A d d e n d u m

Iowa Department of Transportation
Office of Contracts

Date of Letting: January 21, 2015
Date of Addendum: January 16, 2015

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
109	82-0741-226	PCC PAVEMENT - GRADE & REPLACE	SCOTT	IM-074-1(226)5--13-82 IM-074-1(227)5--13-82	21JAN109.A04

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Add Proposal Line No. 1551 2109-8225100 SPECIAL COMPACTION OF SUBGRADE; 51.700 STA

If the above changes are not made, they will be made as shown here.

Make the following change to the PLAN for Project No. IM-074-1(226)5--13-82:

SHEET C.5:

Add the following note to the ESTIMATE REFERENCE INFORMATION for the item 2109-8225100 SPECIAL COMPACTION OF SUBGRADE:

See Tab 103-1 on the C Sheets for the tabulation and refer to the Q sheets for locations and details.

SHEET C.8:

Add the attached SHEET C.8 to the plans and delete the 2nd SHEET C.9.

SHEET C.20

Replace SHEET C.20 with the attached SHEET C.20. Added Tab. 103-1 SPECIAL COMPACTION.

SHEET N.10

Replace SHEET N.10 with the attached SHEET N.10. Changed Post 3 from Dual 62' and 39' Combination Mast Arm to a Single 62' Combination Mast Arm. Changed Post 12 from a 10' Pedestal Pole to a 38' Mast Arm.

SHEET N.11

Replace SHEET N.11 with the attached SHEET N.11. Conduit and Cable changes to accommodate changes in Sheet N.10.

SHEET N.18

Replace SHEET N.18 with the attached SHEET N.18. Changed Post 5 from Dual 58' and 46' Combination Mast Arm to a Single 46' Combination Mast Arm. Added Post 7 as a 50' Mast Arm.

SHEET N.19

Replace SHEET N.19 with the attached SHEET N.19. Conduit and Cable changes to accommodate changes in Sheet N.18.

Add the attached Tabulation for PERMANENT TRAFFIC SIGNAL BILL OF MATERIALS.

Add the attached Tabulation for MAST ARM POLE FOOTING.

Add the attached detail for POLE FOOTING DETAILS.

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
131	2599-9999005	HANDHOLE, FURNISH AND INSTALL, TYPE I
		DESCRIPTION
		This work shall consist of furnishing and installing the Type I Handholes for the proposed ITS infrastructure
		within this project. This work shall include all materials, hardware, and labor required for complete
		installation of the Type I Handholes.
		Refer to Sheet N.22-N.35 for location and details.
		MATERIALS
		Refer to the Special Provisions.
		METHOD OF MEASUREMENT
		Refer to the Special Provisions.
		BASIS OF PAYMENT
		Refer to the Special Provisions.
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132	2599-9999005	HANDHOLE, FURNISH AND INSTALL, TYPE III
		DESCRIPTION
		This work shall consist of furnishing and installing the Type III Handholes for the proposed ITS infrastructure
		within this project. This work shall include all materials, hardware, and labor required for complete
		installation of the Type III Handholes.
		Refer to Sheet N.22-N.35 for location and details.
		MATERIALS
		Refer to the Special Provisions.
		METHOD OF MEASUREMENT
		Refer to the Special Provisions.
		BASIS OF PAYMENT
		Refer to the Special Provisions.
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133	2599-9999005	METER PEDESTAL
		DESCRIPTION
		This work shall consist of furnishing and installing the Meter Pedestals for the proposed ITS infrastructure
		within this project. This work shall include all materials, hardware, and labor required for complete
		installation of the Type III Handholes.
		Refer to Sheet N.22-N.35 for location and details.
		MATERIALS
		Refer to the Special Provisions for ITS INFRASTRUCTURE.
		METHOD OF MEASUREMENT
		Refer to the Special Provisions for ITS INFRASTRUCTURE.
		BASIS OF PAYMENT
		Refer to the Special Provisions for ITS INFRASTRUCTURE.
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134	2599-9999005	OVERHEAD SIGN SUPPORT STRUCTURE, CANTILEVERED, 17 FT. ARM
		Description.
		This work shall consist of fabricating, furnishing, and erecting the steel cantilever dynamic message
		sign (D.M.S.) support structures along U.S. 67 for the proposed ITS infrastructure within the
		project. This work shall include all materials, equipment, and labor required to construct
		the support structures. See V Sheets for locations and details.
		Materials.
		Materials shall be according to Section 4187 of the Standard Specifications and the V Sheets.
		Construction.
		Construction shall be according to Article 2423.03 of the Standard Specifications and the V Sheets.
		Method of Measurement.
		Method of Measurement shall be according to Article 2423.04 of the Standard Specifications.
		Basis of Payment.
		Basis of Payment shall be according to Article 2423.05 of the Standard Specifications.
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135	2599-9999005	POWER CONNECTION
		DESCRIPTION
		This work shall consist of furnishing and installing the Power Connections for the proposed ITS infrastructure
		within this project. This work shall include all materials, hardware, and labor required for complete
		installation of the Type III Handholes.
		Refer to Sheet N.22-N.35 for location and details.
		MATERIALS
		Refer to the Special Provisions for ITS INFRASTRUCTURE.
		METHOD OF MEASUREMENT
		Refer to the Special Provisions for ITS INFRASTRUCTURE.
		BASIS OF PAYMENT
		Refer to the Special Provisions for ITS INFRASTRUCTURE.
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136	2599-9999005	TRAFFIC SIGNAL POLE MOUNTED LUMINAIRE
		DESCRIPTION.
		Furnish all work, apparatus, and materials to install, and place in operation, to the Engineer's satisfaction,

