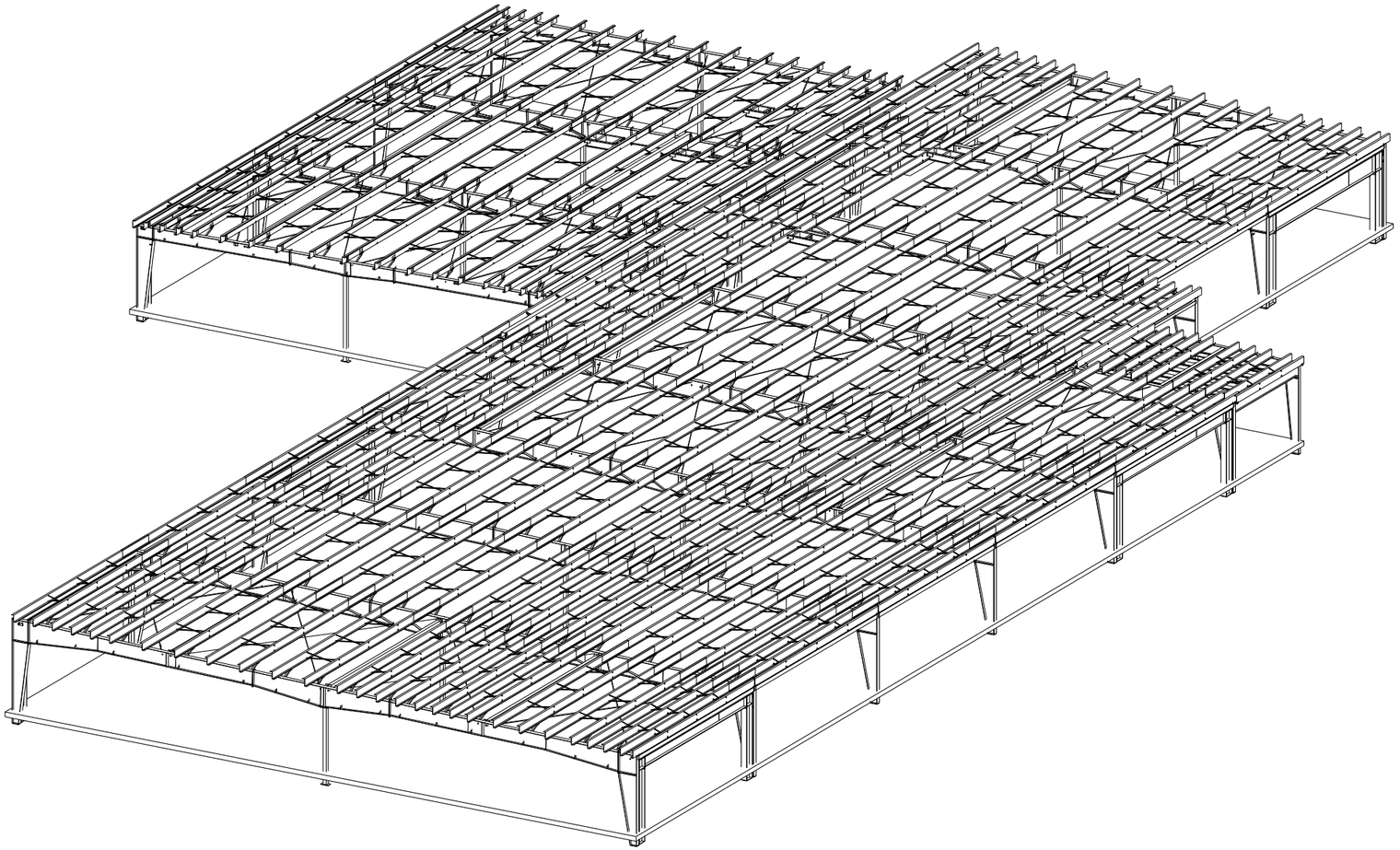
NUCOR BUILDING SYSTEMS

JOB NUMBER
T25U0346A
PROJECT NAME
CYL-HUB1-1,2,&3
COUNTY:
WASHINGTON

DRAWING TITLE	SHEET NUMBER
COVER SHEETS	C1 ~ C4
ANCHOR ROD PLANS	F1 ~ F7
PLANS AND ELEVATIONS	E1 ~ E46
STRUCTURAL DETAILS	D1 ~ D6
SHEETING PLANS AND ELEVATIONS	S1 ~ S19
SHEETING DETAILS	SD1 ~ SD9



FOR BUILDING ERECTION
THIS IS NOT AN APPROVAL SET,
YOUR BUILDING IS BEING FABRICATED.
NO CHANGES CAN BE MADE.
04/02/2026

Engineering performed under Nucor Buildings Group-Texas CA #5642

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
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09/08/2025 03:29:27pm

JOB NUMBER: T25U0346A
ADDRESS: WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE: COVERSHEET
SHEET: C1

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
1	PERMITS	TAK / JMW	WZ	09/06/2025

GENERAL NOTES:

1. MATERIALS

MATERIALS	ASTM DESCRIPTION	MATERIALS	ASTM DESCRIPTION
STRUCTURAL STEEL PLATE	AS529 / A572 / A1011	ROOF AND WALL SHEETING	A653 / A792
HOT ROLLED MILLS SHAPES	A36 / A529 / A572 / A500	BOLTS	A307 / A325 / A490
HSS ROUND	A500	CABLE	A475
HSS RECTANGULAR	A500	RODS	A529 / A572
COLD FORM SHAPES	A653 / A1011		

2. STRUCTURAL PRIMER NOTE:
SHOP COAT PRIMER IS INTENDED TO PROTECT THE STEEL FRAMING FOR A SHORT PERIOD OF TIME. STORAGE IN EXTREME COLD TEMPERATURES OR WINTER SNOW CONDITIONS, INCLUDING TRANSPORTATION ON SALTED OR CHEMICALLY TREATED ROADS WILL ADVERSELY AFFECT THE DURABILITY AND LONGEVITY OF THE PRIMER. THE COAT OF SHOP PRIMER DOES NOT PROVIDE THE UNIFORMITY OF APPEARANCE, OR THE DURABILITY AND CORROSION RESISTANCE OF A FIELD APPLIED FINISH COAT OF PAINT OVER A SHOP PRIMER. MINOR ABRASIONS TO THE SHOP COAT PRIMER CAUSED BY HANDLING, LOADING, SHIPPING, UNLOADING AND ERECTION ARE UNAVOIDABLE AND ARE NOT THE RESPONSIBILITY OF THE METAL BUILDING MANUFACTURER. METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR THE DETERIORATION OF THE PRIMER OR CORROSION THAT MAY RESULT FROM ATMOSPHERIC AND ENVIRONMENTAL CONDITIONS NOR THE COMPATIBILITY OF THE PRIMER TO ANY FIELD APPLIED COATING.

3. BUILDING ERECTION NOTES:
THE GENERAL CONTRACTOR AND/OR ERECTOR IS RESPONSIBLE TO SAFELY AND PROPERLY ERECT THE METAL BUILDING SYSTEM IN CONFORMANCE WITH THESE DRAWINGS, OSHA REQUIREMENTS AND EITHER MBMA OR CSA S16 STANDARDS PERTAINING TO PROPER ERECTION. TEMPORARY SUPPORTS SUCH AS GUYS, BRACES, FALSEWORK, CRIBBING OR OTHER ELEMENTS FOR ERECTION ARE TO BE DETERMINED, FURNISHED AND INSTALLED BY THE ERECTOR. THESE SUPPORTS MUST SECURE THE STEEL FRAMING, OR PARTLY ASSEMBLED STEEL FRAMING, AGAINST LOADS COMPARABLE IN INTENSITY TO THOSE FOR WHICH THE STRUCTURE WAS DESIGNED IN ADDITION TO LOADS RESULTING FROM THE ERECTION OPERATION. SECONDARY WALL AND ROOF FRAMING (PURLINS, GIRTS AND/OR JOIST) ARE NOT DESIGNED TO FUNCTION AS A WORKING PLATFORM OR TO PROVIDE AS AN ANCHORAGE POINT FOR A FALL ARREST /SAFETY TIE OFF.

4. SPECIAL INSPECTION:
SPECIAL INSPECTIONS AND TESTING THAT MAY BE REQUIRED BY GOVERNMENTAL OR OTHER AUTHORITY DURING CONSTRUCTION AND/OR STEEL FABRICATION (COLLECTIVELY, "INSPECTIONS") ARE NOT THE RESPONSIBILITY OF NBG, AND TO THE EXTENT REQUIRED IT SHALL BE THE RESPONSIBILITY OF THE BUILDER AND/OR OWNER. IN THE EVENT THE INSPECTIONS ARE REQUIRED, THE BUILDER AND/OR OWNER SHALL EMPLOY A THIRD PARTY QUALITY ASSURANCE TESTING AGENCY APPROVED BY THE RELEVANT AUTHORITY. IF SUCH REQUIREMENTS ARE NOT SPECIFICALLY INCLUDED IN NBG SALES DOCUMENTS, NO INSPECTIONS BY NBG OR AT ANY NBG FACILITY SHALL BE MADE. ALL NBG FACILITIES ARE ACCREDITED BY IAS AC472.

5. A325 & A490 BOLT TIGHTENING REQUIREMENTS:
IT IS THE RESPONSIBILITY OF THE ERECTOR TO ENSURE PROPER BOLT TIGHTNESS IN ACCORDANCE WITH APPLICABLE REGULATIONS. FOR PROJECTS IN THE UNITED STATES SEE THE RCSC SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS OR FOR PROJECTS IN CANADA, SEE THE CAN/CSA S16 LIMIT STATES DESIGN OF STEEL STRUCTURES FOR MORE INFORMATION.

THE FOLLOWING CRITERIA MAY BE USED TO DETERMINE THE BOLT TIGHTNESS (I.E., "SNUG-TIGHT" OR "FULLY-PRETENSIONED"), UNLESS REQUIRED OTHERWISE BY LOCAL JURISDICTION OR CONTRACT REQUIREMENTS:

A) ALL A490 BOLTS SHALL BE "FULLY-PRETENSIONED".
B) ALL A325 BOLTS IN PRIMARY FRAMING (RIGID FRAMES AND BRACING) MAY BE "SNUG-TIGHT", EXCEPT AS FOLLOWS: "FULLY-PRETENSION"A325 BOLTS IF:
   a) BUILDING SUPPORTS A CRANE SYSTEM WITH A CAPACITY GREATER THAN 5 TONS.
   b) BUILDING SUPPORTS MACHINERY THAT CREATES VIBRATION, IMPACT OR STRESS-REVERSALS ON THE CONNECTIONS. THE ENGINEER-OF- RECORD FOR THE PROJECT SHOULD BE CONSULTED TO EVALUATE FOR THIS CONDITION.
   c) THE PROJECT SITE IS LOCATED IN A HIGH SEISMIC AREA. FOR IBC-BASED CODES, "HIGH SEISMIC AREA" IS DEFINED AS "SEISMIC DESIGN CATEGORY" OF "D", "E", OR "F". SEE THE "BUILDING LOADS" SECTION OF THIS PAGE FOR THE DEFINED SEISMIC DESIGN CATEGORY FOR THIS PROJECT.
   d) ANY CONNECTION DESIGNATED IN THESE DRAWINGS AS "A325-SC". "SLIP-CRITICAL (SC)" CONNECTIONS MUST BE FREE OF PAINT, OIL, OR OTHER MATERIALS THAT REDUCE FRICTION AT CONTACT SURFACES. GALVANIZED OR LIGHTLY RUSTED SURFACES ARE ACCEPTABLE.

C) IN CANADA, ALL A325 AND A490 BOLTS SHALL BE "FULLY PRE-TENSIONED", EXCEPT FOR SECONDARY MEMBERS (PURLINS, GIRTS, OPENING FRAMING, ETC.) AND FLANGE BRACES.

SECONDARY MEMBERS (PURLINS, GIRTS, OPENING FRAMING, ETC.) AND FLANGE BRACE CONNECTIONS MAY ALWAYS BE "SNUG-TIGHT", UNLESS INDICATED OTHERWISE IN THESE DRAWINGS.

6. GENERAL DESIGN NOTES:
1) ALL STRUCTURAL STEEL SECTIONS AND WELDED PLATE MEMBERS ARE DESIGNED IN ACCORDANCE WITH ANSI/AISC 360 "SPECIFICATIONS FOR STRUCTURAL STEEL BUILDINGS" OR THE CAN/CSA S16 "LIMIT STATES DESIGN OF STEEL STRUCTURES", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
2) ALL WELDING OF STRUCTURAL STEEL IS BASED ON EITHER AWS D1.1 "STRUCTURAL WELDING CODE – STEEL" OR CAN/CSA W59 "WELDED STEEL CONSTRUCTION (METAL ARC WELDING)", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
3) ALL COLD FORMED MEMBERS ARE DESIGNED IN ACCORDANCE WITH ANSI/AISI S100 OR THE CAN/CSA S136 "SPECIFICATIONS FOR THE DESIGN OF COLD FORMED STEEL STRUCTURAL MEMBERS", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
4) ALL WELDING OF COLD FORMED STEEL IS BASED ON AWS D1.3 "STRUCTURAL WELDING CODE – SHEET STEEL" OR CAN/CSA W59 "WELDED STEEL CONSTRUCTION (METAL ARC WELDING)", AS REQUIRED BY THE SPECIFIED BUILDING CODE.
5) ALL NUCOR BUILDING GROUP FACILITIES ARE IAS AC-472 ACCREDITED FOR DESIGN AND FABRICATION OF METAL BUILDING SYSTEMS. FOR PROJECTS IN CANADA, DESIGN AND FABRICATION ARE DONE ONLY IN FACILITIES THAT ARE ALSO CAN/CSA A660 AND W47.1 CERTIFIED.
6) IF JOISTS ARE INCLUDED WITH THIS PROJECT, THEY ARE SUPPLIED AS A PART OF THE SYSTEMS ENGINEERED METAL BUILDING AND ARE FABRICATED IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 1926.758 OF OSHA SAFETY STANDARDS FOR STEEL ERECTION, DATED JANUARY 18, 2001.
7) COLUMN BASE PLATES ARE DESIGNED NOT TO EXCEED THE ALLOWABLE BEARING STRESS OF CONCRETE THAT HAS A MINIMUM COMPRESSIVE STRENGTH OF 3000 P.S.I. AT 28 DAYS.

7. GLOSSARY OF ABBREVIATIONS:

APL = A-PANEL FOR THE LINER
APS = A-PANEL FOR THE SOFFIT
APW = A-PANEL FOR THE WALL
A.R. = ANCHOR RODS
BS = BOTH SIDES
B.U. = BUILT-UP
CFR = CONCEALED FASTENED ROOF PANEL
DIA = DIAMETER
FLG = FLANGE
F.S = FAR SIDE
GA. = GAUGE
H.S.B. = HIGH STRENGTH BOLTS
HT. = HEIGHT
LLV = LONG LEG VERTICAL
LSN = LOC SEAM NON-SWAGED ROOF PANELS
LSS = LOC SEAM SWAGED ROOF PANELS
MAX = MAXIMUM
M.B. = MACHINE BOLTS
MBS = METAL BUILDING SUPPLIER
MIN = MINIMUM
N/A = NOT APPLICABLE
NIC = NOT IN CONTRACT
N.S. = NEAR SIDE
O.A.L. = OVERALL LENGTH
O.C. = ON CENTER
PL = PLATE
REQ'D = REQUIRED
REV. = REVISION
RPL = R-PANEL FOR THE LINER
RPR = R-PANEL FOR THE ROOF
RPS = R-PANEL FOR THE SOFFIT
RPW = R-PANEL FOR THE WALL
RRL = REVERSE R-PANEL FOR THE LINER
RRS = REVERSE R-PANEL FOR THE SOFFIT
RRW = REVERSE R-PANEL FOR THE WALL
SL = STEEL LINE
SLV = SHORT LEG VERTICAL
SIM = SIMILAR
SS2 = STANDING SEAM II ROOF PANEL
SS3 = STANDING SEAM 360 ROOF PANEL
TBD = TO BE DETERMINED
TYP = TYPICAL
U.N.O. = UNLESS NOTED OTHERWISE

?? = PART MARK TO BE DETERMINED AND WILL BE UPDATED ON CONSTRUCTION DRAWINGS

BUILDING INFORMATION

PRIMER COLORS
PRIMARY PRIMER COLOR: HOT DIPPED SECONDARY PRIMER COLOR: GALVANIZED

ROOF SHEETING
TYPE: LOC SEAM 360 GAUGE: 24 FINISH: TBK CLIP TYPE: TALL
THERMAL BLOCKS: YES EPS FOAM SPACER: No ROOF LINE TRIM, PAINTED: TBK
YES☒ NO☐ DOWNSPOUTS PAINTED: TBK GUTTERS PAINTED: TBK
YES☒ NO☐ INSULATION 4" INCH (NOT BY MBS)
YES☐ NO☒ PIPE JACKS, SIZE: QUANTITY:
YES☐ NO☒ RIDGE VENTS, 10'-0" LONG X 9" THROAT. QUANTITY:
YES☒ NO☐ ROOF FRAMED OPENINGS, SEE ROOF FRAMING PLAN FOR SIZES
YES☐ NO☒ COMPOSITE DECK, TYPE: GAUGE: FINISH:

WALL SHEETING
TYPE: Santa Fe GAUGE: 22 FINISH: TBK WAINSCOT FINISH, PAINTED: N/A
CORNER TRIM, PAINTED: TBK BASE TRIM, PAINTED: TBK WAINSCOT TRIM, PAINTED: N/A
YES☐ NO☒ WALKDOORS, QUANTITY: PAINTED: WAINSCOT CORNER TRIM, PAINTED: N/A
YES☐ NO☒ WINDOWS, QUANTITY: PAINTED:
YES☐ NO☒ INSULATION INCH (NOT BY MBS)

PARAPET BACKER SHEETING
TYPE: N/A GAUGE: N/A FINISH: N/A
CORNER TRIM, PAINTED: N/A

WALL FRAMED OPENINGS
YES☒ NO☐ FRAMED OPENING TRIM, PAINTED: TBK COVER TRIM, PAINTED: N/A

AREA A.1 SIZES:
FSW: (8) 3'-6" X 6'-2"
BSW: (1) 7'-0" X 7'-8" (2) 3'-6" X 7'-8" (7) 3'-6" X 6'-2"
LEW: (2) 7'-0" X 7'-8"
REW:

AREA A.2 SIZES:
FSW: (2) 3'-6" X 6'-2" (1) 10'-6" X 7'8"
BSW:
LEW:
REW: (1) 7'-0" X 7'-8"

AREA B.1 SIZES:
FSW: (8) 3'-6" X 6'-2"
BSW:
LEW:
REW: (1) 7'-0" X 7'-8" (3) 3'-6" X 6'-2"

AREA B.2 SIZES:
FSW: (7) 3'-6" X 6'-2" (1) 3'-6" X 7'-8"
BSW:
LEW: (1) 7'-0" X 7'-8" (4) 3'-6" X 6'-2"
REW: (1) 3'-6" X 7'-8" (5) 3'-6" X 6'-2"

AREA C SIZES:
FSW: (3) 3'-6" X 6'-2"
BSW: (1) 3'-6" X 7'-8" (3) 3'-6" X 6'-2"
LEW: (8) 3'-6" X 6'-2"
REW:

BUILDING LOADS

DESIGN CODE: IBC 2018
ROOF LIVE LOAD: 20.00 PSF MBMA OCC. CLASS: II
LIVE LOAD REDUCIBLE NO
GROUND SNOW LOAD: 10.0 PSF SNOW EXP. FACTOR, Ce: 0.90
SNOW IMPORTANCE FACTOR, Is: 1.00
RAIN INTENSITY, R: 8.00 in/hr
WIND: 109 / 84 MPH (Vult) / (Vasd)
C & C PRESSURES (PSF): 32 / -40
EXPOSURE: C
UL 90 YES
Classic Roof–Const. No. 161 ; Classic Roof w/ Translucent Panel–Const. No.167 CFR Roof–Const. No.552 ; CFR Roof w/ Translucent Panel–Const. No.590 ; Composite CFR Roof–Const. No. 552A ; VR16 II Roof–Const. No.332 .
SEISMIC INFORMATION Ss: 0.125 S1: 0.072
Design Sds/Sd1: 0.133 / 0.115 Site Class: D
Seismic Imp. Factor: 1.00 Seismic Design Category: B
Analysis Procedure: Equivalent Lateral Force Procedure
Basic SFRS: Not Detailed for Seismic
Not Detailed for Seismic

NOTES:
1) COLLATERAL DEAD LOADS, UNLESS OTHERWISE NOTED, ARE ASSUMED TO BE UNIFORMLY DISTRIBUTED. WHEN SUSPENDED SPRINKLER SYSTEMS, LIGHTING, HVAC EQUIPMENT, CEILINGS, ETC., ARE SUSPENDED FROM ROOF MEMBERS, CONSULT THE M.B.S. IF THESE CONCENTRATED LOADS EXCEED 500 POUNDS (USING THE WEB MOUNT DETAIL) OR 200 POUNDS (USING THE FLANGE MOUNT DETAIL), OR IF INDIVIDUAL MEMBERS ARE LOADED SIGNIFICANTLY MORE THAN OTHERS.

2) THE DESIGN OF STRUCTURAL MEMBERS SUPPORTING GRAVITY LOADS IS CONTROLLED BY THE MORE CRITICAL EFFECT OF ROOF LIVE LOAD OR ROOF SNOW LOAD, AS DETERMINED BY THE APPLICABLE CODE.

3) Pm IS BASED ON THE MINIMUM ROOF SNOW LOAD CALCULATED PER BUILDING CODE OR THE CONTRACT SPECIFIED SNOW LOAD, WHICHEVER IS GREATER. THIS VALUE, Pm, IS ONLY APPLIED IN COMBINATION WITH THE DEAD AND COLLATERAL LOADS. ROOF SNOW IN OTHER LOADING CONDITIONS IS DETERMINED PER THE SPECIFIED BUILDING CODE.

AREA A.1			
ROOF DEAD (PSF):	5.50	ROOF SNOW Pm (PSF):	10.00
PRI. COL. (PSF):	7.00	WIND ENCLOSURE:	Enclosed
SEC. COL. (PSF):	7.00	GCpi:	+/- 0.18
SNOW Ct:	1.00	SEISMIC R:	3.00
SNOW Cs:	1.00	SEISMIC Cs:	0.044
ROOF SNOW Ps (PSF):	6.30	BASE SHEAR (KIPS):	7.93

AREA B.1			
ROOF DEAD (PSF):	5.50	ROOF SNOW Pm (PSF):	10.00
PRI. COL. (PSF):	7.00	WIND ENCLOSURE:	Enclosed
SEC. COL. (PSF):	7.00	GCpi:	+/- 0.18
SNOW Ct:	1.00	SEISMIC R:	3.00
SNOW Cs:	1.00	SEISMIC Cs:	0.044
ROOF SNOW Ps (PSF):	6.30	BASE SHEAR (KIPS):	3.59

AREA C			
ROOF DEAD (PSF):	5.50	ROOF SNOW Pm (PSF):	10.00
PRI. COL. (PSF):	7.00	WIND ENCLOSURE:	Enclosed
SEC. COL. (PSF):	7.00	GCpi:	+/- 0.18
SNOW Ct:	1.00	SEISMIC R:	3.00
SNOW Cs:	1.00	SEISMIC Cs:	0.044
ROOF SNOW Ps (PSF):	6.30	BASE SHEAR (KIPS):	4.34

AREA A.2			
ROOF DEAD (PSF):	5.50	ROOF SNOW Pm (PSF):	10.00
PRI. COL. (PSF):	7.00	WIND ENCLOSURE:	Enclosed
SEC. COL. (PSF):	7.00	GCpi:	+/- 0.18
SNOW Ct:	1.00	SEISMIC R:	3.00
SNOW Cs:	1.00	SEISMIC Cs:	0.044
ROOF SNOW Ps (PSF):	6.30	BASE SHEAR (KIPS):	2.06

AREA B.2			
ROOF DEAD (PSF):	5.50	ROOF SNOW Pm (PSF):	10.00
PRI. COL. (PSF):	7.00	WIND ENCLOSURE:	Enclosed
SEC. COL. (PSF):	7.00	GCpi:	+/- 0.18
SNOW Ct:	1.00	SEISMIC R:	3.00
SNOW Cs:	1.00	SEISMIC Cs:	0.044
ROOF SNOW Ps (PSF):	6.30	BASE SHEAR (KIPS):	5.40

CANOPY			
ROOF DEAD (PSF):	6.20	ROOF SNOW Pm (PSF):	10.00
PRI. COL. (PSF):	4.00	WIND ENCLOSURE:	PARTIALLY ENCL
SEC. COL. (PSF):	4.00	GCpi:	+/- 0.55
SNOW Ct:	1.20	SEISMIC R:	3.00
SNOW Cs:	1.00	SEISMIC Cs:	0.044
ROOF SNOW Ps (PSF):	7.56	BASE SHEAR (KIPS):	0.30

THE DRAWINGS AND THE METAL BUILDING THEY REPRESENT ARE THE PRODUCT OF THE METAL BUILDING MANUFACTURER. THE REGISTERED PROFESSIONAL ENGINEER'S SEAL PERTAINS ONLY TO THE REQUIREMENTS LISTED HEREIN FOR THE MATERIALS DESIGNED AND SUPPLIED BY THE METAL BUILDING MANUFACTURER. THE REGISTERED PROFESSIONAL ENGINEER WHOSE SEAL APPEARS ON THESE DRAWINGS IS EMPLOYED OR ENGAGED BY THE METAL BUILDING MANUFACTURER AND DOES NOT SERVE AS OR REPRESENT THE PROJECT ENGINEER OF RECORD AND SHALL NOT BE CONSTRUED AS SUCH.

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
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09/09/2025 02:26:29pm

JOB NUMBER: T25U0346A
ADDRESS: WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE: BUILDING SHEET 1
SHEET: C2

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
1	PERMITS	TAK / JMW	WZ	09/08/2025

FOR OCCUPANCY (RISK) CATEGORY I OR II, IBC PROVISIONS INDICATE THAT SINGLE-STORY BUILDINGS SHALL HAVE "NO DRIFT LIMIT" PROVIDED THAT INTERIOR WALLS, PARTITIONS, CEILINGS, AND EXTERIOR WALL SYSTEMS HAVE BEEN DESIGNED TO ACCOMMODATE THE SEISMIC STORY DRIFTS. INTERIOR WALLS, PARTITIONS, CEILINGS, OR EXTERIOR WALL SYSTEMS NOT PROVIDED BY THE METAL BUILDING MANUFACTURER SHALL BE DESIGNED AND DETAILED BY OTHERS TO ACCOMMODATE THE SEISMIC STORY DRIFTS. SEISMIC DRIFT VALUES MAY BE OBTAINED FROM THE METAL BUILDING MANUFACTURER.	BCL2
THIS BUILDING SYSTEM DESIGN IS BASED ON UNIFORMLY APPLYING THE CONTRACT-SPECIFIED LIVE LOAD AND ROOF SNOW LOAD. IN ADDITION, THE DESIGN IS BASED ON APPLYING A CODE-DEFINED LIVE LOAD (INCLUDING APPLICABLE REDUCTIONS) AND A CODE-DEFINED SNOW LOAD (BASED ON CONTRACT-SPECIFIED GROUND SNOW) FOR ALL PARTIAL LOADING AND UNBALANCED SNOW LOAD CONDITIONS.	BCL4
THE BUILDING CODE REQUIRES CONSIDERATION OF SNOW SURCHARGES FOR ANY LOWER ROOF OF A STRUCTURE LOCATED WITHIN 20 ft. OF A HIGHER STRUCTURE. INFORMATION PROVIDED TO THE METAL BUILDING MANUFACTURER DOES NOT INDICATE THE PRESENCE OF A SHADOWING STRUCTURE WITHIN THIS 20 ft. ENVELOPE, THEREFORE SNOW SURCHARGES HAVE NOT BEEN CONSIDERED IN THE DESIGN.	BCL9
THE WALL SYSTEM BY OTHERS MUST WEIGH NO MORE THAN 4 PSF.	WM
THE SPANDREL BEAMS AND/OR SPANDREL CHANNELS SUPPORTING THE TOP OF THE MASONRY WALLS MUST BE ATTACHED TO THE WALLS WITH A SPACING NOT TO EXCEED 4'-0" O.C. (MAX.). THE SPANDRELS MUST ALSO BE RIGIDLY ATTACHED TO THE WALL NO MORE THAN 6" AWAY FROM EACH PAIR OF INTERMEDIATE STIFFENERS. THIS ATTACHMENT IS DESIGNED AND PROVIDED BY OTHERS (NOT BY THE METAL BUILDING MANUFACTURER). FIELD DRILLING OF THE SPANDRELS FOR A BOLTED CONNECTION (IF USED) WILL BE REQUIRED.	WB5
ROOF CURB OR EQUIPMENT PLATFORM ATTACHMENT TO THE SUPPORT PURLINS IS NOT BY THE METAL BUILDING MANUFACTURER. SPECIFIC ATTACHMENT METHODS MAY REQUIRE ADDITIONAL REINFORCEMENT OF THE SUPPORT PURLINS. DESIGN FOR ATTACHMENT, AND ANY REQUIRED REINFORCEMENT MATERIALS AND/OR LABOR IS NOT BY THE METAL BUILDING MANUFACTURER.	FA1
IF SNOW GUARDS OR OTHER DEVICES INTENDED TO HOLD SNOW AND/OR ICE ACCUMULATION ON THE ROOF SYSTEM ARE TO BE USED ON THIS PROJECT, THEY MUST BE INSTALLED UNDER THE GUIDANCE OF THE PROJECT "ENGINEER OF RECORD" (EOR), NOT THE METAL BUILDING MANUFACTURER, SO AS NOT TO EXCEED THE DESIGN ROOF SNOW LOAD ON THIS PROJECT.	RA3

NOTE: DEFLECTION CRITERIA: LATERAL DRIFT: H/400 (D+C+0.75L+0.45W) H/50 (INELASTIC SEISMIC) GIRTS: L/240 (10 yr Wind) PURLINS & RAFTERS L/240 (LL OR SL ONLY)
NOTE: A TUBE FOR FALL SUPPORT HAS BEEN SUPPLIED FOR A 5000 LB POINT LOAD IN ANY DIRECTION, HORIZONTAL & VERTICAL.
NOTE: THE HANGING ROOF OPENINGS ARE ACCOUNTED FOR AS AN ADDITIONAL 1PSF COLLATERAL LOAD.
NOTE: FOR 42" WIDE X 3" THICK METAL-SPAN SANTA FE IMP (22Ga/26Ga) THE MINIMUM SPACING IS 3'-6" ON CENTER. THE MAXIMUM ALLOWABLE SPACING IS 4'-0" ON CENTER WHEN USING FP1 CONNECTION AT EACH SUPPORT. ATTACHMENT MUST BE TO MINIMUM 16Ga THICKNESS MATERIAL.
ACCESSORIES (DOORS, WINDOWS, ECT.) NOT PROVIDED BY THE METAL BUILDING MANUFACTURER MUST BE DESIGNED AS "COMPONENTS AND CLADDING" IN ACCORDANCE WITH THE SPECIFIC WIND PROVISIONS OF THE REFERENCED BUILDING CODE DISPLAYED ON THE COVER PAGE OF THIS DRAWING PACKET.

MBMA MEMBER
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CWB CERTIFIED CSA W47.1
NUCOR Nucor Building Systems
CERTIFIED CSA A660
CSSBI
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JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	BUILDING SHEET 2
JOB DATE	05/20/2025 12:55:47pm
SHEET	C3
DATE	09/08/2025

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
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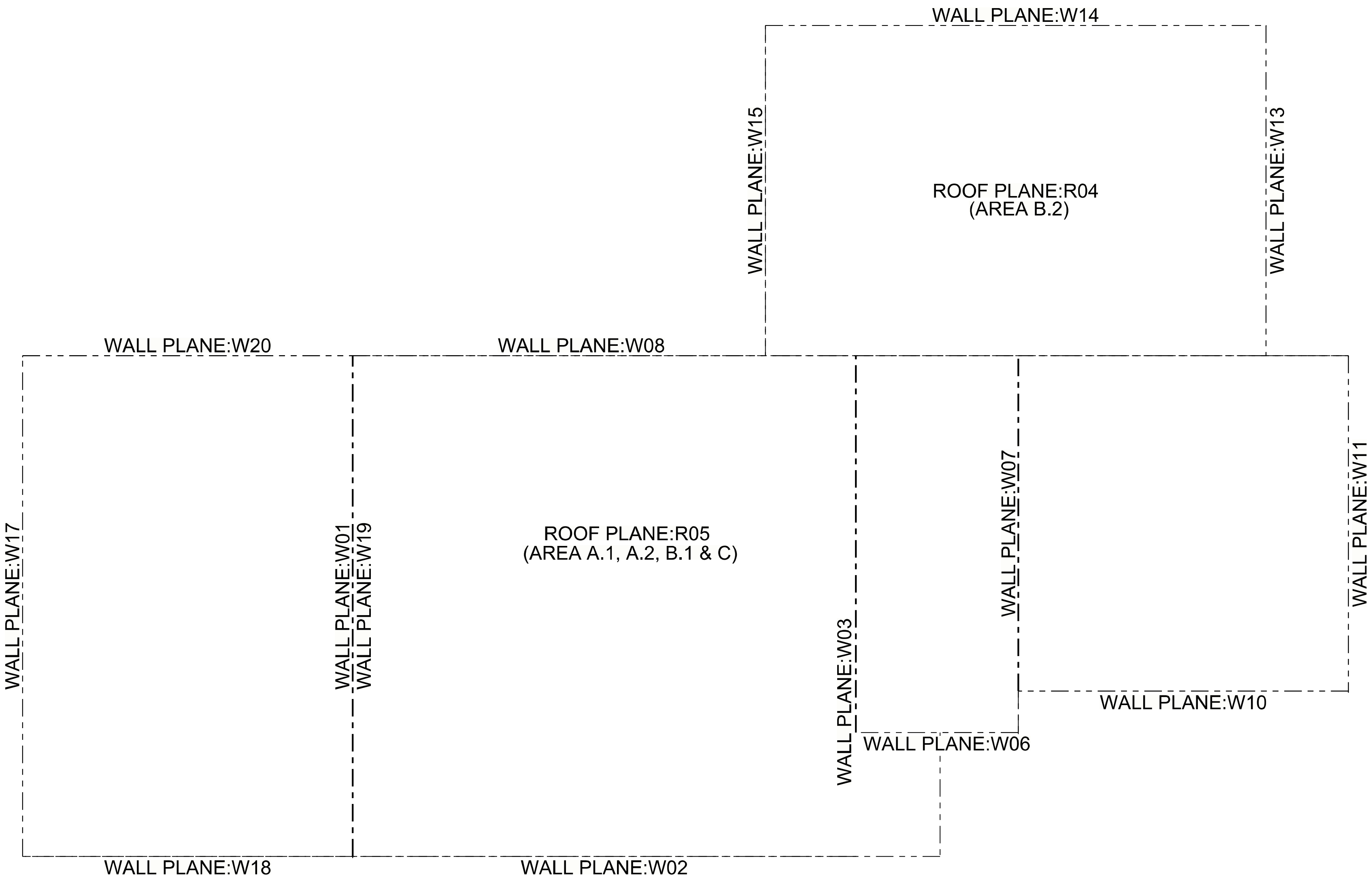
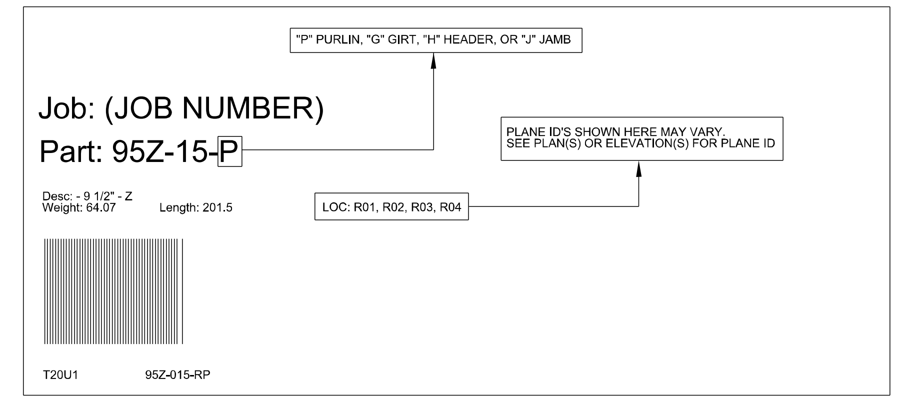


PLANE IDENTIFICATION PLAN

PART TAG:



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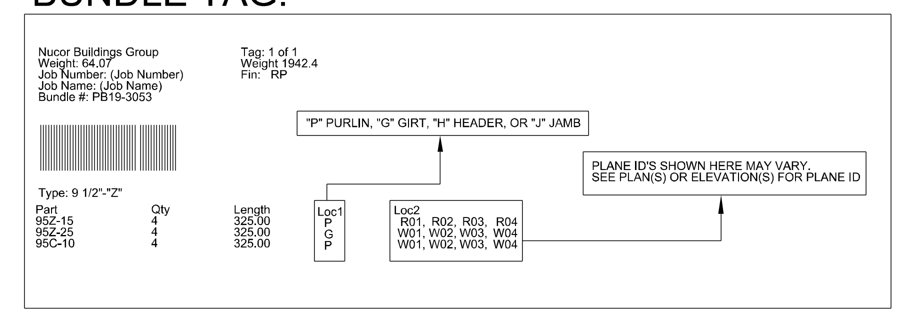

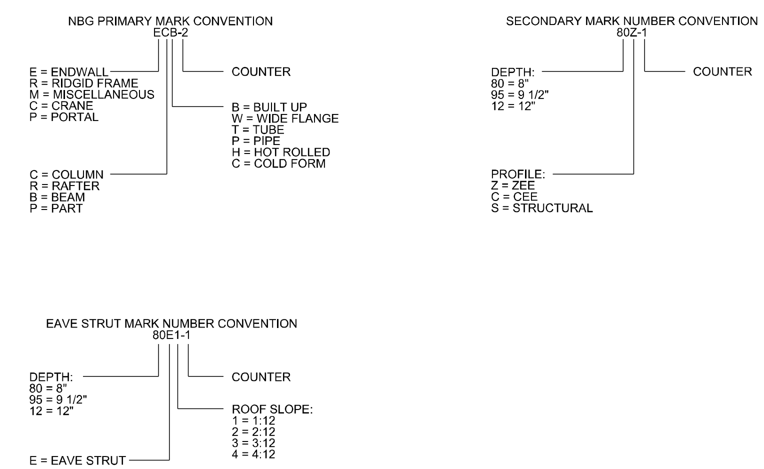

PHONE: (260) 837-7891
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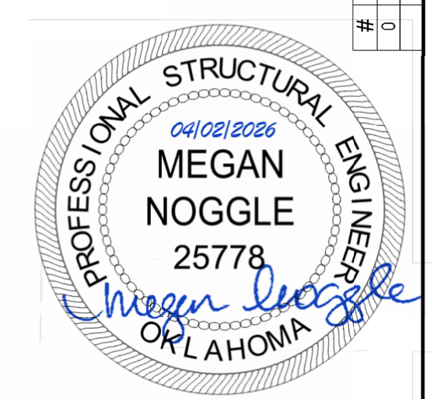
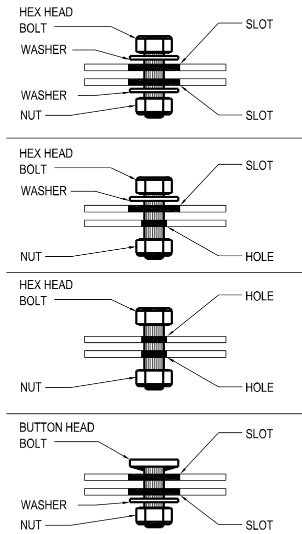
05/23/2025 09:24:16am

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
SHEET	C4
DRAWING TITLE	PLANE IDENTIFICATION PLAN

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025





SLOT TO SLOT CONNECTIONS

WASHERS REQUIRED ON BOTH SIDES OF MATERIAL IF SLOTS ARE ON BOTH SIDES. (EXCEPTION: SEE DETAIL AT RIGHT FOR LAPPED ZEE MEMBERS)

SLOT TO HOLE CONNECTIONS

ONE WASHER REQUIRED ON SLOTTED SIDE ONLY.

HOLE TO HOLE CONNECTIONS

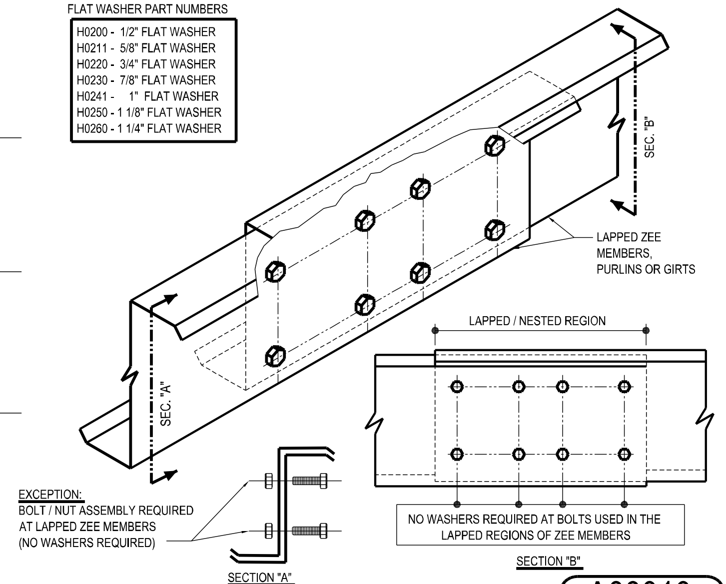
NO WASHERS REQUIRED WHEN SLOTS ARE NOT USED.

SLOT TO SLOT CONNECTIONS

WASHER REQUIRED AT NUT SIDE ONLY FOR BUTTON HEAD BOLTS. (BUTTON HEAD BOLTS HAVE MATERIAL GRABBING FINS UNDER THE HEAD, A WASHER IS NOT NEEDED ON BOLT HEAD SIDE).

FLAT WASHER PART NUMBERS

H0200 -	1/2" FLAT WASHER
H0211 -	5/8" FLAT WASHER
H0220 -	3/4" FLAT WASHER
H0230 -	7/8" FLAT WASHER
H0241 -	1" FLAT WASHER
H0250 -	1 1/8" FLAT WASHER
H0260 -	1 1/4" FLAT WASHER



WASHER REQUIREMENTS ERECTOR NOTE

(UNLESS NOTED OTHERWISE ON DRAWINGS)

A00010

FIELD WELD REQUIREMENTS ERECTOR NOTE

(UNLESS NOTED OTHERWISE ON DRAWINGS)

ALL FIELD WELDING MUST BE PERFORMED BY AWS/CWB CERTIFIED WELDERS WHO ARE QUALIFIED FOR THE WELDING PROCESSES AND POSITIONS INDICATED. ALL WORK MUST BE COMPLETED AND INSPECTED IN ACCORDANCE WITH THE APPLICABLE AWS/CWB SPECIFICATIONS. WELD ELECTRODES USED FOR THE SMAW (OR STICK) WELD PROCESS MUST BE 70 KSI/483 MPa MATERIAL AND LOW HYDROGEN CONTENT.

FIELD WELDING GALVANIZED STEEL RECOMMENDATIONS

PREPARATION OF WELD AREA

AWS D-19.0, WELDING ZINC COATED STEEL, CALLS FOR WELDS TO BE MADE ON STEEL THAT IS FREE OF ZINC IN THE AREA TO BE WELDED. FOR GALVANIZED STRUCTURAL COMPONENTS, THE ZINC COATING SHOULD BE REMOVED AT LEAST ONE TO FOUR INCHES (2.5-10 CM) FROM EITHER SIDE OF THE INTENDED WELD ZONE AND ON BOTH SIDES OF THE WORKPIECE. GRINDING BACK THE ZINC COATING IS THE PREFERRED AND MOST COMMON METHOD; BURNING THE ZINC AWAY OR PUSHING BACK THE MOLTEN ZINC FROM THE WELD AREA ALSO ARE EFFECTIVE.

TOUCH-UP OF WELD AREA

WELDING ON GALVANIZED SURFACES DESTROYS THE ZINC COATING ON AND AROUND THE WELD AREA. RESTORATION OF THE AREA WILL BE PERFORMED IN ACCORDANCE WITH ASTM A 780, STANDARD PRACTICE FOR REPAIR OF DAMAGED AND UNCOATED AREAS OF HOT-DIP GALVANIZED COATINGS, WHICH SPECIFIES THE USE OF PAINTS CONTAINING ZINC DUST, ZINC-BASED SOLDERS OR SPRAYED ZINC. ALL TOUCHUP AND REPAIR METHODS ARE CAPABLE OF BUILDING A PROTECTIVE LAYER TO THE THICKNESS REQUIRED BY ASTM A 780.

SAFETY & HEALTH

WHEN WELDING DIRECTLY ON GALVANIZED STEEL IS UNAVOIDABLE, OSHA PERMISSIBLE EXPOSURE LIMITS (PELS) MAY BE EXCEEDED AND EVERY PRECAUTION, INCLUDING HIGH-VELOCITY CIRCULATING FANS WITH FILTERS, AIR RESPIRATORS AND FUME-EXTRACTION SYSTEMS SUGGESTED BY AWS, SHOULD BE EMPLOYED.

FUMES FROM WELDING GALVANIZED STEEL CAN CONTAIN ZINC, IRON AND LEAD. FUME COMPOSITION TYPICALLY DEPENDS ON THE COMPOSITION OF MATERIALS USED, AS WELL AS THE HEAT APPLIED BY THE PARTICULAR WELDING PROCESS. IN ANY EVENT, GOOD VENTILATION MINIMIZES THE AMOUNT OF EXPOSURE TO FUMES.

PRIOR TO WELDING ON ANY METAL, CONSULT ANSI/ASC Z-49.1, SAFETY IN WELDING, CUTTING AND ALLIED PROCESSES, WHICH CONTAINS INFORMATION ON THE PROTECTION OF PERSONNEL AND THE GENERAL AREA, VENTILATION AND FIRE PREVENTION.

INFORMATION COURTESY OF AMERICAN GALVANIZERS ASSOCIATION

A00020

STANDARD ANGLE SCHEDULE

Part	Description	Legs (as drawn)	Part	Description	Legs (as drawn)
MAE0_	EAVE ANGLE GALVANIZED 4" x 5" x 120"	4", 5", ANG. (SLOPE)	MAL01	LINER LOW EAVE ANGLE GALVANIZED 6" x 7-3/4" x 120"	6", 7-3/4"
MAF0_	EAVE ANGLE GALVANIZED 5" x 8" x 120"	5", 8", ANG. (SLOPE)	MAL0_	LINER EAVE ANGLE GALVANIZED 3" x 3" x 120"	3", 3", ANG. (SLOPE)
MAG01	GIRT ANGLE GALVANIZED 1" x 2-1/2" x 12"	1", 2-1/2"	MAL_	LINER EAVE ANGLE GALVANIZED 3" x 5" x 120"	3", 5", ANG. (SLOPE)
MAG02	GIRT ANGLE GALVANIZED 1" x 2-1/2" x 24"	1", 2-1/2"	MAL1_	LINER EAVE ANGLE GALVANIZED 3" x 7-3/4" x 120"	3", 7-3/4", ANG. (SLOPE)
MAG03	GIRT ANGLE GALVANIZED 1" x 2-1/2" x 30"	1", 2-1/2"	MAP01	RAKE PARAPET ANGLE GALVANIZED 2" x 12" x 120"	2", 12"
MAG10	GIRT ANGLE GALVANIZED 1" x 2-1/2" x 120"	1", 2-1/2"	MAP02	RAKE PARAPET ANGLE GALVANIZED 6" x 6" x 120"	6", 6"
MAH0_	EAVE STRUT ANGLE GALVANIZED 1" x 2-1/2" x 12"	1", 2-1/2", ANG. (SLOPE)	MAR01	RAKE ANGLE GALVANIZED 3" x 5" x 242"	3", 5"
MAH1_	EAVE STRUT ANGLE GALVANIZED 1" x 2-1/2" x 12"	1", 2-1/2", ANG. (SLOPE)	MAR02	STANDING SEAM RAKE/ BASE ANGLE GALVANIZED 2" x 3" x 242"	2", 3"

A00030

NUCOR BUILDING SYSTEMS
MBMA MEMBER
IAS ACCREDITED Metal Building Systems AC 472
CWB CERTIFIED CSA W47.1
CERTIFIED CSA A660
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05/23/2025 09:25:51am

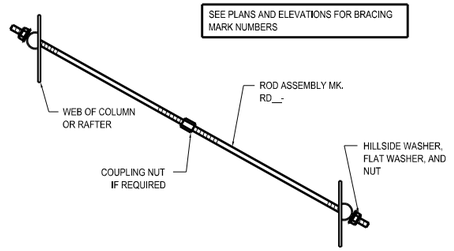
JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION
	NOT FOR ERECTION
SHEET	D1
DRAWING TITLE	GENERAL DETAILS

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN
NOGGLE
25778
OKLAHOMA

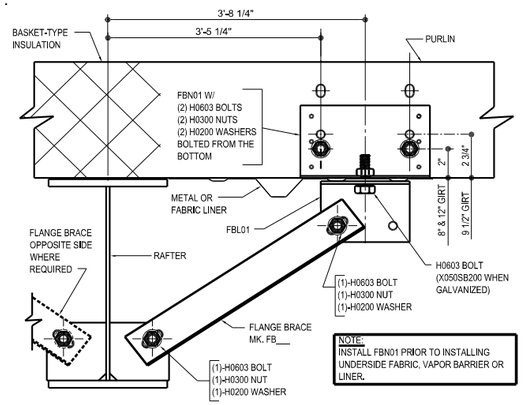
ROD DIAMETER	MARK NUMBER	HILLSIDE WASHERS	FLAT WASHERS	A307/A325 NUTS	COUPLING NUTS (QTY VARIES)
5/8" ▯	RD05-	(2) H0280	(2) H0210	(2) H0310	H0810
3/4" ▯	RD06-	(2) H0285	(2) H0220	(2) H0320	H0820
7/8" ▯	RD07-	(2) H0285	(2) H0230	(2) H0325	H0830
1" ▯	RD08-	(2) H0290	(2) H0240	(2) H0330	H0840
1 1/8" ▯	RD09-	(2) H0290	(2) H0250	(2) H0450	H0850
1 1/4" ▯	RD10-	(2) H0295	(2) H0260	(2) H0340	H0860

SEE PLANS AND ELEVATIONS FOR BRACING MARK NUMBERS



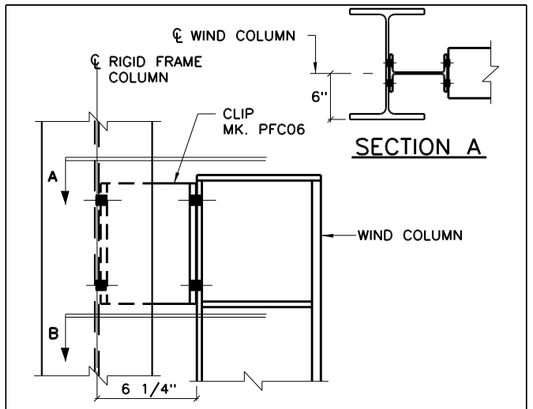
ROD BRACE DETAIL
WEB TO WEB

AF0011

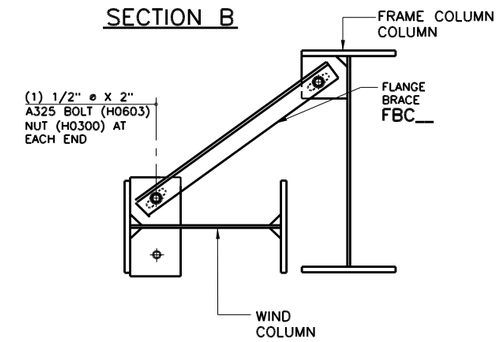


FLANGE BRACE WITH BASKET INSUL OR LINER AT RAFTER
SEE PLANS AND ELEVATIONS FOR FLANGE BRACE LOCATIONS, PART MARKS, & QUANTITIES

AG0110

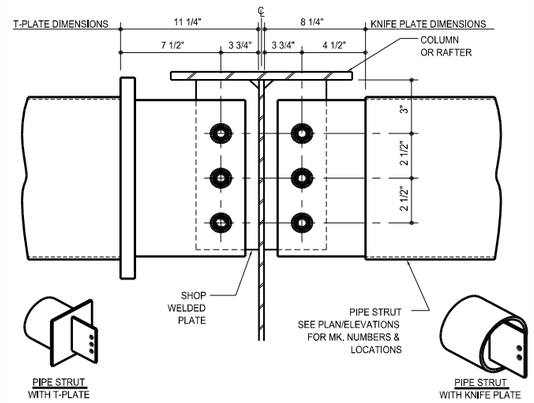


USE (8) 3/4" x 3" A325 BOLTS H0633 / NUTS H0320



PORTAL FRAME COLUMN TO RIGID FRAME
USE (2) 1/2" x 2" A325 BOLTS H0603 / NUTS H0300
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

AJ-X1



NOTE: USE (3) 1" X 3 1/4" A325 BOLTS H0640/NUTS H0330

3-BOLT 8" PIPE STRUT AT COLUMN/RAFTER
STIFFENER CONNECTION WITH 10" MIN. COLUMN/RAFTER
SEE PLANS & ELEVATIONS FOR MARK NUMBERS AND LOCATIONS

AK0170

MBMA MEMBER | IAS ACCREDITED MANUFACTURING PLANT AC172 | AWS CERTIFIED D1.1 | CERTIFIED CSA W47.1 | CERTIFIED CSA A660 | CSSBI

NUCOR BUILDING SYSTEMS

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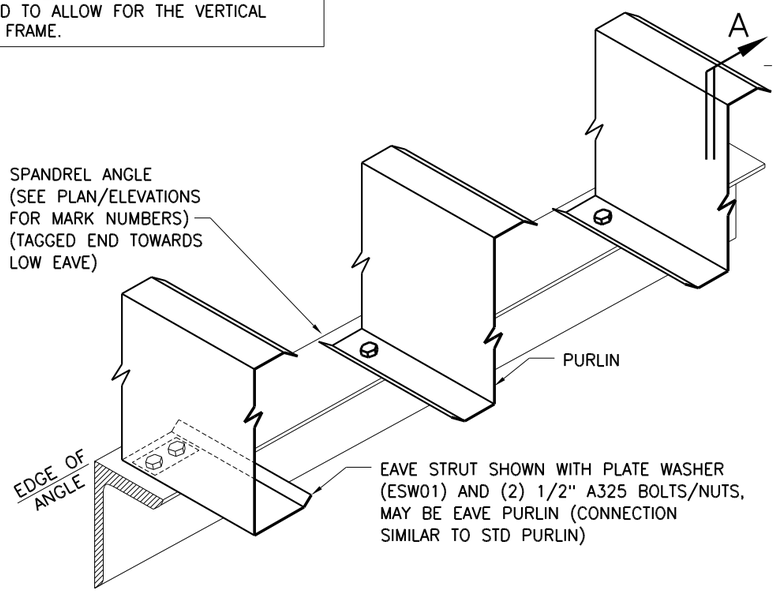
05/23/2025 09:25:53am

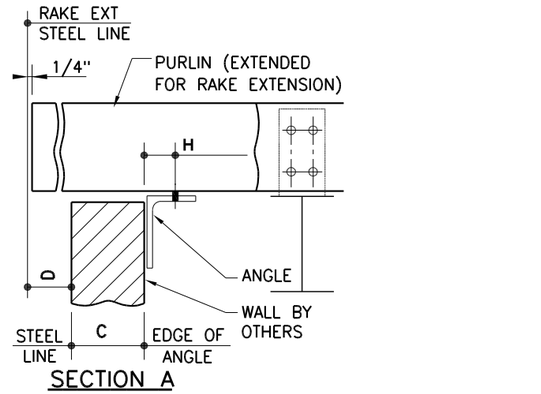
JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,83
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE PRIMARY DETAILS
SHEET D2

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SUPPLY AND DESIGN OF CONNECTION OF ANGLE TO WALL BY OTHERS NOT BY NUCOR. ATTACHMENT OF ANGLE SHOULD BE NO MORE THAN 6" AWAY FROM EACH PURLIN LOCATION. NUCOR WILL NOT PREP THE ANGLE FOR THIS ATTACHMENT TO THE WALL, HOWEVER THE ANGLE MAY NEED TO BE SLOTTED TO ALLOW FOR THE VERTICAL DEFLECTION OF THE FRAME.



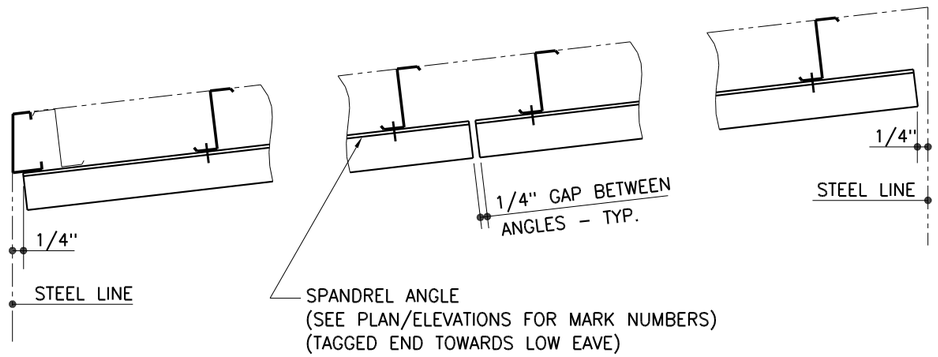


SECTION A

DOWNWARD: MAXIMUM
UNDER DESIGN LIVE LOAD: E

UPWARD: MAXIMUM
UNDER DESIGN UPLIFT: F

DEFLECTION OF FRAME
UNDER FULL DEAD LOAD: G



AT LOW EAVE AT SPLICE AT RIDGE OR HIGHSIDE

SPANDREL ANGLE DETAIL

USE (1) 1/2" x 2" A325 BOLT H0603/NUT H0300 AT EACH PURLIN LOCATION
REFERENCE ERECTOR NOTE FOR TYPICAL WASHER REQUIREMENTS

BO0410

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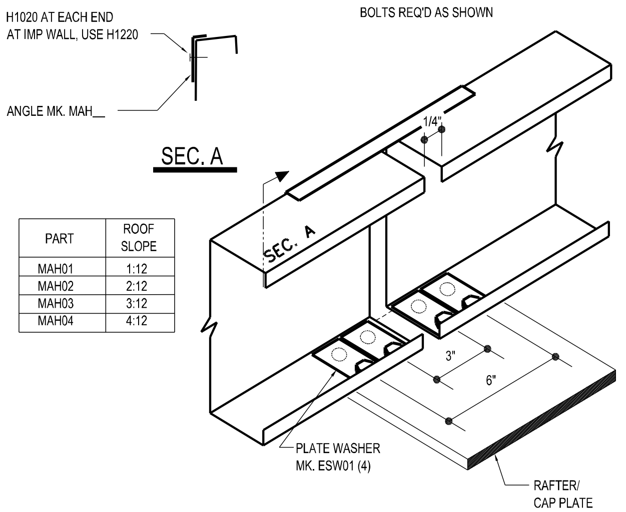
JOB NUMBER T25U0346A
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,83
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE PRIMARY DETAILS
SHEET D3
05/23/2025 09:25:54am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

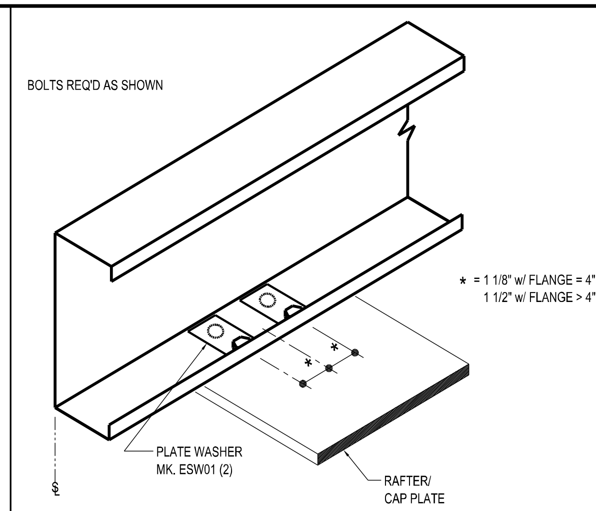


PART	ROOF SLOPE
MAH01	1:12
MAH02	2:12
MAH03	3:12
MAH04	4:12

EAVE STRUT AT INTERIOR FRAME

LOW EAVE FLUSH/INSET SW GIRT CONDITION
USE (4) 1/2" X 2" A325 BOLT H0603/NUT H0300 U.N.O.

