

Steven V. Stenger
County Executive



Daniel W. Dreisewerd, P.E., PTOE
Acting Director

Stephanie Leon Streeter, P.E.
Deputy Director

October 4, 2018

ADDENDUM NO. 1

Notice to All Persons and Firms Proposing
to Submit a Bid or Furnish Materials for
Laclede Station Road Resurfacing
St. Louis County Project No. AR-1639
Federal Project No. STP-4901(642)

The construction contract for this project has been revised as follows:

No. 1

Replace Plan Sheets 2, 22, 23, and 27 with revised plan sheets 2, 22, 23, and 27.

REVISED ITEMIZED BID SHEET NOS. 9 OF 12 AND 11 OF 12 ARE ATTACHED AND REFLECT THE CHANGES NOTED IN ITEM NO. 1 ABOVE. FAILURE TO SUBSTITUTE THE ITEMIZED BID SHEETS MAY RESULT IN REJECTION OF THE BID.

ATTENTION BIDDERS: THE ADDENDUM ACKNOWLEDGEMENT IN THE BID DOCUMENTS MUST BE COMPLETED AND SUBMITTED WITH ALL BID PROPOSALS.

A handwritten signature in blue ink, appearing to read "Joseph W. Kulesa".

Joseph W. Kulesa, P.E.
Division Manager, Design

JWK/DAH/jlh

Attachments: Revised Plan Sheets 2, 22, 23, and 27, and Revised Itemized Bid Sheets

SUB-TOTALS	TOTAL	UNIT	ITEM NO.	DESCRIPTION	REMARKS
ROADWAY ITEMS					
1.0	1.0	Each	107-02.00	Railroad Permits, Agreements, and Licenses	Not shown on B sheets.
1.0	1.0	L.S.	202-20.10	Removal of Improvements	Not shown on B sheets.
557.0	557.0	S.Y.	202-22.30	Removal of Rigid Pavement	
271.8	271.8	C.Y.	203-10.00	Class "A" Excavation	
1.0	1.0	L.S.	203-10.30	Land Disturbance Permits	Not shown on B sheets.
658.2	658.2	S.Y.	304-05.04	Type 5 Aggregate Base (4" Thick)	
2552.1	2679.8	Ton	404-12.77	Superpave Asphaltic Concrete Mixture SP125 (PG 76-22)DLP	Includes 5% extra for contingency.
2882.4	3026.6	Ton	404-19.07	Superpave Asphaltic Concrete Mixture SP190 (PG 70-22)D	Includes 5% extra for contingency.
202.7	212.9	Ton	405-30.10	Type "C" Bituminous Concrete (Pavement)	Includes 5% extra for contingency.
10.8	11.4	Ton	405-30.20	Type "D" Bituminous Concrete (Pavement)	Includes 5% extra for contingency.
307.4	322.8	S.Y.	405-30.25	Asphalt Pavement Repair	Includes 5% extra for contingency.
3870.0	4070.0	Gal.	407-10.27	Tack-Emulsified Asphalt (SS-1H)	Includes 5% extra for contingency.
24036.0	24036.0	S.Y.	412-10.04	Pavement Surfacing and Texturing (0" to 4"), Concrete or Asphalt	
6.7	6.7	S.Y.	502-11.76	Remove and Replace Concrete Pavement (6" Non-reinforced), Includes Curbs	
5.4	5.4	S.Y.	502-11.86	Remove and Replace Concrete Pavement (6" Non-reinforced), Excludes Curbs	
386.7	386.7	S.Y.	509-10.08	Concrete Base (8", Non-Reinforced), Very Early Strength	
351.9	351.9	S.Y.	509-11.08	Concrete Base (8" Non-reinforced)	
2.0	2.0	Each	604-20.26	Adjust Grate Inlet to Grade	
13.0	13.0	Each	604-20.30	Adjusting Manhole to Grade	
5.0	5.0	Each	604-90.40	Adjust Inlet Stone to Grade	
6.0	6.0	Each	604-90.50	Replace Precast Inlet Stone and Adjust to Grade	
6.0	6.0	Each	604-90.55	Replace Inlet Lid	
131.0	131.0	L.F.	606-10.10	Guardrail, Type "A"	
2.0	2.0	Each	606-30.95	Crashworthy Guardrail Terminal	
208.0	208.0	S.Y.	608-10.90	Remove and Replace Concrete Median/Island	
180.8	180.8	S.Y.	608-50.96	Remove and Replace Paved Approach (6")	
85.9	85.9	S.Y.	608-50.97	Remove and Replace Paved Approach (7")	
835.0	835.0	L.F.	609-10.93	Remove and Replace Curb and Gutter (Various Widths), Vertical/Mountable	
49.0	49.0	L.F.	609-20.11	Integral Curb (6" Height and Under)	
224.0	224.0	L.F.	609-20.90	Remove and Replace Integral Curb (6" Height and Under)	
1.0	1.0	L.S.	612-30.10	Standard Traffic Control Devices	Not shown on B sheets.
4.0	4.0	Each	612-60.92	Arrow Panel, Type "B" (Noiseless), Rental	Not shown on B sheets.
2.0	2.0	Each	612-70.20	Changeable Message Board (Noiseless), Rental	Not shown on B sheets.
1.0	1.0	L.S.	619-00.00	Mobilization	
258.0	271.0	S.Y.	803-20.00	Strip Sodding	Includes 5% extra for contingency.
1.0	1.0	L.S.	806-45.00	Inlet Protection	Not shown on B sheets.
PEDESTRIAN AND BICYCLE ITEMS					
27.2	27.2	S.Y.	608-60.04	Concrete Sidewalk (4" Thick)	
31.0	31.0	Each	608-60.93	Remove and Replace Concrete Curb Ramp	
751.9	751.9	S.Y.	608-60.94	Remove and Replace Concrete Sidewalk (4" Thick)	
60.3	60.3	S.Y.	608-60.96	Remove and Replace Concrete Sidewalk (6" Thick)	
40.0	40.0	S.F.	608-60.99	Truncated Domes for Curb Ramps (Retrofit Construction)	

