

Appendix D

Cost Estimates

Job Number: 3752
MaineDOT WIN: 24833.00
Project Location: North Windham Moves, Transportation Planning Study
 Comments: **Planning Level Cost Estimates - West Connector Road**

From: Gorrill Palmer
 Date: 11/23/2021

Calculated By: M Richard
 Checked By: D Ettinger

- Notes:
1. Planning level cost estimates.
 2. Costs calculated for major pay items only. Contingency provided for remaining items.
 3. Costs based on concept plans and typical sections provided in draft report.
 4. Total costs include construction, engineering, right of way, and inspection costs.
 5. Excludes costs associated with relocation of overhead utilities to underground.
 6. Assumes no retaining walls or bridges required.
 7. Assumes granite curbing, closed drainage, bituminuous sidewalk & multiuse path with esplanades.

ROAD DESCRIPTION: West Connector Road (New Construction) - Amato Drive to Whites Bridge Rd (2,850 ft)

Item	Item Description	Unit	Unit Price	Quantity	Cost
201.11	CLEARING	AC	\$20,000.00	2.5	\$50,000.00
203.20	COMMON EXCAVATION	CY	\$20.00	10600	\$212,000.00
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	CY	\$30.00	7900	\$237,000.00
403.208	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE	T	\$125.00	2650	\$331,250.00
403.209	HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE (SIDEWALKS, DRIVES, ISLANDS & INCIDENTALS)	T	\$200.00	750	\$150,000.00
603.00	LARGE CULVERT	LS	\$600,000.00	1	\$600,000.00
604.00	CATCH BASINS	EA	\$3,500.00	20	\$70,000.00
605.00	UNDERDRAIN	LF	\$70.00	2850	\$199,500.00
609.11	VERTICAL CURB TYPE 1	LF	\$50.00	5700	\$285,000.00
609.34	SLOPE CURB TYPE 5	LF	\$50.00	100	\$5,000.00
621.00	LANDSCAPING	LS	\$50,000.00	1	\$50,000.00
626.00	ORNAMENTAL LIGHTING	LS	\$250,000.00	1	\$250,000.00
643.00	TRAFFIC SIGNAL / TRAFFIC SIGNAL MODIFICATION	LS	\$150,000.00	0	\$0.00
652.00	TRAFFIC CONTROL	LS	\$25,000.00	1	\$25,000.00
652.38	FLAGGERS	HR	\$30.00	2600	\$78,000.00
659.10	MOBILIZATION	LS	\$220,000.00	1	\$220,000.00

SUBTOTAL =	\$2,762,750.00
25% CONTINGENCY =	\$690,687.50
CONSTRUCTION =	\$3,453,437.50
SAY =	\$3,453,000.00

ROAD DESCRIPTION: West Connector Road - (Rehabilitation) - Manchester Road, Route 35 to Amato Drive (3,050 ft)

New Construction Cost from section above minus Large Culvert Cost	New Construction Cost/Mile	\$5,290,000.00
Rehabilitation Cost assumed to be 50% of New Construction Cost	Rehabilitation Cost/Mile	\$2,645,000.00
	Length (ft.) =	3050
	CONSTRUCTION =	\$1,527,888.26
	SAY =	\$1,528,000.00

CONSTRUCTION TOTAL =	\$4,981,000.00
ENGINEERING (10% CONST) =	\$498,100.00
INSPECTION (8% CONST) =	\$398,480.00
RIGHT OF WAY =	\$568,000.00
PROJECT COST TOTAL =	\$6,445,580.00
SAY =	\$6,446,000.00

Job Number: 3752
MaineDOT WIN: 24833.00
Project Location: North Windham Moves, Transportation Planning Study
 Comments: **Planning Level Cost Estimates - East Connector Road**

From: Gorrill Palmer
 Date: 11/23/2021

Calculated By: M Richard
 Checked By: D Ettinger

- Notes:
1. Planning level cost estimates.
 2. Costs calculated for major pay items only. Contingency provided for remaining items.
 3. Costs based on concept plans and typical sections provided in draft report.
 4. Total costs include construction, engineering, right of way, and inspection costs.
 5. Excludes costs associated with relocation of overhead utilities to underground.
 6. Assumes no retaining walls or bridges required.
 7. Assumes granite curbing, closed drainage, bituminuous sidewalk & multiuse path with esplanades.

