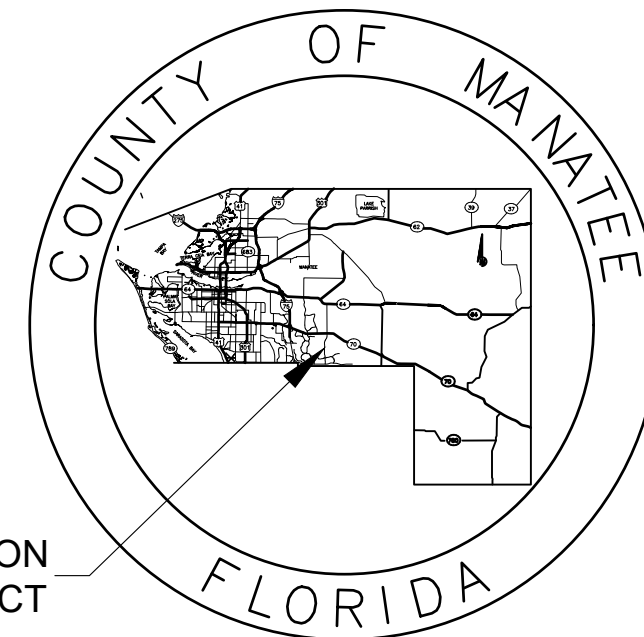


STATE OF FLORIDA  
COUNTY OF MANATEE

PLANS FOR PROPOSED INTERSECTION IMPROVEMENTS AT  
LORRAINE ROAD AND PLAYER'S DRIVE  
BRADENTON, FLORIDA



## INDEX OF SIGNALIZATION & LIGHTING PLANS

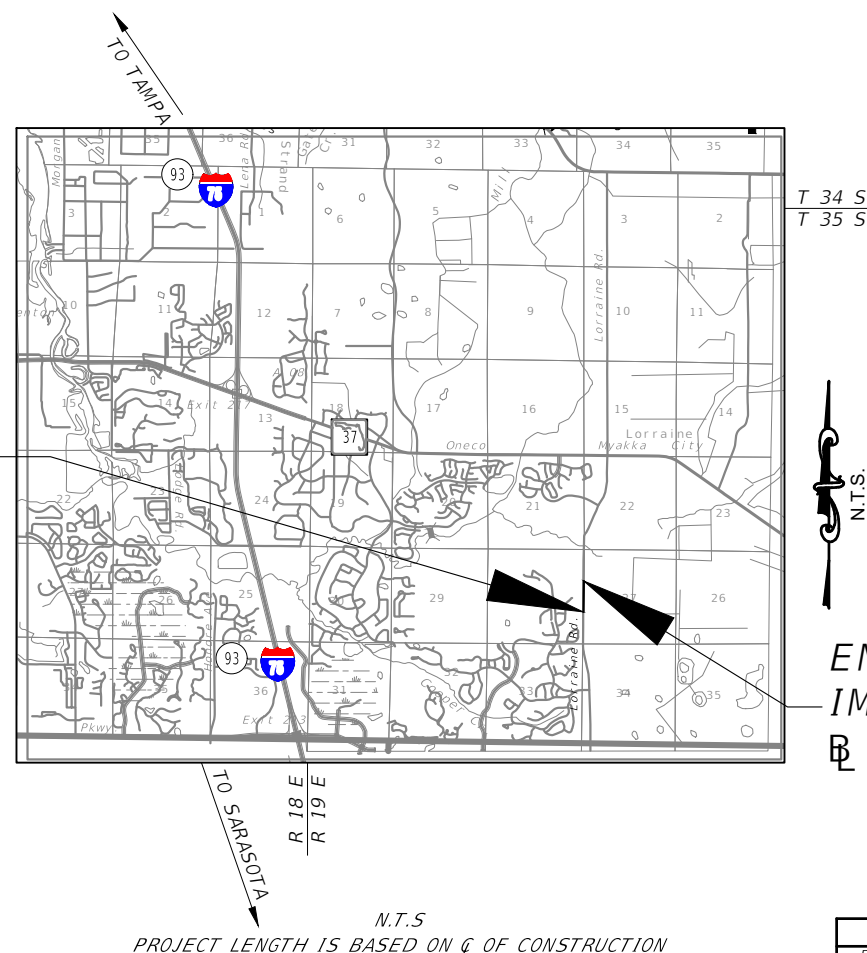
### SIGNING & PAVEMENT MARKINGS PLANS

| SHEET NO.   | SHEET DESCRIPTION                                   |
|-------------|-----------------------------------------------------|
| T-1         | KEY SHEET                                           |
| T-2         | SIGNATURE SHEET                                     |
| T-3         | SIGNALIZATION & LIGHTING TABULATION OF QUANTITIES   |
| T-4 - T-6   | GENERAL NOTES                                       |
| T-7 - T-8   | SIGNALIZATION PLAN                                  |
| T-9         | LIGHTING PLAN                                       |
| T-10        | IT FIBER RELOCATION PLAN                            |
| T-11        | SIGNING & PAVEMENT MARKING TABULATION OF QUANTITIES |
| T-12 - T-15 | SIGNING & PAVEMENT MARKING PLAN                     |
| T-16 - T-17 | MAST ARM TABULATION                                 |
| T-18        | STANDARD MAST ARM ASSEMBLIES DATA TABLE             |
| T-19 - T-20 | GUIDE SIGN WORKSHEET                                |
| T-21        | REPORT OF CORE BORINGS                              |

MANATEE COUNTY PROJECT No: 6109060

## LOCATION OF PROJECT

*SIGNALIZATION & LIGHTING PLANS*  
*SIGNING & PAVEMENT MARKING PLANS*



END INTERSECTION  
-IMPROVEMENTS  
B CONST STA. 22+80.88

GOVERNING DESIGN STANDARDS:

FLORIDA DEPARTMENT OF TRANSPORTATION, FY 2024-25 DESIGN STANDARDS  
eBOOK (DSeB) AND APPLICABLE DESIGN STANDARDS REVISIONS (DSRs) AT THE  
FOLLOWING WEBSITE:  
<https://www.fdot.gov/design/standardplans/sprbc.shtm>

MANATEE COUNTY PUBLIC WORKS HIGHWAY, TRAFFIC & STORMWATER STANDARDS,  
AMENDED APRIL 2022,  
MANATEE COUNTY PUBLIC WORKS UTILITY STANDARDS, APRIL 2024

GOVERNING STANDARD SPECIFICATIONS:

FLORIDA DEPARTMENT OF TRANSPORTATION FY 2024-25 STANDARD  
SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AT THE  
FOLLOWING WEBSITE:  
<http://www.fdot.gov/programmanagement/Implemented/SpecBooks>

MANATEE COUNTY, APRIL 2022 PUBLIC WORKS STANDARDS PUBLIC  
WORKS STANDARDS  
<http://public-works-standards-public-manateeegis.hub.arcgis.com>

| LENGTH OF PROJECT       |             |       |
|-------------------------|-------------|-------|
|                         | LINEAR FEET | MILES |
|                         |             |       |
| GROSS LENGTH OF PROJECT | 967.71      | 0.183 |

[illegible]

SIGNALIZATION & LIGHTING PLANS  
SIGNING & PAVEMENT MARKING PLANS

PROFESSIONAL OF RECORD: DAVID J. ALLEN, P.E.

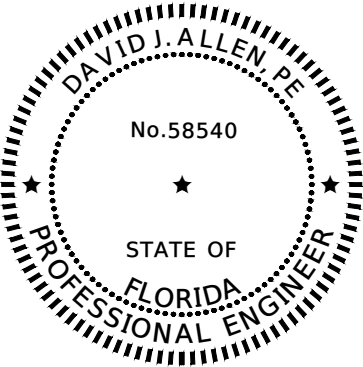
FLORIDA P.E. # 58540

|                        |                      |
|------------------------|----------------------|
| <i>FISCAL<br/>YEAR</i> | <i>SHEET<br/>NO.</i> |
| <i>25</i>              | <i>T-1</i>           |

ATTENTION IS DIRECTED TO THE FACT THAT THESE PLANS MAY HAVE BEEN ENLARGED IN SIZE BY REPRODUCTION. THIS MUST BE CONSIDERED WHEN OBTAINING SCALED DATA.



Know what's below  
Call before you dig



THIS ITEM HAS BEEN DIGITALLY  
SIGNED AND SEALED BY:

ON THE DATE ADJACENT TO THE SEAL

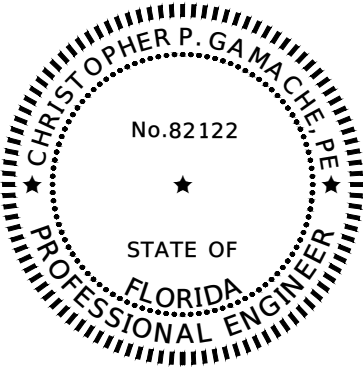
PRINTED COPIES OF THIS DOCUMENT ARE  
NOT CONSIDERED SIGNED AND SEALED AND  
THE SIGNATURE MUST BE VERIFIED ON ANY  
ELECTRONIC COPIES.

DAVID J. ALLEN, PE  
STANTEC CONSULTING SERVICES, INC.  
3915 CRESCENT PARK DRIVE  
RIVERVIEW, FL 33578  
PHONE NUMBER: (813) 664-4500

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

PLAN INDEX

| SHEET NO.   | DESCRIPTION                                         |
|-------------|-----------------------------------------------------|
| T-1         | KEY SHEET                                           |
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| T-3         | SIGNALIZATION & LIGHTING TABULATION OF QUANTITIES   |
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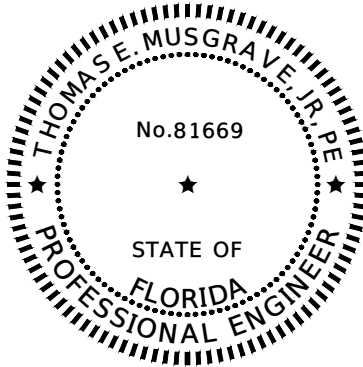
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CHRISTOPHER P. GAMACHE, PE  
STANTEC CONSULTING SERVICES, INC.  
380 PARK PLACE BLVD SUITE 300  
CLEARWATER, FL 33579  
PHONE NUMBER: (727) 531-3505

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

PLAN INDEX

| SHEET NO. | DESCRIPTION                             |
|-----------|-----------------------------------------|
| T-2       | SIGNATURE SHEET                         |
| T-18      | STANDARD MAST ARM ASSEMBLIES DATA TABLE |



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ON THE DATE ADJACENT TO THE SEAL

PRINTED COPIES OF THIS DOCUMENT ARE  
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ELECTRONIC COPIES.

THOMAS E. MUSGRAVE, JR., PE  
TIERRA INC.  
7351 TEMPLE TERRACE HIGHWAY  
TAMPA, FL 33637  
PHONE NUMBER: (813) 989-1354

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

PLAN INDEX

| SHEET NO. | DESCRIPTION            |
|-----------|------------------------|
| T-2       | SIGNATURE SHEET        |
| T-21      | REPORT OF CORE BORINGS |

| REVISIONS |             |      |    |
|-----------|-------------|------|----|
| NO.       | DESCRIPTION | DATE | BY |
| ----      | ----        |      |    |



**Stantec**  
STANTEC CONSULTING SERVICES, INC.

DAVID J. ALLEN, P.E.  
LICENSE NUMBER 58540  
3915 CRESCENT PARK DRIVE  
RIVERVIEW, FLORIDA 33578



**MANATEE COUNTY  
PUBLIC WORKS**  
COUNTY PROJECT NO:  
6109060

INTERSECTION IMPROVEMENTS FOR LORRAINE  
ROAD AND PLAYERS DRIVE

*SIGNATURE SHEET*

| SHEET<br>NO. |
|--------------|
| T-2          |

| SIGNALIZATION & LIGHTING TABULATION OF QUANTITIES |                                                                                          |      |               |       |       |       |        |       |      |       |      |       |      |       |  |  |                        |       |                |       |  |
|---------------------------------------------------|------------------------------------------------------------------------------------------|------|---------------|-------|-------|-------|--------|-------|------|-------|------|-------|------|-------|--|--|------------------------|-------|----------------|-------|--|
| PAY<br>ITEM<br>NO.                                | DESCRIPTION                                                                              | UNIT | SHEET NUMBERS |       |       |       |        |       |      |       |      |       |      |       |  |  | TOTAL<br>THIS<br>SHEET |       | GRAND<br>TOTAL |       |  |
|                                                   |                                                                                          |      | T - 7         |       | T - 9 |       | T - 10 |       |      |       |      |       |      |       |  |  | PLAN                   | FINAL | PLAN           | FINAL |  |
|                                                   |                                                                                          |      | PLAN          | FINAL | PLAN  | FINAL | PLAN   | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL |  |  |                        |       |                |       |  |
| INFORMATION TECHNOLOGY PAY ITEMS                  |                                                                                          |      |               |       |       |       |        |       |      |       |      |       |      |       |  |  |                        |       |                |       |  |
| 630-2-12B                                         | CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE (IT)                                        | LF   |               |       |       |       | 95     |       |      |       |      |       |      |       |  |  | 95                     |       | 95             |       |  |
| 635-2-12B                                         | PULL & SPLICE BOX, F&I, 24" X 36" COVER SIZE (IT)                                        | EA   |               |       |       |       | 1      |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| SIGNALIZATION AND LIGHTING PAY ITEMS              |                                                                                          |      |               |       |       |       |        |       |      |       |      |       |      |       |  |  |                        |       |                |       |  |
| 630-2-11                                          | CONDUIT, FURNISH & INSTALL, OPEN TRENCH                                                  | LF   | 210           |       | 60    |       |        |       |      |       |      |       |      |       |  |  | 270                    |       | 270            |       |  |
| 630-2-12                                          | CONDUIT, FURNISH & INSTALL, DIRECTIONAL BORE                                             | LF   | 410           |       |       |       |        |       |      |       |      |       |      |       |  |  | 410                    |       | 410            |       |  |
| 632-7-1                                           | SIGNAL CABLE- NEW OR RECONSTRUCTED INTERSECTION, FURNISH & INSTALL                       | PI   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 635-2-11                                          | PULL & SPLICE BOX, F&I, 13" x 24" COVER SIZE                                             | EA   | 4             |       | 4     |       |        |       |      |       |      |       |      |       |  |  | 8                      |       | 8              |       |  |
| 635-2-13                                          | PULL & SPLICE BOX, F&I, 30" X 60" RECTANGULAR OR 36" ROUND COVER SIZE                    | EA   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 635-2-14                                          | PULL & SPLICE BOX, F&I, 17" x 30" COVER SIZE                                             | EA   | 9             |       |       |       |        |       |      |       |      |       |      |       |  |  | 9                      |       | 9              |       |  |
| 639-2-1                                           | ELECTRICAL SERVICE WIRE, FURNISH & INSTALL                                               | LF   | 20            |       |       |       |        |       |      |       |      |       |      |       |  |  | 20                     |       | 20             |       |  |
| 639-4-6                                           | EMERGENCY GENERATOR - PORTABLE, INSTALL HOUSING ONLY                                     | EA   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 641-2-80                                          | PRESTRESSED CONCRETE POLE, COMPLETE POLE REMOVAL- POLE 30' AND GREATER                   | EA   | 4             |       |       |       |        |       |      |       |      |       |      |       |  |  | 4                      |       | 4              |       |  |
| 646-1-11                                          | ALUMINUM SIGNALS POLE, PEDESTAL                                                          | EA   | 8             |       |       |       |        |       |      |       |      |       |      |       |  |  | 8                      |       | 8              |       |  |
| 649-21-10                                         | STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 60' (PAINTED)                   | EA   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 649-21-15                                         | STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 70' (PAINTED)                   | EA   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 649-21-21                                         | STEEL MAST ARM ASSEMBLY, FURNISH AND INSTALL, SINGLE ARM 78' (PAINTED)                   | EA   | 2             |       |       |       |        |       |      |       |      |       |      |       |  |  | 2                      |       | 2              |       |  |
| 650-1-34                                          | VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 3 SECTION, 1 WAY              | AS   | 10            |       |       |       |        |       |      |       |      |       |      |       |  |  | 10                     |       | 10             |       |  |
| 650-1-36                                          | VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 4 SECTION, 1 WAY              | AS   | 4             |       |       |       |        |       |      |       |      |       |      |       |  |  | 4                      |       | 4              |       |  |
| 650-1-39                                          | VEHICULAR TRAFFIC SIGNAL, FURNISH & INSTALL POLYCARBONATE, 5 SECTION CLUSTER, 1 WAY      | AS   | 2             |       |       |       |        |       |      |       |      |       |      |       |  |  | 2                      |       | 2              |       |  |
| 653-1-11                                          | PEDESTRIAN SIGNAL, FURNISH & INSTALL LED COUNTDOWN, 1 WAY                                | AS   | 8             |       |       |       |        |       |      |       |      |       |      |       |  |  | 8                      |       | 8              |       |  |
| 660-3-11                                          | VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL CABINET EQUIPMENT                 | EA   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 660-3-12                                          | VEHICLE DETECTION SYSTEM- MICROWAVE, FURNISH & INSTALL, ABOVE GROUND EQUIPMENT           | EA   | 6             |       |       |       |        |       |      |       |      |       |      |       |  |  | 6                      |       | 6              |       |  |
| 665-1-11                                          | PEDESTRIAN DETECTOR, FURNISH & INSTALL, STANDARD                                         | EA   | 8             |       |       |       |        |       |      |       |      |       |      |       |  |  | 8                      |       | 8              |       |  |
| 670-5-110                                         | TRAFFIC CONTROLLER ASSEMBLY, F&I, NEMA                                                   | AS   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 670-5-600                                         | TRAFFIC CONTROLLER ASSEMBLY, REMOVE CONTROLLER WITH CABINET                              | AS   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 682-1-133                                         | ITS CCTV CAMERA, F&I, DOME ENCLOSURE - NON-PRESSURIZED, 1P, HIGH DEFINITION              | EA   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 684-1-1                                           | MANAGED FIELD ETHERNET SWITCH, FURNISH & INSTALL                                         | EA   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 685-1-14                                          | UNINTERRUPTIBLE POWER SUPPLY, FURNISH AND INSTALL, ONLINE/DOUBLE CONVERSION WITH CABINET | EA   | 1             |       |       |       |        |       |      |       |      |       |      |       |  |  | 1                      |       | 1              |       |  |
| 700-3-201                                         | SIGN PANEL, FURNISH & INSTALL OVERHEAD MOUNT, UP TO 12 SF                                | EA   | 12            |       |       |       |        |       |      |       |      |       |      |       |  |  | 12                     |       | 12             |       |  |
| 700-5-22</                                        |                                                                                          |      |               |       |       |       |        |       |      |       |      |       |      |       |  |  |                        |       |                |       |  |

