



**CITY OF ESSEX JUNCTION
CAPITAL PROGRAM REVIEW COMMITTEE
NOTICE AND AGENDA**

Online & 2 Lincoln St.
Essex Junction, VT 05452
Tuesday, November 7, 2023
6:00 PM

E-mail: admin@essexjunction.org

www.essexjunction.org

Phone: (802) 878-6944

This meeting will be in-person at 2 Lincoln Street and available remotely. Options to watch or join the meeting remotely:

- **JOIN ONLINE:** [Join Zoom Meeting](#)
- **JOIN CALLING (toll free audio only):** (888) 788-0099 | Meeting ID: 832 5366 1622; Passcode: 189879
- **PROVIDE FULL NAME:** For minutes, please provide your full name whenever prompted.
- **MUTE YOUR MIC:** When not speaking, please mute your microphone on your computer/phone.

1. **CALL TO ORDER** [6:00 PM]
2. **AGENDA ADDITIONS/CHANGES**
3. **PUBLIC COMMENTS**
4. **DISCUSSION ITEMS**
 - a. Draft LOT Policy Review and Discussion
 - b. Capital Ranking and Cost Estimate Updates Review and Discussion
5. **REVIEW AND APPROVE MINUTES**
 - a. Approve minutes: October 3, 2023
6. **ADJOURN**

Members of the public are encouraged to speak during the Public Comments agenda item, or when recognized by the Chair during consideration of a specific agenda item. Public comments are limited to a three minute rule unless waived by the Chair. This agenda is available in alternative formats upon request. Meetings of the Capital Program Review Committee, like all programs and activities of the City of Essex Junction, are accessible to people with disabilities. For information on accessibility or this agenda, call the Finance office at 802-878-6944 TTY: 7-1-1 or (800) 253-0191.

**CITY OF ESSEX JUNCTION
LOCAL OPTION TAX FUND REVENUE POLICY**

Purpose:

To define a process and procedure for allocating revenue from the local option tax (“LOT”) fund for the City of Essex Junction to certain expenditures.

Definitions:

Capital projects are defined as a physical improvement on the following that exceeds \$10,000.00, that is not recurring on an annual basis: roads, bridges, culverts, sidewalks and waterlines.

Capital projects **DO NOT** include the following: paving, rolling stock and buildings.

Policy:

The general policy is that all revenues received through the imposition of the LOT shall be used for capital projects within the City of Essex Junction **except as specifically approved by the City Council.**

During the annual budgeting process, the City Council shall develop a plan which identifies the specific capital projects the LOT funds will be used for in the upcoming fiscal year. The specific capital projects do not need to be listed on the current Capital Program Review Committee priority projects but must include an annual set-aside of \$_____ to be applied toward sidewalk improvements/repairs. The prioritization of sidewalk repairs shall be based on the most recent Chittenden County Regional Planning Commission (“CCRPC”) sidewalk assessment.

All revenues received by the City of Essex Junction as proceeds of the LOT fund, shall be set aside by the City Finance Director in a dedicated, restricted fund.

The LOT fund is subject to the City of Essex Junction Purchasing Policy.

A report of all revenues and expenditures of the LOT fund shall be prepared by the City Finance Director and included in the monthly financial statements, and annual City report.

The City Council shall review and amend (as applicable) this policy on a semi-annual basis.

Adopted by the City Council on _____, 2023:

Raj Chawla, President

Amber Thibeault, Vice President

Andrew Brown

Elaine Haney

Marcus Certa

11/3/2023 7:11		J - Densmore Drive (re-ranked Oct 2020)		SSS - Main Street Waterline IN CONSTRUCTION	Brickyard Culvert (NEW Ranked May 2021)	Y - Railroad Ave	OOO & PPP - Iroquois		FFF - West of Pearl Street	UU - Pearl Street	III - Rosewood Lane
Rating Criteria	Max points	Upstream Culvert and partial road (became FEMA event Oct 2019)	Downstream Culvert and partial road (became FEMA event Oct 2019)	Waterline	Culvert (identified as part of Densmore study after FEMA event)	Waterline Lincoln PI to Central	Road and waterline rebuild - waterline loop Cherokee (conventional construction)	Road and waterline rebuild - waterline loop Cherokee (innovative construction)	Multi-use path through ANR from West St to Pearl St	Sidewalk and road West Street to Susie Wilson	Road and Sidewalk Replacement
Safety & Health	28	25	25	26	23	24	24	24	19	18	18
Mandates	24	0	0	0	0	0	0	0	0	0	0
Remaining Service Life	26	24	24	24	18	18	18	18		12	18
Community Support	24	17	17	12	12	12	12	12	17	17	13
Financing Source	20	18	18	0	0	4	0	0	18	0	0
Timing/Linkages	16	0	0	1	10	0	3	3	0	0	0
Positive Economic Impact	12	0	0	0	0	8	0	0	1	4	0
Cost of Deferral	10	10	10	10	10	0	2	2	0	0	0
Efficiencies	8	7	7	2	4	0	4	4	0	0	4
Service Improvements	8	8	8	4	0	7	4	4	3	4	4
Alignment with Village Priorities	6	1	1	0	0	4	2	2	6	6	3
Other	4	2	2	3	1	0	3	3	2	2	2
Total		112	112	82	78	77	72	72	66	63	62
Engineering		\$ 161,717	\$ 255,034	\$ 482,286	\$ 209,700	\$ 40,779	\$ 306,867	\$ 314,792	\$ 132,254	\$ 174,752	\$ 268,826
Pavement				\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway				\$ -	\$ -	\$ 97,440	\$ 1,303,139	\$ 1,344,990	\$ -	\$ 276,202	\$ 1,257,186
Waterline		\$ 129,670	\$ 112,942	\$ 2,679,366	\$ 102,999	\$ 106,454	\$ 352,559	\$ 354,376	\$ -	\$ 10,614	\$ -
Sanitary Sewer			\$ 52,621	\$ -	\$ 37,229	\$ -	\$ 10,968	\$ 11,059	\$ -	\$ -	\$ 60,056
Storm Drainage		\$ 720,330	\$ 989,277	\$ -	\$ 919,731	\$ -	\$ 27,460	\$ 27,641	\$ -	\$ 58,760	\$ 15,969
Sidewalk				\$ -	\$ 20,041	\$ -	\$ 10,689	\$ 10,780	\$ 696,072	\$ 574,174	\$ 160,268
Project Total		\$ 1,011,717	\$ 1,409,874	\$ 3,161,652	\$ 1,289,700	\$ 244,672	\$ 2,011,681	\$ 2,063,639	\$ 828,325	\$ 1,094,502	\$ 1,762,306
Water Fund		\$ 154,341	\$ 137,884	\$ 3,161,652	\$ 122,998	\$ 127,745	\$ 416,020	\$ 418,164	\$ -	\$ 12,631	\$ -
Sanitation Fund		\$ -	\$ 64,241	\$ -	\$ 44,457	\$ -	\$ 12,943	\$ 13,050	\$ -	\$ -	\$ 70,866
General Fund		\$ 857,376	\$ 1,207,748	\$ -	\$ 1,122,245	\$ 116,927	\$ 1,582,719	\$ 1,632,425	\$ 828,325	\$ 1,081,872	\$ 1,691,439
Priority				1		2	3	3	4	5	6

11/3/2023 7:11	C - Algonquin Avenue	V - Pearl Street	QQQ - North Street	NNN - Pleasant Street	VV - West Street	TT - Pearl Street	BBB - West Street (12/2 minutes for ranking)	GGG - South Street	GGG1 - South Street	R - Main Street	T - Old Colchester Road	H - Central Street
Rating Criteria	New waterline installation Cherokee Ave to Iroquois Ave	Waterline 235 Pearl to Susie Wilson	Replace waterline, road, and storm drainage	Rebuild roadway	Sidewalk South Street to Clems Drive	Sidewalk and lighting Wileys Ct to West Street Ext	West St and West St Extension intersection	Sidewalk and drainage improvements	Sidewalk and drainage improvements	Enclose drainage from Educational Dr to Athens Dr, new bridge at Indian Brook	New sanitary sewer	Waterline
Safety & Health	28	18	24	12	18	18	24	17	17	24	16	24
Mandates	0	0	0	0	0	0	0	0	0	0	0	0
Remaining Service Life		12	18	18	12	12	12					
Community Support	12	12	12	16	12	14	20	17	17	12	12	12
Financing Source	0	0	0	0	0	0	0	0	0	0	0	0
Timing/Linkages	12	0	0	0	0	0	0	0	0	0	0	0
Positive Economic Impact	0	8	0	0	1	3	0	4	4	0	8	0
Cost of Deferral	0	0	0	0	0	0	0	2	2	5	0	0
Efficiencies	2	0	0	3	0	0	0	2	2	0	0	0
Service Improvements	8	6	4	3	4	4	4	6	6	4	8	8
Alignment with Village Priorities	0	3	0	2	6	3	4	4	4	6	6	3
Other	0	2	2	3	2	1	2	2	2	2	0	0
Total	62	61	60	57	55	55	54	54	54	53	50	47
Engineering	\$ 46,929	\$ 74,249	\$ 303,431	\$ 195,748	\$ 129,669	\$ 283,483	\$ 17,906	\$ 23,601	\$ 45,418	\$ 470,546	\$ 177,866	\$ 241,666
Pavement	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,048	\$ -	\$ -	\$ -	\$ -	\$ -
Roadway	\$ 168,588	\$ -	\$ 1,028,309	\$ 1,045,761	\$ -	\$ 220,902	\$ 54,789	\$ -	\$ -	\$ 1,708,391	\$ 639,125	\$ 796,242
Waterline	\$ 66,058	\$ 371,243	\$ 362,662	\$ 5,642	\$ 20,948	\$ 8,410	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 450,365
Sanitary Sewer	\$ -	\$ -	\$ 10,872	\$ 12,068	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 23,386	\$ 297,010	\$ 7,255
Storm Drainage	\$ -	\$ -	\$ 179,573	\$ 24,016	\$ -	\$ 22,002	\$ 19,777	\$ 41,181	\$ 64,195	\$ 589,531	\$ -	\$ 14,981
Sidewalk	\$ -	\$ -	\$ 104,310	\$ -	\$ 661,523	\$ 1,323,593	\$ 4,916	\$ 76,823	\$ 162,896	\$ 292,835	\$ -	\$ 73,746
Project Total	\$ 281,576	\$ 445,492	\$ 1,989,157	\$ 1,283,234	\$ 812,140	\$ 1,858,391	\$ 107,436	\$ 141,604	\$ 272,509	\$ 3,084,689	\$ 1,114,000	\$ 1,584,255
Water Fund	\$ 79,270	\$ 445,492	\$ 427,942	\$ 6,657	\$ 24,928	\$ 9,924	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 531,431
Sanitation Fund	\$ -	\$ -	\$ 12,829	\$ 14,240	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 27,595	\$ 353,441	\$ 8,561
General Fund	\$ 202,306	\$ -	\$ 1,548,387	\$ 1,262,337	\$ 787,212	\$ 1,848,467	\$ 107,436	\$ 141,604	\$ 272,509	\$ 3,057,093	\$ 760,559	\$ 1,044,263
Priority	7	8	9	10	11	12	13	14	15	16	17	18

11/3/2023 7:11	Yya - Main Street	S - North Street	HH - West Street	HHH - Lincoln Hall	KK - Main Street	Z - River Street	AA - River Street	A - Abnaki Avenue	U - Orchard Terrace	BB - Rosewood Lane	CC - South Street	I - Church Street
Rating Criteria	New sidewalk and lighting from bridge to crestview on west side	Replace waterline Grove St to Central St	Waterline replacement South Summit to Hayden Dr	Senior bus parking	Drainage, Curb & Sidewalk Pleasant to Bridge, elevate Educational Dr intersection	Section A new curb and sidewalk Park St to Stanton Dr	Section B new curb and sidewalk Stanton Dr to Riverside in the Village	Road Reconstruction	Sidewalk long stretch & cul-de-sac	Sidewalk replacement Mansfield to Briar (south side)	Waterline replacement Park St to Doon Way	Waterline replacement Main St to East St
Safety & Health	20	22	22	15	18	14	14	12	8	16	13	14
Mandates	0	0	0	0	0	0	0	0	0	0	0	0
Remaining Service Life	0			0	0			6	6			
Community Support	15	12	12	14	12	12	12	14	12	12	12	12
Financing Source	0	0	0	0	0	0	0	0	0	0	0	0
Timing/Linkages	0	0	0	0	0	2	2	0	0	0	0	0
Positive Economic Impact	0	0	0	1	0	2	2	0	0	0	0	0
Cost of Deferral	0	4	4	5	0	0	0	0	0	0	0	0
Efficiencies	0	0	0	0	0	0	0	0	4	2	0	0
Service Improvements	5	6	6	5	5	4	4	2	4	2	6	2
Alignment with Village Priorities	4	0	0	3	3	6	6	2	1	4	2	0
Other	2	2	2	2	3	0	0	3	2	0	0	0
Total	46	46	46	45	41	40	40	39	37	36	33	28
Engineering	\$ 52,446	\$ 254,561	\$ 188,018	\$ 7,783	\$ 110,713	\$ 41,104	\$ 59,756	\$ 67,644	\$ 36,316	\$ 51,582	\$ 177,589	\$ 56,933
Pavement	\$ -	\$ -	\$ -	\$ -	\$ 61,533	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 25,763
Roadway	\$ -	\$ 758,400	\$ 417,017	\$ -	\$ 276,122	\$ 39,054	\$ 52,886	\$ 338,219	\$ -	\$ -	\$ 163,836	\$ -
Waterline	\$ -	\$ 366,494	\$ 627,527	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 576,982	\$ 258,901
Sanitary Sewer	\$ -	\$ 18,483	\$ -	\$ -	\$ 9,610	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Storm Drainage	\$ -	\$ 149,866	\$ -	\$ -	\$ 104,744	\$ 36,338	\$ 197,688	\$ -	\$ -	\$ -	\$ -	\$ -
Sidewalk	\$ 262,231	\$ 120,988	\$ -	\$ 38,913	\$ 130,688	\$ 130,129	\$ 48,206	\$ -	\$ 181,578	\$ 257,911	\$ 193,862	\$ -
Project Total	\$ 314,677	\$ 1,668,791	\$ 1,232,562	\$ 46,695	\$ 693,410	\$ 246,625	\$ 358,536	\$ 405,862	\$ 217,894	\$ 309,494	\$ 1,112,268	\$ 341,597
Water Fund	\$ -	\$ 432,462	\$ 740,482	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 686,608	\$ 310,682
Sanitation Fund	\$ -	\$ 21,810	\$ -	\$ -	\$ 11,436	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
General Fund	\$ 314,677	\$ 1,214,519	\$ 492,080	\$ 46,695	\$ 681,975	\$ 246,625	\$ 358,536	\$ 405,862	\$ 217,894	\$ 309,494	\$ 425,660	\$ 30,916
Priority	19	20	21	22	23	24	25	26	27	28	29	30

11/3/2023 7:11	O and P - Iroquois Avenue		L - Grant Street	KKK - Densmore Drive	MMM - South Street	TTT - Fairview Drive	Totals
Rating Criteria	Road reconstruction So Summit St to Park St (conventional construction)	Road reconstruction So Summit St to Park St (innovative construction)	Waterline replacement Jackson St to Maple St	Reconstruction and culvert replacement	Reduce flooding south of South St residences during major rain storm events	New waterline and pressure reducing valve vault	
Safety & Health	8	8					
Mandates	0	0					
Remaining Service Life							
Community Support	12	12					
Financing Source	0	0					
Timing/Linkages	0	0					
Positive Economic Impact	0	0					
Cost of Deferral	0	0					
Efficiencies	0	0					
Service Improvements	0	0					
Alignment with Village Priorities	0	0					
Other	0	0					
Total	20	20	0	0	0	0	
Engineering	\$ 224,027	\$ 220,318	\$ 72,846	\$ 299,842	\$ 110,089	\$ 36,667	\$ 5,906,307
Pavement	\$ -	\$ -	\$ 29,494	\$ -	\$ -	\$ -	\$ 97,344
Roadway	\$ 1,050,794	\$ 1,187,505	\$ 78,735	\$ 1,076,654	\$ -	\$ -	\$ 14,224,894
Waterline	\$ 2,380	\$ 1,860	\$ 256,001	\$ 2,961	\$ -	\$ 183,337	\$ 6,968,452
Sanitary Sewer	\$ 9,445	\$ 9,583	\$ -	\$ 5,490	\$ -	\$ -	\$ 550,616
Storm Drainage	\$ 181,974	\$ 25,043	\$ -	\$ 398,706	\$ 571,086	\$ -	\$ 4,203,061
Sidewalk	\$ -	\$ -	\$ -	\$ 181,978	\$ 8,328	\$ -	\$ 5,085,398
Project Total	\$ 1,468,620	\$ 1,444,309	\$ 437,075	\$ 1,965,632	\$ 689,503	\$ 220,004	\$ 33,037,603
Water Fund	\$ 2,809	\$ 2,194	\$ 307,201	\$ 3,494	\$ -	\$ 220,004	\$ 7,250,021
Sanitation Fund	\$ 11,145	\$ 11,308	\$ -	\$ 6,479	\$ -	\$ -	\$ 655,470
General Fund	\$ 1,454,667	\$ 1,430,806	\$ 129,874	\$ 1,955,659	\$ 689,503	\$ -	\$ 25,132,113
Priority	31	31					

General Fund Capital Reserve Fund Balance

	FY24	FY25	FY26	FY27	FY28	FY29	FY30
Beginning Fund Balance	1,073,157	1,610,087	1,116,461	173,294	120,004	(15,230)	(2,566,778)
Planned Spending	(90,000)	(1,120,867)	(1,662,425)	(878,325)	(1,081,872)	(3,620,756)	(7,075,978)
Revenue Sources							
<i>General Fund Transfer In</i>	531,585	611,323	703,021	808,474	929,745	1,069,207	1,229,588
<i>CVE Annual Contribution</i>	15,606	15,918	16,236	16,561	16,892		
<i>LOT Transfer In</i>	79,739						
<i>Misc. Donations and Interest Earnings</i>							
<i>Summary Stormwater Grants</i>							
<i>Brickyard Culvert</i>							
<i>Vtrans Structures Grant-Main St. Ped Bridge</i>							
<i>Crescent Connector Grant</i>							
<i>Pearl St. Missing Link Grants</i>							
<i>FEMA - Densmore Drive (Oct 2019 event) and State 15%</i>							
Total Revenues	626,930	627,241	719,258	825,036	946,638	1,069,207	1,229,588
Ending Fund Balance	1,610,087	1,116,461	173,294	120,004	(15,230)	(2,566,778)	(8,413,167)

annual planned increase GF transfer in: 15%

Water Fund Capital Reserve Balance

	FY24	FY25	FY26	FY27	FY28	FY29	FY30
Beginning Fund Balance	1,026,945	840,451	965,288	791,622	1,054,168	1,223,110	879,037
Planned Spending	(412,398)	(127,745)	(431,214)	-	(12,631)	(530,699)	(994,213)
Debt Payments (previous FY35, Main St. water line FY53, lead service line FY32)	(234,096)	(257,418)	(252,452)	(247,454)	(328,427)	(323,374)	(318,301)
Revenue Sources							
<i>Transfer In from Water Operating Budget</i>	460,000	510,000	510,000	510,000	510,000	510,000	510,000
<i>Interest Earnings</i>							
<i>Vac Truck Rental</i>							
Total Revenues	460,000	510,000	510,000	510,000	510,000	510,000	510,000
Ending Fund Balance	840,451	965,288	791,622	1,054,168	1,223,110	879,037	76,523

Wastewater Fund Capital Reserve Balance

	FY24	FY25	FY26	FY27	FY28	FY29	FY30
Beginning Fund Balance	1,998,726	2,167,769	2,547,131	2,985,993	3,437,856	3,954,718	4,491,580
Planned Spending	(268,500)	(77,500)	(38,000)	(45,000)	-	-	-
Debt Payments (ARRA Stimulus Loan ends FY31)	(2,457)	(3,138)	(3,138)	(3,138)	(3,138)	(3,138)	(3,138)
Revenue Sources							
<i>Transfer In from Wastewater Operating Budget</i>	440,000	460,000	480,000	500,000	520,000	540,000	560,000
<i>Interest Earnings</i>							
Total Revenues	440,000	460,000	480,000	500,000	520,000	540,000	560,000
Ending Fund Balance	2,167,769	2,547,131	2,985,993	3,437,856	3,954,718	4,491,580	5,048,442

Sanitation Fund Capital Reserve Balance

	FY24	FY25	FY26	FY27	FY28	FY29	FY30
Beginning Fund Balance	526,878	456,253	401,609	(263,551)	(249,869)	(236,188)	(228,985)
Planned Spending	(83,625)	(68,300)	(678,400)	-	-	(6,479)	(97,935)
Debt Payments (HS Pump Station Upgrade RF1-157 FY34 and ARRA Stimulus Loan FY31)	(82,000)	(81,344)	(81,760)	(81,318)	(81,318)	(81,318)	(81,317)
Revenue Sources							
<i>Transfer In from Wastewater Operating Budget</i>	95,000	95,000	95,000	95,000	95,000	95,000	95,000
<i>Interest Earnings</i>							
Total Revenues	95,000	95,000	95,000	95,000	95,000	95,000	95,000
Ending Fund Balance	456,253	401,609	(263,551)	(249,869)	(236,188)	(228,985)	(313,237)

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Summary of Capital Projects Estimates

Cost Reference Date: 8/17/2023

Revision Date: 8/17/2023

		Original Capital Plan Date	Estimate Preparation Date	Cost Reference Date	Construction Cost	Engineering Fees	Total Cost
Street Name	Project Description						
A Abnaki Avenue	Reconstruction of 525 L.F. of Roadway	11/24/2003	8/17/2023	8/17/2023	\$ 338,218.50	\$ 67,643.70	\$ 405,862.20
B Algonquin Avenue	Reconstruction of 230 L.F. of Roadway and Install New Waterline	11/24/2003	Completed Summer of 2012				
C Algonquin Avenue	New Waterline Installation, Cherokee Ave to Iroquois Ave	10/17/2005	8/17/2023	8/17/2023	\$ 234,646.55	\$ 46,929.31	\$ 281,575.86
D Briar Lane	Sidewalk Replacement	9/28/2001	Completed Summer of 2016				
E Briar Lane	Waterline and Sidewalk Replacement	9/29/2005	Completed Summer of 2016				
F Briar Lane	Road Reconstruction, Conventional Construction	9/28/2001	Rebuilt using Innovative Construction see Project "G"				
G Briar Lane	Road Reconstruction, Innovative Construction	9/28/2001	Completed Summer of 2016				
H Central Street	Waterline Replacement, Lincoln Street to Main Street	9/29/2005	8/17/2023	8/17/2023	\$ 1,342,589.36	\$ 241,666.08	\$ 1,584,255.44
I Church Street	Waterline Replacement, Main Street to East Street	9/29/2005	8/17/2023	8/17/2023	\$ 284,664.42	\$ 56,932.88	\$ 341,597.30
J Densmore Drive	Partial Reconstruction and Culvert Replacement	10/17/2005	8/17/2023	8/17/2023	\$ 478,541.95	\$ 95,708.39	\$ 574,250.34
K Fairview Farms	Stormwater Pond Improvements	12/16/2008	Completed Summer of 2010				
L Grant Street	Waterline Replacement, Jackson Street to Maple Street	9/29/2005	8/17/2023	8/17/2023	\$ 364,228.91	\$ 72,845.78	\$ 437,074.69
M Grove Street	Replace Sanitary Sewer, Road Reconstruction	1/6/2009	Completed Summer of 2010				
N Hillcrest Road	Drainage Improvements on Hillcrest, Water & Drainage Improvements on North Hillcrest	9/29/2005	Completed Summer of 2015				
O Iroquois Avenue	Road Reconstruction, South Summit Street to Park Street, Conventional Construction	9/28/2001	8/17/2023	8/17/2023	\$ 1,244,593.40	\$ 224,026.81	\$ 1,468,620.21
P Iroquois Avenue	Road Reconstruction, South Summit Street to Park Street, Innovative Construction	9/28/2001	8/17/2023	8/17/2023	\$ 1,223,990.33	\$ 220,318.26	\$ 1,444,308.59
Q Lamoille Street	Waterline Replacement and Roadway Reconstruction	9/29/2005	Completed Summer of 2020				
R Main Street	Enclose Drainage from Educational Dr. to Athens Dr., New Bridge at Indian Brook	10/15/2003	8/17/2023	8/17/2023	\$ 2,614,142.89	\$ 470,545.72	\$ 3,084,688.61
S North Street	Replace Waterline, Grove Street to Central Street	9/29/2005	8/17/2023	8/17/2023	\$ 1,414,229.54	\$ 254,561.32	\$ 1,668,790.86
T Old Colchester Road	New Sanitary Sewer	12/16/2008	8/17/2023	8/17/2023	\$ 936,134.43	\$ 177,865.54	\$ 1,113,999.97
U Orchard Terrace	Sidewalk Replacement	10/17/2005	8/17/2023	8/17/2023	\$ 181,578.47	\$ 36,315.69	\$ 217,894.17
V Pearl Street	New Waterline, 235 Pearl Street to Susie Wilson Road	9/29/2005	8/17/2023	8/17/2023	\$ 371,243.05	\$ 74,248.61	\$ 445,491.66
W Pearl Street	Waterline Replacement, CVE Water Vault to Hillcrest Road	9/29/2005	Does not need to be completed per Rick Jones				
X Pearl Street	Waterline Replacement, Hillcrest Road to Curtis Avenue	9/29/2005	Does not need to be completed per Rick Jones				
Y Railroad Avenue	New Waterline, South of Lincoln Place to Central Street	9/29/2005	8/17/2023	8/17/2023	\$ 203,893.43	\$ 40,778.69	\$ 244,672.11
Z River Street	Section A, New Curb and Sidewalk, Park Street to Stanton Drive	9/29/2005	8/17/2023	8/17/2023	\$ 205,520.55	\$ 41,104.11	\$ 246,624.66

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

			Original Capital	Estimate Preparation	Cost Reference	Construction	Engineering	Total
	Street Name	Project Description	Plan Date	Date	Date	Cost	Fees	Cost
AA	River Street	Section B, New Curb and Sidewalk, Stanton Drive to Riverside in the Village	9/29/2005	8/17/2023	8/17/2023	\$ 298,779.65	\$ 59,755.93	\$ 358,535.59
BB	Rosewood Lane	Sidewalk Replacement, Mansfield to Briar, south side	9/28/2001	8/17/2023	8/17/2023	\$ 257,911.35	\$ 51,582.27	\$ 309,493.62
CC	South Street	Waterline Replacement, Park Street to Doon Way	6/21/2001	8/17/2023	8/17/2023	\$ 934,679.20	\$ 177,589.05	\$ 1,112,268.25
DD	South Street	Municipal Water and Sanitary Sewer Improvements	1/10/2009	Does not need to be completed per Rick Jones				
EE	South Summit St	Waterline Replacement, Pearl Street to Cherry Street	6/21/2001	Completed Summer of 2010				
FF	Summit Street	Waterline Replacement, Pearl Street to Prospect Street	9/29/2005	Completed Summer of 2011				
GG	Thasha Lane	Waterline Installation	9/29/2005	Does not need to be completed, Private Development				
HH	West Street	Waterline Replacement, South Summit to Hayden Drive	9/29/2005	8/17/2023	8/17/2023	\$ 1,044,544.31	\$ 188,017.98	\$ 1,232,562.28
II	Woods End	Road Reconstruction, Conventional Construction	9/28/2001	Rebuilt using Innovative Construction see Project "JJ"				
JJ	Woods End	Road Reconstruction, Innovative Construction	9/28/2001	Completed Summer of 2014				
KK	Main Street	New Drainage, Curb & Sidewalk-Pleasant Street to Bridge, Elevate Educational Drive Intersection	11/24/2003	8/17/2023	8/17/2023	\$ 582,697.70	\$ 110,712.56	\$ 693,410.26
LL	Main Street	New Bridge at Indian Brook, Enclose Drainage, New Curb & Sidewalk, Bridge to Crestview Road	11/24/2003	8/17/2023	8/17/2023	\$ 1,155,571.33	\$ 208,002.84	\$ 1,363,574.16
MM	Main Street	Enclose Drainage, New Curb & Sidewalk, Crestview Road to Taft Street	11/24/2003	8/17/2023	8/17/2023	\$ 853,428.58	\$ 162,151.43	\$ 1,015,580.01
NN	Main Street	Enclose Drainage, New Curb & Sidewalk, Taft Street to Athens Drive	2/24/2003	8/17/2023	8/17/2023	\$ 561,791.49	\$ 106,740.38	\$ 668,531.87
OO	Pearl Street	Sidewalk and Lighting Improvements from Five Corners to School Street	2/3/2009	Completed				
PP	Pearl Street	Sidewalk and Lighting Improvements from School Street to South Summit Street	2/3/2009	Completed				
QQ	Pearl Street	Sidewalk and Lighting Improvements from South Summit Street to West Hillcrest Road	2/3/2009	Completed				
RR	Pearl Street	Sidewalk and Lighting Improvements from West Hillcrest Road to Mac's Market	2/3/2009	Completed				
SS	Pearl Street	Sidewalk & Lighting Improvements from Mac's Market to Willeys Court	2/3/2009	Completed				
TT	Pearl Street	Sidewalk and Lighting Improvements from Willeys Court to West Street Extension	2/3/2009	8/17/2023	8/17/2023	\$ 1,574,907.60	\$ 283,483.37	\$ 1,858,390.97
UU	Pearl Street	Sidewalk and Roadway Improvements from West Street to Susie Wilson Road	2/3/2009	8/17/2023	8/17/2023	\$ 919,749.70	\$ 174,752.44	\$ 1,094,502.14
VV	West Street	Sidewalk Improvements from South Street to Clems Drive	2/18/2009	8/17/2023	8/17/2023	\$ 682,470.62	\$ 129,669.42	\$ 812,140.04
WW	School Street	Water & Sanitary Sewer Improvements, Road Reconstruction	10/3/2013	Completed Summer of 2014				
XX	Maple Street	Replace Existing Drainage Pipe that Crosses Maple Street	11/1/2013	Completed Summer of 2015				
YY	Main Street	Enclose Drainage, New Curb, Bridge to Crestview Road	12/13/2013	Completed Summer of 2015				
YYa	Main Street	Install New Sidewalk and Lighting from Bridge to Crestview Road on the West Side	4/21/2014	8/17/2023	8/17/2023	\$ 262,230.56	\$ 52,446.11	\$ 314,676.67
ZZ	Main Street	Enclose Drainage, New Curb, Crestview Road to Top of Hill	12/13/2013	Completed Summer of 2015				
AAA	Main Street	Enclose Drainage, New Curb, Bridge to Top of Hill on West Side	1/7/2014	Completed Summer of 2015				
BBB	West Street	West St. & West St. Ext. Intersection Improvements	6/14/2014	8/17/2023	8/17/2023	\$ 89,530.38	\$ 17,906.08	\$ 107,436.46
CCC	Maple Street	Replace 300' of Waterline near Maple Street Park	2/20/2015	Completed Summer of 2015				
DDD	Hillcrest Road	Sidewalk Improvements from Pearl Street to Fleming School	4/6/2015	Completed Summer of 2017				
EEE	Greenwood Avenue	Drainage Course Improvements at 17 Greenwood Avenue	10/6/2015	Completed Summer of 2018				
FFF	West of Pearl	ANR PATH	5/1/2016	8/17/2023	8/17/2023	\$ 696,071.78	\$ 132,253.64	\$ 828,325.42
GGG	South Street	Sidewalk and Drainage Improvements	5/1/2016	8/17/2023	8/17/2023	\$ 118,003.13	\$ 23,600.63	\$ 141,603.76
GGG-1	South Street	Sidewalk and Drainage Improvements	5/1/2016	8/17/2023	8/17/2023	\$ 227,090.89	\$ 45,418.18	\$ 272,509.07

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

			Original Capital	Estimate Preparation	Cost Reference	Construction	Engineering	Total	
	Street Name	Project Description	Plan Date	Date	Date	Cost	Fees	Cost	
HHH	Lincoln Hall	Sidewalk, Handicap Ramp and Parking Improvements	5/1/2016	8/17/2023	8/17/2023	\$ 38,912.90	\$ 7,782.58	\$ 46,695.47	
III	Rosewood Lane	Road Reconstruction and Sidewalk Replacement	11/3/2016	8/17/2023	8/17/2023	\$ 1,493,479.44	\$ 268,826.30	\$ 1,762,305.74	
JJJ	Main Street	Install 8' Wide Pedestrian Bridge over Indian Brook on East Side Main Street	12/9/2016	Completed Summer of 2018					
KKK	Densmore Drive	Complete Reconstruction and Culvert Replacement	4/2/2019	8/17/2023	8/17/2023	\$ 1,665,790.14	\$ 299,842.23	\$ 1,965,632.37	
LLL	West Street	Grind and Overlay from West Side of Hiawatha Ave. to East Side of South Street	4/2/2019	Completed Summer of 2020					
MMM	South Street	Help reduce flooding of South Street Residences during major rain storm events.	8/6/2018	8/17/2023	8/17/2023	\$ 579,414.12	\$ 110,088.68	\$ 689,502.81	
NNN	Pleasant Street	Road Reconstruction, Main Street to Mansfield Avenue, Innovative Construction	8/6/2018	8/17/2023	8/17/2023	\$ 1,087,486.65	\$ 195,747.60	\$ 1,283,234.24	
OOO	Iroquois Avenue	Road Reconstruction, South Summit Street to Park Street, Conventional Construction	8/6/2018	8/17/2023	8/17/2023	\$ 1,704,814.70	\$ 306,866.65	\$ 2,011,681.35	
PPP	Iroquois Avenue	Road Reconstruction, South Summit Street to Park Street, Innovative Construction	8/6/2018	8/17/2023	8/17/2023	\$ 1,748,846.28	\$ 314,792.33	\$ 2,063,638.61	
QQQ	North Street	Replace Waterline, Grove Street to Central Street, Innovative Roadway Reconstruction	8/6/2018	8/17/2023	8/17/2023	\$ 1,685,726.25	\$ 303,430.73	\$ 1,989,156.98	
RRR	Class II Road	Unit Cost per Liner Foot for Sidewalk Replacement	3/1/2019	8/17/2023	8/17/2023	Cost per LF = \$ 135.18			
SSS	Main Street	Waterline Replacement	10/5/2020	8/17/2023	8/17/2023	\$ 2,679,365.71	\$ 482,285.83	\$ 3,161,651.53	
TTT	Fairview Drive	Install New Waterline and Pressure Reducing ValveVault	3/27/2020	8/17/2023	8/17/2023	\$ 183,336.85	\$ 36,667.38	\$ 220,004.23	

Note: Use ENR conversion factor for correction to projected construction date.

Enr Construction Index - December 2008 =	8551.32	
Enr Construction Index - February 2012 =	9198.29	7.5657%
Enr Construction Index - August 2012 =	9359.99	1.7579%
Enr Construction Index - November 2012 =	9398.41	0.4105%
Enr Construction Index - October 2013 =	9551.58	1.6297%
Enr Construction Index - August 2016 =	10385.65	8.7323%
Enr Construction Index - July 2018 =	11116.42	7.0363%
Enr Construction Index - September 2021 =	12464.55	12.1274%
Enr Construction Index - August 2023 =	13472.56	8.0870%

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Abnaki Avenue
Reconstruction of 525 L.F. of Roadway**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023
Original Capital Plan Date: 11/24/2003

Primary Project Reason:

The existing roadway is subject to severe frost action.

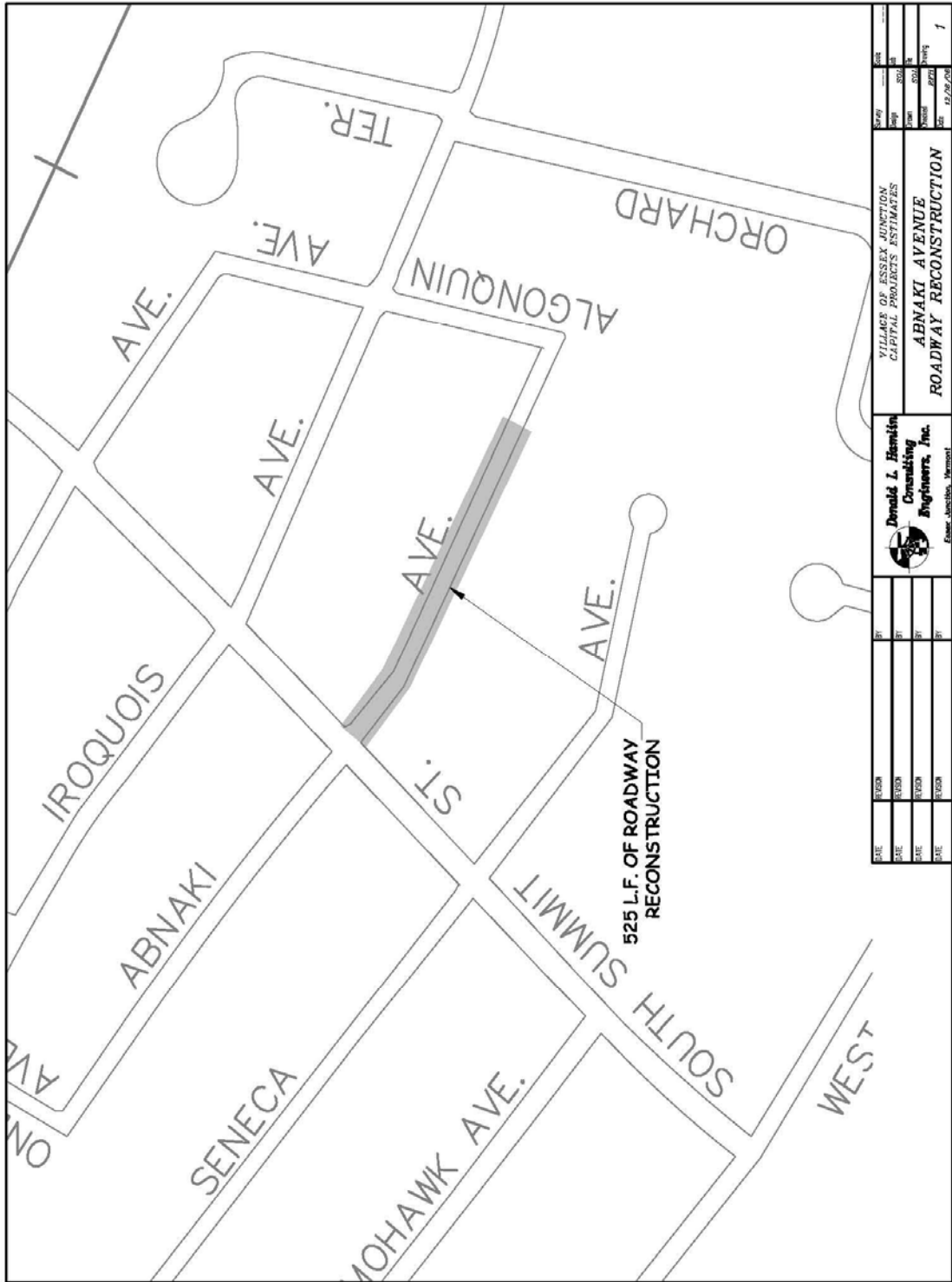
Secondary Project Reason:

Assumptions:

- New roadway will have a pavement width of 24' with 1' gravel shoulder.
- Existing drainage structures will set to new finish grade.
- Insulation will be utilized versus underdrain.
- A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	338,218.50
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	338,218.50
	Project Management, Design and Resident Engineering	\$	67,643.70
	Total Project Cost	\$	405,862.20

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

Donald L. Hamlin Consulting Engineers, Inc.		VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES			
Essex Junction, Vermont		ROADWAY RECONSTRUCTION			
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Abnaki Avenue

Cost Reference Date: 8/17/2023

Reconstruction of 525 L.F. of Roadway

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	70	lf	\$ 4.17	\$ 291.90
2) Excavation of Pavement 4" to 6" Thick	1,475	sy	\$ 12.69	\$ 18,717.75
3) Excavation for New Roadway Subbase	1,375	cy	\$ 26.16	\$ 35,970.00
4) Sand Borrow	140	cy	\$ 32.97	\$ 4,615.80
5) Dense Graded Crushed Stone	800	cy	\$ 44.80	\$ 35,840.00
6) Plant Mixed Gravel	275	cy	\$ 44.08	\$ 12,122.00
7) 2" Thick Extruded Polystyrene Panels	28,600	sf	\$ 2.58	\$ 73,788.00
8) Bituminous Concrete Pavement - 1-3/4", Type II	1,475	sy	\$ 13.62	\$ 20,089.50
9) Bituminous Concrete Pavement - 1-1/4", Type III	1,475	sy	\$ 10.03	\$ 14,794.25
10) Remove Existing Manhole Frame and Cover, Replace with New	1	each	\$ 1,372.57	\$ 1,372.57
11) Remove & Reset Catch Basin Frame & Grate	6	each	\$ 1,013.08	\$ 6,078.48
12) Supply & Spread Topsoil	70	cy	\$ 49.68	\$ 3,477.60
13) Seed, Fertilize, Lime and Matting	615	sy	\$ 3.58	\$ 2,201.70
14) New Bituminous Concrete Driveway and Apron	335	sy	\$ 60.21	\$ 20,170.35
15) New Gravel Driveway	70	sy	\$ 44.70	\$ 3,129.00
16) Traffic Control - Type I	20	day	\$ 573.40	\$ 11,468.00
17) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
18) Mobilization	---	---	5%	\$ 13,421.37
Contingency	---	---	20%	\$ 56,369.75

Subtotal	\$	338,218.50
Design Engineering Services	\$	33,821.85
Bidding and Construction Services	\$	33,821.85
Grand Total	\$	405,862.20

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Algonquin Avenue

Cost Reference Date: 8/17/2023

Reconstruct 230 L.F. of Roadway & Install New Waterline

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 11/24/2003

Primary Project Reason:

Install new waterline to complete loop between Abnaki Avenue
and Iroquois Avenue

Secondary Project Reason:

The existing roadway is subject to severe frost action.

Assumptions:

New roadway will have a pavement width of 24' with 1' gravel shoulder.

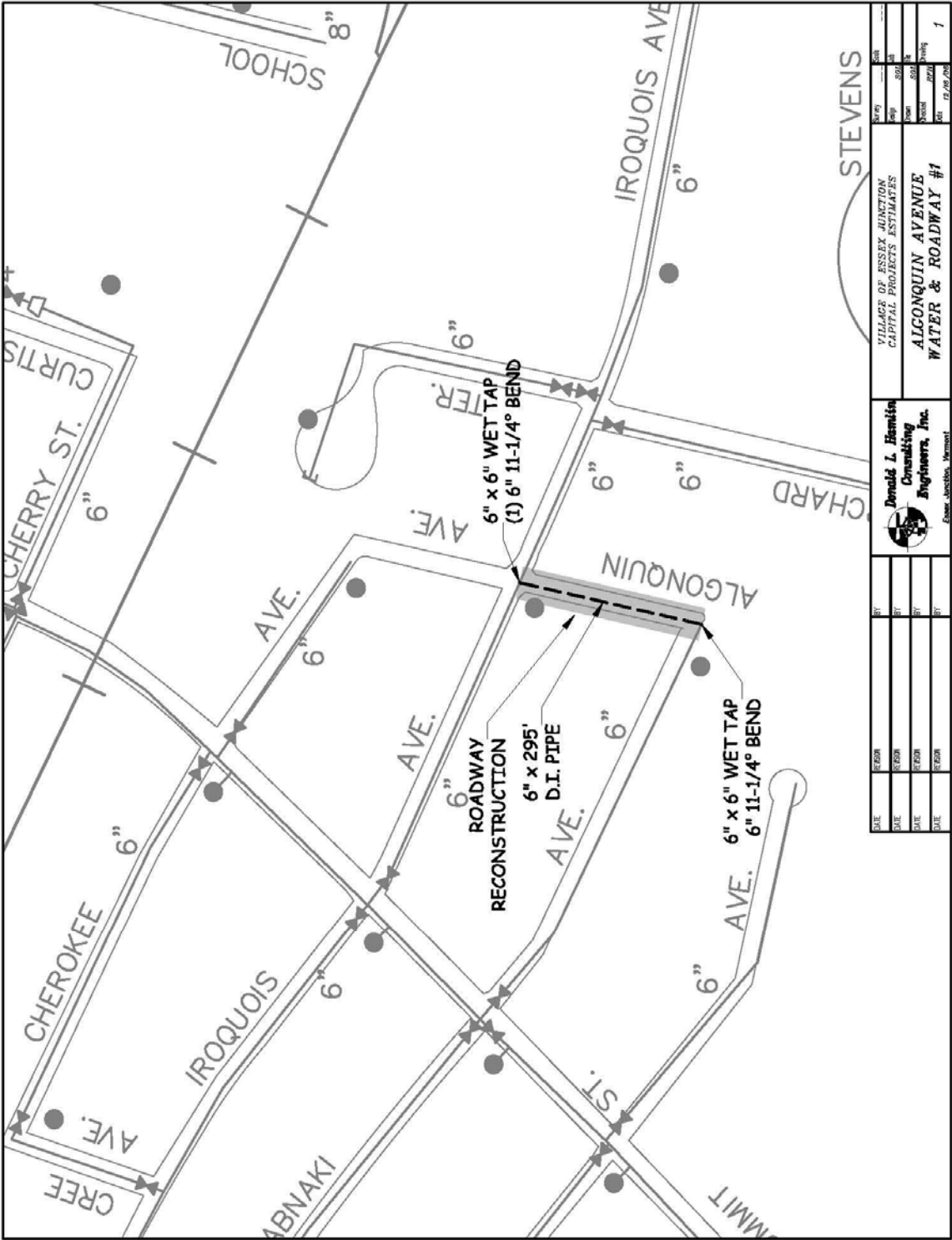
Existing drainage structures will set to new finish grade.

Insulation will be utilized versus underdrain.

A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	147,729.61
W	Waterline Improvements	\$	59,498.78
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	-
	 Combined Total	 \$	 207,228.39

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Algonquin Avenue

8/17/2023

Reconstruction of 230 L.F. of Roadway and Install New Waterline

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	120	lf	\$ 4.17	\$ 500.40
2) Excavation of Pavement 4" to 6" Thick	655	sy	\$ 12.69	\$ 8,311.95
3) Excavation for New Roadway Subbase	600	cy	\$ 26.16	\$ 15,696.00
4) Sand Borrow	70	cy	\$ 32.97	\$ 2,307.90
5) Dense Graded Crushed Stone	355	cy	\$ 44.80	\$ 15,904.00
6) Plant Mixed Gravel	130	cy	\$ 44.08	\$ 5,730.40
7) 2" Thick Extruded Polystyrene Panels	12,440	sf	\$ 2.58	\$ 32,095.20
8) Bituminous Concrete Pavement - 1-3/4", Type II	655	sy	\$ 21.50	\$ 14,082.50
9) Bituminous Concrete Pavement - 1-1/4", Type III	655	sy	\$ 10.03	\$ 6,569.65
10) Remove & Reset Catch Basin Frame & Grate	2	each	\$ 1,013.08	\$ 2,026.16
11) Supply & Spread Topsoil	30	cy	\$ 49.68	\$ 1,490.40
12) Seed, Fertilize and Matting	260	sy	\$ 3.58	\$ 930.80
13) Wet Tap (6x6)	2	each	\$ 5,943.68	\$ 11,887.36
14) 6" Ductile Iron Pipe, CL 52	295	lf	\$ 101.79	\$ 30,028.05
15) 6" Mechanical Bends	2	each	\$ 996.28	\$ 1,992.56
16) New Bituminous Concrete Driveway and Apron	65	sy	\$ 60.21	\$ 3,913.65
17) Traffic Control	20	day	\$ 400.00	\$ 8,000.00
18) Dust Control	1	ls	\$ 3,000.00	\$ 3,000.00
19) Mobilization	---	---	5%	\$ 8,223.35
Contingency	---	---	20%	\$ 34,538.07

Subtotal	\$	207,228.39
Design Engineering Services	\$	20,722.84
Bidding and Construction Services	\$	20,722.84
Grand Total	\$	248,674.07

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Algonquin Avenue

New Waterline Installation, Cherokee Ave to Iroquois Ave

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 10/17/2005

Primary Project Reason:

Install new waterline to complete loop between Cherokee Avenue and Iroquois Avenue

Secondary Project Reason:

The existing roadway is subject to severe frost action.

Assumptions:

New roadway will have a pavement width of 24' with 1' gravel shoulder.

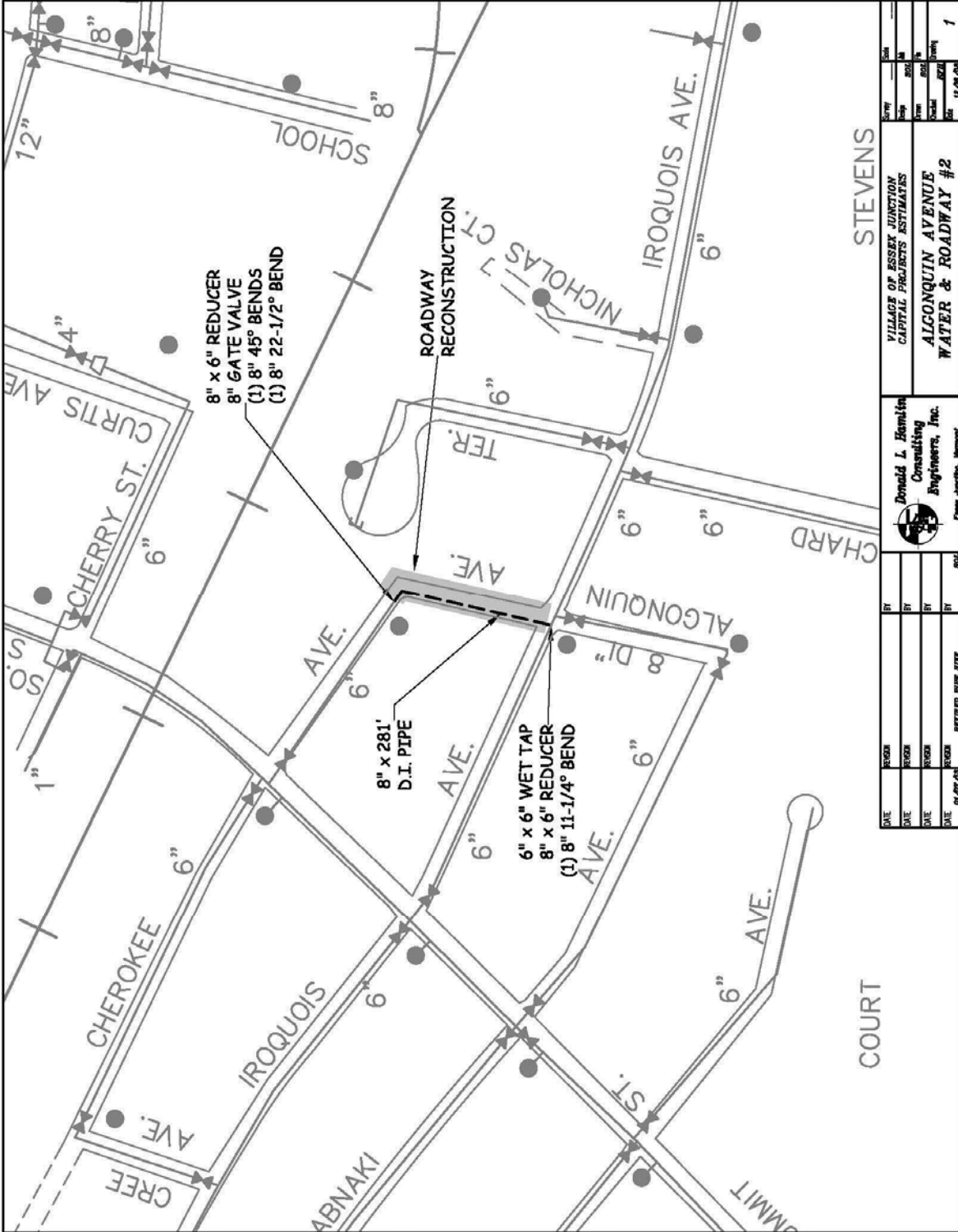
Existing drainage structures will set to new finish grade.

Insulation will be utilized versus underdrain.

A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	168,588.46
W	Waterline Improvements	\$	66,058.09
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements		
	Combined Account Costs	\$	234,646.55
	Project Management, Design and Resident Engineering	\$	46,929.31
	Total Project Cost	\$	281,575.86

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Algonquin Avenue

Cost Reference Date: 8/17/2023

New Waterline Installation, Cherokee Ave to Iroquois Ave

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	100	lf	\$ 4.17	\$ 417.00
2) Excavation of Pavement 4" to 6" Thick	750	sy	\$ 12.69	\$ 9,517.50
3) Excavation for New Roadway Subbase	700	cy	\$ 26.16	\$ 18,312.00
4) Sand Borrow	70	cy	\$ 32.97	\$ 2,307.90
5) Dense Graded Crushed Stone	405	cy	\$ 44.80	\$ 18,144.00
6) Plant Mixed Gravel	135	cy	\$ 44.08	\$ 5,950.80
7) 2" Thick Extruded Polystyrene Panels	14,625	sf	\$ 2.58	\$ 37,732.50
8) Bituminous Concrete Pavement - 1-3/4", Type II	750	sy	\$ 13.62	\$ 10,215.00
9) Bituminous Concrete Pavement - 1-1/4", Type III	750	sy	\$ 10.03	\$ 7,522.50
10) Remove & Reset Catch Basin Frame & Grate	2	each	\$ 1,013.08	\$ 2,026.16
11) Supply & Spread Topsoil	35	cy	\$ 49.68	\$ 1,738.80
12) Seed, Fertilize and Matting	312	sy	\$ 3.58	\$ 1,116.96
13) Wet Tap (6x6)	1	each	\$ 5,943.68	\$ 5,943.68
14) 8" Ductile Iron Pipe, CL 52	281	lf	\$ 120.24	\$ 33,787.44
15) 8" Gate Valve	1	each	\$ 3,049.04	\$ 3,049.04
16) 8" Mechanical Bends	3	each	\$ 1,433.49	\$ 4,300.47
17) Reducer (8x6)	2	each	\$ 1,027.57	\$ 2,055.14
18) New Bituminous Concrete Driveway and Apron	105	sy	\$ 60.21	\$ 6,322.05
19) Traffic Control - Type I	20	day	\$ 573.40	\$ 11,468.00
20) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
21) Mobilization	---	---	5%	\$ 9,311.37
Contingency	---	---	20%	\$ 39,107.76

Subtotal	\$ 234,646.55
Design Engineering Services	\$ 23,464.65
Bidding and Construction Services	\$ 23,464.65
Grand Total	\$ 281,575.86

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Briar Lane
Sidewalk Replacement**

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 9/28/2001

Primary Project Reason:

Remove and replace sidewalk.

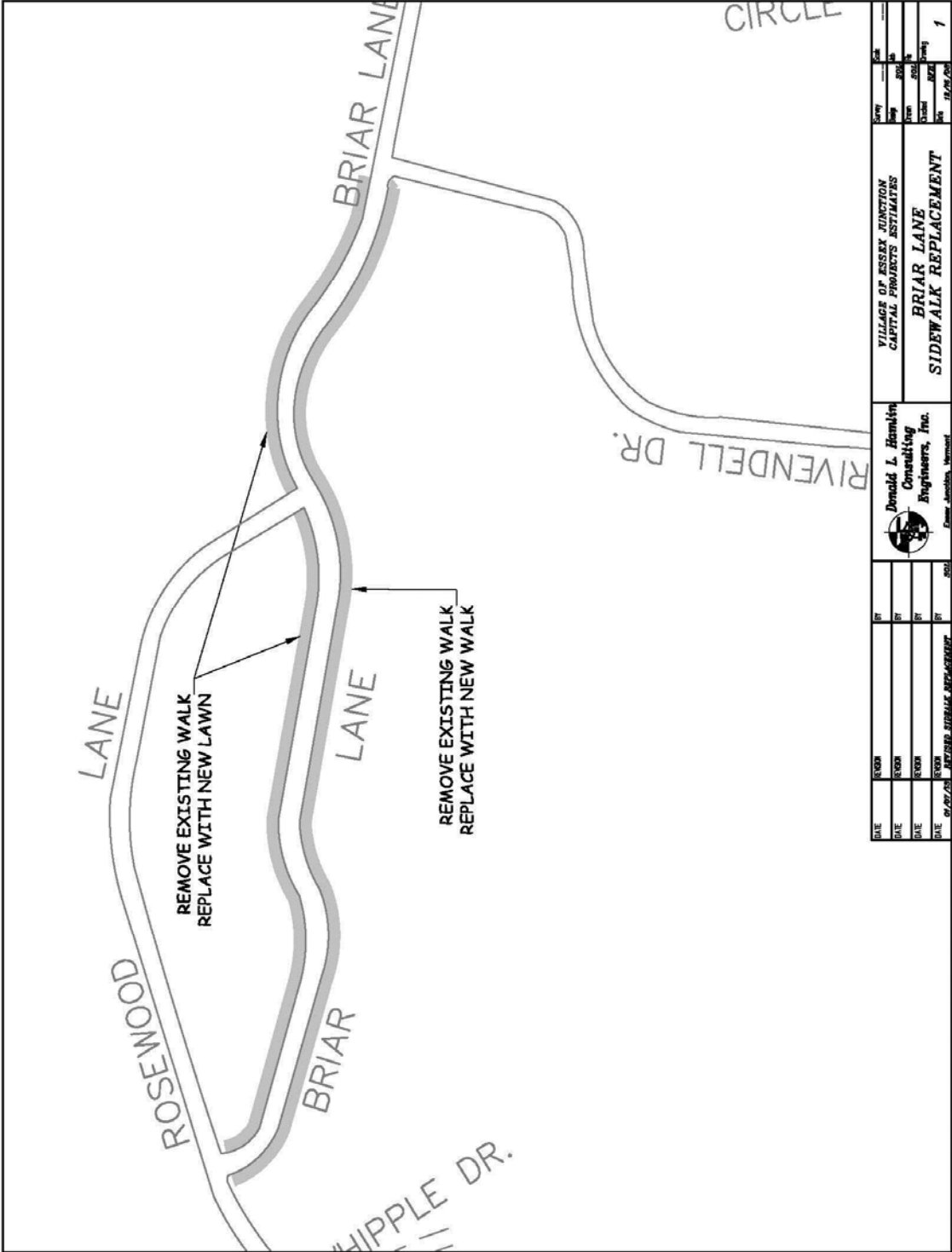
Secondary Project Reason:

Assumptions:

- Remove and replace walk on south side of road.
- Remove walk on north side of road and replace with lawn
- A portion of each residential driveway will be rebuilt to match new roadway.
- New sidewalk shall have a width of 5'.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	261,257.84
	Combined Total	\$	261,257.84

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	BY	SCALE	PROJECT	DATE	BY	SCALE	PROJECT
DATE	BY	SCALE	PROJECT	DATE	BY	SCALE	PROJECT
DATE	BY	SCALE	PROJECT	DATE	BY	SCALE	PROJECT
DATE	BY	SCALE	PROJECT	DATE	BY	SCALE	PROJECT

**Donald L. Hamlin
Consulting
Engineers, Inc.**
Essex Junction, Vermont

**VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES**

**BRIAR LANE
SIDEWALK REPLACEMENT**

DATE: 12/06/08
PAGE: 1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Briar Lane
Sidewalk Replacement**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 3" Thick or Less	680	lf	\$ 2.87	\$ 1,951.60
2) Excavation of Pavement to 3" Thick	775	sy	\$ 7.74	\$ 5,998.50
3) Remove Existing Concrete Sidewalk	1,539	sy	\$ 16.49	\$ 25,378.11
4) New Cement Concrete Sidewalk - 4" Thick	900	sy	\$ 84.58	\$ 76,122.00
5) New Cement Concrete Sidewalk - 6" Thick	215	sy	\$ 115.78	\$ 24,892.70
6) New Bituminous Concrete Driveway and Apron	775	sy	\$ 60.21	\$ 46,662.75
7) Supply and Spread Topsoil	175	cy	\$ 49.68	\$ 8,694.00
8) Seed, Fertilize, Lime and Matting	1,526	sy	\$ 3.58	\$ 5,463.08
9) Traffic Control - Type I	20	day	\$ 573.40	\$ 11,468.00
10) Dust Control - Type I	1	ls	\$ 716.75	\$ 716.75
11) Mobilization	---	---	5%	\$ 10,367.37
Contingency	---	---	20%	\$ 43,542.97

Subtotal	\$ 261,257.84
Design Engineering Services	\$ 26,125.78
Bidding and Construction Services	\$ 26,125.78
Grand Total	\$ 313,509.40

The work includes the following components:

- A - Remove and replace walk on south side, Rosewood to Rosewood
- B - Remove walk and restore with lawn on north side, Rosewood to Rosewood
- A - Remove and replace walk on south side, Rosewood to Rivendell
- B - Remove walk and restore with lawn on north side, Rosewood to Rivendell

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Briar Lane
Waterline and Sidewalk Replacement**

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Remove and replace sidewalk

Secondary Project Reason:

Replace waterline in sidewalk replacement area

Assumptions:

New sidewalk will be 5' wide.

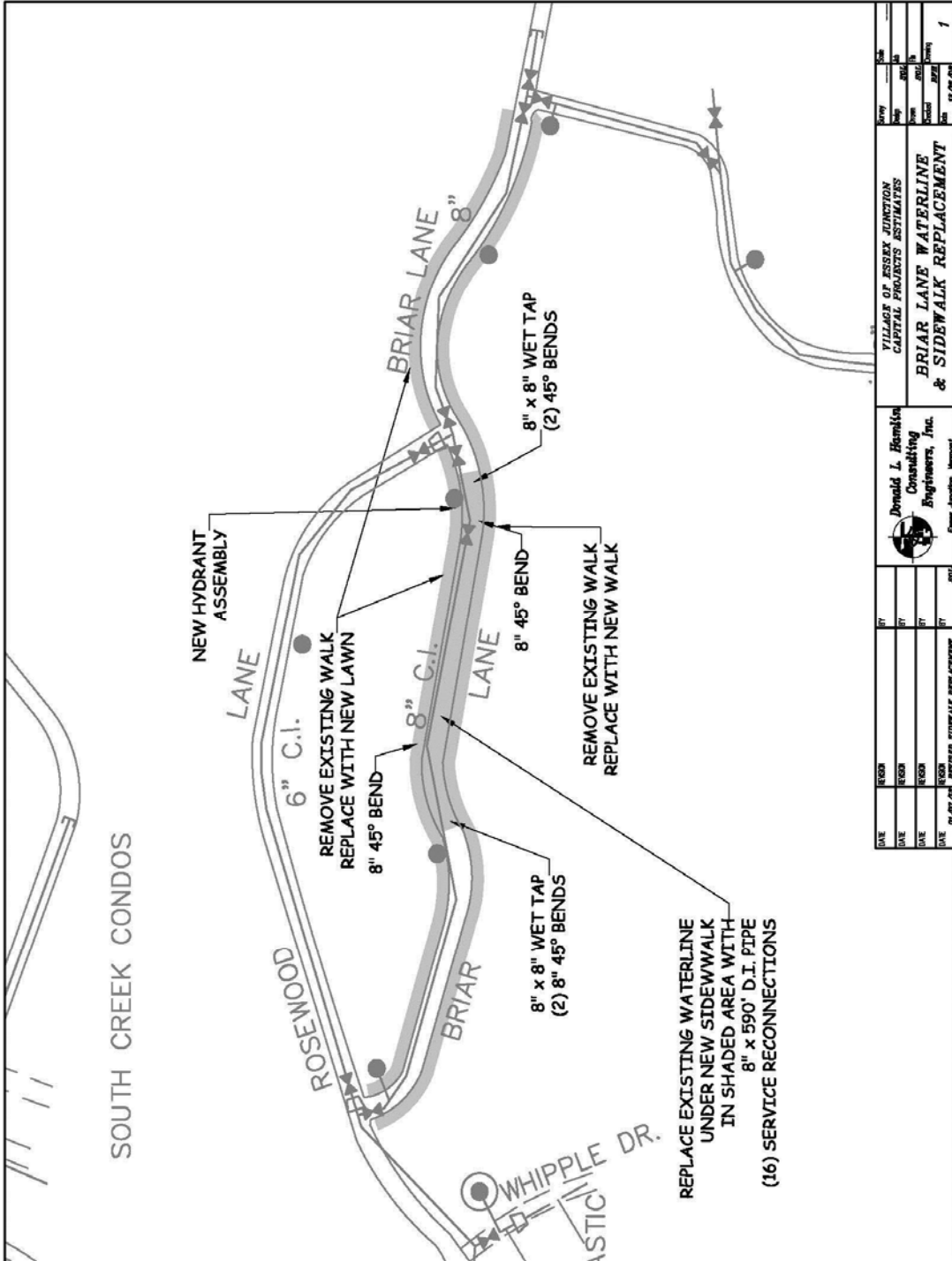
Existing waterline to remain in service until new waterline is operational.

New 8' D. I. pipe

A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	88,356.44
W	Waterline Improvements	\$	172,645.92
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	185,946.20
	Combined Total	\$	446,948.56

City of Essex Junction
Capital Projects
Construction Cost Estimate



DATE	REVISION	BY	DATE	REVISION	BY

DATE	REVISION	BY	DATE	REVISION	BY


 Donald L. Hamlin
 Consulting Engineers, Inc.
 Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION
 CAPITAL PROJECTS ESTIMATES
**BRIAR LANE WATERLINE
 & SIDEWALK REPLACEMENT**

SHEET NO. 1
 DATE: 8/29/24

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Briar Lane

Cost Reference Date: 8/17/2023

Waterline and Sidewalk Replacement

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	100	lf	\$ 4.17	\$ 417.00
2) Excavation of Pavement 4" to 6" Thick	50	sy	\$ 12.69	\$ 634.50
3) New Bituminous Concrete Pavement - 4" Thick Over Trench	50	sy	\$ 80.99	\$ 4,049.50
4) Saw Cut Existing Pavement 3" Thick or Less	680	lf	\$ 2.87	\$ 1,951.60
5) Excavation of Pavement to 3" Thick	775	sy	\$ 7.74	\$ 5,998.50
6) Remove Existing Concrete Sidewalk	1,539	sy	\$ 16.49	\$ 25,378.11
7) New Cement Concrete Sidewalk - 4" Thick	900	sy	\$ 84.58	\$ 76,122.00
8) New Cement Concrete Sidewalk - 6" Thick	215	sy	\$ 115.78	\$ 24,892.70
9) New Bituminous Concrete Driveway and Apron	775	sy	\$ 60.21	\$ 46,662.75
10) 24" Plant Mixed Gravel	40	cy	\$ 44.08	\$ 1,763.20
11) Wet Tap (8x8)	2	each	\$ 6,749.36	\$ 13,498.72
12) 8" Ductile Iron Pipe, CI 52	590	lf	\$ 120.24	\$ 70,941.60
13) 8" Mechanical Bends	6	each	\$ 1,433.49	\$ 8,600.94
14) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	1	each	\$ 8,020.40	\$ 8,020.40
15) 3/4" Corporation Stop	16	each	\$ 792.72	\$ 12,683.52
16) 3/4" Curb Stop	8	each	\$ 357.66	\$ 2,861.28
17) 3/4" Copper Waterline	160	lf	\$ 55.32	\$ 8,851.20
18) Supply and Spread Topsoil	175	cy	\$ 49.68	\$ 8,694.00
19) Seed, Fertilize, Lime and Matting	1,526	sy	\$ 3.58	\$ 5,463.08
20) Traffic Control - Type I	40	day	\$ 573.40	\$ 22,936.00
21) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
22) Mobilization	---	---	5%	\$ 17,736.05
Contingency	---	---	20%	\$ 74,491.43

Subtotal \$ 446,948.56
Design Engineering Services \$ 44,694.86
Bidding and Construction Services \$ 44,694.86
Grand Total \$ 536,338.27

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Briar Lane

Road Reconstruction, Conventional Construction

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023
Original Capital Plan Date: 9/28/2001

Primary Project Reason:

The existing roadway is subject to severe frost action.