SUB-TOTALS	TOTAL	UNIT	ITEM NO.	DESCRIPTION	REMARKS
TRAFFIC SIGNAL ITEMS					
1.0	1.0	Each	904-02.13	Signal Head, Type 3S	
1.0	1.0	Each	904-02.14	Signal Head, Type 4S	
4.0	4.0	Each	904-05.43	Signal Head, Type 3B, Terminal Compartment, and Astro Bracket Mounting	
2.0	2.0	Each	904-05.44	Signal Head, Type 4B, Terminal Compartment, and Astro Bracket Mounting	
2.0	2.0	Each	904-12.13	Signal Head, Type 3S, OL	
1.0	1.0	Each	904-12.14	Signal Head, Type 4S, OL	
8.0	8.0	Each	904-13.43	Signal Head, Type 3B, OL, Terminal Compartment, and Astro Bracket Mounting	
1.0	1.0	Each	904-13.44	Signal Head, Type 4B, OL, Terminal Compartment, and Astro Bracket Mounting	
1.0	1.0	Each	904-22.33	Signal Head, Type 33B OL and Conventional Combination	
14.0	14.0	Each	904-24.01	Signal Head, Type 1S, Pedestrian	
3.0	3.0	Each	904-28.07	Post, Signal, w/Sq. Pedestal Base and Post Cap, 7' Maximum Total Height, Aluminum	
3.0	3.0	Each	904-28.10	Post, Signal, w/Sq. Pedestal Base and Post Cap, 10' Total Height, Aluminum	
1.0	1.0	Each	904-32.24	19' Pole, w/24' Mast Arm, Steel	
2.0	2.0	Each	904-32.28	19' Pole, w/28' Mast Arm, Steel	
1.0	1.0	Each	904-32.34	19' Pole, w/34' Mast Arm, Steel	
1.0	1.0	Each	904-32.38	19' Pole, w/38' Mast Arm, Steel	
1.0	1.0	Each	904-32.40	19' Pole, w/40' Mast Arm, Steel	
1.0	1.0	Each	904-33.44	28' Pole, w/44' Mast Arm, Steel	
2.0	2.0	Each	904-43.88	Controller, Fully Actuated, (8 Phase Timer, in Aluminum Cabinet Approx. 55"H x 44"W x 26"D, Wired for 8 Phase Operation) w/Internal Fiber Optic Modem and Termination Housing, TS2, Type 2, w/Battery Backup	
1.0	1.0	Each	904-45.01	Controller Unit Only, w/Internal Fiber Optic Modem, TS2, Type 2	
14.0	14.0	Each	904-49.22	Detector, Pedestrian Push Button, APS, Freezeproof	
10.0	10.0	Each	904-49.35	Detector, Vehicle Induction Loop, Card Rack Mtg., 2 Channel, w/Delay and Extension Timing and Relay Outputs	
1.0	1.0	Each	904-49.51	Pan Tilt Zoom (PTZ) Internet Protocol Video Surveillance Camera System (Camera w/Bracket, Managed Ethernet Switch, and Misc. Cables)	
1.0	1.0	Each	904-49.52	Software License, PTZ Camera	
546.0	546.0	L.F.	904-51.00	Conduit, 1"	
8.0	8.0	L.F.	904-51.50	Conduit, 1-1/2"	
456.0	456.0	L.F.	904-52.00	Conduit, 2"	
9.0	9.0	L.F.	904-53.00	Conduit, 3"	
407.0	407.0	L.F.	904-54.00	Conduit, 4"	
4.0	4.0	Each	904-74.99	Conduit Repair (locate broken conduit, excavate, remove existing cable, repair/replace conduit, reinstall cable, backfill and restore) (Does not include sidewalk or pavement removal and replacement)	
1580.0	1580.0	L.F.	904-82.06	Cable, Power, #6 Gauge, 1 Conductor	
1020.0	1020.0	L.F.	904-83.05	Cable, Signal, #14 Gauge, 5 Conductor	
4150.0	4150.0	L.F.	904-83.07	Cable, Signal, #14 Gauge, 7 Conductor	
220.0	220.0	L.F.	904-84.00	Wire, Stranded Ground, #6 Gauge	
1420.0	1420.0	L.F.	904-85.05	Cable, Detector Loop, #14 Gauge, 1 Conductor, w/Tube Jacket (In Conduit and Pull Boxes)	
13420.0	13420.0	L.F.	904-85.06	Cable, Detector Loop, #14 Gauge, 1 Conductor, w/Tube Jacket (In Sawed Slot)	
4340.0	4340.0	L.F.	904-85.18	Cable, Push Button and/or Detector Loop Lead-In, #18 Gauge, 2 Conductor (Shielded)	
300.0	300.0	L.F.	904-85.34	Cable, Communication, #18 Gauge, 4 Conductor (APS)	
1130.0	1130.0	L.F.	904-85.36	Cable, Communication, Fiber Optic, 36 Fibers (30 Single-Mode and 6 Multi-Mode)	
220.0	220.0	L.F.	904-85.81	Cable, Communication, Power, PTZ Camera, #24 Gauge, 4 Pair (Shielded)	
3.0	3.0	Each	904-88.01	Pull Box, Single, Concrete	
2.0	2.0	Each	904-88.02	Pull Box, Double, Concrete	
1.0	1.0	Each	904-90.17	Preformed Pull Box (17"W x 30"L x 26"min.H), Reinforced Polymer Concrete w/1' Concrete Apron	
3.0	3.0	Each	904-91.43	Base, Type P-3, Concrete	
3.0	3.0	Each	904-91.56	Base, Type B-6, Concrete	
1.0	1.0	Each	904-91.57	Base, Type B-7, Concrete	
3.0	3.0	Each	904-91.59	Base, Type B-9, Concrete	
3.0	3.0	Each	904-91.73	Base, Type C-3, Concrete	
2.0	2.0	Each	904-91.88	Base, Type D-8PH, Concrete	
2.0	2.0	Each	904-93.10	Temporary Signal Installation	
2.0	2.0	Each	904-93.20	Temporary Traffic Detection System	
33.0	33.0	Each	904-95.10	Opening Drilled in Existing Concrete Pull Box	
3.0	3.0	Each	904-95.20	Removal of Concrete Single Pull Box	
1.0	1.0	Each	904-95.30	Removal of Preformed Pull Box	
10.0	10.0	Each	904-96.20	Removal of Concrete Base	
2.0	2.0	Each	904-96.21	Removal of Concrete Controller Base	
2.0	2.0	Each	904-97.20	Removal of Signal Equipment (Intersection)	
2.0	2.0	Each	904-98.50	Relocation of Existing Mast Arm	
2.0	2.0	Each	904-98.70	Relocation of Existing Signal Head	
100.0	100.0	L.F.	904-98.81	Relocation of Existing Interconnect Cable	
72.0	72.0	Each	904-99.09	Fiber-Optic Termination	
72.0	72.0	Each	904-99.10	Fiber-Optic Fusion Splice	

COUNTY PROJECT NO. AR-1639

FEDERAL PROJECT NO. STP-4901(642)

E-W GATEWAY TIP NO. 6607J-17

MSD:

MSD BASE MAP: 22J, 23J, 23K

REVISIONS:

REV	DATE	BY	APP	DESCRIPTION
1				ADDENDUM NO. 1

DISCLAIMER OF RESPONSIBILITY: The responsibility for the design and construction of the project is limited to this sheet, and I am not responsible for any other drawings, reports or other documents prepared or intended to be used for any part of the engineering project or survey.

