Appendix C:
Traffic Signal Data

Existing Signal Timing Plans

Existing Signal Timing Plans

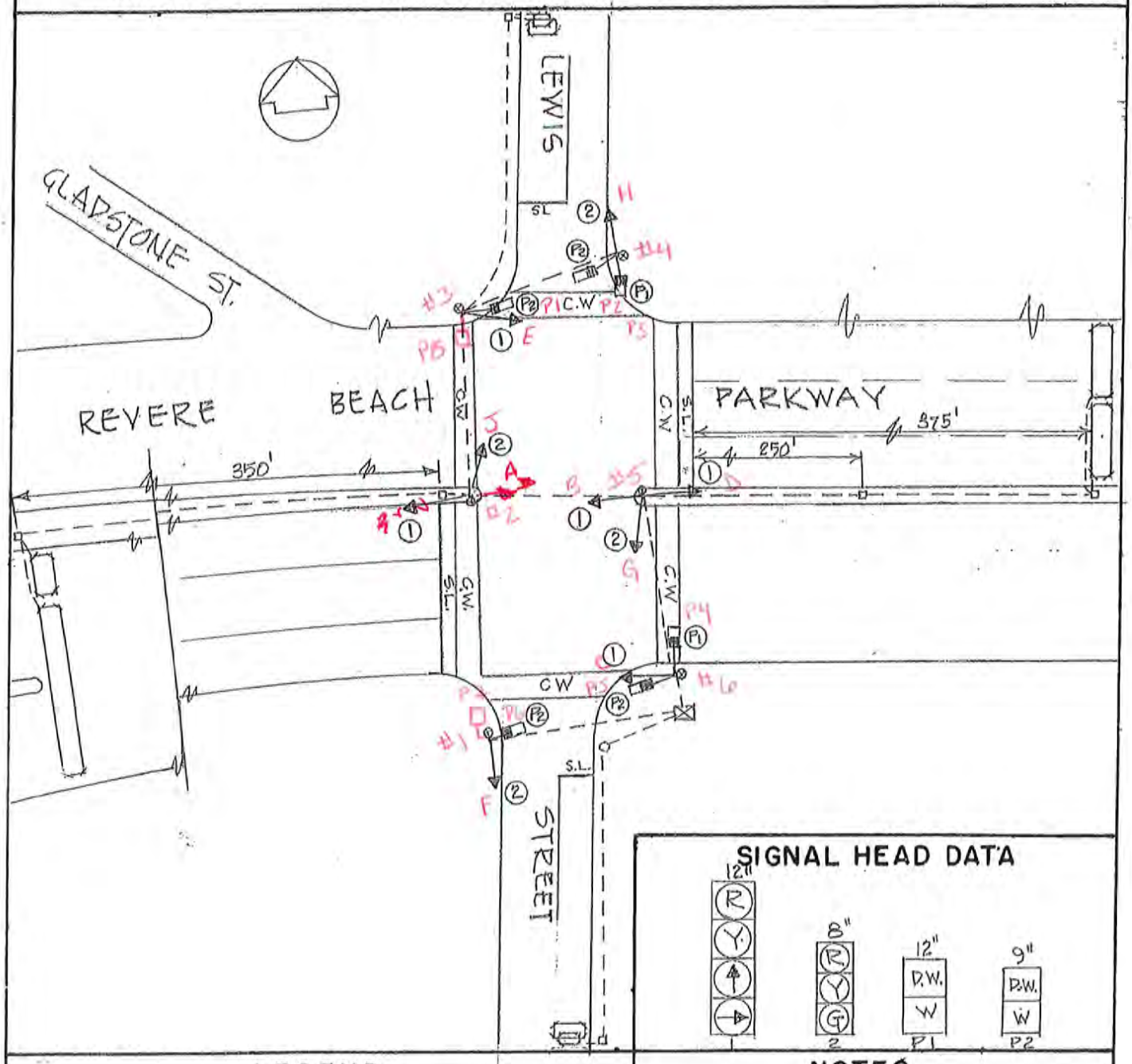
COMMONWEALTH OF MASSACHUSETTS

METROPOLITAN DISTRICT COMMISSION

TRAFFIC SIGNAL LAYOUT

REVERE BEACH PARKWAY AND LEWIS STREET, EVERETT

SCALE: 1" = 40' Traffic Control Device No. 212 DATE: MAY 27, 1976



SIGNAL HEAD DATA

LEGEND

VEHICLE SIGNAL	→	WOODEN POLE	○
PEDESTRIAN SIGNAL	—■	SIGNAL POST	•
CONTROL CABINET	⊠	MAST ARM	•—
LOOP DETECTOR	⬭	PULL BOX	□
MAGNETIC DETECTOR	Ⓜ	CONDUIT	— — —
PED. PUSH BUTTON	⊗	OVERHEAD CABLE	—·—·—
TRAFFIC SIGN	▶	ELECTRIC MANHOLE	○E.M.H.

NOTES

Traffic Signal Inventory

2. *Controller Data*

Eagle	Epac 300 M41	115402/OSS #090906
Manufacturer	**Model No.**	**Serial No.**

TYPE	CONDITION	CONTROLLER PHASE CAPABILITY
☐ Electromechanical ☐ Non-NEMA ☐ NEMA-Modular ☒ NEMA-Keyboard	☐ Good ☒ Fair ☐ Poor	☐ 2 Phase ☐ 4 Phase ☒ 8 Phase

CONTROLLER TYPE	SETTING TYPE
☐ Pretimed ☐ Actuated ☒ Semi-Actuated	☐ Pin ☐ Thumbwheel ☐ Dial ☒ Keyboard

BACKPANEL SIZE	LOAD SWITCHES INSTALLED/TYPE	FLASH TRANSFER RELAYS INSTALLED
12P	3 – SSS-87-I/O	2 – Struthers-Dunn

SOFTWARE LEVEL SIZE	CONFLICT MONITOR MODEL/SIZE
3.33e May 2006	EDI MMU – 16E

FLASHER	INTERCONNECT CABLE (If Yes, List Size)	COORDINATED (If Yes, complete section 9)
PDC 204	No	Yes

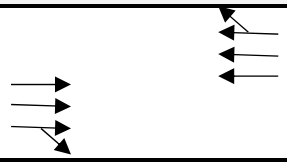
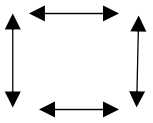
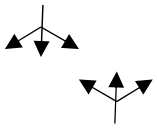
DETECTOR/AMPLIFIERS	QUANTITY/TYPE
1 – EDI LMD 622t (2-channel)	

Traffic Signal Inventory

7. Signal Timing Sheet

∅1 Route 16 EB/WB	∅2 Pedestrian	∅3 Lewis Street NB/SB
∅4	∅5	∅6
∅7	∅8	OLA
OLB	OLC	OLD

PHASE	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8
Minimum Green (initial)	20		12					
Extension (passage) Vehicle Interval	5		5					
Yellow	4	3	4					
Red Clear	2	1	1					
Maximum Green I	50		20					
Maximum Green II	50		20					
Pedestrian Walk		7						
Pedestrian Clear		28						
Seconds Per Act								
Time to Reduce								
Before Reduction								
Minimum Gap								
Pedestrian Gap								
Walk (flash/steady)								
Recall	MAX		Off					
Memory	Lock		Lock					
Delay								
FDW thru Vehicle Clearance		1						

∅1	∅2	∅3	∅4
			

∅5	∅6	∅7	∅8

Traffic Signal Inventory

8. Time of Day Plans

Daylight Savings / Equate Days				
DST Begin:	Month	__3___	Week	__2___
DST End:	Month	__11___	Week	__1___

Equate Days	
__1___ =	_Mon-Fri_
_____ =	_____

DAY	TIME HH:MM	Coord Pattern	MAX 2 Phases	OMITS Phases	Aux Events
1	0:00	Free			
	7:00	1/1/1			
	10:00	Free			
	15:00	2/1/1			
	19:00	Free			

9. *Coordination Data for Eagle Controllers*

SET-UP	CODE	0	1	2	3
Operation	1	FREE	AUTO	MANUAL	---
Mode (Normal)	0	PERM	YIELD	PM YLD	PM OMIT
Maximum	0	M INH	MAX 1	MAX 2	---
Correction	2	DWELL	MX DW	SH WAY	SW+
Offset	0	BEGIN	END	---	---
Force	0	PLAN	CYCLE	---	---

CYCLE LENGTH	1	2	3	4
Split 1	110	150		
Split 2				
Split 3				
Split 4				

CYCLE/ OFFSET	1	2	3	4	5	6
1	55	80				
2						
3						
4						

Cycle/Split Modes: 0=Actuated; 1=Coord Phase; 2=Min Rec; 3=Max Rec; 4=Ped Rec; 5=Max+Ped Rec
6=Phase Omitted; 7=Dual Coord Phase

