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## PROJECT LOCATION

https://goo.gl/maps/FnoXfBHnr25XQZ5J6

### OSCEOLA COUNTY BOARD OF COUNTY COMMISSIONERS

DISTRICT 1 PEGGY CHOUDHRY

VIVIANA JANER - CHAIRWOMAN DISTRICT 2

DISTRICT 3 BRANDON ARRINGTON

DISTRICT 4 CHERYL GRIEB - VICE CHAIRWOMAN

DISTRICT 5 RICKY BOOTH

### OSCEOLA COUNTY ENGINEERS

MAHMOUD R NAJDA, COUNTY ENGINEER GHASSAN CHOUEIRY, TRANSPORTATION ENGINEER

### GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY 2023/24 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: http://www.fdot.gov/design/standardplans

APPLICABLE IRs: IR -N/A-

Standard Plans for Bridge Construction are included in the Structures Plans Component

### GOVERNING STANDARD SPECIFICATIONS:

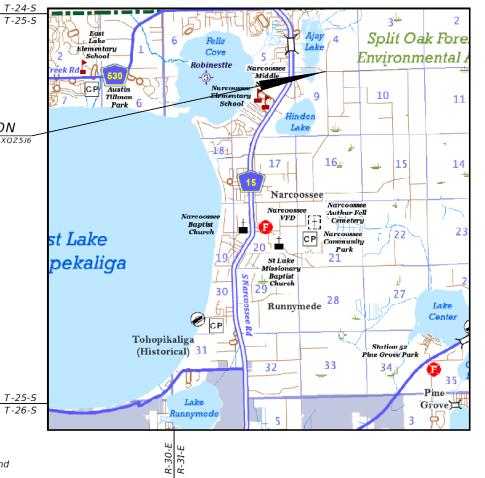
Florida Department of Transportation, FY 2023/24 Standard Specifications for Road and Bridge Construction at the following website: http://www.fdot.gov/programmanagement/Implemented/SpecBooks

## OSCEOLA COUNTY, FLORIDA PUBLIC WORKS DEPARTMENT

# CONSTRUCTION PLANS

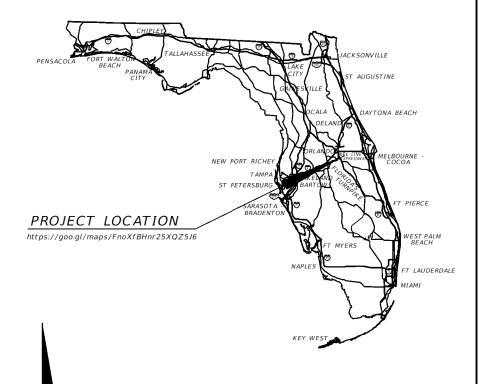
CYRILS DRIVE AND ZUNI ROAD

# SIGNALIZATION PLANS



60% SUBMITTAL 05/05/2023

PRELIMINARY - NOT FOR CONSTRUCTION



SIGNALIZATION SHOP DRAWINGS TO BE SUBMITTED TO:

JEREMY M. CROWE, PE 77064 TRAFFIC & MOBILITY CONSULTANTS LLC 3101 MAGUIRE BLVD, SUITE 265 ORLANDO, FL 32803

PLANS PREPARED BY:



TRAFFIC & MOBILITY CONSULTANTS LLC 3101 MAGUIRE BLVD, SUITE 265 ORLANDO, FL 32803 (407)531-5332 CERTIFICATE OF AUTHORIZATION NO.: 30024

NOTE: THE SCALE OF THESE PLANS MAY HAVE CHANGES DUE TO REPRODUCTION

## SIGNALIZATION PLANS **ENGINEER OF RECORD:**

JEREMY M. CROWE, PE P.E. NO.: 77064

TMC	FISCAL	SHEET
PROJECT NO.	YEAR	NO.
21190.2	24	T-1

TO BE INCLUDED AT 90% SUBMITTAL

5/2023 6:00:49 PM SM \21190.2 Cyrils Dr & Zuni Rd Sig Des\300 - CADD\2119

REVISIONS

DATE DESCRIPTION

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TRAFFIC & MOBILITY CONSULTANTS LLC
3101 MAGUIRE BLVD, SUITE 265
ORLANDO, FL 32803
OFFICE: (407) 531-5332
FAX: (407) 531-5331
JEREMY M. CROWE, P.E. 77064
CERTIFICATE OF AUTHORIZATION NO.: 30024



SIGNATURE SHEET

SHEET NO.

## SIGNALIZATION TABULATION OF QUANTITIES

PAY	BESCON STANK	110117	SHEET NUMBERS										
ITEM NO.	DESCRIPTION	UNIT	T - 6	T - 8	8	T - 9	T - 10	Т-	11		TOT	AL	
NO.			PLAN FINAL	PLAN F	INAL P	PLAN FINAL	PLAN FIN	AL PLAN	FINAL PLAN F	INAL PLAN FINAL	PLAN	FINA	
30 - 2 - 11	CONDUIT, FURNISH & INSTALL, OPEN TRENCH	LF	365	2805		2170	3300	2345			10985	-	
30 - 2 - 12	CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE	LF	190			210					400		
32-7-1	SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL	PI	1								1		
				100		100					222		
	FIBER OPTIC CABLE, F&I, UNDERGROUND,2-12 FIBERS  FIBER OPTIC CABLE, F&I, UNDERGROUND,49-96 FIBERS	LF LF		3005		200					200 3205		
	FIBER OPTIC CONNECTION, INSTALL, SPLICE	EA		5005		6					12		
33-2-31	FIBER OPTIC CONNECTION, INSTALL, TERMINATION	EA		72		72					144		
	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE ENCLOSURE	EA		1		1					2		
	FIBER OPTIC CONNECTION HARDWARE, F&I, SPLICE TRAY	EA EA	7	1							2		
	FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED CONNECTOR ASSEMBLY  FIBER OPTIC CONNECTION HARDWARE, F&I, PRETERMINATED PATCH PANEL	EA	7								2		
	FIBER OPTIC CONNECTION HARDWARE, F&I, CONNECTOR PANEL	EA	1								1		
	PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE  PULL & SPLICE BOX, F&I, 24" x 36" COVER SIZE	EA EA	17			4		2			17 12		
	PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE  PULL & SPLICE BOX, F&I, 36" ROUND COVER SIZE	EA EA		2		1	4	2			12		
	ELECTRICAL POWER SERVICE, F&I, UNDERGROUND, METER PURCHASED BY CONTRACTOR	AS	1								1		
	ELECTRICAL SERVICE WIRE, FURNISH & INSTALL	LF	50								50		
89 - 3 - 11	ELECTRICAL SERVICE DISCONNECT, F&I, POLE MOUNT	EA	1								1		
11-2-12	PRESTRESSED CONCRETE POLE, F&I, TYPE P-11 SERVICE POLE	EA	1								1		
16 - 1 - 11	ALUMINUM SIGNAL POLE, PEDESTAL	EA	8								8		
10 21 14	CTEEL MACT ARM ACCEMBLY FURNICU AND INCTALL DOUBLE ARM COL COL	EA	1								1		
	STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, DOUBLE ARM 60'-60'  STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, DOUBLE ARM 70'-50'	EA	7								7		
75 21 10	STEEL WAS THAT TO SET THE THOUSENESS THE THOUSENESS THE THOUSE THE THOUSENESS THE THOUSENESS THE THOUSE THE THE THOUSE THE THOUSE THE THOUSE THE THOUSE THE THOUSE THE THOUSE THE THE THE THE THE THE THOUSE THE THE THE THE THE THE THE THE THE TH	271									1		
	TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 3 SECTION, 1 WAY	AS	7								7		
	TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 4 SECTION, 1 WAY	AS	2								2		
50 - 1 - 19	TRAFFIC SIGNAL, FURNISH & INSTALL ALUMINUM, 5 SECTION CLUSTER, 1 WAY	AS	1								1		
53 - 1 - 11	PEDESTRIAN SIGNAL FURNISH & INSTALL LED COUNTDOWN, 1 WAY	AS	8								8		
60-3-11	TRAFFIC VEHICLE DETECTION SYSTEM-VIDEO/MICROWAVE, F&I, CABINET EQUIPMENT	EA	1								1		
50 - 3 - 12	TRAFFIC VEHICLE DETECTION SYSTEM-VIDEO/MICROWAVE, F&I, ABOVE GROUND EQUIPMENT	EA	2								2		
	TRAFFIC VEHICLE DETECTION SYSTEM-VIDEO, F&I, ABOVE GROUND EQUIPMENT	EA	2								2		
	CICNAL PRIORITY AND REFURTION CYCTEM FOLICIES CARRIET FLECTROMICS		1										
	SIGNAL PRIORITY AND PREEMPTION SYSTEM, F&I,GPS, CABINET ELECTRONICS  SIGNAL PRIORITY AND PREEMPTION SYSTEM, F&I,GPS, DETCTOR	EA EA	1								1		
13-1-122	SIGNAL PRIDATITY AND PREEMPTION SISTEM, PRI, GPS, DETCION	LA	1								1		
55 - 1 - 11	PEDESTRIAN DETECTOR, FURNISH & INSTALL, STANDARD	EA	8								8		
0-5-112	TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA, 2 PREEMPTION	AS	1								1		
32 - 1 - <u>1</u> 13	ITS CCTV CAMERA, F&I, DOME PTZ ENCLOSURE - PRESSURIZED, IP, HIGH DEFINITION	EA	1								1		
34 - 1 - 1	MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL	EA	1								1		
											1		
35 - 1 - 13	UNINTERRUPTIBLE POWER SUPPLY, FURNISH & INSTALL, LINE INTERACTIVE WITH CABINET	EA	1								1		
35 - 2 - 1	REMOTE POWER MANAGEMENT UNIT-RPMU, FURNISHED AND INSTALL	EA	1								1		
00 - 5 - 22	INTERNALLY ILLUMINATED SIGN, FURNISH & INSTALL, OVERHEAD MOUNT, 12 TO 18 SF	EA	4								4		
			•								,		

