

BIDS ESTIMATING

Client: (Hidden for Privacy)
 Project Name: (Hidden for Privacy)
 Project ID: (Hidden for Privacy)
 Last Updated: 19/02/2021



Website: bidsestimating.com
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 Contact: +1 (832) 346 0507

Quantity Takeoff Sheet

Siteworks

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WAST AGE	QTY WITH WASTAG E	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
\$ 242,887																	
General																	
Plan Design and Permitting																	
1			DIV-01	General Requirements	Architecture (Assumed By Owner)	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
2			DIV-01	General Requirements	Engineering (Assumed By Owner)	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
3			DIV-01	General Requirements	Surveying	324,538	5%	340,765	SF			\$ 100.0	\$ -			\$ -	
4			DIV-01	General Requirements	Soils Report (Assumed By Owner)	-	0%	-	LS			\$ 100.0	\$ -			\$ -	
5			DIV-01	General Requirements	Geological Report (Assumed By Owner)	-	0%	-	LS			\$ 100.0	\$ -			\$ -	
6			DIV-01	General Requirements	Concrete Testing	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
7			DIV-01	General Requirements	Permit Running (Assumed By Owner)	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
8			DIV-01	General Requirements	Permits (Based on interior finish area)	-	5%	-	SF			\$ 100.0	\$ -			\$ -	
9			DIV-01	General Requirements	Plan Coordination	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
10			DIV-01	General Requirements	Roof Inspection	-	5%	-	SF			\$ 100.0	\$ -			\$ -	
11			DIV-01	General Requirements	Blueprints	324,538	5%	340,765	SF	0.00125	425.96	\$ 100.0	\$ 42,595.6			\$ 42,596	
Utilities																	
12			DIV-01	General Requirements	Utilities during construction	324,538	5%	340,765	SF	0.001	425.96	\$ 100.0	\$ 42,595.6			\$ 42,596	
13			DIV-01	General Requirements	Port-o-Potty	324,538	5%	340,765	SF	0.000	136.31	\$ 100.0	\$ 13,630.6			\$ 13,631	
14			DIV-01	General Requirements	Temporary Power	324,538	5%	340,765	SF	0.001	212.98	\$ 100.0	\$ 21,297.8			\$ 21,298	
Equipment and Tools																	
15			DIV-01	General Requirements	Tool Rentals	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
16			DIV-01	General Requirements	Tool Shed	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
17			DIV-01	General Requirements	Dust Control	324,538	5%	340,765	SF			\$ 100.0	\$ -			\$ -	
18			DIV-01	General Requirements	Ice, Water, Beverages	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
19			DIV-01	General Requirements	Garbage Dumpster / Trash Containers	324,538	0%	324,538	LS	0.001	324.54	\$ 100.0	\$ 32,453.8			\$ 32,454	
20			DIV-01	General Requirements	Mobilization	324,538	5%	340,765	SF	0.0013	425.96	\$ 100.0	\$ 42,595.6			\$ 42,596	
Signage and Promotion																	
21			DIV-01	General Requirements	Job Signs	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
22			DIV-01	General Requirements	Job Photos	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
23			DIV-01	General Requirements	Signage	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
24			DIV-01	General Requirements	Promotion/entertainment	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
25			DIV-01	General Requirements	Misc.	1	0%	1	LS	250	250.00	\$ 100.0	\$ 25,000.0			\$ 25,000	
Cleaning and Final																	
26			DIV-01	General Requirements	Trash	-	5%	-	SF			\$ 100.0	\$ -			\$ -	
27			DIV-01	General Requirements	Final Cleaning	324,538	5%	340,765	SF	0.0007	227.18	\$ 100.0	\$ 22,717.7			\$ 22,718	
28			DIV-01	General Requirements	Window washing (rough # of windows)	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
29			DIV-01	General Requirements	Punch List Items	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
Bonds, Insurance, Legal																	
30			DIV-01	General Requirements	Casualty Insurance	1	0%	1	LS			\$ 100.0	\$ -			\$ -	
31			DIV-01	General Requirements	Medical Insurance	1	0%	1	LS			\$ 100.0	\$ -			\$ -	

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32			DIV-01	General Requirements	General Liability Insurance	1	0%	1	LS		-	\$ 100.0	\$ -			\$ -	
					Supervision, Temporary Control & Facilities												
33			DIV-01	General Requirements	Project Management	324,538	5%	340,765	SF	0.001	425.96	\$ 100.0	\$ 42,595.6			\$ 42,596	
34			DIV-01	General Requirements	Supervision	324,538	5%	340,765	SF	0.004	1,490.85	\$ 100.0	\$ 149,084.6			\$ 149,085	
35			DIV-01	General Requirements	Temporary Control & Facilities	324,538	5%	340,765	SF	0.001	170.38	\$ 100.0	\$ 17,038.2			\$ 17,038	
			DIV-02		Selective Removals And Demolition												\$ 258,304
					Demolition												
36	25	25	DIV-02	Demo - Site	Demolition Building (8920 SF)	1	0%	1	LS	981.200	981.20	\$ 120.4	\$ 118,164.0			\$ -	\$ 118,164
37	23, 105	23, 105	DIV-02	Demo - Site	Remove Sign	5	0%	5	EA	2.000	10.00	\$ 120.4	\$ 1,204.3			\$ -	\$ 1,204
38	62	62	DIV-02	Demo - Site	Remove Utilities Line	148	5%	156	LF	0.150	23.34	\$ 120.4	\$ 2,810.6			\$ -	\$ 2,811
39	62	62	DIV-02	Demo - Site	Remove Water Line	182	5%	191	LF	0.120	22.96	\$ 120.4	\$ 2,765.4			\$ -	\$ 2,765
40	23-30	23-30	DIV-02	Demo - Site	Remove & Dispose Curb	454	5%	477	LF	0.070	33.36	\$ 120.4	\$ 4,017.1			\$ -	\$ 4,017
41	81	81	DIV-02	Demo - Site	Remove & Stack Controller Cabinets complete	2	0%	2	EA	0.564	1.13	\$ 120.4	\$ 135.8			\$ -	\$ 136
42	23	23	DIV-02	Demo - Site	Remove & Stack Guardrail	107	5%	112	LF	0.100	11.24	\$ 120.4	\$ 1,353.0			\$ -	\$ 1,353
43	23	23	DIV-02	Demo - Site	Remove & Stack Landscape Block Wall	553	5%	581	SF	0.055	31.96	\$ 120.4	\$ 3,848.5			\$ -	\$ 3,848
44	30	30	DIV-02	Demo - Site	Remove & Stack Stone Wall	86	5%	91	SF	0.055	4.98	\$ 120.4	\$ 600.3			\$ -	\$ 600
45	24, 25, 107	24, 25, 107	DIV-02	Demo - Site	Remove Bushes	15	0%	15	EA	0.010	0.15	\$ 120.4	\$ 18.1			\$ -	\$ 18
46	59	59	DIV-02	Demo - Site	Remove Concrete Headwall	1	0%	1	EA	1.603	1.60	\$ 120.4	\$ 193.0			\$ -	\$ 193
47	59	59	DIV-02	Demo - Site	Remove DMH-100	1	0%	1	EA	4.000	4.00	\$ 120.4	\$ 481.7			\$ -	\$ 482
48	59	59	DIV-02	Demo - Site	Remove EX-CBCI-205	1	0%	1	EA	6.000	6.00	\$ 120.4	\$ 722.6			\$ -	\$ 723
49	63	63	DIV-02	Demo - Site	Remove EX-DMH-200	1	0%	1	EA	4.526	4.53	\$ 120.4	\$ 545.1			\$ -	\$ 545
50	30	30	DIV-02	Demo - Site	Remove HMA Sidewalk	741	5%	778	SF	0.006	4.67	\$ 120.4	\$ 562.1			\$ -	\$ 562
51	107, 108	107, 108	DIV-02	Demo - Site	Remove Invasive Plants	19	0%	19	EA	0.185	3.52	\$ 120.4	\$ 423.3			\$ -	\$ 423
52	25, 106	25, 106	DIV-02	Demo - Site	Remove Pavement	4,336	5%	4,552	SF	0.012	54.63	\$ 120.4	\$ 6,579.0			\$ -	\$ 6,579
53	59, 61, 62	59, 61, 62	DIV-02	Demo - Site	Remove Pipe	37	5%	39	LF	0.100	3.88	\$ 120.4	\$ 467.1			\$ -	\$ 467
54	28	28	DIV-02	Demo - Site	Remove Plantings (707 SF)	1	0%	1	LS	35.350	35.35	\$ 120.4	\$ 4,257.1			\$ -	\$ 4,257
55	26	26	DIV-02	Demo - Site	Remove Retaining Wall	2,174	5%	2,283	SF	0.055	125.54	\$ 120.4	\$ 15,118.4			\$ -	\$ 15,118
56	26	26	DIV-02	Demo - Site	Remove Wall Fence	93	5%	98	LF	0.100	9.77	\$ 120.4	\$ 1,176.0			\$ -	\$ 1,176
57	23	23	DIV-02	Demo - Site	Remove Shrubs	8	0%	8	EA	0.282	2.26	\$ 120.4	\$ 271.8			\$ -	\$ 272
58	25, 30, 107	25, 30, 107	DIV-02	Demo - Site	Remove Tree	53	0%	53	EA	4.000	212.00	\$ 120.4	\$ 25,530.7			\$ -	\$ 25,531
59	25	25	DIV-02	Demo - Site	Remove Trench Drain	47	5%	49	LF	0.250	12.21	\$ 120.4	\$ 1,470.0			\$ -	\$ 1,470
60	24	24	DIV-02	Demo - Site	Remove Flagstone Walk	31	5%	33	SF	0.055	1.82	\$ 120.4	\$ 218.7			\$ -	\$ 219
61	59, 60	59, 60	DIV-02	Demo - Site	Remove Hydrant	2	0%	2	EA	1.000	2.00	\$ 120.4	\$ 240.9			\$ -	\$ 241
62	83, 84	83, 84	DIV-02	Demo - Site	Remove Meter	2	0%	2	EA	1.020	2.04	\$ 120.4	\$ 245.7			\$ -	\$ 246
63	26	26	DIV-02	Demo - Site	Remove Granite Curb	187	5%	196	LF	0.070	13.71	\$ 120.4	\$ 1,650.9			\$ -	\$ 1,651
64	26	26	DIV-02	Demo - Site	Remove & Stack MHB Bound	9	0%	9	EA	3.000	27.00	\$ 120.4	\$ 3,251.6			\$ -	\$ 3,252
65	26	26	DIV-02	Demo - Site	Remove MHB Bound	2	0%	2	EA	2.500	5.00	\$ 120.4	\$ 602.1			\$ -	\$ 602
66	Specs	Specs	DIV-02	Demo - Site	Remove Sign	1	0%	1	EA	2.000	2.00	\$ 120.4	\$ 240.9			\$ -	\$ 241
67	Specs	Specs	DIV-02	Demo - Site	Remove & Discarded Sign	61	0%	61	EA	2.000	122.00	\$ 120.4	\$ 14,692.2			\$ -	\$ 14,692
68	Specs	Specs	DIV-02	Asbestos Worker	Asbestos removal	4,336	5%	4,553	SF	0.045	204.88	\$ 77.2	\$ 15,807.0			\$ -	\$ 15,807
69	Specs	Specs	DIV-02	Asbestos Worker	Removed & Stacked Sprinkler System	1	0%	1	LS	200.000	200.00	\$ 77.2	\$ 15,430.8			\$ -	\$ 15,431
70	Specs	Specs	DIV-02	Asbestos Worker	Black Built up Roofing	100	0%	100	SF	0.050	5.00	\$ 77.2	\$ 385.8			\$ -	\$ 386

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71	Specs	Specs	DIV-02	Asbestos Worker	Residual Black Mastic Under yellow carpet mastic	2,500	0%	2,500	SF	0.055	137.50	\$ 77.2	\$ 10,608.7		\$ -	\$ 10,609	
72	Specs	Specs	DIV-02	Asbestos Worker	Gray Vestibule Caulk	80	0%	80	LF	0.010	0.80	\$ 77.2	\$ 61.7		\$ -	\$ 62	
73	Specs	Specs	DIV-02	Asbestos Worker	Gray Metal Frame Caulk	150	0%	150	LF	0.010	1.50	\$ 77.2	\$ 115.7		\$ -	\$ 116	
74	Specs	Specs	DIV-02	Asbestos Worker	Gray Large Window Glazing	12	0%	12	EA	2.200	26.40	\$ 77.2	\$ 2,036.9		\$ -	\$ 2,037	
			DIV-31	Earthwork													\$ 415,532
					Curbs & Ties												
75	49	49	DIV-31	Earth worker	Excavation for conduit	450	5%	473	CY	0.050	23.65	\$ 248.1	\$ 5,867.5		\$ -	\$ 5,867	
76	Profiles	Profiles	DIV-31	Earth worker	Cut	9,511	5%	9,987	CY	0.065	649.13	\$ 248.1	\$ 161,056.9		\$ -	\$ 161,057	
77	Profiles	Profiles	DIV-31	Earth worker	Fill	839	5%	881	CY	0.065	57.26	\$ 248.1	\$ 14,207.4		\$ -	\$ 14,207	
78	Profiles	Profiles	DIV-31	Earth worker	Soil to be dispose	8,672	5%	9,106	CY	0.077	701.13	\$ 248.1	\$ 173,960.2		\$ -	\$ 173,960	
79	Specs	Specs	DIV-31	Earth worker	Class A Trench Excavation	600	5%	630	CY	0.050	31.50	\$ 248.1	\$ 7,815.6		\$ -	\$ 7,816	
80	Specs	Specs	DIV-31	Earth worker	Class B Trench Excavation	3,950	5%	4,148	CY	0.050	207.38	\$ 248.1	\$ 51,452.5		\$ -	\$ 51,453	
81	Specs	Specs	DIV-31	Earth worker	Class B Rock Excavation	40	5%	42	CY	0.050	2.10	\$ 248.1	\$ 521.0		\$ -	\$ 521	
82	Specs	Specs	DIV-31	Earth worker	Test Pit for Exploration	50	5%	53	CY	0.050	2.63	\$ 248.1	\$ 651.3		\$ -	\$ 651	
					Note: As per specs												
			DIV-32	Exterior Improvements													\$ 3,216,121
					Curbs & Ties												
83	49	49	DIV-32	Site Concrete	Sloped Granite Curb Type SB	2,810	5%	2,951	LF	0.120	354.06	\$ 108.3	\$ 38,361.2	\$ 5.8	\$ 17,112.9	\$ 55,474	
84	49	49	DIV-32	Site Concrete	Granite Curb Type VB	4,906	5%	5,151	LF	0.200	1,030.18	\$ 108.3	\$ 111,615.9	\$ 5.8	\$ 29,875.1	\$ 141,491	
85	24	24	DIV-32	Site Concrete	Cement Concrete Curb	258	5%	271	LF	0.120	32.57	\$ 108.3	\$ 3,528.8	\$ 5.5	\$ 1,492.8	\$ 5,022	
					Cont. Footing												
86	105	115	DIV-32	Site Concrete	6"x2'-6"x8' Concrete Footing	0.7	5%	1	CY	2.500	1.94	\$ 108.3	\$ 210.7	\$ 140.0	\$ 108.9	\$ 320	
87	105	115	DIV-32	Site Concrete	6"x5'x10' Concrete Footing	1	5%	1	CY	2.500	3.12	\$ 108.3	\$ 337.9	\$ 140.0	\$ 174.6	\$ 512	
88	107	111	DIV-32	Site Concrete	1'-8"x3'-0" Footing	18	5%	19	CY	2.500	46.27	\$ 108.3	\$ 5,013.5	\$ 140.0	\$ 2,591.3	\$ 7,605	
89	107, 108	114	DIV-32	Site Concrete	Granite Marker Steel Reinforced Concrete	2	5%	2	CY	2.500	4.85	\$ 108.3	\$ 525.0	\$ 140.0	\$ 271.4	\$ 796	
90	107	115	DIV-32	Site Concrete	6"x24"x24" Concrete Footing	0.1	5%	0	CY	2.500	0.19	\$ 108.3	\$ 21.1	\$ 140.0	\$ 10.9	\$ 32	
91	115	115	DIV-32	Site Concrete	3'D Bicycle Rack Footing	2	5%	3	CY	2.500	6.28	\$ 108.3	\$ 680.1	\$ 140.0	\$ 351.5	\$ 1,032	
92	67	68	DIV-32	Site Concrete	1'-8"x1'-8"x4' Pole Foundation	1	5%	1	CY	2.500	2.17	\$ 108.3	\$ 235.0	\$ 140.0	\$ 121.5	\$ 356	
93	77, 79, 81	77, 79, 81	DIV-32	Site Concrete	1'-8"x1'-8"x4'-0" Signal Post Foundation	6	5%	6	CY	2.500	15.18	\$ 108.3	\$ 1,645.1	\$ 140.0	\$ 850.3	\$ 2,495	
					Note size is assumed												
94	77, 79, 81	77, 79, 81	DIV-32	Site Concrete	3'x3'x1' Traffic Controller foundation	2	5%	2	CY	2.500	4.38	\$ 108.3	\$ 474.0	\$ 140.0	\$ 245.0	\$ 719	
					Note Size is assumed												
95	24	116	DIV-32	Site Concrete	5' W Bluestone Steps Concrete	1	5%	1	CY	2.500	3.09	\$ 108.3	\$ 335.0	\$ 140.0	\$ 173.1	\$ 508	
96	24	116	DIV-32	Site Concrete	#4 Rebar 12" O.C. Both ways	33	5%	35	LBS	0.034	1.19	\$ 108.3	\$ 129.2	\$ 0.7	\$ 24.5	\$ 154	
97	24	116	DIV-32	Site Concrete	12" Dia x 4' D Concrete Footing	0.3	5%	0	CY	2.500	0.92	\$ 108.3	\$ 99.2	\$ 140.0	\$ 51.3	\$ 151	
98	24	119	DIV-32	Site Concrete	8"x2'x295 Stone Wall footing	15	5%	15	CY	2.500	38.43	\$ 108.3	\$ 4,164.0	\$ 140.0	\$ 2,152.2	\$ 6,316	
					30' Mast Arm												

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99	77, 81	77	DIV-32	Site Concrete	3'-6" Dia x 7'-6" Foundation	5	5%	6	CY	2.500	14.02	\$ 108.3	\$ 1,519.4	\$ 140.0	\$ 785.3	\$ 2,305	
100	77, 81	77	DIV-32	Site Concrete	18-#8 Vertical Bars	721	5%	757	LBS	0.037	28.01	\$ 108.3	\$ 3,034.5	\$ 0.5	\$ 355.8	\$ 3,390	
101	77, 81	77	DIV-32	Site Concrete	#5 @ 12" O.C. Tie Bars	172	5%	181	LBS	0.035	6.32	\$ 108.3	\$ 684.6	\$ 0.6	\$ 113.7	\$ 798	
					35' Mast Arm												
102	77, 81	77	DIV-32	Site Concrete	3'-6" Dia x 8'-6" Foundation	9	5%	10	CY	2.500	23.84	\$ 108.3	\$ 2,583.0	\$ 140.0	\$ 1,335.1	\$ 3,918	
103	77, 81	77	DIV-32	Site Concrete	18-#8 Vertical Bars	1,226	5%	1,287	LBS	0.037	47.61	\$ 108.3	\$ 5,158.6	\$ 0.5	\$ 604.8	\$ 5,763	
104	77, 81	77	DIV-32	Site Concrete	#5 @ 9" O.C. Tie Bars	390	5%	409	LBS	0.035	14.32	\$ 108.3	\$ 1,551.8	\$ 0.6	\$ 257.8	\$ 1,810	
					40' Mast Arm												
105	77, 81	79	DIV-32	Site Concrete	3'-6" Dia x 11'-6" Foundation	8	5%	9	CY	2.500	21.50	\$ 108.3	\$ 2,329.8	\$ 140.0	\$ 1,204.2	\$ 3,534	
106	77, 81	79	DIV-32	Site Concrete	18-#8 Vertical Bars	1,105	5%	1,161	LBS	0.037	42.94	\$ 108.3	\$ 4,652.8	\$ 0.5	\$ 545.5	\$ 5,198	
107	77, 81	79	DIV-32	Site Concrete	#5 @ 9" O.C. Tie Bars	336	5%	353	LBS	0.035	12.36	\$ 108.3	\$ 1,338.8	\$ 0.6	\$ 222.4	\$ 1,561	
					45' Mast Arm												
108	77, 81	79	DIV-32	Site Concrete	4' Dia x 12' Foundation	17	5%	18	CY	2.500	43.96	\$ 108.3	\$ 4,762.9	\$ 140.0	\$ 2,461.8	\$ 7,225	
109	77, 81	79	DIV-32	Site Concrete	18-#9 Vertical Bars	1,469	5%	1,542	LBS	0.038	58.61	\$ 108.3	\$ 6,349.7	\$ 0.5	\$ 694.0	\$ 7,044	
110	77, 81	79	DIV-32	Site Concrete	#5 @ 9" O.C. Tie Bars	367	5%	385	LBS	0.035	13.48	\$ 108.3	\$ 1,460.5	\$ 0.6	\$ 242.6	\$ 1,703	
					50' Mast Arm												
111	77, 81	79	DIV-32	Site Concrete	4' Dia x 9' Foundation	4	5%	4	CY	2.500	10.99	\$ 108.3	\$ 1,190.7	\$ 140.0	\$ 615.4	\$ 1,806	
112	77, 81	79	DIV-32	Site Concrete	18-#9 Vertical Bars	551	5%	578	LBS	0.038	21.98	\$ 108.3	\$ 2,381.1	\$ 0.5	\$ 260.3	\$ 2,641	
113	77, 81	79	DIV-32	Site Concrete	#5 @ 9" O.C. Tie Bars	138	5%	144	LBS	0.035	5.05	\$ 108.3	\$ 547.7	\$ 0.6	\$ 91.0	\$ 639	
					50' Mast Arm												
114	77, 81	79	DIV-32	Site Concrete	4' Dia x 12' Foundation	6	5%	6	CY	2.500	14.65	\$ 108.3	\$ 1,587.6	\$ 140.0	\$ 820.6	\$ 2,408	
115	77, 81	79	DIV-32	Site Concrete	18-#9 Vertical Bars	734	5%	771	LBS	0.038	29.30	\$ 108.3	\$ 3,174.8	\$ 0.5	\$ 347.0	\$ 3,522	
116	77, 81	79	DIV-32	Site Concrete	#5 @ 9" O.C. Tie Bars	183	5%	193	LBS	0.035	6.74	\$ 108.3	\$ 730.3	\$ 0.6	\$ 121.3	\$ 852	
					Sidewalk & Pavements												
117	23	23	DIV-32	Site Concrete	4" Cement Concrete Bike Ramp	2	5%	2	CY	2.500	4.35	\$ 108.3	\$ 471.0	\$ 140.0	\$ 243.4	\$ 714	
					Cement Concrete Sidewalk												
118	51-54	10	DIV-32	Site Concrete	4" Cement Concrete	461	5%	484	CY	1.000	483.79	\$ 108.3	\$ 52,416.8	\$ 140.0	\$ 67,730.4	\$ 120,147	
119	51-54	10	DIV-32	Site Concrete	8" Gravel Borrow Type B	935	5%	982	CY	0.500	491.12	\$ 108.3	\$ 53,211.0	\$ 32.5	\$ 31,922.7	\$ 85,134	
					Cement Concrete Sidewalk at Driveways												
120	51-54	10	DIV-32	Site Concrete	6" Cement Concrete	4	5%	5	CY	2.000	9.07	\$ 108.3	\$ 982.5	\$ 140.0	\$ 634.8	\$ 1,617	
121	51-54	10	DIV-32	Site Concrete	8" Gravel Borrow Type B	6	5%	6	CY	1.500	9.11	\$ 108.3	\$ 987.4	\$ 32.5	\$ 197.5	\$ 1,185	
					Cement Concrete Sidewalk												
122	25	120	DIV-32	Site Concrete	4" Cement Concrete Sidewalk	2	5%	2	CY	2.000	3.26	\$ 108.3	\$ 353.0	\$ 140.0	\$ 228.1	\$ 581	
123	25	120	DIV-32	Site Concrete	8" Compacted Gravel Borrow	3	5%	3	CY	1.500	4.98	\$ 108.3	\$ 539.9	\$ 32.5	\$ 108.0	\$ 648	
					HMA Sidewalk												
124	53	10	DIV-32	Paving	1-1/4" Hot Mix Asphalt Surface Course Over	8	5%	8	CY	0.500	4.11	\$ 97.5	\$ 400.3	\$ 73.0	\$ 599.3	\$ 1,000	

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Quantity Takeoff Sheet

Siteworks

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125	53	10	DIV-32	Paving	1-3/4" Hot Mix Asphalt Bottom Course Over	11	5%	11	CY	0.500	5.72	\$ 97.5	\$ 558.1	\$ 160.0	\$ 1,831.5	\$ 2,390	
126	53	10	DIV-32	Paving	8" Gravel Borrow Type B	50	5%	53	CY	1.500	79.34	\$ 97.5	\$ 7,736.5	\$ 32.5	\$ 1,719.0	\$ 9,456	
Bicycle Rack																	
127	115	115	DIV-32	Site Concrete	4" Cement Concrete Pavement	4	5%	5	CY	2.500	11.65	\$ 108.3	\$ 1,261.8	\$ 140.0	\$ 652.2	\$ 1,914	
128	115	115	DIV-32	Site Concrete	8" Gravel Borrow Type B	9	5%	9	CY	1.500	14.19	\$ 108.3	\$ 1,537.1	\$ 32.5	\$ 307.4	\$ 1,844	
129	115	115	DIV-32	Site Concrete	Score Joint Pattern	121	5%	127	LF	0.200	25.41	\$ 108.3	\$ 2,753.1		\$ -	\$ 2,753	
130	115	115	DIV-32	Site Concrete	Dummy Joint	45	5%	47	LF	0.220	10.33	\$ 108.3	\$ 1,118.8		\$ -	\$ 1,119	
Fine Milling & HMA Overlay																	
131	23-30	10	DIV-32	Paving	2" Superpave Surface Course-12.5 Polymer	865	5%	909	CY	0.500	454.32	\$ 97.5	\$ 44,301.4	\$ 73.0	\$ 66,330.5	\$ 110,632	
132	23-30	10	DIV-32	Paving	1-3/4" Superpave Intermediate Course-12.5 (SIC-12.5)	738	5%	775	CY	0.500	387.51	\$ 97.5	\$ 37,786.5	\$ 138.0	\$ 106,952.0	\$ 144,738	
133	23-30	10	DIV-32	Paving	3-1/2" Maximum Pavement Fine Milling	137,441	5%	144,313	SF	0.012	1,731.76	\$ 97.5	\$ 168,866.7		\$ -	\$ 168,867	
HMA Construction																	
134	23-30	10	DIV-32	Paving	2" Superpave Surface Course-12.5 Polymer	472	5%	496	CY	0.500	247.82	\$ 97.5	\$ 24,165.8	\$ 73.0	\$ 36,182.4	\$ 60,348	
135	23-30	10	DIV-32	Paving	1-3/4" Superpave Intermediate Course-12.5(SIC-12.5)	403	5%	423	CY	0.500	211.38	\$ 97.5	\$ 20,612.0	\$ 138.0	\$ 58,340.8	\$ 78,953	
136	23-30	10	DIV-32	Paving	4-1/2" Superpave Base Course-37.5 (SBC-37.5)	1,041	5%	1,093	CY	0.500	546.67	\$ 97.5	\$ 53,307.2	\$ 160.0	\$ 174,935.7	\$ 228,243	
137	23-30	10	DIV-32	Paving	4" Dens Graded Crushed Stone	916	5%	962	CY	0.500	481.07	\$ 97.5	\$ 46,910.3	\$ 32.5	\$ 31,269.8	\$ 78,180	
138	23-30	10	DIV-32	Paving	8" Gravel Borrow Type B	1,860	5%	1,953	CY	0.500	976.72	\$ 97.5	\$ 95,241.7	\$ 32.5	\$ 63,486.8	\$ 158,729	
HMA Trail																	
139	106-108	10	DIV-32	Paving	1-1/2" Hot Mix Asphalt Surface Course	84	5%	88	CY	0.500	43.91	\$ 97.5	\$ 4,281.4	\$ 73.0	\$ 6,410.3	\$ 10,692	
140	106-108	10	DIV-32	Paving	2-1/2" Hot Mix Asphalt Bottom Course	139	5%	146	CY	0.500	73.06	\$ 97.5	\$ 7,124.2	\$ 160.0	\$ 23,379.2	\$ 30,503	
141	106-108	10	DIV-32	Paving	8" Gravel Borrow Type B	448	5%	471	CY	1.500	706.01	\$ 97.5	\$ 68,844.5	\$ 32.5	\$ 15,296.9	\$ 84,141	
142	23-30	23-30	DIV-32	Site Concrete	Sawcut	3,853	5%	4,046	LF	0.220	890.11	\$ 108.3	\$ 96,440.5		\$ -	\$ 96,441	
143	107, 108	114	DIV-32	Site Concrete	Compacted Gravel Borrow Type B	2	5%	2	CY	1.500	2.48	\$ 108.3	\$ 268.5	\$ 32.5	\$ 53.7	\$ 322	
144	119	119	DIV-32	Mason - CMU	2'x2' Crushed Stone T	36	5%	37	CY	1.500	55.98	\$ 123.9	\$ 6,935.1	\$ 32.5	\$ 1,212.9	\$ 8,148	
Stone Masonry Wall																	
145	24	117	DIV-32	Mason - CMU	Stone Cap	251	5%	264	LF	0.200	52.71	\$ 123.9	\$ 6,529.8	\$ 12.5	\$ 3,294.4	\$ 9,824	
146	24	117	DIV-32	Mason - CMU	Mortared Field Stone, 1"/1" on Both Side	3,514	5%	3,690	SF	0.200	737.94	\$ 123.9	\$ 91,417.4	\$ 12.5	\$ 46,121.3	\$ 137,539	
147	Specs	Specs	DIV-32	Paving	Sand Borrow As per Specs	30	5%	32	CY	0.580	18.27	\$ 97.5	\$ 1,781.5	\$ 20.5	\$ 645.8	\$ 2,427	
Retaining Wall																	
					1'-8"W Retaining Wall 7'-4"H												

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148	24, 25	124, 125	DIV-32	Site Concrete	Concrete of wall	155	5%	163	CY	2.500	407.24	\$ 108.3	\$ 44,123.3	\$ 140.0	\$ 22,805.6	\$ 66,929	
149	24, 25	124, 125	DIV-32	Site Concrete	2'x5' Concrete of Footing	127	5%	133	CY	2.500	332.68	\$ 108.3	\$ 36,045.2	\$ 140.0	\$ 18,630.3	\$ 54,676	
150	24, 25	124, 125	DIV-32	Site Concrete	#5 @ 18" O.C.	641	5%	673	LBS	0.035	23.56	\$ 108.3	\$ 2,552.9	\$ 0.6	\$ 424.1	\$ 2,977	
151	24, 25	124, 125	DIV-32	Site Concrete	#6 @ 12" O.C.	5,592	5%	5,872	LBS	0.036	211.38	\$ 108.3	\$ 22,902.0	\$ 0.6	\$ 3,288.1	\$ 26,190	
152	24, 25	124, 125	DIV-32	Site Concrete	#5 @ 12" O.C.	2,520	5%	2,646	LBS	0.035	92.60	\$ 108.3	\$ 10,032.9	\$ 0.6	\$ 1,666.8	\$ 11,700	
153	24, 25	124, 125	DIV-32	Site Concrete	5-#5 Rebars at Coping	1,785	5%	1,874	LBS	0.035	65.58	\$ 108.3	\$ 7,105.5	\$ 0.6	\$ 1,180.5	\$ 8,286	
154	24, 25	124, 125	DIV-32	Site Concrete	Construction Joint	413	5%	434	LF	0.320	138.86	\$ 108.3	\$ 15,044.5		\$ -	\$ 15,044	
155	24, 25	124, 125	DIV-32	Site Concrete	Expansion Joint	72	5%	75	LF	0.210	15.82	\$ 108.3	\$ 1,713.6	\$ 0.5	\$ 34.6	\$ 1,748	
156	24, 25	124, 125	DIV-32	Water Proofing	5"W Plastic Water Stopper	13	0%	13	EA	0.445	5.79	\$ 248.1	\$ 1,435.3	\$ 3.7	\$ 48.6	\$ 1,484	
157	24, 25	124, 125	DIV-32	Water Proofing	9"W Plastic Water Stopper	13	0%	13	EA	0.452	5.88	\$ 248.1	\$ 1,457.9	\$ 3.7	\$ 48.6	\$ 1,507	
158	24, 25	124, 125	DIV-32	Water Proofing	Waterproofing Membrane	571	5%	600	SF	0.005	3.00	\$ 248.1	\$ 744.4	\$ 0.7	\$ 390.0	\$ 1,134	
	24, 25				Thrie Beam Hwy. Guard With Metal Handrail												
159	24, 25	124, 125	DIV-32	aircasc and Railings - Metal	10 Gauge Thrie Beam	342	5%	359	LF	0.250	89.82	\$ 105.8	\$ 9,503.8	\$ 34.0	\$ 12,216.2	\$ 21,720	
160	24, 25	124, 125	DIV-32	aircasc and Railings - Metal	W6x15	5,482	5%	5,756	LBS	0.010	57.56	\$ 105.8	\$ 6,090.1	\$ 2.5	\$ 14,389.9	\$ 20,480	
161	24, 25	124, 125	DIV-32	aircasc and Railings - Metal	5/8"x13-3/4"x10" Base Plate	3,708	5%	3,893	LBS	0.010	38.93	\$ 105.8	\$ 4,119.5	\$ 2.5	\$ 9,733.7	\$ 13,853	
162	24, 25	124, 125	DIV-32	aircasc and Railings - Metal	Hand rail	146	5%	153	LF	0.125	19.16	\$ 105.8	\$ 2,027.5	\$ 28.4	\$ 4,347.6	\$ 6,375	
					Signal Plan												
163	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	3" Conduit for Electric Service	119	5%	125	LF	0.045	5.64	\$ 111.5	\$ 628.3	\$ 5.4	\$ 679.8	\$ 1,308	
164	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	3" Conduit for Cable Service	119	5%	125	LF	0.045	5.64	\$ 111.5	\$ 628.3	\$ 5.4	\$ 679.8	\$ 1,308	
165	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	3" Conduit	1,408	5%	1,478	LF	0.045	66.53	\$ 111.5	\$ 7,417.0	\$ 5.4	\$ 8,025.3	\$ 15,442	
166	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	3" Interconnection Conduit	305	5%	320	LF	0.045	14.39	\$ 111.5	\$ 1,604.4	\$ 5.4	\$ 1,736.0	\$ 3,340	
167	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	Fiber Optic Cable	1,944	5%	2,041	LF	0.025	51.03	\$ 111.5	\$ 5,688.8	\$ 1.5	\$ 3,061.8	\$ 8,751	
168	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	3" Conduit for Interconnect	639	5%	671	LF	0.045	30.19	\$ 111.5	\$ 3,365.1	\$ 5.4	\$ 3,641.1	\$ 7,006	
169	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	3" Conduit for Traffic Signal	199	5%	209	LF	0.045	9.41	\$ 111.5	\$ 1,049.5	\$ 5.4	\$ 1,135.5	\$ 2,185	
170	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	3" Conduit for Service Connection	199	5%	209	LF	0.045	9.41	\$ 111.5	\$ 1,049.5	\$ 5.4	\$ 1,135.5	\$ 2,185	
171	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	12"x12" Pull box	37	0%	37	EA	1.100	40.70	\$ 111.5	\$ 4,537.2	\$ 49.0	\$ 1,811.2	\$ 6,348	
172	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	Electric Handhole SD2.022	3	0%	3	EA	2.685	8.06	\$ 111.5	\$ 898.0	\$ 100.0	\$ 300.0	\$ 1,198	
173	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	Electric Handhole SD2.023	1	0%	1	EA	2.685	2.69	\$ 111.5	\$ 299.3	\$ 100.0	\$ 100.0	\$ 399	
174	77, 79, 81	77, 79, 81	DIV-32	Site Electrical	Wireless Broadband Antenna w/Ethernet Cable	2	0%	2	EA	1.400	2.80	\$ 111.5	\$ 312.1	\$ 91.0	\$ 182.0	\$ 494	
					Fence												
175	107, 108	118	DIV-32	Fencing and Gates - Wood	42" Timber Rail Fence 2"x6" Rail (306 LF) 6"x6" Pressure Treated Intermediate Post 5'H (33EA)	158	5%	166	LF	0.700	116.03	\$ 105.8	\$ 12,275.7	\$ 24.8	\$ 4,117.3	\$ 16,393	
176	Specs	Specs	DIV-32	Fencing and Gates - Metal	4' Metal Pipe Rail	100	5%	105	LF	0.400	42.00	\$ 105.8	\$ 4,443.6	\$ 11.5	\$ 1,207.5	\$ 5,651	
					Miscellaneous Item												
177	107, 108	114	DIV-32	Site Signage	1'x8' Granite Road Marker/Granite Post	4	0%	4	EA	2.500	10.00	\$ 103.2	\$ 1,032.3	\$ 360.0	\$ 1,440.0	\$ 2,472	
178	107, 108	114	DIV-32	Site Signage	8"x5' Street Sign	4	0%	4	EA	0.875	3.50	\$ 103.2	\$ 361.3	\$ 65.3	\$ 261.0	\$ 622	
179	105, 107	115	DIV-32	Site Furnishing	69"x31-3/8" Steel Park Bench	9	0%	9	EA	1.983	17.85	\$ 100.0	\$ 1,784.7	\$ 477.0	\$ 4,293.0	\$ 6,078	
180	105, 107	115	DIV-32	Site Furnishing	25-7/8"x31-3/8" Chair	9	0%	9	EA	0.850	7.65	\$ 100.0	\$ 765.0	\$ 172.8	\$ 1,555.4	\$ 2,320	

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181	105, 107	115	DIV-32	Site Signage	3/8"x3" Solid Steel Plate	17	5%	18	LBS	0.010	0.18	\$ 103.2	\$ 18.7	\$ 2.5	\$ 45.2	\$ 64	
182	105, 107	115	DIV-32	Site Signage	2-3/8" Tubular Steel Post 17"H	18	0%	18	EA	1.224	22.03	\$ 103.2	\$ 2,274.3	\$ 49.3	\$ 886.8	\$ 3,161	
183	107, 108	110	DIV-32	Site Signage	"Pollinator Friendly" Garden Sign	12	0%	12	EA	0.956	11.47	\$ 103.2	\$ 1,184.2	\$ 24.0	\$ 288.0	\$ 1,472	
184	107, 108	110	DIV-32	Site Signage	9" Dia Sign Panel for Sign	12	0%	12	EA	0.956	11.47	\$ 103.2	\$ 1,184.2	\$ 24.0	\$ 288.0	\$ 1,472	
185	107, 108	110	DIV-32	Site Signage	4x4 Pressure Treated Post 6'H	12	0%	12	EA	0.600	7.20	\$ 103.2	\$ 743.2	\$ 28.8	\$ 345.2	\$ 1,088	
186	107	107	DIV-32	Site Signage	Trailhead Sign	1	0%	1	EA	0.785	0.79	\$ 103.2	\$ 81.0	\$ 22.5	\$ 22.5	\$ 104	
187	105, 106, 108	105, 106, 108	DIV-32	Landscaper	Tree Protection Armoring/Trunk Armoring	81	5%	85	LF	0.045	3.81	\$ 123.7	\$ 471.7	\$ 1.6	\$ 133.8	\$ 606	
188	105, 106, 108	105, 106, 108	DIV-32	Landscaper	Tree Protection Fence	435	5%	457	LF	0.100	45.72	\$ 123.7	\$ 5,654.9	\$ 0.3	\$ 137.2	\$ 5,792	
189	107	115	DIV-32	Site Furnishing	25-5/8"x41-1/2" Steel Trash Receptacle	1	0%	1	EA	0.750	0.75	\$ 100.0	\$ 75.0	\$ 38.4	\$ 38.4	\$ 113	
190	24	120	DIV-32	Site Signage	1-1/4" Min. to 2" Max. O.D. Galv. Steel Post & Rails 34"H with 8 post	53	5%	55	LF	0.425	23.47	\$ 103.2	\$ 2,422.6	\$ 43.3	\$ 2,391.9	\$ 4,815	
191	105	115	DIV-32	Site Signage	Steel Curved Benches 61-5/8"x31-5/8"	2	0%	2	EA	2.952	5.90	\$ 103.2	\$ 609.5	\$ 947.0	\$ 1,894.0	\$ 2,503	
192	105	115	DIV-32	Site Signage	3/8"x3" Solid Steel Plate	4	5%	4	LBS	0.010	0.04	\$ 103.2	\$ 4.1	\$ 2.5	\$ 10.0	\$ 14	
193	105	115	DIV-32	Site Signage	2-3/8" Tubular Steel Post 17"H	4	0%	4	EA	1.224	4.90	\$ 103.2	\$ 505.4	\$ 49.3	\$ 197.1	\$ 702	
194	68	68	DIV-32	Site Signage	4" Tubular steel Post	2	0%	2	EA	0.885	1.77	\$ 103.2	\$ 182.7	\$ 22.9	\$ 45.8	\$ 229	
195	24	116	DIV-32	Ornamental Steel	Ornamental Handrail	15	5%	16	LF	0.250	3.94	\$ 105.8	\$ 416.6	\$ 46.3	\$ 728.4	\$ 1,145	
196	24	116	DIV-32	Ornamental Steel	Handrail with 3 Post	15	5%	16	LF	0.321	5.06	\$ 105.8	\$ 534.9	\$ 29.8	\$ 468.7	\$ 1,004	
197	24	116	DIV-32	Site Signage	MHB Bound -Please see ss at right.	12	0%	12	EA		-	\$ 103.2	\$ -		\$ -	\$ -	
					Traffic Stripping												
198	67-74	2	DIV-32	Site Paint	6" Broken White Line (BWL)	225	5%	236	LF	0.015	3.54	\$ 78.4	\$ 277.9	\$ 1.2	\$ 283.4	\$ 561	
199	67-74	2	DIV-32	Site Paint	6" Broken Yellow Line (BYL)	105	5%	110	LF	0.015	1.66	\$ 78.4	\$ 130.0	\$ 1.2	\$ 132.6	\$ 263	
200	67-74	2	DIV-32	Site Paint	6" Double Yellow Line (DBYL)	4,744	5%	4,981	LF	0.015	74.72	\$ 78.4	\$ 5,861.3	\$ 1.2	\$ 5,977.5	\$ 11,839	
201	67-74	2	DIV-32	Site Paint	6" Dotted Line Extension (DWLE)	308	5%	324	LF	0.015	4.86	\$ 78.4	\$ 381.1	\$ 1.2	\$ 388.7	\$ 770	
202	67-74	2	DIV-32	Site Paint	6" Solid White Line (SwL)	8,660	5%	9,093	LF	0.015	136.40	\$ 78.4	\$ 10,700.0	\$ 1.2	\$ 10,912.1	\$ 21,612	
203	67-74	2	DIV-32	Site Paint	6" Solid Yellow Line (SYL)	1,099	5%	1,154	LF	0.015	17.31	\$ 78.4	\$ 1,358.1	\$ 1.2	\$ 1,385.0	\$ 2,743	
204	67-74	2	DIV-32	Site Paint	12" Stop Line (SL)	586	5%	615	LF	0.018	11.07	\$ 78.4	\$ 868.1	\$ 2.4	\$ 1,475.5	\$ 2,344	
205	67-74	2	DIV-32	Site Paint	12" Solid White Line (SwL)	846	5%	888	LF	0.018	15.99	\$ 78.4	\$ 1,254.1	\$ 2.4	\$ 2,131.7	\$ 3,386	
206	67-74	2	DIV-32	Site Paint	12" Solid Yellow Line (SYL)	2,119	5%	2,225	LF	0.018	40.05	\$ 78.4	\$ 3,141.4	\$ 2.4	\$ 5,339.5	\$ 8,481	
207	67-74	2	DIV-32	Site Paint	12" White Line	170	5%	179	LF	0.018	3.22	\$ 78.4	\$ 252.7	\$ 2.4	\$ 429.5	\$ 682	
208	67-74	2	DIV-32	Site Paint	24" Crosswalk (CW)	2,380	5%	2,499	LF	0.021	52.49	\$ 78.4	\$ 4,117.3	\$ 4.8	\$ 11,997.0	\$ 16,114	
					Mast Arm												
209	77, 81	77, 81	DIV-32	Site Electrical	Traffic signal pole with 30' Mast Arm .	2	0%	2	EA	20.000	40.00	\$ 111.5	\$ 4,459.2	\$11,373.3	\$ 22,746.7	\$ 27,206	
210	77, 81	77, 81	DIV-32	Site Electrical	Traffic signal pole with 35' Mast Arm .	1	0%	1	EA	22.500	22.50	\$ 111.5	\$ 2,508.3	\$12,768.9	\$ 12,768.9	\$ 15,277	
211	77, 81	77, 81	DIV-32	Site Electrical	Traffic signal pole with 35' Mast Arm .	2	0%	2	EA	22.500	45.00	\$ 111.5	\$ 5,016.6	\$12,768.9	\$ 25,537.8	\$ 30,554	
212	77, 81	77, 81	DIV-32	Site Electrical	Traffic signal pole with 40' Mast Arm .	2	0%	2	EA	25.000	50.00	\$ 111.5	\$ 5,574.0	\$14,164.4	\$ 28,328.9	\$ 33,903	
213	77, 81	77, 81	DIV-32	Site Electrical	Traffic signal pole with 45' Mast Arm .	3	0%	3	EA	27.500	82.50	\$ 111.5	\$ 9,197.0	\$15,560.0	\$ 46,680.0	\$ 55,877	

