SCHULTZ

Vermont Agency of Transportation

RECEIVED

ON: May 5, 2014

and Checked for

CONFORMANCE

BY: Jennifer Fitch DATE: 05/21/2014

May 5, 2014

Town of Rochester, Vermont. Bridge 15

BRF 0162(16)

Traffic Control Plan

During the course of construction for Bridge 15 on Route 73 over Brandon Brook traffic control will be necessary. W.M. Schultz Construction Inc. (WMSCI) intends to limit our impact on the public as much as possible. To help with this WMSCI will utilize daily temporary single lane traffic setups prior to and after the allowed contract Bridge Closure Period. At a minimum, traffic will remain open to alternating one lane of traffic in each direction. When physical work begins we will have one lane alternating traffic controlled with the proper traffic control devices as needed directing each side when to proceed. Once the contract allowed Bridge Closure Period has begun the contract plan detour will be installed and implemented. Traffic setups will comply with the contract plans, specifications, VTRANS section 641 and the MUTCD.

- Attached are drawings of our proposed traffic setup, along with applicable standards & plan sheets.
- We plan to deploy message boards, two weeks prior to the detour and road closure.
- Sign location, layout and setup will occur prior to initiation of the detour; signs will remain covered until detour is initiated.
- Driveways will be maintained or have alternate access provided.
- Flaggers will be used as needed and communicate with 2 way radios.
- All traffic control devices such as signs, signals, message boards, arrow boards, cones, barricades, drums and barrier will comply with VTRANS standard sheets and the MUTCD.
- Initially temporary lane closures will be utilized until the contract allowed Bridge Closure Period.
- During the Bridge Closure Period the plan detour traffic control setup will be utilized.
- After the Bridge Closure Period it will be necessary to use single lane traffic control to finish

1. The Traffic Control Plan is accepted for vehicle traffic only.
2. The Agency will coordinate with the Contractor for a single two week truck traffic detour prior to and after the bridge closure period for Bridge 15. The Contractor shall notify the Agency at least two weeks in advance of implementing the truck detour route.
3. The Agency will provide the Contractor with a received Regional Traffic Control Plan that includes additional signage to be added to the current detour signs and confirmatory route markers and messages to be displaced on the portable changeable message signs as required for detouring trucks.
4. The Contractor shall install the additional signs as shown on the revised Regional Traffic Control Plan prior to detouring truck traffic. Per the contract documents the detour signs shall be covered aft the additional signs have been added and uncovered immediately prior to implementing the truck detour route (exact time to uncover the truck detour signage for the truck detour is to be coordinated with the Resident Engineer).
5. The Contractor shall modify the portable changeable message signs for detouring trucks as shown on the revised Traffic Control Plan and implement the associated message one week prior to the implementation of

the truck detour and immediately prior to detouring truck traffic (exact timing is to be coordinated with the Resident Engineer.

Phase 1 – Daily Closures, Single Lane Alternating Traffic with Flaggers

- Initial job mobilization will use temporary daily single lane closures to unload equipment and materials.
- Initial site access and staging will require daily single lane closures.
- Also during this time select pile installation will begin under daily closures.
- Due to the limited space for turning at bridge 15 all personnel will be made aware of this. The possibility of having to adjust the traffic pattern conditions as needed to accommodate certain truck traffic may arise.
- Pre- setup for the detour closure may also need daily traffic control.

Phase 2 – Initiate Detour, Bridge Closure Period

- Implement use of advanced placement of traffic control devices for detour around route 73 bridge 15.
- Dismantle and removal of existing bridge.
- Complete new bridge installation and items necessary to open to 1 lane of traffic.

Phase 3 – Single Lane Alternating Traffic

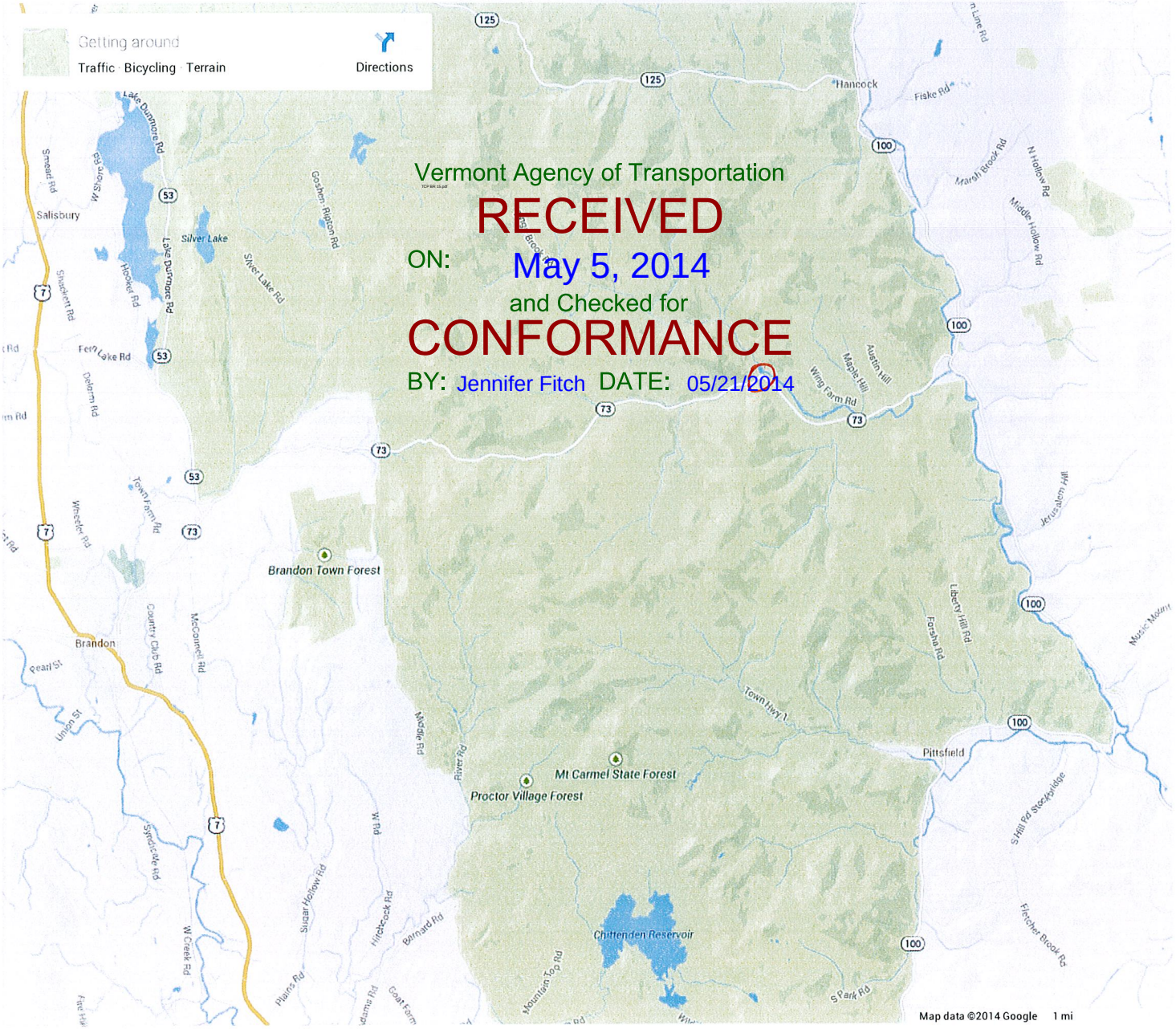
- Complete remaining Items of work.

This proposed plan is meant to apply to most regular daily operations and the BCP for Bridge 15 on Route 73. Special or unique situations are to be expected and this traffic control plan can be adapted with approval from the Resident Engineer to address changes that may arise from actual field conditions while still complying with the plans, standards, VTRANS section 641, and the MUTCD. Please advise of any additional information that the agency may require.

Sincerely,
W.M. Schultz Construction, Inc.

