CITY OF LEESBURG
DEPARTMENT OF PUBLIC WORKS

CONTRACT PLANS

LEESBURG

US 441 COLLEGE DRIVE TO CR 473

COMPONENTS OF CONTRACT PLANS SET

SIGNALIZATION PLANS

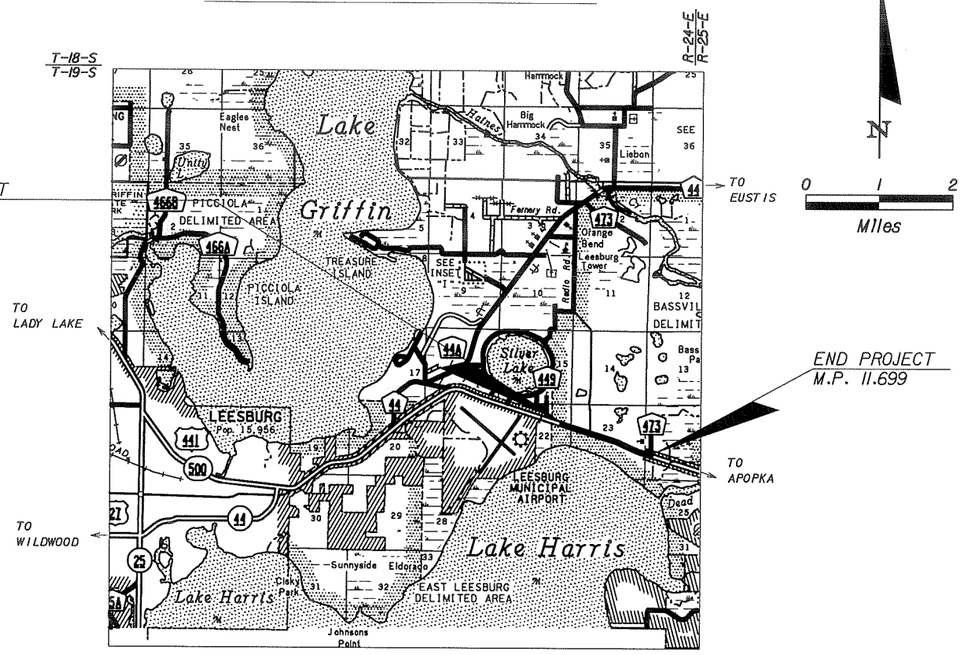
INDEX OF SIGNALIZATION PLANS

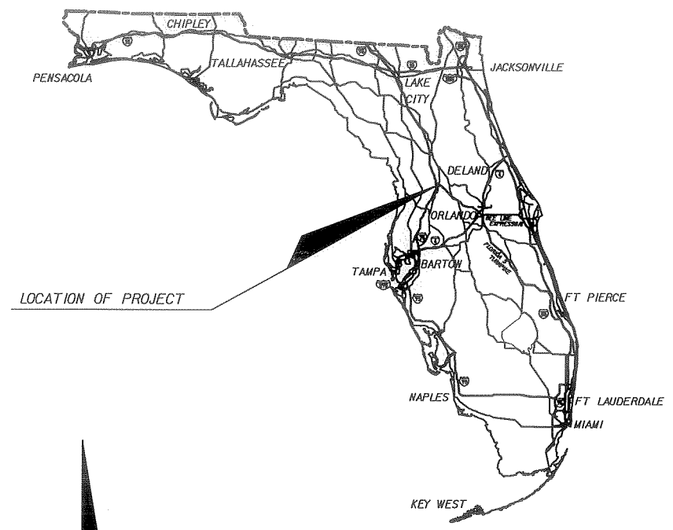
GOVERNING STANDARDS AND SPECIFICATIONS:
FLORIDA DEPARTMENT OF TRANSPORTATION,
DESIGN STANDARDS DATED JANUARY 2006,
AND STANDARD SPECIFICATIONS FOR ROAD AND
BRIDGE CONSTRUCTION DATED 2004,
AS AMENDED BY CONTRACT DOCUMENTS.

APPLICABLE DESIGN STANDARDS MODIFICATIONS: 1-1-06

For Design Standards Modifications click on
"Design Standards" at the following web site:
http://www.dot.state.fl.us/rddesign/

SIGNALIZATION PLANS





SIGNALIZATION SHOP DRAWINGS
TO BE SUBMITTED TO:

MICHAEL L. CORNEJO, P.E.
METRIC ENGINEERING INC.
2269 LEE ROAD - SUITE 200
WINTER PARK, FL 32789

METRIC ENGINEERING, INC.
2269 LEE ROAD- SUITE 200
WINTER PARK, FLORIDA 32789
TEL. (407) 644-1898
FAX. (407) 644-2376
FLORIDA CERT. NO. EB-0002294
VENDOR NO. F-59-1685550
MICHAEL L. CORNEJO, P.E.
P.E. NUMBER 47734

● ENGINEERS
● PLANNERS
● SURVEYORS

PLANS PREPARED BY:
KEITH B. DELUCA

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

PRELIMINARY

KEY SHEET REVISIONS		
DATE	BY	DESCRIPTION

SIGNALIZATION PLANS
ENGINEER OF RECORD: MICHAEL L. CORNEJO

P.E. NO.: 47734

PROJECT MANAGER: LORA HOLLINGSWORTH, P.E.

