

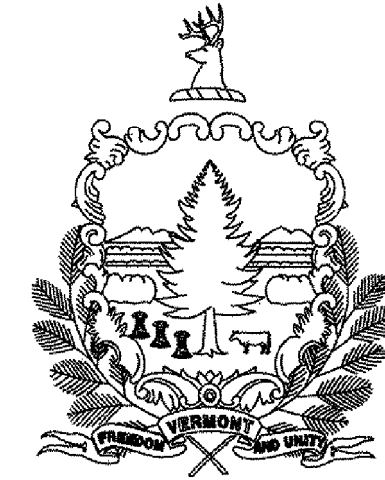
INDEX OF SHEETS

- 1. TITLE SHEET
- 2. QUANTITY SHEET
- 3-5. TRAFFIC SIGNAL SHEETS

STANDARDS

E-100	CONSTRUCTION APPROACH SIGNS	01/02/2004
E-100A	SIDE ROAD CONSTRUCTION APPROACH SIGNS	01/02/2004
E-101	CONSTRUCTION SIGN DETAILS	05/30/2003
E-102	CONSTRUCTION SIGN DETAILS	06/30/2003
E-110	MAJOR MAINTENANCE OPERATION LANE CLOSURE	08/08/1995
E-111	MINOR MAINTENANCE OPERATIONS	03/11/1997
E-171A	TRAFFIC CONTROL SIGNALS GENERAL NOTES AND DETAILS	08/09/1995
E-171B	TRAFFIC CONTROL SIGNALS MISC. DETAILS	08/09/1995
E-171C	TRAFFIC CONTROL SIGNALS CANTILEVER MOUNTING DETAILS	08/09/1995