Michael D. Garn
Asst. Project Manager

PO Box 2620 · Ballston Spa, NY 12020 · Ph 518.885.0060 · Fx 518.885.0744 · www.wmschultz.com


Getting around
Traffic · Bicycling · Terrain
Directions
Vermont Agency of Transportation
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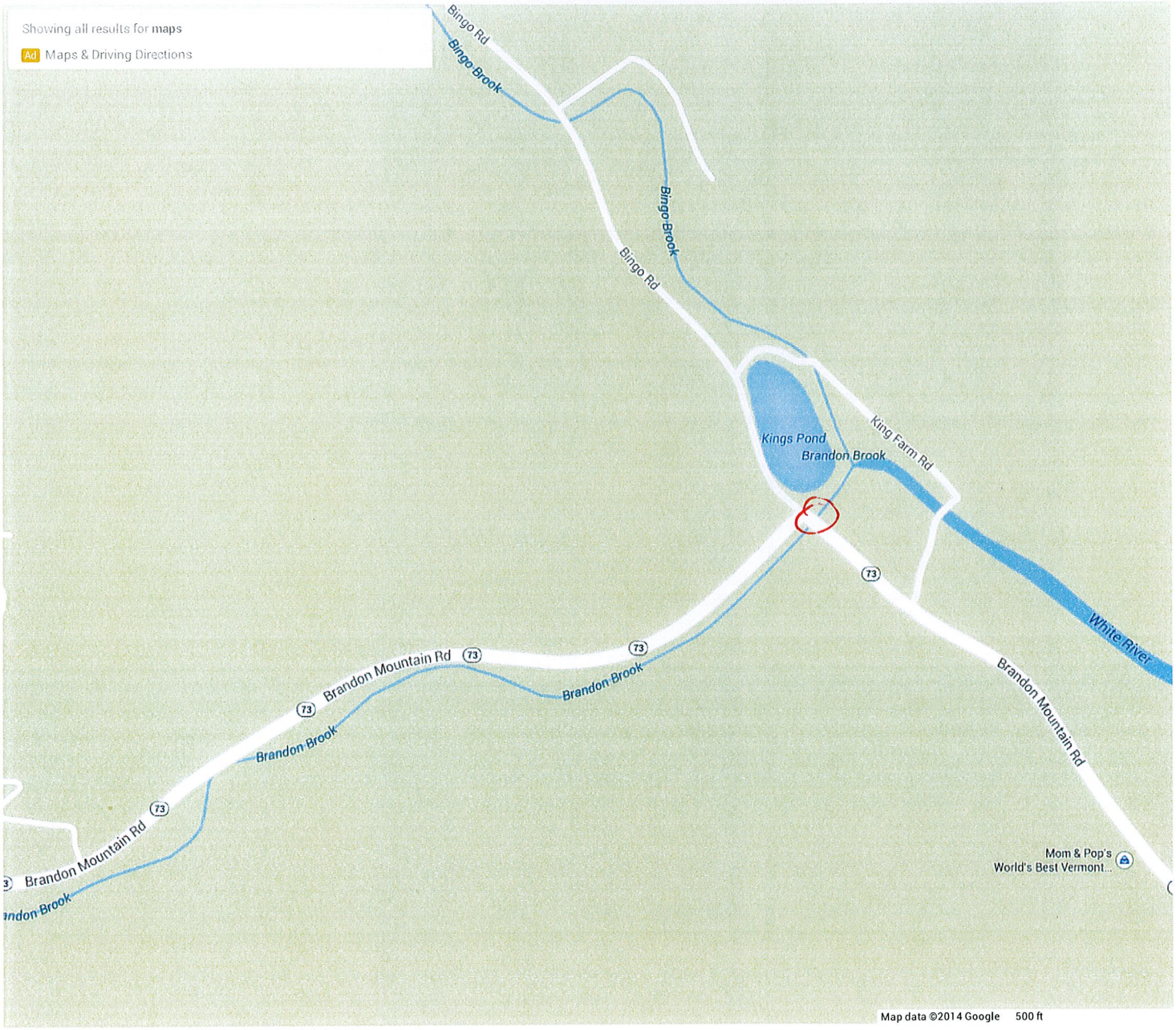
BY: Jennifer Fitch DATE: 05/21/2014
Salisbury
Silver Lake
Lake Dunmore Rd
Hancock
Fiske Rd
Brandon Town Forest
Brandon
Mt Carmel State Forest
Proctor Village Forest
Pittsfield
Chittenden Reservoir
Map data ©2014 Google 1 mi



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TRAFFIC CONTROL

10. THE CONTRACTOR SHALL IMPLEMENT THE ROAD CLOSURE, TRAFFIC CONTROL, AND DETOUR AS SHOWN ON THE PLANS.

11. THE CONTRACTOR SHALL NOTIFY THE TOWN A MINIMUM OF TWO (2) WEEKS PRIOR TO CLOSING THE ROAD.

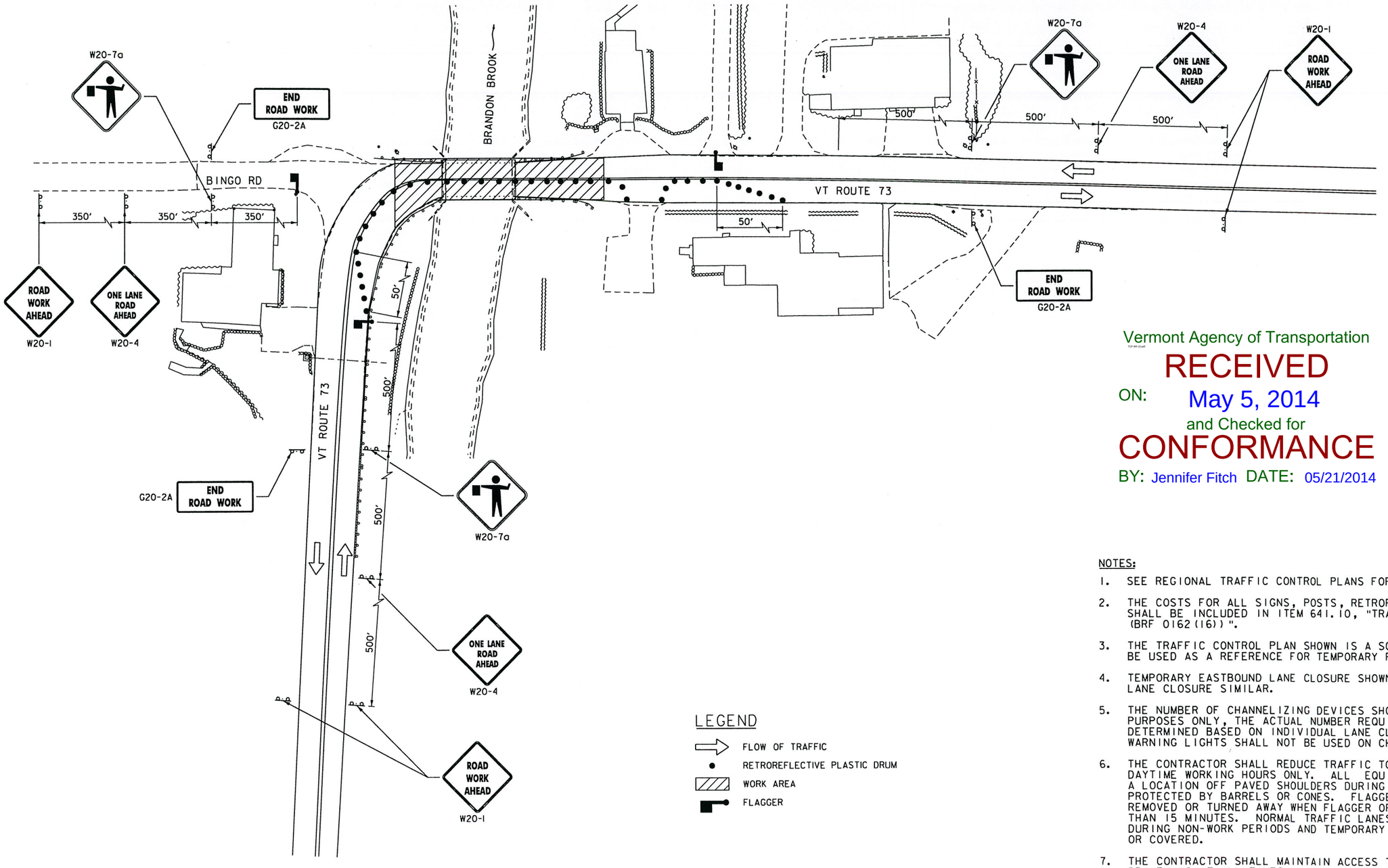
12. FULL ACCESS TO ALL SIDE ROADS AND DRIVES WITHIN THE PROJECT LIMITS SHALL BE MAINTAINED AT ALL TIMES. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL (BRF 0162(16))".

13. UNLESS COVERED UNDER INDIVIDUAL PAY ITEMS OR NOTED OTHERWISE, ALL COSTS FOR WORK SHOWN ON THE TRAFFIC CONTROL SHEETS AND FOR TEMPORARY TRAFFIC CONTROL DEVICES WILL BE INCLUDED IN THE CONTRACT LUMP SUM PRICE FOR ITEM 641.10, "TRAFFIC CONTROL (BRF 0162(16))". THIS INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING ITEMS:

    TEMPORARY TRAFFIC BARRIERS
    RETROREFLECTIVE DRUMS
    SIGNS
    SIGN POSTS

    TEMPORARY TRAFFIC BARRIER SHALL BE FURNISHED IN ACCORDANCE WITH SECTION 621.

14. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS AND MARKINGS" BOOK (SHSM) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).