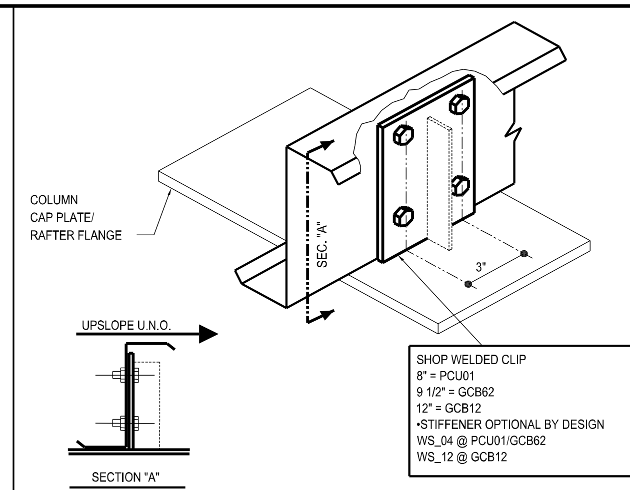
BA0010



EAVE STRUT AT ENDWALL FRAME

LOW EAVE - FLUSH/INSET SW GIRT CONDITION
USE (2) 1/2" x 2" A325 BOLT H0603/NUT H0300 U.N.O.

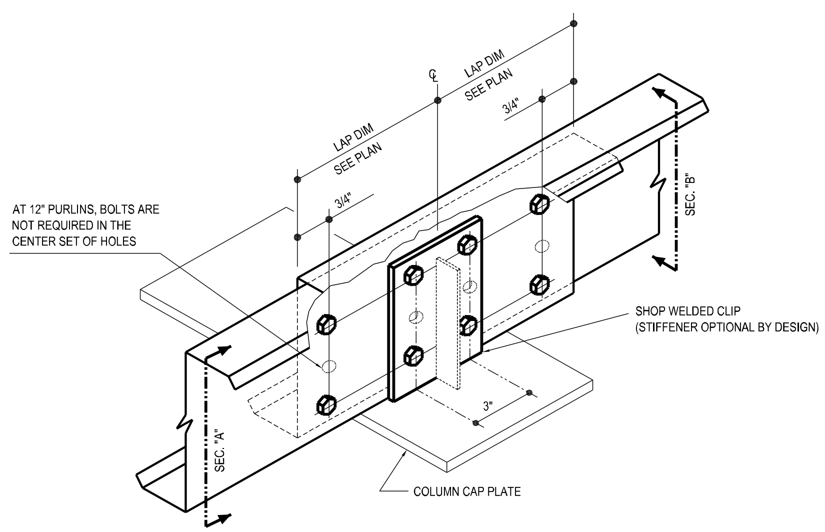
BA0040

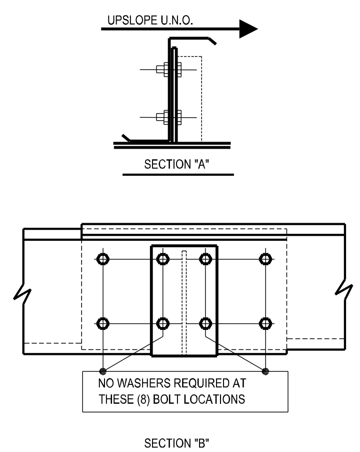


WELDED CLIP @ END FRAME

USE (4) 1/2" x 1 1/4" A307 BOLTS H0500/NUTS H0400 U.N.O.
REFERENCE ERECTOR NOTE FOR TYP. WASHER REQUIREMENTS

BB0050





WELDED CLIP @ INTERIOR FRAME

USE (8) 1/2" x 1 1/4" A307 BOLTS H0500/NUTS H0400 U.N.O.

BB0055

MBMA MEMBER
IAS ACCREDITED
CWB CERTIFIED CSA W47.1
CERTIFIED CSA A660
CSSBI
NUCOR BUILDING SYSTEMS
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05/23/2025 09:25:55am

JOB NUMBER
T25U0346A
PROJECT NAME
CYL-HUB1-1,2,&3
BUYER NAME
DLR GROUP
DRAWING STATUS
FOR CONSTRUCTION
ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055
NOT FOR ERECTION
SHEET
D4
DRAWING TITLE
ROOF FRAMING DETAILS

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN
NOGGLE
25778
OKLAHOMA

INSTALLATION INSTRUCTIONS

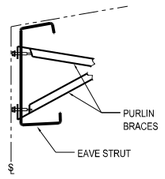
1) FOR PURLIN BRACE "X", INSERT ANGLES "BACK-TO-BACK" INTO THE FACTORY PUNCHED SLOTS. BEND TABS AS SHOWN AND FASTEN THROUGH TAB WITH (1) H1020 FASTENER PER END. WHEN IMP WALL IS PRESENT, USE H1220 AT STEEL LINE WITH EAVE STRUTS.

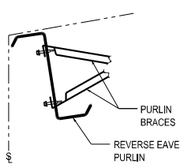
2) CONNECT PURLIN BRACE "X" AT THE ANGLE INTERSECTION WITH (1) H1020 FASTENER.

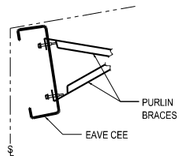
3) PURLIN BRACING IS NOT TO DISTORT OR ALTER PURLINS FROM THEIR INTENDED SHAPE OR LOCATION.

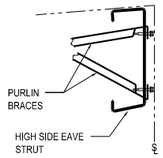
4) SEE DETAILS BELOW FOR ADDITIONAL INFORMATION WHEN ATTACHING TO ALTERNATE FRAMING MEMBERS.

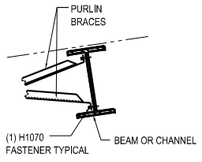
5) IF A BRACE IS USED IN A SPACING THAT IS LESS THAN 1'-3", THEN THE BRACE WILL BE SUPPLIED AT 1'-3". ERECTOR TO FIELD CUT AND CREATE A TAB AS NEEDED TO FIT IN SMALL SPACE.



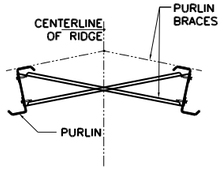




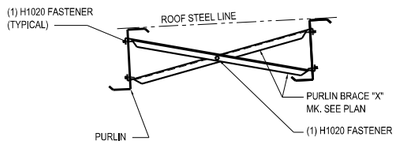


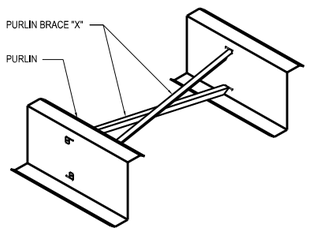


NOTE: IF CHANNEL, IT MAY BE TOED UP OR DOWN.



PURLIN BRACING ATTACHMENT METHODS



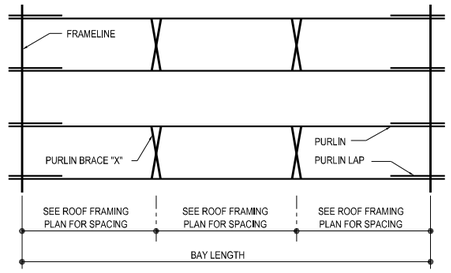


NOTE: PURLIN BRACING ATTACHMENT METHOD IS THE SAME REGARDLESS OF THE SECONDARY MEMBER TYPE (ZEE, CEE, EAVE STRUT, BEAM, ETC.)

PLAN VIEW OF PURLIN BRACING LOCATIONS PER BAY

1) SEE ROOF FRAMING PLAN(S) FOR PURLIN BRACE MARK NUMBERS, QUANTITIES AND LOCATIONS.

2) (2) ROWS OF PURLIN BRACING IS SHOWN BELOW FOR REFERENCE ONLY, ACTUAL NUMBER OF ROWS MAY VARY PER BAY AND PER PROJECT, SEE ROOF FRAMING PLAN(S) FOR SPACING.



BE0001

MBMA MEMBER
IAS ACCREDITED MANUFACTURING AC472
CWB CERTIFIED CSA W47.1
CERTIFIED CSA A660
CESSB

NUCOR BUILDING SYSTEMS
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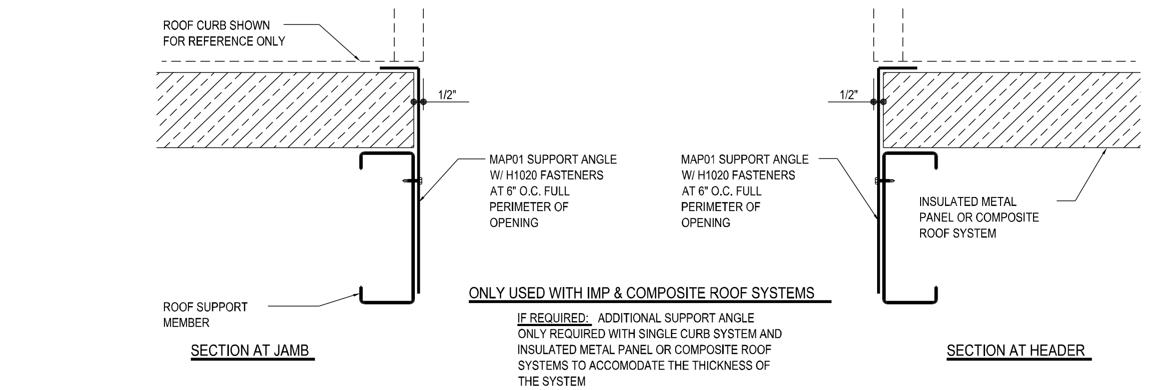
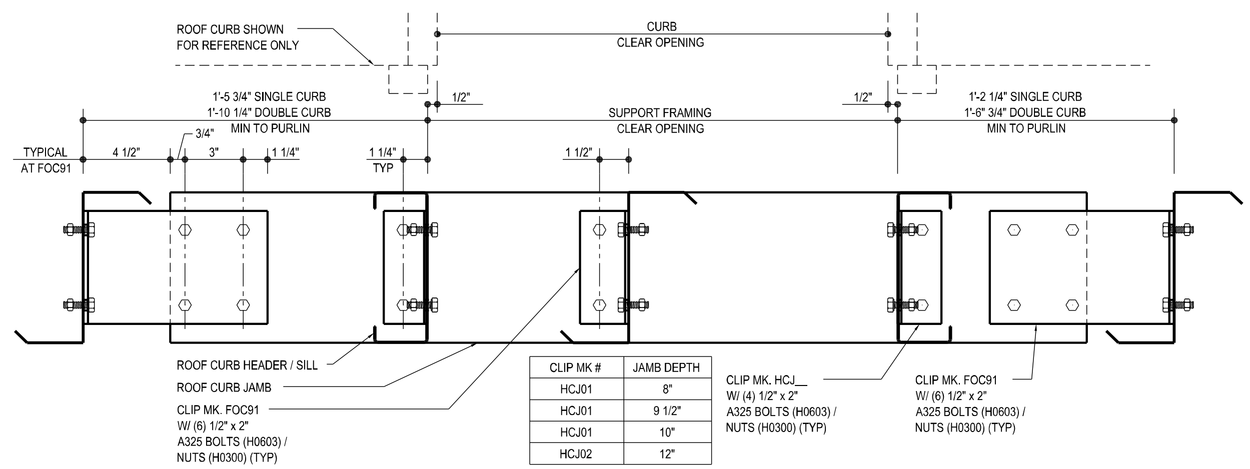
JOB NUMBER T25U0346A
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
SHEET D5
DRAWING TITLE ROOF FRAMING DETAILS
05/23/2025 09:25:56am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WIZ	09/08/2025
	PERMITS	TAK / JMW	WIZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

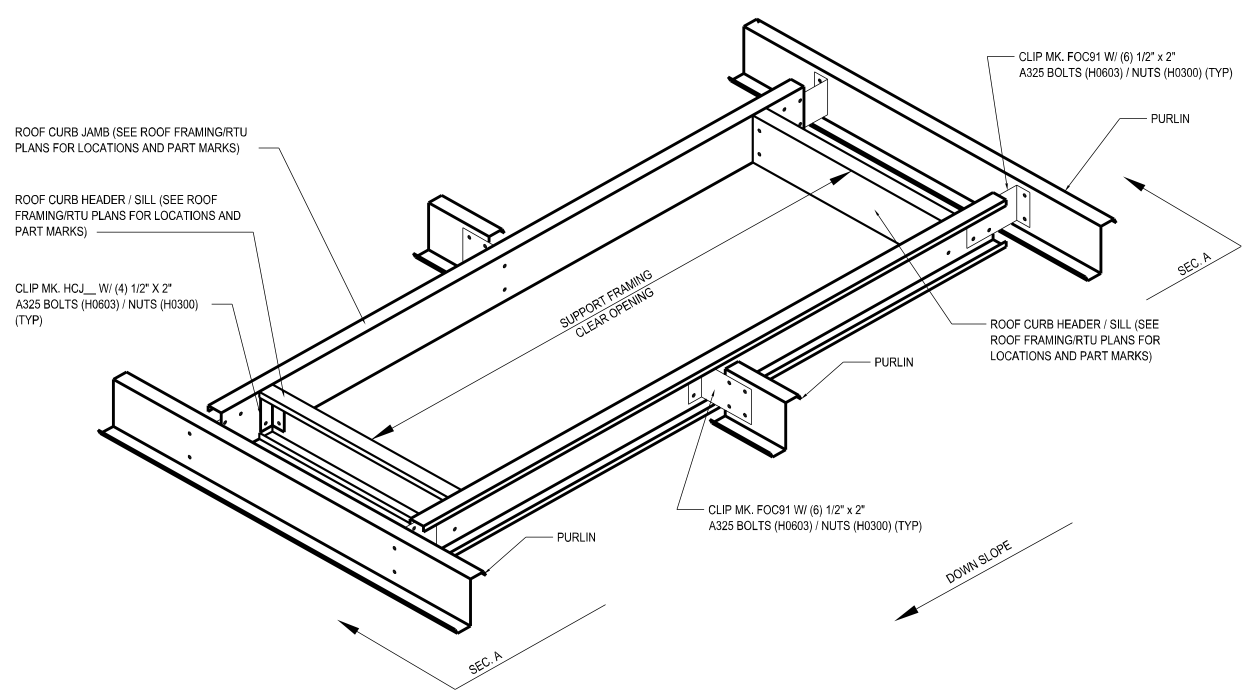




CLIP MK #	JAMB DEPTH
HCJ01	8"
HCJ01	9 1/2"
HCJ01	10"
HCJ02	12"

SECTION A

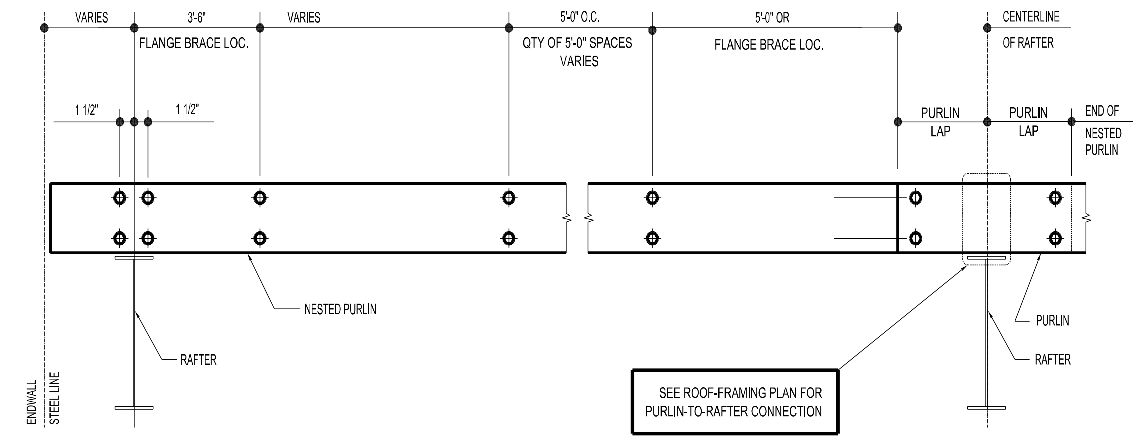
NOTE: JAMB IS FLUSH WITH TOP OF PURLINS. FOR ROOF CURBS NOT BY NBG, CONSIDERATION SHOULD BE GIVEN TO KEEP THE CURB FLANGE IN PLANE WITH THE ROOF PANEL.



RTU SUPPORT FRAMING

CUT SECONDARY MEMBERS, SUPPORT FRAMING INSTALLATION,
USED FOR ALL SINGLE AND DOUBLE CURB SYSTEMS
REFERENCE STANDARD WASHER DETAIL FOR TYPICAL WASHER REQUIREMENTS

BK0150



ENDBAY NESTED PURLIN - CONTINUOUS THROUGH LAP

BOLTS REQUIRED ONLY AS SHOWN, NOT AT ALL HOLES
USE 1/2"Ø A307 BOLTS (MK. H0500) AND NUTS (MK. H0400) AT ALL BOLTED CONNECTIONS SHOWN

BM0020

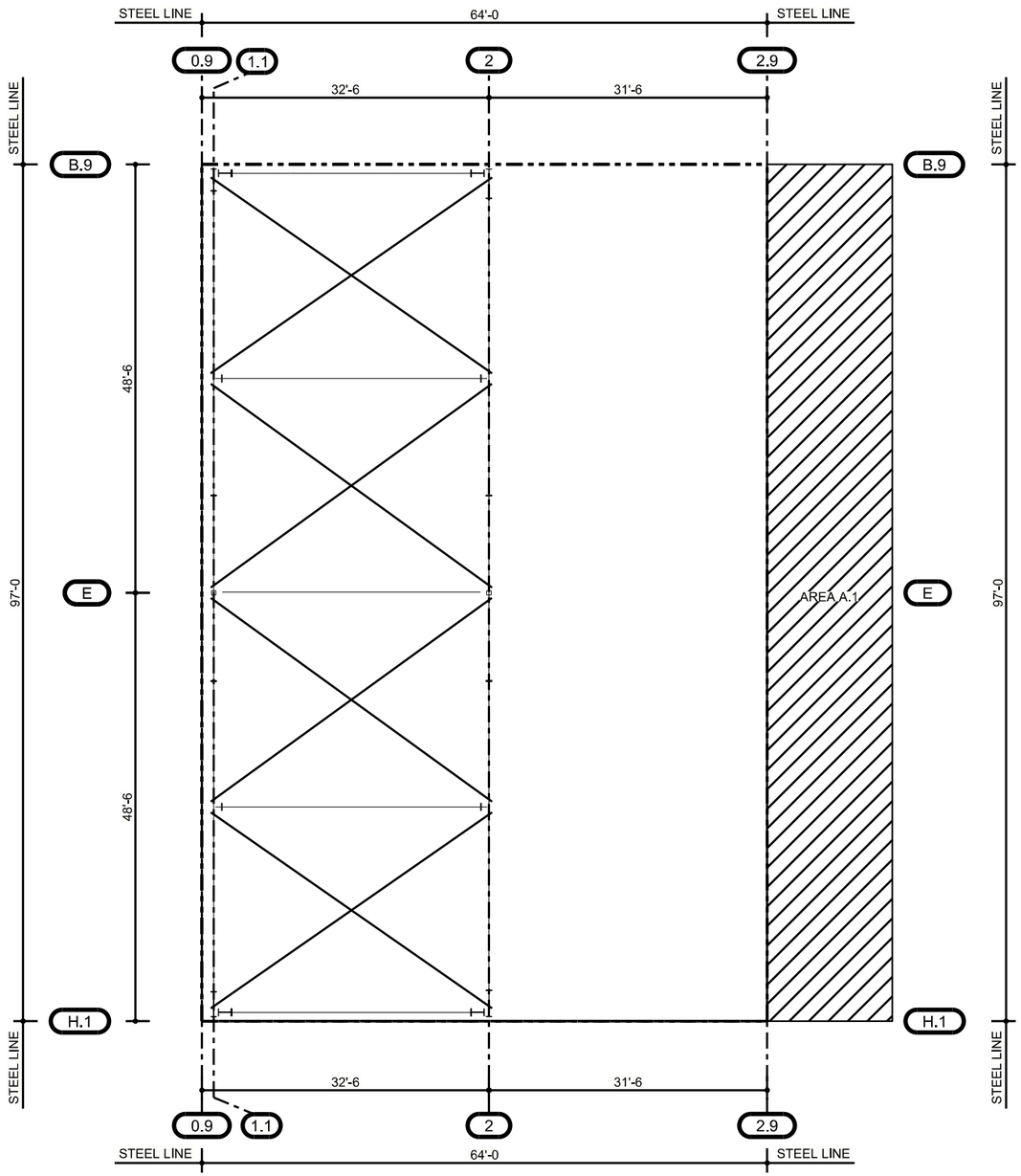
MBMA MEMBER
IAS ACCREDITED
CWB CERTIFIED CSA W47.1
CERTIFIED CSA A660
05/23/2025 09:25:57am

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER
T25U0346A
PROJECT NAME
CYL-HUB1-1,2,&3
BUYER NAME
DLR GROUP
DRAWING STATUS
FOR CONSTRUCTION
NOT FOR ERECTION
SHEET
D6
ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055
DRAWING TITLE
ROOF FRAMING DETAILS

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN
NOGGLE
25778
OKLAHOMA



PRIMARY FRAMING SHAKEOUT PLAN (AREA C)

SHAKEOUT PLAN GENERAL NOTES

SH1: PLACE WELDED METAL TAGGED END OF RAFTER TOWARD LOW EAVE.
RAFTERS CENTERED ON RIDGE. IF NOT SYMMETRICAL, "*" INDICATES THE TAGGED END.
OTHERWISE, THEY ARE SYMMETRICAL AND CAN BE ORIENTED EITHER DIRECTION.
REFERENCE CROSS SECTIONS FOR ORIENTATION OF INTERIOR COLUMNS.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION.
ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

MBMA MEMBER

IAS ACCREDITED MANUFACTURING PLANT AC431

CWB CERTIFIED CSA W47.1

NUCOR BUILDING SYSTEMS

CERTIFIED CSA A660

PHONE: (260) 837-7891
FAX: (260) 837-7384

CSSBI

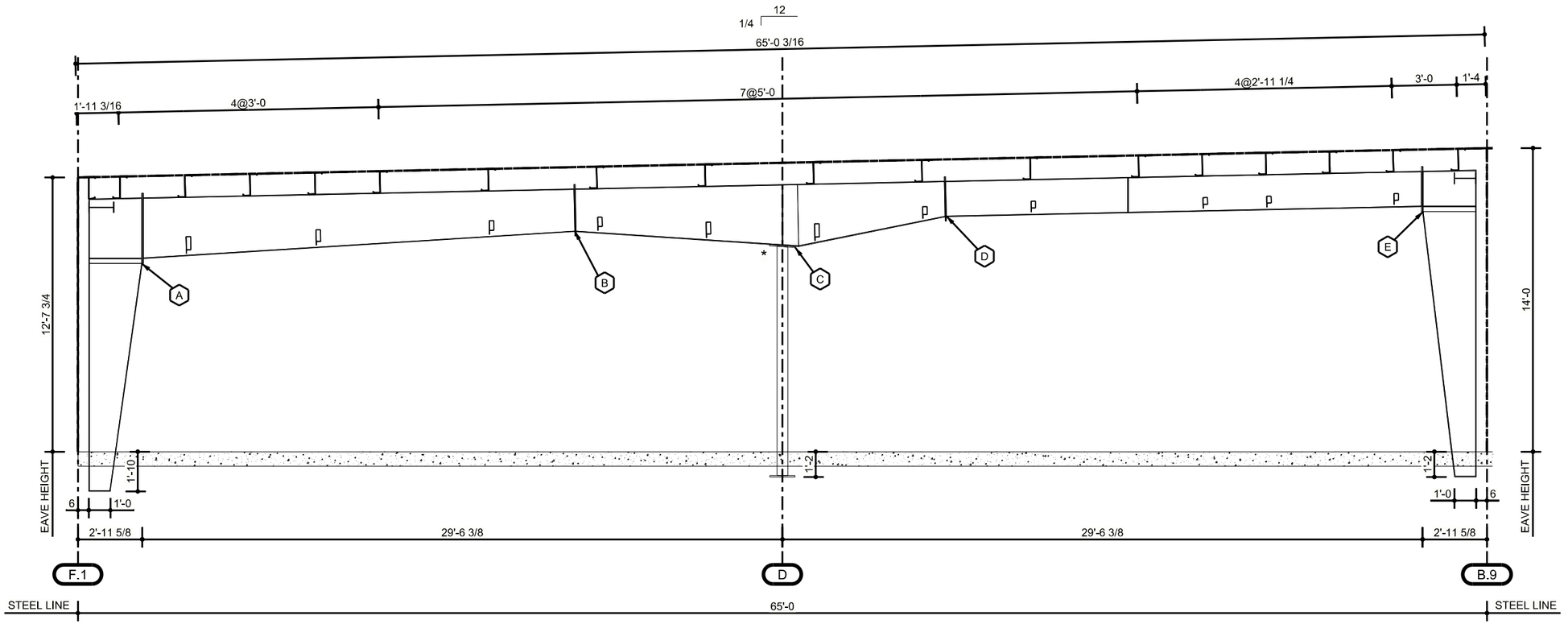
05/23/2025 09:24:26am

JOB NUMBER	**T25U0346A**
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	PRIMARY FRAMING SHAKEOUT PLAN
SHEET	E1

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 3/4" X 3" A325	H0633	H0320	8'-10 13/16	8" X 1/2	8" X 1/2
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-11 5/16	8" X 3/8	8" X 3/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	9'-5"	10" X 5/8	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-7 9/16	8" X 3/8	8" X 3/8
E	(8) 3/4" X 3" A325	H0633	H0320	11'-3 9/16	8" X 1/2	8" X 1/2



CROSS SECTION AT LINE 8 (AREA B.1)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:45am

JOB NUMBER **T25U0346A**

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,&3

BUYER NAME DLR GROUP

DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**

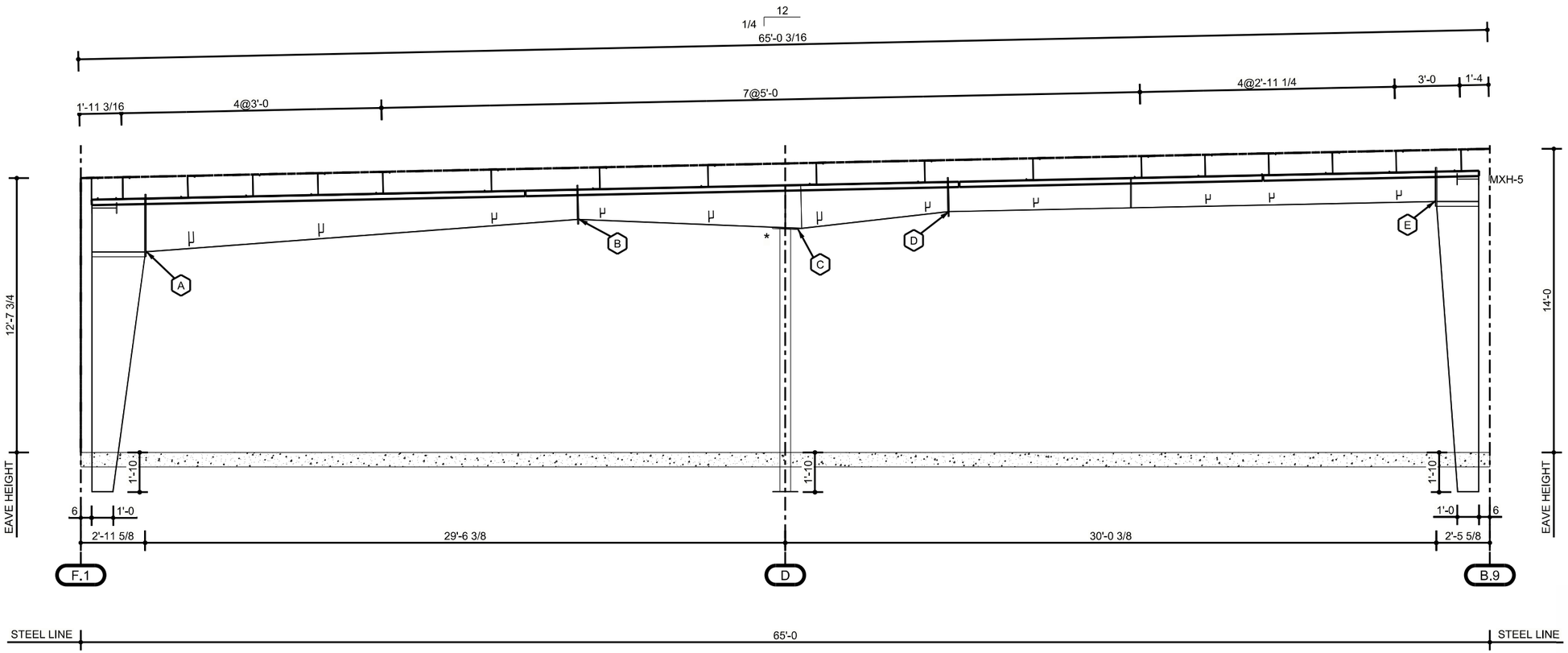
DRAWING TITLE CROSS SECTION AT LINE 8 (AREA B.1)

SHEET E10

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-2 13/16	8" X 1/2	8" X 1/2
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-6 5/16	8" X 3/8	8" X 3/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	10'-3 5/16	10" X 1/2	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-10 9/16	8" X 3/8	8" X 3/8
E	(8) 5/8" X 2 1/4" A325	H0610	H0310	11'-6 11/16	8" X 1/2	8" X 1/2



CROSS SECTION AT LINE 8.9 (AREA B.1)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:47am

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION

NOT FOR ERECTION

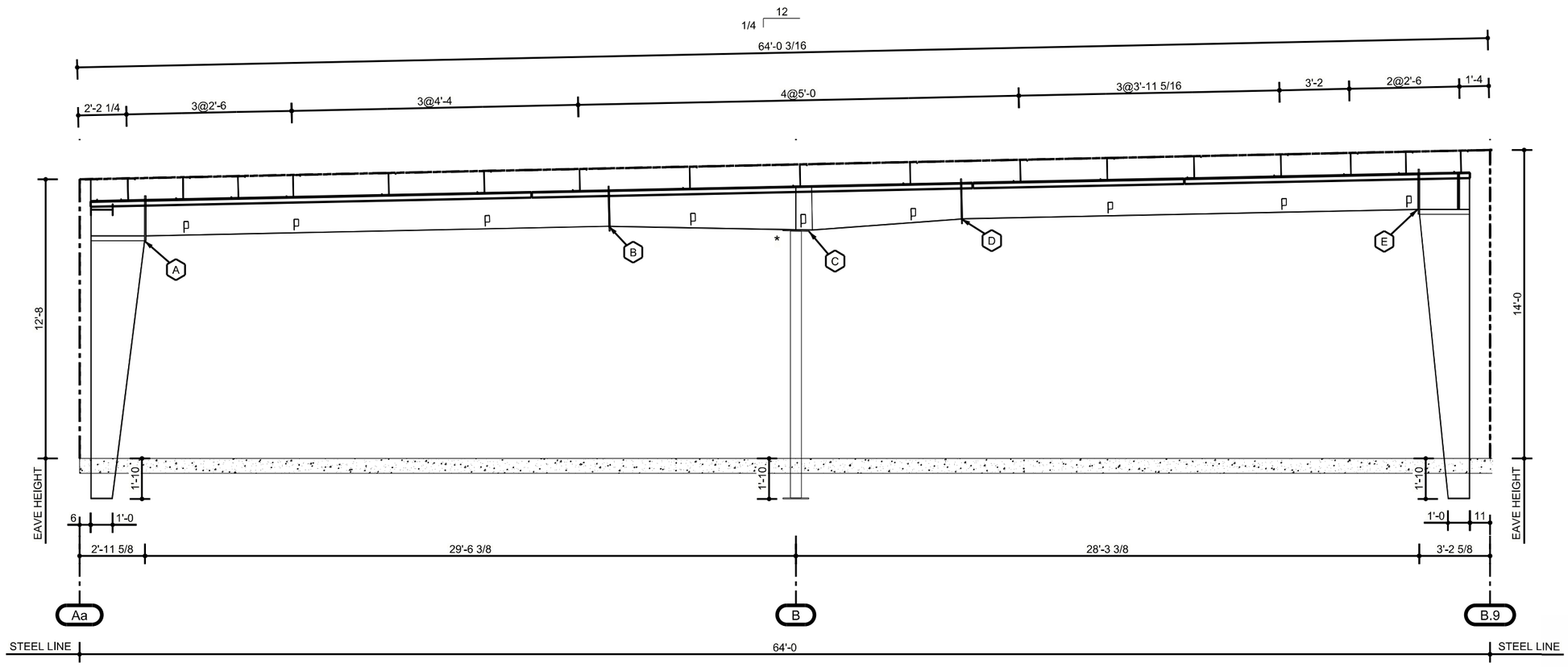
DRAWING TITLE
CROSS SECTION AT LINE 8.9 (AREA B.1)

SHEET
E11

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-1 1/16	8" X 1/2	8" X 1/2
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-3 13/16	8" X 3/8	8" X 3/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	10'-3 3/4	10" X 1/2	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-7 13/16	8" X 3/8	8" X 3/8
E	(8) 5/8" X 2 1/4" A325	H0610	H0310	11'-3 1/2	8" X 1/2	8" X 1/2



CROSS SECTION AT LINE 8.4 (AREA B.2)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:49am

JOB NUMBER **T25U0346A**

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,83

BUYER NAME DLR GROUP

DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**

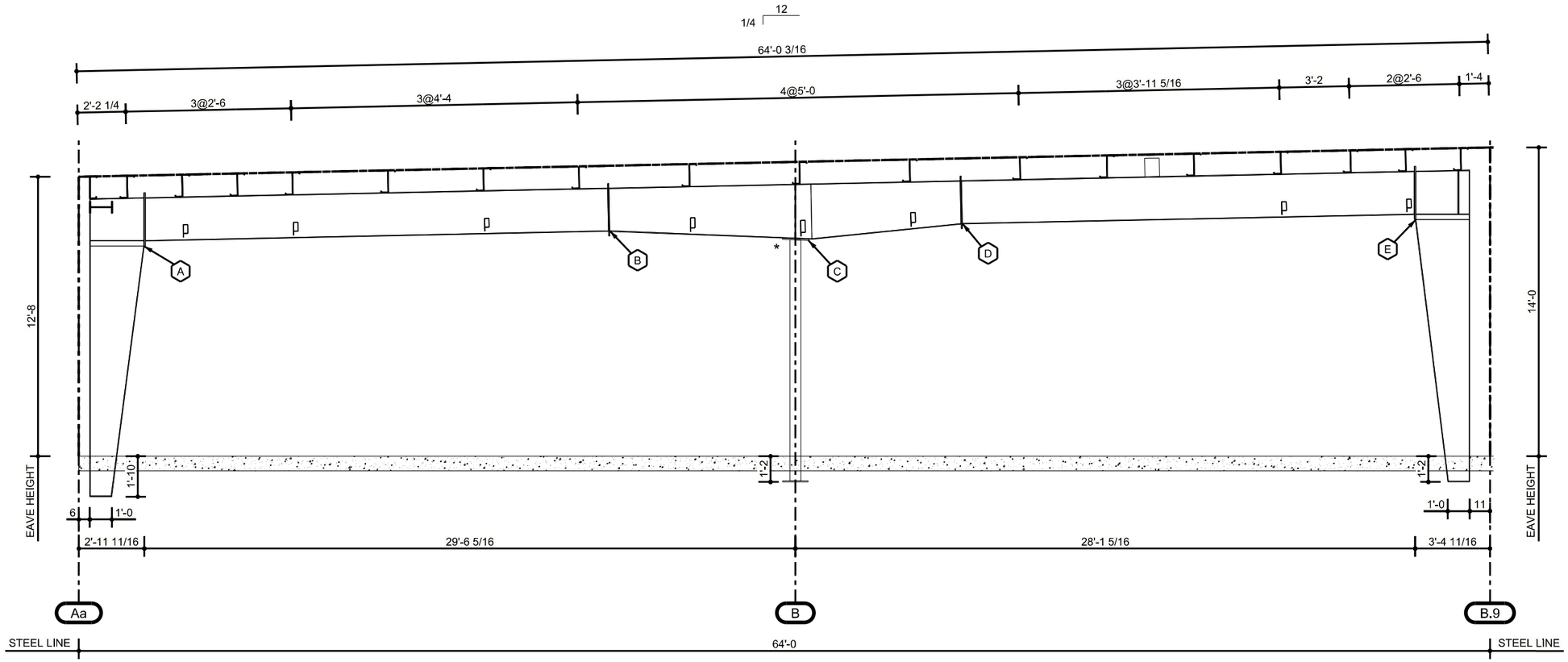
DRAWING TITLE CROSS SECTION AT LINE 8.4 (AREA B.2)

SHEET E12

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 3/4" X 3" A325	H0633	H0320	9'-9 1/16	8" X 1/2	8" X 1/2
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-11 13/16	8" X 3/8	8" X 3/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	9'-9 7/16	10" X 5/8	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-3 13/16	8" X 3/8	8" X 3/8
E	(8) 3/4" X 3" A325	H0633	H0320	10'-11 7/16	8" X 1/2	8" X 1/2



CROSS SECTION AT LINE 6.5 & 7.5 (AREA B.2)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

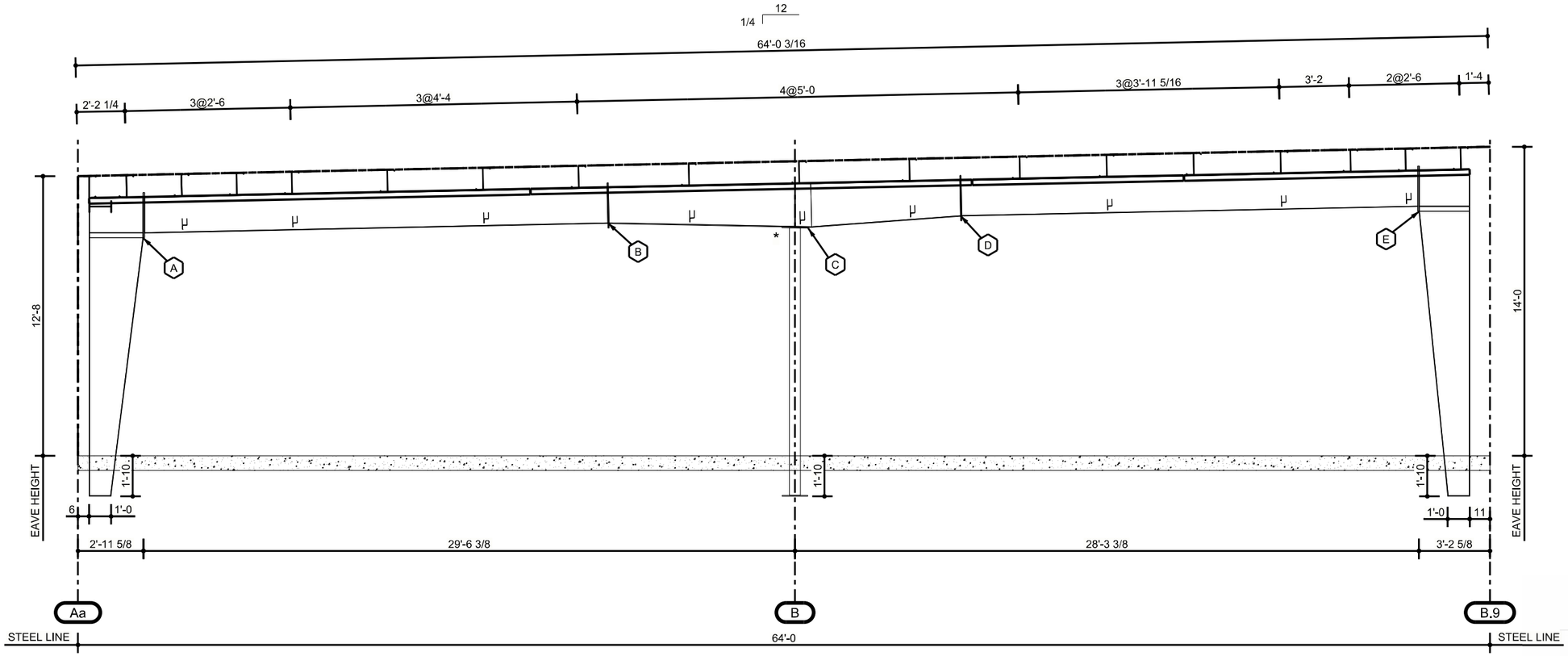
05/23/2025 09:24:50am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE CROSS SECTION AT LINE 6.5 & 7.5 (AREA B.2)
SHEET E13

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-1 1/16	8" X 1/2	8" X 1/2
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-3 13/16	8" X 3/8	8" X 3/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	10'-3 3/4	10" X 1/2	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-7 13/16	8" X 3/8	8" X 3/8
E	(8) 5/8" X 2 1/4" A325	H0610	H0310	11'-3 1/2	8" X 1/2	8" X 1/2



CROSS SECTION AT LINE 5.6 (AREA B.2)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

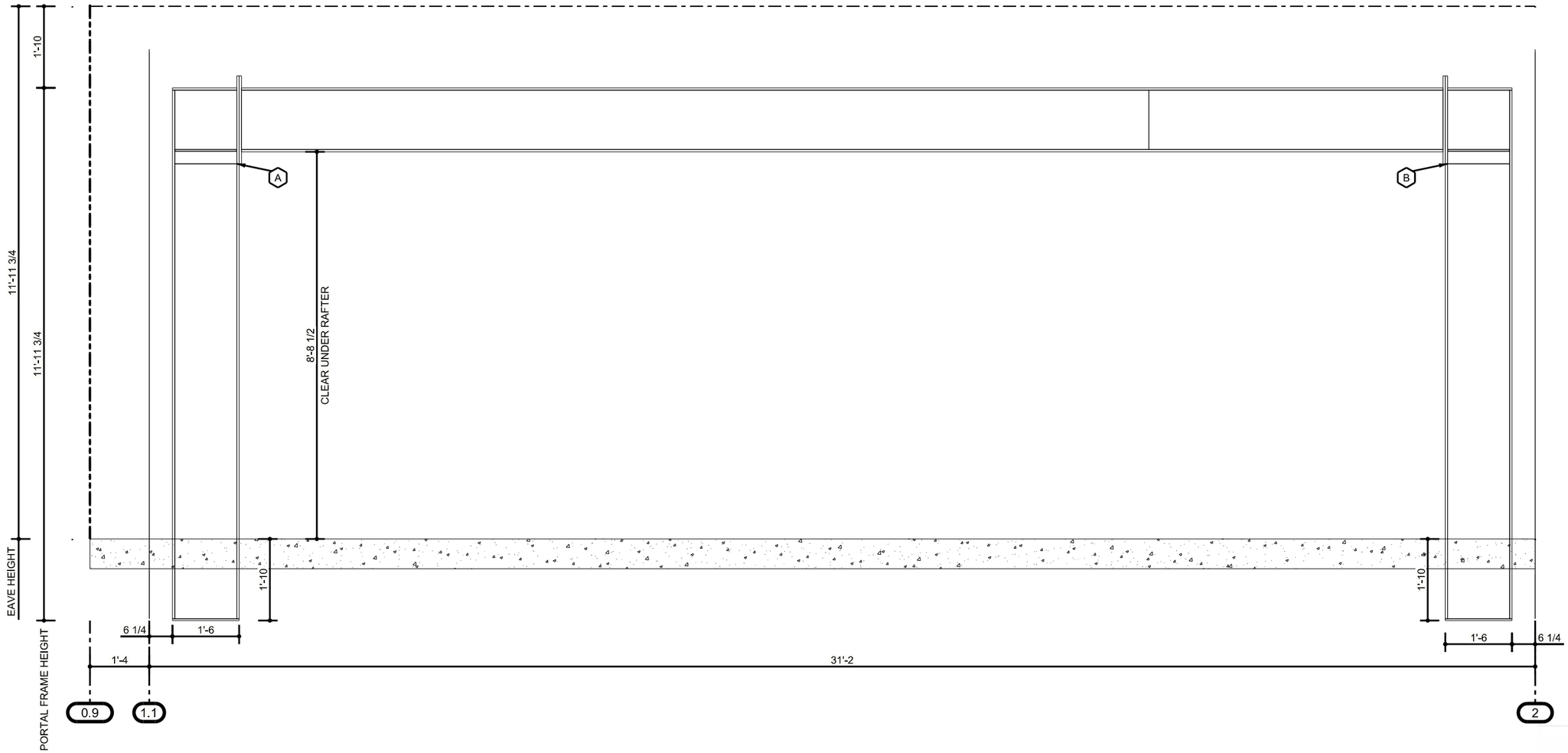
05/23/2025 09:24:52am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE CROSS SECTION AT LINE 5.6 (AREA B.2)
SHEET E14

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 1" X 3 1/4" A325	H0640	H0330	8'-8 1/2	10" X 5/8	10" X 5/8
B	(8) 1" X 3 1/4" A325	H0640	H0330	8'-8 1/2	10" X 5/8	10" X 5/8



CROSS SECTION - PORTAL FRAME AT LINE H.1 (AREA C)

PORTAL FRAME CROSS SECTION GENERAL NOTES

PF1P: FLANGE BRACES FROM THE PORTAL COLUMNS TO THE MAIN FRAME COLUMNS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

PF2P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:53am

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION
NOT FOR ERECTION

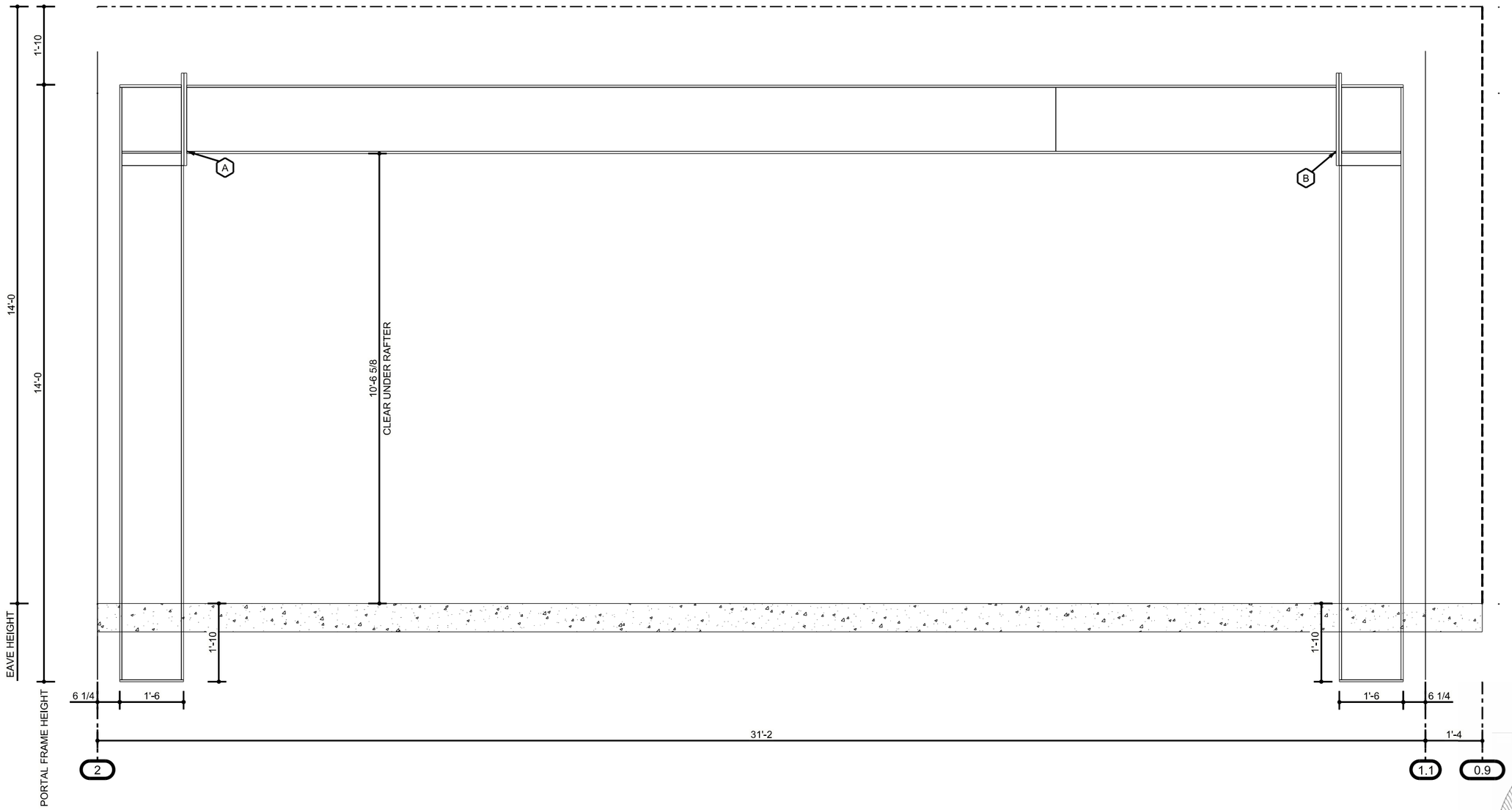
DRAWING TITLE
CROSS SECTION - PORTAL FRAME AT LINE H.1 (AREA C)

SHEET
E15

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 1" X 3 1/4" A325	H0640	H0330	10'-6 5/8	10" X 3/4	10" X 3/4
B	(8) 1" X 3 1/4" A325	H0640	H0330	10'-6 5/8	10" X 3/4	10" X 3/4



CROSS SECTION - PORTAL FRAME AT LINE B.9 (AREA C)

PORTAL FRAME CROSS SECTION GENERAL NOTES

PF1P: FLANGE BRACES FROM THE PORTAL COLUMNS TO THE MAIN FRAME COLUMNS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

PF2P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:55am

JOB NUMBER **T25U0346A**

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,&3

BUYER NAME DLR GROUP

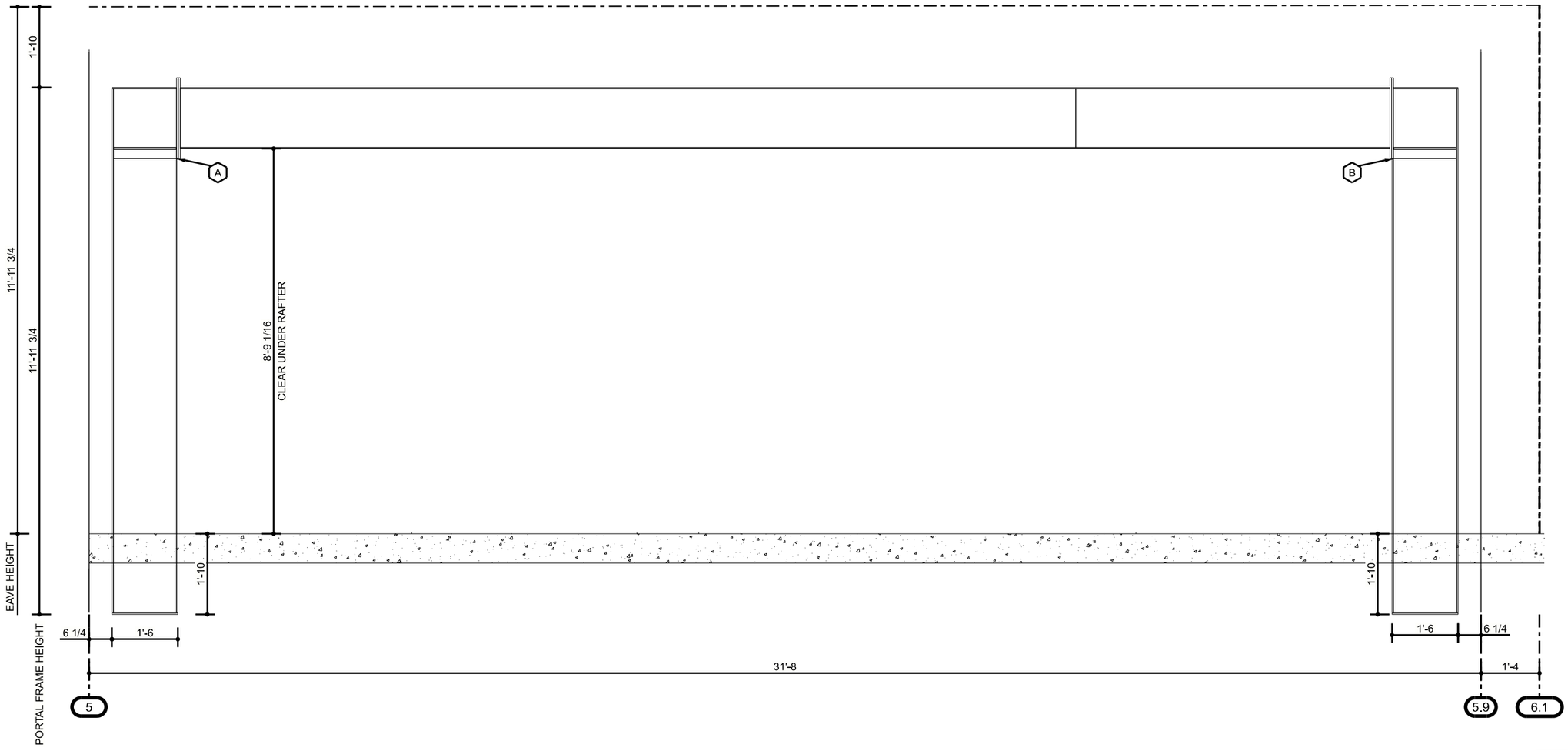
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**

DRAWING TITLE CROSS SECTION - PORTAL FRAME AT LINE B.9 (AREA C)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 3/4" X 3" A325	H0633	H0320	8'-9 1/16	8" X 1/2	10" X 1/2
B	(8) 3/4" X 3" A325	H0633	H0320	8'-9 1/16	10" X 1/2	8" X 1/2



CROSS SECTION - PORTAL FRAME AT LINE H.1 (AREA A.1)

PORTAL FRAME CROSS SECTION GENERAL NOTES

PF1P: FLANGE BRACES FROM THE PORTAL COLUMNS TO THE MAIN FRAME COLUMNS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

PF2P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

MBMA MEMBER
IAS ACCREDITED
CWB CERTIFIED CSA W47.1
CSSBI CERTIFIED CSA A660

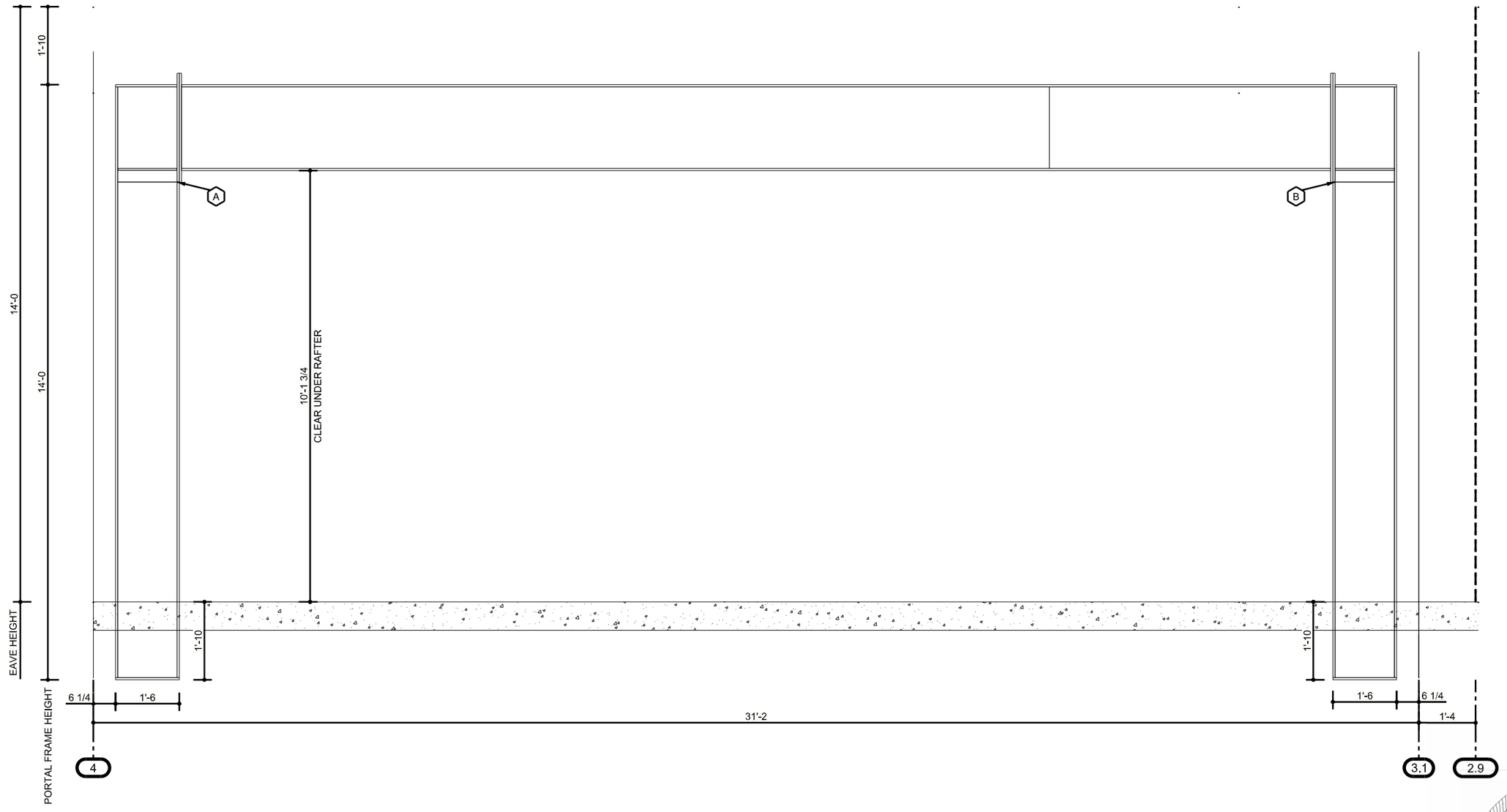
NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

09/09/2025 08:32:50am

JOB NUMBER: T25U0346A
ADDRESS: WASHINGTON COUNTY, OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE: CROSS SECTION - PORTAL FRAME AT LINE H.1 (AREA A.1)
DATE: 09/09/2025
SHEET: E17
DATE: 09/09/2025

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WIZ	09/09/2025
	PERMITS	TAK / JMW	WIZ	

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 1" X 3 1/4" A325	H0640	H0330	10'-1 3/4	10" X 5/8	10" X 5/8
B	(8) 1" X 3 1/4" A325	H0640	H0330	10'-1 3/4	10" X 5/8	10" X 5/8



CROSS SECTION - PORTAL FRAME AT LINE B.9 (AREA A.1)

PORTAL FRAME CROSS SECTION GENERAL NOTES

PF1P: FLANGE BRACES FROM THE PORTAL COLUMNS TO THE MAIN FRAME COLUMNS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

PF2P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION **NOT FOR ERECTION**

SHEET E18

DRAWING TITLE
CROSS SECTION - PORTAL FRAME AT LINE B.9 (AREA A.1)

05/23/2025 09:24:57am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(12) 1" X 3 1/4" A325	H0640	H0330	8'-3 1/4	10" X 3/4	10" X 3/4
B	(12) 1" X 3 1/4" A325	H0640	H0330	8'-3 1/4	10" X 3/4	10" X 3/4

CROSS SECTION - PORTAL FRAME AT LINE F.1 (AREA B.1)

PORTAL FRAME CROSS SECTION GENERAL NOTES

PF1P: FLANGE BRACES FROM THE PORTAL COLUMNS TO THE MAIN FRAME COLUMNS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

