



GREEN INTERNATIONAL AFFILIATES, INC.
Civil and Structural Engineers
239 Littleton Road, Suite 3
Westford, MA 01886

SHEET NO. 1
CALCULATED BY MB
CHECKED BY TB
DESCRIPTION Nagog Hill Road Bid Summary

OF 1
DATE April 10, 2017
DATE April 13, 2017

Summary

Item #	Item Description	Unit	Quantity	Engineer's Estimate		EH Perkins		ET&L		Onyx	
				Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost
103.	TREE REMOVED - DIAMETER UNDER 24 INCHES	EA	4	\$ 850.00	\$ 3,400.00	\$ 1,000.00	\$ 4,000.00	\$ 1,200.00	\$ 4,800.00	\$ 500.00	\$ 2,000.00
104.	TREE REMOVED - DIAMETER 24 INCHES AND OVER	EA	3	\$ 2,000.00	\$ 6,000.00	\$ 2,000.00	\$ 6,000.00	\$ 2,700.00	\$ 8,100.00	\$ 800.00	\$ 2,400.00
105.	STUMP REMOVED	EA	1	\$ 500.00	\$ 500.00	\$ 600.00	\$ 600.00	\$ 500.00	\$ 500.00	\$ 300.00	\$ 300.00
120.1	UNCLASSIFIED EXCAVATION	CY	9,450	\$ 24.50	\$ 231,525.00	\$ 5.00	\$ 47,250.00	\$ 30.00	\$ 283,500.00	\$ 10.00	\$ 94,500.00
121.	CLASS A ROCK EXCAVATION	CY	100	\$ 100.00	\$ 10,000.00	\$ 300.00	\$ 30,000.00	\$ 120.00	\$ 12,000.00	\$ 0.01	\$ 1.00
129.	PAVEMENT MILLING	SY	1,450	\$ 10.00	\$ 14,500.00	\$ 2.00	\$ 2,900.00	\$ 5.00	\$ 7,250.00	\$ 7.00	\$ 10,150.00
141.	CLASS A TRENCH EXCAVATION	CY	240	\$ 24.00	\$ 5,760.00	\$ 35.00	\$ 8,400.00	\$ 23.00	\$ 5,520.00	\$ 25.00	\$ 6,000.00
141.1	TEST PIT FOR EXPLORATION	CY	150	\$ 60.00	\$ 9,000.00	\$ 35.00	\$ 5,250.00	\$ 94.00	\$ 14,100.00	\$ 20.00	\$ 3,000.00
144.	CLASS B ROCK EXCAVATION	CY	200	\$ 140.00	\$ 28,000.00	\$ 300.00	\$ 60,000.00	\$ 165.00	\$ 33,000.00	\$ 150.00	\$ 30,000.00
146.	DRAINAGE STRUCTURE REMOVED	EA	11	\$ 450.00	\$ 4,950.00	\$ 10.00	\$ 110.00	\$ 550.00	\$ 6,050.00	\$ 600.00	\$ 6,600.00
150.	ORDINARY BORROW	CY	50	\$ 30.00	\$ 1,500.00	\$ 25.00	\$ 1,250.00	\$ 1.00	\$ 50.00	\$ 20.00	\$ 1,000.00
151.	GRAVEL BORROW	CY	5,400	\$ 37.00	\$ 199,800.00	\$ 5.00	\$ 27,000.00	\$ 36.00	\$ 194,400.00	\$ 13.00	\$ 70,200.00
153.	CONTROLLED DENSITY FILL - EXCAVATABLE	CY	20	\$ 160.00	\$ 3,200.00	\$ 120.00	\$ 2,400.00	\$ 180.00	\$ 3,600.00	\$ 140.00	\$ 2,800.00