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DATE

REVISIONS

DESCRIPTION

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DESCRIPTION

TRAFFIC & MOBILITY CONSULTANTS LLC
3101 MAGUIRE BLVD, SUITE 265
ORLANDO, FL 32803
OFFICE: (407) 531-5332
FAX: (407) 531-5331
JEREMY M. CROWE, P.E. 77064
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TABULATION OF QUANTITIES

SHEET NO.

- UNLESS OTHERWISE NOTED IN THE TECHNICAL SPECIFICATIONS: INSTALLATION, ACCEPTANCE, AND PAYMENT FOR ALL
  ITEMS REQUIRED IN THESE PLANS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING,
  REFERENCED IN THE KEY SHEET: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), FDOT STANDARD PLANS,
  FDOT DESIGN MANUAL, FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AND OSCEOLA COUNTY
  CONTRACTOR SIGNAL SPECIFICATIONS.
- 2. TEMPORARY TRAFFIC CONTROL SHALL BE MAINTAINED IN ACCORDANCE WITH THE MUTCD, DATED 2022, AND THE FDOT STANDARD PLANS, DATED FY 2023/24. ATTENTION IS DIRECTED TO THE 102 STANDARD PLAN INDEX SERIES.
- 3. THE CONTRACTOR SHALL NOTIFY OSCEOLA COUNTY AT LEAST 48 HOURS BEFORE BEGINNING ANY RELATED TRAFFIC SIGNAL WORK.
- 4. THE CONTRACTOR SHALL BE ADVISED THAT OTHER PROJECTS MAY BE UNDER CONSTRUCTION CONCURRENTLY WITH THIS PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL ASPECTS OF SCHEDULING AND WORK WITH OTHER AGENCIES AND CONTRACTOR'S IN CHARGE OF CONCURRENT PROJECTS.
- 5. FINAL LOCATIONS OF ANY DEVICES INCLUDING CABINETS SHALL BE APPROVED BY THE ENGINEER PRIOIR TO PLACEMENT OF THE FOUNDATION IF THE LOCATION HAS CHANGED FROM THE PLANS.
- 6. THE CONTRACTOR SHALL NOTIFY THE TMC 48 HOURS IN ADVANCE SHOULD COMMUNICATION TO AN INTERSECTION BE DISRUPTED TO PERFORM WORK. NOTIFICATION SHALL BE CONVEYED VIA EMAIL TO LINDSEY.GIOVINAZZO@OSCEOLA.ORG AND SHALL INCLUDE CONTACT NAME, PHONE NUMBER, PURPOSE, LOCATION, AND DURATION OF OUTAGE.
- 7. THREE SPARE CONDUCTORS SHALL BE INSTALLED FOR EACH VEHICLE PHASE PER OSCEOLA CONUNTY STANDARD.
- SIGNAL CABLE SHALL BE SPLICED TO A SEPARATE 7 CONDUCTOR CABLE FOR EACH SIGNAL AND 7 CONDUCTOR CABLE FOR EACH PEDESTRIAN HEAD. THE SPLICES SHALL BE INSTALLED IN EITHER THE HAND-HOLE OF THE STEEL POLE/CONCRETE STRAIN POLE OR WITHIN THE TRANSFORMER BASE OF A PEDESTRIAN PEDESTAL. THE COLOR CODE OF SIGNAL CABLE SHALL BE VERIFIED WITH OSCEOLA COUNTY PRIOR TO WIRING INTERSECTION. A PERMANENT TAG SHALL BE PLACED AT BOTH WIRE TERMINATIONS DESIGNATING THE PHASE USED. ALL UNUSED SIGNAL WIRES SHALL BE BONDED TO THE POLE GROUND. EACH DETECTOR PUSH BUTTON SHALL BE FED WITH AN INDIVIDUAL TWO CONDUCTOR BELDEN CABLE, WITH THE SHIELD WIRE BONDED TO THE POLE GROUND. THE OUTSIDE INSULATION JACKET OF ALL SIGNAL CABLES SHALL REMAIN INTACT FROM THE SIGNAL HEADS TO THE FIELD TERMINATION POINTS. NO UN-JACKETED INDIVIDUAL CONDUCTORS SHALL REST IN ANY FIELD DRILLED STRUCTURES OR ASSEMBLIES.
- 9. SOLID COLORED INSULATION CONDUCTORS SHOULD BE USED FOR MAIN ROADWAY PHASES AND TRACERS USED FOR SIDE STREET PHASES.
- 10. THE CONTRACTOR SHALL VERIFY STRUCTURE ORIENTATION PRIOR TO PLACEMENT. STRUCTURES OF INCORRECT ORIENTATION SHALL BE REPLACED AT CONTRACTOR'S EXPENSE. THE CONTRACTOR SHALL VERIFY THAT ALL STRUCTURES ARE SET TO ELEVATIONS THAT WILL MEET VERTICAL CLEARANCE REQUIREMENTS SPECIFIED IN FDOT, MUTCD, AND COUNTY STANDARDS PRIOR TO INSTALLING STRUCTURAL MATERIAL. IF A DISCREPANCY IS FOUND, CONTACT THE ENGINEER OF RECORD.
- 11. IF THE CONTRACTOR CALLS FOR AN INSPECTION AND THE CONTRACTOR IS NOT PREPARED FOR THE INSPECTION (I.E. THE INSPECTION HAS TO BE RESCHEDULED), THE CONTRACTOR SHALL BE BACK CHARGED FOR ALL COSTS ASSOCIATED WITH THE INSPECTION.
- 12. MOT SHALL INCLUDE VDMS FOR THE MAINLINE TO FLASH "NEW SIGNAL AHEAD" AND "BE PREPARED TO STOP" MESSAGES FOR MINIMUM OF 14 DAYS AFTER SIGNAL ACTIVATION.
- 13. SURVEY WAS PROVIDED BY AMERICAN SURVEYING & MAPPING, INC ON 08/25/22.
- 14. ROADWAY DESIGN FILES WERE PROVIDED BY ASKEY HUEY ON 01/10/23.

