

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

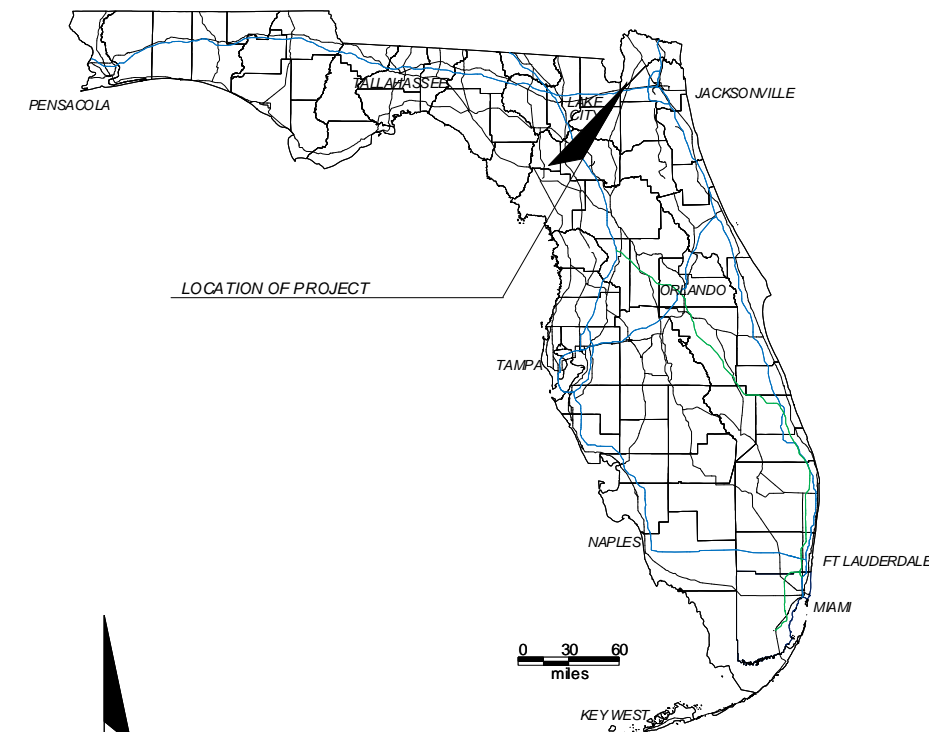
APPENDIX F

FINANCIAL PROJECT ID 424401-1-52-01
NASSAU COUNTY
BALDWIN (2-2500) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

INDEX OF PLANS

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




TOWER SITE ADDRESS:
BALDWIN
400 N. US HWY 301
BALDWIN, FL 32234
LATITUDE: 30-18-26.9 N (NAD 83)
LONGITUDE: 81-58-19.0 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			BALDWIN KEY SHEET	SHEET NO. F-1
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION		SITE NAME	COUNTY	FINANCIAL PROJECT ID		
						BALDWIN	NASSAU	424401-1-52-01			

BALDWIN 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 "G" THROUGH "J" AND "L" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET F-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.

BALDWIN 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 "F" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET F-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 F-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 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: 172.16.150.14
SUBNET MASK: 255.255.254.0
DEFAULT GATEWAY: 172.16.150.19

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: BALDWIN TECHNOSTROBE
SYSTEM DESCRIPTION: BALDWIN TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: BALDWIN
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

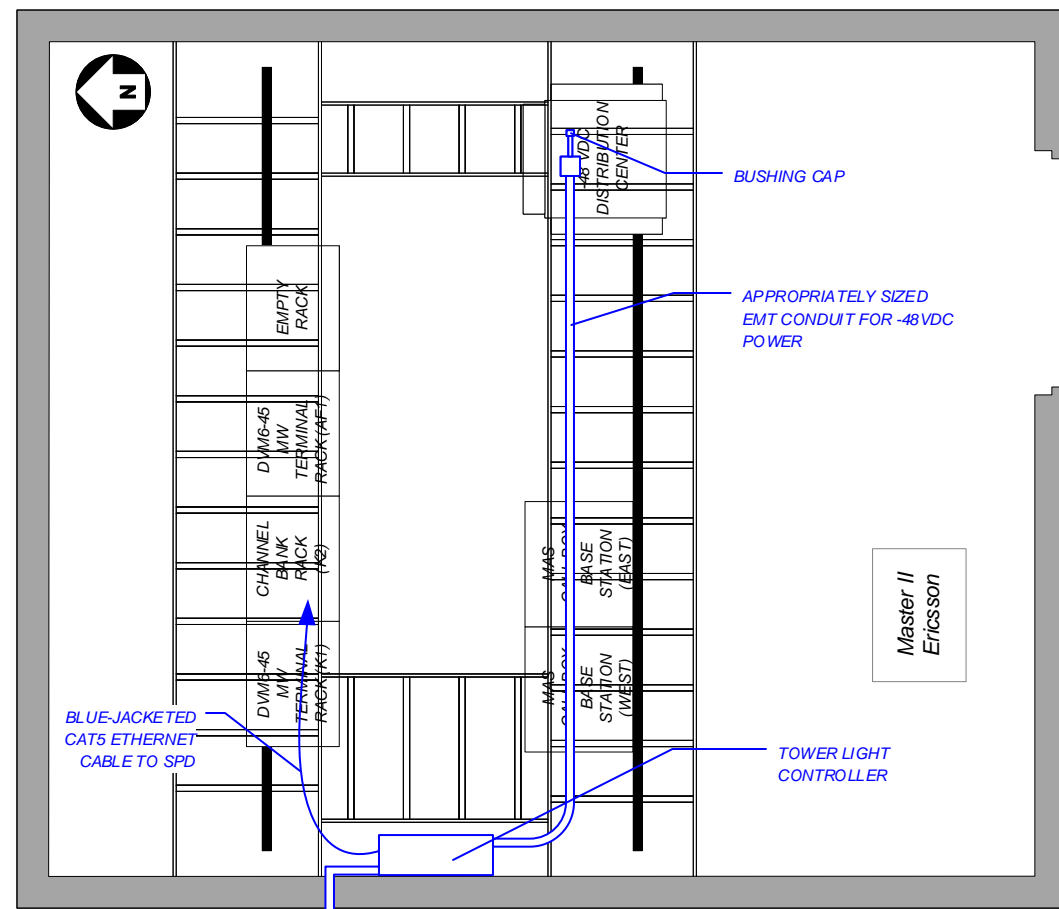
**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

SITE NAME	COUNTY	FINANCIAL PROJECT ID
BALDWIN	NASSAU	424401-1-52-01

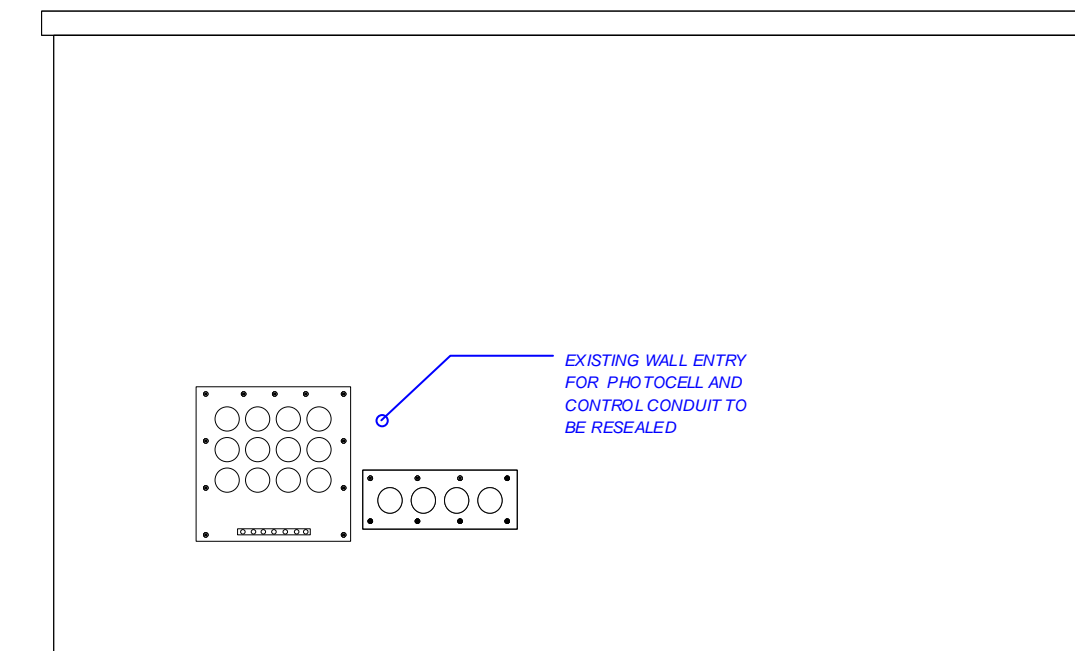
**BALDWIN
 REMOVAL AND
 INSTALLATION NOTES**

SHEET NO.

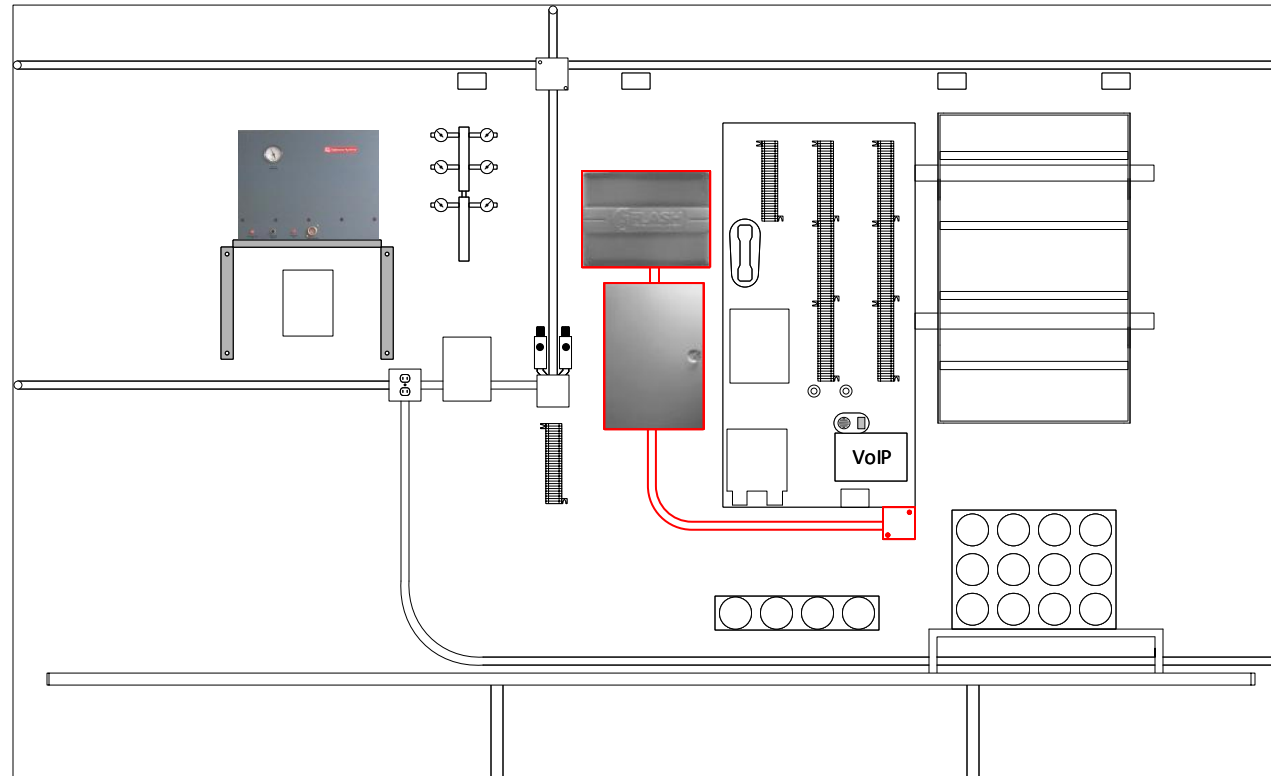
F-2



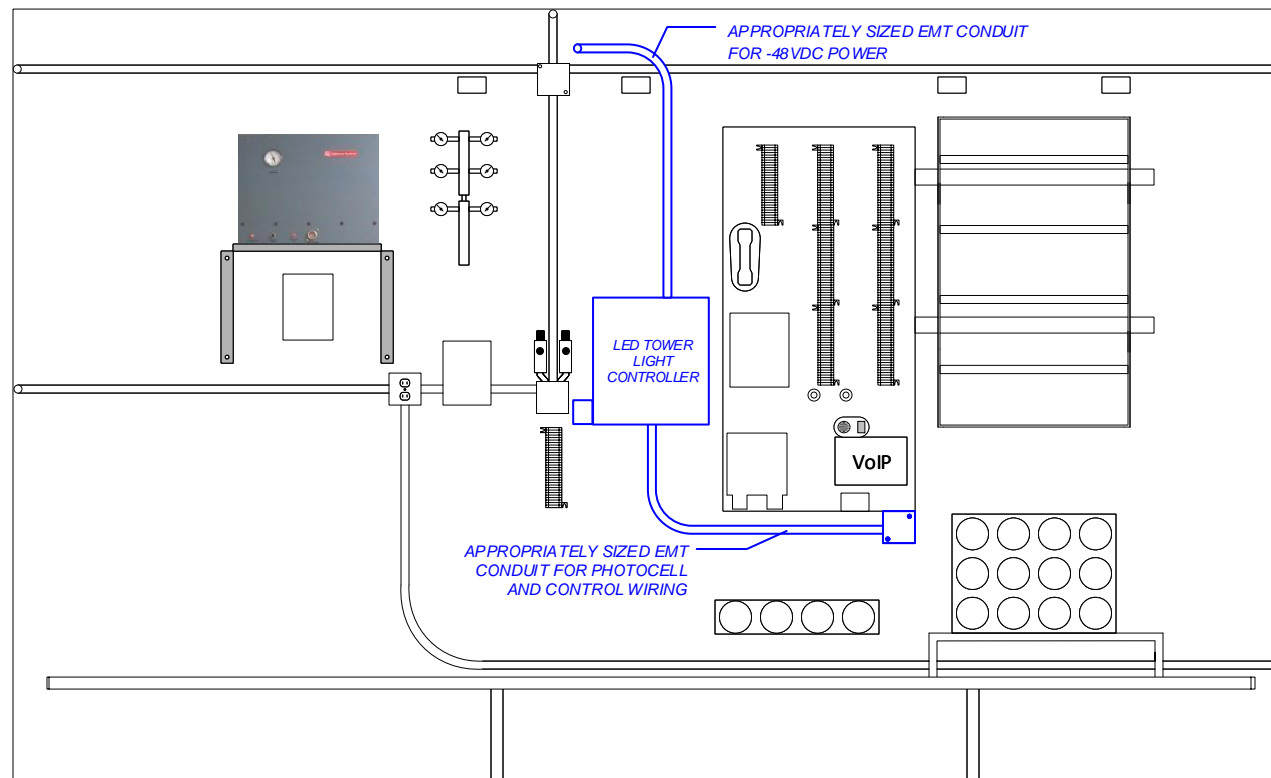
SHELTER FLOOR PLAN



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 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



