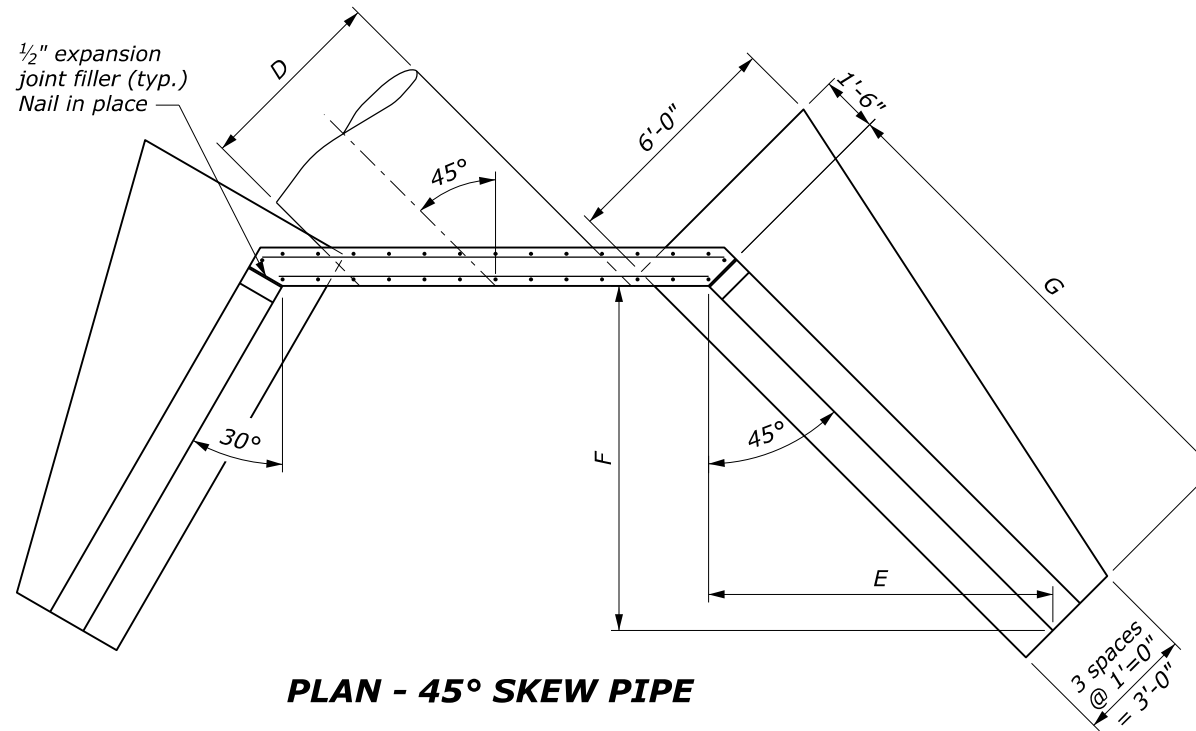


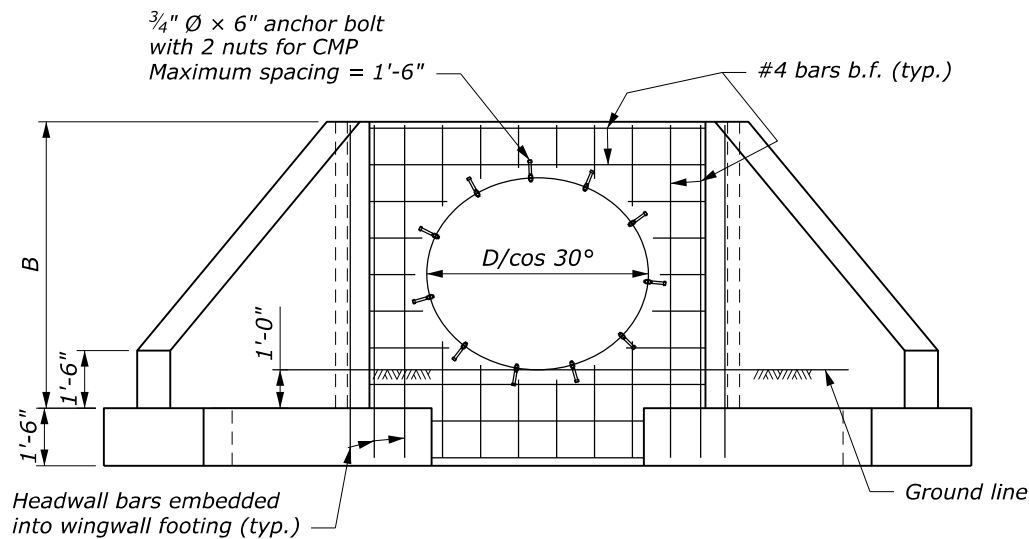
PLAN - 30° SKEW PIPE



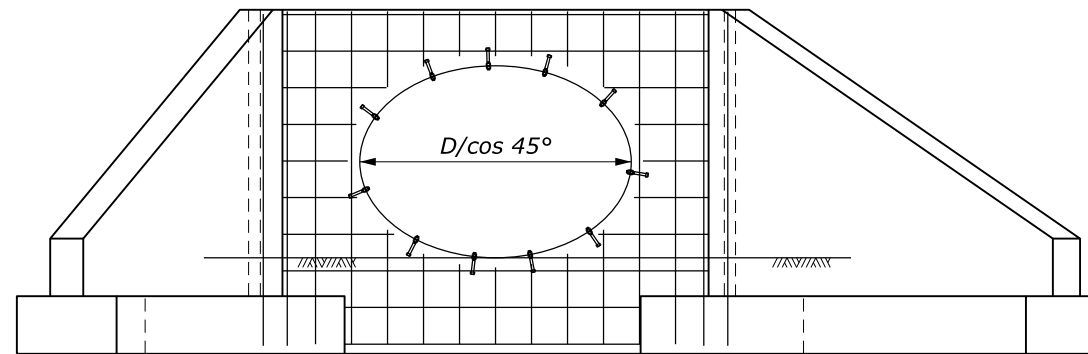
PLAN - 45° SKEW PIPE

NOTE:

1. Use the 30° Skew Detail for skews greater than 15° to 37°30'. Use the 45° Skew Detail for skews greater than 37°30' to 45°.
2. Quantities shown in table are for one headwall and two wingwalls and are based on CMP. Concrete and steel quantities shown will be used as basis for final payment for headwall/wingwalls constructed according to this standard.
3. For dimensions and reinforcing details not shown, and additional notes see Standard 601-5.



FRONT ELEVATION - 30° SKEW PIPE
(Showing headwall reinforcement)



FRONT ELEVATION - 45° SKEW PIPE
(Showing headwall reinforcement)

DIMENSIONS AND QUANTITIES FOR 30° SKEW PIPE

		D (Diameter of pipe culvert)							
		42"	48"	54"	60"	66"	72"	78"	84"
1V:1.5H fill slope	Conc. (CUYD)	8.4	9.4	10.5	11.6	12.7	13.9	15.1	16.4
	Steel (LB)	682	764	853	908	1016	1080	1196	1294
1V:2H fill slope	Conc. (CUYD)	10.4	11.7	13.0	14.5	15.9	17.4	18.9	20.5
	Steel (LB)	829	938	1036	1135	1245	1355	1461	1598

DIMENSIONS AND QUANTITIES FOR 45° SKEW PIPE

		D (Diameter of pipe culvert)							
