Straub Construction Company, Inc.
7775 Meadow View Drive
Shawnee, Kansas 66227
P: (913) 451-8828

Project: 665 John Knox Village Courtyards - Bldg E
515 NW Moore St
Lee's Summit, Missouri 64081

Submittal #02.0 - 051200-02 Shop Drawings
051200 - STRUCTURAL STEEL FRAMING

Revision	0	**Submittal Manager**	De Nell Morris (Straub Construction Company, Inc.)
Status	Open	**Date Created**	May 20, 2024
Issue Date	May 20, 2024	**Spec Section**	051200 - STRUCTURAL STEEL FRAMING
Responsible Contractor	KC Fab LLC	**Received From**	Jacob Greene (KC Fab LLC)
Received Date		**Submit By**	
Final Due Date	May 30, 2024	**Lead Time**	
		Cost Code	
Location		**Type**	Shop Drawing
Approvers	A. Faye Doughty (SFCS)		
Ball in Court	A. Faye Doughty (SFCS)		
Distribution	Daron Speight (SFCS), Justin Thompson (John Knox Village)		
Description			

Submittal Workflow

Name	Sent Date	Due Date	Returned Date	Response	Attachments
General Information Attachments					
A. Faye Doughty		May 30, 2024		Pending	

05/20/2024 11:25:48 AM
Straub Construction Reviewed
665-051200-02

WE HEREBY REPRESENT THAT WE HAVE DETERMINED AND VERIFIED ALL MATERIALS, FIELD MEASUREMENTS, AND FIELD CONSTRUCTION CRITERIA, RELATED THERETO, AND THAT WE HAVE CHECKED AND COORDINATED ALL SUCH DATA WITH THE REQUIREMENTS OF THE WORK, THE SURROUNDING CONDITIONS, AND THE CONTRACT DOCUMENTS, AND HEREBY APPROVE THIS SUBMISSION.

CONTRACTOR: Straub Construction DATE: 5/20/24

1. Architect[ ] will not review submittals received from Contractor that do not have the above statement, signed and dated.

SFCS Architecture Engineering Planning Interiors
SFCS Inc. ▪ 305 South Jefferson Street
Roanoke, Virginia 24011.2003
540.344.6664 ▪ Fax 540.343.6925
www.sfcs.com

Comm. No. 23104.00
Date 5/29/24
By MSH/LBF

Approval of this submittal is limited to checking for conformance with information given and design concept expressed in the Contract Documents. Approval does not release the contractor from responsibility for accuracy of measurements and details, nor does approval authorize any variation from Contract Documents. Review is limited to the provisions of the General Conditions of the Contract for Construction.

X Approved as Noted
Fabrication may proceed on the basis of corrections indicated (if any).

Not Approved
Fabrication may NOT proceed. Revisions shall be made and drawings resubmitted.

H&R STEEL DETAILING

1536 N.E. 96th Street

Liberty, Mo 64068

Date: 5/17/2024
Transmittal # 02A
H&R Job # M24014
Customer Job# --

JOHN KNOX VILLAGE
COURTYARDS-BUILDING E

To: KC FAB
13720 Botts Rd,
Grandview, MO 64030.

Attention: John Derham

Sent Via: Email

ERECTION PLANS & DETAIL SHEETS
TO BE RETURNED BY: PLEASE RETURN WITHIN 10 DAYS SO SCHEDULE IS NOT DELAYED

Drawing Number	Revision	Drawing Number	Revision
E1-E8	A		
B101-B104	A		
C101-C109	A		
M106,M113,M115-M117	A		

TOTAL SHEETS RELEASED:26

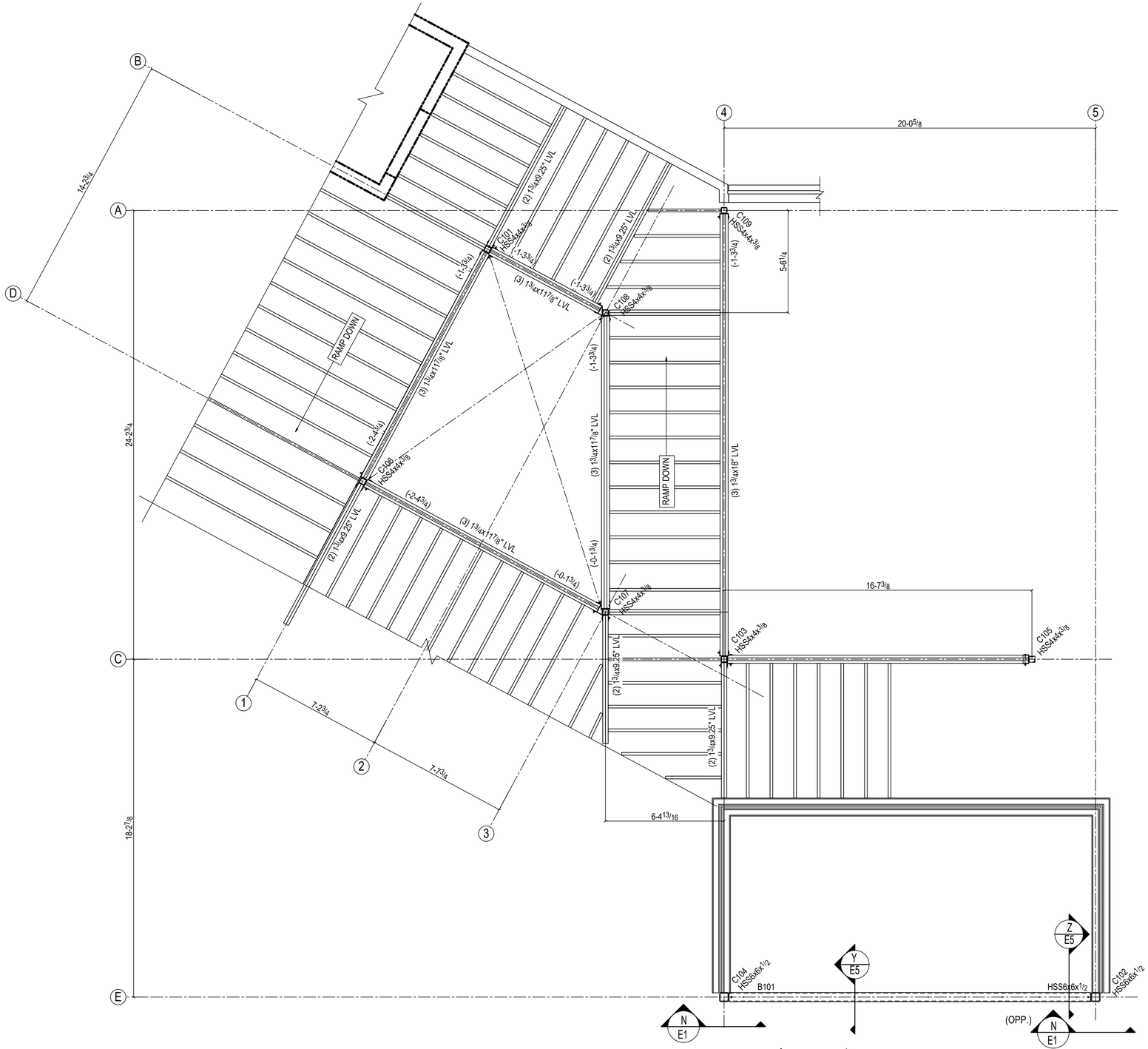
This material is being transmitted for the purpose listed below:

For Approval

Remarks:

If enclosures are not as noted, please notify at once.

From: Brandon Eichhorst
H&R Steel Detailing

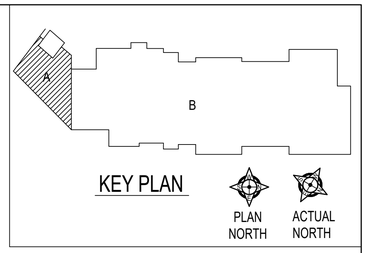


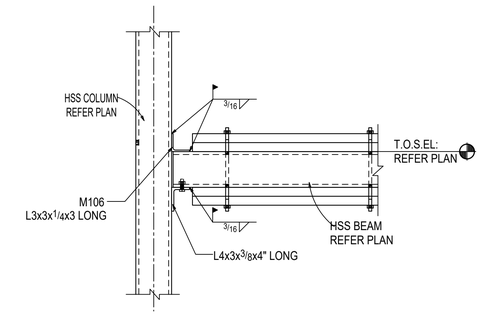
SECOND FLOOR FRAMING PLAN

T.O.S.ELEVATION:11-4 (U.O.N.)

PLAN NORTH

ACTUAL NORTH





SECTION N-N

(REF.6/S3.2)

NOTES:
1.REFER DESIGN DRAWING SHEET S1.2,S1.7 & S3.2
2.T.O.S.EL. INDICATES TOP OF STEEL ELEVATION.

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

ISSUE #2		
ISSUE #1		
CALCS		
APPROVAL (B)		
REF: **S1.2,S1.7 & S3.2**	APPROVAL (A)	05-17-24

CONTRACTOR: **STRAUB CONSTRUCTION**

KC FAB
13720 Botts Rd, Grandview, MO 64030.

BOLTS: **3/4 DIA A325N BOLTS U.N.O.**

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

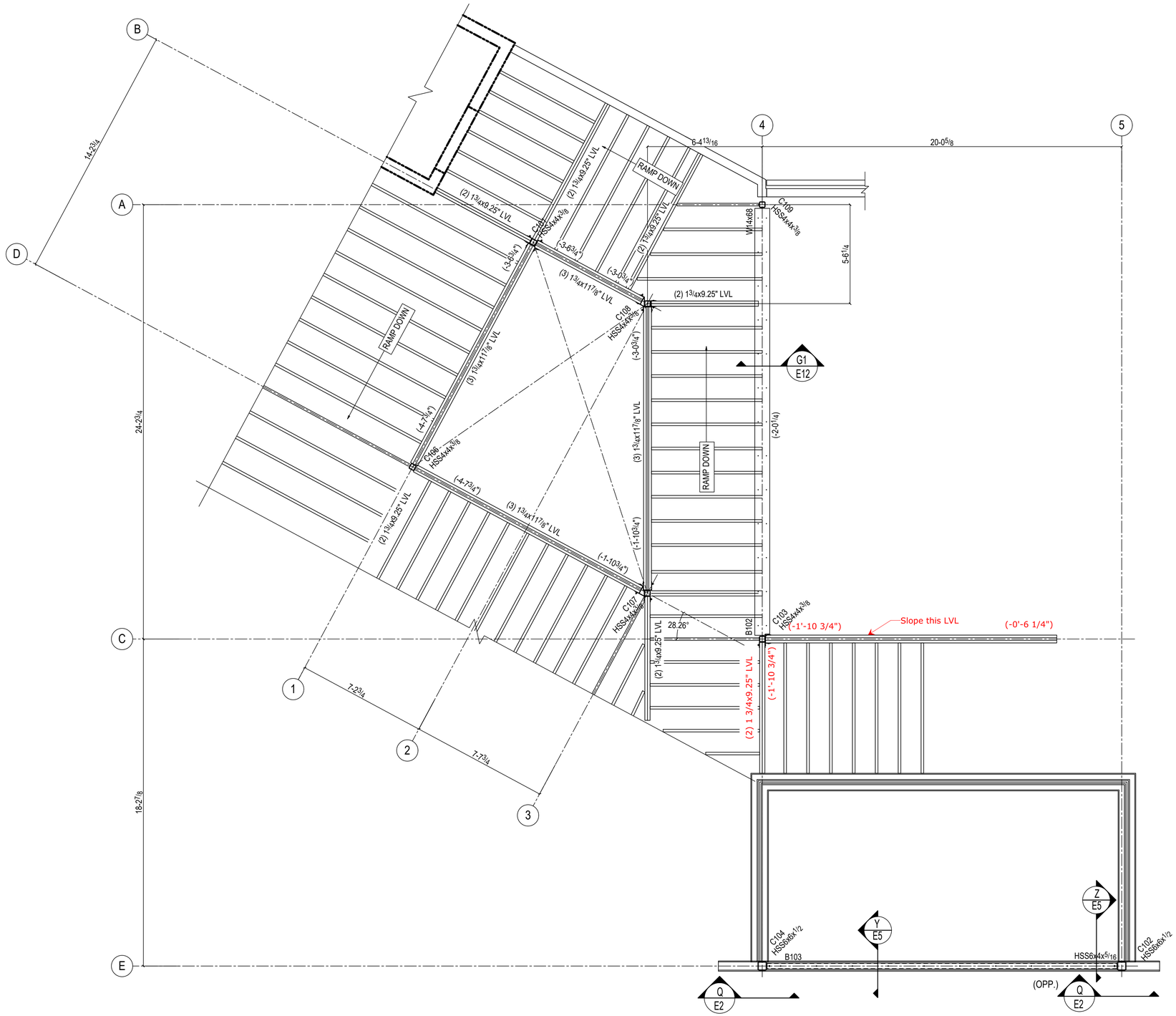
TITLE: **SECOND FLOOR FRAMING PLAN**

WELD: **E70XX**

DETAILER: **VBB**
CHECKED: **ABD**

JOB NUMBER: **----**

SHEET: **E1**
ISSUE: **A**

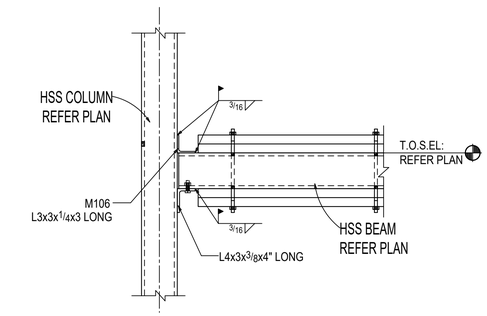


THIRD FLOOR FRAMING PLAN-ATRIUM

T.O.S.EL: 22-8 (U.N.O.)

