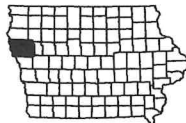


ALL WORKING DRAWINGS, INCLUDING SHOP DRAWINGS AND FALSEWORK DRAWINGS, SHALL BE SUBMITTED ACCORDING TO ARTICLE 1105.03 OF THE STANDARD SPECIFICATIONS. THESE DRAWINGS SHALL BE SUBMITTED TO AND CHECKED BY:

HR GREEN, INC  
431 N PHILLIPS AVE  
SUITE 400  
SIOUX FALLS, SD 57104  
605-221-2651  
BWHITE@HRGREEN.COM

INDEX OF SHEETS	
No.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
A.1	Title Sheet
A.2	Location Map Sheet
<b>B Sheets</b>	<b>Typical Cross Sections and Details</b>
B.1 - 2	Typical Cross Sections and Details
<b>C Sheets</b>	<b>Quantities and General Information</b>
C.1	Project Description
C.1	Estimated Project Quantities
C.1	Index of Tabulations
C.1	Standard Road Plans
C.2	Estimate Reference Information
C.2	Delivery and Stockpiling
C.3 - 7	Tabulations
<b>D Sheets</b>	<b>Mainline Plan and Profile Sheets</b>
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2 - 4	Hamilton Blvd
<b>G Sheets</b>	<b>Survey Sheets</b>
G.1 - 2	Reference Ties and Bench Marks
G.3	Horizontal Control Tabulation
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
J.1	Traffic Control Plan
J.1	Pedestrian Path Closures
J.1	Traffic Control Closure Table(s)
<b>K Sheets</b>	<b>Pavement Marking Sheets</b>
K.1 - 3	Pavement Markings
<b>N Sheets</b>	<b>Traffic Signal Sheets</b>
* N.1 - 11	Traffic Signal Sheets Hamilton Boulevard
<b>S Sheets</b>	<b>Sidewalk Sheets</b>
* S.1	Sidewalk Legend & Symbol Information Sheet
* S.2 - 6	Sidewalk Plan Sheets
S.7 - 11	Sidewalk Tabulations
	* Color Plan Sheets



## Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

# URBAN ROAD SYSTEM CITY OF SIOUX CITY HMA RESURFACING WITH MILLING

IN THE CITY OF SIOUX CITY, ON HAMILTON BLVD,  
FROM 15TH STREET .4 MILES TO W 20TH STREET

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.

MILEAGE SUMMARY			
			105-1
			09-27-94
Div.	Location	Lin. Ft.	Miles
1	Sta 1+06.15 to Sta 20+23.00	1,916.85	0.37
Total Length of Road		1,916.85	0.37
Total length of Project		1,916.85	0.37

For List of Applicable Standard  
Road Plans Refer to Sheet C.1

For Project Location Map  
Refer to Sheet A.2

For Utility Company List  
Refer to Sheet D.1

INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	Benjamin Donald White	Primary Signature Block
N.1	Benjamin Donald White	Signal Design

REVISIONS

TOTAL  
44

PROJECT IDENTIFICATION NUMBER

PROJECT NUMBER

STP-U-7057(723)--70-97

R.O.W. PROJECT NUMBER

CITY PROJECT NUMBER

7356-719-385



Building Communities.  
Improving Lives.



CITY OF SIOUX CITY, IOWA

CITY ENGINEER

ACCEPTED FOR LETTING

*Benjamin Donald White*

4/13/26

DATE



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

*Benjamin Donald White* 4/13/2026

Signature  
BENJAMIN DONALD WHITE  
Printed or Typed Name

My license renewal date is December 31, 20 26

Pages or sheets covered by this seal: A, B, C, D, G, J, K, N, AND S SHEETS.

FILE NO.

ENGLISH

DESIGN TEAM City of Sioux City \ HR Green, Inc.

WOODBURY COUNTY

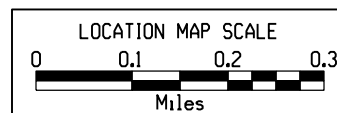
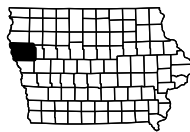
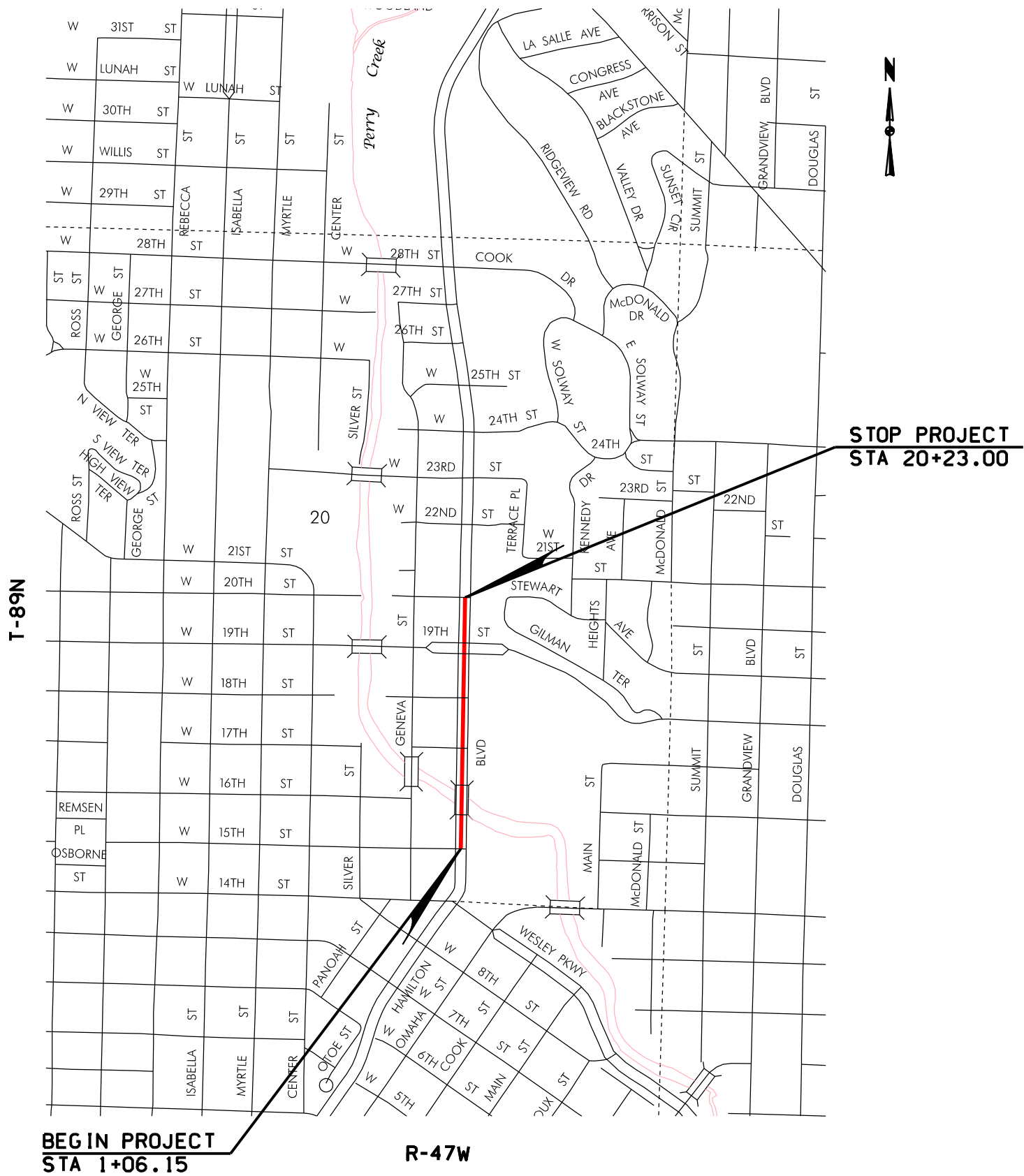
PROJECT NUMBER

STP-U-7057(723)--70-97

SHEET NUMBER

A.1

## CITY OF SIOUX CITY

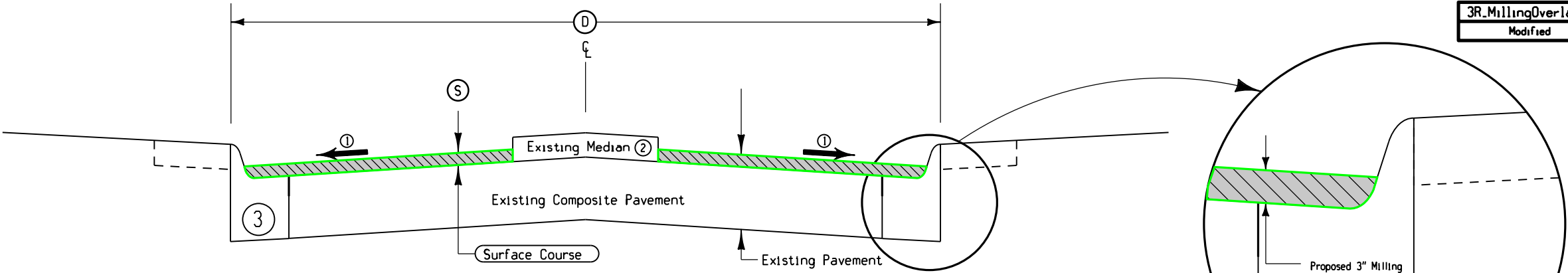


NOTES:

Normal section shown may be appropriately modified for areas specifically designated by the engineer such as intersections or superelevated curves.

- ① Finished Slope shall match existing pavement except, maximum allowable slope is 4% and minimum allowable slope is 2%.
- ② See tab. 112-5 for median replacement locations.
- ③ Refer to tab. 110-1 for spot location Curb & Gutter replacement.

PROPOSED HMA RESURFACING



3R\_MillingOverlay.C

Modified

TABLE OF DESIGN QUANTITIES Per Locations on sheets D.2-D.17													
LOCATION		T: HMA Thickness		③	①	②		ASPHALT BINDER	HOT MIX ASPHALT (Tons)			PAVEMENT SCARIFICATION	
ROADWAY	STATION TO STATION	Net Area (1'-3") (Sq. Ft.)	Net Area (1'-3"-2") (Sq. Ft.)	Inches	Inches	Feet		Tons	SURFACE	INTERMEDIATE	BASE	Sq. Yds.	Tons
HMLTN.S	1+06.15 3+72.48	13815	---	3.0	---	55-61		15.23	253.86	---	---	1535.0	---
HMLTN.S	4+88.93 8+35.00	20563	---	3.0	---	55-75		22.67	377.84	---	---	2284.8	---
HMLTN.S	8+35.00 12+40.00	28690	---	3.0	---	64.0		31.63	527.18	---	---	3187.8	---
HMLTN.S	12+40.00 16+20.00	25816	---	3.0	---	64.0		28.46	474.37	---	---	2868.5	---
HMLTN.S	16+20.00 20+23.00	29602	---	3.0	---	64.0		32.64	543.93	---	---	3289.1	---
Totals=		118486						130.63	2177.18			13165.1	

PAVEMENT SCARIFICATION with HMA RESURFACING (3" depth)

DESIGN RATES	
ITEM	RATE
Surface Course	147 lbs./cu. ft.
Intermediate Course	147 lbs./cu. ft.
Binder Rate	6% of S+I tons

TYPICAL CROSS SECTION  
3" HMA RESURFACING WITH MILLING  
ON CURBED ROADWAY WITH MEDIAN

DESIGN RATES	
ITEM	RATE
Surface Course	147 lbs./cu.ft
Binder Course	147 lbs./cu.ft

NOTE: Extreme care must be taken when milling and resurfacing intersections to insure that drainage goes to existing intakes.

① Actual dimensions used in the field may be different in order to use existing joint lines.

LOCATION		DIMENSIONS ①			HMA Surface (Tons)
ROAD IDENTIFICATION	SIDE	W	L	Milling (SY)	
Hamilton @ W 17th St	Lt	30	27	119	19.7
Hamilton @ W 17th St	Rt	41	60	321	53.1
Hamilton @ W 18th St	Lt	26	31	125	20.7
Hamilton @ W 18th St	Rt	31	27	124	20.5
Hamilton @ W 19th St	Lt	60	44	366	60.5
Hamilton @ W 19th St	Rt	49	26	181	29.9

Typical cross section diagram showing existing pavement, proposed resurfacing, surface course, gutter area at side street, and face of curb. Dimensions include 12' (Outside Lane), 3", and L. Viewed in Direction of Travel.

Plan view diagram showing the milling area at the intersection of Hamilton Blvd and a Sideroad. Dimensions include L and W. A legend indicates the Milling Area.

**TYPICAL CROSS SECTION  
MILLING & RESURFACING AT INTERSECTIONS**

6149  
04-17-07

Details of Milling

Details of Median Placement

Notes:  
This section may be appropriately modified in areas specifically designated by the Engineer.  
Use 'C' joints in the doweled median and match the location of all transverse and longitudinal joints to the joints in the existing pavement.  
Place tie bars at 24" C-C longitudinal spacing between joints in existing pavement. Drill 3/8" holes for tie bars and epoxy to new pavement. See Tabulation 112-5 for additional details. Epoxy material shall be as specified in Materials IM491.11, appendix C.

① #5 x 18" Tie Bars

② 6" Sloped Curb

**DOWELED MEDIAN  
WITH SLOPED CURB**



100-1D  
10-18-05

PROJECT DESCRIPTION

This project consists of PCC Milling, PCC Cracking and Seating, HMA Resurfacing, Patching, Curb and Gutter, ADA Curb Ramps, and Signal Upgrades on Hamilton Boulevard from W 15th St to W 20th St in Sioux City, Iowa.

100-1C  
04-17-12

ESTIMATED PROJECT QUANTITIES  
(UP TO A 5 DIVISION PROJECT)

Division 1: Iowa DOT Participating  
Division 2: Non-Participating (100% City of Sioux City)

Item No.	Item Code	Item	Unit	Quantities										
				Estimated					As Built					
				Division 1	Division 2	Division 3	Division 4	Division 5	Total	Division 1	Division 2	Division 3	Division 4	Division 5
1	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	13					13					
2	2105-8425005	TOPSOIL, FURNISH AND SPREAD	CY	12					12					
3	2212-0475095	CLEANING AND PREPARATION OF BASE	MILE	1					1					
4	2214-5145150	PAVEMENT SCARIFICATION, NOMINAL THICKNESS	SY	13165.1					13165.1					
5	2301-4874106	MEDIAN, DOWELLED P.C. CONCRETE, 6 INCH	SY	642.1										
6	2303-1043500	HOT MIX ASPHALT HIGH TRAFFIC, SURFACE COURSE, 1/2 IN. MIX, NO SPECIAL FRICTION REQUIREMENT	TON	2138.58					2138.58					
7	2303-1258284	ASPHALT BINDER, PG 58-28H, HIGH TRAFFIC	TON	130.63					130.63					
8	2303-6911000	HOT MIX ASPHALT PAVEMENT SAMPLES	LS	1					1					
9	2435-0600010	MANHOLE ADJUSTMENT, MINOR	EACH	20					20					
10	2510-6745850	REMOVAL OF PAVEMENT	SY	740					740					
11	2511-6745900	REMOVAL OF SIDEWALK	SY	487.8					487.8					
12	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN.	SY	235.8					235.8					
13	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN.	SY	933.3					933.3					
14	2511-7528101	DETECTABLE WARNINGS	SF	364					364					
15	2512-1725256	CURB AND GUTTER, P.C. CONCRETE, 2.5 FT.	LF	349					349					
16	2525-0000100	TRAFFIC SIGNALIZATION	LS	1					1					
17	2526-8285020	CONSTRUCTION SURVEY, CONTROL POINT SURVEY	LS	1					1					
18	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY	LS	1					1					
19	2527-9263138	PAINTED SYMBOLS AND LEGENDS, HIGH-BUILD WATERBORNE	EACH	18					18					
20	2527-9263212	PAINTED PAVEMENT MARKINGS, HIGH-BUILD WATERBORNE	STA	109.44					109.44					
21	2527-9270120	GROOVES CUT FOR SYMBOLS AND LEGENDS	EACH	18					18					
22	2528-8445110	TRAFFIC CONTROL	LS	1					1					
23	2528-8445113	FLAGGERS	EACH	45					45					
24	2528-8445115	PILOT CARS	EACH	17					17					
25	2529-5070110	PATCHES, FULL-DEPTH FINISH, BY AREA	SY	434.6					434.6					
26	2529-5070120	PATCHES, FULL-DEPTH FINISH, BY COUNT	EACH	8					8					
27	2533-4980005	MOBILIZATION	LS	1					1					
28	2554-0212040	VALVE BOX ADJUSTMENT, MINOR	EACH	15					15					
29	2555-0000010	DELIVER AND STOCKPILE SALVAGED MATERIALS	LS		1				1					
30	2601-2634105	MULCHING, BONDED FIBER MATRIX	ACRE	0.1					0.1					
31	2601-2636070	HYDRAULIC SEEDING	ACRE	0.1					0.1					

111-25  
10-18-11

INDEX OF TABULATIONS

Tabulation	Tabulation Title	Sheet No.
C Sheets		
100-1C	ESTIMATED PROJECT QUANTITIES (UP TO A 5 DIVISION PROJECT)	C.1
100-1D	PROJECT DESCRIPTION	C.1
100-4A	ESTIMATE REFERENCE INFORMATION	C.2
100-25	HMA PAVEMENT	C.4
102-6C	FULL-DEPTH PATCHES	C.5
104-10	ADJUSTMENT OF FIXTURES	C.3
105-4	STANDARD ROAD PLANS	C.1
108-22	PAVEMENT MARKING LINE TYPES	C.5
108-29	PAVEMENT MARKING SYMBOLS AND LEGENDS	C.5
110-1	REMOVAL OF PAVEMENT	C.3
110-5	SIDEWALK REMOVAL	C.3
110-13	DELIVERY AND STOCKPILING	C.2
111-25	INDEX OF TABULATIONS	C.1
112-4	CURBS AND RAISED ISLANDS	C.3
112-5	CONCRETE MEDIANS	C.3
113-1	SIDEWALKS	C.6 - C.7
190-62	EXISTING SIGNS TO BE REMOVED	C.3
J Sheets		
108-23A	TRAFFIC CONTROL PLAN	J.1
108-23B	TRAFFIC CONTROL CLOSURE TABLE(S)	J.1
113-2	PEDESTRIAN PATH CLOSURES	J.1
S Sheets		
113-10	SIDEWALK COMPLIANCE	S.7 - S.11

105-4  
10-18-11

STANDARD ROAD PLANS

The following Standard Road Plans apply to construction work on this project.

Number	Date	Title
MI-220	04-15-25	Detectable Warnings and Pedestrian Ramp
PM-110	10-15-24	Line Types
PM-111	04-21-20	Symbols and Legends
PM-120	10-15-24	Stop Lines and Islands
PM-210	10-15-24	Separation in Two-Lane Roadway
PM-522	10-15-24	Two-Lane Roadway with Left Turn Lanes
PR-103	10-21-25	Full Depth PCC Patch with Dowels
PR-202	10-21-14	Notches for Resurfacing (with or without Runout)
PV-20	10-21-14	Raised Islands
PV-101	01-01-26	Joints
PV-102	10-21-25	PCC Curb Details
PV-202	04-21-20	Hot Mix Asphalt Resurfacing
SI-881	04-16-19	Special Signs for Workzones
TC-202	04-18-23	Work Within 15 ft of Traveled Way
TC-213	04-18-23	Lane Closure with Flaggers
TC-214	04-18-23	Lane Closure with Flaggers for use with Pilot Car
TC-233	10-17-17	Pavement Marking Operations Two-Lane
TC-282	10-15-19	Uneven Lanes
TC-402	04-18-23	Work Within 15 ft of Traveled Way
TC-433	10-17-17	Pavement Marking Operations
TC-601	10-15-19	Pedestrian Detour

FILE NO.

ENGLISH

DESIGN TEAM

City of Sioux City \ HR Green

WOODBURY COUNTY

PROJECT NUMBER

STP-U-7057(723)--70-97

SHEET NUMBER

C.1

100-4A  
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
1	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW A. Item for removal of excess material or placement of new material where sidewalk work requires change in elevation adjacent to graded areas. B. Any damage to adjacent landscaping shall be replaced at Contractor's expense. C. Top 6 inches of material shall be topsoil suitable for the establishment of urban seeding. D. Estimated at 0.5 feet in depth. E. Contractor shall remove all waste material from the site.
2	2105-8425005	TOPSOIL, FURNISH AND SPREAD A. Topsoil placement shall be a uniform 6 inches deep over disturbed areas.
3	2212-0475095	CLEANING AND PREPARATION OF BASE A. Item includes all areas to receive HMA resurfacing within the project limits.
4	2214-5145150	PAVEMENT SCARIFICATION, NOMINAL THICKNESS A. Refer to Typical Sections in the B Sheets. B. Refer to Tab. 100-25 in the C Sheets. C. The contractor is required to place temporary fillets around any castings or intakes in a traveled portion of the milling operations prior to opening those lanes to traffic; this work and material is incidental to the HMA bid items; also see construction survey notes.
5	2301-4874106	MEDIAN, DOWELLED P.C. CONCRETE, 6 INCH A. Refer to Tab. 112-5 in the C Sheets. B. Certified Plant Inspection is required. C. Refer to Typical 6149 in the B Sheets for Dowelled Median with Standard Curb.
6	2303-1043500	HOT MIX ASPHALT HIGH TRAFFIC, SURFACE COURSE, 1/2 IN. MIX, NO SPECIAL FRICTION REQUIREMENT A. Item for HMA resurfacing over existing PCC, HMA, or composite pavement. Refer to the Typical Section in the B Sheets. B. Certified plant inspection will be required. C. Refer to Tab. 100-25 in the C Sheets.
7	2303-1258284	ASPHALT BINDER, PG 58-28H, HIGH TRAFFIC A. Item for HMA Surface Course. Refer to Typical Sections in the B Sheets. B. Refer to Tab. 100-25 in the C Sheets. C. Binder is estimated at 6% of Surface Course tons.
8	2303-6911000	HOT MIX ASPHALT PAVEMENT SAMPLES
9	2435-0600010	MANHOLE ADJUSTMENT, MINOR A. Refer to Tab. 104-10 in the C Sheets.
10	2510-6745850	REMOVAL OF PAVEMENT A. Refer to Tab. 110-1 in the C Sheets for locations and details.
11	2511-6745900	REMOVAL OF SIDEWALK A. Refer to Tab. 110-5 in the C Sheets for locations and details.
12	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN. A. Certified Plant Inspection is required.
13	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN. A. Certified Plant Inspection is required.
14	2511-7528101	DETECTABLE WARNINGS A. Refer to Tab. 113-1 in the C Sheets for locations and details. B. Certified Plant Inspection is required. C. Removal limits may be lengthened to reach an existing sidewalk joint. Saw cuts may be required.
15	2512-1725256	CURB AND GUTTER, P.C. CONCRETE, 2.5 FT. A. Refer to Tab. 112-4 in the C Sheets for locations and details. B. Use "C" mix. Use of Calcium Chloride will not be permitted. C. Place BT-3 joints where curb and gutter ties into existing pavement. D. Place L-2 joint at locations of existing joints or random cracks in adjacent pavement.
16	2525-0000100	TRAFFIC SIGNALIZATION A. Refer to N Sheets for locations and details.
17	2526-8285020	CONSTRUCTION SURVEY, CONTROL POINT SURVEY
18	2526-8285040	CONSTRUCTION SURVEY, LOCATION SURVEY
19	2527-9263138	PAINTED SYMBOLS AND LEGENDS, HIGH-BUILD WATERBORNE
20	2527-9263212	PAINTED PAVEMENT MARKINGS, HIGH-BUILD WATERBORNE
21	2527-9270120	GROOVES CUT FOR SYMBOLS AND LEGENDS A. Refer to Tab. 108-22 and Tab. 108-29 in the C Sheets.
22	2528-8445110	TRAFFIC CONTROL
23	2528-8445113	FLAGGERS
24	2528-8445115	PILOT CARS A. Refer to Traffic Control Plan in the J sheets.

100-4A  
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
25	2529-5070110	PATCHES, FULL-DEPTH FINISH, BY AREA
26	2529-5070120	PATCHES, FULL-DEPTH FINISH, BY COUNT A. Refer to Tab. 102-6C in the C Sheets for locations and details. B. Due to the urban nature of this project the work on these items may involve patching and working around or near curbs, manholes, traffic loop detectors, intakes or other utility access lids; unless otherwise noted no additional payment will be made for patches placed in or around these items. C. Several patches have existing integral curb and gutter or PCC median noses which shall be included in their replacement patch. All Full Depth Finish Patches, except those approved by the engineer will be measured and paid for per current specification section 2529. D. Unless otherwise directed, when PCC curb and gutter is required included in full depth patch the contractor shall shape those features to match curb, gutter nearest to that patch and include all labor and materials required to construct it. No additional payment will be made for Full Depth Patches by Count or Area that include integral PCC curb and gutter within the new patch.
27	2533-4980005	MOBILIZATION
28	2554-0212040	VALVE BOX ADJUSTMENT, MINOR A. Refer to Tab. 104-10 in the C Sheets.
29	2555-0000010	DELIVER AND STOCKPILE SALVAGED MATERIALS A. Refer to Tab. 110-13 in the C Sheets. Salvaged materials include manhole castings and pedestrian signal items. The items shall be removed without damage and cleaned prior to delivery. The contractor shall coordinate delivery of the salvaged materials with the City of Sioux City contacts listed in Tab. 110-13.
30	2601-2634105	MULCHING, BONDED FIBER MATRIX A. Bonded Fiber Matrix shall be applied as mulch for all areas designated as "Hydraulic Seeding". B. Bonded Fiber Matrix application rate shall be a minimum of 3000 pounds per acre.
31	2601-2636070	HYDRAULIC SEEDING A. For all disturbed areas or as directed by the Engineer. B. Use urban seeding and fertilizer mixture. C. Prepare seedbed, fertilize, and seed according to Article 2601.03, C, 4 of the Standard Specifications.

110-13  
04-20-10

DELIVERY AND STOCKPILING

Item Description	Quantity	Units	Delivery Location	Contact Name & Number	Remarks
Manhole Castings	1	LS	1921 18th St	Utilities 712-279-6164	
Pedestrian Signal Heads	1	LS	715 Omaha St	Kurt Frank 712-898-4612	
Pedestrian Pushbuttons	1	LS	715 Omaha St	Kurt Frank 712-898-4612	
Pedestrian Signs	1	LS	715 Omaha St	Kurt Frank 712-898-4612	

FILE NO.

ENGLISH

DESIGN TEAM

City of Sioux City \ HR Green

WOODBURY

COUNTY

PROJECT NUMBER

STP-U-7057(723)- -70-97

SHEET NUMBER

C.2

110-1 04-16-13						
REMOVAL OF PAVEMENT						
Refer to Tabulation 102-5						
* Not a Bid Item						
Begin Station	End Station	Side	Pavement Type	Area	Saw Cut*	Remarks
				SY	LF	
+38.22	+65.80	LT	PCC C&G	9.4	39.0	Sidewalk Curb Drop
+38.16	+65.62	RT	PCC C&G	9.7	40.0	Sidewalk Curb Drop
1+30.19	3+54.96	Med	Median	106.3		Median
5+06.32	5+31.45	Med	Median	144.4		Median
8+28.54	8+41.38	RT	PCC C&G	5.3	24.0	Sidewalk Curb Drop
8+43.51	8+59.77	RT	PCC C&G	10.8	44.0	Sidewalk Curb Drop
8+91.01	9+19.37	RT	PCC C&G	12.8	51.0	Sidewalk Curb Drop
8+95.87	9+18.81	LT	PCC C&G	8.1	34.0	Sidewalk Curb Drop
9+19.48	12+20.30	Med	Median	134.4		Median
12+33.90	12+59.57	LT	PCC C&G	11.1	45.0	Sidewalk Curb Drop
12+35.74	12+54.64	RT	PCC C&G	7.5	32.0	Sidewalk Curb Drop
12+88.85	13+12.55	LT	PCC C&G	8.3	35.0	Sidewalk Curb Drop
12+90.50	13+08.17	RT	PCC C&G	6.9	30.0	Sidewalk Curb Drop
13+34.76	16+12.63	Med	Median	122.8		Median
17+20.36	20+16.75	Med	Median	135.2		Median
20+22.45	20+40.85	RT	PCC C&G	6.9	30.0	Sidewalk Curb Drop

112-4

10-21-14

CURBS AND RAISED ISLANDS

Refer to PV-20, PV-102, and 6000s Detail Series.