Cycle 1/Split 1	1	2	3	4	5	6	7	8	9
Time	52	37	21						
Mode	1								

Cycle 2/Split 1	1	2	3	4	5	6	7	8	9
Time	80	37	33						
Mode	1								

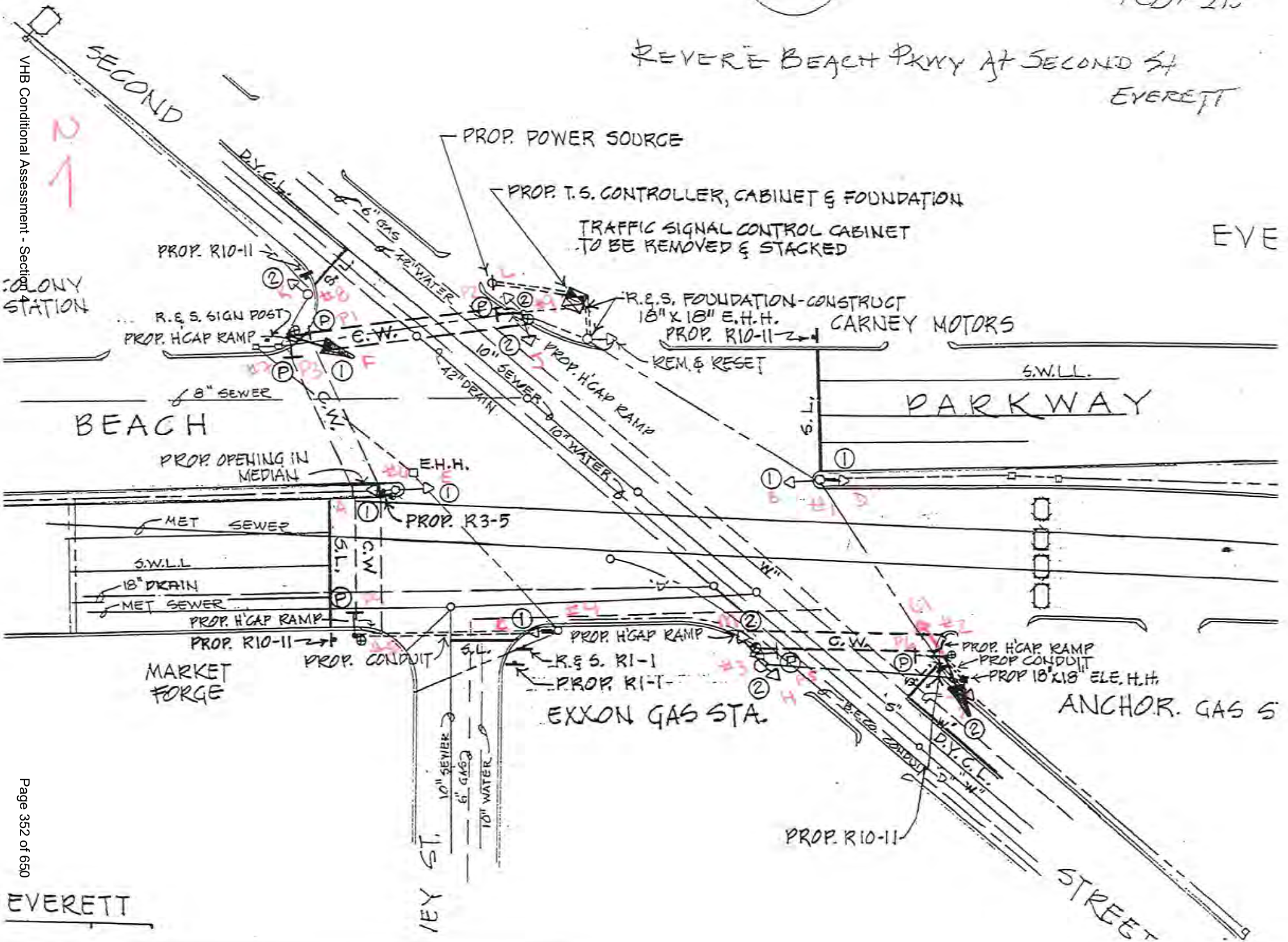
Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

ICD# 215

REVERE BEACH PKWY AT SECOND ST EVERETT



Traffic Signal Inventory

2. *Controller Data*

Eagle	Epac 300 M51	134722/OSS #130807
Manufacturer	**Model No.**	**Serial No.**

TYPE	CONDITION	CONTROLLER PHASE CAPABILITY
☐ Electromechanical ☐ Non-NEMA ☐ NEMA-Modular ☒ NEMA-Keyboard	☒ Good ☐ Fair ☐ Poor	☐ 2 Phase ☐ 4 Phase ☒ 8 Phase

CONTROLLER TYPE	SETTING TYPE
☐ Pretimed ☒ Actuated ☐ Semi-Actuated	☐ Pin ☐ Thumbwheel ☐ Dial ☒ Keyboard

BACKPANEL SIZE	LOAD SWITCHES INSTALLED/TYPE	FLASH TRANSFER RELAYS INSTALLED
12P	1 – TSC Cube 200 2 – SSS-87-I/O	2 – Struthers Dunn

SOFTWARE LEVEL SIZE	CONFLICT MONITOR MODEL/SIZE
3.34g Feb 2010	EDI MMU-16E

FLASHER	INTERCONNECT CABLE (If Yes, List Size)	COORDINATED (If Yes, complete section 9)
PDC 204	No	Yes

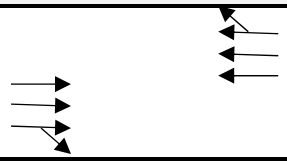
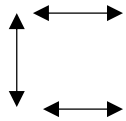
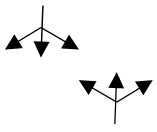
DETECTOR/AMPLIFIERS	QUANTITY/TYPE
2 – EDI LMD 622t (2-channel)	

Traffic Signal Inventory

7. Signal Timing Sheet

∅1 Route 16 EB/WB	∅2 Pedestrian	∅3 Second Street NB/SB
∅4	∅5	∅6
∅7	∅8	OLA
OLB	OLC	OLD

PHASE	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8
Minimum Green (initial)	15		8					
Extension (passage) Vehicle Interval	1.2		4					
Yellow	4	3	4					
Red Clear	1	1	1					
Maximum Green I	60		40					
Maximum Green II	60		40					
Pedestrian Walk		7						
Pedestrian Clear		29						
Seconds Per Act								
Time to Reduce								
Before Reduction								
Minimum Gap								
Pedestrian Gap								
Walk (flash/steady)								
Recall	MAX		Off					
Memory	NL		NL					
Delay								
FDW thru Vehicle Clearance		1						

∅1	∅2	∅3	∅4
			

∅5	∅6	∅7	∅8

Traffic Signal Inventory

8. Time of Day Plans

Daylight Savings / Equate Days				
DST Begin:	Month	__3___	Week	__2___
DST End:	Month	__11___	Week	__1___

Equate Days	
__1___ =	_Mon-Fri_
_____ =	_____

DAY	TIME HH:MM	Coord Pattern	MAX 2 Phases	OMITS Phases	Aux Events
1	0:00	Free			
	7:00	1/1/1			
	10:00	Free			
	15:00	2/1/1			
	19:00	Free			

9. *Coordination Data for Eagle Controllers*

SET-UP	CODE	0	1	2	3
Operation	1	FREE	AUTO	MANUAL	---
Mode (Normal)	0	PERM	YIELD	PM YLD	PM OMIT
Maximum	0	M INH	MAX 1	MAX 2	---
Correction	2	DWELL	MX DW	SH WAY	SW+
Offset	0	BEGIN	END	---	---
Force	0	PLAN	CYCLE	---	---

CYCLE LENGTH	1	2	3	4
Split 1	110	150		
Split 2				
Split 3				
Split 4				

CYCLE/ OFFSET	1	2	3	4	5	6
1	47	68				
2						
3						
4						

Cycle/Split Modes: 0=Actuated; 1=Coord Phase; 2=Min Rec; 3=Max Rec; 4=Ped Rec; 5=Max+Ped Rec 6=Phase Omitted; 7=Dual Coord Phase

Cycle 1/Split 1	1	2	3	4	5	6	7	8	9
Time	44	38	28						
Mode	1								

Cycle 2/Split 1	1	2	3	4	5	6	7	8	9
Time	64	38	48						
Mode	1								

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

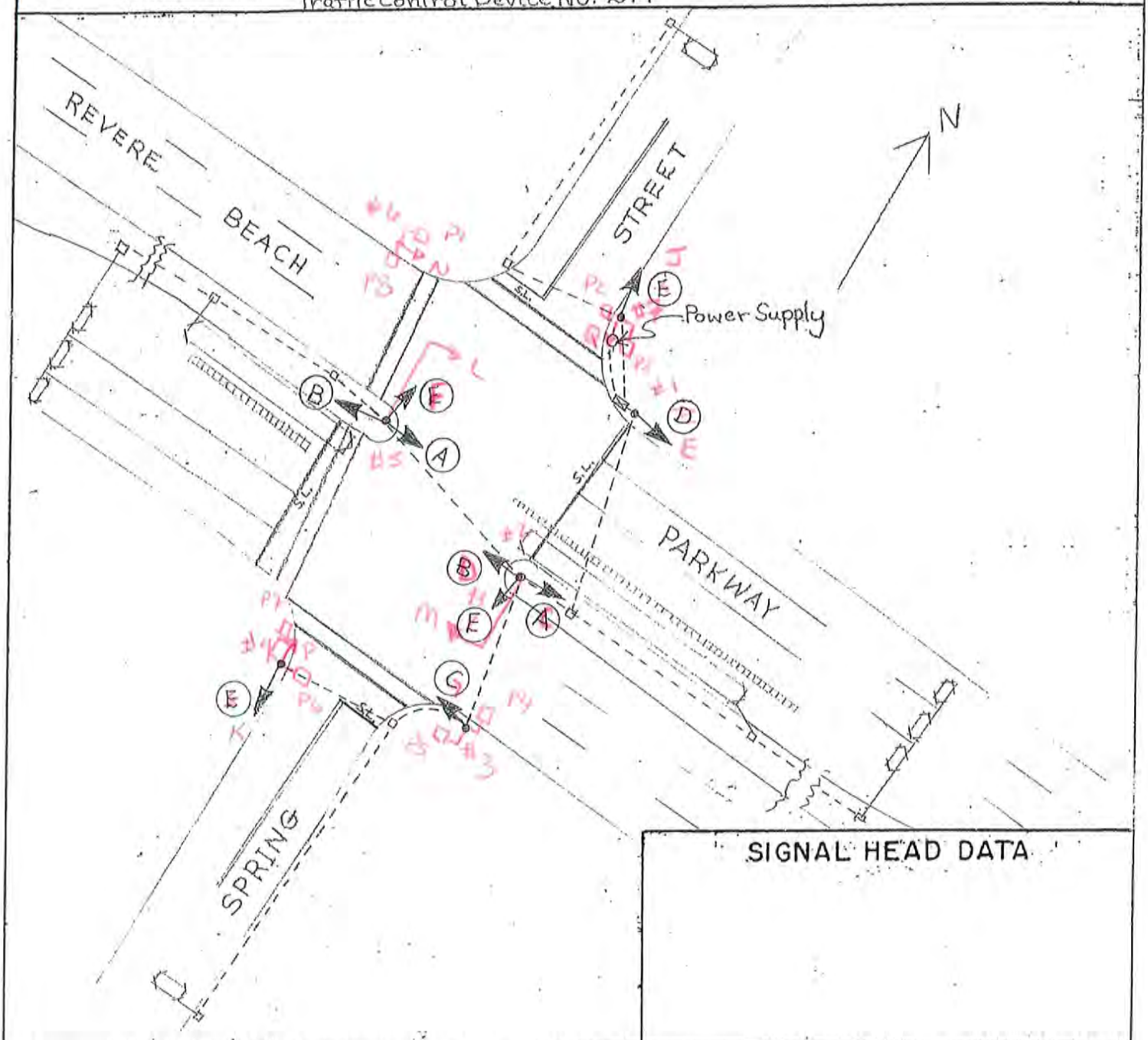
Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

COMMONWEALTH OF MASSACHUSETTS — METROPOLITAN DISTRICT COMMISSION

TRAFFIC SIGNAL LAYOUT

REVERE BEACH PARKWAY AND SPRING STREET, EVERETT

SCALE: 1" = 40' — Traffic Control Device No. 217 — DATE: _____



SIGNAL HEAD DATA

LEGEND

VEHICLE SIGNAL	→	WOODEN POLE	○
PEDESTRIAN SIGNAL	▭	SIGNAL POST	●
CONTROL CABINET	⊠	MAST ARM	●—
LOOP DETECTOR	▭	PULL BOX	□
MAGNETIC DETECTOR	▭M	CONDUIT	———
PED. PUSH BUTTON	⊗	OVERHEAD CABLE	—·—·—
TRAFFIC SIGN	▮	ELECTRIC MANHOLE	○E.M.H.

