INTERSECTION: Laning Rd / Russell St @ Rosecrans St

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: Rosecrans St
E/W Street Name: Laning Rd/Russel St

Last Date Phase Change:
System Pattern Number:

51

Row	Phase # --->	1	2	3	4	5	6	7	8
	Column # --->		Rosecrans St		Russell St		Rosecrans St		Laning Rd
0	Ped Walk		7		7		7		7
1	Ped FDW		14		20		14		20
2	Min Green	4	10		7	4	10		7
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	4.4		2.0	2.0	4.4		2.0
6	Max Gap	2.0	4.4		2.0	2.0	4.4		2.0
7	Min Gap	2.0	0.2		2.0	2.0	0.2		2.0
8	Max Limit	30	60		40	30	60		40
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.7				0.7		
E	Yellow	3.4	4.3		3.9	3.4	4.3		3.9
F	Red Clear	1.0	1.0		1.0	1.0	1.0		1.0
	Grade								

Phase Timing - Bank 1
F + Phase + Row

<F Page>

RR-1 Delay		
RR-1 Clear		
EV-A Delay	0	
EV-A Clear	0	
EV-B Delay	0	
EV-B Clear	0	
EV-C Delay	0	
EV-C Clear	0	
EV-D Delay	0	
EV-D Clear	0	
RR-2 Delay		
RR-2 Clear		
View EV Delay	---	
View EV Clear	---	
View RR Delay	---	
View RR Clear	---	

Preempt Timing
F + E + Row

	F	Row
Permit	12_456_8	0
Red Lock		1
Yellow Lock		2
Min Recall	_2___6__	3
Ped Recall		4
Peds (View)	_2_4_6_8	5
Rest In Walk		6
Red Rest		7
Dbl Entry	___4___8	8
Max Recall		9
Soft Recall		A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	_2___6__	E
1st Phases	___4___8	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	15	C + 0 + 0
Zone Number	15	C + 0 + 1
Area Number	1	C + 0 + 2
Area Address	96	C + 0 + 3
QuicNet Channel	COM76digi62	(QuicNet)

JDS 12/9/09

JDS 12/9/09

Communication Addresses

C + F + O	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

Timing Sheet By: rej
Approved By:
Drawing Number: 31733-2-D
Timing Implemented On: 7/17/2003

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INTERSECTION: Laning Rd / Russell St @ Rosecrans ST — 223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1				2I2U	1
2		1.8		2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7	10.0			4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7	12.0			8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+C+1
Time Before Yellow		F+C+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: LANING RD/RUSSELL ST @ ROSECRANS ST

223 Program

Coordination Timing By: M2S
Implemented On: 3/24/2010

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Plan

Row	Column # --->	1	2	3	4	5	6	7	8	9
	Plan Name --->		MID		WKND		AM	PM		
0	Cycle Length		140		140		116	150		
1	Phase 1 - ForceOff		55		55		64	62		
2	Phase 2 - ForceOff		0		0		0	0		
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff		30		35		33	36		
5	Phase 5 - ForceOff		55		55		49	52		
6	Phase 6 - ForceOff		0		0		0	0		
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff		30		35		33	36		
9	Ring Offset									
A	Offset A		90		135		105	134		
B	Offset B									
C	Offset C									
D	Permissive		10		15		12	15		
E	Hold Release		255		255		255	255		
F	Ped Shift		10		10		0	0		

Coordination <C Page>

C + Plan + ROW

Row	Time	Plan	Offset	Day of Week
0	06 : 30	6	A	_23456_
1	11 : 00	2	A	_23456_
2	13 : 30	7	A	_23456_
3	18 : 30	E	A	_23456_
4	10 : 00	4	A	_____7
5	18 : 00	E	A	_____7
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	
Plan 1		1	Plan 1 - Lag	
Plan 2	_2__6__	2	Plan 2 - Lag	_2_4_6_8
Plan 3		3	Plan 3 - Lag	
Plan 4	_2__6__	4	Plan 4 - Lag	_2_4_6_8
Plan 5		5	Plan 5 - Lag	
Plan 6	_2__6__	6	Plan 6 - Lag	_2_4_6_8
Plan 7	_2__6__	7	Plan 7 - Lag	_2_4_6_8
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration

E + F + ROW

<E Page>

Day of Week
1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	2 5
B	EV-B Phases	4
C	EV-C Phases	1 6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

For access, set F + 9 + E = 1

Configuration

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Prefimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+E

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

.NTERSECTION: HAWTHORN & KETTNER

223 gram

52

Group Assignment:
Field Master Assignment:

N/S Street Name: KETTNER Bl
E/W Street Name: HAWTHORN St

Last Database Change: 12/9/2002 10:58
System Ref. Number: 184

N

Row	Column # ---->	Phase 1	2	3	4	5	6	7	8
	Phase # ---->				KETTNER		HAWTHORN		
0	Ped Walk				7		7		
1	Ped FDW				11		10		
2	Min Green				18		25		
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn								
6	Max Gap								
7	Min Gap								
8	Max Limit				40		50		
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By								
D	Every								
E	Yellow				3.9		4.3		
F	Red Clear				1.0		1.0		
	Grade				0.0%		-7.0%		

Phase Timing - Bank 1
F + Phase + Row

<F Page>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	
EV-A Clear	
EV-B Delay	
EV-B Clear	
EV-C Delay	
EV-C Clear	
EV-D Delay	
EV-D Clear	
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	4 6	0
Red Lock		1
Yellow Lock		2
Min Recall	4 6	3
Ped Recall	4 6	4
Peds (View)	4 6	5
Rest In Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Start	6	E
1st Phases	4	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	3	C + 0 + 0
Zone Number	3	C + 0 + 1
Area Number	1	C + 0 + 2
Area Address	31	C + 0 + 3
QuicNet Channel	DIGI70:	(QuicNet)

Communication Addresses

C + F + O	F	Row
Free Lag	4 6	0
	Lag Phases	<C Page>

Overlap Timing

	Row	9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
Overlap A	A				
Overlap B	B				
Overlap C	C				
Overlap D	D				

<F Page>
F + COLOR +

<D Page>
D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communication Ports
D + D + 9

Timing Sheet By: WXH
Approved By: EFF
Drawing Number:
Timing Implemented On: 2/17/2004

(3)

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1				2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7				4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1				6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7				8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	5678
E	-- -- -- -- -- -- -- --	1234
F	-- 25 26 27 28 -- -- --	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

INTERSECTION: HAWTHORN & KETTNER

223 Program

Row	Column # ---> / Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length		80	105	90					
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff		35	35	38					
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff		0	0	0					
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff									
9	Ring Offset									
A	Offset A		71	5	68					
B	Offset B									
C	Offset C									
D	Permissive		1	1	1					
E	Hold Release		255	255	255					
F	Ped Shift		0	0	0					

Coordination <C Page>

C + Plan + ROW

Coordination Timing By: EFF
Implemented On: 1/18/2001

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	06 : 00	4	A	1234567
1	10 : 30	3	A	23456
2	15 : 30	4	A	23456
3	19 : 00	2	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	4 6
Plan 1		1	Plan 1 - Lag	
Plan 2	6	2	Plan 2 - Lag	4 6
Plan 3	6	3	Plan 3 - Lag	4 6
Plan 4	6	4	Plan 4 - Lag	4 6
Plan 5		5	Plan 5 - Lag	
Plan 6		6	Plan 6 - Lag	
Plan 7		7	Plan 7 - Lag	
Plan 8		8	Plan 8 - Lag	
Plan 9		9	Plan 9 - Lag	
Coord Ped*		A	Coord Max *	
NEMA Hold		B	Coord Lag *	
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function <D Page>

7 + ROW D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	
6	Ped 6P	6
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration <E Page>

E + F + ROW

Day of Week
1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	
C	EV-C Phases	
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345_7_
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1 E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

NTERSECTION: GRAPE & KETTNER

223 ' gram

53

Group Assignment: 4023
Field Master Assignment: NONE

N/S Street Name: KETTNER
E/W Street Name: GRAPE

Last Database Change:
Timing Sheet By:
Approved By: YNM
System Ref. Number: 363
Drawing Number: 10598-1-D
Timing Implemented On: 01/18/01

N

Row	Column # ---> / Phase # --->	GRAPE 1	2	3	KETTNER 4	5	6	7	8
0	Ped Walk	0	7	0	7	0	0	0	0
1	Ped FDW	0	11	0	12	0	0	0	0
2	Min Green	0	25	0	19	0	0	0	0
3	Type 3 Limit	0	0	0	0	0	0	0	0
4	Add/Veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extn	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0
6	Max Gap	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0
7	Min Gap	0.0	2.0	0.0	2.0	0.0	0.0	0.0	0.0
8	Max Limit	0	50	0	40	0	0	0	0
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Bus Adv	0	0	0	0	0	0	0	0
B	Call to Phs	0	0	0	0	0	0	0	0
C	Reduce By	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
D	Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow	0.0	3.0	0.0	4.0	0.0	0.0	0.0	0.0
F	Red Clear	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0

Phase Timing - Bank 1 <F Page>
F + Phase + Row

	E
RR-1 Delay	0
RR-1 Clear	0
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	3
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	0
RR-2 Clear	20
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

	F	Row
Permit	_2_4____	0
Red Lock	_____	1
Yellow Lock	_____	2
Min Recall	_2_4____	3
Ped Recall	_2_4____	4
Peds (View)	_2_4____	5
Rest In Walk	_____	6
Red Rest	_____	7
Dbl Entry	_____	8
Max Recall	_____	9
Soft Recall	_____	A
Max 2	_____	B
Cond Serv	_____	C
Ped Lock	12345678	D
Yellow Start	_2_____	E
1st Phases	___4____	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number	11	C + 0 + 0
Zone Number	11	C + 0 + 1
Area Number	1	C + 0 + 2
Area Address	37	C + 0 + 3
QuicNet Channel	DIGI70:	(QuicNet)

Communication Addresses

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A	0.0	0.0	0.0	0
B	Overlap B	0.0	0.0	0.0	0
C	Overlap C	0.0	0.0	0.0	0
D	Overlap D	0.0	0.0	0.0	0

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	0	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + O	F	Row
Free Lag	_2_4____	0

Lag Phases <C Page>

Downtime Flash	60	(minutes)

Downtime Before Auto Manual Flash
E + 0 +8

Disable Ports	_234____

Disable Communication Ports
D + D + 9

6

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		1I1	14
1	0.0	0.0		2I2U	1
2	0.0	0.0		2I2L	5
3	0.0	0.0		2I3U	21
4	0.0	0.0		2I3L	25
5	0.0	0.0		2I4	9
6	0.0	0.0		3I5	16
7	0.0	0.0		4I6U	3
8	0.0	0.0		4I6L	7
9	0.0	0.0		4I7U	23
A	0.0	0.0		4I7L	27
B	0.0	0.0		4I8	11
C	0.0	0.0		1I9U	18
D	0.0	0.0		3I9L	20
E	---	---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0	0.0	0.0		5J1	13
1	0.0	0.0		6J2U	2
2	0.0	0.0		6J2L	6
3	0.0	0.0		6J3U	22
4	0.0	0.0		6J3L	26
5	0.0	0.0		6J4	10
6	0.0	0.0		7J5	15
7	0.0	0.0		8J6U	4
8	0.0	0.0		8J6L	8
9	0.0	0.0		8J7U	24
A	0.0	0.0		8J7L	28
B	0.0	0.0		8J8	12
C	0.0	0.0		5J9U	17
D	0.0	0.0		7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	_2345___

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)
(These parameters are NOT downloaded)

Coordination Timing By: EFF
Implemented On: 1/18/01

Row	Column # ---> / Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length	0	80	105	90	0	0	0	0	0
1	Phase 1 - ForceOff	0	0	0	0	0	0	0	0	0
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	0	0	0	0	0	0	0	0	0
4	Phase 4 - ForceOff	0	34	35	28	0	0	0	0	0
5	Phase 5 - ForceOff	0	0	0	0	0	0	0	0	0
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	0	0	0	0	0	0	0	0	0
8	Phase 8 - ForceOff	0	0	0	0	0	0	0	0	0
9	Ring Offset	0	0	0	0	0	0	0	0	0
A	Offset A	0	79	4	75	0	0	0	0	0
B	Offset B	0	0	0	0	0	0	0	0	0
C	Offset C	0	0	0	0	0	0	0	0	0
D	Permissive	0	1	1	1	0	0	0	0	0
E	Hold Release	0	255	255	255	0	0	0	0	0
F	Ped Shift	0	0	0	0	0	0	0	0	0

Coordination <C Page>

C + Plan + ROW

FOR OBSERVATION ONLY

Master Plan	C + A + 2
Current Plan	C + A + 3
Next Plan	C + A + 4
T.O.D. Plan	C + A + 5
Master Cycle	C + A + 0
Ring A Cycle	C + B + 0
Ring B Cycle	C + D + 0
Min Cycle	C + A + E
Max Cycle	C + B + E

Row	Time	Plan	Offset	Day of Week
0	06 : 00	4	A	1234567
1	10 : 30	3	A	_23456_
2	15 : 30	4	A	_23456_
3	18 : 00	2	A	1234567
4	00 : 00	0	0	_____
5	00 : 00	0	0	_____
6	00 : 00	0	0	_____
7	00 : 00	0	0	_____
8	00 : 00	0	0	_____
9	00 : 00	0	0	_____
A	00 : 00	0	0	_____
B	00 : 00	0	0	_____
C	00 : 00	0	0	_____
D	00 : 00	0	0	_____
E	00 : 00	0	0	_____
F	00 : 00	0	0	_____

