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TRAFFIC OPERATIONS

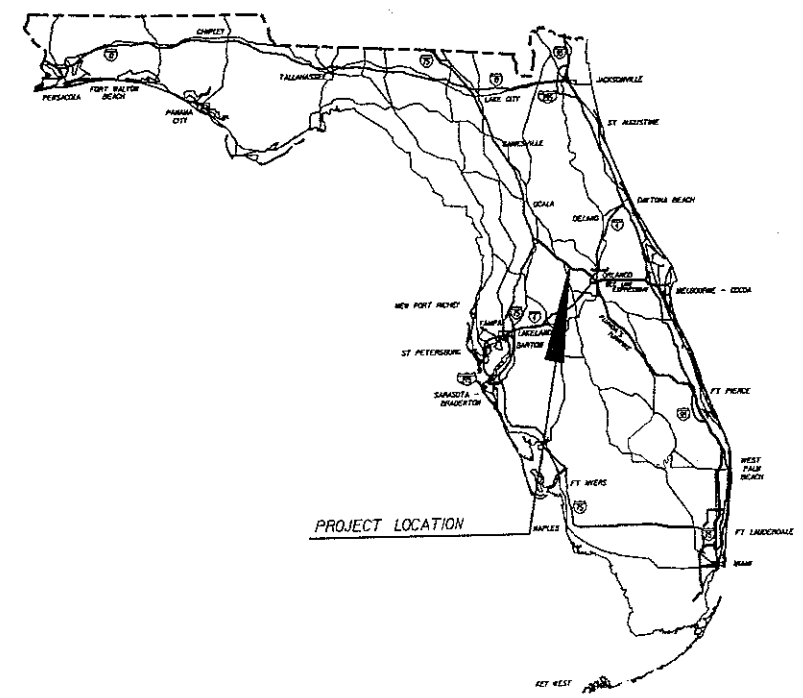
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Pa Phil

LAKE COUNTY PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

CONTRACT PLANS

LAKE COUNTY
HOOK STREET AT
SOUTH HANCOCK ROAD

SIGNALIZATION PLANS

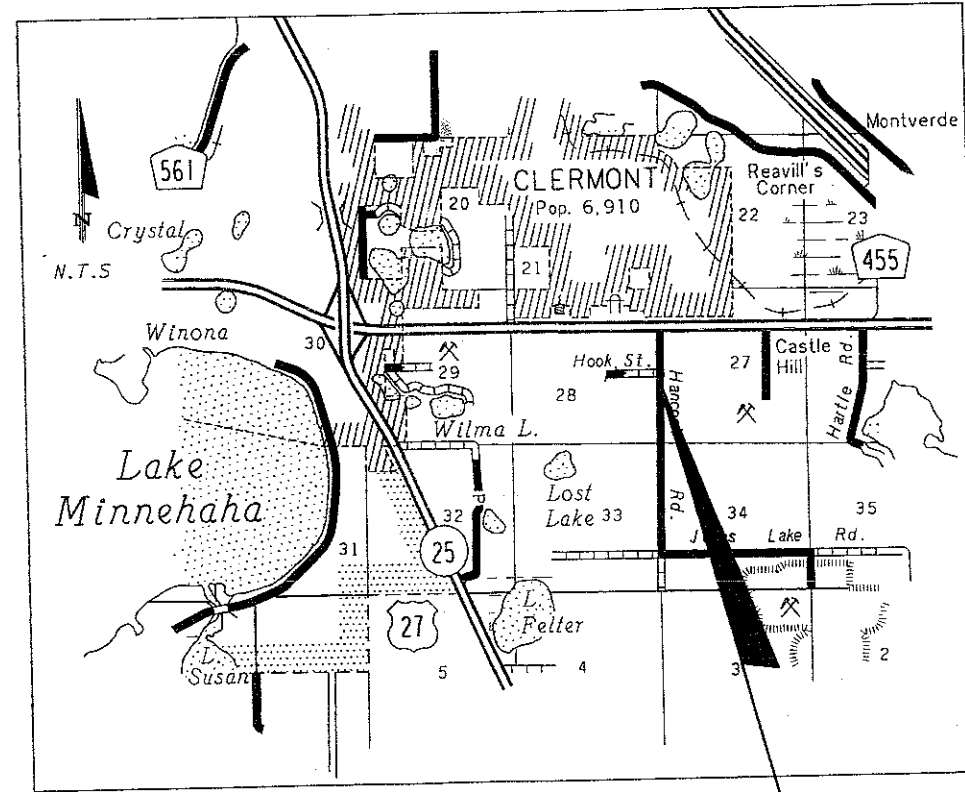


INDEX OF SIGNALIZATION PLANS

SHEET NO.	SHEET DESCRIPTION
T-1	KEY SHEET
T-2	TABULATION OF QUANTITIES
T-3	GENERAL NOTES SHEET
T-4	SIGNALIZATION PLAN
T-5	SIGNING AND PAVEMENT MARKING PLAN SHEET
T-6	CONCRETE STRAIN POLE SCHEDULE
T-7	GUIDESIGN WORKSHEET

COUNTY COMMISSIONERS

JENNIFER HILL	DISTRICT ONE
ROBERT A. POOL, CHAIR	DISTRICT TWO
DEBBIE STIVENDER	DISTRICT THREE
CATHERINE C. HANSON	DISTRICT FOUR
WELTON G. CADWELL, VICE CHAIR	DISTRICT FIVE
BILL NERON	COUNTY MANAGER



PROJECT LOCATION

GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS DATED JANUARY 2002, AND
STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE
CONSTRUCTION DATED 2000,
AS AMENDED BY CONTRACT DOCUMENTS.