FISCAL YEAR	SHEET NO.
06	T-1

$USER$ $DATE$ $TIME$ $FILE$

TABULATION OF QUANTITIES

PAY ITEM NO.	DESCRIPTION	UNIT	SHEET NUMBERS																				TOTAL THIS SHEET		GRAND TOTAL		REF. SHEET
			T-4		T-5		T-6		T-7		T-8																
			PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	PLAN	FINAL	
102-2	MAINTENANCE OF TRAFFIC	DA	36		36		36		36		36												180		180		
102-99	CHANGEABLE VARIABLE MESSAGE SIGN-TEMP	ED	36		36		36		36		36												180		180		
522-1	CONCRETE SIDEWALK	SY	1								1												2		2		
630-1-12	CONDUIT (F&I) (UNDERGROUND)	LF	68		77		171		104		206												626		626		
630-1-13	CONDUIT (F&I) (UNDERPAVEMENT)	LF							16		10												26		26		
630-1-14	CONDUIT (F&I) (DIRECTIONAL BORE)	LF	363		390		393		399		332												1877		1877		
632-7-1	CABLE (SIGNAL) (F&I)	PI	1		1		1		1		1												5		5		
633-113-1	CABLE FIBER OPTIC (F&I)	LF	100		100		100		100		100												500		500		
635-1-11	PULL & JUNCTION BOXES	EA	6		6		6		6		9												33		33		
639-1-22	ELEC POWER SERVICE (UNDERGROUND)	AS	1		1		1		1		1												5		5		
639-2-1	ELECTRICAL SERVICE WIRE	LF	156		99		540		150		375												1320		1320		
649-713-002	MAST ARM ASSEMBLY (F&I) (RL) (C3-R2)	EA					1				1												2		2		
649-715-003	MAST ARM ASSEMBLY (F&I) (RL) (C5-R3)	EA	4		1		1		1														7		7		
649-716-004	MAST ARM ASSEMBLY (F&I) (RL) (C6-R4)	EA			1		2		1														4		4		
649-717-006	MAST ARM ASSEMBLY (F&I) (RL) (C7-R6)	EA							2		1												3		3		
649-726-204	MAST ARM ASSEMBLY (F&I) (RL) (C6-C2-R4)	EA			1																		1		1		
649-726-504	MAST ARM ASSEMBLY (F&I) (RL) (C6-C5-R4)	EA									1												1		1		
650-1-131	TRAFFIC SIGNAL (F&I 3-SEC., 1 WAY, STANDARD)	AS	10		10		9		11		10												50		50		
650-9-151	TRAFFIC SIGNAL (F&I 5-SEC., 1 WAY, STANDARD)	AS			2		2		2		2												8		8		
653-181	SIGNAL, PEDESTRIAN (F&I, LED, 1 WAY)(COUNTDOWN)	AS	6		4		4		6		6												26		26		
653-182	SIGNAL, PEDESTRIAN (F&I, LED, 2 WAY)(COUNTDOWN)	AS			1																		1		1		
659-108	SIGNAL HEAD AUX. (F&I, STEEL PEDESTAL)	EA			1						2												3		3		
659-109	SIGNAL HEAD AUX. (F&I, CONC. PEDESTAL)(TYPE 2)	EA	1		1		1		1		1												5		5		
663-70A	VEHICLE DETECTOR ASSEMBLIES (OPT 2 WAY)	AS			1		1		1		1												4		4		
663-70B	VEHICLE DETECTOR ASSEMBLIES (OPT 3 WAY)	AS	1																				1		1		
665-11	DETECTOR, PEDESTRIAN (F&I)	AS	6		6		4		6		6												28		28		
690-10	SIGNAL HEAD TRAFFIC ASSEMBLY, REMOVAL	EA	10		10		10		10		10												50		50		
690-20	SIGNAL PEDESTRIAN ASSEMBLY, REMOVAL	EA	6		5		4		4		6												25		25		
690-30	REMOVE CONCRETE STRAIN POLE	EA	4		2		2		2		2												12		12		
690-31	SIGNAL PEDESTAL REMOVAL	EA			4		3		4		4												15		15		
690-60	DETECTOR VEHICLE ASSEMBLY, REMOVE	EA	1		1		1		1		1												5		5		
690-70	DETECTOR PEDESTRIAN ASSEMBLY, REMOVE	EA	6		6		4		6		6												28		28		
690-80	SPAN WIRE ASSEMBLY REMOVE	EA	4		1		1		1		1												8		8		
690-90	CONDUIT & CABLING, REMOVE	PI	1		1		1		1		1												5		5		
690-100	SIGNAL EQUIPMENT, MISCELLANEOUS REMOVE	PI	1		1		1		1		1												5		5		
699-1-1	INTERNALLY ILLUMINATED SIGN	EA	4		3		3		3		4												17		17		
700-46-25	REMOVE EXISTING OVERHEAD SIGN	EA	4		4		4		3		4												19		19		

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

MICHAEL L. CORNEJO, PE# 47734
METRIC ENGINEERING, INC.
2269 LEE ROAD- SUITE 200
WINTER PARK, FLORIDA 32789
TEL. (407) 644-1898
FAX. (407) 644-2376
FLORIDA CERT. NO. EB-0002294

● ENGINEERS
● PLANNERS
● SURVEYORS

CITY OF LEESBURG
DEPARTMENT OF PUBLIC WORKS

ROAD NO.	COUNTY
US 441	LAKE

TABULATION OF QUANTITIES

SHEET NO. T-2

$USER$ $DATE$ $TIME$ $FILE$

GENERAL

1. A PRECONSTRUCTION MEETING SHALL BE SCHEDULED WITH THE CITY OF LEESBURG AT (352) 728-9876 AND LAKE COUNTY TRAFFIC OPERATIONS AT (352) 742-1766, 30 DAYS PRIOR TO BEGINNING CONSTRUCTION.

2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE CITY OF LEESBURG AT (352) 728-9876 AND LAKE COUNTY TRAFFIC OPERATIONS AT (352) 742-1766, 48 HOURS IN ADVANCE OF ALL PHASES OF CONSTRUCTION INCLUDING, INSTALLING SIGNAL POLES, GROUND RODS, UNDERGROUND CONDUIT, SIGNAL HEAD ASSEMBLIES, AND LOOP INSTALLATION.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ACQUIRING ALL NECESSARY PERMITS, INCLUDING THE ELECTRICAL PERMIT, AND WILL COORDINATE APPLICATION FOR POWER WITH THE CITY OF LEESBURG (352) 728-9876.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE POWER COMPANY PROVIDING THE ELECTRICAL POWER, TO DETERMINE IF ANY ADDITIONAL FEES ARE REQUIRED TO CONNECT POWER AND FOR CONNECTION OF POWER. IF REQUIRED, THE FEE SHALL BE INCLUDED AS PART OF BID ITEM PAYMENT FOR ELECTRICAL SERVICE ASSEMBLY.

5. TRAFFIC CONTROL SHALL BE PERFORMED IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS INDEX 600 SERIES AS APPLICABLE. EXISTING SPEED LIMITS SHALL BE MAINTAINED DURING CONSTRUCTION. SPEED LIMIT ON US 441 IS 45 MPH.

6. THE CONTRACTOR SHALL STAKE ALL MAST ARM LOCATIONS AND HAVE THEM APPROVED BY LAKE COUNTY TRAFFIC OPERATIONS.

7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO HAVE EXACT LOCATIONS OF ALL UTILITIES PRIOR TO BEGINNING WORK. THE CONTRACTOR SHALL HAND DIG THE FIRST 4' AT EACH LOCATION TO VERIFY THERE ARE NO UTILITY CONFLICTS.

8. 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.

9. ALL MATERIALS AND HARDWARE SHALL BE F.D.O.T. APPROVED, AND PRE-APPROVED BY LAKE COUNTY TRAFFIC OPERATIONS.

10. THE CONTRACTOR SHALL FURNISH LAKE COUNTY TRAFFIC OPERATIONS WITH EMERGENCY CONTACTS AND PHONE NUMBERS AND HAVE AN IMSA LEVEL II CERTIFIED SIGNAL TECHNICIAN ON CALL WITHIN A TWO HOUR MINIMUM RESPONSE TIME.