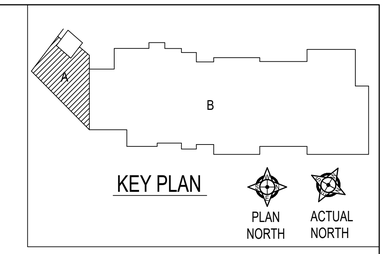
PLAN NORTH

ACTUAL NORTH



SECTION Q-Q

(REF.6/S3.2)



NOTES:
1.REFER DESIGN DRAWING SHEET S1.8,S3.2.
2.T.O.S.EL. INDICATES TOP OF STEEL ELEVATION.

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

ISSUE #2		
ISSUE #1		
CALCS		
APPROVAL (B)		
REF: **S1.8,S3.2**	APPROVAL (A)	05-17-24

CONTRACTOR: **STRAUB CONSTRUCTION**

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

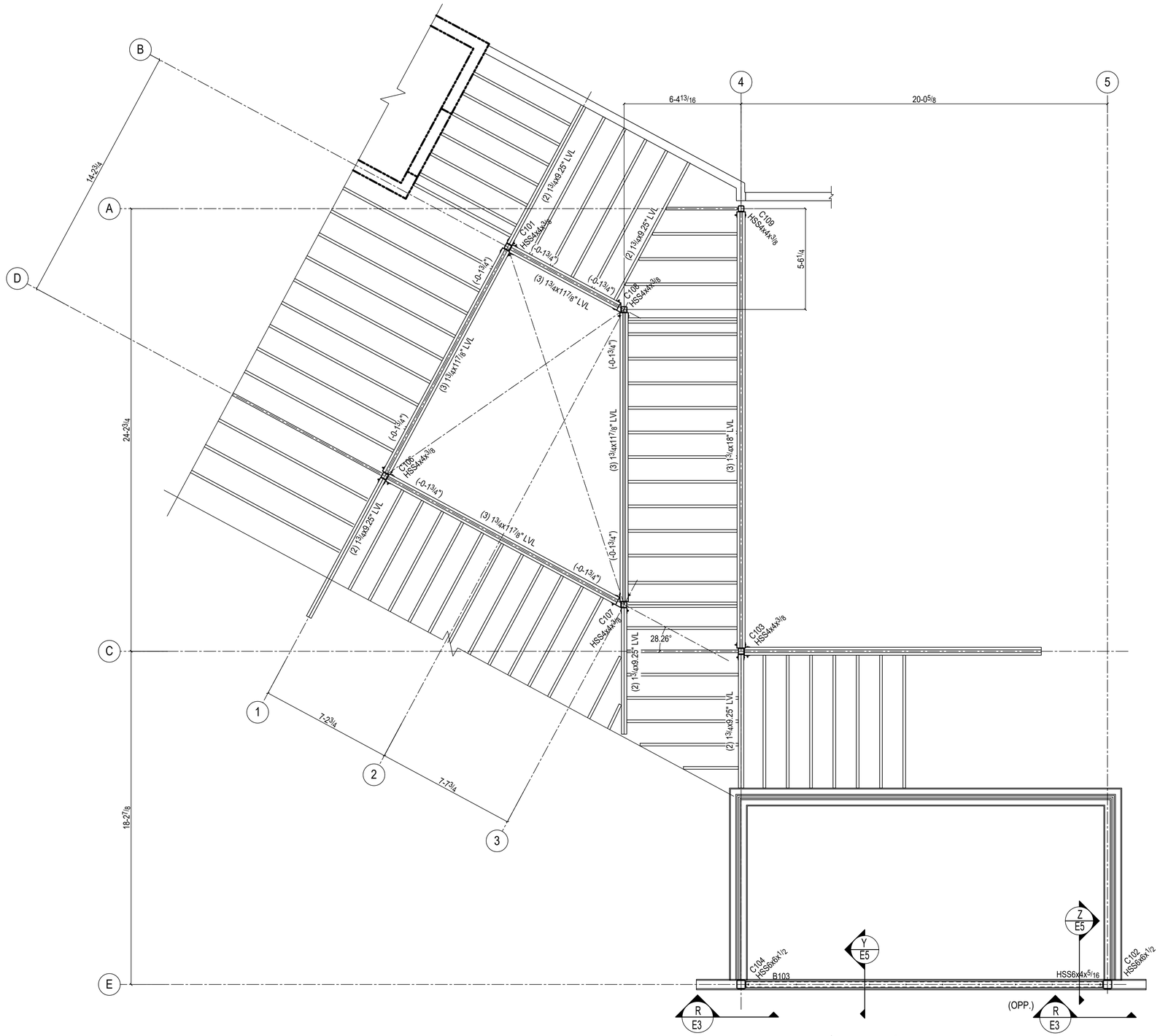
BOLTS: **3/4 DIA A325N BOLTS U.N.O.**

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

TITLE: **THIRD FLOOR FRAMING PLAN**

WELD: **E70XX**

DETAILER: **VBB**
CHECKED: **RS**
JOB NUMBER: **----**
SHEET: **E2**
ISSUE: **A**

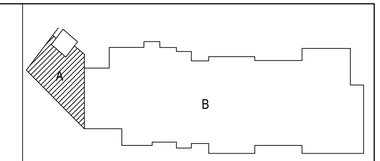


FOURTH FLOOR FRAMING PLAN

T.O.S.EL: 34-0 (U.N.O.)

PLAN NORTH

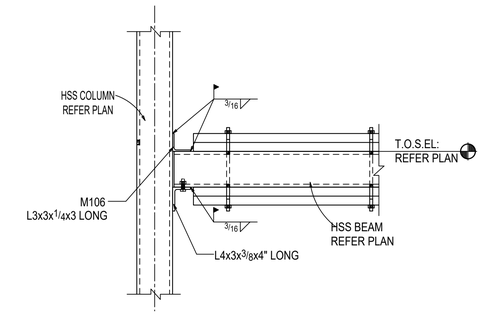
ACTUAL NORTH



KEY PLAN

PLAN NORTH

ACTUAL NORTH



SECTION R-R

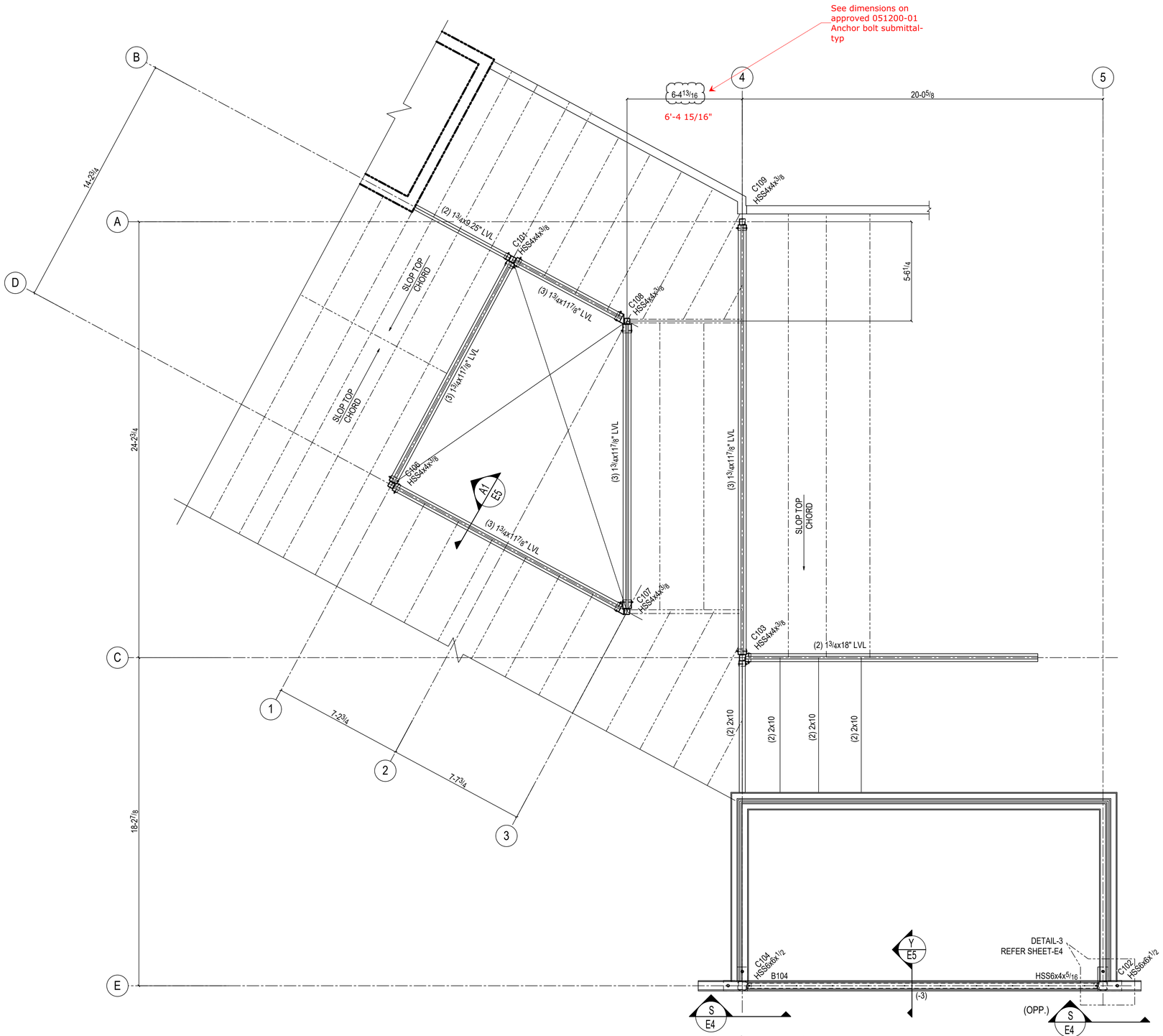
(REF.6/S3.2)

NOTES:
1.REFER DESIGN DRAWING SHEET S1.9,S3.2.
2.T.O.S.EL. INDICATES TOP OF STEEL ELEVATION.

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

ISSUE #2		
ISSUE #1		
CALCS		
APPROVAL (B)		
REF: **S1.9,S3.2**	APPROVAL (A)	05-17-24

CONTRACTOR: **STRAUB CONSTRUCTION**	**KC FAB** 13720 Botts Rd, Grandview, MO 64030.		
BOLTS: **3/4 DIA A325N BOLTS U.N.O.**	PROJECT: **JOHN KNOX VILLAGE BUILDING E** LEE'S SUMMIT, MO		
	TITLE: **FOURTH FLOOR FRAMING PLAN**		
WELD: **E70XX**	DETAILER: **VBB**	JOB NUMBER: **----**	SHEET: **E3**
	CHECKED: **RS**		ISSUE: **A**

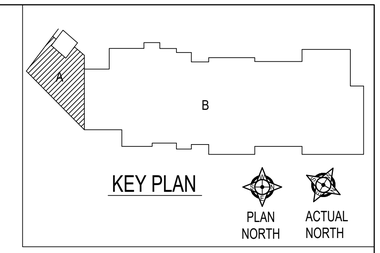


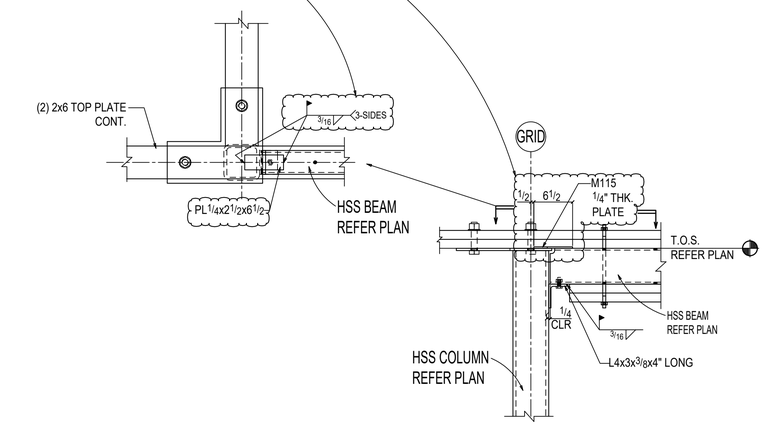
ROOF FRAMING PLAN

ROOF TRUSS BEARING.EL: 43-0 1/4 (U.N.O.)

APPROVER, PLEASE VERIFY THE BEAM TOP CONNECTION. ACCORDING TO SECTION 6/S3.2, WE ARE REQUIRED TO PROVIDE AN HSS BEAM TO HSS COLUMN SEATED CONNECTION. HOWEVER, AT THE ROOF LEVEL, AS PER DETAIL 13/S3.3, THEY HAVE SHOWN A 3/8" CAP PLATE CONNECTION. DUE TO THIS, WE CAN ONLY ADD ONE ANGLE AT THE BOTTOM OF THE HSS BEAM. SO, INSTEAD OF A TOP ANGLE, WE ARE USING A 1/4" PLATE AT THE TOP OF THE CAP PLATE.

Approved.



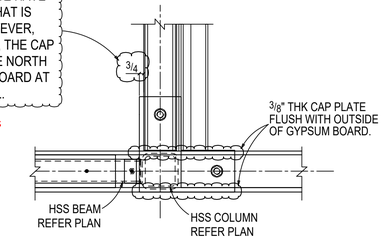


SECTION S-S

(REF.6/S3.2)

"APPROVER, PLEASE VERIFY AT THE CLOUDED LOCATION AS PER SECTION 13/S3.3, WE HAVE PROVIDED A 3/8" THICK CAP PLATE THAT IS 1/2" WIDER THAN THE HSS TUBE. HOWEVER, BASED ON THE FRAMING CONDITION, THE CAP PLATE PROTRUDES BY 3/4" FROM THE NORTH SIDE WALL AND CUTS THE GYPSUM BOARD AT THE EAST & WEST SIDE OF THE WALL.

