

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

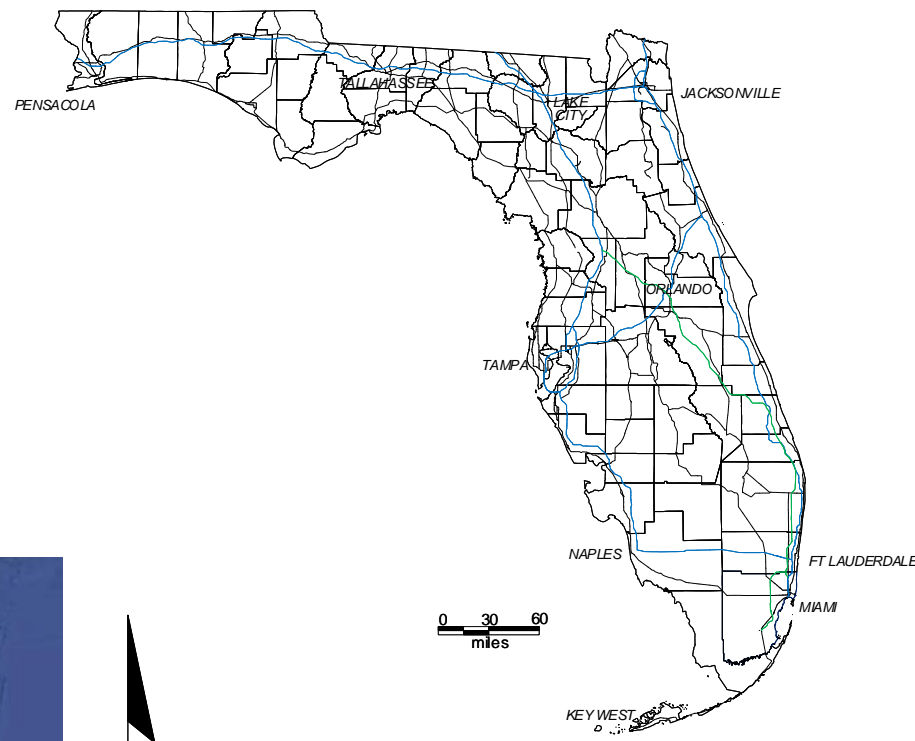
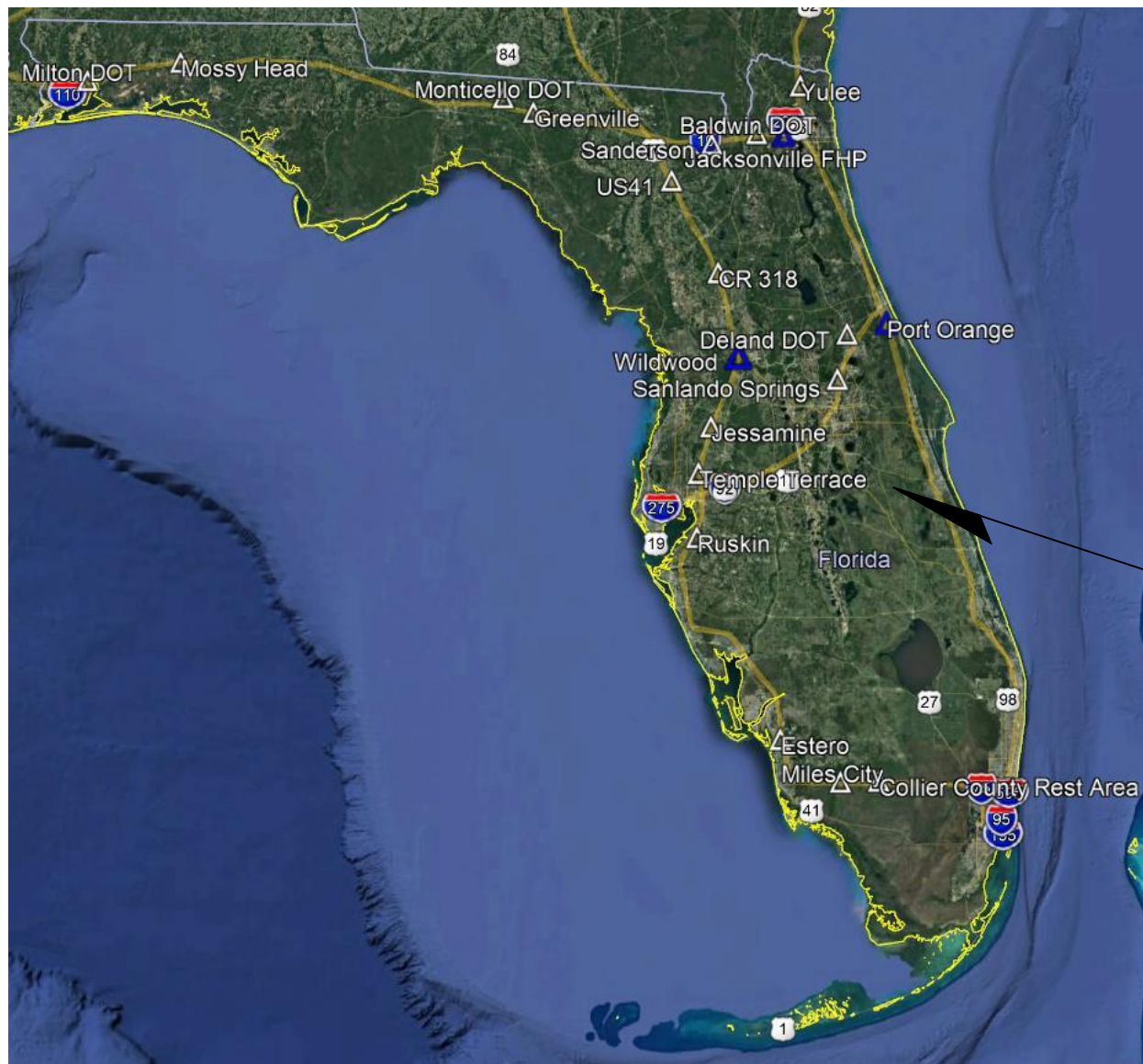
APPENDIX A

FINANCIAL PROJECT ID 424401-1-52-01
FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)
LED TOWER OBSTRUCTION LIGHTING SYSTEM UPGRADE

INDEX OF PLANS

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INTELLIGENT TRANSPORTATION SYSTEMS PLANS



LOCATION OF SITES

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

**FLORIDA DEPARTMENT OF
TRANSPORTATION
LED TOWER OBSTRUCTION LIGHTING
UPGRADE PROJECT**

FDOT PROJECT MANAGER: RANDY PIERCE

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS (CURRENT EDITION),
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION (CURRENT EDITION),
AS AMENDED BY CONTRACT DOCUMENTS.

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



FLORIDA DEPARTMENT OF TRANSPORTATION
605 SUWANNEE ST. MS 90
TALLAHASSEE, FL 32399-0450
PH. (850)-410-5600
FAX. (850)-410-5501

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
SITE NAME	COUNTY	FINANCIAL PROJECT ID
		424401-1-52-01

**LED TOWER LIGHTING
UPGRADE KEY SHEET**

SHEET NO.
A-1

https://skns-my.sharepoint.com/personal/sean_kane_atkins@fla DOT gov/_layouts/15/Doc.aspx?sourcedoc=/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329.vsd&id=...

GENERAL NOTES:

1. THE VENDOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONDITIONS AND MEASUREMENTS RELATING TO THE WORK IN THE FIELD PRIOR TO PROCEEDING WITH INSTALLATION, REMOVAL, AND DISPOSAL ACTIVITIES. THE VENDOR SHALL COORDINATE ANY MODIFICATIONS REQUIRED WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) IN ADVANCE.
2. THE VENDOR IS RESPONSIBLE FOR ALL EQUIPMENT, MATERIALS, AND SERVICES REQUIRED TO COMPLETE THIS PROJECT. THE VENDOR IS RESPONSIBLE FOR VERIFYING THE COMPLETENESS OF MATERIALS REQUIRED AND SUITABILITY OF DEVICES TO MEET THESE PLANS. THE VENDOR SHALL PROVIDE AND INSTALL, WITHOUT CLAIM, ANY ADDITIONAL EQUIPMENT AND SERVICES REQUIRED FOR OPERATION PER THESE PLANS.
ALL EQUIPMENT AND COMPONENT PARTS FURNISHED SHALL BE NEW, MEET OR EXCEED THE MINIMUM REQUIREMENTS STATED HEREIN, AND PERFORM TO MANUFACTURER'S SPECIFICATIONS. NO PART OR ATTACHMENT SHALL BE SUBSTITUTED OR APPLIED CONTRARY TO THE MANUFACTURER'S RECOMMENDATIONS AND STANDARD PRACTICES.
3. THE VENDOR SHALL BE RESPONSIBLE FOR DETERMINING LOCAL FACILITIES FOR DELIVERING, STORING, AND LEGALLY DISPOSING OF POST-INSTALLATION MATERIALS.
4. THE VENDOR SHALL PROTECT AND PRESERVE ALL EXISTING UTILITIES, EXCLUDING THOSE REQUIRING UPGRADES OR RELOCATION IN THESE PLANS, LOCATED WITHIN THE INSTALLATION LIMITS OF THE PROJECT.
5. THE VENDOR IS RESPONSIBLE FOR OBTAINING ANY PERMITS (DEP, SOUTH FLORIDA WATER MANAGEMENT DISTRICT, ETC.) AND MEETING BUILDING OFFICIAL REQUIREMENTS, INCLUDING ASSOCIATED FEES. THE VENDOR IS RESPONSIBLE FOR CONTACTING APPLICABLE BUILDING OFFICIALS FOR PERMIT APPLICATIONS AND SUBMITTING TO THE FDOT FOR SIGNATURE.
6. THE VENDOR IS RESPONSIBLE FOR COORDINATING ALL NECESSARY NOTIFICATIONS OF WORK AND CONSTRUCTION WITH THE FEDERAL AVIATION ADMINISTRATION (FAA).
THE VENDOR SHALL ISSUE A FAA NOTICE TO AIRMEN (NOTAM) PRIOR TO REMOVING EACH EXISTING TOWER OBSTRUCTION LIGHTING SYSTEM. THE VENDOR SHALL ALSO BE RESPONSIBLE FOR CLOSING THE NOTAM ONCE EACH NEW TOWER OBSTRUCTION LIGHTING SYSTEM IS INSTALLED AND FUNCTIONAL.
7. THE VENDOR SHALL SUBMIT AN INSTALLATION SCHEDULE TO FDOT FOR REVIEW AND APPROVAL. THE VENDOR SHALL COORDINATE EACH ELEMENT ON THE SCHEDULE WITH OTHER INSTALLATION ACTIVITIES AND SHOW EACH ACTIVITY IN PROPER SEQUENCE.
8. THE VENDOR MUST COORDINATE ALL SITE WORK WITH FDOT. THE CONTACT PERSON IS DANIELLE MORALES, P.E., 850-410-5617.
9. ALL INSTALLATION WORK PERFORMED ON THE TOWER SHALL BE DONE BY TOWER CLIMBERS CERTIFIED BY COMTRAIN, OR APPROVED EQUIVALENT.
10. THE VENDOR SHALL RESTRICT PERSONNEL, THE USE OF EQUIPMENT, AND THE STORAGE OF MATERIALS TO AREAS WITHIN THE LIMITS OF INSTALLATION. ANY OFF-SITE STORAGE AREA IS THE RESPONSIBILITY OF THE VENDOR.
11. THE VENDOR SHALL PROVIDE SECURITY FOR HIS/HER EQUIPMENT AND SHALL CONDUCT HIS/HER OPERATIONS SO AS TO AVOID INTERFERENCE WITH FDOT'S NORMAL OPERATIONS.
12. ALL EXISTING DRIVEWAYS, EASEMENTS, AND GROUNDS SHALL BE PROTECTED OR RESTORED TO INITIAL CONDITION IF DAMAGED OR DISTURBED AS A RESULT OF INSTALLATION.
13. THE VENDOR SHALL PROVIDE AND MAINTAIN IN A NEAT AND SANITARY CONDITION SUCH ACCOMMODATIONS FOR THE USE OF HIS/HER EMPLOYEES AS MAY BE NECESSARY TO COMPLY WITH REGULATIONS OF THE COUNTY OR THE DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES. NO NUISANCE WILL BE PERMITTED.
14. THE VENDOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING OF THE TRASH GENERATED FROM THE INSTALLATION, INCLUDING LUNCH BAGS AND DRINKS, DAILY. THE VENDOR SHALL NOT ALLOW TRASH TO BLOW AROUND OR AWAY FROM ANY CONSTRUCTION SITE.
15. ALL EQUIPMENT AND SERVICES FURNISHED BY THE VENDOR AS PART OF THIS PROJECT SHALL BE WARRANTED TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP. IN THE EVENT ANY SUCH DEFECTS IN EQUIPMENT OR SERVICES BECOME EVIDENT WITHIN THE WARRANTY PERIOD, THE VENDOR SHALL CORRECT THE DEFECT BY REPAIRING OR REPLACING THE DEFECTIVE COMPONENT OR EQUIPMENT AT NO COST TO FDOT DURING THE WARRANTY PERIOD. THE WARRANTY PERIOD SHALL BE A MINIMUM OF 12 MONTHS FROM DATE OF FINAL ACCEPTANCE. CLAIMS UNDER ANY OF THE WARRANTIES HEREIN ARE VALID IF MADE WITHIN 30 DAYS AFTER TERMINATION OF THE WARRANTY PERIOD.
16. THE VENDOR SHALL COLLECT PRODUCT DATA INTO A SINGLE SUBMITTAL FOR EACH ELEMENT OF INSTALLATION OR SYSTEM. PRODUCT DATA SHALL INCLUDE PRINTED INFORMATION SUCH AS MANUFACTURER'S INSTALLATION INSTRUCTIONS AND PERFORMANCE SPECIFICATIONS.
17. THE VENDOR SHALL SUBMIT (2) SETS OF AS-BUILT DRAWINGS DEPICTING THE LOCATION OF THE COMPONENTS OF THE COMMUNICATIONS FACILITIES WITH RESPECT TO LOCAL FEATURES AND BENCHMARKS. AS-BUILT DRAWINGS DEPICTING ANY FIELD CHANGES TO THE FACILITIES SHALL ALSO BE SUBMITTED. AS-BUILT DOCUMENTATION SHALL BE SUBMITTED IN ELECTRONIC FORMAT, AS WELL AS PRINTED. ALL ITS FACILITY MANAGEMENT ATTRIBUTE FORMS SHALL BE COMPLETED IN ACCORDANCE WITH THIS TECHNICAL SPECIFICATION.
18. THE VENDOR SHALL BE RESPONSIBLE FOR ALL EXISTING ELLIPTICAL WAVEGUIDES, FLEXIBLE RECTANGULAR WAVEGUIDE, COAXIAL CABLES, POWER/DATA CABLES, AND RESPECTIVE HARDWARE AND CONDUITS. ANY ELLIPTICAL WAVEGUIDES, FLEXIBLE RECTANGULAR WAVEGUIDE, COAXIAL CABLES, OR POWER/DATA CABLES DAMAGED BY THE VENDOR SHALL BE REPLACED WITH NEW FULL-LENGTH ELLIPTICAL WAVEGUIDES, FLEXIBLE RECTANGULAR WAVEGUIDE, COAXIAL CABLES, OR POWER/DATA CABLES, WITHOUT CLAIM, AND AT THE VENDOR'S COST.

APPLICABLE PUBLICATIONS AND STANDARDS:

1. ANSITIA-222-H, STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, STRUCTURE CLASSIFICATION-III.
2. APPLICABLE MANUFACTURER'S INSTRUCTIONS AND STANDARD PRACTICES.
3. APPLICABLE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (O.S.H.A.) PRACTICES.
4. ASTM A123: STANDARD SPECIFICATION FOR: ZINC (HOT GALVANIZED) COATINGS ON PRODUCTS FABRICATED FROM ROLLED, PRESSED, AND FORGED STEEL SHAPES, PLATES, BARS, AND STRIP.
5. ASTM A153: STANDARD SPECIFICATION FOR: ZINC COATING (HOT-DIP) ON IRON AND STEEL HARDWARE.
6. FLORIDA BUILDING CODE, CURRENT EDITION.
7. FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE DESIGN, CURRENT EDITION.
8. FDOT DESIGN STANDARDS, CURRENT EDITION.
9. FEDERAL AVIATION ADMINISTRATION REGULATIONS.
10. IEEE 837: STANDARD FOR QUALIFYING PERMANENT CONNECTIONS USED IN SUBSTATION GROUNDING.
11. NATIONAL ELECTRICAL CODE (NEC) (NFPA 70), CURRENT EDITION.
12. NEC ARTICLE 250: GROUNDING AND BONDING.
13. NIST: NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY.
14. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) LAW AND REGULATIONS.
15. UL 467: STANDARDS FOR GROUNDING AND BONDING EQUIPMENT.
16. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA 780)

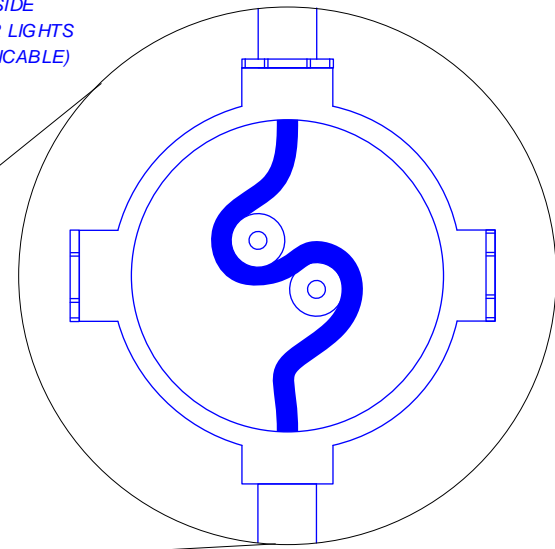
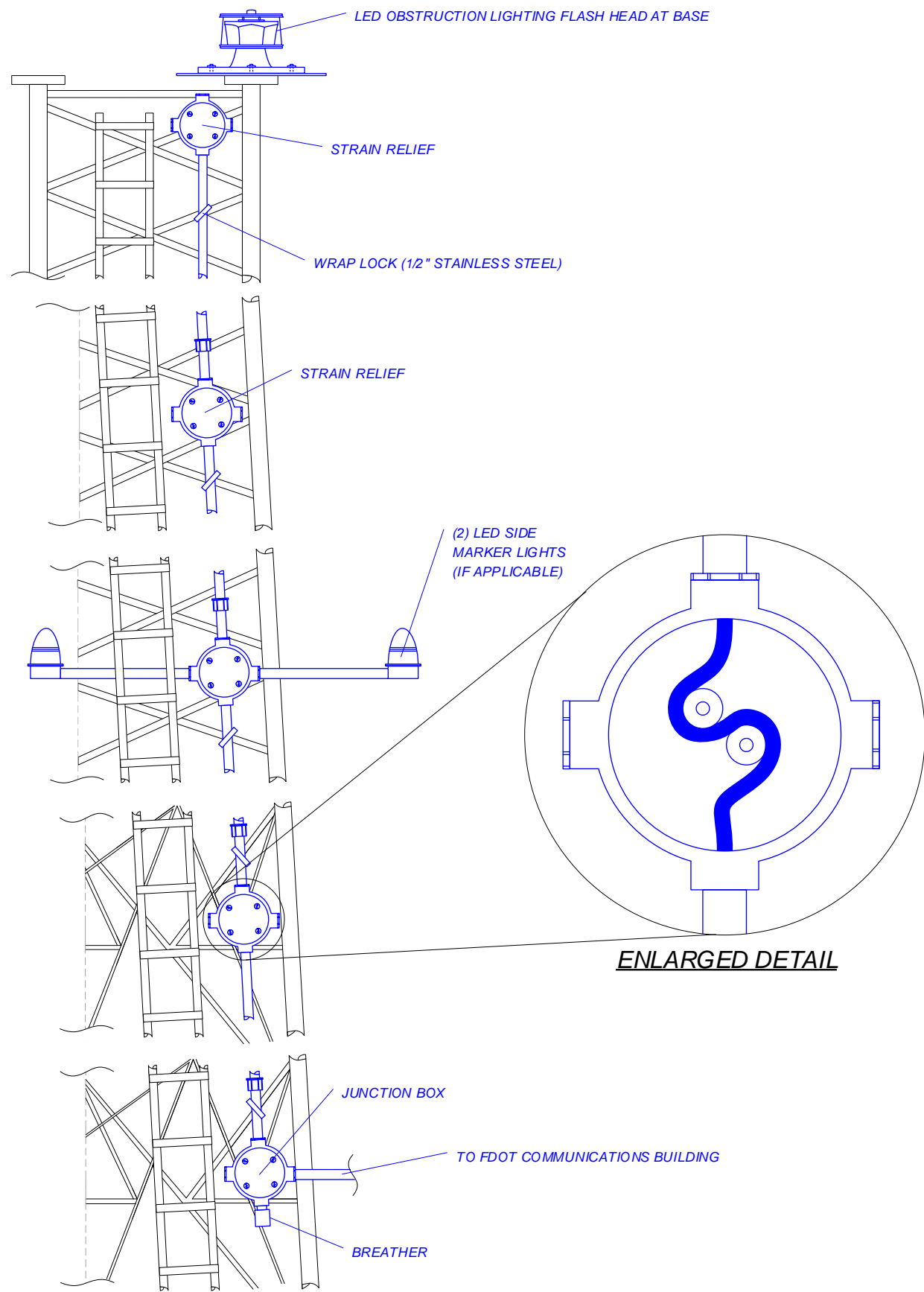
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STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
SITE NAME	COUNTY	FINANCIAL PROJECT ID
		424401-1-52-01

<i>GENERAL NOTES</i>
SHEET NO. A-2



ENLARGED DETAIL

TYPICAL TOWER OBSTRUCTION LIGHTING INSTALLATION DETAIL

INSTALLATION NOTES:

1. THE VENDOR SHALL PROVIDE AND INSTALL THE TOWER LIGHTNING PROTECTION AND GROUNDING SYSTEM PER THESE PLANS.
2. THE OBSTRUCTION LIGHTING SYSTEM SHALL BE MOUNTED TO THE TOWER WITH GALVANIZED OR STAINLESS STEEL HARDWARE. ALL TOWER LIGHTING CABLES SHALL BE INSTALLED IN APPROPRIATELY SIZED GALVANIZED STEEL CONDUIT. THE CONDUIT SYSTEM SHALL BE EQUIPPED WITH CABLE STRAIN RELIEF JUNCTION BOXES EVERY 100 FT. (MAXIMUM). ALL TOWER LIGHTING SYSTEM CONDUIT SHALL BE SECURED TO THE TOWER USING GALVANIZED OR STAINLESS STEEL 1/2 INCH BOLT-ON WRAP LOCKS. SNAP IN HARDWARE IS NOT PERMITTED.
3. THE VENDOR SHALL PROVIDE AND INSTALL A NEW TOWER OBSTRUCTION LIGHTING SYSTEM PER THESE SITE SPECIFIC PLANS. THE TECHNOSTROBE TOWER LIGHT CONTROLLERS SHALL BE MECHANICALLY BONDED TO THE COMMUNICATIONS BUILDING'S INTERIOR GROUND HALO AT EACH SITE.
4. AT EACH SITE, THE VENDOR SHALL INSTALL A 10 AMP BREAKER IN THE -48 VDC POWER DISTRIBUTION RACK. SEE SHEET A-4 FOR A TYPICAL -48VDC DISTRIBUTION RACK, AND WIRING SPECIFICATIONS.
5. GROUND CONDUCTORS SHALL BE DOWNWARD COURSING AND VERTICAL, AS MUCH AS POSSIBLE, AND BE AS SHORT AND STRAIGHT AS PRACTICAL. SHARP BENDS AND MULTIPLE BENDS IN CONDUCTORS SHALL BE AVOIDED IN ALL CASES. THE MINIMUM BEND RADIUS SHALL BE EIGHT (8) INCHES PER NFPA 780.
6. ALL ABOVE GROUND GROUNDING CONNECTIONS SHALL BE MECHANICAL CLAMP, OR IRREVERSIBLE CRIMP CONNECTIONS.
7. THE VENDOR SHALL CLEAN AND PREPARE ALL GROUND CONDUCTORS AND SURFACES PRIOR TO PERFORMING BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH CONNECTION IS MADE. NO-OX GREASE SHALL BE APPLIED ON ALL NEW GROUND CONNECTIONS TO KEEP METALS FREE FROM RUST AND CORROSION.
8. THE VENDOR SHALL COORDINATE WITH THE TOWER LIGHT MANUFACTURER TO UPGRADE ALL TOWER LIGHT CONTROLLERS TO THE FOLLOWING SOFTWARE REVISIONS:
ARCHITECTURE REVISION: 10.04
SNMP REVISION: 03.13
HTML REVISION: 03.13
9. UPON SUCCESSFUL OPERATIONAL CUT-OVER TO THE NEW TOWER OBSTRUCTION LIGHTING SYSTEM, THE VENDOR SHALL TURN OVER THE OLD TOWER OBSTRUCTION LIGHTING SYSTEM TO THE FDOT MAINTENANCE CONTRACTOR TO BE USED FOR SPARES.

