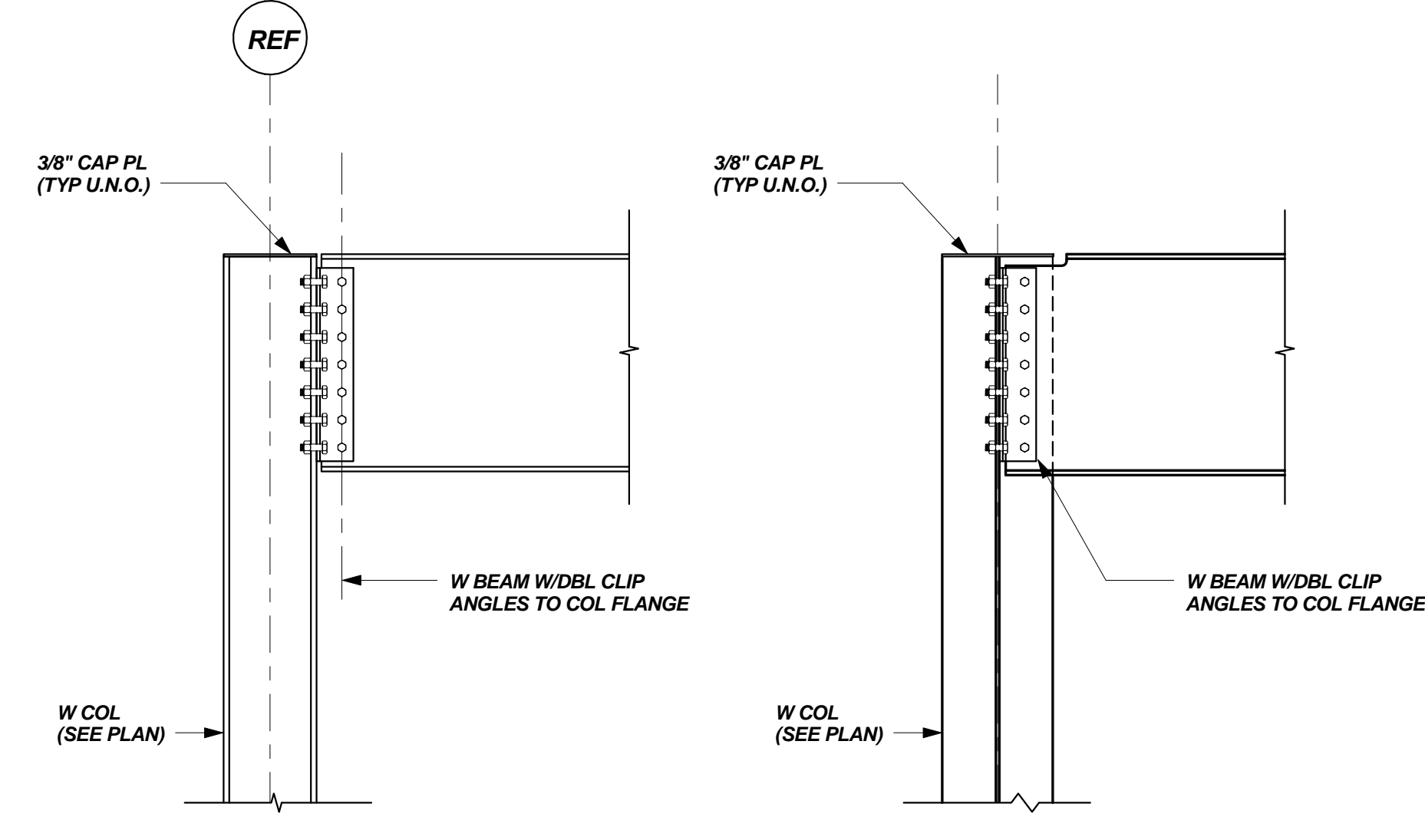
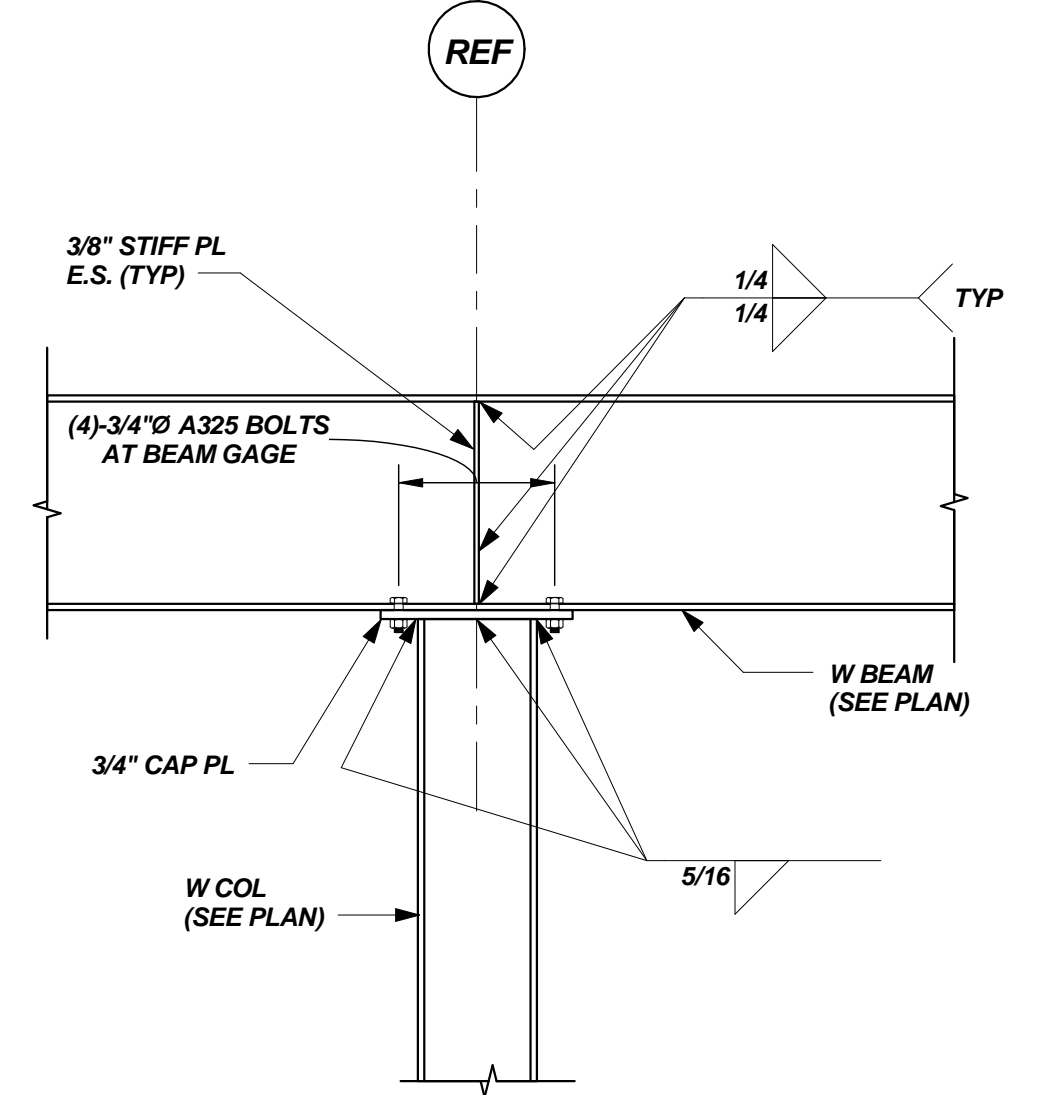


