 GA TUBE	3
21	DB BRACKET	2.25" X 2.25" X 6" LG. 14GA ANGLE	9
22	TRUSS SPACER	2.5" X 2.5" X 14GA TUBE	1
23	ALL FASTENERS	#12 X 1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER	

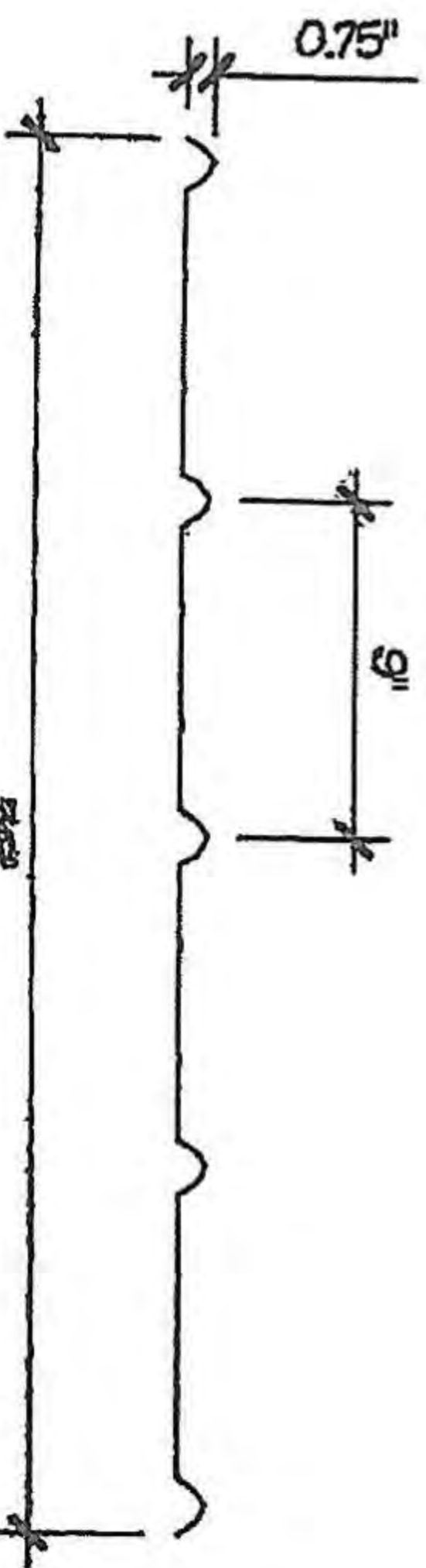
TABLE 2.2: SHEATHING FASTENER SCHEDULE

NO.	CORNER PANELS	SIDE LAPS	EDGE LAPS	ELSEWHERE
1	9" C/C	MIN 1	4 1/2" C/C	9" C/C

FASTENER TYPE: #12X1" SELF-DRILL SCREWS (ESR-2196 OR EQ) W/ NEOPRENE/STEEL WASHER
SEE TYP. SHEATHING FASTENER SCHEDULE DIAGRAM ON PAGE 6.

TABLE 2.3: GAUGE THICKNESS

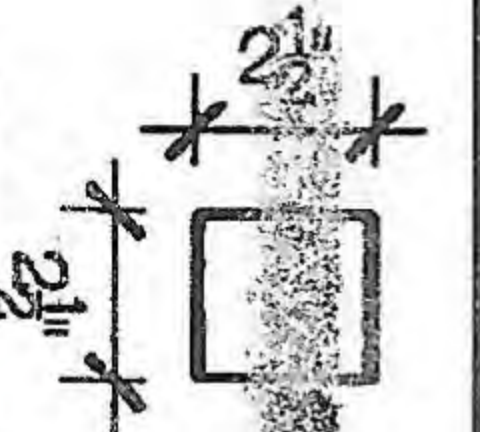
GAUGE	29	18	14	12
THICKNESS (IN)	0.0135	0.049	0.083	0.109



THICKNESS = 29GA

29 GA CORRUGATED SHEATHING

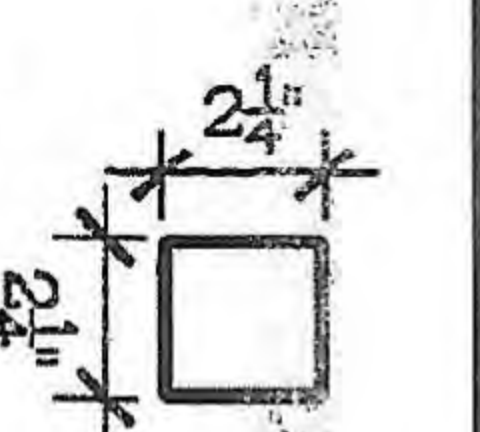
SCALE: NTS



THICKNESS = 14GA

2.5" X 2.5" 14GA TUBE

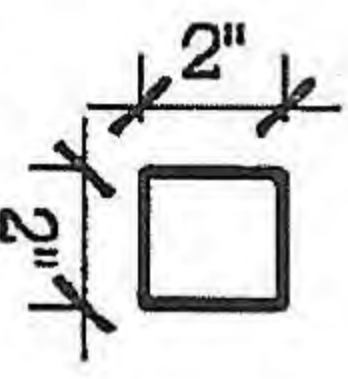
SCALE: NTS



THICKNESS = 12GA

2.25" X 2.25" 12GA TUBE

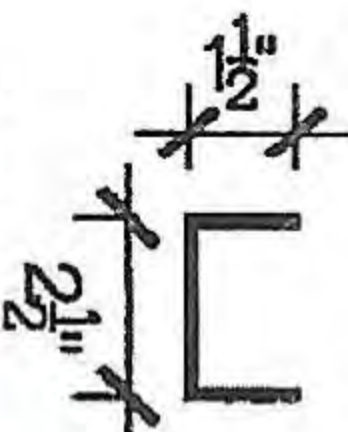
SCALE: NTS



THICKNESS = 14GA

2" X 2" 14GA TUBE

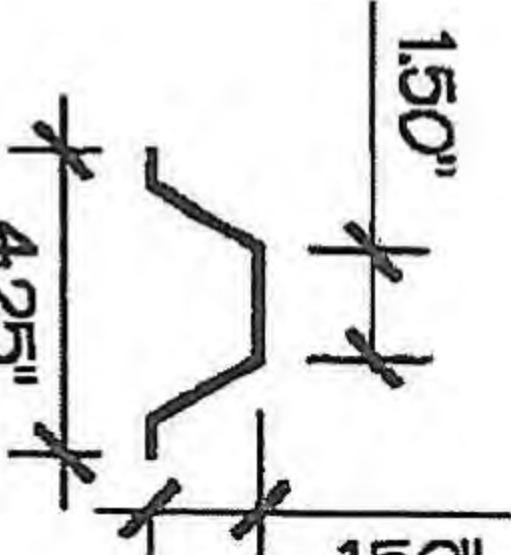
SCALE: NTS



THICKNESS = 14GA

2.5" X 1.5" 14GA CHANNEL

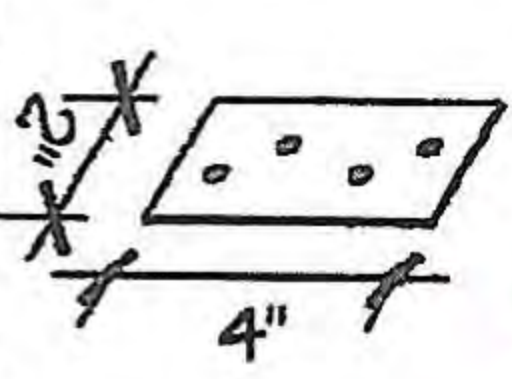
SCALE: NTS



THICKNESS = 14GA / 18GA

4.25" X 1.5" X 14GA / 18GA HAT CHANNEL

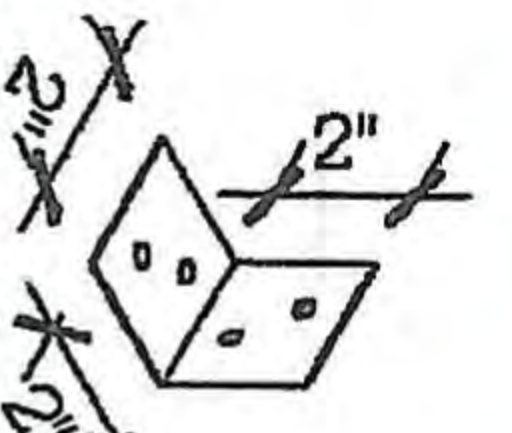
SCALE: NTS



THICKNESS = 14GA

STRAIGHT BRACKET

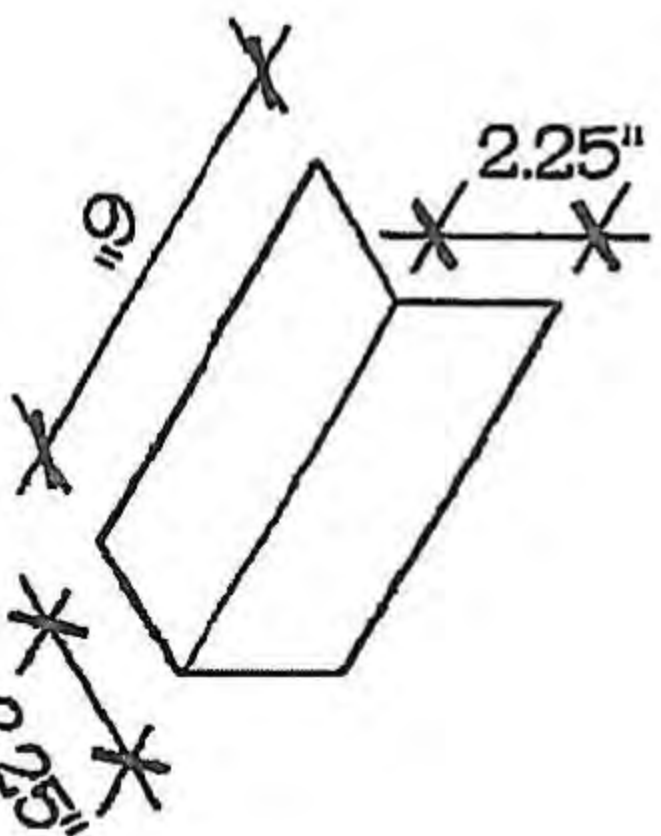
SCALE: NTS



THICKNESS = 14GA

ANGLE BRACKET

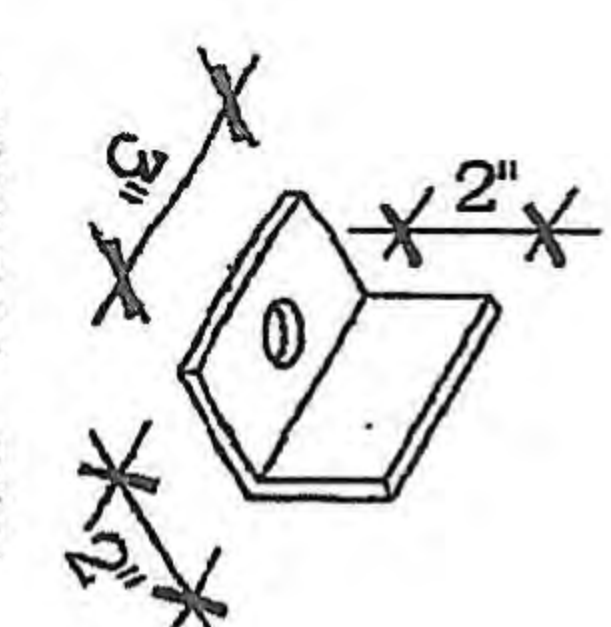
SCALE: NTS



THICKNESS = 14GA

DB BRACKET

SCALE: NTS



THICKNESS = 3/16"

BASE ANGLE

SCALE: NTS

MANUFACTURED BY:



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360-262-9354

ENGINEERED BY:



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CIVIL - STRUCTURAL

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www.aandengineering.com

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

SCHEDULES &

MEMBER SECTIONS

SHEET NO.: 2 / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

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SEAL:



STAMP EXPIRY: 11/09/2020

DATE SIGNED: AUG 13 2020

MANUFACTURED BY:



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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:

**FRAME SECTIONS &
DETAILS**

SHEET NO.: 3-A / 11
DRAWN BY: A.W. DATE: 8/13/20
CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

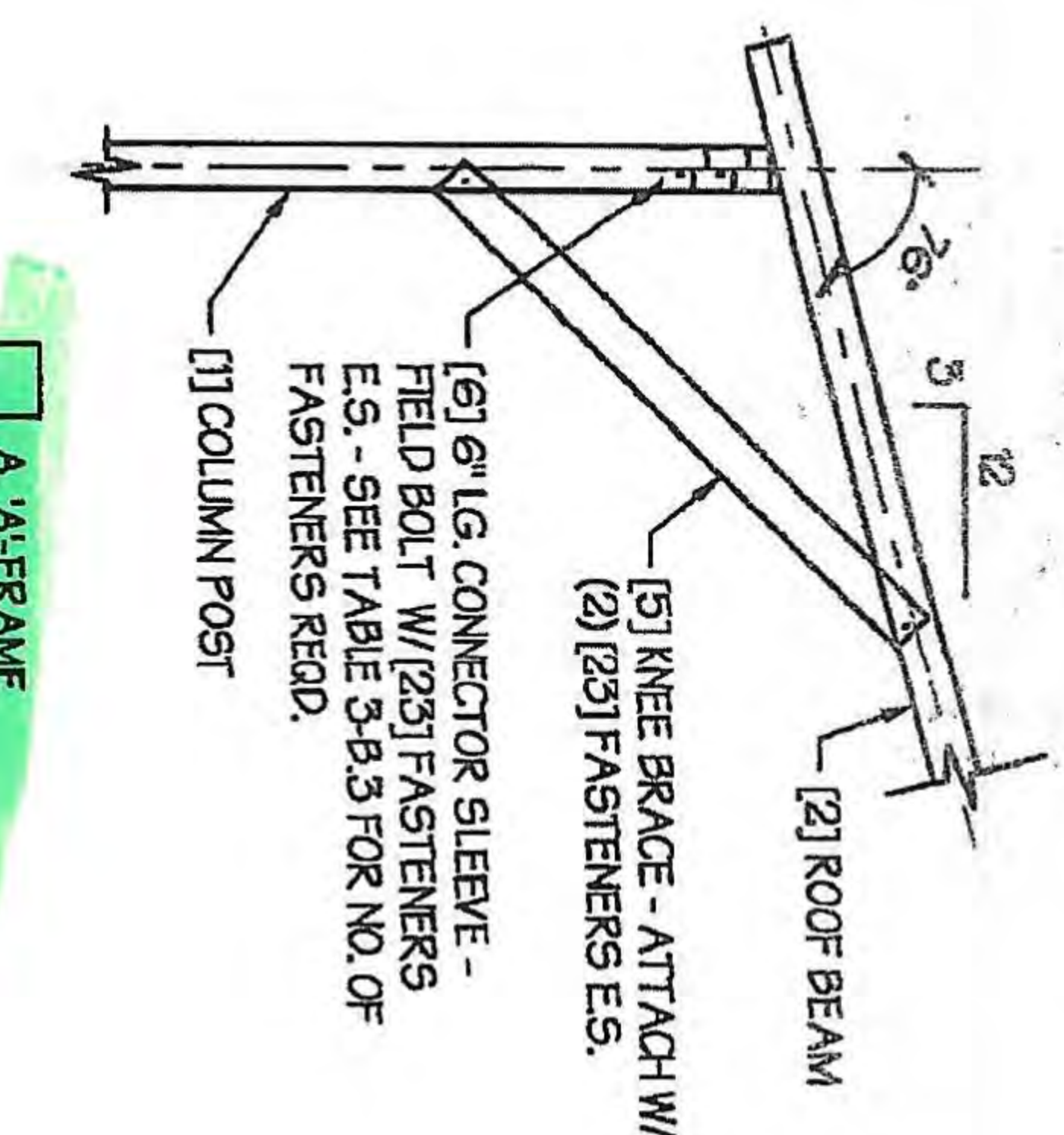
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SEAL:

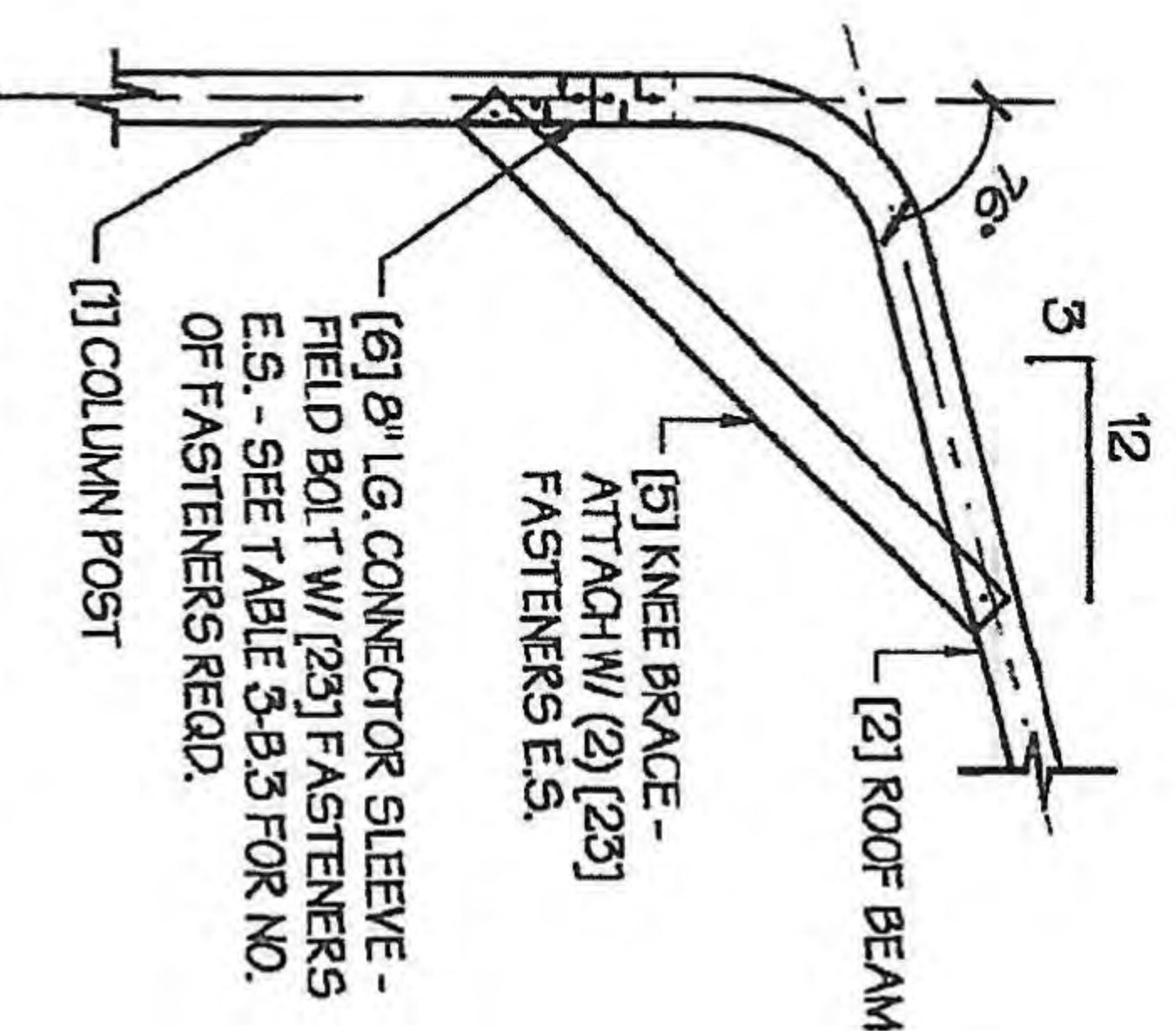


STAMP EXPIRY: 11/09/2020

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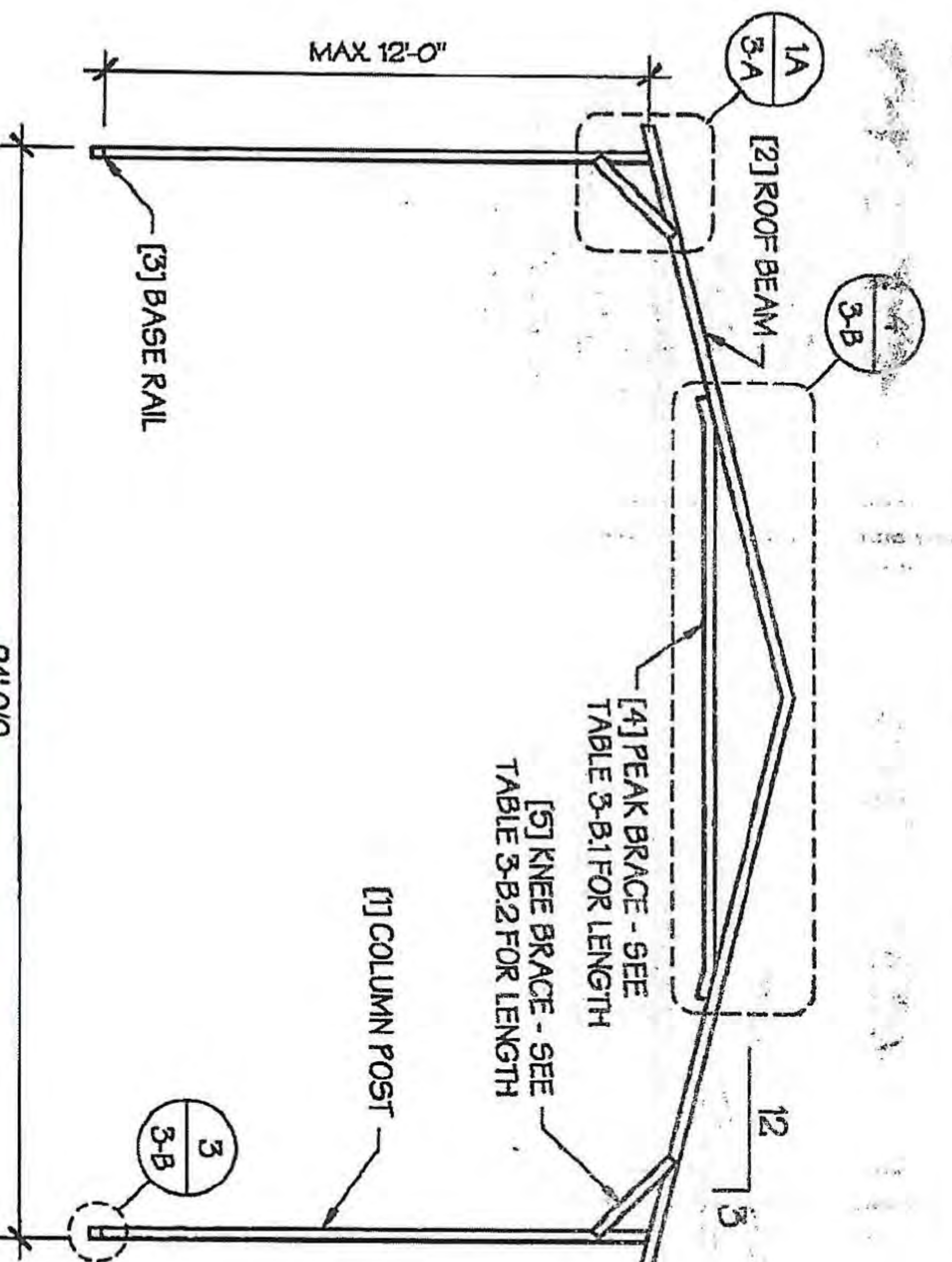


☒ **A. 'A'-FRAME**



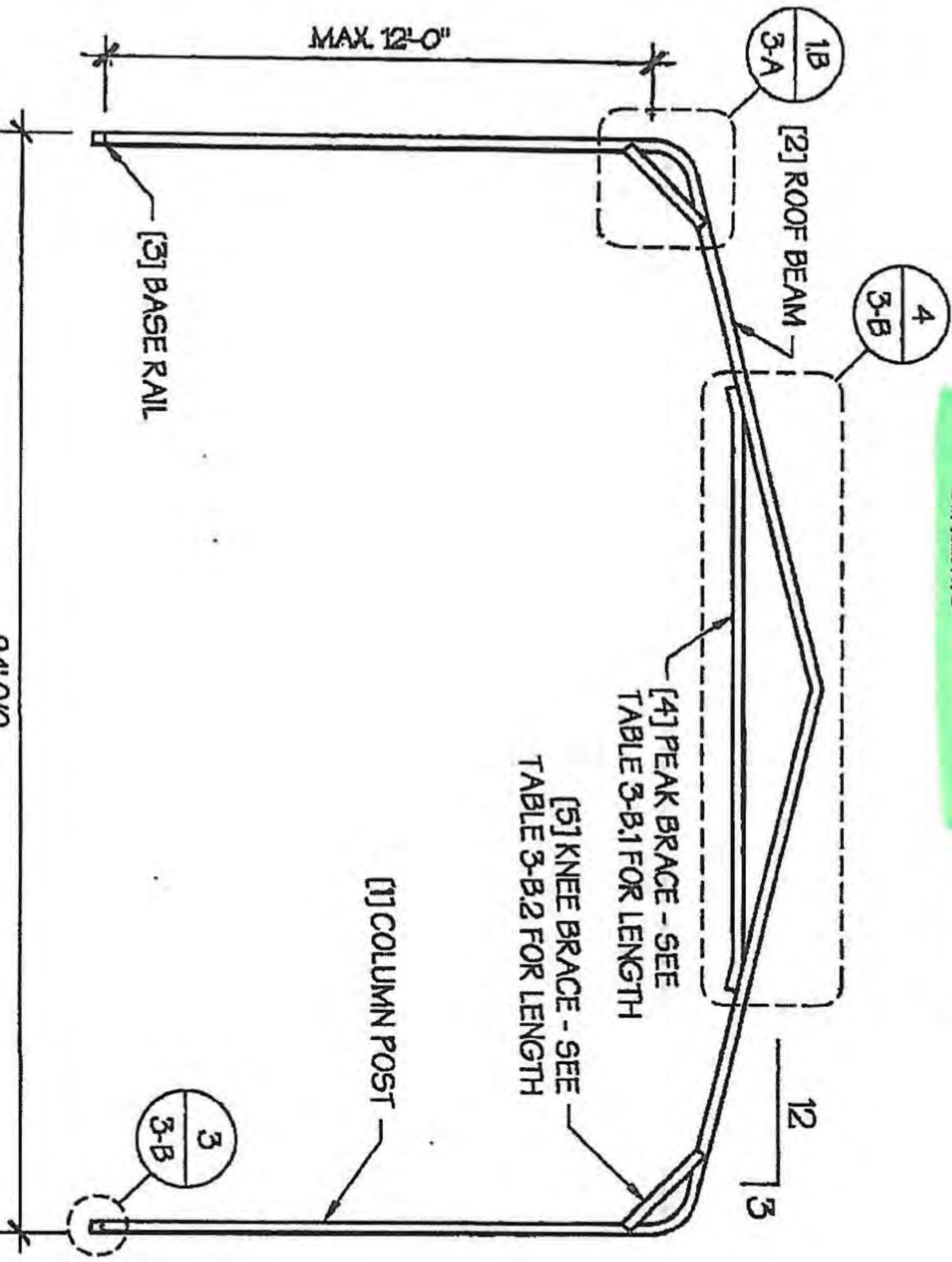
☐ **B. REGULAR-FRAME**

☒ **EAVE DETAIL 1**



☒ **TYP. A-FRAME SECTION**

SCALE: NTS



☐ **TYP. REGULAR FRAME SECTION**

SCALE: NTS

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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:

FRAME DETAILS

SHEET NO.: 3-B / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

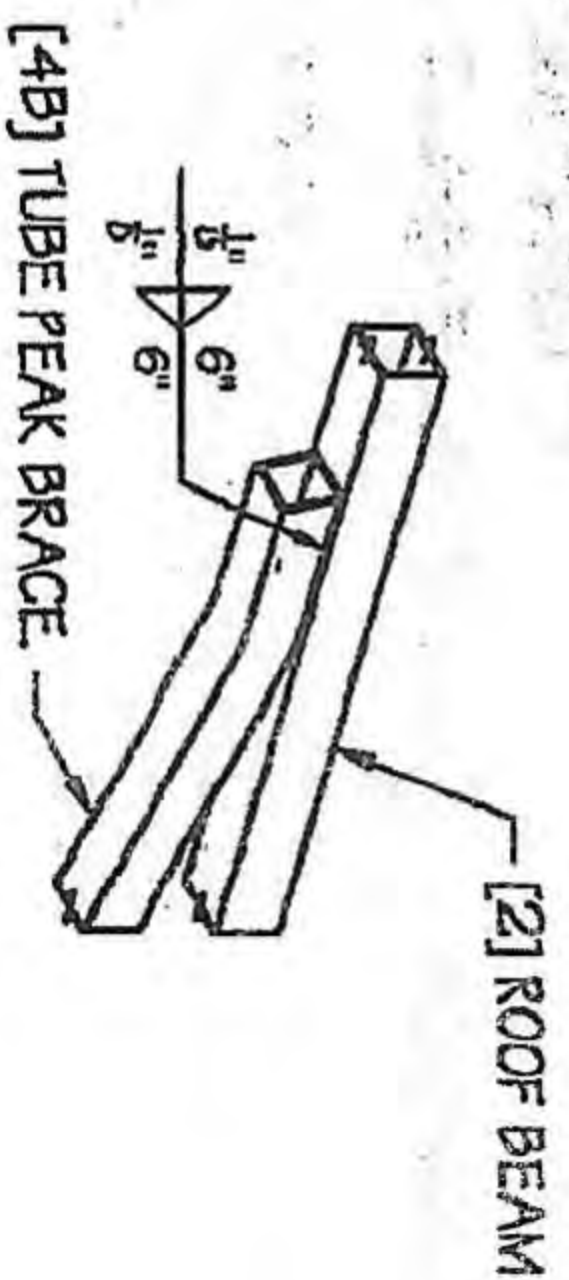
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SEAL:

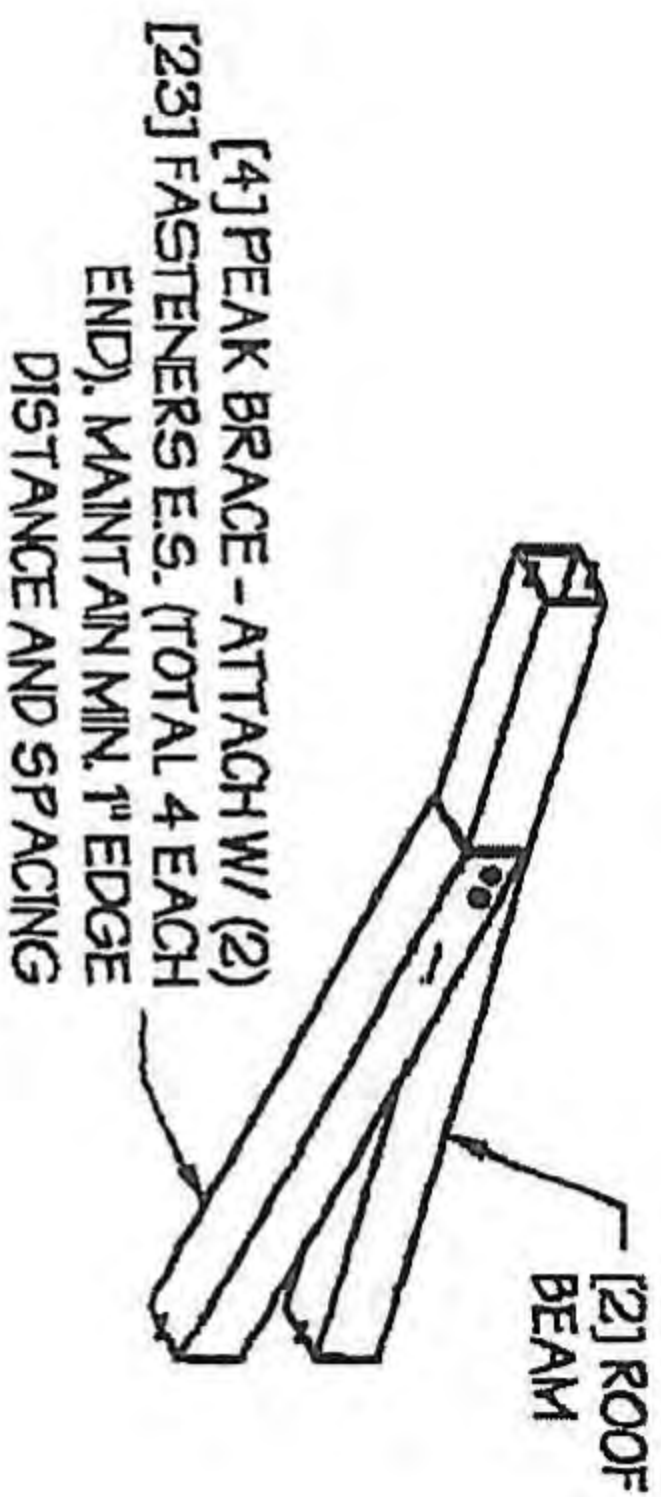


STAMP EXPIRY: 11/09/2020

DATE SIGNED: AUG 13 2020



A. PEAK BRACE TUBE



B. PEAK BRACE CHANNEL

PEAK BRACE CONNECTION DETAILS

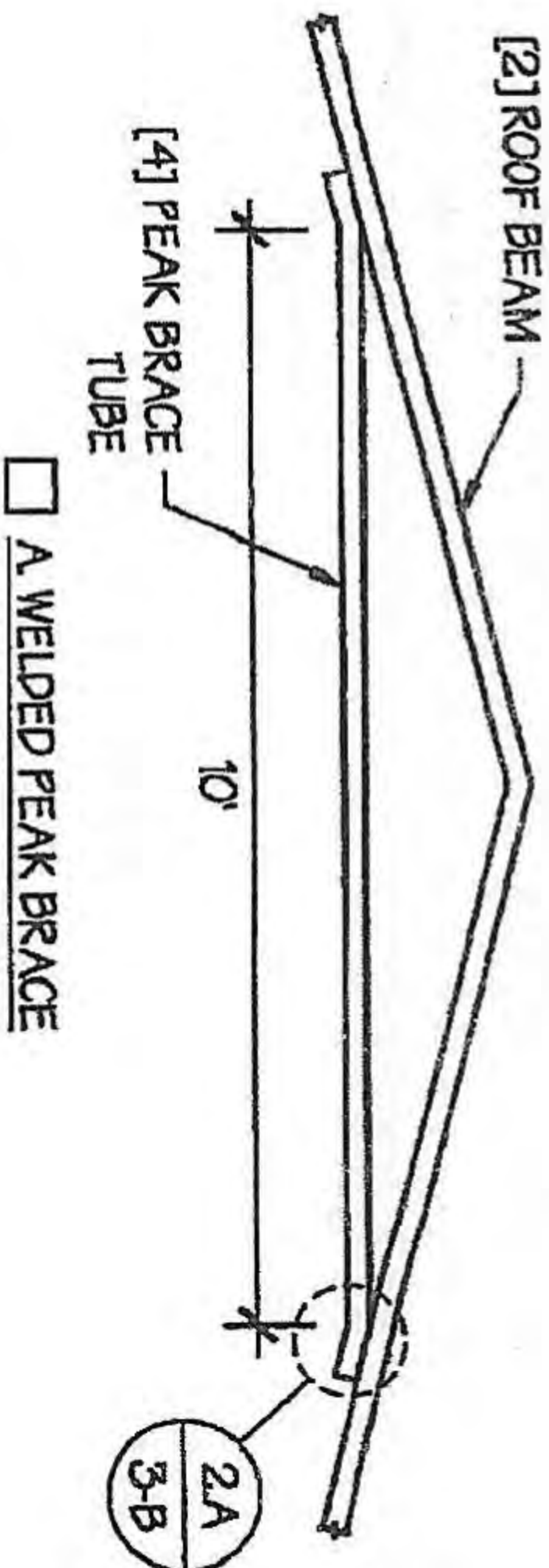
2

TABLE 3-B.1: PEAK BRACE SCHEDULE

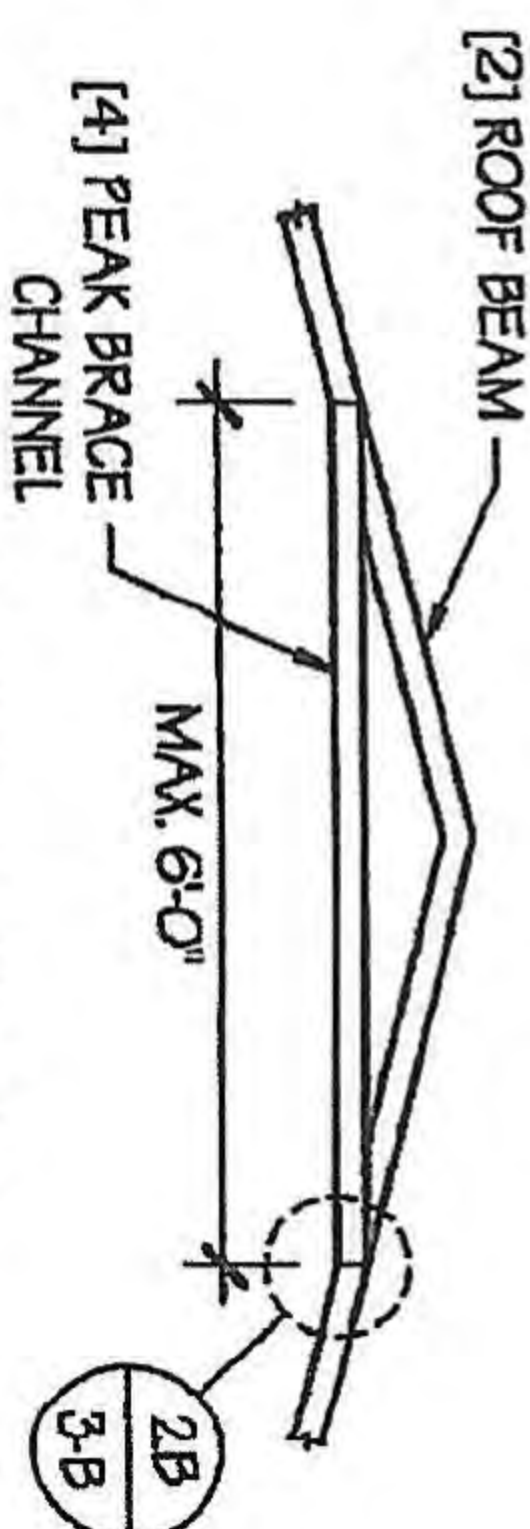
GROUND SNOW / ROOF LIVE LOAD (PSF)	WIND SPEED
□ 30 / 20	□ 105 TO 130
□ 35 / 25 TO 90 / 61	□ 140 TO 180

TABLE 3-B.2: KNEE BRACE SCHEDULE

EAVE HEIGHT	KNEE BRACE LENGTH
□ UP TO 8'	24"
□ 9' TO 12'	36"



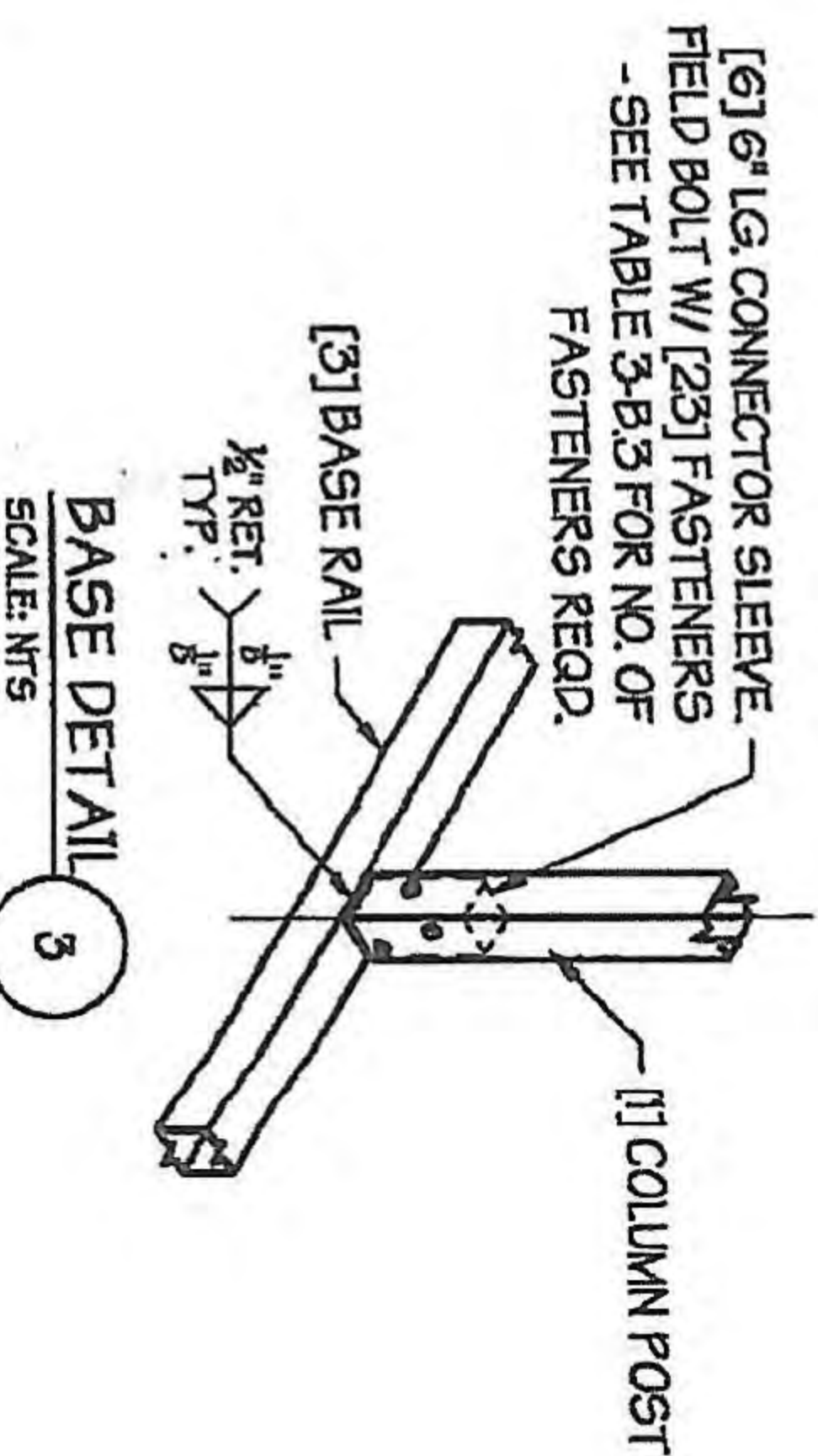
A. WELDED PEAK BRACE



B. CHANNEL PEAK BRACE

PEAK BRACE DETAILS

4



BASE DETAIL

3

NOTE: COLUMN POST MAY BE ADJUSTED ±1" FOR LEVELING. MANUFACTURER IS NOT RESPONSIBLE FOR LEVELING OF GROUND AND/OR CONCRETE SURFACE PROVIDED BY OTHERS.

TABLE 4: FRAME SPACING CHART / SCHEDULE

GROUND / SNOW / ROOF LIVE LOAD (PSF)		ENCLOSED BUILDINGS										WIND SPEED (MPH)											
		WIND SPEED (MPH)										WIND SPEED (MPH)											
		105	115	130	140	155	165	180	105	115	130	140	155	165	180	105	115	130	140	155	165	180	
30/20	60	60	54/60	54	42	42	36	48	48	48	42	42	36	30	24	48	48	48	42	42	36	30	24
40/27	48/60	48/60	42/60	42/54	42	42	36	42	42	42	42	36	30	24	42	42	42	42	42	36	30	24	
50/34	40/48	40/48	40/48	40/48	40/42	40/42	36	30	30	30	30	30	30	24	30	30	30	30	30	30	24	24	
60/41	36	36	36	36	36	36	36	30	30	30	30	30	30	24	24	30	30	30	30	30	24	24	
70/47	30	30	30	30	30	30	30	24	24	24	24	24	24	18	24	24	24	24	24	24	24	24	
80/54	24	24	24	24	24	24	24	24	24	24	24	24	24	18	24	24	24	24	24	24	24	24	
90/61	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
30/20	60	60	54/60	54	48	42/48	42	54	54	48/54	42/54	36/48	36	30	30	42/54	42/54	36/48	36/42	36/42	36	30	
40/27	48/60	48/60	42/60	42/54	42/48	42/48	42	48	48	42/48	42/48	36/48	36/42	36	30	42/48	42/48	36/48	36/42	36/42	36	30	
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60/41	36	36	36	36	36	36	36	30	30	30	30	30	30	24	30	30	30	30	30	30	24	24	
70/47	30	30	30	30	30	30	30	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
80/54	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
90/61	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	
30/20	60	60	54/60	54	48	42/48	42	60	54/60	48/60	42/54	36/48	36/42	36	30	60	54/60	48/60	42/54	36/48	36/42	36	
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80/54	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
90/61	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	

EAVE HEIGHT = UP TO 5'-0"		EAVE HEIGHT = 7'-0" TO 9'-0"		EAVE HEIGHT = 10'-0" TO 12'-0"	
30/20	60	30/20	60	30/20	60
40/27	48/60	40/27	48/60	40/27	48/60
50/34	40/48	50/34	40/48	50/34	40/48
60/41	36	60/41	36	60/41	36
70/47	30	70/47	30	70/47	30
80/54	24	80/54	24	80/54	24
90/61	---	90/61	---	90/61	---

NOTES:

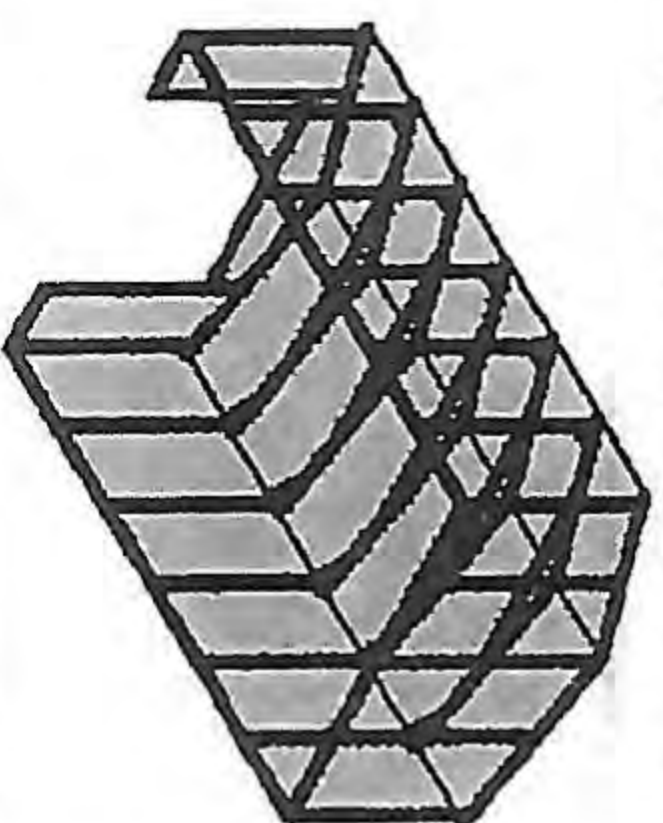
- FRAME SPACINGS ARE IN UNITS OF INCHES (IN).
- WHERE TWO VALUES ARE SHOWN, THE HIGHER VALUE CAN ONLY BE USED FOR VERTICAL SHEATHING.
- SNOW LOADS AND ROOF LIVE LOADS ARE IN POUNDS PER SQUARE FOOT (PSF). WIND SPEED IS 3 SEC. GUST IN MILES PER HOUR (MPH).
- FOR VALUES THAT LIE BETWEEN TWO CELLS, THE HIGHER (MORE STRINGENT) VALUE HAS TO BE USED. INTERPOLATION BETWEEN CELLS IS NOT ALLOWED.

ENCLOSURE CLASSIFICATION:

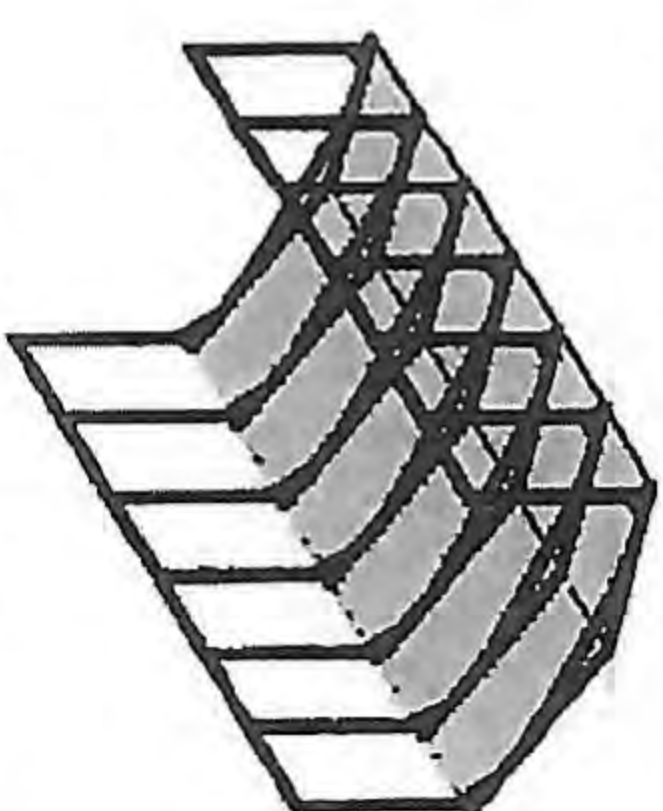
- ENCLOSED BUILDING = ALL 4 WALLS FULLY ENCLOSED WITH DOORS/WINDOWS = USE ENCLOSED BUILDING SPACING CHART.
- OPEN BUILDING = ALL 4 WALLS FULLY OPEN = USE OPEN BUILDING SPACING CHART.
- 3FT PARTIALLY ENCLOSED = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ONLY 3FT ENCLOSED = USE OPEN BUILDING SPACING CHART.
- PARTIALLY ENCLOSED = BOTH END-WALLS FULLY OPEN, WITH BOTH SIDE-WALLS ENCLOSED MORE THAN 3FT = START WITH OPEN BUILDING SPACING CHART AND THEN REDUCE SPACING BY 6".
- 3 SIDED ENCLOSED = ALL WALLS ARE ENCLOSED EXCEPT FOR 1 END-WALL = START WITH ENCLOSED BUILDING SPACING + THE OPEN END FRAME MUST HAVE EITHER A GABLED END OR HAVE DOUBLED WELDED LEGS & ROOF.
- FOR ALL SHEATHING ENCLOSURES NOT LISTED ABOVE, REFER TO SHEET 5 FOR SPACING AND DESIGN REQUIREMENTS.

GENERAL NOTES:

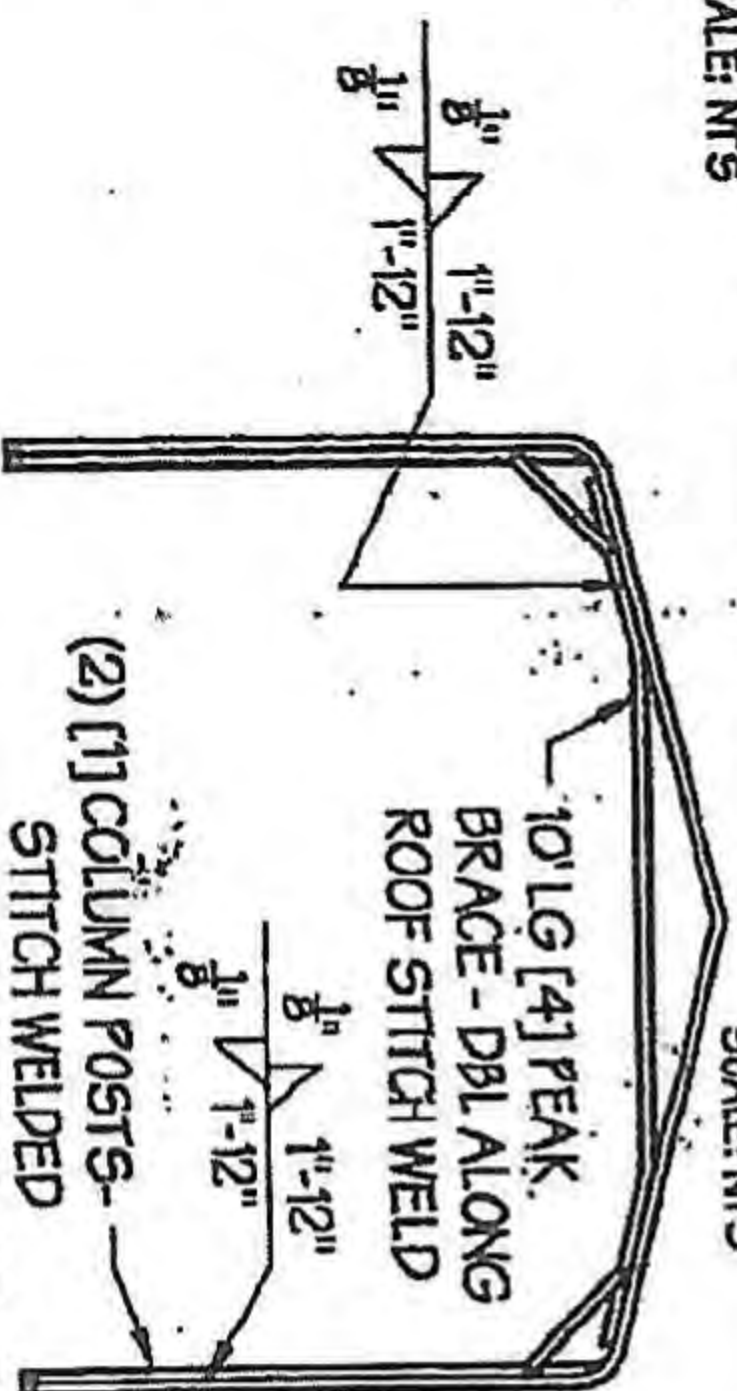
- THE MAX. BUILDING LENGTH FOR ENCLOSED BUILDINGS IS 50'-0". THIS CAN BE INCREASED BY ADDING A DOUBLE FRAME AT THE CENTER TO BREAK THE LENGTH OF THE BUILDING.
- BUILDINGS WITH PARTIALLY ENCLOSED END WALLS NEED TO HAVE SIDE WALL BRACING TO SUPPORT THE PARTIALLY ENCLOSED END WALL. (SEE FIGURE A ON SHEET 5).
- ALL BUILDINGS WITH AN OPEN END WALL MUST HAVE A 10'-0" TUBE PEAK BRACE.