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214	77, 81	77, 81	DIV-32	Site Electrical	Traffic signal pole with 50' Mast Arm .	2	0%	2	EA	30.000	60.00	\$ 111.5	\$ 6,688.8	\$16,912.1	\$ 33,824.2	\$ 40,513	
					Tree												
215	110	110	DIV-32	Landscaper	AC-Amelanchier Canadensis 2"CAL	8	0%	8	EA	3.200	25.60	\$ 123.7	\$ 3,166.4	\$ 185.0	\$ 1,480.0	\$ 4,646	
216	110	110	DIV-32	Landscaper	AF-Acer Fremani Autum Blaze 2.5"CAL 10EA	10	0%	10	EA	2.500	25.00	\$ 123.7	\$ 3,092.2	\$ 212.0	\$ 2,120.0	\$ 5,212	
217	110	110	DIV-32	Landscaper	BN-Betula nigra Dura Heat 8'H 5EA	5	0%	5	EA	4.320	21.60	\$ 123.7	\$ 2,671.6	\$ 155.0	\$ 775.0	\$ 3,447	
218	110	110	DIV-32	Landscaper	BP-Betula Populifolia 8'H	8	0%	8	EA	2.325	18.60	\$ 123.7	\$ 2,300.6	\$ 145.0	\$ 1,160.0	\$ 3,461	
219	110	110	DIV-32	Landscaper	CV-Crataegus Viridis Winter King 2"CAL	6	0%	6	EA	2.320	13.92	\$ 123.7	\$ 1,721.7	\$ 154.0	\$ 924.0	\$ 2,646	
220	110	110	DIV-32	Landscaper	GT-Gleditisia Triacanthos Var. Inermis 2.5"CAL	9	0%	9	EA	2.325	20.93	\$ 123.7	\$ 2,588.1	\$ 184.0	\$ 1,656.0	\$ 4,244	
221	110	110	DIV-32	Landscaper	MA-Malus Donald Wyman 2"CAL	6	0%	6	EA	3.200	19.20	\$ 123.7	\$ 2,374.8	\$ 122.0	\$ 732.0	\$ 3,107	
222	110	110	DIV-32	Landscaper	PG-Picea Glauca 6'H	10	0%	10	EA	2.350	23.50	\$ 123.7	\$ 2,906.6	\$ 85.0	\$ 850.0	\$ 3,757	
223	110	110	DIV-32	Landscaper	PR-Pinus Resinosa 6'H	11	0%	11	EA	3.250	35.75	\$ 123.7	\$ 4,421.8	\$ 110.0	\$ 1,210.0	\$ 5,632	
224	110	110	DIV-32	Landscaper	QB-Quercus Bicolor 2.5"CAL	5	0%	5	EA	2.350	11.75	\$ 123.7	\$ 1,453.3	\$ 125.0	\$ 625.0	\$ 2,078	
225	110	110	DIV-32	Landscaper	QC-Quercus Coccinea 2.5"CAL	2	0%	2	EA	3.250	6.50	\$ 123.7	\$ 804.0	\$ 144.0	\$ 288.0	\$ 1,092	
226	110	110	DIV-32	Landscaper	TO-Thuja Occidentalis Techny 6'H	17	0%	17	EA	3.254	55.32	\$ 123.7	\$ 6,842.1	\$ 165.0	\$ 2,805.0	\$ 9,647	
227	110	110	DIV-32	Landscaper	UA-Ulmus Americana Princeton 2.5"CAL	5	0%	5	EA	4.500	22.50	\$ 123.7	\$ 2,783.0	\$ 258.0	\$ 1,290.0	\$ 4,073	
					Shrubs												
228	110	110	DIV-32	Landscaper	AM-Aronia Melanocarpa Ground Hog 24"H	65	0%	65	EA	0.350	22.75	\$ 123.7	\$ 2,813.9	\$ 28.5	\$ 1,852.5	\$ 4,666	
229	110	110	DIV-32	Landscaper	CA-Cornus Amomum 3'H	10	0%	10	EA	0.250	2.50	\$ 123.7	\$ 309.2	\$ 32.0	\$ 320.0	\$ 629	
230	110	110	DIV-32	Landscaper	CP-Comptonia Peregrina 1GAL	45	0%	45	EA	0.320	14.40	\$ 123.7	\$ 1,781.1	\$ 12.0	\$ 540.0	\$ 2,321	
231	110	110	DIV-32	Landscaper	CR-Cornus Racemosa Maszam 24"H	53	0%	53	EA	0.254	13.46	\$ 123.7	\$ 1,665.1	\$ 25.0	\$ 1,325.0	\$ 2,990	
232	110	110	DIV-32	Landscaper	CS-Cornus Stoloidera Farrow 24"H	44	0%	44	EA	0.365	16.06	\$ 123.7	\$ 1,986.4	\$ 36.0	\$ 1,584.0	\$ 3,570	
233	110	110	DIV-32	Landscaper	HI-Hamamelis Intermedia Arnold Promise 4'H	10	0%	10	EA	0.215	2.15	\$ 123.7	\$ 266.4	\$ 35.0	\$ 350.0	\$ 616	
234	110	110	DIV-32	Landscaper	IG-Ilex Glabra Shamrock 24"H	38	0%	38	EA	0.322	12.24	\$ 123.7	\$ 1,513.9	\$ 25.0	\$ 950.0	\$ 2,464	
235	110	110	DIV-32	Landscaper	IT-Itea Virginica 3'H	11	0%	11	EA	0.254	2.79	\$ 123.7	\$ 345.6	\$ 45.0	\$ 495.0	\$ 841	
236	110	110	DIV-32	Landscaper	IV-Ilex Verticillata Southern Gentleman(Male) 30"H	3	0%	3	EA	0.235	0.71	\$ 123.7	\$ 87.2	\$ 32.5	\$ 97.5	\$ 185	
237	110	110	DIV-32	Landscaper	IV-Ilex Verticillata Winter Red(Female) 30"H	12	0%	12	EA	0.215	2.58	\$ 123.7	\$ 319.1	\$ 36.0	\$ 432.0	\$ 751	
238	110	110	DIV-32	Landscaper	JC-Juniperus Chinesis Sea Green 24"SPRD	20	0%	20	EA	0.325	6.50	\$ 123.7	\$ 804.0	\$ 24.5	\$ 490.0	\$ 1,294	
239	110	110	DIV-32	Landscaper	MP-Myrica Pensylvanica 3'H	17	0%	17	EA	0.365	6.21	\$ 123.7	\$ 767.5	\$ 32.2	\$ 547.4	\$ 1,315	
240	110	110	DIV-32	Landscaper	PO-Physocarpus Opulifolius 3'H	26	0%	26	EA	0.256	6.65	\$ 123.7	\$ 822.7	\$ 55.0	\$ 1,430.0	\$ 2,253	
241	110	110	DIV-32	Landscaper	RA-Rhus Aromatica Gro-Low 24"SPRD	30	0%	30	EA	0.325	9.75	\$ 123.7	\$ 1,205.9	\$ 85.0	\$ 2,550.0	\$ 3,756	
242	110	110	DIV-32	Landscaper	VT-Viburnum Trilobum 4'H	20	0%	20	EA	0.365	7.31	\$ 123.7	\$ 903.9	\$ 38.5	\$ 770.0	\$ 1,674	
					Grasses												
243	110	110	DIV-32	Landscaper	PA-Pennisetum al opecuroides Hameln 1GAL	69	0%	69	EA	0.320	22.08	\$ 123.7	\$ 2,731.0	\$ 36.0	\$ 2,484.0	\$ 5,215	

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244	110	110	DIV-32	Landscaper	PC-Panicum Virgatum Cape Breeze 1GAL	90	0%	90	EA	0.250	22.50	\$ 123.7	\$ 2,783.0	\$ 24.0	\$ 2,160.0	\$ 4,943	
245	110	110	DIV-32	Landscaper	PV-Panicum Virgatum Praire Fire 1GAL	83	0%	83	EA	0.200	16.60	\$ 123.7	\$ 2,053.2	\$ 18.5	\$ 1,535.5	\$ 3,589	
246	110	110	DIV-32	Landscaper	SH-Sporobolus Heterolepis 1GAL	95	0%	95	EA	0.260	24.70	\$ 123.7	\$ 3,055.1	\$ 32.0	\$ 3,040.0	\$ 6,095	
247	110	110	DIV-32	Landscaper	SS-Schizachyrium Scoparium The Blues 1GAL	71	0%	71	EA	0.254	18.03	\$ 123.7	\$ 2,230.6	\$ 28.0	\$ 1,988.0	\$ 4,219	
					Perennials												
248	110	110	DIV-32	Landscaper	AO-Aster Oblongifolius Raydons Favorite 1GAL	26	0%	26	EA	0.255	6.64	\$ 123.7	\$ 821.3	\$ 25.0	\$ 650.0	\$ 1,471	
249	110	110	DIV-32	Landscaper	EP-Echinacea Purpurea 1GAL	18	0%	18	EA	0.325	5.85	\$ 123.7	\$ 723.6	\$ 35.5	\$ 639.0	\$ 1,363	
250	110	110	DIV-32	Landscaper	HS-Hemerocallis Stella D'oro 1GAL	30	0%	30	EA	0.280	8.40	\$ 123.7	\$ 1,039.0	\$ 45.5	\$ 1,365.0	\$ 2,404	
251	110	110	DIV-32	Landscaper	NW-Nepeta Six Hills Giant 1GAL	15	0%	15	EA	0.398	5.97	\$ 123.7	\$ 738.4	\$ 55.0	\$ 825.0	\$ 1,563	
252	110	110	DIV-32	Landscaper	RF-Rudbeckia Fulgida Goldsturm 1GAL	25	0%	25	EA	0.425	10.63	\$ 123.7	\$ 1,314.8	\$ 42.5	\$ 1,062.5	\$ 2,377	
253	110	110	DIV-32	Landscaper	SA-Sedum Autumn Joy 1 GAL	18	0%	18	EA	0.435	7.83	\$ 123.7	\$ 968.5	\$ 36.5	\$ 657.0	\$ 1,625	
					Plugs												
254	110	110	DIV-32	Landscaper	AO-Aster Oblongifolius Raydons Favorite 5"Plug	25	0%	25	EA	0.565	14.13	\$ 123.7	\$ 1,747.1	\$ 45.0	\$ 1,125.0	\$ 2,872	
255	110	110	DIV-32	Landscaper	BA-Baptisia Australis 5"Plugs	25	0%	25	EA	0.650	16.25	\$ 123.7	\$ 2,009.9	\$ 54.0	\$ 1,350.0	\$ 3,360	
256	110	110	DIV-32	Landscaper	CO-Coreopsis Moonbeam 5"Plugs	25	0%	25	EA	0.650	16.25	\$ 123.7	\$ 2,009.9	\$ 55.0	\$ 1,375.0	\$ 3,385	
257	110	110	DIV-32	Landscaper	CT-Carex Stricta 5"Plugs	25	0%	25	EA	0.650	16.25	\$ 123.7	\$ 2,009.9	\$ 25.0	\$ 625.0	\$ 2,635	
258	110	110	DIV-32	Landscaper	EU-Eupatorium Purpureum 5"Plugs	25	0%	25	EA	0.560	14.00	\$ 123.7	\$ 1,731.6	\$ 35.5	\$ 887.5	\$ 2,619	
259	110	110	DIV-32	Landscaper	RF-Rudbeckia Fulgida Goldsturm 5"Plugs	25	0%	25	EA	0.254	6.35	\$ 123.7	\$ 785.4	\$ 45.2	\$ 1,130.0	\$ 1,915	
260	110	110	DIV-32	Landscaper	SR-Solidago Rugosa Fireworks 5"Plugs	25	0%	25	EA	0.350	8.75	\$ 123.7	\$ 1,082.3	\$ 25.0	\$ 625.0	\$ 1,707	
261	110	110	DIV-32	Landscaper	SS-Schizachyrium Scoparium The Blues 5"Plugs	25	0%	25	EA	0.540	13.50	\$ 123.7	\$ 1,669.8	\$ 32.0	\$ 800.0	\$ 2,470	

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LANDSCAPING																	
262	105	105	DIV-32	Landscaper	12"H x 16'R Planting Bed	1	0%	1	EA	1.250	1.25	\$ 123.7	\$ 154.6	\$ 454.0	\$ 454.0	\$ 609	
263	5,106, 107, 108	5,106, 107, 108	DIV-32	Landscaper	Aged Pine Bark Mulch	6,999	5%	7,349	SF	0.005	36.74	\$ 123.7	\$ 4,544.8	\$ 0.2	\$ 1,469.8	\$ 6,015	
264	105	105	DIV-32	Landscaper	Air Spade/Root Pruning 111	50	5%	53	LF	0.250	13.14	\$ 123.7	\$ 1,624.7		\$ -	\$ 1,625	
265	107	107	DIV-32	Landscaper	Bio Retention Seed Mixture	3,147	5%	3,305	SF	0.008	26.44	\$ 123.7	\$ 3,269.8	\$ 0.4	\$ 1,321.8	\$ 4,592	
266	24	116	DIV-32	Cast Stone	2" Thick x 12" Wide x 5' Long Bluestone Tread	6	0%	6	EA	0.540	3.24	\$ 105.8	\$ 342.8	\$ 85.0	\$ 510.0	\$ 853	
267	24	116	DIV-32	Brick Veneer	2" Stone Veneer	30	5%	32	LF	0.250	7.88	\$ 123.9	\$ 975.6	\$ 15.5	\$ 488.3	\$ 1,464	
268	24	116	DIV-32	Landscaper	Cement Concrete Cheek Walls	9	5%	9	SF	0.180	1.70	\$ 123.7	\$ 210.4	\$ 4.5	\$ 42.5	\$ 253	
269	24	116	DIV-32	Landscaper	1" Mortar Scratch Coat & Setting Coat	15	5%	16	SF	0.100	1.58	\$ 123.7	\$ 194.8	\$ 3.6	\$ 56.7	\$ 252	
270	24	116	DIV-32	Landscaper	Wire Mesh Lath	15	5%	16	SF	0.005	0.08	\$ 123.7	\$ 9.7	\$ 0.2	\$ 2.4	\$ 12	
271	24	116	DIV-32	Landscaper	Gravel Borrow	5	5%	5	CY	1.500	7.26	\$ 123.7	\$ 898.3	\$ 35.5	\$ 171.9	\$ 1,070	
272	24	116	DIV-32	Brick Veneer	Natural Stone Veneer	10	5%	11	LF	0.250	2.63	\$ 123.9	\$ 325.2	\$ 18.5	\$ 194.3	\$ 519	
273	24	116	DIV-32	Landscaper	3/4" Mortar Setting Bed	0.1	5%	0	CY	1.500	0.22	\$ 123.7	\$ 27.1	\$ 65.5	\$ 9.6	\$ 37	
274	26, 105	26, 105	DIV-32	Landscaper	Clearing & Grubbing	4,272	5%	4,486	SF	0.012	53.83	\$ 123.7	\$ 6,658.1		\$ -	\$ 6,658	
275	24	24	DIV-32	Cast Stone	Reinstall Flagstone Walk	31	5%	33	SF	0.055	1.82	\$ 105.8	\$ 192.1		\$ -	\$ 192	
276	5,106, 107, 108	110	DIV-32	Landscaper	Decompaction of Lawn	20,320	5%	21,336	SF	0.015	320.04	\$ 123.7	\$ 39,584.6		\$ -	\$ 39,585	
277	5,106, 107, 108	110	DIV-32	Landscaper	4" Sub Soil	248	5%	261	CY	0.500	130.39	\$ 123.7	\$ 16,127.0	\$ 15.5	\$ 4,042.0	\$ 20,169	
278	107	111	DIV-32	Landscaper	Granite Seat Wall 111	95	5%	100	LF	0.250	25.06	\$ 123.7	\$ 3,100.0	\$ 12.5	\$ 1,253.2	\$ 4,353	
279	107	111	DIV-32	Landscaper	1" Mortar Setting Bed	95	5%	100	LF	0.025	2.51	\$ 123.7	\$ 310.0	\$ 1.1	\$ 110.3	\$ 420	
280	106-108	106-108	DIV-32	Landscaper	4" Loam	63,744	5%	66,931	SF	0.005	334.66	\$ 123.7	\$ 41,392.6	\$ 0.2	\$ 13,386.2	\$ 54,779	
281	106-108	112	DIV-32	Landscaper	Native Seed Mixture	7,111	5%	7,466	SF	0.008	59.73	\$ 123.7	\$ 7,387.7	\$ 0.4	\$ 2,986.5	\$ 10,374	
282	106-108	112	DIV-32	Landscaper	6" Crushed stone	132	5%	138	CY	1.500	207.39	\$ 123.7	\$ 25,651.9	\$ 35.5	\$ 4,908.3	\$ 30,560	
283	106-108	112	DIV-32	Landscaper	10" Modified Rockfill	7,111	5%	7,466	SF	0.055	410.64	\$ 123.7	\$ 50,790.7	\$ 2.2	\$ 16,425.6	\$ 67,216	
284	106-108	106-108	DIV-32	Landscaper	Lawn Seed Mix	56,663	5%	59,496	SF	0.005	297.48	\$ 123.7	\$ 36,794.5	\$ 0.2	\$ 11,899.2	\$ 48,694	
285	105-108	105-108	DIV-32	Landscaper	Permanent Easement	21,882	5%	22,977	SF	0.006	137.86	\$ 123.7	\$ 17,051.4		\$ -	\$ 17,051	
286	24	116	DIV-32	Landscaper	Reclaimed Granite Block Wall 3'-6"H	476	5%	500	SF	0.200	100.00	\$ 123.7	\$ 12,368.3	\$ 5.5	\$ 2,749.9	\$ 15,118	
287	24	116	DIV-32	Landscaper	Expansion Joint Filler	136	5%	143	LF	0.003	0.43	\$ 123.7	\$ 53.0		\$ -	\$ 53	
288	24	116	DIV-32	Landscaper	3/4" Stone	476	5%	500	SF	0.055	27.50	\$ 123.7	\$ 3,401.3	\$ 2.2	\$ 1,100.0	\$ 4,501	
289	115	115	DIV-32	Landscaper	Granite Curb	26	5%	28	LF	0.120	3.32	\$ 123.7	\$ 410.8	\$ 6.3	\$ 174.4	\$ 585	
290	23-28	23-28	DIV-32	Landscaper	TL-2 Guardrail (Single Faced) with 62 EA Post	364	5%	382	LF	0.450	171.91	\$ 123.7	\$ 21,263.6	\$ 25.5	\$ 9,741.8	\$ 31,005	
291	05, 106, 108	111	DIV-32	Landscaper	Tree Pruning (Arborist determine how many number of branches will be clear)	10	0%	10	EA	2.200	22.00	\$ 123.7	\$ 2,721.1		\$ -	\$ 2,721	
292	05, 106, 108	111	DIV-32	Landscaper	3'D Gravel Borrow	255	5%	268	CY	1.500	401.98	\$ 123.7	\$ 49,719.1	\$ 15.5	\$ 4,153.7	\$ 53,873	
293	119	119	DIV-32	Landscaper	Bioretention Basin Filter Media Soi: 40% Sand, 30% Topsoil, 30% Compost	1,966	5%	2,064	SF	0.005	10.32	\$ 123.7	\$ 1,276.6	\$ 0.4	\$ 825.7	\$ 2,102	
294	119	119	DIV-32	Landscaper	3/8" Pea Gravel Filter	1,966	5%	2,064	SF	0.055	113.54	\$ 123.7	\$ 14,043.0	\$ 3.5	\$ 7,225.1	\$ 21,268	
Tree Trench																	
295	105	111	DIV-32	Landscaper	22" Planting Soil Mix	273	5%	287	CY	0.500	143.27	\$ 123.7	\$ 17,720.3	\$ 12.5	\$ 3,581.7	\$ 21,302	
296	105	111	DIV-32	Landscaper	4" Ordinary Borrow (where Fill is Required)	49	5%	52	CY	0.500	25.84	\$ 123.7	\$ 3,195.5	\$ 15.5	\$ 800.9	\$ 3,996	
297	105	111	DIV-32	Landscaper	Prepare 4" Sub Soil	4,026	5%	4,228	SF	0.020	84.55	\$ 123.7	\$ 10,457.9		\$ -	\$ 10,458	

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					Mobilization For Concrete												
298	N/A	N/A	DIV-32	Site Concrete	Mobilization For Concrete	862	5%	905	CY	0.15	135.77	\$ 108.3	\$ 14,709.7		\$ -	\$ 14,710	
					Mobilization For Steel												
299	N/A	N/A	DIV-32	Site Concrete	Mobilization For Steel/Reinforcement	14	5%	14	TONS	0.35	4.99	\$ 108.3	\$ 540.6		\$ -	\$ 541	
					Mobilization For Aggregate												
300	N/A	N/A	DIV-32	Site Concrete	Mobilization For Aggregate	7,308	5%	7,673	TONS	0.015	115.10	\$ 108.3	\$ 12,470.8		\$ -	\$ 12,471	
					Mobilization For Asphalt												
301	N/A	N/A	DIV-32	Paving	Mobilization For Asphalt	10,571	5%	11,099	TONS	0.013	138.74	\$ 97.5	\$ 13,528.6		\$ -	\$ 13,529	
			DIV-33		Utilities												\$ 1,032,354
					Utility Pipes												
302	59-66	59-66	DIV-33	Utilities	6" DI Ductile Iron Water Pipe	7	5%	7	LF	0.707	5.23	\$ 165.4	\$ 865.1	\$ 45.2	\$ 334.7	\$ 1,200	
303	59-66	59-66	DIV-33	Utilities	6" PVC Pipe	252	5%	265	LF	0.407	107.64	\$ 165.4	\$ 17,804.5	\$ 16.2	\$ 4,280.7	\$ 22,085	
304	59-66	59-66	DIV-33	Utilities	10" DIP Ductile Iron Pipes	106	5%	111	LF	0.734	81.37	\$ 165.4	\$ 13,459.2	\$ 53.8	\$ 5,972.6	\$ 19,432	
305	59-66	59-66	DIV-33	Utilities	12" DIP Ductile Iron Pipes	100	5%	105	LF	0.869	91.34	\$ 165.4	\$ 15,108.2	\$ 72.8	\$ 7,651.0	\$ 22,759	
306	59-66	59-66	DIV-33	Utilities	12" Perforated PVC Pipe	116	5%	121	LF	0.482	58.60	\$ 165.4	\$ 9,693.7	\$ 30.0	\$ 3,647.0	\$ 13,341	
307	59-66	59-66	DIV-33	Utilities	12" RCP Reinforced Concrete Pipe	1,262	5%	1,325	LF	0.769	1,018.34	\$ 165.4	\$ 168,443.1	\$ 14.2	\$ 18,864.4	\$ 187,307	
308	59-66	59-66	DIV-33	Utilities	15" RCP Reinforced Concrete Pipe	646	5%	679	LF	1.080	733.02	\$ 165.4	\$ 121,247.7	\$ 16.9	\$ 11,436.4	\$ 132,684	
309	59-66	59-66	DIV-33	Utilities	16" DI Ductile Iron Water Pipes	177	5%	186	LF	1.226	227.54	\$ 165.4	\$ 37,637.9	\$ 148.1	\$ 27,495.6	\$ 65,134	
310	59-66	59-66	DIV-33	Utilities	18" Reinforced concrete pipes	237	5%	249	LF	1.188	295.98	\$ 165.4	\$ 48,958.3	\$ 21.6	\$ 5,375.9	\$ 54,334	
311	59-66	59-66	DIV-33	Utilities	24" RCP Reinforced Concrete Pipe	91	5%	95	LF	1.305	124.53	\$ 165.4	\$ 20,598.1	\$ 23.7	\$ 2,265.4	\$ 22,864	
312	59-66	59-66	DIV-33	Utilities	36" RCP Reinforced Concrete Pipe	416	5%	437	LF	1.386	606.10	\$ 165.4	\$ 100,255.0	\$ 69.0	\$ 30,195.0	\$ 130,450	
313	59-66	59-66	DIV-33	Utilities	42" RCP Reinforced Concrete Pipe	108	5%	113	LF	1.665	188.71	\$ 165.4	\$ 31,213.7	\$ 89.8	\$ 10,173.6	\$ 41,387	
314	59-66	59-66	DIV-33	Utilities	48" RCP Reinforced Concrete Pipes	26	5%	27	LF	1.989	54.32	\$ 165.4	\$ 8,985.1	\$ 93.2	\$ 2,545.9	\$ 11,531	
315	62	62	DIV-33	Utilities	Reinstall Utilities Line	148	5%	156	LF	0.509	79.12	\$ 165.4	\$ 13,086.7		\$ -	\$ 13,087	
316	62	62	DIV-33	Utilities	Reinstall Water Line	182	5%	191	LF	0.394	75.44	\$ 165.4	\$ 12,477.6		\$ -	\$ 12,478	
317	119	119	DIV-33	Utilities	12" Perforated PVC Pipe	240	5%	252	LF	0.560	141.07	\$ 165.4	\$ 23,334.7	\$ 30.2	\$ 7,607.9	\$ 30,943	
318	119	119	DIV-33	Utilities	12" PVC Standpipe Grated Cap	4	5%	4	LF	0.560	2.35	\$ 165.4	\$ 389.0	\$ 30.2	\$ 126.8	\$ 516	
					Utility Item												
319	59-66	59-66	DIV-33	Utilities	16" Cast Iron Plug	1	0%	1	EA	1.326	1.33	\$ 165.4	\$ 219.3	\$ 328.6	\$ 328.6	\$ 548	
320	59-66	59-66	DIV-33	Utilities	16"x16" Tapping Sleeve Valve	1	0%	1	EA	2.692	2.69	\$ 165.4	\$ 445.3	\$ 2,047.7	\$ 2,047.7	\$ 2,493	
321	59-66	59-66	DIV-33	Utilities	Adjust Hydrant	1	0%	1	EA	2.585	2.59	\$ 165.4	\$ 427.6		\$ -	\$ 428	
322	59-66	59-66	DIV-33	Utilities	Adjust W.G. Water Gate	1	0%	1	EA	2.365	2.37	\$ 165.4	\$ 391.2		\$ -	\$ 391	
323	59-66	59-66	DIV-33	Utilities	Curb Stop & Service Box	1	0%	1	EA	1.695	1.70	\$ 165.4	\$ 280.4	\$ 140.6	\$ 140.6	\$ 421	
324	59-66	59-66	DIV-33	Utilities	Stone for Pipe Ends	171	5%	180	SF	0.028	5.04	\$ 165.4	\$ 833.1	\$ 1.5	\$ 269.8	\$ 1,103	
325	59-66	59-66	DIV-33	Utilities	Stub Pole	4	0%	4	EA	1.250	5.00	\$ 165.4	\$ 827.0	\$ 160.0	\$ 639.8	\$ 1,467	
326	59-66	59-66	DIV-33	Utilities	1" Corporation Cock	1	0%	1	EA	1.582	1.58	\$ 165.4	\$ 261.7	\$ 316.0	\$ 316.0	\$ 578	
327	59-66	59-66	DIV-33	Utilities	Concrete Head Wall as per Standard	1	0%	1	EA	5.540	5.54	\$ 165.4	\$ 916.4	\$ 2,454.0	\$ 2,454.0	\$ 3,370	
328	59-66	59-66	DIV-33	Utilities	Bank Impact wall related headwall	27	5%	28	LF	0.150	4.26	\$ 165.4	\$ 703.9	\$ 15.5	\$ 439.8	\$ 1,144	
329	59, 60	59, 60	DIV-33	Utilities	Reinstall Hydrant	2	0%	2	EA	5.000	10.00	\$ 165.4	\$ 1,654.1		\$ -	\$ 1,654	

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Quantity Takeoff Sheet

Siteworks

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330	83, 84	83, 84	DIV-33	Utilities	Reinstall Meter	2	0%	2	EA	2.365	4.73	\$ 165.4	\$ 782.4		\$ -	\$ 782	
331	77	77	DIV-33	Utilities	Service Connection	2	0%	2	EA	0.659	1.32	\$ 165.4	\$ 218.0	\$ 41.0	\$ 82.0	\$ 300	
					Fittings & Accessories												
332	83, 84	83, 84	DIV-33	Utilities	Bends, Wyes, Tees etc.	3	0%	3	EA	0.875	2.63	\$ 165.4	\$ 434.2	\$ 364.8	\$ 1,094.4	\$ 1,529	
					Inlet/Catch Basin/Manhole												
333	59-66	59-66	DIV-33	Utilities	Adjust EX-Catch Basin with Curb Inlet (CBCI)-300	1	0%	1	EA	3.652	3.65	\$ 165.4	\$ 604.1		\$ -	\$ 604	
334	59-66	59-66	DIV-33	Utilities	Adjust EX-Drainage Manhole (DMH)-302	1	0%	1	EA	3.652	3.65	\$ 165.4	\$ 604.1		\$ -	\$ 604	
335	59-66	59-66	DIV-33	Utilities	Adjust-EX-Drainage Manhole (DMH)-400	1	0%	1	EA	3.652	3.65	\$ 165.4	\$ 604.1		\$ -	\$ 604	
336	59-66	59-66	DIV-33	Utilities	Adjust-EX-Drainage Manhole (DMH)-403	1	0%	1	EA	3.652	3.65	\$ 165.4	\$ 604.1		\$ -	\$ 604	
337	59-66	59-66	DIV-33	Utilities	Adjust-EX-Drainage Manhole (DMH)-430	1	0%	1	EA	3.652	3.65	\$ 165.4	\$ 604.1		\$ -	\$ 604	
338	59-66	59-66	DIV-33	Utilities	Catch Basin (CB)-200	1	0%	1	EA	5.334	5.33	\$ 165.4	\$ 882.2	\$ 670.5	\$ 670.5	\$ 1,553	
339	59-66	59-66	DIV-33	Utilities	Catch Basin (CB)-400 W/4' Sump	1	0%	1	EA	7.824	7.82	\$ 165.4	\$ 1,294.2	\$ 1,243.6	\$ 1,243.6	\$ 2,538	
340	59-66	59-66	DIV-33	Utilities	Catch Basin (CB)-424	1	0%	1	EA	5.334	5.33	\$ 165.4	\$ 882.2	\$ 670.5	\$ 670.5	\$ 1,553	
341	59-66	59-66	DIV-33	Utilities	Catch Basin (CB)-425 W/4' Sump	1	0%	1	EA	7.824	7.82	\$ 165.4	\$ 1,294.2	\$ 1,243.6	\$ 1,243.6	\$ 2,538	
342	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-100	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
343	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-101	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
344	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-200	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
345	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-300	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
346	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-304	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
347	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-305	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
348	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-307	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
349	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-308	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
350	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-309	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
351	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-312	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
352	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-313	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
353	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-314	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
354	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-401 W/4' Sump	1	0%	1	EA	8.435	8.44	\$ 165.4	\$ 1,395.2	\$ 1,449.2	\$ 1,449.2	\$ 2,844	

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Siteworks

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355	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-402	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
356	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-406 w/4' Sump	1	0%	1	EA	8.435	8.44	\$ 165.4	\$ 1,395.2	\$ 1,449.2	\$ 1,449.2	\$ 2,844	
357	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-409 W/4' Sump	1	0%	1	EA	8.435	8.44	\$ 165.4	\$ 1,395.2	\$ 1,449.2	\$ 1,449.2	\$ 2,844	
358	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-411	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
359	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-412	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
360	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-414	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
361	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-418	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
362	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-420	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
363	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-422	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
364	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-423	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
365	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-500	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
366	59-66	59-66	DIV-33	Utilities	Catch Basin with Curb Inlet (CBCI)-501	1	0%	1	EA	6.313	6.31	\$ 165.4	\$ 1,044.1	\$ 876.6	\$ 876.6	\$ 1,921	
367	59-66	59-66	DIV-33	Utilities	Change In Type (CIT)-300	1	0%	1	EA	1.000	1.00	\$ 165.4	\$ 165.4		\$ -	\$ 165	
368	59-66	59-66	DIV-33	Utilities	Change In Type (CIT)-301	1	0%	1	EA	1.000	1.00	\$ 165.4	\$ 165.4		\$ -	\$ 165	
369	59-66	59-66	DIV-33	Utilities	Change In Type (CIT)-303	1	0%	1	EA	1.000	1.00	\$ 165.4	\$ 165.4		\$ -	\$ 165	
370	59-66	59-66	DIV-33	Utilities	Change In Type (CIT)-426	1	0%	1	EA	1.000	1.00	\$ 165.4	\$ 165.4		\$ -	\$ 165	
371	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-100	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
372	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-204	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
373	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-205	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
374	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-206	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
375	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-207	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
376	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-208	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
377	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-301	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
378	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-302	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
379	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-303	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
380	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-306	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
381	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-310	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
382	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-310	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
383	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-314	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
384	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-403	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
385	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-404	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
386	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-405	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
387	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-408	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
388	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-413	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
389	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-415	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
390	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-419	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	

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391	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-421	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
392	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-436	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
393	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-437	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
394	59-66	59-66	DIV-33	Utilities	Drainage Manhole (DMH)-500	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
395	59-66	59-66	DIV-33	Utilities	Sewer Manhole (SMH)-101	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
396	59-66	59-66	DIV-33	Utilities	Gutter Inlet (GI)-407	1	0%	1	EA	1.626	1.63	\$ 165.4	\$ 268.9	\$ 206.1	\$ 206.1	\$ 475	
397	59-66	59-66	DIV-33	Utilities	Leach Basin (LB)-204	1	0%	1	EA	6.965	6.97	\$ 165.4	\$ 1,152.1	\$ 4,833.4	\$ 4,833.4	\$ 5,985	
398	59-66	59-66	DIV-33	Utilities	Leach Basin (LB)-206	1	0%	1	EA	6.965	6.97	\$ 165.4	\$ 1,152.1	\$ 4,833.4	\$ 4,833.4	\$ 5,985	
399	59-66	59-66	DIV-33	Utilities	OS-440	1	0%	1	EA	4.540	4.54	\$ 165.4	\$ 751.0	\$ 2,545.0	\$ 2,545.0	\$ 3,296	
400	59-66	59-66	DIV-33	Utilities	Sewer Manhole (SMH)-100	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 4,103.2	\$ 4,103.2	\$ 5,244	
401	59-66	59-66	DIV-33	Utilities	Sewer Manhole (SMH)-200	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 4,103.2	\$ 4,103.2	\$ 5,244	
402	59-66	59-66	DIV-33	Utilities	SP-Drainage Manhole (DMH)-200	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
403	59-66	59-66	DIV-33	Utilities	SP-Drainage Manhole (DMH)-201	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
404	59-66	59-66	DIV-33	Utilities	SP-Drainage Manhole (DMH)-202	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
405	59-66	59-66	DIV-33	Utilities	SP-Drainage Manhole (DMH)-203	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
406	59-66	59-66	DIV-33	Utilities	SP-Drainage Manhole (DMH)-204	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
407	59-66	59-66	DIV-33	Utilities	SP-Drainage Manhole (DMH)-205	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
408	59-66	59-66	DIV-33	Utilities	SP-Drainage Manhole (DMH)-206	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
409	59-66	59-66	DIV-33	Utilities	SP-Drainage Manhole (DMH)-207	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
410	59-66	59-66	DIV-33	Utilities	Rebuild-EX-Drainage Manhole (DMH)-301	1	0%	1	EA	6.895	6.90	\$ 165.4	\$ 1,140.5	\$ 3,145.8	\$ 3,145.8	\$ 4,286	
			DIV-34		Transportation												\$ 189,715
					Traffic Sign												
411	77, 79, 81	77, 79, 81	DIV-34	Traffic Controller	Emergency Preemption Optical Detector	11	0%	11	EA	3.665	40.32	\$ 103.2	\$ 4,161.6	\$ 1,722.0	\$ 18,942.0	\$ 23,104	
412	77, 79, 81	77, 79, 81	DIV-34	Traffic Controller	Pedestrian Signal Head	22	0%	22	EA	1.365	30.03	\$ 103.2	\$ 3,099.9	\$ 56.3	\$ 1,237.5	\$ 4,337	
413	77, 79, 81	77, 79, 81	DIV-34	Traffic Controller	Pedestrian Push Button	22	0%	22	EA	1.396	30.71	\$ 103.2	\$ 3,170.3	\$ 140.2	\$ 3,084.6	\$ 6,255	
414	77, 79, 81	77, 79, 81	DIV-34	Traffic Controller	Preemption strobe	5	0%	5	EA	1.456	7.28	\$ 103.2	\$ 751.5	\$ 185.1	\$ 925.4	\$ 1,677	
415	77, 79, 81	77, 79, 81	DIV-34	Traffic Controller	Traffic Controller w/Cabinet	5	0%	5	EA	3.625	18.13	\$ 103.2	\$ 1,871.0	\$ 532.0	\$ 2,660.0	\$ 4,531	
416	77, 79, 81	77, 79, 81	DIV-34	Traffic Controller	Vehicular Signal Head	35	0%	35	EA	2.326	81.41	\$ 103.2	\$ 8,403.8	\$ 668.0	\$ 23,380.0	\$ 31,784	
417	77, 79, 81	77, 79, 81	DIV-34	Traffic Controller	Video Detection Camera	11	0%	11	EA	2.585	28.44	\$ 103.2	\$ 2,935.3	\$ 450.0	\$ 4,950.0	\$ 7,885	
418	77, 79, 81	77, 79, 81	DIV-34	Traffic Controller	8'H Signal Post	13	0%	13	EA	1.850	24.05	\$ 103.2	\$ 2,482.6	\$ 106.9	\$ 1,389.6	\$ 3,872	
419	77, 79, 81	77, 79, 81	DIV-34	Traffic Controller	10'H Signal Post	1	0%	1	EA	2.236	2.24	\$ 103.2	\$ 230.8	\$ 136.5	\$ 136.5	\$ 367	
420	67, 68	67, 68	DIV-34	Traffic Controller	5'-9" x 8'-0" "ONLY" Sign	36	0%	36	EA	1.610	57.96	\$ 103.2	\$ 5,983.1	\$ 36.8	\$ 1,324.8	\$ 7,308	
421	67, 68	67, 68	DIV-34	Traffic Controller	8'-3"x6'-7" "Arrow" Sign	60	0%	60	EA	1.900	114.00	\$ 103.2	\$ 11,767.8	\$ 43.4	\$ 2,605.7	\$ 14,374	
422	69, 70	69, 70	DIV-34	Traffic Controller	Advanced Trail Markings at Highway"XING"	4	0%	4	EA	1.362	5.45	\$ 103.2	\$ 562.4	\$ 35.5	\$ 142.0	\$ 704	
423	67, 68	67, 68	DIV-34	Traffic Controller	Bike Lane Markings	43	0%	43	EA	1.385	59.56	\$ 103.2	\$ 6,148.6	\$ 30.1	\$ 1,294.3	\$ 7,443	
424	67-74	75, 76	DIV-34	Traffic Controller	66x42 D3-2A	1	0%	1	EA	1.444	1.44	\$ 103.2	\$ 149.0	\$ 140.5	\$ 140.5	\$ 290	
425	67-74	75, 76	DIV-34	Traffic Controller	48x30 D3-2c	1	0%	1	EA	0.985	0.99	\$ 103.2	\$ 101.7	\$ 73.0	\$ 73.0	\$ 175	
426	67-74	75, 76	DIV-34	Traffic Controller	48x30 D3-2D	2	0%	2	EA	1.236	2.47	\$ 103.2	\$ 255.2	\$ 73.0	\$ 146.0	\$ 401	
427	67-74	75, 76	DIV-34	Traffic Controller	24x24 D9-2	3	0%	3	EA	0.870	2.61	\$ 103.2	\$ 269.4	\$ 29.2	\$ 87.6	\$ 357	
428	67-74	75, 76	DIV-34	Traffic Controller	24x18 D11-1	10	0%	10	EA	0.835	8.35	\$ 103.2	\$ 862.0	\$ 21.9	\$ 219.0	\$ 1,081	
429	67-74	75, 76	DIV-34	Traffic Controller	12x18 D11-20	2	0%	2	EA	0.736	1.47	\$ 103.2	\$ 152.0	\$ 11.0	\$ 21.9	\$ 174	
430	67-74	75, 76	DIV-34	Traffic Controller	12x18 D11-20a	2	0%	2	EA	0.736	1.47	\$ 103.2	\$ 152.0	\$ 11.0	\$ 21.9	\$ 174	
431	67-74	75, 76	DIV-34	Traffic Controller	21x15 M2-1	1	0%	1	EA	0.785	0.79	\$ 103.2	\$ 81.0	\$ 16.0	\$ 16.0	\$ 97	
432	67-74	75, 76	DIV-34	Traffic Controller	24x12 M3-1	1	0%	1	EA	0.763	0.76	\$ 103.2	\$ 78.8	\$ 14.6	\$ 14.6	\$ 93	

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Quantity Takeoff Sheet

Siteworks

ITEM #	REF. SHEET	DETAIL	CSI SECT	Sub Contractor	DESCRIPTION	QTY.	WAST AGE	QTY WITH WASTAG E	UNIT	UNIT LABOR HOURS	TOTAL LABOR HOURS	PER HOUR LABOR RATE	TOTAL LABOR COST	UNIT MATERIAL COST	TOTAL MATERIAL COST	ITEM COST	TRADE COST
433	67-74	75, 76	DIV-34	Traffic Controller	24x12 M3-3	1	0%	1	EA	0.763	0.76	\$ 103.2	\$ 78.8	\$ 14.6	\$ 14.6	\$ 93	
434	67-74	75, 76	DIV-34	Traffic Controller	21x15 M6-1L	1	0%	1	EA	0.785	0.79	\$ 103.2	\$ 81.0	\$ 16.0	\$ 16.0	\$ 97	
435	67-74	75, 76	DIV-34	Traffic Controller	21x15 M6-1R	1	0%	1	EA	0.785	0.79	\$ 103.2	\$ 81.0	\$ 16.0	\$ 16.0	\$ 97	
436	67-74	75, 76	DIV-34	Traffic Controller	21x15 M6-2L	1	0%	1	EA	0.785	0.79	\$ 103.2	\$ 81.0	\$ 16.0	\$ 16.0	\$ 97	
437	67-74	75, 76	DIV-34	Traffic Controller	21x15 M6-2R	1	0%	1	EA	0.785	0.79	\$ 103.2	\$ 81.0	\$ 16.0	\$ 16.0	\$ 97	
438	67-74	75, 76	DIV-34	Traffic Controller	21x15 M6-3	1	0%	1	EA	0.785	0.79	\$ 103.2	\$ 81.0	\$ 16.0	\$ 16.0	\$ 97	
439	67-74	75, 76	DIV-34	Traffic Controller	21x15 M6-4	5	0%	5	EA	0.785	3.93	\$ 103.2	\$ 405.2	\$ 16.0	\$ 79.9	\$ 485	
440	67-74	75, 76	DIV-34	Traffic Controller	96x24 MA-D3-1A	5	0%	5	EA	1.286	6.43	\$ 103.2	\$ 663.8	\$ 116.8	\$ 584.0	\$ 1,248	
441	67-74	75, 76	DIV-34	Traffic Controller	126x24 MA-D3-1B	2	0%	2	EA	1.495	2.99	\$ 103.2	\$ 308.7	\$ 153.3	\$ 306.6	\$ 615	
442	67-74	75, 76	DIV-34	Traffic Controller	54x12 MA-D3-1C	2	0%	2	EA	0.895	1.79	\$ 103.2	\$ 184.8	\$ 32.9	\$ 65.7	\$ 250	
443	67-74	75, 76	DIV-34	Traffic Controller	96x24 MA-D3-1D	2	0%	2	EA	1.286	2.57	\$ 103.2	\$ 265.5	\$ 116.8	\$ 233.6	\$ 499	
444	67-74	75, 76	DIV-34	Traffic Controller	42x12 MA-D3-1E	2	0%	2	EA	0.850	1.70	\$ 103.2	\$ 175.5	\$ 25.6	\$ 51.1	\$ 227	
445	67-74	75, 76	DIV-34	Traffic Controller	36x12 MA-D3-1F	2	0%	2	EA	0.835	1.67	\$ 103.2	\$ 172.4	\$ 21.9	\$ 43.8	\$ 216	
446	67-74	75, 76	DIV-34	Traffic Controller	120x24 MA-D3-1G	1	0%	1	EA	1.450	1.45	\$ 103.2	\$ 149.7	\$ 146.0	\$ 146.0	\$ 296	
447	67-74	75, 76	DIV-34	Traffic Controller	120x24 MA-D3-1H	1	0%	1	EA	1.450	1.45	\$ 103.2	\$ 149.7	\$ 146.0	\$ 146.0	\$ 296	
448	67-74	75, 76	DIV-34	Traffic Controller	126x24 MA-D3-1J	1	0%	1	EA	1.495	1.50	\$ 103.2	\$ 154.3	\$ 153.3	\$ 153.3	\$ 308	
449	67-74	75, 76	DIV-34	Traffic Controller	126x24 MA-D3-1K	1	0%	1	EA	1.495	1.50	\$ 103.2	\$ 154.3	\$ 153.3	\$ 153.3	\$ 308	
450	67-74	75, 76	DIV-34	Traffic Controller	60x12 MA-D3-1L	2	0%	2	EA	0.936	1.87	\$ 103.2	\$ 193.2	\$ 36.5	\$ 73.0	\$ 266	
451	67-74	75, 76	DIV-34	Traffic Controller	48x12 MA-D3-1M	2	0%	2	EA	0.870	1.74	\$ 103.2	\$ 179.6	\$ 29.2	\$ 58.4	\$ 238	
452	67-74	75, 76	DIV-34	Traffic Controller	24x24 MA-M1-5(2)	1	0%	1	EA	0.870	0.87	\$ 103.2	\$ 89.8	\$ 29.2	\$ 29.2	\$ 119	
453	67-74	75, 76	DIV-34	Traffic Controller	24x24 MA-M1-5(12)	2	0%	2	EA	0.870	1.74	\$ 103.2	\$ 179.6	\$ 29.2	\$ 58.4	\$ 238	
454	67-74	75, 76	DIV-34	Traffic Controller	60x96 MA-M1-7a(1)	1	0%	1	EA	2.326	2.33	\$ 103.2	\$ 240.1	\$ 292.0	\$ 292.0	\$ 532	
455	67-74	75, 76	DIV-34	Traffic Controller	30x36 MA-R10-12a	5	0%	5	EA	0.974	4.87	\$ 103.2	\$ 502.7	\$ 54.8	\$ 273.8	\$ 776	
456	67-74	75, 76	DIV-34	Traffic Controller	24x24 OM1-1	1	0%	1	EA	0.870	0.87	\$ 103.2	\$ 89.8	\$ 29.2	\$ 29.2	\$ 119	
457	67-74	75, 76	DIV-34	Traffic Controller	30x30 R1-1	9	0%	9	EA	1.036	9.32	\$ 103.2	\$ 962.5	\$ 45.6	\$ 410.6	\$ 1,373	
458	67-74	75, 76	DIV-34	Traffic Controller	18x318 R1-1	4	0%	4	EA	0.792	3.17	\$ 103.2	\$ 327.0	\$ 16.4	\$ 65.7	\$ 393	
459	67-74	75, 76	DIV-34	Traffic Controller	R2-1(25)	2	0%	2	EA	0.936	1.87	\$ 103.2	\$ 193.2	\$ 36.5	\$ 73.0	\$ 266	
460	67-74	75, 76	DIV-34	Traffic Controller	R2-1(35)	2	0%	2	EA	0.936	1.87	\$ 103.2	\$ 193.2	\$ 36.5	\$ 73.0	\$ 266	
461	67-74	75, 76	DIV-34	Traffic Controller	30x30 R3-2	5	0%	5	EA	1.036	5.18	\$ 103.2	\$ 534.7	\$ 45.6	\$ 228.1	\$ 763	
462	67-74	75, 76	DIV-34	Traffic Controller	30x30 R3-4	8	0%	8	EA	1.036	8.29	\$ 103.2	\$ 855.6	\$ 45.6	\$ 365.0	\$ 1,221	
463	67-74	75, 76	DIV-34	Traffic Controller	3x36 R3-5L	4	0%	4	EA	0.974	3.90	\$ 103.2	\$ 402.2	\$ 54.8	\$ 219.0	\$ 621	
464	67-74	75, 76	DIV-34	Traffic Controller	30x30 R3-7L	6	0%	6	EA	1.036	6.22	\$ 103.2	\$ 641.7	\$ 45.6	\$ 273.8	\$ 915	
465	67-74	75, 76	DIV-34	Traffic Controller	30x30 R3-7R	1	0%	1	EA	1.036	1.04	\$ 103.2	\$ 106.9	\$ 45.6	\$ 45.6	\$ 153	
466	67-74	75, 76	DIV-34	Traffic Controller	48x30 R3-8b	1	0%	1	EA	1.236	1.24	\$ 103.2	\$ 127.6	\$ 73.0	\$ 73.0	\$ 201	
467	67-74	75, 76	DIV-34	Traffic Controller	30x30 R3-8c	1	0%	1	EA	1.036	1.04	\$ 103.2	\$ 106.9	\$ 45.6	\$ 45.6	\$ 153	
468	67-74	75, 76	DIV-34	Traffic Controller	48x30 R3-8d	4	0%	4	EA	1.236	4.94	\$ 103.2	\$ 510.4	\$ 73.0	\$ 292.0	\$ 802	
469	67-74	75, 76	DIV-34	Traffic Controller	24x18 R3-17	11	0%	11	EA	0.835	9.19	\$ 103.2	\$ 948.1	\$ 21.9	\$ 240.9	\$ 1,189	
470	67-74	75, 76	DIV-34	Traffic Controller	24x30 R4-7	11	0%	11	EA	0.936	10.30	\$ 103.2	\$ 1,062.8	\$ 36.5	\$ 401.5	\$ 1,464	
471	67-74	75, 76	DIV-34	Traffic Controller	30x30 R5-1	10	0%	10	EA	1.036	10.36	\$ 103.2	\$ 1,069.4	\$ 45.6	\$ 456.3	\$ 1,526	
472	67-74	75, 76	DIV-34	Traffic Controller	24x24 R5-3	6	0%	6	EA	0.870	5.22	\$ 103.2	\$ 538.9	\$ 29.2	\$ 175.2	\$ 714	
473	67-74	75, 76	DIV-34	Traffic Controller	26x12 R6-1L	2	0%	2	EA	0.700	1.40	\$ 103.2	\$ 144.5	\$ 15.8	\$ 31.6	\$ 176	
474	67-74	75, 76	DIV-34	Traffic Controller	36x12 R6-1R	4	0%	4	EA	0.835	3.34	\$ 103.2	\$ 344.8	\$ 21.9	\$ 87.6	\$ 432	
475	67-74	75, 76	DIV-34	Traffic Controller	24x30 R6-2(L)	1	0%	1	EA	0.936	0.94	\$ 103.2	\$ 96.6	\$ 36.5	\$ 36.5	\$ 133	
476	67-74	75, 76	DIV-34	Traffic Controller	24x30 R6-2(R)	1	0%	1	EA	0.936	0.94	\$ 103.2	\$ 96.6	\$ 36.5	\$ 36.5	\$ 133	
477	67-74	75, 76	DIV-34	Traffic Controller	12x18 R7-1L	5	0%	5	EA	0.689	3.45	\$ 103.2	\$ 355.6	\$ 11.0	\$ 54.8	\$ 410	
478	67-74	75, 76	DIV-34	Traffic Controller	12x18 R7-1R	1	0%	1	EA	0.689	0.69	\$ 103.2	\$ 71.1	\$ 11.0	\$ 11.0	\$ 82	
479	67-74	75, 76	DIV-34	Traffic Controller	12x18 R7-1LR	5	0%	5	EA	0.689	3.45	\$ 103.2	\$ 355.6	\$ 11.0	\$ 54.8	\$ 410	
480	67-74	75, 76	DIV-34	Traffic Controller	24x24 R8-3a	1	0%	1	EA	0.870	0.87	\$ 103.2	\$ 89.8	\$ 29.2	\$ 29.2	\$ 119	

