

DESIGN (S;H; FILL OVER TOP)	DBL 5-6-10	DBL 5-6-20	DBL 5-6-30	DBL 5-6-40	DBL 5-6-50	DBL 5-6-60	DBL 5-6-70	DBL 5-6-80	DESIGN (S; H; FILL OVER TOP)	DBL 7-6-10	DBL 7-6-20	DBL 7-6-30	DBL 7-6-40	DBL 7-6-50	DBL 7-6-60	
T ₁	6"	8"	10"	12"	13 1/2"	15"	16 1/2"	18"	T ₁	9	11	13	15	16	17 1/2	
T ₂	8"	8"	9"	10"	11"	12"	14"	15"	T ₂	10	10	11	12	13	14	
BARS "A"	401 AT 12"	405 AT 12"	504 AT 12"	505 AT 12"	604 AT 12"	606 AT 12"	609 AT 12"	612 AT 12"	BARS "A"	440 AT 11"	443 AT 12"	533 AT 11"	625 AT 12"	626 AT 12"	628 AT 11"	
BARS "B"	402 AT 12"	502 AT 12"	407 AT 12"	506 AT 12"	410 AT 12"	412 AT 12"	414 AT 12"	511 AT 12"	BARS "B"	441 AT 11"	532 AT 12"	441 AT 11"	446 AT 12"	446 AT 12"	447 AT 11"	
BARS "C"	501 AT 12"	601 AT 12"	602 AT 12"	603 AT 12"	509 AT 12"	607 AT 12"	610 AT 12"	701 AT 12"	BARS "C"	442 AT 11"	444 AT 12"	445 AT 11"	519	627	629	
BARS "D"	403	503	503	507	510	507	507	510	BARS "D"	531	623	620	706	901	901	
NO. BARS "E" IN 2 SLABS	32	32	32	32	36	36	36	36	NO. BARS "E" IN 2 SLABS	44	44	48	48	48	48	
BARS "F"	404 AT 12"	406 AT 12"	408 AT 12"	508 AT 12"	605 AT 12"	608 AT 12"	611 AT 12"	613 AT 12"	BARS "F"	421 AT 11"	408 AT 12"	424 AT 11"	424 AT 12"	413 AT 12"	415 AT 11"	
BARS "G"	404 AT 12"	406 AT 12"	408 AT 12"	409 AT 12"	411 AT 12"	413 AT 12"	415 AT 12"	416 AT 12"	BARS "G"	421 AT 12"	408 AT 12"	424 AT 12"	424 AT 12"	413 AT 12"	415 AT 12"	
NO. BARS "H" IN INT. WALL	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	NO. BARS "H" IN INT. WALL	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	
NO. BARS "K" IN 2 EXT. WALLS	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	NO. BARS "K" IN 2 EXT. WALLS	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	
NO. BARS "L" IN 2 EXT. WALLS	8	8	8	8	8	8	8	8	NO. BARS "L" IN 2 EXT. WALLS	8	8	8	8	8	8	
NO. BARS "J" EXT. CORNER	0	0	0	0	1	1	1	1	NO. BARS "J" EXT. CORNER	0	0	0	0	2 AT 8"	2 AT 7"	
NO. BARS "J" INT. CORNER	0	0	1	1	2 AT 4"	2 AT 4"	2 AT 4"	2 AT 5"	NO. BARS "J" INT. CORNER	0	1	2 AT 6"	3 AT 7 1/2"	4 AT 5 1/2"	4 AT 5"	
CU. YDS. CONC. PER FT.	0.994	1.146	1.346	1.549	1.718	1.889	2.117	2.296	CU. YDS. CONC. PER FT.	1.537	1.743	1.999	2.259	2.418	2.632	
LBS. REINF. STEEL PER FT.	124.91	154.59	169.48	187.14	211.98	230.52	235.56	261.22	LBS. REINF. STEEL PER FT.	170.35	195.56	237.66	307.49	417.03	481.13	