TYP. ENCLOSED BUILDING
SCALE: NTS



TYP. OPEN BUILDING
SCALE: NTS



TYP. OPEN END WALL ON 3
SIDE ENCLOSED BUILDING
SCALE: NTS

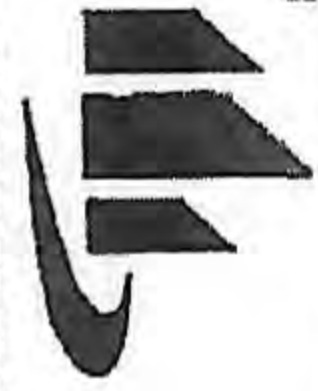
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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

SPACING SCHEDULES
& ENCLOSURE NOTES

SHEET NO.: 4 / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

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TABLE 5.1: PURLIN SPACING SCHEDULE

SNOW / ROOF LIVE LOAD (PSF)	WIND SPEED (MPH)									
	105	115	130	140	155	165	180	200	220	240
30/20	54	48	42	36	30	24	24	24	24	24
40/27	42	42	42	36	30	24	24	24	24	24
50/34	40	40	40	36	30	24	24	24	24	24
60/41	36	36	36	36	30	24	24	24	24	24
70/47	32	32	32	32	30	24	24	24	24	24
80/54	30	30	30	30	30	24	24	24	24	24
90/61	24	24	24	24	24	24	24	24	24	24
30/20	54	48	42	42	36	30	30	30	30	30
40/27	42	42	42	42	36	30	30	30	30	30
50/34	40	40	40	40	36	30	30	30	30	30
60/41	36	36	36	36	36	30	30	30	30	30
70/47	32	32	32	32	32	30	30	30	30	30
80/54	32	32	32	32	32	32	30	30	30	30
90/61	30	30	30	30	30	30	30	30	30	30
30/20	54	48	42	42	36	36	36	36	36	36
40/27	42	42	42	42	36	36	36	36	36	36
50/34	40	40	40	40	36	36	36	36	36	36
60/41	36	36	36	36	36	36	36	36	36	36
70/47	32	32	32	32	32	32	32	32	32	32
80/54	32	32	32	32	32	32	32	32	32	32
90/61	30	30	30	30	30	30	30	30	30	30
30/20	54	48	42	42	36	36	36	36	36	36
40/27	42	42	42	42	36	36	36	36	36	36
50/34	40	40	40	40	36	36	36	36	36	36
60/41	36	36	36	36	36	36	36	36	36	36
70/47	32	32	32	32	32	32	32	32	32	32
80/54	32	32	32	32	32	32	32	32	32	32
90/61	30	30	30	30	30	30	30	30	30	30
30/20	54	48	42	42	36	36	36	36	36	36
40/27	42	42	42	42	36	36	36	36	36	36
50/34	40	40	40	40	36	36	36	36	36	36
60/41	36	36	36	36	36	36	36	36	36	36
70/47	32	32	32	32	32	32	32	32	32	32
80/54	32	32	32	32	32	32	32	32	32	32
90/61	30	30	30	30	30	30	30	30	30	30
30/20	54	48	42	42	36	36	36	36	36	36
40/27	42	42	42	42	36	36	36	36	36	36
50/34	40	40	40	40	36	36	36	36	36	36
60/41	36	36	36	36	36	36	36	36	36	36
70/47	32	32	32	32	32	32	32	32	32	32
80/54	32	32	32	32	32	32	32	32	32	32
90/61	30	30	30	30	30	30	30	30	30	30

NOTES:

- PURLIN SPACING UNITS ARE IN INCHES.
- FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE 4.

IRREGULAR BUILDING NOTES:

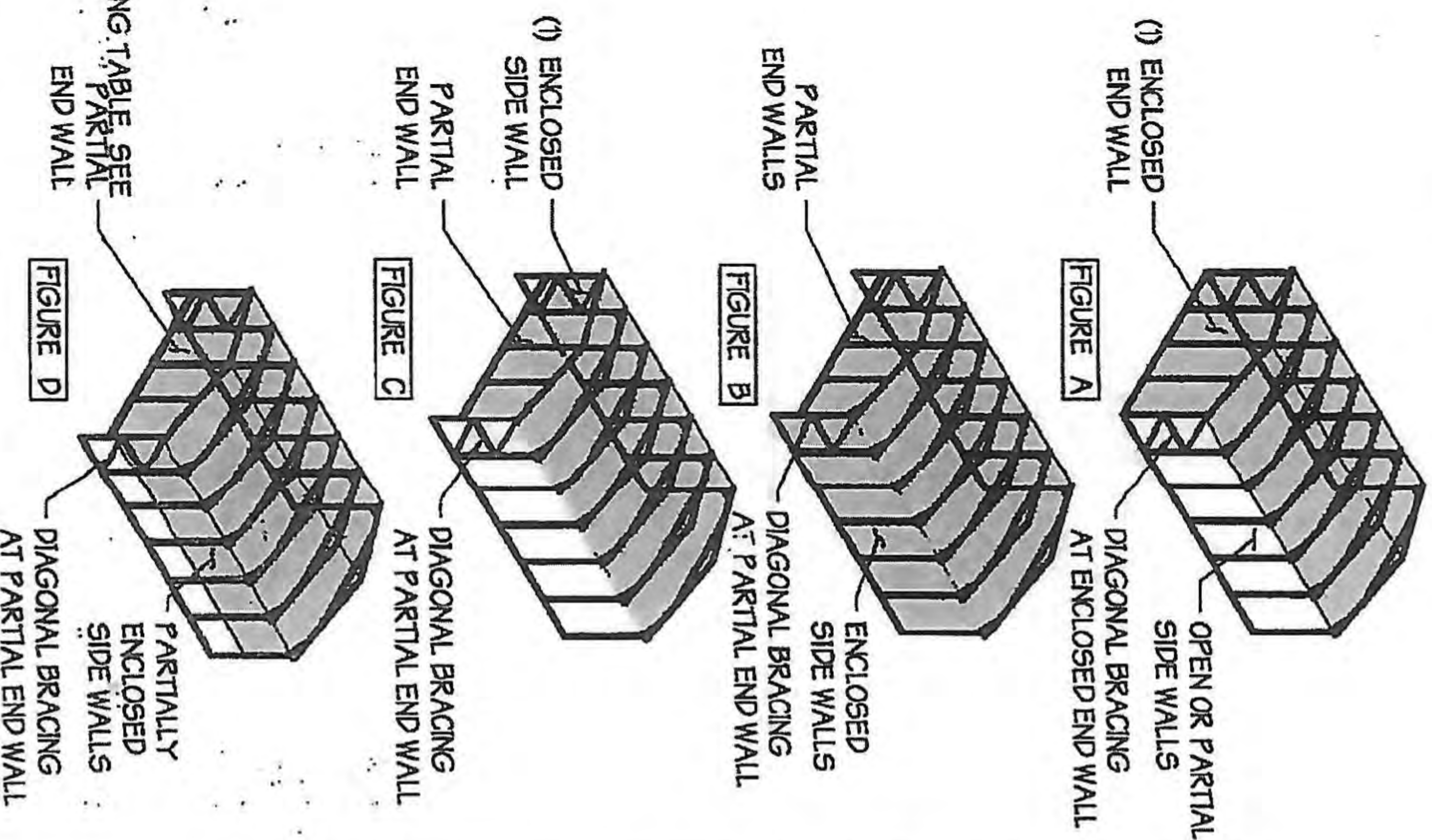
- FIGURES A, B, C & D ON THE RIGHT INDICATE EXAMPLES OF IRREGULAR BUILDINGS.
- FOR IRREGULAR BUILDINGS, FRAME SPACING MUST BE REDUCED BY 12" FROM OPEN BUILDING SPACING TABLE SEE SHEET 4 FOR OPEN BUILDING TABLE.
- SITE SPECIFICS MAY ALLOW FOR ALTERNATIVE SPACING.

TABLE 5.2: GIRT SPACING SCHEDULE

FRAME SPACING	WIND SPEED (MPH)									
	105	115	130	140	155	165	180	200	220	240
5'-0"	60	48	36	30	24	24	18	18	18	18
4'-6"	60	60	48	42	36	30	24	24	24	24
4'-0"	60	60	54	54	42	36	30	30	30	30
3'-6"	60	60	54	54	48	42	42	42	42	42
2'-0" TO 3'-0"	60	60	54	54	48	42	42	42	42	42

NOTES:

- GIRT SPACING UNITS ARE IN INCHES.
- THIS SCHEDULE IS TO BE USED FOR BOTH 14GA
- FRAME SPACING NEEDS TO BE DETERMINED FROM TABLE 4.



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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:
PURLIN & GIRT
SPACING SCHEDULES

SHEET NO.: 5 / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

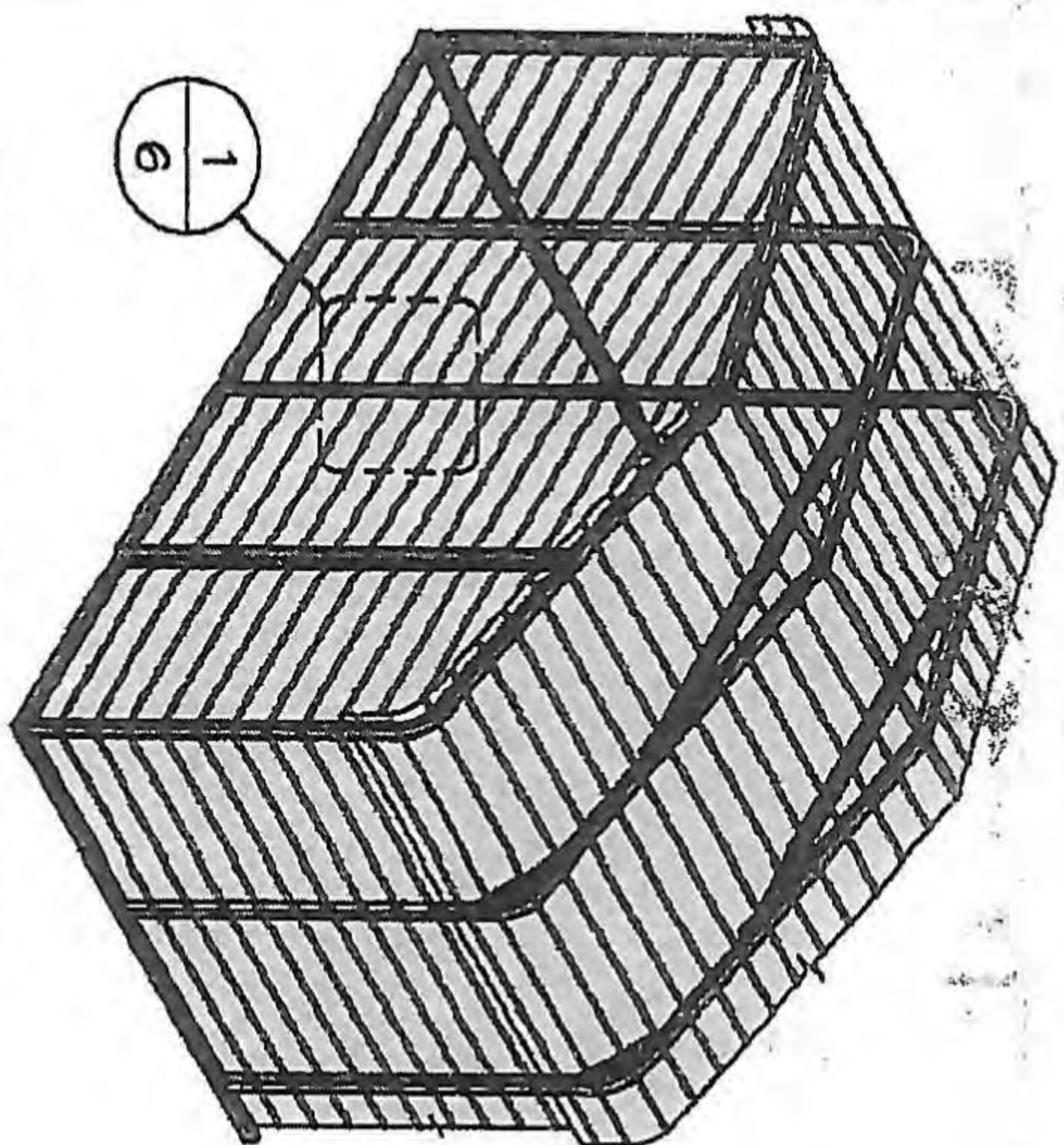
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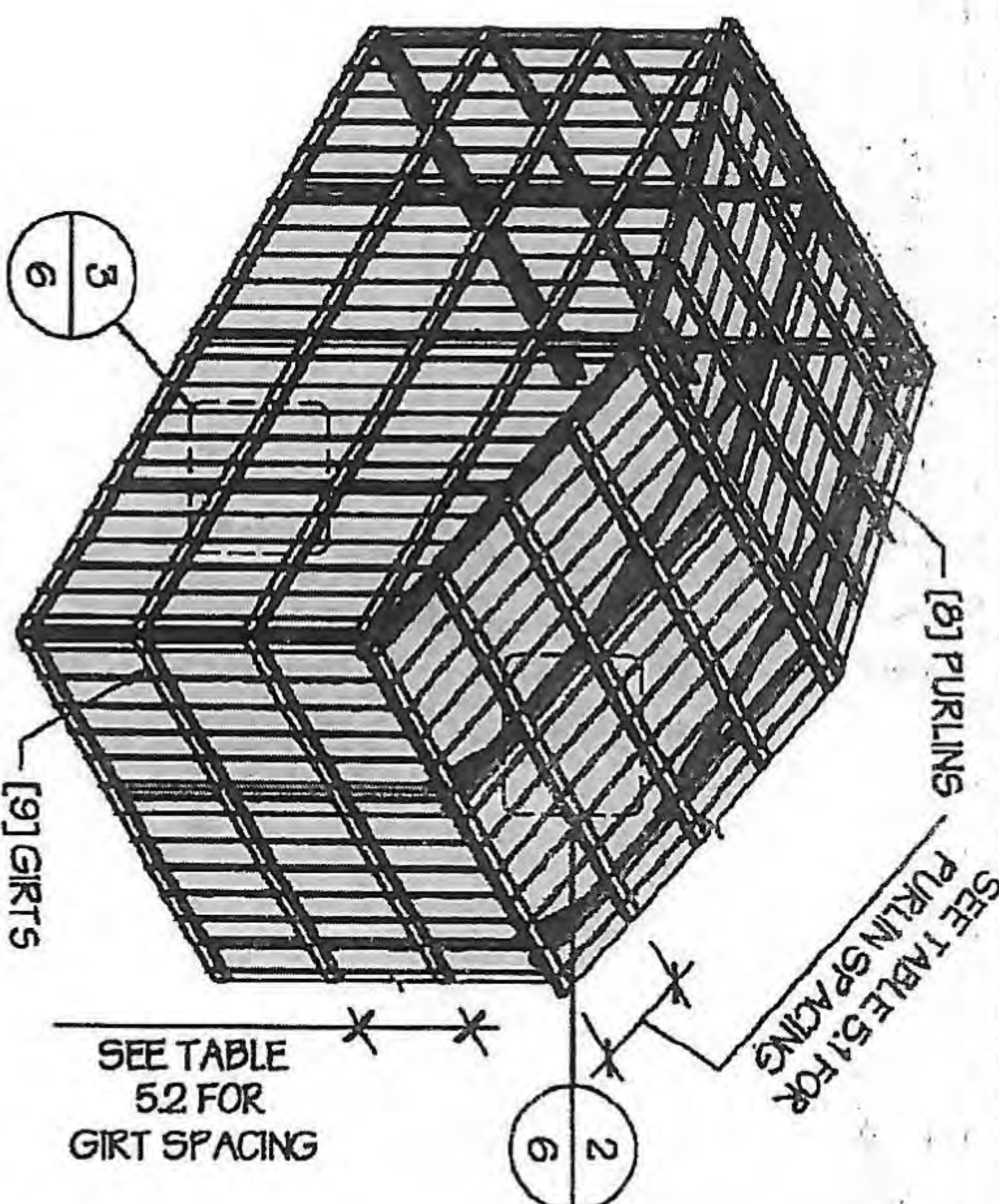


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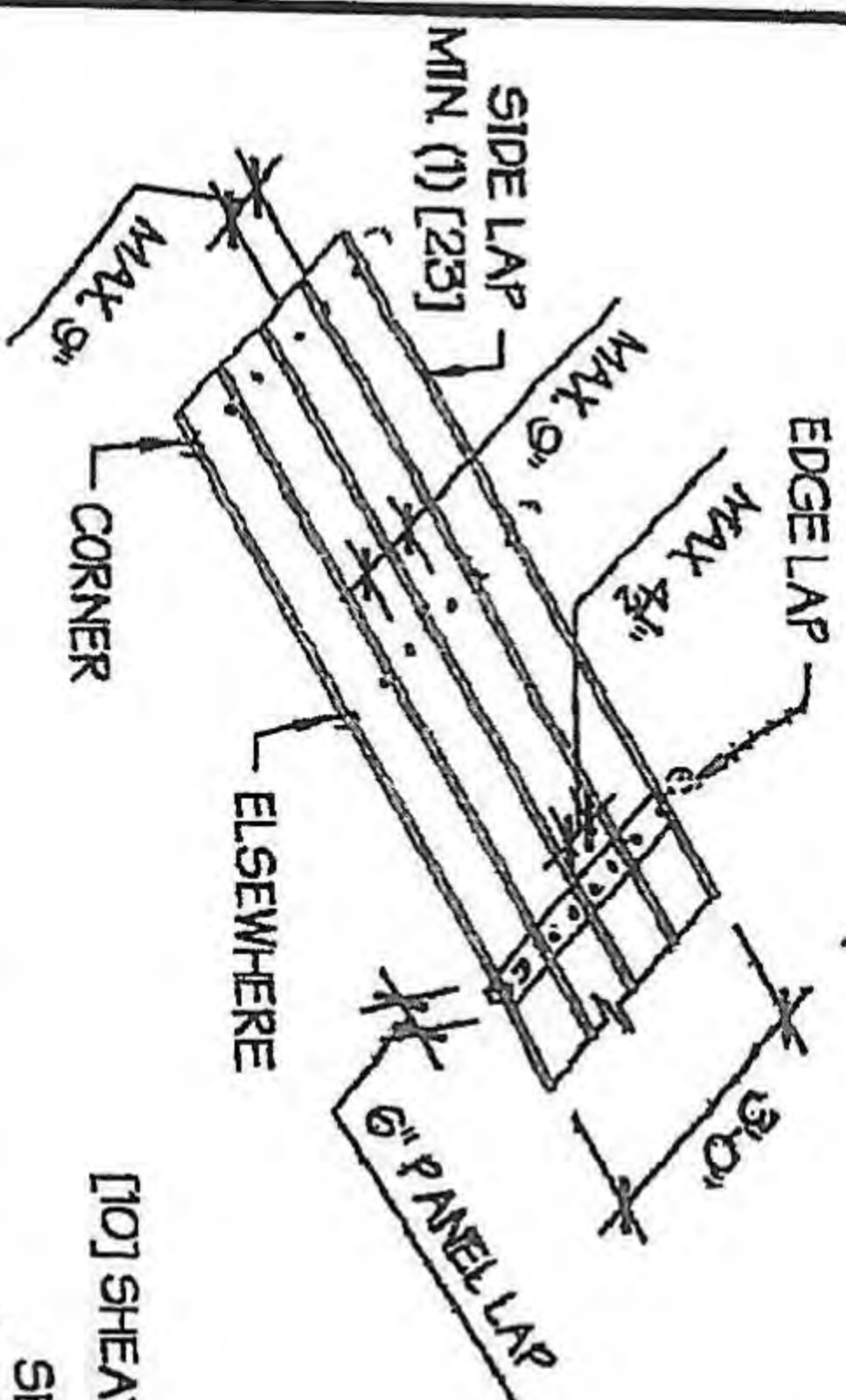


□ TYP. HORIZONTAL SHEATHING
SCALE: NTS

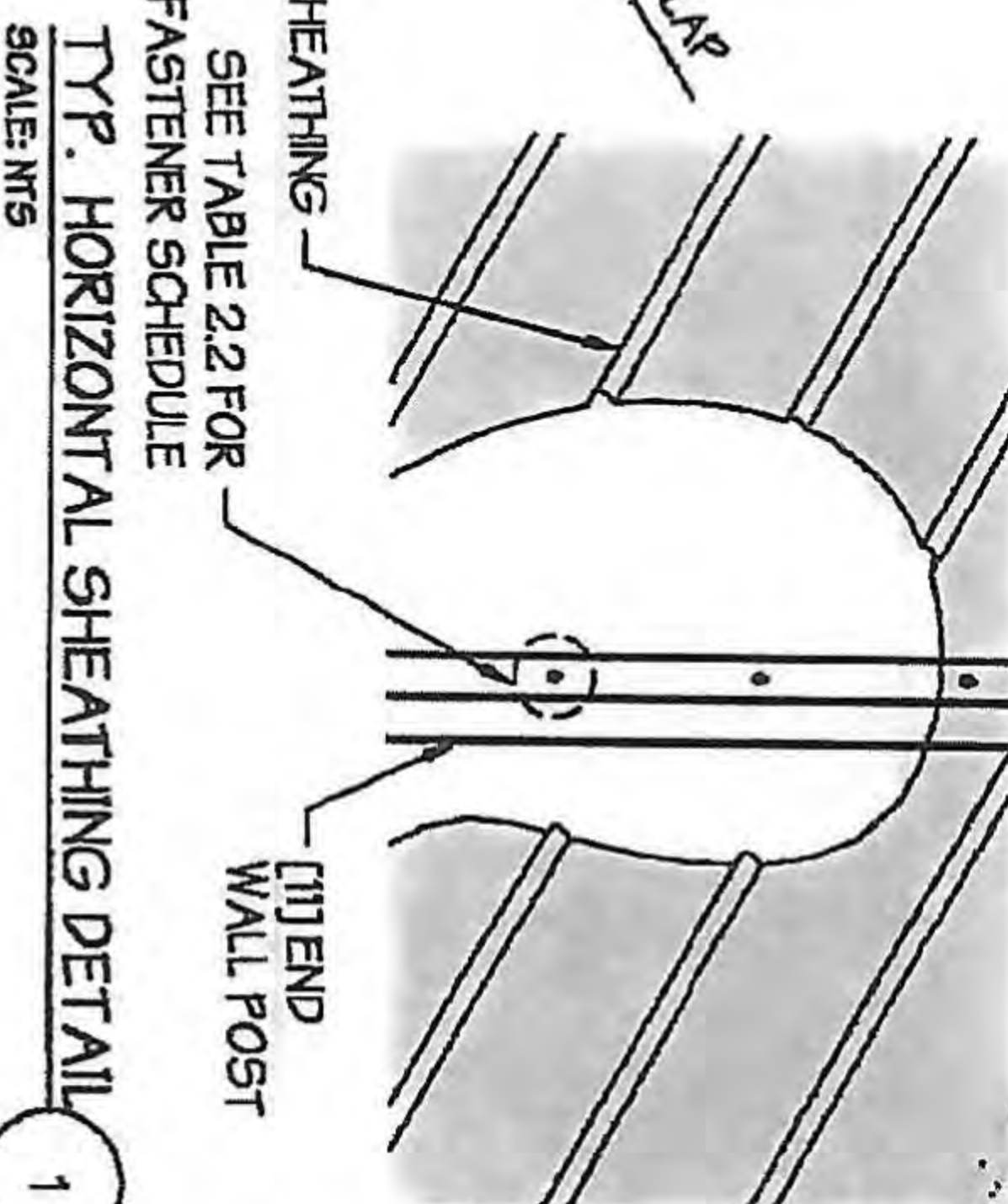


□ TYP. VERTICAL SHEATHING
SCALE: NTS

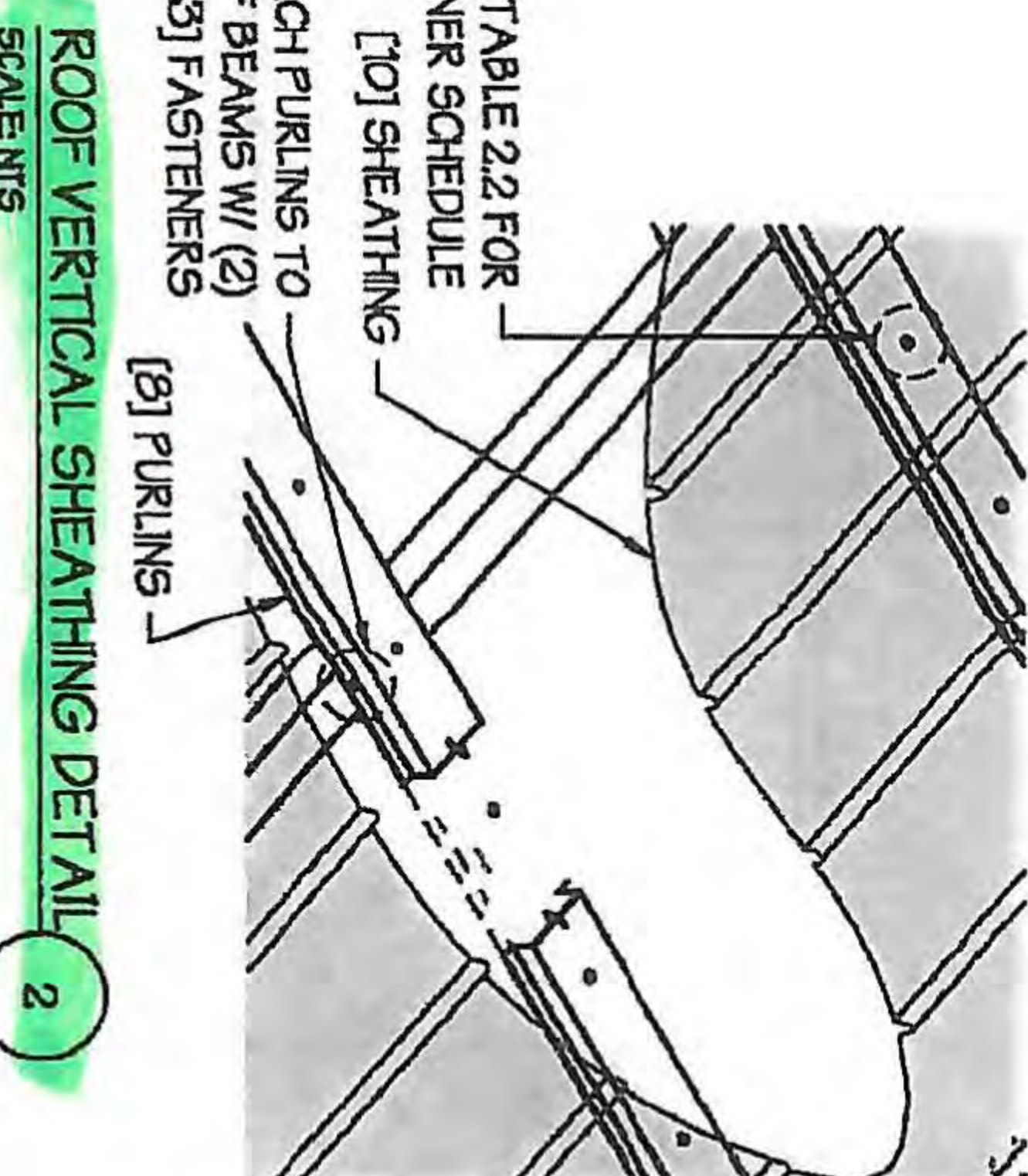
- GENERAL SHEATHING NOTES:**
1. REGULAR STYLE BUILDINGS CAN ONLY HAVE HORIZONTAL SHEATHING ON ROOF AND WALLS.
 2. A-FRAME STYLE BUILDINGS CAN HAVE ANY COMBINATION OF HORIZONTAL OR VERTICAL SHEATHING ON ROOFS AND WALLS.
 3. BOTH HORIZONTAL AND VERTICALS ROOF SHEATHING CAN HAVE MAX. 6" OVERHANG.
 4. USING VERTICAL SHEATHING MAY ALLOW FOR GREATER FRAME SPACING. SEE NOTE 2 UNDER TABLE 4.
 5. VERTICAL SHEATHING RECOMMENDED FOR BUILDINGS 30' OR LONGER