① Bid Item

Point No.	Station	Offset	Island Interior	Curb and Gutter			Remarks
			Area ① SY	Curb Type	Gutter Width FT	Length ① LF	
	0+53.43	-39.01		6" Standard PCC	2.5	34.0	Sidewalk Curb Drop
	0+53.76	39.19		6" Standard PCC	2.5	35.0	Sidewalk Curb Drop
	8+35.41	58.99		6" Standard PCC	2.5	19.0	Sidewalk Curb Drop
	8+54.96	47.88		6" Standard PCC	2.5	39.0	Sidewalk Curb Drop
	9+01.27	42.03		6" Standard PCC	2.5	46.0	Sidewalk Curb Drop
	9+05.95	-35.81		6" Standard PCC	2.5	29.0	Sidewalk Curb Drop
	12+46.85	38.83		6" Standard PCC	2.5	27.0	Sidewalk Curb Drop
	12+50.07	-41.29		6" Standard PCC	2.5	40.0	Sidewalk Curb Drop
	12+97.94	38.39		6" Standard PCC	2.5	25.0	Sidewalk Curb Drop
	12+99.24	-36.64		6" Standard PCC	2.5	30.0	Sidewalk Curb Drop
	20+33.37	37.2		6" Standard PCC	2.5	25.0	Sidewalk Curb Drop

110-5 10-20-15				
SIDEWALK REMOVAL				
* Not a bid item				
Begin Station	End Station	Area	Saw Cut*	Remarks
		SY	LF	
+40.22	+61.83	16.1	9.3	
+40.32	+62.23	18.0	8.2	
1+02.59	1+26.41	12.6	7.3	
1+04.90	1+43.85	28.6	9.9	
8+21.73	8+37.24	8.7	6.8	
8+30.73	8+57.83	16.7	10.0	
8+48.14	8+59.18	9.7	11.8	
8+91.68	9+22.72	29.6	8.7	
8+96.77	9+27.59	28.4	8.9	
12+25.02	12+54.28	25.3	7.8	
12+31.01	12+52.97	15.3	4.6	
12+91.57	13+25.43	20.8	7.7	
12+93.80	13+21.35	17.2	7.0	
16+12.95	16+35.04	17.9	7.8	
16+18.16	16+41.83	40.7	68.9	
16+98.79	17+20.31	30.3	9.6	
17+01.26	17+51.50	119.7	15.6	
20+13.60	20+47.51	23.9	7.4	
20+23.07	20+39.86	8.3	4.6	

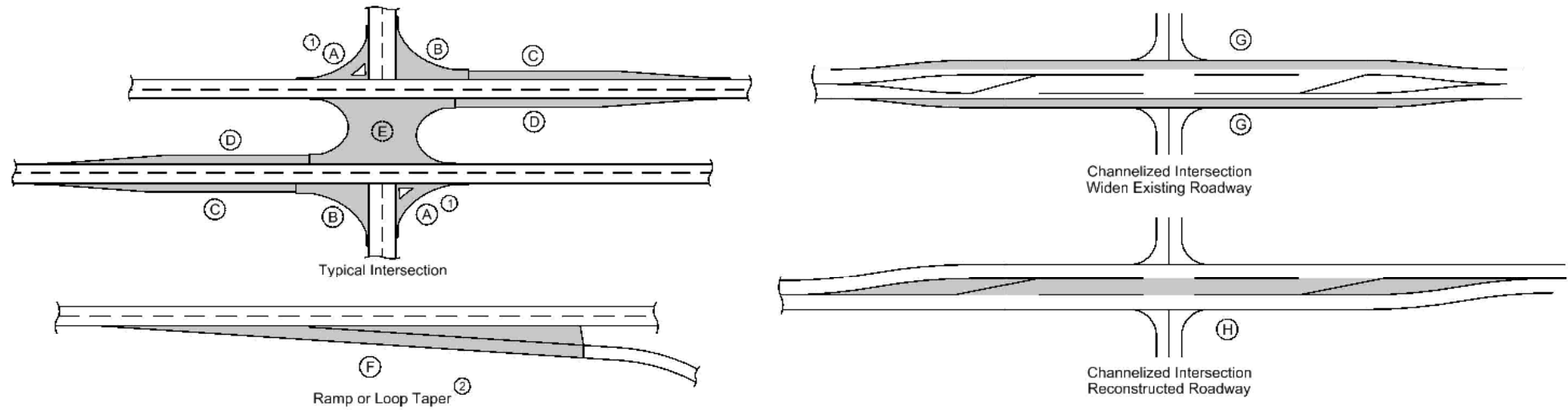
104-10 08-01-08			
ADJUSTMENT OF FIXTURES			
No.	Location Station	Type of Fixture	Adjustment
1	0+98.22	Water Valve Box Adjustment	± 1"
2	0+98.57	Water Valve Box Adjustment	± 3"
3	1+05.77	Manhole Cover	± 3"
4	1+21.87	Manhole Cover	± 3"
5	1+83.62	Manhole Cover	± 3"
6	5+81.93	Manhole Cover	± 3"
7	7+46.51	Manhole Cover	± 3"
8	8+32.90	Manhole Cover	± 3"
9	8+33.58	Manhole Cover	± 3"
10	8+46.33	Manhole Cover	± 3"
11	8+46.39	Manhole Cover	± 3"
12	8+49.05	Manhole Cover	± 3"
13	8+56.24	Manhole Cover	± 3"
14	8+76.44	Manhole Cover	± 3"
15	9+14.85	Water Valve Box Adjustment	± 3"
16	9+26.03	Water Valve Box Adjustment	± 3"
17	9+30.61	Water Valve Box Adjustment	± 3"
18	12+28.00	Water Valve Box Adjustment	± 3"
19	12+43.07	Manhole Cover	± 3"
20	12+82.48	Water Valve Box Adjustment	± 3"
21	13+06.55	Water Valve Box Adjustment	± 3"
22	13+06.75	Manhole Cover	± 3"
23	13+09.31	Manhole Cover	± 3"
24	14+94.40	Manhole Cover	± 3"
25	16+21.56	Manhole Cover	± 3"
26	16+27.08	Water Valve Box Adjustment	± 3"
27	16+43.27	Manhole Cover	± 3"
28	16+68.49	Manhole Cover	± 3"
29	17+02.08	Water Valve Box Adjustment	± 3"
30	17+02.20	Water Valve Box Adjustment	± 3"
31	17+05.07	Water Valve Box Adjustment	± 3"
32	17+05.58	Water Valve Box Adjustment	± 3"
33	17+16.26	Manhole Cover	± 3"
34	20+09.73	Water Valve Box Adjustment	± 3"
35	20+16.19	Water Valve Box Adjustment	± 3"

190-62  
10-15-13

EXISTING SIGNS TO BE REMOVED										
SIGN NUMBER OR DESCRIPTION	LOCATION STATION	DIRECTION OF TRAVEL	TYPE 'A' SIGN ASSEMBLY	TYPE 'B' SIGN ASSEMBLY	REMOVE & REINSTALL EXISTING SIGNS		CONCRETE FOUNDATION	SUPPORT STRUCTURE & FOUNDATION	APPLICABLE SIGNING NOTES	REMARKS
			Ⓡⓐ	Ⓡⓑ	TYPE 'A'	TYPE 'B'				
					ⓇⓇ	ⓇⓇ				
EACH	EACH	EACH	EACH	EACH	EACH	EACH				
R4-7C and OM1-2	9+27.98	NB			1				RR	
R4-7C and OM1-2	12+10.02	SB			1				RR	
R4-7C and OM1-2	13+39.54	NB			1				RR	
OM3-L	16+02.81	SB			1				RR	
OM3-L	17+33.61	NB			1				RR	
R4-7C and OM1-2	20+08.74	SB			1				RR	
				Total:	6					

112-5 10-20-15						
CONCRETE MEDIANS						
* Bid item						
Begin Station	End Station	Type	Area*	Modified Subbase	Special Backfill	Remarks
			SY	CY	CY	
1+30.19	3+54.96	6 inch, dowelled	105.3			Note 1
5+06.32	5+31.45	6 inch, dowelled	144.4			Note 1
9+19.48	12+20.30	6 inch, dowelled	134.4			Note 1
13+34.76	16+12.63	6 inch, dowelled	122.8			Note 1
17+20.36	20+16.75	6 inch, dowelled	135.2			Note 1
Notes:						
+01.00	Construct Ramped Median Nose per Standard Road Plan PV-104. 12" Hole for Sign Shall Post be Required Except Where Existing Sign is Mounted to Traffic Signal Pole					

## HMA PAVEMENT



- ① Does not include raised island area or curb. Refer to tabulation 112-4 for quantities.
- ② Refer to PV-410, PV-411, PV-412, and PV-414.
- ③ Quantity includes Pavement Header.

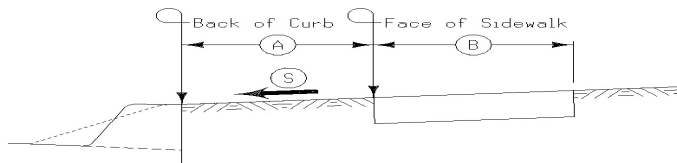
Calculations assume a surface course unit weight (lbs/cf) of 147, an intermediate course unit weight (lbs/cf) of 0, a base course unit weight (lbs/cf) of 0, and a special backfill unit weight (lbs/cf) of 140.

[illegible]





SIDEWALKS  
See MI-220 and S Sheets



Intersection/Road	Quadrant/Side	Length	<div>A</div>	<div>B</div>	<div>S</div>	4" PCC Sidewalk	6" PCC Sidewalk	8" PCC Sidewalk	10" PCC Sidewalk	Detectable Warnings	Remarks
			FT	FT	%	SY	SY	SY	SY	SF	
W 15th St	SW	12					5.5				
	SW	11.45					6.9				
	SW	5				2.2					
	SW	4.85					3.0			10	
	SW	10.35					5.5			10	
	SE	14.74					6.6				
	SE	11.13					5.3				
	SE	5				1.8					
	SE	5.72					3.2			10	
	SE	10.22					4.4			10	
	NE	12.65					7.2				
	NE	9.75				2.7					
	NE	7.57				4.1				10	
	NW	20					11.7				
	NW	13.18					7.4				
	NW	5.69				3.2					
	NW	12.57				5.9					
W 17th St	NW	10.64								16	
	SW	10					5.6				
	SW	5				2.8					
	SW	5					2.8				
	SW	8.5				4.5					
	SW	9.46					6.3			16	
	SW	15.5				4.0					
	SE	2.24				1.2					
	SE	4					2.2				
	SE	5				2.8					
	SE	5.08					3.4			10	
	Island	5.7				1.9				10	
	Island	3.46				1.9				12	
	Island	8.72				3.6					
	NE	5				2.8					
	NE	5.8					3.3				
	NE	22.2				17.2				50	
	NE	5					2.8				
	NE	5				2.8					
	NW	5					7.8				
W 18th St	NW	13.19				2.8					
	NW	5					6.4				
	NW	10.5									
	NW	5				2.8					
	NW	7.34					4.8			10	
	NW	3.7					2.4			10	
	SW	5				2.4					
	SW	7.23					4.7				
	SW	5				2.8					
	SW	8.52					5.4				
	SW	5				2.8					
	SW	8.95					5.9			10	
	SW	8.7				4.6					
	SE	5					2.8				
	SE	5				2.8					
	SE	9.25					6.2			10	
	NE	5				2.8					
W 19th St	NE	5					2.8				
	NE	7.44				4.0				14	
	NE	15					8.3				
	NE	4				2.2					
	NW	5				2.8					
	NW	10.55					5.9				
	NW	5				2.8					
	NW	10					5.6				
	NW	10.97					7.3			10	
	NW	10.3				5.2					
	SW	5				2.8					
	SW	5					2.8				
	SW	11.3				6.9				26	
	SW	5					2.8				

113-1  
04-16-19

SIDEWALKS

See MI-220 and S Sheets

The diagram illustrates the relationship between the 'Back of Curb' and 'Face of Sidewalk' lines. It shows a cross-section of a road with a curb and a sidewalk. A dashed line represents the 'Back of Curb', and a solid line represents the 'Face of Sidewalk'. The distance between them is labeled 'A'. The width of the sidewalk is labeled 'B'. A small circle labeled 'S' is shown on the sidewalk surface.

Intersection/Road	Quadrant/Side	Length	A	B	S	4" PCC Sidewalk	6" PCC Sidewalk	8" PCC Sidewalk	10" PCC Sidewalk	Detectable Warnings	Remarks
			FT	FT	%	SY	SY	SY	SY	SF	
	SW	5				2.8					
	SE	5				2.8					
	SE	5					2.8				
	SE	5				2.8					
	SE	20.09					11.8				
	SE	5				2.8					
	SE	13.8					10.1			33	
	NE	5				2.8					
	NE	7.09					3.9				
	NE	12.99				7.3					
	NE	7.09					3.9				
	NE	6.6				3.1					
	NE	17.46					13.7			39	
	NW	68.95				62.0					
	NW	27.5					15.2				
	NW	5.35				3.0					
	NW	27.36					15.2				
	NW	30.96				14.6					
	NW	6.01					3.7			12	
W 20th St											
	SW	18.57					10.3				
	SW	11.3					6.3				
	SW	9.08				4.9				15	
	SE	5				2.8					
	SE	5				2.8					
	SE	5.65					3.8			10	

SURVEY SYMBOLS

	TDC Tree Deciduous
	GDL Guard Rail
	Lot Corner
	ROW Rail
	Tree Line
	Utility Access
	RR Centerline of Railroad Tracks
	Edge of Water
	RIP Rip-Rap
	FCL Chain Link and Security Fence
	Fence Wire
	RET Retaining Walls
	FWD Wood Fence
	D Centerline Draw or Stream (Down)
	MIS Miscellaneous
	GP Guard Post (Less Than 4 Posts)
	LUM Luminaire
	TSG Traffic Signal
	HT Electrical Highline Tower
	FHD Fire Hydrants
	PR Electric Riser Pole
	PPD Power Pole Co. 4
	PPC Power Pole Co. 3
	INB Storm Sewer Beehive Intake
	PPB Power Pole Co. 2
	LP L.P. Tank
	BB Billboard
	SHR Shrub
	RRB Railroad Signal Box
	TA Tower Anchor
	WV Water Valve
	WHD Water Hydrant
	GV Gas Valve
	TPD Telephone Pedestal
	SI Sign
	UB Utility Box
	IN Storm Sewer Intake
	PPA Power Pole Co. 1
	FLG Flag Poles
	TEV Evergreen Tree
	EB Electrical Box
	Dike or Dam
	Electric Line Company 1
	Electric Line Company 2
	Electric Line Company 3
	Electric Line Company 4
	Fiber Optic Company 1

	Fiber Optic Company 2
	Fiber Optic Company 3
	Fiber Optic Company 4
	Gas Company 1
	Gas Company 2
	High Pressure Gas Company 1
	Sanitary Sewer Company 1
	Storm Sewer Company 1
	Telephone Company 1
	Water Company 1

UTILITY LEGEND

	City of Sioux City Contact: Utilities Field Office Phone: 712-279-6135
	MidAmerican Energy Company Contact: Cody Parmeter Phone: 712-233-4821
	MidAmerican Energy Company Contact: Kathleen Miller Office: 712-233-4866 Cell: 712-574-1097
	MidAmerican Energy Company Contact: Kathleen Miller Office: 712-233-4866 Cell: 712-574-1097
	Lumen (CenturyLink) Contact: Arrash Parvanehgohar Office: 402-210-1206
	FiberComm Contact: Rick Welch Office: 712-224-2020 Cell: 712-251-6921
	LongLines Contact: Miles Patton Office: 712-271-5550
	MidWest Fiber Networks Contact: Nate Wright Office: 414-459-3546

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design	Color No.	
Green	(10)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING	Design	Color No.	
Yellow	(4)		Highlight for Critical Notes or Features
Red	(3)		Delineates Restricted Areas
Lavender	(9)		Temporary Pavement Shading
Gray, Light	(48)		Proposed Pavement Shading
Gray, Med	(80)		Proposed Granular Shading
Gray, Dark	(112)		Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)		Grading Shading
Tan	(8)		Proposed Sidewalk Shading
Blue, Light	(230)		Proposed Sidewalk Landing Shading
Pink	(11)		Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design	Color No.	
Green	(2)		Existing Ground Line Profile
Blue	(1)		Proposed Profile and Annotation
Magenta	(5)		Existing Utilities
Blue, Light	(230)		Proposed Ditch Grades, Left
Black	(0)		Proposed Ditch Grades, Median
Rust	(14)		Proposed Ditch Grades, Right

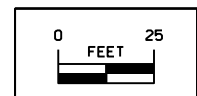
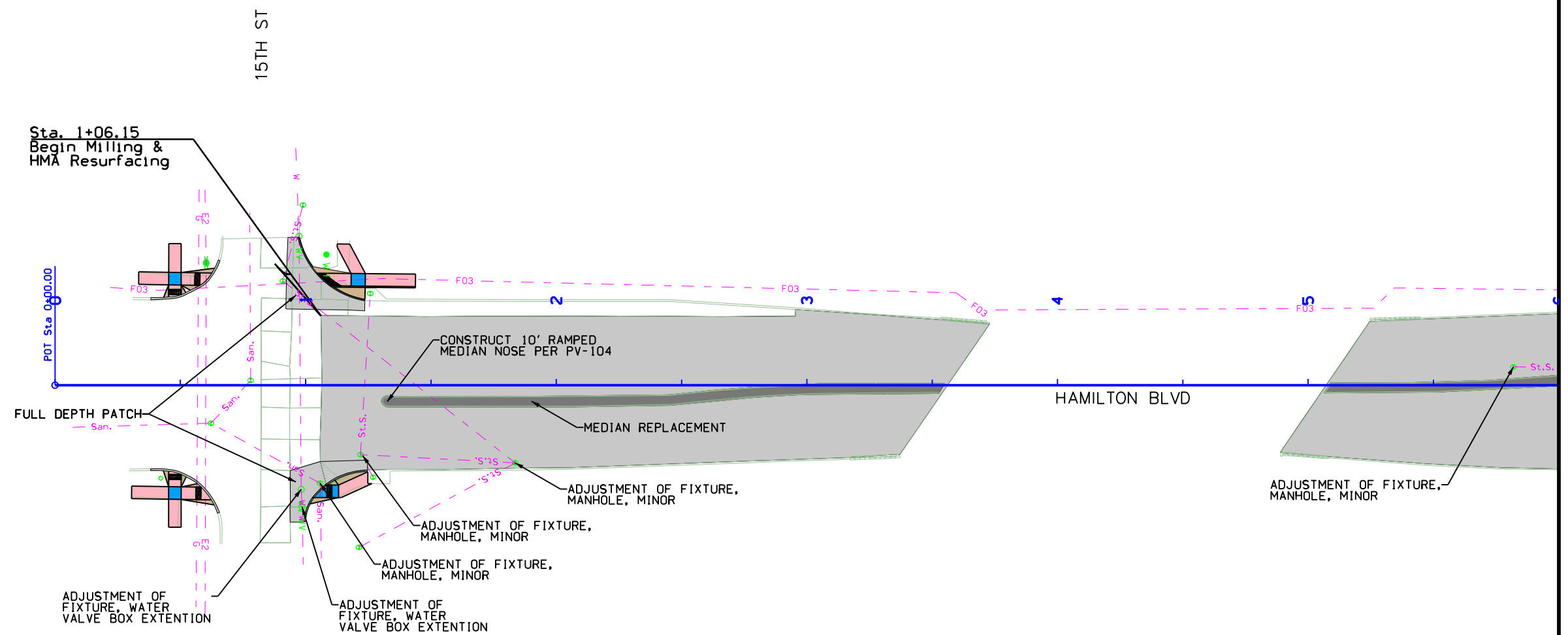
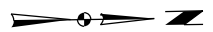
	Reference Point
	Station
	Survey Line
	Section Corner
	Ground Line Intercept
	Saw Cut
	Guardrail
	Trench Drain
	HighTension Cable Guardrail
	Sheet Pile
	Pavement Removal
	Clearing & Grubbing Area

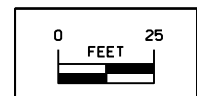
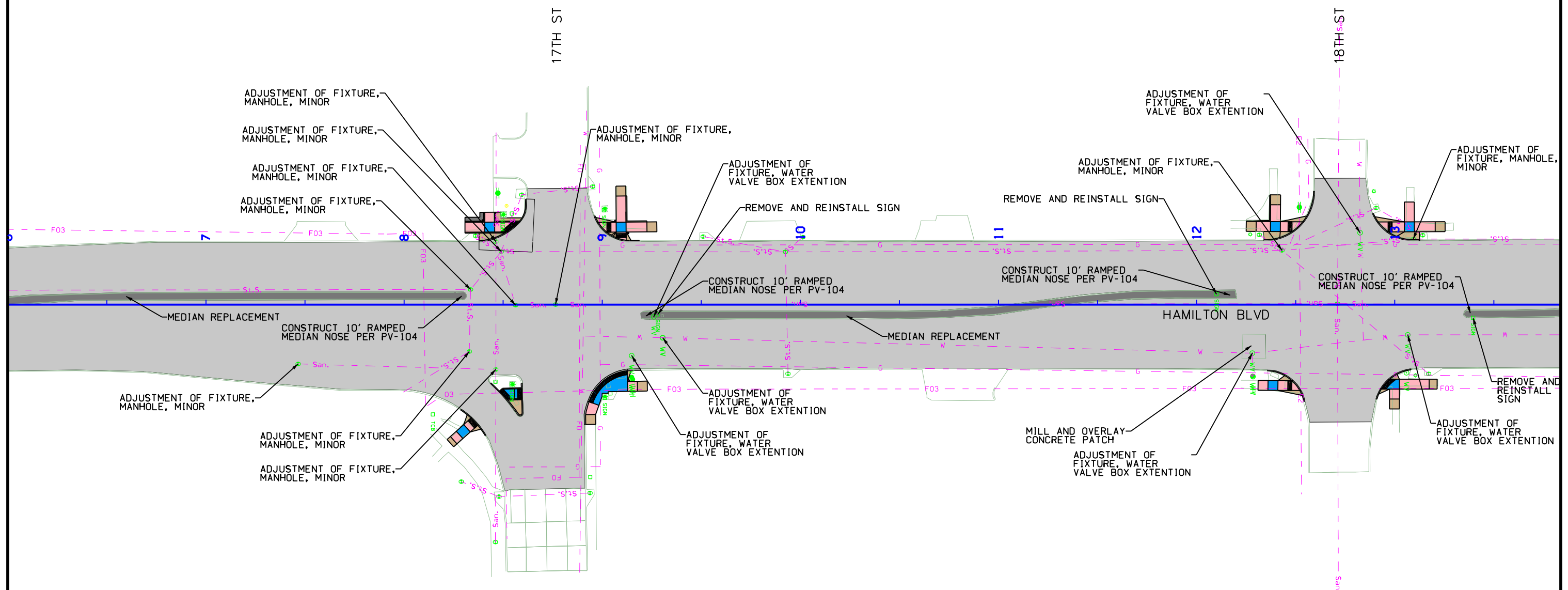
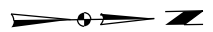
RIGHT-OF-WAY LEGEND

	Proposed Right-of-Way
	Existing Right of Way
	Existing and Proposed Right-of-Way
	Easement and Existing Right-of-Way
	Easement (Temporary)
	Easement
	C/A Access Control
	Property Line

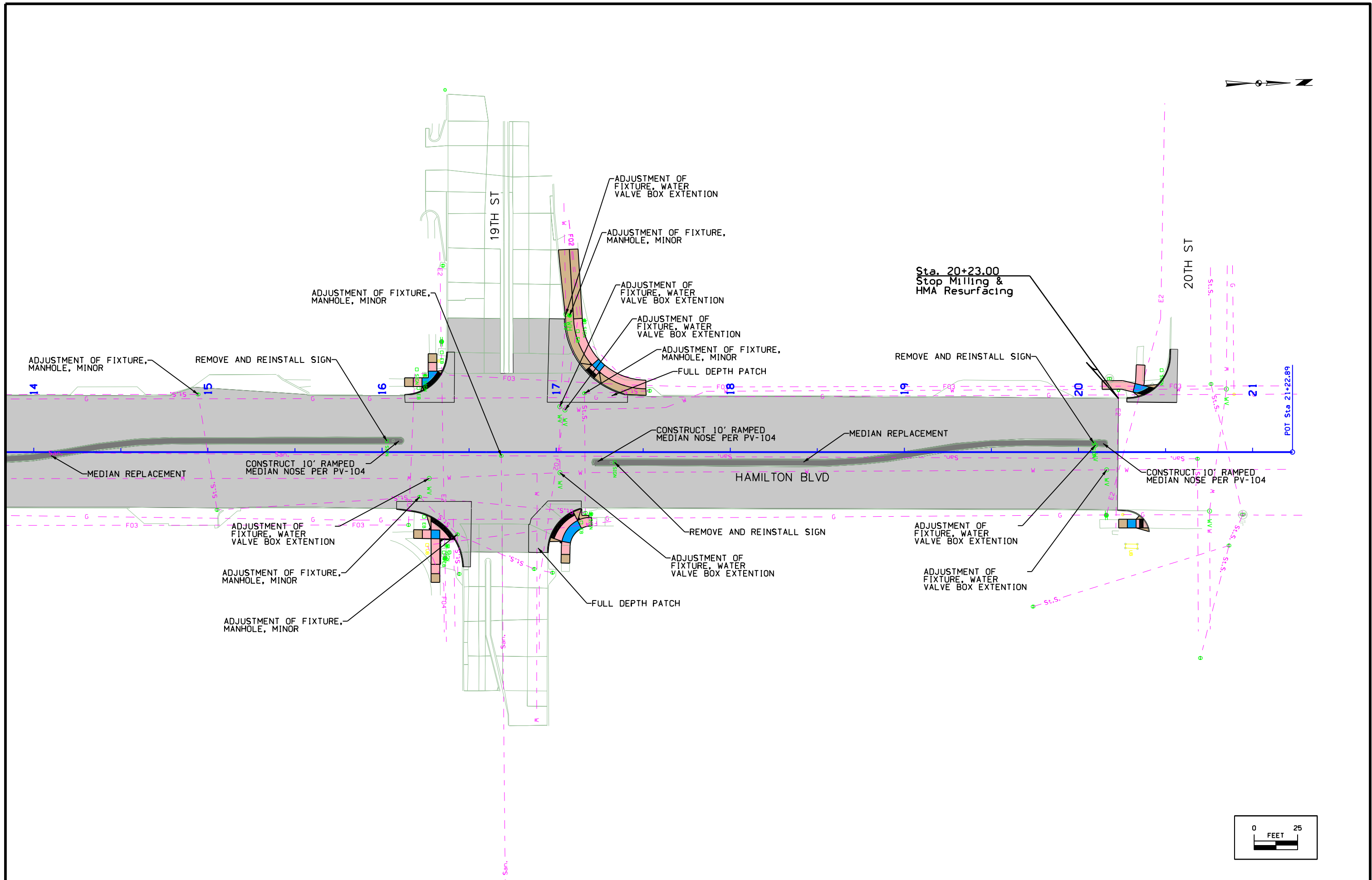
PLAN AND PROFILE  
LEGEND AND SYMBOL  
INFORMATION SHEET

(COVERS SHEET SERIES D, E, F, & K)









SIOUX CITY, IOWA  
 VERTICAL AND HORIZONTAL CONTROL

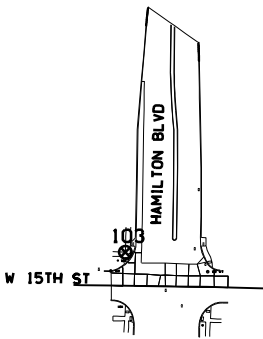
General Information  
 Horizontal - Iowa State Plane Coordinate System - North Zone

Vertical Datum  
 This survey is relative to NAVD88 vertical datum  
 The datum conversion from NGVD29 to NAVD88 is from VERTCON 2.1 and calculates to be +0.203 meters or 7.99 inches

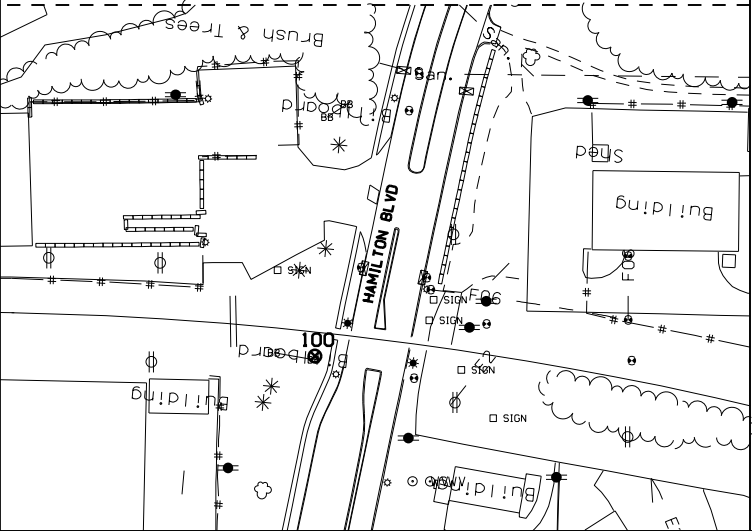
County GPS Monument  
 Number 8109  
 N42°28'39.88019"  
 W96°22'48.15701"  
 The monument is in the northeast quadrant of US 75 and Vine Avenue  
 75.1 feet northeast of of the northeast corner of US 75 Overpass  
 84.1 feet north of the back of curb of Vine Ave  
 3'-1/4" aluminum cap on aluminum rod in 6" pvc pipe with  
 aluminium access cover

PROJECT SURVEY WAS  
 COMPLETED BY:  
  
 Eric Meyer, PLS, CFedS  
 Meyer Land Surveying, LLC  
 45246 275th Street  
 Parker, SD 57053  
 Email: meyerlandsurveyingsd@gmail.com  
 Cell: 605-310-9401