11. ANY STRIPING/PAVEMENT MARKINGS OR LANDSCAPING DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED AT THE CONTRACTOR'S EXPENSE.

12. THE COST FOR THE USE OF OFF-DUTY LAW ENFORCEMENT OFFICERS BE INCIDENTAL TO THE WORK AND WILL NOT BE PAID SEPARATELY.

13. THE CONTRACTOR SHALL FURNISH FDOT AND LAKE COUNTY TRAFFIC OPERATIONS, THREE COMPLETE SETS OF AS-BUILT PLANS AT FINAL INSPECTION.

14. LANE CLOSURE RESTRICTIONS ARE AS FOLLOWS; 8 AM TO 7 PM EASTBOUND AND 7 AM TO 8 PM WESTBOUND. ALL LANE CLOSURES SHALL BE APPROVED BY FDOT PRIOR TO INITIATION.

15. THE CONTRACTOR IS REQUIRED TO INSPECT THE INSTALLATION OF THE TRAFFIC SIGNALS IN ACCORDANCE WITH FDOT SPECIFICATIONS 105.5.10. THE CONTRACTOR SHALL COORDINATE THE FINAL ACCEPTANCE INSPECTION IN ACCORDANCE WITH FDOT SPECIFICATION 611-2.2 WITH THE ENGINEER AT LEAST TEN DAYS IN ADVANCE. CONTACT LAKE COUNTY (STEVE BOLLINGER 352-742-1766) AND FDOT (386) 943-5318 TEN DAYS BEFORE THE INSPECTION IS TO BE PERFORMED SO THEY MAY BE PRESENT.

16. THE MAINTENANCE OF EXISTING SIGNALS, UNTIL REMOVED, SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR.

17. ALL REMOVED EQUIPMENT SHALL BE DELIVERED TO LAKE COUNTY TRAFFIC OPERATIONS, 28127 C.R. 561, TAVARES, 352-742-1766, EXCEPT SIGNAL POLES, WHCH SHALL BE DISPOSED OF BY THE CONTRACTOR. CARE SHALL BE TAKEN NOT TO DAMAGE THE EQIPMENT IN THE REMOVAL PROCESS.

CONTROLLER

1. OPTICOM PREEMPTION OR EQUIVALENT SHALL BE USED.

2. THE MOUNTING OF ELECTRICAL SERVICE EQUIPMENT TO THE TRAFFIC SIGNAL CABINET SHALL BE PROHIBITED.

3. THE FIRST BUFFER OF SINGLE MODE SHALL BE TERMINATED IN THE CABINET USING ST CONNECTORS.

4. A PHOTOCELL FOR THE INTERNALLY ILLUMINATED SIGNS SHALL BE INSTALLED NEAR THE ELECTRIC SERVICE WITHIN REACH OF A LIFT TRUCK. CARE SHALL BE GIVEN TO INSTALL WHERE STREET LIGHTING DOES NOT AFFECT OPERATION.

MAST ARMS

1. SIX FEET OF ADDITIONAL SIGNAL CABLE SLACK SHALL BE WOUND INSIDE THE UPRIGHT AND SUPPORTED BY THE J HOOK SUCH THAT THE TERMINAL BLOCK CAN BE REMOVED FROM THE UPRIGHT TO ALLOW FOR TROUBLE SHOOTING.

2. THE CABLE GRIP SHALL BE OF SUFFICIENT SIZE TO NOT COMPROMISE THE INSULATION ON THE SIGNAL CABLE.

SIGNAL CABLE, LOOPS, CONDUIT, & PULL BOXES

1. IT SHALL BE NOTED THAT NO TEST BORINGS WERE MADE WHERE CONDUIT RUNS ARE TO BE INSTALLED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE THE JOB SITE CONDITIONS BEFORE SUBMITTING BID PROPOSALS. IN ACCORDANCE WITH SECTION 2-4 OF THE SPECIFICATIONS.

2. THE CONTRACTOR SHALL MAINTAIN TEMPORARY VEHICLE DETECTION IF LOOPS ARE DESTROYED DURING CONSTRUCTION.

3. THE CONTRACTOR SHALL VERIFY COLOR CODES FOR SIGNAL CABLE WITH LAKE COUNTY BEFORE ORDERING.

4. PULL BOXES SHALL BE LOCATED AWAY FROM EDGE OF PAVEMENT, OR BEHIND A CURB WHEN POSSIBLE, ATTEMPTING TO KEEP FROM THE BOTTOM OF A DITCH OR RETENTION AREA, AND WHERE LARGE VEHICLES PARK.

5. PULL BOX COVERS SHALL BE F.D.O.T. APPROVED NON-METALLIC WITH RECESSED COVER LOGO "TRAFFIC SIGNAL", "ELECTRICAL", OR "FIBER OPTICS" AS APPROPRIATE.

6. SIGNAL CABLE AND LOOP WIRES TO BE IN SEPARATE PULL BOXES.

SIGNAL HEADS

1. SIGNAL HEADS SHALL BE WIRED DIRECTLY TO THE TERMINAL BLOCKS. THE USE OF "JONES" PLUGS SHALL BE PROHIBITED.

2. VEHICLE SIGNAL HEADS SHALL BE BLACK, CAST ALUMINUM, WITH TUNNEL VISORS, AND LED'S FOR ALL INDICATIONS.

3. PEDESTRIAN SIGNAL ASSEMBLIES SHALL BE CAST ALUMINUM WITH FILLED HAND/PERSON LED'S WITH COUNT DOWN INDICATION.

4. THE INSIDE LANE SIGNAL HEAD SHALL BE WIRED FOR FUTURE 5 SECTION HEADS.

5. THREE (3) SPARE CONDUCTORS ARE TO BE RUN TO THE FURTHEST PEDESTRIAN SIGNAL HEAD.

PAY ITEM NOTES

1. PAY ITEM NUMBER 632-7-1 AS APPLICABLE INCLUDES THE ADDITIONAL SLACK CABLE STORED IN THE UPRIGHT PER THE CABLE STRAIN RELIEF DETAIL.

2. PAY ITEM NUMBER 635-1-11 SHALL INCLUDE REMOVAL AND RESTORATION (EQUAL TO OR BETTER THAN THE PRE EXISTING CONDITION) OF CONCRETE SIDEWALK NECESSARY TO INSTALL THE PULL BOXES.

