SIGNALIZATION PLANS

TOWN OF SURFSIDE

TRAFFIC SIGNAL MODIFICATIONS

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

INDEX OF SIGNALIZATION PLANS

SHEET NO. SHEET DESCRIPTION

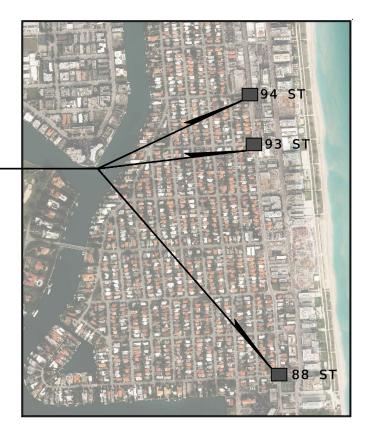
T - 1 KEY SHEET

T-2 TABULATION OF QUANTITIES
T-3 SIGNALIZATION GENERAL NOTES

T-4 - T-6 SIGNALIZATION PLAN

T-7 - T-8 MIAMI-DADE COUNTY LOOP INSTALLATION DETAILS
T-9 - T-10 MIAMI-DADE COUNTY VIDEO VEHICLE DETECTION DETAILS

MIAMI-DADE COUNTY REFERENCE # 2017000223



PROJECT LOCATIONS

GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, 2016 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 "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 08-30-16)
↑ ↑ ABULATION OF QUANTITIES - SHEET T-2 (REVISED 12-28-16)
↑ ↑ SIGNALIZATION PLAN SHEETS T-4, T-5, T-6, T-7 (REVISED 12-28-16)







SIGNALIZATION SHOP DRAWINGS TO BE SUBMITTED TO:

DIANA RIVAS, P.E.
CALVIN, GIORDANO & ASSOCIATES INC.
1800 ELLER DRIVE
SUITE 600
FORT LAUDERDALE, FL 33316
PHONE: 954-921-7781
FAX: 954-921-8807
PLANS PREPARED BY:



Calvin, Giordano & Associates, Inc.

1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316 Phone: 954.921.7781 ≠ Fax: 954.921.8807 Certificate of Authorization 514 VENDOR LD. NO. 65-01-360

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

KEY SHEET REVISIONS

12-28-16 MIAMI-DADE COUNTY
COMMENTS

SIGNALIZATION PLANS ENGINEER OF RECORD: <u>DIANA RIVAS, P.E.</u>

P.E. NO.: 74568



| FISCAL | SHEET |
|--------|-------|
| YEAR | NO. |
| 16 | T-1 |

FOR BIDDING PURPOSES ONLY NOT FOR CONSTRUCTION

| PAY ITEM | DECCRIPTION | UNIT | | SHEET NU | HEET NUMBERS | | | GRAND TOTAL | |
|---------------|---|------|------------|--|--------------|--|------|----------------|-------|
| NO. | DESCRIPTION DESCRIPTION | | T - 4 | T - 4 T - 5 | | T - 6 | 10 | IAL | SHEET |
| | | | PLAN FINAL | PLAN I | FINAL | PLAN FINAL | PLAN | FINAL | |
| 101-1 | MOBILIZATION | L5 | 1 | | | A. A | 1 | | |
| 102-1 | MAINTENANCE OF TRAFFIC | LS | 1 | | | | 1 | | |
| 104-18 | INLET PROTECTION SYSTEM | EA | 8 | 6 | | 2 | 16 | | |
| 110-1-1 | CLEARING AND GRUBBING | LS | 1 | | | | 1 | | |
| 522 - 1 | CONCRETE SIDEWALKAND DRIVEWAYS, 4" THICK (INCLUDES REMOVAL AND REPAIRS) | LS | 1 | | | | 1 | | |
| 630-2-11 | CONDUIT, (F&I) (OPEN TRENCH) | LF | 20 | 60 | | 60 | 140 | | |
| 630-2-12 | CONDUIT, (F&I) (DIRECTIONAL BORE) | LF | 190 | 170 | | 180 | 540 | | |
| 632-7-2 | SIGNAL CABLE, REPAIR/REPLACE/OTHER (F&I) | LF | 190 | 170 | | 180 | 540 | | · |
| 635-2-11 | PULL & SPLICE BOX (F&I) (13"x24" COVER SIZE) | EA | 6 | 6 | | 5 | 17 | | |
| 646 - 1 - 11 | ALUMINUM SIGNALS POLE (F&I) PEDESTAL | EA | 2 | 2 | | 1 | 5 | | |
| 646 - 1 - 60 | ALUMINUM SIGNALS POLE (REMOVE) | EA | 1 | 1 | | | 2 | | |
| 653-1-11 | PEDESTRIAN SIGNAL (F&I) (LED COUNTDOWN) (1 WAY) | | | | | | 4 | | |
| 653-1-12 | PEDESTRIAN SIGNAL (F&I) (LED COUNTDOWN) (2 WAYS) | AS | 2 | 2 | | | 4 | | |
| 653-1-40 | PEDESTRIAN SIGNAL, RELOCATE | AS | | | | 1 | 1 | | |
| 653-1-60 | PEDESTRIAN SIGNAL (REMOVE) | AS | 6 | 2 | | | 8 | | |
| 660 - 1 - 109 | LOOP DETECTOR INDUCTIVE (F&I) TYPE 9 | EA | 2 | 2 | | 1 | 5 | | |
| 660-2-101 | LOOP ASSEMBLY (F&I) TYPE A | EA | 2 | 2 | | 1 | 5 | | |
| 660-4-11 | VEHICLE DETECTION SYSTEM (VIDEO) (F&I) INSTALL CABINET EQUIPMENT | | 1 | 1 | | | | | |
| 660-4-12 | VEHICLE DETECTION SYSTEM (VIDEO) (F&I) ABOVE GROUND EQUIPMENT | EA | | | | 1 | 1 | | |
| 665-1-11 | PEDESTRIAN DETECTOR (F&I) INCLUDES R10-031 SIGN | EA | 8 | 8 | | 8 | 24 | | |
| 665-1-60 | PEDESTRIAN DETECTOR (REMOVE) | EA | 3 | | | | 3 | | |
| 670 - 5 - 400 | TRAFFIC CONTROLLER ASSEMBLY, MODIFY | AS | 1 | 1 | | 1 | 3 | | |
| | | | | THE STATE OF THE S | | | | | |

