WORCESTER BF 0241(56)

Estimate FINAL - Engineer's Estimate - B87

Phase: F	INAL
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Estimate Date: 09 June, 2022

Specification: Standard Specifications for Construction

Region: NORTHWEST

Town: WORCESTER

Advertising Season:

Designed By:

Reviewed By: Jon Olin

Approved By:

Work Type: BRIDGE CONSTRUCTION

Highway Type: MAJOR COLLECTOR

Urban/Rural: RURAL

Description: EXISTING CULVERT REPLACEMENT WITH A FOUR-SIDED PRECAST CONCRETE BOX CULVERT WITH ASSOCIATED ROADWAY IMPROVEMENTS.

Category

1011 - ROADWAY

Item Number	Description	Supplemental Description	Quantity	. I Init	Unit Price	Amount
201.10	CLEARING AND GRUBBING, INCLUDING	(BRIDGE 87)	1.00		\$9,300.000	\$9,300.00
203.15	INDIVIDUAL TREES AND STUMPS COMMON EXCAVATION		1,510.00	CY	\$12.814	\$19,349.14
203.16	SOLID ROCK EXCAVATION		10.00	CY	\$84.488	\$844.88
203.30	EARTH BORROW		850.00	CY	\$4.723	\$4,014.55
204.20	TRENCH EXCAVATION OF EARTH		50.00	CY	\$22.067	\$1,103.35
204.21	TRENCH EXCAVATION OF ROCK		3.00	CY	\$138.541	\$415.62
204.22	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)		1.00	CY	\$75.000	\$75.00
210.10	COARSE-MILLING, BITUMINOUS PAVEMENT		920.00	SY	\$6.490	\$5,970.80
301.35	SUBBASE OF DENSE GRADED CRUSHED STONE		1,250.00	CY	\$37.112	\$46,390.00
401.10	AGGREGATE SURFACE COURSE		100.00	CY	\$50.384	\$5,038.40
404.65	EMULSIFIED ASPHALT		20.00	CWT	\$46.662	\$933.24
406.38	HAND-PLACED BITUMINOUS CONCRETE MATERIAL, DRIVES		130.00	SY	\$26.734	\$3,475.42
406.50	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)		1.00	LU	\$1.000	\$1.00
507.11	REINFORCING STEEL, LEVEL I	(UNCOATED)	760.00	LB	\$1.091	\$829.16
541.25	CONCRETE, CLASS B		5.00	CY	\$909.710	\$4,548.55
601.0915	18" CPEP		80.00	LF	\$54.284	\$4,342.72
608.25	ALL PURPOSE EXCAVATOR RENTAL, TYPE I		10.00	HR	\$121.140	\$1,211.40
613.10	STONE FILL, TYPE I		80.00	CY	\$63.128	\$5,050.24
617.10	REMOVE AND RESET MAILBOX, SINGLE SUPPORT		2.00	EACH	\$189.074	\$378.15
619.17	YIELDING MARKER POSTS		2.00	EACH	\$49.668	\$99.34
621.20	STEEL BEAM GUARDRAIL, GALVANIZED	(MIDWEST GUARDRAIL SYSTEM)	850.00	LF	\$19.572	\$16,636.20

