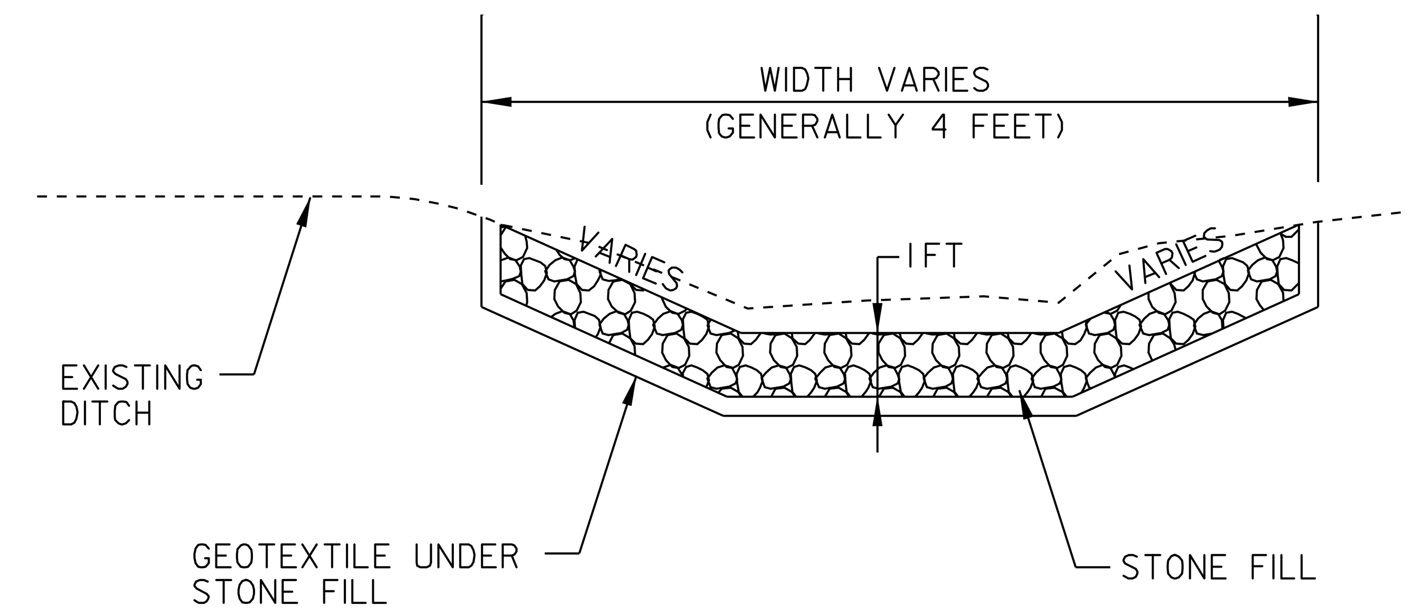
LOCATION				FEET OF DITCHING — PERCENT GRADE				MISC. ITEMS 654.10	613.10	649.31	REMARKS
SITE	STATION	STATION	POS.	0–1	1–2.5	2.5–10	>10	EROS. MATT.	STONE FILL TYP. I	GEOT. UNDER STONE FILL	
VT ROUTE 109, CAMBRIDGE								SY	CY	SY	
DISTRICT #~~X~~ 8											
1	~~4+15~~ 4+18	~~6+25~~ 6+32	LT			~~210~~ 214			~~31~~ 51.5	~~93~~ 178.3	
2	~~15+50~~ 15+72	~~18+50~~ 18+62	RT		~~250~~ 100	~~50~~ 218		~~110~~ 77.8	~~7~~ 56.5	~~22~~ 181.7	
3	~~15+90~~ 15+72	~~17+05~~ 17+26	LT		~~115~~ 0	154		~~50~~ 0	42.8	128.3	
4	~~23+20~~ 23+08	~~27+00~~ 27+02	LT		~~100~~ 107	~~280~~ 289		~~45~~ 83.2	~~41~~ 80.3	~~124~~ 240.8	
5	~~27+80~~ 27+78	~~28+80~~ 28+79	LT			~~100~~ 101			~~15~~ 25.25	~~44~~ 84.2	
6	~~31+75~~ 30+45	~~34+10~~ 33+60	LT		~~165~~ 0	~~70~~ 254		~~75~~ 0	~~10~~ 66.7	~~31~~ 206.9	SHALLOW DITCH AROUND CORNER
7	~~36+25~~ 36+35	~~37+25~~ 38+51	LT		~~100~~ 216			~~45~~ 168			
8	~~39+25~~ 39+22	~~40+45~~ 40+68	LT			~~120~~ 146			~~18~~ 35.1	~~53~~ 121.7	
9	~~42+50~~ 41+47	~~45+70~~ 45+92	LT			~~320~~ 445			~~47~~ 123.6	~~142~~ 370.8	
10	~~53+00~~ 53+08	~~59+50~~ 65+63	LT	~~150~~ 0	~~200~~ 263	~~300~~ 993		~~90~~ 204.6	257	828	
~~11~~	~~60+00~~	~~63+00~~	~~LT~~			~~300~~			~~44~~	~~133~~	
12	~~73+75~~ 73+90	~~74+50~~ 74+55	LT			~~75~~ 65			~~11~~ 17	~~33~~ 54	
~~13~~	~~73+75~~	~~75+75~~	~~RT~~		~~100~~	~~100~~		~~45~~	~~15~~	~~44~~	
14	~~77+50~~ 77+52	~~82+10~~ 82+09	LT			~~460~~ 457			~~68~~ 106	~~204~~ 381	
15	~~84+45~~ 84+58	~~85+00~~ 85+14	LT			~~55~~ 56			~~8~~ 10	~~24~~ 47	CLEAN OUT LT&RT ENDS OF CULVERT
16	~~86+00~~ 85+55	90+00	LT			~~400~~ 445			~~59~~ 103	~~178~~ 371	
17	~~92+85~~ 90+24	~~96+50~~ 95+55	LT			~~365~~ 333			~~54~~ 90	~~162~~ 277	
18	~~99+60~~ 99+75	~~100+40~~ 101+25	LT		~~80~~ 0	150		~~35~~ 0	42	125	