3. PAY ITEM NUMBER 639-1-22 TO INCLUDE ALL FEES BY THE POWER COMPANY.

4. PAY ITEM NUMBER 659-108 TO INCLUDE A BREAK AWAY BASE AND SLIP FOOTER.

5. PAY ITEM NUMBER 663-70A & 663-70B TO INCLUDE ALL CHANNEL DETECTORS, DETECTOR CABLES, PREEMPTION SYSTEM CHASSIS WITH DISCRIMINATOR CARDS AND ANY CONTROLLER/SYSTEM INTERFACE PANELS WITH ASSOCIATED WIRING AND PREEMPTION TIMINGS TO MAKE A FULLY OPERATIONAL AND FUNCTIONAL PREEMPTION SYSTEM COMPATIBLE WITH THE EXISTING ENCODED FREQUENCIES OF THE LAKE COUNTY PREEMPTION SYSTEM.

6. PAY ITEM NUMBER 665-11 INCLUDES FTP-25-04 AND R10-3F INTERNATIONAL SIGNS.

7. PAY ITEM NUMBER 690-100 INCLUDES REMOVAL OF ABANDONED PULL BOXES.

8. PAY ITEM NUMBER 699-1-1 SHALL INCLUDE A SINGLE MASTER PHOTOCELL MOUNTED AND RUN ON A SEPARATE BREAKER FROM THE TRAFFIC SIGNAL. INTERNALLY ILLUMINATED SIGNS TO BE DOUBLE SIDED.

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

● ENGINEERS
● PLANNERS
● SURVEYORS

MICHAEL L. CORNEJO, PE# 47734
METRIC ENGINEERING, INC.
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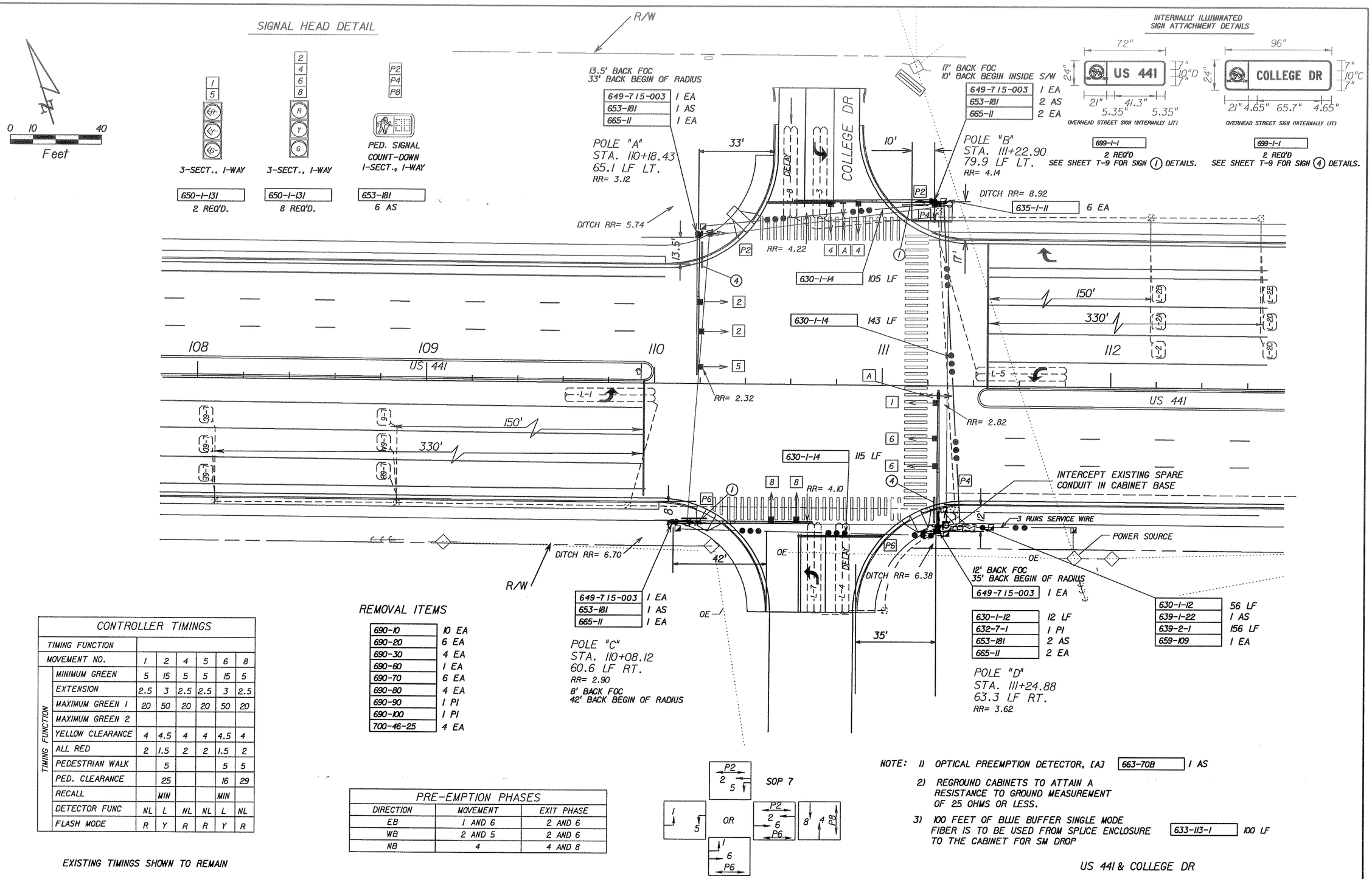
CITY OF LEESBURG
DEPARTMENT OF PUBLIC WORKS

ROAD	COUNTY
US 441	LAKE

GENERAL NOTES

SHEET NO. T-3

$DATE$ $TIME$ $FILE$



CONTROLLER TIMINGS							
TIMING FUNCTION							
MOVEMENT NO.		1	2	4	5	6	8
TIMING FUNCTION	MINIMUM GREEN	5	15	5	5	15	5
	EXTENSION	2.5	3	2.5	2.5	3	2.5
	MAXIMUM GREEN 1	20	50	20	20	50	20
	MAXIMUM GREEN 2						
	YELLOW CLEARANCE	4	4.5	4	4	4.5	4
	ALL RED	2	1.5	2	2	1.5	2
	PEDESTRIAN WALK		5			5	5
	PED. CLEARANCE		25			16	29
	RECALL		MIN			MIN	
	DETECTOR FUNC	NL	L	NL	NL	L	NL
	FLASH MODE	R	Y	R	R	Y	R

EXISTING TIMINGS SHOWN TO REMAIN

REMOVAL ITEMS

690-10	10 EA
690-20	6 EA
690-30	4 EA
690-60	1 EA
690-70	6 EA
690-80	4 EA
690-90	1 PI
690-100	1 PI
700-46-25	4 EA

PRE-EMPTION PHASES		
DIRECTION	MOVEMENT	EXIT PHASE
EB	1 AND 6	2 AND 6
WB	2 AND 5	2 AND 6
NB	4	4 AND 8

NOTE: 1) OPTICAL PREEMPTION DETECTOR, [A] 663-70B 1 AS

2) REGROUND CABINETS TO ATTAIN A RESISTANCE TO GROUND MEASUREMENT OF 25 OHMS OR LESS.

