

GENERAL

- All work shall be in accordance with Florida Department of Transportation, Design Standards dated January, 2006, and Standard Specifications for Road and Bridge Construction, dated 2007, as amended by contract documents.
- The Contractor shall verify color codes for signal cable with Steve Bollinger, Lake County Traffic Operations, 352-742-1766 before ordering.
- The Contractor is required to inspect the installation of the traffic signals in accordance with FDOT Specification 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. Steve Bollinger of Lake County Traffic Operations at (352) 742-1766 and Ray Martin of FDOT at (386) 943-5318 should also be contacted ten days before the inspection is to be performed so they may be present.
- Unless otherwise noted, all removed equipment shall be turned over to Lake County Traffic Operations at 28127 County Road 561, Tavares, Florida 32778 as directed by the engineer, except poles, which shall be disposed of by the Contractor.
- It should be noted that no test borings were made where conduit runs are to be installed by directional boring, or trenching. It shall be the Contractor's responsibility to examine job site conditions before submitting bid proposals in accordance with Section 2-4 of the Specifications. The Contractor shall hand dig the first 4 feet at each pole location and the first 2' at each pedestal location to verify there are no utility conflicts.
- A pre-construction meeting shall be scheduled with Lake County Traffic Operations, (352) 742-1766, prior to any construction.
- All materials and hardware shall be F.D.O.T. approved, and pre-approved by Lake County Traffic Operations.
- The Contractor shall furnish Lake County Traffic Operations with emergency contacts and phone numbers and have an I.M.S.A. Level II or III certified signal technician on call within a two hour maximum response time.
- The Contractor shall furnish Lake County Traffic Operations two complete sets of As-Built Plans that include conduit and pull box locations, at final inspection.
- The Contractor shall notify Lake County Traffic Operations and FDOT 2 business days prior to beginning construction.

CONDUITS / PULL BOXES / CABLING

- All signal cable, loop cable, and communication cable shall be installed in separate pull boxes.
- Pull boxes and covers shall be FDOT approved of non-metallic construction with recessed cover logo "Traffic Signal" or "Fiber Optic" as appropriate.
- Multiple conduit runs in the same trench shall be jack and bored or directional bored for the first conduit only. Subsequent conduit runs shall be paid for as underground.
- Conduit under reconstructed driveways shall be placed prior to placing pavement and shall be paid as underground conduit.

TIMINGS / CONTROLLER


- The controller cabinet assembly shall be a Lake County Haztec Regional TS-2 with a TS-1 controller, ethernet enabled for the Lake County closed loop system. The additional equipment and accessories for the fiber optic cable interconnect shall be furnished and installed as part of the controller assembly.
- The controller shall be wired for future S.O.P. 10 Operation.
- Delay times shall be set to 10 seconds.
- Spare cabinet conduit shall be stubbed and capped in the nearest pull box.
- Grounding for the controller assembly shall measure 25 ohms or less.
- The mounting of the electrical service to the traffic signal cabinet shall be prohibited.
- A manual pushbutton cord shall be furnished in the controller cabinet.
- The cabinet door shall open away from the intersection, within the FDOT right-of-way.
- Opticom preemption shall be used when emergency preemption is requested, and shall include all equipment and timings fully operational and functional.

SIGNAL HEADS

- All signal displays including pedestrian signals shall be LED.
- All signal head assemblies shall be black cast aluminum.
- All signal head assemblies shall include tunnel visors.
- The use of "Jones" plugs shall be prohibited.

REVISIONS

DATE	BY	DESCRIPTION
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**COUNTY ROAD 466
LAKE COUNTY, FLORIDA**

**SIGNALIZATION
GENERAL NOTES**

SHEET NO. 60

PED FEATURES

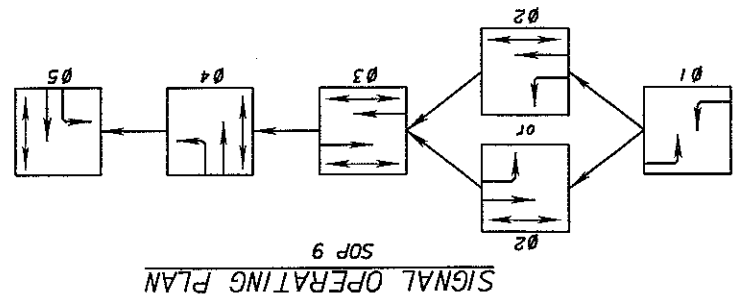
- All pedestrian signal assemblies shall be 16" with full hand/person overlapping countdown LED symbols.
- Pushbuttons shall be Pelco oversized metal buttons or approved equivalent.
- Three (3) spare conductors shall be run from the controller assembly to the furthest pedestrian signal head.
- Contractor is to ensure that a 4' x 4' flat landing area (522-1) is adjacent to all ped buttons for pedestrian access.