DESIGN (S;H; FILL OVER TOP)	DBL 6-6-10	DBL 6-6-20	DBL 6-6-30	DBL 6-6-40	DBL 6-6-50	DBL 6-6-60			DESIGN (S;H; FILL OVER TOP)	DBL 6-7-10	DBL 6-7-20	DBL 6-7-30	DBL 6-7-40	DBL 6-7-50	DBL 6-7-60	DBL 6-7-70
T ₁	8"	10"	12"	13"	14"	15"			T ₁	9"	11"	14"	17"	18 1/2"	22"	22"
T ₂	8"	9"	11"	11"	12"	13"			T ₂	10"	10"	12"	12"	14"	16"	16"
BARS "A"	417 AT 12"	512 AT 12"	514 AT 12"	544 AT 12"	545 AT 12"	636 AT 11"	(See Special Design Box Culvert sheets 13a & 13b for Double 6x6 where Req'd)		BARS "A"	534 AT 12"	537 AT 12"	632 AT 12"	635 AT 12"	708 AT 12"	709 AT 12"	714 AT 12"
BARS "B"	418 AT 12"	422 AT 12"	515 AT 12"	422 AT 12"	458 AT 12"	458 AT 11"			BARS "B"	535 AT 12"	630 AT 12"	633 AT 12"	633 AT 12"	636 AT 12"	638 AT 12"	638 AT 12"
BARS "C"	419 AT 12"	614 AT 12"	516 AT 12"	448	445	444 AT 11"			BARS "C"	536 AT 12"	631 AT 12"	634 AT 12"	707 AT 12"	637 AT 12"	710 AT 12"	715 AT 12"
BARS "D"	420	513	517	510	617	713			BARS "D"	619	619	706	706	706	706	716
NO. BARS "E" IN 2 SLABS	36	36	36	36	36	36			NO. BARS "E" IN 2 SLABS	44	44	44	44	44	44	44
BARS "F"	421 AT 12"	423 AT 12"	424 AT 12"	411 AT 12"	455 AT 12"	413 AT 11"			BARS "F"	413 AT 12"	448 AT 12"	449 AT 12"	431 AT 12"	539 AT 12"	541 AT 12"	541 AT 12"
BARS "G"	421 AT 12"	423 AT 12"	424 AT 12"	411 AT 12"	455 AT 12"	413 AT 11"			BARS "G"	413 AT 12"	448 AT 12"	449 AT 12"	431 AT 12"	450 AT 12"	451 AT 12"	451 AT 12"
NO. BARS "H" IN INT. WALL	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"			NO. BARS "H" IN INT. WALL	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"
NO. BARS "K" IN 2 EXT. WALLS	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"	6 AT 18"			NO. BARS "K" IN 2 EXT. WALLS	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"
NO. BARS "L" IN 2 EXT. WALLS	8	8	8	8	8	8			NO. BARS "L" IN 2 EXT. WALLS	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"
NO. BARS "J" EXT. CORNER	0	0	0	0	1	1			NO. BARS "J" EXT. CORNER	0	1	1	1	2 AT 9"	2 AT 9"	2 AT 9"
NO. BARS "J" INT. CORNER	0	0	0	0	2 AT 7"	3 AT 8"			NO. BARS "J" INT. CORNER	0	1	3 AT 8"	4 AT 6"	5 AT 6"	5 AT 6"	7 AT 4"
CU. YDS. CONC. PER FT.	1.245	1.469	1.747	1.898	1.981	2.127			CU. YDS. CONC. PER FT.	1.747	1.977	2.436	2.790	3.210	3.640	3.640
LBS. REINF. STEEL PER FT.	128.04	174.30	178.53	199.64	229.86	272.10			LBS. REINF. STEEL PER FT.	223.17	268.15	331.37	376.98	406.03	444.07	476.68