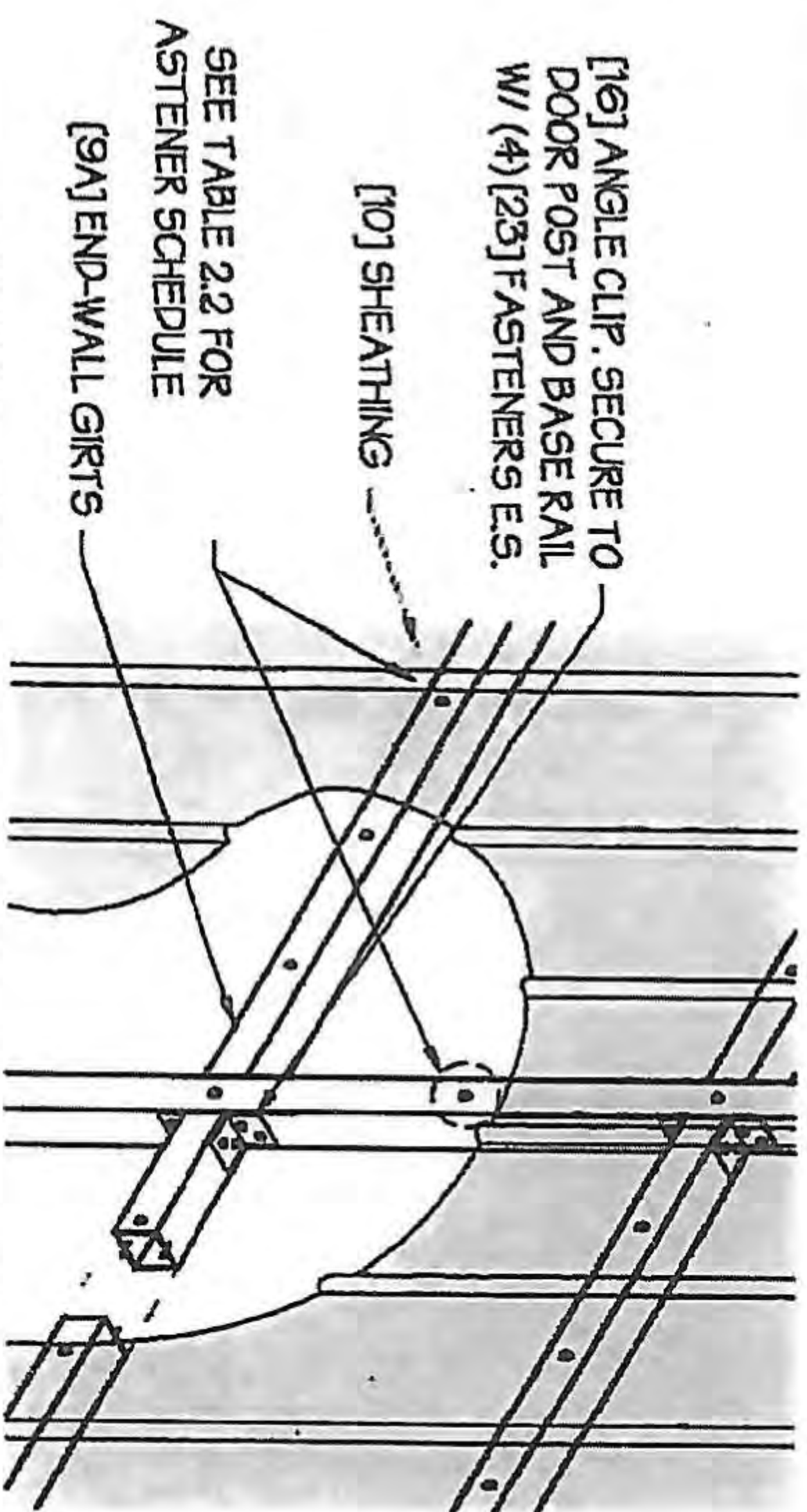
TYP. SHEATHING FASTENER SCHEDULE
SCALE: NTS



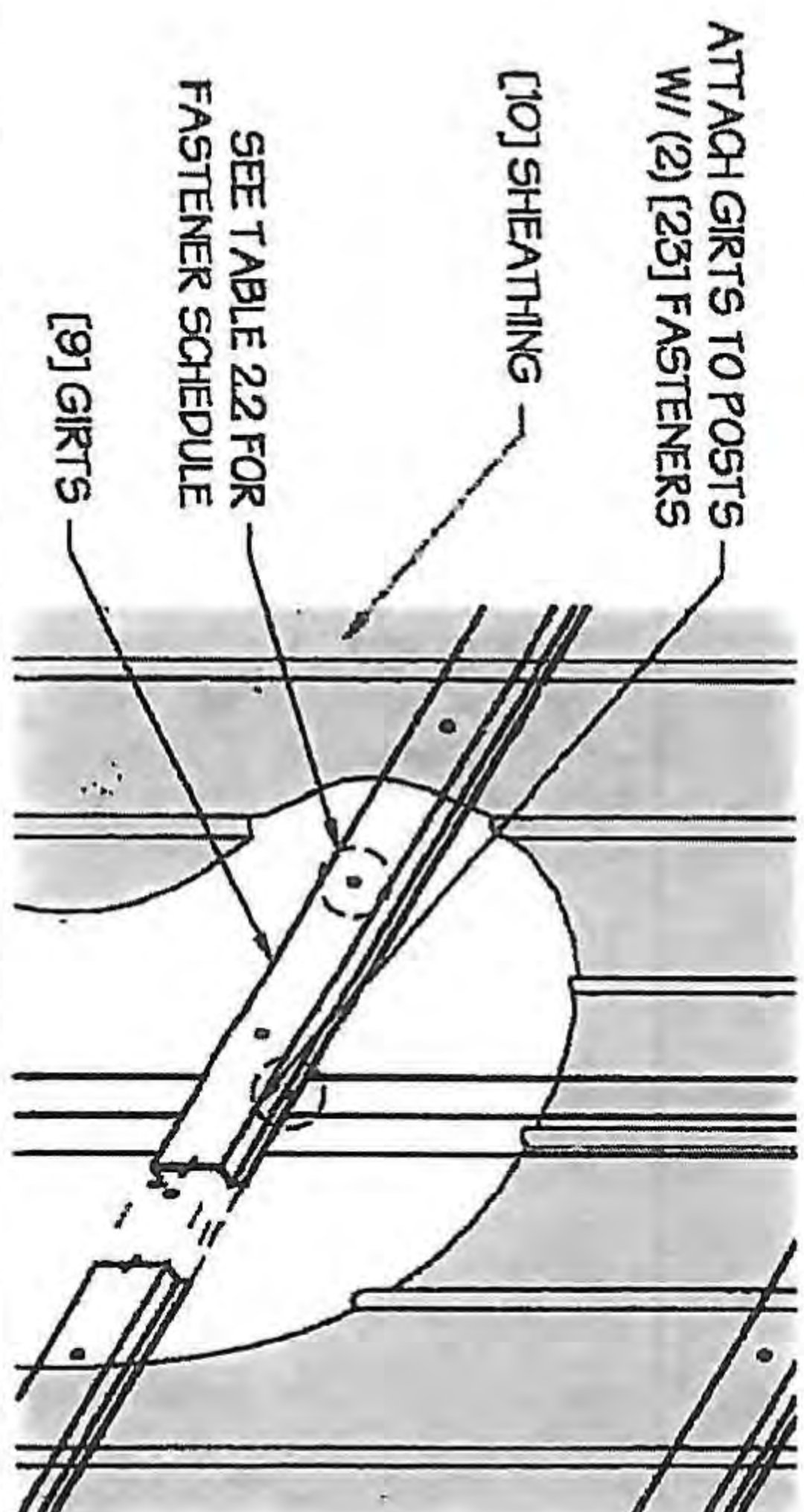
TYP. HORIZONTAL SHEATHING DETAIL
SCALE: NTS



ROOF VERTICAL SHEATHING DETAIL
SCALE: NTS



□ WALL VERTICAL SHEATHING - TUBE DETAIL
SCALE: NTS



□ WALL VERTICAL SHEATHING - HAT CHANNEL DETAIL
SCALE: NTS

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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:
SHEATHING OPTIONS
& DETAILS

SHEET NO.: 6 / 11
DRAWN BY: A.W. DATE: 8/13/20
CHECKED BY: OAA DATE: 8/13/20

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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

**SIDE WALL FRAMING
& OPENINGS**

SHEET NO.: 7-A / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

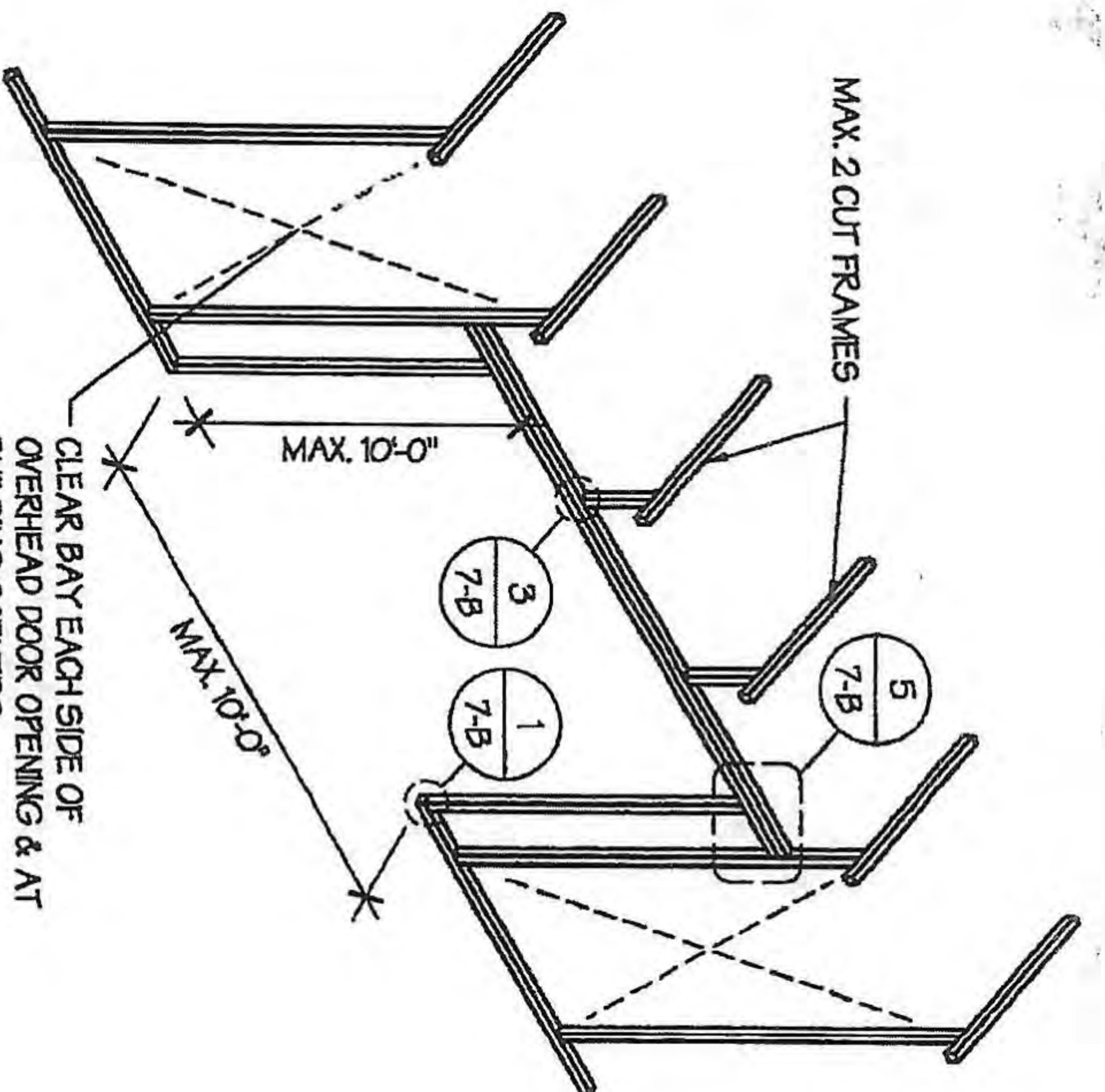
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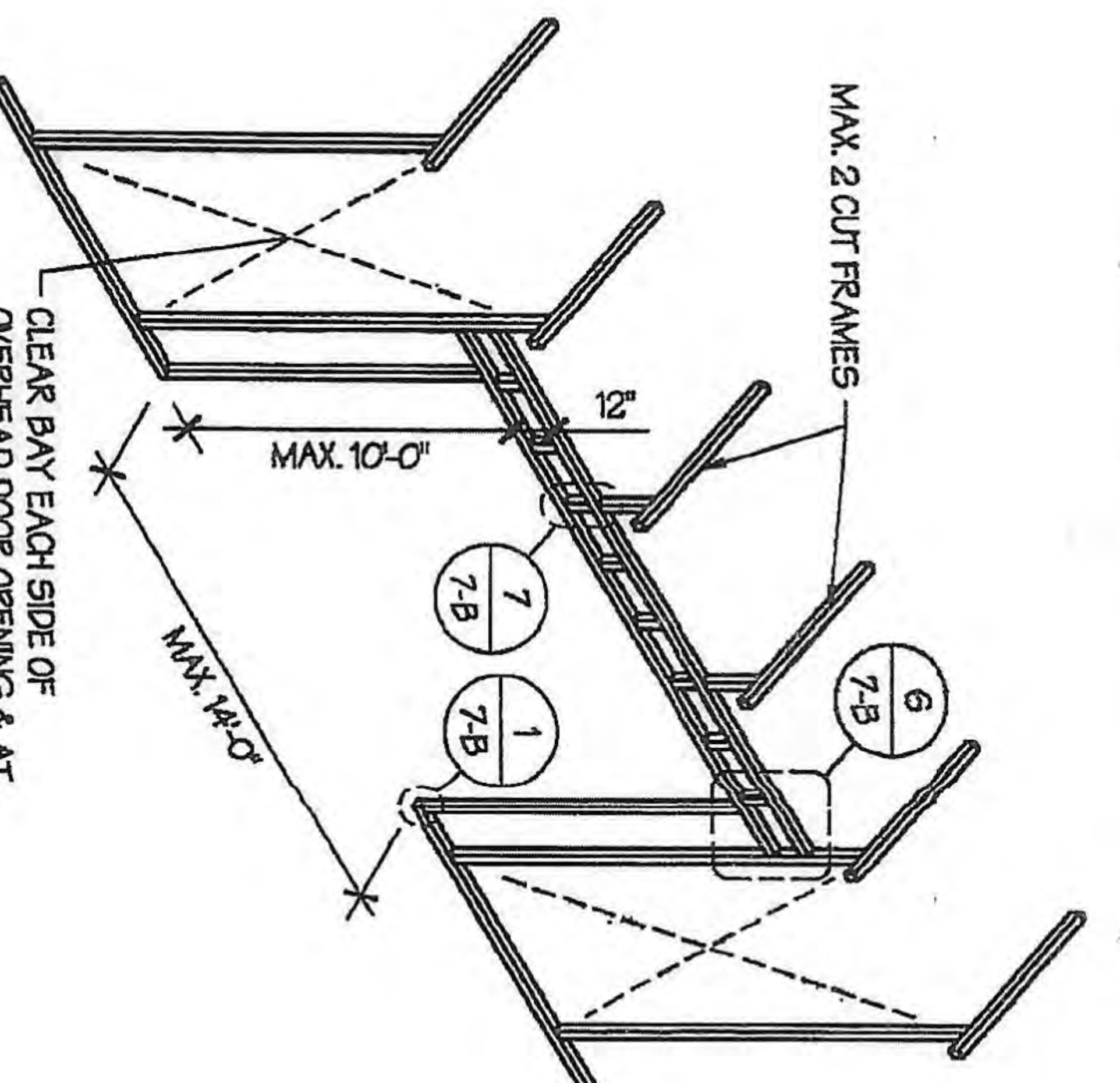


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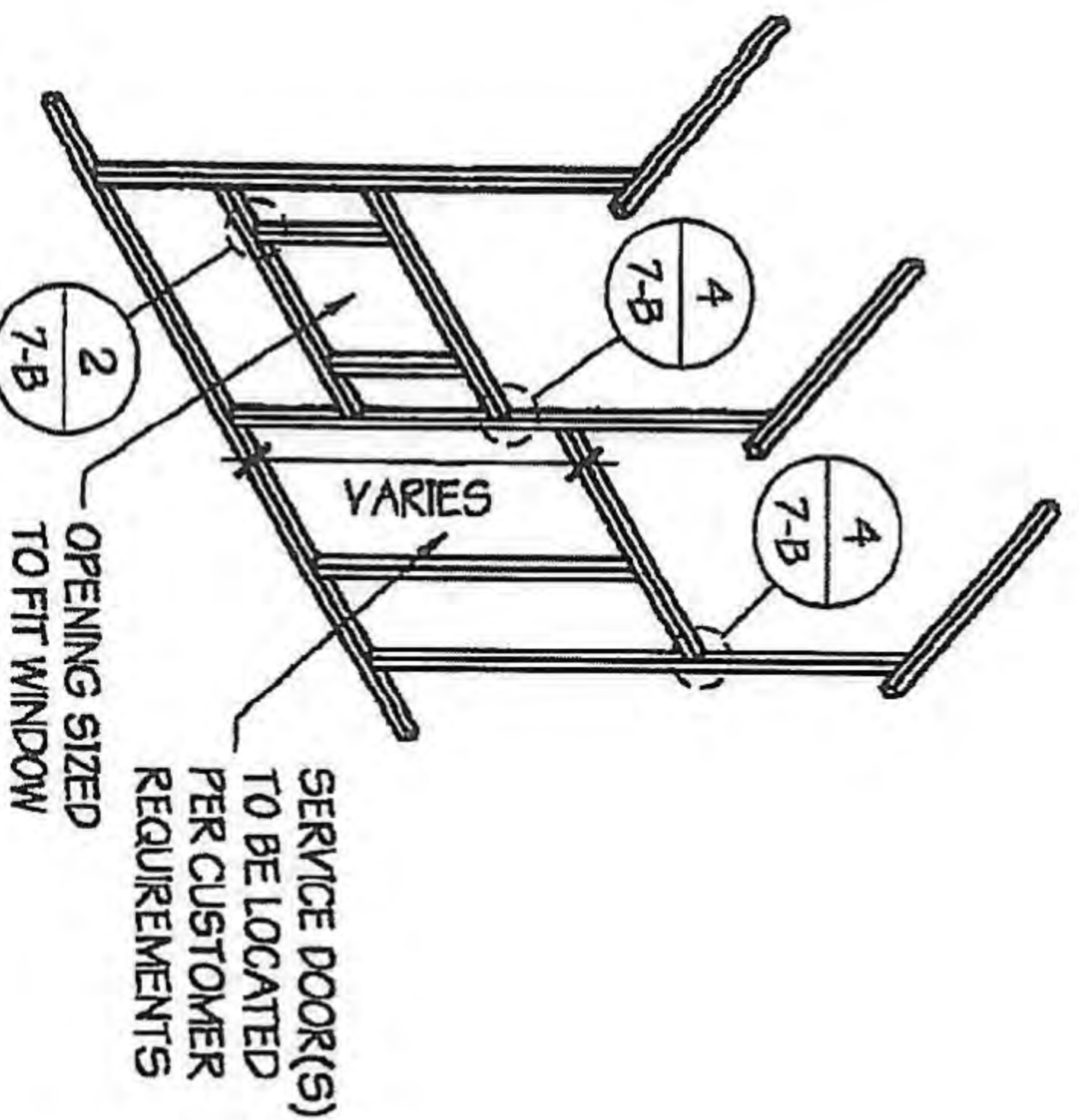
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☐ SIDE WALL OVERHEAD DOOR OPENINGS
SCALE: NTS



☐ SIDE WALL OVERHEAD DOOR OPENINGS
WITH TRUSS STYLE HEADER
SCALE: NTS



☐ SIDE WALL SERVICE DOOR / WINDOW OPENINGS
SCALE: NTS

SIDE WALL FRAMING NOTES:

1. TRUSS-STYLE HEADERS ARE REQUIRED FOR WHERE THE GROUND SNOW LOAD IS 40 PSF OR GREATER.
2. DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
3. MAX. HEIGHT OF SIDE WALL OVERHEAD DOOR OPENINGS IS 2 FT LESS THAN THE EAVE HEIGHT.
4. OVERHEAD DOOR OPENINGS CANNOT CUT THROUGH MORE THAN 2 FULL FRAMES.
5. MIN. 1 CLEAR BAY MUST BE MAINTAINED BETWEEN ANY 2 OVERHEAD DOOR OPENINGS. A CLEAR BAY IS A SPACE BETWEEN TWO FRAMES THAT HAS NO OVERHEAD DOOR OPENINGS.
6. MIN. 1 CLEAR BAY MUST ALSO BE MAINTAINED FROM THE BUILDING CORNERS.
7. SERVICE DOORS AND WINDOWS CAN BE PLACED IN CLEAR BAYS OR ANY WHERE ELSE AS NEEDED.

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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:
**SIDE WALL FRAMING
DETAILS**

