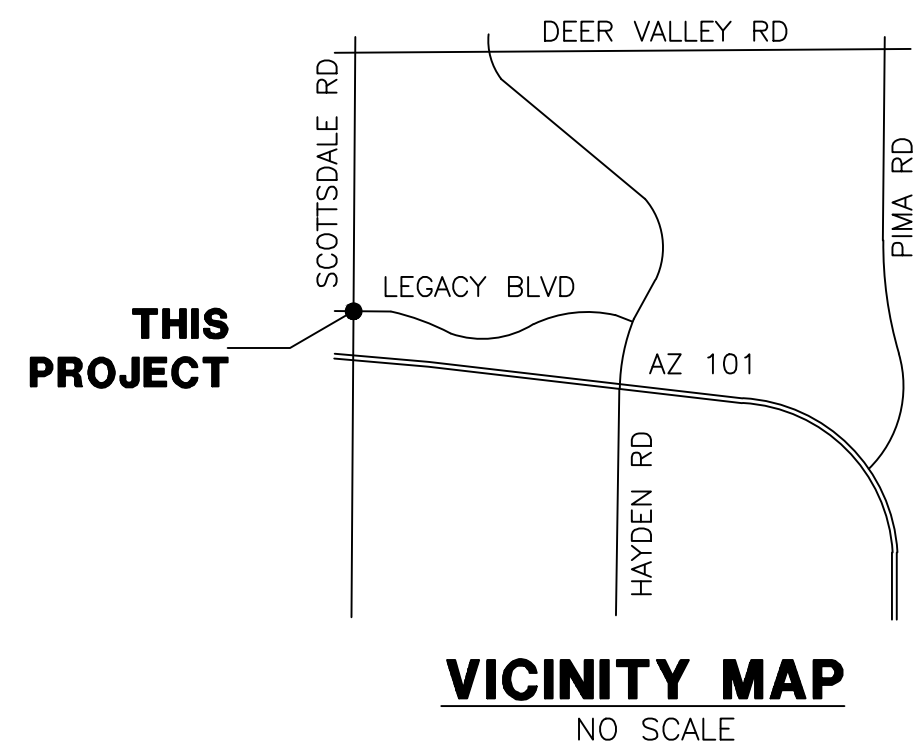
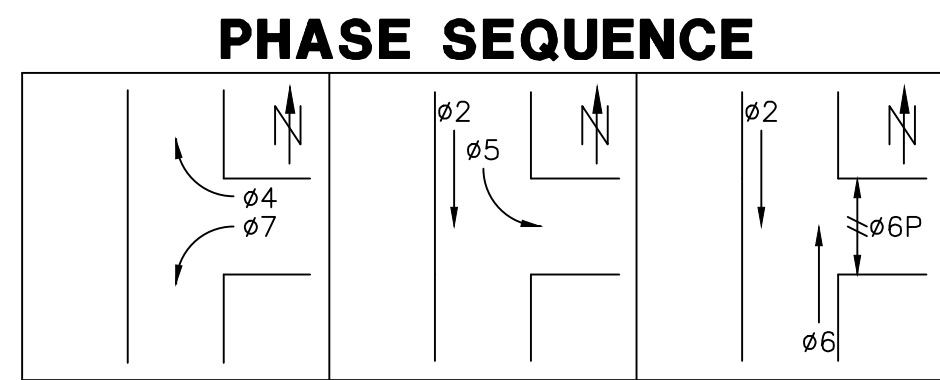


SCOTTSDALE RD & LEGACY BLVD TRAFFIC SIGNAL



PULL BOX SCHEDULE

BOX #	TYPE	LOCATION
1	#7 W/EXT	EXISTING
2	#9	EXISTING
3	#7	EXISTING
4	#7	EXISTING
5	#7	EXISTING
6	#7	EXISTING
7	#7	EXISTING