ROAD DESCRIPTION: East Connector Road (New Construction) - Route 115 to Franklin Drive (3,550 ft)

Item	Item Description	Unit	Unit Price	Quantity	Cost
201.11	CLEARING	AC	\$20,000.00	4.3	\$86,000.00
203.20	COMMON EXCAVATION	CY	\$20.00	13275	\$265,500.00
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	CY	\$30.00	9850	\$295,500.00
403.208	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE	T	\$125.00	3300	\$412,500.00
403.209	HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE (SIDEWALKS, DRIVES, ISLANDS & INCIDENTALS)	T	\$200.00	1050	\$210,000.00
603.00	LARGE CULVERT	LS	\$600,000.00	0	\$0.00
604.00	CATCH BASINS	EA	\$3,500.00	24	\$84,000.00
605.00	UNDERDRAIN	LF	\$70.00	3550	\$248,500.00
609.11	VERTICAL CURB TYPE 1	LF	\$50.00	7100	\$355,000.00
609.34	SLOPE CURB TYPE 5	LF	\$50.00	400	\$20,000.00
621.00	LANDSCAPING	LS	\$50,000.00	1	\$50,000.00
626.00	ORNAMENTAL LIGHTING	LS	\$250,000.00	1	\$250,000.00
643.00	TRAFFIC SIGNAL / TRAFFIC SIGNAL MODIFICATION	LS	\$150,000.00	0	\$0.00
652.00	TRAFFIC CONTROL	LS	\$25,000.00	1	\$25,000.00
652.38	FLAGGERS	HR	\$30.00	2600	\$78,000.00
659.10	MOBILIZATION	LS	\$200,000.00	1	\$200,000.00

SUBTOTAL =	\$2,580,000.00
25% CONTINGENCY =	\$645,000.00
CONSTRUCTION =	\$3,225,000.00
SAY =	\$3,225,000.00

ROAD DESCRIPTION: East Connector Road - (Rehabilitation) - Franklin Drive, Route 302 to New Connector Rd (1,550 ft)

New Construction Cost from section above	New Construction Cost/Mile	\$4,800,000.00
Rehabilitation Cost assumed to be 50% of New Construction Cost	Rehabilitation Cost/Mile	\$2,400,000.00
	Length (ft.) =	1550
		\$704,545.45
	CONSTRUCTION =	\$704,545.45
	SAY =	\$705,000.00

CONSTRUCTION TOTAL =	\$3,930,000.00
ENGINEERING (10% CONST) =	\$393,000.00
INSPECTION (8% CONST) =	\$314,400.00
RIGHT OF WAY =	\$1,024,000.00
PROJECT COST TOTAL =	\$5,661,400.00
SAY =	\$5,662,000.00

Job Number: 3752
MaineDOT WIN: 24833.00
Project Location: North Windham Moves, Transportation Planning Study
 Comments: **Planning Level Cost Estimates - Middle Connector Road**

From: Gorrill Palmer
 Date: 11/23/2021

Calculated By: M Richard
 Checked By: D Ettinger

- Notes:
1. Planning level cost estimates.
 2. Costs calculated for major pay items only. Contingency provided for remaining items.
 3. Costs based on concept plans and typical sections provided in draft report.
 4. Total costs include construction, engineering, right of way, and inspection costs.
 5. Excludes costs associated with relocation of overhead utilities to underground.
 6. Assumes no retaining walls or bridges required.
 7. Assumes granite curbing, closed drainage, bituminuous sidewalk & multiuse path with esplanades.

