CONTRACT PLANS COMPONENTS
SIGNALIZATION

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

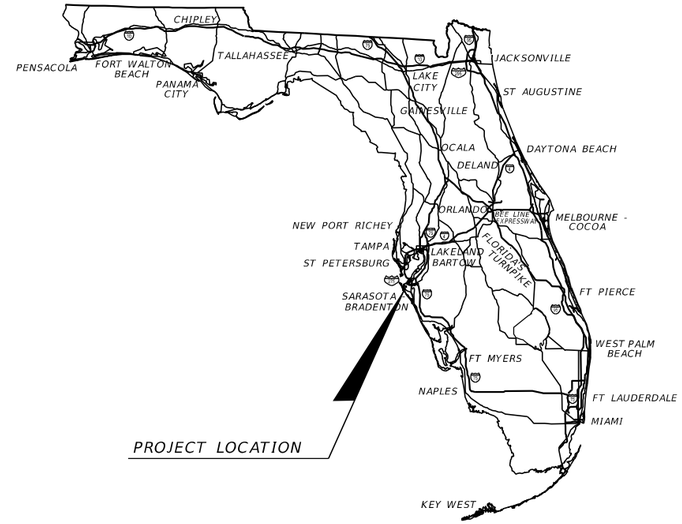
SIGNALIZATION PLANS

FINANCIAL PROJECT ID 454032-1-52-01
(FEDERAL FUNDS)
MANATEE COUNTY (13040)

STATE ROAD NO. SR 684

SIGNALIZATION IMPROVEMENTS AT SR 684 AND ROYAL PALM DRIVE

THIS PROJECT TO BE LET TO CONTRACT
WITH FINANCIAL PROJECT ID(S):
447379-1-52-01, 454033-1-52-01, 449120-1-52-01



PROJECT LOCATION URL:	https://tinyurl.com/mr2kaend
PROJECT LIMITS:	BEGIN MP 2.267 – END MP 2.399
EXCEPTIONS:	NONE
BRIDGE LIMITS:	NONE
RAILROAD CROSSING:	NONE

PHASE IIR SUBMITTAL
07/19/2024

INDEX OF SIGNALIZATION PLANS

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

APPLICABLE IRs: IR N/A

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

SIGNALIZATION PLANS
ENGINEER OF RECORD:
BHARATHI CHIGURUPATI, P.E.
P.E. NO.: 84860
(813) 265-9800
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FLORIDA 33647
CONTRACT NO.: CAO20
VENDOR NO.: F591791174001

FDOT PROJECT MANAGER:

SCOTT MCCALL

CONSTRUCTION CONTRACT NO.	FISCAL YEAR	SHEET NO.
T1910	25	1

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

7/12/2024 8:23:41 AM jnordahl
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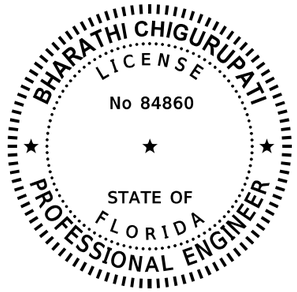

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ON THE DATE ADJACENT TO THE SEAL

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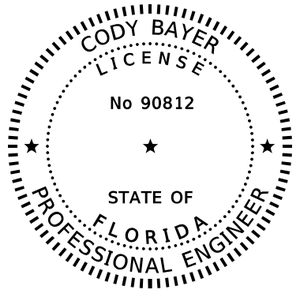
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FLORIDA 33647
BHARATHI CHIGURUPATI, P.E.
LICENSE NO. 84860

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
1	KEY SHEET
2	SIGNATURE SHEET
3	GENERAL NOTES
4	REFERENCE POINTS
6	SIGNING AND PAVEMENT MARKING PLAN
7-8	SIGNALIZATION PLAN
9	INTERCONNECT PLAN
10	LIGHTING PLAN
11	TYPICAL FIELD SITE WIRING SCHEMATIC
12	SPLICING DETAIL
13-14	GUIDE SIGN WORKSHEET
15	STANDARD MAST ARM TABULATION SHEET



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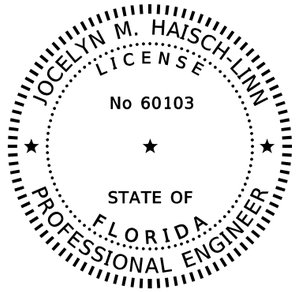
DRMP, INC.
941 LAKE BALDWIN LANE
ORALNDO, FLORIDA 32814
CODY BAYER, P.E.
LICENSE NO. 90812

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
2	SIGNATURE SHEET
5	ROADWAY PLAN
17-18	TEMPORARY TRAFFIC CONTROL PLAN



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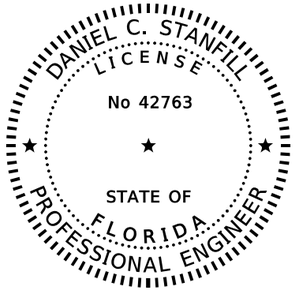
DRMP, INC.
941 LAKE BALDWIN LANE
ORLANDO, FLORIDA 32814
JOCELYN M. HAISCH-LINN, P.E.
LICENSE NO. 60103

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
2	SIGNATURE SHEET
16	STANDARD MAST ARM ASSEMBLY DATA TABLE



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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.

GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC.
919 LAKE BALDWIN LANE,
ORLANDO, FLORIDA 32814
DANIEL C. STANFILL, P.E.
LICENSE NO. 42763

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
2	SIGNATURE SHEET
19	REPORT OF CORE BORINGS

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

SIGNATURE SHEET

SHEET NO. 2

GENERAL NOTES

1. THE MAST ARM, STRAIN POLES, OR ANY OTHER SIGNAL EQUIPMENT REQUIRING FOUNDATIONS ARE PROPOSED WITHIN 4 FEET OF ANY UNDERGROUND UTILITY, THE UTILITY SHALL BE LOCATED, EXPOSED AND PROTECTED. THE INITIAL 5 FEET OF THE SHAFT INSTALLATION SHALL BE EXPOSED USING NON MECHANIZED EQUIPMENT.

2. MAINTAINING AGENCY: MANATEE COUNTY FOR SIGNAL AND LIGHTING

3. FP&L POWER COMPANY TO ASSIST CONTRACTOR IN PERFORMING ALL NECESSARY WORK UNDER THEIR POWER LINES, SUCH AS THE INSTALLATION OF SPAN WIRE, SIGNAL CABLE, FIBERGLASS INSULATORS AND SIGNAL POLES. CONTRACTOR TO NOTIFY THE POWER COMPANY AT LEAST THREE (3) FULL BUSINESS DAYS PRIOR TO INSTALLATION OF THIS EQUIPMENT.

4. AT LEAST TWO (2) FULL BUSINESS DAYS PRIOR TO BEGINNING THE TRAFFIC SIGNAL INSTALLATION, CONTACT THE TRAFFIC SIGNAL INSPECTOR/LIAISON:

   MANATEE AND SARASOTA COUNTY
   JAMES NICHOLS
   FLORIDA DEPARTMENT OF TRANSPORTATION
   MANATEE OPERATIONS CENTER
   14000 STATE ROAD 64 EAST
   BRADENTON, FL 34212
   PHONE: 941-708-4429

5. WHEN CONSTRUCTION IS COMPLETE, IN ADDITION TO THE REQUIREMENT OF STANDARD SPECIFICATION 9-8, PROVIDE A SET OF "AS-BUILT" PLANS TO:

   TRAFFIC ENGINEERING DIVISION
   MUKUNDA GOPALAKRISHNA, P.E., PTOE
   TRAFFIC SYSTEMS ENGINEER
   2101 47TH TERRACE E,
   BRADENTON, FL 34203
   MAIL: MUKUNDA.GOPALAKRISHNA@MYMANATEE.ORG
   PHONE: 941-749-3500, EXT. 7813

   WHEN CONSTRUCTION IS COMPLETE, PROVIDE A SET OF "AS-BUILT" PLANS IN ELECTRONIC FORM (PDF) TO:

   FDOT TRAFFIC OPERATIONS
   NEAL TURNER, P.E., TSM&O ENGINEER – ARTERIALS
   801 N. BROADWAY AVE.
   P.O. BOX 1249
   BARTOW, FL 33830-1249
   MAIL: NEAL.TURNER@DOT.STATE.FL.US
   PHONE: 863-519-2216

6. 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. INTERPOLATIONS BETWEEN POINTS HAVE NOT BEEN VERIFIED.

7. ALL SURVEY INFORMATION WAS OBTAINED FROM A LICENSED FLORIDA PROFESSIONAL SURVEYOR AND MAPPER AND UTILIZED AS SUPPORTING DATA IN THE PRODUCTION OF DESIGN PLANS AND FOR CONSTRUCTION ON SUBJECT PROJECT. THE PROFESSIONAL SURVEYOR AND MAPPER OF RECORD IS:

   DAVID-PAUL CHARLES, PSM
   LB 7451
   DRMP, INC.
   15310 AMBERLY DRIVE, SUITE 310
   TAMPA, FL 33647
   LB 2648

8. USE ROUTE MARKERS FOR FIBER OPTIC CONDUIT RUNS.

9. PROVIDE SEPARATE DISCONNECT SERVICE BOXES ONE EACH FOR SIGNAL, INTERNALLY ILLUMINATED SIGNS, AND LIGHTING. PROVIDE ONE (1) PHOTOCELL OUTSIDE THE RESPECTIVE DISCONNECT BOX FOR THE INTERNALLY ILLUMINATED SIGNS AND LUMINARES.

10. EXISTING MCAT BUS LOCATIONS (BENCH, TRASH BIN, AND SIGN) TO BE RELOCATED. PLEASE CONTACT STEVEN ROBERTS AT STEVEN.ROBERTS@MYMANATEE.ORG FOR MORE INFORMATION.

11. COORDINATE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEMS (NPDES) DEWATERIN ACTIVITIES THROUGH THE PROJECT ENGINEER, DISTRICT CONTAMINATION IMPACT COORDINATOR, AND CONTAMINATION ASSESSMENT & REMEDIATION CONTRACTOR TO ENSURE COMPLIANCE WITH THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION AND WATER MANAGEMENT DISTRICT. SEE CONTAMINATION MEMORANDIUM.

12. NO VIBRATORY COMPACTION TO BE ALLOWED FOR MILLING AND RESURFACING OPERATIONS.

13. UTILITY/AGENCY OWNERS / FOR THIS PROJECT INCLUDE:

COMPANY	CONTACT	TELEPHONE NUMBERS	EMAIL
MANATEE COUNTY UTILITY OPERATION	STEVE KERR	(941) 708-7450	STEVE.KERR@MYMANATEE.ORG
FP&L DISTRIBUTION	BRIAN GARVER	(239) 31-9471	BRIAN.GARVER@FPL.COM
FRONTIER COMMUNICATIONS	DENISE HUTTON	(941) 504-9452	DENISE.HUTTON@FTR.COM
VERIZON/MCI	MICHAEL KROL	(813) 410-4803	MICHAEL.KROL@VERIZON.COM
ZAYO GROUP	MARK MATHIS	(813) 509-2405	MARK.MATHIS@ZAYO.COM
UNITI FIBER	TERRY YOUNG	(251) 422-3872	TERRY.YOUNG@UNITI.COM
CHARTER/SPECTRUM	PATRICK PISTNER	(941) 737-5159	PATRICK.PISTNER@CHARTER.COM

PAY ITEM NOTES

630-2-11, 630-2-12:
USE A MINIMUM OF 3" DIAMETER CONDUIT FOR FIBER OPTIC INTERCONNECT CABLE.

632-7-1:
VERIFY THE COLOR CODE OF SIGNAL CABLE WITH THE MAINTAINING AGENCY PRIOR TO WIRING INTERSECTION.

USE A MINIMUM OF 7 CONDUCTOR SIGNAL CABLE FOR SIGNAL HEADS AND PEDESTRIAN HEADS.

PAY ITEM NOTES

633-1-121:
INTERCONNECT CABLE IS NOT TO SHARE A PULL BOX OR CONDUIT WITH OTHER CABLES.

