

**Vermont Agency of Transportation**

ELMORE STP CULV(64)

Estimate FINAL - Engineer's Estimate - B90

Phase: FINAL	Designed By:
Estimate Date: 03 June, 2022	Reviewed By: Jon Olin
Specification: Standard Specifications for Construction	Approved By:
Region: NORTHWEST	Work Type: BRIDGE CONSTRUCTION
Town: ELMORE	Highway Type: MAJOR COLLECTOR
Advertising Season:	Urban/Rural: RURAL
Description: EXISTING CULVERT REPLACEMENT WITH STEEL GIRDER BRIDGE WITH ASSOCIATED ROADWAY IMPROVEMENTS.	

Category

**1011 - ROADWAY**

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
201.10	CLEARING AND GRUBBING, INCLUDING INDIVIDUAL TREES AND STUMPS	(BRIDGE 90)	1.00	LS	\$17,000.000	\$17,000.00
203.15	COMMON EXCAVATION		1,250.00	CY	\$12.042	\$15,052.50
203.16	SOLID ROCK EXCAVATION		10.00	CY	\$80.409	\$804.09
203.30	EARTH BORROW		85.00	CY	\$5.203	\$442.26
204.20	TRENCH EXCAVATION OF EARTH		30.00	CY	\$22.543	\$676.29
204.22	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)		1.00	CY	\$75.000	\$75.00
210.10	COARSE-MILLING, BITUMINOUS PAVEMENT		1,000.00	SY	\$6.648	\$6,648.00
301.35	SUBBASE OF DENSE GRADED CRUSHED STONE		1,200.00	CY	\$35.588	\$42,705.60
401.10	AGGREGATE SURFACE COURSE		100.00	CY	\$46.919	\$4,691.90
404.65	EMULSIFIED ASPHALT		20.00	CWT	\$47.996	\$959.92
406.38	HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES		25.00	SY	\$29.544	\$738.60
406.50	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)		1.00	LU	\$1.000	\$1.00
613.10	STONE FILL, TYPE I		10.00	CY	\$61.389	\$613.89
616.28	CAST-IN-PLACE CONCRETE CURB, TYPE B		160.00	LF	\$36.346	\$5,815.36
619.20	REMOVING AND RESETTING PROPERTY MARKERS		2.00	EACH	\$335.000	\$670.00
621.20	STEEL BEAM GUARDRAIL, GALVANIZED	(MIDWEST GUARDRAIL SYSTEM)	487.50	LF	\$20.413	\$9,951.34
621.51	MANUFACTURED TERMINAL SECTION, TANGENT		5.00	EACH	\$2,309.112	\$11,545.56
621.72	GUARDRAIL APPROACH SECTION, GALVANIZED 2 RAIL BOX BEAM		4.00	EACH	\$1.252	\$5.01
621.80	REMOVAL AND DISPOSAL OF GUARDRAIL		640.00	LF	\$1.172	\$750.08
630.10	UNIFORMED TRAFFIC OFFICERS		115.00	HR	\$67.474	\$7,759.51
630.15	FLAGGERS		560.00	HR	\$34.826	\$19,502.56

**Vermont Agency of Transportation**

ELMORE STP CULV(64)

Estimate FINAL - Engineer's Estimate - B90

635.11	MOBILIZATION/DEMobilIZATION	(BRIDGE 90)	1.00	LS	\$190,000.000	\$190,000.00
641.11	TRAFFIC CONTROL, ALL-INCLUSIVE	(BRIDGE 90)	1.00	LS	\$13,000.000	\$13,000.00
641.15	PORTABLE CHANGEABLE MESSAGE SIGN		2.00	EACH	\$3,944.194	\$7,888.39
646.201	4 INCH WHITE LINE, WATERBORNE PAINT		1,360.00	LF	\$0.667	\$907.12
646.2111	4 INCH YELLOW LINE, WATERBORNE PAINT		1,360.00	LF	\$0.703	\$956.08
675.50	REMOVING SIGNS		3.00	EACH	\$16.439	\$49.32
675.60	RESETTING SIGNS		3.00	EACH	\$28.616	\$85.85
676.10	DELINEATOR WITH STEEL POST		5.00	EACH	\$77.786	\$388.93
676.12	REMOVAL OF EXISTING DELINEATOR AND POST		3.00	EACH	\$2.191	\$6.57
678.40	TEMPORARY TRAFFIC SIGNAL SYSTEM		1.00	EACH	\$35,000.000	\$35,000.00
900.680	SPECIAL PROVISION	(BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	550.00	TON	\$107.236	\$58,979.80
Category total:						\$453,670.52