NOTES

Traffic Signal Inventory

2. *Controller Data*

Eagle	Epac 300 M41	111894 (OSS#010802)
Manufacturer	Model No.	Serial No.

TYPE	CONDITION	CONTROLLER PHASE CAPABILITY
☐ Electromechanical ☐ Non-NEMA ☐ NEMA-Modular ☒ NEMA-Keyboard	☐ Good ☒ Fair ☐ Poor	☐ 2 Phase ☐ 4 Phase ☒ 8 Phase

CONTROLLER TYPE	SETTING TYPE
☐ Pretimed ☒ Actuated ☐ Semi-Actuated	☐ Pin ☐ Thumbwheel ☐ Dial ☒ Keyboard

BACKPANEL SIZE	LOAD SWITCHES INSTALLED/TYPE	FLASH TRANSFER RELAYS INSTALLED
12P	5 – PDC 200 1 – SSS-87-I/O	4

SOFTWARE LEVEL SIZE	CONFLICT MONITOR MODEL/SIZE
3.34g Feb 2010	EDI – MMU – 16E

FLASHER	INTERCONNECT CABLE (If Yes, List Size)	COORDINATED (If Yes, complete section 9)
1 – PDC 204	No	Yes

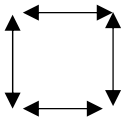
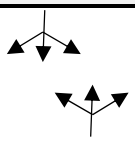
DETECTOR/AMPLIFIERS	QUANTITY/TYPE
3 - EDI LM 622t	

Traffic Signal Inventory

7. *Signal Timing Sheet*

∅1	Route 16 EB Left	∅2	Route 16 WB	∅3	Pedestrian
∅4	Spring Street NB/SB	∅5	Route 16 WB Left	∅6	Route 16 EB
∅7		∅8		OLA	
OLB		OLC		OLD	

PHASE	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8
Minimum Green (initial)	8	12		8	8	12		
Extension (passage) Vehicle Interval	1	7		7	1	7		
Yellow	4	4	4	4	4	4		
Red Clear	1	1	1	2	1	1		
Maximum Green I	15	55		18	10	55		
Maximum Green II	15	40		25	15	40		
Pedestrian Walk			7					
Pedestrian Clear			29					
Seconds Per Act								
Time to Reduce								
Before Reduction								
Minimum Gap								
Pedestrian Gap								
Walk (flash/steady)								
Recall	Off	Soft		Off	Off	Soft		
Memory	NL	Lock		Lock	NL	Lock		
Delay								
FDW thru Vehicle Clearance			1					

∅1	∅2	∅3	∅4
			

∅5	∅6	∅7	∅8
			

Traffic Signal Inventory

8. *Time of Day Plans*

Daylight Savings / Equate Days				
DST Begin:	Month	__3___	Week	__2___
DST End:	Month	__11___	Week	__1___

Equate Days	
__1___ =	_Mon-Fri_
____ =	_____

DAY	TIME HH:MM	Coord Pattern	MAX 2 Phases	OMITS Phases	Aux Events
1	0:00	Free			
	7:00	1/1/1			
	10:00	Free			
	15:00	2/1/1			
	19:00	Free			

9. *Coordination Data for Eagle Controllers*

SET-UP	CODE	0	1	2	3
Operation	1	FREE	AUTO	MANUAL	---
Mode (Normal)	0	PERM	YIELD	PM YLD	PM OMIT
Maximum	0	M INH	MAX 1	MAX 2	---
Correction	2	DWELL	MX DW	SH WAY	SW+
Offset	0	BEGIN	END	---	---
Force	0	PLAN	CYCLE	---	---

CYCLE LENGTH	1	2	3	4
Split 1	110	150		
Split 2				
Split 3				
Split 4				

CYCLE/ OFFSET	1	2	3	4	5	6
1	44	71				
2						
3						
4						

Cycle/Split Modes: 0=Actuated; 1=Coord Phase; 2=Min Rec; 3=Max Rec; 4=Ped Rec; 5=Max+Ped Rec
6=Phase Omitted; 7=Dual Coord Phase

Cycle 1/Split 1	1	2	3	4	5	6	7	8	9
Time	15	39	38	18	14	40			
Mode		1				1			

Cycle 2/Split 1	1	2	3	4	5	6	7	8	9
Time	20	68	38	24	15	73			
Mode		1				1			

Cycle __/Split__	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split__	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle __/Split__	1	2	3	4	5	6	7	8	9
Time									
Mode									

COMMONWEALTH OF MASSACHUSETTS
TRAFFIC CONTROL DEVICE No. 216

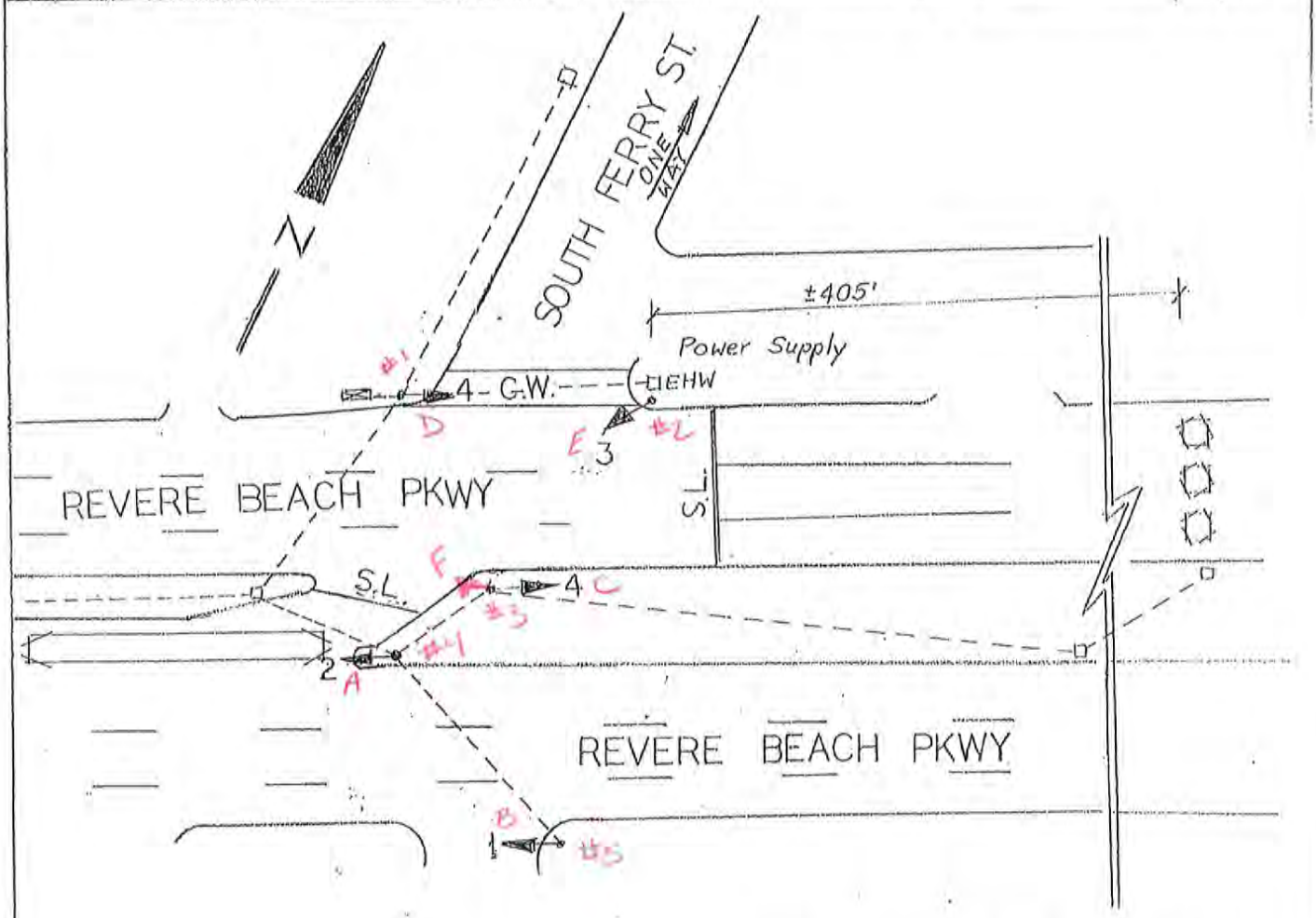
METROPOLITAN DISTRICT COMMISSION

TRAFFIC SIGNAL LAYOUT

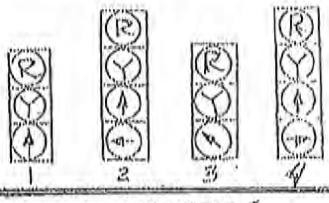
REVERE BEACH PKWY AND SOUTH FERRY ST.

SCALE: 1" = 40'

DATE: December 10, 200



SIGNAL HEAD DATA



LEGEND

VEHICLE SIGNAL	→	WOODEN POLE	○
PEDESTRIAN SIGNAL	—■	SIGNAL POST	•
CONTROL CABINET	⊠	MAST ARM	•—
LOOP DETECTOR	⬭	PULL BOX	□
MAGNETIC DETECTOR	Ⓜ	CONDUIT	- - -
PED. PUSH BUTTON	⊗	OVERHEAD CABLE	—·—
TRAFFIC SIGN	⊦	ELECTRIC MANHOLE	E.M.H.