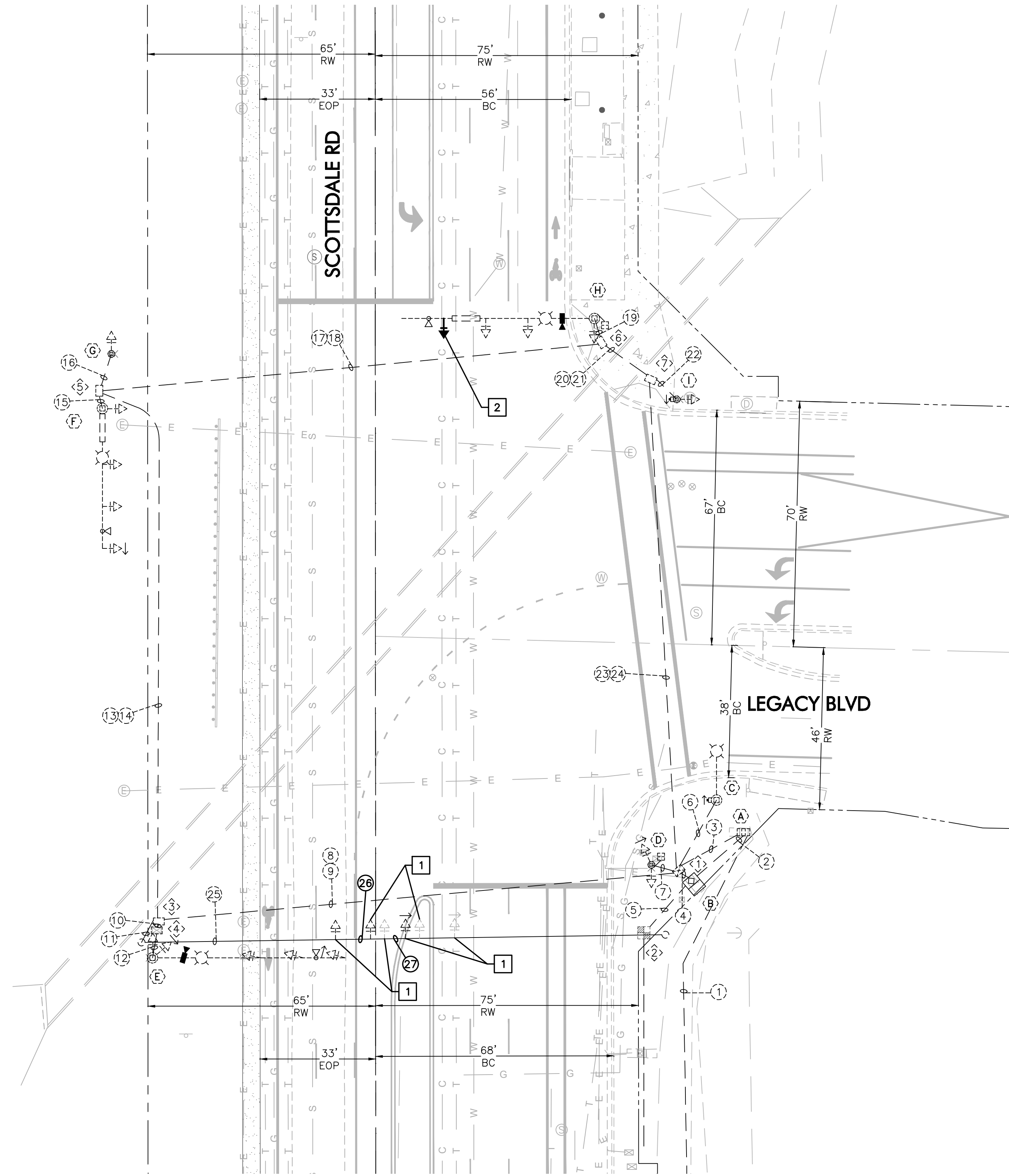


TRAFFIC SIGNAL CONTRACTOR IS REQUIRED TO HAVE A MINIMUM OF TWO IMSA CERTIFIED SIGNAL TECHNICIANS SUPERVISING THE JOB. ONE SIGNAL TECHNICIAN MUST BE IMSA LEVEL II OR HIGHER AND ONE SIGNAL TECHNICIAN MUST BE IMSA LEVEL I OR HIGHER. PROOF OF CERTIFICATION IS REQUIRED PRIOR TO ISSUANCE OF TRAFFIC SIGNAL CONSTRUCTION PERMIT.

CONDUCTOR SCHEDULE

CONDUIT RUN NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
CONDUIT SIZE (IN)	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E	E
AWG	NUMBER OF WIRES																										
#14* 20-CONDUCTOR CABLE																											
#14 7-CONDUCTOR CABLE																											
#4 4-CONDUCTOR CABLE																											
#4 POWER HOT																											
COMMON WHITE																											
BARE BOND SOLID																											
#8 GREEN STRANDED																											
SIGNAL COMMON																											
#12 SIGN LIGHTING - HOT																											
LIGHTING - HOT																											
LIGHTING - COMMON																											
VIDEO DETECTION																											
PRE-EMPTION																											

