TDI- NECPL
Summary of Proposed Stream and Stream Culvert Crossings
Prepared by VHB/TRC
Date: March 27, 2015

Mile Marker	Stream Delineation ID	Subwatershed Location	Stream Name	Structure Width/ Diameter (feet)	Structure Material [1]	Town	Ordinary High Water (feet) [2]	Flow Regime [3]	Crossing Method [4,5]
99	V-BE-AS-3	Lake Champlain Direct Main Lake	na	2	CMP	Benson	3	Perennial	At Culvert Splice
99.5	V-BE-AS-5	Lake Champlain Direct Main Lake	na	4.5	CMP	Benson	7	Intermittent	At Culvert Splice
100.7	V-BE-S-8	Hubbardton River	Unnamed Tributary to Hubbardton River	2	CPP	Benson	7	Perennial	At Culvert Splice
101.2	V-BE-AS-10	Hubbardton River	na	3	CPP	Benson	5	Perennial	At Culvert Splice
101.7	V-BE-AS-11	Hubbardton River	na	2.5	CMP	Benson	4	Intermittent	At Culvert Splice
102.2	V-BE-S-100	Hubbardton River	na	2	CMP	Benson	3	Perennial	At Culvert Splice
102.9	V-BE-S-101	Hubbardton River	na	2	Steel	Benson	1.5	Ephemeral	At Culvert Splice
103.1	V-BE-S-102	Hubbardton River	Unnamed Tributary to Hubbardton River	6	RCP	Benson	3	Perennial	Over Culvert
104.5	V-BE-AS-105	Hubbardton River	na	1.25	CMP	Benson	1.5	Intermittent	Open Trench Excavate
104.7	V-BE-S-106	Hubbardton River	Hubbardton River	4	Double Steel	Benson	25	Perennial	HDD
105.1	V-BE-S-109	Hubbardton River	Unnamed Tributary to Hubbardton River	2.5	CMP	Benson	4	Perennial	At Culvert Splice
106.2	V-WH-S-4	Hubbardton River	Unnamed Tributary to Hubbardton River	2.5	HDPE	West Haven	5	Perennial	Open Trench Excavate
106.7	V-WH-S-5	Hubbardton River	Unnamed Tributary to Hubbardton River	3	RCP	West Haven	3	Intermittent	Open Trench Excavate
108.1	V-WH-S-2	Poultney River	Unnamed Tributary to Poultney River	2	CMP	West Haven	4.5	Perennial	At Culvert Splice
108.4	V-FH-S-25	Poultney River	na	4	CMP	Fair Haven	5	Perennial	HDD
108.8	V-FH-S-24	Poultney River	na	1.5	CMP	Fair Haven	2	Intermittent	At Culvert Splice
109.1	V-FH-S-22	Poultney River	Unnamed Tributary to Poultney River	2	CMP	Fair Haven	2	Ephemeral	At Culvert Splice
109.3	V-FH-S-18	Poultney River	Unnamed Tributary to Poultney River	na	na	Fair Haven	2	Intermittent	Open Trench Excavate
109.6	V-FH-S-17	Mud River	Unnamed Tributary to Mud Brook	4	CMP	Fair Haven	3	Perennial	At Culvert Splice
110.2	V-FH-S-13	Mud River	Mud Brook	7	RCP	Fair Haven	18	Perennial	HDD
110.5	V-FH-S-3	Mud River	na	3	CMP	Fair Haven	1.5	Intermittent	Open Trench Excavate
110.8	V-FH-S-4	Mud River	na	4	CMP	Fair Haven	2	Ephemeral	At Culvert Splice
111	V-FH-S-5	Mud River	na	4	CMP	Fair Haven	4	Perennial	At Culvert Splice
111.2	V-FH-S-26	Mud River	na	2.5	RCP	Fair Haven	2	Ephemeral	At Culvert Splice
111.6	V-FH-S-6	Castleton River	na	4	CMP	Fair Haven	2	Intermittent	At Culvert Splice
111.8	V-FH-S-10	Castleton River	Unnamed Tributary to Castleton River	4	CMP	Fair Haven	2	Perennial	At Culvert Splice
112	V-FH-S-7	Castleton River	na	2.5	CMP	Fair Haven	1	Ephemeral	Open Trench Excavate
112.5	V-FH-S-8	Lake Bomoseen	na	3	RCP	Castleton	3	Intermittent	At Culvert Splice
