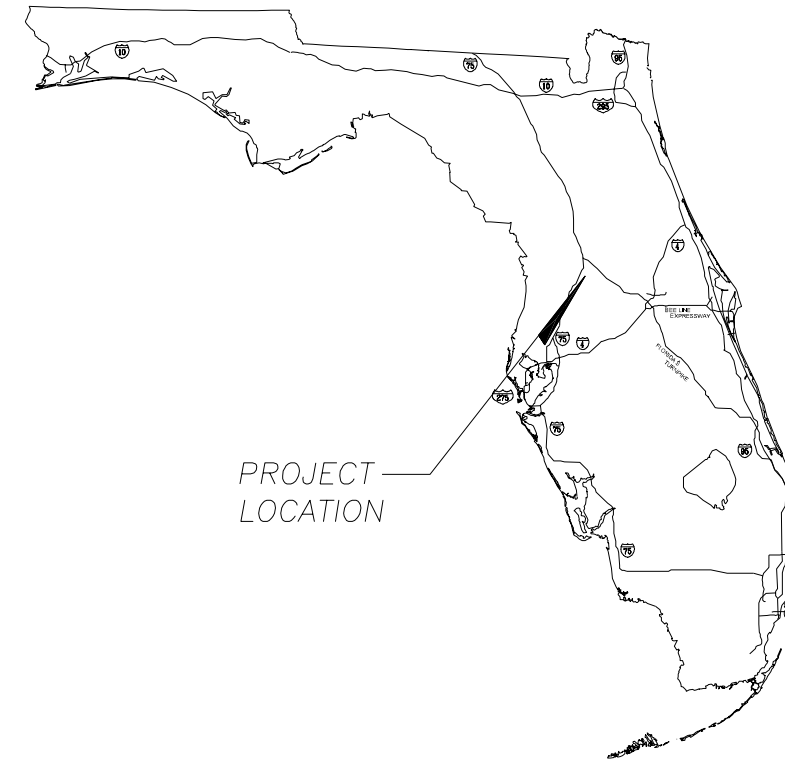


**LAKE COUNTY PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION**

CONTRACT PLANS

LAKE COUNTY
CR 561 AT CR 48

SIGNALIZATION PLANS

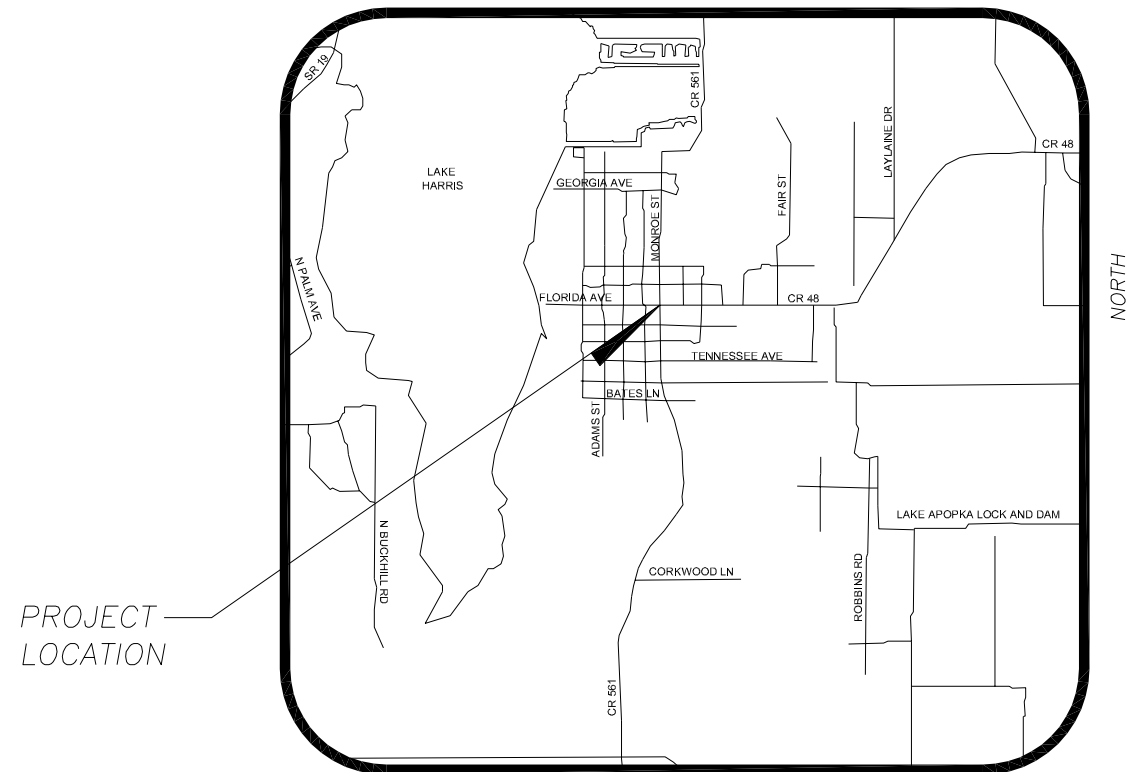


INDEX OF SIGNALIZATION PLANS

SHEET NO.	SHEET DESCRIPTION
T-1	COVER SHEET
T-2	TABULATION OF QUANTITIES
T-3	GENERAL NOTES
T-4	SIGNALIZATION PLANS
T-5	SIGNING AND PAVEMENT MARKING PLAN
T-6	INTERNALLY ILLUMINATED STREET NAME SIGNS
T-7	CONCRETE STRAIN POLE SCHEDULE

COUNTY COMMISSIONERS

JENNIFER HILL, VICE CHAIRMAN	DISTRICT ONE
ROBERT A. POOL	DISTRICT TWO
DEBBIE STIVENDER, CHAIRMAN	DISTRICT THREE
CATHERINE C. HANSON	DISTRICT FOUR
WELTON G. CADWELL	DISTRICT FIVE



PROJECT LOCATION

PLANS PREPARED BY:



TINDALE-OLIVER AND ASSOCIATES, INC.
3660 MAGUIRE BOULEVARD, SUITE 103
ORLANDO, FLORIDA 32803
407-896-9200

PROJECT LOCATION

100% SUBMITTAL
JUNE 16, 2004

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH AND ARE GOVERNED BY THE STATE OF FLORIDA, DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS BOOKLET (JANUARY 2004), AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION (2004).

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.