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481	67-74	75, 76	DIV-34	Traffic Controller	12x18 R9-5	5	0%	5	EA	0.689	3.45	\$ 103.2	\$ 355.6	\$ 11.0	\$ 54.8	\$ 410	
482	67-74	75, 76	DIV-34	Traffic Controller	24x36 R10-6	1	0%	1	EA	0.915	0.92	\$ 103.2	\$ 94.5	\$ 43.8	\$ 43.8	\$ 138	
483	67-74	75, 76	DIV-34	Traffic Controller	30x36 R10-10R	1	0%	1	EA	0.974	0.97	\$ 103.2	\$ 100.5	\$ 54.8	\$ 54.8	\$ 155	
484	67-74	75, 76	DIV-34	Traffic Controller	36x36 R10-11b	1	0%	1	EA	0.974	0.97	\$ 103.2	\$ 100.5	\$ 54.8	\$ 54.8	\$ 155	
485	67-74	75, 76	DIV-34	Traffic Controller	30x30 R10-15a	2	0%	2	EA	1.036	2.07	\$ 103.2	\$ 213.9	\$ 45.6	\$ 91.3	\$ 305	
486	68	75, 76	DIV-34	Traffic Controller	R10-25	2	0%	2	EA	1.036	2.07	\$ 103.2	\$ 213.9	\$ 45.6	\$ 91.3	\$ 305	
487	68	75, 76	DIV-34	Traffic Controller	24x12 W16-7PR	2	0%	2	EA	0.712	1.42	\$ 103.2	\$ 147.0	\$ 14.6	\$ 29.2	\$ 176	
488	68	75, 76	DIV-34	Traffic Controller	24x12 W16-7PS	2	0%	2	EA	0.712	1.42	\$ 103.2	\$ 147.0	\$ 14.6	\$ 29.2	\$ 176	
489	68	75, 76	DIV-34	Traffic Controller	30x30 W11-2	2	0%	2	EA	1.036	2.07	\$ 103.2	\$ 213.9	\$ 45.6	\$ 91.3	\$ 305	
490	67-74	75, 76	DIV-34	Traffic Controller	18x18 W2-1	2	0%	2	EA	0.792	1.58	\$ 103.2	\$ 163.5	\$ 16.4	\$ 32.9	\$ 196	
491	67-74	75, 76	DIV-34	Traffic Controller	36x36 W4-2R	1	0%	1	EA	0.974	0.97	\$ 103.2	\$ 100.5	\$ 54.8	\$ 54.8	\$ 155	
492	23, 105	23, 105	DIV-34	Traffic Controller	Reinstall Sign	5	0%	5	EA	0.785	3.93	\$ 103.2	\$ 405.2		\$ -	\$ 405	
493	68	68	DIV-34	Traffic Controller	Rectangular Rapid Flashing Beacon RRFB 15'H Post	2	0%	2	EA	2.965	5.93	\$ 103.2	\$ 612.1	\$ 2,825.0	\$ 5,650.0	\$ 6,262	
494	68	68	DIV-34	Traffic Controller	Dual Rectangular Yellow LED Beacons in Nema Enclosure	2	0%	2	EA	1.695	3.39	\$ 103.2	\$ 349.9	\$ 101.9	\$ 203.7	\$ 554	
495	68	68	DIV-34	Traffic Controller	APS Pushbutton	2	0%	2	EA	0.465	0.93	\$ 103.2	\$ 96.0	\$ 99.0	\$ 198.0	\$ 294	
496	68	68	DIV-34	Traffic Controller	Neman Enclosure	2	0%	2	EA	1.336	2.67	\$ 103.2	\$ 275.8	\$ 189.3	\$ 378.6	\$ 654	
497	68	68	DIV-34	Traffic Controller	Battery System	2	0%	2	EA	1.500	3.00	\$ 103.2	\$ 309.7	\$ 927.0	\$ 1,854.1	\$ 2,164	
498	68	68	DIV-34	Traffic Controller	Solar Panel	2	0%	2	EA	2.554	5.11	\$ 103.2	\$ 527.3	\$ 555.0	\$ 1,110.0	\$ 1,637	
499	67-74	67-74	DIV-34	Traffic Controller	Signal Post	1	0%	1	EA	0.925	0.93	\$ 103.2	\$ 95.5	\$ 71.0	\$ 71.0	\$ 166	
500	67-74	67-74	DIV-34	Traffic Controller	Two-Stage Bicycle Turn Box	2	0%	2	EA	2.526	5.05	\$ 103.2	\$ 521.5	\$ 806.4	\$ 1,612.8	\$ 2,134	
501	67-74	67-74	DIV-34	Traffic Controller	P-5 Post <i>We don't find any detail Please Verify</i>	99	0%	99	EA	0.354	35.05	\$ 103.2	\$ 3,617.7	\$ 125.0	\$ 12,375.0	\$ 15,993	
502	67-74	67-74	DIV-34	Traffic Controller	Dual P-5 Post <i>We don't find any detail Please Verify</i>	11	0%	11	EA	0.254	2.79	\$ 103.2	\$ 288.4	\$ 145.0	\$ 1,595.0	\$ 1,883	
503	67-74	67-74	DIV-34	Traffic Controller	P-5 Post with M.A Support <i>We don't find any detail Please Verify</i>	1	0%	1	EA	0.365	0.37	\$ 103.2	\$ 37.7	\$ 85.0	\$ 85.0	\$ 123	
504	67-74	67-74	DIV-34	Traffic Controller	MNT on Post <i>Note: Please Verify This</i>	43	0%	43	EA	0.254	10.92	\$ 103.2	\$ 1,127.5	\$ 95.0	\$ 4,085.0	\$ 5,212	
505	67-74	67-74	DIV-34	Traffic Controller	MNT(BTB) <i>Note: Please Verify This</i>	6	0%	6	EA	0.655	3.93	\$ 103.2	\$ 405.9	\$ 110.0	\$ 660.0	\$ 1,066	
					Temporary Sign												
506	94	94	DIV-34	Traffic Controller	12x36 R1-6	4	0%	4	EA	0.432	1.73	\$ 103.2	\$ 178.4		\$ -	\$ 178	
507	94	94	DIV-34	Traffic Controller	48"x36" MA-R2-10a	9	0%	9	EA	1.728	15.55	\$ 103.2	\$ 1,605.4		\$ -	\$ 1,605	
508	94	94	DIV-34	Traffic Controller	36"x48" MA-R2-10e	10	0%	10	EA	1.728	17.28	\$ 103.2	\$ 1,783.8		\$ -	\$ 1,784	
509	94	94	DIV-34	Traffic Controller	30x30 R3-7L	2	0%	2	EA	0.900	1.80	\$ 103.2	\$ 185.8		\$ -	\$ 186	
510	94	94	DIV-34	Traffic Controller	30"x30" R3-7R	2	0%	2	EA	0.900	1.80	\$ 103.2	\$ 185.8		\$ -	\$ 186	
511	94	94	DIV-34	Traffic Controller	24"x30" R4-8	1	0%	1	EA	0.720	0.72	\$ 103.2	\$ 74.3		\$ -	\$ 74	
512	94	94	DIV-34	Traffic Controller	24"x12" R9-9	2	0%	2	EA	0.250	0.50	\$ 103.2	\$ 51.6		\$ -	\$ 52	
513	94	94	DIV-34	Traffic Controller	24"x12" R9-10	4	0%	4	EA	0.250	1.00	\$ 103.2	\$ 103.2		\$ -	\$ 103	
514	94	94	DIV-34	Traffic Controller	24"x12" R9-11aL	1	0%	1	EA	0.250	0.25	\$ 103.2	\$ 25.8		\$ -	\$ 26	
515	94	94	DIV-34	Traffic Controller	24"x12" R9-11aR	1	0%	1	EA	0.250	0.25	\$ 103.2	\$ 25.8		\$ -	\$ 26	
516	94	94	DIV-34	Traffic Controller	48"x30" R11-2	2	0%	2	EA	1.440	2.88	\$ 103.2	\$ 297.3		\$ -	\$ 297	

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517	94	94	DIV-34	Traffic Controller	36x36" W1-4L	2	0%	2	EA	1.296	2.59	\$ 103.2	\$ 267.6		\$ -	\$ 268		
518	94	94	DIV-34	Traffic Controller	36"x36" W1-4R	2	0%	2	EA	1.296	2.59	\$ 103.2	\$ 267.6		\$ -	\$ 268		
519	94	94	DIV-34	Traffic Controller	36"x36" W-42L	1	0%	1	EA	1.296	1.30	\$ 103.2	\$ 133.8		\$ -	\$ 134		
520	94	94	DIV-34	Traffic Controller	36"x36" MA-W4-7L	1	0%	1	EA	1.296	1.30	\$ 103.2	\$ 133.8		\$ -	\$ 134		
521	94	94	DIV-34	Traffic Controller	36"x36" W5-1	2	0%	2	EA	1.296	2.59	\$ 103.2	\$ 267.6		\$ -	\$ 268		
522	94	94	DIV-34	Traffic Controller	36"x36" W8-1	4	0%	4	EA	1.296	5.18	\$ 103.2	\$ 535.1		\$ -	\$ 535		
523	94	94	DIV-34	Traffic Controller	36"x36" W8-3	2	0%	2	EA	1.296	2.59	\$ 103.2	\$ 267.6		\$ -	\$ 268		
524	94	94	DIV-34	Traffic Controller	36"x36" W8-8 2EA	2	0%	2	EA	1.296	2.59	\$ 103.2	\$ 267.6		\$ -	\$ 268		
525	94	94	DIV-34	Traffic Controller	36"x36" W8-15	2	0%	2	EA	1.296	2.59	\$ 103.2	\$ 267.6		\$ -	\$ 268		
526	94	94	DIV-34	Traffic Controller	36"x36" W9-2L	1	0%	1	EA	1.296	1.30	\$ 103.2	\$ 133.8		\$ -	\$ 134		
527	94	94	DIV-34	Traffic Controller	30"x30" W11-2	4	0%	4	EA	0.900	3.60	\$ 103.2	\$ 371.6		\$ -	\$ 372		
528	94	94	DIV-34	Traffic Controller	30"x30" W12-1	1	0%	1	EA	0.900	0.90	\$ 103.2	\$ 92.9		\$ -	\$ 93		
529	94	94	DIV-34	Traffic Controller	24"x24" W13-1P	2	0%	2	EA	0.576	1.15	\$ 103.2	\$ 118.9		\$ -	\$ 119		
530	94	94	DIV-34	Traffic Controller	24"x12" W16-7pl	4	0%	4	EA	0.288	1.15	\$ 103.2	\$ 118.9		\$ -	\$ 119		
531	94	94	DIV-34	Traffic Controller	24"x12" W16-9p	4	0%	4	EA	0.288	1.15	\$ 103.2	\$ 118.9		\$ -	\$ 119		
532	94	94	DIV-34	Traffic Controller	36"x36" W20-1	9	0%	9	EA	1.296	11.66	\$ 103.2	\$ 1,204.1		\$ -	\$ 1,204		
533	94	94	DIV-34	Traffic Controller	36"x36" W20-4	2	0%	2	EA	1.296	2.59	\$ 103.2	\$ 267.6		\$ -	\$ 268		
534	94	94	DIV-34	Traffic Controller	36"x36" W20-5L	1	0%	1	EA	1.296	1.30	\$ 103.2	\$ 133.8		\$ -	\$ 134		
535	94	94	DIV-34	Traffic Controller	36"x36" W20-7	2	0%	2	EA	1.296	2.59	\$ 103.2	\$ 267.6		\$ -	\$ 268		
536	94	94	DIV-34	Traffic Controller	36"x36" MA-W20-7b	2	0%	2	EA	1.296	2.59	\$ 103.2	\$ 267.6		\$ -	\$ 268		
537	94	94	DIV-34	Traffic Controller	36"x36" W21-5a	1	0%	1	EA	1.296	1.30	\$ 103.2	\$ 133.8		\$ -	\$ 134		
538	94	94	DIV-34	Traffic Controller	30"x24" M4-9BR	4	0%	4	EA	0.720	2.88	\$ 103.2	\$ 297.3		\$ -	\$ 297		
539	94	94	DIV-34	Traffic Controller	30"x24" M4-9BL	3	0%	3	EA	0.720	2.16	\$ 103.2	\$ 223.0		\$ -	\$ 223		
SUB TOTAL											Total Lab. Hours = \$	31,594	Total Lab	\$ 3,869,177	Total Mat. C	\$ 1,694,456	\$ 5,563,632	\$ 5,112,027
MATERIAL TAX											9.5%		\$ 160,973	\$ 160,973	\$ 160,973			
OVERHEAD AND P											12%		\$ 464,301	\$ 203,335	\$ 667,636	\$ 667,636		
TOTAL BASE BID													\$ 4,333,478	\$ 2,058,764	\$ 6,392,241	\$ 5,940,636		

COST SUMMARY

Date: 1/4/2022
Project: \$ -
Project Location: \$ -

Project Type: Public
Scope of Work: GC
Total Base Bid: \$ 6,488,125

BASE BID /ALTERNATES/ALLOWANCES	TOTAL COSTS
<i>Base bid</i>	\$ 6,488,125
<i>By Others</i>	\$ -

Please see "BY OTHERS" Tab.

For Client's Use Only

CSI Summary for Base Bid					
Div. No.	CSI Division	Labor Cost	Material Cost	Total Cost	% of sub-total cost
DIV-01	General Requirements	\$ 451,605	\$ -	\$ 451,605	8.1%
DIV-02	Existing conditions	\$ 258,304	\$ -	\$ 258,304	4.6%
DIV-31	Earthwork	\$ 415,532	\$ -	\$ 415,532	7.5%
DIV-32	Exterior Improvements	\$ 1,922,464	\$ 1,293,657	\$ 3,216,121	57.8%
DIV-33	Utilities	\$ 731,526	\$ 300,828	\$ 1,032,354	18.6%
DIV-34	Transportation	\$ 89,745	\$ 99,971	\$ 189,715	3.4%
SUB TOTAL		\$ 3,869,177	\$ 1,694,456	\$ 5,563,632	
MATERIAL TAX			\$ 160,973	\$ 160,973	9.5%
OVERHEAD AND PROFIT		\$464,301.20	\$ 203,334.68	\$ 667,636	12.0%
Bond Fee				\$ 95,884	1.5%
TOTAL BASE BID				\$ 6,488,125	

Comparison with Sub-Quotes	
Enter Sub-Quotes here	Difference
	\$ 451,605
	\$ 258,304
	\$ 415,532
	\$ 3,216,121
	\$ 1,032,354
	\$ 189,715
	\$ 5,563,632
	\$ 160,973
	\$ 667,636
	\$ 95,884
	\$ 6,488,125

For Client's Use Only

Sub-Contractor/Trade Summary for Base Bid				
Sub Contractor	Labor Cost	Material Cost	Total Cost	% of sub-total
General Requirements	\$ 451,605	\$ -	\$ 451,605	8.1%
Asbestos Worker	\$ 44,447	\$ -	\$ 44,447	0.8%
Demo - Site	\$ 213,858	\$ -	\$ 213,858	3.8%
Site Concrete	\$ 591,996	\$ 216,794	\$ 808,790	14.5%
Brick Veneer	\$ 1,301	\$ 683	\$ 1,983	0.0%
Cast Stone	\$ 535	\$ 510	\$ 1,045	0.0%
Mason - CMU	\$ 104,882	\$ 50,629	\$ 155,511	2.8%
Ornamental Steel	\$ 952	\$ 1,197	\$ 2,149	0.0%
Staircases and Railings - Me	\$ 21,741	\$ 40,687	\$ 62,428	1.1%
Water Proofing	\$ 3,638	\$ 487	\$ 4,125	0.1%
Site Paint	\$ 28,342	\$ 40,452	\$ 68,794	1.2%
Site Signage	\$ 10,604	\$ 8,115	\$ 18,719	0.3%
Site Furnishing	\$ 2,625	\$ 5,887	\$ 8,512	0.2%
Site Electrical	\$ 60,921	\$ 192,375	\$ 253,296	4.6%
Earth worker	\$ 415,532	\$ -	\$ 415,532	7.5%
Fencing and Gates - Metal	\$ 4,444	\$ 1,208	\$ 5,651	0.1%
Fencing and Gates - Wood	\$ 12,276	\$ 4,117	\$ 16,393	0.3%
Landscaper	\$ 482,762	\$ 143,136	\$ 625,898	11.2%
Traffic Controller	\$ 89,745	\$ 99,971	\$ 189,715	3.4%
Paving	\$ 595,447	\$ 587,380	\$ 1,182,827	21.3%
Utilities	\$ 731,526	\$ 300,828	\$ 1,032,354	18.6%
SUB TOTAL	\$ 3,869,177	\$ 1,694,456	\$ 5,563,632	
MATERIAL TAX		\$ 160,973	\$ 160,973	9.5%
OVERHEAD AND PROFIT	\$464,301.20	\$ 203,334.68	\$ 667,636	12.0%
Bond Fee			\$ 95,884	1.50%
TOTAL BASE BID			\$ 6,488,125	

Comparison with Sub-Quotes	
Enter Sub-Quotes here	Difference
	\$ 451,605
	\$ 44,447
	\$ 213,858
	\$ 808,790
	\$ 1,983
	\$ 1,045
	\$ 155,511
	\$ 2,149
	\$ 62,428
	\$ 4,125
	\$ 68,794
	\$ 18,719
	\$ 8,512
	\$ 253,296
	\$ 415,532
	\$ 5,651
	\$ 16,393
	\$ 625,898
	\$ 189,715
	\$ 1,182,827
	\$ 1,032,354
	\$ 5,563,632
	\$ 160,973
	\$ 667,636
	\$ 95,884
	\$ 6,488,125

HIGHWAY GUARDRAIL DETAILS

ITEM 627.82 GUARDRAIL TANGENT END TREATMENT, TL-2 (STA. 12+50 RT TO STA. 12+82 RT)
 ITEM 620.12 GUARDRAIL, TL-2 (SINGLE FACED) (STA. 12+82 RT TO STA. 13+75 RT)
 ITEM 627.1 TRAILING ANCHORAGE (STA. 13+75 RT)

TRAFFIC SIGNAL CONDUIT

SEE SHEET 77

WATER SUPPLY ALTERATIONS

NONE

DRAINAGE DETAILS

SEE SHEET 59

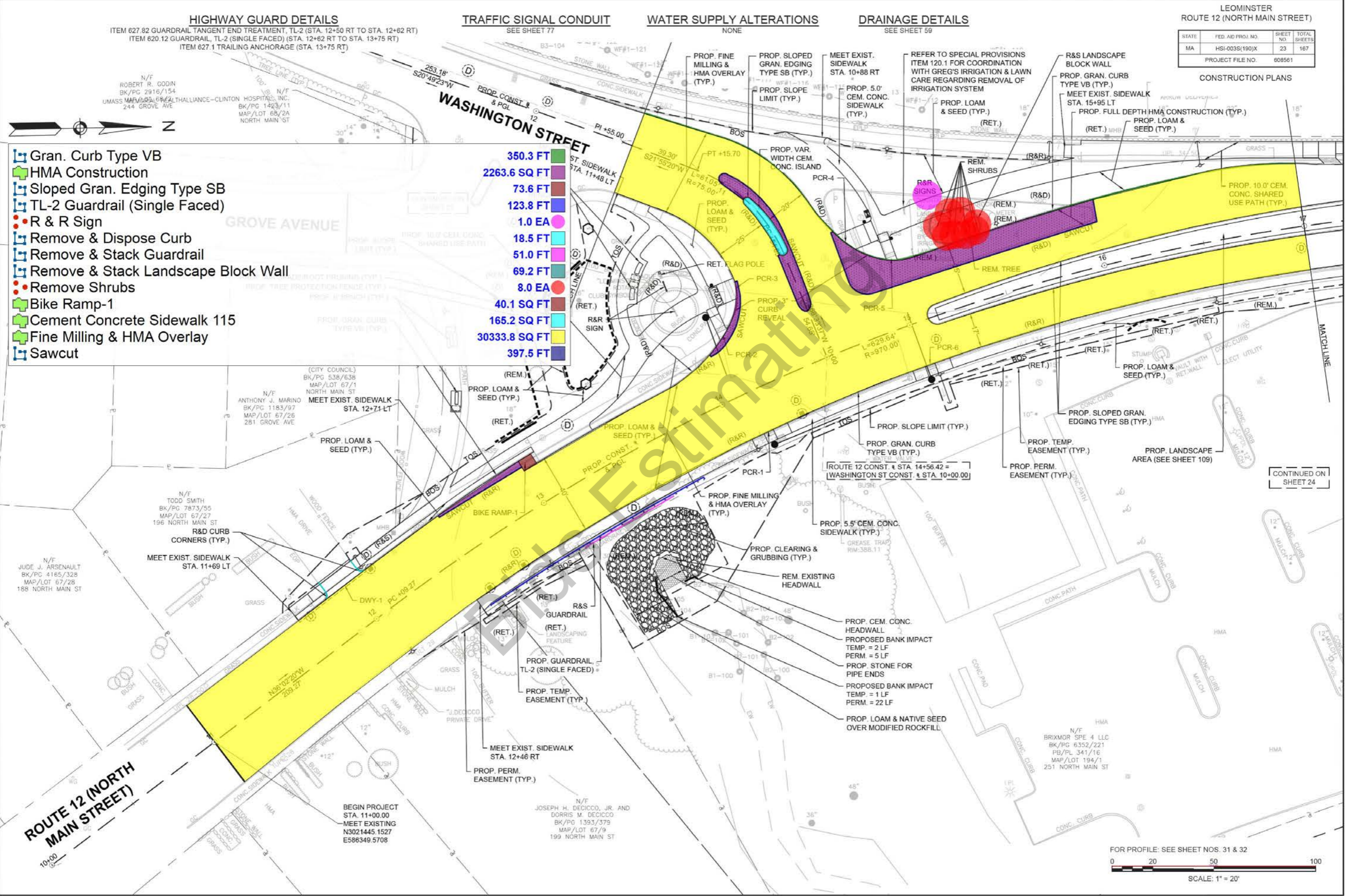
LEOMINSTER
 ROUTE 12 (NORTH MAIN STREET)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	23	167
PROJECT FILE NO.		608561	

CONSTRUCTION PLANS

- Gran. Curb Type VB
- HMA Construction
- Sloped Gran. Edging Type SB
- TL-2 Guardrail (Single Faced)
- R & R Sign
- Remove & Dispose Curb
- Remove & Stack Guardrail
- Remove & Stack Landscape Block Wall
- Remove Shrubs
- Bike Ramp-1
- Cement Concrete Sidewalk 115
- Fine Milling & HMA Overlay
- Sawcut

- 350.3 FT
- 2263.6 SQ FT
- 73.6 FT
- 123.8 FT
- 1.0 EA
- 18.5 FT
- 51.0 FT
- 69.2 FT
- 8.0 EA
- 40.1 SQ FT
- 165.2 SQ FT
- 30333.8 SQ FT
- 397.5 FT



ROUTE 12 (NORTH MAIN STREET)

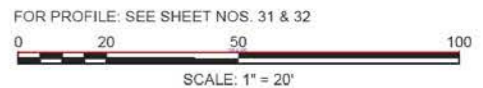
10,000

BEGIN PROJECT
 STA. 11+00.00
 MEET EXISTING
 N3021445.1527
 E586349.5708

N/F
 JOSEPH H. DECICCO, JR. AND
 DORRIS M. DECICCO
 BK/PG 1393/379
 MAP/LOT 67/9
 199 NORTH MAIN ST

N/F
 BRIMMOR SPE 4 LLC
 BK/PG 6352/221
 PB/PL 341/16
 MAP/LOT 194/1
 251 NORTH MAIN ST

CONTINUED ON
 SHEET 24



FOR PROFILE: SEE SHEET NOS. 31 & 32

Z HIGHWAY GUARD DETAILS

TRAFFIC SIGNAL CONDUIT

WATER SUPPLY ALTERATIONS

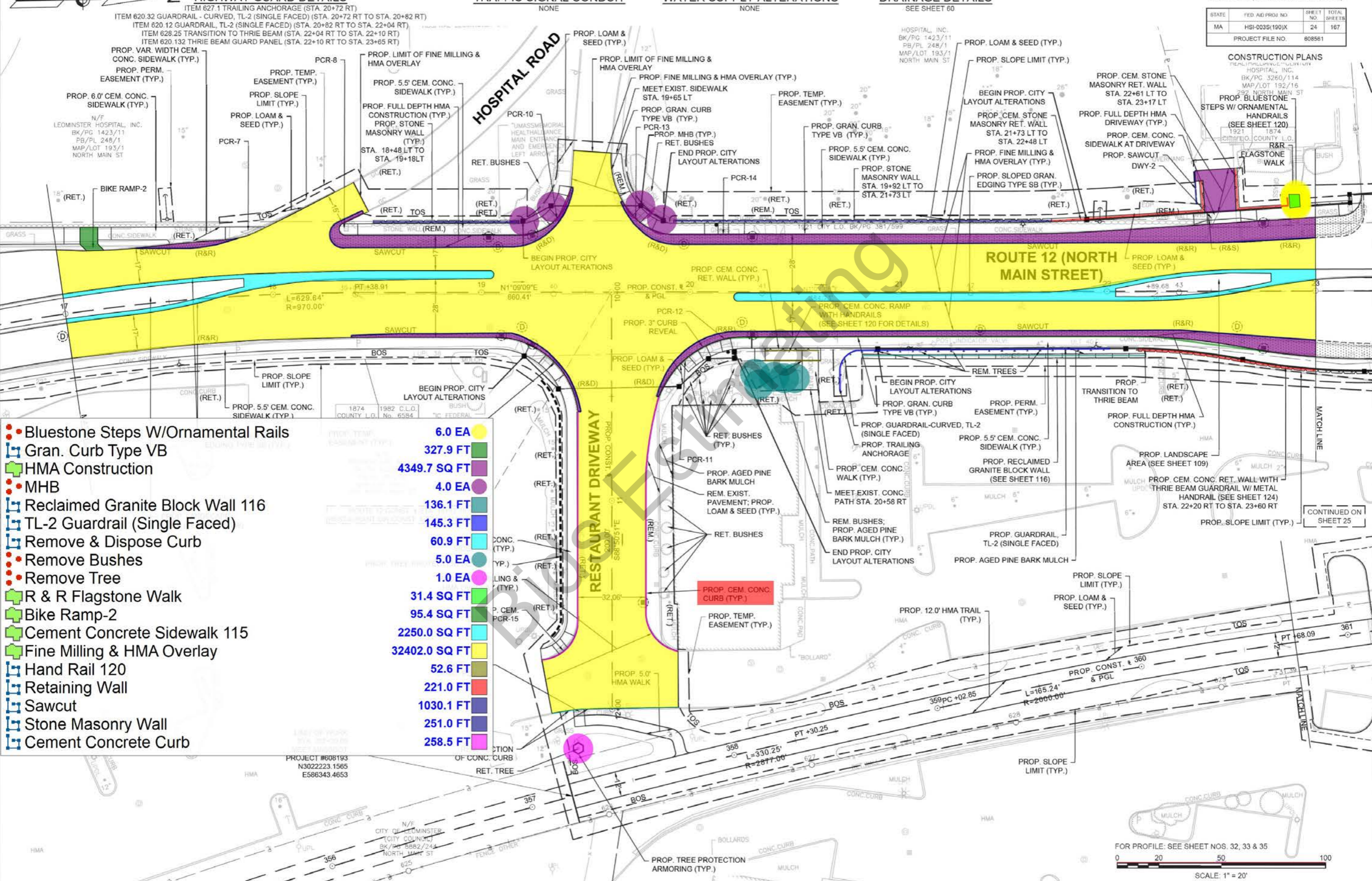
DRAINAGE DETAILS

ROUTE 12 (NORTH MAIN STREET)

STATE	FED AID PROJ NO	SHEET NO	TOTAL SHEETS
MA	HSI-003S(190)X	24	167
PROJECT FILE NO.			808581

CONSTRUCTION PLANS

HOSPITAL, INC.
 BK/PG 3260/114
 MAP/LOT 192/15
 297 NORTH MAIN ST
 CHATHAM COUNTY, G.O.
 1921 1874



- Bluestone Steps W/Ornamental Rails
- Gran. Curb Type VB
- HMA Construction
- MHB
- Reclaimed Granite Block Wall 116
- TL-2 Guardrail (Single Faced)
- Remove & Dispose Curb
- Remove Bushes
- Remove Tree
- R & R Flagstone Walk
- Bike Ramp-2
- Cement Concrete Sidewalk 115
- Fine Milling & HMA Overlay
- Hand Rail 120
- Retaining Wall
- Sawcut
- Stone Masonry Wall
- Cement Concrete Curb

- 6.0 EA
- 327.9 FT
- 4349.7 SQ FT
- 4.0 EA
- 136.1 FT
- 145.3 FT
- 60.9 FT
- 5.0 EA
- 1.0 EA
- 31.4 SQ FT
- 95.4 SQ FT
- 2250.0 SQ FT
- 32402.0 SQ FT
- 52.6 FT
- 221.0 FT
- 1030.1 FT
- 251.0 FT
- 258.5 FT

FOR PROFILE: SEE SHEET NOS. 32, 33 & 35
 0 20 50 100
 SCALE: 1" = 20'

HIGHWAY GUARD DETAILS

ITEM 620.132 THRIE BEAM GUARD PANEL (STA. 22+10 RT TO STA. 23+65 RT)
 ITEM 628.25 TRANSITION TO THRIE BEAM (STA. 23+65 RT TO STA. 23+71 RT)
 ITEM 627.1 TRAILING ANCHORAGE (STA. 23+71 TO STA. 23+81 RT)

TRAFFIC SIGNAL CONDUIT

SEE SHEET 79

WATER SUPPLY ALTERATIONS

NONE

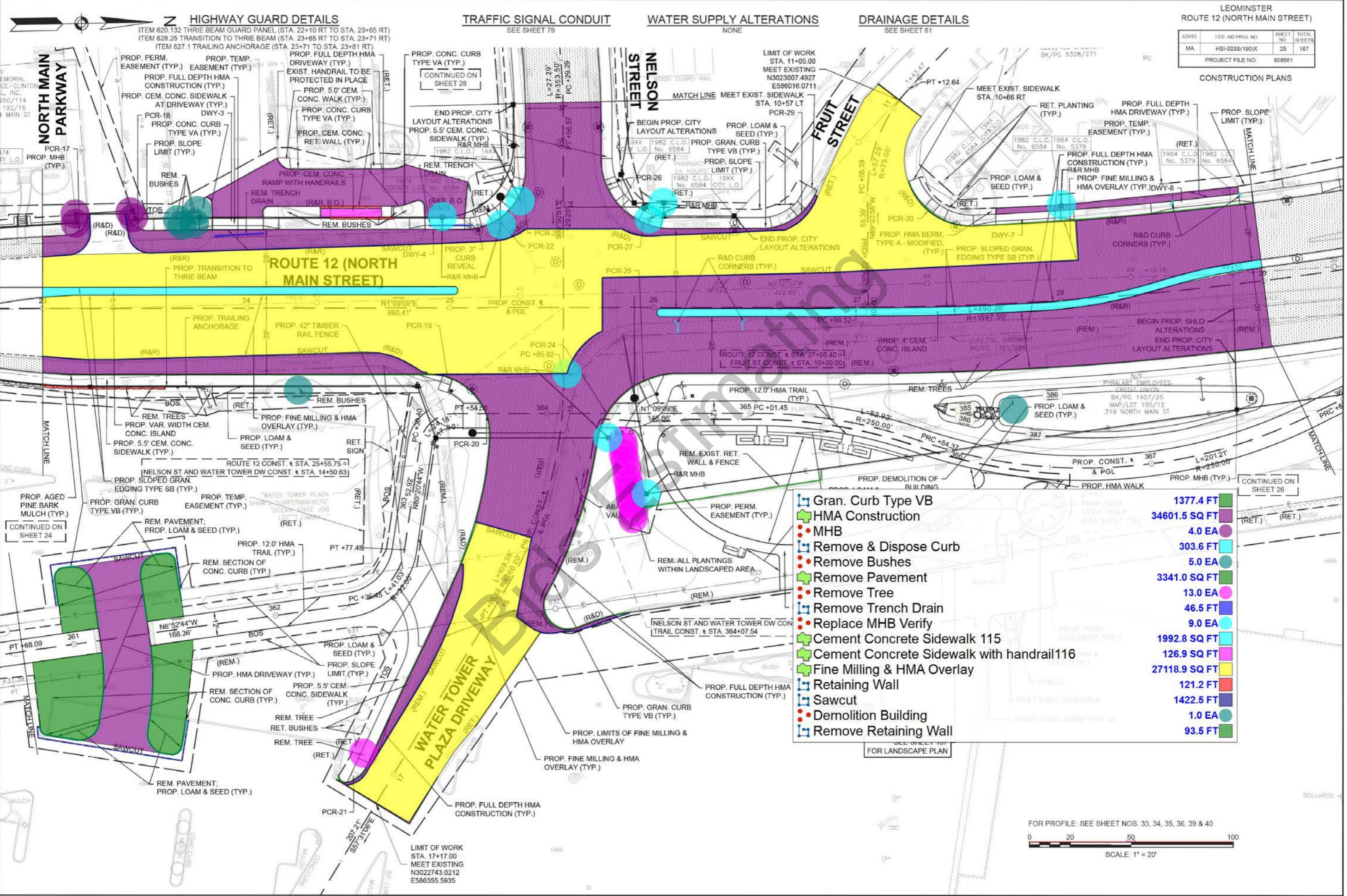
DRAINAGE DETAILS

SEE SHEET 61

ROUTE 12 (NORTH MAIN STREET)

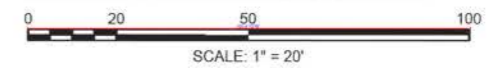
STATE	FED AID PROJ NO	SHEET NO	TOTAL SHEETS
MA	HSI-003S(190)X	25	167
PROJECT FILE NO.		808581	

CONSTRUCTION PLANS



	Gran. Curb Type VB		1377.4 FT
	HMA Construction		34601.5 SQ FT
	MHB		4.0 EA
	Remove & Dispose Curb		303.6 FT
	Remove Bushes		5.0 EA
	Remove Pavement		3341.0 SQ FT
	Remove Tree		13.0 EA
	Remove Trench Drain		46.5 FT
	Replace MHB Verify		9.0 EA
	Cement Concrete Sidewalk 115		1992.8 SQ FT
	Cement Concrete Sidewalk with handrail 116		126.9 SQ FT
	Fine Milling & HMA Overlay		27118.9 SQ FT
	Retaining Wall		121.2 FT
	Sawcut		1422.5 FT
	Demolition Building		1.0 EA
	Remove Retaining Wall		93.5 FT

FOR PROFILE: SEE SHEET NOS. 33, 34, 35, 36, 39 & 40

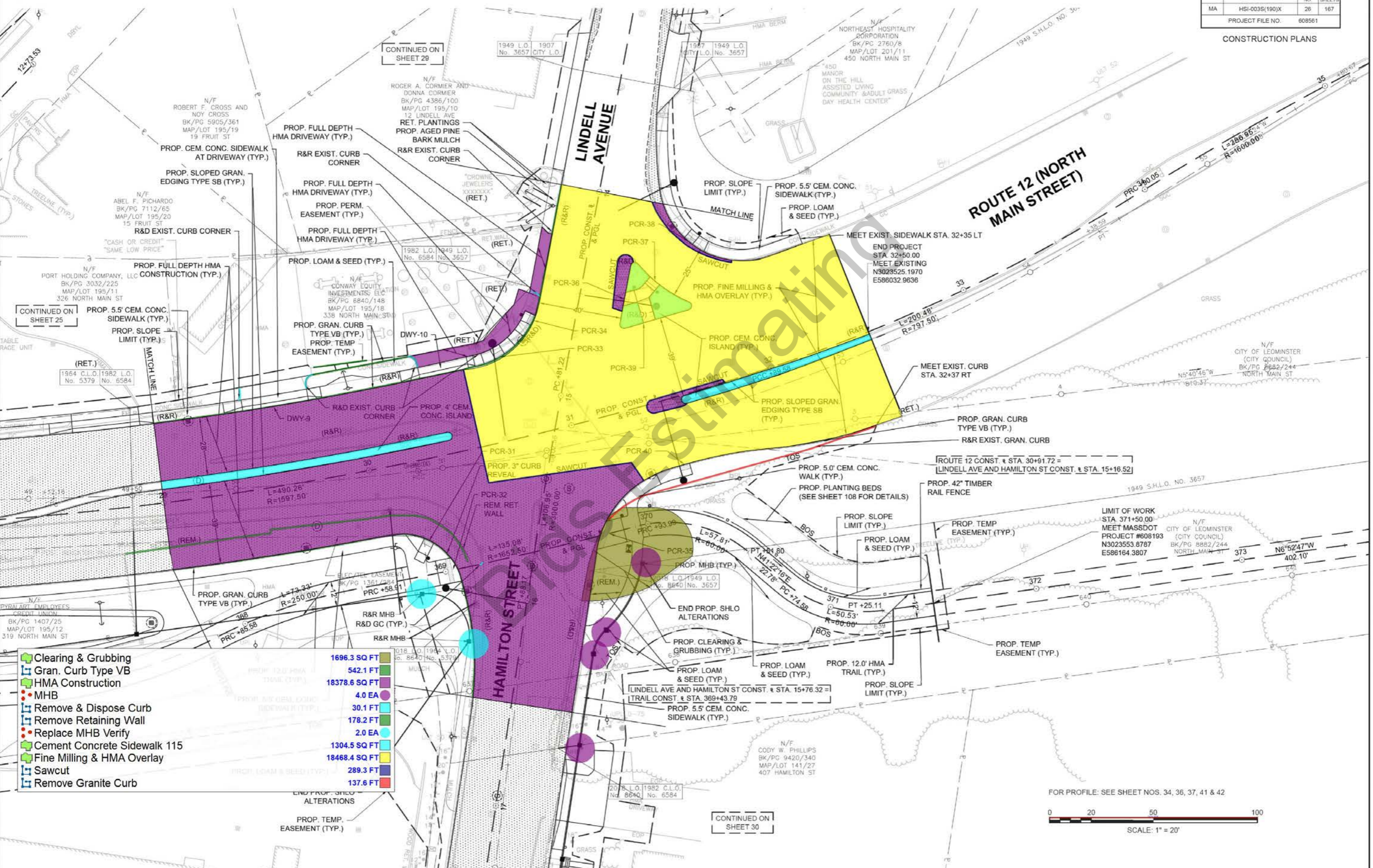


LIMIT OF WORK
 STA. 17+17.00
 MEET EXISTING
 N3022743.0212
 E586355.5935

CONTINUED ON
 SHEET 26

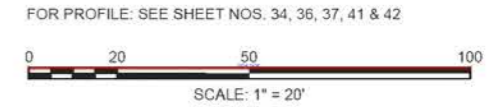
CONTINUED ON
 SHEET 24

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	26	167
PROJECT FILE NO.		608561	



- Clearing & Grubbing
- Gran. Curb Type VB
- HMA Construction
- MHB
- Remove & Dispose Curb
- Remove Retaining Wall
- Replace MHB Verify
- Cement Concrete Sidewalk 115
- Fine Milling & HMA Overlay
- Sawcut
- Remove Granite Curb

■	1696.3 SQ FT
■	542.1 FT
■	18378.6 SQ FT
●	4.0 EA
■	30.1 FT
●	178.2 FT
■	2.0 EA
■	1304.5 SQ FT
■	18468.4 SQ FT
■	289.3 FT
■	137.6 FT



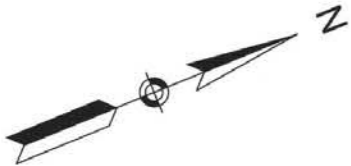
CONTINUED ON SHEET 30

CONTINUED ON SHEET 25

CONTINUED ON SHEET 29

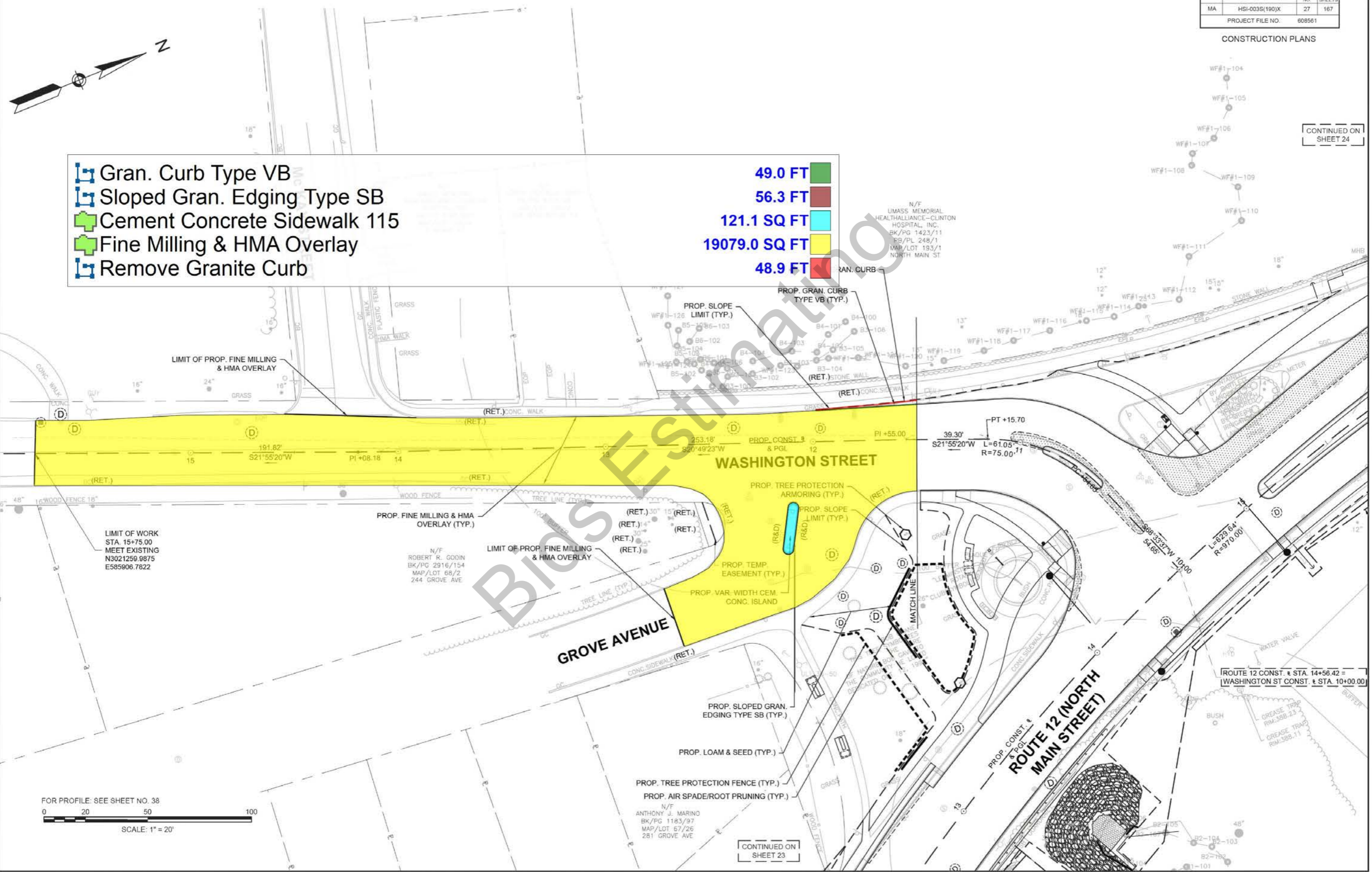
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	27	167
PROJECT FILE NO.		608561	

CONTINUED ON SHEET 24



- Gran. Curb Type VB
- Sloped Gran. Edging Type SB
- Cement Concrete Sidewalk 115
- Fine Milling & HMA Overlay
- Remove Granite Curb

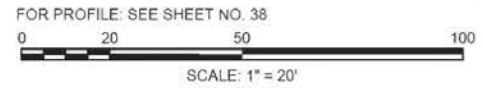
- 49.0 FT
- 56.3 FT
- 121.1 SQ FT
- 19079.0 SQ FT
- 48.9 FT



LIMIT OF WORK
STA. 15+75.00
MEET EXISTING
N3021259.9875
E585906.7622

N/F
ROBERT R. GODIN
BK/PG 2916/154
MAP/LOT 66/2
244 GROVE AVE

N/F
ANTHONY J. MARINO
BK/PG 1183/97
MAP/LOT 67/26
281 GROVE AVE



CONTINUED ON SHEET 23

ROUTE 12 CONST. + STA. 14+56.42 =
WASHINGTON ST CONST. + STA. 10+00.00

HIGHWAY GUARD DETAILS
 ITEM 627.1 TRAILING ANCHORAGE (STA. 10+91 TO STA. 11+00)
 ITEM 620.12 GUARDRAIL, TL-2 (SINGLE FACED) (STA. 11+00 TO STA. 11+74)
 ITEM 627.82 GUARDRAIL TANGENT END TREATMENT, TL-2 (STA. 11+74 TO STA. 11+86)

TRAFFIC SIGNAL CONDUIT
 NONE

WATER SUPPLY ALTERATIONS
 NONE

DRAINAGE DETAILS
 SEE SHEET 64

LEOMINSTER
 ROUTE 12 (NORTH MAIN STREET)

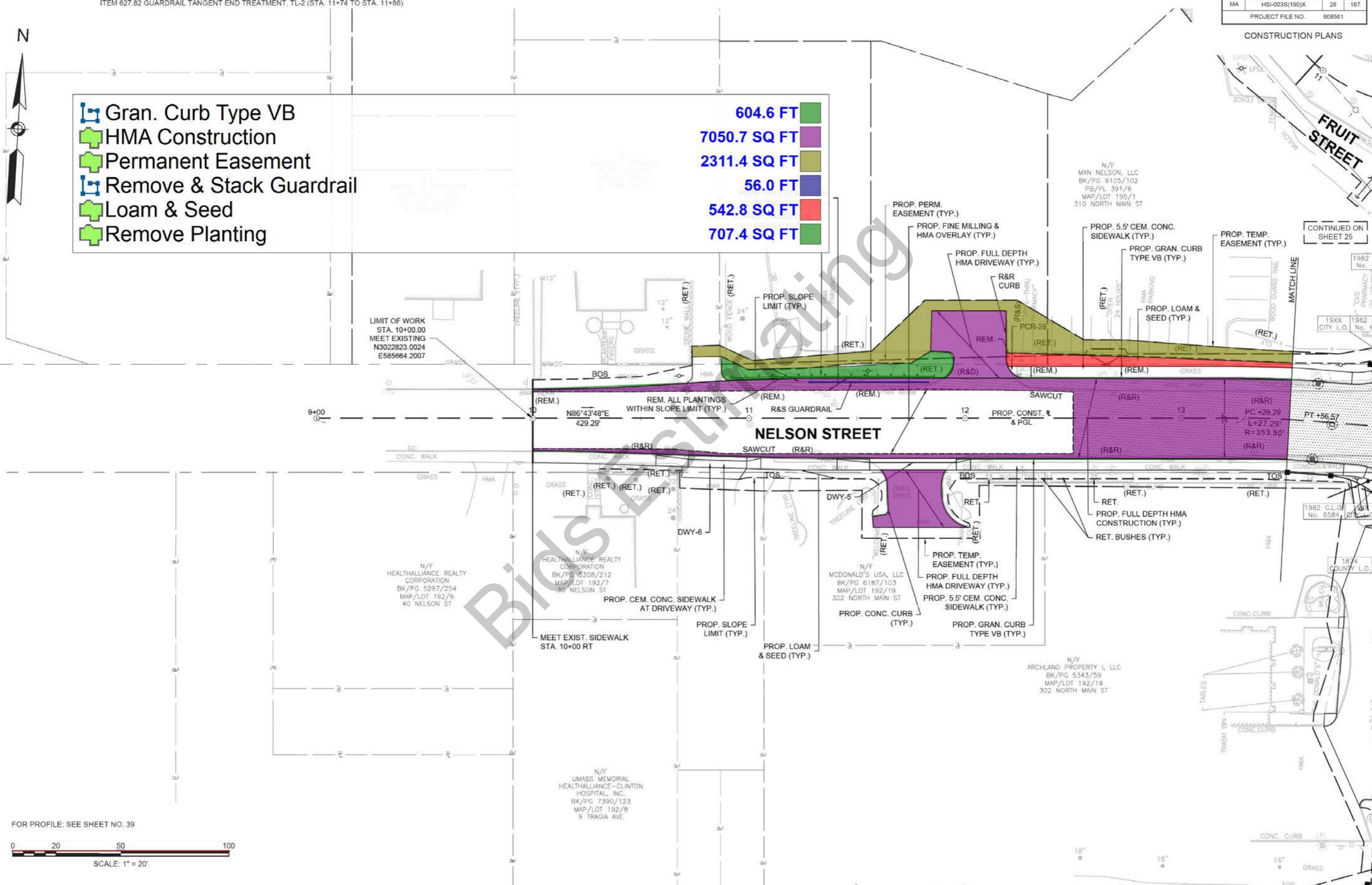
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	28	167
PROJECT FILE NO.		608561	

CONSTRUCTION PLANS

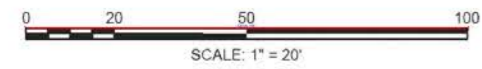


- Gran. Curb Type VB
- HMA Construction
- Permanent Easement
- Remove & Stack Guardrail
- Loam & Seed
- Remove Planting

- 604.6 FT
- 7050.7 SQ FT
- 2311.4 SQ FT
- 56.0 FT
- 542.8 SQ FT
- 707.4 SQ FT









FOR PROFILE: SEE SHEET NO. 39



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	29	167
PROJECT FILE NO.		608561	



-  Gran. Curb Type VB
-  HMA Construction
-  Cement Concrete Sidewalk 115
-  Fine Milling & HMA Overlay

-  319.6 FT
-  1688.9 SQ FT
-  244.0 SQ FT
-  6710.2 SQ FT

Bids Estimating

10+00 S59°52'46"E
31.04' PC +31.04

L=191.46'
R=600.00' 11

PT+22.50
PROP CONST & PGL
S78°08'46"E
258.72'

LINDELL AVENUE

LIMIT OF WORK
STA. 11+85.00
MEET EXISTING
N3023442 2388
E585752 7695

PROP. EDGE OF PVMT. (TYP.)

