

September 19, 2020

ADDENDUM #1

**NOTICE TO ALL BIDDERS FOR
CITY OF WINCHESTER**

ITB #202012 – New Traffic Signal at Adams/Legge

This Addendum forms a part of the Contract Documents and modifies the original bidding documents for ITB #202012 dated August 2020. **Bidders shall acknowledge receipt of the Addendum in the space provided on the Bid Form and return a signed copy with your bid.**

This Addendum consists of 8 total pages. The following information shall modify and clarify the Contract Documents:

1. The completion date for the project is hereby revised to 300 calendar days following the Notice to Proceed.
2. The Bid Form has been revised and is attached.
3. The Drawing has been revised and is attached.
4. The written Questions and Answers are binding and hereby made a part of the Contract Documents.

This Addendum must be signed and returned to the Finance Department – Purchasing Division, 4th Floor Rouss City Hall, 15 North Cameron Street, Winchester, VA 22601 by **2:00 p.m. local time on September 30, 2020** with your BID.

Receipt of Addendum #1 to Invitation to Bid #202012 is acknowledged by my signature below:

Company Name: _____

Authorized Representative: _____

Address: _____

Telephone: _____ FAX: _____

**BID FORM
NEW TRAFFIC SIGNAL AT ADAMS/LEGGE INTERSECTION
ITB# 202012**

REVISED 9-19-2020

This Bid is submitted to:

City of Winchester, Virginia
Finance Department - Purchasing Division
Rouss City Hall, 1st Floor
15 North Cameron Street
Winchester, Virginia 22601

In submitting this Bid, bidder acknowledges that the bidder has examined copies of the following Contract Documents:

BIDDING DOCUMENTS

- Invitation to Bid
- Instructions to Bidders
- Bid Form
- Bid Bond
- Non-Collusion Affidavit
- Contract
- Performance Bond
- Labor and Material Payment Bond
- Notice of Intent to Award
- Notice of Award
- Notice to Proceed
- City of Winchester Required General Terms and Conditions
- General Conditions
- Supplement to General Conditions
- Special Terms and Conditions

TECHNICAL SPECIFICATIONS

- Signal Mast Arms, Poles, Luminaire Arms, and Sign Supports
- Emergency Vehicle Preemption Equipment
- Traffic Signal Cabinets
- Traffic Signal Controllers
- Uninterruptible Power Supply
- Video Detection Equipment
- Signal Head Sections
- LED Edge-Lit Internally Illuminated Street Name Signs
- Wireless Broadband Equipment

DRAWINGS

ADDENDA:

<u>NUMBER</u>	<u>DESCRIPTION</u>	<u>DATE</u>
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Receipt of all of above is hereby acknowledged.

CONTRACTOR: _____

BY (SIGNATURE): _____

NAME AND TITLE: _____

DATE: _____

BID ITEMS/QUANTITIES

- (a) The Contractor shall provide all unit prices or lump sum prices for all bid items on the Bid Form herein. **If a unit price or lump sum price is omitted or left blank the bid and bidder shall be non-responsive.** The bid forms designate which prices are for *Install* only work, complete and in place, (i.e. assumes equipment and/ or materials will be supplied by the City). All other bid prices are for Furnish and Install work, complete and in place.
- (b) The quantities shown for unit bid items are based upon the best information available at time of preparation of these bid documents and are established for the purpose of obtaining a bid price. No adjustments to the bid prices based on changes to quantities will be considered. All bid prices will be held throughout the duration of the contract regardless of any increase or decrease in bid quantity.
- (c) Emergency work shall be negotiated with a maximum allowable amount of 50% over the bid price by item. This excludes all lump sum bid items.
- (d) All other bid items not listed or described in the Contract Documents will be negotiated between the City and the Contractor before the time of need. Once a negotiated price is established, it will be used for the remainder of the contract.