JAMES W. DIETZEL
 PE-2014023907
 PROFESSIONAL ENGINEER

DATE: 10/3/2018

DESIGN DIVISION
 1060 N. WILSON HIGH BLVD.
 ST. LOUIS, MISSOURI 63132
 (314) 615-8543

JAMES W. DIETZEL
 PROFESSIONAL ENGINEER
 LICENSE NO. 2014023907

SAINT LOUIS COUNTY
 TRANSPORTATION
 PUBLIC WORKS
 Damien W. Dreger, P.E., PTOE
 Acting Director

LACLEDE STATION ROAD
 RESURFACING

SUMMARY OF QUANTITIES
 (SHEET 1 OF 4)

DESIGNED: K. J. JONES

DRAWN: K. J. JONES

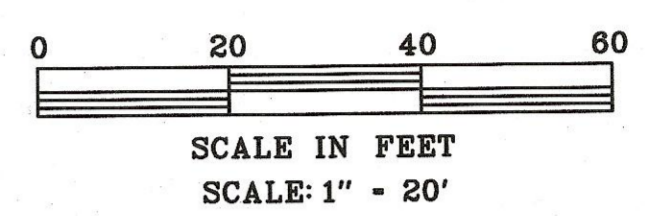
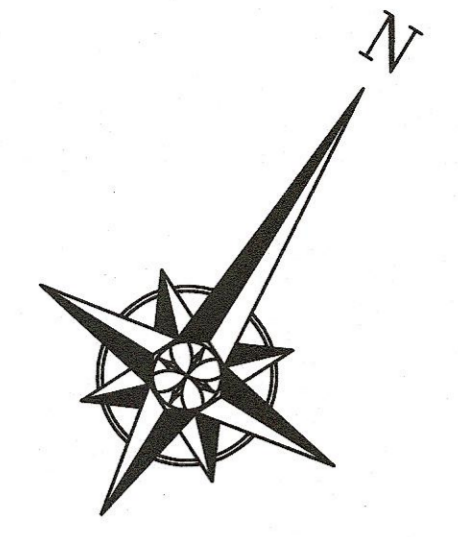
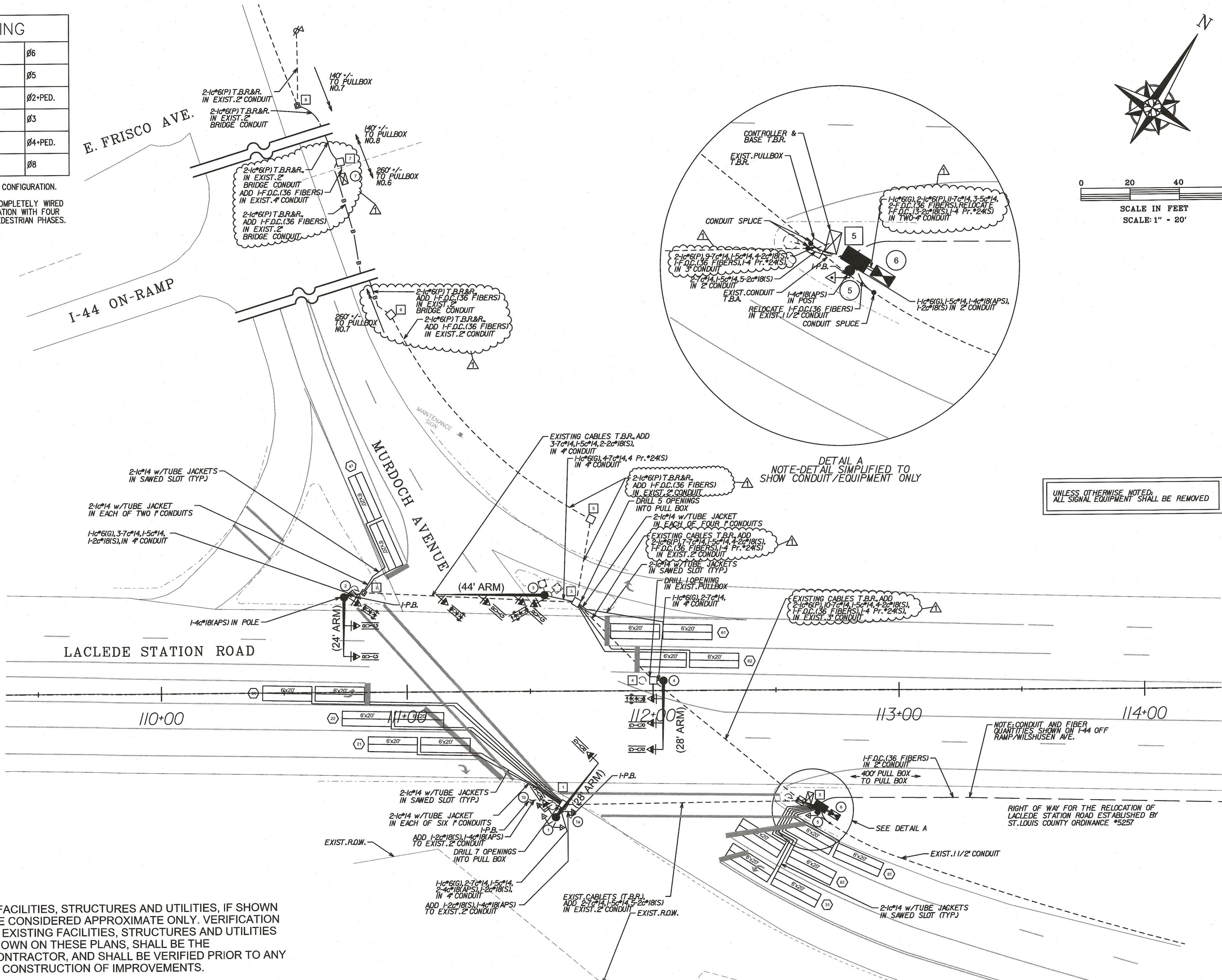
CHECKED: J. W. DIETZEL