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621.51	MANUFACTURED TERMINAL SECTION, TANGENT		5.00	EACH	\$2,610.543	\$13,052.72
621.80	REMOVAL AND DISPOSAL OF GUARDRAIL		1,150.00	LF	\$1.187	\$1,365.05
630.10	UNIFORMED TRAFFIC OFFICERS		115.00	HR	\$65.066	\$7,482.59
630.15	FLAGGERS		560.00	HR	\$34.643	\$19,400.08
635.11	MOBILIZATION/DEMOBILIZATION	(BRIDGE 87)	1.00	LS	\$130,000.000	\$130,000.00
641.11	TRAFFIC CONTROL, ALL-INCLUSIVE	(BRIDGE 87)	1.00	LS	\$20,000.000	\$20,000.00
641.15	PORTABLE CHANGEABLE MESSAGE SIGN		2.00	EACH	\$3,827.175	\$7,654.35
646.201	4 INCH WHITE LINE, WATERBORNE PAINT		1,500.00	LF	\$0.637	\$955.50
646.2111	4 INCH YELLOW LINE, WATERBORNE PAINT		1,500.00	LF	\$0.679	\$1,018.50
675.50	REMOVING SIGNS		3.00	EACH	\$15.771	\$47.31
675.60	RESETTING SIGNS		3.00	EACH	\$27.462	\$82.39
676.10	DELINEATOR WITH STEEL POST		5.00	EACH	\$81.106	\$405.53
676.12	REMOVAL OF EXISTING DELINEATOR AND		5.00	EACH	\$2.653	\$13.27
678.40	POST TEMPORARY TRAFFIC SIGNAL SYSTEM		1.00	EACH	\$35,000.000	\$35,000.00
900.680	SPECIAL PROVISION	(BITUMINOUS CONCRETE PAVEMENT, SMALL QUANTITY)	660.00	TON	\$105.865	\$69,870.90
					Category total:	\$436,355.34
1031 - TRAINI	NG					
Item Number 634.10	NG Description EMPLOYEE TRAINEESHIP	Supplemental Description	Quantity 208.00		Unit Price \$17.411	Amount \$3,621.49
Item Number	Description	Supplemental Description				
Item Number 634.10 Category	Description EMPLOYEE TRAINEESHIP		208.00	HR	\$17.411 Category total:	\$3,621.49
Item Number 634.10 Category 1051 - EROSI Item Number	Description EMPLOYEE TRAINEESHIP ON CONTROL Description	Supplemental Description	208.00 Quantity	Unit	\$17.411 Category total: Unit Price	\$3,621.49 \$3,621.49 Amount
Item Number 634.10 Category 1051 - EROSI Item Number 651.15	Description EMPLOYEE TRAINEESHIP ON CONTROL Description SEED		208.00 Quantity 85.00	HR Unit LB	\$17.411 Category total: Unit Price \$10.177	\$3,621.49 \$3,621.49 Amount \$865.05
Item Number 634.10 Category 1051 - EROSI Item Number 651.15 651.18	Description EMPLOYEE TRAINEESHIP ON CONTROL Description SEED FERTILIZER		208.00 Quantity 85.00 515.00	HR Unit LB LB	\$17.411 Category total: Unit Price \$10.177 \$3.841	\$3,621.49 \$3,621.49 Amount \$865.05 \$1,978.12
Item Number 634.10 Category 1051 - EROSI Item Number 651.15 651.18 651.20	Description EMPLOYEE TRAINEESHIP ON CONTROL Description SEED FERTILIZER AGRICULTURAL LIMESTONE		208.00 Quantity 85.00 515.00 3.00	HR Unit LB LB TON	\$17.411 Category total: Unit Price \$10.177 \$3.841 \$695.308	\$3,621.49 \$3,621.49 Amount \$865.05 \$1,978.12 \$2,085.92
Item Number 634.10 Category 1051 - EROSI Item Number 651.15 651.18 651.20 651.35	Description EMPLOYEE TRAINEESHIP ON CONTROL Description SEED FERTILIZER AGRICULTURAL LIMESTONE TOPSOIL	Supplemental Description	208.00 Quantity 85.00 515.00 3.00 230.00	HR Unit LB LB TON CY	\$17.411 Category total: Unit Price \$10.177 \$3.841 \$695.308 \$39.612	\$3,621.49 \$3,621.49 Amount \$865.05 \$1,978.12 \$2,085.92 \$9,110.76