REVISIONS

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

PLANS PREPARED BY
TEI
Engineers & Planners

TEI, ENGINEERS & PLANNERS
300 PRIMERA BOULEVARD, SUITE 200
LAKE MARY, FL 32746
(407) 805-0355
VENDOR NO.: VF-593094436-001
ENGINEERING BUSINESS NO. EB 6185

NOTE: THE SCALE OF THESE PLANS MAY HAVE
CHANGED WITH REPRODUCTION.

SIGNALIZATION PLANS
ENGINEER OF RECORD: JAMES S. STROZ, JR., P.E.
DATE: _____
P.E. NO.: 56984

LAKE COUNTY PROJECT MANAGER: PHILIP MAGGIO

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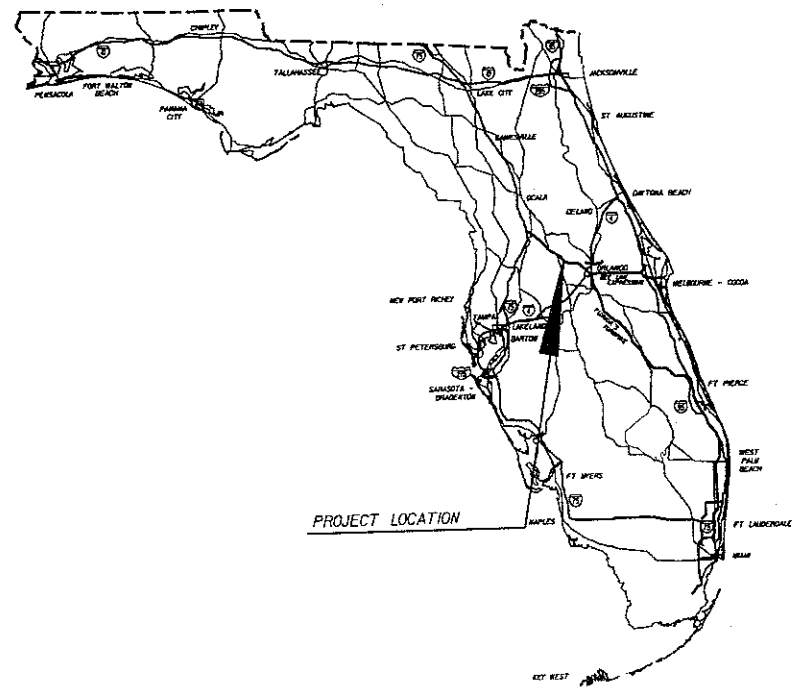
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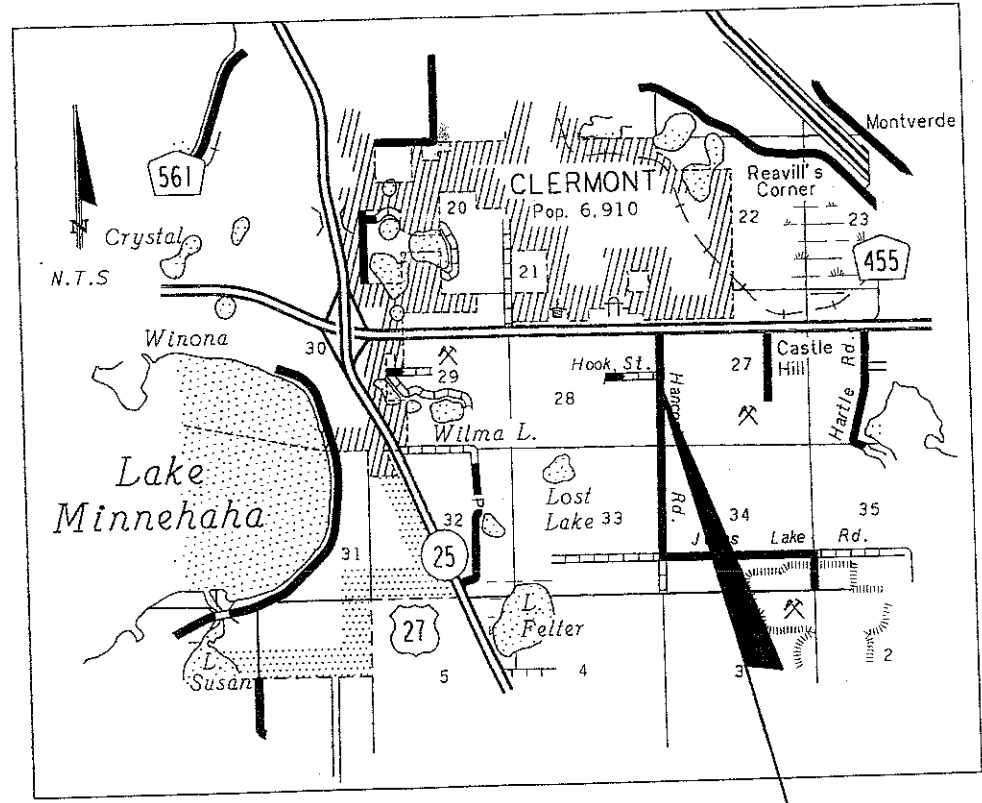


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ENGINEER OF RECORD: JAMES S. STROZ, JR., P.E.
DATE: _____
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LAKE COUNTY PROJECT MANAGER: PHILIP MAGGIO

