COMPONENTS OF CONTRACT PLANS SET
SIGNALIZATION PLANS

TOWN OF SURFSIDE

TRAFFIC SIGNAL MODIFICATIONS

HARDING AVENUE AND 88 STREET
HARDING AVENUE AND 93 STREET
HARDING AVENUE AND 94 STREET

PROJECT LOCATION

INDEX OF SIGNALIZATION PLANS

<table>
<thead>
<tr>
<th>SHEET NO.</th>
<th>SHEET DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-1</td>
<td>KEY SHEET</td>
</tr>
<tr>
<td>T-2</td>
<td>TABULATION OF QUANTITIES</td>
</tr>
<tr>
<td>T-3</td>
<td>SIGNALIZATION GENERAL NOTES</td>
</tr>
<tr>
<td>T-4 - T-6</td>
<td>SIGNALIZATION PLAN</td>
</tr>
<tr>
<td>T-7 - T-8</td>
<td>MIAMI-DADE COUNTY LOOP INSTALLATION DETAILS</td>
</tr>
<tr>
<td>T-9 - T-10</td>
<td>MIAMI-DADE COUNTY VIDEO VEHICLE DETECTION DETAILS</td>
</tr>
</tbody>
</table>

MAYMI-DADE COUNTY REFERENCE # 2017000223

GOVERNING STANDARDS AND SPECIFICATIONS:
Florida Department of Transportation, 2018 Design Standards and Revised Index Drawings as Appended Herein, and 2016 Standard Specifications for Road and Bridge Construction, as Amended by Contract Documents.

For Design Standards revisions click on the “Design Standards” link at following web site:
http://www.fdot.gov/roadway/DesignStandards.shtm

For the Standard Specifications for Road and Bridge Construction click on the “Specifications” link at the following web site:
http://www.fdot.gov/programmanagement/implemented/SpecsBook

REVISIONS

GENERAL NOTES - SHEET T-3 (REVISED 08-20-16)
TABULATION OF QUANTITIES - SHEET T-3 (REVISED 12-28-16)
SIGNALIZATION PLAN SHEETS T-4, T-5, T-6, T-7 (REVISED 12-28-16)

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NOT FOR CONSTRUCTION
ELEVATIONS SHOWN ARE NAVD 1988

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

PROJECT LOCATIONS
### Tabulation of Quantities

<table>
<thead>
<tr>
<th>PAY ITEM NO.</th>
<th>DESCRIPTION</th>
<th>UNIT</th>
<th>T-4</th>
<th>T-5</th>
<th>T-6</th>
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<tr>
<td>101-3</td>
<td>MOBILIZATION</td>
<td>LS</td>
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<td>102-1</td>
<td>MAINTENANCE OF TRAFFIC</td>
<td>LS</td>
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<tr>
<td>104-JB</td>
<td>INLET PROTECTION SYSTEM</td>
<td>EA</td>
<td>8</td>
<td>6</td>
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<tr>
<td>110-2-1</td>
<td>CLEANING AND GRUBBING</td>
<td>LS</td>
<td>1</td>
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<td>1</td>
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<tr>
<td>122-1</td>
<td>CONCRETE SIDEWALK AND DRIVEWAYS, 4&quot; THICK (INCLUDES REMOVAL AND REPAIRS)</td>
<td>LS</td>
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<tr>
<td>630-2-11</td>
<td>CONDUIT, (16&quot;) (OPEN TRENCH)</td>
<td>LF</td>
<td>20</td>
<td>60</td>
<td>140</td>
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<tr>
<td>630-2-12</td>
<td>CONDUIT, (16&quot;) (DIRECTORIAL BORE)</td>
<td>LF</td>
<td>190</td>
<td>150</td>
<td>140</td>
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<td>632-7-2</td>
<td>SIGNAL CABLE, REPAIR/REPLACE/OTHER (16&quot;)</td>
<td>LF</td>
<td>190</td>
<td>170</td>
<td>140</td>
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<tr>
<td>635-2-11</td>
<td>POOL &amp; SPHERE BOX (16&quot;) (13&quot;X24&quot; COVER SIZE)</td>
<td>EA</td>
<td>6</td>
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<td>5</td>
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<tr>
<td>646-1-11</td>
<td>ALUMINUM SIGNALS POLE (16&quot;) PEDESTAL</td>
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<tr>
<td>646-1-60</td>
<td>ALUMINUM SIGNALS POLE (REMOVE)</td>
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<td>653-1-11</td>
<td>PEDESTRIAN SIGNAL (16&quot;) (LED COUNTDOWN) (1 WAY)</td>
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<td>653-1-12</td>
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<tr>
<td>653-1-60</td>
<td>PEDESTRIAN SIGNAL, REMOVE</td>
<td>AS</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>660-1-101</td>
<td>LOOP DETECTOR INDUCTIVE (16&quot;) TYPE B</td>
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<td>5</td>
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<tr>
<td>660-2-102</td>
<td>LOOP ASSEMBLY (16&quot;) TYPE A</td>
<td>EA</td>
<td>2</td>
<td>2</td>
<td>5</td>
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<tr>
<td>660-4-11</td>
<td>VEHICLE DETECTION SYSTEM (VIDEO) (16&quot;) INSTALL CABINET EQUIPMENT</td>
<td>EA</td>
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<tr>
<td>660-4-12</td>
<td>VEHICLE DETECTION SYSTEM (VIDEO) (16&quot;) ABOVE GROUND EQUIPMENT</td>
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<td>1</td>
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<tr>
<td>665-1-11</td>
<td>PEDESTRIAN DETECTOR (16&quot;) INCLUDES MD-03 TION</td>
<td>EA</td>
<td>8</td>
<td>8</td>
<td>24</td>
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<tr>
<td>665-1-60</td>
<td>PEDESTRIAN DETECTOR (REMOVE)</td>
<td>EA</td>
<td>3</td>
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<tr>
<td>670-5-400</td>
<td>TRAFFIC CONTROLLER ASSEMBLY, MODIFY</td>
<td>AS</td>
<td>1</td>
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</tr>
</tbody>
</table>

