

Baughman

HEADWALL DETAIL

Engineering Company, P.A. 315 Main St., Waltham, MA 02154 | Phone: 781.852.7271 | Fax: 781.852.0196

REVISIONS: PROJECT NUMBER: 468-8492

SCALE: DRAWN: DATE: 03/07

SHEET: 15 OF 22

HEADWALL FOR 15" RCP

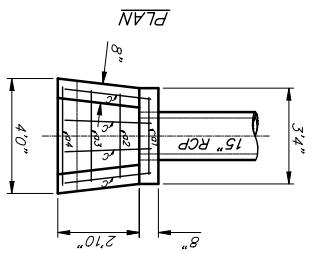
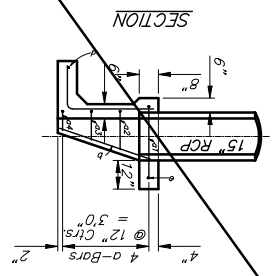
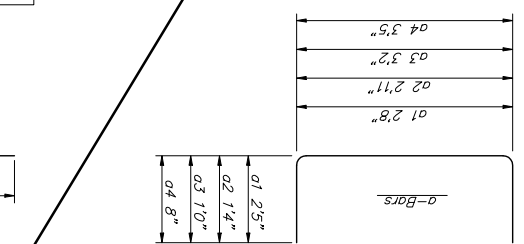
A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall

* Field Bend or Cut Reinforcing as Required for Clearance. All Concrete Reinforcement to be #4 Rebar

All Rebar to Have Min. of 1 1/2" Conc. Cover

Bar	Shape	No.	Length	Weight
a1		1	7.6"	5.01
a2		1	5.7"	3.73
a3		1	5.2"	3.45
a4		2	4.9"	3.17
b		2	4.0"	5.34
c		2	5.6"	14.70
d		1	3.5"	2.28
e		1	2.8"	1.78
Total Rebar				39.46 lbs.
Concrete				0.67 C.Y.

REBAR SCHEDULE



HEADWALL FOR 18" RCP

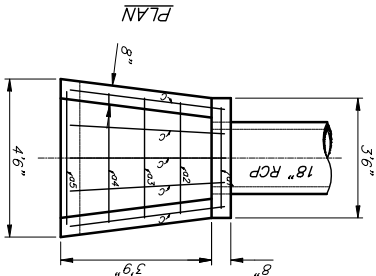
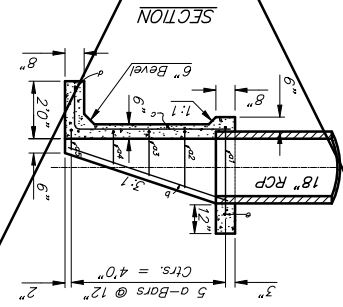
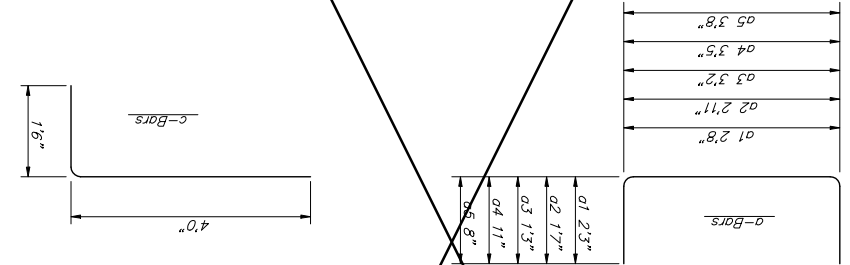
A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall

* Field Bend or Cut Reinforcing as Required for Clearance. All Concrete Reinforcement to be #4 Rebar

All Rebar to Have Min. of 1 1/2" Conc. Cover

Bar	Shape	No.	Length	Weight
a1		1	4.9"	4.79
a2		1	4.06"	3.79
a3		1	5.8"	3.79
a4		1	5.3"	3.51
a5		1	5.0"	3.34
b		2	4.0"	5.34
c		5	5.6"	18.37
d		1	4.0"	2.67
e		1	3.2"	2.12
Total Rebar				47.99 lbs.
Concrete				0.91 C.Y.