Secondary Project Reason:

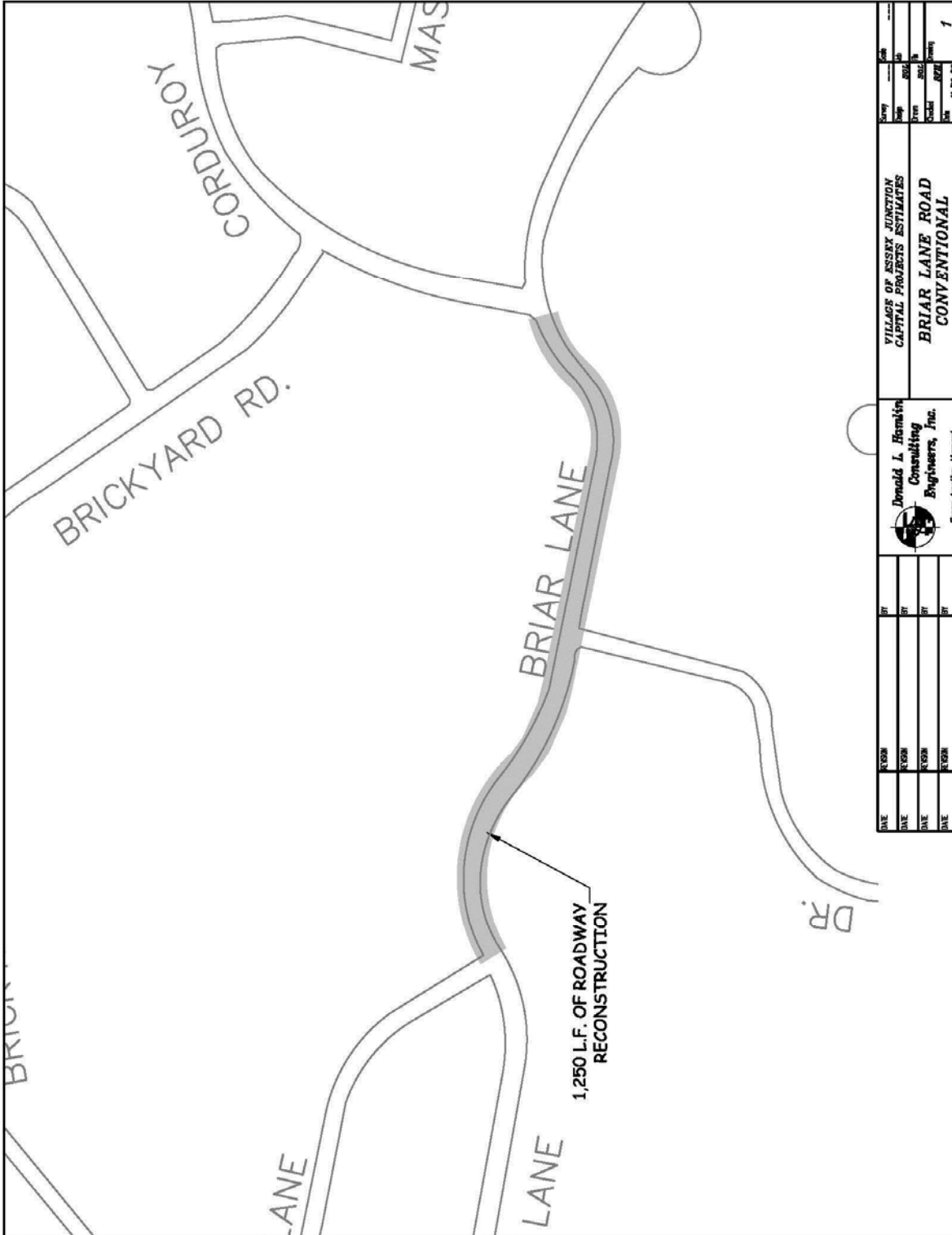
Assumptions:

- New roadway will have a pavement width of 30' and curb on both sides
- Existing drainage structures will set to new finish grade.
- Underdrain will be installed as part of the roadway section.
- A portion of each residential driveway will be rebuilt to match new roadway.
- The existing storm drainage pipe with the zone shall be inspected with a camera.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	870,957.27
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	126,393.19
P	Sidewalk Improvements		
	Combined Total	\$	997,350.45

Cost is based upon 2012 unit prices without ENR Construction Cost Index adjustment.

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	FROM	BY	<p style="text-align: center;">Donald L. Remick Consulting Engineers, Inc. <small>Essex Junction, Vermont</small></p>	<p style="text-align: center;">VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES BRIAR LANE ROAD CONVENTIONAL</p>	DATE	BY	DATE	BY
DATE	FROM	BY			DATE	BY		
DATE	FROM	BY			DATE	BY		
DATE	FROM	BY			DATE	BY		
				<p style="text-align: right;">1</p>				

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Briar Lane

Cost Reference Date: 8/17/2023

Road Reconstruction, Conventional Construction

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	200	lf	\$ 4.17	\$ 834.00
2) Excavation of Pavement 4" to 6" Thick	4,340	sy	\$ 12.69	\$ 55,074.60
3) Remove Existing Concrete Curb	2,500	lf	\$ 6.95	\$ 17,375.00
4) Excavation for New Roadway Subbase	5,175	cy	\$ 26.16	\$ 135,378.00
5) Mirafi 500X Geotextile Fabric	4,430	sy	\$ 2.08	\$ 9,214.40
6) Sand Borrow - 12"	1,475	cy	\$ 32.97	\$ 48,630.75
7) Dense Graded Crushed Stone - 24"	2,960	cy	\$ 44.80	\$ 132,608.00
8) Plant Mixed Gravel - 6"	740	cy	\$ 44.08	\$ 32,619.20
9) New Bituminous Concrete Pavement - 1-3/4", Type II	4,150	sy	\$ 13.62	\$ 56,523.00
10) New Bituminous Concrete Pavement - 1-1/4", Type III	4,150	sy	\$ 10.03	\$ 41,624.50
11) New Bituminous Concrete Driveway and Apron	190	sy	\$ 60.21	\$ 11,439.90
12) Remove and Reset Existing Catch Basin Frame and Grate	11	each	\$ 1,013.08	\$ 11,143.88
13) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
14) Adjust Existing Gate Valve Box to New Finish Grade	7	each	\$ 253.27	\$ 1,772.89
15) Underdrain	2,500	lf	\$ 29.26	\$ 73,150.00
16) Underdrain Cleanout	2	each	\$ 322.54	\$ 645.08
17) Connect New Underdrain to Existing Structure	11	each	\$ 1,144.44	\$ 12,588.84
18) New Cement Concrete Curb	2,500	lf	\$ 35.12	\$ 87,800.00
19) Supply and Spread Topsoil	140	cy	\$ 49.68	\$ 6,955.20
20) Seed, Fertilize, Lime and Matting	1,200	sy	\$ 3.58	\$ 4,296.00
21) Inspect Drainage Pipe with Camera	1	day	\$ 1,433.49	\$ 1,433.49
22) Traffic Control - Type II	50	day	\$ 860.10	\$ 43,005.00
23) Dust Control - Type III	1	ls	\$ 573.40	\$ 573.40
24) Mobilization	---	---	5%	\$ 39,577.40
Contingency	---	---	20%	\$ 166,225.08

Subtotal	\$ 997,350.45
Design Engineering Services	\$ 89,761.54
Bidding and Construction Services	\$ 99,735.05
Grand Total	\$ 1,186,847.04

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Briar Lane

Road Reconstruction, Innovative Construction

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/28/2001

Primary Project Reason:

The existing roadway is subject to severe frost action.

Secondary Project Reason:

Assumptions:

New roadway will have a pavement width of 30' and curb on both sides

Existing drainage structures will set to new finish grade.

Insulation will be utilized versus underdrain.

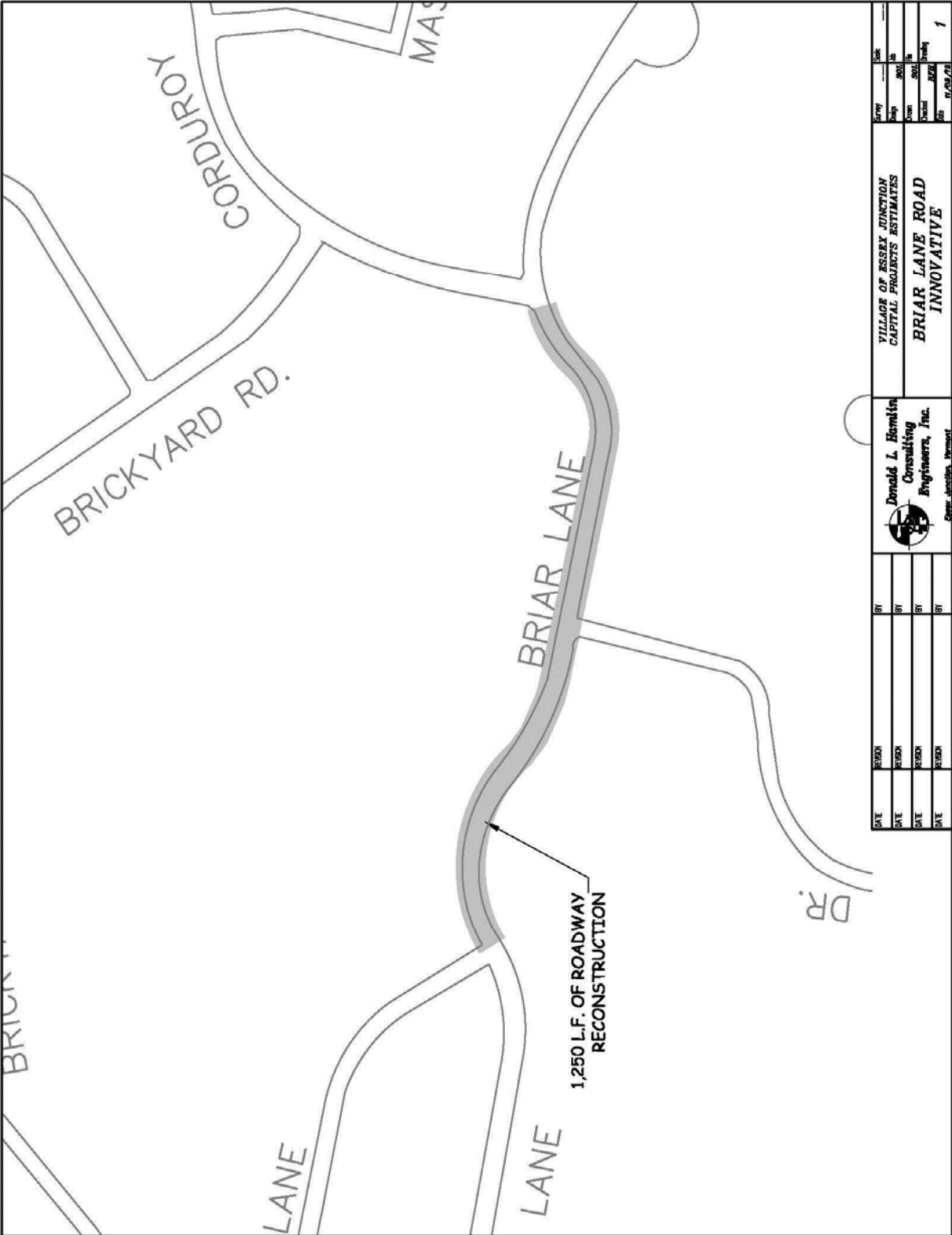
A portion of each residential driveway will be rebuilt to match new roadway.

The existing storm drainage pipe with the zone shall be inspected with a camera.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	988,458.88
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	16,190.29
P	Sidewalk Improvements		
	 Combined Total	 \$	 1,004,649.17

Cost is based upon 2012 unit prices without ENR Construction Cost Index adjustment.

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	PERSON	BY	DATE	PERSON	BY	DATE	PERSON	BY	DATE	PERSON	BY	DATE	PERSON	BY	DATE	PERSON	BY

VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES
BRIAR LANE ROAD
INNOVATIVE



DATE PERSON BY DATE PERSON BY DATE PERSON BY DATE PERSON BY DATE PERSON BY DATE PERSON BY DATE PERSON BY

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Briar Lane

Cost Reference Date: 8/17/2023

Road Reconstruction, Innovative Construction

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	200	lf	\$ 4.17	\$ 834.00
2) Excavation of Pavement 4" to 6" Thick	4,340	sy	\$ 12.69	\$ 55,074.60
3) Remove Existing Concrete Curb	2,500	lf	\$ 6.95	\$ 17,375.00
4) Excavation for New Roadway Subbase	3,825	cy	\$ 26.16	\$ 100,062.00
5) Sand Borrow - 3"	370	cy	\$ 32.97	\$ 12,198.90
6) New 2" Thick Extruded Polystyrene Insulation	79,700	sf	\$ 2.58	\$ 205,626.00
7) Dense Graded Crushed Stone - 18"	2,225	cy	\$ 44.80	\$ 99,680.00
8) Plant Mixed Gravel - 6"	750	cy	\$ 44.08	\$ 33,060.00
9) New Bituminous Concrete Pavement - 1-3/4", Type II	4,150	sy	\$ 13.62	\$ 56,523.00
10) New Bituminous Concrete Pavement - 1-1/4", Type III	4,150	sy	\$ 10.03	\$ 41,624.50
11) New Bituminous Concrete Driveway and Apron	190	sy	\$ 60.21	\$ 11,439.90
12) Remove and Reset Existing Catch Basin Frame and Grate	11	each	\$ 1,013.08	\$ 11,143.88
13) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
14) Adjust Existing Gate Valve Box to New Finish Grade	7	each	\$ 253.27	\$ 1,772.89
15) New Cement Concrete Curb	2,500	lf	\$ 35.12	\$ 87,800.00
16) Supply and Spread Topsoil	140	cy	\$ 49.68	\$ 6,955.20
17) Seed, Fertilize, Lime and Matting	1,200	sy	\$ 3.58	\$ 4,296.00
18) Inspect Drainage Pipe with Camera	1	day	\$ 1,433.49	\$ 1,433.49
19) Traffic Control - Type II	50	day	\$ 860.10	\$ 43,005.00
20) Dust Control - Type III	1	ls	\$ 573.40	\$ 573.40
21) Mobilization	---	---	5%	\$ 39,867.03
Contingency	---	---	20%	\$ 167,441.53

Subtotal \$ 1,004,649.17
Design Engineering Services \$ 80,371.93
Bidding and Construction Services \$ 100,464.92
Grand Total \$ 1,185,486.02

**City of Essex Junction
Capital Improvements
Construction Cost Estimate**

Central Street

Waterline Replacement, Lincoln Street to Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Replace old and undersized waterline

Secondary Project Reason:

Rebuild roadway

Remove and replace existing sidewalk

Assumptions:

New roadway will have a pavement width of 24' with curb on both sides.

Existing drainage structures will set to new finish grade.

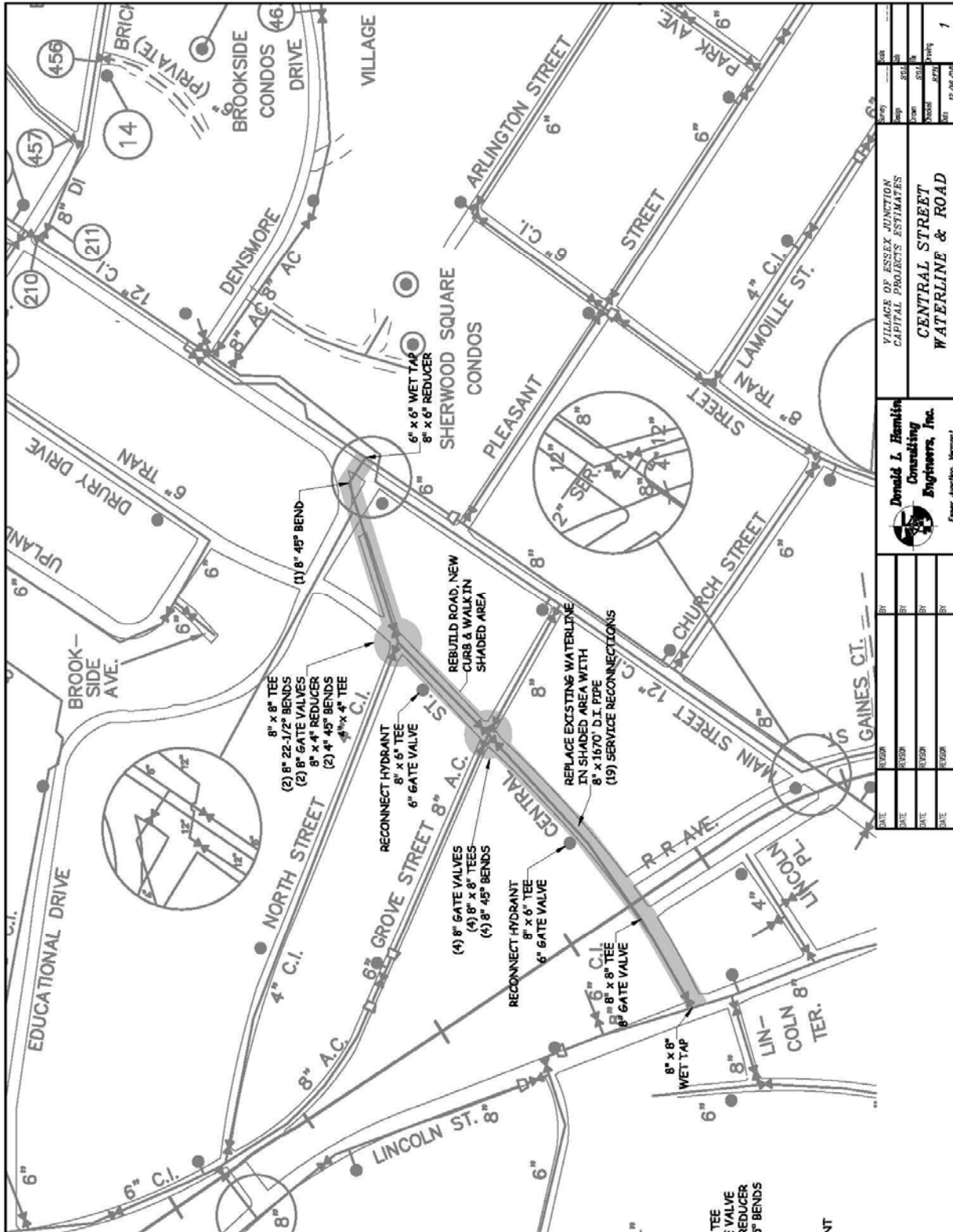
New sidewalk to be 5' wide.

A portion of each residential driveway will be rebuilt to match new roadway.

Existing waterline to remain in service until new waterline is operational.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	796,241.71
W	Waterline Improvements	\$	450,365.48
S	Sanitary Sewer Improvements	\$	7,255.37
D	Storm Drainage Improvements	\$	14,981.10
P	Sidewalk Improvements	\$	73,745.71
	 Combined Account Costs	 \$	 1,342,589.36
	Project Management, Design and Resident Engineering	\$	241,666.08
	Total Project Cost	\$	1,584,255.44

City of Essex Junction
Capital Improvements
Construction Cost Estimate



**City of Essex Junction
Capital Improvements
Construction Cost Estimate**

Central Street

Cost Reference Date: 8/17/2023

Waterline Replacement, Lincoln Street to Main Street

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Wet Tap (8x8)	1	each	\$ 6,749.36	\$ 6,749.36
2) Wet Tap (6x6)	1	each	\$ 5,943.68	\$ 5,943.68
3) 8" Ductile Iron Pipe, CI 52	1,670	lf	\$ 120.24	\$ 200,800.80
4) 8" Gate Valve with valve box	7	each	\$ 3,049.04	\$ 21,343.28
5) 6" Gate Valve with valve box	2	each	\$ 2,479.94	\$ 4,959.88
6) 8"x8" Tee	6	each	\$ 2,727.94	\$ 16,367.64
7) 8"x6" Tee	2	each	\$ 2,727.94	\$ 5,455.88
8) 4"x4" Tee	1	each	\$ 1,451.77	\$ 1,451.77
9) 8" Mechanical Bends	7	each	\$ 1,433.49	\$ 10,034.43
10) 4" Mechanical Bends	2	each	\$ 782.11	\$ 1,564.22
11) 8"x6" Reducer	1	each	\$ 1,027.57	\$ 1,027.57
12) 8"x4" Reducer	1	each	\$ 1,027.57	\$ 1,027.57
13) 3/4" Copper Waterline	450	lf	\$ 55.32	\$ 24,894.00
14) 3/4" Corporation Stop	19	each	\$ 792.72	\$ 15,061.68
15) 3/4" Curb Stop	19	each	\$ 357.66	\$ 6,795.54
16) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	2	each	\$ 8,020.40	\$ 16,040.80
17) Saw Cut Existing Pavement 4" Thick	1,000	lf	\$ 4.17	\$ 4,170.00
18) Excavation of Pavement 4" to 6" Thick	4,450	sy	\$ 12.69	\$ 56,470.50
19) Remove Existing Concrete Sidewalk	400	sy	\$ 16.49	\$ 6,596.00
20) Remove Existing Concrete Curb	750	lf	\$ 6.95	\$ 5,212.50
21) Remove and Reset Existing Granite Curb	250	lf	\$ 24.23	\$ 6,057.50
22) Excavation for New Roadway Subbase	4,100	cy	\$ 26.16	\$ 107,256.00
23) Mirafi 500X Geotextile Fabric	4,825	sy	\$ 2.08	\$ 10,036.00
24) Dense Graded Crushed Stone - 24"	3,280	cy	\$ 44.80	\$ 146,944.00
25) Plant Mixed Gravel - 6"	820	cy	\$ 44.08	\$ 36,145.60
26) New Bituminous Concrete Pavement - 1-3/4", Type II	4,450	sy	\$ 13.62	\$ 60,609.00
27) New Bituminous Concrete Pavement - 1-1/4", Type III	4,450	sy	\$ 10.03	\$ 44,633.50
28) New Bituminous Concrete Driveway and Apron	650	sy	\$ 60.21	\$ 39,136.50

**City of Essex Junction
Capital Improvements
Construction Cost Estimate**

Central Street

Cost Reference Date: 8/17/2023

Waterline Replacement, Lincoln Street to Main Street

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
29) Remove and Reset Existing Catch Basin Frame and Grate	12	each	\$ 1,013.08	\$ 12,156.96
30) Remove Existing Manhole Frame and Cover, Replace with New	4	each	\$ 1,372.57	\$ 5,490.28
31) New Cement Concrete Sidewalk - 4" Thick	340	sy	\$ 84.58	\$ 28,757.20
32) New Cement Concrete Sidewalk - 6" Thick	170	sy	\$ 115.78	\$ 19,682.60
33) New Cement Concrete Curb	750	lf	\$ 35.12	\$ 26,340.00
34) Supply and Spread Topsoil	425	cy	\$ 49.68	\$ 21,114.00
35) Seed, Fertilize, Lime and Matting	3,700	sy	\$ 3.58	\$ 13,246.00
36) Traffic Control - Type III	60	day	\$ 1,146.79	\$ 68,807.40
37) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
38) Mobilization	---	---	5%	\$ 53,277.36
Contingency	---	---	20%	\$ 223,764.89

Subtotal \$ 1,342,589.36
 Design Engineering Services \$ 107,407.15
 Bidding and Construction Services \$ 134,258.94
 Grand Total \$ 1,584,255.44

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Church Street

Cost Reference Date: 8/17/2023

Waterline Replacement, Main Street to East Street

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Replace existing old and undersized waterline

Secondary Project Reason:

Overlay roadway

Assumptions:

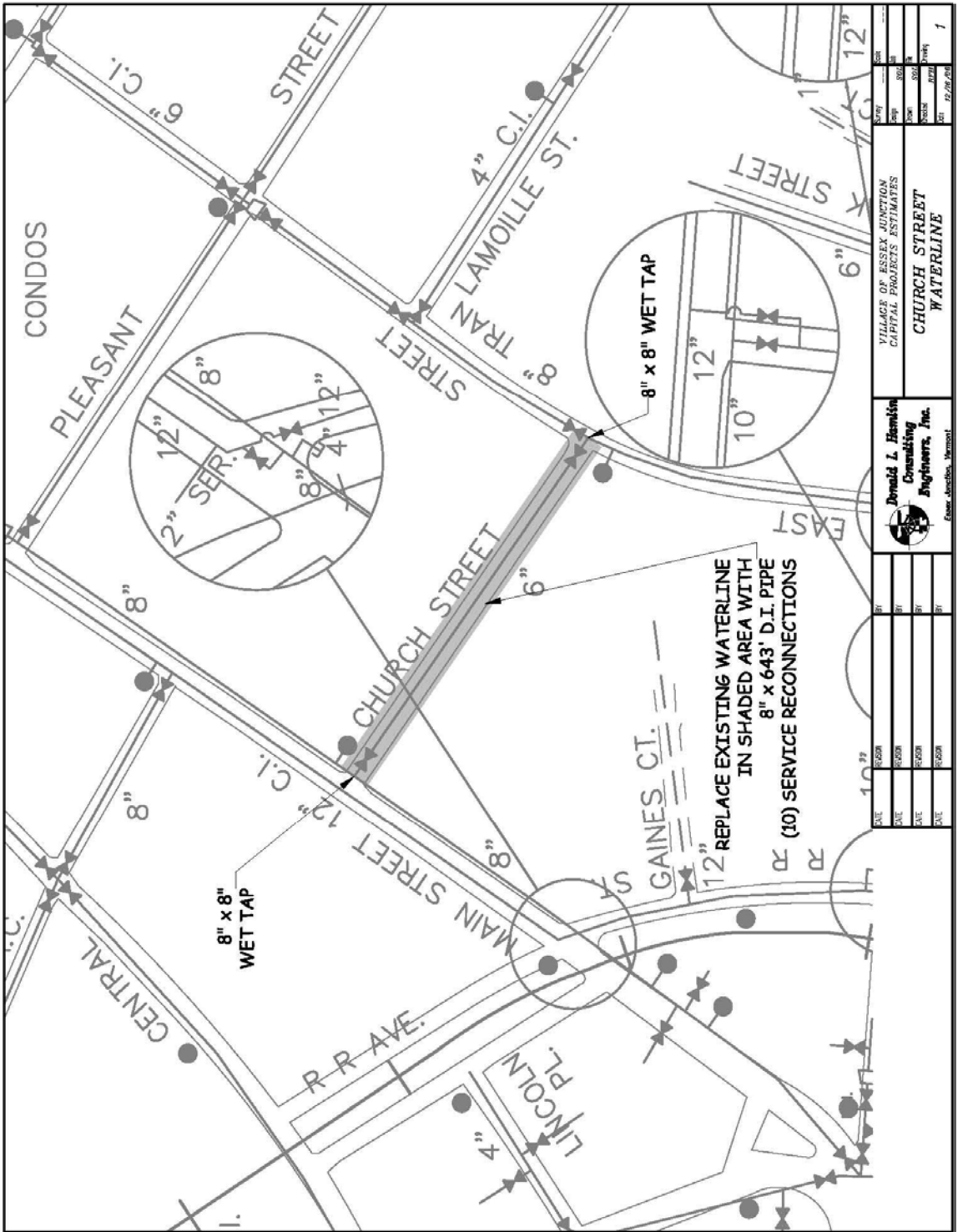
Existing waterline to remain in service until new waterline is operational.

A portion of each residential driveway will be rebuilt to match new roadway.

1-1/4" bituminous pavement overlay.

O	Pavement Overlay	\$	25,762.93
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	258,901.48
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	284,664.42
	Project Management, Design and Resident Engineering	\$	56,932.88
	Total Project Cost	\$	341,597.30

City of Essex Junction
Capital Projects
Construction Cost Estimate



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Church Street

Cost Reference Date: 8/17/2023

Waterline Replacement, Main Street to East Street

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	1,286	lf	\$ 4.17	\$ 5,362.62
2) Excavation of Pavement 4" to 6" Thick	640	sy	\$ 12.69	\$ 8,121.60
3) Wet Tap (8x8)	2	each	\$ 6,749.36	\$ 13,498.72
4) 8" Ductile Iron Pipe, CI 52	643	lf	\$ 120.24	\$ 77,314.32
5) 3/4" Copper Waterline	200	lf	\$ 55.32	\$ 11,064.00
6) 3/4" Corporation Stop	10	each	\$ 792.72	\$ 7,927.20
7) 3/4" Curb Stop	10	each	\$ 357.66	\$ 3,576.60
8) 24" Plant Mixed Gravel	430	cy	\$ 44.08	\$ 18,954.40
9) New Bituminous Concrete Pavement - 3" Thick Over Trench	640	sy	\$ 69.09	\$ 44,217.60
10) New Bituminous Concrete Pavement - 1-1/4", Type III	1,720	sy	\$ 10.03	\$ 17,251.60
11) Traffic Control - Type I	25	day	\$ 573.40	\$ 14,335.00
12) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
13) Mobilization	---	---	5%	\$ 11,296.21
Contingency	---	---	20%	\$ 47,444.07

Subtotal	\$	284,664.42
Design Engineering Services	\$	28,466.44
Bidding and Construction Services	\$	28,466.44
Grand Total	\$	341,597.30

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Densmore Drive
Partial Reconstruction and Culvert Replacement**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023
Original Capital Plan Date: 10/17/2005

Primary Project Reason:

The existing GMP culverts are in fair to poor condition and should be replaced.

Secondary Project Reason:

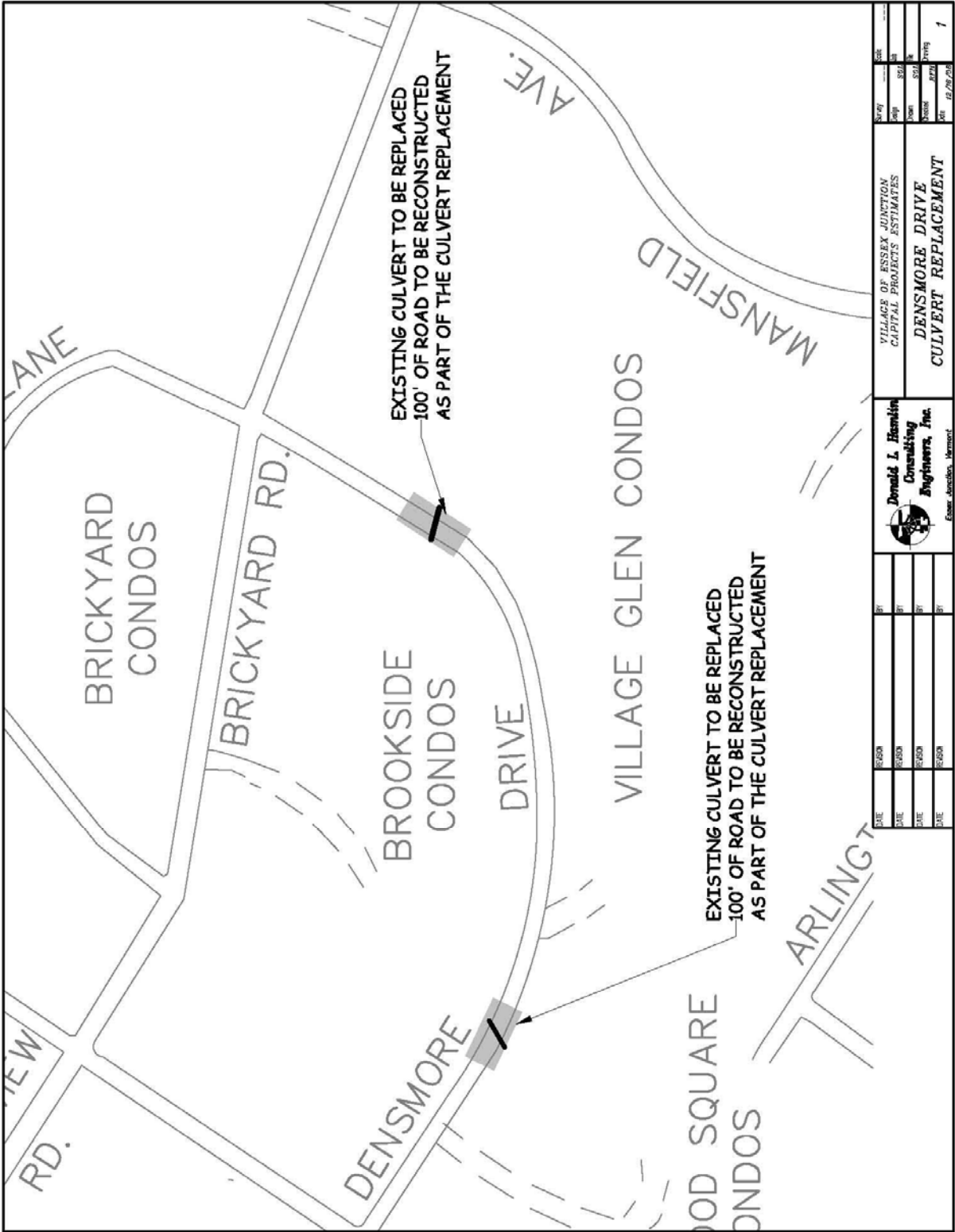
Rebuild roadway and replace sidewalk at culvert replacement.

Assumptions:

100' of roadway will be rebuilt over each culvert.
New sidewalk will be installed at the new culvert locations.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	123,996.76
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	335,179.29
P	Sidewalk Improvements	\$	19,365.90
	Combined Account Costs	\$	478,541.95
	Project Management, Design and Resident Engineering	\$	95,708.39
	Total Project Cost	\$	574,250.34

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



 Donald L. Hamlin Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>		VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES DENSMORE DRIVE CULVERT REPLACEMENT		DATE: 02/28/2018 DRAWN BY: [blank] CHECKED BY: [blank] SCALE: 1" = 40'
DATE	REVISION	BY	DATE	DATE

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Densmore Drive
Partial Reconstruction and Culvert Replacement**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	180	lf	\$ 4.17	\$ 750.60
2) Excavation of Pavement 4" to 6" Thick	675	sy	\$ 12.69	\$ 8,565.75
3) Excavation for New Roadway Subbase	575	cy	\$ 26.16	\$ 15,042.00
4) Mirafi 500X Geotextile Fabric	675	sy	\$ 2.08	\$ 1,404.00
5) Sand Borrow - 12"	225	cy	\$ 32.97	\$ 7,418.25
6) Dense Graded Crushed Stone - 24"	450	cy	\$ 44.80	\$ 20,160.00
7) Plant Mixed Gravel - 6"	115	cy	\$ 44.08	\$ 5,069.20
8) New Bituminous Concrete Pavement - 1-3/4", Type II	675	sy	\$ 13.62	\$ 9,193.50
9) New Bituminous Concrete Pavement - 1-1/4", Type III	675	sy	\$ 10.03	\$ 6,770.25
10) New Bituminous Concrete Driveway and Apron	30	sy	\$ 60.21	\$ 1,806.30
11) Remove and Reset Existing Catch Basin Frame and Grate	4	each	\$ 1,013.08	\$ 4,052.32
12) 10' x 4' Concrete Box Culvert	170	lf	\$ 1,468.61	\$ 249,663.70
13) Remove Existing Concrete Sidewalk	115	sy	\$ 16.49	\$ 1,896.35
14) Remove Existing Concrete Curb	400	lf	\$ 6.95	\$ 2,780.00
15) New Cement Concrete Sidewalk - 4" Thick	115	sy	\$ 84.58	\$ 9,726.70
16) New Cement Concrete Curb	400	lf	\$ 35.12	\$ 14,048.00
17) Supply and Spread Topsoil	35	cy	\$ 49.68	\$ 1,738.80
18) Seed, Fertilize, Lime and Matting	300	sy	\$ 3.58	\$ 1,074.00
19) Traffic Control - Type I	25	day	\$ 573.40	\$ 14,335.00
20) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
21) Mobilization	---	---	5%	\$ 18,989.76
Contingency	---	---	20%	\$ 79,756.99

Subtotal \$ 478,541.95
Design Engineering Services \$ 47,854.20
Bidding and Construction Services \$ 47,854.20
Grand Total \$ 574,250.34

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Fairview Farms
Stormwater Pond Improvements**

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 12/16/2008

Primary Project Reason:

Improve water quality discharge for stormwater system

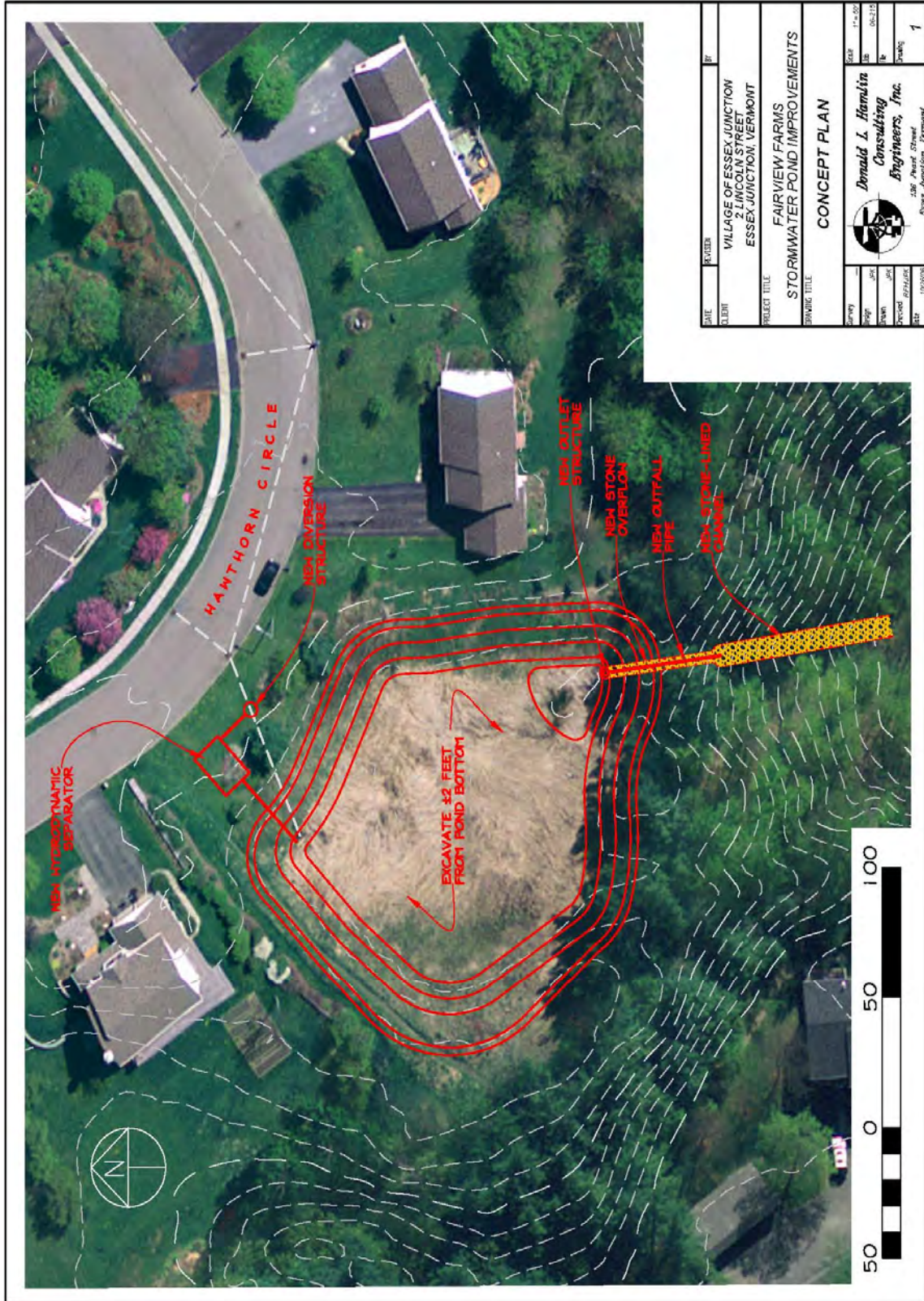
Secondary Project Reason:

Assumptions:

- Install new Vortechs unit.
- All material to be hauled off site.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	194,013.79
P	Sidewalk Improvements	\$	-
Combined Total		\$	194,013.79

City of Essex Junction Capital Projects Construction Cost Estimate



DATE	REVISION	BY
CLIENT	VILLAGE OF ESSEX JUNCTION 2 LINCOLN STREET ESSEX JUNCTION, VERMONT	
PROJECT TITLE	FAIRVIEW FARMS STORMWATER POND IMPROVEMENTS	
DRAWING TITLE	CONCEPT PLAN	
DESIGNED	DATE	SCALE
DRAWN	DATE	SCALE
CHECKED	DATE	SCALE
DATE	10/20/2018	SCALE
 Donald L. Hamelin Consulting Engineers, Inc. 136 Pearl Street South Ferrisburgh, Vermont		SHEET NO. 1 OF 1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Fairview Farms

8/17/2023

Stormwater Pond Improvements

1)	Excavation of Material from Pond Bottom	850	cy	\$ 17.12	\$ 14,552.00
2)	Pond Outlet Structure 4' Diameter Manhole	1	each	\$ 4,371.30	\$ 4,371.30
3)	12" HDPE Drainage Pipe - 8' to 12' Deep	50	lf	\$ 60.29	\$ 3,014.50
4)	15" HDPE Drainage Pipe - 0' to 8' Deep	45	each	\$ 51.64	\$ 2,323.80
5)	Type I Rip Rap for Outfall Pads	50	cy	\$ 156.50	\$ 7,825.00
6)	Mirafi 140N Geotextile Fabric	100	sy	\$ 2.05	\$ 205.00
7)	6' Diameter Diversion Manhole	1	each	\$ 9,305.60	\$ 9,305.60
8)	Vortechs Model 16000	1	each	\$ 100,000.00	\$ 100,000.00
9)	Seed, Fertilize, Lime and Matting	2,600	sy	\$ 2.07	\$ 5,382.00
10)	Traffic Control	20	day	\$ 200.00	\$ 4,000.00
11)	Dust Control	1	ls	\$ 3,000.00	\$ 3,000.00
12)	Mobilization	---	---	5%	\$ 7,698.96
	Contingency	---	---	20%	\$ 32,335.63

Subtotal	\$ 194,013.79
Design Engineering Services	\$ 19,401.38
Bidding and Construction Services	\$ 19,401.38
Grand Total	\$ 232,816.55

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Grant Street

Waterline Replacement, Jackson Street to Maple Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Replace existing old and undersized waterline

Secondary Project Reason:

Overlay roadway

Assumptions:

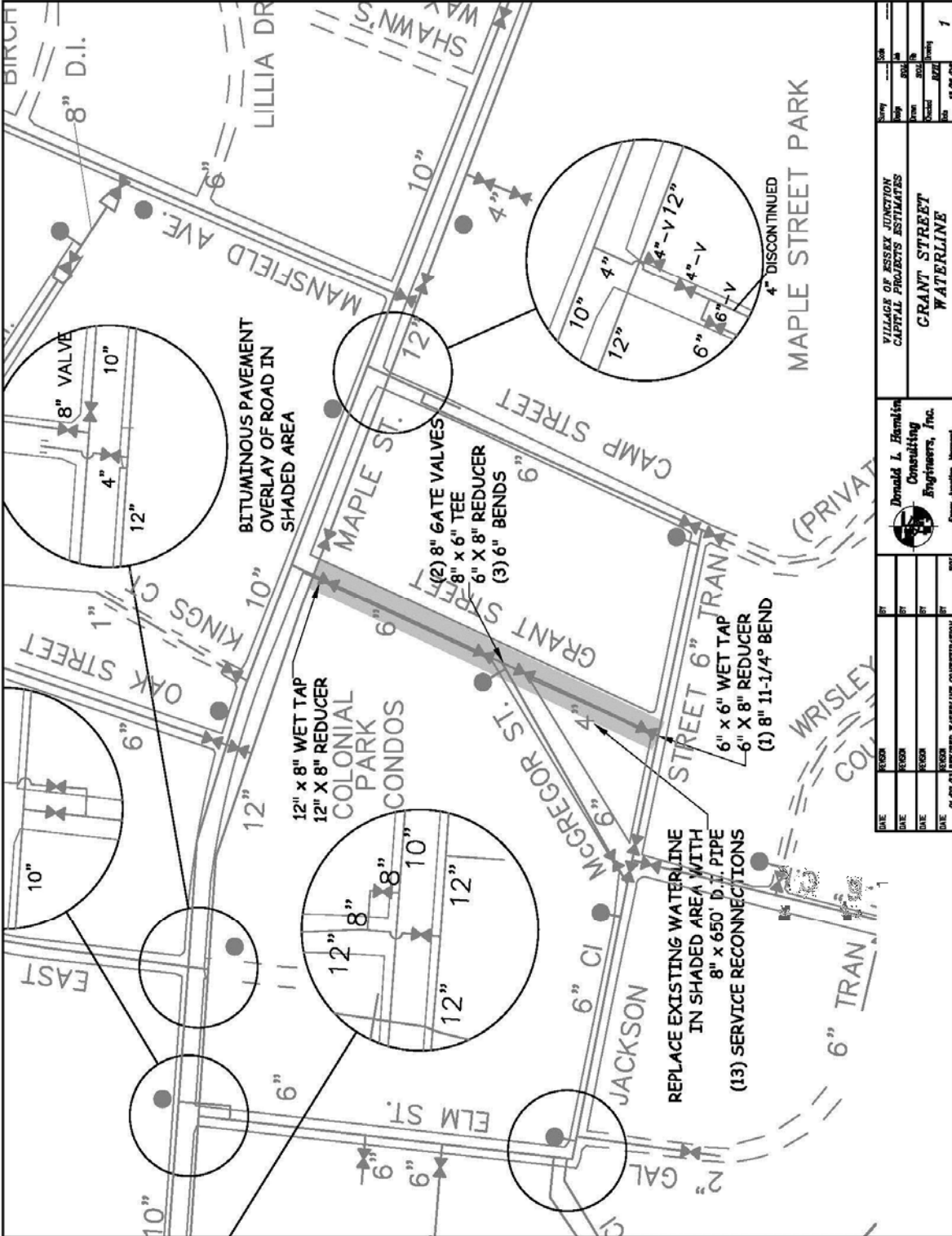
Existing waterline to remain in service until new waterline is operational.

A portion of each residential driveway will be rebuilt to match new roadway.

1-1/4" bituminous pavement overlay.

O	Pavement Overlay	\$	29,493.52
R	Roadway Reconstruction	\$	78,734.75
W	Waterline Improvements	\$	256,000.64
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements		
	Combined Account Costs	\$	364,228.91
	Project Management, Design and Resident Engineering	\$	72,845.78
	Total Project Cost	\$	437,074.69

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	REVISION	BY	DATE	REVISION	BY	DATE	REVISION	BY
DATE	REVISION	BY	DATE	REVISION	BY	DATE	REVISION	BY
01/07/10	ISSUED FOR PERMITS CONSTRUCTION	SP						
Donald L. Hamlin Consulting Engineers, Inc. Essex Junction, Vermont			VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES			GRANT STREET WATERLINE		
15/09/2010			15/09/2010			1		

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Grant Street

Cost Reference Date: 8/17/2023

Waterline Replacement, Jackson Street to McGregor Street

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	1,600	lf	\$ 4.17	\$ 6,672.00
2) Excavation of Pavement 4" to 6" Thick	750	sy	\$ 12.69	\$ 9,517.50
3) Wet Tap (12x8)	1	each	\$ 8,557.96	\$ 8,557.96
4) Wet Tap (6x6)	1	each	\$ 5,943.68	\$ 5,943.68
5) 8" Ductile Iron Pipe, CI 52	650	lf	\$ 120.24	\$ 78,156.00
6) 8" Mechanical Bends	1	each	\$ 1,433.49	\$ 1,433.49
7) 8" Gate Valve	2	each	\$ 3,049.04	\$ 6,098.08
8) 8" x 6" Reducer	2	each	\$ 1,027.57	\$ 2,055.14
9) 8" X 6" Tee	1	each	\$ 2,727.94	\$ 2,727.94
10) 12" x 8" Reducer	1	each	\$ 2,098.82	\$ 2,098.82
11) 6" Mechanical Bends	3	each	\$ 996.28	\$ 2,988.84
12) 3/4" Corporation Stop	13	each	\$ 792.72	\$ 10,305.36
13) 3/4" Curb Stop	13	each	\$ 357.66	\$ 4,649.58
14) 3/4" Copper Waterline	260	lf	\$ 55.32	\$ 14,383.20
15) 24" Plant Mixed Gravel	500	cy	\$ 44.08	\$ 22,040.00
16) New Bituminous Concrete Pavement - 3" Thick Over Trench	750	sy	\$ 69.09	\$ 51,817.50
17) New Bituminous Concrete Pavement - 1-1/4", Type III	1,800	sy	\$ 10.03	\$ 18,054.00
18) Traffic Control - Type II	40	day	\$ 860.10	\$ 34,404.00
19) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
20) Mobilization	---	---	5%	\$ 14,453.53
Contingency	---	---	20%	\$ 60,704.82

Subtotal	\$ 364,228.91
Design Engineering Services	\$ 36,422.89
Bidding and Construction Services	\$ 36,422.89
Grand Total	\$ 437,074.69

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Grove Street

Replace Sanitary Sewer, Road Reconstruction

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 1/6/2009

Primary Project Reason:

The existing concrete sewer pipe is in poor condition.

Secondary Project Reason:

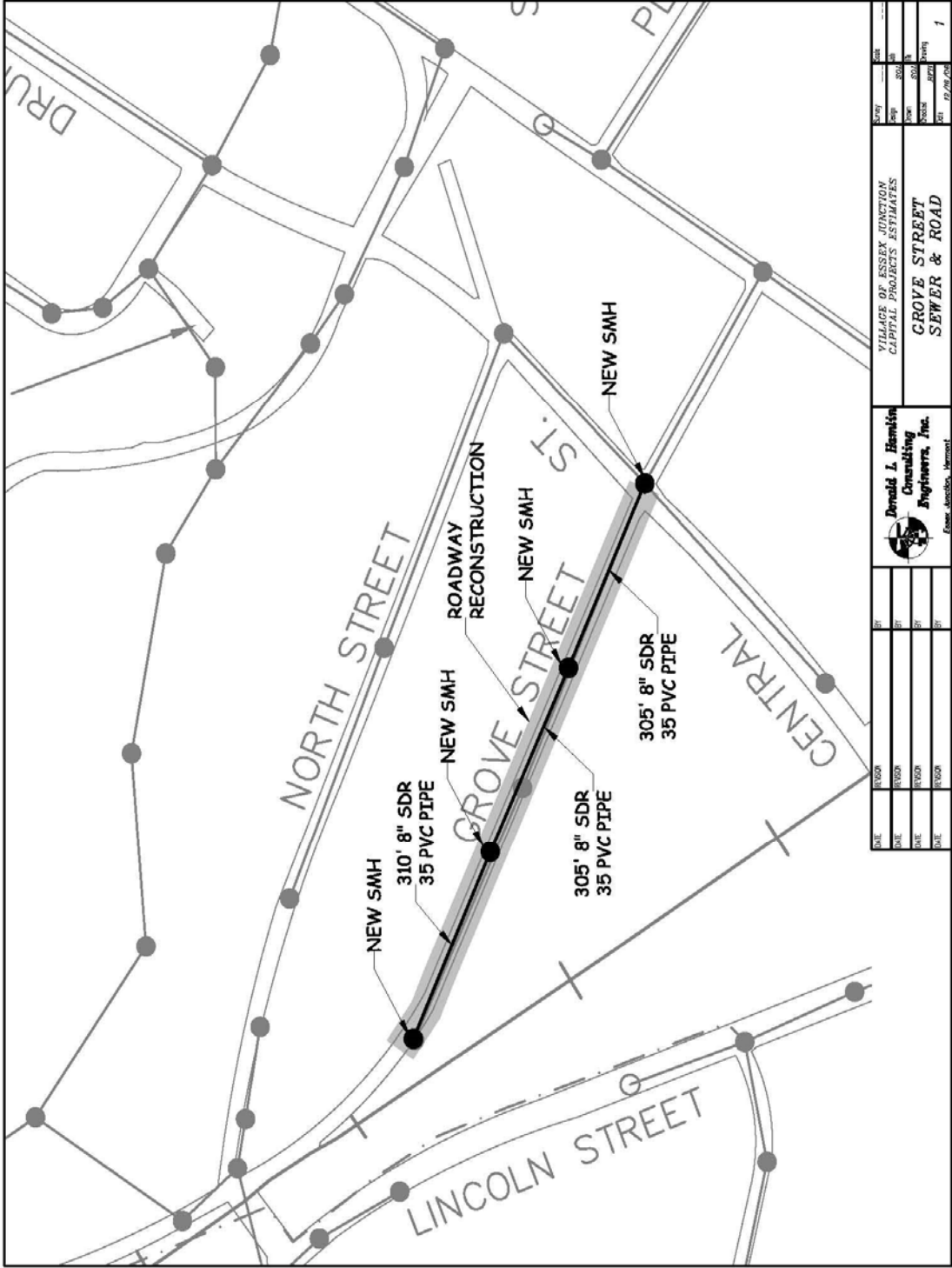
Rebuild roadway due to depth of sewerline installation.

Assumptions:

- New roadway will have a pavement width of 28'.
- Existing drainage structures will set to new finish grade.
- Utilize existing granite curb.
- A portion of each residential driveway will be rebuilt to match new roadway.
- New 4.5' wide concrete sidewalk will be installed.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	476,097.82
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	250,923.36
D	Storm Drainage Improvements	\$	13,318.12
P	Sidewalk Improvements	\$	87,950.07
	Combined Total	\$	828,289.38

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE		REVISION	BY	<p>Donald L. Hamblin Consulting Engineers, Inc. Essex Junction, Vermont</p>	VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES		SHEET NO. DATE PROJECT NO. DRAWN BY CHECKED BY 1
DATE		REVISION	BY		GROVE STREET SEWER & ROAD		
DATE		REVISION	BY				
DATE		REVISION	BY				
DATE		REVISION	BY				

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Grove Street

Cost Reference Date: 8/17/2023

Replace Sanitary Sewer, Road Reconstruction

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	500	lf	\$ 4.17	\$ 2,085.00
2) Excavation of Pavement 4" to 6" Thick	2,865	sy	\$ 12.69	\$ 36,356.85
3) Remove and Reset Existing Granite Curb	1,750	lf	\$ 24.23	\$ 42,402.50
4) Remove Existing Concrete Sidewalk	390	sy	\$ 16.49	\$ 6,431.10
5) Excavation for New Roadway Subbase	2,430	cy	\$ 26.16	\$ 63,568.80
6) Dense Graded Crushed Stone	1,945	cy	\$ 44.80	\$ 87,136.00
7) Plant Mixed Gravel	485	cy	\$ 44.08	\$ 21,378.80
8) Mirafi 500X Geotextile Fabric	2,920	sy	\$ 2.08	\$ 6,073.60
9) New Bituminous Concrete Pavement - 1-3/4", Type II	2,865	sy	\$ 13.62	\$ 39,021.30
10) New Bituminous Concrete Pavement - 1-1/4", Type III	2,865	sy	\$ 10.03	\$ 28,735.95
11) New Bituminous Concrete Driveway and Apron	425	sy	\$ 60.21	\$ 25,589.25
12) New Cement Concrete Sidewalk - 4" Thick	320	sy	\$ 84.58	\$ 27,065.60
13) New Cement Concrete Sidewalk - 6" Thick	120	sy	\$ 115.78	\$ 13,893.60
14) Sanitary Sewer Manhole - 4' Dia., 12' to 16' Deep	4	each	\$ 10,139.39	\$ 40,557.56
15) 8" SDR 35 PVC Sewer Pipe - 12' to 16' Deep	920	lf	\$ 106.08	\$ 97,593.60
16) 6" SDR 35 PVC Sewer Pipe - 8' to 12' Deep	570	lf	\$ 86.01	\$ 49,025.70
17) Remove and Reset Existing Catch Basin Frame and Grate	10	each	\$ 1,013.08	\$ 10,130.80
18) Adjust Existing Gate Valve Box to New Finish Grade	2	each	\$ 253.27	\$ 506.54
19) Supply and Spread Topsoil	225	cy	\$ 49.68	\$ 11,178.00
20) Seed, Fertilize, Lime and Matting	1,975	sy	\$ 3.58	\$ 7,070.50
21) Traffic Control - Type II	40	day	\$ 860.10	\$ 34,404.00
22) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
23) Mobilization	---	---	5%	\$ 32,868.63
Contingency	---	---	20%	\$ 138,048.23

Subtotal	\$ 828,289.38
Design Engineering Services	\$ 74,546.04
Bidding and Construction Services	\$ 82,828.94
Grand Total	\$ 985,664.36

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Hillcrest Road

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Drainage Improvements on Hillcrest, Water & Drainage Improvements on North Hillcrest

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

- Improve drainage on both roads
- Improve water quality by looping waterline

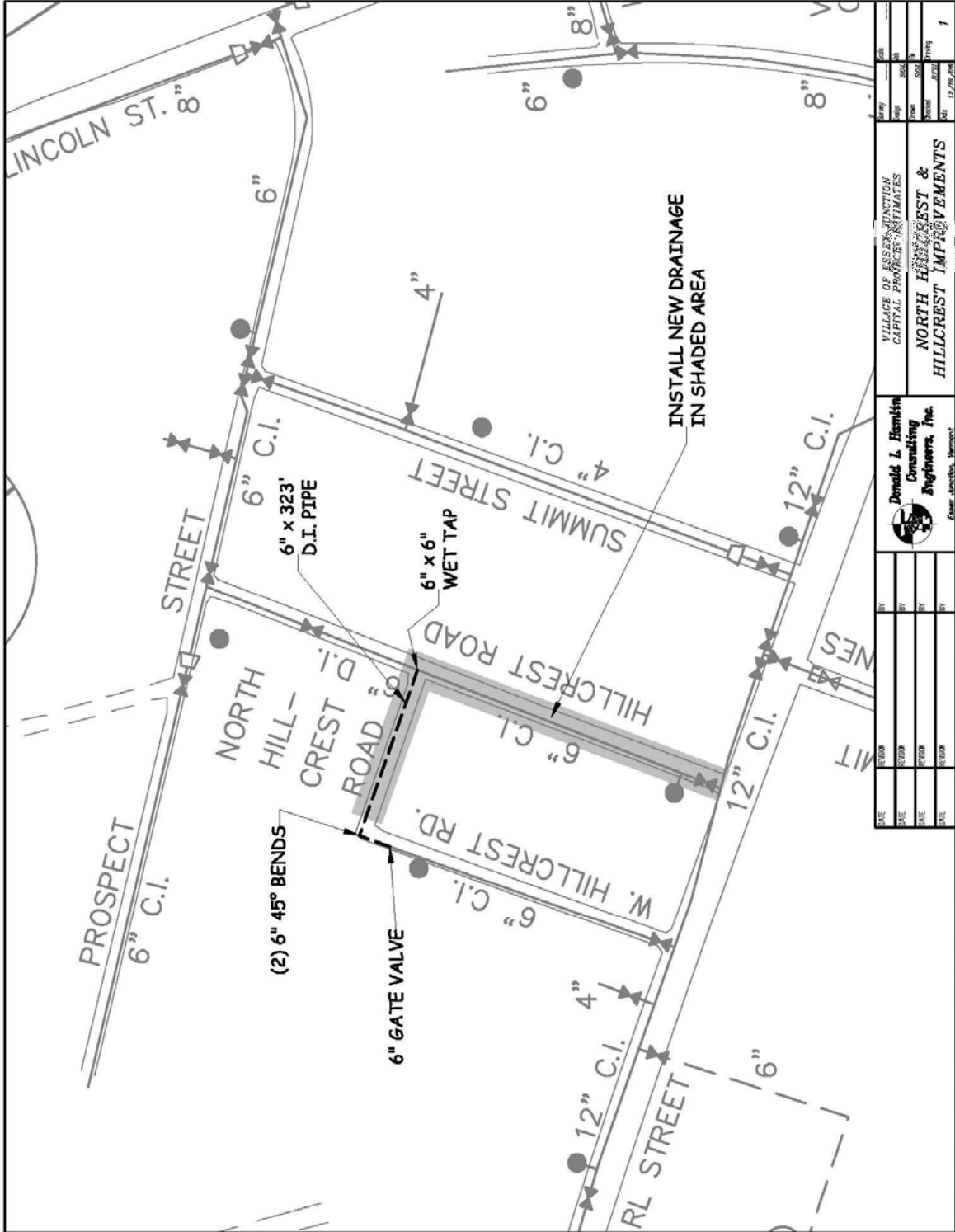
Secondary Project Reason:

Assumptions:

- A portion of each residential driveway will be rebuilt to match new roadway.
- Existing waterline will remain in service until new waterline is operational.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	129,694.07
W	Waterline Improvements	\$	79,227.93
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	119,913.03
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	328,835.03
	Project Management, Design and Resident Engineering	\$	65,767.01
	Total Project Cost	\$	394,602.03

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	PERSON	BY	DATE	PERSON	BY

VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS - ESTIMATES	
NORTH HILLCREST & HILLCREST IMPROVEMENTS	
DATE	BY
12/28/2010	

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Hillcrest Road

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Drainage Improvements on Hillcrest, Water & Drainage Improvements on North Hillcrest

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	1,646	lf	\$ 4.17	\$ 6,863.82
2) Excavation of Pavement 4" to 6" Thick	638	sy	\$ 12.69	\$ 8,096.22
3) Catch Basin - 4' Dia., To 8' Deep	5	each	\$ 5,260.84	\$ 26,304.20
4) 15" HDPE Drainage Pipe - To 8' Deep	515	lf	\$ 72.88	\$ 37,533.20
5) 15" HDPE Perforated Drainage Pipe with Stone - To 8' Deep	220	lf	\$ 96.63	\$ 21,258.60
6) Connect New Pipe to Existing Structure	1	each	\$ 1,144.44	\$ 1,144.44
7) Abandon Existing Sewer Connection	1	each	\$ 806.27	\$ 806.27
8) Wet Tap (6x6)	1	each	\$ 5,943.68	\$ 5,943.68
9) 6" Gate Valve with Valve Box	1	each	\$ 2,479.94	\$ 2,479.94
10) 6" Ductile Iron Pipe, CI 52	323	lf	\$ 101.79	\$ 32,878.17
11) 6" Mechanical Bends	2	each	\$ 996.28	\$ 1,992.56
12) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	2	each	\$ 8,020.40	\$ 16,040.80
13) Plant Mixed Gravel	500	cy	\$ 44.08	\$ 22,040.00
14) New Bituminous Concrete Pavement - 3" Thick Over Trench	640	sy	\$ 69.09	\$ 44,217.60
15) New Bituminous Concrete Driveway and Apron	200	sy	\$ 60.21	\$ 12,042.00
16) Supply & Spread Topsoil	40	cy	\$ 49.68	\$ 1,987.20
17) Seed, Fertilize, Lime and Matting	200	sy	\$ 3.58	\$ 716.00
18) Traffic Control - Type I	25	day	\$ 573.40	\$ 14,335.00
19) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
20) Mobilization	---	---	5%	\$ 13,049.01
Contingency	---	---	20%	\$ 54,805.84

Subtotal	\$	328,835.03
Design Engineering Services	\$	32,883.50
Bidding and Construction Services	\$	32,883.50
Grand Total	\$	394,602.03

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Iroquois Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Road Reconstruction, South Summit Street to Park Street, Conventional Construction

Original Capital Plan Date: 9/28/2001

Primary Project Reason:

Reconstruct the existing 24' wide roadway

Secondary Project Reason:

Assumptions:

New roadway will have a pavement width of 24'

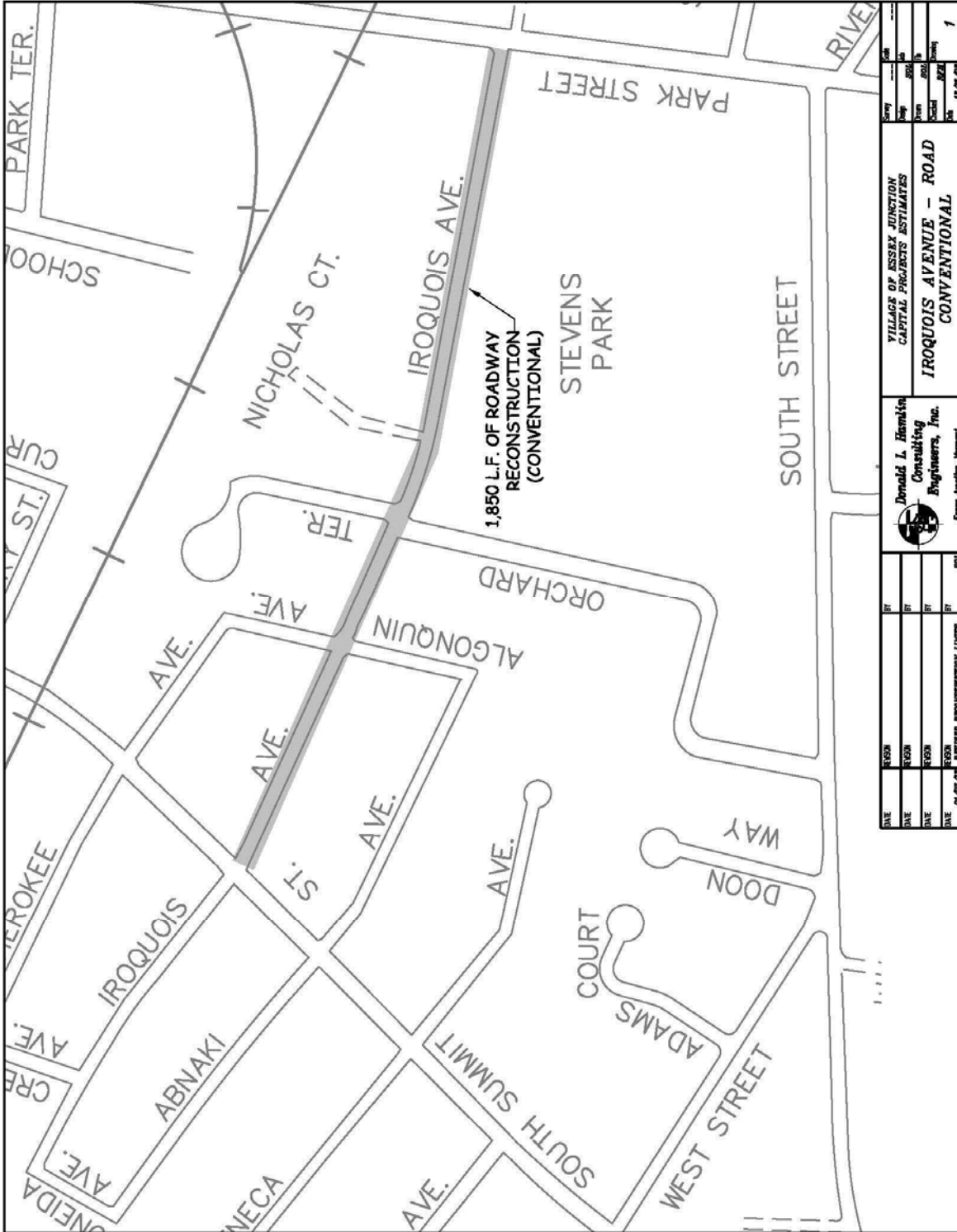
Existing drainage structures will set to new finish grade.

Remove and reset existing granite curb.

A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	1,050,793.82
W	Waterline Improvements	\$	2,380.28
S	Sanitary Sewer Improvements	\$	9,444.83
D	Storm Drainage Improvements	\$	181,974.47
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	1,244,593.40
	Project Management, Design and Resident Engineering	\$	224,026.81
	Total Project Cost	\$	1,468,620.21

City of Essex Junction Capital Projects Construction Cost Estimate



DATE	BY	DATE	BY	DATE	BY	DATE	BY

Donald L. Hambleton
Consulting Engineers, Inc.
Essex Junction, Vermont

YILLAGS OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES

IROQUOIS AVENUE - ROAD CONVENTIONAL

DATE	BY	DATE	BY	DATE	BY	DATE	BY

1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Iroquois Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Road Reconstruction, South Summit Street to Park Street, Conventional Construction

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	950	lf	\$ 4.17	\$ 3,961.50
2) Excavation of Pavement 4" to 6" Thick	5,350	sy	\$ 12.69	\$ 67,891.50
3) Excavation for New Roadway Subbase	6,250	cy	\$ 26.16	\$ 163,500.00
4) Mirafi 500X Geotextile Fabric	4,950	sy	\$ 2.08	\$ 10,296.00
5) Sand Borrow - 12"	1,800	cy	\$ 32.97	\$ 59,346.00
6) Dense Graded Crushed Stone - 24"	3,575	cy	\$ 44.80	\$ 160,160.00
7) Plant Mixed Gravel - 6"	900	cy	\$ 44.08	\$ 39,672.00
8) New Bituminous Concrete Pavement - 1-3/4", Type II	4,950	sy	\$ 13.62	\$ 67,419.00
9) New Bituminous Concrete Pavement - 1-1/4", Type III	4,950	sy	\$ 10.03	\$ 49,648.50
10) New Bituminous Concrete Driveway and Apron	460	sy	\$ 60.21	\$ 27,696.60
11) Remove and Reset Existing Catch Basin Frame and Grate	17	each	\$ 1,013.08	\$ 17,222.36
12) Adjust Existing Gate Valve Box to New Finish Grade	6	each	\$ 253.27	\$ 1,519.62
13) Underdrain	3,700	lf	\$ 29.26	\$ 108,262.00
14) Underdrain Cleanout	8	each	\$ 322.54	\$ 2,580.32
15) Connect New Underdrain to Existing Structure	8	each	\$ 1,144.44	\$ 9,155.52
16) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
17) Remove and Reset Existing Granite Curb	3,700	lf	\$ 24.23	\$ 89,651.00
18) Supply and Spread Topsoil	200	cy	\$ 49.68	\$ 9,936.00
19) Seed, Fertilize, Lime and Matting	1,550	sy	\$ 3.58	\$ 5,549.00
20) Traffic Control - Type III	70	day	\$ 1,146.79	\$ 80,275.30
21) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
22) Mobilization	---	---	5%	\$ 49,388.63
Contingency	---	---	20%	\$ 207,432.23

Subtotal \$ 1,244,593.40
Design Engineering Services \$ 99,567.47
Bidding and Construction Services \$ 124,459.34
Grand Total \$ 1,468,620.21

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Iroquois Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Road Reconstruction, South Summit Street to Park Street, Innovative Construction

Original Capital Plan Date: 9/28/2001

Primary Project Reason:

Reconstruct the existing 24' wide roadway

Secondary Project Reason:

Assumptions:

New roadway will have a pavement width of 24'

Existing drainage structures will set to new finish grade.