### Notes

- **522-1 includes the cost of concrete sidewalk removal and repairs for the installation of new pull boxes and pedestrian poles. Saw cutting of the existing sidewalk shall be made only at the nearest flag joints.**

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**For Bidding Purposes Only**

**Not for Construction**

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**Town of Surfside**

**Project No.**

**City**

**Date**

**Sheet No.**

**T-2**
1. THE CONTRACTOR SHALL PERFORM AN INVENTORY OF THE EXISTING INTERSECTIONS PRIOR TO THE BEGINNING CONSTRUCTION ACTIVITIES, AND SUBMIT TWO (2) COPIES OF THE INVENTORY REPORT, LISTING ALL OPERABLE AND INOPERABLE SIGNAL ITEMS TO THE ENGINEER. ALL DAMAGED ITEMS SHOULD BE CLEARLY IDENTIFIED IN THE REPORT.


3. ALL ELECTRICAL AND ELECTRONIC EQUIPMENT AND STRUCTURES SHALL COMPLY WITH THE FOOT APL AND THE MIAMI Dade COUNTY GFL.

4. THE SIGNAL-MAINTEINANCE AGENCY IS:
MIAMI Dade COUNTY PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT, TRAFFIC SIGNAL & SIGN DIVISION.

5. THE CONTRACTOR SHALL NOTIFY THE MAINTEINANCE AGENCY AT LEAST FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY WORK TO BE CARRIED OUT AT ANY SIGNAL RELATED INSTALLATION AND UTILILITY OWNERS LISTED BELOW:

DADE COUNTY PUBLIC WORKS AND TRAFFIC / LISA: 786-3450986 / OCTAVE: 786-308-1168
FLORIDA POWER & LIGHT (DADE) / ANGEL LARRAMENDI / 305-325-5152
FLORIDA POWER & LIGHT (TRANSMISSION) / SEYED HAJIASSADOLLAH / DAY: 305-228-5220 / ALT: 305-495-8601
MOTIONE COMMUNICATIONS / WALTER SANCHO AVILA / DAY: 954-417-3536 / ALT: 954-248-7398
TECO PEOPLE GAS SOUTH FLORIDA / ALEX ROYCE / 954-453-0811
AT&T DISTRIBUTION / STEVE LOW / DAY: 305-222-8745

6. FULL BOXES, MAST ARM FOUNDATIONS AND CONTROLLER FOUNDATIONS SHALL HAVE A MINIMUM 4” CLEARANCE FROM ALL JOINTS AND EDGE OF SIDEWALK. THERE SHALL BE NO EXPANSION MATERIAL AROUND PULL BOXES, MAST ARM FOUNDATIONS AND CONTROLLER FOUNDATIONS.

7. ALL SALVAGEABLE SIGNAL EQUIPMENT THAT ARE REMOVED MUST BE DELIVERED AND LOADED AT THE MIAMI-DADE COUNTY PUBLIC WORKS AND WASTE MANAGEMENT TRAFFIC SIGNALS & SIGNS DIVISION:

7100 N.W. 36TH STREET
MIAMI, FLORIDA 33163
RECEIPTS MUST BE OBTAINED FROM THE ABOVE AGENCY AND SUBMITTED TO THE PROJECT ENGINEER TO RECEIVE PAYMENT FOR REMOVAL ITEMS.