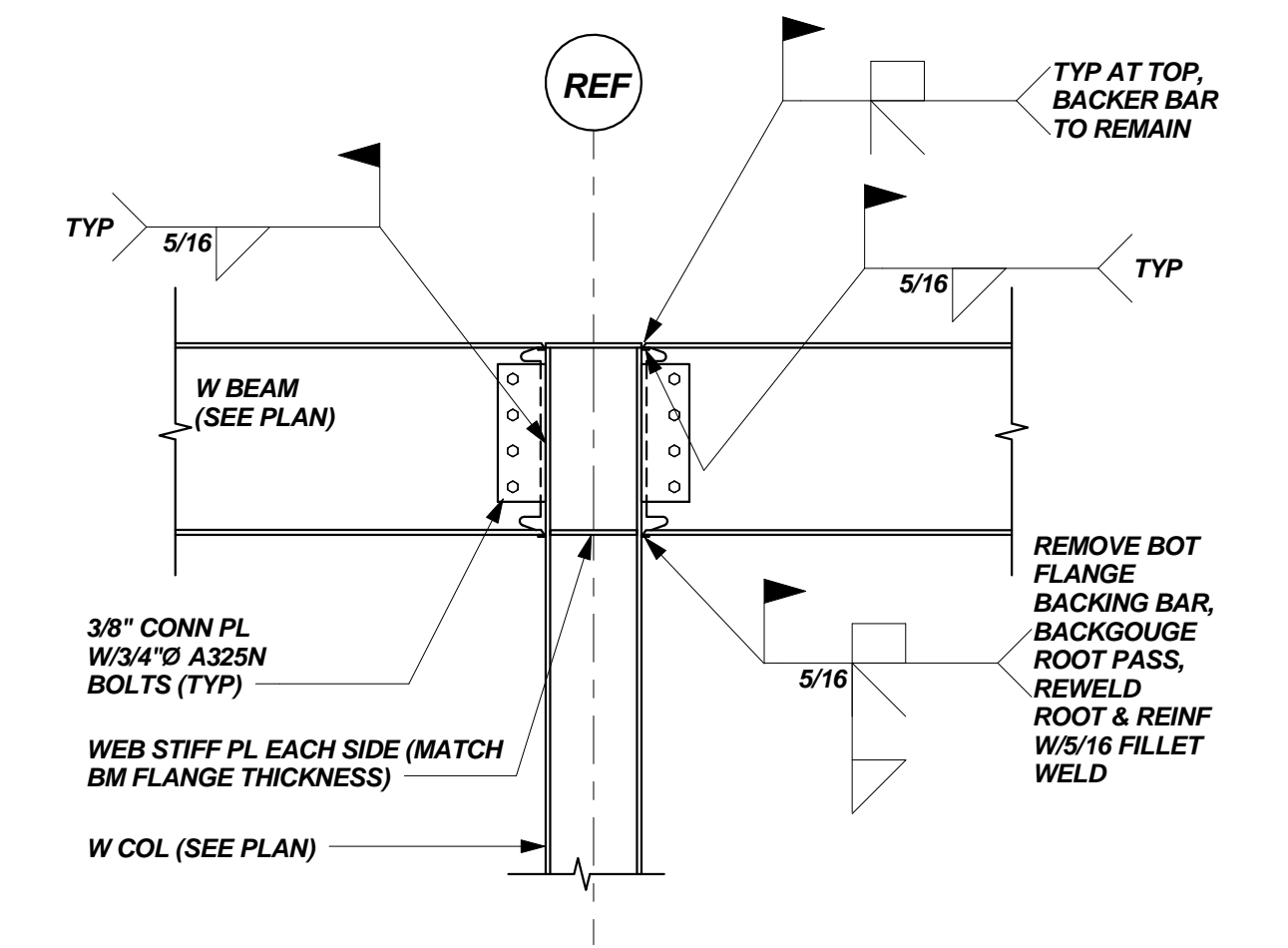
TYP BEAM TO HSS COL CONN U.N.O.
N.T.S.