IMMEDIATELY FOLLOWING NOTICE TO PROCEED FOR CONSTRUCTION, PROOF EXISTING SPARE FIBER CONDUIT PRIOR TO INSTALLATION OF NEW FIBER OPTIC CABLE IN-ORDER TO AVOID DELAYS AND ADDRESS ANY UNFORESEEN CONDUIT OBSTRUCTIONS.

635-2-11:
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.

USE POLYMER CONCRETE CONSTRUCTION PULL BOX WITH A POLYMER CONCRETE, COVER MARKED "TRAFFIC SIGNAL" FOR FIBER OPTIC COMMUNICATION. USE 24" X 36" PULL BOXES PLACED A MINIMUM OF 800' APART.

635-2-14:
USE POLYMER CONCRETE CONSTRUCTION PULL BOXES (STANDARD) TO BE A MINIMUM OF SEVENTEEN INCHES (17") (LENGTH) X THIRTY INCHES (30") (WIDTH) X TWELVE INCHES 12" (DEPTH). THE LID SHALL BE STAMPED "MANATEE COUNTY TRAFFIC SIGNAL" ON THE COVER.

639-1-122:
USE ALUMINUM RIGID ABOVEGROUND CONDUIT FOR ELECTRICAL POWER SERVICE.

THE ELECTRICAL SERVICE DISCONNECT IS 100 AMP, COMPRISING OF A SIX (6) CIRCUIT DISCONNECT BOX WITH TWO CIRCUIT BREAKERS – ONE 50 AMP/120 VOLT FOR CONTROLLER/INTERNALLY ILLUMINATED STREET SIGNS AND ONE 15 AMP/120 VOLT FOR FUTURE USE.

646-1-11:
USE LOCKING COLLARS WHEN MOUNTING ALUMINUM PEDESTRIAN POLES TO PEDESTRIAN PEDESTAL BASES.

USE BREAKAWAY ALUMINUM SQUARE BASE ASSEMBLIES WITH ALUMINUM DOORS FOR PEDESTRIAN PEDESTALS.

649-21-23:
USE TWO 2" AND ONE 1" CONDUITS STUBBED OUT THROUGH THE MAST ARM POLE FOUNDATION AND TEMPORARILY SEAL.

ALL MAST ARM ASSEMBLIES SHALL HAVE A TERMINAL COMPARTMENT.

ALL MAST ARM POLES ARE TO BE GALVANIZED NON-PAINTED. SEE FDOT DESIGN MANUAL, SECTION 232.8.1 (MAST ARM SUPPORTS) FOR STATE DESIGN REQUIREMENT.

WIRE ALL SIGNAL MOUNTED LUMINAIRES AT AN INTERSECTION TO ONE (1) PHOTOELECTRIC CELL INSTALLED ON THE SERVICE DISCONNECT.

650-1-14 AND 650-1-16:
USE LOUVERED ALUMINUM SIGNAL HEAD WITH RIGID RETROREFLECTIVE BACKPLATES.

USE MANATEE COUNTY TRAFFIC OPERATIONS WIRING DIAGRAM WHEN WIRING DISCONNECTS AND SIGNALS. WIRING DIAGRAM MAY BE OBTAINED BY CONTACTING MANATEE COUNTY TRAFFIC OPERATIONS AT (941) 748-4501 PRIOR TO BEGINNING OF CONSTRUCTION.

653-1-11:
PEDESTRIAN SIGNAL HEADS TO BE 16" INTERNATIONAL SYMBOL, LED COUNTDOWN TYPE.

660-3-11 AND 660-3-12:
SEE PLAN SHEET FOR THE NUMBER OF MICROWAVE DETECTORS INCLUDED IN THE MICROWAVE DETECTION ASSEMBLY.

MICROWAVE VEHICLE DETECTION SYSTEM TO BE COMPATIBLE WITH MAINTAINING AGENCY'S EXISTING DETECTION SYSTEM.

665-1-11:
USE PEDESTRIAN BUTTON SIGNAL SIGN FTP-68B-06 OR R10-3e. STREET NAME SHALL BE IN ACCORDANCE WITH THE STREET NAMES SHOWN ON THE SIGNALIZATION PLAN SHEETS.

670-5-300:
THE CONTRACTOR SHALL COORDINATE WITH FDOT OR MANATEE COUNTY FOR THE PICK UP OF THE CONTROLLER CABINET ASSEMBLY AND UPS.

CABINET – TRAFFICWARE WIRED CABINET ASSEMBLY TS2 SIZE 6, NO CONTROLLER OR MMU
CONTROLLER – 980 ATC CONTROLLER, TYPE 1

682-1-113:
POWER FOR THE CCTV CAMERA MUST BE IN A SEPARATE CONDUIT FROM THE ETHERNET AND LOW VOLTAGE CONNECTIONS. MOUNT THE CAMERA AT A HEIGHT OF 39 FEET ABOVE GROUND.

THE SYSTEM INSTALLER SHALL LEAVE A MINIMUM OF 30 INCHES OF SPARE CABLE AT EACH CAMERA BRACKET. THE SLACK SHALL BE NEATLY FORMED INTO A LOOP AND SECURED TO THE CAMERA. A MINIMUM OF 10 FEET OF VIDEO CABLE SLACK SHALL BE NEATLY STORE DATE ACH PULL BOX LOCATION WITHIN A CONDUIT RUN. A MINIMUM OF 30 FEET OF SLACK SHALL BE AVAILABLE FOR EACH NEW VIDEO DETECTION CABLE RUN.

684-1-1:
USE RUGGEDCOM SWITCH MODEL #RSG920P (6GK6092-0PS23-0BA0-Z A05+B05+C02+D02).

685-1-13:
THE CONTRACTOR SHALL COORDINATE WITH FDOT OR MANATEE COUNTY FOR THE PICK UP OF THE UPS.

UPS UNIT – APL 685-02-018, DUAL CONVERSION WITHOUT CABINET, NO GENERATOR INLET
UPS CABINET – STANDALONE/ PIGGYBACK CABINET ONLY

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

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			GENERAL NOTES	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	BHARATHI CHIGURUPATI, P.E. LICENSE NUMBER: P.E. 84860 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		3
					SR 684	MANATEE	454032-1-52-01		

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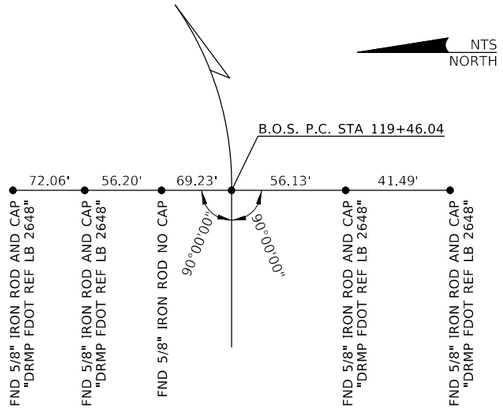
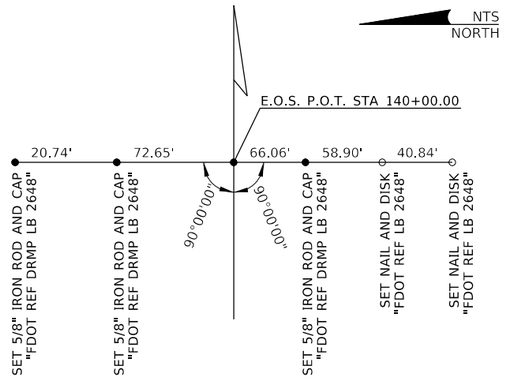


B.O.S. P.C. STA 119+46.04
FND NAIL AND DISK
"HYAT SURVEYING LB 7203"



E.O.S. P.O.T. STA 140+00.00
SET IRON ROD AND CAP
"DRMP LB 2648"

● = SET 5/8" IRON ROD AND CAP "FDOT REF LB 2648" (UNLESS OTHERWISE NOTED)
○ = SET NAIL AND DISK "FDOT REF LB 2648" (UNLESS OTHERWISE NOTED)
B.O.S. = BEGINNING OF SURVEY
E.O.S. = END OF SURVEY
FND = FOUND
F.P. = FINANCIAL PROJECT
ID = IDENTIFICATION
LB = LICENSED BUSINESS
NAD = NORTH AMERICAN DATUM
NAVD = NORTH AMERICAN VERTICAL DATUM
NO. = NUMBER
NTS = NOT TO SCALE
P.C. = POINT OF CURVATURE
P.O.T. = POINT ON TANGENT
SR = STATE ROAD
STA = STATION

SR 684 (CORTEZ ROAD)
F.P. ID.: 443574-1-32-02
SURVEY PERFORMED BY: DRMP, INC.
SURVEY DATE: MARCH 22, 2024

HORIZONTAL AND VERTICAL CONTROL - DATUM NAD83(2011) / NAVD88

POINT	NORTHING	EASTING	ELEVATION	LATITUDE	LONGITUDE	STATION	OFFSET	SCALE FACTOR	DESCRIPTION
A1	1137577.133	440718.854	4.82'	27°27'42.0521"	82°39'51.7719"	125+17.92	48.16' RT	0.999994389	SET 5/8" IRON ROD AND CAP "DRMP TRAV LB 2648"
A2	1137635.008	441025.357	5.43'	27°27'42.6414"	82°39'48.3729"	128+17.41	37.44' LT	0.999994238	SET 5/8" IRON ROD AND CAP "DRMP LB 2648"
A3	1137556.729	441392.548	4.83'	27°27'41.8857"	82°39'44.2922"	131+85.45	37.06' RT	0.999994057	SET 5/8" IRON ROD AND CAP "DRMP LB 2648"
BM8	1137560	441287	4.987'	27°27'41.9125"	82°39'45.4640"	130+79.7	35.2' RT	N/A	RECOVERED NAIL AND DISK "DRMP BM LB2468"
BM9	1137544	442278	5.178'	27°27'41.8063"	82°39'34.4622"	140+71	41.0' RT	N/A	RECOVERED NAIL AND DISK "DRMP BM LB2648"

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

REFERENCE POINTS

SHEET NO. 4

WEST MANATEE FIRE RESCUE STATION 2

CURVE DATA SR684
PI STA. = 124+14.98
Δ = 24°44'40" (LT)
D = 03°00'00"
T = 418.94
L = 824.81
R = 1,909.86
PC STA. = 119+96.04
PT STA. = 128+20.85
e = MATCH EXIST.

LEGEND
MILLING AND RESURFACING
WIDENING
DETECTABLE WARNING

Feet 0 10 50

ROYAL PALM DRIVE W

R/W LINE

OE

2" HDPE CONDUIT W/72 / VERIZON
20" WM / MANATEE COUNTY UTILITIES
2" HDPE CONDUIT W/864 / VERIZON
+86.92 50.00' LT.
+05.57 34.25' LT.
+05.57 6.00' LT. MATCH EXIST.
BEGIN PROJECT
BEGIN MILLING AND RESURFACING
STA. 124+05.57
SOD
CONST. TYPE F CURB AND GUTTER
SAWCUT, MATCH EXIST.
SAWCUT
+39.85 4.50' LT.
+47.67 6.00' LT.
+47.86 4.00' LT.
+40.10 2.51' LT.
+05.57 33.17' RT.
+03.97 70.89' RT.
REMOVE EXIST. SLOTTED TRAFFIC SEPARATOR
CONST. 2' WIDE CONCRETE TRAFFIC SEPARATOR (TYPE IV, OPTION II)
+27.01 6.00' LT.
+27.00 4.00' LT.
CURVE SR684
4" PVC WITH COPPER / FRONTIER
SEE MODIFIED CR-E DETAIL
CR-E
CR-C
SOD
1' R
50' R
6' R
3' R
70' R
4' R
1903.9' R
1915.9' R
124
125
126
127
128
129
130
131

+58.83 88.00' LT.
SAWCUT, MATCH EXIST.
+38.91 88.00' LT.
+22.40 106.07' LT.
4" HDPE RECLAIMED WM / MANATEE COUNTY UTILITIES
12" PVC RECLAIMED WM / MANATEE COUNTY UTILITIES
+69.94 50.00' LT.
+21.64 44.06' LT.
+29.72 39.01' LT.
+75.83 88.00' LT.
SAWCUT, MATCH EXIST.
+95.41 88.00' LT.
+07.99 97.54' LT.
8" VCP FM / MANATEE COUNTY UTILITIES
CONST. 5' CONC. SIDEWALK
+32.45 40.63' LT.
+37.55 40.72' LT.
+39.73 44.20' LT.
BUS STOP AND AMENITIES TO BE REMOVED BY OTHERS
+60.66 50.00' LT.
+60.18 39.27' LT.
+69.81 39.31' LT.
CONST. CONC. SIDEWALK
CONST. TYPE F CURB AND GUTTER