STREET NAME SIGNS

- All internally illuminated street name signs shall be illuminated by LED's installed one foot below the messenger cable, powered by a separate circuit breaker, and be installed in accordance with the internally illuminated Street Name Sign Detail for Lake County Public Works.

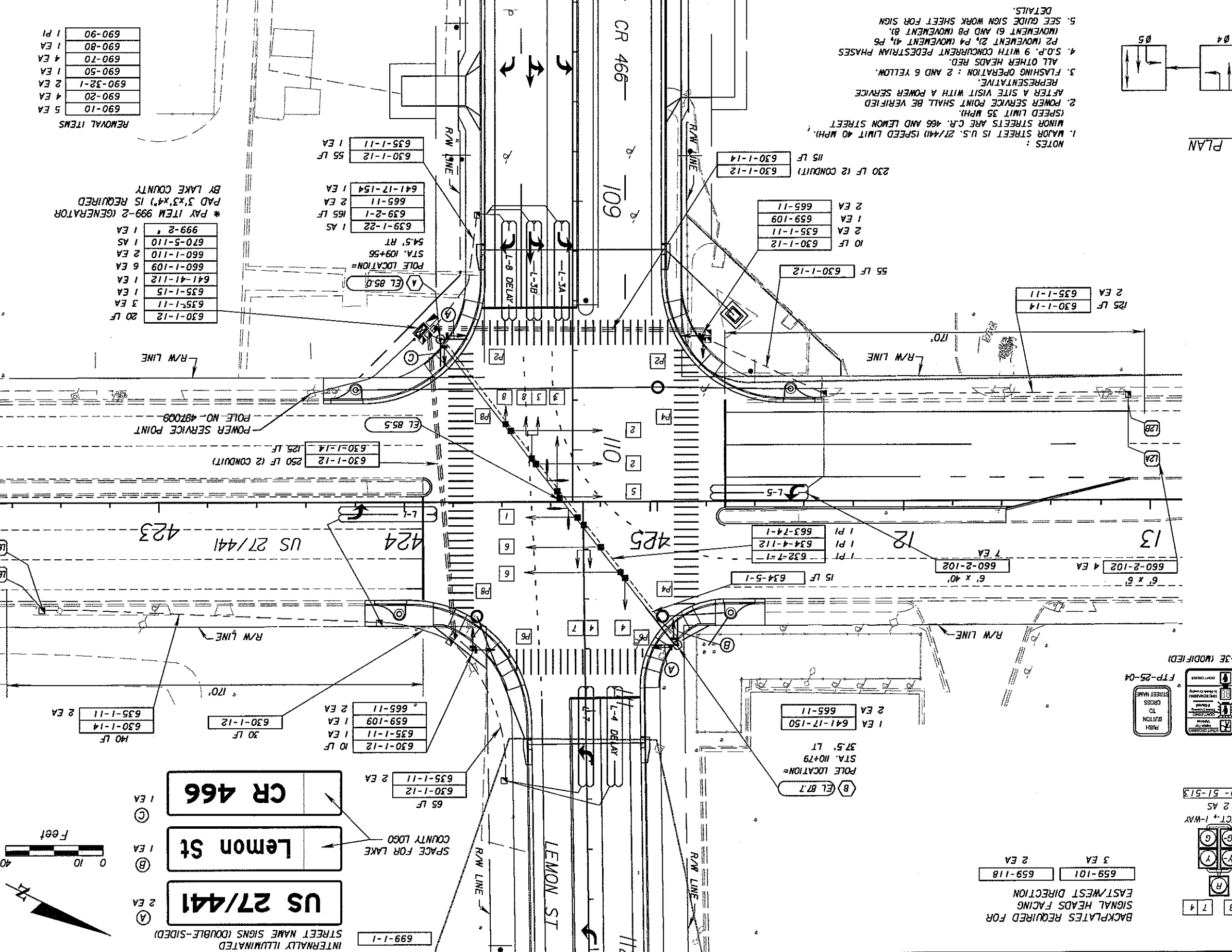
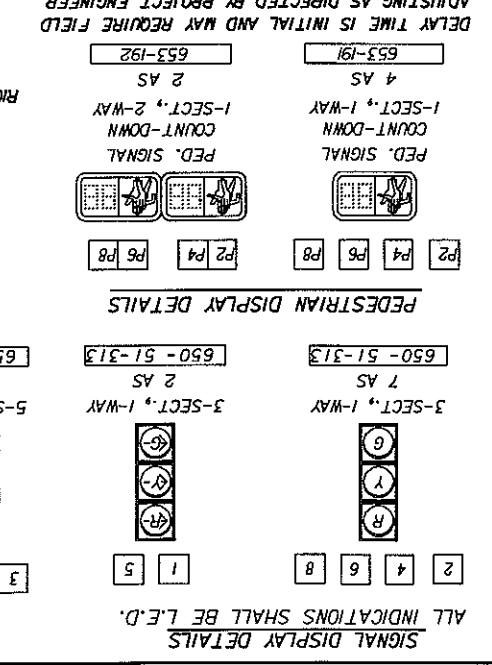
PAY ITEM NOTE

