

FOR BRACING CONNECTIONS REFER TO ROOF PLAN ON DRAWING 4-30-5-SF SH2 AND CONNECTION DETAILS ON DRAWING 4-30-5-SF SH3

ALL FORMED ROOF SUPPORT CHANNELS FROM 6.4 THICK PLATE. REFER TO DRAWING 4-30-5-SF SH2

ALL FORMED CHANNEL COLUMNS 101.6 WIDE x 101.6 DEEP x 6.4 THICK. REFER TO COLUMN PLAN ON DRAWING 4-30-5-SF SH5.

FOR TREAD PLATE FLOORING (NOT ALL SHOWN) REFER TO DRAWING 4-30-5-SF SH6

COLUMN BASES MK-CB2

ALL FORMED FLOOR SUPPORT CHANNELS 203.2 HIGH x 101.6 WIDE x 6.4 THICK REFER TO DRAWING 4-30-5-SF SH4

ALL ROOF BEAMS AND COLUMNS SHALL BE ELECTROSTATICALLY PAINTED. REFER TO THE GENERAL NOTES

DOOR THRESHOLD PLATE

FOR COLUMN BASES MK-CB2 REFER TO DRAWING 4-30-5-SF SH5

ALL STRUCTURAL BOLTS SHALL BE 5/8" [M16] STAINLESS STEEL HEXAGON HEAD C/W S.S. HEX NUT, S.S. FLAT WASHER AND S.S. LOCK WASHER PER BOLT AS PER GENERAL NOTES

FORMED WALL SUPPORT CHANNELS 152.4 WIDE x 76.2 HIGH x 6.4 THICK (N.T.S.) ALL AROUND BASE OF BUILDING. REFER TO DRAWING 4-30-5-SF SH4.

FOR STAIRS REFER TO DRAWING 4-30-5-SF SH8

FOR COLUMN BASE MK-CB1 REFER TO DRAWING 4-30-5-SF SH4

3D VIEW - PARALLEL PROJECTION

SCALE: NONE

DRAWING INDEX	
DWG. / SHEET #	DESCRIPTION
4-30-5-SF SH1	MODEL 12X24-S1, STRUCTURAL ALUMINUM FRAME, 3D GENERAL ARRANGEMENT, GENERAL NOTES, DRAWING INDEX AND LEGEND
4-30-5-SF SH2	MODEL 12X24-S1, STRUCTURAL ALUMINUM FRAME, ROOF FRAMING PLAN, CROSS SECTION AND ROOF FRAMING DETAILS
4-30-5-SF SH3	MODEL 12X24-S1, STRUCTURAL ALUMINUM FRAME, KNEE BRACING AND ROOF BEAM CONNECTION DETAILS
4-30-5-SF SH4	MODEL 12X24-S1, STRUCTURAL ALUMINUM FRAME, FLOOR FRAMING PLAN, COLUMN BASE MK-CB1 SECTIONS & DETAILS
4-30-5-SF SH5	MODEL 12X24-S1, STRUCTURAL ALUMINUM FRAME, COLUMN PLAN, COLUMN BASE MK-CB2, SECTIONS AND DETAILS
4-30-5-SF SH6	MODEL 12X24-S1, STRUCTURAL ALUMINUM FRAME, TREAD PLATE FLOOR PLAN AND DETAILS
4-30-5-SF SH7	MODEL 12X24-S1, STRUCTURAL ALUMINUM FRAME, CABLE BRACING GUSSET PLATE LAYOUT, SECTION AND DETAILS
4-30-5-SF SH8	MODEL 12X24-S1, STRUCTURAL ALUMINUM FRAME, EXTERIOR STAIRS, PLANS AND SECTIONS
4-30-FN SH1	MODEL 12X24-S1, ALUMINUM FOUNDATION, 3D GENERAL ARRANGEMENT, FLOOR FRAMING AND FOOTINGS
4-30-FN SH2	MODEL 12X24-S1, ALUMINUM FOUNDATION, FOOTING LAYOUT AND ELEVATIONS
4-30-FN SH3	MODEL 12X24-S1, ALUMINUM FOUNDATION, FOOTING AND BRACING CONNECTION DETAILS
4-30-FN SH4	MODEL 12X24-S1, ALUMINUM FOUNDATION, FOOTING TYPE F1, 3D GENERAL ASSEMBLY
4-30-FN SH5	MODEL 12X24-S1, ALUMINUM FOUNDATION, FOOTING TYPE F1, ASSEMBLY SECTIONS AND MISC. DETAILS
4-30-FN SH6	MODEL 12X24-S1, ALUMINUM FOUNDATION, FOOTING TYPE F1, BOX FRAME FABRICATION DETAILS
4-30-FN SH7	MODEL 12X24-S1, ALUMINUM FOUNDATION, FOOTING TYPE F2, 3D GENERAL ASSEMBLY
4-30-FN SH8	MODEL 12X24-S1, ALUMINUM FOUNDATION, FOOTING TYPE F2, ASSEMBLY SECTIONS AND FABRICATION DETAILS

GENERAL NOTES

- (A) DESIGN
- CONSTRUCTION AND DESIGN SHALL CONFORM TO NATIONAL BUILDING CODE OF CANADA (2010), PART 9.
 - SNOW LOAD : SS = 169 P.S.F. (8.1 kPa), SR = 16.7 P.S.F. (0.8 kPa); L/240 MAXIMUM LIVE-LOAD DEFLECTION; MAXIMUM SPAN 4 FT. (1.2m).
 - WIND LOAD: Q(1/50) = 13.4 P.S.F. (0.64 kPa); L/180 MAXIMUM DEFLECTION; MAXIMUM SPAN 12 FT. (3.66m).
 - SEISMIC: S_a(0.2) = 1.20
 - OCCUPANCY LOAD = 100 P.S.F. (4.8 kPa); L/360 MAXIMUM DEFLECTION; MAXIMUM SPAN 4'-4" (1.32m).

- (B) METALS AND FABRICATION
- UNLESS OTHERWISE NOTED, ONLY NEW MATERIALS SHALL BE USED.
 - THE ENGINEER MAY INSPECT MATERIALS AND PRODUCTS (EXCLUDING OWNER-SUPPLIED MATERIALS) AT HIS DISCRETION AT ALL STAGES OF THEIR MANUFACTURE, TRANSPORTATION AND ASSEMBLY. SATISFACTORY INSPECTION AT ANY STAGE DOES NOT PRECLUDE FUTURE REJECTION IF THE MATERIALS OR PRODUCTS ARE SUBSEQUENTLY FOUND TO LACK UNIFORMITY OR FAIL TO CONFORM TO THE REQUIREMENTS SPECIFIED.
 - ALUMINUM MANUFACTURING SOURCES AND CERTIFICATES SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND RECORD.
 - ALUMINUM ALLOY SHALL CONFORM TO THE ALUMINUM ASSOCIATION PUBLICATION "ALUMINUM STANDARDS AND DATA, ISO 6362-2"
 - ITEMS MANUFACTURED OR FABRICATED FROM SCRAP METAL OF UNKNOWN CHEMICAL COMPOSITION OR PHYSICAL PROPERTIES ARE NOT ACCEPTABLE.
 - ALUMINUM WELDING TO CSA W59.2M-M1991 (R2008) BY FABRICATORS QUALIFIED TO DIVISION 2 OF CSA W47.2
 - FABRICATION PRACTICES AND TOLERANCES SHALL FOLLOW THOSE OF STEEL, AS IN CSA STANDARD CAN3-S16.1-M
 - FORMING OF ALUMINUM SHALL BE CARRIED OUT AT ROOM TEMPERATURE.
 - ALL FORMED SHEET ALUMINUM INCLUDING BEAMS, COLUMNS AND BRACING SHALL BE LAID OUT AND CUT AS FLAT SHEET AND THEN BENT INTO FINAL SHAPE USING STANDARD AIR BRAKE BENDING DIES. ALL FLAT SHEET ALUMINUM COMPONENTS SHALL BE CUT BY THE CNC MILLING PROCESS. FLAME CUTTING AND PLASMA CUTTING WILL NOT BE PERMITTED FOR ALL MAJOR STRUCTURAL COMPONENTS.
 - ALL ALUMINUM PLATE 6.4mm. OR LESS IN THICKNESS SHALL HAVE A MINIMUM PERMISSIBLE INSIDE BENDING RADIUS OF 1 1/2 TIMES THE MATERIAL THICKNESS. THE RADIUS IS THE MINIMUM RECOMMENDED FOR BENDING PLATES WITHOUT FRACTURING IN A STANDARD PRESS BRAKE WITH AIR BEND DIES. OTHER TYPES OF BENDING OPERATIONS MAY REQUIRE LARGER RADI. THE MINIMUM PERMISSIBLE RADI WILL ALSO VARY WITH THE DESIGN AND THE CONDITION OF TOOLING. FOR MORE DETAILED REQUIREMENTS REFER TO THE CONTRACT SPECIFICATIONS.
 - THE FABRICATOR SHALL PROVIDE TEST SAMPLES OF A FULL SIZE BEAM AND COLUMN TO THE ENGINEER FOR APPROVAL PRIOR TO PROCEEDING WITH THE PRODUCTION WORK. THE FABRICATOR SHALL DEMONSTRATE TO THE SATISFACTION OF THE ENGINEER'S DESIGNATED TESTING LAB THAT THE ALUMINUM PLATE BENDS ARE FREE OF STRESS FRACTURES.
 - BENDS SHALL BE SMOOTH WITHOUT SHARP KINKS. CRACKS SHALL BE CAUSE FOR REJECTION IF THE CRACK LIES IN A ZONE THAT IS STRESSED IN SERVICE.
 - SUBMIT SHOP DRAWINGS BEARING STAMP AND SIGNATURE OF QUALIFIED PROFESSIONAL ENGINEER REGISTERED OR LICENSED IN THE PROVINCE OF BC
 - STAINLESS STEEL BOLTS SHALL CONFORM TO AISI 316.
 - ALL STRUCTURAL BOLTS, NUTS AND WASHERS SHALL A316 GRADE STAINLESS STEEL HEXAGON HEAD FASTENERS.
 - ALUMINUM EXTRUSIONS AND PLATE THICKER THAN 6.4mm. SHALL BE ALCAN STRUCTURAL ALLOY 6061-T6.
 - ALL BENT ALUMINUM SHEET (6.4mm. OR LESS) SHALL BE ALCAN ALLOY 5052-H32.
 - SAMPLE TESTING SHALL BE CONDUCTED BY THE ENGINEER'S DESIGNATED CERTIFIED TESTING SERVICES PROVIDER.
 - ALUMINUM FABRICATION AND ASSEMBLY SHALL CONFORM TO C.S.A. SPECIFICATION S157.
 - ALUMINUM WELDING SHALL BE EITHER: GMAW (MIG) OR GTAW (TIG) PROCESS USING 5356 FILLER ROD.
 - ALL BURRS, SHARP CORNERS, ROUGH EDGES & WELD SPATTER TO BE GROUND SMOOTH.
- (C) PAINT
- ALL ROOF BEAMS AND COLUMNS SHALL BE ELECTROSTATICALLY PAINTED (POWDER COATED), COLOUR: WHITE, SHEEN: GLOSS.
 - ALL ALUMINUM SURFACES THAT REQUIRE POWDER COATING SHALL BE PREPARED BY SAND BLASTING AND PRETREATMENT.
 - PAINTINGS SHALL BE THE SAME OR EQUIVALENT TO AMERICAN ARCHITECTURAL MANUFACTURERS ASSOCIATION SPECIFICATION AAMA 2604 OR APPROVED EQUAL.
- (D) ERECTION
- THE ERECTOR SHALL MAINTAIN BUILDING SQUARENESS WILL ERECTING THE STRUCTURAL FRAME. THE ERECTOR SHALL PROVIDE DETAILS TO THE ENGINEER OF THE METHOD USED TO KEEP THE BUILDING SQUARE DURING AND AFTER ERECTION. TEMPORARY BRACING IN THE FORM OF TENSION WIRES AND TURNBUCKLES MAY BE USED BUT MUST BE KEPT CLEAR OF THE EXTERIOR FACE OF THE STRUCTURE TO PROVIDE SPACE FOR THE BUILDING ENVELOPE TO BE INSTALLED. EXTRA HOLES MAY BE ADDED TO THE FRAMEWORK TO INSTALL BRACING BUT HOLE SIZE AND LOCATIONS MUST BE APPROVED BY THE ENGINEER. AFTER THE BUILDING ENVELOPE HAS BEEN INSTALLED THE TEMPORARY BRACING SHALL BE REMOVED.