Item Number 634.10 Category 1051 - EROSI Item Number 651.15 651.18 651.20 651.35 651.40	Description EMPLOYEE TRAINEESHIP	Supplemental Description	Quantity 85.00 515.00 3.00 230.00 130.00	HR Unit LB LB TON CY SY	\$17.411 Category total: Unit Price \$10.177 \$3.841 \$695.308 \$39.612 \$3.500	\$3,621.49 \$3,621.49 Amount \$865.05 \$1,978.12 \$2,085.92 \$9,110.76 \$455.00
Item Number 634.10 Category 1051 - EROSI Item Number 651.15 651.18 651.20 651.35 651.40 653.01	Description EMPLOYEE TRAINEESHIP OUNCONTROL Description SEED FERTILIZER AGRICULTURAL LIMESTONE TOPSOIL GRUBBING MATERIAL EPSC PLAN	Supplemental Description	Quantity 85.00 515.00 3.00 230.00 130.00 1.00	HR Unit LB LB TON CY SY LS	\$17.411 Category total: Unit Price \$10.177 \$3.841 \$695.308 \$39.612 \$3.500 \$3,600.000	\$3,621.49 \$3,621.49 Amount \$865.05 \$1,978.12 \$2,085.92 \$9,110.76 \$455.00 \$3,600.00
Item Number 634.10 Category 1051 - EROSI Item Number 651.15 651.18 651.20 651.35 651.40 653.01 653.02	Description EMPLOYEE TRAINEESHIP ON CONTROL Description SEED FERTILIZER AGRICULTURAL LIMESTONE TOPSOIL GRUBBING MATERIAL EPSC PLAN MONITORING EPSC PLAN	Supplemental Description	Quantity 85.00 515.00 3.00 230.00 130.00 1.00 102.00	HR Unit LB LB TON CY SY LS HR	\$17.411 Category total: Unit Price \$10.177 \$3.841 \$695.308 \$39.612 \$3.500 \$3,600.000 \$27.720	\$3,621.49 \$3,621.49 \$3,621.49 Amount \$865.05 \$1,978.12 \$2,085.92 \$9,110.76 \$455.00 \$3,600.00 \$2,827.44
Item Number 634.10 Category 1051 - EROSI Item Number 651.15 651.18 651.20 651.35 651.40 653.01 653.02 653.03	Description EMPLOYEE TRAINEESHIP ON CONTROL Description SEED FERTILIZER AGRICULTURAL LIMESTONE TOPSOIL GRUBBING MATERIAL EPSC PLAN MONITORING EPSC PLAN (N.A.B.I.)	Supplemental Description	Quantity 85.00 515.00 3.00 130.00 1.00 1.00 1.00	HR Unit LB LB TON CY SY LS HR LU	\$17.411 Category total: Unit Price \$10.177 \$3.841 \$695.308 \$39.612 \$3.500 \$3,600.000 \$27.720 \$4,000.000	\$3,621.49 \$3,621.49 Amount \$865.05 \$1,978.12 \$2,085.92 \$9,110.76 \$455.00 \$3,600.00 \$2,827.44 \$4,000.00
Item Number 634.10 Category 1051 - EROSI Item Number 651.15 651.18 651.20 651.35 651.40 653.01 653.02	Description EMPLOYEE TRAINEESHIP ON CONTROL Description SEED FERTILIZER AGRICULTURAL LIMESTONE TOPSOIL GRUBBING MATERIAL EPSC PLAN MONITORING EPSC PLAN	Supplemental Description (12 INCH) (BRIDGE 87)	Quantity 85.00 515.00 3.00 130.00 1.00 1.00 1.00	HR Unit LB LB TON CY SY LS HR LU TON	\$17.411 Category total: Unit Price \$10.177 \$3.841 \$695.308 \$39.612 \$3.500 \$3,600.000 \$27.720	\$3,621.49 \$3,621.49 \$3,621.49 Amount \$865.05 \$1,978.12 \$2,085.92 \$9,110.76 \$455.00 \$3,600.00 \$2,827.44