SHEET SEQUENCE: 2 OF 31

SIGNAL PHASING

S.B. THRU - LACLEDE STATION ROAD	Ø6
N.B. LEFT - LACLEDE STATION RD.	Ø5
N.B. THRU - LACLEDE STATION ROAD w/ PED. EAST SIDE	Ø2+PED.
W.B. LEFT - MURDOCH AVE.	Ø3
E.B. THRU - MURDOCH AVE. w/ PED. SOUTH SIDE	Ø4+PED.
W.B. THRU - MURDOCH AVE.	Ø8

1. THE CONTROLLER UNIT SHALL BE NEMA CONFIGURATION.
2. THE CABINET BACK PANEL SHALL BE COMPLETELY WIRED WITH HARNESSES FOR 8-PHASE OPERATION WITH FOUR OVERLAPS AND FOUR CONCURRENT PEDESTRIAN PHASES.

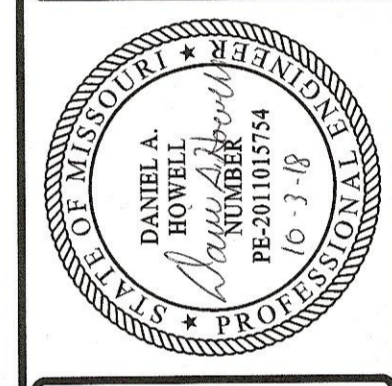


UNLESS OTHERWISE NOTED,
ALL SIGNAL EQUIPMENT SHALL BE REMOVED

UTILITIES NOTE:
EXISTING UNDERGROUND FACILITIES, STRUCTURES AND UTILITIES, IF SHOWN ON THESE PLANS, SHALL BE CONSIDERED APPROXIMATE ONLY. VERIFICATION OF THE LOCATIONS OF ALL EXISTING FACILITIES, STRUCTURES AND UTILITIES EITHER SHOWN OR NOT SHOWN ON THESE PLANS, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND SHALL BE VERIFIED PRIOR TO ANY GRADING, EXCAVATION OR CONSTRUCTION OF IMPROVEMENTS.

COUNTY PROJECT NO. AR-1639	
FEDERAL PROJECT NO. STP-4901(642)	
E-W GATEWAY TIP NO. 6607J-17	
MSD:	
MSD BASE MAP:	
REV	DATE BY APP
1	10/2/18 DWH/CBD
DESCRIPTION	ADDENDUM 1

I, the undersigned, hereby certify that the documents herein are true and correct copies of the original documents on file in my office. I am a duly Licensed Professional Engineer in the State of Missouri, License No. PE-2011015754.



DATE: 10-3-18

DESIGNED BY:
D.A. HOWELL
1050 N. WILSON BLVD.
ST. LOUIS, MISSOURI 63132
(314) 815-8543

PREPARED BY:
DANIEL W. DRAISNERD, P.E., PTOE
Acting Director
SAINT LOUIS COUNTY
TRANSPORTATION
PUBLIC WORKS

LACLEDE STATION ROAD
RESURFACING

LACLEDE STATION ROAD
& MURDOCH AVENUE
INTERSECTION DETAILS

DESIGNED:	D.A. HOWELL
DRAWN:	D.A. HOWELL
CHECKED:	E. WILLIAMS
SHEET SEQUENCE:	22 OF 31

TRAFFIC SIGNAL ITEMS			
ITEM NO.	DESCRIPTION	UNIT	QUANT.
904-12.13	Signal Head, Type 3S, OL	Each	2
904-12.14	Signal Head, Type 4S, OL	Each	1
904-13.43	Signal Head, Type 3B, OL, Terminal Compartment, and Astro Bracket Mounting	Each	8
904-13.44	Signal Head, Type 4B, OL, Terminal Compartment, and Astro Bracket Mounting	Each	1
904-24.01	Signal Head, Type 1S, Pedestrian	Each	4
904-28.10	Post, Signal, w/Sq. Pedestal Base and Post Cap, 10' Total Height, Aluminum	Each	1
904-32.24	19' Pole, w/24' Mast Arm, Steel	Each	1
904-32.28	19' Pole, w/28' Mast Arm, Steel	Each	2
904-33.44	28' Pole, w/44' Mast Arm, Steel	Each	1
904-43.88	Controller, Fully Actuated, (8 Phase Timer, in Aluminum Cabinet Approx. 55"H x 44"W x 26"D, Wired for 8 Phase Operation) w/Internal Fiber Optic Modem and Termination Housing TS2, Type 2, w/Battery Backup	Each	1
904-49.22	Detector, Pedestrian Push Button, APS, Freezeproof	Each	4
904-49.35	Detector, Vehicle Induction Loop, Card Rack Mtg., 2 Channel, w/Delay and Extension Timing and Relay Outputs	Each	6
904-49.51	Pan Tilt Zoom (PTZ) Internet Protocol Video Surveillance Camera System (Camera w/ Bracket, Managed Ethernet Switch, and Misc. Cables)	Each	1
904-49.52	Software License, PTZ Camera	Each	1
904-51.00	Conduit, 1"	L.F.	168
904-51.50	Conduit, 1 1/2"	L.F.	8
904-52.00	Conduit, 2"	L.F.	12
904-53.00	Conduit, 3"	L.F.	9
904-54.00	Conduit, 4"	L.F.	42
904-74.99	Conduit Repair (Locate broken conduit, excavate, remove existing cable, repair/replace conduit, reinstall cable, backfill and restore) (Does not include sidewalk or pavement removal and replacement.)	Each	1
904-82.06	Cable, Power, #6 Gauge, 1 Conductor	L.F.	1580
904-83.05	Cable Signal, #14 Gauge, 5 Conductor	L.F.	470
904-83.07	Cable Signal, #14 Gauge, 7 Conductor	L.F.	2600
904-84.00	Wire, Stranded Ground, #6 Gauge	L.F.	90
904-85.05	Cable, Detector Loop, #14 Gauge, 1 Conductor, w/Tube Jacket (In Conduit and Pull Boxes)	L.F.	450
904-85.06	Cable, Detector Loop, #14 Gauge, 1 Conductor, w/Tube Jacket (In Sawed Slot)	L.F.	4730
904-85.18	Cable, Push Button and/or Detector Loop Lead-In, #18 Gauge, 2 Conductor (Shielded)	L.F.	1680
904-85.34	Cable, Communication, #18 Gauge, 4 Conductor (APS)	L.F.	100
904-85.36	Cable, Communication, Fiber Optic, 36 Fibers (30 Single-Mode and 6 Multi-mode)	L.F.	650
904-85.81	Cable, Communication, Power, PTZ Camera, #24 Gauge, 4 Pair (Shielded)	L.F.	220
904-88.02	Pull Box, Double, Concrete	Each	1
904-91.56	Base, Type B-6, Concrete	Each	3
904-91.59	Base, Type B-9, Concrete	Each	1
904-91.73	Base, Type C-3, Concrete	Each	1
904-91.88	Base, Type D-8PH, Concrete	Each	1
904-93.10	Temporary Signal Installation	Each	1
904-93.20	Temporary Traffic Detection System	Each	1
904-95.10	Opening Drilled in Existing Concrete Pull Box	Each	13
904-95.20	Removal of Concrete Single Pull Box	Each	1
904-96.20	Removal of Concrete Base	Each	5
904-96.21	Removal of Concrete Controller Base	Each	1
904-97.20	Removal of Signal Equipment (Intersection)	Each	1
904-98.81	Relocation of Existing Interconnect Cable	L.F.	100
904-99.09	Fiber Optic Termination	Each	60
904-99.10	Fiber Optic Fusion Splices	Each	60