DESIGN (S;H; FILL OVER TOP)	DBL 8-8-10	DBL 8-8-20	DBL 8-8-30	DBL 8-8-40	DBL 8-8-50	DBL 8-8-60	DBL 8-8-70	DBL 8-8-80	DESIGN (S;H; FILL OVER TOP)	DBL 8-8-10	DBL 8-8-20	DBL 8-8-30	DBL 8-8-40	DBL 8-8-50	DBL 8-8-60	DBL 8-8-70	DBL 8-8-80	DBL 8-8-90	DBL 8-8-100
T ₁	9"	12"	15"	16"	17"	18"	19 1/2"	20 1/2"	T ₁	9"	11"	14"	17"	18 1/2"	22"	23"	26"		
T ₂	9"	11"	12"	12"	14"	14"	17"	18 1/2"	T ₂	10"	10"	12"	12"	14"	16"	16"	16"		
BARS "A"	518 AT 12"	615 AT 12"	618 AT 12"	704 AT 12"	712 AT 12"	803 AT 12"	720 AT 12"	722 AT 12"	BARS "A"	534 AT 12"	640 AT 12"	641 AT 12"	642 AT 12"	708 AT 12"	711 AT 12"	728 AT 12"	729 AT 12"		
BARS "B"	425 AT 12"	520 AT 12"	521 AT 12"	633 AT 12"	636 AT 12"	636 AT 12"	650 AT 12"	651 AT 12"	BARS "B"	452 AT 12"	535 AT 12"	633 AT 12"	633 AT 12"	636 AT 12"	638 AT 12"	638 AT 12"	730 AT 12"		
BARS "C"	519 AT 12"	616 AT 12"	702 AT 12"	705 AT 12"	802 AT 12"	802 AT 12"	460 AT 12"	462 AT 12"	BARS "C"	542 AT 12"	444 AT 12"	543 AT 12"	631 AT 12"	634 AT 12"	643 AT 12"	643 AT 12"	652 AT 12"		
BARS "D"	503	617	619	713	801	804	721	723	BARS "D"	639	623	706	706	706	706	706	706		
NO. BARS "E" IN 2 SLABS	40	40	40	40	40	40	40	40	NO. BARS "E" IN 2 SLABS	44	44	44	44	44	44	44	44		
BARS "F"	426 AT 12"	427 AT 12"	522 AT 12"	645 AT 12"	644 AT 12"	624 AT 12"	461 AT 12"	463 AT 12"	BARS "F"	453 AT 12"	454 AT 12"	455 AT 12"	448 AT 12"	456 AT 12"	457 AT 12"	470 AT 12"	471 AT 12"		
BARS "G"	426 AT 12"	427 AT 12"	428 AT 12"	451 AT 12"	451 AT 12"	438 AT 12"	461 AT 12"	463 AT 12"	BARS "G"	453 AT 12"	454 AT 12"	455 AT 12"	448 AT 12"	456 AT 12"	457 AT 12"	470 AT 12"	471 AT 12"		
NO. BARS "H" IN INT. WALL	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	NO. BARS "H" IN INT. WALL	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"		
NO. BARS "K" IN 2 EXT. WALLS	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"	NO. BARS "K" IN 2 EXT. WALLS	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"		
NO. BARS "L" IN 2 EXT. WALLS	8	8	8	8	8	8	8	8	NO. BARS "L" IN 2 EXT. WALL	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"	8 AT 17"		
NO. BARS "J" EXT. CORNER	0	0	0	1	2 AT 12"	2 AT 10"	3 AT 5"	4 AT 5"	NO. BARS "J" EXT. CORNER	0	0	1	1	1	2 AT 9"	3 AT 6"	5 AT 4"		
NO. BARS "J" INT. CORNER	0	1	1	2 AT 12"	4 AT 6"	6 AT 4 1/2"	8 AT 3 1/2"	9 AT 3 1/2"	NO. BARS "J" INT. CORNER	0	1	3 AT 8"	4 AT 6"	5 AT 6"	5 AT 6"	5 AT 6"	7 AT 4"		
CU. YDS. CONC. PER FT.	1.787	2.253	2.667	2.784	3.035	3.154	3.511	3.819	CU. YDS. CONC. PER FT.	1.648	1.879	2.325	2.679	3.088	3.504	3.626	3.990		
LBS. REINF. STEEL PER FT.	193.28	256.82	290.46	409.40	500.45	538.20	392.74	413.88	LBS. REINF. STEEL PER FT.	203.34	246.91	311.72	339.14	387.90	407.85	412.67	479.66		