NOTES

Traffic Signal Inventory

2. *Controller Data*

Eagle	Epac 300 M51	#123149/OSS #110207
Manufacturer	**Model No.**	**Serial No.**

TYPE	CONDITION	CONTROLLER PHASE CAPABILITY
☐ Electromechanical ☐ Non-NEMA ☐ NEMA-Modular ☒ NEMA-Keyboard	☒ Good ☐ Fair ☐ Poor	☐ 2 Phase ☐ 4 Phase ☒ 8 Phase

CONTROLLER TYPE	SETTING TYPE
☐ Pretimed ☒ Actuated ☐ Semi-Actuated	☐ Pin ☐ Thumbwheel ☐ Dial ☒ Keyboard

BACKPANEL SIZE	LOAD SWITCHES INSTALLED/TYPE	FLASH TRANSFER RELAYS INSTALLED
12P	3 – SSS-87-I/O	1 – STRUTHERS DUNN

SOFTWARE LEVEL SIZE	CONFLICT MONITOR MODEL/SIZE
3.35a Oct ‘09	EDI MMU-16E

FLASHER	INTERCONNECT CABLE (If Yes, List Size)	COORDINATED (If Yes, complete section 9)
1 – PDC 204	No	Yes

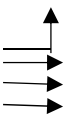
DETECTOR/AMPLIFIERS	QUANTITY/TYPE
2 – LMD 622t	

Traffic Signal Inventory

7. Signal Timing Sheet

∅1 Route 16 EB/WB	∅2 Route 16 EB Left & Thru	∅3
∅4	∅5	∅6
∅7	∅8	OLA
OLB	OLC	OLD

PHASE	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8
Minimum Green (initial)	7	7						
Extension (passage) Vehicle Interval	8	1						
Yellow	4	4						
Red Clear	2	1						
Maximum Green I	55	37						
Maximum Green II	55	37						
Pedestrian Walk								
Pedestrian Clear								
Seconds Per Act								
Time to Reduce								
Before Reduction								
Minimum Gap								
Pedestrian Gap								
Walk (flash/steady)								
Recall	Min	Off						
Memory	NL	NL						
Delay								
FDW thru Vehicle Clearance								

∅1	∅2	∅3	∅4
			

∅5	∅6	∅7	∅8

Traffic Signal Inventory

8. Time of Day Plans

Daylight Savings / Equate Days				
DST Begin:	Month	__3___	Week	__2___
DST End:	Month	__11___	Week	__1___

Equate Days	
__1___ =	_Mon-Fri_
_____ =	_____

DAY	TIME HH:MM	Coord Pattern	MAX 2 Phases	OMITS Phases	Aux Events
1	0:00	Free			
	7:00	1/1/1			
	10:00	Free			
	15:00	2/1/1			
	19:00	Free			

9. *Coordination Data for Eagle Controllers*

SET-UP	CODE	0	1	2	3
Operation	1	FREE	AUTO	MANUAL	---
Mode (Normal)	0	PERM	YIELD	PM YLD	PM OMIT
Maximum	0	M INH	MAX 1	MAX 2	---
Correction	2	DWELL	MX DW	SH WAY	SW+
Offset	0	BEGIN	END	---	---
Force	0	PLAN	CYCLE	---	---

CYCLE LENGTH	1	2	3	4
Split 1	110	150		
Split 2				
Split 3				
Split 4				

CYCLE/ OFFSET	1	2	3	4	5	6
1	20	147				
2						
3						
4						

Cycle/Split Modes: 0=Actuated; 1=Coord Phase; 2=Min Rec; 3=Max Rec; 4=Ped Rec; 5=Max+Ped Rec 6=Phase Omitted; 7=Dual Coord Phase

Cycle 1/Split 1	1	2	3	4	5	6	7	8	9
Time	75	35							
Mode	1								

Cycle 2/Split 1	1	2	3	4	5	6	7	8	9
Time	89	61							
Mode	1								

Cycle __/Split__	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle __/Split__	1	2	3	4	5	6	7	8	9
Time									
Mode									

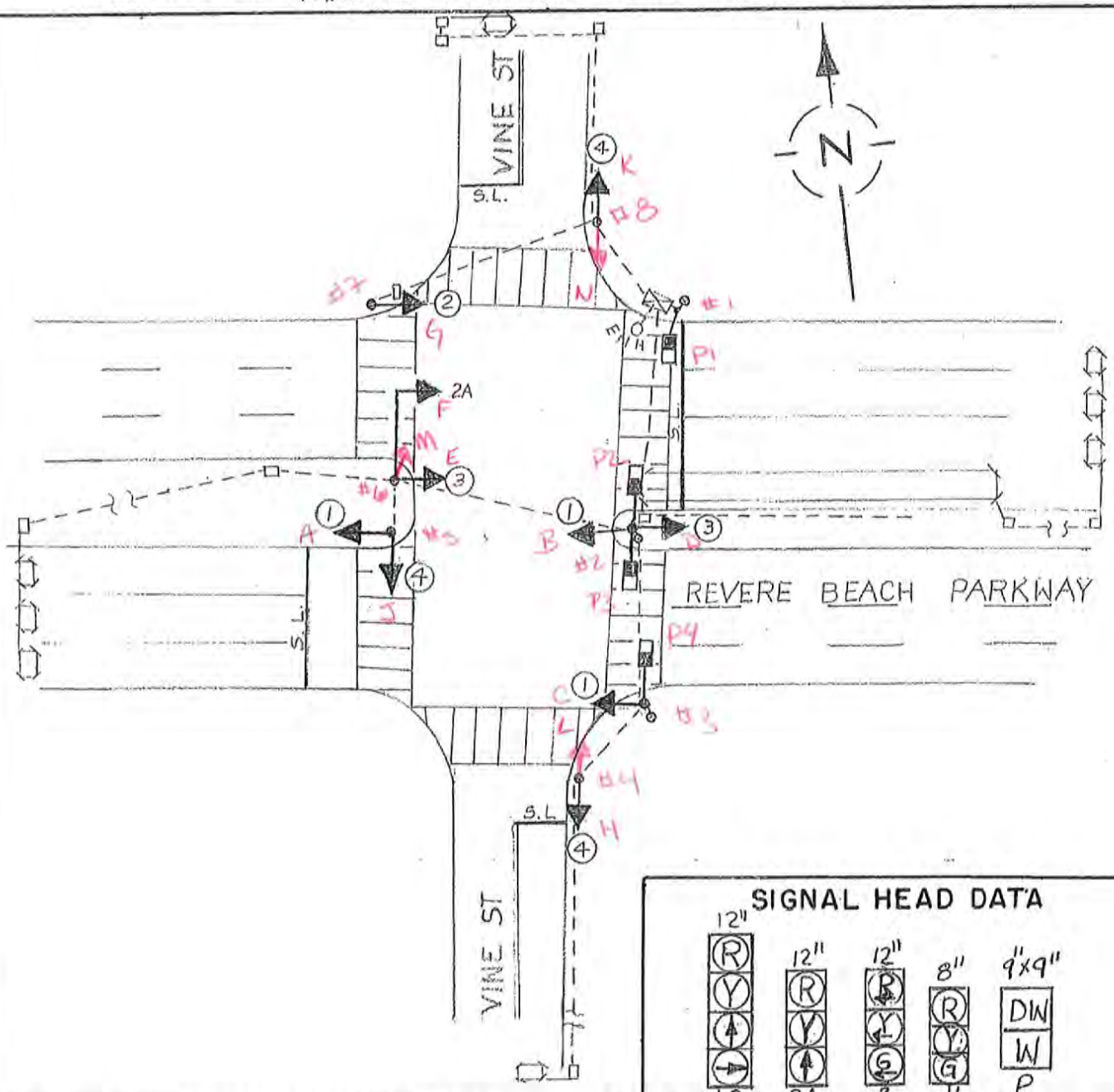
Cycle __/Split__	1	2	3	4	5	6	7	8	9
Time									
Mode									

COMMONWEALTH OF MASSACHUSETTS — METROPOLITAN DISTRICT COMMISSION

TRAFFIC SIGNAL LAYOUT

REVERE BEACH PARKWAY AND VINE STREET, EVERETT

SCALE: 1"= 40 TRAFFIC CONTROL DEVICE Nº 219 DATE: FEBRUARY 12, 1982



SIGNAL HEAD DATA

LEGEND

VEHICLE SIGNAL	→	WOODEN POLE	○
PEDESTRIAN SIGNAL	—■	SIGNAL POST	•
CONTROL CABINET	⊠	MAST ARM	•—
LOOP DETECTOR	⬭	PULL BOX	□
MAGNETIC DETECTOR	Ⓜ	CONDUIT	— — —
PED. PUSH BUTTON	⊗	OVERHEAD CABLE	—·—·—
TRAFFIC SIGN		ELECTRIC MANHOLE	○E.M.H.

NOTES

Traffic Signal Inventory

2. *Controller Data*

Eagle	Epac 300 M41	86761 (OSS#041008)
Manufacturer	**Model No.**	**Serial No.**

TYPE	CONDITION	CONTROLLER PHASE CAPABILITY
☐ Electromechanical ☐ Non-NEMA ☐ NEMA-Modular ☒ NEMA-Keyboard	☐ Good ☒ Fair ☐ Poor *Controller has a Coviello Electric sticker (loaner?)	☐ 2 Phase ☐ 4 Phase ☒ 8 Phase

CONTROLLER TYPE	SETTING TYPE
☐ Pretimed ☒ Actuated ☐ Semi-Actuated Faults shown on Loop Amps	☐ Pin ☐ Thumbwheel ☐ Dial ☒ Keyboard

BACKPANEL SIZE	LOAD SWITCHES INSTALLED/TYPE	FLASH TRANSFER RELAYS INSTALLED
12P	5 – SSS-87-I/O	3

SOFTWARE LEVEL SIZE	CONFLICT MONITOR MODEL/SIZE
3.33e May 2006	EDI MMU-16E

FLASHER	INTERCONNECT CABLE (If Yes, List Size)	COORDINATED (If Yes, complete section 9)
1 – PDC 204	NO	YES

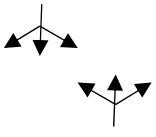
DETECTOR/AMPLIFIERS	QUANTITY/TYPE
3 – EDI LM622t	

Traffic Signal Inventory

7. Signal Timing Sheet

∅1 Route 16 WB Left	∅2 Route 16 EB	∅3
∅4 Vine Street NB/SB	∅5	∅6 Route 16 WB
∅7	∅8	∅9 Pedestrian
OLA	OLB	OLC

PHASE	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8	∅9
Minimum Green (initial)	8	12		8		12			
Extension (passage) Vehicle Interval	1	10		5		10			
Yellow	4	4		4		4			3
Red Clear	2	2		2		2			1
Maximum Green I	30	50		30		50			
Maximum Green II	30	50		30		50			
Pedestrian Walk		7		7		7		7	7
Pedestrian Clear		8		8		8		8	28
Seconds Per Act									
Time to Reduce									
Before Reduction									
Minimum Gap									
Pedestrian Gap									
Walk (flash/steady)									
Recall	Off	MAX		Off		MAX			
Memory	NL	Lock		Lock		Lock			
Delay									
FDW thru Vehicle Clearance									1

∅1	∅2	∅3	∅4
			

∅5	∅6	∅7	∅9
			

Traffic Signal Inventory

8. Time of Day Plans

Daylight Savings / Equate Days				
DST Begin:	Month	__3___	Week	__2___
DST End:	Month	__11___	Week	__1___

Equate Days	
__1___ =	_Mon-Fri_
_____ =	_____

DAY	TIME HH:MM	Coord Pattern	MAX 2 Phases	OMITS Phases	Aux Events
1	0:00	Free			
	7:00	1/1/1			
	10:00	Free			
	15:00	2/1/1			
	19:00	Free			