- * IMSA 19-1 20 CONDUCTOR CABLE
- o #14 AWG, DETECT-A-DUCT, IMSA 51-5
- IMSA 50-2, OR APPROVED EQUIVALENT
- VIDEO DETECTION CABLE
- ▲ 3-M OPTICOM, MODEL 138 OPTICAL DETECTOR CABLE, OR APPROVED EQUIVALENT
- MESSENGER WIRE
- EXISTING CONDUIT

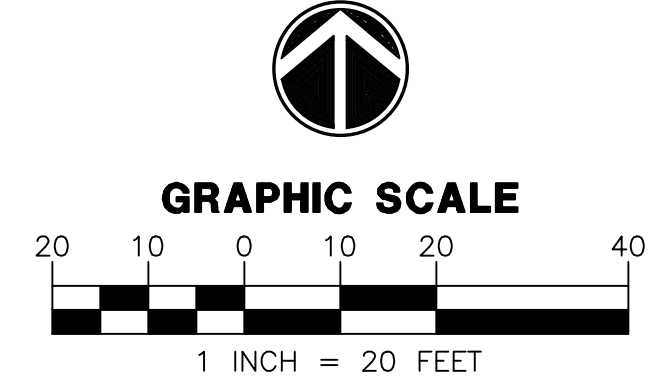


CONSTRUCTION NOTES

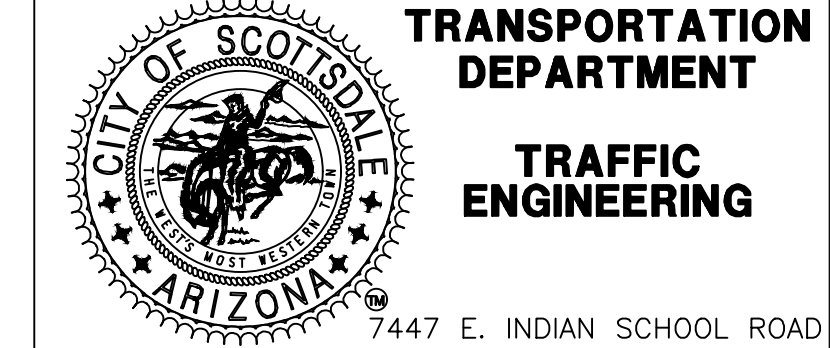
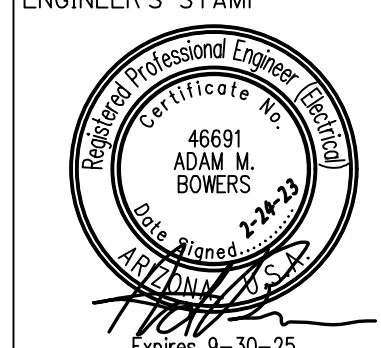
- ALIGN TRAFFIC SIGNAL HEADS OVER CENTER OF LANE ON SPAN WIRE.
- INSTALL NEW F HEAD ON EXISTING TENON.

