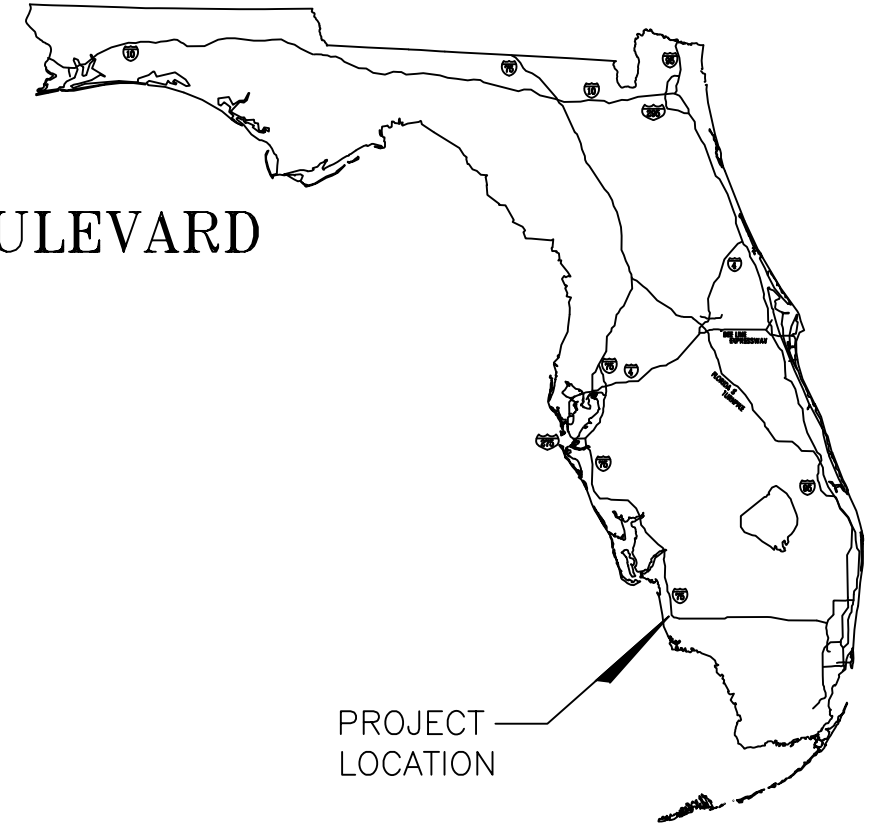


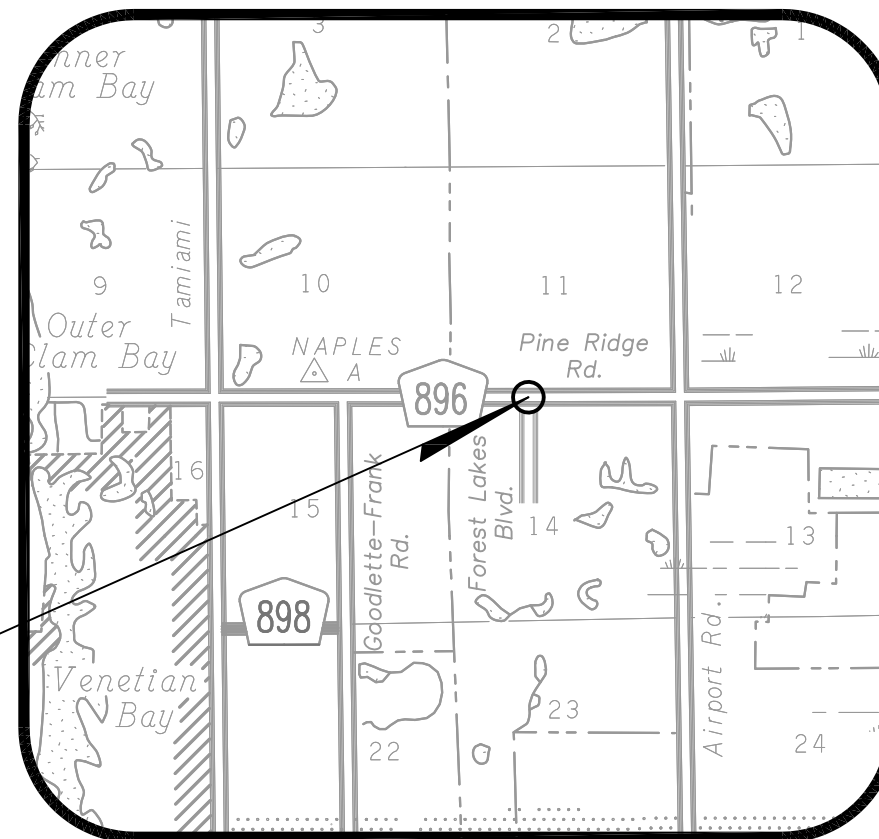
PINE RIDGE ROAD AT FOREST LAKES BOULEVARD SIGNALIZATION MODIFICATION PLANS



PROJECT LOCATION

INDEX OF SIGNALIZATION MODIFICATION PLANS

SHEET NO.	SHEET DESCRIPTION
T-1	KEY SHEET
T-2	TABULATION OF QUANTITIES AND SIGNALIZATION MODIFICATION PLAN NOTES
T-3	SIGNALIZATION MODIFICATION PLAN
T-4	EXISTING CONDUIT AND PULL BOXES



PROJECT LOCATION

PREPARED FOR:
COLLIER COUNTY TRANSPORTATION ENGINEERING
DEPARTMENT-TRAFFIC OPERATIONS
2885 SOUTH HORSESHOE DRIVE
NAPLES, FLORIDA 34104
(239) 774-8192

SIGNAL SHOP DRAWINGS
SUBMITTED TO:
COLLIER COUNTY TRANSPORTATION ENGINEERING
DEPARTMENT-TRAFFIC OPERATIONS
2885 SOUTH HORSESHOE DRIVE
NAPLES, FLORIDA 34104
(239) 774-8192

PREPARED BY:
TINDALE-OLIVER AND ASSOCIATES, INC.
1000 NORTH ASHLEY DRIVE, SUITE 400
TAMPA, FLORIDA 33602
(813) 224-8862

FINAL PLANS
MAY 10, 2013

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS BOOKLET (LATEST VERSION), THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (LATEST VERSION), AND COLLIER COUNTY TRAFFIC TECHNICAL SPECIAL PROVISIONS (JULY 2012).