N/F
LYNN B. TAYLOR
BK/PG 9186/224
MAP/LOT 195/6
45 FRUIT ST

PROP. GRAN. CURB
TYPE VB (TYP.)

PROP. FULL DEPTH
HMA DRIVEWAY (TYP.)

N/F
DONALD COSTA II
BK/PG 9021/287
MAP/LOT 195/7
37 FRUIT ST

PROP. FULL DEPTH HMA
CONSTRUCTION (TYP.)

N/F
JAMES J. ORDILE
BK/PG 6864/254
MAP/LOT 195/8
33 FRUIT ST

PROP. FULL DEPTH HMA DRIVEWAY (TYP.)

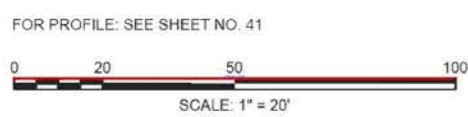
N/F
TINA BLOXSON
BK/PG 7324/72
MAP/LOT 195/9
14 LINDELL AVE

PROP. FULL DEPTH HMA DRIVEWAY (TYP.)

RET. PLANTINGS

N/F
ROGER A. CORMIER AND
DONNA CORMIER
BK/PG 4386/100
MAP/LOT 195/10
12 LINDELL AVE

N/F
ROBERT F. CROSS AND
NOY CROSS
BK/PG 5905/361
MAP/LOT 195/19
19 FRUIT ST



CONTINUED ON
SHEET 26

HIGHWAY GUARD DETAILS

NONE

TRAFFIC SIGNAL CONDUIT

NONE

WATER SUPPLY ALTERATIONS

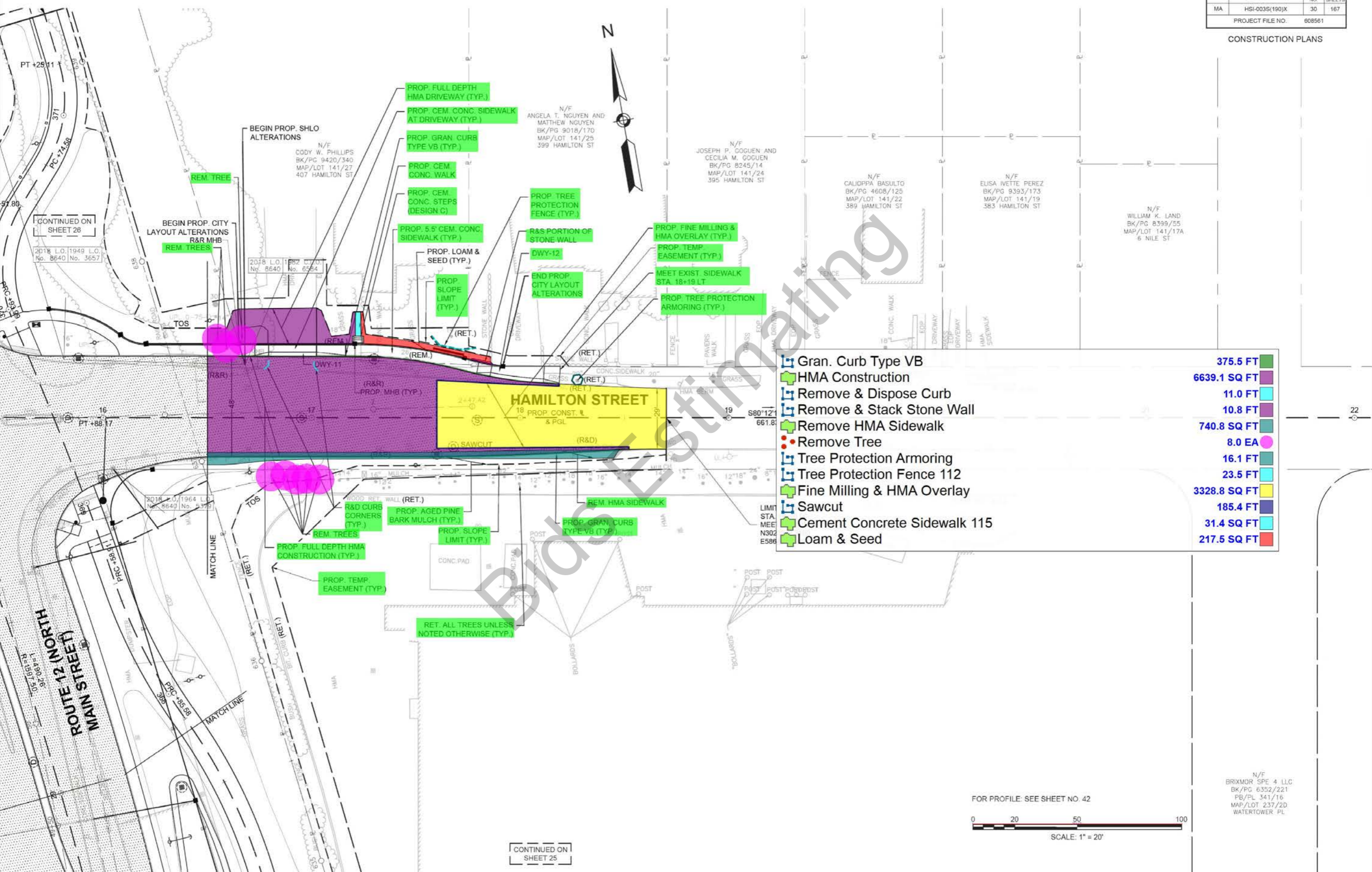
SEE SHEET 66

DRAINAGE DETAILS

SEE SHEET 66

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	30	167
PROJECT FILE NO. 608561			

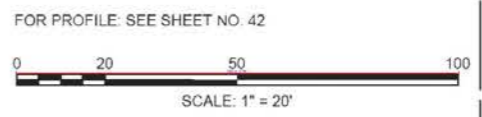
CONSTRUCTION PLANS



- Gran. Curb Type VB
- HMA Construction
- Remove & Dispose Curb
- Remove & Stack Stone Wall
- Remove HMA Sidewalk
- Remove Tree
- Tree Protection Armoring
- Tree Protection Fence 112
- Fine Milling & HMA Overlay
- Sawcut
- Cement Concrete Sidewalk 115
- Loam & Seed

	375.5 FT
	6639.1 SQ FT
	11.0 FT
	10.8 FT
	740.8 SQ FT
	8.0 EA
	16.1 FT
	23.5 FT
	3328.8 SQ FT
	185.4 FT
	31.4 SQ FT
	217.5 SQ FT

CONTINUED ON SHEET 25



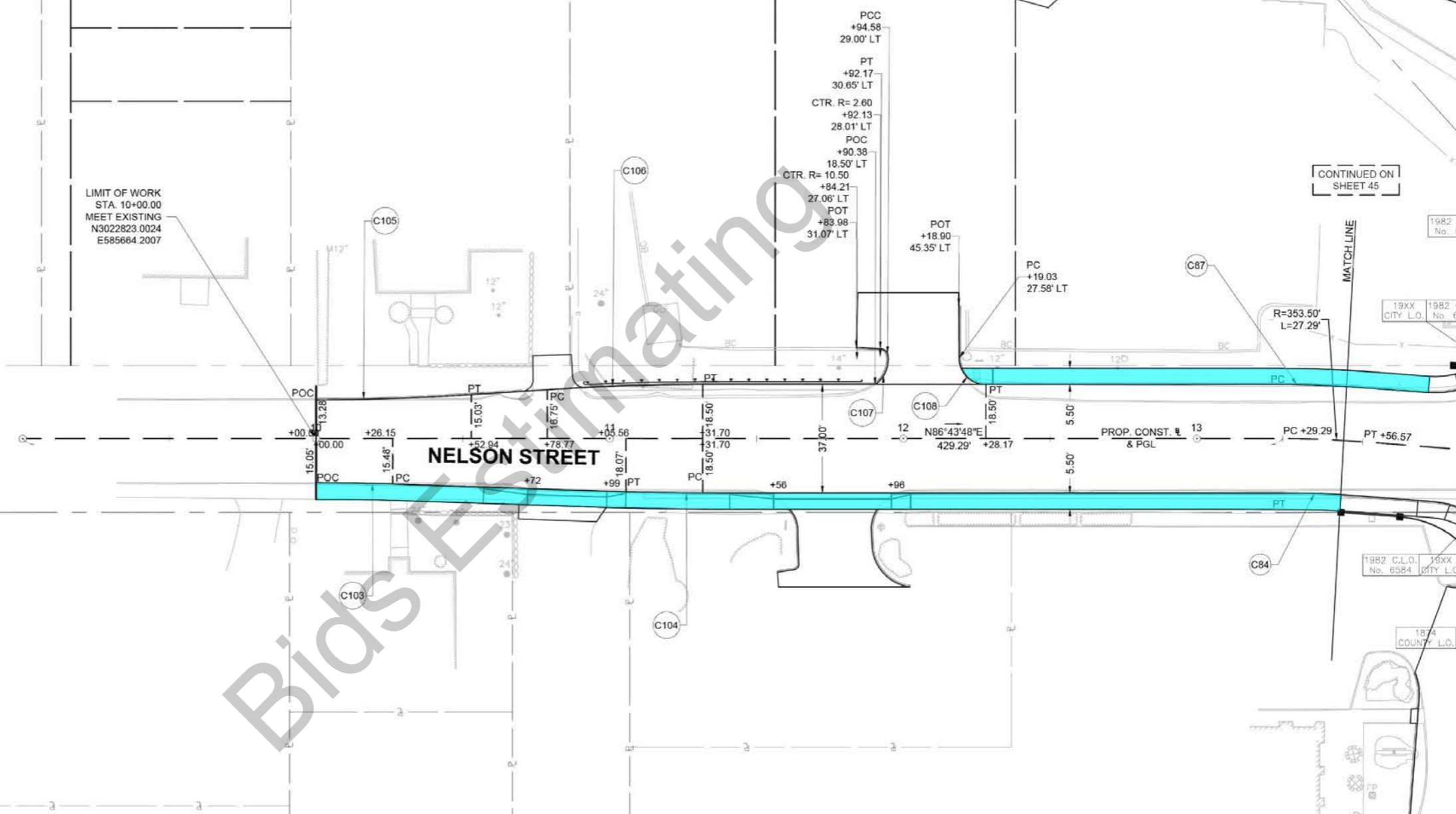
N/F
BRIXMOR SPE 4 LLC
BK/PG 6352/221
PB/PL 341/16
MAP/LOT 237/2D
WATERTOWER PL

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	47	187
PROJECT FILE NO.		608561	

CURB TIE PLANS



LIMIT OF WORK
STA. 10+00.00
MEET EXISTING
N3022823.0024
E585664.2007



CONTINUED ON
SHEET 45

1982 C.L.O.
No. 6584

19XX CITY L.O. 1982 C.L.O.
No. 6584

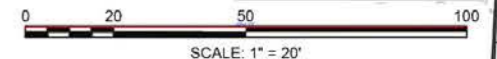
1982 C.L.O. 19XX
No. 6584 CITY L.O.

1874 COUNTY L.O. 1982
No. 6584

NELSON STREET

 Cement Concrete Sidewalk 115

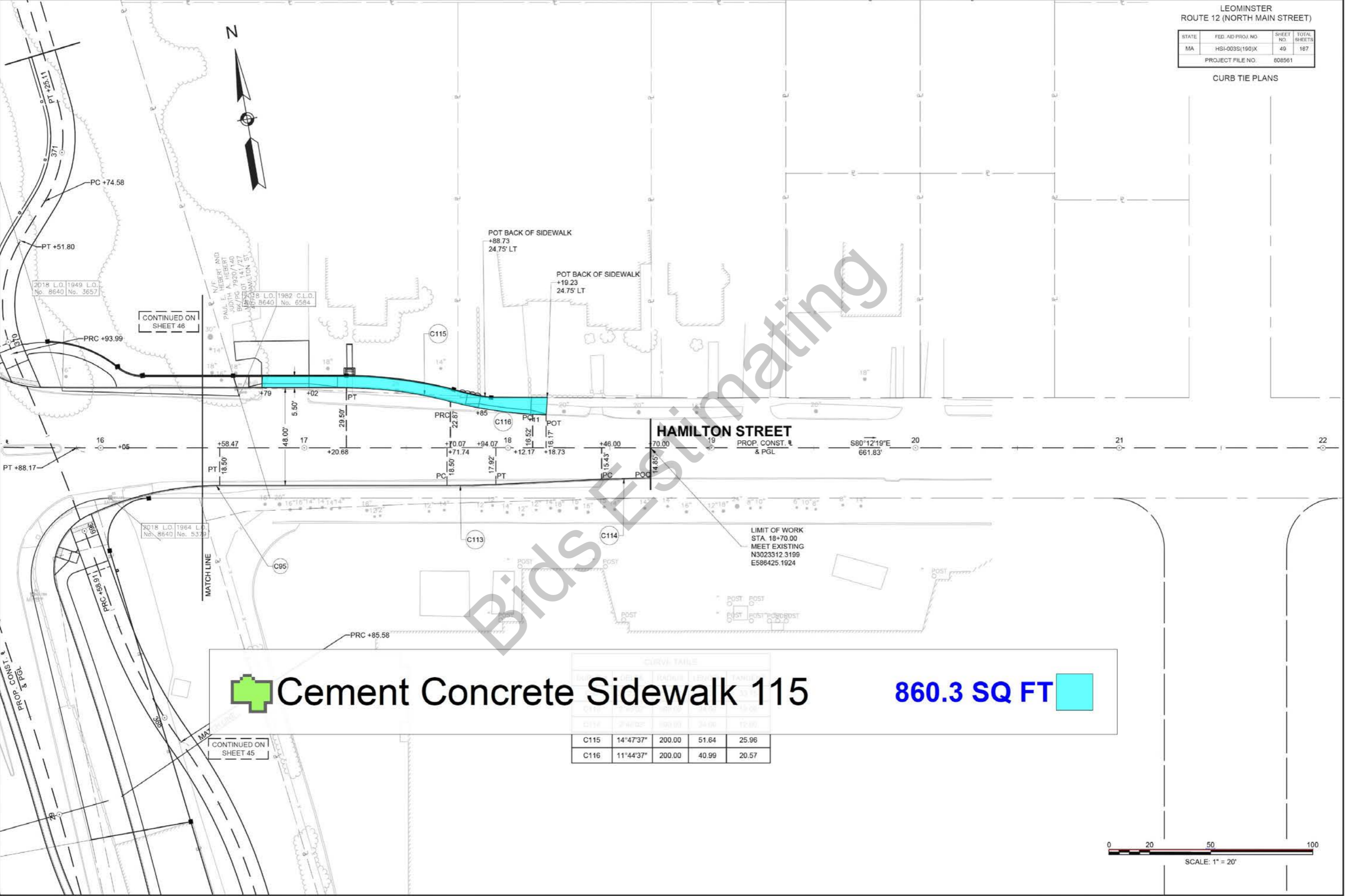
CURVE #	ANGLE	CHORD	CHORD BEARING	PERCENT
2765.8 SQ FT				
C87	4°25'21"	372.00	28.71	14.36
C103	1°52'23"	800.00	26.15	13.08
C104	1°52'23"	800.00	26.15	13.08
C105	3°47'39"	800.00	52.98	26.50
C106	3°47'39"	800.00	52.97	26.50
C107	64°48'09"	11.00	11.94	6.70
C108	90°51'51"	9.00	14.27	9.14



(PRIVATE)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	49	187
PROJECT FILE NO.		608561	

CURB TIE PLANS



CONTINUED ON SHEET 46

CONTINUED ON SHEET 45

HAMILTON STREET

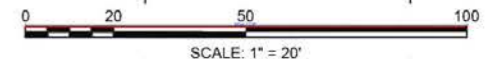
LIMIT OF WORK STA. 18+70.00
MEET EXISTING
N3023312.3199
E586425.1924



Cement Concrete Sidewalk 115

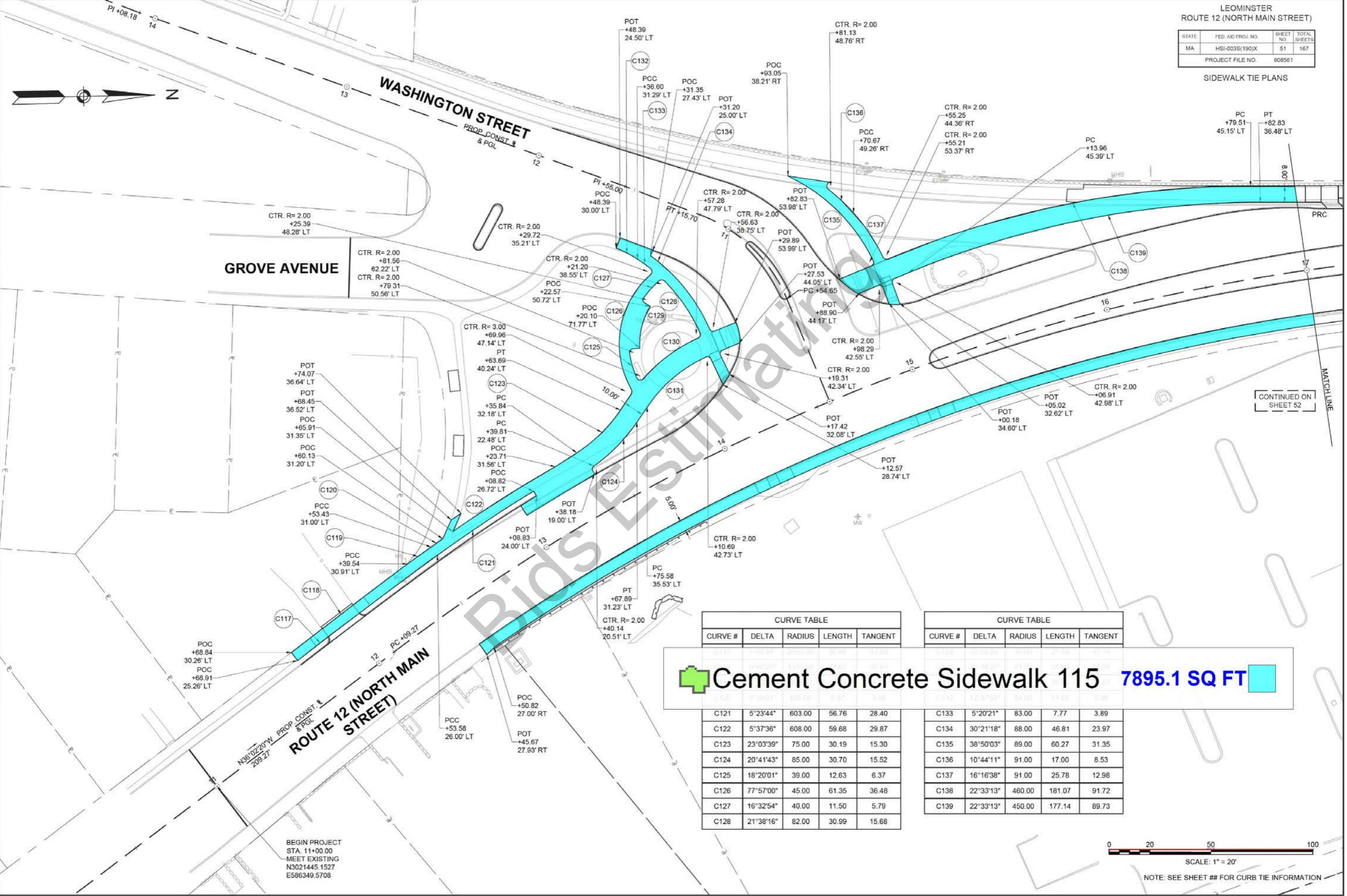
860.3 SQ FT

CURB	CURB TIE			
	WIDTH	RADIUS	AREA	TANGENT
C115	14"47'37"	200.00	51.64	25.96
C116	11"44'37"	200.00	40.99	20.57



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	51	167
PROJECT FILE NO. 608561			

SIDEWALK TIE PLANS



GROVE AVENUE

CTR. R=2.00
+81.56
62.22' LT
CTR. R=2.00
+79.31
50.56' LT

POT +74.07
36.04' LT
POT +68.45
36.52' LT
POC +65.91
31.35' LT
POC +60.13
31.20' LT

PCC +53.43
31.00' LT
PCC +39.54
30.91' LT

POC +68.84
30.26' LT
POC +68.91
25.26' LT

ROUTE 12 (NORTH MAIN STREET)
N36°02'20"W PROP. CONST. & PGL
209.27

BEGIN PROJECT
STA. 11+00.00
MEET EXISTING
N3021445 1527
E586349.5708

CURVE TABLE				
CURVE #	DELTA	RADIUS	LENGTH	TANGENT
C121	5°23'44"	603.00	56.76	28.40
C122	5°37'36"	608.00	59.68	29.87
C123	23°03'39"	75.00	30.19	15.30
C124	20°41'43"	85.00	30.70	15.52
C125	18°20'01"	39.00	12.63	6.37
C126	77°57'00"	45.00	61.35	36.48
C127	16°32'54"	40.00	11.50	5.79
C128	21°38'16"	82.00	30.99	15.68

CURVE TABLE				
CURVE #	DELTA	RADIUS	LENGTH	TANGENT
C133	5°20'21"	83.00	7.77	3.89
C134	30°21'18"	88.00	46.81	23.97
C135	38°50'03"	89.00	60.27	31.35
C136	10°44'11"	91.00	17.00	8.53
C137	16°16'38"	91.00	25.78	12.98
C138	22°33'13"	460.00	181.07	91.72
C139	22°33'13"	450.00	177.14	89.73

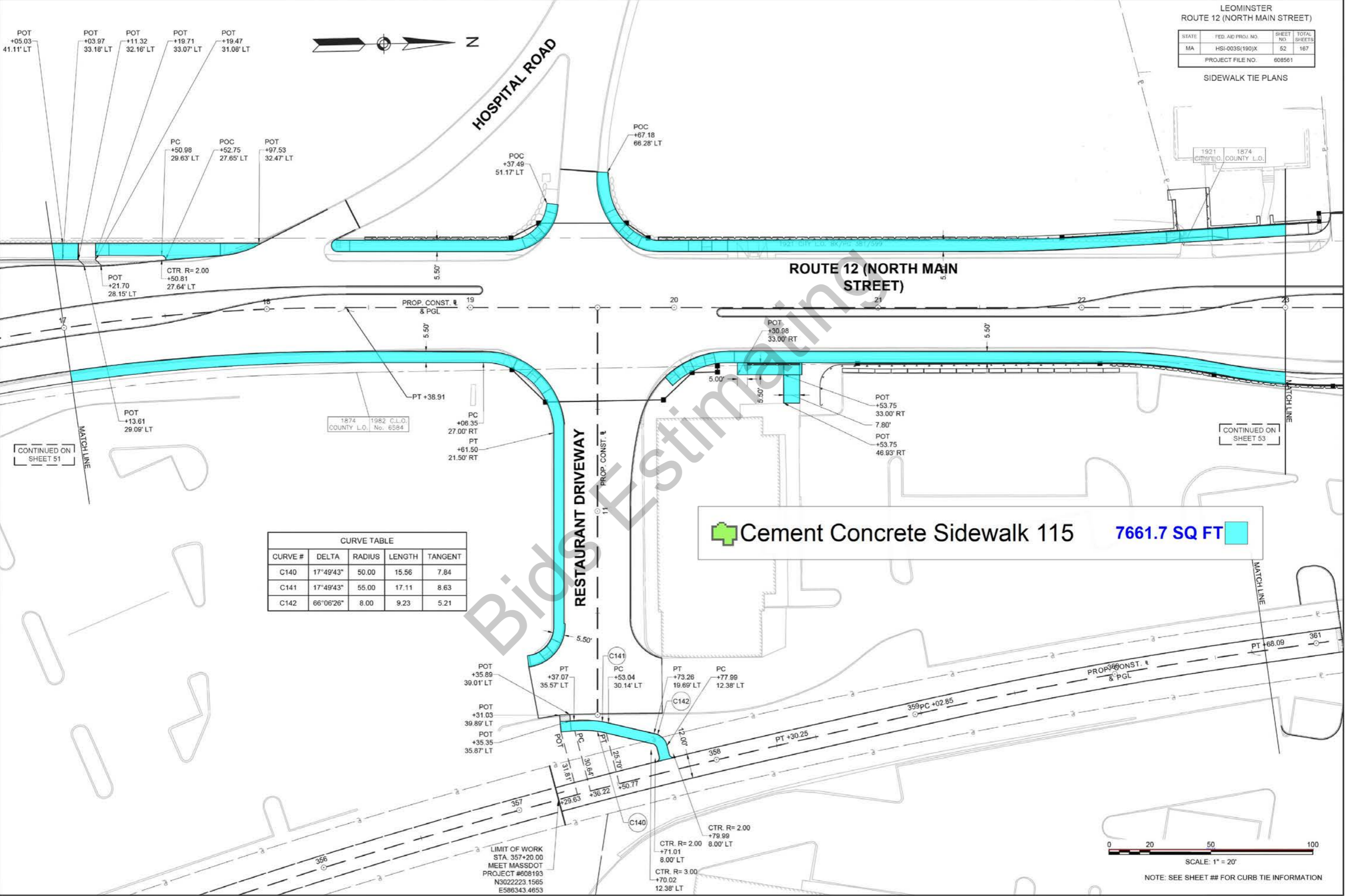
Cement Concrete Sidewalk 115 7895.1 SQ FT



SCALE: 1" = 20'

NOTE: SEE SHEET ## FOR CURB TIE INFORMATION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	52	167
PROJECT FILE NO. 608561			



CURVE #	DELTA	RADIUS	LENGTH	TANGENT
C140	17°49'43"	50.00	15.56	7.84
C141	17°49'43"	55.00	17.11	8.63
C142	66°06'26"	8.00	9.23	5.21

 **Cement Concrete Sidewalk 115** **7661.7 SQ FT**

LIMIT OF WORK
STA. 357+20.00
MEET MASSDOT
PROJECT #608193
N3022223.1565
E586343.4653



SCALE: 1" = 20'

NOTE: SEE SHEET ## FOR CURB TIE INFORMATION

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	53	167
PROJECT FILE NO.		608561	

SIDEWALK TIE PLANS



NELSON STREET

FRUIT STREET

ROUTE 12 (NORTH MAIN STREET)

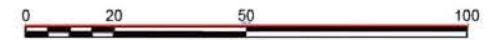
WATER TOWER PLAZA DRIVEWAY

CURVE #	DELTA	RADIUS	LENGTH	TANGENT
C143	67°56'36"	15.00	17.71	10.06
C144	63°08'40"	30.00	33.06	18.44
C145	45°41'21"	35.00	27.91	14.74
C146	62°37'02"	6.00	7.10	3.95
C147	71°37'28"	5.00	6.25	3.61
C148	71°37'28"	20.00	25.00	14.43
C149	117°22'58"	10.00	20.49	16.44
C150	40°11'20"	60.00	42.09	21.95
C151	47°56'44"	55.00	46.02	24.46
C152	4°02'34"	234.00	16.55	8.28
C153	9°07'35"	65.00	10.35	5.19
C154	21°56'36"	60.00	22.98	11.63
C155	8°47'39"	239.00	36.76	18.42
C156	6°04'55"	234.00	24.89	12.46
C157	3°32'18"	255.00	15.77	7.89
C158	3°14'40"	255.00	14.46	7.23
C159	20°54'15"	250.00	91.34	46.18
C160	2°46'28"	255.00	12.36	6.18
C161	7°25'28"	239.00	31.03	15.54
C162	4°35'04"	255.00	20.43	10.22
C163	28°13'20"	20.00	9.85	5.03
C164	2°25'36"	806.00	34.12	17.06
C165	90°00'00"	24.00	38.48	24.50
C166	90°00'00"	30.00	46.34	29.50
C167	47°45'00"	24.00	20.42	10.84

Cement Concrete Sidewalk 115
 HMA Sidewalk

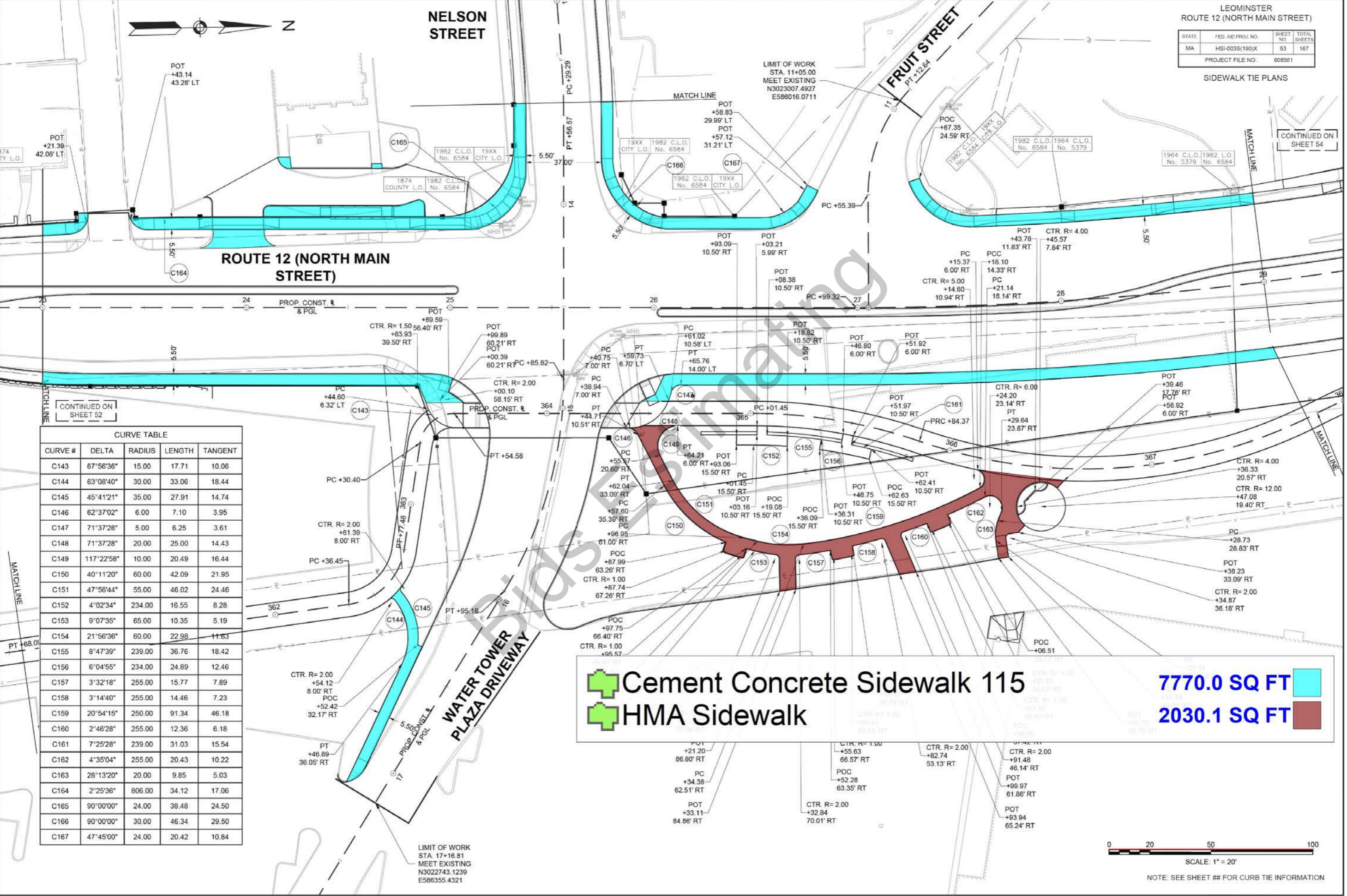
7770.0 SQ FT

2030.1 SQ FT



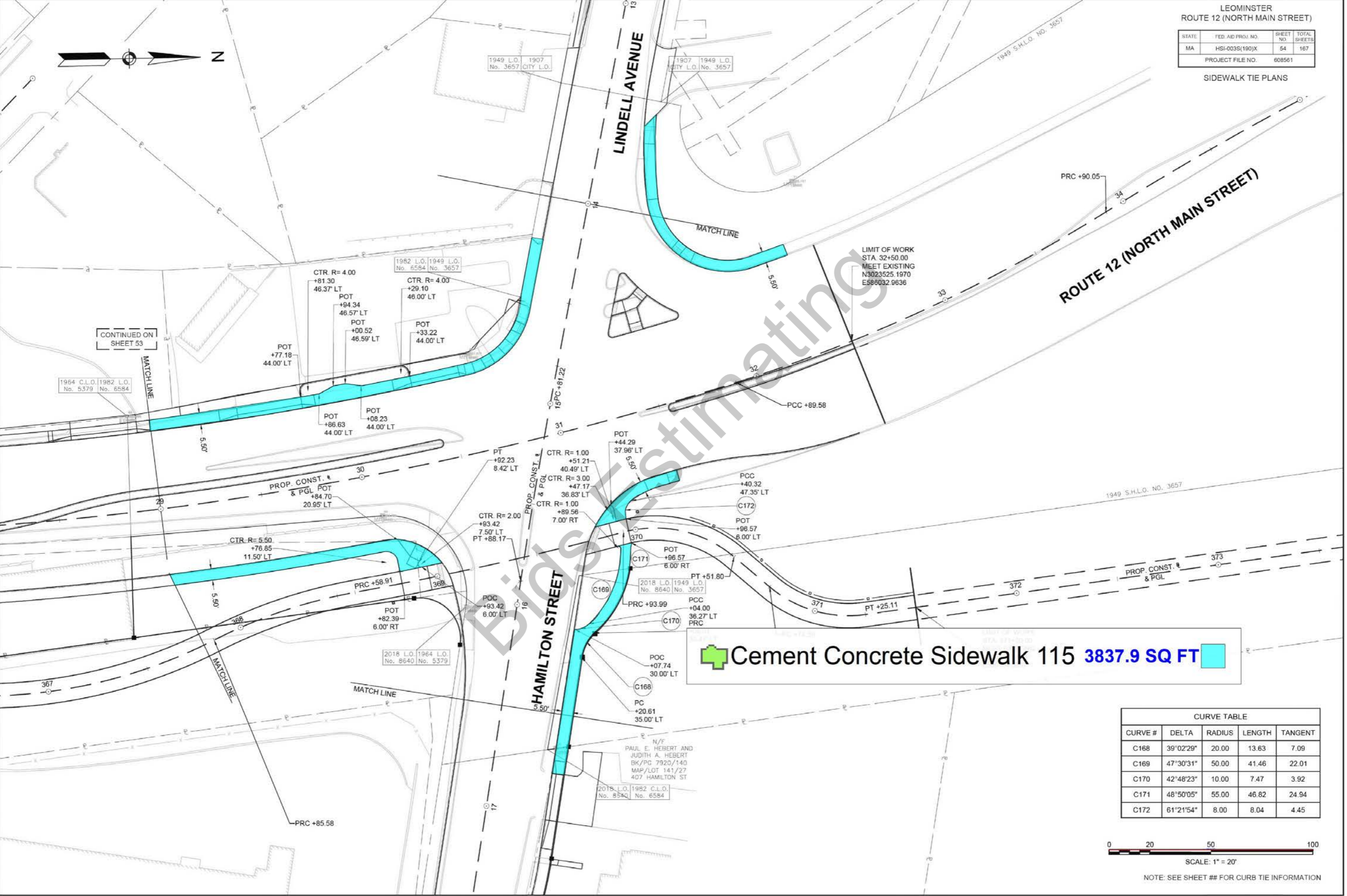
SCALE: 1" = 20'

NOTE: SEE SHEET ## FOR CURB TIE INFORMATION



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	54	167
PROJECT FILE NO. 608561			

SIDEWALK TIE PLANS



CONTINUED ON SHEET 53

LIMIT OF WORK
STA 32+50.00
MEET EXISTING
N3023525.1970
E588032.9636

Cement Concrete Sidewalk 115 **3837.9 SQ FT**

CURVE TABLE				
CURVE #	DELTA	RADIUS	LENGTH	TANGENT
C168	39°02'29"	20.00	13.63	7.09
C169	47°30'31"	50.00	41.46	22.01
C170	42°48'23"	10.00	7.47	3.92
C171	48°50'05"	55.00	46.82	24.94
C172	61°21'54"	8.00	8.04	4.45



SCALE: 1" = 20'

NOTE: SEE SHEET ## FOR CURB TIE INFORMATION

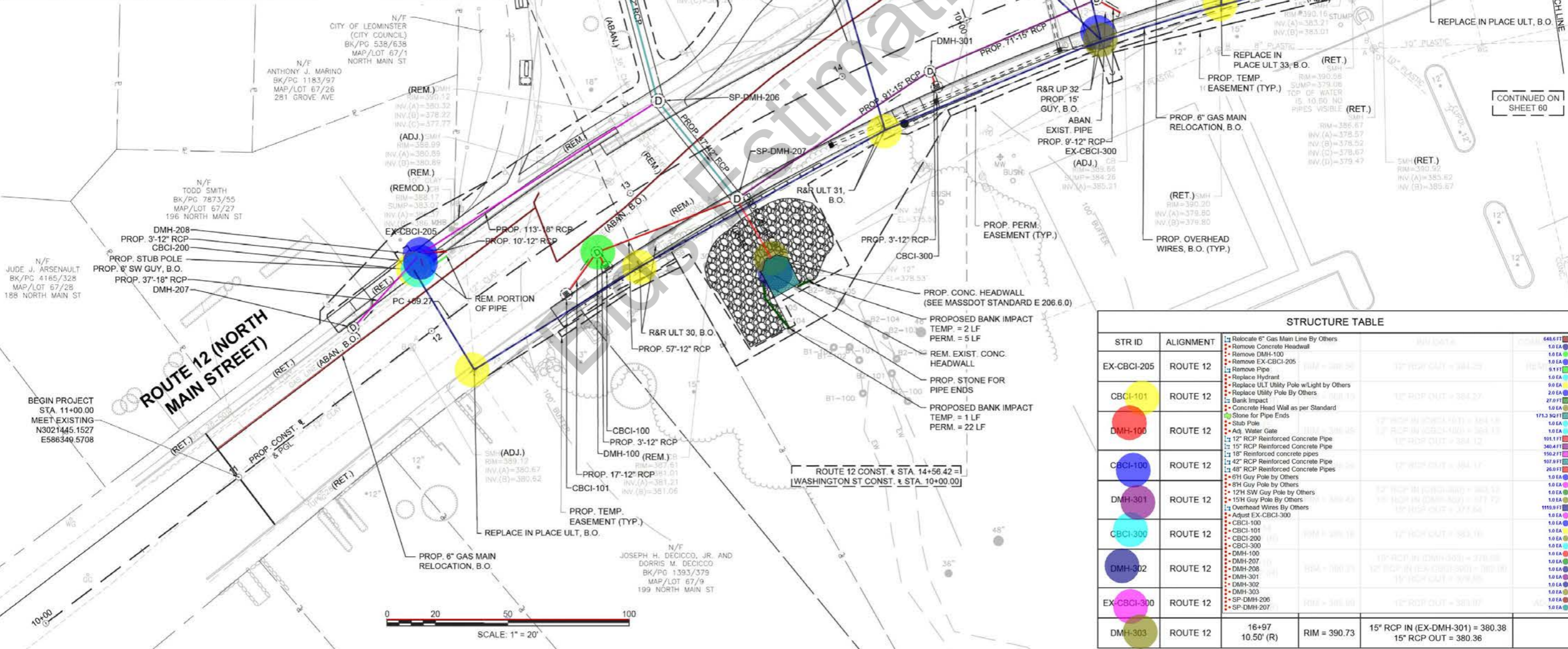
STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	59	167
PROJECT FILE NO. 608561			

DRAINAGE & UTILITY PLANS



CONTINUED ON
SHEET 63

STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
SP-DMH-206	WASHINGTON ST	10+18 130.44' (L)	RIM = 390.21	42" RCP IN (SP-DMH-205) = 376.75 18" RCP IN (DMH-208) = 380.30 42" RCP OUT = 376.49	
DMH-207	ROUTE 12	11+75 20.65' (L)	RIM = 388.84	EXIST. 18" CLAY IN () = 380.89 18" RCP OUT = 380.87	
CBCI-200	ROUTE 12	12+12 21.51' (L)	RIM = 388.60	12" RCP OUT = 384.70	
DMH-208	ROUTE 12	12+15 28.16' (L)	RIM = 388.99	12" RCP IN (CBCI-200) = 384.67 18" RCP IN (DMH-207) = 380.74 12" RCP IN (EX-CBCI-205) = 384.26 18" RCP OUT = 380.72	
SP-DMH-207	ROUTE 12	13+37 24.50' (R)	RIM = 388.94	12" RCP IN (DMH-100) = 383.54 15" RCP IN (DMH-301) = 376.16 42" RCP IN (SP-DMH-206) = 376.28 RCP 48" RCP OUT = 371.13	