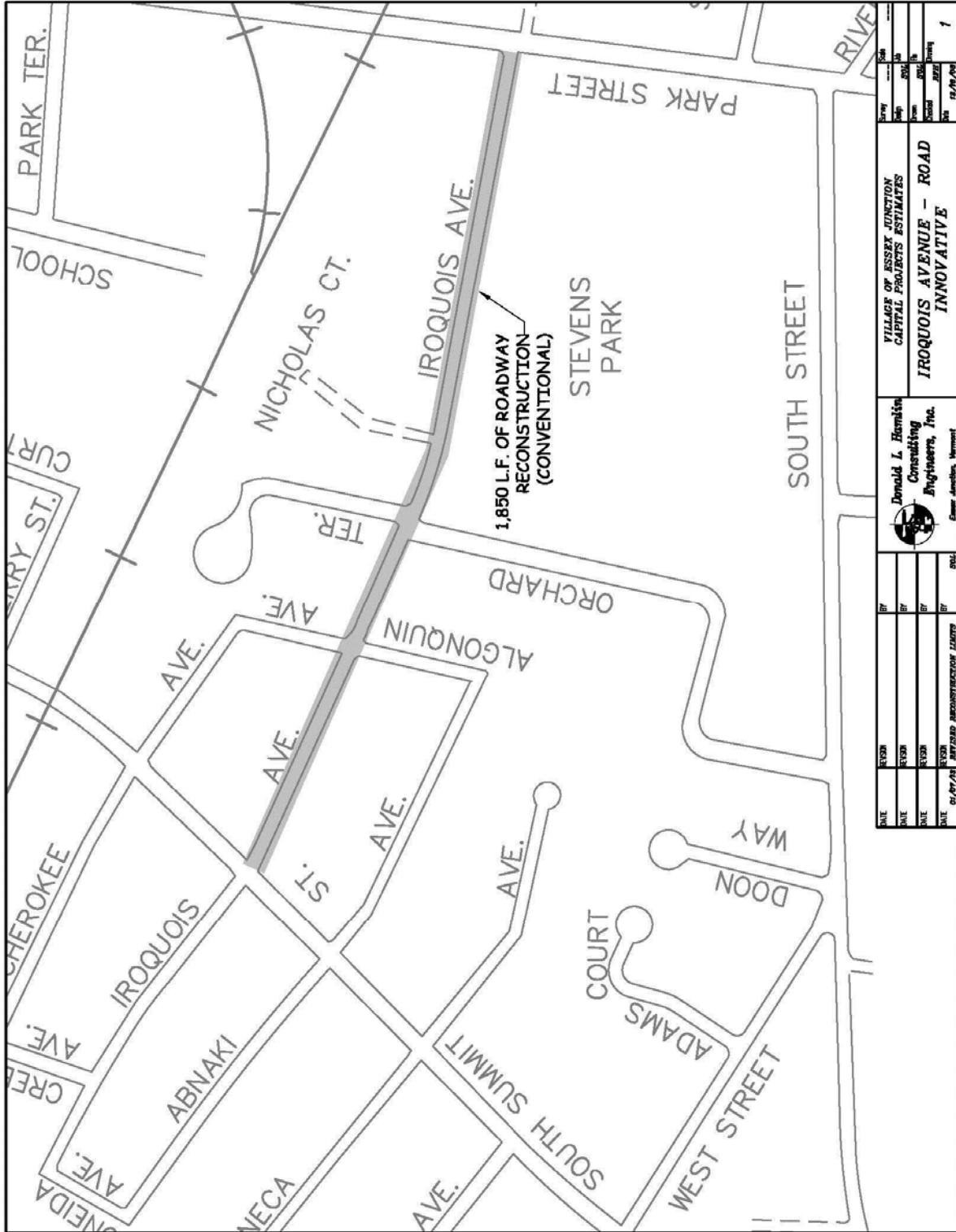
Remove and reset existing granite curb.

A portion of each residential driveway will be rebuilt to match new roadway.

Insulation will be utilized instead of underdrain.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	1,187,505.11
W	Waterline Improvements	\$	1,859.63
S	Sanitary Sewer Improvements	\$	9,582.95
D	Storm Drainage Improvements	\$	25,042.64
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	1,223,990.33
	Project Management, Design and Resident Engineering	\$	220,318.26
	Total Project Cost	\$	1,444,308.59

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Iroquois Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Road Reconstruction, South Summit Street to Park Street, Innovative Construction

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	950	lf	\$ 4.17	\$ 3,961.50
2) Excavation of Pavement 4" to 6" Thick	5,350	sy	\$ 12.69	\$ 67,891.50
3) Excavation for New Roadway Subbase	4,325	cy	\$ 26.16	\$ 113,142.00
3) Sand Borrow - 3"	460	cy	\$ 32.97	\$ 15,166.20
4) New 2" Thick Extruded Polystyrene Insulation	96,000	sf	\$ 2.58	\$ 247,680.00
5) Dense Graded Crushed Stone - 18"	2,700	cy	\$ 44.80	\$ 120,960.00
6) Plant Mixed Gravel - 6"	900	cy	\$ 44.08	\$ 39,672.00
7) New Bituminous Concrete Pavement - 1-3/4", Type II	4,950	sy	\$ 13.62	\$ 67,419.00
8) New Bituminous Concrete Pavement - 1-1/4", Type III	4,950	sy	\$ 10.03	\$ 49,648.50
9) New Bituminous Concrete Driveway and Apron	460	sy	\$ 60.21	\$ 27,696.60
10) Remove and Reset Existing Catch Basin Frame and Grate	17	each	\$ 1,013.08	\$ 17,222.36
11) Adjust Existing Gate Valve Box to New Finish Grade	6	each	\$ 253.27	\$ 1,519.62
12) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
13) Remove and Reset Existing Granite Curb	3,700	lf	\$ 24.23	\$ 89,651.00
14) Supply and Spread Topsoil	200	cy	\$ 49.68	\$ 9,936.00
15) Seed, Fertilize, Lime and Matting	1,550	sy	\$ 3.58	\$ 5,549.00
16) Traffic Control - Type III	70	day	\$ 1,146.79	\$ 80,275.30
17) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
18) Mobilization	---	---	5%	\$ 48,571.05
Contingency	---	---	20%	\$ 203,998.39

Subtotal \$ 1,223,990.33
Design Engineering Services \$ 97,919.23
Bidding and Construction Services \$ 122,399.03
Grand Total \$ 1,444,308.59

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Lamoille Street

Waterline Replacement and Roadway Reconstruction

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Replace existing undersized and old waterline

Secondary Project Reason:

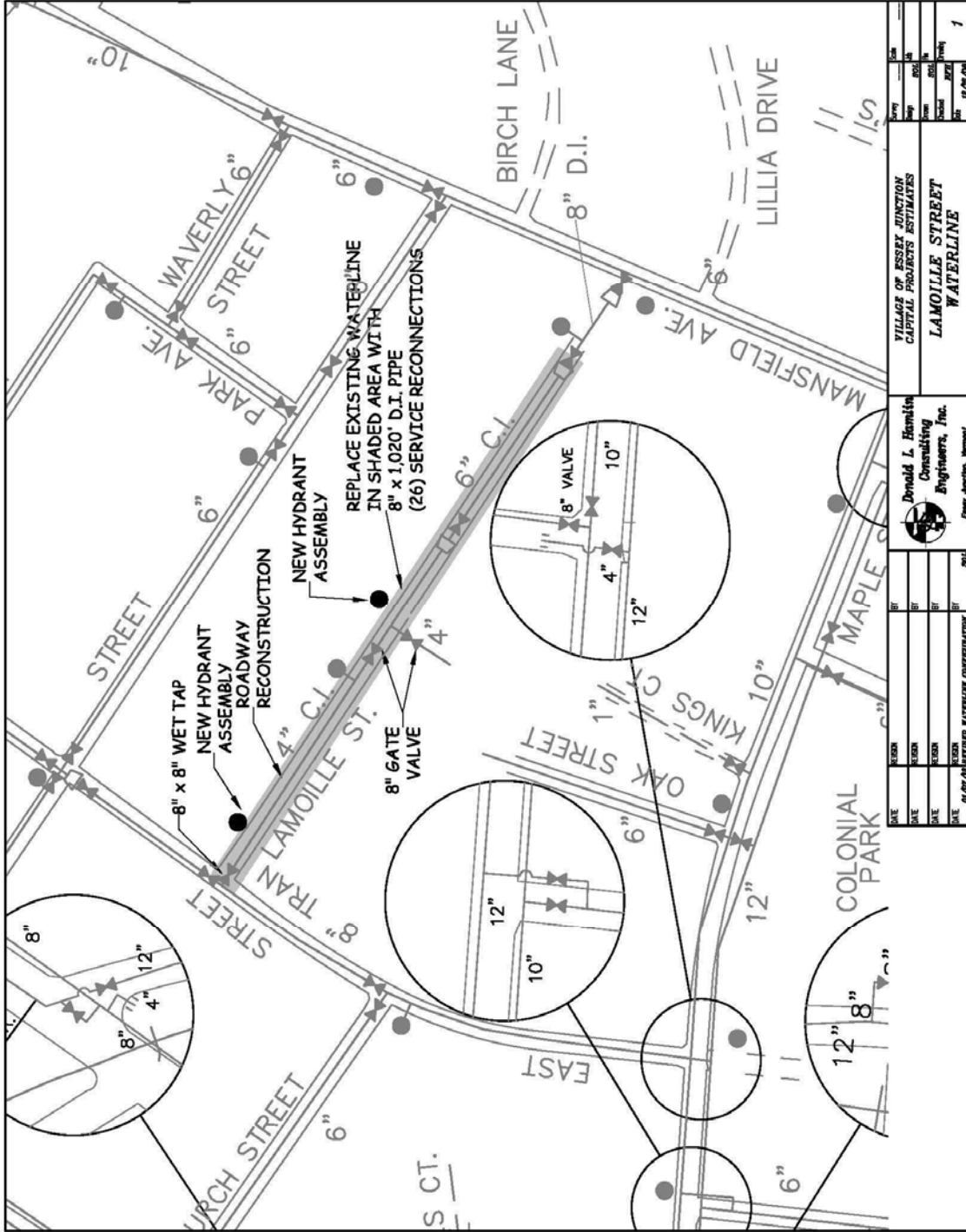
Rebuild roadway in area of waterline replacement

Assumptions:

- New roadway will have a pavement width of 24' with 1' gravel shoulder.
- Existing drainage structures will set to new finish grade.
- Existing waterline will remain in service until new waterline is operational.
- A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	511,554.65
W	Waterline Improvements	\$	280,487.35
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	10,155.12
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	802,197.12
	Project Management, Design and Resident Engineering	\$	152,417.45
	Total Project Cost	\$	954,614.57

City of Essex Junction
Capital Projects
Construction Cost Estimate



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Lamoille Street

Cost Reference Date: 8/17/2023

Waterline Replacement and Roadway Reconstruction

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	725	lf	\$ 4.17	\$ 3,023.25
2) Excavation of Pavement 4" to 6" Thick	2,750	sy	\$ 12.69	\$ 34,897.50
3) Excavation for New Roadway Subbase	3,450	cy	\$ 26.16	\$ 90,252.00
4) Mirafi 500X Geotextile Fabric	3,000	sy	\$ 2.08	\$ 6,240.00
5) Sand Borrow - 12"	990	cy	\$ 32.97	\$ 32,640.30
6) Dense Graded Crushed Stone - 24"	1,975	cy	\$ 44.80	\$ 88,480.00
7) Plant Mixed Gravel - 6"	500	cy	\$ 44.08	\$ 22,040.00
8) New Bituminous Concrete Pavement - 1-3/4", Type II	2,725	sy	\$ 13.62	\$ 37,114.50
9) New Bituminous Concrete Pavement - 1-1/4", Type III	2,725	sy	\$ 10.03	\$ 27,331.75
10) New Bituminous Concrete Driveway and Apron	560	sy	\$ 60.21	\$ 33,717.60
11) Remove and Reset Existing Catch Basin Frame and Grate	7	each	\$ 1,013.08	\$ 7,091.56
12) Wet Tap (8x8)	1	each	\$ 6,749.36	\$ 6,749.36
13) 8" Gate Valve	2	each	\$ 3,049.04	\$ 6,098.08
14) 8" Ductile Iron Pipe, CI 52	1,020	lf	\$ 120.24	\$ 122,644.80
15) 8" Mechanical Bends	2	each	\$ 1,433.49	\$ 2,866.98
16) Reducer (8x6)	2	each	\$ 1,027.57	\$ 2,055.14
17) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	2	each	\$ 8,020.40	\$ 16,040.80
18) 3/4" Copper Waterline	520	lf	\$ 55.32	\$ 28,766.40
19) 3/4" Corporation Stop	26	each	\$ 792.72	\$ 20,610.72
20) 3/4" Curb Stop	26	each	\$ 357.66	\$ 9,299.16
21) Traffic Control - Type I	60	day	\$ 573.40	\$ 34,404.00
22) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
23) Mobilization	---	---	5%	\$ 31,833.22
Contingency	---	---	20%	\$ 133,699.52

Subtotal	\$	802,197.12
Design Engineering Services	\$	72,197.74
Bidding and Construction Services	\$	80,219.71
Grand Total	\$	954,614.57

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage from Educational Dr. to Athens Dr., New Bridge at Indian Brook

Original Capital Plan Date: 10/15/2003

Primary Project Reason:

Install New 5' wide sidewalk

Enclose storm Drainage

Secondary Project Reason:

Replace old Bridge

Assumptions:

5' Wide sidewalk.

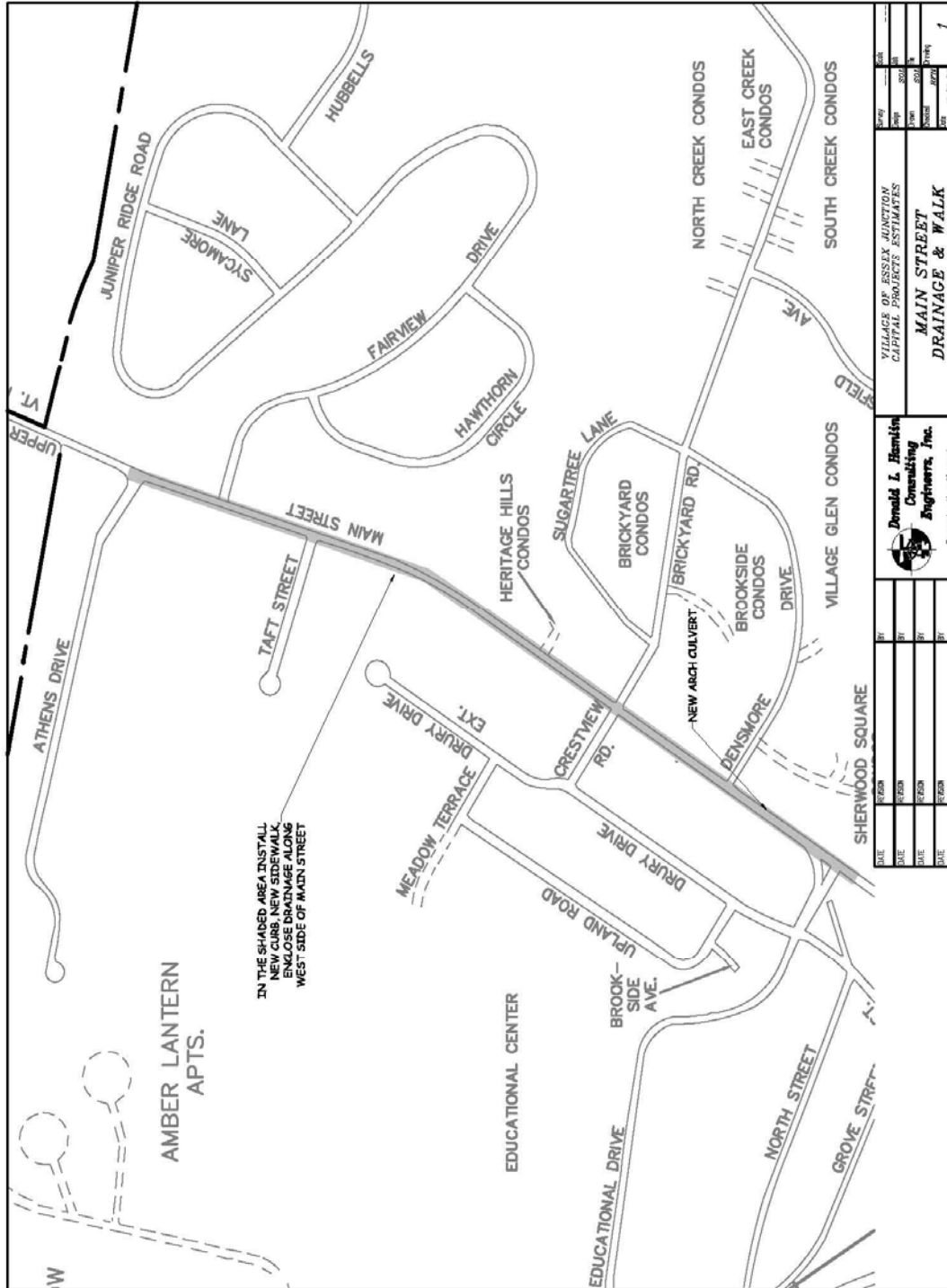
New bridge is an arch culvert

Two way traffic maintained

A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	1,708,391.27
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	23,385.89
D	Storm Drainage Improvements	\$	589,531.21
P	Sidewalk Improvements	\$	292,834.52
	Combined Account Costs	\$	2,614,142.89
	Project Management, Design and Resident Engineering	\$	470,545.72
	Total Project Cost	\$	3,084,688.61

City of Essex Junction Capital Projects Construction Cost Estimate



DATE	BY	DATE	BY	DATE	BY	DATE	BY


Donald L. Hamilton
 Consulting
 Engineers, Inc.
Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES	
MAIN STREET DRAINAGE & WALK	
NO. 1	REV. 1
DATE: 12/29/2018	BY: [Signature]

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage from Educational Dr. to Athens Dr., New Bridge at Indian Brook

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	400	lf	\$ 4.17	\$ 1,668.00
2) Remove Existing Concrete Curb	1,100	lf	\$ 6.95	\$ 7,645.00
3) Excavation of Pavement 4" to 6" Thick	3,850	sy	\$ 12.69	\$ 48,856.50
4) Remove Existing Concrete Sidewalk	562	sy	\$ 16.49	\$ 9,267.38
5) Remove Existing Pipe - To 8' Deep	525	lf	\$ 20.20	\$ 10,605.00
6) Remove Existing Pipe - 8' to 12' Deep	600	lf	\$ 30.29	\$ 18,174.00
7) Remove Existing Structure - 8' to 12' Deep	9	each	\$ 1,353.22	\$ 12,178.98
8) Silt Fence	1,200	lf	\$ 3.80	\$ 4,560.00
9) Remove Existing Manhole Frame and Cover, Replace with New	13	each	\$ 1,372.57	\$ 17,843.41
10) Test Excavation	20	each	\$ 693.01	\$ 13,860.20
11) Remove and Reset Existing Catch Basin Frame and Grate	1	each	\$ 1,013.08	\$ 1,013.08
12) Catch Basin - 4' Dia., To 8' Deep	20	each	\$ 5,260.84	\$ 105,216.80
13) 18" HDPE Drainage Pipe - To 8' Deep	3,000	lf	\$ 84.76	\$ 254,280.00
14) Type I Rip Rap for Outfall Pads	40	cy	\$ 136.18	\$ 5,447.20
15) Excavation for New Roadway Subbase	2,200	cy	\$ 26.16	\$ 57,552.00
16) Sand Borrow	625	cy	\$ 32.97	\$ 20,606.25
17) Dense Graded Crushed Stone	1,300	cy	\$ 44.80	\$ 58,240.00
18) Plant Mixed Gravel	1,100	cy	\$ 44.08	\$ 48,488.00
19) New Cement Concrete Curb	4,350	lf	\$ 35.12	\$ 152,772.00
20) New Cement Concrete Sidewalk - 4" Thick	2,000	sy	\$ 84.58	\$ 169,160.00
21) New Cement Concrete Sidewalk - 6" Thick	300	sy	\$ 115.78	\$ 34,734.00
22) New Bituminous Concrete Pavement - 4" Thick Over Trench	5,750	sy	\$ 80.99	\$ 465,692.50
23) New Bituminous Concrete Driveway and Apron	975	sy	\$ 60.21	\$ 58,704.75
24) New Gravel Driveway	450	sy	\$ 44.70	\$ 20,115.00
25) 4" White Line - Painted	4,700	lf	\$ 1.33	\$ 6,251.00
26) 4" Yellow Line - Painted	2,000	lf	\$ 1.33	\$ 2,660.00
27) 24" Wide Stop Bar - Painted	175	lf	\$ 9.72	\$ 1,701.00
28) 12" Wide Crosswalk Bar - Painted	800	lf	\$ 9.32	\$ 7,456.00

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage from Educational Dr. to Athens Dr., New Bridge at Indian Brook

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
29) Symbol or Letter - Painted	40	each	\$ 44.37	\$ 1,774.80
30) Supply and Spread Topsoil	1,000	cy	\$ 49.68	\$ 49,680.00
31) Seed, Fertilize, Lime and Matting	8,500	sy	\$ 3.58	\$ 30,430.00
32) Temporary Bridge	1	ls	\$ 89,880.04	\$ 89,880.04
33) New Bridge (Arch Culvert) at Indian Brook	1	ls	\$ 134,820.07	\$ 134,820.07
34) Traffic Control = Type IV	85	day	\$ 1,720.19	\$ 146,216.15
35) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
36) Mobilization	---	---	5%	\$ 103,735.83
Contingency	---	---	20%	\$ 435,690.48

Subtotal	\$ 2,614,142.89
Design Engineering Services	\$ 209,131.43
Bidding and Construction Services	\$ 261,414.29
Grand Total	\$ 3,084,688.61

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

North Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Replace Waterline, Grove Street to Central Street

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Replace old and undersized waterline

Secondary Project Reason:

Rebuild roadway because of deep excavation

Rebuild storm drainage

Assumptions:

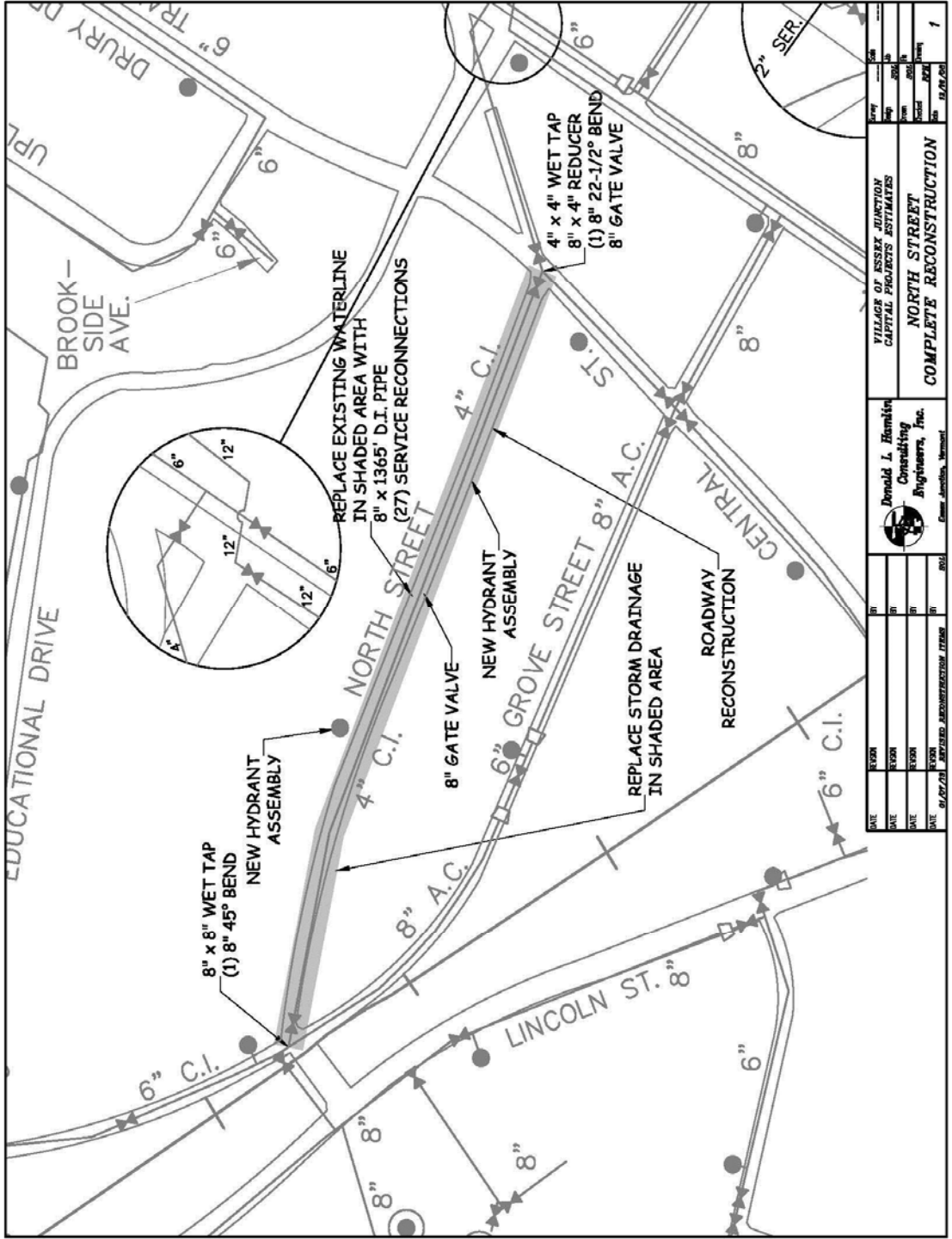
New roadway will have a pavement width of 24' with curb.

Existing waterline will remain in use until new waterline is operational.

New 5' sidewalk on one side of the road.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	758,399.52
W	Waterline Improvements	\$	366,493.60
S	Sanitary Sewer Improvements	\$	18,482.97
D	Storm Drainage Improvements	\$	149,865.74
P	Sidewalk Improvements	\$	120,987.72
	Combined Account Costs	\$	1,414,229.54
	Project Management, Design and Resident Engineering	\$	254,561.32
	Total Project Cost	\$	1,668,790.86

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

North Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Replace Waterline, Grove Street to Central Street

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	640	lf	\$ 4.17	\$ 2,668.80
2) Excavation of Pavement 4" to 6" Thick	3,940	sy	\$ 12.69	\$ 49,998.60
3) Remove Existing Concrete Curb	1,325	lf	\$ 6.95	\$ 9,208.75
4) Remove Existing Concrete Sidewalk	590	sy	\$ 16.49	\$ 9,729.10
5) Excavation for New Roadway Subbase	3,925	cy	\$ 26.16	\$ 102,678.00
6) Dense Graded Crushed Stone	3,140	cy	\$ 44.80	\$ 140,672.00
7) Plant Mixed Gravel	785	cy	\$ 44.08	\$ 34,602.80
8) Mirafi 500X Geotextile Fabric	4,715	sy	\$ 2.08	\$ 9,807.20
9) New Bituminous Concrete Pavement - 1-3/4", Type II	4,405	sy	\$ 13.62	\$ 59,996.10
10) New Bituminous Concrete Pavement - 1-1/4", Type III	4,405	sy	\$ 10.03	\$ 44,182.15
11) New Bituminous Concrete Driveway and Apron	600	sy	\$ 60.21	\$ 36,126.00
12) New Cement Concrete Curb	2,650	lf	\$ 35.12	\$ 93,068.00
13) New Cement Concrete Sidewalk - 4" Thick	510	sy	\$ 84.58	\$ 43,135.80
14) New Cement Concrete Sidewalk - 6" Thick	235	sy	\$ 115.78	\$ 27,208.30
15) Wet Tap (8x8)	1	each	\$ 6,749.36	\$ 6,749.36
16) Wet Tap (4x4)	1	each	\$ 5,331.55	\$ 5,331.55
17) 8" Ductile Iron Pipe, CI 52	1,365	lf	\$ 120.24	\$ 164,127.60
18) 8" Mechanical Bends	2	each	\$ 1,433.49	\$ 2,866.98
19) Reducer (8x4)	1	each	\$ 1,027.57	\$ 1,027.57
20) 8" Gate Valve with Valve Box	2	each	\$ 3,049.04	\$ 6,098.08
21) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	2	each	\$ 8,020.40	\$ 16,040.80
22) 3/4" Corporation Stop	27	each	\$ 792.72	\$ 21,403.44
23) 3/4" Curb Stop	27	each	\$ 357.66	\$ 9,656.82
24) 3/4" Copper Waterline	550	lf	\$ 55.32	\$ 30,426.00
25) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

North Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Replace Waterline, Grove Street to Central Street

ITEM	QUANTITY	UNIT	PRICE	TOTAL
27) Connect New Pipe to Existing Structure	1	each	\$ 1,144.44	\$ 1,144.44
28) Catch Basin - 4' Dia., To 8' Deep	6	each	\$ 5,260.84	\$ 31,565.04
29) 15" HDPE Drainage Pipe - To 8' Deep	900	lf	\$ 72.88	\$ 65,592.00
30) Supply & Spread Topsoil	385	cy	\$ 49.68	\$ 19,126.80
31) Seed, Fertilize and Matting	3,500	sy	\$ 3.58	\$ 12,530.00
32) Traffic Control - Type II	60	day	\$ 860.10	\$ 51,606.00
33) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
34) Mobilization	---	---	5%	\$ 56,120.22
Contingency	---	---	20%	\$ 235,704.92

Subtotal	\$ 1,414,229.54
Design Engineering Services	\$ 113,138.36
Bidding and Construction Services	\$ 141,422.95
Grand Total	\$ 1,668,790.86

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Old Colchester Road
New Sanitary Sewer**

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 12/16/2008

Primary Project Reason:

Install New Municipal Sanitary Sewer.

Secondary Project Reason:

Roadway Reconstruction due to depth of sewer installation.

Assumptions:

New roadway will have a pavement width of 24' with 1' gravel shoulder.

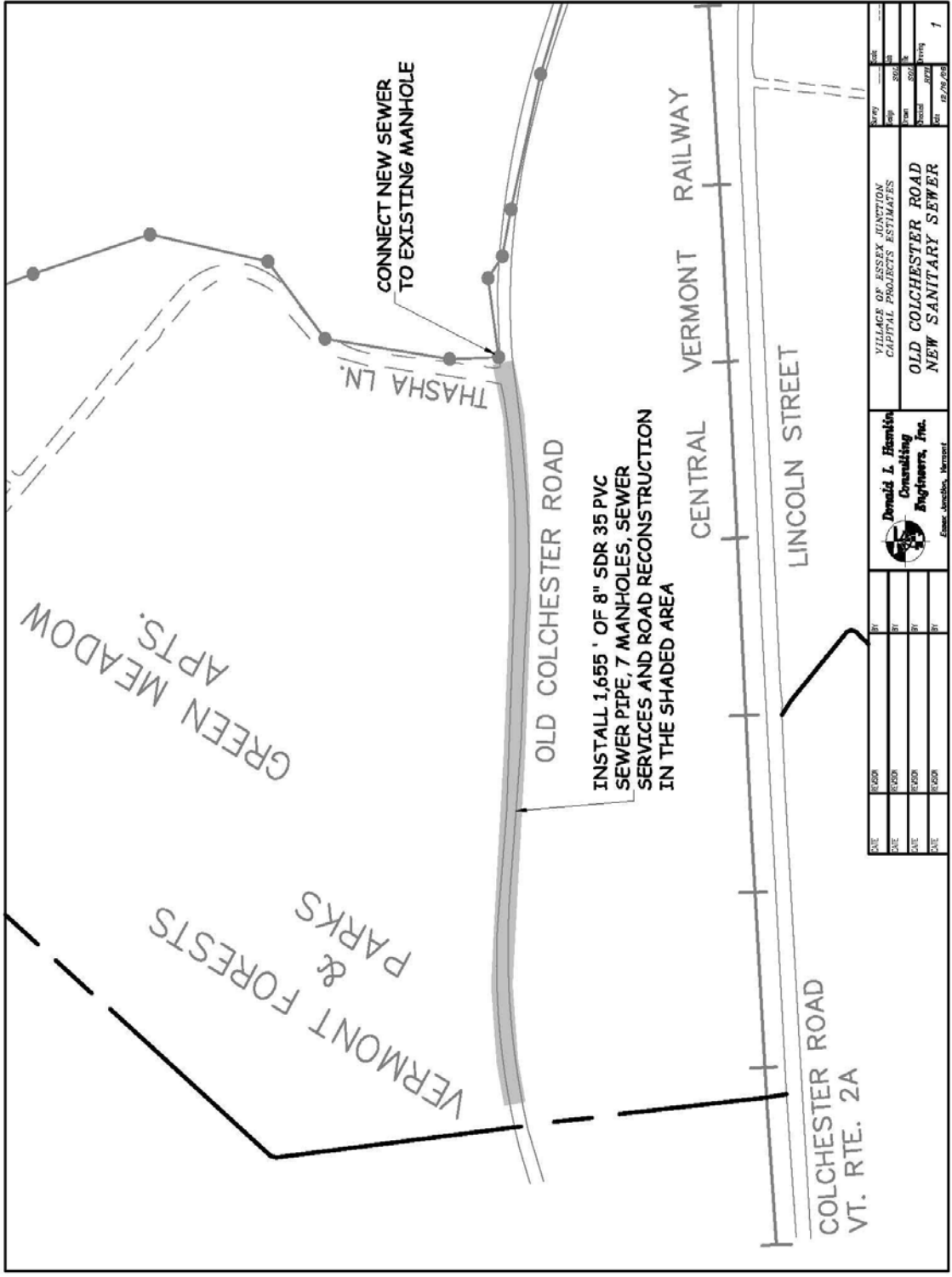
New 8" SDR PVC Sewer Pipe.

8' to 12' Deep Structures.

A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	639,124.83
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	297,009.60
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	936,134.43
	Project Management, Design and Resident Engineering	\$	177,865.54
	Total Project Cost	\$	1,113,999.97

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	REVISION	BY	PROJECT	NO.
DATE	REVISION	BY	PROJECT	NO.
DATE	REVISION	BY	PROJECT	NO.
DATE	REVISION	BY	PROJECT	NO.
Donald I. Hamlin Consulting Engineers, Inc. Essex Junction, Vermont				VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES OLD COLCHESTER ROAD NEW SANITARY SEWER
				1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Old Colchester Road
New Sanitary Sewer**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	80	lf	\$ 4.17	\$ 333.60
2) Excavation of Pavement 4" to 6" Thick	4,535	sy	\$ 12.69	\$ 57,549.15
3) Excavation for New Roadway Subbase	4,100	cy	\$ 26.16	\$ 107,256.00
4) 24" Dense Graded Crushed Stone	3,275	cy	\$ 44.80	\$ 146,720.00
5) 6" Plant Mixed Gravel	825	cy	\$ 44.08	\$ 36,366.00
6) Bituminous Concrete Pavement - 1-3/4", Type II	4,550	sy	\$ 13.62	\$ 61,971.00
7) Bituminous Concrete Pavement - 1-1/4", Type III	4,550	sy	\$ 10.03	\$ 45,636.50
8) Sanitary Sewer Manhole - 4' Dia., 8' to 12' Deep	7	each	\$ 7,979.60	\$ 55,857.20
9) 8" SDR 35 PVC Sewer Pipe - 8' to 12' Deep	1,655	lf	\$ 86.01	\$ 142,346.55
10) 6" SDR 35 PVC Sewer Pipe - 8' to 12' Deep	360	lf	\$ 86.01	\$ 30,963.60
11) Supply & Spread Topsoil	200	cy	\$ 49.68	\$ 9,936.00
12) Seed, Fertilize and Matting	1,900	sy	\$ 3.58	\$ 6,802.00
13) New Bituminous Concrete Driveway and Apron	100	sy	\$ 60.21	\$ 6,021.00
14) New Gravel Driveway Repair	50	sy	\$ 44.70	\$ 2,235.00
15) Traffic Control - Type III	25	day	\$ 1,146.79	\$ 28,669.75
16) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
17) Mobilization	---	---	5%	\$ 37,148.19
Contingency	---	---	20%	\$ 156,022.40

Subtotal	\$	936,134.43
Design Engineering Services	\$	84,252.10
Bidding and Construction Services	\$	93,613.44
Grand Total	\$	1,113,999.97

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Orchard Terrace
Sidewalk Replacement**

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 10/17/2005

Primary Project Reason:

Replace existing sidewalk with new sidewalk

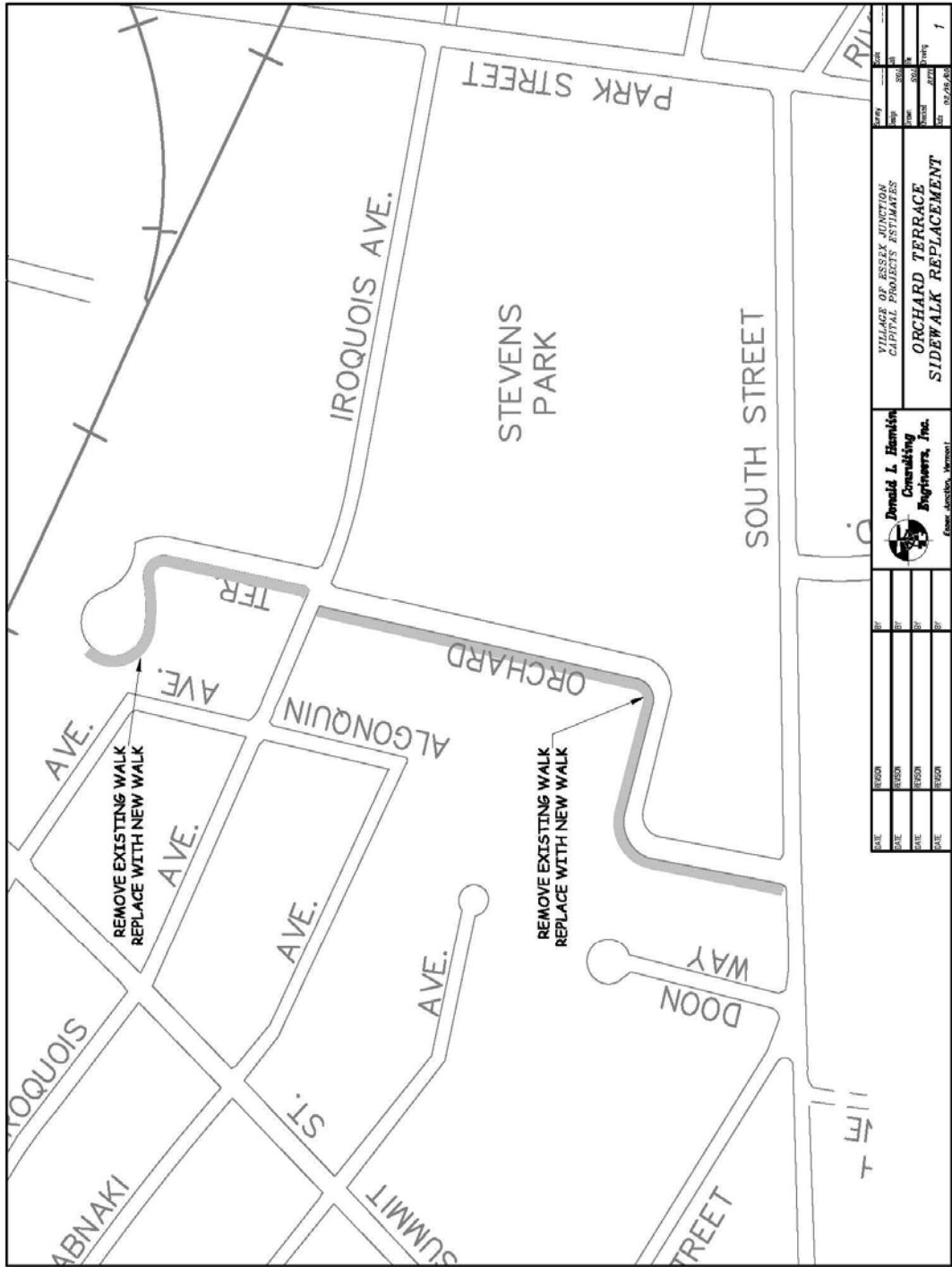
Secondary Project Reason:

Assumptions:

- New walk on one side only.
- New sidewalk to be 5' wide.
- Walk removed from one side and replaced with new lawn.
- A portion of each residential driveway will be rebuilt to match new sidewalk.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	181,578.47
	Combined Account Costs	\$	181,578.47
	Project Management, Design and Resident Engineering	\$	36,315.69
	Total Project Cost	\$	217,894.17

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	REVISION	BY	DESCRIPTION

 Donald L. Hamilton Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>		VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES ORCHARD TERRACE SIDEWALK REPLACEMENT
DATE	BY	DESCRIPTION

DATE	BY	DESCRIPTION

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Orchard Terrace
Sidewalk Replacement**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 3" Thick or Less	400	lf	\$ 2.87	\$ 1,148.00
2) Excavation of Pavement to 3" Thick	375	sy	\$ 7.74	\$ 2,902.50
3) Remove Existing Concrete Sidewalk	500	sy	\$ 16.49	\$ 8,245.00
4) New Cement Concrete Sidewalk - 4" Thick	840	sy	\$ 84.58	\$ 71,047.20
5) New Cement Concrete Sidewalk - 6" Thick	190	sy	\$ 115.78	\$ 21,998.20
6) New Bituminous Concrete Driveway and Apron	375	sy	\$ 60.21	\$ 22,578.75
7) Supply and Spread Topsoil	50	cy	\$ 49.68	\$ 2,484.00
8) Seed, Fertilize, Lime and Matting	425	sy	\$ 3.58	\$ 1,521.50
9) Traffic Control - Type I	20	day	\$ 573.40	\$ 11,468.00
10) Dust Control - Type I	1	ls	\$ 716.75	\$ 716.75
11) Mobilization	---	---	5%	\$ 7,205.50
Contingency	---	---	20%	\$ 30,263.08

Subtotal	\$	181,578.47
Design Engineering Services	\$	18,157.85
Bidding and Construction Services	\$	18,157.85
Grand Total	\$	217,894.17

The work includes the following components:

- A - Remove and replace walk on west side, north of Iroquois Avenue
- B - Remove and replace walk on west side, south of Iroquois Avenue

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

New Waterline, 235 Pearl Street to Susie Wilson Road

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Replace existing old and undersized waterline.

Secondary Project Reason:

Assumptions:

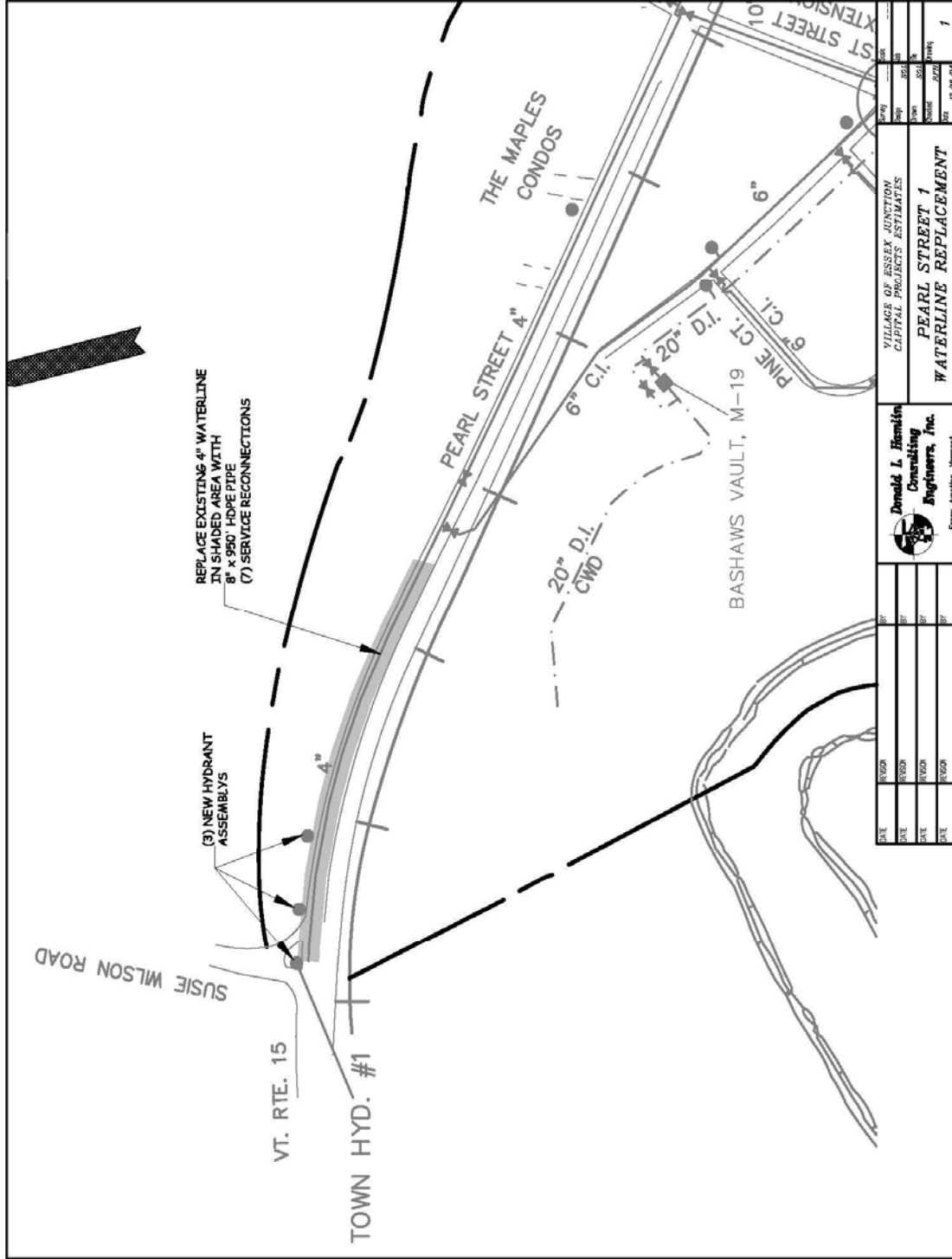
New waterline installed by directional bore.

All water services from new waterline to each resident

Existing waterline remains in use until new waterline is operational.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	371,243.05
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	371,243.05
	Project Management, Design and Resident Engineering	\$	74,248.61
	Total Project Cost	\$	445,491.66

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	REVISION	BY	NO.
DATE	REVISION	BY	NO.
DATE	REVISION	BY	NO.
DATE	REVISION	BY	NO.

VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES	
PEARL STREET 1	
WATERLINE REPLACEMENT	
DATE	BY
12.09.2010	1

**Donald L. Hamlin
Consulting
Engineers, Inc.**
Essex Junction, Vermont

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

New Waterline, 235 Pearl Street to Susie Wilson Road

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	530	lf	\$ 4.17	\$ 2,210.10
2) Excavation of Pavement 4" to 6" Thick	200	sy	\$ 12.69	\$ 2,538.00
3) Remove and Reset Existing Granite Curb	160	lf	\$ 24.23	\$ 3,876.80
4) 8" HDPE Waterline by Directional Bore	920	lf	\$ 147.92	\$ 136,086.40
5) 6" Ductile Iron Pipe, CI 52	40	lf	\$ 101.79	\$ 4,071.60
6) 6" Tee	1	each	\$ 1,920.88	\$ 1,920.88
7) 6" Gate Valve with Valve Box	1	each	\$ 2,479.94	\$ 2,479.94
8) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	3	each	\$ 8,020.40	\$ 24,061.20
9) HDPE Fusing Coupling	8	each	\$ 966.96	\$ 7,735.68
10) 3/4" Copper Waterline	140	lf	\$ 55.32	\$ 7,744.80
11) 3/4" Corporation Stop	7	each	\$ 792.72	\$ 5,549.04
12) 3/4" Curb Stop	7	each	\$ 357.66	\$ 2,503.62
13) Cap and Abandon Existing 4" Waterline	2	each	\$ 4,766.72	\$ 9,533.44
14) Plant Mixed Gravel - 24"	100	cy	\$ 44.08	\$ 4,408.00
15) New Bituminous Concrete Pavement - 4" Thick Over Trench	40	sy	\$ 80.99	\$ 3,239.60
16) Excavation Pit on Route 15	11	each	\$ 3,225.36	\$ 35,478.96
17) Supply and Spread Topsoil	25	cy	\$ 49.68	\$ 1,242.00
18) Seed, Fertilize, Lime and Matting	350	sy	\$ 3.58	\$ 1,253.00
19) Traffic Control - Type IV	20	day	\$ 1,720.19	\$ 34,403.80
20) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
21) Mobilization	---	---	5%	\$ 14,731.87
Contingency	---	---	20%	\$ 61,873.84

Subtotal	\$ 371,243.05
Design Engineering Services	\$ 37,124.30
Bidding and Construction Services	\$ 37,124.30
Grand Total	\$ 445,491.66

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Waterline Replacement, CVE Water Vault to Hillcrest Road

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Replace existing old waterline.

Secondary Project Reason:

Replace old curb and sidewalk

Assumptions:

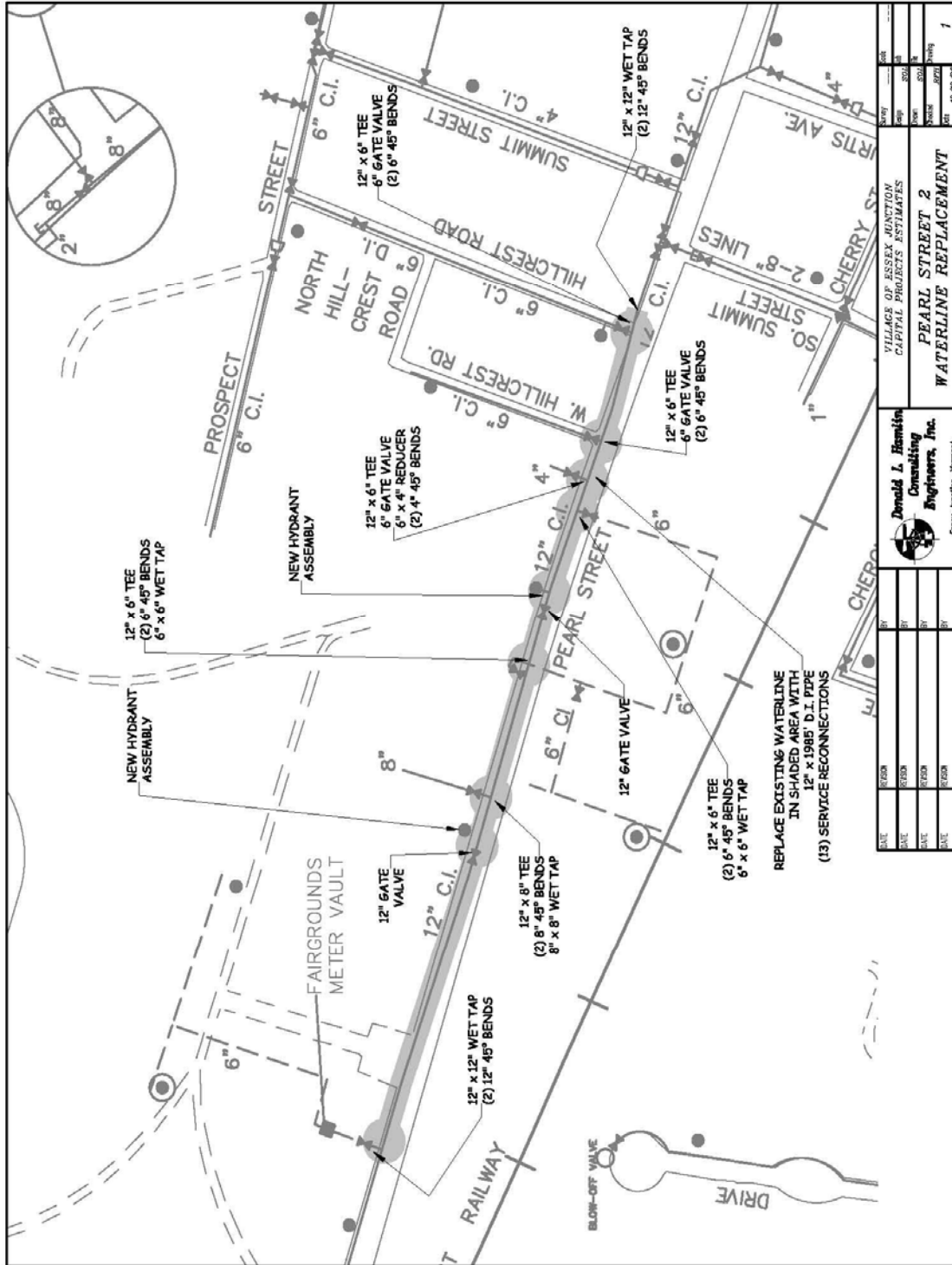
New waterline installed in green belt.

New curb and sidewalk along pipe route.

Existing waterline remains in use until new waterline is operational.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	372,953.01
W	Waterline Improvements	\$	703,988.72
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	167,182.75
	Combined Total	\$	1,244,124.48

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	PERSON	BY	DATE	PERSON	BY

**Donald L. Hamlin
Consulting
Engineers, Inc.**
Essex Junction, Vermont

VILLAGES OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES

**PEARL STREET 2
WATERLINE REPLACEMENT**

DATE	PERSON	BY	DATE	PERSON	BY

12,076,000 1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Waterline Replacement, CVE Water Vault to Hillcrest Road

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 6" Thick	5,700	lf	\$ 6.78	\$ 38,646.00
2) Excavation of Pavement 4" to 6" Thick	1,250	sy	\$ 12.69	\$ 15,862.50
3) Remove Existing Concrete Curb	1,850	lf	\$ 6.95	\$ 12,857.50
4) Remove Existing Concrete Sidewalk	1,075	sy	\$ 16.49	\$ 17,726.75
5) Wet Tap (12x12)	2	each	\$10,262.75	\$ 20,525.50
6) Wet Tap (8x8)	1	each	\$ 6,749.36	\$ 6,749.36
7) Wet Tap (6x6)	2	each	\$ 5,943.68	\$ 11,887.36
8) 12" Ductile Iron Pipe, CI 52	1,985	lf	\$ 134.58	\$ 267,141.30
9) 12" Mechanical Bend	4	each	\$ 2,508.61	\$ 10,034.44
10) 8" Mechanical Bend	2	each	\$ 1,433.49	\$ 2,866.98
11) 6" Mechanical Bend	8	each	\$ 996.28	\$ 7,970.24
12) 4" Mechanical Bend	4	each	\$ 782.11	\$ 3,128.44
13) Reducer (8x4)	1	each	\$ 1,027.57	\$ 1,027.57
14) Reducer (6x4)	1	each	\$ 862.29	\$ 862.29
15) 12" Gate Valve with Valve Box	3	each	\$ 5,296.76	\$ 15,890.28
16) 8" Gate Valve with Valve Box	1	each	\$ 3,049.04	\$ 3,049.04
17) 6" Gate Valve with Valve Box	9	each	\$ 2,479.94	\$ 22,319.46
18) Tee (12x12)	1	each	\$ 4,611.55	\$ 4,611.55
19) Tee (12x8)	1	each	\$ 4,611.55	\$ 4,611.55
20) Tee (12x6)	11	each	\$ 4,611.55	\$ 50,727.05
21) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	2	each	\$ 8,020.40	\$ 16,040.80
22) 3/4" Copper Waterline	420	each	\$ 55.32	\$ 23,234.40
23) 3/4" Corporation Stop	13	each	\$ 792.72	\$ 10,305.36
24) 3/4" Curb Stop	13	each	\$ 357.66	\$ 4,649.58
25) 24" Plant Mixed Gravel	840	cy	\$ 44.08	\$ 37,027.20
26) New Bituminous Concrete Pavement - 4" Thick Over Trench	1,250	sy	\$ 80.99	\$ 101,237.50

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Waterline Replacement, CVE Water Vault to Hillcrest Road

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
27) New Cement Concrete Curb	1,850	lf	\$ 35.12	\$ 64,972.00
28) New Cement Concrete Sidewalk - 4" Thick	915	sy	\$ 84.58	\$ 77,390.70
29) New Cement Concrete Sidewalk - 6" Thick	160	sy	\$ 115.78	\$ 18,524.80
30) Supply and Spread Topsoil	100	cy	\$ 49.68	\$ 4,968.00
31) Seed, Fertilize, Lime and Matting	850	sy	\$ 3.58	\$ 3,043.00
32) Traffic Control - Type IV	60	day	\$ 1,720.19	\$ 103,211.40
33) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
34) Mobilization	---	---	5%	\$ 49,370.02
Contingency	---	---	20%	\$ 207,354.08

Subtotal	\$ 1,244,124.48
Design Engineering Services	\$ 99,529.96
Bidding and Construction Services	\$ 124,412.45
Grand Total	\$ 1,468,066.88

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Waterline Replacement, Hillcrest Road to Curtis Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Replace existing old waterline.

Secondary Project Reason:

Replace old curb and sidewalk

Assumptions:

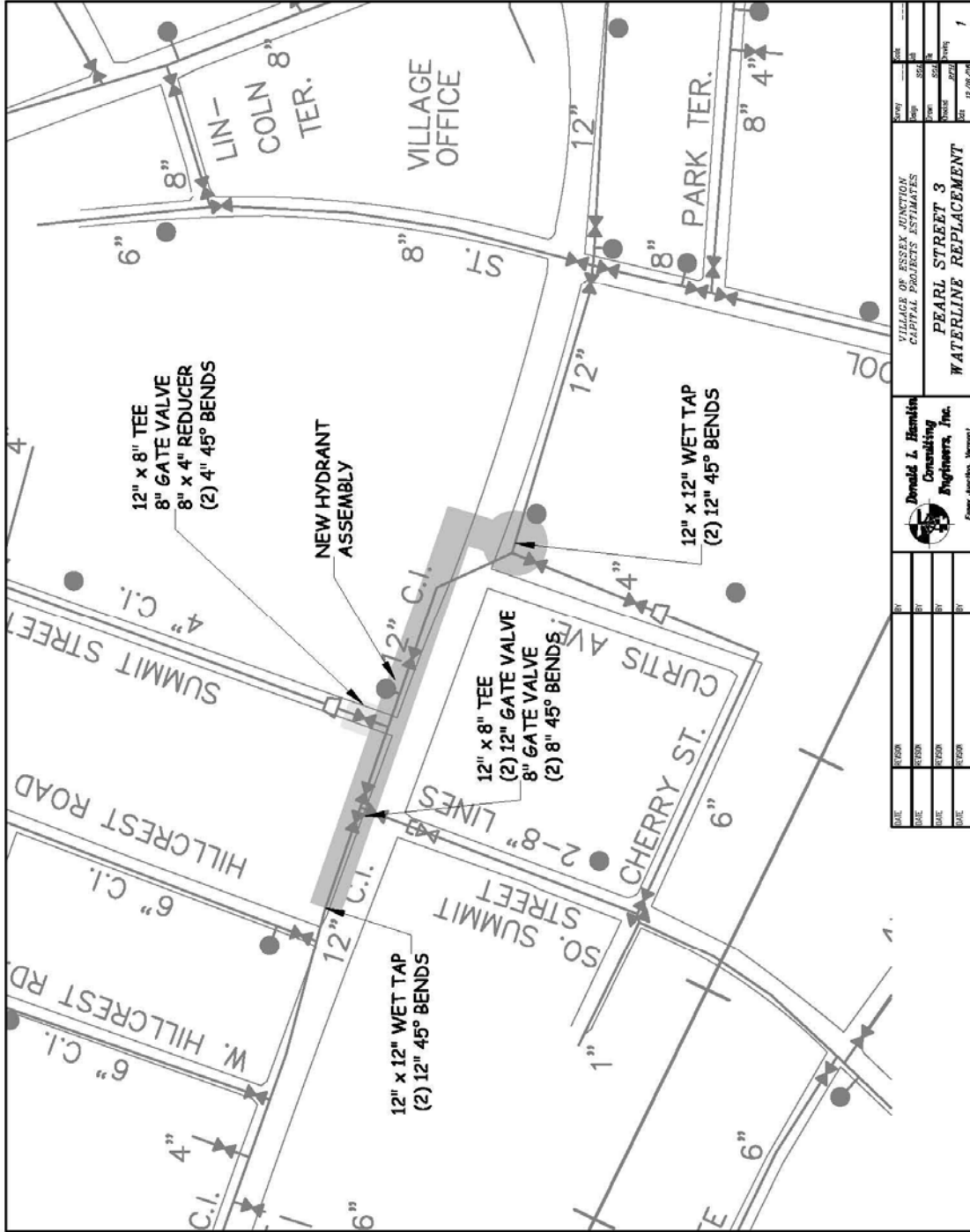
New waterline installed in green belt.

New curb and sidewalk along pipe route.

Existing waterline remains in use until new waterline is operational.

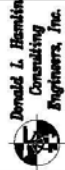
O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	132,576.35
W	Waterline Improvements	\$	285,415.22
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	53,489.97
	 Combined Total	 \$	 471,481.54

City of Essex Junction
 Capital Projects
 Construction Cost Estimate



DATE	BY	DATE	BY

VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES	
PROJECT NO.	PEARL STREET 3
DESCRIPTION	WATERLINE REPLACEMENT
DATE	12/18/2014
BY	1

 Donald L. Hamlin Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>	
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**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Waterline Replacement, Hillcrest Road to Curtis Avenue

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 6" Thick	800	lf	\$ 6.78	\$ 5,424.00
2) Excavation of Pavement 4" to 6" Thick	450	sy	\$ 12.69	\$ 5,710.50
3) Remove Existing Concrete Curb	650	lf	\$ 6.95	\$ 4,517.50
4) Remove Existing Concrete Sidewalk	335	sy	\$ 16.49	\$ 5,524.15
5) Wet Tap (12x12)	2	each	\$10,262.75	\$ 20,525.50
6) 12" Ductile Iron Pipe, CI 52	775	lf	\$ 134.58	\$ 104,299.50
7) 12" Mechanical Bend	4	each	\$ 2,508.61	\$ 10,034.44
8) 8" Mechanical Bend	2	each	\$ 1,433.49	\$ 2,866.98
9) 4" Mechanical Bend	2	each	\$ 782.11	\$ 1,564.22
10) Reducer (8x4)	1	each	\$ 1,027.57	\$ 1,027.57
11) 12" Gate Valve with Valve Box	2	each	\$ 5,296.76	\$ 10,593.52
12) 8" Gate Valve with Valve Box	2	each	\$ 3,049.04	\$ 6,098.08
13) Tee (12x8)	2	each	\$ 4,611.55	\$ 9,223.10
14) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	1	each	\$ 8,020.40	\$ 8,020.40
15) 3/4" Copper Waterline	230	each	\$ 55.32	\$ 12,723.60
16) 3/4" Corporation Stop	7	each	\$ 792.72	\$ 5,549.04
17) 3/4" Curb Stop	7	each	\$ 357.66	\$ 2,503.62
18) 24" Plant Mixed Gravel	300	cy	\$ 44.08	\$ 13,224.00
19) New Bituminous Concrete Pavement - 4" Thick Over Trench	450	sy	\$ 80.99	\$ 36,445.50
20) New Cement Concrete Curb	650	lf	\$ 35.12	\$ 22,828.00
21) New Cement Concrete Sidewalk - 4" Thick	295	sy	\$ 84.58	\$ 24,951.10
22) New Cement Concrete Sidewalk - 6" Thick	40	sy	\$ 115.78	\$ 4,631.20
23) Traffic Control - Type IV	30	day	\$ 1,720.19	\$ 51,605.70
24) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
25) Mobilization	---	---	5%	\$ 18,709.59
Contingency	---	---	20%	\$ 78,580.26

Subtotal	\$	471,481.54
Design Engineering Services	\$	47,148.15
Bidding and Construction Services	\$	47,148.15
Grand Total	\$	565,777.85

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Railroad Avenue

Cost Reference Date: 8/17/2023

New Waterline, South of Lincoln Place to Central Street

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Install new waterline for improved water quality and fire protection

Secondary Project Reason:

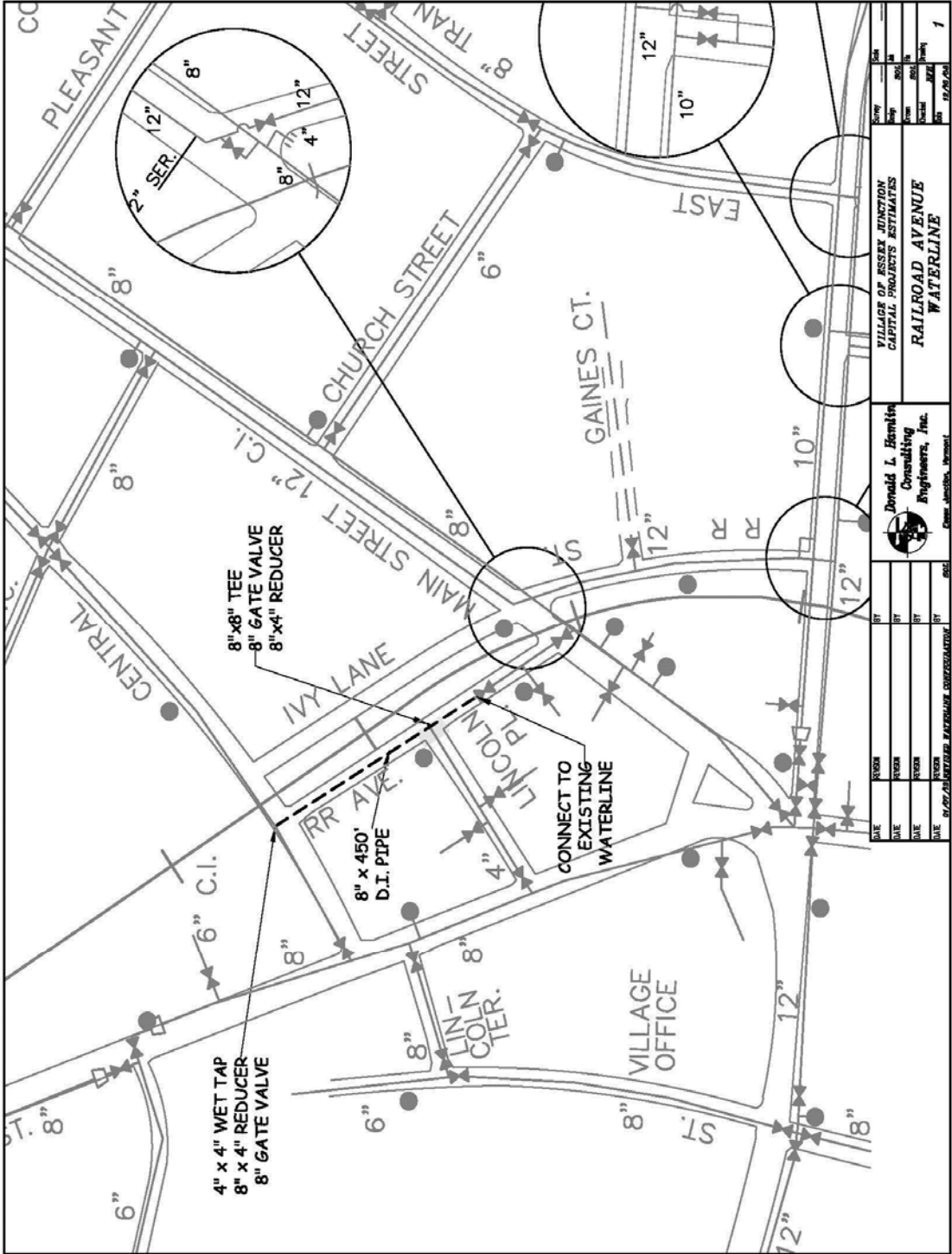
Assumptions:

New 8" Waterline

Pavement Replacement

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	97,439.51
W	Waterline Improvements	\$	106,453.92
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	203,893.43
	Project Management, Design and Resident Engineering	\$	40,778.69
	Total Project Cost	\$	244,672.11

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Railroad Avenue

Cost Reference Date: 8/17/2023

New Waterline, South of Lincoln Place to Central Street

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	1,220	lf	\$ 4.17	\$ 5,087.40
2) Excavation of Pavement 4" to 6" Thick	542	sy	\$ 12.69	\$ 6,877.98
3) Wet Tap (4x4)	1	each	\$ 5,331.55	\$ 5,331.55
4) 8" Ductile Iron Pipe, CI 52	450	lf	\$ 120.24	\$ 54,108.00
5) 8" Tee	1	each	\$ 2,727.94	\$ 2,727.94
6) 8" Gate Valve with Valve Box	2	each	\$ 3,049.04	\$ 6,098.08
7) Reducer (8x4)	2	each	\$ 1,027.57	\$ 2,055.14
8) 4" Mechanical Bend	3	each	\$ 782.11	\$ 2,346.33
9) Plant Mixed Gravel - 24"	365	each	\$ 44.08	\$ 16,089.20
10) New Bituminous Concrete Pavement - 4" Thick Over Trench	542	sy	\$ 80.99	\$ 43,896.58
11) Traffic Control - Type II	15	day	\$ 860.10	\$ 12,901.50
12) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
13) Mobilization	---	---	5%	\$ 8,091.01
Contingency	---	---	20%	\$ 33,982.24

Subtotal	\$ 203,893.43
Design Engineering Services	\$ 20,389.34
Bidding and Construction Services	\$ 20,389.34
Grand Total	\$ 244,672.11

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

River Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Section A, New Curb and Sidewalk, Park Street to Stanton Drive

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Install new curb and sidewalk.