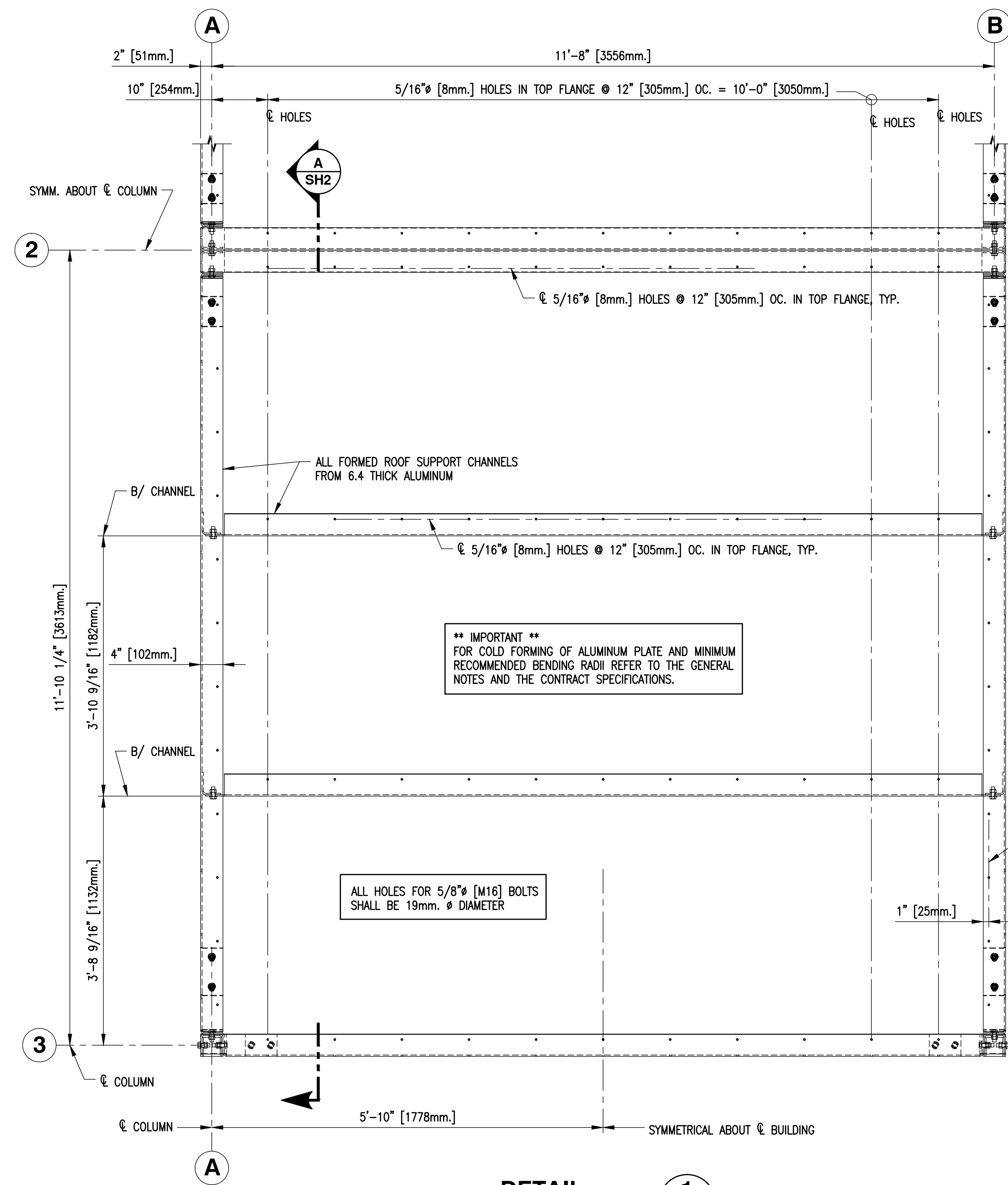
LEGEND (NOT ALL SYMBOLS USED)

B/O	BACK OF
B/O	BOTTOM OF
C/O	CENTER TO OUT DISTANCE
C/W	COMPLETE WITH
COL.	COLUMN
CONN.	CONNECTION
CONT.	CONTINUOUS
DWG.	DRAWING
EL.	ELEVATION
EPS	EXPANDED POLYSTYRENE
EXIST.	EXISTING
F.S.	FAR SIDE
I.D.	INSIDE DIAMETER
INVERT	INVERT
LG.	LONG
MAX.	MAXIMUM
MIN.	MINIMUM
N.S.	NEAR SIDE
N.T.S.	NOT TO SCALE
NOM.	NOMINAL
O.D.	OUTSIDE DIAMETER
O/O	OUT TO OUT DISTANCE
OC	ON CENTER
REQ'D	REQUIRED
S.S.	STAINLESS STEEL
SYMM.	SYMMETRICAL
T.O.S.	TOP OF STEEL
T/O	TOP OF
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
U/S	UNDERSIDE OF

PREFABRICATED BUILDING
MODEL 12X24-S1
STRUCTURAL ALUMINUM FRAME
3D GENERAL ARRANGEMENT
GENERAL NOTES, DRAWING INDEX
AND LEGEND

SCALE	NONE
DATE	JULY 5, 2013
DWG. NUMBER	4-30-5-SF
SHEET	1 of 8
SIZE	D
REVISION	

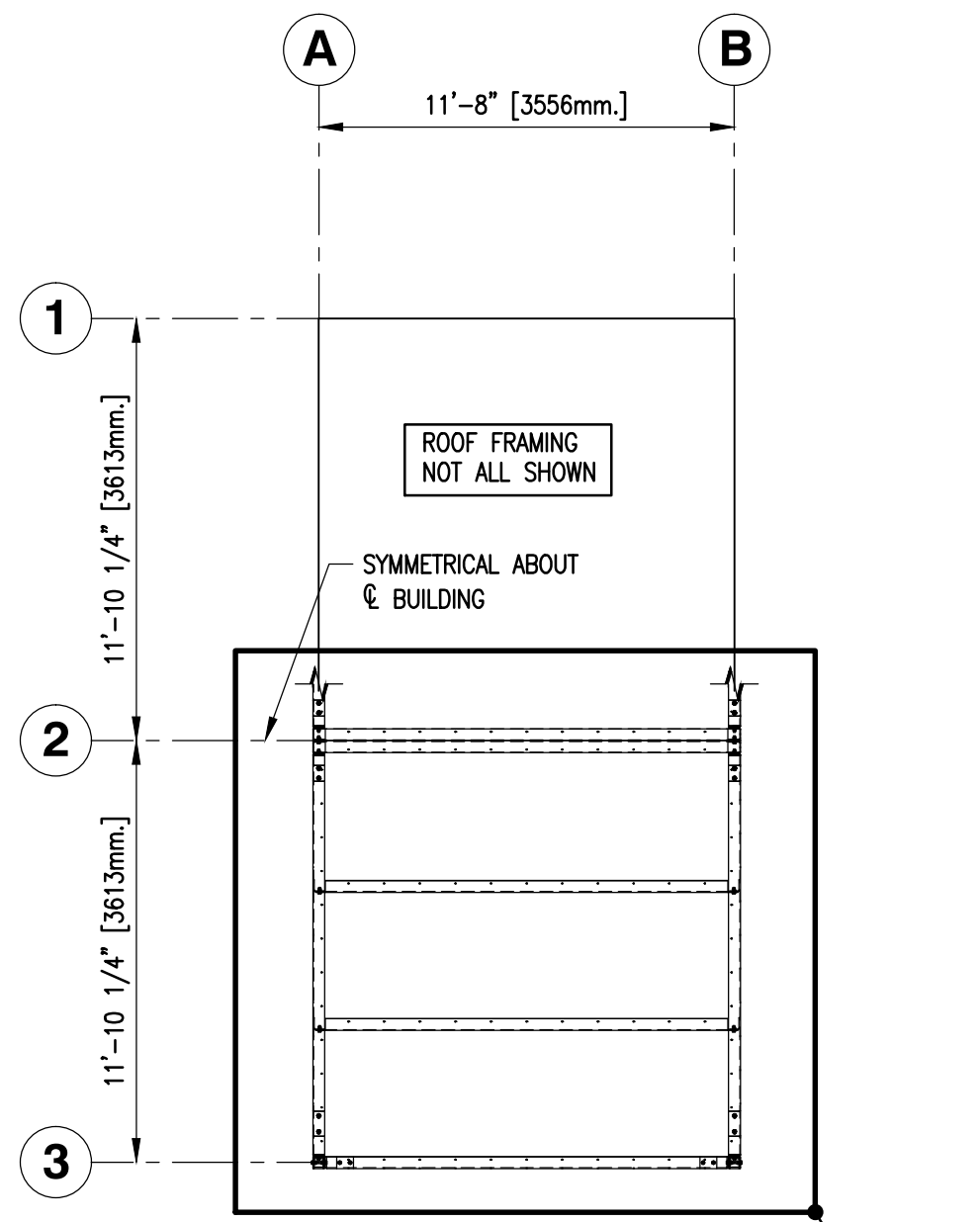
DWG. NO.	DRAWING REFERENCES	NOTES	N.O.	DATE	REVISIONS	DESIGNED	DRAWN	CHECKED	RECOMMENDED	APPROVED
			2	JAN. 15, 2014	FORMED WALL SUPPORT CHANNELS 152.4 WIDE x 76.2 HIGH x 6.4 THICK (N.T.S.) ALL AROUND BASE OF BUILDING WAS 101.6 WIDE x 76.2 HIGH x 6.4 THICK. DOOR THRESHOLD ANGLE LOCATIONS REVISED. STAIR REFERENCE ADDED. ISSUED FOR FABRICATION.	M. Liang	G. Reichhardt			
			1	NOV. 18, 2013	DRAWING INDEX REVISED FOR ADDITIONAL DRAWINGS ADDED TO TENDER PACKAGE.					
			0	SEPT. 19, 2013	ISSUED ONLY FOR TENDERING PURPOSES; NOT FOR CONSTRUCTION.					