Reduce plate to match wall stud depths



DETAIL-3

NOTES:

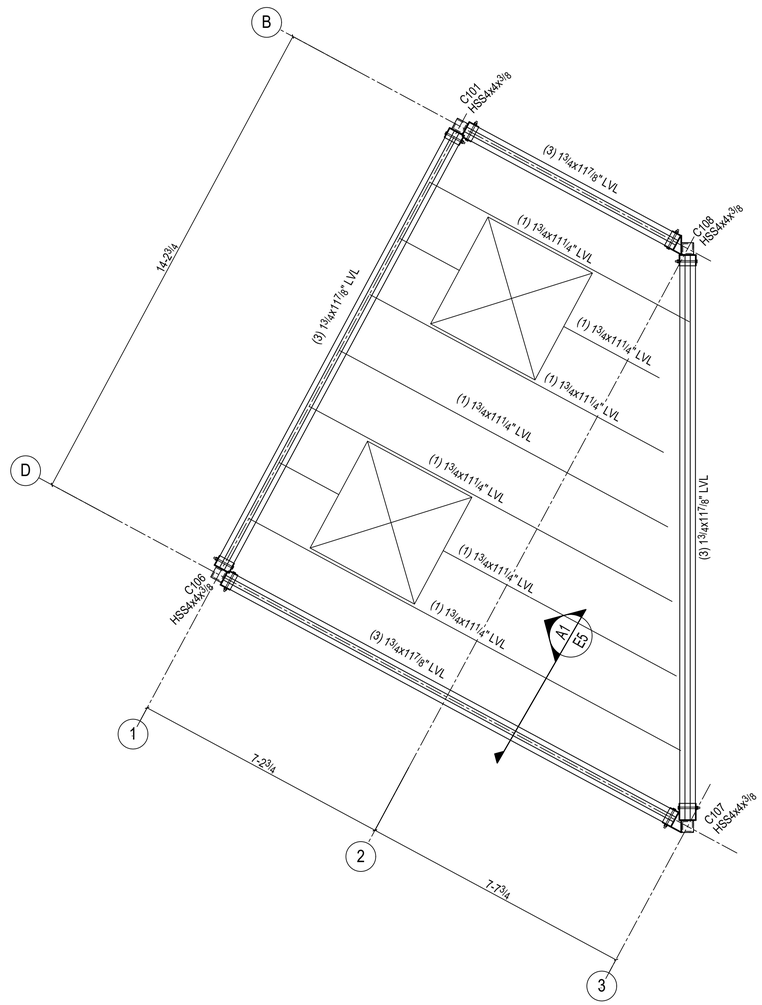
1.REFER DESIGN DRAWING SHEET S1.10,S3.2.

2.ROOF TRUSS BEARING.EL INDICATES ROOF TRUSS BEARING ELEVATION

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

ISSUE #2		
ISSUE #1		
CALCS		
APPROVAL (B)		
REF:**S1.10,S3.2**	APPROVAL (A)	05-17-24

CONTRACTOR: **STRAUB CONSTRUCTION**	**KC FAB** 13720 Botts Rd, Grandview, MO 64030.		
BOLTS: **3/4 DIA A325N BOLTS U.N.O.**	PROJECT: **JOHN KNOX VILLAGE BUILDING E** LEE'S SUMMIT, MO		
	TITLE: **ROOF FRAMING PLAN**		
WELD: **E70XX**	DETAILER: **VBB**	JOB NUMBER: **----**	SHEET: **E4**
	CHECKED: **RS**		ISSUE: **A**



CLERESTORY ROOF FRAMING PLAN

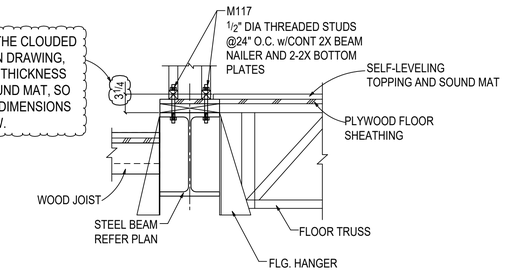
J.B.EL: 50-4 (U.N.O.)

PLAN NORTH

ACTUAL NORTH

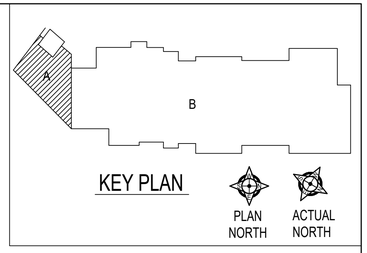
APPROVER, PLEASE VERIFY THE CLOUDED DIMENSION AS IN THE DESIGN DRAWING, THEY HAVE NOT SHOWN THE THICKNESS FOR SELF-LEVELING AND SOUND MAT, SO WE HAVE USED CALIBRATED DIMENSIONS TO LOCATE THE BEAM BELOW.

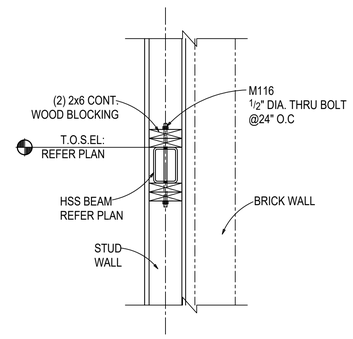
Confirmed



SECTION G1-G1

(REF.13/S3.4)



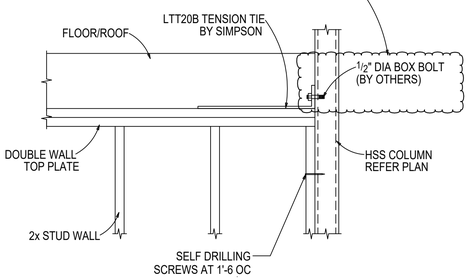


SECTION Y-Y

(REF.9/S3.2)

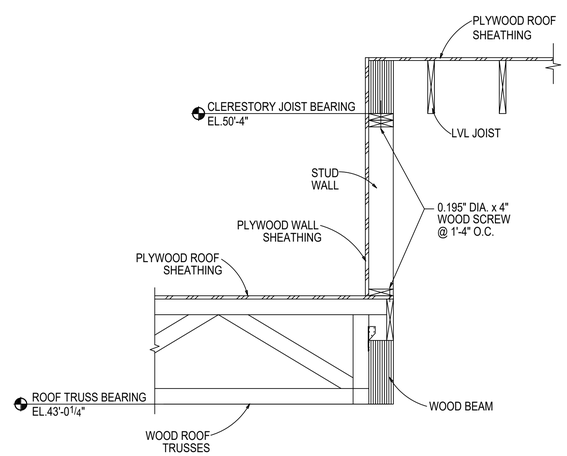
Provide hole for bolt at each floor landing.

APPROVER, PLEASE VERIFY AS PER DETAIL 8/S3.2 WE HAVE PROVIDED HOLE IN HSS COLUMN FOR BOX BOLT AT STAIR LANDING ONLY, SO ADVISE IF WE HAVE TO PROVIDE HOLE AT OTHER LOCATIONS ALSO.



SECTION Z-Z

(REF.8/S3.2)



SECTION A1-A1

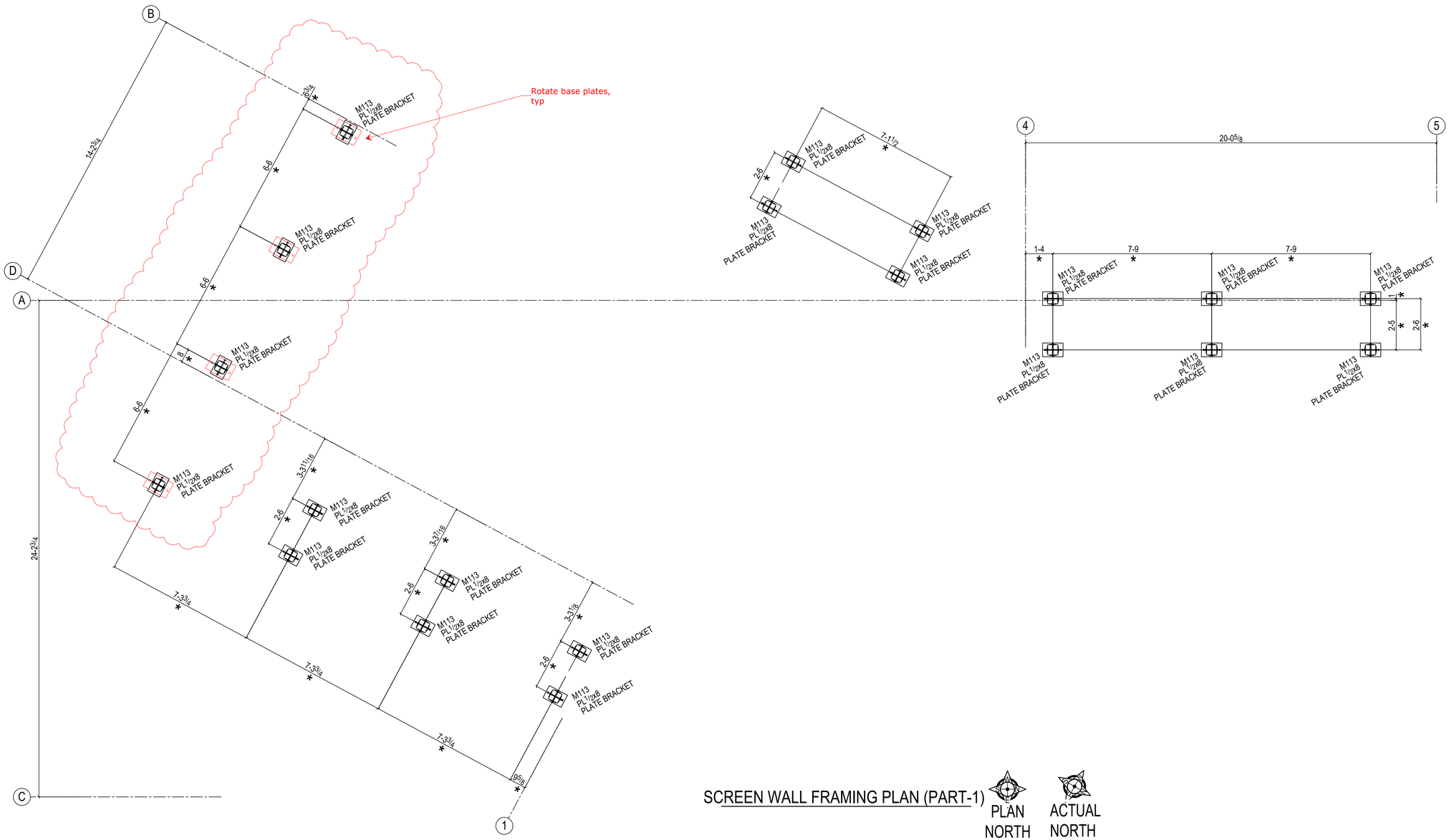
(REF.6/S3.4)

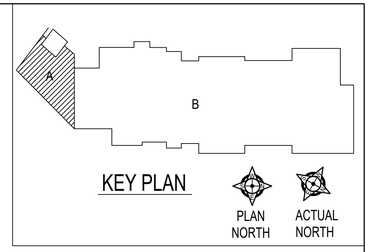
NOTES:
1.REFER DESIGN DRAWING SHEET S1.10,S3.2,S3.4
2.J.B.EL. INDICATES JOIST BEARING ELEVATION

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

	ISSUE #2	
	ISSUE #1	
	CALCS	
	APPROVAL (B)	
REF: **S1.10,S3.2,S3.4.**	APPROVAL (A)	05-17-24

CONTRACTOR: **STRAUB CONSTRUCTION**	**KC FAB** 13720 Botts Rd, Grandview, MO 64030.		
BOLTS: **3/4 DIA A325N BOLTS U.N.O.**	PROJECT: **JOHN KNOX VILLAGE BUILDING E** LEE'S SUMMIT, MO		
	TITLE: **CLERESTORY ROOF FRAMING PLAN**		
WELD: **E70XX**	DETAILER: **VBB**	JOB NUMBER: **----**	SHEET: **E5**
	CHECKED: **RS**		ISSUE: **A**





SCREEN WALL FRAMING PLAN (PART-1)

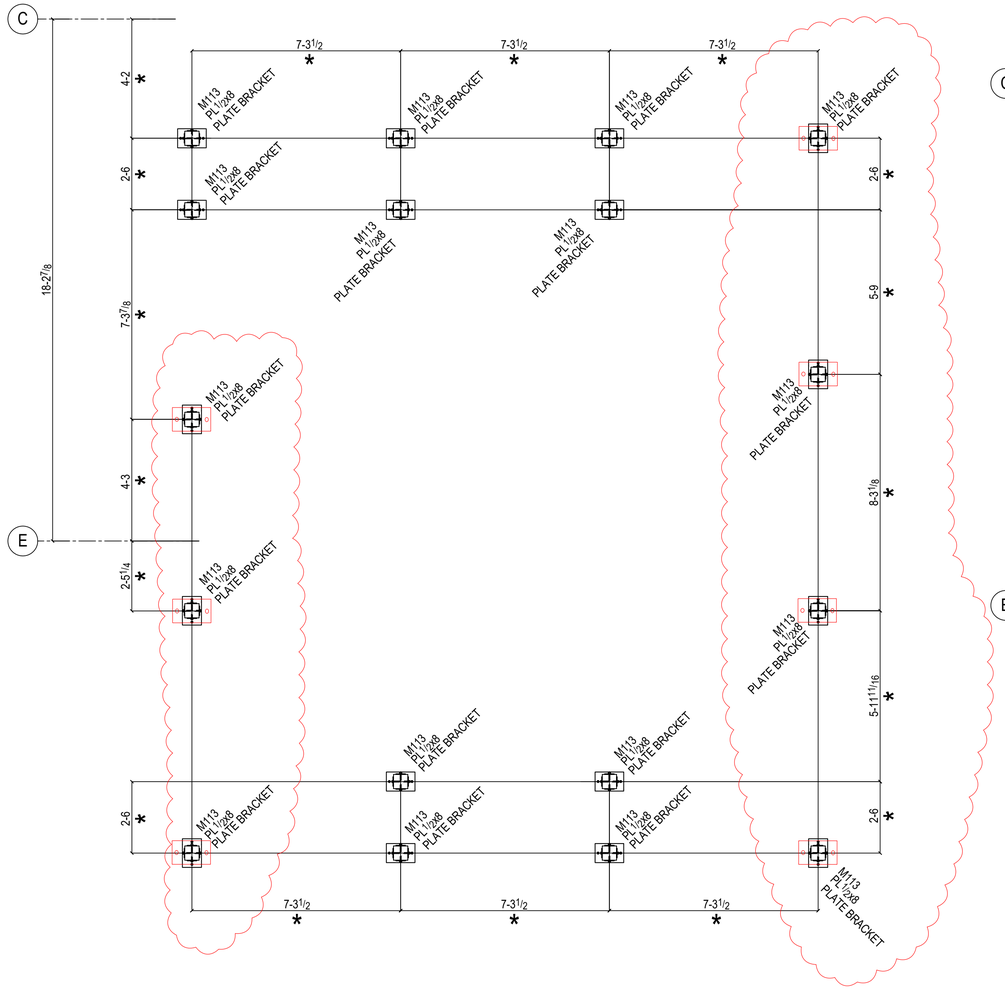
PLAN NORTH ACTUAL NORTH

NOTES:
1.REFER DESIGN DRAWING SHEET S1.10, S1.5
2.FOR SECTION REF. SHEET E15.
3.* INDICATES FIELD TO LOCATE BRACKET PER SCREEN WALL LOCATIONS.