PF2P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION
NOT FOR ERECTION

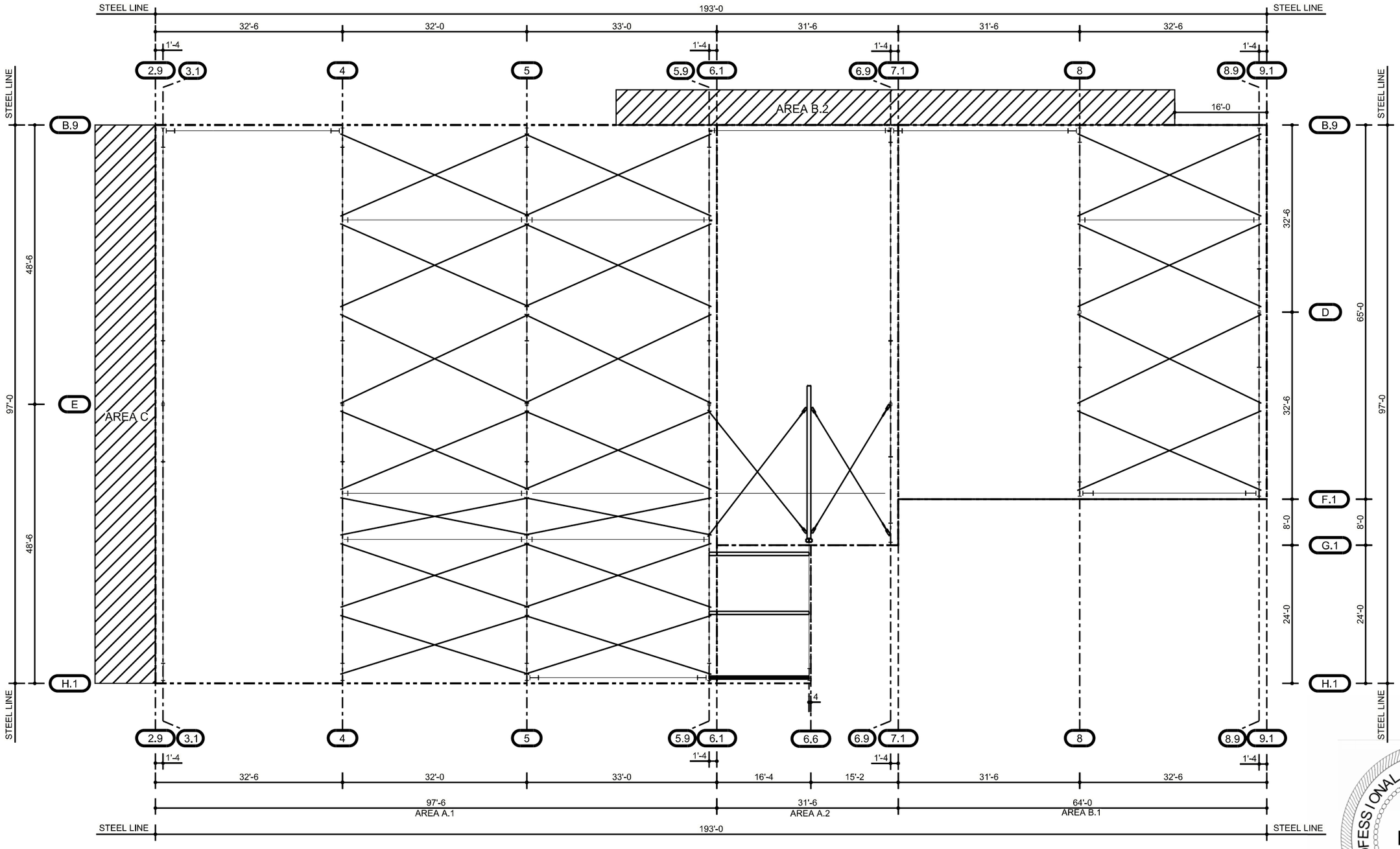
DRAWING TITLE
CROSS SECTION - PORTAL FRAME AT LINE F.1 (AREA B.1)

05/23/2025 09:24:58am

SHEET
E19

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA



PRIMARY FRAMING SHAKEOUT PLAN (AREA A.1, A.2 & B.1)

SHAKEOUT PLAN GENERAL NOTES

SH1: PLACE WELDED METAL TAGGED END OF RAFTER TOWARD LOW EAVE.
RAFTERS CENTERED ON RIDGE. IF NOT SYMMETRICAL, "*" INDICATES THE TAGGED END.
OTHERWISE, THEY ARE SYMMETRICAL AND CAN BE ORIENTED EITHER DIRECTION.
REFERENCE CROSS SECTIONS FOR ORIENTATION OF INTERIOR COLUMNS.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION.
ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

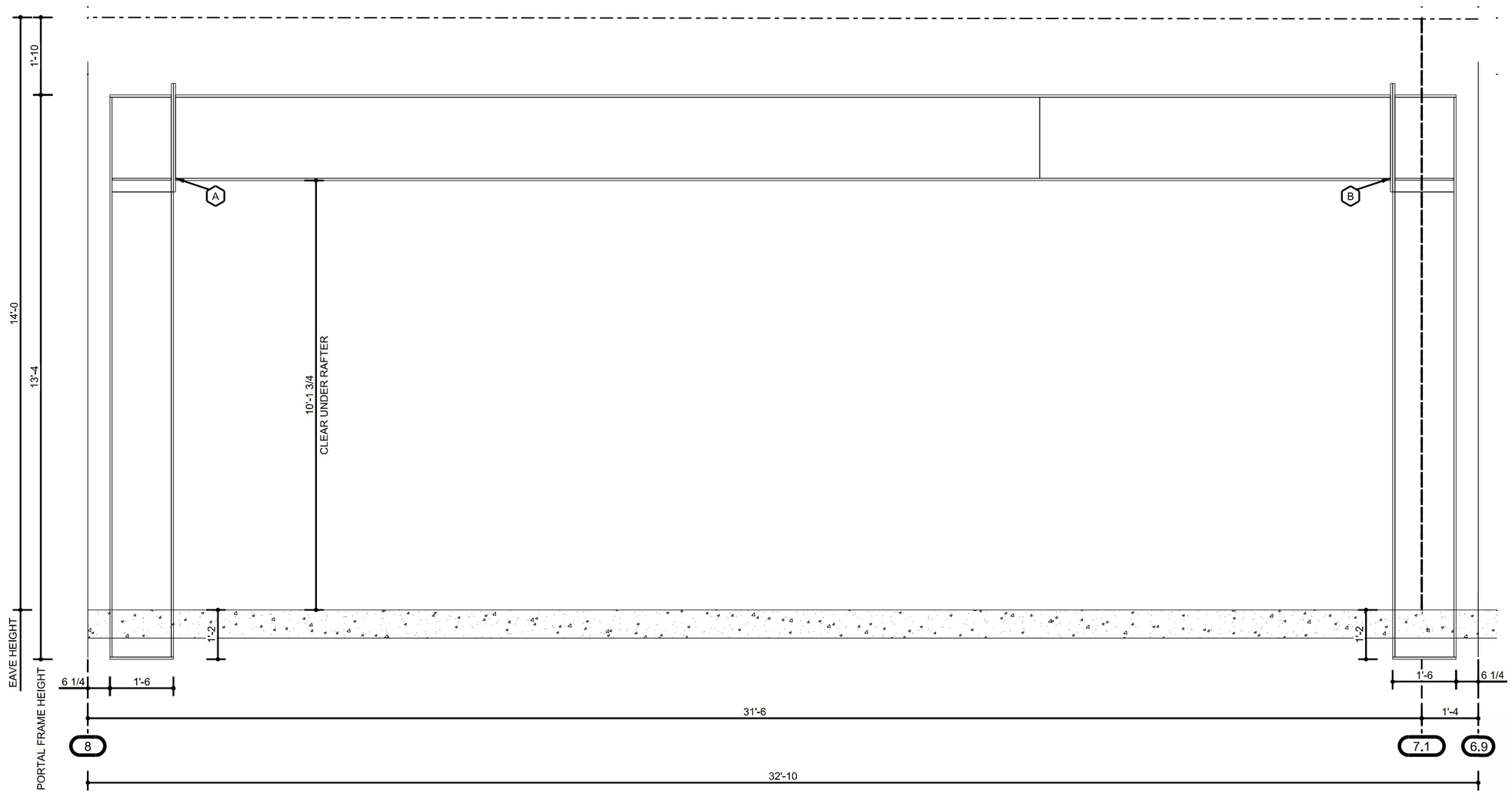
05/23/2025 09:24:28am

JOB NUMBER: **T25U0346A**
ADDRESS: WASHINGTON COUNTY, OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE: PRIMARY FRAMING SHAKEOUT PLAN
SHEET: E2

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 1" X 3 1/4" A325	H0640	H0330	10'-1 3/4	10" X 5/8	10" X 5/8
B	(8) 1" X 3 1/4" A325	H0640	H0330	10'-1 3/4	10" X 5/8	10" X 5/8



CROSS SECTION - PORTAL FRAME AT LINE B.9 (AREA B.1)

PORTAL FRAME CROSS SECTION GENERAL NOTES

PF1P: FLANGE BRACES FROM THE PORTAL COLUMNS TO THE MAIN FRAME COLUMNS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

PF2P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

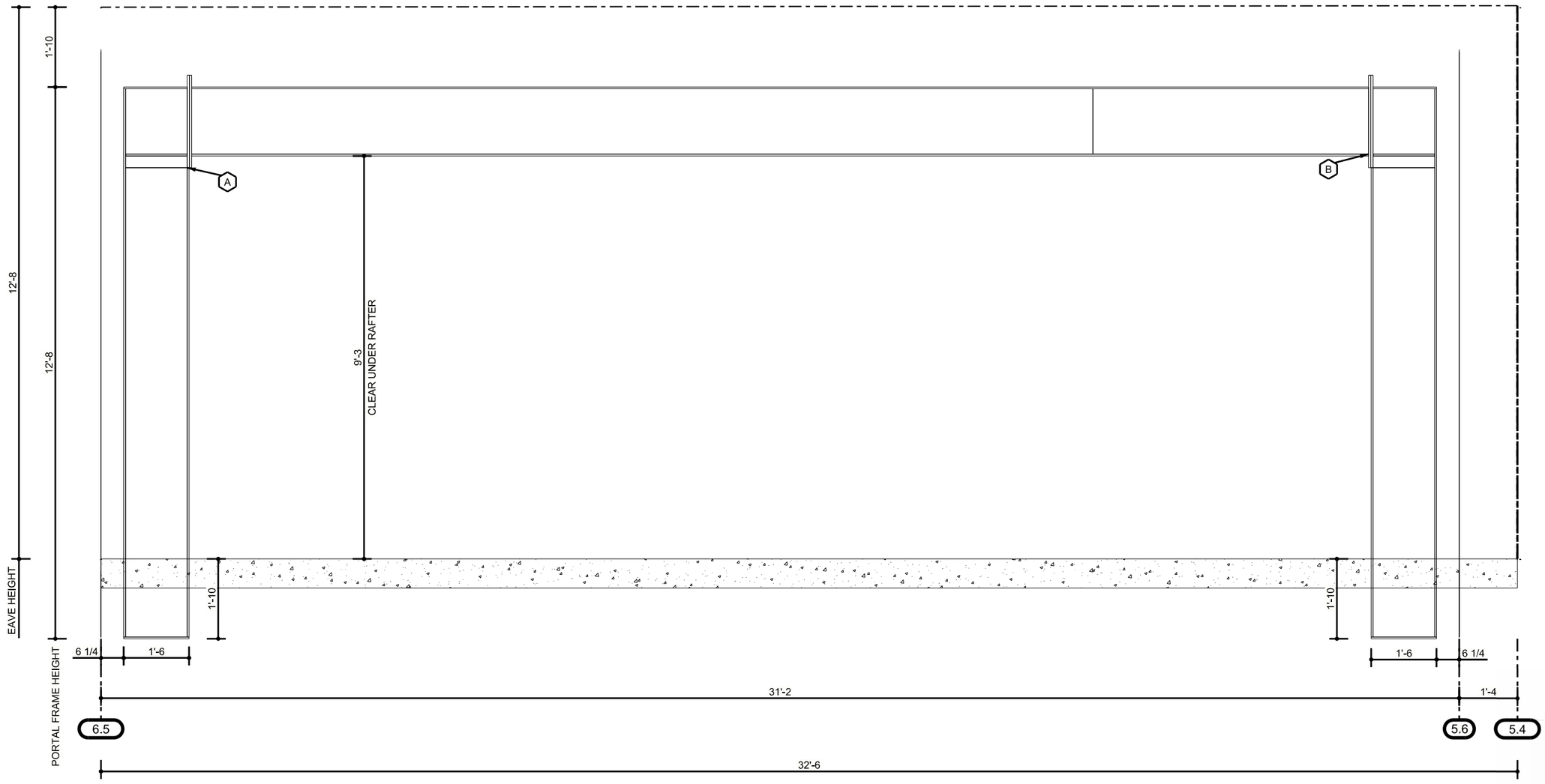
NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE CROSS SECTION - PORTAL FRAME AT LINE B.9 (AREA B.1)
05/23/2025 09:24:59am
SHEET E20

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 1" X 3 1/4" A325	H0640	H0330	9'-3"	10" X 5/8	10" X 5/8
B	(8) 1" X 3 1/4" A325	H0640	H0330	9'-3"	10" X 5/8	10" X 5/8



CROSS SECTION - PORTAL FRAME AT LINE Aa (AREA B.2)

PORTAL FRAME CROSS SECTION GENERAL NOTES

PF1P: FLANGE BRACES FROM THE PORTAL COLUMNS TO THE MAIN FRAME COLUMNS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

PF2P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:25:00am

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION **NOT FOR ERECTION**

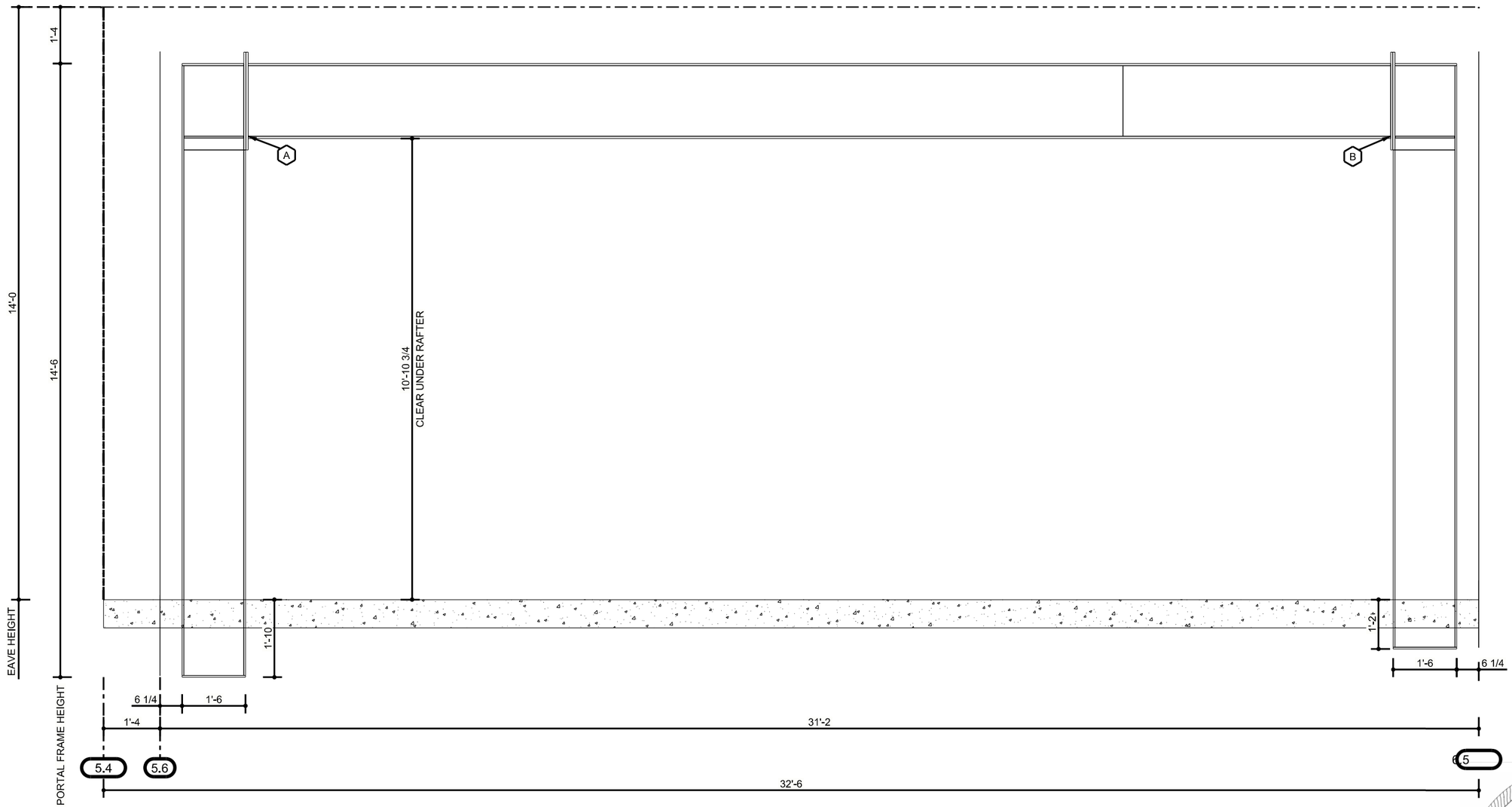
DRAWING TITLE
CROSS SECTION - PORTAL FRAME AT LINE AA (AREA B.2)

SHEET
E21

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 1" X 3 1/4" A325	H0640	H0330	10'-10 3/4	10" X 5/8	10" X 5/8
B	(8) 1" X 3 1/4" A325	H0640	H0330	10'-10 3/4	10" X 5/8	10" X 5/8



CROSS SECTION - PORTAL FRAME AT LINE B.9 (AREA B.2)

PORTAL FRAME CROSS SECTION GENERAL NOTES

PF1P: FLANGE BRACES FROM THE PORTAL COLUMNS TO THE MAIN FRAME COLUMNS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

PF2P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:25:02am

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

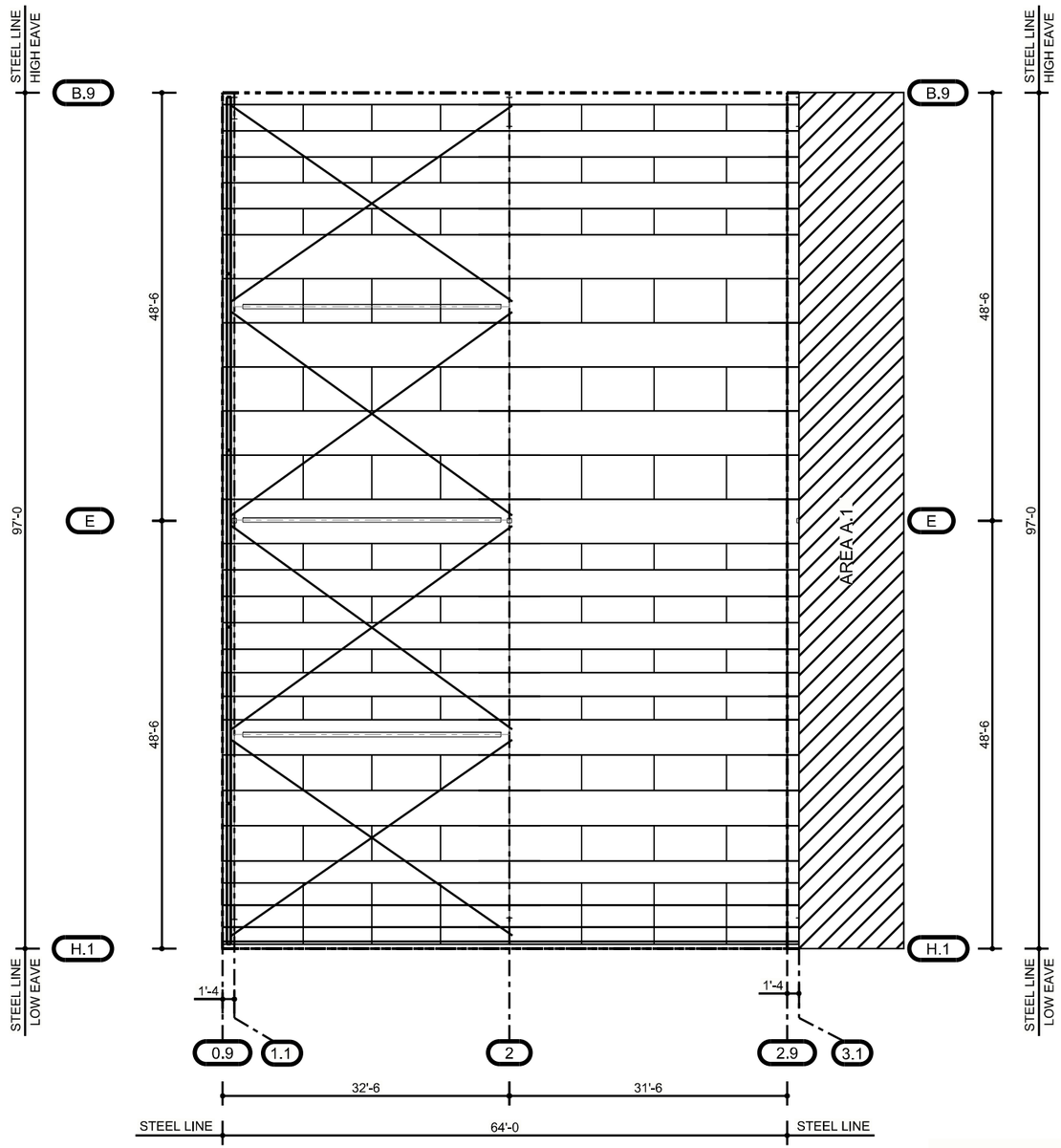
DRAWING STATUS
FOR CONSTRUCTION **NOT FOR ERECTION**

DRAWING TITLE
CROSS SECTION - PORTAL FRAME AT LINE B.9 (AREA B.2)

SHEET
E22

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA



ROOF FRAMING PLAN (AREA C)

ROOF FRAMING GENERAL NOTES

RN1P: PURLIN DEPTH AND PURLIN SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

JOB NUMBER	**T25U0346A**
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
SHEET	E23
DRAWING TITLE	ROOF FRAMING PLAN (AREA C)

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

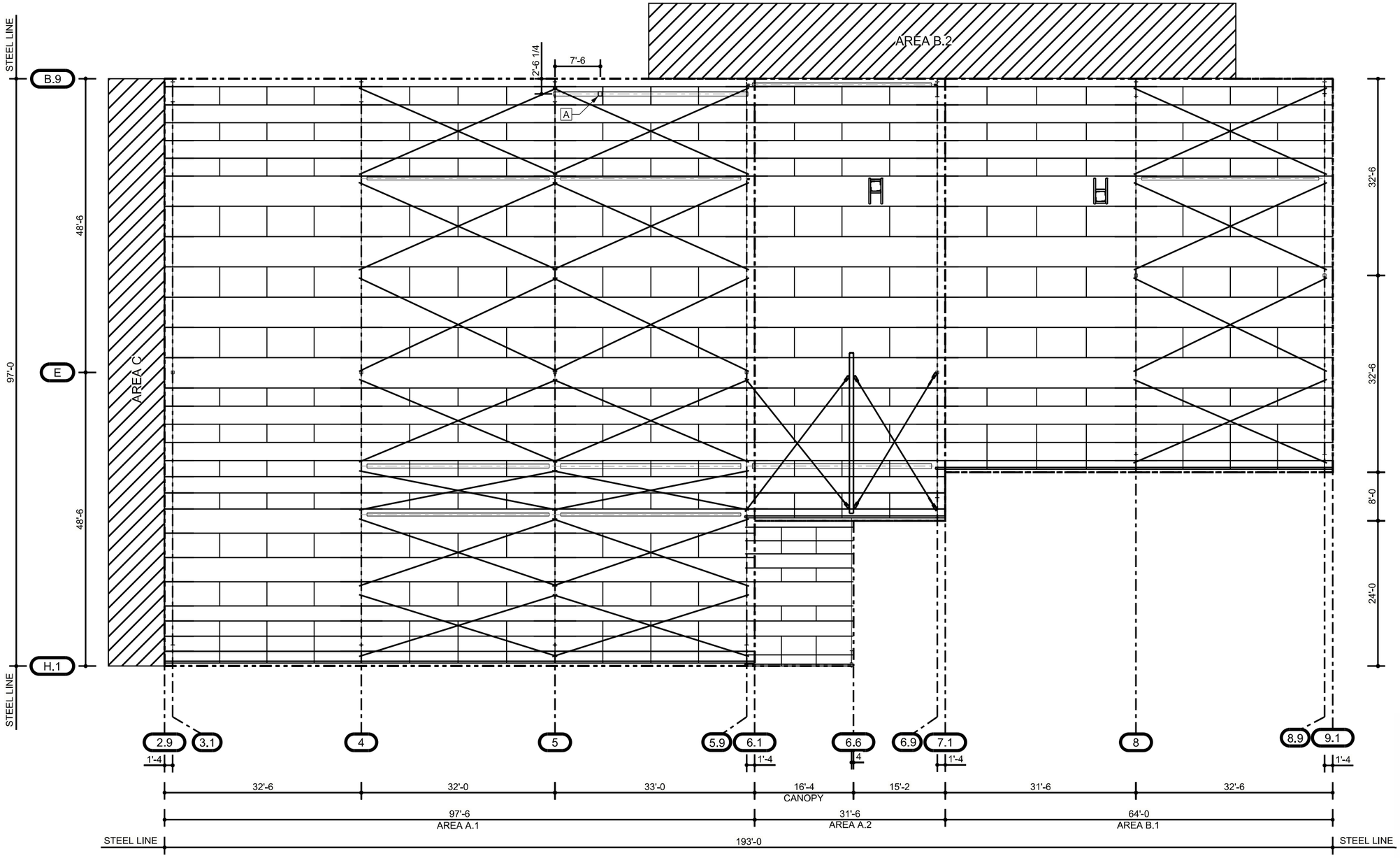
MBMA MEMBER · IAS ACCREDITED · CWB · CERTIFIED CSA W47.1 · CERTIFIED CSA A660 · ICSSB

05/23/2025 09:25:03am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FALL PROTECTION LOCATION	
MARK	WEIGHT (LBS)
A	5000



ROOF FRAMING PLAN (AREA A.1, A.2 & B.1)

ROOF FRAMING GENERAL NOTES

RN1P: PURLIN DEPTH AND PURLIN SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

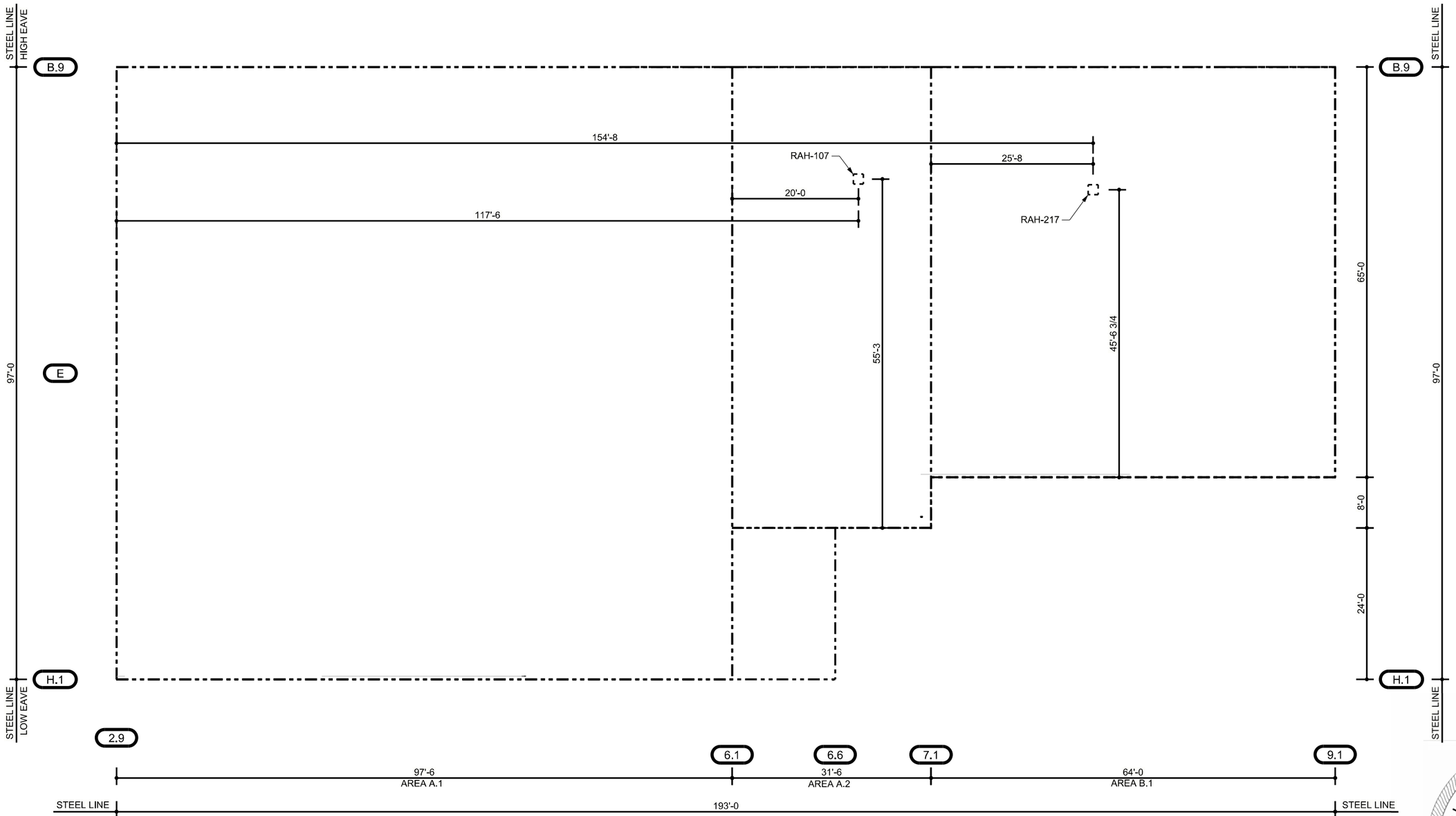
05/23/2025 09:25:07am

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	ROOF FRAMING PLAN (AREA A.1, A.2 & B.1)
SHEET	E24

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

ROOF FRAMED OPENING TABLE			
MARK	WIDTH	LENGTH	WEIGHT (LBS)
RAH-107	1'-7"	1'-7"	8
RAH-217	1'-7"	1'-7"	7



ROOF FRAMING PLAN - OPENINGS (AREA A.1, A.2 & B.1)

ROOF FRAMED OPENING GENERAL NOTES

RF1: IN THE ROOF TOP UNIT TABLE, "WIDTH" IS THE NOMINAL DIMENSION OF THE OPENING PARALLEL TO THE PURLINS. "LENGTH" IS THE NOMINAL DIMENSION OF THE OPENING PERPENDICULAR TO THE PURLINS AS MEASURED "ON SLOPE" (PARALLEL WITH THE ROOF PLANE). THE FRAMED OPENING CLEARANCE IS +1/2" ON EACH SIDE (+1" OVERALL, BOTH DIRECTIONS). SEE BK___ DETAILS FOR MORE INFORMATION.

RF2: FRAMED OPENING LOCATION DIMENSIONS ARE MEASURED "ON FLAT" (PARALLEL TO FINSHED FLOOR) AND TO THE CENTER OF THE OPENING.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:25:09am

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION

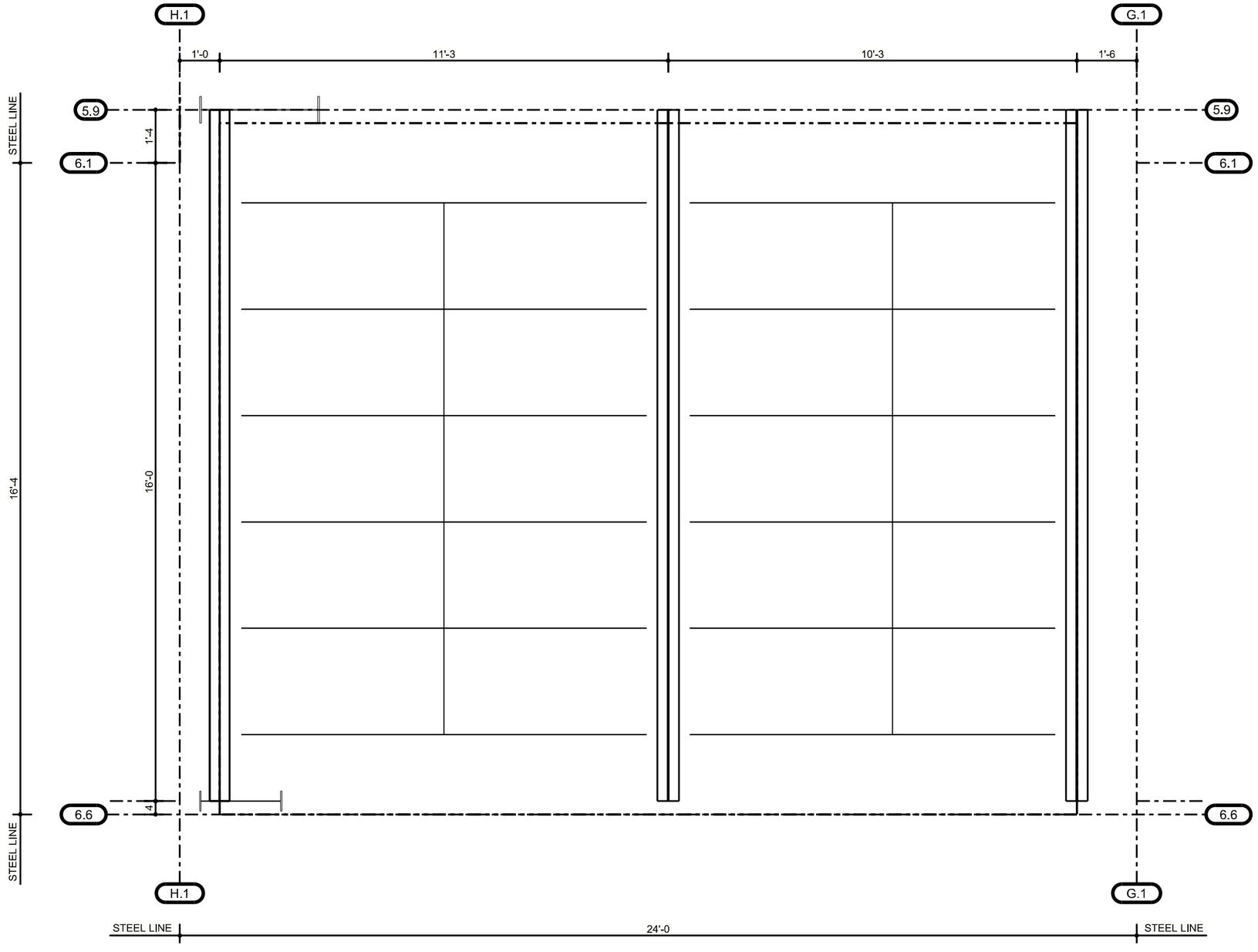
NOT FOR ERECTION

DRAWING TITLE
ROOF FRAMING PLAN - OPENINGS (AREA A.1, A.2 & B.1)

SHEET
E25

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA



SOFFIT FRAMING PLAN - CANOPY

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

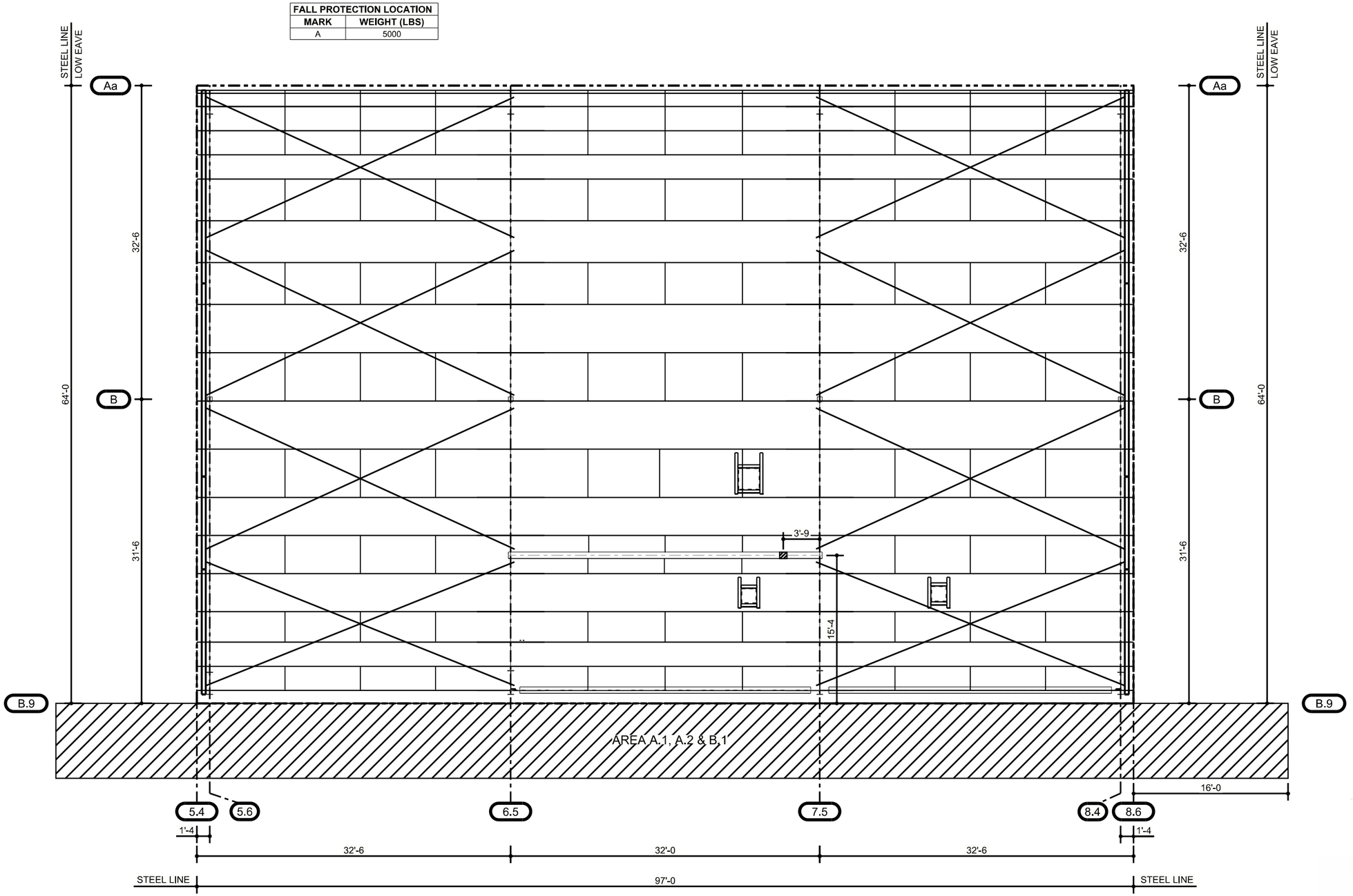
JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	SOFFIT FRAMING PLAN - CANOPY
SHEET	E26

05/23/2025 09:25:11am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FALL PROTECTION LOCATION	
MARK	WEIGHT (LBS)
A	5000



ROOF FRAMING PLAN (AREA B.2)

ROOF FRAMING GENERAL NOTES

RN1P: PURLIN DEPTH AND PURLIN SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

MBMA MEMBER

IAS ACCREDITED MANUFACTURING AC431

CWB CERTIFIED CSA W47.1

CERTIFIED CSA A660

NUCOR BUILDING SYSTEMS

PHONE: (260) 837-7891
FAX: (260) 837-7384

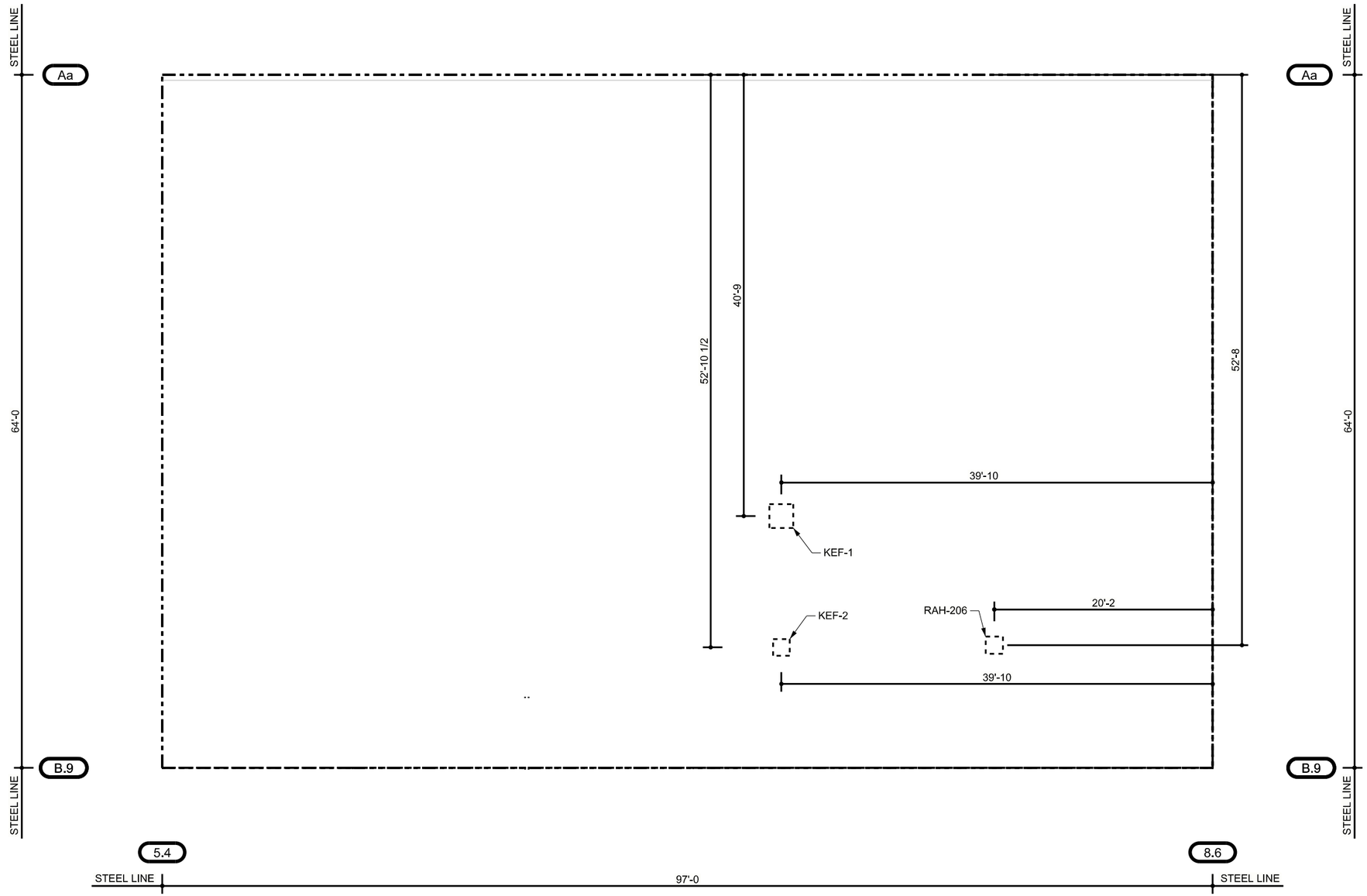
05/23/2025 12:02:20pm

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	ROOF FRAMING PLAN (AREA B.2)
SHEET	E27

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

ROOF FRAMED OPENING TABLE			
MARK	WIDTH	LENGTH	WEIGHT (LBS)
KEF-1	2'-2 1/2"	2'-2 1/2"	142
KEF-2	1'-6 1/2"	1'-6 1/2"	108
RAH-206	1'-7"	1'-7"	7



ROOF FRAMING PLAN - OPENINGS (AREA B.2)

ROOF FRAMED OPENING GENERAL NOTES

RF1: IN THE ROOF TOP UNIT TABLE, "WIDTH" IS THE NOMINAL DIMENSION OF THE OPENING PARALLEL TO THE PURLINS. "LENGTH" IS THE NOMINAL DIMENSION OF THE OPENING PERPENDICULAR TO THE PURLINS AS MEASURED "ON SLOPE" (PARALLEL WITH THE ROOF PLANE). THE FRAMED OPENING CLEARANCE IS +1/2" ON EACH SIDE (+1" OVERALL, BOTH DIRECTIONS). SEE BK____ DETAILS FOR MORE INFORMATION.

RF2: FRAMED OPENING LOCATION DIMENSIONS ARE MEASURED "ON FLAT" (PARALLEL TO FINSHED FLOOR) AND TO THE CENTER OF THE OPENING.
GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

MBMA MEMBER · IAS ACCREDITED MANUFACTURING PLANT #241 · CWB CERTIFIED CSA W47.1 · CSSEA · CERTIFIED CSA A660

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:25:17am

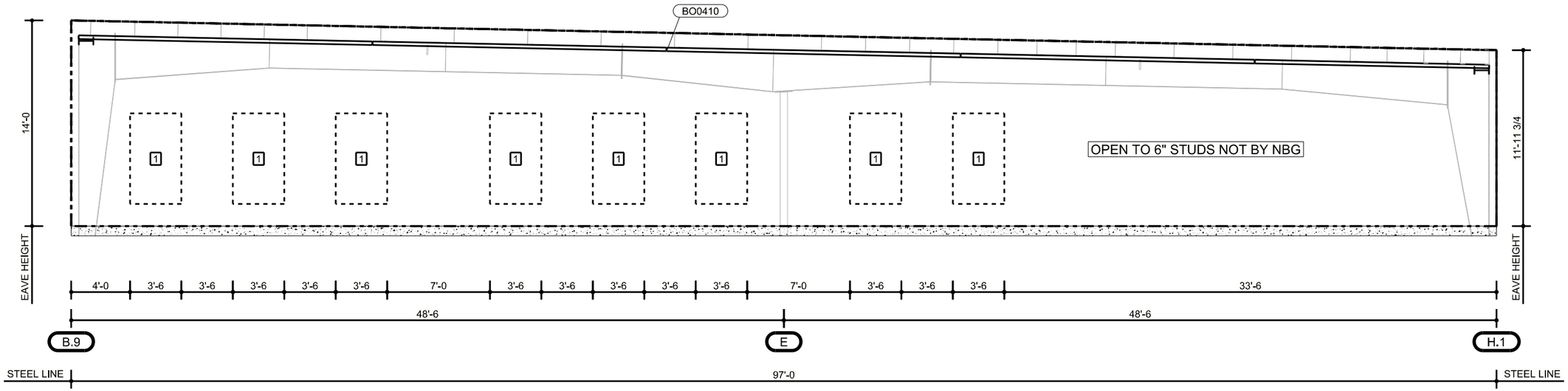
JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE ROOF FRAMING PLAN - OPENINGS (AREA B.2)
SHEET E28

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	3'-6"	6'-2"						1'-6"	Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - ENDWALL AT LINE 0.9 (AREA C)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

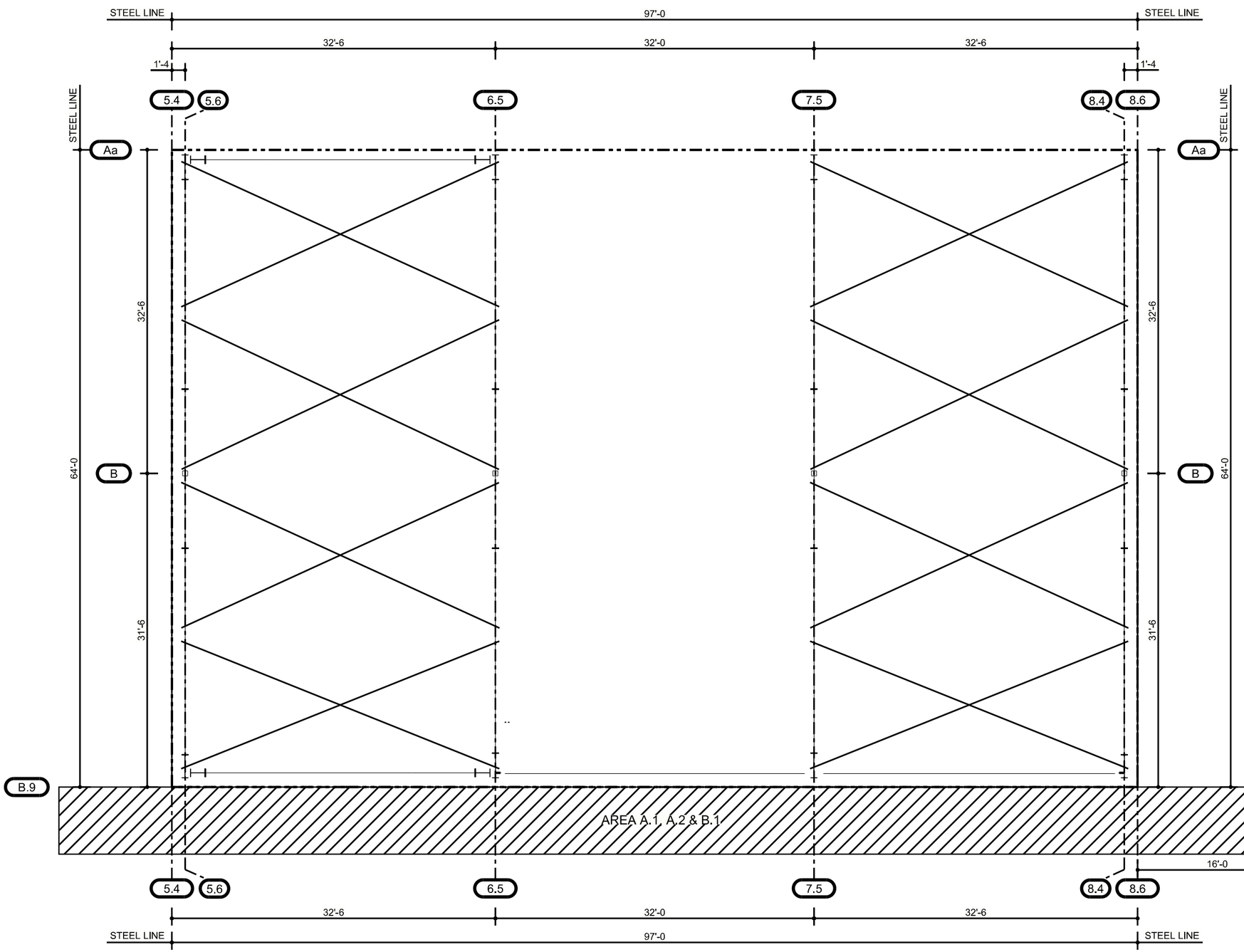
NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:25:19am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE FRAMING ELEVATION - ENDWALL AT LINE 0.9 (AREA C)
SHEET E29

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA



PRIMARY FRAMING SHAKEOUT PLAN (AREA B.2)

SHAKEOUT PLAN GENERAL NOTES

SH1: PLACE WELDED METAL TAGGED END OF RAFTER TOWARD LOW EAVE.
RAFTERS CENTERED ON RIDGE. IF NOT SYMMETRICAL, "*" INDICATES THE TAGGED END.
OTHERWISE, THEY ARE SYMMETRICAL AND CAN BE ORIENTED EITHER DIRECTION.
REFERENCE CROSS SECTIONS FOR ORIENTATION OF INTERIOR COLUMNS.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION.
ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:30am

JOB NUMBER	ADDRESS
T25U0346A	WASHINGTON COUNTY OWASSO, OK 74055

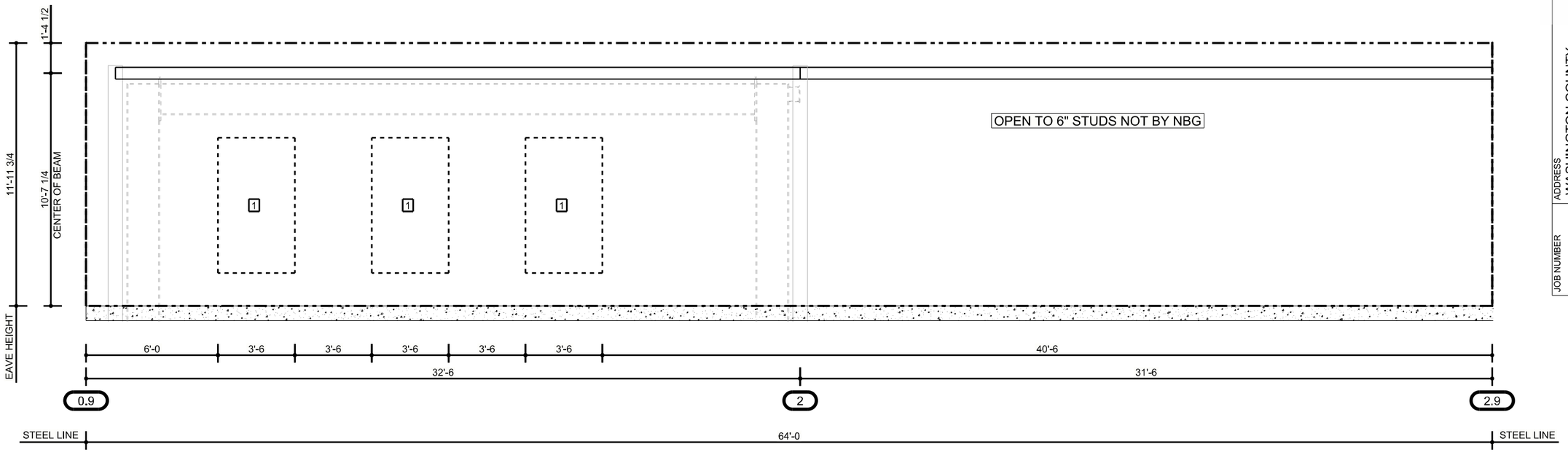
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE: PRIMARY FRAMING SHAKEOUT PLAN
SHEET: E3

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	3'-6"	6'-2"						1'-6"	Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - SIDEWALL AT LINE H.1 (AREA C)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION **NOT FOR ERECTION**

DRAWING TITLE
FRAMING ELEVATION - SIDEWALL AT LINE H.1 (AREA C)

SHEET
E30

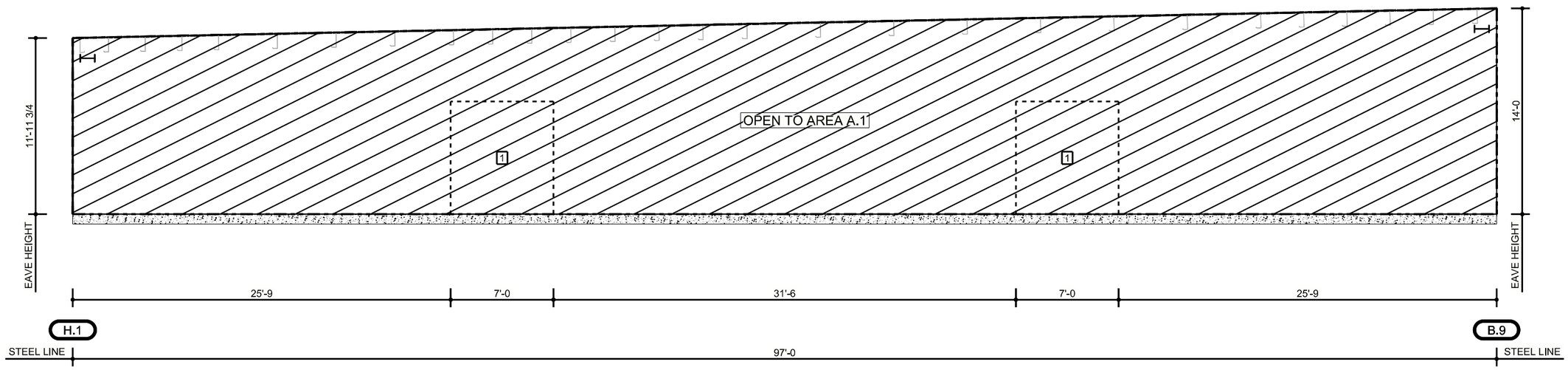
#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

05/23/2025 09:25:21am

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	7'-0"	7'-8"							Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - ENDWALL AT LINE 2.9 (AREA C)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

MBMA MEMBER
IAS ACCREDITED MANUFACTURING AC472
CWB CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384
CERTIFIED CSA A660
CSSBI
05/23/2025 09:25:22am

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION **NOT FOR ERECTION**

SHEET E31

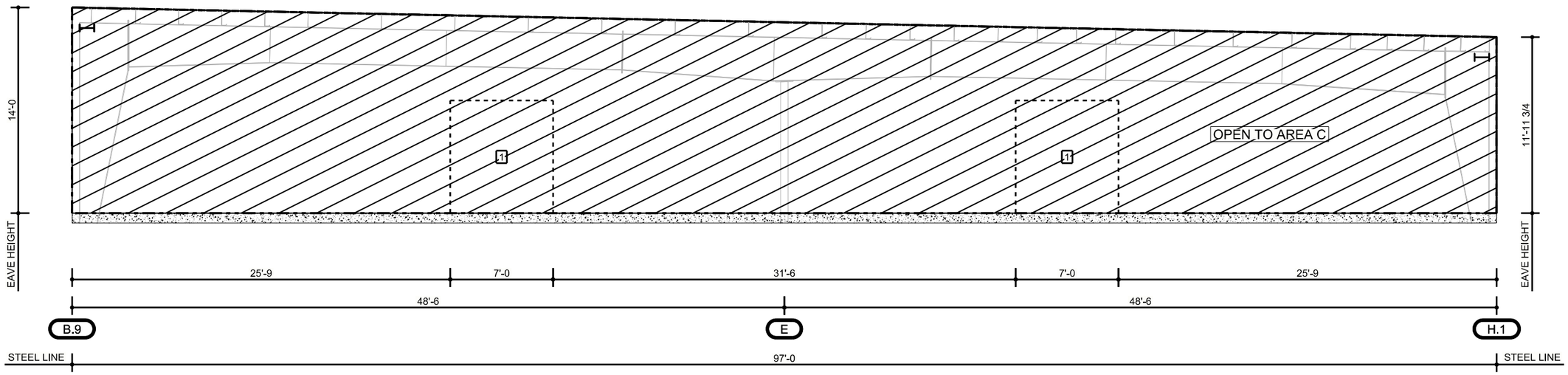
DRAWING TITLE
FRAMING ELEVATION - ENDWALL AT LINE 2.9 (AREA C)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	7'-0"	7'-8"							Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - ENDWALL AT LINE 2.9 (AREA A.1)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

MBMA MEMBER
IAS ACCREDITED MANUFACTURING AC472
CWB CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384
CERTIFIED CSA A660
CSSBI
05/23/2025 09:25:24am

JOB NUMBER **T25U0346A**

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,&3

BUYER NAME DLR GROUP

DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**

SHEET E32

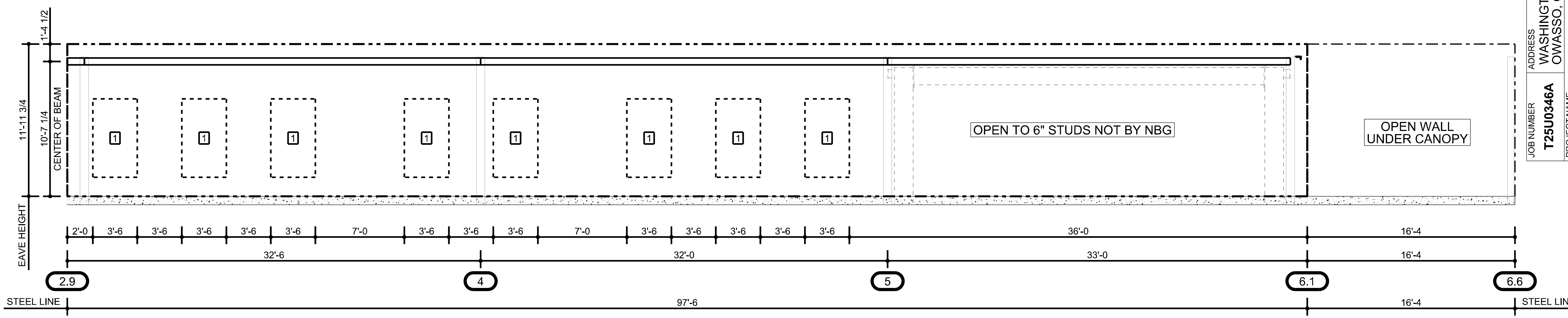
DRAWING TITLE FRAMING ELEVATION - ENDWALL AT LINE 2.9 (AREA A.1)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	3'-6"	6'-2"						1'-6"	Y

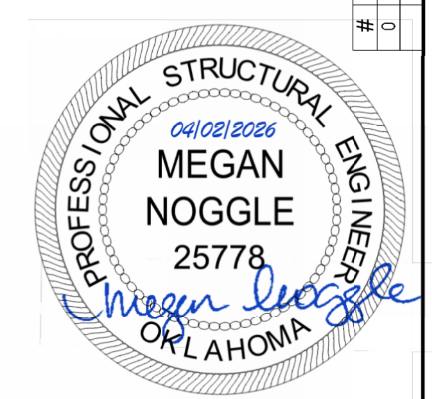
NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - SIDEWALL AT LINE H.1 (AREA A.1)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