8. SIGNAL EQUIPMENT CONSIDERED SALVAGEABLE IS AS FOLLOWS:

CONTROLLERS, CONTROLLER CABINETS, CONTROLLER HARDWARE AND SOFTWARE, FLASHERS, COMMUNICATION DEVICES AND HARDWARE, SIGNAL HEADS, MAST-ARM POLES AND ASSOCIATED HARDWARE, MOUNTED MAST ARM SIGNS, PEDESTRIAN DETECTORS, PEDESTRIAN SIGNAL HEADS. ALL OTHER EQUIPMENT SHALL BE DISPOSED OF AT THE CONTRACTOR’S EXPENSE.

9. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT IN WRITING, NO LESS THAN 14 WORKING DAYS IN ADVANCE OF THE NEED OF ELECTRICAL POWER SERVICE HOOKUPS OF SIGNALIZATION / STREET LIGHTING FACILITIES. THE CONTRACTOR SHALL SUBMIT A LETTER OF REQUEST ALONG WITH AN AFFIDAVIT OF GENERAL ELECTRICAL WORK, SIGNED AND CERTIFIED BY A MASTER ELECTRICIAN.

10. INSTALLATIONS OF NEW PULL BOXES SHALL BE PERFORMED BY A QUALIFIED ELECTRICAL CONTRACTOR. WHEN NEW PULL BOX IS REPLACING EXISTING PULL BOX, THE CONTRACTOR SHALL ADJUST CONDUITS AND CABLES TO FIT THE NEW PULL BOX ELEVATION. COST OF ADJUSTMENTS IS INCLUDED IN THE PULL BOX PAY ITEM.

11. THE CONTRACTOR SHALL CONSTRUCT CONCRETE SLABS AROUND ALL PULL BOXES, MAST ARM POLES, CONTROLLERS, SERVICE POINTS AND ELECTRICAL DEVICES LOCATED IN UNPAVED/GRASS AREA. SEE INDEX 17500 FOR DETAILS AND NOTES. COST OF THE SLAB CONSTRUCTION, INCLUDING REINFORCED STEEL FABRIC, SHALL BE INCLUDED IN THE RELATED PAY ITEMS FOR PULL BOXES, MAST ARM POLES, CONTROLLERS, SERVICE POINTS AND ELECTRICAL DEVICES.

12. THE CONTRACTOR SHALL RESPOND TO ALL OUTAGE CALLS AND DISPATCHED MALFUNCTIONS OF TRAFFIC SIGNAL WITHIN (2) HOURS. CLEAR DISPATCHES WITH THE TRAFFIC CONTROL CENTER (TCC) OPERATOR OR TIMING ENGINEER AT 305-592-8925 EXT. 248.

13. THE CONTRACTOR SHALL NOTIFY THE MIAMI Dade COUNTY PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT, TRAFFIC SIGNAL & SIGN DIVISION DAILY, VIA E-MAIL AND FAX 305-477-6422, OF THE SIGNAL AND ELECTRICAL WORK LOCATIONS. ALL THE DAILY E-MAILS AND FAXES SHALL BE SENT BETWEEN 7:00 AM AND 8:00 AM.

14. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF FOUR (4) SPARE SIGNAL CONDUCTORS FROM EXISTING MAST ARM AND PEDESTRIAN POLES TO THE CONTROLLER CABINET.

15. GALVANIZED STEEL COUPLINGS AND FITTINGS WHEN INSTALLED IN DIRECT CONTACT WITH THE SOIL OR IN CONCRETE SHALL BE COATED WITH A PROTECTIVE ANTI-CORROSION PAINT, ASPHALT COMPOUND, OR OTHER EQUIVALENT PROTECTION TO HELP PREVENT CORROSION.
TYPICAL MAST ARM VIDEO DETECTOR MOUNTING DETAILS

