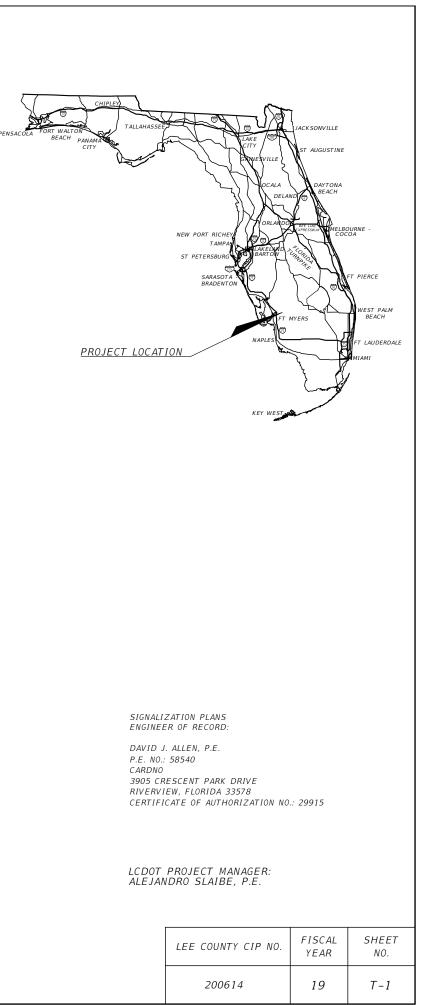
LEE COUNTY DEPARTMENT OF TRANSPORTATION



CONTRACT PLANS

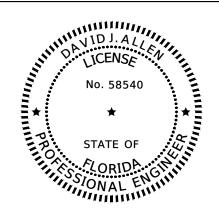
LEE COUNTY

SUNSHINE BLVD & 8th STREET SW INTERSECTION

SIGNALIZATION PLANS

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T-13	REPORT OF TEST BORINGS



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CARDNO 3905 CRESCENT PARK DRIVE RIVERVIEW, FL 33578 DAVID J. ALLEN, P.E. NO. 58540

RO FT RO STATE OF STATE OF STORIDA CONTINUE THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE FOLLOWING SHEETS IN ACCORDANCE WITH RULE 61G15-23.004, F.A.C.

INDEX OF SIGNALIZATION

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DATE DE	ESCRIPTION DATE	DESCRIPTION	P.E. LICENSE NU CARDNO				NSPORTATION
			3905 CRESCENT RIVERVIEW, FLC		ROAD NAME	COUNTY	LEE COUNTY CIP NO.
				F AUTHORIZATION 29915	BLVD.	LEE Howard Holley	200614



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Howard Holley

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CARDNO

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INDEX OF SIGNALIZATION

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GFA INTERNATIONAL 201 WALDO AVE NORTH LEHIGH ACRES, FL 33971 ADAM J. DORNACKER, P.E. NO. 85319

SIGNALIZATION

SHEET DESCRIPTION

SIGNATURE SHEET REPORT OF TEST BORINGS

> SHEET NO.

SIGNATURE SHEET

T-2

TABULATION OF QUANTITIES

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GENERAL NOTES

1. ADHERE TO REQUIREMENTS IN "LEE COUNTY DEPARTMENT OF TRANSPORTATION PLAN SPECIFICATIONS FOR SIGNAL & STREET LIGHTING", DATE REVISED APRIL 15, 2014. CONTACT LEE COUNTY DEPARTMENT OF TRANSPORTATION (LCDOT) FOR ANY QUESTIONS REGARDING EQUIPMENT OR INSTALLATION REQUIREMENTS.

2. CABINET/CONTROLLER/VIDEO DETECTION PREPARATION:

LEE COUNTY SIGNALS WILL ASSIST THE CONTRACTOR IN THE SETUP OF NEW SIGNAL CABINET/CONTROLLERS/CAMERAS WHEN THE FOLLOWING CONDITIONS ARE MET: DELIVERY OF EQUIPMENT TO 5650 ENTERPRISE PARKWAY BY CONTRACTOR OR SHIPPER. SEND A QUALIFIED TECHNICIAN TO THE SIGNAL SHOP TO SET UP THE EQUIPMENT WITH THE AID OF A SENIOR SIGNAL TECH, GIVING MINIMUM OF 48 HOURS NOTICE. AFTER SET UP, ARRANGE TO PICK UP THE EQUIPMENT WITHIN ONE WEEK. AT TIME OF REMOVAL FROM THE LEE COUNTY SIGNAL SHOP, THE EQUIPMENT SHALL BE SIGNED OUT BY THE CONTRACTOR REPRESENTATIVE AS COMPLETE. LEE COUNTY WILL NOT STORE CONTRACTOR EQUIPMENT. UNDER THESE CONDITIONS, LEE COUNTY SIGNALS WILL ASSIST THE CONTRACTOR ON "TURN ON" DAY IN THE FIELD. SHOULD THE CONTRACTOR ELECT TO SET UP. BURN IN. AND TEST THE EQUIPMENT WITHOUT LEE COUNTY ASSISTANCE. A MANUFACTURER'S REPRESENTATIVE SHALL BE ONSITE, AT CONTRACTOR'S EXPENSE, ON THE DAY OF "TURN ON" TO ASSIST THE CONTRACTOR AND TO VERIFY PROPER OPERATION.

3. SPECIAL NOTE REGARDING NEW CONTROLLERS:

LEE COUNTY RESERVES THE RIGHT TO SUBSTITUTE DIFFERENT CONTROL EQUIPMENT IN THE EVENT THAT DELIVERED EQUIPMENT IS NOT COMPATIBLE WITH THE EXISTING SYSTEM. SINCE SYSTEM UPGRADES MAY BE BEHIND CONTROLLER TECHNOLOGY, AS THE MAINTAINING AGENCY, LEE COUNTY SIGNALS WILL DECIDE EQUIPMENT PLACEMENT AND TIMING AND MAY PROVIDE AN ALTERNATE CONTROLLER TEMPORARILY UNTIL FUTURE UPGRADES ARE MADE. IF THERE IS A COST DIFFERENTIAL, PAYMENT WILL BE MADE TO THE CONTRACTOR PER PLAN QUANTITY AND SPECIFICATION.

4. INSPECTIONS:

IT IS REQUIRED TO HAVE AN AUTHORIZED REPRESENTATIVE AND THE NECESSARY EQUIPMENT TO COMPLETE THE INSPECTIONS ONSITE AT ALL SIGNAL AND LIGHTING INSPECTIONS. FAILURE TO HAVE A REPRESENTATIVE ONSITE WILL RESULT IN THE CANCELLATION OF THE INSPECTION AND THE WITHHOLDING OF FINAL PAYMENT. AUTHORIZED REPRESENTATIVE IS A PERSON WITH THE KNOWLEDGE AND ABILITY TO MAKE CORRECTIONS AS NEEDED. THIS IS A REQUIREMENT AND IS NECESSARY TO ELIMINATE COSTLY RE-INSPECTIONS AND TO SPEED UP THE CLOSE OUT OF THE PROJECT.

5. GROUNDING:

EACH SIGNAL POLE SHALL HAVE A MINIMUM OF TWENTY (20) FEET OF GROUND ROD DRIVEN. GROUND RODS MUST READ LESS THAN 15 OHMS WHEN TESTED AFTER INSTALLATION.

EACH PEDESTRIAN POLE SHALL HAVE MINIMUM OF TWENTY (20) FEET OF GROUND ROD DRIVEN. GROUND RODS MUST READ LESS THAN 15 OHMS WHEN TESTED AFTER INSTALLATION.

EACH CABINET SHALL HAVE MINIMUM OF FIFTY (50) FEET OF GROUND ROD DRIVEN. GROUND RODS MUST READ LESS THAN 5 OHMS WHEN TESTED AFTER INSTALLATION. NO GROUND RODS INSTALLED IN CABINET BASE.

EACH ELECTRICAL SERVICE SHALL HAVE MINIMUM OF TWENTY (20) FEET OF GROUND ROD DRIVEN. GROUND RODS MUST READ LESS THAN 15 OHMS WHEN TESTED AFTER INSTALLATION.

EACH STREET LIGHT POLE SHALL HAVE MINIMUM OF TWENTY (20) FEET GROUND ROD DRIVEN. GROUND RODS MUST READ LESS THAN 15 OHMS WHEN TESTED AFTER INSTALLATION.

ALL GROUND WIRE SHALL BE #6 STRANDED COPPER.