INSPECTION NOTES:

1. THE INSPECTION SHALL BE PERFORMED BY THE VENDOR AND WITNESSED BY FDOT. THE VENDOR SHALL NOTIFY FDOT AT LEAST 10 DAYS PRIOR TO COMPLETION OF INSTALLATION. THE VENDOR AND FDOT SHALL VERIFY JOINTLY THAT ALL INSTALLATION WORK IS CORRECTLY INSTALLED AND FUNCTIONAL.
2. GROUNDING SHALL BE INSPECTED FOR PROPER CONNECTION TYPES, TIGHTNESS, WORKMANSHIP, AND CONFORMANCE WITH THE APPROVED DESIGN.
3. EACH SITE SHALL BE INSPECTED TO BE FREE OF DEBRIS AND THAT THE COMPOUND IS RESTORED.
4. FOLLOWING THE COMPLETION OF INSPECTIONS, THE INSTALLED EQUIPMENT AND FACILITIES SHALL BE SUBJECTED TO A MINIMUM 20-DAY PERFORMANCE PERIOD. FOR THE PURPOSE OF THE SUCCESSFUL PERFORMANCE PERIOD, FAILURE OF OPERATION IS DEFINED AS THE FAILURE OF A MAJOR COMPONENT OF THE SITE. THE PERFORMANCE VERIFICATION SHALL BE ACCOMPLISHED WITH THE FDOT. UPON ACCEPTANCE OF THE CRITERIA OF THE TEST BY FDOT, THE 20-DAY PERFORMANCE PERIOD SHALL BEGIN.

SPARE PARTS:

1. THE VENDOR SHALL PROVIDE THE FOLLOWING SPARE PARTS FOR THE TECHNOSTROBE OBSTRUCTION LIGHTING SYSTEM TO BE DELIVERED TO THE FDOT MAINTENANCE CONTRACTOR:
 - A. (2) LCMRO-G2-USA-48VDC-PS (POWER SUPPLY BOARD COMPLETE)
 - B. (1) LFHMWO-G2-USA-FH (WHITE FLASH HEAD)
 - C. (2) LCMRO-G2-USA-48VDC-CC (CONTROL CARD)
 - D. (2) LCMRO-G3-USA-48VDC-IC (INTERFACE CARD)
 - E. (2) LCMRO-G3-USA-48VDC-CAP (CAPACITOR)
 - F. (2) LCMRO-G3-USA-FAN (FAN)
 - G. (2) LCMRO-G3-USA-ILS (INTERLOCK SWITCH)
 - H. (2) PMEVI20 (SNMP BOARD WITH CABLE)
 - I. (2) OL1B-LED48VDC-RF3 (MARKER GLOBE REPLACEMENT)
 - J. (4) PEC-03 (PHOTOCELL)
 - K. (2) DB-5.X (CONTROL AND ALARM BOARD)
 - L. (2) PMEVI20 (G5 SNMP BOARD - NO CABLE)
 - M. (2) PSU-5.X-48 (POWER SUPPLY CARD)
 - N. (2) SE-824-249-PSU DC/DC, 48VDC (DC/DC CONVERTER)
 - O. (2) BE-254-225-SWITCH (INTERLOCK BOARD AND SWITCH)
 - P. (2) LCMO-G5-USA-48VDC-PS (COMPLETE POWER CONTROL UNIT)
 - Q. (1) LFHMWRO-G5-USA-FH (DUAL FLASH HEAD G5)
 - R. (4) APT-TWL S50A 120AR (BEACON/SIDE MARKER SPD)
 - S. (4) SPT-TWL-D60401-005S (PHOTOCELL SPD)

CONTRACT PLANS RECORD					
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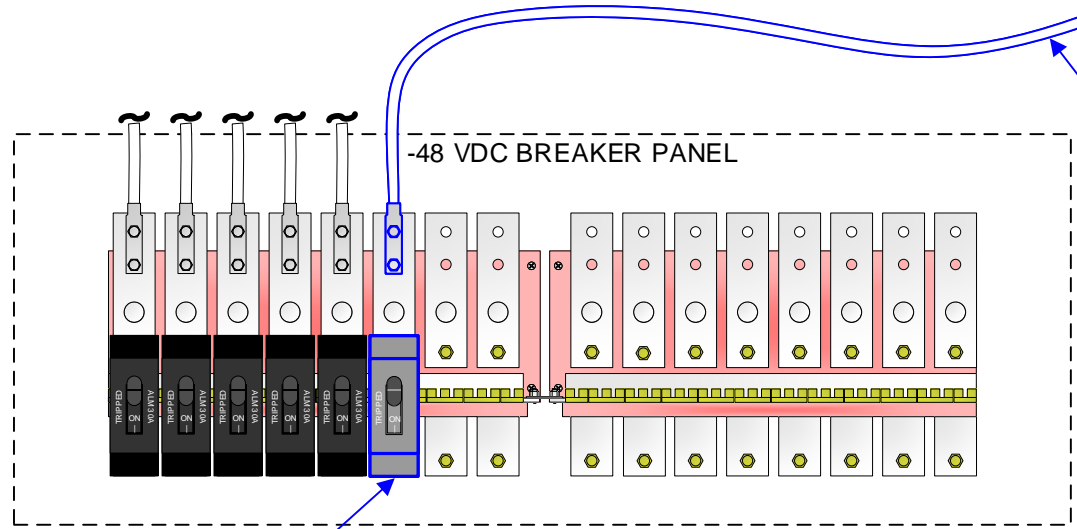
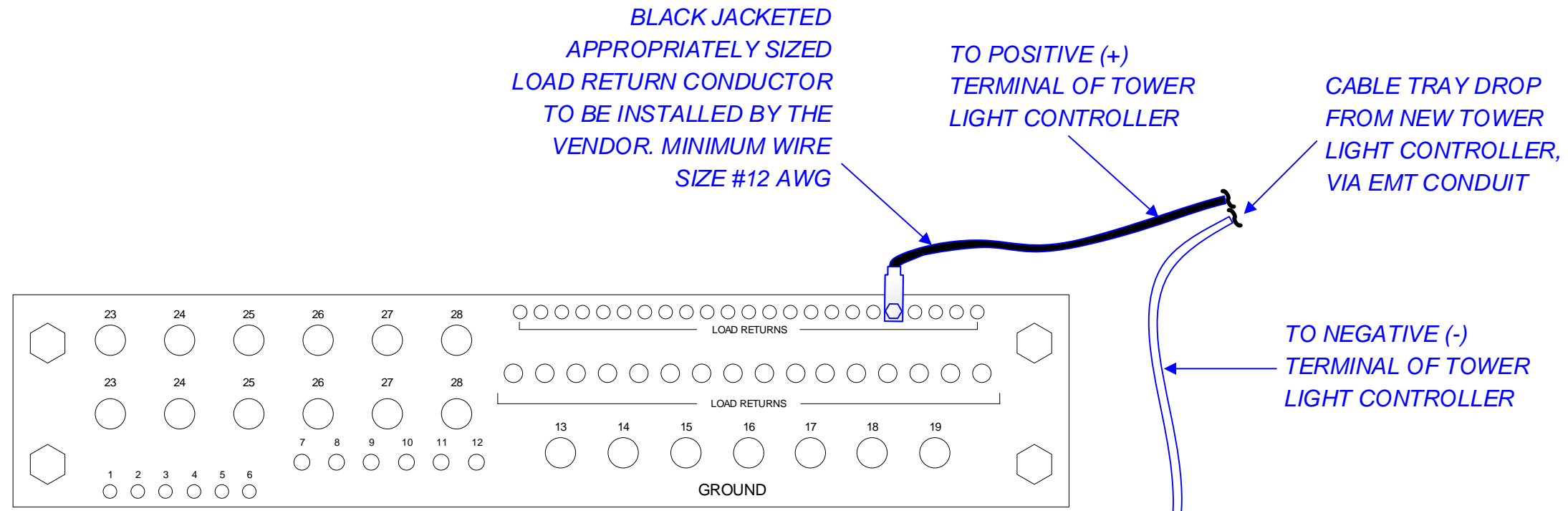
FDOT
 FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
SITE NAME	COUNTY	FINANCIAL PROJECT ID
		424401-1-52-01

**TYPICAL TOWER
OBSTRUCTION
LIGHTING INSTALL**

SHEET NO.
A-3

https://akims-my.sharepoint.com/personal/sean_kane_akingsj@fla.com/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329.vstx



BREAKER MODEL TO BE SUPPLIED BY VENDOR. SEE THE SITE SPECIFIC APPENDICES FOR THE SPECIFIED MANUFACTURER AND MODEL OF THE BREAKER. THE VENDOR SHALL INSTALL THE BREAKER IN THE NEXT AVAILABLE POSITION

TYPICAL -48VDC DISTRIBUTION PANEL

LEGEND

	VENDOR FURNISHED AND INSTALLED
	EXISTING INSTALLATION

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
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SITE NAME	COUNTY	FINANCIAL PROJECT ID
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TYPICAL
 -48VDC DISTRIBUTION
 DETAIL

SHEET NO.
 A-4

https://a1kns-my.sharepoint.com/personal/sean_kane_a1knsj@fla.com/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329.vsd

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

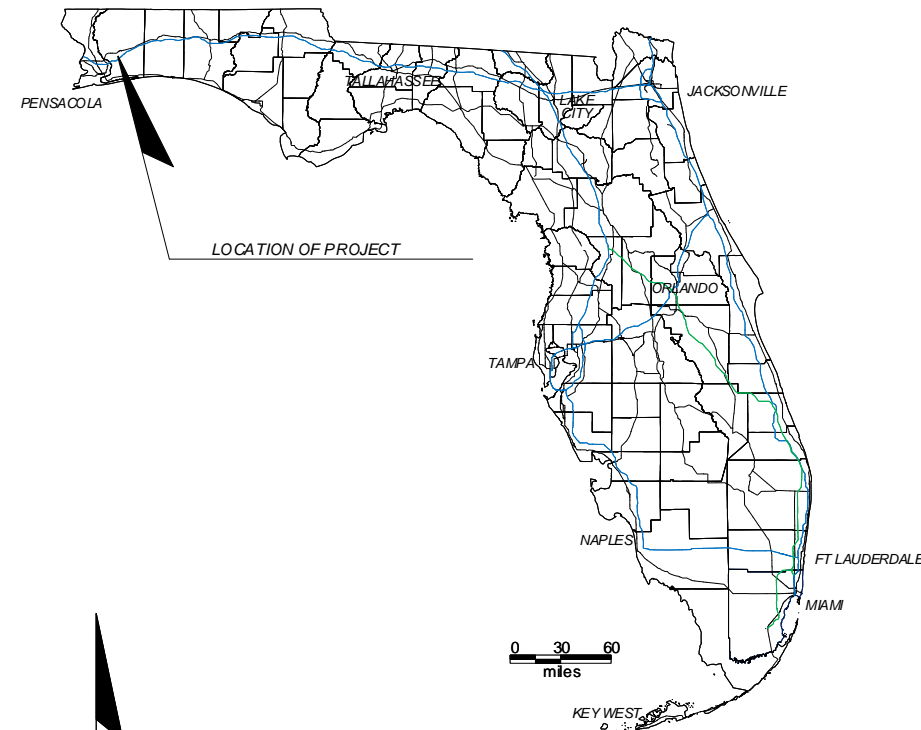
APPENDIX B

FINANCIAL PROJECT ID 424401-1-52-01
SANTA ROSA COUNTY
MILTON (3-3434) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
B-1	MILTON KEY SHEET
B-2	MILTON REMOVAL AND INSTALLATION NOTES
B-3	MILTON COMM BLDG PLANS
B-4	MILTON TOWER LOADING DIAGRAM



MILTON TOWER SITE


TOWER SITE ADDRESS:
MILTON
6025 OLD BAGDAD HIGHWAY
MILTON, FL 32583
LATITUDE: 30-35-59.7 N (NAD 83)
LONGITUDE: 87-04-20.5 W

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

**FLORIDA DEPARTMENT OF
TRANSPORTATION
LED TOWER OBSTRUCTION LIGHTING
UPGRADE PROJECT**

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS (CURRENT EDITION),
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION (CURRENT EDITION),
AS AMENDED BY CONTRACT DOCUMENTS.

FDOT PROJECT MANAGER: RANDY PIERCE

CONTRACT PLANS RECORD						 FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 32399-0450 PH. (850)-410-5600 FAX. (850)-410-5501	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			MILTON KEY SHEET	SHEET NO. B-1
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION		SITE NAME	COUNTY	FINANCIAL PROJECT ID		
						MILTON	SANTA ROSA	424401-1-52-01			

MILTON REMOVAL NOTES:

1. THE VENDOR SHALL REMOVE THE OLD OBSTRUCTION LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO, POWER SUPPLIES, CONTROLLERS, SPDS, CONDUITS, TOWER LIGHT PHOTOCELL, AND ALL ASSOCIATED ELECTRICAL AND GROUNDING CONDUCTORS. THE VENDOR SHALL LEAVE THE CIRCUIT BREAKER IN PLACE AND SWITCH IT TO THE "OFF" POSITION. THE VENDOR SHALL DELIVER THE OLD TOWER LIGHT CONTROLLER, BEACON AND STROBE TO THE MAINTENANCE CONTRACTOR ON SITE, AND PROPERLY DISPOSE OF THE REMAINING MATERIALS.

THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.

2. THE VENDOR SHALL DISCONNECT AND PROPERLY REMOVE AND DISPOSE OF THE ANTENNAS LABELED "I" "K" "M" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET B-4. THE VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE TRANSMISSION LINE SPDS LOCATED INSIDE THE COMMUNICATIONS SHELTER UPON THE TRANSMISSION LINES ENTERING THE SHELTER, AND RETURN TO THE FDOT. THE VENDOR SHALL INSTALL NEW ENTRY PORT BOOTS ON THE BULKHEAD.

IF THE TRANSMISSION LINES ASSOCIATED WITH THE ANTENNAS SPECIFIED TO BE REMOVED ARE NOT DISCONNECTED UPON ENTERING THE SHELTER, THE VENDOR SHALL COORDINATE WITH THE ON-SITE FDOT REPRESENTATIVE BEFORE ANTENNA REMOVAL ACTIVITIES BEGIN.

MILTON INSTALLATION NOTES:

1. THE VENDOR SHALL FURNISH AND INSTALL A NEW -48 VDC LED DUAL DAYTIME/NIGHT-TIME TOWER OBSTRUCTION LIGHTING SYSTEM IN ACCORDANCE WITH THESE PLANS. THE TOWER OBSTRUCTION LIGHTING SYSTEM SHALL BE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD. TOWER LIGHTS TO BE INSTALLED ARE LABELED "B" AND "F" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET B-4.

THE TOWER OBSTRUCTION LIGHTING SYSTEM AND CONDUIT SHALL BE MOUNTED TO THE TOWER AND HORIZONTAL TRANSMISSION LINE BRIDGE WITH GALVANIZED OR STAINLESS STEEL BOLT-ON HARDWARE. SNAP-ON HANGERS ARE NOT PERMITTED. ALL EXTERIOR TOWER LIGHTING CABLES SHALL BE INSTALLED IN APPROPRIATELY SIZED RIGID GALVANIZED STEEL (RGS) CONDUIT.

THE TOWER LIGHT CONTROLLER SHALL BE MOUNTED INSIDE THE COMMUNICATIONS SHELTER. SEE SHEET B-3.

2. THE VENDOR SHALL FURNISH AND INSTALL NEW ELECTRICAL METALLIC TUBING (EMT) CONDUIT INSIDE THE COMMUNICATIONS SHELTER BETWEEN THE TOWER LIGHT CONTROLLER AND THE -48VDC DISTRIBUTION RACK. THE VENDOR SHALL FURNISH AND INSTALL NEW EMT CONDUIT FOR THE PHOTOCELL AND CONTROL WIRING BETWEEN THE TOWER LIGHT CONTROLLER AND ENTRY PORT INSIDE THE SHELTER, AND IT SHALL BE LOCATED SO AS NOT TO OBSCURE ANY PORTION OF AN ELECTRICAL OUTLET OR JUNCTION BOX, PER NEC, ITEM 11, 'APPLICABLE PUBLICATIONS AND STANDARDS' OR OBSTRUCT ANY EMPTY ENTRY PORTS. THE VENDOR SHALL REUSE THE EXISTING EXTERIOR PHOTOCELL METALLIC CONDUIT. THE VENDOR SHALL TERMINATE THE EXTERIOR EMT CONDUIT AT BOTH ENDS WITH AN END BUSHING.

3. THE VENDOR SHALL INSTALL THE LOAD CONDUCTORS BETWEEN THE TOWER LIGHTING SYSTEM, AND THE -48VDC DISTRIBUTION PANEL, IN ACCORDANCE WITH SHEET A-4. THE 10A BREAKER MODEL SHALL BE:

EATON HEINEMANN
AM1-2774-2
AM1-B3-A
AMPERAGE: 10 AMPS
VOLTAGE: 65VDC
DELAY: 3

4. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING NETWORK INFORMATION:

IP ADDRESS: 172.16.88.14
SUBNET MASK: 255.255.254.0
DEFAULT GATEWAY: 172.16.88.19

5. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING SNMP INFORMATION:

STATE: ENABLED
READ COMMUNITY: PUBLIC
WRITE COMMUNITY: PUBLIC
SYSTEM NAME: MILTON TECHNOSTROBE
SYSTEM DESCRIPTION: MILTON TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: MILTON
TRAP STATE: ENABLED
TRAPS PRIMARY DESTINATION: 172.16.2.21
TRAPS SECONDARY DESTINATION: 172.16.16.21

6. THE VENDOR SHALL NOTIFY THE FDOT UPON COMPLETION OF ALL TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION WORK.

7. THE FDOT WILL INSPECT THE TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION FOR COMPLIANCE WITH THESE SPECIFICATIONS.

8. THE FDOT WILL WITNESS COMMISSIONING AND TESTING OF THE NEW TOWER OBSTRUCTION LIGHTING SYSTEM AND NOTIFY THE VENDOR OF FINAL ACCEPTANCE.