SHEET NO.: 7-B / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

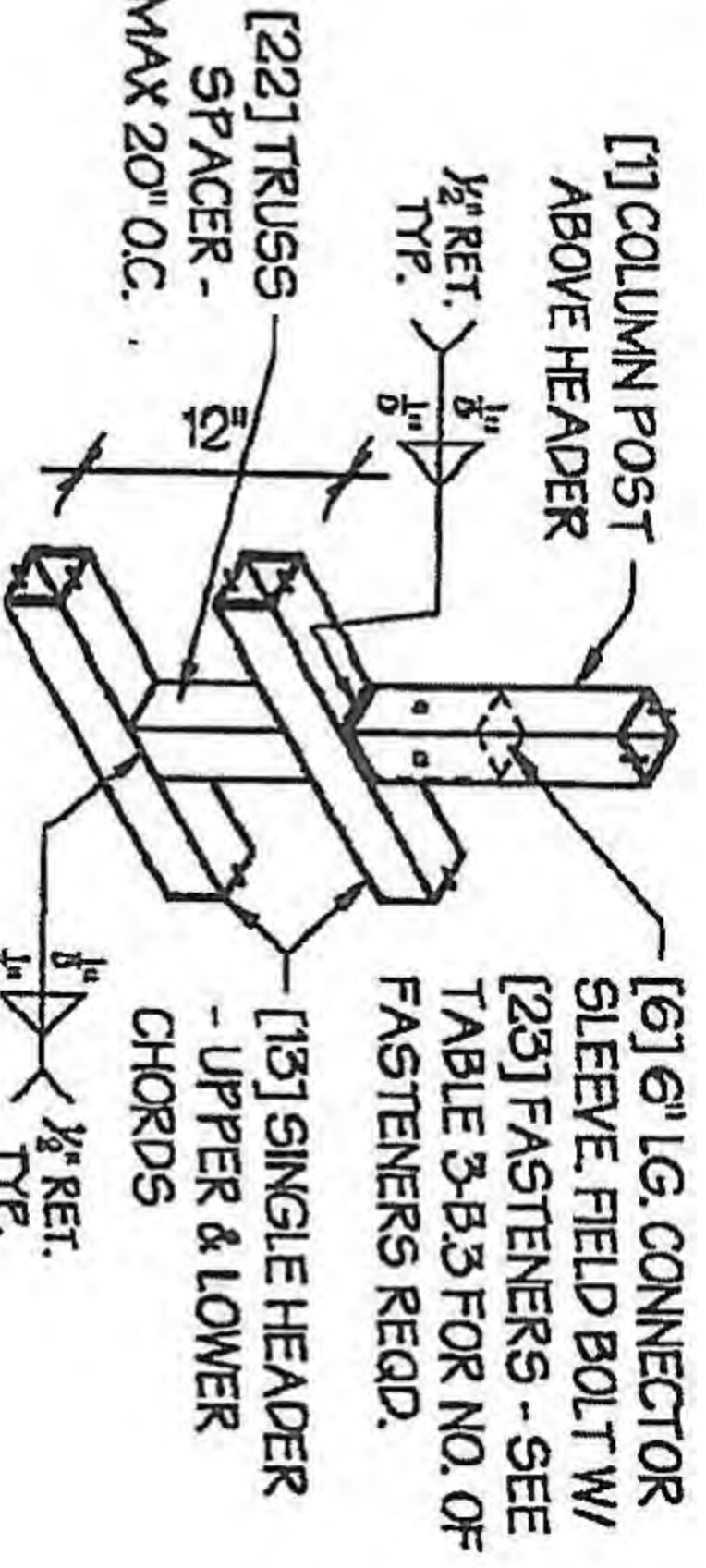
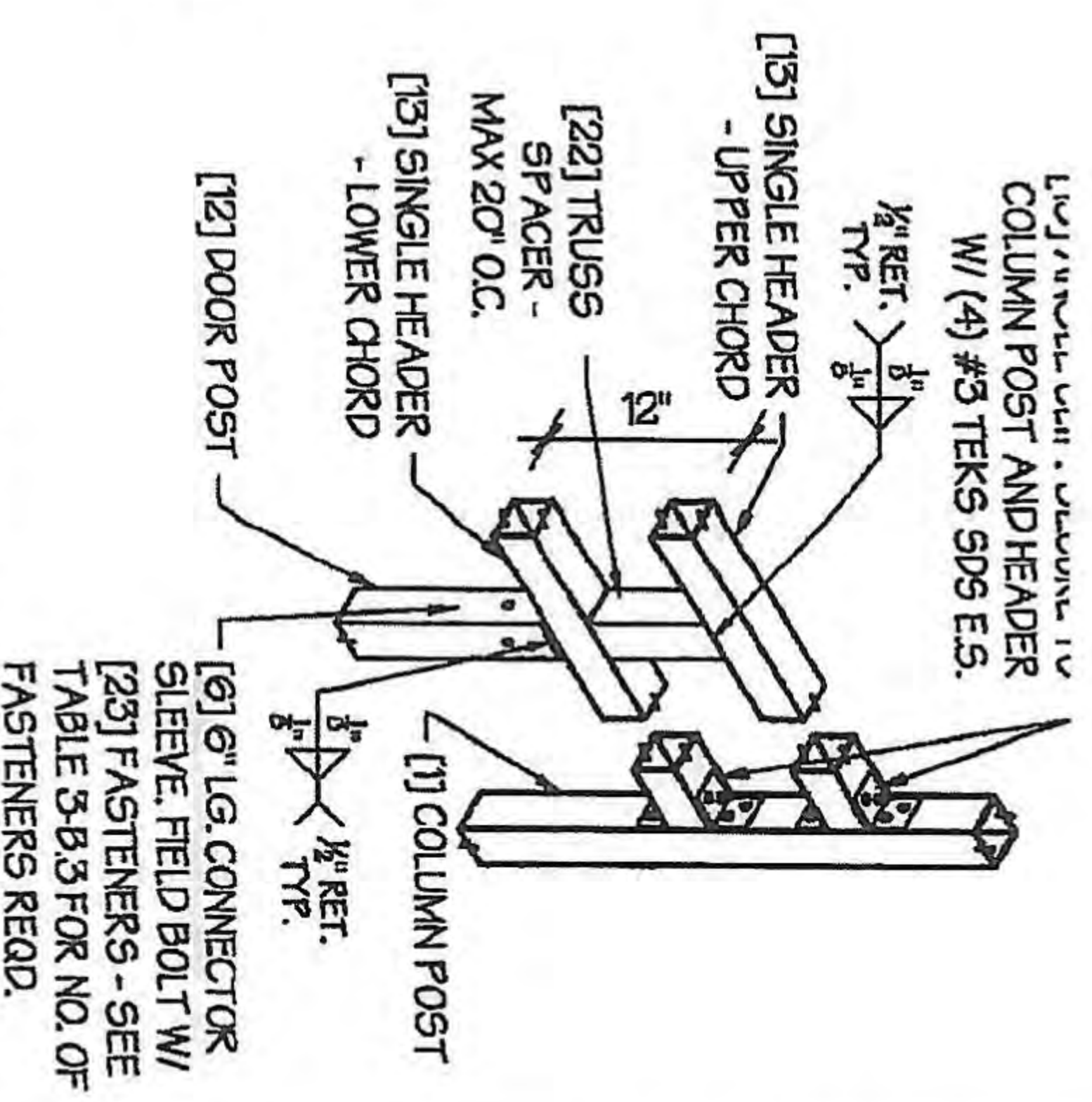
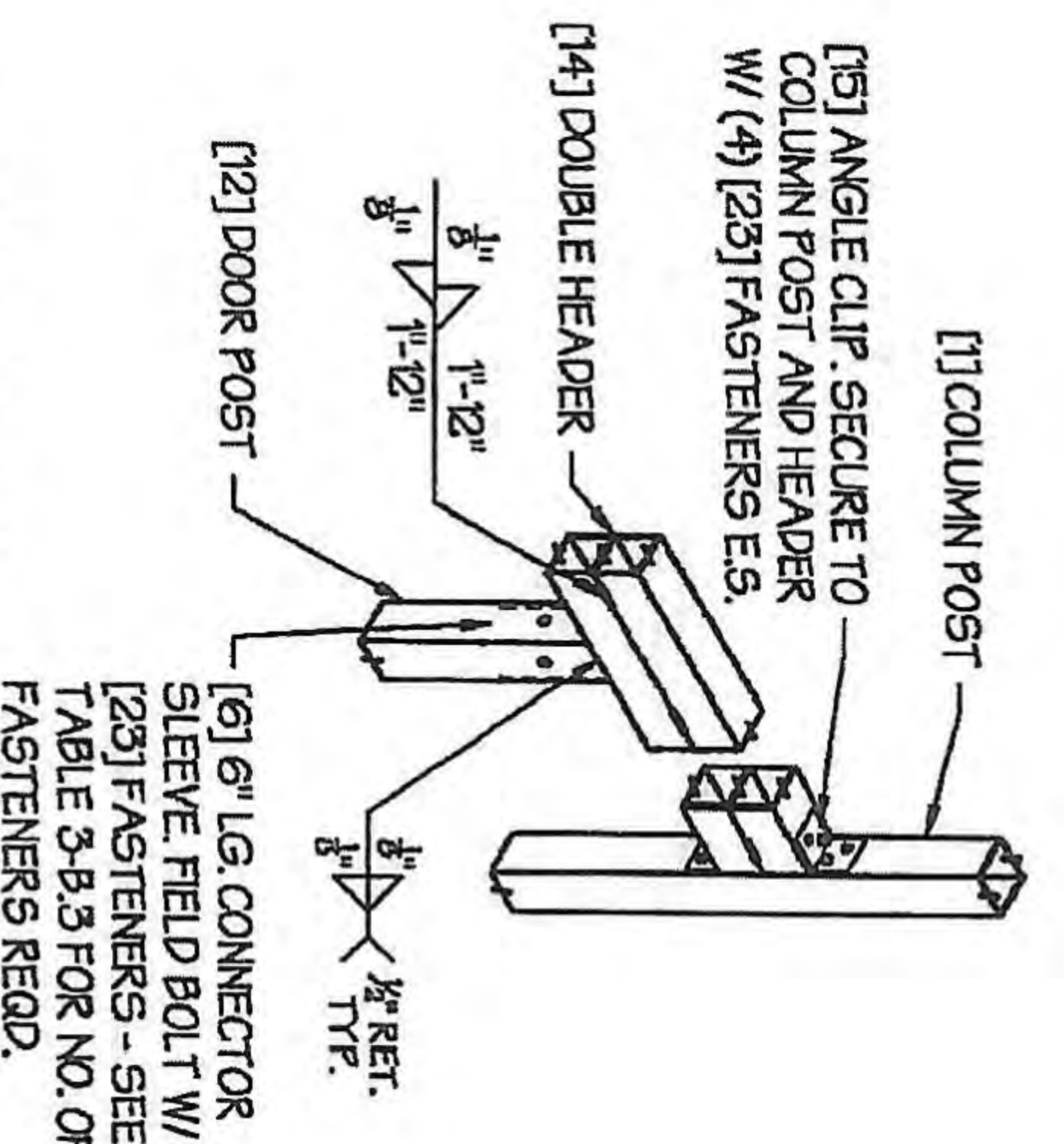
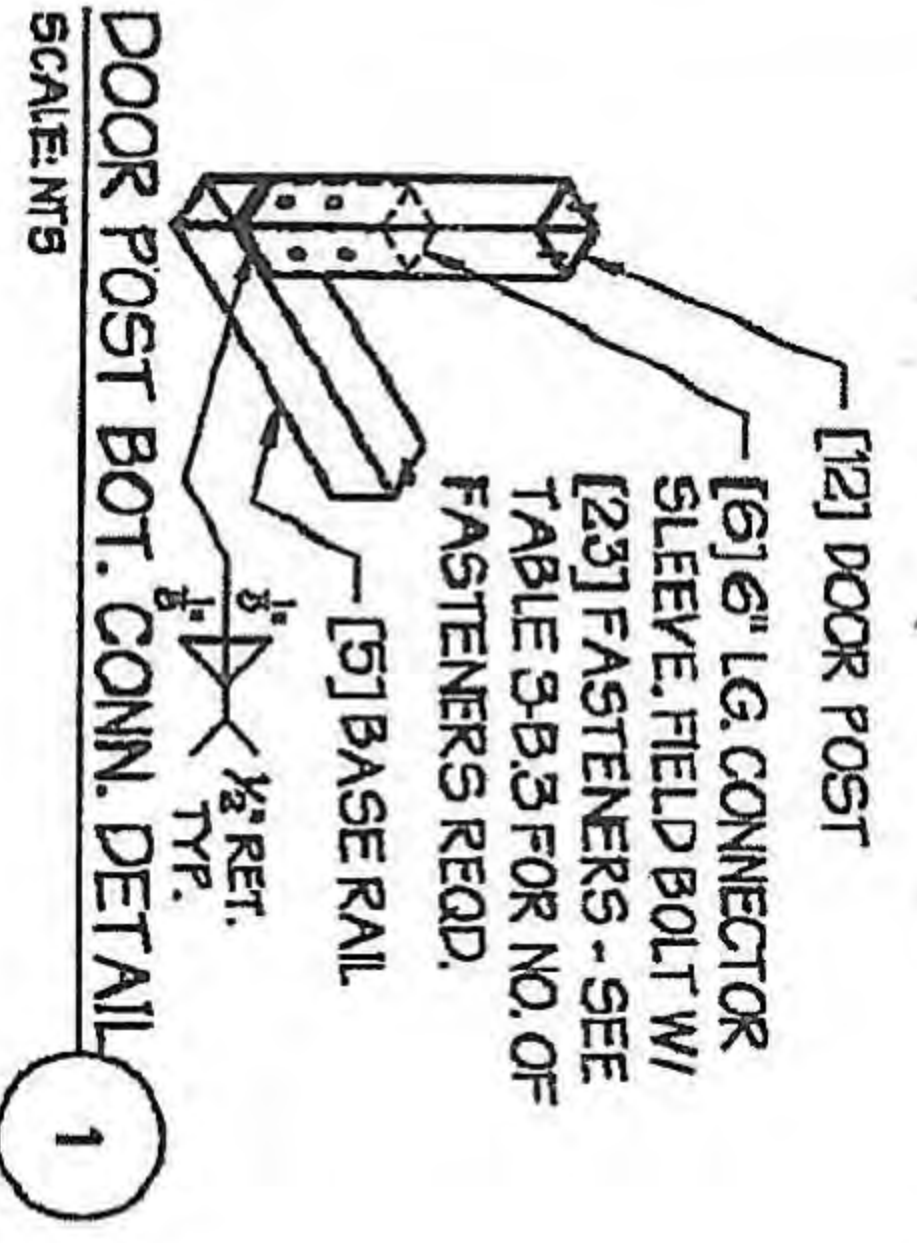
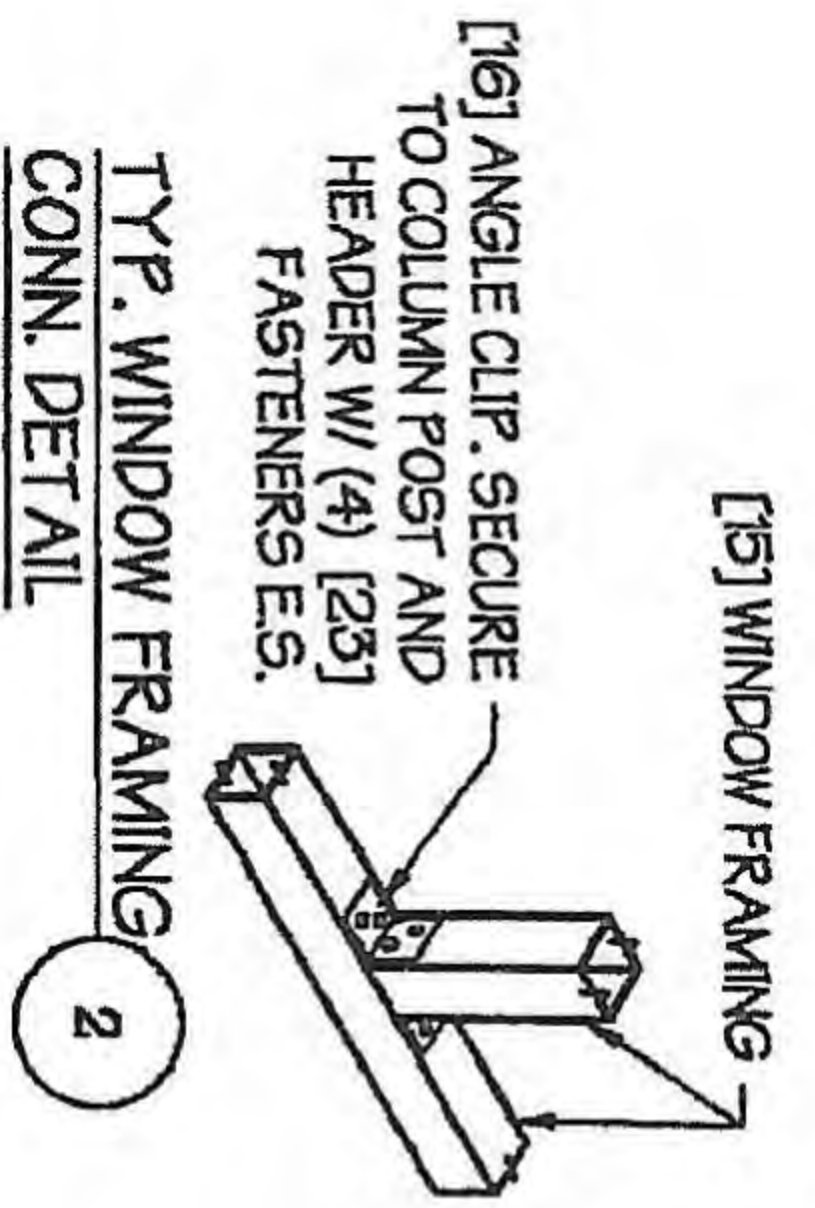
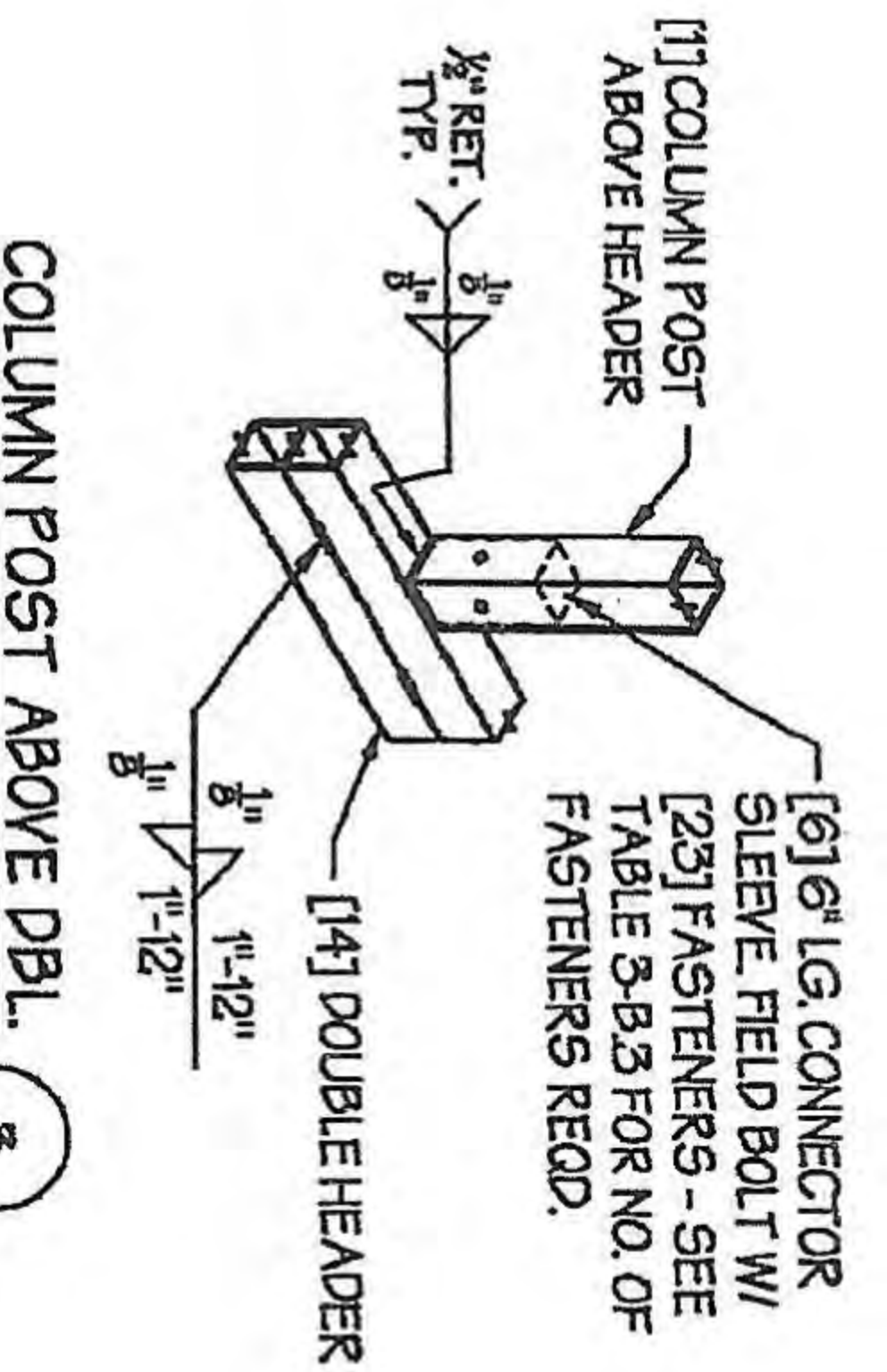
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PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

END WALL FRAMING

SHEET NO.: 8-A / 11

DRAWN BY: A.W. **DATE:** 8/13/20

CHECKED BY: OAA DATE: 8/13/20

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☐ END WALL SERVICE DOOR AND WINDOW OPENINGS

SCALE: NTS

-SERVICE DOOR(S) TO BE LOCATED PER CUSTOMER REQUIREMENTS

☐ PARTIAL END WALL FRAMING
SCALE: NTS
TABLE 8-A.1: END WALL POST
SPACING SCHEDULE

SCALE: NTG

WIND SPEED (MPH)	EAVE HEIGHT			
	■ UP TO 7'	■ 8' TO 9'	■ 10' TO 12'	
□ 105	5'	5'	5'	
□ 115	5'	5'	4.5'	
□ 130	4.5'	4.5'	4'	
□ 140	4.5'	4.5'	3'	
□ 155	4'	4'	2.5'	
□ 165 - 180	3.5'	3'	2'	

1. DESIGNS AND DETAILS SHOWN HERE ARE APPLICABLE TO BOTH REGULAR AND A-FRAME STYLE BUILDINGS.
2. MIN. 12" CLEARANCE MUST BE MAINTAINED BETWEEN ANY TWO OPENINGS (OVERHEAD DOOR OR SERVICE DOOR) AND FROM CORNERS.
3. SERVICE DOORS AND WINDOWS CAN BE PLACED AS NEEDED.
4. DIAGONAL BRACES NEED TO BE ADDED FOR PARTIAL END WALL ENCLOSURES. SEE SHEET 9 FOR DIAGONAL BRACE CONNECTION DETAILS.

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DRAWING INFORMATION

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PROJECT NO.: 331-20-1753
SHEET TITLE:
END WALL FRAMING
DETAILS

SHEET NO.: 8-B / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

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[12] DOOR POST

[16] ANGLE BRACKET, SECURE TO DOOR POST AND BASE RAIL W/ (4) [23] FASTENERS (FLAT CLIP INSTALLED FROM INSIDE)

[3] BASE RAIL

DOOR POST BASE RAIL CONN. DETAIL
SCALE: NTS

[2] ROOF BEAM

[17] STRAIGHT BRACKET, SECURE TO DOOR POST AND BASE RAIL W/ (4) [23] FASTENERS (FLAT CLIP INSTALLED FROM INSIDE)

END WALL POST - ROOF BEAM CONN. DETAIL
SCALE: NTS

[11] END WALL POST

[15] ANGLE CLIP, SECURE TO END WALL POST AND DOOR / WINDOW FRAMING W/ (4) [23] FASTENERS E.S.

[15] SERVICE DOOR / WINDOW FRAMING

TYP. SERVICE DOOR / WINDOW FRAMING CONN. DETAIL
SCALE: NTS

[11] END WALL POST POST ABOVE HEADER

[15] ANGLE CLIP, SECURE TO DOOR POST AND BASE RAIL W/ (4) [23] FASTENERS E.S.

[14] DOUBLE HEADER

END WALL POST ABOVE DOUBLE HEADER CONN. DETAIL
SCALE: NTS

[20] GABLE BRACE

[11] END WALL POST ABOVE GABLE HEADER

DETAIL A

GABLE BRACE - END WALL CONN. DETAIL
SCALE: NTS

[3] SIDE WALL BASE RAIL

[1] COLUMN POST CONNECTOR SLEEVE

[16] ANGLE BRACKET, SECURE TO DOOR POST AND BASE RAIL W/ (4) [23] FASTENERS

[3] END WALL BASE RAIL

CORNER DETAIL
SCALE: NTS

[11] END WALL POST ABOVE HEADER

[15] ANGLE CLIP, SECURE TO DOOR POST AND BASE RAIL W/ (4) [23] FASTENERS E.S.

[13] SINGLE HEADER

END WALL POST ABOVE HEADER CONN. DETAIL
SCALE: NTS

[15] ANGLE CLIP, SECURE TO HEADER AND COLUMN POST W/ (4) [23] FASTENERS E.S.

[13] SINGLE HEADER

HEADER - END WALL POST CONN. DETAIL
SCALE: NTS

[11] END WALL POST

[15] ANGLE CLIP, SECURE TO DOOR POST AND BASE RAIL W/ (4) [24] FASTENERS E.S.

[14] DOUBLE HEADER

DOUBLE HEADER - END WALL POST CONN. DETAIL
SCALE: NTS

[20] GABLE BRACE

[11] END WALL POST ABOVE GABLE HEADER

DETAIL B

12

[11] END WALL POST

[16] ANGLE BRACKET, SECURE TO DOOR POST AND BASE RAIL W/ (4) [23] FASTENERS E.S.

[3] BASE RAIL

END WALL POST - BASE RAIL CONN. DETAIL
SCALE: NTS

[11] END WALL POST ABOVE HEADER

[15] ANGLE CLIP, SECURE TO DOOR POST AND BASE RAIL W/ (4) [23] FASTENERS E.S.

[13] SINGLE HEADER

5

[13] SINGLE HEADER

[11] COLUMN POST AT CORNER

GABLE HEADER - CORNER POST CONN. DETAIL
SCALE: NTS

[2] ROOF BEAMS

[20] GABLE BRACE

[17] ANGLE CLIPS 2 EACH END - TOTAL 4, SECURE TO ROOF BEAMS W/ (4) [23] FASTENERS E.S.

TYP. GABLE BRACE CONN. DETAIL
SCALE: NTS

[11] END WALL POST ABOVE GABLE HEADER

[17] ANGLE CLIPS 2 EACH END - TOTAL 4, SECURE TO GABLE HEADER W/ (4) [23] FASTENERS E.S.

[13] SINGLE HEADER

11

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DRAWING INFORMATION

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LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

**CORNER BRACING
DETAILS**

SHEET NO.: 9 / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

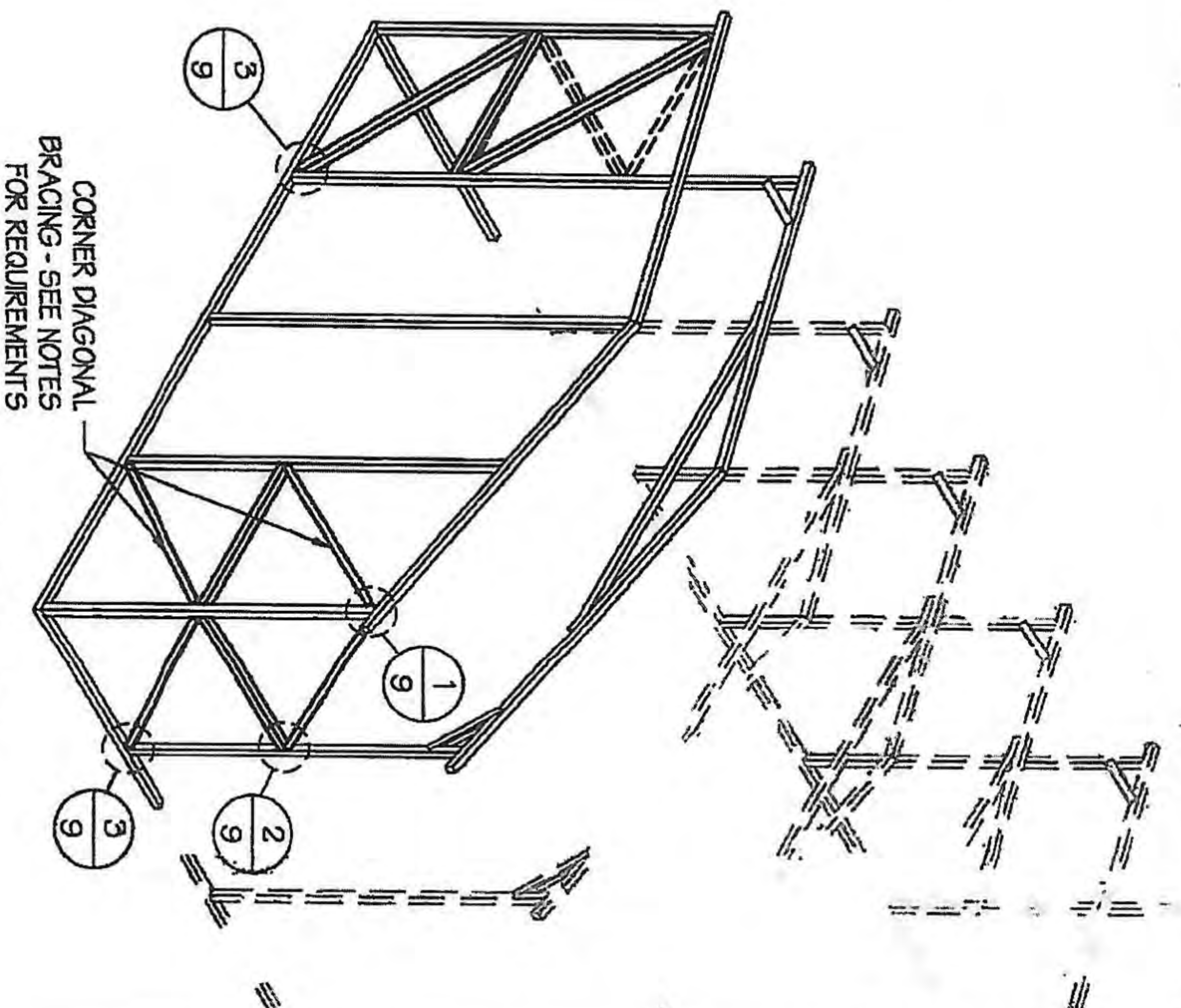
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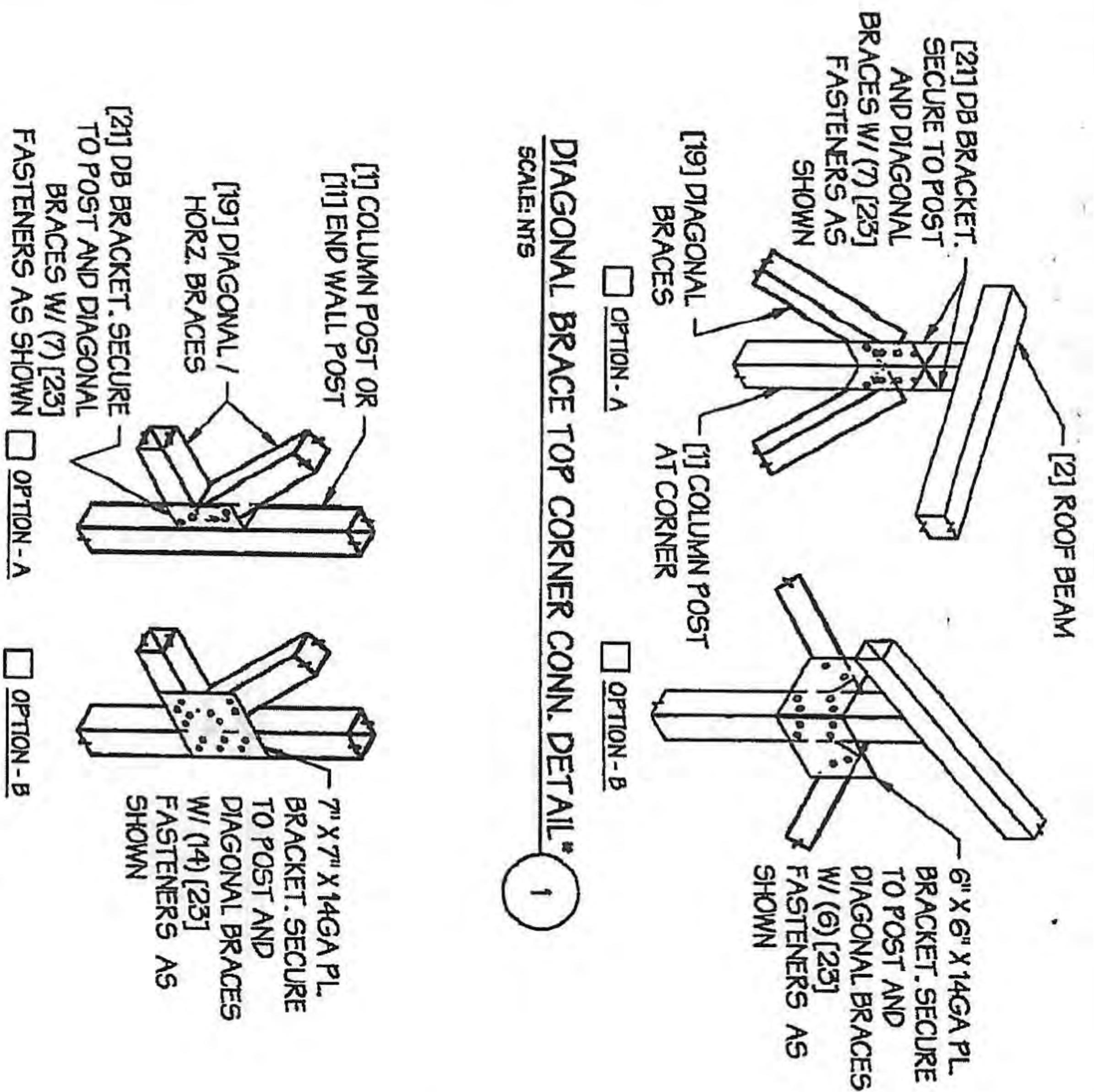
DATE SIGNED: AUG 13 2020