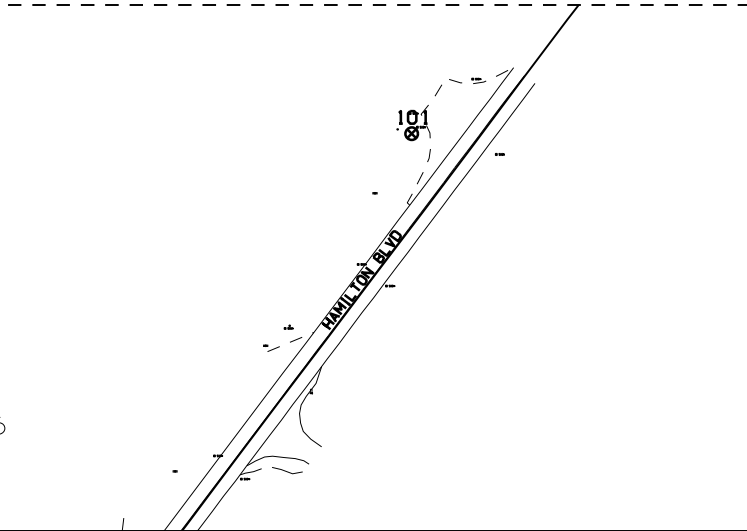
CP-103  
 NAIL  
 N=3661125.208 E=4134917.702 ELEV=1117.63



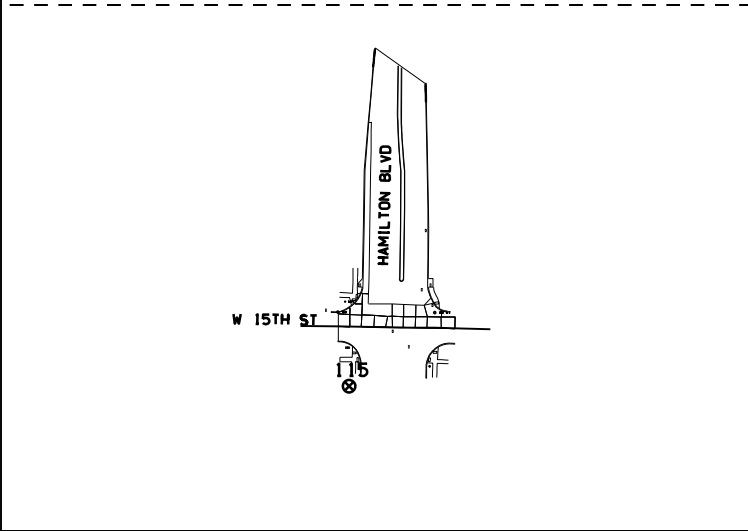
BM-100  
 N=3657156.666 E=4132764.787 ELEV=1100.83



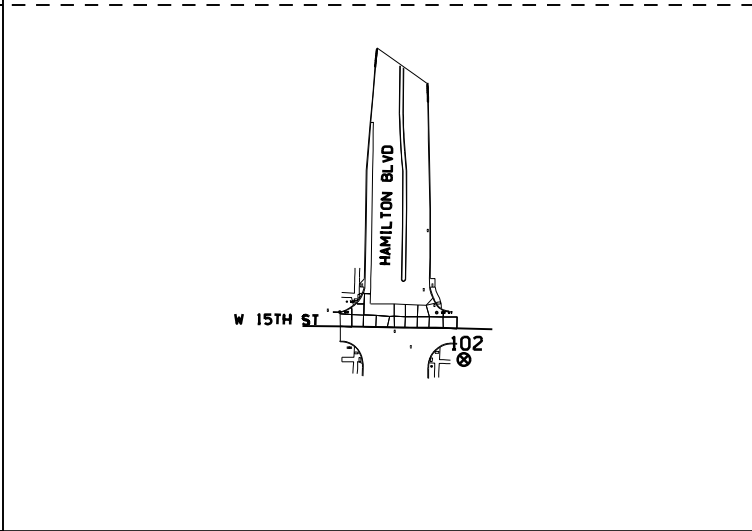
BM-101 STA 225+61.25, 58.40' LT  
 N=3682130.939 E=4140423.219 ELEV=1173.83



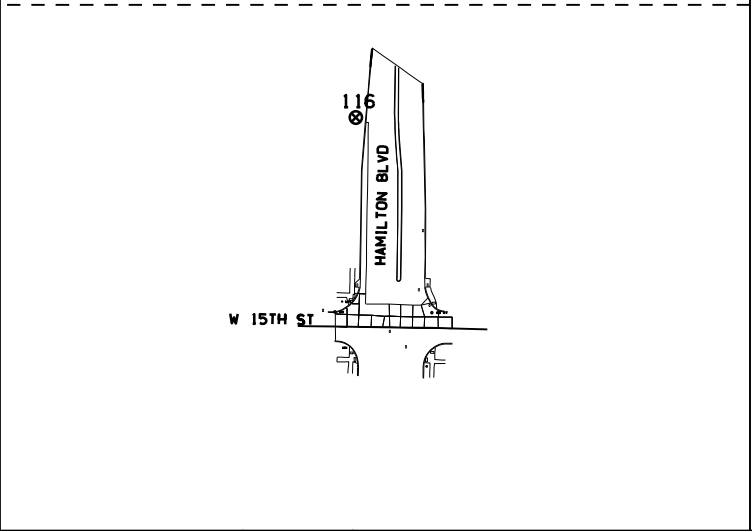
CP-115  
 MAGNAIL  
 N=3661028.322 E=4134914.231 ELEV=1116.59



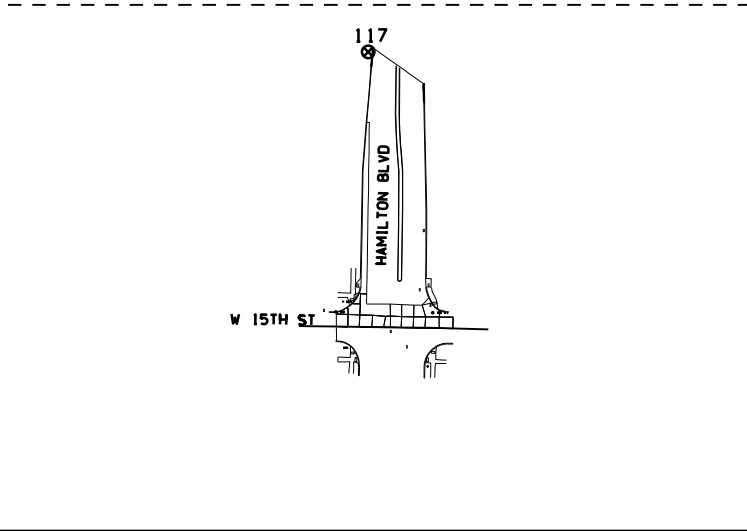
CP-102  
 NAIL  
 N=3661056.103 E=4135031.820 ELEV=1116.76



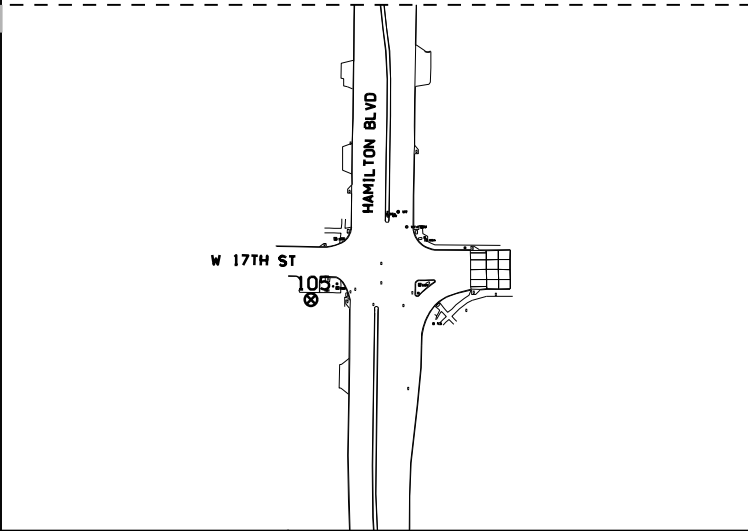
CP-116  
 N=3661308.386 E=4134924.288 ELEV=1121.61



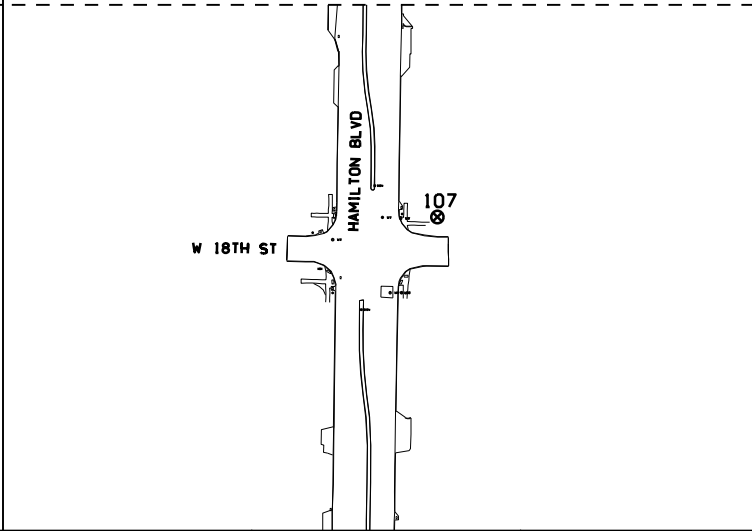
CP-117  
 N=3661376.785 E=4134936.237 ELEV=1122.69



CP-105  
 MAGNAIL  
 N=3661846.060 E=4134900.521 ELEV=1118.68



CP-107  
 NAIL  
 N=3662313.875 E=4135053.017 ELEV=1120.08



SIOUX CITY, IOWA  
 VERTICAL AND HORIZONTAL CONTROL

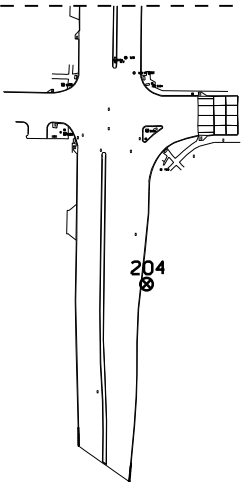
General Information  
 Horizontal - Iowa State Plane Coordinate System - North Zone

Vertical Datum  
 This survey is relative to NAVD88 vertical datum  
 The datum conversion from NGVD29 to NAVD88 is from VERTCON 2.1 and  
 calculates to be +0.203 meters or 7.99 inches

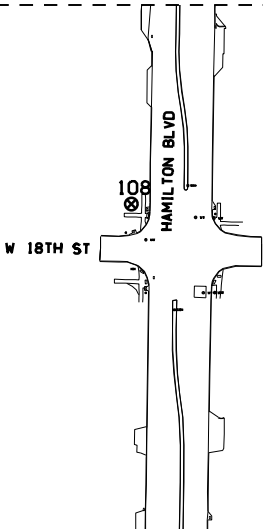
County GPS Monument  
 Number 8109  
 N42°28'39.88019"  
 W96°22'48.15701"  
 The monument is in the northeast quadrant of US 75 and Vine Avenue  
 75.1 feet northeast of of the northeast corner of US 75 Overpass  
 84.1 feet north of the back of curb of Vine Ave  
 3'-1/4" aluminum cap on aluminum rod in 6" pvc pipe with  
 aluminium access cover

PROJECT SURVEY WAS  
 COMPLETED BY:  
  
 Eric Meyer, PLS, CFedS  
 Meyer Land Surveying, LLC  
 45246 275th Street  
 Parker, SD 57053  
 Email: meyerlandsurveyingsd@gmail.com  
 Cell: 605-310-9401

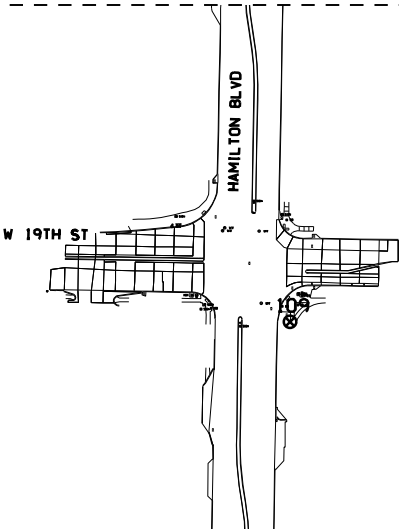
CP-204  
 NAIL  
 N=3661701.510 E=4135013.229 ELEV=1119.93



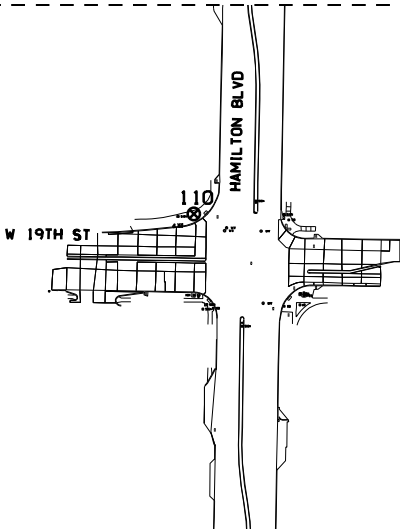
CP-108  
 NAIL  
 N=3662327.534 E=4134928.797 ELEV=1121.57



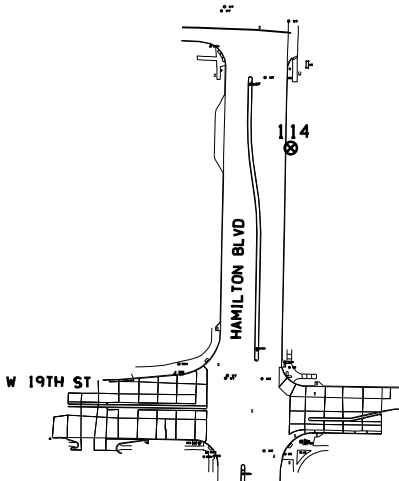
CP-109  
 NAIL  
 N=3662614.699 E=4135030.596 ELEV=1136.83



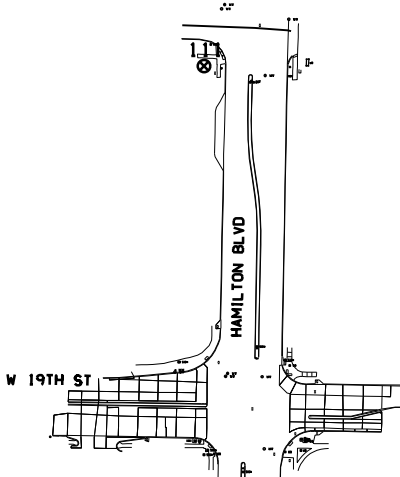
CP-110  
 PKNAIL  
 N=3662727.153 E=4134928.331 ELEV=1137.33



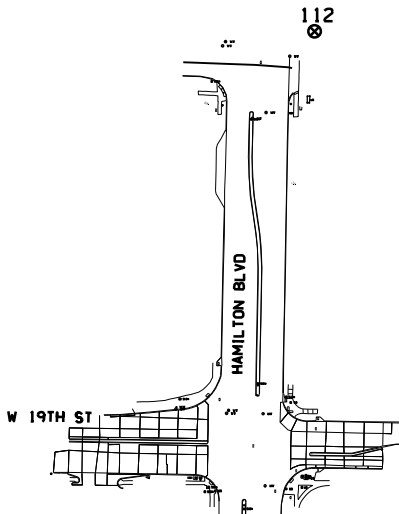
CP-114  
 NAIL  
 N=3662949.713 E=4135028.514 ELEV=1145.83



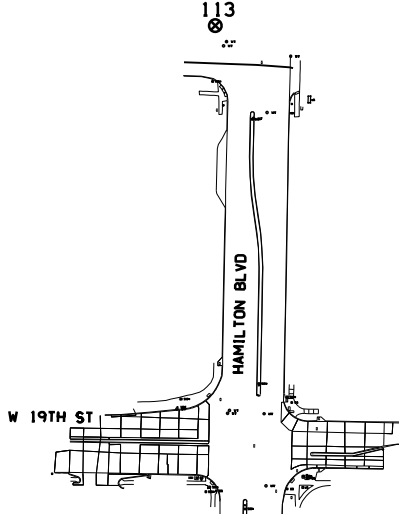
CP-111  
 NAIL  
 N=3663033.045 E=4134937.920 ELEV=1143.50



CP-112  
 MAGNAIL  
 N=3663107.784 E=4135052.060 ELEV=1148.09



CP-113  
 NAIL  
 N=3663113.677 E=4134947.612 ELEV=1141.32

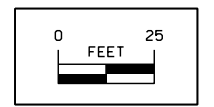
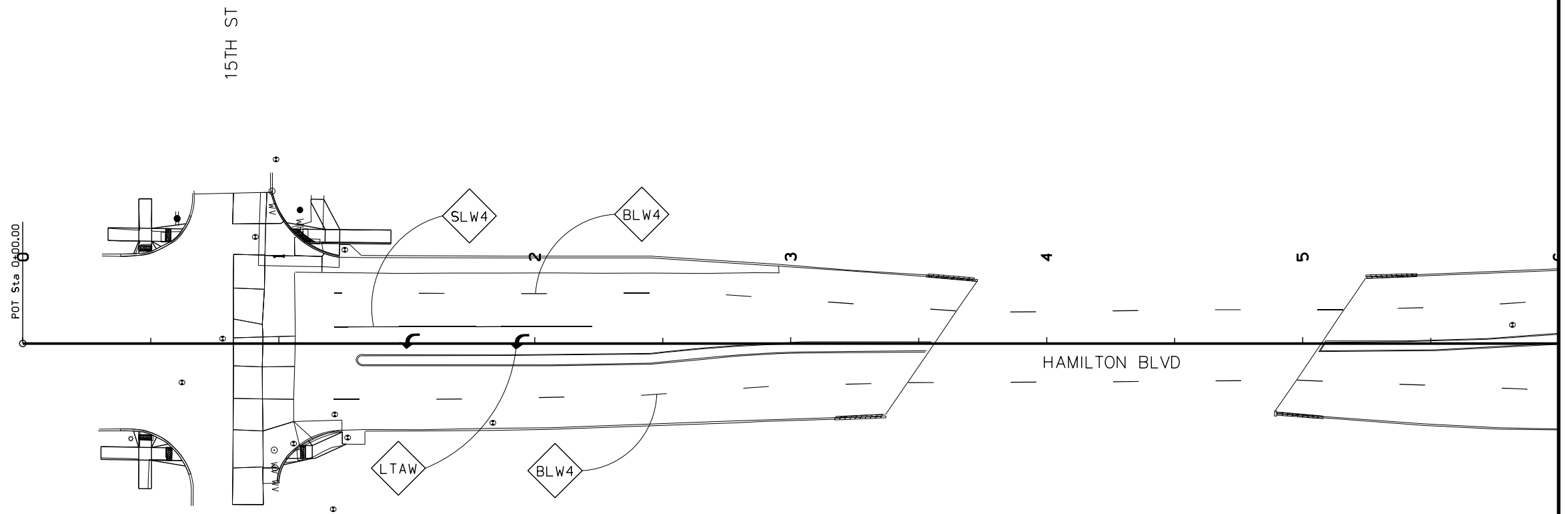


101-16
10-20-09

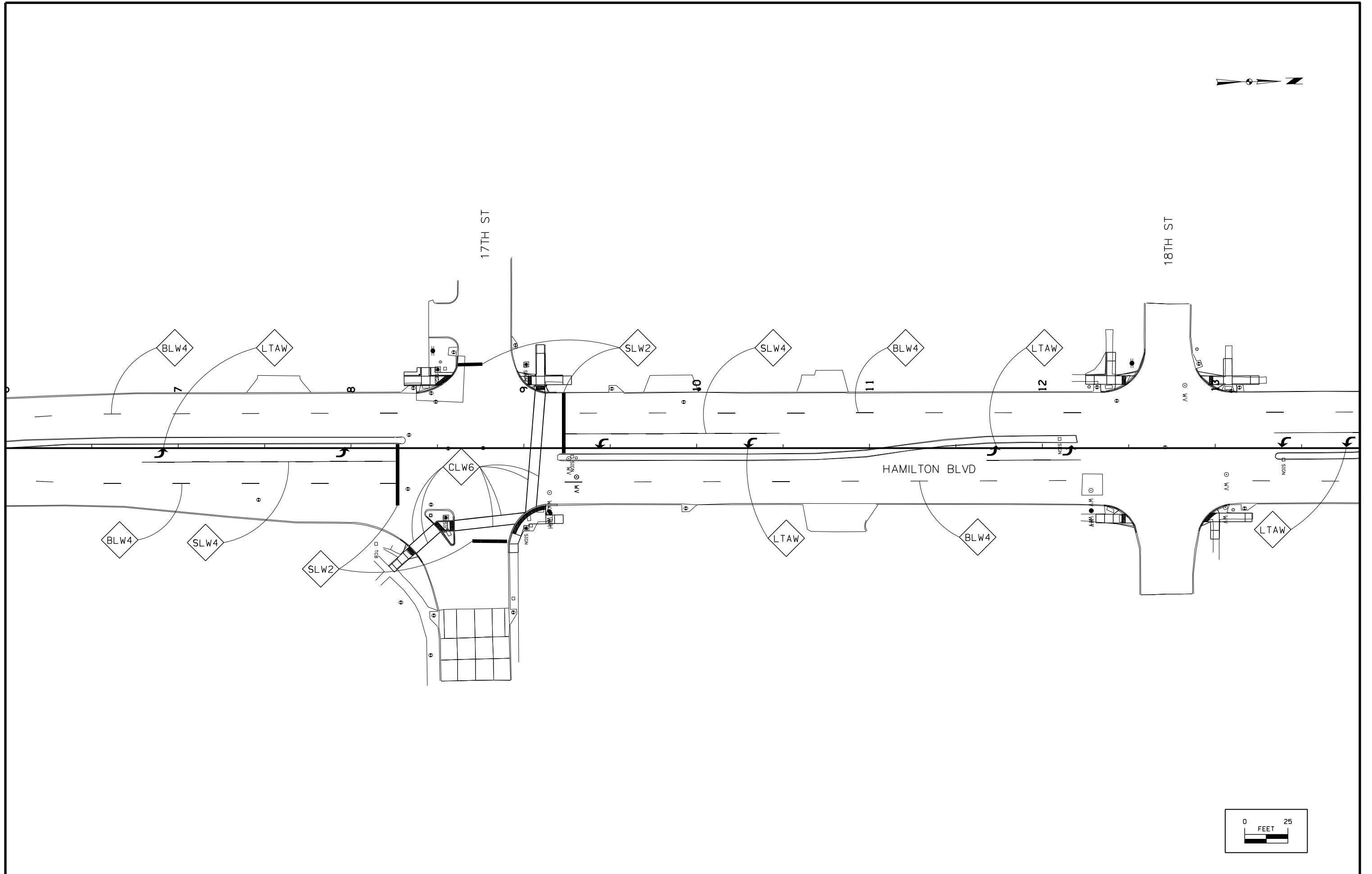
A large, empty rectangular box with a black border, occupying the majority of the page below the header. It is a placeholder for content, likely a figure or a detailed description related to the header information.

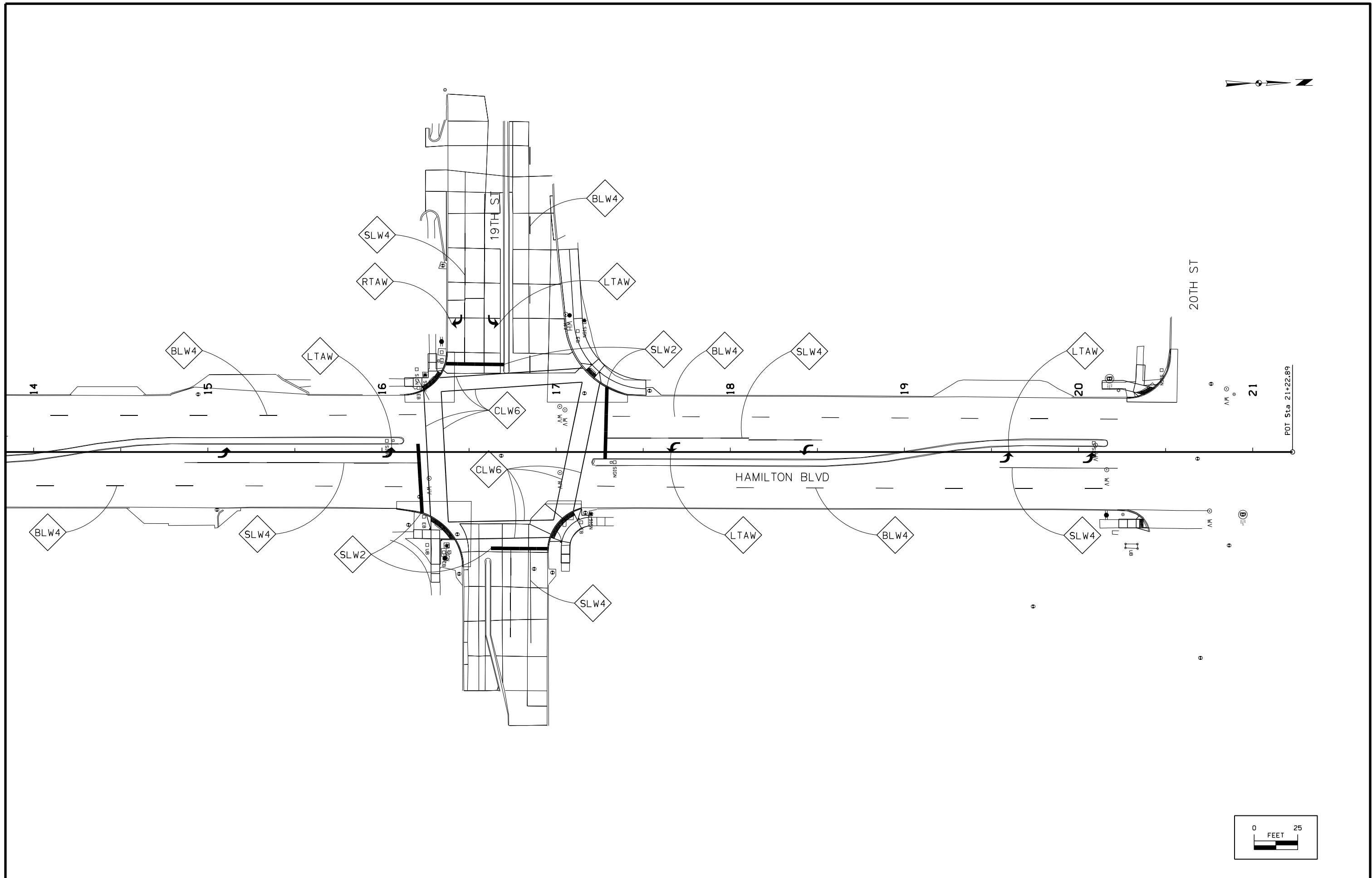
TRAFFIC CONTROL PLAN			108-23A 08-01-08
<div>1. Through traffic on Hamilton Boulevard shall be maintained on this project at all times.</div> <div>2. A minimum of one lane in each direction on Hamilton Boulevard shall be maintained at all times.</div> <div>3. Contractor will be allowed lane closures during construction activities, as indicated in the plans. The contractor shall coordinate with the City and adjacent property owners to facilitate traffic flow and access to businesses and residents.</div> <div>4. Contractor shall maintain traffic through the 17th and 19th Street intersections at all times, except when intersection work requires total closure. The contractor shall provide the City a minimum of 72 hour notice prior to closing and install appropriate road closure signage, advance warning signage, and barricades. Intersections may only be closed during the hours from 9:00 a.m. to 3:00 p.m. Intersections must be opened to traffic outside of these hours.</div> <div>5. The 17th and 19th Street intersections shall not be closed concurrently. The contractor shall provide the City a minimum of 48 hour notice prior to closing one of these intersections, and install appropriate road closure signage, advance warning signage, and barricades.</div> <div>6. Contractor shall maintain communication with the adjacent businesses the duration of the project and provide a minimum of 48 hour notice when their access to Hamilton Boulevard will be closed. Communication includes but not limited to, phone calls, emails, distribution of flyers, and personal visits as necessary.</div> <div>7. Traffic Control on this project shall be in accordance with the Standard Road Plans listed in Tab. 105-4 located in the C Sheets.</div> <div>8. Contractor is responsible for furnishing, installing, and adjusting business and wayfinding signs as needed when property access changes during construction.</div> <div>9. Hamilton Boulevard - W 15th St to W 20th St:<div>A. Night work WILL NOT be allowed for milling and paving operations.</div><div>B. Night work on weekends WILL NOT be allowed on from 10:00 p.m. to 6:30 a.m. nightly beginning at 10:00 p.m. Friday and ending at 6:30 a.m. Sunday.</div><div>C. Lane closures WILL NOT be allowed during peak traffic hours as follows:<div>Monday thru Friday 6:30 a.m. thru 8:30 a.m. and 3:30 p.m. thru 7:00 p.m.</div></div></div> <div>10. Sidewalks with pedestrian path crossings are present within the limits of this project. In the event any part of the proposed work or the equipment used is within or occupies any part of the of the pedestrian crossing, the contractor will be required to furnish and place any and all traffic control required to close the pedestrian crossing per Section 2528 of the Standard Specifications and Standard Road Plan TC-601. Refer to Tab. 113-2 in the J Sheets for Pedestrian Path Closures. Extra payment will not be made for traffic control required at pedestrian crossings.</div> <div>11. Contractor shall coordinate sidewalk work with adjacent property owners and businesses.</div> <div>12. Contract Time<div>A. Hamilton Boulevard - W 15th St to W 20th St<div>1) Start Date: ###</div><div>2) Working Days: 25</div></div></div>			