CONTINUED ON
SHEET 60

STR ID	ALIGNMENT	DESCRIPTION	QUANTITY
EX-CBCI-205	ROUTE 12	Relocate 6" Gas Main Line By Others Remove Concrete Headwall Remove DMH-100 Remove EX-CBCI-205 Remove Pipe Replace Hydrant Replace Utility Pole w/Light by Others Replace Utility Pole By Others Bank Impact Concrete Head Wall as per Standard Stone for Pipe Ends Stub Pole	648.6 FT 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 27.0 FT 1.0 EA 171.3 SQ FT 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA
CBCI-101	ROUTE 12	12" RCP Reinforced Concrete Pipe 15" RCP Reinforced Concrete Pipe 18" Reinforced concrete pipes 42" RCP Reinforced Concrete Pipe 48" RCP Reinforced Concrete Pipes 6" Guy Pole by Others	101.1 FT 340.4 FT 150.2 FT 107.9 FT 26.0 FT 1.0 EA
DMH-100	ROUTE 12	Adj. Water Gate 12" RCP Reinforced Concrete Pipe 15" RCP Reinforced Concrete Pipe 18" Reinforced concrete pipes 42" RCP Reinforced Concrete Pipe 48" RCP Reinforced Concrete Pipes 6" Guy Pole by Others	1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA
CBCI-100	ROUTE 12	12" RCP Reinforced Concrete Pipe 15" RCP Reinforced Concrete Pipe 18" Reinforced concrete pipes 42" RCP Reinforced Concrete Pipe 48" RCP Reinforced Concrete Pipes 6" Guy Pole by Others	1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA
DMH-301	ROUTE 12	12" RCP Reinforced Concrete Pipe 15" RCP Reinforced Concrete Pipe 18" Reinforced concrete pipes 42" RCP Reinforced Concrete Pipe 48" RCP Reinforced Concrete Pipes 6" Guy Pole by Others	1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA
CBCI-300	ROUTE 12	12" RCP Reinforced Concrete Pipe 15" RCP Reinforced Concrete Pipe 18" Reinforced concrete pipes 42" RCP Reinforced Concrete Pipe 48" RCP Reinforced Concrete Pipes 6" Guy Pole by Others	1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA
DMH-302	ROUTE 12	12" RCP Reinforced Concrete Pipe 15" RCP Reinforced Concrete Pipe 18" Reinforced concrete pipes 42" RCP Reinforced Concrete Pipe 48" RCP Reinforced Concrete Pipes 6" Guy Pole by Others	1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA
EX-CBCI-300	ROUTE 12	12" RCP Reinforced Concrete Pipe 15" RCP Reinforced Concrete Pipe 18" Reinforced concrete pipes 42" RCP Reinforced Concrete Pipe 48" RCP Reinforced Concrete Pipes 6" Guy Pole by Others	1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA
DMH-303	ROUTE 12	12" RCP Reinforced Concrete Pipe 15" RCP Reinforced Concrete Pipe 18" Reinforced concrete pipes 42" RCP Reinforced Concrete Pipe 48" RCP Reinforced Concrete Pipes 6" Guy Pole by Others	1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA 1.0 EA



STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
CBCI-305	ROUTE 12	19+24 24.82' (R)	RIM = 389.26	12" RCP OUT = 386.07	
CBCI-308	ROUTE 12	19+24 27.31' (L)	RIM = 389.45	10" DIP OUT = 386.86	

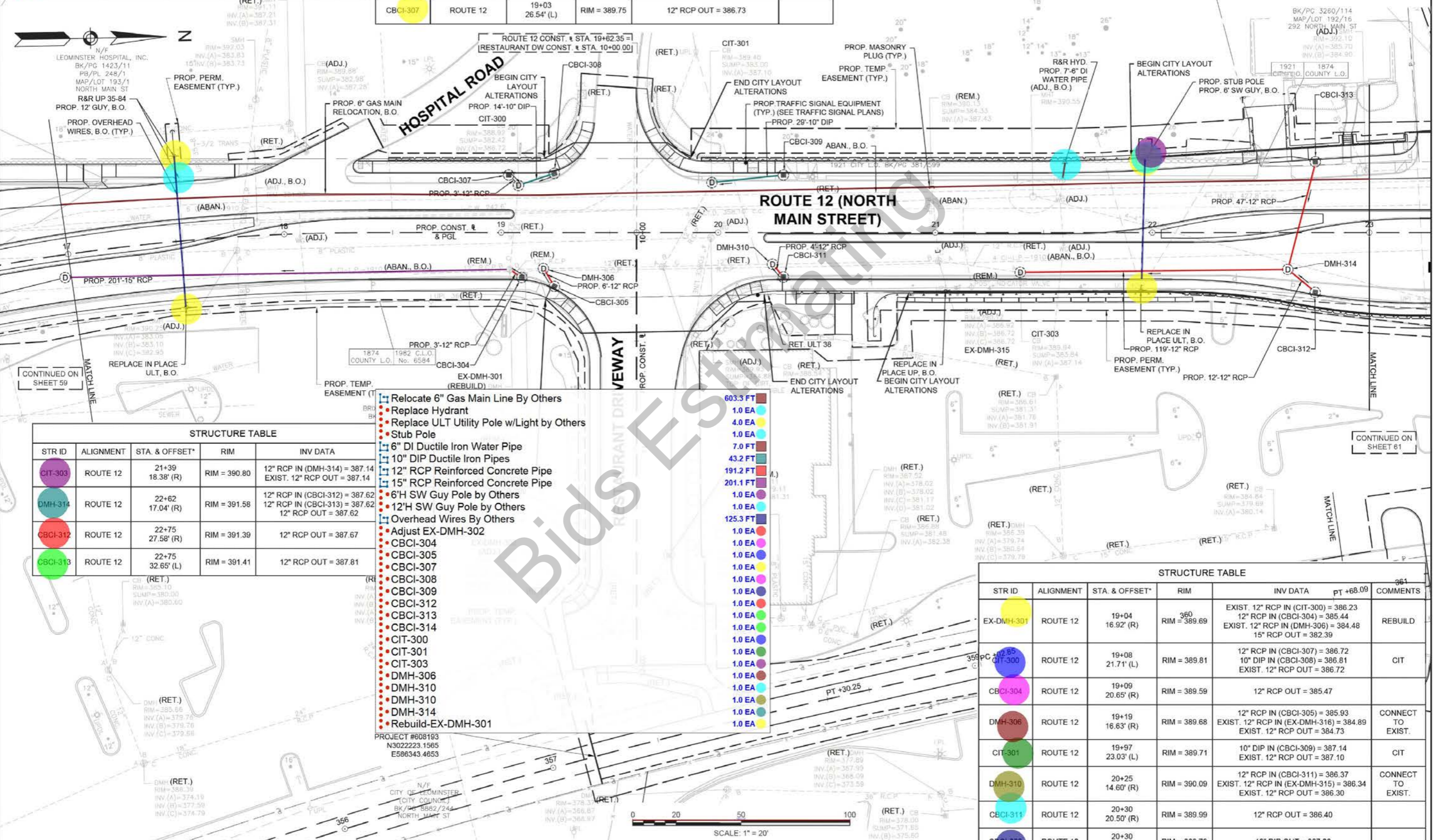
STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
CBCI-314	RESTAURANT DW	11+49 15.02' (L)	RIM = 387.42	EXIST. 12" RCP OUT = 381.19	
EX-DMH-302	RESTAURANT DW	11+84 11.66' (R)	RIM = 388.10	EXIST. 12" RCP IN (CBCI-314) = 380.85	ADJ.
CBCI-307	ROUTE 12	19+03 26.54' (L)	RIM = 389.75	12" RCP OUT = 386.73	

LEOMINSTER
ROUTE 12 (NORTH MAIN STREET)

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	60	167

PROJECT FILE NO. 608561

DRAINAGE & UTILITY PLANS



STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
CIT-303	ROUTE 12	21+39 18.38' (R)	RIM = 390.80	12" RCP IN (DMH-314) = 387.14 EXIST. 12" RCP OUT = 387.14	
DMH-314	ROUTE 12	22+62 17.04' (R)	RIM = 391.58	12" RCP IN (CBCI-312) = 387.62 12" RCP IN (CBCI-313) = 387.62 12" RCP OUT = 387.62	
CBCI-312	ROUTE 12	22+75 27.58' (R)	RIM = 391.39	12" RCP OUT = 387.67	
CBCI-313	ROUTE 12	22+75 32.65' (L)	RIM = 391.41	12" RCP OUT = 387.81	

- Relocate 6" Gas Main Line By Others
- Replace Hydrant
- Replace ULT Utility Pole w/Light by Others
- Stub Pole
- 6" DI Ductile Iron Water Pipe
- 10" DIP Ductile Iron Pipes
- 12" RCP Reinforced Concrete Pipe
- 15" RCP Reinforced Concrete Pipe
- 6"H SW Guy Pole by Others
- 12"H SW Guy Pole by Others
- Overhead Wires By Others
- Adjust EX-DMH-302
- CBCI-304
- CBCI-305
- CBCI-307
- CBCI-308
- CBCI-309
- CBCI-312
- CBCI-313
- CBCI-314
- CIT-300
- CIT-301
- CIT-303
- DMH-306
- DMH-310
- DMH-314
- Rebuild-EX-DMH-301

- 603.3 FT
- 1.0 EA
- 4.0 EA
- 1.0 EA
- 7.0 FT
- 43.2 FT
- 191.2 FT
- 201.1 FT
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 125.3 FT
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA

STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	PT +68.09	COMMENTS
EX-DMH-301	ROUTE 12	19+04 16.92' (R)	RIM = 389.69	EXIST. 12" RCP IN (CIT-300) = 386.23 12" RCP IN (CBCI-304) = 385.44 EXIST. 12" RCP IN (DMH-306) = 384.48 15" RCP OUT = 382.39		REBUILD
CIT-300	ROUTE 12	19+08 21.71' (L)	RIM = 389.81	12" RCP IN (CBCI-307) = 386.72 10" DIP IN (CBCI-308) = 386.81 EXIST. 12" RCP OUT = 386.72		CIT
CBCI-304	ROUTE 12	19+09 20.65' (R)	RIM = 389.59	12" RCP OUT = 385.47		
DMH-306	ROUTE 12	19+19 16.63' (R)	RIM = 389.68	12" RCP IN (CBCI-305) = 385.93 EXIST. 12" RCP IN (EX-DMH-316) = 384.89 EXIST. 12" RCP OUT = 384.73		CONNECT TO EXIST.
CIT-301	ROUTE 12	19+97 23.03' (L)	RIM = 389.71	10" DIP IN (CBCI-309) = 387.14 EXIST. 12" RCP OUT = 387.10		CIT
DMH-310	ROUTE 12	20+25 14.60' (R)	RIM = 390.09	12" RCP IN (CBCI-311) = 386.37 EXIST. 12" RCP IN (EX-DMH-315) = 386.34 EXIST. 12" RCP OUT = 386.30		CONNECT TO EXIST.
CBCI-311	ROUTE 12	20+30 20.50' (R)	RIM = 389.99	12" RCP OUT = 386.40		
CBCI-308	ROUTE 12	20+30 26.50' (L)	RIM = 389.79	10" DIP OUT = 387.26		

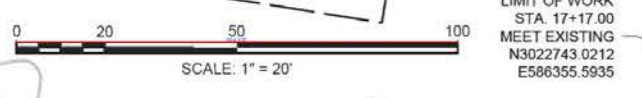
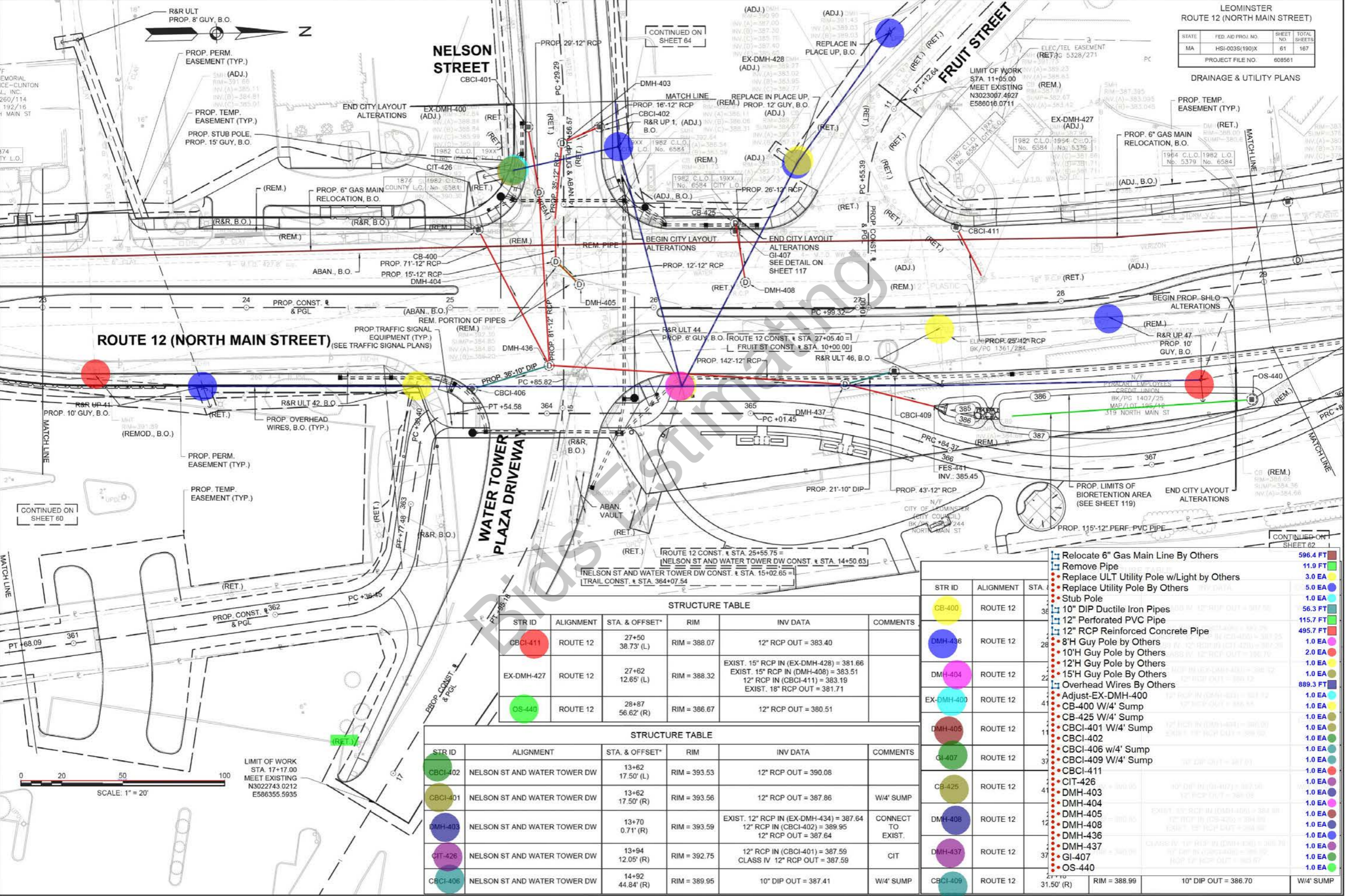


PROJECT #608193
N3022223.1565
E586343.4653

CITY OF LEOMINSTER
(CITY COUNCIL)
BK/PG 5882/244
NORTH MAIN ST

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	61	167
PROJECT FILE NO. 608561			

DRAINAGE & UTILITY PLANS



STRUCTURE TABLE

STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
CBCI-411	ROUTE 12	27+50 38.73' (L)	RIM = 388.07	12" RCP OUT = 383.40	
EX-DMH-427	ROUTE 12	27+62 12.65' (L)	RIM = 388.32	EXIST. 15" RCP IN (EX-DMH-428) = 381.66 EXIST. 15" RCP IN (DMH-408) = 383.51 12" RCP IN (CBCI-411) = 383.19 EXIST. 18" RCP OUT = 381.71	
OS-440	ROUTE 12	28+87 56.62' (R)	RIM = 386.67	12" RCP OUT = 380.51	

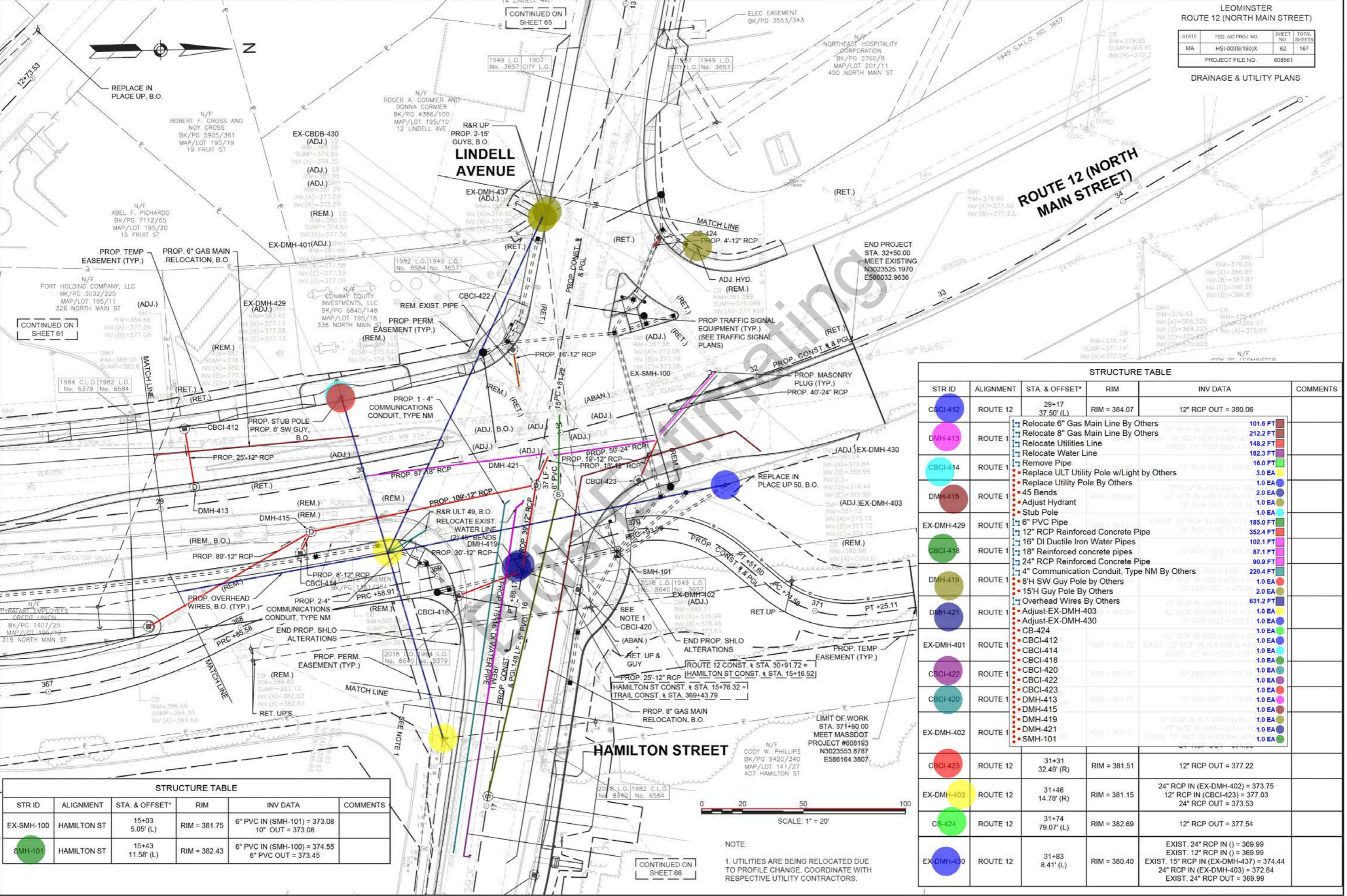
STRUCTURE TABLE

STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
CBCI-402	NELSON ST AND WATER TOWER DW	13+62 17.50' (L)	RIM = 393.53	12" RCP OUT = 390.08	
CBCI-401	NELSON ST AND WATER TOWER DW	13+62 17.50' (R)	RIM = 393.56	12" RCP OUT = 387.86	W/4' SUMP
DMH-403	NELSON ST AND WATER TOWER DW	13+70 0.71' (R)	RIM = 393.59	EXIST. 12" RCP IN (EX-DMH-434) = 387.64 12" RCP IN (CBCI-402) = 389.95 12" RCP OUT = 387.64	CONNECT TO EXIST.
CIT-426	NELSON ST AND WATER TOWER DW	13+94 12.05' (R)	RIM = 392.75	12" RCP IN (CBCI-401) = 387.59 CLASS IV 12" RCP OUT = 387.59	CIT
CBCI-406	NELSON ST AND WATER TOWER DW	14+92 44.84' (R)	RIM = 389.95	10" DIP OUT = 387.41	W/4' SUMP

STR ID	ALIGNMENT	STA.	DESCRIPTION	LENGTH
CB-400	ROUTE 12	36	Relocate 6" Gas Main Line By Others	596.4 FT
DMH-436	ROUTE 12	28	Remove Pipe	11.9 FT
DMH-404	ROUTE 12	22	Replace ULT Utility Pole w/Light by Others	3.0 EA
DMH-403	ROUTE 12	22	Replace Utility Pole By Others	5.0 EA
DMH-408	ROUTE 12	22	Stub Pole	1.0 EA
EX-DMH-400	ROUTE 12	41	10" DIP Ductile Iron Pipes	56.3 FT
DMH-405	ROUTE 12	11	12" Perforated PVC Pipe	115.7 FT
GI-407	ROUTE 12	37	12" RCP Reinforced Concrete Pipe	495.7 FT
CB-425	ROUTE 12	41	8'H Guy Pole by Others	1.0 EA
DMH-408	ROUTE 12	12	10'H Guy Pole by Others	2.0 EA
DMH-437	ROUTE 12	37	12'H Guy Pole by Others	1.0 EA
CBCI-409	ROUTE 12	27	15'H Guy Pole by Others	1.0 EA
CBCI-401	ROUTE 12	11	Overhead Wires By Others	889.3 FT
DMH-403	ROUTE 12	12	Adjust-EX-DMH-400	1.0 EA
DMH-404	ROUTE 12	12	CB-400 W/4' Sump	1.0 EA
DMH-405	ROUTE 12	11	CB-425 W/4' Sump	1.0 EA
DMH-408	ROUTE 12	12	CBCI-401 W/4' Sump	1.0 EA
DMH-437	ROUTE 12	37	CBCI-402	1.0 EA
CBCI-409	ROUTE 12	27	CBCI-406 w/4' Sump	1.0 EA
CBCI-409	ROUTE 12	27	CBCI-409 W/4' Sump	1.0 EA
CBCI-409	ROUTE 12	27	CBCI-411	1.0 EA
CBCI-409	ROUTE 12	27	CIT-426	1.0 EA
CBCI-409	ROUTE 12	27	DMH-403	1.0 EA
CBCI-409	ROUTE 12	27	DMH-404	1.0 EA
CBCI-409	ROUTE 12	27	DMH-405	1.0 EA
CBCI-409	ROUTE 12	27	DMH-408	1.0 EA
CBCI-409	ROUTE 12	27	DMH-436	1.0 EA
CBCI-409	ROUTE 12	27	DMH-437	1.0 EA
CBCI-409	ROUTE 12	27	GI-407	1.0 EA
CBCI-409	ROUTE 12	27	OS-440	1.0 EA
CBCI-409	ROUTE 12	27	10" DIP OUT = 387.0	W/4' SUMP

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	62	167
PROJECT FILE NO.			608561

DRAINAGE & UTILITY PLANS



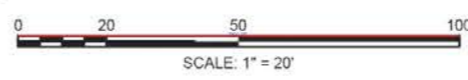
CONTINUED ON SHEET 61

CONTINUED ON SHEET 65

CONTINUED ON SHEET 66

STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
CBCI-412	ROUTE 12	29+17 37.50' (L)	RIM = 384.07	12" RCP OUT = 380.06	
DMH-413	ROUTE 1				<ul style="list-style-type: none"> Relocate 6" Gas Main Line By Others 101.6 FT Relocate 8" Gas Main Line By Others 212.2 FT Relocate Utilities Line 148.2 FT Relocate Water Line 182.3 FT
CBCI-414	ROUTE 1				<ul style="list-style-type: none"> Remove Pipe 16.0 FT Replace ULT Utility Pole w/Light by Others 3.0 EA Replace Utility Pole By Others 1.0 EA Adjust Hydrant 2.0 EA Stub Pole 1.0 EA
DMH-415	ROUTE 1				<ul style="list-style-type: none"> 45 Bends 1.0 EA Adjust EX-DMH-403 1.0 EA Stub Pole 1.0 EA
EX-DMH-429	ROUTE 1				<ul style="list-style-type: none"> 6" PVC Pipe 185.0 FT 12" RCP Reinforced Concrete Pipe 352.4 FT 16" DI Ductile Iron Water Pipes 102.1 FT 18" Reinforced concrete pipes 87.1 FT 24" RCP Reinforced Concrete Pipe 90.9 FT 4" Communication Conduit, Type NM By Others 220.4 FT
DMH-419	ROUTE 1				<ul style="list-style-type: none"> 8" SW Guy Pole by Others 1.0 EA 15'H Guy Pole By Others 2.0 EA Overhead Wires By Others 631.2 FT
DMH-421	ROUTE 1				<ul style="list-style-type: none"> Adjust-EX-DMH-403 1.0 EA Adjust-EX-DMH-430 1.0 EA CB-424 1.0 EA CBCI-412 1.0 EA CBCI-414 1.0 EA CBCI-418 1.0 EA CBCI-420 1.0 EA CBCI-422 1.0 EA CBCI-423 1.0 EA DMH-415 1.0 EA DMH-419 1.0 EA DMH-421 1.0 EA SMH-101 1.0 EA
EX-DMH-401	ROUTE 1				<ul style="list-style-type: none"> CBCI-412 1.0 EA CBCI-414 1.0 EA CBCI-418 1.0 EA CBCI-420 1.0 EA CBCI-422 1.0 EA CBCI-423 1.0 EA DMH-415 1.0 EA DMH-419 1.0 EA DMH-421 1.0 EA SMH-101 1.0 EA
CBCI-422	ROUTE 1				<ul style="list-style-type: none"> CBCI-412 1.0 EA CBCI-414 1.0 EA CBCI-418 1.0 EA CBCI-420 1.0 EA CBCI-422 1.0 EA CBCI-423 1.0 EA DMH-415 1.0 EA DMH-419 1.0 EA DMH-421 1.0 EA SMH-101 1.0 EA
CBCI-420	ROUTE 1				<ul style="list-style-type: none"> CBCI-412 1.0 EA CBCI-414 1.0 EA CBCI-418 1.0 EA CBCI-420 1.0 EA CBCI-422 1.0 EA CBCI-423 1.0 EA DMH-415 1.0 EA DMH-419 1.0 EA DMH-421 1.0 EA SMH-101 1.0 EA
EX-DMH-402	ROUTE 1				<ul style="list-style-type: none"> CBCI-412 1.0 EA CBCI-414 1.0 EA CBCI-418 1.0 EA CBCI-420 1.0 EA CBCI-422 1.0 EA CBCI-423 1.0 EA DMH-415 1.0 EA DMH-419 1.0 EA DMH-421 1.0 EA SMH-101 1.0 EA
CBCI-423	ROUTE 12	31+31 32.49' (R)	RIM = 381.51	12" RCP OUT = 377.22	
EX-DMH-403	ROUTE 12	31+46 14.78' (R)	RIM = 381.15	24" RCP IN (EX-DMH-402) = 373.75 12" RCP IN (CBCI-423) = 377.03 24" RCP OUT = 373.53	
CB-424	ROUTE 12	31+74 79.07' (L)	RIM = 382.69	12" RCP OUT = 377.54	
EX-DMH-430	ROUTE 12	31+83 8.41' (L)	RIM = 380.40	EXIST. 24" RCP IN () = 369.99 EXIST. 12" RCP IN () = 369.99 EXIST. 15" RCP IN (EX-DMH-437) = 374.44 24" RCP IN (EX-DMH-403) = 372.84 EXIST. 24" RCP OUT = 369.99	

STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
EX-SMH-100	HAMILTON ST	15+03 5.05' (L)	RIM = 381.75	6" PVC IN (SMH-101) = 373.08 10" OUT = 373.08	
SMH-101	HAMILTON ST	15+43 11.58' (L)	RIM = 382.43	6" PVC IN (SMH-100) = 374.55 6" PVC OUT = 373.45	



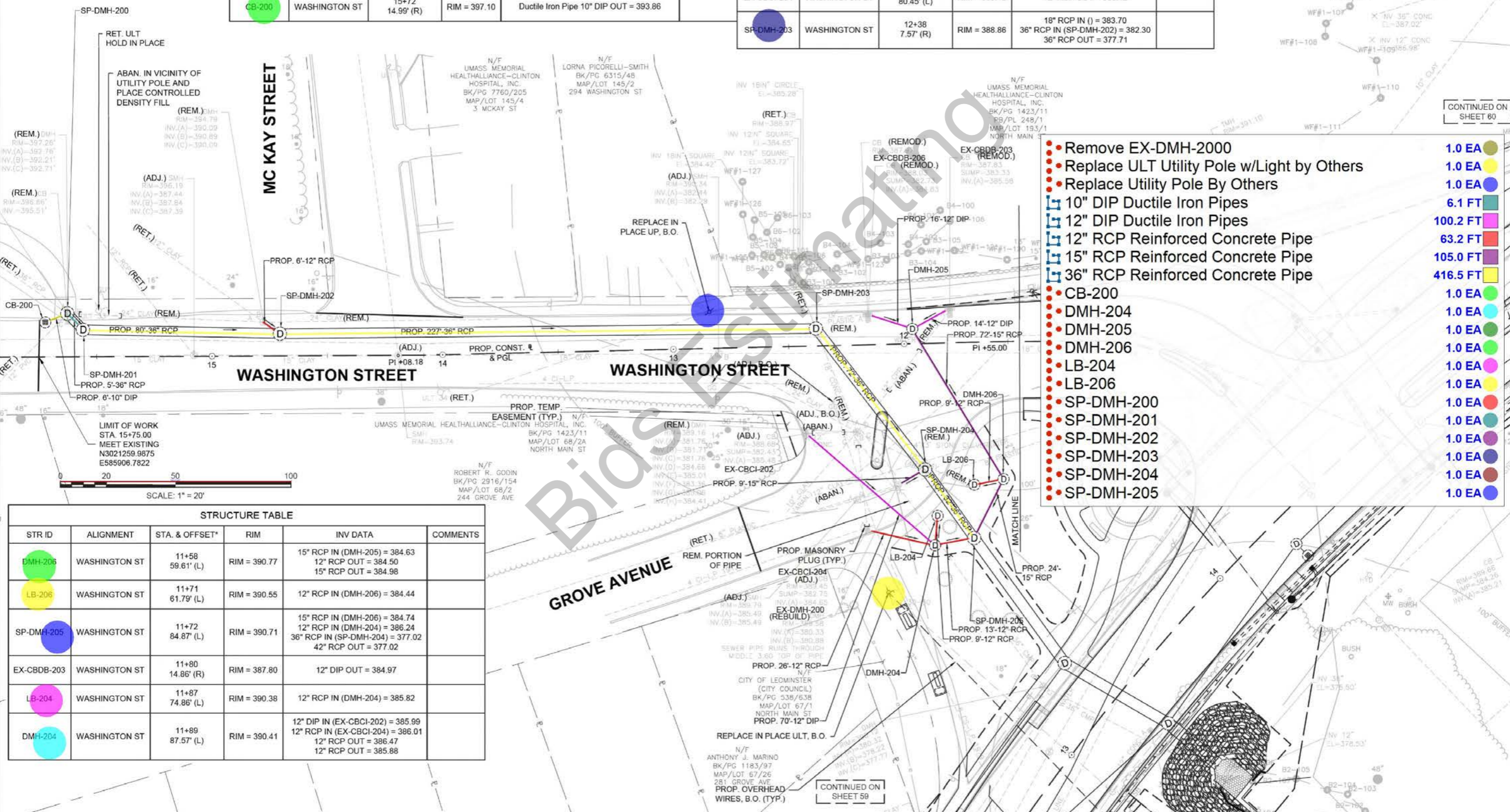
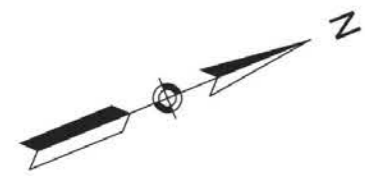
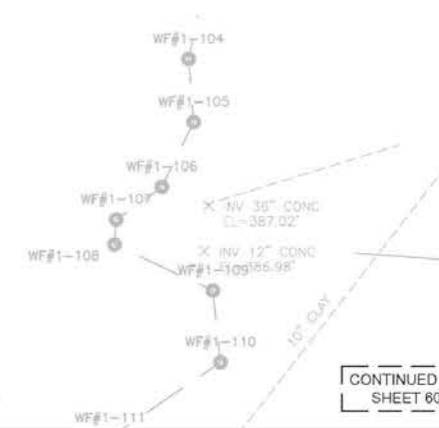
NOTE:
1. UTILITIES ARE BEING RELOCATED DUE TO PROFILE CHANGE. COORDINATE WITH RESPECTIVE UTILITY CONTRACTORS.

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
EX-CBCI-202	WASHINGTON ST	12+43 37.76' (L)	RIM = 388.68	12" DIP OUT = 386.27	
SP-DMH-202	WASHINGTON ST	14+71 9.63' (R)	RIM = 394.59	36" RCP IN (SP-DMH-201) = 387.97 12" RCP IN (PIPE CONNECTION) = 390.83 36" RCP OUT = 383.24	
SP-DMH-201	WASHINGTON ST	15+56 11.70' (R)	RIM = 396.75	36" RCP IN (SP-DMH-200) = 388.41 36" RCP OUT = 388.30	
SP-DMH-200	WASHINGTON ST	15+63 18.83' (R)	RIM = 397.27	EXIST. 12" PVC IN (EX-CB-200) = 392.71 EXIST. 36" RCP IN () = 392.76 Ductile Iron Pipe 10" DIP IN (CB-200) = 393.80 36" RCP OUT = 388.46	
CB-200	WASHINGTON ST	15+72 14.99' (R)	RIM = 397.10	Ductile Iron Pipe 10" DIP OUT = 393.86	

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
SP-DMH-204	WASHINGTON ST	11+92 54.65' (L)	RIM = 389.55	15" RCP IN (EX-DMH-200) = 382.13 36" RCP IN (SP-DMH-203) = 377.27 36" RCP OUT = 377.25	
DMH-205	WASHINGTON ST	11+96 6.43' (R)	RIM = 388.36	12" DIP IN (EX-CBDB-206) = 384.93 12" DIP IN (EX-CBDB-203) = 384.92 15" RCP OUT = 384.90	
EX-DMH-200	WASHINGTON ST	12+04 61.18' (L)	RIM = 389.58	EXIST. 15" RCP IN () = 382.22 15" RCP OUT = 382.22	REMOD.
EX-CBDB-206	WASHINGTON ST	12+16 13.20' (R)	RIM = 387.98	12" DIP OUT = 385.05	
EX-CBCI-204	WASHINGTON ST	12+18 80.45' (L)	RIM = 389.45	12" RCP OUT = 386.12	
SP-DMH-203	WASHINGTON ST	12+38 7.57' (R)	RIM = 388.86	18" RCP IN () = 383.70 36" RCP IN (SP-DMH-202) = 382.30 36" RCP OUT = 377.71	

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	63	167
PROJECT FILE NO.		608561	

DRAINAGE & UTILITY PLANS



- Remove EX-DMH-2000
- Replace ULT Utility Pole w/Light by Others
- Replace Utility Pole By Others
- 10" DIP Ductile Iron Pipes
- 12" DIP Ductile Iron Pipes
- 12" RCP Reinforced Concrete Pipe
- 15" RCP Reinforced Concrete Pipe
- 36" RCP Reinforced Concrete Pipe
- CB-200
- DMH-204
- DMH-205
- DMH-206
- LB-204
- LB-206
- SP-DMH-200
- SP-DMH-201
- SP-DMH-202
- SP-DMH-203
- SP-DMH-204
- SP-DMH-205

- 1.0 EA
- 1.0 EA
- 1.0 EA
- 6.1 FT
- 100.2 FT
- 63.2 FT
- 105.0 FT
- 416.5 FT
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
DMH-206	WASHINGTON ST	11+58 59.61' (L)	RIM = 390.77	15" RCP IN (DMH-205) = 384.63 12" RCP OUT = 384.50 15" RCP OUT = 384.98	
LB-206	WASHINGTON ST	11+71 61.79' (L)	RIM = 390.55	12" RCP IN (DMH-206) = 384.44	
SP-DMH-205	WASHINGTON ST	11+72 84.87' (L)	RIM = 390.71	15" RCP IN (DMH-206) = 384.74 12" RCP IN (DMH-204) = 386.24 36" RCP IN (SP-DMH-204) = 377.02 42" RCP OUT = 377.02	
EX-CBDB-203	WASHINGTON ST	11+80 14.86' (R)	RIM = 387.80	12" DIP OUT = 384.97	
LB-204	WASHINGTON ST	11+87 74.86' (L)	RIM = 390.38	12" RCP IN (DMH-204) = 385.82	
DMH-204	WASHINGTON ST	11+89 87.57' (L)	RIM = 390.41	12" DIP IN (EX-CBCI-202) = 385.99 12" RCP IN (EX-CBCI-204) = 386.01 12" RCP OUT = 386.47 12" RCP OUT = 385.88	

CONTINUED ON SHEET 59

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	64	167
PROJECT FILE NO.		608561	

DRAINAGE & UTILITY PLANS



N/F
MARTIN E. ANDREWS AND
ANNE ANDREWS
BK/PG 3691/199
PB/PL 282/1
MAP/LOT 196/1
47 NELSON ST

N/F
GABRIEL A. RODRIGUEZ
BK/PG 8034/278
MAP/LOT 196/20
35 NELSON ST

N/F
BLANCA D. PAREDES
BK/PG 6306/95
MAP/LOT 195/13
29 HAMILTON ST

(ADJ.) CB
RM=406.06
SUMP=400.21
INV.(A)=402.12
TOP OF WATER 3.50

PROP. OVERHEAD
WIRES, B.O. (TYP.)

N/F
MAN NELSON, LLC
BK/PG 9105/102
PB/PL 391/6
MAP/LOT 195/1
310 NORTH MAIN ST

EX-DMH-428

PROP. TEMP.
EASEMENT (TYP.)

NELSON STREET

PROP. PERM.
EASEMENT (TYP.)

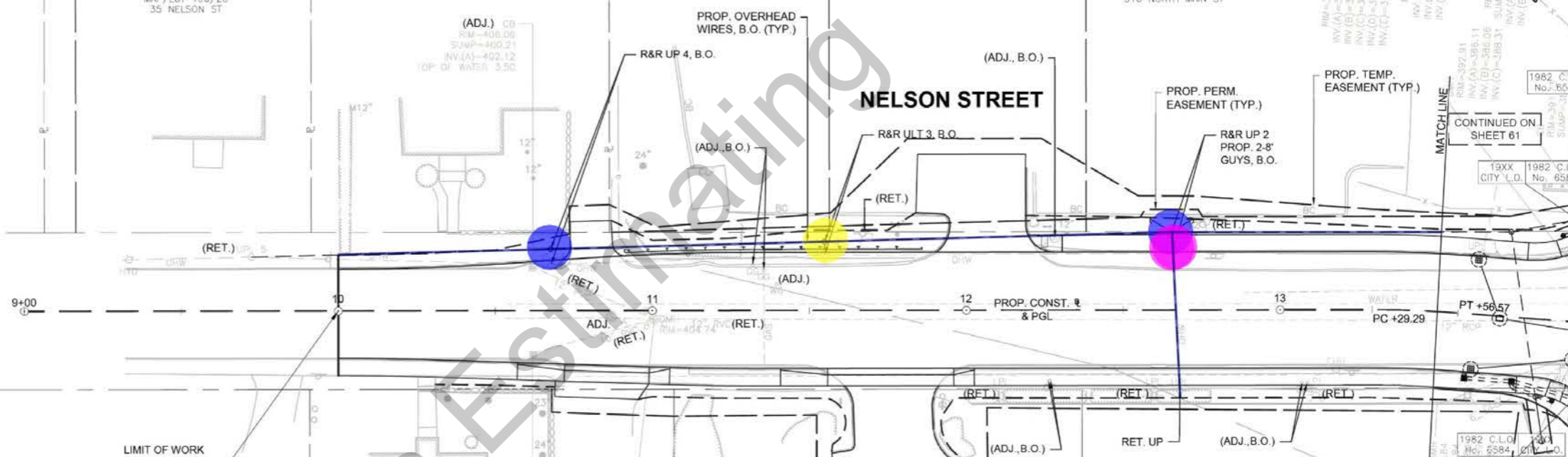
R&R UP 2
PROP. 2-8'
GUYS, B.O.

CONTINUED ON
SHEET 61

19XX
CITY L.O.