WB SR 684 (CORTEZ RD.)
℄ SURVEY SR 684
EB SR 684 (CORTEZ RD.)
+35.10 2.51' RT.
+27.65 4.00' RT.
+80.00 6.00' LT.
+70.00 6.00' LT.
+27.85 6.00' RT.
+35.35 4.50' RT.
+80.00 6.00' RT.
CONST. TYPE F CURB AND GUTTER
SOD

SAWCUT, MATCH EXIST.
END PROJECT
END MILLING AND RESURFACING
STA. 130+86.00
CONST. 2' WIDE CONCRETE TRAFFIC SEPARATOR (TYPE IV, OPTION II)
36" DIP FM / MANATEE COUNTY UTILITIES
R/W LINE

A +13.00 6.00' LT.
B +73.47 6.00' LT.
C +74.68 0.26' LT.
D +64.49 5.33' RT.
E +62.28 6.00' RT.
F +13.00 6.00' RT.
G +29.00 4.00' RT.
H +29.00 6.00' RT.
I +35.00 0.00' RT.
J +05.99 5.97' RT. EL. 5.68
K +06.40 7.93' RT.
L +13.16 4.46' RT. EL. 5.71
M +25.58 1.90' RT. EL. 5.73
N +26.45 6.21' RT.
O +34.99 2.06' RT.
P +34.60 0.09' RT. EL. 5.70

R/W LINE
SAWCUT, MATCH EXIST.
6" WM / MANATEE COUNTY UTILITIES
+56.09 86.30' RT.
8" GRAVITY FM / MANATEE COUNTY UTILITIES
BUS STOP AND AMENITIES TO BE REMOVED BY OTHERS
+27.14 34.92' RT. MATCH EXIST.
+27.18 43.71' RT.
+42.86 35.00' RT. MATCH EXIST.
+53.01 51.24' RT.
+42.82 43.76' RT.
+01.71 49.93' RT.
SAWCUT, MATCH EXIST.
6" PVC WM / MANATEE COUNTY UTILITIES
1-1/4" HDPE DUCTS (3) / ZAYO
30" RECLAIMED WM / MANATEE COUNTY UTILITIES
+10.86 52.54' RT.

102 ST. W
101 ST. W

MODIFIED CR-E DETAIL
N.T.S.

2% 2% 5' WIDTH

MILLING AND RESURFACING
MILL EXISTING ASPHALT PAVMENT FOR DEPTH (1.5")
AND FRICTION COURSE FC-12.5 (TRAFFIC B) (PG 76-22) (1.5")

WIDENING
TYPE B STABILIZATION LBR 40 (12")
OPTIONAL BASE GROUP 11 (TYPE B-12.5 ONLY)
TYPE SP STRUCTURAL COURSE (TRAFFIC B) (2")
FRICTION COURSE FC-12.5 (TRAFFIC B) (PG 76-22) (1.5")

1' 10' 1' 2' 2' ℄ TRAFFIC SEPARATOR 1' R (TYP.)
TRAFFIC SEPARATOR SLOT DETAIL
N.T.S.

1' R 2" 6" 1'-4" Dowels 20.8" oc 6" Plus Friction Course (7½" Min.) ¼" FC-12.5 6" Milled Surface Existing Asphalt Pavement Existing Base Existing Stabilized Subgrade Dowel
LONGITUDINAL SECTION (NOSE)

2'-0" 2" 6" 6" Plus Friction Course (7½" Min.) ¼" 6" 2" FC-12.5 3" Existing Asphalt Pavement Existing Base Milled Surface Existing Stabilized Subgrade ½" Ø x6" Steel Dowel (Typ.) Cost To Be Included In The Contract Unit Price For Separator
TRANSVERSE SECTION

TYPE IV, OPTION II
2' WIDE TRAFFIC SEPARATOR
N.T.S.

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

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
CODY BAYER, P.E.
LICENSE NUMBER: P.E. 90812
DRMP, INC.
941 LAKE BALDWIN LANE
ORLANDO, FL 32814

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

ROADWAY PLAN

SHEET NO. 5

c:\pw_working\drmp01\dms92843\PLANRD01.dgn : SR 684 [SHEET]
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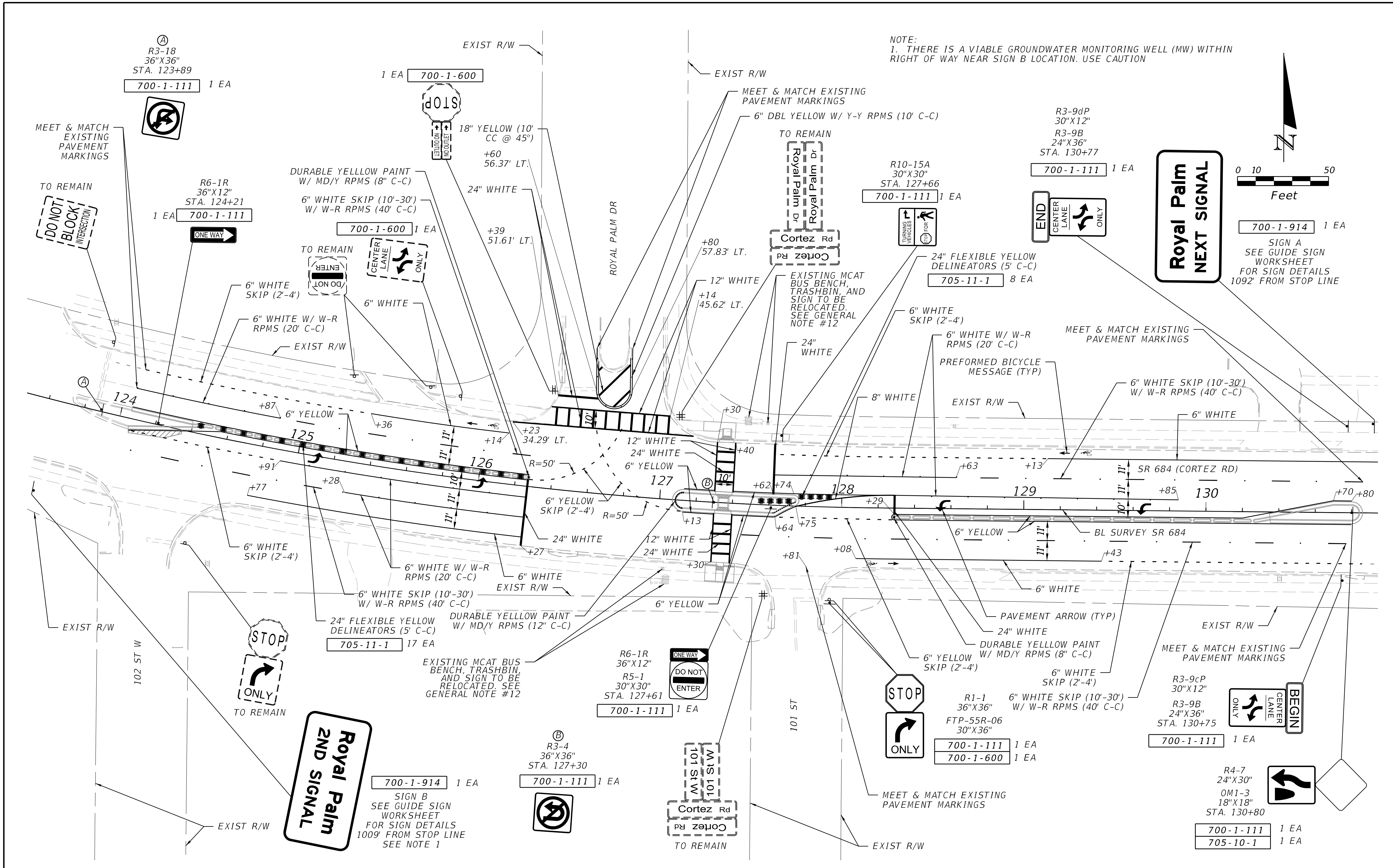

NOTE:
1. THERE IS A VIABLE GROUNDWATER MONITORING WELL (MW) WITHIN RIGHT OF WAY NEAR SIGN B LOCATION. USE CAUTION
(A) R3-18 36"X36" STA. 123+89
700-1-111 1 EA
1 EA 700-1-600
STOP
NO OUTLET
NO OUTLET
EXIST R/W
EXIST R/W
MEET & MATCH EXISTING PAVEMENT MARKINGS
6" DBL YELLOW W/ Y-Y RPMS (10' C-C)
TO REMAIN
Royal Palm Dr
Royal Palm Dr
Cortez Rd
Cortez Rd
R10-15A 30"X30" STA. 127+66
700-1-111 1 EA
TURNING VEHICLES STOP FOR
R3-9dP 30"X12"
R3-9B 24"X36" STA. 130+77
700-1-111 1 EA
END
CENTER LANE ONLY
Royal Palm
NEXT SIGNAL
0 10 50
Feet
700-1-914 1 EA
SIGN A
SEE GUIDE SIGN WORKSHEET FOR SIGN DETAILS
1092' FROM STOP LINE
MEET & MATCH EXISTING PAVEMENT MARKINGS
18" YELLOW (10' CC @ 45°)
+60 56.37' LT.
DURABLE YELLLOW PAINT W/ MD/Y RPMS (8" C-C)
24" WHITE
TO REMAIN
DO NOT BLOCK INTERSECTION
R6-1R 36"X12" STA. 124+21
1 EA 700-1-111
ONE WAY
6" WHITE SKIP (10'-30') W/ W-R RPMS (40' C-C)
700-1-600 1 EA
TO REMAIN
DO NOT ENTER
CENTER LANE ONLY
+39 51.61' LT.
ROYAL PALM DR
+80 57.83' LT.
12" WHITE
+14 45.62' LT.
EXISTING MCAT BUS BENCH, TRASHBIN, AND SIGN TO BE RELOCATED. SEE GENERAL NOTE #12
24" FLEXIBLE YELLOW DELINEATORS (5' C-C)
705-11-1 8 EA
6" WHITE SKIP (2'-4')
6" WHITE W/ W-R RPMS (20' C-C)
6" WHITE
6" WHITE SKIP (2'-4')
6" WHITE W/ W-R RPMS (20' C-C)
EXIST R/W
24" WHITE
PREFORMED BICYCLE MESSAGE (TYP)
8" WHITE
EXIST R/W
6" WHITE SKIP (10'-30') W/ W-R RPMS (40' C-C)
6" WHITE
(A)
124
+87
6" YELLOW
+36
125
11'
11'
10'
11'
11'
126
+23 34.29' LT.
+14
R=50'
10'
+30
12" WHITE
24" WHITE
+40
6" YELLOW
127
(B)
10'
+62 +74
128
+63
+13
SR 684 (CORTEZ RD)
11'
11'
10'
129
+85
130
+70 +80
+91
+77
+28
6" YELLOW SKIP (2'-4')
R=50'
+13
+29
+64 +75
6" YELLOW
11'
11'
BL SURVEY SR 684
+43
6" WHITE SKIP (2'-4')
24" WHITE
+27
12" WHITE
24" WHITE
+30
+81
+08
6" WHITE W/ W-R RPMS (20' C-C)
6" WHITE
EXIST R/W
6" WHITE
6" WHITE SKIP (10'-30') W/ W-R RPMS (40' C-C)
6" YELLOW
PAVEMENT ARROW (TYP)
EXIST R/W
EXIST R/W
24" FLEXIBLE YELLOW DELINEATORS (5' C-C)
705-11-1 17 EA
DURABLE YELLLOW PAINT W/ MD/Y RPMS (12" C-C)
24" WHITE
DURABLE YELLLOW PAINT W/ MD/Y RPMS (8" C-C)
MEET & MATCH EXISTING PAVEMENT MARKINGS
STOP
ONLY
TO REMAIN
102 ST W
EXISTING MCAT BUS BENCH, TRASHBIN, AND SIGN TO BE RELOCATED. SEE GENERAL NOTE #12
R6-1R 36"X12"
R5-1 30"X30" STA. 127+61
ONE WAY
DO NOT ENTER
700-1-111 1 EA
6" YELLOW SKIP (2'-4')
6" WHITE SKIP (2'-4')
STOP
ONLY
R1-1 36"X36"
FTP-55R-06 30"X36"
700-1-111 1 EA
700-1-600 1 EA
6" WHITE SKIP (10'-30') W/ W-R RPMS (40' C-C)
R3-9cP 30"X12"
R3-9B 24"X36" STA. 130+75
700-1-111 1 EA
ONLY CENTER LANE
BEGIN
101 ST
Royal Palm
2ND SIGNAL
700-1-914 1 EA
SIGN B
SEE GUIDE SIGN WORKSHEET FOR SIGN DETAILS
1009' FROM STOP LINE
SEE NOTE 1
(B) R3-4 36"X36" STA. 127+30
700-1-111 1 EA
101 St W
101 St W
Cortez Rd
Cortez Rd
TO REMAIN
MEET & MATCH EXISTING PAVEMENT MARKINGS
EXIST R/W
EXIST R/W
R4-7 24"X30"
OM1-3 18"X18" STA. 130+80
700-1-111 1 EA
705-10-1 1 EA