STATE OF VERMONT AGENCY OF TRANSPORTATION



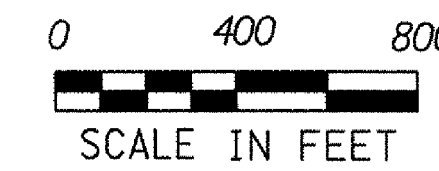
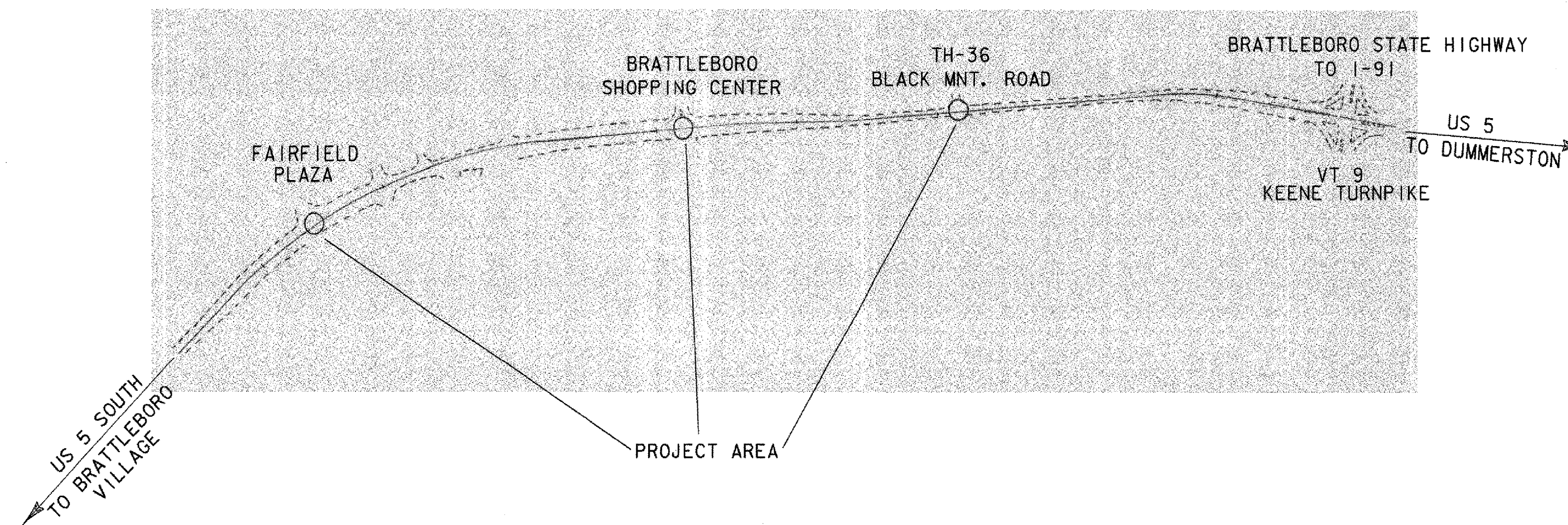
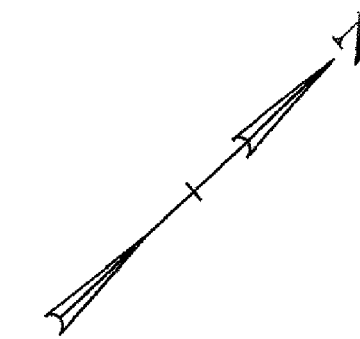
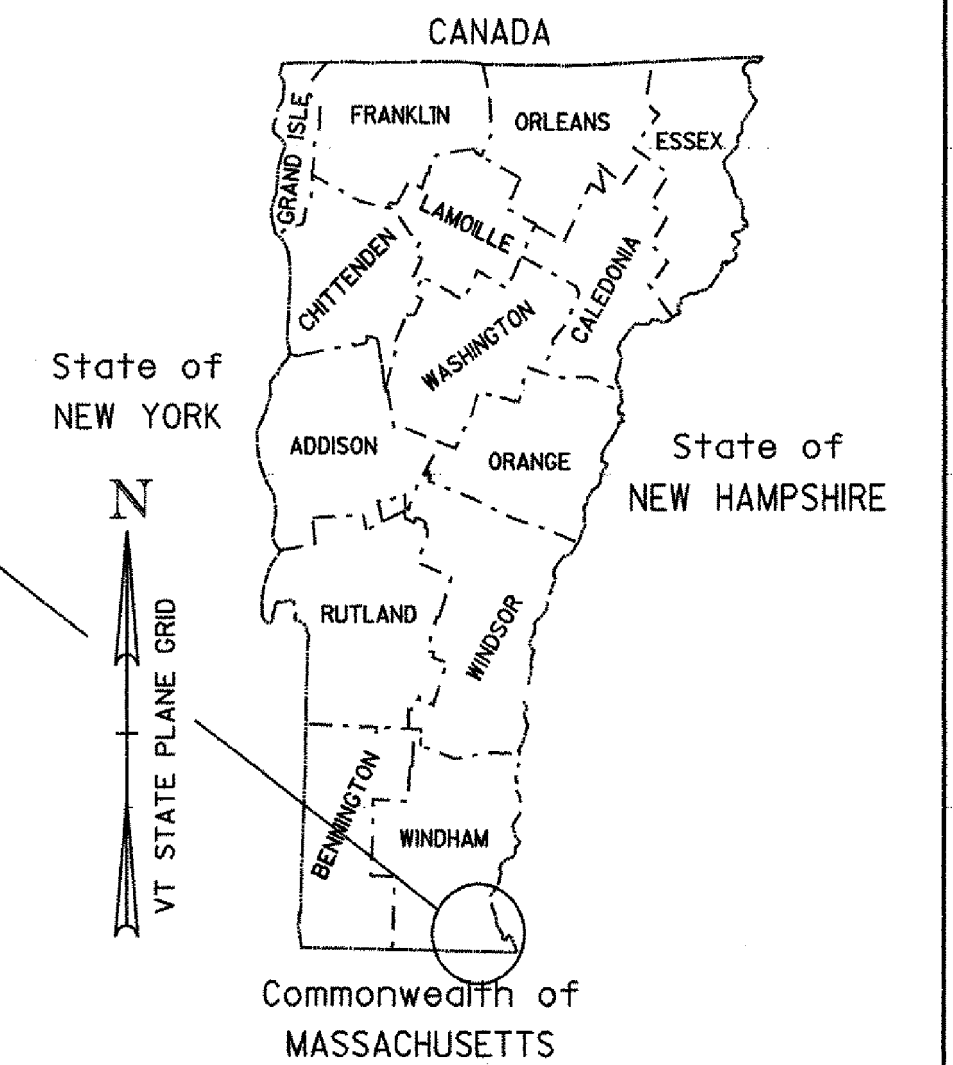
PROPOSED IMPROVEMENT TOWN OF BRATTLEBORO COUNTY OF WINDHAM US ROUTE 5 - PRINCIPAL ARTERIAL

TOWN OF BRATTLEBORO, US 5 AT THE INTERSECTIONS OF FAIRFIELD PLAZA (MM 3.90), SHOPPING CENTER (MM 4.16), AND BLACK MTN. ROAD (MM 4.35).