#### PROCEDURES

1. THE CONTRACTOR SHALL COORDINATE A FIELD MEETING WITH THE SIGNAL PROJECT MANAGER (407) 738-9405, PRIOR TO REMOVING ANY EXISTING EQUIPMENT, TO DETERMINE WHICH EQUIPMENT SHOULD BE DELIVERED TO OSCEOLA COUNTY TRANSPORTATION AND TRANSIT. THE AGREED UPON EQUIPMENT SHALL BE DISASSEMBLED INTO THEIR COMPONENT PARTS, TAGGED AS TO LOCATION, PACKAGED AS NEEDED FOR PROTECTION FROM DAMAGE AND DELIVERED TO:

3850 OLD CANOE CREEK ROAD ATTENTION: AARON TORRES SAINT CLOUD, FL 34769

- 2. THE SIGNAL PROJECT MANAGER IS TO BE CONTACTED AT LEAST 48 HOURS PRIOR TO DELIVERY. WRITTEN ACKNOWLEDGEMENT OF EQUIPMENT RECEIPT SHALL BE OBTAINED FROM THE PROJECT MANAGER IN THE FORM OF A SIGNED RECEIPT BEARING THE CONTRACTOR'S LETTERHEAD. THE ITEMIZED RECEIPT SHALL STATE ALL EQUIPMENT REMOVED FROM EACH LOCATION WAS RETURNED TO OSCEOLA COUNTY IN GOOD CONDITION. THE CONTRACTOR SHALL PRESENT THE RECEIPT TO THE PROJECT MANAGER AT THE TIME OF SIGNAL INSPECTION. ABSENCE OF SUCH RECEIPT SHALL BE RECORDED ON THE PUNCH LIST AS AN ITEM TO BE CORRECTED PRIOR TO FINAL APPROVAL OF THE INSTALLATION.
- 3. ALL SIGNALIZATION EQUIPMENT THAT IS REMOVED AND NOT REQUESTED BY OSCEOLA COUNTY SHALL BE PROPERLY DISPOSED OF AT THE CONTRACTOR'S EXPENSE IN A MANNER AND LOCATION APPROVED BY THE PROJECT MANAGER (407) 738-9405.

### SUBMITTALS

1. ALL SUBMITTAL DATA ON OSCEOLA COUNTY PROJECTS SHOULD BE SUBMITTED TO VIA EMAIL TO GHASSAN CHOUEIRY AT GHASSAN.CHOUEIRY@OSCEOLA.ORG AND AARON TORRES@OSCEOLA.ORG

#### UTILITIES

1. THE CONTRACTOR SHALL NOTIFY ALL UTILITIES AT LEAST 48 HOURS IN ADVANCE OF ANY OPERATION THAT MAY CONFLICT WITH OVERHEAD OR UNDERGROUND UTILITIES, INCLUDING POLE SETTING OPERATIONS WHERE A CONFLICT WITH OVERHEAD ELECTRICAL CONDUCTORS IS EXPECTED.

LIST OF UTILITY OWNERS (NOTIFIED 05/05/23):

COMPANY	CONTACT	TELEPHONE #
832 COMMUNICATIONS CENTURY LINK CHARTER COMMUNICATIONS COMCAST COMMUNICATIONS OUC-ELECTRIC DISTRIBUTION-OSCEOLA TECO PEOPLE GAS-ORLANDO TOHO WATER AUTHORITY- ST CLOUD DIVISION	SCOTT SOUSER BILL MCCLOUD JOHN SMITH ANDREW SWEENEY CHRISTOPHER TYLOR JOAN DOMNING LESLIE KLEIN	(407) 462-7040 (850) 599-1444 (407) 532-8520 (904) 738-6898 (321) 436-6219 (813) 275-3783 (407) 957-7120
TOHO WATER AUTHORITY - 31 CLOUD DIVISION TOHO WATER AUTHORITY - ZONE 3	PETER S. BROWN	(407) 944-5042

2. THESE PLANS REFLECT CONDITIONS KNOWN DURING PLAN DEVELOPMENT. IN THE EVENT ACTUAL PHYSICAL CONDITIONS PREVENT THE APPLICATION OR THE PROGRESSION OF ANY WORK SPECIFIED IN THESE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY AND PRIOR TO ANY FURTHER WORK ACTIVITY.

#### DRILLED SHAFTS

- 1. THE CONTRACTOR SHALL HIRE A CERTIFIED DRILLED SHAFT CTOP LEVEL 1 CONSTRUCTION ENGINEERING AND INSPECTION (CEI) FIRM, AND A CONCRETE TESTING LABORATORY FOR THE PURPOSE OF INSPECTING ALL DRILLED SHAFT INSTALLATIONS PER CURRENT FOOT STANDARDS. THE FIRM SHALL THEN SUBMIT A SIGNED AND SEALED REPORT VERIFIED BY THE PE IN RESPONSIBLE CHARGE OF THE DRILLED SHAFT INSPECTOR TO THE DEPARTMENT FOR APPROVAL. CONTRACTOR TO ALSO COORDINATE WITH OSCEOLA COUNTY TO PERFORM VT INSPECTION AT TIME OF DRILLED SHAFT POUR. FAILURE TO OBTAIN THESE SERVICES PRIOR TO THE CONSTRUCTION OF THE DRILLED SHAFT(S).
- 2. THE SIGNAL CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT NO CONFLICTS EXIST DURING THE SOFT DIGS WITH DRILL SHAFT LOCATIONS AND MUST NOTIFY THE ENGINEER OF RECORD WHEN THEY ARISE. THE SIGNAL CONTRACTOR IS RESPONSIBLE FOR ALL ASSOCIATED COST, NOT COMPLYING WITH THE SIGNAL NOTE.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPLYING APPROVED SHOP DRAWINGS SHOWING THE BOLT PATTERN AND ARM ORIENTATION PRIOR TO THE PRE-DRILL SHAFT MEETING.

#### MAST ARMS

1. THE MAST ARMS SHALL BE PAINTED "MIDNIGHT NEUTRAL" (SHERWIN WILLIAMS J4-55-34), APPLIED ACCORDING TO FDOT STANDARD SPECIFICATIONS 560 (CODES Z-C AND B-8 FOR PRIME AND INTERMEDIATE COATS). THIS INCLUDES ANY LUMINAIRES INSTALLED ON THE MAST ARM.

#### AS-BUILT PLANS

- 1. AS DEFINED IN THE FDOT STANDARD SPECIFICATIONS, SECTION 611-2.3, SEVEN DAYS PRIOR TO SIGNAL CONDITIONAL ACCEPTANCE INSPECTIONS BY THE MAINTAINING AGENCY, THE CONTRACTOR SHALL PROVIDE A PDF OF THE AS BUILT PLANS TO OSCEOLA COUNTY TRANSPORTATION AND TRANSIT. THE CONTRACTOR SHALL ALSO LEAVE ONE AS-BUILT PLAN IN THE DRAWER OF THE SIGNAL CABINET. IN ADDITION TO AS BUILT PLANS, CONTRACTOR SHALL SUBMIT BORE LOGS. THE CONTRACTOR SHALL BE REQUIRED TO BECOME FAMILIAR WITH OSCEOLA COUNTY'S INSPECTION PROCEDURE.
- 2. ANY FIBER INTERCONNECT CABLE THAT IS DAMAGED DURING CONSTRUCTION MUST BE REPLACED AS AN ENTIRE RUN AND SHALL BE RE-SPLICED WITHIN THE SPLICE CLOSURE AT THE END OF THE RUN. SPLICING OF FIBER INTERCONNECT CABLE BETWEEN SPLICE CLOSURES IS NOT PERMITTED. THE CONTRACTOR SHALL BEAR ALL EXPENSES ASSOCIATED WITH THE INSTALLATION OF THE NEW INTERCONNECT CABLE.

### PAY ITEM NOTES

- 1. 630-2-XX: AN ORANGE #12 AWG TRACE WIRE SHALL BE INSTALLED WITHIN ANY UNUSED CONDUIT AND SPLICED WITHIN THE PULL BOX TO PROVIDE ELECTRICAL CONTINUITY. ALL REFERENCES IN THE PLAN TO RIGID CONDUIT SHALL BE INSTALLED AS 1.5" GALVANIZED STEEL METAL CONDUIT. THERE SHALL BE ONE SPARE 2" UNDERGROUND CONDUIT INSTALLED PER RUN. THIS SHALL BE REFLECTED IN THE CALLOUT. THERE SHALL BE A SEPARATE CONDUIT FOR VIDEO OR LOOP RUNS FROM SIGNAL POWER CONDUITS. UNDER NO CIRCUMSTANCES SHALL LOOP AND VIDEO RUNS BE HOUSED IN THE SAME CONDUIT AS SIGNAL POWER.
- 2. 635-2-XX: PULL BOXES SHALL BE "QUAZITE", HAVE NON-CONDUCTIVE COVERS, AND MEET ANSI TIER 22 RATING. COVERS SHALL BE STAMPED "OSCEOLA COUNTY TRAFFIC SIGNAL" FOR ALL SIGNALIZATION APPLICATIONS.
- 3. 641-2-12: INCLUDES THE COST OF PROVIDING CONCRETE SERVICE POLE TO MOUNT SIGNAL DISCONNECT WHEN NOT PERMITTED TO BE MOUNTED ON POWER COMPANY POLE. SERVICE POLE SHALL BE EXPOSED 12' ABOVE GRADE WITH DISCONNECT MOUNTED AT 8'. SURGE ARRESTOR SHALL BE WIRED ON THE LOAD SIDE OF THE DISCONNECT.
- 4. 650-1-XX: ALL TRAFFIC SIGNAL HEADS SHALL BE ALUMINUM. AN ARTICULATED ASTRO-BRACKET SHALL BE PROVIDED UNDER THIS PAY ITEM IF NEEDED FOR PROPER ORIENTATION OF HORIZONTAL SIGNAL HEAD ON A SKEWED ARM OR APPROACH. RETRO REFLECTIVE BACK PLATE BORDERS ARE REQUIRED ON ALL BACK PLATES. ANY FOUR SECTION SIGNAL HEADS WITH THE FLASHING YELLOW ARROW SHALL HAVE THE FTP-85-13 SIGN INSTALLED ADJACENT TO THE HEAD ASSEMBLY TO THE RIGHT.