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07/31/03

TABULATION OF QUANTITIES

BID ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBER								TOTAL THIS SHEET	GRAND TOTAL	REFERENCE SHEET
			T-4		T-5								
			ORIGINAL	FINAL	ORIGINAL	FINAL	ORIGINAL	FINAL	ORIGINAL	FINAL			
101-1	MOBILIZATION	LS	1								1	1	
522-1	SIDEWALK CONCRETE 4"	SY	1.4								1.4	1.4	
630-1-12	CONDUIT, UNDERGROUND	LF	1843		139						1982	1982	
630-1-13	CONDUIT, UNDERPAVEMENT	LF	10								10	10	
630-1-14	CONDUIT, UNDERGROUND JACKED	LF	331								331	331	
632-7-1	SIGNAL CABLE	PI	1								1	1	
634-4-112	SPAN WIRE ASSEMBLY	PI	1								1	1	
635-1-11	PULL BOX	EA	20		2						22	22	
639-1-12	ELECTRICAL POWER SERVICE (OVERHEAD)	AS	1								1	1	
639-2-1	ELECTRICAL SERVICE WIRE	LF	12								12	12	
641-16-146	CONCRETE STRAIN POLES	EA	1								1	1	
641-16-150	CONCRETE STRAIN POLES	EA	1								1	1	
650-51-313	TRAFFIC SIGNAL, 3 SECTION, 1WAY (SPECIAL - LED)	AS	2								2	2	
650-51-323	TRAFFIC SIGNAL, 3 SECTION, 2 WAY (SPECIAL - LED)	AS	1								1	1	
650-51-513	TRAFFIC SIGNAL, 5 SECTION, 1WAY (SPECIAL - LED)	AS	4								4	4	
653-181	PEDESTRIAN SIGNAL, 1SECTION, 1WAY (LED)	AS	2								2	2	
653-182	PEDESTRIAN SIGNAL, 1SECTION, 2 WAY (LED)	EA	3								3	3	
659-109	CONCRETE PEDESTAL (TYPE II)	EA	5								5	5	
660-1-105	INDUCTIVE LOOP DETECTOR TYPE 5	EA	4								4	4	
660-1-106	INDUCTIVE LOOP DETECTOR TYPE 6	EA	5								5	5	
660-2-102	LOOP ASSEMBLY TYPE B	AS	6								6	6	
660-2-106	LOOP ASSEMBLY TYPE F	AS	7								7	7	
665-11	PEDESTRIAN DETECTOR	EA	8								8	8	
670-5-110	ACTUATED SOLID STATE CONTROLLER ASSEMBLY	AS	1								1	1	
699-1-1	INTERNALLY ILLUMINATED STREET NAME SIGN (DOUBLE SIDED)	EA	4								4	4	
700-40-1	SIGN SINGLE POST SI-1, W16-9P(30"X30", 24"X10")	AS			3						3	3	
700-40-1	SIGN SINGLE POST SI-1, W16-7(30"X30", 24"X12")	AS			3						3	3	
700-40-1	SIGN SINGLE POST FTP-36(24"X30")	AS			2						2	2	
700-40-2	SIGN SINGLE POST R4-7, OMI-1(24"X30", 18"X18")	AS			2						2	2	
700-48-60	SIGN EXISTING REMOVE PANEL	EA			2						2	2	
700-90-11	SIGN FLASHING BEACON	AS			2						2	2	
706-3	RETRO RELECTIVE PAVEMENT MARKERS (COLORLESS/RED)	EA			10						10	10	
	RETRO RELECTIVE PAVEMENT MARKERS (AMBER/AMBER)	EA			26						26	26	
711-3	PAVEMENT MESSAGES	EA			5						5	5	
711-4	DIRECTIONAL ARROW	EA			6						6	6	
711-35-061	SOLID TRAFFIC STRIPE (6" WHITE)	LF			160						160	160	
711-35-121	SOLID TRAFFIC STRIPE (12" WHITE)	LF			1050						1050	1050	
711-35-241	SOLID TRAFFIC STRIPE (24" WHITE)	LF			260						260	260	
711-36-061	SOLID TRAFFIC STRIPE (6" YELLOW)	LF			554						554	554	
711-36-181	SOLID TRAFFIC STRIPE (18" YELLOW)	LF			150						150	150	
711-7	REMOVE EXISTING PAVEMENT MARKINGS	SF			38						38	38	

PAY ITEM NOTES

1. PAY ITEM NO. 630-1-12 SHALL BE INSTALLED PER SECTION 630, CONDUIT OF THE STANDARD SPECIFICATIONS. ALL CONDUITS SHALL ENTER PULL BOXES AS REQUIRED IN STANDARD INDEX 17721, SHEET 2 OF 2.
2. WHEN JACKING CONDUIT UNDER PAVEMENT, THE CONTRACTOR MAY USE AN FDOT APPROVED GUIDED BORING SYSTEM AS AN ALTERNATE METHOD OF CONSTRUCTION. AN ACCEPTABLE METHOD IS THE DITCH WITCH JET-TRAC OR EQUIVALENT, PAID FOR UNDER PAY ITEM NUMBER 630-1-14.
3. PAY ITEM NO. 632-7-1 SHALL BE INSTALLED PER STANDARD INDEX 17727, AS APPLICABLE, AND AS STATED IN THE GENERAL NOTES.
4. 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.
5. PAY ITEM NO. 639-2-1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING THE CONDUCTORS FOR THE POWER SERVICE.
6. PAY ITEM NO. 670-5-110 SHALL BE A TYPE V CABINET.
7. 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.
8. INTERNALLY ILLUMINATED STREET NAME SIGNS SHALL HAVE A SEPARATE CIRCUIT BREAKER IN THE MAIN CIRCUIT BREAKER PANEL CONTROLLED BY A SINGLE PHOTOCCELL ACCESSIBLE BY A LIFT TRUCK. IN ADDITION, THE SIGNS MUST BE COUNTY APPROVED WITH A LAKE COUNTY LOGO.
9. INTERNALLY ILLUMINATED STREET NAME SIGN SHALL BE DOUBLE SIDED.

