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CONTRACT PLANS COMPONENTS

- ROADWAY PLANS
- SIGNING AND PAVEMENT MARKING PLANS
- SIGNALIZATION PLANS
- LIGHTING PLANS
- SPECIFIC PURPOSE/TOPOGRAPHIC SURVEY (FOR INFORMATION ONLY)

INDEX OF SIGNALIZATION PLANS

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\* The sheet is included in the index of Signal Plans only to indicate that it is part of the Signal Plans. The sheet is contained in separte digitally signed and sealed document.

COUNTY OF PALM BEACH  
STATE OF FLORIDA  
LYONS RD. AND BOYNTON BEACH BLVD.

INTERSECTION IMPROVEMENTS  
SIGNALIZATION PLANS

BOARD OF COUNTY COMMISSIONERS  
PROJECT NO. 2020110

MARIA G. MARINO  
(MAYOR)  
DISTRICT 1

GREGG K. WEISS  
DISTRICT 2

MARCI WOODWARD  
DISTRICT 4

SARA BAXTER  
(VICE MAYOR)  
DISTRICT 6



JOEL G FLORES  
DISTRICT 3

MARIA SACHS  
DISTRICT 5

BOBBY POWELL, JR  
DISTRICT 7

100% SUBMITTAL

GOVERNING STANDARD PLANS:

Florida Department of Transportation, FY2024-25 Standard Plans for Road and Bridge Construction and applicable Interim Revisions (IRs).

Standard Plans for Road Construction and associated IRs are available at the following website: <http://www.fdot.gov/design/standardplans>

GOVERNING STANDARD SPECIFICATIONS:

State of Florida Department of Transportation Standard Specifications, FY 2024-25 and supplements thereto if noted in the special provisions for this project.

ENGINEER'S CERTIFICATION

I HEREBY CERTIFY THAT THE ATTACHED PLANS AND DESIGN ARE IN SUBSTANTIAL COMPLIANCE WITH THE DESIGN STANDARDS AND CRITERIA IN EFFECT ON THIS DATE FOR PALM BEACH COUNTY ENGINEERING DEPARTMENT AND THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION.

APPROVED BY: DILNAHAR H SHUVO, P.E.

DATE: 11/7/2025

P.E. NO.: FL REGISTRATION NO. 92997

TS 46015



PROPEL ENGINEERING, LLC.  
2711 N VISTA PARKWAY., SUITE NO. B-7  
WEST PALM BEACH, FLORIDA 33411  
FLORIDA BUSINESS CERT. NO. 31050  
PHONE (561) 866-5730

Seal:

DILNAHAR H SHUVO  
P.E.# 92997

| No. | Revisions | By | Date |
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PALM BEACH COUNTY  
ENGINEERING AND PUBLIC WORKS  
ROADWAY PRODUCTION  
P.O. BOX 21229, WEST PALM BEACH, FLORIDA

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LYONS RD. AND BOYNTON BEACH BLVD  
INTERSECTION IMPROVEMENTS  
KEY SHEET

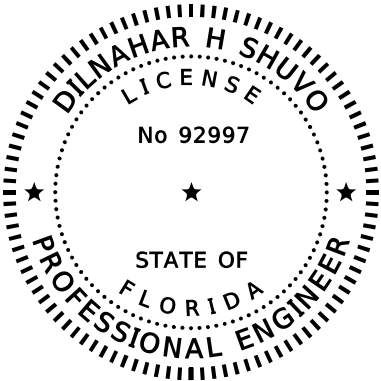
SHEET: T-1  
OF: T-13  
PROJECT NO.  
2020110

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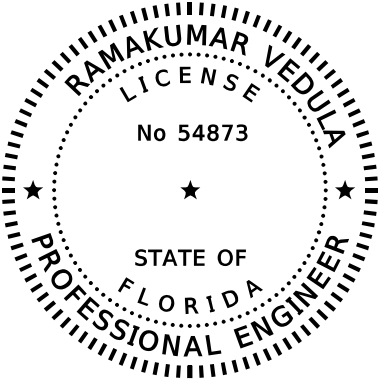
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2711 N VISTA PARKWAY, SUITE B7  
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DILNAHAR H SHUVO, P.E. NO. 92997

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

SIGNALIZATION PLANS

| SHEET NO.    | SHEET DESCRIPTION        |
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| T-10         | MAST ARM TABULATION      |
| T-11         | MAST ARM DATA TABLE      |
| T-13         | GUIDESIGN WORKSHEET      |



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TIERRA SOUTH FLORIDA. INC.  
2765 N VISTA PARKWAY, SUITE 10  
WEST PALM BEACH, FL 33411  
RAMAKUMAR VEDULA P.E. NO. 54873

THE ABOVE NAMED PROFESSIONAL ENGINEER SHALL BE RESPONSIBLE FOR THE  
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SIGNALIZATION PLANS

| SHEET NO. | SHEET DESCRIPTION      |
|-----------|------------------------|
| T-2       | SIGNATURE SHEET        |
| T-12      | REPORT OF CORE BORINGS |



**PROPEL ENGINEERING, LLC.**  
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PALM BEACH COUNTY  
ENGINEERING AND PUBLIC WORKS  
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LYONS RD. AND BOYNTON BEACH BLVD  
INTERSECTION IMPROVEMENTS