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.

FOR BIDDING PURPOSES ONLY NOT FOR CONSTRUCTION



| ぢ | | | | | |
|---------|----------|------------------------------|-------|-------------|--|
| oje | | REVIS | SIONS | | |
| ā | DATE | DESCRIPTION | DATE | DESCRIPTION | |
| ۵ | 8/20/16 | ⚠ FDOT COMMENTS 8/20/2016 | | | |
| ame | 11/21/16 | ⚠ MIAMI-DADE COUNTY COMMENTS | | | |
| File No | 12/28/16 | MIAMI-DADE COUNTY COMMENTS | | | |



| l S™ | | |
|------|----------|-------------|
| 316 | CITY | PROJECT NO. |
| | TOWN OF | |
| | SURFSIDE | |

TABULATION OF QUANTITIES

SHEET NO.

FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT 6 SIGNALIZATION PLAN NOTES

- 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.
- 2. GOVERNING STANDARDS AND SPECIFICATIONS FOR SIGNALIZATION ITEMS OF WORK ARE: THE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS, THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS FOR ROAD AND BRIDGE CONSTRUCTION, THE TRAFFIC CONTROL EQUIPMENT SPECIFICATIONS AND STANDARDS FOR THE METRO TRAFFIC CONTROL SYSTEM MIAMI—DADE COUNTY 2000 EDITION; MODIFICATIONS TO TRAFFIC CONTROL EQUIPMENT SPECIFICATIONS AND STANDARDS FOR THE METRO TRAFFIC CONTROL SYSTEM MIAMI—DADE COUNTY 2000 EDITION.
- 3. ALL ELECTRICAL AND ELECTRONIC EQUIPMENT AND STRUCTURES SHALL COMPLY WITH THE FDOT APL AND THE MIAMI DADE COUNTY QPL.
- . THE SIGNAL-MAINTAINING AGENCY IS:

MIAMI DADE COUNTY PUBLIC WORKS AND WASTE MANAGEMENT DEPARTMENT. TRAFFIC SIGNAL & SIGN DIVISION.

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

AMERICAN TRAFFIC SOLUTIONS / KIMBERLY GREIS / DAY: 631-242-4100 / EMERG: 866-682-8669 & SANTIAGO MARTINEZ / 480-443-7000 DADE COUNTY PUBLIC WORKS AND TRAFFIC / LISA: 786-3450986 / OCTAVIO: 786-306-1168
FLORIDA POWER & LIGHT (DADE) (ELECTRIC) / ANGEL LARRAMENDI / 386-329-5152
FLORIDA POWER & LIGHT (TRANSMISSION) / SEYED HAJASSADOLLAH / DAY: 305-228-5290 / ALT: 305-495-8601
ATLANTIC BROADBAND / PETE FREYTAG / DAY: 305861-8069 x 5208 / ALT: 786-251-5989 & EDWIN ZAMBRANA / 305-861-8069 / EXT. 5411
HOTWIRE COMMUNICATIONS / WALTER SANCHO DAVILA / DAY: 954-417-3606 / ALT: 954-248-7396
TECO PEOPLE GAS SOUTH FLORIDA / ALEX ROCHE / 954-453-0811
AT&T DISTRIBUTION / STEVE LOW / DAY: 305-222-8745

- 6. PULL 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 UNLOADED AT THE, MIAMI-DADE COUNTY PUBLIC WORKS AND WASTE MANAGEMENT TRAFFIC SIGNALS & SIGNS DIVISION:

7100 N.W. 36TH STREET MIAMI, FLORIDA 33166

RECEIPTS MUST BE OBTAINED FROM THE ABOVE AGENCY AND SUBMITTED TO THE PROJECT ENGINEER TO RECEIVE PAYMENT FOR REMOVAL ITEMS.

- . 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 TROUBLE CALL DISPATCHES AND REPORTED 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 PUBLIC WORK 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 ANTICORROSION PAINT, ASPHALT COMPOUND, OR OTHER EQUIVALENT PROTECTION TO HELP PREVENT DETERIORATION.