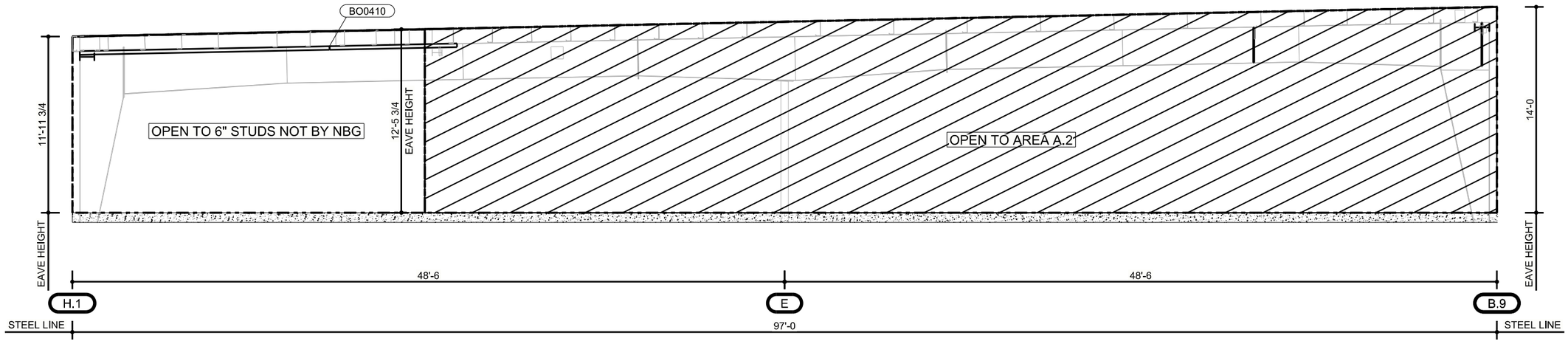


MBMA MEMBER
IAS ACCREDITED Metal Building Systems AC 472
CWB CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384
CWB CERTIFIED CSA A660
CSSBI
05/23/2025 09:25:26am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION
NOT FOR ERECTION
SHEET E33
DRAWING TITLE FRAMING ELEVATION - SIDEWALL AT LINE H.1 (AREA A.1)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

Part Sizes	
Mark	Profile



FRAMING ELEVATION - ENDWALL AT LINE 6.1 (AREA A.1)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	FRAMING ELEVATION - ENDWALL AT LINE 6.1 (AREA A.1)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

05/23/2025 09:25:28am

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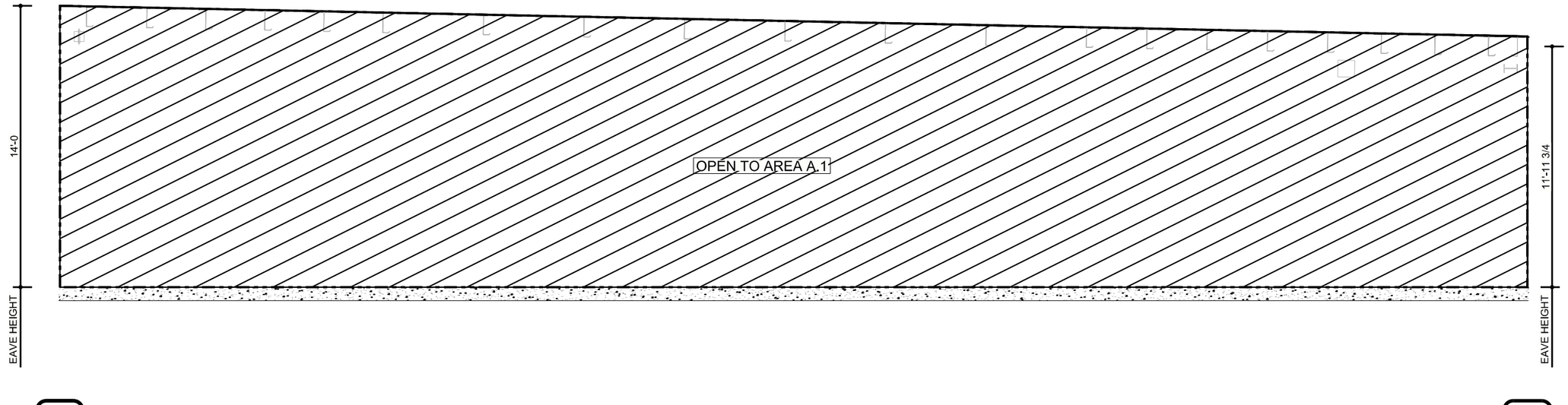
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA



FRAMING ELEVATION - ENDWALL AT LINE 6.1 (AREA A.2)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	FRAMING ELEVATION - ENDWALL AT LINE 6.1 (AREA A.2)
SHEET	E35

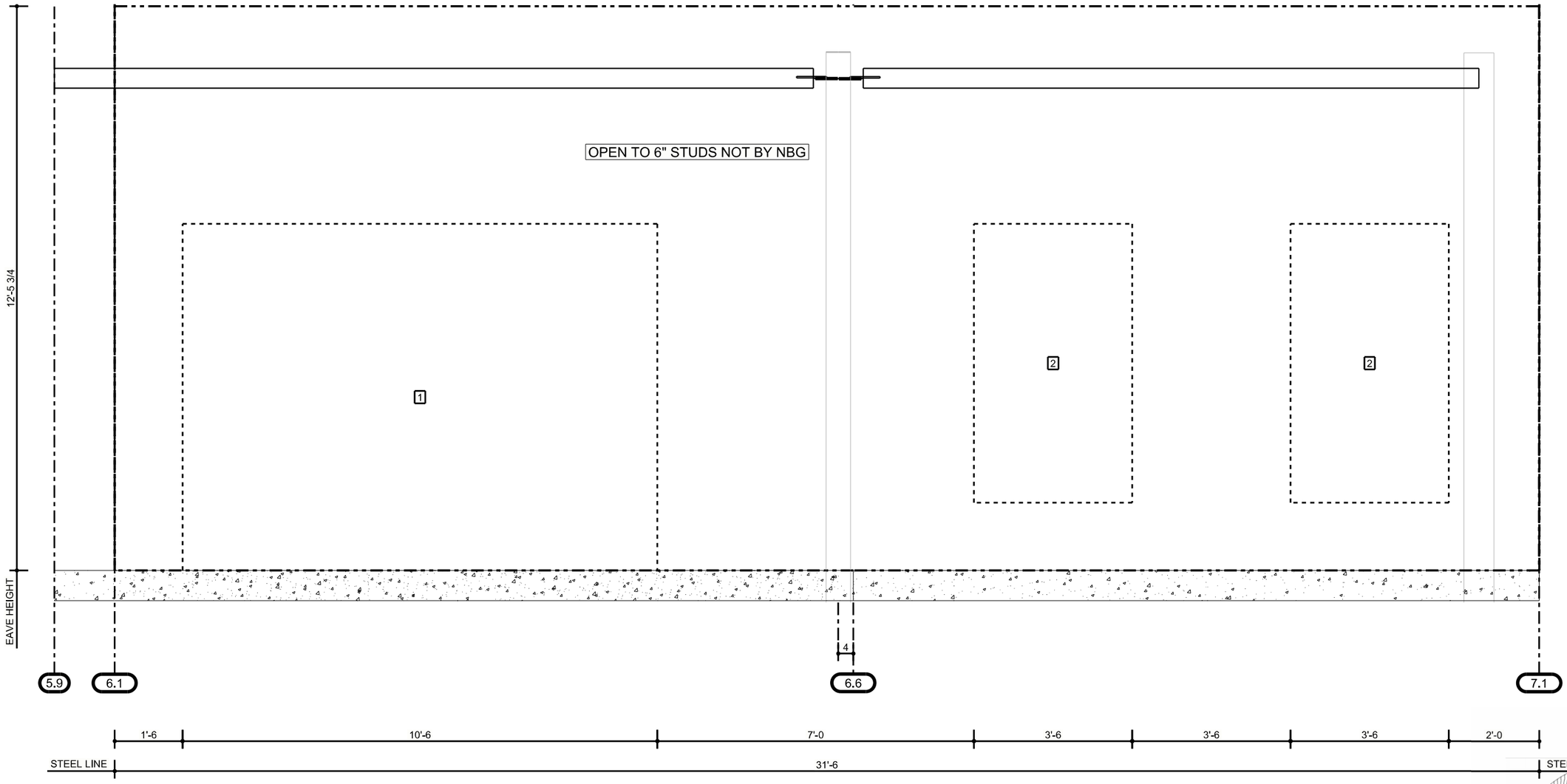
#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

05/23/2025 09:25:30am

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	10'-6"	7'-8"							Y
2	3'-6"	6'-2"						1'-6"	Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - SIDEWALL AT LINE G.1 (AREA A.2)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:25:31am

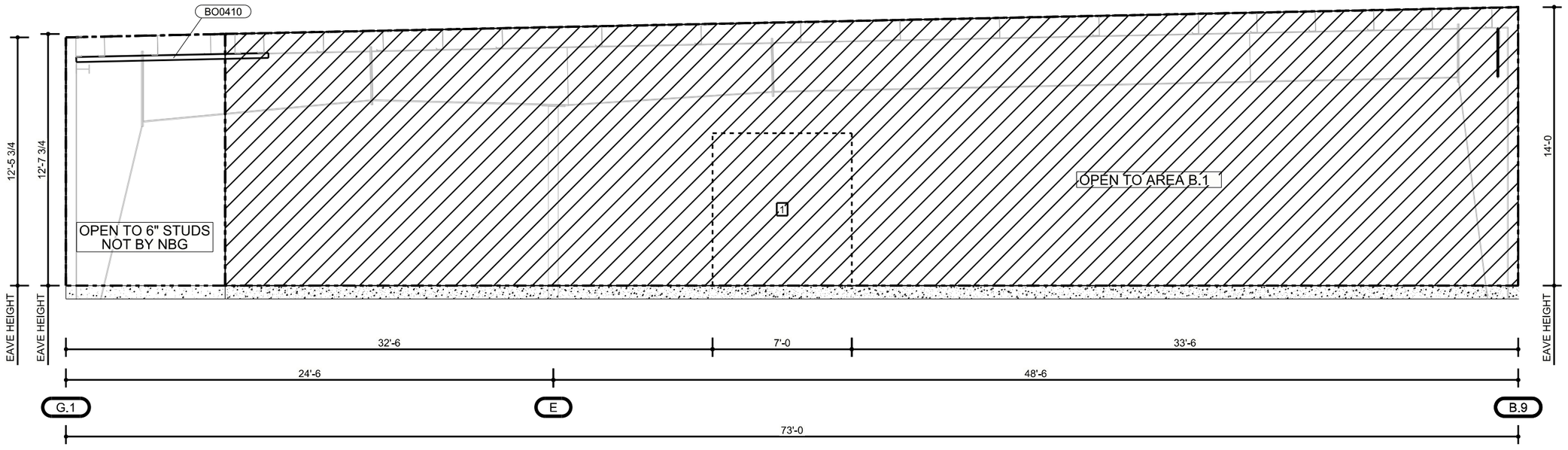
JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
SHEET E36
DRAWING TITLE FRAMING ELEVATION - SIDEWALL AT LINE G.1 (AREA A.2)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	7'-0"	7'-8"							Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - ENDWALL AT LINE 7.1 (AREA A.2)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

MBMA MEMBER
IAS ACCREDITED MANUFACTURING PLANT #141
CWB CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
CERTIFIED CSA A660
CSSBI
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:25:33am

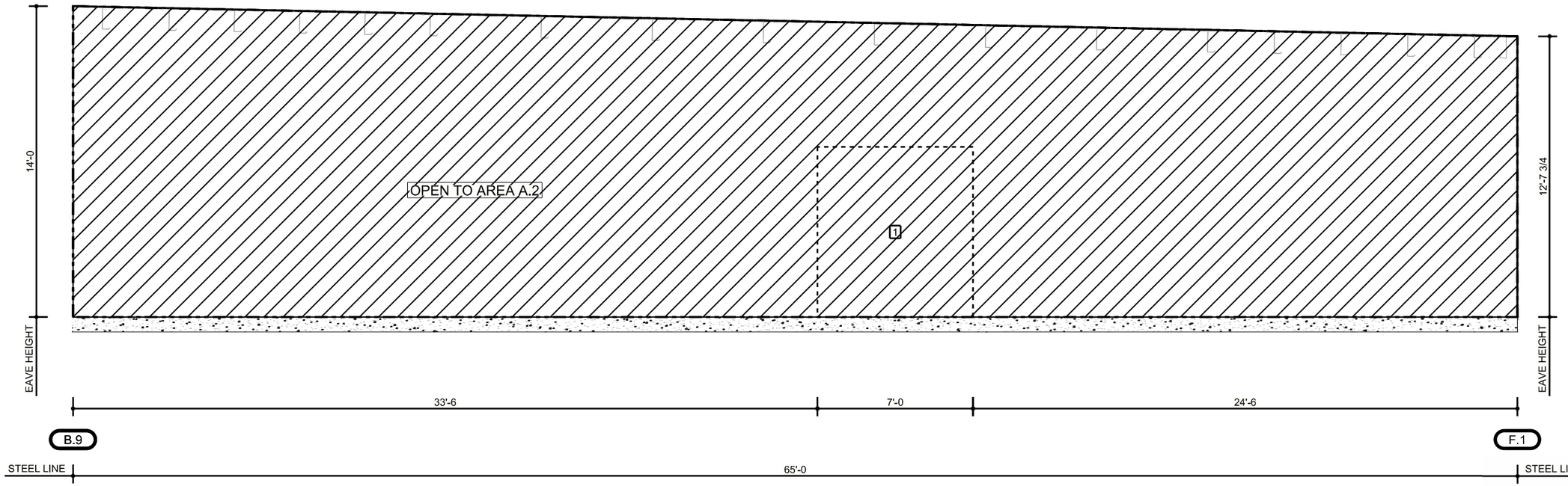
JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	FRAMING ELEVATION - ENDWALL AT LINE 7.1 (AREA A.2)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	7'-0"	7'-8"							Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - ENDWALL AT LINE 7.1 (AREA B.1)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:25:34am

JOB NUMBER **T25U0346A**

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,&3

BUYER NAME DLR GROUP

DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**

DRAWING TITLE FRAMING ELEVATION - ENDWALL AT LINE 7.1 (AREA B.1)

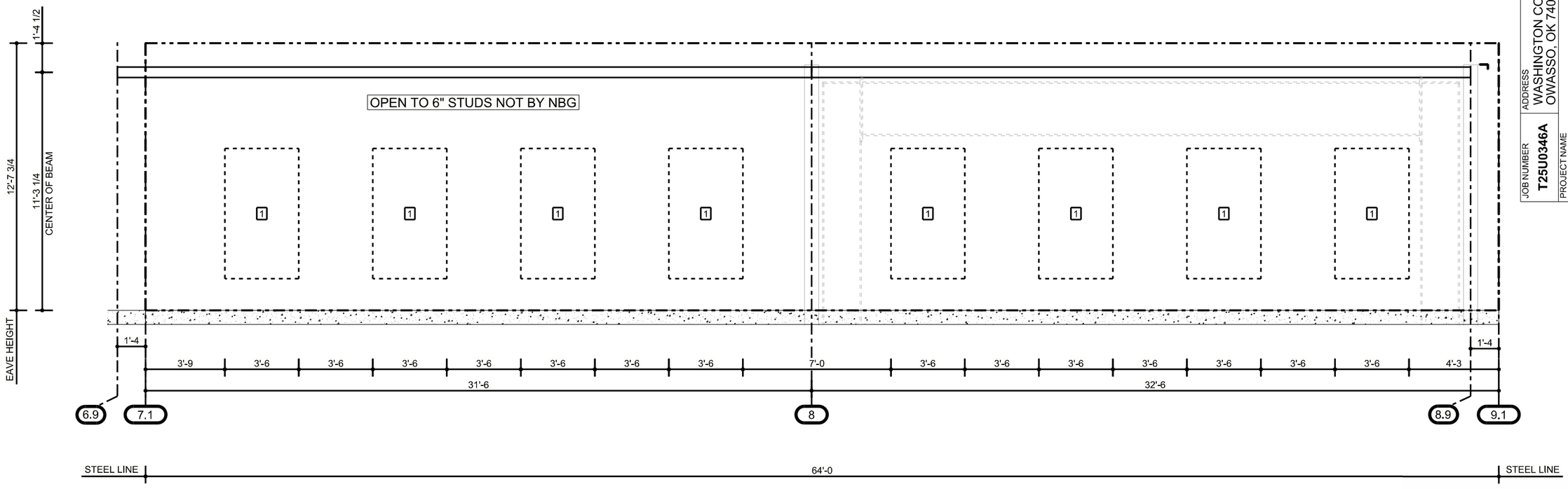
#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

SHEET E38

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	3'-6"	6'-2"						1'-6"	Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - SIDEWALL AT LINE F.1 (AREA B.1)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

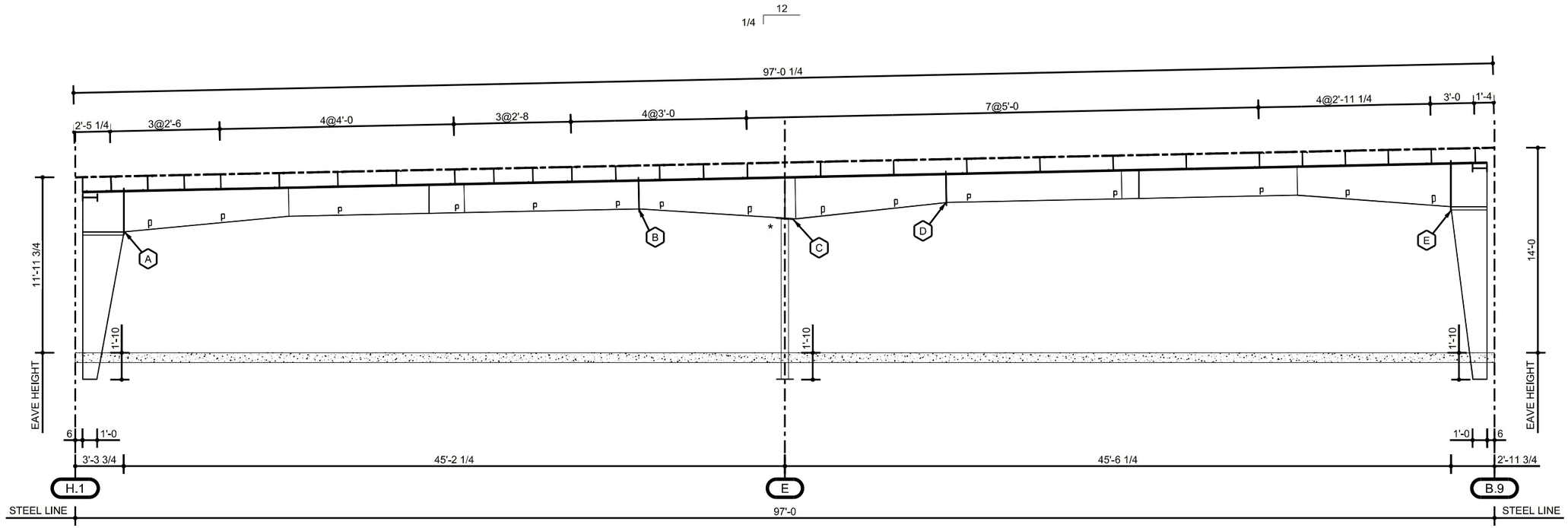
JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	FRAMING ELEVATION - SIDEWALL AT LINE F.1 (AREA B.1)

05/23/2025 09:25:36am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 5/8" X 2 1/4" A325	H0610	H0310	8'-2 7/8	8" X 1/2	8" X 1/2
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-7 3/16	8" X 3/8	8" X 3/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	9'-1 1/16	10" X 5/8	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	10'-0 7/16	8" X 3/8	8" X 3/8
E	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-11 1/2	8" X 3/8	8" X 1/2



CROSS SECTION AT LINE A.1 (AREA C)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:32am

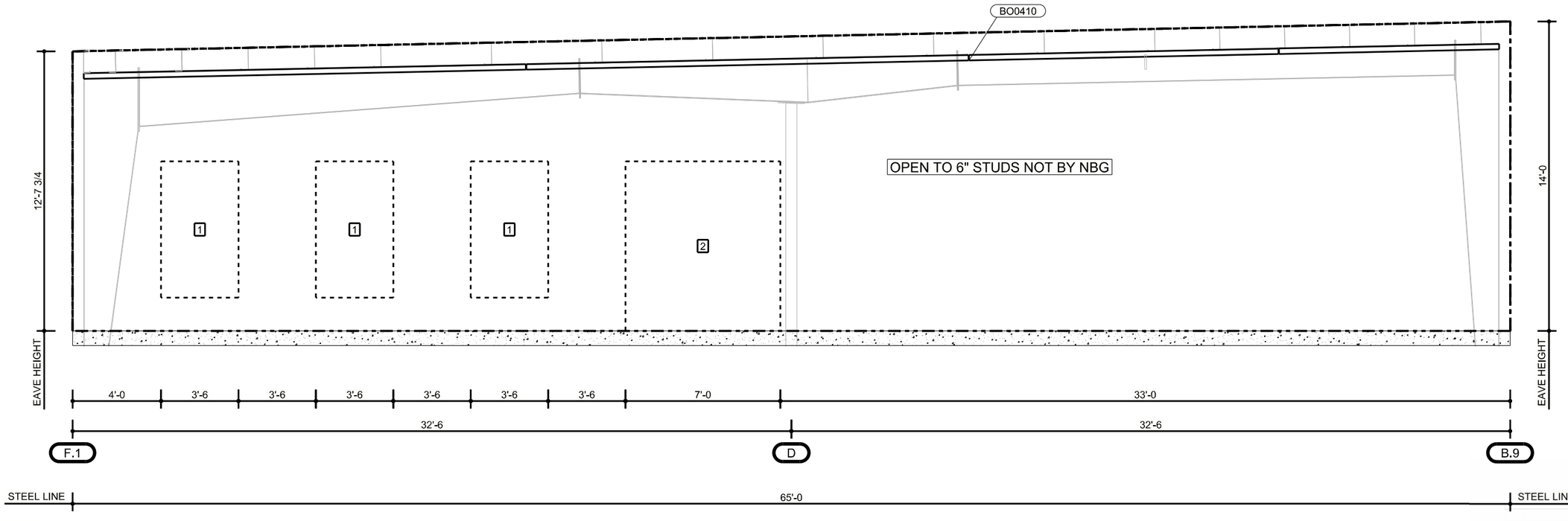
JOB NUMBER T25U0346A
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE CROSS SECTION AT LINE 1.1 (AREA C)
SHEET E4

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	3'-6"	6'-2"						1'-6"	Y
2	7'-0"	7'-8"							Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - ENDWALL AT LINE 9.1 (AREA B.1)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION

NOT FOR ERECTION

DRAWING TITLE
FRAMING ELEVATION - ENDWALL AT LINE 9.1 (AREA B.1)

05/23/2025 09:25:38am

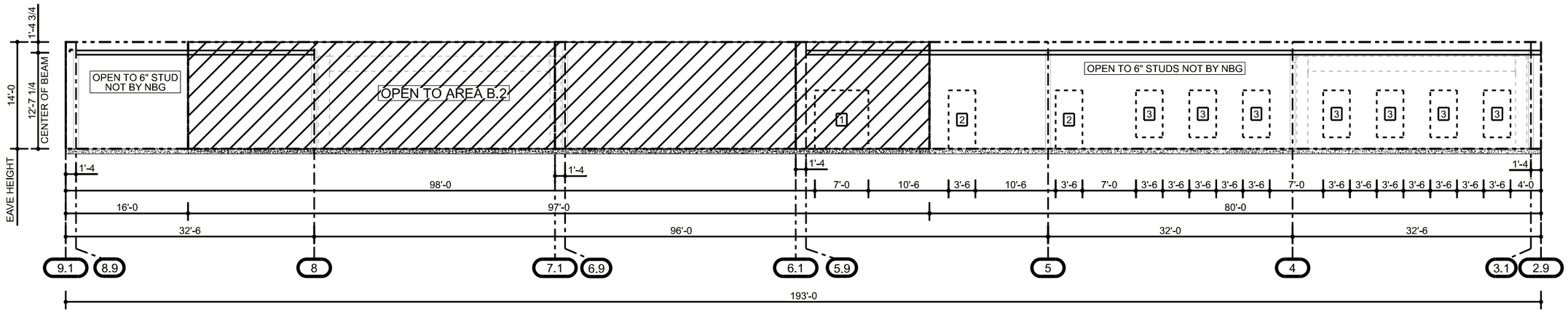
#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

DATE 04/02/2025
SHEET E40

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	7'-0"	7'-8"							Y
2	3'-6"	7'-8"							Y
3	3'-6"	6'-2"						1'-6"	Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - SIDEWALL AT LINE B.9 (AREA A.1, A.2 & B.1)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

MBMA MEMBER
IAS ACCREDITED MANUFACTURING AC172
AWS CERTIFIED D1.3 WAF1
CERTIFIED CSA A660
CSSEA
NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

09/09/2025 08:47:07 am

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION **NOT FOR ERECTION**

DRAWING TITLE
FRAMING ELEVATION - SIDEWALL AT LINE B.9 (AREA A.1, A.2 & B.1)

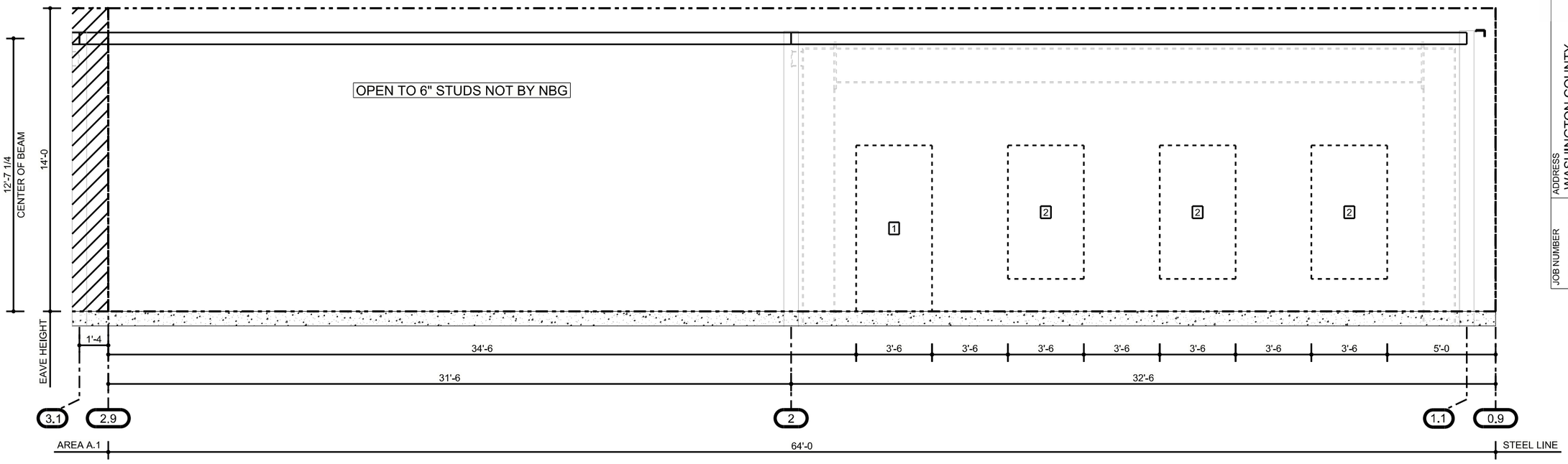
SHEET
E41

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	3'-6"	7'-8"							Y
2	3'-6"	6'-2"						1'-6"	Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - SIDEWALL AT LINE B.9 (AREA C)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	FRAMING ELEVATION - SIDEWALL AT LINE B.9 (AREA C)
SHEET	E42

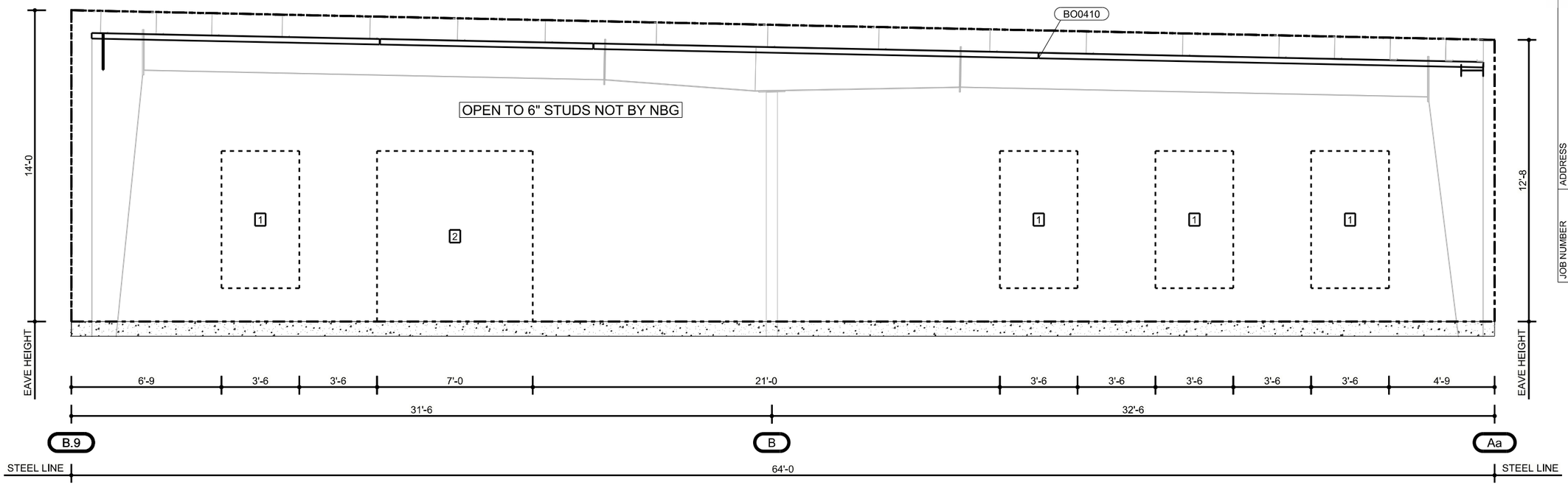
05/23/2025 09:25:42am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WIZ	09/08/2025
	PERMITS	TAK / JMW	WIZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	3'-6"	6'-2"						1'-6"	Y
2	7'-0"	7'-8"							Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - ENDWALL AT LINE 8.6 (AREA B.2)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

MBMA MEMBER
IAS ACCREDITED MANUFACTURING
CWB CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
CSSBI
CERTIFIED CSA A660

PHONE: (260) 837-7891
FAX: (260) 837-7384

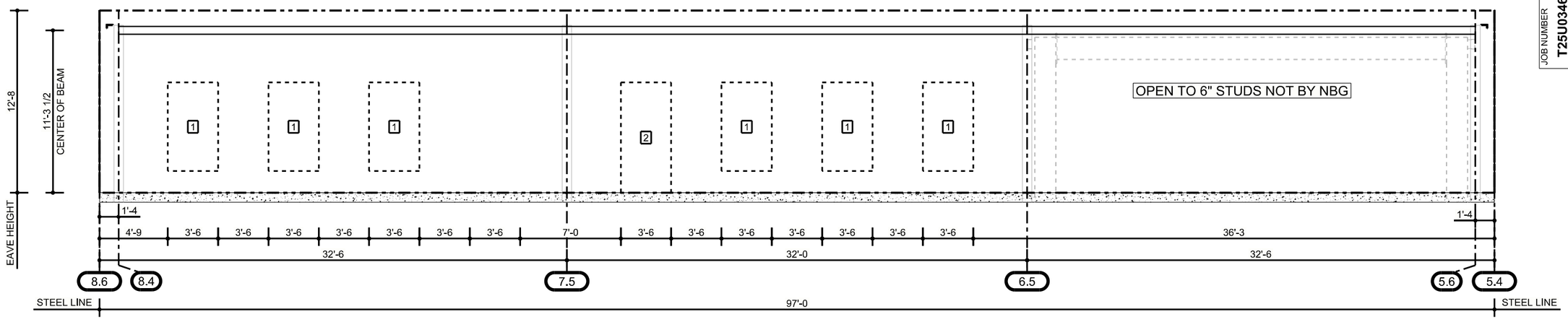
05/23/2025 09:25:44am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE FRAMING ELEVATION - ENDWALL AT LINE 8.6 (AREA B.2)
SHEET E43

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	3'-6"	6'-2"						1'-6"	Y
2	3'-6"	7'-8"							Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - SIDEWALL AT LINE Aa (AREA B.2)

WALL FRAMING GENERAL NOTES

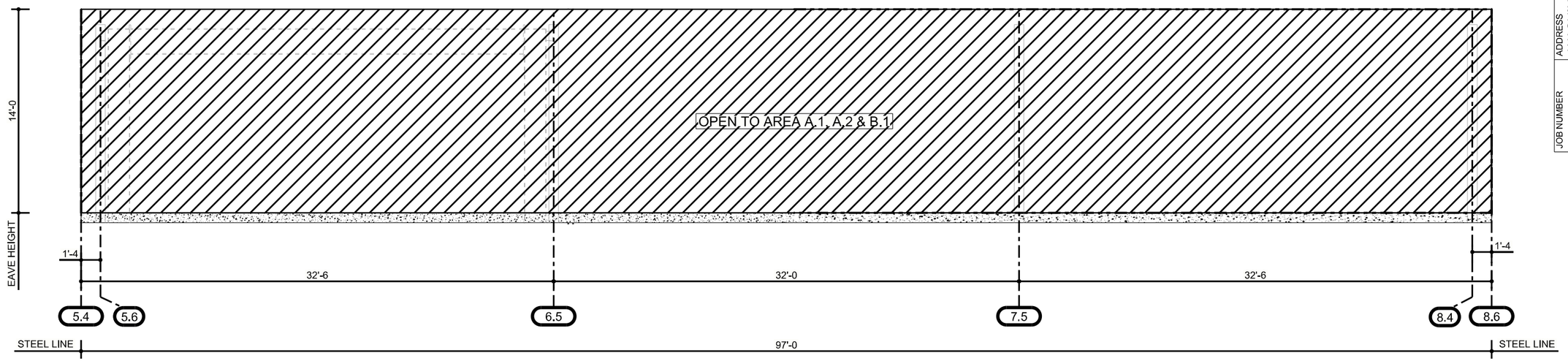
WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER: T25U0346A
ADDRESS: WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE: FRAMING ELEVATION - SIDEWALL AT LINE AA (AREA B.2)
SHEET: E44
05/23/2025 09:25:46am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WIZ	09/08/2025
	PERMITS	TAK / JMW	WIZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA



FRAMING ELEVATION - SIDEWALL AT LINE B.9 (AREA B.2)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	FRAMING ELEVATION - SIDEWALL AT LINE B.9 (AREA B.2)

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

MBMA MEMBER
CWB CERTIFIED CSA W47.1
IAS ACCREDITED AC161

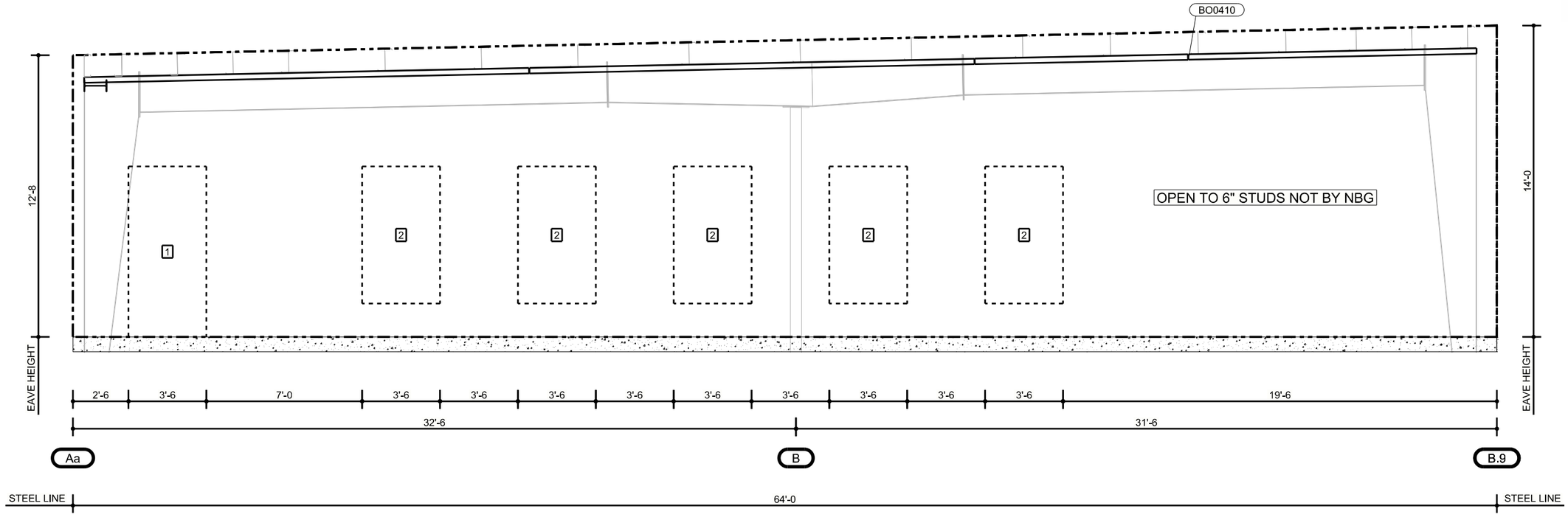
#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

05/23/2025 09:25:48am

E
025 SHEET
025 E45

FRAMED OPENING TABLE									
MARK	WIDTH	HEIGHT	HEADER	DRUM SUPPORT	LEFT JAMB	RIGHT JAMB	SILL	SILL HEIGHT	FIELD LOCATED
1	3'-6"	7'-8"							Y
2	3'-6"	6'-2"						1'-6"	Y

NOTE: FRAMING FOR FRAMED OPENINGS NOT BY NBG



FRAMING ELEVATION - ENDWALL AT LINE 5.4 AREA B.2)

WALL FRAMING GENERAL NOTES

WN1P: GIRT ELEVATIONS ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

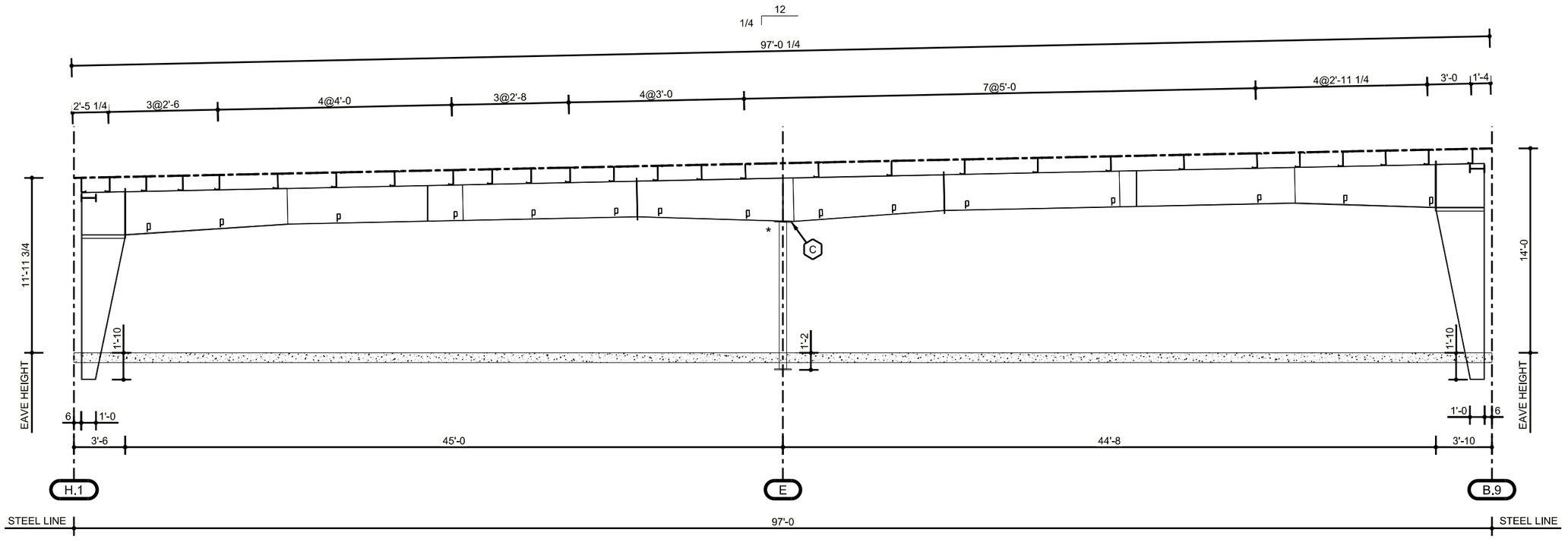
NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE FRAMING ELEVATION - ENDWALL AT LINE 5.4 AREA B.2)
05/23/2025 09:25:50am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE	SHEET
0	ANCHOR BOLTS	TEK / JMW	WIZ	09/08/2025	E46
	PERMITS	TAK / JMW	WIZ	09/08/2025	

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 3/4" X 3" A325	H0633	H0320	8'-0 5/8	8" X 1/2	8" X 1/2
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-1 1/16	8" X 3/8	8" X 3/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	8'-11 1/8	10" X 5/8	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-6 5/16	8" X 3/8	8" X 3/8
E	(8) 3/4" X 3" A325	H0633	H0320	9'-11 1/16	8" X 1/2	8" X 1/2



CROSS SECTION AT LINE 2 (AREA C)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

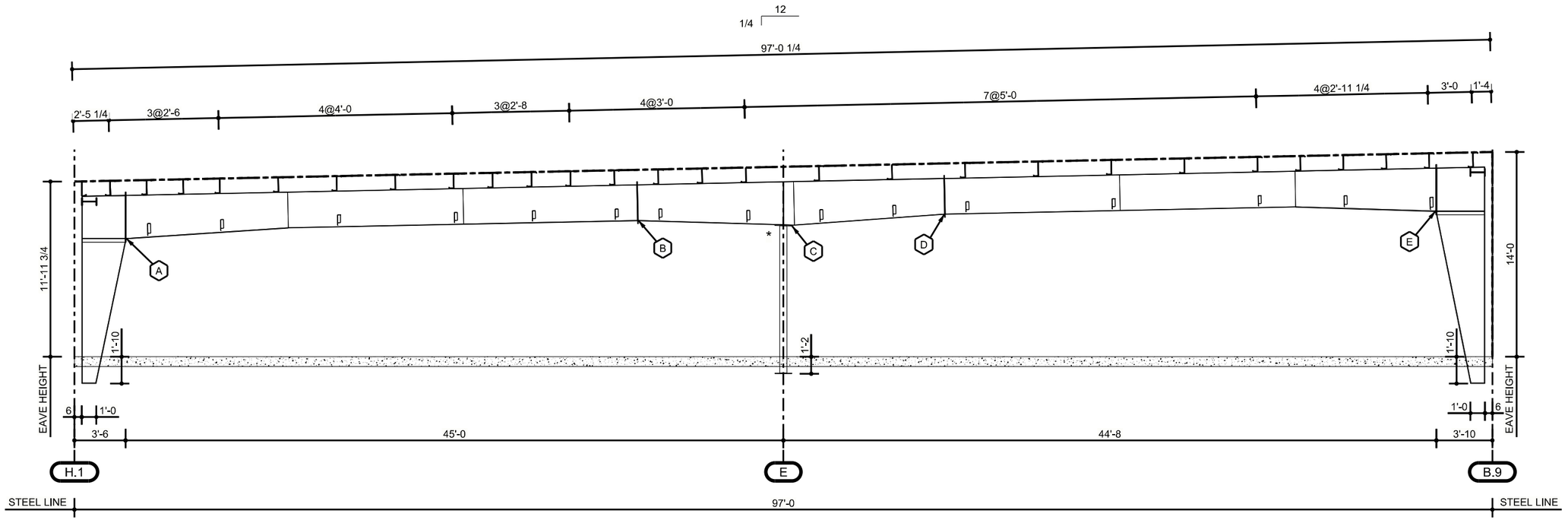
05/23/2025 09:24:34am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE CROSS SECTION AT LINE 2 (AREA C)
SHEET E5

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 3/4" X 3" A325	H0633	H0320	8'-0 5/8	8" X 1/2	8" X 1/2
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-1 1/16	8" X 3/8	8" X 3/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	8'-11 1/8	10" X 5/8	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-6 5/16	8" X 3/8	8" X 3/8
E	(8) 3/4" X 3" A325	H0633	H0320	9'-11 1/16	8" X 1/2	8" X 1/2



CROSS SECTION AT LINE 3.1 (AREA A.1)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:37am

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION

NOT FOR ERECTION

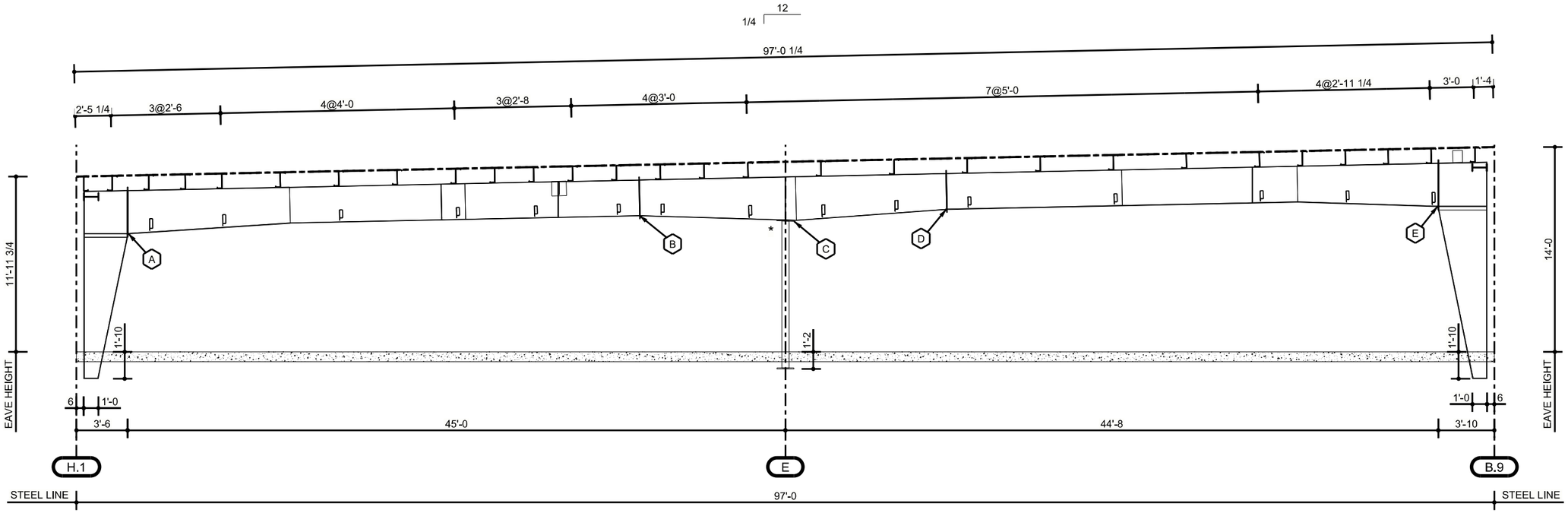
DRAWING TITLE
CROSS SECTION AT LINE 3.1 (AREA A.1)

SHEET E6

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 3/4" X 3" A325	H0633	H0320	8'-0 5/8	8" X 1/2	8" X 1/2
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-1 1/16	8" X 3/8	8" X 3/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	8'-11 1/8	10" X 5/8	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-6 5/16	8" X 3/8	8" X 3/8
E	(8) 3/4" X 3" A325	H0633	H0320	9'-11 1/16	8" X 1/2	8" X 1/2



CROSS SECTION AT LINE 4 & 5 (AREA A.1)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:39am

JOB NUMBER **T25U0346A**

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,&3

BUYER NAME DLR GROUP

DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**

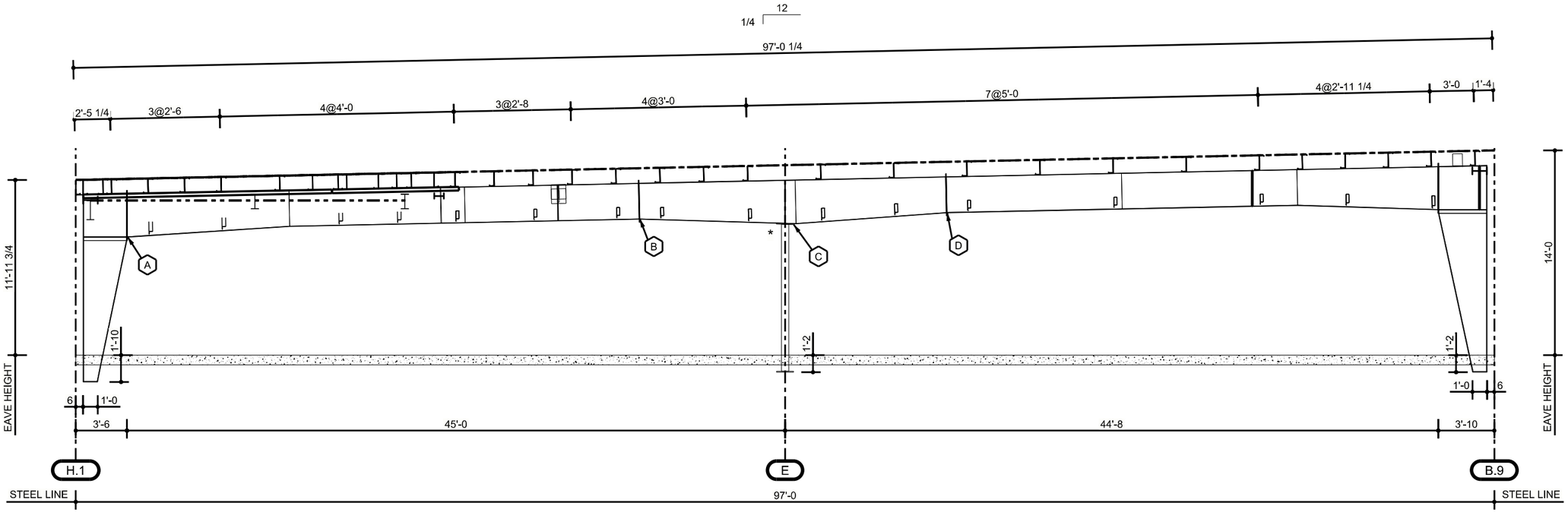
DRAWING TITLE CROSS SECTION AT LINE 4 & 5 (AREA A.1)

SHEET E7

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WIZ	09/08/2025
	PERMITS	TAK / JMW	WIZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 3/4" X 3" A325	H0633	H0320	8'-0 3/4	8" X 1/2	8" X 1/2
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-1 1/16	8" X 3/8	8" X 3/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	8'-11 1/8	10" X 5/8	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-6 5/16	8" X 3/8	8" X 3/8



CROSS SECTION AT LINE 5.9 (AREA A.1)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:42am

JOB NUMBER **T25U0346A**

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,&3

BUYER NAME DLR GROUP

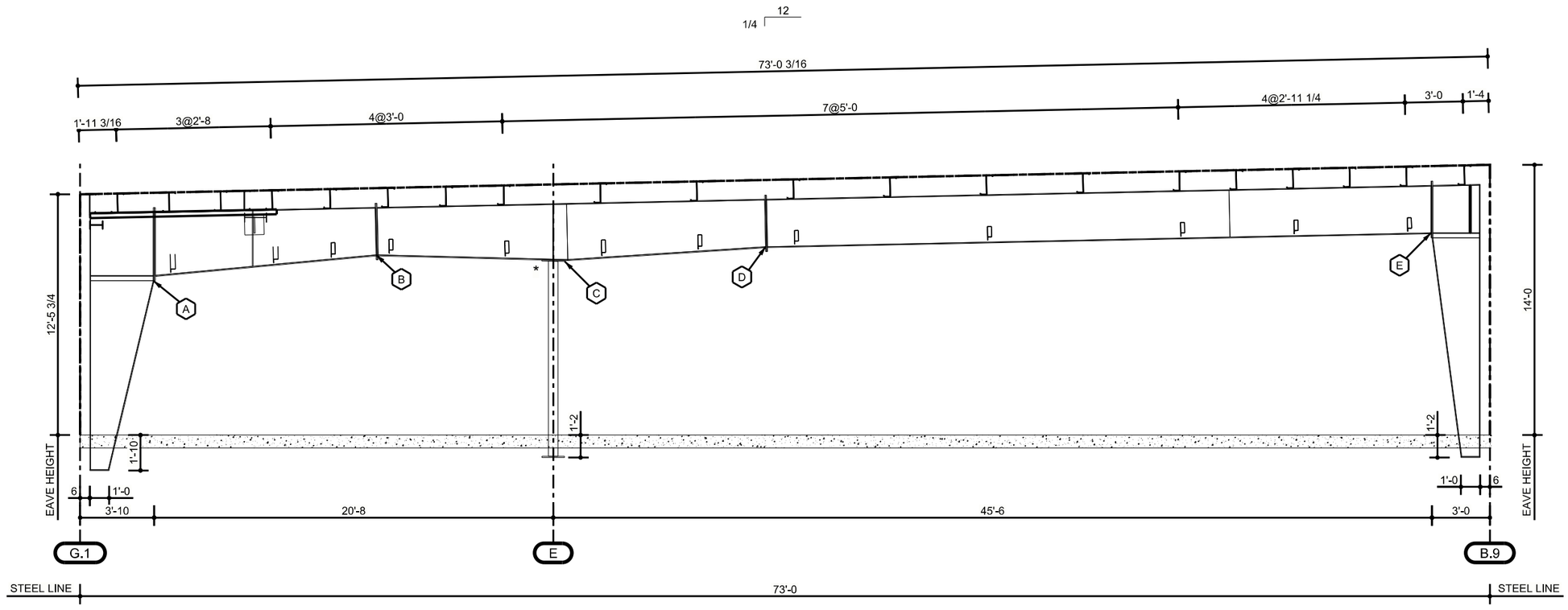
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**

DRAWING TITLE CROSS SECTION AT LINE 5.9 (AREA A.1)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SPLICE BOLT TABLE						
SPLICE	BOLTS DESCRIPTION	BOLT #	NUT #	CLEAR TO F.F.	PLATE SIZE	PLATE SIZE
A	(8) 3/4" X 3" A325	H0633	H0320	8'-2 5/8	8" X 5/8	8" X 5/8
B	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-1"	8" X 5/8	8" X 5/8
C	(4) 5/8" X 2 1/4" A325	H0610	H0310	8'-11 15/16	10" X 5/8	N/A
D	(8) 5/8" X 2 1/4" A325	H0610	H0310	9'-6 1/16	8" X 5/8	8" X 1/2
E	(8) 3/4" X 3" A325	H0633	H0320	10'-5 1/4	8" X 1/2	8" X 5/8



CROSS SECTION AT LINE 6.9 (AREA A.2)

FRAME CROSS SECTION GENERAL NOTES

FN1P: PURLIN AND GIRT DEPTH AND SPACING ARE SUBJECT TO CHANGE UPON FINAL DESIGN.

FN2P: FLANGE BRACES FROM THE GIRTS AND PURLINS TO THE COLUMNS AND RAFTERS ARE REQUIRED FOR STRUCTURAL STABILITY, BUT ARE NOT SHOWN ON THIS DRAWING FOR CLARITY. THIS DRAWING SHALL NOT BE CONSTRUED AS ALLOWING THE STRUCTURE TO BE ERECTED WITHOUT FLANGE BRACES.

FN3P: "##" WITHIN THE SPLICE BOLT TABLE UNDER NUT AND WASHER INDICATES THAT THE NUT AND WASHER ARE PART OF THE TENSION CONTROL BOLT ASSEMBLY SUPPLIED.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:44am

JOB NUMBER **T25U0346A**

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,&3

BUYER NAME DLR GROUP

DRAWING STATUS FOR CONSTRUCTION

NOT FOR ERECTION

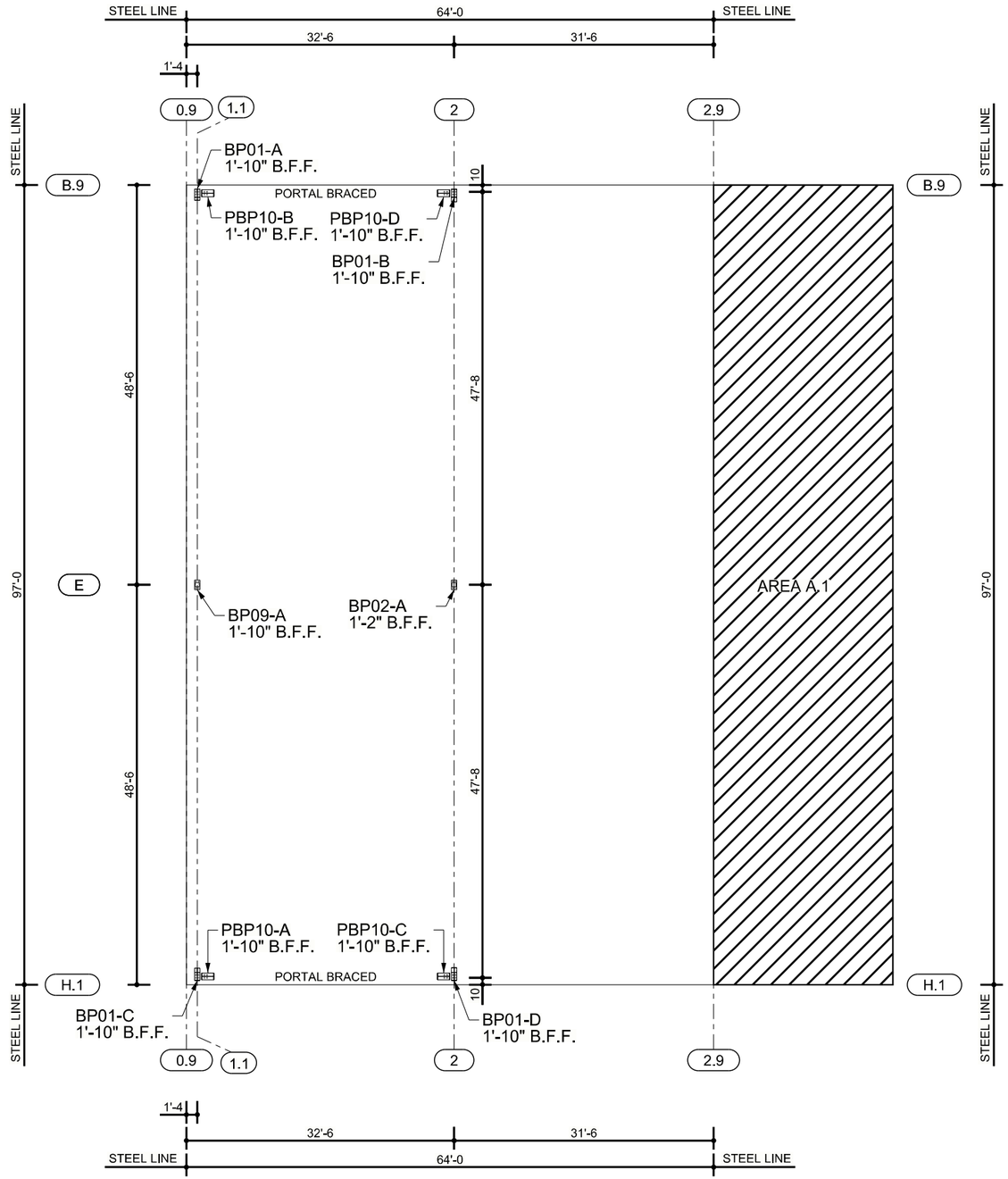
DRAWING TITLE CROSS SECTION AT LINE 6.9 (AREA A.2)

SHEET E9

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

ANCHOR ROD TABLE		
SIZE	QTY	MATERIAL
1"	40	F1554-GR.36



ANCHOR ROD PLAN (AREA C)

ANCHOR ROD PLAN GENERAL NOTES

AN1: THE SPECIFIED ANCHOR ROD DIAMETER ASSUMES F1554 GRADE 36 UNLESS NOTED OTHERWISE. ANCHOR ROD MATERIAL OF EQUAL DIAMETER MEETING OR EXCEEDING THE STRENGTH REQUIREMENTS SET FORTH ON THESE DRAWINGS MAY BE UTILIZED AT THE DISCRETION OF THE FOUNDATION DESIGN ENGINEER. ANCHOR ROD EMBEDMENT LENGTH SHALL BE DETERMINED BY THE FOUNDATION DESIGN ENGINEER.

AN2: METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR PROJECT FOUNDATION DESIGN. THE FOUNDATION DESIGN IS THE RESPONSIBILITY OF A REGISTERED PROFESSIONAL ENGINEER, FAMILIAR WITH LOCAL SITE CONDITIONS.

AN3: ANCHOR RODS, NUTS, FLAT WASHERS FOR ANCHOR RODS, EXPANSION BOLTS, AND CONCRETE/MASONRY EMBEDMENT PLATES ARE NOT BY THE METAL BUILDING MANUFACTURER.

AN4: DRAWING IS NOT TO SCALE. SEE DETAILS FOR COLUMN ORIENTATION.

