MAJOR EQUIPMENT LIST

EQUIPMENT ITEM NO. 678.15	US ROUTE 2 WILLISTON ROAD. @ RAMP "C"
CANTILEVER POLES W/MAST ARMS	2
PEDESTAL POSTS	2
NEW 12" TRAFFIC SIGNAL HEADS W/ TUNNEL VISORS, DISCONNECT HANGERS, BACKPLATES AND MOUNTING HARDWARE	
ONE-WAY, 3-SECTION	5
ONE-WAY, 5-SECTION	-
TWO-WAY, 3-SECTION	-
HANDICAP ACCESSIBLE PEDESTRIAN SIGNALS	
SIDE MOUNTED	-
POST TOP MOUNTED	2
CONTROLLER/CABINET	1
POWER DROP STANCHION	1
VEHICLE IDENTIFYING OPTICAL PREEMPTION AND COMMUNICATION SYSTEM (LS)	1(SEE SPECIAL PROVISIONS)
SPREAD SPECTRUM RADIO ASSEMBLY (LS)	1(SEE SPECIAL PROVISIONS)
CAMERA EXTENSION BRACKET (EA)	4 (SEE SPECIAL PROVISIONS)
CAMERA ASSEMBLY (EA)	4 (SEE SPECIAL PROVISIONS)
VIDEO DETECTION PROCESSOR (EA)	2 (SEE SPECIAL PROVISIONS)

EQUIPMENT	ITEM NO.	UNIT	US ROUTE 2 WILLISTON ROAD. @ RAMP "C"	NOTES
INTERCONNECTING CABLE	678.20	LF	415	CONT. TO JBI
INTERCONNECTING CABLE (MOD. - CAMERA CABLE)	678.20	LF	2200	SEE SPECIAL PROVISIONS
WIRED CONDUIT (1½") (PVC)	678.23	LF	1337	-
WIRED CONDUIT (2") (PVC)	678.23	LF	178	-
WIRED CONDUIT (2½") (PVC)	678.23	LF	15	-
ELECTRICAL CONDUIT SLEEVE	678.30	LF	81	6 INCHES
PULL BOX - STANDARD	678.25	EA	2	-
JUNCTION BOX	678.26	EA	9	-

THE QUANTITY LISTED ABOVE ARE APPROXIMATE AND ARE FURNISHED FOR INFORMATION ONLY. MISCELLANEOUS (UNLISTED) WIRE, CABLE, HARDWARE ETC., ARE REQUIRED TO PROVIDE FOR A FUNCTIONING TRAFFIC SIGNAL SYSTEM. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF THE NUMBER OF ITEMS AND THE TYPES OF EQUIPMENT REQUIRED.

SEE SHEET 70 FOR MAST ARM CROSS SECTIONS

SEE SHEET 56 FOR PAVEMENT MARKINGS AND SIGNS LAYOUT

SEE SHEET 67 - TRAFFIC SIGNAL SHEET NO.1 FOR INTERCONNECT TO SHERATON DR.

SEE SHEETS 56 AND 60 FOR VIDEO DETECTION ON RAMP "C"

NOTES:

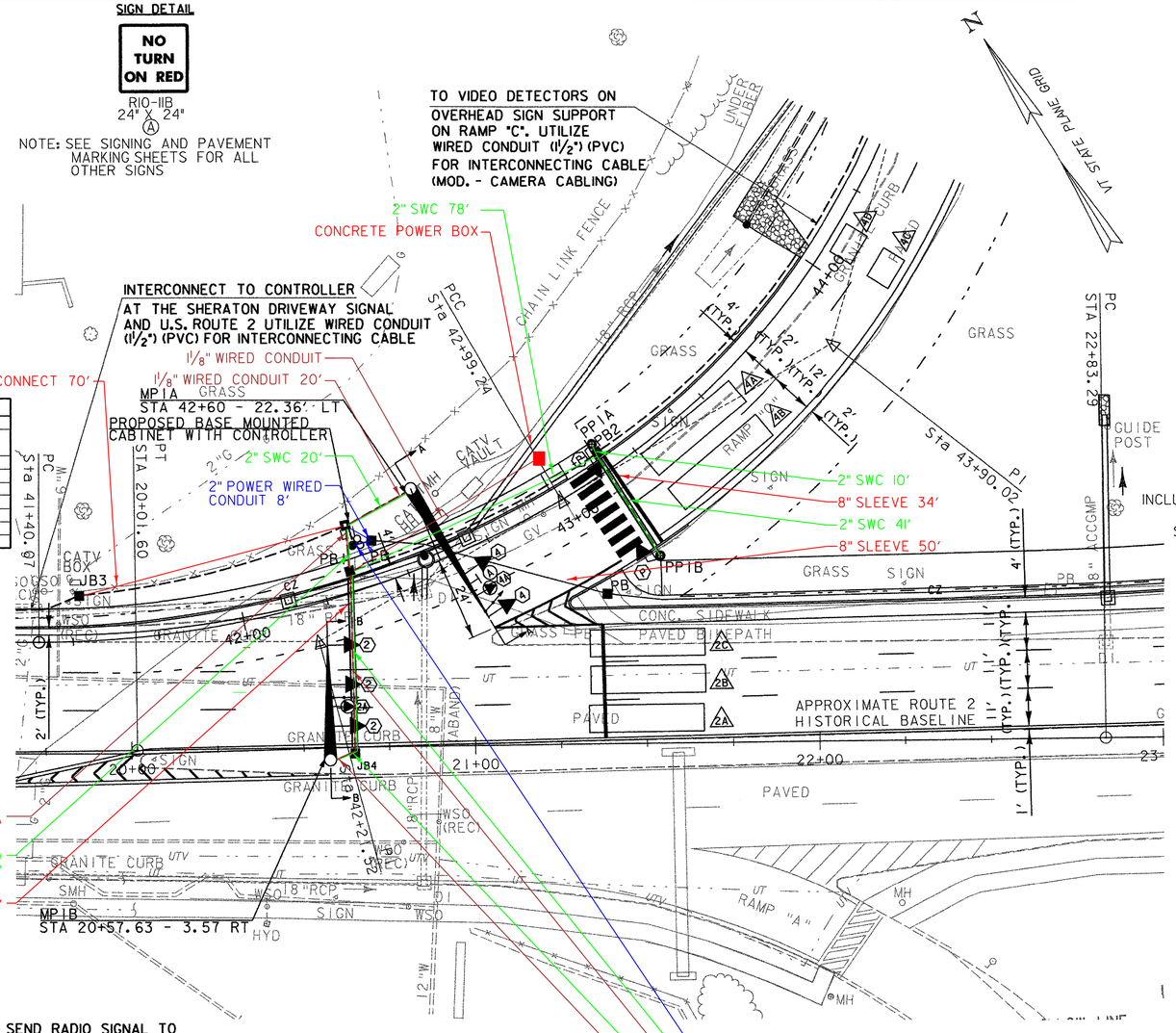
1. OFFSET IS REFERENCED AT THE END OF PHASE 2.
2. SPLITS AND OFFSETS ARE SHOWN IN SECONDS.
3. SPREAD SPECTRUM RADIO ASSEMBLY TO SEND SIGNAL COORDINATE DORSET STREET, INSTALL ANTENNA ON MPIA, MASTER RADIO IN CONTROLLER AT RAMP "C", INSTALL A REMOTE RADIO IN THE CONTROLLER CABINET AT DORSET AND AN ANTENNA ON THE EXISTING SPAN POLE (NW) CORNER.
4. VIDEO DETECTION AREAS 2A, 2B, 2C, 4A, 4B, 4C AND 4D ARE IN NON-LOCK PRESENCE MODE. VIDEO DETECTORS 4E - 4K ARE IN DELAY MODE, 10 SECONDS, LOCK. DETECTORS 4E-4J TO FORCE SPECIAL TIMING UNTIL RAMP CLEARS.
5. SIGNAL TO COORDINATE WITH BURLINGTON SYSTEM AT SHERATON DRIVEWAY BY INTERCONNECT.
6. SIGNAL TO INCLUDE VEHICLE IDENTIFYING OPTICAL PREEMPTION AND COMMUNICATION SYSTEM. THE SYSTEM INCLUDES AN OPTICAL SIGNAL PROCESSOR, 3 OPTICAL DETECTORS AND APPROXIMATELY 1290' +/- OF DETECTOR CABLE. THE SYSTEM SHALL BE COMPATIBLE WITH TOMAR STROBECOM II WHEN OPERATING IN THE ENCODED MODE.
7. ANY PULL BOX OR JUNCTION BOX WITHIN SIDEWALK SHALL HAVE A SKID RESISTANT COVER.

SIGN DETAIL

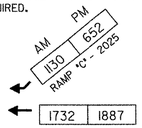
NO TURN ON RED

R10-11B 24" X 24"

NOTE: SEE SIGNING AND PAVEMENT MARKING SHEETS FOR ALL OTHER SIGNS



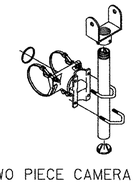
2025 HOURLY VOLUMES



SEND RADIO SIGNAL TO COORDINATE WITH SIGNAL AT DORSET STREET

CAMERA EXTENSION BRACKET FOR MAST ARM AND MONOTUBE SIGN BRIDGE

N.T.S.



TWO PIECE CAMERA MOUNT

TUBE LENGTHS: 23", 37", 46", OR 74"

BAND LENGTHS: 29", 36", 42", 48", OR 56"

Notes:

All assemblies shall have steel fasteners and stainless steel clamp screw kits.

1or 2 piece bracket mounts shall be specified for camera type.