154.	SAND BORROW	CY	2,000	\$ 30.00	\$ 60,000.00	\$ 25.00	\$ 50,000.00	\$ 32.00	\$ 64,000.00	\$ 0.01	\$ 20.00
156.	CRUSHED STONE	TON	950	\$ 30.00	\$ 28,500.00	\$ 25.00	\$ 23,750.00	\$ 1.00	\$ 950.00	\$ 0.01	\$ 9.50
156.21	CRUSHED STONE FOR SLOPE STABILIZATION	TON	55	\$ 90.00	\$ 4,950.00	\$ 75.00	\$ 4,125.00	\$ 70.00	\$ 3,850.00	\$ 60.00	\$ 3,300.00
156.22	CRUSHED STONE FOR SLOPE STABILIZATION REMOVED, STACKED AND RESET	SY	30	\$ 80.00	\$ 2,400.00	\$ 100.00	\$ 3,000.00	\$ 75.00	\$ 2,250.00	\$ 90.00	\$ 2,700.00
170.	FINE GRADING AND COMPACTING	SY	19,200	\$ 3.50	\$ 67,200.00	\$ 14.00	\$ 268,800.00	\$ 1.45	\$ 27,840.00	\$ 4.50	\$ 86,400.00
182.21	ASBESTOS REMOVAL PERMITS	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 45,000.00	\$ 45,000.00	\$ 5,000.00	\$ 5,000.00	\$ 2,500.00	\$ 2,500.00
182.22	REMOVAL OF ASBESTOS PIPE	FT	800	\$ 56.25	\$ 45,000.00	\$ 5.00	\$ 4,000.00	\$ 35.00	\$ 28,000.00	\$ 5.00	\$ 4,000.00
201.	CATCH BASIN	EA	16	\$ 3,000.00	\$ 48,000.00	\$ 4,000.00	\$ 64,000.00	\$ 3,000.00	\$ 48,000.00	\$ 3,600.00	\$ 57,600.00
202.	MANHOLE	EA	19	\$ 3,400.00	\$ 64,600.00	\$ 4,000.00	\$ 76,000.00	\$ 2,800.00	\$ 53,200.00	\$ 3,000.00	\$ 57,000.00
202.5	MANHOLE (5 FT DIAMETER)	EA	1	\$ 4,400.00	\$ 4,400.00	\$ 5,000.00	\$ 5,000.00	\$ 4,200.00	\$ 4,200.00	\$ 3,500.00	\$ 3,500.00
202.6	MANHOLE (6 FT DIAMETER)	EA	1	\$ 5,400.00	\$ 5,400.00	\$ 6,000.00	\$ 6,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00
203.	SPECIAL MANHOLE	EA	2	\$ 3,000.00	\$ 6,000.00	\$ 5,000.00	\$ 10,000.00	\$ 4,500.00	\$ 9,000.00	\$ 4,000.00	\$ 8,000.00
203.1	SPECIAL MANHOLE (DIVERSION STRUCTURE)	EA	1	\$ 6,000.00	\$ 6,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 6,000.00	\$ 6,000.00
204.	GUTTER INLET	EA	2	\$ 1,800.00	\$ 3,600.00	\$ 1,500.00	\$ 3,000.00	\$ 1,500.00	\$ 3,000.00	\$ 3,000.00	\$ 6,000.00
205.	LEACHING BASIN	EA	2	\$ 5,000.00	\$ 10,000.00	\$ 3,500.00	\$ 7,000.00	\$ 4,500.00	\$ 9,000.00	\$ 6,500.00	\$ 13,000.00
220.	DRAINAGE STRUCTURE ADJUSTED	EA	7	\$ 350.00	\$ 2,450.00	\$ 250.00	\$ 1,750.00	\$ 280.00	\$ 1,960.00	\$ 250.00	\$ 1,750.00