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

INVESTIGATE
BEFORE YOU EXCAVATE
"CALL SUNSHINE"
1-800-432-4770
FL. STATUTE 553.851 (1974) REQUIRES
MIN. OF 2 DAYS AND MAX. OF 5 DAYS
NOTICE BEFORE YOU EXCAVATE.

ENGINEER OF RECORD: WILLIAM T. "WT" BOWMAN, P.E.
69132 5/10/2013
P.E. NUMBER DATE

SHEET NO.
T-1

T A B U L A T I O N O F Q U A N T I T I E S

S U M M A R Y O F P A Y I T E M S				
ITEM No.	DESCRIPTION	UNIT	T-3	TOTAL
			101-1	
102-1	MAINTENANCE OF TRAFFIC	LS	1	1
555-1-1	DIRECTIONAL BORE (LESS THAN 6")	LF	45	45
630-1-12	CONDUIT, UNDERGROUND, F&I	LF	55	55
632-7-1	SIGNAL CABLE, F&I	PI	1	1
635-1-11	PULL BOXES, F&I	EA	2	2
646-1-11	ALUMINUM SIGNAL POLE, F&I, (ALUMINUM PEDESTAL)	EA	1	1
650-1-311	TRAFFIC SIGNAL, F&I, (3-SECTION, 1-WAY, VERTICAL)	AS	1	1
660-2-106	LOOP ASSEMBLY, F&I, TYPE F	AS	1	1
670-5-410	CONTROLLER MODIFICATION	AS	1	1
700-48-18	SIGN PANEL, F&I, (LESS THAN 15 S.F.)	EA	1	1