CONTRACT PLANS RECORD

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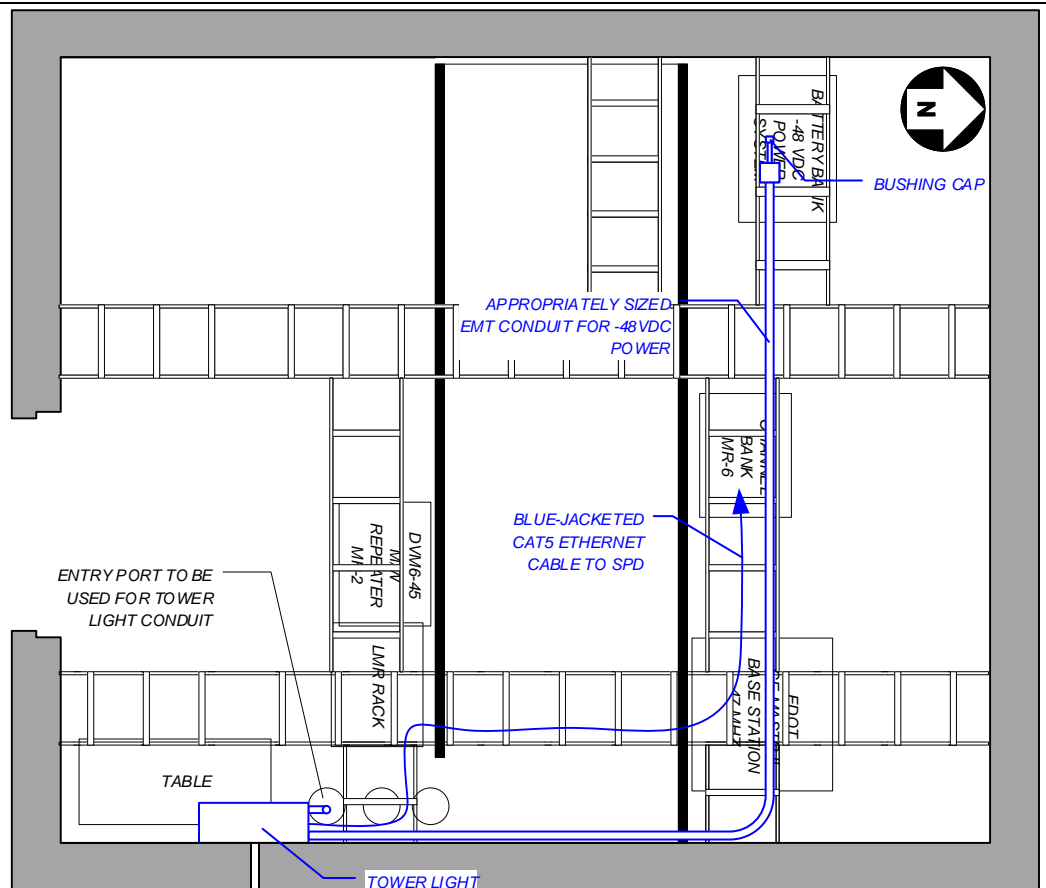
DEPARTMENT OF TRANSPORTATION

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MILTON	SANTA ROSA	424401-1-52-01

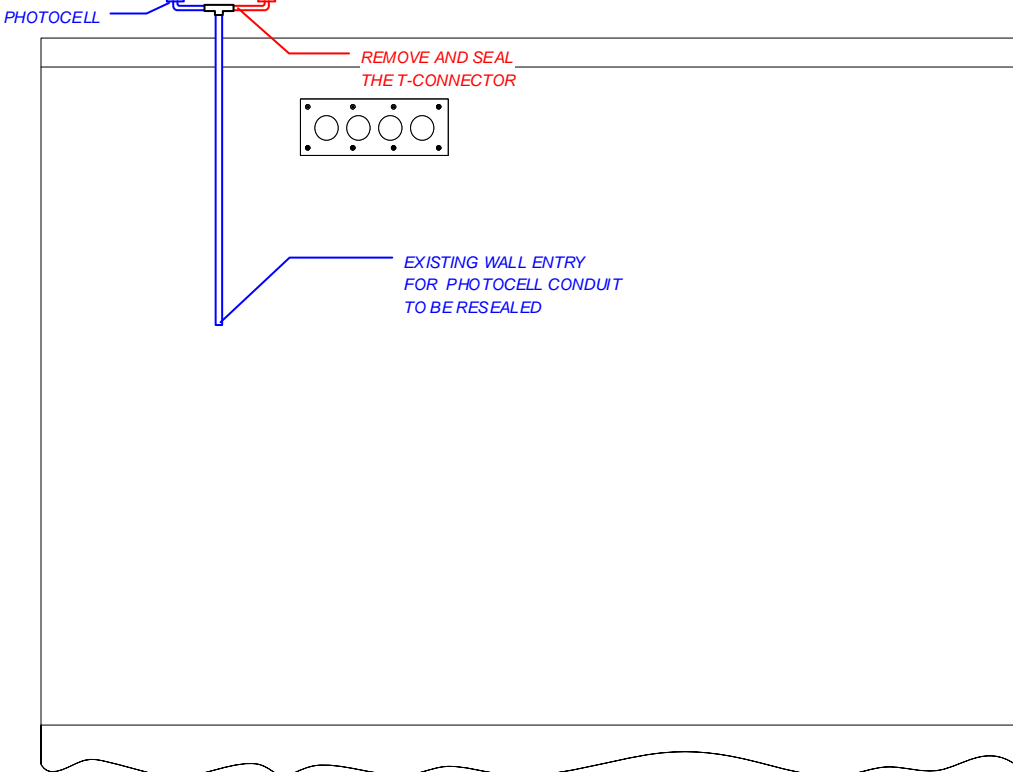
**MILTON
REMOVAL AND
INSTALLATION NOTES**

SHEET NO.

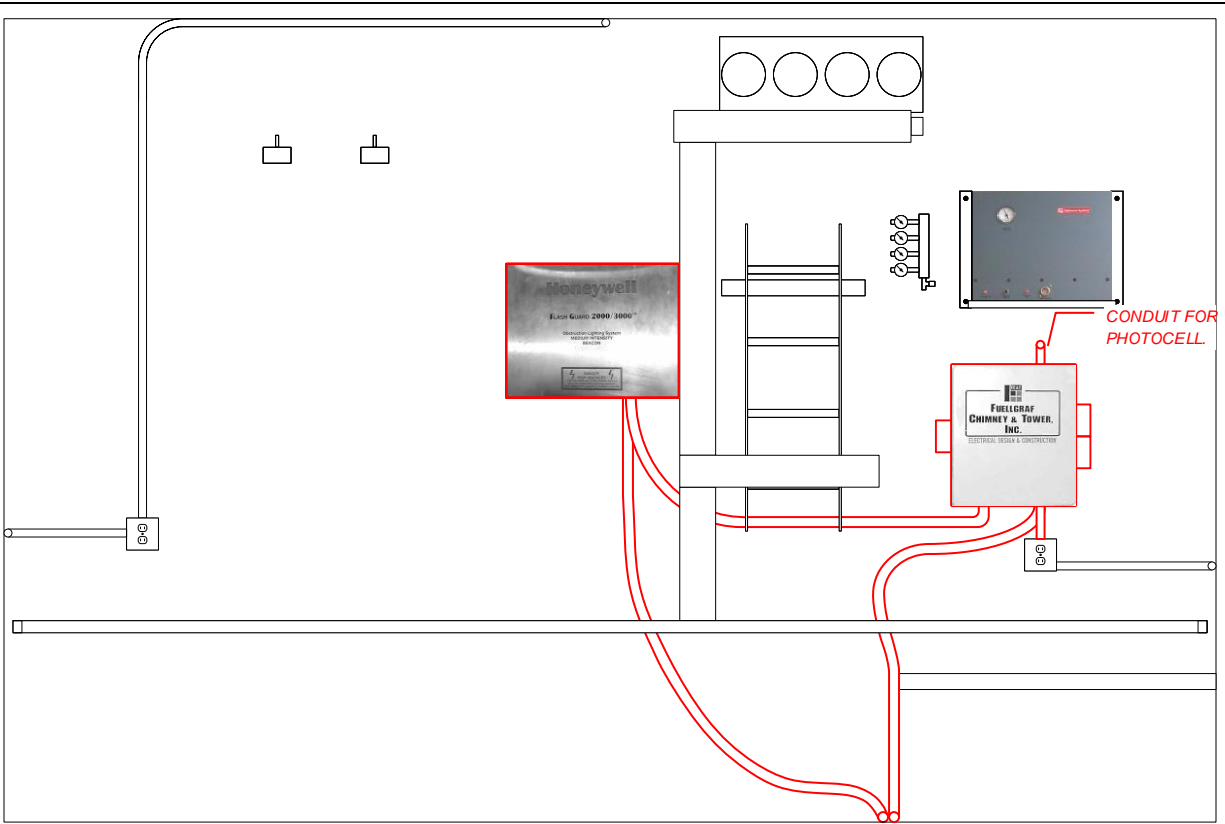
B-2



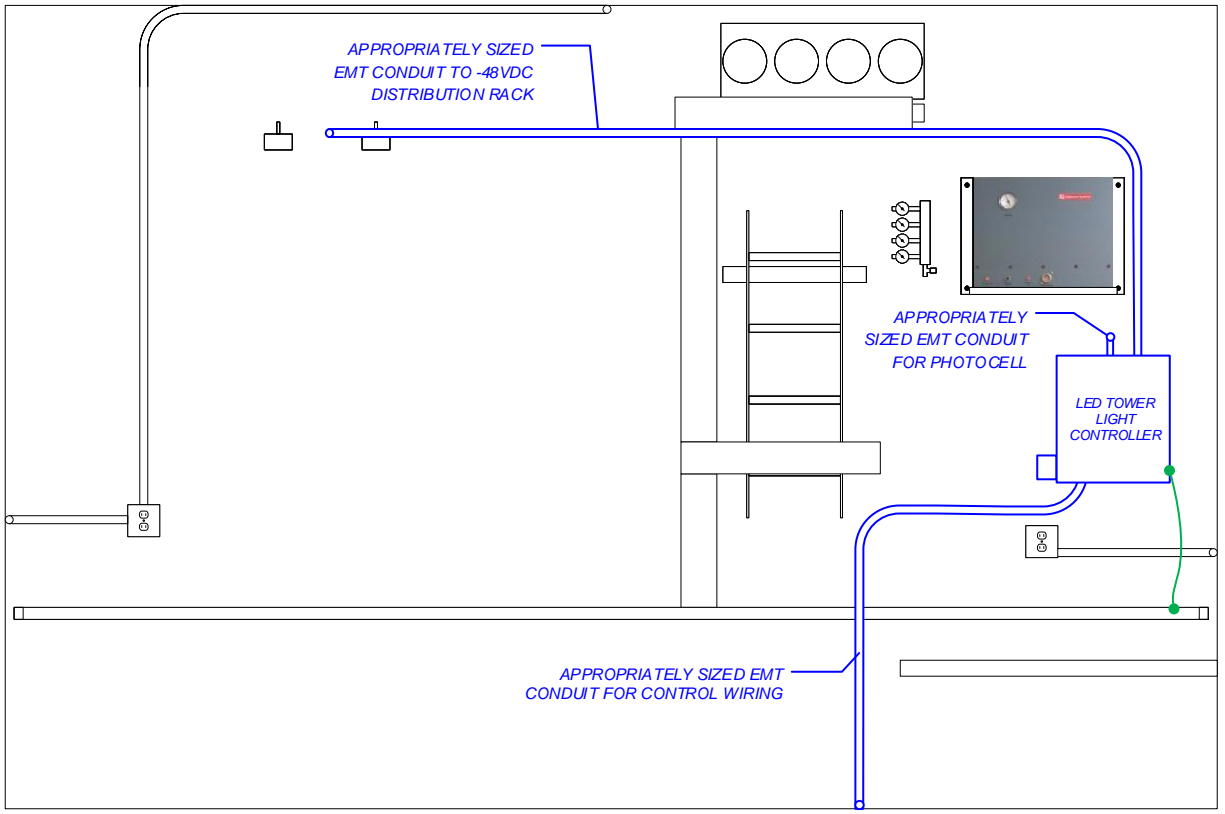
SHELTER FLOOR PLAN



PROPOSED EXTERIOR EAST WALL



EXISTING INTERIOR EAST WALL



PROPOSED INTERIOR EAST WALL

NOTES

1. THE APPROXIMATE LOCATION OF THE EQUIPMENT IS FOR DIAGRAMMATICAL PURPOSES ONLY. THE VENDOR IS RESPONSIBLE FOR DETERMINING THE BEST LOCATIONS FOR EQUIPMENT AND ALL ASSOCIATED CONDUITS AND MOUNTING AND GROUNDING HARDWARE. THE VENDOR SHALL SUBMIT DETAILED PLANS FOR APPROVAL BY THE FDOT.
2. THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.
3. THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE -48 VDC TOWER OBSTRUCTION LIGHTING SYSTEM MODEL E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD WITH ASSOCIATED PHOTOCELL, SURGE PROTECTION, GROUNDING, AND CONDUIT.
4. THE VENDOR SHALL FURNISH AND INSTALL ONE (1) ETHERNET SURGE PROTECTIVE DEVICE (SPD), MTL-SURGE MODEL NUMBER ZB24540. THIS SPD SHALL BE MOUNTED ON THE DIN RAIL IN THE CHANNEL BANK RACK.
5. THE VENDOR SHALL INSTALL A CUSTOM LENGTH BLUE-JACKETED CAT 5 ETHERNET CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE CHANNEL BANK RACK, AND FROM THE ETHERNET SPD TO THE BPS 2000, PORT #22.
THE VENDOR SHALL ROUTE THE NEW BLUE-JACKETED CAT 5 ETHERNET CABLE ALONG THE OVERHEAD CABLE TRAYS, PARALLEL TO EXISTING ETHERNET CABLES TO THE CHANNEL BANK RACK. THE VENDOR SHALL INDEPENDENTLY SECURE THE ETHERNET CABLE TO THE OVERHEAD CABLE TRAYS WITH ZIP TIES OR LACING STRING, AT 36 IN. INTERVALS, MAXIMUM.
6. THE VENDOR SHALL MECHANICALLY GROUND THE TECHNOSTROBE TOWER LIGHT CONTROLLER TO THE GROUND HALO USING #6 AWG GREEN JACKETED CONDUCTOR. THE GROUND SHALL BE DOWNWARD COURSING, AND AS STRAIGHT AND SHORT AS POSSIBLE.
THE VENDOR SHALL CLEAN AND PREPARE ALL GROUND CONDUCTORS AND SURFACES PRIOR TO BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH CONNECTION IS MADE.

LEGEND

	EXISTING
	VENDOR FURNISHED AND INSTALLED
	TO BE REMOVED BY VENDOR

CONTRACT PLANS RECORD

DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

FDOT
 FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

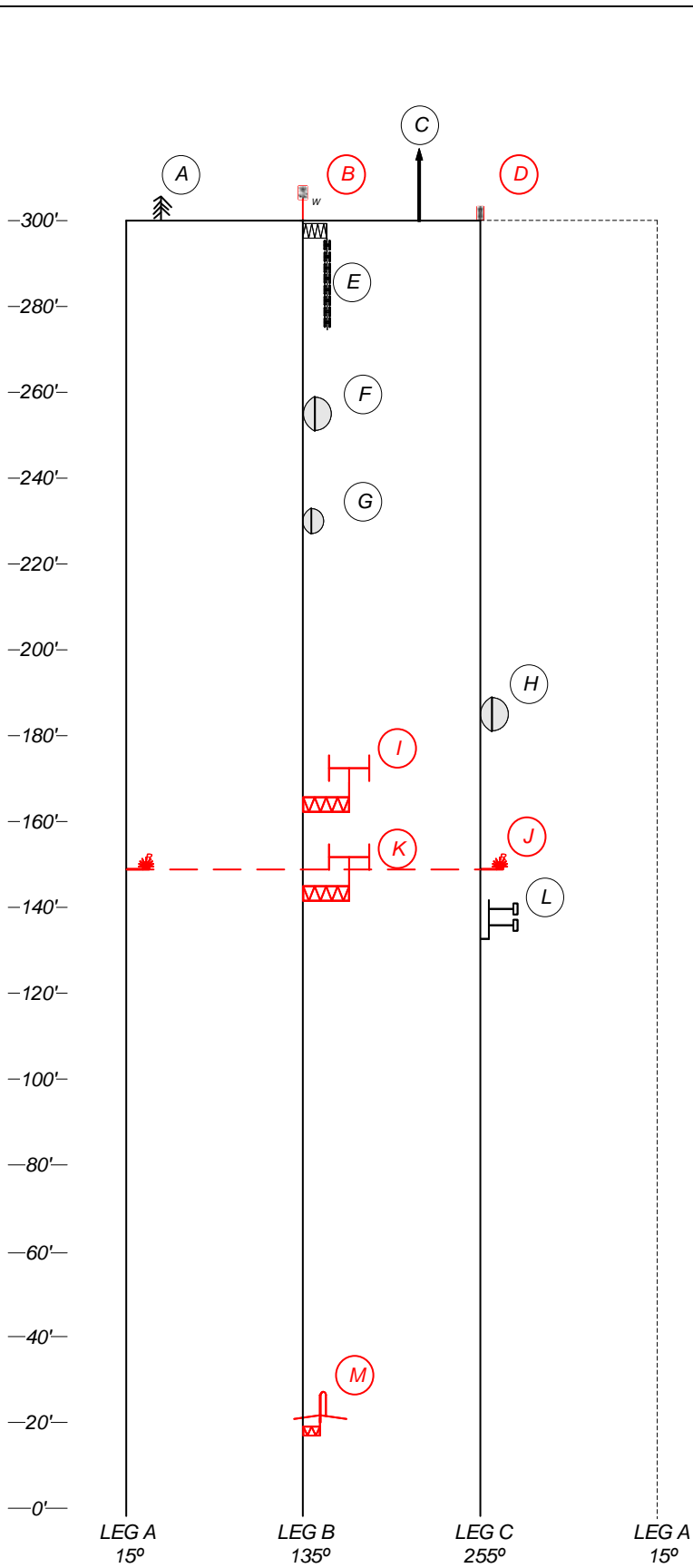
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

SITE NAME	COUNTY	FINANCIAL PROJECT ID
MILTON	SANTA ROSA	424401-1-52-01

MILTON
COMM BLDG PLANS

SHEET NO.
 B-3

https://a1kns-my.sharepoint.com/personal/kean_kane_atkins@fla DOT gov/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329.vsd

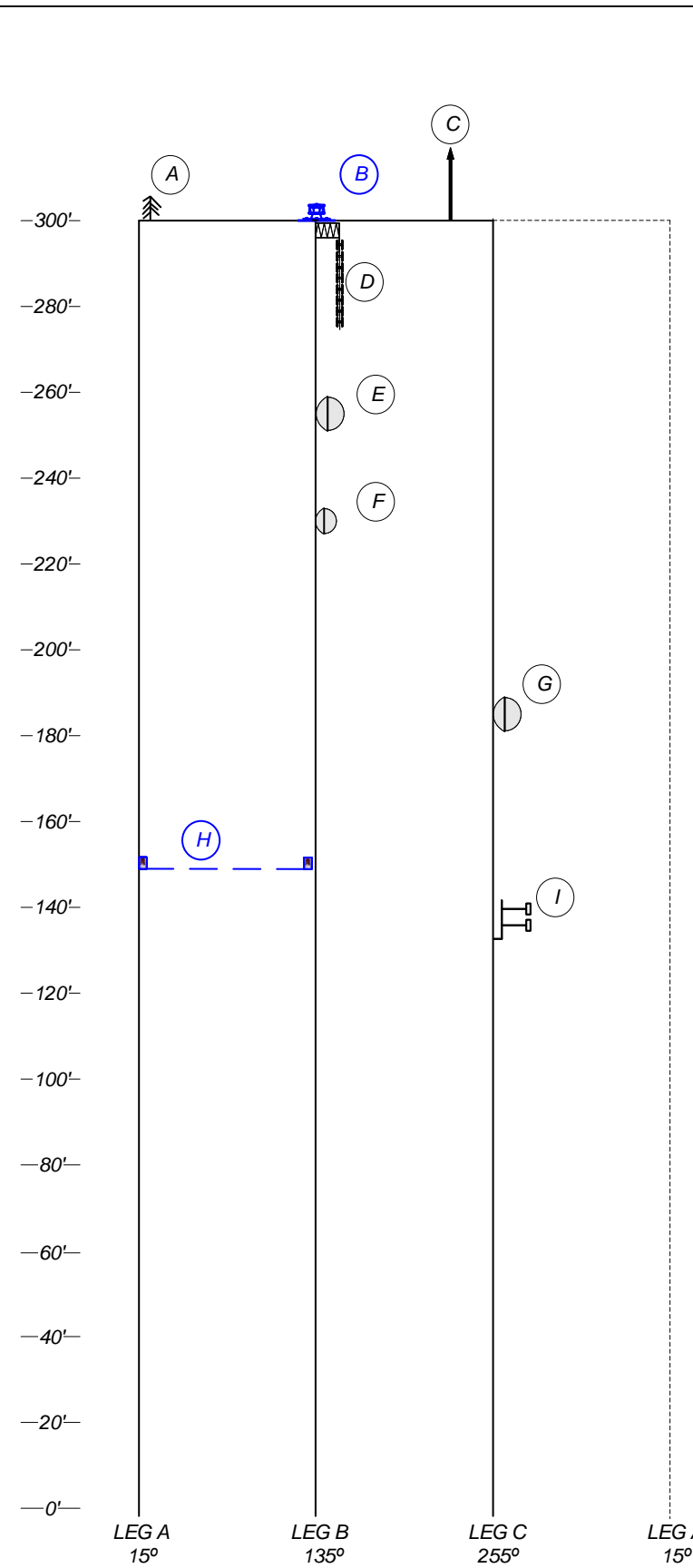
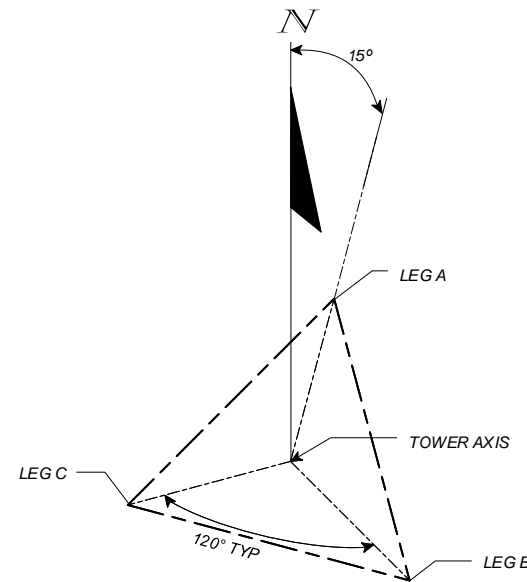


EXISTING TOWER LOADING DIAGRAM

ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	DIAMOND DISCONE	A	305' (BASE)	7/8"	-	-
B	WHITE STROBE	B	305' BASE	-	-	1
C	AIR TERMINAL	BC	305' (BASE)	-	-	-
D	RED BEACON	C	300' BASE	-	-	1
E	DB-420	B	300' (TOP)	7/8"	-	-
F	P8-65D	B	255' (C.L.)	EW-63	70.3	-
G	PD-65D	B	230' (C.L.)	EW-63	70.3	-
H	P8-65D	C	185' (C.L.)	EW-63	233.0	-
I	DB-214	B	165' Base	-	-	2
J	SIDE MARKERS	A, C	150' (C.L.)	-	-	1
K	DB-214	B	145' Base	-	-	2
L	COMPROD 872-70	C	135' BASE	7/8"	-	-
M	DB-201	B	20' BASE	7/8"	-	-

NOTES:

- REMOVE AND PROPERLY DISPOSE OF THE TOWER OBSTRUCTION LIGHTING SYSTEM, CONDUIT, AND ASSOCIATED MOUNTING HARDWARE PER THESE PLANS. THE STROBE SHALL BE PRESERVED AND DELIVERED TO THE MAINTENANCE CONTRACTOR IN ACCORDANCE WITH SHEET B-2 REMOVAL NOTE 1.
- VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE ANTENNAS, ASSOCIATED COAXIAL TRANSMISSION LINES, MOUNTING HARDWARE, AND SPDS.
- RESTORE SITE COMPOUND PER THESE PLANS.



PROPOSED TOWER LOADING DIAGRAM

ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	DIAMOND DISCONE	A	300' BASE	7/8"	-	-
B	TECHNOSTROBE DUAL LED FLASH HEAD	B	300' BASE	CONDUIT	-	1
C	AIR TERMINAL	BC	300' BASE	-	-	-
D	DB-420	B	300' (TOP)	7/8"	-	-
E	P8-65D	B	255' (C.L.)	EW-63	70.3	-
F	PD-65D	B	230' (C.L.)	EW-63	70.3	-
G	P8-65D	C	185' (C.L.)	EW-63	233.0	-
H	(2) LED SIDE MARKERS	A, B	150' (C.L.)	SAME CONDUIT	-	1
I	COMPROD 872-70	C	135' BASE	7/8"	-	-

NOTES:

- THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 TOWER LIGHTING SYSTEM IN ACCORDANCE WITH SHEET A-3.