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

ENGINEER OF RECORD: _____

P.E. NUMBER _____ DATE _____

FISCAL YEAR	SHEET NO.
03	T-1

LAKE COUNTY PROJECT MANAGER: FRED SCHNEIDER, PE

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

T A B U L A T I O N O F P A Y I T E M S			
ITEM No.	DESCRIPTION	UNIT	TOTAL
101-1	MOBILIZATION	LS	1
555-1-1	DIRECTIONAL BORE	LF	189
630-1-12	CONDUIT, UNDERGROUND	LF	411
632-7-1	SIGNAL CABLE	PI	1
634-4-112	SPAN WIRE ASSEMBLY	PI	1
634-5-1	FIREGLASS INSULATOR	LF	20
634-6-1	MESSENGER WIRE	LF	94
635-1-11	PULL BOXES	EA	6
635-1-15	PULL BOXES (FIBER OPTIC)	EA	1
639-1-12	ELECTRICAL POWER SERVICE	AS	1
639-2-1	ELECTRICAL SERVICE WIRE	LF	20
641-15-150	CONCRETE STRAIN POLE (TYPE N-VI)	EA	2
650-51-311	TRAFFIC SIGNAL, (3-SECTION, 1-WAY)	AS	7
650-51-511	TRAFFIC SIGNAL, (5-SECTION, 1-WAY)	AS	1
653-182	PEDESTRIAN SIGNAL, LED (2-WAY)	AS	4
659-107	SIGNAL HEAD AUXILIARIES (ALUMINUM PEDESTAL)	EA	4
659-109	CONCRETE METER POLE	EA	1
660-1-103	INDUCTIVE LOOP DETECTOR	EA	6
660-1-104	INDUCTIVE LOOP DETECTOR	EA	2
660-2-102	LOOP ASSEMBLY (TYPE B)	AS	2
660-2-106	LOOP ASSEMBLY (TYPE F)	AS	6
665-11	PEDESTRIAN DETECTOR	EA	8
670-5-111	ACTUATED SOLID STATE CONTROLLER ASSEMBLY	AS	1
699-1-1	INTERNALLY ILLUMINATED SIGNS	EA	4
700-46-11	EXISTING SIGN REMOVAL	AS	2
711-4	DIRECTIONAL ARROWS (THERMOPLASTIC)	EA	5
711-5-1	GUIDE LINES (THERMOPLASTIC) (WHITE) (2'X4')	LF	106
711-7	REMOVE PAVEMENT MARKING (THERMOPLASTIC)	SF	304
711-35-121	TRAFFIC STRIPE SOLID (THERMOPLASTIC) (WHITE) (12")	LF	511
711-35-241	TRAFFIC STRIPE SOLID (THERMOPLASTIC) (WHITE) (24")	LF	127
711-36-61	SOLID TRAFFIC STRIPE (THERMOPLASTIC) (YELLOW) (6")	LF	28

PAY ITEM NOTES

1. PAY ITEM NO. 630-1-12 SHALL BE INSTALLED PER SECTION 630, CONDUIT OF THE STANDARD SPECIFICATIONS. ALL CONDUIT SHALL ENTER PULL BOXES AS REQUIRED IN STANDARD INDEX 17721, SHEET 2 OF 2.
2. PAY ITEM NO. 632-7-1 SHALL BE INSTALLED PER STANDARD INDEX 17727, AS APPLICABLE, AND AS STATED IN THE GENERAL NOTES.
3. PAY ITEM NO. 639-1-12 SHALL INCLUDE THE COST OF ALL LABOR, MATERIALS AND PERMITS REQUIRED TO FURNISH AND INSTALL THE ASSEMBLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION WITH ALL AGENCIES REQUIRED FOR APPROVAL OF THE COMPLETED INSTALLATION. STANDARD INDEX 17736, AS APPLICABLE, SHALL APPLY.
4. PAY ITEM NO. 639-2-1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING THE CONDUCTORS FOR THE POWER SERVICE.
5. PAY ITEM NO. 670-5-110 SHALL BE TYPE V CABINET.
6. PAY ITEM NO. 699-1-1 SHALL INCLUDE CANTILEVER ARMS, BRACKETS AND ALL HARDWARE NECESSARY TO INSTALL STREET NAME SIGNS AND PROVIDE FOR A COMPLETE INSTALLATION.
7. INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL HAVE A SEPARATE CIRCUIT BREAKER IN THE CABINET CONTROLLED BY A SINGLE PHOTOCELL IN THE CABINET. IN ADDITION, THE SIGNS MUST BE COUNTY APPROVED WITH A LAKE COUNTY LOGO.
8. INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL BE DOUBLE SIDED.
9. PAY ITEM NUMBER 711-7 ALL PAVEMENT MARKINGS TO BE REMOVED SHALL BE REMOVED BY HYDRO BLASTING. DUE CARE SHALL BE USED SO THAT EXISTING PAVEMENT DAMAGE WILL BE MINIMAL.

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	

G:\16625\ACAD\PLANS\100%\TABQSG01.DWG 100% PLAN SUBMITTAL JUNE 16, 2004

R E V I S I O N S						TINDALE-OLIVER AND ASSOCIATES, INC. 3660 MAGUIRE BOULEVARED, SUITE 103 ORLANDO, FLORIDA 32803 407-896-9200	LAKE COUNTY TRAFFIC ENGINEERING DEPARTMENT			TABULATION OF QUANTITIES	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	PROJECT NO.		T-2
						CR 561 AT CR 48	LAKE	XXXXX			