ROAD DESCRIPTION: Middle Connector Road (New Construction) - Route 302 to Landing Road (725 ft)

Item	Item Description	Unit	Unit Price	Quantity	Cost
201.11	CLEARING	AC	\$20,000.00	0	\$0.00
203.20	COMMON EXCAVATION	CY	\$20.00	2700	\$54,000.00
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	CY	\$30.00	2000	\$60,000.00
403.208	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE	T	\$125.00	660	\$82,500.00
403.209	HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE (SIDEWALKS, DRIVES, ISLANDS & INCIDENTALS)	T	\$200.00	230	\$46,000.00
603.00	LARGE CULVERT	LS	\$600,000.00	0	\$0.00
604.00	CATCH BASINS	EA	\$3,500.00	6	\$21,000.00
605.00	UNDERDRAIN	LF	\$70.00	1450	\$101,500.00
609.11	VERTICAL CURB TYPE 1	LF	\$50.00	1450	\$72,500.00
609.34	SLOPE CURB TYPE 5	LF	\$50.00	200	\$10,000.00
621.00	LANDSCAPING	LS	\$10,000.00	1	\$10,000.00
626.00	ORNAMENTAL LIGHTING	LS	\$75,000.00	1	\$75,000.00
643.00	TRAFFIC SIGNAL / TRAFFIC SIGNAL MODIFICATION	LS	\$150,000.00	0	\$0.00
652.00	TRAFFIC CONTROL	LS	\$25,000.00	1	\$25,000.00
652.38	FLAGGERS	HR	\$30.00	1300	\$39,000.00
659.10	MOBILIZATION	LS	\$75,000.00	1	\$75,000.00

SUBTOTAL =	\$671,500.00
25% CONTINGENCY =	\$167,875.00
CONSTRUCTION =	\$839,375.00
SAY =	\$839,000.00

CONSTRUCTION TOTAL =	\$839,000.00
ENGINEERING (10% CONST) =	\$83,900.00
INSPECTION (8% CONST) =	\$67,120.00
RIGHT OF WAY =	\$1,120,000.00
PROJECT COST TOTAL =	\$2,110,020.00
SAY =	\$2,111,000.00

Job Number: 3752
MaineDOT WIN: 24833.00
Project Location: North Windham Moves, Transportation Planning Study
 Comments: **Planning Level Cost Estimates - Route 302 Improvements**

From: Gorrill Palmer
 Date: 11/23/2021

Calculated By: M Richard
 Checked By: D Ettinger

- Notes:
1. Planning level cost estimates.
 2. Costs calculated for major pay items only. Contingency provided for remaining items.
 3. Costs based on concept plans provided in draft report.
 4. Total costs include construction, engineering, right of way, and inspection costs.
 5. Excludes costs associated with relocation of overhead utilities to underground.
 6. Assumes sidewalk improvements, center median installations, widening for center turn lane.
 7. Adaptive signals excluded from estimate.

ROAD DESCRIPTION: Route 302 Improvements (Sidewalks, Medians, Widening) - River Road to Whites Bridge Road (8,550 ft)

Item	Item Description	Unit	Unit Price	Quantity	Cost
201.11	CLEARING	AC	\$20,000.00	0	\$0.00
203.20	COMMON EXCAVATION	CY	\$20.00	5000	\$100,000.00
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	CY	\$30.00	4500	\$135,000.00
403.208	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE	T	\$125.00	950	\$118,750.00
403.209	HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE (SIDEWALKS, DRIVES, ISLANDS & INCIDENTALS)	T	\$200.00	920	\$184,000.00
603.00	LARGE CULVERT	LS	\$600,000.00	0	\$0.00
604.00	CATCH BASINS	EA	\$3,500.00	6	\$21,000.00
605.00	UNDERDRAIN	LF	\$70.00	1800	\$126,000.00
609.11	VERTICAL CURB TYPE 1	LF	\$50.00	1800	\$90,000.00
609.34	SLOPE CURB TYPE 5	LF	\$50.00	3400	\$170,000.00
621.00	LANDSCAPING	LS	\$100,000.00	1	\$100,000.00
626.00	ORNAMENTAL LIGHTING	LS	\$500,000.00	1	\$500,000.00
643.00	TRAFFIC SIGNAL / TRAFFIC SIGNAL MODIFICATION	LS	\$150,000.00	1	\$150,000.00
652.00	TRAFFIC CONTROL	LS	\$100,000.00	1	\$100,000.00
652.38	FLAGGERS	HR	\$30.00	2600	\$78,000.00
659.10	MOBILIZATION	LS	\$150,000.00	1	\$150,000.00