Secondary Project Reason:

Install new drainage for new curbed road.

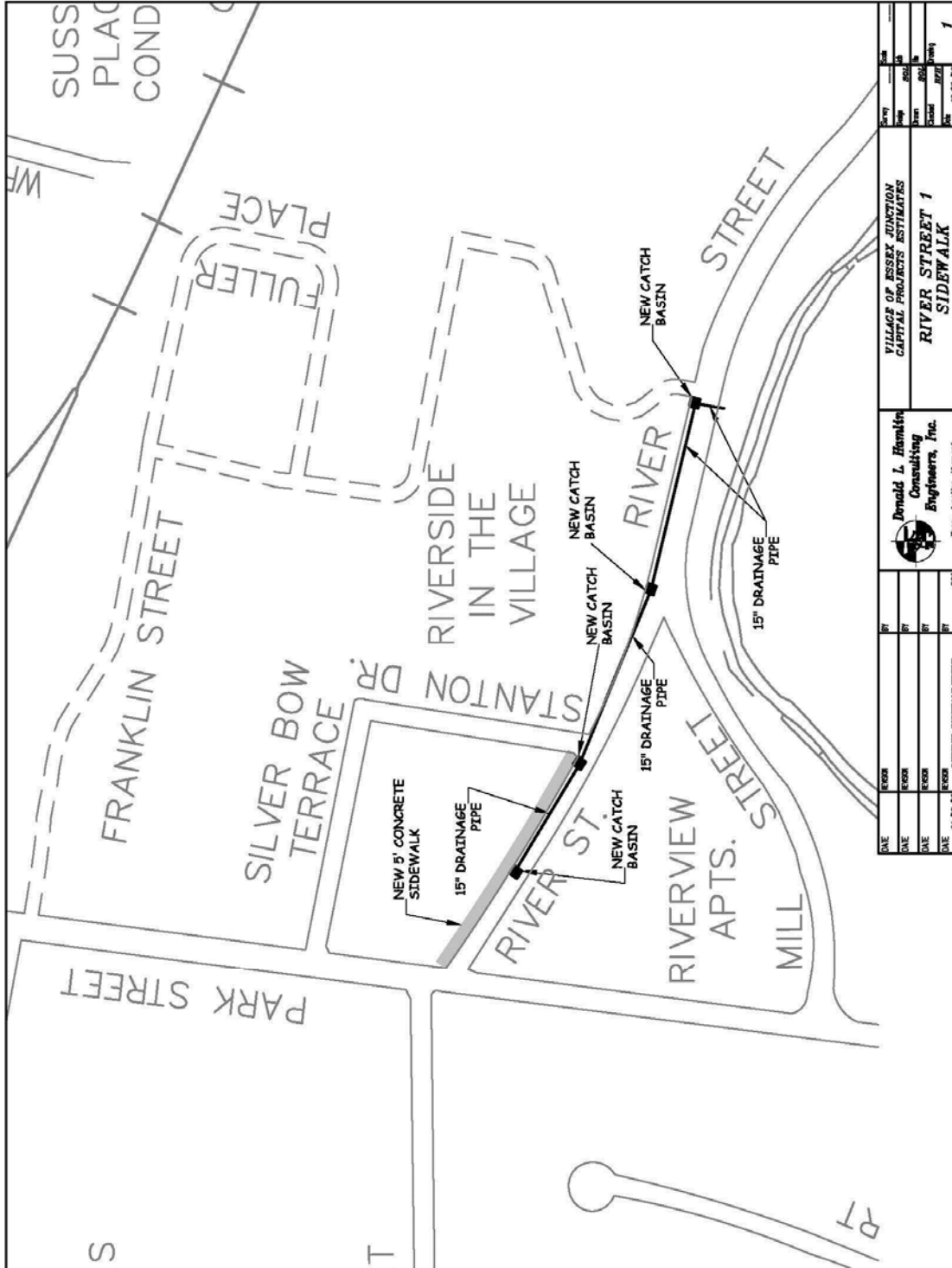
Assumptions:

New sidewalk is 5' wide

A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	39,053.94
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	36,337.53
P	Sidewalk Improvements	\$	130,129.07
	Combined Account Costs	\$	205,520.55
	Project Management, Design and Resident Engineering	\$	41,104.11
	Total Project Cost	\$	246,624.66

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	REVISION	BY	DATE	REVISION	BY	DATE	REVISION	BY
04/22/20								
04/22/20								
04/22/20								
04/22/20								
Donald L. Hamblin Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>								
VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS INSTALLATIONS RIVER STREET 1 SIDEWALK								
DATE	BY	DATE	BY	DATE	BY	DATE	BY	DATE
SHEET NO. 1 OF 1								

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

River Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Section A, New Curb and Sidewalk, Park Street to Stanton Drive

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 3" Thick or Less	450	lf	\$ 2.87	\$ 1,291.50
2) Excavation of Pavement to 3" Thick	50	sy	\$ 7.74	\$ 387.00
3) Mirafi 500X Geotextile Fabric	228	sy	\$ 2.08	\$ 474.24
4) New Cement Concrete Curb	450	lf	\$ 35.12	\$ 15,804.00
5) New Cement Concrete Sidewalk - 4" Thick	230	sy	\$ 84.58	\$ 19,453.40
6) New Cement Concrete Sidewalk - 6" Thick	23	sy	\$ 115.78	\$ 2,662.94
7) New Bituminous Concrete Pavement - 3" Thick Over Trench	50	sy	\$ 69.09	\$ 3,454.50
8) New Bituminous Concrete Driveway and Apron	45	sy	\$ 60.21	\$ 2,709.45
9) Supply and Spread Topsoil	20	cy	\$ 49.68	\$ 993.60
10) Seed, Fertilize, Lime and Matting	137	sy	\$ 3.58	\$ 490.46
11) Catch Basin - 4' Dia., To 8' Deep	1	each	\$ 5,260.84	\$ 5,260.84
12) 15" HDPE Drainage Pipe - To 8' Deep	215	lf	\$ 72.88	\$ 15,669.20
13) New Gas Lamp Style Light (Base, Pole and Fixture)	7	each	\$ 8,423.21	\$ 58,962.47
14) New Wired Conduit for Lighting	450	lf	\$ 24.73	\$ 11,128.50
15) Lighting Pedestal Meter Socket/Load Center (Includes Timer)	1	each	\$ 10,751.20	\$ 10,751.20
16) Traffic Control - Type II	15	day	\$ 860.10	\$ 12,901.50
17) Dust Control- Type I	1	ls	\$ 716.75	\$ 716.75
18) Mobilization	---	---	5%	\$ 8,155.58
Contingency	---	---	20%	\$ 34,253.43

Subtotal	\$	205,520.55
Design Engineering Services	\$	20,552.06
Bidding and Construction Services	\$	20,552.06
Grand Total	\$	246,624.66

* If Section A constructed without Section B

The drainage elements of Section B must also be constructed, increasing the cost by: \$ 75,559.42

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

River Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Section B, New Curb and Sidewalk, Stanton Drive to Riverside in the Village

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Install new curb and sidewalk.

Secondary Project Reason:

Install new drainage for new curbed road.

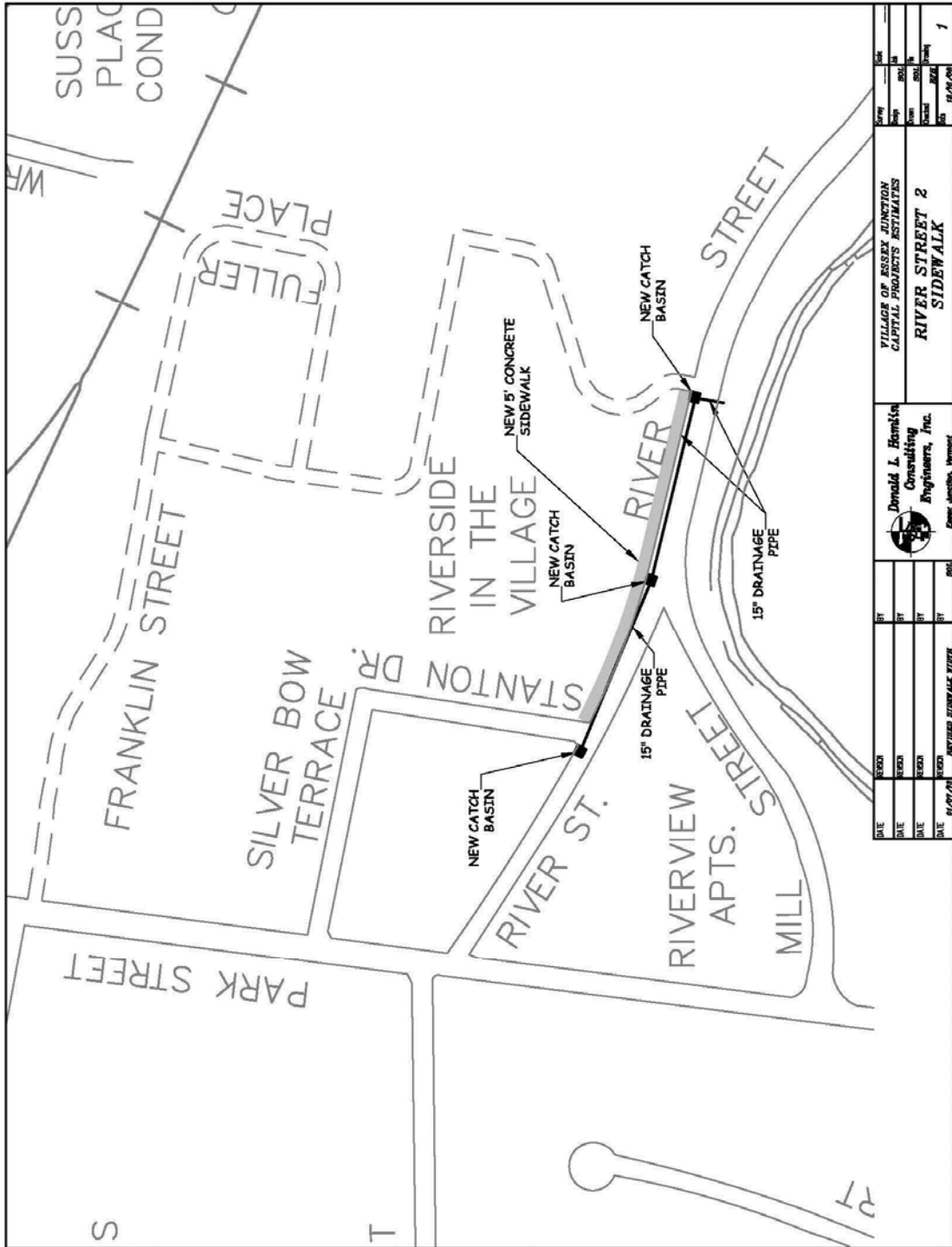
Assumptions:

New sidewalk is 5' wide

A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	52,885.98
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	197,687.66
P	Sidewalk Improvements	\$	48,206.02
	Combined Account Costs	\$	298,779.65
	Project Management, Design and Resident Engineering	\$	59,755.93
	Total Project Cost	\$	358,535.59

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

River Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Section B, New Curb and Sidewalk, Stanton Drive to Riverside in the Village

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 3" Thick or Less	650	lf	\$ 2.87	\$ 1,865.50
2) Excavation of Pavement to 3" Thick	100	sy	\$ 7.74	\$ 774.00
3) Mirafi 500X Geotextile Fabric	334	sy	\$ 2.08	\$ 694.72
4) New Cement Concrete Curb	600	lf	\$ 35.12	\$ 21,072.00
5) New Cement Concrete Sidewalk - 4" Thick	340	sy	\$ 84.58	\$ 28,757.20
6) Plant Mixed Gravel	40	cy	\$ 44.08	\$ 1,763.20
7) New Bituminous Concrete Pavement - 3" Thick Over Trench	100	sy	\$ 69.09	\$ 6,909.00
8) Supply and Spread Topsoil	25	cy	\$ 49.68	\$ 1,242.00
9) Seed, Fertilize, Lime and Matting	200	sy	\$ 3.58	\$ 716.00
10) Catch Basin - 4' Dia., To 8' Deep	3	each	\$ 5,260.84	\$ 15,782.52
11) 15" HDPE Drainage Pipe - To 8' Deep	665	lf	\$ 72.88	\$ 48,465.20
12) New Gas Lamp Style Light (Base, Pole and Fixture)	9	each	\$ 8,423.21	\$ 75,808.89
13) New Wired Conduit for Lighting	650	lf	\$ 24.73	\$ 16,074.50
14) Traffic Control - Type II	15	day	\$ 860.10	\$ 12,901.50
15) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
16) Mobilization	---	---	5%	\$ 11,856.34
Contingency	---	---	20%	\$ 49,796.61

Subtotal	\$ 298,779.65
Design Engineering Services	\$ 29,877.97
Bidding and Construction Services	\$ 29,877.97
Grand Total	\$ 358,535.59

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Rosewood Lane
Sidewalk Replacement, Mansfield to Briar, south side**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023
Original Capital Plan Date: 9/28/2001

Primary Project Reason:

Install new sidewalk along the south side of the road.

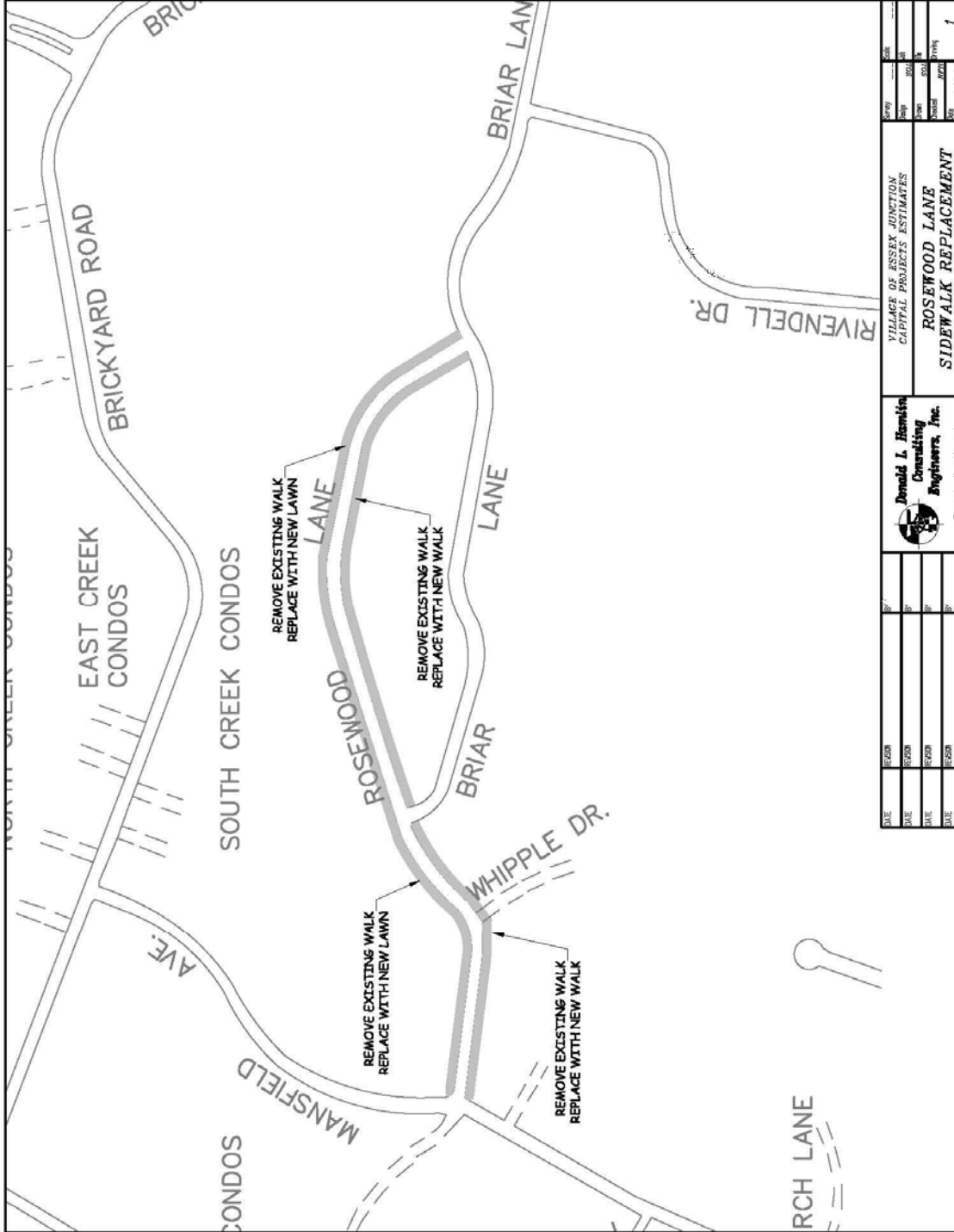
Secondary Project Reason:

Assumptions:

Existing walk on the north side to be removed and replaced with lawn.
A portion of each residential driveway will be rebuilt to match new roadway.
The sidewalk will be replaced on the south side of the road, 4.5' wide.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	257,911.35
	Combined Account Costs	\$	257,911.35
	Project Management, Design and Resident Engineering	\$	51,582.27
	Total Project Cost	\$	309,493.62

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	SECTION	BY	DATE	REVISION	BY	DATE	REVISION

**Donald L. Hamlin
Consulting
Engineers, Inc.**
Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES

**ROSEWOOD LANE
SIDEWALK REPLACEMENT**

DATE	BY	REVISION
12/28/20		1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Rosewood Lane

Cost Reference Date: 8/17/2023

Sidewalk Replacement, Mansfield to Briar, south side

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 3" Thick or Less	700	lf	\$ 2.87	\$ 2,009.00
2) Excavation of Pavement to 3" Thick	675	sy	\$ 7.74	\$ 5,224.50
3) Remove Existing Sidewalk	1,605	sy	\$ 16.49	\$ 26,466.45
4) New Cement Concrete Sidewalk - 4" Thick	790	sy	\$ 84.58	\$ 66,818.20
5) New Cement Concrete Sidewalk - 6" Thick	175	sy	\$ 115.78	\$ 20,261.50
6) Mirafi 500X Geotextile Fabric	1,175	sy	\$ 2.08	\$ 2,444.00
7) Reconstruct Driveway Aprons	845	sy	\$ 60.21	\$ 50,877.45
8) Supply and Spread Topsoil	200	cy	\$ 49.68	\$ 9,936.00
9) Seed, Fertilize, Lime and Matting	1,565	sy	\$ 3.58	\$ 5,602.70
10) Traffic Control - Type I	25	day	\$ 573.40	\$ 14,335.00
11) Dust Control - Type I	1	ls	\$ 716.75	\$ 716.75
12) Mobilization	---	---	5%	\$ 10,234.58
Contingency	---	---	20%	\$ 42,985.23

Subtotal	\$	257,911.35
Design Engineering Services	\$	25,791.14
Bidding and Construction Services	\$	25,791.14
Grand Total	\$	309,493.62

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Street

Waterline Replacement, Park Street to Doon Way

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 6/21/2001

Primary Project Reason:

Replace old and undersized waterline

Secondary Project Reason:

Replace sidewalk

Assumptions:

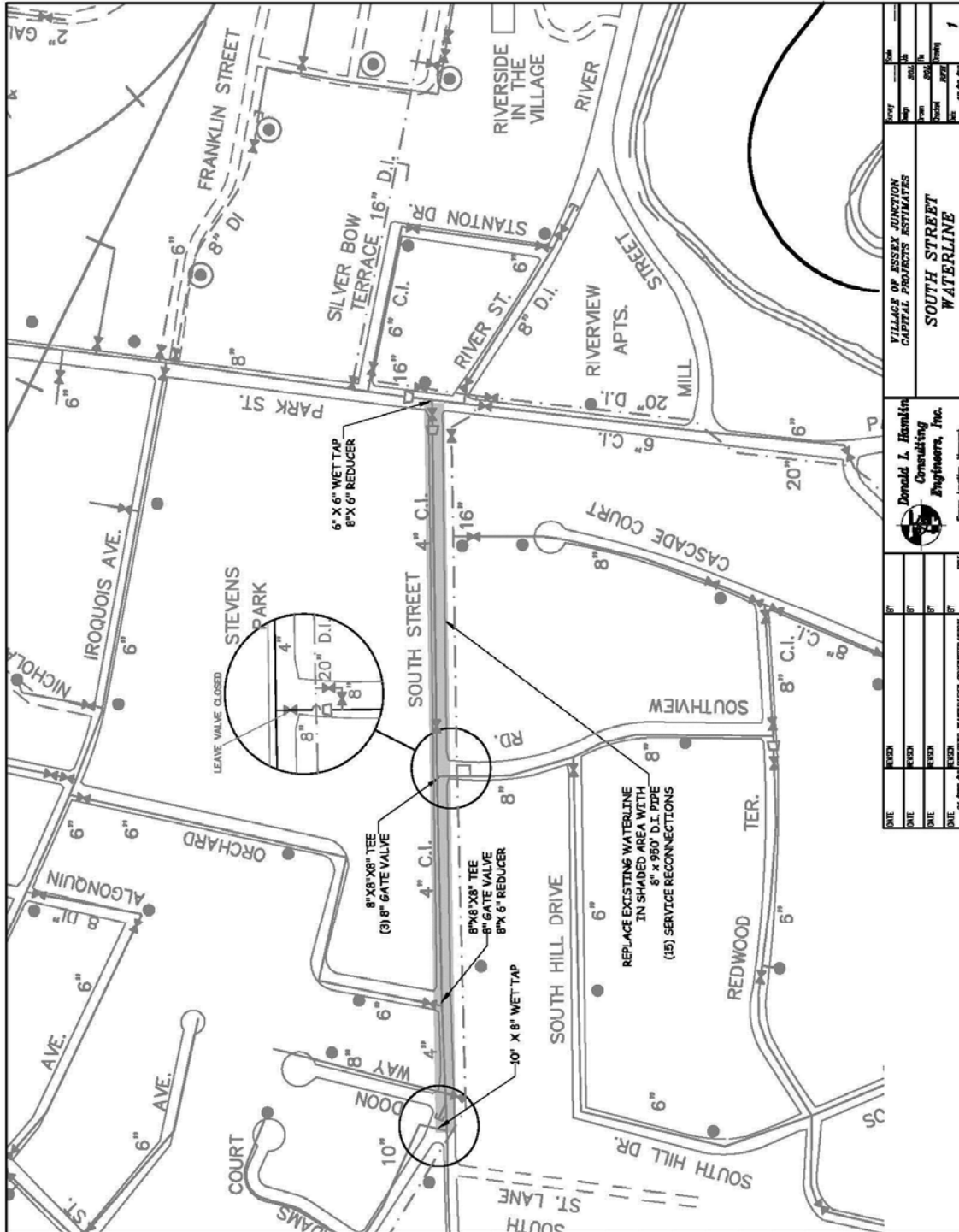
A portion of each residential driveway will be rebuilt to match new roadway.

8" D.I. Waterline to be installed

Existing waterline to remain in use until new waterline is operational.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	163,835.82
W	Waterline Improvements	\$	576,981.74
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	193,861.64
	 Combined Account Costs	 \$	 934,679.20
	Project Management, Design and Resident Engineering	\$	177,589.05
	Total Project Cost	\$	1,112,268.25

City of Essex Junction Capital Projects Construction Cost Estimate



VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES		SOUTH STREET WATERLINE
DATE	BY	SCALE
DATE	BY	SCALE
DATE	BY	SCALE
DATE	BY	SCALE
DATE	BY	SCALE
DONALD L. HENNING Consulting Engineers, Inc. Essex Junction, Vermont		
01/20/2018 WATERLINE CONSTRUCTION		
1		

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Street

Cost Reference Date: 8/17/2023

Waterline Replacement, Park Street to Doon Way

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	1,700	lf	\$ 4.17	\$ 7,089.00
2) Excavation of Pavement 4" to 6" Thick	750	sy	\$ 12.69	\$ 9,517.50
3) Remove Existing Concrete Sidewalk	950	sy	\$ 16.49	\$ 15,665.50
4) Remove and Reset Existing Granite Curb	600	lf	\$ 24.23	\$ 14,538.00
5) Wet Tap (6x6)	1	each	\$ 5,943.68	\$ 5,943.68
6) 8" Ductile Iron Pipe, CI 52	1,900	lf	\$ 120.24	\$ 228,456.00
7) 6" Ductile Iron Pipe, CI 52	20	lf	\$ 101.79	\$ 2,035.80
8) 8" Gate Valve with Valve Box	4	each	\$ 3,049.04	\$ 12,196.16
9) Wet Tap (10x8)	1	each	\$10,262.75	\$ 10,262.75
10) 8" Tee	2	each	\$ 2,727.94	\$ 5,455.88
11) Reducer (8x6)	1	each	\$ 1,027.57	\$ 1,027.57
12) 8" Mechanical Bend	12	each	\$ 1,433.49	\$ 17,201.88
13) 3/4" Copper Waterline	680	lf	\$ 55.32	\$ 37,617.60
14) 3/4" Corporation Stop	34	each	\$ 792.72	\$ 26,952.48
15) 3/4" Curb Stop	34	each	\$ 357.66	\$ 12,160.44
16) Cap and Abandon Existing 4" Waterline	3	each	\$ 4,766.72	\$ 14,300.16
17) Plant Mixed Gravel - 24"	500	cy	\$ 44.08	\$ 22,040.00
18) New Bituminous Concrete Pavement - 4" Thick Over Trench	750	sy	\$ 80.99	\$ 60,742.50
19) New Cement Concrete Sidewalk - 4" Thick	900	sy	\$ 84.58	\$ 76,122.00
20) New Cement Concrete Sidewalk - 6" Thick	170	sy	\$ 115.78	\$ 19,682.60
21) Hold Existing Utility Pole	16	each	\$ 1,182.63	\$ 18,922.08
22) Supply and Spread Topsoil	250	cy	\$ 49.68	\$ 12,420.00
23) Seed, Fertilize, Lime and Matting	3,000	sy	\$ 3.58	\$ 10,740.00
24) 24" Wide Stop Bar - Painted	48	lf	\$ 9.72	\$ 466.56
25) 12" Wide Crosswalk Bar - Painted	144	lf	\$ 9.32	\$ 1,342.08
26) Traffic Control - Type III	80	day	\$ 1,146.79	\$ 91,743.20
27) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Street

Cost Reference Date: 8/17/2023

Waterline Replacement, Park Street to Doon Way

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
28) Mobilization	---	---	5%	\$ 37,090.44
Contingency	---	---	20%	\$ 155,779.87

Subtotal	\$	934,679.20
Design Engineering Services	\$	84,121.13
Bidding and Construction Services	\$	93,467.92
Grand Total	\$	1,112,268.25

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Street

Municipal Water and Sanitary Sewer Improvements

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 1/10/2009

Primary Project Reason:

Construct Municipal Sewer and Water

Secondary Project Reason:

Rebuild the roadway

Assumptions:

New roadway will have a pavement width of 24' with 1' gravel shoulder.

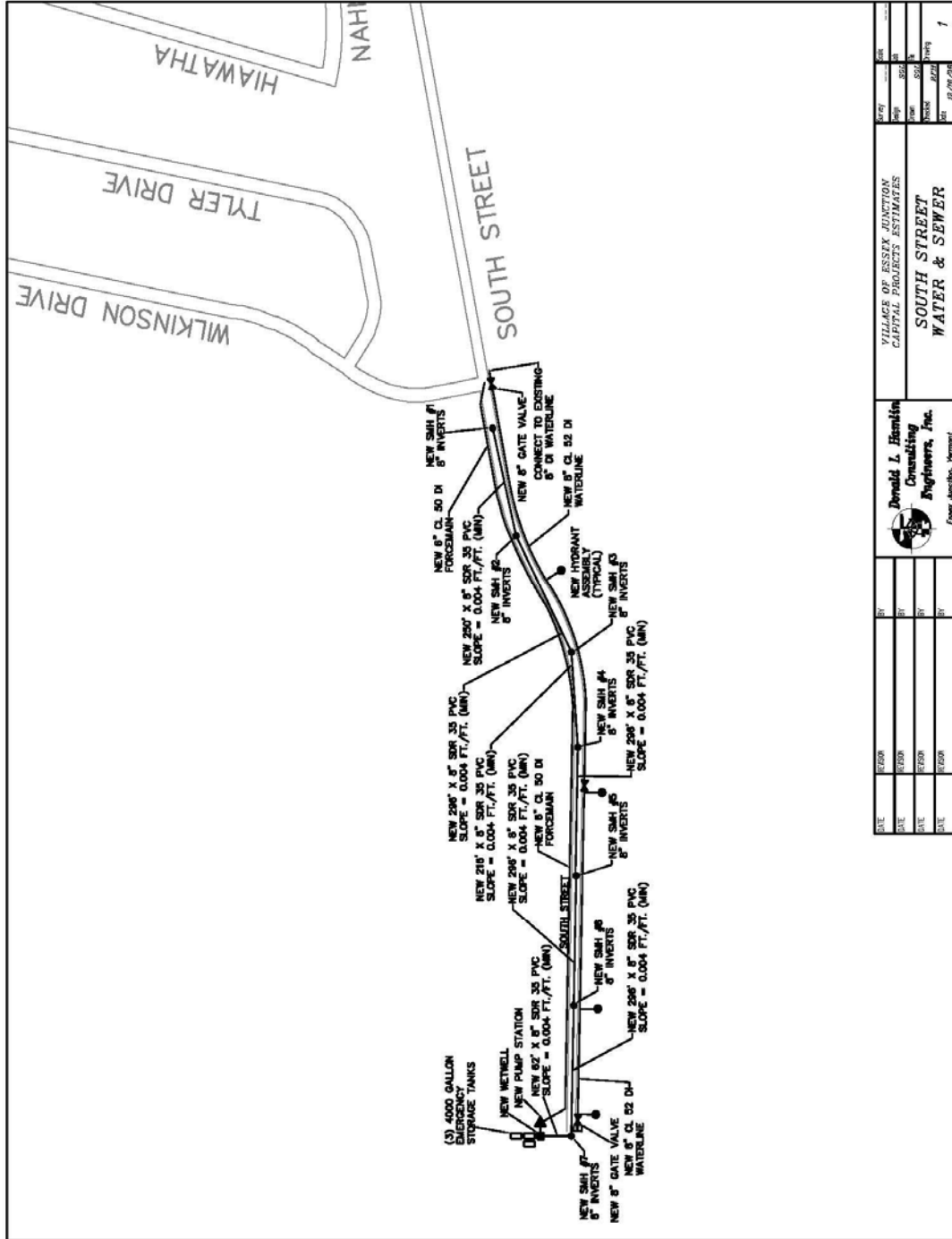
8" D.I. waterline to be installed

New gravity sewer and forcemain

New pump station with emergency storage

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	588,344.58
W	Waterline Improvements	\$	402,718.09
S	Sanitary Sewer Improvements	\$	771,754.57
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	-
	Combined Total	\$	1,762,817.24

City of Essex Junction
Capital Projects
Construction Cost Estimate



DATE	REVISION	BY	DATE	REVISION	BY

VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES	
SOUTH STREET WATER & SEWER	
Donald L. Hamlin Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>	
DATE	BY
DATE	BY
DATE	BY
DATE	BY

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Street

Cost Reference Date: 8/17/2023

Municipal Water and Sanitary Sewer Improvements

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	50	lf	\$ 4.17	\$ 208.50
2) Excavation of Pavement 4" to 6" Thick	4,800	sy	\$ 12.69	\$ 60,912.00
3) Excavation for New Roadway Subbase	3,200	cy	\$ 26.16	\$ 83,712.00
4) 24" Dense Graded Crushed Stone	2,400	cy	\$ 44.80	\$ 107,520.00
5) 6" Plant Mixed Gravel	800	cy	\$ 44.08	\$ 35,264.00
6) Bituminous Concrete Pavement - 1-3/4", Type II	4,800	sy	\$ 13.62	\$ 65,376.00
7) Bituminous Concrete Pavement - 1-1/4", Type III	4,800	sy	\$ 10.03	\$ 48,144.00
8) Sanitary Sewer Manhole - 4' Dia., 8' to 12' Deep	7	each	\$ 7,979.60	\$ 55,857.20
9) 8" SDR 35 PVC Sewer Pipe - 8' to 12' Deep	1,712	lf	\$ 86.01	\$ 147,249.12
10) 6" SDR 35 PVC Sewer Pipe - 8' to 12' Deep	600	lf	\$ 86.01	\$ 51,606.00
11) 6" CL 50 DI Forcemain	1,776	lf	\$ 101.79	\$ 180,779.04
12) 6' Diameter Wet Well	1	each	\$ 18,176.70	\$ 18,176.70
13) 4,000 Gallon storage Tank	3	each	\$ 13,226.50	\$ 39,679.50
14) Pump Station	1	each	\$120,055.08	\$ 120,055.08
15) Wet Tap (8x8)	1	each	\$ 6,749.36	\$ 6,749.36
16) 8" Ductile Iron Pipe, CI 52	1,800	lf	\$ 120.24	\$ 216,432.00
17) 8" Gate Valve with Valve Box	3	each	\$ 3,049.04	\$ 9,147.12
18) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	4	each	\$ 8,020.40	\$ 32,081.60
19) 3/4" Copper Waterline	600	lf	\$ 55.32	\$ 33,192.00
20) 3/4" Corporation Stop	20	each	\$ 792.72	\$ 15,854.40
21) 3/4" Curb Stop	20	each	\$ 357.66	\$ 7,153.20
22) Supply & Spread Topsoil	450	cy	\$ 49.68	\$ 22,356.00
23) Seed, Fertilize and Matting	4,000	sy	\$ 3.58	\$ 14,320.00
24) Traffic Control - Type I	40	day	\$ 573.40	\$ 22,936.00
25) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
26) Mobilization	---	---	5%	\$ 69,953.07
Contingency	---	---	20%	\$ 293,802.87

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Street

Cost Reference Date: 8/17/2023

Municipal Water and Sanitary Sewer Improvements

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
------	----------	------	-------	-------

Subtotal	\$	1,762,817.24
Design Engineering Services	\$	141,025.38
Bidding and Construction Services	\$	176,281.72
Grand Total	\$	2,080,124.34

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Summit

Waterline Replacement, Pearl Street to Cherry Street

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 6/21/2001

Primary Project Reason:

Replace old and undersized waterline
 Frequent breaks

Secondary Project Reason:

Rebuild the roadway

Assumptions:

8" D.I. waterline to be installed
 24' wide road with new curb
 New 4.5' wide sidewalk
 Existing waterline to remain in use until new waterline is operational.

O	Pavement Overlay	\$	50,772.52
R	Roadway Reconstruction	\$	198,225.52
W	Waterline Improvements	\$	206,415.05
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	35,941.47
P	Sidewalk Improvements	\$	28,261.95
	 Combined Total	 \$	 519,616.50

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Summit

8/17/2023

Waterline Replacement, Pearl Street to Cherry Street

1)	Saw Cut Existing Pavement 6" Thick	475	lf	\$ 4.17	\$ 1,980.75
2)	Excavation of Pavement 4" to 6" Thick	1,250	sy	\$ 12.69	\$ 15,862.50
3)	Saw Cut Existing Cement Concrete 4" Thick	50	lf	\$ 5.19	\$ 259.50
4)	Saw Cut Existing Cement Concrete 8" Thick	80	lf	\$ 8.29	\$ 663.20
5)	Remove Existing Concrete Sidewalk	180	sy	\$ 16.49	\$ 2,968.20
6)	Remove Existing Concrete (Under Pavement on Pearl)	35	sy	\$ 32.97	\$ 1,153.95
7)	Remove and Reset Existing Granite Curb	800	lf	\$ 24.23	\$ 19,384.00
8)	Excavation for New Roadway Subbase	1,380	cy	\$ 26.16	\$ 36,100.80
9)	Mirafi 500X Geotextile Fabric	1,160	sy	\$ 2.08	\$ 2,412.80
10)	Sand Borrow - 12"	385	cy	\$ 32.97	\$ 12,693.45
11)	Dense Graded Crushed Stone - 24"	770	cy	\$ 44.80	\$ 34,496.00
12)	Plant Mixed Gravel - 6"	195	cy	\$ 44.08	\$ 8,595.60
13)	New Bituminous Concrete Pavement - 1-3/4", Type II	1,250	sy	\$ 21.50	\$ 26,875.00
14)	New Bituminous Concrete Pavement - 1-1/4", Type III	1,250	sy	\$ 10.03	\$ 12,537.50
15)	New Bituminous Concrete Driveway and Apron	200	sy	\$ 60.21	\$ 12,042.00
16)	Remove and Reset Existing Catch Basin Frame and Grate	2	each	\$ 1,013.08	\$ 2,026.16
17)	Underdrain	800	lf	\$ 29.26	\$ 23,408.00
18)	Underdrain Cleanout	2	each	\$ 322.54	\$ 645.08
19)	Connect New Underdrain to Existing Structure	2	each	\$ 1,144.44	\$ 2,288.88
20)	Wet Tap (12x8)	1	each	\$10,262.75	\$ 10,262.75
21)	Wet Tap (8x8)	1	each	\$ 6,749.36	\$ 6,749.36
22)	Wet Tap (6x6)	1	each	\$ 5,943.68	\$ 5,943.68
23)	8" Ductile Iron Pipe, CI 52	475	lf	\$ 120.24	\$ 57,114.00
24)	8" Mechanical Bend	6	each	\$ 1,433.49	\$ 8,600.94
25)	8" Tee	2	each	\$ 2,727.94	\$ 5,455.88
26)	Reducer (8x6)	1	each	\$ 1,027.57	\$ 1,027.57
27)	New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	1	each	\$ 8,020.40	\$ 8,020.40

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Summit

8/17/2023

Waterline Replacement, Pearl Street to Cherry Street

28)	3/4" Copper Waterline	300	lf	\$ 55.32	\$ 16,596.00
29)	3/4" Corporation Stop	13	each	\$ 792.72	\$ 10,305.36
30)	3/4" Curb Stop	13	each	\$ 357.66	\$ 4,649.58
31)	Cut, Cap and Abandon Existing Waterline	2	each	\$ 4,766.72	\$ 9,533.44
32)	New Cement Concrete Sidewalk - 4" Thick	100	sy	\$ 84.58	\$ 8,458.00
33)	New Cement Concrete Sidewalk - 6" Thick	80	sy	\$ 115.78	\$ 9,262.40
34)	Hold Utility Pole	12	each	\$ 1,182.63	\$ 14,191.56
35)	12" Wide Crosswalk Bar - Painted	64	lf	\$ 9.32	\$ 596.48
36)	24" Wide Stop Bar - Painted	24	lf	\$ 9.72	\$ 233.28
37)	Traffic Control	20	day	\$ 800.00	\$ 16,000.00
38)	Dust Control	1	ls	\$ 3,000.00	\$ 3,000.00
39)	Mobilization	---	---	5%	\$ 20,619.70
	Contingency	---	---	20%	\$ 86,602.75

Subtotal	\$	519,616.50
Design Engineering Services	\$	46,765.49
Bidding and Construction Services	\$	51,961.65
Grand Total	\$	618,343.64

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Summit Street

Waterline Replacement, Pearl Street to Prospect Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Replace old and undersized waterline

Secondary Project Reason:

Remove and replace sidewalk on both sides of the road.

Assumptions:

The roadway will receive a 1-1/4" overlay.

Existing drainage structures will set to new finish grade.

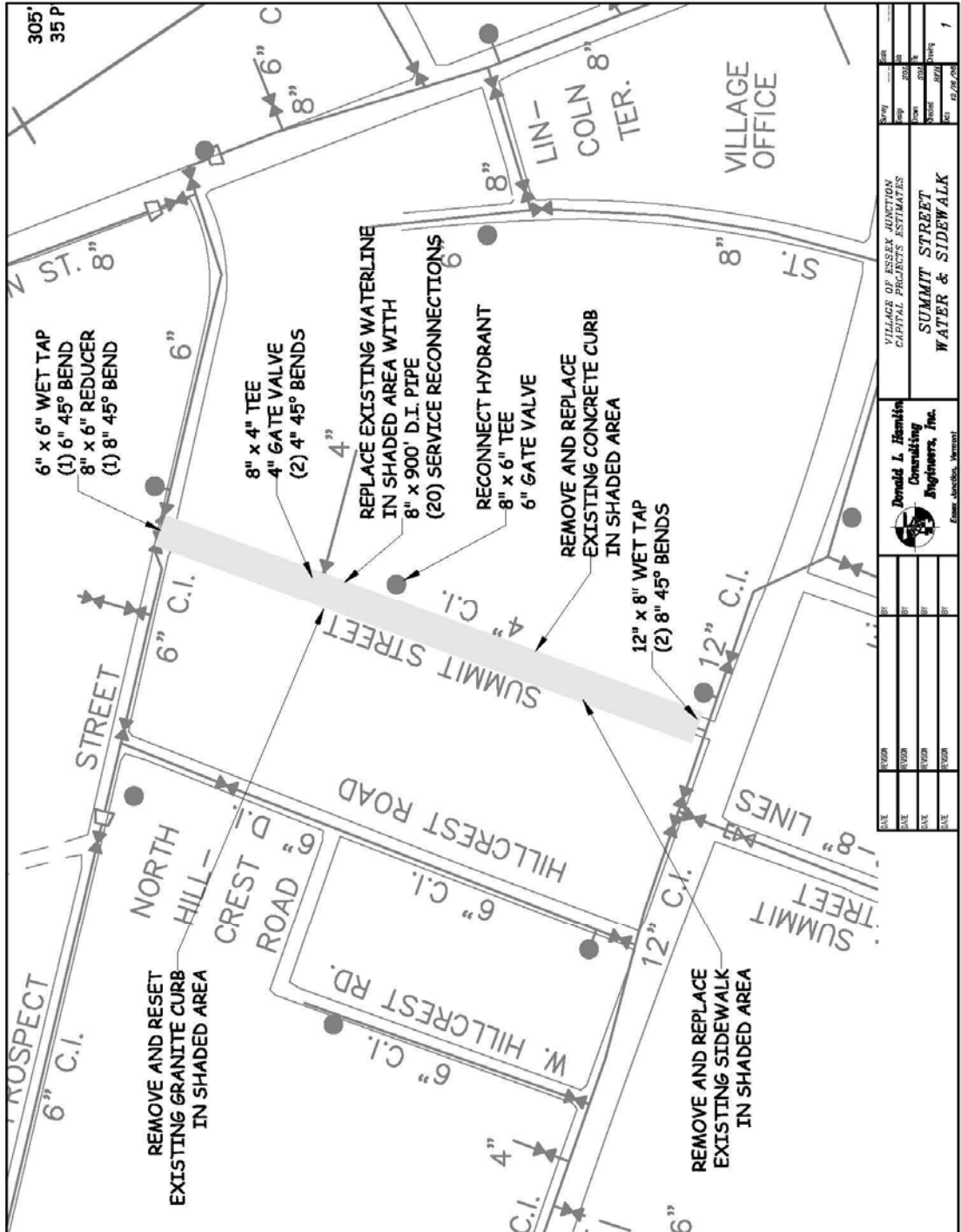
New walks to be 4.5' wide

Existing waterline to remain in use until new waterline is operational.

Remove and reset existing granite curb

O	Pavement Overlay	\$	40,553.48
R	Roadway Reconstruction	\$	187,150.58
W	Waterline Improvements	\$	280,593.24
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	10,130.80
P	Sidewalk Improvements	\$	173,043.90
	Combined Total	\$	691,472.01

City of Essex Junction
Capital Projects
Construction Cost Estimate



REVISION		DATE	BY	CHK

Donald L. Hamlin Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>		VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES	
SUMMIT STREET WATER & SIDEWALK		DATE	12/28/2012
NO.	1	BY	DLH
DATE	12/28/12	CHK	DLH
SCALE	AS SHOWN	APP	DLH
PROJECT NO.	12-001	DATE	12/28/12
SHEET NO.	1	TOTAL SHEETS	1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Summit Street

8/17/2023

Waterline Replacement, Pearl Street to Prospect Street

1)	Saw Cut Existing Pavement 4" Thick	2,010	lf	\$ 4.17	\$ 8,381.70
2)	Excavation of Pavement 4" to 6" Thick	450	sy	\$ 12.69	\$ 5,710.50
3)	Wet Tap (12x8)	1	each	\$ 8,557.96	\$ 8,557.96
4)	Wet Tap (6x6)	1	each	\$ 5,943.68	\$ 5,943.68
5)	8" Ductile Iron Pipe, CI 52	900	lf	\$ 120.24	\$ 108,216.00
6)	8" Mechanical Bend	3	each	\$ 1,433.49	\$ 4,300.47
7)	6" Mechanical Bend	1	each	\$ 996.28	\$ 996.28
8)	4" Mechanical Bend	2	each	\$ 782.11	\$ 1,564.22
9)	Reducer (8x6)	1	each	\$ 1,027.57	\$ 1,027.57
10)	6" Gate Valve with Valve Box	5	each	\$ 2,479.94	\$ 12,399.70
11)	4" Gate Valve with Valve Box	1	each	\$ 2,363.83	\$ 2,363.83
12)	Tee (8x4)	1	each	\$ 2,727.94	\$ 2,727.94
13)	New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	1	each	\$ 8,020.40	\$ 8,020.40
14)	3/4" Copper Waterline	325	lf	\$ 55.32	\$ 17,979.00
15)	3/4" Corporation Stop	20	each	\$ 792.72	\$ 15,854.40
16)	3/4" Curb Stop	20	each	\$ 357.66	\$ 7,153.20
17)	Remove Existing Concrete Sidewalk	1,120	sy	\$ 16.49	\$ 18,468.80
18)	Remove and Reset Existing Granite Curb	1,005	lf	\$ 24.23	\$ 24,351.15
19)	Remove Existing Concrete Curb	1,005	lf	\$ 6.95	\$ 6,984.75
20)	New Cement Concrete Curb	1,005	lf	\$ 35.12	\$ 35,295.60
21)	New Cement Concrete Sidewalk - 4" Thick	750	sy	\$ 84.58	\$ 63,435.00
22)	New Cement Concrete Sidewalk - 6" Thick	250	sy	\$ 115.78	\$ 28,945.00
23)	New Bituminous Concrete Pavement - 3" Thick Over Trench	450	sy	\$ 69.09	\$ 31,090.50
24)	Bituminous Concrete Pavement - 1-1/4", Type III	2,750	sy	\$ 10.03	\$ 27,582.50
26)	Supply and Spread Topsoil	250	cy	\$ 49.68	\$ 12,420.00
27)	Seed, Fertilize, Lime and Matting	2,240	sy	\$ 3.58	\$ 8,019.20
28)	New Bituminous Concrete Driveway and Apron	360	sy	\$ 60.21	\$ 21,675.60
29)	Remove and Reset Existing Manhole Frame and Cover	10	each	\$ 1,013.08	\$ 10,130.80

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Summit Street

8/17/2023

Waterline Replacement, Pearl Street to Prospect Street

29)	Hold Utility Pole	12	each	\$ 1,182.63	\$ 14,191.56
30)	Traffic Control	40	day	\$ 800.00	\$ 32,000.00
31)	Dust Control	1	ls	\$ 3,000.00	\$ 3,000.00
32)	Mobilization	---	---	5%	\$ 27,439.37
	Contingency	---	---	20%	\$ 115,245.34

Subtotal	\$ 691,472.01
Design Engineering Services	\$ 62,232.48
Bidding and Construction Services	\$ 69,147.20
Grand Total	\$ 822,851.69

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Thasha Lane
Waterline Installation**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023
Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Install new waterline to improve water quality and fire protection

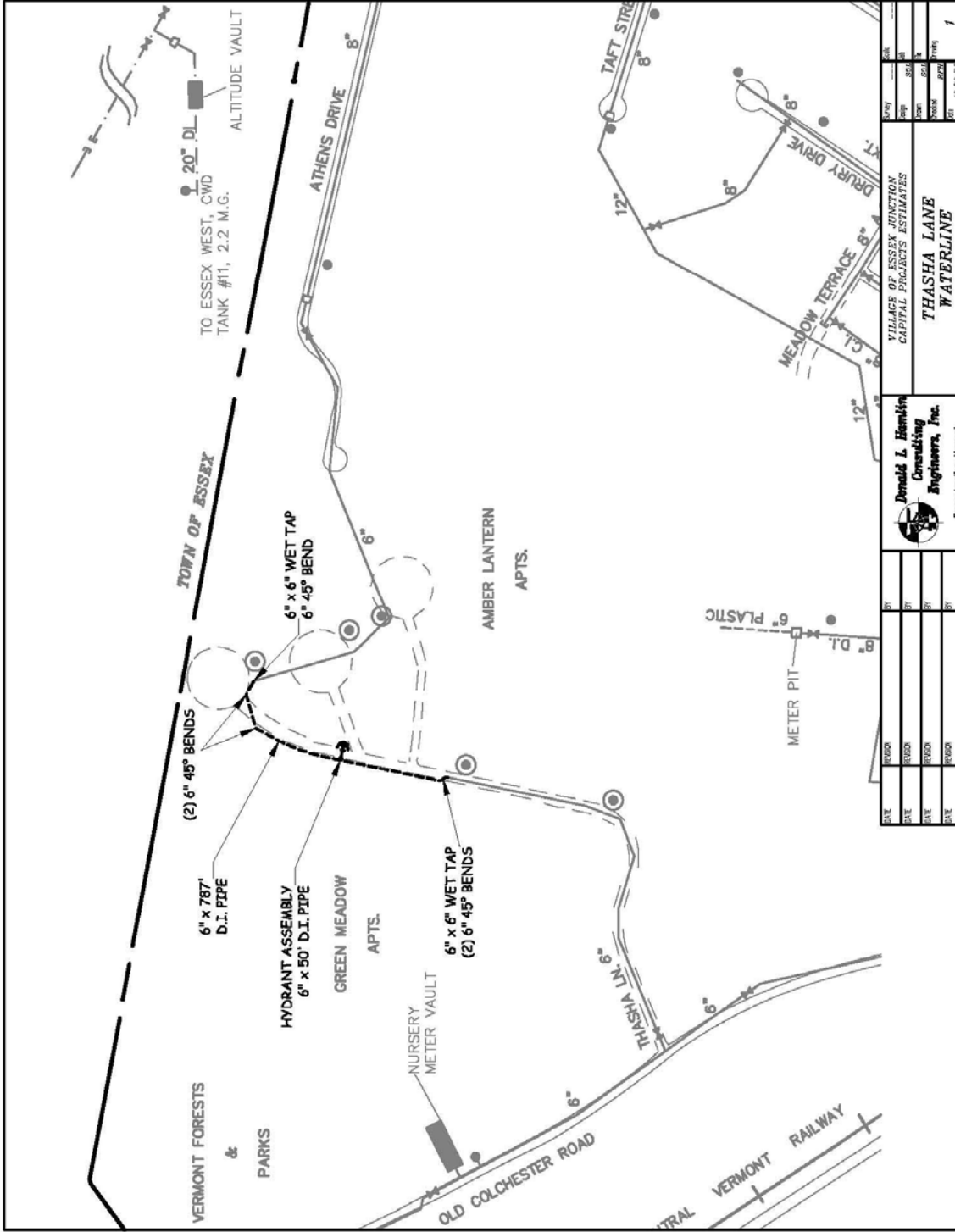
Secondary Project Reason:

Assumptions:

New 8" D.I. Pipe

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	13,367.26
W	Waterline Improvements	\$	154,896.42
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	-
	Combined Total	\$	168,263.69

City of Essex Junction Capital Projects Construction Cost Estimate



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Thasha Lane
Waterline Installation**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	350	lf	\$ 4.17	\$ 1,459.50
2) Excavation of Pavement 4" to 6" Thick	78	sy	\$ 12.69	\$ 989.82
3) Wet Tap (6x6)	2	each	\$ 5,943.68	\$ 11,887.36
4) 6" Ductile Iron Pipe, CI 52	837	lf	\$ 101.79	\$ 85,198.23
5) 6" Mechanical Bends	6	each	\$ 996.28	\$ 5,977.68
6) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	1	each	\$ 8,020.40	\$ 8,020.40
7) 24" Plant Mixed Gravel	39	cy	\$ 44.08	\$ 1,719.12
8) New Bituminous Concrete Pavement - 3" Thick Over Trench	78	sy	\$ 69.09	\$ 5,389.02
9) Traffic Control - Type I	15	day	\$ 573.40	\$ 8,601.00
10) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
11) Mobilization	---	---	5%	\$ 6,677.13
Contingency	---	---	20%	\$ 28,043.95

Subtotal	\$ 168,263.69
Design Engineering Services	\$ 16,826.37
Bidding and Construction Services	\$ 16,826.37
Grand Total	\$ 201,916.43

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

West Street

Waterline Replacement, South Summit to Hayden Drive

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/29/2005

Primary Project Reason:

Replace old and undersized waterline

Secondary Project Reason:

Assumptions:

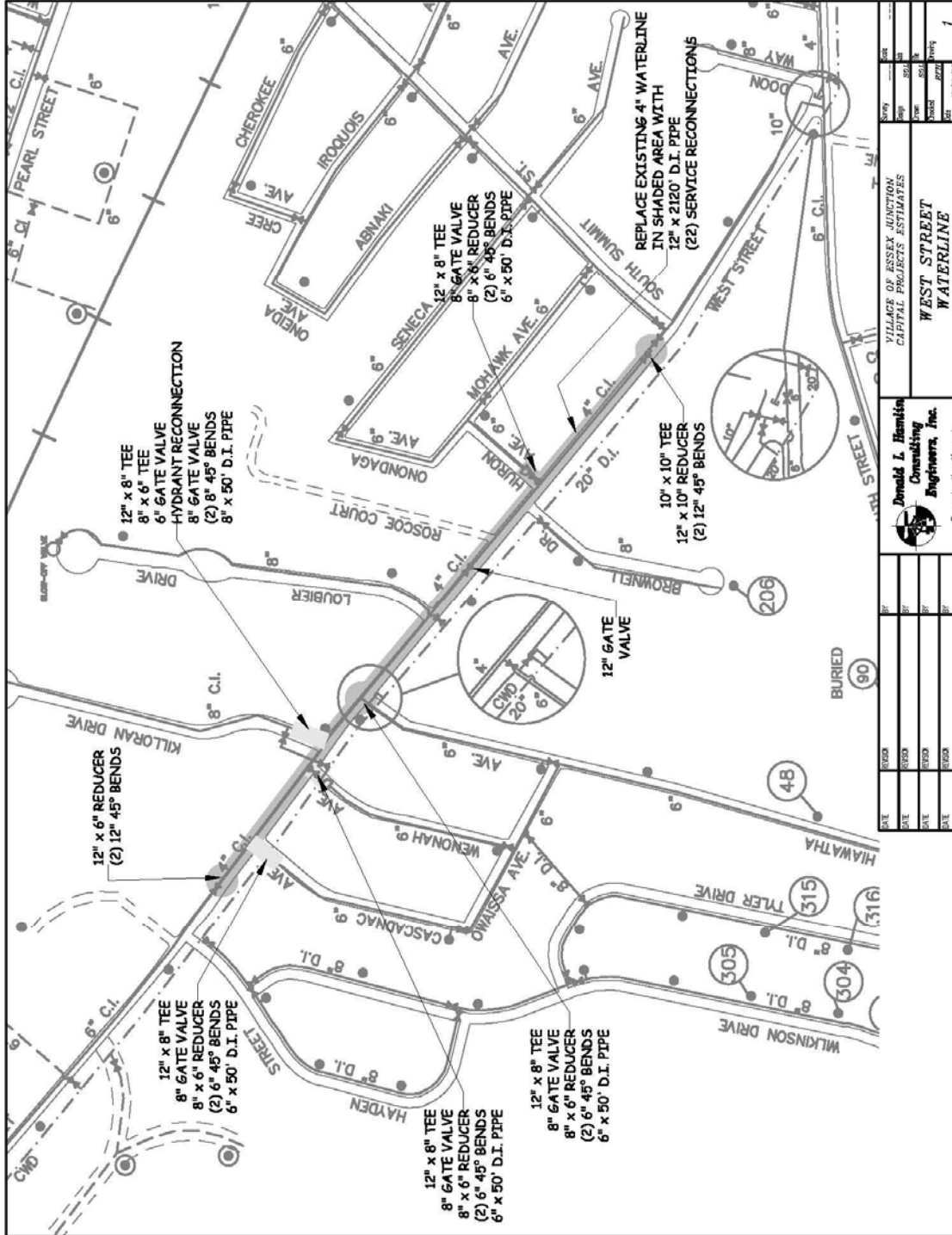
Pavement repair over waterline trench

New 12' D.I. pipe to be installed

Existing waterline to remain in use until new waterline is operational.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	417,017.30
W	Waterline Improvements	\$	627,527.01
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	1,044,544.31
	Project Management, Design and Resident Engineering	\$	188,017.98
	Total Project Cost	\$	1,232,562.28

City of Essex Junction
 Capital Projects
 Construction Cost Estimate



DATE	REVISION	BY	DESCRIPTION

VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES			
NO.	DATE	BY	DESCRIPTION
1	12/28/2018		WEST STREET WATERLINE

Donald L. Hamlin
 Consulting
 Engineers, Inc.
Essex Junction, Vermont

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

West Street

Waterline Replacement, South Summit to Hayden Drive

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

1)	Saw Cut Existing Pavement 4" Thick	5,200	lf	\$ 4.17	\$ 21,684.00
2)	Excavation of Pavement 4" to 6" Thick	2,302	sy	\$ 12.69	\$ 29,212.38
3)	12" Ductile Iron Pipe, CI 52	2,120	lf	\$ 134.58	\$ 285,309.60
4)	8" Ductile Iron Pipe, CI 52	50	lf	\$ 120.24	\$ 6,012.00
5)	6" Ductile Iron Pipe, CI 52	200	lf	\$ 101.79	\$ 20,358.00
6)	12" Mechanical Bend	4	each	\$ 2,508.61	\$ 10,034.44
7)	8" Mechanical Bend	2	each	\$ 1,433.49	\$ 2,866.98
8)	6" Mechanical Bend	8	each	\$ 996.28	\$ 7,970.24
9)	Reducer (12x10)	1	each	\$ 3,286.83	\$ 3,286.83
10)	Reducer (12x6)	1	each	\$ 2,376.02	\$ 2,376.02
11)	Reducer (8x6)	4	each	\$ 1,027.57	\$ 4,110.28
12)	12" Gate Valve with Valve Box	1	each	\$ 5,296.76	\$ 5,296.76
13)	8" Gate Valve with Valve Box	5	each	\$ 3,049.04	\$ 15,245.20
14)	6" Gate Valve with Valve Box	1	each	\$ 2,479.94	\$ 2,479.94
15)	Tee (12x8)	5	each	\$ 4,611.55	\$ 23,057.75
16)	Tee (10x10)	1	each	\$ 4,611.55	\$ 4,611.55
17)	Tee (8x6)	1	each	\$ 2,727.94	\$ 2,727.94
18)	New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	1	each	\$ 8,020.40	\$ 8,020.40
19)	3/4" Copper Waterline	550	lf	\$ 55.32	\$ 30,426.00
20)	3/4" Corporation Stop	22	each	\$ 792.72	\$ 17,439.84
21)	3/4" Curb Stop	22	each	\$ 357.66	\$ 7,868.52
22)	24" Plant Mixed Gravel	1,535	cy	\$ 44.08	\$ 67,662.80
23)	New Bituminous Concrete Pavement - 4" Thick Over Trench	2,302	sy	\$ 80.99	\$ 186,438.98
24)	Traffic Control - Type III	50	day	\$ 1,146.79	\$ 57,339.50
25)	Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
26)	Mobilization	---	---	5%	\$ 41,450.17
	Contingency	---	---	20%	\$ 174,090.72

Subtotal \$ 1,044,544.31

Design Engineering Services \$ 83,563.54

Bidding and Construction Services \$ 104,454.43

Grand Total \$ 1,232,562.28

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Woods End

Road Reconstruction, Conventional Construction

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/28/2001

Primary Project Reason:

The existing roadway is subject to severe frost action.

Secondary Project Reason:

Assumptions:

New roadway will have a pavement width of 30' and curb on both sides.

Existing drainage structures will set to new finish grade.

Underdrain will be installed as part of the roadway section.

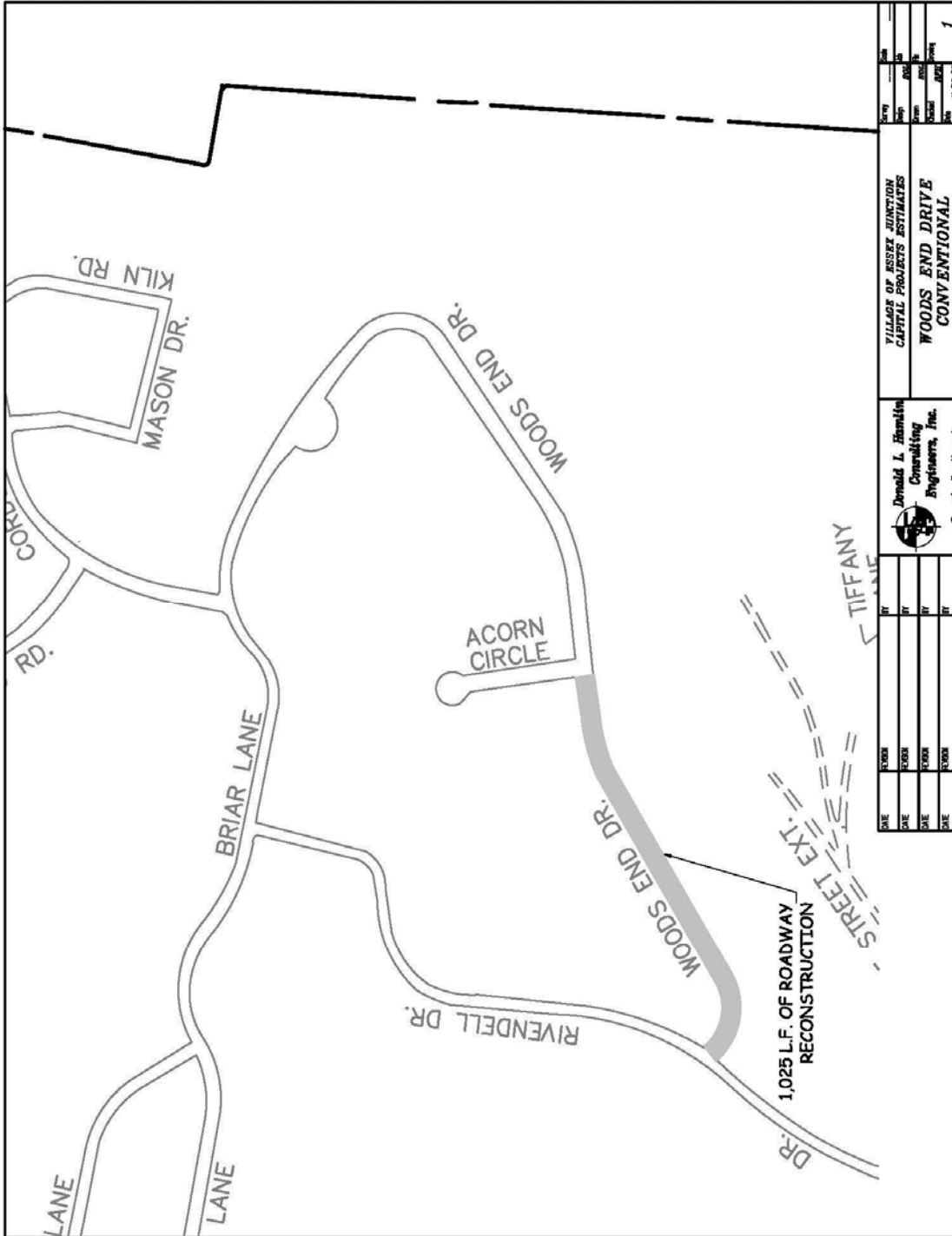
A portion of each residential driveway will be rebuilt to match new roadway.

The existing storm drainage pipe with the zone shall be inspected with a camera.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	721,674.46
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	104,078.21
P	Sidewalk Improvements	\$	-
	Combined Total	\$	825,752.67

Cost is based upon 2012 unit prices without ENR Construction Cost Index adjustment.

City of Essex Junction
 Capital Projects
 Construction Cost Estimate



 Donald L. Hamilton Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>				DATE DATE DATE DATE	BY BY BY BY	SHEET NO. SHEET NO. SHEET NO. SHEET NO.	TOTAL SHEETS TOTAL SHEETS TOTAL SHEETS TOTAL SHEETS	DATE DATE DATE DATE
VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES WOODS END DRIVE CONVENTIONAL						1		

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Woods End

Cost Reference Date: 8/17/2023

Road Reconstruction, Conventional Construction

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	100	lf	\$ 4.17	\$ 417.00
2) Excavation of Pavement 4" to 6" Thick	3,600	sy	\$ 12.69	\$ 45,684.00
3) Remove Existing Concrete Curb	2,100	lf	\$ 6.95	\$ 14,595.00
4) Excavation for New Roadway Subbase	4,350	cy	\$ 26.16	\$ 113,796.00
5) Mirafi 500X Geotextile Fabric	3,725	sy	\$ 2.08	\$ 7,748.00
6) Sand Borrow - 12"	1,245	cy	\$ 32.97	\$ 41,047.65
7) Dense Graded Crushed Stone - 24"	2,485	cy	\$ 44.80	\$ 111,328.00
8) Plant Mixed Gravel - 6"	620	cy	\$ 44.08	\$ 27,329.60
9) New Bituminous Concrete Pavement - 1-3/4", Type II	3,450	sy	\$ 13.62	\$ 46,989.00
10) New Bituminous Concrete Pavement - 1-1/4", Type III	3,450	sy	\$ 10.03	\$ 34,603.50
11) New Bituminous Concrete Driveway and Apron	150	sy	\$ 60.21	\$ 9,031.50
12) Remove and Reset Existing Catch Basin Frame and Grate	8	each	\$ 1,013.08	\$ 8,104.64
13) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
14) Adjust Existing Gate Valve Box to New Finish Grade	2	each	\$ 253.27	\$ 506.54
15) Underdrain	2,025	lf	\$ 29.26	\$ 59,251.50
16) Underdrain Cleanout	2	each	\$ 322.54	\$ 645.08
17) Connect New Underdrain to Existing Structure	11	each	\$ 1,144.44	\$ 12,588.84
18) New Cement Concrete Curb	2,100	lf	\$ 35.12	\$ 73,752.00
19) Supply and Spread Topsoil	120	cy	\$ 49.68	\$ 5,961.60
20) Seed, Fertilize, Lime and Matting	1,000	sy	\$ 3.58	\$ 3,580.00
21) Inspect Drainage Pipe with Camera	1	day	\$ 1,433.49	\$ 1,433.49
22) Traffic Control - Type I	40	day	\$ 573.40	\$ 22,936.00
23) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
24) Mobilization	---	---	5%	\$ 32,767.96
Contingency	---	---	20%	\$ 137,625.44

Subtotal	\$	825,752.67
Design Engineering Services	\$	74,317.74
Bidding and Construction Services	\$	82,575.27
Grand Total	\$	982,645.67

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Woods End

Road Reconstruction, Innovative Construction

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 9/28/2001

Primary Project Reason:

The existing roadway is subject to severe frost action.