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



300 PRIMERA BLVD., SUITE 200, LAKE MARY, FL 32746
 (407) 805-0355 ENGINEERING BUSINESS NO. EB0085

LAKE COUNTY TRAFFIC ENGINEERING DEPARTMENT		
ROAD NO.	COUNTY	PROJECT NO.
HOOKE ST AT S HANCOCK RD	LAKE	99137.25

TABULATION OF QUANTITIES

SHEET NO.
T-2

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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, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS (JANUARY, 2002), 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 LENSES SHALL BE GLASS. TUNNEL VISORS SHALL BE FULL VISORS (NOT CUT-AWAY TYPE) AND PAYMENT FOR TUNNEL VISORS SHALL BE INCIDENTAL TO PAY ITEMS FOR TRAFFIC SIGNAL HEAD ASSEMBLIES. SIGNAL HOUSINGS SHALL BE BLACK IN COLOR. ALL SIGNAL HEADS ON THE EAST AND WEST APPROACHES SHALL HAVE BACK PLATES.
6. THE CONTRACTOR SHALL VERIFY WITH 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 RESISTENCE 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 FULL STOP CONTROL OPERATION.
17. SIGNAL CABLE AND LOOP WIRES TO BE IN SEPARATE PULL BOXES.
18. THE CONTRACTOR SHALL STAKE ALL POLE LOCATIONS AND HAVE THEM APPROVED BY LAKE COUNTY TRAFFIC ENGINEERING.
19. 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.
20. 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.
21. 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.
22. 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.
23. NO LOOP HOME RUNS SHALL BE CUT IN THE RADIUS.
24. ALL SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE LOCATED IN PULL BOXES AND SOLDERED AND TAPED WITH A WATERPROOF COATING APPLIED IN A MANNER APPROVED BY THE ENGINEER.
25. 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 MUST BE GROUNDED TO THE CONTROLLER CABINET GROUND.
26. 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.
27. 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.
28. THE CONTRACTOR SHALL ADHERE TO ALL LOCAL MAINTAINING AGENCY AND STATE REGULATIONS DURING ALL CONSTRUCTION OPERATIONS.
29. 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.
30. THE MAINTAINING AGENCY SHALL BE LAKE COUNTY.
31. 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.
32. ALL SIGNAL HEADS SHALL USE FDOT APPROVED LED'S FOR ALL INDICATIONS, UNLESS OTHERWISE NOTED. PEDESTRIAN ASSEMBLIES SHALL HAVE FULL HAND/PERSON LED'S.
33. THE CONTRACTOR SHALL HAND DIG THE FIRST 4.0' AT THE STRAIN POLE FOUNDATION LOCATIONS TO INSURE THERE ARE NO UTILITY CONFLICTS.
34. 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.
35. 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.
36. ALL MATERIALS AND HARDWARE SHALL BE FDOT APPROVED AND PRE-APPROVED BY LAKE COUNTY TRAFFIC ENGINEERING.
37. 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.
38. SIGNAL HEADS SHALL BE WIRED DIRECTLY TO THE TERMINAL BLOCKS. THE USE OF "JONES" PLUGS SHALL BE PROHIBITED.
39. THE INSIDE LANE DISCONNECT SHALL BE WIRED FOR FUTURE FIVE SECTION HEADS.
40. SIGNAL CABLE SHALL BE ATTACHED TO MESSENGER WIRE USING PROPER SIZE SPIRAL WRAP.
41. NO POWER SERVICE INSTALLATION WILL BE ALLOWED ON THE CABINET.
42. THE CONTROLLER ASSEMBLY SHALL BE COMPATIBLE WITH THE LAKE COUNTY CLOSED LOOP SYSTEMS. A MANUAL PUSH BUTTON SHALL BE FURNISHED IN ALL CONTROLLER CABINETS. THE CABINET DOOR SHALL OPEN AWAY FROM THE INTERSECTION WHEN POSSIBLE.
43. 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.
44. 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.
45. ANY STRIPING/PAVEMENT MARKINGS DESTROYED BY CONTRACTOR DURING CONSTRUCTION SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.

COMPANIES	PHONE NUMBERS	CONTACT PERSON
CITY OF CLERMONT - WATER AND SEWER	352-394-7178	GENE LAINHART
TIME WARNER COMMUNICATIONS	352-748-5633	JOHN WOLSKI/JIM PARKER
FLORIDA POWER CORPORATION - DISTRIBUTION	407-646-8364	SUE FREYSER
FLORIDA POWER CORPORATION - TRANSMISSION	800-700-8744	JORGE OVIEDO
BROADWING COMMUNICATIONS	407-859-7661	JERRY HAMMES
LAKE APOPKA NATURAL GAS DISTRICT	407-656-2734	RICK GULLETT
MCI TELECOMMUNICATIONS	- -	2250 LAKESIDE BLVD. - DEPT 42856/642 - RICHARDSON, TX 75082
SOUTHERN BELL (GAINESVILLE RURAL)	352-331-9199	KEN DORTANA
SPRINT - EAST SIDE	407-814-5386	DAVID BROOKS
SPRINT - WEST SIDE	352-326-1757	JOHN BRUGNOLI

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 Kevin Carey
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REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION



TEI
Engineers & Planners
 300 PRIMA BLVD. SUITE 200, LAKE MARY, FL 32746
 (407) 805-0355 ENGINEERING BUSINESS NO. EB6885