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

SIGNING AND PAVEMENT MARKING PLAN

SHEET NO.
6

EXIST. CONTROLLER CABINET AT FIRE STATION TO REMAIN

630-2-12	9 LF
632-7-2	9 LF
671-2-40	1 EA

EXIST. PULL BOX TO REMAIN AND SIGNAL CABLE TO BE PULLED THROUGH EXIST. SPARE CONDUIT

330 LF	630-2-12
330 LF	632-7-2

2-POLE DISCONNECT
SEE NOTE 1

PED POLE D
STA. 126+26.49
44.52' LT.

16 LF	630-2-11
4 EA	635-2-11
1 EA	646-1-11
1 EA	665-1-11

(2 RUNS - 1 PED SIGNAL, 1 PED DETECTOR)

EL 6.876'

1 EA	611-2-1
22 LF	630-2-11
1 PI	632-7-1
12 EA	633-2-31
1 EA	633-3-12
12 EA	633-3-13
1 EA	633-3-16
1 EA	635-2-11
4 EA	635-2-14
10 LF	639-2-1
1 EA	639-3-11
1 EA	641-2-12
1 EA	660-3-11
1 EA	663-1-111
1 AS	670-5-300
1 EA	684-1-1
1 EA	685-1-13
1 EA	685-2-1

(6 RUNS - 1 SIGNAL HIGH, 1 SIGNAL LOW, 1 LIGHTING, 1 POWER, AND 2 SPARES)

EXIST. R/W

EXIST. R/W

ROYAL PALM DR

630-2-12	81 LF
639-2-1	81 LF

(5 RUNS - 1 SIGNAL HIGH, 1 SIGNAL LOW, 1 LIGHTING, 1 POWER AND 1 SPARE)

PED POLE A
STA. 127+13.73
44.89' LT.

630-2-11	4 LF
635-2-11	4 EA
646-1-11	1 EA
665-1-11	1 EA

(4 RUNS - 1 SIGNAL HIGH, 1 SIGNAL LOW, 1 POWER AND 1 LIGHTING)

630-2-12	18 LF
639-2-1	18 LF

PED POLE B
STA. 127+31.83
40.60' LT.

630-2-12	11 LF
635-2-11	4 EA
646-1-11	1 EA
665-1-11	1 EA

(2 RUNS - 1 PED SIGNAL, 1 PED DETECTOR)

630-2-12	50 LF
639-2-1	50 LF

(5 RUNS - 1 SIGNAL HIGH, 1 SIGNAL LOW, 1 LIGHTING, 1 POWER, AND 1 SPARE)

0 10 40
Feet

123 124 125 126 127 128

SR 684 (CORTEZ RD)

6' (TYP)

DZ-6G DZ-6E DZ-6C DZ-6A 40' (TYP) DZ-6B 50'
DZ-6H DZ-6F DZ-6D 116'
132'
DZ-1

DZ-8

DZ-2A DZ-6C DZ-2E DZ-2G
DZ-2B DZ-6D DZ-2F DZ-2H
DZ-5

℄ SURVEY SR 684

DETECTOR R-1

5 EA	660-3-12
1 EA	663-1-112
1 EA	663-1-112

R-2 R-3 R-4 R-5

ARM 1

EL. 5.10'

ARM 2
EL. 5.15'

EXIST. R/W

SP1 VVH5
SP1 VVH4
SP1 VVH3
SP1 VVH2
SP1 VVH1

SP3 VVH12

(1) EL 5.69'

POLE LOCATION=
STA. 126+92.22
48.09' RT.

630-2-11	49 LF
635-2-11	3 EA
649-21-23	1 EA
682-1-113	1 EA

(4 RUNS - 1 SIGNAL HIGH, 1 SIGNAL LOW, 1 LIGHTING, AND 1 SPARE)

(A) PED POLE C
STA. 127+31.96
40.64' RT.

630-2-11	16 LF
635-2-11	4 EA
646-1-11	1 EA
665-1-11	1 EA

(2 RUNS - 1 PED SIGNAL, 1 PED DETECTOR)

EXIST. R/W

101 ST

630-2-12	47 LF
639-2-1	47 LF

(5 RUNS - 1 SIGNAL HIGH, 1 SIGNAL LOW, 1 LIGHTING, 1 POWER AND 1 SPARE)

630-2-11	7 LF
635-2-11	1 EA
639-1-122	1 AS
641-2-12	1 EA

EXISTING 120/240V POINT OF POWER SERVICE

EXIST. R/W

SUPPLEMENTAL SIGNAL POLE
STA. 127+48.18
00.85' LT.
POLE HEIGHT 10'

630-2-11	3 LF
635-2-11	4 EA
646-1-11	1 EA

(3 RUNS - 1 SIGNAL HIGH, 1 SIGNAL LOW, AND 1 SPARE)

DETAIL OF SIGNAL HEADS

3-SECT., 1-WAY
6 AS
650-1-14

3-SECT., 1-WAY
3 AS
650-1-14

4-SECT., 1-WAY
1 AS
650-1-16

SIGN (C)
Royal Palm Dr
SIGN (E)
Royal Palm Dr
700-5-22 1 EA

SIGN (D)
Cortez Rd W
10015 10200
700-5-22 1 EA
SEE GUIDE SIGN WORKSHEET FOR DETAILS

DETAIL OF PEDESTRIAN HEADS

PED. SIGNAL COUNT-DOWN 1-SECT., 1-WAY
4 AS
653-1-11

SIGN (F)
TURNING VEHICLES
STOP FOR
700-3-201 2 EA
R10-15aL
30" X 30"

NOTES:
1. INSTALL 2-POLE SERVICE DISCONNECT. DISCONNECT SHALL HAVE TWO 30A SINGLE-POLE BREAKERS INSTALLED, ONE 30A BREAKER TO FEED THE SIGNAL CABINET AND ANOTHER 30A BREAKER TO FEED LIGHT POLE NO. 1,3, AND 4.
2. LUMINAIRE INSTALLED ON THE MAST ARM (LIGHT POLE NO. 2) TO BE POWERED FROM THE POWER DISCTIBUTION BLOCK LOCATED INSIDE THE TRAFFIC CABINET.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

SIGNALIZATION PLAN (1)

SHEET NO. 7

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

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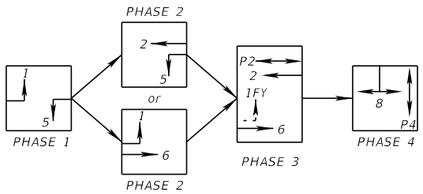
BChigurupati 7/19/2024 5:43:54 PM

CONTROLLER TIMINGS									
	Movement # (Controller Phase Ø)	1	2	3	4	5	6	7	8
TIMING FUNCTION	DIRECTION	EBL	WB			WBL	EB		SBL
	TURN TYPE	P/P							
	MINIMUM GREEN	5.0	15.0			5.0	15.0		5.0
	EXTENSION	3.0	3.0			3.0	3.0		3.0
	YELLOW	4.8	4.8			4.8	4.8		4.4
	ALL RED	2.0	2.8			2.8	2.8		4.2
	MAX I	5	25			5	25		20
	MAX II								
	MAX LIMIT								
	ADJUST BY								
	WALK		7						7
	FLASHING DON'T WALK		22						20
	DETECTOR MEMORY		OFF						OFF
	DET. CROSS SWITCH.								
	DUAL ENTRY								
	RECALL		MIN						

TIMINGS ARE INITAL AND MAY REQUIRE FIELD ADJUSTING AS DIRECTED BY PROJECT ENGINEER.

P/P = PROTECTED/ PERMISSIVE

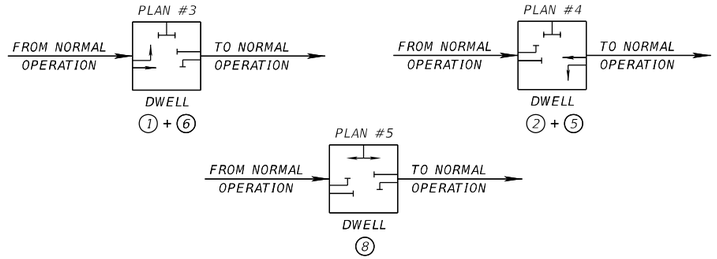
S.O.P. 7 MODIFIED



PRE-EMPTION TIMINGS			
PREEMPTION TIMING PLAN	3(EB)	4(WB)	5(SB)
PRIORITY	6	6	6
DELAY BEFORE PREEMPTION (SEC)	0	0	0
MINIMUM GREEN BEFORE PRE-EMPTION	*	*	*
LOCK CALL	OFF	OFF	OFF
MAXIMUM PRESENCE (SEC)	140	140	140
YELLOW CLEARANCE	**	**	**
ALL RED CLEARANCE	**	**	**
DWELL PHASE	1&6	2&5	8
MINIMUM DWELL	10	10	5
YELLOW CLEARANCE	**	**	**
ALL RED CLEARANCE	**	**	**
EXIT PHASES	2&6	2&6	2&6

1) * ENTRY INTO PREEMPTION SHALL NOT VIOLATE MINIMUM GREEN OR PEDESTRIAN CLEARANCE INTERVALS.
2) ** YELLOW AND ALL RED INTERVALS DURING PREEMPTION SHALL BE THE SAME VALUES USED DURING NORMAL CONTROLLER OPERATIONS.
3) CONTROLLER BRAND: (FIELD VERIFY)

SPECIAL P.O.P.



MICROWAVE VEHICLE DETECTION ASSIGNMENTS			
DETECTOR	DETECTION ZONE	CONNECT TO MOVEMENT	DELAY TIME (SEC)
R-1	DZ-5	5	
	DZ-2C	2	
	DZ-2D		
	DZ-2E		
	DZ-2F		
	DZ-2G		
	DZ-2H		
R-2	DZ-2A	2	
	DZ-2B		
R-3	DZ-6C	6	
	DZ-6D		
	DZ-6E		
	DZ-6F		
	DZ-6G		
	DZ-6H		
R-4	DZ-8	8	8
R-5	DZ-6A	2	
	DZ-6B		
	DZ-1	1	

NOTES:

1. MAJOR STREET IS SR 684 (45 MPH) AND MINOR STREET IS ROYAL PALM DR (20 MPH).
2. STANDARD OPERATING PLAN 7 (MODIFIED) WITH THE FOLLOWING:
   A. CONCURRENT/ ACTUATED PEDESTRIAN MOVEMENTS FOR P2 AND P4.
   B. WHEN SIGNAL IS IN FLASHING MODE, MOVEMENTS 2 AND 6 SHALL FLASH YELLOW. ALL OTHER MOVEMENTS SHALL FLASH RED.
3. REQUEST UPDATED SIGNAL TIMINGS FROM FDOT TSM&O ENGINEER – ARTERIALS (863-519-2216) WHEN ALL LANES, STRIPING, SIGNALS AND PEDESTRIAN FACILITIES ARE IN THEIR FINAL CONFIGURATION AND THE SIGNAL IS OPERATING AS DESIGNED. PROVIDE FDOT WITH ALL "AS-BUILT" INFORMATION NECESSARY TO DEVELOP THE BASIC SIGNALS TIMING PARAMETERS AND ALLOW THREE (3) WEEKS FLLOWING THE REQUEST FOR FDOT TO DEVELOP THE UPDATED TIMINGS. PROGRAM THE CONTROLLER PER THE TIMINGS PROVIDED BY FDOT.
4. MICROWAVE DETECTION ZONES AT STOP BAR TO BE 6' X 40' AND 2' IN FRONT OF STOP BAR.
5. MOVEMENT 1 TO BE FLASHING YELLOW FOR PHASE 3.