3) 100 FEET OF BLUE BUFFER SINGLE MODE FIBER IS TO BE USED FROM SPLICE ENCLOSURE TO THE CABINET FOR SM DROP 633-113-1 100 LF

US 441 & COLLEGE DR

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF LEESBURG
DEPARTMENT OF PUBLIC WORKS

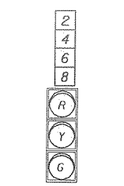
ROAD NO.	COUNTY
US 441	LAKE

SIGNAL PLANS

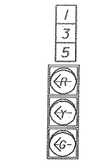
SHEET NO. T-4

$USER$ $DATE$ $TIME$ $FILE$

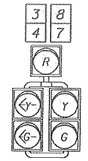
SIGNAL HEAD DETAIL



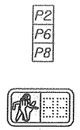
3-SECT., 1-WAY
6 REQ'D.
650-1-131



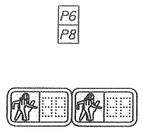
3-SECT., 1-WAY
4 REQ'D.
650-1-131



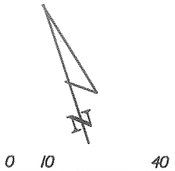
5-SECT. CLUSTER
2 REQ'D.
650-9-151



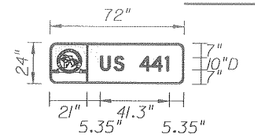
PED. SIGNAL
COUNT-DOWN
1-SECT., 1-WAY
4 AS
653-181



PED. SIGNAL
COUNT-DOWN
1-SECT., 2-WAY
1 AS
653-182

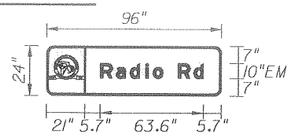


INTERNALLY ILLUMINATED SIGN ATTACHMENT DETAILS



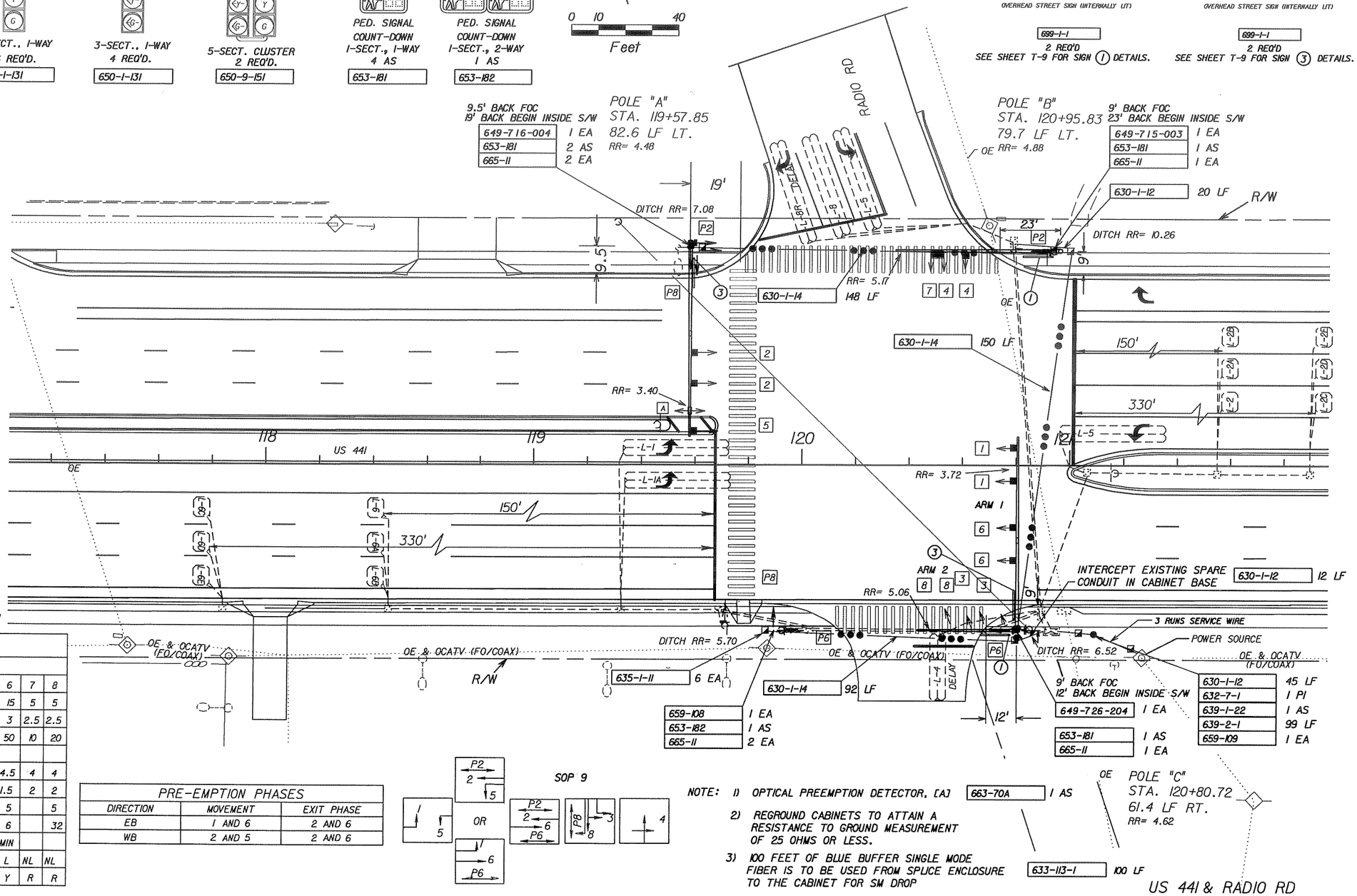
OVERHEAD STREET SIGN (INTERNALLY LIT)

699-1-1
2 REQ'D
SEE SHEET T-9 FOR SIGN (1) DETAILS.



OVERHEAD STREET SIGN (INTERNALLY LIT)

699-1-1
2 REQ'D
SEE SHEET T-9 FOR SIGN (3) DETAILS.