Category  
**1031 - TRAINING**

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
634.10	EMPLOYEE TRAINEESHIP		208.00	HR	\$17.411	\$3,621.49
Category total:						\$3,621.49

Category  
**1051 - EROSION CONTROL**

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
651.15	SEED		35.00	LB	\$9.528	\$333.48
651.18	FERTILIZER		200.00	LB	\$3.565	\$713.00
651.20	AGRICULTURAL LIMESTONE		2.00	TON	\$679.823	\$1,359.65
651.35	TOPSOIL		60.00	CY	\$38.787	\$2,327.22
651.40	GRUBBING MATERIAL	(12 INCH)	2,170.00	SY	\$3.500	\$7,595.00
653.01	EPSC PLAN	(BRIDGE 90)	1.00	LS	\$3,600.000	\$3,600.00
653.02	MONITORING EPSC PLAN		102.00	HR	\$35.410	\$3,611.82
653.03	MAINTENANCE OF EPSC PLAN (N.A.B.I.)		1.00	LU	\$4,000.000	\$4,000.00
653.10	HAY MULCH		2.00	TON	\$688.979	\$1,377.96
653.20	ROLLED EROSION CONTROL PRODUCT, TYPE I		1,200.00	SY	\$1.839	\$2,206.80
653.25	CHECK DAM, TYPE I		20.00	CY	\$58.365	\$1,167.30
653.35	STABILIZED CONSTRUCTION ENTRANCE		35.00	CY	\$40.925	\$1,432.38
653.45	FILTER BAG		2.00	EACH	\$290.696	\$581.39
653.475	SILT FENCE, TYPE I		240.00	LF	\$3.600	\$864.00

**Vermont Agency of Transportation**

ELMORE STP CULV(64)

Estimate FINAL - Engineer's Estimate - B90

653.476	SILT FENCE, TYPE II	390.00	LF	\$4.811	\$1,876.29
653.50	BARRIER FENCE	920.00	LF	\$1.809	\$1,664.28
653.55	PROJECT DEMARCATION FENCE	540.00	LF	\$1.181	\$637.74
				Category total:	\$35,348.30

Category  
**1211 - BRIDGE NO. 1**

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
203.16	SOLID ROCK EXCAVATION		50.00	CY	\$80.409	\$4,020.45
203.27	UNCLASSIFIED CHANNEL EXCAVATION		5,230.00	CY	\$13.670	\$71,494.10
204.30	GRANULAR BACKFILL FOR STRUCTURES		1,250.00	CY	\$35.202	\$44,002.50
208.30	COFFERDAM EXCAVATION, EARTH		2,070.00	CY	\$20.000	\$41,400.00
208.35	COFFERDAM EXCAVATION, ROCK		210.00	CY	\$100.000	\$21,000.00
208.40	COFFERDAM	(BRIDGE 90 - ABUTMENT 1)	1.00	LS	\$155,000.000	\$155,000.00
208.40	COFFERDAM	(BRIDGE 90 - ABUTMENT 2)	1.00	LS	\$130,000.000	\$130,000.00
501.37	HIGH PERFORMANCE CONCRETE, CLASS PCD		70.00	CY	\$810.000	\$56,700.00
501.38	HIGH PERFORMANCE CONCRETE, CLASS PCS		500.00	CY	\$1,100.000	\$550,000.00
506.50	STRUCTURAL STEEL, ROLLED BEAM		57,000.00	LB	\$1.906	\$108,642.00
507.11	REINFORCING STEEL, LEVEL I	(EPOXY COATED)	9,000.00	LB	\$1.617	\$14,553.00
507.11	REINFORCING STEEL, LEVEL I	(UNCOATED)	90,000.00	LB	\$1.500	\$135,000.00
507.12	REINFORCING STEEL, LEVEL II	(CONTINUOUSLY GALVANIZED)	16,000.00	LB	\$2.500	\$40,000.00
508.15	SHEAR CONNECTORS	(XXXX - 7/8" X 7")	1.00	LS	\$7,000.000	\$7,000.00
514.10	WATER REPELLENT, SILANE		50.00	GAL	\$62.237	\$3,111.85
516.10	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG		35.00	LF	\$137.098	\$4,798.43
525.33	BRIDGE RAILING, GALVANIZED 2 RAIL BOX BEAM		90.00	LF	\$140.000	\$12,600.00
528.10	ONE-WAY TEMPORARY BRIDGE	(BRIDGE 90, 2400 SF - EST.)	1.00	LS	\$400,000.000	\$400,000.00
529.15	REMOVAL OF STRUCTURE	(6'-0" X 208'-0" CGMPP)	1.00	EACH	\$20,000.000	\$20,000.00
531.17	BEARING DEVICE ASSEMBLY, STEEL REINFORCED ELASTOMERIC PAD		10.00	EACH	\$1,400.000	\$14,000.00
541.30	CONCRETE, CLASS C		140.00	CY	\$441.288	\$61,780.32
608.25	ALL PURPOSE EXCAVATOR RENTAL, TYPE I		10.00	HR	\$121.663	\$1,216.63
613.06	STONE FILL, STREAM BED MATERIAL	(E-STONE TYPE III)	470.00	CY	\$50.000	\$23,500.00
613.12	STONE FILL, TYPE III		2,225.00	CY	\$40.860	\$90,913.50
649.31	GEOTEXTILE UNDER STONE FILL		2,780.00	SY	\$1.669	\$4,639.82
				Category total:	\$2,015,372.60	