ENSURE THAT ALL GROUNDED ELEMENTS AT AN INTERSECTION ARE BONDED TOGETHER TO FORM AN INTERSECTION GROUNDING NETWORK (620-3.1), SPAN WIRE GROUND BOND AT CONCRETE POLES: USE BI-METAL SPLIT BOLT (CU-AL RATED) TO BOND ALL CABLES TOGETHER. KEEP COPPER WIRE SEPARATED FROM STEEL CABLES ON ONE SIDE OF THE SPLIT BOLT.

ALL SIGNAL POLES. PEDESTRIAN POLES SHALL BE TIED INTO A NETWORK GROUND SYSTEM AND BROUGHT BACK TO THE CABINET.

ALL GROUND RODS SHALL BE INSTALLED IN A PULL BOX. TOP OF GROUND ROD SHALL BE TWO (2) INCHES ABOVE TOP OF ROCK IN PULL BOX, FOR A CONCRETE STRAIN POLE, INSTALL GROUND ROD IN PULL BOX NEXT TO POLE.

GROUND SPARE CONDUCTORS INSIDE CABINET ON CABINET GROUND BAR.

ALL GROUND ROD READINGS SHALL BE VERIFIED BY LEE COUNTY DOT SIGNAL INSPECTOR BEFORE FINAL CONNECTION.

PAY ITEM NOTES

ALL GROUND ROD READINGS SHALL BE NOTED ON A GROUND ROD SHEET.ROUND ROD READINGS SHALL BE RECORDED AT 10 ALL ROCKS AND TRASH SHALL BE REMOVED FROM THE TRENCH. BACKFILL SHALL BE CLEAN AND CONTAIN NO ROCKS. OBSERVE MAXIMUM NUMBER OF CONDUITS ALLOWED IN A PULL BOX PER NEC. INSTALL PER FDOT STANDARD PLANS. ALL MINOR STREET ROAD CROSSINGS SHALL HAVE A MINIMUM OF FIVE (5) TWO (2) INCH PVC CONDUIT. ALL MAJOR ROAD ANY BORES THAT FAIL, ARE TO BE REMOVED. IF REMOVAL IS NOT POSSIBLE, ENDS SHALL BE CUT OFF AT A DEPTH OF 36" ALL HOLES CAUSED BY EQUIPMENT SHALL BE BACKFILLED AND GROUND RESTORED. ALL PEDESTRIAN DETECTORS SHALL BE WIRED WITH A (2) CONDUCTOR SHIELDED CABLE (BELDEN/HOMERUN TYPE CABLE). SHEET GENERAL NOTES (1) T-4

630-2-11, 630-2-12: CONDUIT STREET CROSSINGS SHALL BE MINIMUM OF FIVE (5) EACH TWO (2) INCH PVC CONDUITS. PVC CONDUIT SHALL BE SCHEDULE 40 OR 80 APPROVED FOR ELECTRICAL USE (GRAY). NO THIN WALL CONDUIT IS ALLOWED. TWENTY (20) FOOT CONDUIT RUNS FOR STREET LIGHTING SHALL BE TWO (2) INCH MINIMUM. ANY CONDUIT ABOVE GROUND SHALL BE RIGID GALVANIZED STEEL CONDUIT. CONDUIT SHALL BE INSTALLED AT A MINIMUM DEPTH OF THIRTY-SIX (36) INCHES. CONDUIT TWO (2) INCH AND LARGER SHALL HAVE A THREADED BUSHING INSTALLED AT EACH END, OR A SLIP OVER BUSHING TO PROTECT CABLE. BOTH ENDS OF ALL CONDUITS SHALL BE SEALED WITH DUCT SEAL. DIRECTIONAL BORE CONDUIT SHALL BE A MINIMUM OF SDR 13.5 AND SHALL BE GRAY IN COLOR. BLACK CONDUIT CAN BE SUBSTITUTED IF APPROVED BY THE LEE COUNTY TRAFFIC ENGINEER. NO OTHER CONDUIT COLOR CAN BE USED UNLESS APPROVED BY LEE COUNTY TRAFFIC ENGINEER. CROSSINGS SHALL HAVE A MINIMUM OF FIVE (5) TWO (2) INCH PVC CONDUIT. NO POTHOLES CUT IN PAVEMENT ARE ALLOWED TO LOCATE EXISTING UTILITIES UNLESS APPROVAL IS OBTAINED FROM ENGINEERING SERVICE DIRECTOR. BELOW GROUND AND THE CONDUIT FILLED WITH GROUT. ALL ROAD AND DRIVEWAY CROSSINGS SHALL BE A MINIMUM OF 36" DEEP. COUPLINGS TO CONNECT THE BORES TOGETHER. 632-7-1: EACH SIGNAL PHASE SHALL HAVE ITS OWN NEUTRAL. SHARING OF A NEUTRAL IS NOT ALLOWED. SIGNAL CABLE SHALL BE #14 AWG STRANDED COPPER USED UNLESS OTHERWISE SPECIFIED. AND SHALL MEET IMSA SPECIFICATIONS #19-1. THE COLOR CODE OF SIGNAL CABLE SHALL BE VERIFIED WITH LEE COUNTY TRAFFIC SECTION PRIOR TO WIRING

FOOT INTERVALS (620-3.2). LENGTHS ON RUNS OVER TWENTY (20) FEET SHALL BE USED. IF THE DISTANCE IS TOO FAR TO COMPLETE THE BORE IN ONE ATTEMPT, THEN THE CONTRACTOR SHALL USE "E LOCK" IF CONDUIT IS INSTALLED IN A PULL BOX, OR CABINET, DUCT SEAL SHALL BE USED TO SEAL THE ENDS. EACH SIGNAL CABLE SHALL HAVE FOUR (4) SPARE WIRES OVER THE ENTIRE LENGTH ON SPAN WIRE INSTALLATION. EACH PEDESTRIAN PHASE SHALL HAVE ITS OWN NEUTRAL. SHARING OF A NEUTRAL IS NOT ALLOWED. INTERSECTION. THE COLOR CODE CAN BE OBTAINED FROM LEE COUNTY TRAFFIC SECTION.

EACH BUTTON TO HAVE ITS OWN CABLE FROM THE SIGNAL CABINET. NO SPLICING IS ALLOWED.

	R E V I	DAVID J. ALLEN, P.E.	LEE COUNTY					
DATE	DESCRIPTION	DATE	DESCRIPTION	P.E. LICENSE NUMBER 58540 CARDNO	DEPART		NSPORTATION	
				3905 CRESCENT PARK DRIVE		COUNTY	LEE COUNTY CIP NO.	
		RIVERVIEW, FLORIDA 33578 CERTIFICATE OF AUTHORIZATION 29915	SUNSHINE BLVD.	LEE	200614			

PAY ITEM NOTES (CONT.)

SIGNAL CABLE SHALL BE ATTACHED TO THE MESSENGER BY MEANS OF TIE WRAPS AND LASHING ROD. LASHING ROD SHALL THREAD THROUGH THE DRIP LOOP.

ALL IMSA 19-1 SIGNAL CABLE OUTER BLACK JACKET SHALL EXTEND INTO DISCONNECTS A MINIMUM OF 3".

SIGNAL CABLE SHALL BE SPLICED IN BASE OF PEDESTAL AND NOT IN PEDESTRIAN HEAD. SPLICE CABLE WITH WIRE NUTS.

634-4-153:

THE CATENARY SHALL BE INSTALLED AT THE SPECIFIED DESIGN SAG WITH A MINIMUM OF 12" AND A MAXIMUM OF 24" SEPARATION FROM THE BOTTOM MESSENGER WIRE. THE BOTTOM MESSENGER SHALL BE INSTALLED WITHOUT SAG AT THE SPECIFIED LOCATION ON THE CONCRETE POLE.

2-POINT ATTACHMENT SPANS SHALL BE INSTALLED PER FDOT STANDARDS USING BREAKAWAY HINGE.

IF A HIGHER GRADE AND/OR RATED LOAD IS SPECIFIED FOR THE BOTTOM MESSENGER WIRE BY THE DESIGNER, THE BOTTOM MESSENGER SHALL HAVE A RATED LOAD THAT IS LESS THAN THE TOP CATENARY.

635-2-11:

PULL BOXES SHALL BE COMPOSITE CONSTRUCTION (QUAZITE) AND LOAD RATED 20,000 LBS. NO EXCEPTIONS WILL BE APPROVED.