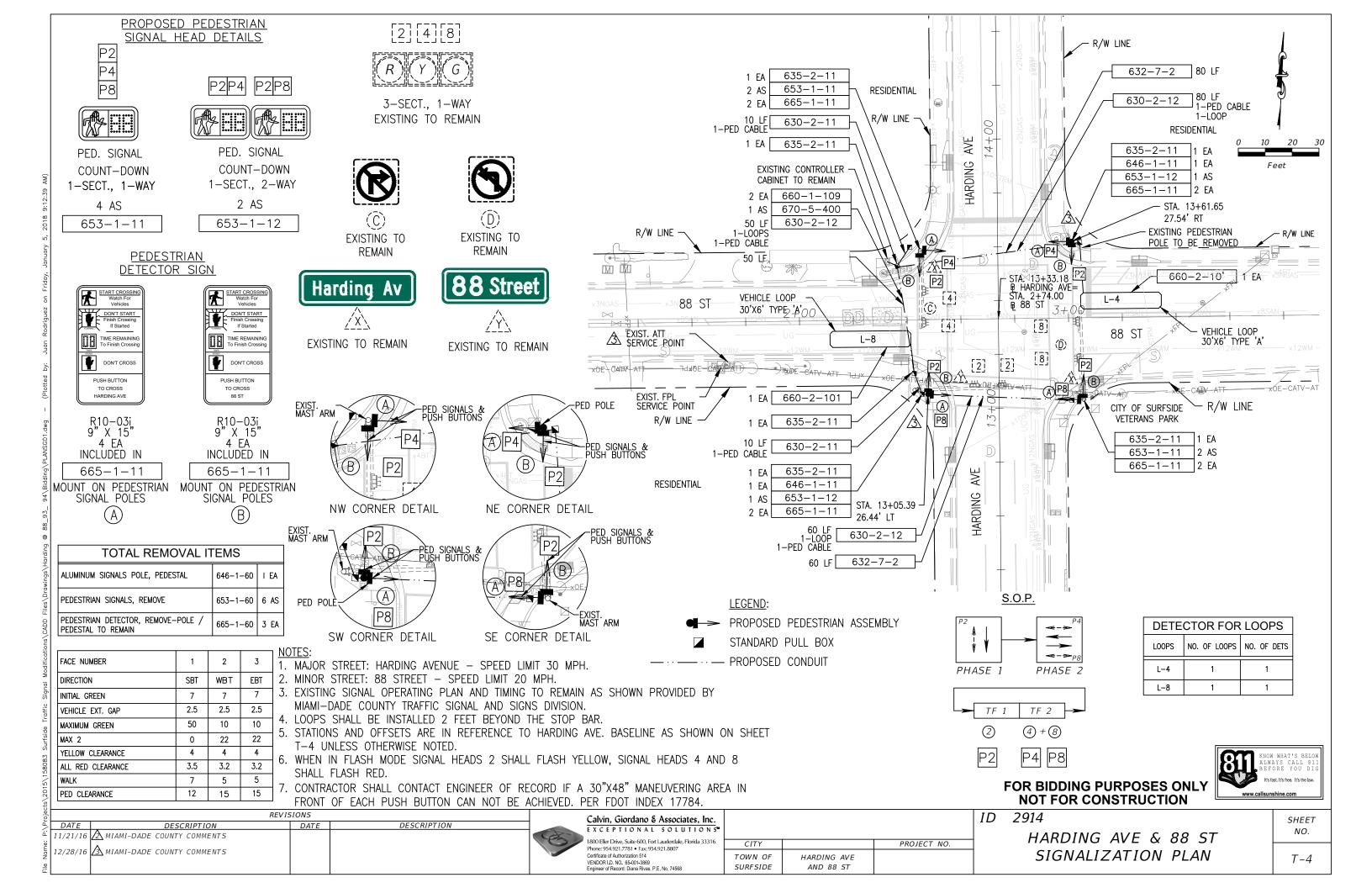
RNOW WHAT'S BELOW ALWAYS CALL 811 BEFORE YOU DIG It's fast. It's free. It's the law.