100-4A
10-29-02

ESTIMATE REFERENCE INFORMATION

Item No.	Item Code	Description
		a luminaire mounted to a traffic signal pole. See P sheets for locations, details, and additional tabulations.
		MATERIALS.
		Install luminaire per Special Provision for Street Lighting for a Roadway Luminaire, Type A.
		CONSTRUCTION.
		Furnish and install the traffic signal pole mounted luminaire, including all incidental items appurtenant to
		the operation of the luminaire per Section 2523.03 of the Standard Specifications.
		METHOD OF MEASUREMENT.
		Measurement for the quantities of Traffic Signal Pole Mounted Luminaire will be by count.
		BASIS OF PAYMENT.
		Payment for the quantities for Traffic Signal Pole Mounted Luminaire will be at the contract unit price of each.
		Payment is full compensation for materials, equipment, and installation of the luminaire and wiring within the
		pole, and connectors within the pole, according to the contract documents.
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137	2599-9999009	CABLE, FURNISH AND INSTALL, #12
		DESCRIPTION
		This work shall consist of furnishing and installing the #6 Copper Cable for proposed ITS Electrical
		Circuits within this project. This work shall include all materials, hardware, and labor required for complete
		installation and full operation of the Cable.
		Refer to Sheet N.22-N.35 for location and details.
		MATERIALS
		Refer to Section 4185.12 of the Standard Specifications for cable. Refer to Section 4185.11 for connector
		assemblies.
		INSTALLATION
		Refer to Section 2523.03 Q of the Standard Specifications.
		METHOD OF MEASUREMENT
		Linear feet as shown in the contract documents.
		BASIS OF PAYMENT
		Payment is full compensation for materials, equipment, and installation of electric cable in conduit between
		connectors and equipment. Connectors shall not be paid for separately but shall be incidental to cable.
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138	2599-9999009	CABLE, FURNISH AND INSTALL, #2
		DESCRIPTION
		This work shall consist of furnishing and installing the #2 Copper Cable for proposed ITS Electrical
		Circuits within this project. This work shall include all materials, hardware, and labor required for complete
		installation and full operation of the Cable.
		Refer to Sheet N.22-N.35 for location and details.
		MATERIALS
		Refer to Section 4185.12 of the Standard Specifications for cable. Refer to Section 4185.11 for connector
		assemblies.
		INSTALLATION
		Refer to Section 2523.03 Q of the Standard Specifications.
		METHOD OF MEASUREMENT
		Linear feet as shown in the contract documents.
		BASIS OF PAYMENT
		Payment is full compensation for materials, equipment, and installation of electric cable in conduit between
		connectors and equipment. Connectors shall not be paid for separately but shall be incidental to cable.
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139	2599-9999009	CABLE, FURNISH AND INSTALL, #6
		DESCRIPTION
		This work shall consist of furnishing and installing the #6 Copper Cable for proposed ITS Electrical
		Circuits within this project. This work shall include all materials, hardware, and labor required for complete
		installation and full operation of the Cable.
		Refer to Sheet N.22-N.35 for location and details.
		MATERIALS
		Refer to Section 4185.12 of the Standard Specifications for cable. Refer to Section 4185.11 for connector
		assemblies.
		INSTALLATION
		Refer to Section 2523.03 Q of the Standard Specifications.
		METHOD OF MEASUREMENT
		Linear feet as shown in the contract documents.
		BASIS OF PAYMENT
		Payment is full compensation for materials, equipment, and installation of electric cable in conduit between
		connectors and equipment. Connectors shall not be paid for separately but shall be incidental to cable.
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103-3
10-16-12

PROPOSED SUBGRADE TREATMENT

(For Additional Details see Soils Survey Sheet No. Q.1 to Q.30.)

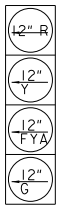
No.	Location		Description					Type		Quantity		Polymer Grid	Available From		Remarks
	Begin Station	End Station	Side	Type	Depth	Width	Area	Material	Shrink %				Quantity	Location or Station to Station	
					FT	FT	SF			CY	TON	SY	CY		
1	197+00.00	199+00.00	BOTH	Standard	1.0	47.0	47.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	348.1	658.000				In addition to any Mod Subbase shown on B Sheets
2	200+50.00	203+70.00	BOTH	Standard	1.0	47.0	47.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	557.0	1,052.800				In addition to any Mod Subbase shown on B Sheets
3	206+00.00	212+00.00	BOTH	Standard	1.0	47.0	47.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	1,044.4	1,974.000				In addition to any Mod Subbase shown on B Sheets
4	213+85.00	217+40.00	BOTH	Standard	1.0	47.0	47.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	618.0	1,167.950				In addition to any Mod Subbase shown on B Sheets
5	1593+00.00	1597+40.10	LT	Standard	1.0	17.5	17.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	285.3	539.123				In addition to any Mod Subbase shown on B Sheets
5	1597+40.10	1599+50.00	LT	Standard	1.0	17.5	17.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	136.0	257.127				In addition to any Mod Subbase shown on B Sheets
5	1599+50.00	1601+50.00	LT	Standard	1.0	23.5	23.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	174.1	329.000				In addition to any Mod Subbase shown on B Sheets
5	1601+50.00	1602+50.00	LT	Standard	1.0	23.5	23.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	87.0	164.500				In addition to any Mod Subbase shown on B Sheets
5	1593+00.00	1597+40.10	RT	Standard	1.0	27.7	27.7	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	450.7	851.814				In addition to any Mod Subbase shown on B Sheets
5	1597+40.10	1599+50.00	RT	Standard	1.0	17.5	17.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	136.0	257.127				In addition to any Mod Subbase shown on B Sheets
5	1599+50.00	1601+50.00	RT	Standard	1.0	17.5	17.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	129.6	245.000				In addition to any Mod Subbase shown on B Sheets
5	1601+50.00	1602+50.00	RT	Standard	1.0	29.5	29.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	109.3	206.500				In addition to any Mod Subbase shown on B Sheets
6	1604+00.00	1607+00.00	LT	Standard	1.0	25.6	25.6	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	284.0	536.760				In addition to any Mod Subbase shown on B Sheets
6	1604+00.00	1607+00.00	RT	Standard	1.0	29.5	29.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	327.8	619.500				In addition to any Mod Subbase shown on B Sheets
7	1609+25.00	1612+11.25	LT	Standard	1.0	38.5	38.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	408.2	771.444				In addition to any Mod Subbase shown on B Sheets
7	1612+11.25	1614+75.00	LT	Standard	1.0	44.0	44.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	429.8	812.350				In addition to any Mod Subbase shown on B Sheets
7	1614+75.00	1615+25.00	LT	Standard	1.0	34.6	34.6	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	64.1	121.100				In addition to any Mod Subbase shown on B Sheets
7	1609+25.00	1612+11.25	RT	Standard	1.0	26.5	26.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	280.9	530.994				In addition to any Mod Subbase shown on B Sheets
7	1612+11.25	1614+75.00	RT	Standard	1.0	26.5	26.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	258.9	489.256				In addition to any Mod Subbase shown on B Sheets
7	1614+75.00	1615+25.00	RT	Standard	1.0	26.5	26.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	49.1	92.750				In addition to any Mod Subbase shown on B Sheets
8	1618+50.00	1619+56.47	LT	Standard	1.0	34.6	34.6	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	136.4	257.870				In addition to any Mod Subbase shown on B Sheets
8	1619+56.47	1620+75.00	LT	Standard	1.0	17.5	17.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	76.8	145.199				In addition to any Mod Subbase shown on B Sheets
8	1620+75.00	1621+00.00	LT	Standard	1.0	17.5	17.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	16.2	30.625				In addition to any Mod Subbase shown on B Sheets
8	1618+50.00	1619+56.47	RT	Standard	1.0	26.5	26.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	104.5	197.502				In addition to any Mod Subbase shown on B Sheets
8	1619+56.47	1620+75.00	RT	Standard	1.0	29.5	29.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	129.5	244.764				In addition to any Mod Subbase shown on B Sheets
8	1620+75.00	1621+00.00	RT	Standard	1.0	29.5	29.5	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	27.3	51.625				In addition to any Mod Subbase shown on B Sheets
9	491+50.00	492+92.50	BOTH	Standard	1.0	41.0	41.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	216.4	408.975				Division (2)
10	4606+06.61	4607+50.00	BOTH	Standard	1.0	47.0	47.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	249.6	471.753				In addition to any Mod Subbase shown on B Sheets
11	4609+50.00	4610+80.00	BOTH	Standard	1.0	47.0	47.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	226.3	427.700				In addition to any Mod Subbase shown on B Sheets
12	102+33.40	103+56.37	BOTH	Standard	1.0	35.0	35.0	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	159.4	301.277				In addition to any Mod Subbase shown on B Sheets
13	103+92.37	104+85.00	BOTH	Standard	1.0	31.6	31.6	SPECIAL BACKFILL (SEE ART. 4132)	0.00%	108.4	204.898				In addition to any Mod Subbase shown on B Sheets
											14,419.283				