PULL BOX LIDS SHALL BE COMPOSITE CONSTRUCTION (QUAZITE) AND MARKED APPROPRIATELY, "TRAFFIC SIGNAL" OR "STREET LIGHT".

NO CONCRETE PULL BOXES OR STEEL LIDS SHALL BE ALLOWED.

PULL BOXES SHALL BE SIZED TO ACCOMMODATE MAXIMUM NUMBER OF PIPES ALLOWED PER NEC AND TO COMPLY WITH CABLE MANUFACTURER'S BEND RADIUS.

A PULL BOX WITH A MINIMUM COVER MEASUREMENT OF 17" X 30" X 12" SHALL BE USED ON TRAFFIC SIGNALS AND STREET LIGHTS.

PULL BOXES SHALL BE INSTALLED ON A BED OF GRAVEL WITH A MINIMUM DEPTH OF TWELVE (12) INCHES. GRAVEL SHALL BE 57 STONE OR EQUIVALENT. GRAVEL SHALL BE INSTALLED INSIDE THE PULL BOX TO A LEVEL OF TWO (2) INCHES BELOW TOP OF CONDUITS.

CONDUIT IN A PULL BOX SHALL BE NO HIGHER THAN HALF THE DEPTH OF THE PULL BOX.

ALL PULL BOXES SHALL HAVE A CONCRETE APRON. APRON SHALL BE 1 FOOT WIDE X 6 INCHES DEEP.

639-1-112: SERVICE SHALL BE MINIMUM 60 AMP, 120/240 VOLT THREE-WIRE.

DISCONNECT SHALL BE A SQUARE D Q06-12L100RB.

ALL SERVICES SHALL BE METERED. A BY-PASS METER CAN SHALL BE INSTALLED ON EACH ELECTRIC SERVICE WHERE POWER IS SUPPLIED BY LCEC. INSTALL A JOSLYN LDP20-120-2 OR EQUIVALENT SURGE ARRESTOR TO ELECTRIC SERVICE DISCONNECT.

GALVANIZED RIGID CONDUIT SHALL BE USED FOR RISER AND WHERE EXPOSED ABOVE GROUND. MINIMUM OF 1" CONDUIT FOR RISERS.

CIRCUIT BREAKER FOR CABINET SHALL BE 120V. 30 AMP: CIRCUIT BREAKER FOR STREET LIGHTS SHALL BE 120V. 15 AMP. EACH 15 AMP BREAKER TO HAVE OWN PHOTOCELL. PHOTOCELL SHALL BE A MINIMUM OF 1800 WATTS.

GROUND WIRE SHALL BE IN 1/2 INCH SCHEDULE 80 PVC OR 1/2 INCH RIGID GALVANIZED CONDUIT. CONDUIT SHALL EXTEND MINIMUM OF 6 INCHES BELOW FINISH GRADE.

RISER CONDUIT SHALL BE CONNECTED TOGETHER BY USE OF GALVANIZED THREADED COUPLINGS OR COMPRESSION NO-THREAD COUPLINGS.

641-2-18:

EACH SIGNAL POLE SHALL HAVE A MINIMUM OF THREE (3) EACH TWO (2) INCH CONDUITS INSTALLED IN EACH POLE, EXTEND CONDUITS WITHIN POLE TO 1 INCH BELOW HANDHOLE.

CONCRETE FOR POLE FOUNDATION SHALL BE TWELVE (12) INCHES BELOW EXISTING GRADE.

CALCULATIONS FOR DESIGN SHALL BE SUBMITTED TO TRAFFIC ENGINEER FOR APPROVAL PRIOR TO ORDERING OF POLES.

SIGNAL POLES SHALL COMPLY WITH TYPICAL DRAWINGS, AS TO PLACEMENT OF ATTACHMENT POINTS, NIPPLE PLACEMENT,

HANDHOLE AND MOUSE HOLE SIZE. MOUSE HOLE SHALL BE CUT AT 45° TO FACILITATE INSTALLATION OF CONDUITS.

ENSURE ALL CONCRETE SIGNAL POLES COMPLY WITH STANDARD DESIGN AND LEE COUNTY SPECIFICATIONS PRIOR TO INST ALLING.

CONCRETE POLES ARE TO BE DESIGNED BY THE POLE MANUFACTURER TO MEET FDOT STANDARDS AND LEE COUNTY'S SPECIFICATIONS AND DETAILS.

646-1-11: USE FOUR (4) INCH ID ALUMINUM CONDUIT FOR PEDESTALS. USE PELCO OR EQUAL BREAKAWAY BASES WITH LOCKING COLLAR AND GROUND LUG.

650-1-14, 650-1-16: ALL SIGNAL HEADS SHALL HAVE A ONE-PIECE METAL LOUVERED REFLECTORIZED BACKPLATE. BACKPLATES SHALL BE REFLECTORIZED FOR ALL DIRECTIONS. PLASTIC BACKGROUNDS REQUIRE SUBMITTAL AND DEPARTMENT APPROVAL.

ALL DISPLAYS SHALL BE EXTENDED VIEW LED DISPLAYS.

TERMINAL BLOCKS AND JONES PLUGS SHALL BE REMOVED FROM EACH DISCONNECT PRIOR TO INSTALLATION. NO WIRING HARNESSES SHALL BE USED IN SIGNAL HEADS. USE #14 STRANDED (THHN) COPPER RED, YELLOW, GREEN, AND WHITE WIRE.

NO ARROW INSERTS ALLOWED.

HUBS SHALL BE SILICONE SEALED TO SIGNAL HEADS.

DIE-CAST METAL HEADS SHALL BE USED UNLESS OTHERWISE APPROVED BY LEE COUNTY.

TWO (2) EACH 1/4 INCH DRAIN HOLE SHALL BE DRILLED IN BOTTOM OF SIGNAL HEADS.

THE SIGNAL PHASE SHALL BE MARKED IN SIGNAL HEAD.

IMSA 19-1 SIGNAL CABLE OUTER JACKET SHALL REMAIN INTACT THROUGH ASSEMBLY, EXTENDED A MINIMUM OF THREE (3) INCHES INTO TRAFFIC SIGNAL DISCONNECT ON SPAN WIRE INSTALLATION.

MESSENGER CLAMPS SHALL BE CORRECT SIZE FOR CABLE USED. MESSENGER CLAMPS SHALL BE 2-INCHES BY 6-INCHES WITH 2 (TWO) EACH 3/8 INCH HOLES.

ALL ATTACHING HARDWARE FOR MESSENGER WIRE SHALL BE STAINLESS STEEL 304 OR 316. SPLICES IN DISCONNECTS SHALL BE DONE WITH WIRE NUTS.

TRI STUD HANGER SHALL BE SILICONE SEALED WHERE IT ATTACHES TO DISCONNECT.

CABLE ENTRANCES IN DISCONNECTS, WHEN NOT USED, SHALL BE SEALED.

NEOPRENE GROMMETS SHALL BE INSTALLED IN BOTH SIDES OF DISCONNECTS.

SIGNAL CABLE OUT JACKET TO BE INSERTED A MINIMUM OF THREE (3) INCHES INTO DISCONNECT.

DATE	R E V I S DESCRIPTION	I O N S DATE		DAVID J. ALLEN, P.E. P.E. LICENSE NUMBER 58540 CARDNO	LEE COUNTY DEPARTMENT OF TRANSPORTATION				
				3905 CRESCENT PARK DRIVE	ROAD NAME	COUNTY	LEE COUNTY CIP NO.		
		RIVERVIEW, FLORIDA 33578 CERTIFICATE OF AUTHORIZATION 299		SUNSHINE BLVD.	LEE	200614			
						Howard Hollev	11/6/2019 10:22:18 AM		

GENERAL	NOTES	(2)

SHEET

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PAY ITEM NOTES (CONT.)

653-1-11:

USE INTERNATIONAL SYMBOL LED COUNTDOWN WITH DIFFUSER HEADS ONLY, WITH EGG CRATE VISOR.

ALL ATTACHING HARDWARE SHALL BE STAINLESS STEEL 304 OR 316.

MOUNTING HEIGHT OF PEDESTRIAN HEADS SHALL BE NINE (9) FEET SIX (6) INCHES ABOVE GRADE TO BOTTOM OF HEAD.

SEAL WITH SILICONE AROUND TOP CAPS AND PED BUTTONS.

PLACEMENT OF PED SIGNS SHALL BE "PUSH TO WALK" ABOVE BUTTON AND INSTRUCTION BELOW BUTTON.