GENERAL NOTES:
1. MEET THE REQUIREMENTS OF MIAMI-DADE COUNTY TRAFFIC CONTROL, EQUIPMENT STANDARDS AND SPECIFICATIONS. EACH INTERSECTION MUST BE INDIVIDUALLY CONSIDERED. THIS INCLUDES SITE-SPECIFIC EQUIPMENT PLACEMENT REQUIREMENTS AND DETECTION ZONE REQUIREMENTS.
2. REFER TO FDOT APPROVED PRODUCT LIST (APL) AND THE MIAMI-DADE COUNTY TRAFFIC SIGNALS AND SIGNS DIVISIONS QUALIFIED PRODUCT LIST FOR VIDEO DETECTOR SYSTEMS AND MOUNTING HARDWARE APPROVED FOR USE IN MIAMI-DADE COUNTY SUBMIT SHOP DRAWINGS FOR APPROVAL BEFORE INSTALLATION.
3. TYPICAL INSTALLATION WILL REQUIRE ONE CAMERA PLACED ON THE LANE LINE BETWEEN THE INBOUND THROUGH LANE AND LEFT TURN LANE.
4. APPROACHES WITH MORE THAN FOUR LANE REQUIRE TWO CAMERAS PER APPROACH. COUNT CYCLE LANE AS A HALF LANE WHEN USING TWO CAMERAS, PLACE ONE BETWEEN THE LEFT LANE AND THE OTHER IN A POSITION THAT CENTERS THE CAMERA TO COVER ALL THE THROUGH LANE. THE CAMERA MUST BE ORIENTED SO THAT THE STOP BAR IS PARALLEL WITH THE BOTTOM OF THE WAVE.
5. WHEN PROPOSED VIDEO DETECTION CAMERAS ARE LOCATED AT A HORIZONTAL DISTANCE FROM 40 TO 100 FEET FROM THE STOP BAR AND NUMBER OF APPROACH LANE EXCEED THREE (3) OR 33 FEET TOTAL WIDTH, INDIVIDUAL VIDEO DETECTORS MUST BE INSTALLED FOR EACH CONTROLLER TIMING FUNCTION.
6. CHECK FOR ANYTHING THAT MIGHT BLOCK THE FIELD OF VIEW OR IMPACT VEHICLE TRACKING SUCH AS TREES, OVERHEAD WIRING, AND COMMERCIAL LIGHT SOURCES.
7. REVIEW THE PLACEMENT OF THE VIDEO IMAGE DETECTION DEVICES AND COORDINATE WITH THE ENGINEER OF RECORD TO CONFIRM THE MOST OPTIMAL LOCATION FOR THE INSTALLATION OF THE VIDEO IMAGE DETECTION DEVICES TO MEET THE PERFORMANCE REQUIREMENTS OF THE TECHNICAL SPECIFICATIONS OF AN APPROVED PRODUCT.
8. CONSIDER CAMERA CABLE(S) THROUGH THE MOUNT'S GUSSETED TUBE AND NEATLY PLACE DRIP LOOP INTO THE MAST ARM MOUNTING EXPOSED CABLE(S). WAVE ACCESS HOLE MUST NOT EXCEED ONE INCH IN DIAMETER AND MUST INCLUDE A RUBBER GROMMET DRILL HOLE AS TO NOT DAMAGE EXISTING SIGNAL CABLES. UTILIZE EXISTING ACCESS WHEREVER POSSIBLE.
9. MEET ALL GROUNDING AND SURGE PROTECTIVE DEVICE (SPD) REQUIREMENTS OF SECTION 602 OF THE FDOT STANDARD SPECIFICATIONS.
10. MAKE THE VIDEO DETECTION SYSTEM OPERATIONAL IMMEDIATELY UPON INSTALLATION, REMOVING THE ASSOCIATED MINOR MOVEMENTS FROM RECALL.
11. ZOOM AND FOCUS THE CAMERA TO INCLUDE ALL LANE WRAPPING DETECTION. HORIZON MUST NOT BE VISIBLE IN THE IMAGE.
12. ALL OSHA CLEARANCE REQUIREMENTS FOR MAINTAINING SAFE DISTANCES TO OVERHEAD ELECTRIC FACILITIES WHILE PERFORMING CAMERA MAINTENANCE SHALL BE ACHIEVED BY CORRECT CAMERA MOUNTING LOCATION AND ANGLE. CAMERAS TAKING INTO CONSIDERATION ITS RELATION TO THE RIDING AND SETTING SUN TO BEST AVOID "SUNBURST" AND "WATERFALL" EFFECTS DEMONSTRATED ON WET ROADWAYS.
13. ALL EXTERIOR VIDEO CABLE FITTINGS SHALL HAVE A WATER AND WEATHER-PROOF BOOT.
14. CAMERA TERMINALS THAT REQUIRE CABLE SPlicing IN THE FIELD MUST BE MADE WITH MECHANICAL CONNECTORS OR TERMINAL LUGS NO ELECTRICAL WIRE NUTS WILL BE ALLOWED AS A MEANS OF TERMINATION.
15. SIGNAL CONTRACTOR IS RESPONSIBLE FOR INITIAL DETECTION ZONE SET UP. COORDINATE WITH MIAMI-DADE COUNTY PRIOR TO SET UP.
16. VIDEO DETECTION SETUP WILL BE SUCH THAT NO FALSE OR DROPPED CALLS ARE OBSERVED.
17. DETECTION ZONE OUTPUT MUST BE PROGRAMMED TO CALL APPROPRIATE TIMING PHASES ASSIGNED TO CAMERA APPROACH. ONE VIDEO PROCESSOR CARD PER CAMERA. ONE DETECTION ZONE PER LANE ON APPROACH.
18. ALL MINIMUM REQUIREMENTS LISTED ABOVE MUST BE DEMONSTRATED PRIOR TO FINAL APPROVAL OF VIDEO DETECTION SYSTEM INSTALLATION.

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