LENGTH OF ROADWAY - US 5 & FAIRFIELD PLAZA	500 FT	.09 MILES
LENGTH OF ROADWAY - US 5 & SHOPPING CENTER	500 FT	.09 MILES
LENGTH OF ROADWAY - US 5 & BLACK MTN. ROAD	500 FT	.09 MILES
TOTAL LENGTH OF ROADWAY	1500 FT	.28 MILES

THIS PROJECT SHALL CONSIST OF ALL WORK ASSOCIATED WITH THE INSTALLATION OF VIDEO DETECTION, NEW SIGNAL CONTROLLERS, AND COORDINATION AT THREE SIGNALIZED INTERSECTIONS.

PROJECT LOCATION
STPG SGNL (36)



THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE DIRECTOR OF PROGRAM DEVELOPMENT.
CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2006, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JUNE 15, 2006 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

CONVENTIONAL SYMBOLS

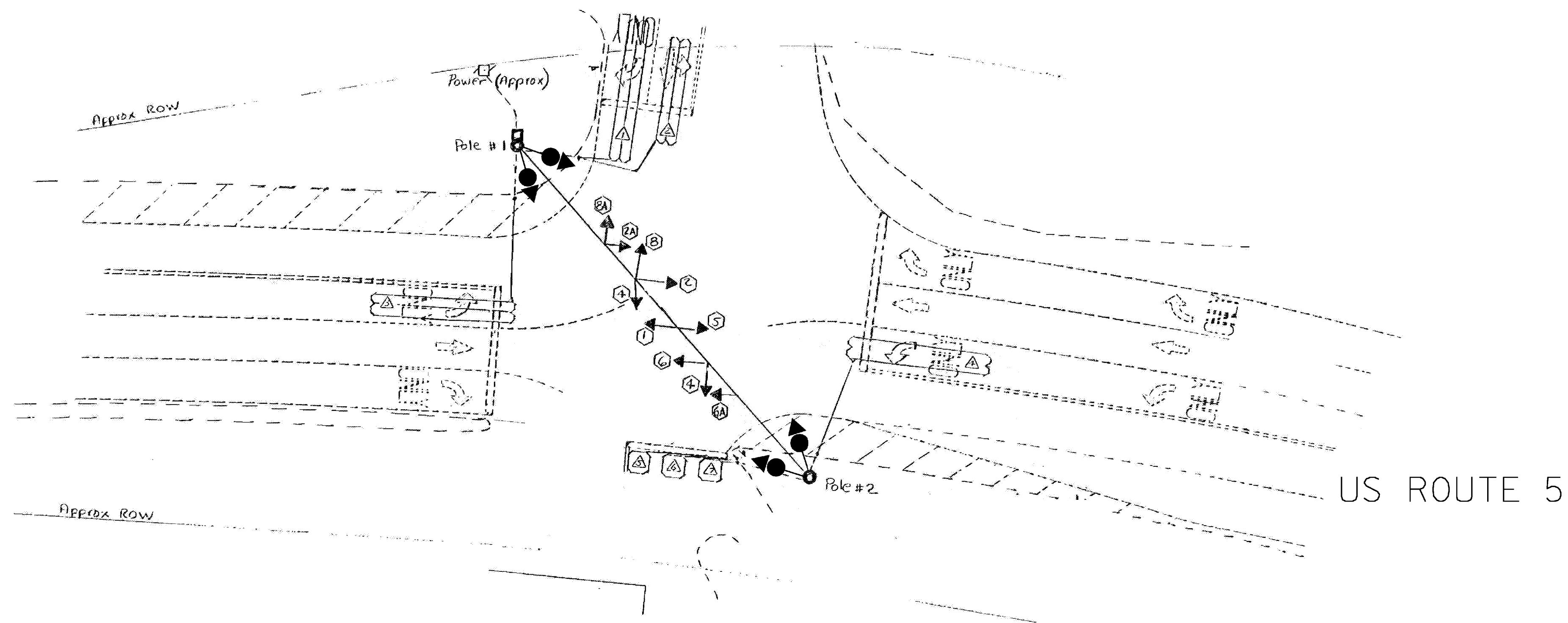
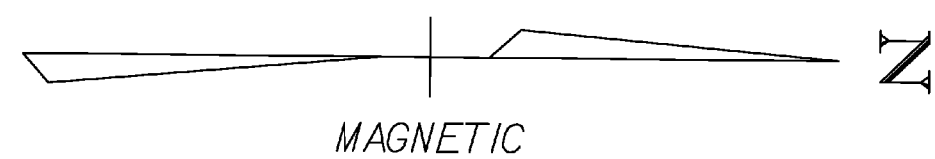
COUNTY LINE	
TOWN LINE	
LIMITS OF ACCESS	
POINT OF ACCESS	
FENCE LINE	
STONE WALL	
TRAVELED WAY	
GUARD RAIL	
RAILROAD	
SURVEY LINE	
CULVERT	
POWER POLE	
TELEPHONE POLE	
TREES	
CONTROL OF ACCESS	
PROPERTY LINE	
R.O.W. TAKING LINE	
SLOPE RIGHTS	
TOP OF CUT	
TOE OF SLOPE	