221.	FRAME AND COVER	EA	24	\$ 700.00	\$ 16,800.00	\$ 550.00	\$ 13,200.00	\$ 675.00	\$ 16,200.00	\$ 750.00	\$ 18,000.00
222.3	FRAME AND GRATE (OR COVER) MUNICIPAL STANDARD	EA	18	\$ 775.00	\$ 13,950.00	\$ 600.00	\$ 10,800.00	\$ 650.00	\$ 11,700.00	\$ 750.00	\$ 13,500.00
222.4	CATCH BASIN BEEHIVE GRATE	EA	2	\$ 950.00	\$ 1,900.00	\$ 750.00	\$ 1,500.00	\$ 745.00	\$ 1,490.00	\$ 800.00	\$ 1,600.00
223.1	FRAME AND GRATE (OR COVER) REMOVED AND STACKED	EA	11	\$ 100.00	\$ 1,100.00	\$ 10.00	\$ 110.00	\$ 125.00	\$ 1,375.00	\$ 150.00	\$ 1,650.00
238.12	12 INCH DUCTILE IRON PIPE	FT	325	\$ 100.00	\$ 32,500.00	\$ 100.00	\$ 32,500.00	\$ 108.00	\$ 35,100.00	\$ 120.00	\$ 39,000.00
238.16	16 INCH DUCTILE IRON PIPE	FT	135	\$ 125.00	\$ 16,875.00	\$ 150.00	\$ 20,250.00	\$ 142.00	\$ 19,170.00	\$ 175.00	\$ 23,625.00
241.12	12 INCH REINFORCED CONCRETE PIPE	FT	1,935	\$ 80.00	\$ 154,800.00	\$ 55.00	\$ 106,425.00	\$ 73.00	\$ 141,255.00	\$ 120.00	\$ 232,200.00
241.15	15 INCH REINFORCED CONCRETE PIPE	FT	55	\$ 85.00	\$ 4,675.00	\$ 70.00	\$ 3,850.00	\$ 70.00	\$ 3,850.00	\$ 125.00	\$ 6,875.00
242.12	12 INCH REINFORCED CONCRETE PIPE FLARED END	EA	1	\$ 900.00	\$ 900.00	\$ 750.00	\$ 750.00	\$ 1,175.00	\$ 1,175.00	\$ 500.00	\$ 500.00



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243.12	12 INCH REINFORCED CONCRETE PIPE CLASS IV	FT	550	\$ 85.00	\$ 46,750.00	\$ 55.00	\$ 30,250.00	\$ 70.00	\$ 38,500.00	\$ 122.00	\$ 67,100.00
244.12	12 INCH REINFORCED CONCRETE PIPE CLASS V	FT	45	\$ 90.00	\$ 4,050.00	\$ 70.00	\$ 3,150.00	\$ 130.00	\$ 5,850.00	\$ 125.00	\$ 5,625.00
258.	STONE FOR PIPE ENDS	SY	60	\$ 60.00	\$ 3,600.00	\$ 100.00	\$ 6,000.00	\$ 30.00	\$ 1,800.00	\$ 50.00	\$ 3,000.00
268.	6 INCH SUBDRAIN CLEANOUT	EA	11	\$ 450.00	\$ 4,950.00	\$ 600.00	\$ 6,600.00	\$ 500.00	\$ 5,500.00	\$ 700.00	\$ 7,700.00
268.06	6 INCH SUBDRAIN CARRIER PIPE	FT	25	\$ 35.00	\$ 875.00	\$ 25.00	\$ 625.00	\$ 25.00	\$ 625.00	\$ 50.00	\$ 1,250.00
269.06	6 INCH SLOT-PERFORATED CORRUGATED PLASTIC PIPE (SUBDRAIN)	FT	4,000	\$ 40.00	\$ 160,000.00	\$ 25.00	\$ 100,000.00	\$ 29.00	\$ 116,000.00	\$ 55.00	\$ 220,000.00