19	~~104+50~~ 104+59	~~106+75~~ 107+00	LT		~~225~~ 241			~~100~~ 187.4			
20	~~108+50~~ 108+91	~~111+95~~ 112+07	LT		~~345~~ 0	256		~~150~~ 0	66	213	
21	~~112+25~~ 112+44	~~115+50~~ 115+81	LT		~~150~~ 0	~~175~~ 179		~~65~~ 0	~~26~~ 39	~~78~~ 150	
22	~~116+00~~ 116+22	~~122+35~~ 122+69	LT		~~100~~ 0	~~535~~ 533		~~45~~ 0	~~79~~ 120	~~238~~ 444	
23	~~130+25~~ 130+07	~~132+15~~ 132+42	LT			~~190~~ 235			~~28~~ 52	~~84~~ 196	
24	~~130+25~~ 130+44	~~131+35~~ 131+60	RT			~~110~~ 116			~~16~~ 26	~~49~~ 97	
	124+35	125+57	RT			122			23	102	
~~25~~	~~134+80~~	~~138+15~~	~~LT~~	~~335~~							
26	~~140+25~~ 138+91	~~143+00~~ 142+40	LT			~~275~~ 349			~~41~~ 65	~~122~~ 291	
27	~~146+50~~ 146+73	~~155+50~~ 158+00	LT	~~200~~ 0	~~250~~ 711	~~450~~ 197		~~110~~ 553	~~67~~ 48	~~200~~ 165	
28	~~158+00~~ 158+44	~~163+25~~ 163+24	LT		~~75~~ 20	~~450~~ 264		~~35~~ 15.6	~~67~~ 59	~~200~~ 220	
29	~~168+00~~ 168+34	~~172+75~~ 173+36	LT		~~475~~ 69	352		~~210~~ 53.7	69	294	
30	~~176+50~~ 176+10	~~178+00~~ 180+17	LT		78	~~150~~ 177		60.6	~~22~~ 29	~~67~~ 147	
31	180+50	~~183+50~~ 183+72	LT	~~300~~ 0	249	94		193.7	21	78	
VT ROUTE 109, WATERVILLE											
32	~~3+85~~ 1+82	~~6+00~~ 4+84	RT		~~215~~ 302			~~95~~ 234.9			
33	~~4+50~~ 1+70	~~6+25~~ 2+18	LT		~~175~~ 48			~~75~~ 37.3			
34	~~11+00~~ 10+88	~~12+25~~ 12+75	RT		187	~~125~~ 0		145.4	~~18~~ 0	~~55~~ 0	
~~35~~	~~19+20~~	~~19+90~~	~~RT~~	~~70~~							
36	~~55+00~~ 13+05	~~59+00~~ 13+85	LT RT		~~200~~ 80	~~200~~ 0		~~90~~ 62.2	~~30~~ 0	~~89~~ 0	
37	~~66+35~~ 54+40	~~67+50~~ 58+85	LT	0	~~115~~ 274	172		~~50~~ 182.7	48	143	
	66+13	67+49									
					(3694)	(7366)		(2768.5)	(1771.75)	(6135.7)	
	31+82	32+41	RT		59			45.9			
	34+40	34+63	RT		23			17.9			
	49+14	49+54	LT		40			26.7			
	59+56	61+44	LT		188			125.3			
	61+85	62+36	LT		51			34			
	73+58	77+61	LT		388			258.6			