REVISIONS

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TRAFFIC & MOBILITY CONSULTANTS LLC

3101 MAGUIRE BLVD, SUITE 265 ORLANDO, FL 32803 OFFICE: (407) 531-5332 FAX: (407) 531-5331 JEREMY M. CROWE, P.E. 77064 CERTIFICATE OF AUTHORIZATION NO.: 3002



GENERAL NOTES

SHEET NO.

- 5. 660-4-XX: ALL VIDEO DETECTORS SHALL MEET OSCEOLA COUNTY'S FUNCTIONALITY REQUIREMENTS. SUNSHIELDS SHALL BE PROVIDED ON EACH CAMERA, A MENU-DRIVEN INTERFACE REQUIRING NO SEPARATE COMPUTER FOR SET-UP OR MAINTENANCE SHALL BE PROVIDED. VIDEO CAMERAS SHALL BE COLOR AND SEALED PRESSURIZED HOUSING. THIS PAY ITEM SHALL ALSO INCLUDE LIGHTNING AND SURGE PROTECTION CONSISTING OF POINT DISCHARGE DISSIPATION TERMINALS ON EACH CAMERA, COAX OR CAT 5 LINE PROTECTORS AND CAMERA PROTECTORS. PROPER GROUNDING MUST BE PROVIDED INCLUDING A BOND WIRE ATTACHED TO THE CAMERA ASSEMBLY RUNNING TO THE POLE GROUND, THIS ITEM INCLUDES EXTERIOR USE CABLING, AND MOUNTING BRACKETS NECESSARY TO MEET THE PERFORMANCE EXPECTATIONS OF THE SYSTEM AS DESCRIBED IN THE SIGNAL GENERAL NOTES. PAYMENT INCLUDES ALL LABOR (MAN-HOURS) AND EQUIPMENT NECESSARY TO DEVELOP AN ACCEPTANCE TESTING PLAN AND TO COMPLETE A SUCCESSFUL VIDEO DETECTION ACCURACY TEST A.K.A. FIELD ACCEPTANCE TEST OF THE VIDEO DETECTION SYSTEM.
- 6. 663-1-XXX: CONTRACTOR TO FURNISH AND INSTALL GLOBAL TRAFFIC TECHNOLOGIES GPS RECEIVER AND ANTENNA. THE CONTRACTOR WILL PERFORM ALL SIGNAL TESTING, MAPPING AND SYSTEM ACTIVATION. CONTRACTOR TO FURNISH AND INSTALL GLOBAL TRAFFIC TECHNOLOGIES FIRE-RESCUE GPS PRE-EMPTION CONTROLLER INTERFACE MODULE. CONTRACTOR TO FURNISH AND INSTALL GLOBAL TRAFFIC TECHNOLOGIES SYSTEM-SPECIFIC PREEMPTION GPS MULTI-PAIR CABLE TO CONNECT TO GPS ANTENNAS TO GPS PRE-EMPTION CONTROLLER INTERFACE.
- 7. 665-1-11: ALL PUSH BUTTONS MUST BE LOCATED NEXT TO A 48" X 48" LEVEL LANDING. THE COST OF THE PEDESTRIAN CROSSING SIGN R10-3i SHALL BE INCLUDED IN THE COST OF THE PUSH BUTTON.
- 8. 670-5-XXX: THE CONTROLLER ASSEMBLY SHALL BE ECONOLITE R77 TS2 TYPE 1 OPERATION, CONSIST OF AN ECONOLITE COBALT 2100 CONTROLLER, AND 3 SHELVES. (SPECIAL NOTE: IF THERE IS LIMITED SIDEWALK A.D.A. CLEARANCE, A REDUCED DEPTH TYPE VI CABINET CAN BE USED WITH PRIOR APPROVAL FROM OSCEOLA COUNTY TRANSPORTATION AND TRANSIT). THE CABINET AIR FILTER SHALL BE OF THE REUSABLE WASHABLE ALUMINUM TYPE. THE TOP OF THE CONTROLLER PAD SHALL BE AT LEAST SIX INCHES ABOVE THE ROADWAY ELEVATION. THIS PAY ITEM SHALL ALSO INCLUDE COMPLETE REINTEGRATION OF THE EXISTING GPS PRIORITY CONTROL PREEMPTION EQUIPMENT, AND RELOCATION TO/FROM THE EXISTING CABINET. A FLUSH MOUNTED AUTOMATIC POWER TRANSFER SWITCH SHALL BE INCLUDED ON THE CABINET. A TECHNICIAN SERVICE PAD 30" IN WIDTH SHALL ALSO BE PROVIDED. WHENEVER POSSIBLE, THE CABINET IS TO BE PLACED SO THAT THE DOOR OPENS AWAY FROM THE INTERSECTION AND OPENS FULLY WITHIN THE RIGHT OF WAY. THIS PAY ITEM INCLUDES THE COST OF THE CONCRETE FOR THE CONTROLLER PAD AND THE SERVICE PAD. NOTE- REFER TO OSCEOLA COUNTY TRAFFIC SIGNAL CABINET AND CONTROLLER SPECIFICATIONS 5/2016. FOR MORE DETAILED SPECIFICATIONS CONTACT AARON TORRES (407) 738-9405, AARON.TORRES@OSCEOLA.ORG OR GHASSAN CHOUEIRY, PE AT (407) 742-0553, GHASSAN.CHOUEIRY@OSCEOLA.ORG
- 9. 685-1-13: THE UPS SYSTEMS SHALL BE ALPHA XM 1100 OR AN EQUIVALENT ALPHA MODEL THAT MEETS OSCEOLA COUNTY'S COMMUNICATION SYSTEM REQUIREMENTS. UPS CABINETS SHALL BE INSTALLED SEPARATELY FROM THE CONTROLLER ASSEMBLY, NO PIGGY BACK MOUNTS.
- 10. 700-5-XX: ILLUMINATED STREET SIGNS SHALL BE L.E.D. DOUBLE FACED TYPE, PRODUCING A MINIMUM OF 50 LUMENS PER WATT. SIGNS SHALL BE DOUBLE-SIDED AND MOUNTED TO SEPARATE CANTILEVER ARMS BELOW THE MAST ARMS. ALL INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL HAVE ONE COMMON PHOTOCELL INSTALLED IN CABINET. INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL HAVE A 24" VIEWING HEIGHT. THIS VIEWING HEIGHT DOES NOT INCLUDE THE HEIGHT OF THE SIGN ASSEMBLY. INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE BURNED IN FOR 60 DAYS BEFORE FINAL ACCEPTANCE. THE SIGNS SHALL USE A BREAKER SEPARATELY FROM THE SIGNAL CABINET AND SHALL BE CONTROLLED BY ONE MASTER PHOTOCELL.