LEGEND

- FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- WORK AREA
- FLAGGER

TRAFFIC CONTROL PLAN ON VT ROUTE 73

NOT TO SCALE

Vermont Agency of Transportation

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BY: Jennifer Fitch DATE: 05/21/2014

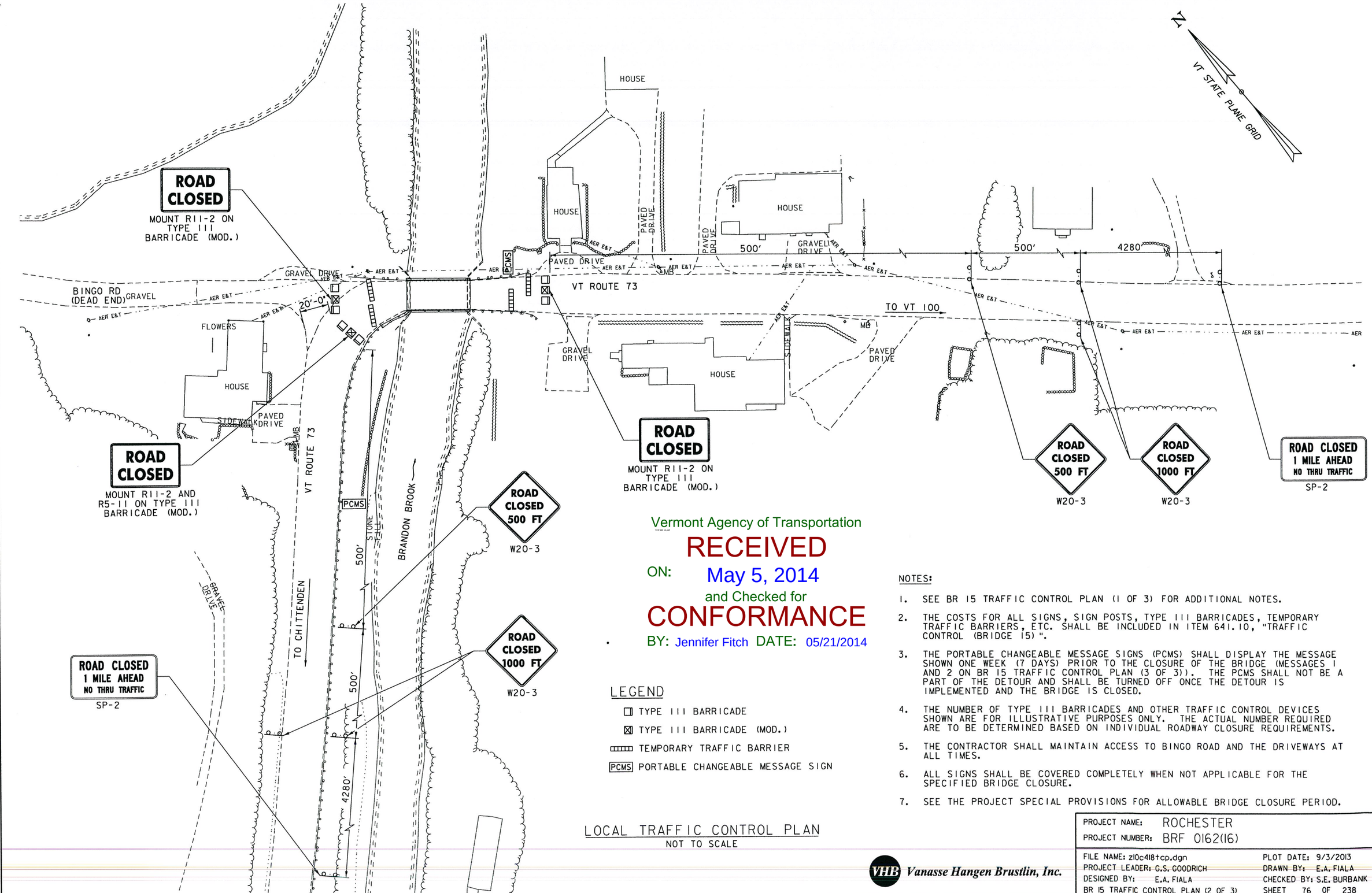
NOTES:

1. SEE REGIONAL TRAFFIC CONTROL PLANS FOR ADDITIONAL NOTES.
2. THE COSTS FOR ALL SIGNS, POSTS, RETROREFLECTIVE DRUMS, ETC. SHALL BE INCLUDED IN ITEM 641.10, "TRAFFIC CONTROL (BRF 0162(16))".
3. THE TRAFFIC CONTROL PLAN SHOWN IS A SCHEMATIC ONLY AND SHOULD BE USED AS A REFERENCE FOR TEMPORARY ROADWAY CLOSURES.
4. TEMPORARY EASTBOUND LANE CLOSURE SHOWN. TEMPORARY WESTBOUND LANE CLOSURE SIMILAR.
5. THE NUMBER OF CHANNELIZING DEVICES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY, THE ACTUAL NUMBER REQUIRED ARE TO BE DETERMINED BASED ON INDIVIDUAL LANE CLOSURE REQUIREMENTS. WARNING LIGHTS SHALL NOT BE USED ON CHANNELIZING DEVICES.
6. THE CONTRACTOR SHALL REDUCE TRAFFIC TO ONE LANE DURING DAYTIME WORKING HOURS ONLY. ALL EQUIPMENT SHALL BE MOVED TO A LOCATION OFF PAVED SHOULDERS DURING NON-WORK PERIODS, AND PROTECTED BY BARRELS OR CONES. FLAGGER SIGNS SHALL BE REMOVED OR TURNED AWAY WHEN FLAGGER OPERATIONS CEASE FOR MORE THAN 15 MINUTES. NORMAL TRAFFIC LANES SHALL BE RESTORED DURING NON-WORK PERIODS AND TEMPORARY TRAFFIC SIGNS REMOVED OR COVERED.
7. THE CONTRACTOR SHALL MAINTAIN ACCESS TO BINGO ROAD AND THE DRIVEWAYS AT ALL TIMES.

PROJECT NAME:	ROCHESTER
PROJECT NUMBER:	BRF 0162(16)
FILE NAME: z10c418tcp.dgn	PLOT DATE: 9/3/2013
PROJECT LEADER: G.S. GOODRICH	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
BR 15 TRAFFIC CONTROL PLAN (1 OF 3)	SHEET 75 OF 238

VHB Vanasse Hangen Brustlin, Inc.

VHB 57526



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LEGEND

- TYPE III BARRICADE
- TYPE III BARRICADE (MOD.)
- TEMPORARY TRAFFIC BARRIER
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN

LOCAL TRAFFIC CONTROL PLAN

NOT TO SCALE

NOTES:

1. SEE BR 15 TRAFFIC CONTROL PLAN (1 OF 3) FOR ADDITIONAL NOTES.
2. THE COSTS FOR ALL SIGNS, SIGN POSTS, TYPE III BARRICADES, TEMPORARY TRAFFIC BARRIERS, ETC. SHALL BE INCLUDED IN ITEM 641.10, "TRAFFIC CONTROL (BRIDGE 15)".
3. THE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL DISPLAY THE MESSAGE SHOWN ONE WEEK (7 DAYS) PRIOR TO THE CLOSURE OF THE BRIDGE (MESSAGES 1 AND 2 ON BR 15 TRAFFIC CONTROL PLAN (3 OF 3)). THE PCMS SHALL NOT BE A PART OF THE DETOUR AND SHALL BE TURNED OFF ONCE THE DETOUR IS IMPLEMENTED AND THE BRIDGE IS CLOSED.
4. THE NUMBER OF TYPE III BARRICADES AND OTHER TRAFFIC CONTROL DEVICES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE ACTUAL NUMBER REQUIRED ARE TO BE DETERMINED BASED ON INDIVIDUAL ROADWAY CLOSURE REQUIREMENTS.
5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO BINGO ROAD AND THE DRIVEWAYS AT ALL TIMES.
6. ALL SIGNS SHALL BE COVERED COMPLETELY WHEN NOT APPLICABLE FOR THE SPECIFIED BRIDGE CLOSURE.
7. SEE THE PROJECT SPECIAL PROVISIONS FOR ALLOWABLE BRIDGE CLOSURE PERIOD.

PROJECT NAME:	ROCHESTER
PROJECT NUMBER:	BRF 0162(16)
FILE NAME: z10c418tcp.dgn	PLOT DATE: 9/3/2013
PROJECT LEADER: G.S. GOODRICH	DRAWN BY: E.A. FIALA
DESIGNED BY: E.A. FIALA	CHECKED BY: S.E. BURBANK
BR 15 TRAFFIC CONTROL PLAN (2 OF 3)	SHEET 76 OF 238

VHB Vanasse Hangen Brustlin, Inc.