9. *Coordination Data for Eagle Controllers*

SET-UP	CODE	0	1	2	3
Operation	1	FREE	AUTO	MANUAL	---
Mode (Normal)	0	PERM	YIELD	PM YLD	PM OMIT
Maximum	0	M INH	MAX 1	MAX 2	---
Correction	2	DWELL	MX DW	SH WAY	SW+
Offset	0	BEGIN	END	---	---
Force	0	PLAN	CYCLE	---	---

CYCLE LENGTH	1	2	3	4
Split 1	110	150		
Split 2				
Split 3				
Split 4				

CYCLE/ OFFSET	1	2	3	4	5	6
1	1	0				
2						
3						
4						

Cycle/Split Modes: 0=Actuated; 1=Coord Phase; 2=Min Rec; 3=Max Rec; 4=Ped Rec; 5=Max+Ped Rec 6=Phase Omitted; 7=Dual Coord Phase

Cycle 1/Split 1	1	2	3	4	5	6	7	8	9
Time	27	29		29		56			25
Mode		1				1			

Cycle 2/Split 1	1	2	3	4	5	6	7	8	9
Time	15	72		38		87			25
Mode		1				1			

Cycle __/Split__	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle __/Split__	1	2	3	4	5	6	7	8	9
Time									
Mode									

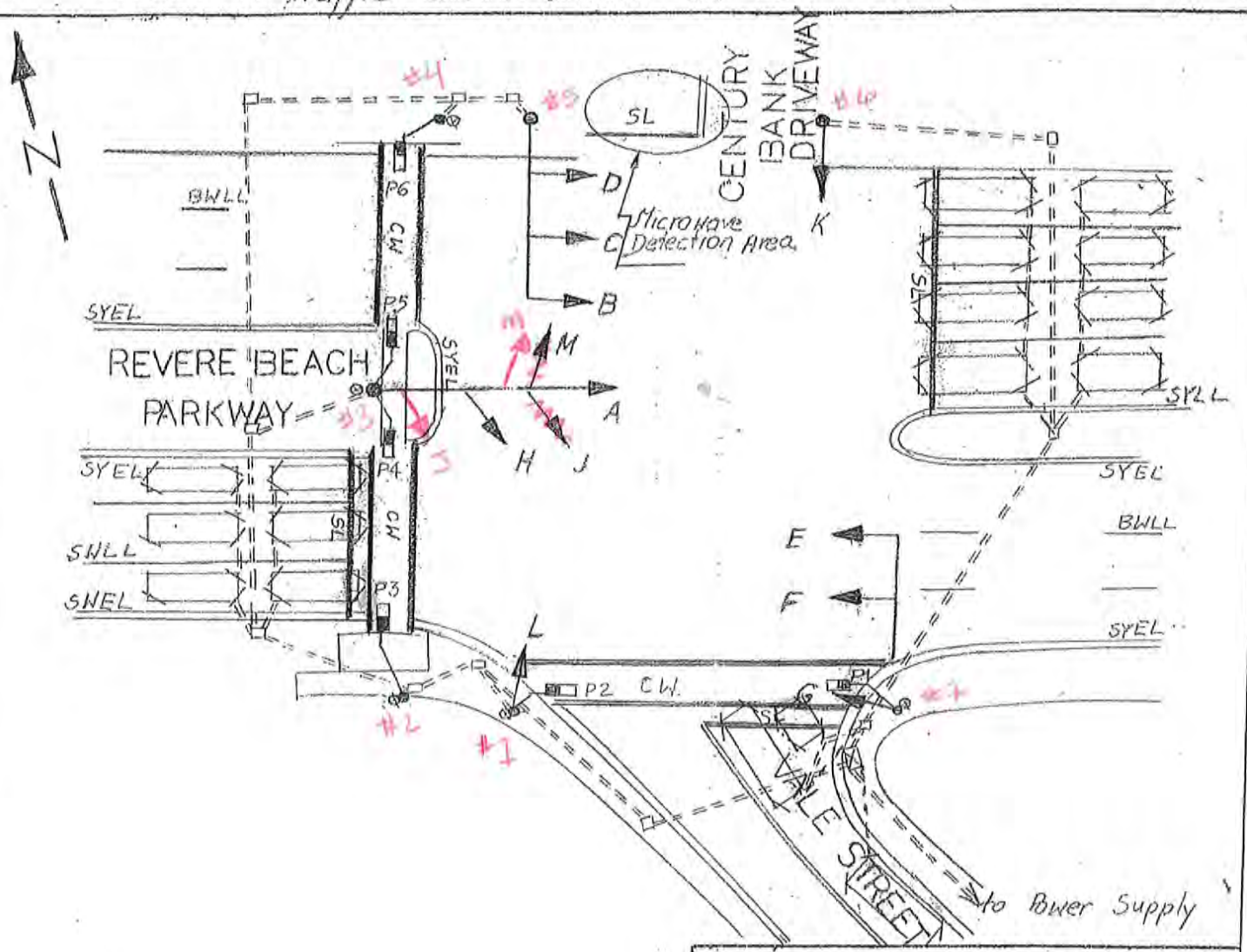
Cycle __/Split__	1	2	3	4	5	6	7	8	9
Time									
Mode									

COMMONWEALTH OF MASSACHUSETTS — METROPOLITAN DISTRICT COMMISSION

TRAFFIC SIGNAL LAYOUT

REVERE BEACH PARKWAY AT VALE STREET, EVERETT

SCALE: 1" = 40' Traffic Control Device No. 239 DATE: 1/11/02



SIGNAL HEAD DATA

B C D E F G H J K L M	A	P1 - P6
R Y G	R Y G	

All 12" Lens

LEGEND

VEHICLE SIGNAL	→	WOODEN POLE	
PEDESTRIAN SIGNAL		SIGNAL POST	
CONTROL CABINET		MAST ARM	
LOOP DETECTOR		PULL BOX	□
MAGNETIC DETECTOR	M	CONDUIT	
PED. PUSH BUTTON		OVERHEAD CABLE	
TRAFFIC SIGN		ELECTRIC MANHOLE	E.M.H.

NOTES

Traffic Signal Inventory

2. *Controller Data*

Eagle	Epac 300 M51	138908/OSS#011028
Manufacturer	**Model No.**	**Serial No.**

TYPE	CONDITION	CONTROLLER PHASE CAPABILITY
☐ Electromechanical ☐ Non-NEMA ☐ NEMA-Modular ☒ NEMA-Keyboard	☒ Good ☐ Fair ☐ Poor	☐ 2 Phase ☐ 4 Phase ☒ 8 Phase

CONTROLLER TYPE	SETTING TYPE
☐ Pretimed ☒ Actuated ☐ Semi-Actuated	☐ Pin ☐ Thumbwheel ☐ Dial ☒ Keyboard

BACKPANEL SIZE	LOAD SWITCHES INSTALLED/TYPE	FLASH TRANSFER RELAYS INSTALLED
12P	6 – PDC 200	4

SOFTWARE LEVEL SIZE	CONFLICT MONITOR MODEL/SIZE
3.51b JAN 2013	EDI MMU-16E

FLASHER	INTERCONNECT CABLE (If Yes, List Size)	COORDINATED (If Yes, complete section 9)
1 – PDC 204	NO	YES

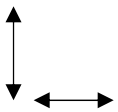
DETECTOR/AMPLIFIERS	QUANTITY/TYPE
4 – EDI LM622t	

7. *Signal Timing Sheet*

∅1		∅2	Route 16 WB	∅3	
∅4	Vale Street NB	∅5	Route 16 WB Left	∅6	Route 16 EB
∅7		∅8	Bank Driveway SB	∅9	Pedestrian
OLA		OLB		OLC	

PHASE	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8	∅9
Minimum Green (initial)		10		6	6	10		6	
Extension (passage) Vehicle Interval		2		2	2	2		1	
Yellow		4		4	4	4		4	4
Red Clear		1		1	1	1		1	1
Maximum Green I		50		25	10	50		10	
Maximum Green II									
Pedestrian Walk									7
Pedestrian Clear									26
Seconds Per Act									
Time to Reduce									
Before Reduction									
Minimum Gap									
Pedestrian Gap									
Walk (flash/steady)									
Recall		Soft		Off	Off	Soft		Off	
Memory		NL		NL	NL	NL		Lock	
Delay									
FDW thru Vehicle Clearance									1

∅1	∅2	∅3	∅4
			

∅5	∅6	∅8	∅9
			

8. Time of Day Plans

Daylight Savings / Equate Days				
DST Begin:	Month	__3___	Week	__2___
DST End:	Month	__11___	Week	__1___

Equate Days	
__1___ =	_Mon-Fri_
_____ =	_____

DAY	TIME HH:MM	Coord Pattern	MAX 2 Phases	OMITS Phases	Aux Events
1	0:00	Free			
	7:00	1/1/1			
	10:00	Free			
	15:00	2/1/1			
	19:00	Free			

9. *Coordination Data for Eagle Controllers*

SET-UP	CODE	0	1	2	3
Operation	1	FREE	AUTO	MANUAL	---
Mode (Normal)	0	PERM	YIELD	PM YLD	PM OMIT
Maximum	0	M INH	MAX 1	MAX 2	---
Correction	2	DWELL	MX DW	SH WAY	SW+
Offset	0	BEGIN	END	---	---
Force	0	PLAN	CYCLE	---	---

Coordination Program/Splits not programmed

CYCLE LENGTH	1	2	3	4
Split 1				
Split 2				
Split 3				
Split 4				

CYCLE/ OFFSET	1	2	3	4	5	6
1						
2						
3						
4						

Cycle/Split Modes: 0=Actuated; 1=Coord Phase; 2=Min Rec; 3=Max Rec; 4=Ped Rec; 5=Max+Ped Rec
6=Phase Omitted; 7=Dual Coord Phase