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

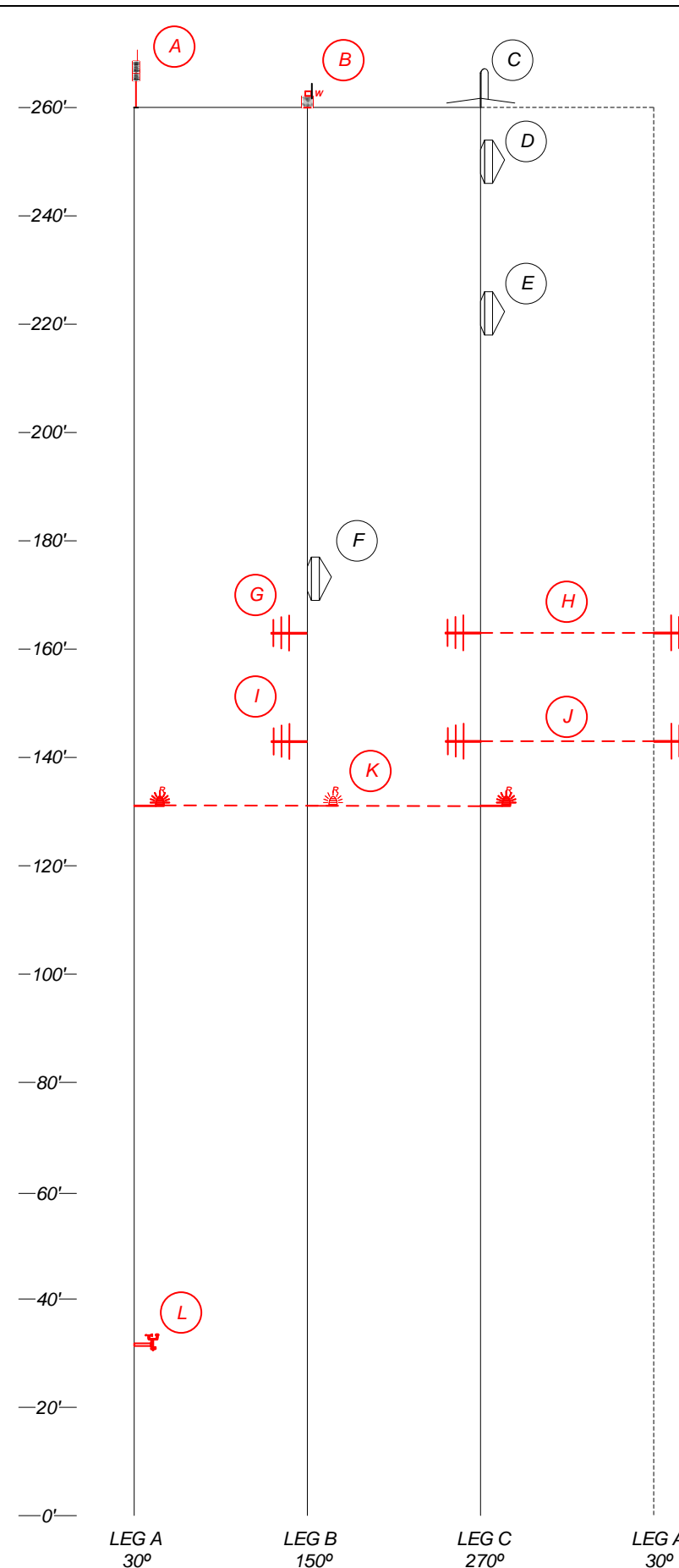
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

SITE NAME	COUNTY	FINANCIAL PROJECT ID
BALDWIN	NASSAU	424401-1-52-01

**BALDWIN
COMM BLDG PLANS**

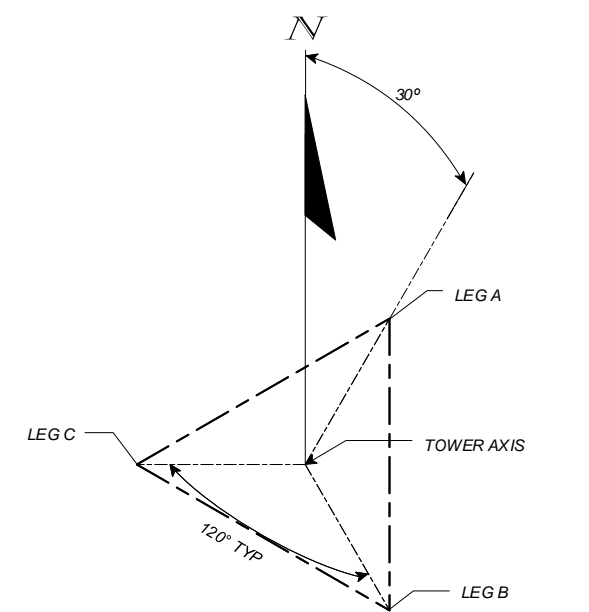
SHEET NO.

F-3

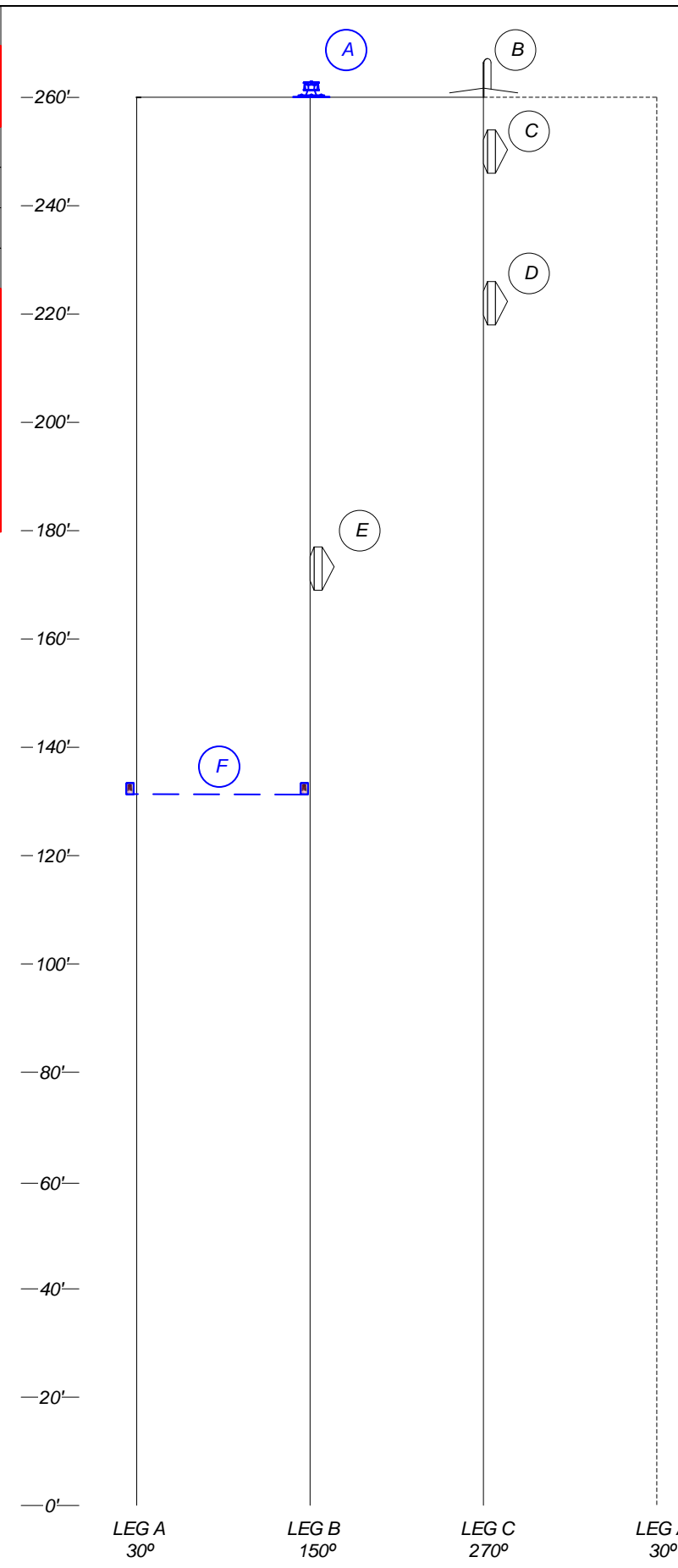


ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	RED BEACON	A	265' BASE	-	-	1
B	WHITE BEACON	B	260' BASE	-	-	1
C	DB-201	C	260' BASE	7/8"	-	-
D	PA8-65	C	250' (C.L.)	WE-65	256.4	-
E	PA8-65	C	222' (C.L.)	WE-65	256.4	-
F	PA8-65	B	173' (C.L.)	WE-65	93.6	-
G	DB-230	B	163' (C.L.)	1/2"	225	2
H	DB-230-2	A,C	163' (C.L.)	1/2"	255, 95	2
I	DB-230	B	143' (C.L.)	1/2"	225	2
J	DB-230-2	A,C	143' (C.L.)	1/2"	255, 95	2
K	SIDE MARKERS	A,B,C	131' (C.L.)	-	-	1
L	WEATHER SENSORS	A	32' (C.L.)	RS-232	-	2

- 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 F-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	B	260' BASE	CONDUIT	-	1
B	DB-201	C	260' BASE	7/8"	-	-
C	PA8-65	C	250' (C.L.)	WE-65	256.4	-
D	PA8-65	C	222' (C.L.)	WE-65	256.4	-
E	PA8-65	B	173' (C.L.)	WE-65	93.6	-
F	(2) LED SIDE MARKERS	A, B	131' (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
BALDWIN	NASSAU	424401-1-52-01

**BALDWIN TOWER
LOADING DIAGRAM**

SHEET NO. F-4

https://skins-my.sharepoint.com/personal/sean_kane_akingsjbal_com/Documents/Desktop/Multiple Tower Light Upgrade Plans 20190329.vsd

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

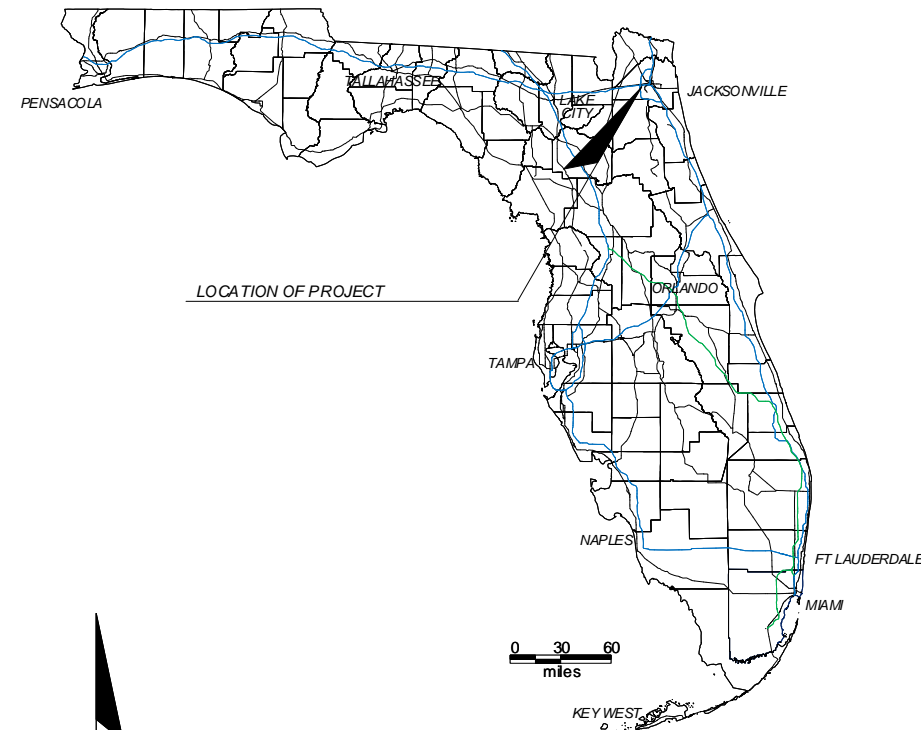
APPENDIX G

FINANCIAL PROJECT ID 424401-1-52-01
DUVAL COUNTY
JACKSONVILLE FHP (2-2524) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
G-1	KEY SHEET
G-2	JACKSONVILLE FHP REMOVAL AND INSTALLATION NOTES
G-3	JACKSONVILLE FHP FDOT COMMUNICATIONS BUILDING DETAIL
G-4	JACKSONVILLE FHP TOWER LOADING DIAGRAM



TOWER SITE ADDRESS:
JACKSONVILLE FHP
7322 NORMANDY BLVD.
JACKSONVILLE FL 32205
LATITUDE: 30-17-49.6 N (NAD 83)
LONGITUDE: 81-46-11.0 W

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


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

JACKSONVILLE FHP 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						 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			JACKSONVILLE FHP KEY SHEET	SHEET NO.
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION		SITE NAME	COUNTY	FINANCIAL PROJECT ID		G-1
						JACKSONVILLE FHP	DUVAL	424401-1-52-01			

REMOVAL NOTES:

1. THE VENDOR SHALL REMOVE THE OLD OBSTRUCTION LIGHTING SYSTEM, INCLUDING BUT NOT LIMITED TO, POWER SUPPLIES, CONTROLLERS, SPDS, CONDUITS, TOWER LIGHT PHOTOCCELL, 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 BEACON 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.

JACKSONVILLE FHP 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 "K" AND "A" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET G-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 G-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 PHOTOCCELL 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 PHOTOCCELL 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 AIRPAX MODEL: LML1-1RLS4R-29954-10

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

IP ADDRESS: 172.16.26.14
SUBNET MASK: 255.255.254.0
DEFAULT GATEWAY: 172.16.26.19

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: JACKSONVILLE FHP TECHNOSTROBE
SYSTEM DESCRIPTION: JACKSONVILLE FHP TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: JACKSONVILLE FHP
TRAP STATE: JACKSONVILLE FHP
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



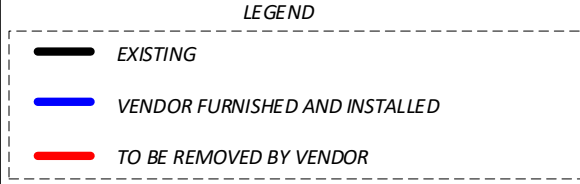
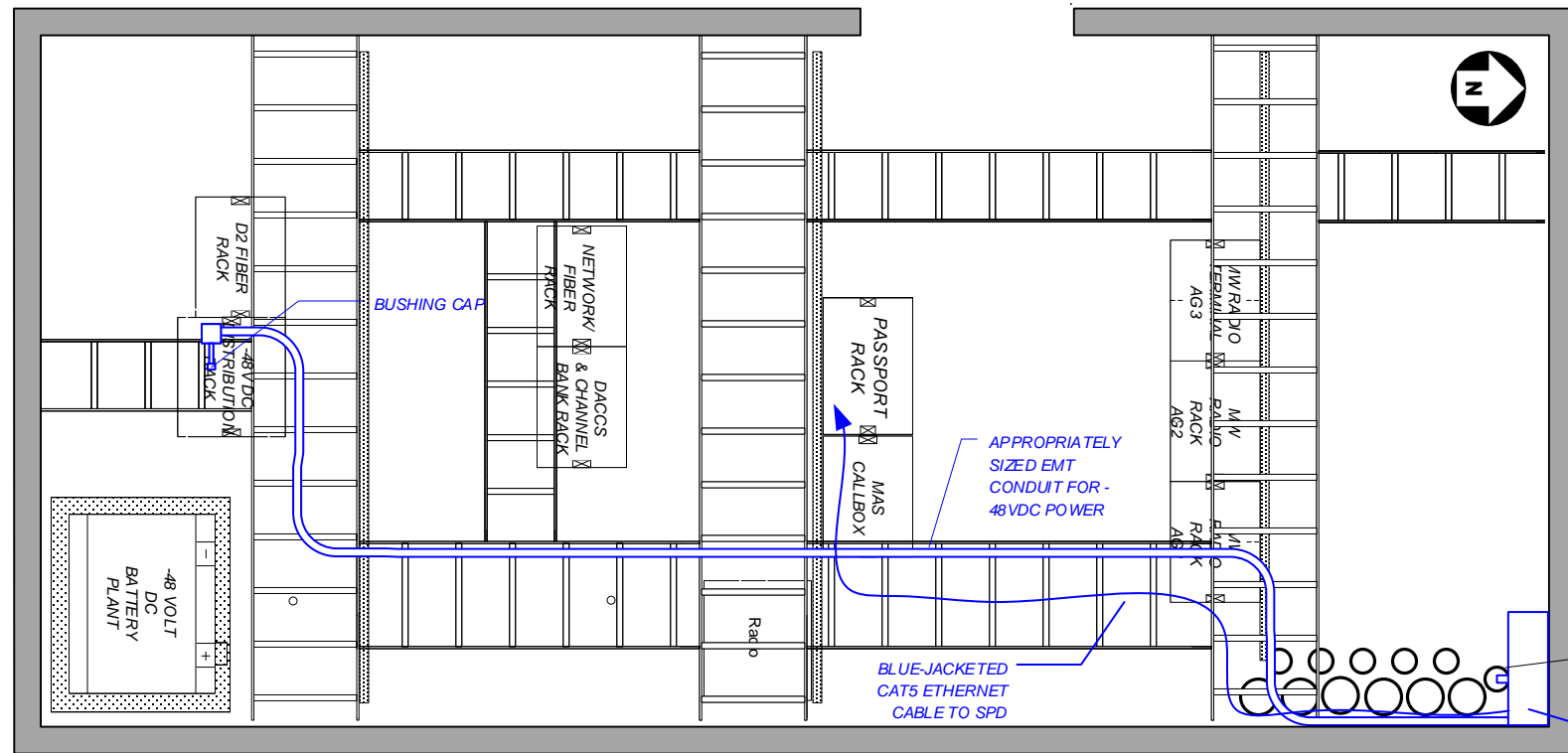
FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

