TDI New England - New England Clean Power Link
Alburgh, VT to Ludlow, VT
Table of Proposed Perennial Stream Crossings
Prepared by VHB
March 6, 2015

Mile Post [1]	Stream ID	Stream / River Name	Right of Way	Town	Average OHW Width [3] (feet)	Existing Structure Width [4] (feet)	Drainage Area [5] (sq. miles)	FEMA Floodplain / Floodway	Proposed Crossing Method [6]
99.0	V-BE-AS-3	Unnamed Tributary to Lake Champlain	North Lake Road	Benson	3	2.0	< 0.5	-	At Culvert
100.7	V-BE-S-8	Unnamed Tributary to Hubbardton River	Old North Lake Road	Benson	7	2.0	0.11	Zone A	Replace Culvert
101.2	V-BE-AS-10	Unnamed Tributary to Hubbardton River	Old North Lake Road	Benson	5	3.0	< 0.5	-	At Culvert
102.2	V-BE-S-100	Unnamed Tributary to Hubbardton River	VT Route 22A	Benson	3	2.0	< 0.5	-	OTE
103.1	V-BE-S-102	Unnamed Tributary to Hubbardton River	VT Route 22A	Benson	3	6.0	1.27	Zone A	Over Culvert
104.7	V-BE-S-106	Hubbardton River	VT Route 22A	Benson	25	2 x 15.0	33.4	Zone A	HDD
105.1	V-BE-S-109	Unnamed Tributary to Hubbardton River	VT Route 22A	Benson	4	2.5	< 0.5	Zone A	OTE
106.2	V-WH-S-4	Unnamed Tributary to Poultney River	VT Route 22A	West Haven	5	2.5	< 0.5	-	OTE
108.1	V-WH-S-2	Unnamed Tributary to Poultney River	VT Route 22A	West Haven	4.5	2.0	0.67	-	At Culvert
108.4	V-FH-S-25	Unnamed Tributary to Poultney River	VT Route 22A	Fair Haven	5	4.0	< 0.5	-	HDD
109.6	V-FH-S-17	Unnamed Tributary to Mud Brook	VT Route 22A	Fair Haven	3	4.0	< 0.5	-	At Culvert
110.2	V-FH-S-13	Mud Brook	US Route 4	Fair Haven	18	7.0	7.63	Zone A	HDD
111.0	V-FH-S-5	Unnamed Tributary to Mud Brook	US Route 4	Fair Haven	4	4.0	< 0.5	-	At Culvert
111.8	V-FH-S-10	Unnamed Tributary to Castleton River	US Route 4	Fair Haven	2	4.0	< 0.5	-	At Culvert
113.2	V-CN-S-101	Unnamed Tributary to Castleton River	US Route 4	Castleton	3.5	5.0	0.52	-	OTE
115.4	V-CN-S-12	Unnamed Tributary to Castleton River	US Route 4	Castleton	16	4.0	0.73	Zone A	HDD
116.5	V-CN-S-8	North Breton Brook	US Route 4	Castleton	26	-	13.6	Zone AE, Floodway	HDD
117.7	V-CN-S-4	Unnamed Tributary to Castleton River	US Route 4	Castleton	5	4.0	< 0.5	-	At Culvert
119.6	T-IR-S4	Unnamed Tributary to Castleton River	US Route 4	Ira	5	4.0	0.63	-	At Culvert
121.1	T-WR-S34	Unnamed Tributary to Castleton River	US Route 4	West Rutland	3	3.0	< 0.5	-	At Culvert
121.6	T-WR-S29	Castleton River	US Route 4	West Rutland	30	-	16.6	Zone A	HDD
123.3	T-WR-S18	Unnamed Tributary to Clarendon River	US Route 4	West Rutland	10	4.0	1.37	Zone AE	HDD
123.8	T-WR-S36	Clarendon River	US Route 4	Rutland	30	-	43.9	Zone A	HDD