The undersigned Bidder proposes to complete all work in accordance with the Contract Documents for the following unit prices:

City of Winchester
New Traffic Signal at Adams/Legge Intersection
BID TABLE

ITEM NO.	DESCRIPTION	UNITS	ESTIMATED QUANTITY	UNIT COST	TOTAL COST
1	MOBILIZATION	LUMP SUM	1		
2	DEMOLITION OF EXISTING ASPHALT OR CONCRETE, INCLUDES DISPOSAL AND TEMPORARY RESTORATION	LUMP SUM	1		
3	WORK ZONE TRAFFIC CONTROL MANAGEMENT	LUMP SUM	1		
4	ROCK EXCAVATION	CUBIC YARD	7		
5	UTILITIES TEST PIT EXCAVATION PAVED AREA	EACH	2		
6	SIGN PANEL	SQUARE FEET	81		
7	PEDESTAL POLE PF-2 12'	EACH	1		
8	CONCRETE FOUNDATION SIGNAL POLE PF-8	CUBIC YARD	21		
9	CONCRETE FOUNDATION PF-2	EACH	1		
10	CONCRETE FOUNDATION CF-1	EACH	1		
11	SIGNAL MAST ARM POLE, TYPE I	EACH	1		
12	SIGNAL MAST ARM POLE, TYPE III	EACH	1		
13	SIGNAL MAST ARM POLE, TYPE IV	EACH	1		
14	MAST ARM 40'	EACH	1		
15	MAST ARM 49'	EACH	2		
16	MAST ARM 60'	EACH	1		
17	VIDEO DETECTION CAMERA CABLE	LINEAR FEET	545		
17a	VIDEO DETECTION CAMERA Y CABLE (BNC TO 2 WIRE)	EACH	3		
18	EVP DETECTION SYSTEM 4-WAY	EACH	1		
19	EVP DETECTOR CABLE	LINEAR FEET	545		
20	14/4 CONDUCTOR CABLE	LINEAR FEET	4600		
21	ILLUMINATED STREET NAME	EACH	4		

	SIGN, ONE LINE				
22	CONDUCTOR CABLE #6 AWG	LINEAR FEET	30		
23	HANGER ASSEMBLY SMB-3, TWO WAY	EACH	4		
24	HANGER ASSEMBLY SM-3 ONE WAY IN LINE	EACH	10		
25	REMOVE EXISTING SIGN PANEL	EACH	7		
26	TRAFFIC SIGNALIZATION ACCESSIBLE PEDESTRIAN PUSHBUTTON w/BLUETOOTH	EACH	8		
27	PEDESTRIAN SIGNAL HEAD SP-8	EACH	8		
28	LUMINAIRE ARM - 20 FEET	EACH	2		
29	ELECTRICAL SERVICE WORK PAD	EACH	1		
30	LUMINAIRE 190 WATT LED POLE-MOUNT	EACH	2		
31	JUNCTION BOX JB-S1	EACH	2		
32	JUNCTION BOX JB-S2	EACH	3		
33	JUNCTION BOX JB-S3	EACH	1		
34	ELECT. SER. GRD. ELECTRODE 10'	EACH	4		
35	1" PVC CONDUIT	LINEAR FEET	85		
36	1 1/4" METAL CONDUIT	LINEAR FEET	15		
37	BORED CONDUIT 2"	LINEAR FEET	590		
38	BORED CONDUIT 3"	LINEAR FEET	1015		
39	2" PVC CONDUIT	LINEAR FEET	120		
40	3" PVC CONDUIT	LINEAR FEET	140		
41	TRENCH EXCAVATION ECI-1	LINEAR FEET	95		
42	TRENCH EXCAVATION ECI-2	LINEAR FEET	40		
43	TEST BORE	EACH	3		
44	4 CAMERA VIDEO DETECTION SYSTEM	EACH	1		
45	ELECTRICAL SERVICE	EACH	1		
46	12" LED, RED	EACH	9		
47	12" LED, RED ARROW	EACH	2		