113.2	V-CN-S-101	Lake Bomoseen	Unnamed Tributary To Castleton River	5	CMP	Castleton	3.5	Perennial	Open Trench Excavate
115.3	V-CN-S-11	Castleton River	na	3	CMP	Castleton	1	Intermittent	Open Trench Excavate
115.4	V-CN-S-12	Castleton River	Unnamed Tributary To Castleton River	na	na	Castleton	16	Perennial	HDD
115.8	V-CN-S-13	Castleton River	na	na	na	Castleton	1	Intermittent	Open Trench Excavate
116.5	V-CN-S-8	North Benton Brook	North Breton Brook	15	Concrete	Castleton	26	Perennial	HDD
117	V-CN-S-5	Castleton River	na	3	CMP	Castleton	2	Ephemeral	At Culvert Splice
117.3	V-CN-S-7	Castleton River	na	2	CMP	Castleton	1	Ephemeral	At Culvert Splice
117.5	V-CN-S-6	Castleton River	na	2.5	RCP	Castleton	3	Intermittent	At Culvert Splice
117.7	V-CN-S-4	Castleton River	Unnamed Tributary to Castelton River	4	RCP	Castleton	5	Perennial	At Culvert Splice
117.9	V-CN-S-3	Castleton River	Unnamed Tributary to Castelton River	2	RCP	Castleton	0.5	Intermittent	At Culvert Splice
118.4	V-CN-S-2	Castleton River	Unnamed Tributary to Castelton River	2.25	CMP	Castleton	2.5	Intermittent	At Culvert Splice
119.1	V-CN-S-1	Castleton River	na	2	CMP	Castleton	2	Intermittent	At Culvert Splice
119.6	T-IR-S4	Castleton River	na	4	CMP	Ira	5	Perennial	At Culvert Splice
119.9	T-IR-S3	Castleton River	na	3	CMP	Ira	5	Intermittent	At Culvert Splice
120.2	T-IR-S2	Castleton River	na	3	RCP	Ira	2	Intermittent	At Culvert Splice
120.3	T-IR-S1	Castleton River	na	4.5	CMP	Ira	4	Intermittent	At Culvert Splice
120.6	T-WR-S31	Castleton River	na	na	na	West Rutland	1	Intermittent	Open Trench Excavate
120.8	T-WR-S30	Castleton River	na	2	CMP	West Rutland	5	Intermittent	At Culvert Splice
121.1	T-WR-S34	Castleton River	na	3	CMP	West Rutland	3	Perennial	At Culvert Splice
121.6	T-WR-S29	Castleton River	Castleton River	na	Bridge	West Rutland	30	Perennial	HDD
122.5	T-WR-S20	Castleton River	na	1.5	CMP	West Rutland	5	Intermittent	At Culvert Splice
122.9	T-WR-S23	Castleton River	na	2.5	CMP	West Rutland	4	Intermittent	Open Trench Excavate
123	T-WR-S24	Castleton River	na	na	na	West Rutland	3	Intermittent	Open Trench Excavate
123.3	T-WR-S18	Clarendon River	na	4	CMP	West Rutland	10	Perennial	HDD
123.5	T-WR-S17	Clarendon River	na	4	Concrete	West Rutland	2	Intermittent	At Culvert Splice
123.6	T-WR-S17	Clarendon River	na	4	Concrete	West Rutland	2	Intermittent	At Culvert Splice
123.8	T-WR-S36	Clarendon River	Clarendon River	1.5	CMP	Rutland	30	Perennial	HDD
124.1	T-WR-S11	Clarendon River	na	4	CMP	West Rutland	3	Intermittent	At Culvert Splice
124.3	T-WR-S12	Clarendon River	na	4.5	CMP	West Rutland	4	Intermittent	At Culvert Splice
124.4	T-WR-S5	Clarendon River	na	3	CMP	West Rutland	5	Intermittent	At Culvert Splice
124.4	T-WR-S14	Clarendon River	na	4	CMP	West Rutland	1	Intermittent	At Culvert Splice
124.6	T-WR-S8	Clarendon River	na	2	CMP	West Rutland	2	Ephemeral	At Culvert Splice