VHB 57526

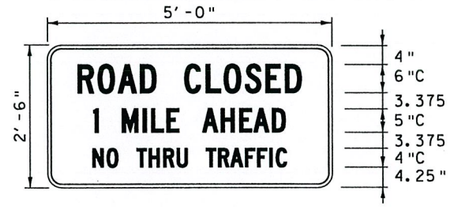
IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	NUMBER OF SIGNS REQ'D	REMARKS
	WIDTH (IN)	HEIGHT (IN)			
G20-2A	48	24	END ROAD WORK	3	PORTABLE OR MOUNT ON TWO POSTS
R11-2	48	24	ROAD CLOSED	3	MOUNT ON TYPE III BARRICADE (MOD.)
SP-2	60	30	ROAD CLOSED 1 MILE AHEAD NO THRU TRAFFIC	2	MOUNT ON TWO POSTS
W20-1	48	48	ROAD WORK AHEAD	5	PORTABLE OR MOUNT ON TWO POSTS
W20-3	48	48	ROAD CLOSED 1000 FT	4	MOUNT ON TWO POSTS
W20-3	48	48	ROAD CLOSED 500 FT	2	MOUNT ON TWO POSTS
W20-4	48	48	ONE LANE ROAD AHEAD	3	PORTABLE OR MOUNT ON TWO POSTS
W20-7a	48	48		3	PORTABLE OR MOUNT ON TWO POSTS

MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) - AT BRIDGE

ONE WEEK PRIOR

MESSAGE 1	MESSAGE 2	
BRIDGE	**MMMM DD**	(DATE) **
CLOSED	**TO**	
	MMMM DD	(DATE) **

** - MONTH SHALL BE SPELLED OUT - JUNE 10 NOT 6/10



SP-2

NOT TO SCALE

NOTE:

1. COLORS FOR THE SP-2 SIGN SHALL BE BLACK TEXT AND BORDER ON RETROREFLECTIVE FLOURESCENT WHITE BACKGROUND. TWO ORANGE FLAGS (ONE EACH SIDE) SHALL BE PLACED AT THE TOP OF THE SP-2 SIGNS. BORDER SHALL BE 0.075" AND INDENT SHALL BE 0.50 ".

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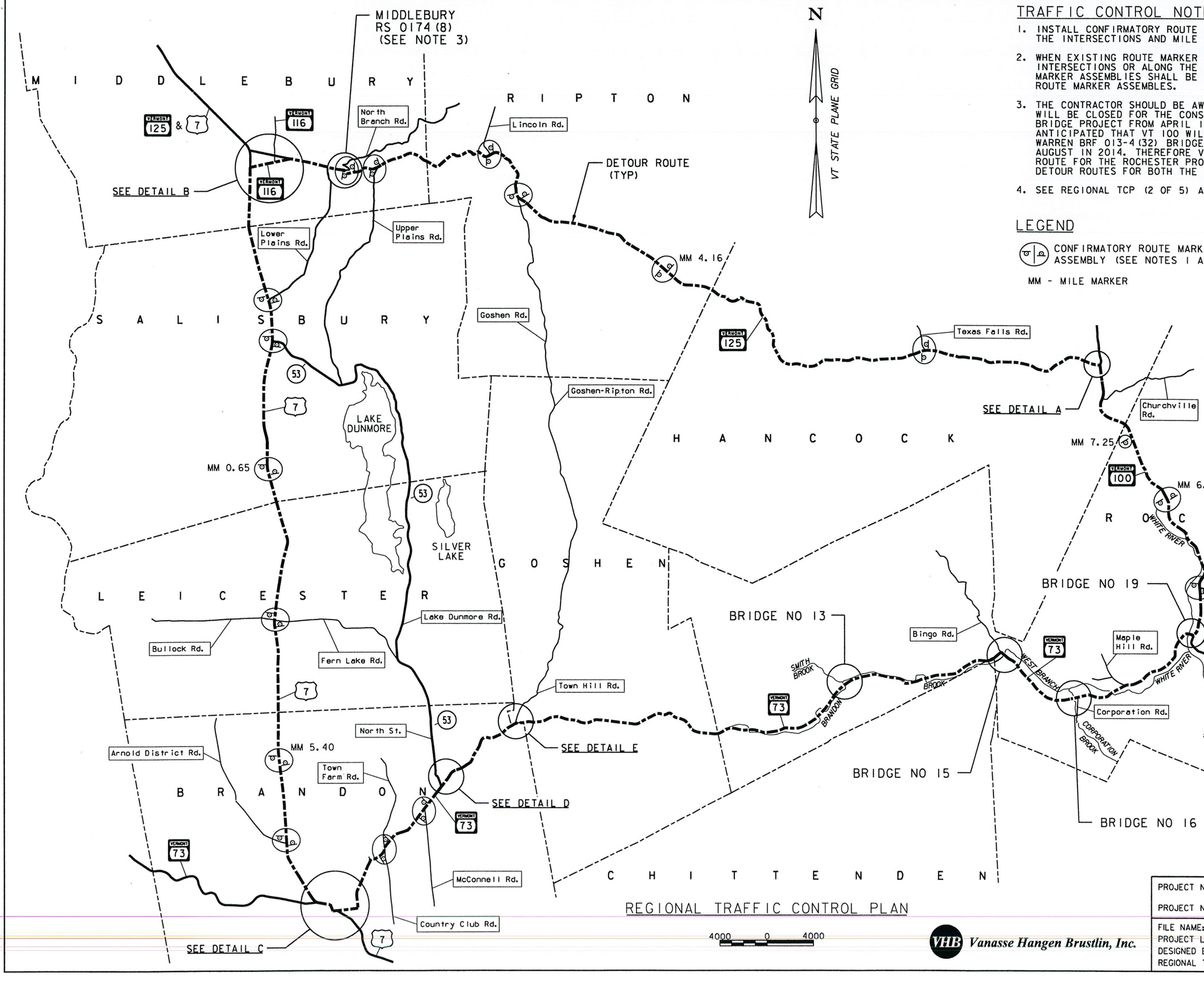
PROJECT NAME: ROCHESTER	
PROJECT NUMBER: BRF 0162(16)	
FILE NAME: z10c418tcp.dgn	PLOT DATE: 9/3/2013
PROJECT LEADER: G.S. GOODRICH	DRAWN BY: E.A. FIALA
DESIGNED BY: E.A. FIALA	CHECKED BY: S.E. BURBANK
BR 15 TRAFFIC CONTROL PLAN (3 OF 3)	SHEET 77 OF 238

VHB 57526



TRAFFIC CONTROL NOTES:

1. INSTALL CONFIRMATORY ROUTE MARKERS ALONG THE DETOUR ROUTE AT THE INTERSECTIONS AND MILE MARKERS AS INDICATED ON THIS PLAN.
2. WHEN EXISTING ROUTE MARKER ASSEMBLIES ARE LOCATED AT THE INTERSECTIONS OR ALONG THE DETOUR ROUTE THE DETOUR ROUTE MARKER ASSEMBLIES SHALL BE INSTALLED ADJACENT TO THE EXISTING ROUTE MARKER ASSEMBLES.
3. THE CONTRACTOR SHOULD BE AWARE IT IS ANTICIPATED THAT VT 125 WILL BE CLOSED FOR THE CONSTRUCTION OF THE MIDDLEBURY RS 0174 (8) BRIDGE PROJECT FROM APRIL 19 TO JUNE 16, 2014. IT IS ADDITIONALLY ANTICIPATED THAT VT 100 WILL BE CLOSED FOR THE CONSTRUCTION OF THE WARREN BRF 013-4 (32) BRIDGE PROJECT FOR THE FIRST THREE FULL WEEKS OF AUGUST IN 2014. THEREFORE VT 125 WILL NOT ONLY BE A PART OF THE DETOUR ROUTE FOR THE ROCHESTER PROJECTS, BUT WILL ALSO BE INCLUDED IN THE DETOUR ROUTES FOR BOTH THE MIDDLEBURY AND WARREN PROJECTS AS WELL.
4. SEE REGIONAL TCP (2 OF 5) AND REGIONAL TCP (3 OF 5) FOR DETAILS A THRU F.

LEGEND

CONFIRMATORY ROUTE MARKER ASSEMBLY (SEE NOTES 1 AND 2 ABOVE)

MM - MILE MARKER

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BY: Jennifer Fitch DATE: 05/21/2014