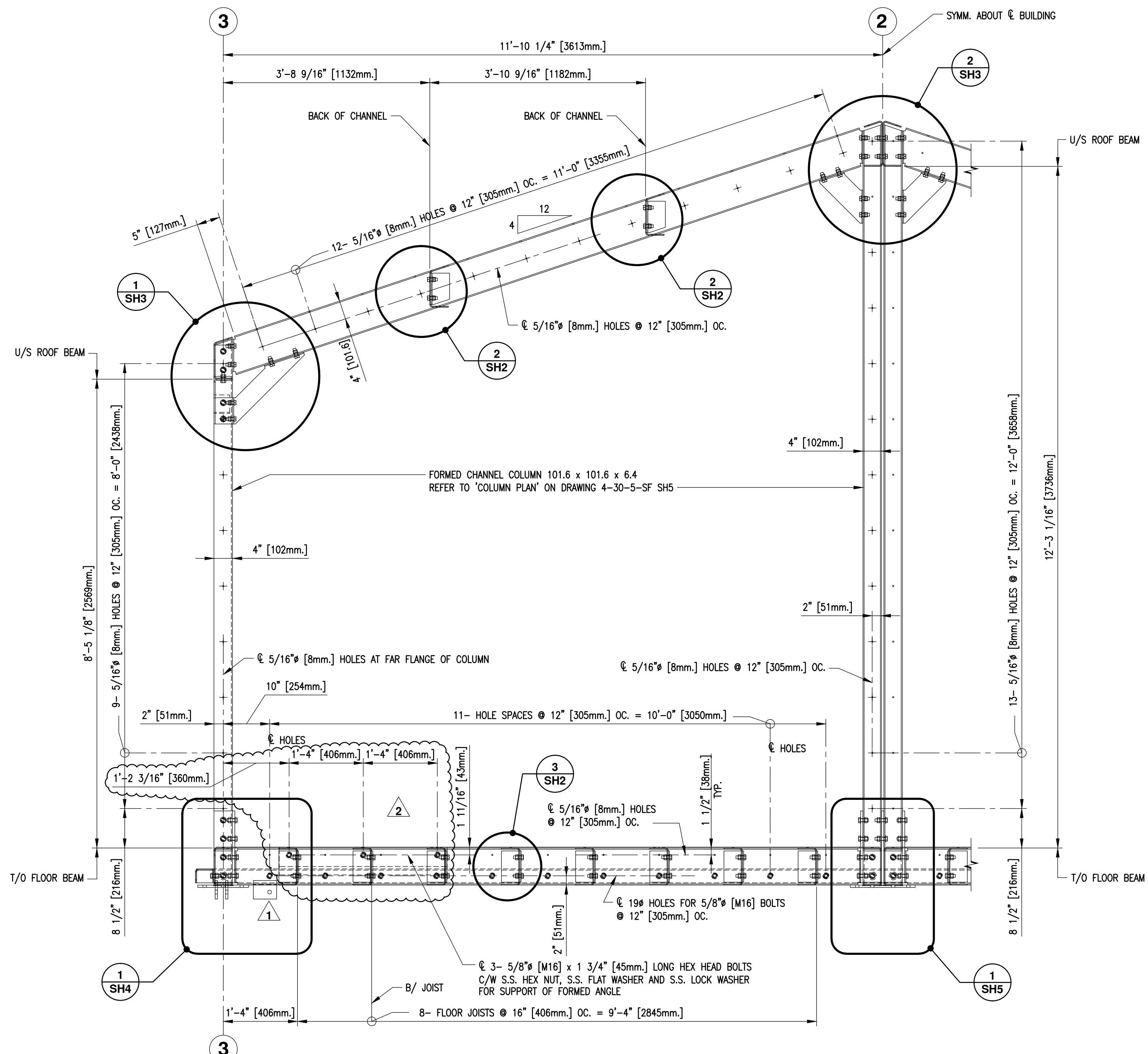
**** IMPORTANT ****
FOR COLD FORMING OF ALUMINUM PLATE AND MINIMUM RECOMMENDED BENDING RADI REFER TO THE GENERAL NOTES AND THE CONTRACT SPECIFICATIONS.

