STATE OF VERMONT
AGENCY OF TRANSPORTATION

DRAINAGE DETAIL SHEET #2

LAYOUT CODE (#)	STATION	STATION	POS.	ASKEW NO. DEG.	INLET/OUTLET TYPE INLET	INLET/OUTLET TYPE OUTLET	DITCH IN	DITCH OUT	PIPE ARCH SPAN IN	PIPE ARCH RISE IN	PIPE ARCH L FT	PIPE D IN	PIPE L FT	ALLOWABLE OPTIONS PCCSP TH	ALLOWABLE OPTIONS SPECIAL PROVISION (TRENCHLESSS PIPE)	ALLOWABLE OPTIONS CPEP SL	ALLOWABLE OPTIONS PVC	PIPE ELBOW NO. DEG.	ES EA	DMH EA	CB EA	DI EA	FRCD	DEPTH DI / DMH FT	SPECIAL PROVISION (FLOWABLE FILL) CY	REINF STEEL LBS	GRATE TYPE	CHAN ELEV EA	CRM CY	TRENCH EXCAVATION EARTH CY	TRENCH EXCAVATION ROCK CY	COMM EXC CY	UNC CHAN EXC CY	STRUCT EXCAV CY	GRAN BKFLL STRUCT CY	GRAN BORR CY	EROS MATT SY	STONE FILL CY	STONE FILL TYPE	MARKER POSTS LT EA	MARKER POSTS RT EA	REMARKS
45	128+89	129+90	LT		MH	DI						18	98			X				X				6.0			MH COVER		32.77	27	4.3	2.37			17	1.79						REMOVE EXIST DI, DMH, & 12" RCP. NEW 18" CPEP(SL) WITH DMH (4').
46	129+90	130+56	LT		DI	BOX						18	60			X						X		7.0			D		24.09	10	3.0	2.37			12	1.79						REMOVE EXIST DI & 12" RCP. NEW 18" CPEP(SL) WITH RCDI. CORE PIPE INTO EXIST. 6X8 BOX CULVERT.
47	129+90	SL 80+36	RT		DI	DI						18	29 26			X						X		7.0			D		27.29	10	9.30+1.99= STRUCTURE 27.29				11	1.79						NEW 18" CPEP(SL) WITH RCDI.
48	NOT USED																														0	0				0						
49	131+06	130+56	LT		DI	BOX						18	44 74			X						X		7.0			D		26.18	14	0.0	2.37			0	1.79						REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. CORE PIPE INTO EXIST. 6X6 BOX CULVERT.
50	131+06	SL 80+33	RT-LT		DI	DI						18	36 46			X						X		7.0			D		21.42	20					23	1.79						NEW 18" CPEP(SL) WITH RCDI.
51	132+32	131+06	LT		DI	DI						18	122 116			X						X		7.0			D		36.10	33	2.4	2.37			22	1.79						REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI.
52	133+04	131+06	RT		DI	DI						18	194 204			X						X		7.0			D		43.33	42	3.6	5.19			27	1.79						REMOVE 2-EXIST DI'S. NEW 18" CPEP(SL) WITH RCDI.
53	133+05	132+32	LT		DI	DI						18	68 70			X						X		7.0			D		24.31	10	1.1	2.37			12	1.79						REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI.
54	134+00	134+82	LT		DI	DI						18	78 80			X						X		7.0			D		30.04	28			SEE FLAT FILES		18	1.79						NEW 18" CPEP(SL) WITH RCDI.
55	134+00	135+54	RT		DI	DI						18	150 154			X						X		7.0			D		60.76	53	1.3	2.37			40	1.79						REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI.
56	134+82	135+54	LT		DI	DI						24	66 70			X						X		8.0			D		38.61	38	4.7	2.37			26	1.79						REMOVE EXIST DI. NEW 24" CPEP(SL) RCDI.
57	135+54	135+54	LT-RT		DI	DI						24	36 40			X						X		9.0			D		29.14	20					10	1.79						NEW 24" CPEP(SL) WITH RCDI.
58	135+54	136+14	RT		DI	DI						24	55 62			X						X		9.0			D		52.45	40					37	1.79						NEW 24" CPEP(SL) WITH RCDI.
59 R	136+14	~~136+10~~ 136+71	RT		DI	MH						24	90 56			X						X		12.0			D		68.46							1.79						NEW 24" CPEP(SL) WITH RCDI. SEE SPECIAL PROVISION (FURNISH AND INSTALL STORM DRAIN PIPE) NOTDONE, REDESIGN
~~60~~	~~138+19~~		~~RT~~		~~MH~~											~~X~~				~~X~~				~~12.0~~			MH COVER			~~25~~					~~21~~						~~NEW 8'x8' CONCRETE DMH. CONNECT TO EXIST 24" RCP. REDESIGN, NOT CONSTRUCTED.~~
~~61~~	~~138+71~~	~~136+14~~	~~RT~~		~~MH~~	~~DI~~						~~24~~	~~51~~			~~X~~								~~10.0~~			MH COVER			~~53~~					~~42~~						~~NEW 24" CPEP(SL) WITH DMH (4').~~ REVISED, NEVER WAS INSTALLED PER PLAN.