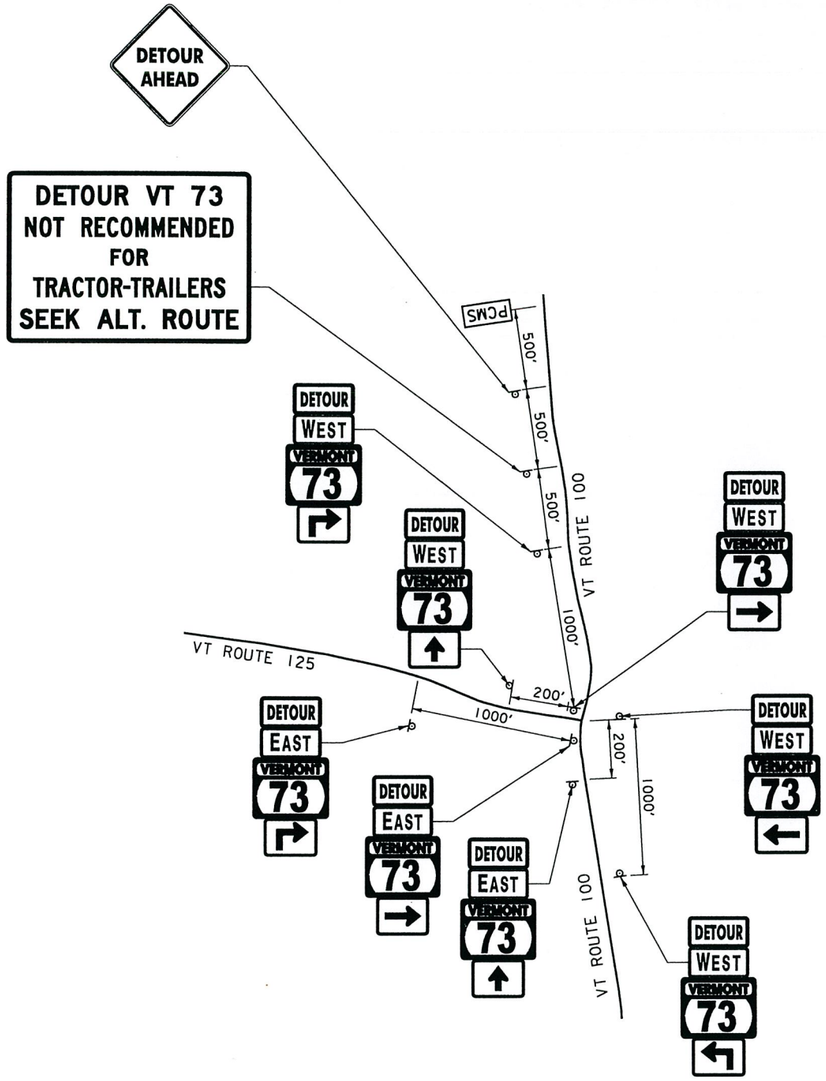
REGIONAL TRAFFIC CONTROL PLAN

4000 0 4000

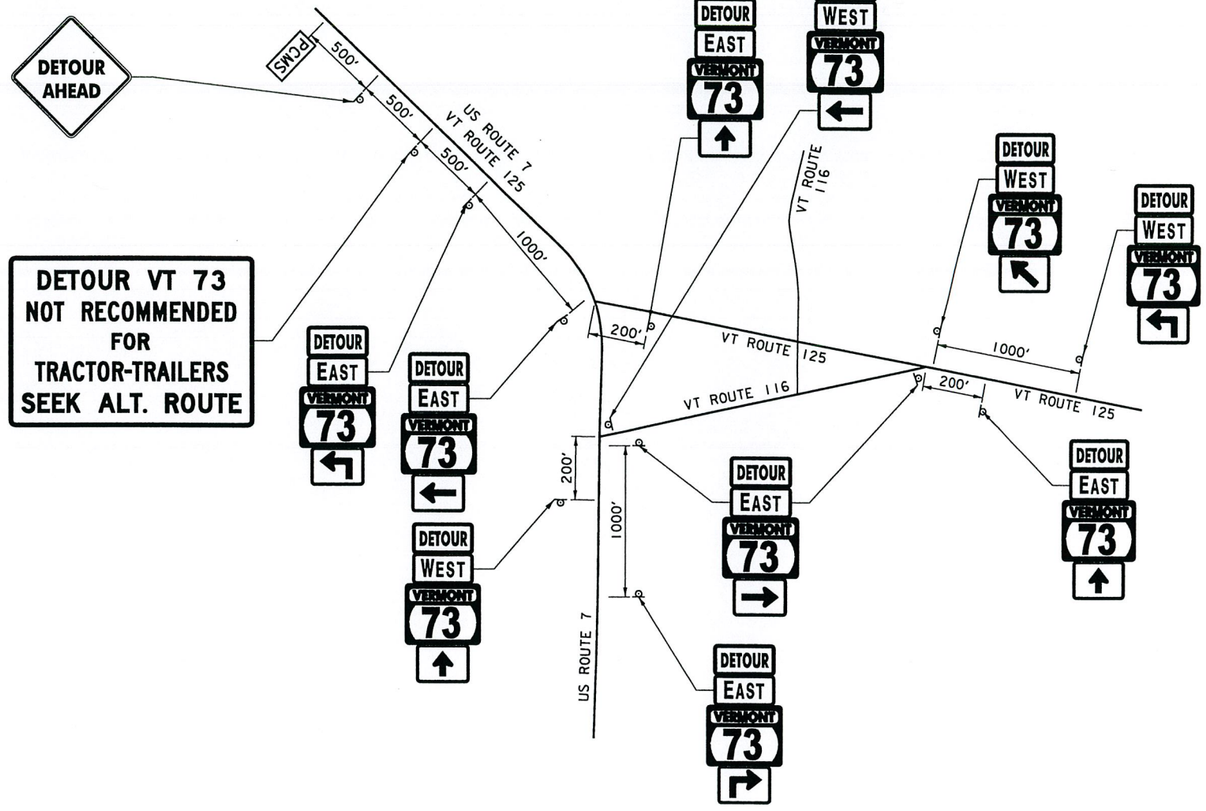
VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: ROCHESTER	
PROJECT NUMBER: 0162(19), 0162(16), 0162(17), 0162(18)	
FILE NAME: zllc334Regionaldetour.dgn	PLOT DATE: 9/16/2013
PROJECT LEADER: S.E. BURBANK	DRAWN BY: C.L. CILLEY
DESIGNED BY: M.D. SUENNEN	CHECKED BY: G.S. GOODRICH
REGIONAL TCP (1 OF 5)	SHEET 8 OF 238

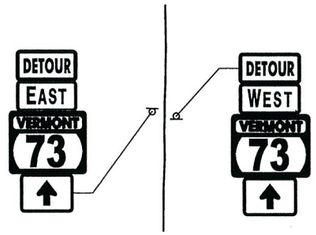
VHB 57518



DETAIL A
NOT TO SCALE



DETAIL B
NOT TO SCALE



CONFIRMATORY ROUTE MARKER ASSEMBLY
NOT TO SCALE

N
VT STATE PLANE GRID

LEGEND

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

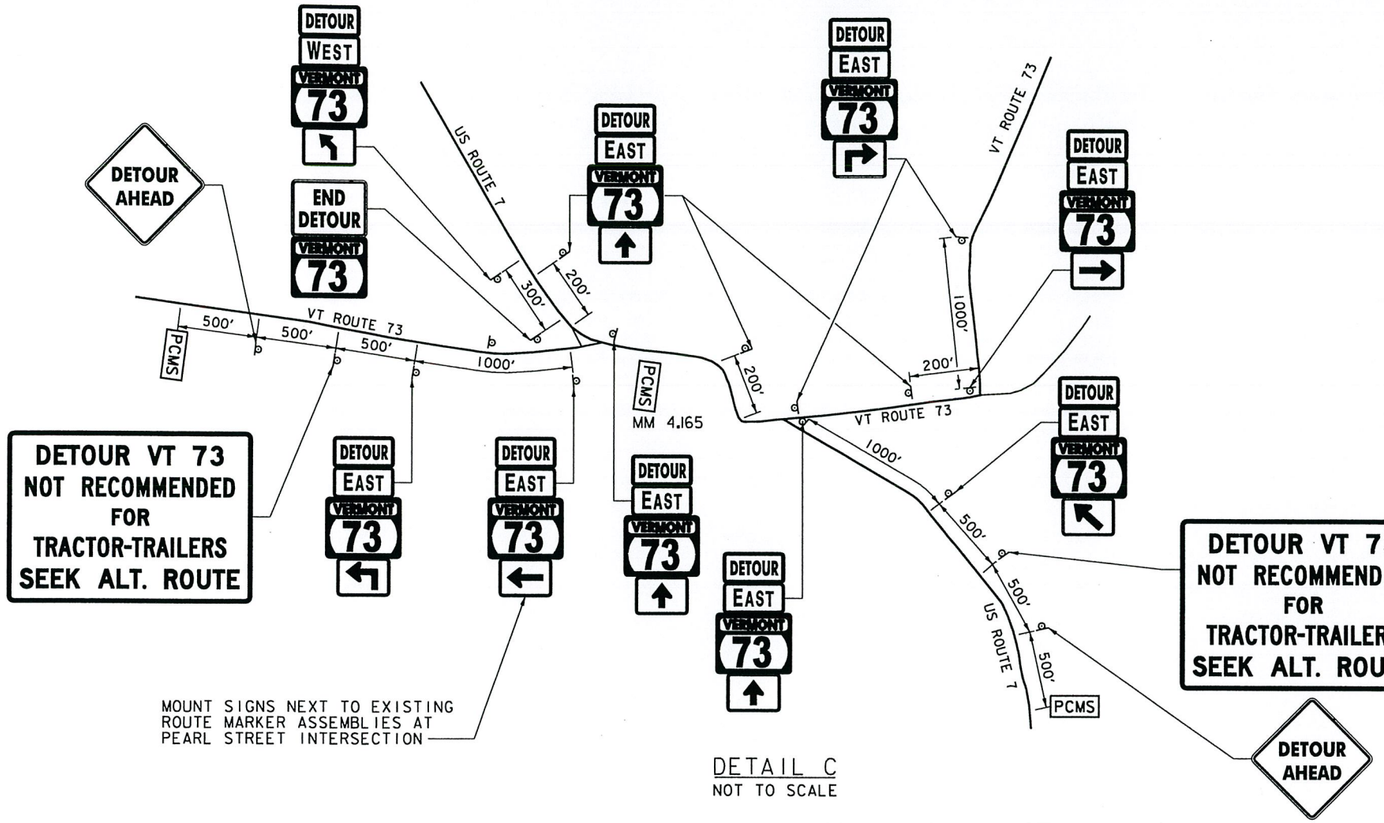
NOTE:

1. SEE REGIONAL TRAFFIC CONTROL PLAN (4 OF 5) FOR PCMS MESSAGES.
2. WHEN EXISTING ROUTE MARKER ASSEMBLIES ARE LOCATED AT THE INTERSECTIONS OR ALONG THE DETOUR ROUTE, THE DETOUR ROUTE MARKER ASSEMBLIES SHALL BE INSTALLED ADJACENT TO THE EXISTING ROUTE MARKER ASSEMBLIES.
3. ALL DISTANCES ARE APPROXIMATE AND MAY VARY IN THE FIELD.