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

	ISSUE #2	
	ISSUE #1	
	CALCS	
	APPROVAL (B)	
REF: **S1.10, S1.5**	APPROVAL (A)	05-17-24

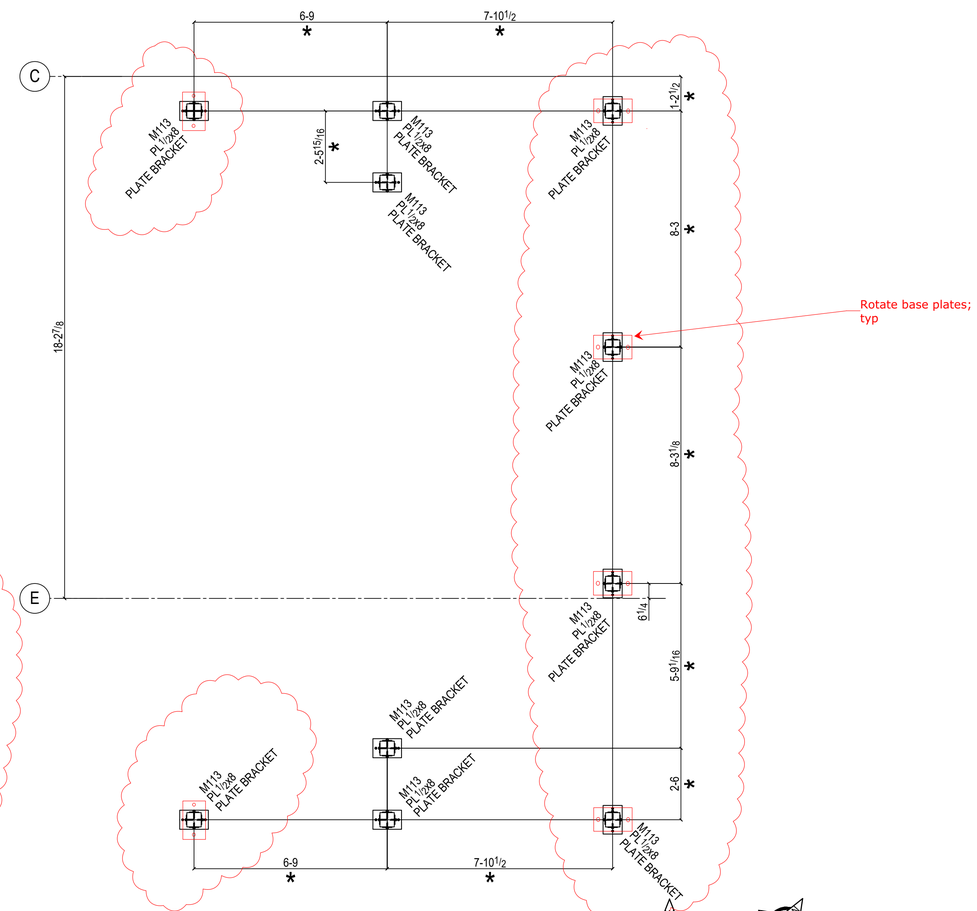
CONTRACTOR: **STRAUB CONSTRUCTION**	**KC FAB** 13720 Botts Rd, Grandview, MO 64030.		
BOLTS: **3/4 DIA A325N BOLTS U.N.O.**	PROJECT: **JOHN KNOX VILLAGE BUILDING E** LEE'S SUMMIT, MO		
	TITLE: **SCREEN WALL FRAMING PLAN (PART-1)**		
WELD: **E70XX**	DETAILER: **VBB**	JOB NUMBER: **----**	SHEET: **E6**
	CHECKED: **RS**		ISSUE: **A**



SCREEN WALL FRAMING PLAN (PART-2)

PLAN NORTH

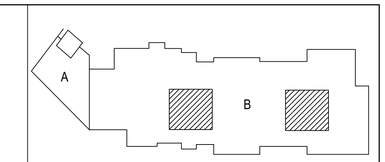
ACTUAL NORTH



SCREEN WALL FRAMING PLAN (PART-3)

PLAN NORTH

ACTUAL NORTH



KEY PLAN

PLAN NORTH

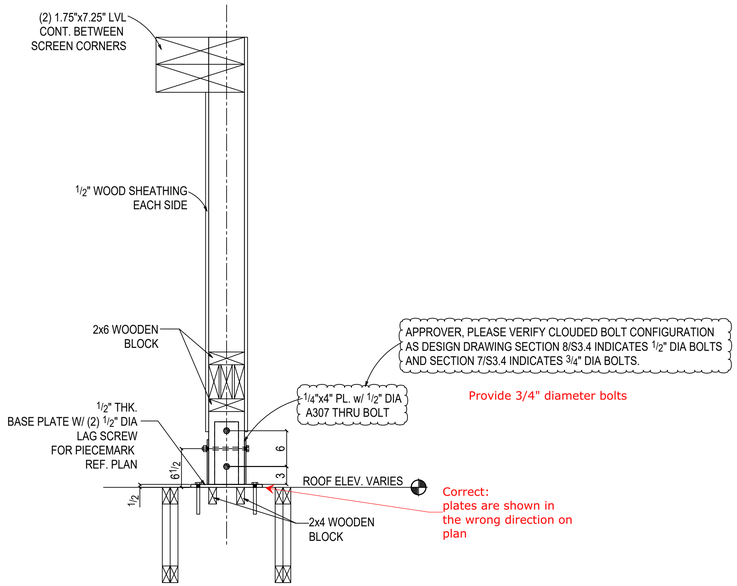
ACTUAL NORTH

NOTES:
1.REFER DESIGN DRAWING SHEET S1.10, S1.5
2.FOR SECTION REF. SHEET E15.
3.* INDICATES FIELD TO LOCATE BRACKET PER SCREEN WALL LOCATIONS.

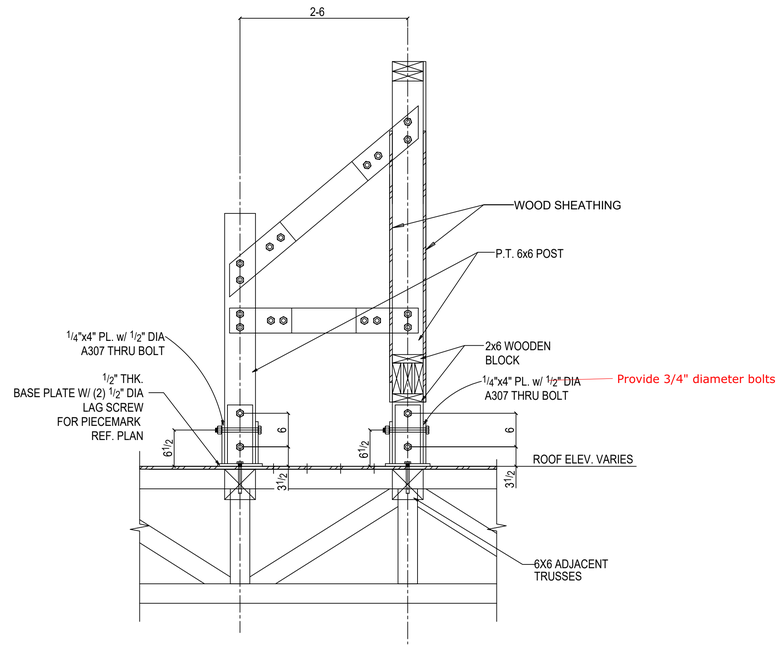
FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

	ISSUE #2	
	ISSUE #1	
	CALCS	
	APPROVAL (B)	
REF: **S1.10, S1.5**	APPROVAL (A)	05-17-24

CONTRACTOR: **STRAUB CONSTRUCTION**	**KC FAB** 13720 Botts Rd, Grandview, MO 64030.		
BOLTS: **3/4 DIA A325N BOLTS U.N.O.**	PROJECT: **JOHN KNOX VILLAGE BUILDING E** LEE'S SUMMIT, MO		
	TITLE: **SCREEN WALL FRAMING PLAN (PART-2 & 3)**		
WELD: **E70XX**	DETAILER: **VBB**	JOB NUMBER: **----**	SHEET: **E7**
	CHECKED: **RS**		ISSUE: **A**



TYP SCREEN WALL SECTION
@ PARALLEL TRUSS
(REF.7/S3.4)



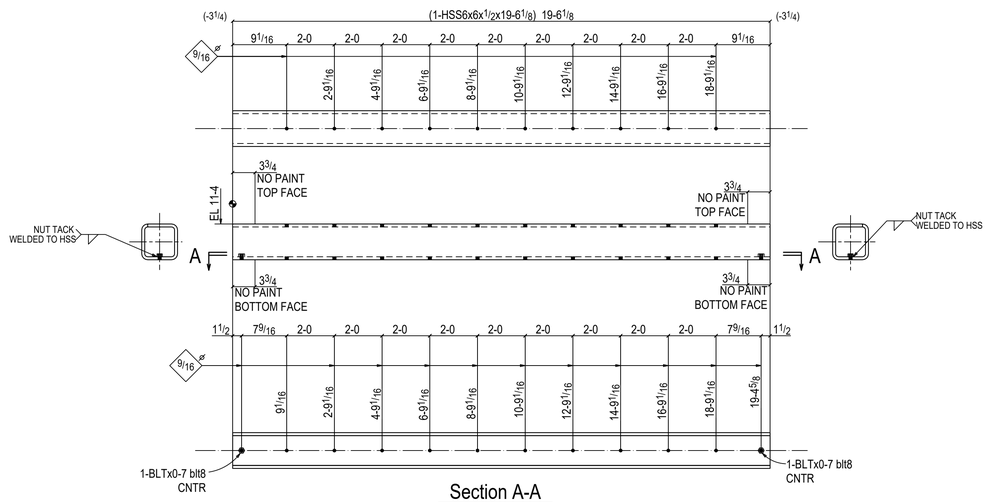
TYP SCREEN WALL SECTION
@ PERPENDICULAR TRUSS
(REF.8/S3.4)

NOTES:
1.REFER DESIGN DRAWING SHEET S3.4
2.REFER THIS SHEET IN CONJUCTION EITH E13 & E14.

FOR APPROVAL ONLY
NOT FOR CONSTRUCTION

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
REF: S3.4 APPROVAL (A)	05-17-24

CONTRACTOR: STRAUB CONSTRUCTION	KC FAB 13720 Botts Rd, Grandview, MO 64030.		
BOLTS: 3/4 DIA A325N BOLTS U.N.O.	PROJECT: JOHN KNOX VILLAGE BUILDING E LEE'S SUMMIT, MO		
	TITLE: SCREEN WALL FRAMING PLAN		
WELD: E70XX	DETAILER: VBB	JOB NUMBER: ----	SHEET: E8
	CHECKED: RS		ISSUE: A



Section A-A
B101

ONE BEAM B101

FIELD BOLTS:
2-1/2Diax1 3/4 A307

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	B101	BEAM					687
1	B101	HSS6x6x1/2	19	6 1/8		A500C	687
2	blt8	1/2 NUT			HHNT	A563	
		FIELD BOLTS					
2		1/2 Dia A307	0	1 3/4			

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
APPROVAL (A)	05-17-24

REF: **E1**

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **BEAM**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **VBB**

JOB NUMBER: **----**

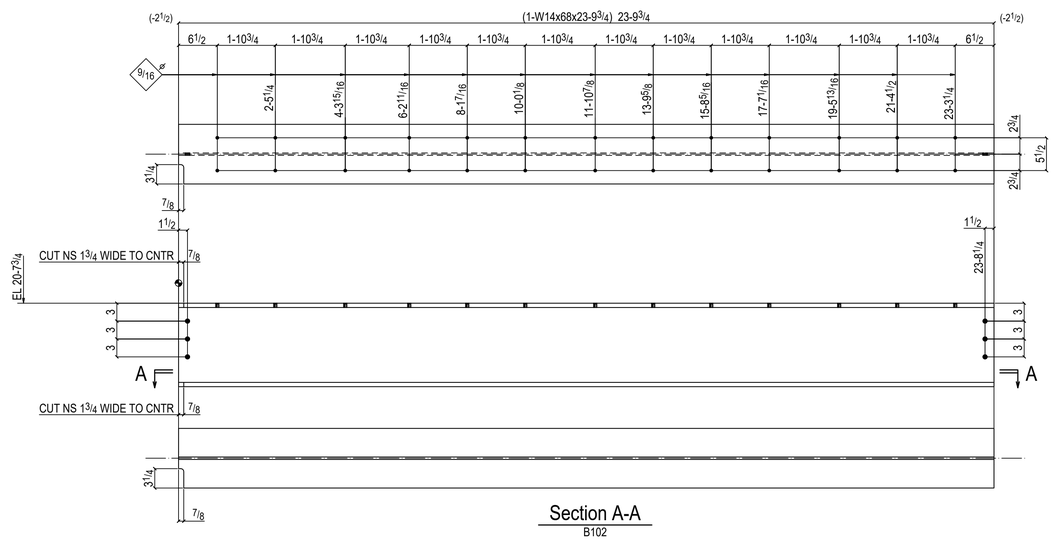
SHEET: **B101**

WELD: **E70XX**

CHECKED: **ABD**

ISSUE: **A**

FOR APPROVAL ONLY
NOT FOR FABRICATION



Section A-A
B102

ONE BEAM B102

W	14x7/16
F	10x3/4
K	19/16x11/16

FIELD BOLTS:
6-3/4Diax2 A325N

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	B102	BEAM					1616
1	B102	W14x68	23	9 3/4		A992	1616
		FIELD BOLTS					
6		3/4 Dia A325N	0	2	+1HD WASH		