EXPLANATORY SIGNS BE MOUNTED ABOVE THE BUTTONS, EACH SIGN IS TO IDENTIFY THE CROSSWALK TO WHICH EACH BUTTON APPLIES.

SIGNAL CABLE SHALL BE SPLICED IN BASE OF PEDESTAL AND NOT IN PEDESTRIAN HEAD. SPLICE CABLE WITH WIRE NUTS.

660-3-11, 660-3-12:

THE PROPOSED DILEMMA ZONE DETECTION SYSTEM SHALL BE MICROWAVE CONTROLLED WITH A DETECTION RANGE OF UP TO 900 FEET. THE CONTROLLER ASSEMBLY DILEMMA ZONE DETECTION SYSTEM CONTROL UNIT SHALL BE SHELF MOUNTED WITH TS2 SDLC AND ETHERNET COMMUNICATIONS. THIS PAY ITEM NUMBER INCLUDES ALL MATERIALS REQUIRED FOR A COMPLETE AND ACCEPTED INSTALLATION. ALL MATERIALS AND EQUIPMENT USED SHALL BE AS PER MANUFACTURER'S RECOMMENDATIONS. DETECTION ZONES SHALL BE SET UP AS INDICATED IN THE PLANS AND PER LEE COUNTY SPECIFICATIONS.

660-4-11, 660-4-12:

AUTOSCOPE ENCORE OR ALDIS GRID SMART ARE THE PREFERRED VIDEO DETECTION FOR LEE COUNTY. THESE ARE GENERAL SPECIFICATIONS FOR SOLO TERRA OR ALDIS GRID SMART INSTALLATIONS AT AN AVERAGE INTERSECTION, IF ANY QUESTIONS CALL LCDOT AT (239) 533-9500.

AUTOSCOPE ENCORE POWER CABLE INSTALLATION

USE A 3 CONDUCTOR #18 STRANDED CABLE WITH POLYETHYLENE JACKET FOR INDIVIDUAL RUNS FROM THE TERRA INTERFACE PANEL (TIP) TO EACH CAMERA, MUST USE SJOOW #18 (FROM YOUR LOCAL ELECTRICAL SUPPLY HOUSE) OR ECONOLITE PART #1175-011.

A WEATHER HEAD AND DRIP LOOP MUST BE USED COMING FROM THE CONCRETE POLE TO THE SPAN.

LABEL ALL CABLES ENTERING THE HAND HOLE AND CABINET SO THAT IT CORRESPONDS TO THE SOLO TERRA TO WHICH IT IS CONNECTED. YELLOW WIRE NUTS (NOT SILICONE FILL) MUST BE USED IN ALL SPLICES. IN THE CABINET, USE THE TERMINAL STRIP PROVIDED ON THE TIP. UP TO TWO TERRAS CAN BE INSTALLED ON EACH CONNECTION. ON THE AUTOSCOPE ENCORE CAMERA CONNECTION USE THE "EASY LOCK" POWER CONNECTOR SUPPLIED WITH EACH CAMERA. FOLLOW AUTOSCOPE SOLO TERRA INSTALLATION GUIDE CHAPTER NUMBER 4 OR ECONOLITE BULLETIN #AN2098.

USE ONE CAMERA PER POLE MOUNTED DIAGONALLY FROM THE STOP BAR. FOR ANY QUESTION IN CAMERA PLACEMENT CALL LCDOT AT (239) 533- 9500 BEFORE INSTALLATION.

SEE LCDOT SPECIFCATIONS FOR MORE ADDITIONAL INFORMATION AND INSTALLATION REQUIREMENTS.

665-1-12:

DETECTORS SHALL BE POLARA EZ COMM NAVIGATOR 2-WIRE (EN2) AND EZ COMMUNICATOR CENTRAL CONTROL UNIT W/ ETHERNET (CCU2EN).

POLARA EN2 TO HAVE STREET NAMES PROGRAMMED BY POLARA, AND LEE COUNTY SHALL RECEIVE THE VOICE FILES FOR INTERSECTION. EACH INSTALL SHALL INCLUDE AN EZ COMM NAVIGATOR CONFIGURATOR. CONTRACTOR SHALL BRING ALL EN2'S AND CCU2EN'S TO LEE COUNTY FOR LEE COUNTY AUDIBLE PED SPECS PROGRAMMING AND SW UPGRADE IF NEEDED AND TO PROGRAM IP ADDRESS. LEE COUNTY WILL LABEL WHERE EACH EN2'S GOES AFTER BEING PROGRAMMED. BELDEN (SHIELDED) CABLE SHALL BE INSTALLED TO EACH EN2. PLEASE CALL LCDOT FOR ANY FURTHER QUESTIONS (239) 533-9500.

MOUNTING HEIGHT OF PEDESTRIAN BUTTON SHALL BE FORTY-TWO (42) INCHES TO CENTER OF BUTTON ABOVE GRADE. BUTTON SHOULD BE UNDER THE HEAD IT CALLS.

BELDEN (SHIELDED) CABLE SHALL BE USED AS PEDESTRIAN DETECTOR CALL WIRE. CALL WIRES SHALL BE CONNECTED TO A PED ISOLATOR BOARD AND CHASSIS GROUND IN CABINET.

670-5-110 THE CONTROLLER SHALL BE AN ECONOLITE COBALT ATC WITH TELEMETRY. SEE LEE COUNTY SPECIFICATIONS FOR MORE INFORMATION INCLUDING BUT NOT LIMITED TO TS2 TYPE 1 CABINET REQUIREMENTS.

THE CABINET BASE SHALL BE COMPOSITE CONSTRUCTION (QUAZITE). EQUAL TO QUAZITE P/N: PB40581224B24, APPROVED FOR LEE COUNTY.

THE CABINET BASE SHALL BE BURIED TO MANUFACTURER'S RECOMMENDED DEPTH. ALL FILL DIRT MUST BE COMPACTED AROUND THE CABINET BASE.

INSTALL TWELVE (12) INCH MINIMUM OF BED OF ROCK UNDER CABINET BASE. GRAVEL SHALL BE 57 STONE OR EQUIVALENT.

A PRECAST CONCRETE PAD SHALL BE PLACED IN FRONT OF THE CABINET BASE. IT SHALL BE THE LENGTH OF THE BASE AND A MINIMUM THIRTY (30) INCHES WIDE AND 4 INCHES THICK. CONTRACTOR'S OPTION TO POUR IN PLACE.

ELEVATION OF CABINET BASE SHALL BE AT THE SAME ELEVATION AS THE CENTER OF ROADWAY, BUT NO HIGHER THAN TWELVE (12) INCHES ABOVE THE CENTER OF ROADWAY.

SPARE CONDUITS FROM CABINET BASE SHALL TERMINATE AT A PULL BOX IN FRONT OF THE BASE AND SHALL BE SEALED WITH DUCT SEAL OR CAPPED.

STUB UP CONDUITS SHALL BE NO LOWER THAN TWELVE (12) INCHES AND NO HIGHER THAN SIX (6) INCHES BELOW THE ACCESS HOLE IN CABINET PAD.

685-161: MODEM SHALL BE A SIERRA WIRELESS AIRLINK ES450. INCLUDE ALL INTERFACE COMPONENTS NEEDED FOR LEE COUNTY REMOTE ACCESS.

700-3-201. 700-3-202: A PELCO ARM FOR STREET SIGNS SHALL BE ATTACHED TO CONCRETE STRAIN POLES. RIGIDLY MOUNT THE SIGN TO ARM WITH NO FREE SWINGING ATTACHMENTS.

715-1-12: ALL CONDUCTORS SHALL USE XLP INSULATION.

NO SPLICING PERMITTED IN PULL BOXES UNLESS APPROVED BY LEE COUNTY TRAFFIC ENGINEERING. SPLICE ONLY BY USE OF USPA INLINE SPLICE.

GROUND WIRE SHALL BE RUN UP POLE TO GROUND THE FIXTURE.

BREAKAWAY RECEPTACLES WITH SET SCREW CONNECTORS AND RUBBER BOOTS SHALL BE INSTALLED IN EACH POLE.

SURGE ARRESTORS SHALL BE INSTALLED IN EACH POLE.

USE #10 STRANDED WIRE TO FEED STREET LIGHT HEAD FROM POLE BASE, HOT - HOT/NEUTRAL - GROUND.