PULL BOX SCHEDULE			
BOX NUMBER	BOX TYPE		
	CONCRETE	PREFORMED	PREFORMED W/ CONC. APRON
1 3 4	EXIST. SINGLE (U.I.P.)		
5	DOUBLE		
2		EXISTING U.I.P.	

GROUND RODS SHALL BE CONSIDERED INCIDENTAL WITH NO DIRECT PAYMENT BEING MADE.

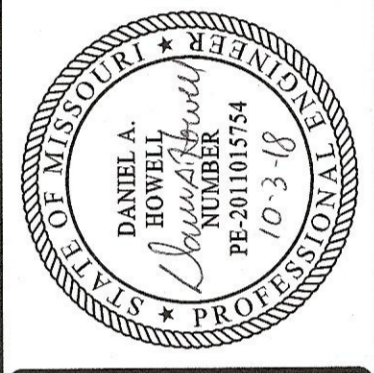
SIGNAL BASE AND EQUIPMENT SCHEDULE			
BASE NO.	CONCRETE BASE TYPE	MAST ARM OR POST TYPE	SIGNAL EQUIPMENT TYPE
1	B-6	STEEL TRAFFIC SIGNAL POLE w/28' ARM	1-3B 1-3S 2-1S PED.
1a	EXIST. P-3 (U.I.P.)	EXIST. ALUMINUM SIGNAL POST & CAP W/SQUARE PEDESTAL BASE (TOTAL MAX. HEIGHT 7') (U.I.P.)	1-PUSH BUTTON (T.B.R.&R.)
1b	EXIST. P-3 (U.I.P.)	EXIST. ALUMINUM SIGNAL POST & CAP W/SQUARE PEDESTAL BASE (TOTAL MAX. HEIGHT 7') (U.I.P.)	1-PUSH BUTTON (T.B.R.&R.)
2	B-6	STEEL TRAFFIC SIGNAL POLE w/24' ARM	2-3B 1-3S 1-1S PED. 1-PUSH BUTTON
3	B-9	STEEL TRAFFIC SIGNAL POLE w/44' ARM	3-3B 1-4S 1-PTZ CAMERA
4	B-6	EXIST. STEEL TRAFFIC SIGNAL POLE w/28' ARM (U.I.P.)	2-3B 1-4B
5	C-3	ALUMINUM SIGNAL POST CAP W/SQUARE PEDESTAL BASE (TOTAL HEIGHT 10')	1-1S PED. 1-PUSH BUTTON
6	D-8PH		CONTROLLER GROUND MOUNT ALUMINUM CABINET (APPROX. 55"Hx44"Wx26"D W/BATTERY BACKUP)

INDUCTION LOOP DETECTOR SCHEDULE				
LOOP NO.	SIZE AND TYPE OF LOOP		CARD POSITION IN RACK	CHANNEL USED
	STANDARD (3-TURNS)	QUADRUPOLE (2-4-2)		
21		2-6'x20'	2	A
22		2-6'x20'	2	B
31		2-6'x20'	3	A
41		2-6'x20'	4	A
51		6'x20'	5	A
61		2-6'x20'	6	A
62		2-6'x20'	6	B
81		2-6'x20'	8	A
82		2-6'x20'	8	B
CARDS PROVIDED FOR FUTURE USE			-	
OPEN SLOTS IN CARD RACK			1, 7	

COUNTY PROJECT NO. AR-1639
 FEDERAL PROJECT NO. STP-4901(642)
 E-W GATEWAY TIP NO. 6607J-17
 MSD:
 MSD BASE MAP:

REV. DATE	BY	APP. DATE	DESCRIPTION
1	DAH/CBD		ADDENDUM 1

DISCLAIMER OF LIABILITY: I hereby specify that the documents intended to be limited to this sheet, and I hereby disclaim any responsibility for other documents or instruments used for any part of the engineering project or survey.



DATE: 10-3-18

PREPARED BY:
 DESIGN DIVISION
 1060 N. LINDBERGH BLVD.
 1ST FLOOR
 ST. LOUIS, MISSOURI 63132
 (314) 615-8843
 DANIEL A. HOWELL
 PROFESSIONAL ENGINEER
 LICENSE NO. 2011015754

St. Louis County
TRANSPORTATION
PUBLIC WORKS
 Daniel W. Dreisewerd, P.E., PTOE
 Acting Director