PEDESTRIAN PATH CLOSURES				113-2 04-16-13
*Assumes 6 foot wide barricade. Closures may need to be removed and re-established.				
Location	Side	Type III Barricades*	Remarks	
		No.		
SW Corner - W 15th St	LT	2		
SE Corner - W 15th St	RT	2		
NE Corner - W 15th St	RT	1		
NW Corner - W 15th St	LT	2		
SE Corner - W 17th St	RT	1		
NE Corner - W 17th St	RT	2		
NW Corner - W 17th St	LT	2		
SW Corner - W 18th St	LT	2		
SE Corner - W 18th St	RT	1		
NE Corner - W 18th St	RT	2		
NW Corner - W 18th St	LT	2		
SW Corner - W 19th St	LT	2		
SE Corner - W 19th St	RT	2		
NE Corner - W 19th St	RT	2		
NW Corner - W 19th St	LT	4		
SW Corner - W 20th St	LT	2		
SE Corner - W 20th St	RT	1		









TRAFFIC SIGNAL GENERAL NOTES

1. TRAFFIC SIGNALS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE IOWA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, SERIES 2023, EXCEPT AS MODIFIED BY THE PLANS AND TRAFFIC SIGNALIZATION SPECIAL PROVISIONS.
2. ALL QUANTITIES SHOWN IN THE PLANS AND SPECIFICATIONS ARE FOR INFORMATIONAL AND ESTIMATING PURPOSES ONLY. THE CONTRACTOR'S LUMP SUM BID FOR THIS PROJECT SHALL INCLUDE ALL LABOR AND MATERIALS NECESSARY TO PROVIDE A COMPLETE AND FUNCTIONAL TRAFFIC SIGNAL SYSTEM. THE CONTRACTOR'S LUMP SUM BID FOR THIS PROJECT SHALL INCLUDE ALL LABOR AND EQUIPMENT NECESSARY FOR THE REMOVAL AND SALVAGE OF THE EXISTING TRAFFIC SIGNAL SYSTEM AS NOTED WITHIN THE PLANS.
3. THE CONTRACTOR SHALL SUBMIT A LIST OF TRAFFIC SIGNAL EQUIPMENT THAT IS PROPOSED FOR INSTALLATION TO THE CITY PROJECT ENGINEER. SHOP DRAWINGS WILL BE REQUIRED, AND THESE SHALL BE SUBMITTED WITHIN 30 CALENDAR DAYS FROM THE DATE OF AWARD OF CONTRACT.
4. THE PLAN LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE EXACT LOCATION AND ELEVATION OF ALL UTILITIES MUST BE DETERMINED BY THE CONTRACTOR. IT SHALL BE THE DUTY OF THE CONTRACTOR TO ASCERTAIN WHETHER ANY ADDITIONAL FACILITIES OTHER THAN THOSE SHOWN ON THE PLANS MAY BE PRESENT. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES AND CITY UTILITIES PRIOR TO ANY EXCAVATION ON THE PROJECT.
5. THE LOCATIONS AND CONTENTS OF ALL EXISTING SIGNAL POLES, HANDHOLES, CABINETS AND CONDUIT ARE APPROXIMATE AND ARE TO BE FIELD VERIFIED BY THE CONTRACTOR. EXISTING INFRASTRUCTURE TO BE USED AS CONSTRUCTED UNLESS SPECIFIED OTHERWISE.
6. THE LOCATION OF ALL FOOTINGS AND HANDHOLES ARE SUBJECT TO ADJUSTMENT IN THE FIELD BY THE CITY PROJECT ENGINEER.
7. CONNECTION OF PROPOSED CONDUIT TO EXISTING HANDHOLES OR FOUNDATIONS TO BE CONSIDERED INCIDENTAL TO PRICE BID FOR CONDUIT.
8. CONNECTION OF EXISTING CONDUIT TO PROPOSED HANDHOLES OR FOUNDATIONS TO BE CONSIDERED INCIDENTAL TO PRICE BID FOR HANDHOLE.
9. CLEANOUT OF ANY HANDHOLES AND PROOFING OF CONDUIT, WHERE NECESSARY, TO BE CONSIDERED INCIDENTAL TO THE BID ITEM.
10. ALL SIGNAL CABLE SHALL BE CONTINUOUS FROM CONNECTIONS MADE IN THE HANDHOLE COMPARTMENTS OF SIGNAL POLE BASES TO THE TERMINAL COMPARTMENT IN THE CONTROLLER CABINET. SPLICING WILL NOT BE PERMITTED IN HANDHOLES UNLESS SPECIFICALLY APPROVED BY THE CITY PROJECT ENGINEER.
11. ALL UNDERGROUND WORK AT LOCATIONS BEING RECONSTRUCTED UNDER THE ROADWAY PORTION OF THIS PROJECT SHALL BE COMPLETED PRIOR TO FINAL PAVING OF THE SIDEWALK AND ROADWAY. NO ADDITIONAL PAYMENT WILL BE MADE FOR REMOVAL OR RECONSTRUCTION OF SIDEWALK OR PAVEMENT IN THESE AREAS.
12. ALL CONDUIT UNDER EXISTING PAVEMENTS AND SIDEWALKS SHALL BE INSTALLED BY A METHOD THAT MINIMIZES THE AMOUNT OF PAVEMENT AND SIDEWALK REPAIR. CONDUITS UNDER PAVEMENTS SHALL BE PARTIALLY BORED AS NEEDED TO CORRESPOND WITH THE CONSTRUCTION STAGING PLANS.
13. THE STATIONS/OFFSETS LISTED ON THE SIGNAL PLANS ARE TO THE CENTER OF THE ITEM UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL FIELD VERIFY ALL EQUIPMENT LOCATIONS WITH THE CITY PROJECT ENGINEER, INCLUDING SIGNAL HEAD LOCATIONS.
14. NO LANE CLOSURES OTHER THAN THOSE LISTED WITHIN THE TRAFFIC CONTROL PLANS WILL BE PERMITTED BETWEEN THE HOURS OF 7:00–9:00AM, OR BETWEEN THE HOURS OF 4:00–6:00PM.
15. THE CONTRACTORS SHALL NOTIFY THE CITY PROJECT ENGINEER WHEN READY TO SCHEDULE THE TURN-ON OF THE TRAFFIC SIGNALS. THE CONTRACTOR SHALL FOLLOW THE CITY'S STANDARD TRAFFIC SIGNAL TURN-ON PROCEDURE.
16. UNLESS OTHERWISE NOTED AND SPECIFIED ON THE PLANS, ALL EXISTING FOOTINGS AND SIGNAL CABINET FOOTINGS ARE TO BE REMOVED TO A MINIMUM DEPTH OF 3 FEET BELOW FINAL GRADE OR ADDITIONAL AS NECESSARY FOR CONSTRUCTION. ALL SURROUNDING SURFACES SHALL BE PROPERLY RESTORED.
17. ALL SIGNING AND TRAFFIC CONTROLS USED WHILE CONSTRUCTION ACTIVITIES ARE IN PROGRESS SHALL BE IN COMPLIANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
18. PEDESTRIAN PUSHBUTTONS AND PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED AND FACED AS INDICATED PER THE DETAIL WITHIN THE N SHEETS.
19. ALL SIGNAL CABLE SHALL BE #14 AWG UNLESS OTHERWISE NOTED ON THE PLANS.
20. ALL WORK WITHIN THE EXISTING TRAFFIC SIGNAL CONTROLLER CABINETS IS TO BE COORDINATED WITH THE CITY OF SIOUX CITY. PROVIDE 48 HOURS OF NOTICE TO THE CITY OF SIOUX CITY SIGNAL SHOP PRIOR TO MODIFICATION OF TRAFFIC SIGNAL SYSTEM COMPONENTS.
21. AREAS DISTURBED BY CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE.
22. CONTRACTOR TO RECEIVE DELIVERY OF PROPOSED TRAFFIC SIGNAL EQUIPMENT AND ASSUMES RESPONSIBILITY FOR DELIVERY AND INSTALLATION IN THE FIELD.
23. ALL ELECTRICAL CONNECTORS, GROUND CONDUCTORS, GROUND RODS AND OTHER MISCELLANEOUS MATERIALS WHICH ARE NOT LISTED ON THE ESTIMATE OF QUANTITIES SHALL BE CONSIDERED INCIDENTAL TO THE TRAFFIC SIGNAL BID ITEM.
24. THE CONTRACTOR WILL HAVE A MINIMUM OF 3 YEARS EXPERIENCE INSTALLING TRAFFIC SIGNALS. THE CONTRACTOR WILL ALSO HAVE AN EMPLOYEE ON-SITE AT ALL TIMES WITH A LEVEL II IMSA TRAFFIC SIGNAL CERTIFICATION.
25. INSTALL PEDESTRIAN PUSHBUTTON SIGNS (R10–3E) ABOVE EACH NEW PEDESTRIAN PUSHBUTTON.
26. ALL CONDUIT SHALL INCLUDE ONE, 1/2" WIDE, POLYESTER CABLE PULLING TAPE WITH A MINIMUM 1200 LB. TENSILE STRENGTH WHEN INSTALLATION IS COMPLETE.
27. THE CONTROLLER ADDRESS WILL BE PROVIDED BY THE CITY PROJECT ENGINEER, IF NECESSARY AND REQUESTED BY THE CONTRACTOR.
28. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING ALL NEW AND EXISTING CONDUITS UNTIL PROJECT ACCEPTANCE.
29. ALL NEW VEHICLE AND PEDESTRIAN INDICATIONS SHALL BE LED.
30. WHEN HEATING PVC CONDUIT TO FORM A BEND, AN APPROVED CONDUIT HEATING DEVICE SHALL BE USED. DIRECT FLAME SHALL NOT BE APPLIED TO THE CONDUIT.
31. ALL PROPOSED TRAFFIC SIGNAL POLES, PUSH BUTTON POLES, AND PEDESTAL POLES SHALL INCLUDE TRANSFORMER BASES, UNLESS DIRECTED OTHERWISE. TOPS OF ALL FOOTINGS SHALL BE FORMED SQUARE AND FLUSH WITH ADJACENT PROPOSED OR EXISTING SIDEWALK/TRAIL FACILITIES.
32. TRAFFIC SIGNAL VEHICLE DETECTION SHALL BE VIDEO DETECTION. THE CONTRACTOR SHALL COORDINATE WITH THE CITY PUBLIC WORKS STAFF TO FIELD VERIFY THE PLACEMENT OF ALL DETECTION EQUIPMENT PRIOR TO INSTALLATION. INSTALLATION MATERIALS AND METHODS FOR DETECTION EQUIPMENT SHALL BE IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. EACH VIDEO DETECTION CABLE RUN FROM THE TRAFFIC SIGNAL CONTROLLER CABINET TO EACH OF THE RESPECTIVE CAMERA LOCATIONS SHALL BE CONTINUOUS AND UNSPLICED.
33. SEE TABLE SHOWN ON BILL OF MATERIALS N SHEET FOR LIST OF SPECIAL EQUIPMENT TO BE USED.

SIGNAL LEGEND

EXISTING	PROPOSED	
		CABINET, CONTROLLER, UNINTERRUPTIBLE POWER SUPPLY/BATTERY BACK-UP SYSTEM, AND CONCRETE PAD
		POWER SOURCE
		METER
1E	1	TRAFFIC SIGNAL POLE, FOOTING SYMBOL, AND IDENTIFYING NUMBER
3E	3	PEDESTAL POLE, FOOTING SYMBOL, AND IDENTIFYING NUMBER
3E	3	TEMPORARY SIGNAL POLE AND IDENTIFYING NUMBER
		UTILITY POLE
81	81	TRAFFIC SIGNAL HEAD WITH BACKPLATE SYMBOL AND IDENTIFYING NUMBER
23	23	TRAFFIC SIGNAL HEAD SYMBOL AND IDENTIFYING NUMBER
25	25	PEDESTRIAN HEAD SYMBOL AND IDENTIFYING NUMBER
201	201	PEDESTRIAN PUSHBUTTON IDENTIFYING NUMBER
C	C	MAST ARM MOUNTED SIGN SYMBOL AND IDENTIFYING NUMBER
		VEHICLE DETECTION DEVICE
	2A-1	VEHICLE DETECTION AREA SYMBOL AND IDENTIFYING NUMBER (S = STOP BAR, A = ADVANCE)
		LUMINAIRE
4	4	24" HANDHOLE SYMBOL AND IDENTIFYING NUMBER – TYPE 1
1	1	"TUB" HANDHOLE SYMBOL AND IDENTIFYING NUMBER – TYPE 3 OR 4
		TRENCHED SIGNAL CONDUIT
		PUSHED SIGNAL CONDUIT

ABBREVIATIONS

SIG	SIGNAL HEAD CABLE	Y1	FUSED WYE CONNECTOR FOR STREET LIGHTING
PED HD	PEDESTRIAN HEAD CABLE	Y2	NON-FUSED WYE CONNECTOR FOR STREET LIGHTING
PED PB	PEDESTRIAN PUSHBUTTON CABLE	Y3	NON-FUSED WYE CONNECTOR FOR STREET LIGHTING
CNTRL	CONTROLLER	L1	FUSED IN-LINE CONNECTOR FOR STREET LIGHTING
LUM	LUMINAIRE	L2	NON-FUSED IN-LINE CONNECTOR FOR STREET LIGHTING
N	NEUTRAL	DET	SHIELDED LOOP DETECTOR LEAD-IN
LN1	POWER – LINE 1	LOOP	DETECTOR LOOP WIRE IN TUBING
LN2	POWER – LINE 2	HH	HANDHOLE
GR	GROUND WIRE 1c #6	FY	FLASHING YELLOW
TR	TRACER WIRE 1c #10	SY	STEADY YELLOW
PR	PULL ROPE	SM	SINGLE MODE
		DETECTION	VEHICLE DETECTION SENSOR CABLE

Permanent Traffic Signal Installation - Bill of Materials / Unit Cost Form Hamilton Boulevard Intersections - City of Sioux City, IA
---

		Units	Quantity Hamilton Blvd & 17th St	Quantity Hamilton Blvd & 19th St	Total Quantity		
No.	Item Description					Unit Price	Unit Extension
1	16"x18" Hand/Man Countdown pedestrian head	EA	6	8	14	\$	\$
2	Handhole, Type 1 - 24" Poured or Precast, Ring and Cover	EA	2	0	2	\$	\$
3	Handhole, Type 3 - "Tub" 30" x 24"	EA	1	0	1	\$	\$
4	Conduit - 2" PVC Trenched	LF	63	116	179	\$	\$
5	Cable - Signal 2c #14	LF	1481	1512	2993	\$	\$
6	Cable - Signal 5c #14	LF	1434	1502	2936	\$	\$
7	Cable - Ground 1c #6	LF	105	179	284	\$	\$
8	Cable - Tracer 1c #10	LF	105	179	284	\$	\$
9	Pull Rope	LF	499	641	1140	\$	\$
10	Vehicle Detection Cable (Per Manufacturer)	LF	121	58	179	\$	\$
11	Concrete Base - Push Button Pole - 1.5' X 3.0' Deep Footing	EA	4	6	10	\$	\$
12	Pole (Aluminum) - Pedestrian Push Button Pole	EA	4	6	10	\$	\$
13	Pedestrian Pushbutton with Sign R10-3E	EA	6	8	14	\$	\$
14	Vehicle Video Detection System	LS	1	1	2	\$	\$
15	Modification to Existing Traffic Signal Controller Components and Accessories	LS	1	1	2	\$	\$
16	Traffic Control	LS	1	1	2	\$	\$
17	Mobilization	LS	1	1	2	\$	\$
	Total Lump Sum to Furnish and Install Traffic Signals						\$

### Traffic Signal Special Equipment To Be Used At Two Project Intersections

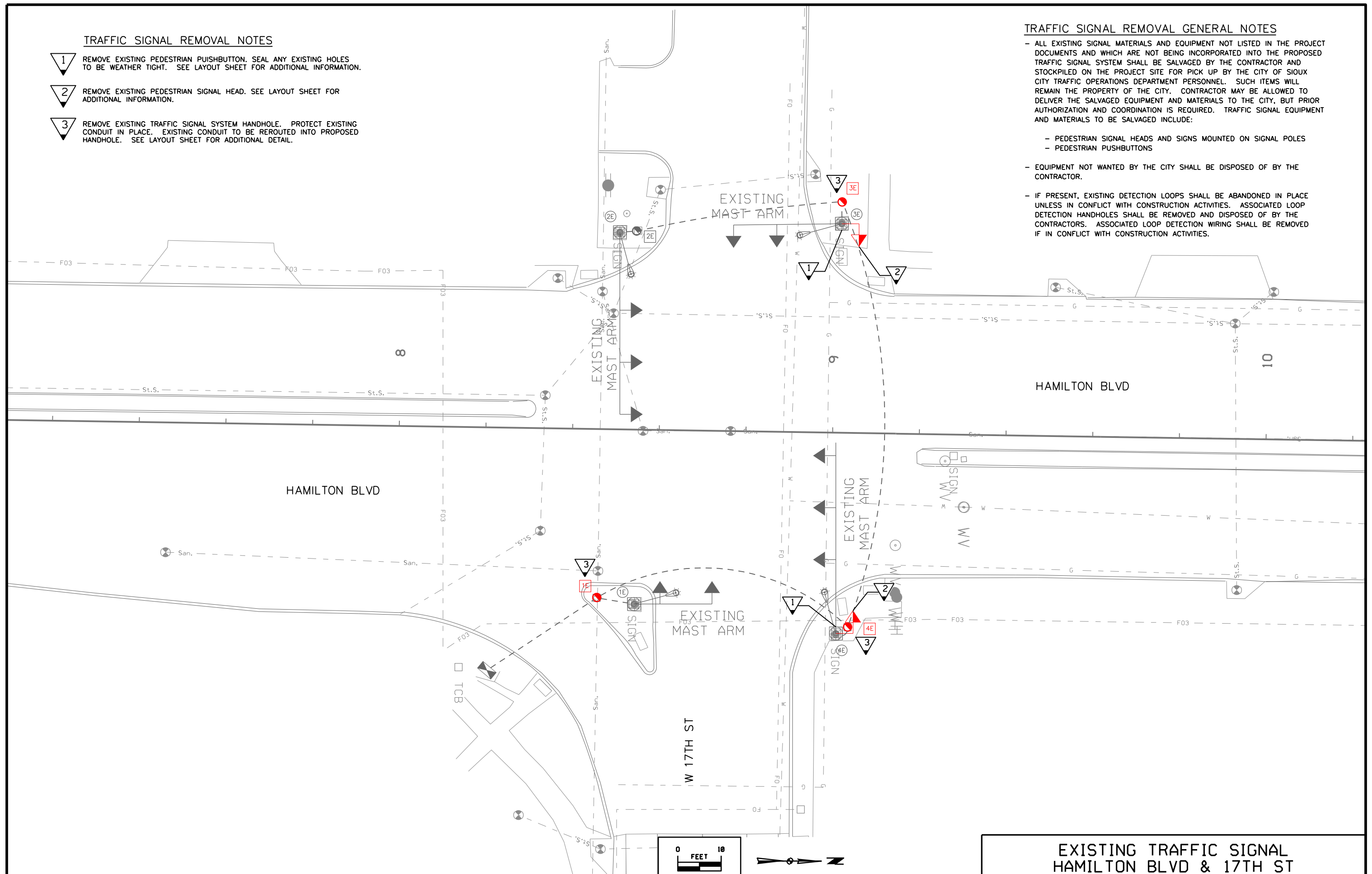
Equipment	Manufacturer	Model Name	Remarks
Vehicle Detection System	NoTraffic	AI Detection	See Special Provisions

# TRAFFIC SIGNAL REMOVAL NOTES

- 1 REMOVE EXISTING PEDESTRIAN PUISHBUTTON. SEAL ANY EXISTING HOLES TO BE WEATHER TIGHT. SEE LAYOUT SHEET FOR ADDITIONAL INFORMATION.
- 2 REMOVE EXISTING PEDESTRIAN SIGNAL HEAD. SEE LAYOUT SHEET FOR ADDITIONAL INFORMATION.
- 3 REMOVE EXISTING TRAFFIC SIGNAL SYSTEM HANDHOLE. PROTECT EXISTING CONDUIT IN PLACE. EXISTING CONDUIT TO BE REROUTED INTO PROPOSED HANDHOLE. SEE LAYOUT SHEET FOR ADDITIONAL DETAIL.

# TRAFFIC SIGNAL REMOVAL GENERAL NOTES

- ALL EXISTING SIGNAL MATERIALS AND EQUIPMENT NOT LISTED IN THE PROJECT DOCUMENTS AND WHICH ARE NOT BEING INCORPORATED INTO THE PROPOSED TRAFFIC SIGNAL SYSTEM SHALL BE SALVAGED BY THE CONTRACTOR AND STOCKPILED ON THE PROJECT SITE FOR PICK UP BY THE CITY OF SIOUX CITY TRAFFIC OPERATIONS DEPARTMENT PERSONNEL. SUCH ITEMS WILL REMAIN THE PROPERTY OF THE CITY. CONTRACTOR MAY BE ALLOWED TO DELIVER THE SALVAGED EQUIPMENT AND MATERIALS TO THE CITY, BUT PRIOR AUTHORIZATION AND COORDINATION IS REQUIRED. TRAFFIC SIGNAL EQUIPMENT AND MATERIALS TO BE SALVAGED INCLUDE:
  - PEDESTRIAN SIGNAL HEADS AND SIGNS MOUNTED ON SIGNAL POLES
  - PEDESTRIAN PUSHBUTTONS
- EQUIPMENT NOT WANTED BY THE CITY SHALL BE DISPOSED OF BY THE CONTRACTOR.
- IF PRESENT, EXISTING DETECTION LOOPS SHALL BE ABANDONED IN PLACE UNLESS IN CONFLICT WITH CONSTRUCTION ACTIVITIES. ASSOCIATED LOOP DETECTION HANDHOLES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTORS. ASSOCIATED LOOP DETECTION WIRING SHALL BE REMOVED IF IN CONFLICT WITH CONSTRUCTION ACTIVITIES.



EXISTING TRAFFIC SIGNAL  
HAMILTON BLVD & 17TH ST

TRAFFIC SIGNAL FACES



NO. 21,22,  
41,42,61,62  
(6-REQ'D)

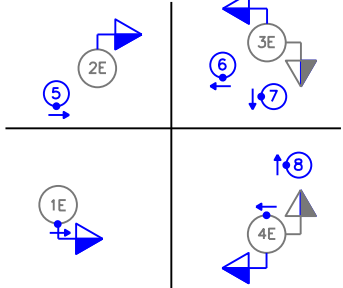
ALL SIGNAL FACES SHALL BE LED.

NOTES

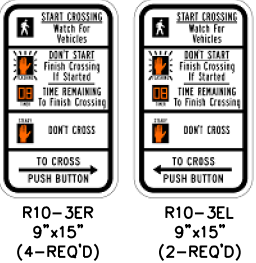
- 1INSTALL VEHICLE VIDEO DETECTION ONTO SIGNAL POLE LUMINAIRE ARM FOLLOWING MANUFACTURERS RECOMMENDATIONS.
- 2REPLACE EXISTING HANDHOLE WITH TYPE 1 OR TYPE 3 HANDHOLE, AS SPECIFIED. REROUTE EXISTING CONDUIT INTO PROPOSED HANDHOLE.

BASE AND HANDHOLE LOCATIONS				
SIGNAL POLE NO.	STATION	OFFSET	RT/LT	COMMENTS
1E	U.A.C.	-	RT	SIGNAL POLE
2E	U.A.C.	-	LT	SIGNAL POLE
3E	U.A.C.	-	LT	SIGNAL POLE
4E	U.A.C.	-	RT	SIGNAL POLE
5	8+39.58	42.69'	LT	PEDESTRIAN PUSHBUTTON POLE
6	9+06.58	42.20'	LT	PEDESTRIAN PUSHBUTTON POLE
7	9+13.02	36.14'	LT	PEDESTRIAN PUSHBUTTON POLE
8	9+13.43	38.29'	RT	PEDESTRIAN PUSHBUTTON POLE
HANDHOLE NO.	STATION	OFFSET	RT/LT	COMMENTS
1	8+46.67	38.77'	RT	TYPE 3 HANDHOLE "TRAFFIC"
2E	U.A.C.	-	LT	HANDHOLE "TRAFFIC"
2	9+01.56	53.79'	LT	TYPE 1 HANDHOLE "TRAFFIC"
3	9+04.69	45.61'	RT	TYPE 1 HANDHOLE "TRAFFIC"
SIGNAL CABINET NO.	STATION	OFFSET	RT/LT	COMMENTS
1	U.A.C.	-	RT	USE AS CONSTRUCTED

PEDESTRIAN PUSHBUTTON AND SIGNAL FACE MOUNTING



PEDESTRIAN PUSHBUTTON SIGNS



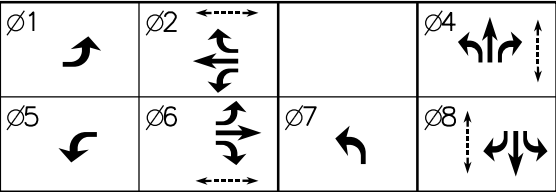
TRAFFIC SIGNAL MODIFICATIONS  
HAMILTON BLVD & 17TH ST



DETECTOR SUMMARY

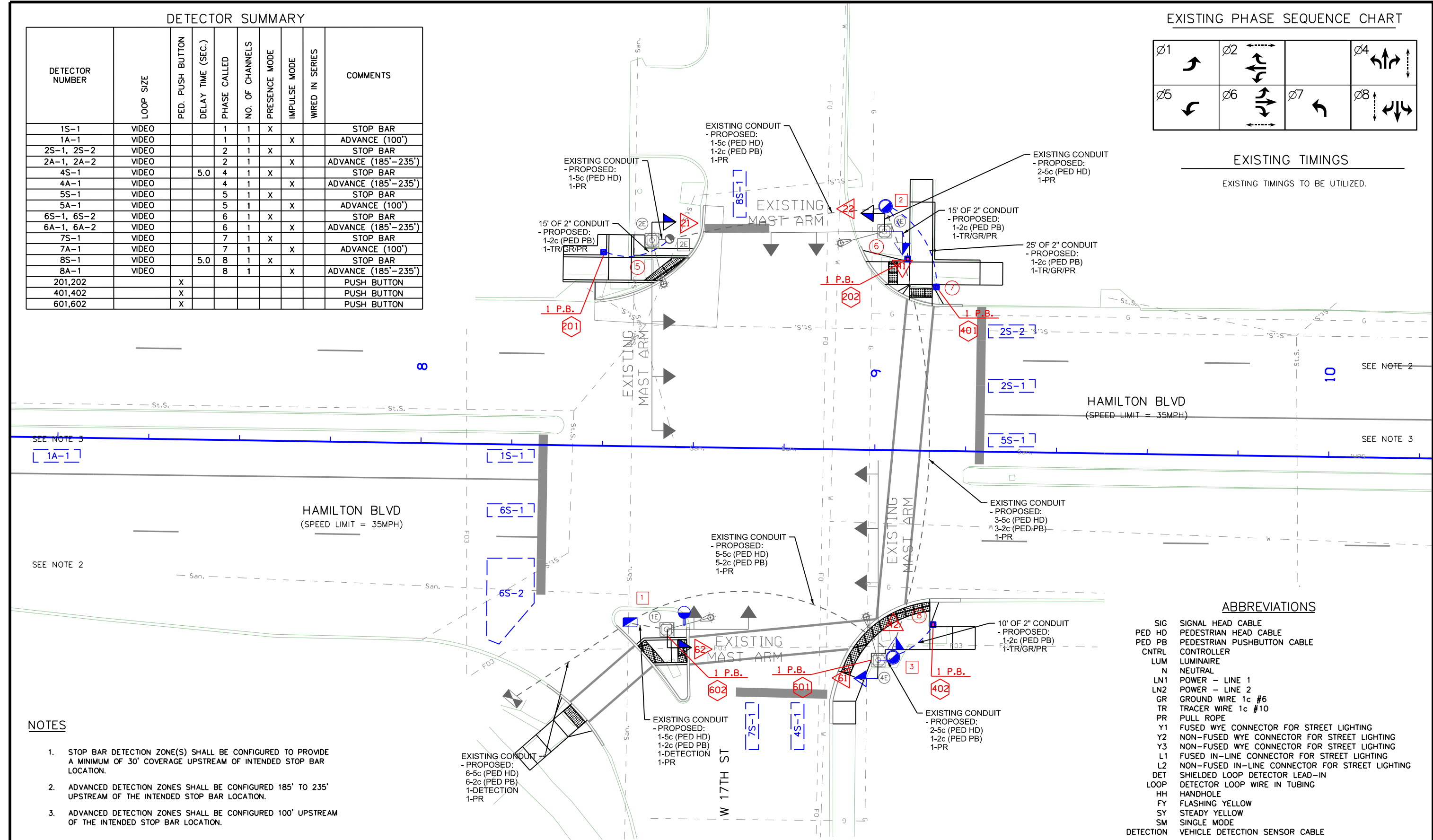
DETECTOR NUMBER	LOOP SIZE	PED. PUSH BUTTON	DELAY TIME (SEC.)	PHASE CALLED	NO. OF CHANNELS	PRESENCE MODE	IMPULSE MODE	WIRED IN SERIES	COMMENTS
1S-1	VIDEO			1	1	X			STOP BAR
1A-1	VIDEO			1	1		X		ADVANCE (100')
2S-1, 2S-2	VIDEO			2	1	X			STOP BAR
2A-1, 2A-2	VIDEO			2	1		X		ADVANCE (185'-235')
4S-1	VIDEO		5.0	4	1	X			STOP BAR
4A-1	VIDEO			4	1		X		ADVANCE (185'-235')
5S-1	VIDEO			5	1	X			STOP BAR
5A-1	VIDEO			5	1		X		ADVANCE (100')
6S-1, 6S-2	VIDEO			6	1	X			STOP BAR
6A-1, 6A-2	VIDEO			6	1		X		ADVANCE (185'-235')
7S-1	VIDEO			7	1	X			STOP BAR
7A-1	VIDEO			7	1		X		ADVANCE (100')
8S-1	VIDEO		5.0	8	1	X			STOP BAR
8A-1	VIDEO			8	1		X		ADVANCE (185'-235')
201,202		X							PUSH BUTTON
401,402		X							PUSH BUTTON
601,602		X							PUSH BUTTON

EXISTING PHASE SEQUENCE CHART



EXISTING TIMINGS

EXISTING TIMINGS TO BE UTILIZED.