* PAY ITEM NUMBERS BASED ON 2012 BASIS OF ESTIMATES.
 XX PENDING COORDINATION WITH FPL

L E G E N D	
LF = LINEAR FOOT	FM = FIELD MEASURE
EA = EACH	PQ = PLAN QUANTITY
PI = PER INTERSECTION	SF = SQUARE FEET
AS = ASSEMBLY	

GENERAL NOTES

1. THE IMPLEMENTATION OF THE SIGNALIZATION PLANS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE LATEST EDITION OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE LATEST EDITION OF THE MINIMUM SPECIFICATIONS FOR TRAFFIC CONTROL SIGNAL DEVICES, THE LATEST EDITION OF THE FDOT DESIGN STANDARDS, AND THE COLLIER COUNTY SIGNALIZATION TECHNICAL SPECIAL PROVISIONS (JULY 2012), EXCEPT AS MODIFIED HEREIN.
2. THE MAINTAINING AGENCY IS COLLIER COUNTY. CONTRACTOR SHALL CONTACT COLLIER COUNTY TRAFFIC OPERATIONS PROJECT MANAGER SEVEN DAYS PRIOR TO BEGINNING WORK.

 TRAFFIC OPERATIONS PROJECT MANAGER
 COLLIER COUNTY
 2885 HORSESHOE DRIVE SOUTH
 NAPLES, FLORIDA 34104
 PH: (239) 252-8260
3. THE CONTRACTOR SHALL NOTIFY THE "SUNSHINE STATE ONE CALL" NOTIFICATION CENTER NOT LESS THAN 48 HOURS, NOR MORE THAN FIVE DAYS IN ADVANCE OF ANY OF THE CONTRACTOR'S WORK ACTIVITY WHICH MAY IMPACT ANY UTILITY FACILITY. CALL "SUNSHINE STATE ONE CALL" AT 1(800) 432-4770. IT WILL BE THE CONTRACTOR'S SOLE RESPONSIBILITY FOR HAVING UNDERGROUND CABLE AND UTILITIES LOCATED AND IDENTIFIED BY PROPER AUTHORITIES AT CONSTRUCTION SITES. THE COLLIER COUNTY TRAFFIC OPERATIONS SECTION SHALL ALSO BE CONTACTED NOT LESS THAN 48 HOURS IN ADVANCE FOR STREET LIGHT AND TRAFFIC SIGNAL LOCATES. CALL (239) 252-8492 FOR LOCATES.
4. CONTRACTOR SHALL COORDINATE UTILITY LOCATES AND ANY RELOCATIONS AS REQUIRED.
5. AT THE TIME OF FINAL INSPECTION OF THE PROJECT, THE CONTRACTOR SHALL FURNISH THE PROJECT ENGINEER AND THE MAINTAINING AGENCY WITH TWO COMPLETE SETS OF "AS-BUILT" PLANS.
6. THE INTENT OF THESE PLANS IS TO PROVIDE A COMPLETE ACCEPTABLE WORKING INSTALLATION. ANY INCIDENTAL ITEMS REQUIRED TO COMPLETE THIS INSTALLATION SHALL BE INCLUDED IN THE PAY ITEMS ESTABLISHED.

PAY ITEM NOTES

1. 101-1:
THIS ITEM SHALL INCLUDE ALL ITEMS OF MOBILIZATION TO COMPLETE ALL WORK SPECIFIED WITHIN THESE PLANS.
2. 102-1:
THIS ITEM SHALL INCLUDE ALL ITEMS OF MAINTENANCE OF TRAFFIC TO COMPLETE ALL WORK SPECIFIED WITHIN THESE PLANS.
3. 630-1-12:
CONDUIT SHALL BE ENCASED IN SAND CEMENT IN AREAS WHERE A MINIMUM DEPTH OF 30 INCHES CANNOT BE MET, COORDINATE WITH COLLIER COUNTY PRIOR TO INSTALLATION AT A DEPTH LESS THAN 30 INCHES.
4. 632-7-1:
THE COLOR CODE OF SIGNAL CABLE SHALL BE VERIFIED WITH COLLIER COUNTY.