302.06	6 INCH DUCTILE IRON WATER PIPE (RUBBER GASKET)	FT	55	\$ 100.00	\$ 5,500.00	\$ 65.00	\$ 3,575.00	\$ 90.00	\$ 4,950.00	\$ 60.00	\$ 3,300.00
302.08	8 INCH DUCTILE IRON WATER PIPE (RUBBER GASKET)	FT	2,000	\$ 85.00	\$ 170,000.00	\$ 75.00	\$ 150,000.00	\$ 89.00	\$ 178,000.00	\$ 90.00	\$ 180,000.00
309.	DUCTILE IRON FITTINGS FOR WATER PIPE	LB	3,240	\$ 6.00	\$ 19,440.00	\$ 0.10	\$ 324.00	\$ 5.50	\$ 17,820.00	\$ 0.01	\$ 32.40
348.1	1 INCH PE TUBING (200 PSI)	FT	220	\$ 66.00	\$ 14,520.00	\$ 30.00	\$ 6,600.00	\$ 77.00	\$ 16,940.00	\$ 100.00	\$ 22,000.00
348.125	1-1/4 INCH PE TUBING (200 PSI)	FT	50	\$ 68.00	\$ 3,400.00	\$ 30.00	\$ 1,500.00	\$ 1.00	\$ 50.00	\$ 0.01	\$ 0.50
348.15	1-1/2 INCH PE TUBING (200 PSI)	FT	50	\$ 73.00	\$ 3,650.00	\$ 30.00	\$ 1,500.00	\$ 1.00	\$ 50.00	\$ 0.01	\$ 0.50
348.2	2 INCH PE TUBING (200 PSI)	FT	50	\$ 81.00	\$ 4,050.00	\$ 40.00	\$ 2,000.00	\$ 70.00	\$ 3,500.00	\$ 0.01	\$ 0.50
350.06	6 INCH GATE AND GATE BOX	EA	4	\$ 1,200.00	\$ 4,800.00	\$ 1,200.00	\$ 4,800.00	\$ 1,575.00	\$ 6,300.00	\$ 600.00	\$ 2,400.00
350.08	8 INCH GATE AND GATE BOX	EA	6	\$ 1,500.00	\$ 9,000.00	\$ 2,000.00	\$ 12,000.00	\$ 2,000.00	\$ 12,000.00	\$ 2,000.00	\$ 12,000.00
357.06	6 INCH GATE BOX	EA	1	\$ 400.00	\$ 400.00	\$ 250.00	\$ 250.00	\$ 300.00	\$ 300.00	\$ 500.00	\$ 500.00
357.08	8 INCH GATE BOX	EA	4	\$ 425.00	\$ 1,700.00	\$ 250.00	\$ 1,000.00	\$ 300.00	\$ 1,200.00	\$ 500.00	\$ 2,000.00
358.	GATE BOX ADJUSTED	EA	5	\$ 205.00	\$ 1,025.00	\$ 200.00	\$ 1,000.00	\$ 140.00	\$ 700.00	\$ 100.00	\$ 500.00
358.1	GATE BOX REMOVED AND STACKED	EA	8	\$ 120.00	\$ 960.00	\$ 10.00	\$ 80.00	\$ 80.00	\$ 640.00	\$ 400.00	\$ 3,200.00
376.	HYDRANT	EA	2	\$ 4,400.00	\$ 8,800.00	\$ 5,000.00	\$ 10,000.00	\$ 4,600.00	\$ 9,200.00	\$ 2,000.00	\$ 4,000.00
376.2	HYDRANT - REMOVED AND RESET	EA	2	\$ 2,400.00	\$ 4,800.00	\$ 3,500.00	\$ 7,000.00	\$ 2,900.00	\$ 5,800.00	\$ 1,500.00	\$ 3,000.00
381.01	SERVICE BOX (MUNICIPAL STANDARD)	EA	11	\$ 200.00	\$ 2,200.00	\$ 125.00	\$ 1,375.00	\$ 185.00	\$ 2,035.00	\$ 200.00	\$ 2,200.00
381.2	SERVICE BOX REMOVED AND STACKED	EA	10	\$ 200.00	\$ 2,000.00	\$ 10.00	\$ 100.00	\$ 135.00	\$ 1,350.00	\$ 100.00	\$ 1,000.00