ALL CONDUCTORS INSTALLED FROM THE SERVICE PULLED THROUGH CONDUITS TO EACH STREET LIGHT LUMINAIRE SHALL HAVE THE FOLLOWING COLOR INSULATION DESIGNATIONS: THE HOT CONDUCTOR SHALL BE BLACK. THE NEUTRAL CONDUCTOR SHALL BE WHITE AND THE GROUNDING CONDUCTOR SHALL BE GREEN.

ALL CONDUCTORS SHALL BE CONTINUOUS IN COLOR FROM THE SERVICE TO EACH STREET LIGHT LUMINAIRE. UNDER NO CIRCUMSTANCES SHALL PHASE TAPE BE USED TO IDENTIFY A CONDUCTOR.

	REVISIO	ON S		DAVID J. ALLEN, P.E.		TY		
DATE	DESCRIPTION D	DATE	E DESCRIPTION P.E. LICENSE NUMBER 58540 DEPARTMENT OF TRANS					
				3905 CRESCENT PARK DRIVE	ROAD NAME	COUNTY	LEE COUNTY CIP NO.	
		RIVERVIEW, FLORIDA 33578		SUNSHINE BLVD.	LEE	200614		
						Howard Hollev	11/6/2019 10:22:18 AM	

SHEET

Т-6

GENERAL NOTES (3)

PAY ITEM NOTES (CONT.)

715-5-31:

THIS PAY ITEM SHALL INCLUDE AN 8-FOOT ALUMINUM BRACKET ARM, MOUNTING HARDWARE, WIRING AND AN AEL AUTOBAHN ATB2 177 WATT LED LUMINAIRE WITH 4000K COLOR TEMPERATURE, TYPE 4 DISTRIBUTION, A FIELD ADJUSTABLE MODULE AND WIRED FOR 120 VOLTS. THE IES CURVE FOR THIS LUMINAIRE IS ATB2 40BLEDE13 XXXXX R4 HS. THIS PAY ITEM SHALL ALSO INCLUDE FURNISHING BOTH LUMINAIRE ACCESSORIES ATB2HS40 (FIELD INSTALLED LIGHT TRESPASS SHIELD LEM 40 HOUSE SIDE) AND ATB2SS40 (FIELD INSTALLED LIGHT TRESPASS SHIELD LEM 40 STREET SIDE). THESE SHIELDS SHALL BE INSTALLED AS DETERMINED BY THE ENGINEER TO AVOID LIGHT POLLUTION TO EXISTING RESIDENTS. ALL SHIELDS NOT USED SHALL BE DELIVERED TO LEE COUNTY. THE BRACKET ARMS SHALL BE MOUNTED ON THE PROPOSED STRAIN POLES AT A LUMINAIRE MOUNTING HEIGHT OF 25 FEET ABOVE GRADE. THE BRACKET ARMS SHALL BE ORIENTATED TOWARDS THE CENTER OF THE INTERSECTION AS DEPICTED IN THE PLANS. THE LUMINAIRES SHALL BE POWERED FROM THE SIGNAL POWER SERVICE. ALL LIGHTING WILL BE ON A DESIGNATED LIGHTING CIRCUIT BREAKER AND CONTROLLED BY A PHOTOCELL.

715-511-125:

THIS PAY ITEM SHALL INCLUDE AN 8-FOOT ALUMINUM BRACKET ARM, FDOT STANDARD STYLE ALUMINUM POLE WITH TRANSFORMER BASE, FDOT STANDARD FOUNDATION, WIRING AND AN AEL AUTOBAHN ATB2 177 WATT LED LUMINAIRE WITH 4000K COLOR TEMPERATURE, TYPE 4 DISTRIBUTION, A FIELD ADJUSTABLE MODULE AND WIRED FOR 120 VOLTS. THE IES CURVE FOR THIS LUMINAIRE IS ATB2 40BLEDE13 XXXXX R4 HS. THIS PAY ITEM SHALL ALSO INCLUDE FURNISHING BOTH LUMINAIRE ACCESSORIES ATB2HS40 (FIELD INSTALLED LIGHT TRESPASS SHIELD LEM 40 HOUSE SIDE) AND ATB2SS40 (FIELD INSTALLED LIGHT TRESPASS SHIELD LEM 40 STREET SIDE). THESE SHIELDS SHALL BE INSTALLED AS DETERMINED BY THE ENGINEER TO AVOID LIGHT POLLUTION TO EXISTING RESIDENTS AS DIRECTED BY THE ENGINEER. ALL SHIELDS NOT USED SHALL BE DELIVERED TO LEE COUNTY. THE LUMINAIRE MOUNTING HEIGHT IS 25 FEET ABOVE GRADE. THE BRACKET ARMS SHALL BE ORIENTATED 45 DEGREES TOWARDS THE INTERSECTION FROM PERPENDICULAR AS SHOWN IN THE PLANS. THE LUMINAIRE SHALL BE POWERED FROM THE SIGNAL POWER SERVICE. ALL LIGHTING WILL BE ON A DESIGNATED LIGHTING CIRCUIT BREAKER AND CONTROLLED BY A PHOTOCELL.

715-511-125A:

THIS PAY ITEM SHALL INCLUDE AN 15-FOOT ALUMINUM BRACKET ARM, UTILITY CONFLICT STYLE ALUMINUM POLE WITH TRANSFORMER BASE, FDOT STANDARD FOUNDATION, WIRING AND AN AEL AUTOBAHN ATB2 138 WATT LED LUMINAIRE WITH 4000K COLOR TEMPERATURE, TYPE 4 DISTRIBUTION, A FIELD ADJUSTABLE MODULE AND WIRED FOR 120 VOLTS. THE IES CURVE FOR THIS LUMINAIRE IS ATB2 40BLEDE10 XXXXX R4 HS. THIS PAY ITEM SHALL ALSO INCLUDE FURNISHING BOTH LUMINAIRE ACCESSORIES ATB2HS40 (FIELD INSTALLED LIGHT TRESPASS SHIELD LEM 40 HOUSE SIDE) AND ATB2SS40 (FIELD INSTALLED LIGHT TRESPASS SHIELD LEM 40 STREET SIDE). THESE SHIELDS SHALL BE INSTALLED AS DETERMINED BY THE ENGINEER TO AVOID LIGHT POLLUTION TO EXISTING RESIDENTS AS DIRECTED BY THE ENGINEER. ALL SHIELDS NOT USED SHALL BE DELIVERED TO LEE COUNTY. THE LUMINAIRE MOUNTING HEIGHT IS 25 FEET ABOVE GRADE. FOR ADDITIONAL INFORMATION ON THE UTILITY CONFLCIT POLE, SEE THE UTILITY CONFLICT POLE DETAILS. THE LUMINAIRE SHALL BE POWERED FROM THE SIGNAL POWER SERVICE. ALL LIGHTING WILL BE ON A DESIGNATED LIGHTING CIRCUIT BREAKER AND CONTROLLED BY A PHOTOCELL.

	REVIS			DAVID J. ALLEN, P.E.	LEE COUNTY					
DATE	DESCRIPTION	DATE	DESCRIPTION	P.E. LICENSE NUMBER 58540 CARDNO	DEPART	DEPARTMENT OF TRANSPORTATION				
				3905 CRESCENT PARK DRIVE			LEE COUNTY CIP NO.			
				RIVERVIEW, FLORIDA 33578 CERTIFICATE OF AUTHORIZATION 29915	SUNSHINE BLVD.	LEE	200614	I		
						Howard Hollev	11/6/2019 10:22:19 AM			