TYP BEAM TO W COL CONN DETAILS
N.T.S.



TYP BEAM OVER COL CONN DETAIL
N.T.S.

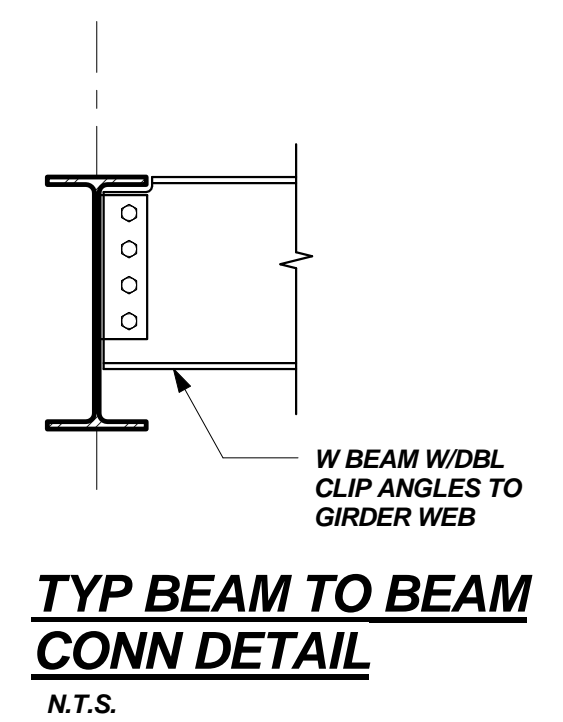


TYP W COL WELDED MOMENT CONN DETAIL U.N.O.
N.T.S.