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

SIGNALIZATION PLAN (2)

SHEET NO. 8

NOTE:
1. INTERCEPT EXISTING FIBER SPLICE VAULT WITH PROPOSED CONDUIT.

N

0 20 100
Feet

EXIST. R/W

SIGNAL CONTROLLER CABINET
(SR 684 @ ROYAL PALM DR)
SEE SIGNALIZATION PLAN
FOR INFORMATION

FIRESTATION

ROYAL PALM DR

1-2" CONDUIT W/
12 STR SM FOC

630-2-11	1 RUN @ 15 LF
633-1-121	15 LF

F&I FIBER PULL BOX
F&I 12 STR SM FOC
(SLACK)

633-1-121	50 LF
635-2-12	1 EA

EXIST. CONDUIT W/
12 SM FOC TO REMAIN

EXIST. CONTROLLER
CABINET TO REMAIN
(SR 684 @ FIRESTATION)

122 123 124 125 126 127 128 129 130 131 132 133 134 135 136

SR 684 (CORTEZ RD)

℄ SURVEY SR 684

EXIST. R/W

EXIST. R/W

EXIST. FIBER SPLICE VAULT
TO REMAIN.
F&I 12 STR SM FOC (SLACK)

633-1-121	100 LF
633-2-31	4 EA
633-3-12	1 EA
633-3-51	1 EA
633-6	100 DA

(SEE NOTE 1)

1-2" CONDUIT W/
12 STR SM FOC

630-2-12	339 LF
633-1-121	339 LF

EXIST. CONDUIT W/
72 SM FOC TO REMAIN

EXIST. FIBER PULL BOX
TO REMAIN

EXIST. CONDUIT W/
72 SM FOC TO REMAIN

EXIST. R/W

102ND ST W

VALERIA AVE

100TH ST W

99TH ST W

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

INTERCONNECT PLAN

SHEET NO. 9

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

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BChigurupati 7/19/2024 9:47:04 AM

EXIST. R/W

PRIVATELY OWNED BACK-TO-BACK SHORT LIGHTPOLE

ROYAL PALM DR

POLE NO. 1:
PROPOSED 35' MH FDOT STANDARD POLE, STANDARD FOUNDATION WITH 15' ARM W/ AEL ATB0_P305_MVOLT_R3_4K_P7

STA. 126+34.28
OFF. = 64.25' LT.
X = 440849.10'
Y = 1137672.43'

630-2-11	14 LF
635-2-11	1 EA
715-1-12	105 LF
715-61-252	1 EA
715-500-1	1 EA

LP1 VVH1

SEE NOTE 1

EXIST. R/W

POLE NO. 3:
PROPOSED 35' MH FDOT STANDARD POLE, STANDARD FOUNDATION WITH 15' ARM W/ AEL ATB0_P305_MVOLT_R4_4K_P7

STA. 127+23.51
OFF. = 60.15' LT.
X = 440934.76'
Y = 1137661.05'

630-2-11	19 LF
635-2-11	1 EA
715-1-12	114 LF
715-61-252	1 EA
715-500-1	1 EA

SEE NOTE 2

715-69-000	1 EA
635-2-11	1 EA
715-1-13	864 LF

LP3 VVH2
LP3 VVH1
LP2 VVH5
LP2 VVH6
LP2 VVH4
LP2 VVH3
LP2 VVH2
LP2 VVH1

POLE NO. 4:
PROPOSED 35' MH FDOT STANDARD POLE, STANDARD SPREAD FOOTING FOUNDATION (6'X7' AT LEAST 4' CLEARENCE FROM FACE BASE TO CONCRETE EDGE) WITH 15' ARM W/ AEL ATB0_P305_MVOLT_R4_4K_P7

STA. 127+65.19
OFF. = 44.05' LT.
X = 440974.44'
Y = 1137642.93'

630-2-11	23 LF
635-2-11	1 EA
715-1-12	117 LF
715-61-252	1 EA
715-500-1	1 EA

EXIST. R/W

123 124 125 126 127 128

SR 684 (CORTEZ RD)

℄ SURVEY SR 684

EXIST. R/W

EXIST. R/W

EXIST. R/W

SR 684 (CORTEZ RD)

EXIST. R/W

STA. 127+13.69
OFF. = 43.70' RT.
X = 440918.38'
Y = 1137558.04'

715-5-31	1 EA

POLE NO. 2:
PROPOSED 40' MH MAST ARM MOUNTED LUMINAIRE WITH 15' ARM W/ AEL ATB0_P305_MVOLT_R4_4K_P7
SEE SIGNAL PLANS FOR MORE INFORMATION

INSTALL 3-#6 CONDUCTORS (120V) IN PROPOSED SEPARATE CONDUIT. SEE SIGNALIZATION PLAN FOR MORE INFORMATION.

EXIST. R/W

715-1-12	948 LF

VALERIA AVE

EXIST. R/W

N

0 10 40
Feet

NOTES:
1. LUMINAIRE ON THE MAST ARM (POLE NO. 2) TO BE POWERED FROM THE POWER DISTRIBUTION BLOCK LOCATED INSIDE THE TRAFFIC CABINET.
2. PULL EXISTING #4 CONDUCTORS TO NEAREST EXISTING TO REMAIN PULLBOX/HANDHOLE AND REPLACE AS NECESSARY TO PRESERVE EXISTING CIRCUITS. LOAD CENTER 6 LOCATED APPROX. AT X:438431.90, Y:1138578.65. TRIM PROPOSED CONCRETE APRON AROUND PROPOSED PULL BOX TO FIT WITHIN EXISTING SIDEWALK LIMITS.
3. LUMINAIRES TO BE EQUIPPED W/A 7 PIN PHOTOCELL RECEPTACLE.

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

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

LIGHTING PLAN

SHEET NO. 10

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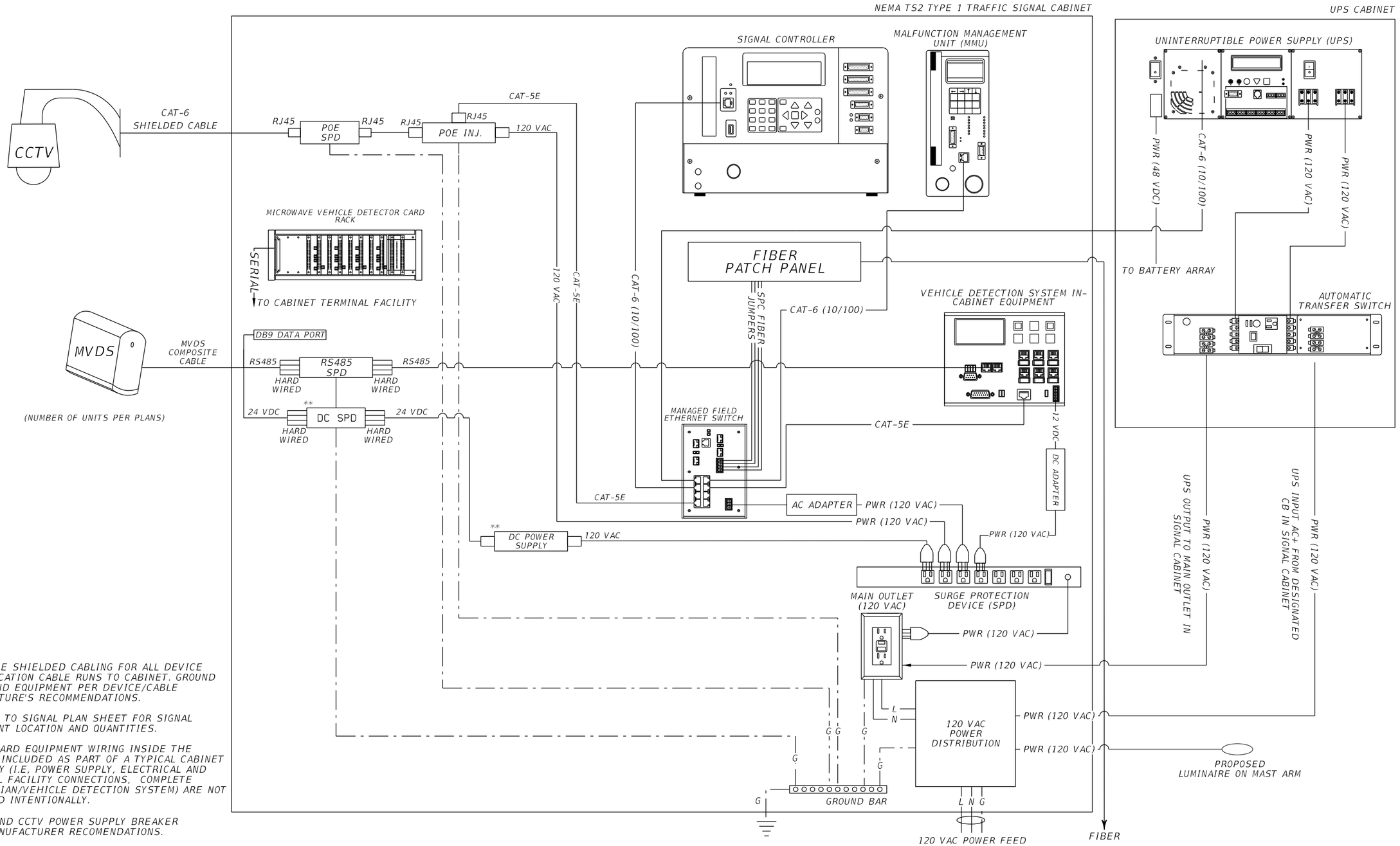

NOTES:
1. UTILIZE SHIELDED CABLING FOR ALL DEVICE COMMUNICATION CABLE RUNS TO CABINET. GROUND CABLE AND EQUIPMENT PER DEVICE/CABLE MANUFACTURE'S RECOMMENDATIONS.

2. REFER TO SIGNAL PLAN SHEET FOR SIGNAL EQUIPMENT LOCATION AND QUANTITIES.

3. STANDARD EQUIPMENT WIRING INSIDE THE CABINET INCLUDED AS PART OF A TYPICAL CABINET ASSEMBLY (I.E, POWER SUPPLY, ELECTRICAL AND TERMINAL FACILITY CONNECTIONS, COMPLETE PEDESTRIAN/VEHICLE DETECTION SYSTEM) ARE NOT DEPICTED INTENTIONALLY.

* MVDS AND CCTV POWER SUPPLY BREAKER PER MANUFACTURER RECOMENDATIONS.