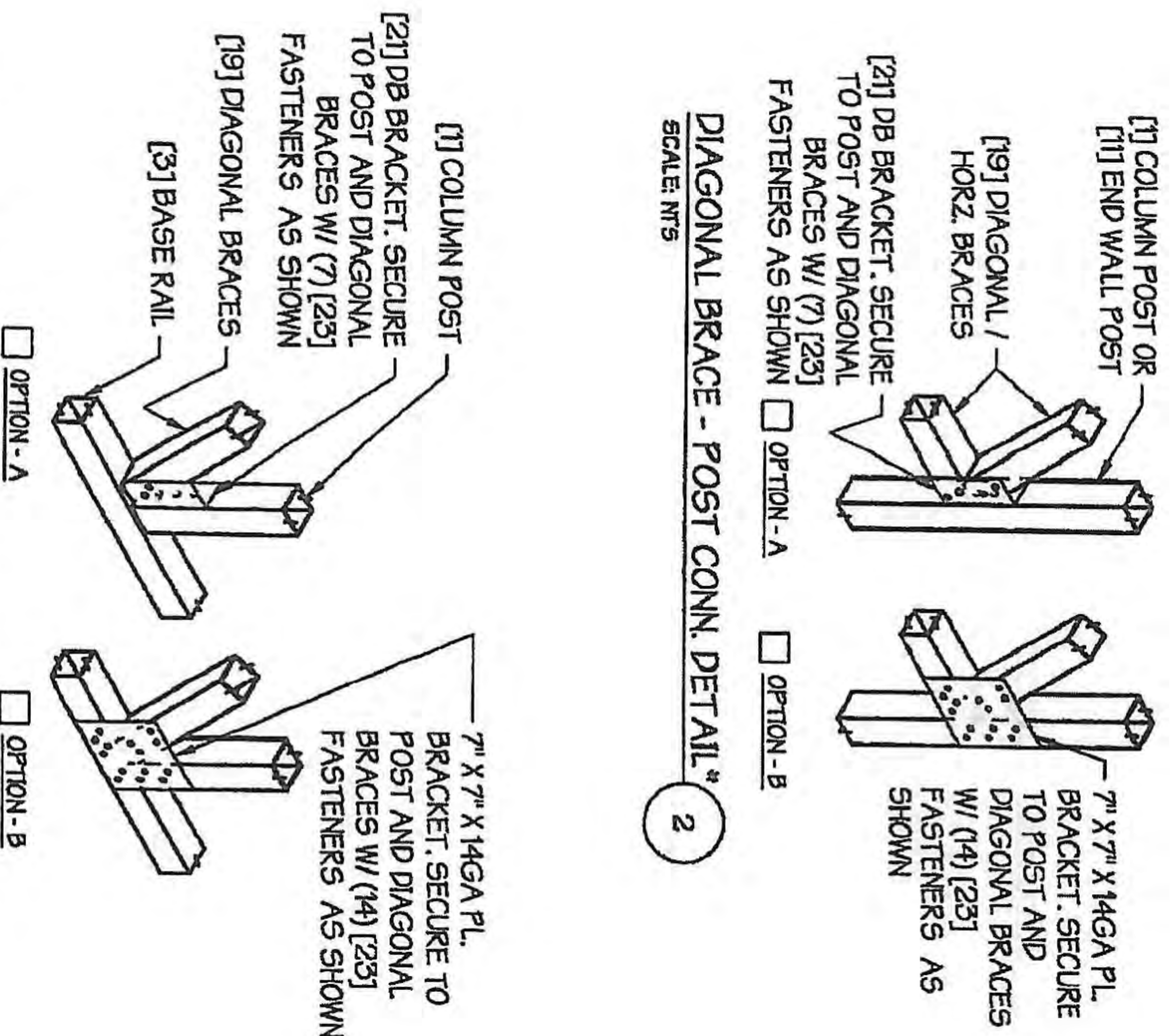
CORNER DIAGONAL
BRACING - SEE NOTES
FOR REQUIREMENTS

DIAGONAL BRACING AT CORNERS
SCALE: NTS

DIAGONAL BRACE TOP CORNER CONN. DETAIL*
SCALE: NTS



DIAGONAL BRACE - POST CONN. DETAIL*
SCALE: NTS



DIAGONAL BRACE BOT. CORNER CONN. DETAIL*
SCALE: NTS

* INSIDE VIEW SHOWN FOR CLARITY

CORNER BRACING NOTES:

1. DIAGONAL BRACING AT BUILDING CORNERS IS REQUIRED FOR ALL BUILDINGS IN LOCATIONS WHERE WIND SPEED IS 140 MPH OR GREATER.
- FOR 3 SIDED ENCLOSED BUILDINGS 140 MPH OR GREATER WIND SPEED - THE BUILDING MUST BE DESIGNED WITH OPEN BUILDING SPACING AND DIAGONAL BRACING IS REQUIRED ON ALL ENCLOSED WALLS.
2. SIDE-WALL DIAGONAL BRACING IS REQUIRED WHEN THE ADJACENT END-WALL IS PARTIALLY ENCLOSED.
3. ALL BUILDINGS WITH IRREGULAR ENCLOSURE (SEE SHEET 5) WILL REQUIRE SIDE-WALL BRACING CLOSE TO THE PARTIALLY ENCLOSED END-WALL.

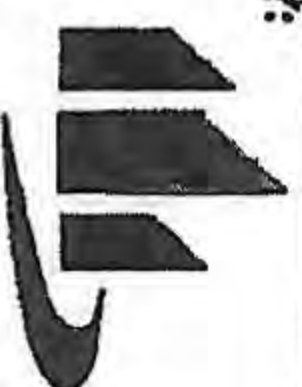
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6086 Renaissance Place, Toledo, OH 43623
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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:

**OPTIONAL LEAN-TO
ADDITION**

SHEET NO.: 10 / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

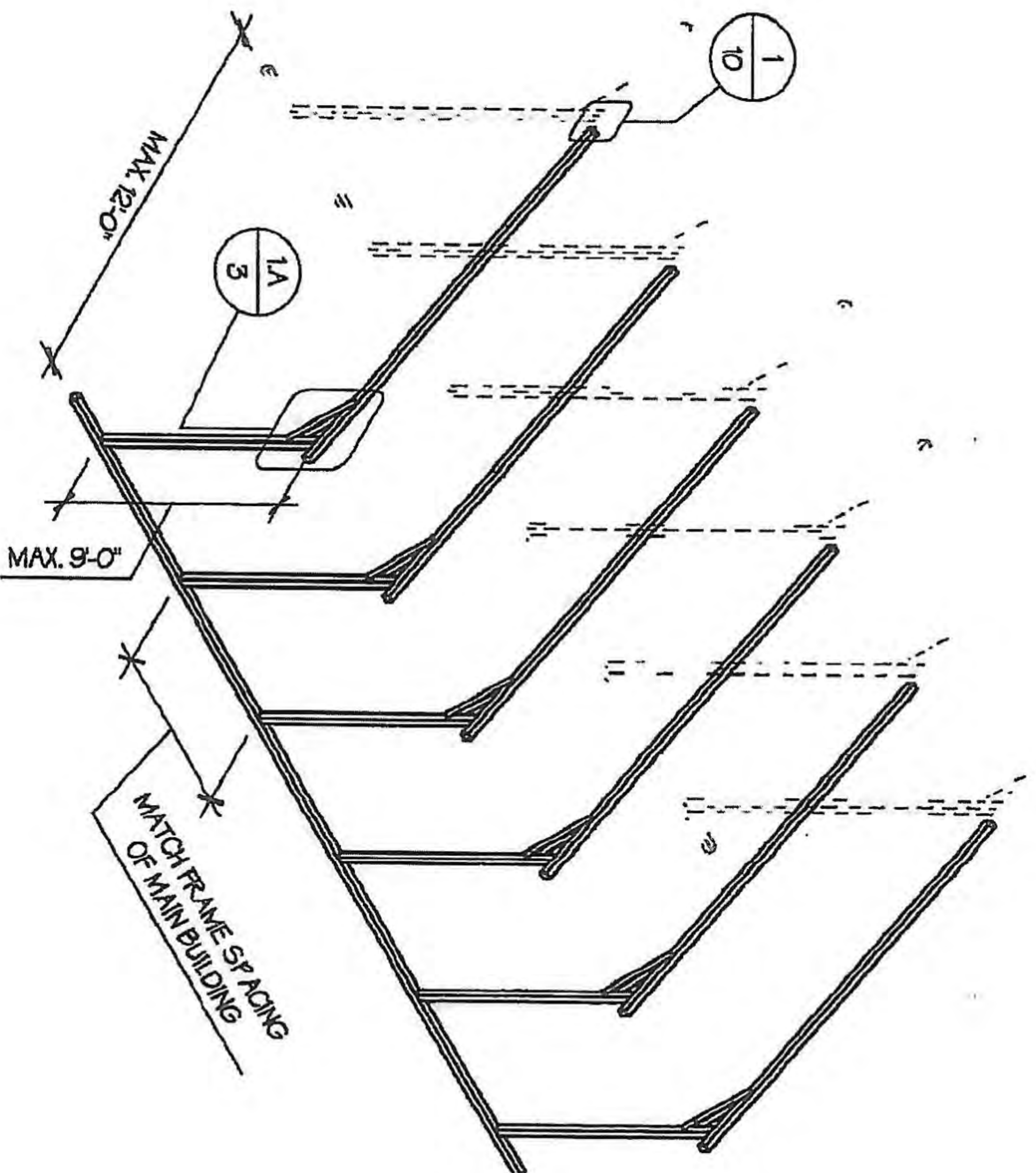
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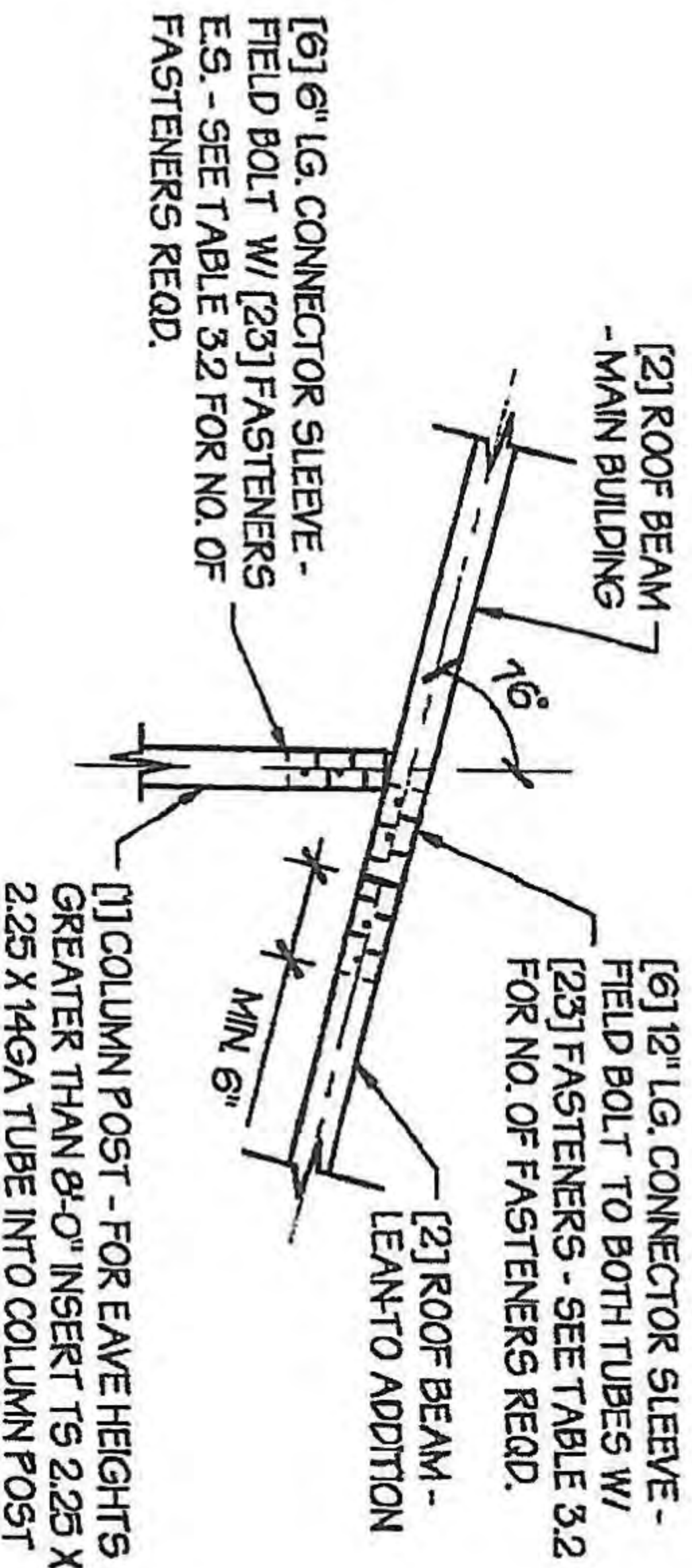
STAMP EXPIRY: 11/09/2020

DATE SIGNED: AUG 13 2020



☐ **OPTIONAL LEAN-TO ADDITION**

SCALE: NTS



LEAN-TO ATTACHMENT DETAIL

SCALE: NTS

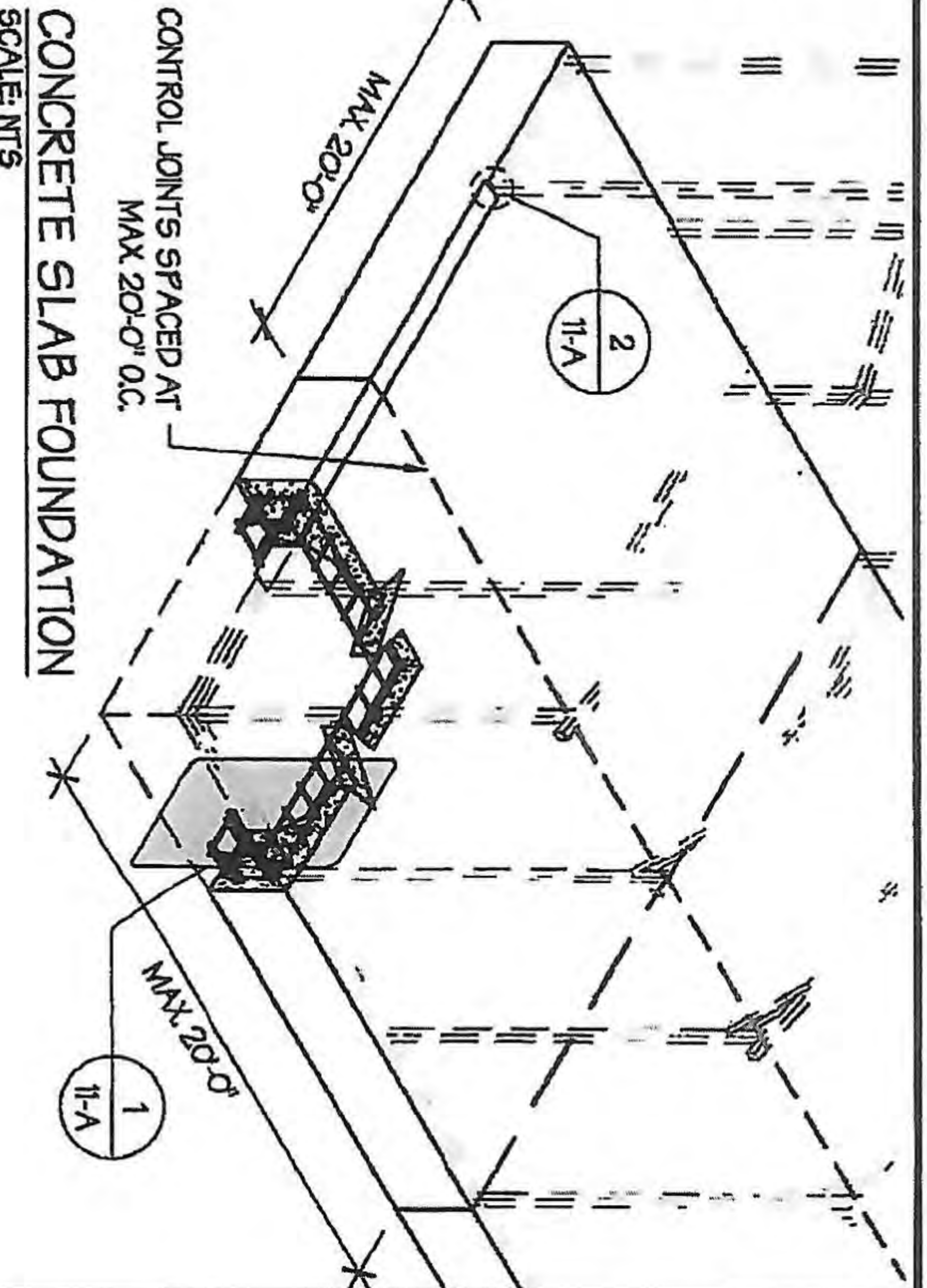
1

LEAN-TO ADDITION NOTES:

1. LEAN-TO ADDITIONS CAN BE ADDED ON EITHER OR BOTH SIDES OF THE BUILDING.
2. ROOF SLOPE, PURLIN, GIRT AND FRAME SPACING OF THE ADDITION HAVE TO MATCH THAT OF THE MAIN STRUCTURE.
3. IF THE LEAN-TO ADDITION IS "OPEN" (BOTH END WALLS OR SIDE WALL IS NOT ENCLOSED), THE DESIGN OF THE MAIN BUILDING HAS TO USE THE FRAME SPACING OF AN OPEN BUILDING FROM TABLE 4.

CONCRETE SLAB FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
- ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-A.2.
- THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS 5" FOR 14GA MATERIAL AND 5" FOR 12GA MATERIAL.
- DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- CONTROL JOINTS SHALL BE PLACED 50 AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTION.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN. OF 2500 PSI @ 28 DAYS.

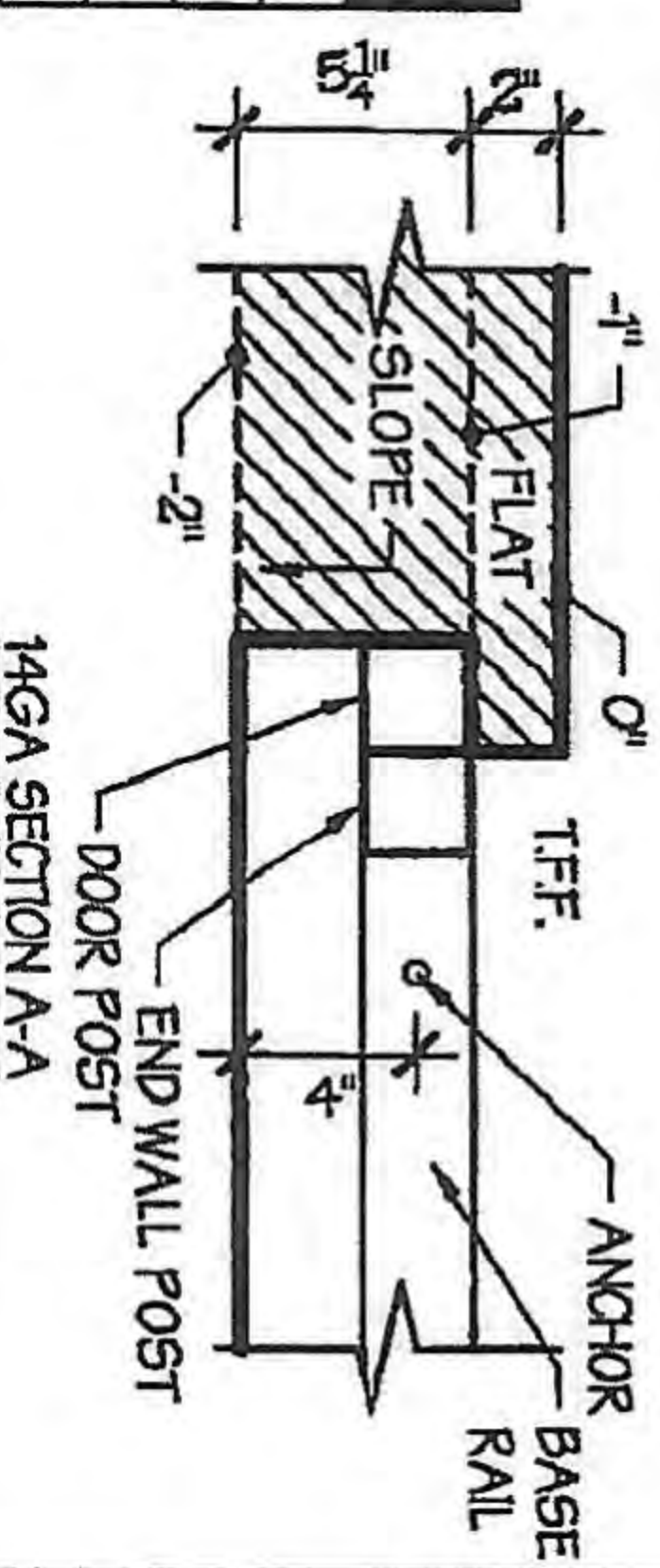


CONCRETE SLAB FOUNDATION

SCALE: NTS

TABLE 11-A.2: CONCRETE SLAB ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2" X 7"
	136 TO 160	(2) 1/2" X 7"
OPEN	105 TO 135	(1) 1/2" X 7"
	136 TO 160	(2) 1/2" X 7"



14GA SECTION A-A

DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE: FOUNDATION OPTION 1: CONCRETE SLAB