| REVISIONS |             |      |    | <br><b>Stantec</b><br>STANTEC CONSULTING SERVICES, INC. | DAVID J. ALLEN, P.E.<br>LICENSE NUMBER 58540<br>3915 CRESCENT PARK DRIVE<br>RIVERVIEW, FLORIDA 33578 | <br><b>MANATEE COUNTY<br/>PUBLIC WORKS</b><br>COUNTY PROJECT NO:<br>6109060 | INTERSECTION IMPROVEMENTS FOR LORRAINE<br>ROAD AND PLAYERS DRIVE        | SHEET<br>NO. |
|-----------|-------------|------|----|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|--------------|
| NO.       | DESCRIPTION | DATE | BY |                                                                                                                                             |                                                                                                      |                                                                                                                                                                  | <i><b>SIGNALIZATION &amp; LIGHTING<br/>TABULATION OF QUANTITIES</b></i> | T-3          |
| ----      | -----       |      |    |                                                                                                                                             |                                                                                                      |                                                                                                                                                                  |                                                                         |              |

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

GENERAL NOTES

1.

AT LEAST FIVE (5) BUSINESS DAYS PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING DEPARTMENTS TO INFORM THEM OF CONSTRUCTION OPERATIONS:  
  
MANATEE COUNTY TRAFFIC OPERATIONS DIVISION:  
MR. AARON BURKETT  
941-708-7509  
  
MANATEE COUNTY TRAFFIC ENGINEERING DIVISION:  
MR. VISHAL KAKKAD, P.E. PTOE  
941-749-3500  
  
DC-INFRASTRUCTURE DIVISION  
MANATEE COUNTY ITS DEPARTMENT (BOCC)  
BILL KERSEY  
PHONE (941) 748-4501 EXT. 5803  
bill.kersey@mymanatee.org  
  
NETWORK SUPPORT SERVICES  
THE SCHOOL DISTRICT OF MANATEE COUNTY FLORIDA (SDMC)  
MATTHEW BAUER  
PHONE (941) 708-8770 X41012  
bauer3m@manateeschools.net
2.

48 HOURS PRIOR TO CONTRACT START DATE, THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AGENCIES IN WRITING GIVING THE LOCATION, START DATE AND EMERGENCY NUMBERS FOR AFTER HOURS REPAIRS:  
  
MANATEE COUNTY SHERIFF'S OFFICE  
515 11TH STREET WEST  
BRADENTON, FLORIDA 34205  
PH 941-747-3011
3.

THE CONTRACTOR SHALL OBTAIN A COPY OF MANATEE COUNTY'S LATEST "TRAFFIC INFRASTRUCTURE DESIGN GUIDE" THROUGH THE COUNTY PROJECT MANAGER PRIOR TO ORDERING MATERIALS AND/OR EQUIPMENT. CONTACT THE MANATEE COUNTY TRAFFIC OPERATIONS DIVISION, MR. AARON BURKETT, 941-709-7509 FOR ADDITIONAL INFORMATION.
4.

THIS PLAN SET INCLUDES PROPOSED WORK INCLUDING SIGNALIZATION AND IT INFRASTRUCTURE. THE IT FIBER OPTIC SYSTEM SHALL NOT SHARE CONDUIT, PULL BOXES, OR LOCATE SYSTEM WITH THE ATMS FIBER SYSTEM. THE PROPOSED IT COMPONENTS SHALL FOLLOW SPECIFICATIONS AS CONTAINED HEREIN AND AVAILABLE FROM THE MANATEE COUNTY IT DEPARTMENT.
5.

THE CONTRACTOR MUST NOTIFY THE TRAFFIC ENGINEERING DIVISION VIA THE PROJECT MANAGER AT LEAST FIVE (5) BUSINESS DAYS IN ADVANCE TO SCHEDULE THE INITIAL POWER SERVICE CONNECTION AND/OR TRAFFIC SIGNAL INSPECTION.
6.

THE PRIME CONTRACTOR SHALL BE RESPONSIBLE FOR THE SIGNAL MAINTENANCE, TIMING AND OPERATION OF ANY AND ALL SIGNALS AND SIGNAGE FROM COMMENCEMENT TO ACCEPTANCE OF THE PROJECT (I.E.: EXISTING LOOPS CUT, SYSTEM COMMUNICATION TERMINATED, LANE OR PAVEMENT MODIFICATIONS, PEDESTRIAN MODIFICATIONS, TRAFFIC SIGNAL SCHOOL FLASHER, WARNING FLASHER, ROADWAY LIGHTING, COUNT STATIONS, AND ANY OTHER TRAFFIC RELATED DEVICE LOCATED WITHIN THE CONSTRUCTION ZONE). MANATEE COUNTY WILL ASSIST IN PROVIDING EXISTING SYSTEM TIMINGS WHEN POSSIBLE.
7.

THE SIGNAL CONTRACTOR SHALL BE AVAILABLE TO RESPOND TO TROUBLE CALLS TWENTY-FOUR HOURS A DAY, SEVEN DAYS A WEEK FOR THE DURATION OF THE PROJECT. THE PRIME CONTRACTOR SHALL PROVIDE CONTACT NUMBERS FOR THE SIGNAL CONTRACTOR TO THE TRAFFIC MANAGEMENT DIVISION AT COMMENCEMENT OF PROJECT. FURTHERMORE, WITHIN TWO HOURS OF NOTIFICATION OR DOCUMENTED ATTEMPTED NOTIFICATIONS, THE SIGNAL CONTRACTOR SHALL BE ON SITE MAKING NEEDED REPAIRS OR MODIFICATIONS. FAILURE TO MEET THE TIME REQUIREMENTS SHALL GIVE THE COUNTY, AT ITS DISCRETION, THE RIGHT TO REQUEST ASSISTANCE FROM THE MANATEE COUNTY SHERIFF'S DEPARTMENT TO CONTROL TRAFFIC FOR THE PERIOD OF TIME UNTIL THE CONTRACTOR RESPONDS AND MAKES THE NEEDED REPAIRS, THE COST FOR THE MANATEE COUNTY SHERIFF'S OFFICE SHALL BE THE RESPONSIBILITY OF THE PRIME CONTRACTOR.
8.

GROUNDING: ALL GROUND ROD EQUIPMENT SHALL BE BONDED TOGETHER TO FORM AN INTEGRATED GROUNDING SYSTEM USING #6 AWG THHN COPPER WIRE. THE UPPER END OF ALL GROUND RODS SHALL BE 18 INCHES BELOW GROUND ELEVATION. MARK GROUND ROD LOCATIONS WITH PERMANENT MARKER SUCH AS AN EPOXY STICKER LOCATED ON THE NEAREST CURB AND PROVIDE AS-BUILT DRAWINGS WITH THE LOCATION OF GROUND RODS MARKED. GROUNDING CONDUCTOR MUST BE #6 OR LARGER INSULATED COPPER. EQUIPMENT SHALL NOT BE PLACED INTO OPERATIONAL SERVICE UNTIL THE ASSOCIATED GROUNDING SYSTEM HAS BEEN INSPECTED AND APPROVED BY A MEMBER OF THE MANATEE COUNTY TRAFFIC OPERATIONS STAFF.
9.

IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY JACKING OR BORING. THE CONTRACTOR SHALL FIELD MARK THE PROPOSED CONDUIT INSTALLATION ALIGNMENT FOR REVIEW AND CONCURRENCE BY THE ENGINEER PRIOR TO TRENCHING AND/OR PLACEMENT. NO PULL BOXES SHALL BE LOCATED IN DRAINAGE SWALES OR PAVED SHOULDERS.
10.

AT LEAST 5 BUSINESS DAYS PRIOR TO SCHEDULING THE INITIAL TRAFFIC SIGNAL INSPECTION, DELIVER THREE HARDCOPY SETS OF AS-BUILT RECORD DRAWINGS, TWO SETS OF IMSA INSPECTION FORMS, OTR FIBER OPTIC CABLE TEST RESULTS, AND ONE COMPACT DISC OF RECORD DRAWINGS IN ADOBE AROBAT (.PDF) AND AUTOCAD (.DWG) FORMAT TO:  
  
MANATEE COUNTY TRAFFIC OPERATIONS DIVISION  
MR. AARON BURKETT  
2904 12TH ST CT EAST  
BRADENTON, FL 34208
11.

SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW FOR ALL EQUIPMENT AND MATERIALS FURNISHED AND INSTALLED. THE CONTRACTOR SHALL FURNISH COPIES OF ALL DRAWINGS, SCHEDULES AND COMPLETE DESCRIPTIVE AND TECHNICAL DATA FOR ALL ITEMS TO THE PROJECT MANAGER.

12.

PROJECT SURVEY IS PROVIDED FOR THE INTERSECTION OF PLAYER'S DRIVE ONLY. THE RIGHT-OF-WAY DEPICTED IN THE PLANS BEYOND THE SURVEYED AREA IS DERIVED FROM COUNTY TAX MAPS. ENSURE PROPOSED WORK IS INSTALLED WITHIN THE EXISTING COUNTY RIGHT-OF-WAY. EMPLOY A FLORIDA LICENSED SURVEYOR FOR ANY AREAS WHERE RIGHT-OF-WAY VERIFICATION IS DEEMED NECESSARY.
13.

ALL CONSTRUCTION ACTIVITIES SHALL FOLLOW CURRENT MANATEE COUNTY HIGHWAY, TRAFFIC & STORMWATER STANDARDS, ALONG WITH FDOT STANDARDS AND SPECIFICATIONS.
14.

THE CONTRACTOR SHALL HAVE AN IMSA CERTIFIED LEVEL II (ELECTRONICS OR ELECTRICAL TECHNICIAN) ON THE JOB SITE AT ALL TIMES WHILE WORK IS BEING PERFORMED. CERTIFICATION OF ALL TECHNICIANS SHALL BE PROVIDED TO THE COUNTY PRIOR TO BEGINNING WORK. SIGNAL INSTALLATION TECHNICIANS SHALL HAVE A MINIMUM OF IMSA LEVEL I CERTIFICATION.
15.

THE CONTRACTOR SHALL PROVIDE A WARRANTY/MAINTENANCE BOND FOR THE SIGNAL INSTALLATIONS IN ACCORDANCE WITH FDOT SPECIFICATION SECTION 611-5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING BOND REQUIREMENTS WITH THE MANATEE COUNTY PUBLIC WORKS SENIOR ADMINISTRATIVE SPECIALIST, AT (941) 708-7450, EXT. 7613.
16.

WHERE MAST ARM, STRAIN POLES, OR ANY OTHER SIGNAL EQUIPMENT REQUIRING FOUNDATIONS ARE PROPOSED WITHIN 4 FEET OF ANY UNDERGROUND UTILITY, LOCATE AND PROTECT THE UTILITY. HAND DIG THE INITIAL 5 FEET FOR THE FOUNDATION.
17.

THE CONTRACTOR SHALL DE-WATER THE POLE FOUNDATION EXCAVATION IF THE ELEVATION OF WATER IS HIGHER THAN THE ELEVATION OF THE FOUNDATION BASE.
18.

THE LOCATION(S) OF THE UTILITIES SHOWN IN THE PLANS (INCLUDING THOSE DESIGNATED VV VH AND VVH) ARE BASED ON LIMITED INVESTIGATION TECHNIQUES AND SHOULD BE CONSIDERED APPROXIMATE ONLY. THE VERIFIED LOCATION/ELEVATIONS APPLY ONLY AT THE POINTS SHOWN. INTERPOLATION BETWEEN POINTS HAVE NOT BEEN VERIFIED. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE CONTRACTOR, VIA SUNSHINE STATE ONE CALL OF FLORIDA, INC. AT 1-800-432-4770, IN COORDINATION WITH UNDERGROUND AND OVERHEAD UTILITY OWNERS. THE CONTRACTOR SHALL NOTIFY UTILITY/OWNERS/AGENCIES LISTED WITHIN OR IMPACTED BY THESE PLANS, NOT LESS THAT TWO (2) FULL BUSINESS DAYS IN ADVANCE OF BEGINNING CONSTRUCTION. AT ALL LOCATIONS WHERE THE REQUIRED VERTICAL CLEARANCE TO THE POWER LINE CANNOT BE MAINTAINED, A QUALIFIED REPRESENTATIVE FROM THE POWER COMPANY SHALL BE PRESENT DURING ALL WORK UNDER POWER LINES. THE CONTRACTOR SHALL CONTACT LOCAL POWER COMPANY FOR THEIR ASSISTANCE IN PERFORMING ALL NECESSARY WORK UNDER POWER LINES, SUCH AS THE INSTALLATION OF SIGNAL CABLE, FIBERGLASS INSULATORS, AND SIGNAL POLES.
19.

RESPONSIBILITIES RELATED TO UTILITIES ARE NOTED IN THE ROADWAY PLANS. SEE ROADWAY PLANS FOR UTILITY CONTACT INFORMATION.
20.

ELEVATION OF THE TOP OF THE MAST ARM FOUNDATION SHALL BE SIX (6) INCHES ABOVE EXISTING GRADE, UNLESS LOCATED DIRECT AT BACK OF SIDEWALK. IF LOCATED AT BACK OF SIDEWALK, THE FOUNDATION ELEVATION SHALL MATCH SIDEWALK GRADE. SEE "TOP OF FOUNDATION ELEVATION" ON MAST ARM TABULATION SHEET.
21.

COORDINATE PAVEMENT MARKINGS AND SIGNAGE WORK WITH THE SCHEDULING OF SIGNAL ACTIVATION. DO NOT ACTIVATE THE SIGNAL UNTIL ALL PROPOSED STOP BARS, CROSSWALKS, RAMPS, AND PAVEMENT REMOVAL WORK IS COMPLETE. COORDINATE REMOVAL OF THE EXISTING STOP SIGNS UPON FULL SIGNAL ACTIVATION.
22.

ALL MATERIALS, EQUIPMENT, AND OTHER CONTRACTOR SUPPLIED ITEMS SHALL BE INSTALLED AND MAINTAINED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS, UNLESS SPECIFICALLY DIRECTED OTHERWISE BY THE ENGINEER.
23.

ELECTRICAL WIRING SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE PUBLISHED BY NATIONAL FIRE PROTECTION ASSOCIATION.
24.

#14 XHHW PULL WIRE SHALL BE INSTALLED IN ALL CONDUITS. AL LEAST 2 FEET OF PULL WIRE SHALL BE ACCESSIBLE AT EACH CONDUIT TERMINATION AND SECURED IN THE PULL BOX OR PLACE OF TERMINATION.
25.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LENGTH OF SIGN COLUMN SUPPORTS IN THE FIELD PRIOR TO FABRICATION.
26.

ALL PROPOSED SINGLE POST SIGN ASSEMBLIES SHALL MEET THE LAKEWOOD RANCH CDD SIGN ASSEMBLY STANDARDS AND SPECIFICATIONS MATCHING THE EXISTING SIGNAGE. THE CONTRACTOR SHALL CONTACT LAKEWOOD RANCH CDD PRIOR TO SUBMITTING SHOP DRAWINGS FOR THE SIGNS FOR REQUIREMENTS IN THE SIGN ASSEMBLY. THIS SHALL INCLUDE THE SIGN PANEL, SIGN POST AND SIGN ASSEMBLY COLOR.
27.

THE CONTRACTOR SHALL CONTACT LAKEWOOD RANCH CDD TO COORDINATE TIME AND LOCATION TO DELIVER ALL REMOVED SIGN ASSEMBLIES.
28.

SIGN LOCATIONS ARE APPROXIMATE AND MAY REQUIRE FIELD ADJUSTMENT AS DIRECTED BY THE ENGINEER.
29.

ANY SIGN TO REMAIN THAT IS DISTURBED DURING CONSTRUCTION SHALL BE RESET TO EXISTING CONDITION PRIOR TO CONSTRUCTION.
30.