103-1
MODIFIED

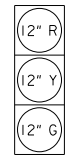
SPECIAL COMPACTION

Location		Lane	Depth	Compact	Remarks
Station to Station					
			FT	STA	
199+00.00	200+50.00	US 67 SB		1.5	Special Compaction
212+00.00	213+85.00	US 67 SB		1.9	Special Compaction
480+31.28	482+03.52	State St		1.7	Special Compaction
489+52.35	491+50.00	State St		2.0	Special Compaction
499+69.52	503+48.96	State St		3.8	Special Compaction
503+72.96	503+97.26	State St		0.2	Special Compaction
4610+84.00	4627+00.00	Kimberly		16.2	Special Compaction
8+60.00	11+70.00	Mississi		3.1	Special Compaction
12+10.01	16+08.69	Mississi		4.0	Special Compaction
9+62.00	11+60.42	Brown St		2.0	Special Compaction
10100+00.00	10100+47.00	10th St		0.5	Special Compaction
11100+00.00	11100+85.05	11th St		0.9	Special Compaction
4603+14.16	4605+05.70	12th St		1.9	Special Compaction
13100+44.44	13103+22.14	13th St		2.8	Special Compaction
101+82.12	106+05.50	15th St		4.2	Special Compaction
107+10.34	108+50.00	15th St		1.4	Special Compaction
99+53.81	101+72.59	16th St		2.2	Special Compaction
2592+65.24	2594+18.94	US 67 Ra		1.5	Special Compaction
				Total = 51.7	

TRAFFIC SIGNAL FACES



NO. 11, 12, 31, 32, 33, 71, 72, 73 (8-REQ'D)



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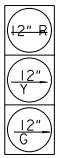
NO. 25, 26, 43, 44, 45, 46, 65, 66, 84, 85, 86, 87 (12-REQ'D)