SURVEYED BY : N/A
SURVEYED DATE : N/A
DATUM
VERTICAL N/A
HORIZONTAL N/A

DIRECTOR OF PROGRAM DEVELOPMENT	
APPROVED	DATE 6-23-2009
PROJECT MANAGER : B. NYQUIST	
PROJECT NAME : BRATTLEBORO	
PROJECT NUMBER : STPG SGNL (36)	
SHEET 1 OF 5 SHEETS	

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES											TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
										ROADWAY	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND	QUANTITIES	UNIT	ITEMS
										1	1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22				
										40	40		HR	UNIFORMED TRAFFIC OFFICERS	630.10				
										40	40		HR	FLAGGERS	630.15				
										1	1		LS	MOBILIZATION/DEMOBILIZATION	635.11				
										1	1		LS	TRAFFIC CONTROL	641.10	-			
										1	1		EACH	SPECIAL PROVISION (RADIO INTERCONNECT / VIDEO VEHICLE DETECTION SYSTEM) (US 5 @ BLACK MTN. ROAD)	900.620				
										1	1		EACH	SPECIAL PROVISION (RADIO INTERCONNECT / VIDEO VEHICLE DETECTION SYSTEM) (US 5 @ FAIRFIELD PLAZA)	900.620				
										1	1		EACH	SPECIAL PROVISION (RADIO INTERCONNECT / VIDEO VEHICLE DETECTION SYSTEM) (US 5 @ SHOPPING CENTER)	900.620				



NOTES:

- 1) EXISTING CONTROLLER TIMINGS SHALL BE RETAINED.
- 2) EXISTING CONDUIT SHALL BE UTILIZED FOR NECESSARY WIRING.
- 3) ANY OTHER MISCELLANEOUS EQUIPMENT AND LABOR NECESSARY TO PROVIDE A FULLY FUNCTIONAL RADIO INTERCONNECT & VIDEO DETECTION SYSTEM SHALL BE INCIDENTAL TO ITEM # 900.620 SPECIAL PROVISION (RADIO INTERCONNECT / VIDEO VEHICLE DETECTION SYSTEM) (US 5 @ FAIRFIELD PLAZA).
- 4) VIDEO VEHICLE DETECTORS SHALL BE PLACED SO THAT OCCLUSION IS MINIMIZED AND PHASING IS NOT AFFECTED.
- 5) VIDEO VEHICLE DETECTION AREAS SHALL EXTEND 5 FT PAST THE STOP BAR.
- 6) NEW ~~ECONOLITE ASC/3-2100 CONTROLLER~~ OR NAZTEC MODEL 980 CONTROLLER TO REPLACE EXISTING ECONOLITE MODEL 8000 CONTROLLER.
- 7) VIDEO VEHICLE DETECTION SYSTEM SHALL BE ~~ECONOLITE AUTOSCOPE SOLO TERRA OR~~ ITERIS VERSICAM OR TRAFICON VIP SERIES OR APPROVED EQUAL.
- 8) VEHICLE DETECTOR LOOPS TO BE DISCONNECTED AT THE EXISTING PULLBOX LOCATIONS AND WIRING REMOVED BACK TO THE CABINET.
- 9) NEW ~~ECONOLITE~~ OR NAZTEC BRAND 55" P44 CABINET TO REPLACE EXISTING POLE MOUNTED CABINET. A TOTAL OF FOUR BRACKETS WITH STRAPS TO BE PROVIDED TO MOUNT NEW CABINET TO THE STRAIN POLE. ALL NECESSARY EXISTING EQUIPMENT SHALL BE TRANSFERRED TO THE NEW CABINET.
- 10) ALL EXISTING EQUIPMENT TO BE SALVAGED INCLUDING SIGNAL CABINET, CONTROLLER, AND LOOP SENSOR AMPS TO BE REMOVED AND RETURNED BY THE CONTRACTOR TO THE VTRANS TRAFFIC SHOP IN BERLIN, VT WITHIN 48 HOURS OF REMOVAL. CONTACT RUSS VELANDER AT 828-3535 WITH ANY QUESTIONS.