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
REF: E2 APPROVAL (A)	05-17-24

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **BEAM**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

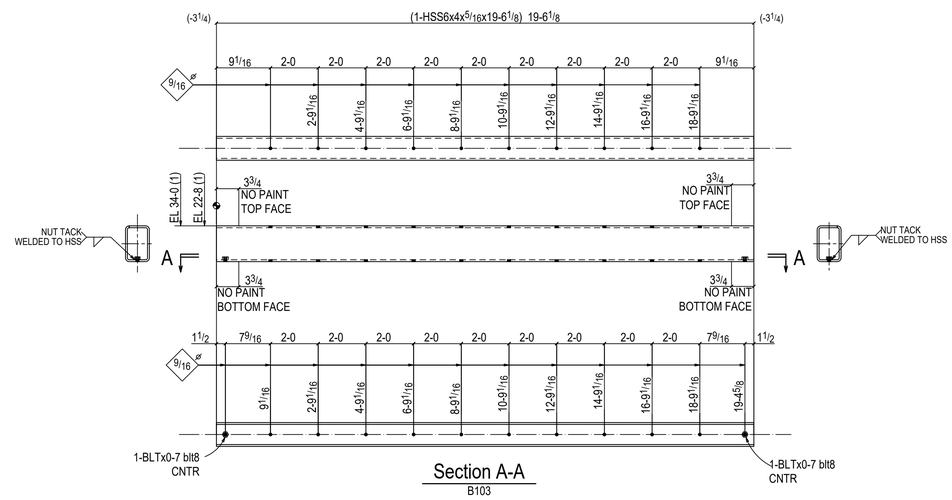
SHEET: **B102**

WELD: **E70XX**

CHECKED: **ABD**

ISSUE: **A**

FOR APPROVAL ONLY
NOT FOR FABRICATION



2 BEAMS B103

FIELD BOLTS:
2-1/2Diax1 1/2 A307

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
2	B103	BEAM					744
2	B103	HSS6x4x5/16	19	6 1/8		A500C	744
4	blt8	1/2 NUT			HHNT	A563	
		FIELD BOLTS					
4		1/2 Dia A307	0	1 1/2			

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
REF: E2,E3 APPROVAL (A)	05-17-24

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **BEAM**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

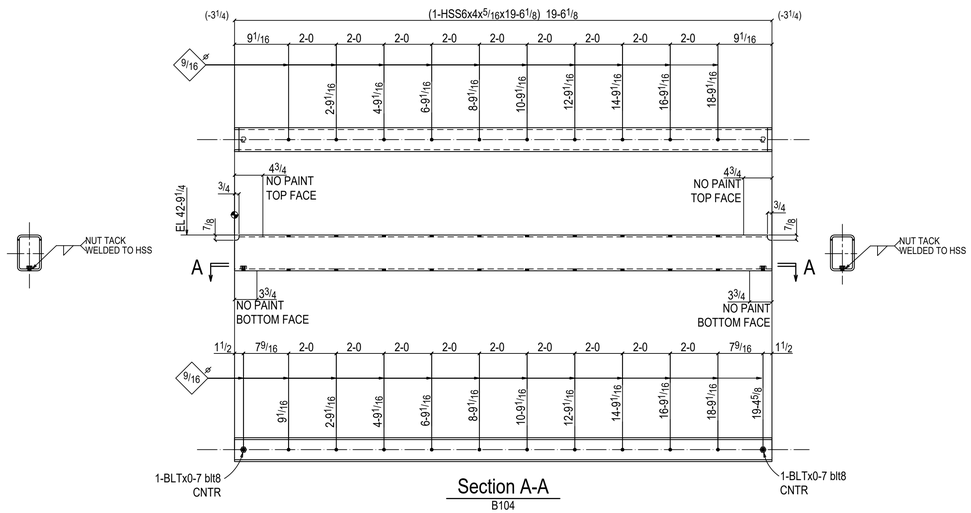
SHEET: **B103**

WELD: **E70XX**

CHECKED: **ABD**

ISSUE: **A**

FOR APPROVAL ONLY
NOT FOR FABRICATION



Section A-A
B104

ONE BEAM B104

FIELD BOLTS:
2-1/2Diax1 1/2 A307

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	B104	BEAM					371
1	B104	HSS6x4x5/16	19	6 1/8		A500C	371
2	blt8	1/2 NUT			HHNT	A563	
		FIELD BOLTS					
2		1/2 Dia A307	0	1 1/2			

ISSUE #2		
ISSUE #1		
CALCS		
APPROVAL (B)		
REF: E4	APPROVAL (A)	05-17-24

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **BEAM**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

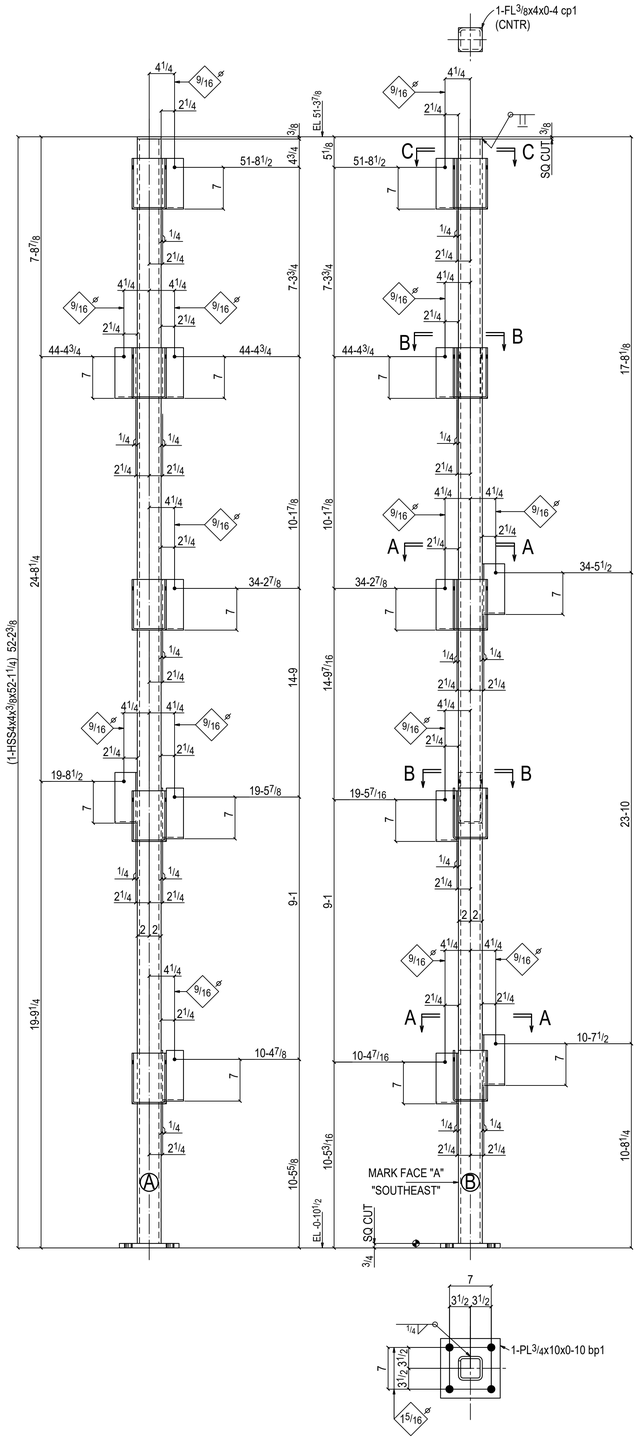
SHEET: **B104**

WELD: **E70XX**

CHECKED: **ABD**

ISSUE: **A**

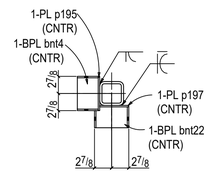
FOR APPROVAL ONLY
NOT FOR FABRICATION



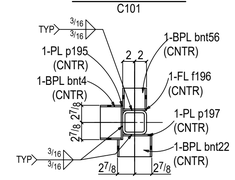
ONE COLUMN C101

AT GRID:
B & 1

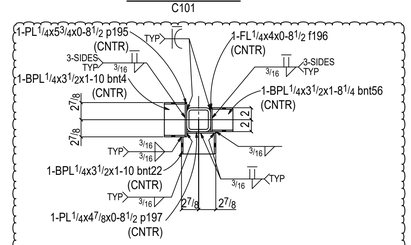
FIELD BOLTS:
10-1/2Diax7 A307
4-1/2Diax5 A307



Section C-C
C101



Section B-B
C101



Section A-A
C101

APPROVER, PLEASE VERIFY ALL WELDS.

Verified

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	C101	COLUMN					1036
1	C101	HSS4x4x3/8	52	11/4	S2E	A500C	900
1	bp1	PL3/4x10	0	10		A36	20
1	cp1	FL3/8x4	0	4		A36	2
5	p197	PL1/4x4 7/8	0	8 1/2		A36	15
5	p195	PL1/4x5 3/4	0	8 1/2		A36	17
4	f196	FL1/4x4	0	8 1/2		A36	10
4	bnt56	BPL1/4x3 1/2	1	8 1/4	BENT	A36	20
5	bnt4	BPL1/4x3 1/2	1	10	BENT	A36	27
5	bnt22	BPL1/4x3 1/2	1	10	BENT	A36	25
		FIELD BOLTS					
10		1/2 Dia A307	0	7	+1HD WASH		
4		1/2 Dia A307	0	5	+1HD WASH		

FOR APPROVAL ONLY
NOT FOR FABRICATION

ISSUE #2		
ISSUE #1		
CALCS		
APPROVAL (B)		
REF: E1,E2,E3,E4,E5	APPROVAL (A)	05-17-24

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: SSPC SP-2
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: JOHN KNOX VILLAGE BUILDING E
LEE'S SUMMIT, MO

HOLES: 13/16 DIA U.N.O.

TITLE: COLUMN

BOLTS: 3/4 DIA A325N U.N.O.

DETAILER: KSD

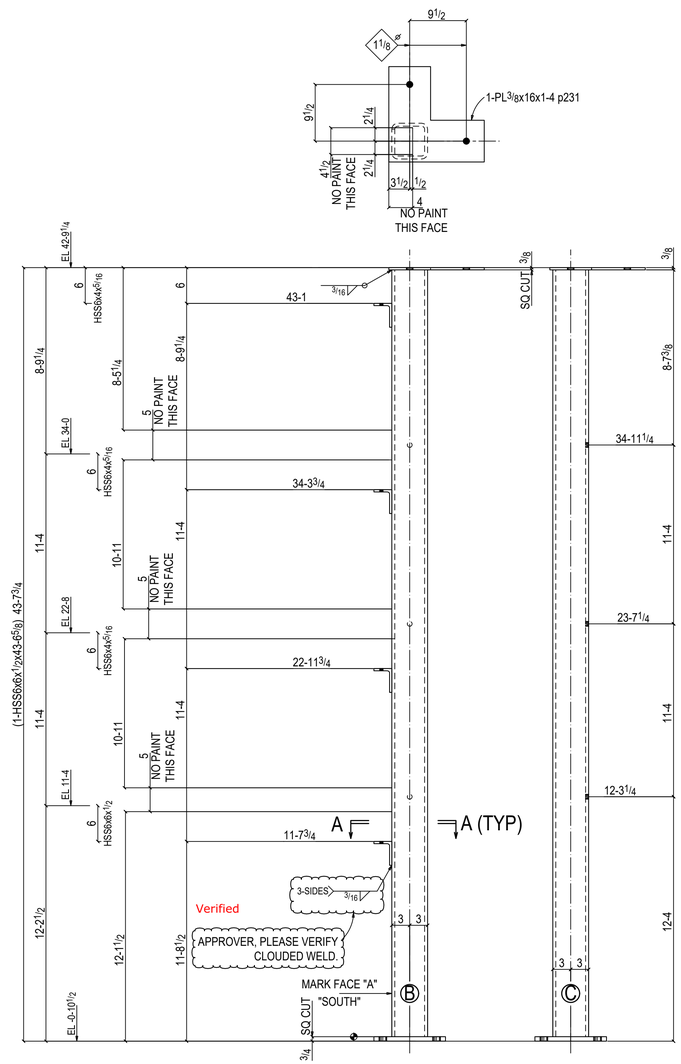
JOB NUMBER: ----

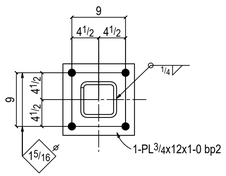
SHEET: C101

WELD: E70XX

CHECKED: ABD

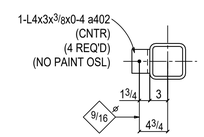
ISSUE: A





ONE COLUMN C102

AT GRID:
E & 5
FIELD BOLTS:
2-1Diax4 3/4 A325N



Section A-A
C102

FOR APPROVAL ONLY
NOT FOR FABRICATION

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	C102	COLUMN					1594
1	C102	HSS6x6x1/2	43	6 5/8	S2E	A500C	1535
4	a402	L4x3x3/8	0	4		A36	11
1	bp2	PL3/4x12	1	0		A36	29
1	p231	PL3/8x16	1	4		A36	18
		FIELD BOLTS					
2		1 Dia A325N	0	4 3/4	+1HD WASH		