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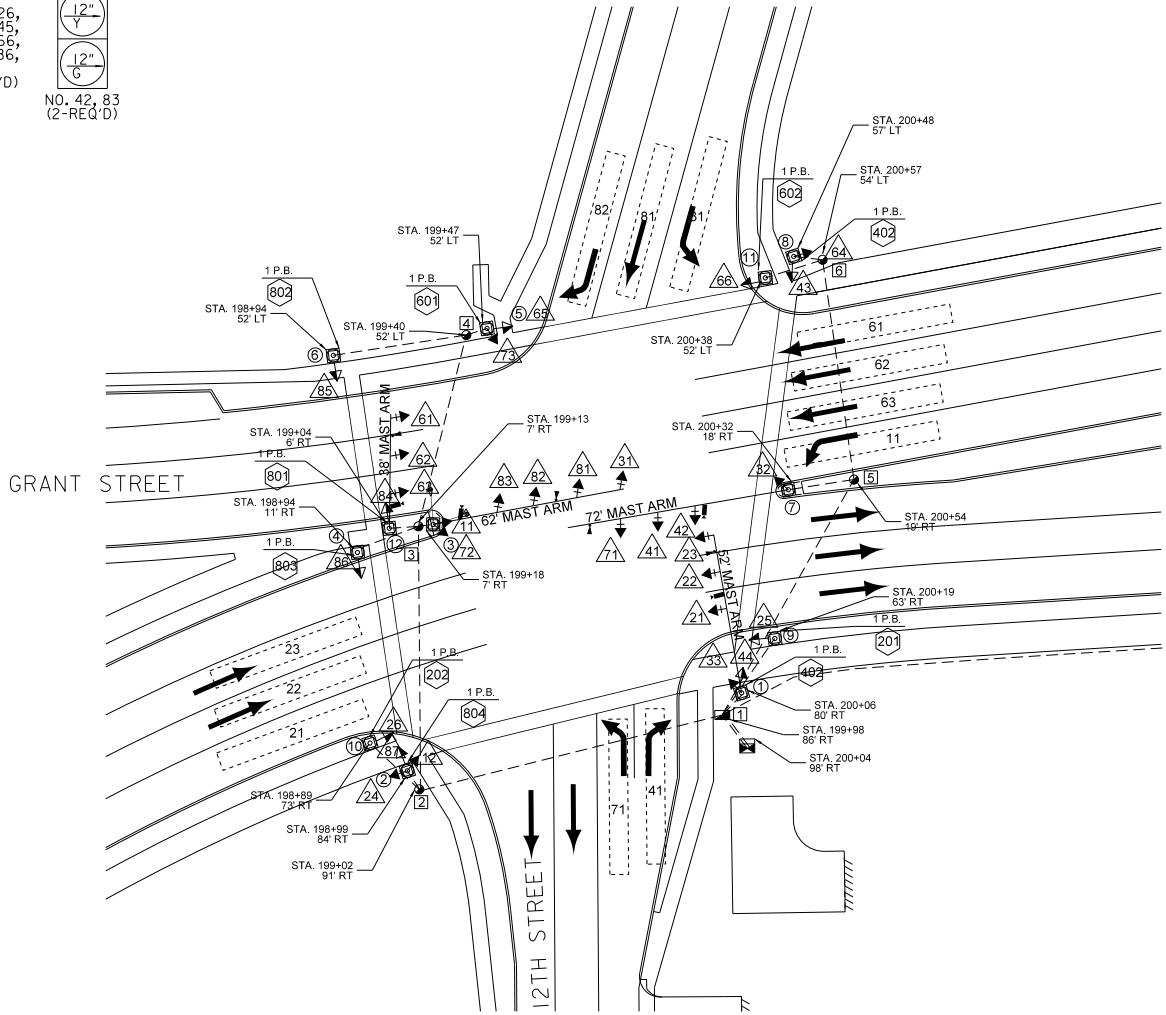
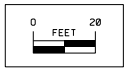
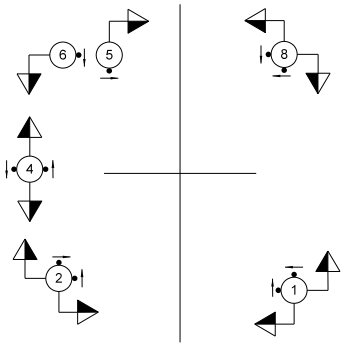
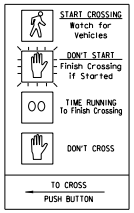




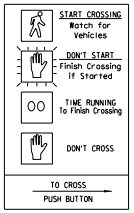
PEDESTRIAN PUSHBUTTON AND SIGNAL FACE MOUNTING



PEDESTRIAN PUSHBUTTON SIGNS



R10-3e
9"x15"
(6-REQ'D)



R10-3e
9"x15"
(6-REQ'D)

PERMANENT TRAFFIC SIGNAL

TRAFFIC SIGNAL PLAN

GRANT STREET AND 12TH STREET

LAYOUT	TMA	4/11/11
DRAWN	RLA	4/8/11
REVIEWED	KNB	4/13/11

ENGLISH	IOWA DOT	DESIGN TEAM **HANSON**	SCOTT COUNTY	PROJECT NUMBER IM-074-1(226)5--13-82	SHEET NUMBER **N.10**

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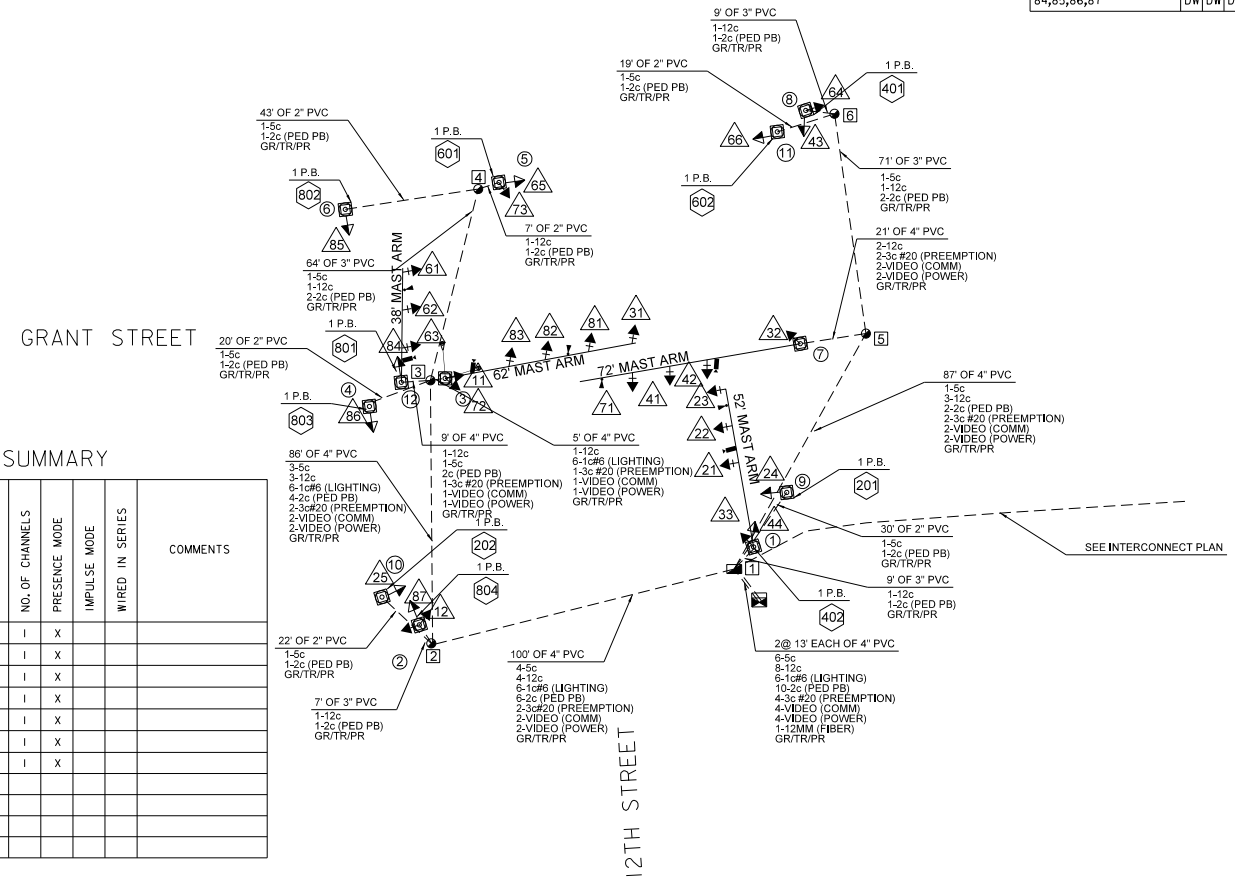
SUGGESTED TIMINGS (SECONDS)