1982 C.L.O.
No. 6584

1982 C.L.O.
COUNTY L.O. No. 6

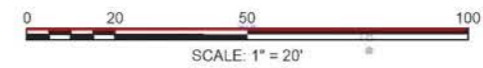


- Replace ULT Utility Pole w/Light by Others
- Replace Utility Pole By Others
- 8'H Guy Pole by Others
- Overhead Wires By Others

- 1.0 EA ●
- 3.0 EA ●
- 2.0 EA ●
- 483.5 FT ■

N/F
UMASS MEMORIAL
HEALTHALLIANCE-CLINTON
HOSPITAL, INC.
BK/PG 7390/123
MAP/LOT 192/8
9 TRAGIA AVE

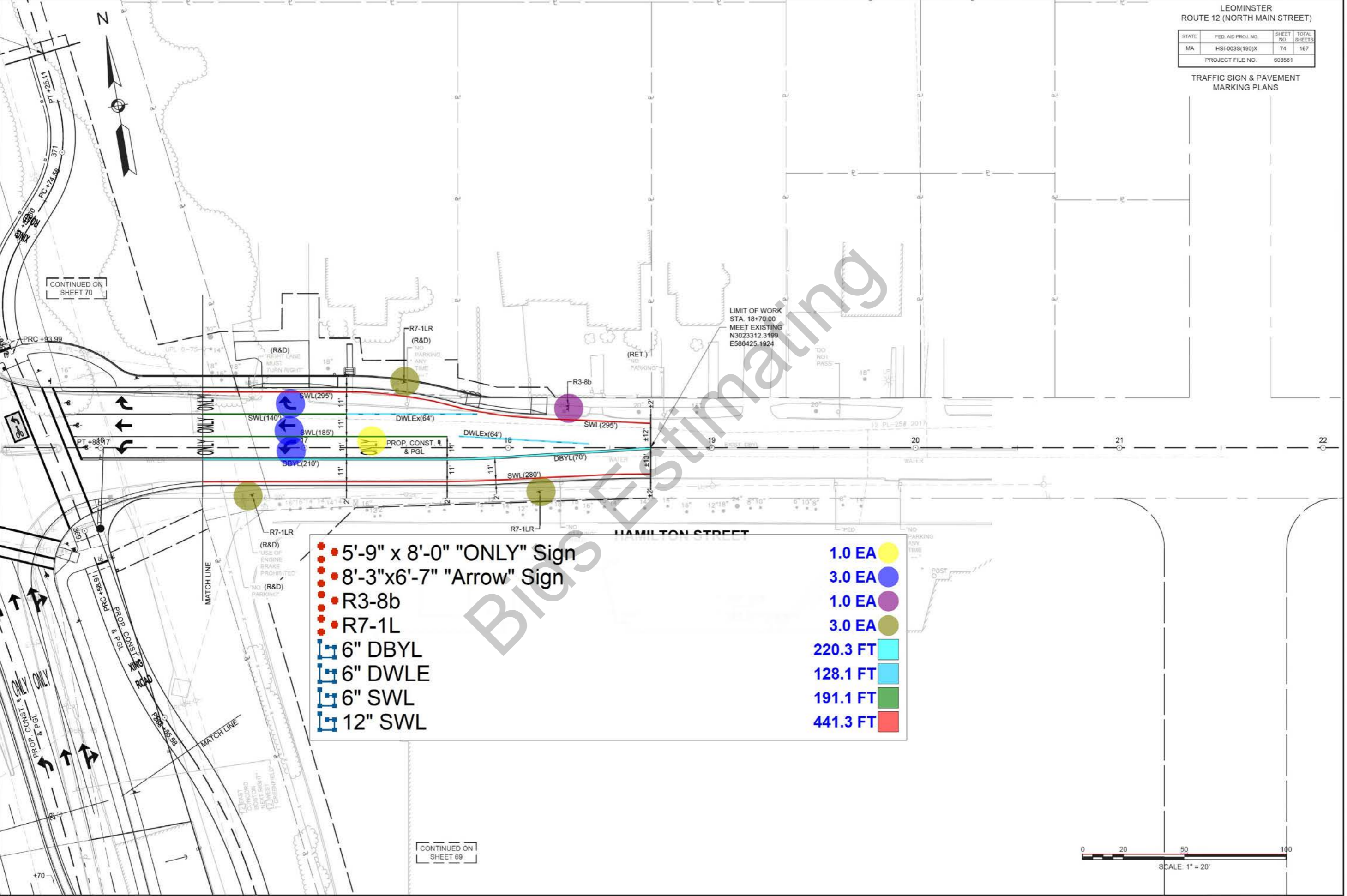
MAP/LOT 192/19
302 NORTH MAIN ST



(PRIVATE)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	74	167
PROJECT FILE NO.		608561	

TRAFFIC SIGN & PAVEMENT MARKING PLANS



CONTINUED ON SHEET 70

LIMIT OF WORK STA. 18+70.00
MEET EXISTING
N3023312.3199
E586425.1924

HAMILTON STREET

• 5'-9" x 8'-0" "ONLY" Sign	1.0 EA	●
• 8'-3"x6'-7" "Arrow" Sign	3.0 EA	●
• R3-8b	1.0 EA	●
• R7-1L	3.0 EA	●
▬ 6" DBYL	220.3 FT	▬
▬ 6" DWLE	128.1 FT	▬
▬ 6" SWL	191.1 FT	▬
▬ 12" SWL	441.3 FT	▬

CONTINUED ON SHEET 69



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	73	167
PROJECT FILE NO.		608561	

TRAFFIC SIGN & PAVEMENT MARKING PLANS



10+00
PC +31.04

LIMIT OF WORK
STA 11+85.00
MEET EXISTING
N3023442.2388
E585752.7895

LINDELL AVENUE

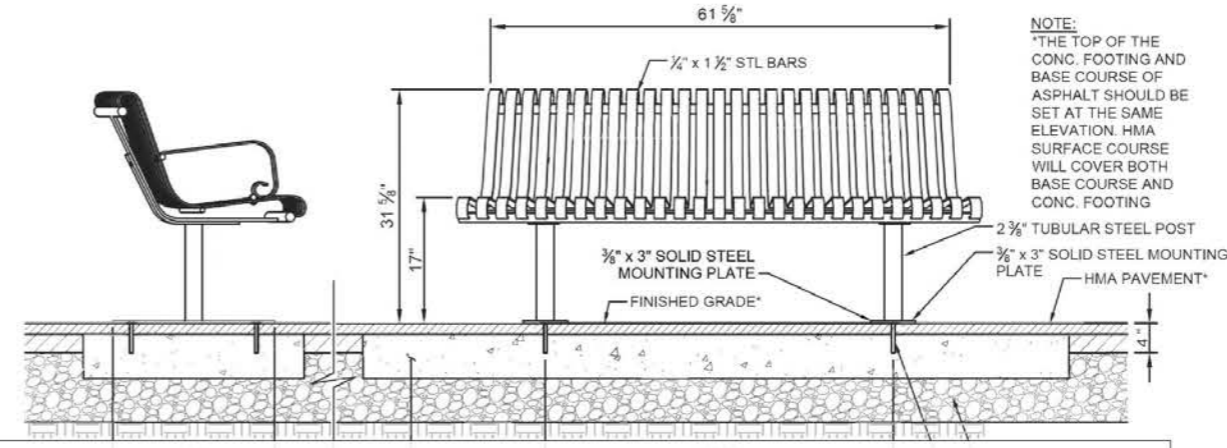
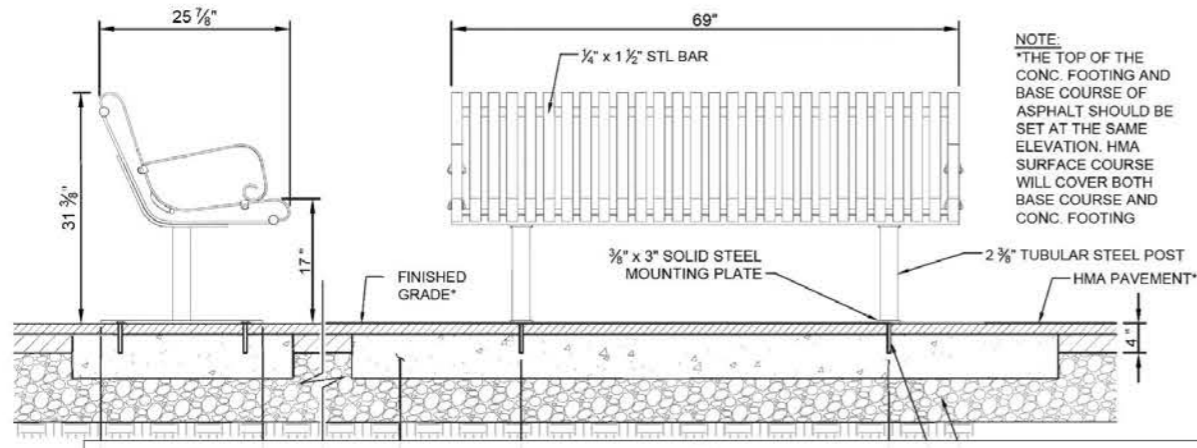
• 5'-9" x 8'-0" "ONLY" Sign	1.0 EA	●
• 8'-3"x6'-7" "Arrow" Sign	2.0 EA	●
• R3-7L	1.0 EA	●
▬ 6" DBYL	316.8 FT	▬
▬ 6" DWLE	72.5 FT	▬
▬ 6" SWL	518.5 FT	▬
▬ 12" SWL	20.2 FT	▬

CONTINUED ON
SHEET 70



STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HS1-0035(190)X	115	187
PROJECT FILE NO.		608561	

LANDSCAPE DETAILS



NOTE:
*THE TOP OF THE CONC. FOOTING AND BASE COURSE OF ASPHALT SHOULD BE SET AT THE SAME ELEVATION. HMA SURFACE COURSE WILL COVER BOTH BASE COURSE AND CONC. FOOTING

NOTE:
*THE TOP OF THE CONC. FOOTING AND BASE COURSE OF ASPHALT SHOULD BE SET AT THE SAME ELEVATION. HMA SURFACE COURSE WILL COVER BOTH BASE COURSE AND CONC. FOOTING

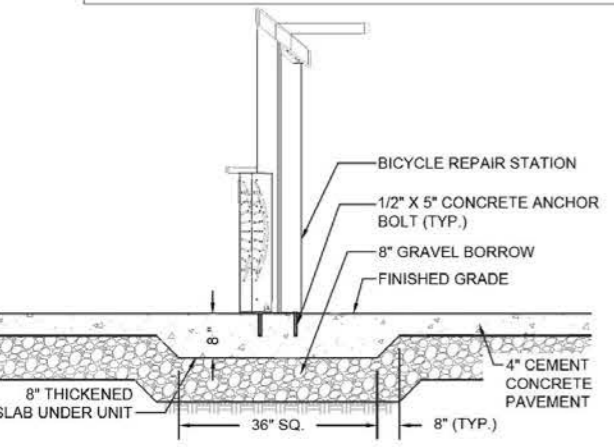
Cement Concrete Walk with 5-Bicycle Racks & 1-Bicycle Repair station 115

363.1 SQ FT	
26.4 FT	
44.7 FT	
15.5 FT	

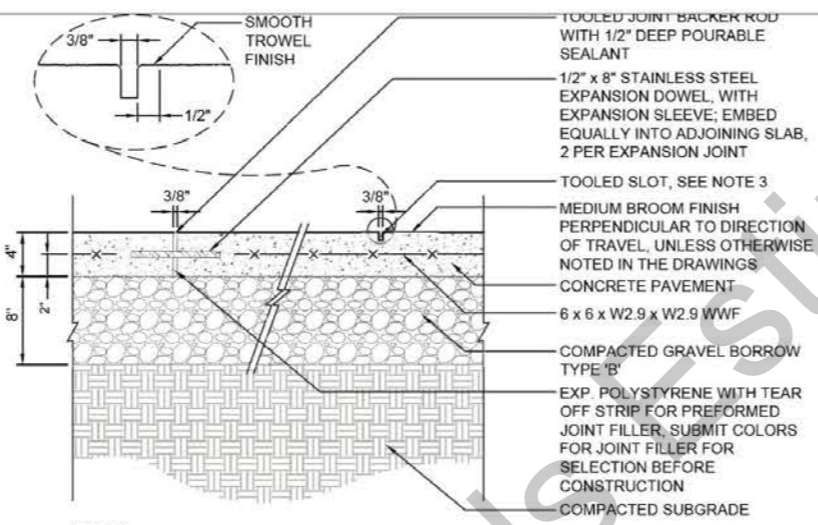
- Cement Concrete Walk with 5-Bicycle Racks & 1-Bicycle Repair station 115
- Granite Curb
- Dummy Joint
- Bicycle Rack

PAR
NOT TO SCALE

CURVED BENCH
NOT TO SCALE

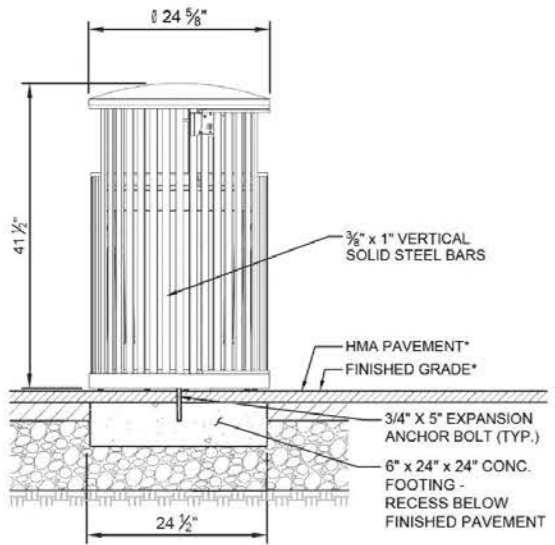


BICYCLE REPAIR STATION
NOT TO SCALE



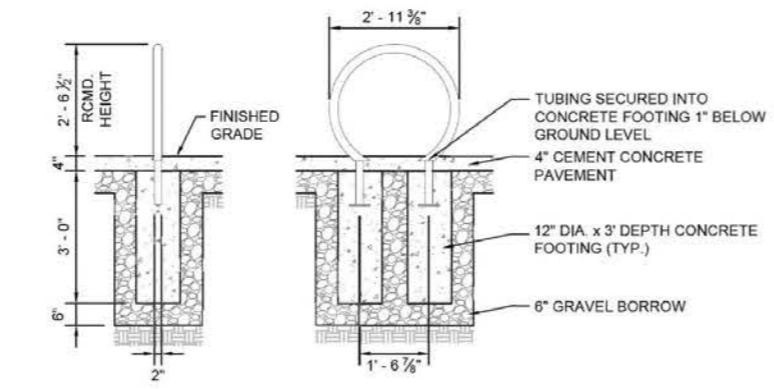
- NOTES:
- UTILIZE EXPANSION JOINT DETAIL FOR ALL CONSTRUCTION JOINT REQUIREMENTS, 30' O.C. MINIMUM.
 - UTILIZE 3/4" EXPANSION JOINT AT ALL VERTICAL STRUCTURE INTERFACES. USE 3/8" EXPANSION JOINTS AT ALL PAVING JOINT.
 - PROVIDE CLEARLY TOOLED BORDER ALL AROUND JOINTS.
 - PROVIDE CONTROL JOINTS IN LAYOUT APPROVED IN SHOP DRAWING.
 - REFER TO PLANS AND SPECIFICATION FOR ADDITIONAL REQUIREMENTS.

CONCRETE JOINT DETAILS
NOT TO SCALE

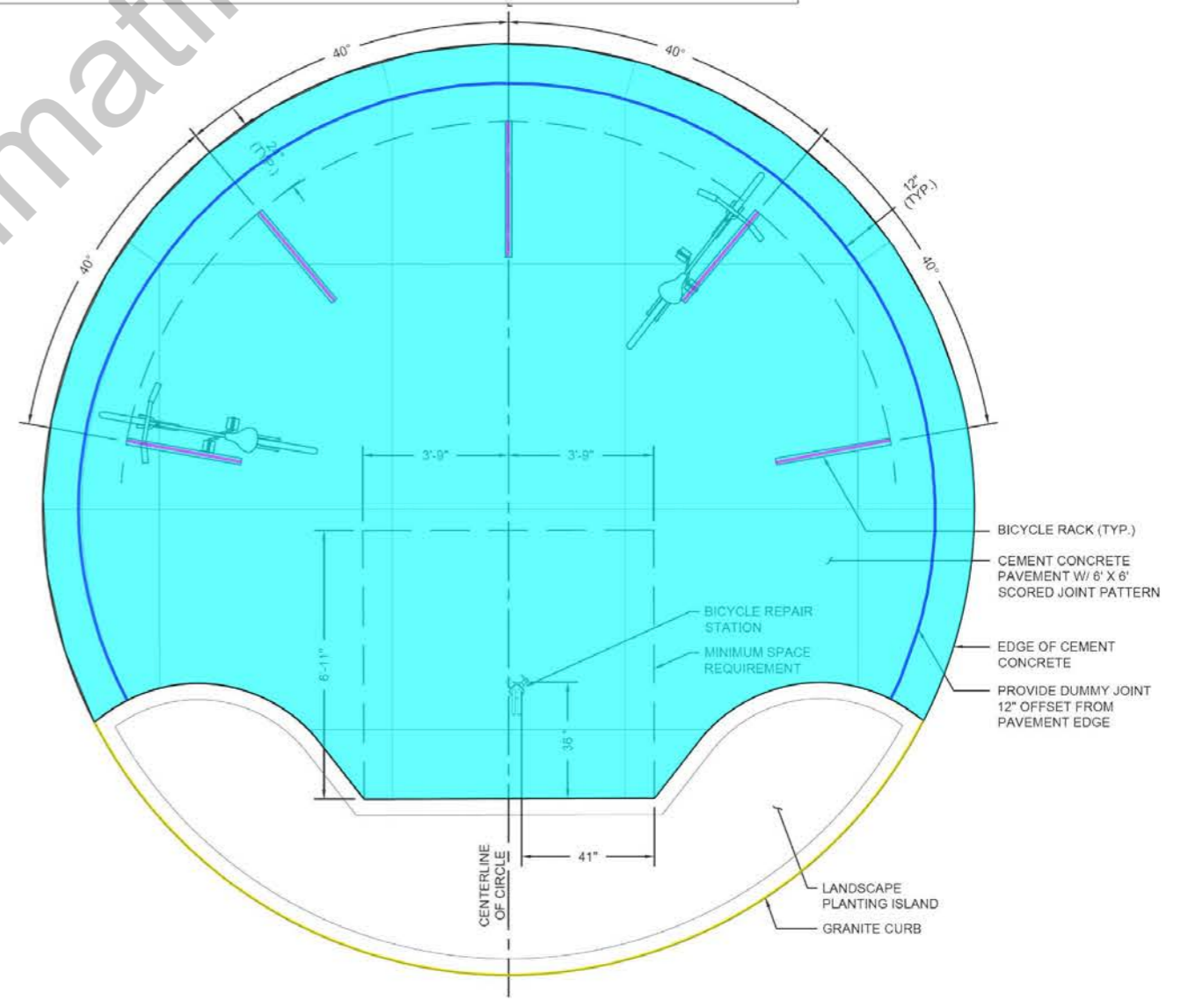


NOTE: *THE TOP OF THE CONC. FOOTING AND BASE COURSE OF ASPHALT SHOULD BE SET AT THE SAME ELEVATION. HMA SURFACE COURSE WILL COVER BOTH BASE COURSE AND CONC. FOOTING

TRASH RECEPACLE
NOT TO SCALE



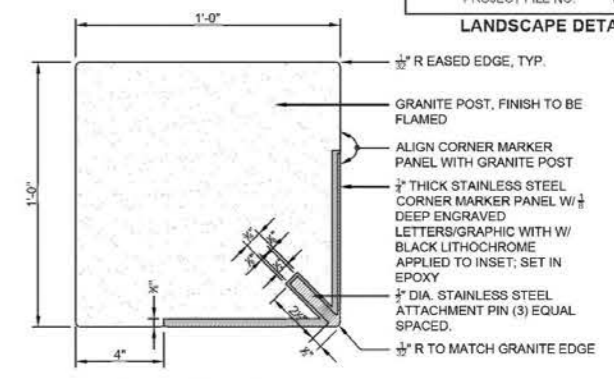
BICYCLE RACK
NOT TO SCALE



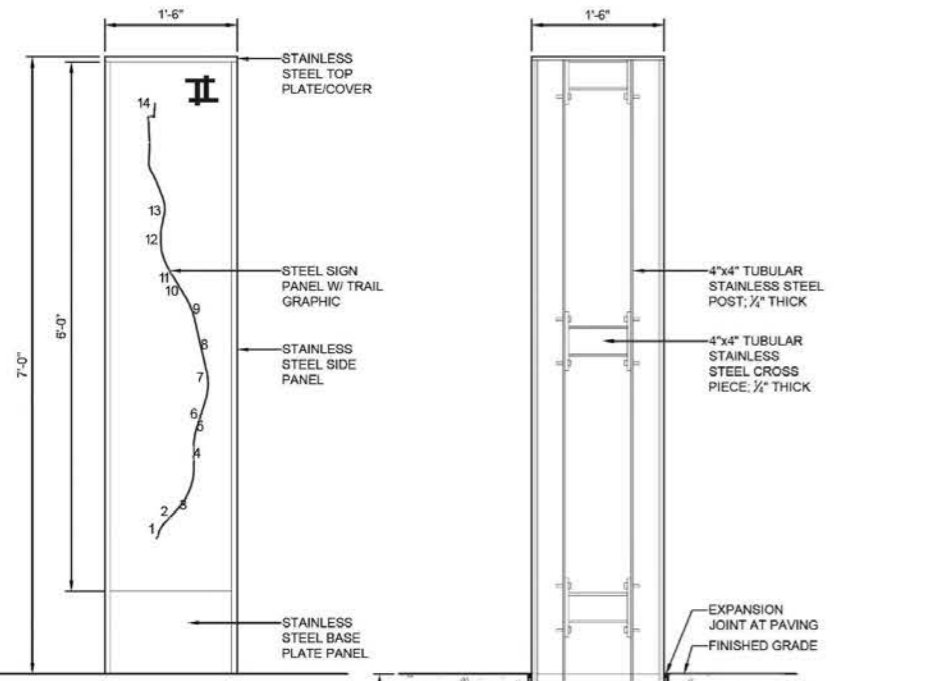
BICYCLE RACK & BICYCLE REPAIR STATION LAYOUT
NOT TO SCALE

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-0035(190)X	114	187
PROJECT FILE NO.		608561	

LANDSCAPE DETAILS

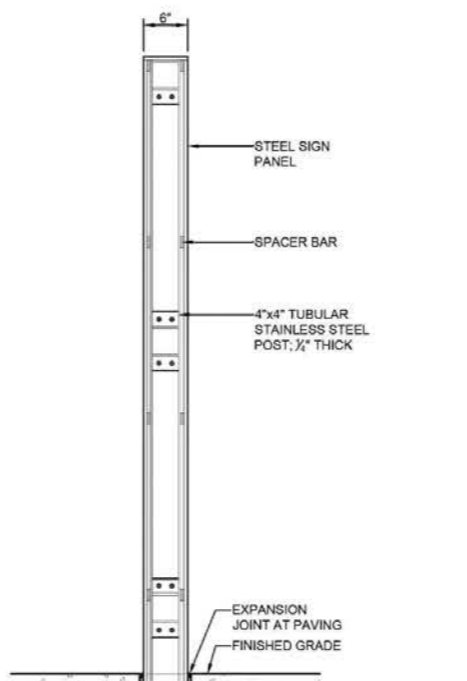


SECTION: TOP DOWN
SCALE: 3" = 1'-0"



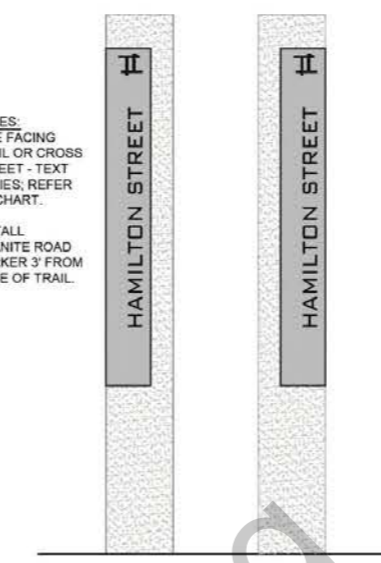
ELEVATION
SCALE: 1" = 1'-0"

- NOTES:
1. ALL ATTACHMENT HARDWARE TO BE STAINLESS STEEL.
 2. SEE SPECIFICATIONS FOR METAL FINISHES.
 3. TRAIL SIGN GRAPHICS TO BE PROVIDED BY OWNER AND LANDSCAPE ARCHITECT. DIGITAL GRAPHIC FILES TO BE PROVIDED FOR SIGN MANUFACTURER'S USE.

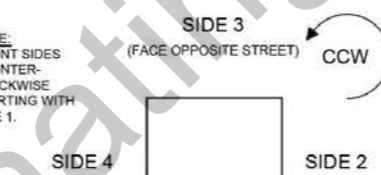


- NOTES:
- SIDE FACING TRAIL OR CROSS STREET - TEXT VARIES; REFER TO CHART.
 - INSTALL GRANITE ROAD MARKER 3' FROM EDGE OF TRAIL.

- NOTE:
- COUNT SIDES COUNTER-CLOCKWISE STARTING WITH SIDE 1.

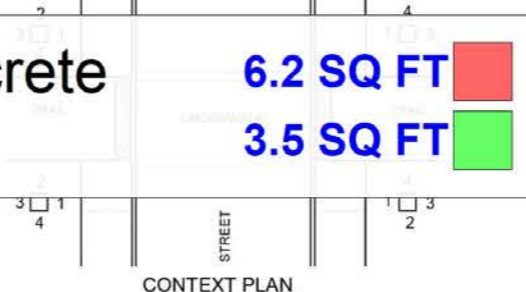


ELEVATION



PLAN

POSSIBLE SIGN LOCATIONS - SEE PLANS FOR EXACT LOCATIONS



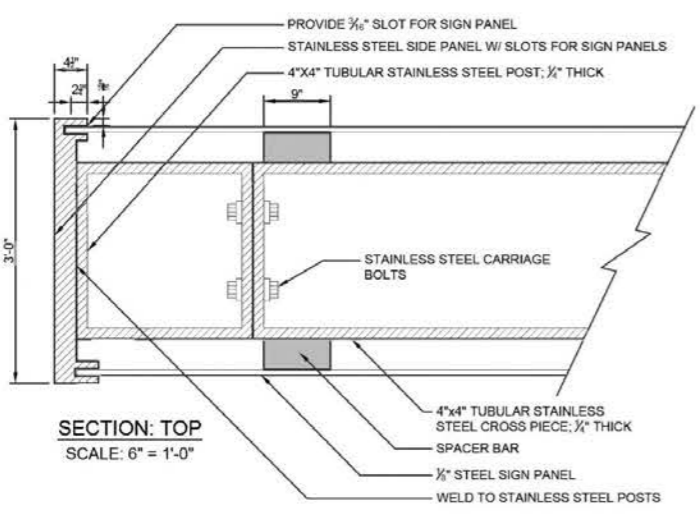
CONTEXT PLAN

LT = LEFT SIDE OF TRAIL
RT = RIGHT SIDE OF TRAIL

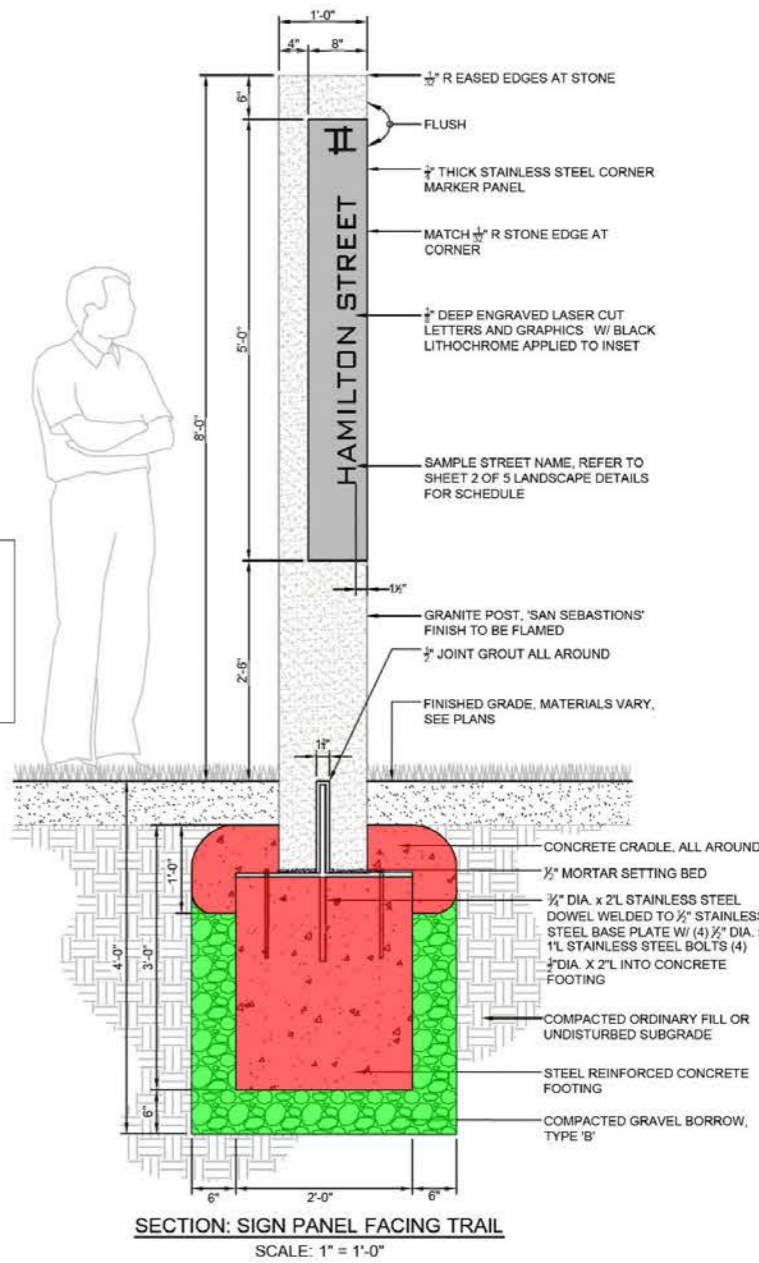
LOCATION/STREET NAME	STEEL PANEL ORIENTATION	TEXT CONTENT
HAMILTON STREET (NORTH SIDE) STA 370+02 LT	SIDES 2 & 3 1 4 2 3	HAMILTON STREET
HAMILTON STREET (SOUTH SIDE) STA 368+76 RT	SIDES 2 & 3 3 4 4 1	HAMILTON STREET
WATER TOWER PL. (NORTH SIDE) STA 364+72 LT	SIDES 2 & 3 1 4 2 3	WATER TOWER PLAZA
WATER TOWER PL. (SOUTH SIDE) STA 363+30 RT	SIDES 2 & 3 3 4 4 1	WATER TOWER PLAZA

Granite Marker Steel Reinforced Concrete 6.2 SQ FT

Compacted Gravel Borrow Type B 3.5 SQ FT



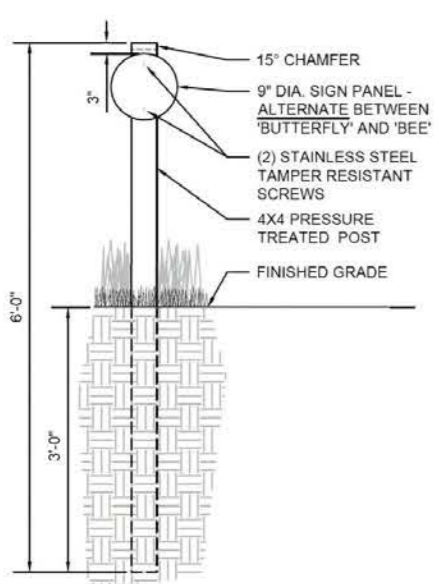
SECTION: TOP
SCALE: 6" = 1'-0"



SECTION: SIGN PANEL FACING TRAIL
SCALE: 1" = 1'-0"

MASTER PLANT SCHEDULE table with columns: SYMBOL, BOTANICAL NAME, COMMON NAME, SIZE, NOTES, QUANTITY (SHT 1, SHT 2, SHT 3, SHT 4, MEDIAN, TOTAL). Rows include TREES, SHRUBS, GRASSES, PERENNIALS, and PLUGS.

- AC-Amelanchier Canadensis 2" CAL 8EA
• AF-Acer Fremani Autum Blaze 2.5" CAL 10EA
• BN-Betula nigra Dura Heat 8" H 5EA
• BP-Betula Populifolia 8" H 8EA
• CV-Crataegus Viridis Winter King 2" CAL 6EA
• GT-Gleditisa Triacanthos Var. Inermis 2.5" CAL 9EA
• MA-Malus Donald Wyman 2" CAL 6EA
• PG-Picea Glauca 6" H 10EA
• PR-Pinus Resinosa 6" H 11EA
• QB-Quercus Bicolor 2.5" CAL 5EA
• QC-Quercus Coccinea 2.5" CAL 2EA
• TO-Thuja Occidentalis Techny 6" H 17EA
• UA-Ulmus Americana Princeton 2.5" CAL 5EA
• AM-Aronia Melanocarpa Ground Hog 24" H 65EA
• CA-Cornus Amomum 3" H 10EA
• CP-Comptonia Peregrina 1 GAL 45EA
• CR-Cornus Racemosa Maszam 24" H 53EA
• CS-Cornus Stolonidera Farrow 24" H 44EA
• HI-Hamamelis Intermedia Arnold Promise 4" H 10EA
• IG-Ilex Glabra Shamrock 24" H 38EA
• IT-Itea Virginica 3" H 11EA
• IV-Ilex Verticillata Southern Gentleman(Male) 30" H 3EA
• IV-Ilex Verticillata Winter Red(Female) 30" H 12EA
• JC-Juniperus Chinesis Sea Green 24" SPRD 20EA
• MP-Myrica Pensylvanica 3" H 17EA
• PO-Physocarpus Opulifolius 3" H 26EA
• RA-Rhus Aromatica Gro-Low 24" SPRD 30EA
• VT-Viburnum Trilobum 4" H 20EA
• PA-Pennisetum al opecuroides Hameln 1 GAL 69EA
• PC-Panicum Virgatum Cape Breeze 1 GAL 90EA
• PV-Panicum Virgatum Praire Fire 1 GAL 83EA
• SH-Sporobolus Heterolepis 1 GAL 95EA
• SS-Schizachyrium Scoparium The Blues 1 GAL 71EA
• AO-Aster Oblongifolius Raydons Favorite 1 GAL 26EA
• EP-Echinacea Purpurea 1 GAL 18EA
• HS-Hemerocallis Stella D'oro 1 GAL 30EA
• NW-Nepeta Six Hills Giant 1 GAL 15EA
• RF-Rudbeckia Fulgida Goldstrum 1 GAL 25EA
• SA-Sedum Autumn Joy 1 GAL 18EA
• AO-Aster Oblongifolius Raydons Favorite 5" Plug 25EA
• BA-Baptisia Australis 5" Plug 25EA
• CO-Coreopsis Moonbeam 5" Plug 25EA
• CT-Carex Stricta 5" Plug 25EA
• EU-Eupatorium Purpureum 5" Plug 25EA
• RF-Rudbeckia Fulgida Goldstrum 5" Plug 25EA
• SR-Solidago Rugosa Fireworks 5" Plug 25EA
• SS-Schizachyrium Scoparium The Blues 5" Plug 25EA

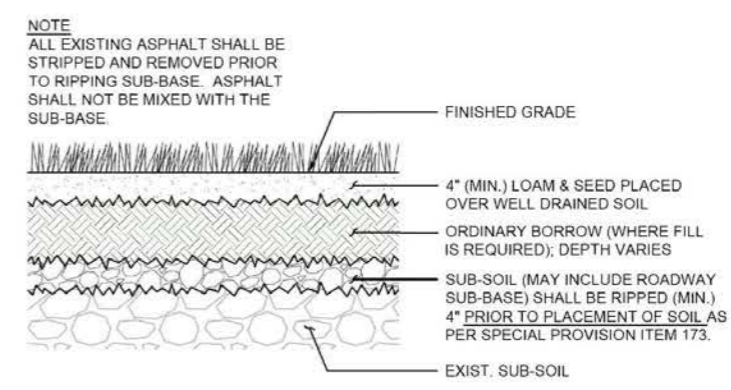


'BUTTERFLY' GRAPHIC NOT TO SCALE



'BEE' GRAPHIC NOT TO SCALE

'POLLINATOR FRIENDLY GARDEN' SIGN SCALE: 1" = 1'-0"



DECOMPACTION FOR PROP. LAWN IN FORMER PAVED AREAS SCALE: 1" = 1'-0"

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)		NUMBER OF SIGNS REQUIRED	COLOR			UNIT AREA IN SQUARE FEET	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING		BACK-GROUND	LEGEND	BORDER		
R1-6	12"	36"			MASSDOT STANDARD	4	ORANGE*	BLACK	BLACK	3.00	12.00
MA-R2-10a	48"	36"			MASSDOT STANDARD	9	ORANGE*	BLACK	BLACK	12.00	108.00
MA-R2-10e	36"	48"			MASSDOT STANDARD	10	ORANGE*	BLACK	BLACK	12.00	120.00
R3-7L	30"	30"			MUTCD STANDARD	2	ORANGE*	BLACK	BLACK	6.25	12.50
R3-7R	30"	30"				2	ORANGE*	BLACK	BLACK	6.25	12.50
R4-8	24"	30"				1	ORANGE*	BLACK	BLACK	5.00	5.00
R9-9	24"	12"				2	ORANGE*	BLACK	BLACK	2.00	4.00
R9-10	24"	12"			MUTCD STANDARD	4	ORANGE*	BLACK	BLACK	2.00	8.00
R9-11aL	24"	12"				1	ORANGE*	BLACK	BLACK	2.00	2.00
R9-11aR	24"	12"				1	ORANGE*	BLACK	BLACK	2.00	2.00
R11-2	48"	30"				2	ORANGE*	BLACK	BLACK	10.00	20.00
W1-4L	36"	36"				2	ORANGE*	BLACK	BLACK	9.00	18.00
W1-4R	36"	36"				2	ORANGE*	BLACK	BLACK	9.00	18.00
W4-2L	36"	36"				1	ORANGE*	BLACK	BLACK	9.00	9.00
MA-W4-7L	36"	36"			MASSDOT STANDARD	1	ORANGE*	BLACK	BLACK	9.00	9.00
W5-1	36"	36"			MUTCD STANDARD	2	ORANGE*	BLACK	BLACK	9.00	18.00
W8-1	36"	36"				4	ORANGE*	BLACK	BLACK	9.00	36.00
W8-3	36"	36"				2	ORANGE*	BLACK	BLACK	9.00	18.00
W8-8	36"	36"				2	ORANGE*	BLACK	BLACK	9.00	18.00
W8-15	36"	36"				2	ORANGE*	BLACK	BLACK	9.00	18.00
W9-2L	36"	36"			MUTCD STANDARD	1	ORANGE*	BLACK	BLACK	9.00	9.00
W11-2	30"	30"				4	YELLOW	BLACK	BLACK	6.25	25.00

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)		NUMBER OF SIGNS REQUIRED	COLOR			UNIT AREA IN SQUARE FEET	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING		BACK-GROUND	LEGEND	BORDER		
W12-1	30"	30"									
W13-1p	24"	24"									
W16-7pL	24"	12"									
W16-9p	24"	12"									
W20-1	36"	36"									
W20-4	36"	36"									
W20-5L	36"	36"									
W20-7	36"	36"									
MA-W20-7b	36"	36"									
W21-5a	36"	36"									
M4-9BR	30"	24"									
M4-9BL	30"	24"									

- 12x36 R1-6 4EA
- 48"x36" MA-R2-10a 9EA
- 36"x48" MA-R2-10e 10EA
- 30x30 R3-7L 2EA
- 30"x30" R3-7R 2EA
- 24"x30" R4-8 1EA
- 24"x12" R9-9 2EA
- 24"x12" R9-10 4EA
- 24"x12" R9-11aL 1EA
- 24"x12" R9-11aR 1EA
- 48"x30" R11-2 2EA
- 36x36" W1-4L 2EA
- 36"x36" W1-4R 2EA
- 36"x36" W-42L 1EA
- 36"x36" MA-W4-7L 1EA
- 36"x36" W5-1 2EA
- 36"x36" W8-1 4EA
- 36"x36" W8-3 2EA
- 36"x36" W8-8 2EA
- 36"x36" W8-15 2EA
- 36"x36" W9-2L 1EA
- 30"x30" W11-2 4EA
- 30"x30" W12-1 1EA
- 24"x24" W13-1P 2EA
- 24"x12" W16-7pl 4EA
- 24"x12" W16-9p 4EA
- 36"x36" W20-1 9EA
- 36"x36" W20-4 2EA
- 36"x36" W20-5L 1EA
- 36"x36" W20-7 2EA
- 36"x36" MA-W20-7b 2EA
- 36"x36" W21-5a 1EA
- 30"x24" M4-9BR 4EA
- 30"x24" M4-9BL 3EA

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	94	167
PROJECT FILE NO.			608561

- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
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- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA

TRAFFIC CONTROL PLANS

LEGEND

- EXISTING TREE TO REMAIN (TYP.)
- REMOVE TREE (TYP.)
- PROP. TREE PROTECTION ARMORING (TYP.)
- PROP. TREE PROTECTION FENCE (TYP.)
- PROP. AIR SPADE / ROOT PRUNING (TYP.)
- PROP. DECIDUOUS TREE (TYP.)
- PROP. EVERGREEN TREE (TYP.)
- PROP. SHRUBS (TYP.)
- PROP. LAWN SEED MIX
- PROP. NATIVE SEED MIX
- PROP. BIO-RETENTION SEED MIX
- PROP. TREE TRENCH (SEE SHEET 111)
- DECOMPACTION FOR PROP. LAWN (SEE SHEET 110)
- PROP. AGED PINE BARK MULCH

LANDSCAPE NOTES

- CONTRACTOR SHALL HAVE ALL SUBSURFACE UTILITIES MARKED PRIOR TO THE START OF WORK.
- PLANT LOCATIONS ARE APPROXIMATE. CONTRACTOR SHALL STAKE OUT PROPOSED PLANTING LOCATIONS FOR APPROVAL BY THE LANDSCAPE ARCHITECT PRIOR TO PLACING PLANT MATERIALS.
- ALL PLANT MATERIALS SHALL HAVE TAGS INDICATING COMMON NAME, BOTANICAL NAME, CULTIVAR, AND SIZE. IMMEDIATELY AFTER INSTALLATION, TAGS AND RIBBONS SHALL BE REMOVED.
- ALL PLANTS SHALL BE MULCHED PER THE PLANS AND SPECIFICATIONS.
- PLANT BEDS SHALL BE THOROUGHLY WATERED AS NECESSARY AND PER THE SPECIFICATIONS.
- ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED UNLESS NOTED OTHERWISE.
- LIMITS OF NATIVE SEED AND LAWN SEED ARE SCHEMATIC AND SHALL BE FINALIZED IN THE FIELD WITH THE LANDSCAPE ARCHITECT.

N/F
OSPITAL, INC.
7PG 1423/11
7/LOT 68/2A
RTH MAIN ST

N/F
TODD SMITH
BK/PG 7873/55
MAP/LOT 67/27
196 NORTH MAIN ST

N/F
JUDE J. ARSENAULT
BK/PG 4165/328
MAP/LOT 67/28
188 NORTH MAIN ST

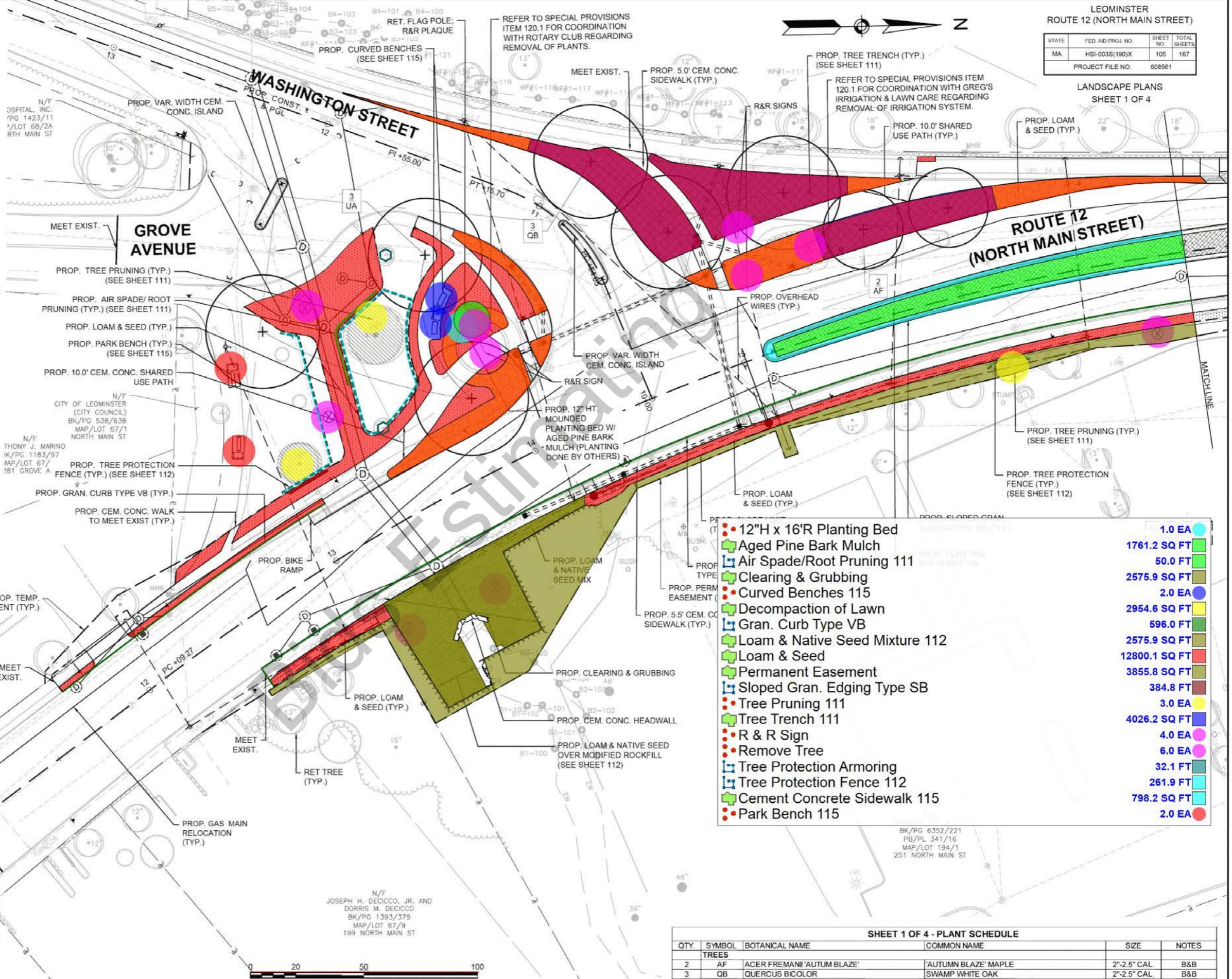
N/F
CITY OF LEOMINSTER
(CITY COUNCIL)
BK/PG 538/638
MAP/LOT 67/1
NORTH MAIN ST

N/F
THONY J. MARINO
IK/PG 1183/97
MAP/LOT 67/
281 GROVE A

N/F
JOSEPH H. DECICCO, JR. AND
DORRIS M. DECICCO
BK/PG 1393/379
MAP/LOT 67/9
199 NORTH MAIN ST

N/F
BK/PG 6352/221
PB/PL 341/16
MAP/LOT 194/1
251 NORTH MAIN ST

BEGIN PROJECT
STA. 11+00.00
MEET EXISTING
N3021445.1527
E586349.5708

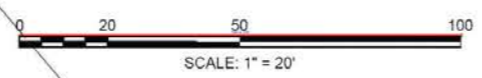


- 12"H x 16'R Planting Bed
- Aged Pine Bark Mulch
- Air Spade/Root Pruning 111
- Clearing & Grubbing
- Curved Benches 115
- Decompaction of Lawn
- Gran. Curb Type VB
- Loam & Native Seed Mixture 112
- Loam & Seed
- Permanent Easement
- Sloped Gran. Edging Type SB
- Tree Pruning 111
- Tree Trench 111
- R & R Sign
- Remove Tree
- Tree Protection Armoring
- Tree Protection Fence 112
- Cement Concrete Sidewalk 115
- Park Bench 115

1.0 EA	
1761.2 SQ FT	
50.0 FT	
2575.9 SQ FT	
2.0 EA	
2954.6 SQ FT	
596.0 FT	
2575.9 SQ FT	
12800.1 SQ FT	
3855.8 SQ FT	
384.8 FT	
3.0 EA	
4026.2 SQ FT	
4.0 EA	
6.0 EA	
32.1 FT	
261.9 FT	
798.2 SQ FT	
2.0 EA	

SHEET 1 OF 4 - PLANT SCHEDULE

QTY.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
TREES					
2	AF	ACER FREMANI 'AUTUM BLAZE'	'AUTUMN BLAZE' MAPLE	2"-2.5" CAL.	B&B
3	QB	QUERCUS BICOLOR	SWAMP WHITE OAK	2"-2.5" CAL.	B&B
3	UA	ULMUS AMERICANA 'PRINCETON'	'PRINCETON' ELM	2"-2.5" CAL.	B&B



LEOMINSTER
ROUTE 12 (NORTH MAIN STREET)

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	105	167
PROJECT FILE NO.		608561	

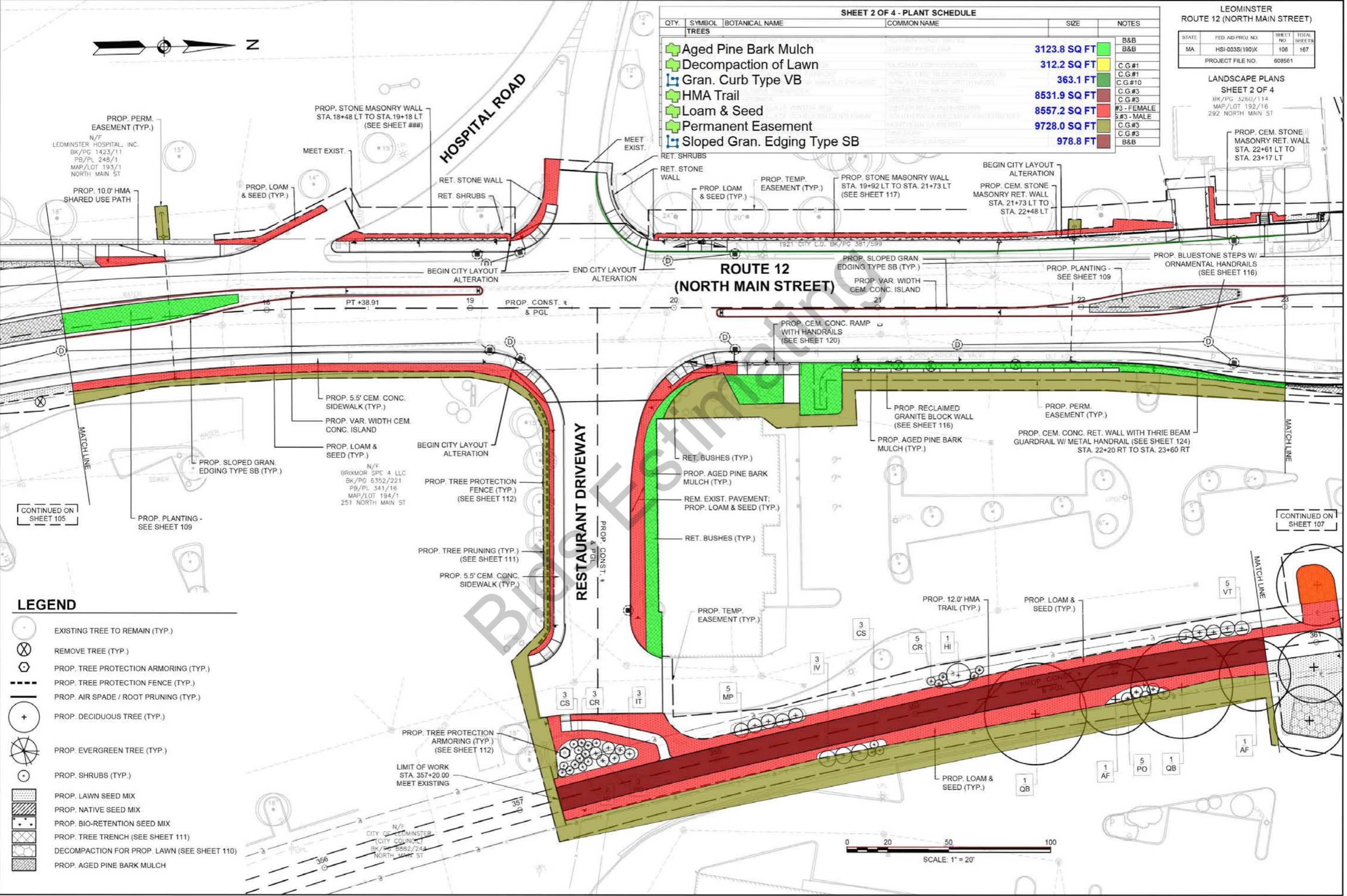
LANDSCAPE PLANS
SHEET 1 OF 4

QTY.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
		Aged Pine Bark Mulch		3123.8 SQ FT	B&B
		Decompaction of Lawn		312.2 SQ FT	B&B
		Gran. Curb Type VB		363.1 FT	C.G.#1
		HMA Trail		8531.9 SQ FT	C.G.#10
		Loam & Seed		8557.2 SQ FT	C.G.#3
		Permanent Easement		9728.0 SQ FT	#3 - FEMALE
		Sloped Gran. Edging Type SB		978.8 FT	#3 - MALE
					C.G.#3
					C.G.#3
					B&B

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-0035(190)X	108	167

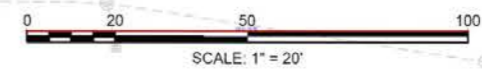
PROJECT FILE NO. 608561

LANDSCAPE PLANS
SHEET 2 OF 4
BK/PG 3260/114
MAP/LOT 192/16
292 NORTH MAIN ST



LEGEND

- EXISTING TREE TO REMAIN (TYP.)
- REMOVE TREE (TYP.)
- PROP. TREE PROTECTION ARMORING (TYP.)
- PROP. TREE PROTECTION FENCE (TYP.)
- PROP. AIR SPADE / ROOT PRUNING (TYP.)
- PROP. DECIDUOUS TREE (TYP.)
- PROP. EVERGREEN TREE (TYP.)
- PROP. SHRUBS (TYP.)
- PROP. LAWN SEED MIX
- PROP. NATIVE SEED MIX
- PROP. BIO-RETENTION SEED MIX
- PROP. TREE TRENCH (SEE SHEET 111)
- DECOMPACTION FOR PROP. LAWN (SEE SHEET 110)
- PROP. AGED PINE BARK MULCH



CONTINUED ON SHEET 105

CONTINUED ON SHEET 107

N/F
CITY OF LEOMINSTER
(CITY COUNCIL)
BK/PG 8882/244
NORTH MAIN ST

N/F
BRIXMOR SPE 4 LLC
BK/PG 6352/221
PB/PL 341/16
MAP/LOT 194/1
251 NORTH MAIN ST

PROP. PERM. EASEMENT (TYP.)
N/F
LEOMINSTER HOSPITAL, INC.
BK/PG 1423/11
PB/PL 248/1
MAP/LOT 193/1
NORTH MAIN ST

PROP. CEM. STONE MASONRY RET. WALL
STA. 22+61 LT TO
STA. 23+17 LT

PROP. STONE MASONRY WALL
STA. 19+92 LT TO STA. 21+73 LT
(SEE SHEET 117)

PROP. STONE MASONRY WALL
STA. 18+48 LT TO STA. 19+18 LT
(SEE SHEET ###)

BEGIN CITY LAYOUT ALTERATION
PROP. CEM. STONE MASONRY RET. WALL
STA. 21+73 LT TO STA. 22+48 LT

**ROUTE 12
(NORTH MAIN STREET)**

RESTAURANT DRIVEWAY

PT +38.91

PROP. CONST. & PGL

PROP. CEM. CONC. RAMP WITH HANDRAILS
(SEE SHEET 120)

PROP. SLOPED GRAN. EDGING TYPE SB (TYP.)