381.3	SERVICE BOX ADJUSTED	EA	1	\$ 145.00	\$ 145.00	\$ 150.00	\$ 150.00	\$ 160.00	\$ 160.00	\$ 200.00	\$ 200.00
384.	CURB STOP	EA	11	\$ 400.00	\$ 4,400.00	\$ 200.00	\$ 2,200.00	\$ 400.00	\$ 4,400.00	\$ 500.00	\$ 5,500.00
402.	DENSE GRADED CRUSHED STONE FOR SUB-BASE	CY	2,025	\$ 60.00	\$ 121,500.00	\$ 15.00	\$ 30,375.00	\$ 53.00	\$ 107,325.00	\$ 60.00	\$ 121,500.00
443.	WATER FOR ROADWAY DUST CONTROL	MGL	350	\$ 50.00	\$ 17,500.00	\$ 10.00	\$ 3,500.00	\$ 45.00	\$ 15,750.00	\$ 0.01	\$ 3.50
460.	HOT MIX ASPHALT	TON	3,700	\$ 90.00	\$ 333,000.00	\$ 70.00	\$ 259,000.00	\$ 75.00	\$ 277,500.00	\$ 90.00	\$ 333,000.00
464.	ASPHALT EMULSION FOR TACK COAT	GAL	1,000	\$ 2.00	\$ 2,000.00	\$ 0.02	\$ 20.00	\$ 7.50	\$ 7,500.00	\$ 8.00	\$ 8,000.00
464.5	HOT POURED RUBBERIZED ASPHALT SEALER	FT	7,750	\$ 1.75	\$ 13,562.50	\$ 0.02	\$ 155.00	\$ 0.70	\$ 5,425.00	\$ 1.00	\$ 7,750.00
470.2	HOT MIX ASPHALT BERM, TYPE A - MODIFIED	FT	5,750	\$ 5.00	\$ 28,750.00	\$ 5.00	\$ 28,750.00	\$ 4.80	\$ 27,600.00	\$ 6.00	\$ 34,500.00
472.	HOT MIX ASPHALT FOR MISCELLANEOUS WORK	TON	100	\$ 200.00	\$ 20,000.00	\$ 150.00	\$ 15,000.00	\$ 205.00	\$ 20,500.00	\$ 0.01	\$ 1.00
482.3	SAWCUTTING ASPHALT PAVEMENT	FT	975	\$ 3.00	\$ 2,925.00	\$ 1.00	\$ 975.00	\$ 2.00	\$ 1,950.00	\$ 1.00	\$ 975.00
583.	EDGING REMOVED AND RESET	FT	60	\$ 25.00	\$ 1,500.00	\$ 30.00	\$ 1,800.00	\$ 42.00	\$ 2,520.00	\$ 10.00	\$ 600.00
620.1	STEEL W BEAM HIGHWAY GUARD (SINGLE FACED)	FT	650	\$ 24.00	\$ 15,600.00	\$ 23.00	\$ 14,950.00	\$ 24.00	\$ 15,600.00	\$ 40.00	\$ 26,000.00
627.1	STEEL W BEAM TERMINAL SECTION (SINGLE FACED)	EA	1	\$ 65.00	\$ 65.00	\$ 100.00	\$ 100.00	\$ 103.00	\$ 103.00	\$ 100.00	\$ 100.00
627.8	STEEL BEAM HIGHWAY GUARD TANGENT END TREATMENT	EA	1	\$ 2,500.00	\$ 2,500.00	\$ 2,200.00	\$ 2,200.00	\$ 2,280.00	\$ 2,280.00	\$ 3,000.00	\$ 3,000.00
627.9	STEEL BEAM HIGHWAY GUARD FLARED END TREATMENT	EA	6	\$ 2,000.00	\$ 12,000.00	\$ 2,000.00	\$ 12,000.00	\$ 2,120.00	\$ 12,720.00	\$ 2,600.00	\$ 15,600.00