Secondary Project Reason:

Assumptions:

New roadway will have a pavement width of 30' and curb on both sides.

Existing drainage structures will set to new finish grade.

Insulation will be utilized versus underdrain.

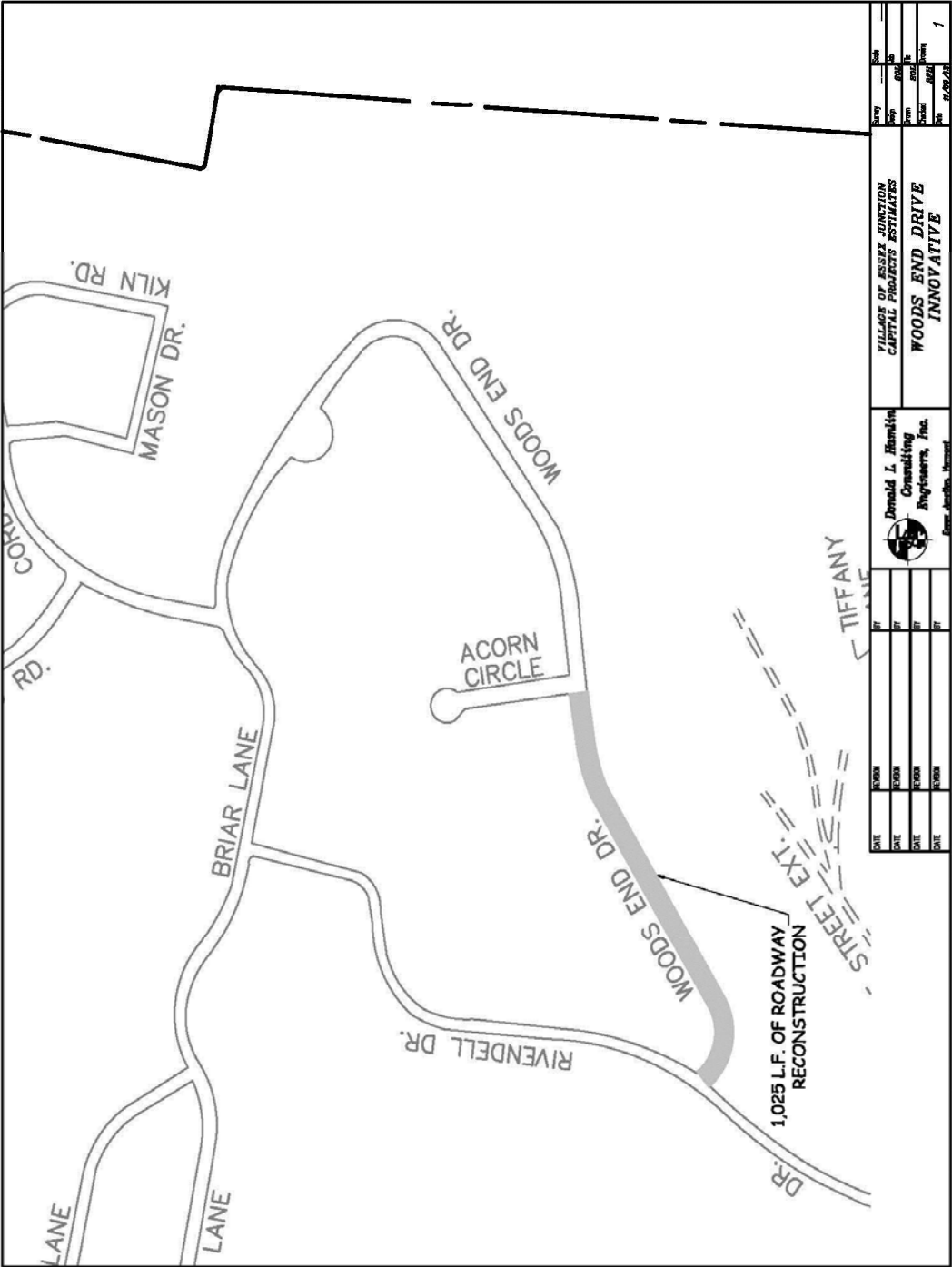
A portion of each residential driveway will be rebuilt to match new roadway.

The existing storm drainage pipe with the zone shall be inspected with a camera.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	812,199.66
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	13,490.47
P	Sidewalk Improvements	\$	-
	Combined Total	\$	825,690.13

Cost is based upon 2012 unit prices without ENR Construction Cost Index adjustment.

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	BY	SCALE	NO.
DATE	BY	SCALE	NO.
DATE	BY	SCALE	NO.
DATE	BY	SCALE	NO.

Donald L. Ramble
Consulting
Engineers, Inc.
Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ACTIVITIES
**WOODS END DRIVE
INNOVATIVE**

DATE	BY	SCALE	NO.
DATE	BY	SCALE	NO.
DATE	BY	SCALE	NO.
DATE	BY	SCALE	NO.

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Woods End

Cost Reference Date: 8/17/2023

Road Reconstruction, Innovative Construction

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	100	lf	\$ 4.17	\$ 417.00
2) Excavation of Pavement 4" to 6" Thick	3,600	sy	\$ 12.69	\$ 45,684.00
3) Remove Existing Concrete Curb	2,100	lf	\$ 6.95	\$ 14,595.00
4) Excavation for New Roadway Subbase	3,200	cy	\$ 26.16	\$ 83,712.00
5) Sand Borrow - 3"	310	cy	\$ 32.97	\$ 10,220.70
6) New 2" Thick Extruded Polystyrene Insulation	66,750	sf	\$ 2.58	\$ 172,215.00
7) Dense Graded Crushed Stone - 18"	1,860	cy	\$ 44.80	\$ 83,328.00
8) Plant Mixed Gravel - 6"	620	cy	\$ 44.08	\$ 27,329.60
9) New Bituminous Concrete Pavement - 1-3/4", Type II	3,450	sy	\$ 13.62	\$ 46,989.00
10) New Bituminous Concrete Pavement - 1-1/4", Type III	3,450	sy	\$ 10.03	\$ 34,603.50
11) New Bituminous Concrete Driveway and Apron	150	sy	\$ 60.21	\$ 9,031.50
12) Remove and Reset Existing Catch Basin Frame and Grate	8	each	\$ 1,013.08	\$ 8,104.64
13) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
14) Adjust Existing Gate Valve Box to New Finish Grade	1	each	\$ 253.27	\$ 253.27
15) New Cement Concrete Curb	2,100	lf	\$ 35.12	\$ 73,752.00
16) Supply and Spread Topsoil	120	cy	\$ 49.68	\$ 5,961.60
17) Seed, Fertilize, Lime and Matting	1,000	sy	\$ 3.58	\$ 3,580.00
18) Inspect Drainage Pipe with Camera	1	day	\$ 1,433.49	\$ 1,433.49
19) Traffic Control - Type I	40	day	\$ 573.40	\$ 22,936.00
20) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
21) Mobilization	---	---	5%	\$ 32,765.48
Contingency	---	---	20%	\$ 137,615.02

Subtotal	\$ 825,690.13
Design Engineering Services	\$ 74,312.11
Bidding and Construction Services	\$ 82,569.01
Grand Total	\$ 982,571.26

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

New Drainage, Curb & Sidewalk-Pleasant Street to Bridge, Elevate Educational Drive Intersection

Original Capital Plan Date: 11/24/2003

Primary Project Reason:

Install New 5' wide sidewalk

Enclose storm drainage

Secondary Project Reason:

Elevate Educational Drive Intersection

Assumptions:

5' Wide sidewalk.

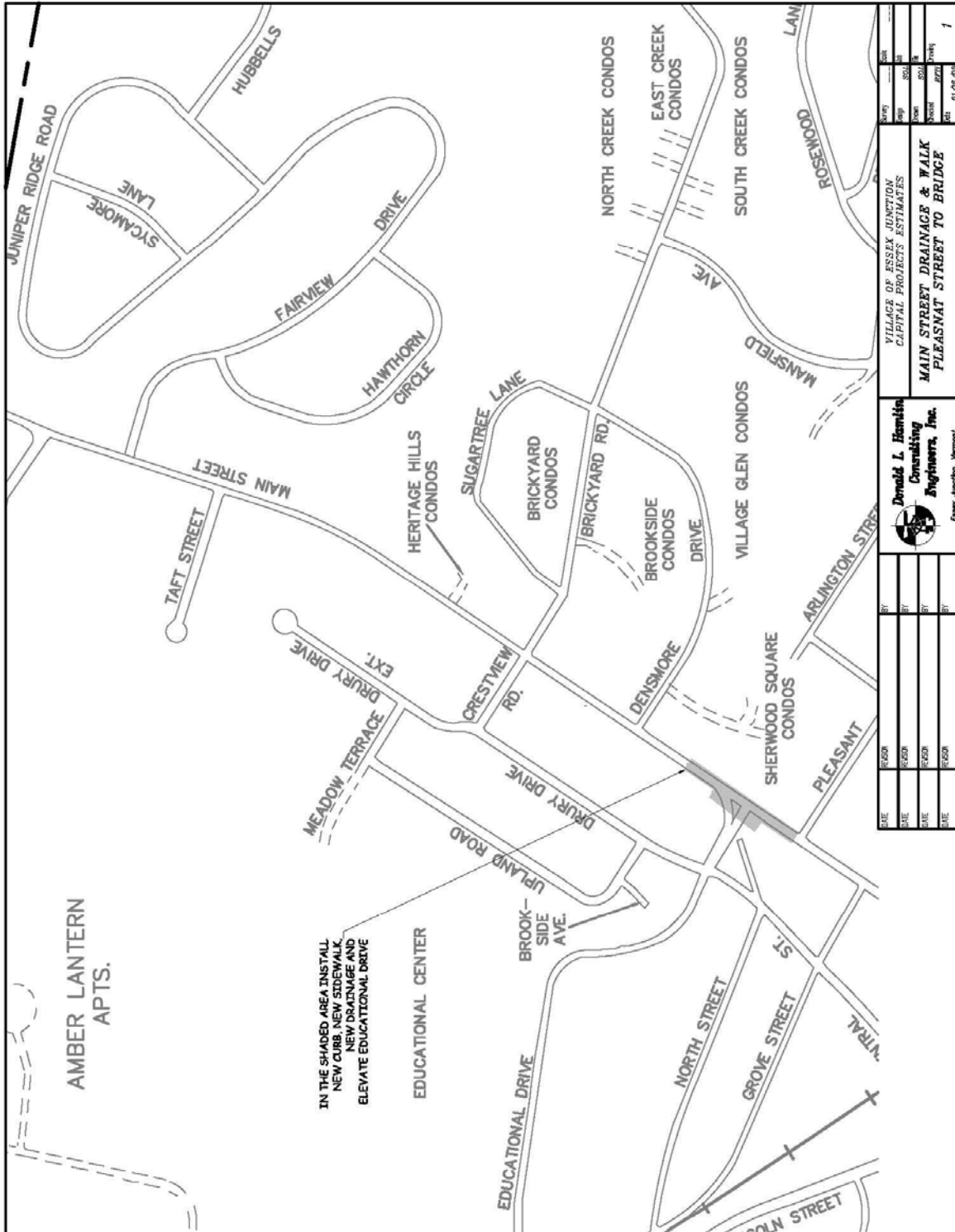
One way traffic maintained

A portion of each residential driveway will be rebuilt to match new roadway.

Existing utility poles to be relocated by others.

O	Pavement Overlay	\$	61,533.34
R	Roadway Reconstruction	\$	276,122.16
W	Waterline Improvements		
S	Sanitary Sewer Improvements	\$	9,609.85
D	Storm Drainage Improvements	\$	104,744.15
P	Sidewalk Improvements	\$	130,688.20
	Combined Account Costs	\$	582,697.70
	Project Management, Design and Resident Engineering	\$	110,712.56
	Total Project Cost	\$	693,410.26

City of Essex Junction Capital Projects Construction Cost Estimate



DATE	REVISION	BY	DESCRIPTION

Donald L. Hamlin Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>		VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES MAIN STREET DRAINAGE & WALK PLEASANT STREET TO BRIDGE	
DATE	BY	SCALE	PROJECT
01/16/2018			1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

New Drainage, Curb & Sidewalk - Pleasant Street to Bridge, Elevate Educational Drive Intersection

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	120	lf	\$ 4.17	\$ 500.40
2) Remove Existing Curb	1,225	lf	\$ 6.95	\$ 8,513.75
3) Excavation of Pavement 4" to 6" Thick	2,900	sy	\$ 12.69	\$ 36,801.00
4) Remove Existing Concrete Sidewalk	480	sy	\$ 16.49	\$ 7,915.20
5) Remove Existing Structure - To 8' Deep	4	each	\$ 902.14	\$ 3,608.56
6) Remove Existing Pipe - To 8' Deep	175	lf	\$ 20.20	\$ 3,535.00
7) Silt Fence	250	lf	\$ 3.80	\$ 950.00
8) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
9) Test Excavation	5	each	\$ 693.01	\$ 3,465.05
10) Catch Basin - 4' Dia., To 8' Deep	4	each	\$ 5,260.84	\$ 21,043.36
11) 18" HDPE Drainage Pipe - To 8' Deep	450	lf	\$ 84.76	\$ 38,142.00
12) Type I Rip Rap for Outfall Pads	10	cy	\$ 136.18	\$ 1,361.80
13) New Cement Concrete Curb	1,300	lf	\$ 35.12	\$ 45,656.00
14) New Cement Concrete Sidewalk - 4" Thick	525	sy	\$ 84.58	\$ 44,404.50
15) New Cement Concrete Sidewalk - 6" Thick	100	sy	\$ 115.78	\$ 11,578.00
16) New Bituminous Concrete Pavement - 3", Type II	2,900	sy	\$ 21.50	\$ 62,350.00
17) New Bituminous Concrete Pavement - 1-1/4", Type III	2,900	sy	\$ 10.03	\$ 29,087.00
18) New Bituminous Concrete Driveway and Apron	275	sy	\$ 60.21	\$ 16,557.75
19) New Gravel Driveway	225	sy	\$ 44.70	\$ 10,057.50
20) 4" White Line - Painted	1,500	lf	\$ 1.33	\$ 1,995.00
21) 4" Yellow Line - Painted	1,200	lf	\$ 1.33	\$ 1,596.00
22) 24" Wide Stop Bar - Painted	50	lf	\$ 9.72	\$ 486.00
23) 12" Wide Crosswalk Bar - Painted	480	lf	\$ 9.32	\$ 4,473.60
24) Symbol or Letter - Painted	30	each	\$ 44.37	\$ 1,331.10
25) Supply and Spread Topsoil	300	cy	\$ 49.68	\$ 14,904.00
26) Seed, Fertilize, Lime and Matting	2,600	sy	\$ 3.58	\$ 9,308.00
27) Traffic Control - Type IV	40	day	\$ 1,720.19	\$ 68,807.60

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

New Drainage, Curb & Sidewalk - Pleasant Street to Bridge, Elevate Educational Drive Intersection

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
28) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
29) Mobilization	---	---	5%	\$ 23,122.92
Contingency	---	---	20%	\$ 97,116.28

Subtotal	\$ 582,697.70
Design Engineering Services	\$ 52,442.79
Bidding and Construction Services	\$ 58,269.77
Grand Total	\$ 693,410.26

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

New Bridge at Indian Brook, Enclose Drainage, New Curb & Sidewalk, Bridge to Crestview Road

Original Capital Plan Date: 11/24/2003

Primary Project Reason:

- Install New 5' wide sidewalk
- Enclose storm drainage
- Slip Lane onto Educational Drive

Secondary Project Reason:

- Replace old Bridge

Assumptions:

- 5' Wide sidewalk.
- New bridge is an arch culvert
- Two way traffic maintained
- A portion of each residential driveway will be rebuilt to match new roadway.
- Existing utility poles to be relocated by others.

O	Pavement Overlay	\$ 183,631.15
R	Roadway Reconstruction	\$ 649,398.56
W	Waterline Improvements	
S	Sanitary Sewer Improvements	\$ 7,057.62
D	Storm Drainage Improvements	\$ 183,502.09
P	Sidewalk Improvements	\$ 131,981.90
	Combined Account Costs	\$ 1,155,571.33
	Project Management, Design and Resident Engineering	\$ 208,002.84
	Total Project Cost	\$ 1,363,574.16

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

New Bridge at Indian Brook, Enclose Drainage, New Curb & Sidewalk, Bridge to Crestview Road

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	1,575	lf	\$ 4.17	\$ 6,567.75
2) Excavation of Pavement 4" to 6" Thick	375	sy	\$ 12.69	\$ 4,758.75
3) Remove Existing Structure - To 8' Deep	3	each	\$ 902.14	\$ 2,706.42
4) Remove Existing Pipe - To 8' Deep	260	lf	\$ 20.20	\$ 5,252.00
5) Silt Fence	300	lf	\$ 3.80	\$ 1,140.00
6) Remove Existing Manhole Frame and Cover, Replace with New	4	each	\$ 1,372.57	\$ 5,490.28
7) Remove and Reset Existing Catch Basin Frame and Grate	4	each	\$ 1,013.08	\$ 4,052.32
8) Test Excavation	10	each	\$ 693.01	\$ 6,930.10
9) Catch Basin - 4' Dia., To 8' Deep	5	each	\$ 5,260.84	\$ 26,304.20
10) 18" HDPE Drainage Pipe - To 8' Deep	825	lf	\$ 84.76	\$ 69,927.00
11) Type I Rip Rap for Outfall Pads	10	cy	\$ 136.18	\$ 1,361.80
12) Excavation for New Roadway Subbase	100	cy	\$ 26.16	\$ 2,616.00
13) Sand Borrow	250	cy	\$ 32.97	\$ 8,242.50
14) Dense Graded Crushed Stone	480	cy	\$ 44.80	\$ 21,504.00
15) Plant Mixed Gravel	1,150	cy	\$ 44.08	\$ 50,692.00
16) New Cement Concrete Curb	1,125	lf	\$ 35.12	\$ 39,510.00
17) New Cement Concrete Sidewalk - 4" Thick	555	sy	\$ 84.58	\$ 46,941.90
18) New Cement Concrete Sidewalk - 6" Thick	70	sy	\$ 115.78	\$ 8,104.60
19) New Bituminous Concrete Pavement - 3" Thick Over Trench	1,000	sy	\$ 69.09	\$ 69,090.00
20) New Bituminous Concrete Pavement - 1-1/4", Type III	4,850	sy	\$ 10.03	\$ 48,645.50
21) Cold Plane Pavement	4,000	sy	\$ 7.86	\$ 31,440.00
22) New Bituminous Concrete Driveway and Apron	200	sy	\$ 60.21	\$ 12,042.00
23) New Gravel Driveway	150	sy	\$ 44.70	\$ 6,705.00
24) 4" White Line - Painted	2,400	lf	\$ 1.33	\$ 3,192.00
25) 4" Yellow Line - Painted	4,950	lf	\$ 1.33	\$ 6,583.50
26) 24" Wide Stop Bar - Painted	300	lf	\$ 9.72	\$ 2,916.00
27) 12" Wide Crosswalk Bar - Painted	250	lf	\$ 9.32	\$ 2,330.00
28) Symbol or Letter - Painted	35	each	\$ 44.37	\$ 1,552.95

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

New Bridge at Indian Brook, Enclose Drainage, New Curb & Sidewalk, Bridge to Crestview Road

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
29) Supply and Spread Topsoil	200	cy	\$ 49.68	\$ 9,936.00
30) Seed, Fertilize, Lime and Matting	1,750	sy	\$ 3.58	\$ 6,265.00
31) Temporary Bridge	1	ls	\$ 89,880.04	\$ 89,880.04
32) New Bridge (Arch Culvert) at Indian Brook	1	ls	\$ 134,820.07	\$ 134,820.07
33) Loop Detectors	1,440	lf	\$ 18.22	\$ 26,236.80
34) Traffic Control - Type IV	85	day	\$ 1,720.19	\$ 146,216.15
35) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
36) Mobilization	---	---	5%	\$ 45,856.01
Contingency	---	---	20%	\$ 192,595.22

	Subtotal	\$ 1,155,571.33
	Design Engineering Services	\$ 92,445.71
	Bidding and Construction Services	\$ 115,557.13
	Grand Total	\$ 1,363,574.16

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb & Sidewalk, Crestview Road to Taft Street

Original Capital Plan Date: 11/24/2003

Primary Project Reason:

- Install New 5' wide sidewalk
- Enclose storm drainage

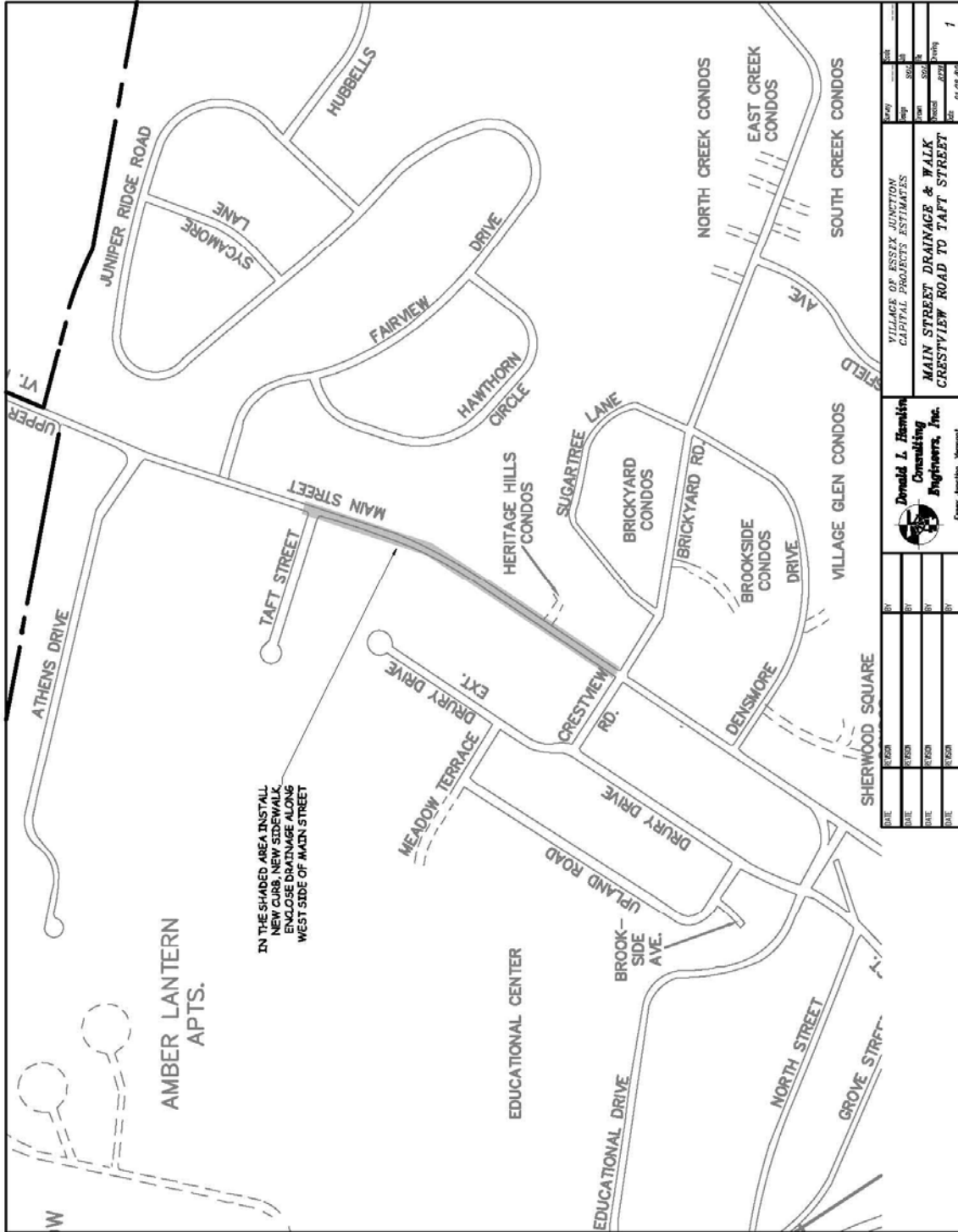
Secondary Project Reason:

Assumptions:

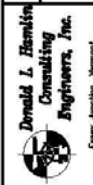
- 5' Wide sidewalk.
- One way traffic maintained
- A portion of each residential driveway will be rebuilt to match new roadway.
- Existing utility poles to be relocated by others.

O	Pavement Overlay	\$ 145,760.50
R	Roadway Reconstruction	\$ 377,033.52
W	Waterline Improvements	
S	Sanitary Sewer Improvements	\$ 9,555.66
D	Storm Drainage Improvements	\$ 192,768.60
P	Sidewalk Improvements	\$ 128,310.29
	Combined Account Costs	\$ 853,428.58
	Project Management, Design and Resident Engineering	\$ 162,151.43
	Total Project Cost	\$ 1,015,580.01

City of Essex Junction
Capital Projects
Construction Cost Estimate



DATE	REVISION	BY	DATE	REVISION	BY



VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES
MAIN STREET DRAINAGE & WALK
CRESTVIEW ROAD TO TAFT STREET

DATE	BY
01/20/20	

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb & Sidewalk, Crestview Road to Taft Street

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	1,550	lf	\$ 4.17	\$ 6,463.50
2) Excavation of Pavement 4" to 6" Thick	575	sy	\$ 12.69	\$ 7,296.75
3) Remove Existing Structure - To 8' Deep	1	each	\$ 902.14	\$ 902.14
4) Remove Existing Pipe - To 8' Deep	380	lf	\$ 20.20	\$ 7,676.00
5) Silt Fence	100	lf	\$ 3.80	\$ 380.00
6) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
7) Remove and Reset Existing Catch Basin Frame and Grate	2	each	\$ 1,013.08	\$ 2,026.16
8) Test Excavation	10	each	\$ 693.01	\$ 6,930.10
9) Catch Basin - 4' Dia., To 8' Deep	6	each	\$ 5,260.84	\$ 31,565.04
10) 18" HDPE Drainage Pipe - To 8' Deep	1,000	lf	\$ 84.76	\$ 84,760.00
11) Connect New Pipe to Existing Structure	2	each	\$ 1,144.44	\$ 2,288.88
12) Excavation for New Roadway Subbase	1,300	cy	\$ 26.16	\$ 34,008.00
13) Sand Borrow	360	cy	\$ 32.97	\$ 11,869.20
14) Dense Graded Crushed Stone	730	cy	\$ 44.80	\$ 32,704.00
15) Plant Mixed Gravel	210	cy	\$ 44.08	\$ 9,256.80
16) New Cement Concrete Curb	1,400	lf	\$ 35.12	\$ 49,168.00
17) New Cement Concrete Sidewalk - 4" Thick	660	sy	\$ 84.58	\$ 55,822.80
18) New Cement Concrete Sidewalk - 6" Thick	85	sy	\$ 115.78	\$ 9,841.30
19) New Bituminous Concrete Pavement - 3" Thick Over Trench	1,100	sy	\$ 69.09	\$ 75,999.00
20) New Bituminous Concrete Pavement - 1-1/4", Type III	5,400	sy	\$ 10.03	\$ 54,162.00
21) Cold Plane Pavement	4,300	sy	\$ 7.86	\$ 33,798.00
22) New Bituminous Concrete Driveway and Apron	400	sy	\$ 60.21	\$ 24,084.00
23) New Gravel Driveway	75	sy	\$ 44.70	\$ 3,352.50
24) 4" White Line - Painted	2,900	lf	\$ 1.33	\$ 3,857.00
25) 4" Yellow Line - Painted	3,200	lf	\$ 1.33	\$ 4,256.00
26) 24" Wide Stop Bar - Painted	24	lf	\$ 9.72	\$ 233.28
27) 12" Wide Crosswalk Bar - Painted	250	lf	\$ 9.32	\$ 2,330.00
28) Supply and Spread Topsoil	275	cy	\$ 49.68	\$ 13,662.00

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb & Sidewalk, Crestview Road to Taft Street

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
29) Seed, Fertilize, Lime and Matting	2,400	sy	\$ 3.58	\$ 8,592.00
30) Traffic Control - Type IV	50	day	\$ 1,720.19	\$ 86,009.50
31) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
32) Mobilization	---	---	5%	\$ 33,866.21
Contingency	---	---	20%	\$ 142,238.10

Subtotal	\$ 853,428.58
Design Engineering Services	\$ 76,808.57
Bidding and Construction Services	\$ 85,342.86
Grand Total	\$ 1,015,580.01

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb & Sidewalk, Taft Street to Athens Drive

Original Capital Plan Date: 2/24/2003

Primary Project Reason:

- Install New 5' wide sidewalk
- Enclose storm drainage

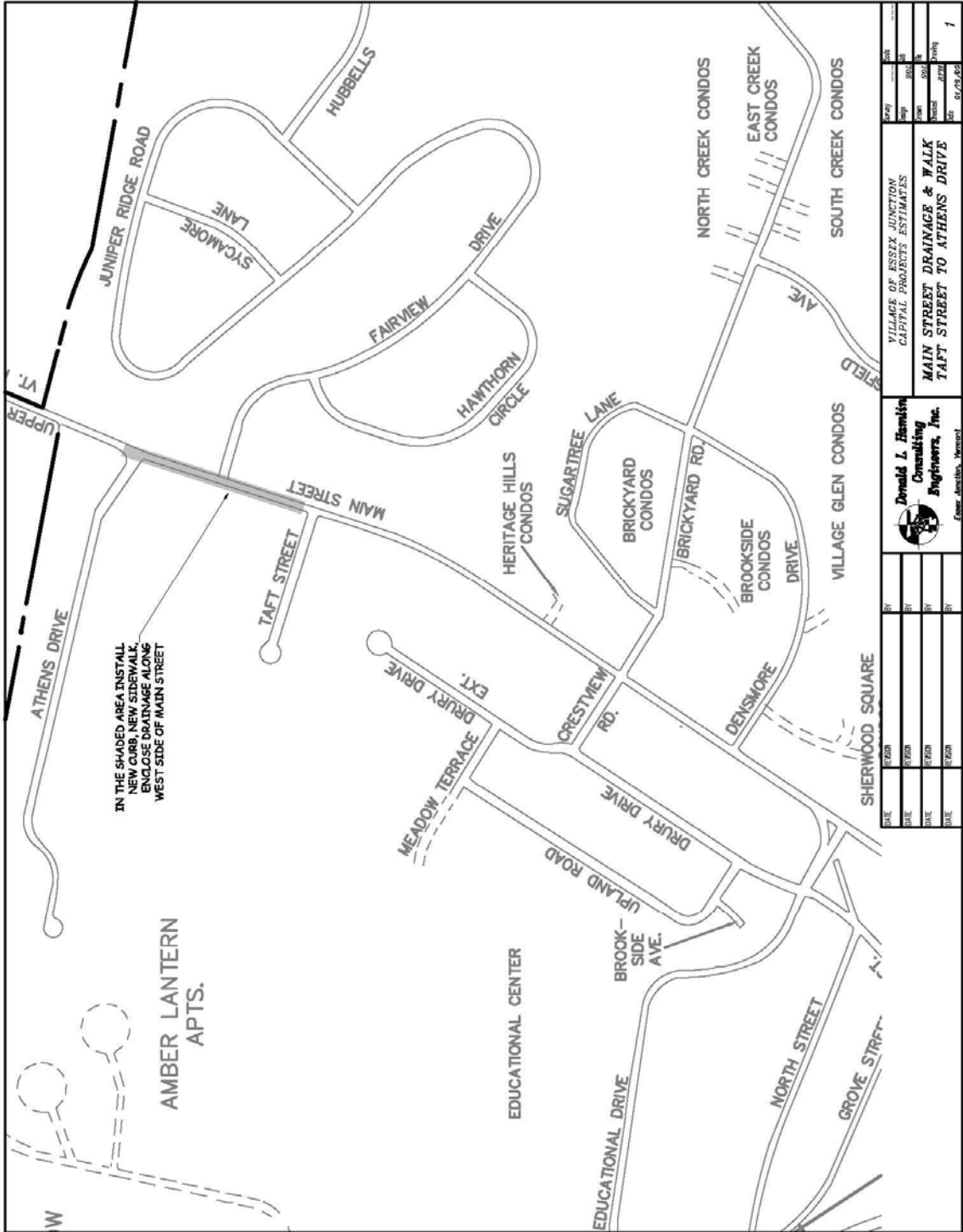
Secondary Project Reason:

Assumptions:

- 5' Wide sidewalk.
- One way traffic maintained
- A portion of each residential driveway will be rebuilt to match new roadway.
- Existing utility poles to be relocated by others.

O	Pavement Overlay	\$	89,284.48
R	Roadway Reconstruction	\$	226,269.57
W	Waterline Improvements		
S	Sanitary Sewer Improvements	\$	1,948.27
D	Storm Drainage Improvements	\$	157,854.03
P	Sidewalk Improvements	\$	86,435.15
	Combined Account Costs	\$	561,791.49
	Project Management, Design and Resident Engineering	\$	106,740.38
	Total Project Cost	\$	668,531.87

City of Essex Junction Capital Projects Construction Cost Estimate



 Donald L. Henise Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>	VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES MAIN STREET DRAINAGE & WALK TAFT STREET TO ATHENS DRIVE		
DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY
DATE	BY	DATE	BY
			SHEET NO. 1 OF 1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb & Sidewalk, Taft Street to Athens Drive

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	850	lf	\$ 4.17	\$ 3,544.50
2) Excavation of Pavement 4" to 6" Thick	250	sy	\$ 12.69	\$ 3,172.50
3) Remove Existing Structure - To 8' Deep	3	each	\$ 902.14	\$ 2,706.42
4) Remove Existing Pipe - To 8' Deep	125	lf	\$ 20.20	\$ 2,525.00
5) Silt Fence	600	lf	\$ 3.80	\$ 2,280.00
6) Remove Existing Manhole Frame and Cover, Replace with New	1	each	\$ 1,372.57	\$ 1,372.57
7) Remove and Reset Existing Catch Basin Frame and Grate	2	each	\$ 1,013.08	\$ 2,026.16
8) Test Excavation	5	each	\$ 693.01	\$ 3,465.05
9) Catch Basin - 4' Dia., To 8' Deep	6	each	\$ 5,260.84	\$ 31,565.04
10) 18" HDPE Drainage Pipe - To 8' Deep	650	lf	\$ 84.76	\$ 55,094.00
11) Type I Rip Rap for Outfall Pads	30	cy	\$ 136.18	\$ 4,085.40
12) Connect Existing Pipe to New Structure	3	each	\$ 1,144.44	\$ 3,433.32
13) Excavation for New Roadway Subbase	550	cy	\$ 26.16	\$ 14,388.00
14) Earth Borrow	1,850	cy	\$ 19.93	\$ 36,870.50
15) Sand Borrow	160	cy	\$ 32.97	\$ 5,275.20
16) Dense Graded Crushed Stone	310	cy	\$ 44.80	\$ 13,888.00
17) Plant Mixed Gravel	80	cy	\$ 44.08	\$ 3,526.40
18) New Cement Concrete Curb	700	lf	\$ 35.12	\$ 24,584.00
19) New Cement Concrete Sidewalk - 4" Thick	375	sy	\$ 84.58	\$ 31,717.50
20) New Cement Concrete Sidewalk - 6" Thick	10	sy	\$ 115.78	\$ 1,157.80
21) New Bituminous Concrete Pavement - 3" Thick Over Trench	550	sy	\$ 69.09	\$ 37,999.50
22) New Bituminous Concrete Pavement - 1-1/4", Type III	2,750	sy	\$ 10.03	\$ 27,582.50
23) Cold Plane Pavement	2,750	sy	\$ 7.86	\$ 21,615.00
24) New Bituminous Concrete Driveway and Apron	50	sy	\$ 60.21	\$ 3,010.50
25) 4" White Line - Painted	1,550	lf	\$ 1.33	\$ 2,061.50
26) 4" Yellow Line - Painted	2,500	lf	\$ 1.33	\$ 3,325.00
27) 24" Wide Stop Bar - Painted	24	lf	\$ 9.72	\$ 233.28
28) 12" Wide Crosswalk Bar - Painted	250	lf	\$ 9.32	\$ 2,330.00

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb & Sidewalk, Taft Street to Athens Drive

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
29) Symbol or Letter - Painted	15	each	\$ 44.37	\$ 665.55
30) Supply and Spread Topsoil	300	cy	\$ 49.68	\$ 14,904.00
31) Seed, Fertilize, Lime and Matting	2,650	sy	\$ 3.58	\$ 9,487.00
32) Traffic Control - Type IV	40	day	\$ 1,720.19	\$ 68,807.60
33) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
34) Mobilization	---	---	5%	\$ 22,293.31
Contingency	---	---	20%	\$ 93,631.91

	Subtotal	\$ 561,791.49
	Design Engineering Services	\$ 50,561.23
	Bidding and Construction Services	\$ 56,179.15
	Grand Total	\$ 668,531.87

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Sidewalk and Lighting Improvements from Five Corners to School Street

Primary Project Reason:

Improve Streetscape along Pearl Street

Secondary Project Reason:

Assumptions:

New sidewalk will be 8' wide.

New sidewalk will butt to curb.

New lights shall be the Gas Style Lamps.

A portion of each residential driveway will be rebuilt to match new sidewalk.

Green Mountain Power to remove existing Cobra Head Lights.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	67,943.86
W	Waterline Improvements		
S	Sanitary Sewer Improvements	\$	3,060.50
D	Storm Drainage Improvements		
P	Sidewalk Improvements	\$	210,763.89
	Combined Total	\$	281,768.24

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Sidewalk and Lighting Improvements from Five Corners to School Street

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	645	lf	\$ 4.17	\$ 2,689.65
2) Excavation of Pavement 4" to 6" Thick	240	sy	\$ 12.69	\$ 3,045.60
3) Remove Existing Concrete Sidewalk	285	sy	\$ 16.49	\$ 4,699.65
4) Remove Existing Concrete Curb	535	lf	\$ 6.95	\$ 3,718.25
5) Cold Plane Pavement 12" Strip at Joint	75	sy	\$ 31.54	\$ 2,365.50
6) New Cement Concrete Curb	535	lf	\$ 35.12	\$ 18,789.20
7) New Cement Concrete Sidewalk - 5" Thick	375	sy	\$ 92.25	\$ 34,593.75
8) New Cement Concrete Sidewalk - 8" Thick	135	sy	\$ 121.57	\$ 16,411.95
9) Detectable Warning Surface	3	sy	\$ 387.04	\$ 1,161.12
10) New Bituminous Concrete Pavement - 3" Thick Over Trench	150	sy	\$ 69.09	\$ 10,363.50
11) New Bituminous Concrete Pavement - 1-1/4", Type III (HW)	215	sy	\$ 23.65	\$ 5,084.75
12) New Bituminous Concrete Driveway and Apron	90	sy	\$ 60.21	\$ 5,418.90
13) Remove and Reset Existing Gas Style Light	2	each	\$ 1,089.15	\$ 2,178.30
14) Remove Existing Light Pole Base	2	each	\$ 412.25	\$ 824.50
15) New Concrete Light Base	2	each	\$ 1,330.91	\$ 2,661.82
16) New Gas Lamp Style Light (Base, Pole and Fixture)	6	each	\$ 8,423.21	\$ 50,539.26
17) New Wired Conduit for Lighting	425	lf	\$ 24.73	\$ 10,510.25
18) Supply and Spread Topsoil	35	cy	\$ 49.68	\$ 1,738.80
19) Seed, Fertilize, Lime and Matting	300	sy	\$ 3.58	\$ 1,074.00
20) Changeable Message Boards	60	day	\$ 64.51	\$ 3,870.60
21) Remove Existing Sign	3	each	\$ 53.70	\$ 161.10
22) New Sign	18	sf	\$ 29.16	\$ 524.88
23) New Sign Post	3	each	\$ 134.65	\$ 403.95
24) Raise Existing Hydrant	1	each	\$ 1,069.03	\$ 1,069.03
25) Adjust Existing Curb Stop Box to New Finish Grade	6	each	\$ 170.50	\$ 1,023.00
26) Traffic Control - Type IV	20	day	\$ 1,720.19	\$ 34,403.80
27) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Sidewalk and Lighting Improvements from Five Corners to School Street

ITEM	QUANTITY	UNIT	PRICE	TOTAL
28) Mobilization	---	---	5%	\$ 11,181.28
Contingency	---	---	20%	\$ 46,961.37

Subtotal	\$	281,768.24
Design Engineering Services	\$	28,176.82
Bidding and Construction Services	\$	28,176.82
Grand Total	\$	338,121.89

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Pearl Street
Sidewalk and Lighting Improvements from School Street
to South Summit Street**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

Primary Project Reason:

Improve Streetscape along Pearl Street

Secondary Project Reason:

Assumptions:

New sidewalk will be 8' wide.

New sidewalk will butt to curb.

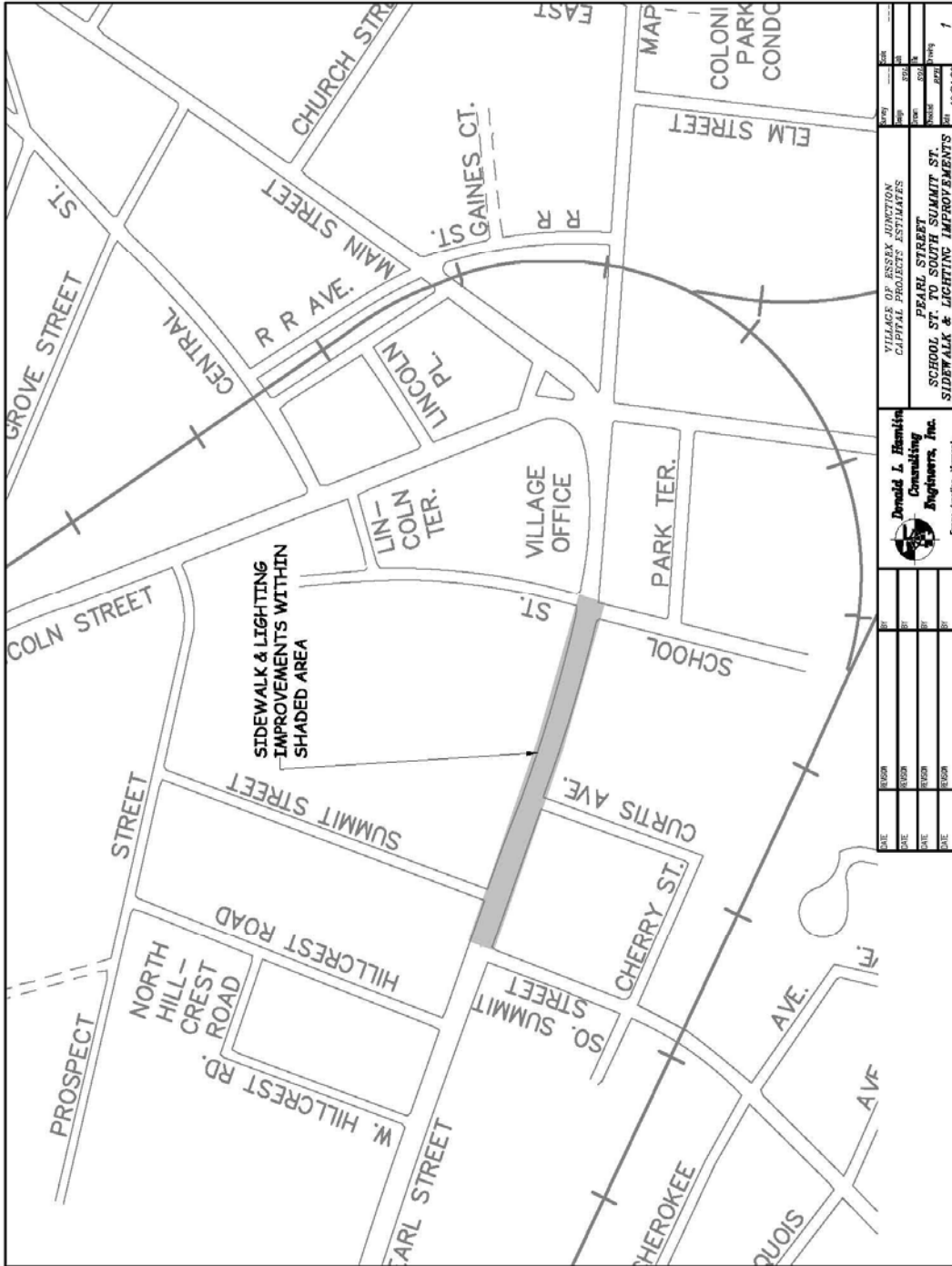
New lights shall be the Gas Style Lamps.

A portion of each residential driveway will be rebuilt to match new sidewalk.

Green Mountain Power to remove existing Cobra Head Lights.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	168,945.57
W	Waterline Improvements	\$	7,469.29
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements	\$	628,985.13
	Combined Total	\$	805,399.98

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Pearl Street
Sidewalk and Lighting Improvements from School Street
to South Summit Street**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	2,375	lf	\$ 4.17	\$ 9,903.75
2) Excavation of Pavement 4" to 6" Thick	840	sy	\$ 12.69	\$ 10,659.60
3) Remove Existing Concrete Sidewalk	800	sy	\$ 16.49	\$ 13,192.00
4) Remove Existing Concrete Curb	1,800	lf	\$ 6.95	\$ 12,510.00
5) Cold Plane Pavement 12" Strip at Joint	225	sy	\$ 31.54	\$ 7,096.50
6) New Cement Concrete Curb	1,800	lf	\$ 35.12	\$ 63,216.00
7) New Cement Concrete Sidewalk - 5" Thick	1,200	sy	\$ 92.25	\$ 110,700.00
8) New Cement Concrete Sidewalk - 8" Thick	340	sy	\$ 121.57	\$ 41,333.80
9) Detectable Warning Surface	10	sy	\$ 387.04	\$ 3,870.40
10) New Bituminous Concrete Pavement - 3" Thick Over Trench	455	sy	\$ 69.09	\$ 31,435.95
11) New Bituminous Concrete Pavement - 1-1/4", Type III (HW)	700	sy	\$ 23.65	\$ 16,555.00
12) New Bituminous Concrete Driveway and Apron	285	sy	\$ 60.21	\$ 17,159.85
13) New Gas Lamp Style Light (Base, Pole and Fixture)	26	each	\$ 8,423.21	\$ 219,003.46
14) New Wired Conduit for Lighting	2,000	lf	\$ 24.73	\$ 49,460.00
15) Supply and Spread Topsoil	125	cy	\$ 49.68	\$ 6,210.00
16) Seed, Fertilize, Lime and Matting	1,000	sy	\$ 3.58	\$ 3,580.00
17) Changeable Message Boards	120	day	\$ 64.51	\$ 7,741.20
18) Remove Existing Sign	10	each	\$ 53.70	\$ 537.00
19) New Sign	60	sf	\$ 29.16	\$ 1,749.60
20) New Sign Post	10	each	\$ 134.65	\$ 1,346.50
21) Raise Existing Hydrant	2	each	\$ 1,069.03	\$ 2,138.06
22) Adjust Existing Curb Stop Box to New Finish Grade	19	each	\$ 170.50	\$ 3,239.50
23) Adjust Existing Gate Valve Box to New Finish Grade	5	each	\$ 253.27	\$ 1,266.35
24) Lighting Pedestal Meter Socket/Load Center (Includes Timer)	1	ls	\$ 10,751.20	\$ 10,751.20
25) 12" Wide Crosswalk Bar - Painted	120	each	\$ 9.32	\$ 1,118.40
26) Replace Existing Utility Pole (Includes Utility Transfer)	4	each	\$10,428.67	\$ 41,714.68

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Pearl Street
Sidewalk and Lighting Improvements from School Street
to South Summit Street**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
27) Landscaping Planter Box (Box, Topsoil, Plantings)	4	each	\$ 1,612.68	\$ 6,450.72
28) Traffic Control - Type IV	40	day	\$ 1,720.19	\$ 68,807.60
29) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
30) Mobilization	---	---	5%	\$ 38,352.38
Contingency	---	---	20%	\$ 161,080.00

Subtotal	\$	966,479.98
Design Engineering Services	\$	86,983.20
Bidding and Construction Services	\$	96,648.00
Grand Total	\$	1,150,111.17

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Pearl Street
Sidewalk and Lighting Improvements from
South Summit Street to West Hillcrest Road**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

Primary Project Reason:

Improve Streetscape along Pearl Street

Secondary Project Reason:

Assumptions:

New sidewalk will be 8' wide.

New sidewalk will butt to curb.

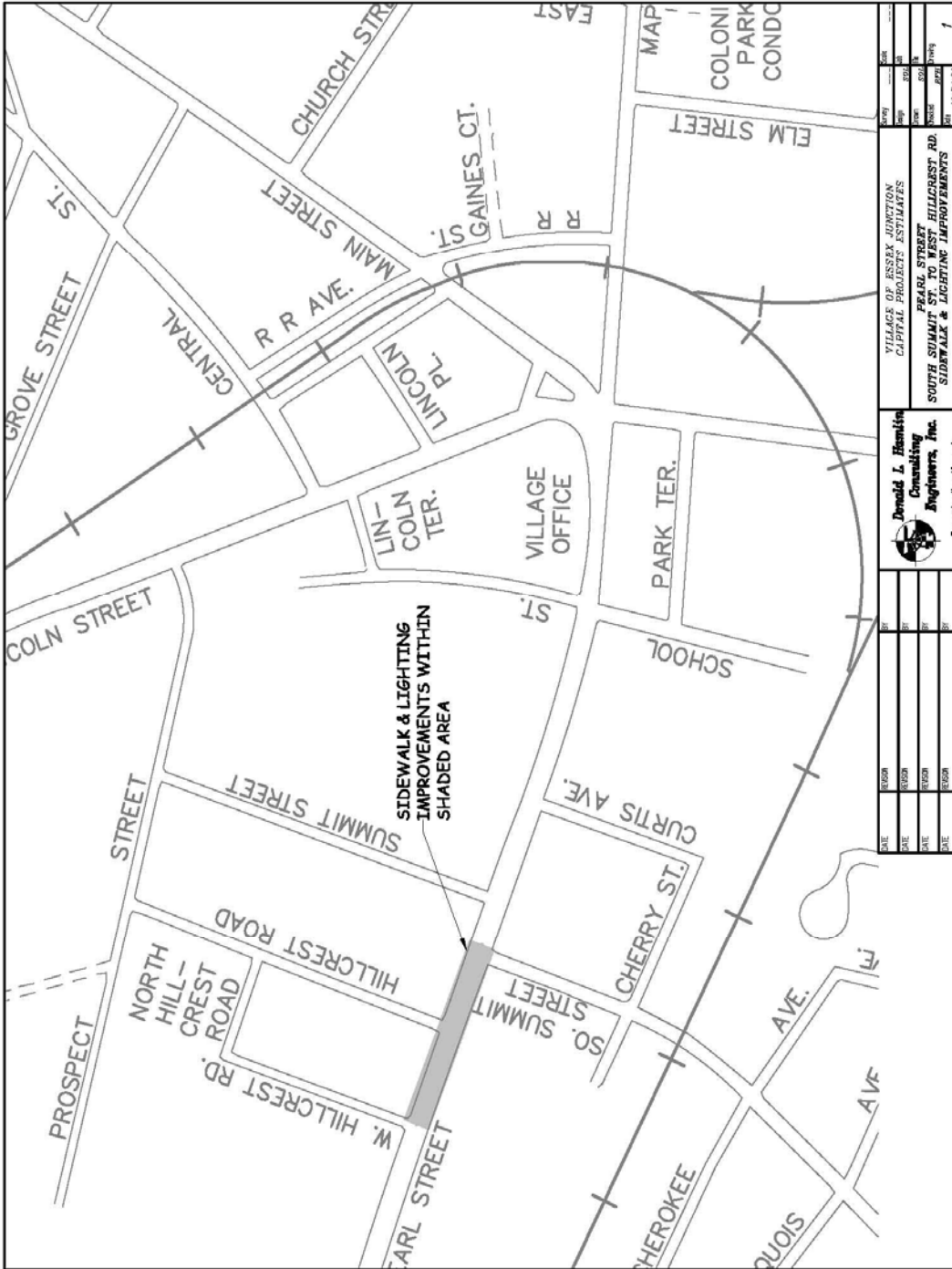
New lights shall be the Gas Style Lamps.

A portion of each residential driveway will be rebuilt to match new sidewalk.

Green Mountain Power to remove existing Cobra Head Lights.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	138,516.91
W	Waterline Improvements	\$	4,480.99
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements	\$	340,804.60
	Combined Total	\$	483,802.50

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	REVISION	BY	DATE	REVISION	BY

**Donald J. Hamblin
Consulting
Engineers, Inc.**
Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES
PEARL STREET
SOUTH SUMMIT ST. TO WEST HILLCREST RD.
SIDEWALK & LIGHTING IMPROVEMENTS

DATE: 02/04/03
PAGE: 001
TOTAL PAGES: 001
SHEET: 1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Sidewalk and Lighting Improvements from

Estimate Preparation Date: 8/17/2023

South Summit Street to West Hillcrest Road

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	1,600	lf	\$ 4.17	\$ 6,672.00
2) Excavation of Pavement 4" to 6" Thick	715	sy	\$ 12.69	\$ 9,073.35
3) Remove Existing Concrete Sidewalk	345	sy	\$ 16.49	\$ 5,689.05
4) Remove Existing Concrete Curb	1,000	lf	\$ 6.95	\$ 6,950.00
5) Cold Plane Pavement 12" Strip at Joint	160	sy	\$ 31.54	\$ 5,046.40
6) New Cement Concrete Curb	1,000	lf	\$ 35.12	\$ 35,120.00
7) New Cement Concrete Sidewalk - 5" Thick	610	sy	\$ 92.25	\$ 56,272.50
8) New Cement Concrete Sidewalk - 8" Thick	30	sy	\$ 121.57	\$ 3,647.10
9) New Cement Concrete Sidewalk - 8" Thick (eared section)	75	sy	\$ 151.23	\$ 11,342.25
10) Detectable Warning Surface	7	sy	\$ 387.04	\$ 2,709.28
11) New Bituminous Concrete Pavement - 3" Thick Over Trench	495	sy	\$ 69.09	\$ 34,199.55
12) New Bituminous Concrete Pavement - 1-1/4", Type III (HW)	655	sy	\$ 23.65	\$ 15,490.75
13) New Bituminous Concrete Driveway and Apron	80	sy	\$ 60.21	\$ 4,816.80
14) New Gas Lamp Style Light (Base, Pole and Fixture)	14	each	\$ 8,423.21	\$ 117,924.94
15) New Wired Conduit for Lighting	1,025	lf	\$ 24.73	\$ 25,348.25
16) Supply and Spread Topsoil	60	cy	\$ 49.68	\$ 2,980.80
17) Seed, Fertilize, Lime and Matting	500	sy	\$ 3.58	\$ 1,790.00
18) Changeable Message Boards	80	day	\$ 64.51	\$ 5,160.80
19) Remove Existing Sign	15	each	\$ 53.70	\$ 805.50
20) New Sign	90	sf	\$ 29.16	\$ 2,624.40
21) New Sign Post	15	each	\$ 134.65	\$ 2,019.75
22) Raise Existing Hydrant	2	each	\$ 1,069.03	\$ 2,138.06
23) Adjust Existing Curb Stop Box to New Finish Grade	6	each	\$ 170.50	\$ 1,023.00
24) Adjust Existing Gate Valve Box to New Finish Grade	2	each	\$ 253.27	\$ 506.54
25) Landscaping Planter Box (Box, Topsoil, Plantings)	4	each	\$ 1,612.68	\$ 6,450.72
26) 12" Wide Crosswalk Bar - Painted	60	each	\$ 9.32	\$ 559.20

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Sidewalk and Lighting Improvements from

Estimate Preparation Date: 8/17/2023

South Summit Street to West Hillcrest Road

ITEM	QUANTITY	UNIT	PRICE	TOTAL
27) Replace Existing Utility Pole (Includes Utility Transfer)	3	each	\$10,428.67	\$ 31,286.01
28) Loop Detectors	144	lf	\$ 18.22	\$ 2,623.68
29) Traffic Control - Type IV	30	day	\$ 1,720.19	\$ 51,605.70
30) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
31) Mobilization	---	---	5%	\$ 22,808.84
Contingency	---	---	20%	\$ 95,797.14

Subtotal	\$	574,782.84
Design Engineering Services	\$	51,730.46
Bidding and Construction Services	\$	57,478.28
Grand Total	\$	683,991.58

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Pearl Street
Sidewalk and Lighting Improvements from
West Hillcrest Road to Mac's Market**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

Primary Project Reason:

Improve Streetscape along Pearl Street

Secondary Project Reason:

Assumptions:

New sidewalk will be 8' wide.

New sidewalk will butt to curb.

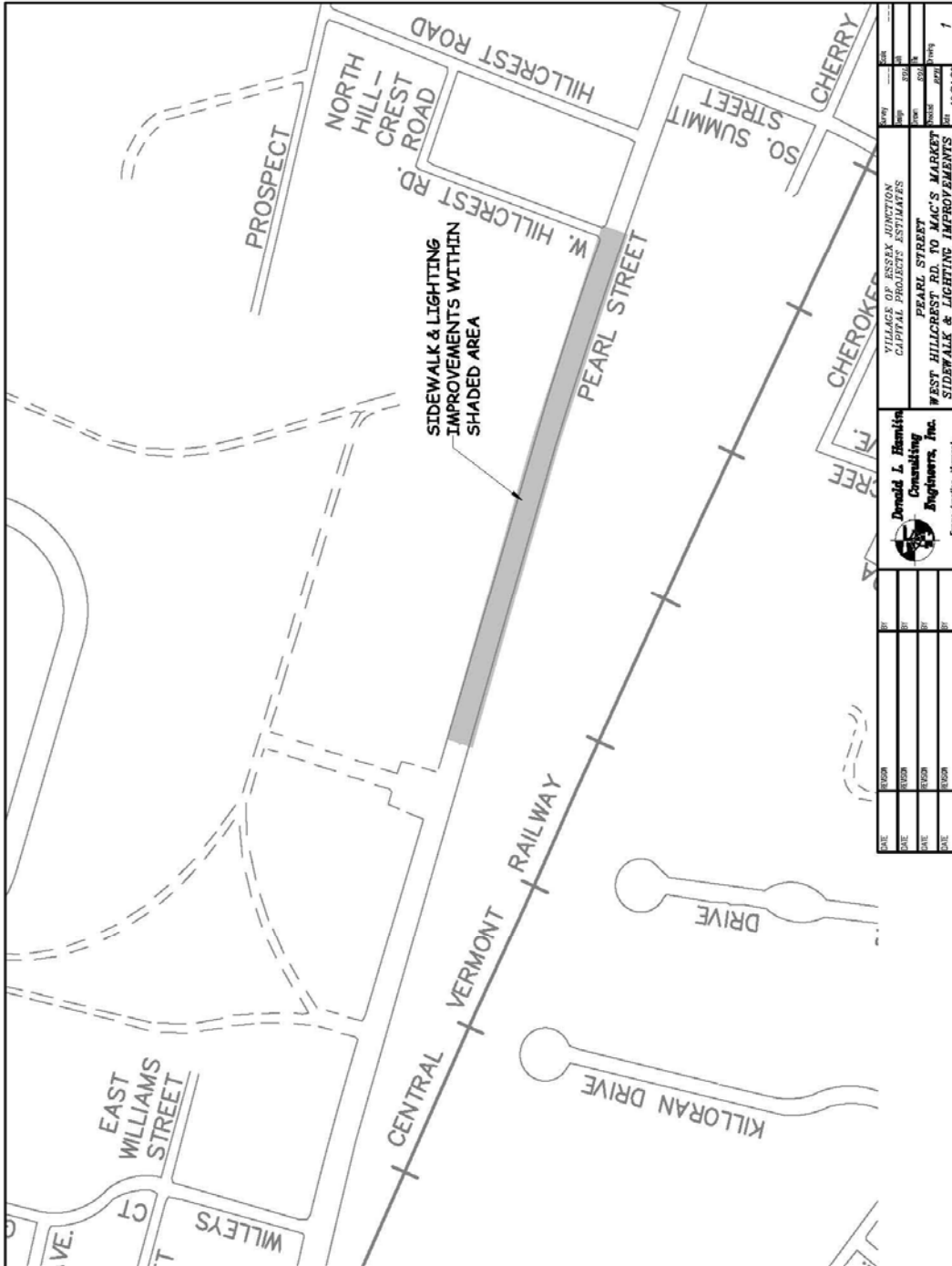
New lights shall be the Gas Style Lamps.

A portion of each residential driveway will be rebuilt to match new sidewalk.

Green Mountain Power to remove existing Cobra Head Lights.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	356,931.77
W	Waterline Improvements	\$	6,939.89
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements	\$	913,843.09
	Combined Total	\$	1,277,714.75

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE		BY	DATE	BY	DATE	BY	DATE	BY
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DATE		BY	DATE	BY	DATE	BY	DATE	BY

**Donald L. Hamlin
Consulting
Engineers, Inc.**
Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES
PEARL STREET
WEST HILLCREST RD. TO MAC'S MARKET
SIDEWALK & LIGHTING IMPROVEMENTS

07/20/20

1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Sidewalk and Lighting Improvements from

Estimate Preparation Date: 8/17/2023

West Hillcrest Road to Mac's Market

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	3,500	lf	\$ 4.17	\$ 14,595.00
2) Excavation of Pavement 4" to 6" Thick	1,810	sy	\$ 12.69	\$ 22,968.90
3) Remove Existing Concrete Sidewalk	1,125	sy	\$ 16.49	\$ 18,551.25
4) Remove Existing Concrete Curb	2,690	lf	\$ 6.95	\$ 18,695.50
5) Cold Plane Pavement 12" Strip at Joint	400	sy	\$ 31.54	\$ 12,616.00
6) New Cement Concrete Curb	2,690	lf	\$ 35.12	\$ 94,472.80
7) New Cement Concrete Sidewalk - 5" Thick	1,875	sy	\$ 92.25	\$ 172,968.75
8) New Cement Concrete Sidewalk - 8" Thick	200	sy	\$ 121.57	\$ 24,314.00
9) New Cement Concrete Sidewalk - 8" Thick (eared section)	290	sy	\$ 151.23	\$ 43,856.70
10) Detectable Warning Surface	24	sy	\$ 387.04	\$ 9,288.96
11) New Bituminous Concrete Pavement - 3" Thick Over Trench	1,375	sy	\$ 69.09	\$ 94,998.75
12) New Bituminous Concrete Pavement - 1-1/4", Type III (HW)	1,775	sy	\$ 23.65	\$ 41,978.75
13) New Bituminous Concrete Driveway and Apron	140	sy	\$ 60.21	\$ 8,429.40
14) New Gas Lamp Style Light (Base, Pole and Fixture)	38	each	\$ 8,423.21	\$ 320,081.98
15) New Wired Conduit for Lighting	2,900	lf	\$ 24.73	\$ 71,717.00
16) Supply and Spread Topsoil	225	cy	\$ 49.68	\$ 11,178.00
17) Seed, Fertilize, Lime and Matting	1,900	sy	\$ 3.58	\$ 6,802.00
18) Changeable Message Boards	180	day	\$ 64.51	\$ 11,611.80
19) Remove Existing Sign	30	each	\$ 53.70	\$ 1,611.00
20) New Sign	180	sf	\$ 29.16	\$ 5,248.80
21) New Sign Post	30	each	\$ 134.65	\$ 4,039.50
22) Raise Existing Hydrant	2	each	\$ 1,069.03	\$ 2,138.06
23) Adjust Existing Curb Stop Box to New Finish Grade	6	each	\$ 170.50	\$ 1,023.00
24) Adjust Existing Gate Valve Box to New Finish Grade	10	each	\$ 253.27	\$ 2,532.70
25) Landscaping Planter Box (Box, Topsoil, Plantings)	6	each	\$ 1,612.68	\$ 9,676.08
26) 12" Wide Crosswalk Bar - Painted	128	each	\$ 9.32	\$ 1,192.96

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Sidewalk and Lighting Improvements from

Estimate Preparation Date: 8/17/2023

West Hillcrest Road to Mac's Market

ITEM	QUANTITY	UNIT	PRICE	TOTAL
27) Replace Existing Utility Pole (Includes Utility Transfer)	4	each	\$10,428.67	\$ 41,714.68
28) Lighting Pedestal Meter Socket/Load Center (Includes Timer)	1	ls	\$ 10,751.20	\$ 10,751.20
29) Benches	6	each	\$ 1,720.19	\$ 10,321.14
30) Loop Detectors	400	lf	\$ 18.22	\$ 7,288.00
31) Traffic Control - Type IV	60	day	\$ 1,720.19	\$ 103,211.40
32) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
33) Mobilization	---	---	5%	\$ 60,352.08
Contingency	---	---	20%	\$ 253,478.72

Subtotal \$ 1,520,872.33
Design Engineering Services \$ 121,669.79
Bidding and Construction Services \$ 152,087.23
Grand Total \$ 1,794,629.35

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Sidewalk & Lighting Improvements from Mac's Market to Willeys Court

Original Capital Plan Date: 2/3/2009

Primary Project Reason:

Improve Streetscape along Pearl Street

Secondary Project Reason:

Relocate Gate A of the Champlain Valley Exposition

Improve Intersection at Gate B of the Champlain Valley Exposition

Assumptions:

New sidewalk will be 8' wide.

New sidewalk will butt to curb.

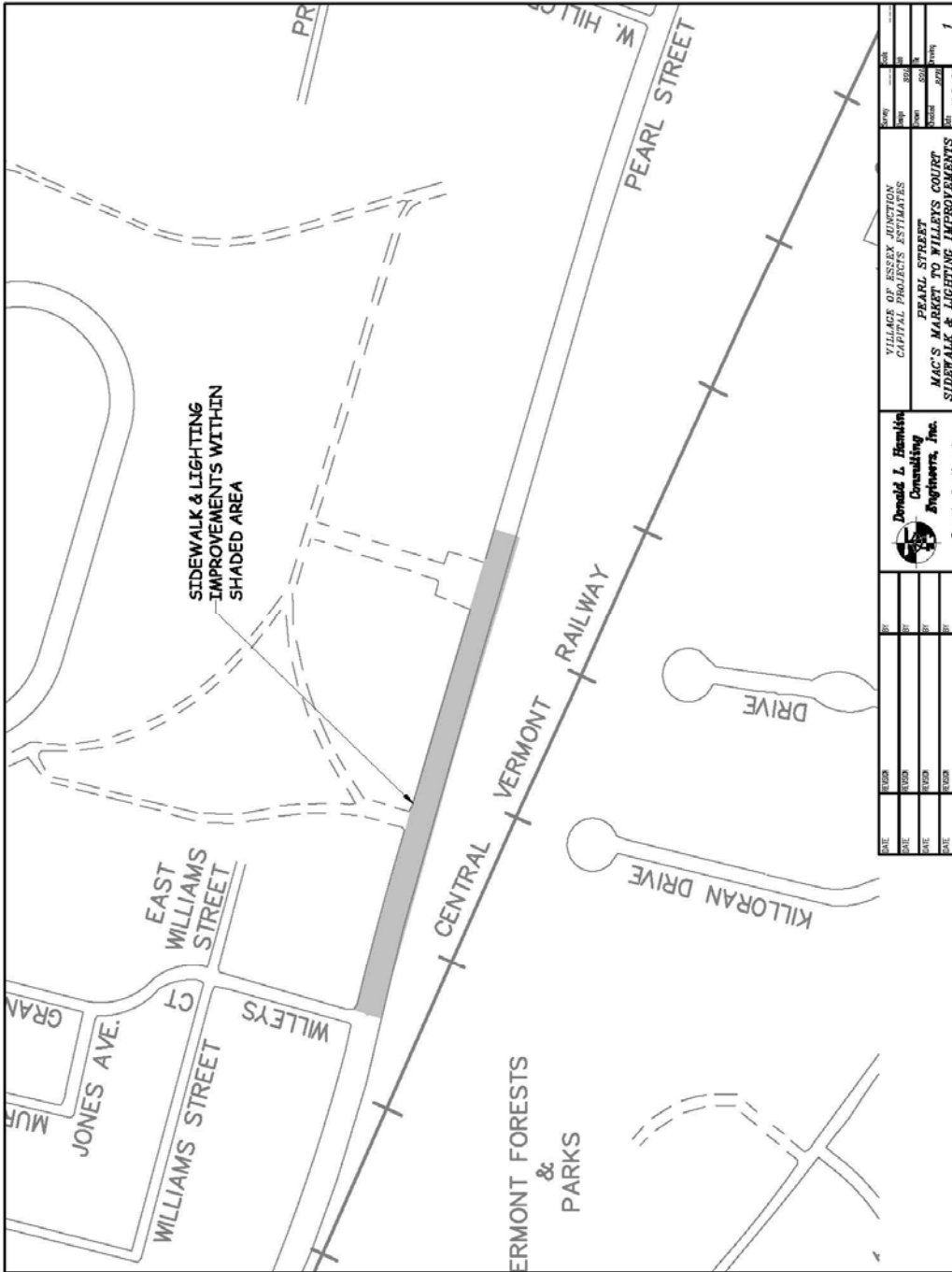
New lights shall be the Gas Style Lamps.