LOCATION				FEET OF DITCHING — PERCENT GRADE				MISC. ITEMS 654.10	613.10	649.31	REMARKS
SITE	STATION	STATION	POS.	0–1	1–2.5	2.5–10	>10	EROS. MATT.	STONE FILL TYP. I	GEOT. UNDER STONE FILL	
VT ROUTE 109, WATERVILLE (CONT'D)								SY	CY	SY	
~~41~~	~~74+00~~	~~76+50~~	~~LT~~	~~250~~							
42	~~79+50~~ 79+27	~~82+00~~ 81+14	LT			~~250~~ 172			~~37~~ 28	~~111~~ 156	
43	~~94+00~~ 94+15	~~105+25~~ 97+86	LT		~~325~~ 0	~~800~~ 371		~~145~~ 0	~~118~~ 82	~~356~~ 309	
44	~~109+25~~ 109+08	~~110+25~~ 110+82	LT		~~100~~ 0	174		~~45~~ 0	39	145	
45	~~119+50~~ 119+43	~~123+50~~ 125+22	LT			~~400~~ 579			~~59~~ 86	~~178~~ 482	
46	~~126+00~~ 125+90	~~127+00~~ 126+82	LT			~~100~~ 92			~~15~~ 14	~~44~~ 77	
47	~~129+75~~ 128+50	~~131+50~~ 130+23	LT	~~175~~ 0	173			134.6			
48	~~135+00~~ 135+29	~~145+00~~ 150+25	LT			1,000 1496			~~148~~ 388	~~444~~ 1247	
49	~~210+40~~ 211+04	~~216+50~~ 216+18	LT			~~610~~ 514			~~90~~ 133	~~271~~ 428	
VT ROUTE 109, BELVIDERE											
50	21+00 11	21+16	RT			5			~~5~~ 0.7	~~10~~ 2.2	CLEAN DITCH, STONE
51	~~24+55~~ 24+63	24+83	RT			20			~~5~~ 3	~~10~~ 8.9	CLEAN & STONE CULVERT INLET
52	~~62+00~~ 62+12	~~68+60~~ 68+96	RT		~~285~~ 684	~~375~~ 0		~~125~~ 760	~~55~~ 0	~~167~~ 0	
53	~~114+00~~ 113+65	~~117+50~~ 117+71	RT	~~350~~ 0	406			315.8			
~~PROJECT SUBTOTALS~~				~~1,830~~	~~4,145~~	~~9,400~~		~~1,835~~	~~1,354~~	~~4,060~~	
~~ROUNDING~~				~~20~~	~~5~~	~~--~~		~~15~~	~~21~~	~~40~~	
~~PROJECT TOTALS~~				~~1,850~~	~~4,150~~	~~9,400~~		~~1,850~~	~~1,375~~	~~4,100~~	
VT ROUTE 109 WATERVILLE (CONT'D)											
	5+19	5+82	RT		63			49			
	78+72	79+26	LT		54			36			
	87+78	88+71	LT		93			72.3			
	90+90	93+28	LT		238			185.15			
	94+70	97+48	RT			278			51	232	
	98+47	105+08	LT			661			147	551	
	104+99	106+28	LT		129			86			
	106+37	107+65	LT			128			28	107	
	107+58	108+63	LT		105			70			
	111+14	111+35	LT			21			3	17	
	111+73	113+39	LT			190			39	158	
	113+73	114+49	LT			76			14	63	
	152+29	155+21	LT			292			65	243	
	159+32	160+71	LT			139			26	116	
	165+54	167+66	LT		212			164.9			
	168+00	168+56	LT		56			43.6			
	174+64	175+03	LT		39			30.3			
	187+47	188+67	LT			120			31	100	
	188+83	191+36	RT			253			66	211	
	188+83	192+90	LT			407			90	339	
	193+29	194+29	LT			100			28	83	
	194+29	196+09	LT		182			141.6			
	210+14	210+69	LT		55			42.8			
VT ROUTE 109 BELVIDERE (CONT'D)											
	8+93	10+02	LT		136			151.1			
	21+69	21+90	RT			21			4.7	14	
	34+29	34+65	RT			36			5.3	16	
	34+50	36+50	RT		200			244.4			
	37+00	41+50	RT		450			350			
	39+57	40+05	RT		48			53.3			
	42+65	43+50	RT			85			18.9	56.7	
	46+43	47+28	RT			85			18.9	56.7	
	47+70	50+10	RT			240			62.2	186.7	
	69+38	70+71	RT		133			103.4			
	80+15	80+82	RT			67			14.9	44.7	
	81+12	82+04	RT		92			71.6			
	89+18	89+46	RT			28			4.1	12.4	
					3485	6650		3105.85	1490.7	5462.3	