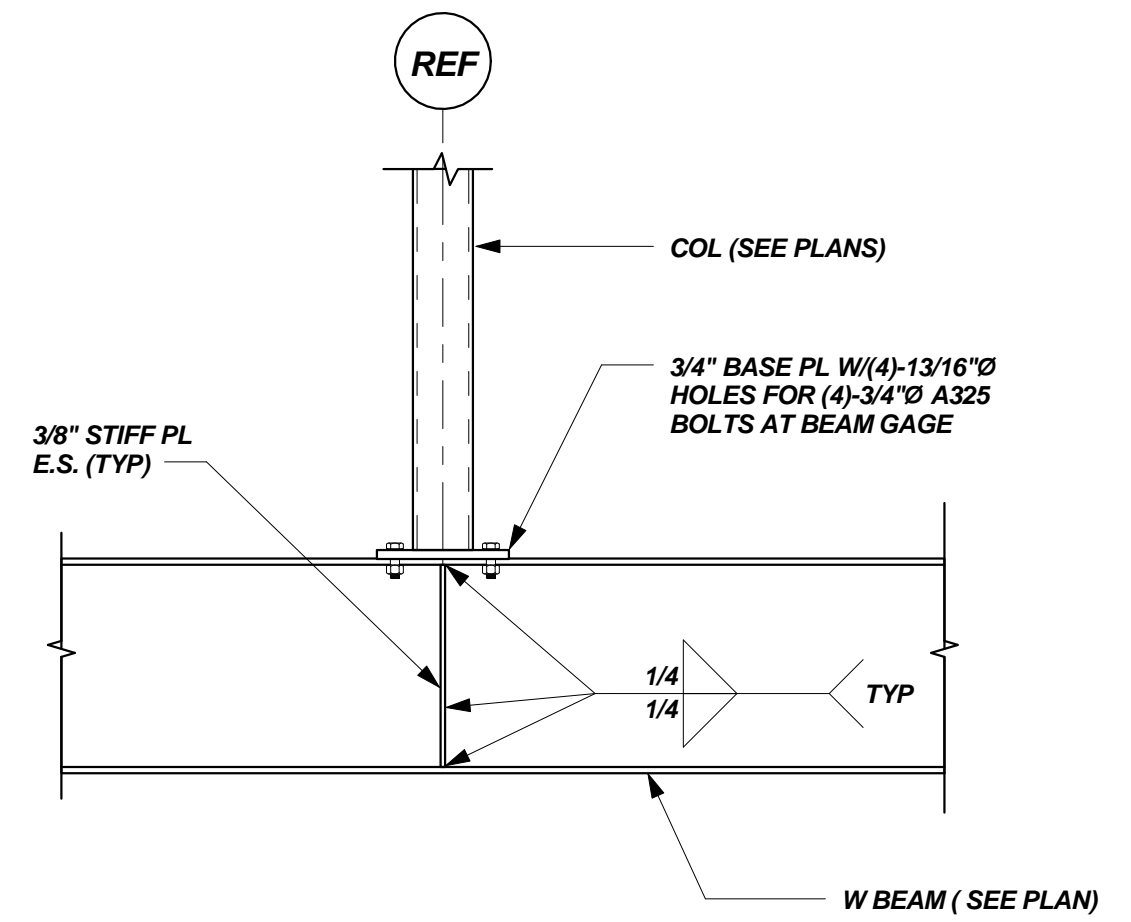
SIMPLE SHEAR BEAM CONNECTION SCHEDULE

BEAM SIZE	DESIGN REACTION	MIN No. BOLTS - ONE SIDED CONNECTION	MIN No. BOLTS - TWO SIDED CONNECTION
W8/W10	25 K	2	2
W12/W14	30 K	3	2
W16	40 K	4	3
W18	90 K	5	3
W21	60 K	5	4
W24	60 K	6	4
W30	60 K	7	5

- SIMPLE SHEAR CONNECTIONS NOTES:**
1. SIMPLE SHEAR CONNECTIONS SHALL BE SELECTED FROM THE AISC "MANUAL OF STEEL CONSTRUCTION, THIRTEENTH EDITION" USING THE ABOVE REFERENCED REACTIONS AND CRITERIA. REACTIONS INDICATED ARE UNFACTORED (SERVICE LEVEL LOADS). MORE BOLTS THAN REFERENCED IN THE "MINIMUM" SECTIONS ABOVE MAY BE REQUIRED FOR LOAD REQUIREMENTS.
 2. CONNECTIONS ARE SUBJECT TO REVIEW ON THE STEEL SHOP DRAWINGS.
 3. ALL BOLTS SHALL BE A325 OR A490 FOR SIMPLE SHEAR CONNECTIONS, MIN 3/4"Ø. MINIMUM WELD SIZE SHALL BE 5/16". MINIMUM ANGLE/PLATE THICKNESS SHALL BE 3/8".
 4. ONE SIDED CONNECTIONS INCLUDE SINGLE PLATES AND SINGLE ANGLE CONNECTIONS.
 5. TWO SIDED CONNECTIONS INCLUDE DOUBLE ANGLE AND END PLATE CONNECTIONS.



TYP BEAM TO BEAM CONN DETAIL
N.T.S.

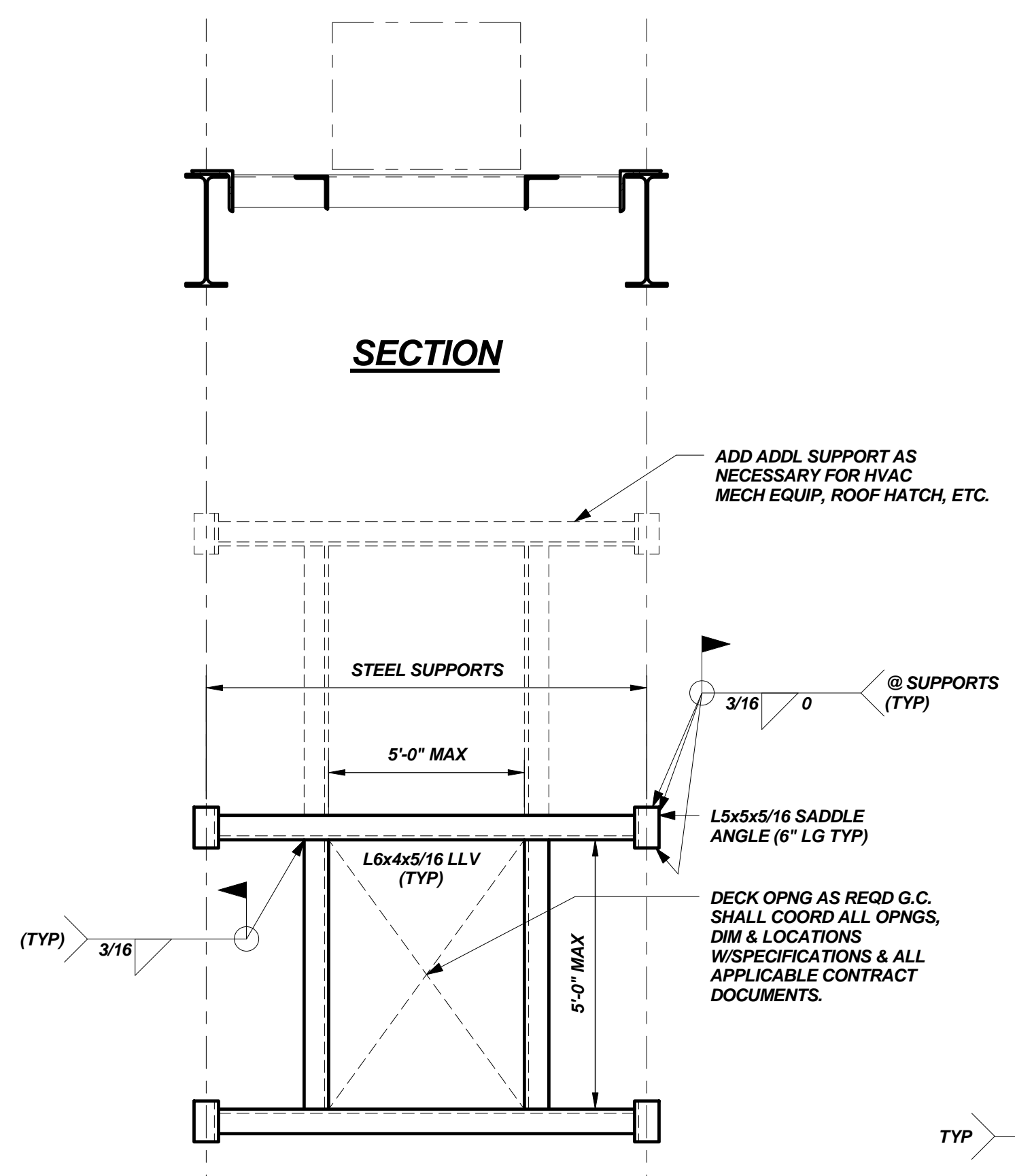


TYP COL TRANSFER DETAIL U.N.O.
N.T.S.