SIGNALIZATION GENERAL NOTES

1. THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, THE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS (JANUARY, 2004), AND ALL SUPPLEMENTS APPLICABLE THERETO.
2. ALL WORK SHALL CONFORM TO THE ABOVE STANDARD REQUIREMENTS, ANY LOCAL JURISDICTIONAL REQUIREMENTS THAT EXCEED THOSE LISTED ABOVE, AND ANY MANUFACTURER'S REQUIREMENTS THAT ARE NOT COVERED ABOVE.
3. NO TEST BORINGS WERE MADE IN THE VICINITY OF PROPOSED CONDUIT RUNS OR DIRECTIONAL BORES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO EXAMINE JOB SITE CONDITIONS PRIOR TO THE SUBMISSION OF BID PROPOSALS PER SECTION 2-4 OF THE FDOT SPECIFICATIONS.
4. THESE PLANS REFLECT CONDITIONS KNOWN AT THE TIME OF PLAN DEVELOPMENT. IN THE EVENT THAT ACTUAL FIELD CONDITIONS PREVENT THE APPLICATION OF THESE PLANS AND/OR THE SPECIFICATIONS OR THE PROGRESSION OF THE WORK SPECIFIED IN THE PLANS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IN CHARGE IMMEDIATELY AND PRIOR TO ANY FURTHER PROSECUTION OF THE WORK.
5. ALUMINUM HOUSINGS SHALL BE USED FOR ALL TRAFFIC SIGNAL HEADS. NO POLYCARBONATE HOUSING OR MOUNTING HARDWARE WILL BE PERMITTED. ALL SIGNAL HEADS ON THE EAST AND WEST APPROACHES SHALL HAVE BACK PLATES. TUNNEL VISORS SHALL BE FULL VISORS (NOT CUT-AWAY TYPE). PAYMENT FOR TUNNEL VISORS AND BACK PLATES SHALL BE INCIDENTAL TO PAY ITEM FOR TRAFFIC SIGNAL HEAD ASSEMBLIES. SIGNAL HOUSINGS SHALL BE BLACK IN COLOR.
6. THE CONTRACTOR SHALL VERIFY THE MAINTAINING AGENCY COLOR CODES FOR THE SIGNAL CABLE CONDUCTORS PRIOR TO ORDERING.
7. ONE ADDITIONAL (SPARE) CONDUIT SHALL BE RUN FROM THE CONTROLLER CABINET BASE TO THE NEAREST PULL BOX FOR DETECTION EQUIPMENT WIRES AND SIGNAL CABLE RESPECTIVELY.
8. PULL BOXES SHALL BE QUAZITE 1324 OR EQUIVALENT AND SHALL BE PLACED BEHIND CURB AND GUTTER, IF THERE IS NO CURB AND GUTTER, THE PULL BOXES SHALL BE PLACED A MINIMUM OF 10' FROM THE EDGE OF PAVEMENT, BUT NOT AT THE BOTTOM OF ANY DITCH OR RETENTION AREA. THE LIDS SHALL BE NON-METALLIC, TRAFFIC BEARING MATERIAL AND PRESSED COVER LOGO WITH "TRAFFIC SIGNAL". ALL PULL BOXES AND COVERS SHALL BE FDOT APPROVED.
9. DURING NON-WORKING HOURS, THE CONTRACTOR SHALL NOT STORE ANY MATERIALS OR PARK ANY EQUIPMENT WITHIN 30' OF THE EDGE OF THE TRAVELWAY. IF THE ABOVE IS NOT POSSIBLE, THE CONTRACTOR SHALL REQUEST THE ENGINEER IN CHARGE TO APPOINT AN APPROVED STORAGE AREA AND SUCH AREA SHALL BE PROPERLY DELINEATED AND ADVANCE WARNING SHALL BE UTILIZED.
10. PER FDOT STANDARD SPECIFICATIONS, ALL FIELD WIRING SHALL BE CLEARLY IDENTIFIED WITH WEATHER PROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE. THE CONTRACTOR SHALL SUBMIT THE PROPOSED TAGGING SYSTEM WITH THE SUBMITTALS PACKAGE AS REQUIRED FOR PERMIT JOBS.
11. THE CONTROLLER BASE ELEVATION SHALL BE 4"-8" ABOVE THE GRADE.
12. THREE SPARE CONDUCTORS PER SIGNAL CABLE ARE REQUIRED. SPARES SHALL BE BOUND TOGETHER AND GROUNDED TO THE BUS GROUNDING FACILITY IN THE CONTROLLER CABINET.
13. ALL TRAFFIC SIGNAL HEAD ASSEMBLIES SHALL HAVE A MINIMUM LOW POINT OF CLEARANCE OF 17.5' AND A MAXIMUM HIGH POINT OF CLEARANCE OF 19' FROM THE BOTTOM OF THE ASSEMBLY TO THE ROADWAY.
14. AT THE TIME OF FINAL INSPECTION OF THE INSTALLATION, THE CONTRACTOR SHALL PROVIDE TWO SETS OF CONSTRUCTION AS-BUILT PLANS, THAT INCLUDE CONDUIT AND PULL BOX LOCATIONS, AND FDOT FORMAT SERIES RESISTANCE DATA FORMS FOR ALL GROUNDING ELECTRODES.
15. THE CONTRACTOR SHALL FURNISH ALL NECESSARY EQUIPMENT INCLUDING A BUCKET TRUCK FOR TESTING AND INSPECTION OF TRAFFIC SIGNALS.
16. UPON COMPLETION OF THE TRAFFIC SIGNAL INSTALLATION, THE TRAFFIC SIGNAL SHALL BE PLACED IN FLASHING OPERATION FOR A PERIOD OF 7-14 DAYS PRIOR TO COMMENCEMENT OF STOP CONTROL OPERATION.
17. THE CONTRACTOR SHALL STAKE ALL POLE LOCATIONS AND HAVE THEM APPROVED BY LAKE COUNTY TRAFFIC ENGINEERING.
18. AS DIRECTED BY THE PROJECT ENGINEER, THE CONTRACTOR SHALL ADJUST CONDUIT AND PULL BOXES HORIZONTALLY AND/OR VERTICALLY IN ORDER TO AVOID ANY POSSIBLE CONFLICTS WITH UNDERGROUND UTILITIES.
19. ALL CONDUIT SHALL BE 2-INCH MINIMUM UNLESS OTHERWISE SPECIFIED IN THE PLANS AND SHALL HAVE A LOCATE WIRE INSTALLED IN ALL FIBER OPTIC AND FUTURE USE CONDUITS.
20. TYPE "F" LOOPS SHALL BE 40' LONG BY 6' WIDE QUADRAPOLE, CENTERED IN THE LANE AND EXTEND 5' BEYOND THE STOP BAR UNLESS OTHERWISE SHOWN ON PLAN SHEET.
21. THE CONTRACTOR SHALL MAKE ALL LOOP ASSEMBLIES AND LOOP DETECTORS INSTALLED AS PART OF THE PROJECT FULLY OPERATIONAL IN ACCORDANCE WITH THEIR ASSOCIATED ISOLATED INTERSECTION SIGNAL TIMING CHART. ALL LOOP ASSEMBLIES SHALL BE SEALED WITH AN FDOT APPROVED LOOP SEALANT. ALL SAW CUTS SHALL BE SEALED IMMEDIATELY AFTER THE LOOP WIRES AND LEAD-IN WIRES HAVE BEEN PLACED IN THE SAW CUTS. LOOPS SHALL NOT BE INSTALLED IN SERIES.
22. NO LOOP HOME RUNS SHALL BE CUT IN THE RADIUS.
23. ALL SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE LOCATED IN PULL BOXES AND A WEATHERPROOF COATING APPLIED.

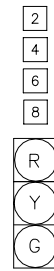
24. ALL TRAFFIC SIGNAL LOOP ASSEMBLY WIRES AND SHIELDED LEAD-IN CABLES SHALL BE ROUTED TO THE TRAFFIC SIGNAL CONTROLLER CABINET IN ONE CONTINUOUS RUN. THERE SHALL BE NO SPLICING ALLOWED EXCEPT IN INSTANCES WHERE LOOP WIRE IS SPLICED TO SHIELDED LEAD-IN CABLE. ALL SHIELDED LOOP LEAD-IN WIRES SHALL BE GROUNDED TO THE CONTROLLER CABINET GROUND.
25. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL UTILITY LOCATION COORDINATION EFFORTS AS REQUIRED BY FLORIDA STATUTE REGARDING PROTECTION OF EXISTING UTILITIES. THE CONTRACTOR IS REMINDED THAT NOT ALL UTILITY PROVIDERS ARE SUBSCRIBERS TO THE SUNSHINE STATE ONE-CALL SYSTEM, AND IT SHALL BE INCUMBENT UPON THE CONTRACTOR TO MAKE EVERY EFFORT TO INSURE THAT ALL UTILITIES ARE LOCATED PRIOR TO CONSTRUCTION.