NOTE: 1) OPTICAL PREEMPTION DETECTOR, [A] 663-70A 1 AS

2) REGROUND CABINETS TO ATTAIN A RESISTANCE TO GROUND MEASUREMENT OF 25 OHMS OR LESS.

3) 100 FEET OF BLUE BUFFER SINGLE MODE FIBER IS TO BE USED FROM SPLICE ENCLOSURE TO THE CABINET FOR SM DROP 633-113-1 100 LF

REMOVAL ITEMS

690-10	10 EA
690-20	5 EA
690-30	2 EA
690-31	4 EA
690-60	1 EA
690-70	6 EA
690-80	1 EA
690-90	1 PI
690-100	1 PI
700-45-25	4 EA

EXISTING TIMINGS SHOWN TO REMAIN

CONTROLLER TIMINGS

TIMING FUNCTION									
	MOVEMENT NO.	1	2	3	4	5	6	7	8
TIMING FUNCTION	MINIMUM GREEN	5	15	5	5	5	15	5	5
	EXTENSION	2.5	3	2.5	2.5	2.5	3	2.5	2.5
	MAXIMUM GREEN 1	20	50	10	20	20	50	10	20
	MAXIMUM GREEN 2								
	YELLOW CLEARANCE	4	4.5	4	4	4	4.5	4	4
	ALL RED	2	1.5	2	2	2	1.5	2	2
	PEDESTRIAN WALK		5				5		5
	PED. CLEARANCE		24				6		32
	RECALL		MIN				MIN		
	DETECTOR FUNC	NL	L	NL	NL	NL	L	NL	NL
	FLASH MODE	R	Y	R	R	R	Y	R	R

PRE-EMPTION PHASES

DIRECTION	MOVEMENT	EXIT PHASE
EB	1 AND 6	2 AND 6
WB	2 AND 5	2 AND 6

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

MICHAEL L. CORNEJO, PE# 47734
METRIC ENGINEERING, INC.
2269 LEE ROAD- SUITE 200
WINTER PARK, FLORIDA 32789
TEL. (407) 644-1898
FAX. (407) 644-2376
FLORIDA CERT. NO. EB-0002294

- ENGINEERS
- PLANNERS
- SURVEYORS

CITY OF LEESBURG
DEPARTMENT OF PUBLIC WORKS

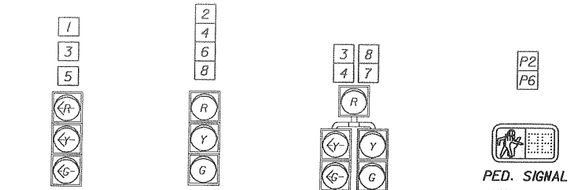
ROAD NO.	COUNTY
US 441	LAKE

SIGNAL PLANS

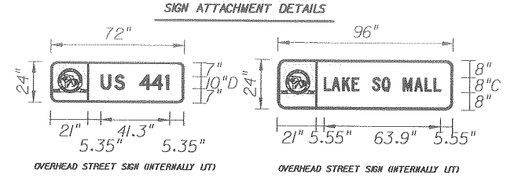
SHEET NO. T-5

$USER$ $DATE$ $TIME$ $FILE$

SIGNAL HEAD DETAIL



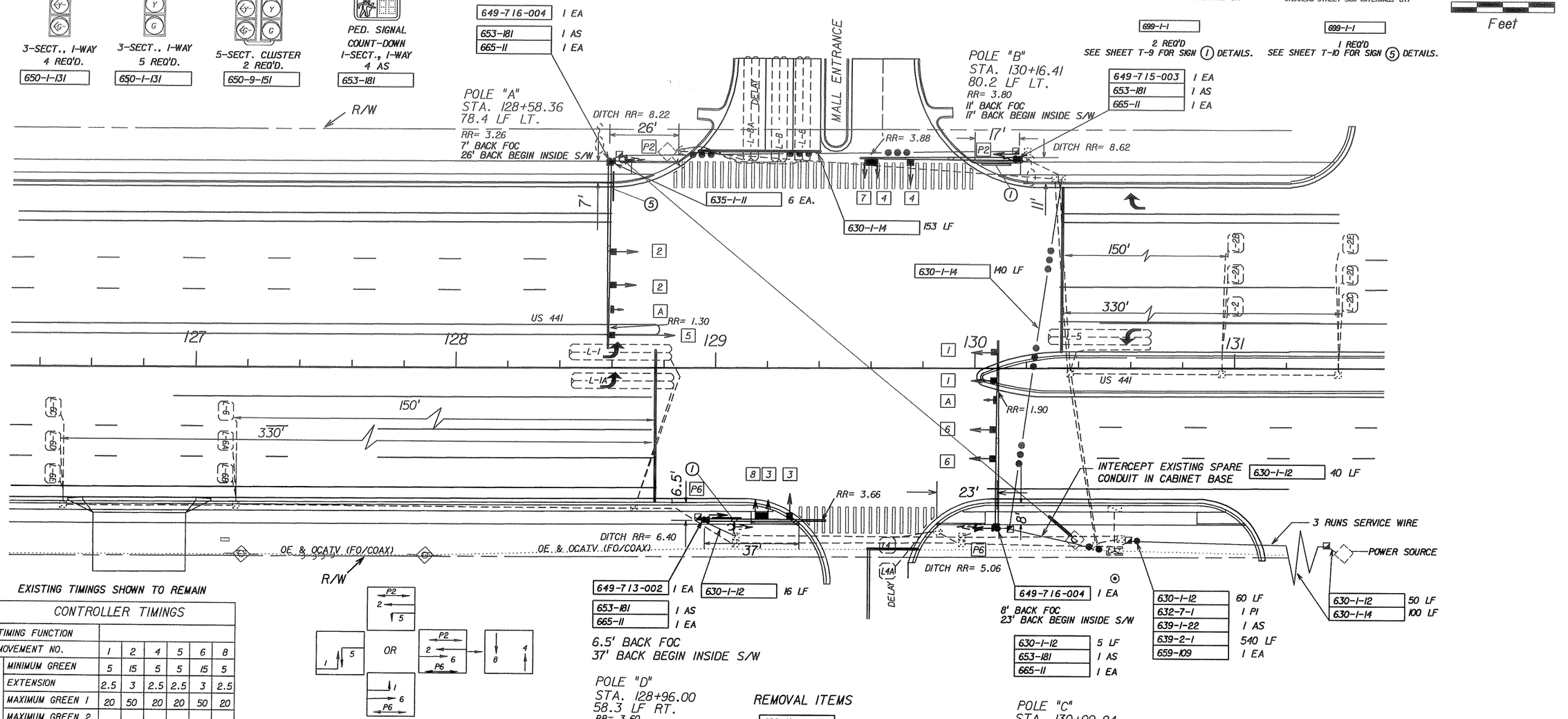
INTERNALLY ILLUMINATED SIGN ATTACHMENT DETAILS



OVERHEAD STREET SIGN (INTERNALLY LIT) — 699-1-1 — 2 REQ'D — SEE SHEET T-9 FOR SIGN (1) DETAILS.