PHASE	1	2	3	4	5	6	7	8
MINIMUM GREEN	7	10	7			10	7	7
PASSAGE	3	3	3			3	3	3
MAXIMUM I	30	60	30			60	30	30
MAXIMUM II								
YELLOW CHANGE	4	4	4			4	4	4
RED CLEARANCE	2	2	2			2	2	3
WALK		7	7			7	7	7
PEDESTRIAN CLEARANCE		23	17			23	17	17
ADDED INITIAL								
TIME TO REDUCE								
TIME BEFORE REDUCTION								
MAXIMUM GAP								

PHASE SEQUENCE CHART

PHASE / NUMBER	06 01				06 02				08 03				07				FLASHING
	01+06				02+06				03+08				07				
61,62,63,64	G	G	Y	R	G	G	Y	R	R	R	R	R	R	R	R	R	R
11,12	G	G	Y	R	FY	FY	Y	R	R	R	R	R	R	R	R	R	R
21,22,23,24	R	R	R	R	G	G	Y	R	R	R	R	R	R	R	R	R	R
41,42,71,72,73	R	R	R	R	R	R	R	R	R	R	R	R	G	G	Y	R	R
81,82,83,31,32,33	R	R	R	R	R	R	R	R	G	G	Y	R	R	R	R	R	R
25,26,65,66	DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	-
43,44	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	-
84,85,86,87	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW	W	FDW	DW	DW	-



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
61,62,63	VIDEO			6	1	X			
11	VIDEO			1	1	X			
21,22,23	VIDEO			2	1	X			
41	VIDEO			7	1	X			
71	VIDEO			7	1	X			
81,82	VIDEO			3,8	1	X			
31	VIDEO			3,8	1	X			
201,202		X		2					
401,402,403,404		X		4					
601,602		X		6					
801,802,803,804		X		8					

0 FEET 20

N

PERMANENT TRAFFIC SIGNAL

TRAFFIC SIGNAL PLAN

GRANT STREET AND 12TH STREET

LAYOUT	TMA	4/11/11
DRAWN	RLA	4/8/11
REVIEWED	KNB	4/13/11

ENGLISH | IOWA DOT | DESIGN TEAM **HANSON** | SCOTT COUNTY | PROJECT NUMBER **IM-074-1(226)5--13-82** | SHEET NUMBER **N.11**

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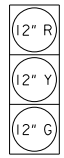
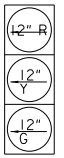
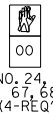
TRAFFIC SIGNAL FACES



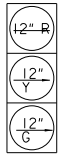
NO. 21, 22, 23, 41, 42, 61, 62, 63, 64, 65
(10-REQ'D)



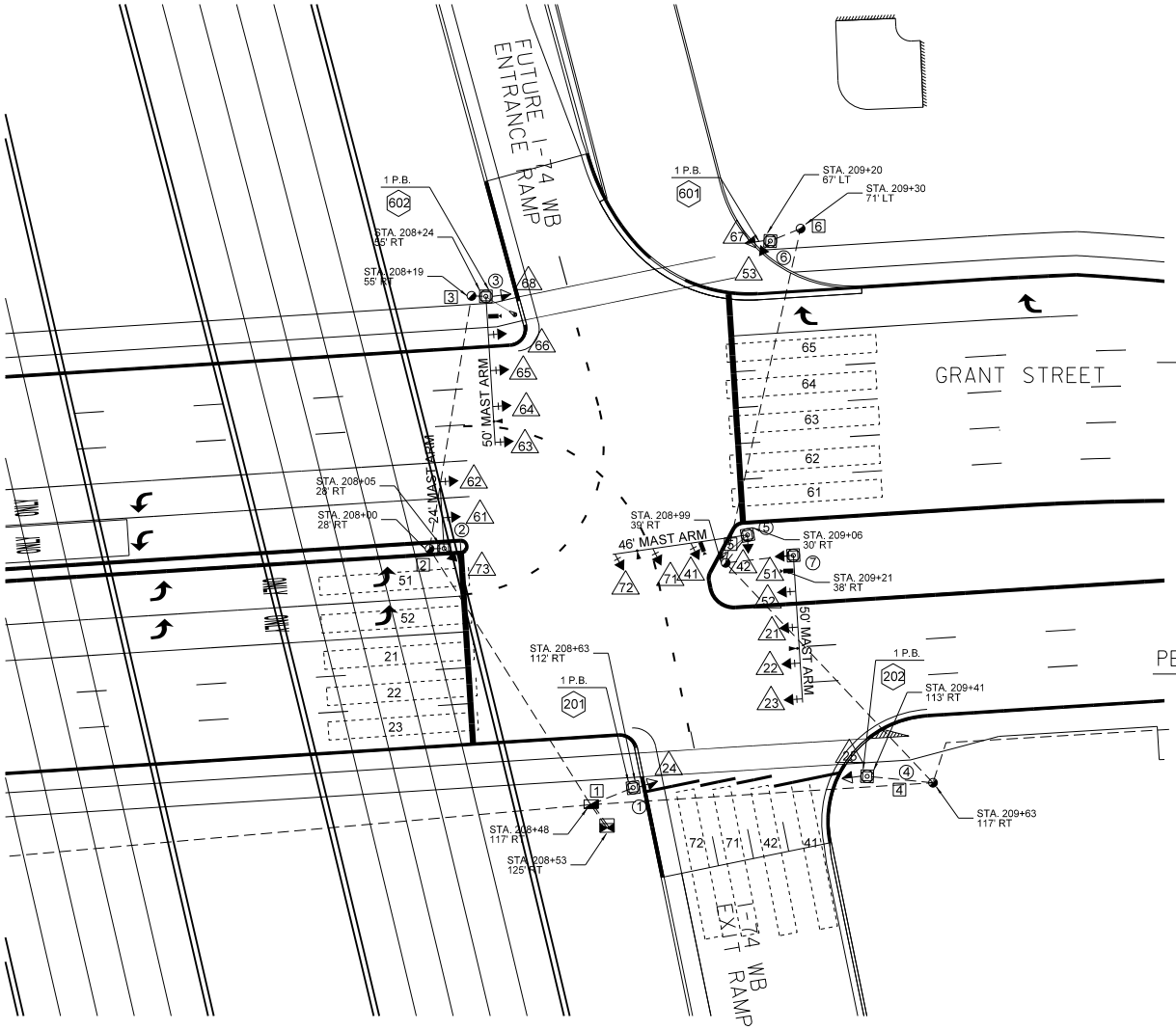
NO. 51, 52, 53, 71, 72, 73
(6-REQ'D)