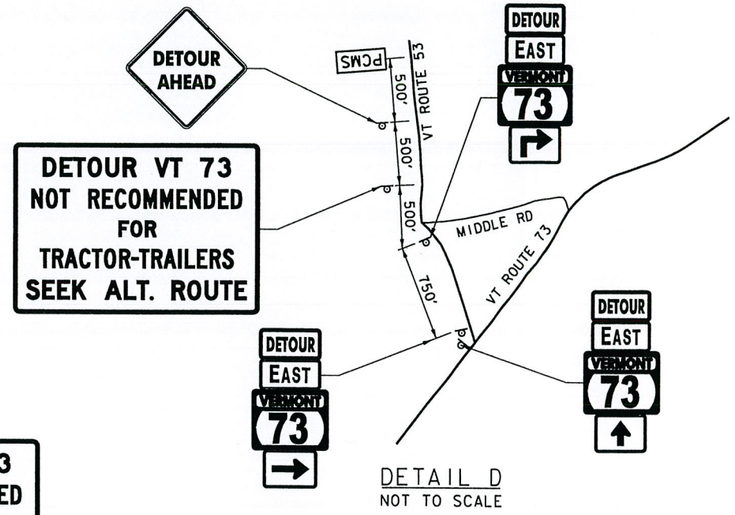
PROJECT NAME:	ROCHESTER
PROJECT NUMBER:	0162(19), 0162(16), 0162(17), 0162(18)
FILE NAME: zllc334Regionaldetour.dgn	PLOT DATE: 9/3/2013
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
REGIONAL TCP (2 OF 5)	SHEET 9 OF 238

VHB Vanasse Hangen Brustlin, Inc.

VHB 57518

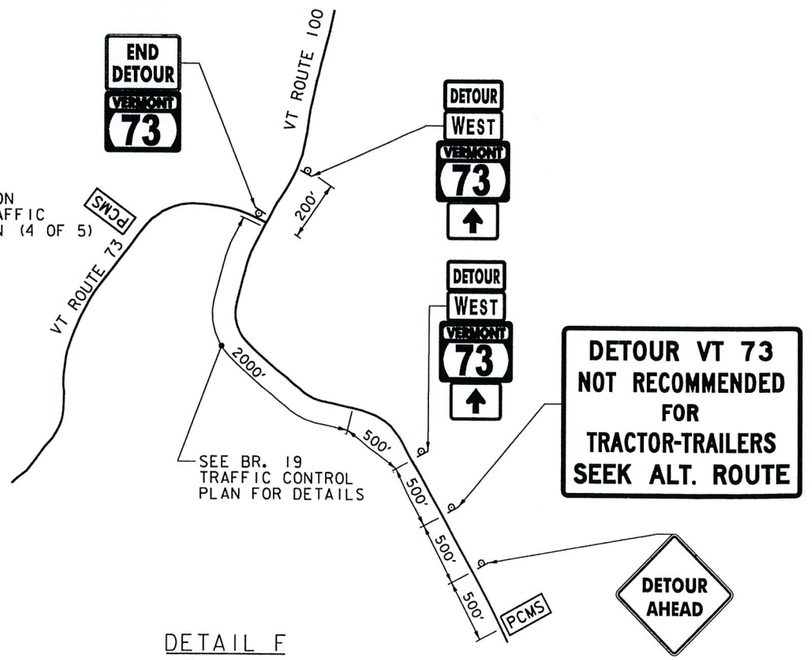


DETAIL C
NOT TO SCALE



DETAIL D
NOT TO SCALE

DETAIL E
NOT TO SCALE



DETAIL F
NOT TO SCALE

LEGEND

PCMS PORTABLE CHANGEABLE MESSAGE SIGN

NOTE:

1. SEE REGIONAL TRAFFIC CONTROL PLAN (4 OF 5) FOR PCMS MESSAGES.
2. WHEN EXISTING ROUTE MARKER ASSEMBLIES ARE LOCATED AT THE INTERSECTIONS OR ALONG THE DETOUR ROUTE, THE DETOUR ROUTE MARKER ASSEMBLIES SHALL BE INSTALLED ADJACENT TO THE EXISTING ROUTE MARKER ASSEMBLIES.
3. ALL DISTANCES ARE APPROXIMATE AND MAY VARY IN THE FIELD.

N

VT STATE PLANE GRID

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: ROCHESTER	
PROJECT NUMBER: 0162(19), 0162(16), 0162(17), 0162(18)	
FILE NAME: z11c334Regionaldetour.dgn	PLOT DATE: 9/3/2013
PROJECT LEADER: S.E. BURBANK	DRAWN BY: E.A. FIALA
DESIGNED BY: S.E. BURBANK	CHECKED BY: S.E. BURBANK
REGIONAL TCP (3 OF 5)	SHEET 10 OF 238

VHB 57518

MESSAGES FOR PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) FOR REGIONAL DETOUR

ER STP 0162(19)
BRIDGE 13

ONE WEEK PRIOR

	MESSAGE 1	MESSAGE 2	MESSAGE 3	
(ROUTE) ***	VT 73 E(W)	ROCHESTR	MMMM DD	(DATE) **
	BRIDGE	WEST OF	TO	
	CLOSED	W HIL RD	MMMM DD	(DATE) **

DURING BRIDGE CLOSURE

	MESSAGE 4	MESSAGE 5
(ROUTE) ***	VT 73	ROCHESTR
	BRIDGE	WEST OF
	CLOSED	W HIL RD

ALONG VT 73 DURING BRIDGE CLOSURE

MESSAGE 6	MESSAGE 7
BRIDGE	SEEK
CLOSED	ALT
XXMI AHD	ROUTE

BRF 0162(16)
BRIDGE 15

ONE WEEK PRIOR

	MESSAGE 1	MESSAGE 2	MESSAGE 3	
(ROUTE) ***	VT 73	ROCHESTR	MMMM DD	(DATE) **
	BRIDGE	EAST OF	TO	
	CLOSED	BINGO RD	MMMM DD	(DATE) **

DURING WEEKEND CLOSURE

	MESSAGE 4	MESSAGE 5
(ROUTE) ***	VT 73	ROCHESTR
	BRIDGE	EAST OF
	CLOSED	BINGO RD

ALONG VT 73 DURING BRIGE CLOSURE

MESSAGE 6	MESSAGE 7
BRIDGE	SEEK
CLOSED	ALT
XXMI AHD	ROUTE

BRF 0162(17)
BRIDGE 16

ONE WEEK PRIOR

	MESSAGE 1	MESSAGE 2	MESSAGE 3	
(ROUTE) ***	VT 73	ROCHESTR	MMMM DD	(DATE) **
	BRIDGE	WEST OF	TO	
	CLOSED	CORP. RD	MMMM DD	(DATE) **

DURING WEEKEND CLOSURE

	MESSAGE 4	MESSAGE 5
(ROUTE) ***	VT 73	ROCHESTR
	BRIDGE	WEST OF
	CLOSED	CORP. RD

ALONG VT 73 DURING BRIDGE CLOSURE

MESSAGE 6	MESSAGE 7
BRIDGE	SEEK
CLOSED	ALT
XXMI AHD	ROUTE

** - MONTH SHALL BE SPELLED OUT - JUNE 10 NOT 06/10
*** - ROUTE VT 73 SHALL SPECIFY W (WEST) OR E (EAST) AS APPROPRIATE FOR THE DETOUR

NOTES:

1. ALL SIGNS SHALL BE LOCATED SO THEY ARE VISIBLE AND ABLE TO BE READ BY THE TRAVELING PUBLIC. SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS.
2. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS AND MARKINGS" BOOK (SHSM) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).
3. SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM D4956) TYPE VII, VIII OR IX REQUIREMENTS, UNLESS OTHERWISE NOTED. SOLID SUBSTRATE REGULATORY SIGNS (WHITE BACKGROUND) SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING ASTM D4956 TYPE III.
4. SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, AND UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
5. FIXED SIGNS SHALL BE SET SECURELY IN THE GROUND. THE BOTTOM OF A SIGN SHALL BE AT LEAST SEVEN FEET ABOVE THE EDGE OF PAVEMENT. THE NEAREST EDGE OF A SIGN SHALL BE AT LEAST SIX FEET OUTSIDE THE SHOULDER POINT OR FOUR FEET OUTSIDE GUARDRAIL. ALL SIGNS SHALL BE INSTALLED WITHIN VTRANS OR TOWNS RIGHTS-OF-WAY (ROW). IF THE SIGN CANNOT BE INSTALLED IN ROW, CONTRACTOR SHALL GET PERMISSION FROM LANDOWNER.
6. WHERE SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL BE "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 COMPLIANT. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POST(S). WHEN ANCHORS ARE INSTALLED, STUB SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.
7. THE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE USED IN ACCORDANCE WITH SECTION 6F.60 OF THE MUTCD.
8. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PLACED OFF THE EDGE OF THE ROADWAY, OUTSIDE THE CLEAR ZONE, BUT SHALL BE VISIBLE FROM THE ROADWAY. ANY VEGETATION THAT INTERFERES WITH VISIBILITY OF THE PCMS SHALL BE REMOVED. REMOVAL OF THE VEGETATION SHALL BE INCIDENTAL TO ITEM 641.15, "PORTABLE CHANGEABLE MESSAGE SIGN". WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.
9. ONE WEEK PRIOR (7 DAYS) TO CLOSING THE BRIDGE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) MESSAGES 1, 2, AND 3 WILL BE DISPLAYED.
10. DURING THE BRIDGE CLOSURE, PCMS SHALL READ MESSAGES 4 AND 5 REGIONALLY.
11. PCMS LOCATED ON VT ROUTE 73 TO READ MESSAGE 6 AND 7 DURING THE BRIDGE CLOSURE.
12. THE COSTS OF ALL DETOUR SIGNS AND REQUIRED SIGN POSTS AND INSTALLATION SHALL BE INCLUDED IN ITEM 641.10, "TRAFFIC CONTROL (DETOUR)".
13. ALL DETOUR SIGNS SHALL BE COVERED COMPLETELY WHEN NOT APPLICABLE FOR THE SPECIFIED DETOUR.
14. PCMS LOCATED ON VT ROUTE 73 AT DETAIL E AND F TO READ MESSAGES 6 AND 7 DURING TIMES OF BRIDGE CLOSURE (SEE REGIONAL TRAFFIC CONTROL PLAN 3 OF 5).

VHB Vanasse Hangen Brustlin, Inc.

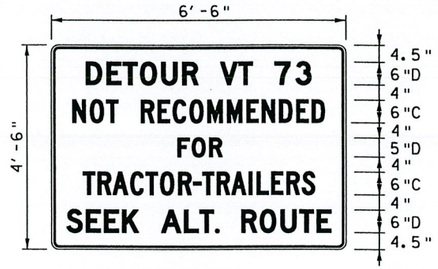
PROJECT NAME: ROCHESTER
PROJECT NUMBER: 0162(19), 0162(16), 0162(17), 0162(18)

FILE NAME: z11c334Reglonaldetour.dgn	PLOT DATE: 9/3/2013
PROJECT LEADER: S.E. BURBANK	DRAWN BY: C.L. CILLEY
DESIGNED BY: M.D. SUENNEN	CHECKED BY: G.S. GOODRICH
REGIONAL TCP (4 OF 5)	SHEET 11 OF 238

VHB 57618

IDENTIFICATION NUMBER	SIZE OF SIGN WIDTH (IN)	SIZE OF SIGN HEIGHT (IN)	TEXT	NUMBER OF SIGNS REQ'D	REMARKS
M1-5	24	24	VERMONT 73	73*	SEE NOTE 5
M3-2	24	12	EAST	43*	SEE NOTE 5
M3-4	24	12	WEST	28*	SEE NOTE 5
M4-8	24	12	DETOUR	71*	MOUNT ABOVE THE M3-2 OR M3-4
M4-8A	24	18	END DETOUR	2	MOUNT ON ONE POST
M5-1L	21	15		4	MOUNT BELOW THE M1-5
M5-1R	21	15		7	MOUNT BELOW THE M1-5
M5-2L	21	15		1	MOUNT BELOW THE M1-5
M6-1L	21	15		4	MOUNT BELOW THE M1-5
M6-1R	21	15		7	MOUNT BELOW THE M1-5
M6-2L	21	15		2	MOUNT BELOW THE M1-5
M6-3	21	15		46*	MOUNT BELOW THE M1-5
SP-1	78	54	DETOUR VT 73 NOT RECOMMENDED FOR TRACTOR-TRAILERS SEEK ALT. ROUTE	6	MOUNT ON TWO POSTS
W20-2	36	36	DETOUR AHEAD	7	MOUNT BELOW M1-5

* = NUMBER OF SIGNS REQ'D ASSUMING APPROXIMATELY 33 LOCATIONS OF CONFIRMATORY ROUTE MARKER ASSEMBLY DETAIL



SP-1
NOT TO SCALE

NOTE: BORDER SHALL BE 0.75" AND INDENT SHALL BE 0.50"

NOTES:

1. COLORS FOR THE M1-5, M3-2, AND M3-4 SIGNS SHALL MATCH THE COLORS SHOWN ON VTRANS STD. E-136B.
2. COLORS FOR THE M5-1L, M5-1R, M5-2L, M6-1L, M6-1R, M6-2L AND THE M6-3 SIGNS SHALL BE A BLACK ARROW AND BORDER ON RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.
3. COLORS FOR THE M4-8 AND M4-8A SIGNS SHALL BE BLACK TEXT AND BORDER ON RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.
4. COLORS FOR THE SP-1 SIGN SHALL BE BLACK TEXT AND BORDER ON RETROREFLECTIVE FLUORESCENT ORANGE BACKGROUND.
5. THE M1-5, M3-2, AND THE M3-4 SIGNS SHALL BECOME THE PROPERTY OF THE STATE AFTER THEY ARE REMOVED FROM THE DETOUR. THE CONTRACTOR SHALL DELIVER THE SIGNS TO THE STATE GARAGE ON STATE GARAGE ROAD IN ROCHESTER. ALL COSTS ASSOCIATED WITH PROVIDING THE SIGNS TO THE STATE SHALL BE INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL (DETOUR)".
6. ALL DETOUR SIGNS SHALL BE COVERED COMPLETELY WHEN THE DETOUR IS NOT IN USE.

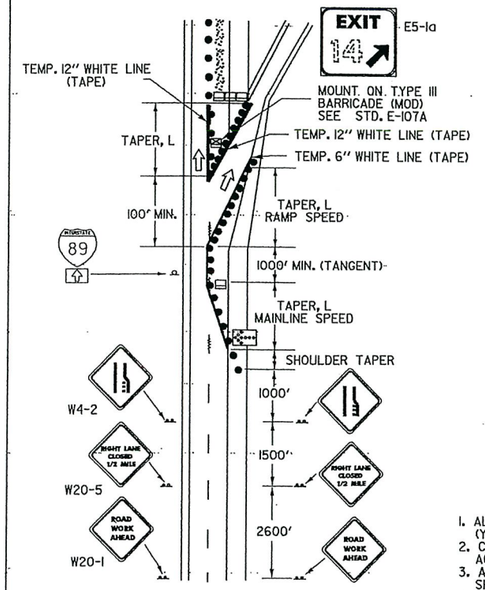
Vermont Agency of Transportation
RECEIVED
ON: May 5, 2014
and Checked for
CONFORMANCE
BY: Jennifer Fitch DATE: 05/21/2014

VHB Vanasse Hangen Brustlin, Inc.

PROJECT NAME: ROCHESTER
PROJECT NUMBER: 0162(19), 0162(16), 0162(17), 0162(18)

FILE NAME: z11c334Reglonaldetour.dgn
PROJECT LEADER: S.E. BURBANK
DESIGNED BY: E.A. FIALA
REGIONAL TCP (5 OF 5)
PLOT DATE: 9/3/2013
DRAWN BY: E.A. FIALA
CHECKED BY: S.E. BURBANK
SHEET 12 OF 238

VHB 57518



MAINLINE LANE CLOSURE AT AN EXIT RAMP

NOT TO SCALE

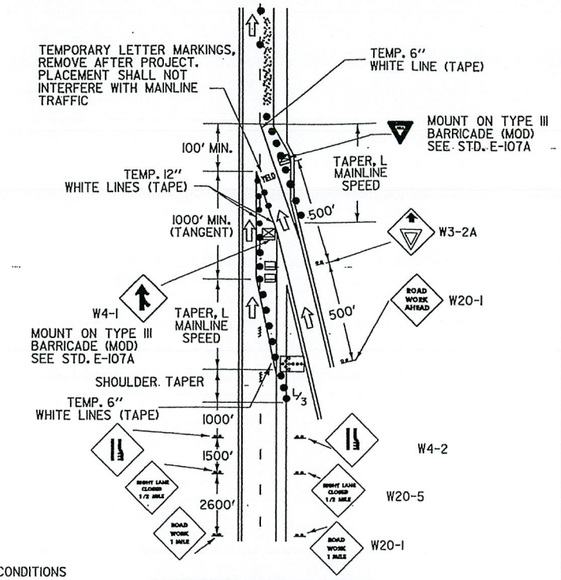
THIS DETAIL SHALL BE USED WHEN THE WORK ZONE BEGINS AT THE GORE OR THE MAINLINE LANE CLOSURE DRUM PLACEMENT INTERFERES WITH THE EXIT RAMP.