REVISIONS

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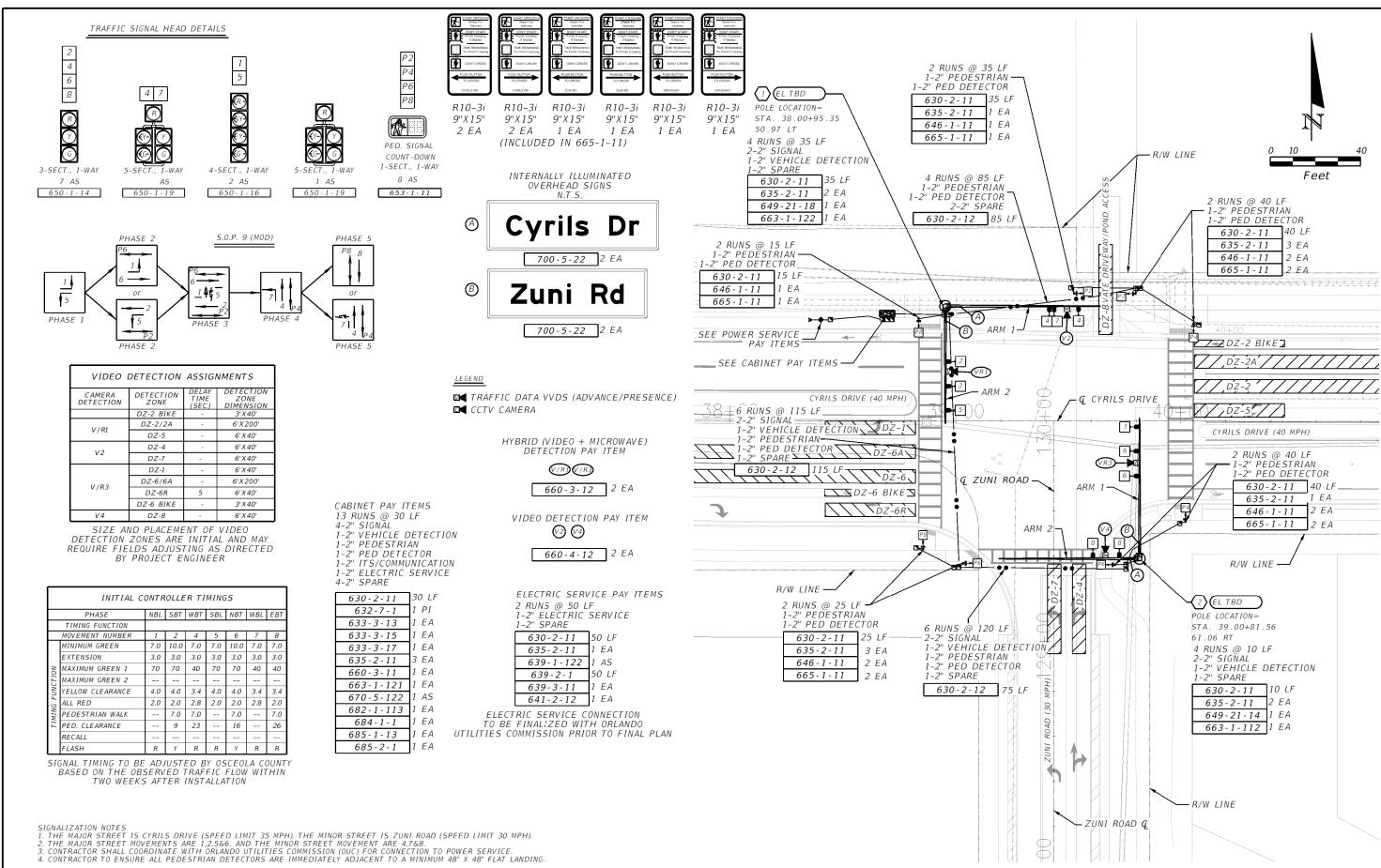


TRAFFIC & MOBILITY CONSULTANTS LLC
3101 MAGUIRE BLVD, SUITE 265
ORLANDO, FL 32803
OFFICE: (407) 531-5332
FAX: (407) 531-5331
FEREMY M. CROWE, P.E. 77064
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ORLANDO, FL 32803
OFFICE: (407) 531-5332

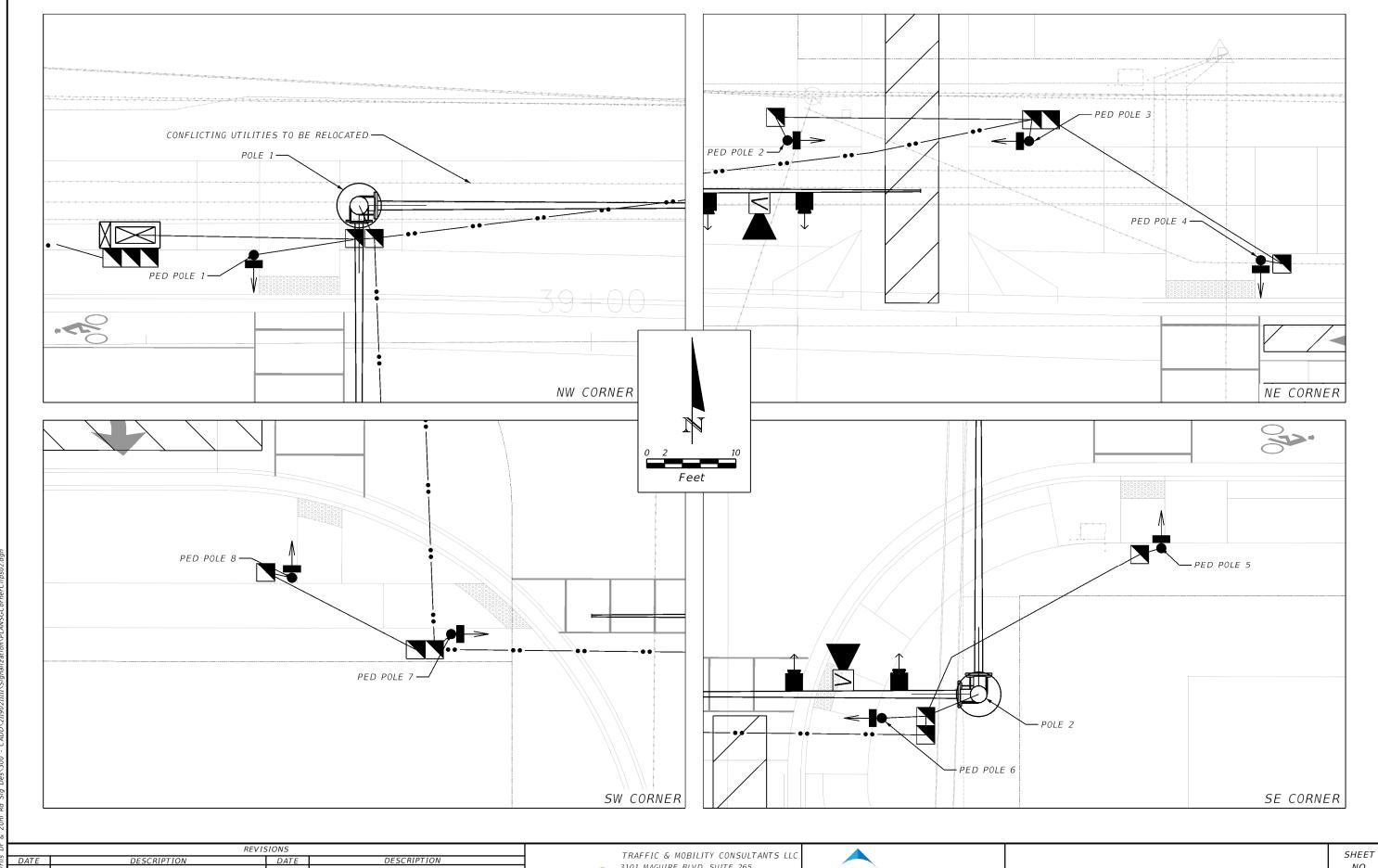
J FAX: (407) 531-5331

CHARLOTTE N. DAVIDSON, P.E. 50725
CERTIFICATE OF AUTHORIZATION: 30024



SIGNALIZATION PLAN

SHEET NO.