AN5: THE ANCHOR ROD LOCATIONS PROVIDED BY THE METAL BUILDING MANUFACTURER SATISFY PERTINENT REQUIREMENTS FOR THE DESIGN OF THE MATERIALS SUPPLIED BY THE METAL BUILDING MANUFACTURER. IT IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER TO MAKE CERTAIN THAT SUFFICIENT EDGE DISTANCE IS PROVIDED FOR ALL ANCHOR RODS IN THE DETAILS OF THE FOUNDATION DESIGN.

AN6: THE ANCHOR ROD PLAN INDICATES WHERE THE ANCHOR RODS ARE TO BE PLACED AS WELL AS THE FOOTPRINT OF THE METAL BUILDING. IT IS ESSENTIAL THAT THESE ANCHOR ROD PATTERNS BE FOLLOWED. IF THESE SETTINGS DIFFER FROM THE ARCHITECTURAL FOUNDATION PLANS, THE METAL BUILDING MANUFACTURER MUST BE CONTACTED IMMEDIATELY – BEFORE CONCRETE IS PLACED.

AN7: "SINGLE" CEE COLUMNS SHALL BE ORIENTED WITH THE "TOES" TOWARD THE LOW EAVE UNLESS NOTED OTHERWISE.

AN8: ALL DIMENSIONS ARE OUT TO OUT OF STEEL. IF A CONCRETE NOTCH IS REQUIRED THEN THE REQUIRED DIMENSION SHOULD BE ADDED TO OBTAIN THE OUT TO OUT OF CONCRETE DIMENSIONS.

AN9: FINISHED FLOOR ELEVATION = 100'-0" AND BOTTOM OF BASE PLATES = 100'-0" UNLESS NOTED OTHERWISE.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

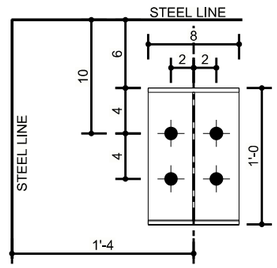
05/23/2025 09:24:17am

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
SHEET	F1
DRAWING TITLE	ANCHOR ROD PLAN (AREA C)

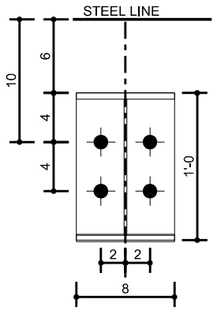
#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

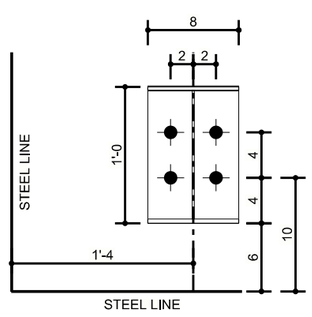
BP01-A [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



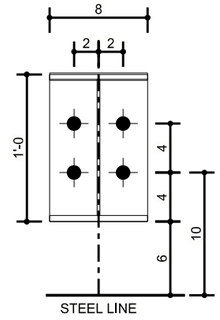
BP01-B [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



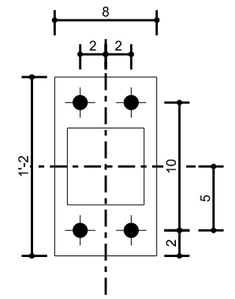
BP01-C [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



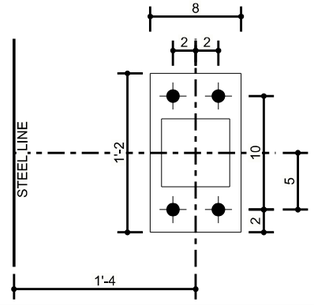
BP01-D [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



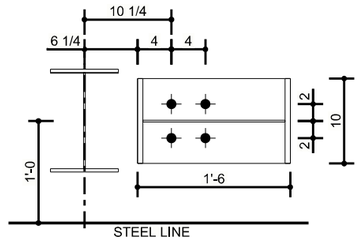
BP02-A [1'-2" B.F.F.]
3/4 PLATE - 1" AB - 3" REQD. PROJECTION



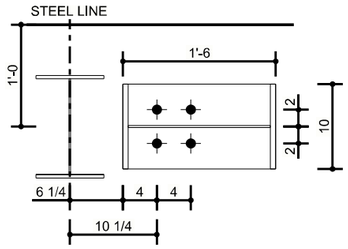
BP09-A [1'-10" B.F.F.]
5/8 PLATE - 1" AB - 3" REQD. PROJECTION



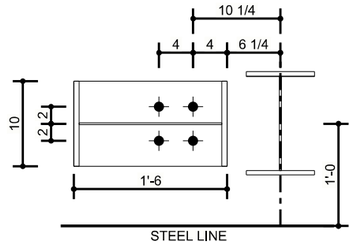
PBP10-A [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



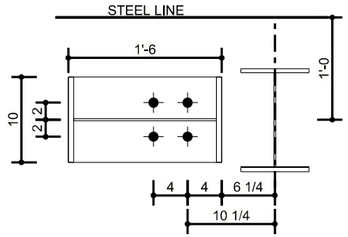
PBP10-B [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION

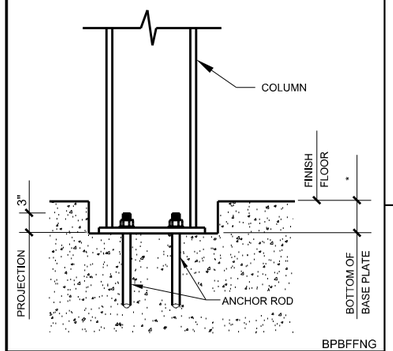


PBP10-C [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION

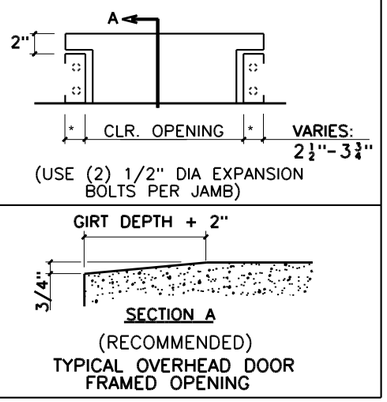


PBP10-D [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION





TYPICAL COLUMN BASE PLATE DETAIL



(RECOMMENDED)
TYPICAL OVERHEAD DOOR FRAMED OPENING

FOUNDATION DESIGN NOTES:

1. THE ORIENTATION OF THE ANCHOR BOLT DETAILS SHOWN ON THIS PAGE MAY NOT COINCIDE WITH THE ACTUAL COLUMN ORIENTATION SHOWN ON THE ANCHOR BOLT DRAWING. PLEASE REFERENCE THE SIDEWALL (SW) AND ENDWALL (EW) STEEL LINES SHOWN ON THE ANCHOR BOLT DETAILS WITH THE ANCHOR BOLT PLAN DURING LAYOUT OF COLUMN AND ANCHOR BOLT LOCATIONS.

2. COLUMN BASE PLATES MAY HAVE MORE HOLES THAN ARE REQUIRED DUE TO PRODUCTION LIMITATIONS. PLEASE FOLLOW ANCHOR BOLT DETAILS FOR QUANTITY OF ANCHOR BOLTS REQUIRED. EXTRA BASE PLATE HOLES DO NOT NEED INFILLED PER THE MBS DESIGN SPECIFICATIONS.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

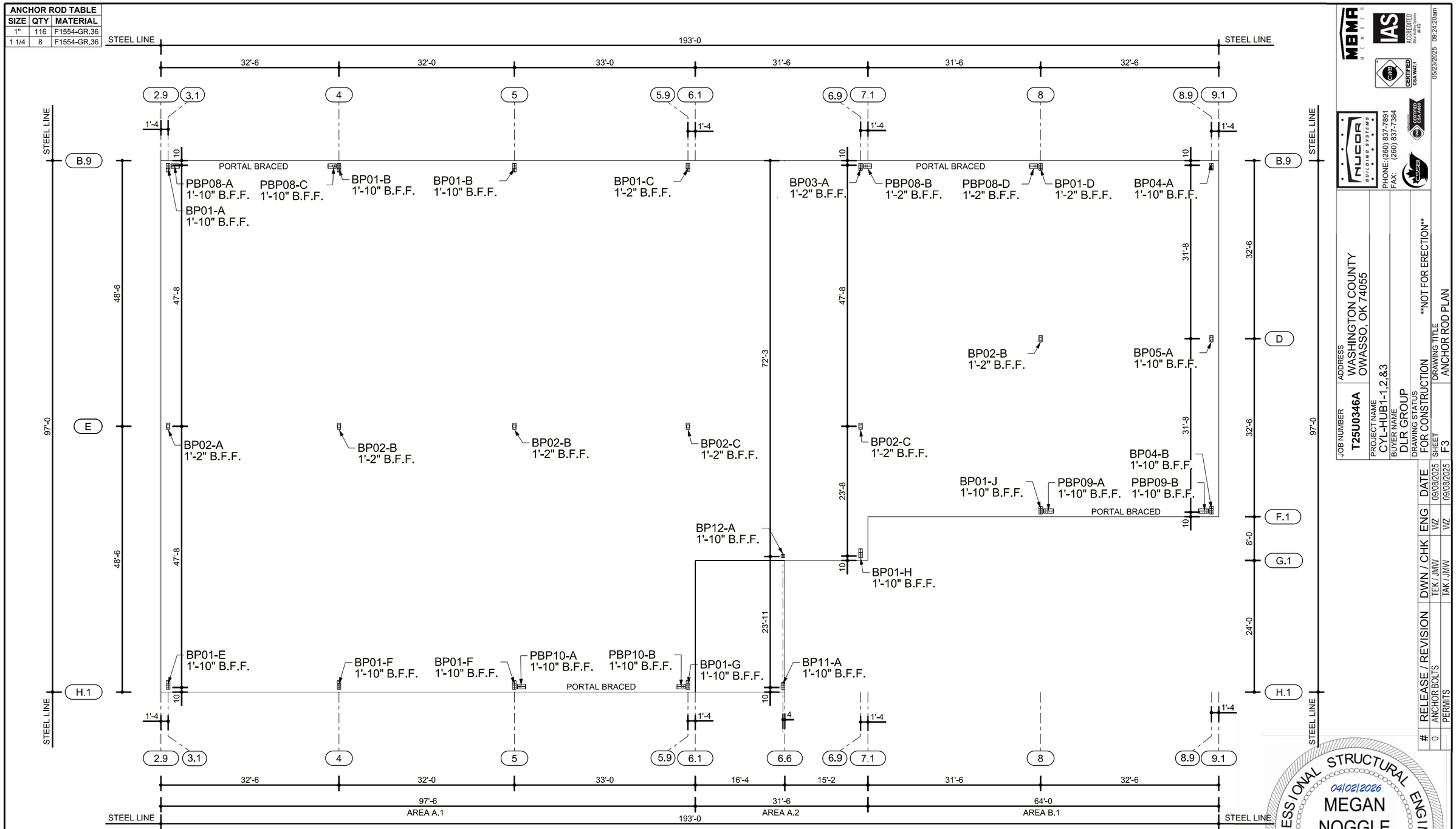
05/23/2025 09:24:18am

JOB NUMBER: T25U0346A
ADDRESS: WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,83
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION
NOT FOR ERECTION
DRAWING TITLE: BASE PLATE DETAILS
SHEET: F2

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WIZ	09/08/2025
	PERMITS	TAK / JMW	WIZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

ANCHOR ROD TABLE		
SIZE	QTY	MATERIAL
1"	116	F1554-GR.36
1 1/4	8	F1554-GR.36



ANCHOR ROD PLAN (AREA A.1, A.2 & B.1)

ANCHOR ROD PLAN GENERAL NOTES

AN1: THE SPECIFIED ANCHOR ROD DIAMETER ASSUMES F1554 GRADE 36 UNLESS NOTED OTHERWISE. ANCHOR ROD MATERIAL OF EQUAL DIAMETER MEETING OR EXCEEDING THE STRENGTH REQUIREMENTS SET FORTH ON THESE DRAWINGS MAY BE UTILIZED AT THE DISCRETION OF THE FOUNDATION DESIGN ENGINEER. ANCHOR ROD EMBEDMENT LENGTH SHALL BE DETERMINED BY THE FOUNDATION DESIGN ENGINEER.

AN2: METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR PROJECT FOUNDATION DESIGN. THE FOUNDATION DESIGN IS THE RESPONSIBILITY OF A REGISTERED PROFESSIONAL ENGINEER, FAMILIAR WITH LOCAL SITE CONDITIONS.

AN3: ANCHOR RODS, NUTS, FLAT WASHERS FOR ANCHOR RODS, EXPANSION BOLTS, AND CONCRETE/MASONRY EMBEDMENT PLATES ARE NOT BY THE METAL BUILDING MANUFACTURER.

AN4: DRAWING IS NOT TO SCALE. SEE DETAILS FOR COLUMN ORIENTATION.

AN5: THE ANCHOR ROD LOCATIONS PROVIDED BY THE METAL BUILDING MANUFACTURER SATISFY PERTINENT REQUIREMENTS FOR THE DESIGN OF THE MATERIALS SUPPLIED BY THE METAL BUILDING MANUFACTURER. IT IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER TO MAKE CERTAIN THAT SUFFICIENT EDGE DISTANCE IS PROVIDED FOR ALL ANCHOR RODS IN THE DETAILS OF THE FOUNDATION DESIGN.

AN6: THE ANCHOR ROD PLAN INDICATES WHERE THE ANCHOR RODS ARE TO BE PLACED AS WELL AS THE FOOTPRINT OF THE METAL BUILDING. IT IS ESSENTIAL THAT THESE ANCHOR ROD PATTERNS BE FOLLOWED. IF THESE SETTINGS DIFFER FROM THE ARCHITECTURAL FOUNDATION PLANS, THE METAL BUILDING MANUFACTURER MUST BE CONTACTED IMMEDIATELY – BEFORE CONCRETE IS PLACED.

AN7: "SINGLE" CEE COLUMNS SHALL BE ORIENTED WITH THE "TOES" TOWARD THE LOW EAVE UNLESS NOTED OTHERWISE.

AN8: ALL DIMENSIONS ARE OUT TO OUT OF STEEL. IF A CONCRETE NOTCH IS REQUIRED THEN THE REQUIRED DIMENSION SHOULD BE ADDED TO OBTAIN THE OUT TO OUT OF CONCRETE DIMENSIONS.

AN9: FINISHED FLOOR ELEVATION = 100'-0" AND BOTTOM OF BASE PLATES = 100'-0" UNLESS NOTED OTHERWISE.

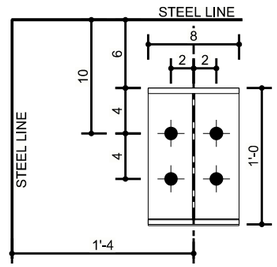
MBMA MEMBER
IAS ACCREDITED MANUFACTURING AC431
CWB CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384
CERTIFIED CSA A660
CESSER
05/23/2025 09:24:20am

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION
	NOT FOR ERECTION
DRAWING TITLE	ANCHOR ROD PLAN
SHEET	F3

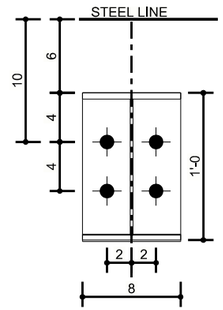
#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

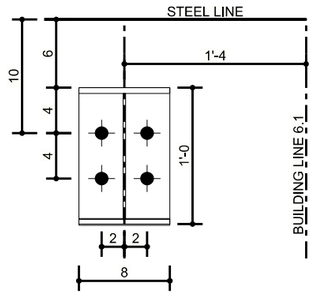
BP01-A [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



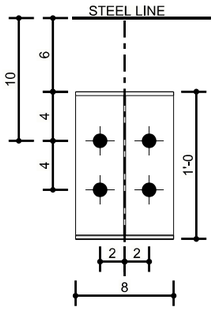
BP01-B [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



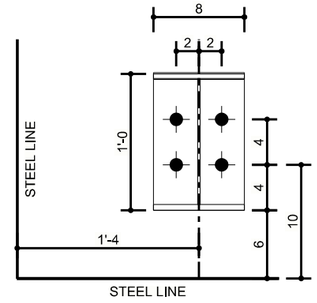
BP01-C [1'-2" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



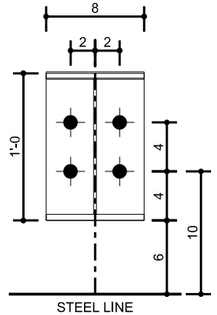
BP01-D [1'-2" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



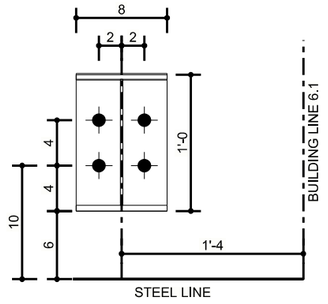
BP01-E [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



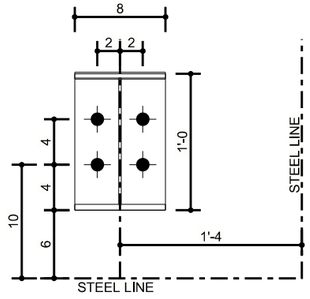
BP01-F [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



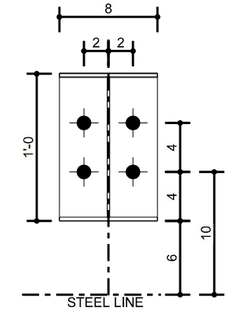
BP01-G [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



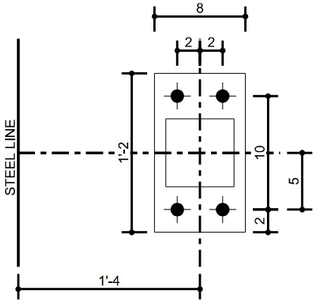
BP01-H [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



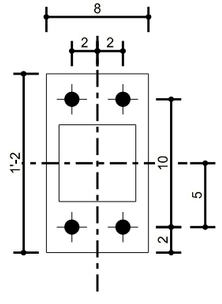
BP01-J [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



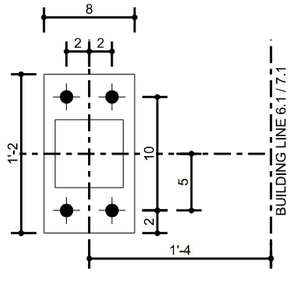
BP02-A [1'-2" B.F.F.]
3/4 PLATE - 1" AB - 3" REQD. PROJECTION



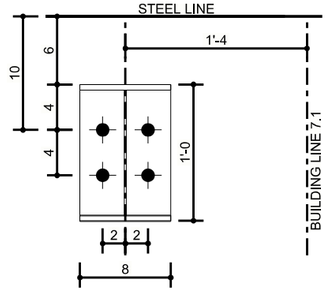
BP02-B [1'-2" B.F.F.]
3/4 PLATE - 1" AB - 3" REQD. PROJECTION



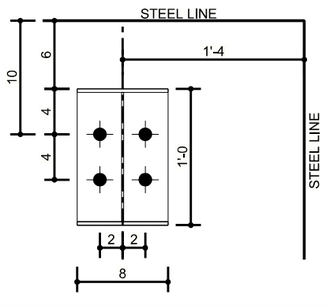
BP02-C [1'-2" B.F.F.]
3/4 PLATE - 1" AB - 3" REQD. PROJECTION



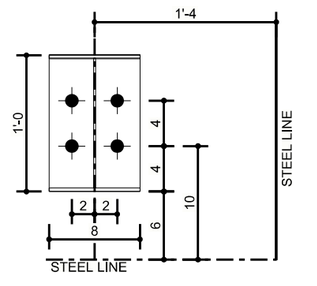
BP03-A [1'-2" B.F.F.]
5/8 PLATE - 1" AB - 3" REQD. PROJECTION



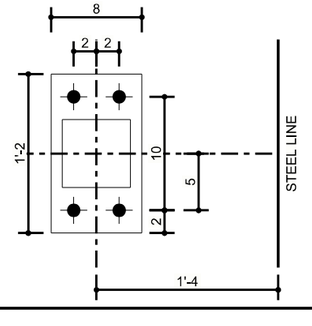
BP04-A [1'-10" B.F.F.]
3/8 PLATE - 1" AB - 3" REQD. PROJECTION



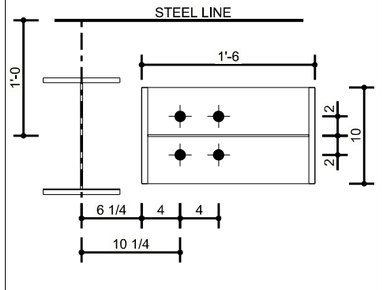
BP04-B [1'-10" B.F.F.]
3/8 PLATE - 1" AB - 3" REQD. PROJECTION



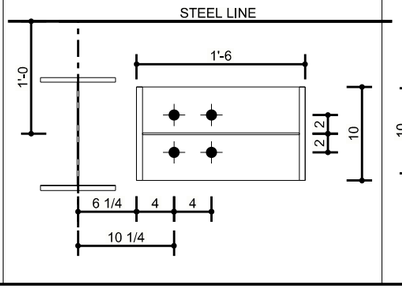
BP05-A [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



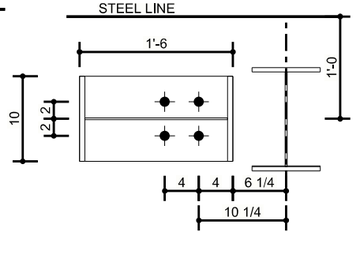
PBP08-A [1'-10" B.F.F.]
5/8 PLATE - 1" AB - 3" REQD. PROJECTION



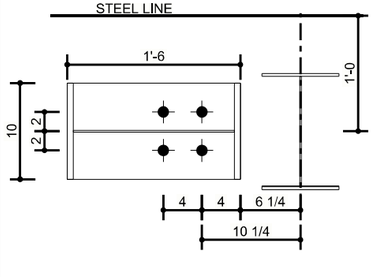
PBP08-B [1'-2" B.F.F.]
5/8 PLATE - 1" AB - 3" REQD. PROJECTION



PBP08-C [1'-10" B.F.F.]
5/8 PLATE - 1" AB - 3" REQD. PROJECTION



PBP08-D [1'-2" B.F.F.]
5/8 PLATE - 1" AB - 3" REQD. PROJECTION



MBMA MEMBER
IAS ACCREDITED MANUFACTURER #241
CWB CERTIFIED CSA W47.1
CERTIFIED CSA A660
CSSBI

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/23/2025 09:24:21am

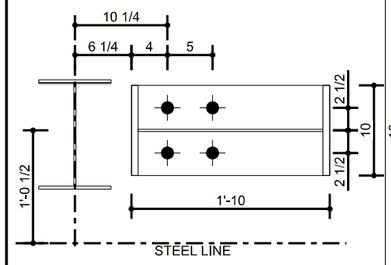
JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	BASE PLATE DETAILS (AREA A.1, A.2 & B.1)
DATE	09/08/2025
SHEET	F4

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

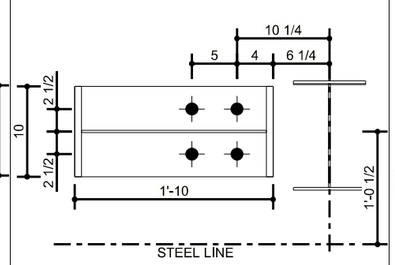
PBP09-A [1'-10" B.F.F.]

3/4 PLATE - 1 1/4 AB - 3" REQD. PROJECTION



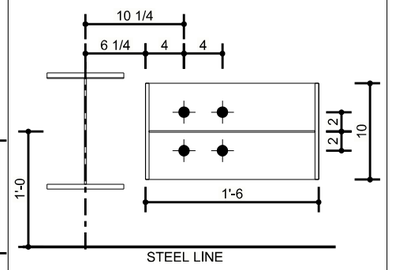
PBP09-B [1'-10" B.F.F.]

3/4 PLATE - 1 1/4 AB - 3" REQD. PROJECTION



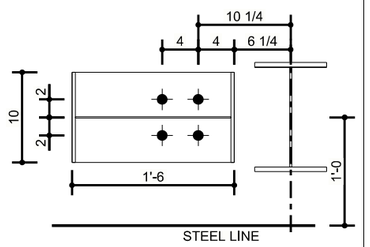
PBP10-A [1'-10" B.F.F.]

3/8 PLATE - 1" AB - 3" REQD. PROJECTION



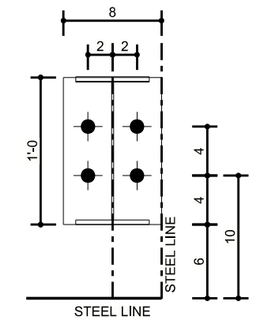
PBP10-B [1'-10" B.F.F.]

3/8 PLATE - 1" AB - 3" REQD. PROJECTION



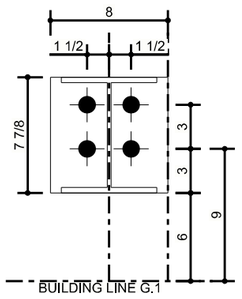
BP11-A [1'-10" B.F.F.]

3/8 PLATE - 1" AB - 3" REQD. PROJECTION



BP12-A [1'-10" B.F.F.]

3/8 PLATE - 1" AB - 3" REQD. PROJECTION



MBMA MEMBER

IAS ACCREDITED MANUFACTURING PLANT AC431

CWB CERTIFIED CSA W47.1

CERTIFIED CSA A660

CSSBI

NUCOR BUILDING SYSTEMS

PHONE: (260) 837-7891
FAX: (260) 837-7384

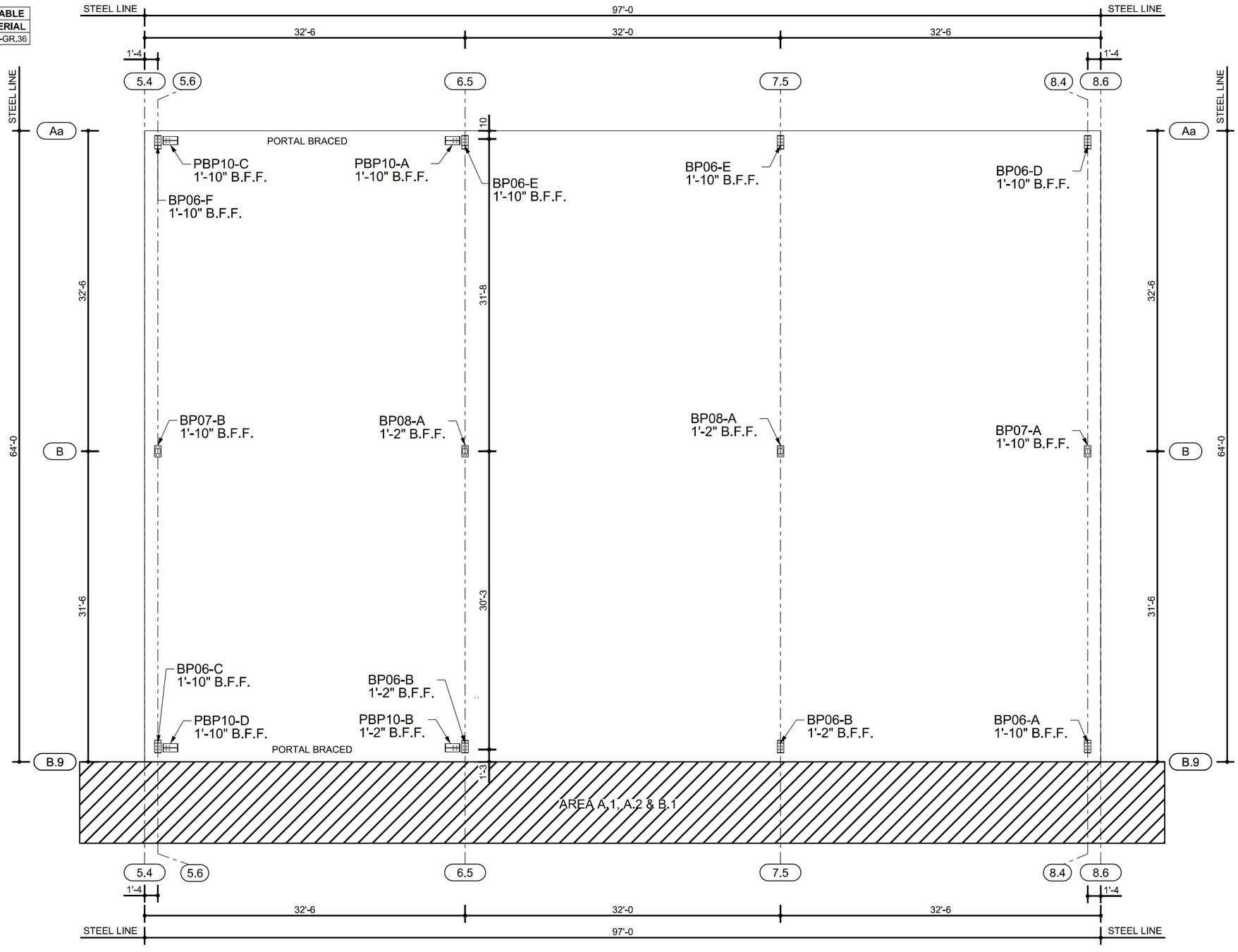
05/23/2025 09:24:22am

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	BASE PLATE DETAILS (AREA A.1, A.2 & B.1)
SHEET	F5

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

ANCHOR ROD TABLE		
SIZE	QTY	MATERIAL
1"	64	F1554-GR.36



ANCHOR ROD PLAN (AREA B.2)

ANCHOR ROD PLAN GENERAL NOTES

AN1: THE SPECIFIED ANCHOR ROD DIAMETER ASSUMES F1554 GRADE 36 UNLESS NOTED OTHERWISE. ANCHOR ROD MATERIAL OF EQUAL DIAMETER MEETING OR EXCEEDING THE STRENGTH REQUIREMENTS SET FORTH ON THESE DRAWINGS MAY BE UTILIZED AT THE DISCRETION OF THE FOUNDATION DESIGN ENGINEER. ANCHOR ROD EMBEDMENT LENGTH SHALL BE DETERMINED BY THE FOUNDATION DESIGN ENGINEER.

AN2: METAL BUILDING MANUFACTURER IS NOT RESPONSIBLE FOR PROJECT FOUNDATION DESIGN. THE FOUNDATION DESIGN IS THE RESPONSIBILITY OF A REGISTERED PROFESSIONAL ENGINEER, FAMILIAR WITH LOCAL SITE CONDITIONS.

AN3: ANCHOR RODS, NUTS, FLAT WASHERS FOR ANCHOR RODS, EXPANSION BOLTS, AND CONCRETE/MASONRY EMBEDMENT PLATES ARE NOT BY THE METAL BUILDING MANUFACTURER.

AN4: DRAWING IS NOT TO SCALE. SEE DETAILS FOR COLUMN ORIENTATION.

AN5: THE ANCHOR ROD LOCATIONS PROVIDED BY THE METAL BUILDING MANUFACTURER SATISFY PERTINENT REQUIREMENTS FOR THE DESIGN OF THE MATERIALS SUPPLIED BY THE METAL BUILDING MANUFACTURER. IT IS THE RESPONSIBILITY OF THE FOUNDATION ENGINEER TO MAKE CERTAIN THAT SUFFICIENT EDGE DISTANCE IS PROVIDED FOR ALL ANCHOR RODS IN THE DETAILS OF THE FOUNDATION DESIGN.

AN6: THE ANCHOR ROD PLAN INDICATES WHERE THE ANCHOR RODS ARE TO BE PLACED AS WELL AS THE FOOTPRINT OF THE METAL BUILDING. IT IS ESSENTIAL THAT THESE ANCHOR ROD PATTERNS BE FOLLOWED. IF THESE SETTINGS DIFFER FROM THE ARCHITECTURAL FOUNDATION PLANS, THE METAL BUILDING MANUFACTURER MUST BE CONTACTED IMMEDIATELY – BEFORE CONCRETE IS PLACED.

AN7: "SINGLE" CEE COLUMNS SHALL BE ORIENTED WITH THE "TOES" TOWARD THE LOW EAVE UNLESS NOTED OTHERWISE.

AN8: ALL DIMENSIONS ARE OUT TO OUT OF STEEL. IF A CONCRETE NOTCH IS REQUIRED THEN THE REQUIRED DIMENSION SHOULD BE ADDED TO OBTAIN THE OUT TO OUT OF CONCRETE DIMENSIONS.

AN9: FINISHED FLOOR ELEVATION = 100'-0" AND BOTTOM OF BASE PLATES = 100'-0" UNLESS NOTED OTHERWISE.

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05/23/2025 09:24:23am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,83
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE ANCHOR ROD PLAN (AREA B.2)
SHEET F6

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

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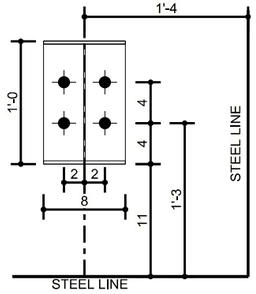
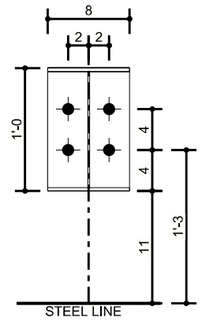
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

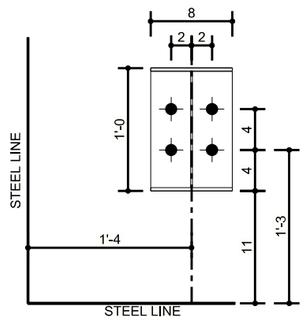
BP06-A [1'-10" B.F.F.]
3/8 PLATE - 1" AB - 3" REQD. PROJECTION



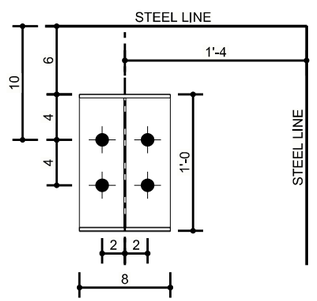
BP06-B [1'-2" B.F.F.]
3/8 PLATE - 1" AB - 3" REQD. PROJECTION



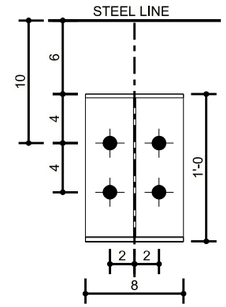
BP06-C [1'-10" B.F.F.]
3/8 PLATE - 1" AB - 3" REQD. PROJECTION



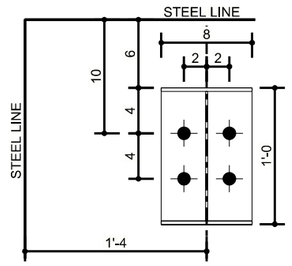
BP06-D [1'-10" B.F.F.]
3/8 PLATE - 1" AB - 3" REQD. PROJECTION



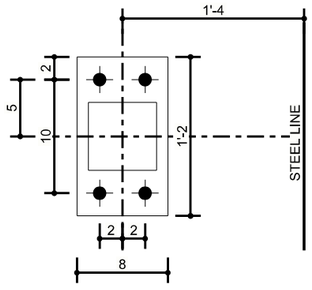
BP06-E [1'-10" B.F.F.]
3/8 PLATE - 1" AB - 3" REQD. PROJECTION



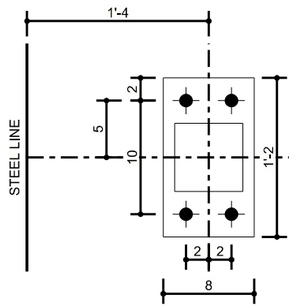
BP06-F [1'-10" B.F.F.]
3/8 PLATE - 1" AB - 3" REQD. PROJECTION



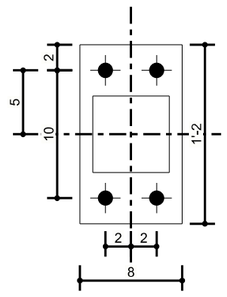
BP07-A [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



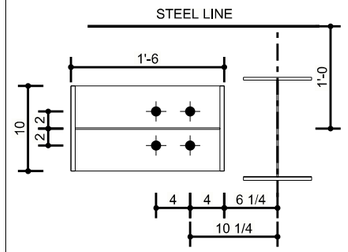
BP07-B [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



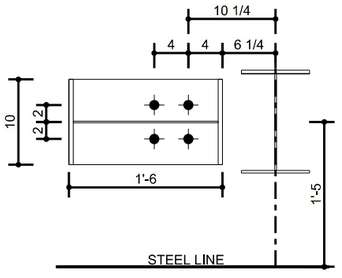
BP08-A [1'-2" B.F.F.]
5/8 PLATE - 1" AB - 3" REQD. PROJECTION



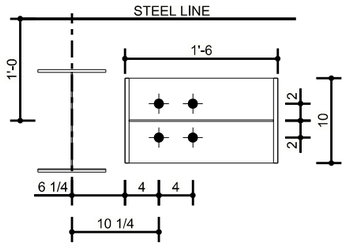
PBP10-A [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION



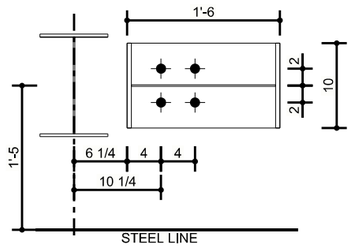
PBP10-B [1'-2" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION

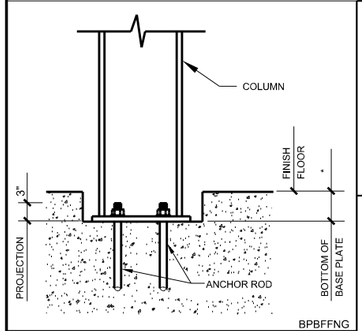


PBP10-C [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION

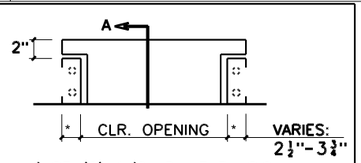


PBP10-D [1'-10" B.F.F.]
1/2 PLATE - 1" AB - 3" REQD. PROJECTION

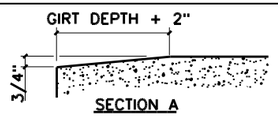




TYPICAL COLUMN BASE PLATE DETAIL



(USE (2) 1/2" DIA EXPANSION BOLTS PER JAMB)



SECTION A
(RECOMMENDED)
TYPICAL OVERHEAD DOOR FRAMED OPENING

FOUNDATION DESIGN NOTES:

1. THE ORIENTATION OF THE ANCHOR BOLT DETAILS SHOWN ON THIS PAGE MAY NOT COINCIDE WITH THE ACTUAL COLUMN ORIENTATION SHOWN ON THE ANCHOR BOLT DRAWING. PLEASE REFERENCE THE SIDEWALL (SW) AND ENDWALL (EW) STEEL LINES SHOWN ON THE ANCHOR BOLT DETAILS WITH THE ANCHOR BOLT PLAN DURING LAYOUT OF COLUMN AND ANCHOR BOLT LOCATIONS.

2. COLUMN BASE PLATES MAY HAVE MORE HOLES THAN ARE REQUIRED DUE TO PRODUCTION LIMITATIONS. PLEASE FOLLOW ANCHOR BOLT DETAILS FOR QUANTITY OF ANCHOR BOLTS REQUIRED. EXTRA BASE PLATE HOLES DO NOT NEED INFILLED PER THE MBS DESIGN SPECIFICATIONS.

NUCOR BUILDING SYSTEMS
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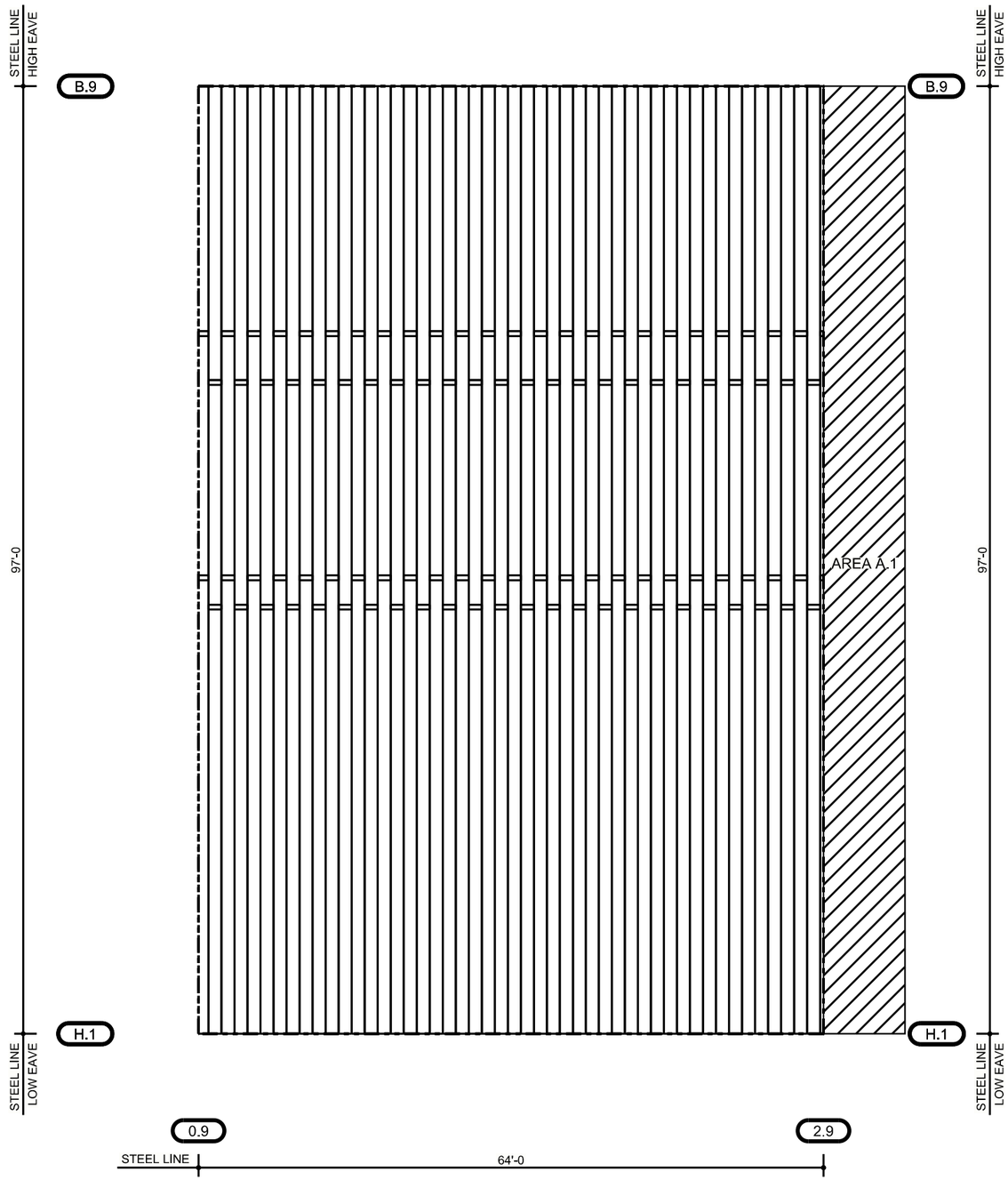
05/23/2025 09:24:25am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
SHEET F7
DRAWING TITLE BASE PLATE DETAILS

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA



ROOF SHEETING PLAN (AREA C)

NOTE: ROOF PANELS WILL EXTEND OVER THE 6" STUD & 3" IMP

ROOF SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

JOB NUMBER **T25U0346A**

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,&3

BUYER NAME DLR GROUP

DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**

DRAWING TITLE ROOF SHEETING PLAN (AREA C)

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
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MBMA MEMBER · IAS ACCREDITED · CWB CERTIFIED CSA W47.1 · CSSBI · CERTIFIED CSA A660

05/23/2025 09:25:59am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

SHEET S1

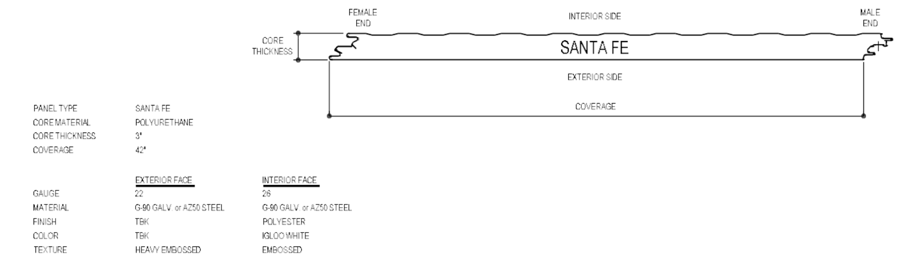
PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	10'-6"	7'-8"		
2	3'-6"	6'-2"		

DOWNSPOUT LOCATION & TRIM CHART		
MARK	TRIM	DETAIL
MAX SPACING OF DOWNSPOUT DROPS: 40'-0" O.C. MAX		
SEE ELEVATION BELOW FOR DROP LOCATIONS (DS1), (DS2), ETC.		

PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W06	1199	TBK	GA4000, GA4001, GA4035, GA4200, GA4100



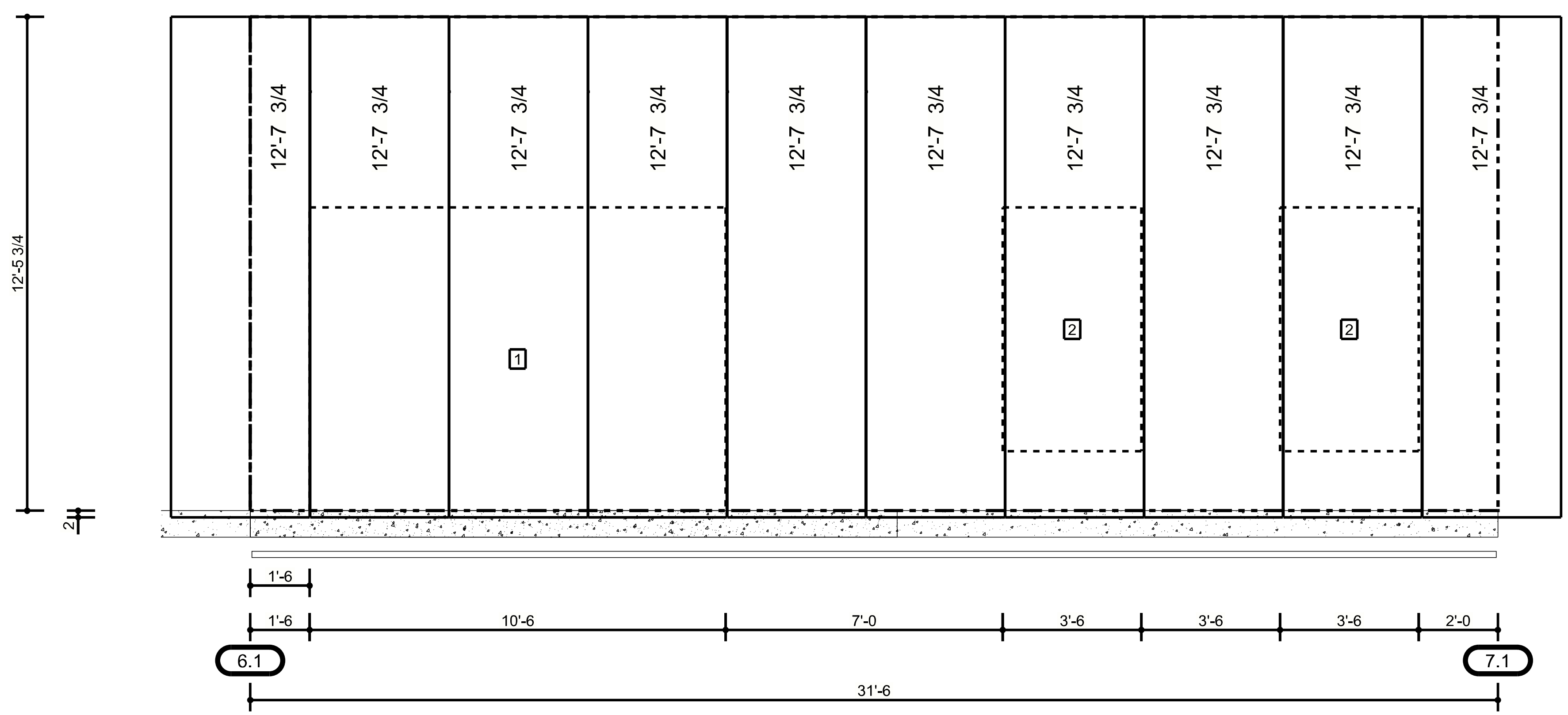
FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

WALL PANEL ALIGNMENT WITH DOORS AND WINDOWS WILL BE VERY DIFFICULT TO ACHIEVE DUE TO VARIATION IN PANEL JOINT WIDTH UPON INSTALLATION AND IS THE RESPONSIBILITY OF THE INSTALLER.

FRAMING FOR FRAMED OPENINGS NOT BY NUCOR.

INSULATED METAL PANELS DO NOT MODULATE TO THE NET DIMENSION OF THE PANEL.

NOTE: FOR 42" WIDE X 3" THICK METL-SPAN SANTA FE IMP (22 Ga / 26 Ga) THE MINIMUM SPACING IS 3'-6" ON CENTER. THE MAXIMUM ALLOWABLE SPACING IS 4'-0" ON CENTER WHEN USING FP1 CONNECTION AT EACH SUPPORT. ATTACHMENT MUST BE TO MINIMUM 16 Ga THICKNESS MATERIAL.



SHEETING ELEVATION - SIDEWALL AT LINE G.1

AREA A.2

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/20/2025 12:55:55pm

JOB NUMBER T25U0346A

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,&3

BUYER NAME DLR GROUP

DRAWING STATUS FOR CONSTRUCTION

NOT FOR ERECTION

DRAWING TITLE SHEETING ELEVATION - SIDEWALL AT LINE G.1 (AREA A.2)

SHEET S10

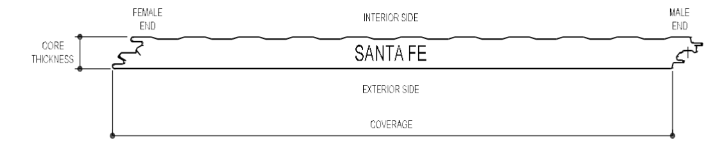
#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	7'-0"	7'-8"		

PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W07	1201	TBK	GA4000, GA4001, GA4035, GA4200, GA4120



PANEL TYPE	SANTA FE	
CORE MATERIAL	POLYURETHANE	
CORE THICKNESS	3"	
COVERAGE	42"	
	EXTERIOR FACE	INTERIOR FACE
GAUGE	22	26
MATERIAL	G-90 GALV. or AZ50 STEEL	G-90 GALV. or AZ50 STEEL
FINISH	TBK	POLYESTER
COLOR	TBK	IGLOO WHITE
TEXTURE	HEAVY EMBOSSED	EMBOSSED

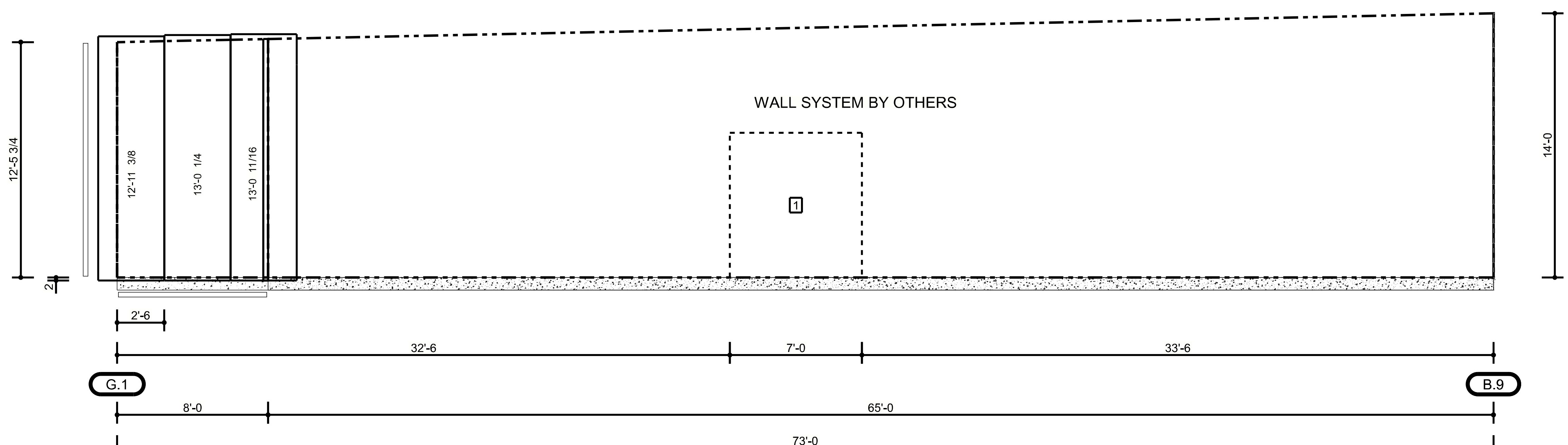
FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

WALL PANEL ALIGNMENT WITH DOORS AND WINDOWS WILL BE VERY DIFFICULT TO ACHIEVE DUE TO VARIATION IN PANEL JOINT WIDTH UPON INSTALLATION AND IS THE RESPONSIBILITY OF THE INSTALLER.

FRAMING FOR FRAMED OPENINGS NOT BY NUCOR.

INSULATED METAL PANELS DO NOT MODULATE TO THE NET DIMENSION OF THE PANEL.

NOTE: FOR 42" WIDE X 3" THICK METL-SPAN SANTA FE IMP (22 Ga / 26 Ga) THE MINIMUM SPACING IS 3'-6" ON CENTER. THE MAXIMUM ALLOWABLE SPACING IS 4'-0" ON CENTER WHEN USING FP1 CONNECTION AT EACH SUPPORT. ATTACHMENT MUST BE TO MINIMUM 16 Ga THICKNESS MATERIAL.



SHEETING ELEVATION - ENDWALL AT LINE 7.1

AREA A.2

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

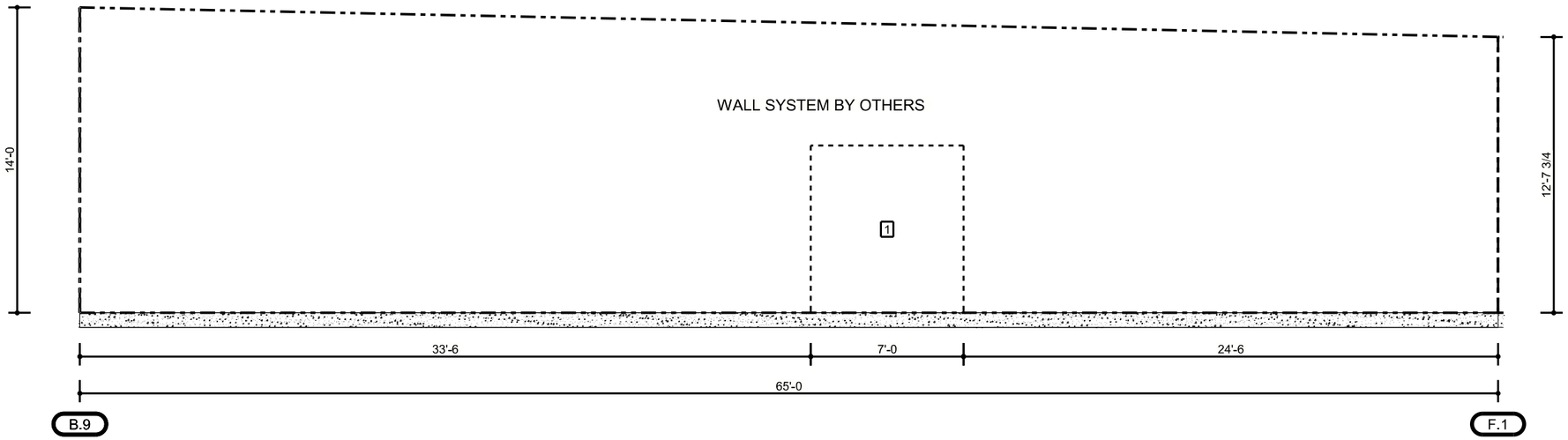
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER T25U0346A
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION
NOT FOR ERECTION
SHEET S11
DRAWING TITLE SHEETING ELEVATION - ENDWALL AT LINE 7.1 (AREA A.2)
05/20/2025 12:55:56pm

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	7'-0"	7'-8"		



SHEETING ELEVATION - ENDWALL AT LINE 7.1
AREA B.1

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER: T25U0346A
ADDRESS: WASHINGTON COUNTY, OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE: SHEETING ELEVATION - ENDWALL AT LINE 7.1 (AREA B.1)
05/20/2025 12:55:57pm

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

DATE: 09/08/2025
SHEET: S12

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	3'-6"	6'-2"		

DOWNSPOUT LOCATION & TRIM CHART		
MARK	TRIM	DETAIL
MAX SPACING OF DOWNSPOUT DROPS: 40'-0" O.C. MAX		
SEE ELEVATION BELOW FOR DROP LOCATIONS (DS1), (DS2), ETC.		

PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W10	1202	TBK	GA4000, GA4001, GA4035, GA4200, GA4100

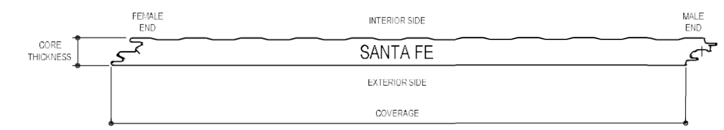
FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

WALL PANEL ALIGNMENT WITH DOORS AND WINDOWS WILL BE VERY DIFFICULT TO ACHIEVE DUE TO VARIATION IN PANEL JOINT WIDTH UPON INSTALLATION AND IS THE RESPONSIBILITY OF THE INSTALLER.

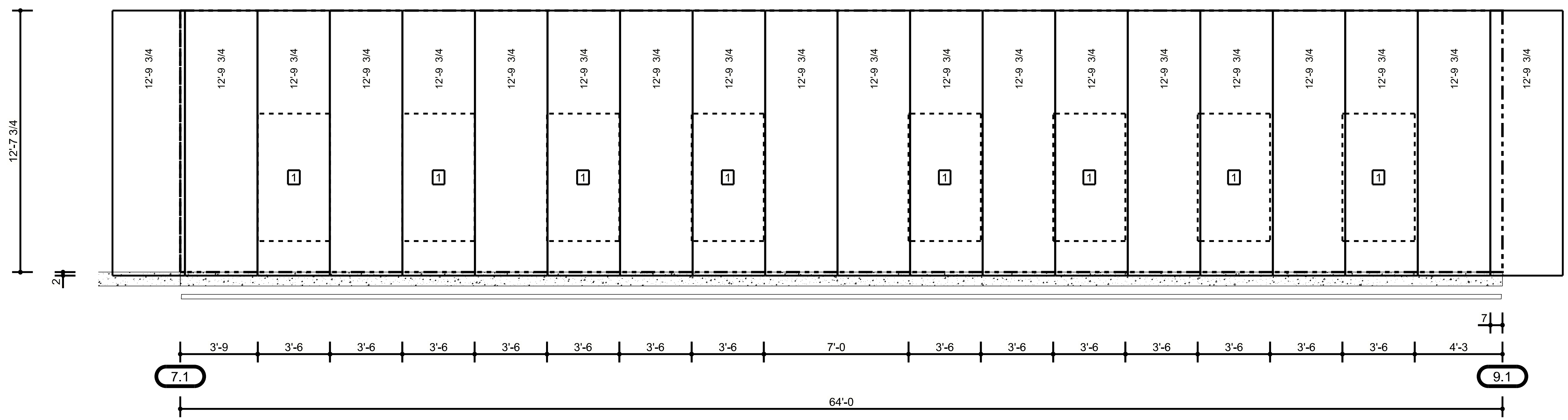
FRAMING FOR FRAMED OPENINGS NOT BY NUCOR.

INSULATED METAL PANELS DO NOT MODULATE TO THE NET DIMENSION OF THE PANEL.

NOTE: FOR 42" WIDE X 3" THICK METL-SPAN SANTA FE IMP (22 Ga / 26 Ga) THE MINIMUM SPACING IS 3'-6" ON CENTER. THE MAXIMUM ALLOWABLE SPACING IS 4'-0" ON CENTER WHEN USING FP1 CONNECTION AT EACH SUPPORT. ATTACHMENT MUST BE TO MINIMUM 16 Ga THICKNESS MATERIAL.