TRAFFIC SIGNAL CABLE PROVIDING POWER TO VEHICULAR AND PEDESTRIAN SIGNAL HEADS SHALL NOT BE INSTALLED IN THE SAME CONDUIT CONTAINING LOOP LEAD-INS AND PEDESTRIAN DETECTOR CABLES.
5. 635-1-11:
PULL BOXES ARE TO BE PLACED BEHIND CURB AND GUTTER. IF THERE IS NO CURB AND GUTTER, THEN PULL BOXES SHALL BE PLACED A MINIMUM OF 7' FROM THE EDGE OF PAVEMENT.
6. 646-1-11:
SIGNAL HEADS MOUNTED ON PEDESTALS SHALL BE INSTALLED USING BREAKAWAY ALUMINUM SQUARE BASE ASSEMBLIES WITH ALUMINUM DOORS.

ALUMINUM BASE ASSEMBLIES SHALL INCLUDE A PELCO PRODUCTS, INC. OR APPROVED EQUIVALENT LOCKING COLLAR.
7. 650-1-311:
THIS ITEM SHALL INCLUDE ALL SUPPORTING HARDWARE NECESSARY TO MOUNT ON ALUMINUM PEDESTAL. (ATTACHMENT CABLES SHALL BE STAINLESS STEEL ONLY).

SIGNAL HEAD RED, YELLOW, AND GREEN SECTIONS SHALL BE APPROVED LED TYPE.

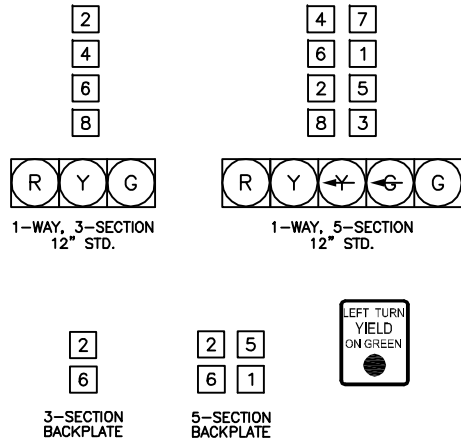
ENGINEER OF RECORD: WILLIAM T. "WT" BOWMAN, P.E.
69132 / 5/10/2013
 P.E. NUMBER / DATE

J:\Client 100 - 289\211008-00.13 Pine Ridge Rd @ Forest Lakes Blvd Signal Mod\Design\100%Plans\T-2_011013.dwg 5/7/2013 1:11 PM FINAL PLANS

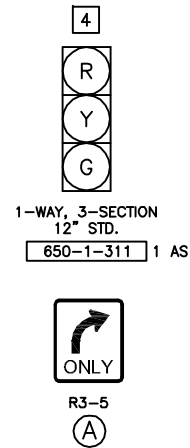
REVISIONS			PREPARED BY: TINDALE-OLIVER AND ASSOCIATES, INC. <small>1000 N. ASHLEY DR., SUITE 400 TAMPA, FLORIDA 33602 813-224-8862</small>	PREPARED FOR: COLLIER COUNTY TRANSPORTATION ENGINEERING DEPARTMENT-TRAFFIC OPERATIONS <small>2885 SOUTH HORSESHOE DRIVE NAPLES, FLORIDA 34104 239-774-8192</small>	NAME	DATE	PINE RIDGE ROAD AT FOREST LAKES BOULEVARD TABULATION OF QUANTITIES AND SIGNAL MODIFICATION PLAN NOTES	SHEET NO. T-2 OF T-4 SHEETS
DATE	BY	DESCRIPTION			DESIGNED	S.T.M.		
			DRAWN	L.M.M.	05/13			
			CHECKED	W.T.B.	05/13			
			SUPERVISED	W.T.B.				

j:\Client\100 - 299\211008-00.13 Pine Ridge Rd @ Forest Lakes Blvd Signal Mod\Design\100%Plans\T-3_011013.dwg 5/7/2013 1:13 PM FINAL PLANS