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

FDOT FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
SITE NAME	COUNTY	FINANCIAL PROJECT ID
MILTON	SANTA ROSA	424401-1-52-01

**MILTON TOWER
LOADING DIAGRAM**

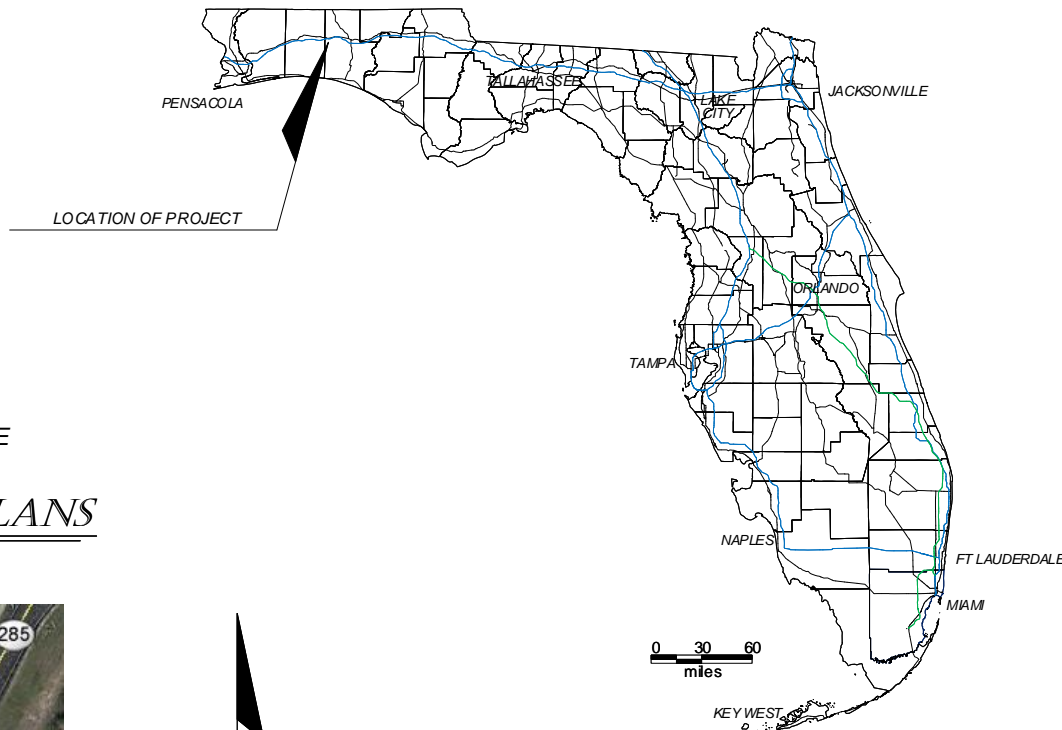
SHEET NO. B-4

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

APPENDIX C

FINANCIAL PROJECT ID 424401-1-52-01
WALTON COUNTY
MOSSY HEAD (3-3431) LED TOWER OBSTRUCTION LIGHTING UPGRADE

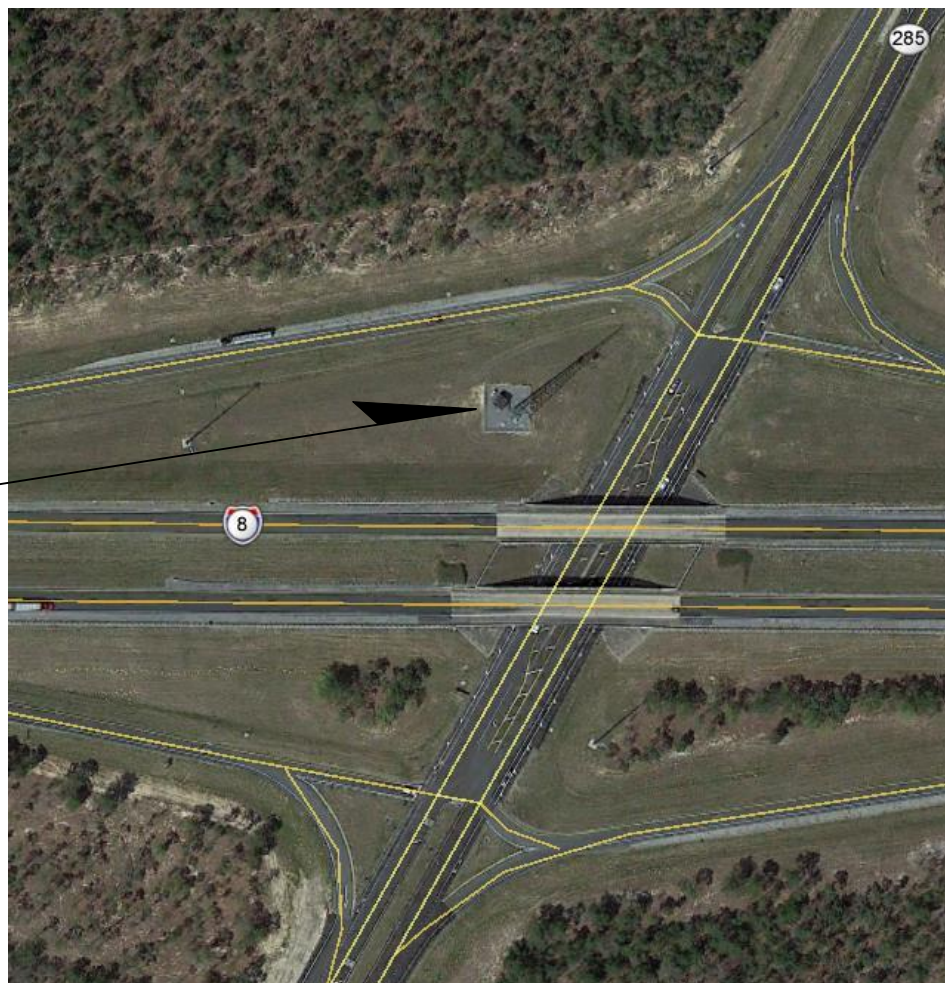
INTELLIGENT TRANSPORTATION SYSTEMS PLANS



INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
C-1	MOSSY HEAD KEY SHEET
C-2	MOSSY HEAD REMOVAL AND INSTALLATION NOTES
C-3	MOSSY HEAD COMM BUILDING PLANS
C-4	MOSSY HEAD TOWER LOADING DIAGRAM

MOSSY HEAD TOWER SITE




TOWER SITE ADDRESS:
MOSSY HEAD
310 STATE HIGHWAY 285
MOSSY HEAD, FL 32433
LATITUDE: 30-43-59.1 N (NAD 83)
LONGITUDE: 86-21-05.7 W

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

**FLORIDA DEPARTMENT OF
TRANSPORTATION
LED TOWER OBSTRUCTION LIGHTING
UPGRADE PROJECT**

FDOT PROJECT MANAGER: RANDY PIERCE

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS (CURRENT EDITION),
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION (CURRENT EDITION),
AS AMENDED BY CONTRACT DOCUMENTS.

CONTRACT PLANS RECORD						 FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 32399-0450 PH. (850)-410-5600 FAX. (850)-410-5501	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			MOSSY HEAD KEY SHEET	SHEET NO. C-1
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION		SITE NAME	COUNTY	FINANCIAL PROJECT ID		
						MOSSY HEAD	WALTON	424401-1-52-01			

MOSSY HEAD REMOVAL NOTES:

1. THE VENDOR SHALL REMOVE THE OLD OBSTRUCTION LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO, POWER SUPPLIES, CONTROLLERS, SPDS, CONDUITS, TOWER LIGHT PHOTOCELL, AND ALL ASSOCIATED ELECTRICAL AND GROUNDING CONDUCTORS. THE VENDOR SHALL LEAVE THE CIRCUIT BREAKER IN PLACE AND SWITCH IT TO THE "OFF" POSITION. THE VENDOR SHALL DELIVER THE OLD TOWER LIGHT CONTROLLER, BEACON AND STROBE TO THE MAINTENANCE CONTRACTOR ON SITE, AND PROPERLY DISPOSE OF THE REMAINING MATERIALS.
THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.
2. THE VENDOR SHALL DISCONNECT AND PROPERLY REMOVE AND DISPOSE OF THE DB-214 ANTENNAS LABELED "E" AND "H" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET C-4. THE VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE TRANSMISSION LINE SPDS LOCATED INSIDE THE COMMUNICATIONS SHELTER UPON THE TRANSMISSION LINES ENTERING THE SHELTER, AND RETURN TO THE FDOT. THE VENDOR SHALL INSTALL NEW ENTRY PORT BOOTS ON THE BULKHEAD.

IF THE TRANSMISSION LINES ASSOCIATED WITH THE ANTENNAS SPECIFIED TO BE REMOVED ARE NOT DISCONNECTED UPON ENTERING THE SHELTER, THE VENDOR SHALL COORDINATE WITH THE ON-SITE FDOT REPRESENTATIVE BEFORE ANTENNA REMOVAL ACTIVITIES BEGIN.

MOSSY HEAD INSTALLATION NOTES:

1. THE VENDOR SHALL FURNISH AND INSTALL A NEW -48 VDC LED MEDIUM INTENSITY WHITE TOWER OBSTRUCTION LIGHTING SYSTEM IN ACCORDANCE WITH THESE PLANS. THE TOWER OBSTRUCTION LIGHTING SYSTEM SHALL BE TECHNOSTROBE D1-LED-B-WHITE-48VDC-SNMP-C-APT-DS-G5 WHITE LED FLASH HEAD. TOWER LIGHT TO BE INSTALLED IS LABELED "C" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET C-4.
THE TOWER OBSTRUCTION LIGHTING SYSTEM AND CONDUIT SHALL BE MOUNTED TO THE TOWER AND HORIZONTAL TRANSMISSION LINE BRIDGE WITH GALVANIZED OR STAINLESS STEEL BOLT-ON HARDWARE. SNAP-ON HANGERS ARE NOT PERMITTED. ALL EXTERIOR TOWER LIGHTING CABLES SHALL BE INSTALLED IN APPROPRIATELY SIZED RIGID GALVANIZED STEEL (RGS) CONDUIT.
THE TOWER LIGHT CONTROLLER SHALL BE MOUNTED INSIDE THE COMMUNICATIONS SHELTER. SEE SHEET C-3.
2. THE VENDOR SHALL FURNISH AND INSTALL NEW ELECTRICAL METALLIC TUBING (EMT) CONDUIT INSIDE THE COMMUNICATIONS SHELTER BETWEEN THE TOWER LIGHT CONTROLLER AND THE -48VDC DISTRIBUTION RACK. THE VENDOR SHALL FURNISH AND INSTALL NEW EMT CONDUIT FOR THE PHOTOCELL AND CONTROL WIRING BETWEEN THE TOWER LIGHT CONTROLLER AND ENTRY PORT INSIDE THE SHELTER, AND IT SHALL BE LOCATED SO AS NOT TO OBSCURE ANY PORTION OF AN ELECTRICAL OUTLET OR JUNCTION BOX, PER NEC, ITEM 11, 'APPLICABLE PUBLICATIONS AND STANDARDS' OR OBSTRUCT ANY EMPTY ENTRY PORTS. THE VENDOR SHALL REUSE THE EXISTING EXTERIOR PHOTOCELL METALLIC CONDUIT. THE VENDOR SHALL TERMINATE THE EXTERIOR EMT CONDUIT AT BOTH ENDS WITH AN END BUSHING.
3. THE VENDOR SHALL INSTALL THE LOAD CONDUCTORS BETWEEN THE TOWER LIGHTING SYSTEM, AND THE -48VDC DISTRIBUTION PANEL, IN ACCORDANCE WITH SHEET A-4. THE 10A BREAKER MODEL SHALL BE:

EATON HEINEMANN
AM1-2774-2
AM1-B3-A
AMPERAGE: 10 AMPS
VOLTAGE: 65VDC
DELAY: 3
4. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING NETWORK INFORMATION:

IP ADDRESS: 172.16.82.14
SUBNET MASK: 255.255.254.0
DEFAULT GATEWAY: 172.16.82.19
5. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING SNMP INFORMATION:

STATE: ENABLED
READ COMMUNITY: PUBLIC
WRITE COMMUNITY: PUBLIC
SYSTEM NAME: MOSSY HEAD TECHNOSTROBE
SYSTEM DESCRIPTION: MOSSY HEAD TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: MOSSY HEAD
TRAP STATE: ENABLED
TRAPS PRIMARY DESTINATION: 172.16.2.21
TRAPS SECONDARY DESTINATION: 172.16.16.21
6. THE VENDOR SHALL NOTIFY THE FDOT UPON COMPLETION OF ALL TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION WORK.
7. THE FDOT WILL INSPECT THE TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION FOR COMPLIANCE WITH THESE SPECIFICATIONS.
8. THE FDOT WILL WITNESS COMMISSIONING AND TESTING OF THE NEW TOWER OBSTRUCTION LIGHTING SYSTEM AND NOTIFY THE VENDOR OF FINAL ACCEPTANCE.

CONTRACT PLANS RECORD

DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



FLORIDA DEPARTMENT OF TRANSPORTATION
605 SUWANNEE ST. MS 90
TALLAHASSEE, FL 32399-0450
PH. (850)-410-5600
FAX. (850)-410-5501

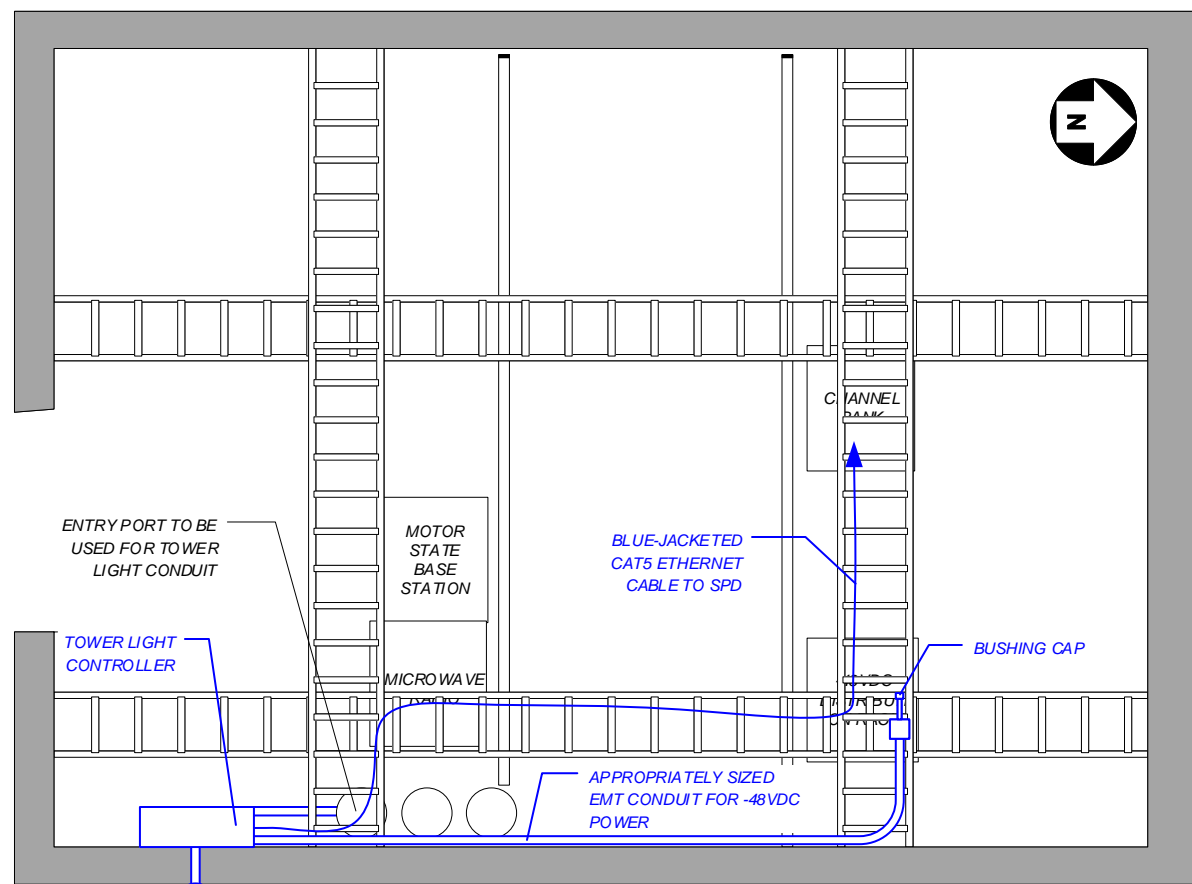
**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

SITE NAME	COUNTY	FINANCIAL PROJECT ID
MOSSY HEAD	WALTON	424401-1-52-01

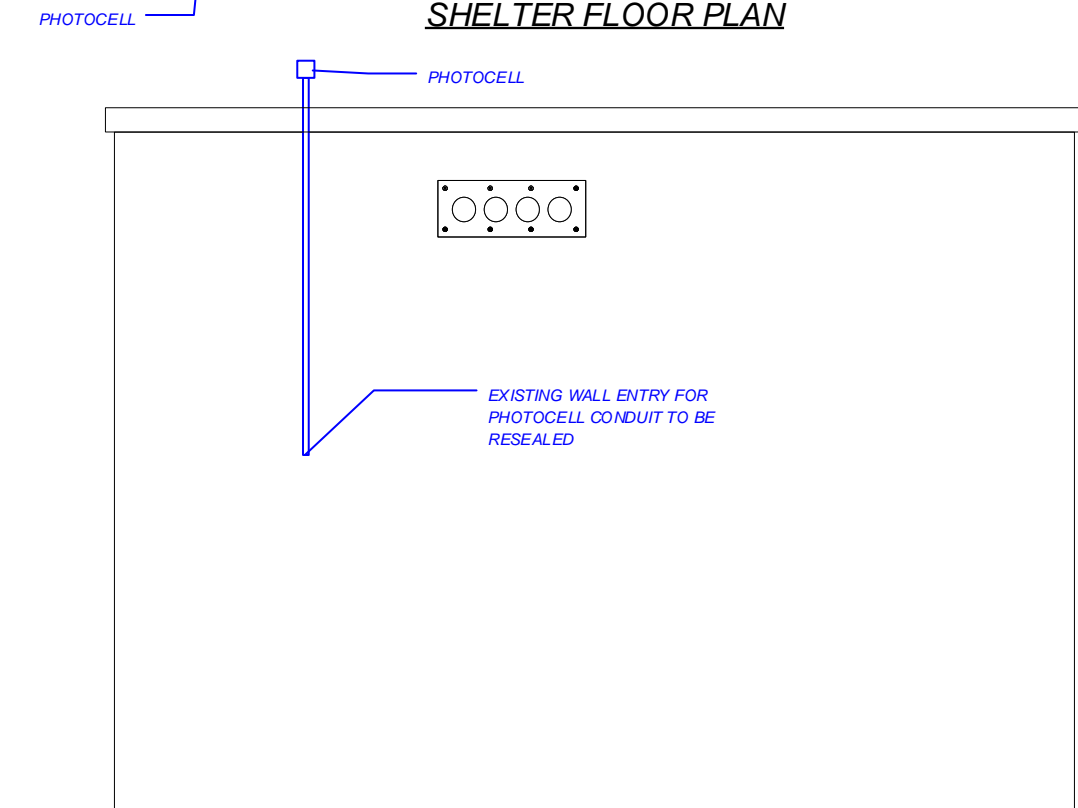
**MOSSY HEAD
REMOVAL AND
INSTALLATION NOTES**

SHEET NO.