A portion of each residential driveway will be rebuilt to match new sidewalk.

Green Mountain Power to remove existing Cobra Head Lights.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	229,737.37
W	Waterline Improvements	\$	6,228.18
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	18,759.00
P	Sidewalk Improvements	\$	1,004,298.65
	Combined Total	\$	1,259,023.20

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

8/17/2023

Sidewalk & Lighting Improvements from Mac's Market to Willeys Court

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	1,875	lf	\$ 2.38	\$ 4,462.50
2) Excavation of Pavement 4" to 6" Thick	2,500	sy	\$ 7.60	\$ 19,000.00
3) Remove Existing Concrete Sidewalk	1,425	sy	\$ 9.50	\$ 13,537.50
4) Remove Existing Concrete Curb	390	lf	\$ 4.23	\$ 1,649.70
5) Remove and Reset Existing Granite Curb	260	lf	\$ 11.51	\$ 2,992.60
6) New Granite Curb	850	lf	\$ 35.88	\$ 30,498.00
7) Cold Plane Pavement 12" Strip at Joint	225	sy	\$ 18.25	\$ 4,106.25
8) Excavation for New Roadway Subbase	1,425	cy	\$ 17.12	\$ 24,396.00
9) Dense Graded Crushed Stone	875	cy	\$ 29.52	\$ 25,830.00
10) Plant Mixed Gravel	230	cy	\$ 28.44	\$ 6,541.20
11) Mirafi 500X Geotextile Fabric	1,305	sy	\$ 1.38	\$ 1,800.90
12) New Cement Concrete Sidewalk - 5" Thick	1,775	sy	\$ 62.40	\$ 110,760.00
13) New Cement Concrete Sidewalk - 8" Thick	110	sy	\$ 78.02	\$ 8,582.20
14) New Cement Concrete Sidewalk - 8" Thick (eared section)	370	sy	\$ 98.02	\$ 36,267.40
15) Detectable Warning Surface	6	sy	\$ 250.00	\$ 1,500.00
16) New Bituminous Concrete Pavement - 3", Type II	1,400	sy	\$ 15.86	\$ 22,204.00
17) New Bituminous Concrete Pavement - 1-1/4", Type III	1,475	sy	\$ 8.20	\$ 12,095.00
18) New Bituminous Concrete Pavement - 3" Thick Over Trench	1,100	sy	\$ 43.50	\$ 47,850.00
19) New Bituminous Concrete Pavement - 1-1/4", Type III (HW)	1,250	sy	\$ 16.40	\$ 20,500.00
20) New Gas Lamp Style Light (Base, Pole and Fixture)	36	each	\$ 5,876.00	\$ 211,536.00
21) New Box Light (Base, Pole and Fixture)	4	each	\$ 5,070.00	\$ 20,280.00
22) New Wired Conduit for Lighting	2,990	lf	\$ 16.22	\$ 48,497.80
23) Lighting Pedestal Meter Socket/Load Center (Includes Timer)	1	ls	\$ 7,500.00	\$ 7,500.00
24) Catch Basin - 4' dia., 0' to 8' Deep	2	each	\$ 3,395.66	\$ 6,791.32
25) 15" HDPE Drainage Pipe - 0' to 8' Deep	120	lf	\$ 51.61	\$ 6,193.20
26) Connect New Pipe to Existing Structure	1	each	\$ 722.50	\$ 722.50
27) Remove Existing Chain Link Fence	850	lf	\$ 3.57	\$ 3,034.50

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

8/17/2023

Sidewalk & Lighting Improvements from Mac's Market to Willeys Court

ITEM	QUANTITY	UNIT	PRICE	TOTAL
28) New Wrought Iron Fence	710	lf	\$ 42.90	\$ 30,459.00
29) New Brick Column	44	each	\$ 1,158.00	\$ 50,952.00
30) New Wrought Iron Gate	6	each	\$ 702.00	\$ 4,212.00
31) Supply and Spread Topsoil	400	cy	\$ 31.08	\$ 12,432.00
32) New Landscaping	1	ls	\$15,000.00	\$ 15,000.00
33) Seed, Fertilize, Lime and Matting	3,500	sy	\$ 2.07	\$ 7,245.00
34) Changeable Message Boards	185	day	\$ 200.00	\$ 37,000.00
35) Remove Existing Sign	20	each	\$ 59.00	\$ 1,180.00
36) New Sign	120	sf	\$ 17.50	\$ 2,100.00
37) New Sign Post	20	each	\$ 85.00	\$ 1,700.00
38) Raise Existing Hydrant	2	each	\$ 750.00	\$ 1,500.00
39) Adjust Existing Curb Stop Box to New Finish Grade	6	each	\$ 107.64	\$ 645.84
40) Adjust Existing Gate Valve Box to New Finish Grade	15	each	\$ 159.89	\$ 2,398.35
41) 12" Wide Crosswalk Bar - Painted	100	each	\$ 4.72	\$ 472.00
42) Replace Existing Utility Pole (Includes Utility Transfer)	8	each	\$ 6,975.00	\$ 55,800.00
43) Traffic Control	60	day	\$ 1,200.00	\$ 72,000.00
44) Dust Control	1	ls	\$ 5,000.00	\$ 5,000.00
45) Mobilization	---	---	5%	\$ 49,961.24
Contingency	---	---	20%	\$ 209,837.20

Subtotal \$ 1,259,023.20
Design Engineering Services \$ 100,721.86
Bidding and Construction Services \$ 125,902.32
Grand Total \$ 1,485,647.37

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Sidewalk and Lighting Improvements from Willeys Court to West Street Extension

Original Capital Plan Date: 2/3/2009

Primary Project Reason:

Improve Streetscape along Pearl Street

Secondary Project Reason:

Assumptions:

New sidewalk will be 5' wide.

5' wide green belt.

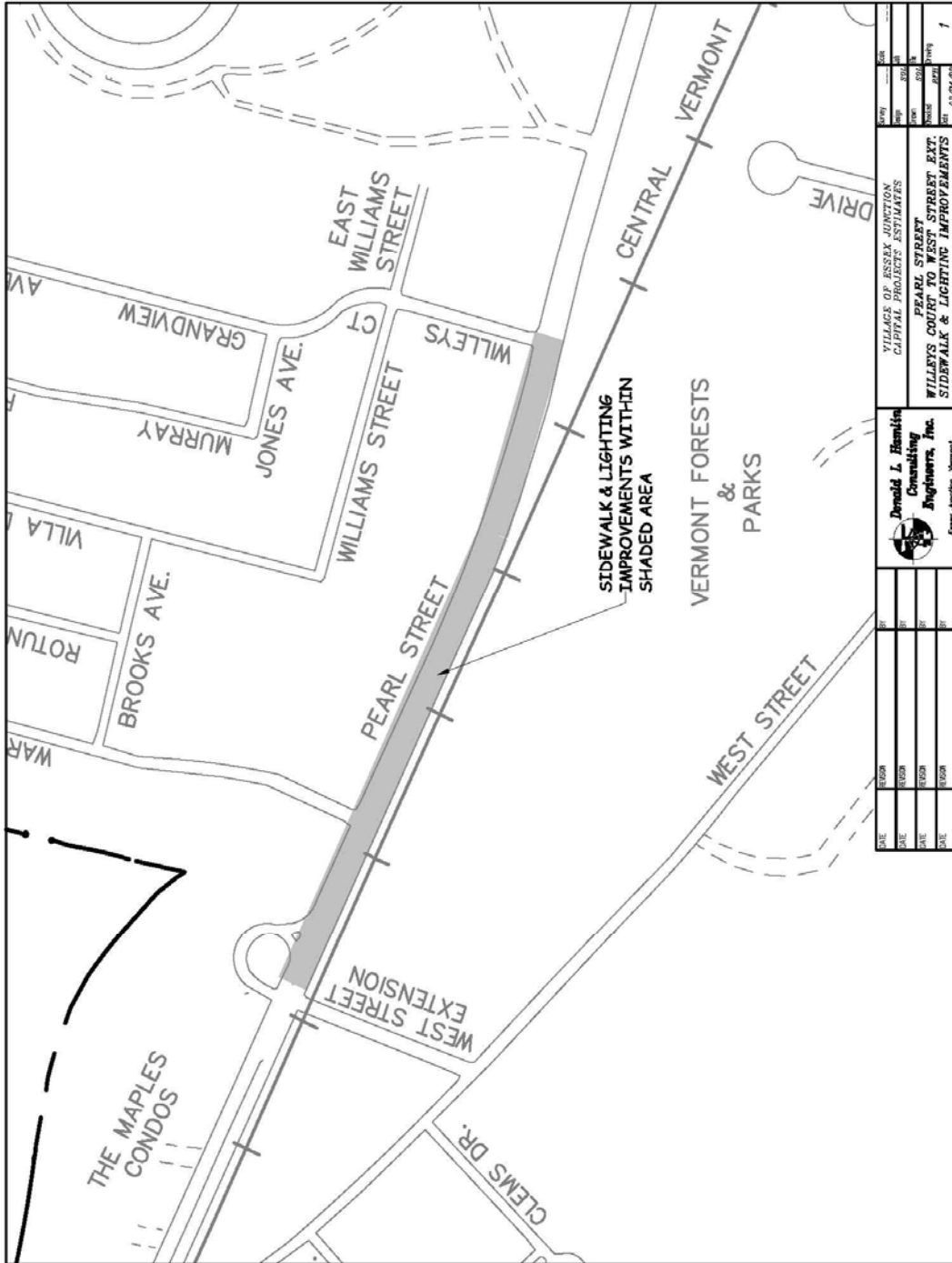
New lights shall be the Gas Style Lamps.

A portion of each residential driveway will be rebuilt to match new sidewalk.

Green Mountain Power to remove existing Cobra Head Lights.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	220,902.02
W	Waterline Improvements	\$	8,409.87
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	22,002.44
P	Sidewalk Improvements	\$	1,323,593.28
	Combined Account Costs	\$	1,574,907.60
	Project Management, Design and Resident Engineering	\$	283,483.37
	Total Project Cost	\$	1,858,390.97

City of Essex Junction
Capital Projects
Construction Cost Estimate



DATE	PERSON	REVISION	DATE	PERSON	REVISION	DATE	PERSON	REVISION

**Donald L. Hamlin
&
Consulting
Engineers, Inc.**
Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS - ESTIMATES

PEARL STREET
WILLEY'S COURT TO WEST STREET EXT.
SIDEWALK & LIGHTING IMPROVEMENTS

DATE: 05/20/20
SCALE: 1" = 40'

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Sidewalk and Lighting Improvements from Willeys Court to West Street Extension

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	2,600	lf	\$ 4.17	\$ 10,842.00
2) Excavation of Pavement 4" to 6" Thick	1,680	sy	\$ 12.69	\$ 21,319.20
3) Remove Existing Concrete Sidewalk	1,750	sy	\$ 16.49	\$ 28,857.50
4) Remove Existing Concrete Curb	100	lf	\$ 6.95	\$ 695.00
5) Remove and Reset Existing Granite Curb	1,010	lf	\$ 24.23	\$ 24,472.30
6) New Granite Curb	550	lf	\$ 52.75	\$ 29,012.50
7) Cold Plane Pavement 12" Strip at Joint	1,375	sy	\$ 31.54	\$ 43,367.50
8) Excavation for New Roadway Subbase	100	cy	\$ 26.16	\$ 2,616.00
9) Dense Graded Crushed Stone	80	cy	\$ 44.80	\$ 3,584.00
10) Plant Mixed Gravel	25	cy	\$ 44.08	\$ 1,102.00
11) Mirafi 500X Geotextile Fabric	125	sy	\$ 2.08	\$ 260.00
12) New Cement Concrete Sidewalk - 5" Thick	1,525	sy	\$ 92.25	\$ 140,681.25
13) New Cement Concrete Sidewalk - 8" Thick (eared section)	450	sy	\$ 151.23	\$ 68,053.50
14) Detectable Warning Surface	7	sy	\$ 387.04	\$ 2,709.28
15) New Bituminous Concrete Pavement - 3", Type II	350	sy	\$ 21.50	\$ 7,525.00
16) New Bituminous Concrete Pavement - 1-1/4", Type III	450	sy	\$ 10.03	\$ 4,513.50
17) New Bituminous Concrete Pavement - 3" Thick Over Trench	830	sy	\$ 69.09	\$ 57,344.70
18) New Bituminous Concrete Pavement - 1-1/4", Type III (HW)	1,005	sy	\$ 23.65	\$ 23,768.25
19) New Gas Lamp Style Light (Base, Pole and Fixture)	48	each	\$ 8,423.21	\$ 404,314.08
20) New Wired Conduit for Lighting	3,800	lf	\$ 24.73	\$ 93,974.00
21) Lighting Pedestal Meter Socket/Load Center (Includes Timer)	1	ls	\$ 10,751.20	\$ 10,751.20
22) Catch Basin - 4' dia., To 8' Deep	2	each	\$ 5,260.84	\$ 10,521.68
23) 15" HDPE Drainage Pipe - To 8' Deep	30	lf	\$ 72.88	\$ 2,186.40
24) Connect New Pipe to Existing Structure	2	each	\$ 1,144.44	\$ 2,288.88
25) Remove and Reset Existing Catch Basin Frame and Grate	2	each	\$ 1,013.08	\$ 2,026.16
26) Concrete Cap for Island	140	sy	\$ 84.58	\$ 11,841.20

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Sidewalk and Lighting Improvements from Willeys Court to West Street Extension

ITEM	QUANTITY	UNIT	PRICE	TOTAL
27) Supply and Spread Topsoil	325	cy	\$ 49.68	\$ 16,146.00
28) New Landscaping	1	ls	\$15,000.00	\$ 15,000.00
29) Seed, Fertilize, Lime and Matting	2,875	sy	\$ 3.58	\$ 10,292.50
30) Changeable Message Boards	185	day	\$ 64.51	\$ 11,934.35
31) Remove Existing Sign	20	each	\$ 53.70	\$ 1,074.00
32) New Sign	120	sf	\$ 29.16	\$ 3,499.20
33) New Sign Post	20	each	\$ 134.65	\$ 2,693.00
34) Raise Existing Hydrant	3	each	\$ 1,069.03	\$ 3,207.09
35) Adjust Existing Curb Stop Box to New Finish Grade	7	each	\$ 170.50	\$ 1,193.50
36) Adjust Existing Gate Valve Box to New Finish Grade	6	each	\$ 253.27	\$ 1,519.62
37) 12" Wide Crosswalk Bar - Painted	192	each	\$ 9.32	\$ 1,789.44
38) Replace Existing Utility Pole (Includes Utility Transfer)	6	each	\$10,428.67	\$ 62,572.02
39) Traffic Control - Type IV	60	day	\$ 1,720.19	\$ 103,211.40
40) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
41) Mobilization	---	---	5%	\$ 62,496.33
Contingency	---	---	20%	\$ 262,484.60

Subtotal \$ 1,574,907.60
 Design Engineering Services \$ 125,992.61
 Bidding and Construction Services \$ 157,490.76
 Grand Total \$ 1,858,390.97

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Sidewalk and Roadway Improvements from West Street to Susie Wilson Road

Original Capital Plan Date: 2/3/2009

Primary Project Reason:

Improve Streetscape along Pearl Street

Secondary Project Reason:

Traffic Calming

Added a bike lane on both east and west bound portions of Route 15.

Assumptions:

New sidewalk will be 5' wide.

5' wide green belt.

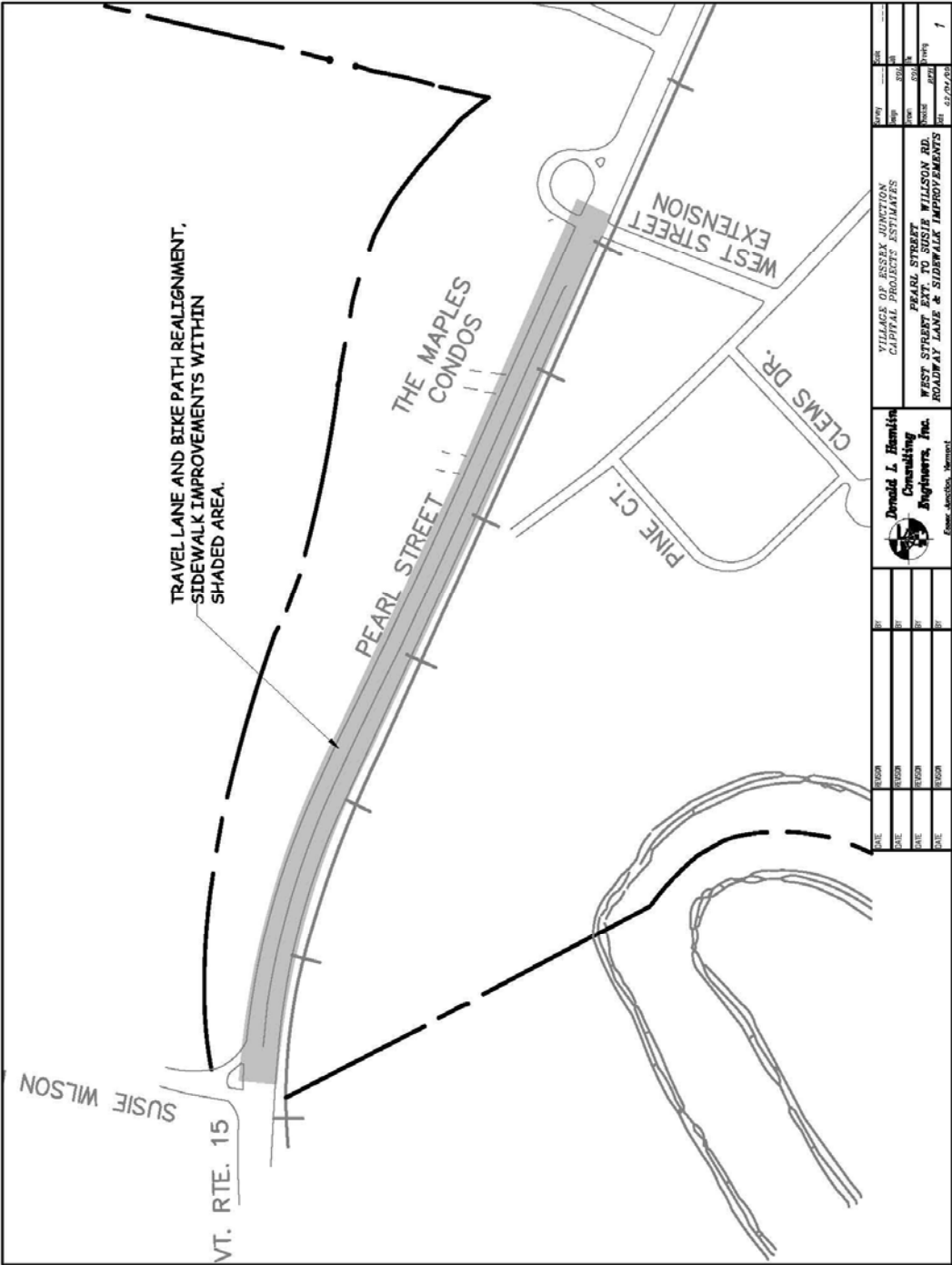
Pearl Street to be re-striped to change lane configurations

A portion of each residential driveway will be rebuilt to match new sidewalk.

Green Mountain Power to remove existing Cobra Head Lights.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	276,202.12
W	Waterline Improvements	\$	10,613.94
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	58,759.88
P	Sidewalk Improvements	\$	574,173.77
	Combined Account Costs	\$	919,749.70
	Project Management, Design and Resident Engineering	\$	174,752.44
	Total Project Cost	\$	1,094,502.14

City of Essex Junction
Capital Projects
Construction Cost Estimate



DATE	PERSON	BY	SCALE	NO.	DATE	BY	SCALE	NO.
DATE	PERSON	BY	SCALE	NO.	DATE	BY	SCALE	NO.
DATE	PERSON	BY	SCALE	NO.	DATE	BY	SCALE	NO.
DATE	PERSON	BY	SCALE	NO.	DATE	BY	SCALE	NO.

Donald L. Hamlin
 Consulting
 Engineers, Inc.
 Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION
 CAPITAL PROJECTS ESTIMATES
 PEARL STREET
 WEST STREET EXTENSION
 SUSIE WILSON RD.
 ROADWAY LANE & SIDEWALK IMPROVEMENTS

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Sidewalk and Roadway Improvements from West Street to Susie Wilson Road

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	3,780	lf	\$ 4.17	\$ 15,762.60
2) Excavation of Pavement 4" to 6" Thick	775	sy	\$ 12.69	\$ 9,834.75
3) Remove Existing Bituminous Concrete Sidewalk	900	sy	\$ 7.74	\$ 6,966.00
4) Remove and Reset Existing Granite Curb	1,850	lf	\$ 24.23	\$ 44,825.50
5) New Granite Curb	100	lf	\$ 52.75	\$ 5,275.00
6) Cold Plane Pavement 12" Strip at Joint	275	sy	\$ 31.54	\$ 8,673.50
7) Excavation for New Roadway Subbase	700	cy	\$ 26.16	\$ 18,312.00
8) Dense Graded Crushed Stone	550	cy	\$ 44.80	\$ 24,640.00
9) Plant Mixed Gravel	150	cy	\$ 44.08	\$ 6,612.00
10) Mirafi 500X Geotextile Fabric	825	sy	\$ 2.08	\$ 1,716.00
11) New Cement Concrete Sidewalk - 5" Thick	800	sy	\$ 92.25	\$ 73,800.00
12) New Cement Concrete Sidewalk - 8" Thick (eared section)	500	sy	\$ 151.23	\$ 75,615.00
13) Detectable Warning Surface	10	sy	\$ 387.04	\$ 3,870.40
14) New Bituminous Concrete Pavement - 3" Thick Over Trench	1,575	sy	\$ 69.09	\$ 108,816.75
15) New Bituminous Concrete Pavement - 1-1/4", Type III (HW)	1,850	sy	\$ 23.65	\$ 43,752.50
16) Catch Basin - 4' dia., To 8' Deep	5	each	\$ 5,260.84	\$ 26,304.20
17) Connect Existing Pipe to New Structure	10	each	\$ 1,144.44	\$ 11,444.40
18) Remove and Reset Existing Catch Basin Frame and Grate	5	each	\$ 1,013.08	\$ 5,065.40
19) Concrete Cap for Island	425	sy	\$ 84.58	\$ 35,946.50
20) Supply and Spread Topsoil	200	cy	\$ 49.68	\$ 9,936.00
21) Seed, Fertilize, Lime and Matting	1,600	sy	\$ 3.58	\$ 5,728.00
22) Changeable Message Boards	125	day	\$ 64.51	\$ 8,063.75
23) Remove Existing Sign	15	each	\$ 53.70	\$ 805.50
24) New Sign	90	sf	\$ 29.16	\$ 2,624.40
25) New Sign Post	15	each	\$ 134.65	\$ 2,019.75
26) Raise Existing Hydrant	3	each	\$ 1,069.03	\$ 3,207.09

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Sidewalk and Roadway Improvements from West Street to Susie Wilson Road

ITEM	QUANTITY	UNIT	PRICE	TOTAL
27) Adjust Existing Curb Stop Box to New Finish Grade	13	each	\$ 170.50	\$ 2,216.50
28) Adjust Existing Gate Valve Box to New Finish Grade	10	each	\$ 253.27	\$ 2,532.70
29) 12" Wide Crosswalk Bar - Painted	125	each	\$ 9.32	\$ 1,165.00
30) 4" White Line - Painted	10,260	lf	\$ 1.33	\$ 13,645.80
31) 4" Yellow Line - Painted	9,200	lf	\$ 1.33	\$ 12,236.00
32) Replace Existing Utility Pole (Includes Utility Transfer)	6	each	\$10,428.67	\$ 62,572.02
33) Traffic Control - Type IV	40	day	\$ 1,720.19	\$ 68,807.60
34) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
35) Mobilization	---	---	5%	\$ 36,498.00
Contingency	---	---	20%	\$ 153,291.62

Subtotal	\$	919,749.70
Design Engineering Services	\$	82,777.47
Bidding and Construction Services	\$	91,974.97
Grand Total	\$	1,094,502.14

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

West Street

Cost Reference Date: 8/17/2023

Sidewalk Improvements from South Street to Clems Drive

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 2/18/2009

Primary Project Reason:

Replace narrow and decaying sidewalk

Secondary Project Reason:

Assumptions:

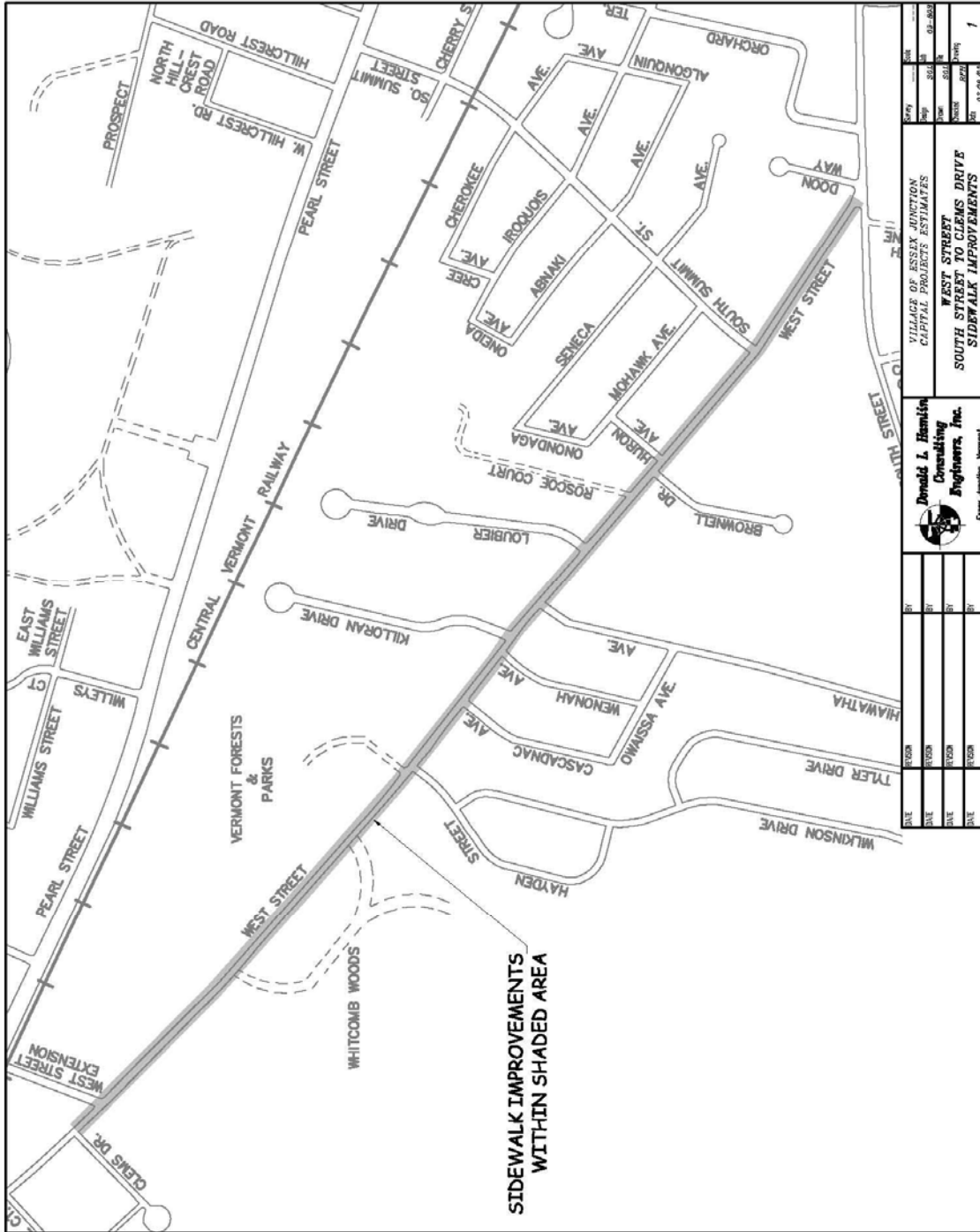
New sidewalk will be 5' wide.

5' wide green belt.

A portion of each residential driveway will be rebuilt to match new sidewalk.

O	Pavement Overlay		
R	Roadway Reconstruction		
W	Waterline Improvements	\$	20,947.72
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements	\$	661,522.90
	Combined Account Costs	\$	682,470.62
	Project Management, Design and Resident Engineering	\$	129,669.42
	Total Project Cost	\$	812,140.04

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



 Donald L. Hamlin Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>		VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES		DATE: _____ BY: _____ TITLE: _____
WEST STREET SOUTH STREET TO CLEMS DRIVE SIDEWALK IMPROVEMENTS		DATE: _____ BY: _____ TITLE: _____		DATE: _____ BY: _____ TITLE: _____
PROJECT NO: _____ SHEET NO: _____ OF _____		DATE: _____ BY: _____ TITLE: _____		DATE: _____ BY: _____ TITLE: _____
PROJECT NO: _____ SHEET NO: _____ OF _____		DATE: _____ BY: _____ TITLE: _____		DATE: _____ BY: _____ TITLE: _____

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

West Street

Cost Reference Date: 8/17/2023

Sidewalk Improvements from South Street to Clems Drive

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 3" Thick	1,000	lf	\$ 2.87	\$ 2,870.00
2) Excavation of Pavement to 3" Thick	2,250	sy	\$ 7.74	\$ 17,415.00
3) Remove Existing Concrete Sidewalk	1,100	sy	\$ 16.49	\$ 18,139.00
4) Remove and Reset Existing Granite Curb	40	lf	\$ 24.23	\$ 969.20
5) New Cement Concrete Sidewalk - 4" Thick	2,160	sy	\$ 84.58	\$ 182,692.80
6) New Cement Concrete Sidewalk - 6" Thick	790	sy	\$ 115.78	\$ 91,466.20
7) Detectable Warning Surface	25	sy	\$ 387.04	\$ 9,676.00
8) New Bituminous Concrete Driveway and Apron	1,100	sy	\$ 60.21	\$ 66,231.00
9) Supply and Spread Topsoil	525	cy	\$ 49.68	\$ 26,082.00
10) Seed, Fertilize, Lime and Matting	4,800	sy	\$ 3.58	\$ 17,184.00
11) Changeable Message Boards	125	day	\$ 64.51	\$ 8,063.75
12) Raise Existing Hydrant	6	each	\$ 1,069.03	\$ 6,414.18
13) Adjust Existing Curb Stop Box to New Finish Grade	43	each	\$ 170.50	\$ 7,331.50
14) Adjust Existing Gate Valve Box to New Finish Grade	10	each	\$ 253.27	\$ 2,532.70
15) Traffic Control - Type IV	45	day	\$ 1,720.19	\$ 77,408.55
16) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
17) Mobilization	---	---	5%	\$ 27,082.17
18) Contingency	---	---	20%	\$ 113,745.10

Subtotal	\$ 682,470.62
Design Engineering Services	\$ 61,422.36
Bidding and Construction Services	\$ 68,247.06
Grand Total	\$ 812,140.04

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

School Street

Cost Reference Date: 8/17/2023

Water & Sanitary Sewer Improvements, Road Reconstruction Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 10/3/2013

Primary Project Reason:

Reconstruct Municipal Sewer and Water due to poor condition and water leaks

Secondary Project Reason:

Rebuild the roadway and sidewalk

Assumptions:

New roadway will have a pavement width of 24' to 26' and curb on both sides.

Insulation will be utilized versus underdrain.

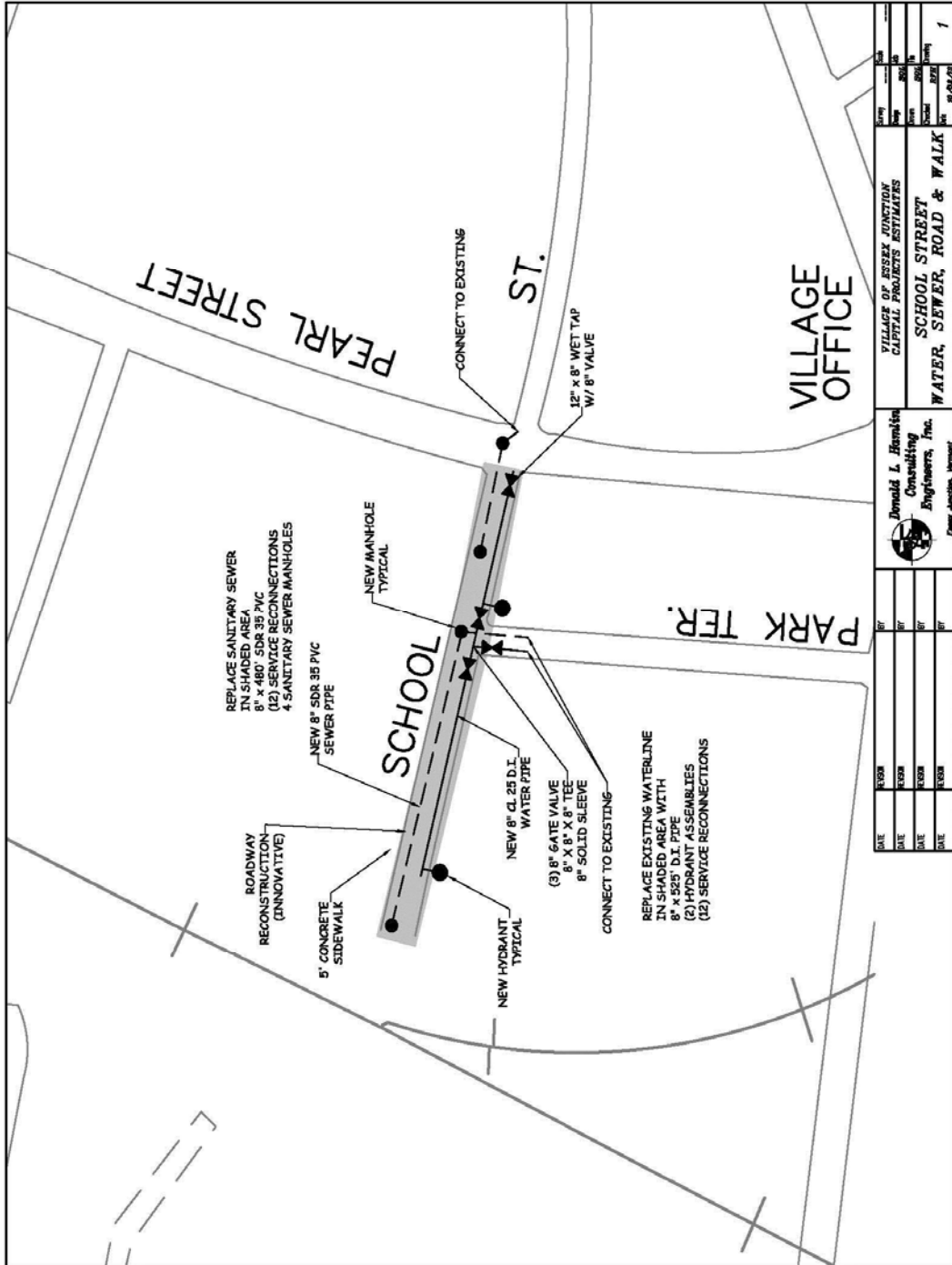
New cement concrete curb and 5' wide cement concrete sidewalk on one side

8" D.I. waterline to be installed and connect to two hydrants

New gravity sewer

O	Pavement Overlay		
R	Roadway Reconstruction	\$	370,775.67
W	Waterline Improvements	\$	240,614.88
S	Sanitary Sewer Improvements	\$	142,358.33
D	Storm Drainage Improvements	\$	2,236.68
P	Sidewalk Improvements	\$	83,475.47
	Combined Total	\$	839,461.03

City of Essex Junction
 Capital Projects
 Construction Cost Estimate



DATE	REVISION	BY	CHK

Donald L. Hamelin
 Consulting
 Engineers, Inc.
 Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION
 CAPITAL PROJECTS - ESTIMATES

SCHOOL STREET
 WATER, SEWER, ROAD & WALK

DATE	9/23/21
BY	
CHK	
SCALE	
SHEET	1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

School Street

Cost Reference Date: 8/17/2023

Water & Sanitary Sewer Improvements, Road Reconstruction

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement	300	lf	\$ 4.17	\$ 1,251.00
2) Excavation of Pavement	2,375	sy	\$ 7.74	\$ 18,382.50
3) Excavation for New Roadway Subbase	1,575	cy	\$ 26.16	\$ 41,202.00
4) 18" Dense Graded Crushed Stone	925	cy	\$ 44.80	\$ 41,440.00
5) 6" Plant Mixed Gravel	315	cy	\$ 44.08	\$ 13,885.20
6) Sand Borrow	160	cy	\$ 32.97	\$ 5,275.20
7) New 2" Thick Extruded Polystyrene Insulation	32,600	sf	\$ 2.04	\$ 66,504.00
8) Bituminous Concrete Pavement - 1-3/4", Type II	1,700	sy	\$ 13.62	\$ 23,154.00
9) Bituminous Concrete Pavement - 1-1/4", Type III	1,700	sy	\$ 10.03	\$ 17,051.00
10) New Bituminous Concrete Driveway and Apron	250	sy	\$ 60.21	\$ 15,052.50
11) Remove Existing Concrete Curb	1,125	lf	\$ 6.95	\$ 7,818.75
12) New Cement Concrete Curb	1,125	lf	\$ 35.12	\$ 39,510.00
13) Remove Existing Concrete Sidewalk	25	sy	\$ 16.49	\$ 412.25
14) New Cement Concrete Sidewalk - 4" Thick	250	sy	\$ 84.58	\$ 21,145.00
15) New Cement Concrete Sidewalk - 6" Thick	90	sy	\$ 115.78	\$ 10,420.20
16) Detectable Warning Surface	2	sy	\$ 387.04	\$ 774.08
17) Sanitary Sewer Manhole - 4' Dia., 8' to 12' Deep	4	each	\$ 7,979.60	\$ 31,918.40
18) 8" SDR 35 PVC Sewer Pipe - 8' to 12' Deep	480	lf	\$ 86.01	\$ 41,284.80
19) 4" SDR 35 PVC Sewer Pipe - 8' to 12' Deep	420	lf	\$ 50.00	\$ 21,000.00
20) Remove Existing Structure - 8' to 12' Deep	2	each	\$ 1,353.22	\$ 2,706.44
21) Wet Tap (12x8)	1	each	\$ 8,557.96	\$ 8,557.96
22) Connect New Waterline to Existing Waterline	1	each	\$ 2,508.61	\$ 2,508.61
23) 8" Ductile Iron Pipe, CI 52	525	1	\$ 120.24	\$ 63,126.00
24) 8" Gate Valve with Valve Box	3	each	\$ 3,049.04	\$ 9,147.12
25) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	2	each	\$ 8,020.40	\$ 16,040.80
26) 3/4" Copper Waterline	490	lf	\$ 55.32	\$ 27,106.80
27) 3/4" Corporation Stop	12	each	\$ 792.72	\$ 9,512.64
28) 3/4" Curb Stop	12	each	\$ 357.66	\$ 4,291.92

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

School Street

Cost Reference Date: 8/17/2023

Water & Sanitary Sewer Improvements, Road Reconstruction

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
29) Remove existing Hydrant	2	each	\$ 750.00	\$ 1,500.00
30) Cut, Cap and Aboned Existing Waterline	3	each	\$ 3,400.00	\$ 10,200.00
31) Remove and Reset Existing Catch Basin Frame and Grate	2	each	\$ 1,013.08	\$ 2,026.16
32) Remove and Reset Existing Sign	10	each	\$ 150.52	\$ 1,505.20
33) 24" Wide Stop Bar - Painted	13	lf	\$ 9.72	\$ 126.36
34) 12" Wide Crosswalk Bar - Painted	56	lf	\$ 9.32	\$ 521.92
35) Supply & Spread Topsoil	225	cy	\$ 49.68	\$ 11,178.00
36) Seed, Fertilize and Matting	1,925	sy	\$ 3.58	\$ 6,891.50
37) Traffic Control - Type II	60	day	\$ 860.10	\$ 51,606.00
38) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
39) Mobilization	---	---	5%	\$ 32,516.74
Contingency	---	---	20%	\$ 136,570.31

Add if new sewerline is installed across Pearl Street \$ 20,000.00

Subtotal \$ 839,421.84
Design Engineering Services \$ 75,547.97
Bidding and Construction Services \$ 83,942.18
Grand Total \$ 998,911.98

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Maple Street

Cost Reference Date: 8/17/2023

Replace Existing Drainage Pipe that Crosses Maple Street

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 11/1/2013

Primary Project Reason:

Replace existing drainage pipe due to being undersized and in poor condition

Secondary Project Reason:

Assumptions:

Existing roadway is 34' wide.

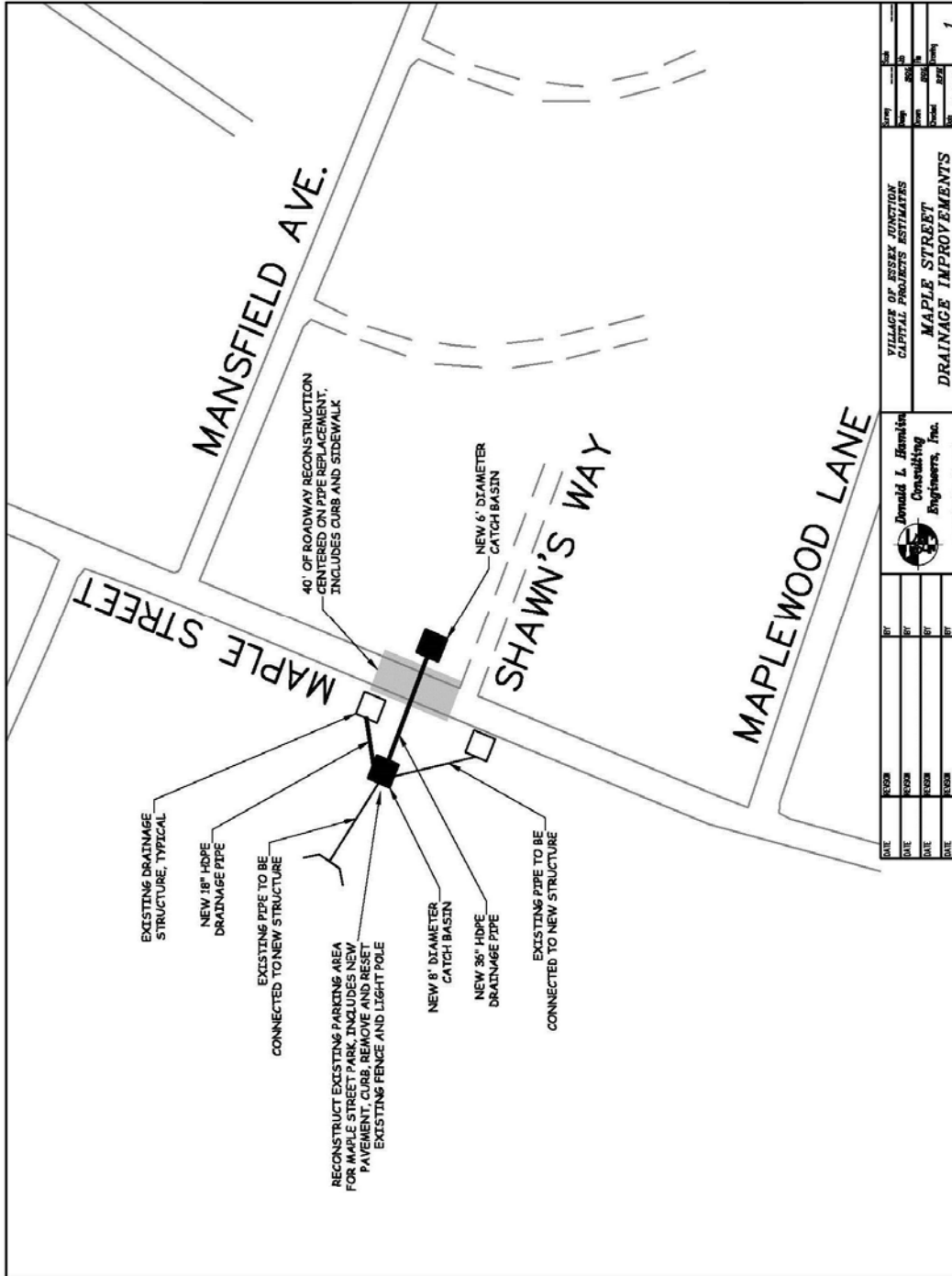
Replace existing GMP culvert with new HDPE pipe.

Replace cement concrete curb and 5' wide cement concrete sidewalk on both sides

Maple Street will be closed to traffic during a period of the construction

O	Pavement Overlay		
R	Roadway Reconstruction		
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	146,113.81
P	Sidewalk Improvements		
	Combined Total	\$	146,113.81

City of Essex Junction
Capital Projects
Construction Cost Estimate



DATE	DESCRIPTION	BY	DATE	DESCRIPTION	BY

 Donald L. Hamilton Consulting Engineers, Inc. One Jackson Street Essex Junction, Vermont		VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES MAPLE STREET DRAINAGE IMPROVEMENTS
DATE	BY	1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Maple Street

Cost Reference Date: 8/17/2023

Replace Existing Drainage Pipe that Crosses Maple Street

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Sawcut Existing Pavement	145	lf	\$ 4.73	\$ 685.85
2) Remove existing Pavement	280	sy	\$ 8.85	\$ 2,478.00
3) Sawcut Existing Concrete	30	lf	\$ 4.16	\$ 124.80
4) Remove Existing Concrete	50	sy	\$ 11.50	\$ 575.00
5) Remove Existing Concrete Curb	160	lf	\$ 4.85	\$ 776.00
6) Remove and Reset Existing Fence	100	lf	\$ 25.00	\$ 2,500.00
7) Clearing and Grubbing (Includes Tree & Stump Removal)	1	ls	\$ 1,500.00	\$ 1,500.00
8) Remove and Reset Existing Box Light with Concrete Base	1	each	\$ 759.79	\$ 759.79
9) Remove and Reset Existing Sign	2	each	\$ 105.00	\$ 210.00
10) New Cement Concrete Curb	160	lf	\$ 24.50	\$ 3,920.00
11) New Cement Concrete Sidewalk	45	sy	\$ 64.35	\$ 2,895.75
12) Plant Mixed Gravel	175	cy	\$ 30.75	\$ 5,381.25
13) Bituminous Concrete Pavement	100	ton	\$ 150.00	\$ 15,000.00
14) Cold Plane Pavement 12" Strip at Joint	20	sy	\$ 22.00	\$ 440.00
15) Remove Existing Pipe	170	lf	\$ 21.13	\$ 3,592.10
16) Remove Existing Structure	2	each	\$ 944.00	\$ 1,888.00
17) Connect Existing Pipe to New Structure	2	each	\$ 798.36	\$ 1,596.72
18) Connect New Pipe to Existing Structure	1	each	\$ 798.36	\$ 798.36
19) 18" HDPE Drainage Pipe	58	lf	\$ 73.13	\$ 4,241.54
20) 36" HDPE Drainage Pipe	116	lf	\$ 217.83	\$ 25,268.28
21) 8' Diameter Catch Basin	1	each	\$ 10,162.00	\$ 10,162.00
22) 6' Diameter Catch Basin	1	each	\$ 5,165.00	\$ 5,165.00
23) (2) Changeable Message Boards	14	day	\$ 450.00	\$ 6,300.00
24) Traffic Control	10	day	\$ 1,200.00	\$ 12,000.00
25) Flaggers	200	hr	\$ 30.00	\$ 6,000.00
26) 4" Yellow Line	80	lf	\$ 1.00	\$ 80.00
27) 4" White Line	80	lf	\$ 1.00	\$ 80.00

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Maple Street

Cost Reference Date: 8/17/2023

Replace Existing Drainage Pipe that Crosses Maple Street

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
28) Supply and Spread Topsoil	15	cy	\$ 34.66	\$ 519.90
29) Seed, Fertilize, Lime and Matting	150	sy	\$ 2.50	\$ 375.00
30) Hold Existing Utility Pole	1	each	\$ 650.00	\$ 650.00
31) Mobilization	---	---	5%	\$ 5,798.17
Contingency	---	---	20%	\$ 24,352.30

Subtotal	\$	146,113.81
Design Engineering Services	\$	14,611.38
Bidding and Construction Services	\$	14,611.38
Grand Total	\$	175,336.57

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb, Bridge to Crestview Road

Original Capital Plan Date: 12/13/2013

Primary Project Reason:

Reduce sediment load to Indian Brook which is impaired due
stormwater run-off, land development and erosion.
Prevent ditch erosion and continued maintenance

Secondary Project Reason:

Assumptions:

Two way traffic maintained
A portion of each residential driveway will be rebuilt to match new roadway.
Existing open ditch will be replaced by stormwater piping.
Construction in 2015

Public Works Accounts:

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	459,095.28
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	459,095.28
	Project Management, Design and Resident Engineering	\$	91,819.06
	Total Project Cost	\$	550,914.33

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb, Bridge to Crestview Road

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement	1,100	lf	\$ 4.17	\$ 4,587.00
2) Excavation of Pavement	525	sy	\$ 12.69	\$ 6,662.25
3) Remove Existing Structure	3	each	\$ 902.14	\$ 2,706.42
4) Remove Existing Pipe	420	lf	\$ 20.20	\$ 8,484.00
5) Silt Fence	100	lf	\$ 3.80	\$ 380.00
6) Test Excavation	10	each	\$ 693.01	\$ 6,930.10
7) Catch Basin - 4' Dia.	6	each	\$ 5,260.84	\$ 31,565.04
8) 24" HDPE Drainage Pipe	825	lf	\$ 137.53	\$ 113,462.25
9) Rip Rap for Outfall Pad	10	cy	\$ 136.18	\$ 1,361.80
10) Sand Borrow	275	cy	\$ 32.97	\$ 9,066.75
11) Dense Graded Crushed Stone	560	cy	\$ 44.80	\$ 25,088.00
12) Plant Mixed Gravel	145	cy	\$ 44.08	\$ 6,391.60
13) New Cement Concrete Curb	775	lf	\$ 35.12	\$ 27,218.00
14) New Bituminous Concrete Pavement - 3", Type II	625	sy	\$ 30.19	\$ 18,868.75
15) New Bituminous Concrete Pavement - 1-1/2", Type III	860	sy	\$ 13.62	\$ 11,713.20
16) Cold Plane Pavement	240	sy	\$ 31.54	\$ 7,569.60
17) New Bituminous Concrete Driveway and Apron	120	sy	\$ 60.21	\$ 7,225.20
18) 4" White Line - Painted	775	lf	\$ 1.33	\$ 1,030.75
19) Supply and Spread Topsoil	150	cy	\$ 49.68	\$ 7,452.00
20) Seed, Fertilize, Lime and Matting	1,375	sy	\$ 3.58	\$ 4,922.50
21) Traffic Control	30	day	\$ 1,720.19	\$ 51,605.70
22) Message Boards	45	day	\$ 64.51	\$ 2,902.95
23) Dust Control	1	ls	\$ 7,167.47	\$ 7,167.47
24) Mobilization	---	---	5%	\$ 18,218.07
25) Contingency	---	---	20%	\$ 76,515.88

Subtotal	\$ 459,095.28
Design Engineering Services	\$ 45,909.53
Bidding and Construction Services	\$ 45,909.53
Grand Total	\$ 550,914.33

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Install New Sidewalk and Lighting from Bridge to Crestview Road on the West Side

Original Capital Plan Date: 4/21/2014

Primary Project Reason:

Install new 5' wide cement concrete sidewalk along west side of a
Class I Highway and install new lighting to improve pedestrian safety.

Secondary Project Reason:

Assumptions:

Two way traffic maintained
A portion of each residential driveway will be rebuilt to match new sidewalk.
New Lights to be installed along new sidewalk.
Project to enclose current open drainage has been completed,
Construction in 2015

Public Works Accounts:

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	262,230.56
	Combined Account Costs	\$	262,230.56
	Project Management, Design and Resident Engineering	\$	52,446.11
	Total Project Cost	\$	314,676.67

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Install New Sidewalk and Lighting from Bridge to Crestview Road on the West Side

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement	120	lf	\$ 4.17	\$ 500.40
2) Excavation of Pavement	200	sy	\$ 12.69	\$ 2,538.00
3) New Cement Concrete Sidewalk - 4" Thick	360	sy	\$ 84.58	\$ 30,448.80
4) New Cement Concrete Sidewalk - 6" Thick	65	sy	\$ 115.78	\$ 7,525.70
5) New Bituminous Concrete Driveway and Apron	135	sy	\$ 60.21	\$ 8,128.35
6) Detectable Warning Surface	2	sy	\$ 387.04	\$ 774.08
7) New Gas Lamp Style Light (Base, Pole and Fixture)	11	each	\$ 8,423.21	\$ 92,655.31
8) New Wired Conduit for Lighting	750	lf	\$ 24.73	\$ 18,547.50
9) Lighting Pedestal Meter Socket/Load Center (Includes Timer)	1	each	\$ 10,751.20	\$ 10,751.20
10) Supply and Spread Topsoil	100	cy	\$ 49.68	\$ 4,968.00
11) Seed, Fertilize, Lime and Matting	1,050	sy	\$ 3.58	\$ 3,759.00
12) Traffic Control	20	day	\$ 1,146.79	\$ 22,935.80
13) Message Boards	30	day	\$ 129.02	\$ 3,870.60
14) Dust Control	1	ls	\$ 716.75	\$ 716.75
15) Mobilization	---	---	5%	\$ 10,405.97
16) Contingency	---	---	20%	\$ 43,705.09

Subtotal \$ 262,230.56
 * - Design Engineering Services \$ 26,223.06
 Bidding and Construction Services \$ 26,223.06
 Grand Total \$ 314,676.67

* - Double this amount if project is run through the LTF Program.

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb, Crestview Road to Top of Hill

Original Capital Plan Date: 12/13/2013

Primary Project Reason:

Reduce sediment load to Indian Brook which is impaired due
stormwater run-off, land development and erosion.
Prevent ditch erosion and continued maintenance

Secondary Project Reason:

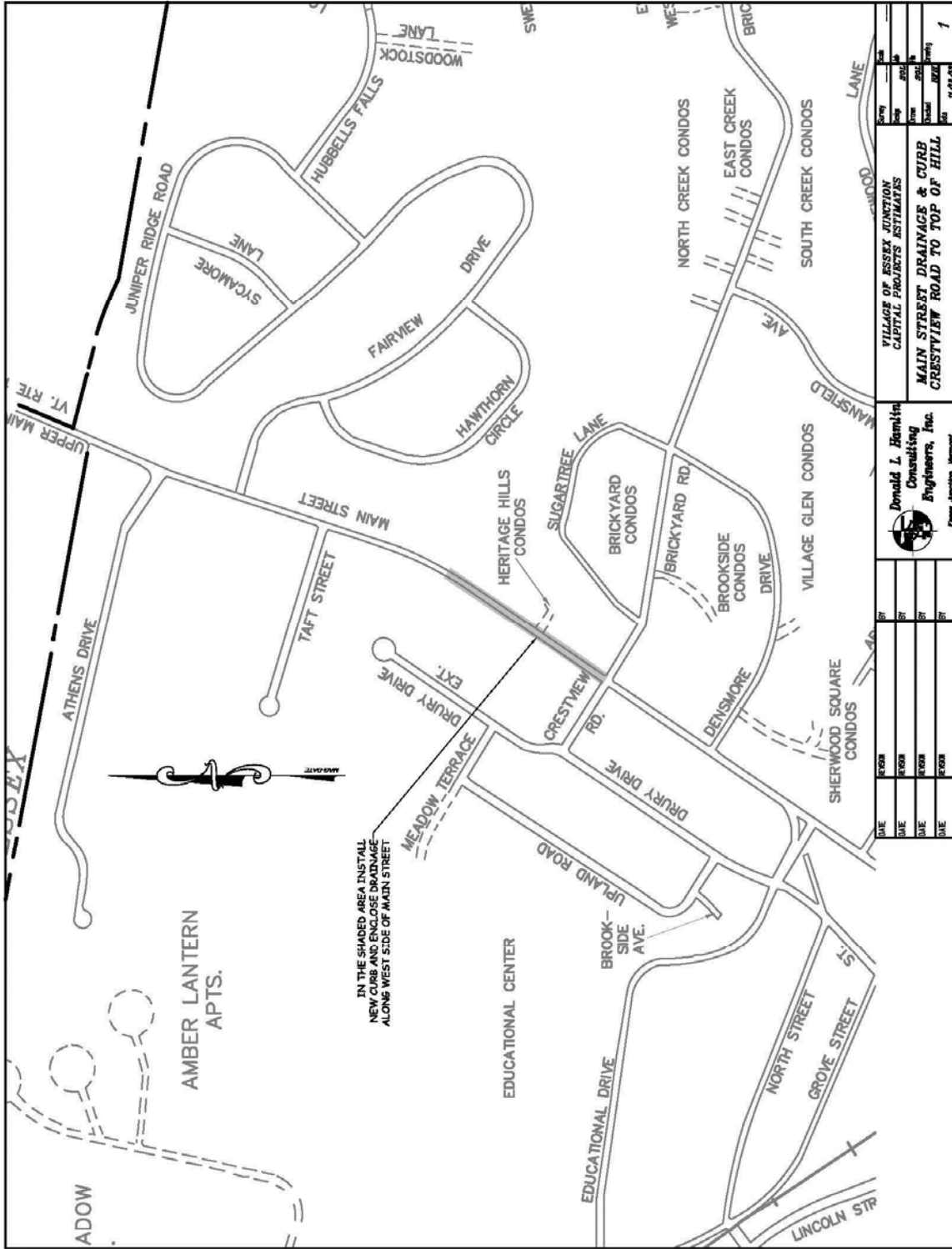
Assumptions:

Two way traffic maintained
A portion of each residential driveway will be rebuilt to match new roadway.
Existing open ditch will be replaced by stormwater piping.
Construction in 2015

Public Works Accounts:

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	450,766.25
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	450,766.25
	Project Management, Design and Resident Engineering	\$	90,153.25
	Total Project Cost	\$	540,919.50

City of Essex Junction
Capital Projects
Construction Cost Estimate



DATE	PERSON	BY	BY

Donald L. Remlin
Consulting
Engineers, Inc.

Essex Junction, Vermont

VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES

MAIN STREET DRAINAGE & CURB
CRESTVIEW ROAD TO TOP OF HILL

Scale	1" = 100'
North Arrow	
Sheet No.	1
Date	11/21/20

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb, Crestview Road to Top of Hill

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement	1,200	lf	\$ 4.17	\$ 5,004.00
2) Excavation of Pavement	575	sy	\$ 12.69	\$ 7,296.75
3) Connect to Existing Structure	1	each	\$ 1,144.44	\$ 1,144.44
4) Remove Existing Pipe	240	lf	\$ 20.20	\$ 4,848.00
5) Silt Fence	20	lf	\$ 3.80	\$ 76.00
6) Test Excavation	8	each	\$ 693.01	\$ 5,544.08
7) Catch Basin - 4' Dia.	5	each	\$ 5,260.84	\$ 26,304.20
8) 24" HDPE Drainage Pipe	360	lf	\$ 137.53	\$ 49,510.80
9) 18" HDPE Drainage Pipe	500	lf	\$ 104.83	\$ 52,415.00
10) Sand Borrow	250	cy	\$ 32.97	\$ 8,242.50
11) Dense Graded Crushed Stone	500	cy	\$ 44.80	\$ 22,400.00
12) Plant Mixed Gravel	125	cy	\$ 44.08	\$ 5,510.00
13) New Cement Concrete Curb	1,075	lf	\$ 35.12	\$ 37,754.00
14) New Bituminous Concrete Pavement - 3", Type II	725	sy	\$ 30.19	\$ 21,887.75
15) New Bituminous Concrete Pavement - 1-1/2", Type III	975	sy	\$ 13.62	\$ 13,279.50
16) Cold Plane Pavement	300	sy	\$ 31.54	\$ 9,462.00
17) New Bituminous Concrete Driveway and Apron	160	sy	\$ 60.21	\$ 9,633.60
18) 4" White Line - Painted	1,075	lf	\$ 1.33	\$ 1,429.75
19) Supply and Spread Topsoil	175	cy	\$ 49.68	\$ 8,694.00
20) Seed, Fertilize, Lime and Matting	1,575	sy	\$ 3.58	\$ 5,638.50
21) Traffic Control	30	day	\$ 1,720.19	\$ 51,605.70
22) Message Boards	45	day	\$ 64.51	\$ 2,902.95
23) Dust Control	1	ls	\$ 7,167.47	\$ 7,167.47
24) Mobilization	---	---	5%	\$ 17,887.55
25) Contingency	---	---	20%	\$ 75,127.71

Subtotal	\$ 450,766.25
Design Engineering Services	\$ 45,076.62
Bidding and Construction Services	\$ 45,076.62
Grand Total	\$ 540,919.50

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb, Bridge to Top of Hill on West Side

Original Capital Plan Date: 1/7/2014

Primary Project Reason:

- Reduce sediment load to Indian Brook which is impaired due to stormwater run-off, land development and erosion.
- Prevent ditch erosion, driveway damage and continued maintenance

Secondary Project Reason:

Assumptions:

- Two way traffic maintained
- A portion of each residential driveway on western side will be rebuilt to match new roadway
- Existing open ditch will be replaced by stormwater piping and grated inlets
- Construction in 2015

Public Works Accounts:

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	900,525.21
P	Sidewalk Improvements	\$	-
	 Combined Account Costs	 \$	 900,525.21
	Project Management, Design and Resident Engineering	\$	180,105.04
	Total Project Cost	\$	1,080,630.26

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

Enclose Drainage, New Curb, Bridge to Top of Hill on West Side

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement	2,300	lf	\$ 4.17	\$ 9,591.00
2) Excavation of Pavement	1,100	sy	\$ 12.69	\$ 13,959.00
3) Remove Existing Structure	4	each	\$ 902.14	\$ 3,608.56
4) Remove Existing Pipe	660	lf	\$ 20.20	\$ 13,332.00
5) Silt Fence	120	lf	\$ 3.80	\$ 456.00
6) Test Excavation	18	each	\$ 693.01	\$ 12,474.18
7) Catch Basin - 4' Dia.	11	each	\$ 5,260.84	\$ 57,869.24
8) 24" HDPE Drainage Pipe	1,185	lf	\$ 137.53	\$ 162,973.05
9) 18" HDPE Drainage Pipe	500	lf	\$ 104.83	\$ 52,415.00
10) Rip Rap for Outfall Pad	10	cy	\$ 136.18	\$ 1,361.80
11) Sand Borrow	525	cy	\$ 32.97	\$ 17,309.25
12) Dense Graded Crushed Stone	1,060	cy	\$ 44.80	\$ 47,488.00
13) Plant Mixed Gravel	270	cy	\$ 44.08	\$ 11,901.60
14) New Cement Concrete Curb	1,850	lf	\$ 35.12	\$ 64,972.00
15) New Bituminous Concrete Pavement - 3", Type II	1,350	sy	\$ 30.19	\$ 40,756.50
16) New Bituminous Concrete Pavement - 1-1/2", Type III	1,835	sy	\$ 13.62	\$ 24,992.70
17) Cold Plane Pavement	540	sy	\$ 31.54	\$ 17,031.60
18) New Bituminous Concrete Driveway and Apron	280	sy	\$ 60.21	\$ 16,858.80
19) 4" White Line - Painted	1,850	lf	\$ 1.33	\$ 2,460.50
20) Supply and Spread Topsoil	325	cy	\$ 49.68	\$ 16,146.00
21) Seed, Fertilize, Lime and Matting	2,950	sy	\$ 3.58	\$ 10,561.00
22) Traffic Control	60	day	\$ 1,720.19	\$ 103,211.40
23) Message Boards	90	day	\$ 64.51	\$ 5,805.90
24) Dust Control	1	ls	\$ 7,167.47	\$ 7,167.47
25) Mobilization	---	---	5%	\$ 35,735.13
26) Contingency	---	---	20%	\$ 150,087.54

Subtotal \$ 900,525.21
Design Engineering Services \$ 90,052.52
Bidding and Construction Services \$ 90,052.52
Grand Total \$ 1,080,630.26

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

West Street

Cost Reference Date: 8/17/2023

West St. & West St. Ext. Intersection Improvements

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 6/14/2014

Primary Project Reason:

- Improve the vehicular and pedestrian safety of the intersection.
- Improve traffic flow through the intersection.

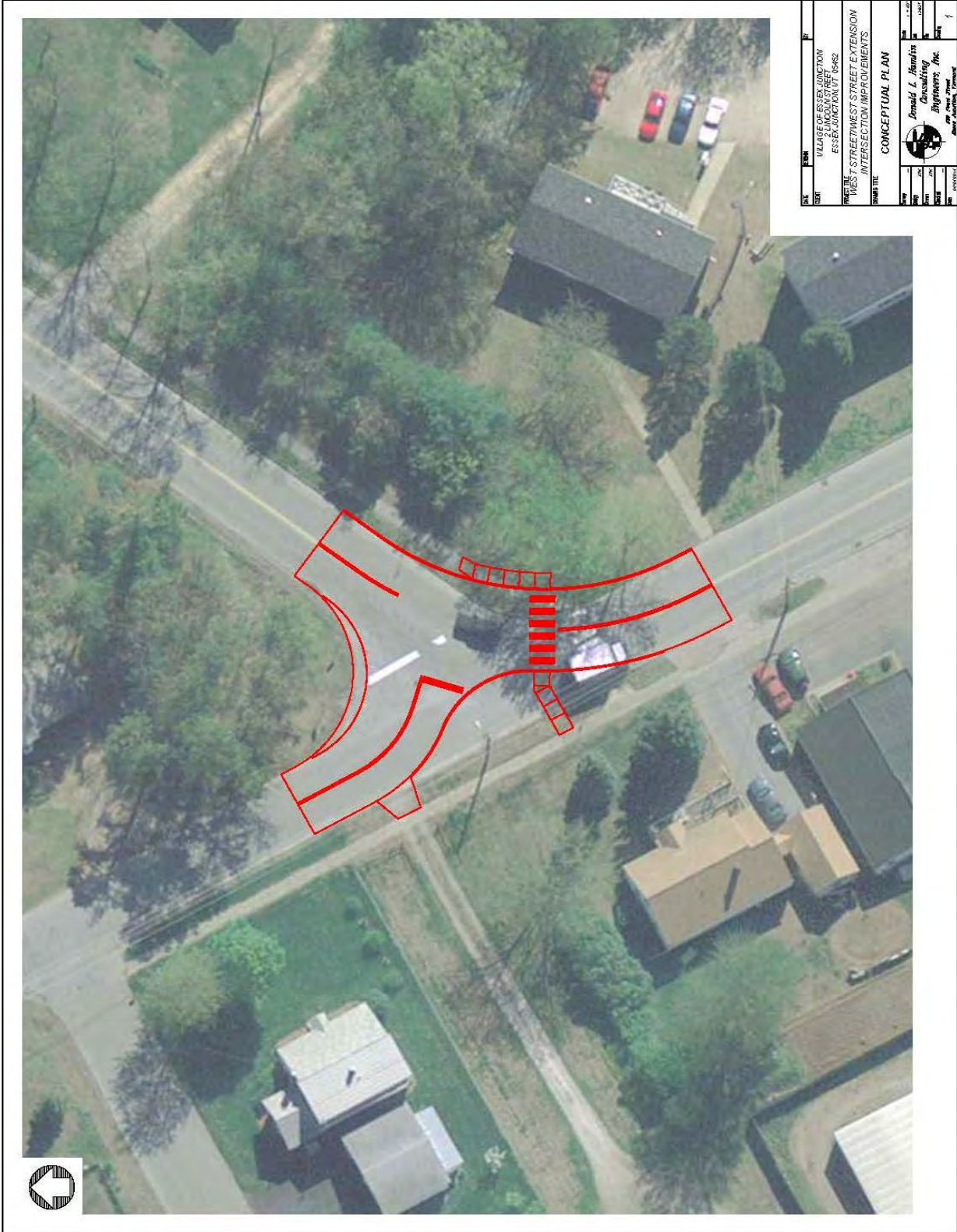
Secondary Project Reason:

Assumptions:

- Entire intersection will receive an overlay and striping.
- Granite curb to be replaced with concrete curb.
- Existing signs will be utilized.
- Drainage improvements to accommodate new configuration.