MOMENT CONNECTION SCHEDULE

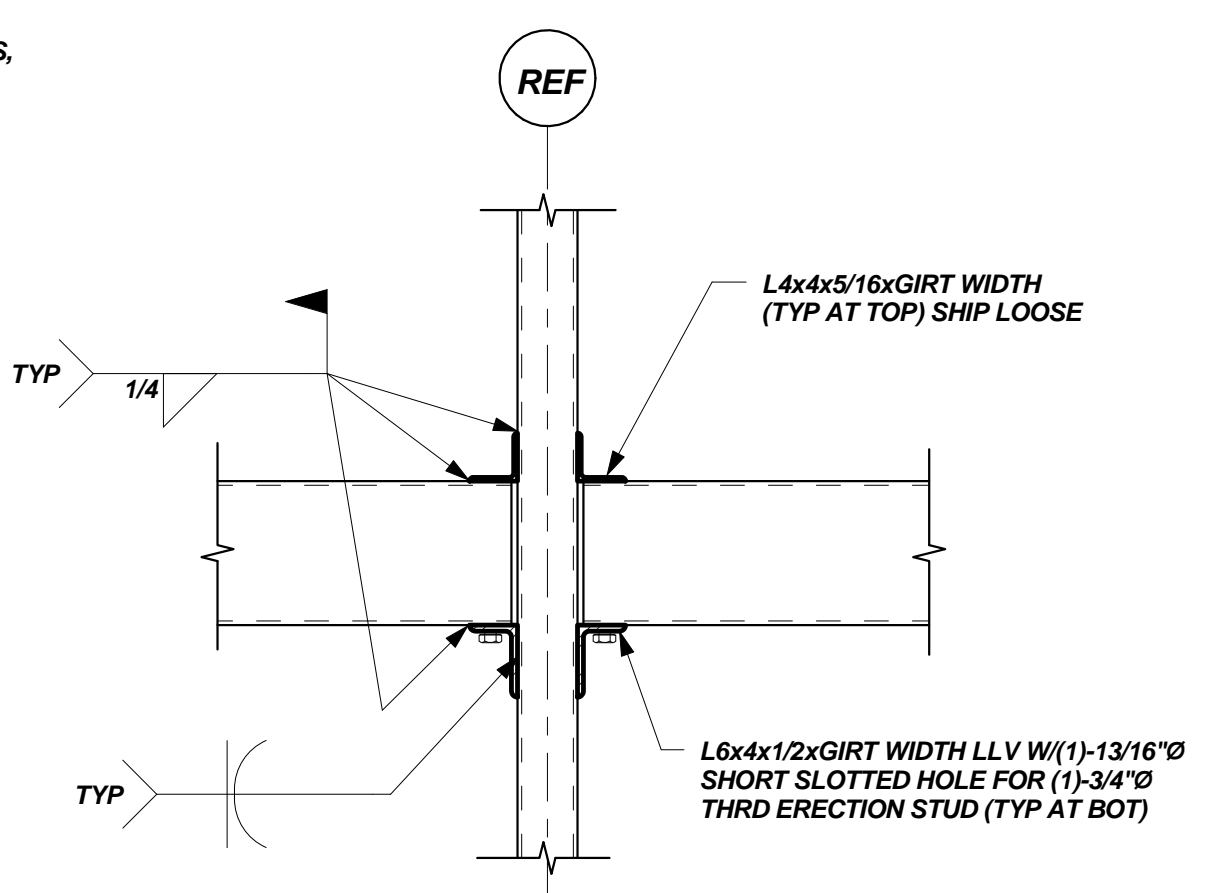
BEAM SIZE	DESIGN MOMENT
W8	15 ft-K
W10W12	25 ft-K
W14	30 ft-K
W16	55 ft-K
W18	25 ft-K
W21	40 ft-K

- MOMENT CONNECTION SCHEDULE NOTES:**
1. ALL MOMENTS PROVIDED ARE BASED ON WORST CASE ALLOWABLE STRESS DESIGN LOAD COMBINATIONS.
 2. MOMENT CONNECTIONS MAY BE DESIGNED AS BOLTED OR WELDED.
 3. PROVIDE MIN (2) ROWS OF BOLTS FOR BOLTED CONNECTIONS.