	SHEET NO.
GENERAL NOTES (4)	
	T-7

				/ENTIONAL INT HTING DESIGN				
			AVERAGE INIT. UNIFORMITY R VEILING LUMIN	ATIO AVG./MIN. MAX./MIN.	3.0 FOOT CAN 4:1 OR LESS 10:1 OR LESS 0.3:1 OR LESS	IDLES		
			WIND SPEED		170 MPH			
			L	EGEND				
*****	SYMBOLS		DE	SCRIPTION				
	••	TEMPERATURE. INCLUDE FIELD I NECESSARY. TH	EL AUTOBAHN ATB2 LUMINA WIRED FOR 120 VOLT OPER INSTALLED HOUSE SIDE ANI E LUMINAIRE MOUNTING HE OUNTED ON A STANDARD F	ATION. DESIGN US D ROADSIDE LIGHT EIGHT IS 25 FEET V	ED ATB2 40BLEDE TRESPASS SHIELD	13 XXXXX R4 HS.IES. S ACCESSORIES AND II	THE LUMINAIRE S NSTALLED WHERE	HALL
	$\bigcirc - \circ$	TEMPERATURE. INCLUDE FIELD NECESSARY. TH	NEL AUTOBAHN ATB2 LUMIN, WIRED FOR 120 VOLT OPER INSTALLED HOUSE SIDE AN IE LUMINAIRE MOUNTING HI WILL BE MOUNTED ON A HEET.	ATION. DESIGN US D ROADSIDE LIGHT EIGHT IS 25 FEET	SED ATB2 40BLEDE TRESPASS SHIELD WITH 15-FOOT ARM	10 XXXXX R4 HS.IES. IS ACCESSORIES AND IN I ON AN UTILITY CONFI	THE LUMINAIRE S NSTALLED WHERE LICT STYLE LIGHT	HALL POLE.
	•	SCHEDULE 40 PV RUN ONE (1) #6 .	C CONDUIT WITH THWN-2 (AWG COPPER BOND CONDU	CONDUCTORS INSIL CTOR (THWN-2 GR	DE (CONDUIT AND EEN INSULATION)	CONDUCTOR SIZE AS S INSIDE CONDUIT WITH	5HOWN ON PLAN : OTHER CONDUCT	SHEETS). 'ORS.
	•• _	HEETS). EXTEND	DIRECTIONAL BORED WITH CONDUIT BEYOND EDGE (INSULATION) INSIDE COND	DF PAVEMENT TO F	PULL BOXES. RUN	UIT AND CONDUCTOR S ONE (1) #6 AWG COPPI	SIZE AS SHOWN C ER BOND CONDUC	DN PLAN TOR
		PROPOSED PULL	BOX. FOR SPECIFICATIONS	SEE SECTION 635	OF STANDARD SP	ECIFICATIONS FOR ROA	AD AND BRIDGE C	ONSTRUCTION.
	DEPART	LEE COUN MENT OF TRA	ITY NSPORTATION	<i>m</i> ~~	י דידי א ביו			SHEET NO.
9915	ROAD NAME SUNSHINE BLVD.	COUNTY LEE	LEE COUNTY CIP NO. 200614	POL	E DATA	AND LEGI		T-8
		Howard Holley	11/6/2019 10:22:30 AM			J:\J0B\00231\00	231-002-00\ACAD\Sig	nals\PLDTLT01.dw

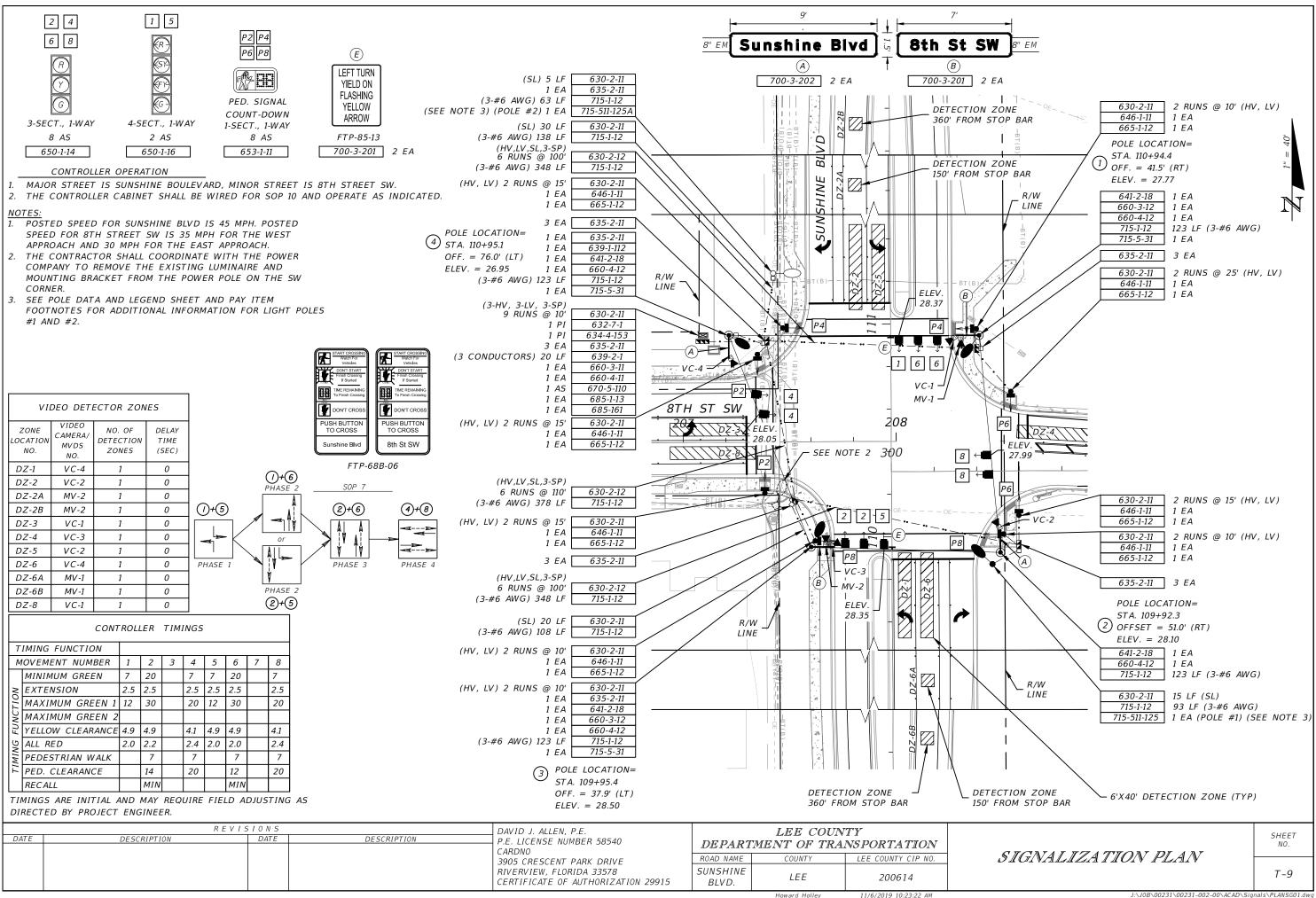
POLE DATA

POLE NO.	CIRCUIT	STATION	DIST. OR ARM	LUMINAIRE WATTAGE	DISTRIBUTION TYPE	MOUNTING HEIGHT	UTILITY CONFLICT POLE?	POLE SETBACK TO CENTER OF POLE	PAY ITEM		
1	A-1	109+86.9 BL SUNSHINE BLVD	8'	177	IV	25'	NO	5.7' FROM FOC	715-511-125		
2	A-1	111+24.3 BL SUNSHINE BLVD	15'	138	IV	25'	YES	15.6' FROM FOC	715-511-125A		
										SYMBOLS	
											177 WATT LED AEL AUTOE
											TEMPERATURE. WIRED FO INCLUDE FIELD INSTALLE NECESSARY. THE LUMINA POLE WILL BE MOUNTED
											NECESSARY. THE LUMINA
											POLE WILL BE MOUNTED
										\bigcirc	138 WATT LED AEL AUTO
										$\bigcirc \frown \bigcirc$	TEMPERATURE. WIRED F
											INCLUDE FIELD INSTALLE NECESSARY. THE LUMIN
											THE LIGHT POLE WILL BE
											POLE DETAILS SHEET.
										— • —	 SCHEDULE 40 PVC CONDU RUN ONE (1) #6 AWG COF
										••	 HDPE CONDUIT, DIRECTIC HEETS). EXTEND CONDUL
											HEETS). EXTEND CONDU (THWN-2 GREEN INSULAT
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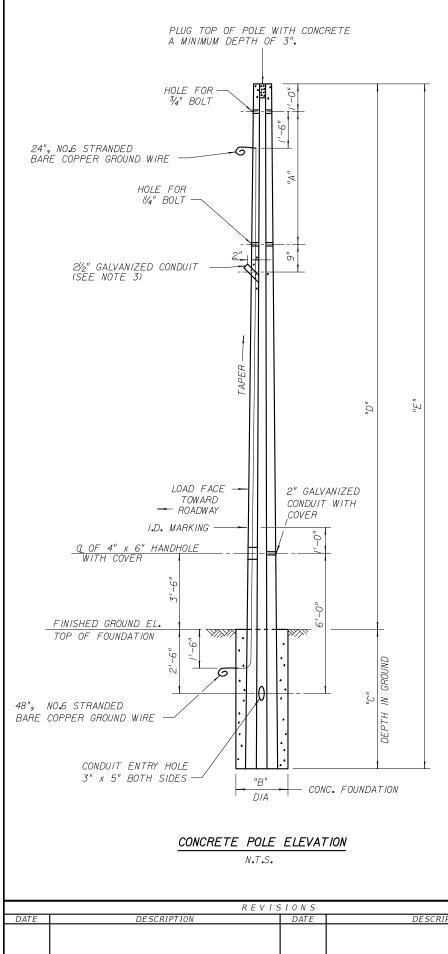
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DATE DESCRIPTION DATE DESCRIPTION P.E. LICENSE NUMBER 58540 DEPARTMENT OF TRANSPORTATION		REVIS	5 I O N S		DAVID J. ALLEN, P.E.				
3905 CRESCENT PARK DRIVE RIVERVIEW, FLORIDA 33578 SUNSHINE LEE 200614	DATE	ATE DESCRIPTION DATE DESCRIPTION P		P.E. LICENSE NUMBER 58540	DEPARTMENT OF TRANSPORTATI				
RIVERVIEW, FLORIDA 33578 SUNSHINE							COUNTY	LEE COUNTY CIP NO.	l Pl
		RIVERV	RIVERVIEW, FLORIDA 33578		LEE	200614			

