DOUBLE PIPE HEADWALL

** FOR (3) OR MORE PIPES USE L^5 SPACING OF PIPES.

HEADWALL DIMENSIONS							
* NOMINAL PIPE SIZE	L^1	L^2	L^3	L^4	L^5	A	B
12"	1'-4"	2'-0"	3'-8"	0'-10"	2'-9"	6"	10"
15"	2'-0"	2'-8"	4'-0"	1'-0"	3'-0"	6"	10"
18"	2'-0"	3'-8"	4'-8"	1'-2"	3'-3"	6"	10"
21"	2'-8"	4'-0"	5'-4"	1'-3"	3'-6"	8"	1'-0"
24"	2'-8"	4'-0"	5'-4"	1'-6"	4'-0"	8"	1'-0"
30"	2'-8"	5'-4"	6'-8"	1'-10"	4'-6"	10"	1'-2"
36"	3'-4"	6'-8"	8'-0"	2'-0"	5'-0"	1'-0"	1'-4"
42"	4'-0"	8'-0"	9-4"	2'-2"	5'-6"	1'-2"	1'-6"

* NOMINAL PIPE SIZE GIVEN FOR REINFORCED CONCRETE PIPE.

NOTES:

1. DESIGN SPECIFICATIONS - AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION 2017.
2. LOADING CLASS - HL-93.
3. DESIGN SOIL WEIGHT = 120 P.C.F.
4. ALL CONCRETE SHALL BE CLASS 'A' PER SECTION 505 & 725.
5. REINFORCING STEEL SHALL CONFORM TO ASTM SPECIFICATIONS A615. ALL REINFORCING SHALL BE FURNISHED AS GRADE 60.
6. ALL BENDS AND HOOKS SHALL MEET THE REQUIREMENTS OF AASHTO LRF ARTICLE 5.10. ALL BEND DIMENSIONS FOR REINFORCING STEEL SHALL BE OUT-TO-OUT OF BARS. ALL PLACEMENT DIMENSIONS FOR REINFORCING STEEL SHALL BE TO CENTER OF BARS UNLESS NOTED OTHERWISE.
7. CONCRETE REINF. SHALL BE NO.4 BAR 12" O.C. BOTH WAYS.
8. ALL REINFORCING STEEL SHALL HAVE 2 INCH CLEAR COVER UNLESS NOTED OTHERWISE.
9. CHAMFER ALL EXPOSED CORNERS 3/4" UNLESS NOTED OTHERWISE.
10. DISTURBED AREA OF PIPE SHALL BE TREATED IN ACCORDANCE WITH STANDARD SPECIFICATIONS REQUIREMENTS WHEN END OF PIPE IS CUT TO FIT SKEW OR SLOPE.
11. COMPACT BACKFILL FOR FOOTING AND WING BASE MINIMUM 95 PERCENT OF ASTM D698 MAXIMUM DRY DENSITY.
12. SEE PROJECT PLANS FOR CULVERT LAYOUT INVERT ELEVATIONS, FINISHED GRADE AND OTHER SITE SPECIFIC DETAILS.
13. INSTALL SAFETY RAIL PER MAG STD DETAIL 145 WHERE INDICATED ON THE PLANS.
14. DIMENSIONS SHALL NOT BE SCALED FROM DRAWINGS.