O	Pavement Overlay	\$	10,048.15
R	Roadway Reconstruction	\$	54,788.79
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	19,777.29
P	Sidewalk Improvements	\$	4,916.16
	Combined Account Costs	\$	89,530.38
	Project Management, Design and Resident Engineering	\$	17,906.08
	Total Project Cost	\$	107,436.46

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	10/20/11	PROJECT	VILLAGE OF ESSEX JUNCTION 2 LINCOLN STREET ESSEX JUNCTION VT 05452
DRAWN BY	AM	PROJECT TITLE	WEST STREET/WEST STREET EXTENSION INTERSECTION IMPROVEMENTS
CONCEPTUAL PLAN			
SCALE	AS SHOWN		Arnold L. Hamlin Consulting Engineers, Inc. 1000 WASHINGTON STREET SUITE 100 SOUTH BEND, IN 46708
DATE	10/20/11		



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

West Street

Cost Reference Date: 8/17/2023

West St. & West St. Ext. Intersection Improvements

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	225	lf	\$ 4.17	\$ 938.25
2) Excavation of Pavement 4" to 6" Thick	175	sy	\$ 12.69	\$ 2,220.75
3) Remove Existing Granite Curb	220	lf	\$ 7.05	\$ 1,551.00
4) Saw Cut Existing Cement Concrete 4" Thick	20	lf	\$ 5.19	\$ 103.80
5) Remove Existing Concrete Sidewalk	35	sy	\$ 16.49	\$ 577.15
6) Excavation for New Roadway Subbase	45	cy	\$ 26.16	\$ 1,177.20
7) Dense Graded Crushed Stone - 18"	35	cy	\$ 44.80	\$ 1,568.00
8) Plant Mixed Gravel - 6"	10	cy	\$ 44.08	\$ 440.80
9) New Bituminous Concrete Pavement - 3" Thick Over Trench	120	sy	\$ 69.09	\$ 8,290.80
10) New Bituminous Concrete Pavement - 1-1/2", Type III	585	sy	\$ 10.39	\$ 6,078.15
11) New Bituminous Concrete Driveway and Apron	10	sy	\$ 60.21	\$ 602.10
12) Remove Existing Structure - To 8' Deep	1	each	\$ 902.14	\$ 902.14
13) Remove Existing Pipe - To 8' Deep	20	lf	\$ 20.20	\$ 404.00
14) Connect New Structure to Existing Pipe	1	each	\$ 1,144.44	\$ 1,144.44
15) Catch Basin - 4' dia., To 8' Deep	2	each	\$ 5,260.84	\$ 10,521.68
16) 15" HDPE Drainage Pipe - To 8' Deep	30	lf	\$ 72.88	\$ 2,186.40
17) New Cement Concrete Sidewalk - 4" Thick	30	sy	\$ 84.58	\$ 2,537.40
18) New Cement Concrete Curb	325	lf	\$ 35.12	\$ 11,414.00
19) Detectable Warning Surface	2	sy	\$ 387.04	\$ 774.08
20) Remove and Reset Existing Sign	5	each	\$ 150.52	\$ 752.60
21) 24" Wide Stop Bar - Painted	13	lf	\$ 9.72	\$ 126.36
22) 12" Wide Crosswalk Bar - Painted	48	lf	\$ 9.32	\$ 447.36
23) 4" White Line - Painted	70	lf	\$ 1.33	\$ 93.10
24) 4" Yellow Line - Painted	400	lf	\$ 1.33	\$ 532.00
25) Supply and Spread Topsoil	40	cy	\$ 49.68	\$ 1,987.20
26) Seed, Fertilize, Lime and Matting	340	sy	\$ 3.58	\$ 1,217.20

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

West Street

Cost Reference Date: 8/17/2023

West St. & West St. Ext. Intersection Improvements

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
27) Traffic Control - Type III	10	day	\$ 1,146.79	\$ 11,467.90
28) Dust Control - Type III	1	ls	\$ 1,000.00	\$ 1,000.00
29) Mobilization	---	---	5%	\$ 3,552.79
Contingency	---	---	20%	\$ 14,921.73

Subtotal	\$	89,530.38
Design Engineering Services	\$	8,953.04
Bidding and Construction Services	\$	8,953.04
Grand Total	\$	107,436.46

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Maple Street

Replace 300' of Waterline near Maple Street Park

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 2/20/2015

Primary Project Reason:

Significant waterline leak near Shawn's Way is health and safety issue.

Secondary Project Reason:

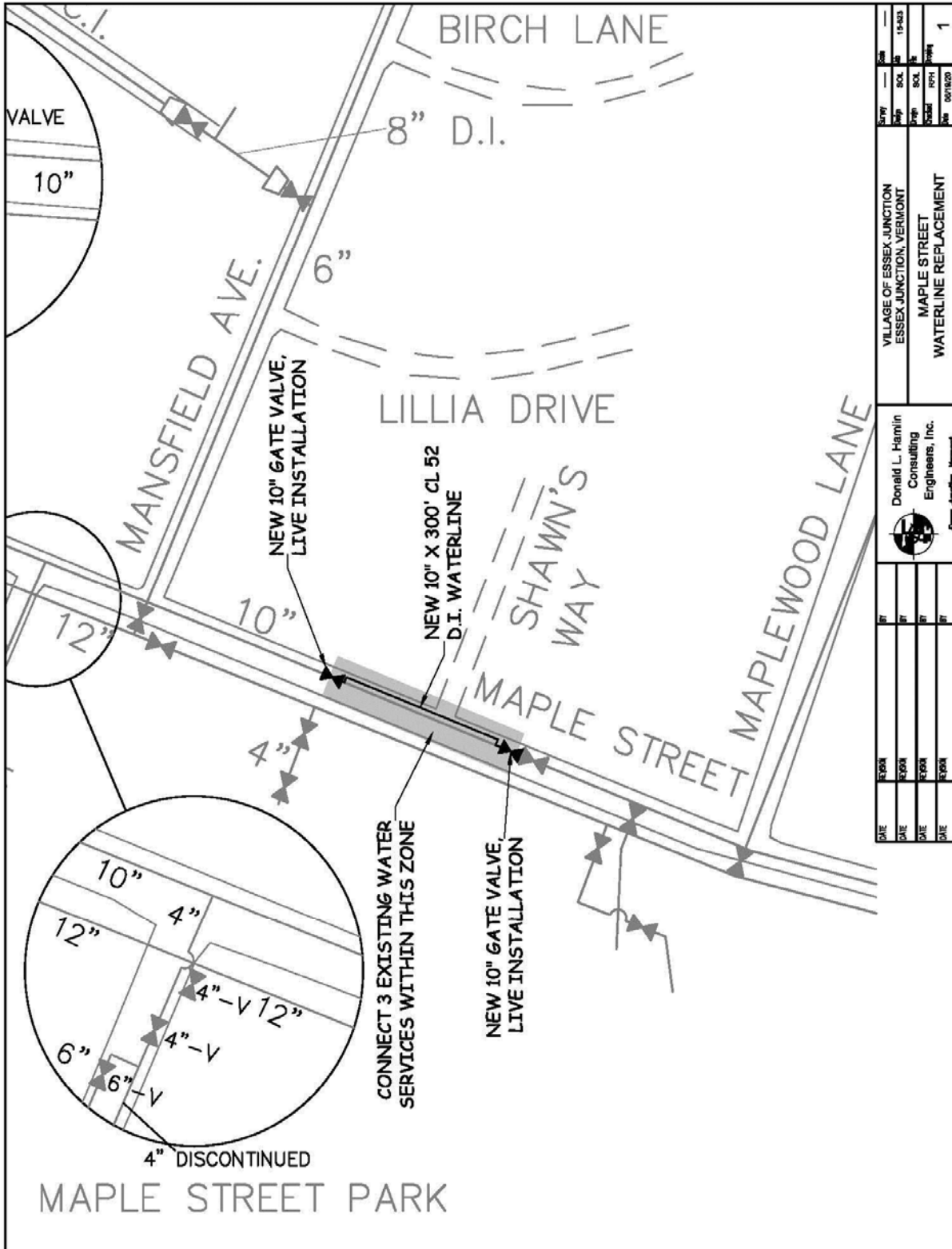
None

Assumptions:

- Work must commence as soon as possible.
- Replacement of 300' of waterline replacement is required.
- Winter work conditions exist and pavement repair will be temporary.
- Closure of Maple Street maybe required.
- No design or bid documents will be prepared.

O	Pavement Overlay		
R	Roadway Reconstruction		
W	Waterline Improvements	\$	153,079.31
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements		
	Combined Account Costs	\$	153,079.31
	Project Management, Design and Resident Engineering	\$	22,961.90
	Total Project Cost	\$	176,041.21

City of Essex Junction
Capital Projects
Construction Cost Estimate



DATE	REVISION	BY	DATE	REVISION	BY	DATE	REVISION	BY
VILLAGE OF ESSEX JUNCTION ESSEX JUNCTION, VERMONT			DATE			12-2023		
MAPLE STREET WATERLINE REPLACEMENT			SCALE			AS SHOWN		
Donald L. Hermin Consulting Engineers, Inc.			DATE			06/16/2023		
1			DATE			06/16/2023		

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Maple Street
Replace 300' of Waterline near Maple Street Park

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	760	lf	\$ 5.48	\$ 4,164.80
2) Excavation of Pavement 4" to 6" Thick	325	sy	\$ 12.69	\$ 4,124.25
3) 10" Gate Valve, Live Installation	2	each	\$12,506.25	\$ 25,012.50
4) 10" Solid Sleeve	1	each	\$ 2,508.61	\$ 2,508.61
5) 10" CL 52 Ductile Iron Waterline	300	lf	\$ 120.24	\$ 36,072.00
6) 3/4" Copper Waterline	75	lf	\$ 55.32	\$ 4,149.00
7) 3/4" Corporation Stop	4	each	\$ 792.72	\$ 3,170.88
8) 3/4" Curb Stop	3	each	\$ 357.66	\$ 1,072.98
9) 1-1/2" Corporation Stop with Saddle	1	each	\$ 880.75	\$ 880.75
10) Testing & Chlorination, Includes all Equipment & Materials	1	ls	\$ 2,265.50	\$ 2,265.50
11) Dense Graded Crushed Stone	260	cy	\$ 44.80	\$ 11,648.00
12) 8" Recycled Asphalt	325	sy	\$ 38.00	\$ 12,350.00
13) Test Excavation	4	each	\$ 3,105.00	\$ 12,420.00
14) Traffic Control - Type IV	10	day	\$ 1,720.19	\$ 17,201.90
15) Changeable Message Boards	28	day	\$ 64.51	\$ 1,806.28
16) Mobilization	---	---	5%	\$ 6,942.37
17) Contingency	---	---	5%	\$ 7,289.49

Subtotal	\$	153,079.31
Design Engineering Services	\$	-
Construction Services	\$	22,961.90
Grand Total	\$	176,041.21

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Hillcrest Road

Cost Reference Date: 8/17/2023

Sidewalk Improvements from Pearl Street to Fleming School

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 4/6/2015

Primary Project Reason:

Requested by residents along the street

Secondary Project Reason:

Assumptions:

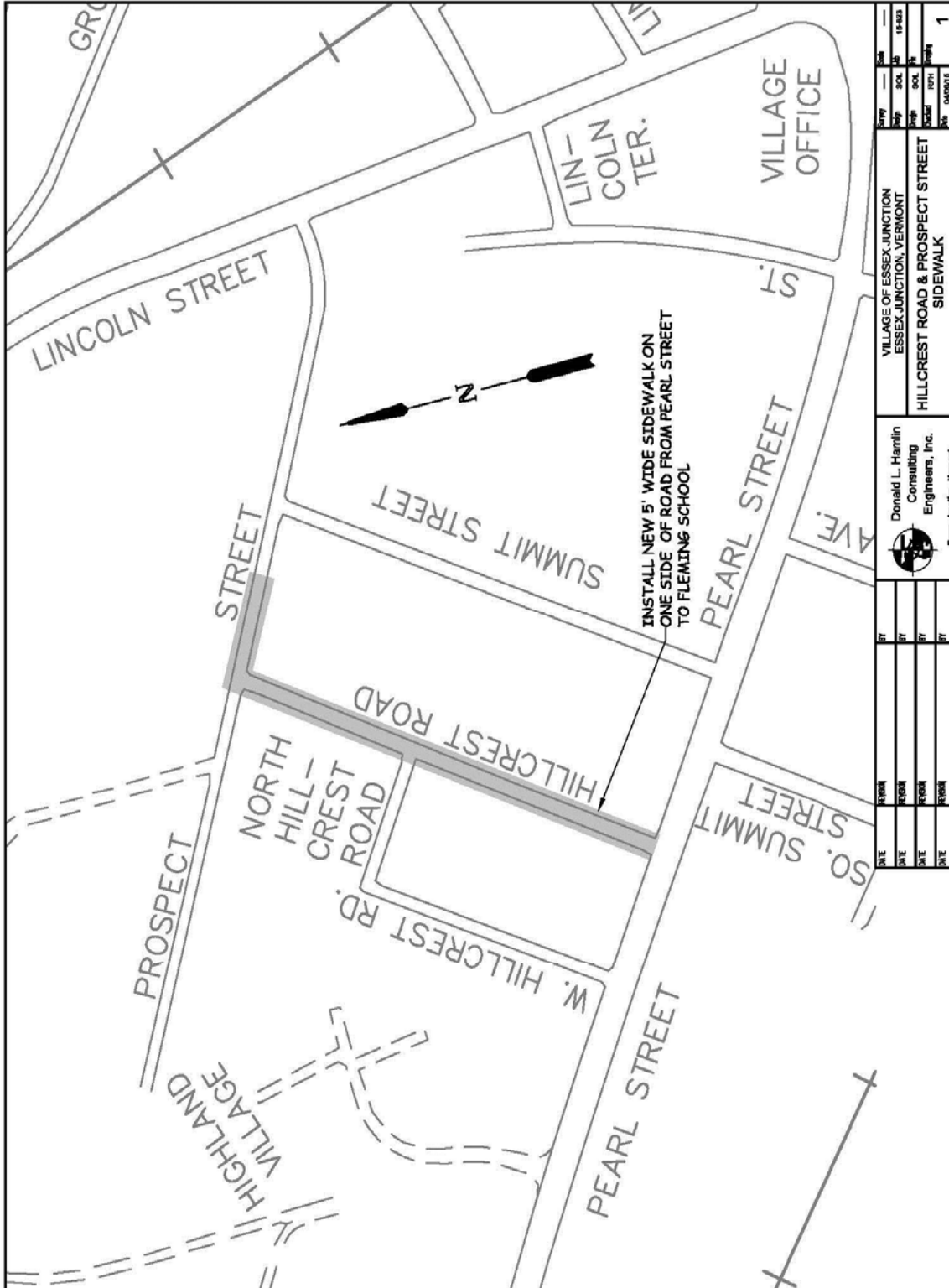
New sidewalk will be 5' wide.

3' wide green belt, except along new curb

A portion of each residential driveway will be rebuilt to match new sidewalk.

O	Pavement Overlay		
R	Roadway Reconstruction		
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements	\$	439,833.44
	Combined Account Costs	\$	439,833.44
	Project Management, Design and Resident Engineering	\$	87,966.69
	Total Project Cost	\$	527,800.13

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	FROM	BY	NO.	DESCRIPTION
DATE	FROM	BY	NO.	DESCRIPTION
DATE	FROM	BY	NO.	DESCRIPTION
DATE	FROM	BY	NO.	DESCRIPTION

VILLAGE OF ESSEX JUNCTION ESSEX JUNCTION, VERMONT		DATE	NO.
HILLCREST ROAD & PROSPECT STREET SIDEWALK		DATE	NO.
Donald L. Hamlin Consulting Engineers, Inc.		DATE	NO.
Essex Junction, Vermont		DATE	NO.

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Hillcrest Road

Cost Reference Date: 8/17/2023

Sidewalk Improvements from Pearl Street to Fleming School

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 3" Thick	900	lf	\$ 2.87	\$ 2,583.00
2) Excavation of Pavement to 3" Thick	700	sy	\$ 7.74	\$ 5,418.00
3) Saw Cut Existing Cement Concrete 4" Thick	10	lf	\$ 5.19	\$ 51.90
4) Remove Existing Concrete Sidewalk	12	sy	\$ 16.49	\$ 197.88
5) Remove Existing Tree and Stump	8	each	\$ 1,182.63	\$ 9,461.04
6) Remove Existing Sign	5	each	\$ 53.70	\$ 268.50
7) Replace Existing Utility Pole (Includes Utility Transfer)	1	each	\$10,428.67	\$ 10,428.67
8) Remove and Reset Existing Blue Stone Walkway	22	sy	\$ 100.00	\$ 2,200.00
9) Remove and Reset Existing Fence	160	lf	\$ 25.00	\$ 4,000.00
10) New Wooden Guardrail	200	lf	\$ 24.00	\$ 4,800.00
11) Earth Borrow	300	cy	\$ 19.93	\$ 5,979.00
12) New Signs	108	sf	\$ 29.16	\$ 3,149.28
13) New Sign Posts	12	each	\$ 134.65	\$ 1,615.80
14) New Cement Concrete Sidewalk - 4" Thick	490	sy	\$ 92.25	\$ 45,202.50
15) New Cement Concrete Sidewalk - 6" Thick	100	sy	\$ 121.57	\$ 12,157.00
16) Detectable Warning Surface	4	sy	\$ 387.04	\$ 1,548.16
17) New Cement Concrete Curb	575	lf	\$ 35.12	\$ 20,194.00
18) Cold Plane Pavement 12" Strip at Joint	65	sy	\$ 31.54	\$ 2,050.10
19) New Bituminous Concrete Pavement - 1-1/4", Type III (HW)	200	sy	\$ 23.65	\$ 4,730.00
20) New Bituminous Concrete Pavement - 3" Thick Over Trench	130	sy	\$ 69.09	\$ 8,981.70
21) New Bituminous Concrete Driveway and Apron	445	sy	\$ 69.09	\$ 30,745.05
22) Adjust Existing Curb Stop Box to New Finish Grade	6	each	\$ 1,353.22	\$ 8,119.32
23) Adjust Existing Gate Valve Box to New Finish Grade	2	each	\$ 902.14	\$ 1,804.28
24) 4" SDR 35 PVC Carrier Pipe	350	lf	\$ 20.21	\$ 7,073.50
25) 4" SDR 35 PVC Underdrain Pipe	250	lf	\$ 29.26	\$ 7,315.00
26) New Retaining Walls	225	sy	\$ 435.00	\$ 97,875.00
27) New Tree	4	each	\$ 1,250.00	\$ 5,000.00

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Hillcrest Road

Cost Reference Date: 8/17/2023

Sidewalk Improvements from Pearl Street to Fleming School

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
28) Supply and Spread Topsoil	200	cy	\$ 49.68	\$ 9,936.00
29) Seed, Fertilize, Lime and Matting	1,700	sy	\$ 3.58	\$ 6,086.00
30) Traffic Control - Type II	30	day	\$ 860.10	\$ 25,803.00
31) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
32) Mobilization	---	---	5%	\$ 17,453.71
Contingency	---	---	20%	\$ 73,305.57

Subtotal	\$ 439,833.44
Design Engineering Services	\$ 43,983.34
Bidding and Construction Services	\$ 43,983.34
Grand Total	\$ 527,800.13

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Greenwood Avenue

Drainage Course Improvements at 17 Greenwood Avenue

Cost Reference Date: 11/1/2015

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 10/6/2015

Primary Project Reason:

Help reduce flooding of Greenwood Avenue residences during major rain storm events.

Secondary Project Reason:

Help reduce damage to 17 Greenwood Avenue during major rain storm events.

Assumptions:

- Replace concrete sidewalk at driveway
- Reconstruct entire driveway
- Install precast concrete block retaining wall
- Install lawn reinforcement to prevent erosion

O	Pavement Overlay		
R	Roadway Reconstruction		
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	38,820.94
P	Sidewalk Improvements		
	Combined Account Costs	\$	38,820.94
	Project Management, Design and Resident Engineering	\$	7,764.19
	Total Project Cost	\$	46,585.13

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Greenwood Avenue

Cost Reference Date: 11/1/2015

Drainage Course Improvements at 17 Greenwood Avenue

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement	20	lf	\$ 4.17	\$ 83.40
2) Saw Cut Existing Cement Concrete	10	lf	\$ 5.19	\$ 51.90
3) Excavation of Pavement	235	sy	\$ 7.74	\$ 1,818.90
4) Remove Existing Concrete Sidewalk	22	sy	\$ 16.49	\$ 362.78
5) New Bituminous Concrete Driveway and Apron	240	sy	\$ 60.21	\$ 14,450.40
6) New Cement Concrete Curb	16	lf	\$ 35.12	\$ 561.92
7) New Cement Concrete Sidewalk - 4" Thick	4	sy	\$ 84.58	\$ 338.32
8) New Cement Concrete Sidewalk - 6" Thick	18	sy	\$ 115.78	\$ 2,084.04
9) Geoweb Slope Stabilization	700	sf	\$ 3.43	\$ 2,401.00
10) Supply and Spread Topsoil	35	cy	\$ 49.68	\$ 1,738.80
11) Seed, Fertilize, Lime and Matting	325	sy	\$ 3.58	\$ 1,163.50
12) 6' x 2' x 2' Precast Concrete Blocks	15	each	\$ 271.99	\$ 4,079.85
13) Wooden Guardrail	44	lf	\$ 38.08	\$ 1,675.46
14) Mobilization	---	---	5%	\$ 1,540.51
Contingency	---	---	20%	\$ 6,470.16

Subtotal	\$	38,820.94
Design Engineering Services	\$	3,882.09
Bidding and Construction Services	\$	3,882.09
Grand Total	\$	46,585.13

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Multi-use Path through ANR from West St. to Pearl St.

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 5/1/2016

Primary Project Reason:

To provide a safe pedestrian and bicycle connection between West Street and Pearl Street, through the State parcel, as the nearest rail crossings are at West Street Extension and South Summit Street.

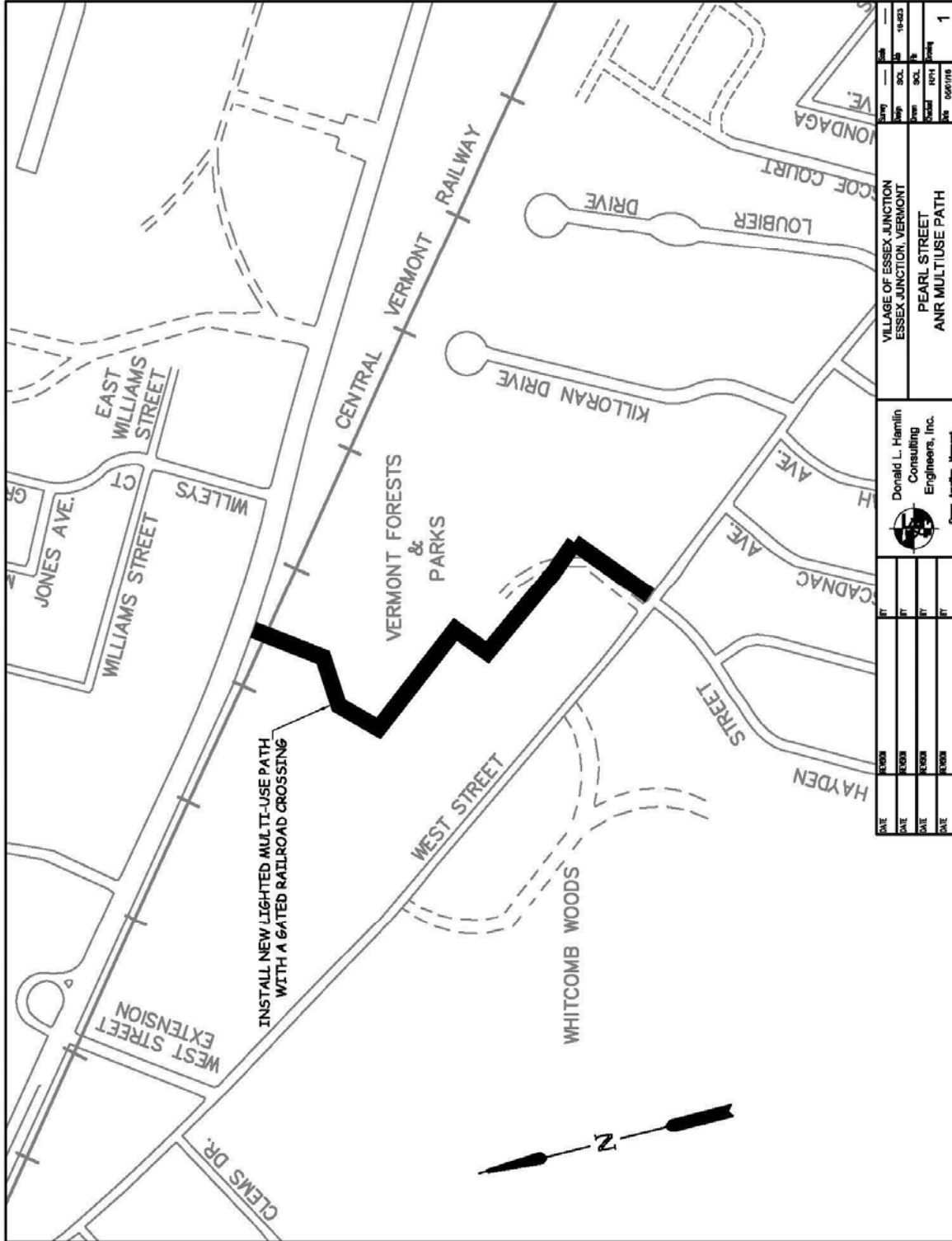
Secondary Project Reason:

A new multi-use path would provided greatly improved access to the community gardens and the dog park from Pearl Street and its adjacent neighbors.

Assumptions:

O	Pavement Overlay	
R	Roadway Reconstruction	
W	Waterline Improvements	
S	Sanitary Sewer Improvements	
D	Storm Drainage Improvements	
P	Sidewalk Improvements	\$ 696,071.78
	Combined Account Costs	\$ 696,071.78
	Project Management, Design and Resident Engineering	\$ 132,253.64
	Total Project Cost	\$ 828,325.42

City of Essex Junction
 Capital Projects
 Construction Cost Estimate



INSTALL NEW LIGHTED MULTI-USE PATH
 WITH A GATED RAILROAD CROSSING

DATE	SCALE	BY	PROJECT	DATE	SCALE	BY	PROJECT
DATE	SCALE	BY	PROJECT	DATE	SCALE	BY	PROJECT
DATE	SCALE	BY	PROJECT	DATE	SCALE	BY	PROJECT

Donald L. Hamlin
 Consulting
 Engineers, Inc.

Village of Essex Junction
 Essex Junction, Vermont
 Pearl Street
 ANR Multiuse Path

1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pearl Street

Cost Reference Date: 8/17/2023

Multi-use Path through ANR from West St. to Pearl St.

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Clearing and Grubbing	1	ls	\$ 10,000.00	\$ 10,000.00
2) Saw Cut Existing Pavement	250	lf	\$ 4.17	\$ 1,042.50
3) Excavation of Pavement	300	sy	\$ 7.74	\$ 2,322.00
4) Saw Cut Existing Cement Concrete	20	lf	\$ 5.96	\$ 119.20
5) Remove Existing Concrete Sidewalk	20	sy	\$ 16.49	\$ 329.80
6) Remove Existing Concrete Curb	30	lf	\$ 6.95	\$ 208.50
7) Remove and Reset Existing Granite Curb	30	lf	\$ 24.23	\$ 726.90
8) New Cement Concrete Curb	30	lf	\$ 35.12	\$ 1,053.60
9) New Cement Concrete Sidewalk - 5" Thick	50	sy	\$ 92.25	\$ 4,612.50
10) Common Excavation	1,250	cy	\$ 26.16	\$ 32,700.00
11) Plant Mixed Gravel	1,350	cy	\$ 44.08	\$ 59,508.00
12) New Bituminous Concrete Pavement, Type II	80	ton	\$ 100.00	\$ 8,000.00
13) New Bituminous Concrete Pavement, Type IV	275	ton	\$ 100.00	\$ 27,500.00
14) Detectable Warning Surface	10	sy	\$ 387.04	\$ 3,870.40
15) New Box Light (Base, Pole and Fixture)	17	each	\$ 8,030.93	\$ 136,525.81
16) New Wired Conduit for Lighting	1,750	lf	\$ 24.73	\$ 43,277.50
17) Lighting Pedestal Meter Socket/Load Center (Includes Timer)	1	each	\$ 10,751.20	\$ 10,751.20
18) Supply and Spread Topsoil	275	cy	\$ 49.68	\$ 13,662.00
19) Seed, Fertilize, Lime and Matting	2,330	sy	\$ 3.58	\$ 8,341.40
20) Concrete Filled Steel Bollard	21	each	\$ 368.41	\$ 7,736.61
21) 6' Chain Link Fence	900	lf	\$ 33.50	\$ 30,150.00
22) Railroad Crossing	1	ls	\$ 150,000.00	\$ 150,000.00
23) Mobilization	---	---	5%	\$ 27,621.90
Contingency	---	---	20%	\$ 116,011.96

Subtotal \$ 696,071.78
Design Engineering Services \$ 62,646.46
Bidding and Construction Services \$ 69,607.18
Grand Total \$ 828,325.42

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**South Street
Sidewalk and Drainage Improvements**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023
Original Capital Plan Date: 5/1/2016

Primary Project Reason:

Help reduce flooding of South Street Residences during major rain storm events.

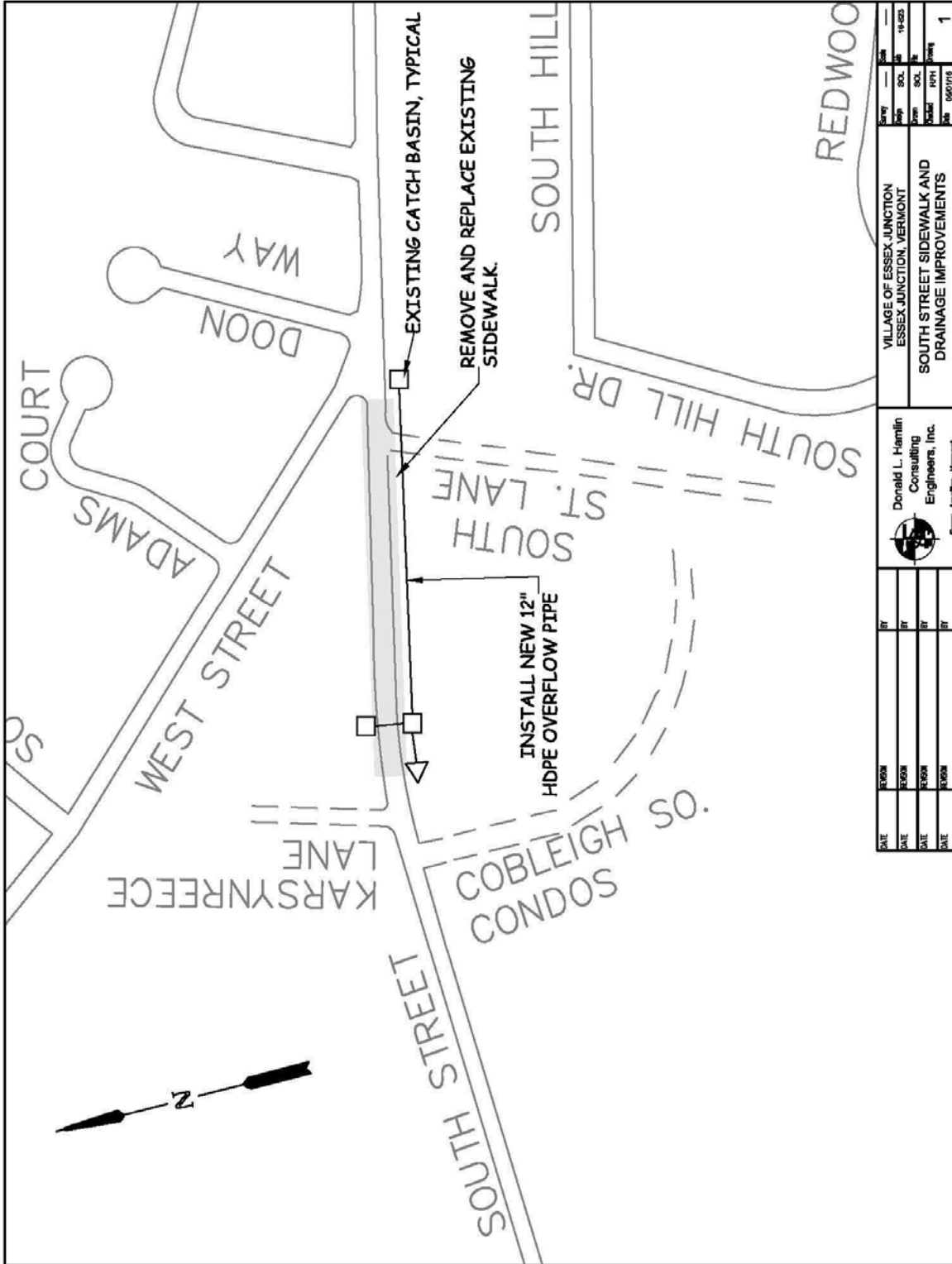
Secondary Project Reason:

Assumptions:

- Replace 505' concrete sidewalk along South Street with new 5' wide concrete walk.
- Reconstruct driveways
- Install new overflow drainage pipe

O	Pavement Overlay		
R	Roadway Reconstruction		
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	41,180.58
P	Sidewalk Improvements	\$	71,877.05
	Combined Account Costs	\$	118,003.13
	Project Management, Design and Resident Engineering	\$	23,600.63
	Total Project Cost	\$	141,603.76

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	FORUM	BY	
DATE	FORUM	BY	
DATE	FORUM	BY	
DATE	FORUM	BY	

VILLAGE OF ESSEX JUNCTION ESSEX JUNCTION, VERMONT		DATE	18-023
SOUTH STREET SIDEWALK AND DRAINAGE IMPROVEMENTS		SCALE	AS SHOWN
Donald L. Hamlin Consulting Engineers, Inc.		PROJECT NO.	0800116
Essex Junction, Vermont		SHEET NO.	1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**South Street
Sidewalk and Drainage Improvements**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement	300	lf	\$ 4.17	\$ 1,251.00
2) Saw Cut Existing Cement Concrete	20	lf	\$ 5.19	\$ 103.80
3) Excavation of Pavement	250	sy	\$ 7.74	\$ 1,935.00
4) Remove Existing Concrete Sidewalk	290	sy	\$ 16.49	\$ 4,782.10
5) New Bituminous Concrete Driveway and Apron	205	sy	\$ 60.21	\$ 12,343.05
6) New Cement Concrete Sidewalk - 4" Thick	215	sy	\$ 84.58	\$ 18,184.70
7) New Cement Concrete Sidewalk - 6" Thick	75	sy	\$ 115.78	\$ 8,683.50
8) 12" HDPE Drainage Pipe	290	lf	\$ 72.88	\$ 21,135.20
9) Connect New Pipe to Existing Structure	2	each	\$ 1,144.44	\$ 2,288.88
10) Plant Mixed Gravel	150	cy	\$ 44.08	\$ 6,612.00
11) Sand Borrow	150	cy	\$ 32.97	\$ 4,945.50
12) New Bituminous Concrete Pavement - 3" Thick Over Trench	45	sy	\$ 69.09	\$ 3,109.05
13) Supply and Hand Dress Topsoil	100	cy	\$ 49.68	\$ 4,968.00
14) Seed, Fertilize, Lime and Matting	925	sy	\$ 3.58	\$ 3,311.50
15) Mobilization	---	---	5%	\$ 4,682.66
Contingency	---	---	20%	\$ 19,667.19

Subtotal	\$	118,003.13
Design Engineering Services	\$	11,800.31
Bidding and Construction Services	\$	11,800.31
Grand Total	\$	141,603.76

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Street

Sidewalk and Drainage Improvements

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 5/1/2016

Primary Project Reason:

Help reduce flooding of South Street Residences during major rain storm events.

Secondary Project Reason:

Assumptions:

- Replace 505' concrete sidewalk along South Street with new 5' wide concrete walk.
- Reconstruct driveways
- Install new overflow drainage pipe

O	Pavement Overlay		
R	Roadway Reconstruction		
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements	\$	64,195.25
P	Sidewalk Improvements	\$	70,655.68
	Combined Account Costs	\$	-
	Project Management, Design and Resident Engineering	\$	-
	Total Project Cost	\$	-

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**South Street
Sidewalk and Drainage Improvements**

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement	400	lf	\$ 4.17	\$ 1,668.00
2) Saw Cut Existing Cement Concrete	20	lf	\$ 5.19	\$ 103.80
3) Excavation of Pavement	350	sy	\$ 7.74	\$ 2,709.00
4) Remove Existing Concrete Sidewalk	345	sy	\$ 16.49	\$ 5,689.05
5) New Bituminous Concrete Driveway and Apron	235	sy	\$ 60.21	\$ 14,149.35
6) New Cement Concrete Sidewalk - 4" Thick	335	sy	\$ 84.58	\$ 28,334.30
7) New Cement Concrete Sidewalk - 6" Thick	75	sy	\$ 115.78	\$ 8,683.50
8) 12" HDPE Drainage Pipe	115	lf	\$ 72.88	\$ 8,381.20
9) 15" HDPE Drainage Pipe	315	lf	\$ 92.95	\$ 29,279.25
10) New 2' x 2' Catch Basin	1	each	\$ 5,260.84	\$ 5,260.84
11) New 2' x 5' Catch Basin	2	each	\$ 9,580.32	\$ 19,160.64
12) New 4' Diameter Drainage Manhole	2	each	\$ 9,580.32	\$ 19,160.64
13) 12" HDPE End Section	1	each	\$ 450.00	\$ 450.00
14) Excavation for Infiltration Chambers	175	cy	\$ 26.16	\$ 4,578.00
15) Crushed Stone for Infiltration Gallery	35	cy	\$ 79.76	\$ 2,791.60
16) Storm Tech SC-740 Chambers	8	each	\$ 451.55	\$ 3,612.40
17) Storm Tech sc-740 End Caps	2	each	\$ 86.01	\$ 172.02
18) Storm Tech sc-740 End Caps with Pipe Adaptor	2	each	\$ 172.02	\$ 344.04
19) Mirafil 140N Geotextile Fabric	40	sy	\$ 2.08	\$ 83.20
20) Detectable Warning Plates	8	sf	\$ 43.00	\$ 344.04
21) Plant Mixed Gravel	75	cy	\$ 44.08	\$ 3,306.00
22) Sand Borrow	225	cy	\$ 32.97	\$ 7,418.25
23) New Bituminous Concrete Pavement - 3" Thick Over Trench	120	sy	\$ 69.09	\$ 8,290.80
24) Remove Existing Catch Basin	2	each	\$ 902.14	\$ 1,804.28
25) Remove Existing Drainage Pipe	45	lf	\$ 20.20	\$ 909.00
26) Remove Existing Drywells	3	each	\$ 902.14	\$ 2,706.42
27) Remove Existing Tree	2	each	\$ 1,182.63	\$ 2,365.26

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Street

Cost Reference Date: 8/17/2023

Sidewalk and Drainage Improvements

Cost Reference Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
28) New Tree	1	each	\$ 625.00	\$ 625.00
29) Replace Existing Curb Stop Box	6	each	\$ 341.00	\$ 2,046.00
30) Clearing and Grubbing	1	ls	\$ 2,500.00	\$ 2,500.00
31) Remove and Reset Existing Sign	1	ls	\$ 1,000.00	\$ 1,000.00
32) Supply and Hand Dress Topsoil	150	cy	\$ 49.68	\$ 7,452.00
33) Seed, Fertilize, Lime and Matting	1,350	sy	\$ 3.58	\$ 4,833.00
34) 1-1/4" Overlay of Cobleigh Square Driveway	575	sy	\$ 10.03	\$ 5,767.25
35) Mobilization	---	---	5%	\$ 10,298.91
36) Contingency	---	---	5%	\$ 10,813.85

Subtotal	\$	227,090.89
Design Engineering Services	\$	22,709.09
Bidding and Construction Services	\$	22,709.09
Grand Total	\$	272,509.07

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Lincoln Hall

Sidewalk, Handicap Ramp and Parking Improvements

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 5/1/2016

Primary Project Reason:

Reduce number of accidents with Senior Bus and separate bus and pedestrian traffic from the Village Office's parking lot traffic.

Secondary Project Reason:

Assumptions:

O	Pavement Overlay		
R	Roadway Reconstruction		
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements	\$	38,912.90
	Combined Account Costs	\$	38,912.90
	Project Management, Design and Resident Engineering	\$	7,782.58
	Total Project Cost	\$	46,695.47

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Lincoln Hall
Sidewalk, Handicap Ramp and Parking Improvements**

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement	100	lf	\$ 4.17	\$ 417.00
2) Saw Cut Existing Cement Concrete	40	lf	\$ 5.19	\$ 207.60
3) Excavation of Pavement	80	sy	\$ 7.74	\$ 619.20
4) Remove Existing Concrete Sidewalk	30	sy	\$ 16.49	\$ 494.70
5) Remove Existing Curb	110	lf	\$ 6.95	\$ 764.50
6) Remove Existing Sign	2	each	\$ 53.70	\$ 107.40
7) Remove Existing Steel Railings	1	ls	\$ 175.00	\$ 175.00
8) New 6" Concrete Curb	110	lf	\$ 35.12	\$ 3,863.20
9) New 8" Concrete Curb	15	lf	\$ 52.68	\$ 790.20
10) Plant Mixed Gravel	75	cy	\$ 44.08	\$ 3,306.00
11) Crushed Stone	25	cy	\$ 79.76	\$ 1,994.00
12) 4' Concrete Wall	40	lf	\$ 94.50	\$ 3,780.00
13) Concrete Sidewalk	25	sy	\$ 115.78	\$ 2,894.50
14) Stamped Colored Concrete	36	sy	\$ 200.00	\$ 7,200.00
15) Hand Railing	60	lf	\$ 49.00	\$ 2,940.00
16) Pavement Sealing	185	sy	\$ 3.27	\$ 604.95
17) New Signs	2	each	\$ 275.00	\$ 550.00
18) Pavement Markings 4" White Stripe	175	lf	\$ 1.00	\$ 175.00
19) Mobilization	---	---	5%	\$ 1,544.16
Contingency	---	---	20%	\$ 6,485.48

Subtotal	\$	38,912.90
Design Engineering Services	\$	3,891.29
Bidding and Construction Services	\$	3,891.29
Grand Total	\$	46,695.47

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Rosewood Lane

Road Reconstruction and Sidewalk Replacement

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 11/3/2016

Primary Project Reason:

The existing roadway is subject to severe frost action.

The existing sidewalk is in very poor condition.

Secondary Project Reason:

Assumptions:

New roadway will have a pavement width of 30' and curb on both sides.

Existing drainage structures will set to new finish grade.

Insulation will be utilized versus underdrain.

A portion of each residential driveway will be rebuilt to match new roadway.

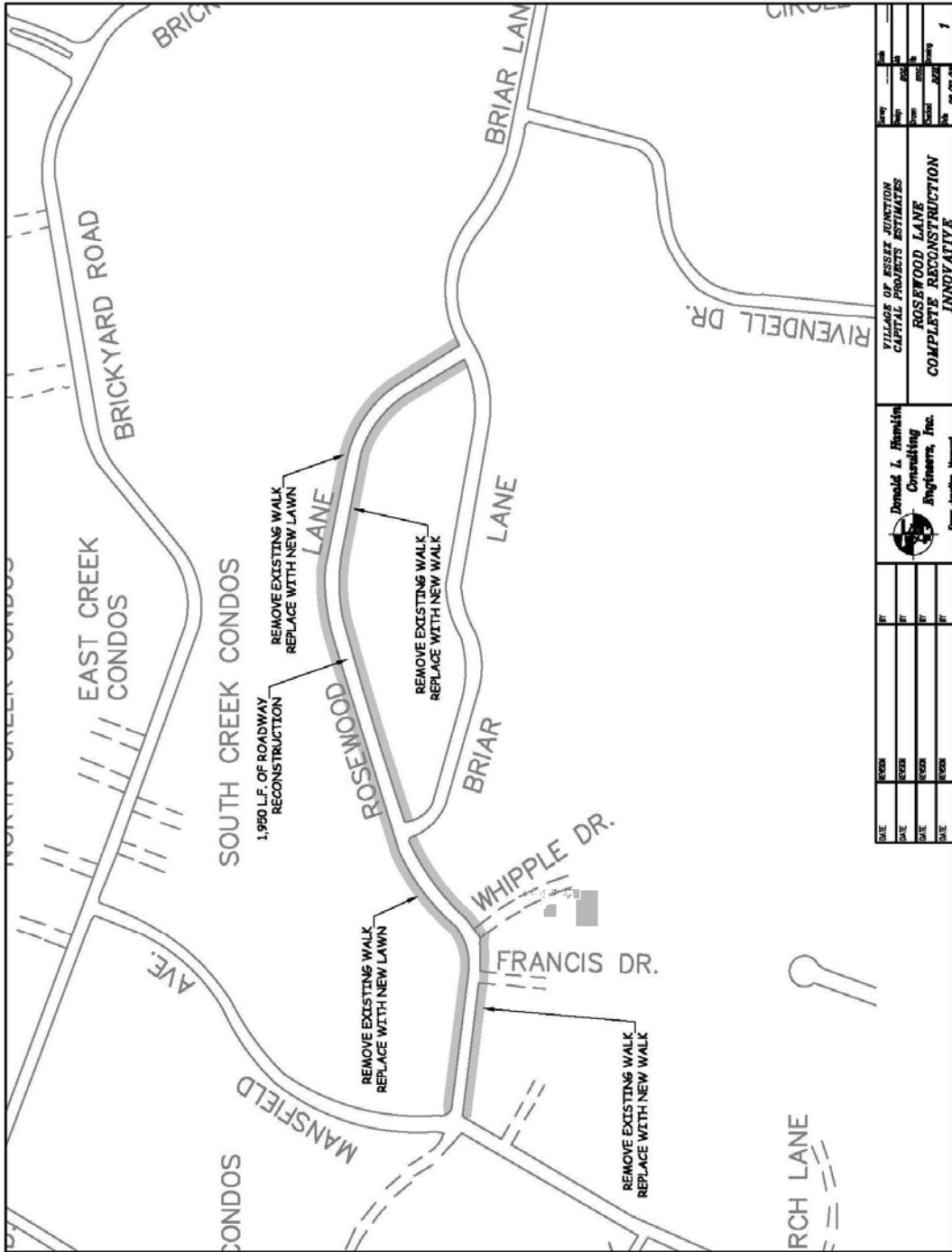
The existing storm drainage pipe with the zone shall be inspected with a camera.

The sidewalk will be replaced on the south side of the road, 5' wide.

The sidewalk on the north side of the roadway will be removed.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	1,257,185.56
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	60,056.20
D	Storm Drainage Improvements	\$	15,969.26
P	Sidewalk Improvements	\$	160,268.42
Combined Account Costs		\$	1,493,479.44
Project Management, Design and Resident Engineering		\$	268,826.30
Total Project Cost		\$	1,762,305.74

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	REVISION	BY	DATE	DESCRIPTION


Donald L. Hamilton
 Consulting Engineers, Inc.
 Essex Junction, Vermont

**VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES**
**ROSEWOOD LANE
COMPLETE RECONSTRUCTION
INNOVATIVE**

DATE	BY	SCALE	SHEET NO.
09/22/20			1

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Rosewood Lane

Road Reconstruction and Sidewalk Replacement

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	800	lf	\$ 4.17	\$ 3,336.00
2) Excavation of Pavement 4" to 6" Thick	7,375	sy	\$ 12.69	\$ 93,588.75
3) Remove Existing Concrete Curb	3,875	lf	\$ 6.95	\$ 26,931.25
4) Excavation for New Roadway Subbase	5,850	cy	\$ 26.16	\$ 153,036.00
5) Sand Borrow - 3"	675	cy	\$ 32.97	\$ 22,254.75
6) New 2" Thick Extruded Polystyrene Insulation	119,000	sf	\$ 2.58	\$ 307,020.00
7) Dense Graded Crushed Stone - 18"	3,400	cy	\$ 44.80	\$ 152,320.00
8) Plant Mixed Gravel - 6"	1,150	cy	\$ 44.08	\$ 50,692.00
9) New Bituminous Concrete Pavement - 2", Type II	6,175	sy	\$ 13.62	\$ 84,103.50
10) New Bituminous Concrete Pavement - 1-1/2", Type III	6,200	sy	\$ 10.03	\$ 62,186.00
11) Cold Plane Pavement 12" Strip at Joint	25	sy	\$ 31.54	\$ 788.50
12) New Bituminous Concrete Driveway and Apron	850	sy	\$ 60.21	\$ 51,178.50
13) Remove and Reset Existing Catch Basin Frame and Grate	7	each	\$ 1,013.08	\$ 7,091.56
14) Remove Existing Manhole Frame and Cover, Replace with New	6	each	\$ 1,372.57	\$ 8,235.42
15) Adjust Existing Gate Valve Box to New Finish Grade	8	each	\$ 253.27	\$ 2,026.16
16) New Cement Concrete Curb	3,900	lf	\$ 35.12	\$ 136,968.00
17) Saw Cut Existing Concrete	40	lf	\$ 5.96	\$ 238.40
18) Remove Existing Sidewalk	1,725	sy	\$ 16.49	\$ 28,445.25
19) New Cement Concrete Sidewalk - 4" Thick	675	sy	\$ 84.58	\$ 57,091.50
20) New Cement Concrete Sidewalk - 6" Thick	400	sy	\$ 115.78	\$ 46,312.00
21) Detectable Warning Surface	4	sy	\$ 387.04	\$ 1,548.16
22) Remove and Reset Existing Sign	10	each	\$ 109.25	\$ 1,092.50

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Rosewood Lane

Cost Reference Date: 8/17/2023

Road Reconstruction and Sidewalk Replacement

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
23) Supply and Spread Topsoil	240	cy	\$ 49.68	\$ 11,923.20
24) Seed, Fertilize, Lime and Matting	2,100	sy	\$ 3.58	\$ 7,518.00
25) Traffic Control - Type II	40	day	\$ 860.10	\$ 34,404.00
26) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
27) Mobilization	---	---	5%	\$ 67,731.49
Contingency	---	---	5%	\$ 71,118.07

Subtotal \$ 1,493,479.44
 Design Engineering Services \$ 119,478.36
 Bidding and Construction Services \$ 149,347.94
 Grand Total \$ 1,762,305.74

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Install 8' Wide Pedestrian Bridge over Indian Brook on East Side Main Street

Original Capital Plan Date: 12/9/2016

Primary Project Reason:

Replace existing pedestrian bridge which is failing

Secondary Project Reason:

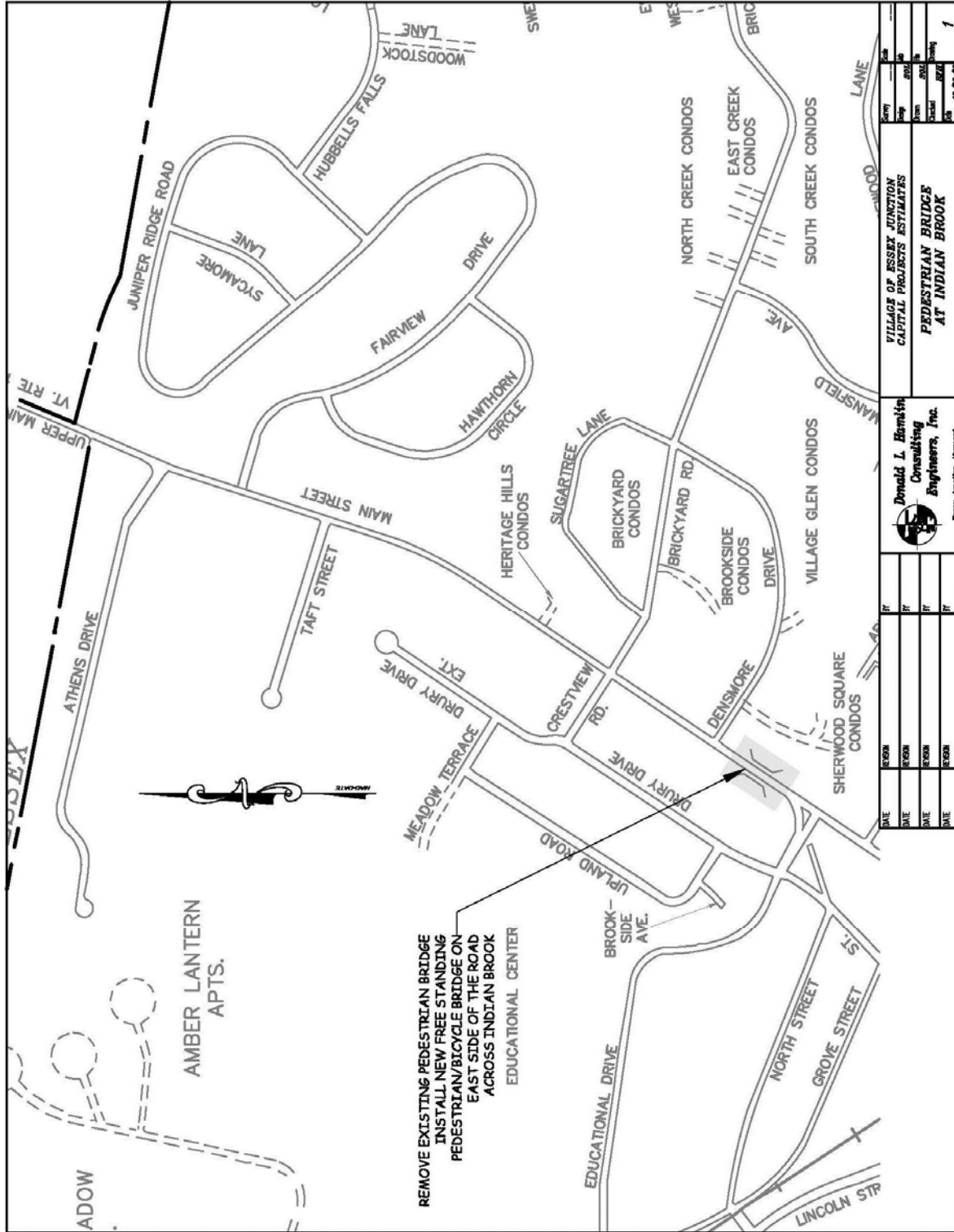
Provide bicycle/pedestrian bridge on East side of Main Street

Assumptions:

- Existing 5' wide sidewalk will transition to 8' bridge
- New bridge is free standing steel truss bridge
- Existing pedestrian bridge to be removed
- One way traffic maintained on Main Street during construction

O	Pavement Overlay		
R	Roadway Reconstruction		
W	Waterline Improvements		
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements	\$	230,747.54
	Combined Account Costs	\$	230,747.54
	Project Management, Design and Resident Engineering	\$	46,149.51
	Total Project Cost	\$	276,897.05

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Install 8' Wide Pedestrian Bridge over Indian Brook on East Side Main Street

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	125	lf	\$ 4.17	\$ 521.25
2) Remove Existing Concrete Curb	75	lf	\$ 6.95	\$ 521.25
3) Excavation of Pavement 4" to 6" Thick	20	sy	\$ 12.69	\$ 253.80
4) Remove Existing Concrete Sidewalk	40	sy	\$ 16.49	\$ 659.60
5) Remove Existing Pedestrian Bridge	1	ls	\$ 10,000.00	\$ 10,000.00
6) Steel Sheeting	1,200	sf	\$ 23.00	\$ 27,600.00
7) Wailers	2	ton	\$ 530.00	\$ 1,060.00
8) Concrete Footing	12	lf	\$ 117.00	\$ 1,404.00
9) Concrete Walls	12	lf	\$ 285.00	\$ 3,420.00
10) Excavation and Backfill for Abutments	1	ls	\$ 10,000.00	\$ 10,000.00
11) Anchor Bolts	16	each	\$ 1,200.00	\$ 19,200.00
12) Crane Rental	1	day	\$ 2,800.00	\$ 2,800.00
13) Bridge	1	each	\$ 39,600.00	\$ 39,600.00
14) Type I Rip Rap for Slopes	40	cy	\$ 136.18	\$ 5,447.20
15) Concrete for Bridge Deck	5	cy	\$ 250.00	\$ 1,250.00
16) Sand Borrow	30	cy	\$ 32.97	\$ 989.10
17) Dense Graded Crushed Stone	20	cy	\$ 44.80	\$ 896.00
18) Plant Mixed Gravel	20	cy	\$ 44.08	\$ 881.60
19) New Cement Concrete Curb	75	lf	\$ 35.12	\$ 2,634.00
20) New Cement Concrete Sidewalk - 4" Thick	30	sy	\$ 84.58	\$ 2,537.40
21) New Cement Concrete Sidewalk - 6" Thick	10	sy	\$ 115.78	\$ 1,157.80
22) New Bituminous Concrete Pavement - 4" Thick Over Trench	5	sy	\$ 80.99	\$ 404.95
23) New Bituminous Concrete Driveway and Apron	5	sy	\$ 60.21	\$ 301.05
24) 4" White Line - Painted	125	lf	\$ 1.33	\$ 166.25
25) 4" Yellow Line - Painted	100	lf	\$ 1.33	\$ 133.00
26) Supply and Spread Topsoil	20	cy	\$ 49.68	\$ 993.60
27) Seed, Fertilize, Lime and Matting	150	sy	\$ 3.58	\$ 537.00
28) Changeable Message Boards	30	day	\$ 64.51	\$ 1,935.30

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Install 8' Wide Pedestrian Bridge over Indian Brook on East Side Main Street

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
29) 12" Wide Crosswalk Bar - Painted	30	lf	\$ 9.32	\$ 279.60
30) Relocate Existing Utility Pole	1	each	\$ 10,428.67	\$ 10,428.67
31) Traffic Control = Type IV	20	day	\$ 1,720.19	\$ 34,403.80
32) Dust Control - Type I	1	ls	\$ 716.75	\$ 716.75
33) Mobilization	---	---	5%	\$ 9,156.65
Contingency	---	---	20%	\$ 38,457.92

Subtotal	\$	230,747.54
Design Engineering Services	\$	23,074.75
Bidding and Construction Services	\$	23,074.75
Grand Total	\$	276,897.05

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Densmore Drive

Complete Reconstruction and Culvert Replacement

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 4/2/2019

Primary Project Reason:

The existing GMP culverts are in fair to poor condition and should be replaced.

Secondary Project Reason:

Complete rebuild roadway and replace sidewalk.

Assumptions:

New roadway will have a pavement width of 30' and curb on both sides.

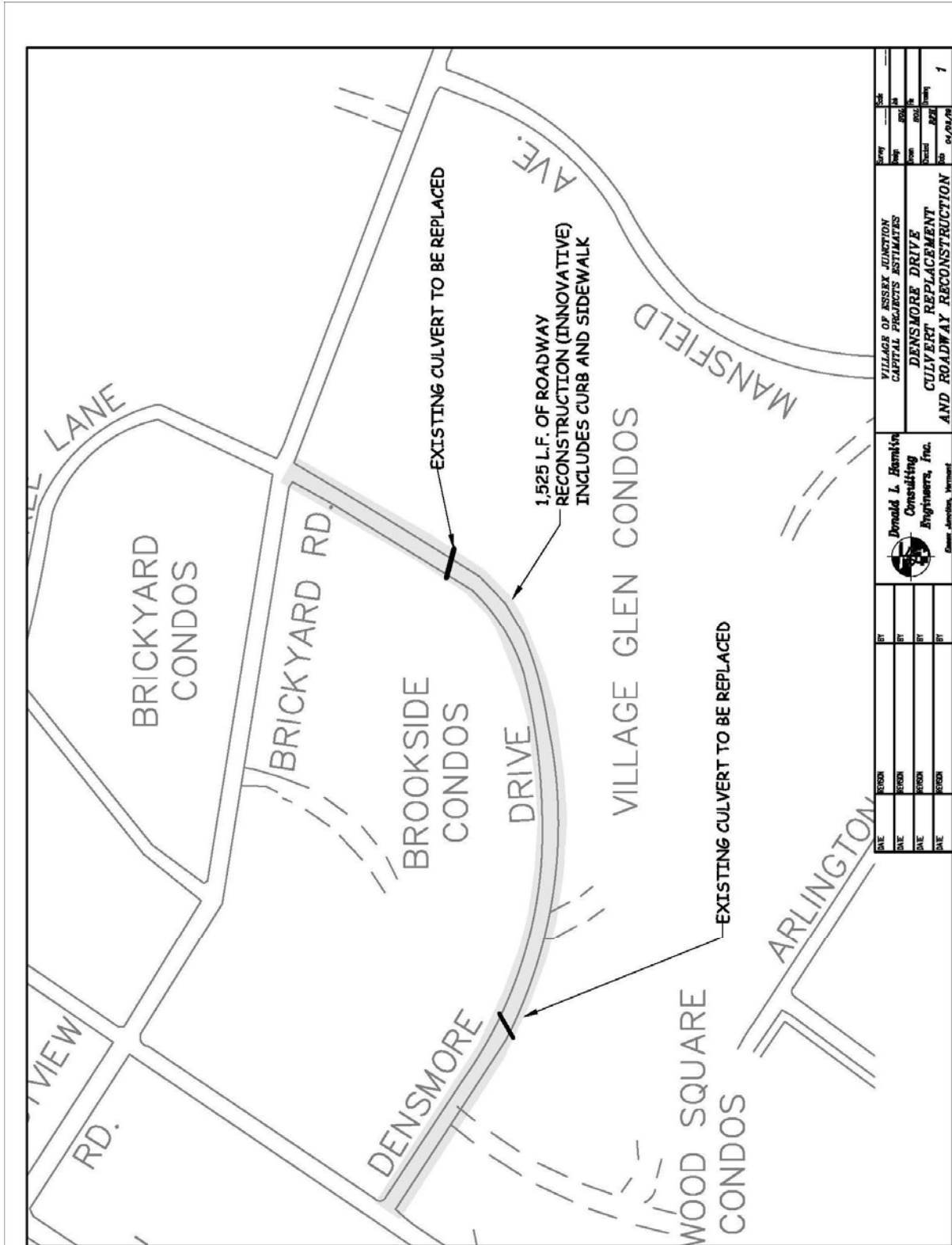
Existing drainage structures will set to new finish grade.

Insulation will be utilized versus underdrain.

The sidewalk will be replaced on the south side of the road, 5' wide.

O	Pavement Overlay		
R	Roadway Reconstruction	\$	1,076,654.41
W	Waterline Improvements	\$	2,961.43
S	Sanitary Sewer Improvements	\$	5,490.28
D	Storm Drainage Improvements	\$	398,706.28
P	Sidewalk Improvements	\$	181,977.74
	Combined Account Costs	\$	1,665,790.14
	Project Management, Design and Resident Engineering	\$	299,842.23
	Total Project Cost	\$	1,965,632.37

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	BY	DATE	BY	DATE	BY	DATE	BY	DATE	BY

Donald L. Hemkin Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>		VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES DENSMORE DRIVE CULVERT REPLACEMENT AND ROADWAY RECONSTRUCTION		SHEET NO. 1
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**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Densmore Drive

Cost Reference Date: 8/17/2023

Partial Reconstruction and Culvert Replacement

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Clearing and Grubbing	1	ls	\$ 2,500.00	\$ 2,500.00
2) Silt Fence	800	lf	\$ 3.80	\$ 3,040.00
3) Saw Cut Existing Pavement 4" Thick	360	lf	\$ 4.17	\$ 1,501.20
4) Excavation of Pavement 4" to 6" Thick	4,800	sy	\$ 12.69	\$ 60,912.00
5) Excavation for New Roadway Subbase	3,800	cy	\$ 26.16	\$ 99,408.00
6) New 2" Thick Extruded Polystyrene Insulation	85,200	sf	\$ 2.58	\$ 219,816.00
7) Sand Borrow - 3"	400	cy	\$ 32.97	\$ 13,188.00
8) Dense Graded Crushed Stone - 18"	2,400	cy	\$ 44.80	\$ 107,520.00
9) Plant Mixed Gravel - 6"	800	cy	\$ 44.08	\$ 35,264.00
10) New Bituminous Concrete Pavement - 1-3/4", Type II	4,400	sy	\$ 13.62	\$ 59,928.00
11) New Bituminous Concrete Pavement - 1-1/4", Type III	4,400	sy	\$ 10.03	\$ 44,132.00
12) New Bituminous Concrete Driveway and Apron	550	sy	\$ 60.21	\$ 33,115.50
13) Remove and Reset Existing Catch Basin Frame and Grate	10	each	\$ 1,013.08	\$ 10,130.80
14) Remove Existing Pipe	585	lf	\$ 20.20	\$ 11,817.00
15) 15" HDPE Drainage Pipe	100	lf	\$ 72.88	\$ 7,288.00
16) 15" HDPE Perforated Drainage Pipe	100	lf	\$ 96.63	\$ 9,663.00
17) 18" HDPE Drainage Pipe	55	lf	\$ 84.76	\$ 4,661.80
18) 24" HDPE Drainage Pipe	80	lf	\$ -	\$ -
19) Drainage Manhole	2	each	\$ 5,260.84	\$ 10,521.68
20) 10' x 4' Concrete Box Culvert	170	lf	\$ 1,468.61	\$ 249,663.70
21) Remove Existing Manhole Frame and Cover, Replace with New	4	each	\$ 1,372.57	\$ 5,490.28
22) Adjust Existing Gate Valve Box to New Finish Grade	9	each	\$ 253.27	\$ 2,279.43
23) Adjust Existing Curb Stop Box to New Finish Grade	4	each	\$ 170.50	\$ 682.00
24) Remove Existing Concrete Sidewalk	840	sy	\$ 16.49	\$ 13,851.60
25) Remove Existing Concrete Curb	3,050	lf	\$ 6.95	\$ 21,197.50
26) New Cement Concrete Sidewalk - 4" Thick	1,000	sy	\$ 84.58	\$ 84,580.00
27) New Cement Concrete Sidewalk - 8" Thick	130	sy	\$ 121.57	\$ 15,804.10

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Densmore Drive

1/0/1900

1/0/1900

Partial Reconstruction and Culvert Replacement

1/0/1900

1/0/1900

ITEM	QUANTITY	UNIT	PRICE	TOTAL
28) Detectable Warning Surface	10	sy	\$ 387.04	\$ 3,870.40
29) New Cement Concrete Curb	3,050	lf	\$ 35.12	\$ 107,116.00
30) 24" Wide Stop Bar - Chlorinated Painted	30	lf	\$ 9.72	\$ 291.60
31) 12" Wide Crosswalk Bar - Chlorinated Rubber Painted	80	lf	\$ 9.32	\$ 745.60
32) Supply and Spread Topsoil	325	cy	\$ 49.68	\$ 16,146.00
33) Seed, Fertilize, Lime and Matting	2,800	sy	\$ 3.58	\$ 10,024.00
34) Traffic Control - Type II	60	day	\$ 860.10	\$ 51,606.00
35) Dust Control - Type II	1	ls	\$ 4,300.48	\$ 4,300.48
36) Mobilization	---	---	5%	\$ 66,102.78
37) Contingency	---	---	20%	\$ 277,631.69

Subtotal \$ 1,665,790.14

Design Engineering Services \$ 133,263.21

Bidding and Construction Services \$ 166,579.01

Grand Total \$ 1,965,632.37

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

West Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Grind and Overlay from West Side of Hiawatha Ave. to East Side of South Street

Original Capital Plan Date: 4/2/2019

Primary Project Reason:

Resurface Existing road and re-establish road crown

Secondary Project Reason:

Improve Drainage

Assumptions:

Existing roadway is 30' wide

Adjust all drainage structure

Install new gasket frame and cover on sanitary sewer manholes

Redo driveway aprons

New line striping

O	Pavement Overlay	\$	96,407.22
R	Roadway Reconstruction		
W	Waterline Improvements	\$	1,836.98
S	Sanitary Sewer Improvements	\$	3,673.95
D	Storm Drainage Improvements	\$	7,347.91
P	Sidewalk Improvements		
	Combined Account Costs	\$	109,266.05
	Project Management, Design and Resident Engineering	\$	-
	Total Project Cost	\$	-

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

West Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Grind and Overlay from West Side of Hiawatha Ave. to East Side of South Street

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Cold Plane Pavement	7,900	sy	\$ 4.53	\$ 35,787.00
2) Excavation of Pavement		sy	\$ 7.74	\$ -
3) Remove and Reset Existing Catch Basin Frame and Grate		each	\$ 1,013.08	\$ -
4) Remove and Reset Existing Manhole Frame and Cover		each	\$ 1,013.08	\$ -
5) Remove Existing Manhole Frame and Cover, Replace with New		each	\$ 1,372.57	\$ -
6) Adjust Existing Gate Valve Box to New Finish Grade		each	\$ 253.27	\$ -
7) New Bituminous Concrete Pavement - Hand Placed Apron		sy	\$ 49.03	\$ -
8) Emulsified Asphalt		cwt	\$ 57.34	\$ -
9) New Bituminous Concrete Pavement - 1/2", Type IV		sy	\$ 3.51	\$ -
10) New Bituminous Concrete Pavement - 1-1/2", Type III		sy	\$ 10.39	\$ -
11) 4" Yellow Line - Temporary		lf	\$ 0.29	\$ -
12) 24" Wide Stop Bar - Temporary		lf	\$ 5.73	\$ -
13) 12" Wide Crosswalk Bar - Temporary		lf	\$ 5.45	\$ -
14) 4" Yellow Line - Chlorinated Rubber Painted		lf	\$ 1.33	\$ -
15) 24" Wide Stop Bar - Chlorinated Painted		lf	\$ 9.72	\$ -
16) 12" Wide Crosswalk Bar - Chlorinated Rubber Painted		lf	\$ 9.32	\$ -
17) Symbol or Letter - Chlorinated Rubber Painted		lf	\$ 44.37	\$ -
18) Flaggers	80	hr	\$ 39.42	\$ 3,153.60
19) Changeable Message Boards (2)	37	day	\$ 129.02	\$ 4,773.74
20) Traffic Control - Type IV	25	day	\$ 1,720.19	\$ 43,004.75
21) Mobilization	---	---	5%	\$ 4,335.95
22) Contingency	---	---	20%	\$ 18,211.01

Subtotal	\$	109,266.05
Design Engineering Services	\$	10,926.61
Bidding and Construction Services	\$	10,926.61
Grand Total	\$	131,119.26

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Street

Curb and Drainage Improvements

Cost Reference Date: 8/17/2023
 Estimate Preparation Date: 8/17/2023
 Original Capital Plan Date: 8/6/2018

Primary Project Reason:

Help reduce flooding of South Street Residences during major rain storm events.