124.8	T-RU-S10	Clarendon River	na	2	CMP	Rutland	3	Ephemeral	At Culvert Splice
125	T-RU-S7	Otter Creek	na	2.5	CMP	Rutland	5	Intermittent	At Culvert Splice
125.4	T-WR-S1	Otter Creek	na	5	CMP	West Rutland	4	Intermittent	At Culvert Splice
126.4	T-RU-S4	Otter Creek	na	4	CMP	Rutland	2	Intermittent	HDD
126.6	T-RU-S2	Otter Creek	Otter Creek	na	na	Rutland	100	Perennial	HDD
127.7	T-RU-S1	Otter Creek	na	3	CMP	Rutland	2	Intermittent	HDD
128.1	T-CL-S6	Cold River	Cold River	na	Bridge	Clarendon	75	Perennial	HDD
128.3	T-CL-S8	Otter Creek	Tributary to Otter Creek	4	CMP	Clarendon	3	Perennial	HDD
128.7	T-CL-S4	Otter Creek	na	4	CMP	Clarendon	15	Perennial	Open Trench Excavate
129.6	T-CL-S2	Otter Creek	na	4	CMP	Clarendon	10	Perennial	HDD
130.9	T-WR-S9	Otter Creek	na	6	RCP	West Rutland	1	Ephemeral	At Culvert Splice
132.7	V-SH-S-17	Mill River	na	3	RCP	Shrewsbury	2	Intermittent	At Culvert Splice
132.7	V-SH-S-16	Mill River	na	3	CMP	Shrewsbury	3	Perennial	At Culvert Splice
133.4	V-SH-S-14	Mill River	Unnamed Tributary to Mill River	12	Concrete	Shrewsbury	25	Perennial	At Culvert Splice
134.3	T-SH-S1	Mill River	na	3	Stone	Shrewsbury	5	Intermittent	Open Trench Excavate
134.4	T-SH-S2	Mill River	Unnamed Tributary to Mill River	15	Stone	Shrewsbury	25	Perennial	HDD
134.7	T-SH-S4	Mill River	Unnamed Tributary to Mill River	8	Stone	Shrewsbury	5	Intermittent	At Culvert Splice
135.5	T-SH-S3	Mill River	Unnamed Tributary to Mill River	14	Stone	Shrewsbury	20	Perennial	Open Trench Excavate
135.8	T-SH-S5	Mill River	na	3	Stone	Shrewsbury	3	Intermittent	At Culvert Splice
136	T-SH-S6	Mill River	na	3	Stone	Shrewsbury	2.5	Intermittent	At Culvert Splice
136.1	T-SH-S7	Mill River	na	3	Stone	Shrewsbury	3	Perennial	Open Trench Excavate
136.3	T-SH-S10	Mill River	na	na	na	Shrewsbury	3	Intermittent	Open Trench Excavate
136.3	T-SH-S9	Mill River	na	na	na	Shrewsbury	1	Ephemeral	Open Trench Excavate
136.6	T-SH-S11	Mill River	na	na	na	Shrewsbury	2	Ephemeral	Open Trench Excavate
136.9	T-WA-S1	Freeman Brook	Freeman Brook	3.3	Bridge	Wallingford	30	Perennial	HDD
137.1	T-WA-S2	Mill River	na	3.3	Stone	Wallingford	1	Intermittent	Open Trench Excavate
137.3	T-WA-S3	Mill River	na	4.5	RCP	Wallingford	6	Intermittent	Open Trench Excavate
137.5	T-WA-S6	Mill River	na	na	na	Wallingford	4	Intermittent	HDD
137.6	V-WA-S-6	Mill River	na	2	RCP	Wallingford	2	Ephemeral	HDD
137.8	V-WA-S-106	Mill River	Unnamed Tributary to Mill River	2	CMP	Wallingford	3.5	Perennial	Open Trench Excavate
137.9	V-WA-S-105	Mill River	na	2.5	CMP	Wallingford	3	Perennial	At Culvert Splice
138	V-WA-AS-104	Mill River	na	2	RCP	Wallingford	5	Intermittent	At Culvert Splice
138.5	V-WA-S-100	Mill River	na	2	Concrete	Wallingford	1.5	Intermittent	At Culvert Splice
138.5	V-WA-S-100	Mill River	na	2	Concrete	Wallingford	1.5	Intermittent	At Culvert Splice
138.9	T-MH-DITCH18	Mill River	na	2	CMP	Mount Holly	2	Intermittent	At Culvert Splice
139.1	T-MH-S38	Mill River	na	3	Concrete	Mount Holly	1	Ephemeral	At Culvert Splice