SITE NAME	COUNTY	FINANCIAL PROJECT ID
JACKSONVILLE FHP	DUVAL	424401-1-52-01

**JACKSONVILLE FHP
 REMOVAL AND
 INSTALLATION NOTES**

SHEET NO.
G-2

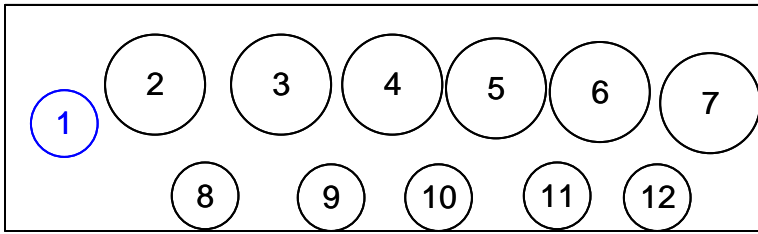


ENTRY PORT TO BE USED FOR TOWER LIGHT AND PHOTOCELL CONDUIT

TOWER LIGHT CONTROLLER

NEW PHOTOCELL LOCATED ON VERTICAL TRANSMISSION LINE LADDER AND REUSE THE EXISTING CONDUIT IF SERVICABLE

CABLE TRAY LAYOUT

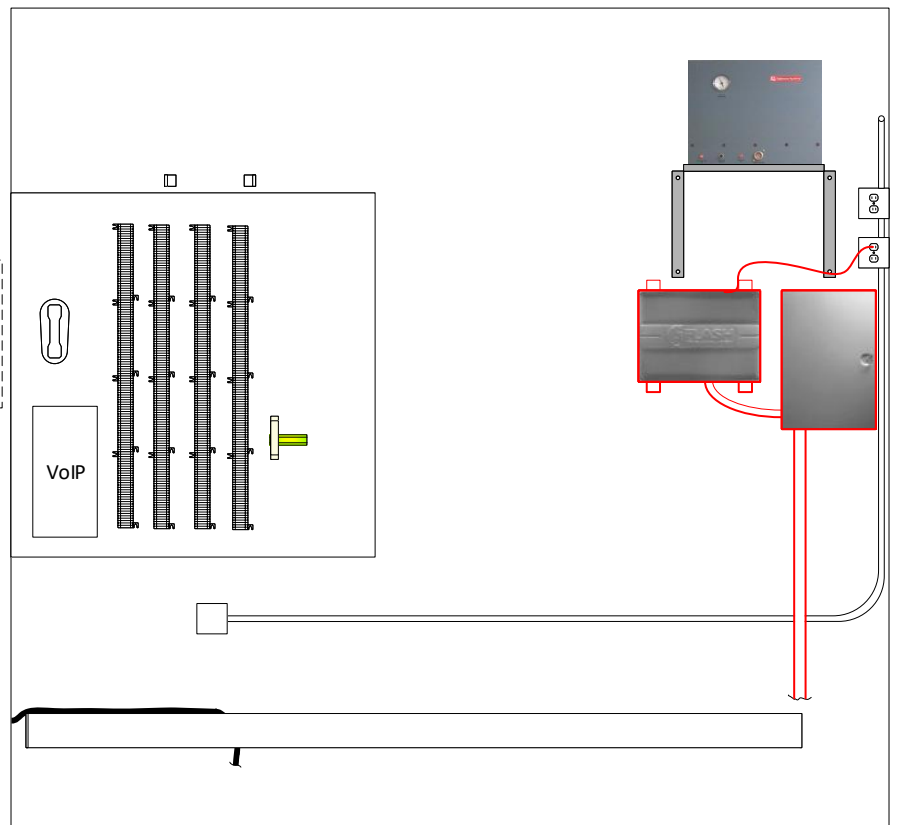


1. 1" FLEX CONDUIT (TOWER LIGHTS)
2. 4 1/2" COPPER STRAP
3. RFS CABLEWAVE SYSTEMS FLEXWELL WE65
4. RFS CABLEWAVE SYSTEMS FLEXWELL WE65
5. RFS CABLEWAVE SYSTEMS FLEXWELL WE65
6. RFS CABLEWAVE SYSTEMS FLEXWELL WE65
7. RFS CABLEWAVE SYSTEMS FLEXWELL WE65
8. (1) 3/4" FLEX CONDUIT (RWIS SERIAL CABLES)
9. (1) 1-1/4" FLEX CONDUIT (IFLORIDA SWCM)
10. RFS CABLEWAVE SYSTEMS FLEXWELL FLC 78-50 J COAXIAL (DB201 AT 240' - MCC - 45.22 MHZ)
11. (1) RFS CABLEWAVE SYSTEMS FLEXWELL FLC 12-50 J COAXIAL (230' LEG B)
12. (1) RFS CABLEWAVE SYSTEMS FLEXWELL 78-50 COAXIAL (1) 3/8" TX LINE TO JOHNSON RADIO (1 ON FLOOR PLAN) AND 2' OMNI ANTENNA
12. (2) RFS CABLEWAVE SYSTEMS FLEXWELL FLC 78-50 COAXIAL (182' AND 240')

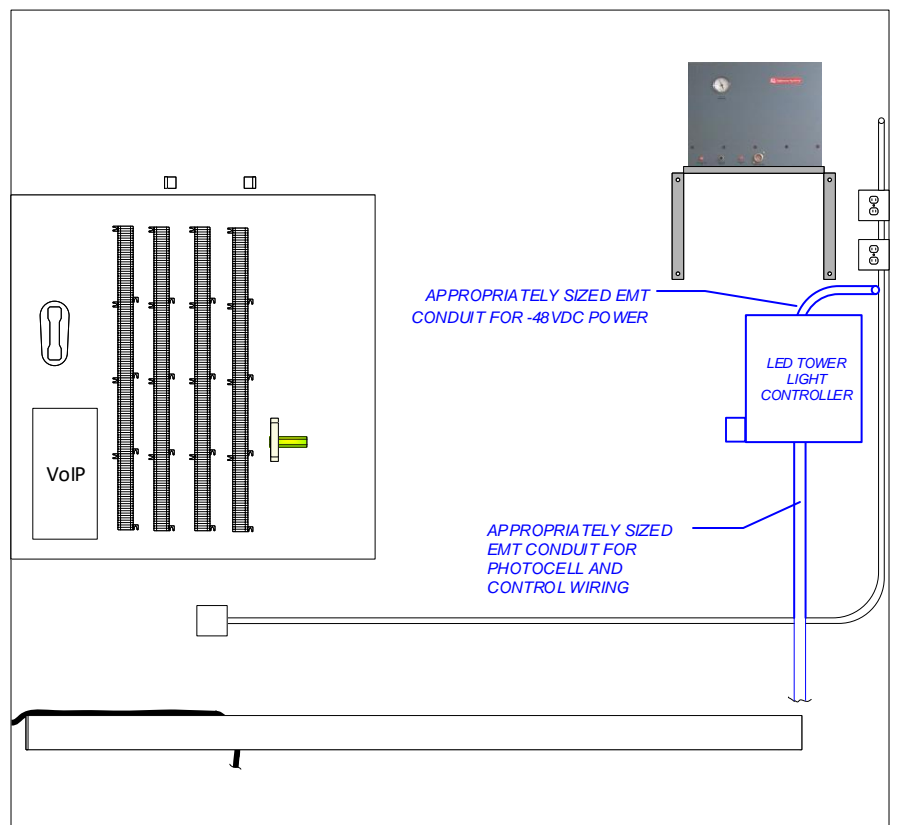
NOTES

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 PASSPORT RACK.
5. THE VENDOR SHALL INSTALL CUSTOM LENGTH BLUE-JACKETED CAT 5 CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE PASSPORT RACK, AND FROM THE SPD TO THE BPS 2000, PORT #21.
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.

ENTRY PORT DIAGRAM INTERIOR VIEW



EXISTING INTERIOR NORTH WALL



PROPOSED INTERIOR NORTH WALL

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

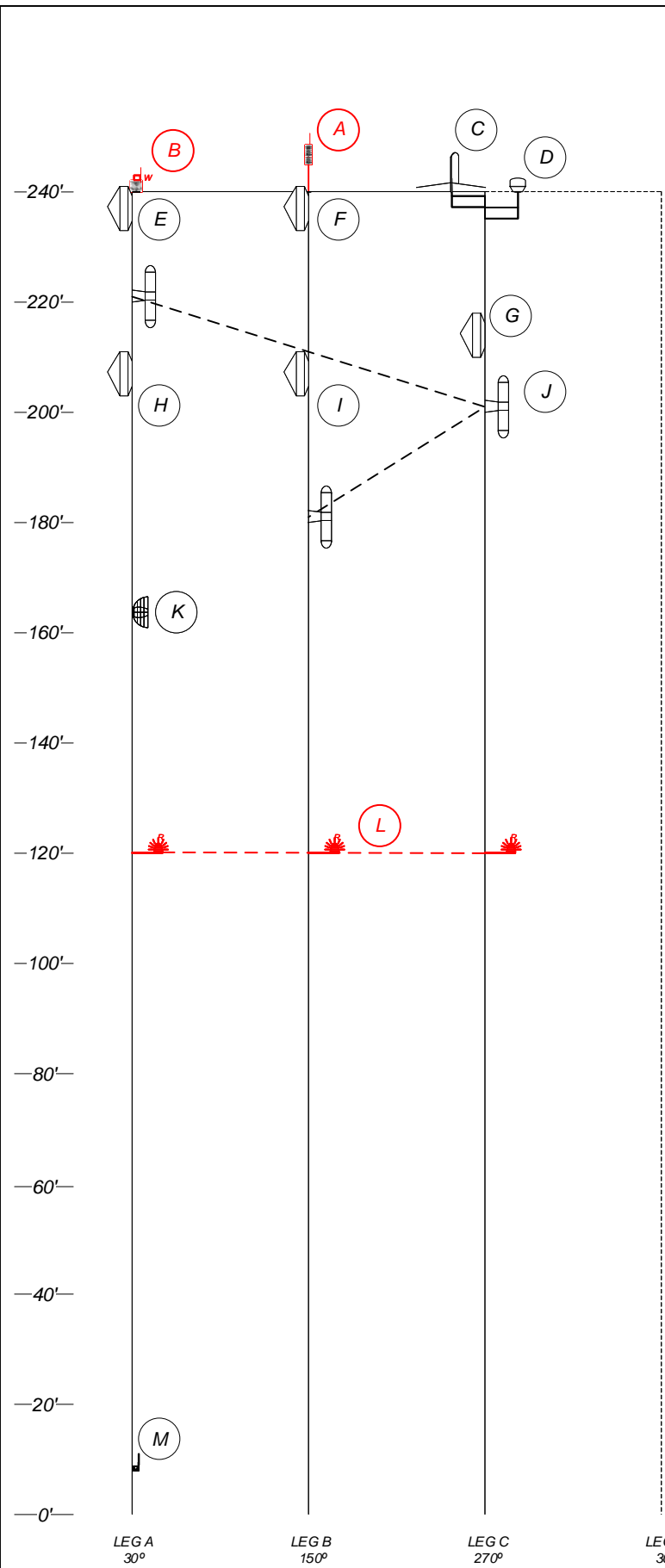
FDOT
 FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

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

**JACKSONVILLE FHP
BLDG PLANS**

SHEET NO.
G-3

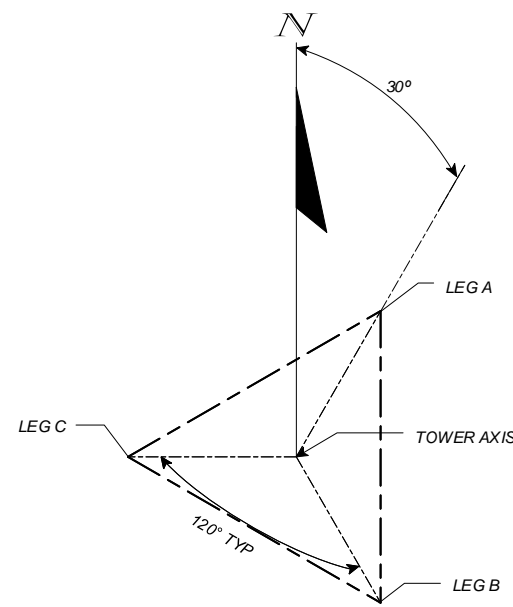
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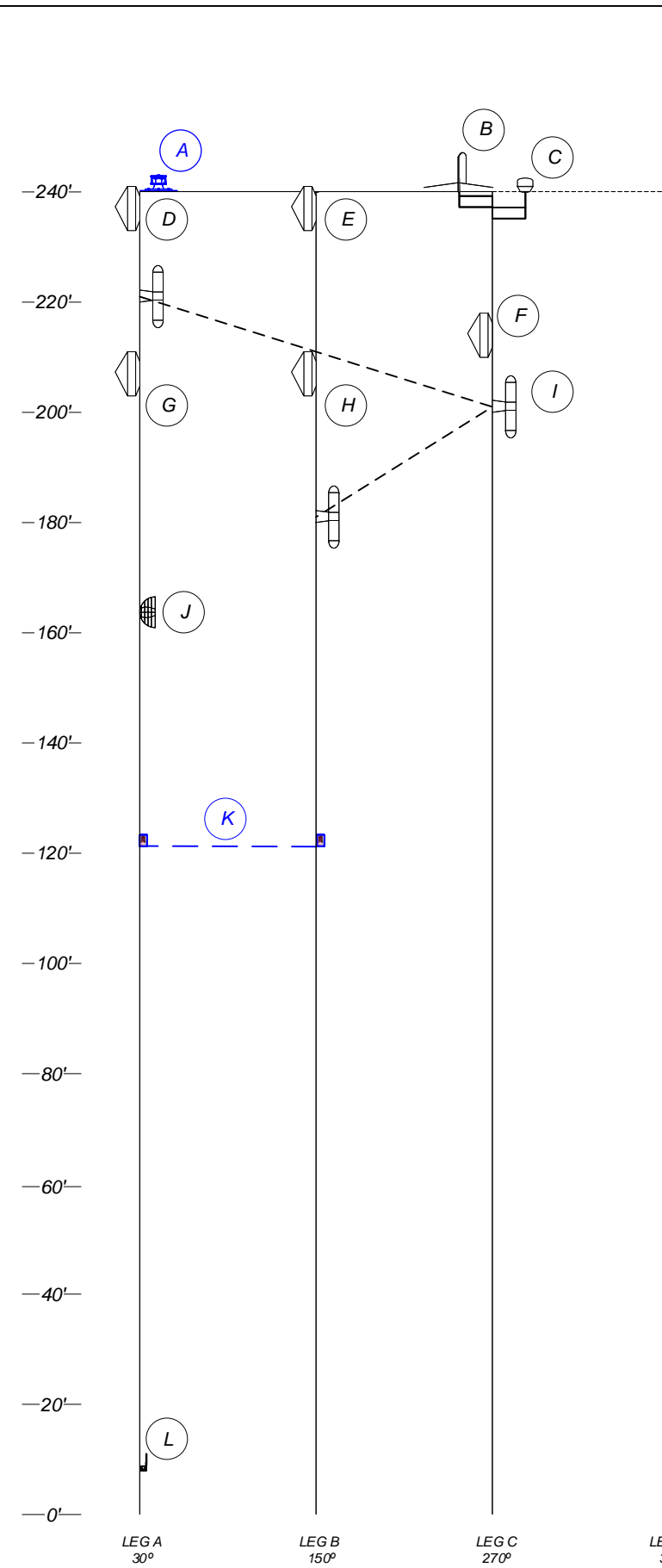
ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	RED BEACON	B	245' BASE	-	-	1
B	WHITE BEACON	A	240' BASE	-	-	1
C	DB-201	C	240' BASE	7/8"	-	-
D	BMS SILHOUETTE W/ STM - (X)	C	240' BASE	7/8"	-	-
E	PA8-65	A	237' (C.L.)	WE-65	17.8	-
F	PA8-65	B	237' (C.L.)	WE-65	130.9	-
G	PA8-65	C	214' (C.L.)	WE-65	273.7	-
H	PA8-65	A	207' (C.L.)	WE-65	17.8	-
I	PA8-65	B	207' (C.L.)	WE-65	130.9	-
J	DB-212-3	A,C,B	221', 201', 181' (C.L.)	7/8"	-	-
K	KATHREIN SCALA PR-950	A	164' (C.L.)	1/2"	73.5	-
L	SIDE MARKERS	A,B,C	120' BASE	-	-	1
M	2' OMNI ANTENNA	A	10' BASE	1/2"	-	-

NOTES:

1. 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 G-2 REMOVAL NOTE 1.
2. 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	240' BASE	CONDUIT	-	1
B	DB-201	C	240' BASE	7/8"	-	-
C	BMS SILHOUETTE W/ STM - (X)	C	240' BASE	7/8"	-	-
D	PA8-65	A	237' (C.L.)	WE-65	17.8	-
E	PA8-65	B	237' (C.L.)	WE-65	130.9	-
F	PA8-65	C	214' (C.L.)	WE-65	273.7	-
G	PA8-65	A	207' (C.L.)	WE-65	17.8	-
H	PA8-65	B	207' (C.L.)	WE-65	130.9	-
I	DB-212-3	A,C,B	221', 201', 181' (C.L.)	7/8"	-	-
J	KATHREIN SCALA PR-950	A	164' (C.L.)	1/2"	73.5	-
K	(2) LED SIDE MARKERS	A, B	120' BASE	SAME CONDUIT	-	1
L	2' OMNI ANTENNA	A	10' BASE	1/2"	-	-

NOTES:

1. 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

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
JACKSONVILLE FHP	DUVAL	424401-1-52-01

**JACKSONVILLE FHP
TOWER LOADING
DIAGRAM**

SHEET NO.
G-4

https://skms-my.sharepoint.com/personal/sean_kane_atkins@fla DOT gov/_layouts/15/Doc.aspx?DocId=20190329.vsd

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

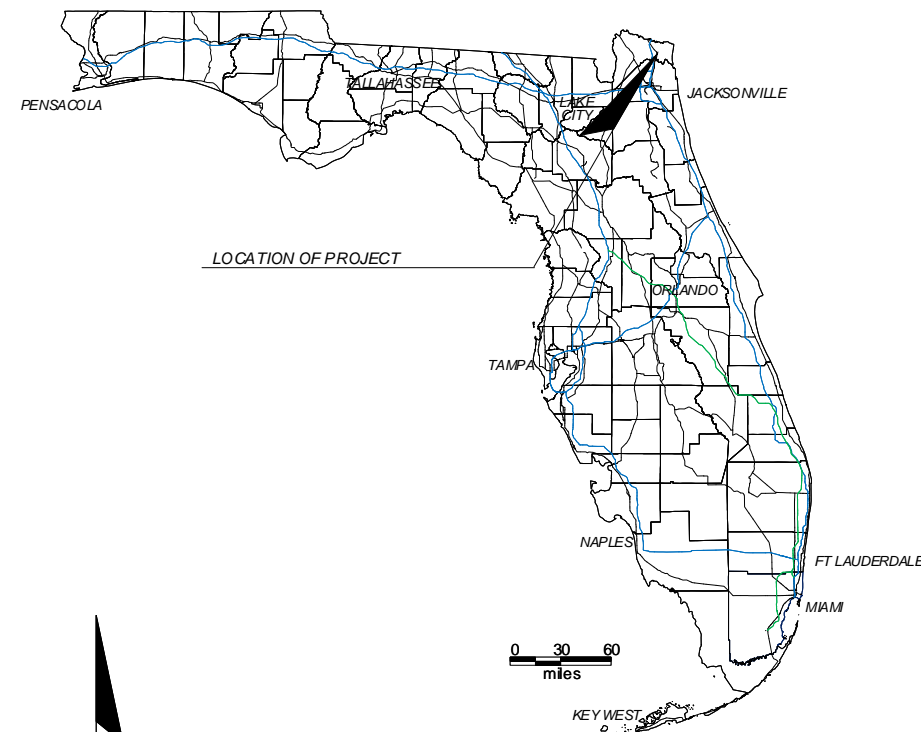
APPENDIX H

FINANCIAL PROJECT ID 424401-1-52-01
NASSAU COUNTY
YULEE (2-2522) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
H-1	KEY SHEET
H-2	YULEE REMOVAL AND INSTALLATION NOTES
H-3	YULEE COMMUNICATIONS BUILDING DETAIL
H-4	YULEE TOWER LOADING DIAGRAM



YULEE TOWER SITE

TOWER SITE ADDRESS:
YULEE
462521 SR-200
YULEE, FL 32097
LATITUDE: 30-37-12.8 N (NAD 83)
LONGITUDE: 81-38-58.6 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					
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
YULEE	NASSAU	424401-1-52-01

**YULEE
KEY SHEET**

SHEET NO.

H-1

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 BEACON 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 "G", "H" AND "J" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET H-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.

YULEE 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 "B" AND "F" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET H-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 H-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 AIRPAX MODEL: LML1-1RLS4R-29954-10

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

IP ADDRESS: 172.16.224.14
SUBNET MASK: 255.255.254.0
DEFAULT GATEWAY: 172.16.224.19

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: YULEE TECHNOSTROBE
SYSTEM DESCRIPTION: YULEE TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: YULEE
TRAP STATE: YULEE
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

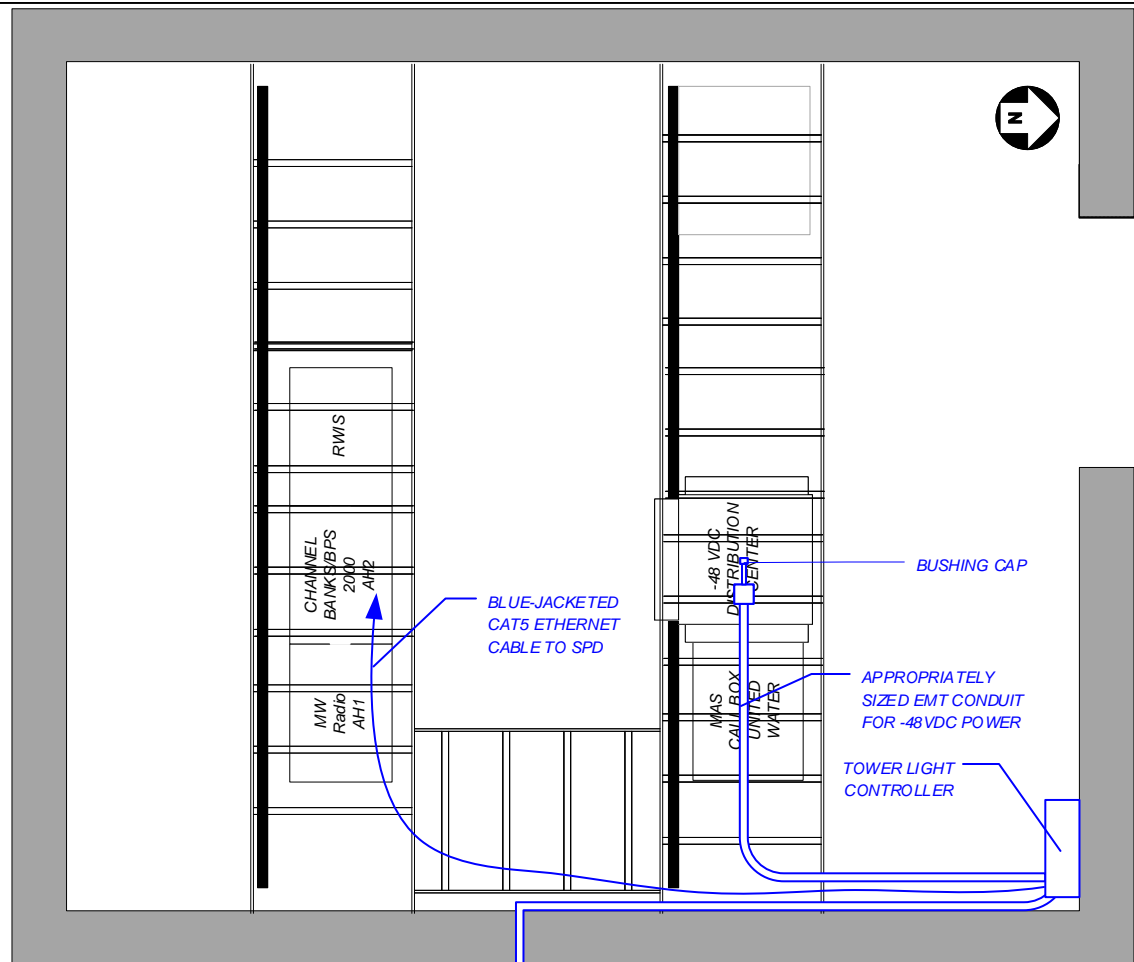
**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

SITE NAME	COUNTY	FINANCIAL PROJECT ID
YULEE	NASSAU	424401-1-52-01

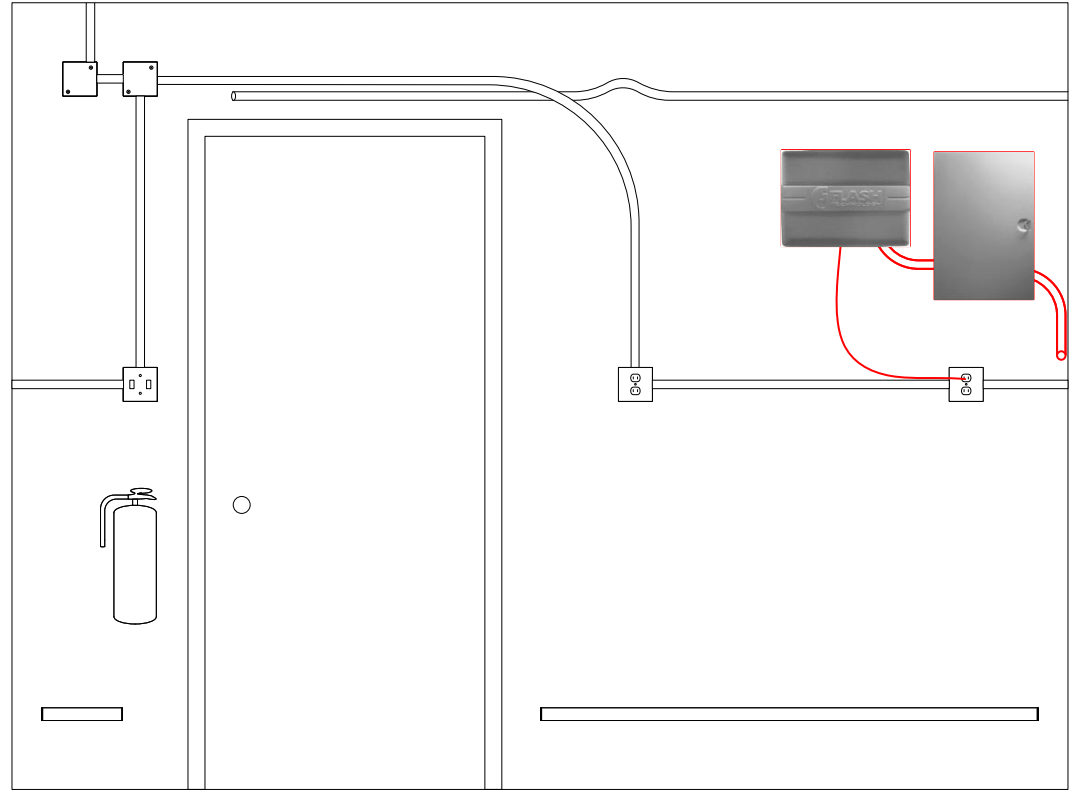
**YULEE
 REMOVAL AND
 INSTALLATION NOTES**

SHEET NO.

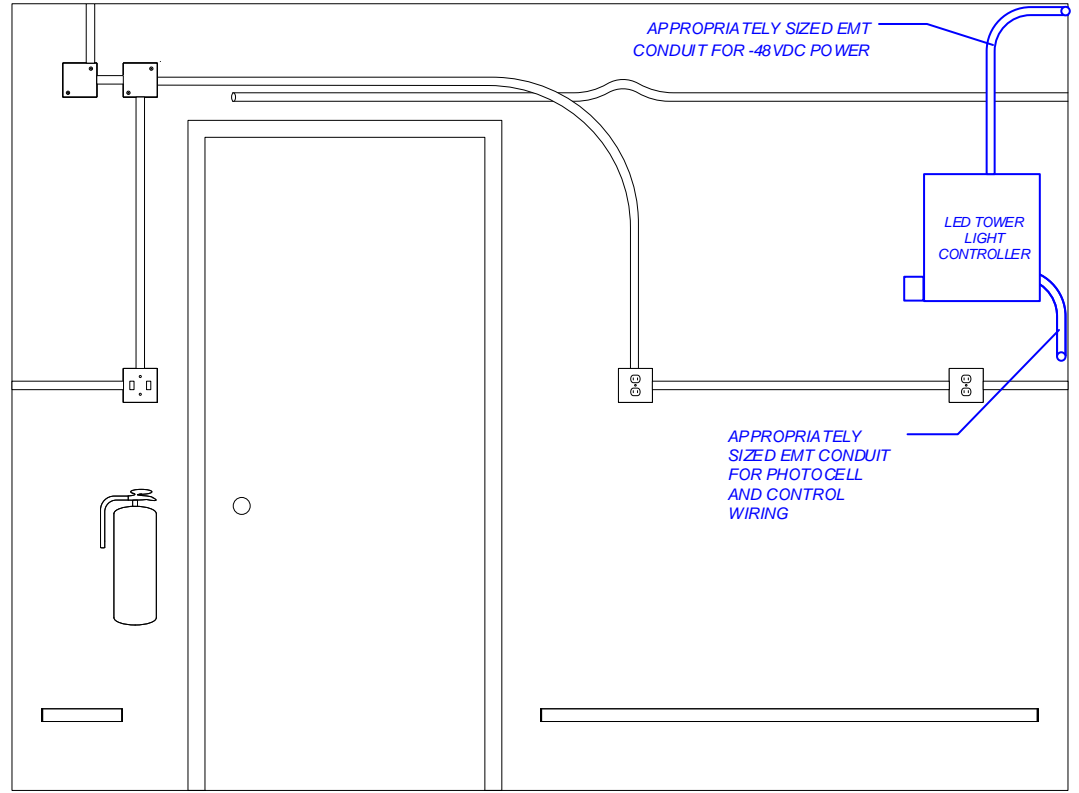
H-2



SHELTER CABLETRAY PLAN



EXISTING INTERIOR NORTH WALL



PROPOSED INTERIOR NORTH WALL

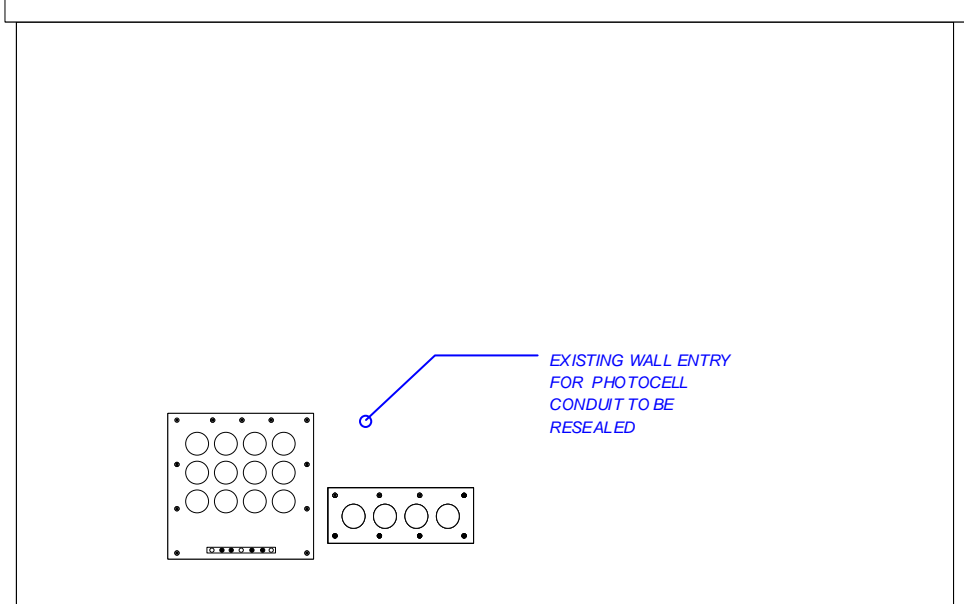
NOTES

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 CUSTOM LENGTH BLUE-JACKETED CAT 5 CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE CHANNEL BANK RACK, AND FROM THE 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.