DESCRIPTION

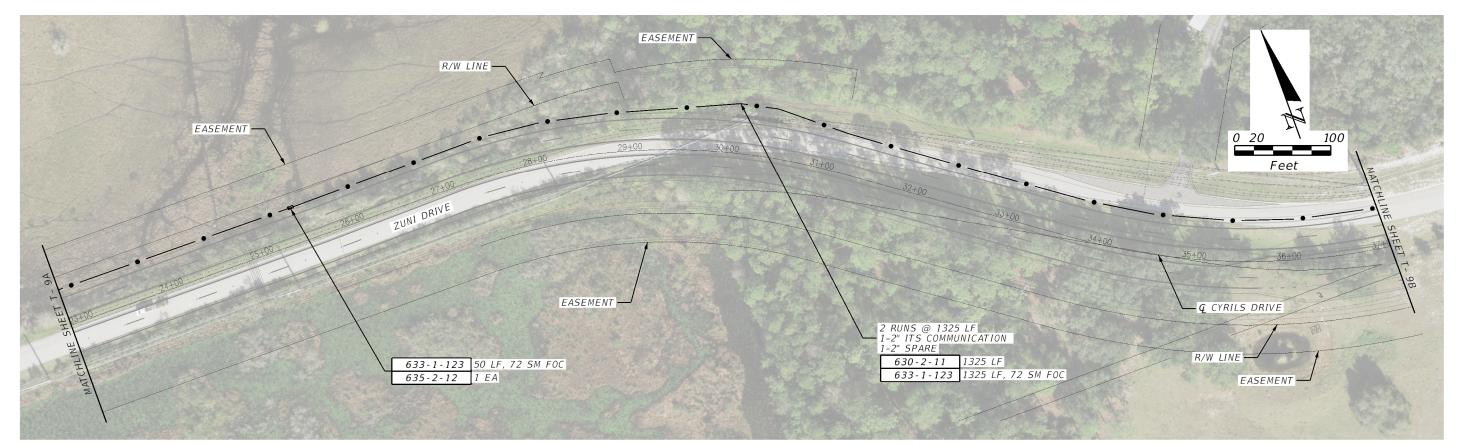
DESCRIPTION

TRAFFIC & MOBILITY CONSULTANTS LLC 3101 MAGUIRE BLVD, SUITE 265
ORLANDO, FL 32803
OFFICE: (407) 531-5332
FAX: (407) 531-5331
JEREMY M. CROWE, P.E. 77064
CERTIFICATE OF AUTHORIZATION NO.: 30024



CORNER CLIPS

SHEET NO.



DESCRIPTION DATE

REVISIONS

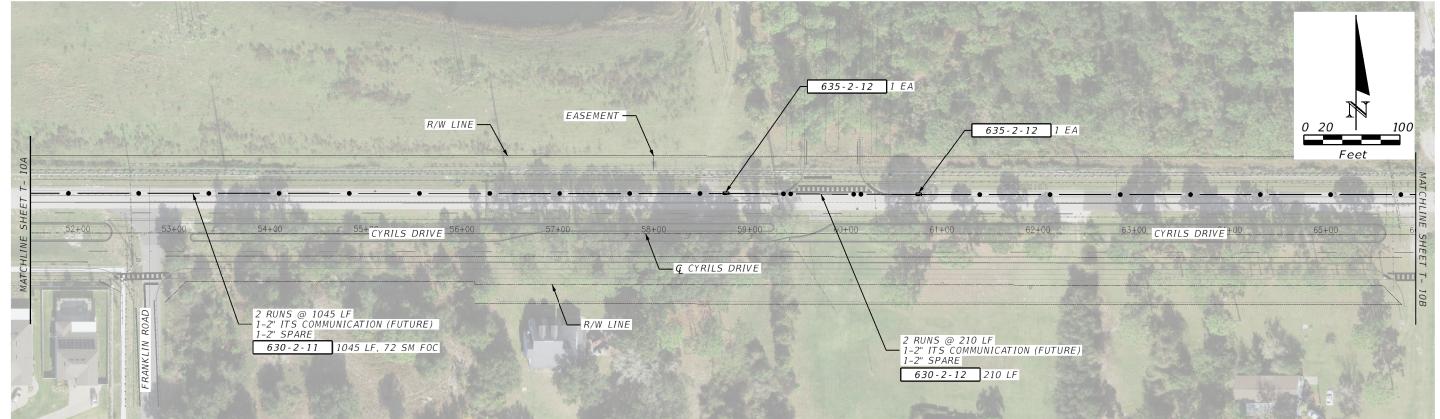
DESCRIPTION

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ORLANDO, FL 32803
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JEREMY M. CROWE, P.E. 77064
CERTIFICATE OF AUTHORIZATION NO.: 30024

Osceola County Florida "Honoring the past shaping the future."

INTERCONNECT PLAN

SHEET NO.



5/5/2023 6:03:22 PM SM

DATE

REVISIONS

DATE

DESCRIPTION

DESCRIPTION

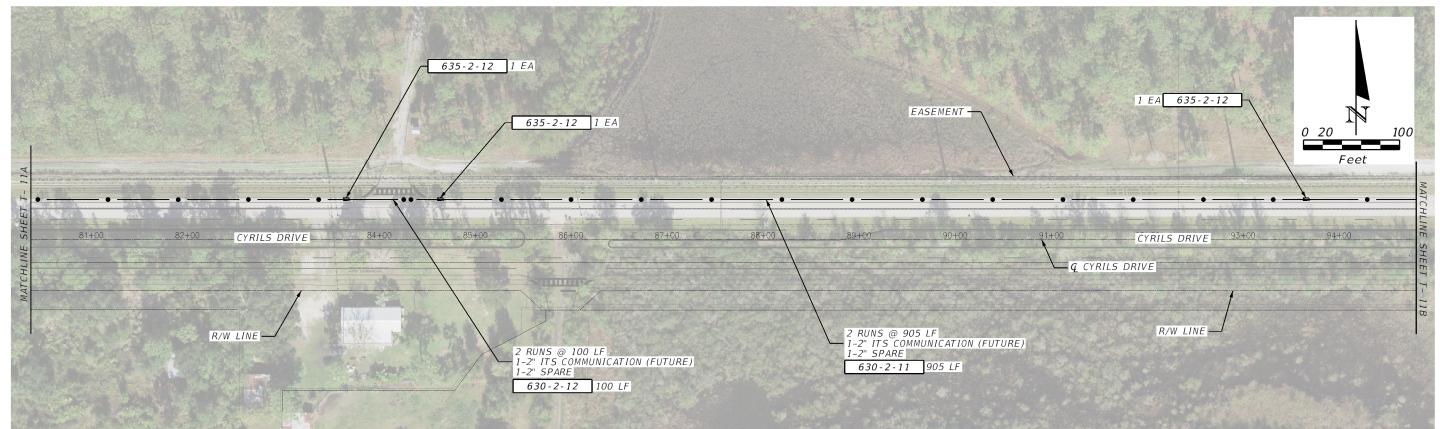
TAGE
Traffic & Mobility Consultants

TRAFFIC & MOBILITY CONSULTANTS LLC
3101 MAGUIRE BLVD, SUITE 265
ORLANDO, FL 32803
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INTERCONNECT PLAN

SHEET NO.