48	12" LED, YELLOW	EACH	9		
49	12" LED, YELLOW ARROW	EACH	5		
50	12" LED, GREEN	EACH	9		
51	12" LED, GREEN ARROW	EACH	2		
52	BASE MOUNTED CABINET	EACH	1		
53	TRAFFIC SIGNAL CONTROLLER	EACH	1		
54	UNINTERRUPTIBLE POWER SUPPLY	EACH	1		
54b	UNINTERRUPTIBLE POWER CABINET	EACH	1		
55	UNINTERRUPTIBLE POWER SUPPLY BATTERY	EACH	6		
56	HANGER ASSEMBLY SM-3 ONE WAY CLUSTER	EACH	1		
57	REMOVE EXISTING SIGN POST AND FOUNDATION	EACH	5		
58	ENCOM 5.8 GHZ ANTENNA & RADIO, WITH CABLE	EACH	1		
59	12/2 CONDUCTOR TRAY CABLE	LINEAR FEET	545		
TOTAL FOR ALL WORK					

TOTAL BID: \$ _____

IN WORDS:

CONTRACTOR: _____

BY: (SIGNATURE) _____

NAME AND TITLE: _____

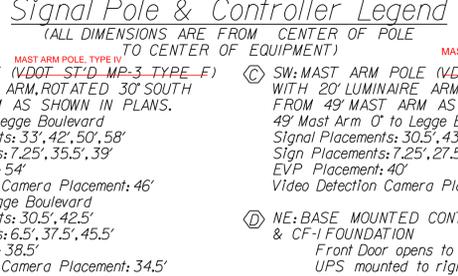
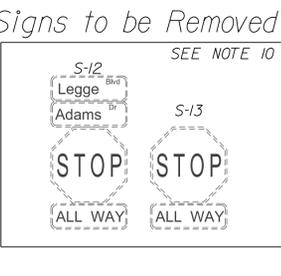
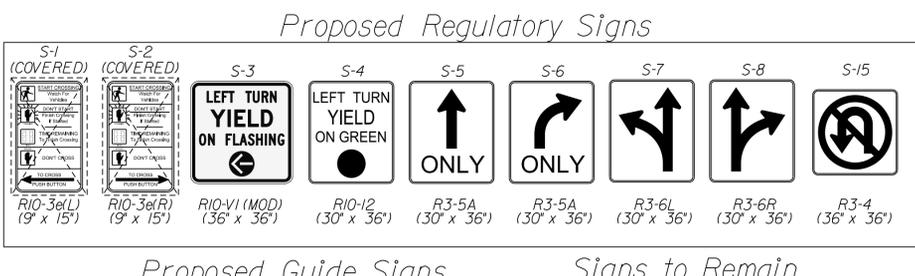
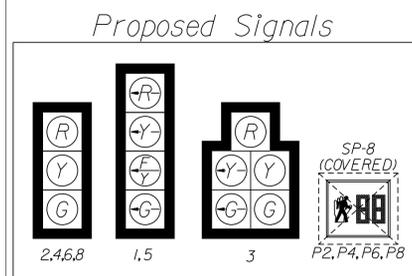
DATE: _____

ADDRESS: _____

TELEPHONE: _____

CURRENT VIRGINIA CONTRACTOR REGISTRATION NUMBER: _____

NOTE: REQUIRED BID GUARANTEE MUST BE ENCLOSED WITH THIS BID PROPOSAL.



Clearance Chart

R/W	CLEARANCE	N/E	P/S
1	1	2	3
G	G	G	G
G	Y	R	R
-G	-Y	-R	-FYA
-G	-Y	G	G
-G	-Y	R	R
W	W	W	W
W	FDW	DW	DW

Cable & Conduit Legend

2 - 3' CONDUITS FOR TRAFFIC SIGNAL
1 - 2' CONDUIT FOR TRAFFIC SIGNAL
2 - 1/4" FOR SIGNAL HEADS 1,6
2 - 1/4" FOR PED HEADS P6,P8
2 - 1/4" FOR PUSH BUTTONS
1 - 1/4" FOR ILLUMINATED SIGN S-11
1 - EPDC FOR PREEMPTION EVP-6
1 - 1/4" FOR PREEMPTION CONFIRMATION LIGHT
1 - VIDEO CAMERA DETECTION LEAD-IN CABLE
3 - 1/2" AWG (EGC)