PANEL TYPE	SANTA FE	
CORE MATERIAL	POLYURETHANE	
CORE THICKNESS	3"	
COVERAGE	42"	
	EXTERIOR FACE	INTERIOR FACE
GAUGE	22	26
MATERIAL	G-90 GALV. or AZ50 STEEL	G-90 GALV. or AZ50 STEEL
FINISH	TBK	POLYESTER
COLOR	TBK	IGLOO WHITE
TEXTURE	HEAVY EMBOSSED	EMBOSSED



SHEETING ELEVATION - SIDEWALL AT LINE F.1
AREA B.1

JOB NUMBER
T25U0346A
ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055
PROJECT NAME
CYL-HUB1-1,2,&3
BUYER NAME
DLR GROUP
DRAWING STATUS
FOR CONSTRUCTION
NOT FOR ERECTION
SHEET
S13
DRAWING TITLE
SHEETING ELEVATION - SIDEWALL AT LINE F.1 (AREA B.1)

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/20/2025 12:55:58pm

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	3'-6"	6'-2"		
2	7'-0"	7'-8"		

FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

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FRAMING FOR FRAMED OPENINGS NOT BY NUCOR.

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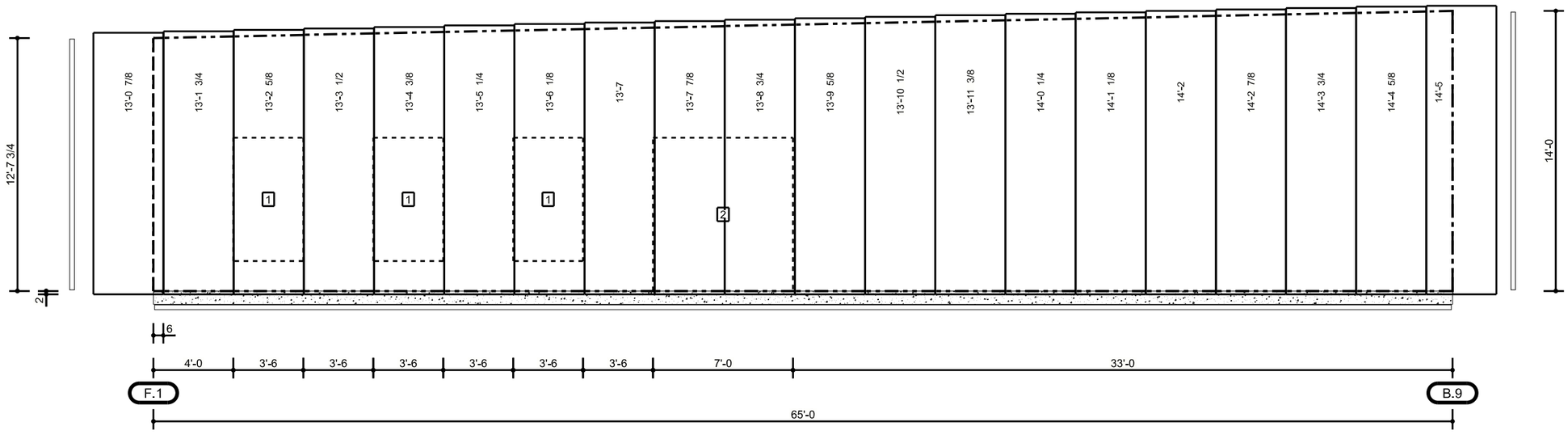
NOTE: FOR 42" WIDE X 3" THICK METL-SPAN SANTA FE IMP (22 Ga / 26 Ga) THE MINIMUM SPACING IS 3'-6" ON CENTER. THE MAXIMUM ALLOWABLE SPACING IS 4'-0" ON CENTER WHEN USING FP1 CONNECTION AT EACH SUPPORT. ATTACHMENT MUST BE TO MINIMUM 16 Ga THICKNESS MATERIAL.

PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W11	1203	TBK	GA4000, GA4001, GA4035, GA4200, GA4120

PANEL TYPE	SANTA FE		
CORE MATERIAL	POLYURETHANE		
CORE THICKNESS	3"		
COVERAGE	42"		
	EXTERIOR FACE	INTERIOR FACE	
GAUGE	22	26	
MATERIAL	G-90 GALV. or AZ50 STEEL	G-90 GALV. or AZ50 STEEL	
FINISH	TBK	POLYESTER	
COLOR	TBK	IGLOO WHITE	
TEXTURE	HEAVY EMBOSSED	EMBOSSED	



SHEETING ELEVATION AT LINE 9.1
AREA B.1

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

MBMA MEMBER
IAS ACCREDITED MANUFACTURING AC152
CWB CERTIFIED CSA W47.1
CERTIFIED CSA A660
CSSBI
NUCOR BUILDING SYSTEMS
PHONE:(260) 837-7891
FAX: (260) 837-7384

05/20/2025 12:55:59pm

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE SHEETING ELEVATION - ENDWALL AT LINE 9.1 (AREA B.1)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

DATE 09/06/2025 SHEET S14

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	3'-6"	6'-2"		
2	7'-0"	7'-8"		

FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

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FRAMING FOR FRAMED OPENINGS NOT BY NUCOR.

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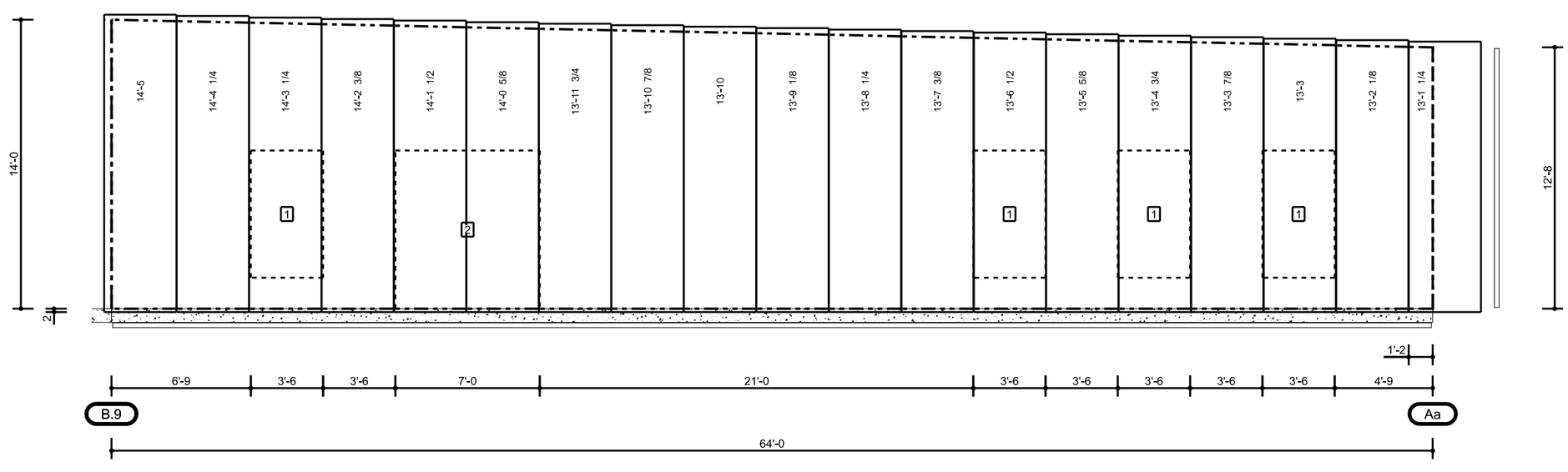
PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W13	1204	TBK	GA4000, GA4001, GA4035, GA4200, GA4120

		EXTERIOR FACE	INTERIOR FACE
PANEL TYPE	SANTA FE		
CORE MATERIAL	POLYURETHANE		
CORE THICKNESS	3"		
COVERAGE	42"		
GAUGE		22	26
MATERIAL		G-90 GALV. or AZ50 STEEL	G-90 GALV. or AZ50 STEEL
FINISH		TBK	POLYESTER
COLOR		TBK	KYNAR 500 WHITE
TEXTURE		HEAVY EMBOSSED	EMBOSSED



SHEETING ELEVATION - ENDWALL AT LINE 8.6
AREA B.2

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

MBMA METAL BUILDING MANUFACTURERS ASSOCIATION
IAS ACCREDITED MANUFACTURER
AWS CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
CERTIFIED CSA A660
ESSR
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/20/2025 12:56:01pm

JOB NUMBER: T25U0346A
ADDRESS: WASHINGTON COUNTY, OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION
NOT FOR ERECTION
SHEET: S15
DRAWING TITLE: SHEETING ELEVATION - ENDWALL AT LINE 8.6 (AREA B.2)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

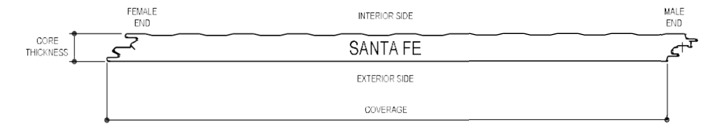
PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	3'-6"	6'-2"		
2	3'-6"	7'-8"		

DOWNSPOUT LOCATION & TRIM CHART		
MARK	TRIM	DETAIL
MAX SPACING OF DOWNSPOUT DROPS: 40'-0" O.C. MAX		
SEE ELEVATION BELOW FOR DROP LOCATIONS (DS1), (DS2), ETC.		

PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W14	1205	TBK	GA4000, GA4001, GA4035, GA4200, GA4100



PANEL TYPE	SANTA FE	
CORE MATERIAL	POLYURETHANE	
CORE THICKNESS	3"	
COVERAGE	42"	
	EXTERIOR FACE	INTERIOR FACE
GAUGE	22	26
MATERIAL	G-90 GALV. or AZ50 STEEL	G-90 GALV. or AZ50 STEEL
FINISH	TBK	POLYESTER
COLOR	TBK	IGLOO WHITE
TEXTURE	HEAVY EMBOSSED	EMBOSSED

FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

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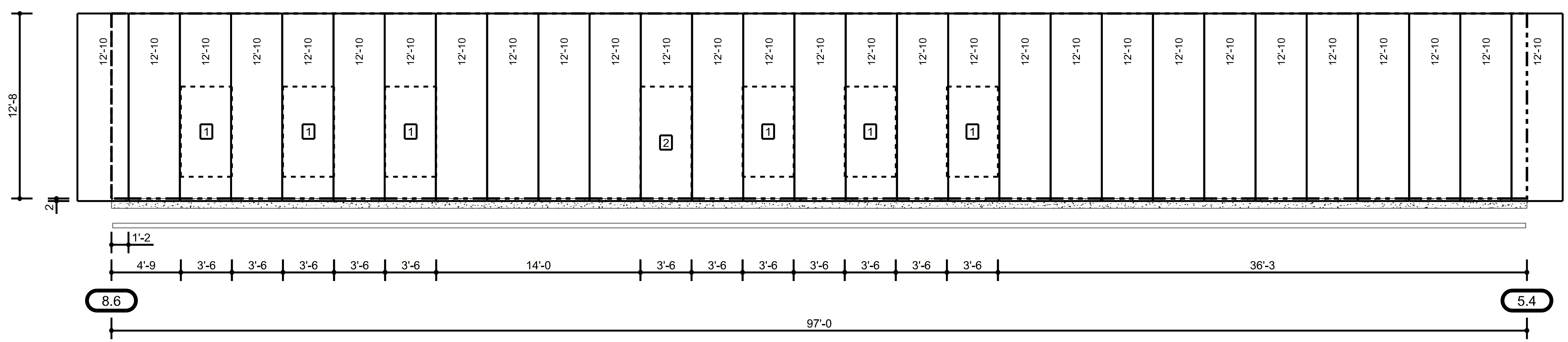

SHEETING ELEVATION - SIDEWALL AT LINE Aa

AREA B.2

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

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05/20/2025 12:56:02pm

MBMA MEMBER

IAS ACCREDITED

CWB CERTIFIED CSA W47.1

CERTIFIED CSA A660

NUCOR BUILDING SYSTEMS

PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER T25U0346A

ADDRESS WASHINGTON COUNTY OWASSO, OK 74055

PROJECT NAME CYL-HUB1-1,2,&3

BUYER NAME DLR GROUP

DRAWING STATUS FOR CONSTRUCTION

NOT FOR ERECTION

SHEET S16

DRAWING TITLE SHEETING ELEVATION - SIDEWALL AT LINE AA (AREA B.2)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	3'-6"	7'-8"		
2	3'-6"	6'-2"		

FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

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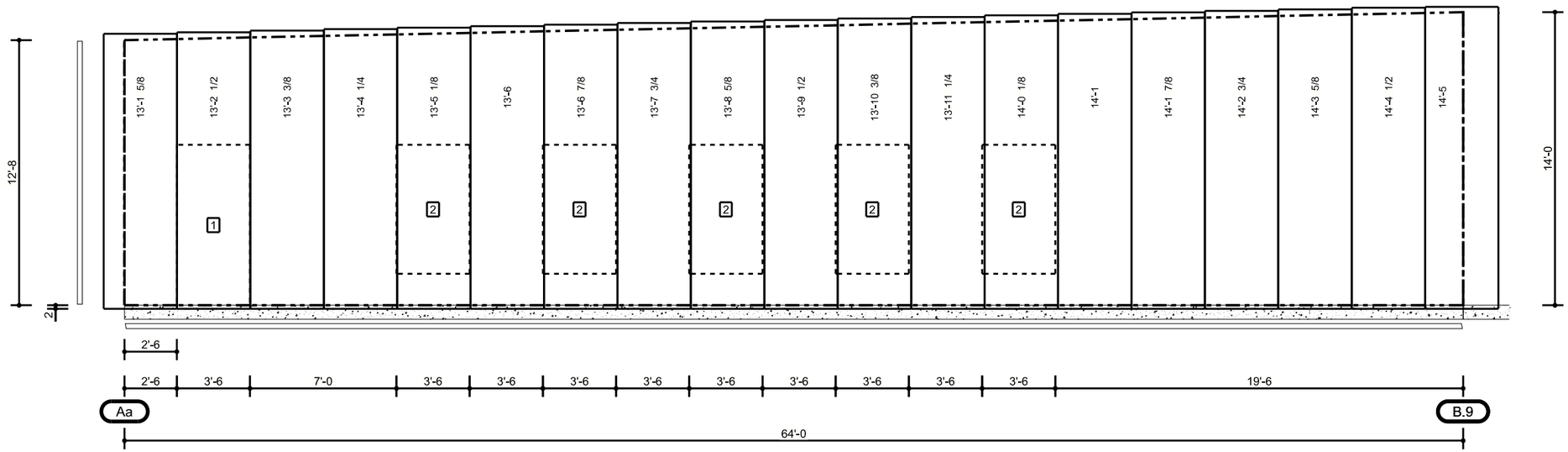
PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W15	1206	TBK	GA4000, GA4001, GA4035, GA4200, GA4120

PANEL TYPE	SANTA FE		
CORE MATERIAL	POLYURETHANE		
CORE THICKNESS	3"		
COVERAGE	42"		
	EXTERIOR FACE	INTERIOR FACE	
GAUGE	22	29	
MATERIAL	G-90 GALV. or AZ50 STEEL	G-90 GALV or AZ50 STEEL	
FINISH	TBK	POLYESTER	
COLOR	TBK	IGLOO WHITE	
TEXTURE	HEAVY EMBOSSED	EMBOSSED	



SHEETING ELEVATION - ENDWALL AT LINE 5.4
AREA B.2

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

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NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/20/2025 12:56:03pm

JOB NUMBER T25U0346A
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
SHEET S17
DRAWING TITLE SHEETING ELEVATION - ENDWALL AT LINE 5.4 (AREA B.2)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	7'-0"	7'-8"		
2	3'-6"	7'-8"		
3	3'-6"	6'-2"		

FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

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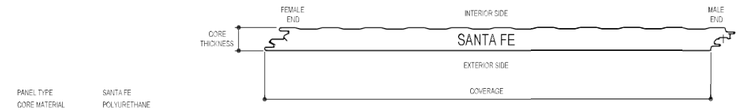
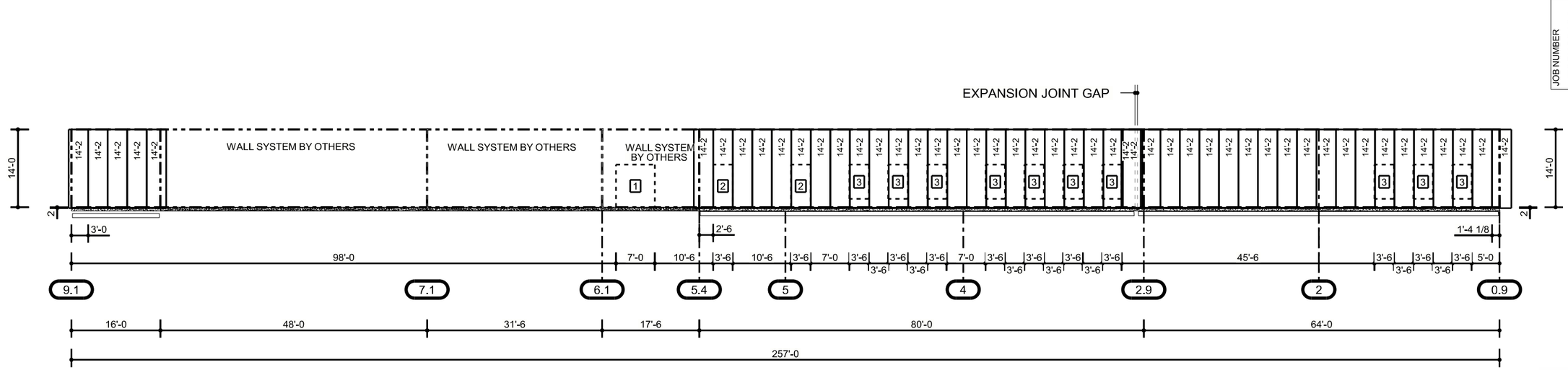
PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W12	1209	TBK	GA4000, GA4001, GA4035, GA4200, GA4100
W12	1210	TBK	GA4000, GA4001, GA4035, GA4200, GA4100
W12	1211	TBK	GA4000, GA4001, GA4035, GA4200, GA4100



PANEL TYPE	SANTA FE	
CORE MATERIAL	POLYURETHANE	
CORE THICKNESS	3"	
COVERAGE	42"	
	EXTERIOR FACE	INTERIOR FACE
GAUGE	22	26
MATERIAL	G-90 GALV. or A250 STEEL	G-90 GALV. or A250 STEEL
FINISH	TBK	POLYESTER
COLOR	TBK	IGLOO WHITE
TEXTURE	HEAVY EMBOSSED	EMBOSSED



SHEETING ELEVATION - SIDEWALL AT LINE B.9

AREAS A.1, A.2, B.1 & C

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

JOB NUMBER: T25U0346A
ADDRESS: WASHINGTON COUNTY, OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE: SHEETING ELEVATION - SIDEWALL AT LINE B.9 (AREAS A.1, A.2, B.1 & C)
05/20/2025 12:56:05pm

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WIZ	09/08/2025
	PERMITS	TAK / JMW	WIZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
R04	1212	TBK	

FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

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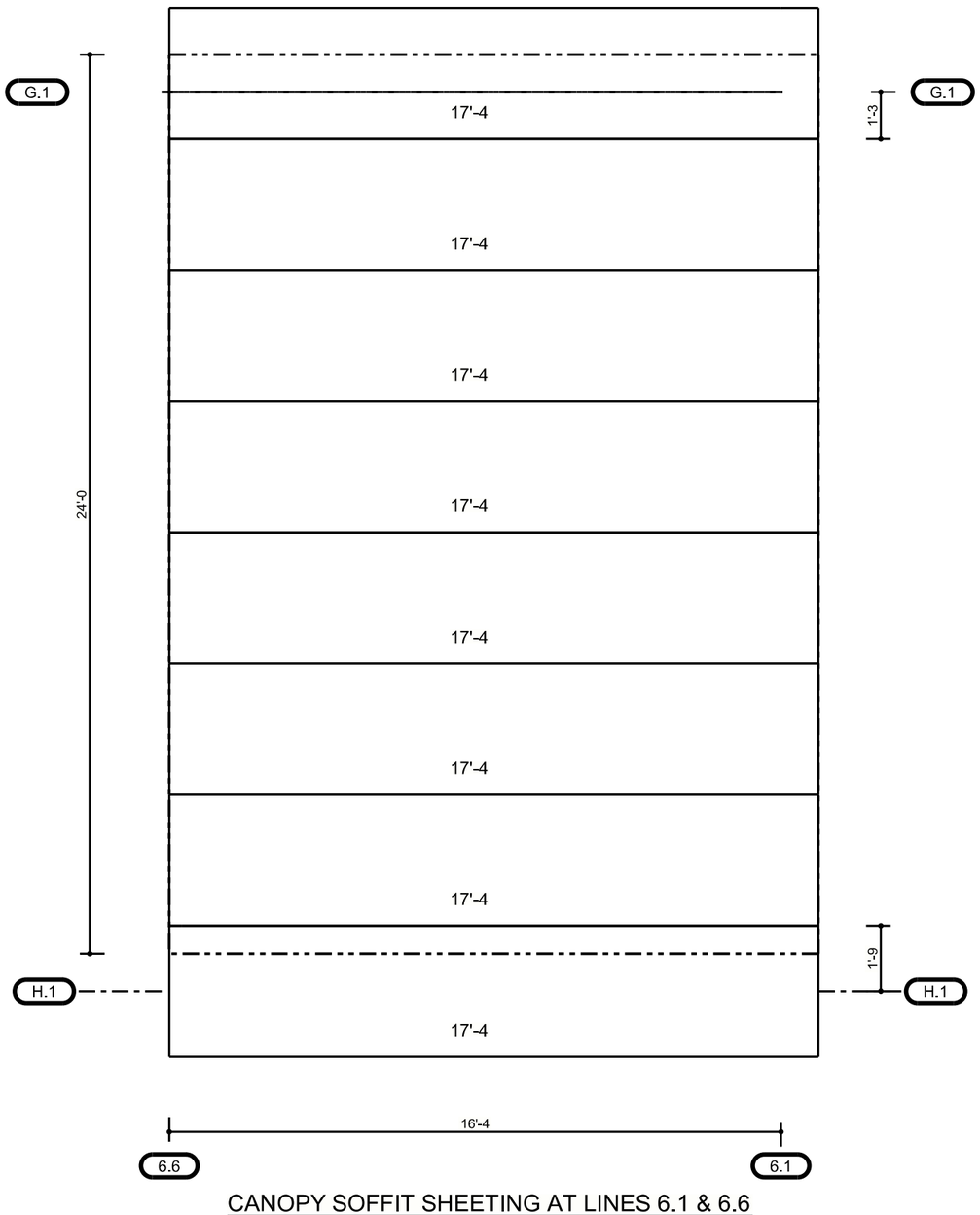
		EXTERIOR FACE	INTERIOR FACE
PANEL TYPE	SANTA FE		
CORE MATERIAL	POLYURETHANE		
CORE THICKNESS	3"		
COVERAGE	42"		
GAUGE		22	26
MATERIAL		G-90 GALV or AZ50 STEEL	G-90 GALV or AZ50 STEEL
FINISH		TEK	POLYESTER
COLOR		TEK	KLOO WHITE
TEXTURE		HEAVY EMBOSSED	EMBOSSED



CANOPY SOFFIT SHEETING AT LINES 6.1 & 6.6

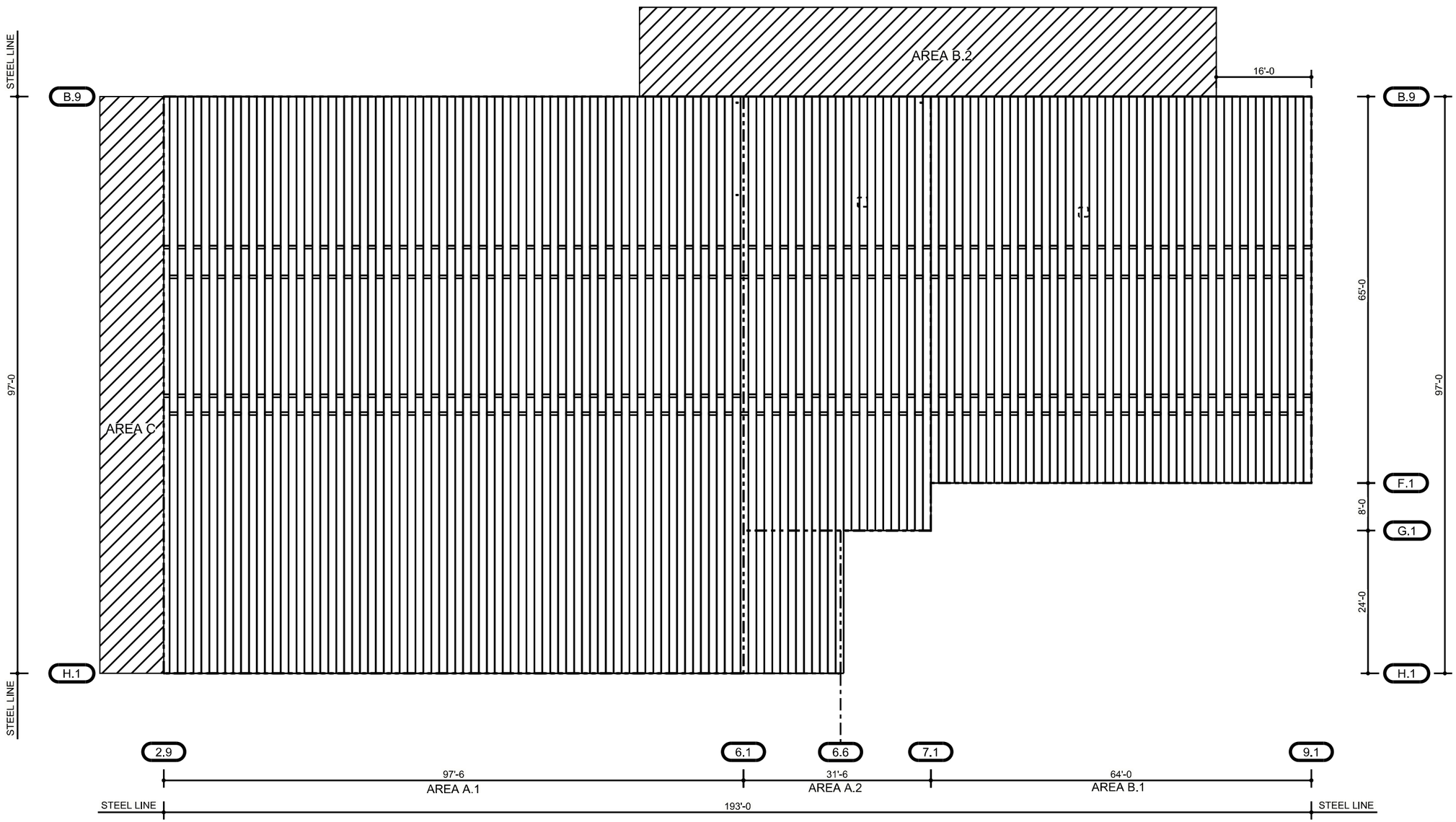
MBMA MEMBER
IAS ACCREDITED AC172
CWB CERTIFIED CSA W47.1
CERTIFIED CSA A660
NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/20/2025 12:56:06pm

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	CANOPY SOFFIT SHEETING AT LINES 6.1 & 6.6
SHEET	S19

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA



ROOF SHEETING PLAN (AREA A.1, A.2 & B.1)

NOTE: ROOF PANELS WILL EXTEND OVER THE 6" STUDS & 3" IMP

JOB NUMBER	T25U0346A
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
DRAWING TITLE	ROOF SHEETING PLAN (AREA A.1, A.2 & B.1)

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
FAX: (260) 837-7384

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

05/23/2025 09:26:04am

NOT FOR ERECTION

SHEET S2

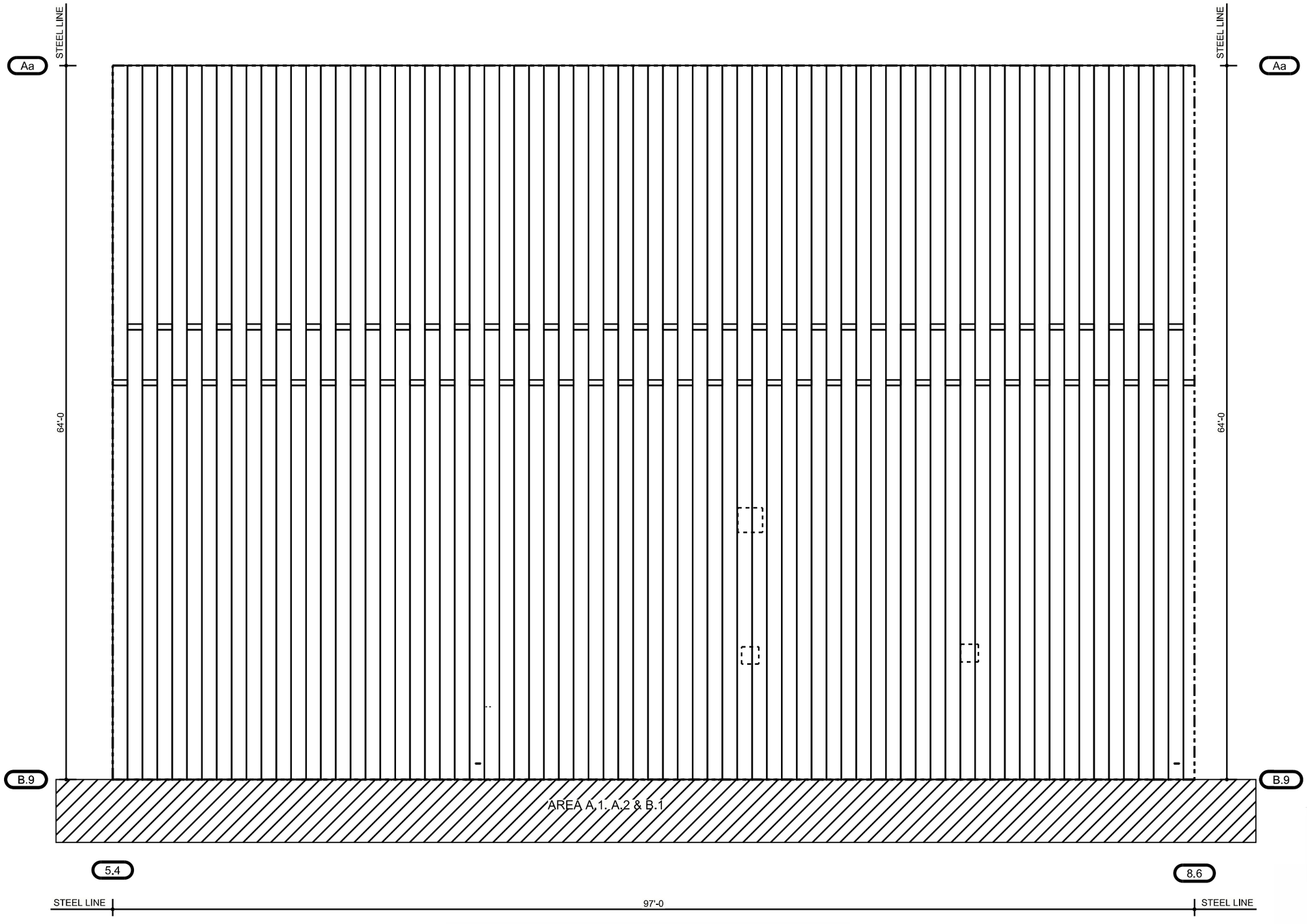
PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

ROOF SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.



NOTE: ROOF PANELS WILL EXTEND OVER THE 6" STUDS & 3" IMP

ROOF SHEETING PLAN (AREA B.2)

ROOF SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION **NOT FOR ERECTION**

DRAWING TITLE
ROOF SHEETING PLAN (AREA B.2)

SHEET
S3

NUCOR BUILDING SYSTEMS
PHONE: (280) 837-7891
FAX: (280) 837-7384

MBMA MEMBER
IAS ACCREDITED
CERTIFIED CSA W47.1
CERTIFIED CSA A660

05/23/2025 09:26:06am

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	3'-6"	6'-2"		

FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

WALL PANEL ALIGNMENT WITH DOORS AND WINDOWS WILL BE VERY DIFFICULT TO ACHIEVE DUE TO VARIATION IN PANEL JOINT WIDTH UPON INSTALLATION AND IS THE RESPONSIBILITY OF THE INSTALLER.

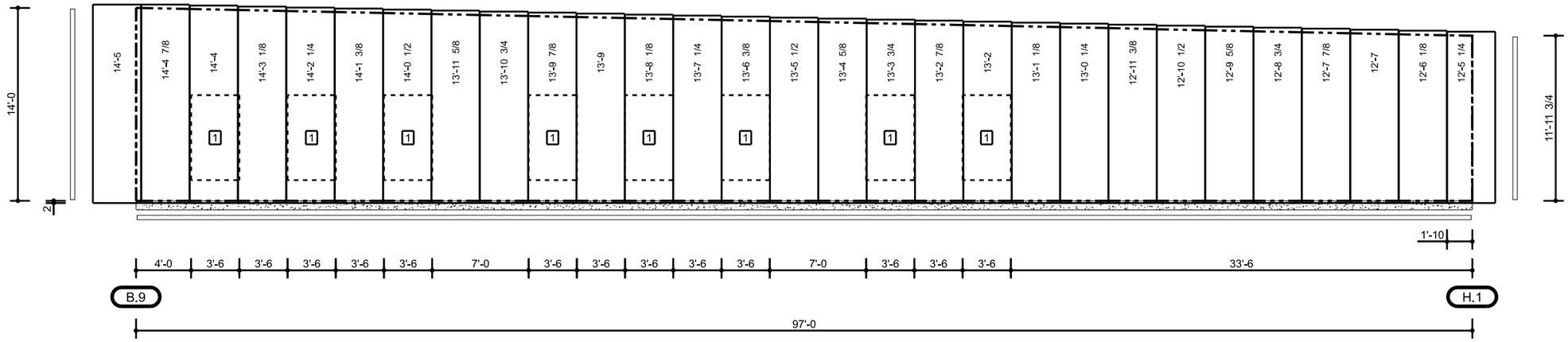
FRAMING FOR FRAMED OPENINGS NOT BY NUCOR.

INSULATED METAL PANELS DO NOT MODULATE TO THE NET DIMENSION OF THE PANEL.

NOTE: FOR 42" WIDE X 3" THICK METL-SPAN SANTA FE IMP (22 Ga / 26 Ga) THE MINIMUM SPACING IS 3'-6" ON CENTER. THE MAXIMUM ALLOWABLE SPACING IS 4'-0" ON CENTER WHEN USING FP1 CONNECTION AT EACH SUPPORT. ATTACHMENT MUST BE TO MINIMUM 16 Ga THICKNESS MATERIAL.

PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W17	1196	TBK	GA4000, GA4001, GA4035, GA4200, GA4120

PANEL TYPE	SANTA FE		
CORE MATERIAL	POLYURETHANE		
CORE THICKNESS	3"		
COVERAGE	42"		
		EXTERIOR FACE	INTERIOR FACE
GAUGE		22	26
MATERIAL		G-90 GALV. or AZ50 STEEL	G-90 GALV. or AZ50 STEEL
FINISH		TBK	POLYESTER
COLOR		TBK	IGLOO WHITE
TEXTURE		HEAVY EMBOSSED	EMBOSSED



SHEETING ELEVATION - ENDWALL AT LINE 0.9
AREA C

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

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MBMA MEMBER
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CSSBI CERTIFIED CSA A660
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05/20/2025 12:55:48pm

JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
NOT FOR ERECTION

DRAWING TITLE
SHEETING ELEVATION - ENDWALL AT LINE 0.9 (AREA C)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
	ENGINEERING	TEK / JMW	WZ	09/08/2025
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW		

SHEET S4

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
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OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	3'-6"	6'-2"		

DOWNSPOUT LOCATION & TRIM CHART		
MARK	TRIM	DETAIL
MAX SPACING OF DOWNSPOUT DROPS: 40'-0" O.C. MAX.		
SEE ELEVATION BELOW FOR DROP LOCATIONS (DS1), (DS2), ETC.		

PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W18	1194	TBK	GA4000, GA4001, GA4035, GA4200, GA4100
W18	1195	TBK	GA4000, GA4001, GA4035, GA4200, GA4100

FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

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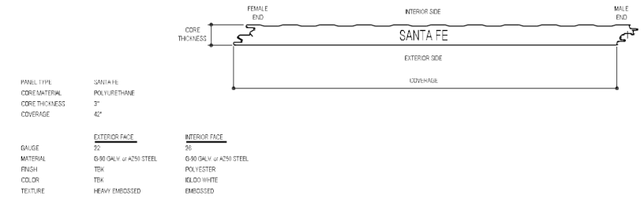
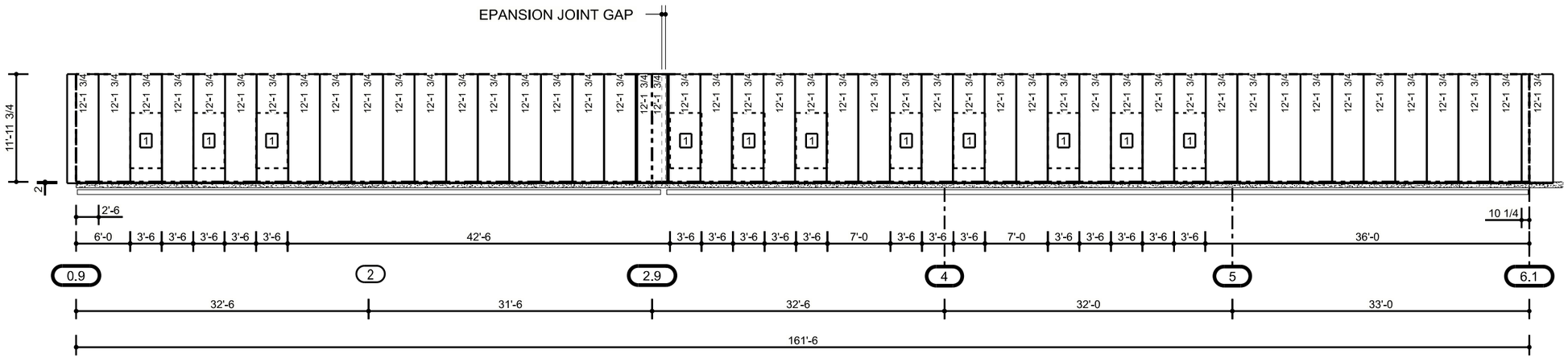


		EXTERIOR FACE	INTERIOR FACE
PANEL TYPE	SANTA FE		
CORE MATERIAL	POLYURETHANE		
CORE THICKNESS	3"		
COVERAGE	42"		
GAUGE		22	26
MATERIAL		G-90 GALV. or A792 STEEL	G-90 GALV. or A792 STEEL
FINISH		TBK	POLYESTER
COLOR		TBK	IGLOO WHITE
TEXTURE		HEAVY EMBOSSED	EMBOSSED



SHEETING ELEVATION - SIDEWALL AT LINE H.1
AREA C & AREA A.1

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

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GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

MBMA
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CERTIFIED CSA A660
CSSBI

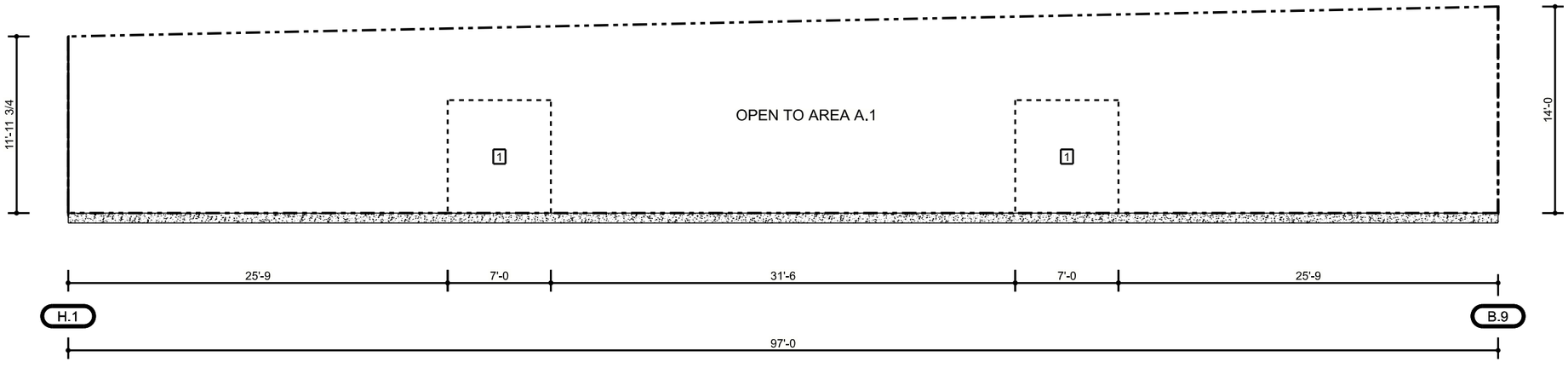
05/20/2025 12:55:51pm

JOB NUMBER T25U0346A
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION
NOT FOR ERECTION
DRAWING TITLE SHEETING ELEVATION - SIDEWALL AT LINE H.1 (AREA C & AREA A.1)
SHEET S5

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/06/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	7'-0"	7'-8"		



SHEETING ELEVATION - ENDWALL AT LINE 2.9
AREA C

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

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MBMA MEMBER
IAS ACCREDITED AC472
CWB CERTIFIED CSA W47.1
CERTIFIED CSA A660
CSSBI
NUCOR BUILDING SYSTEMS
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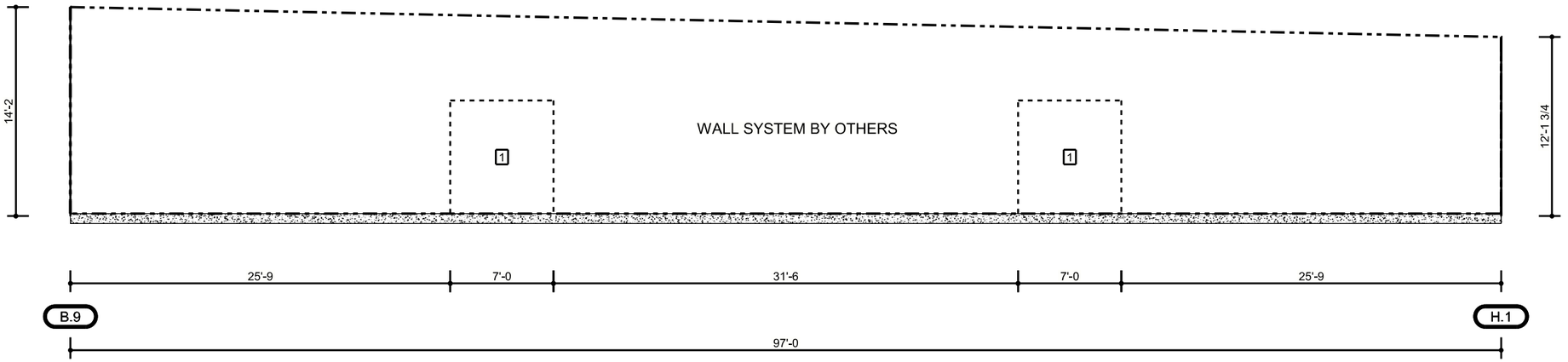
05/20/2025 12:55:52pm

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,&3
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE SHEETING ELEVATION - ENDWALL AT LINE 2.9 (AREA C)
SHEET S6

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/06/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

FRAMED OPENING TABLE				
MARK	WIDTH	HEIGHT	TRIM	DETAIL
1	7'-0"	7'-8"		



SHEETING ELEVATION - ENDWALL AT LINE 2.9
AREA A.1

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

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MBMA MEMBER
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CSSBI CERTIFIED CSA A660
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05/20/2025 12:55:52pm

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	SHEETING ELEVATION - ENDWALL AT LINE 2.9 (AREA A.1)

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

LINE AND TERMINATION TRIM CHART		
MARK	TRIM	DETAIL

FIELD NOTE: NUCOR DOES NOT RECOMMEND LINING UP FRAMED OPENING JAMBS WITH WALL PANEL SIDE LAPS DUE TO WEATHER TIGHTNESS CONCERNS. THE WEATHER TIGHTNESS PERFORMANCE OF THE BUILDING AT THE LOCATIONS OF THE CONDITION CANNOT BE GUARANTEED BY NUCOR.

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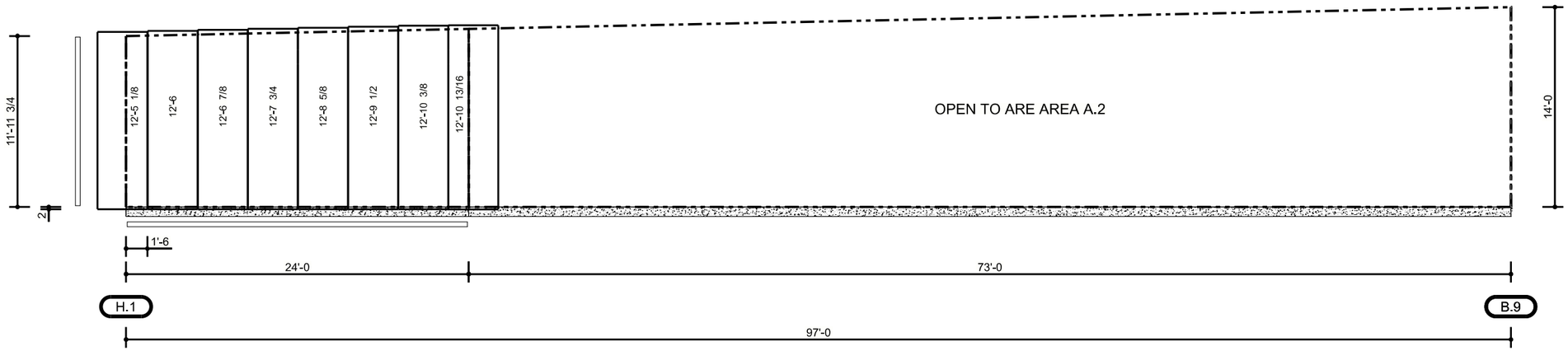
PANEL PLANE ID			
PLANE NAME	PLANE ID#	COLOR	DETAILS
W03	1198	TBK	GA4000, GA4001, GA4035, GA4200, GA4120

PANEL TYPE	SANTA FE		
CORE MATERIAL	POLYURETHANE		
CORE THICKNESS	3"		
COVERAGE	42"		
	EXTERIOR FACE	INTERIOR FACE	
GAUGE	22	26	
MATERIAL	G-90 GALV. or AZ50 STEEL	G-90 GALV. or AZ50 STEEL	
FINISH	TBK	POLYESTER	
COLOR	TBK	IGLOO WHITE	
TEXTURE	HEAVY EMBOSSED	EMBOSSED	



SHEETING ELEVATION - ENDWALL AT LINE 6.1
AREA A.1

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

GN1: REQUIRED DETAILS ARE NOT ALWAYS CALLED OUT ON THE PLAN/ELEVATION. ALL DETAILS AND INFO ON THE D & SD PAGES SHOULD BE REVIEWED PRIOR TO INSTALLATION.

MBMA MEMBER
IAS ACCREDITED MANUFACTURING AC192
CWB CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
CERTIFIED CSA A660
ESSR
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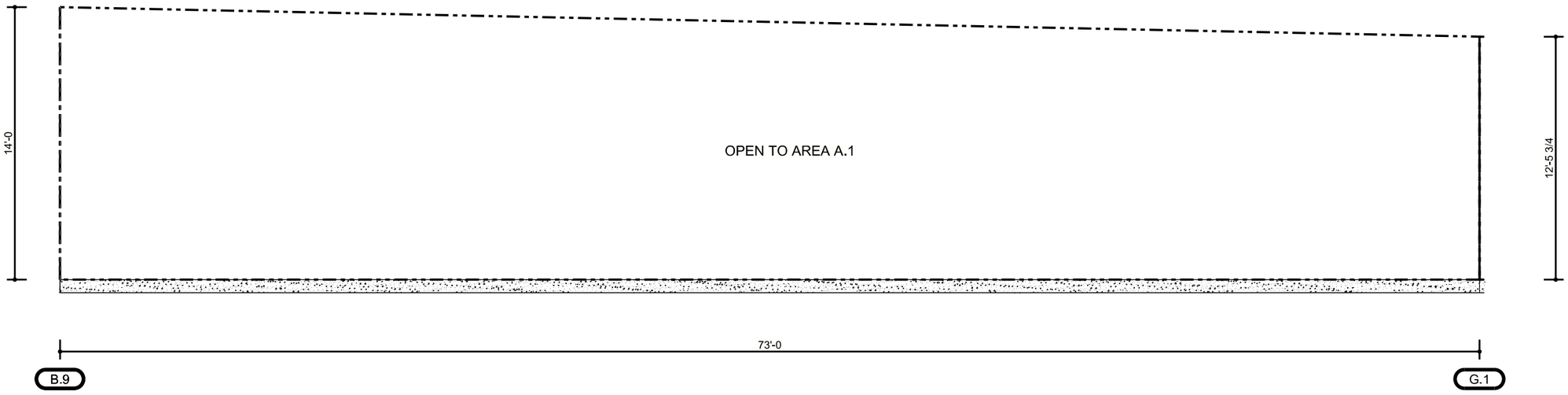
FAX: (260) 837-7384

05/20/2025 12:55:53pm

JOB NUMBER: T25U0346A
ADDRESS: WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE: SHEETING ELEVATION - ENDWALL AT LINE 6.1 (AREA A.1)
SHEET: S8

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WIZ	09/08/2025
	PERMITS	TAK / JMW	WIZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA



SHEETING ELEVATION - ENDWALL AT LINE 6.1
AREA A.2

WALL SHEETING GENERAL NOTES

GSN1: PRE-DRILLING MAY BE REQUIRED WHEN FASTENING TO HOT-ROLL, NESTED, LAPPED, OR HEAVY GAUGE MEMBERS.

GSN2: THERMAL BLOCKS AND FOAM CLOSURES MAY NOT BE PROVIDED UNLESS SPECIFIED IN THE ORDER DOCUMENTS OR OTHERWISE REQUIRED.

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JOB NUMBER **T25U0346A**

ADDRESS
WASHINGTON COUNTY
OWASSO, OK 74055

PROJECT NAME
CYL-HUB1-1,2,&3

BUYER NAME
DLR GROUP

DRAWING STATUS
FOR CONSTRUCTION **NOT FOR ERECTION**

DRAWING TITLE
SHEETING ELEVATION - ENDWALL AT LINE 6.1 (AREA A.2)

NUCOR BUILDING SYSTEMS
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MBMA MEMBER · IAS ACCREDITED · CWB CERTIFIED CSA W47.1 · CERTIFIED CSA A660

05/20/2025 12:55:54pm

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

SHEET S9

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

DESIGN AND PERFORMANCE CRITERIA

ROOF SYSTEM
THE ROOF SYSTEM CONSISTS OF 24 GAUGE PANELS WITH A NOMINAL COVERAGE OF 1'-4" AND A PANEL SEAM THAT IS 2 1/2" OR 3 1/2" HIGH DEPENDING ON CLIP TYPE USED. REFER TO THE DETAILS AND SECTIONS FOR SPECIFIC PANEL CLIP TYPE.

PANEL CLIP SPACING
THE ROOF SYSTEM USES A CLIP TO ATTACH THE PANELS TO THE ROOF SECONDARY MEMBERS. PANEL CLIP SPACING REQUIREMENTS AS A STANDARD ARE REQUIRED AT EVERY PURLIN AND/OR ROOF JOIST.

PANEL CLIP FASTENING REQUIREMENTS
STANDARD CLIP FASTENERS ARE DESIGNED TO FASTEN TO A STEEL STRUCTURAL MEMBER OF .060" MINIMUM THICKNESS (16 GA.). A MINIMUM OF TWO FASTENERS ARE REQUIRED TO ENGAGE THE STRUCTURAL MEMBER AT EVERY PANEL CLIP LOCATION. IN CERTAIN INSTANCES, THREE FASTENERS MAY BE REQUIRED PER CLIP REQUIRED. LOOK ON CHART AT RIGHT AND IN THE ERECTION DRAWINGS FOR YOUR SPECIFIC FASTENER REQUIREMENTS. FASTENER PULLOUT VALUES ARE DEPENDENT UPON PROJECT LOCATION, SIZE, BUILDING CODE AND LOADING.

ROOF TOP UNITS AND CURB SUPPORTS
THE ROOF SYSTEM IS ELEVATED ABOVE THE TOP OF THE ROOF SECONDARY STRUCTURAL MEMBERS. THE ROOF CURB SUB-FRAMING IS LEVEL WITH THE SECONDARY STRUCTURAL MEMBERS. REFER TO THE DETAILS FOR PROPER JAMB LOCATIONS AND DIMENSIONS.

THE ROOF SYSTEM IS DESIGNED AS A FLOATING SYSTEM. CURB FRAMING AND FLASHING MUST BE DESIGNED ACCORDINGLY TO ALLOW THE CURB SYSTEM TO FLOAT WITH THE ROOF DURING THERMAL EXPANSION AND CONTRACTION. ROOF CURBS SHALL NOT SPAN THE RIDGE OF A BUILDING.

INSULATION REQUIREMENTS
INSULATION IS RECOMMENDED TO BE USED IN ALL ROOF APPLICATIONS TO AVOID PROBLEMS WITH CONDENSATION FORMING ON THE UNDERSIDE OF THE SHEETING. THIS ALSO PROVIDES A BUFFER BETWEEN THE PURLINS AND THE ROOF TO ELIMINATE NOISE AND POSSIBLE DAMAGE DUE TO METAL-TO-METAL CONTACT. NOISE REDUCING FOAM TAPE CAN BE SUPPLIED FOR USE IN LIMITED APPLICATIONS (CANOPIES, ETC.) WHEN INCLUDED AS PART OF THE ROOF ORDER. REFER TO THE DETAILS FOR FOAM TAPE REQUIREMENTS.

PAINTED ROOF
PAINTED Loc Seam ROOF PANELS ARE OFTEN PROVIDED BY MBS. IN THIS CASE, GUTTER BRACKETS AND OUTSIDE CLOSURES WILL BE PAINTED TO MATCH THE ROOF COLOR AS A STANDARD.

MASTIC APPLICATION

TEMPERATURE EXTREMES
TEMPERATURE EXTREMES MUST BE CONSIDERED DURING INSTALLATION OF THE ROOF DUE TO THE SENSITIVITY OF MASTICS. THE RECOMMENDED INSTALLATION TEMPERATURE RANGE IS 20-120 DEGREES FAHRENHEIT. AT COLDER TEMPERATURES, THE MASTIC STIFFENS RESULTING IN LOSS OF ADHESION AND COMPRESSIBILITY. AT HOTTER TEMPERATURES, THE MASTIC BECOMES TOO SOFT FOR PRACTICAL HANDLING. ON COLD BUT SUNNY DAYS, THE PANEL SURFACE MAY BECOME WARM ENOUGH TO ACCEPT THE APPLICATION OF HEATED MASTIC EVEN THOUGH THE AIR TEMPERATURE IS BELOW 20 DEGREES FAHRENHEIT.

WHEN OVERNIGHT TEMPERATURES FALL BELOW FREEZING, THE MASTIC SHOULD BE STORED IN A HEATED ROOM SO IT WILL BE WARM ENOUGH TO USE THE FOLLOWING DAY. ON HOT DAYS, THE MASTIC CARTONS SHOULD BE STORED OFF THE ROOF IN A COOL AND SHADED AREA. WHILE ON THE ROOF, MASTIC ROLLS SHOULD BE KEPT SHADED UNTIL ACTUAL USE.

IN VERY COLD WEATHER, IT IS RECOMMENDED THAT THE FASTENERS BE TIGHTENED SLOWLY AND ONLY TIGHT ENOUGH THAT THE MASTIC IS IN FULL CONTACT WITH THE PANEL OR FLASHING. THEN ON THE NEXT SUNNY DAY, COMPLETE THE TIGHTENING PROCESS AFTER THE SUN WARMS THE PANEL AND FLASHING SURFACES.

CONTAMINATION
TO ASSURE PROPER ADHESION AND SEALING, THE MASTIC MUST HAVE COMPLETE CONTACT WITH ADJOINING SURFACES. CONTAMINANTS SUCH AS WATER OIL, DIRT AND DUST PREVENT SUCH CONTACT. THE PANEL AND FLASHING SURFACES MUST BE DRY AND THOROUGHLY CLEANED OF ALL CONTAMINANTS. BEFORE APPLYING TAPE MASTIC, THE MASTIC SHOULD BE CHECKED FOR CONTAMINANTS. IF THE MASTIC SURFACES ARE CONTAMINATED, IT MUST NOT BE USED.

DURING COOL WEATHER, CONDENSATION OR LIGHT MIST CAN ACCUMULATE ON THE PANEL AND FLASHING SURFACE AND NOT BE EASILY NOTICED. IT IS RECOMMENDED THAT THE MASTICS ALWAYS BE KEPT UNDER PROTECTIVE COVER AND THAT THE PANEL AND FLASHING SURFACES BE WIPED DRY IMMEDIATELY BEFORE INSTALLATION.

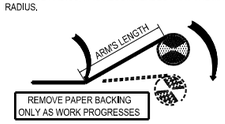
TAPE MASTIC IS PROVIDED WITH A PROTECTIVE PAPER TO REDUCE CONTAMINATION. INCOMPLETE REMOVAL OF THE PROTECTIVE PAPER WILL PREVENT THE MASTIC ADHESION TO THE PANEL OR FLASHING SURFACES. ALWAYS CHECK THAT THE PROTECTIVE PAPER IS COMPLETELY REMOVED. DO NOT REMOVE THE PROTECTIVE PAPER UNTIL IMMEDIATELY BEFORE THE PANEL OR FLASHING IS INSTALLED OVER THE MASTIC.

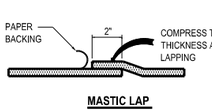
COMPRESSION
TO ASSURE PROPER COMPRESSION AND SEAL, THE TAPE MASTIC MUST BE COMPRESSED BETWEEN THE PANEL AND FLASHING SURFACES WITH FIRM AND UNIFORM PRESSURE. IN MOST CASES, THE REQUIRED PRESSURE IS APPLIED BY THE CLAMPING ACTION OF SCREWS PULLING THE ADJOINING SURFACES TOGETHER. HOWEVER, THE TAPE SEALANT'S RESISTANCE TO PRESSURE BECOMES GREATER IN COLD WEATHER.

DURING COLD WEATHER, THE FASTENERS MUST BE TIGHTENED SLOWLY TO ALLOW THE MASTIC TIME TO COMPRESS. IF THE FASTENERS ARE TIGHTENED TOO FAST, THE FASTENERS MAY STRIP OUT BEFORE THE MASTIC COMPRESSES ADEQUATELY, OR THE PANEL OR FLASHING MAY DEFORM IN THE IMMEDIATE AREA OF THE FASTENER, LEAVING THE REST OF THE MASTIC INSUFFICIENTLY COMPRESSED.

INSIDE CORNERS
AN INSIDE RADIUS, SUCH AS WHERE THE PANEL FLAT MEETS A RIB, IS USUALLY THE MOST CRITICAL AREA TO SEAL. A COMMON MISTAKE FOR THE INSTALLER IS TO BRIDGE THE MASTIC ACROSS THE INSIDE RADIUS.

WHEN THE LAPPING PANEL OR FLASHING IS PUSHED INTO PLACE, THE BRIDGED MASTIC IS STRETCHED AND THINNED. THE MASTIC MAY THEN BE TOO THIN TO ADEQUATELY SEAL THIS CRITICAL AREA. WHEN TAPE MASTIC IS APPLIED AT AN INSIDE RADIUS, IT IS RECOMMENDED THAT THE MASTIC BE FOLDED BACK, THEN PUSH THE MASTIC FOLD INTO THE RADIUS.





MASTIC LAP

ERECTORS RESPONSIBILITY

REGULATIONS
REGULATIONS SET FORTH BY THE OCCUPATIONAL SAFETY AND HEALTH ACT, LOCAL, STATE, AND/OR FEDERAL AGENCIES SHOULD BE ADHERED TO AT ALL TIMES. MBS IS NOT RESPONSIBLE FOR INJURY, DAMAGE, OR FAILURE, WHICH MAY BE THE RESULT FROM FAILING TO MEET ANY OF THESE REGULATIONS.

IN COMPLIANCE WITH THE HAZARD COMMUNICATION RULE 1910.1200, MATERIAL SAFETY DATA SHEETS (MSDS) HAVE BEEN PROVIDED FOR YOUR USE AND SAFETY. THESE DATA SHEETS SHOULD BE MADE AVAILABLE TO ALL PERSONNEL THAT COME IN CONTACT WITH THESE PRODUCTS. THESE DATA SHEETS WILL GIVE YOU THE NECESSARY INFORMATION TO PROPERLY HANDLE SUCH MATERIALS AND WHAT TO DO IN CASE OF AN EMERGENCY. (THE MSDS SHEETS ARE LOCATED ONLINE AND ARE AVAILABLE UPON REQUEST).