61R	136+71	137+20	RT		MH	DI						24	48			X						X								61.82					1.79						REMOVED 18"CPEP FROM DRAINAGE RUN #65 AND REPLACED WITH 24" CPEP PITCHEC TOWARD DS #65R
62	136+71	136+71	LT-RT		MH	MH						18	36 40			X						X		9.0			MH COVER		51.40	33	2.37				25	1.79						NEW 18" CPEP(SL) WITH DMH (4'). CONNECT EXIST DRAIN PIPE.
63	137+67	137+20	RT		DI	DI						18	44	← RE-LAID AS 63R BELOW		X						X		9.0			D		32.40	20					20	1.79						NEW 18" CPEP(SL) WITH RCDI.
63R	137+67	137+20	RT		DI	DI						18	44	RELAY PIPE →															25.10												RELAYED 44 LF OF 18"CPEP PREVIOUSLY INSTALLED IN DRAINAGE RUN #63
64	137+21	136+71	LT		DI	MH						18	45 46			X						X		9.0			D		31.34	24	0.5	2.37			17	1.79						REMOVE EXIST DI & 10" RCP. NEW 18" CPEP(SL) WITH RCDI.
65	137+20	136+71	RT		DI	MH						18	45 48			X						X		9.0			D		36.19	24	6.0	2.37			16	1.79						REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. ~~PLUG & ABANDON EXIST 24" RCP.~~
65R	137+20		RT		DI	EXISTING DI						24				X													18.38		2.37				1.79						REDESIGNED DS #65R, REMOVE OLD DS #65, CONNECT TO EXISTING 24" RCP
66	138+33	137+67	RT		DI	DI						18	70 64			X						X		8.0			D		36.32	27					18	1.79						NEW 18" CPEP(SL) WITH RCDI.
67	~~138+65~~ 138+55	137+21	LT		DI	DI						18	138 128			X						X		8.0			D		90.59	62	5.48 * 4.63		SEE FLAT FILES		39	1.79						REMOVE EXIST 10" RCP. NEW 18" CPEP(SL) WITH RCDI.
68	139+75	139+47	RT		DI	DI						18	38 28			X						X		6			D		41.89	45			SEE FLAT FILES		37	1.79						NEW 18" CPEP(SL) WITH RCDI.
68R												12	6	TIED EXISTING STATUTE DRAIN INTO DI 68																											
69	SL 11+02	SL 11+02	RT		DI	CB						18	8 12			X						X		8			D		28.74	20	4.1	8.0	SEE FLAT FILES		10	1.79						NEW 18" CPEP(SL) WITH RCDI. CONNECT TO EXIST. 15" RCP REMOVE 2 EXIST. DI'S
70	SL 11+02	SL 12+42	RT		CB	MH						36	136			X					X			8			D		317.52	81	4.3	2.37	SEE SHEET II		29	3.01						REMOVE EXIST DI. NEW 36" CPEP(SL) WITH CONCRETE CB
71	SL 12+42	SL 13+11	RT		MH	MH						36	48 *	TRENCHLESS PIPE					X					8			MH COVER		36.90	25			SEE FLAT FILES		14	0						SPECIAL PROVISION (TRENCHLESS PIPE) (48"). 36" HDPE PIPE WITH 48" STEEL CASING. NEW DMH (6') 48' 40'
72	SL 12+88	SL 13+11	RT		DI	MH						18	36 30			X			NOT USED		X	[REHABBED 13 DI #72]						D		56.68	48	8.3	0	SEE FLAT FILES		36	0						REHAB CLASS I ~~REMOVE~~ EXIST. DI. NEW 18" CPEP(SL) ~~WITH RCDI. CONNECT EXIST. 15" RCP.~~
73	SL 13+11	SL 14+28	RT		MH	SP MH						36	90 60			X				X				13			MH COVER		147.84	155			SEE SHEET II		118	3.01						NEW 36" CPEP(SL) WITH CONCRETE DMH (6') / REMOVE EXIST DI & 80 LF EXIST 30" RCP
74	SL 14+28	SL 14+41	RT		SP MH	OPS						12	13 10			X								7			MH COVER		40.52	24			SEE FLAT FILES		13	3.01			1			NEW 12" CPEP(SL) WITH MODIFIED DMH / REMOVE 9 LF EXIST 30" RCP / SEE DRAINAGE DETAILS SHEET
75	SL 14+41	SL 14+60	RT		OPS	OUT						12	20 24			X													13.53	10			SEE FLAT FILES		15	10.48		2.0	III	2		NEW 12" CPEP(SL) / CONSTRUCT OFF-LINE PARTICLE SEPARATOR / SEE DRAINAGE DETAILS SHEET
76	SL 14+85		RT																																83.85	80.5	I				CONSTRUCT WET POND / SEE PLANS FOR POND LAYOUT AND GRADING SPHM EXCAVATION INCLUDED IN DRAINAGE RUN #74
77	SL 14+25	SL 15+28	RT		SP MH	OUT						36	100			X													167.78	127			SEE SHEET II		100	0		4.5	III			NEW 36" CPEP(SL) SECONDARY OUTLET / SEE DRAINAGE DETAILS SHEET
78	SL 15+25	SL 15+59	RT		OCS	OUT						18	33 34			X													61.42	10			SEE FLAT FILES		16	10.68		1.0	III			NEW 18" CPEP(SL) / CONSTRUCT OVERFLOW CONTROL STRUCTURE / SEE DRAINAGE DETAILS SHEET
79	SL 30+46	116+42	LT		DI	MH						18	22			X						X		6			D		36.04	22	2.3	0	SEE FLAT FILES		15	0						REMOVE EXIST DI & 6" VCT. NEW 18" CPEP(SL) WITH RCDI. CONNECT EXIST 6" PVC.