COMPANIES	PHONE NUMBERS	CONTACT PERSON
SUMTER ELECTRIC COOPERATIVE, INC.	352-793-3801	ALAN KIMBLEY
FLORIDA POWER CORPORATION	407-942-9358	MIGUEL RODRIGUEZ
SPRINT	352-326-1620	DANNY JOSEPH
FLORIDA CABLE, INC.	352-759-2788	BILL BOETTTLHER

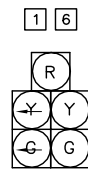
26. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITY DEPARTMENT AT LEAST 48 HOURS IN ADVANCE OF POLE SETTING OPERATIONS WHERE A CONFLICT WITH OVERHEAD ELECTRICAL CONDUCTORS IS EXPECTED AND WHEN JOINT USE POLES ARE TO BE USED.
27. THE CONTRACTOR SHALL ADHERE TO ALL LOCAL MAINTAINING AGENCY AND STATE REGULATIONS DURING ALL CONSTRUCTION OPERATIONS.
28. THE CONTRACTOR SHALL NOTIFY LAKE COUNTY TRAFFIC OPERATIONS AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND LOOP CUTTING, NOTIFY DENIS DEITZ OR STEVE BOLLINGER 352-742-1766. THE CONTRACTOR SHALL NOTIFY LAKE COUNTY TRAFFIC OPERATIONS AT LEAST 24 HOURS IN ADVANCE OF INSTALLING SIGNAL POLES, GROUND RODS, UNDERGROUND CONDUIT, AND SEALING SIGNAL HEAD ASSEMBLIES SO THAT THESE OPERATIONS CAN BE OBSERVED.
29. THE MAINTAINING AGENCY SHALL BE LAKE COUNTY.
30. THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING THE POWER COMPANY AND MAINTAINING AGENCY OF HIS PROPOSED DATE ON WHICH THE NEW ELECTRICAL SERVICE FOR THIS SIGNAL WILL BE COMPLETE IN ORDER THAT ARRANGEMENTS CAN BE MADE FOR ESTABLISHING AN ACCOUNT FOR THE LOCAL MAINTAINING AGENCY AND HOOK-UP DATE WITH THE LOCAL POWER COMPANY.
31. ALL SIGNAL HEADS SHALL USE FDOT APPROVED LED'S FOR ALL INDICATIONS, UNLESS OTHERWISE NOTED.
32. THE CONTRACTOR SHALL HAND DIG THE FIRST 4.0' AT THE STRAIN POLE FOUNDATION LOCATIONS TO INSURE THERE ARE NO UTILITY CONFLICTS.
33. THE CONTRACTOR IS RESPONSIBLE FOR ALL STATE AND LOCAL PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING THE ELECTRIC PERMIT AND TO COORDINATE APPLICATION FOR POWER, WITH LAKE COUNTY TRAFFIC OPERATIONS, PATTY FLETCHER, 352-742-1766.
34. ALL MAINTENANCE OF TRAFFIC SHALL CONFORM TO STANDARD INDEX 600 SERIES AND SHALL BE PAID FOR UNDER MOBILIZATION (101-1). THE COST FOR THE USE OF OFF-DUTY LAW ENFORCEMENT OFFICERS TO DIRECT TRAFFIC IN CASE OF LANE CLOSURES SHALL BE INCIDENTAL TO THE WORK AND WILL NOT BE PAID SEPARATELY.
35. ALL MATERIAL AND HARDWARE SHALL BE FDOT APPROVED AND PRE-APPROVED BY LAKE COUNTY TRAFFIC ENGINEERING.
36. ALL REMOVED EQUIPMENT SHALL BE DELIVERED TO LAKE COUNTY TRAFFIC OPERATIONS, 28127 C.R. 561, TAVARES, 352-742-1766, EXCEPT SIGNAL POLES, WHICH SHALL BE DISPOSED OF BY THE CONTRACTOR.
37. SIGNAL HEADS SHALL BE WIRED DIRECTLY TO THE TERMINAL BLOCKS. THE USE OF "JONES" PLUGS SHALL BE PROHIBITED.
38. THE INSIDE LANE DISCONNECT SHALL BE WIRED FOR FUTURE FIVE SECTION HEADS.
39. SIGNAL CABLE SHALL BE ATTACHED TO MESSENGER WIRE USING PROPER SIZE SPIRAL WRAP.
40. NO POWER SERVICE INSTALLATION WILL BE ALLOWED ON THE CABINET.
41. THE CONTROLLER ASSEMBLY SHALL BE REGIONAL LAKE COUNTY NAZTEC TS2 TYPE 1 CABINET WITH A TS2 TYPE 2 ETHERNET ENABLED CONTROLLER. A MANUAL PUSH BUTTON SHALL BE FURNISHED IN ALL CONTROLLER CABINETS. THE CABINET DOOR SHALL OPEN AWAY FROM THE INTERSECTION WHEN POSSIBLE. A SEPARATE CIRCUIT BREAKER, PHOTOCELL, AND BYPASS SWITCH FOR THE ILLUMINATED STREET NAME SIGNS SHALL BE PROVIDED.
42. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING THE PROPER AMOUNT OF RAKE WITH RESPECT TO LOADING TO BE USED ON POLES AT THE TIME OF INSTALLATION.
43. THE CONTRACTOR SHALL FURNISH LAKE COUNTY TRAFFIC OPERATIONS WITH EMERGENCY CONTACTS AND TELEPHONE NUMBERS AND HAVE AN IMSA LEVEL II CERTIFIED SIGNAL TECHNICIAN ON CALL WITHIN A TWO-HOUR MINIMUM RESPONSE.
44. ANY STRIPING/PAVEMENT MARKINGS DESTROYED BY CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

G:\16625\ACAD\PLANS\100%\GNITSG01.DWG JUNE 16, 2004 100% PLAN SUBMITTAL

REVISIONS						TINDALE-OLIVER AND ASSOCIATES, INC. 3660 MAGUIRE BOULEVARED, SUITE 103 ORLANDO, FLORIDA 32803 407-896-9200	LAKE COUNTY TRAFFIC ENGINEERING DEPARTMENT			GENERAL NOTES	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	PROJECT NO.		
							CR 561 AT CR 48	LAKE	XXXXX		



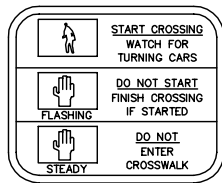
1-WAY, 3-SECT.
12" STD.
650-51-311 7 AS



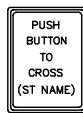
1-WAY, 5-SECT.
12" STD.
650-51-511 1 AS



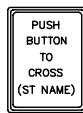
1-SECT. 2-WAY
653-182 4 AS



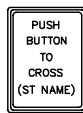
FTP-49



FTP-47



FTP-47



FTP-47

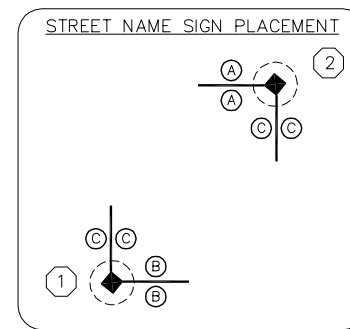


(A)

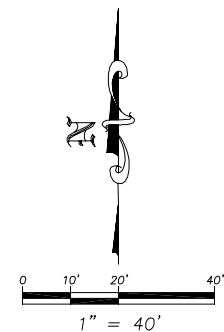
(B)

(C)

SEE SHEET T-6 FOR INTERNALLY ILLUMINATED STREET NAME SIGN DETAILS.



