SURVEYED BY
SUPERVISED BY
DESIGNED BY

Section IV - Traffic Signals

## SUMMARY OF QUANTITIES

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT

REVISED	FHWA REGION	STATE	FEDERAL AID	STATE	
	REGION	SIHIE		ROUTE	

Appendix IV A-4

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INT.	NTERSECTION	Install Controller	Electrical Service SE - 3								Signal Pole MP - I Comb. Lumin.		8/2 Conductor Cable	14/1 Enclosed Conductor Cable	Cable	Cable	14/7 Conductor Coble	14/2 Canductor Cobie Shielded	Pedestrian Pushbuttan	Hanger Assembly SM-3, One Way	Hanger Assembly SWB-2. One Way	Hanger Assembly SWB-2, Two Wey	Honger Assembly SNB-3, One Way	Honger Assenbly SNB-3, Two Woy	Saw Cul	Sign Panel	Install Sign		Remove Exist. Signal Equipment Int. No. 2	Jurdion Box JB - IA	3A	Junction Box JB - 5A	F Wetal Conduit	r Condult	Z Condult	3 Condulf	4 Condut	Trench Excavation ECI - 1	Jacked 6" Plpe	Energency Preemption 4 - way	Test Bore					
NO.	UNIT	EA	EA	EA	EA.	EA	CY.	EA	EA	EA	EA	EA	ĿF.	LF.	ĿF.	LF.	LF.	LF.	EA.	EA	EA	EA.	EA	EA	uF.	SF.	EA.	LS.	LS.	EA	EA	EA	LF.	UF.	UF.	UF.	UF.	UF.	ĿГ.	EA	EA					
1	MAIN ST. AND RTE.58	1	1	50	10	3	14	1	1	2	ı	12	15	3236	1644	1892	2991	3918	9	16	2	$\neg$	2	2	1187	96	8	L.S.	L.S.	-	11	2	66	15	998	252	202	1523	409		4			=	=	_
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PROPOSED		EXISTING	PROPOSED	EXISTING
•	Metal Pole	•	Pedestal Pole - Metal	0
•	Wood Pole	0	☐ Pedestal Pole - Concrete	0
•	Concrete Pole	Φ	Metal Pedestal Mount; Control Cabinet	CO
₽	Mast Arm Metal Signal Pole	8 0	Concrete Pedestal Mount; Control Cabinet	<b>E</b> (0)
•	Wood Pole w/Metal Mast Arm	<b>~</b>	■ Junction Box	⊠.
<del>} =</del> ●	Combination Luminaire - Signal Metal Pole	<del>∑ 0</del> ⊚	Man Hole	
· * •	Combination Luminaire - Signal Wood Pole	<del>* "</del> O	■ Hond Hole	<u> </u>
***	Combination Luminaire - Signal Concrete Pole	<del>y</del> 0	☐ Loop Detector	5.73
<b>⊸</b> •	One Way Signal Head	<b>~</b> ⊶	Quadrupole Loop Detector	559
<b>-</b> •	Two Way Signal Head	9—Ф	Service Disconnect Switch Box	₩
9	Three Way Signal Head	8	■ Meter Box	₩
₽~	• •	₽~	Span Wire	-
	Four Way Signal Head	<u>o⊷ </u> \$-∞	Span Wire w/Cable	<del>مردره</del>
	One Way Bracket Mounted Signal - Metal Pole	<b>∞</b> —0	=== Conduit Only	::::
<b>⊚</b> † • • •	Two Way Bracket Mounted Signal - Metal Pole	<b>9</b> —0	Conduit w/Cable	24-24
*	One Way Bracket Mounted Signal - Wood Pole		─ Guy Wire	<(
•0	Two Way Bracket Mounted Signal - Wood Pole	o <u></u> −•	Pedestrion Push Button	
J C	•	<b>⊶</b> °	● Pedestrian Push Button On Metal Pole	©—⊙*. <b>s</b> .
<b>0</b>	One Way Bracket Mounted Signal - Concrete Pole	<b>□•</b> —• <b>□</b>	Magnetic Detector - Multi Lane	[0]
<b>~</b>	Two Way Bracket Mounted Signal - Concrete Pole	Φ_Φ	Magnetic Detector - Single Lane	<u>[6</u> 1
0—0	One Way Pedestal Top Mounted Signal - Metal Pole	ο—⊠	◆ ◆ ◆ Magnetometer Detector Probes	
₽-19-2	Two Way Pedestal Top Mounted Signal - Metal Pole	0-0-2	<ul> <li>Emergency Preemptor Sensor</li> </ul>	· 🔷
<b>0</b> ─- <b>0</b>	One Way Pedestal Top Mounted Signal - Metal Pole	Φ—Φ	<ul> <li>Wood Utility Pole w/Overhead Wires</li> </ul>	ρ_
0-0-2	Two Way Pedestal Top Mounted Signal - Concrete Pole	0-0-0	Concrete Utility Pole w/Overhead Wires	<b>/</b> p
G	Base Mounted Local Control Cabinet	ق ت	———— Direct Burial Cable (Signal)	
Œ	Base Mounted System Master Cabinet	œ,	Street Light	₩
©	Bracket Mounted (S. O. P.) Control Cabinet Metal Pole	© O		