SUBTOTAL =	\$2,022,750.00
25% CONTINGENCY =	\$505,687.50
CONSTRUCTION =	\$2,528,437.50
SAY =	\$2,528,000.00

CONSTRUCTION TOTAL =	\$2,528,000.00
ENGINEERING (10% CONST) =	\$252,800.00
INSPECTION (8% CONST) =	\$202,240.00
RIGHT OF WAY =	\$355,000.00
PROJECT COST TOTAL =	\$3,338,040.00
SAY =	\$3,339,000.00

Job Number: 3752
MaineDOT WIN: 24833.00
Project Location: North Windham Moves, Transportation Planning Study
 Comments: **Planning Level Cost Estimates - Route 35 and 115 Improvements**

From: Gorrill Palmer
 Date: 11/23/2021

Calculated By: M Richard
 Checked By: D Ettinger

- Notes:
1. Planning level cost estimates.
 2. Costs calculated for major pay items only. Contingency provided for remaining items.
 3. Costs based on concept plans provided in draft report.
 4. Total costs include construction, engineering, right of way, and inspection costs.
 5. Excludes costs associated with relocation of overhead utilities to underground.
 6. Assumes sidewalk improvements, center median installations, widening at new intersestions.
 7. Adaptive signals excluded from estimate.

ROAD DESCRIPTION: Route 35 & 115 Improvements (Sidewalks, Medians, Widening) - West Connector to East Connector (4,000 ft)

Item	Item Description	Unit	Unit Price	Quantity	Cost
201.11	CLEARING	AC	\$20,000.00	0	\$0.00
203.20	COMMON EXCAVATION	CY	\$20.00	2200	\$44,000.00
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	CY	\$30.00	1900	\$57,000.00
403.208	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE	T	\$125.00	600	\$75,000.00
403.209	HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE (SIDEWALKS, DRIVES, ISLANDS & INCIDENTALS)	T	\$200.00	300	\$60,000.00
603.00	LARGE CULVERT	LS	\$600,000.00	0	\$0.00
604.00	CATCH BASINS	EA	\$3,500.00	6	\$21,000.00
605.00	UNDERDRAIN	LF	\$70.00	1200	\$84,000.00
609.11	VERTICAL CURB TYPE 1	LF	\$50.00	2700	\$135,000.00
609.34	SLOPE CURB TYPE 5	LF	\$50.00	1200	\$60,000.00
621.00	LANDSCAPING	LS	\$100,000.00	0	\$0.00
626.00	ORNAMENTAL LIGHTING	LS	\$250,000.00	1	\$250,000.00
643.00	TRAFFIC SIGNAL / TRAFFIC SIGNAL MODIFICATION	LS	\$150,000.00	1	\$150,000.00
652.00	TRAFFIC CONTROL	LS	\$75,000.00	1	\$75,000.00
652.38	FLAGGERS	HR	\$30.00	2600	\$78,000.00
659.10	MOBILIZATION	LS	\$100,000.00	1	\$100,000.00

SUBTOTAL =	\$1,189,000.00
25% CONTINGENCY =	\$297,250.00
CONSTRUCTION =	\$1,486,250.00
SAY =	\$1,486,000.00

CONSTRUCTION TOTAL =	\$1,486,000.00
ENGINEERING (10% CONST) =	\$148,600.00
INSPECTION (8% CONST) =	\$118,880.00
RIGHT OF WAY =	\$70,000.00
PROJECT COST TOTAL =	\$1,823,480.00
SAY =	\$1,824,000.00

Job Number: 3752
MaineDOT WIN: 24833.00
Project Location: North Windham Moves, Transportation Planning Study
 Comments: **Planning Level Cost Estimates - Whites Bridge Road Improvements**

From: Gorrill Palmer
 Date: 11/23/2021

Calculated By: M Richard
 Checked By: D Ettinger

- Notes:
1. Planning level cost estimates.
 2. Costs calculated for major pay items only. Contingency provided for remaining items.
 3. Costs based on concept plans provided in draft report.
 4. Total costs include construction, engineering, right of way, and inspection costs.
 5. Excludes costs associated with relocation of overhead utilities to underground.
 6. Assumes multiuse path improvements and widening at new intersection.