ALL HOLES FOR 5/8" (M16) BOLTS SHALL BE 19mm. Ø DIAMETER

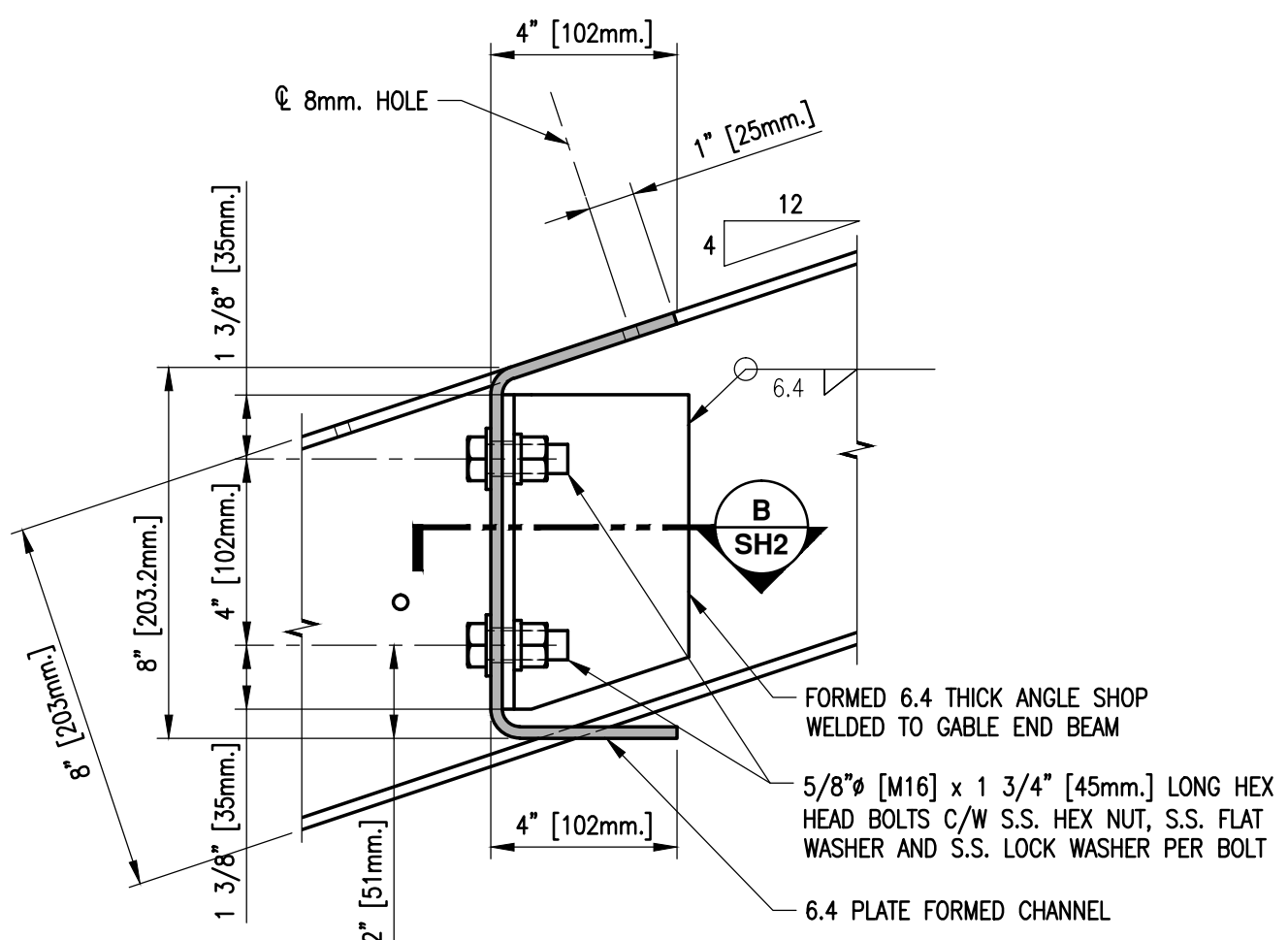
DETAIL 1
SCALE 1:16
SH2



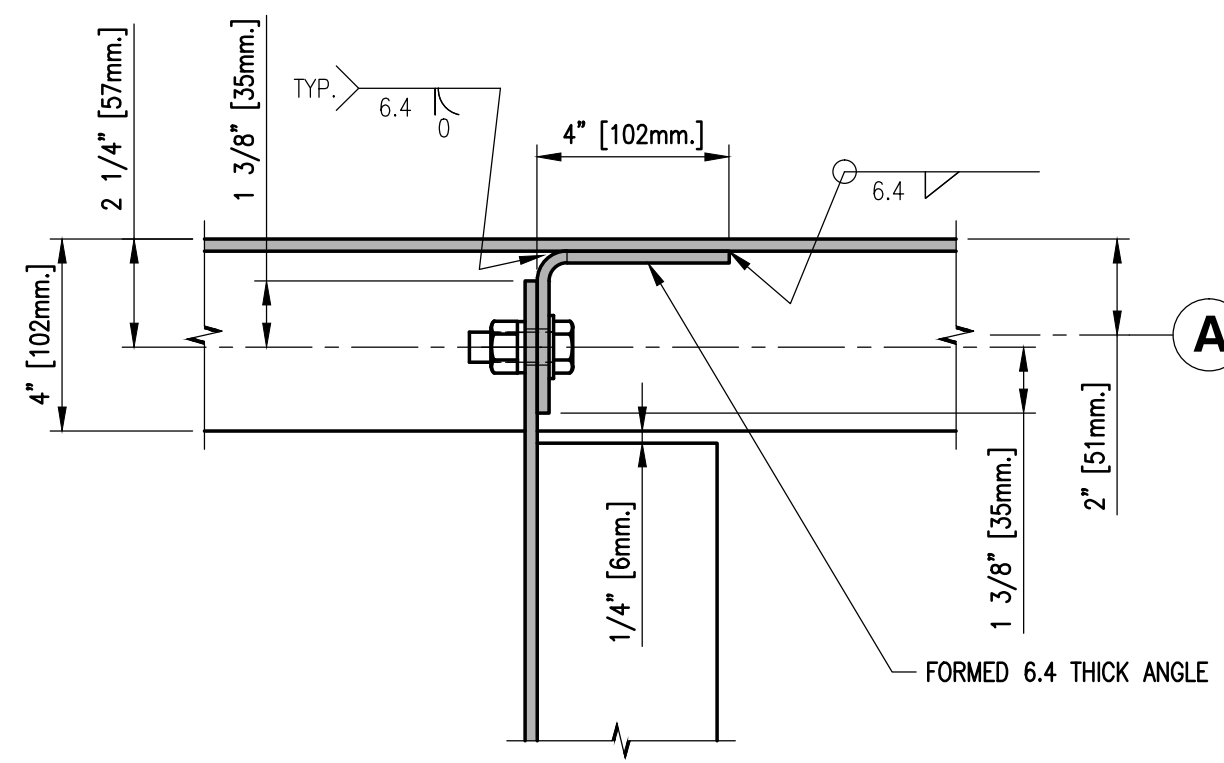
ROOF FRAMING PLAN
SCALE 1:64
SH2



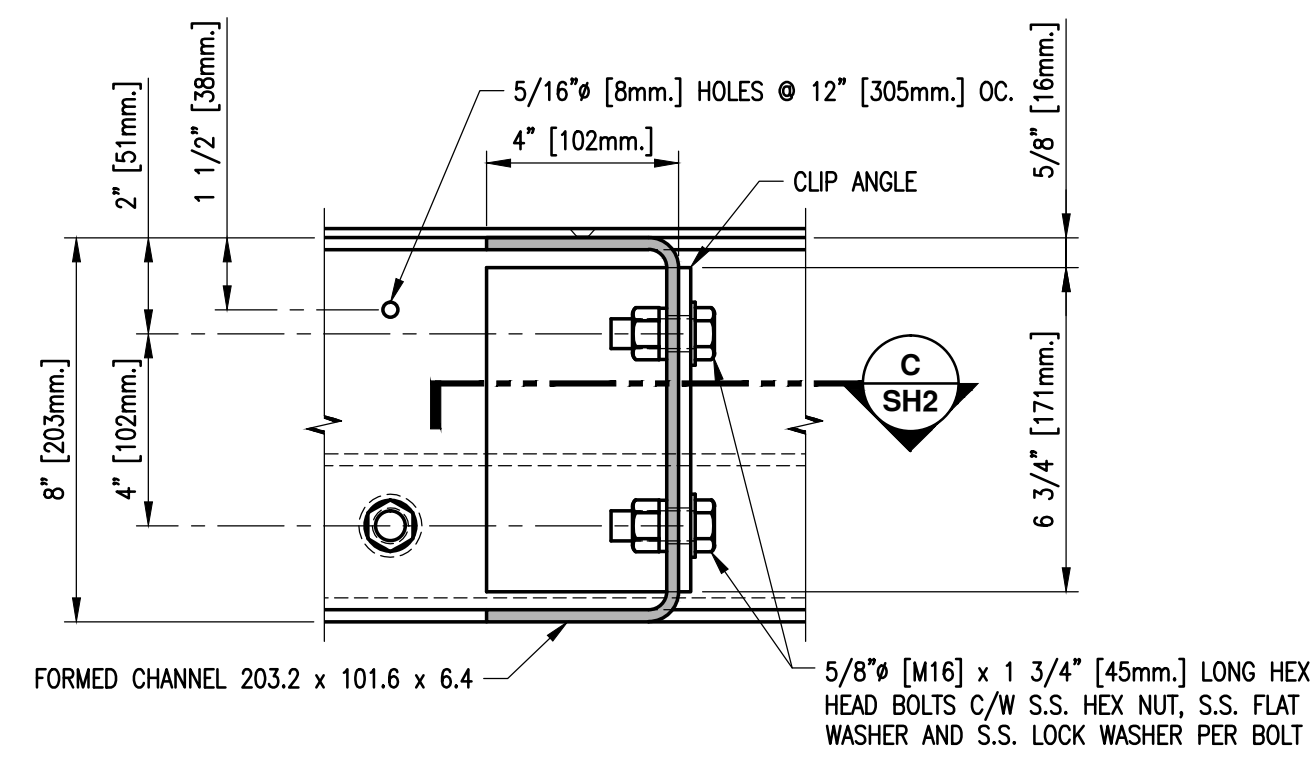
SECTION A
SCALE 1:16
SH2, SH4



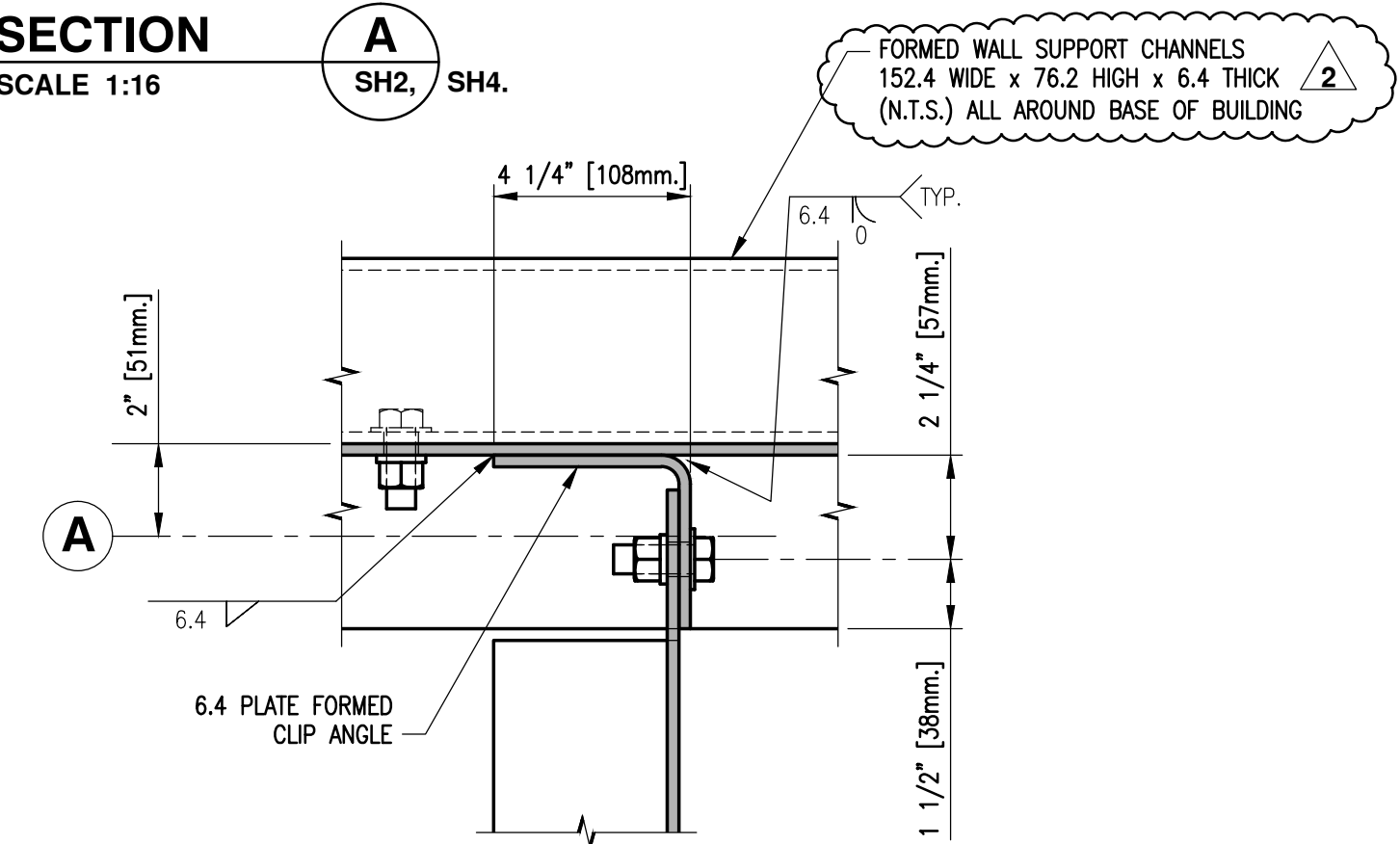
DETAIL 2
SCALE 1:4
SH2



SECTION B
SCALE 1:4
SH2



DETAIL 3
SCALE 1:4
SH2



SECTION C
SCALE 1:4
SH2

1. FOR GENERAL NOTES, LEGEND AND DRAWING INDEX REFER TO DRAWING 4-30-5-SF SH1.

NO.	DATE	REVISIONS
2	JAN. 15, 2014	FORMED WALL SUPPORT CHANNELS 152.4 WIDE x 76.2 HIGH x 6.4 THICK (N.T.S.) ALL AROUND BASE OF BUILDING WAS 101.6 WIDE x 76.2 HIGH x 6.4 THICK. DOOR THRESHOLD ANGLE LOCATIONS REVISED. ISSUED FOR FABRICATION
1	NOV. 18, 2013	SECTION 'A'/SH2, SH4 UPDATED TO SHOW CABLE BRACING GUSSET PLATE CONNECTIONS AS PER DETAILS ON DRAWING 4-30-6-SF SH7
0	SEPT. 19, 2013	ISSUED ONLY FOR TENDERING PURPOSES; NOT FOR CONSTRUCTION.

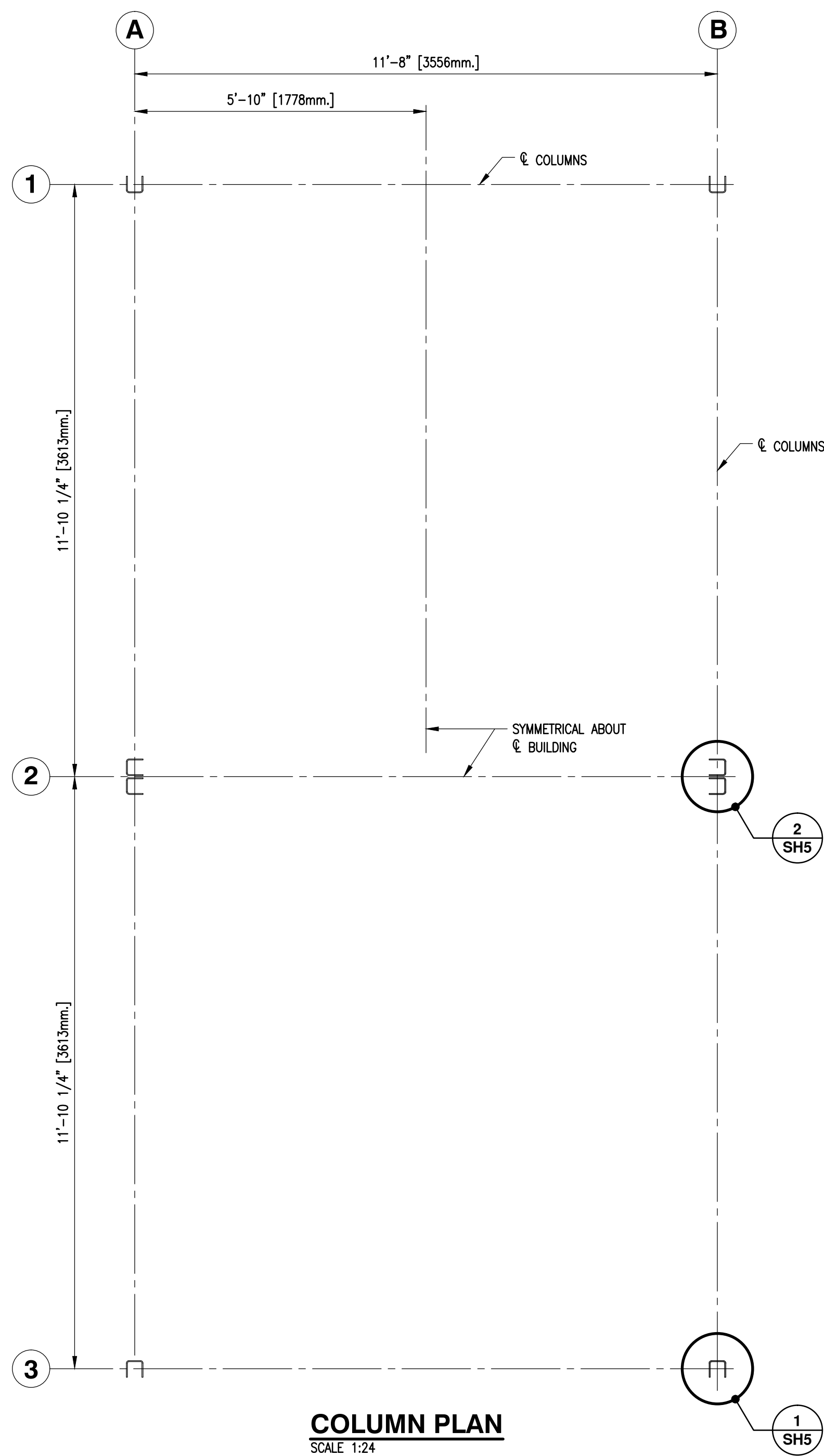
FISHERIES AND OCEANS CANADA
REAL PROPERTY, SAFETY & SECURITY

PREFABRICATED BUILDING
MODEL 12X24-S1
STRUCTURAL ALUMINUM FRAME
ROOF FRAMING PLAN, CROSS SECTION
AND ROOF FRAMING DETAILS

