

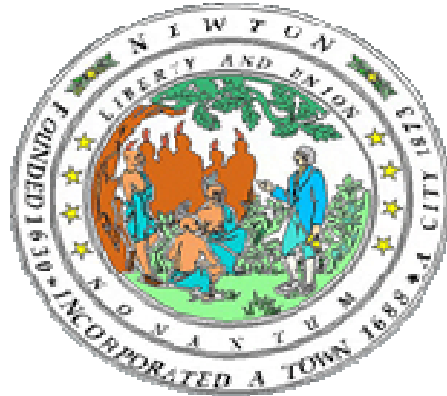
**WASHINGTON STREET REDESIGN
PHASE 1A - PHASE 1B**

IN THE CITY OF

NEWTON

MIDDLESEX COUNTY

WASHINGTON STREET PILOT DESIGN



HSR PROJECT NUMBER 2021163.00

**25%/75% SUBMISSION - APRIL 2024
HOWARD STEIN HUDSON**

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CALC'D BY: SS **DATE:** 3/29/2024
CHK'D BY: VC **DATE:** 3/31/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

AREA SUMMARY

	AREA (SF)	AREA (SY)
Mill & Overlay	2,605	290
Cem Conc Sidewalks	1,486	166
HMA Sidewalks	294	33
Pedestrian Curb Ramps	2,030	226
Pavement Removal	640	72
Loam and Seed	2,525	281