ROAD DESCRIPTION: White Bridge Road Improvements (Pathway, Intersection Widening) - New Connector to Route 302 (1,400 ft)

Item	Item Description	Unit	Unit Price	Quantity	Cost
201.11	CLEARING	AC	\$20,000.00	0	\$0.00
203.20	COMMON EXCAVATION	CY	\$20.00	1000	\$20,000.00
304.10	AGGREGATE SUBBASE COURSE - GRAVEL	CY	\$30.00	900	\$27,000.00
403.208	HOT MIX ASPHALT, 12.5 MM NOMINAL MAXIMUM SIZE	T	\$125.00	150	\$18,750.00
403.209	HOT MIX ASPHALT, 9.5 MM NOMINAL MAXIMUM SIZE (SIDEWALKS, DRIVES, ISLANDS & INCIDENTALS)	T	\$200.00	175	\$35,000.00
603.00	LARGE CULVERT	LS	\$600,000.00	0	\$0.00
604.00	CATCH BASINS	EA	\$3,500.00	7	\$24,500.00
605.00	UNDERDRAIN	LF	\$70.00	1800	\$126,000.00
609.11	VERTICAL CURB TYPE 1	LF	\$50.00	1800	\$90,000.00
609.34	SLOPE CURB TYPE 5	LF	\$50.00	0	\$0.00
621.00	LANDSCAPING	LS	\$100,000.00	0	\$0.00
626.00	ORNAMENTAL LIGHTING	LS	\$150,000.00	1	\$150,000.00
643.00	TRAFFIC SIGNAL / TRAFFIC SIGNAL MODIFICATION	LS	\$150,000.00	0	\$0.00
652.00	TRAFFIC CONTROL	LS	\$50,000.00	1	\$50,000.00
652.38	FLAGGERS	HR	\$30.00	1300	\$39,000.00
659.10	MOBILIZATION	LS	\$50,000.00	1	\$50,000.00

SUBTOTAL =	\$630,250.00
25% CONTINGENCY =	\$157,562.50
CONSTRUCTION =	\$787,812.50
SAY =	\$788,000.00

CONSTRUCTION TOTAL =	\$788,000.00
ENGINEERING (10% CONST) =	\$78,800.00
INSPECTION (8% CONST) =	\$63,040.00
RIGHT OF WAY =	\$20,000.00
PROJECT COST TOTAL =	\$949,840.00
SAY =	\$950,000.00