SIGNS OVER SIDEWALK SHALL HAVE A STANDARD VERTICAL CLEARANCE OF 8 FEET.
31.

THE CONTRACTOR SHALL PROVIDE AND MAINTAIN TWO PORTABLE 4' X 8' VARIABLE-MESSAGE SIGNS (VMS) FOR A PERIOD OF TWO WEEKS. THE VMS WILL BE LOCATED AT AN APPROPRIATE DISTANCE IN ADVANCE OF EACH APPROACH TO THE NEW SIGNALIZED INTERSECTION AS SPECIFIED BY THE MAINTAINING AGENCY'S ENGINEER. THE VMS WILL BE PROVIDED ONE WEEK PRIOR TO THE SCHEDULED ACTIVATION IN FULL COLOR OPERATION AND SHALL REMAIN IN PLACE FOR ONE (1) WEEK FOLLOWING ACTIVATION. COST OF FURNISHING VMS TO BE INCLUDED UNDER THE ASSOCIATED PAY ITEM FOR MAINTENANCE OF TRAFFIC.  
  
A. PRIOR TO ACTIVATION, THE VMS SIGN SHALL BE:  
(PANEL ONE - LINE 1) "TRAFFIC" (PANEL TWO - LINE 1) "ACTIVATED"  
(PANEL ONE - LINE 2) "SIGNAL" (PANEL TWO - LINE 2) "ON DAY"  
(PANEL ONE - LINE 3) "WILL BE" (PANEL TWO - LINE 3) "MONTH X"  
  
B. SUBSTITUTION FOR THE WORD "DAY" SHALL BE AS FOLLOWS:  
SUNDAY AS "SUN"  
THURSDAY AS "THUR"  
MONDAY AS "MON"  
FRIDAY AS "FRI"  
TUESDAY AS "TUES"  
SATURDAY AS "SAT"  
WEDNESDAY AS "WED"

| REVISIONS |             |      |    |  <div>STANTEC CONSULTING SERVICES, INC.</div> | <div>DAVID J. ALLEN, P.E.<br/>LICENSE NUMBER 58540<br/>3915 CRESCENT PARK DRIVE<br/>RIVERVIEW, FLORIDA 33578</div> |  <div>MANATEE COUNTY<br/>PUBLIC WORKS<br/>COUNTY PROJECT NO:<br/>6109060</div> | INTERSECTION IMPROVEMENTS FOR LORRAINE<br>ROAD AND PLAYERS DRIVE |  | SHEET<br>NO. |
|-----------|-------------|------|----|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--|--------------|
| NO.       | DESCRIPTION | DATE | BY |                                                                                                                                   |                                                                                                                    |                                                                                                                                                                     | <i>GENERAL NOTES (1)</i>                                         |  | T-4          |
| ----      | ----        |      |    |                                                                                                                                   |                                                                                                                    |                                                                                                                                                                     |                                                                  |  |              |

GENERAL NOTES (CONT.)

- C. SUBSTITUTION FOR THE WORD "MONTH" SHALL BE AS FOLLOWS:  
JANUARY AS "JAN" JULY AS "JUL"  
FEBRUARY AS "FEB" AUGUST AS "AUG"  
MARCH AS "MAR" SEPTEMBER AS "SEP"  
APRIL AS "APR" OCTOBER AS "OCT"  
MAY AS "MAY" NOVEMBER AS "NOV"  
JUNE AS "JUN" DECEMBER AS "DEC"
- D. SUBSTITUTION FOR THE WORD "XX" SHALL BE AS FOLLOWS:  
THE NUMERICAL DAY OF THE MONTH, FROM ONE (1) TO THIRTY-ONE (31).  
DATES LESS THAN TEN (10) SHALL BE PRECEDED BY A ZERO (0); EXAMPLE: "JAN 03" FOR JANUARY 3RD.
- E. AFTER THE TURN-ON, THE VMS SHALL BE CHANGED TO  
(PANEL ONE - LINE 1) "TRAFFIC" (PANEL TWO - LINE 1) "NOW"  
(PANEL ONE - LINE 2) "SIGNAL" (PANEL TWO - LINE 2) "ACTIVE"
- PANEL TWO, LINE 1 AND LINE 2, SHALL FLASH THREE (3) TIMES BEFORE REVERTING TO PANEL ONE.
- LIGHTING GENERAL NOTES
- THE LOCATION OF THE POLES, CONDUCTORS, CONDUITS, AND JUNCTION BOXES ARE DIAGRAMMATIC ONLY AND MAY BE SHIFTED WITHIN THE RIGHT-OF-WAY BY THE CONTRACTOR WITH APPROVAL FROM THE ENGINEER TO ACCOMMODATE LOCAL CONDITIONS AND EXISTING UTILITY LOCATIONS. THE MAINTENANCE SLAB ORIENTATION SHALL BE DETERMINED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER PER INDIVIDUAL POLE LOCATION.
  - THE CONTRACTOR SHALL STAKE ALL POLE LOCATIONS AND REQUEST UTILITY COMPANIES TO LOCATE AND STAKE UNDERGROUND UTILITIES PRIOR TO EXCAVATING. THIS INCLUDES NOTIFYING FLORIDA POWER AND LIGHT ON REVIEWING THE STAKED LOCATIONS WITH RESPECT TO THE UNDERGROUND AND OVERHEAD POWER LINES.
  - AT LOCATIONS WHERE UNDERGROUND UTILITIES ARE WITHIN TWO FEET OF THE LIGHTING POLE FOUNDATION OR CONDUIT RUN, THE CONTRACTOR SHALL HAND DIG THE FIRST FIVE (5) FEET OF THE HOLE FOR THE POLE FOUNDATION AND/OR CONDUIT RUN.
  - MAINTAIN ACCESS TO ALL SIDE STREETS, PRIVATE AND COMMERCIAL DRIVEWAYS AT ALL TIMES DURING THE CONSTRUCTION OPERATION.
  - NO SCREW TYPE BASE FOUNDATIONS SHALL BE USED ON THIS PROJECT.
  - FOR LOCATIONS WHERE THE LIGHT POLE IS WITHIN OR ADJACENT TO THE PROPOSED SIDEWALK, THE POLE FOUNDATION ELEVATION SHALL MATCH THE PROPOSED SIDEWALK GRADE.
  - ALL EXCESS DIRT AND DEBRIS EXCAVATED FROM POLE FOUNDATIONS SHALL BE REMOVED DAILY TO AREAS APPROVED BY THE ENGINEER AND PAID FOR UNDER THE LIGHT POLE COMPLETE PAY ITEM. ALL VOIDS LEFT BY REMOVAL OF EXISTING POLE FOUNDATIONS SHALL BE FILLED AND COMPACTED TO MATCH SURROUNDING GRADE AND PAID FOR UNDER 715-69-00.
  - THE INTERSECTION LIGHTING WILL BE MAINTAINED BY MANATEE COUNTY UPON FINAL ACCEPTANCE. NOTIFY THE TRAFFIC OPERATIONS DIVISION (MR. AARON BURKETT, 941-708-7509) AT LEAST TWO (2) BUSINESS DAYS IN ADVANCE TO SCHEDULE THE FINAL INSPECTION. UPON PASSING THE FINAL INSPECTION, SEND A WRITTEN REQUEST TO THE FOLLOWING:  
  
MR. AARON BURKETT  
MANATEE COUNTY TRAFFIC OPERATIONS DIVISION  
2904 12TH STREET COURT EAST  
BRADENTON, FLORIDA 34208  
EMAIL: AARON.BURKETT@MYMANATEE.ORG  
  
REQUESTING TO TRANSFER MAINTENANCE FROM THE CONTRACTOR TO MANATEE COUNTY. MANATEE COUNTY WILL RESPOND WITHIN FIVE (5) WORKING DAYS TO ESTABLISH A TIME TABLE FOR THE TRANSFER OF MAINTENANCE RESPONSIBILTY.
  - WHEN CONSTRUCTION IS COMPLETE, A HARD COPY SET OF "AS-BUILT" PLANS IN ADDITION TO AN ELECTRONIC COPY (pdf) IS TO BE SUBMITTED TO:  
  
MANATEE PUBLIC WORKS  
VISHAL S. KAKKAD, PE, PTOE  
TRAFFIC DESIGN DIVISION MANAGER  
2101 47TH TERRACE EAST  
BRADENTON, FL 34203  
EMAIL: VISHAL.KAKKAD@MYMANATEE.ORG  
  
MANATEE PUBLIC WORKS  
MR. AARON BURKETT  
MANATEE COUNTY TRAFFIC OPERATIONS DIVISION  
2904 12TH STREET COURT EAST  
BRADENTON, FLORIDA 34208  
EMAIL: AARON.BURKETT@MYMANATEE.ORG
  - RECORD DRAWINGS AND INSPECTION FORMS MUST BE DELIVERED TO THE COUNTY AT LEAST TWO (2) BUSINESS DAYS PRIOR TO SCHEDULING THE FINAL INSPECTION.
  - HANDHOLE COVERS FOR POLES SHALL BE LOCATED OPPOSITE APPROACHING TRAFFIC.
  - ALL EXISTING UTILITIES ARE TO REMAIN IN PLACE UNLESS OTHERWISE NOTED.
  - THE WIRES AT THE POLE HANDHOLES AND PULL BOXES SHALL BE LOOPED IN THE POLE AND PULL BOXES WITH SUFFICIENT LENGTH TO COMPLETELY REMOVE CONNECTORS AND SPLICES ONE FOOT OUTSIDE OF THE HANDHOLE AND PULL BOXES. THE SLACK IS FOR MAKING CONNECTIONS AND SPLICES ACCESSIBLE FOR CHANGING FUSES AND TROUBLE SHOOTING THE SYSTEM.
  - LIGHT POLES AND PULL BOXES SHALL NOT BE LOCATED IN DRAINAGE SWALES, DITCHES, WETLANDS, DRIVEWAYS, SURFACE WATER, PAVED SHOULDERS OR PEDESTRIAN RAMPS. THE CONTRACTOR SHALL COORDINATE WITH THE ENGINEER FOR AN APPROVED OFFSET ADJUSTMENT IF NECESSARY.

IT PAY ITEM NOTES

- 630-2-12B:  
CONDUIT SHALL BE 1.25" HDPE AS PER MANATEE COUNTY IT STANDARDS. THE CONTRACTOR SHALL PROVIDE BORE LOGS FOR ALL CONDUIT INSTALLED USING DIRECTIONAL BORE METHOD. INSTALL COUNTY APPROVED STANDARD AND ELECTRONIC ROUTE MARKERS AT ALL PULL BOX LOCATIONS.
- 635-2-12B:  
FIBER OPTIC PULL BOXES SHALL BE 24"X36"X36" AND THE LID SHALL BE STAMPED "MANATEE COUNTY SCHOOL BOARD".
- SIGNALIZATION AND LIGHTING PAY ITEM NOTES
- 630-2-12:  
THE CONTRACTOR SHALL PROVIDE BORE LOGS FOR ALL CONDUIT INSTALLED USING DIRECTIONAL BORE METHOD.
- ALL CONDUIT TRENCHES SHALL BE BACKFILLED COMPLETELY TO PROVIDE SAFE CROSSING BY THE END OF EACH WORKING DAY OR WHENEVER THE WORK ZONE BECOMES INACTIVE. THE CONTRACTOR SHALL NO OPEN ANY AREA THAT CAN NOT BE BACKFILLED IN THE SAME WORK PERIOD.
- SPARE CONDUIT AT PAVEMENT CROSSINGS SHALL BE CAPPED AT BOTH ENDS.
- 632-7-1:  
CONTACT MANATEE COUNTY FOR COLOR CODE VERIFICATION.
- THIS PAY ITEM INCLUDES CONDUCTORS TO POWER THE OVERHEAD ILLUMINATED STREET NAME SIGNS AND BLANK-OUT SIGNS.
- 635-2-11, 635-2-13, 635-2-14:  
PULL BOXES SHALL BE TRAFFIC BEARING, ALL POLYMER TYPE (QUAZITE OR EQUIVALENT) CONSTRUCTION (NOT CONCRETE). PULL BOXES ARE TO BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, PULL BOXES SHALL BE PLACED A MINIMUM OF 7' FROM THE EDGE OF PAVEMENT. ALL PULL BOXES AND SPLICE BOXES SHALL HAVE TRAFFIC BEARING LIDS WITH A MINIMUM LOAD RATING OF 20,000 LB.
- LIGHTING PULL BOX DIMENSIONS SHALL BE 13"X24"X12" WITH THE LID STAMPED "MANATEE COUNTY STREET LIGHTING". THE FIBER OPTIC SPLICE VAULT SHALL BE 30"X60"X48" WITH THE LID STAMPED "MANATEE COUNTY FIBEROPTIC SYSTEM" ON THE COVER.  
SIGNAL PULL BOX DIMENSIONS SHALL BE 17"X30"X12" WITH THE LID STAMPED "MANATEE COUNTY TRAFFIC SIGNAL" ON THE COVER.
- 639-3-11:  
THE ELECTRICAL SERVICE DISCONNECT SHALL BE 100 AMP MINIMUM, COMPRISED OF A SIX (6) CIRCUIT DISCONNECT BOX WITH THREE CIRCUIT BREAKERS: ONE 40 AMP FOR CONTROLLER CABINET, ONE 15 AMP/120 VOLT FOR INTERNALLY ILLUMINATED STREET NAME SIGNS AND STREET LIGHTING, AND ONE 15 AMP/120 VOLT FOR FUTURE USE.
- PAYMENT INCLUDES THE COST OF A PHOTOCELL ATTACHED TO THE SERVICE DISCONNECT TO POWER THE OVERHEAD STREET NAME SIGNS.
- USE RIGID ALUMINUM CONDUIT FOR ABOVE-GROUND APPLICATION.
- 639-4-6:  
INCLUDES FURNISHING AND INSTALLING A BASE MOUNTED GENERATOR CABINET ASSEMBLY COMPATIBLE WITH MANATEE COUNTY'S GENERATOR/INVERTER BACK UP PROGRAM. CABINET DIMENSIONS ARE APPROXIMATELY 36"X26"X43" WITH A PULLOUT SHELF AND INTERNAL FAN. THE GENERATOR CABINET BASE IS 36"X48" WITH THE BASE TOP AT SAME ELEVATION AS THE TOP OF THE CONTROLLER ASSEMBLY BASE. THE GENERATOR CABINET AND CONTROLLER CABINET CAN BE MOUNTED ON A SHARED BASE IF FIELD CONDITIONS ALLOW.
- THE CABINET SHALL BE CAPABLE OF OPERATING A YAMAHA YG2800I INVERTER OR SIMILAR MODEL TO PROVIDE POWER TO OPERATE THE TRAFFIC SIGNAL, CONTROLLER CABINET AND ALL PERIPHERAL EQUIPMENT HOUSED THEREIN, EXCLUDING LIGHTING CIRCUITS SUCH AS ILLUMINATED STREET NAME SIGNS AND STREET LIGHTING.
- THIS CABINET ASSEMBLY REQUIRES SPECIFIC DESIGN AND INSTALLATION REQUIREMENTS INCLUDING POWER CONNECTION TO THE PROPOSED POWER SERVICE AND CONTROLLER CABINET. SEE TRAFFIC INFRASTRUCTURE DESIGN GUIDE FOR MORE DETAILS.
- 641-2-80, 670-5-600:  
THESE PAY ITEMS ARE ALL-INCLUSIVE FOR REMOVAL OF THE EXISTING SIGNALIZATION. THIS INCLUDES DELIVERY OF COUNTY OWNED ITEMS TO THE DEPARTMENT OF PUBLIC WORKS. SEE PLAN SHEET NOTES.
- 649-21-10, 649-21-15, 649-2-21:  
THE MAST ARM POLES SHALL BE POWDER COATED PAINTED PPG #PCTB49104 - #347923 GREEN SD TGIC, VALMONT #F578E DARK GREEN. MEET REQUIREMENTS OF FDOT SPECIFICATION SECTION 649 AND PROVIDE A 5-YEAR WARRANTY TO LAKEWOOD RANCH INTER-DISTRICT AUTHORITY.
- THE CONTRACTOR SHALL SUBMIT PAINT SAMPLES TO THE COUNTY PROJECT MANAGER FOR APPROVAL PRIOR TO FABRICATION. THE MAST ARM PAINT IS TO BE MAINTAINED BY LAKEWOOD RANCH INTER-DISTRICT AUTHORITY AND SHALL BE PROVIDED A 5-YEAR PAINT WARRANTY AS PER SPECIFICATIONS SECTION 649.
- 650-1-34, 650-1-36, 650-1-39:  
USE ALUMINUM LOUVERED BACKPLATES ON ALL SIGNAL HEADS. ALL BACKPLATES SHALL INCLUDE A 2" YELLOW REFLECTORIZED (TYPE III REFLECTIVITY) OUTER EDGE BORDER.
- 653-1-11:  
USE LOCKING COLLARS FOR MOUNTING PEDESTRIAN SIGNAL HEADS TO PEDESTALS.

| REVISIONS |             |      |    |  <div>STANTEC CONSULTING SERVICES, INC.</div> | <div>DAVID J. ALLEN, P.E.<br/>LICENSE NUMBER 58540<br/>3915 CRESCENT PARK DRIVE<br/>RIVERVIEW, FLORIDA 33578</div> | <div>MANATEE COUNTY<br/>PUBLIC WORKS<br/>COUNTY PROJECT NO:<br/>6109060</div> | INTERSECTION IMPROVEMENTS FOR LORRAINE<br>ROAD AND PLAYERS DRIVE | SHEET<br>NO. |
|-----------|-------------|------|----|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------|
| NO.       | DESCRIPTION | DATE | BY |                                                                                                                                   |                                                                                                                    |                                                                                                                                                                    | <i>GENERAL NOTES (2)</i>                                         | T-5          |
| ----      | ----        |      |    |                                                                                                                                   |                                                                                                                    |                                                                                                                                                                    |                                                                  |              |

SIGNALIZATION AND LIGHTING PAY ITEM NOTES (CONT.)