SHEET NO.: 11-A / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

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OVERHEAD DOOR NOTCH DETAIL

SCALE: NTS

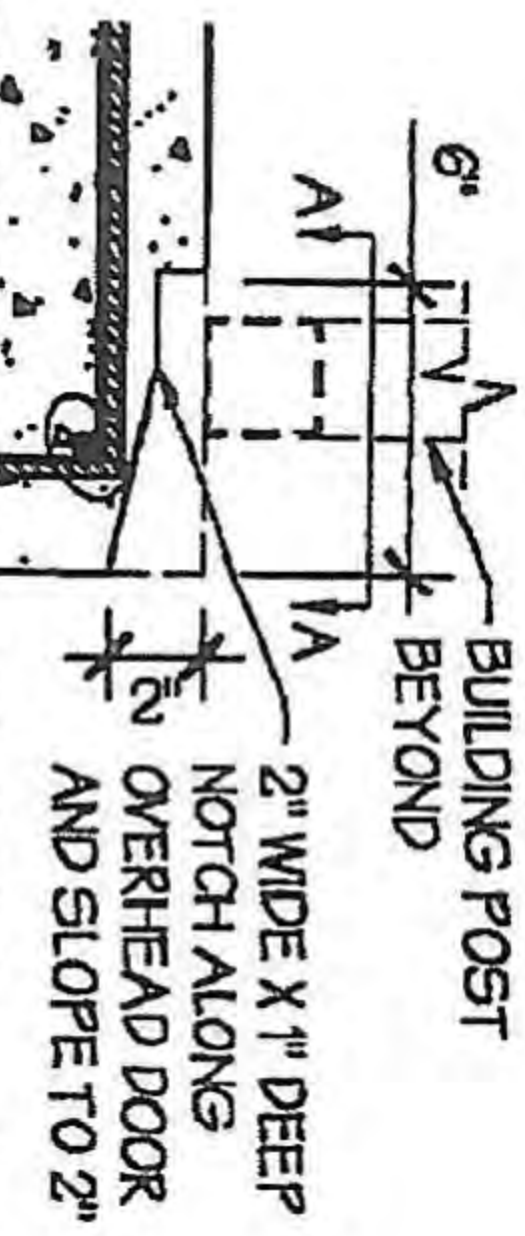
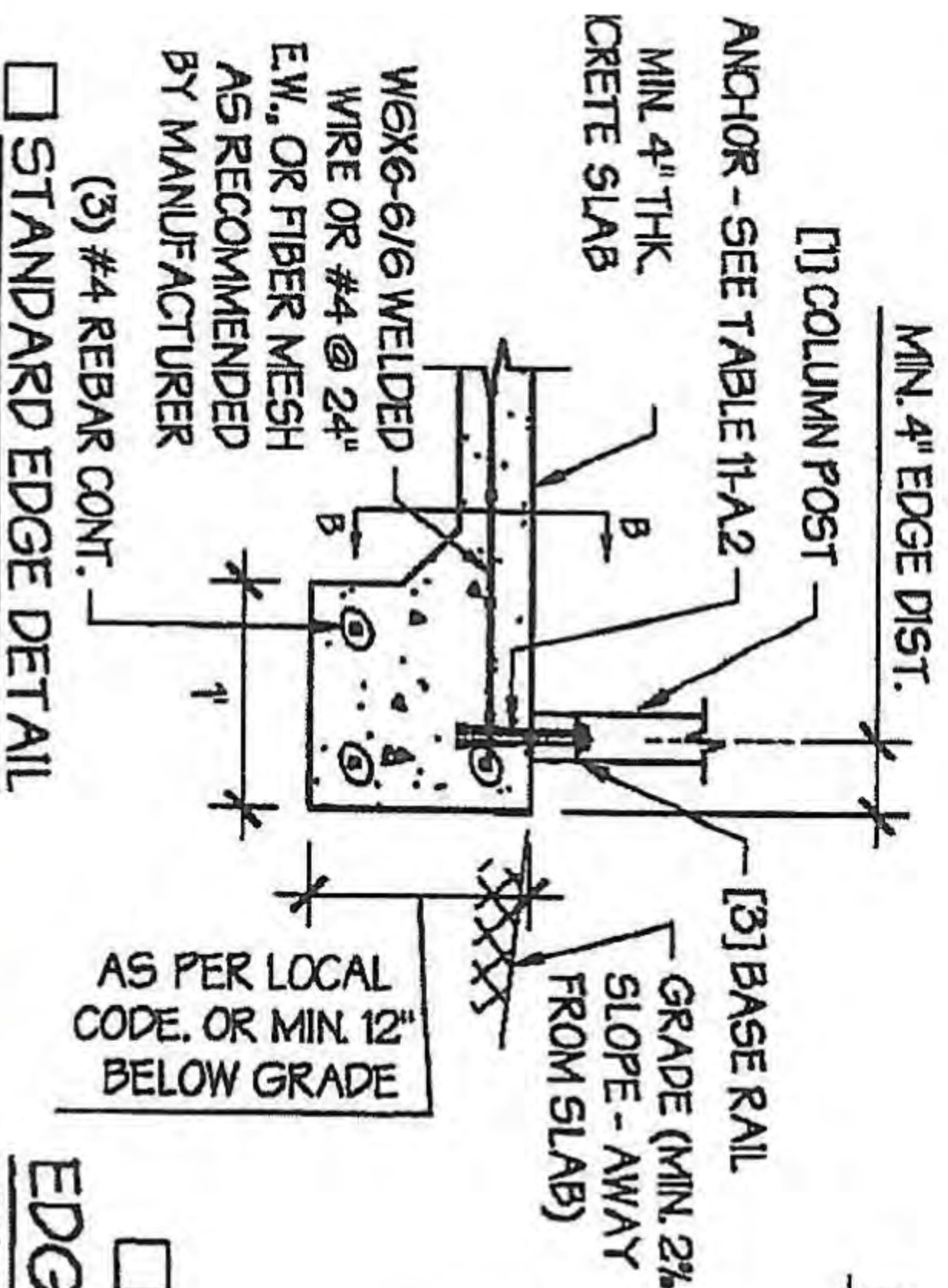


TABLE 11-A.1: NOTCH WIDTH

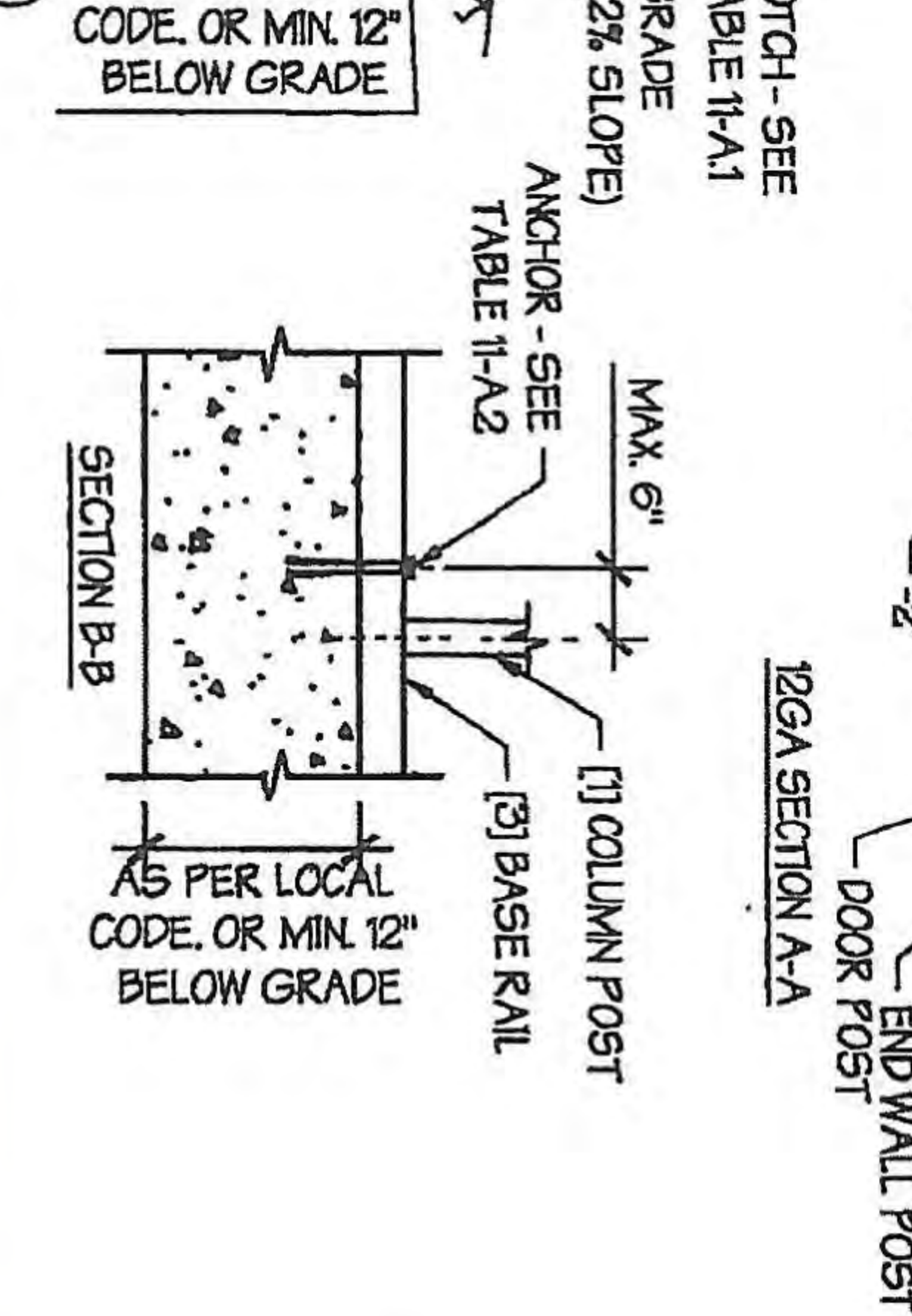
HORIZONTAL/OPEN	VERTICAL
14GA	12GA
12GA	14GA
12GA	12GA
2 3/4"	2 7/8"
	1 3/4"
	1 7/8"

NOTE: DEPTH IS TO BE 1 1/2"



EDGE OFFSET DETAIL

SCALE: NTS

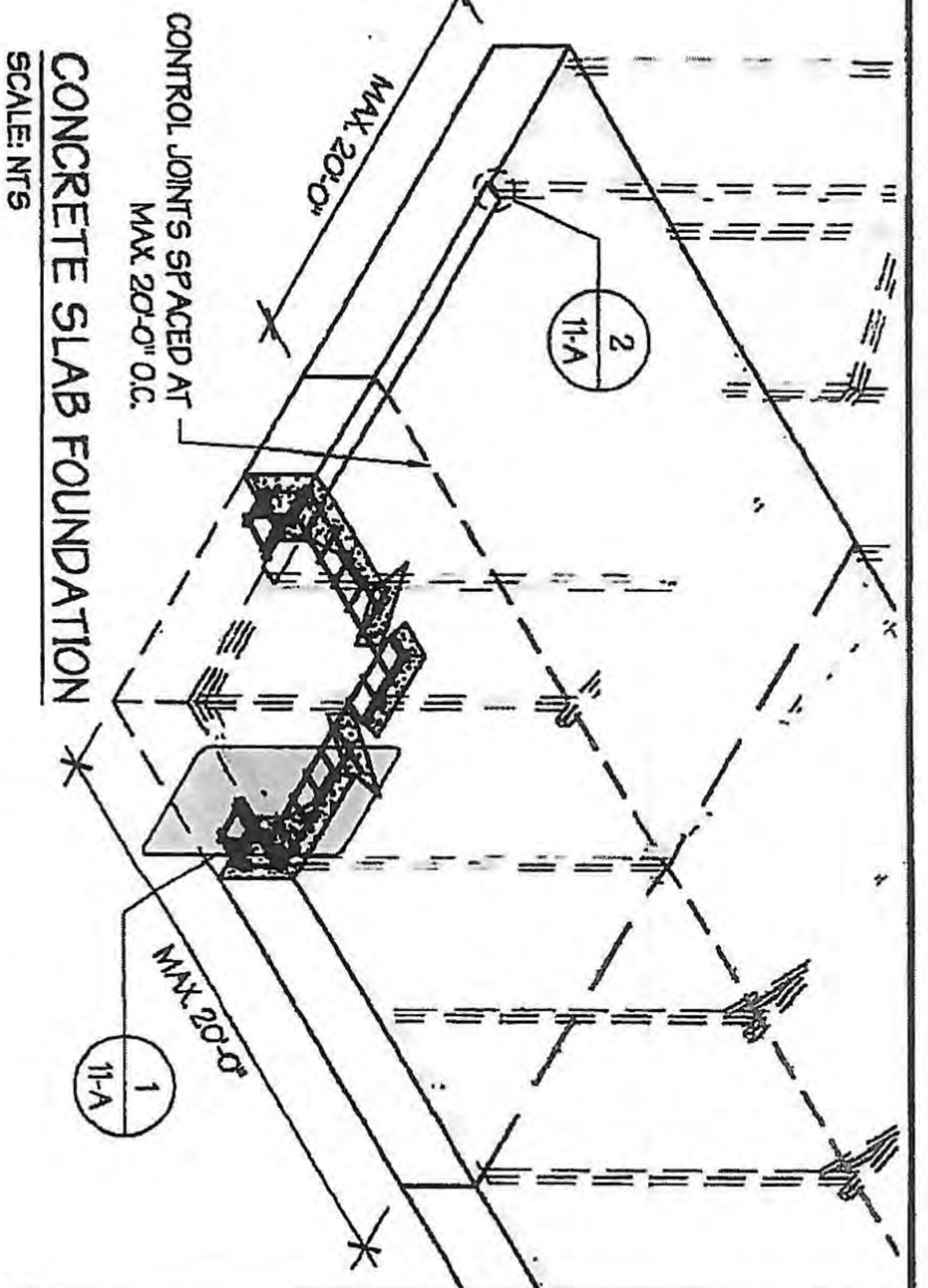


SECTION B-B

AS PER LOCAL CODE, OR MIN. 12" BELOW GRADE

CONCRETE SLAB FOUNDATION NOTES:

- DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE SLAB FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
- CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
- MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-A.1.
- THE SIZE OF THE SLAB SHALL BE THE SIZE (WIDTH AND LENGTH) OF THE BUILDING PLUS $\frac{1}{2}$ " FOR 14GA MATERIAL AND 1" FOR 12GA MATERIAL.
- DEPTH OF SLAB TURN DOWN FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
- CONTROL JOINTS SHALL BE PLACED 50 AS TO LIMIT MAX. SLAB SPANS TO 20' IN EACH DIRECTION.
- ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
- CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.



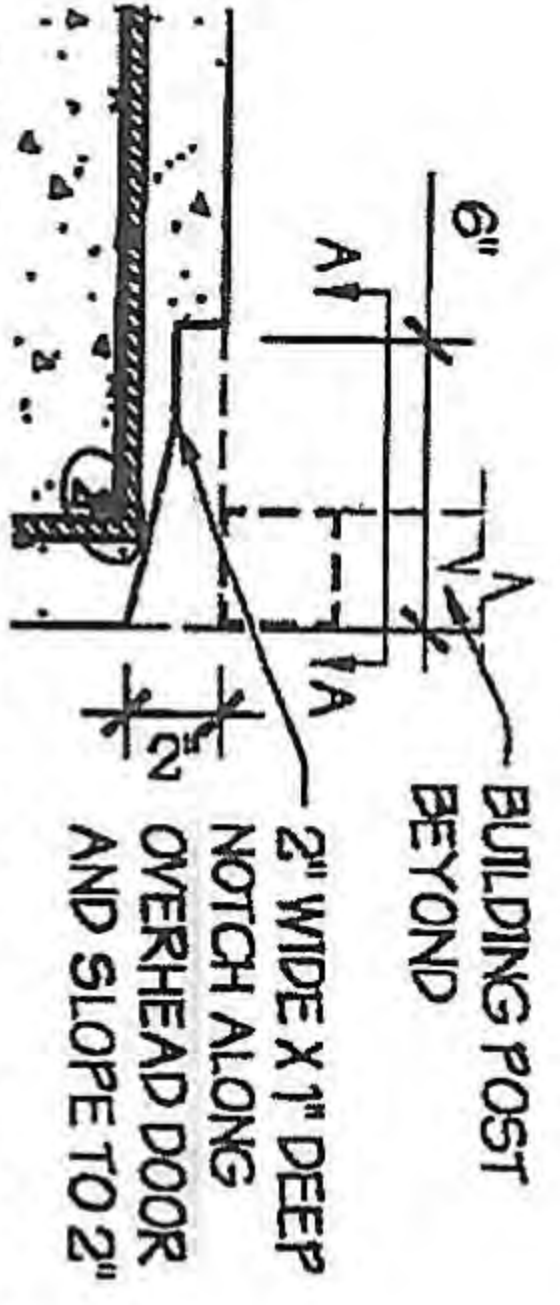
CONCRETE SLAB FOUNDATION

SCALE: NTS

TABLE 11-A.1: CONCRETE SLAB ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 180	(2) 1/2" Ø X 7"
OPEN	105 TO 135	(1) 1/2" Ø X 7"
	136 TO 180	(2) 1/2" Ø X 7"

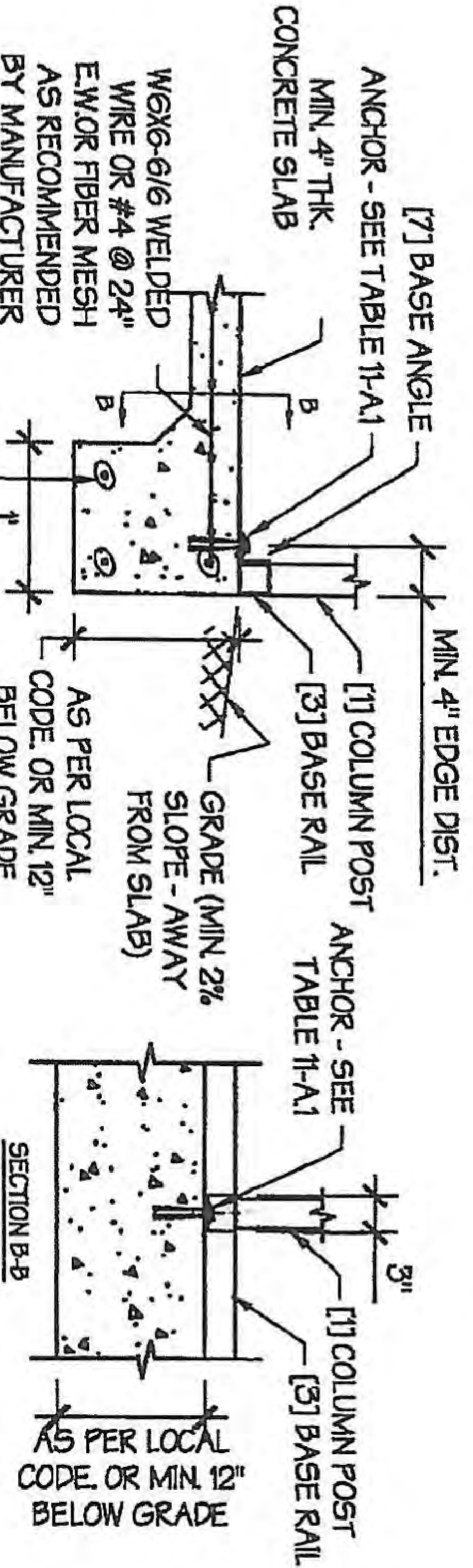
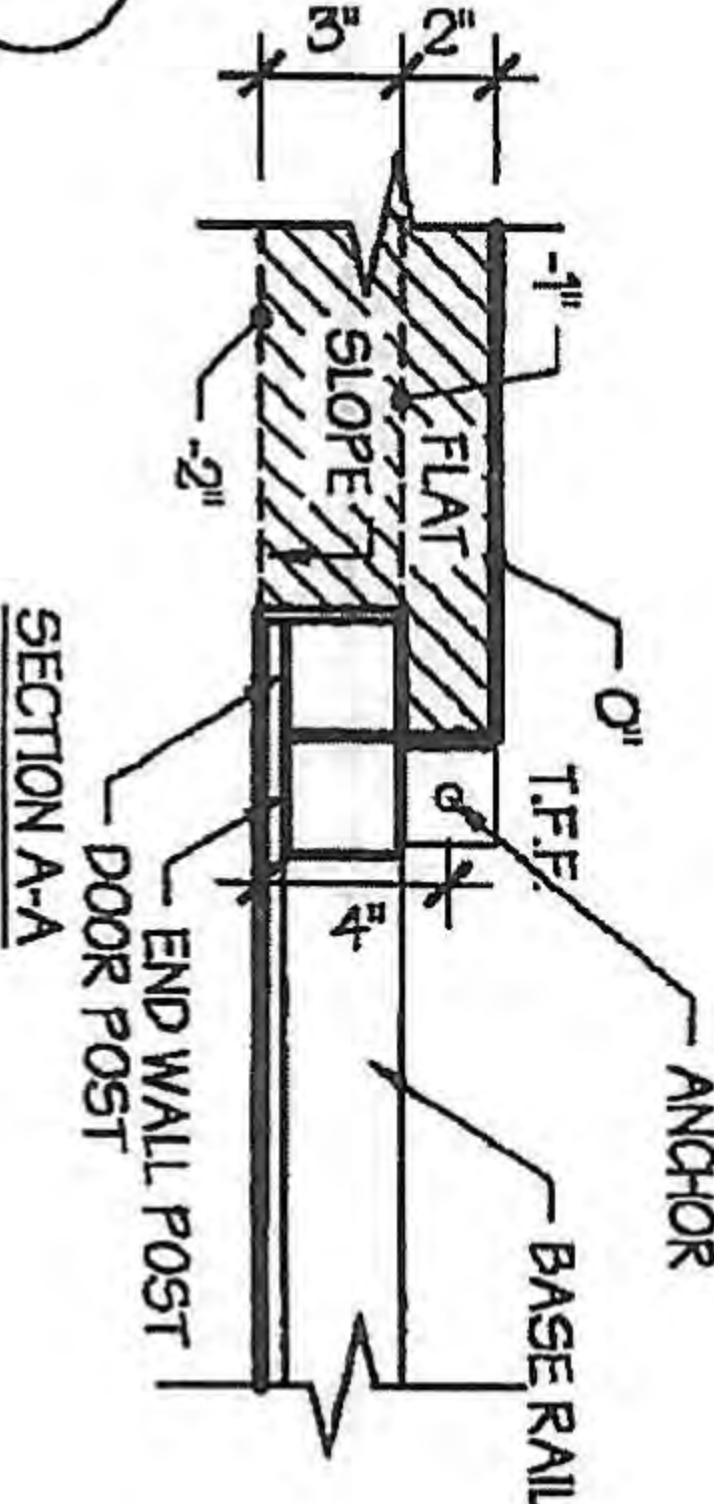
- NOTES:
- ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
 - MIN. EMBEDMENT DEPTH TO BE 28".
 - ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.



OVERHEAD DOOR NOTCH DETAIL

SCALE: NTS

2



EDGE FLUSH DETAIL

SCALE: NTS

1

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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:

FOUNDATION OPTION 1:
CONCRETE SLAB

SHEET NO.: 11-A / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

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TABLE 11-B.1: ANCHOR SCHEDULE

ENCLOSURE TYPE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2"Ø X 7"
	136 TO 160	(2) 1/2"Ø X 7"
OPEN	105 TO 135	(1) 1/2"Ø X 7"
	136 TO 160	(2) 1/2"Ø X 7"

NOTES:

1. ANCHORS ARE TO BE CONCRETE WEDGE OR EXPANSION ANCHORS.
2. MIN. EMBEDMENT DEPTH TO BE 2 $\frac{1}{2}$ "
3. ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

TABLE 11-B.2: CONC. STRIP SCHEDULE

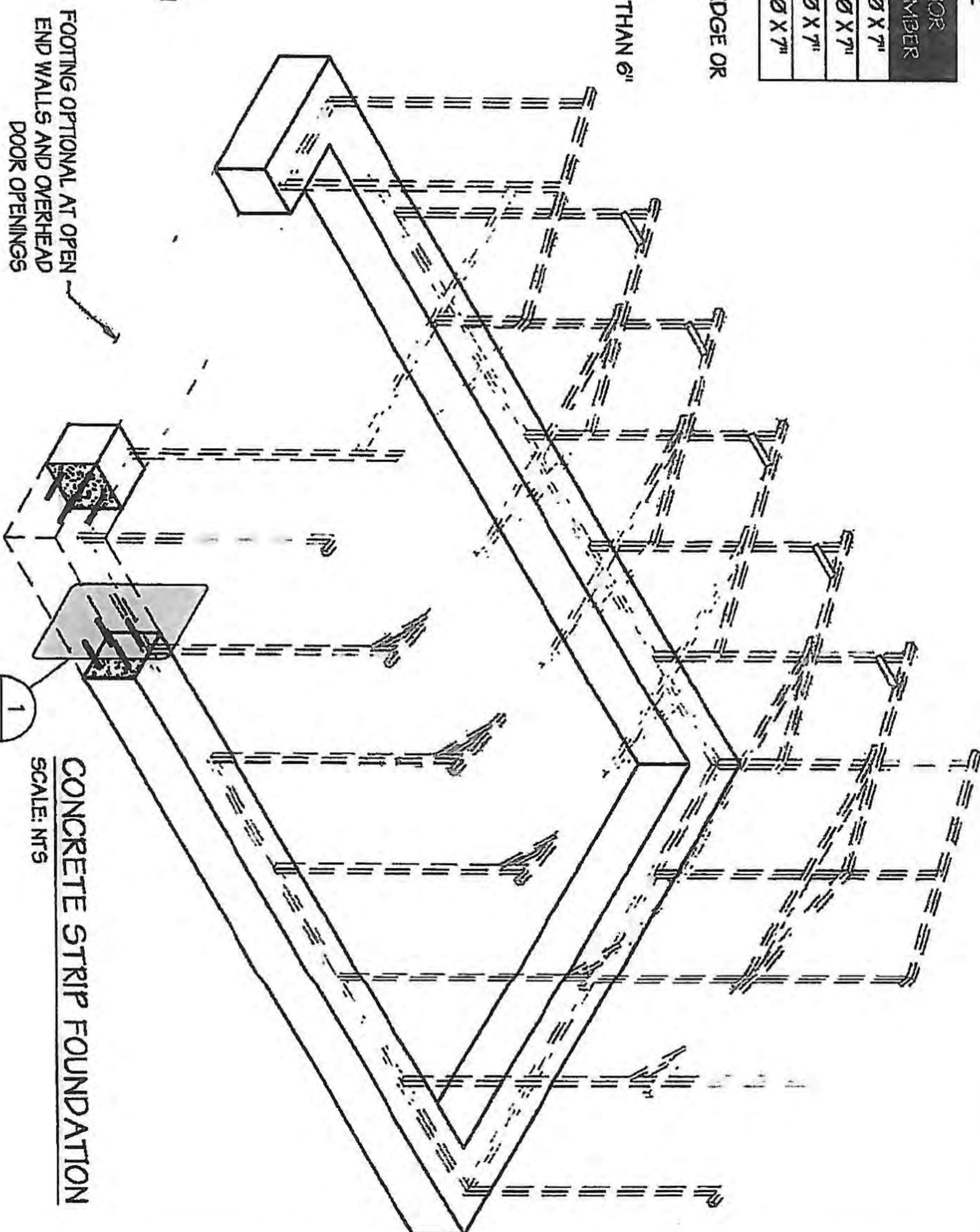
WIND SPEED (MPH)	MIN. SIZE REQ'D.
105 TO 130	15" X 12"
140 TO 155	24" X 12"
165 TO 180	30" X 12" 24" X 15" 20" X 18"

NOTES:

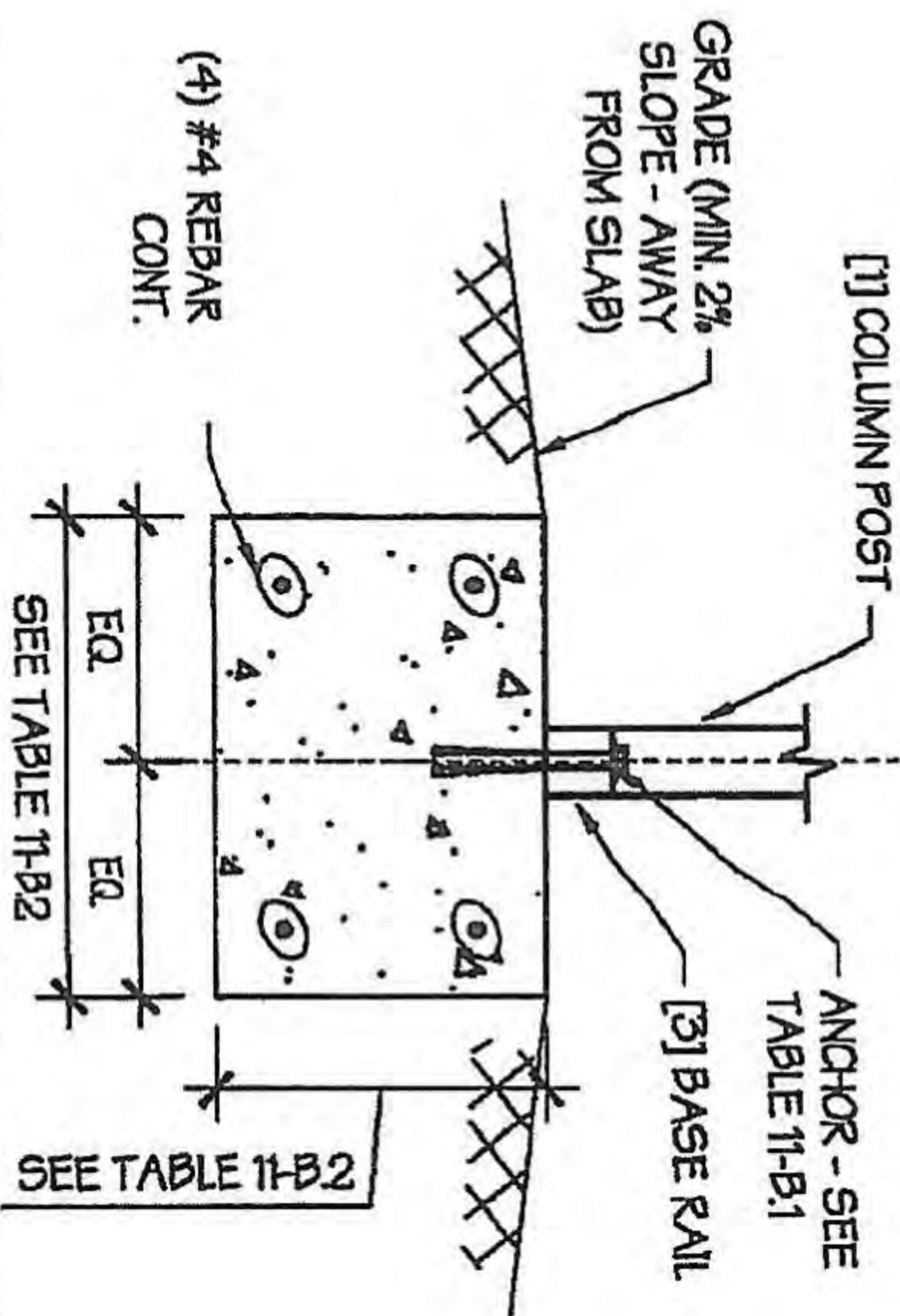
1. WIDTH AND DEPTH DIMENSIONS CAN BE INTERCHANGED.