OVERHEAD STREET SIGN (INTERNALLY LIT) — 699-1-1 — 1 REQ'D — SEE SHEET T-10 FOR SIGN (5) DETAILS.

0 10 40
Feet



EXISTING TIMINGS SHOWN TO REMAIN

CONTROLLER TIMINGS

TIMING FUNCTION	MOVEMENT NO.	1	2	4	5	6	8
	MINIMUM GREEN	5	15	5	5	15	5
	EXTENSION	2.5	3	2.5	2.5	3	2.5
	MAXIMUM GREEN 1	20	50	20	20	50	20
	MAXIMUM GREEN 2						
	YELLOW CLEARANCE	4	4.5	4	4	4.5	4
	ALL RED	2	1.5	2	2	1.5	2
	PEDESTRIAN WALK		5			5	
	PED. CLEARANCE		25			11	
	RECALL		MIN			MIN	
	DETECTOR FUNC	NL	L	L	NL	L	NL
	FLASH MODE	R	Y	R	R	Y	R

SOP 7

PRE-EMPTION PHASES

DIRECTION	MOVEMENT	EXIT PHASE
EB	1 AND 6	2 AND 6
WB	2 AND 5	2 AND 6

POLE "D"
STA. 128+96.00
58.3 LF RT.
RR= 3.60

REMOVAL ITEMS

690-10	10 EA
690-20	4 EA
690-30	2 EA
690-31	3 EA
690-60	2 EA
690-70	4 EA
690-80	1 EA
690-90	1 PI
690-100	1 PI
700-46-25	4 EA

POLE "C"
STA. 130+09.24
61.5 LF RT.
RR= 2.56

NOTE: 1) OPTICAL PREEMPTION DETECTOR, [A] 663-70A 1 AS

2) REGROUND CABINETS TO ATTAIN A RESISTANCE TO GROUND MEASUREMENT OF 25 OHMS OR LESS.

3) 100 FEET OF BLUE BUFFER SINGLE MODE FIBER IS TO BE USED FROM SPLICE ENCLOSURE TO THE CABINET FOR SM DROP 633-113-1 100 LF

US 441 & MALL ENTRANCE

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

ENGINEERS
PLANNERS
SURVEYORS

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WINTER PARK, FLORIDA 32789
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FAX. (407) 644-2376
FLORIDA CERT. NO. EB-0002294

CITY OF LEESBURG
DEPARTMENT OF PUBLIC WORKS

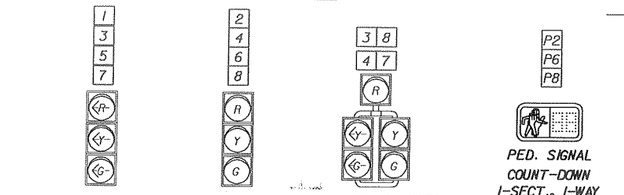
ROAD NO.	COUNTY
US 441	LAKE

SIGNAL PLANS

SHEET NO. T-6

$USER$ $DATE$ $TIME$ $FILE$

SIGNAL HEAD DETAIL



650-1-131	650-1-131	650-9-151	653-181
5 REQ'D.	6 REQ'D.	2 REQ'D.	6 AS

EXISTING TIMINGS SHOWN TO REMAIN

CONTROLLER TIMINGS

TIMING FUNCTION									
	MOVEMENT NO.	1	2	3	4	5	6	7	8
TIMING FUNCTION	MINIMUM GREEN	5	15	5	5	5	15	5	5
	EXTENSION	2.5	3	2.5	2.5	2.5	3	2.5	2.5
	MAXIMUM GREEN 1	20	50	20	20	20	50	20	20
	MAXIMUM GREEN 2								
	YELLOW CLEARANCE	4	4.5	4	4	4	4.5	4	4
	ALL RED	2	1.5	2	2	2	1.5	2	2
	PEDESTRIAN WALK		5				5		5
	PED. CLEARANCE		21				17		28
	RECALL		MIN				MIN		
	DETECTOR FUNC	NL	L	NL	NL	NL	L	NL	NL
	FLASH MODE	R	Y	R	R	R	Y	R	R

REMOVAL ITEMS

690-10	10 EA
690-20	4 EA
690-30	2 EA
690-31	4 EA
690-60	1 EA
690-70	6 EA
690-80	1 EA
690-90	1 PI
690-100	1 PI
700-46-25	3 EA

PRE-EMPTION PHASES

DIRECTION	MOVEMENT	EXIT PHASE
EB	1 AND 6	2 AND 6
WB	2 AND 5	2 AND 6

NOTE:
1) OPTICAL PREEMPTION DETECTOR, [A] 663-70A 1 AS
2) REGROUND CABINETS TO ATTAIN A RESISTANCE TO GROUND MEASUREMENT OF 25 OHMS OR LESS.
3) 100 FEET OF BLUE BUFFER SINGLE MODE FIBER IS TO BE USED FROM SPLICE ENCLOSURE TO THE CABINET FOR SM DROP

INTERNALLY ILLUMINATED SIGN ATTACHMENT DETAILS

OVERHEAD STREET SIGN (INTERNALLY LIT) — OVERHEAD STREET SIGN (INTERNALLY LIT)

699-1-1 1 REQ'D — 699-1-1 2 REQ'D

SEE SHEET T-10 FOR SIGN (6) DETAILS. SEE SHEET T-9 FOR SIGN (1) DETAILS.

