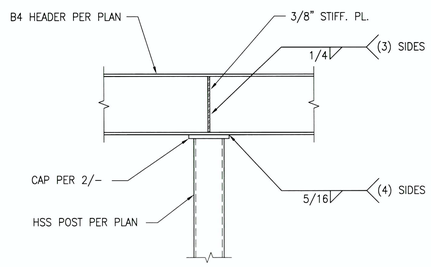
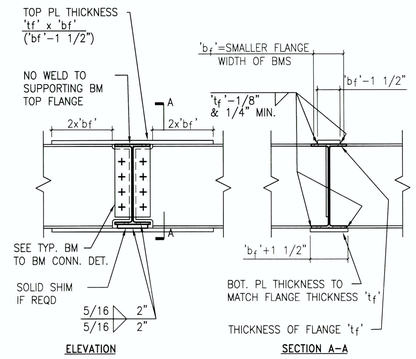
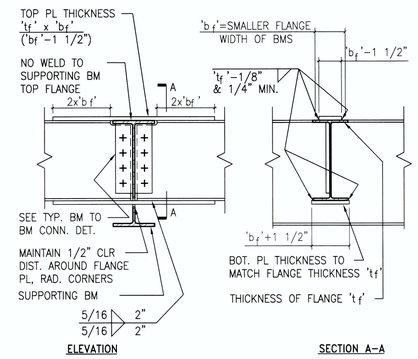
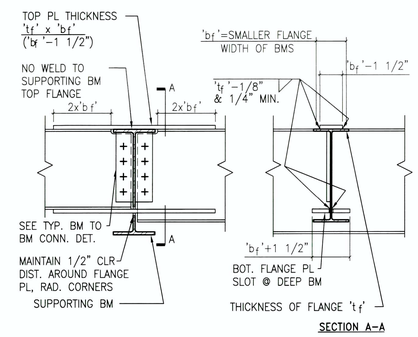




A BEAM W/ SAME DEPTH



B BEAM W/ VARYING DEPTH



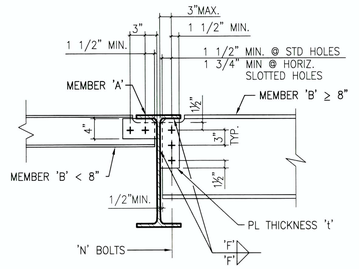
C STEPPED BEAMS

9 BM TO BM MOMENT CONNECTION
N.T.S.

BEAM CONNECTION SCHEDULE				
NOMINAL MEMBER DEPTH	SHEAR PL THICKNESS ('t')	FASTENERS A325-X U.O.N. ('N')	WELD SIZE ('F')	REMARKS
LESS THAN 8"	3/8"	(2)-7/8" ø	5/16"	
8" THRU 10"	3/8"	(2)-7/8" ø	5/16"	
12" THRU 14"	3/8"	(3)-7/8" ø	5/16"	
16" THRU 18"	1/2"	(4)-7/8" ø	3/8	
21"	1/2"	(5)-7/8" ø	3/8"	
24"	1/2"	(6)-7/8" ø	3/8"	
27"	1/2"	(7)-7/8" ø	3/8"	
30"	1/2"	(8)-7/8" ø	3/8"	

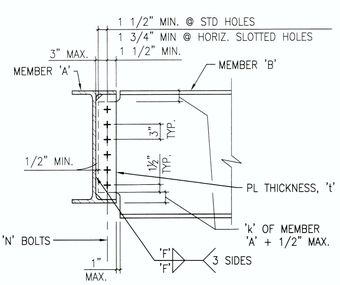
NOTES:
1. BOLT HOLES TO BE STD HOLES 1/16" GREATER THAN BOLT DIAMETER. SHORT SLOTTED HOLES IN SHEAR PL MAY BE USED ONLY WHERE NOTED.
2. BOLTS TO BE FULLY PRETENSIONED W/ HARDENED WASHERS, U.O.N.
3. SCHEDULE BASED ON NOMINAL DEPTH OF WIDE FLANGE BEAMS, CHANNELS, TUBES, & OTHER MISCELLANEOUS SHAPES.
4. SLIP CRITICAL BOLTS ARE NOT REQUIRED U.O.N. CHANNELS, TUBES, & OTHER MISCELLANEOUS SHAPES.

4 BOLTED BEAM CONNECTION SCHEDULE
N.T.S.



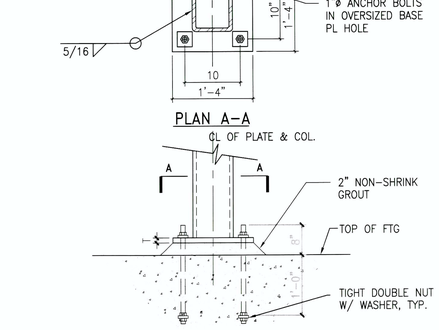
NOTES:
1. FOR WELD 'F', NUMBER OF BOLTS 'N' & PL THICKNESS 't', SEE BOLTED BM CONNECTION SCHEDULE.
2. SHORT SLOTTED HOLES IN SHEAR PL MAY BE USED.

5 BM TO BM CONNECTION MEMBER 'A' > MEMBER 'B'
N.T.S.



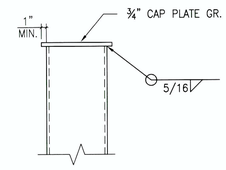
NOTES:
1. SIMILAR CONDITIONS APPLY FOR BMS ON BOTH SIDES OF MEMBER 'A'.
2. FOR WELD SIZE 'F', NUMBER OF BOLTS 'N' & PL THICKNESS 't', SEE BOLTED BM TO BM CONN. SCHED USING MEMBER 'B'.
3. SHORT SLOTTED HOLES IN SHEAR PL MAY BE USED.
4. IF MEMBER 'B' < 8", SEE BM TO BM CONN. – MEMBER 'A' > MEMBER 'B'.

6 BM TO BM CONNECTION MEMBER 'A' ≤ MEMBER 'B'
N.T.S.

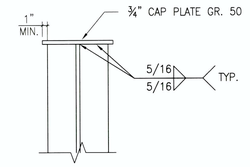


PLAN A-A

1 GRAVITY COLUMN BASE PLATE FOR HSS
N.T.S.

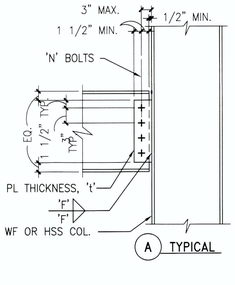


HSS COLUMN

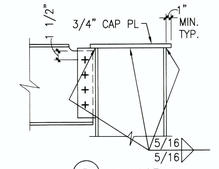


WF COLUMN

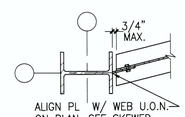
2 COLUMN CAP PLATES
N.T.S.



A TYPICAL



B AT ROOF



C

NOTES:
1. SIMILAR CONDITIONS APPLY FOR BMS ON BOTH SIDES OF COL.
2. FOR WELD SIZE 'F', NUMBER OF BOLTS 'N' & PL THICKNESS 't', SEE BOLTED BM CONNECTION

3 WF TO STRONG-WAY WF OR HSS COLUMN
N.T.S.

Revisions:	Date
BACKCHECK #1	3/25/11
100% CONSTRUCTION DOCUMENTS	9/10/08
95% CONSTRUCTION DOCUMENTS	8/8/08

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REGISTERED PROFESSIONAL ENGINEER ANDREW N. SIRY No. 4809 Exp. 6/30/13 STRUCTURAL STATE OF CALIFORNIA

Drawing Title: **TYPICAL STEEL DETAILS**
Scale: **AS NOTED**
Approved: Project Director

Project Title: **VA Medical Center Seismic Replacement And Retrofit**
Location: **San Francisco, CA**
Date: **10 / 22 / 2012**
Checked:
Drawn:

Project Number: **2941-001-00**
Building Number: **22**
Drawing Number: **S-521**

Office of Facilities Management
Department of Veterans Affairs

one sixteenth inch = one foot 16
one thirty second inch = one foot 16