11 BEACON STREET, SUITE 1010 | BOSTON, MASSACHUSETTS 02108 | 617.482.7080

25%/75% Design Estimate

Item No.	Description	Units	Total Quantity	Average Bid Price	Total Estimated Cost
102	SELECTIVE CLEARING AND THINNING	AC	1	\$1,200.00	\$1,200
102.511	TREE PROTECTION - ARMORING AND PRUNING	EA	12	\$400.00	\$4,800
120	EARTH EXCAVATION	CY	280	\$47.00	\$13,160
120.1	UNCLASSIFIED EXCAVATION	CY	160	\$125.00	\$20,000
150	ORDINARY BORROW	CY	40	\$35.00	\$1,400
151	GRAVEL BORROW	CY	120	\$55.00	\$6,600
170	FINE GRADING AND COMPACTING - SUBGRADE AREA	SY	430	\$17.00	\$7,310
220	DRAINAGE STRUCTURE ADJUSTED	EA	2	\$550.00	\$1,100
415.2	PAVEMENT FINE MILLING	SY	290	\$23.00	\$6,670
443	WATER FOR ROADWAY DUST CONTROL	MGL	1	\$125.00	\$125
450.231	SUPERPAVE SURFACE COURSE - 12.5 POLYMER (SSC - 12.5 - P)	TON	35	\$357.00	\$12,495
451	HMA FOR PATCHING	TON	10	\$380.00	\$3,800
452	ASPHALT EMULSION FOR TACK COAT	GAL	25	\$15.00	\$375
453	HMA JOINT ADHESIVE	FT	60	\$4.00	\$240
472	TEMPORARY ASPHALT PATCHING	TON	10	\$317.00	\$3,170
504	GRANITE CURB TYPE VA4 - STRAIGHT	FT	170	\$120.00	\$20,400
509	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - STRAIGHT	FT	120	\$93.50	\$11,220
509.1	GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS - CURVED	FT	10	\$265.00	\$2,650
580	CURB REMOVED AND RESET	FT	250	\$45.00	\$11,250
594	CURB REMOVED AND DISCARDED	FT	190	\$9.00	\$1,710
697.1	SILT SACK	EA	6	\$230.00	\$1,380
701.2	CEMENT CONCRETE PEDESTRIAN CURB RAMP	SY	230	\$155.00	\$35,650
708*	SHRUBTUB CYLINDRICAL PLANTER WITH WATER & CARE SYSTEM	EA	5	\$9,000.00	\$45,000
748	MOBILIZATION	LS	1	\$28,930.00	\$28,930
751	LOAM FOR ROADSIDES	CY	40	\$87.00	\$3,480
751.2*	PLANTING SOIL - AMMEND WITH COMPOST	CY	189	\$125.00	\$23,625
751.3*	PLANTING SOIL- IMPORTED	CY	22	\$125.00	\$2,750
765	SEEDING	SY	290	\$3.50	\$1,015
770.2*	PLANTING MAINTENANCE	LS	1	\$15,000.00	\$15,000
772.1*	THUJA OCCIDENTALIS- 8-10' HT	EA	2	\$1,200.00	\$2,400
772.2*	THUJA OCCIDENTALIS- 10-12' HT	EA	3	\$1,650.00	\$4,950
776.9*	ACER PENNSYLVANICA 8-10' HT	EA	6	\$1,250.00	\$7,500
778.2*	BETULUS POPULIFOLIA- 8-10' HT	EA	9	\$1,250.00	\$11,250
778.3*	BETULUS POPULIFOLIA- 10-12' HT	EA	10	\$1,450.00	\$14,500
782.537*	CERCIS CANADENSIS 8-10' HT	EA	26	\$1,350.00	\$35,100
783*	MAGNOLIA VIRGINIANA 10-12' HT	EA	9	\$1,500.00	\$13,500
784*	PICEA GLAUCA- 8-10' HT	EA	4	\$1,600.00	\$6,400
784.1*	PICEA GLAUCA- 10-12' HT	EA	2	\$2,400.00	\$4,800
786.5*	JUNIPERUS VIRGINIANA 24-30" B&B	EA	3	\$225.00	\$675
789.334*	MYRICA PENNSYLVANICA - 24-30" B&B	EA	3	\$225.00	\$675
794.332*	RHUS AROMATICA 'GROW LOW' -24"-2 GALLON	EA	485	\$125.00	\$60,625
794.735*	ILEX GLABRA -30-36" B&B	EA	28	\$275.00	\$7,700
794.736*	ARONIA MELANOCARPA - 30-36" B&B	EA	38	\$225.00	\$8,550
794.738*	CLETHRA ALNIFOLIA - 30-36" B&B	EA	48	\$200.00	\$9,600
795.1*	VIBURNUM DENTATUM - 3-4' B&B	EA	34	\$350.00	\$11,900
796.1	SCHIZACHYRIUM SCOPARIUM- 2 GALLON	EA	150	\$75.00	\$11,250
816.01*	TRAFFIC SIGNAL RECONSTRUCTION LOCATION NO. 1	LS	1	\$0.00	\$0
816.02*	TRAFFIC SIGNAL RECONSTRUCTION LOCATION NO. 2	LS	1	\$9,100.00	\$9,100
832	WARNING-REGULATORY AND ROUTE MARKER - ALUMINUM PANEL (TYPE A)	SF	400	\$14.00	\$5,600
834.183*	REFLECTORIZED FLEXIBLE DELINATOR POST 36" WHITE OR YELLOW- ADHESIVE MOUNT	EA	148	\$200.00	\$29,600
834.287*	12" PRECAST CONCRETE CURBING FOR BICYCLE LANES (10' SECTION)	EA	132	\$500.00	\$66,000

25%/75% Design Estimate

Item No.	Description	Units	Total Quantity	Average Bid Price	Total Estimated Cost
847.1	SIGN SUP (N/GUIDE)+RTE MKR W/1 BRKWAY POST ASSEMBLY - STEEL	EA	98	\$245.00	\$24,010
854.1	PAVEMENT MARKING REMOVAL	SF	22,330	\$3.00	\$66,990
864.04	PAVEMENT ARROWS AND LEGENDS REFLECTORIZED WHITE (THERMOPLASTIC)	SF	1,300	\$16.00	\$20,800
864.41*	GREEN COLORIZED PAVEMENT MARKINGS	SF	1,900	\$11.00	\$20,900
866.106	6 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC)	FT	10,060	\$2.00	\$20,120
866.112	12 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC)	FT	4,160	\$6.50	\$27,040
867.106	6 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC)	FT	10,200	\$2.00	\$20,400
867.112	12 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC)	FT	300	\$6.50	\$1,950
874.2*	TRAFFIC SIGN REMOVED AND RESET	EA	9	\$160.00	\$1,440
874.41*	TRAFFIC SIGN REMOVED AND DISCARDED	EA	20	\$50.00	\$1,000
875.1*	PARKING METER REMOVED AND RESET	EA	15	\$582.00	\$8,730
875.2*	PARKING METER REMOVED AND STACKED	EA	6	\$325.00	\$1,950
998.1*	MODULAR BUS PLATFORM	LS	1	\$141,400.00	\$141,400
998.2*	MODULAR MEDIAN	LS	1	\$28,300.00	\$28,300
				SUBTOTAL	\$993,210
				Design Contingency (25%)	\$248,303
				Temp Traffic Control (15%)	\$148,982
				Police Detail (5%)	\$49,661
				TOTAL	\$1,440,155
				TOTAL ESTIMATE SAY	\$1,450,000