699-1-1 4 EA

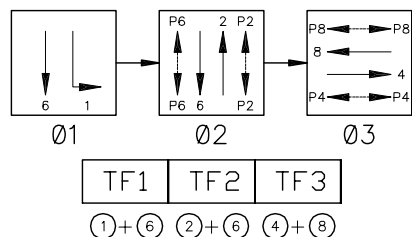


CONTROLLER NOTES

- MAJOR STREET IS CR 561, PHASE 1, MOVEMENTS 2 AND 6. MINOR STREET IS CR 48, PHASE 2, MOVEMENTS 4 AND 8.
- SIGNAL TIMINGS ARE INITIAL AND MAY REQUIRE FIELD ADJUSTMENTS.

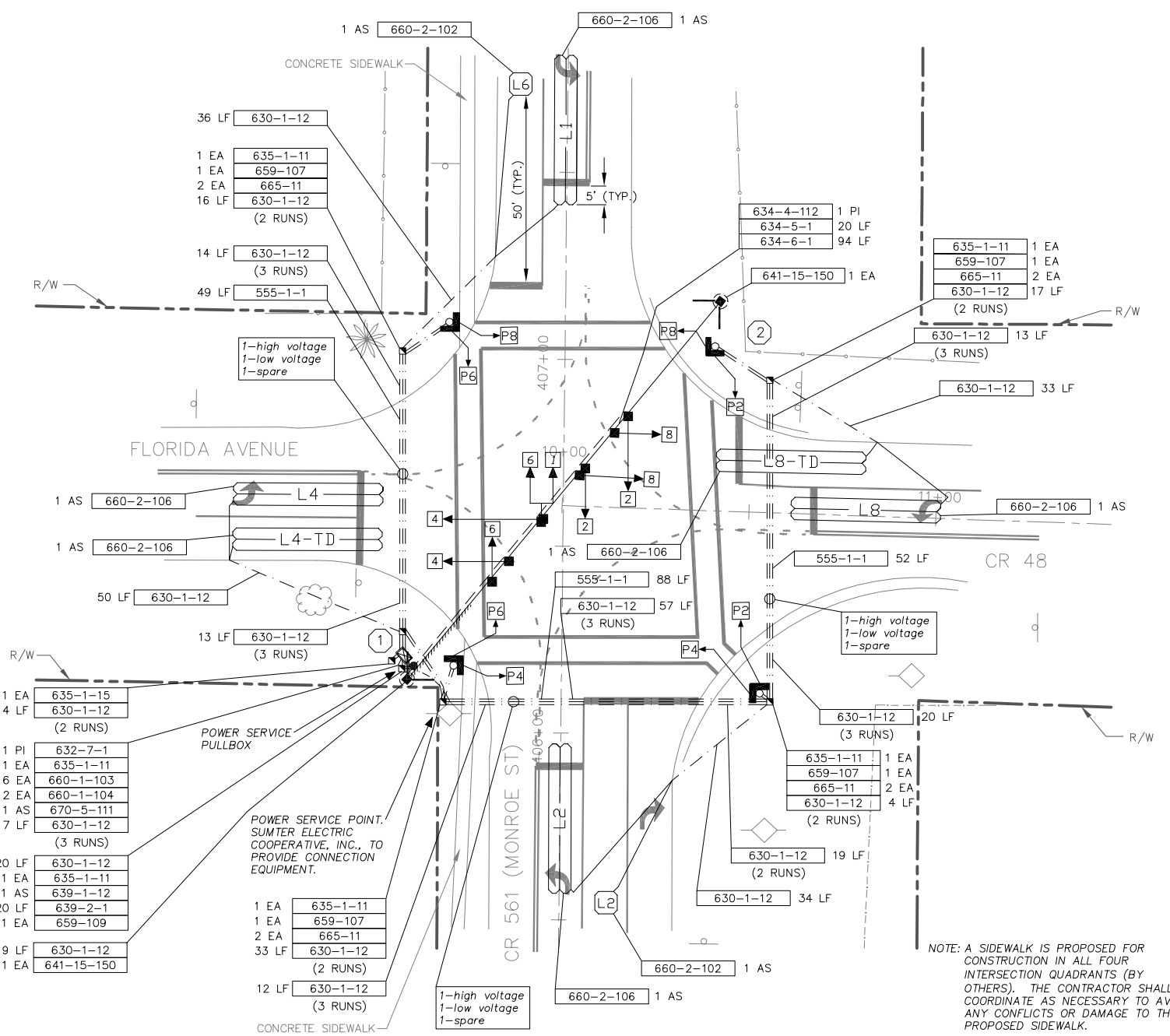
POLE DATA			
No.	ELEV.	STATION	OFFSET
1	90.41	406+13	41.3 LT
2	90.57	407+16	41.5 RT

SIGNAL OPERATION PLAN 11



CONTROLLER TIMING PLAN			
TIMING FUNCTION	1	2	3
MOVEMENT NUMBER	1	2+6	4+8
MINIMUM GREEN (INITIAL)	5	20	5
EXTENSION (PASSAGE)	2.5	3.0	2.5
MAXIMUM GREEN I	15	50	20
MAXIMUM GREEN II	--	--	--
YELLOW	4	4	4
ALL RED	0	1	1
PEDESTRIAN WALK	--	5	5
PEDESTRIAN CLEAR	--	16	16
RECALL	NONE	MIN	NONE
FLASHING OPERATION	RED	YELLOW	RED

LOOP DETECTOR/CONNECTION CHART					
LOOP DETECTOR	CONNECT TO LOOPS	LOOP TYPE	LOOP SIZE	CONTROLLER FUNCTION	DETECTOR FUNCTION
1	L2	F	40'x6'	TF2	CALL TO EXTEND
2	L2	B	6'x6'	TF2	CALL TO EXTEND
3	L4	F	40'x6'	TF3	CALL AND EXTEND
4	L4-TD	F	40'x6'	TF3	DELAY ON RED (8 SEC)
5	L1	F	40'x6'	TF1	CALL AND EXTEND
6	L6	B	6'x6'	TF1	CALL TO EXTEND
7	L8	F	40'x6'	TF3	CALL AND EXTEND
8	L8-TD	F	40'x6'	TF3	DELAY ON RED (8 SEC)



NOTE: A SIDEWALK IS PROPOSED FOR CONSTRUCTION IN ALL FOUR INTERSECTION QUADRANTS (BY OTHERS). THE CONTRACTOR SHALL COORDINATE AS NECESSARY TO AVOID ANY CONFLICTS OR DAMAGE TO THE PROPOSED SIDEWALK.