THE ERECTOR OF THE ROOF SYSTEM IS RESPONSIBLE FOR THE SAFE EXECUTION OF THIS DETAIL. THESE INSTRUCTIONS ARE INTENDED TO DESCRIBE THE SEQUENCE AND PROPER PLACEMENT OF PARTS. THEY ARE NOT INTENDED TO PRESCRIBE COMPREHENSIVE SAFETY PROCEDURES. THE PROCEDURES IN THIS DETAIL ARE BELIEVED TO BE RELIABLE. HOWEVER, MBS SHALL NOT BE RESPONSIBLE FOR INJURY, DAMAGE, OR FAILURE DUE TO THE MISAPPLICATION OF THESE PROCEDURES, IMPROPER ERECTION TECHNIQUES, OR NEGLIGENCE

WALKING AND WORKING ON ROOF PANELS
DO NOT PLACE BUNDLES OF PANELS ON THE ROOF STRUCTURE WITHOUT FIRST VERIFYING THE STRUCTURE WILL SAFELY SUPPORT THE CONCENTRATED WEIGHT OF THE PANELS AND THE WEIGHT OF THE INSTALLATION CREW. SOME ROOF STRUCTURES MAY NOT BE DESIGNED TO SUPPORT THE WEIGHT OF A FULL PANEL BUNDLE WITHOUT ADDITIONAL STRUCTURE SUPPORT.

DO NOT USE A ROOF PANEL AS A WORKING PLATFORM. AN UNSECURED PANEL COULD COLLAPSE UNDER THE WEIGHT OF A PERSON STANDING BETWEEN PURLINS OR AT THE PANEL END.

DO NOT WALK ON THE LAST INSTALLED PANEL RUN, AS THE UNSECURED EDGE COULD COLLAPSE UNDER A PERSON'S WEIGHT. WHEN INSTALLING CLIPS OR MAKING END LAP CONNECTIONS, ETC., STAND WHERE THE ROOF STRUCTURAL WILL SUPPORT YOUR WEIGHT.

AN APPROVED AND SAFE WALKING PLATFORM SHOULD BE USED IN HIGH TRAFFIC AREAS TO PREVENT THE ROOF PANEL FROM BEING DEFORMED, SCRATCHED, OR SCUFFED.

SAFETY EQUIPMENT
THE USE OF SAFETY EQUIPMENT FOR THE ROOF PANEL INSTALLATION IS RECOMMENDED AT ALL TIMES DURING THE INSTALLATION PROCESS. HOWEVER, WHEN USING LANYARDS, ENSURE THAT THE CLASP, BELT HOOKS AND WIRE CABLES ARE COVERED IN SUCH A MANNER THAT THEY WILL NOT SCRATCH THE PANEL SURFACE IF ACCIDENTALLY DRAGGED ALONG THE PANEL.

CREW SIZE
THE LENGTH OF THE INDIVIDUAL ROOF PANELS SHOULD BE CONSIDERED WHEN DETERMINING CREW SIZE. IT IS RECOMMENDED THAT UNDER NORMAL CONDITIONS, THERE BE ONE PERSON FOR EVERY TEN FEET OF PANEL LENGTH, PLUS ONE.

PANEL OVERHANG
DO NOT STAND ON THE END OF UNSUPPORTED (CANTILEVERED) PANELS AT THE EAVE OR RIDGE. STANDING ON THE CANTILEVER PORTION MAY RESULT IN PANEL COLLAPSE.

POINT LOADS
WHEN PROPERLY SUPPORTED BY THE STRUCTURAL STEEL, PANELS ARE DESIGNED TO SUPPORT UNIFORM LOADS, WHICH ARE EVENLY DISTRIBUTED OVER THE PANEL SURFACES. POINT LOADS THAT OCCUR IN SMALL OR CONCENTRATED AREAS, SUCH AS HEAVY EQUIPMENT, LADDER, OR PLATFORM FEET, ETC., MAY CAUSE PANEL DEFORMATION OR EVEN PANEL COLLAPSE.

SLICK SURFACES
PANEL SURFACES AND STRUCTURAL STEEL SURFACES ARE HARD, SMOOTH, AND NONABSORBENT, WHICH CAUSES THESE SURFACES TO BE VERY SLICK WHEN WET OR COVERED WITH SNOW OR ICE. EVEN BLOWING SAND OR HEAVY DUST CAN MAKE THESE SURFACES DIFFICULT TO WALK ON WITHOUT SLIPPING.

UNPAINTED PANEL SURFACES ARE OFTEN COATED WITH OIL TO ACCOMMODATE THE PANEL-FABRICATION PROCESS. ALTHOUGH DESIGNED TO WASH AWAY OR EVAPORATE DURING NORMAL WEATHER, THE OIL ON NEW PANELS CAN BE EXTREMELY SLICK, ESPECIALLY DURING PERIODS OF LIGHT RAIN AND DEW.
CAUTION MUST BE EXERCISED TO PREVENT SLIPPING AND FALLING ONTO THE ROOF SURFACE OR EVEN SLIDING OFF THE ROOF. NON-SLIP FOOTWEAR IS A NECESSITY AND NON-SLIP WORKING PLATFORMS ARE RECOMMENDED.

ELECTRICAL CONDUCTANCE
METAL PANELS ARE EXCELLENT ELECTRICAL CONDUCTORS. A COMMON CAUSE OF INJURY IS THE CONTACT OF METAL PANELS WITH POWER LINES DURING HANDLING AND INSTALLATION. THE LOCATION OF ALL POWER LINES MUST BE NOTED AND, IF POSSIBLE, FLAGGED. THE INSTALLATION PROCESS MUST BE ROUTED TO AVOID ACCIDENTAL CONTACT WITH ALL POWER LINES AND HIGH VOLTAGE SERVICES AND EQUIPMENT. ALL TOOLS AND POWER CORDS MUST BE PROPERLY INSULATED AND GROUNDED AND THE USE OF APPROVED GROUND FAULT CIRCUIT BREAKERS IS RECOMMENDED.

FALSE SECURITY OF INSULATION
BLANKET AND RIGID BOARD INSULATION BLOCK THE INSTALLER'S VIEW OF THE GROUND BELOW THE ROOF. SERIOUS INJURY CAN OCCUR WHEN THE INSTALLER GETS A FALSE SENSE OF SECURITY BECAUSE HE CANNOT SEE THE GROUND AND STEPS THROUGH THE INSULATION.

SHARP EDGES
SOME EDGES OR PANELS AND FLASHING ARE RAZOR SHARP AND CAN CAUSE SEVERE CUTS IF PROPER PROTECTIVE HAND GEAR IS NOT WORN. BE CAREFUL NOT TO INJURE OTHERS WHILE MOVING PANELS AND FLASHING.

COORDINATION WITH OTHER TRADES
SUPPORTS FOR THE ROOF SYSTEM SHALL BE PROVIDED AND ARE REQUIRED AS SHOWN IN THE SECTIONS AND AS NOTED IN THESE SPECIFICATIONS. ALL NECESSARY CLEARANCE DIMENSIONS FOR PROPER ELEVATIONS RELATIVE TO THE ROOF PANELS HAVE BEEN SHOWN. THE ERECTOR SHALL BE RESPONSIBLE FOR COORDINATING THESE DIMENSIONAL REQUIREMENTS WITH OTHER TRADES ASSOCIATED WITH THE BUILDING ROOF SYSTEM.

ERECTION CARE
THE ERECTOR MUST BE SKILLED IN THE ERECTION OF METAL BUILDING SYSTEMS AND IS RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE LOCAL, FEDERAL AND STATE CONSTRUCTION AND SAFETY REGULATIONS INCLUDING OSHA REGULATIONS AS WELL AS ANY APPLICABLE REQUIREMENTS OF LOCAL, NATIONAL OR INTERNATIONAL UNION RULES OR PRACTICES. THE ERECTOR REMAINS SOLELY RESPONSIBLE FOR THE SAFETY AND APPROPRIATENESS OF ALL TECHNIQUES AND METHODS UTILIZED BY ITS CREWS IN THE ERECTION OF THE METAL BUILDING SYSTEM AND/OR THE ROOF SYSTEM. THE ERECTOR IS ALSO RESPONSIBLE FOR SUPPLYING ANY SAFETY DEVICES SUCH AS SCAFFOLDS, RUNWAYS, NETS, ETC. WHICH MAY BE REQUIRED TO SAFELY ERECT THE METAL BUILDING SYSTEM AND/OR ROOF SYSTEM.

THE ERECTOR OF THE ROOF SYSTEM SHALL EXERCISE GREAT CARE AND ATTENTION TO THE DETAILS AS SHOWN ON THESE DRAWINGS TO INSURE A SECURE AND PROPER FIT OF ALL COMPONENTS. MBS SHALL NOT BE RESPONSIBLE FOR SUPERVISING AND/OR COORDINATING THE ERECTION OF THE ROOF SYSTEM WITH OTHER TRADES.

DUE CONSIDERATION MUST BE GIVEN BY THE ERECTOR TO THE EFFECTS OF THERMAL EXPANSION AND CONTRACTION WHEN ERECTING A ROOF TIE-IN TO AN EXISTING STRUCTURE TO INSURE A SAFE, SECURE, WEATHER TIGHT CONDITION. FLASHING FOR TIE-INS TO EXISTING BUILDINGS IS TYPICALLY NOT INCLUDED AS PART OF THE MATERIAL PROVIDED BY MBS. REFER TO THE SECTIONS/DETAILS FOR SPECIFIC MATERIALS PROVIDED BY MBS.

THERMAL BLOCKS

PURPOSE
THERMAL BLOCKS ARE USED IN BOTH INSULATED AND UN-INSULATED CONDITIONS. THEY PROVIDE IMPROVED THERMAL PERFORMANCE WHERE INSULATION HAS BEEN COMPRESSED AT THE SECONDARY MEMBERS UNDER THE PANEL. THEY ALSO PROVIDE SUPPORT TO THE PANEL AND REDUCE PANEL FLUTTERING AND RUMBLE IN UN-INSULATED CONDITIONS. UN-INSULATED CONDITIONS UTILIZE THERMAL BLOCKS OR FOAM SPACERS THAT HAVE ADHESIVE TO ADHERE TO THE SECONDARY MEMBER TO PREVENT THEM FROM FALLING OUT OF PLACE.

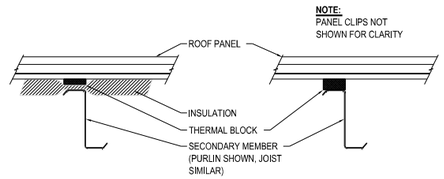
LOCATIONS
THERMAL BLOCKS OR FOAM SPACERS ARE TO BE USED OVER ANY SECONDARY MEMBER WITH THE EXCEPTION OF THE EAVE MEMBER WHERE THE EAVE PLATE IS LOCATED.

INSULATED ROOF

	THERMAL BLOCK		
CLIP	THICK	MIN. R-VALUE	MK. #
SHORT	N/A	N/A	N/A
TALL	13/16"	R-3.5	H4400
TALL	1"	R-5	H4445

UNINSULATED ROOF

	THERMAL BLOCK	
CLIP	THICK	MK. #
SHORT	1/2"	H3310
TALL	1 1/2"	H3305
FIELD CUT H3305 TO LENGTH FOR PROPER FITTING BETWEEN PANEL CLIPS		



ROOF SYSTEM COMPONENT WITH DETAILING

DEFINITION
COMPONENTS WITH DETAILING DEFINITION IS A CASE WHERE MBS IS PROVIDING THE ROOF SYSTEM TO BE USED IN CONJUNCTION WITH ANOTHER STRUCTURE. MBS REFERS TO THAT AS A "COMPONENTS WITH DETAILING." THIS SIMPLY MEANS THAT MBS SHALL CALCULATE THE QUANTITIES AND LENGTHS FOR THE MATERIAL REQUIRED. MBS IS PERFORMING NO ENGINEERING STUDY OF THE EXISTING STRUCTURE. THE ENGINEER OF RECORD ON THE PROJECT SHALL BE RESPONSIBLE FOR COORDINATING THE ROOF SYSTEM WITH THE OTHER TRADES OF THE PROJECT TO INSURE A SAFE, QUALITY AND PROPER APPLICATION OF THE ROOF SYSTEM.

DIAPHRAGM
THE ROOF IS DESIGNED TO ACCOMMODATE THERMAL EXPANSION AND CONTRACTION AND WILL NOT ACT AS A DIAPHRAGM FOR RESISTING LATERAL LOAD FORCES OR PROVIDING LATERAL STABILITY TO THE ROOF STRUCTURAL MEMBERS. DUE CONSIDERATION FOR THIS MUST BE ADDRESSED BY THE PROJECT ENGINEER OF RECORD. IN ADDITION, THE ROOF SYSTEM, BECAUSE IT IS DESIGNED TO FLOAT, WILL NOT SUPPORT STRUCTURAL MEMBERS LATERALLY. WHEN REPLACING AN EXISTING SCREW DOWN ROOF, ADDITIONAL BRACING MAY BE REQUIRED TO LATERALLY SUPPORT THE MEMBERS. ENGINEERING AND MATERIAL FOR THESE USES SHALL NOT BE PROVIDED BY MBS.

BUILDING & PANEL PREPARATION

STEP 1: PLUMB AND SQUARE
THE FIRST STEP IN THE SUCCESSFUL INSTALLATION OF WALL PANELS IS TO HAVE THE PRIMARY FRAMING PLUMB AND SQUARE. FOR BEST RESULTS, IT IS RECOMMENDED THAT A TRANSIT BE USED WHEN ERECTING THE STRUCTURAL STEEL. MAKE SURE THAT THE FOUNDATION AND BUILDING STRUCTURE IS SQUARE, LEVEL, AND CORRECT TO THE OUT-TO-OUT STEEL LINE DIMENSIONS.
SEE FIGURE "A"

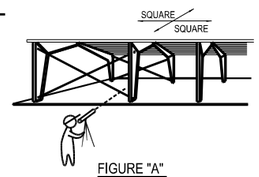


FIGURE "A"

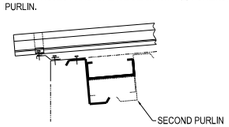
FIELD CUTTING PANELS

WHEN FIELD CUTTING OR MITERING WALL PANELS, NON-ABRASIVE CUTTING TOOLS SUCH AS NIBBLERS OR TIN-SNIPS SHALL BE USED. ABRASIVE CUTTING TOOLS SUCH AS MECHANICAL GRINDERS OR POWER SAWS CAN DAMAGE THE MATERIAL FINISH AND CREATE EXCESS METAL SHAVINGS THAT CAN CORRODE THE PANELS. THE USE OF NON-APPROVED CUTTING DEVICES MAY VOID THE FACTORY WARRANTY.

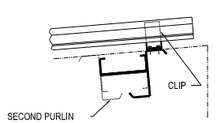
ANY METAL SHAVINGS THAT ARE CREATED NEED TO BE CLEANED FROM THE PANEL TO PREVENT SCRATCHING AND/OR CORROSION. THE MANUFACTURER WILL NOT ACCEPT CLAIMS FOR DAMAGE/DETERIORATION DUE TO USE OF UNAPPROVED TOOLS.

SPECIAL CONDITION AT A STRONG-BACK EAVE BEAM

IF THIS PROJECT HAS AN EAVE BEAM WITH (2) PURLINS, AS SHOWN, DO NOT ATTACH ROOF CLIPS TO THE "SECOND" PURLIN.



EAVE BEAM AT LOW EAVE



EAVE BEAM AT HIGH EAVE

FASTENER INSTALLATION

RECOMMENDED TOOL TYPES: SEE ALSO FASTENER SCHEDULE
4 AMP OR HIGHER RATED TOOLS (DO NOT USE IMPACTING TOOLS)
2000 - 2500 RPM SCREW GUN WITH TORQUE ADJUSTABLE CLUTCH
MANUAL OR ELECTRIC RIVET TOOL

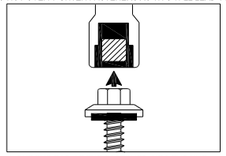
DO NOT USE IMPACTING TOOLS
TO ASSURE PROPER VOLTAGE TO THE TOOL, EXTENSION CORDS SHOULD BE CHECKED FOR PROPER WIRE SIZE/CHORD LENGTH.
16 GAGE WIRE, MAXIMUM CHORD LENGTH = 100'
14 GAGE WIRE, MAXIMUM CHORD LENGTH = 200'
12 GAGE WIRE, MAXIMUM CHORD LENGTH = 300'

DRIVING TIPS:
SET THE NUT DRIVER AS DESCRIBED BELOW PRIOR TO INSTALLING FASTENERS TO PREVENT FASTENER WOBBLE...

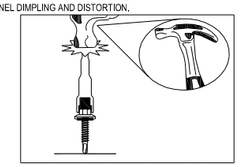
SOCKET EXTENSIONS (4" OR 6") ARE RECOMMENDED TO BE USED FOR INSTALLING PANEL CLIP FASTENERS TO MAINTAIN VERTICAL FASTENER INSTALLATION.

EXCESSIVE PRESSURE CAN CAUSE DRILL POINT FAILURE. LET THE FASTENER DO THE WORK.

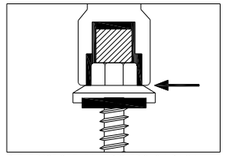
DO NOT OVER TIGHTEN FASTENERS AS THIS WILL LEAD TO PANEL DIMPLING AND DISTORTION.



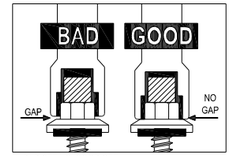
1. PUT THE TOP OF THE FASTENER INTO THE NUT DRIVER. NOTE: FOR PAINTED FASTENERS, PLACE A SINGLE OR DOUBLED LAYER OF PLASTIC BETWEEN THE FASTENER HEAD AND THE NUT DRIVER.



2. PLACE THE POINT OF THE FASTENER ONTO A HARD SURFACE AND FIRMLY HIT THE TOP OF THE NUT DRIVER 2-3 TIMES.



3. THE BASE OF THE NUT DRIVER SHOULD NOW BE CONTACTING THE TOP OF THE HEAD OF THE FASTENER WITH NO GAPS.



4. BAD SET VS. GOOD SET.

CORRECT

SEALING MATERIAL COMPRESSED UNDER CAP OF FASTENER.

TOO LOOSE

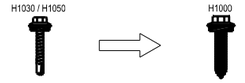
SEALING MATERIAL VISIBLE UNDER CAP OF FASTENER.

TOO TIGHT

SEALING MATERIAL COMPRESSED BUT DIMPLED THE PANEL / TRIM.

STRIP A FASTENER?
IF YOU STRIP H1030 OR H1050 REPLACE IT WITH H1000

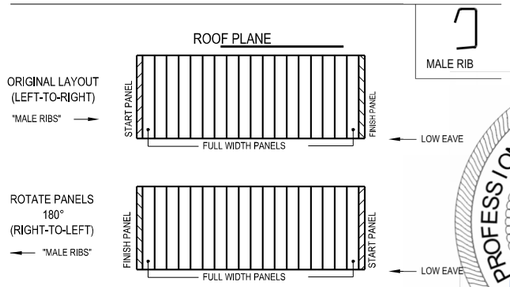
IF YOU STRIP H1000 IN ENDLAP YOU MUST REBUILD THE ENDLAP



ROOF SHEETING DIRECTION

1.) THE ROOF SHEETING PLAN IS SHOWN WITH THE ROOF PANELS BEING ERECTED FROM "LEFT-TO-RIGHT". IF THE DESIRE IS TO ERECT THE ROOF PANELS FROM "LEFT-TO-RIGHT", FOLLOW THE ROOF SHEETING PLAN AS SHOWN. IF THE DESIRE IS TO ERECT THE ROOF PANELS FROM "RIGHT-TO-LEFT", FOLLOW THE INSTRUCTIONS SHOWN BELOW.

2.) WHEN SETTING BUNDLES OF PANELS ON THE ROOF, THE "MALE RIB" MUST ALWAYS BE AWAY FROM THE END OF THE BUILDING WHERE THE SHEETING WILL BEGIN.



Loc Seam NOTES
EAVE GUTTER DETAIL w/ WALL PANELS
SEE WALL SHEETING ERECTION NOTES FOR WALL PANEL FASTENER LOCATIONS

EA3010

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
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JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,83
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	ROOF SHEETING DETAILS
SHEET	SD1

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

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BASIC INSTALLATION SEQUENCE

THE FOLLOWING STEPS OUTLINE THE BASIC INSTALLATION OF THE ROOF SYSTEM. REFERENCE THE SPECIFIC DETAILS WITHIN THIS ERECTION DRAWING SET FOR CONDITIONS SPECIFIC TO THIS PROJECT.

START PANEL PREPARATION
THE ROOF SYSTEM IS DESIGNED TO BE ELEVATED AND FLOAT ABOVE THE ROOF SUPPORT MEMBERS. BEGIN AT THE LOWER RAKE CORNER BY INSTALLING THE EAVE PLATE. (REFERENCE EAVE PLATE INSTALLATION BELOW)

AFTER EAVE PLATE HAS BEEN INSTALLED, STITCH THE FIRST ROLL OF ROOF INSULATION FROM RIDGE / HIGH EAVE TO LOW EAVE.

INSTALL THE RAKE CLIPS AND RAKE ANGLE TO SUPPORT / SECURE THE START PANEL. (REFERENCE RAKE ANGLE / RAKE CLIP PREPARATION TO THE RIGHT)

FIELD CUT AND INSTALL START PANEL
THE START PANEL IS SUPPLIED AS A FULL SHEET AND WILL NEED TO BE CUT. REFER TO THE ROOF SHEETING PLAN FOR START / FINISH DIMENSIONS AND RAKE DETAILS TO DETERMINE PROPER PANEL CUT. INSTALL THE START PANEL (LOW EAVE PANEL FIRST IF PANEL RUN IS LONG ENOUGH TO REQUIRE ENDLAPS) BY SECURING THE PANEL TO THE EAVE PLATE AND RAKE ANGLE. (REFERENCE LOW EAVE AND RAKE DETAILS). INSTALL PANEL CLIPS ON LEADING EDGE OF PANEL AS SHOWN IN THE PANEL CLIP DETAIL. CONTINUE TO INSTALL UPSLOPE START PANEL IF ENDLAPS ARE REQUIRED. REFERENCE THE BACKUP PLATE DETAIL AND ENDLAP DETAIL FOR ATTACHMENT OF START PANEL(S) AT RAKE ANGLE.

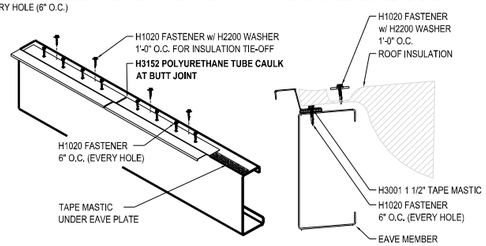
INTERMEDIATE PANEL & MODULARITY
THE INTERMEDIATE PANELS (FULL PANELS) SHOULD BE INSTALLED BY ROLLING THE PANEL INTO PLACE ENSURING THE SEAM IS FULLY ENGAGED. SECURE THE PANELS WITH PANEL CLIPS AND THE LOW EAVE ACROSS THE ROOF. IT IS RECOMMENDED TO INSTALL THE OUTSIDE CLOSURE AT THE HIGH EAVE / RIDGE AS THE ROOF PROGRESSES. THIS WILL HELP MAINTAIN MODULARITY. (REFERENCE HIGH EAVE / RIDGE DETAILS)

FINISH PANEL
THE FINISH PANEL IS SIMILAR TO THE START PANEL INSTALLATION. THE RAKE ANGLE CLIPS AND RAKE ANGLE NEEDS TO BE INSTALLED ON TOP OF THE INSULATION PRIOR TO INSTALLING THE FINISH PANEL. THE FINISH PANEL SHOULD BE FIELD CUT AND ROLLED INTO PLACE AND SECURED TO THE RAKE ANGLE SIMILAR TO THE START PANEL.

TRIM INSTALLATION
TRIM INSTALLATION CAN BE DONE AFTER THE ROOF PANELS ALL HAVE BEEN INSTALLED OR CAN BE INSTALLED AS ENOUGH PANELS HAVE BEEN INSTALLED FOR ATTACHMENT OF TRIMS. (REFERENCE TRIM DETAILS)

EAVE PLATE INSTALLATION

PLACE TAPE MASTIC ON TOP OF EAVE MEMBER PRIOR TO INSTALLING EAVE PLATE. INSTALL EAVE PLATE BY FASTENING EVERY HOLE TO EAVE MEMBER (6" O.C.) PRIOR TO INSULATION BEING INSTALLED. SECURE INSULATION WITH FASTENER & INSULATION RETAINER WASHER. NOTE: IF NO ROOF INSULATION IS USED SECURE EAVE PLATE IN EVERY HOLE (6" O.C.)

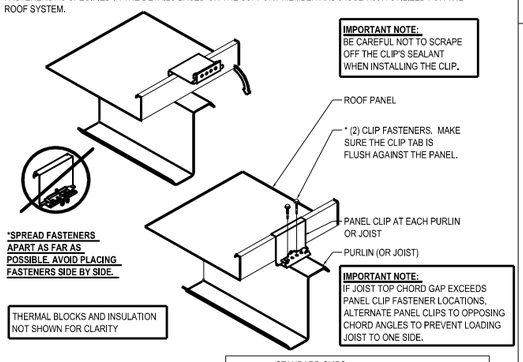


NOTE: H1020/H1070 (PURLIN/JOIST) FASTENER w/ H2200 WASHER 1'-0" O.C. FOR INSULATION TIE-OFF PROVIDED AT HIGH SIDE / RIDGE

SHORT EAVE PLATE		TALL EAVE PLATE	
EPS108	BASIC EAVE / GUTTER	EPT108	BASIC EAVE / GUTTER

PANEL CLIP INSTALLATION

BEFORE INSTALLING THE PANEL CLIP, FEEL FOR THE SUPPORT MEMBER BELOW THE INSULATION. ALIGN CLIP CENTERED OVER THE SUPPORT MEMBER AND ROLL CLIP OVER THE MALE HOOK OF THE PANEL. FASTEN CLIP WITH FASTENERS AS SPECIFIED IN THE DETAILS BASED ON THE SUPPORT MEMBER AND INSULATION UTILIZED FOR THE ROOF SYSTEM.



	STANDARD CLIPS
PART #	PART DESCRIPTION
H4550	UTILITY FIXED CLIP
LSBC-1	SHORT BEARING CLIP (USED WITH RIGID BOARD)
LSEC-1	SHORT SLIDING CLIP
LSEC-2T	TALL SLIDING CLIP

CLIP FASTENER SELECTION

PURLIN APPLICATION
H1020 FOR INSULATION ≤ R-19 (6 3/8")
H1025 FOR INSULATION = R-25 (8")
H1220 FOR UTILITY CLIP

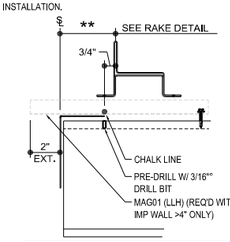
JOIST APPLICATION
H1070 FOR INSULATION ≤ R-19 (6 3/8")
H1075 FOR INSULATION = R-25 (8")

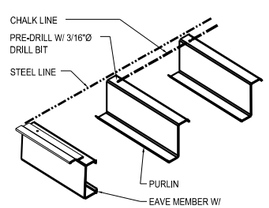
RAKE ANGLE / RAKE CLIP PREPARATION

PRIOR TO INSTALLING THE ROOF INSULATION THE SECONDARY MEMBER WILL NEED TO BE PRE-DRILLED FOR THE RAKE CLIPS. PRE-DRILLING WILL MAKE INSTALLATION OF THE RAKE AND CLIPS MUCH EASIER AFTER INSULATION IS IN PLACE. DO NOT INSTALL RAKE CLIPS UNTIL INSULATION (IF REQUIRED) IS INSTALLED. **RAKE CLIP IS INSTALLED ON TOP OF THE INSULATION.**

SNAP A CHALK LINE AS SHOWN BELOW FROM HIGH EAVE / RIDGE TO LOW EAVE. DRILL 3/16" Ø HOLE CENTERED ON SECONDARY MEMBER. THIS IS HELPS TO ALIGN THE START PANEL.

NOTE: IMP WALL PANEL >4" THICK REQUIRE ANGLES ON TOP OF SECONDARY MEMBER EXTENDED BEYOND STEEL LINE TO ALLOW FOR RAKE CLIP ATTACHMENT. ATTACH WITH (1) H1020 / H1070 TO PURLIN / JOIST PRIOR TO RAKE CLIP INSTALLATION.



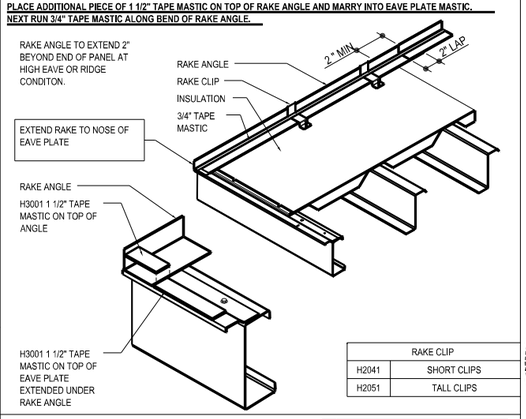


RAKE ANGLE / RAKE CLIP INSTALLATION

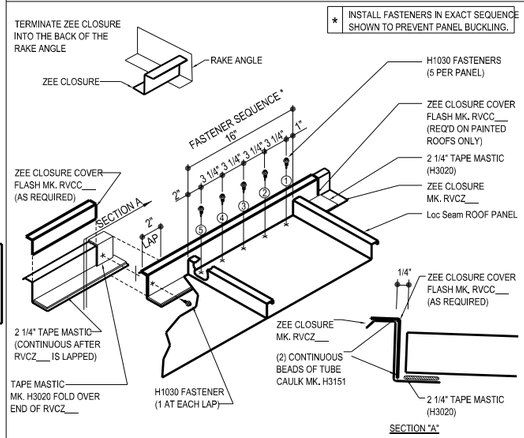
AFTER INSULATION IS IN PLACE AND PRIOR TO INSTALLING THE RAKE CLIPS AND RAKE ANGLE APPLY 1 1/2" TAPE MASTIC ON TOP OF THE EAVE PLATE BUT ONLY REMOVE PAPER BACKING WHERE THE RAKE ANGLE WILL REST. THIS WILL SEAL BETWEEN THE EAVE PLATE AND THE RAKE ANGLE.

SLIDE RAKE CLIPS ONTO RAKE ANGLE PRIOR TO SECURING THE RAKE CLIPS TO THE SECONDARY MEMBERS. PLACE THE RAKE CLIPS AND ANGLE OVER THE INSULATION USING A SMALL DRIFT PIN TO LOCATE THE PRE-DRILLED HOLE. INSTALL FASTENER THROUGH OPPOSITE CLIP HOLE INTO SECONDARY MEMBER. REMOVE DRIFT PIN AND INSTALL SECOND FASTENER TO SECURE CLIP. NOTE: (2) SCREWS ARE REQUIRED IN EVERY CLIP. DO NOT CUT INSULATION OUT FROM AROUND THE CLIP.

PLACE ADDITIONAL PIECE OF 1 1/2" TAPE MASTIC ON TOP OF RAKE ANGLE AND MARRY INTO EAVE PLATE MASTIC. NEXT RUN 3/4" TAPE MASTIC ALONG BEND OF RAKE ANGLE.



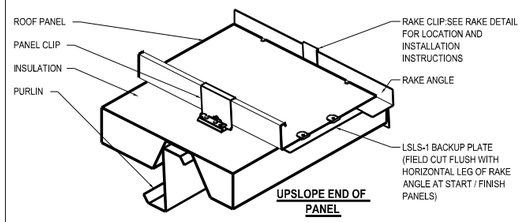
RAKE CLIP	
H2041	SHORT CLIPS
H2051	TALL CLIPS

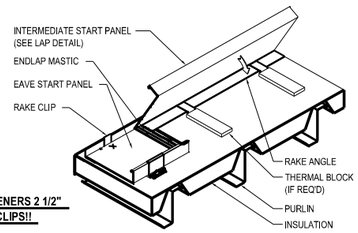


RIDGE/HIGHSIDE ZEE CLOSURE DETAIL

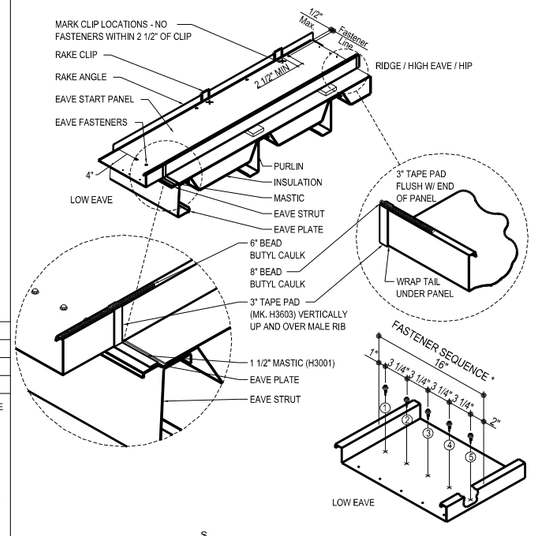
BACKUP PLATE INSTALLATION

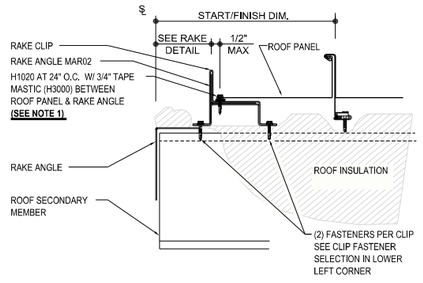
THE BACKUP PLATE PROVIDES SUPPORT AT THE ENDLAP OF THE PANEL TO ALLOW FOR COMPRESSION OF SEALANTS. THE BACK UP PLATE HAS NOTCHES THAT SLIDE ONTO THE PANEL TO LOCATE AND HOLD THE BACKUP PLATE IN PLACE. AT THE RAKE CONDITION, THE BACKUP PLATE IS TO BE FIELD CUT FLUSH WITH THE HORIZONTAL LEG OF THE RAKE ANGLE. DO NOT EXTEND BACKUP PLATE ON TOP OF RAKE ANGLE.





NOTE 1: KEEP FASTENERS 2 1/2" AWAY FROM RAKE CLIPS!!





LOC SEAM BASIC INSTALLATION DETAIL

BASIC PANEL INSTALLATION INSTRUCTIONS
SEE ROOFLINE TRIM DETAILS FOR FURTHER INFORMATION

EA3011

MBMA MEMBER | IAS ACCREDITED MANUFACTURING INSPECTION AC472 | CERTIFIED CSA W47.1 | CERTIFIED CSA A660 | CESSER

NUCOR BUILDING SYSTEMS

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05/23/2025 09:26:08am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,83
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE ROOF SHEETING DETAILS
SHEET SD2

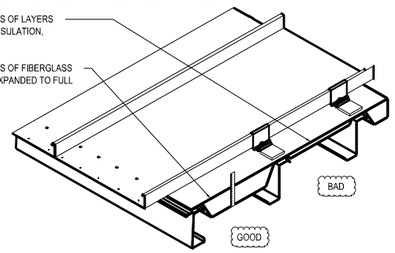
#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

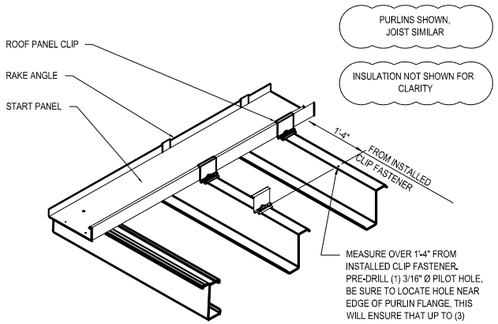
SPECIAL ATTENTION MUST BE GIVEN TO INSULATION SAG AND RECOMMEND PRE-DRILLING TO LOCATE CLIPS. MODULARITY TOOLS ARE AVAILABLE TO AID IN MODULARITY.

ENSURE THE INSULATION IS PERMITTED TO SAG AT MID-SPAN BETWEEN ROOF SECONDARY MEMBERS AND EXPANDED TO THE FULL THICKNESS WHILE STILL KEEPING CONTACT WITH BOTTOM OF PANEL.

DO NOT PULL THE INSULATION TAUT AS THIS WILL SIGNIFICANTLY REDUCE THE THERMAL PERFORMANCE OF THE ROOF SYSTEM AND COULD CAUSE ROOF PANEL MODULARITY ISSUES.



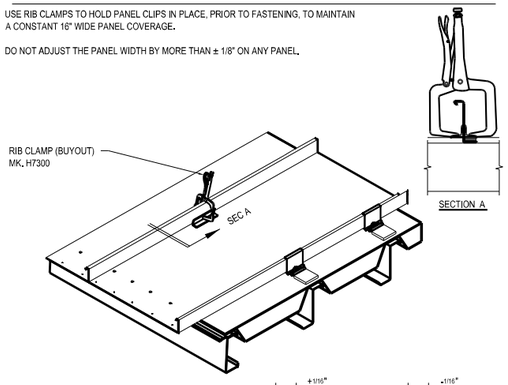
PRE-DRILL ONE PILOT HOLE FOR ROOF PANEL CLIPS AT MID-SPANS, HIGH SIDE OR RIDGE AND PANEL END LAPS, IF ANY.



MEASURE OVER 1'-4" FROM INSTALLED CLIP FASTENER. PRE-DRILL (1) 3/16" Ø PILOT HOLE. BE SURE TO LOCATE HOLE NEAR EDGE OF PURLIN FLANGE. THIS WILL ENSURE THAT UP TO (3) FASTENERS CAN BE INSTALLED IN CLIP BASE (IF REQ'D BY DESIGN. REF. ERECTION DRAWINGS FOR FASTENER REQUIREMENTS).

USE RIB CLAMPS TO HOLD PANEL CLIPS IN PLACE, PRIOR TO FASTENING, TO MAINTAIN A CONSTANT 16" WIDE PANEL COVERAGE.

DO NOT ADJUST THE PANEL WIDTH BY MORE THAN ± 1/8" ON ANY PANEL.



CORRECT PANEL MODULARITY

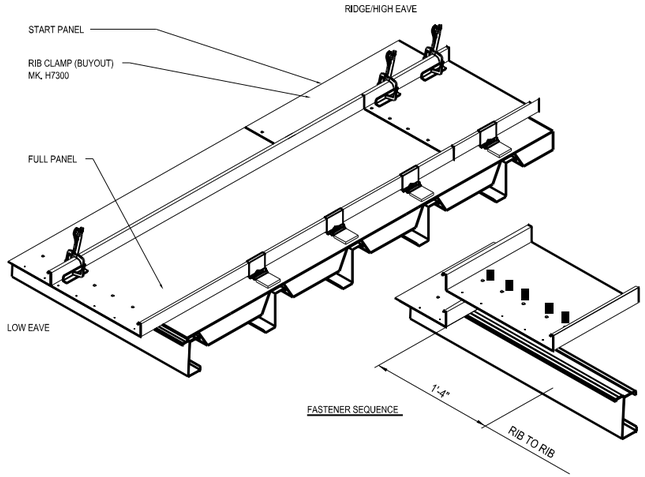
ADJUSTING PANEL MODULARITY

PANEL MODULARITY SEQUENCE

THE PROCEDURES AND SEQUENCE SHOWN ARE RECOMMENDED TO AID IN MAINTAINING PANEL MODULARITY.
THE TOOLS SHOWN ARE NOT REQUIRED BUT RECOMMENDED TO AID INSTALLATION.

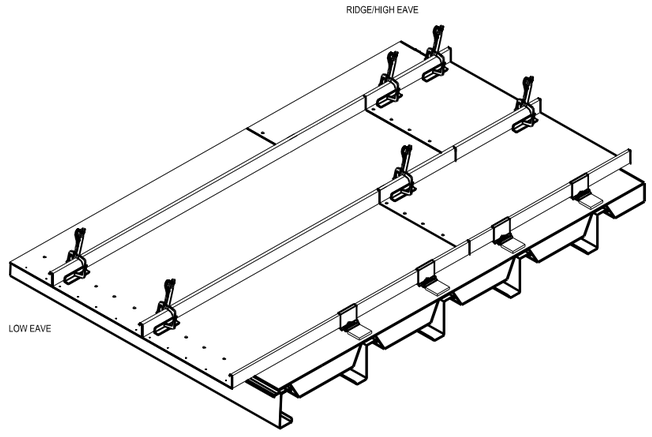
STAGE #1

1. ROLL FIRST FULL PANEL IN PLACE AND ALIGN CENTER OF PANEL FLAT TO SQUARE AS SHOWN BELOW.
2. APPLY THE LOW EAVE CLAMP AS SHOWN TO DRAW PANEL TIGHT TO CLOSURE.
3. INSTALL THE EAVE FASTENERS STARTING AT LEADING RIB.
4. AS PANEL INSTALLATION PROGRESSES, INSTALL MORE CLAMPS UPSLOPE AS SHOWN.
5. ADD, ADJUST OR LEAVE CLAMPS OFF TO MAINTAIN PANEL MODULARITY AS NECESSARY.
6. LEAVE CLAMPS ON FIRST FULL SEAM.



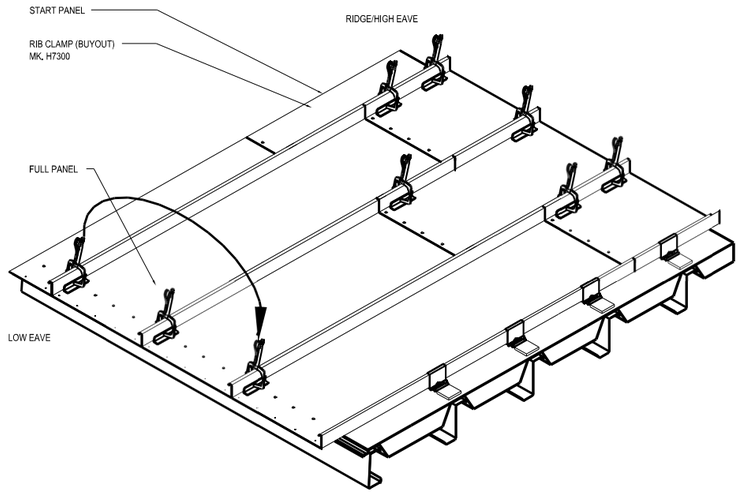
STAGE #2

1. INSTALL THE NEXT LOW EAVE PANEL AND ADD CLAMP.
2. REPEAT STEPS 2 THROUGH 6 FROM STAGE #1 NOTES.
3. LEAVE CLAMPS ON FIRST AND SECOND FULL SEAM.
4. INSTALL THE OUTSIDE CLOSURE IN THE FIRST FULL PANEL.



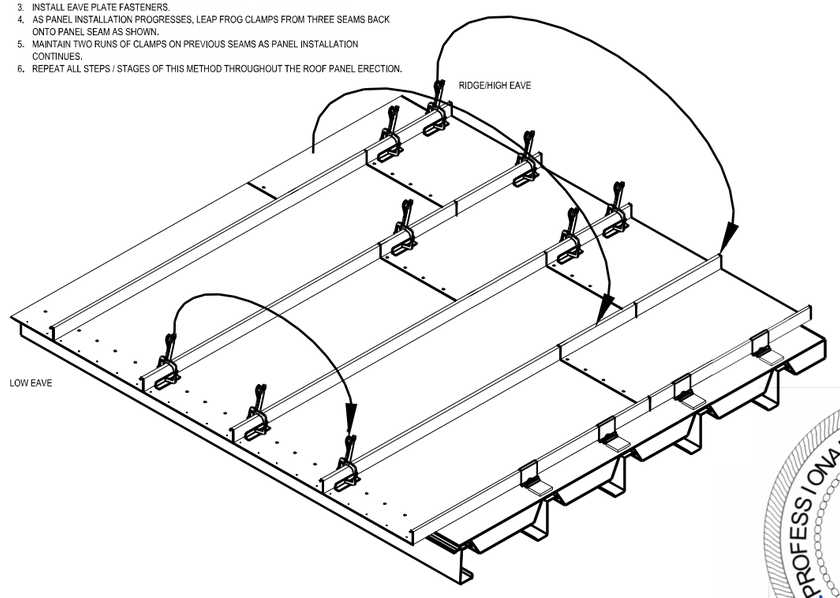
STAGE #3

1. KEEP CLAMPS IN PLACE ON THE FIRST TWO SEAMS WITH THE EXCEPTION OF THE LOW EAVE CLAMP.
2. INSTALL THE NEXT LOW EAVE PANEL AND LEAP FROG CLAMP AS SHOWN.
3. REPEAT STEPS 2 THROUGH 5 FROM STAGE #1 NOTES.



STAGE #4

1. KEEP CLAMPS IN PLACE ON THE FIRST TWO SEAMS WITH THE EXCEPTION OF THE LOW EAVE CLAMP.
2. INSTALL THE NEXT LOW EAVE PANEL AND LEAP FROG THE CLAMP AS SHOWN.
3. INSTALL EAVE PLATE FASTENERS.
4. AS PANEL INSTALLATION PROGRESSES, LEAP FROG CLAMPS FROM THREE SEAMS BACK ONTO PANEL SEAM AS SHOWN.
5. MAINTAIN TWO RUNS OF CLAMPS ON PREVIOUS SEAMS AS PANEL INSTALLATION CONTINUES.
6. REPEAT ALL STEPS / STAGES OF THIS METHOD THROUGHOUT THE ROOF PANEL ERECTION.



MODULARITY GUIDANCE

SPECIAL ATTENTION TO ABOVE STEPS TO MAINTAIN PROPER PANEL MODULARITY AND THERMAL PERFORMANCE IS CRITICAL, FAILURE TO DO SO WILL RESULT IN UNSIGHTLY PANEL APPEARANCE.

EA3012

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
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IAS ACCREDITED AC472
CWB CERTIFIED CSA W47.1
CERTIFIED CSA A660
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NUCOR BUILDING SYSTEMS
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05/23/2025 09:26:10am

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,83
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	ROOF SHEETING DETAILS
SHEET	SD3

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

IMPORTANT NOTE:

THE INSTRUCTIONS ON THIS PAGE ONLY ADDRESS THE USE OF THE HAND CRIMPING TOOLS. INSTRUCTIONS FOR MECHANICAL SEAMING, IF REQUIRED, ARE OUTLINED IN THE SEAMING MANUAL, WHICH IS INCLUDED WITH THE MECHANICAL SEAMER KIT PROVIDED BY D.I. ROOF SEAMERS.

SPECIALIZED SEAMING AND HAND CRIMPING TOOLS
THE FINISHED SEAM OF THE ROOF PANELS REQUIRES SPECIAL SEAMING TOOLS THAT ARE AVAILABLE ONLY THROUGH D.I. ROOF SEAMERS. CAUTION: THE USE OF OTHER SEAMING / CRIMPING EQUIPMENT WILL LIKELY RESULT IN FAULTY AND / OR DAMAGED SEAMS AND SHALL INVALIDATE ANY OF THE ROOF SYSTEM'S MATERIAL AND WEATHER TIGHTNESS WARRANTIES.

SEAMING TOOL SOURCE
CONTACT D.I. ROOF SEAMERS TO PURCHASE ANY NECESSARY CRIMPING TOOLS AND FOR RENTAL INFORMATION OF THE MECHANICAL SEAMER IF REQUIRED.

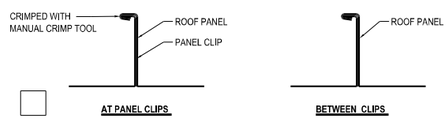
CRIMPING & SEAMING REQUIREMENTS

THE DESIGN OF THIS STRUCTURE REQUIRES SEAMING TO MEET DESIGN AND CODE REQUIREMENTS. SEE THE SEAMING PLAN FOR ROOF PLANE SPECIFIC SEAMING REQUIREMENTS.
THERE ARE THE TWO SEAM TYPES POSSIBLE WITH THE NBG Loc Seam AS NOTED BELOW. ALL OF THESE SEAM TYPES CAN BE ACHIEVED WITH THE AVAILABLE CRIMPERS, IT IS RECOMMENDED TO RENT A MECHANICAL SEAMER TO AID IN THE SEAMING PROCESS.

1. **NBG Loc Seam 90**
   THE Loc Seam 90 SEAM REQUIRES HAND CRIMPING THE ROOF PANEL WITH THE MANUAL SEAMING TOOL AT THE STARTING EAVE OR RIDGE END OF THE PANELS, END LAPS, AND AT ALL ROOF CLIPS. ONCE THE HAND CRIMPING HAS BEEN COMPLETED, THEN SEAM THE FULL LENGTH OF THE ROOF PANELS WITH THE MOTORIZED SEAMING TOOL.

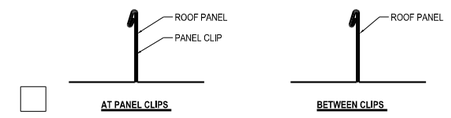
2. **NBG Loc Seam 360**
   THE Loc Seam 360 SEAM IS ACHIEVED BY RUNNING THE SINGLE DIRECTIONAL SEAMER OVER THE ENTIRE ROOF. THE ERECTOR MUST FIRST SEAM THE ENTIRE ROOF PANEL TO THE Loc Seam 90 SEAM WITH THE MOTORIZED SEAMING TOOL. **IT IS RECOMMENDED TO HAND CRIMP PANEL TO THE Loc Seam 90 SEAM PROFILE AT ALL PANEL CLIP LOCATIONS PRIOR TO MECHANICALLY SEAMING TO THE REQUIRED Loc Seam 360 SEAM PROFILE** BEFORE THE SEAMER IS LOCKED ON, THE LOW END OF THE PANEL MUST BE HAND CRIMPED INTO A NBG Loc Seam 360 SEAM, UTILIZING THE HAND CRIMPER THAT IS SUPPLIED IN THE SEAMER KIT. THIS WILL ENABLE YOU TO LOCK THE SEAMER ONTO THE PANEL SEAM. THEN SEAM THE FULL LENGTH OF THE ROOF PANEL.

NBG Loc Seam 90 SEAM



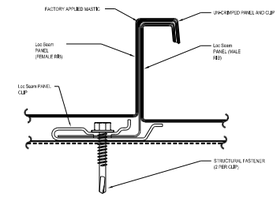
☐ **AT PANEL CLIPS** **BETWEEN CLIPS**

NBG Loc Seam 360 SEAM



☐ **AT PANEL CLIPS** **BETWEEN CLIPS**

CHECK PANEL ASSEMBLY



SIDE LAP FIT-UP
BEFORE SEAMING, INSPECT THE FULL LENGTH OF EACH ROOF PANEL SIDE LAP. CHECK THAT THE TWO PANELS ARE PROPERLY HAND CRIMPED AT ALL CLIP LOCATIONS, LOW EAVE, HIGH EAVE AND END LAPS. ANY CONDITIONS WHERE THE PANEL **IS NOT** CRIMPED PROPERLY **MUST** BE CORRECTED BEFORE ATTEMPTING TO SEAM THE ROOF PANELS. **UN-SEAMED ROOF PANELS CANNOT PROVIDE THEIR DESIGNED WIND LOAD AND WEATHER RESISTANCE.**

CLIP ALIGNMENT
BEFORE CRIMPING AND / OR SEAMING, INSPECT THAT EACH ROOF PANEL CLIP **IS** PROPERLY ENGAGED IN THE SIDE LAP ASSEMBLY. ANY DISPLACED CLIPS MUST BE CORRECTED BEFORE ATTEMPTING TO CRIMP / SEAM THE ROOF PANELS. PANEL CLIPS THAT ARE NOT PROPERLY ENGAGED AND ALIGNED CAN CAUSE FAULTY CRIMP / SEAM AND OBJECTIONABLE SEAM APPEARANCE. **THE MBS NOR D.I. ROOF SEAMERS CAN BE HELD RESPONSIBLE FOR ANY CONCERNS RELATED TO IMPROPERLY ALIGNED CLIPS.**

SEAM DAMAGE
BEFORE CRIMPING AND / OR SEAMING, INSPECT THAT EACH ROOF PANEL MALE AND FEMALE ARE FREE FROM DISTORTION AND KINKS WHICH CAN LEAD TO DIFFICULTY AND / OR DAMAGE TO THE PANEL WHILE ATTEMPTING TO CRIMP / SEAM THE PANEL. ANY DISTORTIONS / KINKS MUST BE CORRECTED BEFORE ATTEMPTING TO CRIMP / SEAM THE PANELS. **THE MBS NOR D.I. ROOF SEAMERS CAN BE HELD RESPONSIBLE FOR ANY CONCERNS RELATED TO DAMAGE CAUSED IN THE FIELD.**

CRITICAL SEAMER ORDERING INFORMATION

ROOF TYPE	-
PANEL GAUGE	- GA.
SQUARE FOOTAGE (ENTIRE ROOF)	- SQ. FT
ROOF PITCH	- :12
SEAM HEIGHT	2"
ENDLAPS	☐ YES ☐ NO
GALVALUME OR PAINTED ROOF	☐ GALVALUME ☐ PAINTED
PERIMETER CLIPS REQUIRED	☐ YES ☐ NO

PLEASE NOTE THAT ALL SEAMER ORDERS WILL TAKE APPROXIMATELY 5-7 WORKING DAYS FOR DELIVERY TO JOB SITE FROM DATE OF ORDER.

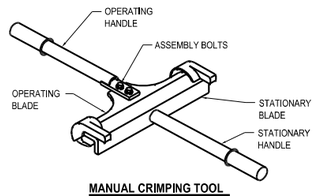
DIROOFSEAMERS.COM
PHONE (888) 343-0456

MANUAL CRIMPING TOOL OPERATION FOR Loc Seam 90 SEAM

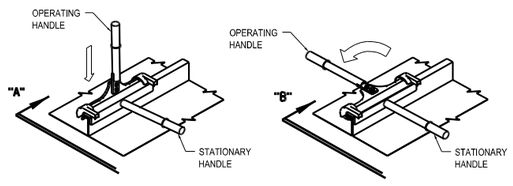
ASSEMBLE THE SEAMING TOOL
WHEN RECEIVED, THE MANUAL CRIMPING TOOL MAY BE DISASSEMBLED. ASSEMBLE THE HANDLE TO THE TOOL BODY WITH THE PROVIDED BOLTS.

TOOL ORIENTATION TO SEAM
ORIENT THE TOOL TO FIT CORRECTLY ON THE ROOF PANEL SEAM (SEE SECTION A BELOW). THE STATIONARY HANDLE MUST BE IN THE HORIZONTAL POSITION AND THE OPERATING HANDLE MUST BE ROTATED UP TO THE OPEN OR VERTICAL POSITION

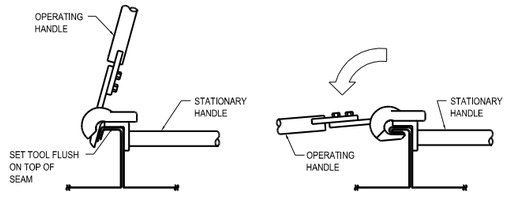
FORMING THE SEAM
WHEN THE TOOL IS CORRECTLY POSITIONED ON THE PANEL, PUSH THE STATIONARY BLADE SOLIDLY AGAINST THE TOP OF THE SEAM. WHILE HOLDING THE STATIONARY HANDLE IN THE HORIZONTAL POSITION, ROTATE THE OPERATING HANDLE DOWN TO THE HORIZONTAL POSITION. THIS WILL FORM THE SEAM (SEE SECTION B BELOW).



MANUAL CRIMPING TOOL



STEP 1 **STEP 2**



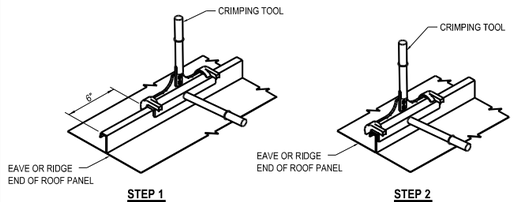
SECTION "A" **SECTION "B"**

MANUAL CRIMPING TOOL OPERATION FOR Loc Seam 90 SEAM CONT.

TOOL POSITION ON THE ROOF
WHEN HAND SEAMING AT THE LOW EAVE, RIDGE END, END LAP AND **ALL** ROOF CLIP LOCATIONS. THE SEAMING MUST BE DONE IN TWO STEPS.
STEP 1: POSITION THE CRIMPING TOOL AS SHOWN BELOW IN THE VARIOUS AREAS OF THE ROOF. ROTATE THE MOVEABLE HANDLE DOWN TO FORM A Loc Seam 90 SEAM. RELEASE HANDLE.

STEP 2: RE-POSITION THE CRIMPING TOOL AS SHOWN BELOW AND REPEAT STEP 1.

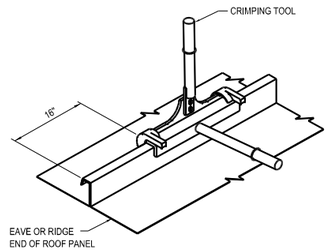
CHECKING THE FINISHED SEAM
ROTATE THE OPERATING HANDLE TO THE OPEN POSITION. REMOVE THE TOOL AND CHECK THAT THE SEAM IS CORRECTLY FORMED, AS SHOWN BELOW.



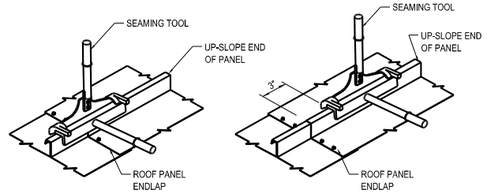
STEP 1 **STEP 2**

MANUAL CRIMPING AT THE EAVE

ERECTOR NOTES:
THE ROOF SEAM PROFILE IS COMPLETE ONLY AFTER THE ENTIRE ROOF HAS BEEN MECHANICALLY SEAMED. IF BUILDING HAS LOC SEAM 360 SEAM, DO NOT SEAM / CRIMP THE PANEL INTO A LOC SEAM 360 SEAM 16" UP FROM THE LOW EAVE, OTHERWISE THE GUTTER BRACKET WILL NOT FIT UP PROPERLY.

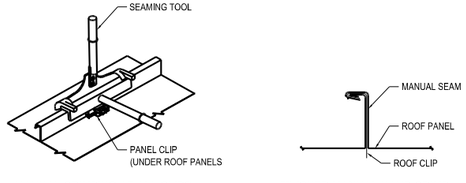


MANUAL CRIMPING AT THE EAVE



STEP 1 **STEP 2**

MANUAL CRIMPING AT THE ENDLAP

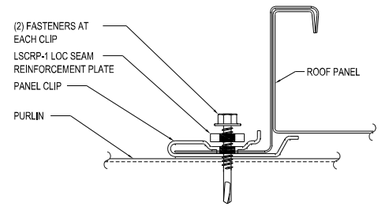


MANUAL CRIMPING AT ALL CLIPS **FINISHED MANUAL HAND CRIMP**

LOC SEAM HAND CRIMPING NOTES

HAND CRIMING TOOLS AND PROCEDURES

EA3015



CLIP FASTENER SELECTION

PURLIN APPLICATION
H1020 FOR INSULATION ≤ R-19
H1025 FOR INSULATION > R-19 AND ≤ R-25

JOIST APPLICATION
H1070 FOR INSULATION ≤ R-19
H1075 FOR INSULATION > R-19 AND ≤ R-25

IMPORTANT NOTE:
IF JOIST TOP CHORD GAP EXCEEDS PANEL CLIP FASTENER LOCATIONS, ALTERNATE PANEL CLIPS TO OPPOSING CHORD ANGLES TO PREVENT LOADING JOIST TO ONE SIDE.

THERMAL BLOCKS AND INSULATION NOT SHOWN FOR CLARITY

REINFORCED CLIPS	
PART #	PART DESCRIPTION
LSEC-1	SHORT CLIP
LSEC-2T	TALL CLIP

LOC SEAM REINFORCEMENT PLATE

FACTORY MUTUAL APPROVED
FM CLASS 1-120 @ 5'-0" PURLIN SPACING
FM CLASS 1-180 @ 2'-6" PURLIN SPACING

EA3018

MBMA MEMBER
IAS ACCREDITED AC472
CWB CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
CERTIFIED CSA A660
CSSBI
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05/23/2025 09:26:12am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,83
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE ROOF SHEETING DETAILS
SHEET SD4

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
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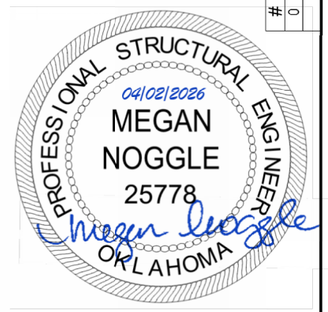
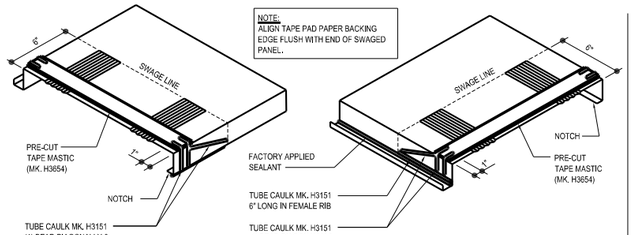
	PERMITS	TAK / JMW	WZ	09/08/2025

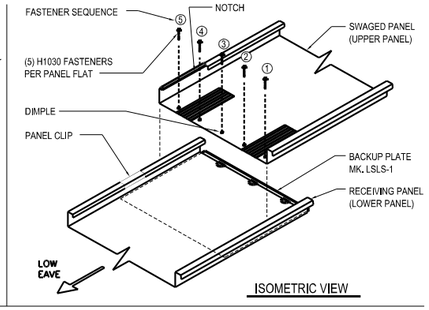




NOTE:
ALIGN TAPE PAD PAPER BACKING EDGE FLUSH WITH END OF SWAGED PANEL.