LACLEDE STATION ROAD
 RESURFACING
 LACLEDE STATION ROAD
 & MURDOCH AVENUE
 INTERSECTION QUANTITIES

DESIGNED: D.A. HOWELL
 DRAWN: D.A. HOWELL
 CHECKED: E. WILLIAMS
 SHEET SEQUENCE: 23 OF 31

TRAFFIC SIGNAL ITEMS			
ITEM NO.	DESCRIPTION	UNIT	QUANT.
904-02.13	Signal Head, Type 3S	Each	1
904-02.14	Signal Head, Type 4S	Each	1
904-05.43	Signal Head, Type 3B, Terminal Compartment, and Astro Bracket Mounting	Each	4
904-05.44	Signal Head, Type 4B, Terminal Compartment, and Astro Bracket Mounting	Each	2
904-22.33	Signal Head, Type 33B, OL and Conventional Combination	Each	1
904-24.01	Signal Head, Type 1S, Pedestrian	Each	6
904-28.07	Post, Signal, w/Sq. Pedestal Base and Post Cap, 7' Maximum Total Height, Aluminum	Each	3
904-28.10	Post, Signal, w/Sq. Pedestal Base and Post Cap, 10' Total Height, Aluminum	Each	1
904-32.34	19' Pole, w/34' Mast Arm, Steel	Each	1
904-32.38	19' Pole, w/38' Mast Arm, Steel	Each	1
904-32.40	19' Pole, w/40' Mast Arm, Steel	Each	1
904-43.88	Controller, Fully Actuated, (8 Phase Timer, in Aluminum Cabinet Approx. 55"H x 44"W x 26"D, Wired for 8 Phase Operation) w/Internal Fiber Optic Modem and Termination Housing TS2, Type 2, w/Battery Backup	Each	1
904-49.22	Detector, Pedestrian Push Button, Freezeproof	Each	6
904-49.35	Dectector, Vehicle Induction Loop, Card Rack Mtg., 2 Channel, w/Delay and Extension Timing and Relay Outputs	Each	4
904-51.00	Conduit, 1"	L.F.	231
904-52.00	Conduit, 2"	L.F.	440
904-54.00	Conduit, 4"	L.F.	286
904-74.99	Conduit Repair (locate broken conduit, excavate, remove existing cable, repair/replace conduit, reinstall cable, backfill and restore) (Does not include sidewalk or pavement removal and replacement)	Each	1
904-83.05	Cable, Signal, #14 Gauge, 5 Conductor	L.F.	550
904-83.07	Cable, Signal, #14 Gauge, 7 Conductor	L.F.	1450
904-84.00	Wire, Stranded Ground, #6 Gauge	L.F.	110
904-85.05	Cable, Detector Loop, #14 Gauge, 1 Conductor, w/Tube Jacket (In 1" Conduit and Pull Boxes)	L.F.	580
904-85.06	Cable, Detector Loop, #14 Gauge, 1 Conductor, w/Tube Jacket (In Sawed Slot)	L.F.	3080
904-85.18	Cable, Push Button and/or Detector Loop Lead-In, #18 Gauge, 2 Conductor (Shielded)	L.F.	1820
904-85.34	Cable, Communication, #18 Gauge, 4 Conductor (APS)	L.F.	160
904-85.36	Cable, Communication, Fiber Optic, 36 Fibers (30 Single-Mode and 6 Multi-mode)	L.F.	480
904-88.01	Pull Box, Single, Concrete	Each	2
904-88.02	Pull Box, Double, Concrete	Each	1
904-91.43	Base, Type P-3, Concrete	Each	3
904-91.57	Base, Type B-7, Concrete	Each	1
904-91.59	Base, Type B-9, Concrete	Each	2
904-91.73	Base, Type C-3, Concrete	Each	1
904-91.88	Base, Type D-8PH, Concrete	Each	1
904-93.10	Temporary Signal Installation	Each	1
904-93.20	Temporary Traffic Detection System	Each	1
904-95.10	Opening Drilled in Existing Concrete Pull Box	Each	4
904-95.20	Removal of Concrete Single Pull Box	Each	2
904-95.30	Removal of Preformed Pull Box	Each	1
904-96.20	Removal of Concrete Base	Each	5
904-96.21	Removal of Concrete Controller Base	Each	1
904-97.20	Removal of Signal Equipment (Intersection)	Each	1
904-99.09	Fiber-Optic Termination	Each	12
904-99.10	Fiber-Optic Fusion Splices	Each	12

PULL BOX SCHEDULE			
BOX NUMBER	BOX TYPE		
	CONCRETE	PREFORMED	PREFORMED W/ CONC. APRON
1 2	SINGLE		
3	EXIST. SINGLE		
4	DOUBLE		

GROUND RODS SHALL BE CONSIDERED INCIDENTAL WITH NO DIRECT PAYMENT BEING MADE.

SIGNAL BASE AND EQUIPMENT SCHEDULE			
BASE NO.	CONCRETE BASE TYPE	MAST ARM OR POST TYPE	SIGNAL EQUIPMENT TYPE
1	B-7	STEEL TRAFFIC SIGNAL POLE w/34' ARM	1-4B w/BP (ALL 12") 2-3B w/BP (ALL 12") 2-1S PED. 1-PUSH BUTTON
1a	P-3	ALUMINUM SIGNAL POST & CAP W/SQUARE PEDESTAL BASE (TOTAL MAX. HEIGHT 7')	1-PUSH BUTTON
2	C-3	POST, SIGNAL, w/SQ. PEDESTAL BASE AND POST CAP, 10' TOTAL HEIGHT, ALUMINUM	1-1S PED. 1-PUSH BUTTON
3	B-9	STEEL TRAFFIC SIGNAL POLE w/38' ARM	1-33B w/BP (ALL 12") 1-OL, 1-3B w/BP (ALL 12") 1-3S w/BP (ALL 12") 1-1S PED. 1-PUSH BUTTON
4	B-9	STEEL TRAFFIC SIGNAL POLE w/40' ARM	1-4B w/BP (ALL 12") 1-3B w/BP (ALL 12") 1-4S w/BP (ALL 12") 2-1S PED.
4a	P-3	ALUMINUM SIGNAL POST & CAP W/SQUARE PEDESTAL BASE (TOTAL MAX. HEIGHT 7')	1-PUSH BUTTON
4b	P-3	ALUMINUM SIGNAL POST & CAP W/SQUARE PEDESTAL BASE (TOTAL MAX. HEIGHT 7')	1-PUSH BUTTON
5	D-8PH		CONTROLLER GROUND MOUNT ALUMINUM CABINET (APPROX. 55"Hx44"Wx26"D W/BATTERY BACKUP)

INDUCTION LOOP DETECTOR SCHEDULE				
LOOP NO.	SIZE AND TYPE OF LOOP		CARD POSITION IN RACK	CHANNEL USED
	STANDARD (3-TURNS)	QUADRUPOLE (2-4-2)		
11		2-6'x20'	1	A
12		2-6'x20'	1	B
21		2-6'x20'	2	A
22		2-6'x20'	2	B
23		2-6'x20'	2	B
41		EXIST. 2-6'x20'	4	A
42		EXIST. 2-6'x20'	4	B
61		2-6'x20'	6	A
62		2-6'x20'	6	B
CARDS PROVIDED FOR FUTURE USE			-	
OPEN SLOTS IN CARD RACK			3, 5, 7, 8	