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 102

SELECTIVE CLEARING AND THINNING

AC

SUBTOTAL = 1200 AC

ITEM 102 SAY 1,200 AC



CALC'D BY:

SS

DATE:

3/29/2024

CITY:

NEWTON

CHK'D BY:

VC

DATE:

4/1/2024

PROJECT: WASHINGTON STREET PILOT

ITEM 102.511*

TREE PROTECTION - ARMORING AND PRUNING

EA

To be used for tree diameter 8" and greater. See construction plans.

<u>Location</u>	<u>Quantity</u>
Washington Street	12

SUBTOTAL = 12 EA

ITEM 102.511* SAY 12 EA



CALC'D BY:

PC

DATE:

4/1/2024

CITY:

NEWTON

CHK'D BY:

BJ

DATE:

4/1/2024

PROJECT:

Washington St. Redesign

ITEM 120

EARTH EXCAVATION

CY

160 shrubs with 24" rootball- 3 square foot per shrub or 480 square foot of soil to be removed assume 30" depth =480 *2.5= 1200/27=44 CY plus remainder of strip- 236 cy= 280

Quantity 280 CY

Unit Price = \$47.00

SUBTOTAL = \$13,160.00

ITEM 102 SAY 280 CY



CALC'D BY: SS
CHK'D BY: VC

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 120.1	UNCLASSIFIED EXCAVATION			CY
	<u>Area (SY)</u>	<u>Depth (FT)</u>	<u>Volume (CY)</u>	
Cem Conc Sidewalks	166	1.00	55.33	
HMA Sidewalks	33	1.00	11.00	
Pedestrian Curb Ramps	226	1.00	75.33	
Pavement Removal	72	0.50	12.00	
		SUBTOTAL	153.67	CY
		ITEM 120.1 SAY	160	CY



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 150

ORDINARY BORROW

CY

FROM AREA SUMMARY:

	Area (SY)	x	Depth (yd)	Volume (CY)
PAVEMENT REMOVAL	640		0.06	35.56

ITEM 150 SAY 40 CY



CALC'D BY:

SS

DATE:

3/29/2024

CITY:

NEWTON

CHK'D BY:

VC

DATE:

4/1/2024

PROJECT: WASHINGTON STREET PILOT

ITEM 151

GRAVEL BORROW

CY

HMA
SIDEWALK

Area (SY)	x	Depth (yd)	Volume (CY)
33		0.22	7.33

CEM CONC
SIDEWALK

Area (SY)	x	Depth (yd)	Volume (CY)
166		0.22	36.89

PED CURB
RAMPS

Area (SY)	x	Depth (yd)	Volume (CY)
226		0.22	50.22

TOTAL	94	CY
+ 25% SWELL	24	CY
SUBTOTAL	118	CY

ITEM 151 SAY 120 CY



CALC'D BY:

SS

DATE:

3/29/2024

CITY:

NEWTON

CHK'D BY:

VC

DATE:

4/1/2024

PROJECT: WASHINGTON STREET PILOT

ITEM 170

FINE GRADING AND COMPACTING - SUBGRADE AREA

SY

FROM AREA SUMMARY PAGE:

FULL DEPTH CONSTRUCTION AREAS

Area (SY)

CONCRETE SIDEWALKS=

166

PEDESTRIAN CURB RAMPS=

226

HMA SIDEWALKS=

33

SUBTOTAL = 425 SY

ITEM 170 SAY 430 SY



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 220

DRAINAGE STRUCTURE ADJUSTED

EA

LOCATION	TYPE	QUANTITY
STA 132+50, LT	CB	1
STA 136+00, LT	CB	1

CBs = 2 EA
 DMHs = 0 EA
 TOTAL = 2 EA

ITEM 220 SAY 2 EA



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 415.2

PAVEMENT FINE MILLING

SY

From Area Summary:

Area (SY):

Mill & Overlay =

290 SY

SUBTOTAL = 290 SY

ITEM 415.2 SAY 290 SY



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 443

WATER FOR ROADWAY DUST CONTROL

MGL

*Estimate 1 GAL per SY

From Area Summary:

Area (SY):

Mill & Overlay = 290 SY

TOTAL = 290 SY

Total: (290 SY* 1 GAL/SY)/ (1,000 GAL/MGL) = **0.3 MGL**

SUBTOTAL = 1 MGL

ITEM 443 SAY 1 MGL



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 450.231 SUPERPAVE SURFACE COURSE - 12.5 POLYMER (SSC - 12.5-P) TON

FROM AREA SUMMARY

Full Depth	0	SY
Full Depth Less than 4'	0	SY
Mill and Overlay	290	SY
TOTAL =	<u>290</u>	SY

Area (SY)	Depth (in.)	Ton/sy/in	Tons
290	2	0.056	32.48

SUBTOTAL = 32.5 TON

ITEM 455.231 SAY 35 TON



CALC'D BY:

SS

DATE:

3/29/2024

CITY:

NEWTON

CHK'D BY:

VC

DATE:

4/1/2024

PROJECT: WASHINGTON STREET PILOT

ITEM 451

HMA FOR PATCHING

TON

Mill and Overlay

290

SY

Assume 10% of Area	Depth (in.)	Ton/sy/in	Tons
10%	29.0 (SY)	4	0.056
			6

TOTAL =

6

TON

ITEM 451 SAY

10

TON



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 452

ASPHALT EMULSION FOR TACK COAT

GAL

MILLED SURFACE

From Area Summary
Mill & Overlay (1 Layer) = 290 SY

TOTAL = 290 SY

Area (SY)	GAL/SY	GAL
290	0.07	20.3

NEW HMA

From Area Summary
Full Depth = 0 SY
Full Depth < 4' = 0 SY
HMA Sidewalks = 33 SY

TOTAL = 33 SY

Area (SY)	GAL/SY	GAL
33	0.06	2.0

TOTAL = 22.3 GAL

ITEM 452 SAY 25 GAL



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 453	HMA JOINT ADHESIVE	FT
	Mill and Overlay Area	52 FT
	Total Joint Adhesive	52 FT
	ITEM 453 SAY	60 FT



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 472

TEMPORARY ASPHALT PATCHING

TON

* HMA for miscellaneous use shall be used for all temporary HMA and include all ramping at the limits of work, at raised structures, to provide access at curb cuts during construction and as directed by the resident engineer.

| Assume 35sf per ramp

Temporary Pedestrian Ramps 315 SF = 35 SF * 9 RAMPS

TOTAL 315 SF

Area (SY)	Depth (in)	Ton/sy/in	Tons
35.0	3	0.056	6

Total HMA: 6 TONS

ITEM 472 SAY 10 TON



CALC'D BY:

DATE:

CITY:

NEWTON

CHK'D BY:

DATE:

PROJECT: WASHINGTON STREET PILOT

ITEM 504

GRANITE CURB TYPE VA4 - STRAIGHT

FT

Unsuitable R&R curb to be replaced with VGC=	61	FT	<i>From Item 580</i>
Existing Transition Curb to be replaced with VGC=	102	FT	<i>Measured in CAD</i>

TOTAL NEW GRANITE CURB REQUIRED = 163 FT

ITEM 504 SAY 170 FT



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 509 GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS – STRAIGHT FT

Ramp Number	Length	
R1	7.7	FT
R2	20.0	FT
R5	14.2	FT
R8	5.7	FT
R11	15.4	FT
R12	13.0	FT
R15	11.6	FT
R18	15.4	FT
R19	13.0	FT
TOTAL	116.0	FT

ITEM 509 SAY 120 FT



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 509.1 GRANITE TRANSITION CURB FOR PEDESTRIAN CURB RAMPS – CURVED FT