SIGNATURE SHEET

SHEET: T-2  
OF: T-13

PROJECT NO.  
2020110

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TABULATION OF QUANTITIES

| PAY<br>ITEM<br>NO. | DESCRIPTION                                                                                                                                                            | UNIT | SHEET NUMBERS |       | TOTAL<br>THIS<br>SHEET |       | GRAND<br>TOTAL |       |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|---------------|-------|------------------------|-------|----------------|-------|
|                    |                                                                                                                                                                        |      | T - 8         |       |                        |       |                |       |
|                    |                                                                                                                                                                        |      | PLAN          | FINAL | PLAN                   | FINAL | PLAN           | FINAL |
| 630-2-11-2A        | ADDITIONAL 2" PVC (SCH 40) CONDUIT, IN OPEN TRENCH                                                                                                                     | LF   | 90            |       | 90                     |       | 90             |       |
| 630-2-12-2-2       | 2-2" (HDPE SDR 11) UNDER PAVEMENT CONDUIT (DIRECTIONAL BORE)                                                                                                           | LF   | 234           |       | 234                    |       | 234            |       |
| 630-2-12-2-4       | 4-2" (HDPE SDR 11) UNDER PAVEMENT CONDUIT (DIRECTIONAL BORE)                                                                                                           | LF   | 35            |       | 35                     |       | 35             |       |
| 630-2-12-2-7       | 7-2" (HDPE SDR 11) UNDER PAVEMENT CONDUIT (DIRECTIONAL BORE)                                                                                                           | LF   | 305           |       | 305                    |       | 305            |       |
| 630-2-14-1         | 1" RIGID CONDUIT HOT DIPPED GALVANIZED CONDUIT SURFACE MOUNTED                                                                                                         | LF   | 120           |       | 120                    |       | 120            |       |
| 632-7-1-7          | SIGNAL CABLE- 7 CONDUCTOR                                                                                                                                              | PI   | 1             |       | 1                      |       | 1              |       |
| 632-7-1-7A         | PEDESTRIAN SIGNAL CABLE- 7 CONDUCTOR                                                                                                                                   | PI   | 1             |       | 1                      |       | 1              |       |
| 632-7-6            | SIGNAL CABLE, REMOVE- INTERSECTION                                                                                                                                     | PI   | 1             |       | 1                      |       | 1              |       |
| 635-2-12-A         | PULL BOX (17" X 30" X 12"D) HEAVY DUTY COVERS (TIER 22)                                                                                                                | EA   | 17            |       | 17                     |       | 17             |       |
| 639-1-121          | ELECTRICAL POWER SERVICE WITH METER BASE (UNDERGROUND) METER FURNISHED BY POWER COMPANY                                                                                | AS   | 1             |       | 1                      |       | 1              |       |
| 639-2-1-3          | ELECTRICAL SERVICE WIRE (SIGLE PHASE 3-WIRE, TRIPLEX)                                                                                                                  | LF   | 120           |       | 120                    |       | 120            |       |
| 641-2-12-16        | PRESTRESSED CONCRETE POLE, F&I, 16' TYPE P-II SERVICE POLE                                                                                                             | EA   | 1             |       | 1                      |       | 1              |       |
| 641-2-80           | CONCRETE POLE REMOVAL - DEEP (INCLUDES POLE AND COMPLETE REMOVAL OF THE POLE FOUNDATIOND DEPTH OF UP TO 25 FEET) INCLUDES DISPOSAL OF POLE WHEN INSTRUCTED BY ENGINEER | EA   | 1             |       | 1                      |       | 1              |       |
| 646-1-12           | ALUMINUM SIGNALS POLE, FURNISH & INSTALL PEDESTRIAN DETECTOR POST                                                                                                      | EA   | 4             |       | 4                      |       | 4              |       |
| 646-1-60           | ALUMINUM SIGNALS POLE, REMOVE                                                                                                                                          | EA   | 4             |       | 4                      |       | 4              |       |
| 649-22-6           | MAST ARM ASSEMBLY , FURNISH AND INSTALL ON EXISTING FOUNDATION, SINGLE ARM 50' (A50/S-P3/S)                                                                            | EA   | 1             |       | 1                      |       | 1              |       |
| 649-22-21-HD       | MAST ARM ASSEMBLY , FURNISH AND INSTALL ON EXISTING FOUNDATION, SINGLE ARM 78' HEAVY DUTY(A78/S-P6/S-HD)                                                               | EA   | 1             |       | 1                      |       | 1              |       |
| 649-2-16-45        | DRILLED SHAFT FOUNDATION ASSEMBLY, 16' DEEP AND 4.5' DIAMETER, FURNISH AND INSTALL (DS/16/4.5 )                                                                        | EA   | 1             |       | 1                      |       | 1              |       |
| 649-2-20-50        | DRILLED SHAFT FOUNDATION ASSEMBLY, 20' DEEP AND 5' DIAMETER, FURNISH AND INSTALL (DS/20/5 )                                                                            | EA   | 1             |       | 1                      |       | 1              |       |
| 649-2-20-50-AD     | ADDITIONAL DEPTH FOR DRILLED SHAFT FOUNDATION ASSEMBLY, 20' DEEP AND 5' DIAMETER, FURNISH AND INSTALL (DS/20/5 )                                                       | LF   | 8             |       | 8                      |       | 8              |       |
| 649-26-05          | STEEL MAST ARM ASSEMBLY , REMOVE, DEEP FOUNDATION - BOLT ON ATTACHMENT                                                                                                 | EA   | 2             |       | 2                      |       | 2              |       |
| 650-1-13           | TRAFFIC SIGNAL HEAD ALUMINUM (3-SECTION, 1-WAY) INCLUDES BACKPLATES                                                                                                    | AS   | 4             |       | 4                      |       | 4              |       |
| 650-1-15           | TRAFFIC SIGNAL HEAD ALUMINUM (5-SECTION, 1-WAY) INCLUDES BACKPLATES                                                                                                    | AS   | 1             |       | 1                      |       | 1              |       |
| 650-1-60           | TRAFFIC SIGNAL HEAD ASSEMBLY, REMOVAL                                                                                                                                  | AS   | 5             |       | 5                      |       | 5              |       |
| 653-191            | PEDESTRIAN SIGNAL - COUNT DOWN (1-WAY) ALUMINUM                                                                                                                        | EA   | 4             |       | 4                      |       | 4              |       |
| 653-1-60           | PEDESTRIAN SIGNAL, REMOVE PED SIGNAL                                                                                                                                   | EA   | 4             |       | 4                      |       | 4              |       |
| 660-1-109          | LOOP DETECTOR INDUCTIVE, F&I, TYPE 9                                                                                                                                   | EA   | 21            |       | 21                     |       | 21             |       |
| 660-2-106B         | LOOP ASSEMBLY (TYPE F - 46')                                                                                                                                           | EA   | 21            |       | 21                     |       | 21             |       |
| 660-4-60           | VEHICLE DETECTION SYSTEM - VIDEO, REMOVE                                                                                                                               | EA   | 8             |       | 8                      |       | 8              |       |
| 665-1-11           | PEDESTRIAN DETECTOR (PUSH BUTTON)                                                                                                                                      | EA   | 4             |       | 4                      |       | 4              |       |
| 700-5-21           | INTERNALLY ILLUMINATED SIGN (6'), LED                                                                                                                                  | EA   | 1             |       | 1                      |       | 1              |       |
|                    |                                                                                                                                                                        |      |               |       |                        |       |                |       |



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PALM BEACH COUNTY  
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LYONS RD. AND BOYNTON BEACH BLVD  
INTERSECTION IMPROVEMENTS

**TABULATION OF QUANTITIES**

SHEET: T-3

OF: T-13

PROJECT NO.  
2020110

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PRIOR TO CONSTRUCTION:

1. CONTRACTOR SHALL ADHERE TO THE PALM BEACH COUNTY TRAFFIC SIGNAL INSTALLATION STANDARDS AND DETAILS 2024 (OR LATEST REVISED EDITION) AND THE FDOT DESIGN STANDARD PLANS 2024-2025 (OR LATEST EDITION).

2. PRIOR TO EQUIPMENT ORDER, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE EOR AND PALM BEACH COUNTY TRAFFIC DIVISION EQUIPMENT SPECIFICATIONS OR DESIGN DATA FOR ALL MATERIAL PROPOSED FOR THE PROJECT. THIS SHALL INCLUDE, BUT IS NOT LIMITED TO:

NON-STRUCTURAL SUBMITTALS

ALL GUIDE SIGN LEGENDS (IF DIFFERENT FROM DETAILED)

CONTROLLER CABINET AND ASSEMBLY

VIDEO DETECTION SYSTEM.

STRUCTURAL SUBMITTALS

SIGN STRUCTURES, INCLUDING CANTILEVER TRUSSES AND FOUNDATIONS

MAST ARM, POLE AND FOUNDATIONS

MAST ARM POLES WITH LUMINAIRE ATTACHMENTS SHALL BE PROVIDED WITH SHOP DRAWINGS AND CALCULATIONS.
3. SHOP DRAWINGS AND DESIGN DATA SHALL BE SUBMITTED ELECTRONICALLY TO THE EOR WITH A COPY SENT TO PALM BEACH COUNTY TRAFFIC DIVISION AT ENG-TRAFF-INSPECTION@PBC.GOV. ALLOW 30 DAYS TURN AROUND FOR SUBMITTALS.

4. THE CONTRACTOR SHALL CONTACT PBC TRAFFIC OPERATIONS AT 561-233-3900 SEVENTY-TWO (72) HOURS (3 WORKING DAYS) PRIOR TO CONSTRUCTION IF WORK IS BEING DONE WITHIN 10 FEET OF ANY SIGNAL EQUIPMENT OR IN ADVANCE OF ANY SIGNAL RELATED INSTALLATION WORK.

5. ALL SIGNS AND OTHER TRAFFIC CONTROL DEVICES, EXCEPT EQUIPMENT SHOWN OR NOTED ON THE PLAN SHEETS FOR REMOVAL BY OTHERS, SHALL BE REMOVED BY THE CONTRACTOR AND STOCKPILED WITHIN THE RIGHT OF WAY ONLY AFTER 48 HOUR NOTICE TO THE MAINTAINING AGENCY. CONTROL DEVICES SHALL THEN BE REMOVED BY OTHERS FOR DELIVERY TO THE NOTIFIED AGENCY. ANY ITEMS TO BE REMOVED BY OTHERS SHALL SPECIFY THE ENTITY RESPONSIBLE OF REMOVING OR RELOCATING THE SPECIFIC ITEM ON THE PLANS.

6. ALL REMOVED ITEMS TO BE DELIVERED TO PBCTED AT 2555 VISTA PARKWAY WEST PALM BEACH FL - CALL 48 HOURS PRIOR TO DELIVERY (561) 233-3900. CONCRETE POLES CAN BE DISCARDED/PROPERLY DISPOSED OF.

7. DURING DEEP REMOVAL OF MAST ARM FOUNDATION (AND ANY OTHER POLE REMOVAL), IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE ANY OTHER FOUNDATION OR STRUCTURE IN THE CLOSE PROXIMITY OF THE FOUNDATION BEING REMOVED. IF THE CONTRACTOR DETERMINES ANY STRUCTURE OR FOUNDATION IN CLOSE PROXIMITY OF FOUNDATION REMOVED COULD POTENTIALLY BE COMPROMISED, THEY SHALL SECURE IT.