** IF MVDS IS POWERED BY 120VAC, DC ADAPTER WILL NOT BE REQUIRED. POWER SPD WILL BE 120VAC.

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

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TYPICAL FIELD SITE WIRING SCHEMATIC	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	BHARATHI CHIGURUPATI, P.E. LICENSE NUMBER: P.E. 84860 DRMP, INC. 15310 AMBERLY DRIVE, SUITE 310 TAMPA, FL 33647	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		11
					SR 684	MANATEE	454032-1-52-01		

c:\pw_working\drmp01\dms92848\SSDTSG01.dgn : SPECIALDETAILSHEETS
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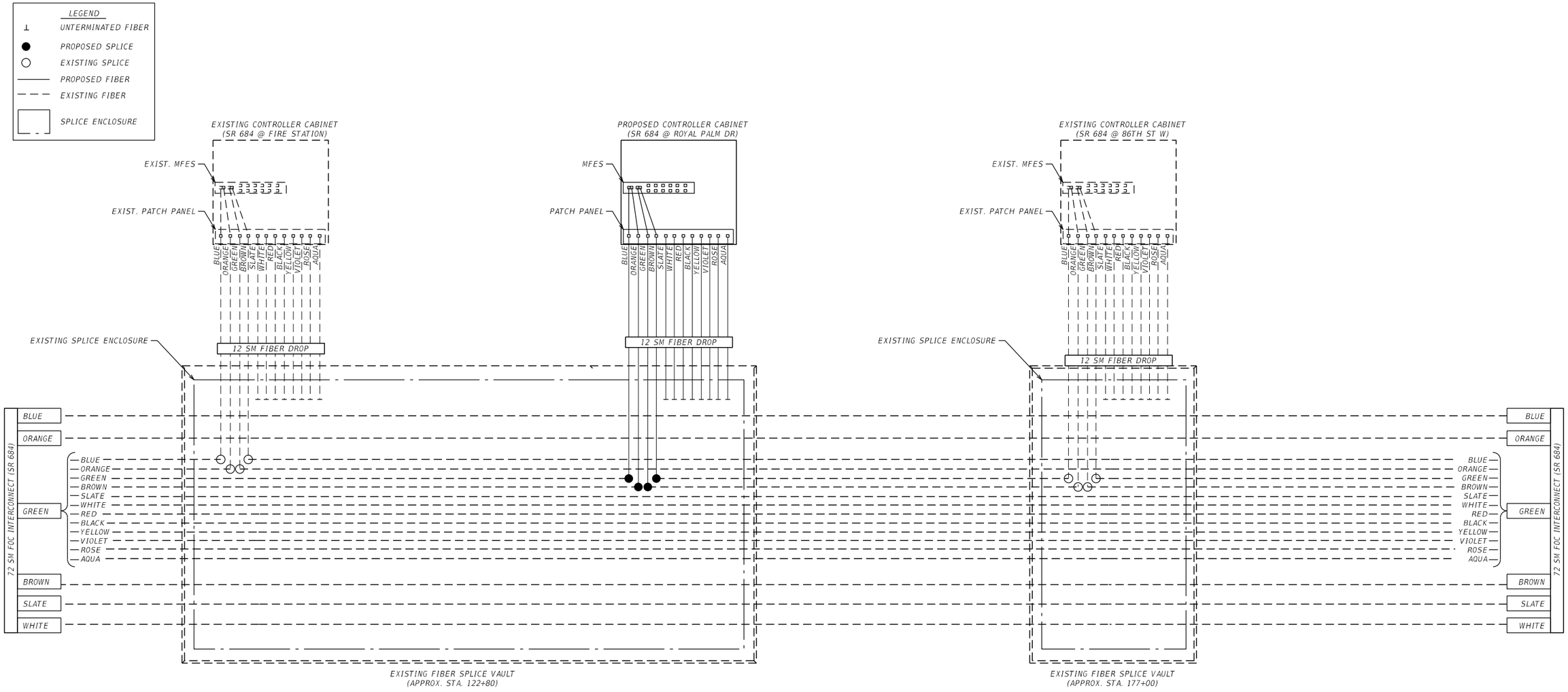

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

SPLICING DETAIL

SHEET NO. 12

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

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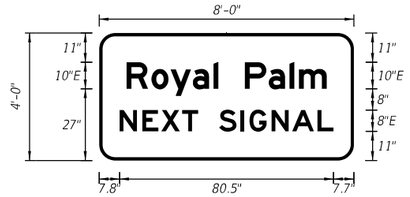
BChigurupati 7/19/2024 9:51:03 AM

SIGN NAME	Sign A	QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER			
WIDTH	8'-0"	WIDTH	1.25"		
HEIGHT	4'-0"	RADII	6"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE		AVERAGE LENGTH



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

COPY		R	o	y	a	l		P	a	l	m		L										
SPACE	10.3	9.4	7.2	8.4	7.8	1.8	10	9	7.8	3.6	10.4	10.3	75.4										
COPY		N	E	X	T		S	I	G	N	A	L		L										
SPACE	7.8	8.6	7.1	7.8	6	8	8.1	3.3	8.3	7.8	9.5	6	7.7	80.5										
COPY																								
SPACE																								
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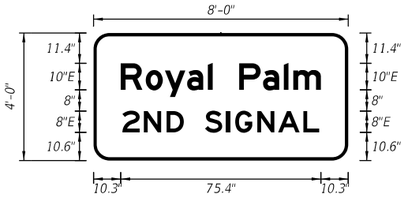
SPACE																								

SIGN NAME	Sign B	QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER			
WIDTH	8'-0"	WIDTH	1.25"		
HEIGHT	4'-0"	RADII	6"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE		AVERAGE LENGTH



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

COPY		R	o	y	a	l		P	a	l	m		L										
SPACE	10.3	9.4	7.2	8.4	7.8	1.8	10	9	7.8	3.6	10.4	10.3	75.4										
COPY		2	N	D		S	I	G	N	A	L		L										
SPACE	10.9	8.1	8.6	6.5	8	8.1	3.3	8.3	7.8	9.5	6	10.9	74.2										
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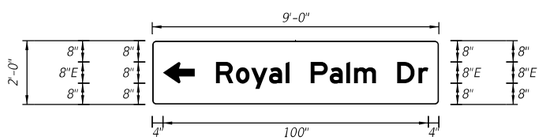
SIGN NAME	Sign C	QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER			none
WIDTH	9'-0"	WIDTH	0.5"		
HEIGHT	2'-0"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT
ARUP	90	4	8	8	12

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE		AVERAGE LENGTH



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

COPY		R	o	y	a	l		P	a	l	m		D	r		L							
SPACE	24.1	7.5	5.8	6.7	6.2	1.4	8	7.2	6.2	2.9	8.3	8	8	3.7	4	79.9							
COPY																							
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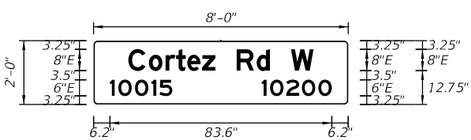
SIGN NAME	Sign D	QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER			none
WIDTH	8'-0"	WIDTH	0.5"		
HEIGHT	2'-0"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE		AVERAGE LENGTH



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

COPY		C	o	r	t	e	z		R	d		W		L									
SPACE	13.1	7.8	6.3	3.9	4.2	5.5	5.1	8	7.5	5	8	8.5	13.1	69.8									
COPY		1	0	0	1	5		L															
SPACE	6.2	3.2	6.2	6.2	3	4.9	66.3	23.5															
COPY		1	0	2	0	0		L															
SPACE	63.4	3.2	6.1	5.9	6.2	5	6.2	26.4															
COPY																							
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THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD

BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

GUIDE SIGN WORKSHEET

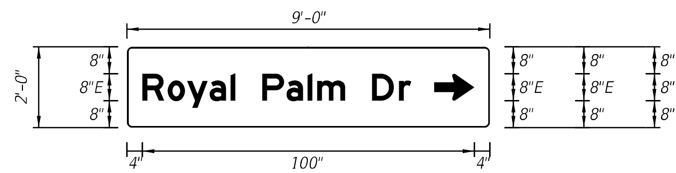
SHEET NO. 13

SIGN NAME	Sign E	QTY	1	SIGN NUMBER	STATION(S)
PANEL		BORDER			none
WIDTH	9'-0"	WIDTH	0.5"		
HEIGHT	2'-0"	RADII	1.5"		
LEGEND	White	COLOR	White		
COLOR	Green				

SYMBOL(S)	ANGLE	X	Y	WID	HT
ARUP	270	84	8	8	12

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE		AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		WATT	
PHOTOMETRIC CURVE			VOLTAGE		



COPY		R	o	y	a	l		P	a	l	m		D	r		L							
SPACE	4	7.5	5.8	6.7	6.2	1.4	8	7.2	6.2	2.9	8.3	8	8	3.7	24	79.9							
COPY																							
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SIGN NAME		QTY		SIGN NUMBER	STATION(S)
PANEL		BORDER			
WIDTH		WIDTH			
HEIGHT		RADII			
LEGEND		COLOR			
COLOR					

SYMBOL(S)	ANGLE	X	Y	WID	HT

SIGN NUMBER	NUMBER OF POSTS	CLEARANCE Edge Of Lane	COLUMN SIZE		AVERAGE LENGTH

NO. OF LIGHT FIXTURES		FIXTURE SPACING		WATT	
PHOTOMETRIC CURVE			VOLTAGE		

NOT USED

COPY																							
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REVISIONS

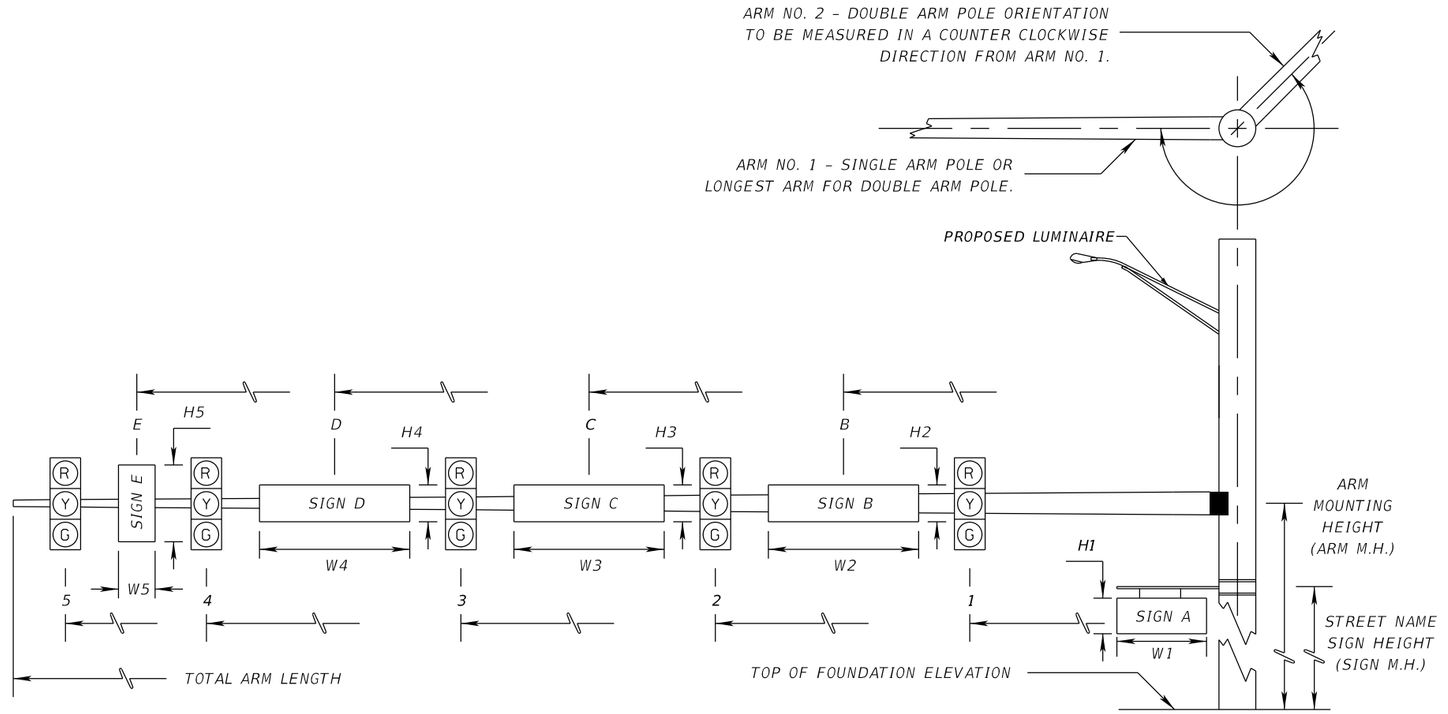
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEER OF RECORD
BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