LAKE COUNTY TRAFFIC ENGINEERING DEPARTMENT		
ROAD NO.	COUNTY	PROJECT NO.
HOOK ST AT S HANCOCK RD	LAKE	99137.25

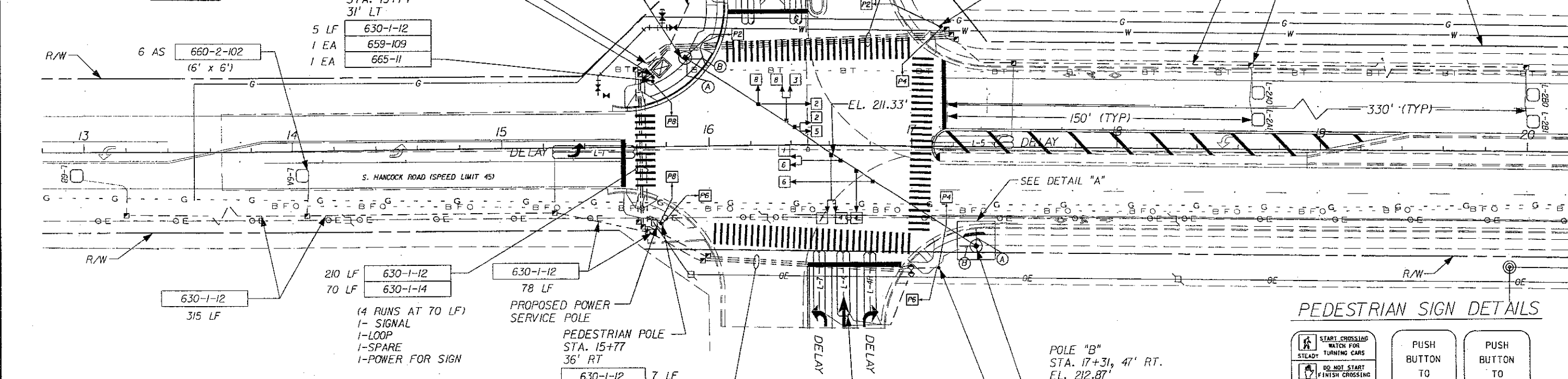
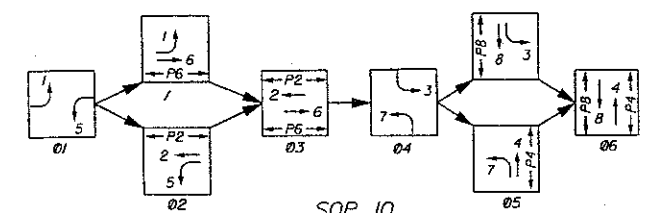
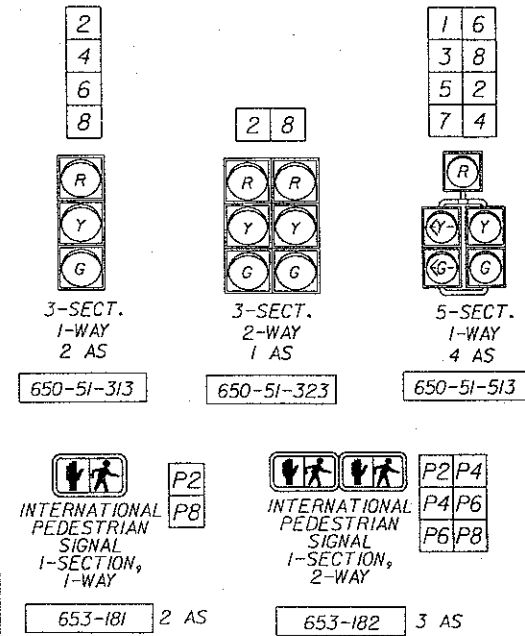
GENERAL NOTES SHEET

SHEET NO.
 T-3

01/31/03

SIGNAL HEAD DETAILS

SIGNAL OPERATING PLAN



SUGGESTED CONTROLLER TIMINGS

TIMING FUNCTIONS	1	2	3	4	5	6	7	8
INITIAL	7	15	7	7	7	15	7	7
EXTENSION	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
MAXIMUM GREEN I	25	45	25	45	25	45	25	45
MAXIMUM GREEN II	-	-	-	-	-	-	-	-
YELLOW CLEARANCE	4.0	4.5	4.0	4.0	4.0	4.5	4.0	4.0
RED CLEARANCE	-	1.5	-	1.0	-	1.5	-	1.0
PED. WALK	-	7	-	7	-	7	-	7
FDN	-	30	-	26	-	30	-	11
MIN. RECALL	-	MIN	-	-	-	MIN	-	-
DETECTOR FUNCTION	NL	LOCK	NL	NL	NL	LOCK	NL	NL

DETECTORS FOR LOOPS

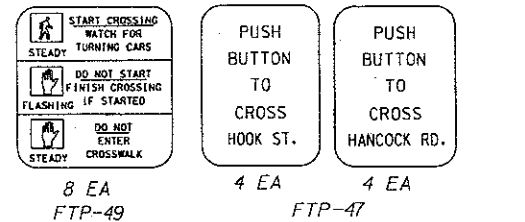
LOOP	No. OF LOOPS	No. OF CHANNELS	No. OF NEW DETECTORS	SECONDS OF DELAY
L-1	1	1	1	5
L-2A0&L-2A1	2	2	1	-
L-2B0&L-2B1	2	2	1	-
L-3*	1	2	-	-
L-4**	1	2	1	-
L-4R**	1	2	-	10
L-5	1	1	1	5
L-6A	1	1	1	-
L-6B	1	1	1	-
L-7	1	1	1	5
L-8*	1	2	1	10

* LOOPS L-3 AND L-8 SHALL BE WIRED TO THE SAME DETECTOR.