PROP. VAR. WIDTH CEM. CONC. ISLAND

PROP. PLANTING - SEE SHEET 109

PROP. BLUESTONE STEPS W/ ORNAMENTAL HANDRAILS
(SEE SHEET 116)

PROP. SLOPED GRAN. EDGING TYPE SB (TYP.)

PROP. 5.5' CEM. CONC. SIDEWALK (TYP.)

PROP. VAR. WIDTH CEM. CONC. ISLAND

PROP. LOAM & SEED (TYP.)

BEGIN CITY LAYOUT ALTERATION

PROP. TREE PROTECTION FENCE (TYP.)
(SEE SHEET 112)

PROP. TREE PRUNING (TYP.)
(SEE SHEET 111)

PROP. 5.5' CEM. CONC. SIDEWALK (TYP.)

RET. BUSHES (TYP.)

PROP. AGED PINE BARK MULCH (TYP.)

REM. EXIST. PAVEMENT;
PROP. LOAM & SEED (TYP.)

RET. BUSHES (TYP.)

PROP. TEMP. EASEMENT (TYP.)

PROP. RECLAIMED GRANITE BLOCK WALL
(SEE SHEET 116)

PROP. AGED PINE BARK MULCH (TYP.)

PROP. PERM. EASEMENT (TYP.)

PROP. CEM. CONC. RET. WALL WITH THRIE BEAM GUARDRAIL W/ METAL HANDRAIL
(SEE SHEET 124)
STA. 22+20 RT TO STA. 23+60 RT

PROP. 12.0' HMA TRAIL (TYP.)

PROP. LOAM & SEED (TYP.)

PROP. LOAM & SEED (TYP.)

PROP. TREE PROTECTION ARMORING (TYP.)
(SEE SHEET 112)

LIMIT OF WORK
STA. 357+20.00
MEET EXISTING

5 VT

3 CS

5 CR

1 HI

3 IV

5 MP

3 CS

3 CR

3 IT

1 AF

5 PO

1 QB

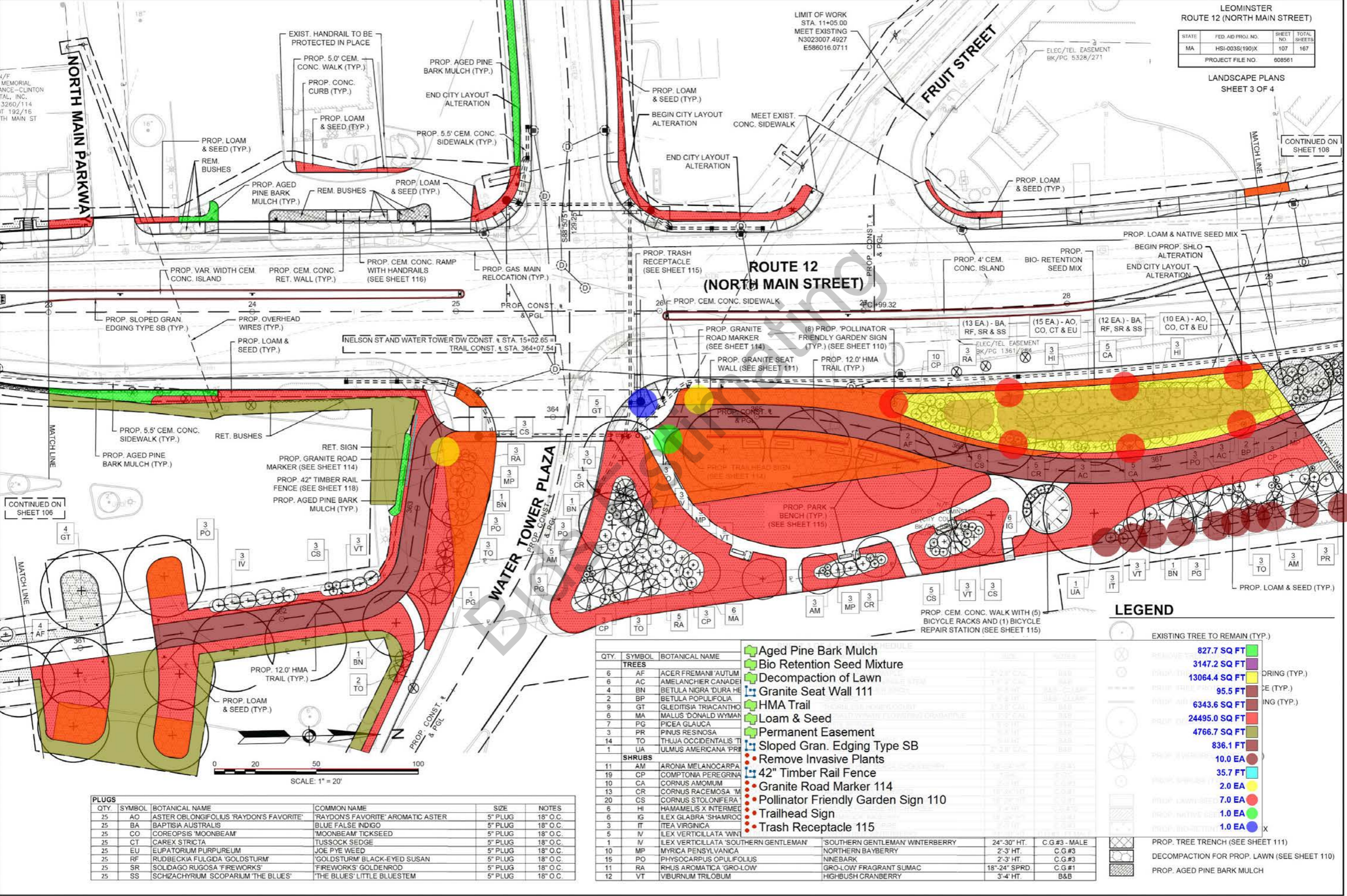
1 AF

1 QB

356

357

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	107	167
PROJECT FILE NO. 608561			

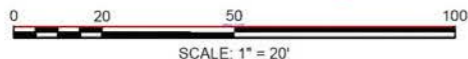


QTY.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
25	AO	ASTER OBLONGIFOLIUS 'RAYDON'S FAVORITE'	'RAYDON'S FAVORITE' AROMATIC ASTER	5" PLUG	18" O.C.
25	BA	BAPTISIA AUSTRALIS	BLUE FALSE INDIGO	5" PLUG	18" O.C.
25	CO	COREOPSIS 'MOONBEAM'	'MOONBEAM' TICKSEED	5" PLUG	18" O.C.
25	CT	CAREX STRICTA	TUSSOCK SEDGE	5" PLUG	18" O.C.
25	EU	EUPATORIUM PURPUREUM	JOE PYE WEED	5" PLUG	18" O.C.
25	RF	RUDBECKIA FULGIDA 'GOLDSTURM'	'GOLDSTURM' BLACK-EYED SUSAN	5" PLUG	18" O.C.
25	SR	SOLIDAGO RUGOSA 'FIREWORKS'	'FIREWORKS' GOLDENROD	5" PLUG	18" O.C.
25	SS	SCHIZACHYRIUM SCOPARIUM 'THE BLUES'	'THE BLUES' LITTLE BLUESTEM	5" PLUG	18" O.C.

QTY.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
6	AF	ACER FREMANI 'AUTUM'	'AUTUM' SWEETGUM	24"-30" HT.	C.G.#3 - MALE
6	AC	AMELANCHIER CANADESI	NORTHERN BAYBERRY	2'-3' HT.	C.G.#3
4	BN	BETULA NIGRA 'DURA HE'	NINEBARK	2'-3' HT.	C.G.#3
2	BP	BETULA POPULIFOLIA	GRO-LOW FRAGRANT SUMAC	18"-24" SPRD	C.G.#1
9	GT	GLEDTISIA TRIACANTHO	HIGHBUSH CRANBERRY	3'-4' HT.	B&B
6	MA	MALUS 'DONALD WYMAN'			
7	PG	PICEA GLAUCA			
3	PR	PINUS RESINOSA			
14	TO	THUJA OCCIDENTALIS 'T'			
1	UA	ULMUS AMERICANA 'PRI'			
SHRUBS					
11	AM	ARONIA MELANOCARPA			
19	CP	COMPTONIA PEREGRINA			
10	CA	CORNUS AMOMUM			
13	CR	CORNUS RACEMOSA 'M'			
20	CS	CORNUS STOLONIFERA			
6	HI	HAMAMELIS X INTERMED			
6	IG	ILEX GLABRA 'SHAMROO'			
3	IT	ITEA VIRGINICA			
5	IV	ILEX VERTICILLATA 'WINT'			
1	IV	ILEX VERTICILLATA 'SOUTHERN GENTLEMAN'	'SOUTHERN GENTLEMAN' WINTERBERRY	24"-30" HT.	C.G.#3 - MALE
10	MP	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	2'-3' HT.	C.G.#3
15	PO	PHYSOCARPUS OPULIFOLIUS	NINEBARK	2'-3' HT.	C.G.#3
11	RA	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	18"-24" SPRD	C.G.#1
12	VT	VIBURNUM TRILOBUM	HIGHBUSH CRANBERRY	3'-4' HT.	B&B

- Aged Pine Bark Mulch
- Bio Retention Seed Mixture
- Decompaction of Lawn
- Granite Seat Wall 111
- HMA Trail
- Loam & Seed
- Permanent Easement
- Sloped Gran. Edging Type SB
- Remove Invasive Plants
- 42" Timber Rail Fence
- Granite Road Marker 114
- Pollinator Friendly Garden Sign 110
- Trailhead Sign
- Trash Receptacle 115

LEGEND	
[Symbol]	EXISTING TREE TO REMAIN (TYP.)
[Symbol]	827.7 SQ FT
[Symbol]	3147.2 SQ FT
[Symbol]	13064.4 SQ FT
[Symbol]	95.5 FT
[Symbol]	6343.6 SQ FT
[Symbol]	24495.0 SQ FT
[Symbol]	4766.7 SQ FT
[Symbol]	836.1 FT
[Symbol]	10.0 EA
[Symbol]	35.7 FT
[Symbol]	2.0 EA
[Symbol]	7.0 EA
[Symbol]	1.0 EA
[Symbol]	1.0 EA
[Symbol]	PROP. TREE TRENCH (SEE SHEET 111)
[Symbol]	DECOMPACTION FOR PROP. LAWN (SEE SHEET 110)
[Symbol]	PROP. AGED PINE BARK MULCH



SCALE: 1" = 20'

SHEET 4 OF 4 - PLANT SCHEDULE

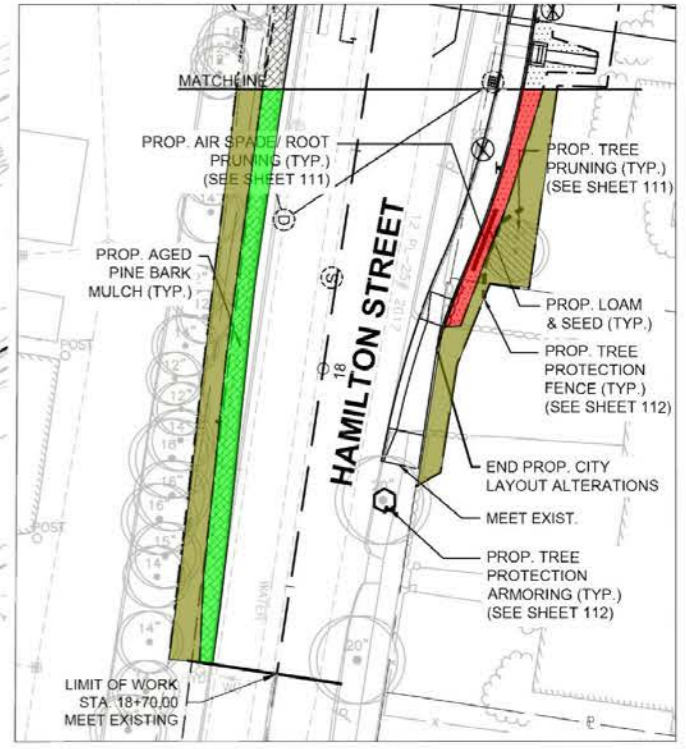
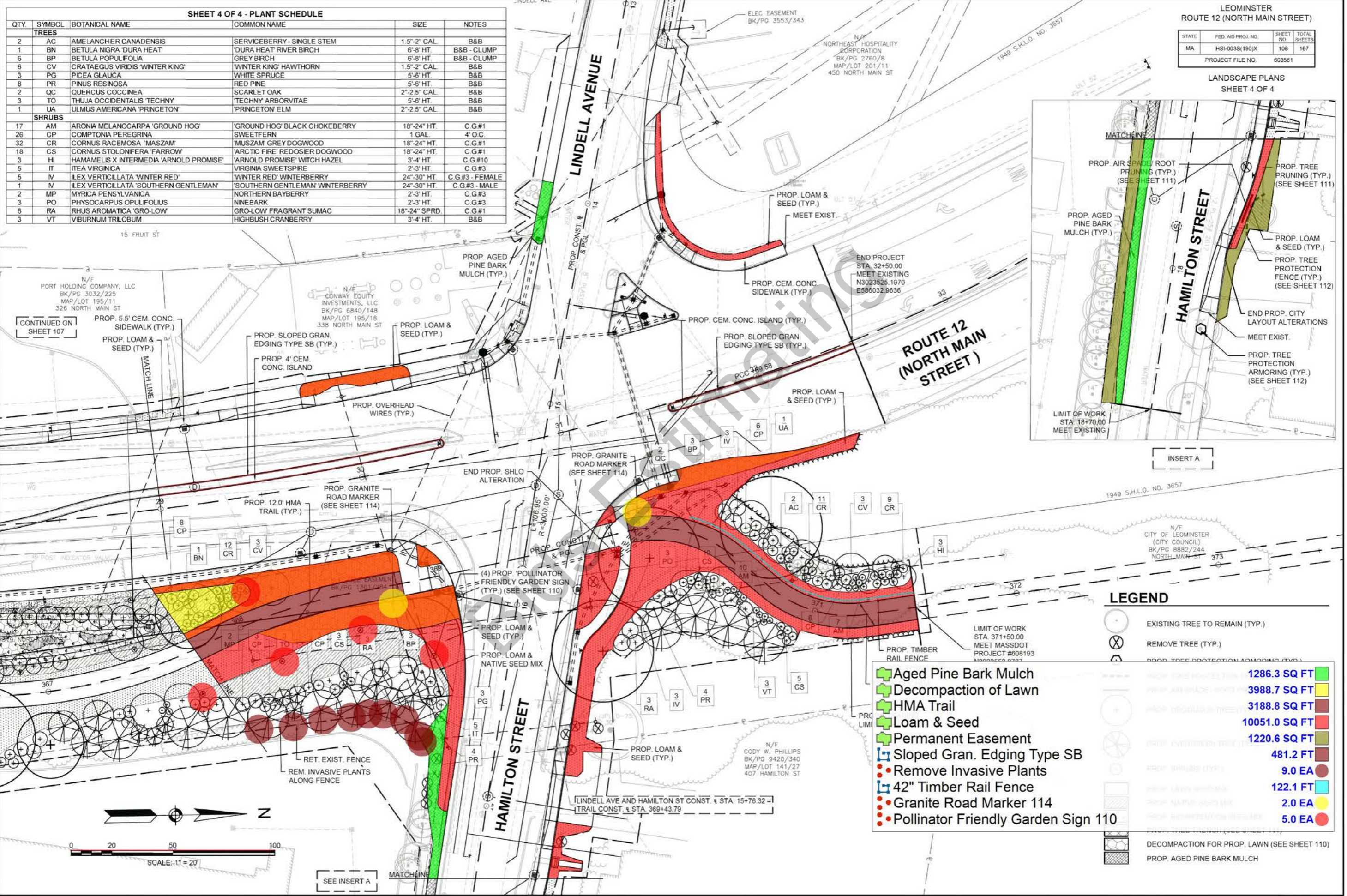
QTY.	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
TREES					
2	AC	AMELANCHIER CANADENSIS	SERVICEBERRY - SINGLE STEM	1.5"-2" CAL.	B&B
1	BN	BETULA NIGRA 'DURA HEAT'	'DURA HEAT' RIVER BIRCH	6'-8' HT.	B&B - CLUMP
6	BP	BETULA POPULIFOLIA	GREY BIRCH	6'-8' HT.	B&B - CLUMP
6	CV	CRATAEGUS VIRIDIS 'WINTER KING'	'WINTER KING' HAWTHORN	1.5"-2" CAL.	B&B
3	PG	PICEA GLAUCA	WHITE SPRUCE	5'-6' HT.	B&B
8	PR	PINUS RESINOSA	RED PINE	5'-6' HT.	B&B
2	QC	QUERCUS COCCINEA	SCARLET OAK	2"-2.5" CAL.	B&B
3	TO	THUJA OCCIDENTALIS 'TECHNY'	'TECHNY' ARBORVITAE	5'-6' HT.	B&B
1	UA	ULMUS AMERICANA 'PRINCETON'	'PRINCETON' ELM	2"-2.5" CAL.	B&B
SHRUBS					
17	AM	ARONIA MELANOCARPA 'GROUND HOG'	'GROUND HOG' BLACK CHOKEBERRY	18"-24" HT.	C.G.#1
26	CP	COMPTONIA PEREGRINA	SWEETFERN	1 GAL.	4' O.C.
32	CR	CORNUS RACEMOSA 'MASZAM'	'MASZAM' GREY DOGWOOD	18"-24" HT.	C.G.#1
18	CS	CORNUS STOLONIFERA 'FARROW'	'ARCTIC FIRE' REDOSIER DOGWOOD	18"-24" HT.	C.G.#1
3	HI	HAMAMELIS X INTERMEDIA 'ARNOLD PROMISE'	'ARNOLD PROMISE' WITCH HAZEL	3'-4' HT.	C.G.#10
5	IT	ITEA VIRGINICA	VIRGINIA SWEETSPIRE	2'-3' HT.	C.G.#3
5	IV	ILEX VERTICILLATA 'WINTER RED'	'WINTER RED' WINTERBERRY	24"-30" HT.	C.G.#3 - FEMALE
1	IV	ILEX VERTICILLATA 'SOUTHERN GENTLEMAN'	'SOUTHERN GENTLEMAN' WINTERBERRY	24"-30" HT.	C.G.#3 - MALE
2	MP	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	2'-3' HT.	C.G.#3
3	PO	PHYSOCARPUS OPULIFOLIUS	NINEBARK	2'-3' HT.	C.G.#3
6	RA	RHUS AROMATICA 'GRO-LOW'	GRO-LOW FRAGRANT SUMAC	18"-24" SPRD.	C.G.#1
3	VT	VIBURNUM TRLOBUM	HIGHBUSH CRANBERRY	3'-4' HT.	B&B

LEOMINSTER
ROUTE 12 (NORTH MAIN STREET)

STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	108	167

PROJECT FILE NO. 608561

LANDSCAPE PLANS
SHEET 4 OF 4



LEGEND

	EXISTING TREE TO REMAIN (TYP.)		1286.3 SQ FT
	REMOVE TREE (TYP.)		3988.7 SQ FT
	PROP. TREE PROTECTION ARMORING (TYP.)		3188.8 SQ FT
	PROP. PERMANENT EASEMENT		10051.0 SQ FT
	PROP. SLOPED GRAN. EDGING TYPE SB		1220.6 SQ FT
	PROP. SLOPED GRAN. EDGING TYPE SB		481.2 FT
	REMOVE INVASIVE PLANTS		9.0 EA
	42" TIMBER RAIL FENCE		122.1 FT
	GRANITE ROAD MARKER 114		2.0 EA
	POLLINATOR FRIENDLY GARDEN SIGN 110		5.0 EA
	DECOMPACTION FOR PROP. LAWN (SEE SHEET 110)		
	PROP. AGED PINE BARK MULCH		

CONTINUED ON SHEET 107

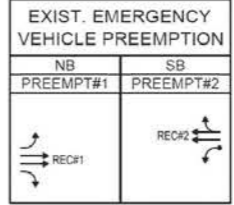
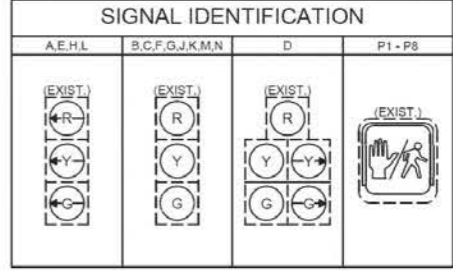
SEE INSERT A

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	H91-0035(190)X	85	167
PROJECT FILE NO.		608561	

TRAFFIC SIGNAL PLANS
LOCATION NO. 4 (LOCAL)

NOTE:

- EXISTING CONDUITS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY THE LOCATIONS OF CONDUITS PRIOR TO INSTALLATION OF THE FIBER OPTIC INTERCONNECT CABLE.
- WORK AT THIS LOCATION (NO. 5) SHALL CONSIST OF R&S EXISTING TRAFFIC CONTROLLER AND CABINET. INSTALL NEW ATC CONTROLLER AND CABINET ON EXISTING FOUNDATION AS WELL AS INSTALLING NEW FIBER OPTIC INTERCONNECT CABLE IN EXISTING CONDUIT.
- RETAIN ALL EXISTING TRAFFIC SIGNAL EQUIPMENT, CONDUIT, SIGNS AND PAVEMENT MARKINGS UNLESS OTHERWISE NOTED.



MAJOR ITEMS REQUIRED	
QUANTITY	DESCRIPTION
1	ADVANCE TRAFFIC CONTROLLER (ATC) IN AC POWERED ATC CABINET - COMPLETE WITH FIBER OPTIC PATCH PANEL ON EXISTING FOUNDATION
1	ENVIRONMENTAL HARDENED ETHERNET SWITCH (FOR INTERCONNECT)
PLUS ALL MISCELLANEOUS EQUIPMENT AND MATERIAL NECESSARY TO PROVIDE A COMPLETE OPERATING TRAFFIC CONTROL SIGNAL.	

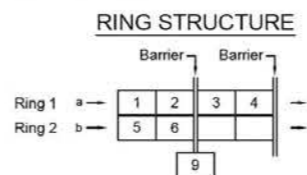
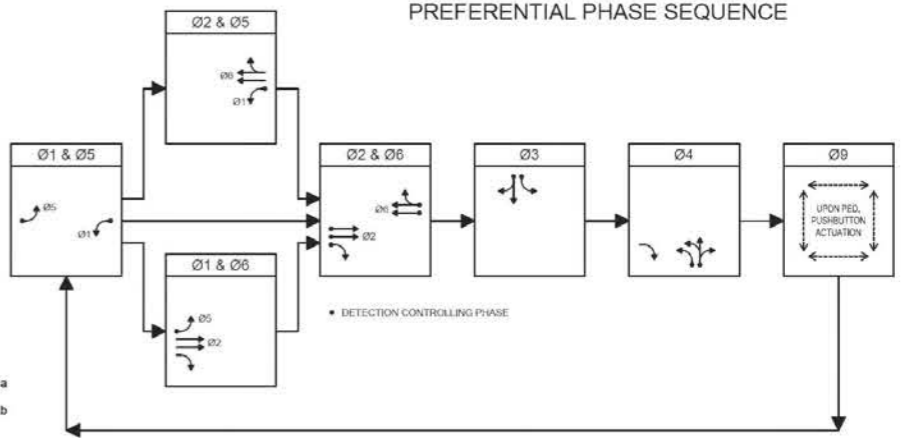


TABLE 2-6: LOCATION NO. 6
ROUTE 12 (NORTH MAIN STREET) @ ERDMAN WAY/SHOPPING PLAZA
COORDINATION DATA
(ALL ENTRIES IN SECONDS)

	PLAN 1 M-F: 0700-1200	PLAN 2 M-F: 1200-1900	PLAN 3 SAT & SUN:
CYCLE	90	120	90

FULLY-ACTUATED	<input checked="" type="checkbox"/>	ISOLATED	<input type="checkbox"/>
SEMI-ACTUATED	<input type="checkbox"/>	COORDINATED/INTERCONNECTED	<input checked="" type="checkbox"/>
PRE-TIMED	<input type="checkbox"/>	(FIBER OPTIC CABLE)	<input type="checkbox"/>

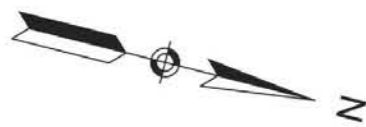
SEQUENCE AND TIMING

STREET	DIRECTION	HOUSINGS	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	FLASH OPER.		
ROUTE 12 (NORTH MAIN STREET)	SB	F,G	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	G	Y	R	R	R	R	FRL	
SHOPPING PLAZA DRIVEWAY	EB	H	RL	RL	RL	RL	RL	RL	GL	YL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	FY		
SHOPPING PLAZA DRIVEWAY	EB	J,K	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	FRL		
ERDMAN WAY	WB	L	RL	RL	RL	RL	RL	RL	RL	GL	YL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	FRL		
ERDMAN WAY	WB	M,N	R	R	R	R	R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	FR		
PEDESTRIAN		P1-P8	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	OUT			
TIMING IN SECONDS																										
MINIMUM INITIAL			7			10			7			7			7			10								
PASSAGE			2			3			2			2			2			3								
MAXIMUM 1			25			55			25			35			20			55								
MAXIMUM 2			-			-			-			-			-			-								
CHANGE			4	2		4	2		4	2		4	2		4	2		4	2		4	2				
PEDESTRIAN																					7	21	4			
RECALL			OFF			SOFT			OFF			OFF			OFF			SOFT			OFF					
MEMORY			NON-LOCKING			NON-LOCKING			NON-LOCKING			NON-LOCKING			NON-LOCKING			NON-LOCKING			LOCKING					

3" Interconnection Conduit with Fiber Optic Cable

SPLIT TIME Ø2	47	19	62	42	42	19
SPLIT TIME Ø3	13	13	13	13	13	13
SPLIT TIME Ø4	14	13	30	20	21	13
SPLIT TIME Ø5	13	13	15	13	13	13
SPLIT TIME Ø6	50	19	62	42	43	19
SPLIT TIME Ø7	-	-	-	-	-	-
SPLIT TIME Ø8	-	-	-	-	-	-
SPLIT TIME Ø9	-	32	-	32	-	32

- OFFSET IS REFERENCE TO THE END OF COORDINATED Ø2 AND Ø6.
- Ø2 & Ø6 "CALL NOT ACTUATED" DURING COORDINATION.
- PLAN FORCE OFF SHALL BE IN EFFECT.
- SPLIT TIMES EQUAL TO GREEN PLUS CLEARANCES.
- MAX2 TERMINATION SHALL BE IN EFFECT DURING COORDINATION.
- YIELD MODE COORDINATION SHALL BE IN EFFECT.



MAJOR ITEMS REQUIRED	
QUANTITY	DESCRIPTION
1	ADVANCE TRAFFIC CONTROLLER (ATC) IN AC POWERED ATC CABINET - COMPLETE WITH FIBER OPTIC PATCH PANEL ON EXISTING FOUNDATION
1	ENVIRONMENTAL HARDENED ETHERNET SWITCH (FOR INTERCONNECT)
PLUS ALL MISCELLANEOUS EQUIPMENT AND MATERIAL NECESSARY TO PROVIDE A COMPLETE OPERATING TRAFFIC CONTROL SIGNAL.	

LEOMINSTER
ROUTE 12 (NORTH MAIN STREET)

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	H91-003S(190)X	84	167

PROJECT FILE NO. 608561

TRAFFIC SIGNAL PLANS
LOCATION NO. 4 (LOCAL)

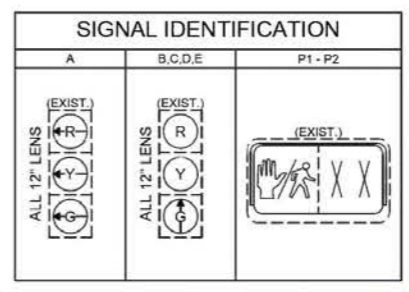
ROUTE 12 (NORTH MAIN STREET)

ROUTE 2
WB OFF-RAMP
ROUTE 2
WB ON-RAMP

PROP. TRAFFIC SIGNAL CONTROLLER AND CABINET ON EXISTING FOUNDATION; RE-USE EXISTING SERVICE CONNECTION AND R&R METER TO NEW CABINET. (NOTE: CONTRACTOR MAY BE REQUIRED TO MODIFY THE EXISTING FOUNDATION FOR PROPER INSTALLATION OF THE NEW CABINET)

PROP. FIBER OPTIC CABLE IN EXIST. INTERCONNECT CONDUIT (TYP.)

PROP. FIBER OPTIC CABLE IN EXIST. INTERCONNECT CONDUIT (TYP.)



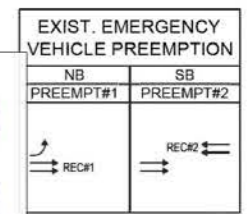
TRAFFIC CONTROLLER DATA	
PARAMETER	SELECTION
PHASE ASSIGNMENTS	STD. NEMA
OVERLAPS	STD. NEMA
RINGS	DUAL
DUAL ENTRY	ON
SIMULTANEOUS GAP OUT DISABLED	YES
MINIMUM YELLOW IN SECONDS	3
MAX II BY INTERNAL CLOCK	YES
NIGHT TIME FLASH BY INTERNAL CLOCK	NOT USED
TYPE OF INTERCONNECT TO MASTER	FIBER OPTIC CABLE
REMOTE MUTCD FLASH BY MASTER	YES
COORDINATION MODE	YIELD
MAXIMUM MODE	MAX 2
FORCE MODE	FLOATING
OFFSET MODE	END OF GREEN
OFFSET SEEK METHOD	SHORTWAY

- Replace Meter
- Traffic Signal Controller w/Cabinet
- Fiber Optic Cable

1.0 EA

1.0 EA

623.3 FT

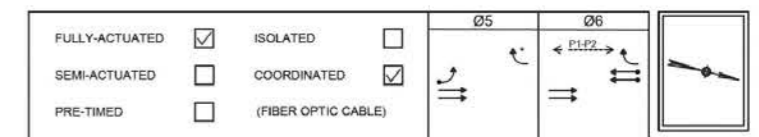
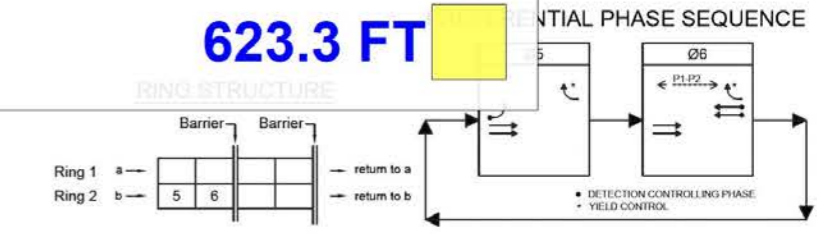


- NOTE:
- EXISTING CONDUITS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY THE LOCATIONS OF CONDUITS PRIOR TO INSTALLATION OF THE FIBER OPTIC INTERCONNECT CABLE.
 - WORK AT THIS LOCATION (NO. 5) SHALL CONSIST OF R&S EXISTING TRAFFIC CONTROLLER AND CABINET. INSTALL NEW ATC CONTROLLER AND CABINET ON EXISTING FOUNDATION AS WELL AS INSTALLING NEW FIBER OPTIC INTERCONNECT CABLE IN EXISTING CONDUIT.
 - RETAIN ALL EXISTING TRAFFIC SIGNAL EQUIPMENT, CONDUIT, SIGNS AND PAVEMENT MARKINGS UNLESS OTHERWISE NOTED.

TABLE 2-5: LOCATION NO. 5
ROUTE 12 (NORTH MAIN STREET) @ ROUTE 2 WB RAMPS
COORDINATION DATA
(ALL ENTRIES IN SECONDS)

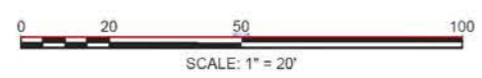
	PLAN 1 M-F: 0700-1200	PLAN 2 M-F: 1200-1900	PLAN 3 SAT & SUN:
CYCLE	45	60	4
OFFSET	15	5	15
SPLIT TIME Ø1	-	-	-
SPLIT TIME Ø2	-	-	-
SPLIT TIME Ø3	-	-	-
SPLIT TIME Ø4	-	-	-
SPLIT TIME Ø5	15	25	15
SPLIT TIME Ø6	30	35	30
SPLIT TIME Ø7	-	-	-
SPLIT TIME Ø8	-	-	-

- OFFSET IS REFERENCE TO THE END OF COORDINATED Ø2 AND Ø6.
- Ø2 & Ø6 "CALL NOT ACTUATED" DURING COORDINATION.
- PLAN FORCE OFF SHALL BE IN EFFECT.
- SPLIT TIMES EQUAL TO GREEN PLUS CLEARANCES.
- MAX2 TERMINATION SHALL BE IN EFFECT DURING COORDINATION.
- YIELD MODE COORDINATION SHALL BE IN EFFECT.
- PROPOSED COORDINATION TIME TO RUN AS HALF CYCLE



STREET	DIRECTION	HOUSINGS	1	2	3	4	5	6	FLASH OPER.
ROUTE 12 (NORTH MAIN STREET)	NBL	A	GL	YL	RL	RL	RL	RL	FYL
ROUTE 12 (NORTH MAIN STREET)	NB	B,C	GV	GV	GV	GV	GV	GV	FY
ROUTE 2 EASTBOUND OFF-RAMP	SB	D,E	R	R	R	GV	Y	R	FY

TIMING IN SECONDS		7	10	EMERGENCY
MINIMUM INITIAL PASSAGE		2	2	
MAXIMUM 1 (FREE OPERATION)		30	60	
MAXIMUM 2 (COORDINATED OPERATION)		**	**	
CHANGE		3.0	2.0	3.0 1.5
PEDESTRIAN			7/6	
RECALL		OFF	SOFT	
MEMORY		NON-LOCKING	LOCKING	



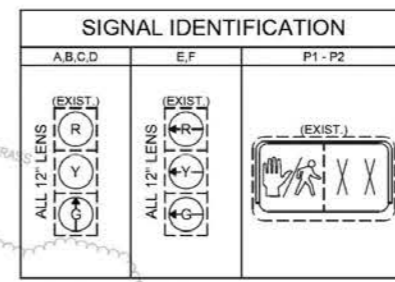
** SEE TABLE 2-5 FOR SPLITS

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	83	167
PROJECT FILE NO. 608561			

TRAFFIC SIGNAL PLANS
LOCATION NO. 4 (LOCAL)

TRAFFIC CONTROLLER DATA	
PARAMETER	SELECTION
PHASE ASSIGNMENTS	STD. NEMA
OVERLAPS	STD. NEMA
RINGS	DUAL
DUAL ENTRY	ON (Ø2 & Ø6)
SIMULTANEOUS GAP OUT DISABLED	YES (Ø2 & Ø6)
MINIMUM YELLOW IN SECONDS	3
MAX II BY INTERNAL CLOCK	YES
NIGHT TIME FLASH BY INTERNAL CLOCK	NOT USED
TYPE OF INTERCONNECT TO MASTER	FIBER OPTIC CABLE
REMOTE MUTCD FLASH BY MASTER	YES
COORDINATION MODE	YIELD
MAXIMUM MODE	MAX 2
FORCE MODE	FLOATING
OFFSET MODE	END OF GREEN
OFFSET SEEK METHOD	SHORTWAY

MAJOR ITEMS REQUIRED	
QUANTITY	DESCRIPTION
1	ADVANCE TRAFFIC CONTROLLER (ATC) IN AC POWERED ATC CABINET - COMPLETE WITH FIBER OPTIC PATCH PANEL ON EXISTING FOUNDATION
1	ENVIRONMENTAL HARDENED ETHERNET SWITCH (FOR INTERCONNECT)
PLUS ALL MISCELLANEOUS EQUIPMENT AND MATERIAL NECESSARY TO PROVIDE A COMPLETE OPERATING TRAFFIC CONTROL SIGNAL.	



- NOTE:**
- EXISTING CONDUITS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL VERIFY THE LOCATIONS OF CONDUITS PRIOR TO INSTALLATION OF THE FIBER OPTIC INTERCONNECT CABLE.
 - WORK AT THIS LOCATION (NO. 4) SHALL CONSIST OF R&S EXISTING TRAFFIC CONTROLLER AND CABINET. INSTALL NEW ATC CONTROLLER AND CABINET ON EXISTING FOUNDATION AS WELL AS INSTALLING NEW FIBER OPTIC INTERCONNECT CABLE IN EXISTING CONDUIT.
 - RETAIN ALL EXISTING TRAFFIC SIGNAL EQUIPMENT, CONDUIT, SIGNS AND PAVEMENT MARKINGS UNLESS OTHERWISE NOTED.

PROP. TRAFFIC SIGNAL CONTROLLER AND CABINET ON EXISTING FOUNDATION; RE-USE EXISTING SERVICE CONNECTION AND R&R METER TO NEW CABINET. (NOTE: CONTRACTOR MAY BE REQUIRED TO MODIFY THE EXISTING FOUNDATION FOR PROPER INSTALLATION OF THE NEW CABINET)

PROP. FIBER OPTIC CABLE IN EXIST. INTERCONNECT CONDUIT (TYP.)

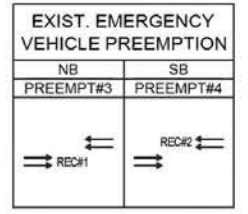
PROP. FIBER OPTIC CABLE IN EXIST. INTERCONNECT CONDUIT (TYP.)

ROUTE 12 (NORTH MAIN STREET)

ROUTE 12 (NORTH MAIN STREET)

REC#2

REC#1



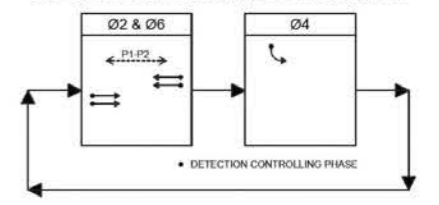
- Replace Meter
- Traffic Signal Controller w/Cabinet
- Fiber Optic Cable

1.0 EA

1.0 EA

577.4 FT

PREFERENTIAL PHASE SEQUENCE



FULLY-ACTUATED	<input checked="" type="checkbox"/>	ISOLATED	<input type="checkbox"/>
SEMI-ACTUATED	<input type="checkbox"/>	COORDINATED	<input checked="" type="checkbox"/>
PRE-TIMED	<input type="checkbox"/>		

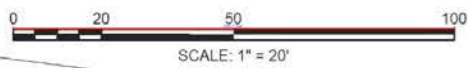
SEQUENCE AND TIMING

STREET	DIRECTION	HOUSINGS	1	2	3	4	5	6	7	8	9	FLASH OPER.
ROUTE 12 (NORTH MAIN STREET)	NB	A,B	GV	Y	R	R	R	R	R	R	R	FY
ROUTE 12 (NORTH MAIN STREET)	SB	B,C	R	R	R	R	R	R	GV	Y	R	FY
ROUTE 2 EASTBOUND OFF-RAMP	EB	E,F	RL	RL	RL	GL	YL	RL	RL	RL	RL	FRL
PEDESTRIAN		P1-P2	DW	DW	DW	DW	DW	DW	W/DW	DW	DW	OUT

TIMING IN SECONDS				EMERGENCY
MINIMUM INITIAL	10	7	10	
PASSAGE	2	3	3	
MAXIMUM 1 (FREE OPERATION)	60	30	60	
MAXIMUM 2 (COORDINATED OPERATION)	*	*	*	
CHANGE	3.0	1.5	3.0 2.5 3.0 1.5	
PEDESTRIAN			7/6	
RECALL	MIN	OFF	MIN	
MEMORY	LOCKING	NON-LOCKING	LOCKING	

	M-F: 0700-1200	M-F: 1200-1900	SAT & SUN:
CYCLE	45	60	45
OFFSET	23	17	23
SPLIT TIME Ø1	-	-	-
SPLIT TIME Ø2	25	35	28
SPLIT TIME Ø3	-	-	-
SPLIT TIME Ø4	20	25	17
SPLIT TIME Ø5	-	-	-
SPLIT TIME Ø6	25	35	28
SPLIT TIME Ø7	-	-	-
SPLIT TIME Ø8	-	-	-

- OFFSET IS REFERENCE TO THE END OF COORDINATED Ø2 AND Ø6.
- Ø2 & Ø6 "CALL NOT ACTUATED" DURING COORDINATION.
- PLAN FORCE OFF SHALL BE IN EFFECT.
- SPLIT TIMES EQUAL TO GREEN PLUS CLEARANCES.
- MAX2 TERMINATION SHALL BE IN EFFECT DURING COORDINATION.
- YIELD MODE COORDINATION SHALL BE IN EFFECT.
- PROPOSED COORDINATION TIME TO RUN AS HALF CYCLE.



- 3" Conduit
- 3" Interconnection Conduit with Fiber Optic Cable
- 3-3" Conduit
- 8'H Signal Post w/Base & Foundation
- 12"x12" Pullbox
- Emergency Preemption Optical Detector
- P1
- P2
- P3
- P4
- P5
- P6
- P7
- P8
- Pedestrian Push Button
- Preemption strobe
- Traffic Controller w/Cabinet & foundation
- Traffic Controller w/Cabinet, foundation & Concrete Pad
- Vehicular Signal Head
- Video Detection Camera
- Wireless Broadband Antenna w/Ethernet Cable
- 40' Mast Arm w/Core Pier Foundation
- 45' Mast Arm w/Core Pier Foundation
- 50' Mast Arm w/Core Pier Foundation
- Service Connection

- 343.7 FT
- 260.3 FT
- 199.2 FT
- 5.0 EA
- 14.0 EA
- 4.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 8.0 EA
- 2.0 EA
- 0.0 EA
- 1.0 EA
- 13.0 EA
- 4.0 EA
- 1.0 EA
- 1.0 EA
- 2.0 EA
- 1.0 EA

CONST. STA. 25+55.75 =
CONST. STA. 14+50.83

PROP. 8' SIGNAL POST
w/BASE & FOUNDATION
(STA. 25+30.0, 62.1' LT)

PROP. 12"x12"
PULLBOX (TYP.)

PROP. 50' MAST ARM
w/CORED PIER FDN.
(STA. 25+24.9, 54.5' LT)

PROP. 8' SIGNAL POST
w/BASE & FOUNDATION
(STA. 25+18.9, 47.9' LT)

P. WIRELESS BROADBAND
ENNA w/ETHERNET CABLE
TO CONTROLLER CABINET

PROP. VIDEO
DETECTION
CAMERA (TYP.)
(SEE GENERAL NOTE 2)

PROP. 8' SIGNAL POST
w/BASE & FOUNDATION
(STA. 25+82.8, 62.4' LT)

PROP. 12"x12"
PULLBOX (TYP.)

PROP. 3"
CONDUIT
(TYP.)

MA-D3-1A

PROP. 40' MAST ARM
w/CORED PIER FDN.
(STA. 25+95.7, 49.3' LT)

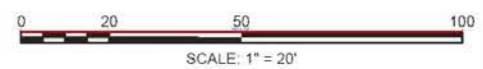
PROP. ZONE OF
DETECTION (TYP.)

ROUTE 12 (NORTH
MAIN STREET)

- GENERAL NOTES:**
- OPTICAL RECEIVERS MAY BE RELOCATED BY THE SIGNAL CONTRACTOR FOR OPTIMUM LINE OF SIGHT DETECTION. CHANGES SHALL BE VERIFIED BY THE ENGINEER.
 - THE DETECTION CAMERA LOCATIONS SHOWN ON THE PLAN ARE NOT FINAL AND SUBJECT TO THE TYPE OF TECHNOLOGY SELECTED BY THE CONTRACTOR. THE EQUIPMENT SHALL BE ON MASSDOT'S QUALIFIED TRAFFIC CONTROL EQUIPMENT (QTCE) LIST. THE SELECTED CAMERA(S) SHALL ACHIEVE THE REQUIRED DETECTION ZONES AS SHOWN. CONTRACTOR SHALL ENSURE THE LOADING OF THE CAMERA(S) IS INCLUDED IN THE CALCULATION OF THE MAST ARM.
 - THE PROPOSED WIRELESS BROADBAND ANTENNA ON THE 50' MAST ARM AT THE SW CORNER SHALL BE MOUNTED ON AN EXTENSION ARM. CONTRACTOR SHALL ADJUST THE ANTENNA TO PROVIDE LINE OF SIGHT WITH WIRELESS ANTENNA AT WASHINGTON STREET INTERSECTION.
 - SEE "TRAFFIC SIGN & PAVEMENT MARKING PLANS" FOR ALL PROPOSED SIGNS AND EXISTING SIGNS.
 - FOR PROPOSED MAST ARMS THAT ARE IN CLOSE PROXIMITY TO OVERHEAD WIRES, THE CONTRACTOR SHALL COORDINATE WITH THE OVERHEAD UTILITY COMPANY FOR THE INSTALLATION OF THE MAST ARM FOUNDATIONS.
 - REMOVE & STACK ALL EXISTING TRAFFIC SIGNAL EQUIPMENT COMPLETE. ABANDON ALL PULL BOXES AND HANDHOLES (R&S FRAMES & COVERS).