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635.	HIGHWAY GUARD REMOVED AND STACKED	FT	300	\$ 8.00	\$ 2,400.00	\$ 13.00	\$ 3,900.00	\$ 14.00	\$ 4,200.00	\$ 10.00	\$ 3,000.00
656.11	WIRE FENCE	FT	25	\$ 20.00	\$ 500.00	\$ 62.00	\$ 1,550.00	\$ 65.00	\$ 1,625.00	\$ 50.00	\$ 1,250.00
670.	FENCE REMOVED AND RESET	FT	350	\$ 25.00	\$ 8,750.00	\$ 20.00	\$ 7,000.00	\$ 20.00	\$ 7,000.00	\$ 20.00	\$ 7,000.00
673.	REMOVE AND RESET GATE	EA	2	\$ 1,000.00	\$ 2,000.00	\$ 900.00	\$ 1,800.00	\$ 950.00	\$ 1,900.00	\$ 1,300.00	\$ 2,600.00
685.	STONE MASONRY WALL IN CEMENT MORTAR	CY	2	\$ 800.00	\$ 1,600.00	\$ 1,000.00	\$ 2,000.00	\$ 1,000.00	\$ 2,000.00	\$ 750.00	\$ 1,500.00
691.	BALANCE STONE WALL REMOVED AND REBUILT	FT	200	\$ 175.00	\$ 35,000.00	\$ 125.00	\$ 25,000.00	\$ 70.00	\$ 14,000.00	\$ 280.00	\$ 56,000.00
697.	SEDIMENTATION FENCE	FT	2,750	\$ 3.50	\$ 9,625.00	\$ 5.00	\$ 13,750.00	\$ 7.00	\$ 19,250.00	\$ 1.00	\$ 2,750.00
697.1	SILT SACK	EA	33	\$ 140.00	\$ 4,620.00	\$ 25.00	\$ 825.00	\$ 230.00	\$ 7,590.00	\$ 10.00	\$ 330.00
698.3	GEOTEXTILE FABRIC FOR SEPARATION	SY	280	\$ 5.00	\$ 1,400.00	\$ 18.00	\$ 5,040.00	\$ 2.40	\$ 672.00	\$ 1.00	\$ 280.00
698.4	GEOTEXTILE FABRIC FOR PERMANENT EROSION CONTROL	SY	315	\$ 5.00	\$ 1,575.00	\$ 18.00	\$ 5,670.00	\$ 3.50	\$ 1,102.50	\$ 1.00	\$ 315.00
701.	CEMENT CONCRETE SIDEWALK	SY	3	\$ 60.00	\$ 180.00	\$ 200.00	\$ 600.00	\$ 70.00	\$ 210.00	\$ 150.00	\$ 450.00
702.	HOT MIX ASPHALT WALK SURFACE	TON	12	\$ 210.00	\$ 2,520.00	\$ 200.00	\$ 2,400.00	\$ 185.00	\$ 2,220.00	\$ 300.00	\$ 3,600.00
703.	HOT MIX ASPHALT DRIVEWAY	TON	220	\$ 170.00	\$ 37,400.00	\$ 200.00	\$ 44,000.00	\$ 180.00	\$ 39,600.00	\$ 180.00	\$ 39,600.00
704.2	GRAVEL FOR DRIVEWAYS	SY	150	\$ 18.00	\$ 2,700.00	\$ 25.00	\$ 3,750.00	\$ 20.00	\$ 3,000.00	\$ 50.00	\$ 7,500.00
706.1	BRICK WALK REMOVED AND RELAID	SY	6	\$ 165.00	\$ 990.00	\$ 200.00	\$ 1,200.00	\$ 185.00	\$ 1,110.00	\$ 100.00	\$ 600.00
707.8	STEEL BOLLARD	EA	2	\$ 1,200.00	\$ 2,400.00	\$ 500.00	\$ 1,000.00	\$ 935.00	\$ 1,870.00	\$ 800.00	\$ 1,600.00
707.11	REMOVE AND RESET BOLLARD	EA	3	\$ 800.00	\$ 2,400.00	\$ 450.00	\$ 1,350.00	\$ 490.00	\$ 1,470.00	\$ 400.00	\$ 1,200.00