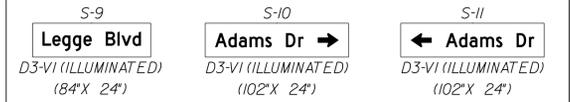
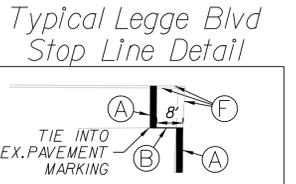


Image Sensing Units

2 DETECTS PHASES 2,5
4 DETECTS PHASE 4
6 DETECTS PHASES 1,6
8 DETECTS PHASES 3,8

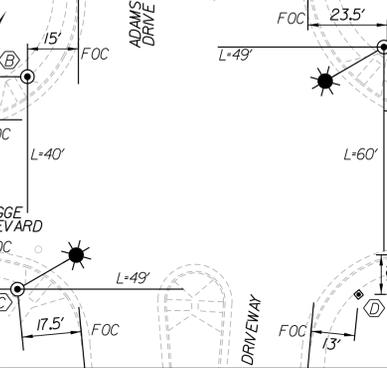
Pavement Marking Legend

A Type B, Class 1, White, 24" Width
B Type B, Class 1, White, 4" Width
C Elongated Left Turn Arrow
D Elongated Thru/Left Turn Arrow
E Elongated Thru/Right Turn Arrow
F Eradicate Existing Linear Pavement Markings
G Eradicate Existing Nonlinear Pavement Markings



Pole Location Diagram

(ALL DIMENSIONS ARE FROM CENTER OF POLE TO TANGENTIAL FACE-OF-CURB)



Signal Plan Notes

- THE CURB RAMPS, SIDEWALKS, CURB WORK, AND CROSSWALKS SHALL BE COMPLETED IN THE FUTURE BY OTHERS.
- INSTALL PROPOSED NEMA TS-2, TYPE 1, BASE-MOUNTED CONTROLLER CABINET AND CF-1 FOUNDATION. MOUNT ELECTRICAL SERVICE ON THE LEFT SIDE OF THE CABINET. MOUNT UNINTERRUPTIBLE POWER SUPPLY (UPS) CABINET TO RIGHT SIDE OF CABINET.
- ALL ELECTRICAL SERVICE SHALL BE METERED. ELECTRICAL SERVICE SHALL BE 120V/240V SINGLE PHASE 3-WIRE SYSTEM.
- THE PEDESTAL POLE (PF-2) SHALL BE 12' IN HEIGHT. PEDESTRIAN SIGNAL HEADS SHALL BE SP-8 LED COUNTDOWN AND MOUNTED PER VDOT STANDARD SMB-3.
- ALL PEDESTRIAN SIGNALS AND PUSHBUTTON SIGNS SHALL BE COVERED. PUSHBUTTONS SHALL BE DEACTIVATED.
- ALL PROPOSED MAST ARM POLES, PEDESTAL POLES, AND CABINETS SHALL BE PAINTED JET BLACK (RAL 9005)
- PAVEMENT MARKINGS SHALL BE INSTALLED PER LATEST MUTCD AND VIRGINIA MUTCD SUPPLEMENTS, AS WELL AS THE 2016 VDOT ROAD AND BRIDGE SPECIFICATIONS.
- THE FLASHING YELLOW ARROW (SIGNALS 1,5) SHALL BE PROGRAMMED TO HAVE THE FOLLOWING TRANSITION:
 - PROTECTED LEFT-TURN PHASE - GREEN ARROW DISPLAYED
 - CHANGE INTERVAL - STEADY YELLOW ARROW DISPLAYED
 - ALL-RED CLEARANCE INTERVAL - STEADY RED ARROW DISPLAYED
 - PERMISSIVE LEFT-TURN PHASE - FLASHING YELLOW ARROW DISPLAYED
- ALL SIGNAL POLE-MOUNTED ROADWAY LUMINAIRES SHALL BE MOUNTED AT A HEIGHT OF 30-FT ABOVE THE ROADWAY. FIXTURES SHALL BE LATEST GENERATION PHILIPS-LUMEC RFL190W112LED4K-T-R3M-UNIV-DMG-FAWS-RCD-SP-2-BK, OR EQUAL.
- ALL GROUND-MOUNTED SIGN PANELS TO BE REMOVED SHALL BE SALVAGED AND DELIVERED TO THE CITY. WHERE EXISTING GROUND-MOUNTED SIGNS ARE TO BE REMOVED, CONTRACTOR SHALL ALSO REMOVE THE SIGN POST AND FOUNDATION, UNLESS OTHERWISE NOTED ON THE PLAN.
- INSTALL 5.8 GHz COMBINATION RADIO/ANTENNA ON THE UPRIGHT OF POLE B, AND ORIENT IT TO RECEIVE OPTIMAL SIGNAL COMMUNICATION FROM THE ANTENNA INSTALLED AT THE INTERSECTION OF S PLEASANT VALLEY DRIVE AND ADAMS BOULEVARD.