TOD Coordination

<9 Key with C+0+9=1>

	E	Row		F
		0	Free Lag	_2_4____
Plan 1	_____	1	Plan 1 - Lag	_____
Plan 2	_2_____	2	Plan 2 - Lag	_2_4____
Plan 3	_2_____	3	Plan 3 - Lag	_2_4____
Plan 4	_2_____	4	Plan 4 - Lag	_2_4____
Plan 5	_____	5	Plan 5 - Lag	_____
Plan 6	_____	6	Plan 6 - Lag	_____
Plan 7	_____	7	Plan 7 - Lag	_____
Plan 8	_____	8	Plan 8 - Lag	_____
Plan 9	_____	9	Plan 9 - Lag	_____
Coord Ped*	_____	A	Coord Max *	_____
NEMA Hold	_____	B	Coord Lag *	_____
		C		
		D		
		E		
		F		

Sync Phases

C + E + FUNCTION #

Lag Phases <C Page>

C + F + FUNCTION #

Transition Type	0

TBC Transition
C + D + D

Plan Select
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Transition Type
0 = Shortway
Non-zero = Lengthen

Row	Time	Function	Day of Week	Column F Phases/Bits
0	00 : 00	0		
1	00 : 00	0		
2	00 : 00	0		
3	00 : 00	0		
4	00 : 00	0		
5	00 : 00	0		
6	00 : 00	0		
7	00 : 00	0		
8	00 : 00	0		
9	00 : 00	0		
A	00 : 00	0		
B	00 : 00	0		
C	00 : 00	0		
D	00 : 00	0		
E	00 : 00	0		
F	00 : 00	0		

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	
7	Ped 4P	4
8	Ped 8P	
9	Yellow Flash Phases	
A	Overlap A - Phases	
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	

Configuration

E + F + ROW

<E Page>

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	2
3	RR-2 Limited Service	4
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	4
C	EV-C Phases	
D	EV-D Phases	
E	Extra 1 Config. Bits	1_345_7_
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

INTERSECTION: Pacific Highway & Sea World Dr.

223 Program

Group Assignment:
Field Master Assignment:

N/S Street Name: Sea World Dr
E/W Street Name: Pacific Highway/E Mission Bay Dr

Last Change:
Timing Sheet By: JLG
Approved By:

Drawing Number: 19078-D-7
Sys. Ref. Number:
Timing implemented on:

Row	Column # --->	Sea World		E Mission Bay		Sea World		Pacific Highway	
	Phase # --->	1	2	3	4	5	6	7	8
0	Ped Walk		7		7		7		7
1	Ped FDW		16		18		18		18
2	Min Green	4	10	4	4	4	10	4	4
3	Type 3 Limit								
4	Add/Veh								
5	Veh Extn	2.0	3.7	2.0	3.0	2.0	4.0	2.0	2.0
6	Max Gap	2.0	3.7	2.0	3.0	2.0	4.0	2.0	2.0
7	Min Gap	2.0	0.2	2.0	3.0	2.0	0.2	2.0	2.0
8	Max Limit	30	70	30	30	30	70	30	30
9	Max Limit 2								
A	Bus Adv								
B	Call to Phs								
C	Reduce By		0.1				0.1		
D	Every		0.9				0.8		
E	Yellow	3.0	4.5	3.0	3.9	3.0	4.4	3.0	4.8
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 1
F + Phase + Row

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	
RR-2 Clear	
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing
F + E + Row

Row		F
0	Permit	12345678
1	Red Lock	
2	Yellow Lock	
3	Min Recall	
4	Ped Recall	
5	Peds (View)	_2_4_6_8
6	Rest In Walk	
7	Red Rest	
8	Dbl Entry	
9	Max Recall	
A	Soft Recall	_2___6__
B	Max 2	
C	Cond Serv	
D	Ped Lock	12345678
E	Yellow Start	_2___6__
F	1st Phases	__3___7_

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
All Red Start	0.0	F + C + O

Start / Revert Times

Drop Number		C + 0 + 0
Zone Number		C + 0 + 1
Area Number		C + 0 + 2
Area Address		C + 0 + 3
QuicNet Channel		(QuicNet)

Communication Addresses

Row		9 Green Clear	C Yellow Change	D Red Clear	0 Load-Switch #
A	Overlap A				
B	Overlap B				
C	Overlap C				
D	Overlap D				

Overlap Timing <F Page> <D Page>
F + COLOR + D + 0 + OVERLAP

Manual Plan	14	C + A + 1
Manual Offset	0	C + B + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + O

	F	Row
Free Lag	_2_4_6_8	0

Lag Phases <C Page>

Downtime Flash	240	(minutes)

Downtime Before Auto Manual Flash
F + 0 + 8

Disable Ports	234

Disable Communications Ports
D + D + 9

INTERSECTION: Pacific Highway & Sea World Dr.

223 Program

Row	1 Delay	3 Carry-over	Detector Name	332 Input File	Detector Number
0				1I1	14
1		1.8		2I2U	1
2				2I2L	5
3				2I3U	21
4				2I3L	25
5				2I4	9
6				3I5	16
7	10.0			4I6U	3
8				4I6L	7
9				4I7U	23
A				4I7L	27
B				4I8	11
C				1I9U	18
D				3I9L	20
E		---	---	---	---
F	---	---	---	---	---

Row	2 Delay	4 Carry-over	Detector Name	332 Input File	Detector Number
0				5J1	13
1		1.8		6J2U	2
2				6J2L	6
3				6J3U	22
4				6J3L	26
5				6J4	10
6				7J5	15
7	10.0			8J6U	4
8				8J6L	8
9				8J7U	24
A				8J7L	28
B				8J8	12
C				5J9U	17
D				7J9L	19
E	---	---	---	---	---
F	---	---	---	---	---

Detector Delay & Carryover <D Page>

D + X (across) + ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 – – – –	1234
C	13 14 15 16 17 18 19 20	12345678
D	– – – – 21 22 23 24	5678
E	– – – – – – – –	1234
F	– 25 26 27 28 – – –	2345

Active Detectors <D Page>

Row		0 Detector #
0		
1	System Det. # 1	0
2	System Det. # 2	0
3	System Det. # 3	0
4	System Det. # 4	0
5	System Det. # 5	0
6	System Det. # 6	0
7	System Det. # 7	0
8	System Det. # 8	0

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number	0	F+C+1
Time Before Yellow	0.0	F+C+3

Advance Warning Beacon - Sign 1

Phase Number	0	F+D+1
Time Before Yellow	0.0	F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+0+6
Short Failure	0.5	F+0+7

Power Cycle Correction (Default = 0.5)

(These parameters are NOT downloaded.)

INTERSECTION: Pacific Highway & Sea World Dr.

223 Program

Row	Time	Function	Day of Week	Column F Phases/Bits
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	_2_____
6	Ped 6P	_____6__
7	Ped 4P	___4____
8	Ped 8P	_____8
9	Yellow Flash Phases	
A	Overlap A - Phases	_23____
B	Overlap B - Phases	_____67_
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1_____

Configuration

E + F + ROW

<E Page>

Day of Week
1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	_2_____
6	Overlap B - Green Omit	_____6__
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	_2__5___
B	EV-B Phases	___4__7_
C	EV-C Phases	1____6__
D	EV-D Phases	__3____8
E	Extra 1 Config. Bits	1_345___
F	IC Select (Interconnect)	_2_____

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Pretimed Operation
8 = Split Ring Operation

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

Time and Date
8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0	D+B+0

Dial-Up Telephone Communications
(If set to a non-zero value, parity will be disabled)
(This parameter is NOT downloaded)

Program Information
C + C + 0 = program
C + C + F = version

Remote Download
C + 0 + 4 = 1 -255
w/ E + E + E bit 5 on

TRAFFIC SIGNAL TIMING

PROGRAM 200SA

54

E. MISSION BAY DR. — SEA WORLD — PHASE TIMING — SEA WORLD — PAC. HWY.

INTERVAL		1	2	3	4	5	6	7	8
WALK	0		7		7		7		7
FLASH D/W	1		16		18		18		18
MIN GREEN	2	4	7	4	4	4	7	4	4
TYPE 3 DET	3								
ADD/VEH	4								
VEH EXTEN *	5	2.0	4.3	2.0	2.0	2.0	4.3	2.0	2.0
MAX GAP *	6	2.0	4.3	2.0	2.0	2.0	4.3	2.0	2.0
MIN GAP *	7	2.0	0.2	2.0	2.0	2.0	0.2	2.0	2.0
MAX EXTEN	8	30	70	30	30	30	70	30	30
MAX 2	9								
	A								
CALL TO PHASE	B								
REDUCE BY	C		.1				.1		
REDUCE EVERY	D		.8				.8		
YELLOW	E	3.0	4.5	3.0	3.5	3.0	4.5	3.0	3.5
RED CLEAR	F	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

PREEMPT

	E	
RR1 DELAY		0
RR1 CLEAR		1
EVA DELAY	0	2
EVA CLEAR	3	3
EVB DELAY	0	4
EVB CLEAR	3	5
EVC DELAY	0	6
EVC CLEAR	3	7
EVD DELAY	0	8
EVD CLEAR	3	9
RR2 DELAY		A
RR2 CLEAR		B
EV CLR TMR		C
EV DLY TMR		D
RR CLR TMR		E
RR DLY TMR		F

MAX INITIAL (F-0-E) = _____ KEYSTROKES: F + PHASE + LOCATION

RED REVERT (F-0-F) = 5.0

ALL RED START (F-C-0) = 5.0

* MUST BE SAME FOR NON-DENSITY OPERATION

PHASE FUNCTION FLAGS

KEYSTROKES: F+F+FUNCTION#

FUNCTION		1	2	3	4	5	6	7	8
PERMIT	0	X	X	X	X	X	X	X	X
RED LOCK	1								
YELLOW LOCK	2								
VEH RECALL	3		X				X		
PED RECALL	4								
PEDS	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A								
MAX 2	B								
COND SERVE	C								
RESERVED	D								
STARTUP	E		X				X		
FIRST PHASES	F				X				X

OVERLAP TIMING

KEYSTROKE: F+ COLOR CODE+OVERLAP

	9 GREEN	C YELLO	D RED
OVERLAP A			
OVERLAP B			
OVERLAP C			
OVERLAP D			

PHASE SEQUENCES (CFO)

	1	2	3	4	5	6	7	8
LAG D (FREE)		X		X		X		X

LOC: E. MISSION BAY DR. / PAC. HWY. & SEA WORLD DR

DATE: 1-10-93

PAGE 1 OF ___

N

INTERVAL		1	2	3	4	5	6	7	8
					TIMING				
WALK	0	—	7	—	7	—	7	—	7
DONT WALK	1	—	16	—	18	—	18	—	18
MIN GREEN	2	2	10	2	10	2	10	[illegible]	[illegible]
TYPE 3 DET	3	—	—	—	—	—	—	—	—
ADD/VEH	4	—	—	—	—	—	—	—	—
PASSAGE	5	2.0	4.0	2.0	2.0	2.0	4.0	2.0	2.0
MAX GAP	6	2.0	[illegible]	2.0	2.0	2.0	[illegible]	[illegible]	[illegible]
MIN GAP	7	2.0	0.2	2.0	2.0	2.0	0.2	2.0	2.0
MAX EXT	8	30	60	[illegible]	50	[illegible]	[illegible]	30	50
MAX EXT TWO	9	30	60	[illegible]	50	30	60	[illegible]	50
	A								
	b								
REDUCE BY	C	—	0.1	—	—	—	0.1	—	—
REDUCE EVERY	d	—	0.5	—	—	—	0.8	—	—
YELLOW	E	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
RED	F		2.0		2.0		2.0		2.0
PED-XING - FT.			8		10		100		[illegible]

	FUNCTIONS	1	2	3	4	5	6	7	8
0	PERMIT FF0	X	X	X	X	X	X	X	X
1	RED LOCK FF1								
2	YEL LOCK FF2								
3	VEH RECALL FF3		X				X		
4	PED RECALL FF4								
5	PED PHASES FF5		X		X		X		X
6	OVERLAP - A FF6		X	X					
7	OVERLAP - B FF7						X	X	
8	DBL ENTRY FF8								
9	MAX TWO FF9					[illegible]			
A	LAG PHASES FFA		X		X	X	[illegible]		X
b	RED REST FFB								
C	SEMI ACT FFC								
d	TYPE 3 DET FFD								
E	STARTUP FFE		X				X		

	PREEMPTION
0	RR 1 DELAY FE0
1	RR 1 TRK CLR FE1
2	EV A DELAY FE2
3	EV A HOLD FE3
4	EV B DELAY FE4
5	EV B HOLD FE5
6	EV C DELAY FE6
7	EV C HOLD FE7
8	EV D DELAY FE8
9	EV D HOLD FE9
A	RR 2 DELAY FEA
b	RR 2 TRK CLR FEB
C	
d	
E	

Red Flash T — 3.0 (FFE)

LT. DRIVING

DATE: 1/18/83

LOCATION: E. Mission Bay Dr. / Pacific Hwy & Sea World Dr.