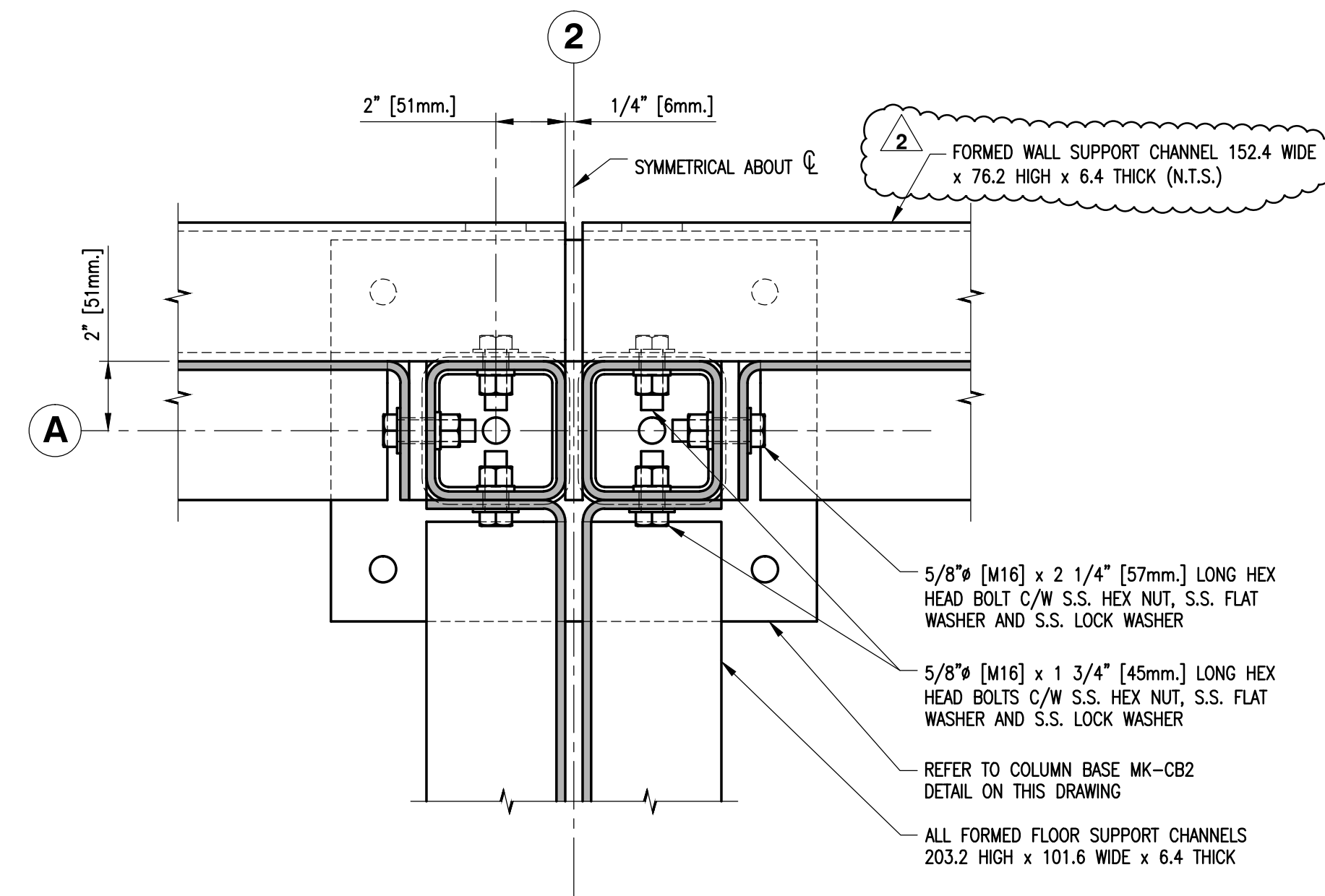
DESIGNED: M. Liang
DRAWN: G. Reichardt
CHECKED: []
RECOMMENDED: []
APPROVED: []
APPROVED: []