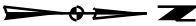


NOTES

- STOP BAR DETECTION ZONE(S) SHALL BE CONFIGURED TO PROVIDE A MINIMUM OF 30' COVERAGE UPSTREAM OF INTENDED STOP BAR LOCATION.
- ADVANCED DETECTION ZONES SHALL BE CONFIGURED 185' TO 235' UPSTREAM OF THE INTENDED STOP BAR LOCATION.
- ADVANCED DETECTION ZONES SHALL BE CONFIGURED 100' UPSTREAM OF THE INTENDED STOP BAR LOCATION.

ABBREVIATIONS

SIG	SIGNAL HEAD CABLE
PED HD	PEDESTRIAN HEAD CABLE
PED PB	PEDESTRIAN PUSHBUTTON CABLE
CNTRL	CONTROLLER
LUM	LUMINAIRE
N	NEUTRAL
LN1	POWER - LINE 1
LN2	POWER - LINE 2
GR	GROUND WIRE 1c #6
TR	TRACER WIRE 1c #10
PR	PULL ROPE
Y1	FUSED WYE CONNECTOR FOR STREET LIGHTING
Y2	NON-FUSED WYE CONNECTOR FOR STREET LIGHTING
Y3	NON-FUSED WYE CONNECTOR FOR STREET LIGHTING
L1	FUSED IN-LINE CONNECTOR FOR STREET LIGHTING
L2	NON-FUSED IN-LINE CONNECTOR FOR STREET LIGHTING
DET	SHIELDED LOOP DETECTOR LEAD-IN
LOOP	DETECTOR LOOP WIRE IN TUBING
HH	HANDHOLE
FY	FLASHING YELLOW
SY	STEADY YELLOW
SM	SINGLE MODE
DETECTION	VEHICLE DETECTION SENSOR CABLE



TRAFFIC SIGNAL WIRING  
HAMILTON BLVD & 17TH ST

WIRE QUANTITIES (IN FEET)													
Hamilton Boulevard & 17th Street													
From	To	Plan Length	Adj. Length	Pull Rope	1c #10 Tracer	1c #6 Bare Copper	1c #8 LUM Copper	1c #6 PWR Copper	Vehicle Detection Multi Cable	PED PB 2c #14	PED HD 5c #14	SIG 5c #14	SIG 7c #14
Controller	Handhole 1	35	60	60					60	360	360		
Handhole 1	Signal Pole 1E	10	20	20					20	20	20		
	At Signal Pole 1E								35	15	20		
Handhole 1	Handhole 3	65	75	75						375	375		
Handhole 3	Signal Pole 4E	10	20	20						20	40		
	At Signal Pole 4E									15	40		
Handhole 3	Pushbutton Pole 8	10	20	20	20	20				20			
	At Pushbutton Pole 8									15			
Handhole 3	Handhole 2	105	115	115						345	345		
Handhole 2	Signal Pole 3E	10	20	20						20	40		
	At Signal Pole 3E									15	40		
Handhole 2	Pedestal Pole 6	10	20	20	20	20				20			
	At Pedestal Pole 6									15			
Handhole 2	Pedestal Pole 7	25	35	35	35	35				35			
	At Pedestal Pole 7									15			
Handhole 2	Handhole 2E												
Handhole 2E	Signal Pole 2E	55	65	65						65	65		
	At Signal Pole 2E										20		
Handhole 2E	Pedestal Pole 5	15	25	25	25	25				25			
	At Pedestal Pole 5									15			
	Sub-Totals =			475	100	100	0	0	115	1410	1365	0	0
	Extra =			24	5	5	0	0	6	71	69	0	0
	Grand Totals =			499	105	105	0	0	121	1481	1434	0	0

NOTES:  
Plan Length: Center to Center length between objects.  
Adjusted Length: Plan length with additional slack length.

CONDUIT QUANTITIES							
Hamilton Boulevard & 17th Street							
From	To	Trenched (Feet)				Pushed (Feet)	
		1" Dia. PVC	2" Dia. PVC	3" Dia. PVC	4" Dia. PVC	2" Dia. PVC	3" Dia. PVC 4" Dia. PVC
Controller	Handhole 1						
Handhole 1	Signal Pole 1E						
Handhole 1	Handhole 3						
Handhole 3	Signal Pole 4E						
Handhole 3	Pushbutton Pole 8		10				
Handhole 3	Handhole 2						
Handhole 2	Signal Pole 3E						
Handhole 2	Pedestal Pole 6		10				
Handhole 2	Pedestal Pole 7		25				
Handhole 2	Handhole 2E						
Handhole 2E	Signal Pole 2E						
Handhole 2E	Pedestal Pole 5		15				
	Sub-Totals =	0	60	0	0	0	0
	Extra =	0	3	0	0	0	0
	Grand Totals =	0	63	0	0	0	0

FOOTING AND HANDHOLE QUANTITIES							
Hamilton Boulevard & 17th Street							
Pole No.	Signal Pole Footing	Pedestal Pole Footing	Push Button Pole Footing	Hand-Hole Type 1 24" Dia.	Hand-Hole Type 3 "Tub"	Hand-Hole Type 4 "Tub"	Comments
Signal Pole 1E							U.A.C.
Signal Pole 2E							U.A.C.
Signal Pole 3E							U.A.C.
Signal Pole 4E							U.A.C.
Pushbutton Pole 5			1				See Details
Pushbutton Pole 6			1				See Details
Pushbutton Pole 7			1				See Details
Pushbutton Pole 8			1				See Details
Handhole 1					1		See Details
Handhole 2E							U.A.C.
Handhole 2				1			See Details
Handhole 3				1			See Details
Totals =	0	0	4	2	1	0	

SIGNAGE QUANTITIES		
Hamilton Boulevard & 17th Street		
Legend Letter =>		
Sign Type =>	Ped PB Sign	Ped PB Sign
Size =>	9" x 15" R10-3E (Left)	9" x 15" R10-3E (Right)
Mounting Location =>	VERTICAL SHAFT	VERTICAL SHAFT
Notes =>		
Signal Pole 1E		1
Signal Pole 2E		
Signal Pole 3E		
Signal Pole 4E		1
Pushbutton Pole 5		1
Pushbutton Pole 6	1	
Pushbutton Pole 7		1
Pushbutton Pole 8	1	
Totals =	2	4

TRAFFIC SIGNAL HEAD QUANTITIES				
Hamilton Boulevard & 17th Street				
Pole No.	Signal Head Number(s)	Hand/Man Countdown Ped Head	Back Plate	Mounting OH Side
1E	21	1		1
2E	22,41	2		2
3E	42,61	2		2
4E	62	1		1
Totals =		6	0	0 6

Traffic Signal Pole Quantities										
Hamilton Boulevard & 17th Street										
Pole No.	Mast-Arm Length	Signal Head Spacing				Sign Spacing	EVP Spacing	Vehicle Detection Spacing	Luminaire Orientation	Finish
	A (Feet)	B (Feet)	C (Feet)	D (Feet)	E (Feet)	F (Feet)	G (Feet)	H (Feet)	I (Degrees)	
1E	U.A.C.					-	-	See Note 1	-	Galvanized
2E	U.A.C.					-	-	-	-	Galvanized
3E	U.A.C.					-	-	-	-	Galvanized
4E	U.A.C.					-	-	-	-	Galvanized
5	-									Galvanized
6	-									Galvanized
7	-									Galvanized
8	-									Galvanized

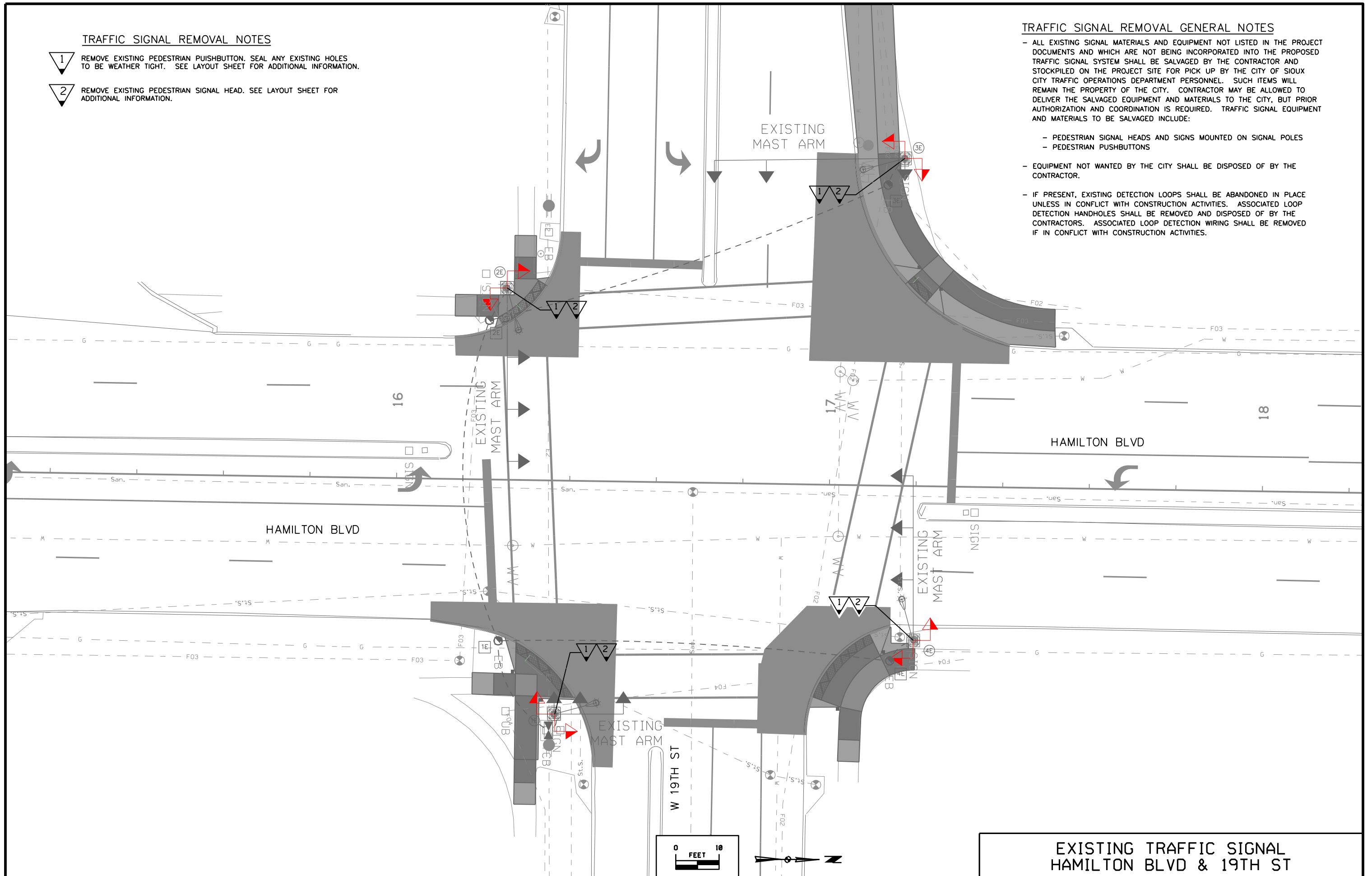
Notes:  
1. Video detector to be mounted onto traffic signal luminaire arm or as directed by equipment manufacturer/vendor.

# TRAFFIC SIGNAL REMOVAL NOTES

- 1 REMOVE EXISTING PEDESTRIAN PUISHBUTTON. SEAL ANY EXISTING HOLES TO BE WEATHER TIGHT. SEE LAYOUT SHEET FOR ADDITIONAL INFORMATION.
- 2 REMOVE EXISTING PEDESTRIAN SIGNAL HEAD. SEE LAYOUT SHEET FOR ADDITIONAL INFORMATION.

# TRAFFIC SIGNAL REMOVAL GENERAL NOTES

- ALL EXISTING SIGNAL MATERIALS AND EQUIPMENT NOT LISTED IN THE PROJECT DOCUMENTS AND WHICH ARE NOT BEING INCORPORATED INTO THE PROPOSED TRAFFIC SIGNAL SYSTEM SHALL BE SALVAGED BY THE CONTRACTOR AND STOCKPILED ON THE PROJECT SITE FOR PICK UP BY THE CITY OF SIOUX CITY TRAFFIC OPERATIONS DEPARTMENT PERSONNEL. SUCH ITEMS WILL REMAIN THE PROPERTY OF THE CITY. CONTRACTOR MAY BE ALLOWED TO DELIVER THE SALVAGED EQUIPMENT AND MATERIALS TO THE CITY, BUT PRIOR AUTHORIZATION AND COORDINATION IS REQUIRED. TRAFFIC SIGNAL EQUIPMENT AND MATERIALS TO BE SALVAGED INCLUDE:
  - PEDESTRIAN SIGNAL HEADS AND SIGNS MOUNTED ON SIGNAL POLES
  - PEDESTRIAN PUSHBUTTONS
- EQUIPMENT NOT WANTED BY THE CITY SHALL BE DISPOSED OF BY THE CONTRACTOR.
- IF PRESENT, EXISTING DETECTION LOOPS SHALL BE ABANDONED IN PLACE UNLESS IN CONFLICT WITH CONSTRUCTION ACTIVITIES. ASSOCIATED LOOP DETECTION HANDHOLES SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTORS. ASSOCIATED LOOP DETECTION WIRING SHALL BE REMOVED IF IN CONFLICT WITH CONSTRUCTION ACTIVITIES.



EXISTING TRAFFIC SIGNAL  
HAMILTON BLVD & 19TH ST

FILE NO.

ENGLISH

DESIGN TEAM City of Sioux City \ HR Green, Inc.

WOODBURY COUNTY

PROJECT NUMBER

STP-U-7057(723)--70-97

SHEET NUMBER N.7

TRAFFIC SIGNAL FACES

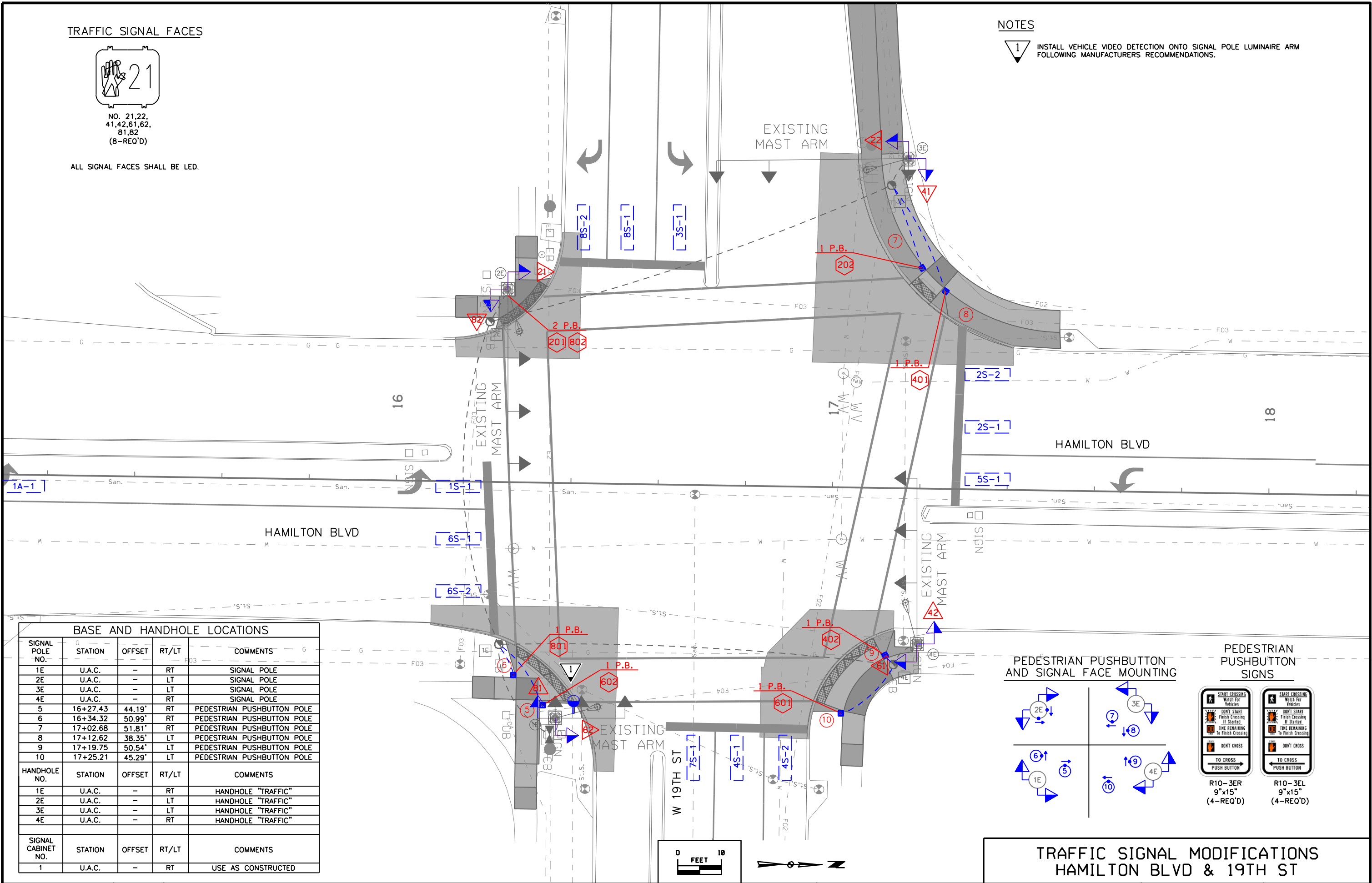


NO. 21,22,  
41,42,61,62,  
81,82  
(8-REQ'D)

ALL SIGNAL FACES SHALL BE LED.

NOTES

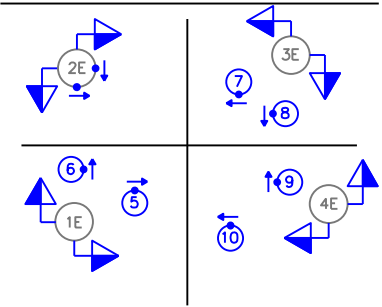
1 INSTALL VEHICLE VIDEO DETECTION ONTO SIGNAL POLE LUMINAIRE ARM FOLLOWING MANUFACTURERS RECOMMENDATIONS.



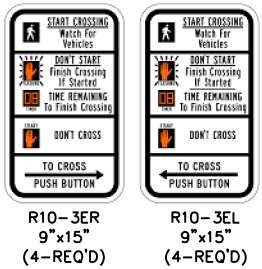
BASE AND HANDHOLE LOCATIONS

SIGNAL POLE NO.	STATION	OFFSET	RT/LT	COMMENTS
1E	U.A.C.	-	RT	SIGNAL POLE
2E	U.A.C.	-	LT	SIGNAL POLE
3E	U.A.C.	-	LT	SIGNAL POLE
4E	U.A.C.	-	RT	SIGNAL POLE
5	16+27.43	44.19'	RT	PEDESTRIAN PUSHBUTTON POLE
6	16+34.32	50.99'	RT	PEDESTRIAN PUSHBUTTON POLE
7	17+02.68	51.81'	RT	PEDESTRIAN PUSHBUTTON POLE
8	17+12.62	38.35'	LT	PEDESTRIAN PUSHBUTTON POLE
9	17+19.75	50.54'	LT	PEDESTRIAN PUSHBUTTON POLE
10	17+25.21	45.29'	LT	PEDESTRIAN PUSHBUTTON POLE
HANDHOLE NO.	STATION	OFFSET	RT/LT	COMMENTS
1E	U.A.C.	-	RT	HANDHOLE "TRAFFIC"
2E	U.A.C.	-	LT	HANDHOLE "TRAFFIC"
3E	U.A.C.	-	LT	HANDHOLE "TRAFFIC"
4E	U.A.C.	-	RT	HANDHOLE "TRAFFIC"
SIGNAL CABINET NO.	STATION	OFFSET	RT/LT	COMMENTS
1	U.A.C.	-	RT	USE AS CONSTRUCTED

PEDESTRIAN PUSHBUTTON AND SIGNAL FACE MOUNTING



PEDESTRIAN PUSHBUTTON SIGNS



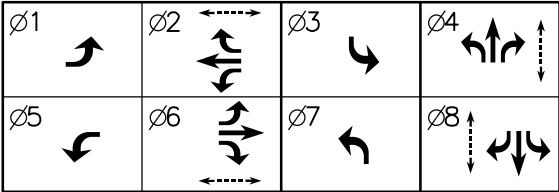
TRAFFIC SIGNAL MODIFICATIONS  
HAMILTON BLVD & 19TH ST



DETECTOR SUMMARY

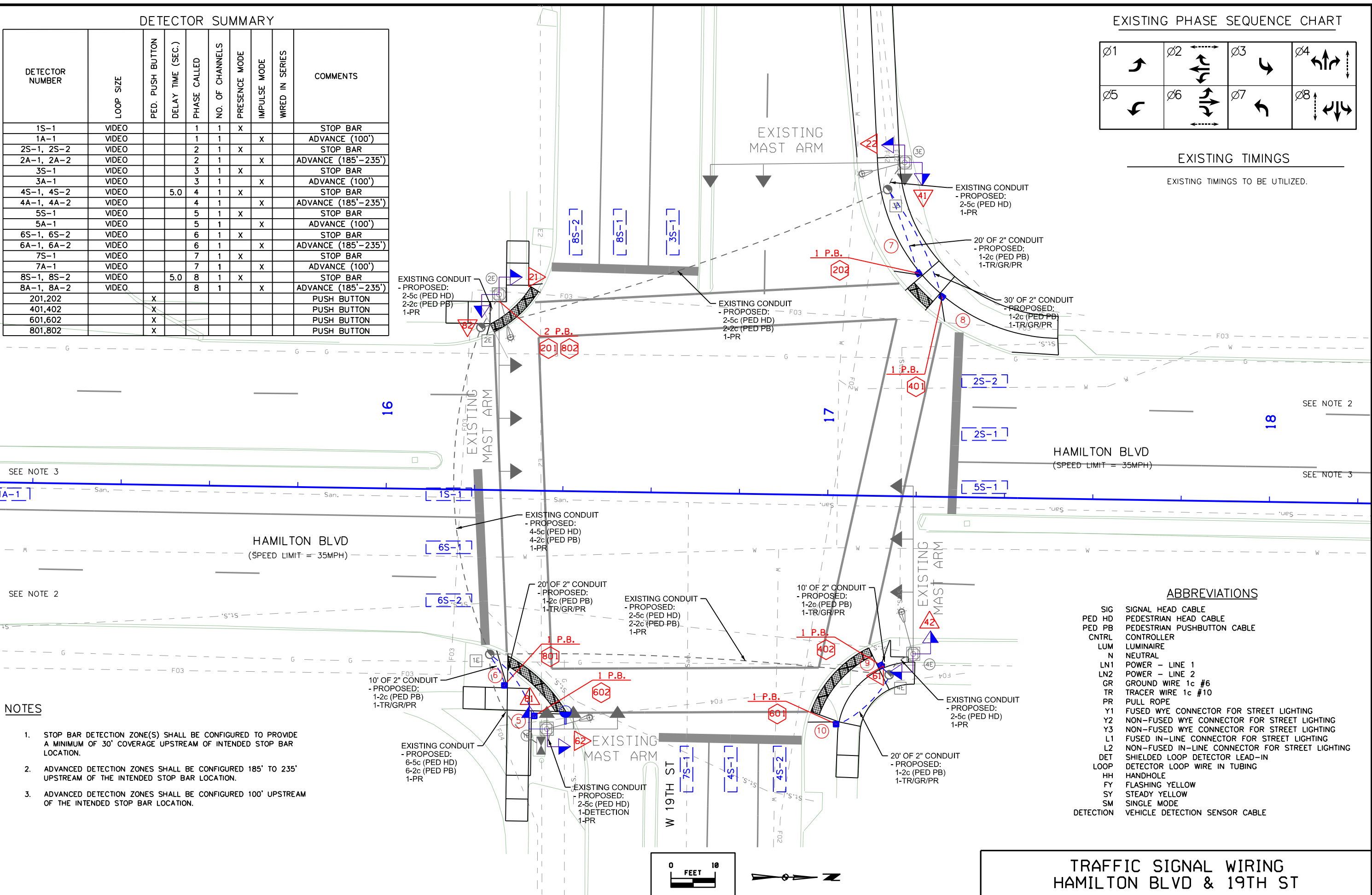
DETECTOR NUMBER	LOOP SIZE	PED. PUSH BUTTON	DELAY TIME (SEC.)	PHASE CALLED	NO. OF CHANNELS	PRESENCE MODE	IMPULSE MODE	WIRED IN SERIES	COMMENTS
1S-1	VIDEO			1	1	X			STOP BAR
1A-1	VIDEO			1	1		X		ADVANCE (100')
2S-1, 2S-2	VIDEO			2	1	X			STOP BAR
2A-1, 2A-2	VIDEO			2	1		X		ADVANCE (185'-235')
3S-1	VIDEO			3	1	X			STOP BAR
3A-1	VIDEO			3	1		X		ADVANCE (100')
4S-1, 4S-2	VIDEO		5.0	4	1	X			STOP BAR
4A-1, 4A-2	VIDEO			4	1		X		ADVANCE (185'-235')
5S-1	VIDEO			5	1	X			STOP BAR
5A-1	VIDEO			5	1		X		ADVANCE (100')
6S-1, 6S-2	VIDEO			6	1	X			STOP BAR
6A-1, 6A-2	VIDEO			6	1		X		ADVANCE (185'-235')
7S-1	VIDEO			7	1	X			STOP BAR
7A-1	VIDEO			7	1		X		ADVANCE (100')
8S-1, 8S-2	VIDEO		5.0	8	1	X			STOP BAR
8A-1, 8A-2	VIDEO			8	1		X		ADVANCE (185'-235')
201,202		X							PUSH BUTTON
401,402		X							PUSH BUTTON
601,602		X							PUSH BUTTON
801,802		X							PUSH BUTTON

EXISTING PHASE SEQUENCE CHART



EXISTING TIMINGS

EXISTING TIMINGS TO BE UTILIZED.



NOTES

- STOP BAR DETECTION ZONE(S) SHALL BE CONFIGURED TO PROVIDE A MINIMUM OF 30' COVERAGE UPSTREAM OF INTENDED STOP BAR LOCATION.
- ADVANCED DETECTION ZONES SHALL BE CONFIGURED 185' TO 235' UPSTREAM OF THE INTENDED STOP BAR LOCATION.
- ADVANCED DETECTION ZONES SHALL BE CONFIGURED 100' UPSTREAM OF THE INTENDED STOP BAR LOCATION.

ABBREVIATIONS

SIG	SIGNAL HEAD CABLE
PED HD	PEDESTRIAN HEAD CABLE
PED PB	PEDESTRIAN PUSHBUTTON CABLE
CNTRL	CONTROLLER
LUM	LUMINAIRE
N	NEUTRAL
LN1	POWER - LINE 1
LN2	POWER - LINE 2
GR	GROUND WIRE 1c #6
TR	TRACER WIRE 1c #10
PR	PULL ROPE
Y1	FUSED WYE CONNECTOR FOR STREET LIGHTING
Y2	NON-FUSED WYE CONNECTOR FOR STREET LIGHTING
Y3	NON-FUSED WYE CONNECTOR FOR STREET LIGHTING
L1	FUSED IN-LINE CONNECTOR FOR STREET LIGHTING
L2	NON-FUSED IN-LINE CONNECTOR FOR STREET LIGHTING
DET	SHIELDED LOOP DETECTOR LEAD-IN
LOOP	DETECTOR LOOP WIRE IN TUBING
HH	HANDHOLE
FY	FLASHING YELLOW
SY	STEADY YELLOW
SM	SINGLE MODE
DETECTION	VEHICLE DETECTION SENSOR CABLE

WIRE QUANTITIES (IN FEET)													
Hamilton Boulevard & 19th Street													
From	To	Plan Length	Adj. Length	Pull Rope	1c #10 Tracer	1c #6 Bare Copper	1c #8 LUM Copper	1c #6 PWR Copper	Vehicle Detection Multi Cable	PED PB 2c #14	PED HD 5c #14	SIG 5c #14	SIG 7c #14
Controller	Handhole 1E	30		55						330	330		
Controller	Signal Pole 1E	10	20	20					20		40		
	At Signal Pole 1E								35		40		
Handhole 1E	Pushbutton Pole 5	20	30	30	30	30				30			
	At Pushbutton Pole 5									15			
Handhole 1E	Pushbutton Pole 6	10	20	20	20	20				20			
	At Pushbutton Pole 6									15			
Handhole 1E	Handhole 2E	75	85	85						340	340		
Handhole 2E	Signal Pole 2E	15	25	25						50	50		
	At Signal Pole 2E									30	40		
Handhole 2E	Handhole 3E	100	110	110						220	220		
Handhole 3E	Signal Pole 3E	10	20	20							40		
	At Signal Pole 3E										40		
Handhole 3E	Pushbutton Pole 7	15	25	25	25	25				25			
	At Pushbutton Pole 7									15			
Handhole 3E	Pushbutton Pole 8	35	45	45	45	45				45			
	At Pushbutton Pole 8									15			
Handhole 1E	Handhole 4E	95	105	105						210	210		
Handhole 4E	Signal Pole 4E	10	20	20							40		
	At Signal Pole 4E										40		
Handhole 4E	Pedestal Pole 9	10	20	20	20	20				20			
	At Pedestal Pole 9									15			
Handhole 4E	Pedestal Pole 10	20	30	30	30	30				30			
	At Pedestal Pole 10									15			
	Sub-Totals =			610	170	170	0	0	55	1440	1430	0	0
	Extra =			31	9	9	0	0	3	72	72	0	0
	Grand Totals =			641	179	179	0	0	58	1512	1502	0	0

NOTES:  
Plan Length: Center to Center length between objects.  
Adjusted Length: Plan length with additional slack length.