GUIDE SIGN WORKSHEET



* DENOTES NUMBER OF SECTIONS IN SIGNAL HEAD ASSEMBLY

SIGNAL DATA

ID NO.	SHEET NO.	LOCATION BY STA.	TOP OF FOUND. ELEVATION	RDWY ARM NO.	CROWN ELEV.	LUMI-NAIRE Y/N	TERM. COMP. Y/N	SIGNAL V/H	BACK PLATES Y/N	PED. SIGNAL Y/N	DISTANCE FROM POLE	TOTAL ARM LENGTH	ARM M.H.	ANGLE BETWEEN DUAL ARMS 90/270
1	8	126+92.22	5.69	1	5.10	Y	Y	V	Y	N	5.6' CT 24.2' 3 26.4' VD 34.7' 3 39.2' EVD 43.2' 3 44' 4 53.1' VD 54.5' 3 59.6' EVD 62.5' VD 65.1' 3 72.8' VD 72.8' VD	78'	20.5'	90
				2	5.15	N	Y	V	Y	N	29.8' 3 38.8' 3	40'		

SIGN DATA

ID NO.	RDWY ARM NO.	A	H1	W1	B	H1	W1
1	1	0'	2'	9'	47.0'	2.5'	2.5'
	2	0'	2'	8'	25.0'	2.5'	2.5'

FUTURE LOADING

SIGNAL DATA

ID NO.	SHEET NO.	LOCATION BY STA.	TOP OF FOUND. ELEVATION	RDWY ARM NO.	CROWN ELEV.	LUMI-NAIRE Y/N	TERM. COMP. Y/N	SIGNAL V/H	BACK PLATES Y/N	PED. SIGNAL Y/N	DISTANCE FROM POLE	TOTAL ARM LENGTH	ARM M.H.	ANGLE BETWEEN DUAL ARMS 90/270
1	8	126+92.22	5.69	1	5.10	Y	Y	V	Y	N	5.6' CT 24.2' 3.0 26.4' VD 34.7' 3 39.2' EVD 43.2' 4 44' 4 53.1' VD 54.5' 3 59.6' EVD 62.5' VD 65.1' 3 72.8' VD 72.8' VD	78'	20.5'	90
				2	5.15	N	Y	V	Y	N	29.8' 3.0 38.8' 3.0	40'		-----

SIGN DATA

ID NO.	RDWY ARM NO.	A	H1	W1	B	H1	W1	C	H1	W1	D	H1	W1
1	1	0'	2'	9'	47.0'	2.5'	2.5'						
	2	0'	2'	8'	25.0'	2.5'	2.5'						

LUMINAIRE DETAILS: PROPOSED 40' MH MAST ARM MOUNTED LUMINAIRE WITH 15' ARM W/ AEL ATB0_P305_MVOLT_R4_4K

VD = VEHICLE DETECTION, CT = CCTV, EVD = EMERGENCY VEHICLE DETECTION

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD

BHARATHI CHIGURUPATI, P.E.
LICENSE NUMBER: P.E. 84860
DRMP, INC.
15310 AMBERLY DRIVE, SUITE 310
TAMPA, FL 33647

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

STANDARD MAST ARM TABULATION

SHEET NO. 15

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

7/19/2024 11:03:14 AM BChigurupati
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SPECIAL MAST ARM ASSEMBLIES DATA TABLE

Table Date 01-01-12

NUMBER OF LOCATIONS	STRUCTURE NUMBER	FIRST ARM				FIRST ARM EXTENSION				SECOND ARM				SECOND ARM EXTENSION				POLE						
		FA(ft)	FB(in)	FC(in)	FD(in)	FE(ft)	FF(in)	FG(in)	FH(in)	SA(ft)	SB(in)	SC(in)	SD(in)	SE(ft)	SF(in)	SG(in)	SH(in)	UA(ft)	UB(ft)	UC(in)	UD(in)	UE(in)	UF(deg)	UG(ft)
1	1	39.0	11.54	17.00	0.25	42.5	16.05	22.00	0.375	40.0	7.40	13.00	0.25	-	-	-	-	39.0	20.5	18.60	24.0	0.500	90	36.25

SPECIAL MAST ARM ASSEMBLIES DATA TABLE (CONT.)

Table Date 01-01-12

STRUCTURE NUMBER	FIRST ARM CONNECTION (in)		First Arm Camber Angle = 2 Degrees									SECOND ARM CONNECTION (in)		Second Arm Camber Angle = 2 Degrees								
	#Bolts	HT	FJ	FK	FL	FN	FO	FP	FR	FS	FT	#Bolts	HT	SJ	SK	SL	SN	SO	SP	SR	SS	ST
1	6	30	36	3.00	0.75	0.625	23.00	1.50	2.5	12.0	0.625	6	30	36	3.00	0.75	0.625	23.00	1.50	2.5	12.0	0.625

NOTES

1. WORK WITH INDEX 649-031, MODIFIED AS FOLLOWS : POLE, MAST ARM AND BACKING RING, INCLUDING LUMINAIRE ARM, MATERIALS SHALL BE ASTM A1011 GRADE 55, 60 OR 65 FOR THICKNESSES OF LESS THAN 3/16" AND ASTM A572 GRADE 55, 60 OR 65 FOR THICKNESSES OF GREATER THAN OR EQUAL TO 3/16".
2. DESIGN WIND SPEED = 150 MPH.

FOUNDATION NOTES

1. DESIGN BASED ON BORINGS TAKEN APRIL 2024. SIGN AND SEALED BY GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC.
2. ASSUMPTIONS AND VALUES USED IN DESIGN:

   STRUCTURE NO. 1
   SOIL TYPE: SAND
   SOIL LAYER THICKNESS = 19 FT.
   SOIL FRICTION ANGLE = 30 DEG.
   SOIL WEIGHT = 50 PCF
   N-BLOWCOUNT = 16
   DESIGN WATER TABLE IS AT GROUND SURFACE

SPECIAL MAST ARM ASSEMBLIES DATA TABLE (CONT.)

Table Date 07-01-15

STRUCTURE NUMBER	POLE BASE CONNECTION (in)					SHAFT AND REINF.								LUMINAIRE AND LUMINAIRE CONNECTION									
	#Bolts	BA	BB	BC	BF	DA(ft)	DB(ft)	RA	RB	RC	RD(in)	RE	RF(in)	LA(ft)	LB(ft)	LC(in)	LD(in)	LE	LF(ft)	LG(in)	LH(in)	LJ(in)	LK(in)	LL(deg)
1	8	40.0	2.5	2.0	40	19.0	5.0	11	18	10	6	10	9	40.0	15.0	3.00	0.125	0.5	8.0	0.500	0.750	0.313	0.250	0

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			SPECIAL MAST ARM ASSEMBLIES DATA TABLE	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	JOCELYN M. HAISCH-LINN, P.E. License Number: P.E. 60103 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		16
					SR 684	MANATEE	454032-1-52-01		

TRAFFIC CONTROL NOTES:

1. LANE CLOSURE RESTRICTIONS ARE AS FOLLOWS:

   NO LANE CLOSURES PERMITTED FROM 6:00 AM TO 8:00 PM.

   NO LANE OR SIDEWALK CLOSURES ARE PERMITTED DURING INACTIVE WORK ZONES.

2. ALL OVERHEAD WORK ASSOCIATED WITH SIGNALIZATION IMPROVEMENTS IS ONLY PERMITTED FROM 8:00 PM TO 6:00 AM.

3. THE CURRENT POSTED SPEED LIMITS SHALL BE MAINTAINED. THE POSTED SPEED OF SR 684 IS 45 MPH.

4. NOTIFY MANATEE COUNTY AREA TRANSIT (MCAT) FOURTEEN (14) BUSINESS DAYS PRIOR TO PERFORMING ANY WORK IN THE VICINITY OF AN EXISTING TRANIT STOP OR ROUTE (STEVE ROBERTS, 941-747-8621 x7639). MAINTAIN ADA-COMPLIANT ACCESS TO ALL EXISTING TRANSIT STOPS DURING CONSTRUCTION. COORDINATE TRANSIT STOP ADJUSTMENTS OR ALTERNATIVE LOCATIONS WITH MCAT PRIOR TO PERFORMING WORK.

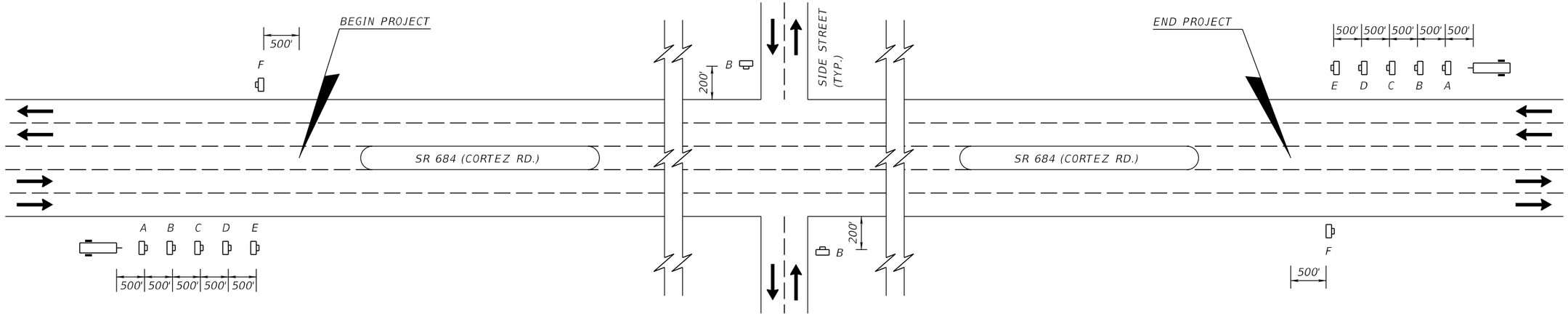
5. PLACE PORTABLE CHANGEABLE MESSAGE SIGNS AS SHOWN BELOW.

PCMS # 1 & 2	PCMS # 3 & 4	PCMS # 5 & 6	PCMS # 7 & 8
ROAD WORK	ROAD WORK AHEAD	SR 684 LANE CLOSURE	LANE CLOSED AHEAD
BEGINS MM/DD	USE CAUTION	MM/DD TO MM/DD	MERGE LT/RT

NOTE:
PCMS # 1 & 2 TO BE USED 14 DAYS PRIOR TO BEGINNING OF CONSTRUCTION AT EACH END OF THE PROJECT ON SR 684.
PCMS # 3 & 4 TO BE USED DURING CONSTRUCTION WHEN THERE IS NOT A LANE CLOSURE ON SR 684.
PCMS # 5 & 6 TO BE USED PRIOR TO LANE CLOSURE ON SR 684.
PCMS # 7 & 8 TO BE USED DURING LANE CLOSURE ON SR 684.

PHASE I

1. INSTALL ADVANCED WARNING SIGNS FOR DURATION OF PROJECT.
2. INSTALL ALL EROSION CONTROL ITEMS.
3. CONSTRUCT MEDIAN, SIDEWALK, LIGHTING, AND SIGNALIZATION IMPROVEMENTS FOR EASTBOUND SR 684 UTILIZING THE PEDESTRIAN DETOUR PLAN AND STANDARD PLAN INDEXES 102-613, 102-615, 102-660, AND 102-661.
4. CONSTRUCT SIDEWALK, LIGHTING, AND SIGNALIZATION IMPROVEMENTS FOR WESTBOUND SR 684 UTILIZING THE PEDESTRIAN DETOUR PLAN AND STANDARD PLAN INDEXES 102-613, 102-615, 102-660, AND 102-661.
5. MILL AND RESURFACE UTILIZING STANDARD PLAN INDEXES 102-613, 102-615, AND 102-661.
6 UTILIZE STANDARD PLAN INDEX 102-613 AND 102-615 TO INSTALL SIGNALS AND MAST ARMS WITH TRAFFIC CONTROL OFFICER.
7 CONSTRUCT SIGNING AND PAVEMENT MARKING IMPROVEMENTS UTILIZING STANDARD PLANS INDEXES 102-613, 102-615, 102-660, AND 102-661.



ADVANCED WARNING SIGNAGE
N.T.S.