- Pay Item 639-1-22 - The Contractor shall be responsible for contacting the power company providing the electrical power, to determine if any additional fees are required for connection of power.
- The Contractor shall be responsible for acquiring the electrical permit and shall coordinate application for power with the Town of Lady Lake.
- Pay Item 665-11 shall include FTP -25-04 and R10E modified.



TIMING FUNCTION		DETECTOR FUNC.		NL		NL		NL	
MOVEMENT NUMBER	MINIMUM GREEN	EXTENSION	MAXIMUM GREEN 1	MAXIMUM GREEN 2	YELLOW CLEARANCE	ALL RED	PEDESTRIAN WALK	PEDESTRIAN CLEARANCE	RECALL
1	2	3	4	5	6	7	8	9	10
2	3	4	5	6	7	8	9	10	11
3	4	5	6	7	8	9	10	11	12
4	5	6	7	8	9	10	11	12	13
5	6	7	8	9	10	11	12	13	14
6	7	8	9	10	11	12	13	14	15
7	8	9	10	11	12	13	14	15	16
8	9	10	11	12	13	14	15	16	17
9	10	11	12	13	14	15	16	17	18
10	11	12	13	14	15	16	17	18	19
11	12	13	14	15	16	17	18	19	20
12	13	14	15	16	17	18	19	20	21
13	14	15	16	17	18	19	20	21	22
14	15	16	17	18	19	20	21	22	23
15	16	17	18	19	20	21	22	23	24
16	17	18	19	20	21	22	23	24	25
17	18	19	20	21	22	23	24	25	26
18	19	20	21	22	23	24	25	26	27
19	20	21	22	23	24	25	26	27	28
20	21	22	23	24	25	26	27	28	29
21	22	23	24	25	26	27	28	29	30
22	23	24	25	26	27	28	29	30	31
23	24	25	26	27	28	29	30	31	32
24	25	26	27	28	29	30	31	32	33
25	26	27	28	29	30	31	32	33	34
26	27	28	29	30	31	32	33	34	35
27	28	29	30	31	32	33	34	35	36
28	29	30	31	32	33	34	35	36	37
29	30	31	32	33	34	35	36	37	38
30	31	32	33	34	35	36	37	38	39
31	32	33	34	35	36	37	38	39	40
32	33	34	35	36	37	38	39	40	41
33	34	35	36	37	38	39	40	41	42
34	35	36	37	38	39	40	41	42	43
35	36	37	38	39	40	41	42	43	44
36	37	38	39	40	41	42	43	44	45
37	38	39	40	41	42	43	44	45	46
38	39	40	41	42	43	44	45	46	47
39	40	41	42	43	44	45	46	47	48
40	41	42	43	44	45	46	47	48	49
41	42	43	44	45	46	47	48	49	50
42	43	44	45	46	47	48	49	50	51
43	44	45	46	47	48	49	50	51	52
44	45	46	47	48	49	50	51	52	53
45	46	47	48	49	50	51	52	53	54
46	47	48	49	50	51	52	53	54	55
47	48	49	50	51	52	53	54	55	56
48	49	50	51	52	53	54	55	56	57
49	50	51	52	53	54	55	56	57	58
50	51	52	53	54	55	56	57	58	59
51	52	53	54	55	56	57	58	59	60
52	53	54	55	56	57	58	59	60	61
53	54	55	56	57	58	59	60	61	62
54	55	56	57	58	59	60	61	62	63
55	56	57	58	59	60	61	62	63	64
56	57	58	59	60	61	62	63	64	65
57	58	59	60	61	62	63	64	65	66
58	59	60	61	62	63	64	65	66	67
59	60	61	62	63	64	65	66	67	68
60	61	62	63	64	65	66	67	68	69
61	62	63	64	65	66	67	68	69	70
62	63	64	65	66	67	68	69	70	71
63	64	65	66	67	68	69	70	71	72
64	65	66	67	68	69	70	71	72	73
65	66	67	68	69	70	71	72	73	74
66	67	68	69	70	71	72	73	74	75
67	68	69	70	71	72	73	74	75	76
68	69	70	71	72	73	74	75	76	77
69	70	71	72	73	74	75	76	77	78
70	71	72	73	74	75	76	77	78	79
71	72	73	74	75	76	77	78	79	80
72	73	74	75	76	77	78	79	80	81
73	74	75	76	77	78	79	80	81	82
74	75	76	77	78	79	80	81	82	83
75	76	77	78	79	80	81	82	83	84
76	77	78	79	80	81	82	83	84	85
77	78	79	80	81	82	83	84	85	86
78	79	80	81	82	83	84	85	86	87
79	80	81	82	83	84	85	86	87	88
80	81	82	83	84	85	86	87	88	89
81	82	83	84	85	86	87	88	89	90
82	83	84	85	86	87	88	89	90	91
83	84	85	86	87	88	89	90	91	92
84	85	86	87	88	89	90	91	92	93
85	86	87	88	89	90	91	92	93	94
86	87	88	89	90	91	92	93	94	95
87	88	89	90	91	92	93	94	95	96
88	89	90	91	92	93	94	95	96	97
89	90	91	92	93	94	95	96	97	98
90	91	92	93	94	95	96	97	98	99
91	92	93	94	95	96	97	98	99	100