EXISTING EQUIPMENT TO REMAIN



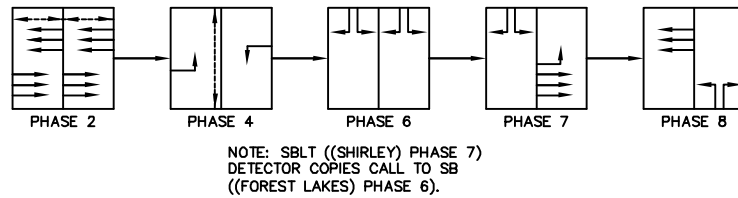
NEW SIGNAL EQUIPMENT



CONTROLLER OPERATION

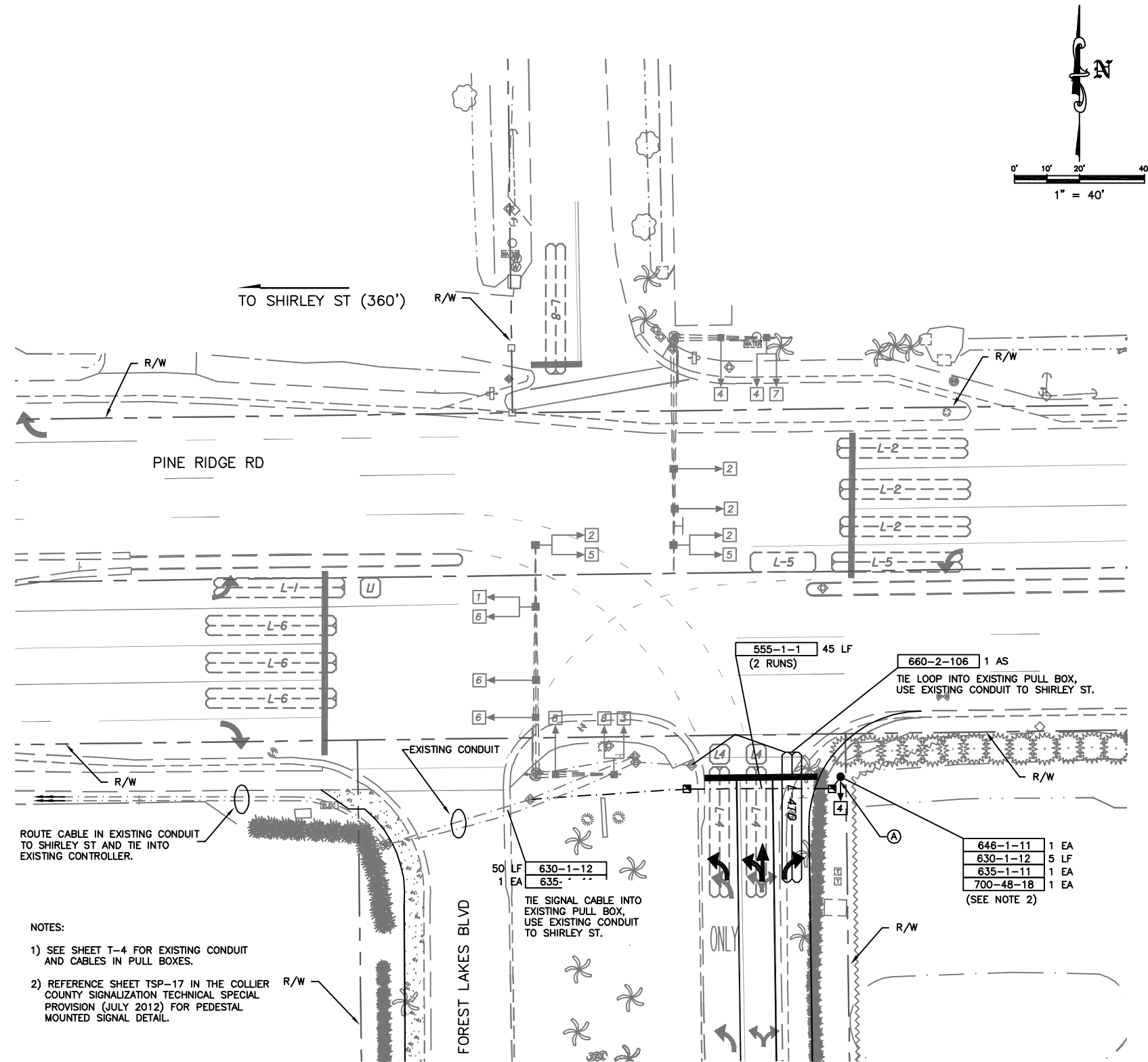
1. MAJOR STREET IS PINE RIDGE RD, MINOR STREET IS FOREST LAKES BLVD AND SHIRLEY ST.
2. THE CONTROLLER OPERATES WITH A NON-STANDARD SOP WITH SHIRLEY ST AND FOREST LAKES BLVD.
3. SEE SIGNALIZATION MODIFICATION PLAN NOTES SHEET (T-2) FOR ADDITIONAL CONTROLLER REQUIREMENTS.