CONDUIT QUANTITIES								
Hamilton Boulevard & 19th Street								
From	To	Trenched (Feet)				Pushed (Feet)		
		1" Dia. PVC	2" Dia. PVC	3" Dia. PVC	4" Dia. PVC	2" Dia. PVC	3" Dia. PVC	4" Dia. PVC
Controller	Handhole 1E							
Controller	Signal Pole 1E							
Handhole 1E	Pushbutton Pole 5		20					
Handhole 1E	Pushbutton Pole 6		10					
Handhole 1E	Handhole 2E							
Handhole 2E	Signal Pole 2E							
Handhole 2E	Handhole 3E							
Handhole 3E	Signal Pole 3E							
Handhole 3E	Pushbutton Pole 7		15					
Handhole 3E	Pushbutton Pole 8		35					
Handhole 1E	Handhole 4E							
Handhole 4E	Signal Pole 4E							
Handhole 4E	Pushbutton Pole 9		10					
Handhole 4E	Pushbutton Pole 10		20					
Sub-Totals =		0	110	0	0	0	0	0
Extra =		0	6	0	0	0	0	0
Grand Totals =		0	116	0	0	0	0	0

FOOTING AND HANDHOLE QUANTITIES  
Hamilton Boulevard & 19th Street

Pole No.	Signal Pole Footing	Pedestal Pole Footing	Push Button Pole Footing	Hand-Hole Type 1 24" Dia	Hand-Hole Type 3 "Tub"	Hand-Hole Type 4 "Tub"	Comments
Signal Pole 1E							U.A.C.
Signal Pole 2E							U.A.C.
Signal Pole 3E							U.A.C.
Signal Pole 4E							U.A.C.
Pushbutton Pole 5			1				See Details
Pushbutton Pole 6			1				See Details
Pushbutton Pole 7			1				See Details
Pushbutton Pole 8			1				See Details
Pushbutton Pole 9			1				See Details
Pushbutton Pole 10			1				See Details
Handhole 1E							U.A.C.
Handhole 2E							U.A.C.
Handhole 3E							U.A.C.
Handhole 4E							U.A.C.
Totals =	0	0	6	0	0	0	

SIGNAGE QUANTITIES  
Hamilton Boulevard & 19th Street

Legend Letter =>		
Sign Type =>	Ped PB Sign	Ped PB Sign
Size =>	9" x 15" R10-3E (Left)	9" x 15" R10-3E (Right)
Mounting Location =>	VERTICAL SHAFT	VERTICAL SHAFT
Notes =>		
Signal Pole 1E		
Signal Pole 2E	1	1
Signal Pole 3E		
Signal Pole 4E		
Pushbutton Pole 5	1	
Pushbutton Pole 6		1
Pushbutton Pole 7	1	
Pushbutton Pole 8		1
Pushbutton Pole 9	1	
Pushbutton Pole 10		1
Totals =	4	4

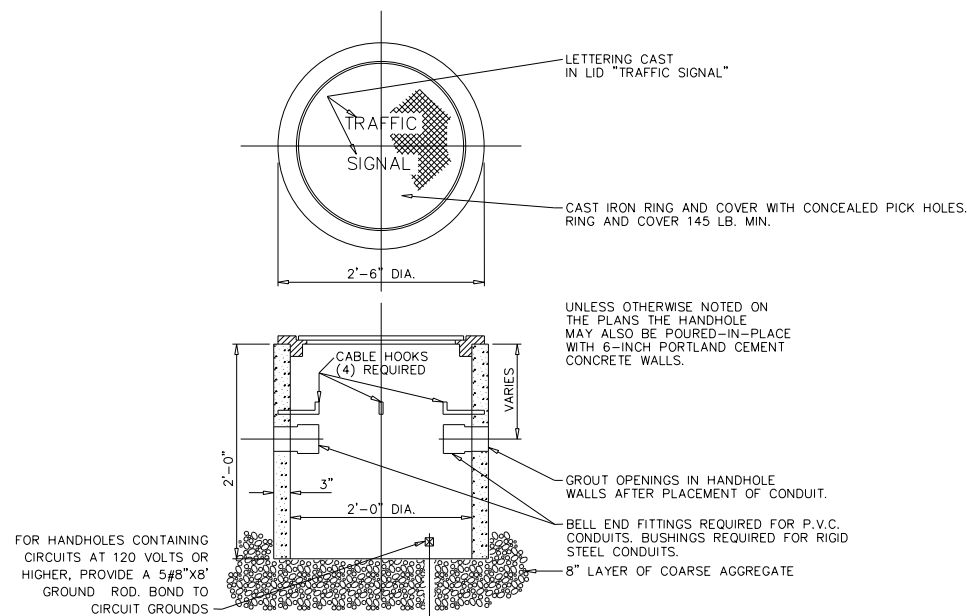
TRAFFIC SIGNAL HEAD QUANTITIES  
Hamilton Boulevard & 19th Street

Pole No.	Signal Head Number(s)	Hand/Man Countdown Ped Head	Back Plate	Mounting OH	Side
1E	62.81	2			2
2E	21.82	2			2
3E	22.41	2			2
4E	42.61	2			2
Totals =		8	0	0	8

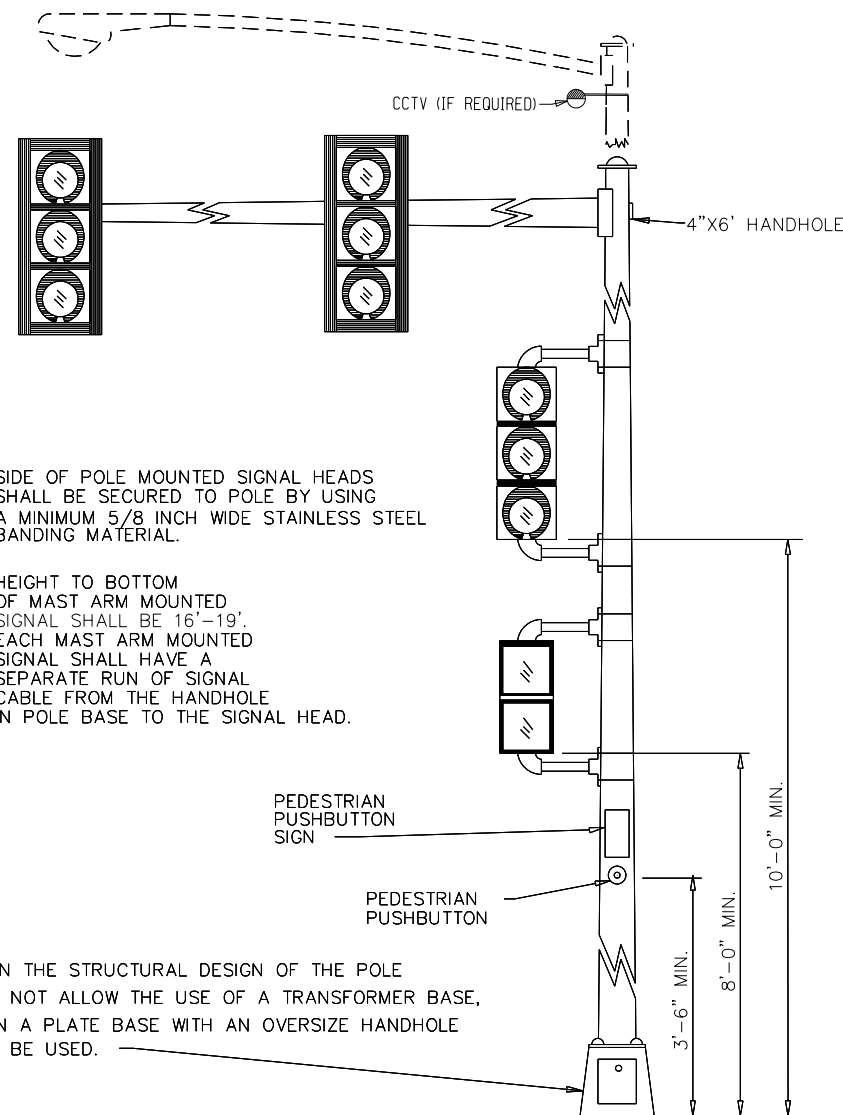
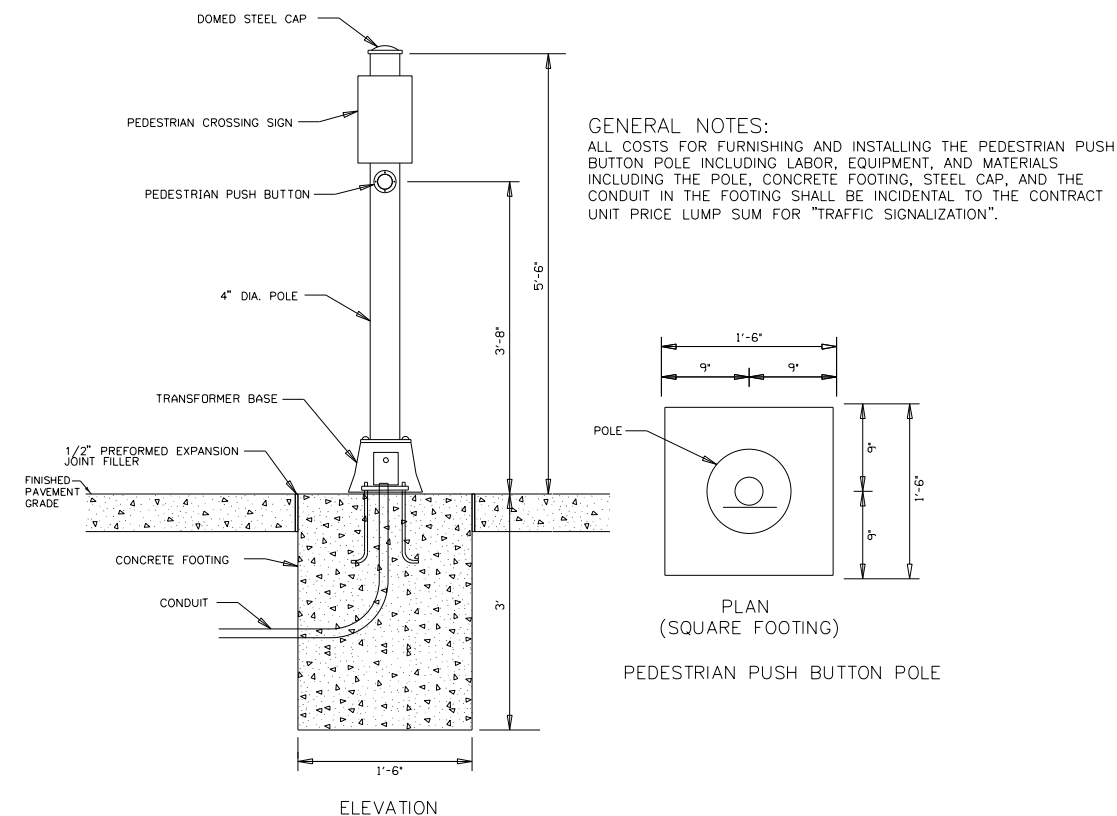
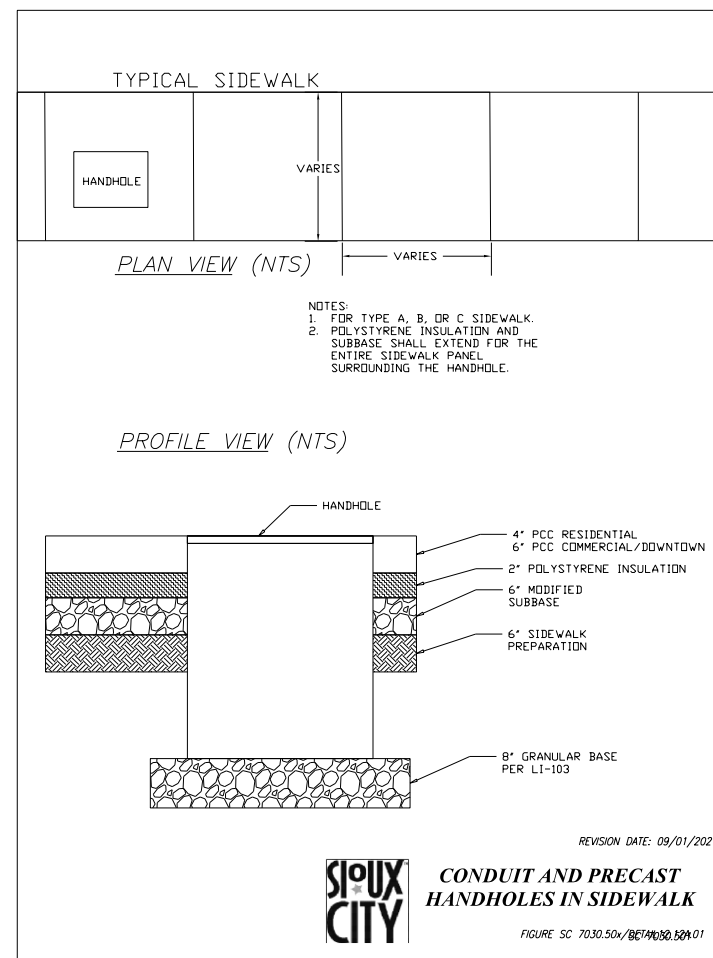
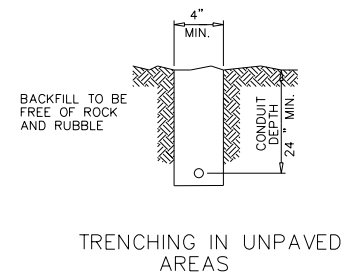
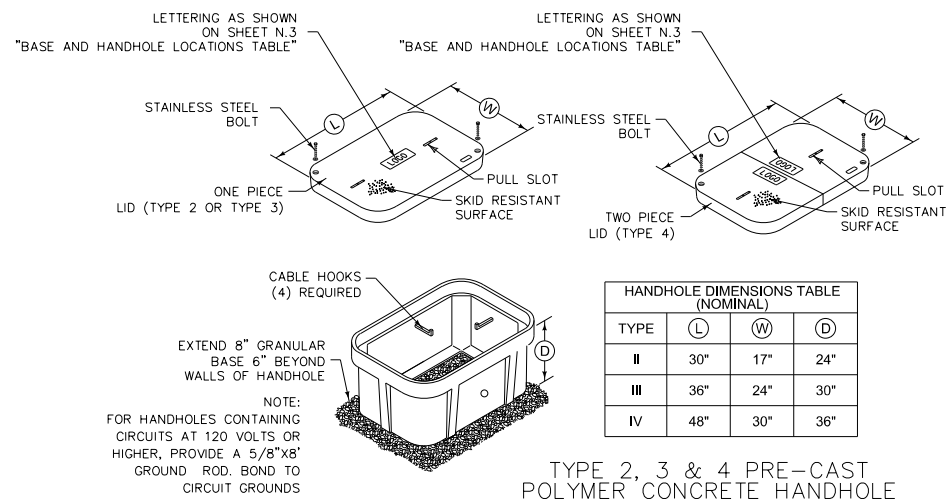
Traffic Signal Pole Quantities  
Hamilton Boulevard & 19th Street

Pole No.	Mast-Arm Length	Signal Head Spacing				Sign Spacing F	EVP Spacing G	Vehicle Detection Spacing H	Luminaire Orientation I	Finish	Remarks
	A (Feet)	B (Feet)	C (Feet)	D (Feet)	E (Feet)	(Feet)	(Feet)	(Feet)	(Degrees)		
1E	U.A.C.					-	-	See Note 1	-	Galvanized	Use As Constructed
2E	U.A.C.					-	-	-	-	Galvanized	Use As Constructed
3E	U.A.C.					-	-	-	-	Galvanized	Use As Constructed
4E	U.A.C.					-	-	-	-	Galvanized	Use As Constructed
5	-									Galvanized	Pushbutton Pole. See Details.
6	-									Galvanized	Pushbutton Pole. See Details.
7	-									Galvanized	Pushbutton Pole. See Details.
8	-									Galvanized	Pushbutton Pole. See Details.
9	-									Galvanized	Pushbutton Pole. See Details.
10	-									Galvanized	Pushbutton Pole. See Details.

Notes:  
1. Video detector to be mounted onto traffic signal luminaire arm or as directed by equipment manufacturer/vendor.



PRE-CAST CONCRETE HANDHOLE  
TYPE 1



MAST ARM POLE

SURVEY SYMBOLS

	TDC Tree Deciduous		F02 Fiber Optic Company 2
	GDL Guard Rail		F03 Fiber Optic Company 3
	Lot Corner		F04 Fiber Optic Company 4
	ROW Rail		G Gas Company 1
	Tree Line		G2 Gas Company 2
	Utility Access		G-HP High Pressure Gas Company 1
	RR Centerline of Railroad Tracks		San. Sanitary Sewer Company 1
	Edge of Water		St.S. Storm Sewer Company 1
	RIP Rip-Rap		T1 Telephone Company 1
	FCL Chain Link and Security Fence		W Water Company 1
	Fence Wire		
	RET Retaining Walls		
	FWD Wood Fence		
	D Centerline Draw or Stream (Down)		
	MIS Miscellaneous		
	GP Guard Post (Less Than 4 Posts)		
	LUM Luminaire		
	TSG Traffic Signal		
	HT Electrical Highline Tower		
	FHD Fire Hydrants		
	PR Electric Riser Pole		
	PPD Power Pole Co. 4		
	PPC Power Pole Co. 3		
	INB Storm Sewer Beehive Intake		
	PPB Power Pole Co. 2		
	LP L.P. Tank		
	BB Billboard		
	SHR Shrub		
	RRB Railroad Signal Box		
	TA Tower Anchor		
	WV Water Valve		
	WHD Water Hydrant		
	GV Gas Valve		
	TPD Telephone Pedestal		
	SI Sign		
	UB Utility Box		
	IN Storm Sewer Intake		
	PPA Power Pole Co. 1		
	FLG Flag Poles		
	TEV Evergreen Tree		
	EB Electrical Box		
	Dike or Dam		
	E1 Electric Line Company 1		
	E2 Electric Line Company 2		
	E3 Electric Line Company 3		
	E4 Electric Line Company 4		
	F0 Fiber Optic Company 1		

UTILITY LEGEND

	E1 City of Sioux City
	San. Contact: Jon O'Brien
	St.S. Phone: 712-279-6135
	W
	E2 MidAmerican Energy Company
	Contact: Cody Parmeter
	Phone: 712-233-4821
	G MidAmerican Energy Company
	Contact: Kathleen Miller
	Office: 712-233-4866
	Cell: 712-574-1097
	G-HP
	F0 Lumen (CenturyLink)
	Contact: Arrash Parvanehgohar
	Office: 402-210-1206
	F02 FiberComm
	Contact: Rick Welch
	Office: 712-224-2020
	Cell: 712-251-6921
	F03 LongLines
	Contact: Miles Patton
	Office: 712-271-5550
	F04 MidWest Fiber Networks
	Contact: Nate Wright
	Office: 414-459-3546

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK	Design	Color No.	
Green	(10)		Existing Topographic Features and Labels
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Magenta	(5)		Existing Utilities
SHADING	Design	Color No.	
Tan	(8)		Proposed Sidewalk Shading
Blue, Light	(230)		Proposed Sidewalk Landing Shading
Pink	(11)		Proposed Sidewalk Ramp Shading
Magenta	(5)		Detectable Warning
Yellow	(4)		Highlight for Critical Notes or Features
Red	(3)		Delineates Restricted Areas
Lavender	(9)		Temporary Pavement Shading
Gray, Light	(48)		Proposed Pavement Shading
Gray, Med	(80)		Proposed Granular Shading
Gray, Dark	(112)		Proposed Grade and Pave Shading
Brown, Light	(236)		Grading Shading

	Reference Point
	Station
	Survey Line
	Section Corner
	Ground Line Intercept
	Saw Cut
	Guardrail
	Pavement Removal
	Clearing & Grubbing Area

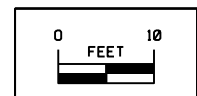
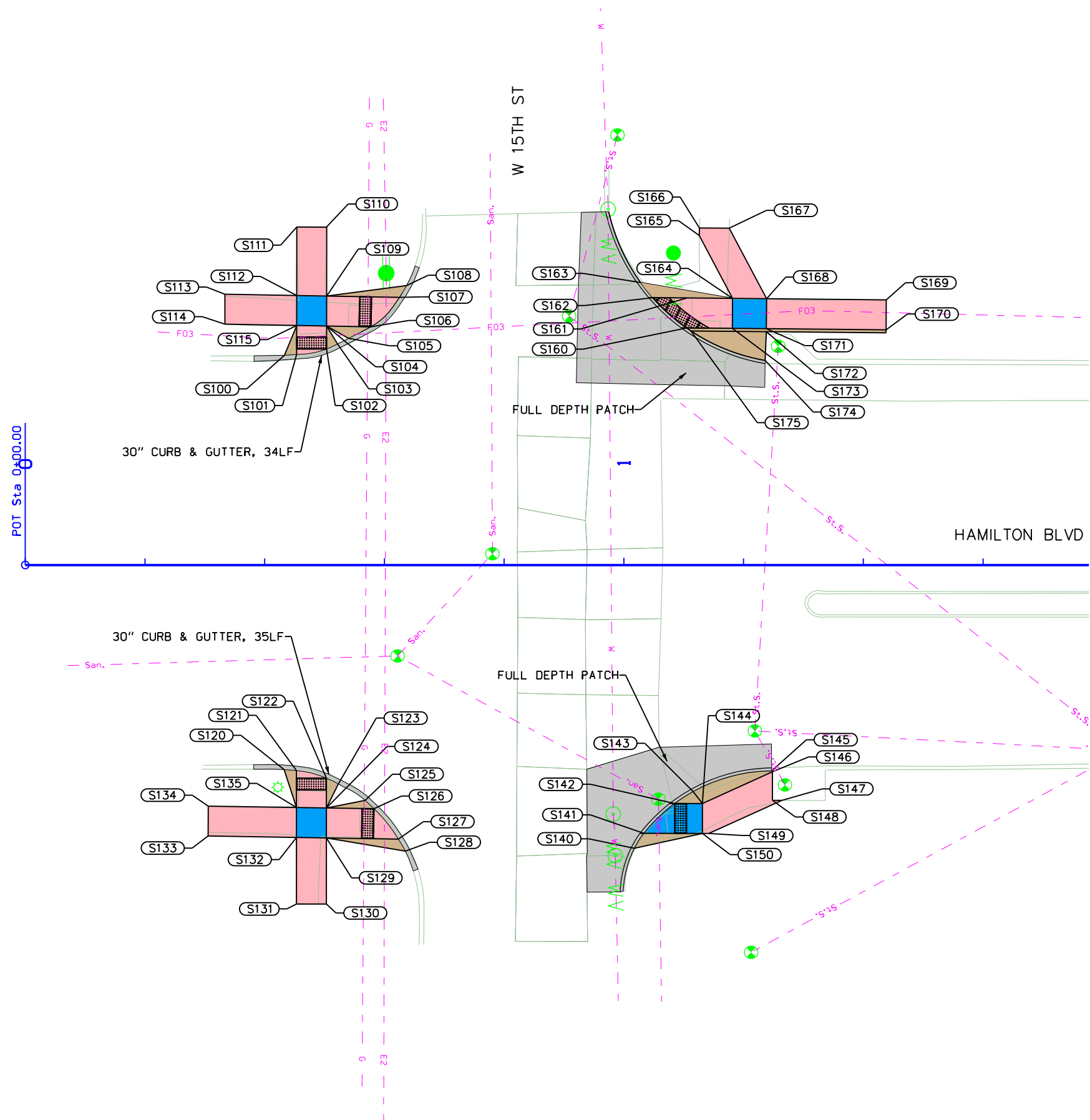
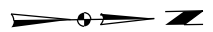
RIGHT-OF-WAY LEGEND

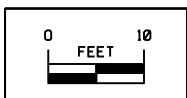
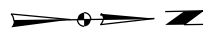
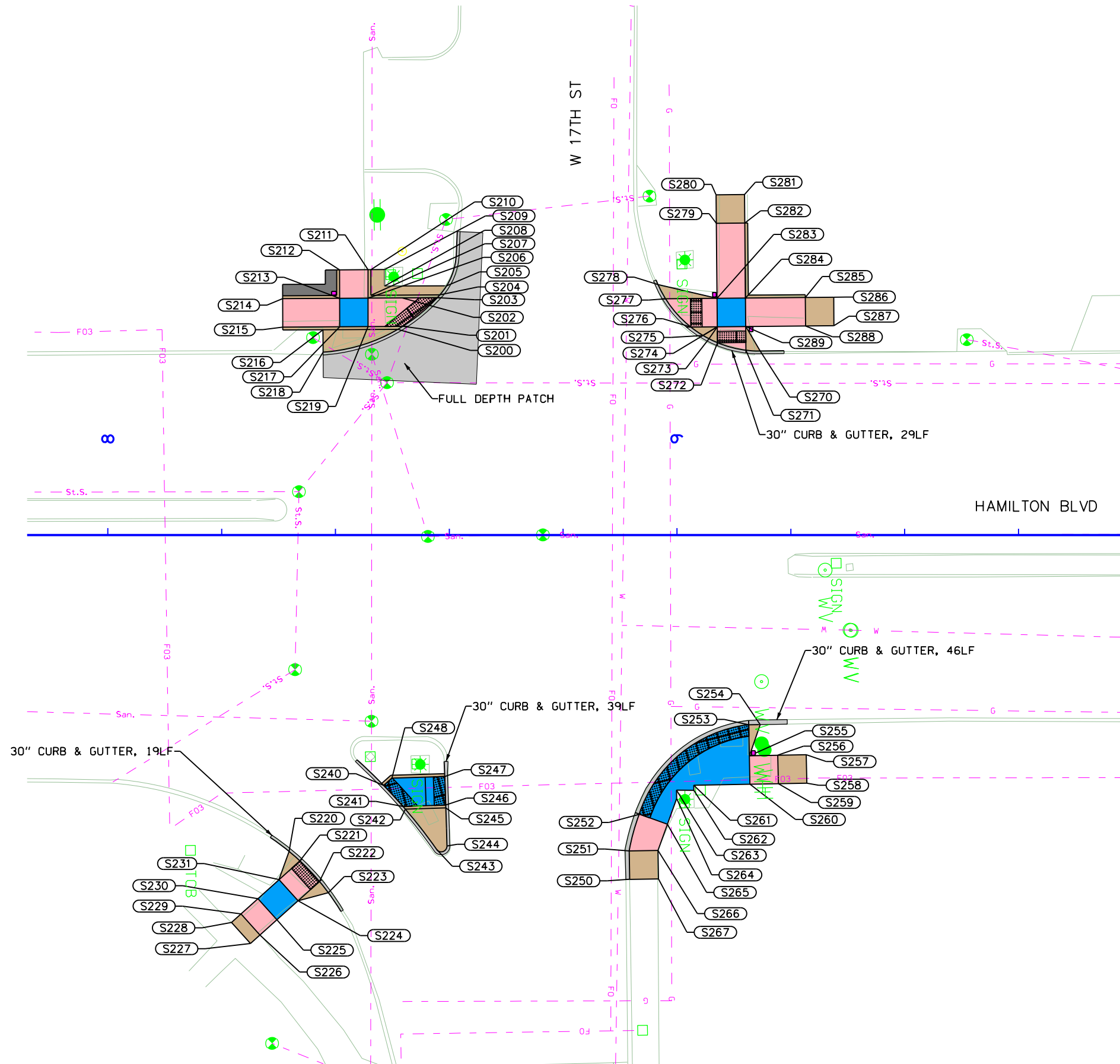
	Proposed Right-of-Way
	Existing and Proposed Right-of-Way
	Easement and Existing Right-of-Way
	Borrow
	Easement (Temporary)
	Easement
	Excess
	Access Control