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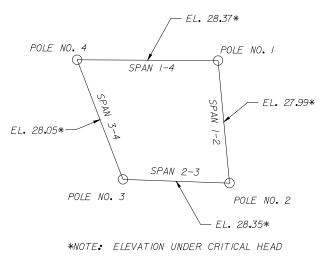
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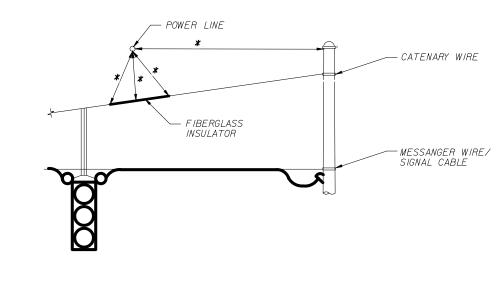
	CONCRETE STRAIN POLE SCHEDULE													
SHEET NUMBER	POLE NO.	POLE TYPE	FINISHED GROUND EL. AT POLE	PAVEMENT EL. UNDER DIM. CRITICAL HEAD (FT)		DIM. B DIM. C (FT) (FT)		DIM. D (FT)		CATENARY WIRE DIA. (IN.)/GRADE	MESSENGER WIRE DIA. (IN.)/GRADE	FOUNDATION DESI EFFECTIVE SOIL UNIT WT. (PCF)	GN ASSUMPTIONS ANGLE OF INTERNAL FRICTION (DEG.)	
T-9	1		27.77	28.37 (SPAN 1-4)	7.00		32.30	52.30						
T-9	2	P-VIII	28.10	28.35 (SPAN 2-3)	6.25	3.5	20	31.20	51.20	3/8	42	37.6	23	
T-9	3	F -V 111	28.50	28.05 (SPAN 2-3)	6.25]	20	30.80	50.80	78	/2	57.0	23	
T-9	4		26.95	28.37 (SPAN 1-4)	7.00			33.10	53.10					

NOTES:

- 1. FOR ADDITIONAL DETAILS NOT SHOWN ON THIS SHEET, REFER TO FDOT STANDARD PLAN INDEX 641-010.
- 2. DESIGN WIND SPEED: 160 MPH.
- 3. A PROPERLY SIZED SERVICE HEAD, (WEATHERHEAD) SHALL BE INSTALLED AND FASTENED SECURELY ONTO CONDUIT FOR EACH POLE LOCATION. AT LOCATIONS OTHER THAN SERVICE ENTRANCE, THE SERVICE HEAD FACE IS TO BE LEFT CLOSED TO OUTSIDE ATMOSPHERE. SERVICE ENTRANCE INSTALLATION PER FDOT STANDARD PLAN INDEX 634-001.
- 4. PROVIDE SHOP DRAWINGS FOR THE LUMINAIRE BRACKET ARM.



STRAIN POLE LAYOUT



DETAIL OF POWER LINE CROSSING

N.T.S.

NOTE: SIGNAL HEAD ATTACHMENT SHALL BE A MINIMUM OF 6" FROM END OF INSULATOR. * DISTANCE WILL VARY. THE MINIMUM DISTANCE IS 6'. HOWEVER, THE DISTANCE SHALL MEET MINIMUM NATIONAL ELECTRICAL CODE STANDARDS.

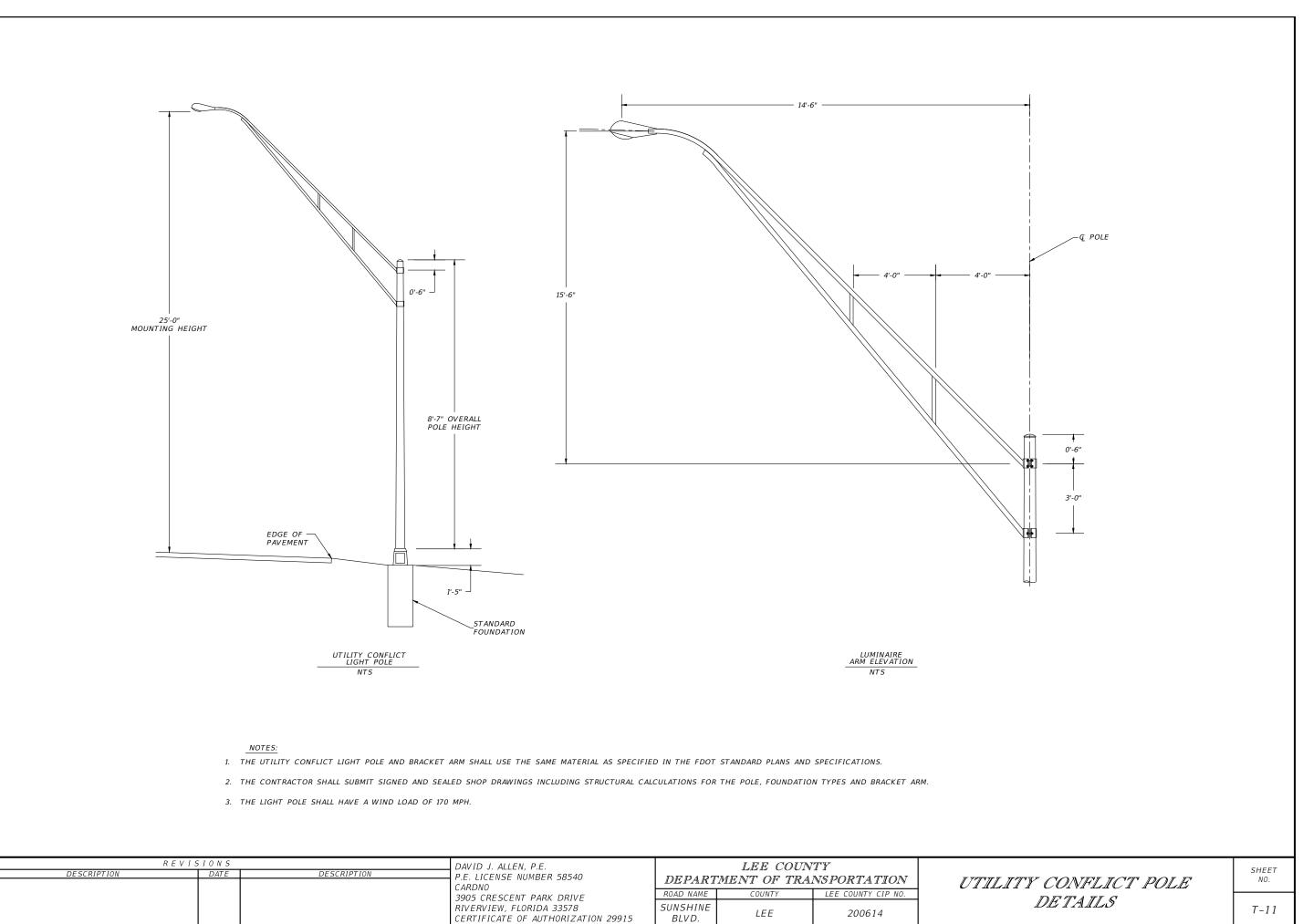
POWER LINES SHALL MEET NATIONAL ELECTRICAL CODE WORKING CLEARANCES FOR NON-QUALIFIED PERSONNEL, SIGNAL HEADS AND SIGNAL POLE ATTACHMENTS.