EXISTING SOP (PROVIDED BY COLLIER CO.)



NEW LOOP DETECTOR CHART				
CONNECT TO LOOPS	LOOP TYPE	LOOP SIZE	CONTROLLER FUNCTION	DETECTOR FUNCTION
L4TD	F	6'x40'	8	CALL AND EXTEND

DEFAULT CONTROLLER TIMING PLAN					
TIMING FUNCTION	1	2	3	5	6
MOVEMENT NUMBER	1	2	4	5	6
MINIMUM GREEN (INITIAL)	-	-	-	-	-
EXTENSION (PASSAGE)	-	-	-	-	-
MAXIMUM GREEN I	-	-	-	-	-
MAXIMUM GREEN II	-	-	-	-	-
YELLOW	MAINTAIN EXISTING				
ALL RED	-	-	-	-	-
PEDESTRIAN WALK	-	-	-	-	-
PEDESTRIAN CLEAR	-	-	-	-	-
RECALL	-	-	-	-	-
FLASHING OPERATION	-	-	-	-	-



- NOTES:**
- 1) SEE SHEET T-4 FOR EXISTING CONDUIT AND CABLES IN PULL BOXES.
 - 2) REFERENCE SHEET TSP-17 IN THE COLLIER COUNTY SIGNALIZATION TECHNICAL SPECIAL PROVISION (JULY 2012) FOR PEDESTAL MOUNTED SIGNAL DETAIL.

ENGINEER OF RECORD: WILLIAM T. "WT" BOWMAN, P.E.
 69132 5/10/2013
 P.E. NUMBER DATE

REVISIONS		
DATE	BY	DESCRIPTION

PREPARED BY:
TINDALE-OLIVER AND ASSOCIATES, INC.
 1000 N. ASHLEY DR., SUITE 400
 TAMPA, FLORIDA 33602
 813-224-8862

PREPARED FOR:
COLLIER COUNTY TRANSPORTATION ENGINEERING DEPARTMENT-TRAFFIC OPERATIONS
 2885 SOUTH HORSESHOE DRIVE
 NAPLES, FLORIDA 34104
 239-774-8192

	NAME	DATE
DESIGNED	S.T.M.	05/13
DRAWN	L.M.M.	05/13
CHECKED	W.T.B.	05/13
SUPERVISED	W.T.B.	