8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD CHECKING INTERSECTION OPERATIONS AS THEY RELATE TO THE INSTALLATION OF MAST ARMS. ANY VISIBILITY ISSUES WITH EXISTING SIGNAL HEADS AND NEWLY INSTALLED MAST ARMS NEEDS TO BE ADJUSTED BY THE CONTRACTOR.

9. TEMPORARY DETECTION REQUIRED IF THE EXISTING VEHICLE DETECTION WILL BE IMPACTED AND OUT OF SERVICE FOR MORE THAN 30 DAYS, AND IF PEDESTRIAN DETECTION IS OUT OF SERVICE FOR MORE THAN 3 DAYS WHILE LOCATION IS UNDER CONSTRUCTION.

10. ALL PUBLIC LAND CORNERS CLIPS AND MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE PROTECTED BY THE CONTRACTOR AS FOLLOWS: CORNERS AND MONUMENTS IN CONFLICT WITH THE WORK AND IN DANGER OF BEING DAMAGED, DESTROYED, OR COVERED HAVE TO BE PROPERLY REFERENCED BY A PROFESSIONAL LAND SURVEYOR. THIS SHALL BE DONE IN ACCORDANCE WITH THE MINIMUM TECHNICAL STANDARDS OF THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS. PRIOR TO BEGINNING WORK AT THE SITE, THE CONTRACTOR SHALL RETAIN A LAND SURVEYOR TO REFERENCE THE RESTORE, UPON COMPLETION OF THE WORK, ALL SUCH CORNERS AND MONUMENTS. THE CONTRACTOR SHALL FURNISH, TO THE DISTRICT LOCATION SURVEYOR, A SIGNED AND SEALED COPY OF THE LAND SURVEYOR'S REFERENCE DRAWING. WHERE EXISTING PALM BEACH COUNTY SECTION CORNER MONUMENT IS INVOLVED WITHIN THE CONSTRUCTION LIMITS OF THE PROJECT THE SURVEYOR WILL BE RESPONSIBLE FOR FILING A NEW CERTIFIED CORNER RECORD OF ITS ORIGINAL POSITION WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUBMIT THOSE RECORDS TO THE PALM BEACH COUNTY DIVISION DIRECTOR OR MANAGER AS PART OF THE REQUIRED AS-BUILTS OR RECORD DRAWINGS.

11. ALL SURVEY BENCH MARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND REFERENCED BY THE CONTRACTOR IN THE SAME WAY AS PUBLIC LAND CORNERS, EXCEPT THAT THE LAND SURVEYOR SHALL NOT BE REQUIRED TO RESTORE THE NGVD BENCH MARK UPON COMPLETION OF THE WORK. THE CONTRACTOR SHALL PROMPTLY TRANSMIT ALL DISPLACED FOR DAMAGED NGVD DISCS TO THE DISTRICT LOCATION SURVEYOR, WHO WILL NOTIFY THE GEODETIC INFORMATION CENTER.

12. ALL EXISTING SIGNALIZATION EQUIPMENT IS ASSUMED TO BE IN GOOD WORKING ORDER UNLESS PBCTED IS NOTIFIED IN WRITING PRIOR TO START OF CONSTRUCTION. ANY SUBSEQUENT DAMAGE TO THE SIGNAL EQUIPMENT SHALL BE REPAIRED BY THE CONTRACTOR.



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PALM BEACH COUNTY  
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LYONS RD. AND BOYNTON BEACH BLVD  
INTERSECTION IMPROVEMENTS

**GENERAL NOTES**

SHEET: **T-4**

OF: **T-13**

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13. EXISTING COMMUNICATIONS OR COMMAND WIRE CONNECTIONS SHALL BE MAINTAINED AT ALL SIGNALIZED LOCATIONS DURING CONSTRUCTION. THIS SHALL INCLUDE, BUT NOT BE LIMITED TO, INTERCONNECT, RAILROAD FLASHING BEACONS, RAILROAD PREEMPTION, EMERGENCY VEHICLE PREEMPTION, AND SCHOOL ZONE FLASHERS. CONTRACTOR TO PROVIDE TEMPORARY LINES AND CONNECTIONS IF NECESSARY. COST OF MAINTAINING COMMUNICATION INCLUDING TEMPORARY CONNECTIONS SHALL BE INCLUDED IN PAY ITEM 102-1 MOT. A CELLULAR COMMUNICATION PLAN MAY NEED TO BE INSTALLED AND APPROVED BY THE COUNTY TO MAINTAIN CONTINUOUS COMMUNICATION THROUGHPUT THE PROJECT.
14. THE CONTRACTOR SHALL PREPARE TRAFFIC CONTROL PLANS AND SUBMIT THEM FOR REVIEW AND APPROVAL BY THE ENGINEER OF RECORD AND THE TRAFFIC DIVISION - MOT SECTION AT LEAST TWO (2) WEEKS IN ADVANCE OF PROPOSED WORK. NO LANE CLOSURES ARE ALLOWED DURING AM AND PM PEAK HOURS (BASED ON LANE CLOSURE ANALYSIS).
15. ALL PEDESTRIAN DETOURS FOR MOT TO BE PRE-APPROVED BY PBC TRAFFIC ENGINEERING DIVISION.
16. NO EXISTING PEDESTRIAN CROSSING TO BE ELIMINATED AT ANY TRAFFIC SIGNAL WITHOUT PRE-APPROVAL FROM PBC TRAFFIC ENGINEERING.
17. IT SHOULD BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED BY DIRECTIONAL BORING OR TRENCHING. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS IN ACCORDANCE WITH SECTION 2-4 OF THE FDOT STANDARD SPECIFICATIONS.
18. THE CONTRACTOR IS TO USE CAUTION WHEN WORKING IN OR AROUND AREAS OF EXISTING LOOP AND LEAD IN WIRE, OVERHEAD TRANSMISSION LINES AND UNDERGROUND UTILITIES. THE CONTRACTOR SHALL EXCAVATE BY HAND WHERE CONFLICTS MAY EXIST. DAMAGE TO LOOPS AND ANY SIGNAL EQUIPMENT CAUSED BY CONSTRUCTION OF THIS PROJECT SHALL BE REPAIRED OR REPLACED TO ORIGINAL OR BETTER CONDITION AT NO COST TO PALM BEACH COUNTY.
19. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THERE ARE NO UTILITY CONFLICTS PRIOR TO ORDERING MAST ARMS.

DURING CONSTRUCTION:

1. CONTRACTOR TO MAINTAIN EXISTING SIGNAL OPERATIONAL AT ALL TIMES.
2. MAST ARM CONCRETE FOUNDATION SHALL BE POURED IN A SINGLE POUR, FOUNDATIONS THAT DO NOT COMPLY WITH THIS REQUIREMENT SHALL BE COMPLETELY REMOVED AND RE-POURED AT THE CONTRACTOR'S EXPENSE. A DRILL SHAFT INSTALLATION PLAN SHALL BE PART OF THE SHOP DRAWINGS.
3. CONTRACTOR IS RESPONSIBLE FOR THE PROPER BOLT PATTERN ABOVE FINISHED SIDEWALK GRADE. THE CONTRACTOR SHALL ENSURE THAT THE DRILL SHAFT AND BOLT PATTERNS ARE INSTALLED CORRECTLY SO THAT THE MAST ARM WILL BE ANGLED AS SHOWN ON THE PLANS.
4. IF PHASE 1 (UNDERGROUND ONLY) AND PHASE 2 (ABOVE GROUND) IS PROPOSED ON PERMITTING PROJECTS, CONTRACTOR IS RESPONSIBLE TO ENSURE EXPOSED BOLTS ARE PROTECTED FROM THE ELEMENTS (INSTALL BOLT CAPS).
5. FOR MAST ARM SIGNAL INSTALLATIONS, THE CONTRACTOR SHALL INSTALL WIRE CLOSED MESH, SINGLE OFFSET EYE SUPPORT GRIPS FOR STRAIN RELIEF. ALL SIGNAL CABLE MUST BE HELD BY A STRAIN RELIEF (LE GRAND FC0750FSS) ATTACHED TO THE J HOOK INSIDE OF A MAST ARM. TO USE APPROVED EQUIVALENT, SHOP DRAWINGS SHALL BE SUBMITTED TO PBC ENGINEER FOR PREAPPROVAL. WRITTEN APPROVAL FOR SHOP DRAWINGS SHALL BE PROVIDED AT TIME OF FINAL SIGNAL INSPECTION.
6. THE DRILL SHAFT FOUNDATION SHALL BE FLUSH WITH THE SIDEWALK (GROUND LEVEL), NOT BELOW GROUND LEVEL. STRUCTURAL GROUT PAD MUST NOT EXTEND HIGHER THAN A 2" ELEVATION ABOVE FOUNDATION PER FDOT STANDARDS.
7. SIGNAL CABLE - CONTRACTOR SHALL INSTALL TRAFFIC SIGNAL CABLE IN ACCORDANCE WITH PBC STANDARDS. THERE SHALL BE NO SPLICING. IF CONTINUOUS RUNS ARE NOT POSSIBLE, THEN TERMINAL BLOCK SHALL BE USED.
8. CONTROLLER CABINET - THE CONTROLLER CABINET SHALL BE INSTALLED SUCH THAT THE CONTROLLER DOOR WILL OPEN AWAY FROM THE ROADWAY TRAVEL LANES AND POSITIONED TO ALLOW THE TECHNICIAN TO SEE THE INTERSECTION.
9. CONTRACTOR TO PROVIDE A MINIMUM 2 FEET CABLE SLACK AT ALL PULL BOXES AND HAND HOLDS.
10. PEDESTRIAN SIGNALS - EACH PEDESTRIAN SIGNAL SHALL BE FED WITH ONE 7 CONDUCTOR CABLE FOR PEDESTRIAN SIGNAL HEAD AND ONE 4 CONDUCTOR CABLE FOR THE PEDESTRIAN DETECTOR/PUSH BUTTON. THESE CABLES WILL RUN FROM EACH PEDESTRIAN SIGNAL/DETECTOR DIRECTLY TO CONTROL BOX WITH NO SPLICES.
11. POSITION PULL BOXES, CABINETS, POLES AND OTHER OBSTRUCTIVE ITEMS CLEAR OF CURB CUT RAMPS. PULL BOXES SHALL BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, THEN PULL BOXES SHALL BE PLACED AT LEAST 10 FEET FROM THE EDGE OF PAVEMENT. PULL BOXES SHALL NOT BE LOCATED AT THE BOTTOM OF ANY DITCH, RETENTION AREA/POND, NOR LOCATED WITHIN



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PALM BEACH COUNTY  
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P.O. BOX 21229, WEST PALM BEACH, FLORIDA

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LYONS RD. AND BOYNTON BEACH BLVD  
INTERSECTION IMPROVEMENTS

GENERAL NOTES

SHEET: T-5  
OF: T-13

PROJECT NO.  
2020110

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SIDEWALK. ALL PULL BOXES SHALL HAVE A 1' WIDE (MIN.) X 6" DEEP CONTINUOUS CONCRETE APRON SLOPED AWAY FROM BOX (TYPICALLY 1%)

- 12.SPARE CABINET CONDUIT SHALL BE STUBBED AND CAPPED IN THE NEAREST PULL BOX. USE GEL CAPS FOR ANY SPARE/USED CONDUIT.
- 13.THE USE OF "JONES" PLUGS FOR SIGNAL INSTALLATIONS SHALL BE PROHIBITED.
- 14.ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT LEGIBLE, WEATHERPROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE. THE TAGGING SYSTEM PROPOSED SHALL BE SUBMITTED FOR APPROVAL WITH THE OTHER EQUIPMENT SUBMITTALS REQUIRED FOR THIS PROJECT.
- 15.THE CONTRACTOR SHALL VERIFY COLOR CODES OF SIGNAL CABLE WITH PALM BEACH COUNTY BEFORE ORDERING.
- 16.DO NOT INSTALL LOOP LEAD-INS WITHIN PAVERS OR IN THE AREA BETWEEN PAVERS AND EDGE OF CURB. FOR ANY INTERSECTIONS WITH PAVERS, THE LEAD-INS NEED TO RUN THROUGH CONDUITS UNDER THE PAVERS.
- 17.INSTALL PEDESTRIAN SIGNALS PER ADA CLEARANCES, PROVIDING CONTINUOUS UNOBSTRUCTED PEDESTRIAN/WHEELCHAIR CIRCULATION PATH TO PEDESTRIAN AREAS (PUSH BUTTON, RAMP, ETC).
- 18.THE T-BASE (PEDESTRIAN PEDESTAL BASE) SHALL BE ORIENTED SO THE TECHNICIAN CAN OPEN THE DOOR AND ALSO SEE ON-COMING TRAFFIC. CAULK AS NEEDED IF THERE IS A LARGE GAP BETWEEN CONCRETE FOUNDATION/SIDEWALK AND THE PEDESTAL BASE.
- 19.PEDESTAL POLE BASE NUT SHOULD BE LARGE ENOUGH TO COVER HOLE AND WASHER.
- 20.ALL SET SCREWS MUST BE INSTALLED (NONE SHOULD BE MISSING). MOST MANUFACTURES HAVE THEM DESIGNED INTO THE PEDESTRIAN BASES FROM FACTORY. WHEN PEDESTAL POLE IS SET AT PROPER DIRECTION, DRILL AND TAP HOLE THRU BASE AND ALUMINUM CONDUIT. SET SCREWS SHOULD GO THROUGH SIDE OF BASE INTO PEDESTAL POLE TO PENETRATE INTO PIPE TO KEEP IT FROM ROTATING. USING A ¼"X20 SS HEX HEAD BOLT WILL LOCK THE PIPE FROM TURNING.
- 21.BOLTS SHOULD BE LONG ENOUGH TO PROTRUDE THROUGH THE THREADED HOLE AND HOLD WASHER AND NUT.
- 22.CAULKING/SEALANT TO BE APPLIED AT ALL SIGNALS FLANGE CONNECTIONS, INCLUDING BUT NOT LIMITED TO THE TOP OF THE FLASHER SIGNAL.
- 23.THE CONTRACTOR SHALL COORDINATE AND FIELD VERIFY LOCATION(S) OF ELECTRICAL SERVICE POINT PRIOR TO INSTALLING CONDUIT, DISCONNECT SWITCH, TRANSFORMER AND PULL BOXES.
- 24.POWER SOURCE -ON MODIFICATIONS/UPGRADES TO EXISTING TRAFFIC SIGNALS A) IF ADDING LOAD, THEN ADD METER; B) IF NOT ADDING LOAD (IE JUST RELOCATING SAME EQUIPMENT) KEEP EXISTING POWER SOURCE. ALL NEW INSTALLED SIGNALS WILL BE METERED. CONTRACTOR SHALL COORDINATE WITH FPL FOR NEW INSTALLATION AS REQUIRED. ELECTRIC SERVICE TO BE SET UP IN CONTRACTOR'S NAME, THEN TRANSFERRED TO PBC TRAFFIC DIVISION AFTER 90 DAY BURN-IN OR WARRANTY PERIOD AND FINAL ACCEPTANCE.
- 25.IF THE EXISTING TRAFFIC SIGNAL IS GOING TO BE METERED ON A DEVELOPER/COUNTY PERMIT PROJECT, THE CONTRACTOR SHALL COORDINATE WITH FPL TO OPEN ELECTRICAL METERED SERVICE ACCOUNT UNDER THEIR NAME AND EMAIL THE COUNTY AT ENG-TRAFFICDIVISION@PBC.GOV WITH THE FPL ACCOUNT NUMBER.
- 26.CONTRACTOR COORDINATION REQUIREMENTS:

WORK SCHEDULE AND POWER COORDINATION: THE CONTRACTOR MUST COORDINATE THE WORK SCHEDULE, POWER SERVICE TIMING, AND OBTAIN AUTHORIZATION FROM PALM BEACH COUNTY TRAFFIC ENGINEERING.

TIMING ENGINEER CONTACT: CONTACT THE TIMING ENGINEER AT (561-684-4030) AT LEAST 2 WEEKS BEFORE CONSTRUCTION BEGINS TO COORDINATE ANY NECESSARY TIMING ADJUSTMENTS PRIOR TO ANY LOOP DAMAGE OCCURS.