		42"	48"	54"	60"	66"	72"	78"	84"
1V:1.5H fill slope	A	8'-11 1/4"	9'-8"	10'-4 1/4"	11'-0 3/4"	11'-9 1/4"	12'-6"	13'-2 1/4"	13'-11"
	C	9'-11 1/4"	10'-8"	11'-4 1/4"	12'-1"	12'-9 1/4"	13'-6"	14'-2 1/4"	14'-11"
	E	6'-8 3/4"	7'-5 3/4"	8'-2 1/2"	8'-11 3/4"	9'-8 1/2"	10'-5 3/4"	11'-2 3/4"	12'-0"
	F	6'-8 3/4"	7'-5 3/4"	8'-2 1/2"	8'-11 3/4"	9'-8 1/2"	10'-5 3/4"	11'-2 3/4"	12'-0"
	G	9'-6"	10'-7"	11'-7 1/2"	12'-8 3/4"	13'-9"	14'-10"	15'-10 1/4"	16'-11 1/4"
	Conc. (CUYD)	9.5	10.6	11.8	13.1	14.4	15.7	17.1	18.5
	Steel (LB)	787	868	977	1051	1177	1249	1370	1490
1V:2H fill slope	E	8'-11 1/2"	9'-11 3/4"	10'-11 1/2"	11'-11 3/4"	12'-11 1/2"	13'-11 3/4"	14'-11 1/2"	15'-11 3/4"
	F	8'-11 1/2"	9'-11 3/4"	10'-11 1/2"	11'-11 3/4"	12'-11 1/2"	13'-11 3/4"	14'-11 1/2"	15'-11 3/4"
	G	12'-8"	14'-1 1/4"	15'-6"	16'-11 1/4"	18'-4"	19'-9 1/4"	21'-2"	22'-7"
	Conc. (CUYD)	11.7	13.2	14.7	16.3	17.9	19.6	21.3	23.1
	Steel (LB)	951	1070	1190	1303	1440	1559	1695	1846

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
OFFICE OF FEDERAL LANDS HIGHWAY

**FLH STANDARD
CONCRETE HEADWALL/WINGWALL
FOR SINGLE SKEW
42" TO 84" PIPE CULVERT**

STANDARD APPROVED FOR USE 6/2005
REVISED:

STANDARD
601-6