G:\16625\ACAD\PLANS\100%\PLANS\01.DWG JUN 16, 2004 100% PLAN SUBMITTAL

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

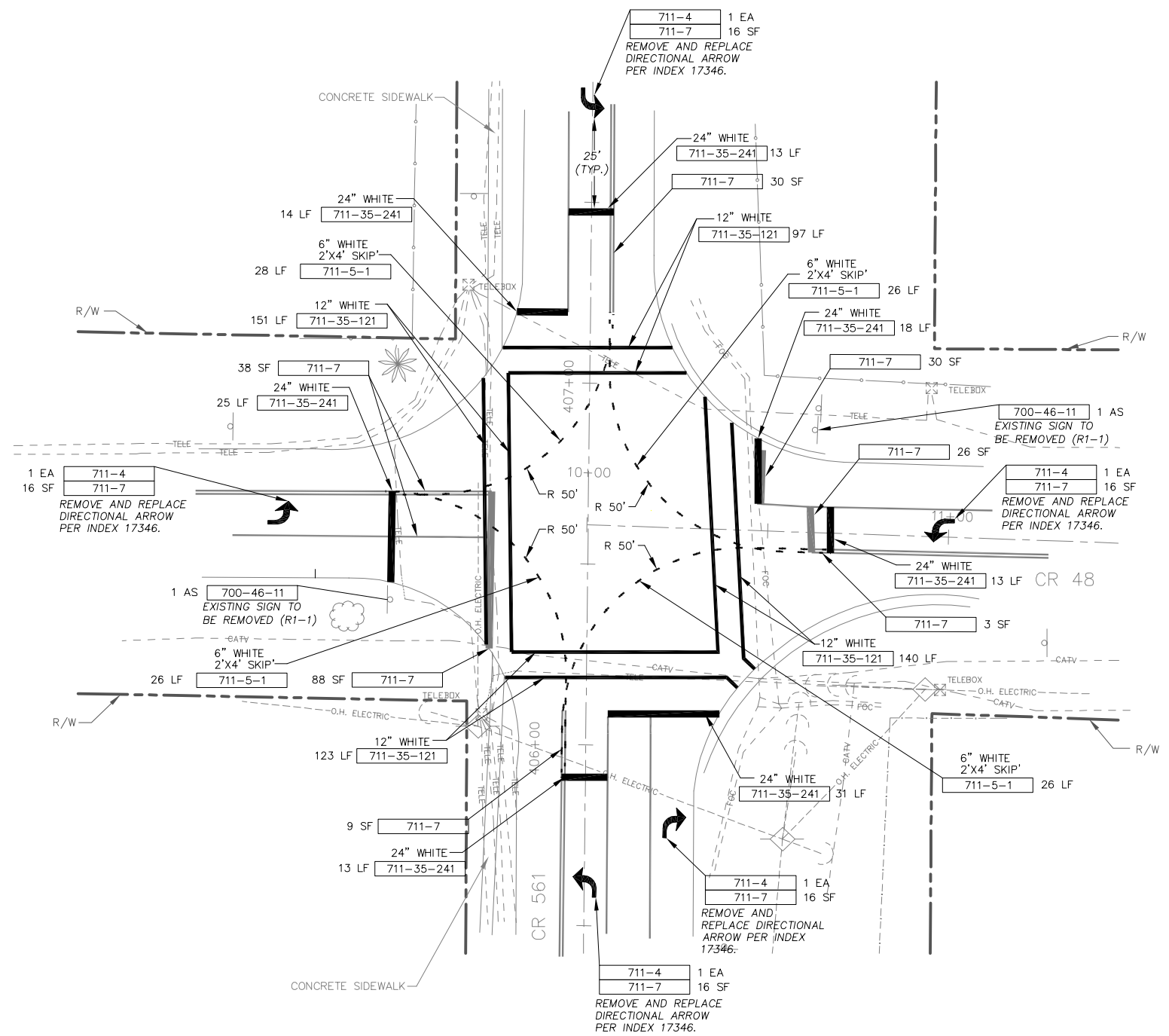
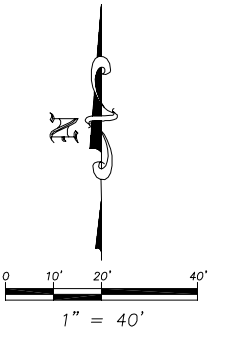
TINDALE-OLIVER AND ASSOCIATES, INC.
3660 MAGUIRE BOULEVARED, SUITE 103
ORLANDO, FLORIDA 32803
407-896-9200

LAKE COUNTY
TRAFFIC ENGINEERING DEPARTMENT

ROAD NO.	COUNTY	PROJECT NO.
CR 561 AT CR 48	LAKE	XXXXX

SIGNALIZATION PLAN

SHEET NO. T-4



G:\16625\ACAD\PLANS\100%\PLANS\G01.DWG JUNE 16, 2004 100% PLAN SUBMITTAL

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

TINDALE-OLIVER AND ASSOCIATES, INC.
 3660 MACUIRE BOULEVARD, SUITE 103
 ORLANDO, FLORIDA 32803
 407-896-9200

LAKE COUNTY TRAFFIC ENGINEERING DEPARTMENT		
ROAD NO.	COUNTY	PROJECT NO.
CR 561 AT CR 48	LAKE	XXXXX

SIGNING AND PAVEMENT
MARKING PLAN

SHEET
NO.
T-5

INTERNALLY ILLUMINATED STREET NAME SIGN REQUIREMENTS

1. 1/8 INCH CLEAR LEXAN AS BACKING.
2. WHITE DIAMOND GRADE VIP SHEETING, 3M SERIES 3990 OR COMPARABLE.
3. GREEN ACRYLIC ELECTRIC CUTTABLE FILM.
4. COLORED LAKE COUNTY LOGO ON WHITE BACKGROUND DESIGNED TO ALLOW LIGHT AND COLORS TO SHOW THROUGH, 14.25 INCHES HIGH, 19.663 INCHES LONG.
5. LAKE COUNTY LOGO SHALL HAVE A 5-YEAR GUARANTEE.
6. LOGO SHALL BE PRINTED WITH 3M TRANSLUCENT INKS UTILIZING ONE OF THE FOLLOWING APPLICATIONS AND SHALL HAVE A 5-YEAR GUARANTEE ON INKS AND VINYL DURABILITY.

APPLICATION 1:
SCOTCHPRINT GRAPHIC FOR TRANSLUCENT LOGOS-
PRINTED ELECTROSTATICALLY

METHOD 1
BASE FILM 8626 ES CLEAR
TRANSFER MEDIA TRIDENT
TONERS 8700/8800
2ND FILM 8628 ES TRANSLUCENT
OVERLAMINATE 3642 GPS MATTE