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653.35	STABILIZED CONSTRUCTION ENTRANCE	35.00	CY	\$46.294	\$1,620.29
653.45	FILTER BAG	1.00	EACH	\$321.201	\$321.20
653.475	SILT FENCE, TYPE I	660.00	LF	\$3.811	\$2,515.26
653.476	SILT FENCE, TYPE II	420.00	LF	\$5.465	\$2,295.30
653.50	BARRIER FENCE	500.00	LF	\$2.050	\$1,025.00
653.55	PROJECT DEMARCATION FENCE	975.00	LF	\$1.114	\$1,086.15
				Category total:	\$43,743.93

Category

1211 - BRIDGE NO. 1

Item Number	Description	Supplemental Description	Quantity	Unit	Unit Price	Amount
203.16	SOLID ROCK EXCAVATION		10.00	CY	\$84.488	\$844.88
203.27	UNCLASSIFIED CHANNEL EXCAVATION		250.00	CY	\$12.840	\$3,210.00
204.25	STRUCTURE EXCAVATION		950.00	CY	\$21.869	\$20,775.55
204.30	GRANULAR BACKFILL FOR STRUCTURES		340.00	CY	\$35.202	\$11,968.68
514.10	WATER REPELLENT, SILANE		5.00	GAL	\$64.998	\$324.99
528.10	ONE-WAY TEMPORARY BRIDGE	(BRIDGE 87, 900 SF - EST.)	1.00	LS	\$350,000.000	\$350,000.00
529.15	REMOVAL OF STRUCTURE	(13'-11" X 8'-7" X 97'-0" CGMPPA)	1.00	EACH	\$10,000.000	\$10,000.00
540.10	PRECAST CONCRETE STRUCTURE	(19'-0" X 10'-0" X 87'-0" BOX)	1.00	LS	\$330,000.000	\$330,000.00
613.06	STONE FILL, STREAM BED MATERIAL	(E-STONE TYPE III)	390.00	CY	\$50.000	\$19,500.00
613.10	STONE FILL, TYPE I		20.00	CY	\$63.128	\$1,262.56
613.12	STONE FILL, TYPE III		130.00	CY	\$50.518	\$6,567.34
649.31	GEOTEXTILE UNDER STONE FILL		460.00	SY	\$1.662	\$764.52
900.640	SPECIAL PROVISION	(WILDLIFE GUIDE FENCE)	310.00	LF	\$15.000	\$4,650.00
900.645	SPECIAL PROVISION	(TEMPORARY RELOCATION OF STREAM, BRIDGE 87)	1.00	LS	\$77,000.000	\$77,000.00
900.670	SPECIAL PROVISION	(PRECAST CONCRETE WINGWALL)	1,390.00	SF	\$75.000	\$104,250.00
					Category total:	\$941,118.52

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

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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.)(CONT.)	9.00	EACH	\$200.000	\$1,800.00
656.20	EVERGREEN TREES	(PICEA GLAUCA)(3'-4' HT.) (CONT.)	15.00	EACH	\$200.000	\$3,000.00
656.20	EVERGREEN TREES	(PICEA GLAUCA)(6'-7' HT.) (B&B)	7.00	EACH	\$200.000	\$1,400.00
656.20	EVERGREEN TREES	(PINUS STROBUS)(3'-4' HT.)(CONT.)	13.00	EACH	\$200.000	\$2,600.00
656.35	DECIDUOUS SHRUBS	(ILEX VERTICILLATA ' RED SPRITE')(1 GALLON) (CONT.)	15.00	EACH	\$80.000	\$1,200.00
656.35	DECIDUOUS SHRUBS	(ILEX VERTICILLATA 'JIM DANDY')(1 GALLON) (CONT.)	3.00	EACH	\$80.000	\$240.00
656.35	DECIDUOUS SHRUBS	(SALIX DISCOLOR)(1 GALLON)(CONT.)	13.00	EACH	\$80.000	\$1,040.00
656.35	DECIDUOUS SHRUBS	(SALIX SERICEA)(1 GALLON)(CONT.)	14.00	EACH	\$80.000	\$1,120.00
656.35	DECIDUOUS SHRUBS	(SPIRAEA LATIFOLIA)(1 GALLON)(CONT.)	15.00	EACH	\$80.000	\$1,200.00
656.35	DECIDUOUS SHRUBS	(SPIRAEA TOMENTOSA)(1 GALLON)(CONT.)	8.00	EACH	\$80.000	\$640.00
656.65	LANDSCAPE WATERING		41.00	MGAL	\$52.000	\$2,132.00
656.80	LANDSCAPE BACKFILL, TRUCK MEASUREMENT		102.00	CY	\$80.000	\$8,160.00
656.85	TREE PROTECTION		1.00	LS	\$5,520.000	\$5,520.00
900.670	SPECIAL PROVISION	(WET AREA SEED MIX)	22,039.00	SF	\$0.100	\$2,203.90
					Category total:	\$32,255.90

Grand Total: \$1,474,395.17