Ramp Number	Radius	Length	FT
R8	40.0	8.6	
	TOTAL=	8.6	FT

ITEM 509.1 SAY 10 FT



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 580

CURB REMOVED AND RESET

FT

Curb available for R&R 306 FT | *Measured in CAD*
Assume 80% reusable = 245 FT

Total 245 FT

SUBTOTAL = 245 FT

ITEM 580 SAY 250 FT



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 594

CURB REMOVED AND DISCARDED

FT

Assume 20% of R&R curb to be discarded =	61	FT	<i>From Item 580</i>
Existing Curved Curb =	26	FT	<i>Measured in CAD</i>
Existing Transition Curb to be removed =	102	FT	<i>Measured in CAD</i>

Total	189	FT
-------	-----	----

ITEM 594 SAY 190 FT



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 697.1*

SILT SACK

EA

Existing CBs Near Limits of Ramp Recon	4	Measured in CAD
Adjusted CBs	2	From Item 220

TOTAL = 6 EA

ITEM 697.1* SAY 6 EA



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 701.2

CEMENT CONCRETE PEDESTRIAN CURB RAMP

SY

FROM AREA SUMMARY:

Area (SY)
226

ITEM 701.2 SAY 230 SY



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 708

SHRUBTUB PLANTER WITH WATER & CARE SYSTEM

EA

Street Life quote-5260 + 1375 for TT-Bottom Up water care system - shipping 758 per planter -7393 ADD 1500 for install-8893 say 9000

Quantity 5 EA

Unit Price = \$9,000.00 EA

SUBTOTAL = \$45,000.00

ITEM 708 SAY 5 EA



CALC'D BY:

SS

DATE:

3/29/2024

CITY:

NEWTON

CHK'D BY:

VC

DATE:

4/1/2024

PROJECT: WASHINGTON STREET PILOT

ITEM 748

MOBILIZATION

LS

LUMP SUM

* Mobilization is calculated as 3.0% of the total project cost.

APPROXIMATE PROJECT TOTAL

\$913,280

MOBILIZATION COST

\$27,400 (Max Value)

ITEM 748 SAY

1

LS



CALC'D BY:

SS

DATE:

3/29/2024

CITY:

NEWTON

CHK'D BY:

VC

DATE:

4/1/2024

PROJECT: WASHINGTON STREET PILOT

ITEM 751

LOAM FOR ROADSIDES

CY

LOAM BORROW

281 SY

| From Area Summary

Depth = 4.00 IN

Depth = 0.11 YD

Volume = 31 CY

25% Swell = 8 CY

Subtotal = 39 CY

ITEM 751 SAY

40

CY



CALC'D BY:

PC

DATE:

4/1/2024

CITY:

NEWTON

CHK'D BY:

BJ

DATE:

4/1/2024

PROJECT:

Washington St. Redesign

ITEM 751.2

PLANTING SOIL- AMMEND WITH COMPOST

CY

10,236 sqare foot of new soil (subtracted 780 for ex shrubgs, 480 for new shrubs,and 504 for new trees
10236*2.5=25590/27=950 (1/5 of that is removal)= 189

Quantity 189 CY

Unit Price = \$125.00

SUBTOTAL = \$23,625.00

ITEM 751.2 SAY 189 CY



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 751.3

PLANTING SOIL- IMPORTED

CY

Planters are 47 Square foot (93"dia) $47*2.5=117.5/27=4.35-$
4.5 CY per planter

Quantity 22 CY

Unit Price = \$125.00

SUBTOTAL = \$2,750.00

ITEM 751.3 SAY 22 CY



CALC'D BY: SS
CHK'D BY: VC

DATE: 3/29/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 765

SEEDING

SY

Loam and Seed
FROM AREA SUMMARY:

Area (SY)
281

TOTAL = 281 SY

ITEM 765 SAY 290 SY



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 770.2

PLANTING MAINTENANCE

LS

Quantity 1 LS

Unit Price = \$15,000.00

SUBTOTAL = \$15,000.00

ITEM 770.2 SAY 1 LS



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 772.1

THUJA OCCIDENTALIS - 8-10' HT

EA

Quantity 2 EA

Unit Price = \$1,200.00

SUBTOTAL = \$2,400.00

ITEM 772.1 SAY 2 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 772.2

THUJA OCCIDENTALIS - 10-12' HT

EA

Quantity 3 EA

Unit Price = \$1,650.00

SUBTOTAL = \$4,950.00

ITEM 772.2 SAY 3 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 776.9

ACER PENSYLVANICA 8-10' HT

EA

Quantity 6 EA

Unit Price = \$1,250.00

SUBTOTAL = \$7,500.00

ITEM 776.9 SAY 6 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 778.2

BETULUS POPULIFOLIA- 8-10' ht

EA

Quantity 9 EA

Unit Price = \$1,250.00

SUBTOTAL = \$11,250.00

ITEM 778.2 SAY 9 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 778.3

BETULUS POPULIFOLIA- 10-12' ht

EA

Quantity 10

Unit Price = \$1,450.00

SUBTOTAL = \$14,500.00

ITEM 778.3 SAY 10 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 782.537

CERCIS CANADENSIS 8-10' HT

EA

Quantity 26 EA

Unit Price = \$1,350.00

SUBTOTAL = \$35,100.00

ITEM 782.537 SAY 26 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 783

MAGNOLIA VIRGINIANA 10-12' HT

EA

Quantity 9 EA

Unit Price = \$1,500.00

SUBTOTAL = \$13,500.00

ITEM 783 SAY 9 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 784

PICEA GLAUCA - 8-10' HT

EA

Quantity 4 EA

Unit Price = \$1,600.00

SUBTOTAL = \$6,400.00

ITEM 784 SAY 4 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 784.1 PICEA GLAUCA - 10-12' HT EA

Quantity 2 EA

Unit Price = \$2,400.00

SUBTOTAL = \$4,800.00

ITEM 784.1 SAY 2 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 786.5

JUNIPERUS VIRGINIANA 24-30" B&B

EA

Quantity 3 EA

Unit Price = \$225.00

SUBTOTAL = \$675.00

ITEM 786.5 SAY 3 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 789.334

MYRICA PENNSYLVANICA - 24-30" B&B

EA

Quantity 3 EA

Unit Price = \$225.00

SUBTOTAL = \$675.00

ITEM 789.334 SAY 3 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 794.332

RHUS AROMATICA 'GROW LOW' -24"- 2 GALLON

EA

Quantity 485 EA

Unit Price = \$125.00

SUBTOTAL = \$60,625.00

ITEM 794.332 SAY 485 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 794.735

ILEX GLABRA -30-36" B&B

EA

Quantity 28 EA

Unit Price = \$275.00 EA

SUBTOTAL = \$7,700.00

ITEM 794.735 SAY 28 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 794.736

ARONIA MELANOCARPA - 30-36" B&B

EA

Quantity 38 EA

Unit Price = \$225.00 EA

SUBTOTAL = \$8,550.00

ITEM 772.2 SAY 38 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 794.738

CLETHRA ALNIFOLIA - 30-36" B&B

EA

Quantity 48 EA

Unit Price = \$200.00

SUBTOTAL = \$9,600.00

ITEM 794.738 SAY 48 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 795.1

VIBURNUM DENTATUM - 3-4' B&B

EA

Quantity 34 EA

Unit Price = \$350.00

SUBTOTAL = \$11,900.00

ITEM 795.1 SAY 34 EA



CALC'D BY: PC
CHK'D BY: BJ

DATE: 4/1/2024
DATE: 4/1/2024

CITY: NEWTON
PROJECT: Washington St. Redesign

ITEM 796.1

SCHIZACHYRIUM SCOPARIUM- 2 GALLON

EA

Quantity 150 EA

Unit Price = \$75.00 EA

SUBTOTAL = \$11,250.00

ITEM 796 SAY 150 EA



CALC'D BY: JM
CHK'D BY: JL

DATE: 3/29/2024
DATE: 4/8/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 816.01*	TRAFFIC CONTROL SIGNAL RECONSTRUCTION			LS
	WASHINGTON STREET AT CHESTNUT STREET			
	<u>UNIT</u>	<u>UNIT PRICE</u>	<u>QUANTITY</u>	<u>COST</u>
PLACEHOLDER ITEM	EA	\$0.00	1	\$0.00
			TOTAL	\$0
	ITEM 816.01* SAY		1	LS



CALC'D BY: TZ DATE: 4/3/2024
CHK'D BY: JL DATE: 4/8/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 832 WARNING-REGULATORY AND ROUTE MARKER - ALUM. PANEL (TYPE A) SF