660-3-11, 660-3-12:  
CONSULT WITH THE MANUFACTURER AND USE RECOMMENDED MATERIALS AND INSTALLATION METHODS. USE EQUIPMENT COMPATIBLE WITH MANATEE COUNTY'S EXISTING ATMS SYSTEM.

CONTRACTOR SHALL COORDINATE WITH THE VENDOR AND PROVIDE DETECTION OVERLAY PLANS FOR COUNTY'S REVIEW, PRIOR TO FINALIZING SENSOR INSTALLATION LOCATIONS IN THE FIELD.

USE WAVETRONIX SMARTSENSOR MATRIX UNITS FOR STOP BAR DETECTION. USE WAVETRONIX SMARTSENSOR ADVANCE EXTENDED RANGE UNITS FOR ADVANCE DETECTION.

INSTALL ALL MICROWAVE DETECTION CABLING IN CONTINUOUS LENGTHS FROM THE CONTROL CABINET TO POINT OF DEVICE TERMINATION.

ATTACH DETECTION DEVICES TO THE PROPOSED MAST ARMS USING MANUFACTURER'S RECOMMENDED HARDWARE AND POSITIONING AS REQUIRED FOR OPTIMAL OPERATION.

670-5-110:  
THE TRAFFIC SIGNAL CONTROLLER, CONTROLLER CABINET AND ASSOCIATED HARDWARE SHALL MEET CURRENT MANATEE COUNTY SPECIFICATIONS, SEE APPENDIX 'A' OF THE TRAFFIC INFRASTRUCTURE DESIGN GUIDE FOR DETAILS. CONTACT MANATEE COUNTY TRAFFIC DESIGN DIVISION PRIOR TO ORDERING THE CONTROLLER ASSEMBLY TO CONFIRM EQUIPMENT COMPATIBILITY. THE CABINET SHALL BE CONFIGURED AS "FIBER READY" WITH COMPONENTS FOR FUTURE CONNECTION.

THE CONTROLLER SHALL BE NAZTEC 980 ATC.

THE CONTROLLER CABINET CABINET SHALL BE A TYPE VI WITH FRONT AND BACK ACCESS DOOR

THE CONTROLLER CABINET SHALL BE WIRED FOR SOP 10 REGARDLESS OF THE PROPOSED SIGNAL OPERATION AT THE INTERSECTION AND SHALL OPERATE AS PER SIGNAL OPERATING PLAN SHOWN.

SUBMIT CABINET DESIGN AND COMPONENTS TO THE COUNTY FOR APPROVAL.

THE CONTROLLER SHALL BE AT LEAST 2 FEET HIGH OR THE THE SAME ELEVATION AS THE CROWN OF THE ROADWAY, WHICHEVER IS GREATER. THE MAXIMUM DISTANCE FROM THE TECHNICIAN PAD OR STEP TO THE FOUNDATION TOP IS 24 INCHES.

682-1-133:  
ENSURE THE CCTV CAMERA IS COMPATIBLE WITH MANATEE COUNTY'S CURRENT ATMS SYSTEM AND CAMERA SOFTWARE. USE A BOSCH AUTODOME ITS 7000 STARLITE SERIES 1080P 30x40. INSTALL CCTV CABLING IN A CONTINUOUS LENGTH FROM THE CONTROL CABINET TO POINT OF DEVICE TERMINATION. USE MANUFACTURER'S RECOMMENDED POWER-OVER-ETHERNET ADAPTER AND SURGE PROTECTION.

ATTACH CCTV TO THE MAST ARM USING A CURVED 1-1/2" SCHEDULE 40 ALUMINUM BRACKET, 92" IN LENGTH. POSITION FOR OPTIMAL VIEWING.

POWER FOR THE CCTV CAMERA SHALL BE IN A SEPARATE CONDUIT FROM THE ETHERNET AND LOW VOLTAGE CONNECTIONS.

684-1-1:  
PROVIDE A SIEMENS RX 1400 (6GK60140AM23-0BA0-ZA07+B00+C02+D02+E00+F00+G02+V00) CELLULAR NETWORK MODEM AND AN EXTERNAL SIEMANS ANTENNA ANT794-4MR, 2G/3G/4G EU NETWORKS. THE CONTRACTOR SHALL PROGRAM THE SWITCH TO MAKE IT OPERATIONAL WITH THE EXISTING ATMS SYSTEM. THE CELLULAR NETWORK SIM CARD, APN, AND IP INFORMATION WILL BE PROVIDED BY THE COUNTY.

685-1-13:  
FURNISH AND INSTALL A COMPLETE UPS ASSEMBLY THAT INCLUDES A CABINET AND BATTERIES THAT MEET COUNTY SPECIFICATIONS. PROVIDE (1) UNINTERRUPTIBLE POWER SUPPLY (UPS) MODEL APC 1300. ALL UPS'S SHALL SUPPORT SNMP PROTOCOL FOR REMOTE MONITORING AND MANAGEMENT. INSTALL THE COMPLETE UPS SYSTEM INCLUDING BATTERIES IN A SEPARATE CABINET EXTERNALLY MOUNTED TO THE SIDE OF THE TRAFFIC CONTROLLER CABINET.

715-1-11:  
THIS PAY ITEM SHALL INCLUDE CONDUCTORS AS INDICATED IN THE PLANS AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS. PAYMENT SHALL BE MADE BASED ON LINEAR FOOT OF SINGLE CONDUCTOR.

715-61-152, 715-61-252:  
THIS PAY ITEM SHALL INCLUDE A STANDARD ALUMINUM LIGHT POLE, 15-FOOT BRACKET ARM, LED LUMINAIRE, ANCHOR BOLTS WITH LOCK NUTS AND WASHERS, VIBRATION DAMPENING DEVICE, FRANGIBLE BREAKAWAY TRANSFORMER TYPE BASE AND FOUNDATION. THE COST OF BREAK-AWAY WATERTIGHT, IN-LINE FUSE HOLDERS, THE STRAIN RELIEF AND THE SURGE ARRESTOR SHALL BE PAID FOR UNDER PAY ITEM 715-500-1.

THE LUMINAIRE TO BE INCLUDED UNDER THIS PAY ITEM IS SPECIFIED ON THE LIGHTING PLAN SHEET. THE LUMINAIRE SHALL INCLUDE THE HOUSE SIDE SHIELD AND THE EVOLVE FIELD ADJUSTABLE MODULE. THE LUMINAIRE AND HOUSE SIDE SHIELD SHALL BE GRAY.

THE COST OF THE MAINTENANCE SLAB AS SPECIFIED IN THE FDOT STANDARD PLANS INDEX 715-001 IS INCLUDED UNDER THIS PAY ITEM. THE ORIENTATION OF THE MAINTENANCE SLAB IN THE PLANS IS SCHEMATIC AND MAYBE ADJUSTED BY THE CONTRACTOR UNDER APPROVAL OF THE ENGINEER. IF THE SLAB CONFLICTS WITH THE PROPOSED SIDEWALK OR RIGHT OF WAY LINE, THE SLAB SHALL BE MODIFIED BY ENDING THE SLAB ADJACENT TO THE EDGE OF THE SIDEWALK OR AT THE RIGHT OF WAY LINE. THERE SHOULD BE NO GAP BETWEEN THE SLAB AND THE EDGE OF SIDEWALK. THE SLAB ELEVATION SHALL MATCH THE BACK OF THE SIDEWALK ELEVATION.

THE CONTRACTOR CAN SUBSTITUTE THE LIGHT POLE STANDARD FOUNDATION WITH A SPECIAL FOUNDATION TO AVOID UTILITY CONFLICTS AS APPROVED BY THE ENGINEER. SPECIFICATIONS FOR THE SPECIAL FOUNDATIONS ARE IN THE FDOT STANDARD PLANS INDEX 715-002.

715-1-60, 715-69-000:  
THE EXISTING LIGHTING IS OWNED AND MAINTAINED BY LAKEWOOD RANCH COMMUNITY DEVELOPMENT DISTRICT 5 (CDD5). COORDINATE WITH CDD5 FOR LOAD CENTER ACCESS AND PICKUP OF POLES AFTER REMOVAL.

CONTACT THE LAKEWOOD RANCH INTER-DISTRICT AUTHORITY PRIOR TO START OF WORK:  
MR. TOM MERRELL  
LWR INTER-DISTRICT AUTHORITY  
DIRECTOR OF OPERATIONS  
PHONE (941) 727-0899 EXT. 105  
tom.merrell@lwrtownhall.com

CONTACT THE LAKEWOOD RANCH AUTHORITY AT LEAST TWO (2) WEEKS PRIOR TO PERFORMING ANY WORK THAT AFFECTS EXISTING LIGHTING. THE EXISTING LIGHTING SHALL REMAIN IN OPERATION UNTIL THE PROPOSED LIGHTING IS ACTIVATED. MAKE PROVISIONS TO MAINTAIN EXISTING CIRCUIT CONTINUITY THROUGHOUT CONSTRUCTION UNTIL REMOVAL. THE CONTRACTOR SHALL REMOVE THE EXISTING LIGHTING INCLUDING POLES, FOUNDATIONS, CONDUCTORS, AND PULL BOXES UNDER THESE PAY ITEMS. STOCKPILE THE POLES AND LUMINAIRES ON SITE FOR PICKUP BY THE OWNER. DISPOSE OF ALL OTHER MATERIALS IN AREAS PROVIDED BY THE CONTRACTOR.

715-500-1:  
THIS PAY ITEM INCLUDES THE COST OF BREAKAWAY WATERTIGHT, IN-LINE FUSE HOLDERS. THE STRAIN RELIEF, AND THE SURGE ARRESTOR PER STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD PLANS INDEX 715-001.

SYMBOL LEGEND

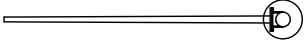
— • — • — • — = OPEN TRENCH CONDUIT

— •• — •• — •• — = DIRECTIONAL BORE CONDUIT

 = PULL BOX (TRAFFIC)

 = PULL BOX (LIGHTING)

 = SPLICE BOX (FUTURE FIBER OPTIC)

 = MAST ARM POLE

 = PEDESTRIAN POLE W/DISPLAY

 = SIGNAL HEAD (3 OR 4 SECTION)

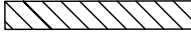
 = SIGNAL HEAD (5 SECTION)

 = OVERHEAD SIGN

 = CCTV CAMERA

 = MICROWAVE VIDEO DETECTOR (STOP BAR)

 = MICROWAVE VIDEO DETECTOR (ADVANCE)

 = DETECTION ZONE

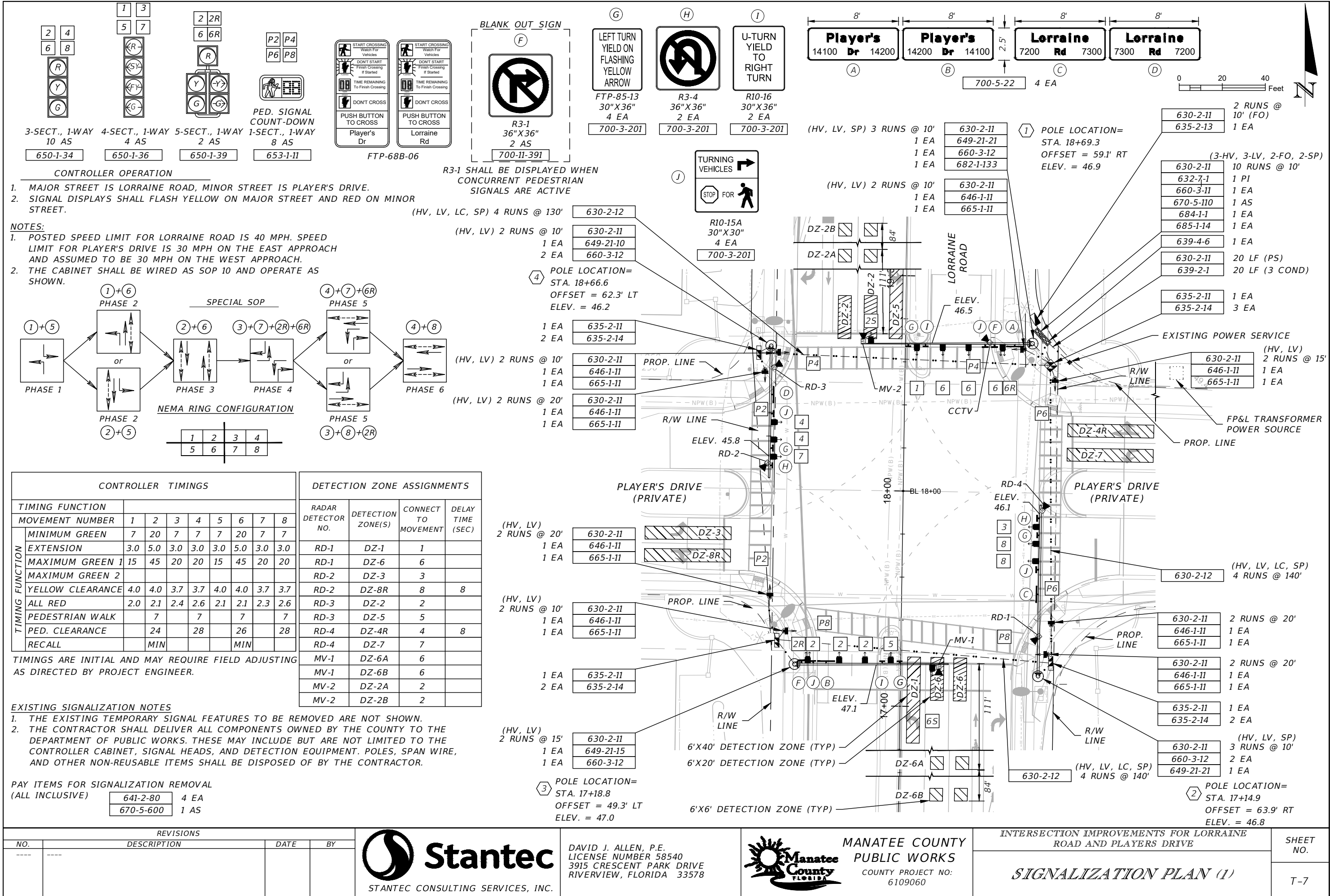
 = CONCRETE PEDESTAL

 = CABINET (CONTROLLER OR GENERATOR)

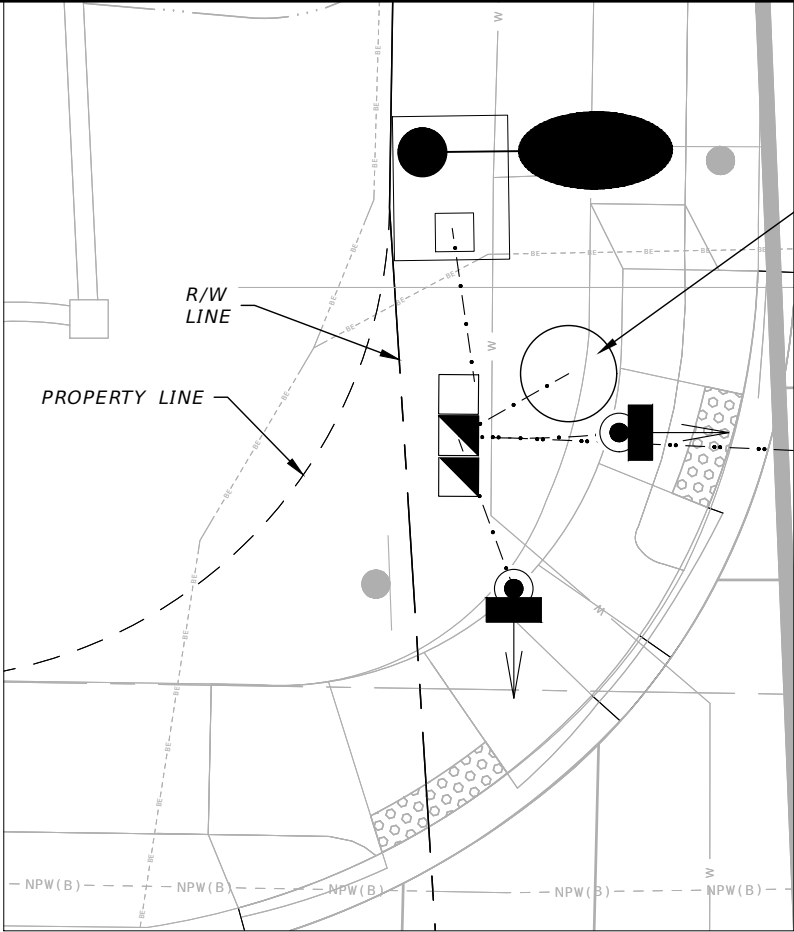
CONDUIT LABELING

HV = HIGH VOLTAGE CONDUIT  
LV = LOW VOLTAGE CONDUIT  
FO = FIBER OPTIC CONDUIT (FUTURE)  
IT = FIBER OPTIC CONDUIT (IT)  
PS = POWER SERVICE CONDUIT  
LC = LIGHTING CONDUIT  
SP = SPARE CONDUIT

| REVISIONS |             |      |    | <br>STANTEC CONSULTING SERVICES, INC. | DAVID J. ALLEN, P.E.<br>LICENSE NUMBER 58540<br>3915 CRESCENT PARK DRIVE<br>RIVERVIEW, FLORIDA 33578 | <br>MANATEE COUNTY<br>PUBLIC WORKS<br>COUNTY PROJECT NO:<br>6109060 | INTERSECTION IMPROVEMENTS FOR LORRAINE<br>ROAD AND PLAYERS DRIVE | SHEET<br>NO. |
|-----------|-------------|------|----|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--------------|
| NO.       | DESCRIPTION | DATE | BY |                                                                                                                           |                                                                                                      |                                                                                                                                                          | <i>GENERAL NOTES (3)</i>                                         | T-6          |
| ----      | ----        |      |    |                                                                                                                           |                                                                                                      |                                                                                                                                                          |                                                                  |              |