		ISSUE #2	
		ISSUE #1	
		CALCS	
		APPROVAL (B)	
REF:	E1,E2,E3,E4	APPROVAL (A)	05-17-24

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

FINISH: SSPC SP-2
SHERWIN WILLIAMS
GRAY STD PRIMER

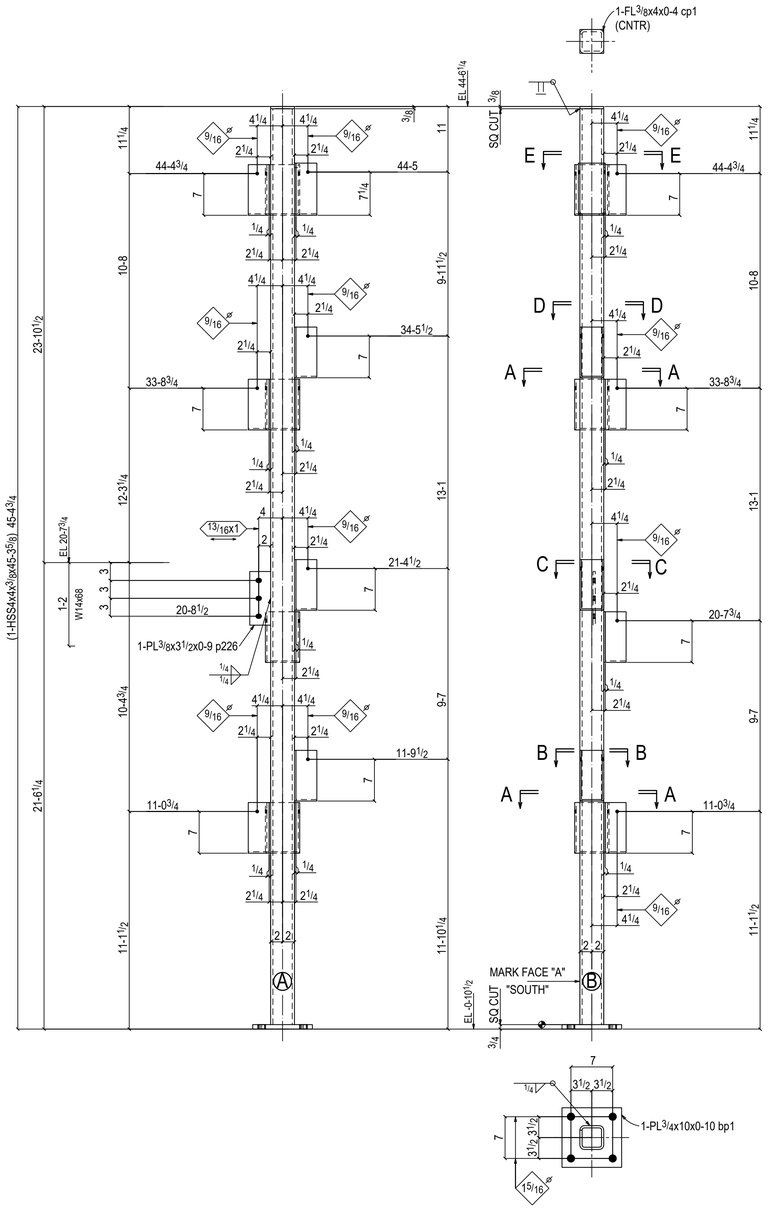
HOLES: 13/16 DIA U.N.O.
BOLTS: 3/4 DIA A325N U.N.O.
WELD: E70XX

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

PROJECT: JOHN KNOX VILLAGE BUILDING E
LEE'S SUMMIT, MO

TITLE: COLUMN

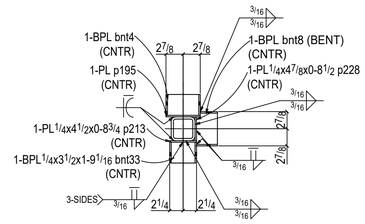
DETAILER: KSD
CHECKED: ABD
JOB NUMBER: ----
SHEET: C102
ISSUE: A



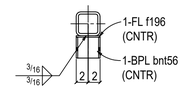
ONE COLUMN C103

AT GRID:
C & 4

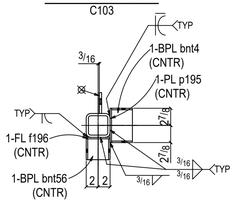
FIELD BOLTS:
7-1/2Diax7 A307
3-1/2Diax5 A307
1-1/2Diax5 3/4 A325N



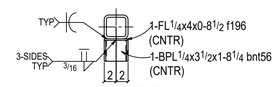
Section E-E
C103



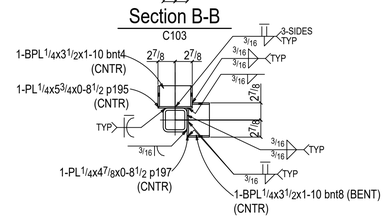
Section D-D
C103



Section C-C
C103



Section B-B
C103



Section A-A
C103

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	C103	COLUMN					897
1	C103	HSS4x4x3/8	45	3 5/8	S2E	A500C	782
1	bp1	PL3/4x10	0	10		A36	20
1	cp1	FL3/8x4	0	4		A36	2
1	p226	PL3/8x3 1/2	0	9		A36	3
2	p197	PL1/4x47/8	0	8 1/2		A36	6
4	p195	PL1/4x5 3/4	0	8 1/2		A36	14
1	p213	PL1/4x41/2	0	8 3/4		A36	3
3	f196	FL1/4x4	0	8 1/2		A36	7
3	bnt56	BPL1/4x3 1/2	1	8 1/4	BENT	A36	15
4	bnt4	BPL1/4x3 1/2	1	10	BENT	A36	22
3	bnt8	BPL1/4x3 1/2	1	10	BENT	A36	15
1	bnt33	BPL1/4x3 1/2	1	9 1/16	BENT	A36	5
1	p228	PL1/4x47/8	0	8 1/2		A36	3
		FIELD BOLTS					
7		1/2 Dia A307	0	7	+1HD WASH		
1		1/2 Dia A325N	0	5 3/4	+1HD WASH		
3		1/2 Dia A307	0	5	+1HD WASH		

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
APPROVAL (A)	05-17-24

REF: **E1,E2,E3,E4**

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **COLUMN**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

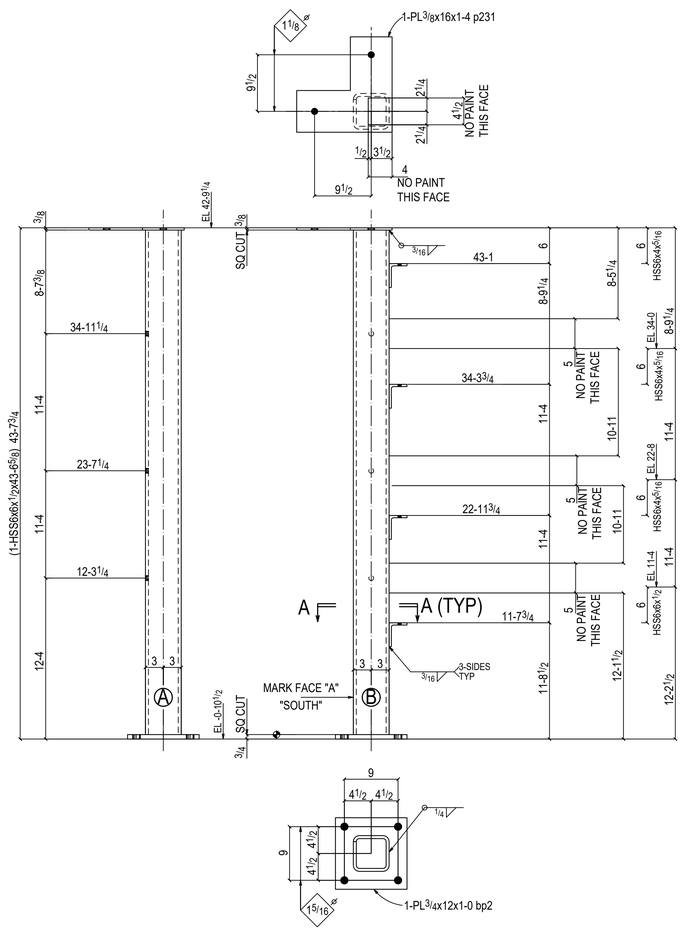
SHEET: **C103**

WELD: **E70XX**

CHECKED: **ABD**

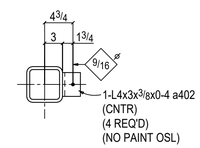
ISSUE: **A**

FOR APPROVAL ONLY
NOT FOR FABRICATION



ONE COLUMN C104

AT GRID:
E & 4
FIELD BOLTS:
2-1Diax4 3/4 A325N



Section A-A

C104

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	C104	COLUMN					1594
1	C104	HSS6x6x1/2	43	6 5/8	S2E	A500C	1535
4	a402	L4x3x3/8	0	4		A36	11
1	bp2	PL3/4x12	1	0		A36	29
1	p231	PL3/8x16	1	4		A36	18
		FIELD BOLTS					
2		1 Dia A325N	0	4 3/4	+1HD WASH		

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
APPROVAL (A)	05-17-24

REF: **E1,E2,E3,E4**

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **COLUMN**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

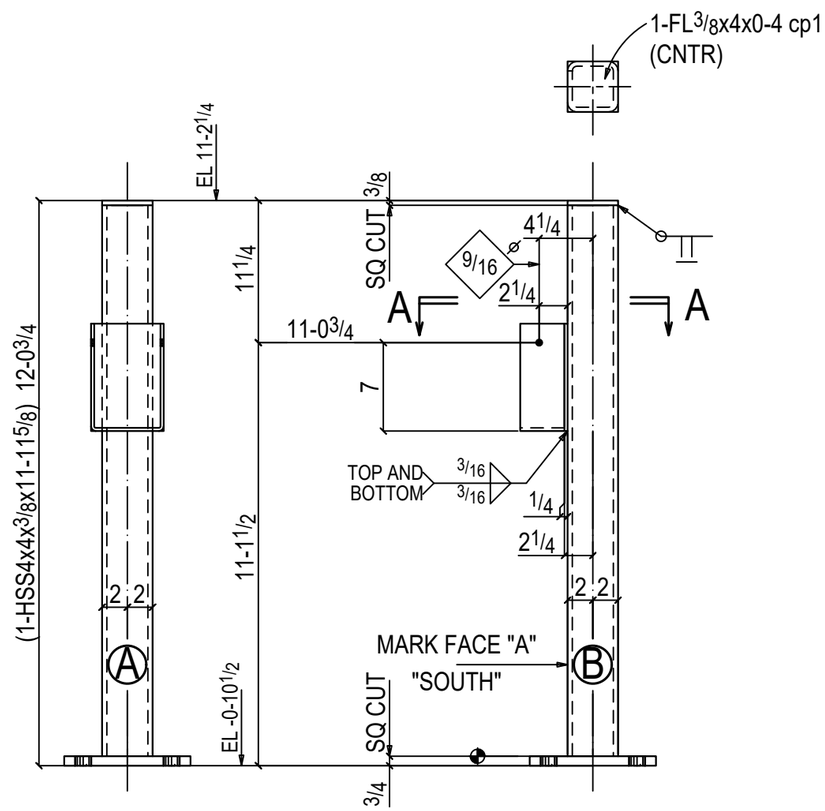
SHEET: **C104**

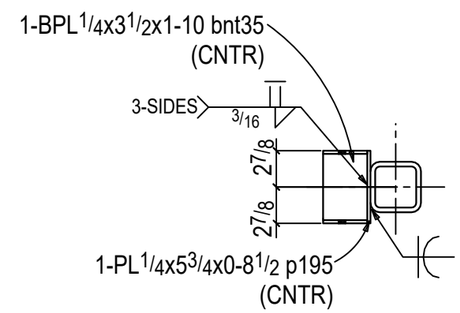
WELD: **E70XX**

CHECKED: **ABD**

ISSUE: **A**

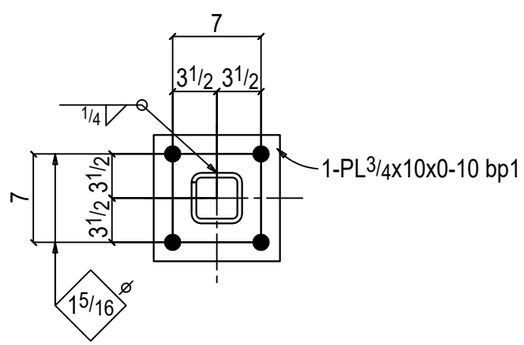
FOR APPROVAL ONLY
NOT FOR FABRICATION





Section A-A

C105



ONE COLUMN C105

FIELD BOLTS:
1-1/2Diax7 A307

BILL OF MATERIAL

QTY	PC		LENGTH			STEEL	WEIGHT
TOTAL	MARK	DESCRIPTION	FT.	IN	REMARKS	GRADE	TOTAL
ONE	C105	COLUMN					237
1	C105	HSS4x4x3/8	11	11 5/8	S2E	A500C	207
1	bp1	PL3/4x10	0	10		A36	20
1	cp1	FL3/8x4	0	4		A36	2
1	p195	PL1/4x5 3/4	0	8 1/2		A36	3
1	bnt35	BPL1/4x3 1/2	1	10	BENT	A36	5
		FIELD BOLTS					
1		1/2 Dia A307	0	7	+1HD WASH		

FOR APPROVAL ONLY
NOT FOR FABRICATION

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
REF: **E1** APPROVAL (A)	05-17-24

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **COLUMN**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