INTERVAL		1	2	3	4	5	6	7	8
WALK	0	-	7	-	7	-	7	-	7
DON'T WALK	1	-	14	-	18	-	16	-	18
MIN GREEN	2	2	8	2	2	2	8	2	2
TYPE 3 DET	3	-	-	-	-	-	-	-	-
ADD/VEH	4	-	-	-	-	-	-	-	-
PASSAGE	5	1	2	1	2	1	2	1	2
MAX GAP	6	1	3	1	2	1	3	1	2
MIN GAP	7	1	0	1	2	1	0	1	2
MAX EXT	8	30	60	30	40	40	60	40	40
MAX EXT TWO	9	30	60	30	40	40	60	40	40
	A								
	b								
REDUCE BY	C		.1				.1		
REDUCE EVERY	d		1				1		
YELLOW	E	3	3.5	3	3	3	3.5	3	3
RED	F	-	1.5	-	1	-	1.5	-	1
PED-XING - FT.		-	64	-	86	-	72	-	86

FUNCTIONS		1	2	3	4	5	6	7	8
0	PERMIT	X	X	X	X	X	X	X	X
1	RED LOCK								
2	YEL LOCK		X				X		
3	VEH RECALL		X				X		
4	PED RECALL								
5	PED PHASES		X		X		X		X
6	OVERLAP - A				X	X			
7	OVERLAP - B	X							X
8	DBL ENTRY		X				X		
9	MAX TWO								
A	LAG PHASES		X		X		X		X
b	RED REST								
C	SEMI ACT								
d	TYPE 3 DET								
E	STARTUP		X				X		

PREEMPTION		
0	RR 1 DELAY	
1	RR 1 TRK CLR	
2	EV A DELAY	0
3	EV A HOLD	8
4	EV B DELAY	
5	EV B HOLD	
6	EV C DELAY	0
7	EV C HOLD	3
8	EV D DELAY	0
9	EV D HOLD	5
A	RR 2 DELAY	
b	RR 2 TRK CLR	
C		
d		
E		

TIMING BY: All

DATE:

D2 (41) = 2.5 D4 (48) = 2.5 E. Mission Bay Dr/Fiesta Island Rd

DETECTOR TIMES (332 CABINET)

X → SET DELAY SET CARRY OBS COUNT OBS DELAY OBS CARRY

Y ↓

Y	1	2	3	4	5	6	7	8	9	A
0	311	3/1	111	5/1	111	5/1	211	5/1	111	5/1
1	212U	6/2U	212U 1.8	6/2U 1.8	212U	6/2U	212U	6/2U	212U	6/2U
2	212L	6/2L	212L	6/2L	212L	6/2L	212L	6/2L	212L	6/2L
3	213U	6/3U	213U	6/3U	213U	6/3U	213U	6/3U	213U	6/3U
4	213L	6/3L	213L	6/3L			213L	6/3L	213L	6/3L
5	214	6/4	214	6/4			214	6/4	214	6/4
6	315	7/5	315	7/5	315	7/5	315	7/5	315	7/5
7	416U 10	8/6U 10	416U	8/6U	416U	8/6U	416U	8/6U	416U	8/6U
8	416L	8/6L	416L	8/6L	416L	8/6L	416L	8/6L	416L	8/6L
9	417U	8/7U	417U	8/7U	417U	8/7U	417U	8/7U	417U	8/7U
A	417L	8/7L	417L	8/7L			417L	8/7L	417L	8/7L
B	418	8/8	418	8/8			418	8/8	418	8/8
C	319U	9/9U	119U	3/9U	119U	3/9U	119U	3/9U	119U	3/9U
D	319L	9/9L	319L	9/9L	319L	9/9L	319L	9/9L	319L	9/9L
E										
F										

KEYSTROKES: D + X + Y

TIME OF DAY FEATURES

EVENT	TIME	FUNCT	DAY OF WEEK S	M	T	W	T	F	S
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
A									
B									
C									
D									
E									
F									

KEYSTROKES: 7+EVENT#

FUNCTION BY PHASE

1	2	3	4	5	6	7	8

KEYSTROKES: D-F-EVENT #

TIME OF DAY LOCAL FUNCTION CODES

0 - PERMIT	7 - RED REST	E - 1 - LOCAL OVERRIDE	F - TOD OUTPUTS
1 - RED LOCK	8 - OBL ENTRY	2 - PHASE BANK 2	1 - TOD OUT 1
2 - YELLOW LOCK	9 - VEH MAX REL	3 - PHASE BANK 3	2 - TOD OUT 2
3 - VEH RECALL	A - SOFT RECALL	7 - DET GROUP	3 - TOD OUT 3
4 - PED RECALL	B - MAX II EXT	8 - SPLIT MONITOR	4 - TOD OUT 4
5 - RESERVED	C - COND SERVC		
6 - REST IN WALK	D - TOD LRG D		

CURRENT TIME AND DATE

8-0 HOUR, MINUTE, DAY OF WEEK
8-1 DAY OF MONTH, YEAR, MONTH
8-F SECONDS

CONFIGURATION DATA

NOTE "E" KEY ENABLED (F-9-E *0)

KEYSTROKES: E+E+INTERVAL

INTERVAL		PHASE 1	2	3	4	5	6	7	8
0	EXCLU FM								
1	RR1 GRN CL								
2	RR2 GRN CL								
3	RR2 LTD								
4									
5	OLR GOMIT								
6	OLR GOMIT								
7	OLR GOMIT								
8	OLD GOMIT								
9	OV FL YEL								
A	EMVEH A		X			X			
B	EMVEH B	X			X		X	X	
C	EMVEH C	X		X			X		X
D	EMVEH D			X	X			X	X
E	EXTRA	X		X	X				
F	TIC SELECT		X						

EXTRA (E+E+E)
1-TSC TYPE 1
2-NEMA CODD
3-DAYLIGHT SAV
4-EV ADVANCE
6-SPECIAL EVENT
7-PRETIMED
8-SPLIT RING

TCSEL (E+E+F)
1- SIMPLEX IN
2-2-WAY MODEM
3-7 WIRE IN
4-FLN/FMES
5-SIMPLEX OUT
7-7 WIRE OUT

ASSIGNS (E+F+I)
1-AT OVERLAP
2-TOD OUTPUTS
3-STEADY EV BEAC
4-FLASH EV BEAC

KEYSTROKES: E+F+INTERVAL

INTERVAL		PHASE 1	2	3	4	5	6	7	8
0									
1	RR OLAP A								
2	RR OLAP B								
3	RR OLAP C								
4	RR OLAP D								
5	PEDOP		X						
6	PEDOP						X		
7	PEDOP				X				
8	PEDOP								X
9	FLH YELO								
A	OVERLAP A		X	X					
B	OVERLAP B						X	X	
C	OVERLAP C								
D	OVERLAP D								
E	RESTART								
F	ASSIGNS	X							

HAWTHORN & PACIFIC HY

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: Pacific Hy
E/W Street: Hawthorn

Last Database Change:

Timing sheets by: SE4
Approved by:
Timing implemented on: 12/20/2005

55

Row	Phase Numbers--->	1	2	3	4	5	6	7	8
					Pacific Hy		Hawthorn		Pacific Hy
0	Ped Walk				7		7		7
1	Ped FDW				10		24		15
2	Min Green			6	10		10		10
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension			3.0	3.3		3.0		3.3
6	Max Gap			3.0	3.3		3.0		3.3
7	Min Gap			3.0	0.2		3.0		0.2
8	Max Limit			30	40		50		40
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every				1.0				1.0
E	Yellow Change			3.4	3.9		3.9		3.9
F	Red Clear			1.0	1.0		1.0		1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	3
EV-B Delay	0
EV-B Clear	3
EV-C Delay	0
EV-C Clear	3
EV-D Delay	0
EV-D Clear	3
RR-2 Delay	0
RR-2 Clear	20
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing <F/1+E+Row>

	F	Row
Permit	34 6 8	0
Red Lock		1
Yellow Lock		2
Min Recall	3 6 8	3
Ped Recall		4
View Set Peds	- - - - -	5
Rest In Walk		6
Red Rest		7
Double Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	6	E
First Phases	4 8	F

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	2	<C/0+0+0>
Zone Number	2	<C/0+0+1>
Area Number	1	<C/0+0+2>
Area Address	30	<C/0+0+3>
QuicNet Channel	DIGI70	(QuicNet)

Communication Addresses

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+(
Exclusive FDW	0	<F/1+0+*
All Red Clear	0.0	<F/1+0+;

Exclusive Ped Phase

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Manual Plan	0	<C/0+A-
Manual Offset	0	<C/0+B-

Manual Selection

Notes: **Timing was copied from old 223 timing sheet created by EFF and implemented on 1/18/2001. No signal timing changes were made.**

Free Lag	3 6 8	<C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1

Version: 233 RV

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term	12345678	4
Sequential Timing		5
Advance Walk Phases		6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls		E
Start-up Ped Calls		F

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	6
3	RR-2 Limited Service	34 8
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	4
C	EV-C Phases	6
D	EV-D Phases	3 8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	
Ped for 6P Output	6
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	4
Low Priority C Phases	
Low Priority D Phases	3 8
Restricted Phases	
Extra 2 Config. Bits	

Configuration <E/125+F+Row>

	C	Row
EV-A		0
EV-B		1
EV-C		2
EV-D		3
RR-1 *	---	4
RR-2 *	---	5
SE-1	0	6
SE-2	0	7
		8
		9
		A
		B
		C
		D
		E
		F

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

	2	Row
		0
Phase 1	0	1
Phase 2	0	2
Phase 3	0	3
Phase 4	0	4
Phase 5	0	5
Phase 6	0	6
Phase 7	0	7
Phase 8	0	8
		9
		A
		B
		C
		D
		E
		F

<C/5+2+Row>

Coordination Transition Minimums

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard dates will be used.

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0							
1	2I2U						
2	2I2L						
3	2I3U						
4	2I3L						
5	2I4						
6	3I5						
7	4I6U						1.8
8	4I6L						
9	4I7U						
A	4I7L						
B							
C							
D							
E							
F							

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0							
1	6J2U						
2	6J2L						
3	6J3U						
4	6J3L						
5	6J4						
6	7J5						
7	8J6U						1.8
8	8J6L						
9	8J7U						
A	8J7L						
B							
C							
D							
E							
F							

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	0	A
DELAY-B	0	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	_____

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6)

Row	Time	Plan	Offset	Day of Week
0	06 : 00	4	A	_23456_
1	10 : 30	3	A	_23456_
2	15 : 30	4	A	_23456_
3	19 : 00	2	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.1+Row>
(Bank 1)

Time	Funct.	Day of Week	Column 4 Phases/Bits

TOD Function <7/0.1+Row> <E/27+4+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.1+Row>
(Bank 1)

Time	Plan	Offset	Holiday Type	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

Holiday Events <9/1.1+Row>
(Bank 1)

T.O.O. Functions:
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select:
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Row	Time	Plan	Offset	Day of Week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.2+Row>
(Bank 2)

Time	Funct.	Holiday Type	Column 4 Phases/Bits

Holiday TOD Function <7/0.2+Row> <E/28+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.2+Row>
(Bank 2)

Time	Plan	Offset	Holiday Type	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

Holiday Events <9/1.2+Row>
(Bank 2)

Month Select:
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminate Sync Phase Peds

Row	Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length		80	105	90					
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff		43	50	50					
4	Phase 4 - ForceOff		24	25	27					
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff									
8	Phase 8 - ForceOff		43	50	50					
9	Ring Offset									
A	Offset 1		0	93	66					
B	Offset 2									
C	Offset 3									
D	Perm 1 - End		5	5	5					
E	Hold Release		255	255	255					
F	Zone Offset		0	0	0					

Coordination - Timing Plans <C/1+Plan+Row>

Row		E
0		
1	Plan 1 - Sync	
2	Plan 2 - Sync	6
3	Plan 3 - Sync	6
4	Plan 4 - Sync	6
5	Plan 5 - Sync	
6	Plan 6 - Sync	
7	Plan 7 - Sync	
8	Plan 8 - Sync	
9	Plan 9 - Sync	
A	NEMA Sync	
B	NEMA Hold	
C		
D		
E	Coord Extra	
F		

Sync Phases <C/1+E+Row>

Row										
0	Ped Adjustment									
1	Perm 2 - Start									
2	Perm 2 - End									
3	Perm 3 - Start									
4	Perm 3 - End									
5	Reservice Time									
6	Reservice Phases									
7										
8	Pretimed Phases									
9	Max Recall									
A	Perm 1 Veh Phase									
B	Perm 1 Ped Phase									
C	Perm 2 Veh Phase									
D	Perm 2 Ped Phase									
E	Perm 3 Veh Phase									
F	Perm 3 Ped Phase									

Coordination - Parameters <C/2+Plan+Row>

Row		F
0	Free Lag	3 6 8
1	Plan 1 - Lag	
2	Plan 2 - Lag	3 6 8
3	Plan 3 - Lag	3 6 8
4	Plan 4 - Lag	3 6 8
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	External Lag	
B		
C		
D		
E		
F		

Lag Phases <C/1+F+Row>

Coordination Timing By:

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1		NOT-3		Max 2		Pretimed		Set Monday		Dial 2 (7-Wire)		Sim Term		0
1	Spec. Funct. 2		NOT-4		System Det 1		Plan 1		Ext. Perm 1		Dial 3 (7-Wire)		EV-A	71	1
2	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Dimming		Offset 2 (7-Wire)		EV-C	73	3
4	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time	32	Free (7-Wire)		RR-1	51	5
6	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	NAND-4 (b)		OR-6 (b)		System Det 7		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	OR-7 (a)		Fig 3 Diamond		System Det 8		Plan 8		Man. Advance		NOT-1		Spec. Event 2		8
9	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)		AND-1 (a)		A
B	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)		B
C	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)		AND-2 (a)		C
D	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)		AND-2 (b)		D
E	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)		E
F	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)		F

Assignable Inputs <E/126+Column+Row>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1		Dial 2 (7-Wire)		0
1	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1		TOD Out 2		Dial 3 (7-Wire)		1
2	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2		TOD Out 3		Offset 1 (7-Wire)		2
3	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)		4
5	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)		5
6	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)	81	6
7	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8		EV-A		Adv. Warn - 1		Low Priority A		8
9	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C				C
D	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D				D
E	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E				E
F	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F				F

Assignable Outputs <E/127+Column+Row>

Min Time (seconds) [ ] <F/1+0+8>
Min Green Before PE Force Off

Max Time (minutes) [ ] <F/1+0+9>
Max Preempt Time Before Failure

Min Time (seconds) [ ] <F/1+0+A>
Min Time Between Same Preempts
(Does Not Apply To Railroad Preempt)

Low Pri. Channel [ ] <E/125+C+8>
Disable Low Priority Channel

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Delay Time (seconds) [0] <F/1+A+D>
Bus Delay

Max Time (seconds) [8] <F/1+A+E>
Max Early Green

Max Time (seconds) [8] <F/1+A+F>
Max Green Extension

Row	Time	Headway	Direction	Day of Week
0	05 : 30	A	A	1234567
1	05 : 30	A	C	1234567
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

Headway <C+0+9=2,1>

Headway Time
(minutes)
1 thru 9 = 1 thru 9
A = 10
B = 11
C = 12
D = 13
E = 14
F = 15

Low Priority Preemption (Bus Priority)

Only available with *Program 233RV2.B* (and above)

Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

GRAPE & PACIFIC HY

56

233 Program

Group Assignment:
Field Master Assignment:
System Reference Number:

N/S Street: Pacific Hy
E/W Street: Grape St

Last Database Change:

Timing sheets by: SE4
Approved by:
Timing implemented on: 12/20/05

Row	Phase Numbers—>	1	2	3	4	5	6	7	8
			Grape St		Pacific Hy				Pacific Hy
0	Ped Walk		7		7				7
1	Ped FDW		25		14				12
2	Min Green		10		10			6	10
3	Type 3 Disconnect								
4	Added per Vehicle								
5	Veh Extension		4.4		3.3			2.0	3.3
6	Max Gap		4.4		3.3			2.0	3.3
7	Min Gap		0.2		0.2			2.0	0.2
8	Max Limit		50		50			30	50
9	Max Limit 2								
A	Adv. / Delay Walk								
B	PE Min Ped FDW								
C	Cond Serv Check								
D	Reduce Every		0.7		1.0				1.0
E	Yellow Change		3.9		3.9			3.4	3.9
F	Red Clear		1.0		1.0			1.0	1.0

Phase Timing - Bank 1 <F/1+Phase+Row>

	E
RR-1 Delay	
RR-1 Clear	
EV-A Delay	0
EV-A Clear	0
EV-B Delay	0
EV-B Clear	0
EV-C Delay	0
EV-C Clear	0
EV-D Delay	0
EV-D Clear	0
RR-2 Delay	0
RR-2 Clear	0
View EV Delay	---
View EV Clear	---
View RR Delay	---
View RR Clear	---

Preempt Timing <F/1+E+Row>

	F	Row
Permit	_2_4__78	0
Red Lock		1
Yellow Lock		2
Min Recall	_2_4__78	3
Ped Recall		4
View Set Peds	-----	5
Rest In Walk		6
Red Rest		7
Double Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	_2_____	E
First Phases	___4___8	F

Phase Functions <F/1+F+Row>

Current Calculated Cycle Length: C/0 + B + F

	9	A	B	C	D
	---	---	---	---	---
Phase 1					
Phase 2					
Phase 3					
Phase 4					
Phase 5					
Phase 6					
Phase 7					
Phase 8					
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing <F/1+Column+Phase>

Drop Number	10	<C/0+0+0>
Zone Number	10	<C/0+0+1>
Area Number	1	<C/0+0+2>
Area Address	36	<C/0+0+3>
QuicNet Channel	DIGI70	(QuicNet)

Communication Addresses

Manual Plan
0 = Automatic
1-9 = Plan 1-9
14 = Free
15 = Flash

(Outputs specified in Assignable Outputs at E/127+A+E & F)

Exclusive Walk	0	<F/1+0+(
Exclusive FDW	0	<F/1+0+1
All Red Clear	0.0	<F/1+0+2

Exclusive Ped Phase

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	0.0	<F/1+C+0>

Start / Revert Times

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

Manual Plan	0	<C/0+A+
Manual Offset	0	<C/0+B+

Manual Selection

Notes: **Timing was copied from old 223 timing sheet created by EFF and implemented on 1/18/2001. No signal timing changes were made.**

Free Lag	_2_4__7_	<C/1+F+0>

How to Set Page Access Code:
F/1 – C + 0 + F = 1

Version: 233 RV

Row		Overlap 1	2	3	4	5	6	7	8
0	Load Switch Number								
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8									
9									
A									
B									
C									
D	Green Clear								
E	Yellow Change								
F	Red Clear								

Overlap Assignments <E/29+Column+Row>

	F	Row
Fast Green Flash Phase		0
Green Flash Phases		1
Flashing Walk Phases		2
Guaranteed Passage		3
Simultaneous Gap Term	12345678	4
Sequential Timing		5
Advance Walk Phases		6
Delay Walk Phases		7
External Recall		8
Start-up Overlap Green		9
Max Extension		A
Inhibit Ped Reservice		B
Semi-Actuated		C
Start-up Overlap Yellow		D
Start-up Vehicle Calls		E
Start-up Ped Calls		F

Specials <F/2+F+Row>

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	2
3	RR-2 Limited Service	4 8
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	4 7
C	EV-C Phases	
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 345
F	IC Select (Interconnect)	2

Configuration <E/125+E+Row>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	12345678
Ped for 2P Output	2
Ped for 6P Output	
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	4
Low Priority C Phases	
Low Priority D Phases	8
Restricted Phases	
Extra 2 Config. Bits	

Configuration <E/125+F+Row>

	C	Row
EV-A		0
EV-B		1
EV-C		2
EV-D		3
RR-1 *	---	4
RR-2 *	---	5
SE-1	0	6
SE-2	0	7
		8
		9
		A
		B
		C
		D
		E
		F

<E/125+C+Row>

Preemption Priority

(* RR-1 is always Highest, and RR-2 is always Second Highest)

	2	Row
		0
Phase 1	0	1
Phase 2	0	2
Phase 3	0	3
Phase 4	0	4
Phase 5	0	5
Phase 6	0	6
Phase 7	0	7
Phase 8	0	8
		9
		A
		B
		C
		D
		E
		F

<C/5+2+Row>

Coordination Transition Minimums

Extra 1 Flags
1 = TBC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Extended Status
6 = International Ped
7 = Flash - Clear Outputs
8 = Split Ring

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Extra 2 Flags
1 = AWB During Initial
2 = LMU Installed
3 = Disable Min Walk
4 = QuicNet/4 System
5 = Ignore P/P on EV
6 =
7 = Reserved
8 =

Flash to PE & PE Non-Lock
1 = EV A 5 = RR 1
2 = EV B 6 = RR 2
3 = EV C 7 = SE 1
4 = EV D 8 = SE 2

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Time and Date

Begin Month	0	<C/5+2+A>
Begin Week	0	<C/5+2+B>
End Month	0	<C/5+2+C>
End Week	0	<C/5+2+D>

Daylight Savings Time

Daylight Savings Date:
If set to all zeros, standard dates will be used.

Row	Detector Name	0 C1 Pin Number	1 Attributes	2 Phase(s)	3 Assign	1 Delay	3 Carry-Over
0							
1	2I2U						1.8
2	2I2L						
3	2I3U						
4	2I3L						
5	2I4						
6	3I5						
7	4I6U						
8	4I6L						
9	4I7U						1.8
A	4I7L						
B							
C							
D							
E							
F							

Row	Detector Name	4 C1 Pin Number	5 Attributes	6 Phase(s)	7 Assign	2 Delay	4 Carry-Over
0							
1	6J2U						
2	6J2L						
3	6J3U						
4	6J3L						
5	6J4						
6	7J5						
7	8J6U						1.8
8	8J6L						
9	8J7U						
A	8J7L						
B							
C							
D							
E							
F							

Detector Assignments <E/126+Column+Row> <D/0+Column+Row>

Detector Attributes
1 = Full Time Delay
2 = Ped Call
3 =
4 = Count
5 = Extension
6 = Type 3
7 = Calling
8 = Alternate

Det. Assignments
1 = Det. Set 1
2 = Det. Set 2
3 = Det. Set 3
4 =
5 =
6 = Failure - Min Recall
7 = Failure - Max Recall
8 = Report on Failure

Program Type:

	Ped / Phase / Overlap 1	2	3	4	5	6	7	8	Row
Walk									0
Don't Walk									1
Phase Green									2
Phase Yellow									3
Phase Red									4
Overlap Green									5
Overlap Yellow									6
Overlap Red									7

Redirect Phase Outputs <E/127+Column+Row>

Cabinet Type	30

<E/125+D+0>

Enable Redirection
(Enable Redirection = 30)

Max OFF (minutes)	5	<D/0+0+1>
Max ON (minutes)	60	<D/0+0+2>

Detector Failure Monitor

	D	Row
		0
Output Port 1		1
Output Port 2		2
Output Port 3		3
Output Port 4		4
Output Port 5		5
Output Port 6		6
Output Port 7		7

Dimming <E/125+D+Row>

	D
Number of Digits	
1 st Digit	
2 ed Digit	
3 ed Digit	
4 th Digit	
5 th Digit	
6 th Digit	
7 th Digit	
8 th Digit	
9 th Digit	
10 th Digit	
11 th Digit	
12 th Digit	
13 th Digit	
14 th Digit	
15 th Digit	

<C/5+D+Row>

Dial-Back Telephone Number

Disable Alarms
1 = Stop Time
2 = Flash Sense
3 = Keyboard Entry
4 = Manual Plan
5 = Police Control
6 = External Alarm
7 = Detector Failure
8 =

	B	Row
DELAY-A	0	A
DELAY-B	0	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

<D/0+B+Row> (seconds)

Delay Logic Times

Omit Alarm	_____

<C/5+F+0>

Disable Alarm Reporting

Time	0	<C/5+C+0>

Redial Time (minutes)
(View Redial Timer at E/2+D+6

Row	Time	Plan	Offset	Day of Week
0	06 : 00	4	A	_23456_
1	10 : 30	3	A	_23456_
2	15 : 30	4	A	_23456_
3	19 : 00	2	A	1234567
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.1+Row>
(Bank 1)

Time	Funct.	Day of Week	Column 4 Phases/Bits

TOD Function <7/0.1+Row> <E/27+4+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.1+Row>
(Bank 1)

Time	Plan	Offset	Holiday Type	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

Holiday Events <9/1.1+Row>
(Bank 1)

T.O.D. Functions:
0 =
1 = Red Lock
2 = Yellow Lock
3 = Veh Min Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Lag Phases
E = Bit 1 - Local Override
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 8

Plan Select:
1 thru 9 = Coordination Plan 1 thru 9
14 or E = Free
15 or F = Flash

Month Select:
1 = January
2 = February
3 = March
4 = April
5 = May
6 = June
7 = July
8 = August
9 = September
A = October
B = November
C = December

Cycle Timer:
Master: C/0 + A + 0
Ring A: C/0 + B + 0
Ring B: C/0 + D + 0

Interval Timer:
Ring A: F/0 + A + Interval Row
Ring B: F/0 + B + Interval Row

Master Plan: C/0 + A + 2
Current Plan: C/0 + A + 3
TOD Plan: C/0 + A + 5

Row	Time	Plan	Offset	Day of Week
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Coordination <9/0.2+Row>
(Bank 2)

Time	Funct.	Holiday Type	Column 4 Phases/Bits

Holiday TOD Function <7/0.2+Row> <E/28+Row>

Row	Day	Year	Month	Holiday Type
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

Holiday Dates <8/1.2+Row>
(Bank 2)

Time	Plan	Offset	Holiday Type	Row
				0
				1
				2
				3
				4
				5
				6
				7
				8
				9
				A
				B
				C
				D
				E
				F

Holiday Events <9/1.2+Row>
(Bank 2)

Coord Extra
1 = Programmed WALK Time for Sync Phases
2 = Always Terminale Sync Phase Peds

Row	Plan Name --->	Plan 1	2	3	4	5	6	7	8	9
0	Cycle Length		80	105	90					
1	Phase 1 - ForceOff									
2	Phase 2 - ForceOff									
3	Phase 3 - ForceOff									
4	Phase 4 - ForceOff		41	50	50					
5	Phase 5 - ForceOff									
6	Phase 6 - ForceOff									
7	Phase 7 - ForceOff		41	50	50					
8	Phase 8 - ForceOff		23	25	25					
9	Ring Offset									
A	Offset 1		73	92	58					
B	Offset 2									
C	Offset 3									
D	Perm 1 - End		8	8	8					
E	Hold Release		255	255	255					
F	Zone Offset		0	0	0					