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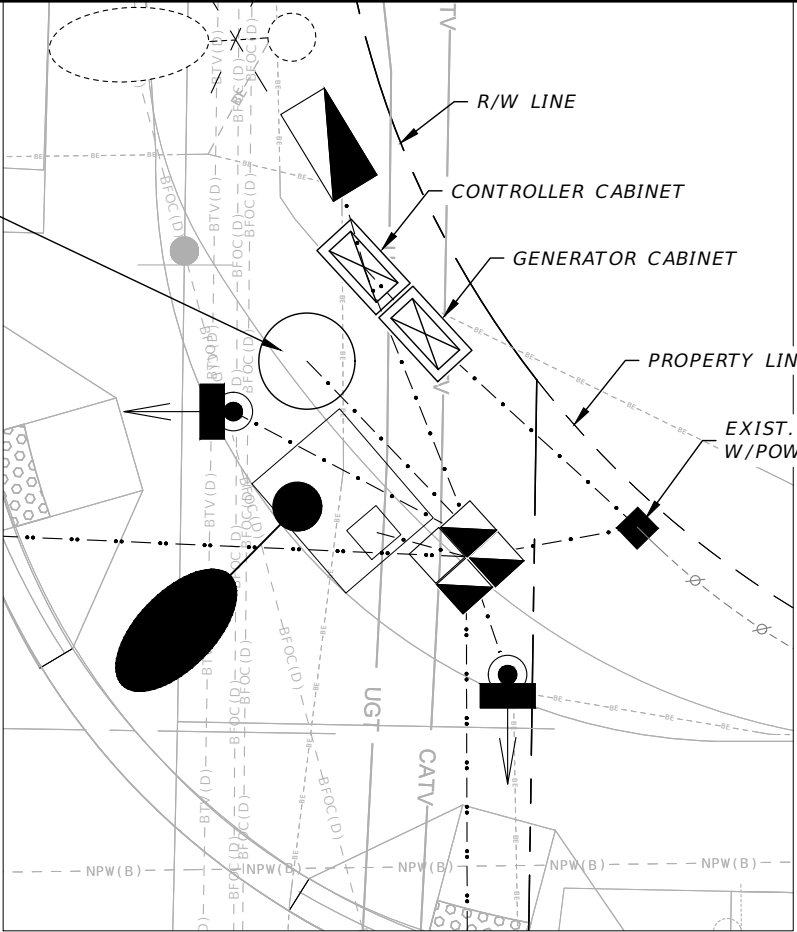
PROPOSED MAST ARM  
FOUNDATION

R/W  
LINE

PROPERTY LINE

LORRAINE ROAD

PLAYER'S DRIVE



PROPOSED MAST ARM  
FOUNDATION

R/W LINE

CONTROLLER CABINET

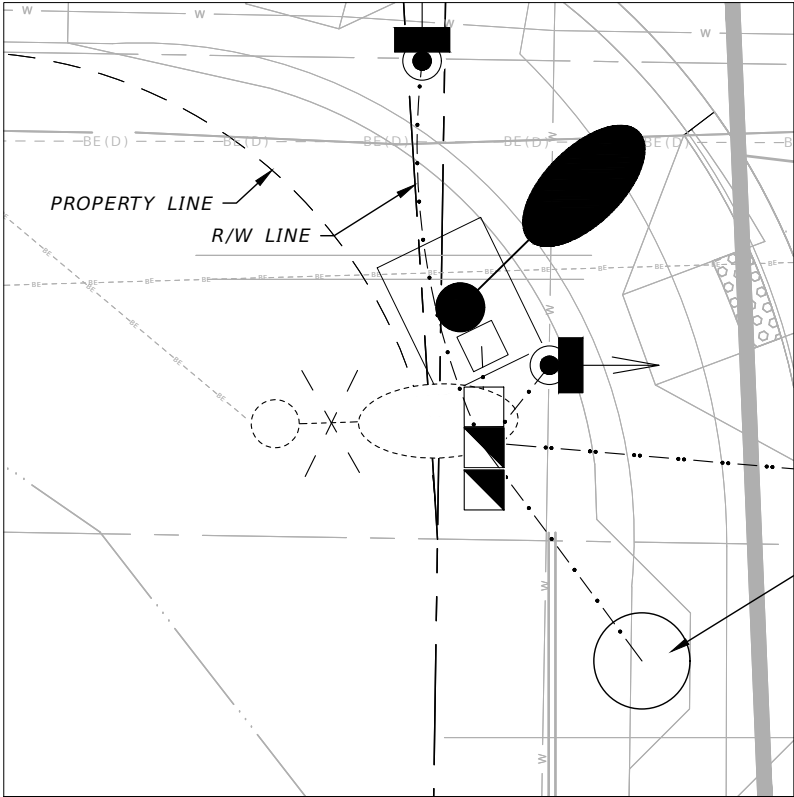
GENERATOR CABINET

PROPERTY LINE

EXIST. PEDESTAL  
W/POWER SERVICE

CATV

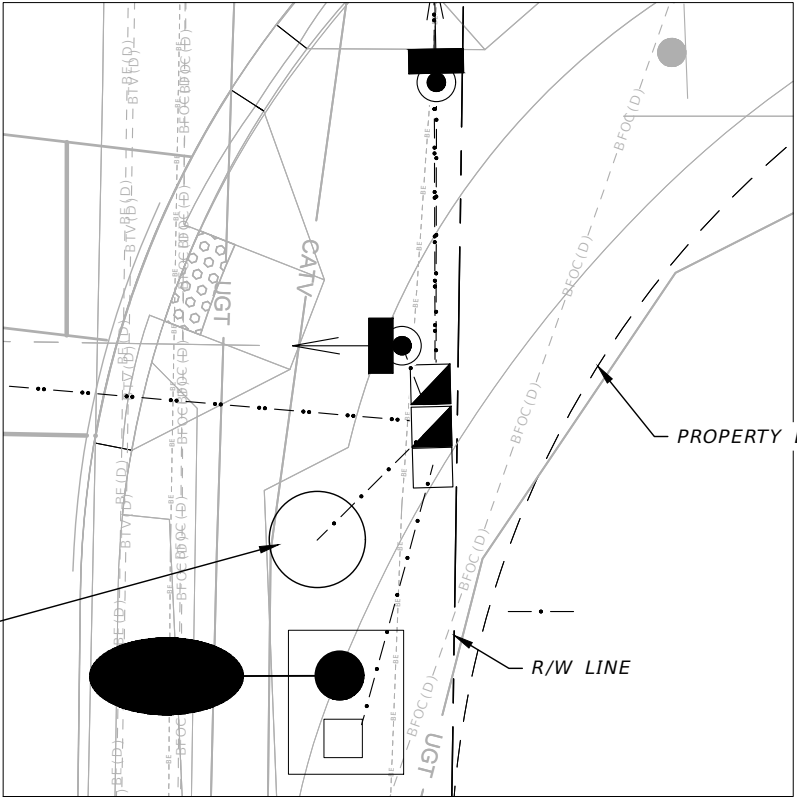
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PROPERTY LINE

R/W LINE

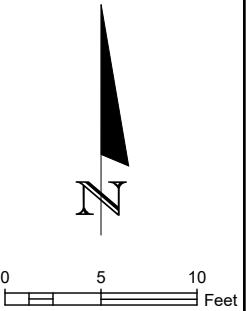
PROPOSED MAST ARM  
FOUNDATION



PROPOSED MAST ARM  
FOUNDATION

PROPERTY LINE

R/W LINE



| REVISIONS |             |       |       |
|-----------|-------------|-------|-------|
| NO.       | DESCRIPTION | DATE  | BY    |
| ----      | -----       | ----- | ----- |



DAVID J. ALLEN, P.E.  
LICENSE NUMBER 58540  
3915 CRESCENT PARK DRIVE  
RIVERVIEW, FLORIDA 33578



MANATEE COUNTY  
PUBLIC WORKS  
COUNTY PROJECT NO:  
6109060

INTERSECTION IMPROVEMENTS FOR LORRAINE  
ROAD AND PLAYERS DRIVE

*SIGNALIZATION PLAN (2)*

SHEET  
NO.

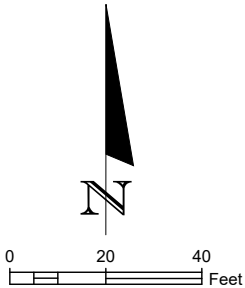
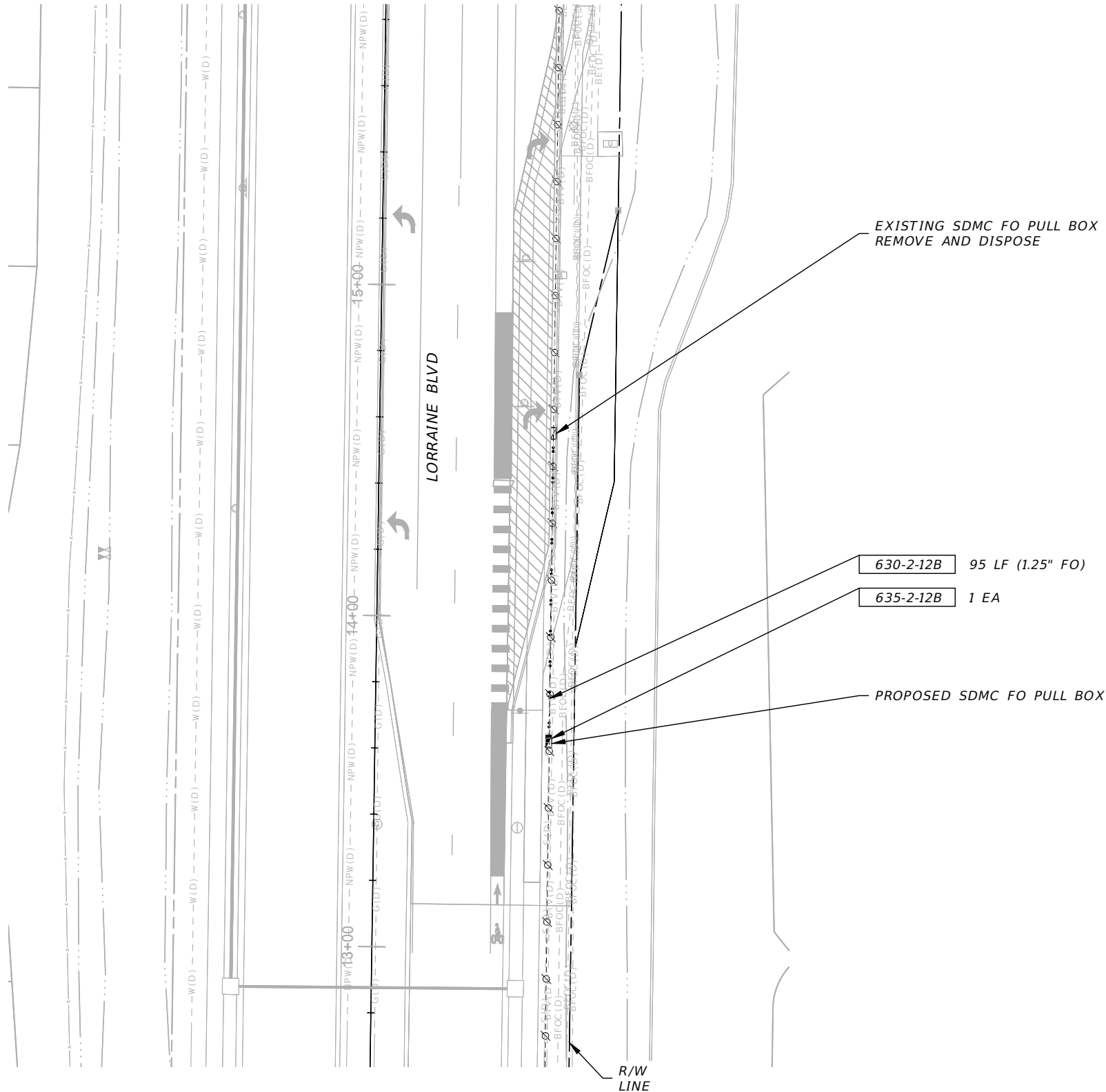
T-8

|                              |                            |
|------------------------------|----------------------------|
| AVERAGE HORIZONTAL INTENSITY | 1.0 - 1.5 FOOT CANDLES     |
| UNIFORMITY RATIO AVG./MIN.   | 4:1 OR LESS                |
|                              | 10:1 OR LESS               |
| AVERAGE VERTICAL INTENSITY   | 1.0 - 1.5 FOOT CANDLES     |
|                              | (1.7 FOOT CANDLES MAXIMUM) |
| WIND SPEED                   | 140 MPH                    |

[illegible][illegible]

*T-9*

- NOTES:**
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING COUNTY IT DEPARTMENT PERSONNEL AT LEAST FIVE BUSINESS DAYS PRIOR TO START OF WORK:  
  
BILL KERSEY  
MANATEE COUNTY BOCC FIBER  
PH. 941-748-4501 (x5803)  
  
MATT BAUER  
MANATEE COUNTY SDMC FIBER  
PH. 941-708-8770 (x41012)
  - THIS PLAN ASSUMES MOVING THE SDMC FO PULL BOX LOCATION CAN BE ACCOMPLISHED WITHOUT SPLICING OR OTHER COMMUNICATIONS INTERRUPTION. COORDINATE WITH THE COUNTY IF INTERRUPTIONS WILL OCCUR AND IF PERMANENT FIBER SPLICING IS REQUIRED. ALL PERMANENT SPLICING WILL BE PERFORMED BY COUNTY FORCES.



| REVISIONS |             |      |    |
|-----------|-------------|------|----|
| NO.       | DESCRIPTION | DATE | BY |
| ----      | -----       |      |    |



DAVID J. ALLEN, P.E.  
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3915 CRESCENT PARK DRIVE  
RIVERVIEW, FLORIDA 33578