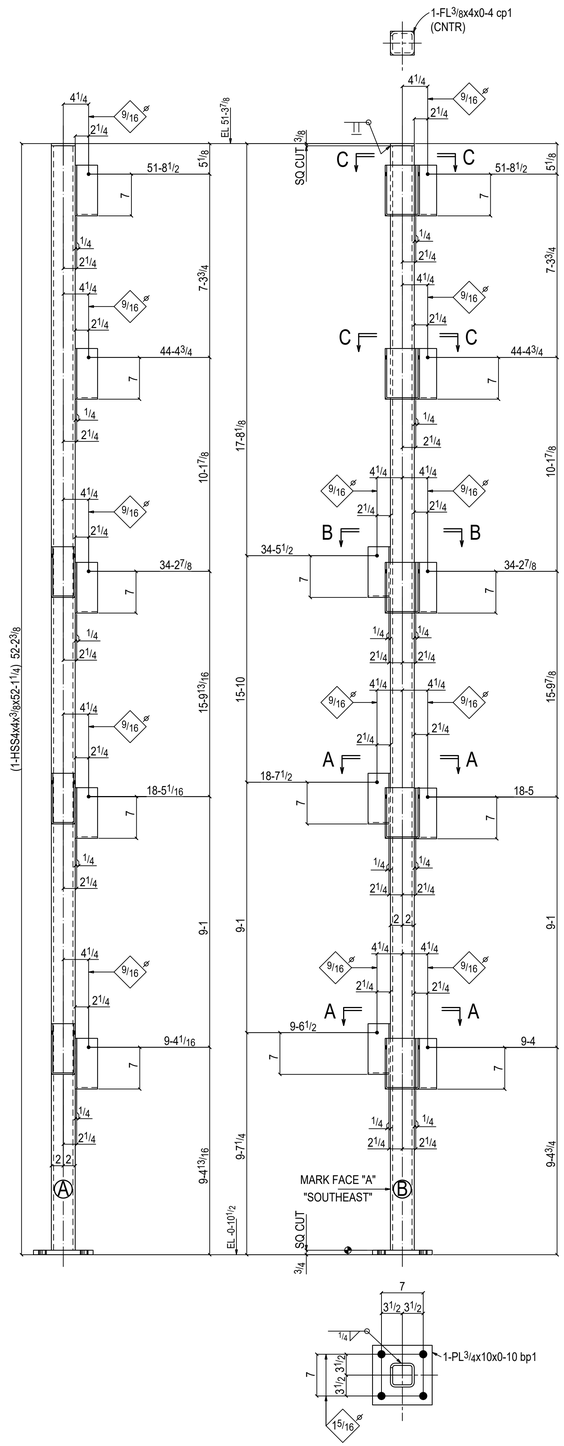
JOB NUMBER: **----**

SHEET: **C105**

WELD: **E70XX**

CHECKED: **ABD**

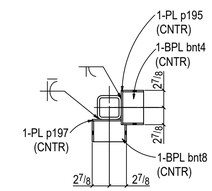
ISSUE: **A**



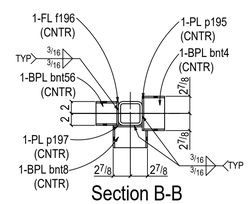
ONE COLUMN C106

AT GRID:
D & 1

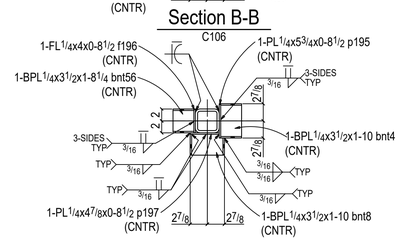
FIELD BOLTS:
10-1/2Diax7 A307
3-1/2Diax5 A307



Section C-C
C106



Section B-B
C106



Section A-A
C106

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	C106	COLUMN					1028
1	C106	HSS4x4x3/8	52	1 1/4	S2E	A500C	900
1	bp1	PL3/4x10	0	10		A36	20
1	cp1	FL3/8x4	0	4		A36	2
5	p197	PL1/4x4 7/8	0	8 1/2		A36	15
5	p195	PL1/4x5 3/4	0	8 1/2		A36	17
3	f196	FL1/4x4	0	8 1/2		A36	7
3	bnt56	BPL1/4x3 1/2	1	8 1/4	BENT	A36	15
5	bnt4	BPL1/4x3 1/2	1	10	BENT	A36	27
5	bnt8	BPL1/4x3 1/2	1	10	BENT	A36	25
		FIELD BOLTS					
10		1/2 Dia A307	0	7	+1HD WASH		
3		1/2 Dia A307	0	5	+1HD WASH		

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
REF: **E1, E2, E3,E4,E5** APPROVAL (A)	05-17-24

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **COLUMN**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

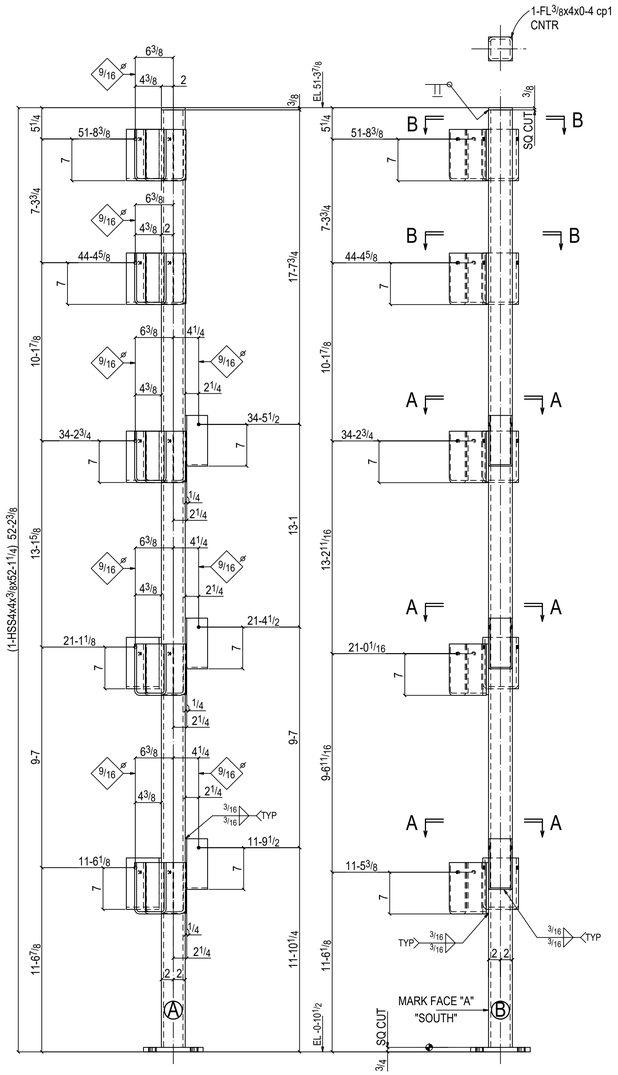
SHEET: **C106**

WELD: **E70XX**

CHECKED: **ABD**

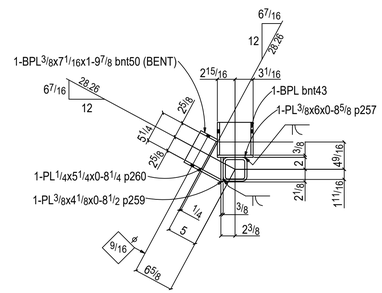
ISSUE: **A**

FOR APPROVAL ONLY
NOT FOR FABRICATION

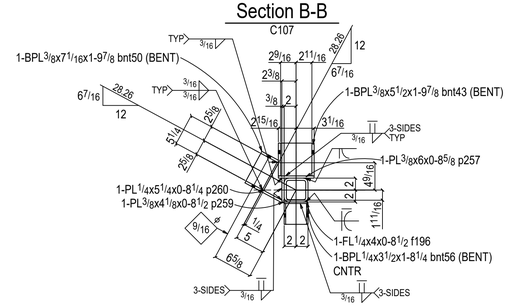


ONE COLUMN C107

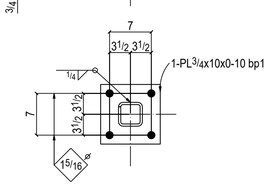
AT GRID:
D & 3
FIELD BOLTS:
10-1/2Diax7 A307
3-1/2Diax5 A307



Section B-B
C107



Section A-A
C107



BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	C107	COLUMN					1128
1	C107	HSS4x4x3/8	52	1 1/4	S2E	A500C	900
1	bp1	PL3/4x10	0	10		A36	20
5	bnt50	BPL3/8x71/16	1	9 7/8	BENT	A36	59
5	p257	PL3/8x6	0	8 5/8		A36	28
5	bnt43	BPL3/8x5 1/2	1	9 7/8	BENT	A36	64
5	p259	PL3/8x41/8	0	8 1/2		A36	19
1	cp1	FL3/8x4	0	4		A36	2
5	p260	PL1/4x51/4	0	8 1/4		A36	15
3	f196	FL1/4x4	0	8 1/2		A36	7
3	bnt56	BPL1/4x3 1/2	1	8 1/4	BENT	A36	15
		FIELD BOLTS					
10		1/2 Dia A307	0	7	+1HD WASH		
3		1/2 Dia A307	0	5	+1HD WASH		

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
REF: E1, E2, E3,E4,E5 APPROVAL (A)	05-17-24

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: SSPC SP-2
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: JOHN KNOX VILLAGE BUILDING E
LEE'S SUMMIT, MO

HOLES: 13/16 DIA U.N.O.

TITLE: COLUMN

BOLTS: 3/4 DIA A325N U.N.O.

DETAILER: KSD

JOB NUMBER: ----

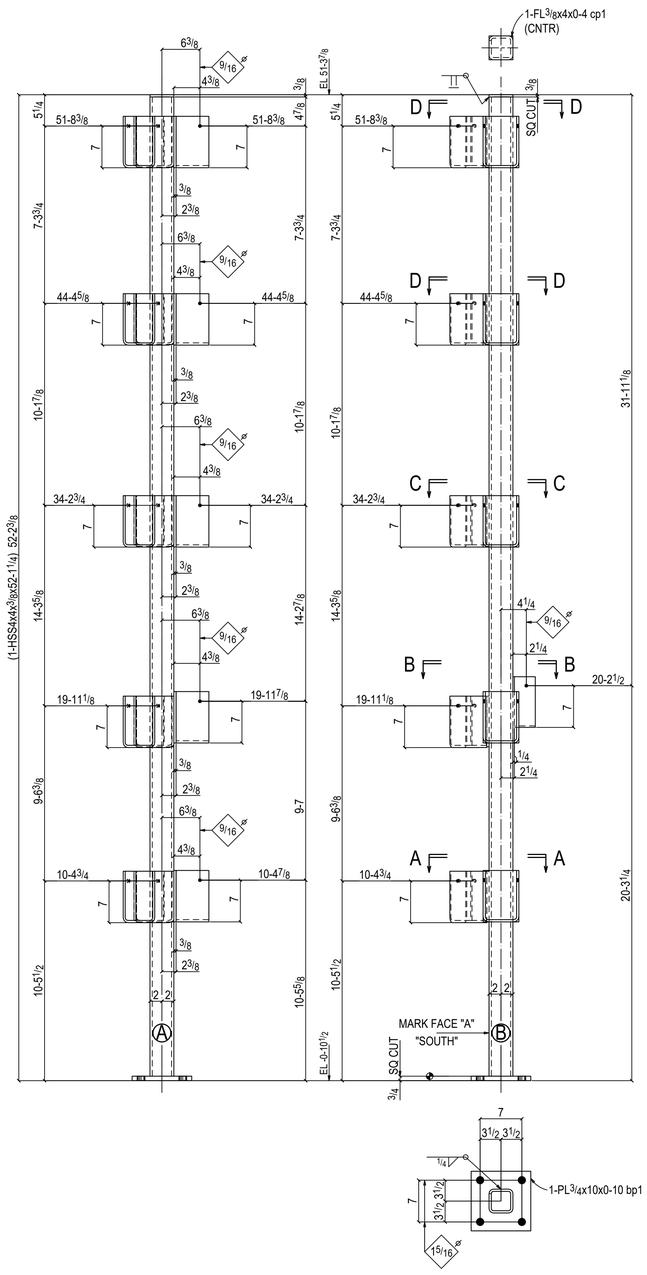
SHEET: C107

WELD: E70XX

CHECKED: ABD

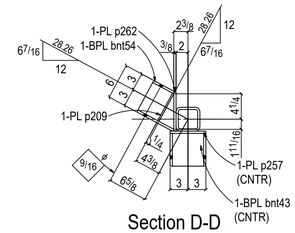
ISSUE: A

FOR APPROVAL ONLY
NOT FOR FABRICATION

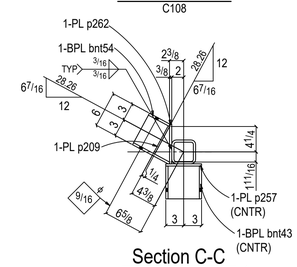


ONE COLUMN C108

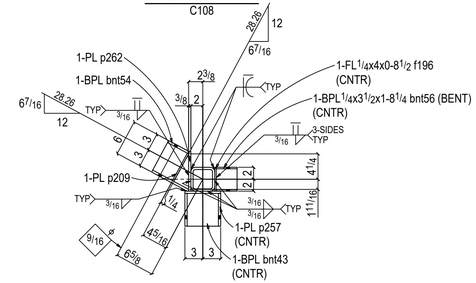
AT GRID:
B & 2
FIELD BOLTS:
9-1/2Diax7 A307
1-1/2Diax5 A307