		QUANTITY	
FOR ALL STREETS	Proposed	399	
		<u>399</u>	
	TOTAL		SF

ITEM 832 SAY 400 SF



CALC'D BY:

SS

DATE: 3/29/2024

CITY:

NEWTON

CHK'D BY:

VC

DATE: 4/1/2024

PROJECT: WASHINGTON STREET PILOT

ITEM 834.183

REFLECTORIZED FLEXIBLE DELINEATOR POST 36"
WHITE OR YELLOW - ADHESIVE MOUNT

EA

	QUANTITY	
WASHINGTON STREET		
Street Buffer	132	
Pedestrian Refuge Islands	16	Assume 4 at each island
TOTAL	148	EA

ITEM 834.183 SAY 148 EA



CALC'D BY:

SS

DATE: 3/29/2024

CITY: NEWTON

CHK'D BY:

VC

DATE: 4/1/2024

PROJECT: WASHINGTON STREET PILOT

ITEM 834.287

**12" PRECAST CONCRETE CURBING FOR
BICYCLE LANES (10' SECTION)**

EA

	QUANTITY	
WASHINGTON STREET		
Street Buffer	132	
TOTAL	<u>132</u>	EA

ITEM 834.287 SAY 132 EA



CALC'D BY: TZ DATE: 4/3/2024
CHK'D BY: JL DATE: 4/8/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 847.1 SIGN SUP (N/GUIDE)+RTE MKR W/1 BRKWAY POST ASSEMBLY-STEEL EA

FOR ALL STREETS

QUANTITY

98

TOTAL 98 EA

ITEM 847.1 SAY 98 EA



CALC'D BY:

TZ

DATE: 4/8/2024

CITY:

NEWTON

CHK'D BY:

JL

DATE: 4/8/2024

PROJECT:

WASHINGTON STREET PILOT

ITEM 854.1

PAVEMENT MARKING REMOVAL

SF

ITEM	SF	TY	A
Thru Arrow	12	2	24
Thru/Turn Arrow	25		0
Turn Arrow	16	2	32
Lane Shift Arrow	12		0
Crosswalks	20	40	800
Yield Markings	3	37	93
Chestnut St Box Marking	390	1	390

Line Lengths Removed 20985

<u>TOTAL</u>	<u>22324</u>	<u>SF</u>
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ITEM 854.1 SAY	22,330	SF
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CALC'D BY: TZ
CHK'D BY: JL

DATE: 4/3/2024
DATE: 4/8/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 864.04 PAVEMENT ARROWS AND LEGENDS REFL. WHITE (THERMOPLASTIC)

SF

ITEM	SF	QUANTITY	AREA (SF)
Bike Yield Lines	0.8	24	18
Thru Arrow	12	1	12
Thru/Turn Arrow	25	7	175
Turn Arrow	16	12	192
Lane Shift Arrow	12	0	0
Sharrow	30	1	30
Bike Lane Arrow	20	25	500
ONLY	20	8	160
BUS	20	5	100
BIKE	20	1	20
Bicycle Box Symbol	20	0	0
Person Walking Symbol	4	4	14

SUBTOTAL = 1,221 FT

ITEM 864.04 SAY 1,300 SF



CALC'D BY: TZ
CHK'D BY: JL

DATE: 4/8/2024
DATE: 4/8/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 864.41*

GREEN COLORIZED PAVEMENT MARKINGS

SF

	ITEM	SF
2' Mark, 4' Skip	BIKE CROSSINGS - 5'	1026
2' Mark, 4' Skip	BIKE CROSSINGS - 4.5'	87
2' Mark, 4' Skip	BIKE CROSSINGS - 4'	56
2' Mark, 4' Skip	BIKE CROSSINGS - 3.5'	9
2' Mark, 4' Skip	BIKE CROSSINGS - 10'	86
	SOLID	537

SUBTOTAL = 1,800 FT

ITEM 864.41* SAY 1,900 SF



CALC'D BY: TZ
CHK'D BY: JL

DATE: 4/3/2024
DATE: 4/8/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 866.106 6 INCH DURABLE WET REFLECTIVE RECESSED WHITE LINE (THERMOPLASTIC) FT