GENERAL NOTES

- ALL TRAFFIC SIGNAL EQUIPMENT (EXCLUDING POLES & ARMS) AND ALL CONSTRUCTION IN PUBLIC RIGHT-OF-WAY OR IN EASEMENTS GRANTED FOR PUBLIC USE SHALL CONFORM TO THE 2013 ARIZONA DEPARTMENT OF TRANSPORTATION (ADOT) STANDARD DRAWINGS AND SPECIFICATIONS, TO THE MARICOPA ASSOCIATION OF GOVERNMENTS (MAG) UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION, TO THE CITY OF SCOTTSDALE (COS) SUPPLEMENT TO MAG STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION, AND TO THE COS DESIGN STANDARDS AND POLICIES MANUAL. SIGNAL POLES AND ARMS SHALL MEET COS STANDARD DETAILS NO. 2180-2188.
- TRAFFIC CONTROL SHALL CONFORM TO THE CITY OF PHOENIX "TRAFFIC BARRICADE MANUAL" AND/OR AS DIRECTED BY THE CITY PUBLIC WORKS INSPECTOR.
- UTILITY LOCATIONS SHOWN ARE BASED UPON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL CONTACT BLUE STAKE AT 602.263.1100 BEFORE CONSTRUCTION AND VERIFY ACTUAL UTILITY LOCATIONS.
- TRAFFIC SIGNAL POLES, MAST ARMS, AND SERVICE CABINETS SHALL BE POWDER COATED.
- ALL PULL BOXES TO BE ADOT NO. 7 UNLESS OTHERWISE NOTED.
- PAVEMENT REPLACEMENT TO CONFORM TO COS STANDARD DETAIL 2200 AND 2201. SIDEWALK REPLACEMENT SHALL CONFORM TO MAG STANDARD DETAIL 230.
- APPLICABLE SIGNAL AND PEDESTRIAN INDICATIONS SHALL BE "LED" TYPE LAMPS PURSUANT TO THE COS DESIGN STANDARDS AND POLICIES MANUAL.
- ALL EXISTING TRAFFIC CONTROL DEVICES (INCLUDING STOP SIGNS) AND STREET LIGHTS SHALL REMAIN IN OPERATION UNTIL NEW INSTALLATIONS ARE ENERGIZED AND OPERATIONAL. ANY REMOVED COS EQUIPMENT SHALL BE SALVAGED AND RETURNED TO THE COS TRAFFIC SIGNAL SHOP AT 9191 E. SAN SALVADOR (SCOTTSDALE).
- QUESTIONS CONCERNING TRAFFIC SIGNAL DESIGN SHOULD BE DIRECTED TO WRIGHT ENGINEERING, 165 E. CHILTON DR., CHANDLER, AZ 85225, 480.497.5829.
- AT START OF CONSTRUCTION THE CONTRACTOR SHALL CONTACT THE COS SIGNAL SUPERVISOR AT 480-312-5253 TO COORDINATE POWER AUTHORIZATION, CABINET SET-UP AND INSPECTION REQUIREMENTS.
- IT IS THE CONTRACTORS RESPONSIBILITY TO CONTACT BLUESTAKE AT 1-800-STAKE-IT AND ALL OTHER INVOLVED AGENCIES AND TO DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES. THE CONTRACTOR AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE TO EXISTING UTILITIES DUE TO THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE THOSE UTILITIES.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL LABOR AND MATERIAL TO INSTALL THE COMPLETE TRAFFIC SIGNAL SYSTEM AS SHOWN ON THIS DRAWING.
- CONTRACTOR SHALL PROVIDE A UNIFORMED OFF DUTY POLICE OFFICER ON SITE TO DIRECT TRAFFIC DURING SIGNAL OUTAGES AND CHANGE OVER TO THE NEW TRAFFIC SIGNAL SYSTEM.
- FOR NEW AND MODIFIED TRAFFIC SIGNALS, ALL INTELLIGENT TRANSPORTATION SYSTEM (ITS) NETWORK DEVICES AND EQUIPMENT SHALL BE CONFIGURED AND INSTALLED BY THE CITY OF SCOTTSDALE ITS TECHNICIANS UNLESS OTHERWISE STATED OR AGREED UPON WITH THE CONTRACTOR(S) PROVIDING THE EQUIPMENT. THIS INCLUDES, BUT IS NOT LIMITED TO, PTZ CAMERAS, ARD DEVICES, WIRELESS COMMUNICATION TECHNOLOGIES, NETWORK COMMUNICATION EQUIPMENT AND ANY OTHER EQUIPMENT OR DEVICE(S) THAT WILL RESIDE ON THE CITY OF SCOTTSDALE ITS COMMUNICATIONS NETWORK.
- THE CONTRACTOR SHALL CONTACT THE CITY OF SCOTTSDALE INTELLIGENT TRANSPORTATION SYSTEMS (STREET OPERATIONS DIVISION) TWO WEEKS PRIOR TO THE SIGNALIZED INTERSECTION'S TURN-ON DATE TO SCHEDULE A DATE AND TIME TO DELIVER ANY ITS EQUIPMENT/MATERIALS FOR THE PROJECT TO ENSURE ADEQUATE TIME FOR CONFIGURING, PROGRAMMING AND INSTALLING DEVICES/EQUIPMENT. EQUIPMENT SHALL DELIVERED TO CITY OF SCOTTSDALE TRAFFIC MANAGEMENT CENTER- 9191 SAN SALVADOR DR. SCOTTSDALE, AZ 85258. CONTACT GRIFF HEPNER (480-312-4315) TUESDAY-FRIDAY 7:00AM-3:30PM TO COORDINATE DROP OFF.