REVISIONS

DATE

DESCRIPTION

DESCRIPTION

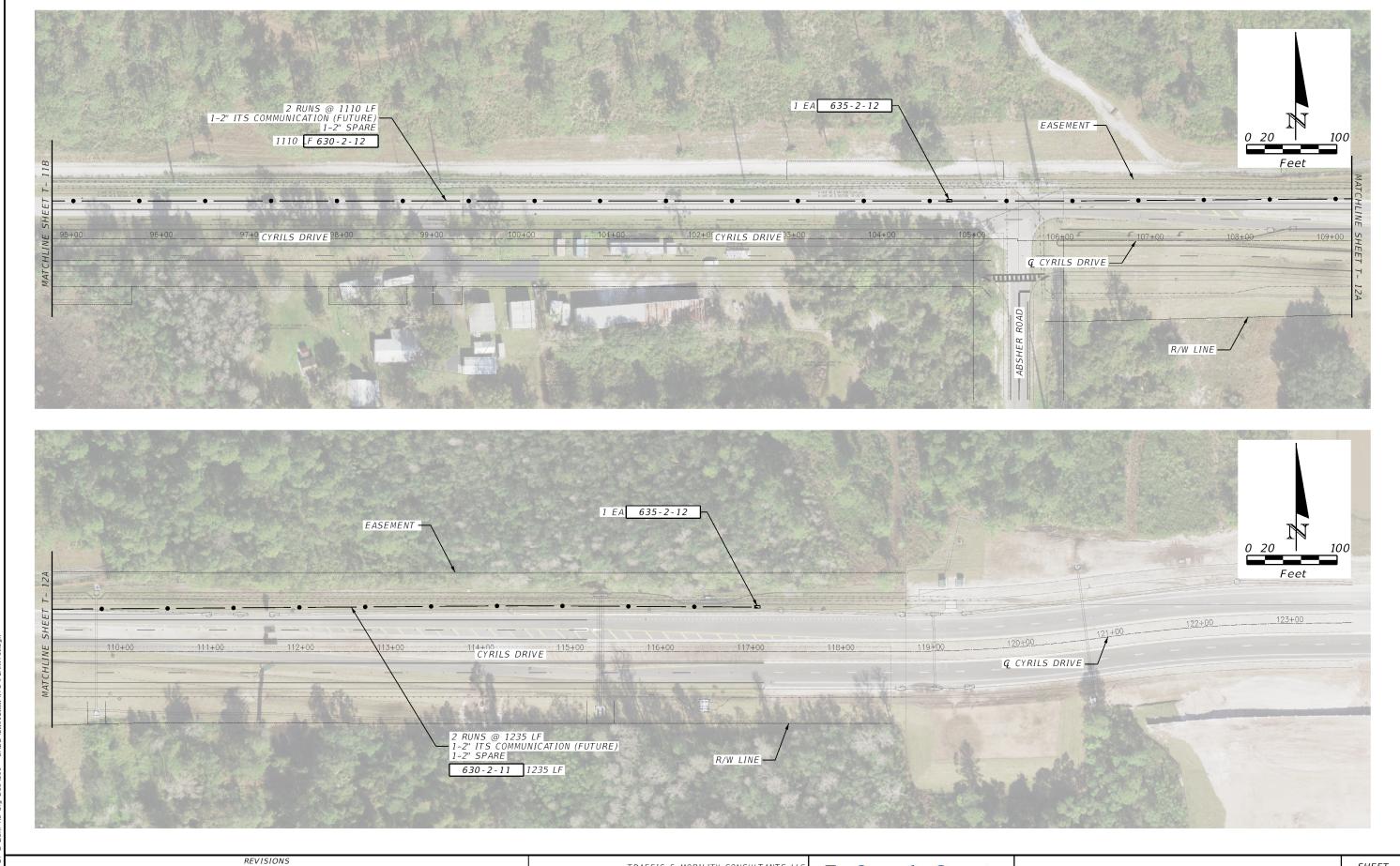
TRAFFIC & MOBILITY CONSULTANTS LLC Traffic & Mobility Consultants & EEC

3101 MAGUIRE BLVD, SUITE 265
ORLANDO, FL 32803
OFFICE: (407) 531-5332
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INTERCONNECT PLAN

SHEET NO.



DESCRIPTION

DATE

DESCRIPTION

TRAFFIC & MOBILITY CONSULTANTS LLC Traffic & Mobility Consultants

3101 MAGUIRE BLVD, SUITE 265
ORLANDO, FL 32803
OFFICE: (407) 531-5332
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JEREMY M. CROWE, P.E. 77064
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INTERCONNECT PLAN

SHEET NO.

\* DENOTES NUMBER OF SECTIONS IN SIGNAL HEAD ASSEMBLY

							<i>D</i> <u>2</u> <i>D</i>	0						0		, , ,	0202.																	_
							SIGNAL DATA											SIGNS	S AND	CCTV	//VIDE	O DE	ΓΕСΤΙ	ON PO	SITIO	N								
ID	SHEET	LOCATION BY STATION	TOP OF FOUND. ELEVATION	RDWY ARM	CROWN	SIGNAL	BACK PLATES	PED. SIGNAL			D.	I ST A	ANCE I	FROM	M POLE				TOTAL ARM	ARM	ANGLE BETWEEN			D I S7	ANCE	FROM	POLE/H	HE I GHT	& WIL	TH OF	SIGN			PAINT
NO	NO.	AND OFFSET	ELEVATION	NO.	ELEV.	V/H	Y/N	Y/N	1	*	2	*	3	*	4	*	5	*	LENGTH	М.Н.		Α	Н1	W 1	В	Н2	W2	С	Н3	W3	V	-	-	COLOR
1	T-6	38+95.35, 50.97LT	TBD	1	TBD	V	Y	N	46.4	5	<i>57 . 2</i>	3							70	TBD	270	0.0	2.0	7.0							52.1			
			TBD	2	TBD	V	Υ	N	22.7	3	33.7	3	44.4	4					50	TBD		0.0	2.0	6.5							27.2			MIDNIGHT
2	T-6	39+81.56, 61.06RT	TBD	1	TBD	V	Y	N	34.5	3	45.6	3	56.3	4					60	TBD	90	0.0	2.0	6.5							40.4			NEUTRAL
			TBD	2	TBD	V	Y	N	6.8	3	18.6	3							60	TBD		0.0	2.0	7.0							13.1			

								5	IGNAL	DA	4TA (	FUTU	RE LO	DADIN	G)									SIGN	S AND	CCTV	//VIDE	O DET	ECTI	ON PO	SITIC	N.		]
I	D SHEET	T LOCATION BY STATION	TOP OF FOUND. ELEVATION	RDWY ARM NO.	CROWN	SIGNAL	BACK PLATES	PED. SIGNAL			D	I ST A	NCE F	ROM	POLE				TOTAL ARM	ARM	ANGLE BETWEEN			DIS	TANCE	FROM	POLE/H	HE I GHT	& WI	отн оғ	SIGN			PAINT
NC	D. NO.	AND OFFSET	ELEVATION	NO.	ELEV.	V/H	Y/N	Y/N	1	*	2	*	3	*	4	*	5	*	LENGTH	М.Н.	DUAL ARMS 90/270	Α	H1	W 1	В	H2	W2	С	Н3	W3	V	-	-	COLOR
1	T-6	38+95.35, 50.97LT	TBD	1	TBD	V	Y	N	46.4	4	54.4	3	62.4	5					70	TBD	270	**	**	**				58.4	3.0	3.0	**			
			TBD	2	TBD	V	Y	N	**	**	**	**	**	**					50	TBD		**	**	**				40.4	3.0	3.0	**			MIDNIGHT
2	T-6	39+81.56, 61.06RT	TBD	1	TBD	V	Y	N	19.8	4	**	**	**	**	**	**			60	TBD	90	**	**	**				52.4	3.0	3.0	**			NEUTRAL
			TBD	2	TBD	V	Y	N	33.8	4	41.8	3	49.8	3					60	TBD		**	**	**				45.8	3.0	3.0	**			]

\*\* DENOTES EXISTING SIGNAL HEAD ASSEMBLY OR SIGN TO REMAIN

NOTES: 1. TOTAL ARM LENGTH, SIGNAL HEAD AND SIGN PLACEMENT IS MEASURED FROM BASE PLATE FLANGE FACE TO TIP OF ARM. 2. TOP OF FOUNDATION AND CROWN ELEVATIONS TO BE PROVIDED AT 90% SUBMITTAL.

	REVISIONS										
DATE	DESCRIPTION	DATE	DESCRIPTION								



TRAFFIC & MOBILITY CONSULTANTS LLC 3101 MAGUIRE BLVD, SUITE 265
ORLANDO, FL 32803
OFFICE: (407) 531-5332
FAX: (407) 531-5331
JEREMY M. CROWE, P.E. 77064
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MAST ARM TABULATION

SHEET NO.

TO BE INCLUDED
AT 90% SUBMITTAL

REVISIONS

DATE DESCRIPTION DATE DESCRIPTION



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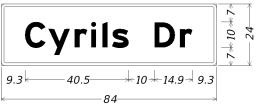
STANDARD MAST ARM ASSEMBLIES DATA TABLE SHEET NO.

T-13

yrils Dr & Zuni Rd Sig Des\300 - CADD\21190211111\signalization\PLDTSG02.dgn

SIGN NUM	BER	A
QUANTITY		2
WIDTH		7'-0"
HEIGHT		2'-0"
BORDER W	IDTH	1.5"
BORDER R	ADII	O"
BACKGROU	ND COLOR	GMI CV 300-18 HUNTER GREEN
LEGEND &	BORDER COLOR	3M 490T WHITE
STATION(S	)	N/A

NOTES: 1. SIGNS SHALL BE DOUBLE SIDED FREE SWINGING MOUNTED ON CANTILEVER ARM ATTACHED TO THE SIGNAL UPRIGHT.