APPLICATION 2:
SCOTCHPRINT GRAPHIC FOR TRANSLUCENT LOGOS-
PRINTED ON ARIZONA 180 PRINTER

METHOD 2
BASE FILM RG3650-114 CLEAR
INK 3700 OR 6700 SERIES
2ND FILM RG3630-20
OVERLAMINATE 3642 GPS MATTE

APPLICATION 3:
SCOTCHPRINT GRAPHIC FOR TRANSLUCENT LOGOS-
PRINTED ON VUTEK ULTRAVU MODEL 2360 OR
3360 PRINTERS

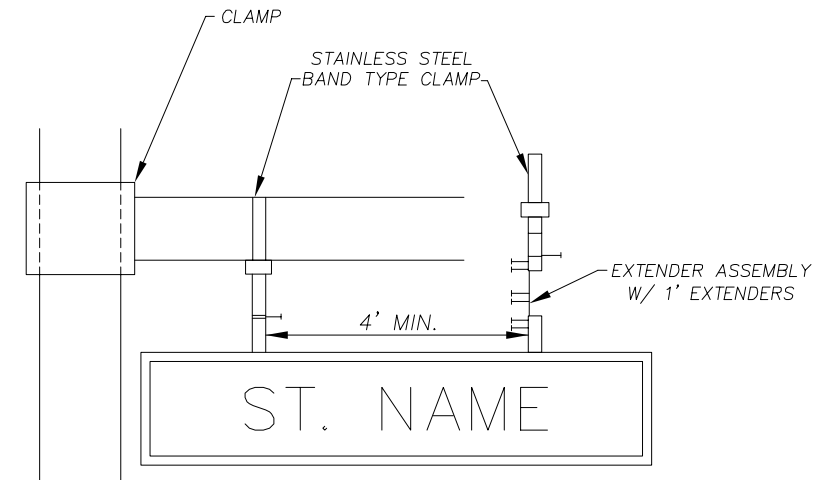
METHOD 3
BASE FILM 3650-114
INK 2300 SERIES
2ND FILM IJ3630-20
OVERLAMINATE 3642 GPS MATTE

APPLICATION 4:
SCOTCHPRINT GRAPHIC FOR TRANSLUCENT LOGOS-
PRINTED ON VUTEK ULTRAVU MODEL 3300/3000 OR
5300/5000 PRINTERS

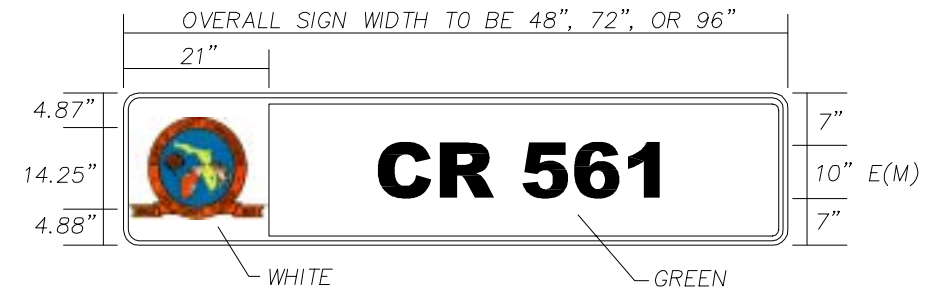
METHOD 4
BASE FILM 3650-114
INK 4000 SERIES
2ND FILM IJ3630-20
OVERLAMINATE 3642 GPS MATTE

7. THE DESIRED LETTER SIZE SHALL BE 10" UPPER CASE AND 6" LOWER CASE, TYPE E MODIFIED. SHOULD A SUBJECT STREET NAME USING THIS SIZE AND SERIES NOT FIT ON THE DESIRED PANEL, ONE OF THE FOLLOWING ALTERNATIVES SHOULD BE USED (LISTED IN DECREASING ORDER OF DESIRABILITY).
 - A. 10" UPPER, SERIES D
 - B. 10" UPPER, SERIES C
 - C. 8" UPPER, SERIES D
 - D. 8" UPPER, SERIES C

8. WHEN THE STREET NAME CONSISTS OF ORDINAL NUMBERS THE SUFFIX SHALL BE SERIES C, 1/2 THE HEIGHT OF THE NUMBER, MOUNTED ALONG THE LOWER EXTREME.
9. AVOID ABBREVIATIONS, IF ABSOLUTELY NECESSARY USE THE FOLLOWING: BOULEVARD (BLVD), AVENUE (AVE), TERRACE (TERR), PLACE (PL), DRIVE (DR), ROAD (RD), LANE (LN). ABBREVIATIONS SHOULD BE USED BEFORE FONT AND TEXT SIZES ARE REDUCED.
10. "22/24" STYLE CONTAINER, 22 INCH VIEWABLE SIGN HEIGHT, 24 INCH CONTAINER HEIGHT.
11. PHOTO CELL SHALL BE INSTALLED IN THE SIGNAL CABINET WITH A 2 INCH PLEXIGLAS WINDOW.
12. A "HANDS OFF PHOTO TEST SWITCH" SHALL BE INSTALLED.
13. THE INTERNALLY ILLUMINATED STREET SIGN SHALL BE INSTALLED ON A SEPARATE BREAKER.
14. SIGN BRACKET AND CLAMP-ON CANTILEVER ARM SHOULD BE INSTALLED 1 FOOT BELOW MESSENGER CABLE.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE MESSAGE WITH THE LOCAL MAINTAINING AGENCY BEFORE FABRICATING THE SIGNS. SHOP DRAWINGS WILL BE REQUIRED FOR SIGN, BRACKET, AND CLAMP DETAILS.