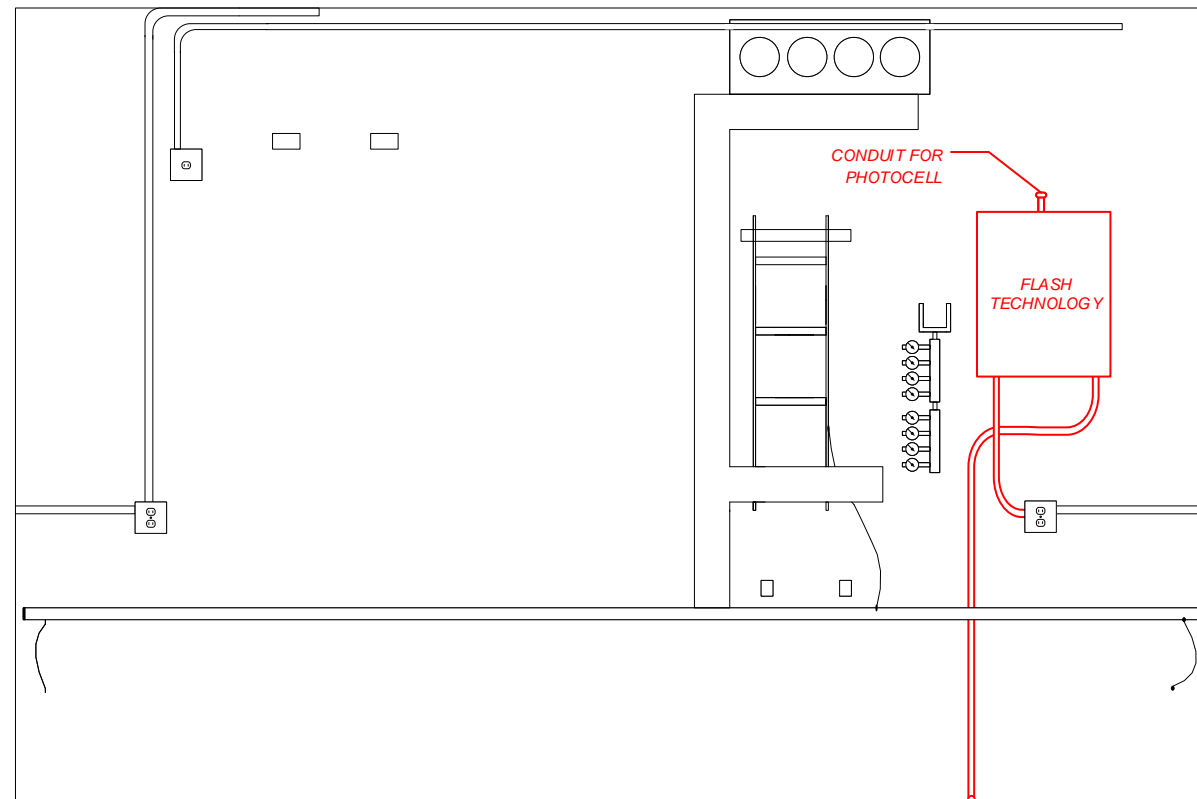
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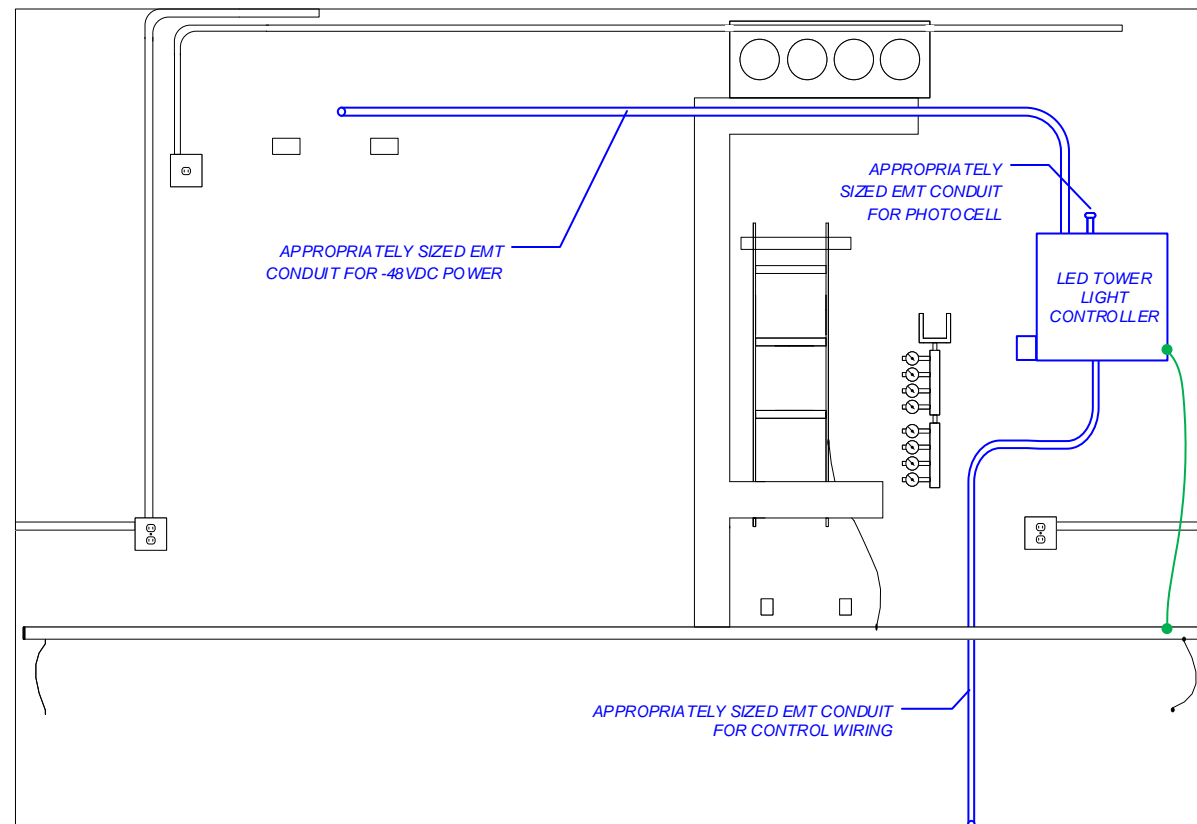
SHELTER FLOOR PLAN



PROPOSED EXTERIOR EAST WALL



EXISTING INTERIOR EAST WALL



PROPOSED INTERIOR EAST WALL

NOTES:

1. THE APPROXIMATE LOCATION OF THE EQUIPMENT IS FOR DIAGRAMMATICAL PURPOSES ONLY. THE VENDOR IS RESPONSIBLE FOR DETERMINING THE BEST LOCATIONS FOR EQUIPMENT AND ALL ASSOCIATED CONDUITS AND MOUNTING AND GROUNDING HARDWARE. THE VENDOR SHALL SUBMIT DETAILED PLANS FOR APPROVAL BY THE FDOT.
2. THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.
3. THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE -48 VDC TOWER OBSTRUCTION LIGHTING SYSTEM MODEL D1-LED-B-WHITE-48VDC-SNMP-C-APT-DS-G5 WHITE LED FLASH HEAD WITH ASSOCIATED PHOTOCELL, SURGE PROTECTION, GROUNDING, AND CONDUIT.
4. THE VENDOR SHALL FURNISH AND INSTALL ONE (1) ETHERNET SURGE PROTECTIVE DEVICE (SPD), MTL-SURGE MODEL NUMBER ZB24540. THIS SPD SHALL BE MOUNTED ON THE DIN RAIL IN THE CHANNEL BANK RACK.
5. THE VENDOR SHALL INSTALL A CUSTOM LENGTH BLUE-JACKETED CAT 5 ETHERNET CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE CHANNEL BANK RACK, AND FROM THE ETHERNET SPD TO THE BPS 2000, PORT #22.

THE VENDOR SHALL ROUTE THE NEW BLUE-JACKETED CAT 5 ETHERNET CABLE ALONG THE OVERHEAD CABLE TRAYS, PARALLEL TO EXISTING ETHERNET CABLES TO THE CHANNEL BANK RACK. THE VENDOR SHALL INDEPENDENTLY SECURE THE ETHERNET CABLE TO THE OVERHEAD CABLE TRAYS WITH ZIP TIES OR LACING STRING, AT 36 IN. INTERVALS, MAXIMUM.
6. THE VENDOR SHALL MECHANICALLY GROUND THE TECHNOSTROBE TOWER LIGHT CONTROLLER TO THE GROUND HALO USING #6 AWG GREEN JACKETED CONDUCTOR. THE GROUND SHALL BE DOWNWARD COURSING, AND AS STRAIGHT AND SHORT AS POSSIBLE.

THE VENDOR SHALL CLEAN AND PREPARE ALL GROUND CONDUCTORS AND SURFACES PRIOR TO BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH CONNECTION IS MADE.

LEGEND

- EXISTING
- VENDOR FURNISHED AND INSTALLED
- TO BE REMOVED BY VENDOR

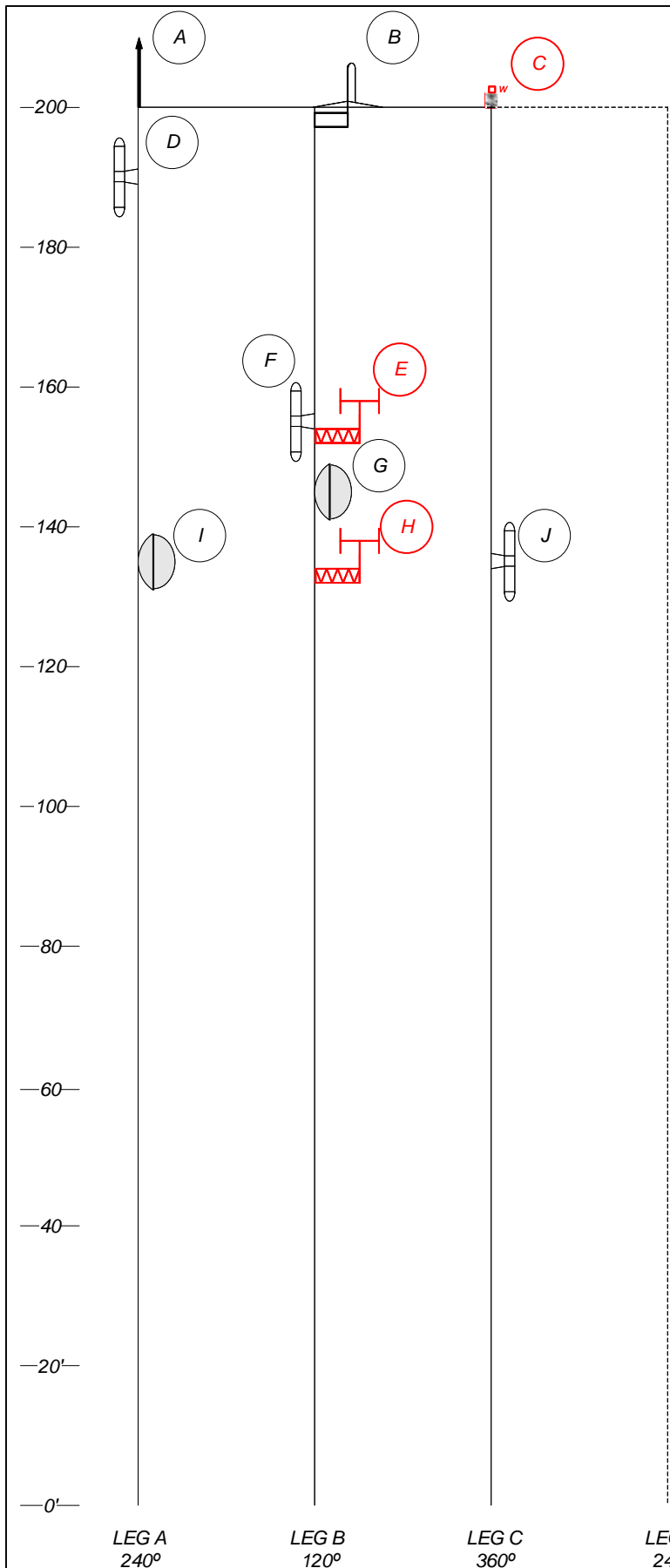
CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

FDOT
 FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
SITE NAME	COUNTY	FINANCIAL PROJECT ID
MOSSY HEAD	WALTON	424401-1-52-01

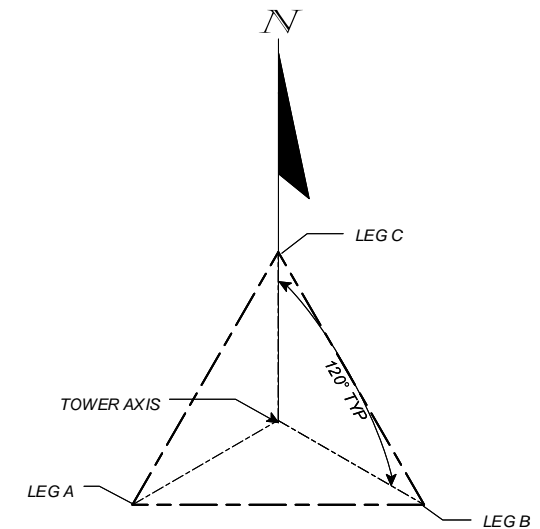
MOSSY HEAD COMM BLDG PLANS	SHEET NO. C-3
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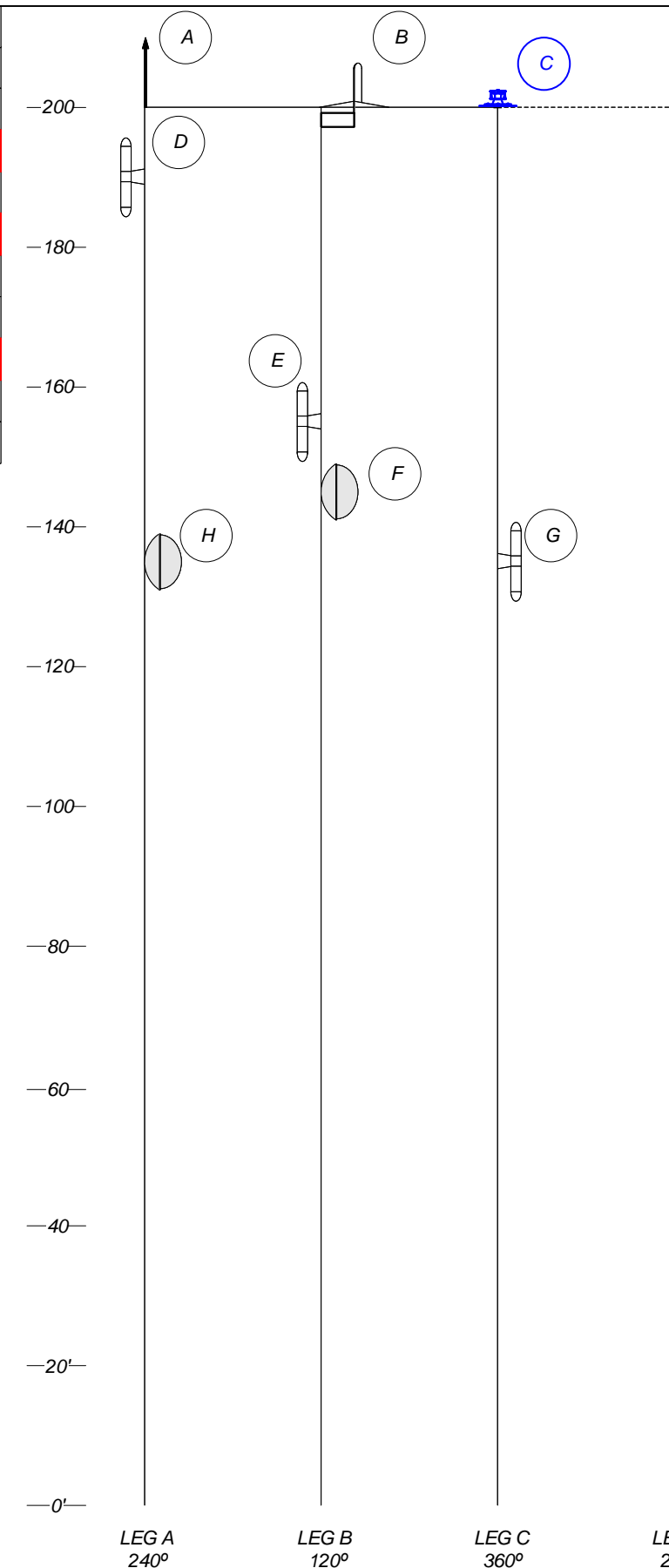


ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	AIR TERMINAL	A	205' BASE	-	-	-
B	DB-201	B	200' BASE	7/8"	-	-
C	WHITE BEACON	C	200' BASE	-	-	1
D	DB-212	A	190' (C.L.)	7/8"	-	-
E	DB-214	B	156' BASE	1/2"	-	2
F	DB-212	B	155' (C.L.)	7/8"	-	-
G	P8-65D	B	145' (C.L.)	EW-63	92.1	-
H	DB-214	B	136' BASE	1/2"	-	2
I	P8-65D	A	135' (C.L.)	EW-63	278.5	-
J	DB-212	C	135' (C.L.)	7/8"	-	-

- NOTES:
- REMOVE AND PROPERLY DISPOSE OF THE TOWER OBSTRUCTION LIGHTING SYSTEM, CONDUIT, AND ASSOCIATED MOUNTING HARDWARE PER THESE PLANS. THE STROBE SHALL BE PRESERVED AND DELIVERED TO THE MAINTENANCE CONTRACTOR IN ACCORDANCE WITH SHEET C-2 REMOVAL NOTE 1.
 - VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE ANTENNAS, ASSOCIATED COAXIAL TRANSMISSION LINES, MOUNTING HARDWARE, AND SPDS.
 - RESTORE SITE COMPOUND PER THESE PLANS.



EXISTING TOWER LOADING DIAGRAM



ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	AIR TERMINAL	A	205' BASE	-	-	-
B	DB-201	B	200' BASE	7/8"	-	-
C	TECHNOSTROBE WHITE LED FLASH HEAD	C	200' BASE	CONDUIT	-	1
D	DB-212	A	190' (C.L.)	7/8"	-	-
E	DB-212	B	155' (C.L.)	7/8"	-	-
F	P8-65D	B	145' (C.L.)	EW-63	92.1	-
G	P8-65D	A	135' (C.L.)	EW-63	278.5	-
H	DB-212	C	135' (C.L.)	7/8"	-	-

- NOTES:
- THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE D1-LED-B-WHITE-48VDC-SNMP-C-APT-DS-G5 TOWER LIGHTING SYSTEM IN ACCORDANCE WITH SHEET A-3.

PROPOSED TOWER LOADING DIAGRAM

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

FDOT FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
SITE NAME	COUNTY	FINANCIAL PROJECT ID
MOSSY HEAD	WALTON	424401-1-52-01

MOSSY HEAD
TOWER LOADING
DIAGRAM

SHEET NO.
C-4

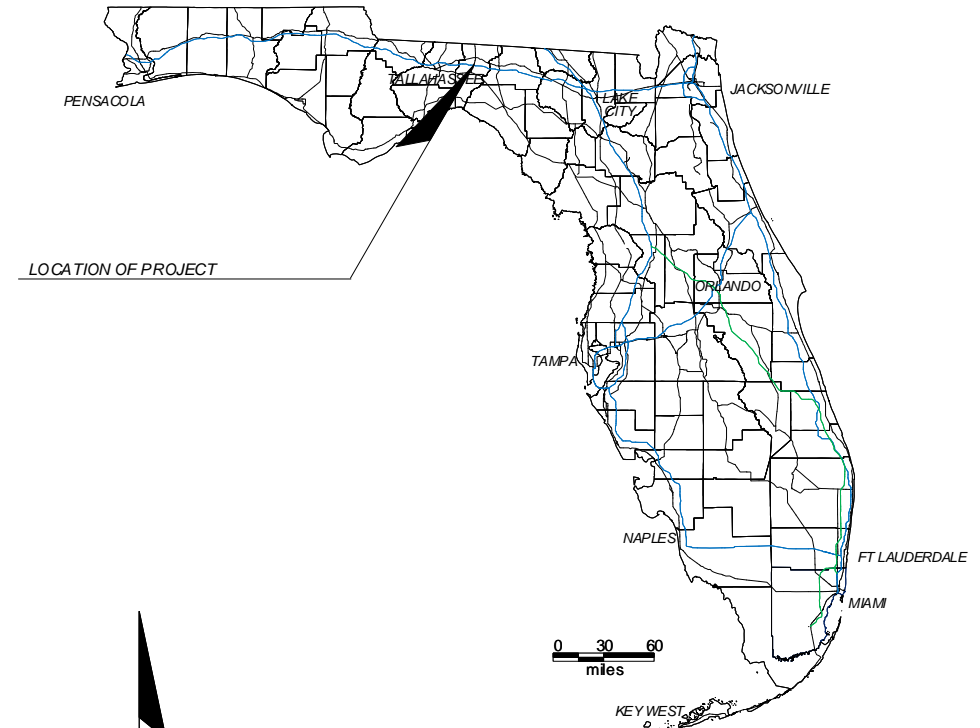
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**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

APPENDIX D

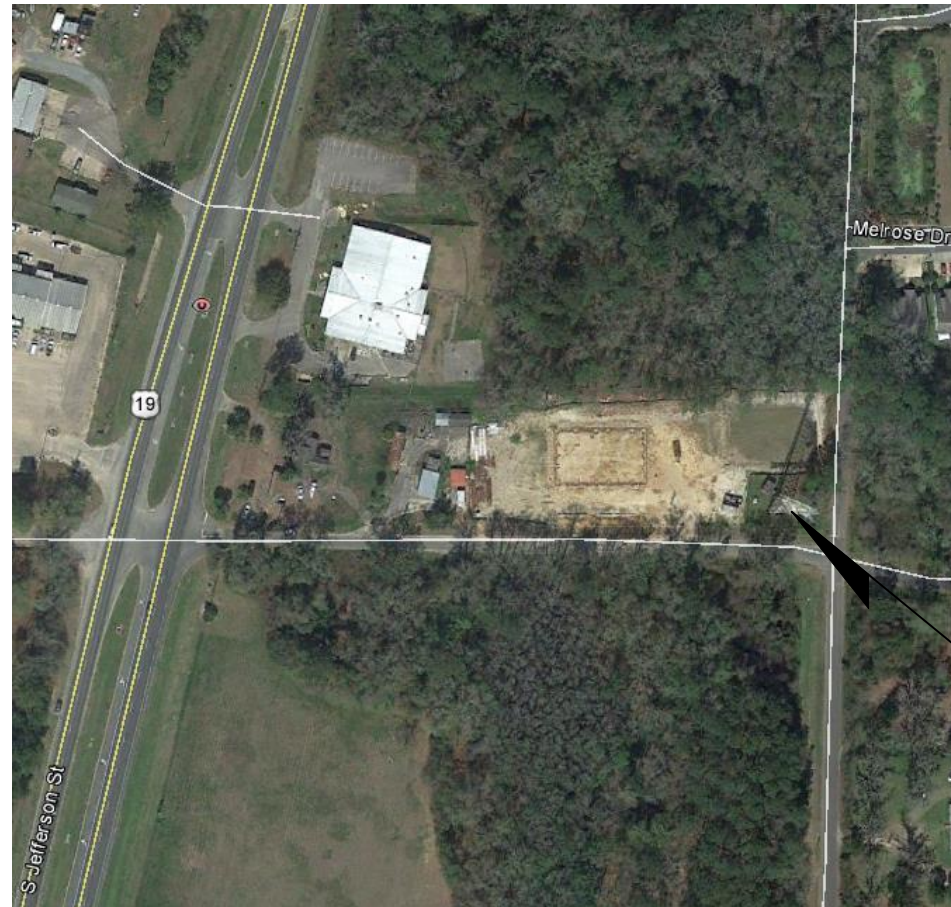
FINANCIAL PROJECT ID 424401-1-52-01
JEFFERSON COUNTY
MONTICELLO (3-3423) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS



INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
D-1	MONTICELLO DOT KEY SHEET
D-2	MONTICELLO DOT REMOVAL AND INSTALLATION NOTES
D-3	MONTICELLO DOT FDOT COMM BLDG PLANS
D-4	MONTICELLO DOT TOWER LOADING DIAGRAM



MONTICELLO TOWER SITE


TOWER SITE ADDRESS:
MONTICELLO
127 MARTIN RD.
MONTICELLO, FL 32344
LATITUDE: 30-31-46.1 N (NAD 83)
LONGITUDE: 83-52-07.9 W

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

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS CURRENT EDITION),
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION (CURRENT EDITION),
AS AMENDED BY CONTRACT DOCUMENTS.

**FLORIDA DEPARTMENT OF
TRANSPORTATION
LED TOWER OBSTRUCTION LIGHTING
UPGRADE PROJECT**

FDOT PROJECT MANAGER: RANDY PIERCE

CONTRACT PLANS RECORD						 FLORIDA DEPARTMENT OF TRANSPORTATION 605 SUWANNEE ST. MS 90 TALLAHASSEE, FL 32399-0450 PH. (850)-410-5600 FAX. (850)-410-5501	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			MONTICELLO KEY SHEET	SHEET NO.
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION		SITE NAME	COUNTY	FINANCIAL PROJECT ID		D-1
						MONTICELLO	JEFFERSON	424401-1-52-01			

MONTICELLO DOT REMOVAL NOTES:

1. THE VENDOR SHALL REMOVE THE OLD OBSTRUCTION LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO, POWER SUPPLIES, CONTROLLERS, SPDS, CONDUITS, TOWER LIGHT PHOTOCELL, AND ALL ASSOCIATED ELECTRICAL AND GROUNDING CONDUCTORS. THE VENDOR SHALL LEAVE THE CIRCUIT BREAKER IN PLACE AND SWITCH IT TO THE "OFF" POSITION. THE VENDOR SHALL DELIVER THE OLD TOWER LIGHT CONTROLLER, BEACON AND STROBE TO THE MAINTENANCE CONTRACTOR ON SITE, AND PROPERLY DISPOSE OF THE REMAINING MATERIALS.

THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.