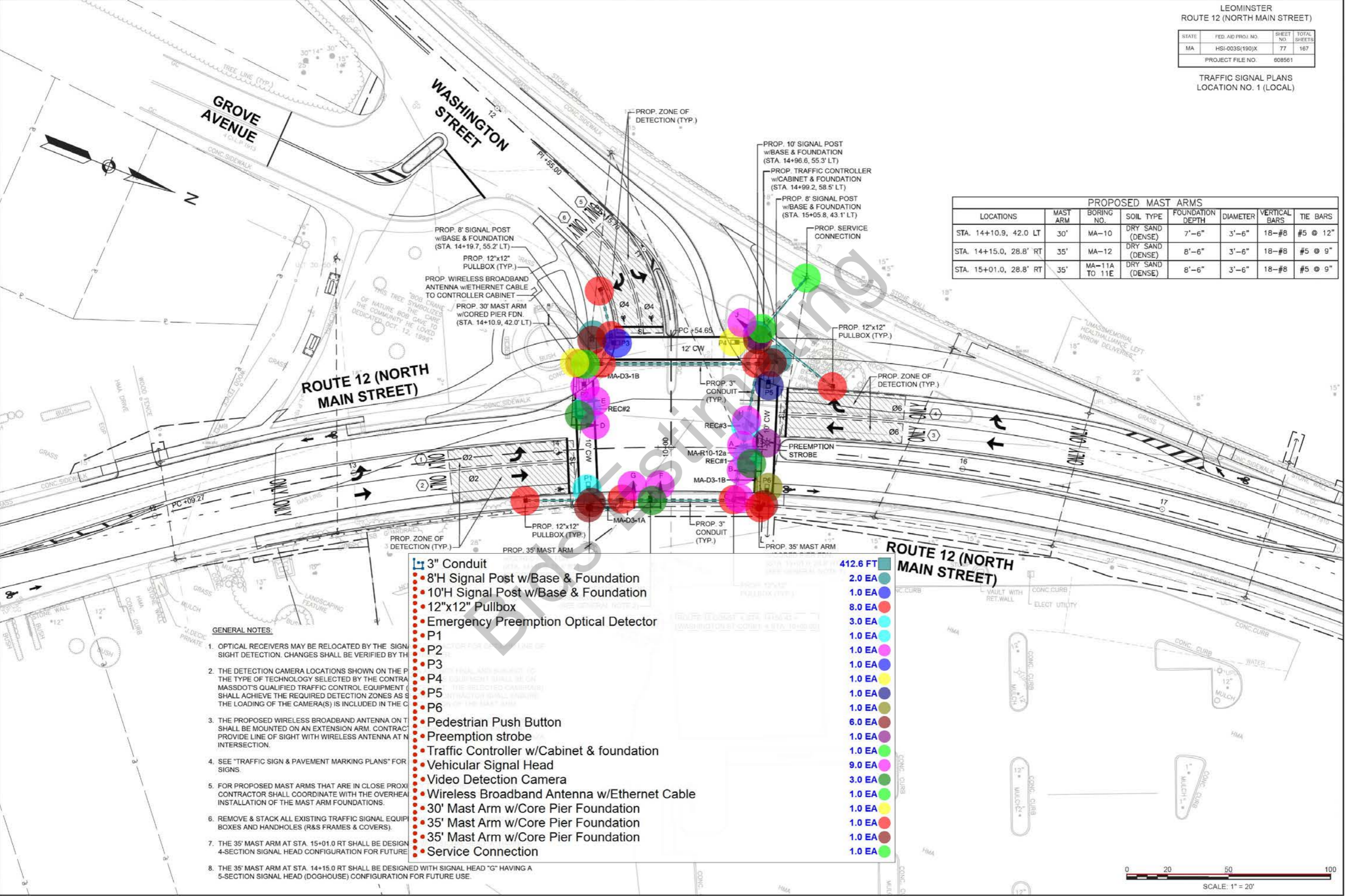
PROPOSED MAST ARMS

LOCATIONS	MAST ARM	BORING NO.	SOIL TYPE	FOUNDATION DEPTH	DIAMETER	VERTICAL BARS	TIE BARS
STA. 25+11.0, 61.5' RT	45'	MA-9	DRY SAND (LOOSE)	12'-0"	4'-0"	18-#9	#5 @ 9"
STA. 25+24.9, 54.5' LT	50'	MA-6	DRY SAND (DENSE)	9'-0"	4'-0"	18-#9	#5 @ 9"
STA. 25+90.5, 44.5' RT	50'	MA-8	DRY SAND (LOOSE)	12'-0"	4'-0"	18-#9	#5 @ 9"
STA. 25+95.7, 49.3' LT	40'	MA-7	DRY SAND (LOOSE)	11'-6"	3'-6"	18-#8	#5 @ 9"



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	77	167
PROJECT FILE NO.		608561	

TRAFFIC SIGNAL PLANS
LOCATION NO. 1 (LOCAL)



PROPOSED MAST ARMS							
LOCATIONS	MAST ARM	BORING NO.	SOIL TYPE	FOUNDATION DEPTH	DIAMETER	VERTICAL BARS	TIE BARS
STA. 14+10.9, 42.0 LT	30'	MA-10	DRY SAND (DENSE)	7'-6"	3'-6"	18-#8	#5 @ 12"
STA. 14+15.0, 28.8' RT	35'	MA-12	DRY SAND (DENSE)	8'-6"	3'-6"	18-#8	#5 @ 9"
STA. 15+01.0, 28.8' RT	35'	MA-11A TO 11E	DRY SAND (DENSE)	8'-6"	3'-6"	18-#8	#5 @ 9"

3" Conduit

- 8'H Signal Post w/Base & Foundation
- 10'H Signal Post w/Base & Foundation
- 12"x12" Pullbox
- Emergency Preemption Optical Detector
- P1
- P2
- P3
- P4
- P5
- P6
- Pedestrian Push Button
- Preemption strobe
- Traffic Controller w/Cabinet & foundation
- Vehicular Signal Head
- Video Detection Camera
- Wireless Broadband Antenna w/Ethernet Cable
- 30' Mast Arm w/Core Pier Foundation
- 35' Mast Arm w/Core Pier Foundation
- 35' Mast Arm w/Core Pier Foundation
- Service Connection

412.6 FT

- 2.0 EA
- 1.0 EA
- 8.0 EA
- 3.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 6.0 EA
- 1.0 EA
- 1.0 EA
- 9.0 EA
- 3.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA

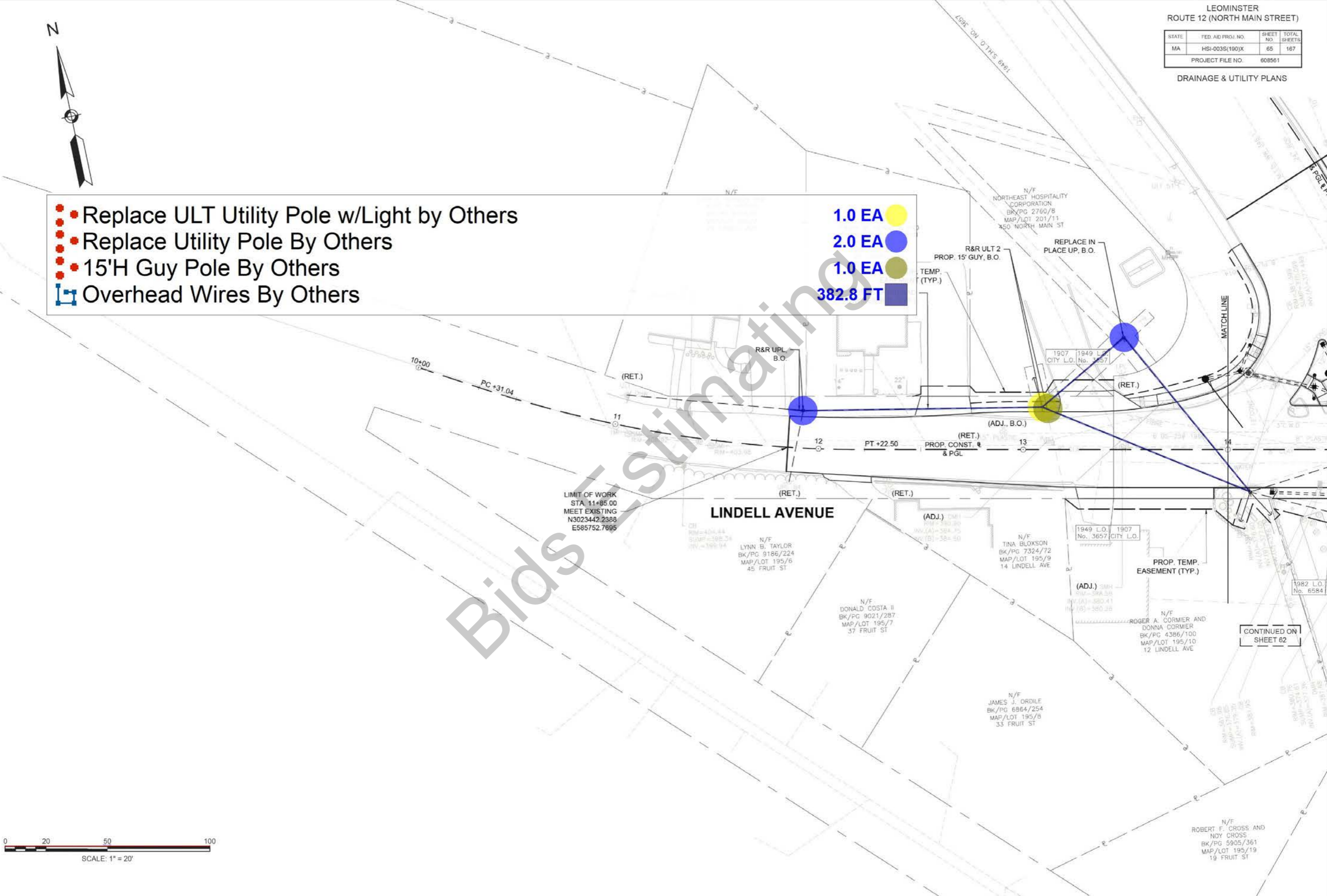
- GENERAL NOTES:**
- OPTICAL RECEIVERS MAY BE RELOCATED BY THE SIGN SIGHT DETECTION. CHANGES SHALL BE VERIFIED BY THE CONTRACTOR.
 - THE DETECTION CAMERA LOCATIONS SHOWN ON THE PLAN SHALL BE VERIFIED BY THE CONTRACTOR. THE TYPE OF TECHNOLOGY SELECTED BY THE CONTRACTOR SHALL BE APPROVED BY THE DESIGNER. THE CONTRACTOR SHALL ACHIEVE THE REQUIRED DETECTION ZONES AS SHOWN ON THE PLAN. THE LOADING OF THE CAMERA(S) IS INCLUDED IN THE CONTRACT PRICE.
 - THE PROPOSED WIRELESS BROADBAND ANTENNA ON THE MAST ARM SHALL BE MOUNTED ON AN EXTENSION ARM. CONTRACTOR SHALL PROVIDE LINE OF SIGHT WITH WIRELESS ANTENNA AT THE INTERSECTION.
 - SEE "TRAFFIC SIGN & PAVEMENT MARKING PLANS" FOR SIGNS.
 - FOR PROPOSED MAST ARMS THAT ARE IN CLOSE PROXIMITY TO OVERHEAD UTILITIES, CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY FOR THE INSTALLATION OF THE MAST ARM FOUNDATIONS.
 - REMOVE & STACK ALL EXISTING TRAFFIC SIGNAL EQUIPMENT BOXES AND HANDHOLES (R&S FRAMES & COVERS).
 - THE 35' MAST ARM AT STA. 15+01.0 RT SHALL BE DESIGNED WITH 4-SECTION SIGNAL HEAD CONFIGURATION FOR FUTURE USE.
 - THE 35' MAST ARM AT STA. 14+15.0 RT SHALL BE DESIGNED WITH SIGNAL HEAD "G" HAVING A 5-SECTION SIGNAL HEAD (DOGHOUSE) CONFIGURATION FOR FUTURE USE.

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	65	167
PROJECT FILE NO.		608561	

DRAINAGE & UTILITY PLANS



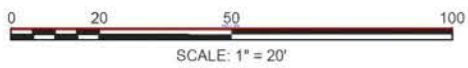
• Replace ULT Utility Pole w/Light by Others	1.0 EA	●
• Replace Utility Pole By Others	2.0 EA	●
• 15'H Guy Pole By Others	1.0 EA	●
☐ Overhead Wires By Others	382.8 FT	■



LIMIT OF WORK
STA 11+85.00
MEET EXISTING
N3023442.2388
E585752.7895

LINDELL AVENUE

CONTINUED ON
SHEET 62

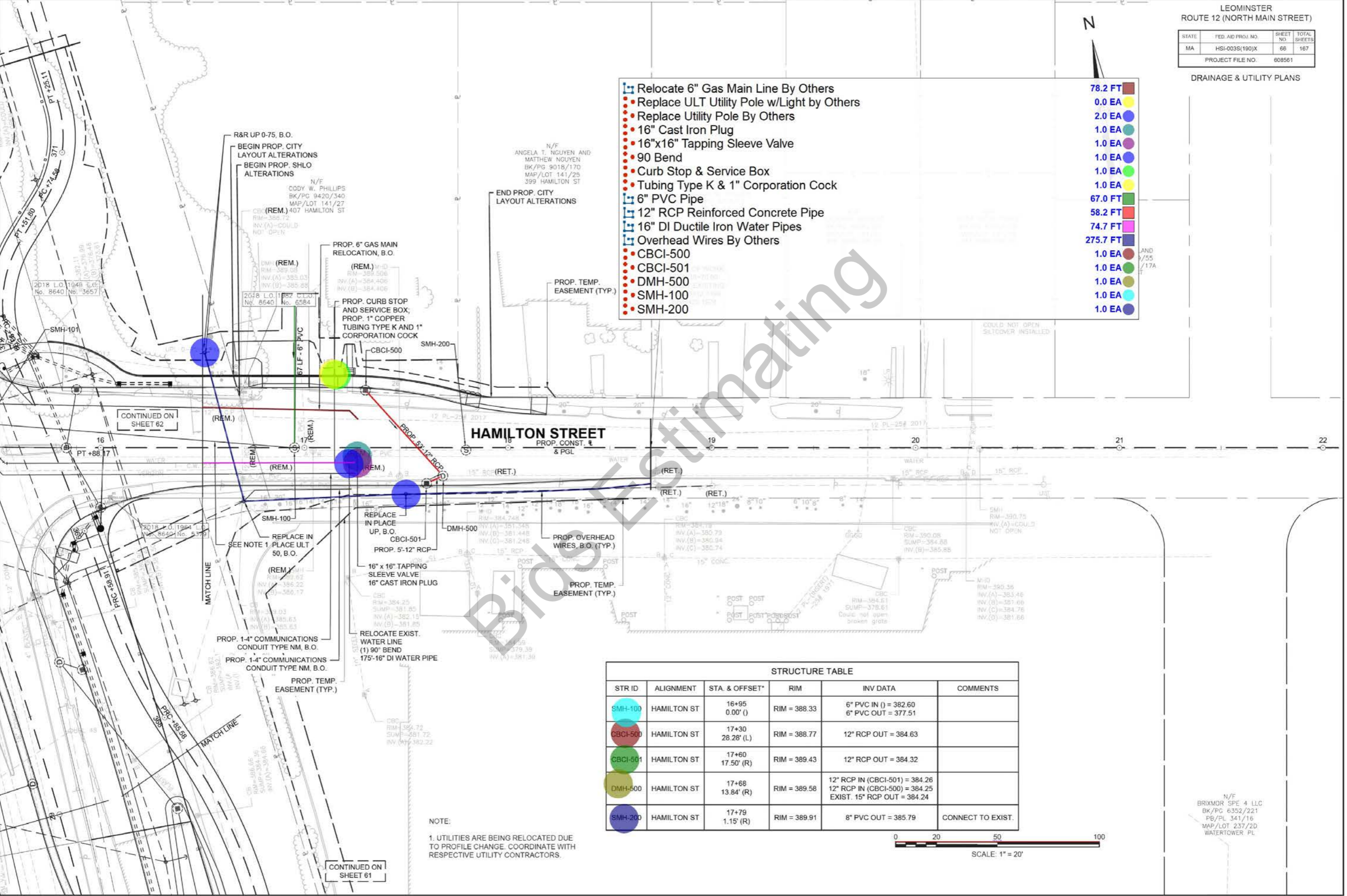


STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	66	167
PROJECT FILE NO. 608561			

DRAINAGE & UTILITY PLANS

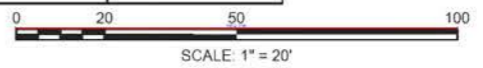
- Relocate 6" Gas Main Line By Others
- Replace ULT Utility Pole w/Light by Others
- Replace Utility Pole By Others
- 16" Cast Iron Plug
- 16"x16" Tapping Sleeve Valve
- 90 Bend
- Curb Stop & Service Box
- Tubing Type K & 1" Corporation Cock
- 6" PVC Pipe
- 12" RCP Reinforced Concrete Pipe
- 16" DI Ductile Iron Water Pipes
- Overhead Wires By Others
- CBCI-500
- CBCI-501
- DMH-500
- SMH-100
- SMH-200

- 78.2 FT
- 0.0 EA
- 2.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 67.0 FT
- 58.2 FT
- 74.7 FT
- 275.7 FT
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA



NOTE:
1. UTILITIES ARE BEING RELOCATED DUE TO PROFILE CHANGE. COORDINATE WITH RESPECTIVE UTILITY CONTRACTORS.

STRUCTURE TABLE					
STR ID	ALIGNMENT	STA. & OFFSET*	RIM	INV DATA	COMMENTS
SMH-100	HAMILTON ST	16+95 0.00' (I)	RIM = 388.33	6" PVC IN (I) = 382.60 6" PVC OUT = 377.51	
CBCI-500	HAMILTON ST	17+30 28.28' (L)	RIM = 388.77	12" RCP OUT = 384.63	
CBCI-501	HAMILTON ST	17+60 17.50' (R)	RIM = 389.43	12" RCP OUT = 384.32	
DMH-500	HAMILTON ST	17+68 13.84' (R)	RIM = 389.58	12" RCP IN (CBCI-501) = 384.26 12" RCP IN (CBCI-500) = 384.25 EXIST. 15" RCP OUT = 384.24	
SMH-200	HAMILTON ST	17+79 1.15' (R)	RIM = 389.91	8" PVC OUT = 385.79	CONNECT TO EXIST.

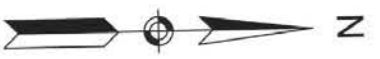


N/F
BRIXMOR SPE 4 LLC
BK/PG 6352/221
PB/PL 341/16
MAP/LOT 237/2D
WATERTOWER PL

STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	67	167
PROJECT FILE NO. 608561			

TRAFFIC SIGN & PAVEMENT MARKING PLANS

PROP. 12" SWL @ 45° & 5'-0" OFFSET (TYP.)
R3-7R

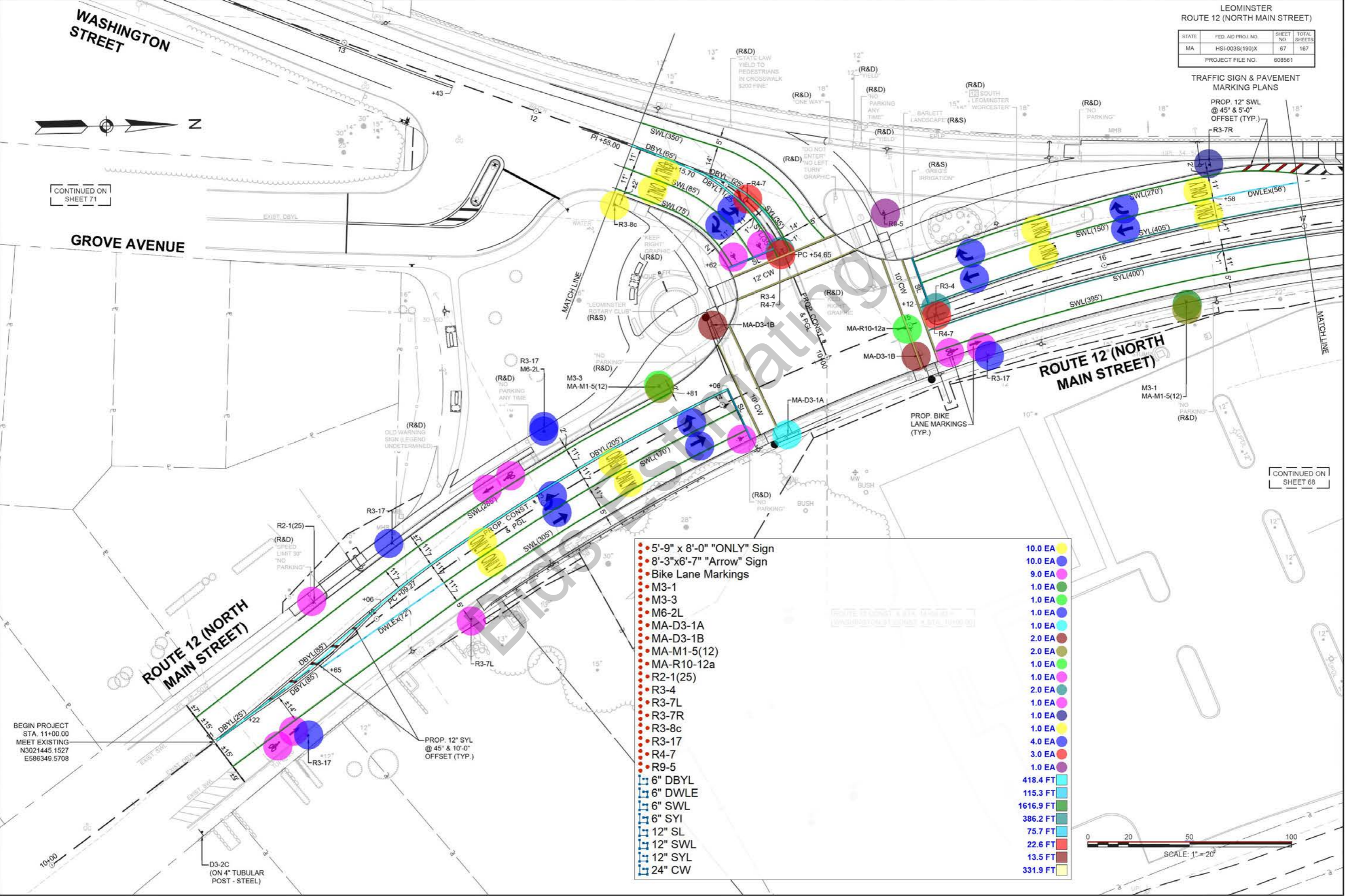


CONTINUED ON SHEET 71

CONTINUED ON SHEET 68

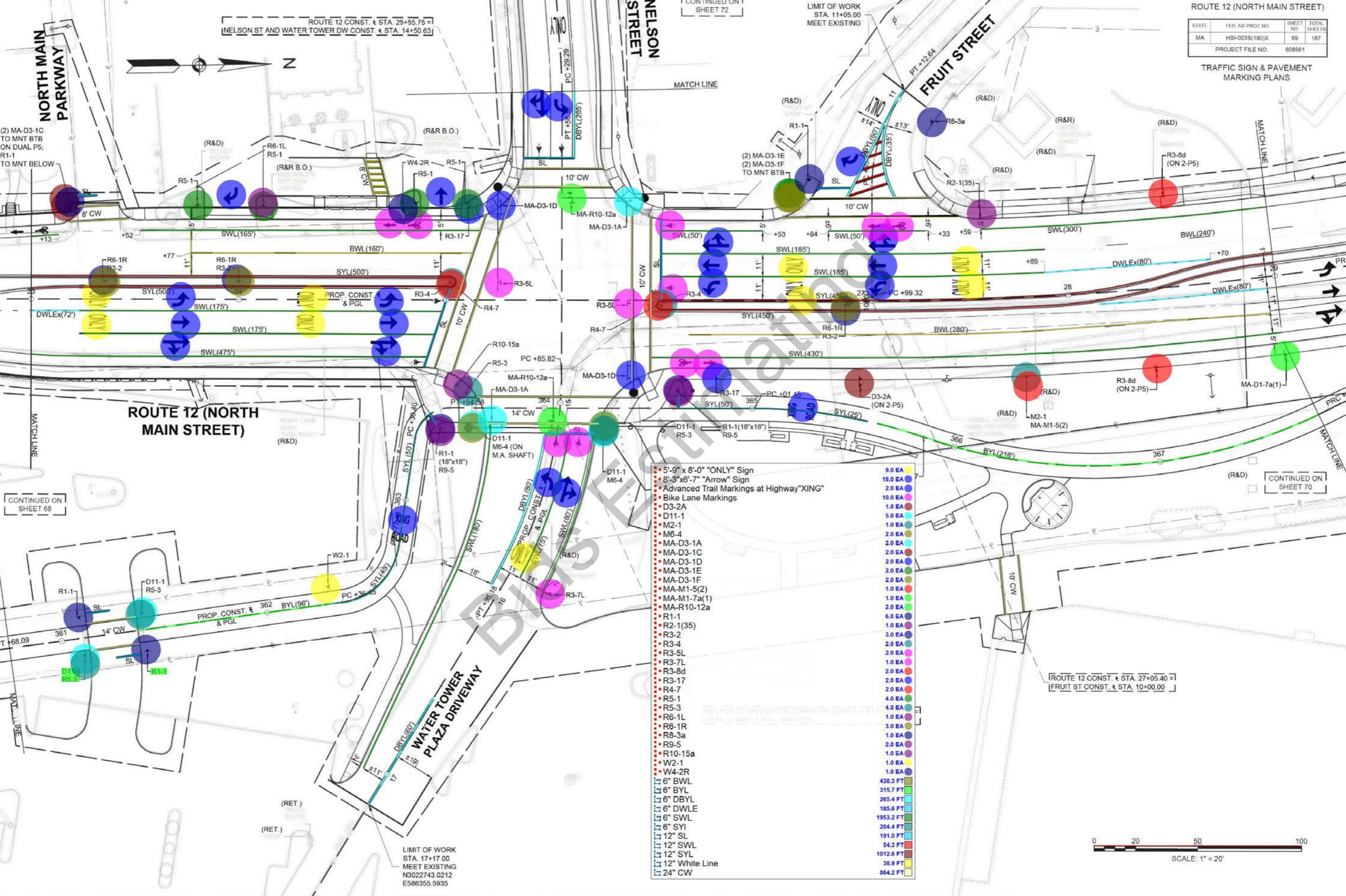
BEGIN PROJECT STA. 11+00.00
MEET EXISTING N3021445.1527
E586349.5708

• 5'-9" x 8'-0" "ONLY" Sign	10.0 EA
• 8'-3" x 6'-7" "Arrow" Sign	10.0 EA
• Bike Lane Markings	9.0 EA
• M3-1	1.0 EA
• M3-3	1.0 EA
• M6-2L	1.0 EA
• MA-D3-1A	1.0 EA
• MA-D3-1B	2.0 EA
• MA-M1-5(12)	2.0 EA
• MA-R10-12a	1.0 EA
• R2-1(25)	1.0 EA
• R3-4	2.0 EA
• R3-7L	1.0 EA
• R3-7R	1.0 EA
• R3-8c	1.0 EA
• R3-17	4.0 EA
• R4-7	3.0 EA
• R9-5	1.0 EA
▬ 6" DBYL	418.4 FT
▬ 6" DWLE	115.3 FT
▬ 6" SWL	1616.9 FT
▬ 6" SYL	386.2 FT
▬ 12" SL	75.7 FT
▬ 12" SWL	22.6 FT
▬ 12" SYL	13.5 FT
▬ 24" CW	331.9 FT



STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HS1-003S(190)X	69	167
PROJECT FILE NO.		808561	

TRAFFIC SIGN & PAVEMENT MARKING PLANS



CONTINUED ON SHEET 68

CONTINUED ON SHEET 70

CONTINUED ON SHEET 72

ROUTE 12 CONST. STA. 25+55.75 = NELSON ST AND WATER TOWER DW CONST. STA. 14+50.63

LIMIT OF WORK STA. 11+05.00 MEET EXISTING

ROUTE 12 CONST. STA. 27+05.40 = FRUIT ST CONST. STA. 10+00.00

LIMIT OF WORK STA. 17+17.00 MEET EXISTING N3022743.0212 E586355.5935

- 5'-9" x 8'-0" "ONLY" Sign
- 8'-3" x 6'-7" "Arrow" Sign
- Advanced Trail Markings at Highway "XING"
- Bike Lane Markings
- D3-2A
- D11-1
- M2-1
- M6-4
- MA-D3-1A
- MA-D3-1C
- MA-D3-1D
- MA-D3-1E
- MA-D3-1F
- MA-M1-5(2)
- MA-M1-7a(1)
- MA-R10-12a
- R1-1
- R2-1(35)
- R3-2
- R3-4
- R3-5L
- R3-7L
- R3-8d
- R3-17
- R4-7
- R5-1
- R5-3
- R6-1L
- R6-1R
- R8-3a
- R9-5
- R10-15a
- W2-1
- W4-2R
- 6" BWL
- 6" BYL
- 6" DBYL
- 6" DWLE
- 6" SWL
- 12" SL
- 12" SWL
- 12" SYL
- 12" White Line
- 24" CW

- 9.0 EA
- 19.0 EA
- 2.0 EA
- 10.0 EA
- 1.0 EA
- 5.0 EA
- 1.0 EA
- 2.0 EA
- 2.0 EA
- 2.0 EA
- 2.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 2.0 EA
- 2.0 EA
- 2.0 EA
- 2.0 EA
- 2.0 EA
- 2.0 EA
- 4.0 EA
- 4.0 EA
- 1.0 EA
- 3.0 EA
- 2.0 EA
- 2.0 EA
- 2.0 EA
- 1.0 EA
- 1.0 EA
- 1.0 EA
- 438.3 FT
- 315.7 FT
- 265.4 FT
- 185.6 FT
- 1953.2 FT
- 204.4 FT
- 191.0 FT
- 54.3 FT
- 1012.6 FT
- 38.9 FT
- 864.2 FT



STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	70	167
PROJECT FILE NO. 608561			

TRAFFIC SIGN & PAVEMENT MARKING PLANS



ROUTE 12 CONST. & STA. 30+91.72 =
LINDELL AVE AND HAMILTON ST CONST. & STA. 15+16.52

CONTINUED ON
SHEET 73

D3-2B
(ON 2-P5)
(INSTALL
@ 400' FROM
STOP LINE)

- 5'-9" x 8'-0" "ONLY" Sign
 - 8'-3"x6'-7" "Arrow" Sign
 - Advanced Trail Markings at Highway "XING"
 - Bike Lane Markings
 - D3-2D
 - D9-2
 - D11-1
 - D11-20
 - D11-20a
 - M6-3
 - M6-4
 - MA-D3-1A
 - MA-D3-1G
 - MA-D3-1H
 - MA-D3-1J
 - MA-D3-1K
 - MA-R10-12a
 - OM1-1
 - R1-1
 - R3-4
 - R3-5L
 - R3-17
 - R4-7
 - R5-1
 - R5-3
 - R7-1LR
 - R9-5
 - R10-6
 - R10-10R
 - R10-11b
 - R10-15a
 - Signal Post
 - Two-Stage Bicycle Turn Box
- 8.0 EA
 - 16.0 EA
 - 2.0 EA
 - 12.0 EA
 - 1.0 EA
 - 3.0 EA
 - 2.0 EA
 - 1.0 EA
 - 2.0 EA
 - 1.0 EA
 - 2.0 EA
 - 1.0 EA
 - 1.0 EA
 - 1.0 EA
 - 1.0 EA
 - 2.0 EA
 - 1.0 EA
 - 2.0 EA
 - 2.0 EA
 - 1.0 EA
 - 2.0 EA
 - 4.0 EA
 - 2.0 EA
 - 1.0 EA
 - 2.0 EA
 - 1.0 EA
 - 2.0 EA
 - 1.0 EA
 - 2.0 EA
 - 236.4 FT
 - 104.5 FT
 - 80.8 FT
 - 1205.1 FT
 - 88.7 FT
 - 182.3 FT
 - 278.5 FT
 - 486.2 FT
 - 631.1 FT

LIMIT OF WORK
STA. 371+50.0
MEET MASSD
PROJECT #601
N3023553.878
E586164.3807

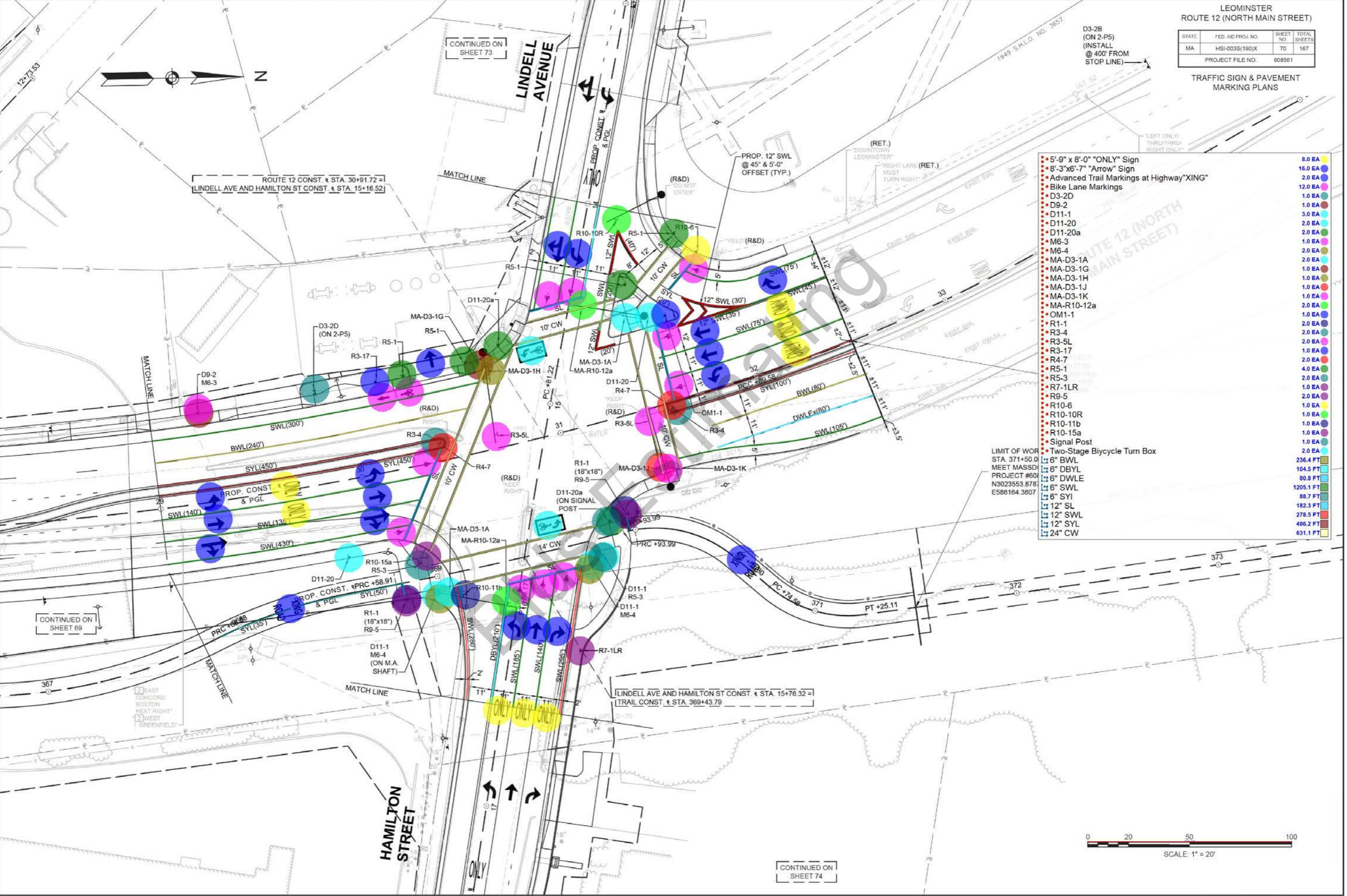


SCALE: 1" = 20'

CONTINUED ON
SHEET 69

LINDELL AVE AND HAMILTON ST CONST. & STA. 15+76.32 =
TRAIL CONST. & STA. 369+43.79

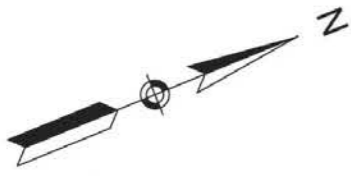
CONTINUED ON
SHEET 74



STATE	FED AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	71	167
PROJECT FILE NO. 608561			

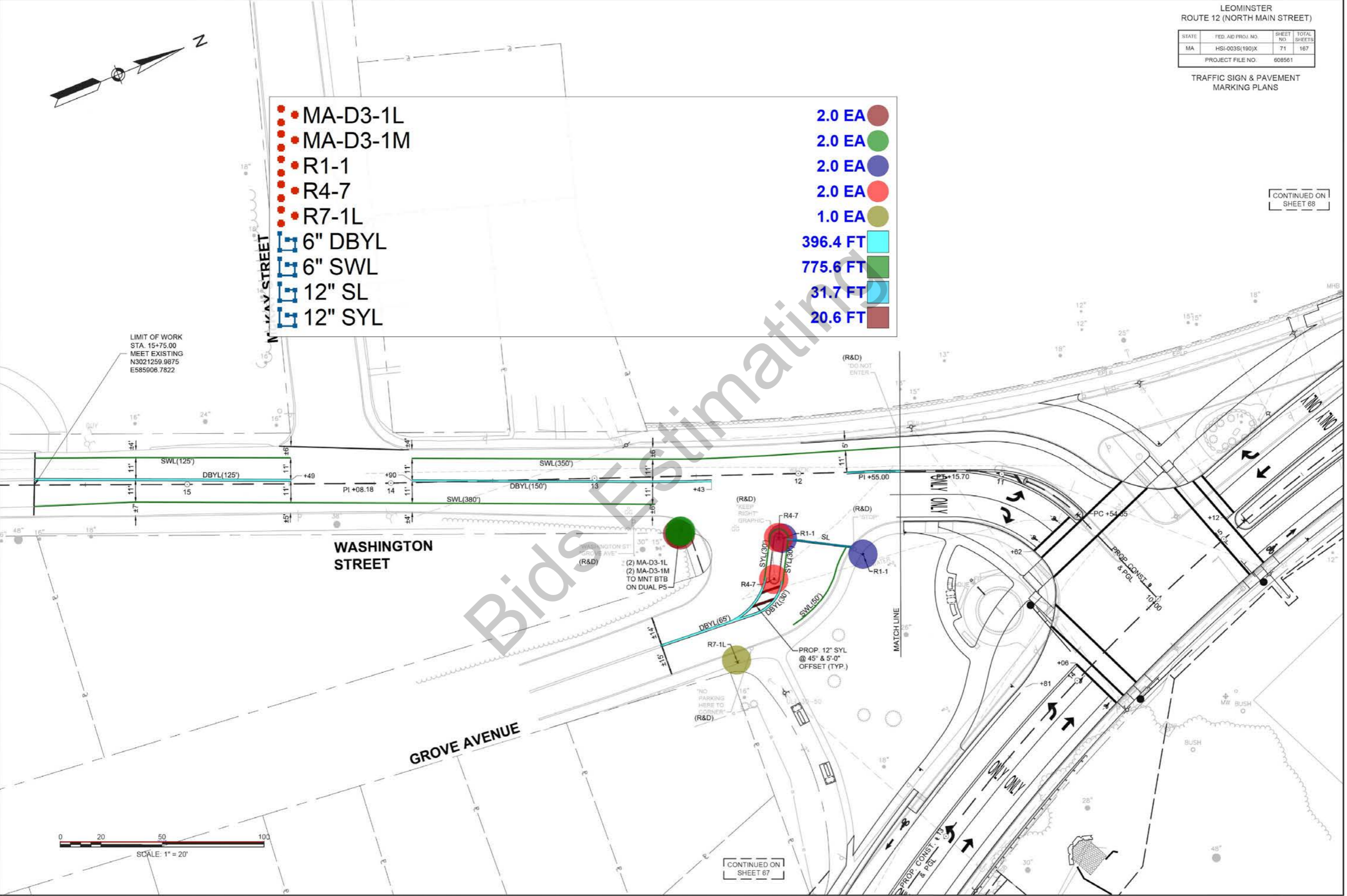
TRAFFIC SIGN & PAVEMENT MARKING PLANS

CONTINUED ON SHEET 68



• MA-D3-1L	2.0 EA	●
• MA-D3-1M	2.0 EA	●
• R1-1	2.0 EA	●
• R4-7	2.0 EA	●
• R7-1L	1.0 EA	●
▬ 6" DBYL	396.4 FT	▬
▬ 6" SWL	775.6 FT	▬
▬ 12" SL	31.7 FT	▬
▬ 12" SYL	20.6 FT	▬

LIMIT OF WORK
STA. 15+75.00
MEET EXISTING
N3021259.9875
E585906.7822



CONTINUED ON SHEET 67

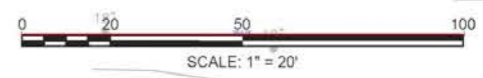
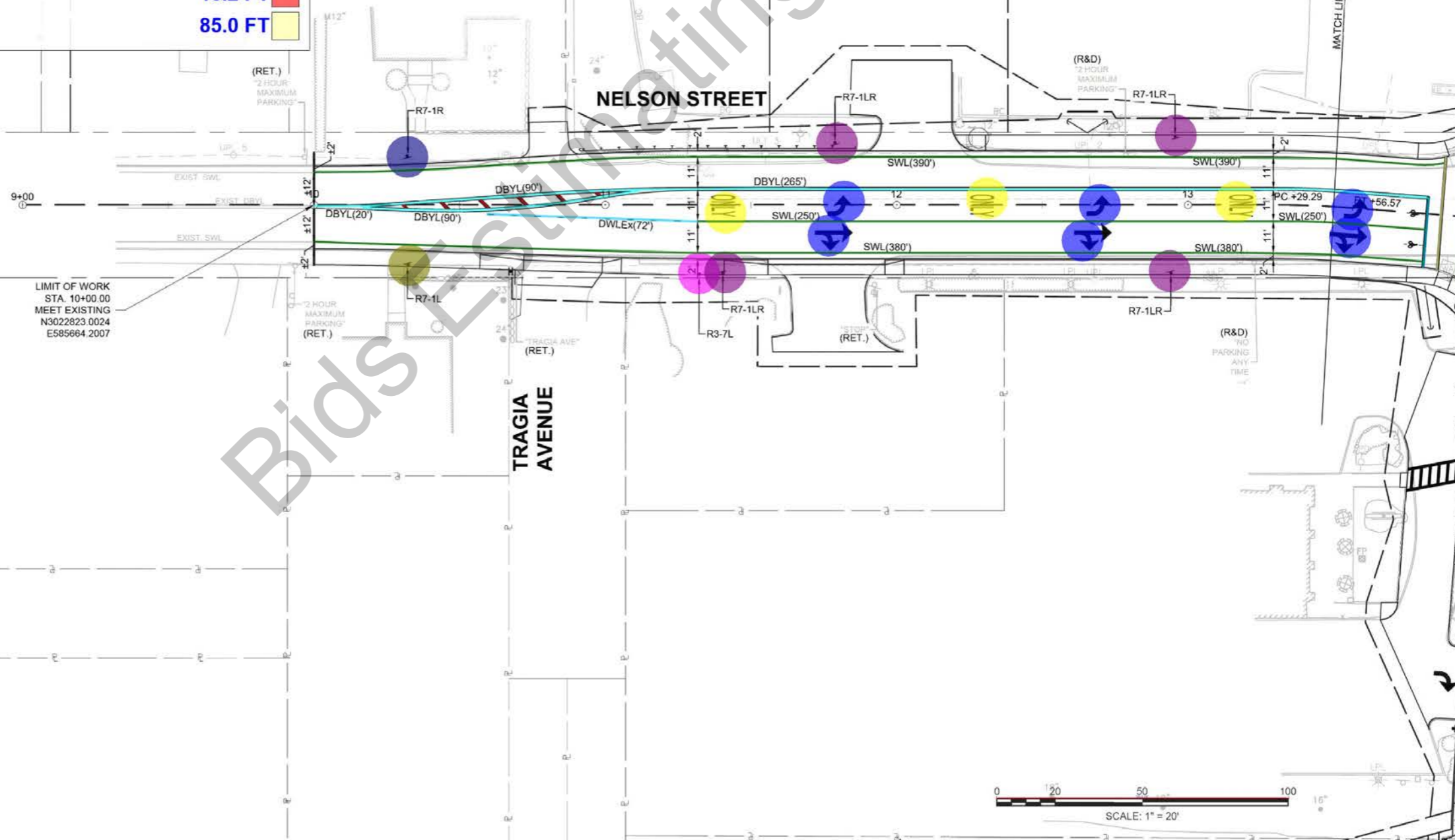
STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
MA	HSI-003S(190)X	72	167
PROJECT FILE NO.			608561

TRAFFIC SIGN & PAVEMENT MARKING PLANS

LIMIT OF WORK
STA. 11+05.00
MEET EXISTING

CONTINUED ON
SHEET 69

- | | | |
|-----------------------------|-------------|-------------|
| ● 5'-9" x 8'-0" "ONLY" Sign | ● 3.0 EA | ● 3.0 EA |
| ● 8'-3"x6'-7" "Arrow" Sign | ● 6.0 EA | ● 6.0 EA |
| ● R3-7L | ● 1.0 EA | ● 1.0 EA |
| ● R7-1L | ● 1.0 EA | ● 1.0 EA |
| ● R7-1R | ● 1.0 EA | ● 1.0 EA |
| ● R7-1LR | ● 4.0 EA | ● 4.0 EA |
| ▬ 6" DBYL | ▬ 478.4 FT | ▬ 478.4 FT |
| ▬ 6" DWLE | ▬ 72.5 FT | ▬ 72.5 FT |
| ▬ 6" SWL | ▬ 1019.5 FT | ▬ 1019.5 FT |
| ▬ 12" SL | ▬ 24.1 FT | ▬ 24.1 FT |
| ▬ 12" SWL | ▬ 18.2 FT | ▬ 18.2 FT |
| ▬ 24" CW | ▬ 85.0 FT | ▬ 85.0 FT |



Bids & Estimating