** LOOPS L-4 AND L-4R SHALL BE WIRED TO THE SAME DETECTOR.



PEDESTRIAN SIGN DETAILS



- NOTES:
- THE MAJOR STREET IS S. HANCOCK ROAD AND THE MINOR STREET IS HOOK STREET.
 - SPEED LIMIT ON S. HANCOCK ROAD IS 45 MPH.
 - DURING TRAFFIC SIGNAL FLASHING OPERATION, MOVEMENTS 2 AND 6 SHALL FLASH YELLOW WHILE MOVEMENTS 4 AND 8 SHALL FLASH RED.
 - PAY ITEM 632-7-1 INCLUDES CABLE TO THE SCHOOL ZONE SPEED LIMIT SIGNS.
 - PAY ITEM 665-II INCLUDES PEDESTRIAN DETECTORS AND SIGNS FTP-47 AND FTP-49.

07:57:27 AM 01/31/03 Kevin Carby n:\99137.25\sign\plans\sg01.dgn

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

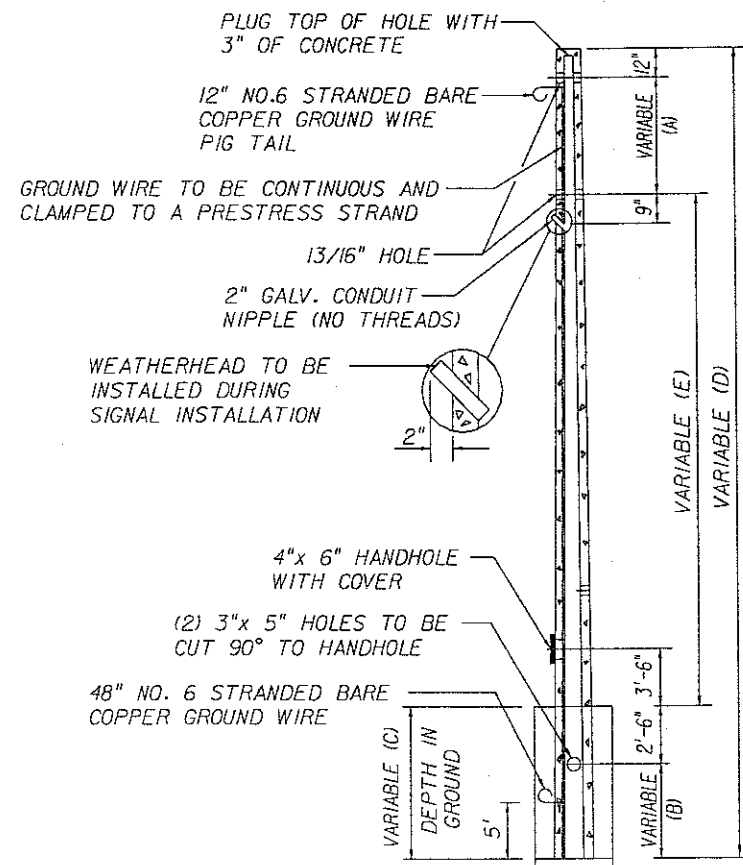
TEI
Engineers & Planners
300 PRIMERA BLVD., SUITE 200, LAKE HAVY, FL 32746
(407) 805-0355 ENGINEERING BUSINESS NO. EB6185