Additional Cable & Conduit Legend

2 - 3' CONDUITS FOR TRAFFIC SIGNAL (BORED)
1 - 2' CONDUIT FOR TRAFFIC SIGNAL (BORED)
2 - 1/4" FOR SIGNAL HEADS 1,6
2 - 1/4" FOR PED HEADS P6,P8
2 - 1/4" FOR PUSH BUTTONS
1 - 1/4" FOR ILLUMINATED SIGN S-11
1 - EPDC FOR PREEMPTION EVP-6
1 - 1/4" FOR PREEMPTION CONFIRMATION LIGHT
1 - VIDEO CAMERA DETECTION LEAD-IN CABLE
3 - 1/2" AWG (EGC)

1 - 2' CONDUIT FOR LIGHTING
1 - 1/2" TRAY CABLE FOR LED ROADWAY LUMINAIRE
1 - 1/2" AWG (EGC)

3 - 3' CONDUITS FOR TRAFFIC SIGNAL (BORED)
1 - 2' CONDUIT FOR TRAFFIC SIGNAL (BORED)
2 - 1/4" FOR SIGNAL HEADS 3,8
2 - 1/4" FOR PED HEADS P2,P8
2 - 1/4" FOR PUSH BUTTONS
1 - 1/4" FOR ILLUMINATED SIGN S-9
1 - EPDC FOR PREEMPTION EVP-6
1 - 1/4" FOR PREEMPTION CONFIRMATION LIGHT
1 - VIDEO CAMERA DETECTION LEAD-IN CABLE
3 - 1/2" AWG (EGC)

1 - 2' CONDUIT FOR LIGHTING
1 - 1/2" TRAY CABLE FOR LED ROADWAY LUMINAIRE
1 - 1/2" AWG (EGC)

3 - 3' CONDUITS FOR TRAFFIC SIGNAL (BORED)
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2 - 1/4" FOR SIGNAL HEADS 3,8
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1 - 1/4" FOR PREEMPTION CONFIRMATION LIGHT
1 - VIDEO CAMERA DETECTION LEAD-IN CABLE
3 - 1/2" AWG (EGC)

1 - 2' CONDUIT FOR LIGHTING
1 - 1/2" TRAY CABLE FOR LED ROADWAY LUMINAIRE
1 - 1/2" AWG (EGC)

1 - 3' CONDUIT FOR TRAFFIC SIGNAL
2 - 1/4" FOR PED HEADS P2,P4
2 - 1/4" FOR PUSH BUTTONS
1 - 1/2" AWG (EGC)

3 - 3' CONDUITS FOR TRAFFIC SIGNAL (BORED)
1 - 2' CONDUIT FOR TRAFFIC SIGNAL (BORED)
2 - 1/4" FOR SIGNAL HEADS 3,8
4 - 1/4" FOR PED HEADS P2,P4,P8
4 - 1/4" FOR PUSH BUTTONS
1 - 1/4" FOR ILLUMINATED SIGN S-9
1 - EPDC FOR PREEMPTION EVP-8
1 - 1/4" FOR PREEMPTION CONFIRMATION LIGHT
1 - VIDEO CAMERA DETECTION LEAD-IN CABLE
4 - 1/2" AWG (EGC)

1 - 2' CONDUIT FOR LIGHTING (BORED)
1 - 1/2" TRAY CABLE FOR LED ROADWAY LUMINAIRE
1 - 1/2" AWG (EGC)