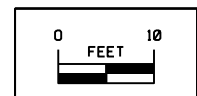
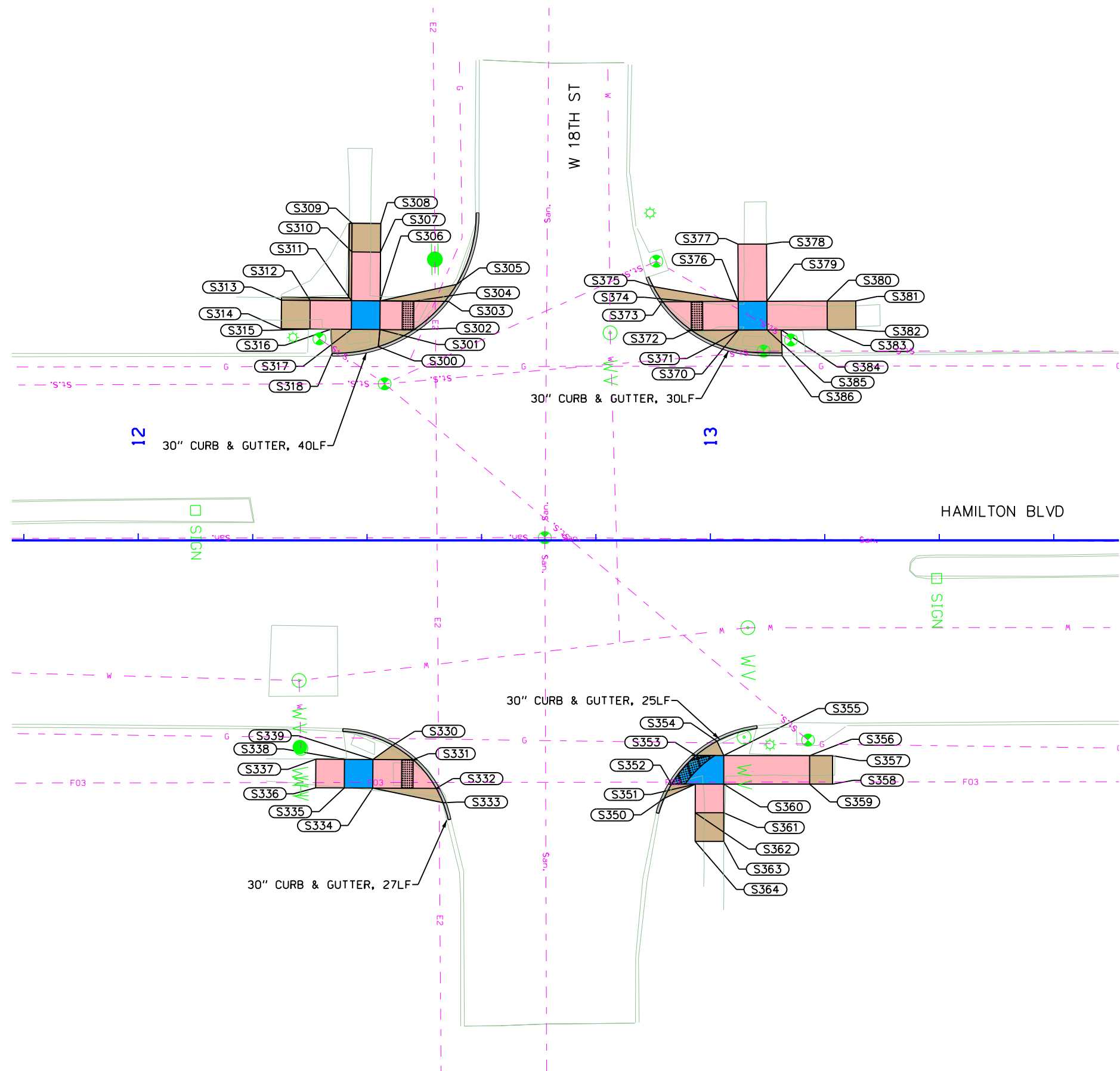
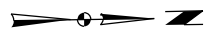
SIDEWALK  
LEGEND AND SYMBOL  
INFORMATION SHEET

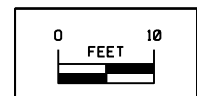
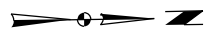
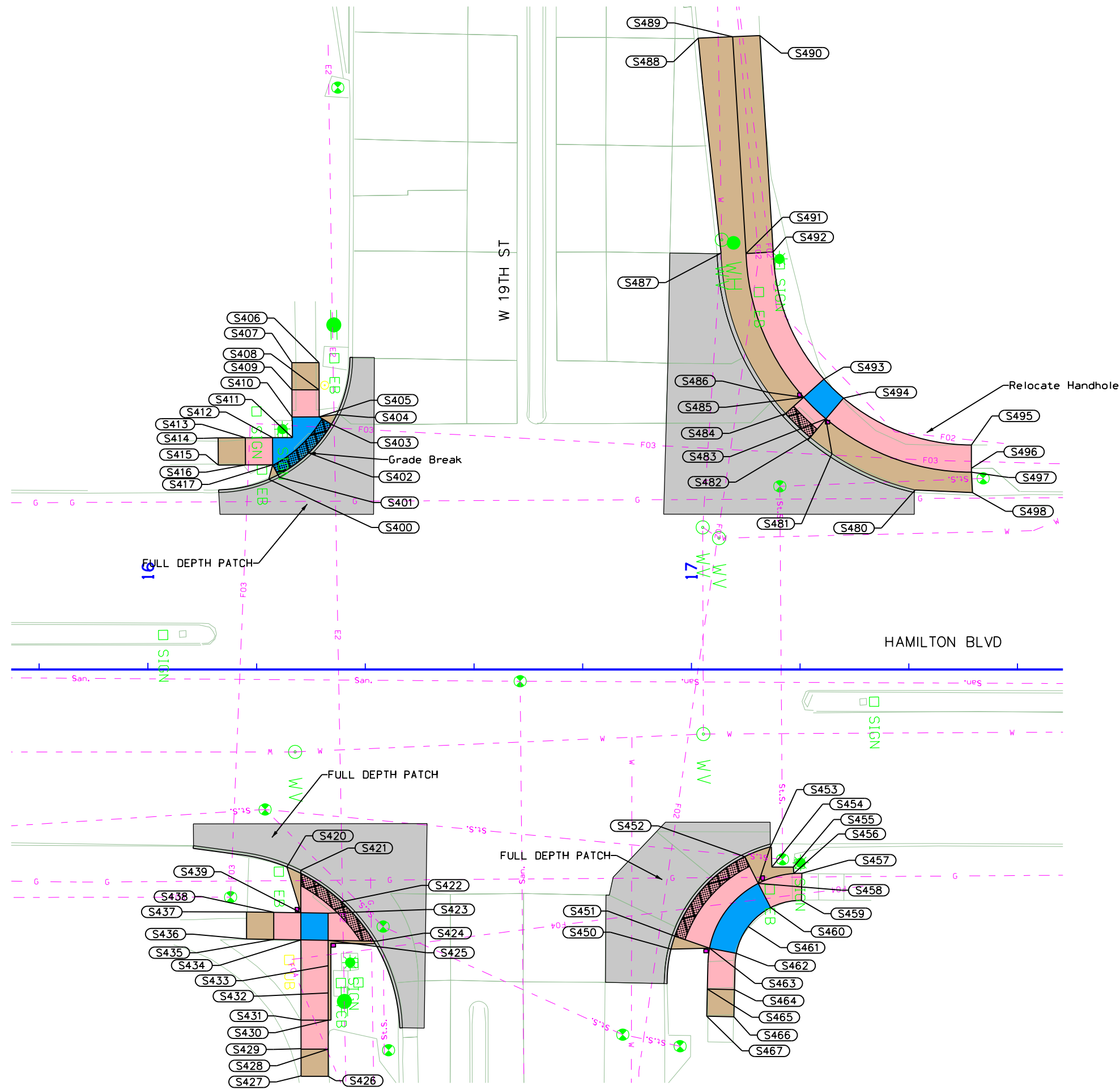
(COVERS SHEET SERIES S)

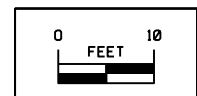
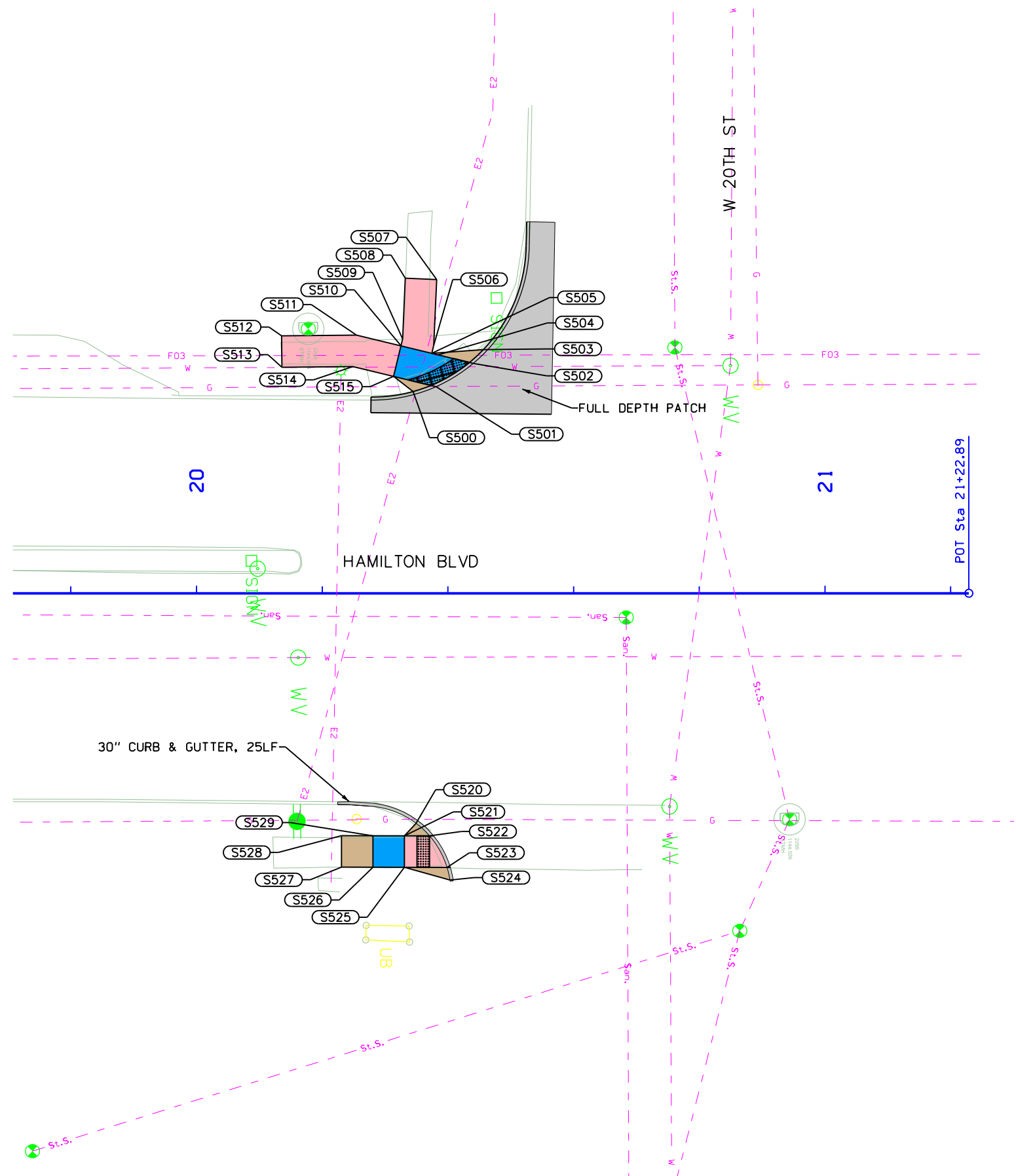
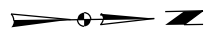












SIDEWALK COMPLIANCE

See S Sheets

113-10  
04-18-17

- \* Does not include curb  
① Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.  
② Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	- " PCC Sidewalk ②	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? ①	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
				FT	FT	%	Pos. or Neg.		%			Point	Station	Offset	Elevation
101	102	Ramp Cross Slope	6	5.08	0.07	1.4%	0.1% to 2.0%					100	0+43.31	-35.03	1118.83
102	104	Ramp Running Slope	6	3.84	0.03	0.8%	0.5% to 8.3%					101	0+45.34	-35.18	1116.35
104	106	Ramp Running Slope	6	7.42	-0.07	-0.9%	0.5% to 8.3%					102	0+50.34	-36.05	1116.42
104	109	Landing/Turning Space	4	5.00	0.04	0.8%	0.1% to 2.0%					103	0+52.17	-39.93	1116.94
106	107	Ramp Cross Slope	6	5.65	-0.07	-1.2%	0.1% to 2.0%					104	0+50.35	-39.93	1116.45
107	109	Ramp Running Slope	6	12.17	0.18	1.5%	0.5% to 8.3%					105	0+54.00	-37.87	1116.90
109	112	Landing/Turning Space	4	5.00	0.03	0.6%	0.1% to 2.0%					106	0+57.76	-39.81	1116.38
109	110	Ramp Running Slope	6	11.51	-0.94	-8.2%	0.5% to 8.3%	Yes				107	0+62.52	-44.72	1116.31
110	111	Match Existing Cross Slope	4	5.00	0.03	0.6%	Match Existing					108	0+63.71	-46.70	1116.79
111	112	Ramp Running Slope	6	11.45	0.94	8.2%	0.5% to 8.3%	Yes				109	0+50.35	-43.93	1116.49
112	113	Ramp Running Slope	6	12.00	0.52	4.3%	0.5% to 8.3%					110	0+50.32	-56.44	1115.55
113	114	Match Existing Cross Slope	4	5.00	-0.15	-3.0%	Match Existing					111	0+45.35	-56.47	1115.58
114	115	Ramp Running Slope	6	12.00	-0.40	-3.3%	0.5% to 8.3%					112	0+45.35	-44.02	1116.52
115	112	Landing/Turning Space	4	5.00	0.03	0.6%	0.1% to 2.0%					113	0+33.35	-45.24	1117.04
115	101	Sidewalk Running Slope	4	4.85	-0.14	-2.9%	0.5% to 5.0%					114	0+33.35	-40.24	1116.89
115	104	Landing/Turning Space	4	5.00	-0.04	-0.8%	0.1% to 2.0%					115	0+45.35	-40.02	1116.49
121	122	Ramp Cross Slope	6	5.38	0.07	1.3%	0.1% to 2.0%					120	0+43.25	34.16	1116.83
121	135	Ramp Running Slope	6	6.17	0.47	7.6%	0.5% to 8.3%	Yes				121	0+45.31	34.34	1116.35
122	124	Ramp Running Slope	6	5.00	0.40	8.0%	0.5% to 8.3%	Yes				122	0+50.31	35.59	1116.42
124	135	Landing/Turning Space	4	5.00	0.00	0.0%	0.1% to 2.0%					123	0+52.31	36.55	1116.94
124	126	Ramp Running Slope	6	7.97	-0.20	-2.5%	0.5% to 8.3%					124	0+50.30	40.58	1116.82
126	127	Ramp Cross Slope	6	6.67	0.12	1.8%	0.1% to 2.0%	Yes				125	0+56.79	39.30	1116.74
127	129	Ramp Running Slope	6	12.02	0.16	1.3%	0.5% to 8.3%					126	0+58.26	40.71	1116.62
124	129	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes				127	0+62.32	45.78	1116.74
129	132	Landing/Turning Space	4	5.00	0.01	0.2%	0.1% to 2.0%					128	0+63.51	47.79	1116.58
132	135	Landing/Turning Space	4	5.00	-0.09	-1.8%	0.1% to 2.0%	Yes				129	0+50.30	45.59	1116.90
129	130	Ramp Running Slope	6	11.06	-0.12	-1.1%	0.5% to 8.3%					130	0+50.30	56.64	1116.78
130	131	Match Existing Cross Slope	4	5.00	0.05	1.0%	Match Existing					131	0+45.30	56.63	1116.83
131	132	Ramp Running Slope	6	11.13	0.08	0.7%	0.5% to 8.3%					132	0+45.30	45.51	1116.91
132	133	Ramp Running Slope	6	14.77	0.24	1.6%	0.5% to 8.3%					133	0+30.53	45.27	1117.15
133	134	Match Existing Cross Slope	4	5.00	-0.26	-5.2%	Match Existing					134	0+30.57	40.27	1116.89
134	135	Ramp Running Slope	6	14.77	-0.07	-0.5%	0.5% to 8.3%					135	0+45.31	40.51	1116.82
141	142	Ramp Cross Slope	6	7.20	0.09	1.3%	0.1% to 2.0%					140	1+01.75	47.33	1117.31
142	144	Ramp Running Slope	6	4.64	0.09	1.9%	0.5% to 8.3%					141	1+03.33	44.83	1117.02
141	150	Ramp Running Slope	6	9.79	0.18	1.8%	0.5% to 8.3%					142	1+08.47	39.83	1117.11
150	144	Landing/Turning Space	4	5.00	0.00	0.0%	0.1% to 2.0%					143	1+11.57	37.83	1117.77
144	146	Ramp Running Slope	6	12.86	1.39	10.8%	0.5% to 11.8%					144	1+13.11	39.83	1117.20
146	145	Sidewalk Cross Slope	4	0.20	0.00	0.0%	0.5% to 2.0%					145	1+24.68	34.39	1118.59
146	148	Match Existing Cross Slope	4	4.77	0.24	5.0%	Match Existing					146	1+24.83	34.54	1118.59
148	147	Match Existing Cross Slope	4	1.57	-0.03	-1.9%	Match Existing					147	1+26.41	39.31	1118.80
147	149	Ramp Running Slope	6	13.41	-1.54	-11.5%	0.5% to 12.5%					148	1+24.83	39.90	1118.83
149	150	Ramp Running Slope	6	1.08	-0.06	-5.6%	0.5% to 8.3%					149	1+14.19	44.83	1117.26
												150	1+13.11	44.83	1117.20
160	161	Ramp Cross Slope	6	5.00	0.08	1.6%	0.1% to 2.0%	Yes							
161	162	Ramp Running Slope	6	5.70	-0.17	-3.0%	0.5% to 8.3%					160	1+10.47	-39.61	1116.86
160	162	Ramp Cross Slope	6	7.72	-0.09	-1.2%	0.1% to 2.0%					161	1+10.52	-44.83	1116.94
161	164	Ramp Running Slope	6	7.64	0.50	6.5%	0.5% to 8.3%					162	1+04.82	-44.83	1116.77
160	173	Ramp Running Slope	6	7.64	0.63	8.2%	0.5% to 8.3%	Yes				163	1+02.81	-47.19	1116.96
164	173	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%					164	1+18.16	-44.83	1117.44
164	165	Ramp Running Slope	6	11.89	-0.71	-6.0%	0.5% to 8.3%					165	1+12.60	-55.05	1116.73
165	166	Ramp Running Slope	6	1.27	-0.04	-3.2%	0.5% to 8.3%					166	1+12.61	-56.32	1116.69
166	167	Match Existing Cross Slope	4	5.00	0.06	1.2%	Match Existing					167	1+17.61	-56.27	1116.75
167	168	Ramp Running Slope	6	13.33	0.78	5.8%	0.5% to 8.3%					168	1+23.85	-44.83	1117.53
164	168	Landing/Turning Space	4	5.00	0.09	1.8%	0.1% to 2.0%	Yes				169	1+43.85	-44.83	1119.01
168	171	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%					170	1+43.80	-39.29	1119.05
173	171	Landing/Turning Space	4	5.00	0.09	1.8%	0.1% to 2.0%	Yes				171	1+23.80	-39.48	1117.58
168	169	Ramp Running Slope	6	20.00	1.48	7.4%	0.5% to 8.3%	Yes				172	1+23.61	-38.98	1118.41
169	170	Ramp Cross Slope	6	5.00	0.04	0.8%	0.1% to 2.0%					173	1+18.11	-39.54	1117.49
170	171	Ramp Running Slope	6	20.00	-1.47	-7.4%	0.5% to 8.3%	Yes				174	1+23.61	-34.17	1118.30
172	174	Match Existing Cross Slope	4	4.82	-0.11	-2.3%	Match Existing					175	1+11.21	-39.10	1117.43
201	203	Ramp Cross Slope	6	7.92	-0.08	-1.0%	0.1% to 2.0%					200	8+50.98	-36.13	1117.55
201	202	Ramp Cross Slope	6	5.00	0.09	1.8%	0.1% to 2.0%	Yes				201	8+51.82	-36.64	1117.03
202	203	Ramp Running Slope	6	6.11	-0.17	-2.8%	0.5% to 8.3%					202	8+51.78	-41.64	1117.12
202	206	Ramp Running Slope	6	6.07	0.50	8.2%	0.5% to 8.3%	Yes				203	8+57.89	-41.68	1116.95
201	219	Ramp Running Slope	6	6.08	0.50	8.2%	0.5% to 8.3%	Yes				204	8+58.35	-42.18	1117.25
206	219	Landing/Turning Space	4	5.00	-0.09	-1.8%	0.1% to 2.0%	Yes				205	8+59.52	-43.76	1117.16
206	213	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%					206	8+45.72	-41.60	1117.62
206	211	Ramp Running Slope	6	5.00	0.41	8.2%	0.5% to 8.3%	Yes				207	8+46.22	-42.10	1118.12
211	212	Match Existing Cross Slope	4	5.00	-0.03	-0.6%	Match Existing					208	8+48.65	-43.73	1117.71
212	213	Ramp Running Slope	6	5.00	-0.33	-6.6%	0.5% to 8.3%					209	8+48.65	-46.62	1117.68
213	217	Landing/Turning Space	4	5.00	-0.09	-1.8%	0.1% to 2.0%	Yes				210	8+46.21	-46.60	1118.03
217	219	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					211	8+45.71	-46.60	1118.03
213	214	Ramp Running Slope	6	10.00	0.41	4.1%	0.5% to 8.3%					212	8+40.71	-46.57	1118.00

SIDEWALK COMPLIANCE

See S Sheets

113-10  
04-18-17

- \* Does not include curb  
① Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.  
② Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	_" PCC Sidewalk ②	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? ①	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
				FT	FT	%	Pos. or Neg.	①	%			Point	Station	Offset	Elevation
214	215	Match Existing Cross Slope	4	5.00	0.00	0.0%	Match Existing					213	8+40.72	-41.57	1117.67
215	217	Ramp Running Slope	6	10.00	-0.50	-5.0%	0.5% to 8.3%					214	8+30.72	-41.51	1118.08
204	205	Sidewalk Cross Slope	4	2.00	-0.09	-4.5%	0.5% to 5.5%					215	8+30.73	-36.51	1118.08
204	207	Sidewalk Running Slope	4	12.13	0.87	7.2%	0.5% to 8.2%					216	8+37.79	-36.05	1118.09
205	208	Sidewalk Running Slope	4	10.88	0.55	5.1%	0.5% to 6.1%					217	8+40.73	-36.57	1117.58
207	210	Sidewalk Running Slope	4	4.50	-0.09	-2.0%	0.5% to 5.0%					218	8+37.82	-32.11	1118.00
208	209	Sidewalk Running Slope	4	2.89	-0.03	-1.0%	0.5% to 5.0%					219	8+45.73	-36.60	1117.53
209	210	Match Existing Cross Slope	4	2.44	0.35	14.3%	Match Existing								
216	218	Match Existing Cross Slope	4	3.94	-0.09	-2.3%	Match Existing								
221	222	Ramp Cross Slope	6	5.01	-0.10	-2.0%	0.1% to 2.0%	Yes				220	8+31.85	55.57	1117.26
221	231	Ramp Running Slope	6	4.93	0.28	5.7%	0.5% to 8.3%					221	8+33.74	57.23	1116.71
222	224	Ramp Running Slope	6	5.07	0.33	6.5%	0.5% to 8.3%					222	8+37.20	60.86	1116.61
224	231	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%					223	8+38.75	62.82	1117.06
224	225	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes				224	8+33.42	64.25	1116.94
225	230	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%					225	8+29.71	67.59	1117.02
230	231	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%	Yes				226	8+26.73	70.26	1117.26
225	226	Ramp Running Slope	6	4.00	0.24	6.0%	0.5% to 8.3%					227	8+25.07	71.76	1117.27
226	229	Ramp Cross Slope	6	5.00	0.09	1.8%	0.1% to 2.0%	Yes				228	8+21.73	68.04	1117.44
226	227	Sidewalk Running Slope	4	2.24	0.01	0.4%	0.5% to 5.0%					229	8+23.39	66.55	1117.35
227	228	Match Existing Cross Slope	4	5.00	0.17	3.4%	Match Existing					230	8+26.36	63.87	1117.07
228	229	Sidewalk Running Slope	4	2.24	-0.09	-4.0%	0.5% to 5.0%					231	8+30.08	60.53	1116.99
229	230	Ramp Running Slope	6	4.00	-0.28	-7.0%	0.5% to 8.3%								
240	241	Landing/Turning Space	4	5.00	-0.09	-1.8%	0.1% to 2.0%	Yes				240	8+48.48	43.98	1116.78
240	248	Landing/Turning Space	4	1.92	0.01	0.5%	0.1% to 2.0%					241	8+51.86	47.66	1116.69
241	246	Landing/Turning Space	4	7.50	-0.04	-0.5%	0.1% to 2.0%					242	8+52.28	48.15	1117.17
248	247	Landing/Turning Space	4	9.29	-0.05	-0.5%	0.1% to 2.0%					243	8+57.77	55.23	1116.94
246	247	Landing/Turning Space	4	5.03	0.09	1.8%	0.1% to 2.0%	Yes				244	8+59.59	54.63	1117.07
242	243	Sidewalk Running Slope	4	9.22	-0.23	-2.5%	0.5% to 5.0%					245	8+59.38	47.94	1117.14
243	244	Sidewalk Running Slope	4	2.56	0.13	5.1%	0.5% to 6.1%					246	8+59.36	47.44	1116.65
242	245	Sidewalk Running Slope	4	7.10	-0.03	-0.4%	0.5% to 5.0%					247	8+59.19	42.42	1116.74
244	245	Sidewalk Running Slope	4	6.70	0.07	1.0%	0.5% to 5.0%					248	8+49.91	42.70	1116.79
250	267	Sidewalk Cross Slope	4	5.05	0.03	0.6%	0.5% to 2.0%					250	8+91.68	60.48	1117.37
250	251	Sidewalk Running Slope	4	5.00	-0.14	-2.8%	0.5% to 5.0%					251	8+91.61	55.48	1117.23
251	266	Ramp Cross Slope	6	5.05	0.02	0.4%	0.1% to 2.0%					252	8+93.35	49.08	1116.77
266	267	Sidewalk Running Slope	4	5.00	0.15	3.0%	0.5% to 5.0%					253	9+12.62	33.34	1116.89
251	252	Ramp Running Slope	6	6.59	-0.46	-7.0%	0.5% to 8.3%					254	9+14.62	33.31	1117.40
266	265	Ramp Running Slope	6	4.90	-0.39	-8.0%	0.5% to 8.3%	Yes				255	9+12.72	38.77	1116.99
252	265	Landing/Turning Space	4	5.26	0.09	1.7%	0.1% to 2.0%	Yes				256	9+17.72	38.68	1117.21
252	253	Landing/Turning Space	4	26.22	0.12	0.5%	0.1% to 2.0%					257	9+22.72	38.59	1117.30
265	264	Landing/Turning Space	4	4.80	0.00	0.0%	0.1% to 2.0%					258	9+22.81	43.59	1117.39
264	263	Landing/Turning Space	4	1.48	0.01	0.7%	0.1% to 2.0%					259	9+17.81	43.68	1117.29
263	262	Landing/Turning Space	4	3.05	0.01	0.3%	0.1% to 2.0%					260	9+12.81	43.77	1117.05
262	261	Landing/Turning Space	4	0.90	0.01	1.1%	0.1% to 2.0%					261	9+02.96	43.95	1116.89
261	260	Landing/Turning Space	4	9.86	0.16	1.6%	0.1% to 2.0%	Yes				262	9+02.97	44.86	1116.88
253	255	Landing/Turning Space	4	5.43	0.10	1.8%	0.1% to 2.0%	Yes				263	8+99.93	44.80	1116.87
255	260	Landing/Turning Space	4	5.00	0.06	1.2%	0.1% to 2.0%					264	8+99.94	46.29	1116.86
255	256	Ramp Running Slope	6	5.00	0.22	4.4%	0.5% to 8.3%					265	8+98.32	50.80	1116.86
256	259	Ramp Cross Slope	6	5.00	0.08	1.6%	0.1% to 2.0%	Yes				266	8+96.66	55.41	1117.25
260	259	Ramp Running Slope	6	5.00	0.24	4.8%	0.5% to 8.3%					267	8+96.74	60.41	1117.40
256	257	Sidewalk Running Slope	4	5.00	0.09	1.8%	0.5% to 5.0%								
257	258	Match Existing Cross Slope	4	5.00	0.09	1.8%	Match Existing								
258	259	Sidewalk Running Slope	4	5.00	-0.10	-2.0%	0.5% to 5.0%								
271	272	Ramp Cross Slope	6	5.20	-0.04	-0.8%	0.1% to 2.0%					270	9+14.63	-32.32	1117.52
271	289	Ramp Running Slope	6	4.17	0.27	6.5%	0.5% to 8.3%					271	9+12.13	-32.45	1117.03
272	274	Ramp Running Slope	6	2.80	0.23	8.2%	0.5% to 8.3%	Yes				272	9+07.11	-33.77	1116.99
274	289	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes				273	9+05.61	-34.46	1117.09
274	276	Ramp Running Slope	6	4.68	-0.28	-6.0%	0.5% to 8.3%					274	9+07.09	-36.57	1117.22
276	277	Ramp Cross Slope	6	6.68	-0.07	-1.0%	0.1% to 2.0%					275	9+04.56	-35.05	1117.03
277	283	Ramp Running Slope	6	9.06	0.42	4.6%	0.5% to 8.3%					276	9+02.41	-36.53	1116.94
274	283	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%					277	8+97.99	-41.49	1116.87
283	284	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes				278	8+96.68	-43.98	1117.32
283	279	Ramp Running Slope	6	13.19	1.52	11.5%	0.5% to 12.5%					279	9+06.92	-54.76	1118.81
279	282	Ramp Cross Slope	6	5.00	0.08	1.6%	0.1% to 2.0%	Yes				280	9+06.88	-59.76	1119.25
279	280	Sidewalk Running Slope	4	5.00	0.44	8.8%	0.5% to 9.8%					281	9+11.88	-59.80	1119.45
280	281	Sidewalk Cross Slope	4	5.00	0.20	4.0%	0.5% to 5%					282	9+11.92	-54.80	1118.89
281	282	Sidewalk Running Slope	4	5.00	-0.56	-11.2%	0.5% to 12.2%					283	9+07.04	-41.57	1117.29
282	284	Ramp Running Slope	6	13.19	-1.52	-11.5%	0.5% to 12.5%					284	9+12.04	-41.61	1117.37
284	289	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%					285	9+22.54	-41.71	1118.00
284	285	Ramp Running Slope	6	10.50	0.63	6.0%	0.5% to 8.3%					286	9+27.54	-41.75	1118.20
285	288	Ramp Cross Slope	6	5.00	-0.08	-1.6%	0.1% to 2.0%	Yes				287	9+27.59	-36.75	1118.10
285	286	Sidewalk Running Slope	4	5.00	0.20	4.0%	0.5% to 5.0%					288	9+22.59	-36.71	1117.92
286	287	Sidewalk Cross Slope	4	5.00	-0.10	-2.0%	0.5% to 2.0%	Yes				289	9+12.09	-36.61	1117.30