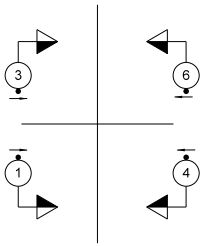
NO. 24, 25, 67, 68
(4-REQ'D)



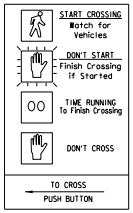
NO. 66
(1-REQ'D)



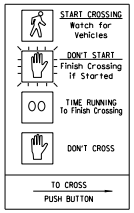
PEDESTRIAN PUSHBUTTON AND SIGNAL FACE MOUNTING



PEDESTRIAN PUSHBUTTON SIGNS



R10-3e
9"x15"
(2-REQ'D)



R10-3e
9"x15"
(2-REQ'D)

PERMANENT TRAFFIC SIGNAL

TRAFFIC SIGNAL PLAN

US 67 AND WESTBOUND RAMPS

LAYOUT	TMA	4/11/11
DRAWN	RLA	4/8/11
REVIEWED	KNB	4/13/11

ENGLISH	IOWA DOT	DESIGN TEAM **HANSON**	SCOTT COUNTY	PROJECT NUMBER IM-074-1(226)5--13-82	SHEET NUMBER N.18

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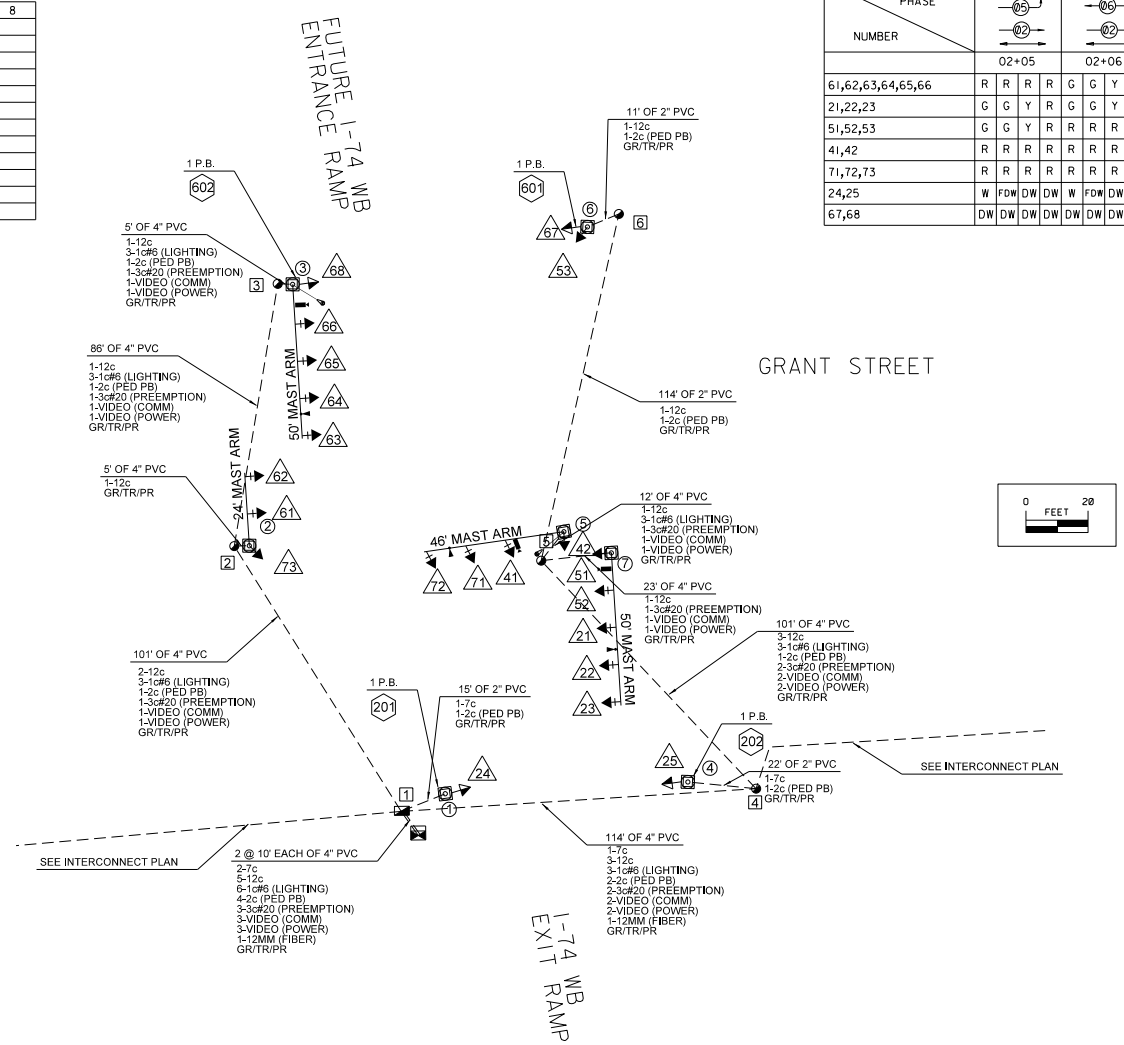
SUGGESTED TIMINGS (SECONDS)