LAKE COUNTY
TRAFFIC ENGINEERING DEPARTMENT

ROAD NO.	COUNTY	PROJECT NO.
HOOK ST AT S HANCOCK RD	LAKE	99137.25

SIGNALIZATION PLAN

SHEET NO. T-4



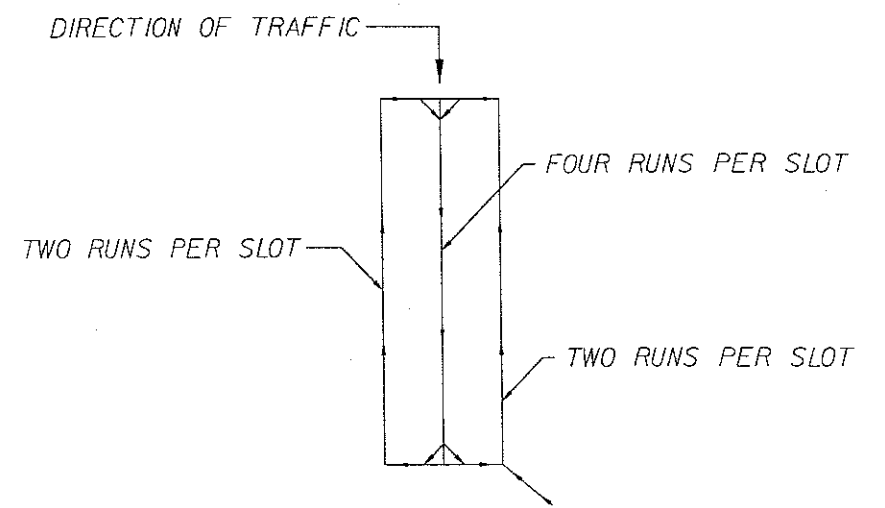
POLE SECTION

POLE SCHEDULE

POLE NO.	TYPE	A	B	C	D	E
A	NVII	12	9.9	12.4	50	24.6
B	NVII	12	9.6	12.1	46	20.9

SPAN WIRE CABLE NOTES

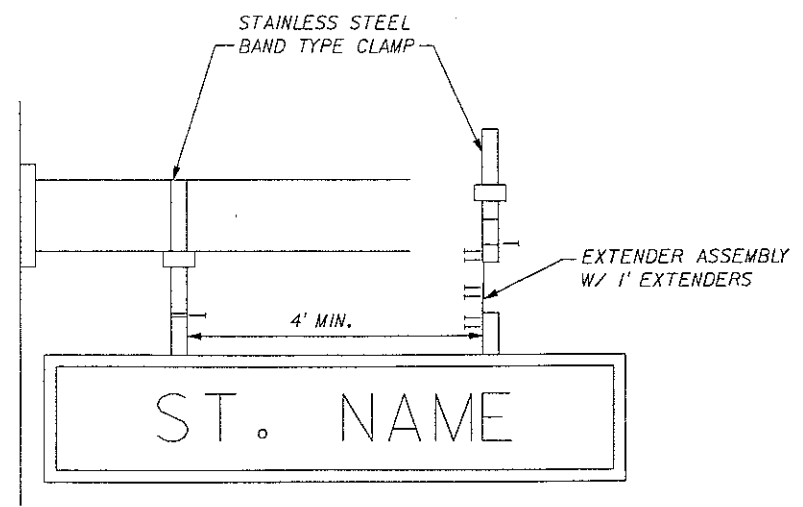
CATENARY WIRE CABLE = 3/8"
 MESSENGER WIRE CABLE = 7/16"



LOOP WINDING DETAIL
 (QUADRAPOLE PRESENCE LOOP)

NOTE: LOOP WIRE SHALL BE PLACED IN THE ABOVE MANNER TO AVOID CENTER SLOT CANCELLATION.

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Kevin Carey
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SIGN BRACKET ATTACHMENT DETAIL

TWO POINT MAST ARM SIGN MOUNTING ASSEMBLY DETAIL

SIGN BRACKET ATTACHMENT DETAIL

- 1/8 INCH CLEAR LEXAN AS BACKING.
- WHITE DIAMOND GRADE VIP SHEETING, 3M SERIES 3990 OR COMPARABLE.
- GREEN ACRYLIC ELECTRIC CUTTABLE FILM.
- LAKE COUNTY LOGO ON WHITE BACKGROUND DESIGNED TO ALLOW LIGHT AND COLORS TO SHOW THROUGH, 14.25 INCHES HIGH, 19.663 INCHES LONG.
- LAKE COUNTY LOGO SHALL HAVE 5-YEAR GUARANTEE.
- LAKE COUNTY LOGO SHALL NOT BE PRODUCED FROM AN INKJET PRINTER.
- "22/24" STYLE CONTAINER, 22 INCH VIEWABLE SIGN HEIGHT, 24 INCH CONTAINER HEIGHT.
- LETTERS SHALL BE 10 INCHES SERIES E(M).
- PHOTO CELL SHALL BE INSTALLED IN THE SIGNAL CABINET WITH A 2 INCH PLEXIGLAS WINDOW
- A "HANDS OFF PHOTO TEST SWITCH" SHALL BE INSTALLED.
- THE INTERNALLY ILLUMINATED STREET SIGN SHALL BE INSTALLED ON A SEPARATE BREAKER.
- SIGN BRACKET AND MAST ARM SHOULD BE INSTALLED 1 FOOT BELOW MESSENGER CABLE.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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 Engineers & Planners
 300 PRIMERA BLVD, SUITE 200, LAKE MARY, FL 32746
 (407) 805-0355 ENGINEERING BUSINESS NO. EB685

LAKE COUNTY TRAFFIC ENGINEERING DEPARTMENT		
ROAD NO.	COUNTY	PROJECT NO.
HOOK ST AT S HANCOCK RD	LAKE	99137.25

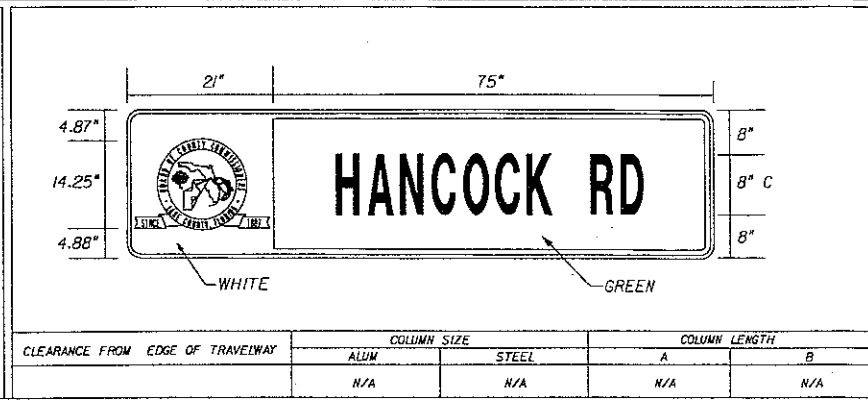
CONCRETE STRAIN POLE SCHEDULE

SHEET NO.
T-6

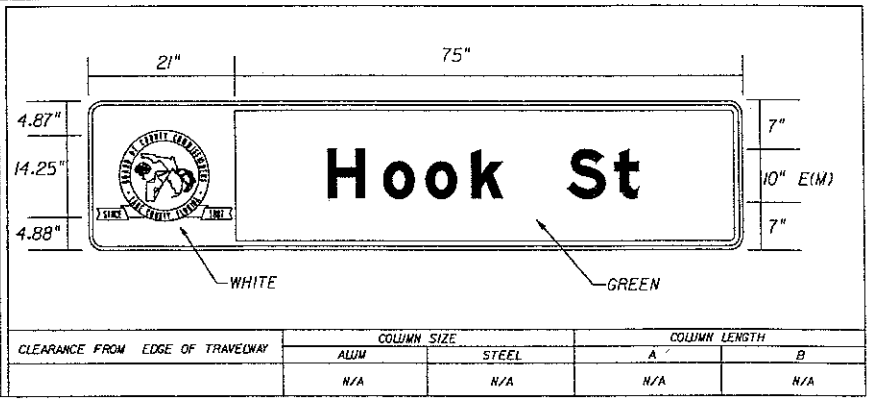
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SIGN NUMBER	A	BACKGROUND
WIDTH	96"	TYPE ACRYLIC
HEIGHT	24"	COLOR GREEN
BORDER WIDTH	1"	LEGEND & BORDER
BORDER RADII	2"	TYPE ACRYLIC
SHIELD SIZE	N/A	COLOR WHITE
ARROW SIZE	N/A	QUANTITY REQ'D 2