COUNTY PROJECT NO. AR-1639
 FEDERAL PROJECT NO. STP-4901(642)
 E-W GATEWAY TIP NO. 6607J-17
 MSD:
 MSD BASE MAP:
 REVISIONS:
 REV. DATE BY APP. DESCRIPTION
 1 10/2/18 DAH C8D ADDENDUM 1
 1 10/2/18 DAH C8D ADDENDUM 1
 DISCLAIMER OF RESPONSIBILITY:
 I, the undersigned, hereby certify that the information provided to me for the purpose of preparing this sheet, and I am not responsible for any other drawings, specifications, estimates, reports or other documents prepared or intended to be prepared for any part of the engineering project or survey.
 STATE OF MISSOURI
 DANIEL A. HOWELL
 PROFESSIONAL ENGINEER
 LICENSE NO. 1018754
 10-3-18
 DATE: 10-3-18
 PREPARED BY:
 DESIGN DIVISION
 1050 N. LINDBERGH BLVD.
 1ST FLOOR
 ST. LOUIS, MISSOURI 63132
 (314) 915-6540
 DANIEL A. HOWELL
 PROFESSIONAL ENGINEER
 LICENSE NO. 2011015754
 Saint Louis COUNTY
 TRANSPORTATION
 PUBLIC WORKS
 Daniel W. Dreisweid, P.E., P.TOE
 Acting Director
 LACLEDE STATION ROAD RESURFACING
 LACLEDE STATION ROAD & WILSHUSEN AVENUE INTERSECTION QUANTITIES
 DESIGNED: D.A. HOWELL
 DRAWN: D.A. HOWELL
 CHECKED: E. WILLIAMS
 SHEET SEQUENCE: 27 OF 31

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
ROADWAY ITEMS					
107-02.00	Railroad Permits, Agreements, and Licenses	EACH	1		
202-20.10	Removal of Improvements	L.S.	1		
202-22.30	Removal of Rigid Pavement	S.Y.	557		
203-10.00	Class "A" Excavation	C.Y.	271.8		
203-10.30	Land Disturbance Permits	L.S.	1		
304-05.04	Type 5 Aggregate Base (4" Thick)	S.Y.	658.2		
404-12.77	Superpave Asphaltic Concrete Mixture SP125 (PG 76-22)DLP	TON	2679.8		
404-19.07	Superpave Asphaltic Concrete Mixture SP190 (PG 70-22)D	TON	3026.6		
405-30.10	Type "C" Bituminous Concrete (Pavement)	TON	212.9		

1 Added per Addendum No. 1

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
ROADWAY ITEMS					
405-30.20	Type "D" Bituminous Concrete (Pavement)	TON	11.4		
405-30.25	Asphalt Pavement Repair	S.Y.	322.8		
407-10.27	Tack-Emulsified Asphalt (SS-1H)	GAL.	4070		
412-10.04	Pavement Surfacing and Texturing (0" to 4"), Concrete or Asphalt	S.Y.	24036		
502-11.76	Remove and Replace Concrete Pavement (6" Non-reinforced), Includes Curbs	S.Y.	6.7		
502-11.86	Remove and Replace Concrete Pavement (6" Non-reinforced), Excludes Curbs	S.Y.	5.4		
509-10.08	Concrete Base (8", Non-Reinforced), Very Early Strength	S.Y.	386.7		
509-11.08	Concrete Base (8" Non-reinforced)	S.Y.	351.9		
604-20.26	Adjust Grate Inlet to Grade	EACH	2		

 **Added per Addendum No. 1**

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
ROADWAY ITEMS					
604-20.30	Adjusting Manhole to Grade	EACH	13		
604-90.40	Adjust Inlet Stone to Grade	EACH	5		
604-90.50	Replace Precast Inlet Stone and Adjust to Grade	EACH	6		
604-90.55	Replace Inlet Lid	EACH	6		
606-10.10	Guardrail, Type "A"	L.F.	131		
606-30.95	Crashworthy Guardrail Terminal	EACH	2		
608-10.90	Remove and Replace Concrete Median/Island	S.Y.	208		
608-50.96	Remove and Replace Paved Approach (6")	S.Y.	180.8		
608-50.97	Remove and Replace Paved Approach (7")	S.Y.	85.9		

 **Added per Addendum No. 1**

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
ROADWAY ITEMS					
609-10.93	Remove and Replace Curb and Gutter (Various Widths), Vertical/Mountable	L.F.	835		
609-20.11	Integral Curb (6" Height and Under)	L.F.	49		
609-20.90	Remove and Replace Integral Curb (6" Height and Under)	L.F.	224		
612-30.10	Standard Traffic Control Devices	L.S.	1		
612-60.92	Arrow Panel, Type "B" (Noiseless), Rental	EACH	4		
612-70.20	Changeable Message Board (Noiseless), Rental	EACH	2		
619-00.00	Mobilization	L.S.	1		
803-20.00	Strip Sodding	S.Y.	271		
806-45.00	Inlet Protection	L.S.	1		

 **1 Added per Addendum No. 1**

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SUBTOTAL - ROADWAY ITEMS					
COUNTY TRAFFIC SIGNAL ITEMS					
904-02.13	Signal Head, Type 3S	EACH	1		
904-02.14	Signal Head, Type 4S	EACH	1		
904-05.43	Signal Head, Type 3B, Terminal Compartment, and Astro Bracket Mounting	EACH	4		
904-05.44	Signal Head, Type 4B, Terminal Compartment, and Astro Bracket Mounting	EACH	2		
904-12.13	Signal Head, Type 3S, OL	EACH	2		
904-12.14	Signal Head, Type 4S, OL	EACH	1		
904-13.43	Signal Head, Type 3B, OL, Terminal Compartment, and Astro Bracket Mounting	EACH	8		
904-13.44	Signal Head, Type 4B, OL, Terminal Compartment, and Astro Bracket Mounting	EACH	1		

 **Added per Addendum No. 1**

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
COUNTY TRAFFIC SIGNAL ITEMS					
904-22.33	Signal Head, Type 33B OL and Conventional Combination	EACH	1		
904-24.01	Signal Head, Type 1S, Pedestrian	EACH	14		
904-28.07	Post, Signal, w/Sq. Pedestal Base and Post Cap, 7' Maximum Total Height, Aluminum	EACH	3		
904-28.10	Post, Signal, w/Sq. Pedestal Base and Post Cap, 10' Total Height, Aluminum	EACH	3		
904-32.24	19' Pole, w/24' Mast Arm, Steel	EACH	1		
904-32.28	19' Pole, w/28' Mast Arm, Steel	EACH	2		
904-32.34	19' Pole, w/34' Mast Arm, Steel	EACH	1		
904-32.38	19' Pole, w/38' Mast Arm, Steel	EACH	1		
904-32.40	19' Pole, w/40' Mast Arm, Steel	EACH	1		