TRAFFIC OPERATIONS CONTACT: FOR REPLACING AND RETIMING SCHOOL FLASHERS, REACH OUT TO PALM BEACH COUNTY TRAFFIC OPERATIONS AT (561-233-3900) TO ENSURE PROPER COORDINATION WITH THE NEW EQUIPMENT.
- 27.ANY SIGNAL MODIFICATION NECESSARY IN ORDER TO CARRY OUT PROJECT CONSTRUCTION SHALL BE SUBMITTED TO PBC TRAFFIC ENGINEERING DIVISION FOR APPROVAL THROUGH AN MOT PERMIT. SIGNAL MODIFICATION SUBMITTAL TO BE IN A FORM OF A LEGIBLE PLAN THAT CLEARLY SHOWS THE SIGNAL HEAD FACES AND ALIGNMENT WITH THE PROPOSED LANE MODIFICATION, AND SIGNAL PHASING. ALL SIGNAL MODIFICATIONS TO FOLLOW MUTCD MINIMUM REQUIREMENTS.
- 28.MOT PLANS WILL NOT BE APPROVED UNTIL THE SIGNAL MODIFICATION PLANS HAVE BEEN APPROVED BY PBC TRAFFIC ENGINEERING.

INSPECTION AND ACTIVATION:

1. THE CONTRACTOR SHALL SUBMIT IN WRITING TO THE MAINTAINING AGENCY FOR FINAL INSPECTION ALLOW TWO (2) WEEKS OR INSPECTION. TO SCHEDULE A SIGNAL INSPECTION, PLEASE EMAIL



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LYONS RD. AND BOYNTON BEACH BLVD  
INTERSECTION IMPROVEMENTS

GENERAL NOTES

SHEET: T-6

OF: T-13

PROJECT NO.  
2020110

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ENG-TRAFF-INSPECTION@PBC.GOV. IF YOUR PROJECT IS PART OF PBC ROADWAY PROJECT, THEN COPY IN CONSTRUCTION COORDINATOR/ROAD INSPECTOR.

2. AT THE TIME OF FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL FURNISH PALM BEACH COUNTY WITH TWO (2) COMPLETE COPIES OF SIGNED AND SEALED "AS-BUILT" PLANS AND CONSULTANT TO PROVIDE ELECTRONIC CAD FILES.
3. A 90 DAY BURN-IN PERIOD IS REQUIRED FOR ALL TRAFFIC SIGNAL EQUIPMENT. THE BURN-IN PERIOD WILL COMMENCE UPON A WRITTEN CONDITIONAL ACCEPTANCE BY THE COUNTY AND WILL TERMINATE NINETY (90) CONSECUTIVE DAYS, THEREAFTER, UNLESS AN EQUIPMENT MALFUNCTION OCCURS.
4. AFTER THE SIGNAL INSPECTION IS COMPLETED AND ALL OUTSTANDING ISSUES ARE RESOLVED (PUNCH LIST ITEMS COMPLETED), THE CONTRACTOR CAN REQUEST PB COUNTY TO SCHEDULE THE SIGNAL ACTIVATION. CONTRACTOR OR CEI SHALL REQUEST ACTIVATION TWO WEEKS IN ADVANCE.
5. WITH NEW TRAFFIC SIGNAL INSTALLATION AND PRIOR TO ACTIVATION: VARIABLE MESSAGE SIGNS SHALL BE INSTALLED SEVEN (7) DAYS BEFORE AND SEVEN (7) DAYS AFTER SIGNAL ACTIVATION AS FOLLOWS:

PRIOR TO SIGNAL ACTIVATION

PANEL 1 - TRAFFIC SIGNAL WILL BE PANEL 2- ACTIVE ON DATE (IE THURS JUNE 25)

AFTER SIGNAL ACTIVATION

PANEL 1 - TRAFFIC SIGNAL PANEL 2- NOW ACTIVE

6. WITH NEW TRAFFIC SIGNAL INSTALLATIONS, A PRE-INSPECTION MEETING BY PBC TRAFFIC OPERATIONS MUST BE SCHEDULED BEFORE AN ACTIVATION DATE IS SCHEDULED. REQUEST INSPECTIONS A MINIMUM OF TWO WEEKS ADVANCE NOTIFICATION THROUGH ENG-TRAFF-INSPECTION@PBC.GOV.

PAY ITEM NOTES:

635-2-11 TYPICAL SIGNAL PULL BOXES SHALL BE 17" X 30" X12" IN DIMENSION. LIDS TO BE MARKED "PBC TRAFFIC". LIDS AND PULL BOXES SHALL BE HEAVY DUTY TIER 22 OR HIGHER. THIS ITEM INCLUDES ADJUSTMENT TO CONDUIT AND CONCRETE APRONS TO MEET THE MINIMUM 6" BETWEEN PULL BOXES.

635-2-12 TYPICAL ITS PULL BOXES SHALL BE 17" X 30" X 24" (SMALL) OR 30" X 48" X24" (LARGE). LIDS AND PULL BOXES SHALL BE HEAVY DUTY TIER 22 OR HIGHER. LIDS TO BE MARKED "PBC TRAFFIC ITS". THIS ITEM INCLUDES ADJUSTMENT TO CONDUIT AND CONCRETE APRONS TO MEET THE MINIMUM 6" BETWEEN PULL BOXES.

639-1-XXX METER MUST BE ON FPL'S APPROVED METER EQUIPMENT ENCLOSURE LIST AND METER CAN MUST BE MILBANK CATALOG NUMBER UAP3505-XL-TG-HSP.

646-1-12 ACORN STYLE POLE CAP

660-2-XX TYPICAL LOOP SIZE IS 46' LONG.

649-XX-XXX AT THE DISCRETION OF THE ENGINEER OF RECORD AND WITH MUTUAL AGREEMENT OF PBC TRAFFIC ENGINEERING FINAL LOCATIONS OF THE MAST ARMS MAY BE ADJUSTED IN THE FIELD IF THERE IS ANY CONFLICT WITH UTILITIES. SIGNAL CONTRACTOR SHALL VERIFY THE PROPOSED FOUNDATION ELEVATIONS.

641-2-12-XX CONCRETE STUB POLE SHALL BE 16' IN LENGTH WITH THE BOTTOM OF THE BREAKER BOX MOUNTED 8' ABOVE THE GROUND.

650-1-XX TRAFFIC SIGNAL HEADS ARE TO BE CAST ALUMINUM. LED MODULES SHALL BE INSTALLED ON ALL SIGNAL DISPLAYS, INCLUDING ARROWS. THESE MODULES SHALL INCLUDE A MANUFACTURER'S WARRANTY OF AT LEAST FIVE YEARS. ALL SIGNAL HEADS SHALL HAVE TUNNEL VISORS AND BACK PLATES.

665-1-XX ALL PEDESTRIAN PUSH BUTTONS SHALL BE ADA COMPLIANT. PBC PREFERS THE POLARA ENGINEERING INC BDL3 BULLDOG III SERIES PUSH BUTTON (APL 665-003-011) WITH COUNTY LOGO. CONTACT MANUFACTURER FOR THE CUSTOM ETCHED LOGO AND REFER TO BDL3-B-CE. COSTS OF PEDESTRIAN SIGN SHALL BE INCLUDED IN UNIT PRICE FOR PEDESTRIAN DETECTORS.

700-5-XX ILLUMINATED STREET NAME SIGNS SHALL BE DOUBLE SIDED AND FREE SWINGING MOUNTED EXCEPT WHERE NOTED. CONTRACTOR SHALL INSTALL ONE PHOTOCCELL PER INTERNALLY ILLUMINATED STREET NAME SIGN. PER THE FDOT PAY ITEM DETAIL, ALL MOUNTING HARDWARE IS INCLUDED IN THE SIGN PAY ITEM. PER MUTCD, USE CORRECT GREEN TRANSLUCENT FILM FOR SIGN PANEL.

715-5-XX LUMINAIRE SHALL BE AUTOBAHN SERIES ATB2 LED (ATB2- P604, R4, 263 WATT, 3000K, MVOLT 120 VOLTS OR ATB2 P601, R4, 175 WATT, 3000K, MVOLT 120V) AND EACH FIXTURE SHALL BE PROVIDED WITH PHOTOELECTRIC CELL. A SEPARATE CIRCUIT/BREAKER SHALL BE PROVIDE IN SIGNAL DISCONNECT FOR MAST ARMS WITH LUMINAIRES, COST OF WHICH IS INCLUDED UNDER THE PAY ITEM.