PINE RIDGE RD AT FOREST LAKES BLVD
SIGNALIZATION MODIFICATION PLAN

SHEET NO.
T-3
 OF T-4 SHEETS

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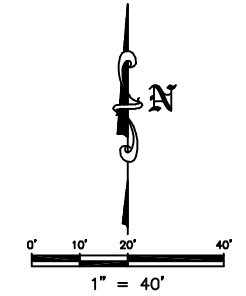
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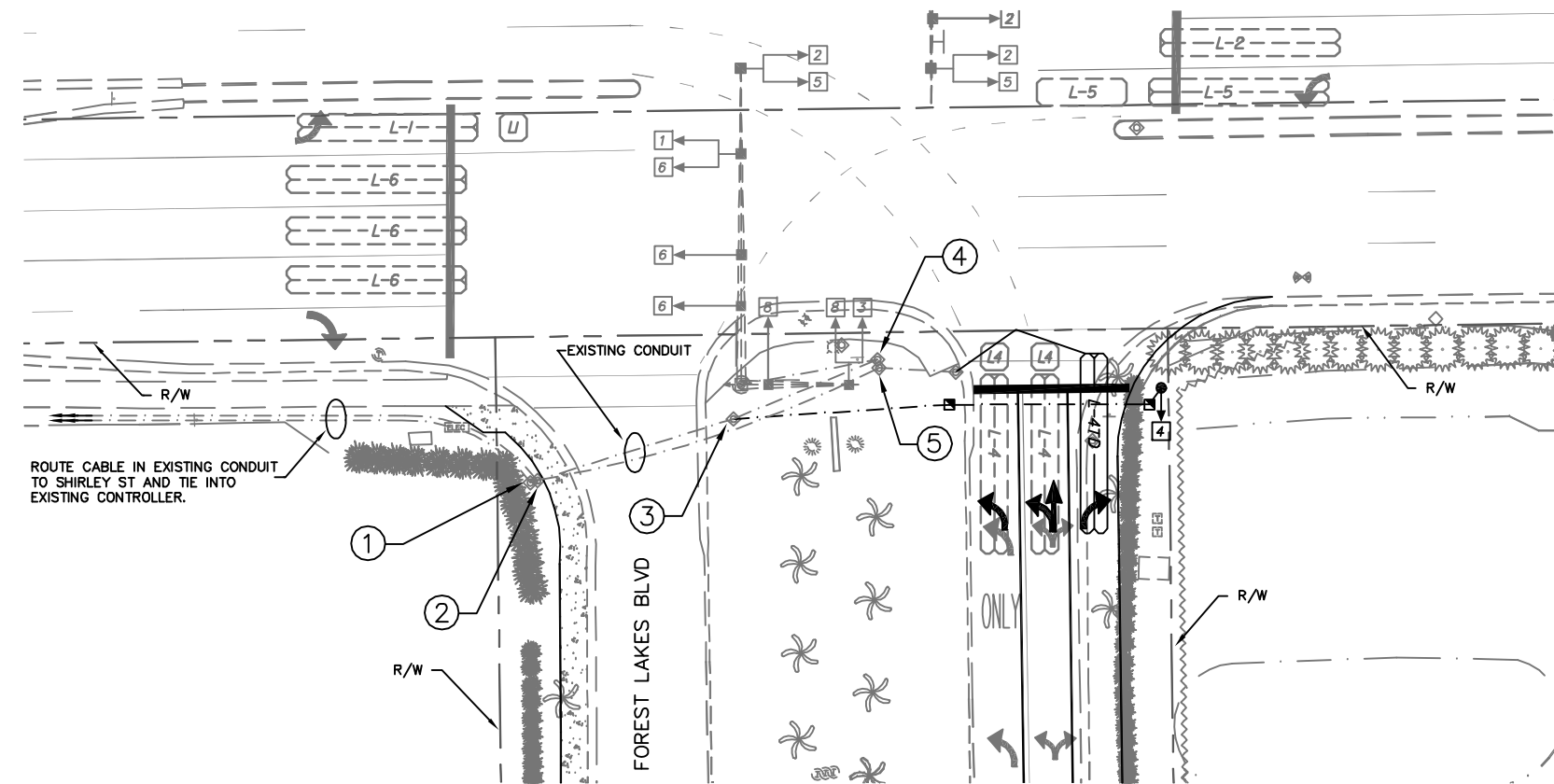
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ENGINEER OF RECORD: WILLIAM T. "WT" BOWMAN, P.E.
 69132 P.E. NUMBER 5/10/2013 DATE

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DATE	BY	DESCRIPTION

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PINE RIDGE RD AT FOREST LAKES BLVD
EXISTING CONDUIT AND PULL BOXES

SHEET NO.
T-4
 OF T-4 SHEETS