	REVIS		CHRISTOPHER P. GAMACHE, P.E.					
DATE	DESCRIPTION	DATE	DESCRIPTION	P.E. LICENSE NUMBER 82122 CARDNO	DEPART	LEE COUN MENT OF TRA	NSPORTATION	CO.
				380 PARK PLACE BLVD, SUITE 300		COUNTY	LEE COUNTY NO.	
					SUNSHINE BLVD.	LEE	CN160311	
						Howard Holley	11/6/2019 10:23:32 AM	

ONCRETE STRAIN POLE SCHEDULE

SHEET NO. T-10

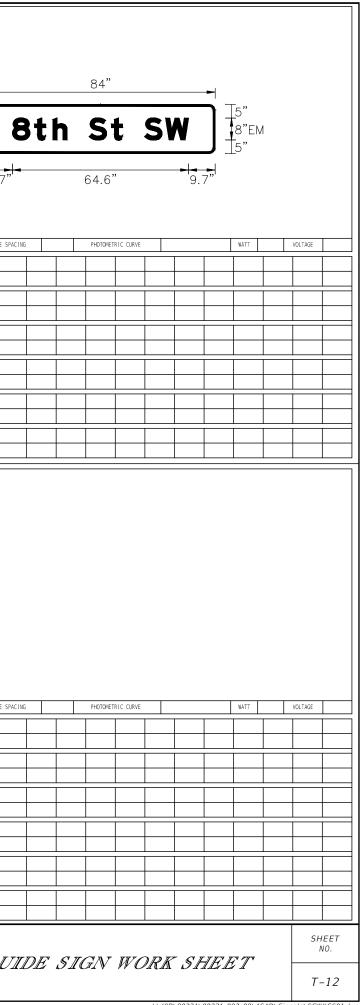
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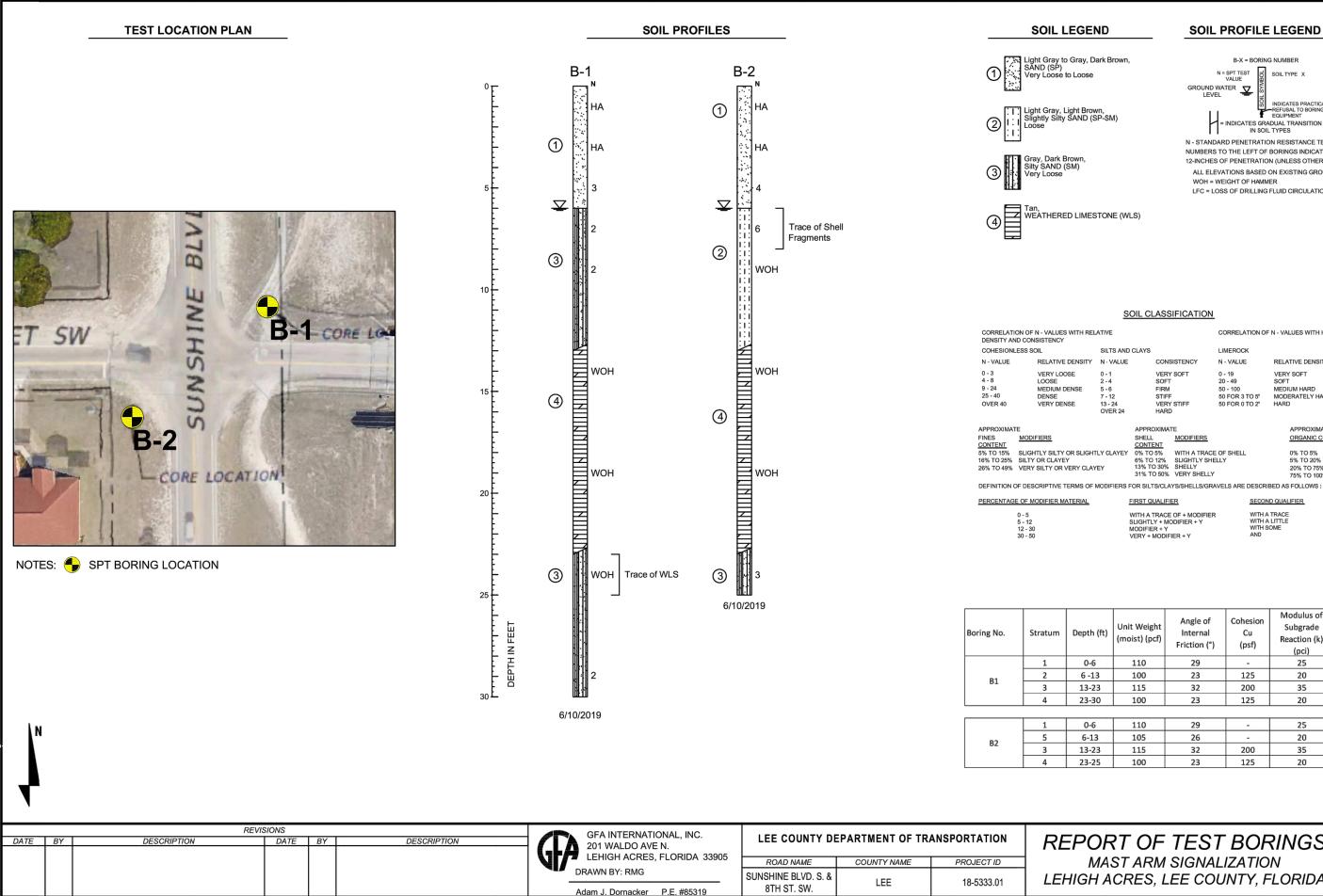
	REVIS	5 I O N S		DAVID J. ALLEN, P.E.				
DATE	DATE DESCRIPTION		P.E. LICENSE NUMBER 58540	DEPART	NTY ANSPORTATION	U		
				3905 CRESCENT PARK DRIVE	ROAD NAME	COUNTY	LEE COUNTY CIP NO.	
					SUNSHINE BLVD.	LEE	200614	
						Howard Holley	11/6/2019 10:23:40 AM	

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SOIL PROFILE LEGEND NOTES

B-X = BORING NUMBER



SOIL TYPE X



LIMEROCK

N - VALUE

50 - 100 50 FOR 3 TO 5" 50 FOR 0 TO 2"

0 - 19 20 - 49

DICATES PRACTICA = INDICATES GRADUAL TRANSITION

N - STANDARD PENETRATION RESISTANCE TEST (SPT) VALUE. NUMBERS TO THE LEFT OF BORINGS INDICATE SPT VALUE FOR 12-INCHES OF PENETRATION (UNLESS OTHERWISE NOTED). ALL ELEVATIONS BASED ON EXISTING GROUND LEVEL.

WOH = WEIGHT OF HAMMER

LFC = LOSS OF DRILLING FLUID CIRCULATION

SILTS AND C

0 - 1

2-4

OVER 24

SOIL CLASSIFICATION

CORRELATION OF N - VALUES WITH HARDNESS DESCRIPTION

RELATIVE DENSITY

MODERATELY HARD

APPROXIMATE

0% TO 5% 5% TO 20% 20% TO 75%

ORGANIC CONTENT MODIFIERS

WITH A TRACE WITH ORGANICS HIGHLY ORGANI

PEAT

VERY SOFT

MEDIUM HARD

SOFT

CLAYS	
	CONSISTENCY
	VERY SOFT SOFT FIRM
	STIFF
	VERY STIFF

SHELL MODIFIERS

75% TO 100%

FIRST QUALIFIER

WITH A TRACE OF + MODIFIER SLIGHTLY + MODIFIER + Y MODIFIER + Y VERY + MODIFIER + Y

SECOND QUALIFIER

WITH A TRACE WITH A LITTLE WITH SOME AND

Depth (ft)	Unit Weight (moist) (pcf)	Angle of Internal Friction (°)	Cohesion Cu (psf)	Modulus of Subgrade Reaction (k) (pci)	USCS
0-6	110	29	-	25	SP
6 -13	100	23	125	20	SM
13-23	115	32	200	35	WLS
23-30	100	23	125	20	SM
0-6	110	29	-	25	SP
6-13	105	26	-	20	SP-SM
13-23	115	32	200	35	WLS
23-25	100	23	125	20	SM

REPORT OF TEST BORINGS MAST ARM SIGNALIZATION LEHIGH ACRES, LEE COUNTY, FLORIDA

SHEET NO.

T-13