◀ - VIDEO DETECTION CAMERA

LIST OF MAJOR EQUIPMENT	
ITEM #900.620 SPECIAL PROVISION (RADIO INTERCONNECT/ VIDEO VEHICLE DETECTION SYSTEM) (US 5 @ FAIRFIELD PLAZA)	QUANTITY
ENCOM MODEL EP-5200, RS-232, SHELF MOUNT RADIO	1 EA
YAGI ANTENNA, 8.5 DB, 900 MHZ	1 EA
LIGHTNING PROTECTION	1 EA
6' RF JUMPER CABLE	1 EA
ENCOM DATA CABLE, CB-81	1 EA
LMR COAXIAL CABLE, CB-1055	1 EA
VIDEO VEHICLE DETECTION	4 EA
ECONOLITE ASC/3-2100 OR NAZTEC MODEL 980 CONTROLLER	1 EA
ECONOLITE ASC/2M-1000 OR NAZTEC MODEL 981 MASTER CONTROLLER	1 EA
ECONOLITE OR NAZTEC 55" P44 TRAFFIC CONTROL CABINET	1 EA

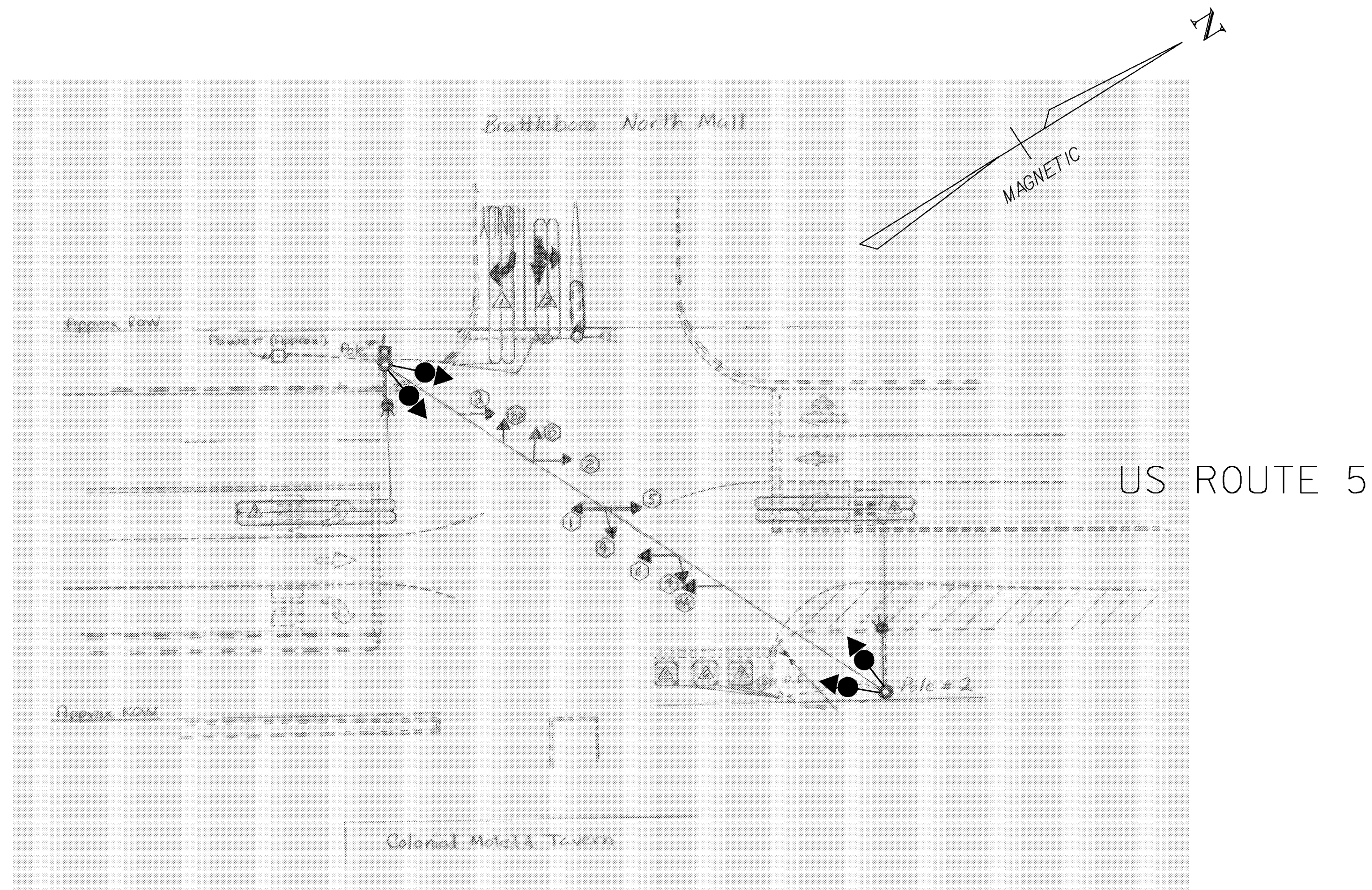
SEE LETTER DATED 9/22/09 FROM B. MCAVOY, TO EAST COAST SIGNALS, INC.