Coordination - Timing Plans <C/1+Plan+Row>

Row		E
0		
1	Plan 1 - Sync	
2	Plan 2 - Sync	_2_____
3	Plan 3 - Sync	_2_____
4	Plan 4 - Sync	_2_____
5	Plan 5 - Sync	
6	Plan 6 - Sync	
7	Plan 7 - Sync	
8	Plan 8 - Sync	
9	Plan 9 - Sync	
A	NEMA Sync	
B	NEMA Hold	
C		
D		
E	Coord Extra	
F		

Sync Phases <C/1+E+Row>

Row										
0	Ped Adjustment									
1	Perm 2 - Start									
2	Perm 2 - End									
3	Perm 3 - Start									
4	Perm 3 - End									
5	Reservice Time									
6	Reservice Phases									
7										
8	Pretimed Phases									
9	Max Recall									
A	Perm 1 Veh Phase									
B	Perm 1 Ped Phase									
C	Perm 2 Veh Phase									
D	Perm 2 Ped Phase									
E	Perm 3 Veh Phase									
F	Perm 3 Ped Phase									

Coordination - Parameters <C/2+Plan+Row>

Row		F
0	Free Lag	_2_4__7_
1	Plan 1 - Lag	
2	Plan 2 - Lag	_2_4__7_
3	Plan 3 - Lag	_2_4__7_
4	Plan 4 - Lag	_2_4__7_
5	Plan 5 - Lag	
6	Plan 6 - Lag	
7	Plan 7 - Lag	
8	Plan 8 - Lag	
9	Plan 9 - Lag	
A	External Lag	
B		
C		
D		
E		
F		

Lag Phases <C/1+F+Row>

Coordination Timing By:

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Spec. Funct. 1		NOT-3		Max 2		Pretimed		Set Monday		Dial 2 (7-Wire)		Sim Term		0
1	Spec. Funct. 2		NOT-4		System Det 1		Plan 1		Ext. Perm 1		Dial 3 (7-Wire)		EV-A	71	1
2	Spec. Funct. 3		OR-4 (a)		System Det 2		Plan 2		Ext. Perm 2		Offset 1 (7-Wire)		EV-B	72	2
3	Spec. Funct. 4		OR-4 (b)		System Det 3		Plan 3		Dimming		Offset 2 (7-Wire)		EV-C	73	3
4	NAND-3 (a)		OR-5 (a)		System Det 4		Plan 4		Set Clock		Offset 3 (7-Wire)		EV-D	74	4
5	NAND-3 (b)		OR-5 (b)		System Det 5		Plan 5		Stop Time	82	Free (7-Wire)		RR-1	51	5
6	NAND-4 (a)		OR-6 (a)		System Det 6		Plan 6		Flash Sense	81	Flash (7-Wire)		RR-2	52	6
7	NAND-4 (b)		OR-6 (b)		System Det 7		Plan 7		Manual Enable		Excl. Ped Omit		Spec. Event 1		7
8	OR-7 (a)		Fig 3 Diamond		System Det 8		Plan 8		Man. Advance		NOT-1		Spec. Event 2		8
9	OR-7 (b)		Fig 4 Diamond		Max Inhibit (nema)		Plan 9		External Alarm		NOT-2		External Lag		9
A	OR-7 (c)		AND-4 (a)		Force A (nema)		DELAY-A		Phase Bank 2		OR-1 (a)		AND-1 (a)		A
B	OR-7 (d)		AND-4 (b)		Force B (nema)		DELAY-B		Phase Bank 3		OR-1 (b)		AND-1 (b)		B
C	OR-8 (a)		NAND-1 (a)		C.N.A. (nema)		DELAY-C		Overlap Set 2		OR-2 (a)		AND-2 (a)		C
D	OR-8 (b)		NAND-1 (b)		Hold (nema)		DELAY-D		Overlap Set 3		OR-2 (b)		AND-2 (b)		D
E	OR-8 (c)		NAND-2 (a)		Max Recall		DELAY-E		Detector Set 2		OR-3 (a)		AND-3 (a)		E
F	OR-8 (d)		NAND-2 (b)		Min Recall		DELAY-F		Detector Set 3		OR-3 (b)		AND-3 (b)		F

Assignable Inputs <E/126+Column+Row>

Row	Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Phase ON - 1		Preempt Fail		Flasher 0		Free		NOT-1		TOD Out 1		Dial 2 (7-Wire)		0
1	Phase ON - 2		Sp Evnt Out 1		Flasher 1		Plan 1		OR-1		TOD Out 2		Dial 3 (7-Wire)		1
2	Phase ON - 3		Sp Evnt Out 2		Fast Flasher		Plan 2		OR-2		TOD Out 3		Offset 1 (7-Wire)		2
3	Phase ON - 4		Sp Evnt Out 3		Fig 3 Diamond		Plan 3		OR-3		TOD Out 4		Offset 2 (7-Wire)		3
4	Phase ON - 5		Sp Evnt Out 4		Fig 4 Diamond		Plan 4		AND-1		TOD Out 5		Offset 3 (7-Wire)		4
5	Phase ON - 6		Sp Evnt Out 5				Plan 5		AND-2		TOD Out 6		Free (7-Wire)		5
6	Phase ON - 7		Sp Evnt Out 6				Plan 6		AND-3		TOD Out 7		Flash (7-Wire)	81	6
7	Phase ON - 8		Sp Evnt Out 7				Plan 7		NOT-2		TOD Out 8		Preempt		7
8	Ph. Check - 1		Sp Evnt Out 8		NOT-3		Plan 8		EV-A		Adv. Warn - 1		Low Priority A		8
9	Ph. Check - 2				NOT-4		Plan 9		EV-B		Adv. Warn - 2		Low Priority B		9
A	Ph. Check - 3		Detector Fail		OR-4		Spec. Funct. 3		EV-C		DELAY-A		Low Priority C		A
B	Ph. Check - 4		Spec. Funct. 1		OR-5		Spec. Funct. 4		EV-D		DELAY-B		Low Priority D		B
C	Ph. Check - 5		Spec. Funct. 2		OR-6		NAND-3		RR-1		DELAY-C				C
D	Ph. Check - 6		Central Control		AND-4		NAND-4		RR-2		DELAY-D				D
E	Ph. Check - 7		Excl. Ped DW		NAND-1		OR-7		Spec. Event 1		DELAY-E				E
F	Ph. Check - 8		Excl. Ped WK		NAND-2		OR-8		Spec. Event 2		DELAY-F				F

Assignable Outputs <E/127+Column+Row>

Min Time (seconds) | | <F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes) | | <F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds) | | <F/1+0+A>

Min Time Between Same Preempts

(Does Not Apply To Railroad Preempt)

Low Pri. Channel | | <E/125+C+8>

Disable Low Priority Channel

Low Priority
1 = Channel A
2 = Channel B
3 = Channel C
4 = Channel D

Delay Time (seconds) | 0 | <F/1+A+D>

Bus Delay

Max Time (seconds) | 8 | <F/1+A+E>

Max Early Green

Max Time (seconds) | 8 | <F/1+A+F>

Max Green Extension

Row	Time	Headway	Direction	Day of Week
0	05 : 30	A	A	1234567
1	05 : 30	A	C	1234567
2	:			
3	:			
4	:			
5	:			
6	:			
7	:			
8	:			
9	:			
A	:			
B	:			
C	:			
D	:			
E	:			
F	:			

Headway <C+0+9=2.1>

Headway Time
(minutes)
1 thru 9 = 1 thru 9
A = 10
B = 11
C = 12
D = 13
E = 14
F = 15

Low Priority Preemption (Bus Priority)

Only available with *Program 233RV2.B* (and above)

Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

INTERSECTION: Sea World Dr @ Friars Rd

Group Assignment: Field Master Assignment

N/S Street Name: Friars
E/W Street Name: Sea World

Last Database Change:
System Ref. Number:

57

Row	Phase 1	Phase 2	Phase 3	Phase 4	Phase 5	Phase 6	Phase 7	Phase 8
	Sea World					Sea World		Friars
0	Ped Walk	7						7
1	Ped FDW	21						20
2	Min Green	4	7			7		4
3	Type 3 Limit							
4	Add/Veh							
5	Veh Extn	2.0	4.0			5.2		2.0
6	Max Gap	2.0	4.0			5.2		2.0
7	Min Gap	2.0	0.2			0.2		2.0
8	Max Limit	30	60			60		40
9	Max Limit 2							
A	Bus Adv							
B	Dall to Phs							
C	Reduce By		0.1			0.1		
D	Every		0.8			0.6		
E	Yellow	3.4	5.2			4.4		5.2
F	Red Clear	1.0	1.0			1.0		1.0
	Grade							

Phase Timing - Bank 1
F + Phase + Row

<F Page>

		Row
RR-1 Delay		
RR-1 Clear		
EV-A Delay		
EV-A Clear		
EV-B Delay		
EV-B Clear		
EV-C Delay		
EV-C Clear		
EV-D Delay		
EV-D Clear		
RR-2 Delay		
RR-2 Clear		
View EV Delay	---	
View EV Clear	---	
View RR Delay	---	
View RR Clear	---	

Preempt Timing
F + E + Row

		Row
Permit	12 6 3	0
Rest Lock		1
Yellow Lock		2
Min Recall	2 6	3
Ped Recall		4
Peds (View)	2 8	5
Rest in Walk		6
Red Rest		7
Dbl Entry		8
Max Recall		9
Soft Recall		A
Max 2		B
Cond Serv		C
Ped Lock	12345678	D
Yellow Stop	2 6	E
Ist Phases	8	F

Phase Functions <F Page>
F + F + Row

Max Initial	0	F + 0 + E
Red Revert	5.0	F + 0 + F
Alt Red Start	0.0	F + C + C

Start / Revert Times

Drop Number		C + C + 0
Zone Number		C + C + 1
Area Number		C + C + 2
Area Address		C + C + 3
Quickset Channel		(Quickset)

Communication Addresses

Overlap Timing

	Row	Green Clear	Yellow Change	Red Clear	Load-Switch #
Overlap A					
Overlap B					
Overlap C					
Overlap D					

<F Page>
F + COLOR +

<D Page>
D + D + OVERLAP

Manual Plan	14	C + 4 + 1
Manual Offset	0	C + 5 + 1

Manual Selection

Manual Plan
0 = Automatic
1-9 = Plan 1-9
10 = Free
15 = Flash

Manual Offset
0 = Automatic
1 = Offset A
2 = Offset B
3 = Offset C

C + F + C		Row
Free Lap	2 6 8	0

Lag Phases <C Page>

Downtime Flash	255	(minutes)

Downtime Before Auto Manual Flash
0 + C + 8

Disable Ports	234

Disable Communication Ports
C + D + 9

Timing Sheet By: FLC
Approved By: EFF
Drawing Number:
Timing Ir

Row	1 Delay	3 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	1I1	14
	2I2U	1
	2I2L	5
	2I3U	21
	2I3L	25
	2I4	9
	3I5	16
	4I6U	3
	4I6L	7
	4I7U	23
	4I7L	27
	4I8	11
	1I9U	18
	3I9L	20
---	---	---
---	---	---

Row	2 Delay	4 Carry-over
0		
1		1.8
2		
3		
4		
5		
6		
7		
8		
9		
A		
B		
C		
D		
E	---	---
F	---	---

Detector Name	332 Input File	Detector Number
	5J1	13
	6J2U	2
	6J2L	6
	6J3U	22
	6J3L	26
	6J4	10
	7J5	15
	8J6U	4
	8J6L	8
	8J7U	24
	8J7L	28
	8J8	12
	5J9U	17
	7J9L	19
---	---	---
---	---	---

Detector Delay & Carryover <D Page>

D → X (across) → ROW

Row	Detector Numbers	E
A	1 2 3 4 5 6 7 8	12345678
B	9 10 11 12 -- -- -- --	1234____
C	13 14 15 16 17 18 19 20	12345678
D	-- -- -- -- 21 22 23 24	____5678
E	-- -- -- -- -- -- -- --	1234____
F	-- 25 26 27 28 -- -- --	2345___

Active Detectors <D Page>

Row		6 Detector #
0		
1	System Det. # 1	
2	System Det. # 2	
3	System Det. # 3	
4	System Det. # 4	
5	System Det. # 5	
6	System Det. # 6	
7	System Det. # 7	
8	System Det. # 8	

System Detectors <D Page>

Max ON (min)	5	D+A+E
Max OFF (min)	60	D+A+F

Detector Failure Monitor

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 1

Phase Number		F+D+1
Time Before Yellow		F+D+3

Advance Warning Beacon - Sign 2

Long Failure	0.5	F+D+6
Short Failure	0.5	F+D+7

Power Cycle Correction (Default = 0.5)