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Bracket Mounted (S. O. P.) Control Cabinet Wood Pole

Bracket Mounted (S. O. P.) Control Cabinet Concrete Pole

## SUMMARY NOTES:

- The Contractor shall notify the Traffic Control Division signal shap 72 hours prior to disturbing any existing cables.
- Contractor furnished signal pole foundation designs shall be in accordance with St'd, PF-I, Conduit, grouting & grounding details shall be in accordance with St'd, PF-I.
- 3 The Contractor shall provide Initial timings for the controllers. Traffic data should be obtained from VDDT through the Engineer with at least 90 days advance notice. The City of Anytown will provide final timings for Implementation. The Contractor shall contact Signal Engineer at (000) 000-0000 90 days in advance of requiring these limings.
- Included in the cost of this item are the following:
   12 Three section backplates
   4 Four section backplate
   50 Tunnel visors
   The totals shown above include existing signal heads.
- A single pull rope conforming to Section 700,04th) of the Specifications shall be installed inside the pole & luminaire arm of the combination luminaire most arm poles. The pull rope shall be adequately secured on the cutside of the luminaire arm & of sufficient length to allow at least 2 of rope to be pulled autiside the brackhole.
- Signs shall include mounting brackets and miscellaneous hardware supplied by the contractor, installation shall be in accordance with SYd.SMD-2.
- This Item shall have "TRAF" cast in cover.
- 8 The grounding for electric service conduit shall be included in the cost for this bid Item.
- All proposed loop detector shall be modified for corner drilling only. The standard TB-IB and TB-IC are modified to require loops placed in new powement areas to be installed in base course and loops placed in powement overlay areas to be installed in the existing powement.
- (I) The Contractor shall deliver the reusable existing signal equipment (poles, signal heads, controller cobinet, cobinet equipment) to the City Traffic Control Division, 000 Main St., Anytown VA 00000. Contact Signal Engineer ar (000) 000-0000 48 hrs. before delivery. The unusable signal equipment (cable, conduit, etc.) shall be disposed by the contractor.

- In addition to Section 512,03(N) temporary signalization, the Following is required:

  The Contractor shall maintain the existing signalized locations in their present conditions to include vehicle detection. As sequence of construction proceeds the signal shall be revised on the existing spans as required. At least a semi-actual signal operation shall be maintained. Existing, temporary or Final stop bar detection will be required. On-site controller mode and timing of justments may be required to enhance traffic operation.
- Street name signs shall have a green reflective background with white reflective message and barder. Sign shall be fabricated in accordance with type 1-1 or 1-2 with a "border and 1½" corner radii. Copy shall be upper case E- series 12" (street name) and 5" (st, ore, dr, 100), install in accordance with details on sheel 11(5).
- (3) All traffic control methods and devices shall conform to the Manual on Uniform Traffic Control Devices for Streets and Highways, and the Virginia Supplement which Includes work area protection guidelines, as stated in latest Specifications.
- Denotes Item to be pold for on basis of plan quantity in accordance with current Rood and Bridge Specifications.
- (5) All signal hardware except controller shall be painted Dark Forest Green (Sherwood Williams \*4072) In accordance with Section 4II of the Specifications.
- (6) Included in the cost of this bid item is the cost of system bonding wire (\*8 awg EGC).

SUMMARY OF QUANTITIES & SIGNAL LEGEND