Prelim By: MDR

Project: North Windham Moves Study

Chk By: DGE

Location: Connector Roads

Scope: ROW Costs

Sheet # 1

Date: 11/27/2021

West Connector								
Map #	Mblu	Assessed Value	Sale Price	Year Sold	Estimated Value	Comment	% of take	Cost
38	69/15/ / /	\$ 74,200.00	-	-	\$ 100,000.00	Land	10	\$ 10,000.00
45	18A/48/ / /	\$ 166,400.00	-	-	\$ 400,000.00	Land	20	\$ 80,000.00
47	18A/48/B/ /	\$ 10,457,300.00	\$ 12,406,015.00	2013	\$ 2,800,000.00	Land	1	\$ 28,000.00
48	18A/48/C/ /	\$ 2,753,300.00	\$ 4,425,000.00	2017	\$ 1,200,000.00	Land	5	\$ 60,000.00
50	71/3/3/ /	\$ 1,891,600.00	\$ 3,000,000.00	2008	\$ 1,200,000.00	Land	5	\$ 60,000.00
61	71/50/3/ /	\$ 250,000.00	\$ 107,500.00	1999	\$ 300,000.00	Land	20	\$ 60,000.00
62	18/5/ / /	\$ 254,600.00	\$ 45,000.00	1995	\$ 300,000.00	Land	20	\$ 60,000.00
67a	18/4/5/D12/	\$ 123,700.00	\$ 129,000.00	2017	\$ 100,000.00	Land	30	\$ 30,000.00
67b	18/4/5/D13/	\$ 137,600.00	\$ 124,900.00	2018	\$ 100,000.00	Land	30	\$ 30,000.00
67c	18/4/5/D14/	\$ 132,500.00	\$ 131,800.00	2016	\$ 100,000.00	Land	30	\$ 30,000.00
67d	18/4/5/D15/	\$ 133,200.00	\$ 127,500.00	2015	\$ 100,000.00	Land	30	\$ 30,000.00
67e	18/4/5/D16/	\$ 133,300.00	\$ 140,000.00	2019	\$ 100,000.00	Land	30	\$ 30,000.00
67f	18/4/5/D17/	\$ 135,300.00	\$ 101,000.00	2015	\$ 100,000.00	Land	30	\$ 30,000.00
68	18/4/4/ /	\$ 193,400.00	\$ 190,000.00	2005	\$ 200,000.00	Land	15	\$ 30,000.00
Total								\$ 568,000.00

East Connector								
Map #	Mblu	Assessed Value	Sale Price	Year Sold	Estimated Value	Comment	% of Take	Cost
1	70/26/A/ /	\$ 1,188,100.00	\$ 250,000.00	1993	\$ 400,000.00	Land	5	\$ 20,000.00
2	70/26/1/ /	\$ 52,800.00	-	-	\$ 55,000.00	Land	20	\$ 11,000.00
9	70/14/ / /	\$ 7,059,100.00	-	-	\$ 3,600,000.00	Land	10	\$ 360,000.00
10	18/26/2/ /	\$ 8,792,600.00	\$ 1,247,718.00	2005	\$ 2,800,000.00	Land	2	\$ 56,000.00
11	18/32/1/ /	\$ 385,400.00	\$ 55,000.00	1993	\$ 40,000.00	Land	5	\$ 2,000.00
12	18/32/1/ /	\$ 83,900.00	\$ 100,000.00	2004	\$ 200,000.00	Land	100	\$ 200,000.00
19	18/32/A/ /	\$ 108,000.00	-	-	\$ 200,000.00	Land	50	\$ 100,000.00
22	18/38/ / /	\$ 363,400.00	\$ 88,500.00	2005	\$ 500,000.00	Land	30	\$ 150,000.00
28	18/38/A/ /	\$ 52,900.00	\$ 128,250.00	2005	\$ 125,000.00	Land	100	\$ 125,000.00
Total								\$ 1,024,000.00

Middle Connector								
Map #	Mblu	Assessed Value	Sale Price	Year Sold	Estimated Value	Comment	% of take	Cost
48	18A/48/C/ /	\$ 2,753,300.00	\$ 4,425,000.00	2017	\$ 1,200,000.00	Land	15	\$ 180,000.00
90	71/1/ / /	\$ 1,454,300.00	\$ 1,352,500.00	2018	\$ 600,000.00	Land	15	\$ 90,000.00
91	70/10/ / /	\$ 640,200.00	\$ 350,000.00	2016	\$ 700,000.00	Land/Bldg	100	\$ 700,000.00
92	70/9/A /				\$ 150,000.00	Land	100	\$ 150,000.00
Total								\$ 1,120,000.00

State & Local Roads								
	Road	Sidewalk Parcels	Value/Parcel	Cost	Widening Parcels	Value/Parcel	Cost	Total
	Route 302	26	\$ 5,000.00	\$ 130,000.00	15	\$ 15,000.00	\$ 225,000.00	\$ 355,000.00
	Route 35/115	2	\$ 5,000.00	\$ 10,000.00	4	\$ 15,000.00	\$ 60,000.00	\$ 70,000.00
	Whites Bridge Road	1	\$ 5,000.00	\$ 5,000.00	1	\$ 15,000.00	\$ 15,000.00	\$ 20,000.00