SIDEWALK COMPLIANCE

See S Sheets

113-10  
04-18-17

- \* Does not include curb  
① Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.  
② Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	. " PCC Sidewalk ②	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? ①	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
				FT	FT	%	Pos. or Neg.	①	%			Point	Station	Offset	Elevation
287	288	Sidewalk Running Slope	4	5.00	-0.18	-3.6%	0.5% to 5.0%								
288	289	Ramp Running Slope	6	10.50	-0.62	-5.9%	0.5% to 8.3%								
302	303	Ramp Cross Slope	6	7.40	0.10	1.4%	0.1% to 2.0%					300	12+41.97	-33.82	1118.46
302	304	Ramp Cross Slope	6	5.00	0.10	2.0%	0.1% to 2.0%	Yes				301	12+42.24	-36.82	1118.40
302	301	Ramp Running Slope	6	5.90	0.31	5.3%	0.5% to 8.3%					302	12+48.14	-36.78	1118.09
303	304	Ramp Running Slope	6	5.42	0.00	0.0%	0.5% to 8.3%					303	12+53.41	-41.74	1118.19
304	306	Ramp Running Slope	6	5.90	0.23	3.9%	0.5% to 8.3%					304	12+48.18	-41.78	1118.19
301	306	Landing/Turning Space	4	5.00	0.02	0.4%	0.1% to 2.0%					305	12+55.67	-44.72	1118.77
306	311	Landing/Turning Space	4	5.00	0.02	0.4%	0.1% to 2.0%					306	12+42.28	-41.82	1118.42
306	307	Ramp Running Slope	6	8.52	0.58	6.8%	0.5% to 8.3%					307	12+42.34	-50.34	1119.00
307	310	Ramp Cross Slope	6	5.00	-0.05	-1.0%	0.1% to 2.0%					308	12+42.38	-55.34	1119.20
307	308	Sidewalk Running Slope	4	5.00	0.20	4.0%	0.5% to 5.0%					309	12+37.38	-55.37	1119.10
308	309	Match Existing Cross Slope	4	5.00	-0.10	-2.0%	Match Existing					310	12+37.34	-50.37	1118.95
309	310	Sidewalk Running Slope	4	5.00	-0.15	-3.0%	0.5% to 5.0%					311	12+37.28	-41.86	1118.44
310	311	Ramp Running Slope	6	8.52	-0.51	-6.0%	0.5% to 8.3%					312	12+30.05	-41.91	1118.58
311	317	Landing/Turning Space	4	5.00	-0.04	-0.8%	0.1% to 2.0%					313	12+25.05	-41.95	1118.96
317	301	Landing/Turning Space	4	5.00	0.00	0.0%	0.1% to 2.0%					314	12+25.05	-36.95	1118.85
311	312	Ramp Running Slope	6	7.23	0.14	1.9%	0.5% to 8.3%					315	12+30.01	-36.91	1118.49
312	315	Ramp Cross Slope	6	5.00	-0.09	-1.8%	0.1% to 2.0%	Yes				316	12+33.64	-36.88	1118.40
312	313	Sidewalk Running Slope	4	5.00	0.38	7.6%	0.5% to 8.6%					317	12+37.24	-36.86	1118.40
313	314	Match Existing Cross Slope	4	5.00	-0.11	-2.2%	Match Existing					318	12+33.89	-32.87	1118.31
314	315	Sidewalk Running Slope	4	5.00	-0.36	-7.2%	0.5% to 8.2%								
315	316	Match Existing Cross Slope	4	3.63	-0.09	-2.5%	Match Existing								
316	317	Ramp Running Slope	6	3.60	0.00	0.0%	0.5% to 8.3%								
316	318	Match Existing Cross Slope	4	4.21	-0.09	-2.1%	Match Existing								
301	300	Sidewalk Running Slope	4	3.01	0.06	2.0%	0.5% to 5.0%								
331	332	Ramp Cross Slope	6	6.48	0.04	0.6%	0.1% to 2.0%					330	12+44.48	35.80	1118.91
331	339	Ramp Running Slope	6	7.01	0.18	2.6%	0.5% to 8.3%					331	12+48.05	38.32	1118.50
332	334	Ramp Running Slope	6	11.08	0.17	1.5%	0.5% to 8.3%					332	12+52.14	43.43	1118.54
334	339	Landing/Turning Space	4	5.00	-0.03	-0.6%	0.1% to 2.0%					333	12+53.27	45.85	1119.06
334	335	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes				334	12+41.01	43.28	1118.71
335	338	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%					335	12+36.01	43.25	1118.79
335	336	Ramp Running Slope	6	5.00	-0.02	-0.4%	0.5% to 8.3%					336	12+31.01	43.23	1118.77
336	337	Match Existing Cross Slope	4	5.00	0.03	0.6%	Match Existing					337	12+31.03	38.23	1118.80
337	338	Ramp Running Slope	6	5.00	-0.08	-1.6%	0.5% to 8.3%					338	12+36.03	38.25	1118.72
338	339	Landing/Turning Space	4	5.00	-0.04	-0.8%	0.1% to 2.0%					339	12+41.03	38.28	1118.68
352	353	Landing/Turning Space	4	6.59	0.11	1.7%	0.1% to 2.0%	Yes				350	12+91.91	45.10	1119.08
352	351	Landing/Turning Space	4	4.16	0.07	1.7%	0.1% to 2.0%	Yes				351	12+97.35	42.60	1118.74
351	353	Landing/Turning Space	4	5.00	0.04	0.8%	0.1% to 2.0%					352	12+93.19	42.60	1118.67
353	355	Sidewalk Running Slope	4	4.90	0.09	1.8%	0.5% to 5.0%					353	12+97.45	37.60	1118.78
351	360	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes				354	13+01.13	35.10	1119.46
355	360	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					355	13+02.35	37.60	1118.87
355	356	Ramp Running Slope	6	15.00	1.23	8.2%	0.5% to 8.3%	Yes				356	13+17.35	37.60	1120.10
356	359	Ramp Cross Slope	6	5.00	-0.05	-1.0%	0.1% to 2.0%					357	13+21.35	37.60	1120.22
356	357	Sidewalk Running Slope	4	4.00	0.12	3.0%	0.5% to 5.0%					358	13+21.35	42.60	1120.30
357	358	Match Existing Cross Slope	4	5.00	0.08	1.6%	Match Existing					359	13+17.35	42.60	1120.05
358	359	Sidewalk Running Slope	4	4.00	-0.25	-6.3%	0.5% to 7.3%					360	13+02.35	42.60	1118.82
359	360	Ramp Running Slope	6	15.00	-1.23	-8.2%	0.5% to 8.3%	Yes				361	13+02.35	47.60	1118.99
360	361	Ramp Running Slope	6	5.00	0.17	3.4%	0.5% to 8.3%					362	12+97.35	47.60	1118.95
361	362	Ramp Cross Slope	6	5.00	-0.04	-0.8%	0.1% to 2.0%					363	13+02.35	52.60	1119.16
351	362	Ramp Running Slope	6	5.00	0.21	4.2%	0.5% to 8.3%					364	12+97.35	52.60	1119.03
361	363	Sidewalk Running Slope	4	5.00	0.17	3.4%	0.5% to 5.0%								
363	364	Match Existing Cross Slope	4	5.00	-0.13	-2.6%	Match Existing								
364	362	Sidewalk Running Slope	4	5.00	-0.08	-1.6%	0.5% to 5.0%								
371	370	Sidewalk Running Slope	4	4.64	0.00	0.0%	0.5% to 5.0%					370	13+04.89	-36.73	1119.31
372	373	Ramp Cross Slope	6	7.11	-0.13	-1.8%	0.1% to 2.0%	Yes				371	13+00.89	-34.37	1119.31
372	374	Ramp Cross Slope	6	5.00	0.07	1.4%	0.1% to 2.0%					372	12+96.67	-36.70	1118.63
373	374	Ramp Running Slope	6	5.00	0.20	4.0%	0.5% to 8.3%					373	12+91.65	-41.67	1118.50
372	370	Ramp Running Slope	6	8.22	0.68	8.3%	0.5% to 8.3%	Yes				374	12+96.65	-41.64	1118.70
374	376	Ramp Running Slope	6	8.22	0.67	8.2%	0.5% to 8.3%	Yes				375	12+90.01	-44.33	1118.96
370	376	Landing/Turning Space	4	5.00	0.06	1.2%	0.1% to 2.0%					376	13+04.86	-41.73	1119.37
370	385	Landing/Turning Space	4	5.00	0.09	1.8%	0.1% to 2.0%	Yes				377	13+04.82	-51.73	1119.86
376	379	Landing/Turning Space	4	5.00	0.08	1.6%	0.1% to 2.0%	Yes				378	13+09.82	-51.75	1119.84
376	377	Ramp Running Slope	6	10.00	0.49	4.9%	0.5% to 8.3%					379	13+09.86	-41.75	1119.45
377	378	Match Existing Cross Slope	4	5.00	-0.02	-0.4%	Match Existing					380	13+20.41	-41.80	1120.27
378	379	Ramp Running Slope	6	10.00	-0.39	-3.9%	0.5% to 8.3%					381	13+25.41	-41.82	1120.47
379	385	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					382	13+25.43	-36.82	1120.32
379	380	Ramp Running Slope	6	10.55	0.82	7.8%	0.5% to 8.3%	Yes				383	13+20.43	-36.80	1120.26
380	383	Ramp Cross Slope	6	5.00	-0.01	-0.2%	0.1% to 2.0%					384	13+12.37	-36.77	1119.60
380	381	Sidewalk Running Slope	4	5.00	0.20	4.0%	0.5% to 5.0%					385	13+09.89	-36.75	1119.40
381	382	Match Existing Cross Slope	4	5.00	-0.15	-3.0%	Match Existing					386	13+12.55	-32.79	1119.50
382	383	Sidewalk Running Slope	4	5.00	-0.06	-1.2%	0.5% to 5.0%								



113-10 04-18-17															
SIDEWALK COMPLIANCE															
See S Sheets															
* Does not include curb															
① Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.															
② Refer to tabulation 113-01 for bid quantities.															
Point to Point		Sidewalk Designation	- " PCC Sidewalk ②	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant? ①	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
				FT	FT	%	Pos. or Neg.	①	%			Point	Station	Offset	Elevation
383	384	Ramp Running Slope	6	8.06	-0.66	-8.2%	0.5% to 8.3%	Yes							
384	385	Ramp Running Slope	6	2.48	-0.20	-8.1%	0.5% to 8.3%	Yes							
401	402	Landing/Turning Space	4	6.97	0.13	1.9%	0.1% to 2.0%	Yes					400	16+22.24	-35.00 1135.90
402	403	Landing/Turning Space	4	6.74	-0.07	-1.0%	0.1% to 2.0%						401	16+23.94	-35.80 1135.47
401	417	Landing/Turning Space	4	2.10	0.04	1.9%	0.1% to 2.0%	Yes					402	16+29.41	-39.67 1135.60
402	411	Landing/Turning Space	4	4.11	0.07	1.7%	0.1% to 2.0%	Yes					403	16+33.77	-45.10 1135.53
403	405	Landing/Turning Space	4	2.66	0.05	1.9%	0.1% to 2.0%	Yes					404	16+34.72	-46.88 1135.97
405	410	Landing/Turning Space	4	5.00	0.04	0.8%	0.1% to 2.0%						405	16+31.52	-46.46 1135.58
410	411	Landing/Turning Space	4	3.78	0.05	1.3%	0.1% to 2.0%						406	16+31.48	-56.46 1135.43
411	412	Landing/Turning Space	4	3.68	-0.06	-1.6%	0.1% to 2.0%	Yes					407	16+26.48	-56.44 1135.24
412	417	Landing/Turning Space	4	5.00	-0.10	-2.0%	0.1% to 2.0%	Yes					408	16+31.50	-51.46 1135.43
405	408	Ramp Running Slope	6	5.00	-0.15	-3.0%	0.5% to 8.3%						409	16+26.50	-51.44 1135.34
408	409	Ramp Cross Slope	6	5.00	-0.09	-1.8%	0.1% to 2.0%	Yes					410	16+26.52	-46.44 1135.62
408	406	Sidewalk Running Slope	4	5.00	0.00	0.0%	0.5% to 5.0%						411	16+26.61	-42.67 1135.67
406	407	Match Existing Cross Slope	4	5.00	-0.19	-3.8%	Match Existing						412	16+22.93	-42.65 1135.61
407	409	Sidewalk Running Slope	4	5.00	0.10	2.0%	0.5% to 5.0%						413	16+17.93	-42.64 1135.20
409	410	Ramp Running Slope	6	5.00	0.28	5.6%	0.5% to 8.3%						414	16+12.93	-42.62 1134.96
412	413	Ramp Running Slope	6	5.00	-0.41	-8.2%	0.5% to 8.3%	Yes					415	16+12.95	-37.62 1135.01
413	416	Ramp Cross Slope	6	5.00	-0.09	-1.8%	0.1% to 2.0%	Yes					416	16+17.95	-37.64 1135.11
413	414	Sidewalk Running Slope	4	5.00	-0.24	-4.8%	0.5% to 5.0%	Yes					417	16+22.95	-37.65 1135.51
414	415	Match Existing Cross Slope	4	5.00	0.05	1.0%	Match Existing								
415	416	Sidewalk Running Slope	4	5.00	0.10	2.0%	0.5% to 5.0%								
416	417	Ramp Running Slope	6	5.00	0.40	8.0%	0.5% to 8.3%	Yes							
421	422	Ramp Cross Slope	6	9.18	0.18	2.0%	0.1% to 2.0%	Yes					420	16+25.56	36.33 1136.80
422	424	Ramp Cross Slope	6	9.35	0.17	1.8%	0.1% to 2.0%	Yes					421	16+28.14	37.51 1136.39
421	439	Ramp Running Slope	6	7.25	0.51	7.0%	0.5% to 8.3%						422	16+35.31	42.45 1136.57
422	423	Ramp Running Slope	6	3.25	0.26	8.0%	0.5% to 8.3%	Yes					423	16+33.43	44.40 1136.83
424	425	Ramp Running Slope	6	8.37	0.16	1.9%	0.5% to 8.3%						424	16+41.53	49.98 1136.74
425	423	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%						425	16+33.43	49.84 1136.90
423	439	Landing/Turning Space	4	5.00	0.07	1.4%	0.1% to 2.0%						426	16+33.43	74.85 1138.61
425	433	Ramp Running Slope	6	5.00	0.37	7.4%	0.5% to 8.3%	Yes					427	16+28.20	74.85 1138.59
433	432	Ramp Running Slope	6	5.00	0.39	7.8%	0.5% to 8.3%	Yes					428	16+33.43	69.85 1138.41
432	430	Ramp Running Slope	6	5.00	0.35	7.0%	0.5% to 8.3%						429	16+28.19	69.77 1138.33
430	431	Ramp Cross Slope	6	5.00	0.02	0.4%	0.1% to 2.0%						430	16+33.43	64.51 1138.01
430	428	Ramp Running Slope	6	5.00	0.40	8.0%	0.5% to 8.3%	Yes					431	16+28.18	64.52 1138.03
428	429	Ramp Cross Slope	6	5.00	-0.08	-1.6%	0.1% to 2.0%	Yes					432	16+33.17	59.51 1137.66
428	426	Sidewalk Running Slope	4	5.00	0.20	4.0%	0.5% to 5.0%						433	16+33.17	54.51 1137.27
426	427	Match Existing Cross Slope	4	5.00	-0.02	-0.4%	Match Existing						434	16+28.16	49.76 1136.97
427	429	Sidewalk Running Slope	4	5.00	-0.26	-5.2%	0.5% to 6.2%						435	16+23.16	49.68 1137.04
429	431	Ramp Running Slope	6	5.00	-0.30	-6.0%	0.5% to 8.3%						436	16+18.16	49.60 1137.11
434	425	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%						437	16+18.15	44.60 1136.97
434	439	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%						438	16+23.15	44.68 1136.95
434	435	Ramp Running Slope	6	5.00	0.07	1.4%	0.5% to 8.3%						439	16+28.15	44.76 1136.90
435	438	Ramp Cross Slope	6	5.00	-0.09	-1.8%	0.1% to 2.0%	Yes							
435	436	Sidewalk Running Slope	4	5.00	0.07	1.4%	0.5% to 5.0%								
436	437	Match Existing Cross Slope	4	5.00	-0.14	-2.8%	Match Existing								
437	438	Sidewalk Running Slope	4	5.00	-0.02	-0.4%	0.5% to 5.0%								
438	439	Ramp Running Slope	6	5.00	-0.05	-1.0%	0.5% to 8.3%								
451	452	Ramp Cross Slope	6	19.97	0.33	1.7%	0.1% to 2.0%	Yes					450	16+96.25	51.45 1138.97
451	463	Ramp Running Slope	6	6.77	0.56	8.3%	0.5% to 8.3%	Yes					451	16+96.95	49.05 1138.65
452	458	Ramp Running Slope	6	5.52	0.45	8.2%	0.5% to 8.3%	Yes					452	17+09.81	34.43 1138.98
452	453	Sidewalk Running Slope	4	5.04	0.50	9.9%	0.5% to 10.9%						453	17+14.53	32.64 1139.48
453	454	Match Existing Cross Slope	4	3.70	0.13	3.5%	Match Existing						454	17+14.79	36.36 1139.61
454	458	Match Existing Cross Slope	4	3.90	-0.18	-4.6%	Match Existing						455	17+18.77	36.37 1139.73
454	455	Match Existing Cross Slope	4	3.98	0.12	3.0%	Match Existing						456	17+18.85	37.53 1139.78
455	456	Match Existing Cross Slope	4	1.17	0.05	4.3%	Match Existing						457	17+20.31	37.49 1139.90
456	457	Match Existing Cross Slope	4	1.46	0.12	8.2%	Match Existing						458	17+12.30	39.36 1139.43
456	458	Ramp Running Slope	6	6.85	-0.35	-5.1%	0.5% to 8.3%						459	17+20.23	42.49 1139.94
457	459	Match Existing Cross Slope	4	5.00	0.04	0.8%	Match Existing						460	17+14.57	43.81 1139.46
459	460	Ramp Running Slope	6	5.87	-0.48	-8.2%	0.5% to 8.3%	Yes					461	17+10.38	47.34 1139.37
458	460	Landing/Turning Space	4	5.00	0.03	0.6%	0.1% to 2.0%						462	17+08.25	52.23 1139.29
460	461	Landing/Turning Space	4	5.45	-0.09	-1.7%	0.1% to 2.0%	Yes					463	17+03.34	51.29 1139.21
461	462	Landing/Turning Space	4	5.45	-0.08	-1.5%	0.1% to 2.0%						464	17+07.93	58.90 1139.24
462	463	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%	Yes					465	17+02.93	58.78 1139.16
462	464	Ramp Running Slope	6	6.68	-0.05	-0.7%	0.5% to 8.3%						466	17+07.82	63.90 1139.21
464	465	Ramp Cross Slope	6	5.00	-0.08	-1.6%	0.1% to 2.0%	Yes					467	17+02.82	63.78 1139.08
465	463	Ramp Running Slope	6	7.51	0.05	0.7%	0.5% to 8.3%								
464	466	Sidewalk Running Slope	4	5.00	-0.03	-0.6%	0.5% to 5.0%								
466	467	Match Existing Cross Slope	4	5.00	-0.13	-2.6%	Match Existing								
467	465	Sidewalk Running Slope	4	5.00	0.08	1.6%	0.5% to 5.0%								

SIDEWALK COMPLIANCE

See S Sheets

113-10  
04-18-17

- \* Does not include curb
- ① Staking required by Contracting Authority per Article 2511.03 of the Standard Specifications.
- ② Refer to tabulation 113-01 for bid quantities.

Point to Point		Sidewalk Designation	- " PCC Sidewalk  ②	Distance*	Δ Elevation	Slope	Acceptable Constructed Range	Staking Required on this Quadrant?	Measured Slope	Initials	Remarks	FOR INFORMATION ONLY: VALUES USED TO DETERMINE DESIGNED SLOPES			
				FT	FT	%	Pos. or Neg.	①	%			Point	Station	Offset	Elevation
482	484	Ramp Cross Slope	6	6.30	-0.10	-1.6%	0.1% to 2.0%	Yes				480	17+41.16	-33.03	1139.90
482	483	Ramp Running Slope	6	4.48	0.37	8.3%	0.5% to 8.3%	Yes				481	17+25.85	-39.68	1138.76
483	485	Landing/Turning Space	4	5.69	-0.10	-1.8%	0.1% to 2.0%	Yes				482	17+21.85	-42.69	1137.86
484	485	Ramp Running Slope	6	4.49	0.37	8.2%	0.5% to 8.3%	Yes				483	17+24.74	-46.11	1138.23
485	491	Ramp Running Slope	6	29.08	-2.39	-8.2%	0.5% to 8.3%	Yes				484	17+17.32	-47.07	1137.76
491	492	Ramp Cross Slope	6	5.00	0.10	2.0%	0.1% to 2.0%	Yes				485	17+20.66	-50.07	1138.13
491	489	Sidewalk Running Slope	4	39.97	-3.07	-7.7%	0.5% to 8.7%					486	17+14.18	-50.96	1137.83
491	487	Sidewalk Cross Slope	4	4.58	-0.36	-7.9%	0.5% to 8.9%					487	17+05.46	-76.59	1135.38
487	488	Match Existing Cross Slope	4	40.14	-2.77	-6.9%	Match Existing					488	17+01.26	-116.15	1132.61
488	489	Match Existing Cross Slope	4	6.34	0.06	0.9%	Match Existing					489	17+07.60	-116.30	1132.67
489	490	Match Existing Cross Slope	4	5.00	0.32	6.4%	Match Existing					490	17+12.59	-116.61	1132.99
490	492	Sidewalk Running Slope	4	39.87	2.85	7.1%	0.5% to 8.1%					491	17+10.07	-76.51	1135.74
492	493	Ramp Running Slope	6	25.73	2.34	9.1%						492	17+15.04	-76.82	1135.84
493	485	Landing/Turning Space	4	5.00	-0.05	-1.0%	0.1% to 2.0%					493	17+24.38	-53.41	1138.18
493	494	Landing/Turning Space	4	5.00	0.09	1.8%	0.1% to 2.0%	Yes				494	17+27.97	-49.93	1138.27
494	483	Landing/Turning Space	4	5.00	-0.04	-0.8%	0.1% to 2.0%					495	17+51.51	-41.29	1140.40
494	495	Ramp Running Slope	6	25.59	2.13	8.3%	0.5% to 8.3%	Yes				496	17+51.50	-37.03	1140.40
495	496	Match Existing Cross Slope	4	4.26	0.00	0.0%	Match Existing					497	17+51.50	-36.29	1140.50
496	497	Match Existing Cross Slope	4	0.74	0.10	13.4%	Match Existing					498	17+51.71	-32.54	1140.50
497	498	Match Existing Cross Slope	4	3.75	0.00	0.0%	Match Existing								
497	483	Ramp Running Slope	6	29.10	-2.27	-7.8%	0.5% to 8.3%	Yes							
501	502	Landing/Turning Space	4	7.18	-0.14	-2.0%	0.1% to 2.0%	Yes				500	20+34.46	-32.10	1144.72
501	515	Landing/Turning Space	4	6.10	0.01	0.2%	0.1% to 2.0%					501	20+37.29	-33.07	1143.47
501	504	Landing/Turning Space	4	5.00	-0.08	-1.6%	0.1% to 2.0%	Yes				502	20+43.44	-36.73	1143.33
502	504	Landing/Turning Space	4	5.11	0.06	1.2%	0.1% to 2.0%					503	20+45.64	-38.76	1143.41
504	505	Landing/Turning Space	4	1.05	0.01	1.0%	0.1% to 2.0%					504	20+38.47	-13.97	1143.39
505	510	Landing/Turning Space	4	5.06	0.08	1.6%	0.1% to 2.0%	Yes				505	20+37.45	-38.17	1143.40
510	515	Landing/Turning Space	4	5.00	0.00	0.0%	0.1% to 2.0%					506	20+37.76	-39.45	1143.32
505	506	Ramp Running Slope	6	1.31	-0.08	-6.1%	0.5% to 8.3%					507	20+38.47	-49.92	1142.68
506	509	Ramp Cross Slope	6	5.06	0.09	1.8%	0.1% to 2.0%	Yes				508	20+33.23	-50.14	1142.78
509	510	Ramp Running Slope	6	1.12	0.07	6.3%	0.5% to 8.3%					509	20+32.80	-40.45	1143.41
506	507	Ramp Running Slope	6	10.48	-0.64	-6.1%	0.5% to 8.3%					510	20+32.54	-39.36	1143.48
507	508	Match Existing Cross Slope	4	5.00	0.10	2.0%	Match Existing					511	20+25.45	-41.08	1144.06
508	509	Ramp Running Slope	6	9.70	0.63	6.5%	0.5% to 8.3%					512	20+13.55	-40.95	1144.99
510	511	Ramp Running Slope	6	7.29	0.58	8.0%	0.5% to 8.3%	Yes				513	20+13.60	-36.23	1144.89
511	514	Ramp Cross Slope	6	5.04	-0.07	-1.4%	0.1% to 2.0%					514	20+24.88	-36.23	1143.99
511	512	Ramp Running Slope	6	11.90	0.93	7.8%	0.5% to 8.3%	Yes				515	20+31.36	-34.50	1143.48
512	513	Match Existing Cross Slope	4	5.00	-0.10	-2.0%	Match Existing								
513	514	Ramp Running Slope	6	11.28	-0.90	-8.0%	0.5% to 8.3%	Yes							
514	515	Ramp Running Slope	6	6.67	-0.51	-7.6%	0.5% to 8.3%	Yes							
522	523	Ramp Cross Slope	6	5.77	0.04	0.7%	0.1% to 2.0%					520	20+34.93	36.60	1145.91
522	521	Ramp Running Slope	6	4.00	0.02	0.5%	0.5% to 8.3%					521	20+33.08	38.59	1145.49
523	525	Ramp Running Slope	6	6.80	0.03	0.4%	0.5% to 8.3%					522	20+37.09	38.60	1145.47
521	525	Landing/Turning Space	4	5.00	0.05	1.0%	0.1% to 2.0%					523	20+39.87	43.61	1145.51
521	529	Landing/Turning Space	4	5.00	0.02	0.4%	0.1% to 2.0%					524	20+40.32	45.61	1146.15
525	526	Landing/Turning Space	4	5.00	0.04	0.8%	0.1% to 2.0%					525	20+33.07	43.59	1145.54
526	529	Landing/Turning Space	4	5.00	-0.07	-1.4%	0.1% to 2.0%					526	20+28.07	43.58	1145.58
526	527	Sidewalk Running Slope	4	5.00	0.06	1.2%	0.5% to 5.0%					527	20+23.07	43.57	1145.64
527	528	Match Existing Cross Slope	4	5.00	-0.11	-2.2%	Match Existing					528	20+23.08	38.57	1145.53
528	529	Sidewalk Running Slope	4	5.00	-0.02	-0.4%	0.5% to 5.0%					529	20+28.08	38.58	1145.51