715.	RURAL MAIL BOX REMOVED AND RESET	EA	20	\$ 140.00	\$ 2,800.00	\$ 25.00	\$ 500.00	\$ 120.00	\$ 2,400.00	\$ 300.00	\$ 6,000.00
720.	BOULDERS REMOVED AND RESET	EA	7	\$ 200.00	\$ 1,400.00	\$ 300.00	\$ 2,100.00	\$ 185.00	\$ 1,295.00	\$ 100.00	\$ 700.00
751.	LOAM BORROW	CY	1,170	\$ 45.00	\$ 52,650.00	\$ 35.00	\$ 40,950.00	\$ 50.00	\$ 58,500.00	\$ 50.00	\$ 58,500.00
756.	NPDES STORMWATER POLLUTION PREVENTION PLAN	LS	1	\$ 12,500.00	\$ 12,500.00	\$ 100,000.00	\$ 100,000.00	\$ 20,000.00	\$ 20,000.00	\$ 3,000.00	\$ 3,000.00
765.	SEEDING	SY	8,400	\$ 1.00	\$ 8,400.00	\$ 2.00	\$ 16,800.00	\$ 0.65	\$ 5,460.00	\$ 1.20	\$ 10,080.00
767.12	COMPOST FILTER TUBES	FT	2,750	\$ 6.00	\$ 16,500.00	\$ 5.00	\$ 13,750.00	\$ 10.00	\$ 27,500.00	\$ 3.00	\$ 8,250.00
767.2	HAY MULCH	SY	8,400	\$ 1.00	\$ 8,400.00	\$ 0.25	\$ 2,100.00	\$ 0.50	\$ 4,200.00	\$ 0.50	\$ 4,200.00
767.91	TEMPORARY MATTING FOR EROSION CONTROL	SY	375	\$ 3.00	\$ 1,125.00	\$ 3.00	\$ 1,125.00	\$ 4.00	\$ 1,500.00	\$ 1.50	\$ 562.50
769.	PAVEMENT MILLING MULCH UNDER GUARD RAIL	FT	825	\$ 8.00	\$ 6,600.00	\$ 6.00	\$ 4,950.00	\$ 9.50	\$ 7,837.50	\$ 10.00	\$ 8,250.00
832.	WARNING-REGULATORY AND ROUTE MARKER - ALUM. PANEL (TYPE A)	SF	70	\$ 12.00	\$ 840.00	\$ 15.00	\$ 1,050.00	\$ 10.00	\$ 700.00	\$ 40.00	\$ 2,800.00
833.5	DEMOUNTABLE REFLECTORIZED DELINEATOR - GUARD RAIL	EA	46	\$ 6.00	\$ 276.00	\$ 6.00	\$ 276.00	\$ 5.50	\$ 253.00	\$ 6.50	\$ 299.00
833.7	DELINEATION FOR GUARD RAIL TERMINI	EA	8	\$ 35.00	\$ 280.00	\$ 40.00	\$ 320.00	\$ 38.00	\$ 304.00	\$ 60.00	\$ 480.00
847.1	SIGN SUP (N/GUIDE)+RTE MKR W/1 BRKWAY POST ASSEMBLY - STEEL	EA	14	\$ 110.00	\$ 1,540.00	\$ 110.00	\$ 1,540.00	\$ 115.00	\$ 1,610.00	\$ 120.00	\$ 1,680.00
851.2	TRAFFIC CONTROLS FOR CONSTRUCTION	LS	1	\$ 50,000.00	\$ 50,000.00	\$ 100,000.00	\$ 100,000.00	\$ 55,000.00	\$ 55,000.00	\$ 200,000.00	\$ 200,000.00
853.2	TEMPORARY BARRIER	FT	320	\$ 45.00	\$ 14,400.00	\$ 5.00	\$ 1,600.00	\$ 1.00	\$ 320.00	\$ 30.00	\$ 9,600.00
856.12	PORTABLE CHANGEABLE MESSAGE SIGN	DAY	950	\$ 20.00	\$ 19,000.00	\$ 20.00	\$ 19,000.00	\$ 21.00	\$ 19,950.00	\$ 5.00	\$ 4,750.00