SAFETY PRECAUTION: DO NOT STEP ON RIB OF PANEL, ALWAYS STEP ON FLAT SURFACE, DO NOT STEP ON PANELS UNTIL FULLY SECURED WITH FASTENERS.

SWAGED PANEL UNDERSIDE VIEW



ISOMETRIC VIEW

NOTE: ALL AREAS ON ALUMINUM COATED PANELS THAT REQUIRE MASTIC SHOULD BE WIPED CLEAN WITH A MILD ALL PURPOSE DETERGENT CLEANER BEFORE MASTIC APPLICATION.

1) WHEN ENDLAPS ARE REQUIRED THE LOWER 6 INCHES OF THE UPPER PANEL ARE SWAGED, WHICH ALLOWS FOR A BETTER LAP ON TO THE LOWER RECEIVING PANEL. THIS LAP WILL OCCUR APPROXIMATELY 12 INCHES UPSLOPE FROM A PURLIN OR JOIST RUN.

2) PRIOR TO SETTING THE SWAGED PANEL, INSTALL THE BACKUP PLATE ONTO THE LOWER RECEIVING PANEL AS SHOWN.

3) NEXT INSTALL A PIECE OF PRE-CUT TAPE MASTIC ACROSS THE WIDTH OF THE UNDERSIDE OF THE SWAGED PANEL BEGINNING AND ENDING AT THE VERTICAL SEAMS (LEGS). ALSO APPLY TUBE CAULK ON THE MALE AND FEMALE RIBS OF THE SWAGED PANEL AS SHOWN IN DETAIL ABOVE.

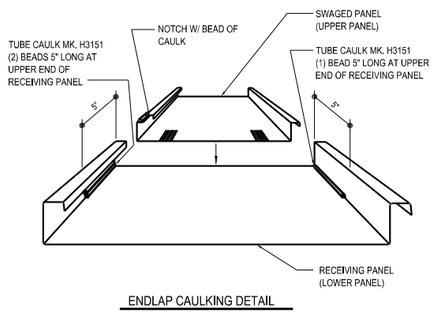
4) NEXT APPLY TUBE CAULK ALONG BOTH PANEL RIBS OF THE LOWER RECEIVING PANEL AS SHOWN IN THE ENDLAP CAULKING DETAIL.

5) INSTALL THE UPPER SWAGED PANEL. BOW PANEL IN THE MIDDLE DURING INSTALLATION TO AVOID SWIPING CAULK FROM THE VERTICAL LEGS OF THE PANEL AT THE ENDLAP.

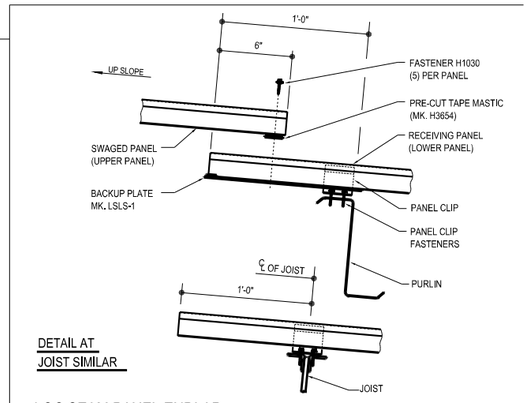
6) NEXT SECURE THE LAP WITH (5) H1030, ROOF FASTENERS IN THE PRE-DIMPLED LOCATIONS.

7) HAND SEAM PANEL RIBS TOGETHER AT ENDLAP PRIOR TO MECHANICALLY SEAMING.

NOTE:
PRIOR TO INSTALLING LAP FASTENERS, PANELS MUST BE HAND SEAMED TOGETHER AT THE ENDLAP.



ENDLAP CAULKING DETAIL



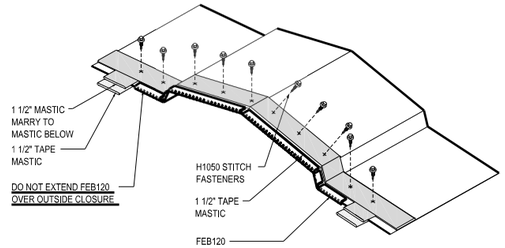
DETAIL AT JOIST SIMILAR

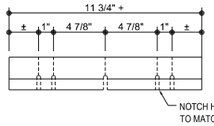
LOC SEAM PANEL ENDLAP

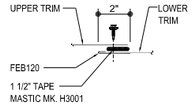
EA3021

RIDGE CAP LAP & FLASHING BACKER

SLIDE FIELD CUT SECTION FLASHING ENDLAP BACKER ONTO THE LOWER TRIM PIECE, PLACE TAPE MASTIC NEXT TO HEM OF THE BACKER (NOT ON TOP OF HEM), MARRY LAP MASTIC WITH MASTIC BETWEEN RIDGE CAP AND RIDGE CLOSURE ZEE.







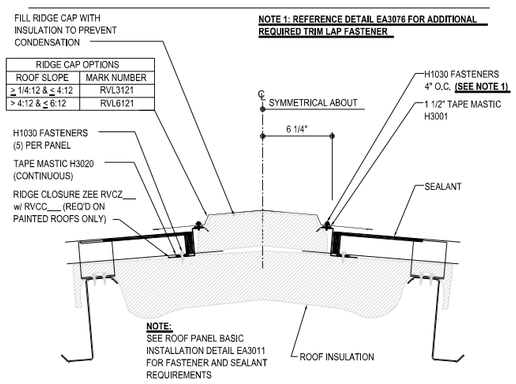
FLASHING ENDLAP BACKER

FIELD CUT FROM STANDARD FEB120

FILL RIDGE CAP WITH INSULATION TO PREVENT CONDENSATION

NOTE 1: REFERENCE DETAIL EA3076 FOR ADDITIONAL REQUIRED TRIM LAP FASTENER

RIDGE CAP OPTIONS	
ROOF SLOPE	MARK NUMBER
≥ 1/4:12 & ≤ 4:12	RVL3121
> 4:12 & ≤ 6:12	RVL6121



RIDGE TRIM DETAIL

RIDGE TRIM DETAIL

EG3010

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CWB CERTIFIED CSA W47.1
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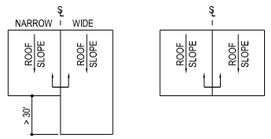
05/23/2025 09:26:14am

JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,83
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
SHEET SD5
DRAWING TITLE ROOF SHEETING DETAILS

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

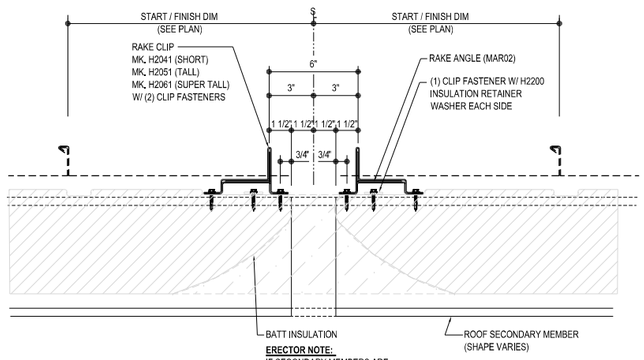
PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

1. SLIDE THE RAKE ANGLE CLIPS ONTO THE MAR02 RAKE ANGLE PRIOR TO ATTACHING THE RAKE ANGLE CLIPS TO THE SECONDARY MEMBER. THEN FASTEN THE RAKE ANGLE CLIPS TO THE TOP LEG OF THE SECONDARY MEMBER IT IS RECOMMENDED TO RUN A STRING LINE TO LOCATE AND PREDRILL ONE HOLE ALONG THE SECONDARY MEMBER FOR EASE OF ATTACHMENT AND ALIGNMENT.



BUILDING OFFSET >30' WITH OR WITHOUT SECONDARY MEMBERS TIED TOGETHER

NO BUILDING OFFSET SECONDARY MEMBERS NOT TIED TOGETHER (STRUCTURAL EXPANSION)



ERECTOR NOTE:
IF SECONDARY MEMBERS ARE TIED TOGETHER, INSULATION CAN BE CONTINUOUS.

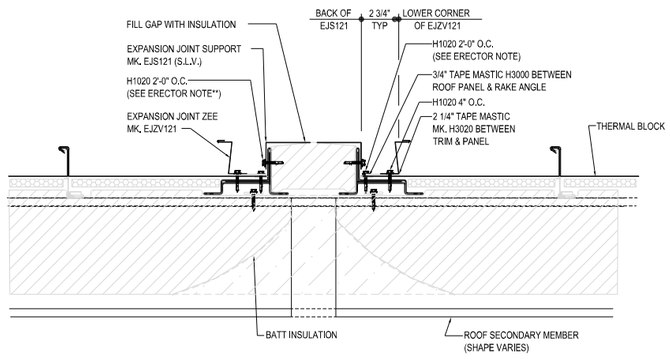
ERECTOR NOTE:
KEEP FASTENER MINIMUM 2 1/2" AWAY FROM RAKE ANGLE CLIP TO AVOID PINNING ROOF SYSTEM

2. AFTER THE RAKE ANGLE CLIPS AND RAKE ANGLE HAVE BEEN INSTALLED THE FINISH AND START PANELS CAN BE INSTALLED. PLACE TAPE MASTIC BETWEEN PANEL AND RAKE ANGLE AND FASTEN PANEL TO RAKE ANGLE. THIS PROVIDES A TEMPORARY SEAL FOR THE PANEL UNTIL THE TRIM IS INSTALLED. FASTENERS MUST BE A MINIMUM OF 2 1/2" AWAY FROM RAKE CLIP TO AVOID PINNING THE ROOF SYSTEM.

NEXT INSTALL THE EXPANSION JOINT SUPPORT TO THE VERTICAL LEG OF THE RAKE ANGLE. FASTENERS MUST BE A MINIMUM OF 2 1/2" AWAY FROM RAKE CLIP TO AVOID PINNING THE ROOF SYSTEM.

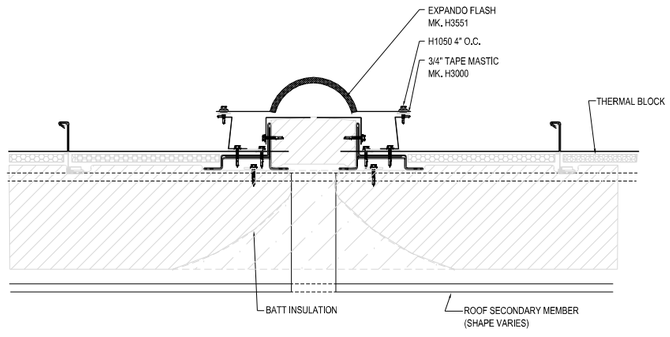
PLACE MASTIC BETWEEN THE EXPANSION JOINT ZEE AND THE PANEL AND FASTEN THROUGH THE ZEE AND PANEL INTO RAKE ANGLE. FASTENERS MUST BE A MINIMUM OF 2 1/2" AWAY FROM RAKE CLIP TO AVOID PINNING THE ROOF SYSTEM. THESE TRIMS SUPPORT THE EXPANSION TRIMS THAT ARE SHOWN IN THE NEXT STEP.

FILL THE CAVITY BETWEEN WITH LOOSE FILL INSULATION.



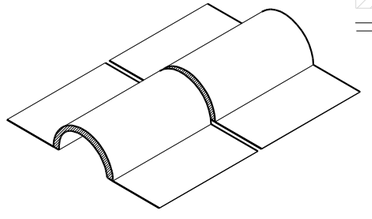
3. PLACE 3/4" TAPE MASTIC ON THE ZEE TRIM AS SHOWN.

NEXT INSTALL THE EXPANDO FLASH AND FASTEN TO THE ZEE. ENSURE FASTENER PENETRATES THROUGH THE MASTIC.



EXPANDO FLASH SPLICE

THE EXPANDO FLASH COMES WITH A SPLICE KIT IN THE BOX WHEN OVER 50' RUN IS REQUIRED. THE KIT INCLUDES INSTRUCTIONS ON PROPERLY SPLICING THE METAL WINGS AND MEMBRANE.



TRANSVERSE EXPANSION DETAIL

STRUCTURAL TRANSVERSE EXPANSION JOINT DETAIL

EJ3400

NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
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JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	ROOF SHEETING DETAILS
SHEET	SD6

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

05/23/2025 09:26:15am

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA

SUGGESTED INITIAL PROCEDURES FOR INSTALLER:

1) CHECK ALL APPLICABLE FEDERAL, STATE AND LOCAL CODES TO VERIFY COMPLIANCE WITH THE CODE.

2) BE CERTAIN THAT SITE CONDITIONS ARE SUCH THAT SAFE WORKING PRACTICES ARE STRICTLY OBSERVED.

3) REVIEW ALL INSTALLATION DRAWINGS AND ASSOCIATED PROJECT DOCUMENTS.

4) CONSULT WITH THE GENERAL CONTRACTOR, DESIGN ENGINEER, ARCHITECT AND/OR OWNER TO CONFIRM THOSE RECOMMENDED.

5) COMPLY WITH ALL SAFETY REGULATIONS.

IT IS THE RESPONSIBILITY OF THE DESIGNER / CONTRACTOR / INSTALLER TO ENSURE THAT THE DETAILS AND INSTALLATION PROCEDURES ARE ADAPTED TO MEET PARTICULAR BUILDING REQUIREMENTS.
THE METAL BUILDING / PANEL SUPPLIER SHALL NOT BE HELD LIABLE FOR ANY AND ALL CLAIMS ARISING FROM LACK OF PROPER INSTALLATION. THE DESIGNER / INSTALLER MUST BE AWARE OF AND ALLOW FOR EXPANSION AND CONTRACTION OF WALL PANELS WHEN DESIGNING AND/OR INSTALLING WALL PANELS.

SOME FIELD CUTTING IS PART OF NORMAL ERECTION WORK. WORKMANSHIP SHALL CONFORM TO THE HIGHEST INDUSTRY STANDARDS. A CERTAIN AMOUNT OF WAVINESS CALLED "OIL CANNING" MAY EXIST IN THE PANEL. MINOR WAVINESS IS NOT SUFFICIENT CAUSE FOR REJECTION AND DOES NOT AFFECT THE STRUCTURAL INTEGRITY OF THE PANEL. MINIMIZING OR ELIMINATION THIS EFFECT CAN BE ACCOMPLISHED BY USING SIMPLE INDUSTRY STANDARD PROCEDURES DURING SURFACE PREPARATION.

NOTES FOR HANDLING PANELS AND COMPONENTS:

INSULATED PANELS ARE CAREFULLY INSPECTED AND BUNDLED PRIOR TO LOADING FOR SHIPMENT. IT IS THE RESPONSIBILITY OF THE TRANSPORTATION COMPANY TO DELIVER THESE COMPONENTS UNDAMAGED. IT IS THE CONSIGNEE'S RESPONSIBILITY TO INSPECT THE SHIPMENT FOR DAMAGE AND SHORTAGES WHEN IT IS RECEIVED.

WHEN A SHIPMENT IS RECEIVED, CHECK EACH ITEM AGAINST THE BILL OF LADING FOR QUANTITY, LENGTH, DAMAGE, ETC. IF A SHORTAGE OR DAMAGE IS FOUND, MAKE SURE A NOTATION OF IT IS MADE ON THE BILL OF LADING AND SIGNED BY THE DRIVER. THE MANUFACTURE CANNOT BE RESPONSIBLE FOR SHORTAGES OR DAMAGED MATERIALS UNLESS THEY ARE NOTED ON THE BILL OF LADING.

IN THE CASE OF PACKAGED COMPONENTS (SUCH AS CLIPS, FASTENERS, AND SEALANTS, ECT.), THE QUANTITIES ARE MARKED ON THEIR CONTAINER AND SHOULD BE CHECKED AGAINST THE BILL OF MATERIALS.

IT IS THE CUSTOMER'S RESPONSIBILITY TO MAKE ANY DAMAGE CLAIM. IMMEDIATELY NOTIFY THE DESIGNATED CUSTOMER SERVICE COORDINATOR OF ANY SHORTAGES OR DAMAGED MATERIALS. THIS WILL HELP TO MINIMIZE ANY ERECTION DELAYS THAT MAY RESULT FROM THE SHORTAGE OR DAMAGED MATERIALS.

UPON ARRIVAL OF PANELS, FORKLIFTS OR HOISTING EQUIPMENT WILL BE REQUIRED TO UNLOAD AND POSITION THE PANEL BUNDLES AND ACCESSORY CRATES FOR JOBSITE STORAGE AND INSTALLATION.

EXTREME CARE SHOULD BE TAKEN TO AVOID BUMPING THE PANELS WHILE LIFTING AND MANEUVERING. IN ALL CASES PANELS SHOULD NOT DEFLECT SIGNIFICANTLY IN THE LIFTING PROCESS.

IN HANDLING PANELS INDIVIDUALLY, ALL PERSONNEL MUST WEAR THE PROPER CLOTHING, PROTECTIVE EYE WEAR, AND GLOVES.

TO HELP PREVENT DAMAGES TO THE SURFACES AND EDGES:

- ALWAYS LIFT THE PANELS WHEN REMOVING THEM FROM BUNDLES, NEVER DRAG THEM.
- NEVER LIFT THE PANEL FROM THE FLAT POSITION BY THE OVERLAPPING RIB.
- DO NOT CARRY PANELS IN THE FLAT POSITION.

UNLOADING:

PANELS ARE SPIRAL WRAPPED WITH STRETCH-FILM AND SHIPPED FLAT. PANEL BUNDLES ARE REINFORCED AT SPECIFIED LIFTING POINTS TO PREVENT DAMAGE WHEN LIFTING. SEE FIGURE'S 1 AND 2 IN THIS SECTION TO DETERMINE WHERE THE LIFTING POINTS ARE FOR THE PANEL BUNDLES.

UNLOADERS MUST TAKE CARE THAT FORKLIFT FORKS ARE LOCATED AT THE PARTICLE BOARD ON THE PANEL BUNDLES BEFORE LIFTING.

EXTREME CARE SHOULD BE TAKEN TO AVOID BUMPING OR DROPPING THE PANELS WHEN LIFTING AND MANEUVERING.

WHEN UNLOADING BUNDLES OF 36'-0" OR LONGER IN LENGTH, TWO OR MORE LIFTING POINTS MAY BE REQUIRED. OVER ENGAGEMENT OF FORKS WILL CAUSE DAMAGE TO THE MATERIALS LOCATED ON THE OPPOSITE SIDE OF THE BUNDLE BEING LIFTED.

WHEN AN OVERHEAD CRANE IS USED, REINFORCED NYLON SLINGS OR STRAPS SHOULD BE USED (NO CHAINS OR CABLES SHOULD COME IN CONTACT WITH THE PANELS), ALONG WITH SUITABLE STIFF INSERTS LOCATED AT TOP AND BOTTOM OF THE BUNDLES AT THE SLING POSITIONS TO PROTECT THE PANELS FROM DAMAGE. ALSO, PLACE FOAM BLOCKS ON THE SIDES OF BUNDLES AT ALL SLING LOCATIONS.

NOTES:

REINFORCED LIFTING POINTS ARE CLEARLY MARKED ON THE PANEL BUNDLE (SEE FIGURES 1 & 2)

LONG LENGTH PANELS HAVE TWO OR MORE LIFTING POINTS (SEE FIGURE 2).

USE EXTREME CARE TO AVOID BUMPING OR DROPPING THE PANELS WHILE LIFTING AND MANEUVERING.

HOIST THE PANELS TO THE ROOF WITH THE AID OF NYLON SLINGS AND A SPREADER BAR TO PREVENT ANY CHANCE OF BENDING OR BUCKLING THE PANELS.

UNLOADING WITH A FORKLIFT:

- OVER ENGAGEMENT OF FORKS WILL CAUSE DAMAGE TO THE MATERIALS LOCATED ON THE OPPOSITE SIDE OF THE BUNDLE BEING LIFTED
- PANELS SHOULD NOT DEFLECT SIGNIFICANTLY IN THE LIFTING PROCESS.
- ENSURE THE FORKS STRADDLE THE DESIGNATED LIFT POINT.
- LIFT BUNDLES ONE AT A TIME WITH THE FORKLIFT

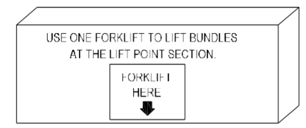


FIGURE 1
STANDARD LENGTH BUNDLES

- BE CAREFUL WHEN UNLOADING OR MOVING LONG LENGTH BUNDLES
- DO NOT POSITION YOUR LIFT AT THE CENTER OF THE BUNDLE, THIS MAY CAUSE PANEL DAMAGE.
- EACH FORKLIFT SHOULD STRADDLE ONE LIFT POINT.

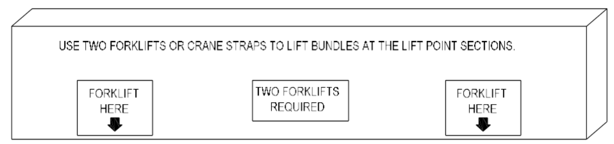


FIGURE 2
LONG LENGTH BUNDLES

UNLOADING WITH AN OVERHEAD CRANE:

- USE NYLON REINFORCED SLINGS OR STRAPS LOCATED AT A MINIMUM OF TWO POINTS ALONG THE LENGTH OF THE BUNDLE FOR CRANE LIFTING OF THE INDIVIDUAL BUNDLES.
- CHAINS OR CABLES SHOULD NOT COME IN CONTACT WITH THE PANELS.
- SUITABLY STIFF INSERTS SHOULD BE LOCATED AT TOP AND BOTTOM OF THE BUNDLES AT THE SLING POSITIONS TO PROTECT THE EDGES OF THE UPPER AND LOWER PANELS.
- PLACE FOAM BLOCKS ON THE SIDES OF BUNDLES AT ALL SLING LOCATIONS.
- WHEN BUNDLES ARE LONGER THAN 15'-0" IT IS SUGGESTED THAT A PROPERLY DESIGNED AND FABRICATED LIFTING BEAM IS USED.

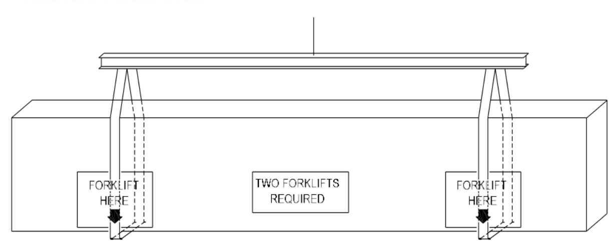


FIGURE 3
BUNDLES UNDER 4,000 LBS AND LESS THAN 44'-0"

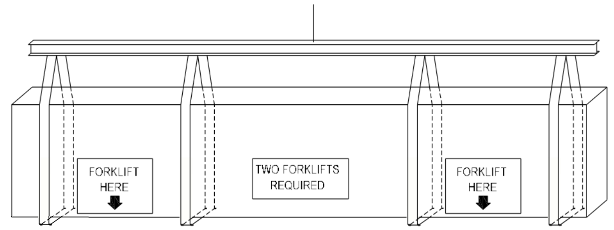


FIGURE 4
BUNDLES OVER 4,000 LBS AND LESS THAN 44'-0"

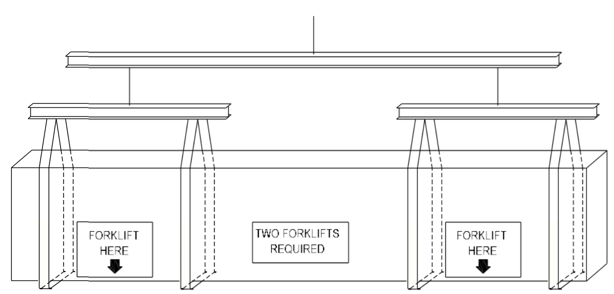
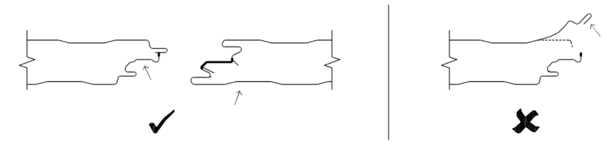


FIGURE 4
BUNDLES OVER 4,000 LBS AND MORE THAN 44'-0"

MANUALLY UNLOADING:

- ON SMALL PROJECTS UNLOADING OF THE PANELS MAY BE CARRIED OUT BY HAND.
  NOTE: SPECIAL CARE SHOULD BE TAKEN WHEN HANDLING. ALWAYS LIFT THE PANELS WHEN REMOVING FROM A BUNDLE, NEVER DRAG THEM.
- WARNING: TO PREVENT JOINT DAMAGE, NEVER LIFT THE PANEL FROM THE FLAT POSITION FROM THE OVERLAPPING RIB. LIFT PANELS FROM THE BOTTOM SKIN.
- IT IS IMPORTANT THAT WHENEVER A PANEL IS HANDLED, PICKED-UP, MOVED OR CARRIED IT SHOULD BE TURNED ON EDGE FIRST. DO NOT CARRY PANEL WHILE FLAT.
- IMPORTANT NOTE: ALL PERSONNEL DOING THESE PROCEDURES MUST WEAR AT ALL TIMES THE PROPER CLOTHING, PROTECTIVE EYE WEAR AND GLOVES.



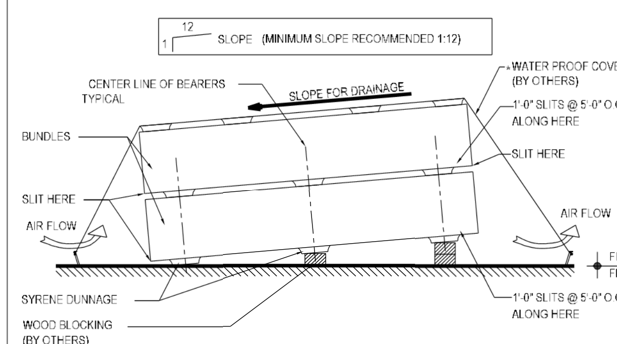
THE METAL BUILDING/PANEL SUPPLIER DOES NOT TAKE ANY RESPONSIBILITY FOR DAMAGE CAUSED FROM MISHANDLING OF PANELS. DAMAGED PANELS SHALL BE REPLACED OR CORRECTED TO APPROVAL OF THE ARCHITECT AND ANY COST INCURRED SHALL BE BORNE BY THE PARTIES RESPONSIBLE FOR THE DAMAGE.

JOBSITE STORAGE:

UPON ACCEPTANCE OF THE SHIPMENT, THE CUSTOMER IS RESPONSIBLE FOR PROPER HANDLING, STORAGE, AND SECURITY OF THE RECEIVED MATERIALS. THE MANUFACTURER IS NOT RESPONSIBLE FOR DAMAGE OR LOSS OF MATERIALS AT THE JOB SITE.

PANELS NOT REQUIRED FOR IMMEDIATE USE SHOULD BE:

- CAREFULLY UNLOAD AND PLACE DIRECTLY IN A PROTECTED STORAGE AREA ON A FIRM, LEVEL SURFACE CLEAR OF DEBRIS, PREFERABLY UNDER WATER PROOF COVER AND SLIT PLASTIC WRAP AT BASE TO ALLOW AIR FLOW, FOR NO LONGER THAN 30 DAYS.
- CUT / SLIT THE BOTTOM OF THE PLASTIC WRAP IN 1'-0" INCREMENTS AT 5'-0" O.C. ALONG THE LENGTH OF THE BUNDLES. A CONTINUOUS CUT / SLIT SHOULD BE MADE ALONG THE WIDTH OF THE BUNDLE.
- ELEVATE WITH WOOD BLOCKING, TO ALLOW AIR CIRCULATION UNDER THE BUNDLE, ON A FIRM, LEVEL SURFACE CLEAR OF DEBRIS, STANDING WATER, DIRECT SUN, AND DRIFTING SNOW.
- SEPARATE FLAT-LAID BUNDLES WITH THE STYRENE DUNNAGE PROVIDED WITH THE SHIPMENT.
- BUNDLES CAN BE STACKED, NO MORE THAN (2) BUNDLES HIGH.
- SLOPE AT A MINIMUM OF **1:12** FOR DRAINAGE OF MOISTURE FROM PANELS.
- INSPECTED DAILY FOR MOISTURE, INSURE NO SAGS ARE PRESENT. TRAPPED MOISTURE CAN DAMAGE THE PANEL FINISH AND VOID APPLICABLE FINISH WARRANTIES. IF PANEL BUNDLES CONTAIN MOISTURE OR SAGS, THE PANEL BUNDLE SHOULD BE DRIED AND RESTACKED. USE CARE IN RESTACKING TO AVOID DAMAGE TO PANELS.



PANELS FOR IMMEDIATE USE:
IF THE PANELS ARE TO BE USED IMMEDIATELY, THE BUNDLES SHOULD BE PLACED AT PRE-PLANNED STRATEGIC LOCATIONS AROUND THE PERIMETER OF THE BUILDING, AS CLOSE AS POSSIBLE TO THE PLANNED WORK AREAS, TO AVOID UNDUE SITE MANEUVERING.

WHEN MOVING PANEL BUNDLES, EXTREME CAUTION SHOULD BE TAKEN TO PREVENT DAMAGE TO THE PANEL SURFACES AND EDGES.

WHEN HANDLING PANELS INDIVIDUALLY, THEY SHOULD BE CARRIED IN A VERTICAL, NOT FLAT POSITION. NEVER DRAG PANELS WHEN REMOVING THEM FROM BUNDLES.

(SEE "HANDLING PANELS AND COMPONENTS)

INSTALLATION TOOLS:

"READ BEFORE YOU START"

- SLIDING PANELS TOGETHER WILL SCUFF, DISCOLOR OR DAMAGE THE FINISH.
- IT IS IMPORTANT TO NOTE THAT, DUE TO THE HIDDEN FASTENER SIDE LAP CONNECTIONS OF THESE PANELS, EXTRA CARE SHOULD BE TAKEN WHEN HANDLING THESE COMPONENTS.
- THE FOLLOWING IS A LIST OF COMMON TOOL REQUIREMENTS. REFER TO "FIELD CUTTING" FOR PANEL CUTTING GUIDELINES.
- WEARING CLEAN GLOVES, HANDLING THE PANELS BY EDGES AND TAKING A LITTLE EXTRA CARE WILL PAY OFF BY PRODUCING A GOOD CLEAN FINISHED WALL.

COMMON TOOL REQUIREMENTS:

CIRCULAR SAW	POWER DRILL	CARPENTER'S SQUARE
RIVET GUN	LEVEL	CHALK LINE
TAPE MEASURE	CAULK GUN	SCREW GUN
POWER SHEARS	HAMMER DRILL	POWER NIBBLER

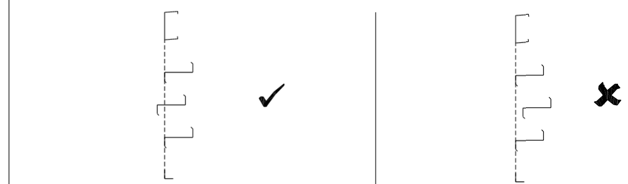
CAUTION: ANY METAL FILINGS OR BURRS SHOULD BE CLEANED OFF THE FACE OF THE PANELS AS SOON AS POSSIBLE TO PREVENT RUST FROM FORMING ON THE PAINT. (SEE "CLEANING PROCEDURES")

ALIGNMENT & SHIMMING
PRIOR TO INSTALLATION, WALL SECONDARY MEMBERS SHOULD BE CHECKED FOR OVERALL DIMENSIONS AND EVENNESS OF PLANE. THE WALL SECONDARY MEMBERS SHOULD ALSO BE CHECKED TO VERIFY THE WALL SYSTEM CAN BE INSTALLED WITHOUT INTERFERENCE. PRIOR TO INSTALLATION OF INSULATED PANEL, INSPECT EACH WALL FOR COMPONENT ALIGNMENT AND PLANE FLATNESS.

CHECK SUPPORT ALIGNMENT AGAINST THESE TOLERANCES:
< 8'-0" SPACING: +1/8", -0"
≥ 8'-0" SP[ACING: +1/4", -0"

(ARCHITECTURAL FLAT PANELS) < 4'-0" SPACING: +1/16", -0"

MISALIGNED SECONDARY STEEL MAY REQUIRE THE ERECTOR TO SHIM THE INSULATED WALL PANELS AT SOME LOCATIONS. SHIMS AND LABOR FOR INSTALLING SHIMS ARE BY OTHERS.



FASTENERS:

INSULATED WALL PANEL FASTENERS VARY BASED ON LOCATION AND PANEL THICKNESS. THE FASTENERS LISTED BELOW ARE TYPICAL FASTENERS. ADDITIONAL FASTENERS, WHEN REQUIRED BY DESIGN, WILL BE INDICATED ELSE WHERE ON THE ERECTION DRAWING SET.

MARK	DESCRIPTION
43L	SELF-DRILLING SCREW 1/4-14 x 1 1/4" TYPE 2
H1030	SELF-DRILLING SCREW 1/4-14 x 1 1/4" TCP 3 W/ WASHER
H1050	SELF-DRILLING SCREW 1/4-14 x 7/8" TCP 1 W/ WASHER
H1100	1/8" STAINLESS STEEL BLIND POP RIVET GRIP RANGE: 1/8" - 3/16"
17	SELF-DRILLING SCREW 12-14 x 1" TCP 3 W/ WASHER
4	SELF-DRILLING SCREW 1/4-14 x 7/8" TCP 1 W/ WASHER
14	1/8" STAINLESS STEEL BLIND POP RIVET GRIP RANGE: 1/8" - 3/16"
H1220	SELF-DRILLING SCREW 12-14 x 1" TCP 3 SQUARE / PHILLIPS PANCAKE HEAD
2605ANC	LOCK RIVET, 9/32 BT DOME HEAD W/ WASHER
14A	1/8" STAINLESS STEEL BLIND POP RIVET GRIP RANGE: 5/16" - 3/8"

16__PNC / 17__PNC
#14 X _ SDHH (SELF DRILLING HEX HEAD)

STRUCTURAL FASTENING AT PANEL HIDDEN JOINT			
PANEL THICK.	HIDDEN FASTENER	(TEK 3) MARK#:	(TEK 5) MARK #:
2"	1/4 - 14 X 2 SDHH W/O WASHER	1616PNC	N/A
2 1/2" & 3"	1/4 - 14 X 3 SDHH W/O WASHER	1624PNC	1724PNC
4"	1/4 - 14 X 4 SDHH W/O WASHER	1632PNC	1732PNC

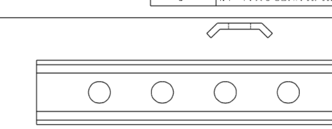
14__PNC
#14 X _ SDPH SELF DRILLING PANCAKE HEAD

STRUCTURAL FASTENER AT PANEL FACE		
PANEL THICK.	THROUGH FASTENER	(TEK 3) MARK#:
2"	#14 X 3 SDPH	1424PNC
2 1/2" & 3"	#14 X 4 SDPH	1432PNC
4"	#14 X 5 SDPH	1440PNC

11__P999
#14 X _ SDHH (SELF DRILLING HEX HEAD)

STRUCTURAL FASTENING FOR THROUGH CONDITIONS		
PANEL THICK.	THROUGH FASTENER	(TEK 3) MARK#:
2"	1/4 - 14 X 4 SDHH W/ WASHER	1132P999
2 1/2" & 3"	1/4 - 14 X 5 SDHH W/ WASHER	1140P999
4"	1/4 - 14 X 6 SDHH W/ WASHER	1148P999
5"	1/4 - 14 X 7 SDHH W/ WASHER	1156P999
6"	1/4 - 14 X 8 SDHH W/ WASHER	1164P999

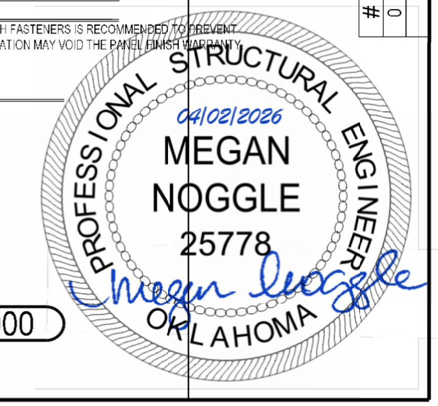
4633GNC
4 HOLE PANEL JOINT WASHER



NOTES: THE USE OF A CENTER PUNCH TO SLIGHTLY DIMPLE THE PANEL FACE PRIOR TO INSTALLING THROUGH FASTENERS IS RECOMMENDED TO PREVENT "WALKING" OF THE FASTENERS. EXCESSIVE DAMAGE TO THE PANEL FINISH CAUSED DURING INSTALLATION MAY VOID THE PANEL FINISH WARRANTY.

PROJECT PREPERATION NOTES
INSULATED WALL PANELS
INITIAL GUIDELINES, UNLOADING, HANDLING PANELS & COMPONENTS, JOBSITE STORAGE, & REQ'D TOOLING FOR INSTALLATION

GA4000



NUCOR BUILDING SYSTEMS
PHONE: (260) 837-7891
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05/20/2025 12:56:07pm

JOB NUMBER: T25U0346A
ADDRESS: WASHINGTON COUNTY, OWASSO, OK 74055
PROJECT NAME: CYL-HUB1-1,2,&3
BUYER NAME: DLR GROUP
DRAWING STATUS: FOR CONSTRUCTION **NOT FOR ERECTION**
SHEET: SD7
DRAWING TITLE: WALL SHEETING DETAILS

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

INSTALLATION PROCEDURES:

NOTE: INSULATED PANELS, DUE TO THEIR JOINERY, DO NOT PROVIDE DIAPHRAGM STIFFNESS FOR THE BUILDING WALL TO RESIST LATERAL FORCES INCLUDING WIND. LATERAL BRACING IS TO BE PROVIDED BY CROSS BRACING SYSTEMS CONNECTED TO THE PRIMARY BUILDING FRAMING.

PRIOR TO PANEL INSTALLATION VERIFY:

BUILDING WALLS ARE PLUMB: ENSURE BUILDING WALLS TO BE SHEETED ARE PLUMB AND THAT ANY CROSS-BRACING REQUIRED IS IN PLACE AND SNUG TO PREVENT WALL MOVEMENT DURING PANEL INSTALLATION. ALL SECONDARY MEMBERS ARE IN PLACE AND PLUMB.

SAG BRACING: IF SAG BRACING IS REQUIRED FOR YOUR JOB, THEN IT NEEDS TO BE INSTALLED PRIOR TO PANEL INSTALLATION. INSULATED PANELS ARE NOT DESIGNED TO CARRY THOSE LOADS.

WALL PLANE IS FREE OF OBSTRUCTIONS - SEE "INSTALLATION GUIDELINES" SECTION BELOW.

PANEL LAYOUT – REVIEW CUT DIMENSIONS FOR INSULATED PANELS AT ERECTION DRAWING PANEL LAYOUTS AND BECOME FAMILIAR WITH STARTING AND ENDING PANEL REQUIREMENTS.

WALL OPENING LOCATIONS – LOCATIONS OF OPENINGS MAY NEED TO BE ADJUSTED SLIGHTLY (INCHES) DUE TO PANEL JOINERY, TYPICALLY, PANELS ABOVE AND BELOW OPENINGS ARE TO BE INSTALLED AS WORK PROGRESSES. IF POSSIBLE, KEEP SIDE PANEL JOINTS 4" AWAY FROM FRAMED OPENINGS AS A MINIMUM.

PERSONNEL WALK DOORS – INSTALL PRIOR TO PANEL INSTALLATION. NOTIFY YOUR CUSTOMER SERVICE COORDINATOR IF YOU FIND A POTENTIAL ERECTION PROBLEM.

ONCE ALL OF THE ABOVE ITEMS HAVE BEEN VERIFIED, BEGIN INSTALLATION PROCESS:

1. TO ENSURE A PROPER VAPOR BARRIER AND WATER TIGHTNESS, APPLY A 3/8" BEAD OF BUTYL TUBE CAULK (MK #3151 TYP.) AT FEMALE END OF THE PANEL. IF CAULK IS NOT PRESENT, ALSO, APPLY A CONTINUOUS 3/8" BEAD OF BUTYL TUBE CAULK RUN AT ALL PERIMETER SUPPORT MEMBERS: BASE, EAVE, HEADER, SILL, AND HORIZONTAL TRANSITIONS. NOTE: THIS CAULK IS NOT REQUIRED AT MID-SPAN (INTERMEDIATE) MEMBERS.

2. OBTAIN FIRST PANEL STARTING PANEL CUT DIMENSION WILL BE SUPPLIED ON ERECTION DRAWINGS. REFER TO "FIELD CUTTING".

3. PLACE THE FIRST PANEL IN THE LOCATION AS DETAILED ON THE SHEETING PLANS WITH THE BASE OF THE FIRST PANEL IN THE PROPER POSITION. PLUMB THE PANEL AND SECURE IN PLACE.

4. PREPARE ADJACENT PANEL EDGE (VERIFY/ADD BUTYL CAULK, ETC.) PLACE INTO POSITION.

5. MAINTAIN AN EVEN AND UNIFORM GAP AT THE PANEL SIDE JOINT (1/8" MAX). THEN FASTEN PANEL INTO POSITION USING ALL REQUIRED SIDE JOINT FASTENERS. REFER TO "WALL OPENINGS" FOR SPECIFIC INFORMATION AT OPENINGS.

6. REPEAT THE INSTALLATION PROCESS OCCASIONALLY CHECKING FOR PLUMB. IF ANY MINOR 'OUT-OF-PLUMB' IS DETECTED, TAKE CORRECTIVE ACTION IN MINOR STEPS WITH SUBSEQUENT PANELS TO BRING THE SHEETING PROCESS BACK TO PLUMB.

INSTALLATION GUIDELINES:

INSULATED PANELS PROVIDE INSULATION PERFORMANCE SUPERIOR TO CONVENTIONAL METAL WALL PANELS WITH FIELD ASSEMBLED INSULATION SYSTEMS. THE FULL ENERGY SAVINGS POTENTIAL CAN ONLY BE REALIZED WHEN THE INSULATED PANELS ARE INSTALLED WITH CAREFUL ATTENTION TO THE DETAILS AFFECTING THE QUALITY OF AIR AND MOISTURE SEAL.

TO ENSURE A PROPER VAPOR BARRIER AND WATER TIGHTNESS, A 3/8" BEAD OF BUTYL CAULK IS REQUIRED AT LOCATIONS INDICATED ON THE ERECTION DRAWINGS. JOINT CAULK MAY BE FACTORY OR FIELD APPLIED. IT IS HOWEVER, THE INSTALLERS RESPONSIBILITY TO FIELD APPLY CONTINUOUS BUTYL CAULK AT AREAS WITH VOIDS OR MISSING CAULK. CONTINUITY, SIZE AND PROPER BEAD PLACEMENT ARE CRITICAL IN OBTAINING A SATISFACTORY SEAL AT EACH PANEL EDGE. DETAILS FOR PLACEMENT OF CAULK AT PANEL EDGES SHOULD BE REVIEWED IN ADVANCE. APPLICATION OF CAULK SHOULD BE CONTINUOUS.

SPECIAL CARE IN HANDLING IS REQUIRED TO PREVENT DAMAGE OR CONTAMINATION BY FIELD DEBRIS WITHIN THE PANEL JOINT. ALL SECONDARY SUPPORT STEEL SHOULD BE IN PLACE FOR CONTINUOUS ATTACHMENT OF PANELS ACROSS THE SURFACE OF PRIMARY FRAMING MEMBERS, INCLUDING OUTER EXTREMES OF CORNERS, OPENINGS, GABLES, ETC.

PRIOR TO INSTALLATION OF INSULATED PANEL, INSPECT EACH WALL FOR COMPONENT ALIGNMENT AND PLANE FLATNESS. WALL COMPONENTS SHOULD NOT VARY MORE THAT 1/8" OVER THE ENTIRE WALL SURFACE, INCLUDING FASTENER HEADS AND OTHER OBSTRUCTIONS THAT WOULD INTERFERE WITH CONTINUOUS BEARING OF THE INSULATED PANEL LINER FACE.

ALIGNMENT AT TRANSITION AREAS, SUCH AS CORNERS AND EAVE, SHALL BE WITHIN 1/8" OF THE THEORETICAL PLANE TO ACCOMMODATE CORNER PANELS AND FORMED FLASHING.

MISALIGNED SECONDARY STEEL MAY REQUIRE THE ERECTOR TO SHIM THE INSULATED WALL PANELS AT SOME LOCATIONS. SHIMS AND LABOR FOR INSTALLING SHIMS ARE NOT BY MBS.

DO NOT OVERDRIVE FASTENERS: OVERDRIVING FASTENERS CAN CAUSE DAMAGE AND DISTORTION OF THE PANEL FACE.

DO NOT SKIP ATTACHMENTS AT SECONDARY SUPPORT MEMBERS: PANELS MUST BE ATTACHED AT EACH PURLIN LINE IN PROGRESSION. SECURING PANELS AT TOP AND BOTTOM ONLY CAN CAUSE PANELS TO BOW AND IT MIGHT BE IMPOSSIBLE FOR THEM TO RETURN TO THEIR NORMAL POSITION.

WEATHER TIGHTNESS REQUIREMENTS:

TO PREVENT CONDENSATION ISSUES CARE MUST BE TAKEN BY THE INSULATED PANEL INSTALLER TO ENSURE PROPER SEALING OF THE BUILDING.

NOTE THE FOLLOWING:

- ALL MATERIALS MUST BE INSTALLED AS SHOWN ON THE PROVIDED ERECTION DETAILS.
- ALL PERIMETER CAULKING AND BUTYL TAPE APPLICATIONS MUST BE INSTALLED AS AS SHOWN ON THE ERECTION DETAILS.
- CONTINUOUS CAULK AND TAPE MASTIC APPLICATIONS (FACTORY OR FIELD) MUST BE CAREFULLY INSPECTED AND ANY VOIDS FOUND MUST BE FIELD APPLIED.
- GAPS, VOIDS OR AIR SPACE CREATED AT PANEL TO PANEL TRANSITIONS, AS AT RAKE, LOW EAVE, RIDGE, HIGH SIDE EAVE, ROOF TO WALL OR CORNERS MUST BE FIELD FILLED WITH FOAM SPRAY IN PLACE INSULATION (BY OTHERS).

MBS WILL NOT BE RESPONSIBLE FOR ANY CONDENSATION ISSUES THAT MAY OCCUR DUE TO IMPROPER INSTALLATION.

IF THE ERECTOR IS NOT EXPERIENCED WITH THE INSULATED PANELS SUPPLIED, IT IS STRONGLY RECOMMENDED THAT A FIELD TECHNICIAN BE ON SITE BEFORE BEGINNING PANEL INSTALLATION. CONTACT YOUR PROJECT COORDINATOR TO REQUEST AND SCHEDULE A FIELD TECHNICIAN.

FIELD CUTTING:

SOME FIELD CUTTING OF PANELS AND FLASHING WILL BE REQUIRED. IT IS THE WORKERS RESPONSIBILITY TO MAKE SURE ALL SAFETY PRECAUTIONS ARE FOLLOWED. SOME SAFETY PRECAUTIONS INCLUDE, BUT ARE NOT LIMITED TO; EYE PROTECTION, ADEQUATE VENTILATION, NO SMOKING AND AVOID EXPOSING PANELS TO HIGH HEAT.

PANELS ARE TO BE CUT ONE METAL SIDE AT A TIME AND THE INSULATION CAN BE REMOVED WITH A SERRATED KNIFE. A CIRCULAR SAW WITH AN APPROPRIATE BLADE SET TO CUT THROUGH THE METAL SKIN ONLY CAN BE USED. CIRCULAR SAWS WITH ABRASIVE BLADES ARE NOT ACCEPTABLE. BE SURE TO CUT COMPLETELY THROUGH THE METAL SKIN AT THE PANEL SIDE JOINTS. A CIRCULAR SAW WITH A **PROPER CARBIDE BLADE** MAY BE USED. **CHECK THE SAW BLADE MANUFACTUER'S SPECIFICATIONS FOR PROPER APPLICATION .**

RECOMMENDED CUTTING TOOLS INCLUDE:

(1) CIRCULAR SAW
(2) PANEL NIBBLER
(3) PANEL SAW
(4) SERRATED KNIFE
(5) BLADE OF A CARPENTER'S HAND SAW

IMP CUTTING PROCEDURES:

- MEASURE THE AREA TO CUT & MARK A LINE ON PANEL SURFACE (DO NOT USE GRAPHITE TO MARK PANEL).
- USE ADHESIVE TAPE ON BOTH SIDES OF THE CUTTING LINE TO PROTECT PANEL SURFACE.
- CONFIRM MEASUREMENT, AND PROCEED WITH CUTTING OPERATION.
- ALWAYS PROMPTLY CLEAN PANEL SURFACES TO REMOVE ANY METAL DUST OR FILINGS FROM CUTTING OPERATIONS.
- IF NECESSARY TURN PANEL OVER AND REPEAT STEPS ABOVE ON OPPOSITE SIDE.
- FILE OR SAND OFF ANY BURRS ON THE CUT EDGE OF THE PANEL. THE PANEL WILL THEN BE READY FOR INSTALLMENT. THE INSTALLER MUST CONSIDER THE APPLICATION OF THE CONTINUOUS BEAD OF SEALANT, & IF NECESSARY, THE CUTTING OF THERMAL BREAKS PRIOR TO INSTALLATION; SUCH TASKS SHALL BE DONE ON THE GROUND.
- FIELD CUT EDGES SHOULD ALWAYS BE COVERED WITH TRIMS.

THE PANEL/BLDG MANUFACTURER **WILL NOT** BE RESPONSIBLE FOR DAMAGE TO PANELS CAUSED BY IMPROPER CUTTING METHODS.

- **NEVER** USE A RECIPROCATING SAW TO CUT INSULATED PANELS. RECIPROCATING SAWS CAN CAUSE STRUCTURAL DAMAGE TO THE INSULATED PANELS BY DELAMINATING THE PANEL FACE METAL FROM THE FOAM CORE MATERIAL.
- **NEVER** USE ANY TYPE OF TORCH TO CUT INSULATED PANEL.
- **NEVER** SUBJECT AN INSULATED PANEL TO THE HEAT OF A TORCH EVEN WHEN CUTTING NEARBY STEEL. HIGH HEAT WILL DAMAGE THE PANEL FINISH AND CAN CAUSE THE FOAM CORE TO PRODUCE FUMES WHICH MAY BE IRRITATING TO SOME INDIVIDUALS.
- **NEVER** BURN REMNANTS. DISPOSE OF INSULATED PANEL REMNANTS BY DEPOSITING IN PROPER CONTAINER.

ACCESSORIES:

- TRIMS LENGTHS SUPPLIED WILL VARY AND MAY REQUIRE SOME FIELD CUTTING.
- TRIM COLOR AVAILABILITY MATCHES PANEL COLOR AVAILABILITY.

TRIM ATTACHMENT:

TRIMS ARE FASTENED WITH BLIND RIVETS OR STITCH SCREWS, PAINTED TO MATCH TRIM COLOR. REFER TO THE ERECTION DETAILS AND THE ERECTION DRAWINGS FOR LOCATIONS AND FASTENING SPACING.

THERMAL WINDOW:

DUE TO THE ISOLATIVE PROPERTIES AND CONNECTION REQUIREMENTS OF THE WALL SYSTEM, THERMAL BREAK WINDOWS ARE RECOMMENDED FOR USE WITH INSULATED WALL PANELS .

SURFACE CLEANING PROCEDURES:

GENERAL:

DIRT, OIL, GREASE, FINGERPRINTS OR ANY OTHER TYPE ON CONTAMINATE MUST BE COMPLETELY REMOVED WHEN INSTALLATION IS COMPLETE IN ORDER TO MAXIMIZE COATING PERFORMANCE.

STEEL FILINGS FROM ADJACENT WORK MAY BECOME EMBEDDED IN THE PAINT SURFACE. THESE FILINGS WILL RUST AND FORM UNSIGHTLY RED SPOTS ON THE PAINTED SURFACE THAT CAN BECOME LARGER THAN THE ORIGINAL FILING. WHEN USING SAWS, DRILLS OR CUTTING DISCS, PROTECT THE PAINTED SURFACED WITH A NON-FLAMMABLE COVER AND REMOVE OR COVER ADJACENT OR NEARBY PANELS IF POSSIBLE.

BRUSH ANY FILINGS OF STEEL OFF THE PAINTED SURFACE. EMBEDDED FILINGS SHOULD BE REMOVED MECHANICALLY. CARE SHOULD BE TAKEN BY WORKMEN TO AVOID STEPPING ON OR EXERTING PRESSURE AGAINST ANY STEEL FILINGS WHICH MAY BECOME EMBEDDED IN THE PAINTED SURFACE.

THINGS TO REMEMBER WHEN CLEANING:

USE ONLY MILD DETERGENTS	(NO LEMON, ALCOHOL OR AMMONIA INGREDIENTS)
USE ONLY SOFT BRISTLE BRUSHES	(NO SCRUB TYPE OR WIRE BRISTLES)
USE ONLY LUKEWARM WATER	(NO HOT WATER)

LIGHT OR PERIODIC CLEANING MAY BE ACCOMPLISHED ON A REGULAR BASIS BY WASHING WITH PLAIN WATER USING A STANDARD GARDEN HOSE OR LOW PRESSURE SPRAYER IS USUALLY SUFFICIENT TO REMOVE MOST CONTAMINATION.

CAULKING COMPOUNDS, OIL, GREASE, TARS, WAX AND SIMILAR SUBSTANCES CAN BE REMOVED BY WIPING WITH A CLOTH SOAKED IN MINERAL SPIRITS. WIPE ONLY CONTAMINATED AREAS AND FOLLOW WITH DETERGENT AND THOROUGHLY CLEAN WITH WATER.

SURFACE REPAIR PROCEDURES:

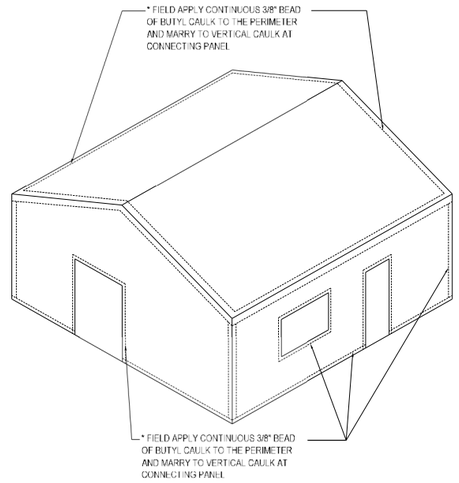
IF "TOUCH UP" PAINT IS REQUIRED CONTACT YOUR PROJECTS CUSTOMER SERVICE COORDINATOR.

PRECAUTIONS:

PROTECT EYES, FACE, AND HANDS FROM DIRECT CONTACT WITH TOUCH-UP PAINT AND/OR SOLVENTS. PROVIDE GOOD VENTILATION IN WORK AREA. ENFORCE NO SMOKING. REMOVE ALL SOURCES OF IGNITION. THESE COATINGS AND SOLVENTS ARE FLAMMABLE.

1. LIGHTLY SAND OR FEATHER EDGES OF DEEP SCRATCHES USING #400 GRIT SAND PAPER.
2. WIPE SCRATCHES AND ADJACENT AREAS USING A LINT FREE CLOTH DAMPENED IN MINERAL SPIRITS.
3. ALLOW AREA TO DRY THOROUGHLY BEFORE APPLYING TOUCH-UP PAINT.
4. SHAKE / STIR PAINT TO MIX THOROUGHLY BEFORE APPLYING.
5. CHECK TOUCH-UP PAINT FOR CORRECT MATCH BEFORE APPLYING.
6. APPLY THIN LAYER OF TOUCH-UP PAINT TO DAMAGED AREA. REPEAT LAYERS AS REQUIRED.

PERIMETER CAULKING:



PERIMETER CAULKING IS A CRITICAL PART OF THE PANEL INSTALLATION. NOT INSTALLING THE PERIMETER CAULKING WILL LEAD TO AIR LEAKS, WHICH WILL LEAD TO CONDENSATION AND / OR FROST. REFERENCE THE DETAILS AND THE ERECTION MANUAL FOR PROPER CAULKING PLACEMENT.

FIELD INSTALLED INSULATION NOTE

IT IS THE RESPONSIBILITY OF THE ERECTOR TO FIELD FILL ALL AIR VOIDS WITH INSULATION. UNINSULATED AREAS WILL CAUSE HOT AND COLD SPOTS THAT CAN CAUSE CONDENSATION AND/OR FROST. THESE VOIDS COMMONLY HAPPEN AROUND THE PERIMETER OF THE BUILDING. FAILURE TO DO SO WILL CAUSE FUTURE PROBLEMS.

PROJECT INSTALLATION NOTES AND GUIDELINES

INSULATED WALL PANEL
INSTALLATION PROCEDURES & GUIDELINES,WEATHER TIGHTNESS REQUIREMENTS, FIELD CUTTING & ACCESSORY INFO,& SURFACE, CLEANING/REPAIR INFORMATION

GA4001

MBMA MEMBER
IAS ACCREDITED MANUFACTURING AC172
CWB CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
PHONE:(260)837-7891
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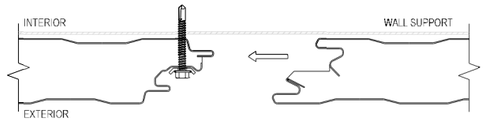
CERTIFIED CSA A660
CSSBI

05/20/2025 12:56:08pm

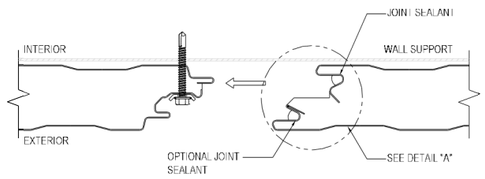
JOB NUMBER **T25U0346A**
ADDRESS WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME CYL-HUB1-1,2,83
BUYER NAME DLR GROUP
DRAWING STATUS FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE WALL SHEETING DETAILS
DATE 09/08/2025
SHEET SD8

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

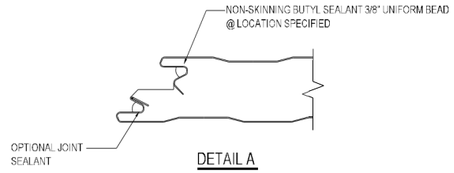
PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA



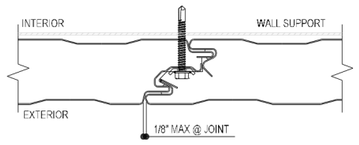
CLIP AND FASTENER ASSEMBLY



JOINT SEALANT APPLICATION



DETAIL A

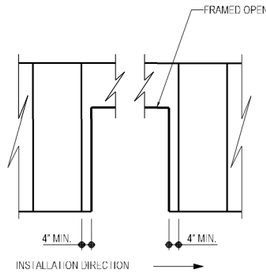


PANEL JOINT DETAIL

WALL PANEL JOINT

GA4035

ERECTOR NOTE:
4" (MINIMUM) DISTANCE FROM EDGE OF FIELD-CUT PANEL TO JAMB.



MINIMUM PANEL WIDTH AT F.O. JAMB

(ELEVATION VIEW)

GD4010

MBMA MEMBER
IAS ACCREDITED
CWB CERTIFIED CSA W47.1
NUCOR BUILDING SYSTEMS
CERTIFIED CSA A660
CSSBI
PHONE: (260) 837-7891
FAX: (260) 837-7384

05/20/2025 12:56:09pm

JOB NUMBER	T25U0346A
ADDRESS	WASHINGTON COUNTY OWASSO, OK 74055
PROJECT NAME	CYL-HUB1-1,2,&3
BUYER NAME	DLR GROUP
DRAWING STATUS	FOR CONSTRUCTION **NOT FOR ERECTION**
DRAWING TITLE	WALL SHEETING DETAILS

#	RELEASE / REVISION	DWN / CHK	ENG	DATE
0	ANCHOR BOLTS	TEK / JMW	WZ	09/08/2025
	PERMITS	TAK / JMW	WZ	09/08/2025

SHEET SD9

PROFESSIONAL STRUCTURAL ENGINEER
04/02/2026
MEGAN NOGGLE
25778
OKLAHOMA