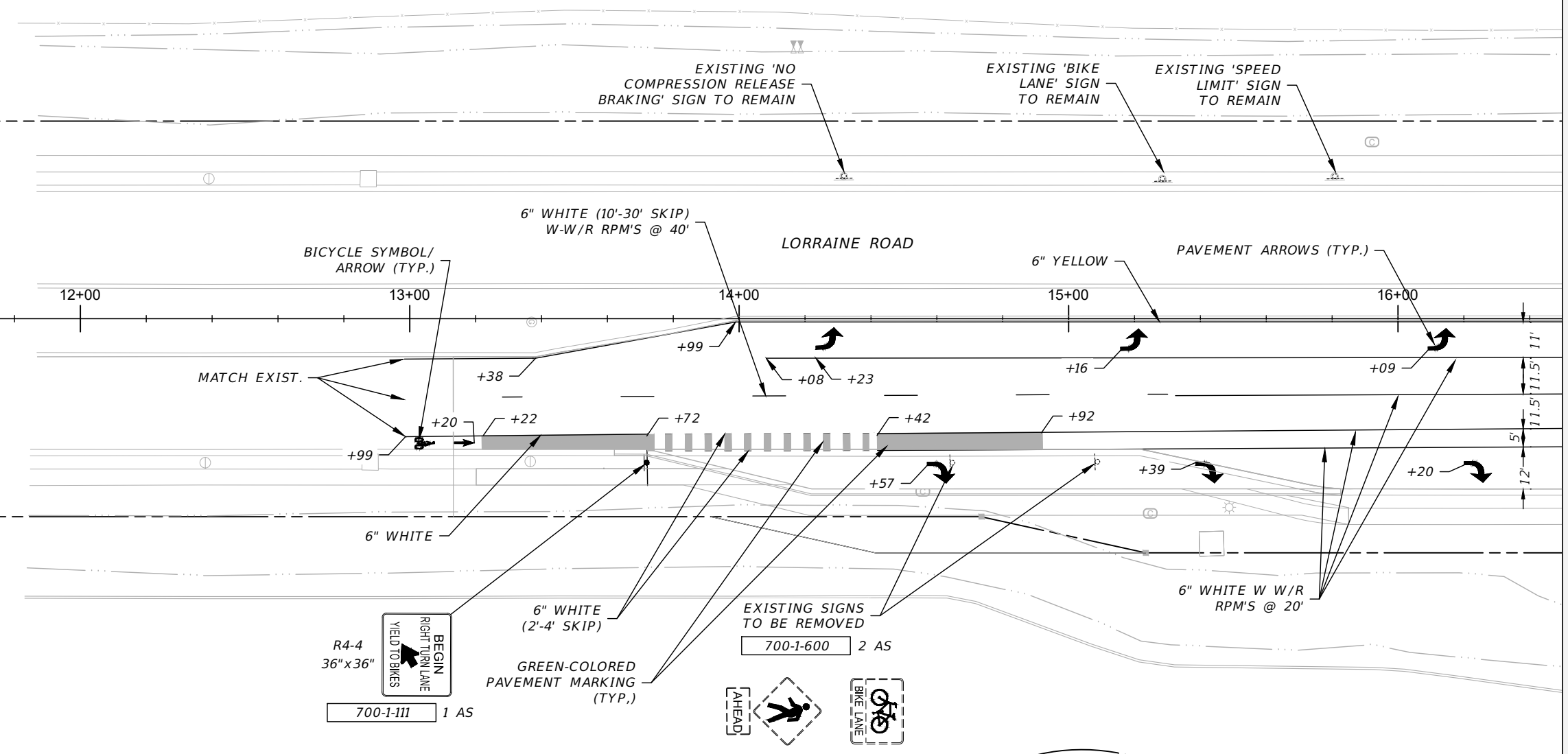
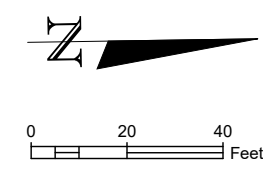


MANATEE COUNTY  
PUBLIC WORKS  
COUNTY PROJECT NO:  
6109060

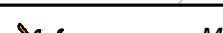
| INTERSECTION IMPROVEMENTS FOR LORRAINE<br>ROAD AND PLAYERS DRIVE |  | SHEET<br>NO. |
|------------------------------------------------------------------|--|--------------|
| IT FIBER RELOCATION PLAN                                         |  | T-10         |

| SIGNING & PAVEMENT MARKING TABULATION OF QUANTITIES |                                                                                   |      |               |       |        |       |        |       |        |       |      |       |      |       |      |       |                        |       |                |       |
|-----------------------------------------------------|-----------------------------------------------------------------------------------|------|---------------|-------|--------|-------|--------|-------|--------|-------|------|-------|------|-------|------|-------|------------------------|-------|----------------|-------|
| PAY<br>ITEM<br>NO.                                  | DESCRIPTION                                                                       | UNIT | SHEET NUMBERS |       |        |       |        |       |        |       |      |       |      |       |      |       | TOTAL<br>THIS<br>SHEET |       | GRAND<br>TOTAL |       |
|                                                     |                                                                                   |      | T - 12        |       | T - 13 |       | T - 14 |       | T - 15 |       |      |       |      |       |      |       |                        |       |                |       |
|                                                     |                                                                                   |      | PLAN          | FINAL | PLAN   | FINAL | PLAN   | FINAL | PLAN   | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN | FINAL | PLAN                   | FINAL | PLAN           | FINAL |
| 700-1-111                                           | SINGLE COLUMN GROUND SIGN ASSEMBLY, F&I GROUND MOUNT, LESS THAN 12 SF             | EA   | 1             |       | 4      |       | 1      |       |        |       |      |       |      |       |      |       | 6                      |       | 6              |       |
| 700-1-500                                           | SINGLE COLUMN GROUND SIGN ASSEMBLY, RELOCATE                                      | EA   |               |       | 4      |       |        |       |        |       |      |       |      |       |      |       | 4                      |       | 4              |       |
| 700-1-600                                           | SINGLE COLUMN GROUND SIGN ASSEMBLY, REMOVE                                        | EA   | 2             |       | 3      |       |        |       |        |       |      |       |      |       |      |       | 5                      |       | 5              |       |
| 700-1-914                                           | SINGLE COLUMN GROUND SIGN ASSEMBLY, F&I CANTILEVER GROUND MOUNT, 30.1+ SF         | EA   |               |       |        |       |        |       | 2      |       |      |       |      |       |      |       | 2                      |       | 2              |       |
| 706-1-3                                             | RAISED PAVEMENT MARKER, TYPE B<br>- BI-DIRECTIONAL WHITE/RED                      | EA   |               |       |        |       |        |       |        |       |      |       |      |       |      |       |                        |       |                |       |
|                                                     |                                                                                   | EA   | 45            |       | 36     |       | 39     |       |        |       |      |       |      |       |      |       | 120                    |       |                |       |
|                                                     |                                                                                   |      |               |       |        |       |        |       |        |       |      |       |      |       |      |       |                        |       |                |       |
| 710-90                                              | PAINTED PAVEMENT MARKINGS, FINAL SURFACE                                          | LS   |               |       |        |       |        |       |        |       |      |       |      |       |      |       |                        |       | 1              |       |
| *                                                   | STANDARD, WHITE, SOLID, 6"                                                        | GM   | 0.139         |       | 0.130  |       | 0.145  |       |        |       |      |       |      |       |      |       | 0.414                  |       |                |       |
| *                                                   | STANDARD, WHITE, 2-4 DOTTED GUIDELINE/6-10 GAP EXTENSION, 6"                      | GM   | 0.025         |       | 0.074  |       | 0.027  |       |        |       |      |       |      |       |      |       | 0.126                  |       |                |       |
| *                                                   | STANDARD, WHITE, 10-30 SKIP, 6"                                                   | GM   | 0.044         |       | 0.013  |       | 0.040  |       |        |       |      |       |      |       |      |       | 0.097                  |       |                |       |
| *                                                   | STANDARD, WHITE, SOLID, 12"                                                       | LF   |               |       | 730    |       |        |       |        |       |      |       |      |       |      |       | 730                    |       |                |       |
| *                                                   | STANDARD, WHITE, SOLID, 24"                                                       | LF   |               |       | 734    |       |        |       |        |       |      |       |      |       |      |       | 734                    |       |                |       |
| *                                                   | STANDARD, YELLOW, SOLID, 6"                                                       | GM   | 0.067         |       | 0.038  |       | 0.065  |       |        |       |      |       |      |       |      |       | 0.170                  |       |                |       |
| *                                                   | STANDARD, WHITE, MESSAGE OR SYMBOL (BIKE)                                         | EA   | 2             |       | 2      |       | 1      |       |        |       |      |       |      |       |      |       | 5                      |       |                |       |
| *                                                   | STANDARD, WHITE, ARROW (LEFT, RIGHT, RIGHT-THRU, BIKE)                            | EA   | 8             |       | 10     |       | 6      |       |        |       |      |       |      |       |      |       | 24                     |       |                |       |
| *                                                   | STANDARD, YELLOW, 2-4 DOTTED GUIDELINE/6-10 GAP EXTENSION, 6"                     | GM   |               |       | 0.076  |       |        |       |        |       |      |       |      |       |      |       | 0.076                  |       |                |       |
| 710-11-290                                          | PAINTED PAVEMENT MARKINGS, STANDARD, YELLOW, ISLAND NOSE                          | SF   |               |       | 53     |       |        |       |        |       |      |       |      |       |      |       | 53                     |       | 53             |       |
| 711-11-123                                          | THERMOPLASTIC, STANDARD, WHITE, SOLID, 12" FOR CROSSWALK                          | LF   |               |       | 730    |       |        |       |        |       |      |       |      |       |      |       | 730                    |       | 730            |       |
| 711-11-125                                          | THERMOPLASTIC, STANDARD, WHITE, SOLID, 24" FOR STOP LINE                          | LF   |               |       | 154    |       |        |       |        |       |      |       |      |       |      |       | 154                    |       | 154            |       |
| 711-11-141                                          | THERMOPLASTIC, STANDARD, WHITE, 2-4 DOTTED GUIDELINE/ 6-10 GAP EXTENSION, 6"      | GM   | 0.025         |       | 0.074  |       | 0.027  |       |        |       |      |       |      |       |      |       | 0.126                  |       | 0.126          |       |
| 711-11-170                                          | THERMOPLASTIC, STANDARD, WHITE, ARROW                                             | EA   | 6             |       | 8      |       | 5      |       |        |       |      |       |      |       |      |       | 19                     |       | 19             |       |
|                                                     | DIRECTIONAL ARROW, LEFT                                                           | EA   | 3             |       | 4      |       | 3      |       |        |       |      |       |      |       |      |       |                        |       |                |       |
|                                                     | DIRECTIONAL ARROW, RIGHT                                                          | EA   | 3             |       | 2      |       | 2      |       |        |       |      |       |      |       |      |       |                        |       |                |       |
|                                                     | DIRECTIONAL ARROW, RIGHT-THRU                                                     | EA   |               |       | 2      |       |        |       |        |       |      |       |      |       |      |       |                        |       |                |       |
| 711-11-241                                          | THERMOPLASTIC, STANDARD, YELLOW, 2-4 DOTTED GUIDELINE/ 6-10 GAP EXTENSION, 6"     | GM   | 0.026         |       | 0.076  |       |        |       |        |       |      |       |      |       |      |       | 0.102                  |       | 0.102          |       |
| 711-14-125                                          | THERMOPLASTIC, PREFORMED, WHITE SOLID, 24" FOR CROSSWALK                          | LF   |               |       | 580    |       |        |       |        |       |      |       |      |       |      |       | 580                    |       | 580            |       |
| 711-14-160                                          | THERMOPLASTIC, PREFORMED, WHITE, MESSAGE (BICYCLE SYMBOL)                         | EA   | 2             |       | 2      |       | 1      |       |        |       |      |       |      |       |      |       | 5                      |       | 5              |       |
| 711-14-170                                          | THERMOPLASTIC, PREFORMED, WHITE, ARROW (BICYCLE ARROW)                            | EA   | 2             |       | 2      |       | 1      |       |        |       |      |       |      |       |      |       | 5                      |       | 5              |       |
| 711-15-101                                          | THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES WHITE, SOLID, 6"             | GM   | 0.139         |       | 0.130  |       | 0.145  |       |        |       |      |       |      |       |      |       | 0.414                  |       | 0.414          |       |
| 711-15-131                                          | THERMOPLASTIC, STANDARD-OPEN GRADED ASPHALT SURFACES, WHITE, SKIP. 6", 10-30 SKIP |      |               |       |        |       |        |       |        |       |      |       |      |       |      |       |                        |       |                |       |

|           |             |      |    |                                                                                                                                            |                                                                                                      |                                                                                                                                                                  |                                                                           |              |
|-----------|-------------|------|----|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--------------|
| REVISIONS |             |      |    | <br><b>Stantec</b><br>STANTEC CONSULTING SERVICES, INC. | DAVID J. ALLEN, P.E.<br>LICENSE NUMBER 58540<br>3915 CRESCENT PARK DRIVE<br>RIVERVIEW, FLORIDA 33578 | <br><b>MANATEE COUNTY<br/>PUBLIC WORKS</b><br>COUNTY PROJECT NO:<br>6109060 | INTERSECTION IMPROVEMENTS FOR LORRAINE<br>ROAD AND PLAYERS DRIVE          | SHEET<br>NO. |
| NO.       | DESCRIPTION | DATE | BY |                                                                                                                                            |                                                                                                      |                                                                                                                                                                  | <i><b>SIGNING &amp; PAVEMENT MARKING<br/>TABULATION OF QUANTITIES</b></i> | T-11         |
| ----      | -----       |      |    |                                                                                                                                            |                                                                                                      |                                                                                                                                                                  |                                                                           |              |

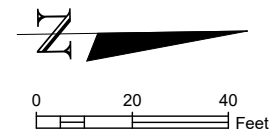


MATCHLINE STA. - 16+50.00

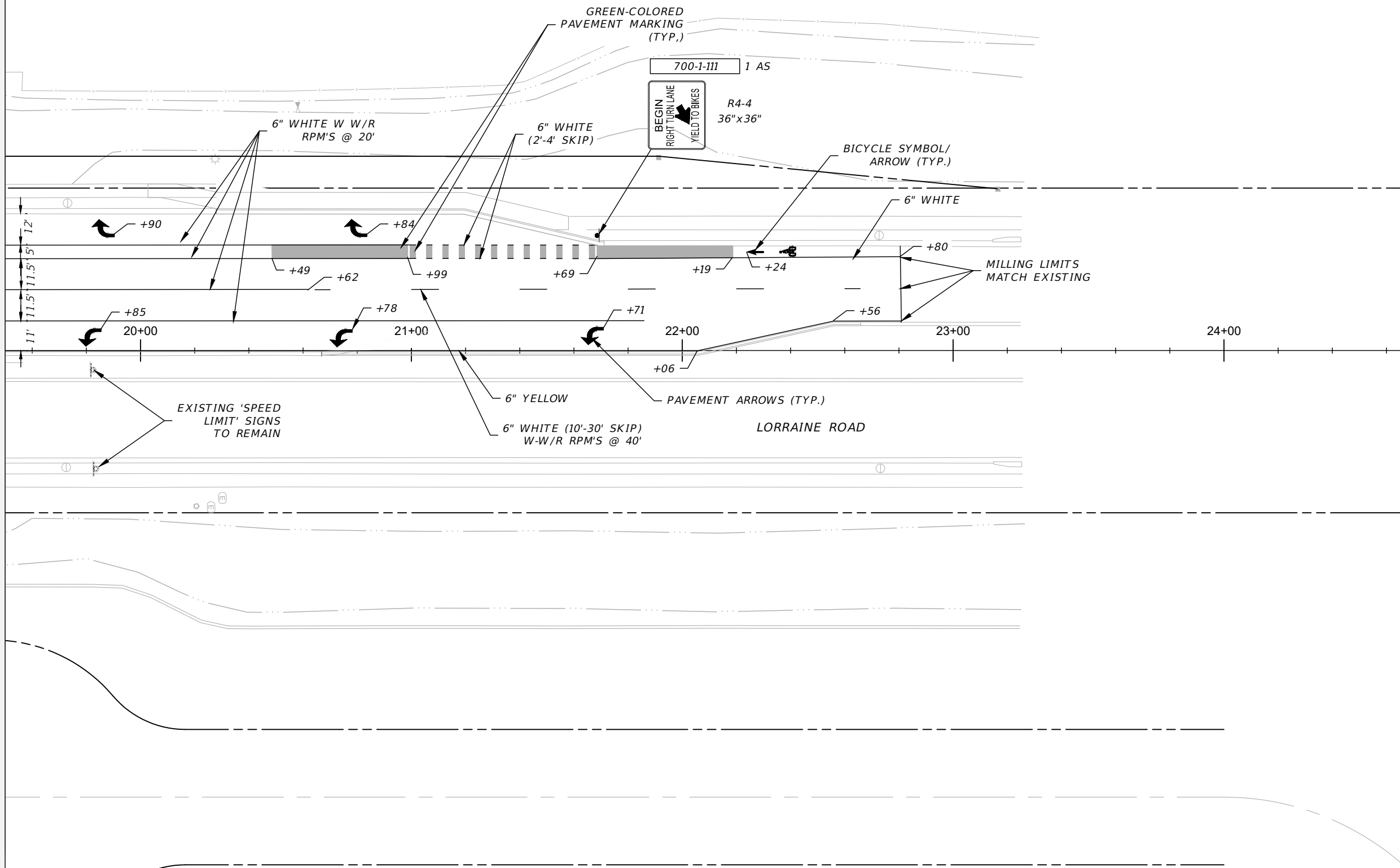
| REVISIONS |             |      |    |  <div>Stantec</div> STANTEC CONSULTING SERVICES, INC. |  <div>MANATEE COUNTY<br/>PUBLIC WORKS</div> COUNTY PROJECT NO:<br>6109060 | INTERSECTION IMPROVEMENTS FOR LORRAINE<br>ROAD AND PLAYERS DRIVE |  | SHEET<br>NO. |
|-----------|-------------|------|----|-------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--|--------------|
| NO.       | DESCRIPTION | DATE | BY |                                                                                                                                           |                                                                                                                                                                | <i>SIGNING &amp; PAVEMENT<br/>MARKING PLAN (1)</i>               |  |              |
| ----      | ----        |      |    |                                                                                                                                           |                                                                                                                                                                |                                                                  |  |              |