WRIGHT engineering corporation
ELECTRICAL ENGINEERING AND DESIGN
165 EAST CHILTON DRIVE • CHANDLER, ARIZONA 85225
PHONE 480.497.5829 • FAX 480.497.5807
www.wrightengineering.us Project # 22647

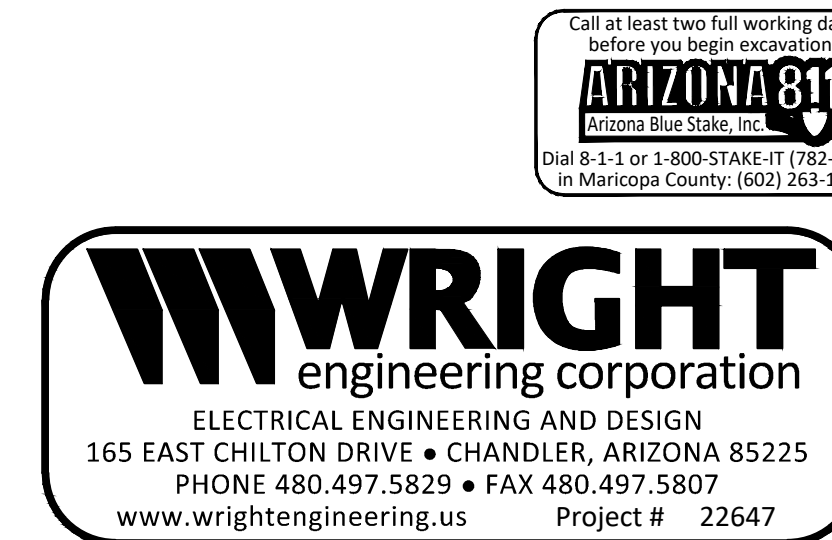


DATE	REVISION	BY						
PROJECT TITLE SCOTTSDALE RD & LEGACY BLVD								
REVIEW BY	DESIGNED BY MRS	DRAWN BY MRS						
DATE 2/2023	AS-BUILT DATE	BID NO.						
ENGINEER'S STAMP		SCALE 1=20 SHT. 1 OF 2						
<table border="1"> <tr> <td> </td> <td> TRANSPORTATION DEPARTMENT TRAFFIC ENGINEERING </td> </tr> </table>				TRANSPORTATION DEPARTMENT TRAFFIC ENGINEERING				
	TRANSPORTATION DEPARTMENT TRAFFIC ENGINEERING							
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REVIEW AND SIGNATURE / DATE BLOCK								
ENGINEERING COORDINATION MANAGER (OR DESIGNER)	ENGINEERING REVIEW	TRAFFIC ENGINEERING DIRECTOR (OR DESIGNER)						

TRAFFIC SIGNAL CONTROLLER							REMARKS	LOCATION
CABINET	TYPE	CONTROLLER		AUX. CONTROL				
(A)		EXISTING METER PEDESTAL					EXISTING	EXISTING
(B)		EXISTING CONTROLLER CABINET					EXISTING	EXISTING
POLE		MAST ARM		SIGNALS		P.B. SIGN	REMARKS	LOCATION
NO.	TYPE	SIG.	LUM.	MTG.	FACE			
(C)		EX R	--	EX 20'			EX R10-3e (L)	EXISTING
(D)		EX 'A' (10')	--	--	EX 1-VI EX 1-V	1-R 1-F 1-M/H		EXISTING
(E)		EX R	EX 55'	EX 20'	EX 1-II EX 2-II EX 1-VII	EX 1-R EX 2-F EX 1-R EX 1-F	NOTE 1	EXISTING
(F)		EX Q	EX 40'	EX 20'	EX 1-II EX 2-II EX 1-V	EX 1-R EX 2-F EX 1-F		EXISTING
(G)		EX Q	--	--	EX 1-IV	EX 1-F		EXISTING
(H)		EX R	EX 55'	EX 20'	NEW 1-II EX 2-II EX 1-V EX 1-V	NEW 1-F EX 2-F EX 1-F EX 1-M/H	NOTE 1	EXISTING
(I)		EX 'A' (10')	--	--	EX 1-IV	EX 1-F	EX R10-3e (R)	EXISTING

EQUIPMENT NOTES

- 1. INSTALL FUR TRAFISENSE2 VIDEO DETECTION ON LUMINAIRE MAST ARM.



DATE	REVISION	BY
PROJECT TITLE SCOTTSDALE RD & LEGACY BLVD		
REVIEW BY	DESIGNED BY MRS	DRAWN BY MRS
DATE 2/2023	AS-BUILT DATE	BID NO. SCALE 1=20 SHT. 2 OF 2
ENGINEER'S STAMP		TRANSPORTATION DEPARTMENT TRAFFIC ENGINEERING
		7447 E. INDIAN SCHOOL ROAD SCOTTSDALE, ARIZONA 85251
REVIEW AND SIGNATURE / DATE BLOCK		
ENGINEERING COORDINATION MANAGER (OR DESIGNER)	ENGINEERING REVIEW	TRAFFIC ENGINEERING DIRECTOR (OR DESIGNER)