**Vermont Agency of Transportation**

ELMORE STP CULV(64)

Estimate FINAL - Engineer's Estimate - B90

Category  
**1999 - FULL C.E. ITEMS**

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
631.10	FIELD OFFICE, ENGINEERS		1.00	LS	\$14,400.000	\$14,400.00
631.16	TESTING EQUIPMENT, CONCRETE		1.00	LS	\$1,000.000	\$1,000.00
631.17	TESTING EQUIPMENT, BITUMINOUS		1.00	LS	\$700.000	\$700.00
631.26	FIELD OFFICE COMMUNICATIONS (N.A.B.I.)		1,200.00	DL	\$1.000	\$1,200.00
Category total:						\$17,300.00

Category  
**3041 - LANDSCAPING**

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
656.20	EVERGREEN TREES	(ABIES BALSAMEA)(3'-4' HT.)(B&B)	5.00	EACH	\$340.000	\$1,700.00
656.20	EVERGREEN TREES	(PICEA GLAUCA)(3'-4' HT.)(B&B)	7.00	EACH	\$340.000	\$2,380.00
656.20	EVERGREEN TREES	(TSUGA CANADENSIS)(3'-4F HT.)(B&B)	5.00	EACH	\$340.000	\$1,700.00
656.30	DECIDUOUS TREES	(ACER RUBRUM)(2" - 2.5" CAL.)(B&B)	3.00	EACH	\$770.000	\$2,310.00
656.30	DECIDUOUS TREES	(ACER SACCHARINUM)(B&B)(2" - 2.5" DIA.)	3.00	EACH	\$770.000	\$2,310.00
656.30	DECIDUOUS TREES	(ALNUS RUGOSA)(3'-4' HT.)(CONT.)	5.00	EACH	\$770.000	\$3,850.00
656.30	DECIDUOUS TREES	(FAGUS GRANDIFOLIA)(2"-2.5" CAL.)(B&B)	2.00	EACH	\$770.000	\$1,540.00
656.35	DECIDUOUS SHRUBS	(CORNUS SERICEA)(3 GALLON)(CONT.)	11.00	EACH	\$80.000	\$880.00
656.35	DECIDUOUS SHRUBS	(SPIRAEA TOMENTOSA)(3 GALLON)(CONT.)	7.00	EACH	\$80.000	\$560.00
656.65	LANDSCAPE WATERING		20.00	MGAL	\$105.000	\$2,100.00
656.80	LANDSCAPE BACKFILL, TRUCK MEASUREMENT		209.00	CY	\$80.000	\$16,720.00
900.620	SPECIAL PROVISION	(TUBELING)(ABIES BALSAMEA)(PLUG)	20.00	EACH	\$13.000	\$260.00
900.620	SPECIAL PROVISION	(TUBELING)(CORNUS SERICEA)(PLUG)	20.00	EACH	\$13.000	\$260.00
900.620	SPECIAL PROVISION	(TUBELING)(PICEA GLAUCA)(PLUG)	20.00	EACH	\$13.000	\$260.00
900.620	SPECIAL PROVISION	(TUBELING)(PINUS STROBUS)(PLUG)	20.00	EACH	\$13.000	\$260.00
900.620	SPECIAL PROVISION	(TUBELING)(SALIX DISCOLOR)(PLUG)	20.00	EACH	\$13.000	\$260.00
900.620	SPECIAL PROVISION	(TUBELING)(SALIX SERICEA)(PLUG)	40.00	EACH	\$13.000	\$520.00
900.620	SPECIAL PROVISION	(TUBELING)(TSUGA CANADENSIS)(PLUG)	20.00	EACH	\$13.000	\$260.00
Category total:						\$38,130.00

**Grand Total:** \$2,563,442.91