CONSTRUCTION ACTIVITIES WILL BE SHORT DURATION AND WILL LIKELY RESULT IN MINIMAL IMPACT TO THE TRAVELING PUBLIC. ALL WORK SHALL BE PERFORMED DURING DAYTIME, OFF-PEAK HOURS. REFER TO THE VERMONT AGENCY OF TRANSPORTATION STANDARD DRAWINGS E-110 AND E-111 FOR ADDITIONAL TRAFFIC CONTROL INFORMATION. TRAFFIC CONTROL WARNING SIGNS SHALL BE PROVIDED AS NECESSARY ON EACH APPROACH PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). PAYMENT FOR THESE SIGNS, REFLECTORIZED PLASTIC DRUMS, ECT. SHALL BE PAID UNDER CONTRACT ITEM 641.10.

US 5 @ FAIRFIELD PLAZA

PROJECT NAME: BRATTLEBORO	PLOT DATE: 19-AUG-2009
PROJECT NUMBER: STPG SGNL (36)	DRAWN BY: B. MCAVOY
FILE NAME: 09d014/Traffic/td014nu1.dg	DESIGNED BY: B. MCAVOY
TRAFFIC SIGNAL SHEET 1	CHECKED BY: B. NYQUIST
	SHEET 3 OF 5

N.T.S.



NOTES:

- 1) EXISTING CONTROLLER TIMINGS SHALL BE RETAINED.
- 2) EXISTING CONDUIT SHALL BE UTILIZED FOR NECESSARY WIRING.
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- 4) VIDEO VEHICLE DETECTORS SHALL BE PLACED SO THAT OCCLUSION IS MINIMIZED AND PHASING IS NOT AFFECTED.
- 5) VIDEO VEHICLE DETECTION AREAS SHALL EXTEND 5 FT PAST THE STOP BAR.
- 6) NEW ~~ECONOLITE ASC/3-2100 CONTROLLER~~ OR NAZTEC MODEL 980 CONTROLLER TO REPLACE EXISTING ECONOLITE MODEL 8000 CONTROLLER.
- 7) VIDEO VEHICLE DETECTION SYSTEM SHALL BE ~~ECONOLITE AUTOSCOPE SOLO TERRA OR~~ ITERIS VERSICAM OR TRAFICON VIP SERIES OR APPROVED EQUAL.
- 8) VEHICLE DETECTOR LOOPS TO BE DISCONNECTED AT THE EXISTING PULLBOX LOCATIONS AND WIRING REMOVED BACK TO THE CABINET.
- 9) ALL EXISTING EQUIPMENT TO BE SALVAGED INCLUDING CONTROLLER AND LOOP SENSOR AMPS TO BE REMOVED AND RETURNED BY THE CONTRACTOR TO THE VTRANS TRAFFIC SHOP IN BERLIN, VT WITHIN 48 HOURS OF REMOVAL. CONTACT RUSS VELANDER AT 828-3535 WITH ANY QUESTIONS.