PHASE TIMING

200 SA 1.e

INTERVAL		1	2	3	4	5	6	7	8	PREEMPT	E	
WALK	0		7						7	RR 1 DELAY		0
FLASH D/W	1		21						20	RR 1 CLEAR		1
MIN GREEN	2	4	7				7		4	EVA DELAY		2
TYPE 3 DET	3									EVA CLEAR		3
ADD PER VEH	4									EVB DELAY		4
VEH EXTN *	5	2.0	2.1				3.5		2.0	EVB CLEAR		5
MAX GAP *	6	2.0	2.1				3.5		2.0	EVC DELAY		6
MIN GAP *	7	2.0	0.2				0.2		2.0	EVC CLEAR		7
MAX EXTN	8	30	60				60		40	EVD DELAY		8
MAX 2	9									EVD CLEAR		9
SUS LEAD	A									RR2 DELAY		A
CALL TO PHS	B									RR 2 CLEAR		B
REDUCE BY	C		0.1				0.1			EV CLR TMR		C
EVERY	D		1.2				0.7			EV DLY TMR		D
YELLOW	E	3.0	~~5.5~~ 5.4				~~4.0~~ 4.4		5.0	RR CLR TMR		E
RED CLEAR	F	1.0	1.0				1.0		1.0	RR DLY TMR		F

F + PHASE + LOCATION

* Must be the same for non-density operation

MAX INITIAL (F-0-E) _____ RED REVERT (F-0-F) 5.0 ALL-RED START (F-C-0) 0.0

PHASE FUNCTION FLAGS

		PHASE 1	2	3	4	5	6	7	8
PERMIT	0	X	X				X		X
RED LOCK	1								
YELLOW LOCK	2								
VEHICLE RECALL	3		X				X		
PED RECALL	4								
PEDS (VIEW)	5								
REST IN WALK	6								
RED REST	7								
DOUBLE ENTRY	8								
MAX RECALL	9								
SOFT RECALL	A								
MAX 2	B								
COND SERVICE	C								
	D								
START-UP	E		X				X		
FIRST PHASES	F								X

F + F + FUNCTION #

OVERLAP TIMING

	LOAD SWITCH	GREEN B	YELLOW C	RED D
OLAP A				
OLAP B				
OLAP C				
OLAP D				

D + O + OVERLAP

F + COLOR + OVERLAP

PHASE SEQUENCE

	PHASE 1	2	3	4	5	6	7	8
LAG 0 (FREE)		X		X		X		X

C + F + O

MANUAL (C-A-1) 14

ADDRESS (C-0-0) _____

TURN-ON DATE:

TIME:

DRAWING NO. D- 13352-18

LAST CHANGE: 04-08-1997

BY: MLG

LOCATION FRIARS ROAD & SEA WORLD DRIVE

DETECTOR TIMES

Y \ X	1 (SET DELAY)	2 (SET CARRY)	3 (OBS COUNT)	4 (OBS DELAY)	5 (OBS CARRY)	6	7	8	9	A
0	[illegible]	[illegible]	[illegible]	[illegible]						
1	[illegible]	[illegible]	1.8	1.8						
2	[illegible]	[illegible]	[illegible]	[illegible]						
3	[illegible]	[illegible]	[illegible]	[illegible]						
4	[illegible]	[illegible]	[illegible]	[illegible]						
5	[illegible]	[illegible]	[illegible]	[illegible]						
6	[illegible]	[illegible]	[illegible]	[illegible]						
7	[illegible]	[illegible]	[illegible]	[illegible]						
8	[illegible]	[illegible]	[illegible]	[illegible]						
9	[illegible]	[illegible]	[illegible]	[illegible]						
A	[illegible]	[illegible]	[illegible]	[illegible]						
B	[illegible]	[illegible]	[illegible]	[illegible]						
C	[illegible]	[illegible]	[illegible]	[illegible]						
D	[illegible]	[illegible]	[illegible]	[illegible]						

D + X (ACROSS) + Y (DOWN)

TO ACCESS CONFIGURATION DATA, SET F-9-E = 1

TIME OF DAY FEATURES

EVENT	TIME	FUNC	DAY OF WEEK S	M	T	W	T	F	S
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									

7 + EVENT #

PHASE OR FUNCTION

1	2	3	4	5	6	7	8

D + F + EVENT

TIME OF DAY FUNCTION CODES

0-PERMIT
1-RED LOCK
2-YELLOW LOCK
3-VEH RECALL
4-PED RECALL
5-(RESERVED)
6-REST IN WALK
7-RED REST
8-DBL ENTRY
9-VEH MAX RCL
A-SOFT RCL
B-MAX 2 EXT
C-COND SERV
D-TOD LAG PHS

E-1-LOCAL OVERRIDE
2-PHASE BANK 2
3-PHASE BANK 3
7-DET COUNT
8-SPLIT MONITOR

F - TOD OUTPUTS
1- TOD OUTPUT 1
2- TOD OUTPUT 2
3- TOD OUTPUT 3
4- TOD OUTPUT 4

TIME AND DATE

8 - 0 HOUR, MINUTE, DAY-OF-WEEK
8 - 1 DAY-OF-MONTH, YEAR, MONTH
8 - F SECONDS

CONFIGURATION DATA

	E	PHASE 1	2	3	4	5	6	7	8
EXCLUSIVE	0								
RR1 GN CLR	1								
RR2 GRN CLR	2								
RR2 LTD SRV	3								
PRO/PERM	4								
OLA GN OMIT	5								
OLB GN OMIT	6								
OLC GN OMIT	7								
OLD GN OMIT	8								
OV FL YELLOW	9								
EMVEH A	A								
EMVEH B	B								
EMVEH C	C								
EMVEH D	D								
EXTRA	E	X		X					
ID SELECT	F		X						

E + E + INTERVAL

EXTRA (E+E+E)
1-TBC TYPE 1
2-NEMA COORD
3-DAYLIGHT SAVINGS
4-EV ADVANCE
5-REMOTE EVP
6-SPECIAL EVENT
7-PRETIMED
8-SPLIT RING

ICSELECT (E+E+F)
1-SIMPLEX IN
2-2 WAY MODEM
3-7 WIRE IN
4-FLW/FREE
5-SIMPLEX OUT
6-7 WIRE OUT

ASSIGNS (E+F+F)
1-RT OVERLAP
2-TOD OUTPUTS
3-STEADY EV BEACON
4-FLASH EV BEACON

CONFIGURATION DATA

	F	PHASE 1	2	3	4	5	6	7	8
	0								
RR OLAP A	1								
RR OLAP B	2								
RR OLAP C	3								
RR OLAP D	4								
PED 2P	5		X						
PED 6P	6								
PED 4P	7								
PED 6P	8							X	
FLH YELLOW	9								
OVERLAP A	A							X	
OVERLAP B	B								
OVERLAP C	C								
OVERLAP D	D								
RESTRICT	E								
ASSIGNS	F	X							

E + F + INTERVAL

LOCATION	FRIARS ROAD & SEA WORLD DRIVE

INTERSECTION: Sea World Dr @ Friars Rd

223 P ram

Row	Time	Function	Day of Week	Column E: Phases/Bks
0				
1				
2				
3				
4				
5				
6				
7				
8				
9				
A				
B				
C				
D				
E				
F				

TOD Function

7 + ROW

<D Page>

D + F + ROW

T.O.D. Functions
0 = Permitted Phases
1 = Red Lock
2 = Yellow Lock
3 = Veh Max Recall
4 = Ped Recall
5 =
6 = Rest In Walk
7 = Red Rest
8 = Double Entry
9 = Veh Max Recall
A = Veh Soft Recall
B = Maximum 2
C = Conditional Service
D = Free Leg Phases
E = Bit 1 - Local Override
Bit 2 - Phase Bank 2
Bit 3 - Phase Bank 3
Bit 4 - Disable Detector OFF Monitor
Bit 7 - Detector Count Monitor
Bit 8 - Real Time Split Monitor
F = Output Bits 1 thru 4

Row		F
0		
1	RR Overlap A - Phases	
2	RR Overlap B - Phases	
3	RR Overlap C - Phases	
4	RR Overlap D - Phases	
5	Ped 2P	2
6	Ped 6P	
7	Ped 4P	
8	Ped 8P	8
9	Yellow Flash Phases	
A	Overlap A - Phases	8
B	Overlap B - Phases	
C	Overlap C - Phases	
D	Overlap D - Phases	
E	Restricted Phases	
F	Assign 5 Outputs	1

Configuration

<E Page>

E + F + ROW

Day of Week

1 = Sunday
2 = Monday
3 = Tuesday
4 = Wednesday
5 = Thursday
6 = Friday
7 = Saturday

Row		E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Overlap A - Green Omit	
6	Overlap B - Green Omit	
7	Overlap C - Green Omit	
8	Overlap D - Green Omit	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	
C	EV-C Phases	
D	EV-D Phases	
E	Extra 1 Config. Bits	1 34
F	IC Select (Interconnect)	2

Configuration

For access, set F + 9 + E = 1

E + E + ROW

Extra 1 Flags
1 = TSC Type 1
2 = NEMA Ext. Coord
3 = Auto Daylight Savings
4 = EV Advance
5 = Remote Download
6 = Special Event
7 = Preemed Operation
8 = Split Ring Operation

Assign 5 Outputs
1 = Right Turn Overlap
2 = TOD Outputs
3 = EV Beacon - Steady
4 = EV Beacon - Flashing
5 = Special Event Outputs
6 = Phase 3 & 7 Ped
7 = Advanced Warning Sign
8 =

IC Select Flags
1 =
2 = Modem
3 = 7-Wire Slave
4 = Flash / Free
5 =
6 = Simplex Master
7 = 7-Wire Master
8 = Offset Interrupter

Time and Date

8-0 Hour, Minute, Day-of-Week
8-1 Day-of-Month, Year, Month
8-F Seconds

Disable Parity	0

D-8-0

Dial-Up Telephone Communications

(If set to a non-zero value, parity will be disabled)

Program Information

C + C + 0 = program
C + C + F = version

Remote Download

C + D + 4 = 1-255
w/ E + E + E bit 5 on

LOCATION: RTE 5 SB / SEA WORLD DRIVE

CALTRANS C8 Version 3 DATE: 8/4/2010

F PAGE

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	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9	PRE-EMPTION E		F FLAGS	1	2	3	4	5	6	7	8	
0	WALK	1	7	7	1	1	1	1	1	CLK RST	EV SEL	0	PERMIT	1	2	3	4	5	6	7	8	0
1	DONT WALK	1	10	10	1	1	1	1	1		RR1 CLR	5	RED LOCK	1			4					1
2	MIN GREEN	5	14	5	5	1	13	1	1		EVA DLY	0	YEL LOCK									2
3	TYPE 3 DET	0	0	0	0	0	0	0	0		EVA CLR	5	V RECALL		2				6			3
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		EVB DLY	0	P RECALL									4
5	PASSAGE	2.0	2.0	0.9	1.0	0.9	2.0	0.9	0.9		EVB CLR	5	PED PHASES		2	3						5
6	MAX GAP	3.0	2.0	0.9	1.0	0.9	2.0	0.9	0.9		EVC DLY	0	RT OLA									6
7	MIN GAP	1.0	2.0	0.9	1.0	0.9	2.0	0.9	0.9		EVC CLR	5	RT OLB									7
8	MAX EXT	30	30	20	30	9	30	9	9		EVD DLY	0	DBL ENTRY									8
9	MAX 2									YR	EVD CLR	5	MAX 2 PHASES									9
A	MAX 3									MO	MAX EV	255	LAG PHASES	READ ONLY								A
B										DAY	RR2 CLR	5	RED REST									B
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW			REST-IN-WALK									C
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR			MAX 3 PHASES									D
E	YELLOW	3.2	4.0	3.0	3.6	3.0	4.0	3.0	3.0	MIN			YEL START UP		2				6			E
F	RED	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	SEC			FIRST PHASE				4					F
	PED XING FT		49	38										1	2	3	4	5	6	7	8	
	BIKE XING FT		101				90															

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5
FCO	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0
FD0 TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1
CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

NOTES:

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: RTE 5 SB / SEA WORLD DRIVE

CALTRANS C8 Version 3 DATE: 9/28/2004 PAGE 2

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE	FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E	F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH	60	75	100	100	100	100								LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR	10	15	15	15	15	20							GAPOUT CP1	LAG FZ CP 1	1		3			6		8	1
2														GAPOUT CP2	LAG FZ CP 2	1		3			6		8	2
3	FZ3 GRN FCTR	14	14	14	14	14	14							GAPOUT CP3	LAG FZ CP 3	1		3			6		8	3
4	FZ4 GRN FCTR	15	20	30	30	25	25				PERM TIME			GAPOUT CP4	LAG FZ CP 4	1		3			6		8	4
5	FZ5 GRN FCTR	0	0	0	0	0	0				LAG OFFSET			GAPOUT CP5	LAG FZ CP 5	1		3			6		8	5
6											FORCE OFF			GAPOUT CP6	LAG FZ CP 6	1		3			6		8	6
7	FZ7 GRN FCTR	0	0	0	0	0	0				LONG GRN			GAPOUT CP7	LAG FZ CP 7									7
8	FZ8 GRN FCTR	0	0	0	0	0	0				NO GREEN			GAPOUT CP8	LAG FZ CP 8									8
9	MULTI CYCLE	0	0	0	0	0	0							GAPOUT CP9	LAG FZ CP 9									9
A	OFFSET A	0	0	0	0	0	0				OFFSET				LAG C COORD									A
B	OFFSET B														LAG D COORD									B
C	OFFSET C														COORD PAZES		2				6			C
D	FZ 3 EXT																							D
E	FZ 7 EXT																							E
F	OFFSET INTRPT																							F
																1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:
RTE 5 NB RAMP

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		1
2		
3		
4		
5		
6		
7		
8		

COO = 1

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: RTE 5 SB / SEA WORLD DRIVE