2. THE VENDOR SHALL DISCONNECT AND PROPERLY REMOVE AND DISPOSE OF THE DB-214 ANTENNAS LABELED "J" AND "K" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET D-4. THE VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE TRANSMISSION LINE SPDS LOCATED INSIDE THE COMMUNICATIONS SHELTER UPON THE TRANSMISSION LINES ENTERING THE SHELTER, AND RETURN TO THE FDOT. THE VENDOR SHALL INSTALL NEW ENTRY PORT BOOTS ON THE BULKHEAD.

IF THE TRANSMISSION LINES ASSOCIATED WITH THE ANTENNAS SPECIFIED TO BE REMOVED ARE NOT DISCONNECTED UPON ENTERING THE SHELTER, THE VENDOR SHALL COORDINATE WITH THE ON-SITE FDOT REPRESENTATIVE BEFORE ANTENNA REMOVAL ACTIVITIES BEGIN.

MONTICELLO DOT INSTALLATION NOTES:

1. THE VENDOR SHALL FURNISH AND INSTALL A NEW -48 VDC LED DUAL DAYTIME/NIGHT-TIME TOWER OBSTRUCTION LIGHTING SYSTEM IN ACCORDANCE WITH THESE PLANS. THE TOWER OBSTRUCTION LIGHTING SYSTEM SHALL BE TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD. TOWER LIGHTS TO BE INSTALLED ARE LABELED "C" AND "J" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET D-4.

THE TOWER OBSTRUCTION LIGHTING SYSTEM AND CONDUIT SHALL BE MOUNTED TO THE TOWER AND HORIZONTAL TRANSMISSION LINE BRIDGE WITH GALVANIZED OR STAINLESS STEEL BOLT-ON HARDWARE. SNAP-ON HANGERS ARE NOT PERMITTED. ALL EXTERIOR TOWER LIGHTING CABLES SHALL BE INSTALLED IN APPROPRIATELY SIZED RIGID GALVANIZED STEEL (RGS) CONDUIT.

THE TOWER LIGHT CONTROLLER SHALL BE MOUNTED INSIDE THE COMMUNICATIONS SHELTER. SEE SHEET D-3.

2. THE VENDOR SHALL FURNISH AND INSTALL NEW ELECTRICAL METALLIC TUBING (EMT) CONDUIT INSIDE THE COMMUNICATIONS SHELTER BETWEEN THE TOWER LIGHT CONTROLLER AND THE -48VDC DISTRIBUTION RACK. THE VENDOR SHALL FURNISH AND INSTALL NEW EMT CONDUIT FOR THE PHOTOCELL AND CONTROL WIRING BETWEEN THE TOWER LIGHT CONTROLLER AND ENTRY PORT INSIDE THE SHELTER, AND IT SHALL BE LOCATED SO AS NOT TO OBSCURE ANY PORTION OF AN ELECTRICAL OUTLET OR JUNCTION BOX, PER NEC, ITEM 11, 'APPLICABLE PUBLICATIONS AND STANDARDS' OR OBSTRUCT ANY EMPTY ENTRY PORTS. THE VENDOR SHALL REUSE THE EXISTING EXTERIOR PHOTOCELL METALLIC CONDUIT. THE VENDOR SHALL TERMINATE THE EXTERIOR EMT CONDUIT AT BOTH ENDS WITH AN END BUSHING.

3. THE VENDOR SHALL INSTALL THE LOAD CONDUCTORS BETWEEN THE TOWER LIGHTING SYSTEM, AND THE -48VDC DISTRIBUTION PANEL, IN ACCORDANCE WITH SHEET A-4. THE 10A BREAKER MODEL SHALL BE:

EATON HEINEMANN
AM1-2774-2
AM1-B3-A
AMPERAGE: 10 AMPS
VOLTAGE: 65VDC
DELAY: 3

4. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING NETWORK INFORMATION:

IP ADDRESS: 172.16.68.14
SUBNET MASK: 255.255.254.0
DEFAULT GATEWAY: 172.16.68.19

5. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING SNMP INFORMATION:

STATE: ENABLED
READ COMMUNITY: PUBLIC
WRITE COMMUNITY: PUBLIC
SYSTEM NAME: MONTICELLO TECHNOSTROBE
SYSTEM DESCRIPTION: MONTICELLO TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: MONTICELLO
TRAP STATE: ENABLED
TRAPS PRIMARY DESTINATION: 172.16.2.21
TRAPS SECONDARY DESTINATION: 172.16.16.21

6. THE VENDOR SHALL NOTIFY THE FDOT UPON COMPLETION OF ALL TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION WORK.

7. THE FDOT WILL INSPECT THE TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION FOR COMPLIANCE WITH THESE SPECIFICATIONS.

8. THE FDOT WILL WITNESS COMMISSIONING AND TESTING OF THE NEW TOWER OBSTRUCTION LIGHTING SYSTEM AND NOTIFY THE VENDOR OF FINAL ACCEPTANCE.

CONTRACT PLANS RECORD

DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



FLORIDA DEPARTMENT OF TRANSPORTATION
605 SUWANNEE ST. MS 90
TALLAHASSEE, FL 32399-0450
PH. (850)-410-5600
FAX. (850)-410-5501

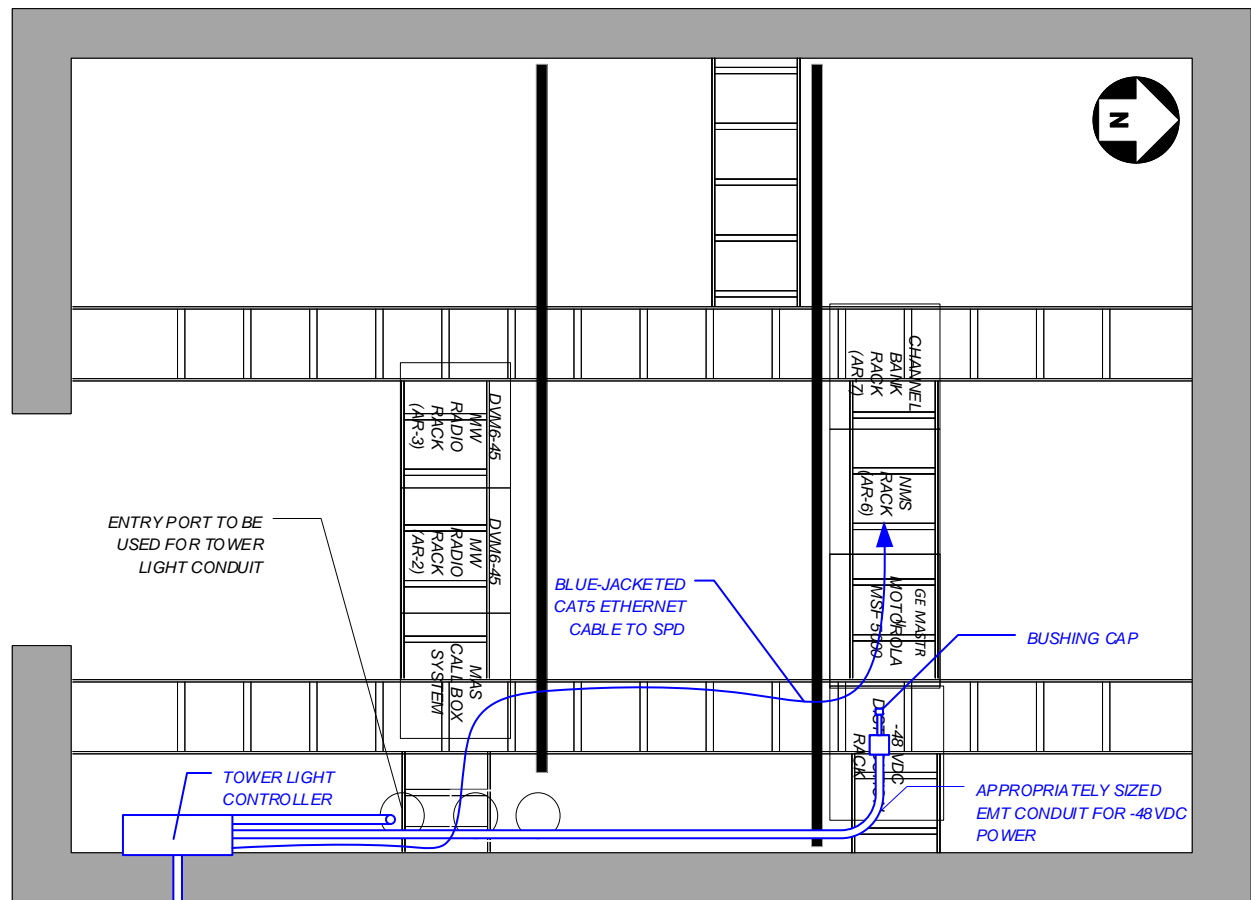
**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

SITE NAME	COUNTY	FINANCIAL PROJECT ID
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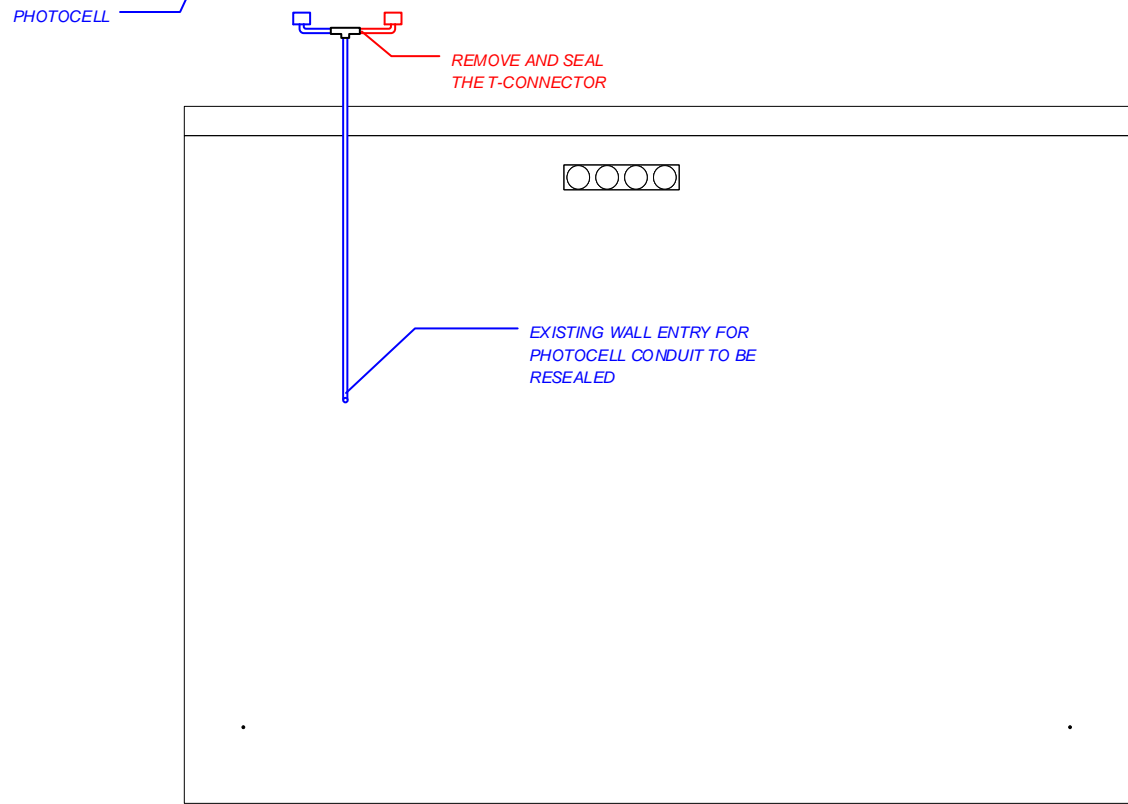
**MONTICELLO
REMOVAL AND
INSTALLATION NOTES**

SHEET NO.

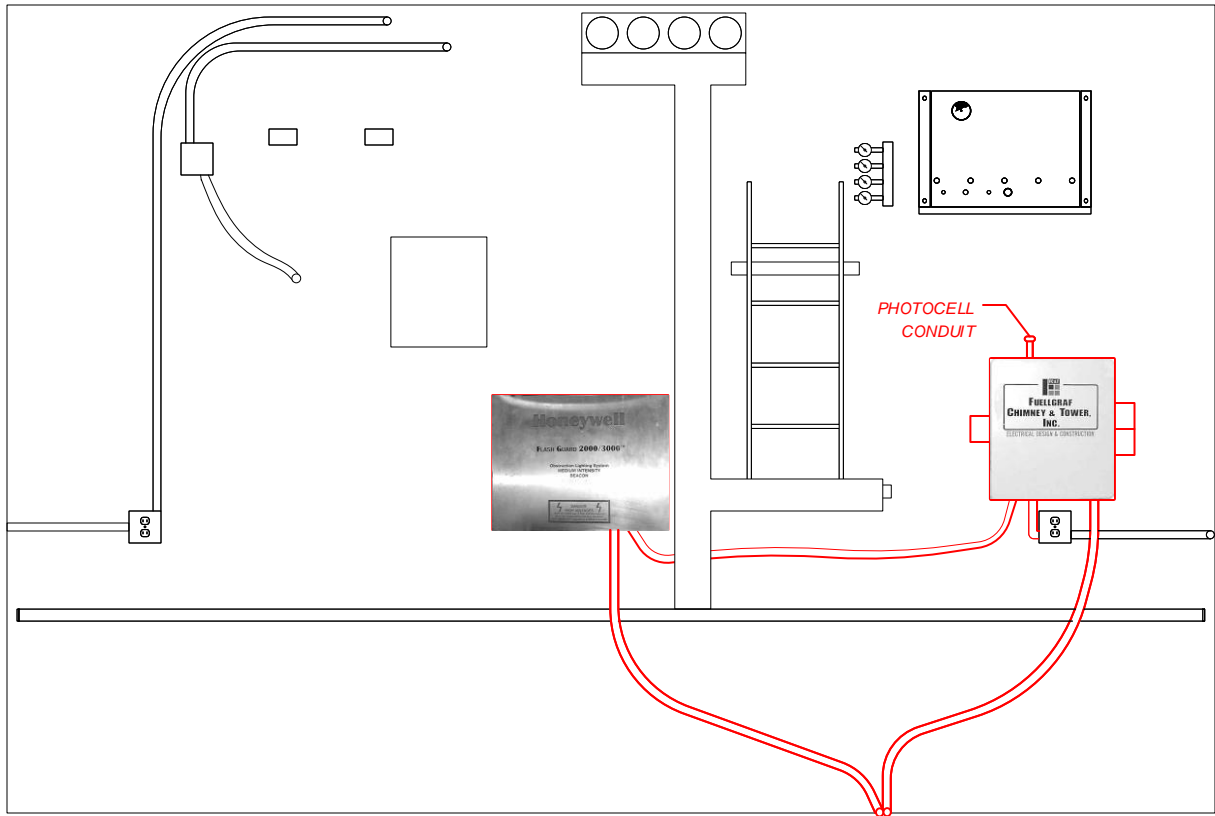
D-2



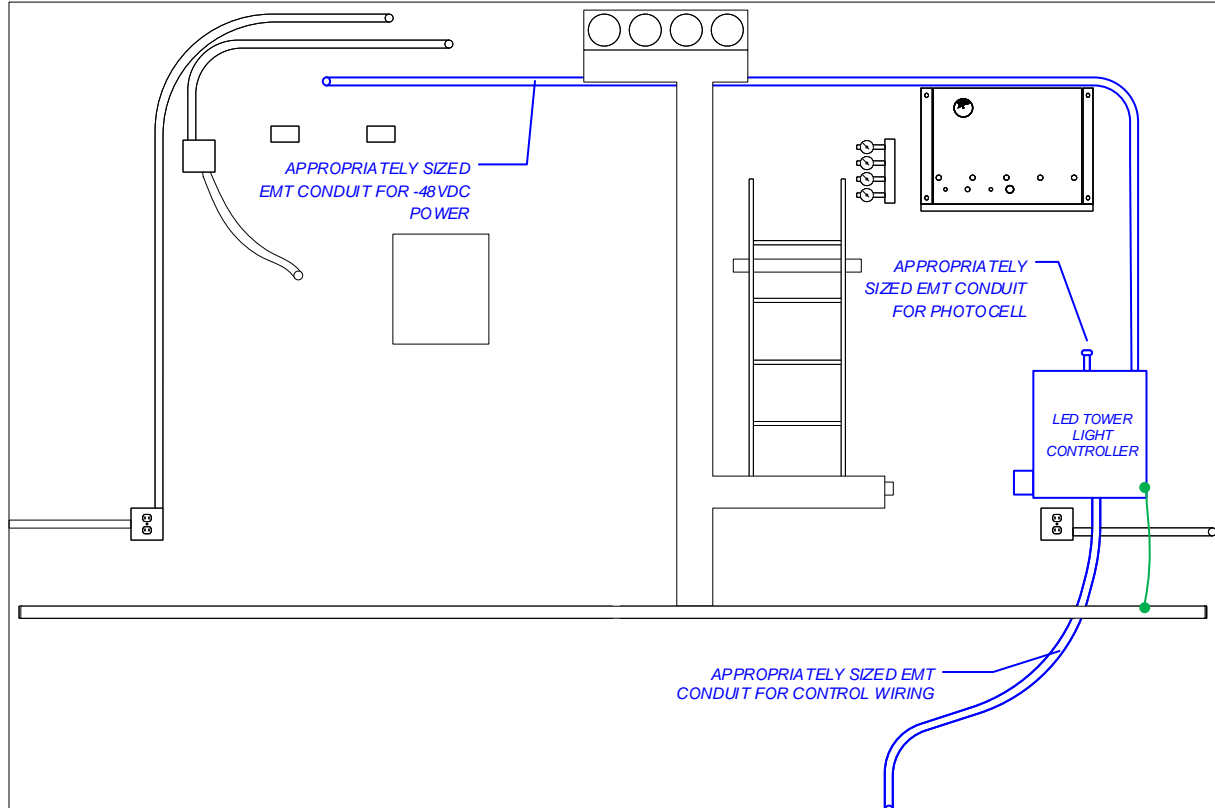
SHELTER FLOOR PLAN



PROPOSED EXTERIOR EAST WALL



EXISTING INTERIOR EAST WALL



PROPOSED INTERIOR EAST WALL

NOTES

1. THE APPROXIMATE LOCATION OF THE EQUIPMENT IS FOR DIAGRAMMATICAL PURPOSES ONLY. THE VENDOR IS RESPONSIBLE FOR DETERMINING THE BEST LOCATIONS FOR EQUIPMENT AND ALL ASSOCIATED CONDUITS AND MOUNTING AND GROUNDING HARDWARE. THE VENDOR SHALL SUBMIT DETAILED PLANS FOR APPROVAL BY THE FDOT.
2. THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.
3. THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE -48 VDC TOWER OBSTRUCTION LIGHTING SYSTEM MODEL E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD WITH ASSOCIATED PHOTOCELL, SURGE PROTECTION, GROUNDING, AND CONDUIT.
4. THE VENDOR SHALL FURNISH AND INSTALL ONE (1) ETHERNET SURGE PROTECTIVE DEVICE (SPD), MTL-SURGE MODEL NUMBER ZB24540. THIS SPD SHALL BE MOUNTED ON THE DIN RAIL IN THE NMS RACK.
5. THE VENDOR SHALL INSTALL A CUSTOM LENGTH BLUE-JACKETED CAT 5 ETHERNET CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE NMS RACK, AND FROM THE ETHERNET SPD TO THE BPS 2000, PORT #22.

THE VENDOR SHALL ROUTE THE NEW BLUE-JACKETED CAT 5 ETHERNET CABLE ALONG THE OVERHEAD CABLE TRAYS, PARALLEL TO EXISTING ETHERNET CABLES TO THE NMS RACK. THE VENDOR SHALL INDEPENDENTLY SECURE THE ETHERNET CABLE TO THE OVERHEAD CABLE TRAYS WITH ZIP TIES OR LACING STRING, AT 36 IN. INTERVALS, MAXIMUM.
6. THE VENDOR SHALL MECHANICALLY GROUND THE TECHNOSTROBE TOWER LIGHT CONTROLLER TO THE GROUND HALO USING #6 AWG GREEN JACKETED CONDUCTOR. THE GROUND SHALL BE DOWNWARD COURSING, AND AS STRAIGHT AND SHORT AS POSSIBLE.

THE VENDOR SHALL CLEAN AND PREPARE ALL GROUND CONDUCTORS AND SURFACES PRIOR TO BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH CONNECTION IS MADE.