SCALE: AS NOTED
DATE: JULY 5, 2013
DWG. NUMBER: 4-30-5-SF
SHEET: 2 of 8
SIZE: D

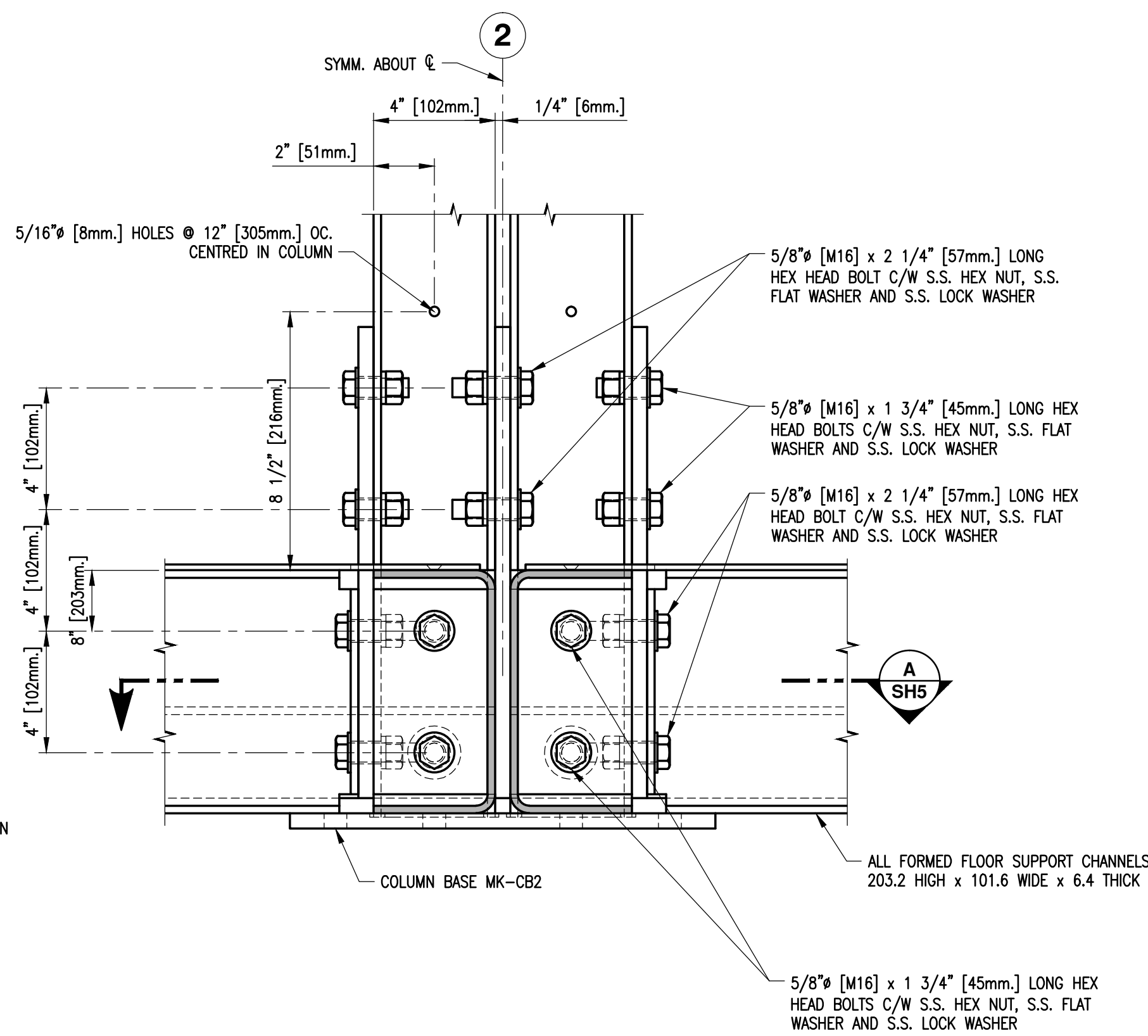
REVISION: 2



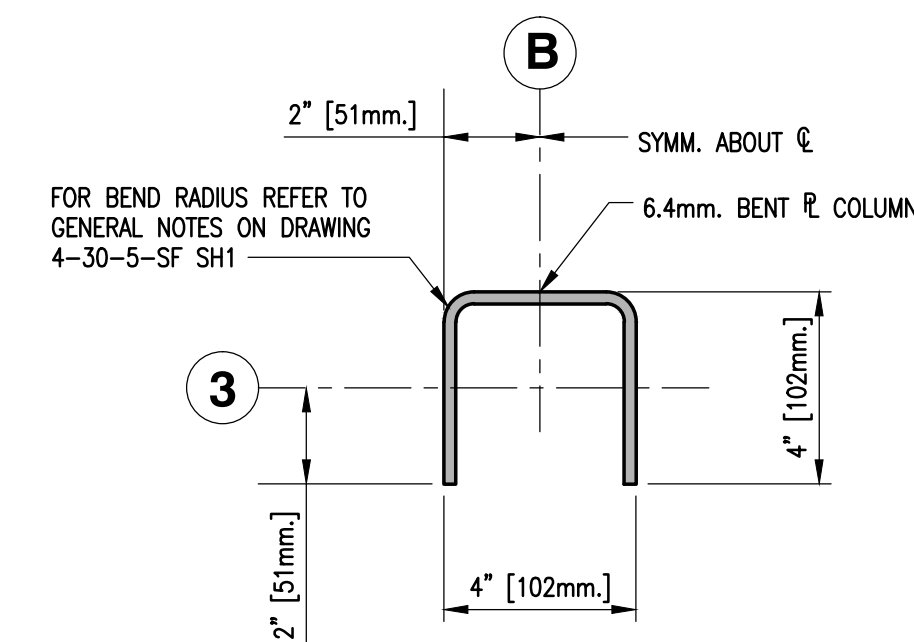
COLUMN PLAN
SCALE 1:24



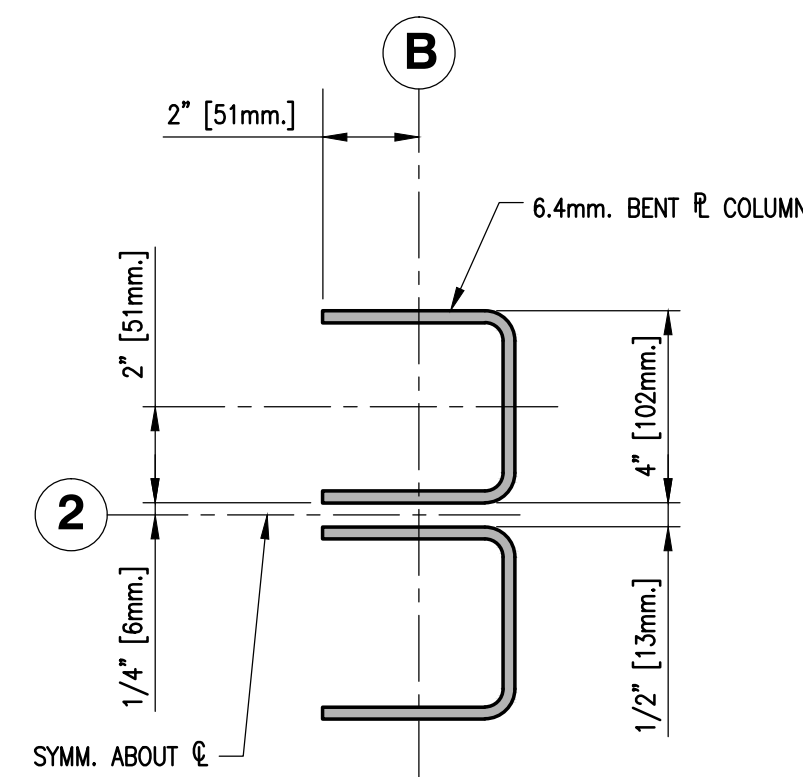
SECTION A
SCALE 1:4



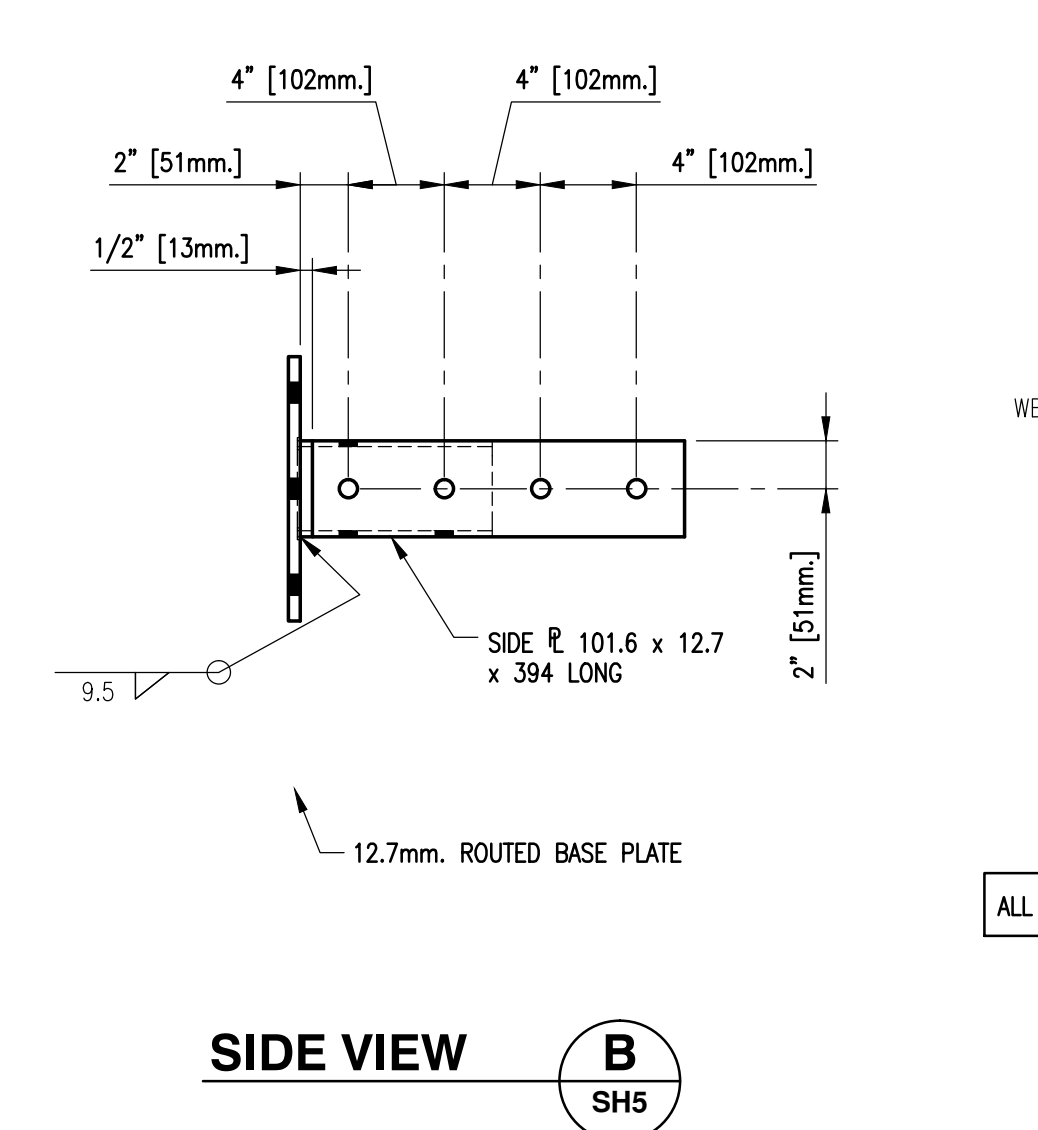
DETAIL 1
SCALE 1:4



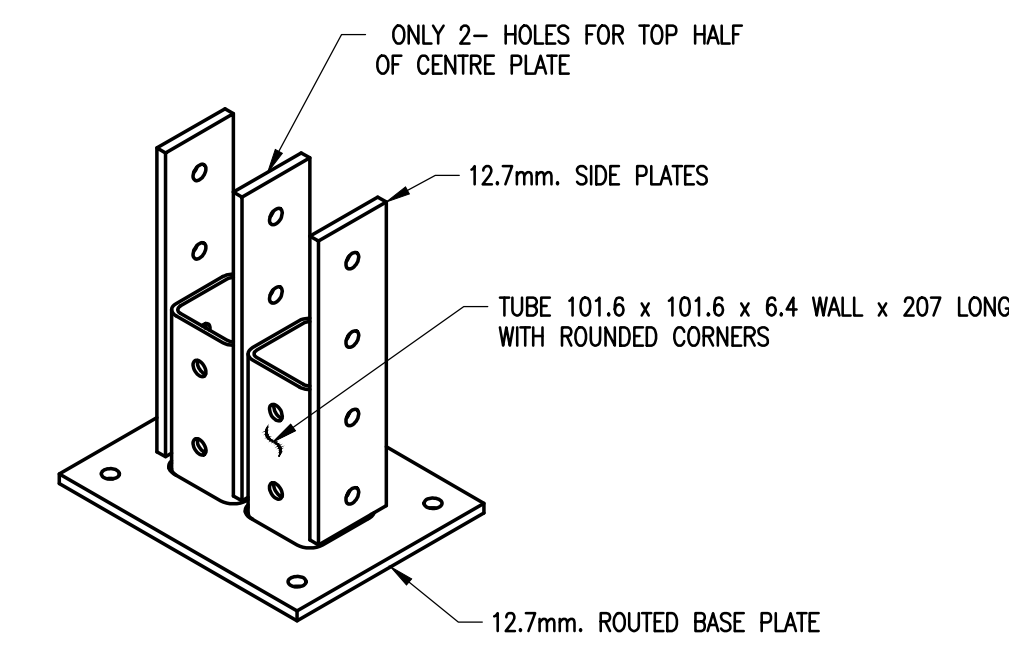
DETAIL 1
SCALE 1:4



DETAIL 2
SCALE 1:4

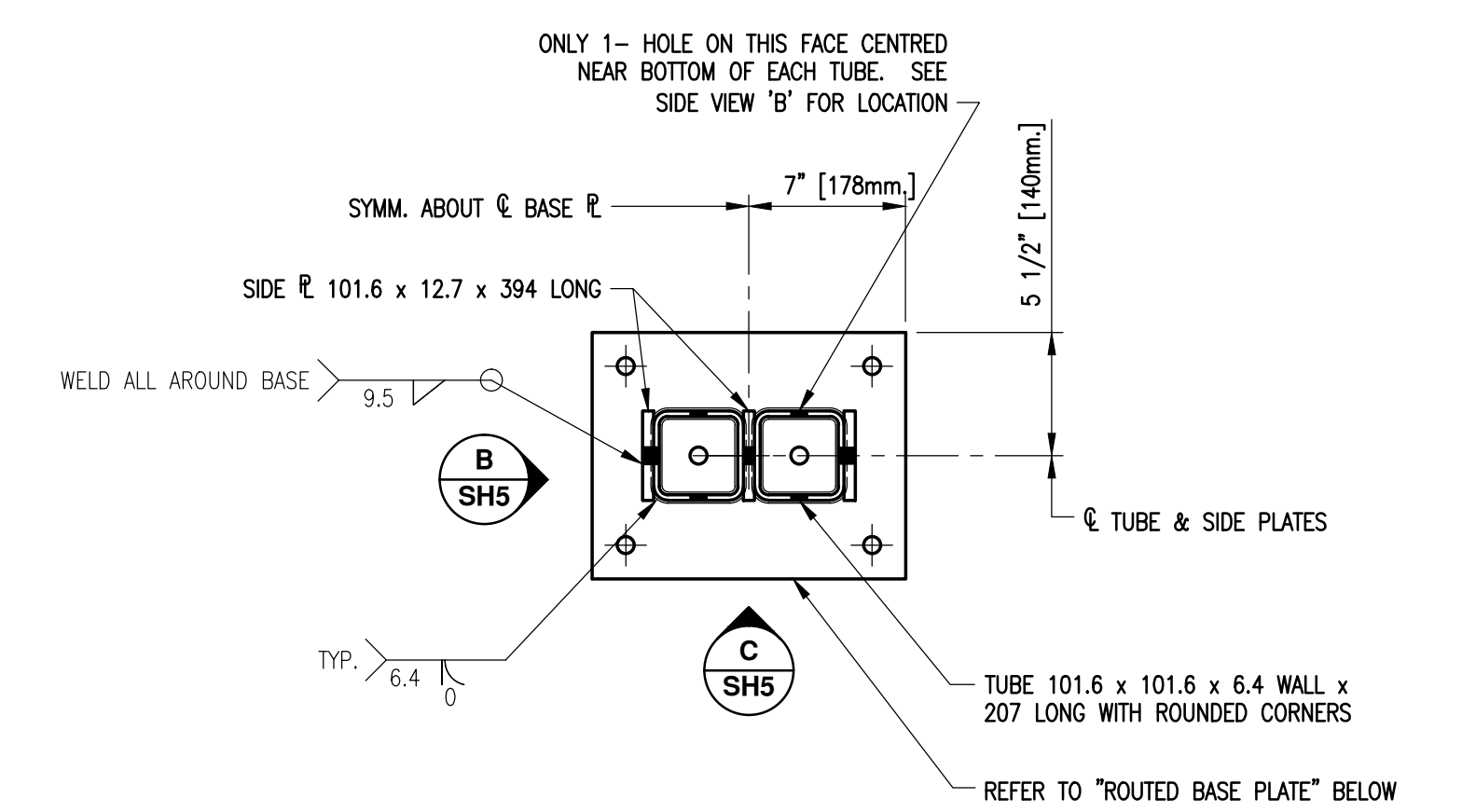


SIDE VIEW B
SCALE 1:8

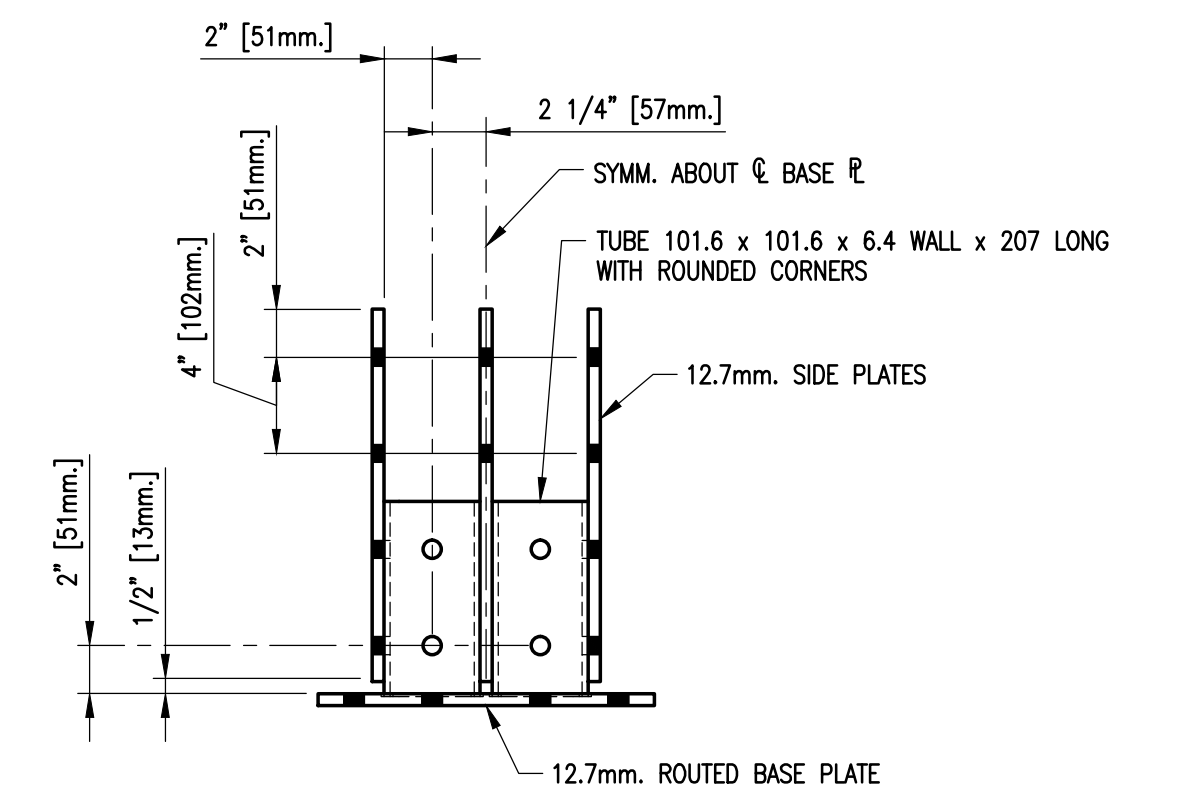


3D VIEW

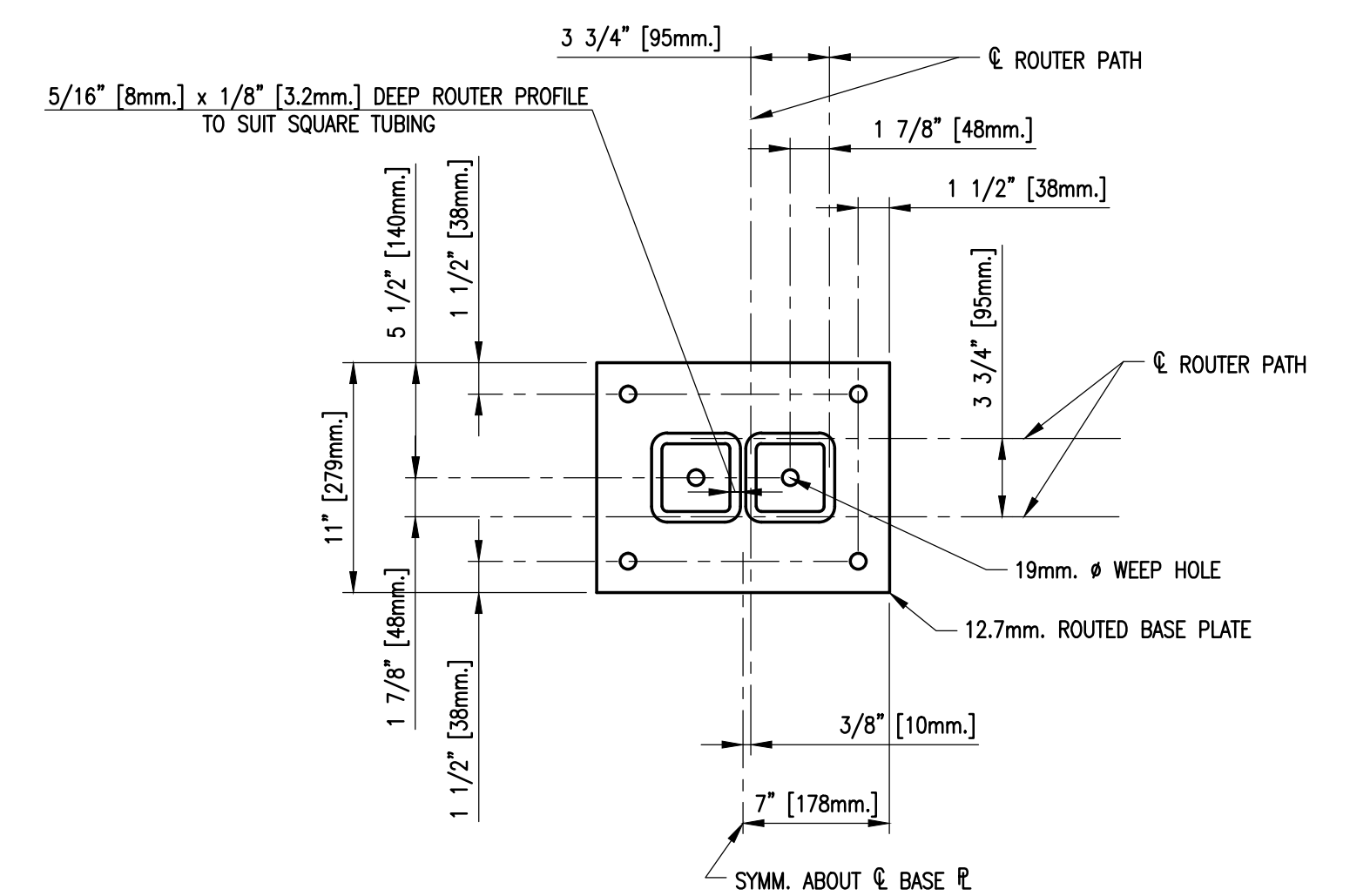