SIGN BRACKET ATTACHMENT DETAIL
TWO POINT CLAMP-ON CANTILEVER ARM
SIGN MOUNTING ASSEMBLY DETAIL



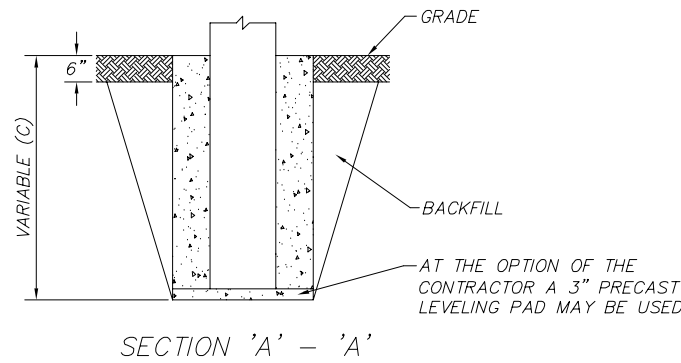
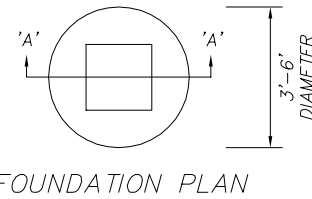
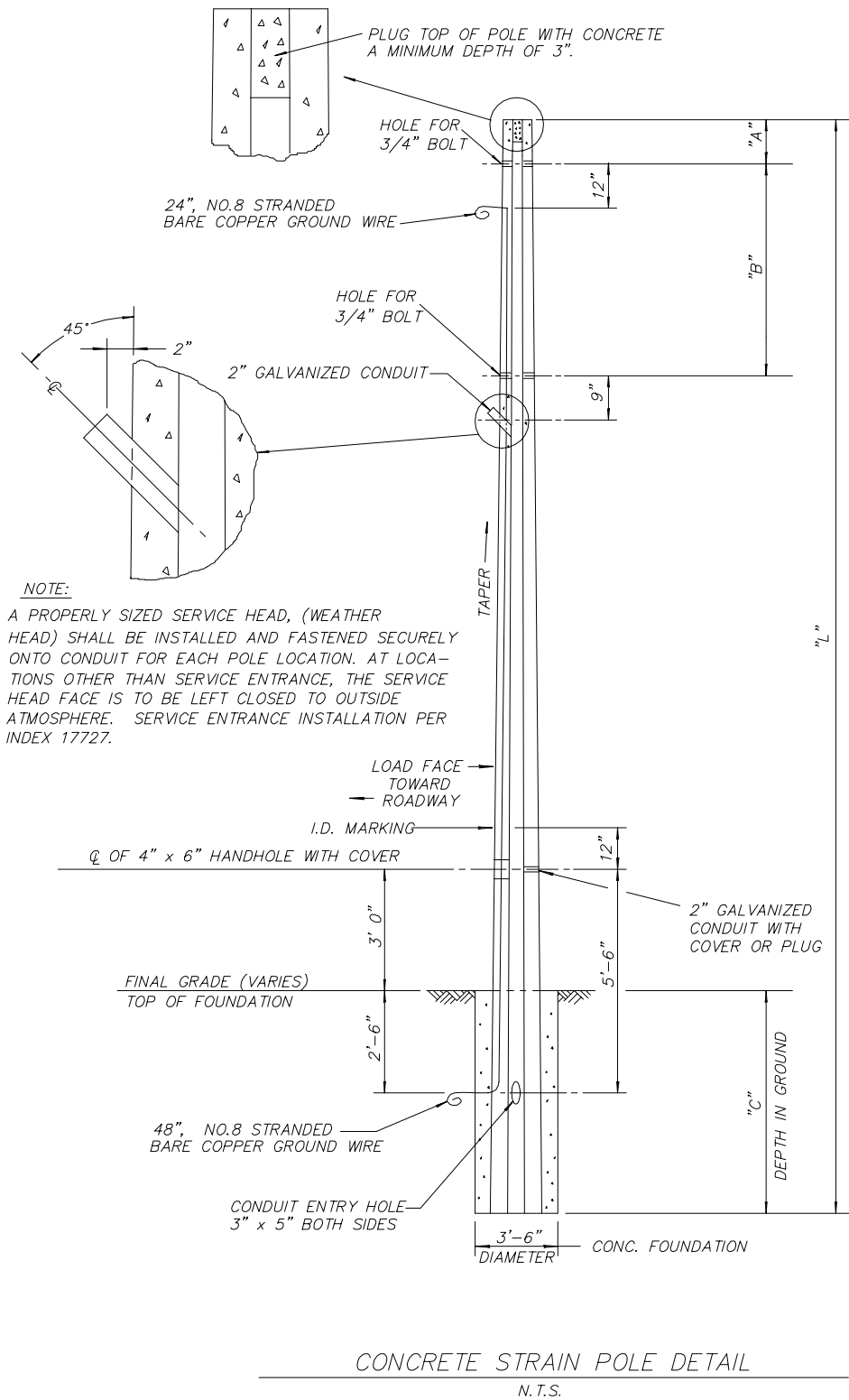
TYPICAL SIGN

G:\16625\ACAD\PLANS\100%\T-6.DWG JUNE 16, 2004 100% PLAN SUBMITTAL

REVISIONS						TINDALE-OLIVER AND ASSOCIATES, INC. 3660 MACUIRE BOULEVARD, SUITE 103 ORLANDO, FLORIDA 32803 407-896-9200	LAKE COUNTY TRAFFIC ENGINEERING DEPARTMENT			INTERNALLY ILLUMINATED STREET NAME SIGNS	SHEET NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION		ROAD NO.	COUNTY	PROJECT NO.		T-6
						CR 561 AT CR 48	LAKE	XXXXX			

STRAIN POLE SCHEDULE

POLE NUMBER	POLE TYPE	L	A	B	C	SPAN	CATENARY WIRE	MESSENGER WIRE
1 STA 406+13 41.3 FT. LT.	NVI	50'	6'-10"	6'-7"	13'-0"	1	3/8"	7/16"
2 STA 407+16 41.5 FT. RT.	NVI	50'	7'-0"	6'-7"	13'-0"	1	3/8"	7/16"
3								
4								
5								
6								



FOUNDATION NOTES

EXCAVATION AND BACKFILL: EXCAVATION AND BACKFILL FOR THE FOOTINGS SHALL BE IN ACCORDANCE WITH ARTICLES 125-4 AND 125-82 WITH THE EXCEPTION THE BACKFILL, IN LIEU OF THE REQUIREMENTS FOR OBTAINING THE SPECIFIED DENSITY, MAY BE HAND TAMPED IN FOUR INCH MAXIMUM LAYERS OR MACHINE TAMPED IN SIX INCH MAXIMUM LAYERS. THE MATERIAL SHOULD BE NEITHER DRY NOR SATURATED. AT THE CONTRACTORS OPTION BACKFILLING MAY BE DONE WITH POURED CONCRETE.

CONCRETE: FOOTING TO BE POURED WITH CLASS I CONCRETE. (SECTION 345)

FORMS: FORMS SHALL BE IN ACCORDANCE WITH ARTICLE 700-8-3. (IF THE FOOTING IS POURED IN AN OVERSIZED HOLE, THE CONCRETE IN THE TOP SIX INCHES SHALL BE PLACED IN A FORM. ALL EXPOSED SURFACES SHALL BE TROWELED TO A SMOOTH FINISH.

STRAIN POLE DIAGONAL SPAN NOTES:

- PRESTRESSED CONCRETE POLES SHALL BE MANUFACTURED AND INSTALLED IN ACCORDANCE WITH SECTION 641.
- ALL MATERIALS FOR SPAN WIRE ASSEMBLY SHALL BE IN ACCORDANCE WITH SECTION 634 AND FDOT INDEX 17727.
- CONCRETE FOR THE FOUNDATION SHAFT SHALL BE CLASS I WITH $f'_c = 3000\text{psi}$.
- FOUNDATION DESIGN:
 - DESIGN IS BASED ON THE GEOTECHNICAL REPORT FURNISHED BY GEOTECHNICAL AND ENVIRONMENTAL CONSULTANTS, INC.
 - ASSUMPTIONS AND VALUES USED IN DESIGN:
 - Cohesionless soil - sand
 - Soil Friction Angle = 30 Degrees
 - Soil Weight = 50 lbs/cf (EFFECTIVE SUBMERGED WEIGHT)
 - Groundwater level 0.0 feet below surface
- DESIGN IS BASED ON 80 MPH WIND, WITH A 30% GUST FACTOR.



12381 Cleveland Avenue
Suite 204
Fort Myers, FL 33907
(239) 939-1414 (239) 278-4289 FAX
C.A. No. 650

FILE No. 04FTM401

G:\16625\ACAD\PLANS\100%\CNGYSG01.DWG JUNE 16, 2004 100% PLAN SUBMITTAL

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

TINDALE-OLIVER AND ASSOCIATES, INC.
3660 MAGUIRE BOULEVARD, SUITE 103
ORLANDO, FLORIDA 32803
407-896-9200

LAKE COUNTY TRAFFIC ENGINEERING DEPARTMENT		
ROAD NO.	COUNTY	PROJECT NO.
CR 561 AT CR 48	LAKE	XXXXX

CONCRETE STRAIN POLE SCHEDULE

SHEET NO.
T-7