139.2	T-MH-DITCH17	Mill River	na	1.5	CMP	Mount Holly	1	Intermittent	At Culvert Splice
139.3	T-MH-S37	Mill River	na	2.5	CMP	Mount Holly	6	Perennial	HDD
139.7	T-MH-DITCH16	Mill River	na	na	na	Mount Holly	1	Ephemeral	Open Trench Excavate

Mile Marker	Stream Delineation ID	Subwatershed Location	Stream Name	Structure Width/ Diameter (feet)	Structure Material [1]	Town	Ordinary High Water (feet) [2]	Flow Regime [3]	Crossing Method [4,5]
139.9	T-MH-S32	Mill River	na	4	RCP	Mount Holly	1	Intermittent	At Culvert Splice
140	T-MH-DITCH13	Mill River	na	1	CMP	Mount Holly	1	Intermittent	At Culvert Splice
140	T-MH-S30	Mill River	na	4	Concrete	Mount Holly	1	Intermittent	At Culvert Splice
140.4	T-MH-S28	Mill River	Unnamed Tributary to Mill River	na	Bridge	Mount Holly	25	Perennial	Open Trench Excavate
140.5	T-MH-DITCH12	Mill River	na	4	Concrete	Mount Holly	1	Intermittent	At Culvert Splice
140.6	T-MH-S27	Mill River	na	3	Concrete	Mount Holly	1.5	Ephemeral	At Culvert Splice
140.6	T-MH-AS-11	Mill River	na	3	Concrete	Mount Holly	3	Intermittent	At Culvert Splice
140.6	T-MH-DITCH11	Mill River	na	1.5	CMP	Mount Holly	3	Intermittent	At Culvert Splice
140.8	T-MH-DITCH10	Mill River	na	1.5	CMP	Mount Holly	1	Intermittent	At Culvert Splice
141.1	T-MH-DITCH9	Mill River	na	na	na	Mount Holly	3	Intermittent	Open Trench Excavate
141.1	T-MH-S26	Mill River	na	na	na	Mount Holly	1	Ephemeral	Open Trench Excavate
141.2	T-MH-S25	Mill River	na	4	RCP	Mount Holly	1	Intermittent	At Culvert Splice
141.4	T-MH-S24	Mill River	na	2.5	RCP	Mount Holly	3	Intermittent	At Culvert Splice
141.8	T-MH-AS-23	Mill River	na	5.5	CMP	Mount Holly	4	Perennial	At Culvert Splice
142.1	T-MH-S22	Mill River	na	2	RCP	Mount Holly	2	Intermittent	At Culvert Splice
142.5	T-MH-S21	Mill River	na	4.5	CMP	Mount Holly	3	Intermittent	At Culvert Splice
142.9	T-MH-AS-20	Mill River	na	5	RCP	Mount Holly	4	Perennial	At Culvert Splice
143.1	T-MH-AS-46	Mill River	na	3	CMP	Mount Holly	3	Intermittent	At Culvert Splice
143.2	T-MH-AS-45	Mill River	na	5	CMP	Mount Holly	5	Perennial	At Culvert Splice
143.6	T-MH-AS-42	Mill River	na	2	CMP	Mount Holly	3	Intermittent	At Culvert Splice
144.1	T-MH-DITCH6	Branch Brook	na	1.5	RCP	Mount Holly	1	Ephemeral	At Culvert Splice
144.8	T-MH-S14	Branch Brook	na	10	RCP	Mount Holly	12	Perennial	Over Culvert
145.4	T-MH-S10	Branch Brook	Branch Brook	na	Bridge	Mount Holly	30	Perennial	HDD
145.7	T-MH-AS-4	Branch Brook	na	2	Concrete	Mount Holly	3	Intermittent	At Culvert Splice
145.7	T-MH-S4	Branch Brook	na	1	CMP	Mount Holly	6	Intermittent	At Culvert Splice
145.7	T-MH-S4	Branch Brook	na	1	CMP	Mount Holly	6	Intermittent	At Culvert Splice
146	T-MH-S5	Branch Brook	na	2	RCP	Mount Holly	1.5	Intermittent	At Culvert Splice
146.1	T-MH-S3	Branch Brook	na	2	RCP	Mount Holly	2	Ephemeral	At Culvert Splice
146.2	T-MH-S2	Branch Brook	na	2.5	RCP	Mount Holly	4	Ephemeral	At Culvert Splice