NEW PHOTOCELL LOCATED ON VERTICAL TRANSMISSION LINE LADDER AND REUSE THE EXISTING CONDUIT IF SERVICABLE



EXTERIOR EAST WALL

LEGEND

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

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

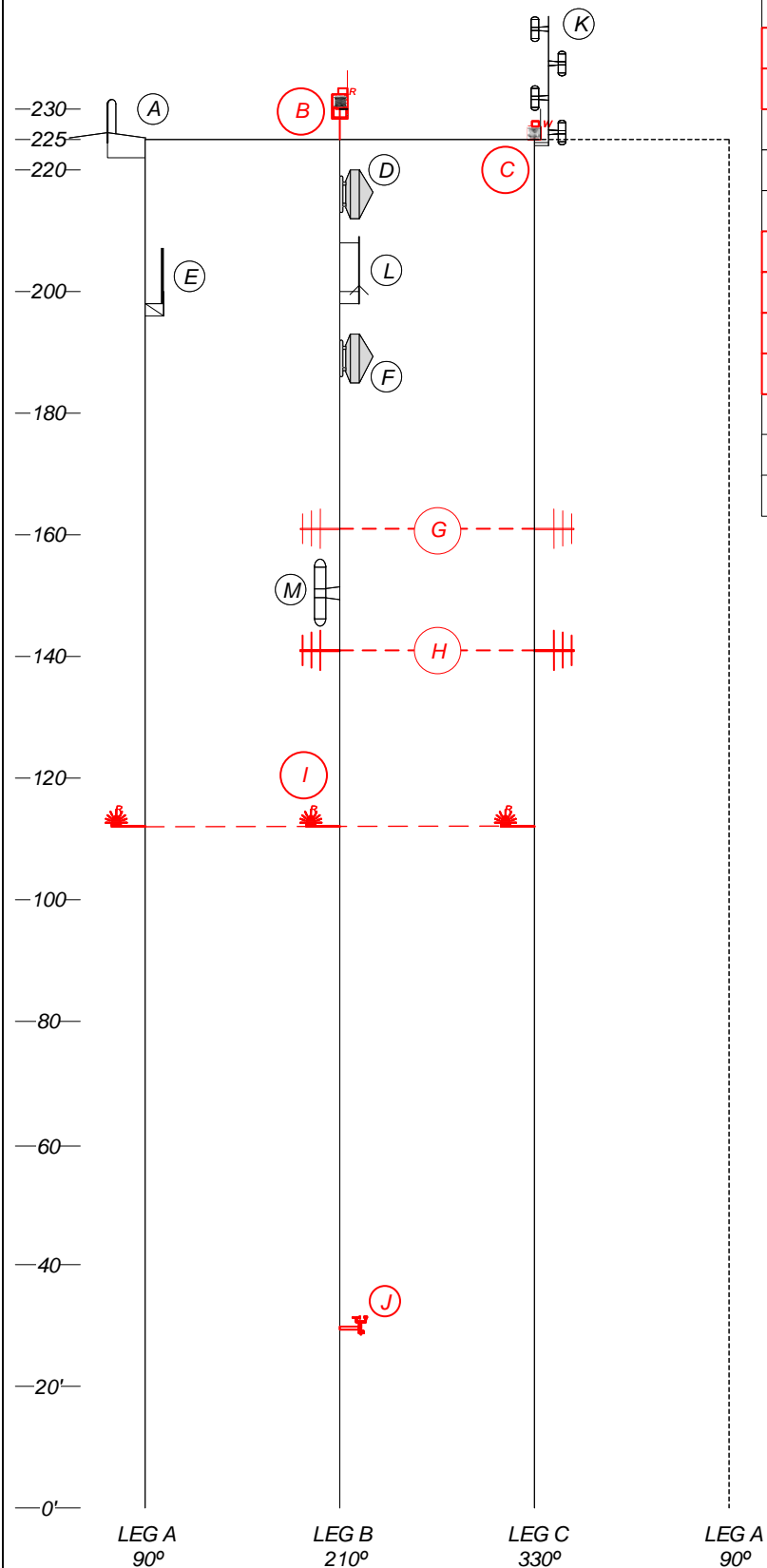
FLORIDA DEPARTMENT OF TRANSPORTATION
605 SUWANNEE ST. MS 90
TALLAHASSEE, FL 32399-0450
PH. (850)-410-5600
FAX. (850)-410-5501

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

**YULEE COMM BLDG
PLANS**

SHEET NO.
H-3

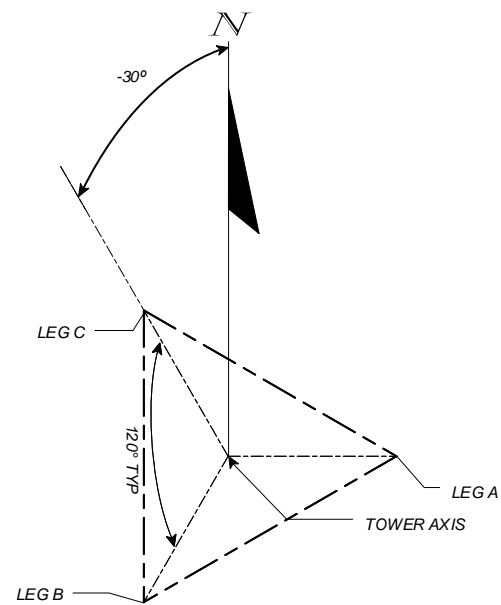
https://a1kns-my.sharepoint.com/personal/sean_kane_a1knsj@fla.com/Document%20s/Desktop/MJ/tp/ Tower Light Upgrade Plans 20190329.vsd



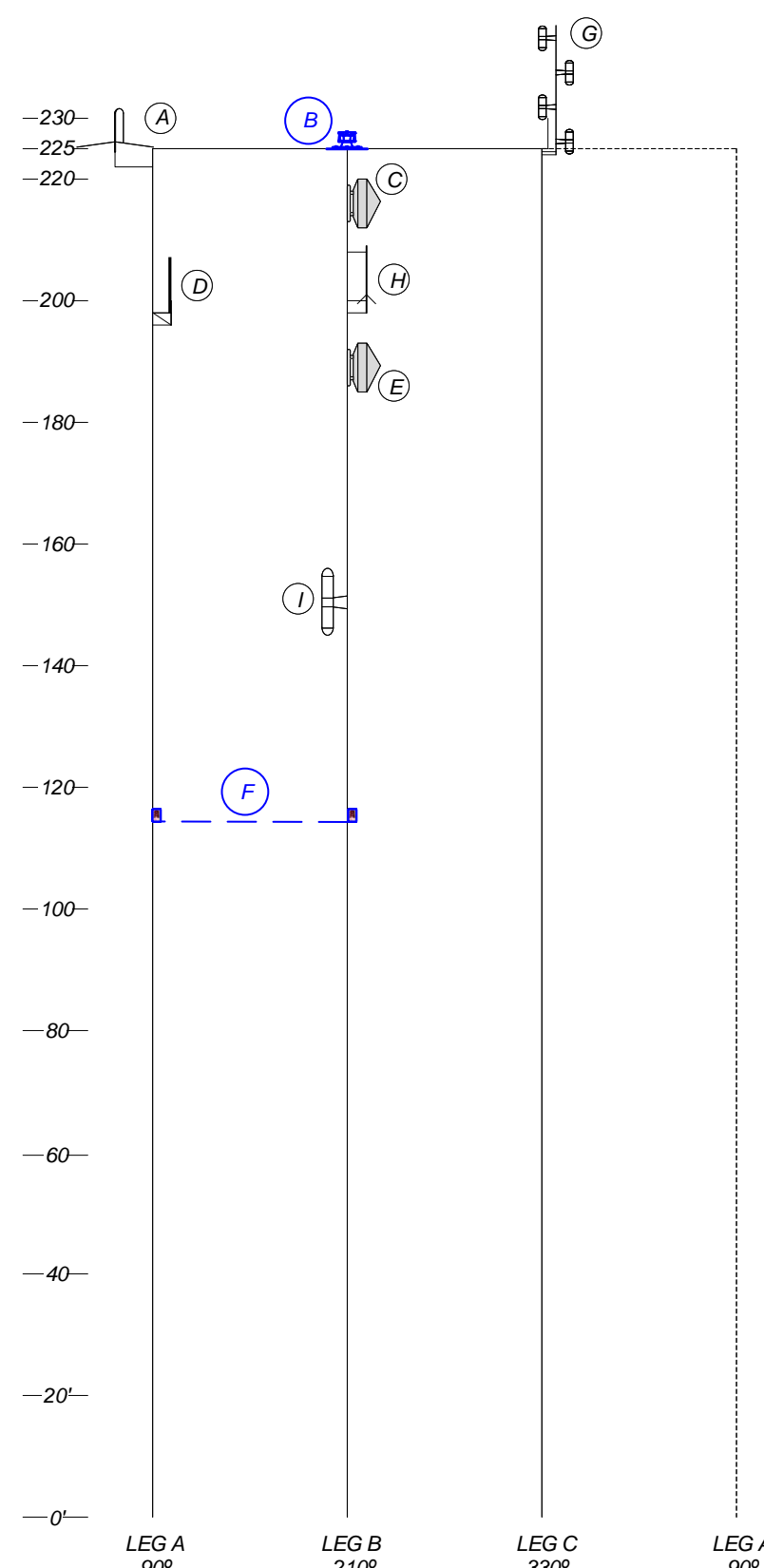
ID	MODEL	MTG. HGT.	LEG/FACE	AZIM.	NOTES
A	DB-201	225' (BASE)	C	-	-
B	BEACON	225' (BASE)	B	-	1
C	STROBE	220' (BASE)	C	-	1
D	PA8-65	216' (C.L.)	B	190°	-
E	DB-589-Y	198' (BASE)	A	90°	-
F	PA8-65	189' (C.L.)	B	190°	-
G	DB-230-2	161' (C.L.)	B,C	190 20	2
H	DB-230-2	141' (C.L.)	B,C	190° 20°	2
I	SIDE BEACONS	112' (C.L.)	A,B,C	-	1
J	WEATHER SENSORS	30' (BASE)	B	-	2
K	DB-224	224' (BASE)	C	-	-
L	DIAMOND X-300 NA	198' (BASE)	B	-	-
M	581-70	153' (C.L.)	B	-	-

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 H-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	MTG. HGT.	TX LINE	AZIM.	NOTES
A	DB-201	C	225' (BASE)	-	-	-
B	TECHNOSTROBE DUAL LED FLASH HEAD	B	225' (BASE)	CONDUIT	-	1
C	PA8-65	B	216' (C.L.)	-	190°	-
D	DB-589-Y	A	198' (BASE)	-	90°	-
E	PA8-65	B	189' (C.L.)	-	190°	-
F	(2) LED SIDE MARKERS	A, B	112' (C.L.)	SAME CONDUIT	-	1
G	DB-224	C	224' (BASE)	-	-	-
H	DIAMOND X-300 NA	B	198' (BASE)	-	-	-
I	581-70	B	153' (C.L.)	-	-	-

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



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
YULEE	NASSAU	424401-1-52-01

**YULEE
TOWER LOADING
DIAGRAM**

SHEET NO.

H-4

**STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION**

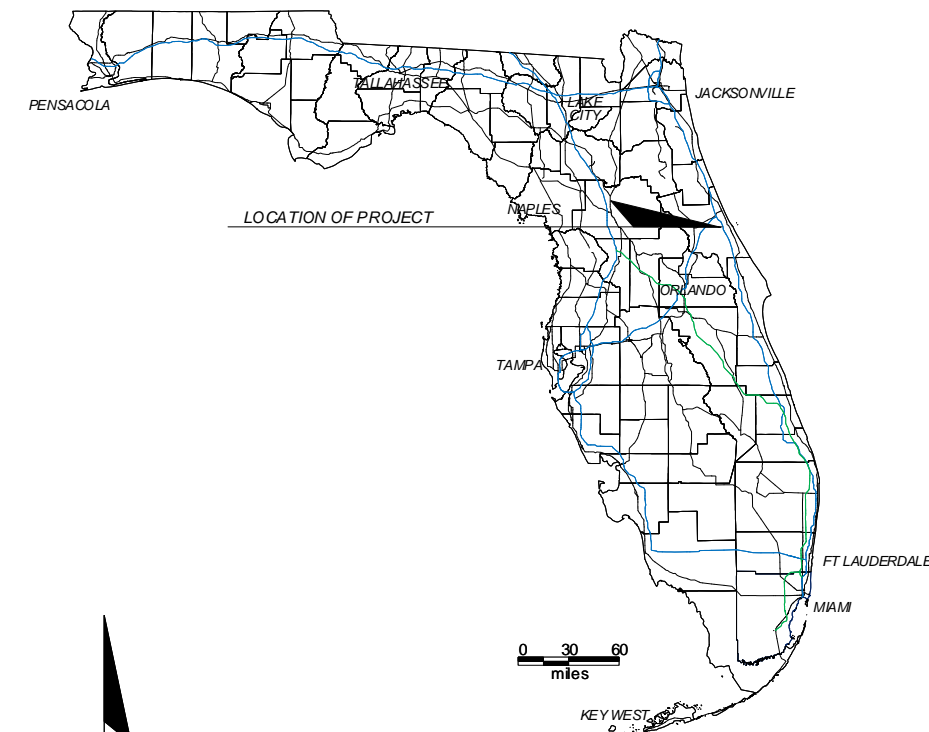
APPENDIX I

FINANCIAL PROJECT ID 424401-1-52-01
VOLUSIA COUNTY
PORT ORANGE (5-5925) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
I-1	KEY SHEET
I-2	PORT ORANGE REMOVAL AND INSTALLATION NOTES
I-3	PORT ORANGE COMMUNICATIONS BUILDING DETAIL
I-4	PORT ORANGE TOWER LOADING DIAGRAM



PORT ORANGE TOWER SITE


TOWER SITE ADDRESS:
PORT ORANGE
254 I-95 NORTHBOUND
PORT ORANGE, FL 32128
LATITUDE: 29-05-05.7 N (NAD 83)
LONGITUDE: 81-00-59.2 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			PORT ORANGE KEY SHEET	SHEET NO. I-1
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION		SITE NAME	COUNTY	FINANCIAL PROJECT ID		
						PORT ORANGE	VOLUSIA	424401-1-52-01			

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 BEACON 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 "M", "P", "R", AND "S" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET I-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. .

PORT ORANGE 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 "D" AND "N" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET I-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 I-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 AIRPAX MODEL: LML1-1RLS4R-29954-10

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

IP ADDRESS: 172.16.22.14
SUBNET MASK: 255.255.254.0
DEFAULT GATEWAY: 172.16.22.19

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: PORT ORANGE TECHNOSTROBE
SYSTEM DESCRIPTION: PORT ORANGE TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: PORT ORANGE
TRAP STATE: PORT ORANGE
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

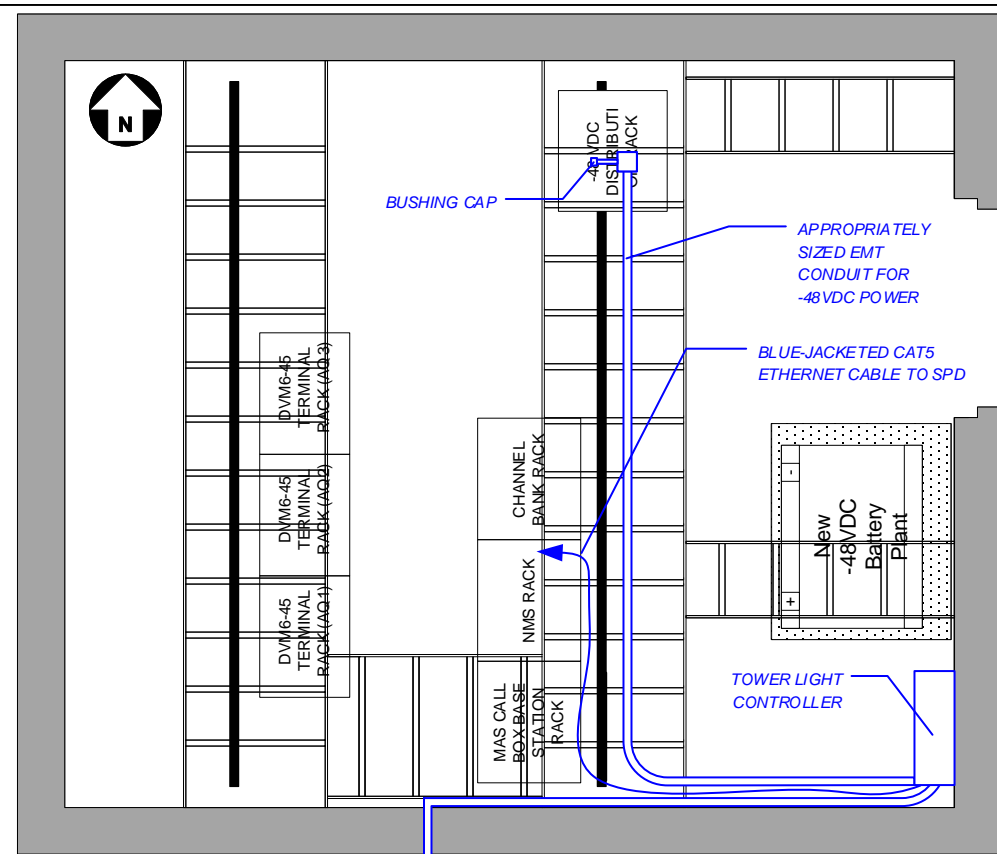
**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

SITE NAME	COUNTY	FINANCIAL PROJECT ID
PORT ORANGE	VOLUSIA	424401-1-52-01

**PORT ORANGE
 REMOVAL AND
 INSTALLATION NOTES**

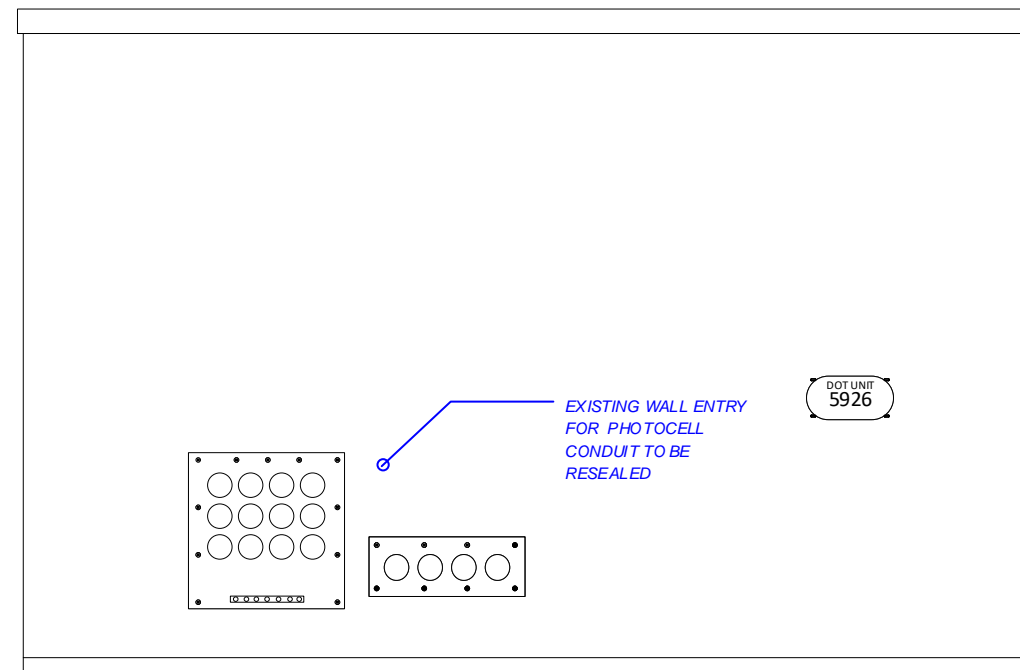
SHEET NO.