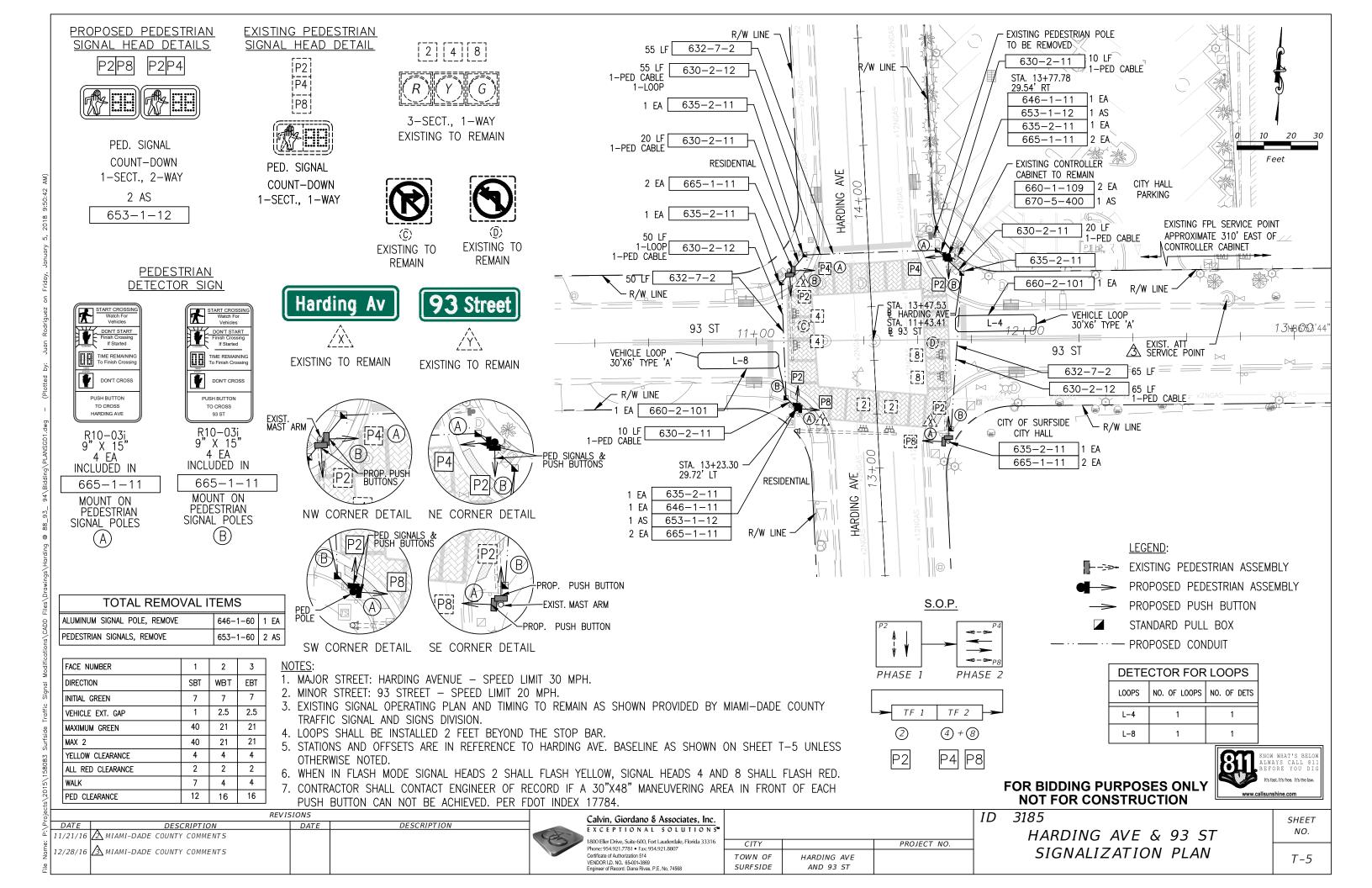
FOR BIDDING PURPOSES ONLY NOT FOR CONSTRUCTION

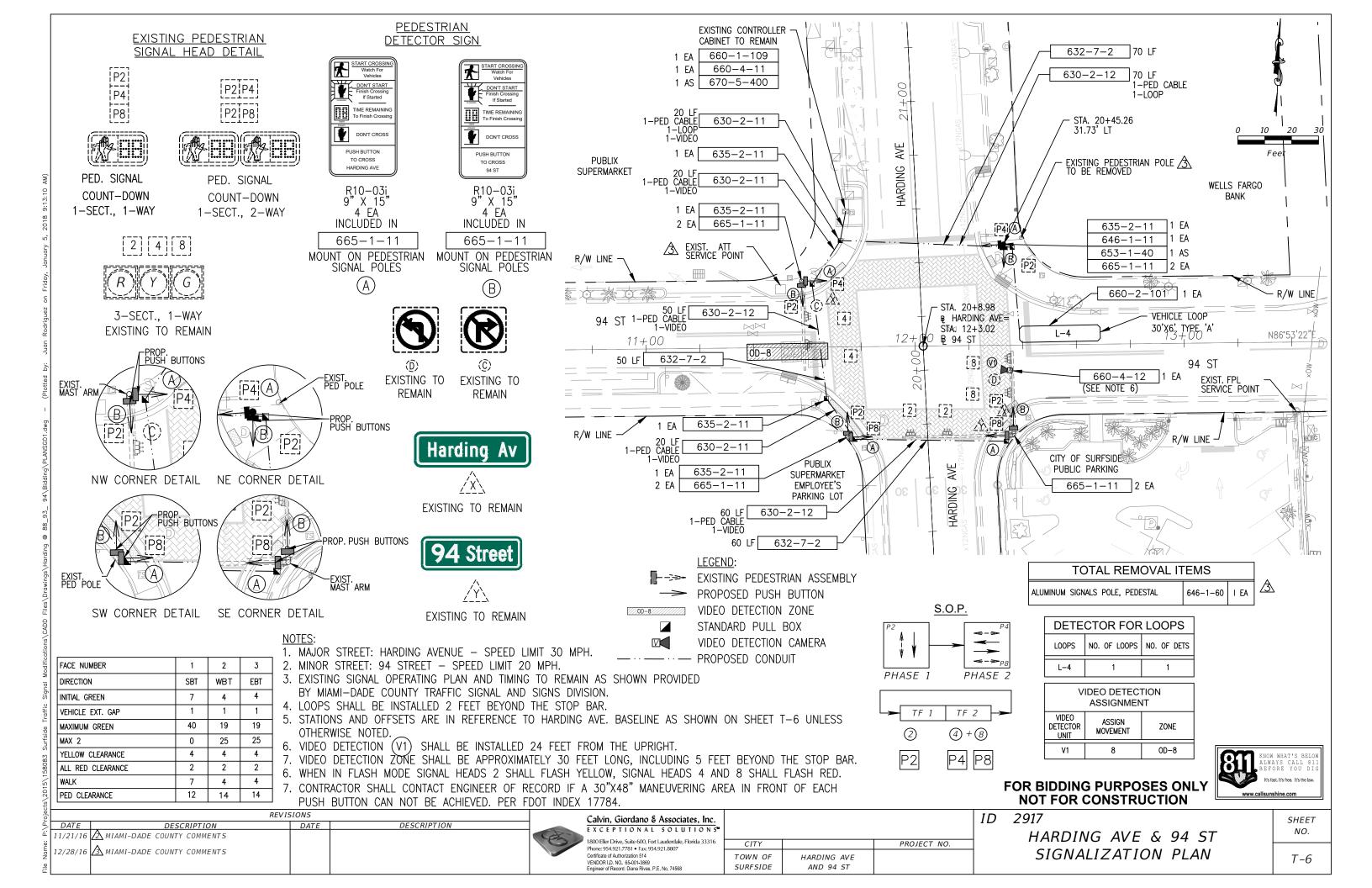
| | REVISIONS | | | | Calvin, Giordano & Associates, |
|------|-----------------|------|-------------|------|---|
| TE | DESCRIPTION | DATE | DESCRIPTION | | EXCEPTIONAL SOLUTION |
| 0/16 | ⚠ FDOT COMMENTS | | | Colo | 1800 Eller Drive, Suite 600, Fort Lauderdale, Florida |
| | | | | | Phone: 954.921.7781 • Fax: 954.921.8807 |
| | | | | | Certificate of Authorization 514 |
| | | | | | VENDOR I.D. NO. 65-001-3869 |
| - 1 | | | | | Engineer of Record: Diana Rivas, P.E. No. 74568 |