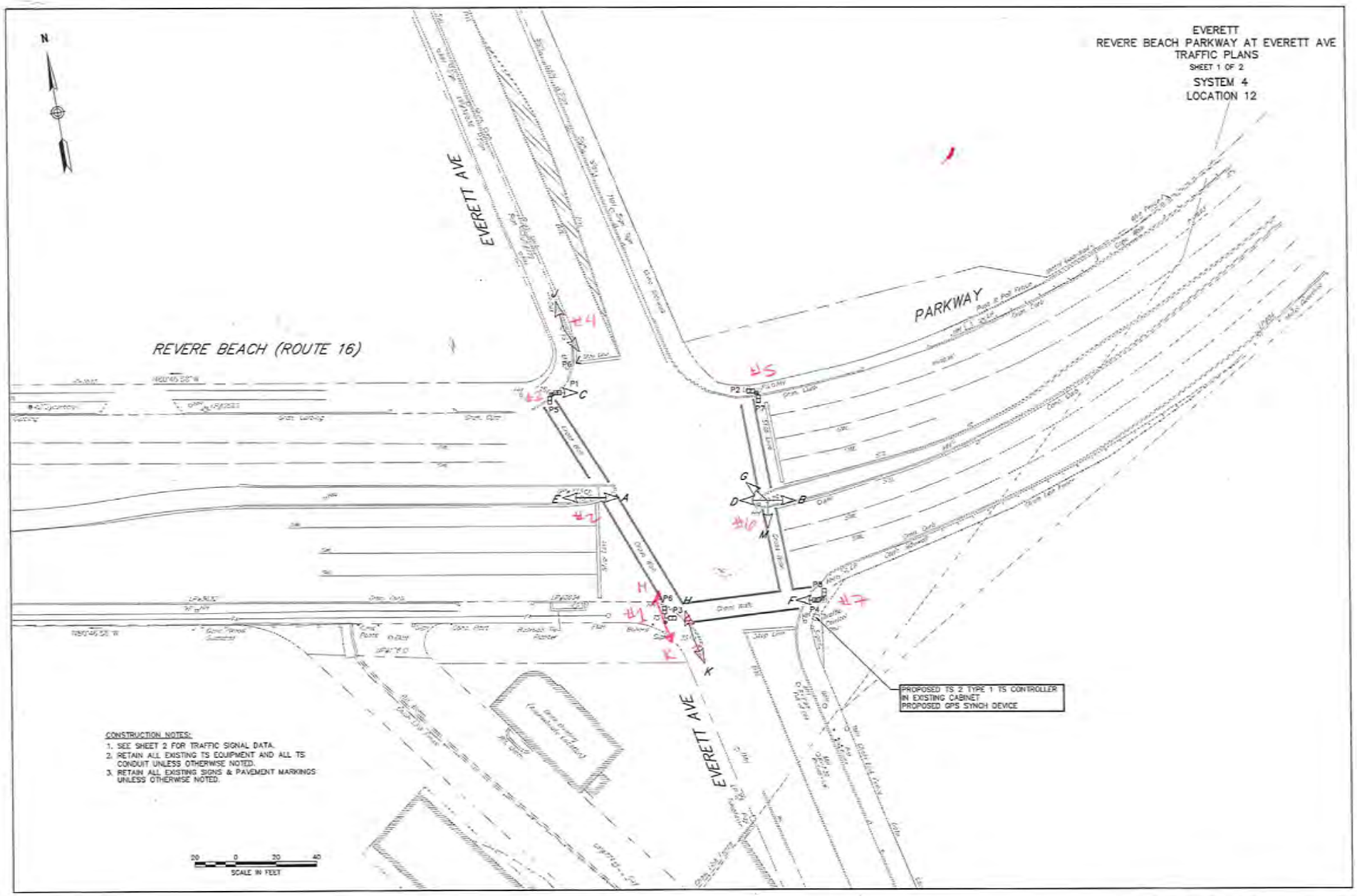
Cycle 1/Split 1	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle 2/Split 1	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle_/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle_/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle_/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									


EVERETT
REVERE BEACH PARKWAY AT EVERETT AVE
TRAFFIC PLANS
SHEET 1 OF 2
SYSTEM 4
LOCATION 12
N
EVERETT AVE
REVERE BEACH (ROUTE 16)
PARKWAY
EVERETT AVE
PROPOSED TS 2 TYPE 1 TS CONTROLLER IN EXISTING CABINET
PROPOSED GPS SYNCH DEVICE
CONSTRUCTION NOTES:
1. SEE SHEET 2 FOR TRAFFIC SIGNAL DATA.
2. RETAIN ALL EXISTING TS EQUIPMENT AND ALL TS CONDUIT UNLESS OTHERWISE NOTED.
3. RETAIN ALL EXISTING SIGNS & PAVEMENT MARKINGS UNLESS OTHERWISE NOTED.
20 0 20 40
SCALE IN FEET
\\vhb\proj\Mat-TS\12361.01\cad\ta\planset\Route 16\Everett Ave.dwg

Traffic Signal Inventory

2. *Controller Data*

Econolite	ASC/3-1000	
Manufacturer	Model No.	Serial No.

TYPE	CONDITION	CONTROLLER PHASE CAPABILITY
☐ Electromechanical ☐ Non-NEMA ☐ NEMA-Modular ☒ NEMA-Keyboard	☒ Good ☐ Fair ☐ Poor	☐ 2 Phase ☐ 4 Phase ☒ 8 Phase

CONTROLLER TYPE	SETTING TYPE
☐ Pretimed ☒ Actuated ☐ Semi-Actuated	☐ Pin ☐ Thumbwheel ☐ Dial ☒ Keyboard

BACKPANEL SIZE	LOAD SWITCHES INSTALLED/TYPE	FLASH TRANSFER RELAYS INSTALLED
16P	8 – SSS-87-I/O	6 STRUTHERS DUNN

SOFTWARE LEVEL SIZE	CONFLICT MONITOR MODEL/SIZE
APPLICATION VERSION 02.57.00 CONFIGURATION VERSION N3000.12	Reno MMU-1600D

FLASHER	INTERCONNECT CABLE (If Yes, List Size)	COORDINATED (If Yes, complete section 9)
TSC - 204	NO	YES

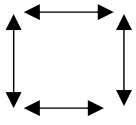
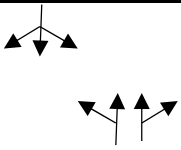
DETECTOR/AMPLIFIERS	QUANTITY/TYPE
3 – EDI LMD622t (2-CHANNEL)	

Traffic Signal Inventory

7. *Signal Timing Sheet*

∅1	Route 16 WB Left	∅2	Route 16 EB	∅3	Pedestrian
∅4	Everett Avenue NB/SB	∅5	Route 16 EB Left	∅6	Route 16 WB
∅7		∅8		OLA	
OLB		OLC		OLD	

PHASE	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8
Minimum Green (initial)	15	23		10	5	23		
Extension (passage) Vehicle Interval	2	4		5	2	4		
Yellow	3	4	3	4	3	4		
Red Clear	2	2	1	2	2	2		
Maximum Green I	25	47		30	25	47		
Maximum Green II	30	50		50	30	50		
Pedestrian Walk			7					
Pedestrian Clear			28					
Seconds Per Act								
Time to Reduce								
Before Reduction								
Minimum Gap								
Pedestrian Gap								
Walk (flash/steady)								
Recall	Off	On		Off	On	MIN		
Memory	NL	NL		NL	NL	NL		
Delay								
FDW thru Vehicle Clearance			1					

∅1	∅2	∅3	∅4
			

∅5	∅6	∅7	∅8
			

8. *Time of Day Plans*

Daylight Savings / Equate Days				
DST Begin:	Month	__3___	Week	__2___
DST End:	Month	__11___	Week	__1___

Equate Days	
__1___ =	_Mon-Fri_
____ =	_____

DAY	TIME HH:MM	Coord Pattern	MAX 2 Phases	OMITS Phases	Aux Events
1	0:00	Free			
	7:00	Action 1			
	10:00	Free			
	15:00	Action 2			
	19:00	Free			

9. Coordination Data for Eagle Controllers

SET-UP	CODE	0	1	2	3
Operation	1	FREE	AUTO	MANUAL	---
Mode (Normal)		PERM	YIELD	PM YLD	PM OMIT
Maximum		M INH	MAX 1	MAX 2	---
Correction		DWELL	MX DW	SH WAY	SW+
Offset		BEGIN	END	---	---
Force		PLAN	CYCLE	---	---

CYCLE LENGTH	1	2	3	4
Split 1	110	150		
Split 2				
Split 3				
Split 4				

CYCLE/ OFFSET	1	2	3	4	5	6
1	82	145				
2						
3						
4						

Cycle/Split Modes: 0=Actuated; 1=Coord Phase; 2=Min Rec; 3=Max Rec; 4=Ped Rec; 5=Max+Ped Rec
6=Phase Omitted; 7=Dual Coord Phase

Cycle 1/Split 1	1	2	3	4	5	6	7	8	9
Time	21	48	10	31	19	50			
Mode		1				1			

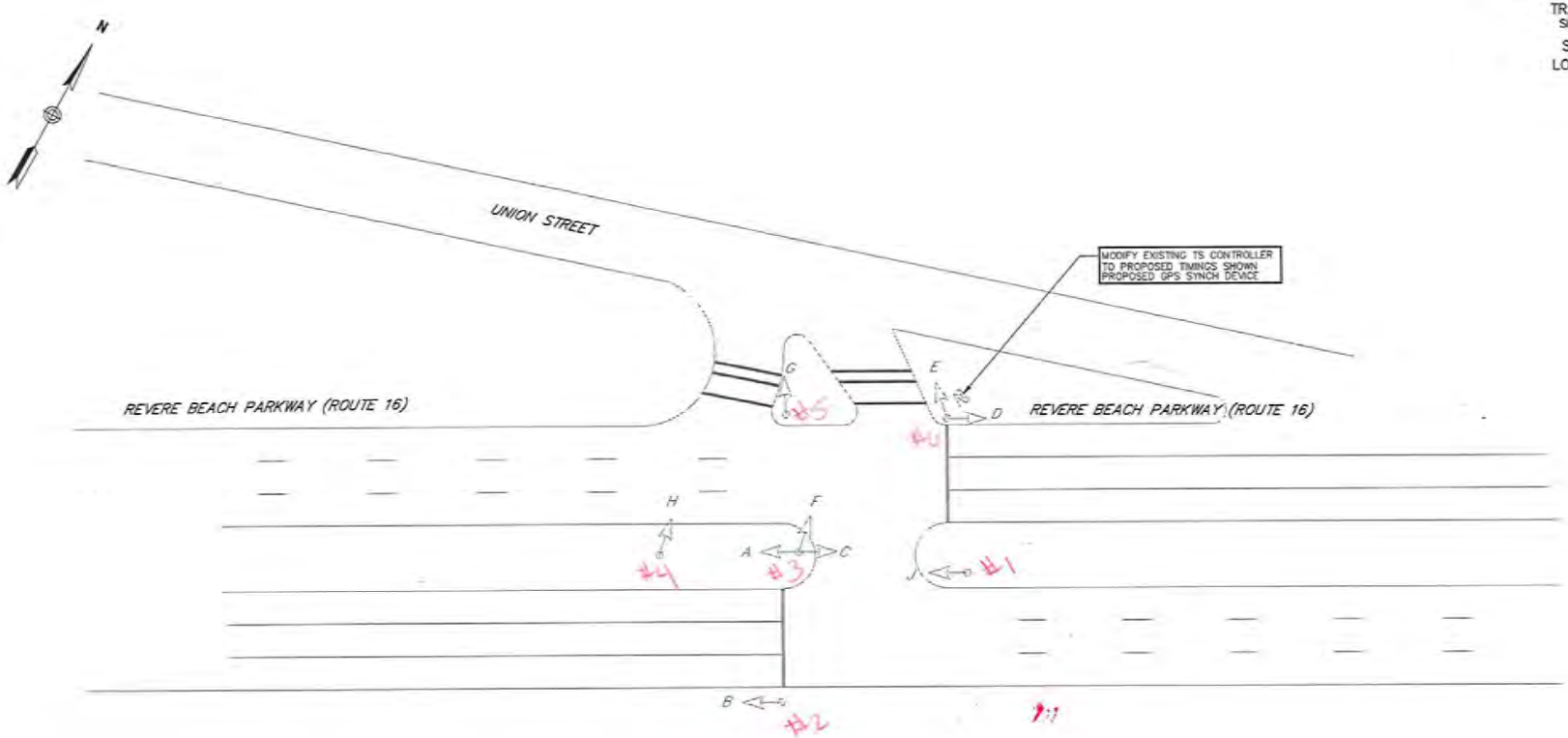
Cycle 2/Split 1	1	2	3	4	5	6	7	8	9
Time	21	72	10	47	27	66			
Mode		1				1			

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

EVERETT
REVERE BEACH PKWY AT UNION STREET
TRAFFIC PLAN
SHEET 1 OF 2
SYSTEM 5
LOCATION 13



CONSTRUCTION NOTES:
1. SEE SHEET 2 FOR TRAFFIC SIGNAL DATA.
2. RETAIN ALL EXISTING TS EQUIPMENT AND ALL TS CONDUIT UNLESS OTHERWISE NOTED.
3. RETAIN ALL EXISTING SIGNS & PAVEMENT MARKINGS UNLESS OTHERWISE NOTED.