I-2

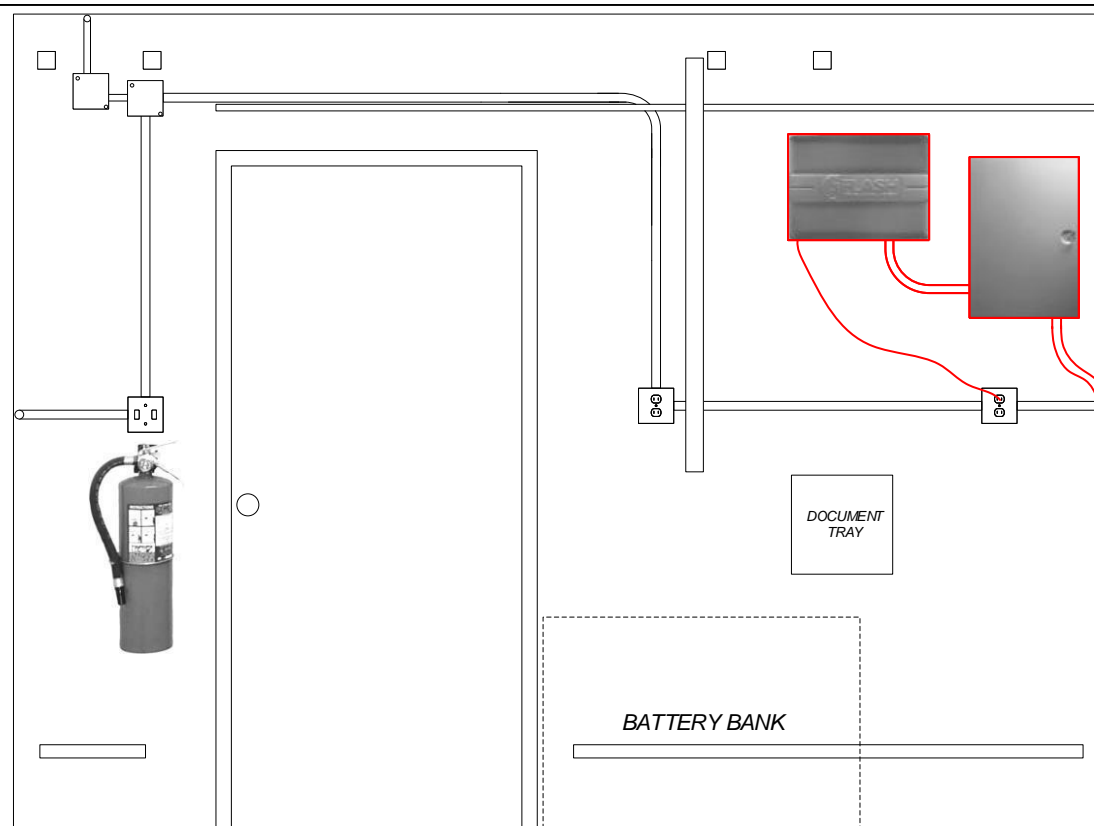


SHELTER CABLETRAY PLAN

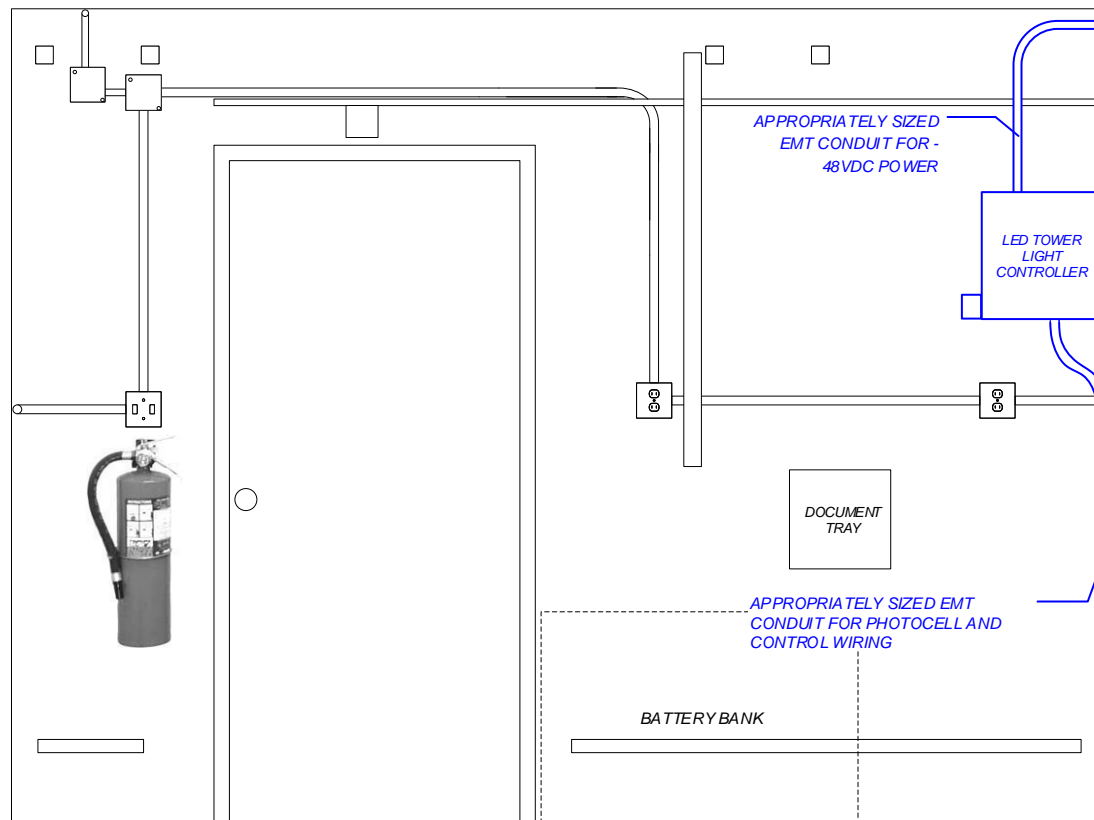
NEW PHOTOCELL LOCATED ON VERTICAL TRANSMISSION LINE LADDER AND REUSE THE EXISTING CONDUIT IF SERVICABLE



EXTERIOR SOUTH 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 CUSTOM LENGTH BLUE-JACKETED CAT 5 CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE NMS RACK, AND FROM THE SPD TO THE BPS 2000, PORT #21.

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.

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

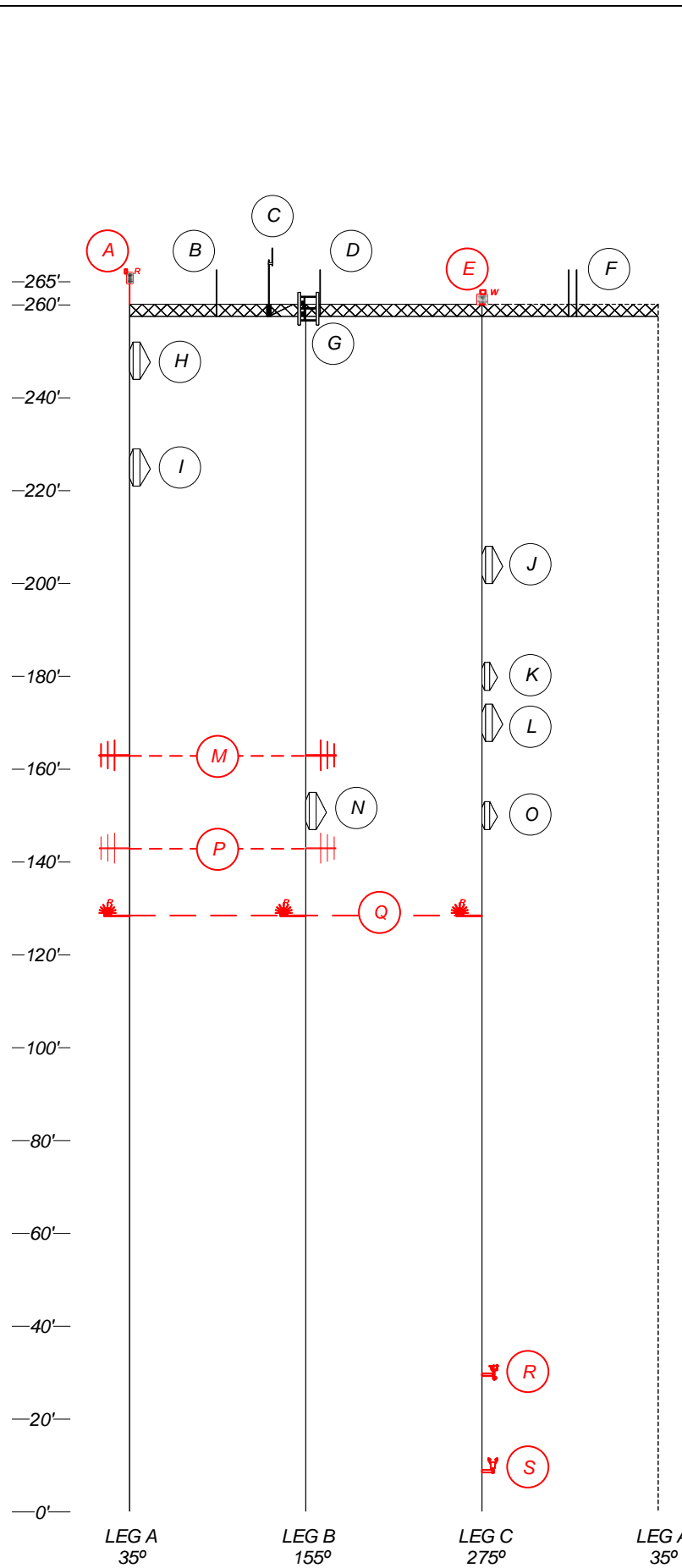
STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

SITE NAME	COUNTY	FINANCIAL PROJECT ID
PORT ORANGE	VOLUSIA	424401-1-52-01

PORT ORANGE COMM
BLDG PLANS

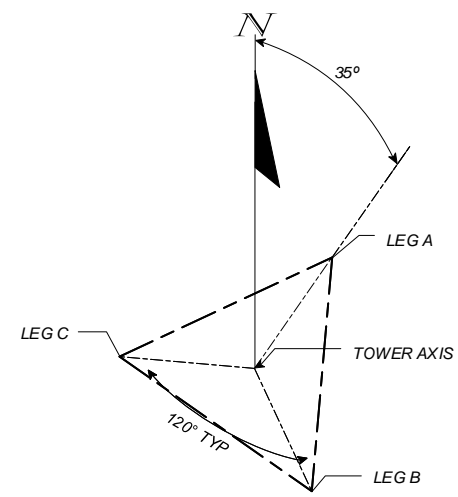
SHEET NO.

I-3

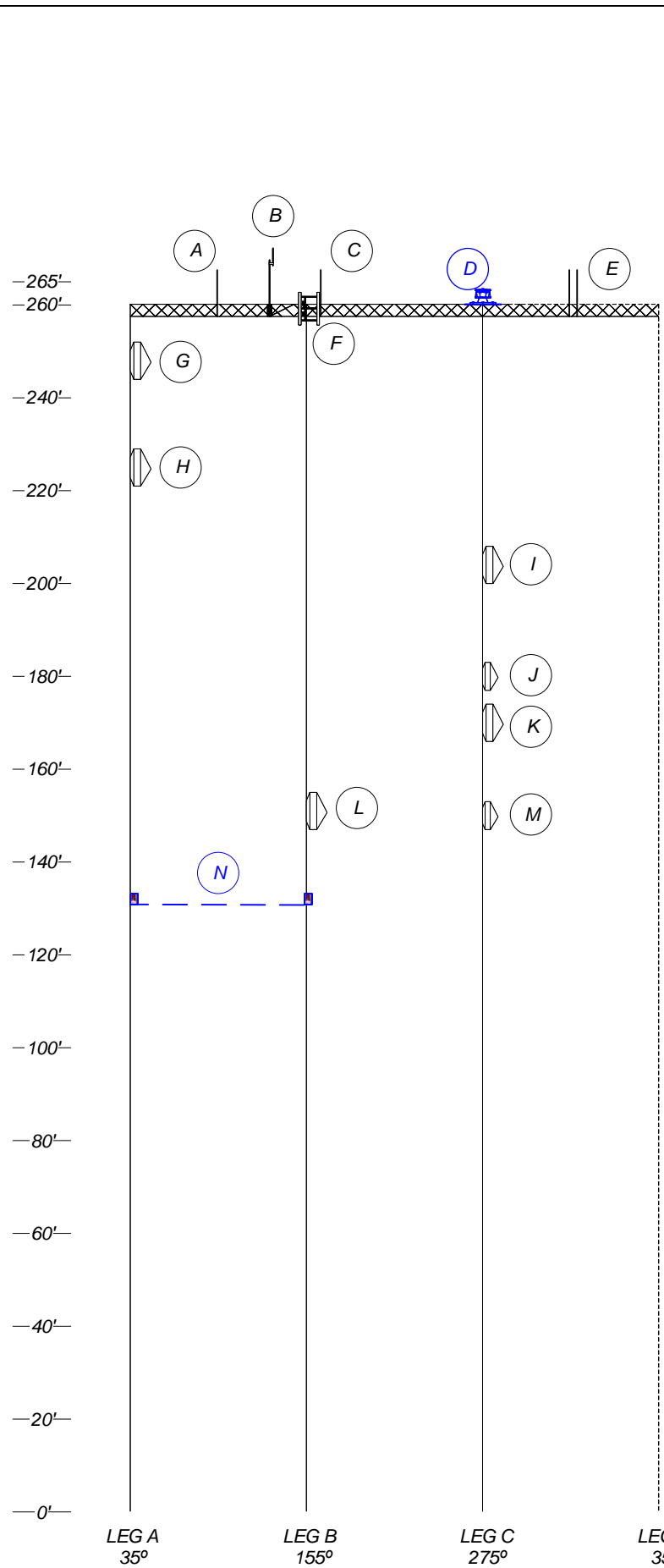


ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	RED BEACON	A	265' BASE	-	-	1
B	OMNI	A-B	258' BASE	-	-	-
C	LIGHTNING ROD	B	260' BASE	-	-	-
D	OMNI	B-C	258' BASE	7/8"	-	-
E	WHITE STROBE	C	260' BASE	1 5/8"	-	1
F	OMNI (2)	C-A	258' BASE	-	-	-
G	(2)DBB10-PS	B	256' (C.L.)	-	-	-
H	PA8-65	A	248' (C.L.)	WE-65	-	-
I	PA8-65	A	225' (C.L.)	WE-65	-	-
J	PA8-65	C	204' (C.L.)	WE-65	-	-
K	PA6-65 (JTF)	C	180' (C.L.)	-	-	-
L	PA8-65	C	170' (C.L.)	WE-65	-	-
M	DB-230-2	A,B	163' (C.L.)	1/2"	-	2
N	PA8-65	B	151' (C.L.)	WE-65	-	-
O	PA6-65 (JTF)	C	150' (C.L.)	WE-65	-	-
P	DB-230-2	A,B	143' (C.L.)	1/2"	-	2
Q	(3) SIDE MARKERS	A,B,C	130' BASE	-	-	1
R	WEATHER SENSORS	C	30' BASE	RS-232	-	2
S	VISIBILITY SENSOR W/ PIPE	C	10' BASE	RS-232	-	2

- NOTES:
1. 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 I-2 REMOVAL NOTE 1.
 2. VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE ANTENNAS, ASSOCIATED COAXIAL TRANSMISSION LINES, MOUNTING HARDWARE, AND SPDS.
 3. RESTORE SITE COMPOUND PER THESE PLANS.