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126.6	T-RU-S2	Otter Creek	US Route 4	Rutland	100	-	235	Zone AE, Floodway	HDD
128.1	T-CL-S6	Cold River	US Route 7	Clarendon	75	-	36.4	Zone A	HDD
128.3	T-CL-S8	Unnamed Tributary to Otter Creek	US Route 7	Clarendon	3	4.0	< 0.5	-	HDD
128.7	T-CL-S4	Unnamed Tributary to Otter Creek	US Route 7	Clarendon	15	4.0	< 0.5	-	OTE
129.6	T-CL-S2	Unnamed Tributary to Otter Creek	US Route 7	Clarendon	10	12.0	4.44	Zone A	HDD
132.7	V-SH-S-16	Unnamed Tributary to Mill River	VT Route 103	Shrewsbury	3	3.0	< 0.5	-	At Culvert
133.4	V-SH-S-14	Unnamed Tributary to Mill River	VT Route 103	Shrewsbury	25	8.0	1.26	-	Over Culvert
134.4	T-SH-S2	Unnamed Tributary to Mill River	Green Mountain Railroad	Shrewsbury	25	15.0	2.32	Zone AE	HDD
135.5	T-SH-S3	Unnamed Tributary to Mill River	Green Mountain Railroad	Shrewsbury	20	14.0	2.45	Zone AE, Floodway	OTE
136.1	T-SH-S7	Unnamed Tributary to Mill River	Green Mountain Railroad	Shrewsbury	3	3.0	< 0.5	-	OTE
136.9	T-WA-S1	Freeman Brook	Green Mountain Railroad	Wallingford	30	-	11.9	Zone A	HDD
137.8	V-WA-S-106	Unnamed Tributary to Mill River	VT Route 103	Wallingford	3.5	2.0	< 0.5	-	OTE
137.9	V-WA-S-105	Unnamed Tributary to Mill River	VT Route 103	Wallingford	3	2.5	< 0.5	-	At Culvert
139.3	T-MH-S37	Unnamed Tributary to Mill River	VT Route 103	Mount Holly	6	4.0	0.4	-	HDD
140.4	T-MH-S28	Unnamed Tributary to Mill River	VT Route 103	Mount Holly	25	-	5.57	Zone A	OTE
141.8	T-MH-AS-23	Unnamed Tributary to Mill River	VT Route 103	Mount Holly	4	5.5	< 0.5	-	At Culvert
142.9	T-MH-AS-20	Unnamed Tributary to Mill River	VT Route 103	Mount Holly	4	5.0	0.64	-	At Culvert
143.2	T-MH-AS-45	Unnamed Tributary to Mill River	VT Route 103	Mount Holly	5	5.0	0.22	-	At Culvert
144.8	T-MH-S14	Unnamed Tributary to Branch Brook	VT Route 103	Mount Holly	12	0.0	2.1	-	Over Culvert
145.4	T-MH-S10	Branch Brook	VT Route 103	Mount Holly	30	-	10.8	Zone A	HDD
146.4	T-MH-S1	Unnamed Tributary to Branch Brook	VT Route 103	Mount Holly	7	6.0	0.12	-	At Culvert
147.9	T-LU-S4	Coleman Brook	VT Route 103	Ludlow	15	4.0	1.28	Zone AE	HDD
148.2	T-LU-S2	Branch Brook	VT Route 100	Ludlow	59	-	15.8	Zone AE, Floodway	HDD

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148.5	T-LU-S5	Unnamed Tributary to Black River	VT Route 100	Ludlow	3	3.5	0.5	Zone AE	Duct Bank
149.0	T-LU-S1	Black River	East Lake Road	Ludlow	50	-	38.3	Zone AE, Floodway	Aerial
150.4	T-LU-S21	Unnamed Tributary to Black River	East Lake Road	Ludlow	2	2.7	< 0.5	-	At Culvert
150.5	T-LU-S20	Unnamed Tributary to Black River	East Lake Road	Ludlow	10	7.0	0.64	-	Aerial
151.5	T-LU-S15	Unnamed Tributary to Black River	Pettiner Hill Road	Ludlow	6	3.3	< 0.5	-	At Culvert
151.6	T-LU-S12	Unnamed Tributary to Black River	Pettiner Hill Road	Ludlow	4	2.0	< 0.5	-	At Culvert

1. Mile post data from TRC 11/20/2014
2. U.S. Army Corps of Engineers (USACE). 2005. "Regulatory Guidance Letter. Subject: Ordinary High Water Mark Identification." No. 05-05.
3. Existing Structure Size is taken from the VTrans Bridge and Culvert Inventory (when available), from field delineations, or other sources. Structures missing dimensions are represented as (-).
4. Watershed size was determined from Vermont ANR River Management Program mapping and US Geological Survey StreamStats website.
5. Crossing Methods per 20% plans. Aerial - Hang from Existing Structure; At Culvert - Segment of existing culvert to be cut and replaced following installation of cable; HDD - Horizontal Directional Drill; OTE - Open Trench Excavation; Over Culvert - Existing culvert to remain undisturbed and cable installed in embankment above culvert; Replace Culvert - Existing culvert to be replaced with a new structure.

Summary of Proposed Crossing Methods and Watershed Sizes

Aerial		At Culvert Splice		Duct Bank		Horizontal Directional Drill		Open Trench Excavation		Over Culvert		Replace Culvert	
Watershed Size	Count	Watershed Size	Count	Watershed Size	Count	Watershed Size	Count	Watershed Size	Count	Watershed Size	Count	Watershed Size	Count
< 1 sq. mile	1	< 1 sq. mile	18	< 1 sq. mile	1	< 1 sq. mile	4	< 1 sq. mile	7	< 1 sq. mile	0	< 1 sq. mile	1
1 - 10 sq. mile	0	1 - 10 sq. mile	0	1 - 10 sq. mile	0	1 - 10 sq. mile	5	1 - 10 sq. mile	2	1 - 10 sq. mile	3	1 - 10 sq. mile	0
> 10 sq. mile	1	> 10 sq. mile	0	> 10 sq. mile	0	> 10 sq. mile	9	> 10 sq. mile	0	> 10 sq. mile	0	> 10 sq. mile	0
Subtotal	**2**	**Subtotal**	**18**	**Subtotal**	**1**	**Subtotal**	**18**	**Subtotal**	**9**	**Subtotal**	**3**	**Subtotal**	**1**

Total Number of Crossings	**52**