LEGEND

- LANE IDENTIFICATION AND DIRECTION OF TRAFFIC
- WORK ZONE SIGN
- PORTABLE CHANGEABLE (VARIABLE) MESSAGE SIGN

A	B	C	D	E	F
SR XXX COMPLETION: SEASON YEAR FOR INFO: 1-(800) XXX-XXXX	ROAD WORK AHEAD	SPEEDING FINES DOUBLED WHEN WORKERS PRESENT	XXXXX LANE CLOSED AHEAD		END ROAD WORK
	W20-01F	MOT-14-06	W20-05LM OR W20-05RM	W04-2	G20-2

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

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TEMPORARY TRAFFIC CONTROL PLAN (1)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: P.E. 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		17
					SR 684	MANATEE	454032-1-52-01		

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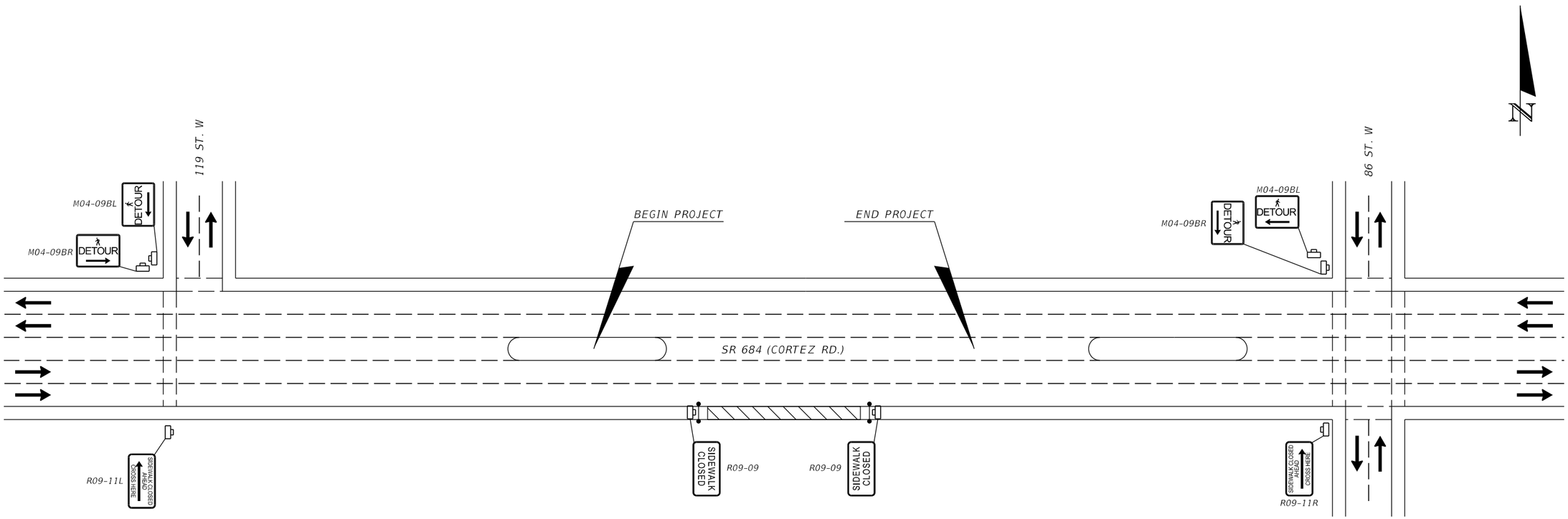

PEDESTRIAN DETOUR PLAN

N.T.S.

LEGEND

- LANE IDENTIFICATION AND DIRECTION OF TRAFFIC
- WORK ZONE
- WORK ZONE SIGN
- PEDESTRIAN LONGITUDINAL CHANNELIZING DEVICE (LCD)

NOTES:

1. PEDESTRIAN DETOUR PLAN SHOWN IS FOR EASTBOUND SR 684 SIDEWALK CLOSURE. PEDESTRIAN DETOUR PLAN WILL BE MIRRORED FOR WESTBOUND SR 684 SIDEWALK CLOSURE.
2. PROVIDE 1 ADDITIONAL M04-09BL OR M04-09BR SIGN AT EACH INTERSECTING STREET/SIDEWALK WITHIN DETOUR LIMITS.

REVISIONS				ENGINEER OF RECORD	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION			TEMPORARY TRAFFIC CONTROL PLAN (2)	SHEET NO.
DATE	DESCRIPTION	DATE	DESCRIPTION	CODY BAYER, P.E. LICENSE NUMBER: P.E. 90812 DRMP, INC. 941 LAKE BALDWIN LANE ORLANDO, FL 32814	ROAD NO.	COUNTY	FINANCIAL PROJECT ID		18
					SR 684	MANATEE	454032-1-52-01		

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

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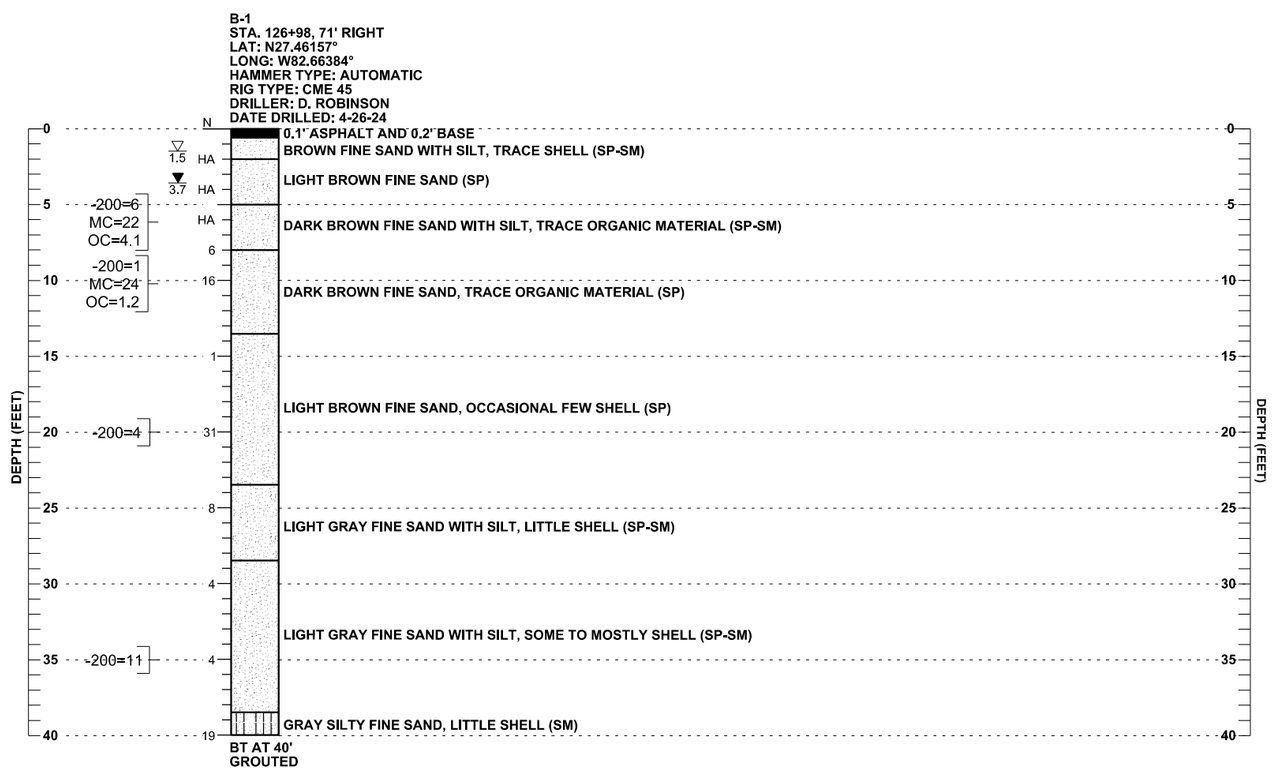

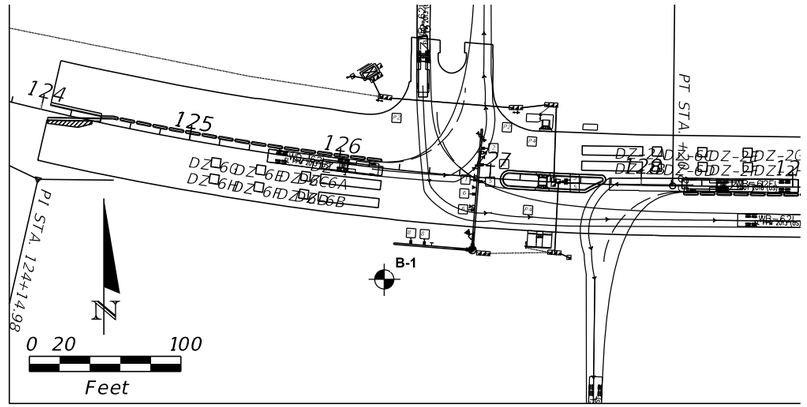

LEGEND

N	STANDARD PENETRATION RESISTANCE, BLOWS PER FOOT
HA	HAND AUGERED FOR UTILITY CLEARANCE
▽ 1.5	ESTIMATED SEASONAL HIGH GROUNDWATER DEPTH (FT.)
▼ 3.7	ENCOUNTERED GROUNDWATER DEPTH (FT.) 24 HRS. AFTER DATE DRILLED
BT	BORING TERMINATED AT DEPTH INDICATED
-200=	PERCENT PASSING NO. 200 U.S. STANDARD SIEVE
MC=	PERCENT NATURAL MOISTURE CONTENT
-200=	PERCENT ORGANIC CONTENT

SAND

SAND AND SILT

GENERAL NOTES

SUBSURFACE CONDITIONS SHOWN ON THE BORING REPRESENT THE CONDITIONS ENCOUNTERED AT THE BORING LOCATION. ACTUAL CONDITIONS MAY VARY FROM THOSE SHOWN. UNIFIED SOIL CLASSIFICATIONS SHOWN ON THE BORING ARE BASED ON VISUAL EXAMINATION AND THE LABORATORY TESTING SHOWN.

THE STANDARD PENETRATION TEST BORING WAS PERFORMED IN ACCORDANCE WITH ASTM D-1586. STANDARD PENETRATION RESISTANCES ARE SHOWN ON THE BORING AT THE TEST DEPTHS IN BLOWS PER FOOT UNLESS OTHERWISE NOTED.

THE BORING LOCATION WAS ESTABLISHED IN THE FIELD USING PROJECT PLANS AND A SUB-METER ACCURACY GPS UNIT (TRIMBLE TDC600). THE BORING LOCATION REFERENCES THE SR 684 CENTERLINE.

ACCORDING TO THE FDEP SEPTEMBER 2019 POTENTIOMETRIC CONTOURS MAP, THE POTENTIOMETRIC SURFACE OF THE FLORIDAN AQUIFER IN THE PROJECT VICINITY IS APPROXIMATELY +19 FEET NAVD88. THE CONTRACTOR SHALL BE PREPARED TO HANDLE ARTESIAN HEAD LEVELS UP TO +19 FEET NAVD88. BASED ON THE USGS BRADENTON BEACH QUADRANGLE MAP, THE EXISTING GROUND SURFACE ELEVATION IS ABOUT +5 FT NGVD.

SPLIT SPOON SAMPLER:
INSIDE DIAMETER: 1.375 IN. **AVERAGE HAMMER DROP: 30 IN.**
OUTSIDE DIAMETER: 2.0 IN. **HAMMER WEIGHT: 140 LBS.**

AUTOMATIC HAMMER			
GRANULAR SOILS: SANDS		NON-GRANULAR SOILS: SILTS, CLAYS, MUCK	
N VALUE (BLOWS/FT)	RELATIVE DENSITY	N VALUE (BLOWS/FT)	CONSISTENCY
0-3	VERY LOOSE	0-1	VERY SOFT
3-8	LOOSE	1-3	SOFT
8-24	MEDIUM DENSE	3-6	FIRM
24-40	DENSE	6-12	STIFF
OVER 40	VERY DENSE	12-24	VERY STIFF
		OVER 24	HARD

SECTION: 11
TOWNSHIP: 35 SOUTH
RANGE: 16 EAST

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

ENGINEER OF RECORD
DANIEL C. STANFILL, P.E.
LICENSE NUMBER: 42763
GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC.
919 LAKE BALDWIN. LANE
ORLANDO, FL 32814

STATE OF FLORIDA
DEPARTMENT OF TRANSPORTATION

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
SR 684	MANATEE	454032-1-52-01

REPORT OF CORE BORINGS

SHEET NO.
19