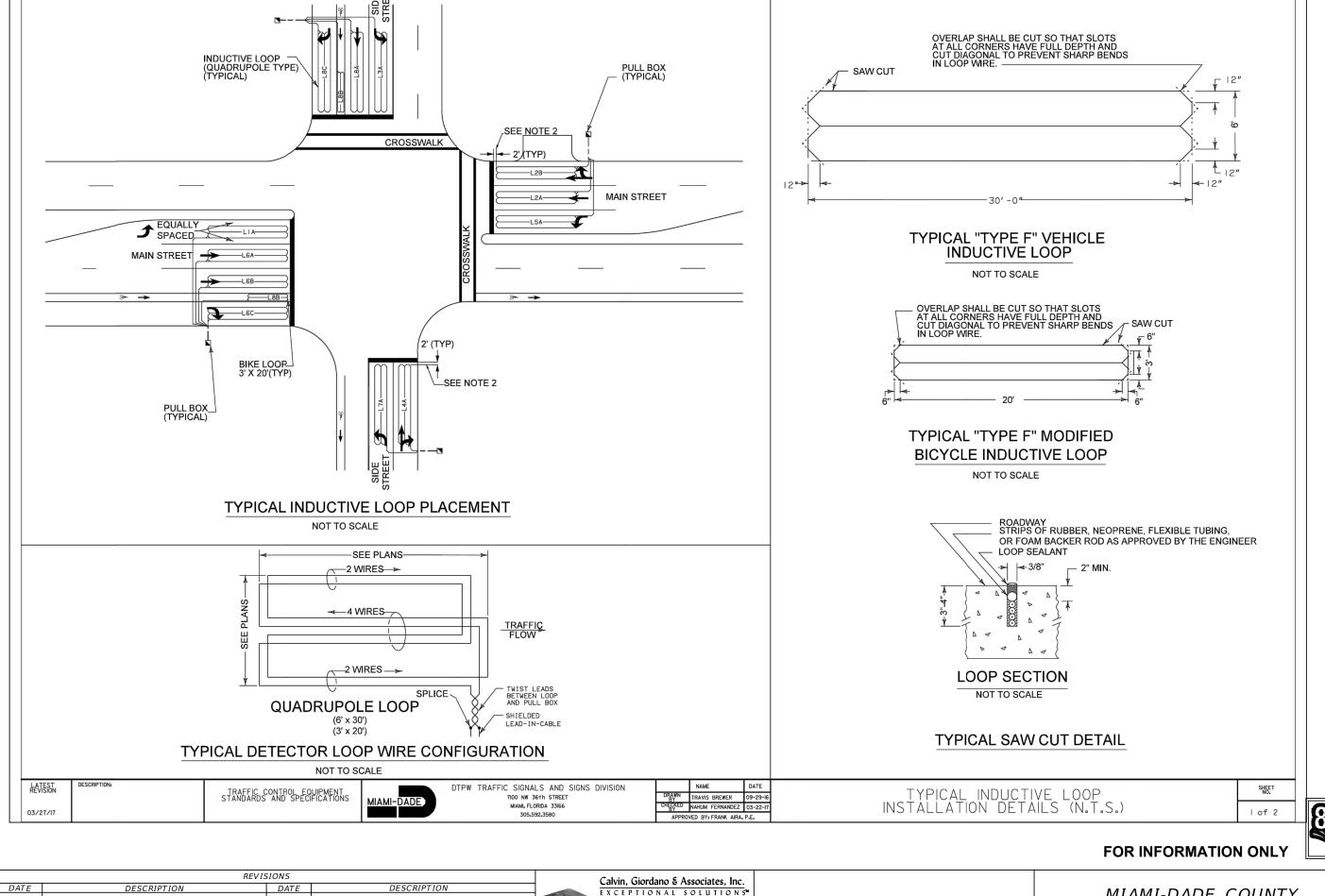
| Calvin, Giordano & Associates, Inc. | | |
|--|---------------------|-------------|
| EXCEPTIONAL SOLUTIONS ** | | |
| 800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316 Phone: 954.921.7781 • Fax: 954.921.8807 | CITY | PROJECT NO. |
| Dertificate of Authorization 514 /ENDOR I.D. NO. 65-001-3869 Engineer of Record: Diana Rivas, P.E. No. 74568 | TOWN OF SURFSIDE | |