LOCATION				FEET OF DITCHING — PERCENT GRADE				MISC. ITEMS 654.10	613.10	649.31	REMARKS
SITE	STATION	STATION	POS.	0–1	1–2.5	2.5–10	>10	EROS. MATT.	STONE FILL TYP. I	GEOT. UNDER STONE FILL	
VT ROUTE 109 BELVIDERE (CONT'D)								SY	CY	SY	
	92+66	93+19	RT			53			13.7	41.2	
	99+31	99+80	RT			49			13.6	40.8	
	101+70	102+68	RT			98			21.8	65.3	
		SUBTOTAL				200			49.1	147.3	
	PROJECT TOTALS							5874.35	3311.5	11745.3	



DITCH DETAIL

NOT TO SCALE

NOTES:

PIPE INLET AND OUTLET AREAS, AND DITCH CLEANING THROUGH PROJECT, SHALL BE PERFORMED AT LOCATIONS AND AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT WILL BE UNDER THE APPLICABLE EQUIPMENT RENTAL ITEM(S).

ESTIMATED QUANTITIES OF EROSION MATTING, STONE FILL TYPE I, HAVE BEEN INCLUDED. EROSION MATTING SHALL BE USED IN ALL DITCHES WITH A GRADE BETWEEN 1 AND 2 1/2 PERCENT AND STONE FILL TYPE I SHALL BE USED IN ALL DITCHES WITH A GRADE BETWEEN 2 1/2 AND 10 PERCENT.

DITCH CLEANING DETAIL SHEET

PROJECT : CAMBRIDGE - BELVIDERE
PROJECT NO.: STP 2219(1)S
DESIGN FILE NAME: p99cl90.dgn
IPARM FILE NAME: p99cl90dit.i
PLOT DATE: 12-DEC-2008 0
SURVEYED BY: CEA
SURVEY DATE:
SQUAD LEADER: CEA
DRAWN BY: CEA
SHEET: 9 OF 37