866.04	4 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC)	FT	15,000	\$ 0.50	\$ 7,500.00	\$ 0.60	\$ 9,000.00	\$ 0.55	\$ 8,250.00	\$ 0.75	\$ 11,250.00
866.112	12 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC)	FT	140	\$ 2.00	\$ 280.00	\$ 3.00	\$ 420.00	\$ 2.75	\$ 385.00	\$ 2.00	\$ 280.00
867.04	4 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC)	FT	14,400	\$ 0.75	\$ 10,800.00	\$ 0.60	\$ 8,640.00	\$ 0.55	\$ 7,920.00	\$ 0.75	\$ 10,800.00
874.1	STREET SIGN REMOVED AND RESET	EA	3	\$ 100.00	\$ 300.00	\$ 110.00	\$ 330.00	\$ 85.00	\$ 255.00	\$ 50.00	\$ 150.00
874.2	TRAFFIC SIGN REMOVED AND RESET	EA	2	\$ 100.00	\$ 200.00	\$ 110.00	\$ 220.00	\$ 85.00	\$ 170.00	\$ 50.00	\$ 100.00
874.4	TRAFFIC SIGN REMOVED AND STACKED	EA	1	\$ 45.00	\$ 45.00	\$ 20.00	\$ 20.00	\$ 35.00	\$ 35.00	\$ 20.00	\$ 20.00



GREEN INTERNATIONAL AFFILIATES, INC.
 Civil and Structural Engineers
 239 Littleton Road, Suite 3
 Westford, MA 01886

SHEET NO. 1
 CALCULATED BY MB
 CHECKED BY TB
 DESCRIPTION Nagog Hill Road Bid Summary

OF 1
 DATE April 10, 2017
 DATE April 13, 2017

Summary

Item #	Item Description	Unit	Quantity	Engineer's Estimate		EH Perkins		ET&L		Onyx	
				Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost	Unit Cost	Extended Cost
901.	4000 PSI, 1.5 IN., 565 CEMENT CONCRETE	CY	7	\$ 750.00	\$ 5,250.00	\$ 750.00	\$ 5,250.00	\$ 990.00	\$ 6,930.00	\$ 1,000.00	\$ 7,000.00
910.	STEEL REINFORCEMENT FOR STRUCTURES	LB	135	\$ 6.00	\$ 810.00	\$ 10.00	\$ 1,350.00	\$ 5.00	\$ 675.00	\$ 5.00	\$ 675.00
983.52	MODIFIED ROCK FILL	CY	115	\$ 90.00	\$ 10,350.00	\$ 100.00	\$ 11,500.00	\$ 87.00	\$ 10,005.00	\$ 180.00	\$ 20,700.00
983.53	STONE CHECK DAM	EA	6	\$ 350.00	\$ 2,100.00	\$ 750.00	\$ 4,500.00	\$ 495.00	\$ 2,970.00	\$ 700.00	\$ 4,200.00

Total Bid:				\$ 2,527,458.50		\$ 2,150,000.00		\$ 2,358,122.00		\$ 2,424,120.40
					Difference from Estimate	\$ (377,458.50)		\$ (169,336.50)		\$ (103,338.10)
				Difference from Low Bid	\$ 377,458.50	0	\$ 208,122.00	\$ 208,122.00	9.68%	\$ 274,120.40
					17.56%	0.00%				12.75%