2 - 3' CONDUITS FOR TRAFFIC SIGNAL
1 - 2' CONDUIT FOR TRAFFIC SIGNAL
4 - 1/4" FOR SIGNAL HEADS 2,4,5,6
2 - 1/4" FOR PED HEAD P4,P6
2 - 1/4" FOR PUSH BUTTONS
2 - 1/4" FOR ILLUMINATED SIGNS S-9,S-10
2 - EPDCs FOR PREEMPTION EVP-2,EVP-4
2 - 1/4" FOR PREEMPTION CONFIRMATION LIGHTS
2 - VIDEO CAMERA DETECTION LEAD-IN CABLES
1 - ANTENNA CABLE
3 - 1/2" AWG (EGC)

1 - 2' CONDUIT FOR LIGHTING
1 - 1/2" TRAY CABLE FOR LED ROADWAY LUMINAIRE
1 - 1/2" AWG (EGC)

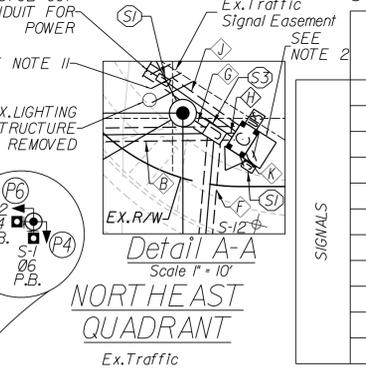
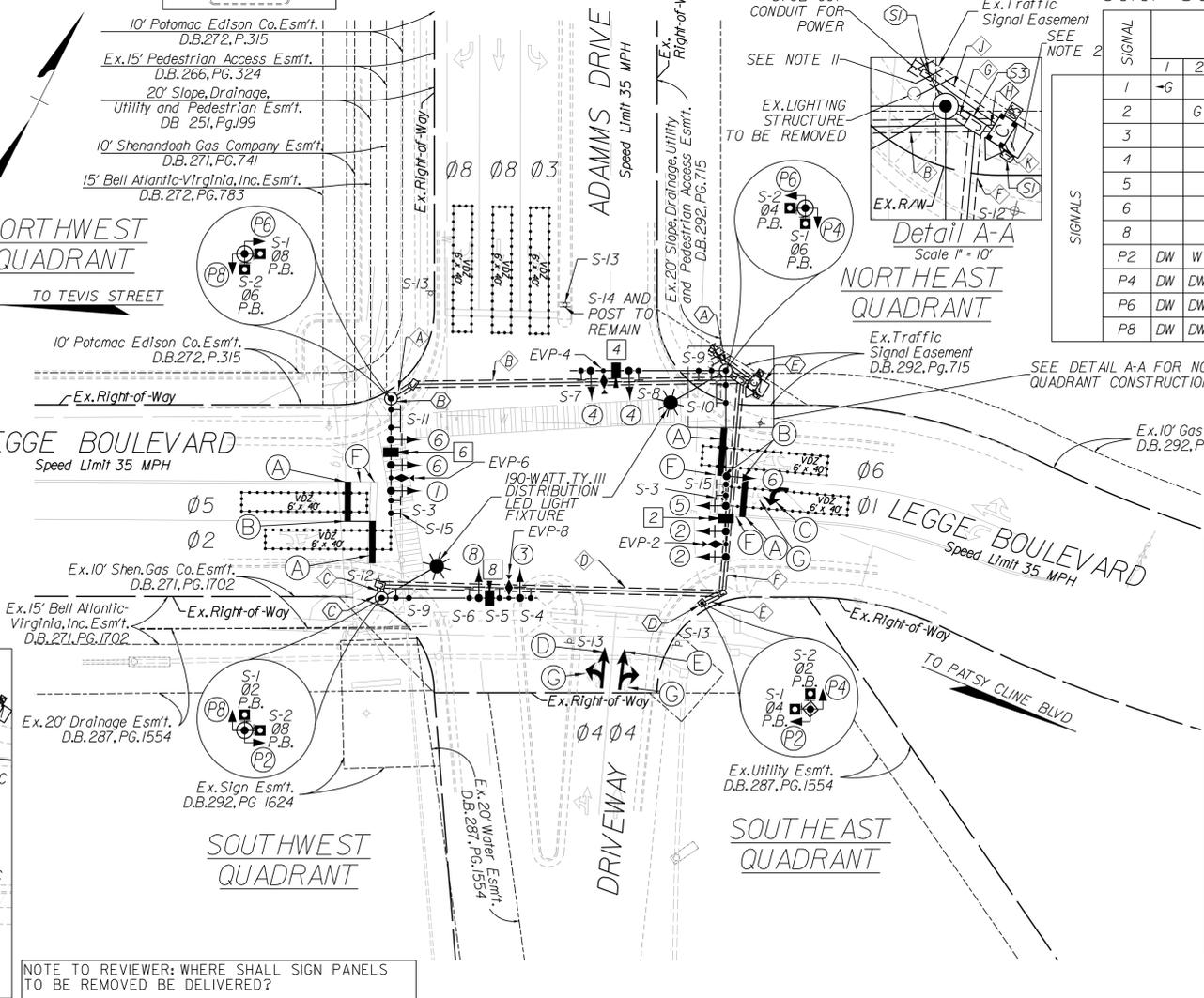
3 - 3' CONDUITS FOR TRAFFIC SIGNAL
1 - 2' CONDUIT FOR TRAFFIC SIGNAL
8 - 1/4" FOR SIGNAL HEADS 1,2,3,4,5,6,8
8 - 1/4" FOR PED HEADS P2,P4,P6,P8
8 - 1/4" FOR PUSH BUTTONS
4 - 1/4" FOR ILLUMINATED SIGN S-9,S-10,S-11
4 - EPDCs FOR PREEMPTION EVP-2,4,6,8
4 - 1/4" FOR PREEMPTION CONFIRMATION LIGHTS
4 - VIDEO CAMERA DETECTION LEAD-IN CABLES
1 - ANTENNA CABLE
4 - 1/2" AWG (EGC)