EXISTING TOWER LOADING DIAGRAM



ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	OMNI	A-B	258' BASE	-	-	-
B	LIGHTNING ROD	B	260' BASE	-	-	-
C	OMNI	B-C	258' BASE	7/8"	-	-
D	TECHNOSTROBE DUAL LED FLASH HEAD	C	260' BASE	CONDUIT	-	1
E	OMNI (2)	C-A	258' BASE	-	-	-
F	(2)DBB10-PS	B	256' (C.L.)	-	-	-
G	PA8-65	A	248' (C.L.)	WE-65	-	-
H	PA8-65	A	225' (C.L.)	WE-65	-	-
I	PA8-65	C	204' (C.L.)	WE-65	-	-
J	PA6-65 (JTF)	C	180' (C.L.)	-	-	-
K	PA8-65	C	170' (C.L.)	WE-65	-	-
L	PA8-65	B	151' (C.L.)	WE-65	-	-
M	PA6-65 (JTF)	C	150' (C.L.)	WE-65	-	-
N	(2) LED SIDE MARKERS	A, B	130' BASE	SAME CONDUIT	-	1

- NOTES:
1. 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
PORT ORANGE	VOLUSIA	424401-1-52-01

PORT ORANGE
TOWER LOADING
DIAGRAM

SHEET NO.
I-4

https://skms-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**

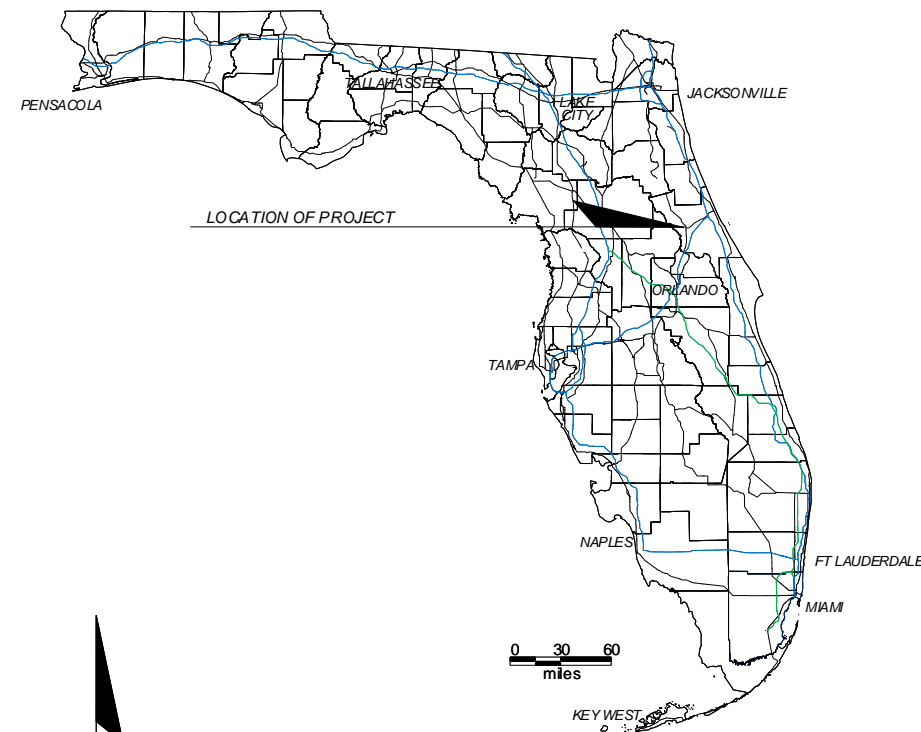
APPENDIX J

FINANCIAL PROJECT ID 424401-1-52-01
VOLUSIA COUNTY
DELAND (5-5939) LED TOWER OBSTRUCTION LIGHTING UPGRADE

INTELLIGENT TRANSPORTATION SYSTEMS PLANS

INDEX OF PLANS

SHEET NO.	SHEET DESCRIPTION
J-1	KEY SHEET
J-2	DELAND REMOVAL AND INSTALLATION NOTES
J-3	DELAND COMMUNICATIONS BUILDING DETAIL
J-4	DELAND TOWER LOADING DIAGRAM



DELAND TOWER SITE

TOWER SITE ADDRESS:

DELAND

719 S. WOODLAND BLVD.
DELAND, FL 32720

LATITUDE: 29-01-00.5 N (NAD 83)
LONGITUDE: 81-18-09.3 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					
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
DELAND	VOLUSIA	424401-1-52-01

**DELAND
KEY SHEET**

SHEET NO.

J-1

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 BEACON 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-230 ANTENNAS LABELED "K" AND "L" AND THE ASSOCIATED TRANSMISSION LINES AND ANTENNA MOUNTS ON THE EXISTING TOWER LOADING DETAIL ON SHEET J-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.

DELAND 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 "A" AND "J" ON THE PROPOSED TOWER LOADING DETAIL ON SHEET J-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 J-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 AIRPAX MODEL: LML1-1RLS4R-29954-10

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

IP ADDRESS: 172.16.136.14
SUBNET MASK: 255.255.254.0
DEFAULT GATEWAY: 172.16.136.19

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: DELAND DOT TECHNOSTROBE
SYSTEM DESCRIPTION: DELAND DOT TECHNOSTROBE TOWER LIGHTS
SYSTEM LOCATION: DELAND DOT
TRAP STATE: DELAND DOT
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

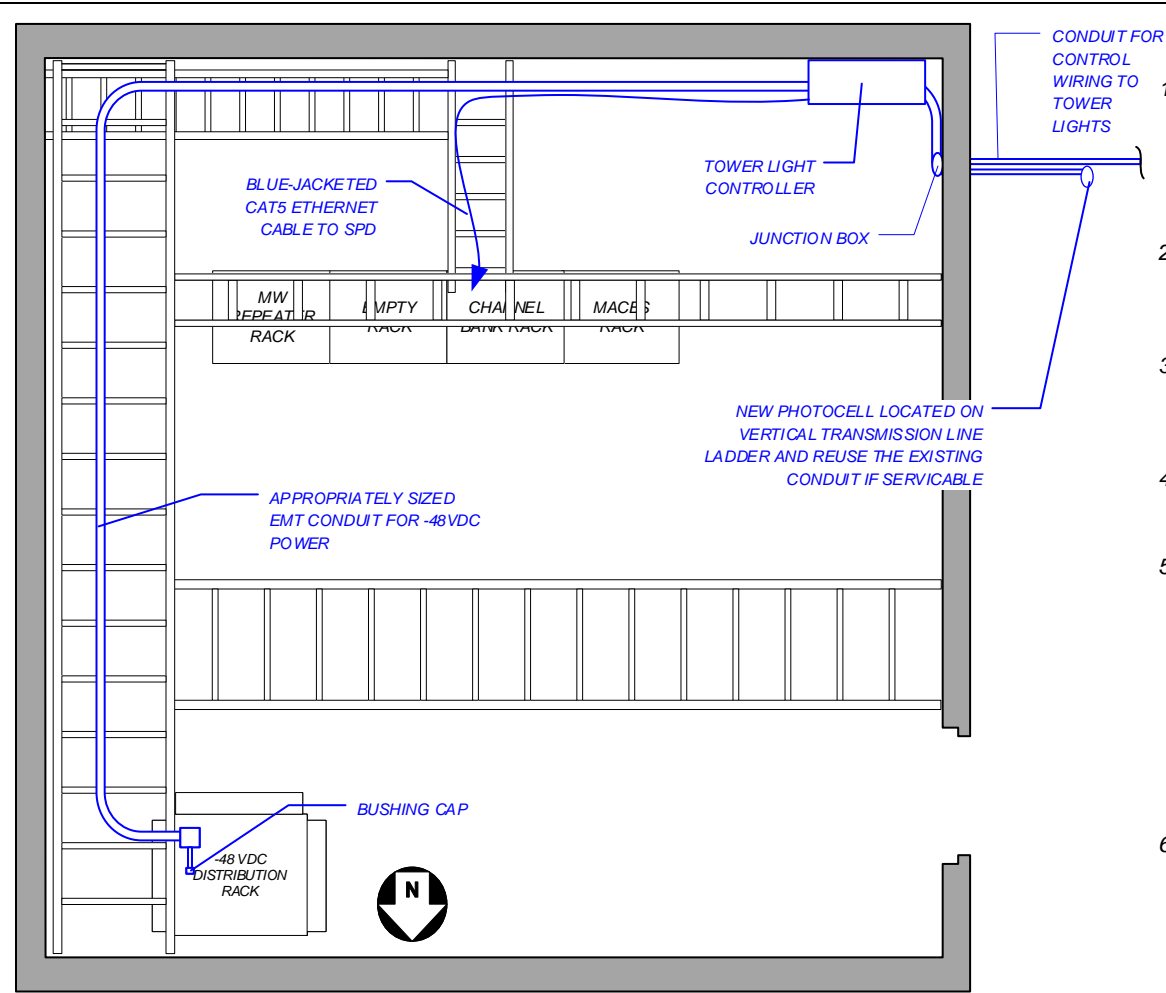
**STATE OF FLORIDA
 DEPARTMENT OF TRANSPORTATION**

SITE NAME	COUNTY	FINANCIAL PROJECT ID
DELAND	VOLUSIA	424401-1-52-01

**DELAND
 REMOVAL AND
 INSTALLATION NOTES**

SHEET NO.

J-2



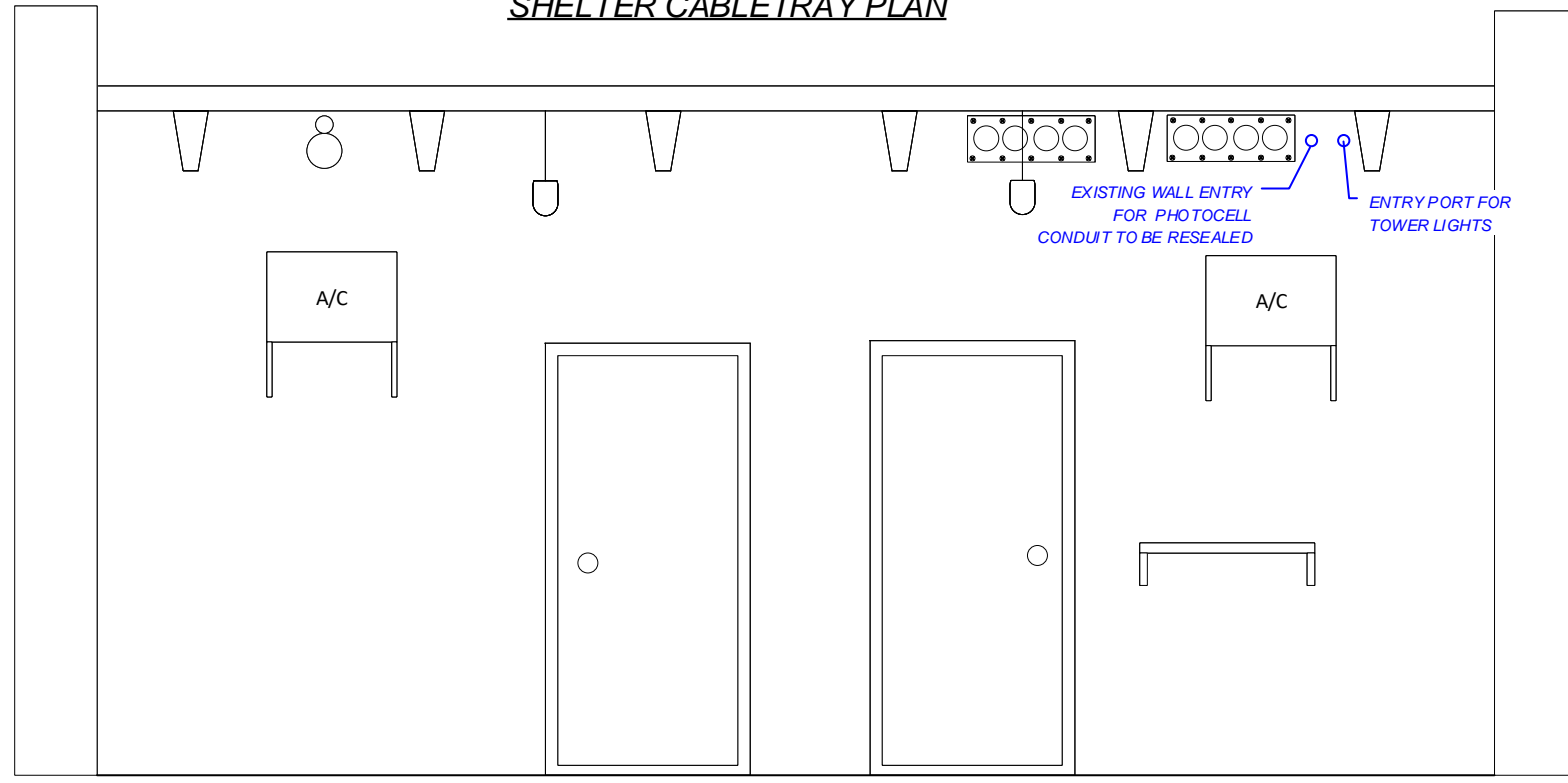
SHELTER CABLETRAY PLAN

NOTES

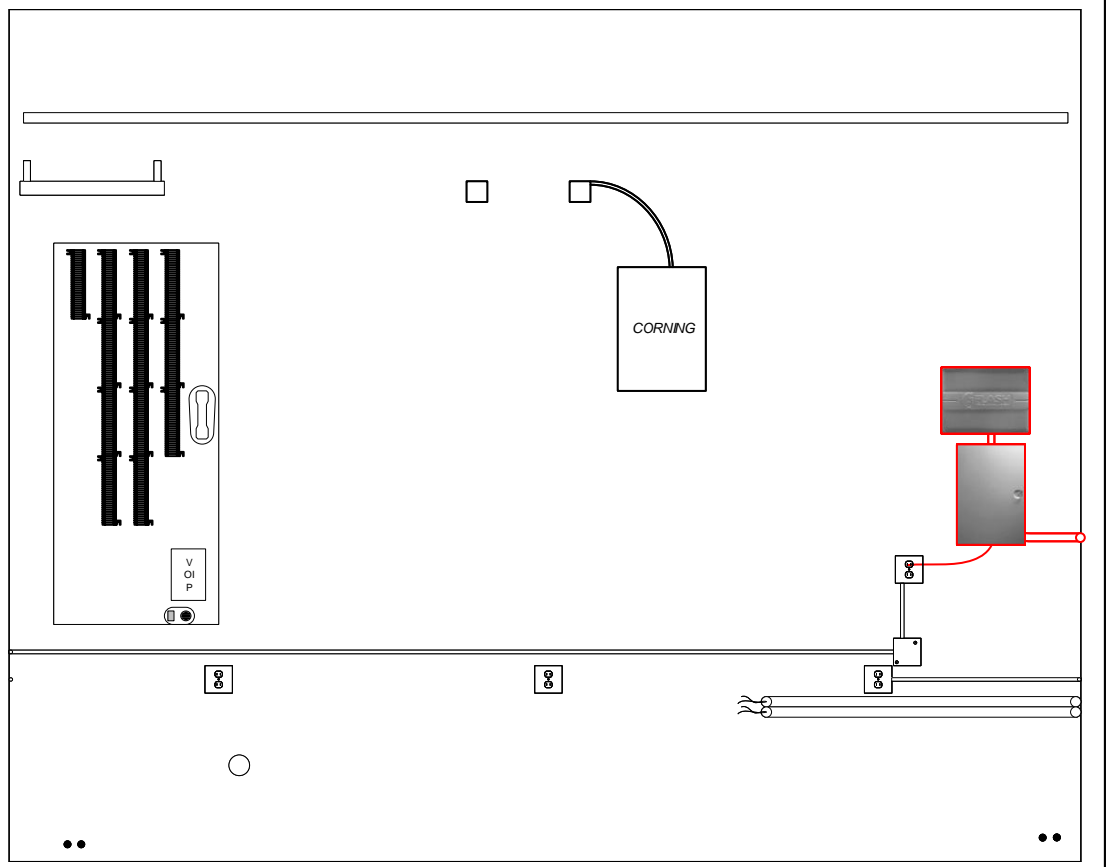
1. THE APPROXIMATE LOCATION OF THE EQUIPMENT IS FOR DIAGRAMMATICAL PURPOSES ONLY. THE VENDOR IS RESPONSIBLE FOR DETERMINING THE BEST LOCATIONS FOR EQUIPMENT AND ALL ASSOCIATED CONDUITS AND MOUNTING AND GROUNDING HARDWARE. THE VENDOR SHALL SUBMIT DETAILED PLANS FOR APPROVAL BY THE FDOT.
2. THE VENDOR 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 CUSTOM LENGTH BLUE-JACKETED CAT 5 CABLE FROM THE TECHNOSTROBE ETHERNET PORT TO THE NEWLY INSTALLED ETHERNET SPD IN THE CHANNEL BANK RACK, AND FROM THE 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.