PHASE	1	2	3	4	5	6	7	8
MINIMUM GREEN		10			7	10	7	
PASSAGE		3			3	3	3	
MAXIMUM I		60			30	60	30	
MAXIMUM II								
YELLOW CHANGE		4			4	4	4	
RED CLEARANCE		2			2	2	4	
WALK		7				7		
PEDESTRIAN CLEARANCE		21				14		
ADDED INITIAL								
TIME TO REDUCE								
TIME BEFORE REDUCTION								
MAXIMUM GAP								

PHASE SEQUENCE CHART

PHASE / NUMBER	05 02				06 02				07								FLASHING
	02+05				02+06				07								
61,62,63,64,65,66	R	R	R	R	G	G	Y	R	R	R	R	R					R
21,22,23	G	G	Y	R	G	G	Y	R	R	R	R	R					R
51,52,53	G	G	Y	R	R	R	R	R	R	R	R	R					R
41,42	R	R	R	R	R	R	R	R	G	G	Y	R					R
71,72,73	R	R	R	R	R	R	R	R	G	G	Y	R					R
24,25	W	FDW	DW	DW	W	FDW	DW	DW	DW	DW	DW	DW					-
67,68	DW	DW	DW	DW	DW	DW	DW	DW	W	FDW	DW	DW					-



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
61,62,63,64,65	VIDEO			6	1	X			
21,22,23	VIDEO			2	1	X			
51,52	VIDEO			5	1	X			
41,42	VIDEO			7	1	X			
71,72	VIDEO			7	1	X			
201,202		X		2					
601,602		X		7					

LAYOUT	TMA	4/11/11
DRAWN	RLA	4/8/11
REVIEWED	KNB	4/13/11

PERMANENT TRAFFIC SIGNAL

TRAFFIC SIGNAL PLAN

US 67 AND WESTBOUND RAMPS

ENGLISH	IOWA DOT	DESIGN TEAM **HANSON**	SCOTT COUNTY	PROJECT NUMBER IM-074-1(226)5--13-82	SHEET NUMBER N.19

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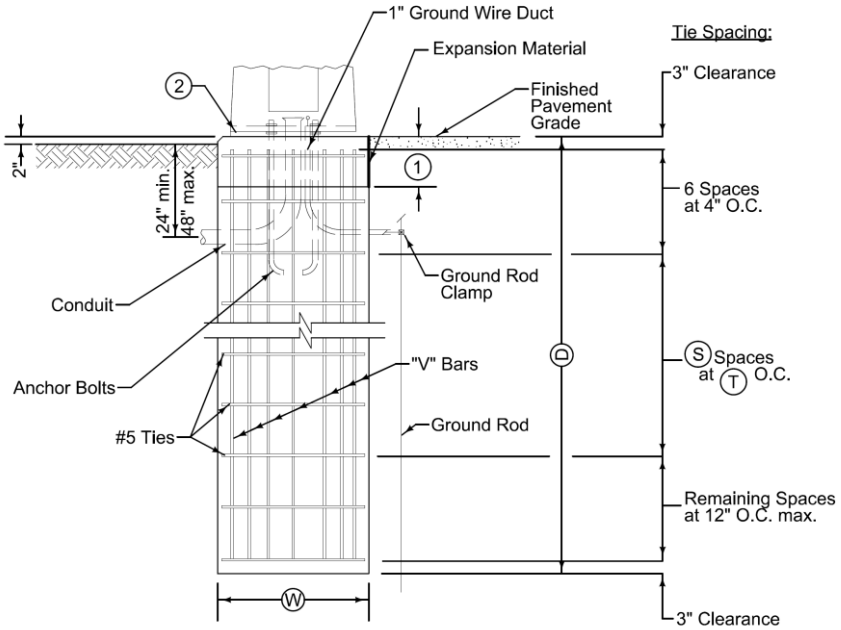
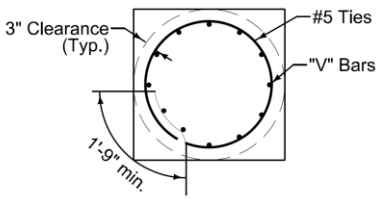
PERMANENT TRAFFIC SIGNAL BILL OF MATERIALS