633-113-1 100 LF

US 441 & LAKES BLVD

REVISIONS					
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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WINTER PARK, FLORIDA 32789
TEL. (407) 644-1898
FAX. (407) 644-2376
FLORIDA CERT. NO. EB-0002294

- ENGINEERS
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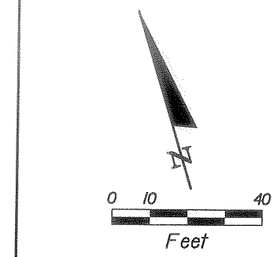
CITY OF LEESBURG
DEPARTMENT OF PUBLIC WORKS

ROAD NO.	COUNTY
US 441	LAKE

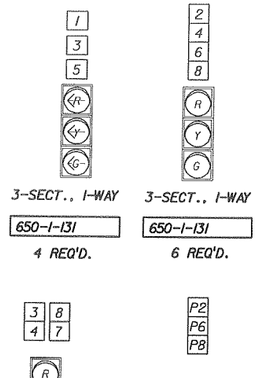
SIGNAL PLANS

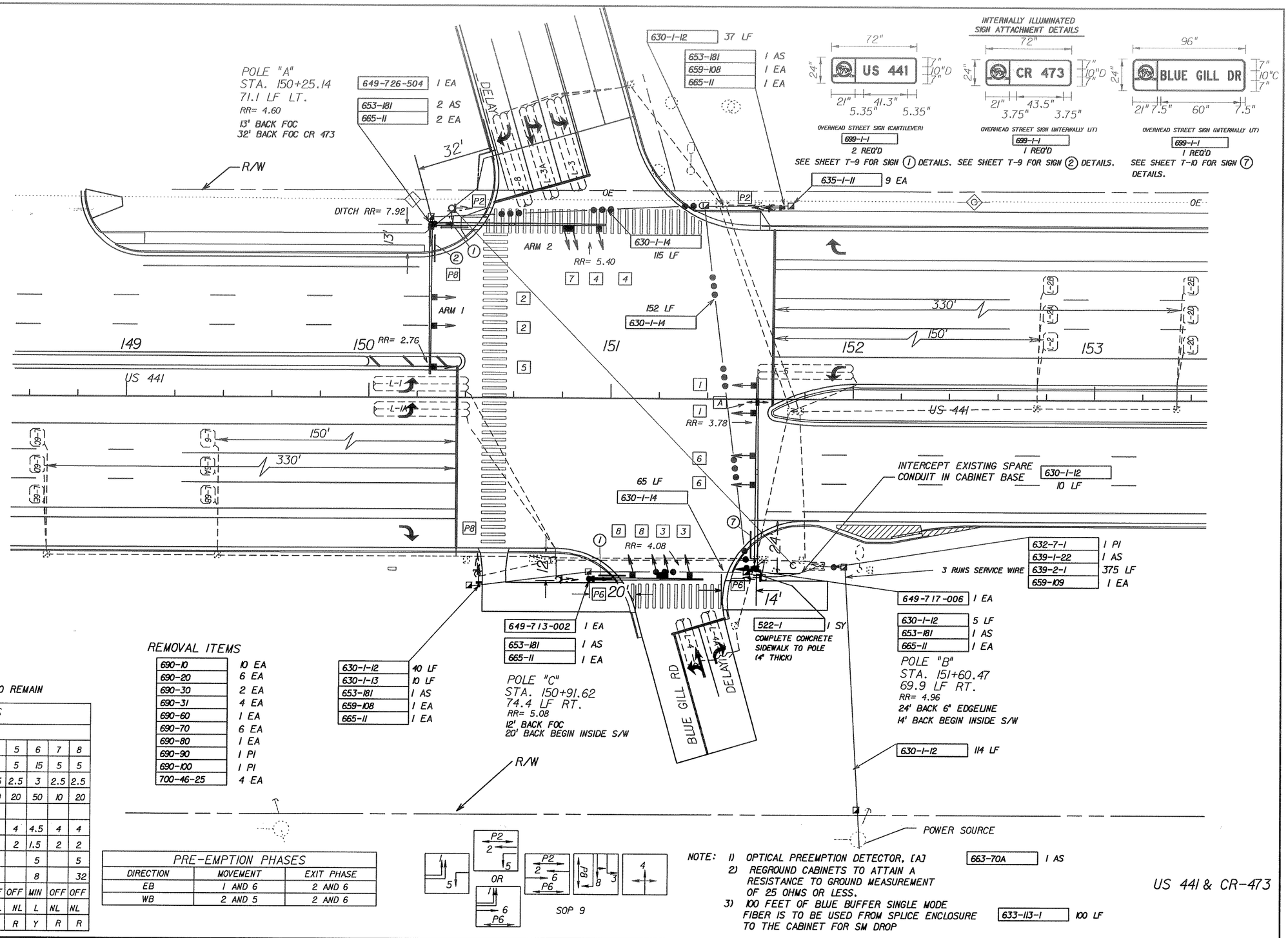
SHEET NO. T-7

$USER$ $DATE$ $TIME$ $FILE$



SIGNAL HEAD DETAIL





REMOVAL ITEMS

690-10	10 EA
690-20	6 EA
690-30	2 EA
690-31	4 EA
690-60	1 EA
690-70	6 EA
690-80	1 EA
690-90	1 PI
690-100	1 PI
700-46-25	4 EA

630-1-12	40 LF
630-1-13	10 LF
653-181	1 AS
659-108	1 EA
665-11	1 EA

EXISTING TIMINGS SHOWN TO REMAIN

CONTROLLER TIMINGS

TIMING FUNCTION									
MOVEMENT NO.		1	2	3	4	5	6	7	8
TIMING FUNCTION	MINIMUM GREEN	5	15	5	5	5	15	5	5
	EXTENSION	2.5	3	2.5	2.5	2.5	3	2.5	2.5
	MAXIMUM GREEN 1	20	50	10	20	20	50	10	20
	MAXIMUM GREEN 2								
	YELLOW CLEARANCE	4	4.5	4	4	4	4.5	4	4
	ALL RED	2	1.5	2	2	2	1.5	2	2
	PEDESTRIAN WALK		5				5		5
	PED. CLEARANCE		18				8		32
	RECALL	OFF	MIN	OFF	OFF	OFF	MIN	OFF	OFF
	DETECTOR FUNC	NL	L	NL	NL	NL	L	NL	NL
	FLASH MODE	R	Y	R	R	R	Y	R	R

PRE-EMPTION PHASES

DIRECTION	MOVEMENT	EXIT PHASE
EB	1 AND 6	2 AND 6
WB	2 AND 5	2 AND 6

NOTE: 1) OPTICAL PREEMPTION DETECTOR, [A] 663-70A 1 AS
2) REGROUND CABINETS TO ATTAIN A RESISTANCE TO GROUND MEASUREMENT OF 25 OHMS OR LESS.
3) 100 FEET OF BLUE BUFFER SINGLE MODE FIBER IS TO BE USED FROM SPLICE ENCLOSURE TO THE CABINET FOR SM DROP 633-113-1 100 LF

US 441 & CR-473

REVISIONS

DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION

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CITY OF LEESBURG
DEPARTMENT OF PUBLIC WORKS

ROAD NO.	COUNTY
US 441	LAKE

SIGNAL PLANS

SHEET NO. T-8

$USER$ $DATE$ $TIME$ $FILE$