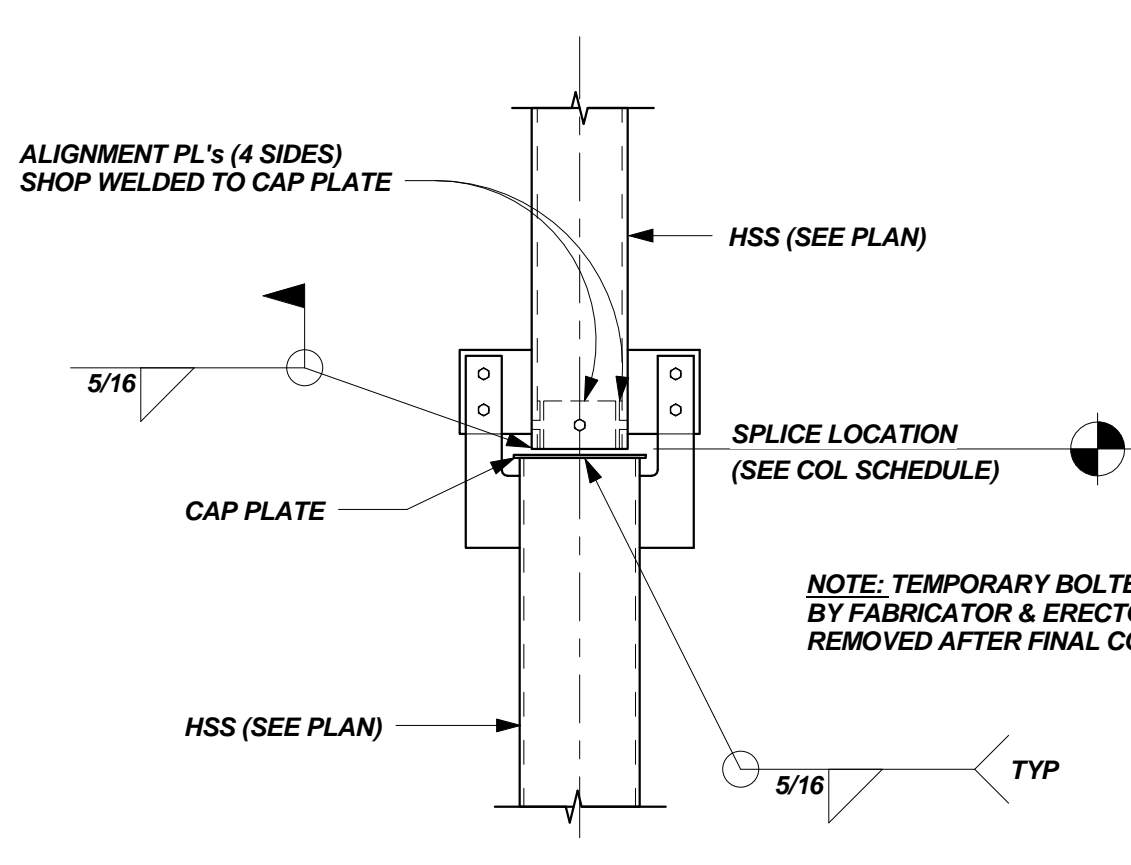


PLAN OF TYP OPENING IN ROOF & FLOOR DECK
N.T.S.

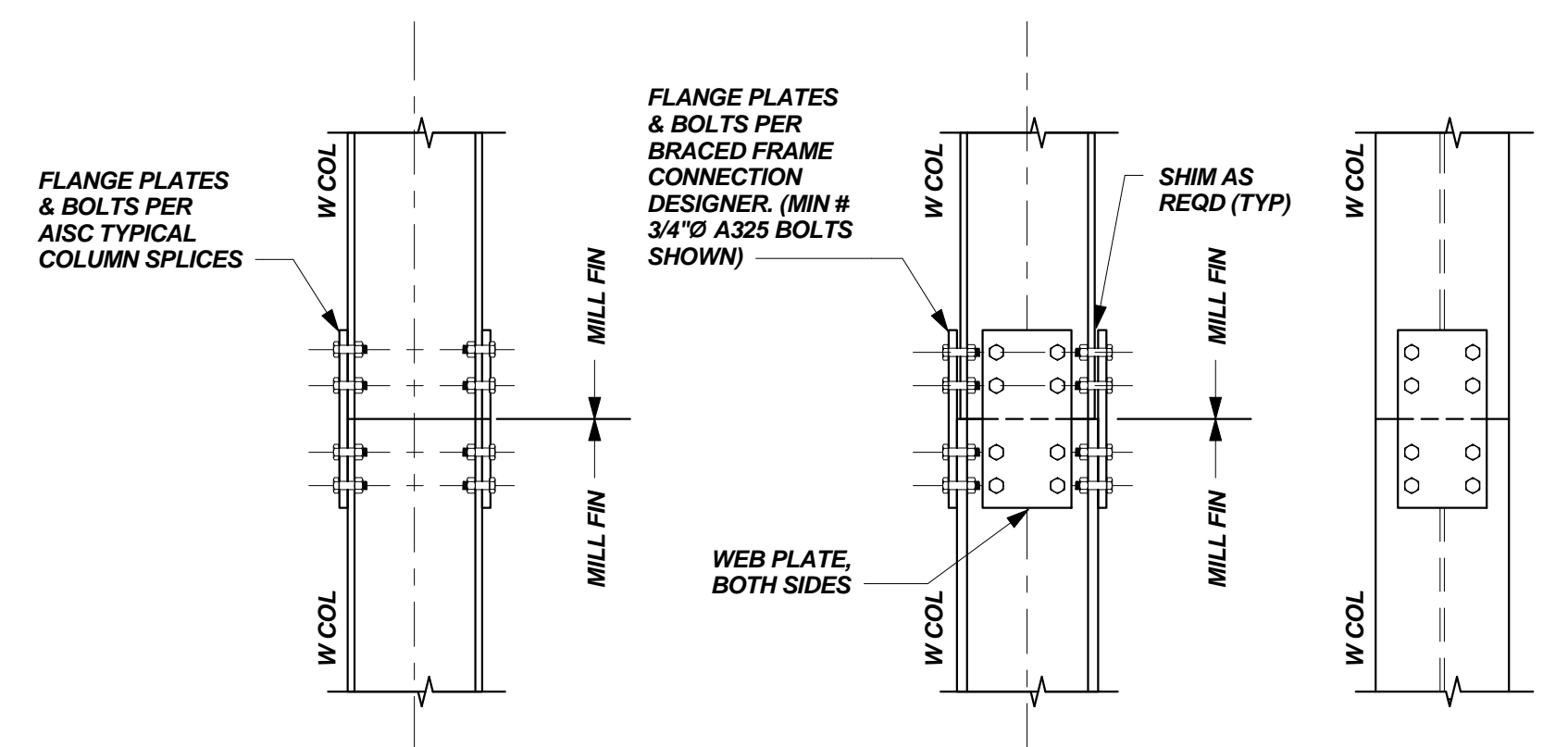
- NOTES:**
1. DETAIL TYPICAL AT ROOF & FLOOR LEVELS TO INCLUDE DRAINS, EXHAUST STUBS AND OTHER MECH AND HVAC EQUIP IF OPENING IS LARGER THAN 10"Ø OR CUTS MORE THAN (2) DECK RISERS. FOR OPENINGS LESS THAN 12"Ø, OR GREATER THAN 3", REINFORCING W/16GA MIN PL. MIN PL LENGTH SHALL BE "D"+4". EXTEND AS REQD FOR 2" MIN BRG ON DECK RISER.
 2. AT GROUPS OF CORE DRILLED HOLES, PROVIDE ANGLE FRAME AROUND GROUP UNLESS INDIVIDUAL HOLES ARE SEPARATED BY A MINIMUM OF 12" EDGE TO EDGE.