ROUTE 2 (WILLISTON ROAD) & RAMP "C"

ELECTRICAL CONDUIT SLEEVE (8") (PVC)
RELOCATED RAMP "C" CROSSING - ~~31'~~ 34'
ROUTE 2 (WILLISTON ROAD) - 50'

WIRED CONDUIT (2½") (PVC)
CONTROLLER TO PBI - 15'

WIRED CONDUIT (2") (PVC)
CONTROLLER TO RELOCATED LIGHT STANDARD (LI) - 10'
PBI TO JB4 - 55'
PBI TO PB2 - 81'
CONTROLLER TO MPIA - 23'
JB4 TO MPIB - 9'

WIRED CONDUIT (1½") (PVC)
JBI TO JB2 - 164'
JB2 TO JB3 - 159'
JB3 TO CONTROLLER - 81'

WIRED CONDUIT (1½") (PVC) (CONT.)
PB2 TO PPIIB - 41'
PPIA TO PB2 - 3'
PB2 TO JB5 - 132'
JB5 TO JB6 - 150'
JB6 TO JB7 - 151'
JB7 TO JB8 - 151'
JB8 TO JB9 - 148'
JB9 TO JBIO - 133'
JBIO TO MONOTUBE SIGN BRIDGE - 24'

0 20 40
SCALE IN FEET

TABLE OF CHANGE SEQUENCE

FACE	Ø4 + Ø8 R/W	Ø4 + Ø8 CLEAR TO ALL OTHER PHASES		Ø2 + Ø6 R/W	Ø2 + Ø6 CLEAR TO ALL OTHER PHASES		FLASHING OPERATION
4	⇙	⇙	R	R	R	R	FY
6	R	R	R	G	Y	R	FR
P	DW	DW	DW	W	DW	DW	B

NOTE: W = WALK, FD = FLASHING DON'T WALK
DW = DON'T WALK, B = BLANK

PREEMPTION SETTINGS

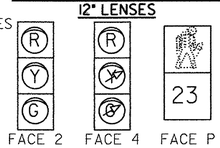
	PREEMPT I	PREEMPT I
PRIORITY	NO	NO
DET. LOCK	YES	YES
DELAY	0	0
ALT. MIN. GRN	5	5
ALT. YELLOW	PARENT	PARENT
ALT. RED	PARENT	PARENT
ALT. PED. CLR.	PARENT	PARENT
HOLD GREEN	15	15
HOLD YELLOW	3.0	4.0
HOLD RED	2.5	2.0
HOLD PHASE	4	2
EXIT PHASE	2	4
EXIT CALL	NONE	NONE

CONTROLLER TIMING CHART

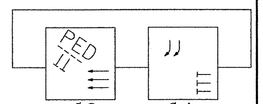
LOCAL PROGRAMING	PHASE 1	2	3	4	5	6	7	8	9
MINIMUM GREEN		15		9					
EXTENSION		2.0		2.0					
YELLOW CLEARANCE		4.0		3.0					
ALL RED CLEARANCE		2.0		2.5					
MAXIMUM GREEN I-75 SEC		39		24					
MAX. GREEN II-75 SEC 0600 - 0900		28		34					
MAX. GREEN III-75 SEC 1500 - 1800		37		26					
MAX. GREEN IV-75 SEC RAMP		23		40					
WALK		7		-					
FLASHING DON'T WALK		8		-					
RECALL		MAX		MAX					
MEMORY		N/L		N/L					

NOTE: INCLUDE BACKPLATES ON ALL SIGNAL FACES.

SIGNAL FACE ARRANGEMENT 12" LENSES



PHASING DIAGRAM EXIT 14 W - RAMP "C" AT ROUTE 2 (WILLISTON ROAD)



COORDINATION TIMING (SECONDS)

DIAL SPLIT	CYCLE LENGTH	PHASES 1	2	3	4	5	6	7	8	OFFSETS SEC	%
1 - 1	75		36		39					20	27
2 - 1	75		43		32					30	40
3 - 1	75		34		41					13	17

1 - 1	WEEKDAYS - 0600 - 0900
2 - 1	WEEKDAYS - 1500 - 1800
3 - 1	WEEKDAYS - 0900 TO 1500, 1800 TO 2300
3 - 1	SAT. & SUN. - 0600 TO 2300

FOR ALL OTHER TIMES, THE INTERSECTION SHALL OPERATE IN FREE MODE.

EXISTING	NEW	LEGEND
		MAST ARM POLE (MP)
		STRAIN POLE (SP)
		CONTROLLER CABINET
		PULLBOX (PB)/ JUNCTION BOX (JB)
		SIGNAL HEAD
		CONDUIT
		VEHICLE LOOPS
		PEDESTAL POST (PP)
		MAST ARM MOUNTED SIGN
		STANCHION
		VIDEO DETECTOR
		VIDEO DETECTION AREA
		OPTICAL DETECTOR

TRAFFIC SIGNAL SHEET NO. 2

PROJECT NAME: SOUTH BURLINGTON
PROJECT NUMBER: IM 089-3(37)

FILE NAME: z03al78trfbdr.dgn
PROJECT LEADER: KEN UPMAL
DESIGNED BY: V. KACOYANNAKIS
PLOT DATE: 5/16/2006
DRAWN BY: V. KACOYANNAKIS
CHECKED BY: J. FORD
SHEET 68 OF 99