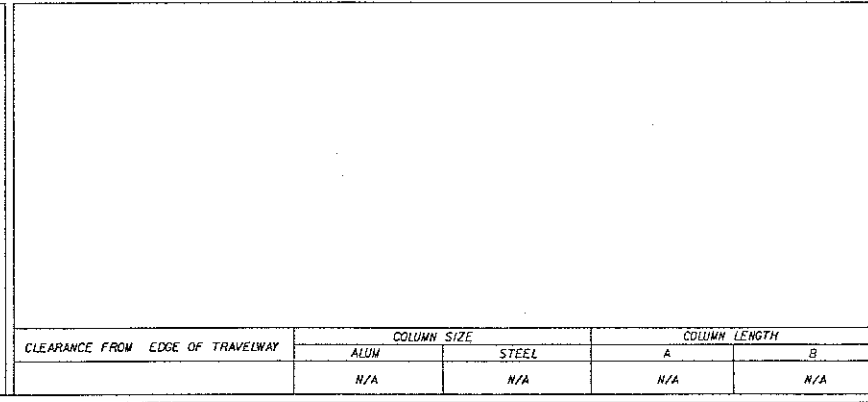
SIGN NUMBER	B	BACKGROUND
WIDTH	96"	TYPE ACRYLIC
HEIGHT	24"	COLOR GREEN
BORDER WIDTH	1"	LEGEND & BORDER
BORDER RADII	2"	TYPE ACRYLIC
SHIELD SIZE	N/A	COLOR WHITE
ARROW SIZE	N/A	QUANTITY REQ'D 2



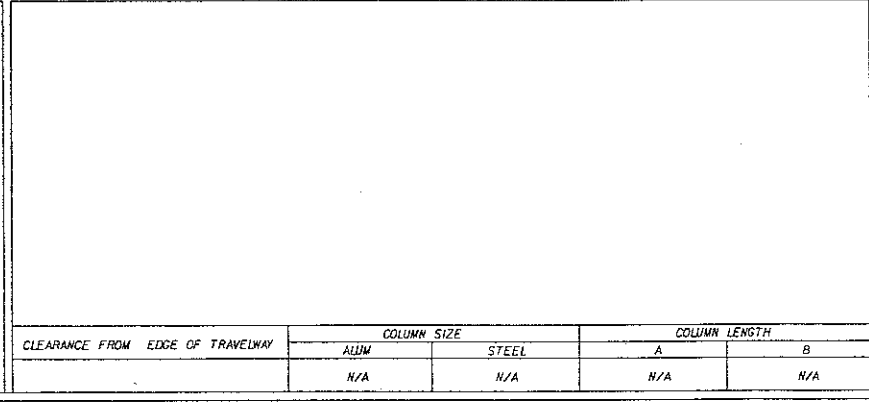
COPY	<input checked="" type="checkbox"/>	LOGO	<input checked="" type="checkbox"/>	H	A	N	C	O	C	K	R	D											
SPACE	1	20	8.4				39.9				8.0	10.4	8.3										
COPY																							
SPACE																							
COPY																							
SPACE																							
COPY																							
SPACE																							

COPY	<input checked="" type="checkbox"/>	LOGO	<input checked="" type="checkbox"/>	H	o	o	k	S	t														
SPACE	1	20	6.2				38.6		8.0	6.1	6.1												
COPY																							
SPACE																							
COPY																							
SPACE																							
COPY																							
SPACE																							

SIGN NUMBER	_____	BACKGROUND
WIDTH	_____	TYPE _____
HEIGHT	_____	COLOR _____
BORDER WIDTH	_____	LEGEND & BORDER
BORDER RADII	_____	TYPE _____
SHIELD SIZE	_____	COLOR _____
ARROW SIZE	_____	QUANTITY REQ'D _____



SIGN NUMBER	_____	BACKGROUND
WIDTH	_____	TYPE _____
HEIGHT	_____	COLOR _____
BORDER WIDTH	_____	LEGEND & BORDER
BORDER RADII	_____	TYPE _____
SHIELD SIZE	_____	COLOR _____
ARROW SIZE	_____	QUANTITY REQ'D _____



COPY																							
SPACE																							
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WIDTH-HORIZONTAL SPACING (ALL DIMENSIONS ARE IN INCHES). END DIMENSIONS INCLUDE BORDER WIDTH AND MARGIN.

R E V I S I O N S					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

TEI
Engineers & Planners

300 PRIMERA BLVD, SUITE 200, LAKE MARY, FL 32746
(407) 805-0355 ENGINEERING BUSINESS NO. EB6185

LAKE COUNTY TRAFFIC ENGINEERING DEPARTMENT		
ROAD NO.	COUNTY	PROJECT NO.
HOOK ST AT S HANCOCK RD	LAKE	99137.25

GUIDESIGN WORKSHEET

T-7

SHEET NO.
T-7

01/31/03