TYP HSS GIRT TO HSS COL DETAIL U.N.O.
N.T.S.

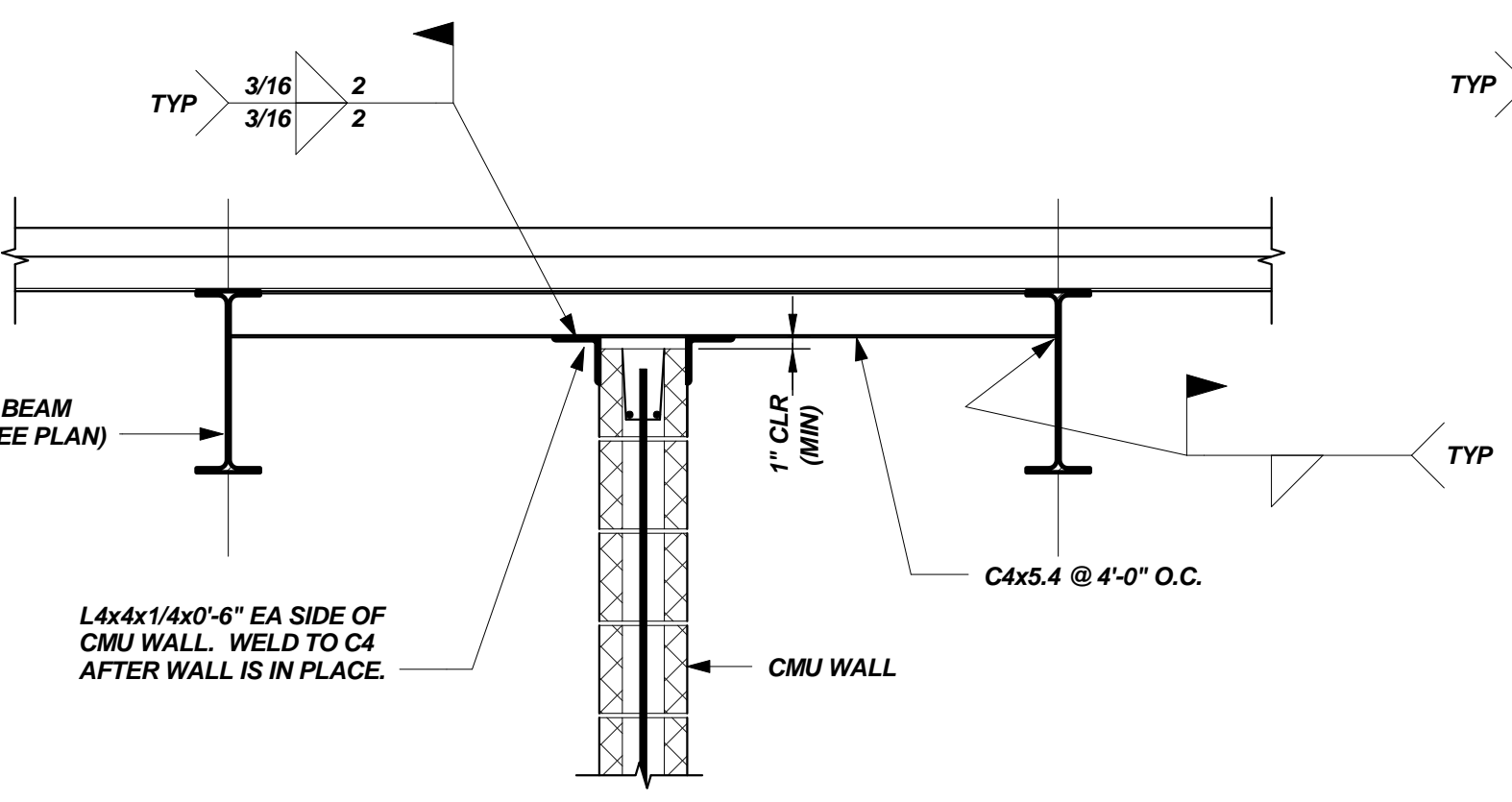


TYP HSS COL SPLICE DETAILS U.N.O.
N.T.S.

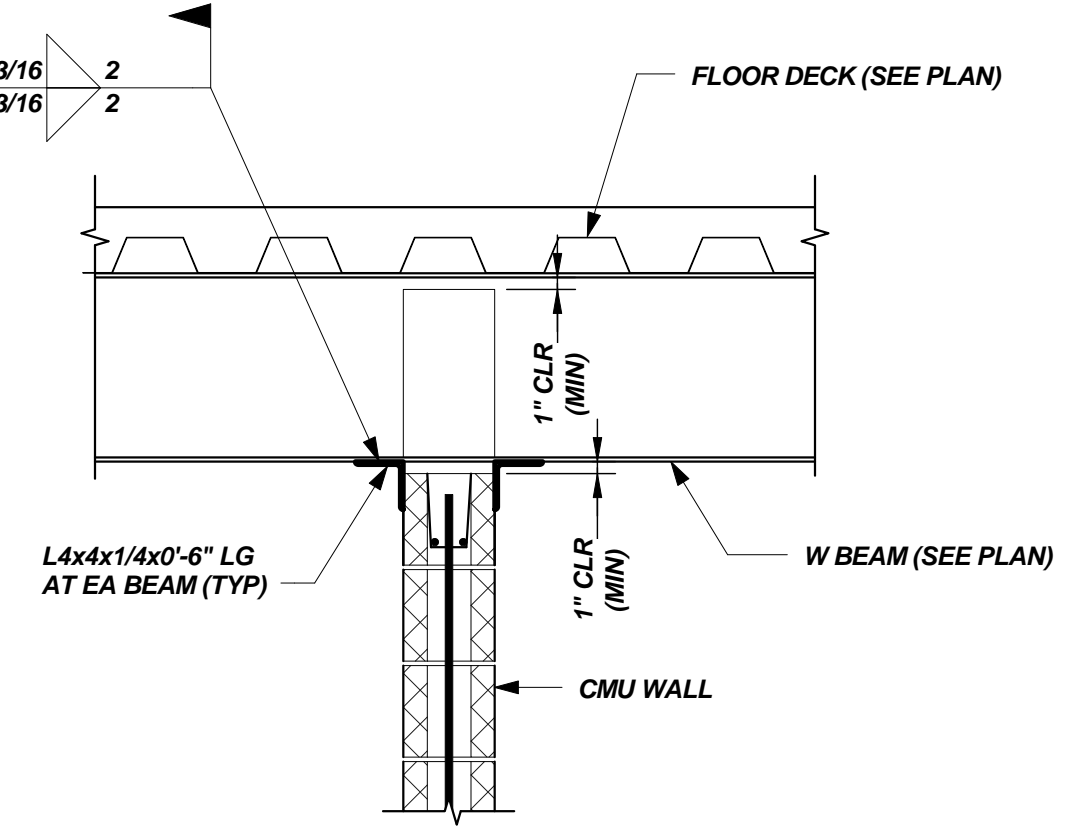


TYP W COL SPLICE DETAILS
N.T.S.

- NOTES:**
1. COLUMN SPLICE PLATES/BOLTS ARE TO BE SIZED BY THE CONNECTION DESIGN ENGINEER. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
 2. WEB CONNECTION IS REQUIRED. DO NOT OMIT IN CONNECTION DESIGN.
 3. MILL COLUMN ENDS FOR UNIFORM BEARING.
 4. COLUMNS AT BRACED FRAMES SHALL BE DESIGNED FOR 60 K AXIAL FORCE.



WALL PARALLEL TO FLOOR FRAMING
N.T.S.



WALL PERPENDICULAR TO FLOOR FRAMING
N.T.S.

TYP LATERAL RESTRAINTS AT TOP OF CMU PARTITION WALLS
N.T.S.

- NOTES:**
1. TOP RESTRAINT ANGLES FOR MASONRY WALLS REQD @ 4'-0" O.C. MAX.
 2. REFER TO ARCH DWGS FOR EXTENTS OF NON-STRUCTURAL PARTITION WALLS.

The Park Danforth

77 Stevens Ave, Portland, ME 04103

NO.	DESCRIPTION	DATE

CONTENT:
TYPICAL STEEL SECTIONS & DETAILS

DRAWN BY: A.P.P.
PROJECT NO: 3422
DATE: 05/27/15
REVISED:
SCALE: As indicated

S3.1

Project Phase
Package 2 - Foundations and Structural Steel
COPYRIGHT © 2014 BY LAVALLEE|BRENSINGER PROFESSIONAL ASSOCIATION. ALL RIGHTS RESERVED. NO REPRODUCTION WITHOUT PERMISSION.