SIGNALIZATION GENERAL NOTES SHEET NO.









1800 Eller Drive, Suite 600, Fort Lauderdale, Florida . Phone: 954.921.7781 • Fax: 954.921.8807 Certificate of Authorization 514 VENDOR I.D. NO. 65-001-3869



| O N S™ | | | |
|--------|----------|-------------|--|
| 33316 | CITY | PROJECT NO. | |
| | TOWN OF | | |
| | SURFSIDE | | |

MIAMI-DADE COUNTY LOOP INSTALLATION DETAILS SHEET NO.

CONSTRUCTION NOTES:

DRILL A HOLE 1/2" TO 1" LARGER IN DIAMETER THAN THE FLEXIBLE CONDUIT TO BE USED THROUGH THE ROADWAY ASPHALT (OR CONCRETE) SURFACE AND BASE AT AN APPROPIATE ANGLE TO INTERCEPT THE TRENCH OR PULL BOX HOLE. PLACE A PREDETERMINED LENGTH OF NON-METALLIC FLEXIBLE CONDUIT IN THE HOLE AND DRIVE THE CONDUIT INTO THE TRENCH OR HOLE. THE TOP OF THE CONDUIT SHALL BE APPROXIMATELY 3" BELOW THE ROADWAY SURFACE. FILL THE HOLE WITH LOOP SEALANT TO THE LEVEL OF THE ROADWAY SURFACE. A NONMETALLIC MATERIAL SHOULD BE USED TO PREVENT EXCESSIVE LOOP SEALANT FROM ENTERING THE NON-METALLIC FLEXIBLE CONDUIT.

TYPICAL SECTION VIEW OF INDUCTIVE LOOP WIRE THROUGH CURB TO PULL BOX.

NOT TO SCALE

LATEST REVISION TRAFFIC CONTROL EQUIPMENT STANDARDS AND SPECIFICATIONS 03/27/17



DTPW TRAFFIC SIGNALS AND SIGNS DIVISION 7100 NW 36th STREET MIAMI, FLORIDA 33166

TRAVIS BREWER 09-29-16 CHECKED NAHUM FERNANDEZ 03-22-17 APPROVED BY: FRANK AIRA, P.E.

GENERAL NOTES:

- 1. MEET THE REQUIREMENTS OF MIAMI-DADE COUNTY TRAFFIC CONTROL EQUIPMENT STANDARDS AND SPECIFICATIONS SECTION 660 (VEHICLE DETECTION SYSTEMS).
- THE STANDARD PLACEMENT OF THE LEADING EDGE OF TYPE F LOOP IS TWO FEET BEFORE THE STOP BAR BUT MAY EXTEND A MAXIMUM OF 10 FEET PAST THE STOP BAR TO MEET SITE-SPECIFIC ENGINEERING REQUIREMENTS. EACH INTERSECTION MUST BE INDIVIDUALLY DESIGNED AND IF THE AFOREMENTIONED MODIFICATION IS REQUIRED IT MUST BE NOTED OR DETAILED IN THE PLANS.UNDER NO CIRCUMSTANCES MAY THE LOOP OR SAW-CUT ENCROACH INTO A CROSSWALK.
- 3. IF THE LOOP LEAD-IN IS 75' OR LESS FROM THE EDGE OF THE LOOP DETECTOR TO CONTROLLER CABINET, CONTINUE THE TWISTED PAIR TO THE CABINET. IF THE LOOP LEAD-IN IS GREATER THAN 75' CONTINUE THE TWISTED PAIR TO THE SPECIFIED PULL BOX, SPLICE TO SHIELDED LEAD-IN WIRE AND CONTINUE TO THE CONTROLLER CABINET.
- 4. THE WIDTH OF ALL SAW CUTS SHALL BE SUFFICIENT TO ALLOW UNFORCED PLACEMENT OF LOOP WIRES OR LEAD-IN CABLES INTO THE SAW CUT. THE DEPTH OF ALL SAW CUTS, EXCEPT ACROSS EXPANSION JOINTS SHALL BE STANDARD 3 INCHES WITH A MAXIMUM OF 4 INCHES.
- 5. LOOP LEAD-IN WIRES MUST NOT BE INSTALLED IN THE SAME PULL BOX WITH
- 6. THE MINIMUM DISTANCE BETWEEN THE TWISTED PAIRS OF LOOP LEAD-IN WIRE IS 6 INCH FROM THE LOOP TO 12 INCH FROM THE PAVEMENT EDGE OR CURB.
- 7. THE MAXIMUM AREA OF ASPHALT TO BE DISTURBED SHALL BE 4"X 4". THIS AREA SHALL BE RESTORED AS DIRECTED BY THE ENGINEER.
- 8. LOOP LEAD-IN WIRES MUST BE 6 INCHES APART WHERE THERE ARE MULTIPLE LOOPS.