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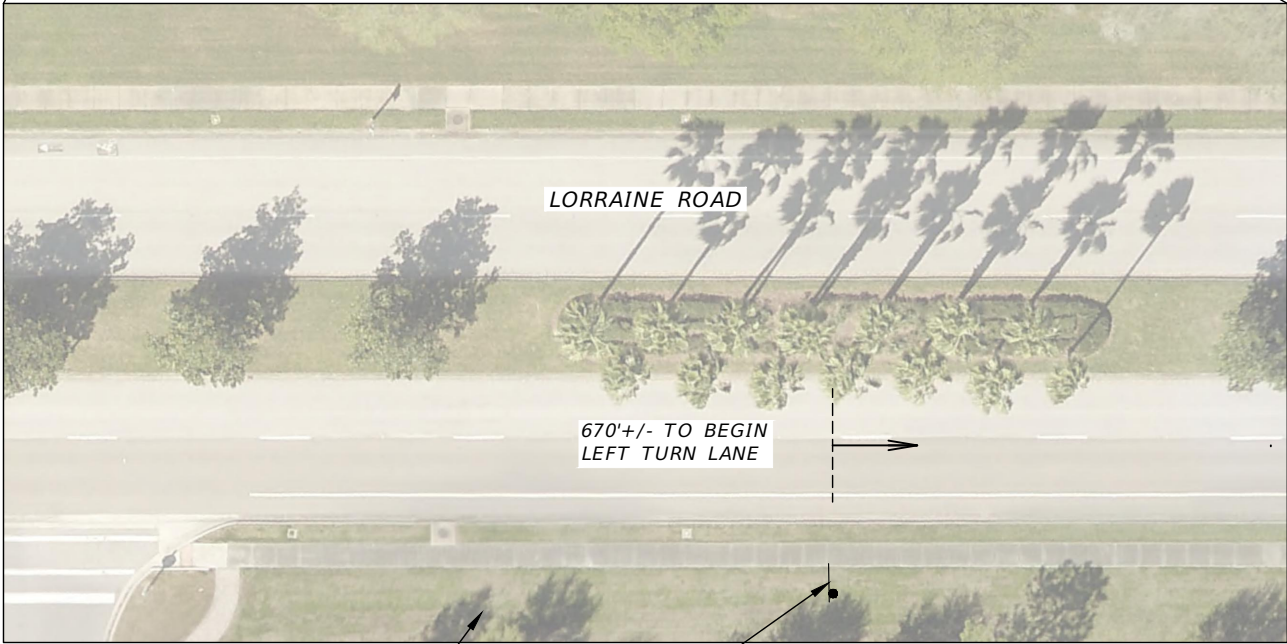
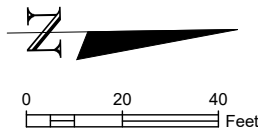
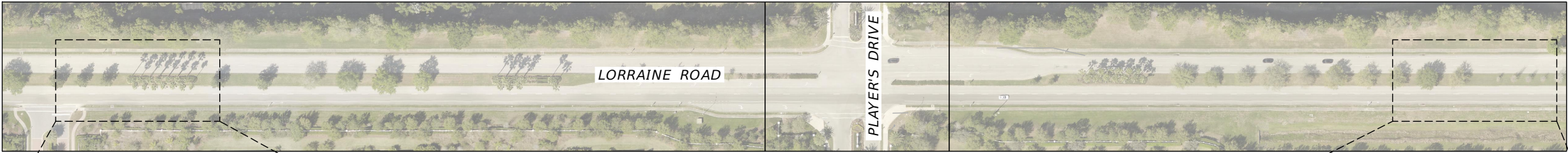
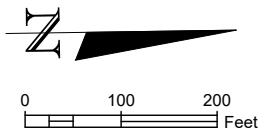


MATCHLINE STA. - 19+50.00



THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

| REVISIONS |             |      |      | <br><b>Stantec</b><br>STANTEC CONSULTING SERVICES, INC. | DAVID J. ALLEN, P.E.<br>LICENSE NUMBER 58540<br>3915 CRESCENT PARK DRIVE<br>RIVERVIEW, FLORIDA 33578 | <br>MANATEE COUNTY<br>PUBLIC WORKS<br>COUNTY PROJECT NO:<br>6109060 | INTERSECTION IMPROVEMENTS FOR LORRAINE<br>ROAD AND PLAYERS DRIVE |  | SHEET<br>NO. |
|-----------|-------------|------|------|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--|--------------|
| NO.       | DESCRIPTION | DATE | BY   |                                                                                                                                             |                                                                                                      |                                                                                                                                                          | <i>SIGNING &amp; PAVEMENT<br/>MARKING PLAN (3)</i>               |  |              |
| ----      | ----        | ---- | ---- |                                                                                                                                             |                                                                                                      |                                                                                                                                                          |                                                                  |  | T-14         |



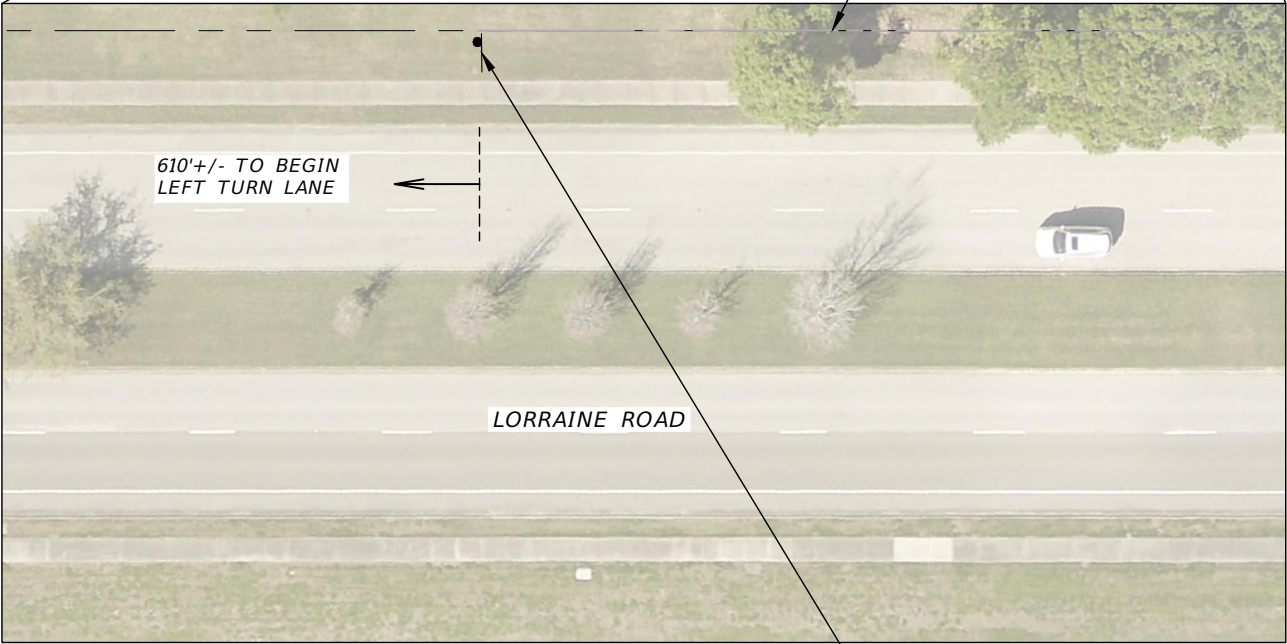
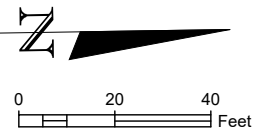
R/W LINE

**Player's Dr  
NEXT SIGNAL**

SIGN E  
48" X 96"

700-1-914

1 AS



**Player's Dr  
NEXT SIGNAL**

SIGN E  
48" X 96"

700-1-914

1 AS

| REVISIONS |             |      |    |
|-----------|-------------|------|----|
| NO.       | DESCRIPTION | DATE | BY |
| ----      | ----        |      |    |



**Stantec**

STANTEC CONSULTING SERVICES, INC.

DAVID J. ALLEN, P.E.  
LICENSE NUMBER 58540  
3915 CRESCENT PARK DRIVE  
RIVERVIEW, FLORIDA 33578



MANATEE COUNTY  
PUBLIC WORKS

COUNTY PROJECT NO:  
6109060

INTERSECTION IMPROVEMENTS FOR LORRAINE  
ROAD AND PLAYERS DRIVE

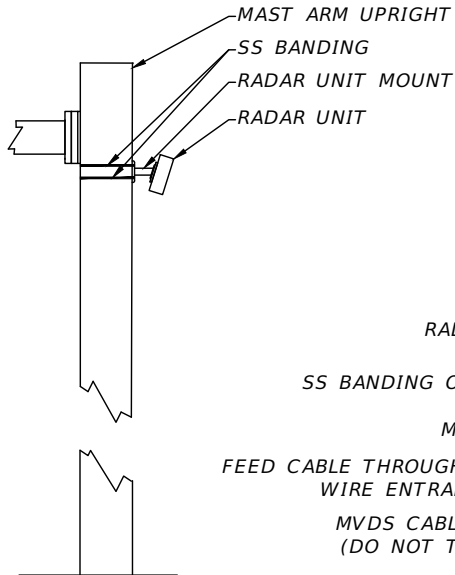
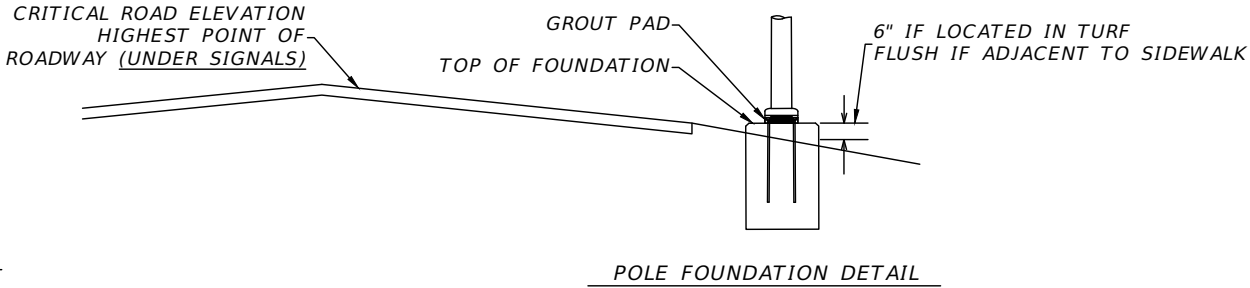
*SIGNING & PAVEMENT  
MARKING PLAN (4)*

SHEET  
NO.

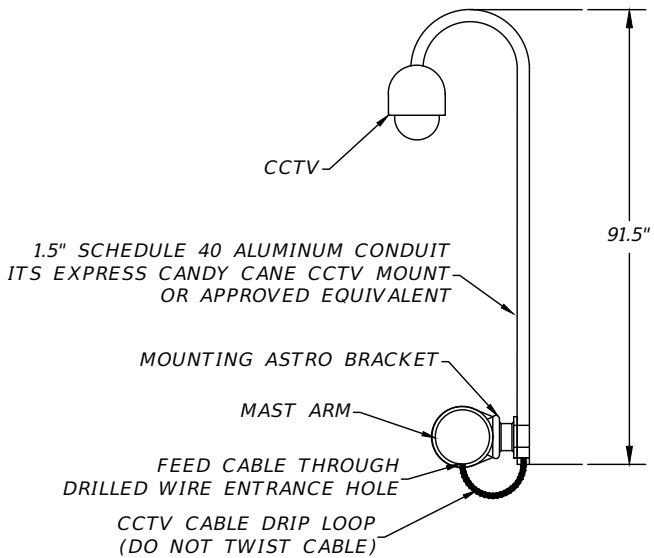
T-15

SPECIAL NOTES

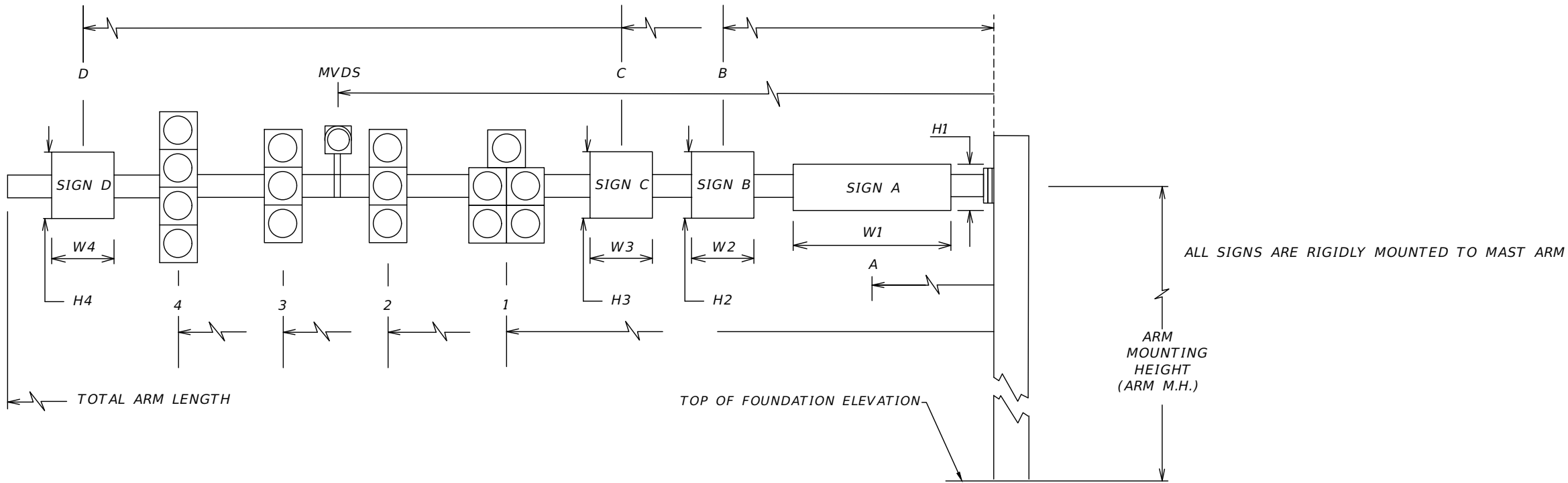
- A. EACH POLE AND MAST ARM SHALL BE IDENTIFIED WITH A PERMANENT ONE INCH (1") HIGH ENGRAVED OR IMPRESSED MARK WHICH BEARS THE POLE IDENTIFICATION NUMBER SHOWN ON THE PLANS.
- B. ANCHOR BOLT COVERS (ORNAMENTAL, NON-ORNAMENTAL, AND/OR PAINTED) SHALL BE GALVANIZED STEEL OR CAST ALUMINUM AND SHALL BE SECURED BY A MINIMUM OF TWO (2) THREADED FASTENERS. THE BOLT COVERS SHALL BE OF SUFFICIENT SIZE SO THAT THERE IS NO GAP BETWEEN ITSELF AND THE POLE SHAFT.
- C. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL ELEVATIONS LISTED IN THE PLANS.
- D. THE MAST ARM POLES SHALL BE POWDER COAT PAINTED PPG #PCTB49104 - #347923 GREEN SD TGIC, VALMONT #F578E DARK GREEN. SEE GENERAL NOTES.



MVDS MOUNTING DETAILS



CCTV MOUNTING DETAIL



| REVISIONS |             |      |      |
|-----------|-------------|------|------|
| NO.       | DESCRIPTION | DATE | BY   |
| ----      | ----        | ---- | ---- |



DAVID J. ALLEN, P.E.  
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MANATEE COUNTY  
PUBLIC WORKS  
COUNTY PROJECT NO:  
6109060

INTERSECTION IMPROVEMENTS FOR LORRAINE  
ROAD AND PLAYERS DRIVE

MAST ARM TABULATION (1)

SHEET  
NO.

T-16

| -- FIELD INSTALLATION DATA -- |                |                  |         |                         |              |             | SIGNAL DATA |                 |                 |                    |   |      |   |      |   |      |   |    |                  | SIGN DATA                      |                                               |     |     |      |     |     |      |    |     |      |      |    |     |      | MINOR DEVICE DISTANCE |     |    |    |    |
|-------------------------------|----------------|------------------|---------|-------------------------|--------------|-------------|-------------|-----------------|-----------------|--------------------|---|------|---|------|---|------|---|----|------------------|--------------------------------|-----------------------------------------------|-----|-----|------|-----|-----|------|----|-----|------|------|----|-----|------|-----------------------|-----|----|----|----|
| FDOT ID NO.                   | SHEET-POLE NO. | LOCATION BY STA. |         | TOP OF FOUND. ELEVATION | RDWY ARM NO. | CROWN ELEV. | SIGNAL V/H  | BACK PLATES Y/N | PED. SIGNAL Y/N | DISTANCE FROM POLE |   |      |   |      |   |      |   |    | TOTAL ARM LENGTH | ANGLE BETWEEN DUAL ARMS 90/270 | DISTANCE FROM POLE / HEIGHT AND WIDTH OF SIGN |     |     |      |     |     |      |    |     |      |      |    |     |      |                       |     |    |    |    |
|                               |                |                  |         |                         |              |             |             |                 |                 | 1                  | * | 2    | * | 3    | * | 4    | * | 5  |                  |                                | *                                             | A   | H1  | W1   | B   | H2  | W2   | C  | H3  | W3   | D    | H4 | W4  | E    | H5                    |     |    |    | W5 |
| N/A                           | T-6-1          | 18+69.3          | 59.1 RT | 46.9                    | 1            | 46.5        | V           | Y               | N               | 12.5               | 5 | 28   | 3 | 40   | 3 | 52   | 4 | 74 | 3                | 78                             | N/A                                           | 7   | 2.5 | 8    | 17  | 3   | 3    | 21 | 2.5 | 2.5  | 48   | 3  | 2.5 | 56   | 3                     | 2.5 | 18 | 76 |    |
| N/A                           | T-6-2          | 17+14.9          | 63.9 RT | 46.8                    | 1            | 46.1        | V           | Y               | N               | 52                 | 3 | 60   | 3 | 68   | 4 |      |   |    | 78               | N/A                            | 37                                            | 2.5 | 8   | 48   | 2.5 | 2.5 | 64   | 3  | 2.5 | 72   | 3    | 3  |     |      | 17                    | 76  |    |    |    |
| N/A                           | T-6-3          | 17+18.8          | 49.3 LT | 47.0                    | 1            | 47.1        | V           | Y               | N               | 4.5                | 5 | 19.5 | 3 | 31.5 | 3 | 43.5 | 4 | 64 | 3                | 70                             | N/A                                           | 2   | 3   | 3    | 8   | 2.5 | 2.5  | 15 | 2.5 | 8    | 39.5 | 3  | 2.5 | 47.5 | 3                     | 2.5 |    | 68 |    |
| N/A                           | T-6-4          | 18+68.9          | 62.1 LT | 46.2                    | 1            | 45.8        | V           | Y               | N               | 34                 | 3 | 42   | 3 | 50   | 4 |      |   |    | 60               | N/A                            | 21.5                                          | 2.5 | 8   | 30.5 | 2.5 | 2.5 | 46.5 | 3  | 2.5 | 54.5 | 3    | 3  |     |      | 9                     | 52  |    |    |    |

REVISIONS

| NO.  | DESCRIPTION | DATE | BY |
|------|-------------|------|----|
| ---- | ----        |      |    |



STANTEC CONSULTING SERVICES, INC.