LIST OF MAJOR EQUIPMENT	
ITEM #900.620 SPECIAL PROVISION (RADIO INTERCONNECT/ VIDEO VEHICLE DETECTION SYSTEM) (US 5 @ SHOPPING CENTER)	QUANTITY
ENCOM MODEL EP-5200, RS-232, SHELF MOUNT RADIO	1 EA
YAGI ANTENNA, 8.5 DB, 900 MHZ	1 EA
LIGHTNING PROTECTION	1 EA
6' RF JUMPER CABLE	1 EA
ENCOM DATA CABLE, CB-81	1 EA
LMR COAXIAL CABLE, CB-1055	1 EA
VIDEO VEHICLE DETECTION	4 EA
ECONOLITE ASC/3-2100 OR NAZTEC MODEL 980 CONTROLLER	1 EA

SEE LETTER DATED 9/22/09 FROM B. MCAVOY, TO EAST COAST SIGNALS, INC.

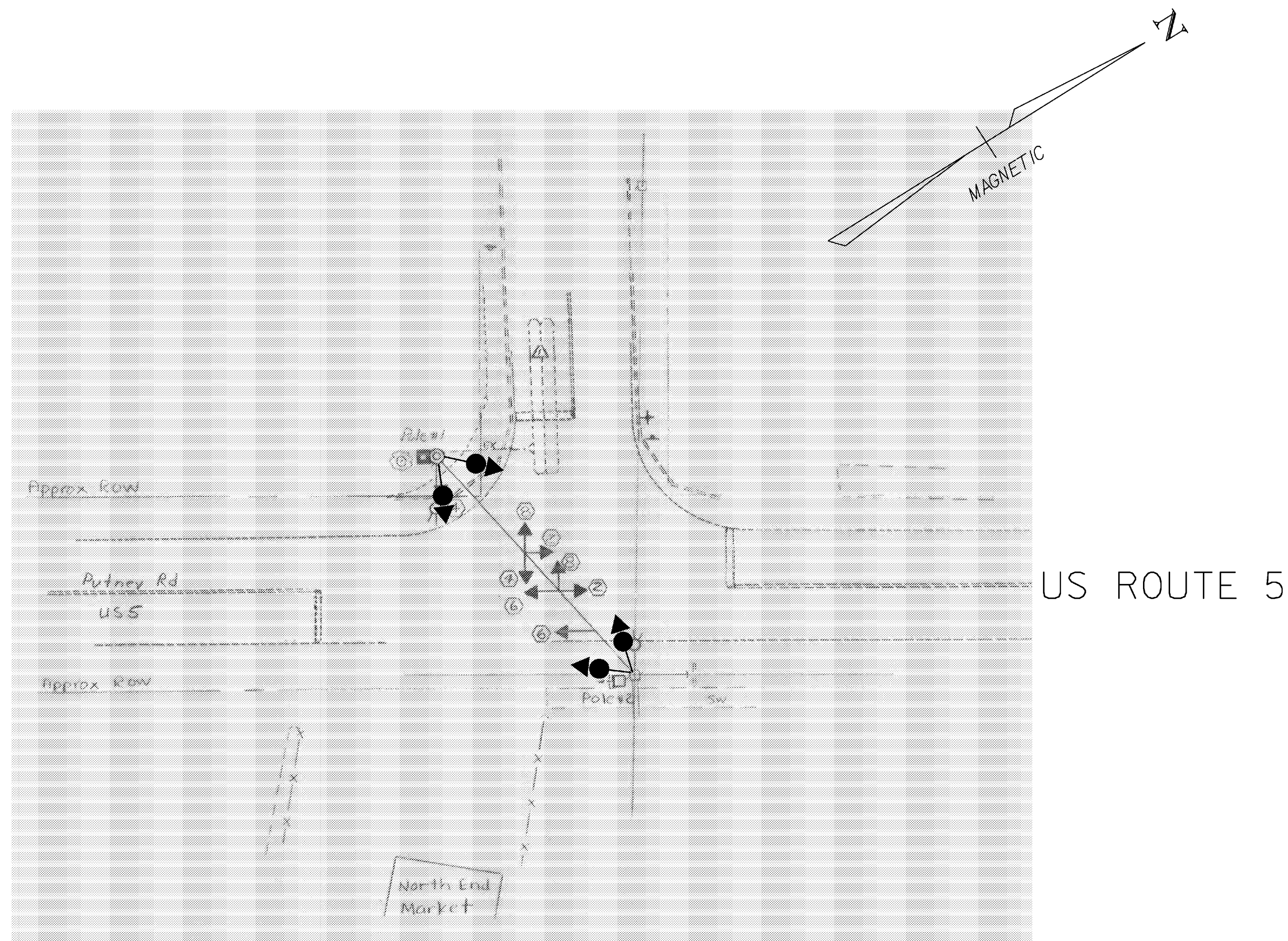
NEW ELECTRICAL RECEPTACLE ADDED TO THE CABINET PER CHANGE OF DESIGN/SUPPLEMENTAL AGREEMENT #1, DATED 7/8/10