146.4	T-MH-S1	Branch Brook	na	6	CMP	Mount Holly	7	Perennial	At Culvert Splice
146.7	T-LU-S32	Branch Brook	na	3	CMP	Ludlow	3	Intermittent	At Culvert Splice
146.9	T-LU-S31	Branch Brook	na	3	CMP	Ludlow	4	Ephemeral	At Culvert Splice
147.9	T-LU-S4	Coleman River	Coleman Brook	4	CMP	Ludlow	15	Perennial	HDD
148.2	T-LU-S2	Black River	Branch Brook	na	Bridge	Ludlow	59	Perennial	HDD
148.5	T-LU-S5	Black River	na	3.5	CMP	Ludlow	3	Perennial	Duct Bank
149	T-LU-S1	Black River	Black River	na	Bridge	Ludlow	50	Perennial	Aerial
149.3	T-LU-S28	Black River	na	1.5	CPP	Ludlow	1.5	Ephemeral	At Culvert Splice
149.7	T-LU-S27	Black River	na	1.5	CMP	Ludlow	1	Ephemeral	At Culvert Splice
149.8	T-LU-S26	Black River	na	1.5	CPP	Ludlow	2	Ephemeral	At Culvert Splice
149.9	T-LU-S24	Black River	na	1.5	CMP	Ludlow	1	Ephemeral	At Culvert Splice
150.2	T-LU-S23	Black River	na	2	CMP	Ludlow	3	Ephemeral	At Culvert Splice
150.2	T-LU-S22	Black River	na	2	CPP	Ludlow	3	Intermittent	At Culvert Splice
150.4	T-LU-S21	Black River	na	2.7	CPP	Ludlow	2	Perennial	At Culvert Splice
150.5	T-LU-S20	Black River	na	7	CMP	Ludlow	10	Perennial	Aerial
150.8	T-LU-AS-19	Black River	na	1.5	CMP	Ludlow	1	Intermittent	At Culvert Splice
151.2	T-LU-S17	Black River	na	1.5	CPP	Ludlow	1	Intermittent	At Culvert Splice
151.4	T-LU-S16	Black River	na	1.5	CPP	Ludlow	1	Ephemeral	At Culvert Splice
151.5	T-LU-S14	Black River	na	2	CPP	Ludlow	2	Intermittent	At Culvert Splice
151.5	T-LU-S15	Black River	na	3.3	CPP	Ludlow	6	Perennial	At Culvert Splice
151.6	T-LU-S13	Black River	na	1.5	CPP	Ludlow	2	Intermittent	At Culvert Splice
151.6	T-LU-S12	Black River	na	2	CPP	Ludlow	4	Perennial	At Culvert Splice
152.5	T-LU-S10	Twentymile Stream	na	2	CMP	Ludlow	4	Intermittent	At Culvert Splice

[1] Structure material abbreviations are as follows: **CMP** - corrugated metal pipe; **CPP** - corrugated plastic pipe; **HDPE** - high density polyethylene; **RCP** - reinforced concrete pipe. "**na**" indicates no structure is present where Project would cross stream.

[2] U.S. Army Corps of Engineers (USACE). 2005. "Regulatory Guidance Letter. Subject: Ordinary High Water Mark Identification." No. 05-05.

[3] Stream flow regime determined based on qualitative observations of instream hydrology indicators and geomorphic characteristic and are subject to professional judgment.

[4] Crossing methods taken from the New England Clean Power Link - TDI New England - Overland Route Segment" plan set, prepared by TRC, dated 3/27/15.

[5] Crossing Methods are as follows: Aerial - Hang/ attach to existing bridge or culvert headwall; At Culvert Splice - Segment of existing culvert to be cut and replaced following installation of cable; HDD - Horizontal Directional Drill; Open Trench Excavation - cable is installed in excavated trench; Over Culvert - Existing culvert to remain undisturbed and cable installed in embankment above culvert; Duct Bank- to be installed beneath VT Route 100 and an existing culvert.