1 - 2' CONDUIT FOR LIGHTING
1 - 1/2" TRAY CABLE FOR LED ROADWAY LUMINAIRE
1 - 1/2" AWG (EGC)

1 - 1/4" CONDUIT (M)
3 - 1/2" AWG (EGC) FOR ELECTRICAL SERVICE

1 - 1" CONDUIT
1 - 1/2" AWG (EGC) FOR SYS. GROUNDING

ACRONYM/ABBREVIATION DEFINITION:
EGC - Equipment Grounding Conductor
(M) - Metal Conduit



Color Sequence Chart

SIGNAL	PHASES								COMBINATIONS								FLASH
	1	2	3	4	5	6	8	I-5	I-6	2-5	2-6	3-8	4-8				
1	-G							-G	-G		-FYA			-Y			
2		G								G				Y			
3			-G								-G	G		R			
4				G									G	R			
5					-G			-G		-G	-FYA			-Y			
6						G			G					Y			
8							G					G	G	R			
P2	DW	W	DW	DW	DW	DW	DW	DW	DW	W	W	DW	DW	BLANK			
P4	DW	DW	DW	W	DW	DW	DW	DW	DW	DW	DW	DW	W	BLANK			
P6	DW	DW	DW	DW	DW	W	DW	DW	W	DW	W	DW	DW	BLANK			
P8	DW	DW	DW	DW	DW	DW	W	DW	DW	DW	DW	W	W	BLANK			

JUNCTION BOX LEGEND

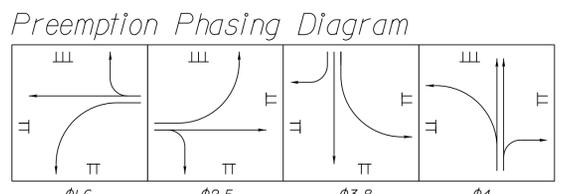
All Junction Boxes shall conform to S'd. JB-S2 unless otherwise noted on the plans.