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LYONS RD. AND BOYNTON BEACH BLVD  
INTERSECTION IMPROVEMENTS

GENERAL NOTES

SHEET: T-7  
OF: T-13

PROJECT NO.  
2020110

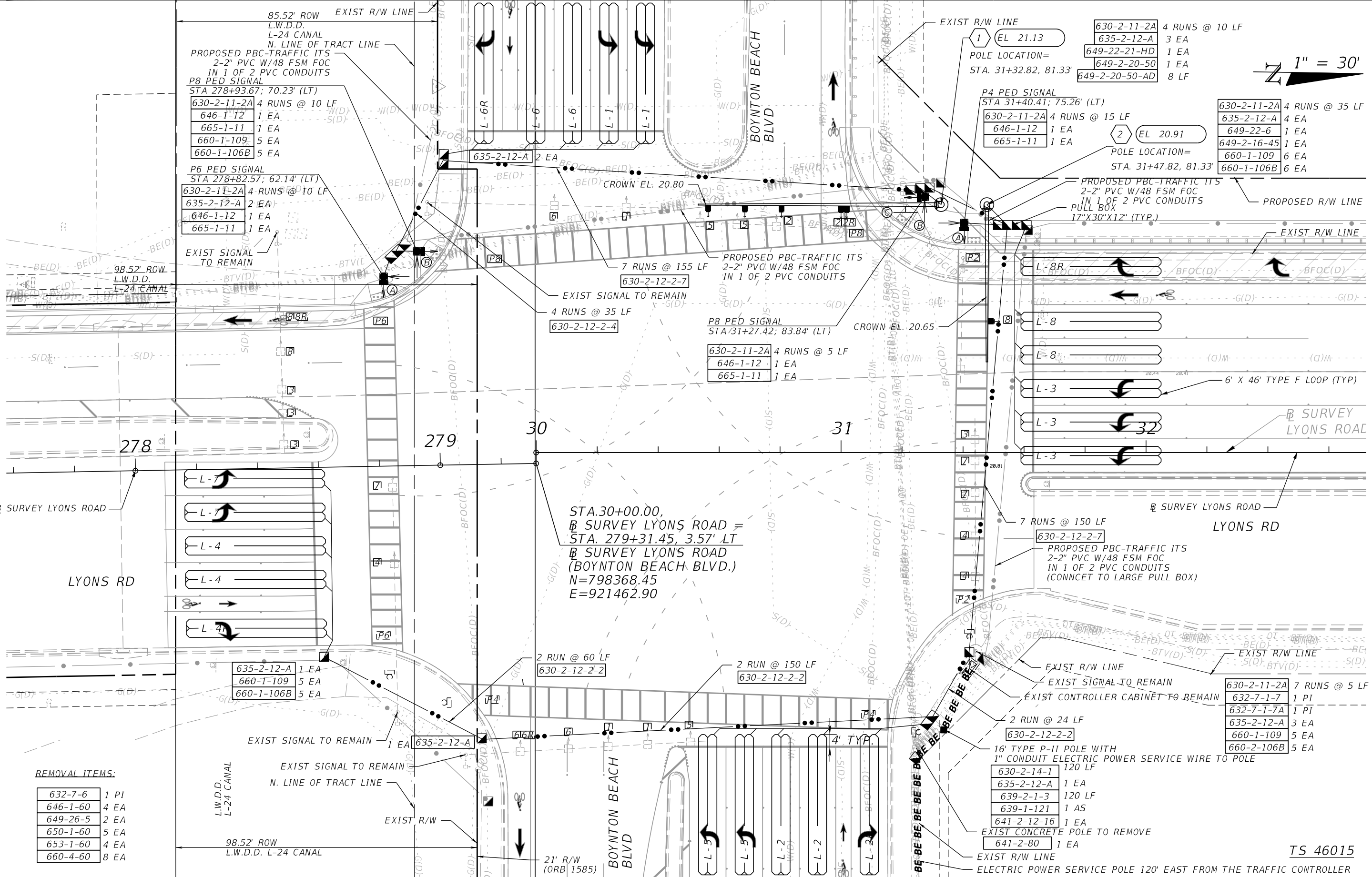
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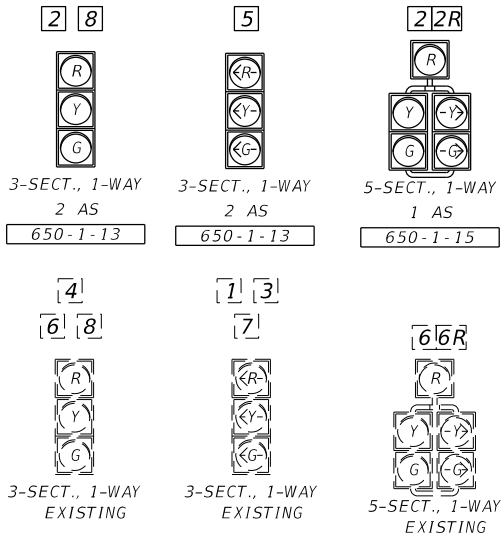
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LYONS RD. AND BOYNTON BEACH BLVD  
INTERSECTION IMPROVEMENTS  
SIGNALIZATION PLAN

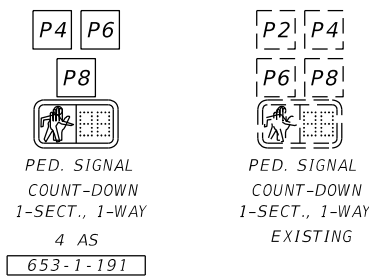
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OF: T-13  
PROJECT NO.  
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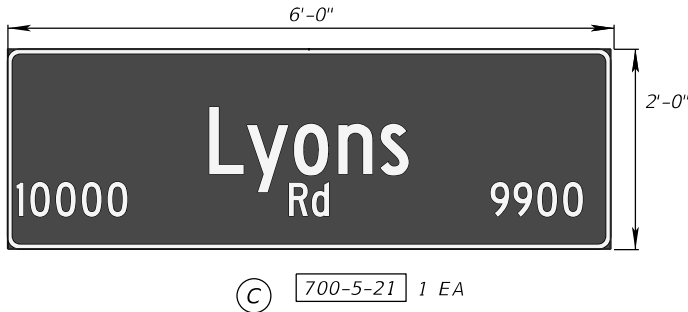
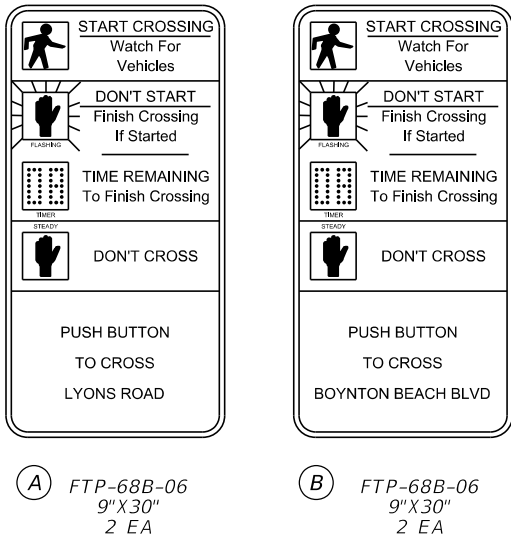
SIGNAL HEADS



PEDESTRIAN SIGNAL HEADS



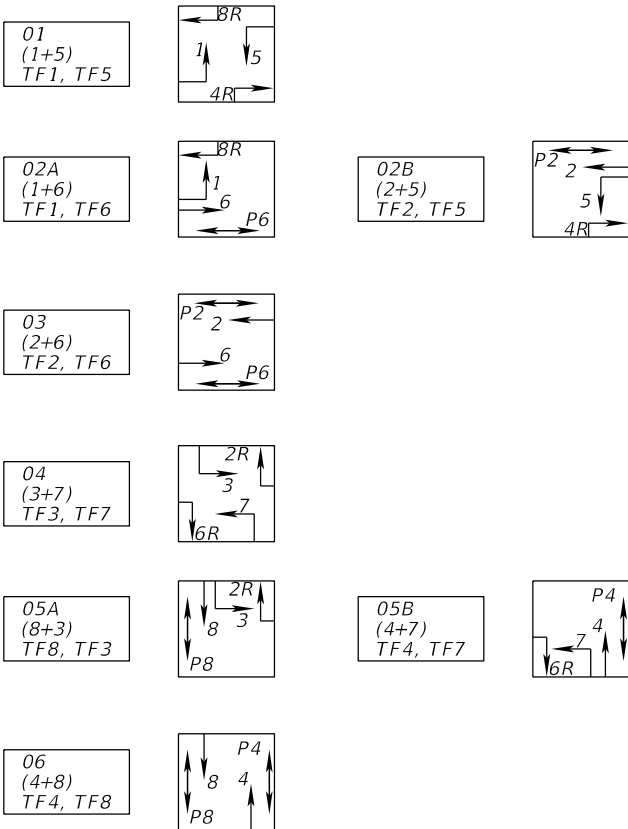
SIGN DETAILS



CONTROLLER NOTES:

- EXISTING SIGNAL PHASING AND TIMINGS TO REMAIN.
- FLASHING OPERATIONS:  
YELLOW MOVEMENTS - 2, 2R, 6, 6R  
RED MOVEMENTS - ALL OTHERS
- SPEED LIMITS:  
LYONS RD - 45 MPH  
BOYNTON BEACH BLVD - 45 MPH

SOP



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INTERSECTION IMPROVEMENTS  
SIGNALIZATION PLAN

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OF: T-13  
PROJECT NO.  
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\* DENOTES NUMBER OF SECTIONS IN SIGNAL HEAD ASSEMBLY

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INTERSECTION IMPROVEMENTS

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MAST ARM TABULATION

SHEET T-10  
OF: T-13  
PROJECT NO.  
2020110

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| STANDARD MAST ARM ASSEMBLIES DATA TABLE |                      |           |              |            |              |             |             |              |              |             |                        |
|-----------------------------------------|----------------------|-----------|--------------|------------|--------------|-------------|-------------|--------------|--------------|-------------|------------------------|
| STRUCTURE<br>ID<br>NUMBERS              | DESTINATION          | 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  | FAA<br>(ft.) |             |             | POLE<br>TYPE | UAA<br>(ft.) | UB<br>(ft.) |                        |
| 1                                       | A78/S/H-P6/S-DS/28/5 | A78/S/H   |              |            |              |             |             | P6/S         |              | 22.00       | DS/28/5                |
| 2                                       | A50/S-P3/S-DS/16/4.5 | A50/S     |              |            |              |             |             | P3/S         |              | 22.00       | DS/16/4.5              |

NOTES:

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 INCOLUMN 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. ARM MOUNTING HEIGHT UB MUST BE BETWEEN 18-22 FEET.
4. POLE TYPE P5 AND LARGER REQUIRE A MINIMUM 5.0 FOOT DIAMETER DRILLED SHAFT.
5. WORK WITH INDEX 649-030 AND 649-031.
6. DESIGN WIND SPEED = 170 MPH.

FOUNDATION NOTES:

1. THE FOUNDATION WERE DESIGN BASED ON THE FOLLOWING GEOTECHNICAL PARAMETERS FROM THE GEOTECHNICAL SERVICES-MAST ARMS PREPARED BY THE TIERRA SOUTH FLORIDA, INC, PBC PROJECT NO.2020110 DATED NOVEMBER 26, 2024.
2. POLE 1 & 2:  
BORING: MA-1  
FRICTION ANGLE: 30  
UNIT WEIGHT: 42 PCF  
N-SPT #: 7



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LYONS RD. AND BOYNTON BEACH BLVD  
INTERSECTION IMPROVEMENTS  
**MAST ARM DATA TABLE**

**SHEET**-11  
OF: **T-13**  
PROJECT NO.  
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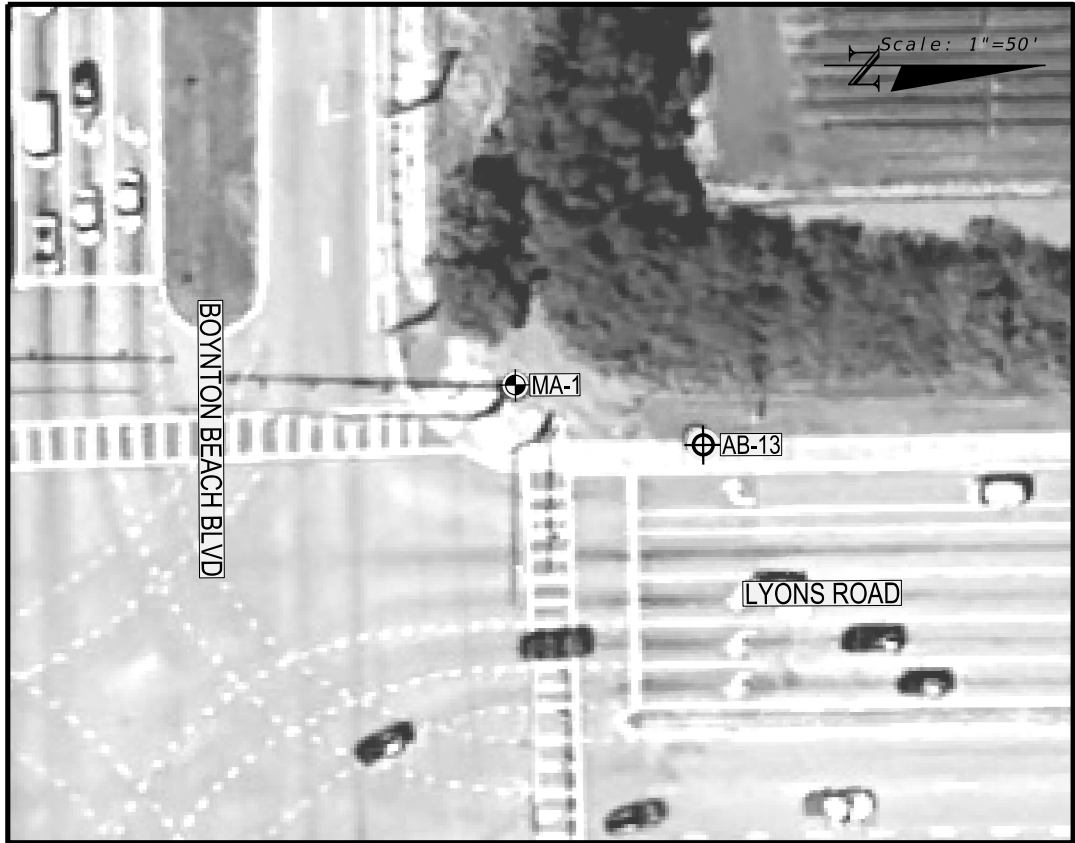
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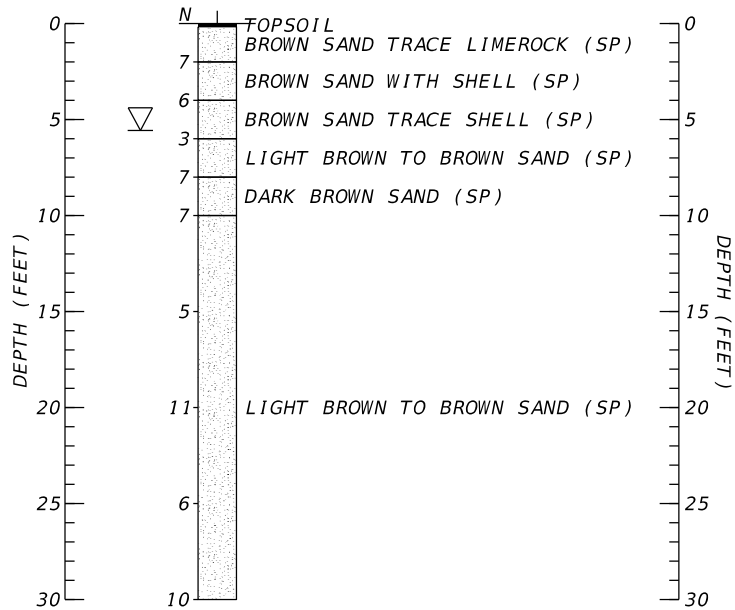
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Approximate Location of SPT Boring

Bore # MA-1  
Date 11/8/2024  
Driller Y. PINO  
Hammer Auto  
Rig CME-45  
Latitude 26.528187  
Longitude -80.188873