MAKE TWO (2) ALUMINUM COLUMN BASES MK-CB2
SCALE 1:8



PLAN



SIDE VIEW C
SCALE 1:8



ROUTED BASE PLATE

1. FOR GENERAL NOTES, LEGEND AND DRAWING INDEX REFER TO DRAWING 4-30-5-SF SH1.

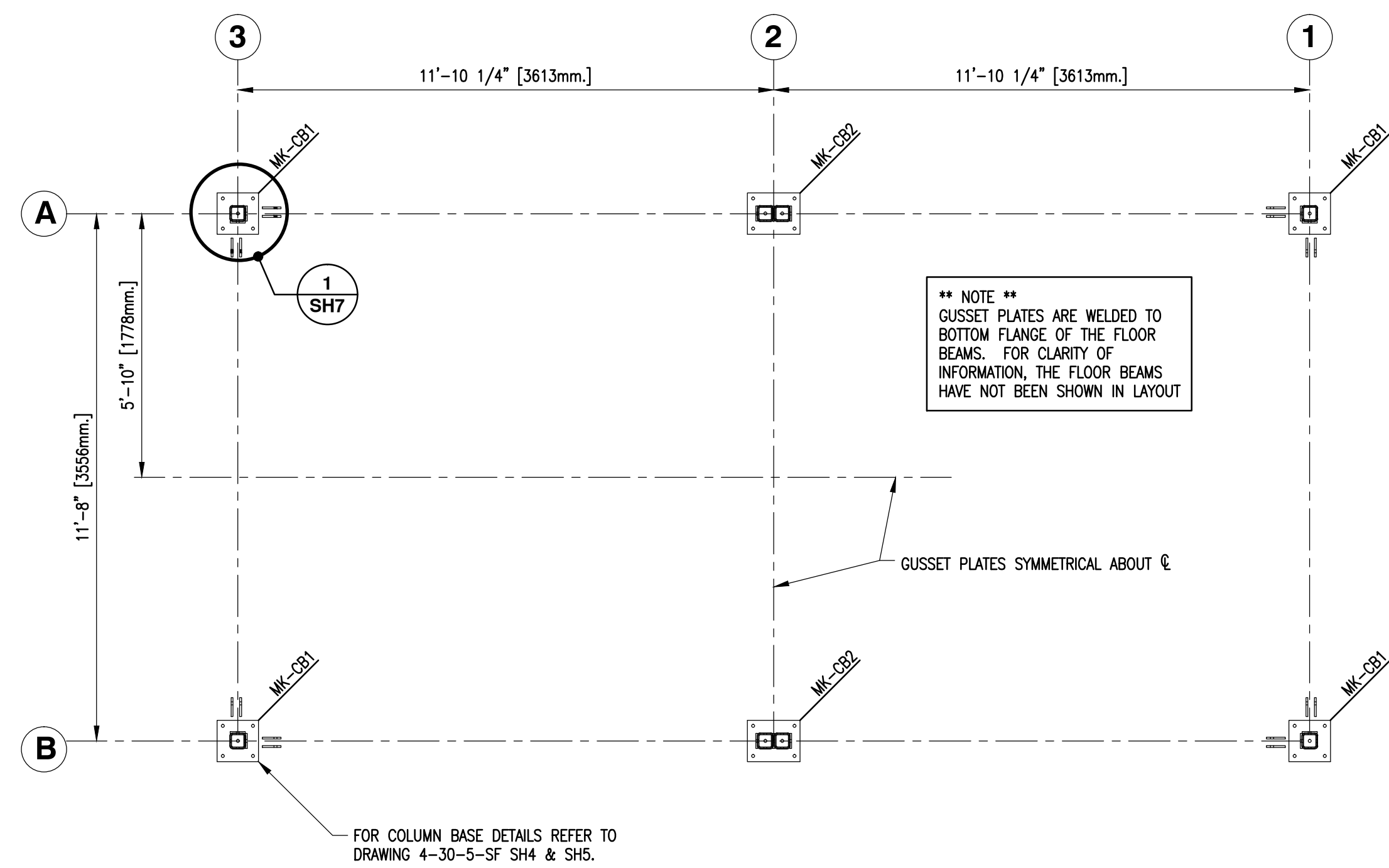
N.O.	DATE	REVISIONS
2	JAN. 15, 2014	FORMED WALL SUPPORT CHANNELS 152.4 WIDE x 76.2 HIGH x 6.4 THICK (N.T.S.) ALL AROUND BASE OF BUILDING WAS 101.6 WIDE x 76.2 HIGH x 6.4 THICK. ISSUED FOR FABRICATION.
1	NOV. 18, 2013	ALL COLUMN BASE PLATE SIZES DECREASED.
0	SEPT. 19, 2013	ISSUED ONLY FOR TENDERING PURPOSES; NOT FOR CONSTRUCTION.