SCALE
N.T.S

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Traffic Signal Inventory

2. *Controller Data*

Eagle	Epac 300 M41	102695 OSS#070503
Manufacturer	**Model No.**	**Serial No.**

TYPE	CONDITION	CONTROLLER PHASE CAPABILITY
☐ Electromechanical ☐ Non-NEMA ☐ NEMA-Modular ☒ NEMA-Keyboard	☐ Good ☒ Fair ☐ Poor	☐ 2 Phase ☐ 4 Phase ☒ 8 Phase

CONTROLLER TYPE	SETTING TYPE
☐ Pretimed ☐ Actuated ☒ Semi-Actuated	☐ Pin ☐ Thumbwheel ☐ Dial ☒ Keyboard

BACKPANEL SIZE	LOAD SWITCHES INSTALLED/TYPE	FLASH TRANSFER RELAYS INSTALLED
12P	2 – SSS-87-I/O	1 - Midtex

SOFTWARE LEVEL SIZE	CONFLICT MONITOR MODEL/SIZE
3.33e May ‘06	EDI MMN-16E

FLASHER	INTERCONNECT CABLE (If Yes, List Size)	COORDINATED (If Yes, complete section 9)
PDC 204	No	Yes

DETECTOR/AMPLIFIERS	QUANTITY/TYPE
1 - EDI LMD622t	

Traffic Signal Inventory

7. Signal Timing Sheet

∅1 Route 16 EB/WB	∅2 Union Street SB	∅3
∅4	∅5	∅6
∅7	∅8	OLA
OLB	OLC	OLD

PHASE	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8
Minimum Green (initial)	10	8						
Extension (passage) Vehicle Interval	1	2						
Yellow	4	4						
Red Clear	1	2						
Maximum Green I	40	30						
Maximum Green II	40	30						
Pedestrian Walk								
Pedestrian Clear								
Seconds Per Act								
Time to Reduce								
Before Reduction								
Minimum Gap								
Pedestrian Gap								
Walk (flash/steady)								
Recall	Max	None						
Memory	-	NL						
Delay								
FDW thru Vehicle Clearance								

∅1	∅2	∅3	∅4
			

∅5	∅6	∅7	∅8

Traffic Signal Inventory

8. Time of Day Plans

Daylight Savings / Equate Days				
DST Begin:	Month	__3___	Week	__2___
DST End:	Month	__11___	Week	__1___

Equate Days	
__1___ =	_Mon-Fri_
_____ =	_____

DAY	TIME HH:MM	Coord Pattern	MAX 2 Phases	OMITS Phases	Aux Events
1	0:00	Free			
	7:00	1/1/1			
	10:00	Free			
	15:00	2/1/1			
	19:00	Free			

9. *Coordination Data for Eagle Controllers*

SET-UP	CODE	0	1	2	3
Operation	1	FREE	AUTO	MANUAL	---
Mode (Normal)	0	PERM	YIELD	PM YLD	PM OMIT
Maximum	0	M INH	MAX 1	MAX 2	---
Correction	2	DWELL	MX DW	SH WAY	SW+
Offset	0	BEGIN	END	---	---
Force	0	PLAN	CYCLE	---	---

CYCLE LENGTH	1	2	3	4
Split 1	100	110		
Split 2				
Split 3				
Split 4				

CYCLE/ OFFSET	1	2	3	4	5	6
1	89	77				
2						
3						
4						

Cycle/Split Modes: 0=Actuated; 1=Coord Phase; 2=Min Rec; 3=Max Rec; 4=Ped Rec; 5=Max+Ped Rec
6=Phase Omitted; 7=Dual Coord Phase

Cycle 1/Split 1	1	2	3	4	5	6	7	8	9
Time	70	30							
Mode	1								

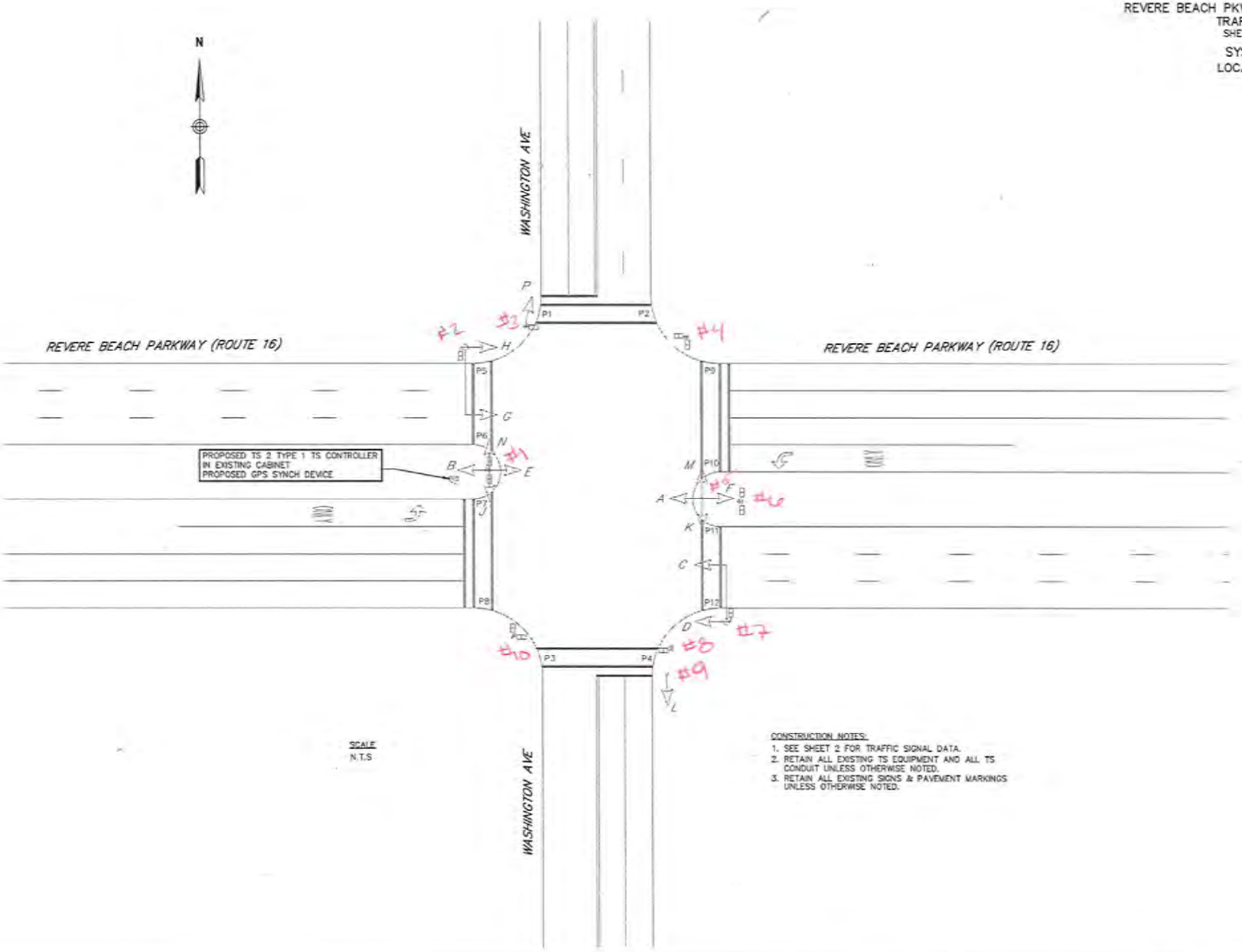
Cycle 2/Split 1	1	2	3	4	5	6	7	8	9
Time	85	25							
Mode	1								

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

EVERETT
REVERE BEACH PKWY AT WASHINGTON AVE
TRAFFIC PLAN
SHEET 1 OF 2
SYSTEM 5
LOCATION 14



SCALE
N.T.S

CONSTRUCTION NOTES:
1. SEE SHEET 2 FOR TRAFFIC SIGNAL DATA.
2. RETAIN ALL EXISTING TS EQUIPMENT AND ALL TS CONDUIT UNLESS OTHERWISE NOTED.
3. RETAIN ALL EXISTING SIGNS & PAVEMENT MARKINGS UNLESS OTHERWISE NOTED.

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Traffic Signal Inventory

2. *Controller Data*

Econolite	ASC-3-2100	
Manufacturer	Model No.	Serial No.