CALTRANS C8 Version 3 DATE: 8/5/2003

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1	1			4					CP 1								
2	CP 2									CP 2	1			4					CP 2								
3	CP 3									CP 3	1			4					CP 3								
4	CP 4									CP 4	1			4					CP 4								
5	CP 5									CP 5	1			4					CP 5								
6	CP 6									CP 6	1			4					CP 6								
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED			3						6
7										4 PED				4					7
8										8 PED								8	8
9																			9
A	OLA NOT			3						OLA ON	1	2		4		6			A
B	OLB NOT				4					OLB ON	1	2	3			6			B
C	OLC NOT	1			4					OLC ON		2	3			6			C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: RTE 5 SB / SEA WORLD DRIVE

CALTRANS C8 Version 3 DATE: 8/5/2003

7 PAGE

TIME OF DAY ACTIVITY TABLE										
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS										
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0	06	00	1	A		2	3	4	5	6	
1	07	00	2	A		2	3	4	5	6	
2	07	30	3	A		2	3	4	5	6	
3	08	00	2	A		2	3	4	5	6	
4	09	30	6	A		2	3	4	5	6	
5	15	30	4	A		2	3	4	5	6	
6	18	00	2	A		2	3	4	5	6	
7	18	30	E			2	3	4	5	6	
8	15	00	5	A	1						7
9	19	00	E		1						7
A											
B											
C											
D											
E											
F											

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R20.3/R30.0	113	137

REGISTERED CIVIL ENGINEER

3-15-93
PLANS APPROVAL DATE

F. G. CASTRO 34424 Exp. 9-30-94 CIVIL STATE OF CALIFORNIA

JHK & ASSOCIATES
8989 RIO SAN DIEGO DR.
SUITE 335
SAN DIEGO, CA 92108

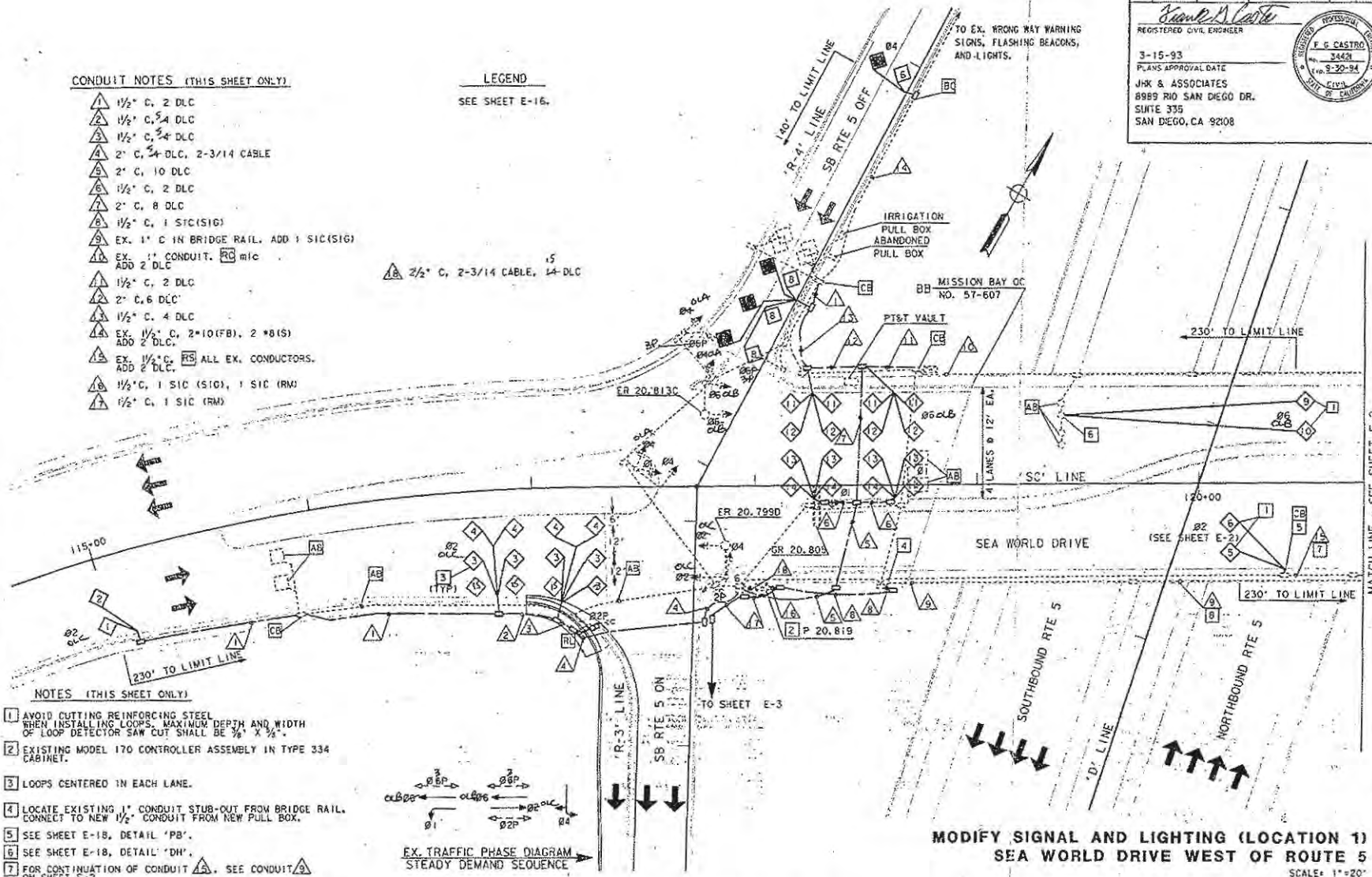
CONDUIT NOTES (THIS SHEET ONLY)

1. 1½" C, 2 DLC
2. 1½" C, 5/4 DLC
3. 1½" C, 5/4 DLC
4. 2" C, 5/4 DLC, 2-3/14 CABLE
5. 2" C, 10 DLC
6. 1½" C, 2 DLC
7. 2" C, 8 DLC
8. 1½" C, 1 SIC(SIG)
9. EX. 1" C IN BRIDGE RAIL. ADD 1 SIC(SIG)
10. EX. 1" CONDUIT. RC mic ADD 2 DLC
11. 1½" C, 2 DLC
12. 2" C, 6 DLC
13. 1½" C, 4 DLC
14. EX. 1½" C, 2-#10(FB), 2 #8(S) ADD 2 DLC.
15. EX. 1½" C. RS ALL EX. CONDUCTORS. ADD 2 DLC.
16. 1½" C, 1 SIC (SIG), 1 SIC (RM)
17. 1½" C, 1 SIC (RM)

18. 2½" C, 2-3/14 CABLE, 15/14 DLC

LEGEND

SEE SHEET E-16.



NOTES (THIS SHEET ONLY)

1. AVOID CUTTING REINFORCING STEEL WHEN INSTALLING LOOPS. MAXIMUM DEPTH AND WIDTH OF LOOP DETECTOR SAW CUT SHALL BE ⅜" X ⅜".
2. EXISTING MODEL 170 CONTROLLER ASSEMBLY IN TYPE 334 CABINET.
3. LOOPS CENTERED IN EACH LANE.
4. LOCATE EXISTING 1" CONDUIT STUB-OUT FROM BRIDGE RAIL. CONNECT TO NEW 1½" CONDUIT FROM NEW PULL BOX.
5. SEE SHEET E-18, DETAIL 'PB'.
6. SEE SHEET E-18, DETAIL 'DH'.
7. FOR CONTINUATION OF CONDUIT 15, SEE CONDUIT 9 ON SHEET E-2.
8. FOR CONTINUATION OF CONDUIT 9, SEE CONDUIT 8 ON SHEET E-2.

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

MODIFY SIGNAL AND LIGHTING (LOCATION 1) SEA WORLD DRIVE WEST OF ROUTE 5

SCALE: 1"=20'

EXISTING SIGNAL NO. P20.819

E-1

CU	11205	EA	085971

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC ELECTRICAL

DESIGN OVERSIGHT: JESSIE CABUGAO

CALCULATED/DESIGNED BY: BCS — DATE: 7/92 — REVISED BY
CHECKED BY: FGC — DATE: 7/92 — DATE REVISED

/usr/bobs/P48/b085971.dgn 18-MAR-1993 10:00 bobs

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

FORM DC-02-50-PF (REV. 3/88)

LOCATION: RTE 5 NB / SEA WORLD DRIVE
CALTRANS C8 Version 3 DATE: 8/4/2010
F PAGE

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	INTERVAL	PHASE TIMING 1	2	3	4	5	6	7	8	9	PRE-EMPTION E		F FLAGS	1	2	3	4	5	6	7	8	
0	WALK	1	7	1	1	19	7	1	1	CLK RST	EV SEL	0	PERMIT	1	2	3	4	5	6	7	8	0
1	DONT WALK	1	10	1	1	1	11	1	1		RR1 CLR	5	RED LOCK				4	5				1
2	MIN GREEN	1	10	1	5	5	14	1	5		EVA DLY	0	YEL LOCK									2
3	TYPE 3 DET	0	0	0	0	0	0	0	0		EVA CLR	5	V RECALL		2				6			3
4	ADD/VEH	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		EVB DLY	0	P RECALL									4
5	PASSAGE	0.9	2.0	0.9	1.0	2.0	2.0	0.9	1.0		EVB CLR	5	PED PHASES		2			5	6			5
6	MAX GAP	0.9	2.0	0.9	1.0	3.0	2.0	0.9	1.0		EVC DLY	0	RT OLA									6
7	MIN GAP	0.9	2.0	0.9	1.0	1.0	2.0	0.9	1.0		EVC CLR	5	RT OLB									7
8	MAX EXT	9	30	9	25	30	30	9	15		EVD DLY	0	DBL ENTRY				4				8	8
9	MAX 2									YR	EVD CLR	5	MAX 2 PHASES									9
A	MAX 3				40					MO	MAX EV	255	LAG PHASES	READ ONLY								A
B										DAY	RR2 CLR	5	RED REST									B
C	REDUCE BY	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	DOW			REST-IN-WALK									C
D	EVERY	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	HR			MAX 3 PHASES				4					D
E	YELLOW	3.0	4.0	3.0	3.6	3.2	4.0	3.0	3.5	MIN			YEL START UP		2				6			E
F	RED	1.0	1.5	1.0	1.0	1.0	1.5	1.0	1.0	SEC			FIRST PHASE				4					F
	PED XING FT		40				55							1	2	3	4	5	6	7	8	
	BIKE XING FT		50				197															

FOC LONG FAILURE	
FOD SHORT FAILURE	
FOE	0
FOF	5

FC0	3
FC1	3
FC2	10
FCA	0.0
FCB	0.0
FCC	0.0
FCD	0.0

FD0 TB SELECT	1
FD3 PED SELECT	0
FD4 7 WIRE	0
FD5 PERMISSIVE	0
FD8 OS SEEKING	1

CO5 FLASH TYPE	1
CC2 DOWNLOAD	1

ENTRIES IN THESE LOCATIONS ARE NOT TO BE CHANGED

ENTRIES IN THESE LOCATIONS CAN BE CHANGED IN CC1 FLASH ONLY

LOCATION: RTE 5 NB / SEA WORLD DRIVE

CALTRANS C8 Version 3 DATE: 8/5/2003

C PAGE

		CONTROL PLANS									Y-COORD			LAG PHASE		FLAGS									
		1	2	3	4	5	6	7	8	9		C	D	E		F	1	2	3	4	5	6	7	8	
0	CYCLE LENGTH	60	75	100	100	100	100									LAG FZ FREE		2		4		6		8	0
1	FZ1 GRN FCTR	0	0	0	0	0	0							GAPOUT CP1	1	LAG FZ CP 1		2		4	5			8	1
2														GAPOUT CP2	1	LAG FZ CP 2		2		4	5			8	2
3	FZ3 GRN FCTR	0	0	0	0	0	0							GAPOUT CP3	1	LAG FZ CP 3		2		4	5			8	3
4	FZ4 GRN FCTR	10	15	20	30	25	35				PERM TIME			GAPOUT CP4	0	LAG FZ CP 4		2		4	5			8	4
5	FZ5 GRN FCTR	20	25	35	30	40	25				LAG OFFSET			GAPOUT CP5		LAG FZ CP 5		2		4	5			8	5
6											FORCE OFF			GAPOUT CP6		LAG FZ CP 6		2		4	5			8	6
7	FZ7 GRN FCTR	0	0	0	0	0	0				LONG GRN			GAPOUT CP7		LAG FZ CP 7									7
8	FZ8 GRN FCTR	10	15	15	15	15	15				NO GREEN			GAPOUT CP8		LAG FZ CP 8									8
9	MULTI CYCLE	0	0	0	0	0	0							GAPOUT CP9		LAG FZ CP 9									9
A	OFFSET A	50	60	70	70	70	70				OFFSET					LAG C COORD									A
B	OFFSET B															LAG D COORD									B
C	OFFSET C															COORD FAZES		2				6			C
D	FZ 3 EXT																								D
E	FZ 7 EXT																								E
F	OFFSET INTRPT																								F
																	1	2	3	4	5	6	7	8	

CO1 MANUAL CP
CO2 MASTER CP
CO3 CURRENT CP
CO4 LAST CP
CO7 TRNSMT CP
COD MANUAL OFFSET
CAO LOCAL CYCLE TIMER
CBO MASTER CYCLE TIMER
CAA LOCAL OFFSET
CBA MASTER OFFSET