TYPICAL INDUCTIVE LOOP INSTALLATION DETAILS (N.T.S.)

SHEET NO. 2 of 2

FOR INFORMATION ONLY

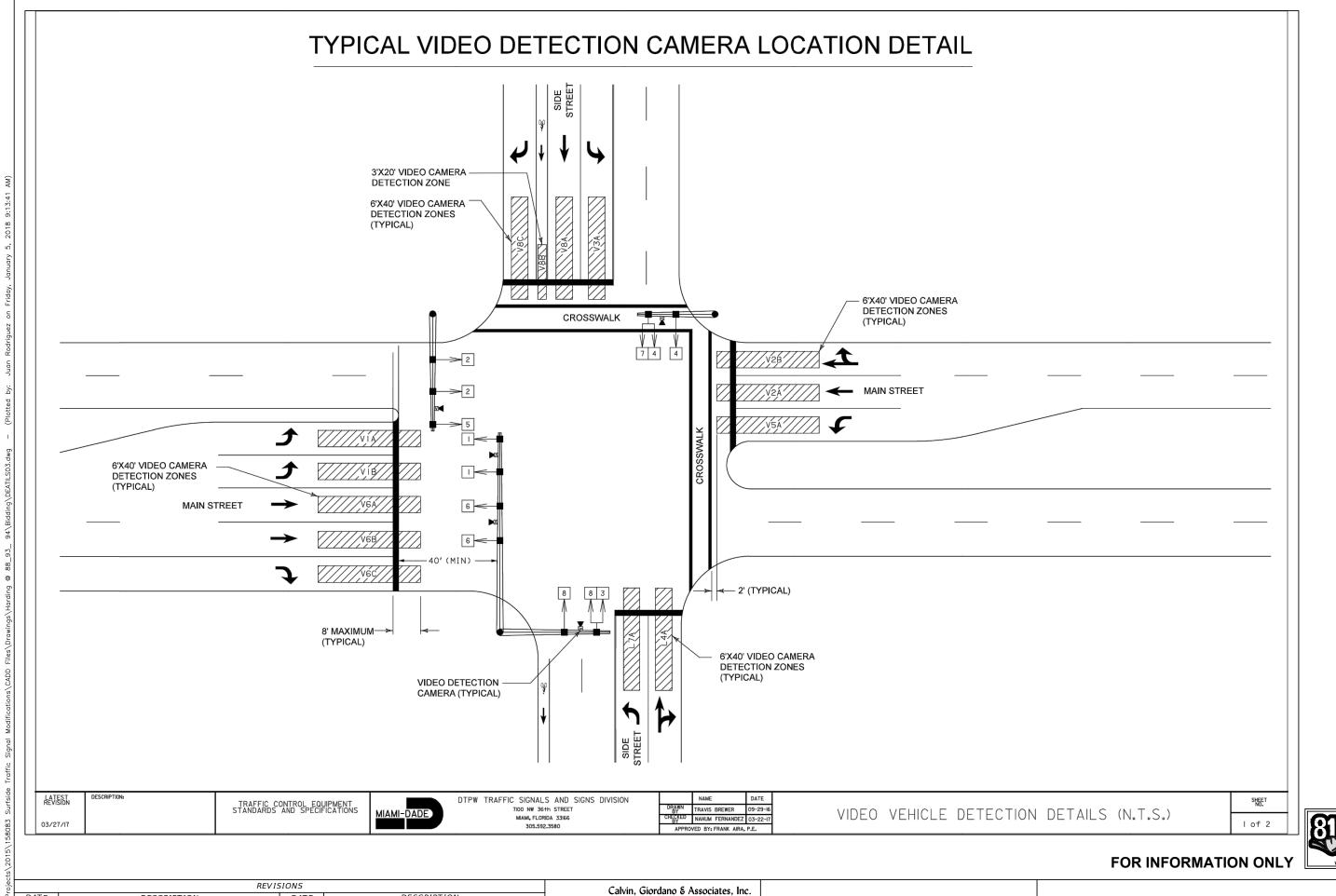
REVISIONS DESCRIPTION DESCRIPTION DATE

Phone: 954.921.7781 • Fax: 954.921.8807 Certificate of Authorization 514 VENDOR I.D. NO. 65-001-3869

Calvin, Giordano & Associates, Inc. EXCEPTIONAL SOLUTIONS 1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316

CITY PROJECT NO. TOWN OF SURFSIDE

MIAMI-DADE COUNTY LOOP INSTALLATION DETAILS SHEET NO.