Boring Terminated  
at Depth of 30ft

#### LEGEND



▽ Encountered Groundwater Table

(SP) Unified Soil Classification System (ASTM D 2488)  
N Indicate SPT Value (12" Penetration-140 lb Hammer)

#### NOTES

- STRATA BOUNDARIES ARE APPROXIMATE AND MAY VARY BETWEEN OR AWAY FROM BORING LOCATIONS.
- BORING LOCATION WAS MARKED IN THE FIELD USING A HANDHELD GPSMap GARMIN 78s. ACTUAL LOCATION AND COORDINATES ARE APPROXIMATE.
- DEPTH SHOWN ARE IN FEET FROM EXISTING GROUND SURFACE
- SPT N-VALUES SHOWN ABOVE WERE OBTAINED USING AUTOMATIC HAMMERS. GENERALLY DESIGN CORRELATIONS AND PROGRAMS USE SAFETY HAMMERS N-VALUES. HENCE, THE ABOVE N-VALUES NEED TO BE MULTIPLIED BY 1.24 TO OBTAIN EQUIVALENT SAFETY HAMMER N-VALUES FOR DESIGN PURPOSE.
- THE CONTRACTOR SHALL ANTICIPATE DIFFICULT DRILLED SHAFT INSTALLATION DUE TO THE PRESENCE OF LOOSE TO VERY LOOSE SAND, OR COMPACTED FILL, OR ANY COMBINATION OF THESE LAYERS. THE PRESENCE OF DIFFICULT SOIL CONDITIONS MAY OCCUR AT VARYING DEPTHS BELOW THE GROUND. THE CONTRACTOR SHALL ANTICIPATE POTENTIAL CAVE-IN OF THE SANDY SOILS, AND DIFFICULT/IMPOSSIBLE CONDITIONS TO RETAIN BENTONITE/POLYMER SLURRY INSIDE THE DRILLED HOLES.
- THE SAND STRATA ENCOUNTERED IN THIS AREA IS SOMETIMES MIXED WITH CEMENTED SAND AND LIMESTONE THAT COULD OFFER HIGH RESISTANCE. CAVING SOILS SHOULD BE EXPECTED. SPECIAL EQUIPMENT AND/OR PROCEDURES MAY BE REQUIRED TO EXCAVATE AND STABILIZE EXCAVATIONS.

| STANDARD PENETRATION TEST DATA          |                                             |                                                |
|-----------------------------------------|---------------------------------------------|------------------------------------------------|
| SPOON INSIDE DIA.                       | 1.375 inches                                |                                                |
| SPOON OUTSIDE DIA.                      | 2.0 inches                                  |                                                |
| AVG. HAMMER DROP                        | 30.0 inches                                 |                                                |
| HAMMER WEIGHT                           | 140.0 pounds                                |                                                |
| SPT CONSISTENCY CHART (SILTS AND CLAYS) |                                             |                                                |
| CONSISTENCY                             | SAFETY HAMMER<br>SPT N-VALUE<br>(BLOW/FOOT) | AUTOMATIC HAMMER<br>SPT N-VALUE<br>(BLOW/FOOT) |
| VERY SOFT                               | LESS THAN 2                                 | LESS THAN 1                                    |
| SOFT                                    | 2 - 4                                       | 1 - 3                                          |
| FIRM                                    | 4 - 8                                       | 3 - 6                                          |
| STIFF                                   | 8 - 15                                      | 6 - 12                                         |
| VERY STIFF                              | 15 - 30                                     | 12 - 24                                        |
| HARD                                    | GREATER THAN 30                             | GREATER THAN 24                                |
| SPT DENSITY CHART / GRANULAR MATERIALS  |                                             |                                                |
| RELATIVE DENSITY                        | SAFETY HAMMER<br>SPT N-VALUE<br>(BLOW/FOOT) | AUTOMATIC HAMMER<br>SPT N-VALUE<br>(BLOW/FOOT) |
| VERY LOOSE                              | LESS THAN 4                                 | LESS THAN 3                                    |
| LOOSE                                   | 4 - 10                                      | 3 - 8                                          |
| MEDIUM                                  | 10 - 30                                     | 8 - 24                                         |
| DENSE                                   | 30 - 50                                     | 24 - 40                                        |
| VERY DENSE                              | GREATER THAN 50                             | GREATER THAN 40                                |

#### ENVIRONMENTAL CLASSIFICATION

SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE  
SUBSTRUCTURE: SLIGHTLY AGGRESSIVE

DRAWN BY:

JO

APPROVED BY:

RV

ENGINEER OF RECORDS

RAMAKUMAR VEDULA, P.E.

FLORIDA LICENSE NO.:

54873



TIERRA SOUTH FLORIDA  
2765 VISTA PARKWAY, STE-10  
WEST PALM BEACH, FL 33411

SCALE:

NTS

PROJECT NUMBER:

7111-23-253

REPORT OF CORE BORINGS

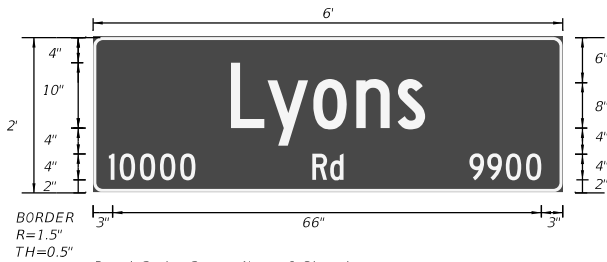
LYONS RD AND BOYNTON BEACH BLVD  
INTERSECTION IMPROVEMENTS

PALM BEACH COUNTY, FLORIDA

SHEET NO.

T-12

T-13



| NO. OF LIGHT FIXTURES | FIXTURE SPACING | PHOTOMETRIC CURVE | WATT | VOLTAGE |
|-----------------------|-----------------|-------------------|------|---------|
|-----------------------|-----------------|-------------------|------|---------|

[illegible][illegible]

|                       |  |                 |  |                   |  |      |  |         |  |
|-----------------------|--|-----------------|--|-------------------|--|------|--|---------|--|
| NO. OF LIGHT FIXTURES |  | FIXTURE SPACING |  | PHOTOMETRIC CURVE |  | WATT |  | VOLTAGE |  |
|-----------------------|--|-----------------|--|-------------------|--|------|--|---------|--|

[illegible][illegible]

| NO. OF LIGHT FIXTURES |  | FIXTURE SPACING |  | PHOTOMETRIC CURVE |  | WATT |  | VOLTAGE |  |
|-----------------------|--|-----------------|--|-------------------|--|------|--|---------|--|
|-----------------------|--|-----------------|--|-------------------|--|------|--|---------|--|

[illegible][illegible]

| NO. OF LIGHT FIXTURES | FIXTURE SPACING | PHOTOMETRIC CURVE | WATT | VOLTAGE |
|-----------------------|-----------------|-------------------|------|---------|
|-----------------------|-----------------|-------------------|------|---------|

[illegible]

|                                                                                                   |  |          |  |         |  |                     |  |                                                               |  |
|---------------------------------------------------------------------------------------------------|--|----------|--|---------|--|---------------------|--|---------------------------------------------------------------|--|
| PALM BEACH COUNTY, FLORIDA<br><h1 style="text-align: center;">TRAFFIC DIVISION</h1>               |  |          |  |         |  |                     |  |                                                               |  |
| UNDERGROUND/UNDER PAVEMENT ITS TRAFFIC FACILITIES                                                 |  |          |  |         |  |                     |  |                                                               |  |
| <h2 style="text-align: center;">DETAIL - COMMUNICATION CONDUITS,<br/>PULL BOXES &amp; WIRING</h2> |  |          |  |         |  |                     |  |                                                               |  |
| SIGNATURE                                                                                         |  |          |  | DATE    |  | REGISTERED ENGINEER |  |                                                               |  |
| NAME                                                                                              |  | DATE     |  | SCALE   |  | CONTRACT NO.        |  |                                                               |  |
| DRAWN BY                                                                                          |  | H. E. R. |  | 4-23-97 |  | N.T.S               |  | <div style="font-size: 2em; text-align: center;">T - 14</div> |  |
| CHECKED BY                                                                                        |  | R.A.     |  |         |  |                     |  |                                                               |  |
|                                                                                                   |  |          |  | SHEET   |  | 14                  |  | OF 14 SHEETS                                                  |  |