TYPE	CONDITION	CONTROLLER PHASE CAPABILITY
☐ Electromechanical ☐ Non-NEMA ☐ NEMA-Modular ☒ NEMA-Keyboard	☒ Good ☐ Fair ☐ Poor	☐ 2 Phase ☐ 4 Phase ☒ 8 Phase

CONTROLLER TYPE	SETTING TYPE
☐ Pretimed ☒ Actuated ☐ Semi-Actuated	☐ Pin ☐ Thumbwheel ☐ Dial ☒ Keyboard

BACKPANEL SIZE	LOAD SWITCHES INSTALLED/TYPE	FLASH TRANSFER RELAYS INSTALLED
12P	3 – SSS-87-I/O 3 – PDC 200	3 – Struthers Dunn

SOFTWARE LEVEL SIZE	CONFLICT MONITOR MODEL/SIZE
	TCT LNM 12

FLASHER	INTERCONNECT CABLE (If Yes, List Size)	COORDINATED (If Yes, complete section 9)
PDC 204	No	Yes

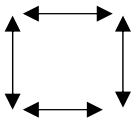
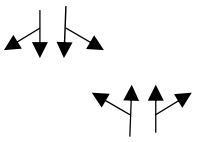
DETECTOR/AMPLIFIERS	QUANTITY/TYPE
1 – Sarasota 516T 2 – Sarasota 515T	2 – detector systems 1 – ICC 3803

Traffic Signal Inventory

7. *Signal Timing Sheet*

∅1	Route 16 WB Left	∅2	Route 16 EB	∅3	Pedestrian
∅4	Washington Avenue NB/SB	∅5	Route 16 EB Left	∅6	Route 16 WB
∅7		∅8		OLA	
OLB		OLC		OLD	

PHASE	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8
Minimum Green (initial)	5	12		12	5	12		
Extension (passage) Vehicle Interval	2	4		2	2	4		
Yellow	3	4	3	4	3	4		
Red Clear	1	1	1	1	1	1		
Maximum Green I	20	60		25	15	35		
Maximum Green II	10	35		20	10	60		
Pedestrian Walk			7					
Pedestrian Clear			19					
Seconds Per Act								
Time to Reduce								
Before Reduction								
Minimum Gap								
Pedestrian Gap								
Walk (flash/steady)								
Recall	Off	MAX		MAX	Off	MAX		
Memory	NL			NL		NL		
Delay								
FDW thru Vehicle Clearance			1					

∅1	∅2	∅3	∅4
			

∅5	∅6	∅7	∅8
			

Traffic Signal Inventory

8. *Time of Day Plans*

Daylight Savings / Equate Days				
DST Begin:	Month	_____	Week	_____
DST End:	Month	_____	Week	_____

Equate Days	
__1__ =	_Mon-Fri_
_____ =	_____

DAY	TIME HH:MM	Coord Pattern	MAX 2 Phases	OMITS Phases	Aux Events
1	0:00	Free			
	7:00	Action 1			
	10:00	Free			
	15:00	Action 2			
	19:00	Free			

9. *Coordination Data for Eagle Controllers*

SET-UP	CODE	0	1	2	3
Operation	1	FREE	AUTO	MANUAL	---
Mode (Normal)		PERM	YIELD	PM YLD	PM OMIT
Maximum		M INH	MAX 1	MAX 2	---
Correction		DWELL	MX DW	SH WAY	SW+
Offset		BEGIN	END	---	---
Force		PLAN	CYCLE	---	---

CYCLE LENGTH	1	2	3	4
Split 1	100	110		
Split 2				
Split 3				
Split 4				

CYCLE/ OFFSET	1	2	3	4	5	6
1	0	0				
2						
3						
4						

Cycle/Split Modes: 0=Actuated; 1=Coord Phase; 2=Min Rec; 3=Max Rec; 4=Ped Rec; 5=Max+Ped Rec
6=Phase Omitted; 7=Dual Coord Phase

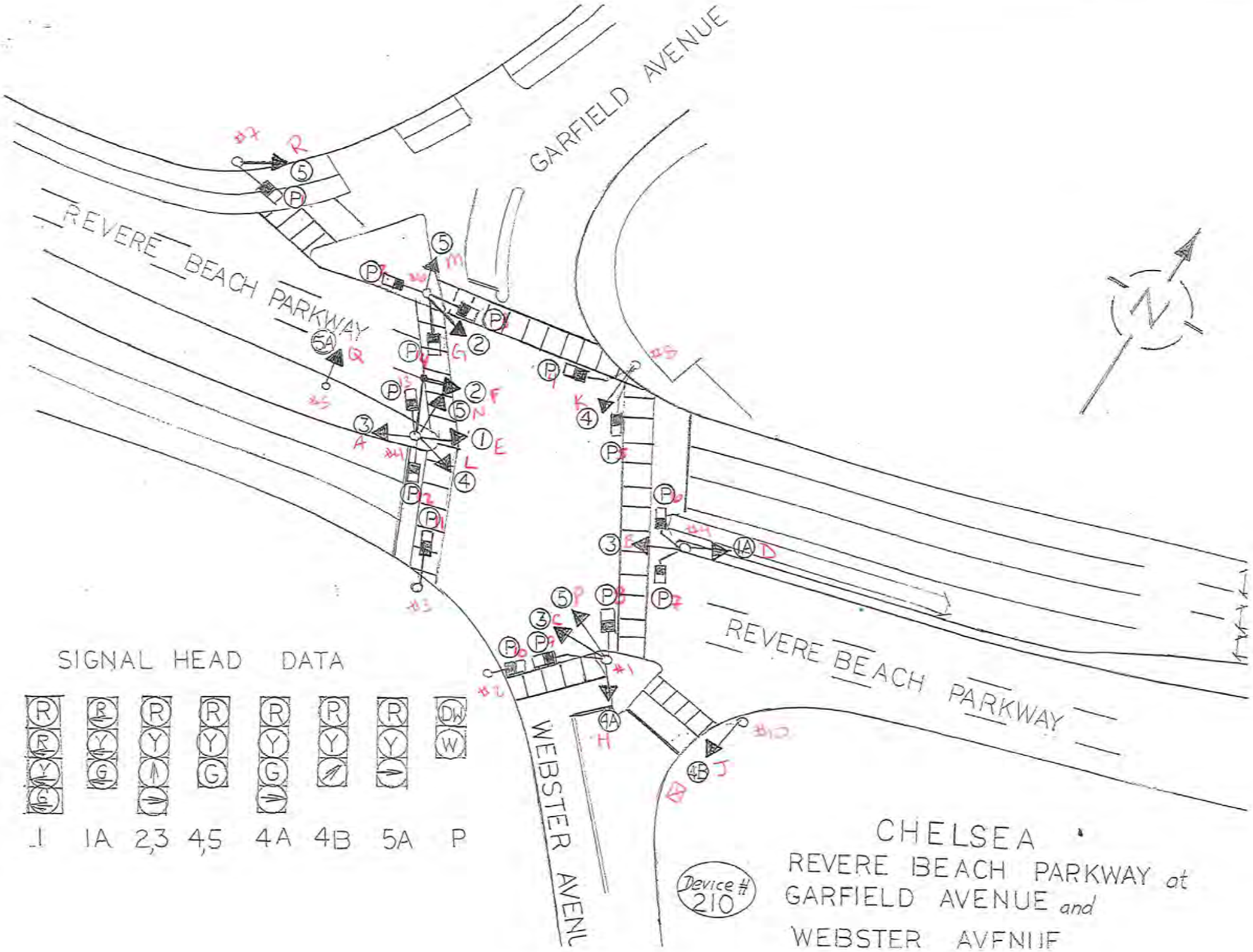
Cycle 1/Split 1	1	2	3	4	5	6	7	8	9
Time	14	36	28	22	14	36			
Mode		1				1			

Cycle 2/Split 1	1	2	3	4	5	6	7	8	9
Time	23	37	28	22	12	48			
Mode		1				1			

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									


GARFIELD AVENUE
REVERE BEACH PARKWAY
REVERE BEACH PARKWAY
WEBSTER AVENUE
SIGNAL HEAD DATA
1
1A
2,3
4,5
4A
4B
5A
P
CHELSEA
REVERE BEACH PARKWAY at
GARFIELD AVENUE and
WEBSTER AVENUE
Device # 210

Traffic Signal Inventory

3. Cabinet Data

Manufacturer	Model No.	Serial No.

OUTSIDE DIMENSIONS				TYPE OF SUPPORT	CONDITION
HEIGHT (inches)	WIDTH (inches)	DEPTH (inches)	HEIGHT OF BOTTOM OF CABINET (inches)		
P	P	P		☐ Side of Pole ☐ Pedestal ☒ Ground	☐ Good ☒ Fair ☐ Poor

DOOR	VENT	FAN / THERMOSTAT	MANUAL CONTROL	TEST BUTTONS (If Yes, List Type)
☒ Single ☐ Double ☒ Police ☐ Other	YES	YES	NONE	NONE

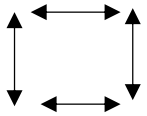
POLICE DOOR SWITCHES	DOCUMENTATION IN CABINET
Timer/Off Signal/Off Auto/Manual Signal/Flash Police Button	

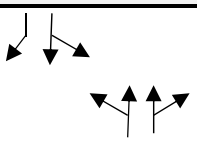
Traffic Signal Inventory

7. *Signal Timing Sheet*

∅1 Route 16 WB Left	∅2 Route 16 EB	∅3
∅4 Pedestrian	∅5	∅6 Route 16 WB
∅7 Webster NB	∅8 Garfield/Webster NB/SB	OLA
OLB	OLC	OLD

PHASE	∅1	∅2	∅3	∅4	∅5	∅6	∅7	∅8
Minimum Green (initial)	9	15				15	20	10
Extension (passage) Vehicle Interval	2	4				4	1	4
Yellow	3	4		3		4	4	4
Red Clear	1	1		1		1	1	1
Maximum Green I	35	55				55	10	35
Maximum Green II	35	50				50	12	30
Pedestrian Walk				5				
Pedestrian Clear				23				
Seconds Per Act								
Time to Reduce		30				30		30
Before Reduction		20				20		20
Minimum Gap		5				5		0
Pedestrian Gap								
Walk (flash/steady)								
Recall	EXT	EXT				EXT	Off	Off
Memory		On				On	NL	NL
Delay								
FDW thru Vehicle Clearance				0				

∅1	∅2	∅3	∅4
			

∅5	∅6	∅7	∅8
			

Traffic Signal Inventory

8. Time of Day Plans

Daylight Savings / Equate Days				
DST Begin:	Month	__3___	Week	__2___
DST End:	Month	__11___	Week	__1___

Equate Days	
_____ =	_____
_____ =	_____

DAY	TIME HH:MM	Coord Pattern	MAX 2 Phases	OMITS Phases	Aux Events

9. *Coordination Data for Eagle Controllers*

SET-UP	CODE	0	1	2	3
Operation	0	FREE	AUTO	MANUAL	---
Mode (Normal)		PERM	YIELD	PM YLD	PM OMIT
Maximum		M INH	MAX 1	MAX 2	---
Correction		DWELL	MX DW	SH WAY	SW+
Offset		BEGIN	END	---	---
Force		PLAN	CYCLE	---	---

CYCLE LENGTH	1	2	3	4
Split 1				
Split 2				
Split 3				
Split 4				

CYCLE/ OFFSET	1	2	3	4	5	6
1						
2						
3						
4						

Cycle/Split Modes: 0=Actuated; 1=Coord Phase; 2=Min Rec; 3=Max Rec; 4=Ped Rec; 5=Max+Ped Rec 6=Phase Omitted; 7=Dual Coord Phase

Cycle _/Split _	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split _	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									

Cycle _/Split_	1	2	3	4	5	6	7	8	9
Time									
Mode									