<u>Item</u>	<u>Length</u>
SWL	9866 FT
DWLEx	168 FT
BWL	21 FT

TOTAL	10055	FT
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ITEM 866.106 SAY	10,060	FT
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CALC'D BY:

TZ

DATE: 4/3/2024

CITY:

NEWTON

CHK'D BY:

JL

DATE: 4/8/2024

PROJECT:

WASHINGTON STREET PILOT

ITEM 866.112	12 INCH REFLECTORIZED WHITE LINE (THERMOPLASTIC)	FT
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	<u>Item</u>	<u>Length</u>
	12" SWL	437 FT
2' Mark, 4' Skip	WDWL	25 FT
	SWCHL	1734 FT
	SWGL	443 FT
	SL	104 FT
2'x10' Lines	CW	780 FT
	BIKE CW	90 FT
	WDWBL	540 FT

	TOTAL	4152 FT
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ITEM 866.112 SAY	4,160	FT
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CALC'D BY:

TZ

DATE:

4/3/2024

CITY:

NEWTON

CHK'D BY:

JL

DATE:

4/8/2024

PROJECT:

WASHINGTON STREET PILOT

ITEM 867.106 6 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC) FT

	<u>Item</u>	<u>Length</u>
	DBYL	7998 FT
	SYL	918 FT
	3' Mark, 9' Skip DYL	863 FT
	10' Mark, 30' Skip BYL	219 FT
	2' Mark, 4' Skip DYBCL	109 FT

TOTAL 10106 FT

ITEM 867.106 SAY 10,200 FT



CALC'D BY:

TZ

DATE:

4/3/2024

CITY:

NEWTON

CHK'D BY:

JL

DATE:

4/8/2024

PROJECT:

WASHINGTON STREET PILOT

ITEM 867.112 12 INCH REFLECTORIZED YELLOW LINE (THERMOPLASTIC) FT

<u>Item</u>	<u>Quantity</u>
SYCHL	284 FT

TOTAL	284	FT
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ITEM 867.112 SAY 300 FT



CALC'D BY: TZ DATE: 4/2/2024
CHK'D BY: JL DATE: 4/8/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 874.2*

TRAFFIC SIGN REMOVED AND RESET

EA

FOR ALL STREETS

QUANTITY

9

TOTAL 9 EA

ITEM 874.2 SAY 9 EA



CALC'D BY:

TZ

DATE:

4/2/2024

CITY:

NEWTON

CHK'D BY:

JL

DATE:

4/8/2024

PROJECT:

WASHINGTON STREET PILOT

ITEM 874.41*

TRAFFIC SIGN REMOVED AND DISCARDED

EA

Location

QUANTITY

20

TOTAL 20 EA

ITEM 874.41* SAY 20 EA



CALC'D BY:

TZ

DATE:

3/28/2024

CITY:

NEWTON

CHK'D BY:

JL

DATE:

4/8/2024

PROJECT:

WASHINGTON STREET PILOT

ITEM 875.1*

PARKING METER REMOVED AND RESET

EA

QUANTITY

15

TOTAL 15 EA

ITEM 875.1* SAY 15 EA



CALC'D BY:

TZ

DATE:

3/28/2024

CITY:

NEWTON

CHK'D BY:

JL

DATE:

4/8/2024

PROJECT:

WASHINGTON STREET PILOT

ITEM 875.2*

PARKING METER REMOVED AND STACKED

EA

QUANTITY

6

TOTAL 6 EA

ITEM 875.2* SAY 6 EA



CALC'D BY: SS DATE: 3/29/2024
CHK'D BY: VC DATE: 4/1/2024

CITY: NEWTON
PROJECT: WASHINGTON STREET PILOT

ITEM 998.2		MODULAR MEDIAN				LS
<u>LOCATION</u>	<u>AREA</u>	<u>QUANTITY</u>	<u>TOTAL AREA</u>	<u>UNIT PRICE</u>	<u>COST</u>	
PED REFUGE AT BUS STOP	119.72	2	239.44	\$ 50.00	\$ 11,972.00	
PED REFUGE AT MID BLOCK	108.24	3	324.72	\$ 50.00	\$ 16,236.00	
					\$ 28,208.00	
TOTAL					\$28,300	
ITEM 998.2 SAY		1	LS			