0" Radius, 1.5" Border, White on Green; "Cyrils Dr", E Mod 2K 60% spacing; Table of distances between letter and object lefts

	С	у	r	i	1	s	D	r	
9.3	9.1	<i>10.2</i>	6.5	4.4	3.7	16.6	9.9	5.0	9.3

SIGN NUMBER	В
QUANTITY	2
WIDTH	6'-6"
HEIGHT	2'-0"
BORDER WIDTH	1.5"
BORDER RADII	O''
BACKGROUND COLOR	GMI CV 300-18 HUNTER GREEN
LEGEND & BORDER COLOR	3M 490T WHITE
STATION(S)	N/A
1	

NOTES:

1. SIGNS SHALL BE DOUBLE SIDED FREE
SWINGING MOUNTED ON CANTILEVER
ARM ATTACHED TO THE SIGNAL UPRIGHT.



O" Radius, 1.5" Border, White on Green; "Zuni Rd", E Mod 2K 60% spacing; Table of distances between letter and object lefts

11.3 | **Z** | **u** | **n** | **i** | **R** | **d** | 6.6 | 11.2

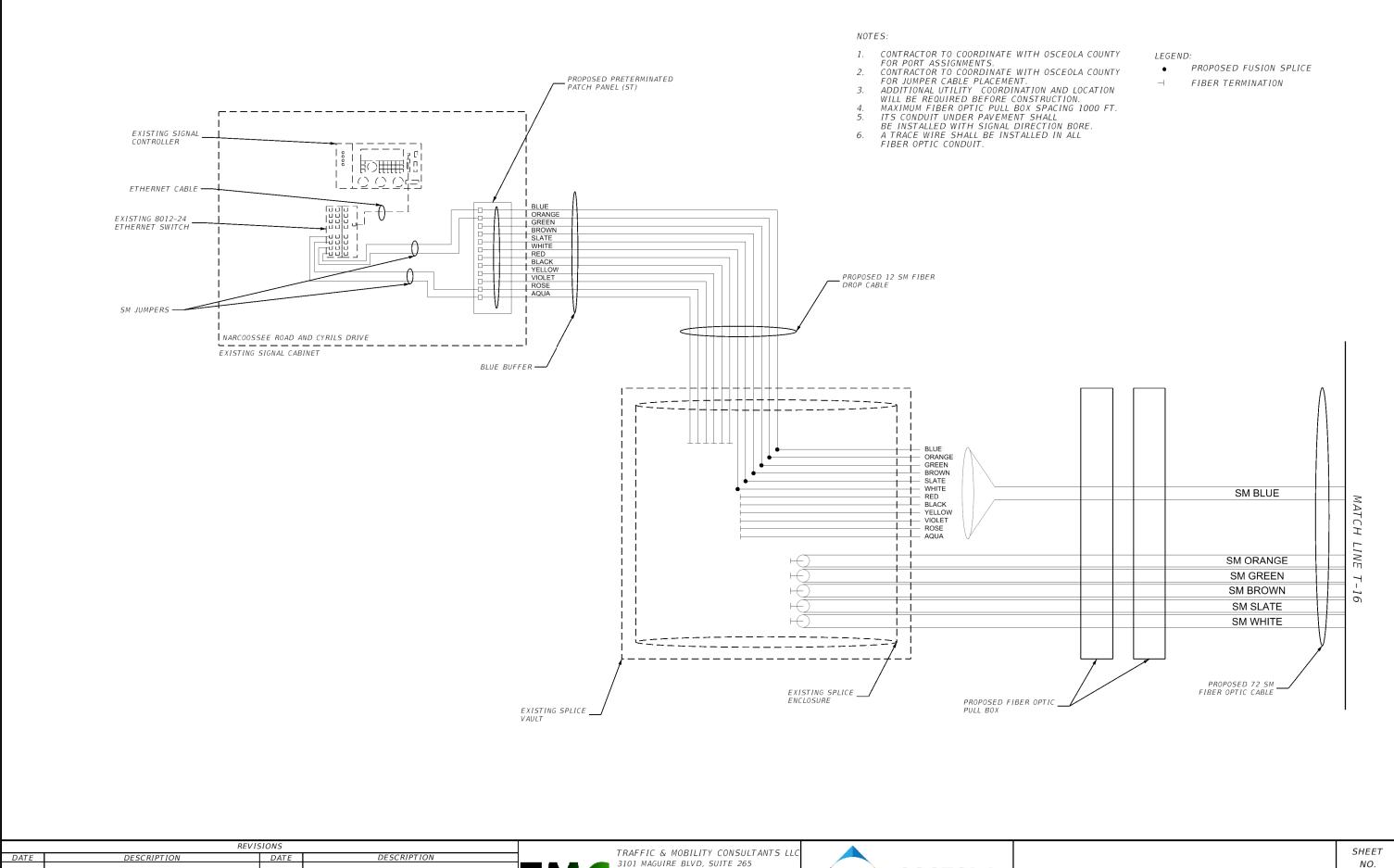
REVISIONS DESCRIPTION DATE DESCRIPTION DATE

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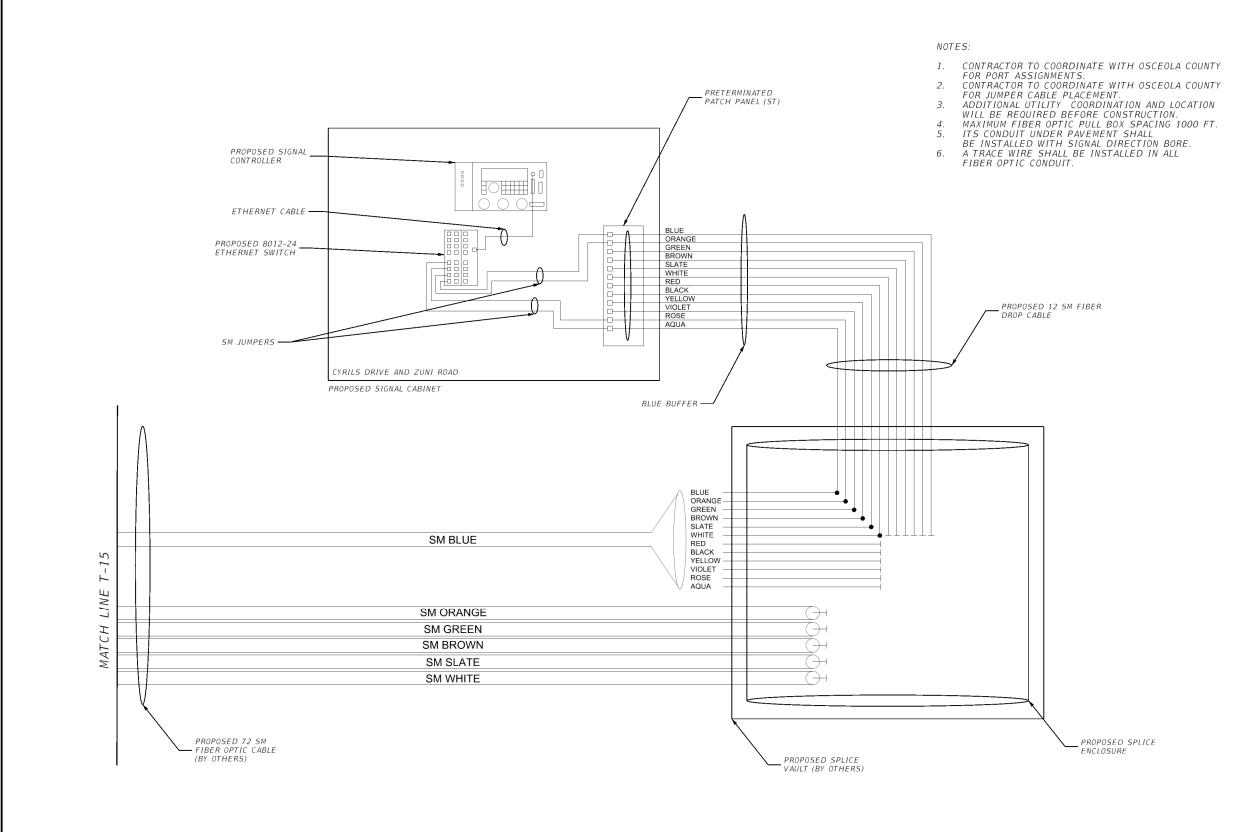
GUIDE SIGN WORKSHEET

SHEET NO.



3101 MAGUIRE BLVD, SUITE 265
ORLANDO, FL 32803
OFFICE: (407)531-5332
FAX: (407)531-5331
JEREMY M. CROWE, P.E. 77064
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LEGEND:

PROPOSED FUSION SPLICE

FIBER TERMINATION

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ORLANDO, FL 32803
OFFICE: (407)531-5332
JFAX: (407)531-5331
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SPLICE DIAGRAM

SHEET NO.

T-16

DATE

**OSCEOLA** COUNTY