CONCRETE STRIP FOUNDATION NOTES:

1. DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE STRIP FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
2. CONCRETE ANCHORS SHALL BE LOCATED NEXT TO EVERY POST AND ON EITHER SIDE OF OPENINGS. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST.
3. MIN. NUMBER OF CONCRETE ANCHORS PER POST SHALL BE AS SHOWN IN TABLE 11-B.1.
4. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
5. DEPTH OF CONCRETE STRIP FOOTING SHALL BE GREATER THAN FROST DEPTH SPECIFIED PER LOCAL CODE.
6. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
7. CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.
8. BUILDING IS TO BE MOUNTED ON THE CENTER OF THE STRIP FOUNDATION.



CONCRETE STRIP FOUNDATION
SCALE: NTS



CONCRETE STRIP FOUNDATION DETAIL
SCALE: NTS

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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS
LOCATION: STATE OF WASHINGTON
PROJECT NO.: 331-20-1753
SHEET TITLE:
FOUNDATION OPTION 2:
CONCRETE STRIP

SHEET NO.: 11-B / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

FOUNDATION OPTION 3:
CONCRETE PIERS

SHEET NO.: 11-C / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

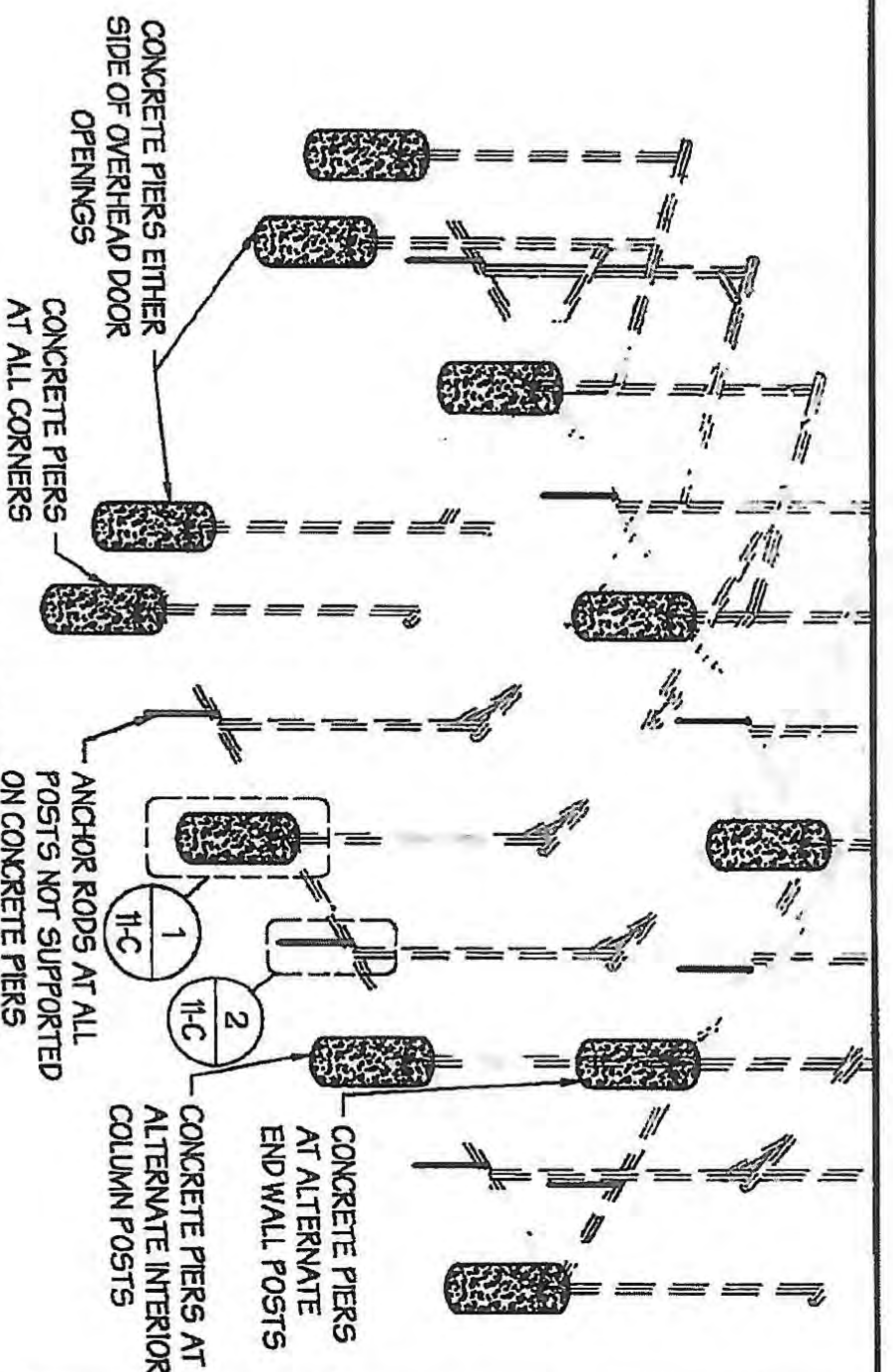
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SEAL:



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DATE SIGNED: AUG 13 2020



SCALE: NTS

TABLE 11-C2: ANCHOR SCHEDULE

ENCLOSURE	WIND SPEED (MPH)	ANCHOR SIZE/NUMBER
ENCLOSED	105 TO 135	(1) 1/2"Ø X 7"
	136 TO 180	(2) 1/2"Ø X 7"
OPEN	105 TO 135	(1) 1/2"Ø X 7"
	136 TO 180	(2) 1/2"Ø X 7"

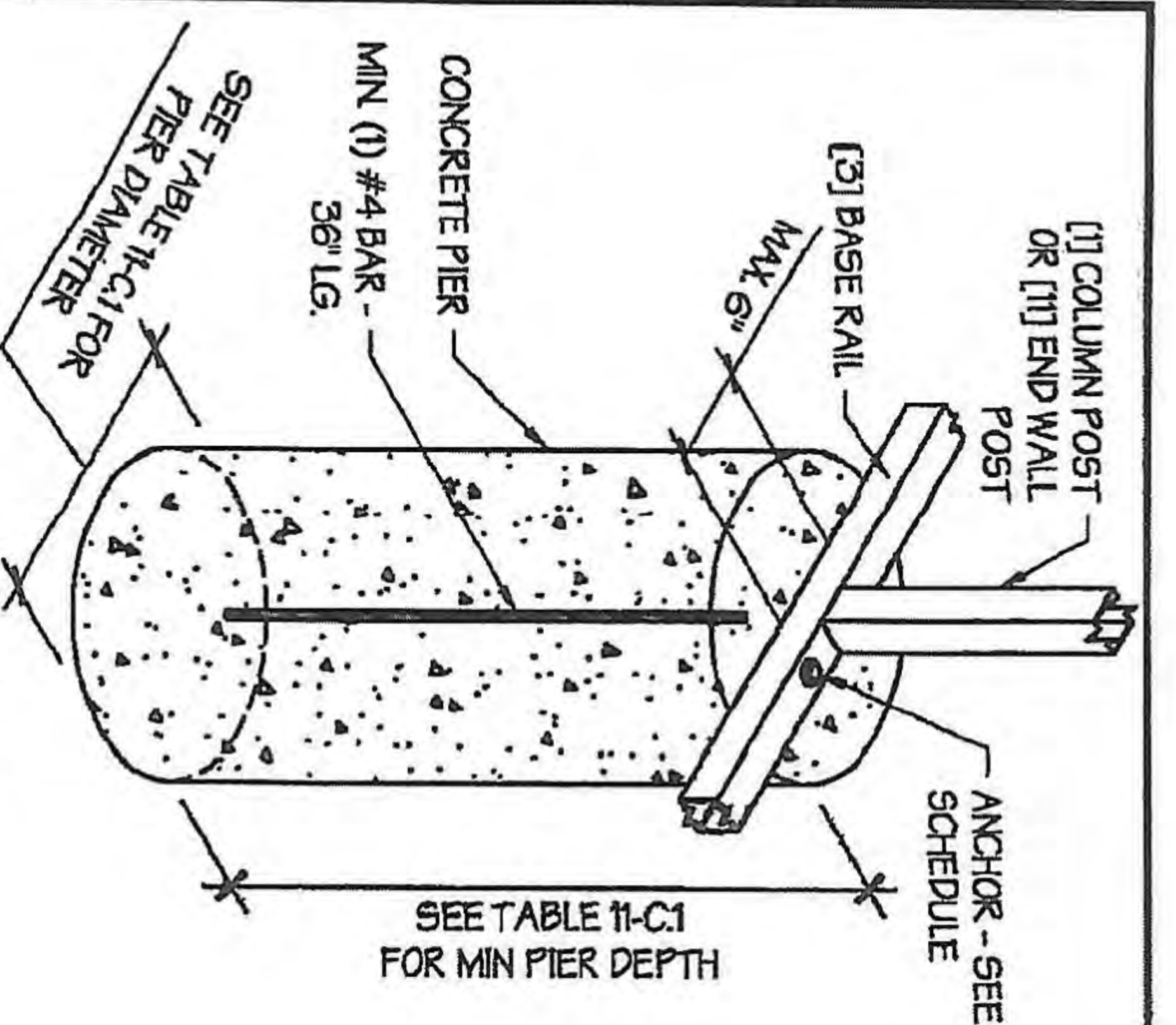
NOTES:

1. ANCHORS ARE TO BE CONCRETE WEDGE OR EXP ANSION ANCHORS.
2. MIN. EMBEDMENT DEPTH TO BE 2 $\frac{1}{2}$ ".
3. ANCHORS TO BE SPACED NO MORE THAN 6" FROM POSTS.

CONCRETE PIER FOUNDATION NOTES:

1. DESIGNS SHOWN ON THIS SHEET ARE FOR CONCRETE PIER FOUNDATION. ANY OF THE FOUNDATIONS SHOWN ON SHEETS 11-A THRU C CAN BE USED.
2. CONCRETE PIERS SHALL BE LOCATED AT ALL 4 CORNERS, ON EACH SIDE OF OVERHEAD DOOR OPENINGS AND ON ALTERNATE INTERIOR COLUMN POSTS AND END WALLS POSTS.
3. TWO ANCHORS SHALL BE INSTALLED AT CORNERS OF ENCLOSED BUILDINGS WITH END WALLS - ONE ON EACH BASE RAIL. IN LOCATIONS REQUIRING TWO ANCHORS DUE TO WIND, ONE ANCHOR IS TO BE ON EACH SIDE OF THE COLUMN POST WITH A PIER.
4. ANCHORS IN CLOSE PROXIMITY TO EACH OTHER MUST HAVE A MIN. 4" SPACING.
5. MIN. NUMBER OF CONCRETE ANCHORS PER POST WITH A PIER SHALL BE AS SHOWN IN TABLE 11-C2.
6. TWO ANCHORS AND A PIER ARE REQUIRED AT DIAGONAL BRACING LOCATIONS WHEN REQUIRED.
7. ALL POSTS NOT SUPPORTED ON CONCRETE PIERS SHALL BE ANCHORED TO THE GROUND WITH A 1/2" X 30" LG. THREADED ROD. RODS WILL HAVE A PRE-FORMED HEAD AT THE TOP AND ONE COAT OF RUST PROOF MATERIAL.
8. PIERS SHALL BE FORMED BY DIGGING A HOLE OF THE SAME SIZE AS THE PIER ON LEVEL GRADE AND FILLING IT WITH CONCRETE. THRD. ROD ANCHORS SHOULD BE DROPPED INTO THE PIERS PRIOR TO POURING THE CONCRETE.
9. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.
10. CONCRETE STRENGTH TO BE A MIN OF 2500 PSI @ 28 DAYS.

CONCRETE PIER DETAIL 1
SCALE: NTS



ANCHOR ROD INTO SOIL DETAIL 2
SCALE: NTS

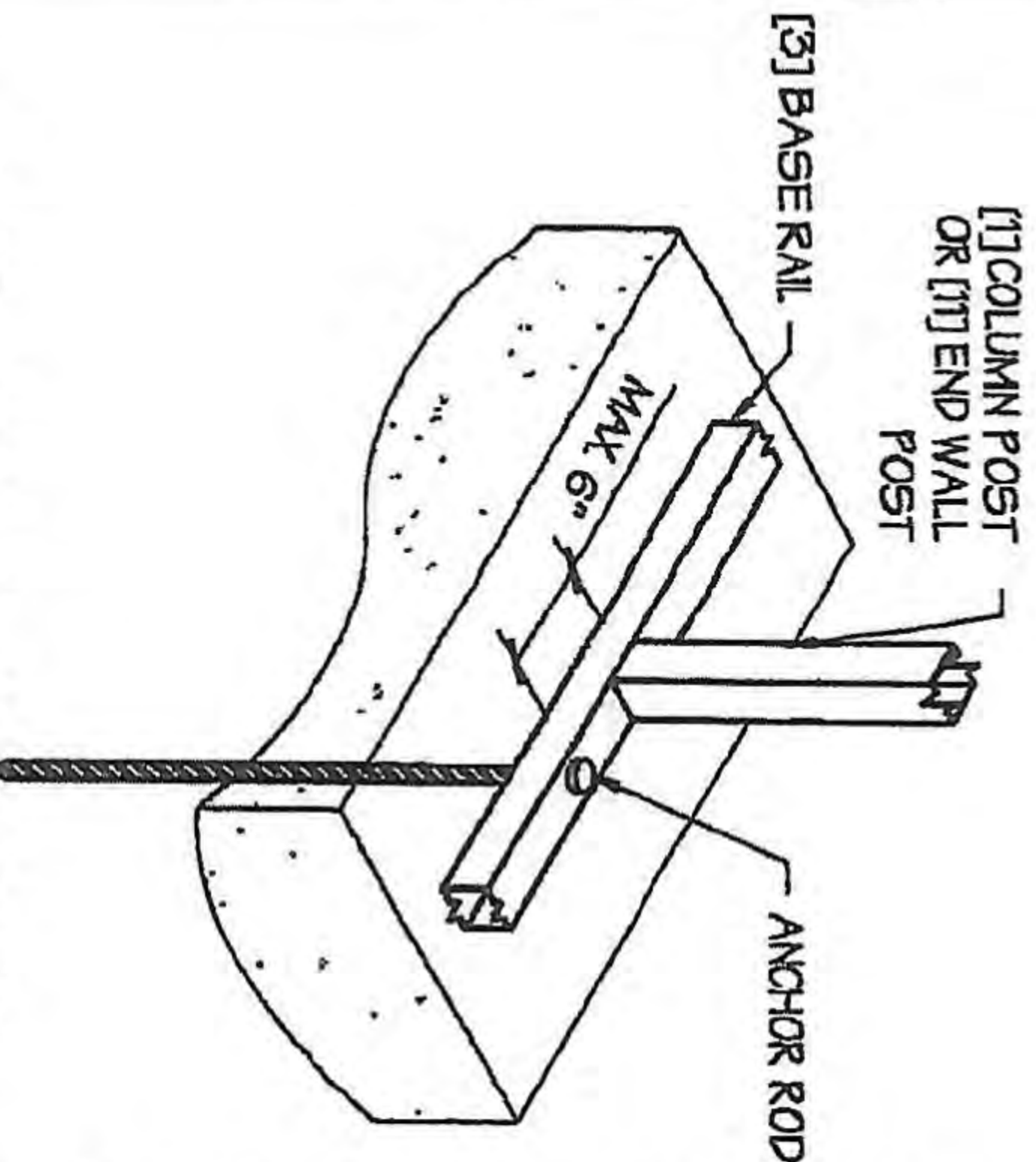


TABLE 11-C1: CONC.
PIER SCHEDULE

WIND SPEED (MPH)	MIN. SIZE REQD.
105 TO 130	24"Ø X 36"
140 TO 155	24"Ø X 42"
165 TO 180	24"Ø X 48"

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DRAWING INFORMATION

PROJECT: 24'-0" WIDE BUILDINGS

LOCATION: STATE OF WASHINGTON

PROJECT NO.: 331-20-1753

SHEET TITLE:

FOUNDATION OPTION 4:

SOIL ANCHORS

SHEET NO.: 11-D / 11

DRAWN BY: A.W. DATE: 8/13/20

CHECKED BY: OAA DATE: 8/13/20

LEGAL INFORMATION

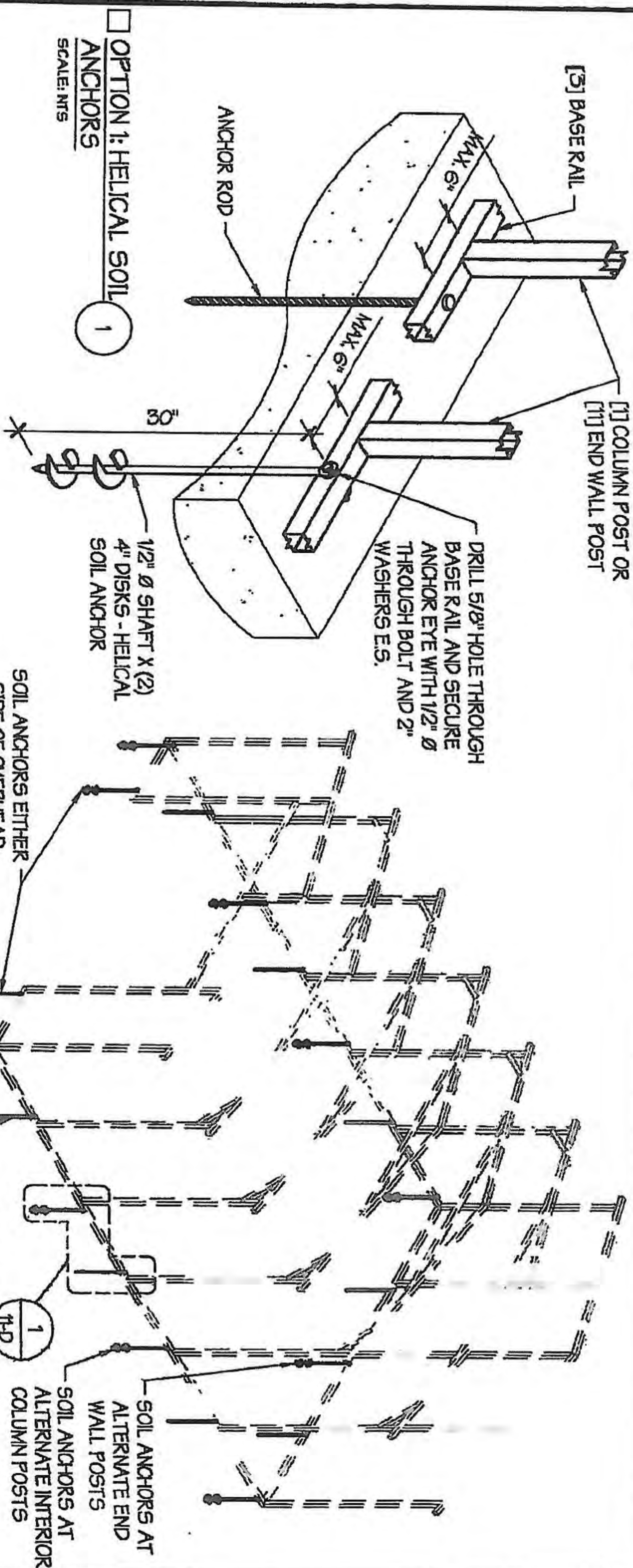
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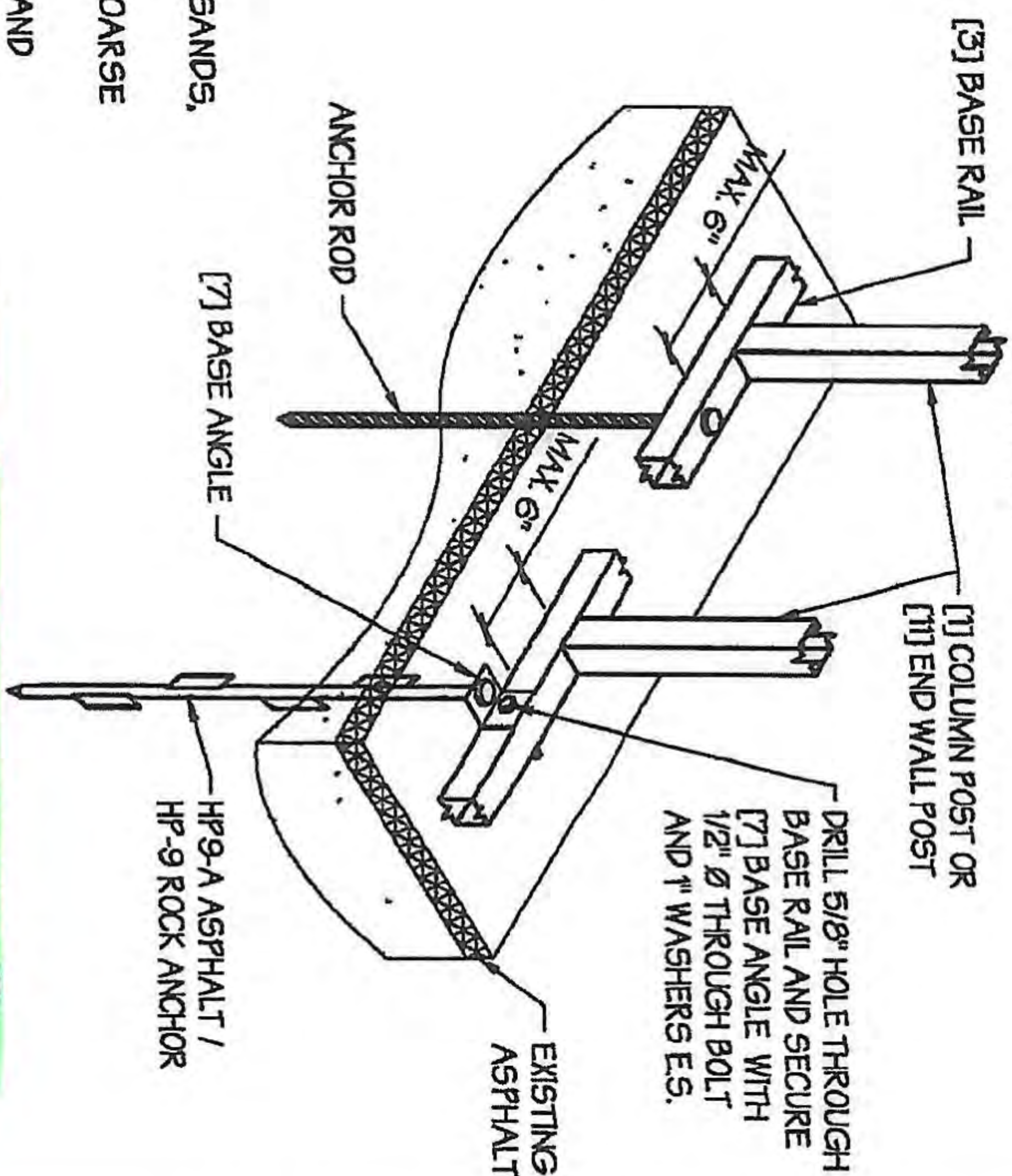


SOIL FOUNDATION NOTES:

1. DESIGNS SHOWN ON THIS SHEET ARE FOR SOIL ANCHOR FOUNDATION.
2. SOIL ANCHORS (HELICAL OR ROCK/ASPHALT) SHALL BE LOCATED AT ALL 4 CORNERS, ON EACH SIDE OF OVERHEAD DOOR OPENINGS, ON POSTS WITH DIAGONAL BRACING IF REQUIRED, AND ON ALTERNATE INTERIOR COLUMN POSTS AND END WALLS POSTS.
3. HELICAL ANCHORS ARE TO BE USED ONLY IF THE DRIVING TORQUE INTO THE GROUND IS 150 FT-LBS OR GREATER. MANUFACTURER IS NOT RESPONSIBLE FOR SOIL QUALITY AT SITE.
4. HELICAL ANCHORS CAN ONLY BE USED FOR CLASS 2, 3 & 4 SOILS (SEE SOIL CLASSIFICATIONS THIS PAGE).
5. ALL POSTS WITH NO ANCHORS ADJACENT SHALL BE ANCHORED TO THE GROUND WITH A 1/2" X 30" LG. ROD. RODS WILL HAVE A PRE-FORMED HEAD AT THE TOP AND ONE COAT OF RUST PROOF MATERIAL.
6. ASSUMED SOIL BEARING CAPACITY IS TO BE A MIN. OF 1500 PSF.

SOIL CLASSIFICATIONS:

- | SOIL CLASS | DESCRIPTION |
|------------|--|
| 2 | SANDY GRAVEL AND GRAVEL, VERY THIN DENSE AND/OR CEMENTED SANDS, COARSE GRAVEL/COBBLES, PRELOADED SILTS, CLAYS AND CORAL. |
| 3 | SAND, SILTY SAND, CLAYEY SAND, SILTY GRAVEL, MEDIUM DENSE COARSE SANDS, SANDY GRAVEL, VERY STIFF SILT AND SANDY CLAYS. |
| 4 | LOOSE TO MEDIUM DENSE SANDS, FIRM TO STIFF CLAYS AND SILTS AND ALLUVIAL FILLS. |



OPTION 2: ROCK / ASPHALT ANCHORS

SCALE: NTS