Item	DESCRIPTION	UNIT	TOTAL	Grant and 12th Street	Southbound US 67 and 16th Street	Northbound US 67 and 16th Street	Northbound US 67 and 17th Street	US 67 and Westbound Ramps	Interconnect
1	Solid State Controller with Cabinet, Accessroies	EACH	5	1	1	1	1	1	0
2	Video Detection System	EACH	5	1	1	1	1	1	0
3	Emergency Vehicle Detectoin System	EACH	5	1	1	1	1	1	0
4	Pedestrian Push Button with R10-4A Sign	EACH	36	10	8	6	8	4	0
5	Pedestrian Signal Head - 18 in Hand-Walking Person Symbol; Countdown	EACH	36	10	8	6	8	4	0
6	Traffic Signal Head - 12 in <R,<Y,<FY,<G with Backplate	EACH	8	8	0	0	0	0	0
7	Traffic Signal Head - 12 in R,Y,G with Backplate	EACH	44	11	9	7	7	10	0
8	Traffic Signal Head - 12 in R>,Y>,G> with Backplate	EACH	3	2	0	0	0	1	0
9	Traffic Signal Head - 12 in <R,<Y,<G with Backplate	EACH	7	0	0	1	0	6	0
10	Handhole 24"	EACH	21	5	3	3	3	5	2
11	Handhole 30" x 40" Tub	EACH	6	1	1	1	1	1	1
12	Cable - 5c #14 AWG, Signal Circuts	FEET	3252	1105	662	753	732	0	0
13	Cable - 7c #14 AWG, Signal Circuts	FEET	1078	0	390	234	210	245	0
14	Cable - 12c #14 AWG, Signal Circuts	FEET	4781	1573	465	664	504	1576	0
15	Cable - 2c #14 AWG, Pedestrian Push Buttons	FEET	5834	2014	987	874	1078	882	0
16	Cable - Preemption Wire	FEET	3341	911	225	598	620	989	0
17	Cable - Video Detecton	FEET	3106	851	205	593	566	893	0
18	Cable - Video Power	FEET	3106	851	205	593	566	893	0
19	Cable, Fiber Optic - 12 Multimode	FEET	2875	0	0	0	0	0	2875
20	Cable - 1c #6 AWG, Bare Copper Wire for Ground Circuits	FEET	3154	843	463	524	538	786	0
21	Cable - 1c #6 AWG, Street Lighting	FEET	4775	1626	849	581	0	1719	0
22	Cable - 1c #10 AWG, Tracer Wire	FEET	2875	0	0	0	0	0	2875
23	Pull Rope	FEET	3154	843	463	524	538	786	0
24	Conduit-2 in PVC (HDPE)	FEET	2414	141	71	46	53	162	1941
25	Conduit-3 in PVC (HDPE)	FEET	427	160	84	95	88	0	0
26	Conduit-4 in PVC (HDPE)	FEET	1531	334	104	258	275	467	93
27	Concrete Base - Controller	EACH	5	1	1	1	1	1	0
28	Concrete Base - Pedestal Pole 2 ft Diameter, 3 ft deep	EACH	26	8	5	4	6	3	0
29	Concrete Base, Type A	EACH	4	0	2	1	0	1	0
30	Concrete Base, Type B	EACH	2	1	0	0	1	0	0
31	Concrete Base, Type C	EACH	5	1	1	0	0	3	0
33	Concrete Base, Type E	EACH	1	1	0	0	0	0	0
34	Concrete Base, Type F	EACH	3	1	0	1	1	0	0
35	Pedestal Pole - 10 Ft	EACH	21	5	5	4	5	2	0
36	Pedestal Pole - 17 Ft	EACH	5	3	0	0	1	1	0
37	Mast Arm Pole - 24 ft Mast Arm Length	EACH	1	0	0	0	0	1	0
38	Mast Arm Pole - 26 ft Mast Arm Length	EACH	1	0	0	1	0	0	0
39	Mast Arm Pole - 32 ft Mast Arm Length	EACH	1	0	1	0	0	0	0
40	Mast Arm Pole - 38 ft Mast Arm Length	EACH	1	1	0	0	0	0	0
41	Mast Arm Pole - 43 ft Mast Arm Length	EACH	1	0	0	0	1	0	0
43	Mast Arm Pole - 50 ft Mast Arm Length	EACH	2	0	1	0	0	1	0
44	Mast Arm Pole - 52 ft Mast Arm Length	EACH	1	1	0	0	0	0	0
45	Mast Arm Pole - 72 ft Mast Arm Length	EACH	1	1	0	0	0	0	0
46	Combination Mast Arm Pole - 15 ft Mast Arm Length	EACH	1	0	1	0	0	0	0
47	Combination Mast Arm Pole - 46 ft Mast Arm Length	EACH	1	0	0	0	0	1	0
48	Combination Mast Arm Pole - 50 ft Mast Arm Length	EACH	1	0	0	0	0	1	0
49	Combonatoin Mast Arm Pole - 62 ft Mast Arm Length	EACH	1	1	0	0	0	0	0
50	Combination Dual Mast Arm Pole - 55 ft and 34 ft Mast Arm Lengths	EACH	1	0	0	1	0	0	0
51	Combination Dual Mast Arm Pole - 43 ft and 43 ft Mast Arm Lengths	EACH	1	0	0	0	1	0	0

Mast Arm Pole Footing

	Mast Arm Post	Station	Mast Arm Length	Footing Type	Footing Depth
Grant and 12th	1	200+06	52	**C**	**15**
	3	199+13	62	**E**	**15**
	7	200+32	72	**F**	**16**
	12	199+04	38	**B**	**13**
US 67 and WB Ramps	2	208+05	24	**A**	**11**
	3	208+24	50	**C**	**15**
	5	209+06	46	**C**	**16**
	7	209+21	50	**C**	**16**
Southbound US 67 and 16th	1	216+46	15	**A**	**11**
	2	215+95	50	**C**	**15**
	3	215+95	32	**A**	**11**
Northbound US 67 and 16th	2	1619+75	26	**A**	**11**
	3	1620+01	Dual 34 and 55	**F**	**16**
Northbound US 67 and 17th	2	1623+91	43	**B**	**11**
	4	1624+76	Dual 43 and 43	**F**	**16**



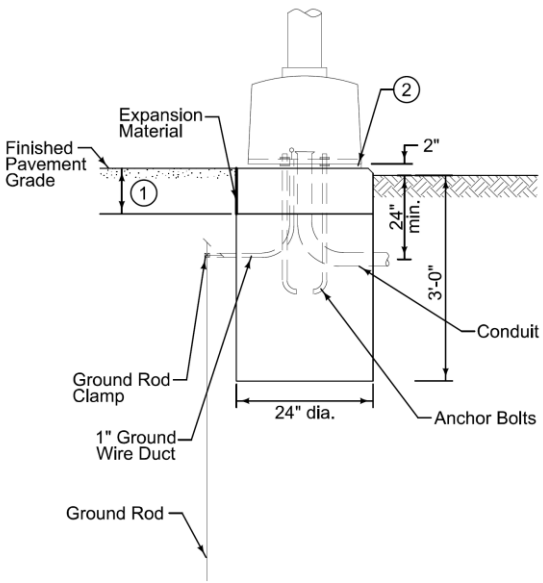


FOOTING DIMENSIONS TABLE						
TYPE	D	W	"V" Bars		S	T
			Count	Size		
A	11'-0"	3'-0"	12	8	8	12"
B	13'-0"	3'-0"	12	8	10	12"
C	15'-0"	3'-0"	12	8	10	12"
D	16'-0"	3'-0"	12	8	10	8"
E	15'-0"	3'-6"	12	10	10	8"
F	16'-0"	3'-6"	12	10	10	8"

Provide footing type as specified in the contract documents.

MAST ARM POLE FOOTING

1. Shape top 11 inches with forms.
2. Install rodent guard or non-shrink grout with weep hole.



PEDESTAL POLE FOOTING

POLE FOOTING DETAILS

SHEET 1 OF 1