SYSTEM MASTER:
RT5 NB RAMP

FEATURE	OFF	ON
1		
2		
3		
4		
5		
6		
7		
8		

LOCATION	OFF	ON
1		
2		1
3		
4		
5		
6		
7		
8		

COO = 2

CCB/CDB OFFSET TIMER
CCC/CDC LAG GREEN TIMER
CCD/CDD FORCE OFF TIMER
CCE/CDE LONG GREEN TIMER
CCF/CDF NO GREEN TIMER

LOCATION: RTE 5 NB / SEA WORLD DRIVE

CALTRANS C8 Version 3 DATE: 8/5/2003

D PAGE

	D	FLAGS								E	FLAGS								F	FLAGS							
	MAX	1	2	3	4	5	6	7	8	MIN	1	2	3	4	5	6	7	8	PED	1	2	3	4	5	6	7	8
0	RCL									RCL									RCL								
1	CP 1									CP 1				4	5				CP 1					5			
2	CP 2									CP 2				4	5				CP 2					5			
3	CP 3									CP 3				4	5				CP 3								
4	CP 4					5				CP 4				4					CP 4								
5	CP 5					5				CP 5									CP 5								
6	CP 6									CP 6				4					CP 6					5			
7	CP 7									CP 7									CP 7								
8	CP 8									CP 8									CP 8								
9	CP 9									CP 9									CP 9								
A																			RCL 1								
B																			RCL 2								
C																											
D																											
E																											
F																											
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8

E PAGE

	E	FLAGS								F	FLAGS								
	FUNCTION	1	2	3	4	5	6	7	8	FUNCTION	1	2	3	4	5	6	7	8	
0										CODE 4									0
1										CODE 5									1
2										C-RECALL									2
3										D-RECALL									3
4										EXCLUSIVE									4
5										2 PED		2							5
6										6 PED						6			6
7										4 PED				4					7
8										8 PED					5				8
9																			9
A	OLA NOT									OLA ON									A
B	OLB NOT									OLB ON									B
C	OLC NOT									OLC ON									C
D	OLD NOT									OLD ON									D
E																			E
F																			F
		1	2	3	4	5	6	7	8		1	2	3	4	5	6	7	8	

LAST POWER FAILURE REGISTER

HOUR = D-A-E

MINUTE = D-B-E

DAY = D-C-E

RCL 1 = TIME OF DAY MAX RECALL (1ST SELECT) PHASES
(CALL ACTIVE LIGHTS)

RCL 2 = TIME OF DAY MAX RECALL (2ND SELECT) PHASES
(CALL ACTIVE LIGHTS)

LAST FLASH TIME REGISTER

HOUR = D-A-F

MINUTE = D-B-F

DAY = D-C-F

D-E-E = C8 VERSION NUMBER

D-E-F = LITHIUM BATTERY CONDITION

84 = BAD

85 = GOOD

LOCATION: RTE 5 NB / SEA WORLD DRIVE

CALTRANS C8 Version 3 DATE: 8/5/2003

7 PAGE

TIME OF DAY ACTIVITY TABLE											
7+EVENT+HR+MIN+ACT+"E"+ON/OFF+DOW LTS											
				ON/	S	M	T	W	T	F	S
	HR	MIN	ACT	OFF	1	2	3	4	5	6	7
0	06	00	3	X	1	2	3	4	5	6	7
1	19	00	3		1	2	3	4	5	6	7
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

ACTIVITY CODE

1 TYPE OF MAX TERMINATION
2 MAX 2
3 MAX 3
4 COND SERV (1ST SELECT)
5 COND SERV (2ND SELECT)
6 ENERGIZE AUX OUTPUT-RED

7 ENERGIZE AUX OUTPUT-GREEN

9 PAGE C09 = 0 or 1

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0	06	00	1	A		2	3	4	5	6	
1	07	00	2	A		2	3	4	5	6	
2	07	30	3	A		2	3	4	5	6	
3	08	00	2	A		2	3	4	5	6	
4	09	30	6	A		2	3	4	5	6	
5	15	30	4	A		2	3	4	5	6	
6	18	00	2	A		2	3	4	5	6	
7	18	30	E			2	3	4	5	6	
8	15	00	5		1						7
9	19	00	E		1						7
A											
B											
C											
D											
E											
F											

8 ENERGIZE AUX OUTPUT-YELLOW

9 TIME OF DAY MAX RECALL (1ST SELECT)
A TRAFFIC ACT. MAX 2 OPERATION
B TIME OF DAY MAX RECALL (2ND SELECT)
C YELLOW YIELD COORDINATION
D YELLOW YIELD COORDINATION
E TIME OF DAY FREE OPERATION
F FLASHING OPERATION

9 PAGE CO9 = 2

CONTROL PLAN TIME OF DAY											
9+EVENT+HR+MIN+CP+OS+E+DOW											
					S	M	T	W	T	F	S
	HR	MIN	CP	OS	1	2	3	4	5	6	7
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
A											
B											
C											
D											
E											
F											

DIST	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET NO.	TOTAL SHEETS
11	SD	5	R20.3/R30.0	114	137

REGISTERED CIVIL ENGINEER

3-15-93
PLANS APPROVAL DATE

JHK & ASSOCIATES
8989 RIO SAN DIEGO DR.
SUITE 335
SAN DIEGO, CA 92108

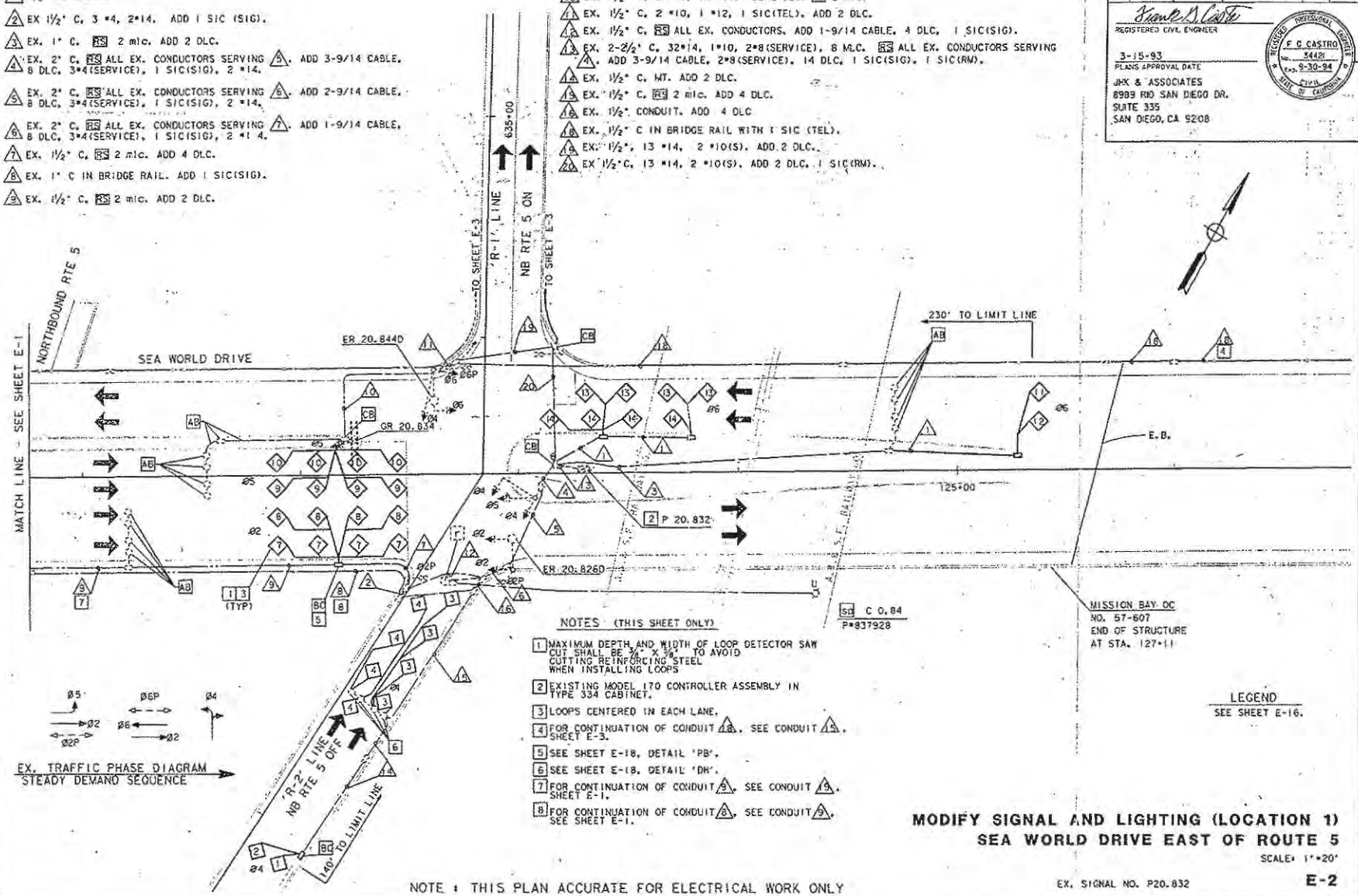
REGISTERED PROFESSIONAL ENGINEER F. C. CASTRO No. 34421 Exp. 9-30-94 Civil STATE OF CALIFORNIA

CONDUIT NOTES (THIS SHEET ONLY)

1. 1½" C. 2 DLC.
2. EX 1½" C. 3 #4, 2#14. ADD 1 SIC (SIG).
3. EX. 1" C. RS 2 mlc. ADD 2 DLC.
4. EX. 2" C. RS ALL EX. CONDUCTORS SERVING 8 DLC. 3#4(SERVICE). 1 SIC(SIG). 2 #14. ADD 3-9/14 CABLE.
5. EX. 2" C. RS ALL EX. CONDUCTORS SERVING 8 DLC. 3#4(SERVICE). 1 SIC(SIG). 2 #14. ADD 2-9/14 CABLE.
6. EX. 2" C. RS ALL EX. CONDUCTORS SERVING 8 DLC. 3#4(SERVICE). 1 SIC(SIG). 2 #14. ADD 1-9/14 CABLE.
7. EX. 1½" C. RS 2 mlc. ADD 4 DLC.
8. EX. 1" C IN BRIDGE RAIL. ADD 1 SIC(SIG).
9. EX. 1½" C. RS 2 mlc. ADD 2 DLC.

CONDUIT NOTES (THIS SHEET ONLY-CONTINUED)

10. EX. 1½" C. 2 #10, 10 #14. ADD 2 DLC. RS 2 mlc.
11. EX. 1½" C. 2 #10, 1 #12, 1 SIC(TEL). ADD 2 DLC.
12. EX. 1½" C. RS ALL EX. CONDUCTORS. ADD 1-9/14 CABLE. 4 DLC. 1 SIC(SIG).
13. EX. 2-2½" C. 32#14, 1#10, 2#8(SERVICE). 8 MLC. RS ALL EX. CONDUCTORS SERVING 4. ADD 3-9/14 CABLE. 2#8(SERVICE). 14 DLC. 1 SIC(SIG). 1 SIC(RM).
14. EX. 1½" C. MT. ADD 2 DLC.
15. EX. 1½" C. RS 2 mlc. ADD 4 DLC.
16. EX. 1½" CONDUIT. ADD 4 DLC
17. EX. 1½" C IN BRIDGE RAIL WITH 1 SIC (TEL).
18. EX. 1½", 13 #14, 2 #10(S). ADD 2 DLC.
19. EX 1½"C. 13 #14, 2 #10(S). ADD 2 DLC. 1 SIC(RM).



NOTES (THIS SHEET ONLY)

1. MAXIMUM DEPTH AND WIDTH OF LOOP DETECTOR SAW CUT SHALL BE ¾" X ¾" TO AVOID CUTTING REINFORCING STEEL WHEN INSTALLING LOOPS
2. EXISTING MODEL 170 CONTROLLER ASSEMBLY IN TYPE 334 CABINET.
3. LOOPS CENTERED IN EACH LANE.
4. FOR CONTINUATION OF CONDUIT 18, SEE CONDUIT 15, SHEET E-3.
5. SEE SHEET E-18, DETAIL 'PB'.
6. SEE SHEET E-18, DETAIL 'DH'.
7. FOR CONTINUATION OF CONDUIT 9, SEE CONDUIT 15, SHEET E-1.
8. FOR CONTINUATION OF CONDUIT 8, SEE CONDUIT 9, SEE SHEET E-1.

LEGEND
SEE SHEET E-16.

MODIFY SIGNAL AND LIGHTING (LOCATION 1)
SEA WORLD DRIVE EAST OF ROUTE 5

SCALE: 1"=20'

EX. SIGNAL NO. P20.832

E-2

NOTE : THIS PLAN ACCURATE FOR ELECTRICAL WORK ONLY

FOR REDUCED PLANS ORIGINAL SCALE IS IN INCHES 0 1 2 3

CU 11205 EA 085971

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans TRAFFIC ELECTRICAL
DESIGN OVERSIGHT JESSIE CABUGAO
CALCULATED/DESIGNED BY BCS DATE 2/93
CHECKED BY FGC DATE 2/93
REVISED BY DATE REVISED
LAST REVISION 02-18-93

FORM DC-OE-90-PF (REV. 3/88)