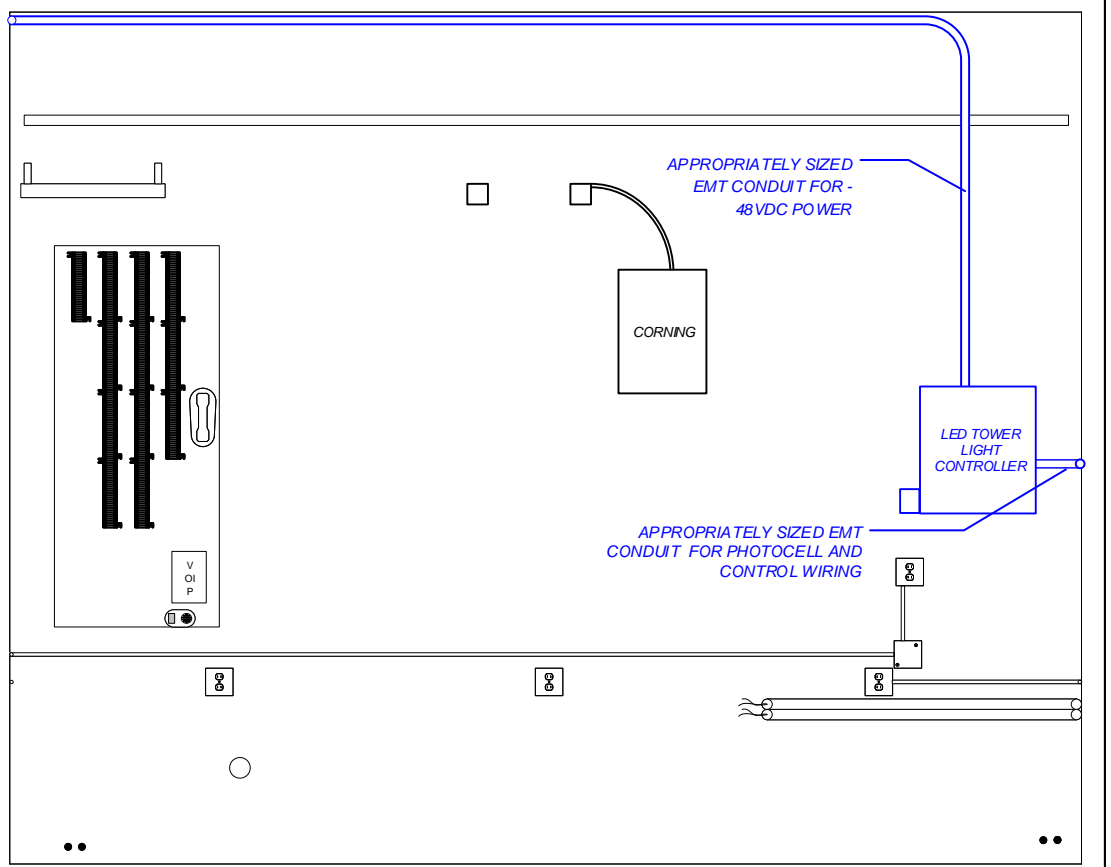
THE VENDOR SHALL CLEAN AND PREPARE ALL GROUND CONDUCTORS AND SURFACES PRIOR TO BONDS. ALL NON-CONDUCTING SURFACE COATINGS SHALL BE REMOVED BEFORE EACH CONNECTION IS MADE.



EXTERIOR WEST WALL



EXISTING INTERIOR SOUTH WALL



PROPOSED INTERIOR SOUTH WALL

LEGEND

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

CONTRACT PLANS RECORD					
DATE	REV.	DESCRIPTION	DATE	REV.	DESCRIPTION

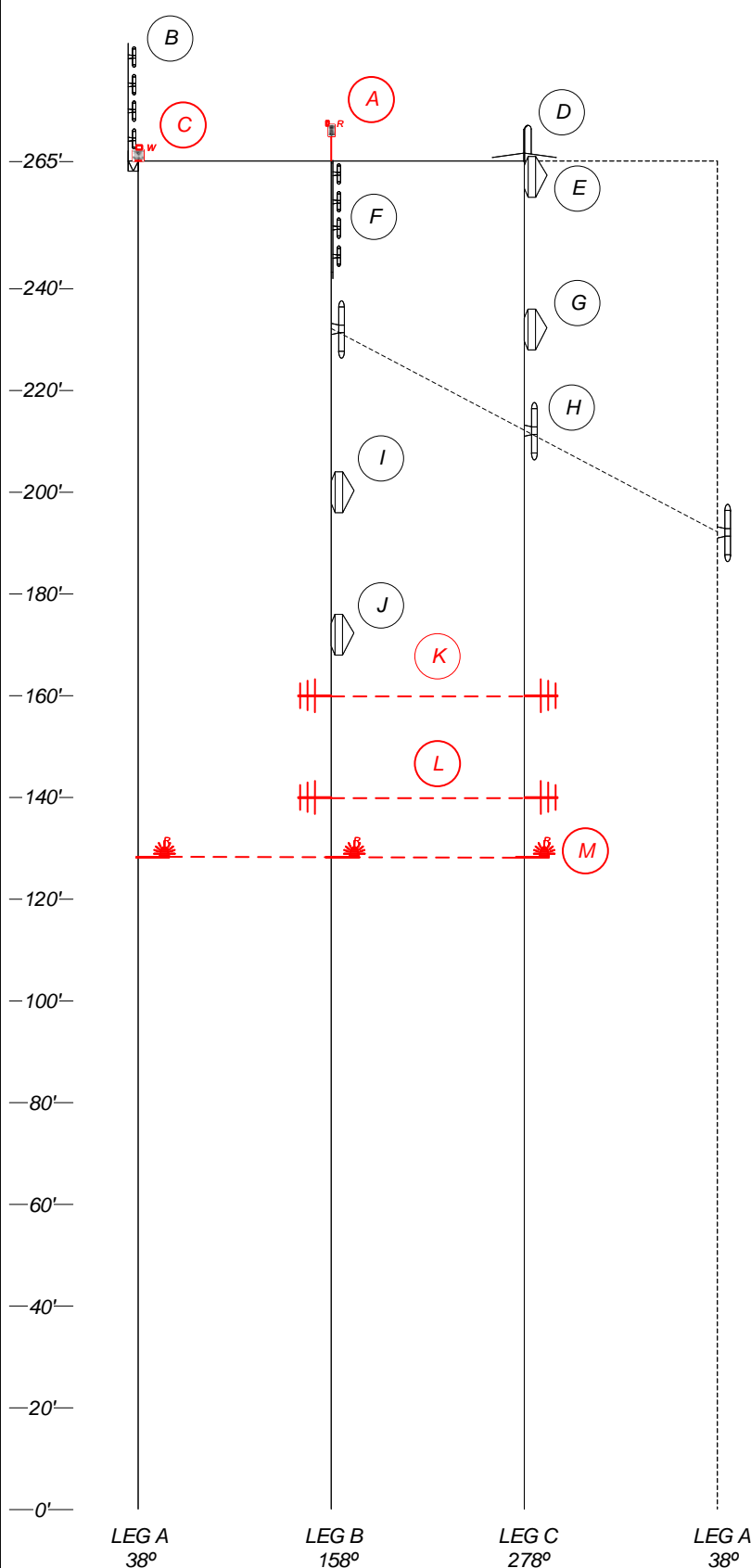
FDOT FLORIDA DEPARTMENT OF TRANSPORTATION
 605 SUWANNEE ST. MS 90
 TALLAHASSEE, FL 32399-0450
 PH. (850)-410-5600
 FAX. (850)-410-5501

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

**DELAND
COMM BLDG PLANS**

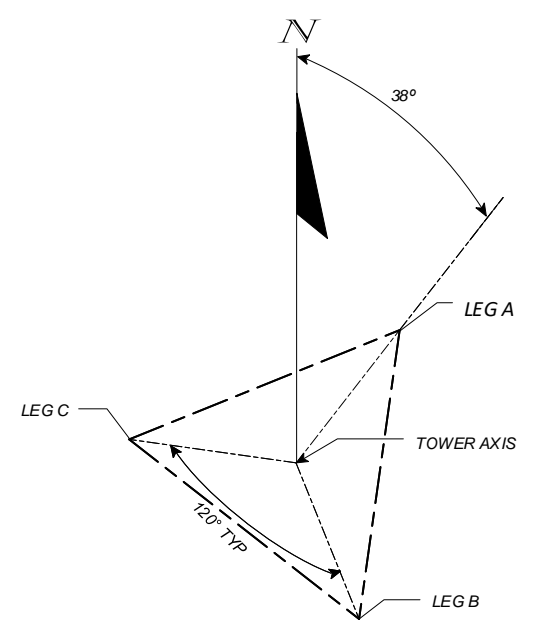
SHEET NO.
J-3

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

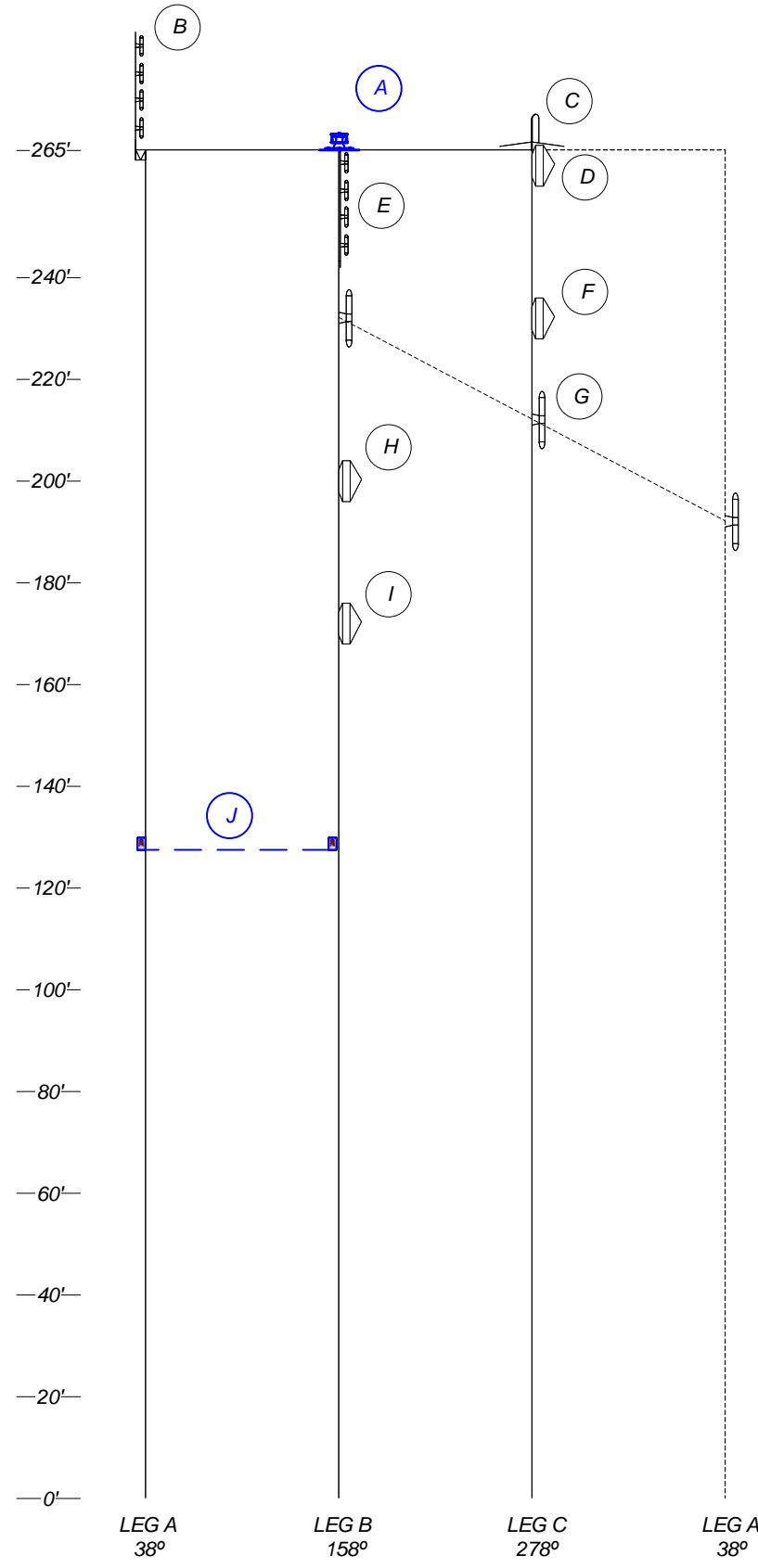


ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	AZIM.	NOTES
A	RED BEACON	B	270' BASE	-	-	1
B	DB-224E	A	265' BASE	7/8"	-	-
C	WHITE BEACON	A	265' BASE	-	-	1
D	DB-201	C	265' BASE	7/8"	-	-
E	PA8-65	C	262' (C.L.)	WE-65	191.9	-
F	DB-224E	B	242' BASE	7/8"	-	-
G	PA8-65	C	232' (C.L.)	WE-65	191.9	-
H	DB-212-3	B,C,A	232', 212', 192' (C.L.)	7/8"	-	-
I	PA8-65	B	200' (C.L.)	WE-65	75.5	-
J	PA8-65	B	172' (C.L.)	WE-65	75.5	-
K	DB-230-2	B,C	160' (C.L.)	1/2"	-	2
L	DB-230-2	B,C	140' (C.L.)	1/2"	-	2
M	SIDE MARKERS	A,B,C	133' (C.L.)	-	-	1

- NOTES:
1. 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 J-2 REMOVAL NOTE 1.
 2. VENDOR SHALL REMOVE AND PROPERLY DISPOSE OF THE ANTENNAS, ASSOCIATED COAXIAL TRANSMISSION LINES, MOUNTING HARDWARE, AND SPDS.
 3. RESTORE SITE COMPOUND PER THESE PLANS.



EXISTING TOWER LOADING DIAGRAM



PROPOSED TOWER LOADING DIAGRAM

ID	MODEL	LEG/FACE	MNT. HGT.	TX LINE	M.	NOTES
A	TECHNOSTROBE DUAL LED FLASH HEAD	B	270' BASE	CONDUIT		1
B	DB-224E	A	265' BASE	7/8"		-
C	DB-201	C	265' BASE	7/8"		-
D	PA8-65	C	262' (C.L.)	WE-65	1.9	-
E	DB-224E	B	242' BASE	7/8"		-
F	PA8-65	C	232' (C.L.)	WE-65	1.9	-
G	DB-212-3	B,C,A	232', 212', 192' (C.L.)	7/8"		-
H	PA8-65	B	200' (C.L.)	WE-65	.5	-
I	PA8-65	B	172' (C.L.)	WE-65	.5	-
J	(2) SIDE MARKERS	A, B	133' (C.L.)	SAME CONDUIT		1

- NOTES:
1. 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
DELAND	VOLUSIA	424401-1-52-01

**DELAND
TOWER LOADING
DIAGRAM**

SHEET NO.
J-4

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