DESIGNED	M. Liang
DRAWN	G. Reichardt
CHECKED	
RECOMMENDED	
APPROVED	

FISHERIES AND OCEANS CANADA
REAL PROPERTY, SAFETY & SECURITY

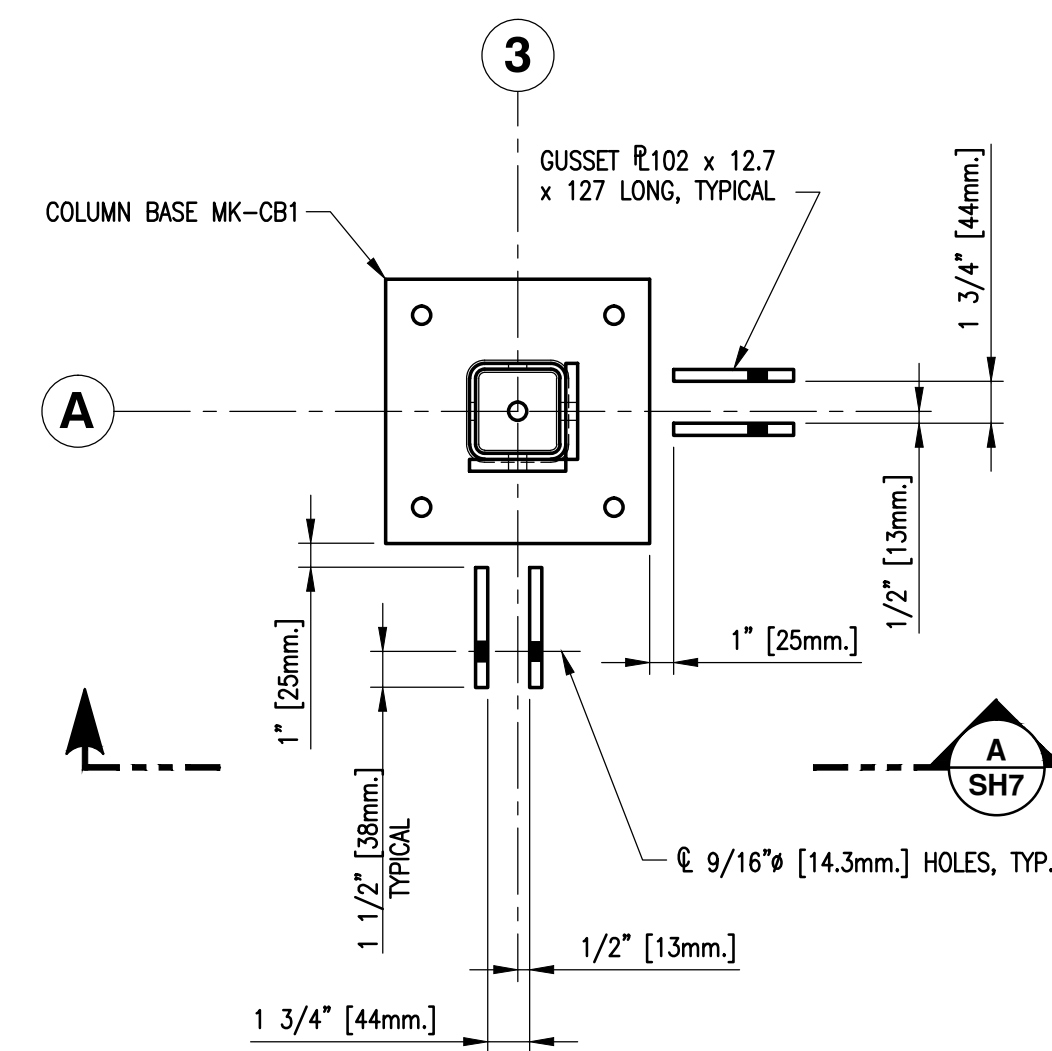
PREFABRICATED BUILDING
MODEL 12X24-S1
STRUCTURAL ALUMINUM FRAME
COLUMN PLAN AND
COLUMN BASE MK-CB2
SECTIONS AND DETAILS

SCALE	AS NOTED
DATE	JULY 5, 2013
DWG. NUMBER	4-30-5-SF
SHEET	5 of 8
SIZE	D
REVISION	



CABLE BRACING GUSSET PLATE LAYOUT

SCALE 1:32

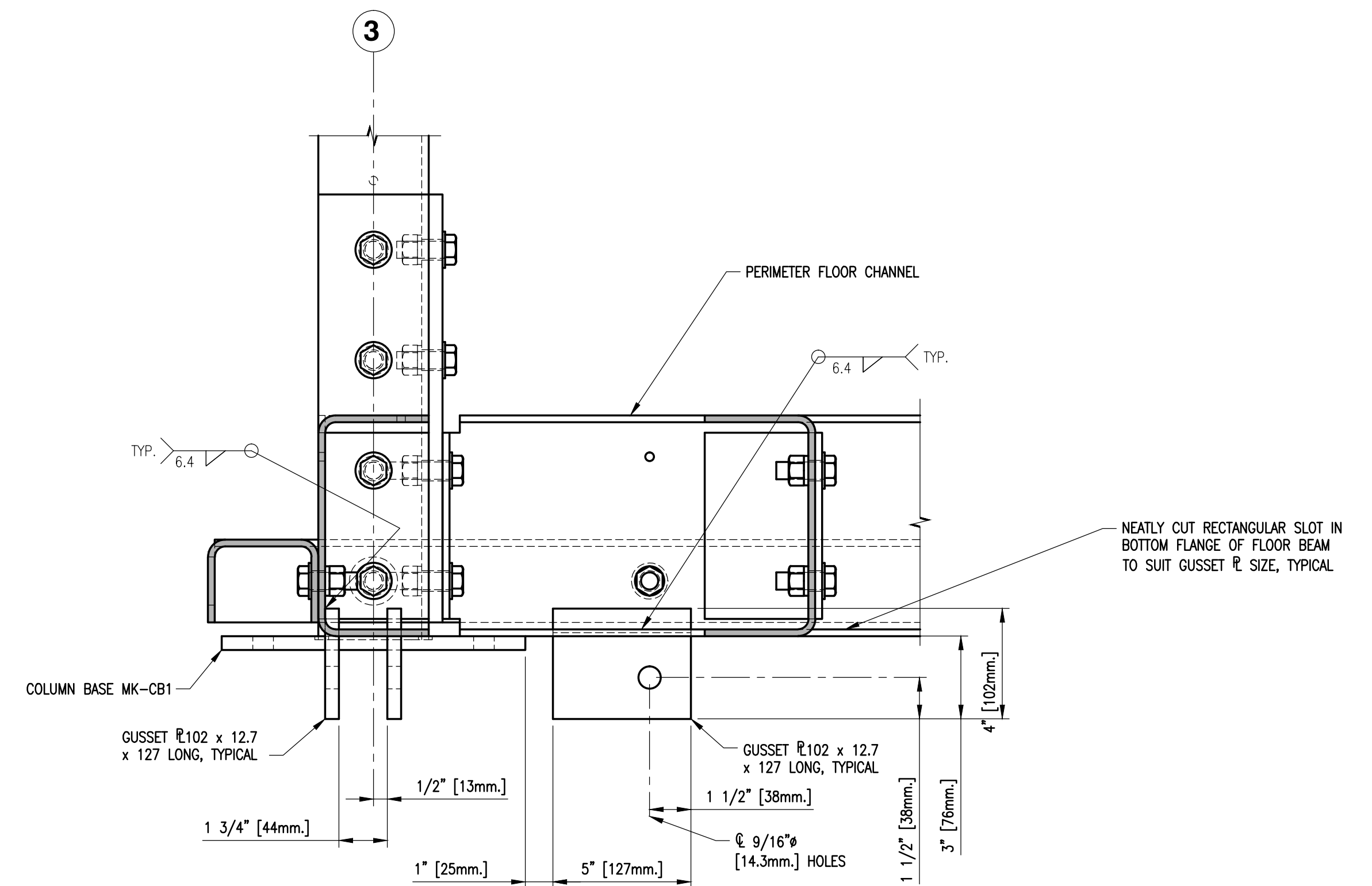


DETAIL

SCALE 1:8

1

SH7



SECTION

SCALE 1:4

A

SH7

TYPICAL GUSSET PLATE CONNECTIONS TO FLOOR BEAMS

1. FOR GENERAL NOTES, LEGEND AND DRAWING INDEX REFER TO DRAWING 4-30-5-SF SH1.

FISHERIES AND OCEANS CANADA REAL PROPERTY, SAFETY & SECURITY										
PREFABRICATED BUILDING MODEL 12X24-S1 STRUCTURAL ALUMINUM FRAME CABLE BRACING GUSSET PLATE LAYOUT, SECTION AND DETAILS	SCALE AS NOTED DATE JULY 5, 2013 DWG. NUMBER 4-30-5-SF SHEET 7 of 8 SIZE D									
DESIGNED M. Liang DRAWN G. Reichhardt CHECKED RECOMMENDED APPROVED APPROVED	REVISIONS <table border="1"> <tr> <th>N.O.</th> <th>DATE</th> <th>REVISIONS</th> </tr> <tr> <td>1</td> <td>JAN. 15, 2014</td> <td>ISSUED FOR FABRICATION.</td> </tr> <tr> <td>2</td> <td>NOV. 18, 2013</td> <td>DRAWING ADDED TO TENDER PACKAGE. ISSUED ONLY FOR TENDERING PURPOSES; NOT FOR CONSTRUCTION.</td> </tr> </table>	N.O.	DATE	REVISIONS	1	JAN. 15, 2014	ISSUED FOR FABRICATION.	2	NOV. 18, 2013	DRAWING ADDED TO TENDER PACKAGE. ISSUED ONLY FOR TENDERING PURPOSES; NOT FOR CONSTRUCTION.
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2	NOV. 18, 2013	DRAWING ADDED TO TENDER PACKAGE. ISSUED ONLY FOR TENDERING PURPOSES; NOT FOR CONSTRUCTION.								

DWG. NO. DRAWING REFERENCES

NOTES


N.O. DATE REVISIONS

REVISION

**THE STAIR UNIT (NOT SHOWN) HAS BEEN
ELIMINATED FROM THE PROCUREMENT
PACKAGE**

DESIGNED	M. Liang
DRAWN	G. Reichhardt
CHECKED	
RECOMMENDED	
APPROVED	
APPROVED	

**PREFABRICATED BUILDING
MODEL12X24-S1
STRUCTURAL ALUMINUM FRAME
EXTERIOR STAIRS
PLANS, SECTIONS AND DETAILS**

SCALE	AS NOTED
DATE	JULY 5, 2013
DWG. NUMBER	4-30-5-SF
SHEET	8 of 8
SIZE	D
REVISION	

DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS