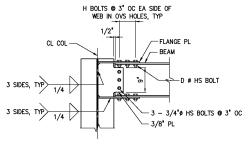


BEAM	D (in)	Н	FLANGE PL
W12x35	7/8"ø	5	3/4"x6 1/2"
W12x53	7/8 " ø	5	3/4"x8 1/2"
W14x43	7/8"ø	6	7/8"x6 1/2"
W18x35	7/8 " ø	5	3/4"x6 1/2"

MOMENT CONNECTION

DETAIL	14	
3/4"=1'-0"	S963	

COLUMN SCHEDULE				
COLUMN	SECTION	BASE PLATE DETAIL	TOP OF COL	BOT OF BASE P
1-A	W12x72	17/S966	922.42	910.08
1-B	W12x72	17/S966	922.00	910.08
1-C & 3-C	W12x72	17/S966	921.58	910.08
2-A	W10x33	18/\$966	922.21	910.08
2-B	W12x72	17/S966	921.79	910.08
2-C	W12x72	17/S966	921.38	910.08
3-A & 8-A	W12x72	17/S966	927.08	910.08
3-B & 8-B	W12x72	17/S966	926.67	910.08
3-D & 8-D	W12x72	17/S966	926.17	910.08
4-A, 5-A, 6-A & 7-A	W10x33	18/S966	926.88	910.08
4-B, 5-B, 6-B & 7-B	W12x72	17/S966	926.46	910.08
4-D, 5-D, 6-D & 7-D	W12x72	17/S966	925.96	910.08



BEAM	D (in)	Н	FLANGE PL
W12x35	7/8"ø	3	1/2"x10 7/8"
W12x53	7/8"ø	3	1/2"x10 7/8"
W18x35	7/8"ø	3	1/2"x10 7/8"

MOMENT CONNECTION

W12 COLUMN

1/2"x14"x14" BASE PLATE CENTERED ON COLUMN

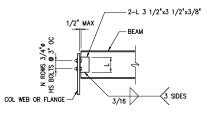
1-7/8" # HEADED A36 ANCHOR BOLTS WITH 12" EMBEDMENT AND 4"
PROJECTION

PROVIDE 1' NONSHRINK GROUT BENEATH BOTTOM OF BASE PLATE

CL COL

3/4"=1'-0"

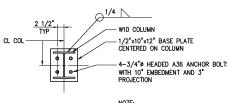
DETAIL	15
3/4"=1'-0"	S963

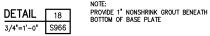


BEAM	L (in)	N
W10x22	5 1/2"	2
W10x33	5 1/2"	2
W12x35	8 1/2"	3
W14x43	8 1/2"	3
W16x50	11 1/2"	4
W18x35	11 1/2"	4

SIMPLE CONNECTION

DETAIL	16
3/4"=1'-0"	S963

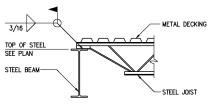




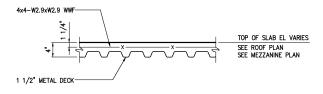
GENERAL STEEL NOTES:

- 1 ALL STEEL STRUCTURES AND MISCELLANEOUS IRON SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH A. I. S. C. "SPECIFICATION FOR DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS AND THE SPEC
- STRUCTURAL JOINTS USING ASTM A325 OR A490*.

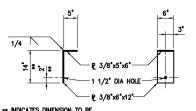
 2 ALL STRUCTURAL STEEL DESIGNED IN ACCORDANCE WITH ABOVE A. I. S. C. SPECIFICATIONS, TYPE I AND TYPE II CONSTRUCTION.
- 3 SHOP CONNECTIONS SHOP WELDING.
- 4 FIELD CONNECTIONS SHALL BE HIGH STRENGTH (H. S.) STEEL BOLTS
 A CONNECTIONS OF BEAMS AND GRDERS TO COLUMNS.
 B CONNECTIONS OF ALL MEMBERS FORMING PART OF THE BRACING SYSTEM OF THE STRUCTURE, INCLUDING MAIN MEMBERS USED AS STRUTS OR TIES IN THE BRACING SYSTEM.
- C SPUCES AND MONORAL BEAM CONNECTIONS.
 D OTHER CONNECTIONS SPECIFICALLY INDICATED ON THE DRAWINGS.
 WHERE BRACING MEMBERS OR HANGERS ARE RIVETED OR BOLTED TO THE
- BOTTOM FLANGES OF BEAMS, BOLTS OR RIVETS SHALL BE PLACED SO THAT ONLY ONE HOLE OCCURS IN ANY CROSS SECTION OF THE BEAM, UNLESS OTHERWISE SHOWN.
- $\,$ 6 GUSSET PLATES SHALL HAVE A MINIMUM THICKNESS OF 5/16".





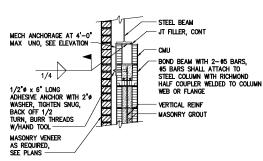


DETAIL 20 1"=1'-0" S962



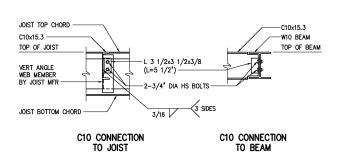
** INDICATES DIMENSION TO BE COORDINATED WITH CMU COURSING

ELEVATION

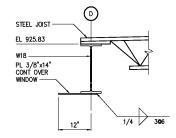


MASONRY WALL TO STEEL BEAM CONNECTION

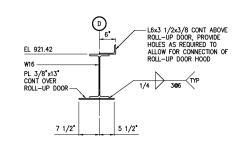
DETAIL	21	
N.T.S.	S961	







TYPICAL BRICK VENEER SUPPORT PLATE SECTION ()



BRICK VENEER SUPPORT PLATE AT ROLL-UP DOOR

SECTION K

				DESIGNED BGS
				DRAWNBGS
				CHECKED
3	RECORD DRAWING	JAN 2006	RLT	PROJ. ENGR. DAN
2	CONSTRUCTION	JAN 2004	RLT	
1	REGULATORY APPROVAL	NOV 2003	RLT	
NO.	ISSUED FOR	DATE	BY	APPROVED

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY ROBERT S. DIFIORE, SEAL NO. 22769

THIS DOCUMENT ORIGINALLY ISSUED FOR CONSTRUCTION AND SEALED BY RONALD L. TAYLOR, SEAL NO. 024649

RECORD DRAWING

THIS DRAWING HAS BEEN MODIFIED TO REFLECT FIELD CHANGES REPORTED BY THE CONTRACTOR OR ANOTHER PARTY, BUT NOT VERIFIED BY THE CERTIFYING ENGINEER. THIS DOCUMENT ORIGINALLY ISSUED AND SEALED BY CHRISTOPHER T. PHILLIPS, 033796. THIS MEDIA SHALL NOT BE CONSIDERED A CERTIFIED DOCUMENT.

HAZEN AND SAWYER Environmental Engineers & Scientists 4011 WestChase Blvd, Raleigh, North Carolina 27607

CITY OF ROANOKE VIRGINIA

REGIONAL WATER POLLUTION CONTROL PLANT PROCESS TRAIN IMPROVEMENTS

MAINTENANCE BUILDING MODIFICATIONS
STRUCTURAL
SECTIONS AND DETAILS

THE SCALE BAR	DATE JANU	ARY 2004
SHOWN BELOW MEASURES ONE	H & S JOB NUMBER	30788C
INCH LONG ON THE ORIGINAL	CONTRACT NUMBER	DRAWING NUMBER
DRAWING.	С	S966

788C DRAWING NUMBER S966