DAVID J. ALLEN, P.E.  
LICENSE NUMBER 58540  
3915 CRESCENT PARK DRIVE  
RIVERVIEW, FLORIDA 33578



MANATEE COUNTY  
PUBLIC WORKS  
COUNTY PROJECT NO:  
6109060

INTERSECTION IMPROVEMENTS FOR LORRAINE  
ROAD AND PLAYERS DRIVE

MAST ARM TABULATION (2)

SHEET NO.

T-17

Holley, Howard

2/25/2025 4:01:34 PM

C:\Projects\Lorraine-Players\00000000000\Signalization\MSSGSG01.dwg

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

| STANDARD MAST ARM ASSEMBLIES DATA TABLE |                        |           |              |            |              |             |             |            |              | Table Date 11-01-16 |                        |
|-----------------------------------------|------------------------|-----------|--------------|------------|--------------|-------------|-------------|------------|--------------|---------------------|------------------------|
| STRUCTURE<br>ID NUMBER                  | DESIGNATION            | FIRST ARM |              | SECOND ARM |              | UF<br>(deg) | LL<br>(deg) | POLE       |              |                     | DRILLED<br>SHAFT<br>ID |
|                                         |                        | ARM<br>ID | FAA<br>(ft.) | ARM<br>ID  | SAA<br>(ft.) |             |             | POLE<br>ID | UAA<br>(ft.) | UB<br>(ft.)         |                        |
| T-6-1                                   | A78/S-P6/S-DS/22/5.0   | A78/S     |              |            |              |             |             | P6/S       | 24.0         | 21.0                | DS/22/5.0              |
| T-6-2                                   | A78/S/H-P6/S-DS/20/5.0 | A78/S     |              |            |              |             |             | H-P6/S     | 23.0         | 20.0                | DS/20/5.0              |
| T-6-3                                   | A70/S-P5/S-DS/18/5.0   | A70/S     |              |            |              |             |             | P5/S       | 24.0         | 21.0                | DS/18/5.0              |
| T-6-4                                   | A60/S-P4/S-DS/25/5.0   | A60/S     |              |            |              |             |             | P4/S       | 23.0         | 20.0                | DS/25/5.0              |
|                                         |                        |           |              |            |              |             |             |            |              |                     |                        |
|                                         |                        |           |              |            |              |             |             |            |              |                     |                        |
|                                         |                        |           |              |            |              |             |             |            |              |                     |                        |
|                                         |                        |           |              |            |              |             |             |            |              |                     |                        |
|                                         |                        |           |              |            |              |             |             |            |              |                     |                        |
|                                         |                        |           |              |            |              |             |             |            |              |                     |                        |
|                                         |                        |           |              |            |              |             |             |            |              |                     |                        |
|                                         |                        |           |              |            |              |             |             |            |              |                     |                        |
|                                         |                        |           |              |            |              |             |             |            |              |                     |                        |

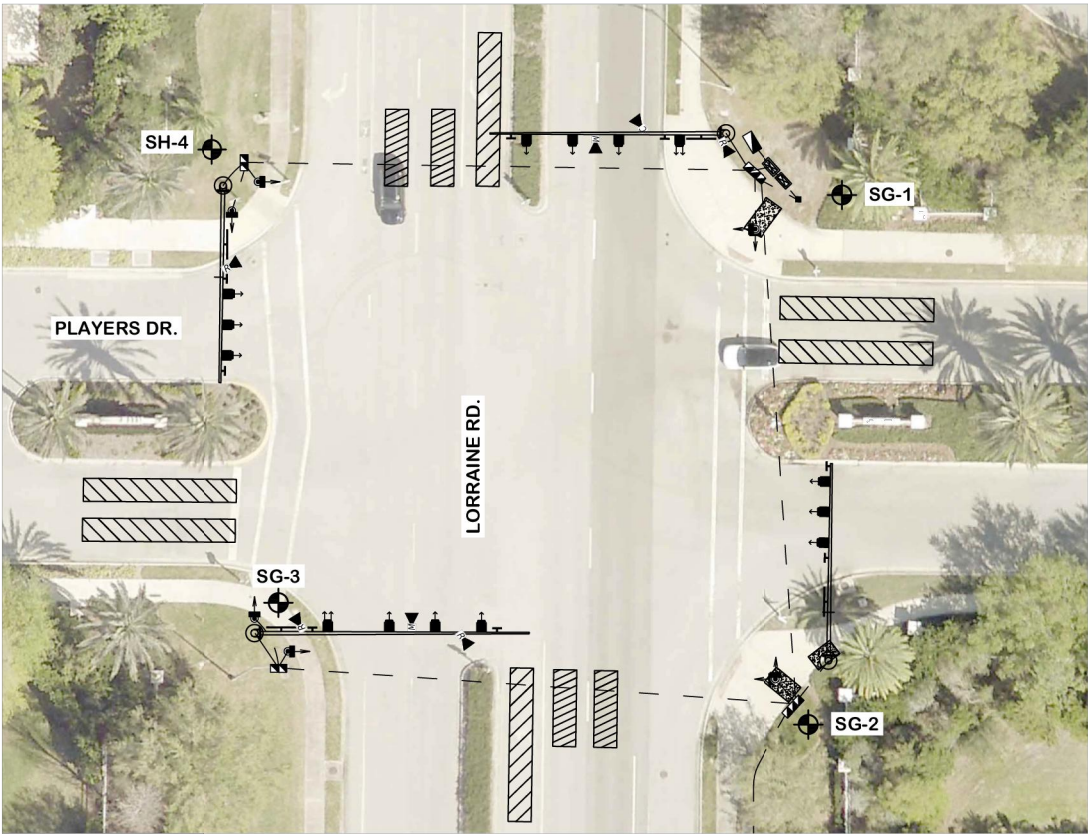
NOTES [Notes Date 11-01-16]:

1. If an entry appears in column FAA, a shorter arm is required. This is obtained by removing length from the arm tip and the arm length shortened from FA to FAA. SAA Similar.
2. If an entry appears in column UAA, a shorter pole is required. This is obtained by removing length from the pole tip and the pole height shortened from UA to UAA.
3. Work this sheet with the Signal Designer's "Mast Arm Tabulation". See "Mast Arm Tabulation" for special instructions that include non-standard Handhole location, paint color, terminal compartment requirement, and pedestrian features.
4. Work with Index 649-030 and 649-031.



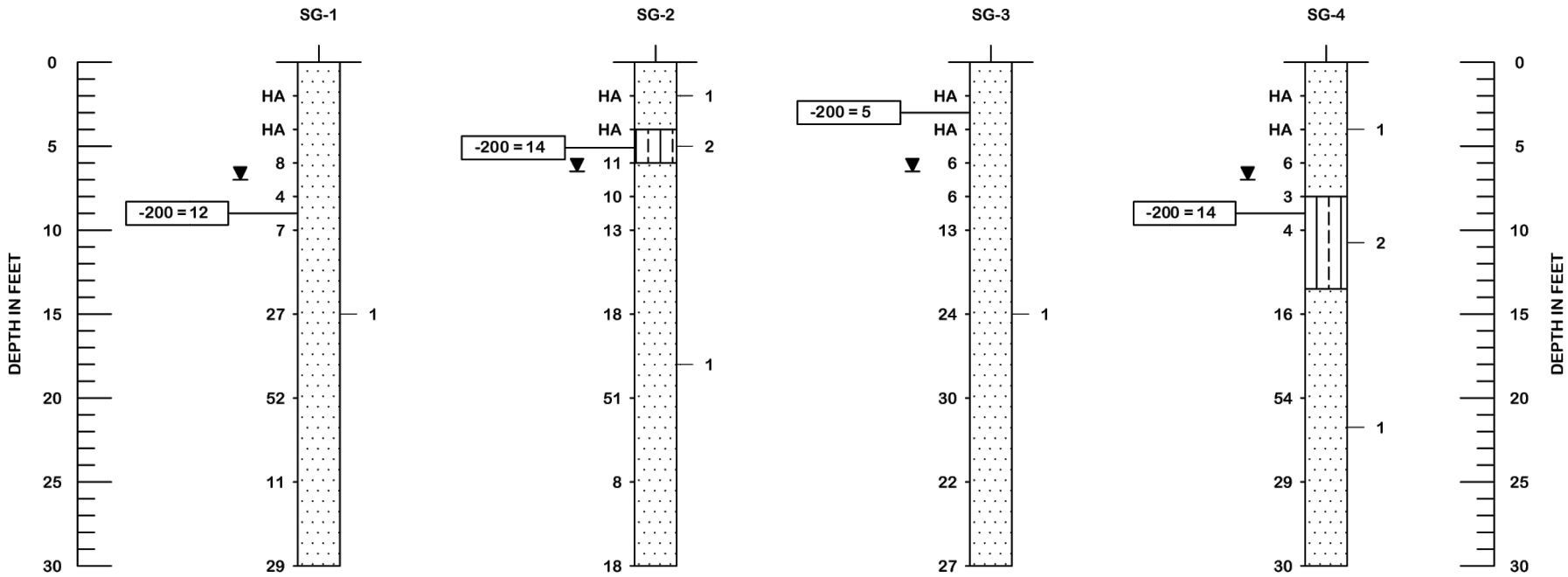


BORING LOCATION PLAN



NOTE: BASE MAP PROVIDED BY CARDNO

SOIL PROFILES



| RECOMMENDED SOIL PARAMETERS |              |          |                     |                        |       |                                  |                |
|-----------------------------|--------------|----------|---------------------|------------------------|-------|----------------------------------|----------------|
| BORING NUMBER               | DEPTH (FT)   | N        | SOIL CLASSIFICATION | SOIL UNIT WEIGHT (PCF) |       | SOIL ANGLE OF FRICTION (DEGREES) | COHESION (PSF) |
|                             |              |          |                     | γ SAT                  | γ SUB |                                  |                |
| SG-1                        | 0 TO 13.5    | HA TO 8  | SP/SP-SM            | 105                    | 43.0  | 30                               | 0              |
|                             | 13.5 TO 23.5 | 27 TO 52 | SP/SP-SM            | 115                    | 53.0  | 32                               | 0              |
|                             | 23.5 TO 28.5 | 11       | SP/SP-SM            | 105                    | 43.0  | 30                               | 0              |
|                             | 28.5 TO 30   | 29       | SP/SP-SM            | 115                    | 53.0  | 32                               | 0              |
| SG-2                        | 0 TO 18.5    | HA TO 18 | SP/SP-SM/SM         | 105                    | 43.0  | 30                               | 0              |
|                             | 18.5 TO 23.5 | 51       | SP/SP-SM            | 115                    | 53.0  | 32                               | 0              |
|                             | 23.5 TO 30   | 8 TO 18  | SP/SP-SM            | 105                    | 43.0  | 30                               | 0              |
| SG-3                        | 0 TO 13.5    | HA TO 13 | SP/SP-SM            | 105                    | 43.0  | 30                               | 0              |
|                             | 13.5 TO 30   | 22 TO 30 | SP/SP-SM            | 115                    | 53.0  | 32                               | 0              |
| SG-4                        | 0 TO 13.5    | HA TO 6  | SP/SP-SM/SM         | 105                    | 43.0  | 29                               | 0              |
|                             | 13.5 TO 18.5 | 16       | SP/SP-SM            | 105                    | 43.0  | 30                               | 0              |
|                             | 18.5 TO 30   | 29 TO 54 | SP/SP-SM            | 115                    | 53.0  | 32                               | 0              |

RECOMMENDED ENVIRONMENTAL CLASSIFICATION:  
SUBSTRUCTURE CONCRETE: EXTREMELY AGGRESSIVE  
SUBSTRUCTURE STEEL: EXTREMELY AGGRESSIVE

LEGEND

- NOTE:
- THE BORINGS WERE LOCATED IN THE FIELD USING A HAND-HELD GARMIN NON-SURVEY GRADE GLOBAL POSITIONING SYSTEM (GPS) DEVICE WITH A REPORTED ACCURACY OF +10 FEET. THE BORING LOCATIONS ARE REFERENCED TO THE STATE PLANE FL WEST COORDINATE SYSTEM AND SHOULD BE CONSIDERED APPROXIMATE.
  - BASED ON A REVIEW OF THE "POTENTIOMETRIC SURFACE OF THE UPPER FLORIDAN AQUIFER" MAPS PUBLISHED BY THE USGS; THE POTENTIOMETRIC SURFACE ELEVATION OF THE UPPER FLORIDAN AQUIFER IN THE PROJECT VICINITY RANGES FROM APPROXIMATELY +20 TO +30 FEET, NGVD 29. ARTESIAN FLOW CONDITIONS WERE NOT ENCOUNTERED WITHIN THE BORINGS PERFORMED AT THE TIME OF OUR FIELD ACTIVITIES; HOWEVER, THE CONTRACTOR SHOULD BE PREPARED TO ADDRESS ARTESIAN LEVELS UP TO A HEAD OF +30 FEET, NGVD 29 AT NO ADDITIONAL COST TO THE OWNER.
  - TEMPORARY CASING METHODS BEYOND WHAT IS REQUIRED IN THE FDOT SPECIFICATIONS MAY BE REQUIRED IN ORDER TO PREVENT THE COLLAPSE OF SANDY SOILS AND/OR GROUNDWATER INTRUSION DURING SHAFT CONSTRUCTION.

- 1

BROWN TO LIGHT GRAY TO GRAY FINE SAND TO FINE SAND WITH SILT (SP/SP-SM)
- 2

BROWN TO LIGHT GRAY TO GRAY SILTY SAND (SM)
- APPROXIMATE LOCATION OF SPT BORING
- GROUNDWATER LEVEL ENCOUNTERED DURING INVESTIGATION
- SP

UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D 2488) GROUP SYMBOL AS DETERMINED BY VISUAL REVIEW AND LABORATORY TESTING ON SELECTED SAMPLES FOR CONFIRMATION OF VISUAL REVIEW
- N

SPT N-VALUE IN BLOWS/FOOT FOR 12 INCHES OF PENETRATION (UNLESS OTHERWISE NOTED)
- HA

HAND AUGERED TO VERIFY UTILITY CLEARANCES
- 200

PERCENT PASSING #200 SIEVE

| AUTOMATIC HAMMER                        |                    |
|-----------------------------------------|--------------------|
| GRANULAR MATERIALS-<br>RELATIVE DENSITY | SPT<br>(BLOWS/FT.) |
| VERY LOOSE                              | LESS THAN 3        |
| LOOSE                                   | 3 TO 8             |
| MEDIUM                                  | 8 TO 24            |
| DENSE                                   | 24 TO 40           |
| VERY DENSE                              | GREATER THAN 40    |
| SILTS AND CLAYS<br>CONSISTENCY          | SPT<br>(BLOWS/FT.) |
| VERY SOFT                               | LESS THAN 2        |
| SOFT                                    | 1 TO 3             |
| FIRM                                    | 3 TO 6             |
| STIFF                                   | 6 TO 12            |
| VERY STIFF                              | 12 TO 24           |
| HARD                                    | GREATER THAN 24    |

| REVISIONS |             |      |             | THOMAS E. MUSGRAVE, JR., P.E.<br>P.E. LICENSE NUMBER 81669<br>TIERRA INC.<br>7351 TEMPLE TERRACE HIGHWAY<br>TAMPA, FL 33637 | MANATEE COUNTY |            | REPORT OF CORE BORINGS | SHEET NO. |
|-----------|-------------|------|-------------|-----------------------------------------------------------------------------------------------------------------------------|----------------|------------|------------------------|-----------|
| DATE      | DESCRIPTION | DATE | DESCRIPTION |                                                                                                                             | ROAD           | PROJECT ID |                        |           |
|           |             |      |             |                                                                                                                             | LORRAINE ROAD  | 6109060    |                        |           |
|           |             |      |             |                                                                                                                             |                |            |                        | T-21      |