 **Added per Addendum No. 1**

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
COUNTY TRAFFIC SIGNAL ITEMS					
904-33.44	28' Pole, w/44' Mast Arm, Steel	EACH	1		
904-43.88	Controller, Fully Actuated, (8 Phase Timer, in Aluminum Cabinet Approx. 55"H x 44"W x 26"D, Wired for 8 Phase Operation) w/Internal Fiber Optic Modem and Termination Housing, TS2, Type 2, w/Battery Backup	EACH	2		
904-45.01	Controller Unit Only, w/Internal Fiber Optic Modem, TS2, Type 2	EACH	1		
904-49.22	Detector, Pedestrian Push Button, APS, Freezeproof	EACH	14		
904-49.35	Detector, Vehicle Induction Loop, Card Rack Mtg., 2 Channel, w/Delay and Extension Timing and Relay Outputs	EACH	10		
904-49.51	Pan Tilt Zoom (PTZ) Internet Protocol Video Surveillance Camera System (Camera w/Bracket, Managed Ethernet Switch, and Misc. Cables)	EACH	1		
904-49.52	Software License, PTZ Camera	EACH	1		
904-51.00	Conduit, 1"	L.F.	546		
904-51.50	Conduit, 1-1/2"	L.F.	8		

 **Added per Addendum No. 1**

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

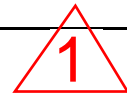
ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
COUNTY TRAFFIC SIGNAL ITEMS					
904-52.00	Conduit, 2"	L.F.	456		
904-53.00	Conduit, 3"	L.F.	9		
904-54.00	Conduit, 4"	L.F.	407		
904-74.99	Conduit Repair (locate broken conduit, excavate, remove existing cable, repair/replace conduit, reinstall cable, backfill and restore) (Does not include sidewalk or pavement removal and replacement)	EACH	4		
904-82.06	Cable, Power, #6 Gauge, 1 Conductor	L.F.	1580		
904-83.05	Cable, Signal, #14 Gauge, 5 Conductor	L.F.	1020		
904-83.07	Cable, Signal, #14 Gauge, 7 Conductor	L.F.	4150		
904-84.00	Wire, Stranded Ground, #6 Gauge	L.F.	220		
904-85.05	Cable, Detector Loop, #14 Gauge, 1 Conductor, w/Tube Jacket (In Conduit and Pull Boxes)	L.F.	1420		

 **Added per Addendum No. 1**

**ITEMIZED BID
 BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)
 COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
COUNTY TRAFFIC SIGNAL ITEMS					
904-85.06	Cable, Detector Loop, #14 Gauge, 1 Conductor, w/Tube Jacket (In Sawed Slot)	L.F.	13420		
904-85.18	Cable, Push Button and/or Detector Loop Lead-In, #18 Gauge, 2 Conductor (Shielded)	L.F.	4340		
904-85.34	Cable, Communication, #18 Gauge, 4 Conductor (APS)	L.F.	300		
904-85.36	Cable, Communication, Fiber Optic, 36 Fibers (30 Single-Mode and 6 Multi-Mode)	L.F.	1130		
904-85.81	Cable, Communication, Power, PTZ Camera, #24 Gauge, 4 Pair (Shielded)	L.F.	220		
904-88.01	Pull Box, Single, Concrete	EACH	3		
904-88.02	Pull Box, Double, Concrete	EACH	2		
904-90.17	Preformed Pull Box (17"W x 30"L x 26"min.H), Reinforced Polymer Concrete w/1' Concrete Apron	EACH	1		
904-91.43	Base, Type P-3, Concrete	EACH	3		



 Added per Addendum No. 1

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
COUNTY TRAFFIC SIGNAL ITEMS					
904-91.56	Base, Type B-6, Concrete	EACH	3		
904-91.57	Base, Type B-7, Concrete	EACH	1		
904-91.59	Base, Type B-9, Concrete	EACH	3		
904-91.73	Base, Type C-3, Concrete	EACH	3		
904-91.88	Base, Type D-8PH, Concrete	EACH	2		
904-93.10	Temporary Signal Installation	EACH	2		
904-93.20	Temporary Traffic Detection System	EACH	2		
904-95.10	Opening Drilled in Existing Concrete Pull Box	EACH	33		
904-95.20	Removal of Concrete Single Pull Box	EACH	3		

 **Added per Addendum No. 1**

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
COUNTY TRAFFIC SIGNAL ITEMS					
904-95.30	Removal of Preformed Pull Box	EACH	1		
904-96.20	Removal of Concrete Base	EACH	10		
904-96.21	Removal of Concrete Controller Base	EACH	2		
904-97.20	Removal of Signal Equipment (Intersection)	EACH	2		
904-98.50	Relocation of Existing Mast Arm	EACH	2		
904-98.70	Relocation of Existing Signal Head	EACH	2		
904-98.81	Relocation of Existing Interconnect Cable	L.F.	100		
904-99.09	Fiber-Optic Termination	EACH	72		
904-99.10	Fiber-Optic Fusion Splice	EACH	72		



 **Added per Addendum No. 1**

**ITEMIZED BID
BID OPTION 1 OF 1**

FEDERAL PROJECT NO. STP-4901(642)

COUNTY PROJECT NO. AR-1639

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT
SUBTOTAL - COUNTY TRAFFIC SIGNAL ITEMS					
PEDESTRIAN AND BICYCLE ITEMS					
608-60.04	Concrete Sidewalk (4" Thick)	S.Y.	27.2		
608-60.93	Remove and Replace Concrete Curb Ramp	EACH	31		
608-60.94	Remove and Replace Concrete Sidewalk (4" Thick)	S.Y.	751.9		
608-60.96	Remove and Replace Concrete Sidewalk (6" Thick)	S.Y.	60.3		
608-60.99	Truncated Domes for Curb Ramps (Retrofit Construction)	S.F.	40		
SUBTOTAL - PEDESTRIAN AND BICYCLE ITEMS					
PROJECT TOTAL - BID OPTION 1 OF 1					

 **Added per Addendum No. 1**