CONSTRUCTION ACTIVITIES WILL BE SHORT DURATION AND WILL LIKELY RESULT IN MINIMAL IMPACT TO THE TRAVELING PUBLIC. ALL WORK SHALL BE PERFORMED DURING DAYTIME, OFF-PEAK HOURS. REFER TO THE VERMONT AGENCY OF TRANSPORTATION STANDARD DRAWINGS E-110 AND E-111 FOR ADDITIONAL TRAFFIC CONTROL INFORMATION. TRAFFIC CONTROL WARNING SIGNS SHALL BE PROVIDED AS NECESSARY ON EACH APPROACH PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). PAYMENT FOR THESE SIGNS, REFLECTORIZED PLASTIC DRUMS, ECT. SHALL BE PAID UNDER CONTRACT ITEM 641.10.

US 5 @ BRATTLEBORO SHOPPING CENTER

PROJECT NAME: BRATTLEBORO	PLOT DATE: 19-AUG-2009
PROJECT NUMBER: STPG SGNL (36)	DRAWN BY: B. MCAVOY
FILE NAME: 09d014/Traffic/td014nu1.dg	DESIGNED BY: B. MCAVOY
TRAFFIC SIGNAL SHEET 2	CHECKED BY: B. NYQUIST
	SHEET 4 OF 5

N.T.S.



NOTES:

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- 4) VIDEO VEHICLE DETECTORS SHALL BE PLACED SO THAT OCCLUSION IS MINIMIZED AND PHASING IS NOT AFFECTED.
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LIST OF MAJOR EQUIPMENT	
ITEM #900.620 SPECIAL PROVISION (RADIO INTERCONNECT/ VIDEO VEHICLE DETECTION SYSTEM) (US 5 @ BLACK MOUNTAIN ROAD)	QUANTITY
ENCOM MODEL EP-5200, RS-232, SHELF MOUNT RADIO	1 EA
YAGI ANTENNA, 8.5 DB, 900 MHZ	1 EA
LIGHTNING PROTECTION	1 EA
6' RF JUMPER CABLE	1 EA
ENCOM DATA CABLE, CB-81	1 EA
LMR COAXIAL CABLE, CB-1055	1 EA
VIDEO VEHICLE DETECTION	4 EA
ECONOLITE ASC/3-2100 OR <u>NAZTEC MODEL 980 CONTROLLER</u>	1 EA

SEE LETTER DATED 9/22/09 FROM B. MCAVOY, TO EAST COAST SIGNALS, INC.

NEW ELECTRICAL RECEIPTAL ADDED TO THE CABINET PER CHANGE OF DESIGN/SUPPLEMENTAL AGREEMENT #1, DATED 7/8/10

CONSTRUCTION ACTIVITIES WILL BE SHORT DURATION AND WILL LIKELY RESULT IN MINIMAL IMPACT TO THE TRAVELING PUBLIC. ALL WORK SHALL BE PERFORMED DURING DAYTIME, OFF-PEAK HOURS. REFER TO THE VERMONT AGENCY OF TRANSPORTATION STANDARD DRAWINGS E-110 AND E-111 FOR ADDITIONAL TRAFFIC CONTROL INFORMATION. TRAFFIC CONTROL WARNING SIGNS SHALL BE PROVIDED AS NECESSARY ON EACH APPROACH PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). PAYMENT FOR THESE SIGNS, REFLECTORIZED PLASTIC DRUMS, ECT. SHALL BE PAID UNDER CONTRACT ITEM 641.10.

US 5 @ BLACK MOUNTAIN ROAD

PROJECT NAME: BRATTLEBORO	PLOT DATE: 19-AUG-2009
PROJECT NUMBER: STPG SGNL (36)	DRAWN BY: B. MCAVOY
FILE NAME: 09d014/Traffic/td014nu1.dg	DESIGNED BY: B. MCAVOY
TRAFFIC SIGNAL SHEET 3	CHECKED BY: B. NYQUIST
	SHEET 5 OF 5

N.T.S.