LEGEND

- EXISTING
- VENDOR FURNISHED AND INSTALLED
- TO BE REMOVED BY VENDOR

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

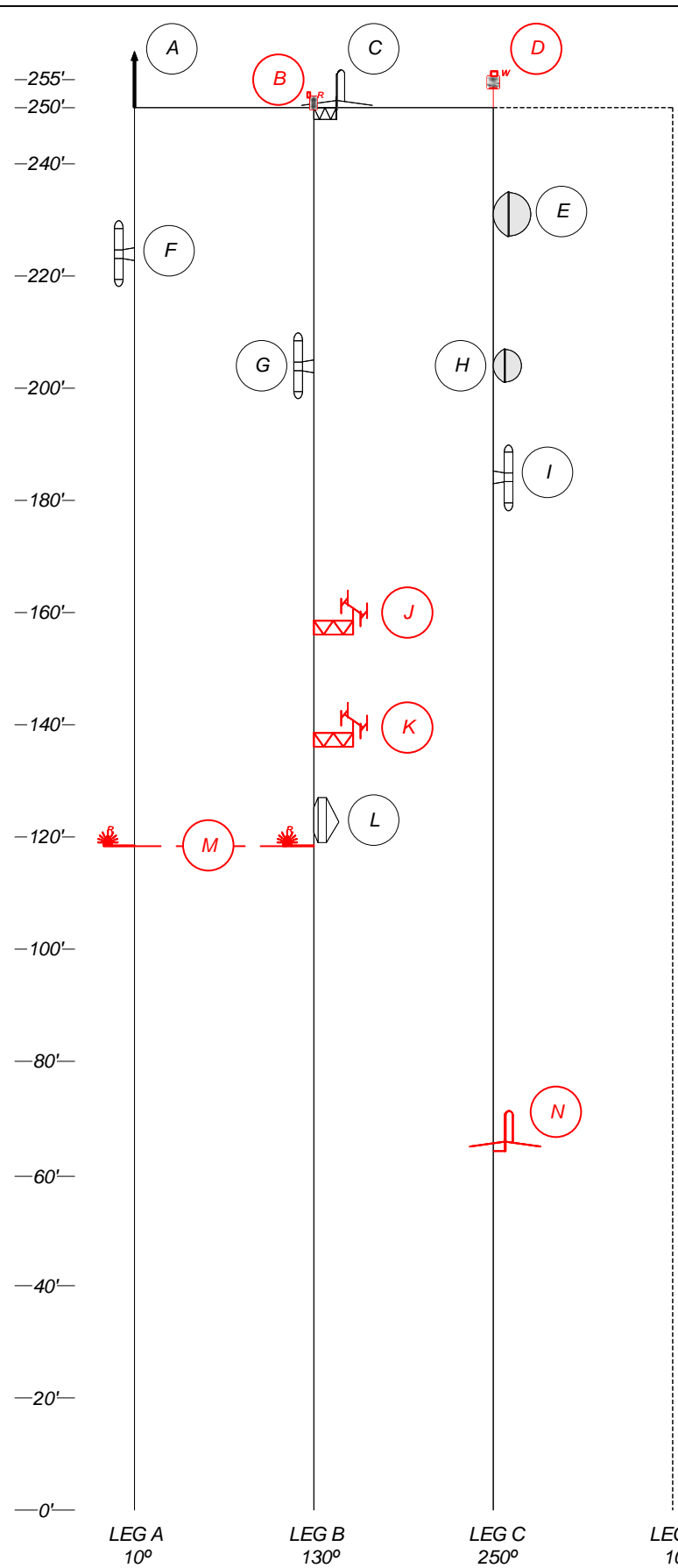
FDOT
 FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
SITE NAME	COUNTY	FINANCIAL PROJECT ID
MONTICELLO	JEFFERSON	424401-1-52-01

**MONTICELLO
COMM BLDG PLANS**

SHEET NO.
D-3

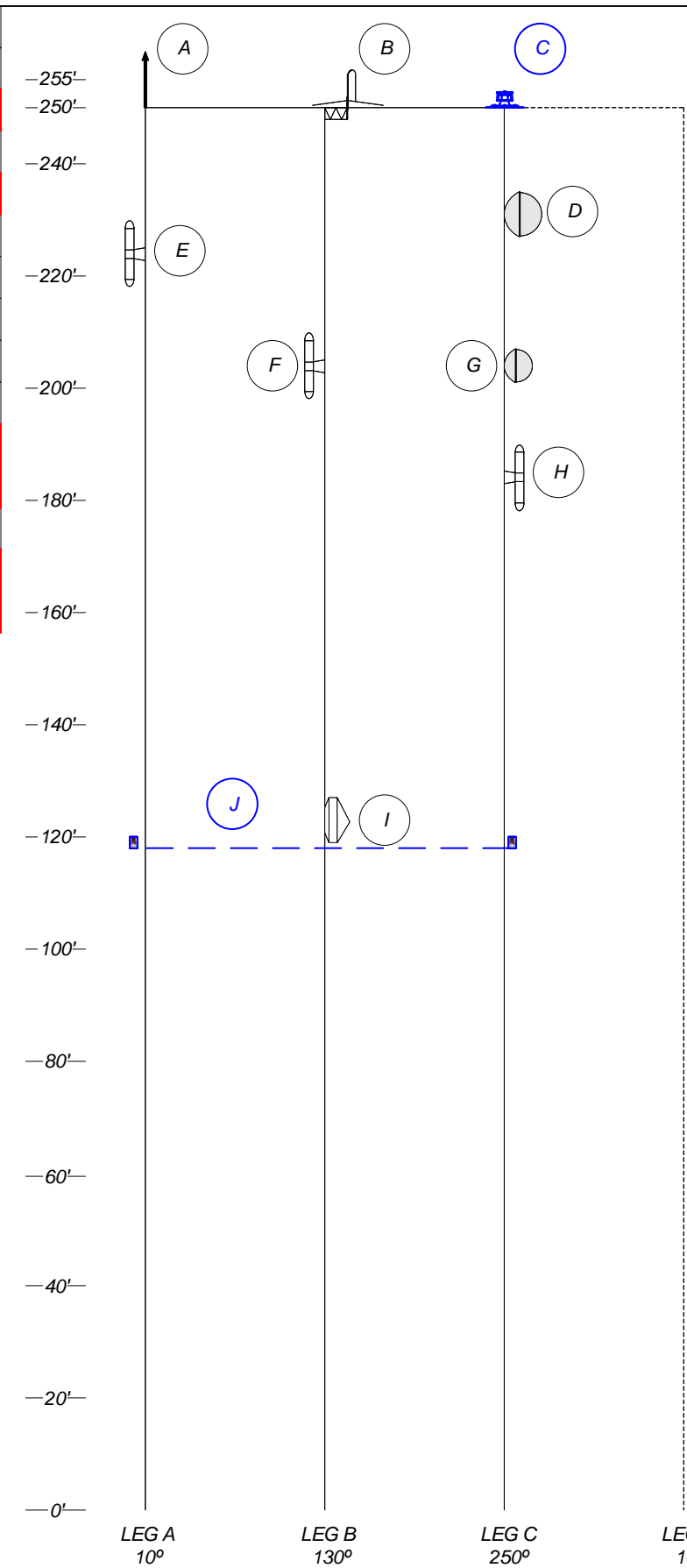
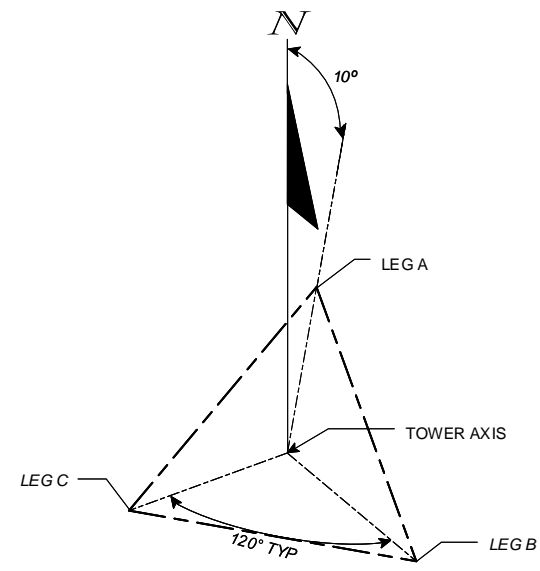
https://skins-my.sharepoint.com/personal/sean_kane_atkins@fla DOT gov/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329.vsd



EXISTING TOWER LOADING DIAGRAM

ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	AIR TERMINAL	A	250' BASE	-	-	-
B	RED BEACON	B	250' BASE	-	-	1
C	DB-201	B	250' BASE	-	-	-
D	WHITE STROBE	C	250' BASE	-	-	1
E	P8-65D	C	231' (C.L.)	EW-63	-	-
F	DB-212	A	224' (C.L.)	-	-	-
G	DB-212	B	204' (C.L.)	-	-	-
H	P6-65D	C	204' (C.L.)	EW-63	-	-
I	DB-212	C	184' (C.L.)	-	-	-
J	DB-214	B	160' BASE	5/8"	-	2
K	DB-214	B	160' BASE	5/8"	-	2
L	P8-65	B	123' (C.L.)	-	-	-
M	SIDE MARKERS	A, B	120' BASE	-	-	1
N	DB-201	C	64' BASE	5/8"	-	-

- NOTES:
- REMOVE AND PROPERLY DISPOSE OF THE TOWER OBSTRUCTION LIGHTING SYSTEM, CONDUIT, AND ASSOCIATED MOUNTING HARDWARE PER THESE PLANS. THE STROBE SHALL BE PRESERVED AND DELIVERED TO THE MAINTENANCE CONTRACTOR IN ACCORDANCE WITH SHEET D-2 REMOVAL NOTE 1.
 - VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE ANTENNAS, ASSOCIATED COAXIAL TRANSMISSION LINES, MOUNTING HARDWARE, AND SPDS.
 - RESTORE SITE COMPOUND PER THESE PLANS.



PROPOSED TOWER LOADING DIAGRAM

ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	AIR TERMINAL	A	250' BASE	-	-	-
B	DB-201	B	250' BASE	-	-	-
C	TECHNOSTROBE DUAL LED FLASH HEAD	C	250' BASE	CONDUIT	-	1
D	P8-65D	C	231' (C.L.)	EW-63	-	-
E	DB-212	A	224' (C.L.)	-	-	-
F	DB-212	B	204' (C.L.)	-	-	-
G	P6-65D	C	204' (C.L.)	EW-63	-	-
H	DB-212	C	184' (C.L.)	-	-	-
I	P8-65	B	123' (C.L.)	-	-	-
J	(2) LED SIDE MARKERS	A, C	120' BASE	SAME CONDUIT	-	1

- NOTES:
- THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 TOWER LIGHTING SYSTEM IN ACCORDANCE WITH SHEET A-3.

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
SITE NAME	COUNTY	FINANCIAL PROJECT ID
MONTICELLO	JEFFERSON	424401-1-52-01

**MONTICELLO
TOWER LOADING
DIAGRAM**

SHEET NO.
D-4

https://skins-my.sharepoint.com/personal/sean_kane_atkins@fla.com/Documents/Desktop/MJ/tp/e Tower Light Upgrade Plans 20190329.vsd

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

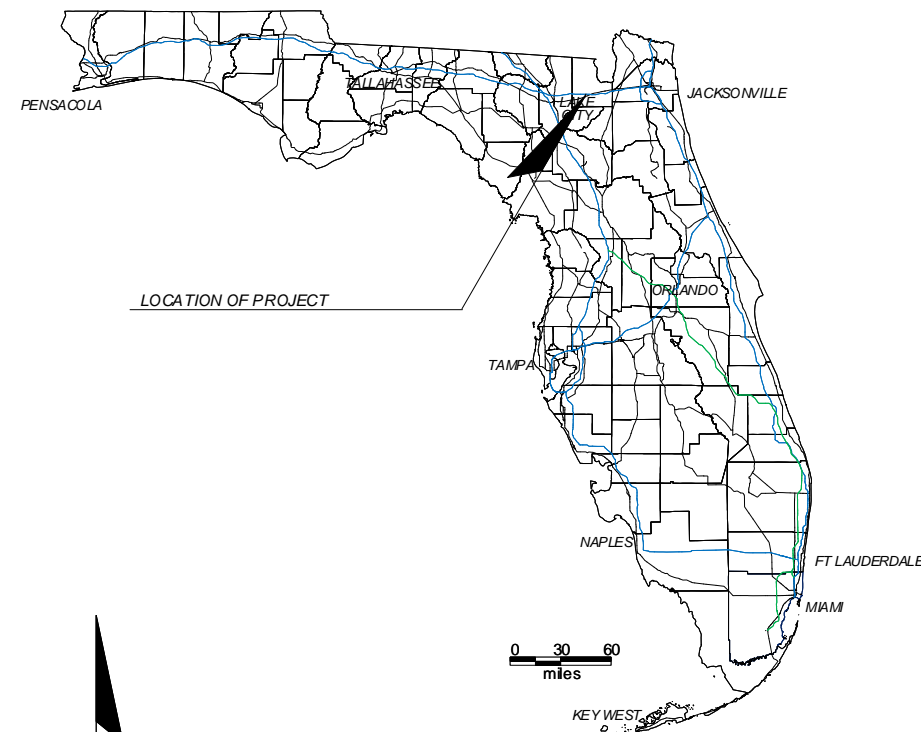
APPENDIX E

FINANCIAL PROJECT ID 424401-1-52-01
BAKER COUNTY
SANDERSON (2-2502) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
E-1	SANDERSON KEY SHEET
E-2	SANDERSON REMOVAL AND INSTALLATION NOTES
E-3	SANDERSON FDOT COMM BLDG PLANS
E-4	SANDERSON TOWER LOADING DIAGRAM



TOWER SITE ADDRESS:
SANDERSON
16256 US-90
SANDERSON FL 32087
LATITUDE: 30-14-16.4 N (NAD 83)
LONGITUDE: 82-18-14.2 W

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

**FLORIDA DEPARTMENT OF
TRANSPORTATION
LED TOWER OBSTRUCTION LIGHTING
UPGRADE PROJECT**



SANDERSON TOWER SITE

FDOT PROJECT MANAGER: RANDY PIERCE

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS (CURRENT EDITION),
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION (CURRENT EDITION),
AS AMENDED BY CONTRACT DOCUMENTS.

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



FLORIDA DEPARTMENT OF TRANSPORTATION
605 SUWANNEE ST. MS 90
TALLAHASSEE, FL 32399-0450
PH. (850)-410-5600
FAX. (850)-410-5501

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

SITE NAME	COUNTY	FINANCIAL PROJECT ID
SANDERSON	BAKER	424401-1-52-01

**SANDERSON
KEY SHEET**

SHEET NO.

E-1

SANDERSON REMOVAL NOTES:

1. THE VENDOR SHALL REMOVE THE OLD OBSTRUCTION LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO, POWER SUPPLIES, CONTROLLERS, SPDS, CONDUITS, TOWER LIGHT PHOTOCELL, AND ALL ASSOCIATED ELECTRICAL AND GROUNDING CONDUCTORS. THE VENDOR SHALL LEAVE THE CIRCUIT BREAKER IN PLACE AND SWITCH IT TO THE "OFF" POSITION. THE VENDOR SHALL DELIVER THE OLD TOWER LIGHT CONTROLLER AND BEACONS TO THE MAINTENANCE CONTRACTOR ON SITE, AND PROPERLY DISPOSE OF THE REMAINING MATERIALS.

THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.

2. THE VENDOR SHALL DISCONNECT AND PROPERLY REMOVE AND DISPOSE OF THE ANTENNAS LABELED "L", "P" AND "N" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET E-4. THE VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE TRANSMISSION LINE SPDS LOCATED INSIDE THE COMMUNICATIONS SHELTER UPON THE TRANSMISSION LINES ENTERING THE SHELTER, AND RETURN TO THE FDOT. THE VENDOR SHALL INSTALL NEW ENTRY PORT BOOTS ON THE BULKHEAD.

IF THE TRANSMISSION LINES ASSOCIATED WITH THE ANTENNAS SPECIFIED TO BE REMOVED ARE NOT DISCONNECTED UPON ENTERING THE SHELTER, THE VENDOR SHALL COORDINATE WITH THE ON-SITE FDOT REPRESENTATIVE BEFORE ANTENNA REMOVAL ACTIVITIES BEGIN.

SANDERSON INSTALLATION NOTES:

1. THE VENDOR SHALL FURNISH AND INSTALL A NEW -48 VDC LED DUAL DAYTIME/NIGHT-TIME TOWER OBSTRUCTION LIGHTING SYSTEM IN ACCORDANCE WITH THESE PLANS. THE TOWER OBSTRUCTION LIGHTING SYSTEM SHALL BE TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD. TOWER LIGHTS TO BE INSTALLED ARE LABELED "A" AND "L" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET E-4.

THE TOWER OBSTRUCTION LIGHTING SYSTEM AND CONDUIT SHALL BE MOUNTED TO THE TOWER AND HORIZONTAL TRANSMISSION LINE BRIDGE WITH GALVANIZED OR STAINLESS STEEL BOLT-ON HARDWARE. SNAP-ON HANGERS ARE NOT PERMITTED. ALL EXTERIOR TOWER LIGHTING CABLES SHALL BE INSTALLED IN APPROPRIATELY SIZED RIGID GALVANIZED STEEL (RGS) CONDUIT.

THE TOWER LIGHT CONTROLLER SHALL BE MOUNTED INSIDE THE COMMUNICATIONS SHELTER. SEE SHEET E-3.

2. THE VENDOR SHALL FURNISH AND INSTALL NEW ELECTRICAL METALLIC TUBING (EMT) CONDUIT INSIDE THE COMMUNICATIONS SHELTER BETWEEN THE TOWER LIGHT CONTROLLER AND THE -48VDC DISTRIBUTION RACK. THE VENDOR SHALL FURNISH AND INSTALL NEW EMT CONDUIT FOR THE PHOTOCELL AND CONTROL WIRING BETWEEN THE TOWER LIGHT CONTROLLER AND ENTRY PORT INSIDE THE SHELTER, AND IT SHALL BE LOCATED SO AS NOT TO OBSCURE ANY PORTION OF AN ELECTRICAL OUTLET OR JUNCTION BOX, PER NEC, ITEM 11, 'APPLICABLE PUBLICATIONS AND STANDARDS' OR OBSTRUCT ANY EMPTY ENTRY PORTS. THE VENDOR SHALL REUSE THE EXISTING EXTERIOR PHOTOCELL METALLIC CONDUIT. THE VENDOR SHALL TERMINATE THE EXTERIOR EMT CONDUIT AT BOTH ENDS WITH AN END BUSHING.

3. THE VENDOR SHALL INSTALL THE LOAD CONDUCTORS BETWEEN THE TOWER LIGHTING SYSTEM, AND THE -48VDC DISTRIBUTION PANEL, IN ACCORDANCE WITH SHEET A-4. THE 10A BREAKER MODEL SHALL BE AIRPAX MODEL LML1-1RLS4R-29954-10.

4. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING NETWORK INFORMATION:

IP ADDRESS: 172.16.152.14
SUBNET MASK: 255.255.254.0
DEFAULT GATEWAY: 172.16.152.19

5. THE VENDOR SHALL CONFIGURE THE TECHNOSTROBE TOWER LIGHT CONTROLLER WITH THE FOLLOWING SNMP INFORMATION:

STATE: ENABLED
READ COMMUNITY: PUBLIC
WRITE COMMUNITY: PUBLIC
SYSTEM NAME: SANDERSON TECHNOSTROBE
SYSTEM DESCRIPTION: SANDERSON TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: SANDERSON
TRAP STATE: ENABLED
TRAPS PRIMARY DESTINATION: 172.16.221
TRAPS SECONDARY DESTINATION: 172.16.1621

6. THE VENDOR SHALL NOTIFY THE FDOT UPON COMPLETION OF ALL TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION WORK.

7. THE FDOT WILL INSPECT THE TOWER OBSTRUCTION LIGHTING SYSTEM INSTALLATION FOR COMPLIANCE WITH THESE SPECIFICATIONS.

8. THE FDOT WILL WITNESS COMMISSIONING AND TESTING OF THE NEW TOWER OBSTRUCTION LIGHTING SYSTEM AND NOTIFY THE VENDOR OF FINAL ACCEPTANCE.

CONTRACT PLANS RECORD

DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION



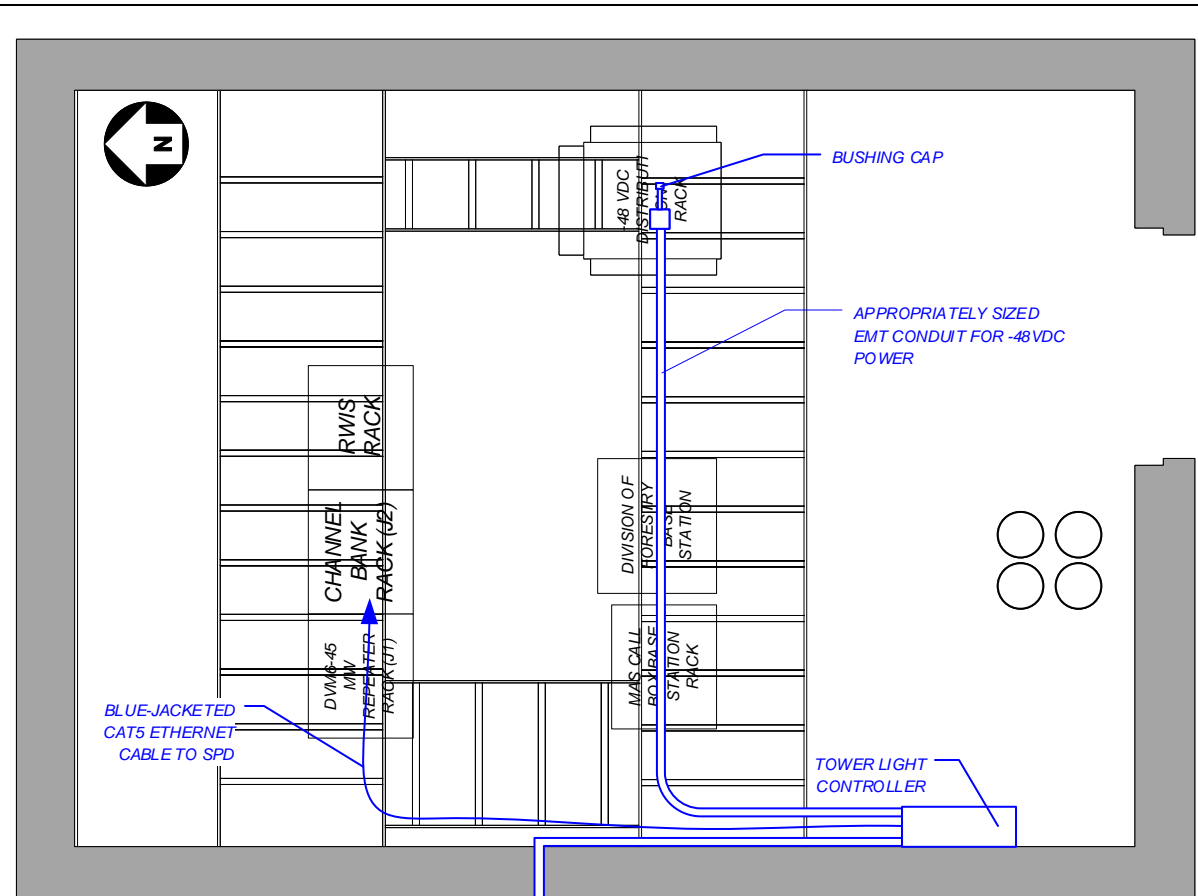
FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

SITE NAME	COUNTY	FINANCIAL PROJECT ID
SANDERSON	BAKER	424401-1-52-01

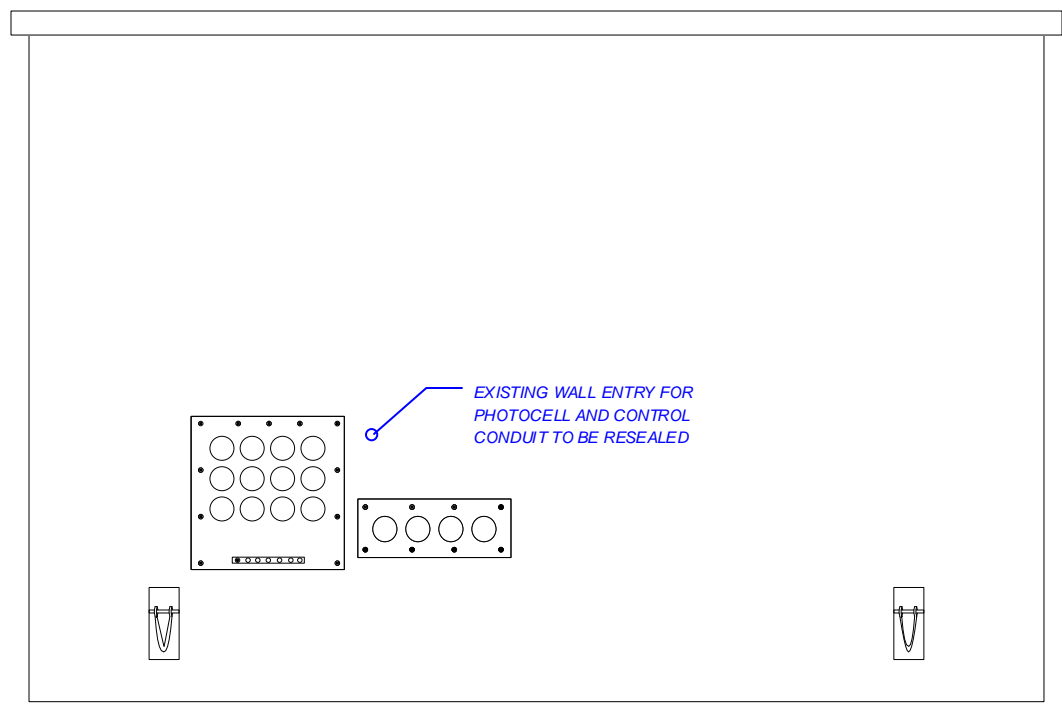
**SANDERSON
 REMOVAL AND
 INSTALLATION NOTES**