(S) Denotes S'd. JB-S3
(SI) Denotes S'd. JB-S1

Initial Timing Chart

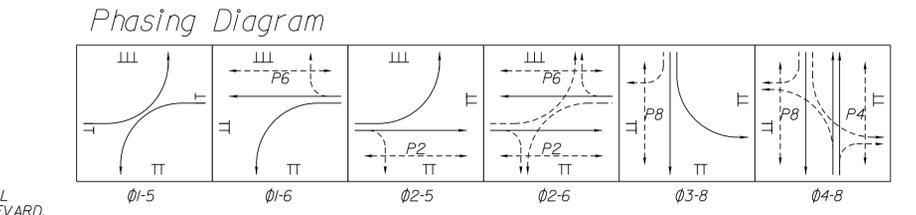
PHASE	1	2	3	4	5	6	7	8
MOVEMENT	WB LT LEGGE	EB THRU/RT LEGGE	SB LT ADAMS	WB LT/THRU/RT DRIVEWAY	EB LT ADAMS	WB THRU/RT ADAMS		SB LT/THRU/RT LEGGE
PHASE ON	X	X	X	X	X	X		X
PHASE OFF							X	
INTERVAL	PHASE TIMINGS							
MIN GR	7.0	20.0	5.0	10.0	7.0	20.0		10.0
PASSAGE	3.0	4.0	3.0	3.0	3.0	4.0		3.0
YELLOW	4.0	4.0	4.0	4.0	4.0	4.0		4.0
RED	2.5	2.5	2.5	2.5	2.5	2.5		2.5
MAX 1	20.0	55.0	20.0	30.0	20.0	55.0		30.0
MAX 2	0.0	0.0	0.0	0.0	0.0	0.0		0.0
MIN GAP	3.0	4.0	3.0	3.0	3.0	4.0		3.0
TIME BEFORE REDUCION	0.0	0.0	0.0	0.0	0.0	0.0		0.0
TIME TO REDUCE	0.0	0.0	0.0	0.0	0.0	0.0		0.0
PED WALK	0.0	0.0						0.0
PED CLEARANCE	0.0	0.0						0.0
MODE	NON-LOCK	MIN RECALL	NON-LOCK	NON-LOCK	NON-LOCK	MIN RECALL		NON-LOCK

THESE PLANS ARE UNFINISHED AND SHALL NOT BE USED FOR CONSTRUCTION



CONTROLLER PROGRAMMING NOTE

1. CONTROLLER SHALL BE PROGRAMMED TO AVOID YELLOW TRAP.



LEGEND

PROPOSED TRAFFIC SIGNAL CABINET W/ CAB. MOUNTED ELECTRICAL SERVICE (LEFT), UNINTERRUPTIBLE POWER SUPPLY (RIGHT), AND PAD

TRAFFIC SIGNAL WITH BACKPLATE

OVERHEAD SIGN

PREEMPTION SENSOR W/ CONFIRMATION LIGHT

VIDEO DETECTION CAMERA

PROPOSED MAST ARM POLE AND FOUNDATION

PROPOSED PF-2 PEDESTAL POLE AND FOUNDATION

P.B. PEDESTRIAN PUSHBUTTON AND PEDESTRIAN SIGN

PROPOSED 16 IN. PEDESTRIAN SIGNAL

PROPOSED JUNCTION BOX

PROPOSED CONDUIT

ANTENNA

REVISIONS

NO.	DATE	DESCRIPTION

TITLE: LEGGE BOULEVARD & ADAMS DRIVE NEW SIGNAL INSTALLATION PLAN

PROJECT: CITY OF WINCHESTER, VIRGINIA ROUSS CITY HALL 15 NORTH CAMERON STREET WINCHESTER, VIRGINIA 22601 TEVIS STREET EXTENSION & ROADWAY IMPROVEMENTS

SABRA & ASSOCIATES, INC. A MEAD & HUNT COMPANY
8150 LEESBURG PIKE SUITE 650 VIENNA, VA 22182 (703) 946-8866 WWW.SABRA-ASSOCIATES.COM

SURVEY: P-L, PLC C.I.:
DRAWN BY: MMM JOB NO.: 17-12 Task 4
SCALE: 1"=25' DATE: 08/14/2020
SHEET: 01/01