DESIGN (S;H; FILL OVER TOP)	DBL 9-8-10	DBL 9-8-20	DBL 9-8-30	DBL 9-8-40					DESIGN (S;H; FILL OVER TOP)	DBL 8-8-90	DBL 8-8-100	DBL 8-8-110							
T ₁	11"	13"	15"	18"					T ₁	22 1/2"	23 1/2"	25"							
T ₂	11"	11"	12"	14"					T ₂	20 1/2"	23 1/2"	26 1/2"							
BARS "A"	523 AT 13"	525 AT 11"	621 AT 12"	622 AT 12"					BARS "A"	810 AT 12"	811 AT 12"	726 AT 12"							
BARS "B"	429 AT 13"	526 AT 11"	527 AT 12"	529 AT 12"					BARS "B"	546 AT 12"	547 AT 12"	727 AT 12"							
BARS "C"	430 AT 13"	433 AT 11"	2-528	2-530					BARS "C"	464 AT 12"	466 AT 12"	468 AT 12"							
BARS "D"	2-524	2-620	2-703	2-801					BARS "D"	724	725	812							
NO. BARS "E" IN 2 SLABS	44	44	44	44					NO. BARS "E" IN 2 SLABS	40	40	40							
BARS "F"	431 AT 13"	434 AT 11"	436 AT 12"	438 AT 12"					BARS "F"	465 AT 12"	467 AT 12"	469 AT 12"							
BARS "G"	432 AT 13"	435 AT 11"	437 AT 12"	439 AT 12"					BARS "G"	465 AT 12"	467 AT 12"	468 AT 12"							
NO. BARS "H" IN INT. WALLS	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"					NO. BARS "H" IN INT. WALL	10 AT 16"	10 AT 16"	10 AT 16"							
NO. BARS "K" IN 2 EXT. WALLS	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"					NO. BARS "K" IN 2 EXT. WALL	10 AT 16"	10 AT 16"	10 AT 16"							
NO. BARS "L" IN 2 EXT. WALLS	10 AT 16"	10 AT 16"	10 AT 16"	10 AT 16"					NO. BARS "L" IN 2 EXT. WALL	8	8	8							
NO. BARS "J" EXT. CORNER	0	0	1	1					NO. BARS "J" EXT. CORNER	3 AT 5"	5 AT 4"	5 AT 4"							
NO. BARS "J" INT. CORNER	0	0	3 AT 8 1/2"	3 AT 6 1/2"					NO. BARS "J" INT. CORNER	9 AT 3"	11 AT 2 1/2"	13 AT 2 1/2"							
CU. YDS. CONC. PER FT.	2.273	2.530	2.852	3.377					CU. YDS. CONC. PER FT.	4.149	4.491	4.947							
LBS. REINF. STEEL PER FT.	202.87	273.14	370.01	416.00					LBS. REINF. STEEL PER FT.	433.37	483.99	524.33							

NOTE: THE DESIGN OF CULVERT SHALL BE DETERMINED BY THE MAXIMUM HEIGHT OF FILL WITH ONLY A SINGLE DESIGN BEING USED FOR THE ENTIRE INSTALLATION.

NOTE: BEND LONGITUDINAL BARS INTO WINGS AND PARAPETS SIMILAR TO STANDARDS. IF CULVERT IS SKEWED CUT TRANSVERSE STEEL AND BEND 12" INTO PARAPET OR TOE WALL AND HOOK.

STATE	PROJECT NUMBER	SHEET No.	TOTAL SHEETS
GA.			