EXCEPTIONAL SOLUTIONS

1800 Eller Drive, Suite 600, Fort Lauderdale, Florida 33316

Phone: 954.921.7781 • Fax: 954.921.8807 Certificate of Authorization 514 VENDOR I.D. NO. 65-001-3869

CITY

TOWN OF

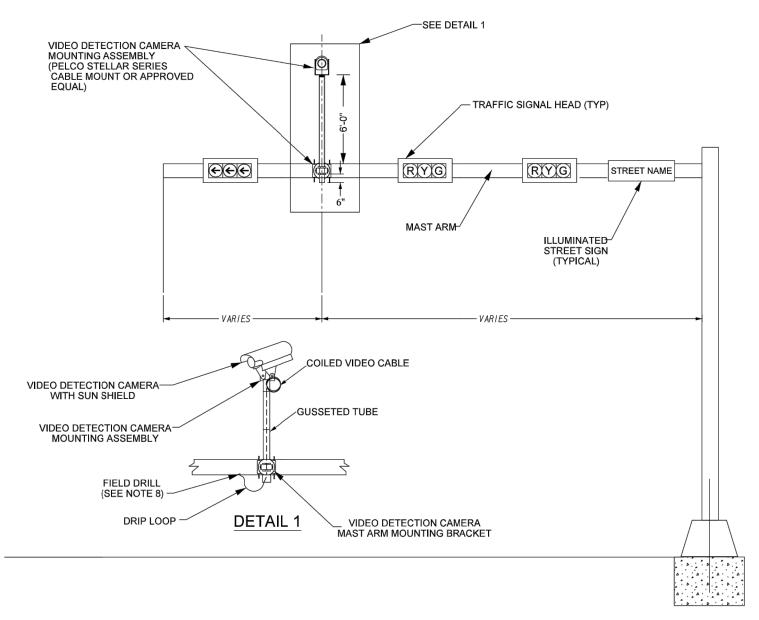
SURFSIDE

PROJECT NO.

DESCRIPTION

DESCRIPTION

MIAMI-DADE COUNTY VIDEO VEHICLE DETECTION DETAILS SHEET NO.



GENERAL NOTES:

- MEET THE REQUIREMENTS OF MIAMI-DADE COUNTY TRAFFIC CONTROL EQUIPMENT STANDARDS AND SPECIFICATIONS SECTION 660 (VEHICLE DETECTION SYSTEMS). EACH INTERSECTION MUST BE INDIVIDUALLY DESIGNED TO INCLUDE SITE-SPECIFIC EQUIPMENT PLACEMENT REQUIREMENTS AND DETECTION ZONE REQUIREMENTS.
- 2. REFER TO FDOT'S APPROVED PRODUCT LIST (APL) AND THE MIAMI-DADE COUNTY TRAFFIC SIGNALS AND SIGNS DIVISION'S 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 INBOARD THROUGH LANE AND LEFT TURN LANE.
- 4. APPROACHES WITH MORE THAN FOUR LANES REQUIRE TWO CAMERAS PER APPROACH. COUNT BICYCLE LANES AS HALF A LANE. WHEN USING TWO CAMERAS, PLACE ONE BETWEEN THE LEFT LANES AND THE OTHER IN A POSITION THAT CENTERS THE CAMERA TO COVER ALL THE THROUGH LANES. THE CAMERA MUST BE ORIENTED SO THAT THE STOP BAR IS PARALLEL WITH THE BOTTOM OF THE IMAGE.
- 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 (OR 33 FEET TOTAL WIDTH), INDIVIDUAL VIDEO CAMERAS 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 WIRES, 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 IN ORDER TO MEET THE PERFORMANCE REQUIREMENTS OF THE TECHNICAL SPECIFICATIONS OF AN APPROVED PRODUCT.
- 8. CONCEAL CAMERA CABLE(S) THROUGH THE MOUNT'S GUSSETED TUBE AND NEATLY PLACE DRIP LOOP INTO THE MAST ARM MINIMIZING EXPOSED CABLE(S). WIRE 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 620 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 TRAVEL LANES REQUIRING 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 PLACEMENT.LOCATE AND ANGLE CAMERAS TAKING INTO CONSIDERATION ITS RELATION TO THE RISING AND SETTING SUN TO BEST AVOID "SUNBURST" AND "WHITEOUT" 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 MECHANIC 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 SET-UP 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 ACCEPTANCE OF ANY VIDEO DETECTION SYSTEM INSTALLATION.

TRAFFIC CONTROL EQUIPMENT STANDARDS AND SPECIFICATIONS

TRAFFIC CONTROL EQUIPMENT STANDARDS AND SPECIFICATIONS

MIAMI-DADE

TRAFFIC CONTROL EQUIPMENT STANDARDS AND SPECIFICATIONS

MIAMI-DADE

TRAFFIC CONTROL EQUIPMENT STORM SIGNS DIVISION TOO NW 36+h STREET MAMM, FLORIDA 33166

305.592.3580

DTPW TRAFFIC SIGNALS AND SIGNS DIVISION TOO NAME DATE OF STANDARD SIGNS DIVISION TOO NAME TO STANDARD SIGNS DIVISION TO STANDARD SIGNS DIVISIO

FOR INFORMATION ONLY

SHEET NO.

2 of 2



| | REV ISIONS | | | | |
|------|-------------|------|-------------|--|--|
| DATE | DESCRIPTION | DATE | DESCRIPTION | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |



| CITY | PROJECT NO. |
|---------------------|-------------|
| TOWN OF SURFSIDE | |

MIAMI-DADE COUNTY
VIDEO VEHICLE DETECTION DETAILS

SHEET NO.