REBAR SCHEDULE



SPECIAL HEADWALL FOR 24" RCP

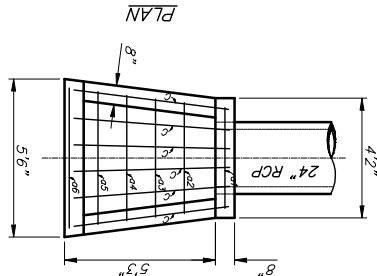
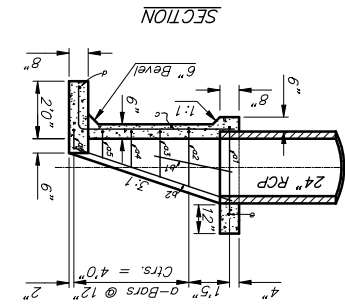
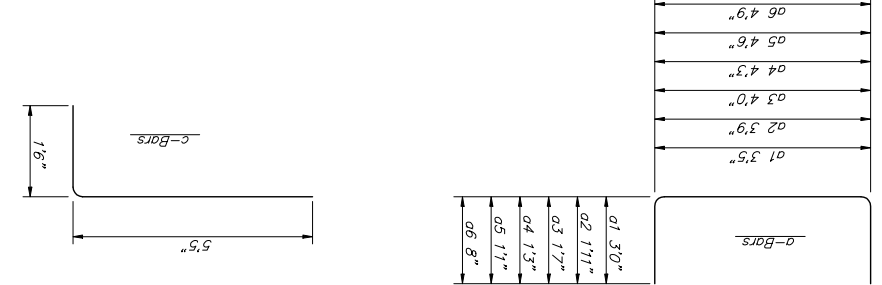
A Deduction in Concrete Quantities Has Been Made for Pipe Openings Through the Headwall

* Field Bend or Cut Reinforcing as Required for Clearance. All Concrete Reinforcement to be #4 Rebar

All Rebar to Have Min. of 1 1/2" Conc. Cover

Bar	Shape	No.	Length	Weight
a1		1	9.5"	6.29
a2		1	7.7"	5.07
a3		1	7.2"	4.79
a4		1	6.9"	4.51
a5		1	6.4"	4.23
b1		2	2.9"	3.67
b2		2	5.10"	7.79
c		6	6.11"	27.72
d		1	5.0"	3.37
e		1	3.10"	2.56
Total Rebar				74.03 lbs.
Concrete				1.40 C.Y.

REBAR SCHEDULE



GENERAL NOTES

- ALL PIPES SHALL BE FLUSH CUT PRIOR TO BEING CAST INTO CONCRETE HEADWALL.
- CONCRETE USED IN HEADWALL CONSTRUCTION SHALL BE SAME AS PER CITY STANDARD PAVING MIX EXCEPT THAT IT SHALL HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI.
- ALL EXPOSED EDGES SHALL BE BEVELED 1/2".
- REINFORCING STEEL SHALL COMPLY TO A.S.T.M. DESIGNATION #615 GRADE 60. ALL DIMENSIONS RELATIVE TO REINFORCING STEEL ARE TO CENTERLINE OF BAR UNLESS OTHERWISE NOTED.
- THE "REIN. CONC. HEADWALL" SHALL BE PAID FOR AT THE UNIT PRICE BID PER EACH IN PLACE WHICH SHALL INCLUDE ALL LABOR, MATERIALS, EXCAVATION, CONCRETE, REINFORCING STEEL AND ALL OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK. MATERIAL QUANTITIES SHOWN ARE FOR INFORMATION ONLY.