80	SL 30+49	SL 30+46	RT-LT		DI	DI						18	24 22			X						X		6			D		24.72	23	2.6	2.4	SEE FLAT FILES		17	0						REMOVE EXIST DI & 12" ACCGMP. NEW 18" CPEP(SL) AND RCDI. CONNECT EXIST. 6" CMP.
81	SL 40+33	122+95	LT		DI	MH						18	22 26			X						X		5			D		41.21	13	2.7	2.37			8	1.78						REMOVE EXIST DI & 8" VCT. NEW 18" CPEP(SL) WITH RCDI
82	SL 40+64	122+95	RT-LT		DI	MH						18	44 46			X						X		5			D		53.26	31	2.9	2.37			23	1.78						REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI. CONNECT EXIST CIP.
83	SL 50+35	124+65	RT		DI	DI						18	25 28			X						X		6			D		36.22	17					11	1.79						NEW 18" CPEP(SL) WITH RCDI.
84	SL 50+35	SL 50+35	LT-RT		DI	DI						18	28			X						X		6			D		12.46	22	2.7	0			15	1.79						REMOVE EXIST 6" CIP & 2-DI'S. NEW 18" CPEP(SL) WITH RCDI. CONNECT EXIST 10" VCT & 8" CIP.
													12	12	TIED EXISTING 10" VCT INTO DI #84 USING 12"CPEP																										
85	SL 60+38	127+00	LT-RT		DI	DI						18	54			X						X		6.0			D		17.48	21	2.37				12	1.79						REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI.
86	SL 60+38	SL 60+38	RT-LT		DI	DI						18	17 18			X						X		6.0			D		30.15	15					0	1.79						NEW 18" CPEP(SL) WITH RCDI (ECCENTRIC).
87	SL 70+35	128+55	LT		DI	DI						18	16 18			X						X		5.0			D		26.91	16	4.1	2.37			11	1.79						REMOVE EXIST DI. NEW 18" CPEP(SL) WITH RCDI.
88	SL 70+46	128+89	RT-LT		DI	MH						18	22			X						X		5.0			D		36.89	10	3.9				12	1.79						REMOVE EXIST DI & 12" VCT. NEW 18" CPEP(SL) WITH RCDI (ECCENTRIC). CONNECT EXIST 10" VCT.
													12	44	REPAIRED EXISTING DRAINAGE PIPE INTO DI #88							X	SEE CALC. FOLDER, 604.18, LINE 0175, DR 12.12/12																		
																			~~6~~ 5	1	~~31~~ 32			32 7																	TYPE D GRATES DRAIN MANHOLE COVERS
												12	~~33~~	96		X													~~1123~~	~~73.7~~				~~994~~		4.5	III	3		
												18	~~1630~~	1698		X													2255.97	64.62				87.45		~~30.5~~	I			
DRAINAGE DETAIL SHEET #2 SUBTOTAL:												24	302	276		X																				83.85				
												36	326	276		X																								
												48	48		X																									

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: **BARRE CITY**
PROJECT NUMBER **FEGC F 026-1(34) C/2**

FILE NAME: z85b010dds.xls | PLOT DATE: **3/21/2011**
PROJECT LEADER: G. BAKOS | DRAWN BY: D. PECK
DESIGNED BY: D. PECK | CHECKED BY:
DRAINAGE DETAIL SHEET #2 | SHEET **20** OF **339**