SHEET NO.
 E-2

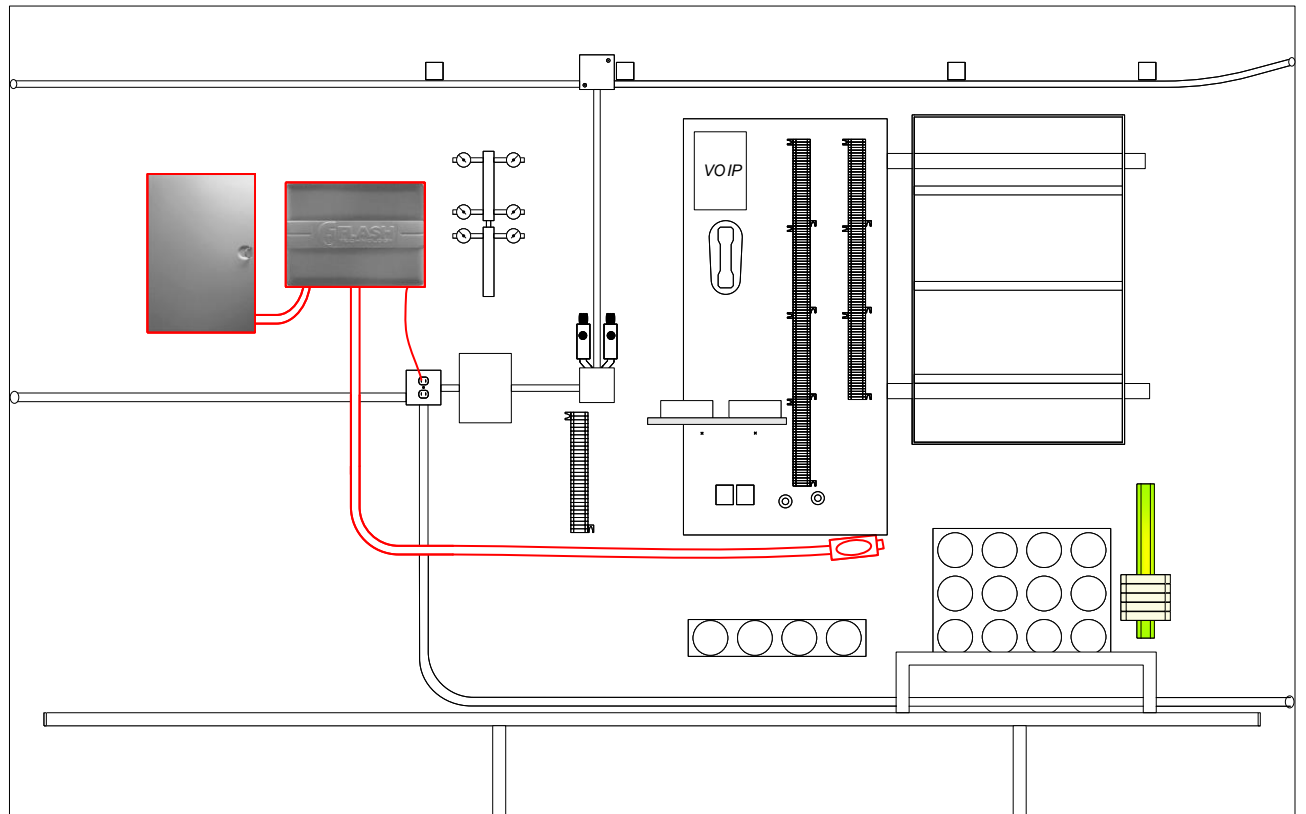


SHELTER FLOOR PLAN

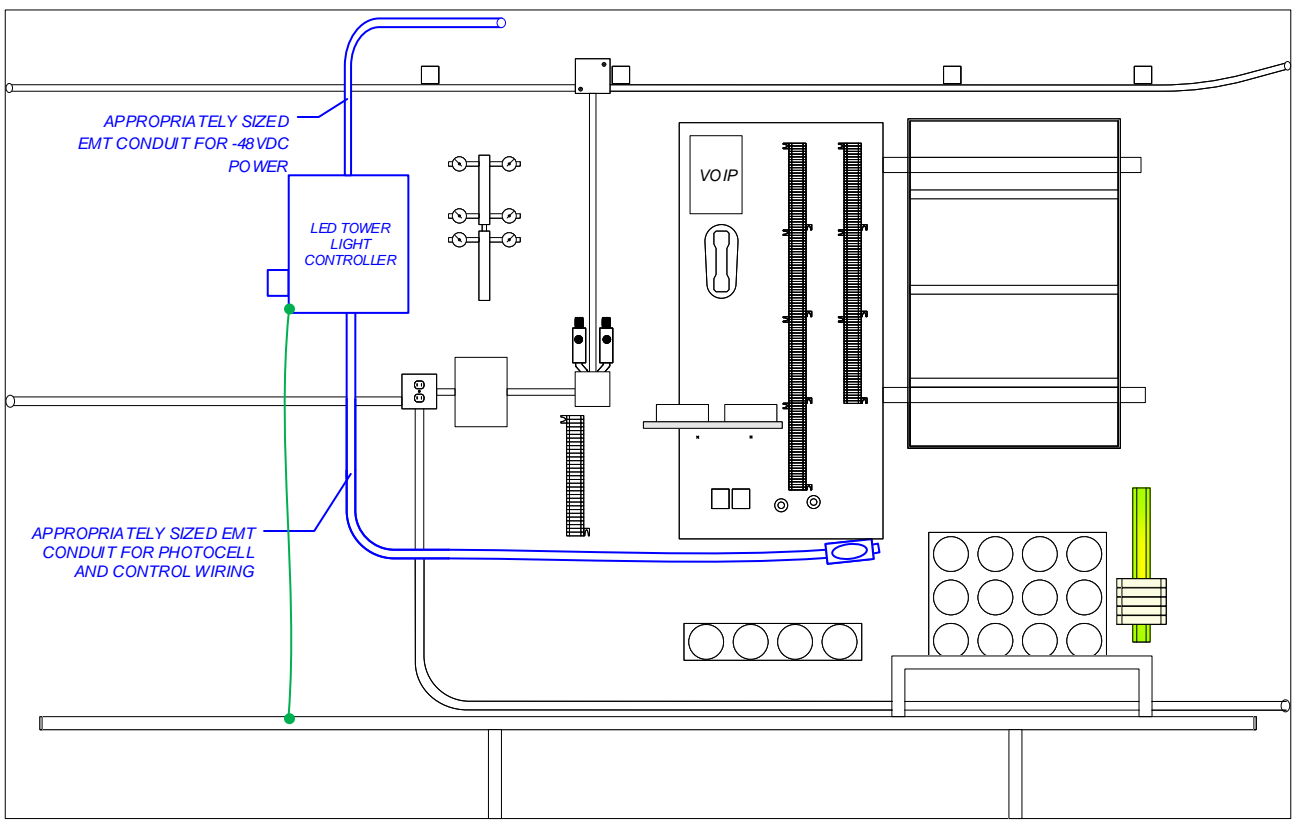
NEW PHOTOCELL LOCATED ON VERTICAL TRANSMISSION LINE LADDER



EXTERIOR WEST WALL



EXISTING INTERIOR WEST WALL



PROPOSED INTERIOR WEST WALL

NOTES

1. THE APPROXIMATE LOCATION OF THE EQUIPMENT IS FOR DIAGRAMMATICAL PURPOSES ONLY. THE VENDOR IS RESPONSIBLE FOR DETERMINING THE BEST LOCATIONS FOR EQUIPMENT AND ALL ASSOCIATED CONDUITS AND MOUNTING AND GROUNDING HARDWARE. THE VENDOR SHALL SUBMIT DETAILED PLANS FOR APPROVAL BY THE FDOT.
2. THE VENDOR SHALL PATCH ALL WALL PENETRATIONS WITH AN APPROPRIATE MORTAR MIX AND SHALL APPROPRIATELY PLUG ALL OPENINGS TO ELECTRICAL BOXES THAT ARE A RESULT OF CONDUIT REMOVAL WITH METALLIC PLUGS.
3. THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE -48 VDC TOWER OBSTRUCTION LIGHTING SYSTEM MODEL E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 DUAL LED FLASH HEAD WITH ASSOCIATED PHOTOCELL, SURGE PROTECTION, GROUNDING, AND CONDUIT.
4. THE VENDOR SHALL FURNISH AND INSTALL ONE (1) ETHERNET SURGE PROTECTIVE DEVICE (SPD), MTL-SURGE MODEL NUMBER ZB24540. THIS SPD SHALL BE MOUNTED ON THE DIN RAIL IN THE NMS RACK.
5. THE VENDOR SHALL INSTALL A CUSTOM LENGTH BLUE-JACKETED CAT 5 ETHERNET CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE NMS RACK, AND FROM THE ETHERNET SPD TO THE BPS 2000, PORT #22.

THE VENDOR SHALL ROUTE THE NEW BLUE-JACKETED CAT 5 ETHERNET CABLE ALONG THE OVERHEAD CABLE TRAYS, PARALLEL TO EXISTING ETHERNET CABLES TO THE NMS RACK. THE VENDOR SHALL INDEPENDENTLY SECURE THE ETHERNET CABLE TO THE OVERHEAD CABLE TRAYS WITH ZIP TIES OR LACING STRING, AT 36 IN. INTERVALS, MAXIMUM.
6. THE VENDOR SHALL MECHANICALLY GROUND THE TECHNOSTROBE TOWER LIGHT CONTROLLER TO THE GROUND HALO USING #6 AWG GREEN JACKETED CONDUCTOR. THE GROUND SHALL BE DOWNWARD COURSING, AND AS STRAIGHT AND SHORT AS POSSIBLE.

THE VENDOR SHALL CLEAN AND PREPARE ALL GROUND CONDUCTORS AND SURFACES PRIOR TO BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH CONNECTION IS MADE.

LEGEND

- EXISTING
- VENDOR FURNISHED AND INSTALLED
- TO BE REMOVED BY VENDOR

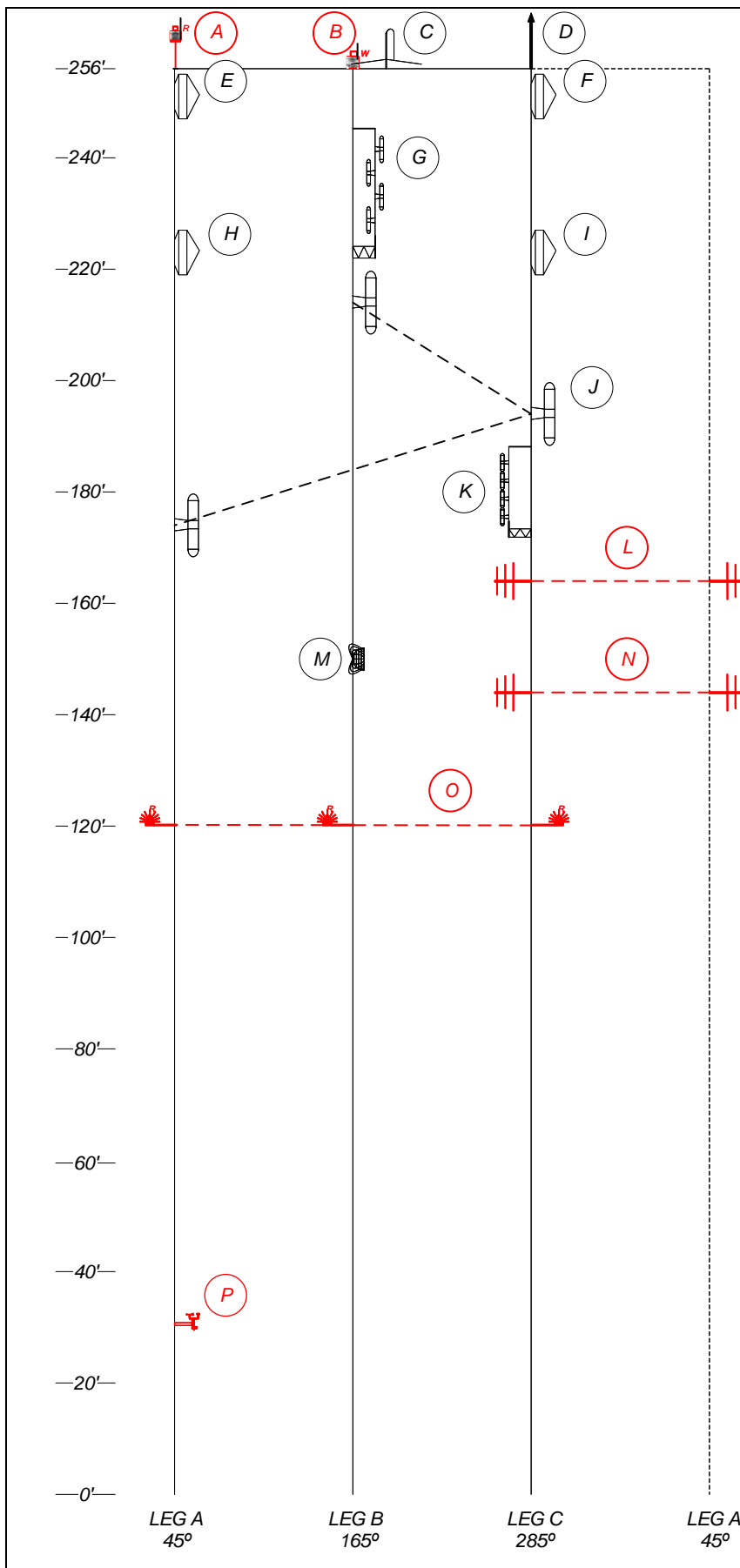
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DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

FDOT
 FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
SITE NAME	COUNTY	FINANCIAL PROJECT ID
SANDERSON	BAKER	424401-1-52-01

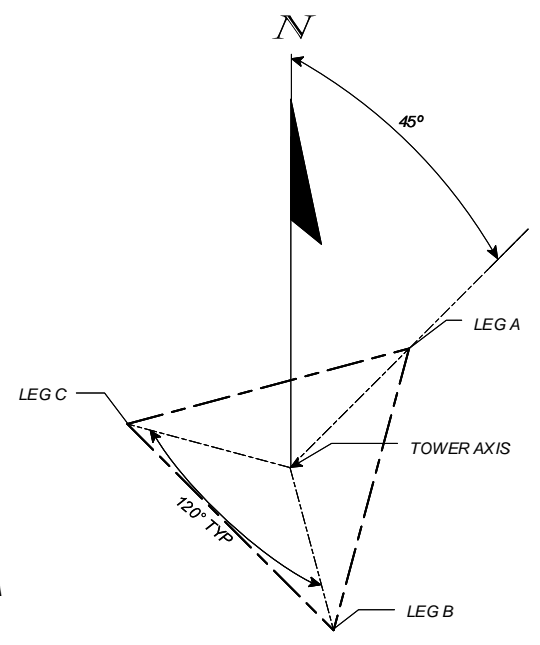
SANDERSON COMM
BLDG PLANS
 SHEET NO. E-3

https://skms-my.sharepoint.com/personal/sean_kane_atkins@fla DOT gov/_layouts/15/Doc.aspx?sourcedoc=/Desktop/ML/1/1/1/1/Tower Light Upgrade Plans 20190329.vsd

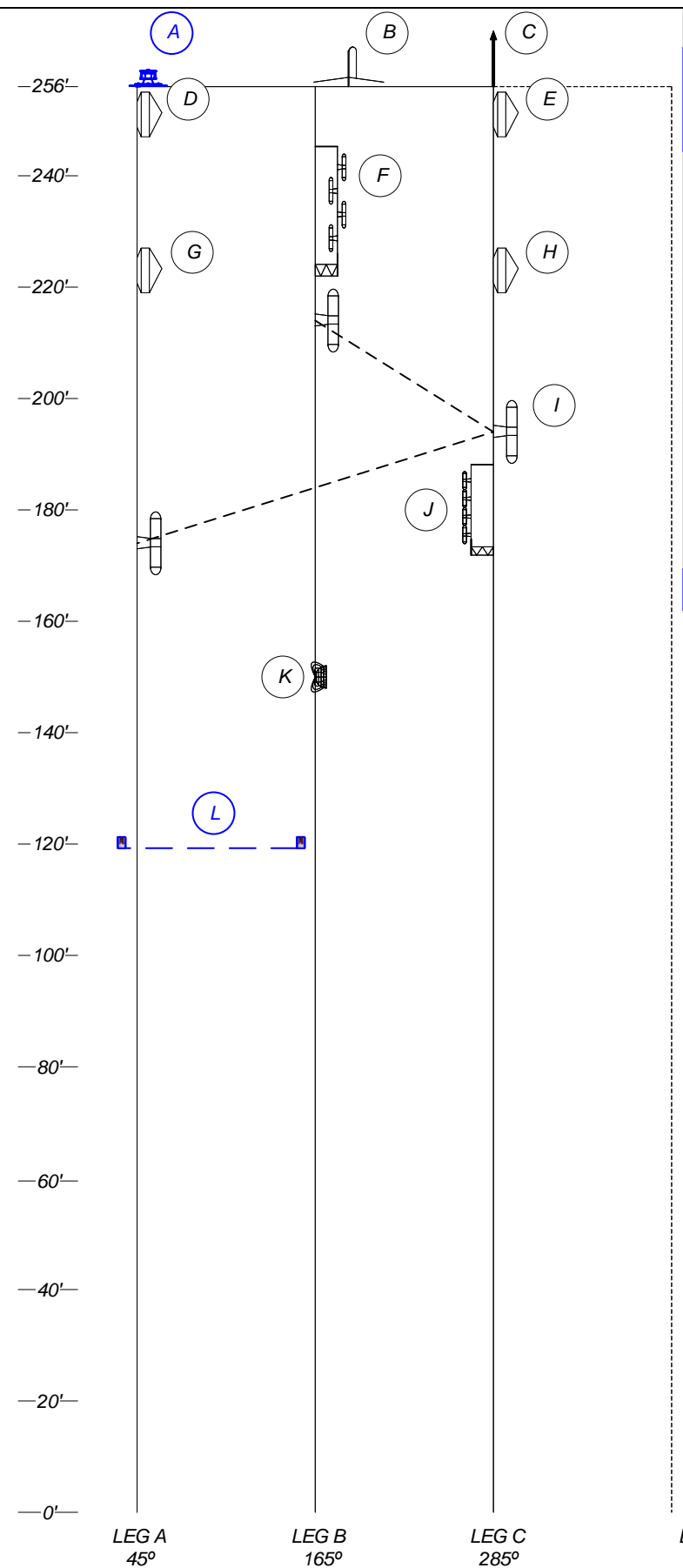


ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	RED BEACON	A	265' BASE	-	-	1
B	WHITE BEACON	B	260' BASE	-	-	1
C	DB-201	C	260' BASE	7/8"	-	-
D	AIR TERMINAL	C	260' BASE	-	-	-
E	PA8-65	C	251' (C.L.)	WE-65	76.2	-
F	PA8-65	B	251' (C.L.)	WE-65	262.4	-
G	DB-224	B	224' BASE	7/8"	-	-
H	PA8-65	A	223' (C.L.)	WE-65	76.2	-
I	PA8-65	C	223' (C.L.)	WE-65	262.4	-
J	DB-212-3	B,C,A	214', 194', 174' (C.L.)	7/8"	-	-
K	ANT150D6-9	C	180' (C.L.)	7/8"	-	-
L	DB-230-2	A,C	164' (C.L.)	1/2"	-	2
M	P-BA48GE-U	B	150' (C.L.)	7/8"	65.0	-
N	DB-230-2	A,C	144' (C.L.)	1/2"	-	2
O	SIDE MARKERS	A,B,C	120' (C.L.)	-	-	1
P	WEATHER SENSORS	A	32' (C.L.)	RS-232	-	2

- NOTES:
- REMOVE AND PROPERLY DISPOSE OF THE CONDUIT AND ASSOCIATED MOUNTING HARDWARE PER THESE PLANS. THE BEACON SHALL BE PRESERVED AND DELIVERED TO THE MAINTENANCE CONTRACTOR IN ACCORDANCE WITH SHEET E-2 REMOVAL NOTE 1.
 - VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE ANTENNAS, ASSOCIATED COAXIAL TRANSMISSION LINES, MOUNTING HARDWARE, AND SPDS.
 - RESTORE SITE COMPOUND PER THESE PLANS.



EXISTING TOWER LOADING DIAGRAM



ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	TECHNOSTROBE DUAL LED FLASH HEAD	A	265' BASE	CONDUIT	-	1
B	DB-201	C	260' BASE	7/8"	-	-
C	AIR TERMINAL	C	260' BASE	-	-	-
D	PA8-65	C	251' (C.L.)	WE-65	76.2	-
E	PA8-65	B	251' (C.L.)	WE-65	262.4	-
F	DB-224	B	224' BASE	7/8"	-	-
G	PA8-65	A	223' (C.L.)	WE-65	76.2	-
H	PA8-65	C	223' (C.L.)	WE-65	262.4	-
I	DB-212-3	B,C,A	214', 194', 174' (C.L.)	7/8"	-	-
J	ANT150D6-9	C	180' (C.L.)	7/8"	-	-
K	P-BA48GE-U	B	150' (C.L.)	7/8"	65.0	-
L	(2) LED SIDE MARKERS	A, B	120' (C.L.)	SAME CONDUIT	-	1

- NOTES:
- THE VENDOR SHALL INSTALL THE NEW TECHNOSTROBE E1-LED-B-HYBRID-48VDC-SNMP-2M-C-APT-DS-G5 TOWER LIGHTING SYSTEM IN ACCORDANCE WITH SHEET A-3.

PROPOSED TOWER LOADING DIAGRAM

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

FDOT FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION		
SITE NAME	COUNTY	FINANCIAL PROJECT ID
SANDERSON	BAKER	424401-1-52-01

**SANDERSON
TOWER LOADING
DIAGRAM**

SHEET NO. E-4

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