Secondary Project Reason:

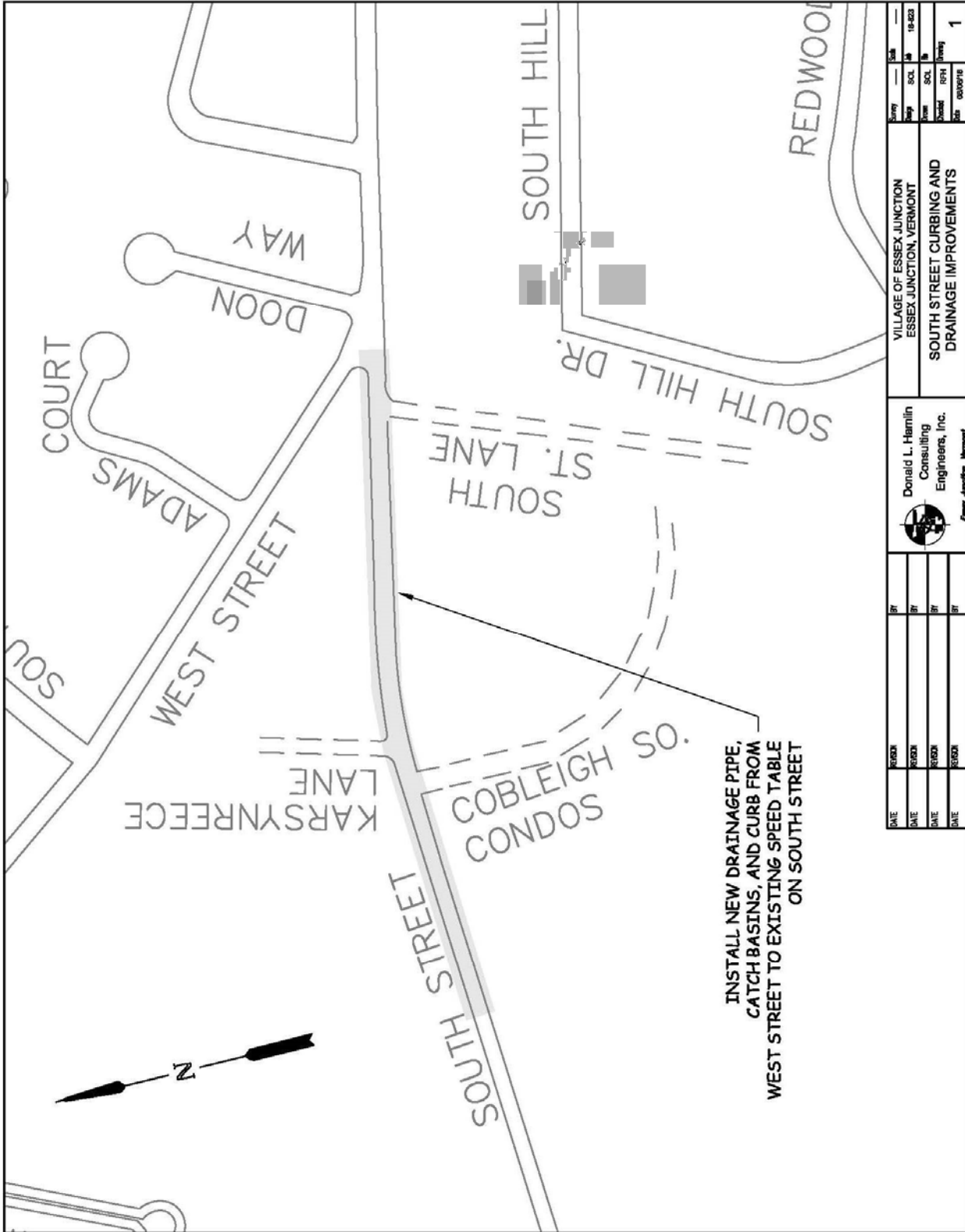
Project will create opportunity for future stormwater collection and treatment.


Assumptions:

- Install new concrete curb along south side of street from West St. to speed table.
- Reconstruct driveway aprons.
- Install new drainage pipe and new drainage structures.
- Install new sidewalk to repaired disturbed by contractor.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	-
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	571,086.17
P	Sidewalk Improvements	\$	8,327.95
	 Combined Account Costs	 \$	 579,414.12
	Project Management, Design and Resident Engineering	\$	110,088.68
	Total Project Cost	\$	689,502.81

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	REVISION	BY	VILLAGE OF ESSEX JUNCTION ESSEX JUNCTION, VERMONT				DATE
			SOUTH STREET CURBING AND DRAINAGE IMPROVEMENTS				16-203
DATE	REVISION	BY	 Donald L. Hamlin Consulting Engineers, Inc. Essex Junction, Vermont				DATE
DATE	REVISION	BY					DATE
DATE	REVISION	BY	DATE	DATE	DATE	DATE	DATE

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**South Street
Curb and Drainage Improvements**

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement	1,300	lf	\$ 4.17	\$ 5,421.00
2) Saw Cut Existing Cement Concrete	20	lf	\$ 5.19	\$ 103.80
3) Excavation of Pavement	1,375	sy	\$ 7.74	\$ 10,642.50
4) Remove Existing Concrete Sidewalk	70	sy	\$ 16.49	\$ 1,154.30
5) New Bituminous Concrete Driveway and Apron	135	sy	\$ 60.21	\$ 8,128.35
6) New Cement Concrete Sidewalk - 4" Thick	50	sy	\$ 84.58	\$ 4,229.00
7) New Cement Concrete Sidewalk - 6" Thick	20	sy	\$ 115.78	\$ 2,315.60
8) Detectable Warning Plates	8	sf	\$ 43.00	\$ 344.04
9) New Cement Concrete Curb	1,100	lf	\$ 35.12	\$ 38,632.00
10) Remove and Reset Existing Granite Curb	50	lf	\$ 150.52	\$ 7,526.00
11) New 2' x 5' Catch Basin	2	each	\$ 7,420.54	\$ 14,841.08
12) New 4' Diameter Drainage Structure	8	each	\$ 7,420.54	\$ 59,364.32
13) 15" HDPE Drainage Pipe	35	lf	\$ 72.88	\$ 2,550.80
14) 24" HDPE Drainage Pipe	1,205	lf	\$ 137.53	\$ 165,723.65
15) 24" HDPE End Section	1	each	\$ 450.00	\$ 450.00
16) Type I Rip Rap for Outfall Pads	15	cy	\$ 136.18	\$ 2,042.70
17) Remove Existing Catch Basin	3	each	\$ 902.14	\$ 2,706.42
18) Remove Existing Drainage Pipe	65	lf	\$ 20.20	\$ 1,313.00
19) Remove Existing Drywells	3	each	\$ 902.14	\$ 2,706.42
20) Plant Mixed Gravel	825	cy	\$ 44.08	\$ 36,366.00
21) New Bituminous Concrete Pavement - 2", Type II	1,275	sy	\$ 17.62	\$ 22,465.50
22) New Bituminous Concrete Pavement - 1-1/2", Type III	1,275	sy	\$ 10.39	\$ 13,247.25
23) Clearing and Grubbing	1	ls	\$ 2,500.00	\$ 2,500.00
24) Remove and Reset Existing Sign	4	each	\$ 150.52	\$ 602.08
25) Replace Existing Curb Stop Box	6	each	\$ 341.00	\$ 2,046.00
26) New Tree	1	each	\$ 625.00	\$ 625.00
27) Connect New Pipe to Existing Structure	1	each	\$ 1,144.44	\$ 1,144.44

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

South Street

Cost Reference Date: 8/17/2023

Curb and Drainage Improvements

Cost Reference Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
28) Relocate Existing 8" Waterline	1	ls	\$10,000.00	\$ 10,000.00
29) Relocate Existing Water Service	6	each	\$ 425.00	\$ 2,550.00
30) Relocate Existing Sewer Service	6	each	\$ 425.00	\$ 2,550.00
31) Hold Existing Utility Pole	4	each	\$ 1,182.63	\$ 4,730.52
32) Supply and Hand Dress Topsoil	75	cy	\$ 49.68	\$ 3,726.00
33) Seed, Fertilize, Lime and Matting	650	sy	\$ 3.58	\$ 2,327.00
34) 24" Wide Stop Bar - Chlorinated Painted	12	lf	\$ 9.72	\$ 116.64
35) Speed Table Approach Striping - Chlorinated Rubber Painted	1	each	\$ 291.60	\$ 291.60
36) Traffic Control - Type I	30	day	\$ 573.40	\$ 17,202.00
37) Dust Control Type III	1	ls	\$ 7,167.47	\$ 7,167.47
38) Mobilization	1	ls	5%	\$ 22,992.62
39) Contingency	---	---	20%	\$ 96,569.02

Subtotal \$ 579,414.12
Design Engineering Services \$ 52,147.27
Bidding and Construction Services \$ 57,941.41
Grand Total \$ 689,502.81

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pleasant Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Road Reconstruction, Main Street to Mansfield Avenue, Innovative Construction

Original Capital Plan Date: 8/6/2018

Primary Project Reason:

Reconstruct the existing 24' wide roadway

Secondary Project Reason:

Assumptions:

New roadway will have a pavement width of 24'

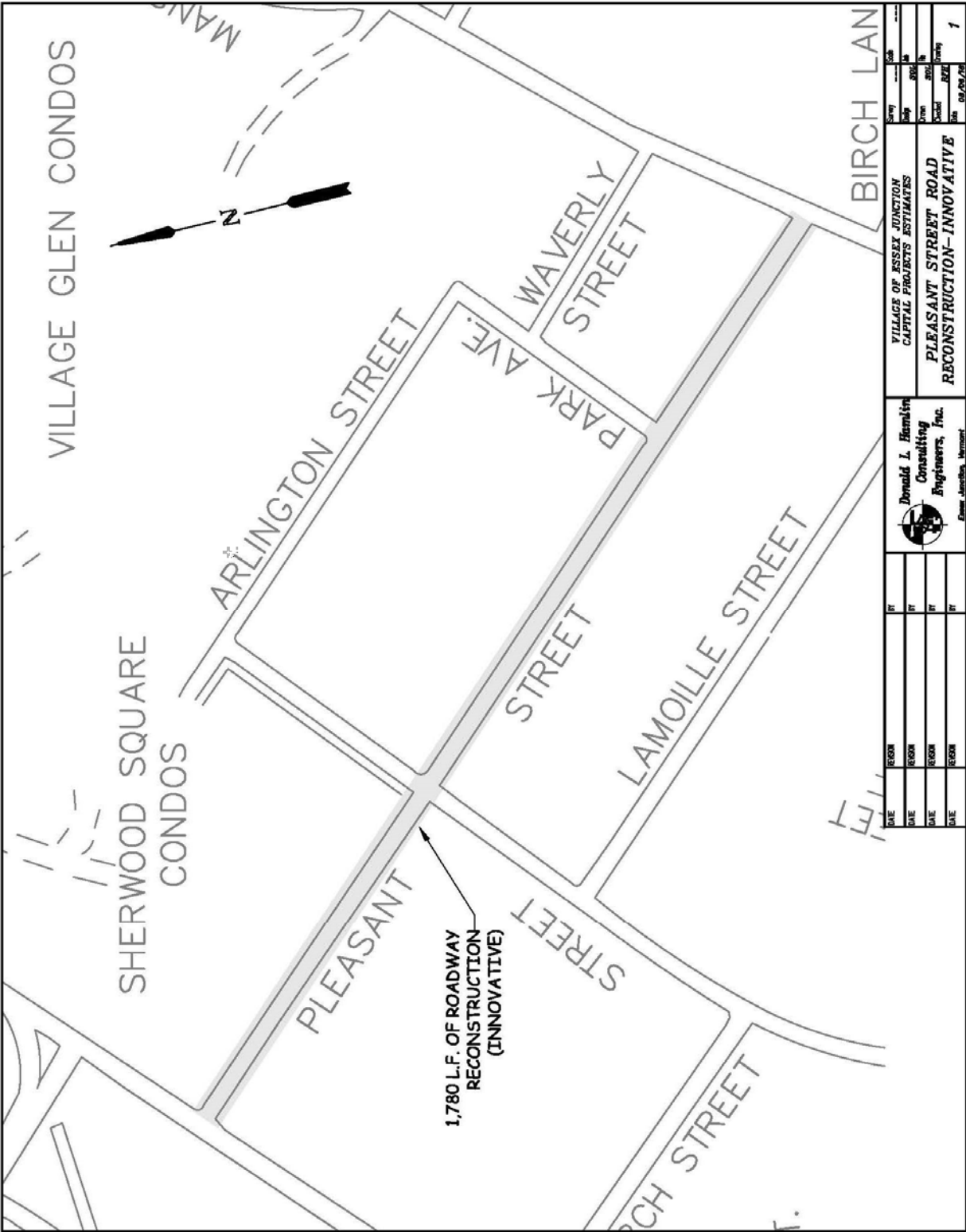
Existing drainage structures will set to new finish grade.

A portion of each residential driveway will be rebuilt to match new roadway.

Speed tables will be re-installed'

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	1,045,760.91
W	Waterline Improvements	\$	5,641.63
S	Sanitary Sewer Improvements	\$	12,067.64
D	Storm Drainage Improvements	\$	24,016.46
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	1,087,486.65
	Project Management, Design and Resident Engineering	\$	195,747.60
	Total Project Cost	\$	1,283,234.24

City of Essex Junction
Capital Projects
Construction Cost Estimate



DATE	ROOM	FT	NO.
DATE	ROOM	FT	NO.
DATE	ROOM	FT	NO.
DATE	ROOM	FT	NO.

VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES
PLEASANT STREET ROAD
RECONSTRUCTION-INNOVATIVE



DATE	ROOM	FT	NO.
DATE	ROOM	FT	NO.
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DATE	ROOM	FT	NO.
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DATE	ROOM	FT	NO.

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Pleasant Street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Road Reconstruction, Main Street to Mansfield Avenue, Innovative Construction

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	650	lf	\$ 4.17	\$ 2,710.50
2) Excavation of Pavement 4" to 6" Thick	5,150	sy	\$ 12.69	\$ 65,353.50
3) Excavation for New Roadway Subbase	4,800	cy	\$ 26.16	\$ 125,568.00
4) Sand Borrow - 3"	475	cy	\$ 32.97	\$ 15,660.75
5) New 2" Thick Extruded Polystyrene Insulation	100,500	sf	\$ 2.58	\$ 259,290.00
6) Dense Graded Crushed Stone - 18"	2,800	cy	\$ 44.80	\$ 125,440.00
7) Plant Mixed Gravel - 6"	950	cy	\$ 44.08	\$ 41,876.00
8) New Bituminous Concrete Pavement - 1-3/4", Type II	5,150	sy	\$ 13.62	\$ 70,143.00
9) New Bituminous Concrete Pavement - 1-1/4", Type III	5,150	sy	\$ 10.03	\$ 51,654.50
10) New Bituminous Concrete Driveway and Apron	375	sy	\$ 60.21	\$ 22,578.75
11) Remove and Reset Existing Catch Basin Frame and Grate	16	each	\$ 1,013.08	\$ 16,209.28
12) Adjust Existing Gate Valve Box to New Finish Grade	12	each	\$ 253.27	\$ 3,039.24
13) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
14) Remove and Reset Existing Sign	15	each	\$ 150.52	\$ 2,257.80
15) Supply and Spread Topsoil	200	cy	\$ 49.68	\$ 9,936.00
16) Seed, Fertilize, Lime and Matting	1,750	sy	\$ 3.58	\$ 6,265.00
17) 24" Wide Stop Bar - Chlorinated Painted	60	lf	\$ 9.72	\$ 583.20
18) 12" Wide Crosswalk Bar - Chlorinated Rubber Painted	70	lf	\$ 9.32	\$ 652.40
19) Speed Table Approach Striping - Chlorinated Rubber Painted	4	each	\$ 291.60	\$ 1,166.40
20) Traffic Control - Type I	50	day	\$ 573.40	\$ 28,670.00
21) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
22) Mobilization	---	---	5%	\$ 43,154.23
Contingency	---	---	20%	\$ 181,247.77

Subtotal	\$	1,087,486.65
Design Engineering Services	\$	86,998.93
Bidding and Construction Services	\$	108,748.66
Grand Total	\$	1,283,234.24

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Iroquois Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

**Road Reconstruction, South Summit Street to Park Street, Conventional Construction
Replace Waterline from South Summit Street to Orchard Terrace, Loop to Cherokee**

Original Capital Plan Date: 8/6/2018

Primary Project Reason:

- Reconstruct the existing 24' wide roadway
- Replace deteriorating waterline that has had several breaks

Secondary Project Reason:

- Loop waterline to improve water quality

Assumptions:

- New roadway will have a pavement width of 24'
- Existing drainage structures will set to new finish grade.
- Remove and reset existing granite curb.
- A portion of each residential driveway will be rebuilt to match new roadway.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	1,303,138.61
W	Waterline Improvements	\$	352,559.10
S	Sanitary Sewer Improvements	\$	10,968.46
D	Storm Drainage Improvements	\$	27,459.73
P	Sidewalk Improvements	\$	10,688.81
	Combined Account Costs	\$	1,704,814.70
	Project Management, Design and Resident Engineering	\$	306,866.65
	Total Project Cost	\$	2,011,681.35

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Iroquois Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

**Road Reconstruction, South Summit Street to Park Street, Conventional Construction
Replace Waterline from South Summit Street to Orchard Terrace, Loop to Cherokee**

	ITEM	QUANTITY	UNIT	PRICE	TOTAL
1)	Saw Cut Existing Pavement 4" Thick	1,050	lf	\$ 4.17	\$ 4,378.50
2)	Excavation of Pavement 4" to 6" Thick	6,100	sy	\$ 12.69	\$ 77,409.00
3)	Excavation for New Roadway Subbase	6,950	cy	\$ 26.16	\$ 181,812.00
4)	Mirafi 500X Geotextile Fabric	5,700	sy	\$ 2.08	\$ 11,856.00
5)	Sand Borrow - 12"	2,080	cy	\$ 32.97	\$ 68,577.60
6)	Dense Graded Crushed Stone - 24"	4,075	cy	\$ 44.80	\$ 182,560.00
7)	Plant Mixed Gravel - 6"	1,035	cy	\$ 44.08	\$ 45,622.80
8)	New Bituminous Concrete Pavement - 1-3/4", Type II	5,700	sy	\$ 13.62	\$ 77,634.00
9)	New Bituminous Concrete Pavement - 1-1/4", Type III	5,700	sy	\$ 10.03	\$ 57,171.00
10)	New Bituminous Concrete Driveway and Apron	565	sy	\$ 60.21	\$ 34,018.65
11)	Remove and Reset Existing Catch Basin Frame and Grate	19	each	\$ 1,013.08	\$ 19,248.52
12)	Adjust Existing Gate Valve Box to New Finish Grade	3	each	\$ 253.27	\$ 759.81
13)	Underdrain	4,200	lf	\$ 29.26	\$ 122,892.00
14)	Underdrain Cleanout	10	each	\$ 322.54	\$ 3,225.40
15)	Connect New Underdrain to Existing Structure	10	each	\$ 1,144.44	\$ 11,444.40
16)	Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
17)	Remove and Reset Existing Granite Curb	3,700	lf	\$ 24.23	\$ 89,651.00
18)	Supply and Spread Topsoil	300	cy	\$ 49.68	\$ 14,904.00
19)	Seed, Fertilize, Lime and Matting	1,975	sy	\$ 3.58	\$ 7,070.50
20)	8" Gate Valve with Valve Box	6	each	\$ 3,049.04	\$ 18,294.24
21)	Reducer (8x6)	4	each	\$ 1,027.57	\$ 4,110.28
22)	8" Tee	5	each	\$ 2,727.94	\$ 13,639.70
23)	New Hydrant Assembly (Tee, Valve, Hydrant, Glands, Pipe)	1	each	\$ 8,020.40	\$ 8,020.40

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Iroquois Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

**Road Reconstruction, South Summit Street to Park Street, Conventional Construction
Replace Waterline from South Summit Street to Orchard Terrace, Loop to Cherokee**

	ITEM	QUANTITY	UNIT	PRICE	TOTAL
24)	Remove Existing Hydrant	1	each	\$ 1,069.03	\$ 1,069.03
25)	3/4" Copper Waterline	660	lf	\$ 55.32	\$ 36,511.20
26)	3/4" Corporation Stop	22	each	\$ 792.72	\$ 17,439.84
27)	3/4" Curb Stop	22	each	\$ 357.66	\$ 7,868.52
28)	8" Ductile Iron Pipe, CI 52	1,275	lf	\$ 120.24	\$ 153,306.00
29)	Cap and Abandon Existing Waterline	5	each	\$ 1,885.59	\$ 9,427.95
30)	Saw Cut Existing Cement Concrete 4" Thick	100	lf	\$ 5.19	\$ 519.00
31)	Remove Existing Concrete Sidewalk	60	sy	\$ 16.49	\$ 989.40
32)	New Cement Concrete Sidewalk - 4" Thick	60	sy	\$ 84.58	\$ 5,074.80
33)	24" Wide Stop Bar - Chlorinated Painted	24	lf	\$ 9.72	\$ 233.28
34)	12" Wide Crosswalk Bar - Chlorinated Rubber Painted	70	lf	\$ 9.32	\$ 652.40
35)	Traffic Control - Type I	90	day	\$ 573.40	\$ 51,606.00
36)	Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
37)	Mobilization	---	---	5%	\$ 67,651.38
	Contingency	---	---	20%	\$ 284,135.78

Subtotal	\$ 1,704,814.70
Design Engineering Services	\$ 136,385.18
Bidding and Construction Services	\$ 170,481.47
Grand Total	\$ 2,011,681.35

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Iroquois Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

**Road Reconstruction, South Summit Street to Park Street, Innovative Construction
Replace Waterline from South Summit Street to Orchard Terrace, Loop to Cherokee**

Original Capital Plan Date: 8/6/2018

Primary Project Reason:

- Reconstruct the existing 24' wide roadway
- Replace deteriorating waterline that has had several breaks

Secondary Project Reason:

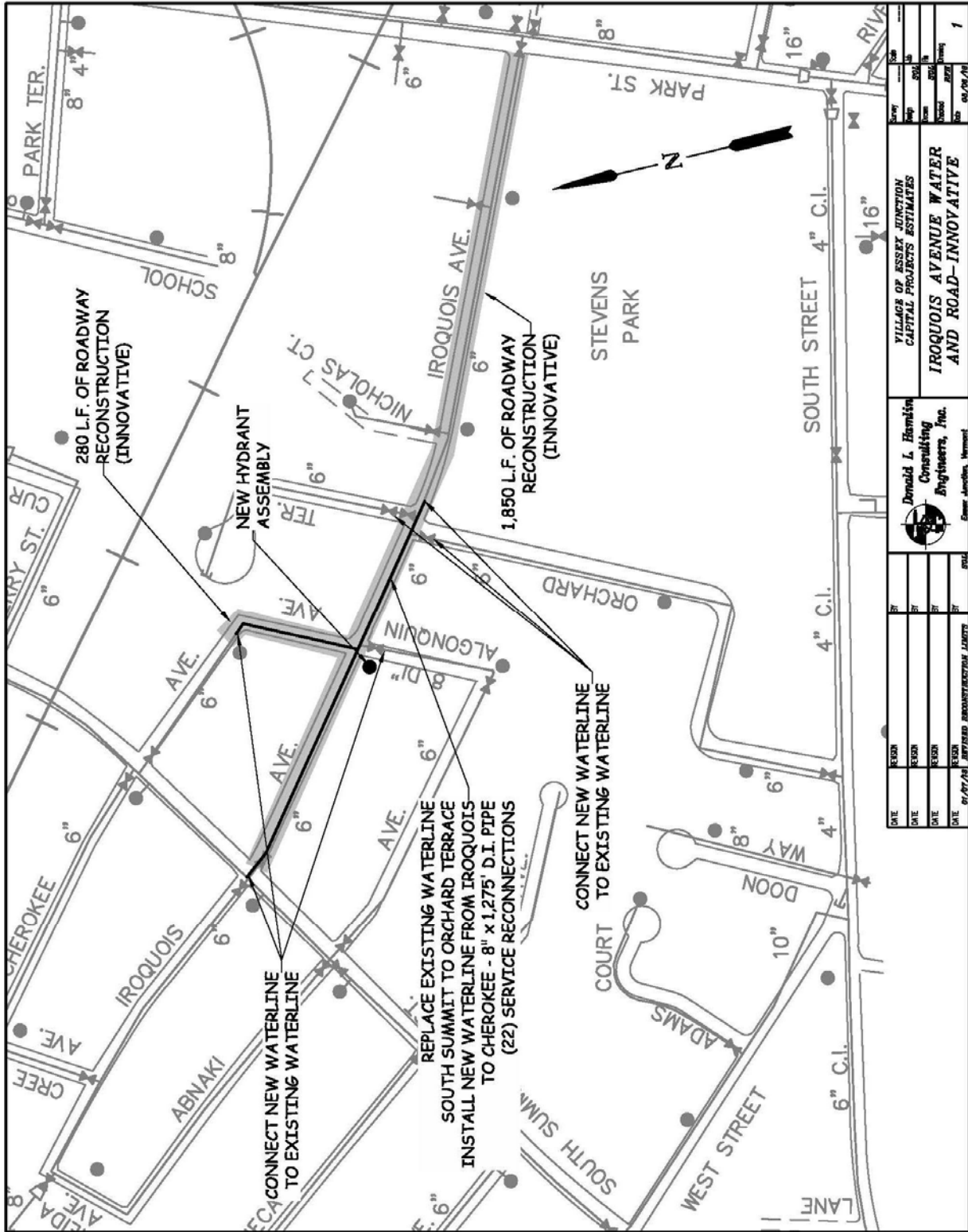
- Loop waterline to improve water quality

Assumptions:

- New roadway will have a pavement width of 24'
- Existing drainage structures will set to new finish grade.
- Remove and reset existing granite curb.
- A portion of each residential driveway will be rebuilt to match new roadway.
- Insulation will be utilized instead of underdrain.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	1,344,989.58
W	Waterline Improvements	\$	354,376.27
S	Sanitary Sewer Improvements	\$	11,059.32
D	Storm Drainage Improvements	\$	27,641.45
P	Sidewalk Improvements	\$	10,779.67
	Combined Account Costs	\$	1,748,846.28
	Project Management, Design and Resident Engineering	\$	314,792.33
	Total Project Cost	\$	2,063,638.61

**City of Essex Junction
Capital Projects
Construction Cost Estimate**



DATE	PERSON	BY	DESCRIPTION

DATE	PERSON	BY	DESCRIPTION
05/07/03			PRELIMINARY RECONSTRUCTION LAYOUT

DATE	PERSON	BY	DESCRIPTION

DATE	PERSON	BY	DESCRIPTION

DATE	PERSON	BY	DESCRIPTION

DATE	PERSON	BY	DESCRIPTION

**VILLAGE OF ESSEX JUNCTION
CAPITAL PROJECTS ESTIMATES**

**IROQUOIS AVENUE WATER
AND ROAD-INNOVATIVE**

**Donald L. Hamlin
Consulting
Engineers, Inc.**

Essex Junction, Vermont

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Iroquois Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

**Road Reconstruction, South Summit Street to Park Street, Innovative Construction
Replace Waterline from South Summit Street to Orchard Terrace, Loop to Cherokee**

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	1,050	lf	\$ 4.17	\$ 4,378.50
2) Excavation of Pavement 4" to 6" Thick	6,100	sy	\$ 12.69	\$ 77,409.00
3) Excavation for New Roadway Subbase	6,950	cy	\$ 26.16	\$ 181,812.00
3) Sand Borrow - 3"	530	cy	\$ 32.97	\$ 17,474.10
4) New 2" Thick Extruded Polystyrene Insulation	110,625	sf	\$ 2.58	\$ 285,412.50
5) Dense Graded Crushed Stone - 18"	3,105	cy	\$ 44.80	\$ 139,104.00
6) Plant Mixed Gravel - 6"	1,035	cy	\$ 44.08	\$ 45,622.80
7) New Bituminous Concrete Pavement - 1-3/4", Type II	5,700	sy	\$ 13.62	\$ 77,634.00
8) New Bituminous Concrete Pavement - 1-1/4", Type III	5,700	sy	\$ 10.03	\$ 57,171.00
9) New Bituminous Concrete Driveway and Apron	565	sy	\$ 60.21	\$ 34,018.65
10) Remove and Reset Existing Catch Basin Frame and Grate	19	each	\$ 1,013.08	\$ 19,248.52
11) Adjust Existing Gate Valve Box to New Finish Grade	3	each	\$ 253.27	\$ 759.81
12) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85
13) Remove and Reset Existing Granite Curb	3,700	lf	\$ 24.23	\$ 89,651.00
14) Supply and Spread Topsoil	200	cy	\$ 49.68	\$ 9,936.00
15) Seed, Fertilize, Lime and Matting	1,550	sy	\$ 3.58	\$ 5,549.00
16) 8" Gate Valve with Valve Box	6	each	\$ 3,049.04	\$ 18,294.24
17) Reducer (8x6)	4	each	\$ 1,027.57	\$ 4,110.28
18) 8" Tee	5	each	\$ 2,727.94	\$ 13,639.70
19) New Hydrant Assembly (Tee, Valve, Hydrant, Glands, Pipe)	1	each	\$ 8,020.40	\$ 8,020.40

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Iroquois Avenue

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

**Road Reconstruction, South Summit Street to Park Street, Innovative Construction
Replace Waterline from South Summit Street to Orchard Terrace, Loop to Cherokee**

ITEM	QUANTITY	UNIT	PRICE	TOTAL
20) Remove Existing Hydrant	1	each	\$ 1,069.03	\$ 1,069.03
21) 3/4" Copper Waterline	660	lf	\$ 55.32	\$ 36,511.20
22) 3/4" Corporation Stop	22	each	\$ 792.72	\$ 17,439.84
23) 3/4" Curb Stop	22	each	\$ 357.66	\$ 7,868.52
24) 8" Ductile Iron Pipe, CI 52	1,275	lf	\$ 120.24	\$ 153,306.00
25) Cap and Abandon Existing Waterline	5	each	\$ 1,885.59	\$ 9,427.95
26) Saw Cut Existing Cement Concrete 4" Thick	100	lf	\$ 5.19	\$ 519.00
27) Remove Existing Concrete Sidewalk	60	sy	\$ 16.49	\$ 989.40
28) New Cement Concrete Sidewalk - 4" Thick	60	sy	\$ 84.58	\$ 5,074.80
29) 24" Wide Stop Bar - Chlorinated Painted	24	lf	\$ 9.72	\$ 233.28
30) 12" Wide Crosswalk Bar - Chlorinated Rubber Painted	70	lf	\$ 9.32	\$ 652.40
31) Traffic Control - Type I	90	day	\$ 573.40	\$ 51,606.00
32) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
33) Mobilization	---	---	5%	\$ 69,398.66
Contingency	---	---	20%	\$ 291,474.38

Subtotal \$ 1,748,846.28
Design Engineering Services \$ 139,907.70
Bidding and Construction Services \$ 174,884.63
Grand Total \$ 2,063,638.61

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

North Street

**Replace Waterline, Grove Street to Central Street
Roadway Reconstruction - Innovative**

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 8/6/2018

Primary Project Reason:

Replace old and undersized waterline

Secondary Project Reason:

Rebuild roadway because of deep excavation

Rebuild storm drainage

Assumptions:

New roadway will have a pavement width of 24' with curb.

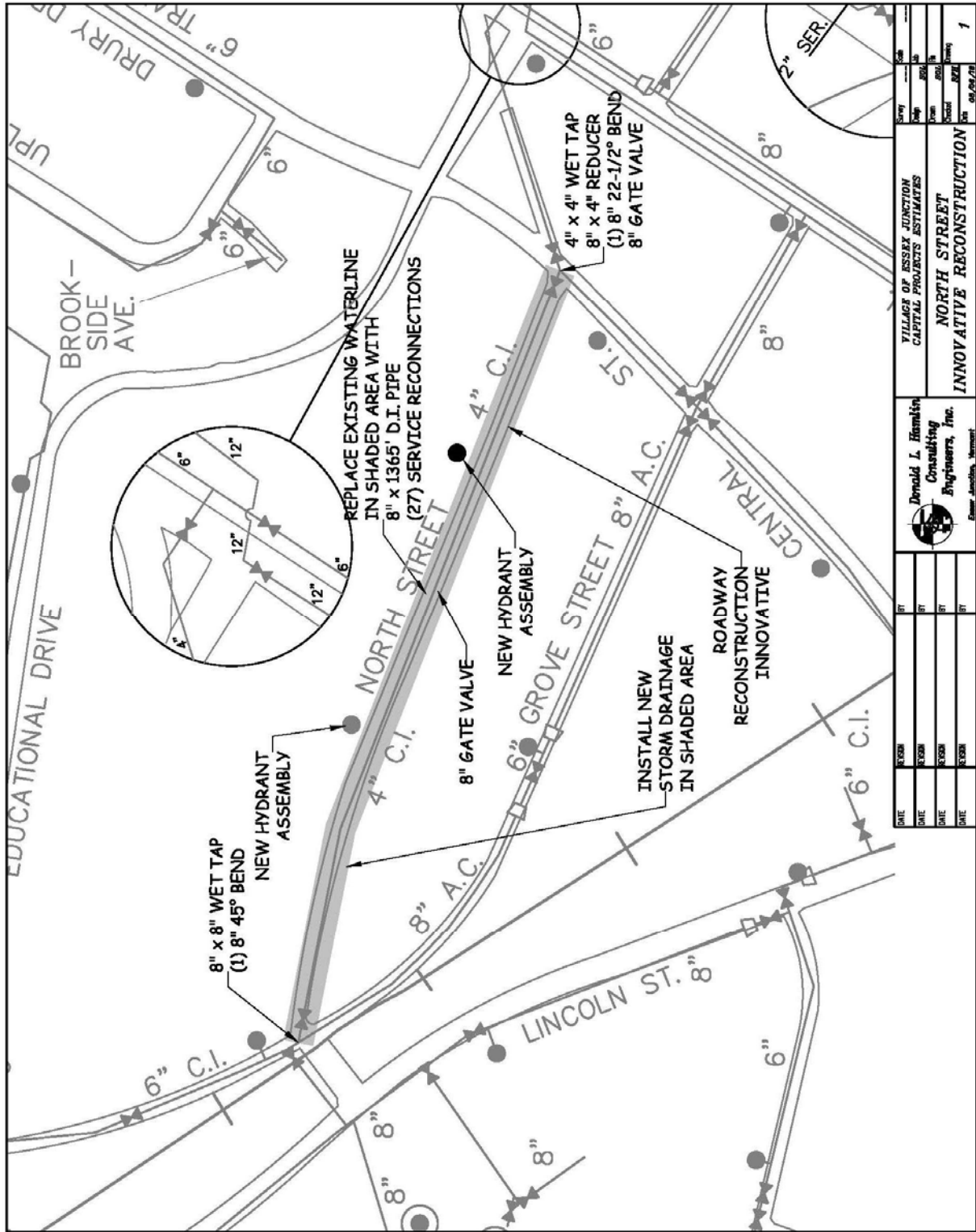
Existing waterline will remain in use until new waterline is operational.

New 5' sidewalk on one side of the road.

8 new drainage structures and piping to be installed.

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	1,028,308.55
W	Waterline Improvements	\$	362,662.39
S	Sanitary Sewer Improvements	\$	10,871.73
D	Storm Drainage Improvements	\$	179,573.25
P	Sidewalk Improvements	\$	104,310.33
	Combined Account Costs	\$	1,685,726.25
	Project Management, Design and Resident Engineering	\$	303,430.73
	Total Project Cost	\$	1,989,156.98

City of Essex Junction
 Capital Projects
 Construction Cost Estimate



DATE	BY	CHECKED	DATE	BY	CHECKED	DATE	 Donald L. Rasmussen Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>	VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES NORTH STREET INNOVATIVE RECONSTRUCTION
DATE	BY	DATE	BY	DATE	BY	DATE		
DATE	BY	DATE	BY	DATE	BY	DATE		

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

North Street

Cost Reference Date: 8/17/2023

Replace Waterline, Grove Street to Central Street

Estimate Preparation Date: 8/17/2023

Roadway Reconstruction - Innovative

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	775	lf	\$ 4.17	\$ 3,231.75
2) Excavation of Pavement 4" to 6" Thick	4,250	sy	\$ 12.69	\$ 53,932.50
3) Remove Existing Concrete Curb	1,350	lf	\$ 6.95	\$ 9,382.50
4) Remove Existing Concrete Sidewalk	600	sy	\$ 16.49	\$ 9,894.00
5) Excavation for New Roadway Subbase	3,900	cy	\$ 26.16	\$ 102,024.00
6) Dense Graded Crushed Stone	2,300	cy	\$ 44.80	\$ 103,040.00
7) Plant Mixed Gravel	775	cy	\$ 44.08	\$ 34,162.00
8) Sand Borrow	400	cy	\$ 32.97	\$ 13,188.00
9) New Bituminous Concrete Pavement - 1-3/4", Type II	4,250	sy	\$ 13.62	\$ 57,885.00
10) New Bituminous Concrete Pavement - 1-1/4", Type III	4,250	sy	\$ 10.03	\$ 42,627.50
11) New Bituminous Concrete Driveway and Apron	650	sy	\$ 60.21	\$ 39,136.50
12) New Cement Concrete Curb	2,700	lf	\$ 35.12	\$ 94,824.00
13) New Cement Concrete Sidewalk - 4" Thick	550	sy	\$ 84.58	\$ 46,519.00
14) New Cement Concrete Sidewalk - 6" Thick	200	sy	\$ 115.78	\$ 23,156.00
15) Wet Tap (8x8)	1	each	\$ 6,749.36	\$ 6,749.36
16) Wet Tap (4x4)	1	each	\$ 5,331.55	\$ 5,331.55
17) 8" Ductile Iron Pipe, CI 52	1,365	lf	\$ 120.24	\$ 164,127.60
18) 8" Mechanical Bends	2	each	\$ 1,433.49	\$ 2,866.98
19) Reducer (8x4)	1	each	\$ 1,027.57	\$ 1,027.57
20) 8" Gate Valve with Valve Box	2	each	\$ 3,049.04	\$ 6,098.08
21) New Hydrant Assembly (Tee, Valve, Hydrant, Glands and 6' Pipe)	2	each	\$ 8,020.40	\$ 16,040.80
22) 3/4" Corporation Stop	29	each	\$ 792.72	\$ 22,988.88
23) 3/4" Curb Stop	29	each	\$ 357.66	\$ 10,372.14
24) 3/4" Copper Waterline	775	lf	\$ 55.32	\$ 42,873.00
25) Remove Existing Manhole Frame and Cover, Replace with New	5	each	\$ 1,372.57	\$ 6,862.85

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

North Street

Cost Reference Date: 8/17/2023

Replace Waterline, Grove Street to Central Street

Estimate Preparation Date: 8/17/2023

Roadway Reconstruction - Innovative

ITEM	QUANTITY	UNIT	PRICE	TOTAL
27) Connect New Pipe to Existing Structure	2	each	\$ 1,144.44	\$ 2,288.88
28) Catch Basin - 4' Dia., To 8' Deep	8	each	\$ 5,260.84	\$ 42,086.72
29) 15" HDPE Drainage Pipe - To 8' Deep	1,250	lf	\$ 72.88	\$ 91,100.00
30) Supply & Spread Topsoil	250	cy	\$ 49.68	\$ 12,420.00
31) Seed, Fertilize and Matting	2,300	sy	\$ 3.58	\$ 8,234.00
32) New 2" Thick Extruded Polystyrene Insulation	81,000	sf	\$ 2.58	\$ 208,980.00
33) Detectable Warning Surface	16	sf	\$ 43.00	\$ 688.07
34) 24" Wide Stop Bar - Chlorinated Painted	24	lf	\$ 9.72	\$ 233.28
35) 12" Wide Crosswalk Bar - Chlorinated Rubber Painted	50	lf	\$ 9.32	\$ 466.00
36) Traffic Control - Type I	80	day	\$ 573.40	\$ 45,872.00
37) Dust Control - Type III	1	ls	\$ 7,167.47	\$ 7,167.47
38) Mobilization	---	---	5%	\$ 66,893.90
Contingency	---	---	20%	\$ 280,954.38

Subtotal \$ 1,685,726.25
 Design Engineering Services \$ 134,858.10
 Bidding and Construction Services \$ 168,572.63
 Grand Total \$ 1,989,156.98

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Class II Road, Village Street

1,600' Sidewalk replacement on Village residential street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

Original Capital Plan Date: 3/1/2019

Primary Project Reason:

Replace narrow and decaying sidewalk

Secondary Project Reason:

Assumptions:

New sidewalk will be 5' wide.

5' wide green belt.

A portion of each residential driveway will be rebuilt to match new sidewalk.

Does not include removing sidewalk on other side of street

O	Pavement Overlay		
R	Roadway Reconstruction		
W	Waterline Improvements	\$	6,457.97
S	Sanitary Sewer Improvements		
D	Storm Drainage Improvements		
P	Sidewalk Improvements	\$	173,779.53
	Combined Account Costs	\$	180,237.50
	Project Management, Design and Resident Engineering	\$	36,047.50
	Total Project Cost	\$	216,285.01

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Class II Road, Village Street

1,600' Sidewalk replacement on Village residential street

Cost Reference Date: 8/17/2023

Estimate Preparation Date: 8/17/2023

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Saw Cut Existing Pavement 3" Thick	320	lf	\$ 2.87	\$ 918.40
2) Excavation of Pavement to 3" Thick	360	sy	\$ 7.74	\$ 2,786.40
3) Remove Existing Concrete Sidewalk	800	sy	\$ 16.49	\$ 13,192.00
4) New Cement Concrete Sidewalk - 4" Thick	825	sy	\$ 84.58	\$ 69,778.50
5) New Cement Concrete Sidewalk - 6" Thick	180	sy	\$ 115.78	\$ 20,840.40
6) Detectable Warning Surface	32	sf	\$ 43.00	\$ 1,376.14
7) New Bituminous Concrete Driveway and Apron	360	sy	\$ 60.21	\$ 21,675.60
8) Supply and Spread Topsoil	180	cy	\$ 49.68	\$ 8,942.40
9) Seed, Fertilize, Lime and Matting	1,650	sy	\$ 3.58	\$ 5,907.00
10) Raise Existing Hydrant	2	each	\$ 1,069.03	\$ 2,138.06
11) Adjust Existing Curb Stop Box to New Finish Grade	16	each	\$ 170.50	\$ 2,728.00
12) Adjust Existing Gate Valve Box to New Finish Grade	4	each	\$ 253.27	\$ 1,013.08
13) Traffic Control - Type I	20	day	\$ 573.40	\$ 11,468.00
14) Dust Control - Type I	1	ls	\$ 716.75	\$ 716.75
15) Mobilization	---	---	5%	\$ 8,174.04
Contingency	---	---	5%	\$ 8,582.74

Subtotal \$ 180,237.50

Design Engineering Services \$ 18,023.75

Bidding and Construction Services \$ 18,023.75

Grand Total \$ 216,285.01

Price per linear foot of 5' wide sidewalk = \$ 135.18

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

**12" and 16" Waterline Replacement from Bridge
to Champlain Water District Water Tank**

Primary Project Reason:

Replace existing waterline due to multiple water breaks

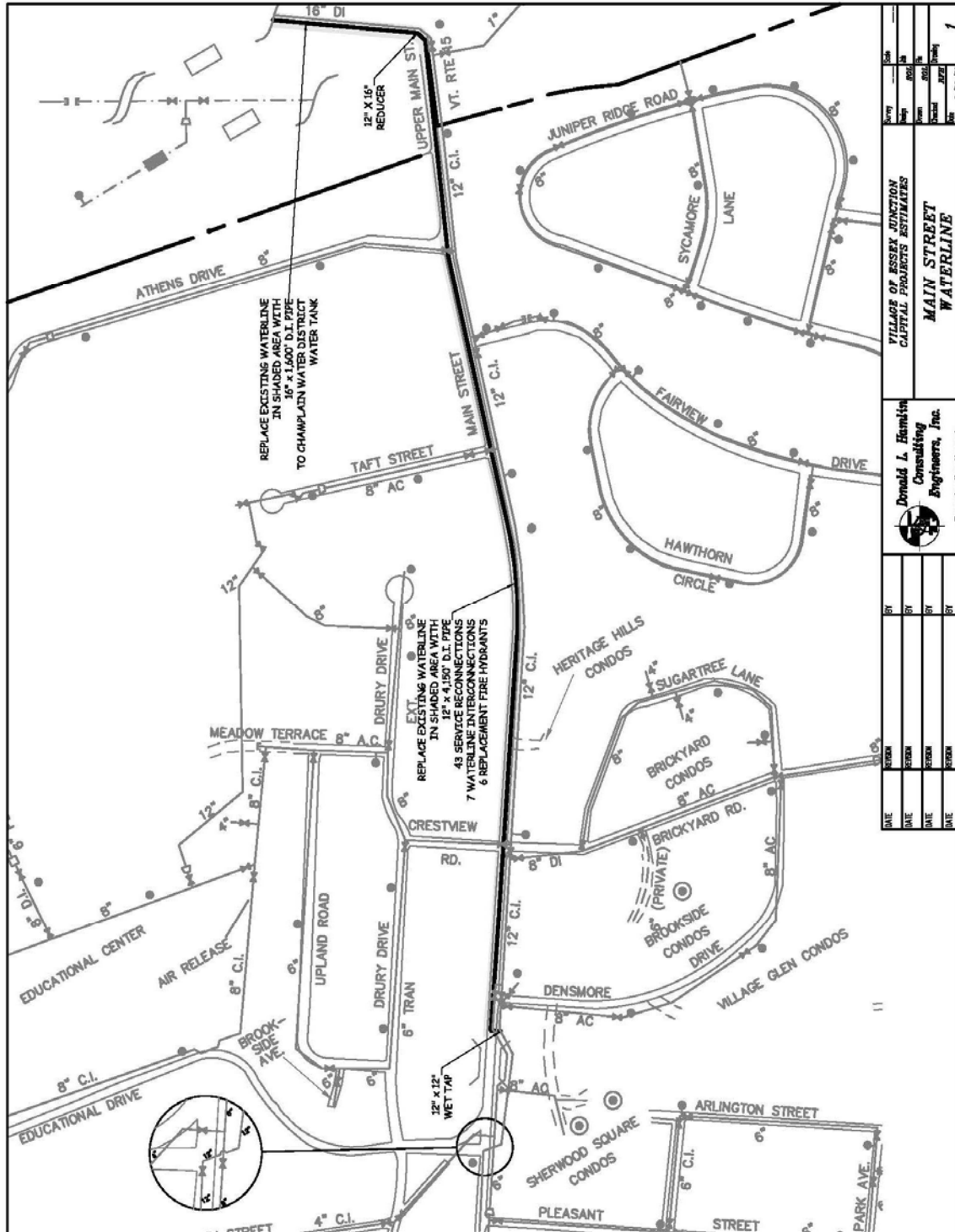
Secondary Project Reason:

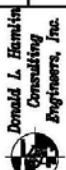
Assumptions:

New 12" and 16" Waterline Replacement from Bridge
to Champlain Water District Water Tank
Reconstruct Roadway
New Water Services
New Hydrants

O	Pavement Overlay	\$	-
R	Roadway Reconstruction	\$	-
W	Waterline Improvements	\$	2,679,365.71
S	Sanitary Sewer Improvements	\$	-
D	Storm Drainage Improvements	\$	-
P	Sidewalk Improvements	\$	-
	Combined Account Costs	\$	2,679,365.71
	Project Management, Design and Resident Engineering	\$	482,285.83
	Total Project Cost	\$	3,161,651.53

City of Essex Junction
Capital Projects
Construction Cost Estimate



VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES	
DATE	BY
DATE	BY
DATE	BY
DATE	BY
 Donald L. Hamelin Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>	
MAIN STREET WATERLINE	
Scale: 1" = 40'	

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

**12" and 16" Waterline Replacement from Bridge
to Champlain Water District Water Tank**

Estimate Preparation Date: 4/28/2021

ITEM	QUANTITY	UNIT	PRICE	TOTAL
1) Clearing and Grubbing	1	ls	\$ 2,500.00	\$ 2,500.00
2) Saw Cut Existing Pavement	11,000	lf	\$ 5.48	\$ 60,280.00
3) Saw Cut Existing Cement Concrete	100	lf	\$ 5.96	\$ 596.00
4) Excavation of Pavement	4,750	sy	\$ 12.69	\$ 60,277.50
5) Remove Existing Concrete Sidewalk	50	sy	\$ 16.49	\$ 824.50
6) Remove Existing Cement Concrete Curb	300	lf	\$ 6.95	\$ 2,085.00
7) New Cement Concrete Sidewalk - 4" Thick	10	sy	\$ 84.58	\$ 845.80
8) New Cement Concrete Sidewalk - 6" Thick	40	sy	\$ 115.78	\$ 4,631.20
9) Detectable Warning Plates	24	sf	\$ 43.00	\$ 1,032.00
10) New Cement Concrete Curb	300	lf	\$ 35.12	\$ 10,536.00
11) Temporary Pavement - 1" Thick	4,400	sy	\$ 11.83	\$ 52,030.00
12) 12" Wet Tap	1	each	\$10,262.75	\$ 10,262.75
13) New 12" Ductile Iron Pipe	3,800	lf	\$ 134.58	\$ 511,404.00
14) New 12" Gate Valve	12	each	\$ 5,296.76	\$ 63,561.12
15) New 8" Ductile Iron Pipe	120	lf	\$ 120.24	\$ 14,428.80
16) New 8" Gate Valve	6	each	\$ 3,049.04	\$ 18,294.24
17) New 6" Ductile Iron Pipe	20	lf	\$ 101.79	\$ 2,035.80
18) New 6" Gate Valve	1	each	\$ 2,479.94	\$ 2,479.94
19) Abandon Existing Gate Valve	14	each	\$ 675.00	\$ 9,450.00
20) Remove Existing Hydrant Assembly	6	each	\$ 875.00	\$ 5,250.00
21) New Hydrant Assembly (Tee, Valve, Hydrant, Glands & Pipe)	6	each	\$ 8,020.40	\$ 48,122.40
22) 3/4" Copper Waterline	1,600	lf	\$ 55.32	\$ 88,512.00
23) 3/4" Corporation Stop	41	each	\$ 792.72	\$ 32,501.52
24) 3/4" Curb Stop	41	each	\$ 357.66	\$ 14,664.06
25) 2" Copper Waterline	150	each	\$ 110.64	\$ 16,596.00
26) 2" Corporation Stop	3	each	\$ 1,585.44	\$ 4,756.32
27) 2" Curb Stop	3	each	\$ 715.32	\$ 2,145.96
28) Connect New Ductile Iron Waterline to Existing Waterline	7	each	\$ 2,536.54	\$ 17,755.78

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

Main Street

Cost Reference Date: 8/17/2023

**12" and 16" Waterline Replacement from Bridge
to Champlain Water District Water Tank**

Estimate Preparation Date: 4/28/2021

ITEM	QUANTITY	UNIT	PRICE	TOTAL
29) New 16" Ductile Iron Pipe	1,600	lf	\$ 164.58	\$ 263,328.00
30) New 16" Gate Valve	3	each	\$ 8,296.76	\$ 24,890.28
31) 16" Wet Tap	1	each	\$17,262.75	\$ 17,262.75
32) Cold Plane Pavement 12" Strip at Joint	1,050	sy	\$ 31.54	\$ 33,117.00
33) Dense Grade Crushed Stone	2,250	cy	\$ 44.80	\$ 100,800.00
34) Plant Mixed Gravel	850	cy	\$ 44.08	\$ 37,468.00
35) New Bituminous Concrete Pavement, Type II	1,500	ton	\$ 160.00	\$ 240,000.00
36) New Bituminous Concrete Pavement, Type III	700	ton	\$ 100.00	\$ 70,000.00
37) New Bituminous Concrete Pavement, Type IV	50	ton	\$ 160.00	\$ 8,000.00
38) Catch Basin Inlet Protection	25	each	\$ 363.76	\$ 9,094.00
39) Supply and Spread Topsoil	450	cy	\$ 49.68	\$ 22,356.00
40) Seed, Fertilize, Lime and Matting	4,300	sy	\$ 3.58	\$ 15,394.00
41) Traffic Control	1	ls	\$60,000.00	\$ 60,000.00
42) Flaggers	3,600	hr	\$ 39.42	\$ 141,912.00
43) Dust Control	1	ls	\$25,000.00	\$ 25,000.00
44) Mobilization	1	ls	5%	\$ 106,324.04
45) Contingency	---	---	20%	\$ 446,560.95

Subtotal	\$	2,679,365.71
Design Engineering Services	\$	214,349.26
Bidding and Construction Services	\$	267,936.57
Grand Total	\$	3,161,651.53

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Fairview Drive Pressure Reducing Valve Vault
Install New Waterline and Pressure Reducing Valve
Vault**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023
Original Capital Plan Date: 3/27/2020

Primary Project Reason:

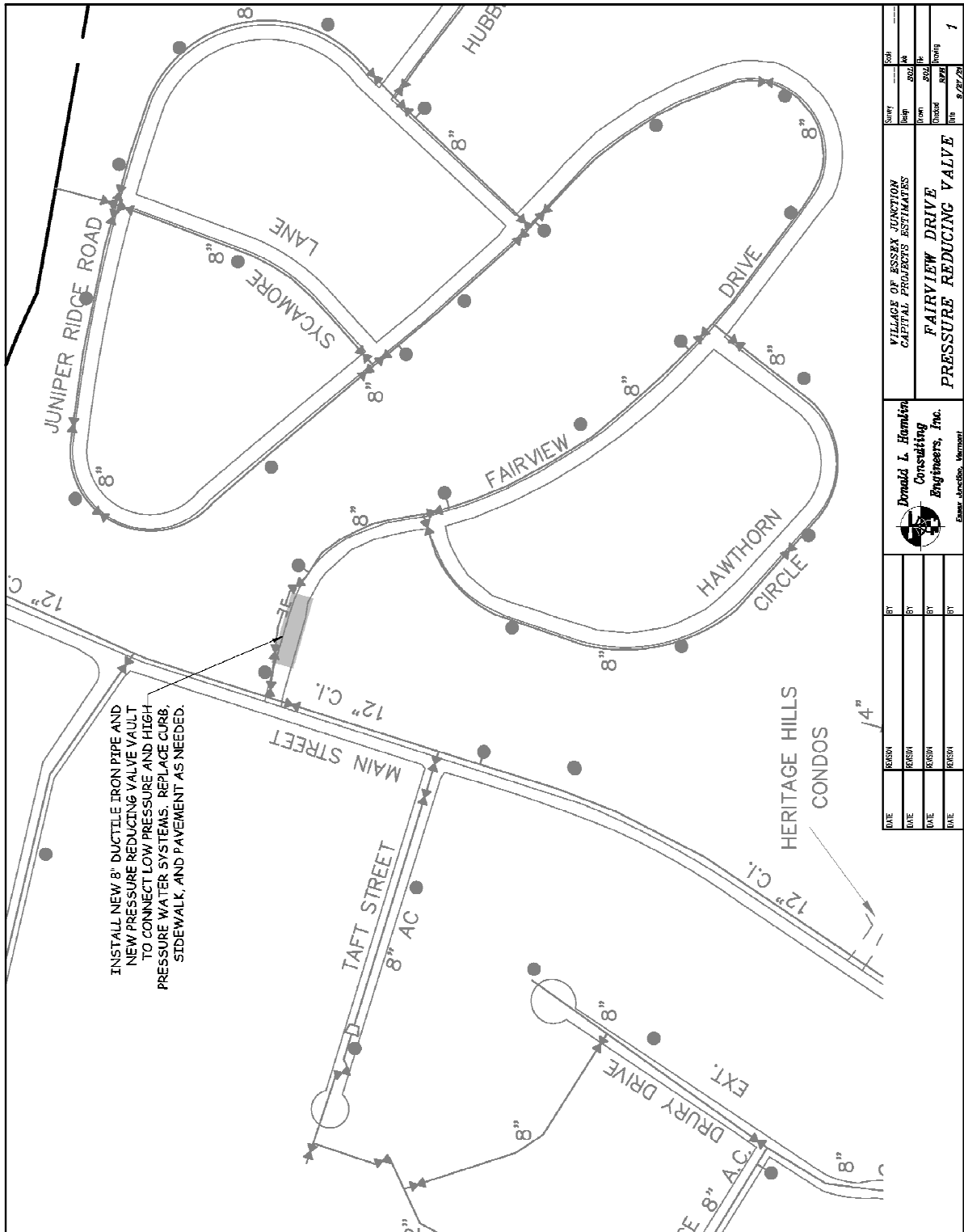
To create a connection between the low and high pressure water systems.

Secondary Project Reason:

Assumptions:

O	Pavement Overlay	\$ -
R	Roadway Reconstruction	\$ -
W	Waterline Improvements	\$ 183,336.85
S	Sanitary Sewer Improvements	\$ -
D	Storm Drainage Improvements	\$ -
P	Sidewalk Improvements	\$ -
	Combined Account Costs	\$ 183,336.85
	Project Management, Design and Resident Engineering	\$ 36,667.38
	Total Project Cost	\$ 220,004.23

City of Essex Junction Capital Projects Construction Cost Estimate



DATE	BY	DATE	BY	DATE	BY	DATE	BY

		VILLAGE OF ESSEX JUNCTION CAPITAL PROJECTS ESTIMATES	
Donald L. Hamlin Consulting Engineers, Inc. <small>Essex Junction, Vermont</small>		FAIRVIEW DRIVE PRESSURE REDUCING VALVE	

Survey	SOH	14	14	14	14	14
Drawn	SOH	14	14	14	14	14
Checked	SOH	14	14	14	14	14
Printed	SOH	14	14	14	14	14
File	SOH	14	14	14	14	14
9/27/20						
1						

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Fairview Drive Pressure Reducing Valve Vault
Install New Waterline and Pressure Reducing Valve
Vault**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023
Original Capital Plan Date: 3/27/2020

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
1) Saw Cut Existing Pavement 4" Thick	300	lf	\$ 4.17	\$ 1,251.00
2) Excavation of Pavement 4" to 6" Thick	85	sy	\$ 12.69	\$ 1,078.65
3) Remove Existing Concrete Curb	280	lf	\$ 6.95	\$ 1,946.00
4) Remove Existing Concrete Sidewalk	120	sy	\$ 16.49	\$ 1,978.80
5) Cold Plane Pavement 12" Strip at Joint	32	sy	\$ 31.54	\$ 1,009.28
6) New Cement Concrete Curb	280	lf	\$ 35.12	\$ 9,833.60
7) New Cement Concrete Sidewalk - 4" Thick	150	sy	\$ 84.58	\$ 12,687.00
8) Dense Graded Crushed Stone	20	cy	\$ 44.80	\$ 896.00
9) Plant Mixed Gravel	10	cy	\$ 44.08	\$ 440.80
10) Sand Borrow	10	cy	\$ 32.97	\$ 329.70
11) Mirafi 500X Geotextile Fabric	35	sy	\$ 2.08	\$ 72.80
12) 8' x 8' Precast Concrete Vault with Aluminum Hatch	1	each	\$10,894.55	\$ 10,894.55
13) 8" Ductile Iron Pipe, CI 52	230	lf	\$ 120.24	\$ 27,655.20
14) 8" Mechanical Bends	4	each	\$ 1,003.44	\$ 4,013.77
15) Reducer (8x6)	2	each	\$ 719.30	\$ 1,438.60
16) Tee (6x6x3)	2	each	\$ 719.30	\$ 1,438.60
17) 8" Solid Sleeve	2	each	\$ 1,003.44	\$ 2,006.89
18) 6" Solid Sleeve	2	each	\$ 697.40	\$ 1,394.79
19) 6" Ductile Iron Pipe, CI 52	14	lf	\$ 101.79	\$ 1,425.06
20) 3" Ductile Iron Pipe, CI 52	22	lf	\$ 88.88	\$ 1,955.36
21) 3" Solid Sleeve	2	each	\$ 547.48	\$ 1,094.95
22) 3" Mechanical Bends	2	each	\$ 547.48	\$ 1,094.95
23) 6" Pressure Reducing Valve	1	each	\$ 10,751.20	\$ 10,751.20
24) 3" Pressure Reducing Valve	1	each	\$ 6,307.37	\$ 6,307.37
25) 6" Dismantling Coupling	1	each	\$ 1,075.12	\$ 1,075.12
26) 3" Dismantling Coupling	1	each	\$ 821.80	\$ 821.80
27) 6" Gate Valve	2	each	\$ 1,735.96	\$ 3,471.92
28) 3" Gate Valve	2	each	\$ 1,654.68	\$ 3,309.36

**City of Essex Junction
Capital Projects
Construction Cost Estimate**

**Fairview Drive Pressure Reducing Valve Vault
Install New Waterline and Pressure Reducing Valve
Vault**

Cost Reference Date: 8/17/2023
Estimate Preparation Date: 8/17/2023
Original Capital Plan Date: 3/27/2020

ITEM	QUANTITY	UNIT	UNIT PRICE	TOTAL
29) 2-1/2" SCH 80 Conduit	220	lf	\$ 24.73	\$ 5,440.60
30) Electrical Meter and Power Panel	1	each	\$ 5,017.23	\$ 5,017.23
31) Sump Pump Assembly	1	each	\$ 1,433.49	\$ 1,433.49
32) Supply and Spread Topsoil	35	cy	\$ 49.68	\$ 1,738.80
33) Seed, Fertilize, Lime and Matting	310	sy	\$ 3.58	\$ 1,109.80
34) Pavement Replacement 3" Over Trench - Type II	85	sy	\$ 69.09	\$ 5,872.65
35) Pavement Replacement 1-1/2" Over Trench - Type IV	115	sy	\$ 23.65	\$ 2,719.75
36) Traffic Control - Type I	20	day	\$ 500.00	\$ 10,000.00
37) Dust Control - Type III	1	ls	\$ 500.00	\$ 500.00
38) Mobilization	---	---	5%	\$ 7,275.27
Contingency	---	---	20%	\$ 30,556.14

Construction Cost = \$ 183,336.85
Design Engineering Services \$ 18,333.69
Bidding and Construction Services \$ 18,333.69
Grand Total \$ 220,004.23

**CITY OF ESSEX JUNCTION
CAPITAL PROGRAM REVIEW COMMITTEE MEETING
MINUTES OF MEETING
OCTOBER 3, 2023**

COMMITTEE: Amber Thibeault, Chair; Kevin Collins; Karen Dolan; Scott McCormick; Mike Plageman; Justin Rabidoux

ADMINISTRATION: Ricky Jones, Public Works Superintendent; Rick Hamlin, City Engineer; Jess Morris, Finance Director

OTHERS PRESENT:

1. CALL TO ORDER

Ms. Thibeault called the meeting to order at 6 PM.

2. AGENDA ADDITIONS/ CHANGES

None.

3. PUBLIC COMMENTS

There were no comments from the public.

4. DISCUSSION ITEMS

a. LOT Policy Discussion

Mr. Rabidoux presented a list of Vermont municipalities who have a Local Options Tax (LOT) and detailed their plans (if any) for using such funds. Some communities use LOT funds as a source of general revenue, and others have allocated these funds for specific purposes. He said that Essex Junction's options are open for utilizing the LOT in whatever model they feel is best. Mr. Rabidoux said that two municipalities have suggested waiting to determine how to use the funds until a few budget cycles have passed, noting recent natural disasters and uncertain economic times.

Ms. Dolan said that it is important to keep in mind why the LOT was originally developed. Ms. Thibeault said that it was intended for capital projects, which could be anything above \$10,000 with some exceptions. There is no clear definition of a capital project. Ms. Thibeault discussed the importance of maintaining an emergency fund and noted that there have been concerns from the public that some of the LOT funds have been allocated to non-capital projects, such as strategic planning and rebranding. Ms. Morris said that the original ballot item did not state that the LOT funds would be used for capital spending, however the discussions prior to the vote implied that it would be used for such.

Mr. McCormick said that the Planning Commission has been working on a rental registry and suggested that some of these funds be allocated to create a program to incentive landlords to make necessary repairs on rental units. Ms. Thibeault suggested that this be discussed after the registry is in place. Mr. Plageman expressed concern about the idea, and Ms. Thibeault said that she would suggest that this idea be reviewed by legal counsel. Mr. McCormick said that this would most likely fall under the Housing Trust Fund mechanism.

Ms. Thibeault said that she would be happy to use the town of Brandon as a model policy, as all members appeared to like it. She said that the updated figures on sidewalk costs would be available at the next meeting. Mr. Collins said that he thinks that it is a good idea to go through a few funding years prior to

coming up with a plan. Mr. Rabidoux asked if there were any audit findings that showed any shortfalls or other concerns, of which the LOT funds could help remedy. Ms. Morris said no but said that the general fund balance could be increased to be in line with best practice. Ms. Thibeault said that this would be a City Council decision to make, and that this committee should focus on capital projects. Mr. Hamlin said that completing capital projects is an ongoing job, and that there will always be a need to fund other projects. Mr. Hamlin discussed different sidewalk types and what the best type of investment would be. Mr. Collins said that he had been getting questions from voters as to how the LOT is spent, and Mr. Hamlin said that the Capital Committee was instituted to allow the public more of a direct role in how projects are prioritized. Ms. Thibeault said that the City is launching a strategic planning process which will better determine how the public would best give input. Ms. Morris said that she would like to state that the LOT policy needs to be subject to the City Purchasing Policy for legal reasons. Ms. Thibeault said that the City Council will be working on the budget in December and said that she is unsure if this policy will be able to be approved by the next budget cycle.

5. REVIEW AND APPROVE MINUTES:

a. Approve Minutes: August 1, 2021

SCOTT MCCORMICK made a motion, seconded KEVIN COLLINS by to approve the minutes of August 1, 2023. Motion passed 6-0.

6. ADJOURN

KEVIN COLLINS made a motion, seconded by SCOTT MCCORMICK, to adjourn the meeting. The motion passed 6-0; the meeting adjourned at 6:48 PM.

Respectfully Submitted,
Darby Mayville
Recording Secretary