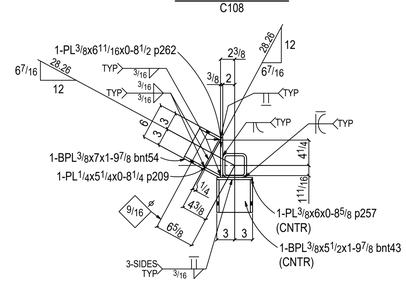
Section D-D
C108



Section C-C
C108



Section B-B
C108



Section A-A
C108

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	C108	COLUMN					1128
1	C108	HSS4x4x3/8	52	1 1/4	S2E	A500C	900
1	bp1	PL3/4x10	0	10		A36	20
5	bnt54	BPL3/8x7	1	9 7/8	BENT	A36	63
5	p262	PL3/8x6 11/16	0	8 1/2		A36	30
5	p257	PL3/8x6	0	8 5/8		A36	28
5	bnt43	BPL3/8x5 1/2	1	9 7/8	BENT	A36	64
1	cp1	FL3/8x4	0	4		A36	2
5	p209	PL1/4x5 1/4	0	8 1/4		A36	15
1	f196	FL1/4x4	0	8 1/2		A36	2
1	bnt56	BPL1/4x3 1/2	1	8 1/4	BENT	A36	5
		FIELD BOLTS					
10		1/2 Dia A307	0	7	+1HD WASH		
1		1/2 Dia A307	0	5	+1HD WASH		

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
APPROVAL (A)	05-17-24

REF: **E1, E2, E3,E4,E5**

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **COLUMN**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

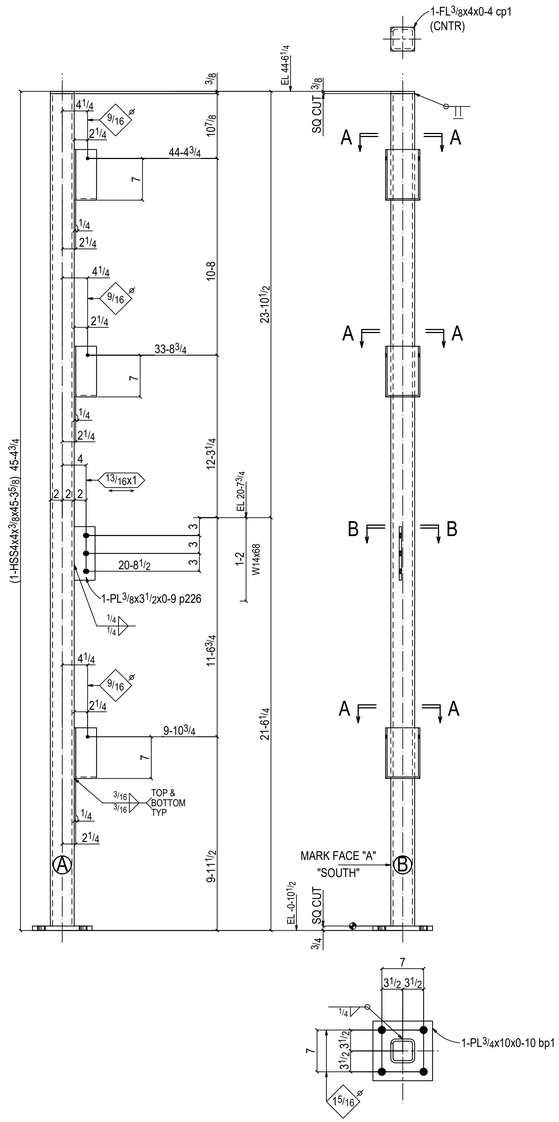
SHEET: **C108**

WELD: **E70XX**

CHECKED: **ABD**

ISSUE: **A**

FOR APPROVAL ONLY
NOT FOR FABRICATION

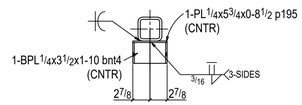


ONE COLUMN C109

AT GRID:
A & 4
FIELD BOLTS:
3-1/2Diax7 A307

Section B-B

C109



Section A-A

C109

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
ONE	C109	COLUMN					834
1	C109	HSS4x4x3/8	45	3 5/8	S2E	A500C	782
1	bp1	PL3/4x10	0	10		A36	20
1	cp1	FL3/8x4	0	4		A36	2
1	p226	PL3/8x3 1/2	0	9		A36	3
3	p195	PL1/4x5 3/4	0	8 1/2		A36	10
3	bnt4	BPL1/4x3 1/2	1	10	BENT	A36	16
		FIELD BOLTS					
3		1/2 Dia A307	0	7	+1HD WASH		

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
APPROVAL (A)	05-17-24

REF: **E1, E2, E3,E4**

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
SHERWIN WILLIAMS
GRAY STD PRIMER

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **COLUMN**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

SHEET: **C109**

WELD: **E70XX**

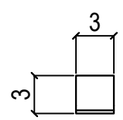
CHECKED: **ABD**

ISSUE: **A**

FOR APPROVAL ONLY
NOT FOR FABRICATION

BILL OF MATERIAL

QTY	PC		LENGTH			STEEL	WEIGHT
TOTAL	MARK	DESCRIPTION	FT.	IN	REMARKS	GRADE	TOTAL
6	M106	ANGLE					7
6	M106	L3x3x1/4	0	3		A36	7



6 ANGLES M106

FOR APPROVAL ONLY
NOT FOR FABRICATION

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
APPROVAL (A)	05-17-24

REF: **E1,E2,E3**

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
NO PAINT

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **ANGLE**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

SHEET: **M106**

WELD: **E70XX**

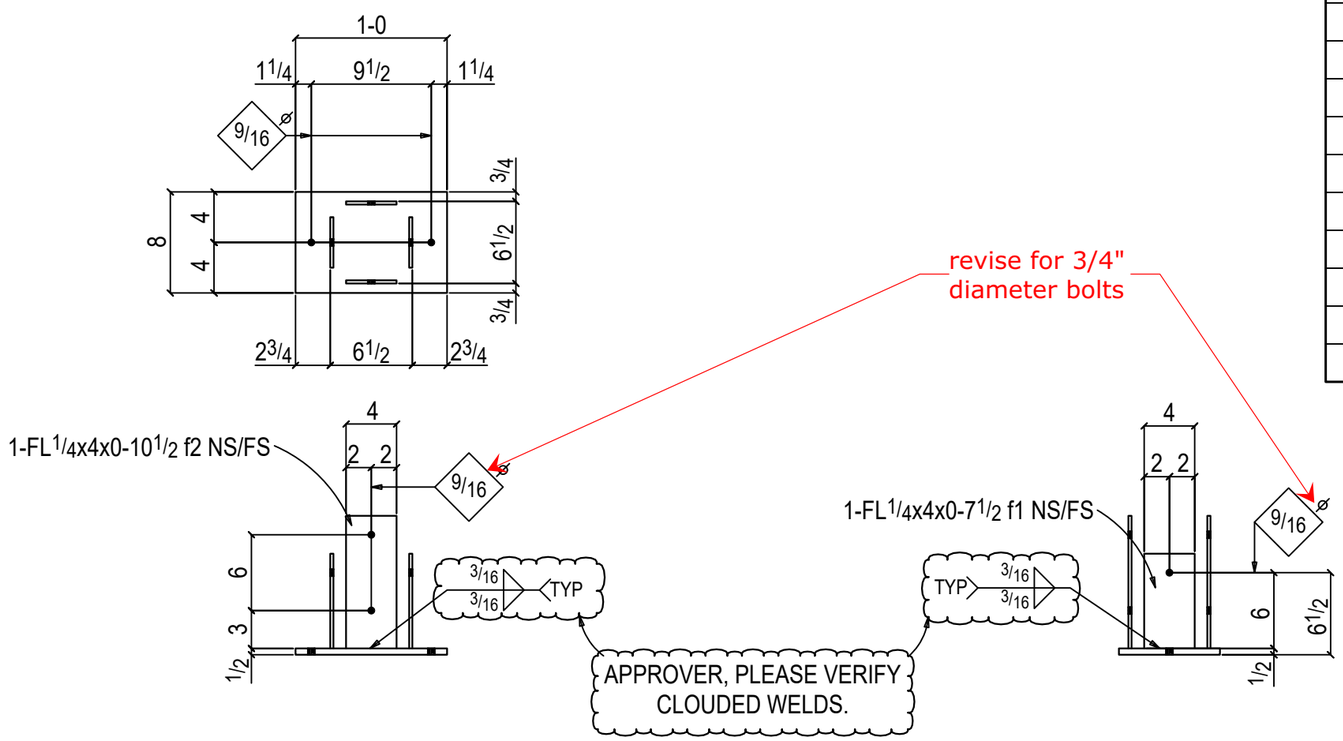
CHECKED: **ABD**

ISSUE: **A**

BILL OF MATERIAL

QTY TOTAL	PC MARK	DESCRIPTION	LENGTH FT.	LENGTH IN	REMARKS	STEEL GRADE	WEIGHT TOTAL
47	M113	BRACKET			Galv		1111
47	M113	PL1/2x8	1	0		A36	636
94	f2	FL1/4x4	0	10 1/2		A36	277
94	f1	FL1/4x4	0	7 1/2		A36	198
		FIELD BOLTS					
141		1/2 Dia A307	0	7 1/2	+2HD WASH		
94		1/2 Dia LAG SCREW	0	5			

FOR APPROVAL ONLY
NOT FOR FABRICATION



47 BRACKETS M113

Approved

FIELD BOLTS:
3-1/2Diax7 1/2 A307
2-1/2Diax5 LAG SCREW

ALL MEMBER ON THIS SHEET ARE TO BE HOT DIP GALVANIZED

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
REF: **E6,E7** APPROVAL (A)	05-17-24

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **GALVANIZED**

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **BRACKET**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

SHEET: **M113**

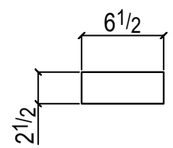
WELD: **E70XX**

CHECKED: **RS**

ISSUE: **A**

BILL OF MATERIAL

QTY	PC		LENGTH			STEEL	WEIGHT
TOTAL	MARK	DESCRIPTION	FT.	IN	REMARKS	GRADE	TOTAL
2	M115	PLATE					2
2	M115	PL$^{1}/_{4}$x2$^{1}/_{2}$	0	6$^{1}/_{2}$		A36	2



2 PLATES M115

FOR APPROVAL ONLY
NOT FOR FABRICATION

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
APPROVAL (A)	05-17-24

REF: **E4**

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
NO PAINT

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **$^{13}/_{16}$ DIA U.N.O.**

TITLE: **PLATE**

BOLTS: **$^{3}/_{4}$ DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

SHEET: **M115**

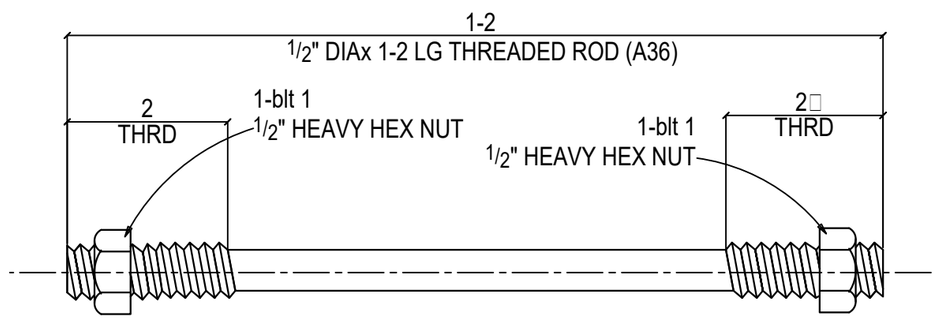
WELD: **E70XX**

CHECKED: **ABD**

ISSUE: **A**

BILL OF MATERIAL

QTY	PC		LENGTH			STEEL	WEIGHT
TOTAL	MARK	DESCRIPTION	FT.	IN	REMARKS	GRADE	TOTAL
40	M116	THREADED ROD					31
40	M116	RB1/2	1	2		A36	31
80	blt1	1/2 NUT			HHNT	A563	



FOR APPROVAL ONLY
NOT FOR FABRICATION

40 THREADED RODS M116

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
APPROVAL (A)	05-17-24

REF: **E5**

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
NO PAINT

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **THREADED ROD**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

SHEET: **M116**

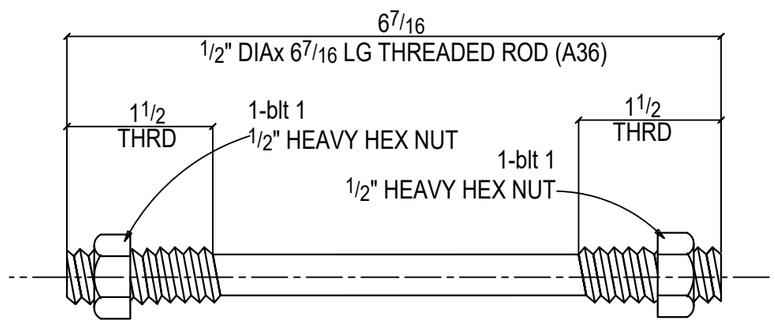
WELD: **E70XX**

CHECKED: **RS**

ISSUE: **A**

BILL OF MATERIAL

QTY	PC		LENGTH			STEEL	WEIGHT
TOTAL	MARK	DESCRIPTION	FT.	IN	REMARKS	GRADE	TOTAL
26	M117	THREADED ROD					9
26	M117	RB1/2	0	6 7/16		A36	9
104	blt6	1/2 NUT			HHNT	A563	



FOR APPROVAL ONLY
NOT FOR FABRICATION

26 THREADED RODS M117

ISSUE #2	
ISSUE #1	
CALCS	
APPROVAL (B)	
REF: **E5** APPROVAL (A)	05-17-24

MATERIAL:
MISC. ASTM A36
WF: ASTM A992, GR50
TUBE: ASTM A500, GRC
PIPE: ASTM A53, GRB

KC FAB
13720 Botts Rd,
Grandview, MO 64030.

FINISH: **SSPC SP-2**
NO PAINT

PROJECT: **JOHN KNOX VILLAGE BUILDING E**
LEE'S SUMMIT, MO

HOLES: **13/16 DIA U.N.O.**

TITLE: **THREADED ROD**

BOLTS: **3/4 DIA A325N U.N.O.**

DETAILER: **KSD**

JOB NUMBER: **----**

SHEET: **M117**

WELD: **E70XX**

CHECKED: **ABD**

ISSUE: **A**