DETECTOR NO.	LOOP OF CHANNEL	DETECT. TIME (SEC)	DELAY	FUNCTION
L-1	1A	-	-	1
L-2A	2A	-	-	2
L-2B	2B	-	-	2
L-3A	3A	-	-	3
L-3B	3B	-	-	3
L-4	4A	-	-	4
L-5	1B	-	-	5
L-6A	5A	-	-	6
L-6B	5B	-	-	6
L-7	6A	-	-	4
L-8	1	4B	5	3



TEMPORARY DETECTION FOR SIGNALS

PAY ITEM NOTES

1. PAY ITEM 102-1 SHALL INCLUDE ALL COSTS PER INTERSECTION/PER DAY ASSOCIATED WITH FURNISHING, INSTALLING, MAINTAINING AND REMOVING AN OVERHEAD DETECTION SYSTEM INCLUDING ALL NECESSARY EQUIPMENT AND COMPONENTS. THE TEMPORARY DETECTION SYSTEM SHALL BE CAPABLE OF ACTUATING ALL MOVEMENTS AS IDENTIFIED IN THESE PLANS.
2. TEMPORARY DETECTION AND CONTROLLER TIMING ARE TO BE IN PLACE 48 HOURS PRIOR TO DAMAGING EXISTING LOOPS AND SHALL REMAIN IN PLACE UNTIL FINAL CONFIGURATION.

GENERAL NOTES

U.S. 27/441 (S.R. 25) & C.R. 466

INTERSECTION NOTES

1. MOVEMENT NOS. 2 & 6 ARE TO CONTINUE TO OPERATE AS CNA FROM 6:00AM TO 10:00PM.
2. MOVEMENT NOS. 1, 4, 5 & 8 ARE TO OPERATE ACTUATED USING OVERHEAD DETECTION.
3. MAX2 IS TO RUN FROM 10:00PM TO 6:00AM. MAX2 IS TO EQUAL MAX1 UNLESS A MAX2 VALUE IS IDENTIFIED IN THE CONTROLLER TIMING CHART.

TIMING FUNCTION		1	2	4	5	6	8
CHANGES TO CONTROLLER DURING MOT*							
MINIMUM GREEN							
EXTENSION							
MAXIMUM GREEN 1							
MAXIMUM GREEN 2							
YELLOW CLEARANCE							
ALL RED							
PEDESTRIAN WALK							
PED. CLEARANCE							
RECALL							
DETECTOR FUNC							
FLASH MODE							

* ALL TIMINGS AND FUNCTIONS NOT NOTED ARE TO REMAIN AS EXISTING.

DATE	BY	DESCRIPTION	REVISIONS

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TEMPORARY DETECTION

SHEET NO. 65