LEGEND

- REFL. PLASTIC DRUMS
- PAVEMENT MARKING REMOVAL
- INDICATES TRAFFIC FLOW.
- WORK AREA
- FLASHING ARROW PANEL
- TYPE III BARRICADES
- TYPE III BARRICADES (MOD.)

NOTES

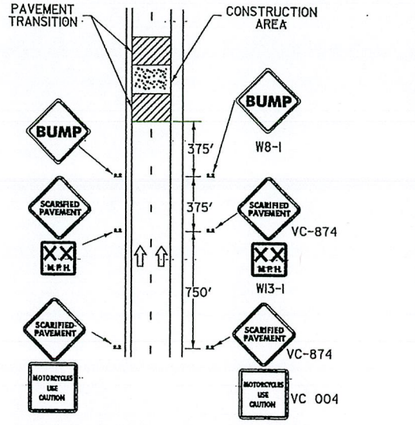
1. ALL SIGNS SHALL BE MOUNTED ON FIXED POSTS (YIELDING TYPE) UNLESS OTHERWISE NOTED.
2. CHANNELIZING DEVICES SHALL BE PLACED IN ACCORDANCE WITH THE TABLE ON THIS SHEET
3. ALL DISTANCES ARE DESIRABLE MINIMUMS, FIELD CONDITIONS SHALL CONTROL THE ACTUAL PLACEMENT.
4. TAPER RATES ARE BASED ON THE POSTED MAINLINE AND EXIT SPEEDS.
5. TEMPORARY PAVEMENT MARKINGS ARE REQUIRED WHEN THE LAYOUT IS TO BE IN EFFECT FOR THREE DAYS OR MORE.
6. LANE CLOSURES AND TAPER LENGTHS, L, AS DETAILED ON THIS SHEET.
7. EXIT SIGN SHALL BE MOUNTED A MINIMUM OF 7 FEET ABOVE THE GROUND AND HIGH ENOUGH TO BE SEEN ABOVE CHANNELIZING DEVICES.



MAINLINE LANE CLOSURE AT AN ENTRANCE RAMP

NOT TO SCALE

THIS DETAIL SHALL BE USED WHEN THE WORK ZONE BEGINS AT THE END OF THE ACCELERATION LANE OR THE MAINLINE LANE CLOSURE DRUM PLACEMENT INTERFERES WITH THE ON-RAMP TRAFFIC. IF THE LENGTH OF THE ACCELERATION LANE IS NOT ADEQUATE, THE YIELD SIGN SHALL BE REPLACED WITH A STOP SIGN. IF A STOP SIGN IS USED, IT SHOULD BE ACCOMPANIED BY A STOP BAR.

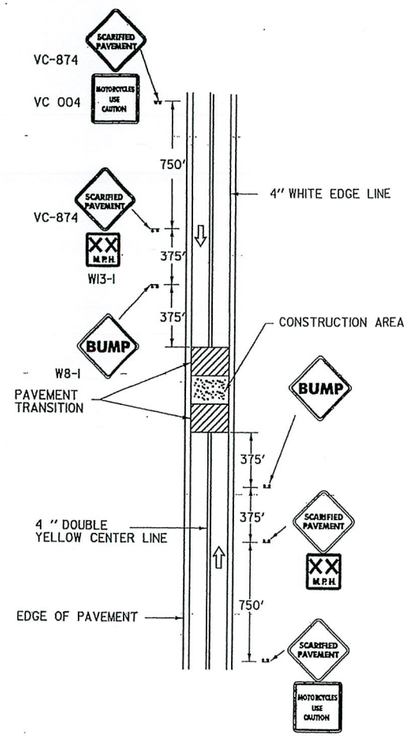


ADVANCED WARNING SIGN PACKAGE FOR COLD PLANED (SCARIFIED) SURFACES DIVIDED HIGHWAY

NOT TO SCALE

NOTES

1. ADVISORY SPEED AS DETERMINED BY THE RESIDENT ENGINEER (40 MPH MINIMUM RECOMMENDED).
2. ALL SIGNS SHALL BE MOUNTED ON FIXED POSTS (YIELDING TYPE).
3. ALL DISTANCES ARE DESIRABLE MINIMUMS, FIELD CONDITIONS SHALL CONTROL THE ACTUAL PLACEMENT.
4. THE BUMP SIGN MAY BE ELIMINATED WHEN THERE IS NO BUMP. WHEN THE CONTRACTOR IS WORKING IN THE CONSTRUCTION AREA THE APPROPRIATE ADVANCED WARNING SIGN PACKAGE SHALL BE USED, SEE STD.E-103.
5. GATE POSTING OF SIGNS IS AN OPTION AS DETERMINED BY THE RESIDENT ENGINEER (WHEN PASSING, TURNING OR CLIMBING LANES LIMIT VISIBILITY).

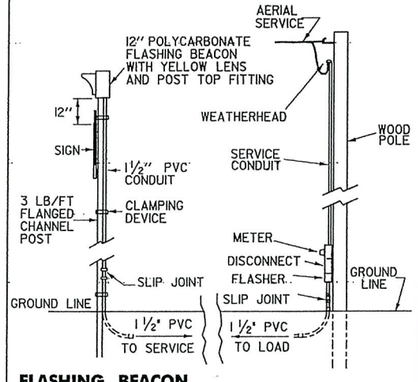


ADVANCED WARNING SIGN PACKAGE FOR COLD PLANED (SCARIFIED) SURFACES 2 LANE ROADWAY

NOT TO SCALE

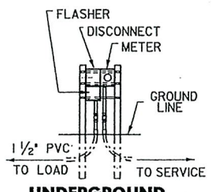
NOTES

1. ADVISORY SPEED AS DETERMINED BY THE RESIDENT ENGINEER (40 MPH MINIMUM RECOMMENDED).
2. ALL SIGNS SHALL BE MOUNTED ON FIXED POSTS (YIELDING TYPE).
3. ALL DISTANCES ARE DESIRABLE MINIMUMS, FIELD CONDITIONS SHALL CONTROL THE ACTUAL PLACEMENT.
4. THE BUMP SIGN MAY BE ELIMINATED WHEN THERE IS NO BUMP. WHEN THE CONTRACTOR IS WORKING IN THE CONSTRUCTION AREA THE APPROPRIATE ADVANCED WARNING SIGN PACKAGE SHALL BE USED, SEE STD.E-110.
5. GATE POSTING OF SIGNS IS AN OPTION AS DETERMINED BY THE RESIDENT ENGINEER (WHEN PASSING, TURNING OR CLIMBING LANES LIMIT VISIBILITY).

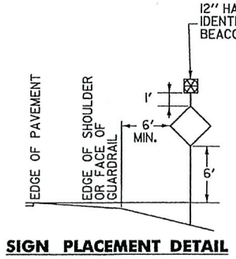


FLASHING BEACON DETAIL

AERIAL SERVICE WITHOUT LUMINAIRE



UNDERGROUND SERVICE DETAIL



SIGN PLACEMENT DETAIL

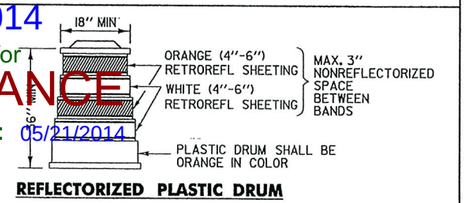
NOTES

1. AT THE CONTRACTOR'S OPTION:
   A. THE POWER SUPPLY MAY BE AERIAL OR UNDERGROUND (SEE DETAIL).
   B. POWER FOR A FLASHING BEACON MAY BE COMBINED WITH POWER FOR A TRAFFIC SIGNAL OR THEY MAY HAVE SEPARATE POWER SOURCES.
   C. THE FLASHER MAY BE INSTALLED ON A STANCHION NEAR THE SIGN, ON A UTILITY COMPANY POLE AT THE SAME LOCATION AS A TRAFFIC SIGNAL CONTROLLER.
2. THE FLASHER UNIT SHALL BE ONE CIRCUIT AND INCLUDE A RADIO INTERFERENCE FILTER.
3. BATTERY OPERATED FLASHERS WILL NOT BE ALLOWED.
4. BOTTOM OF THE BEACON SHALL BE A MIN. OF 8' AND A MAX. OF 12' ABOVE THE EDGE OF THE PAVEMENT.
5. FOR URBAN AREA PLACEMENT SEE STD. E-121.
6. FOR POWER DROP STANCHIONS SEE STD. E-175

28" REFLECTORIZED CONE

NOTES

1. 28" CONES SHALL BE USED ON ROADWAYS WITH SPEED LIMITS OF 35 MPH OR MORE AND ON ALL ROADWAYS DURING HOURS OF DARKNESS.
2. CONES MAY BE WEIGHTED TO PREVENT OVERTURNING, HOWEVER THE WEIGHTS SHALL NOT PRESENT A HAZARD IF THE CONE IS STRUCK.
3. RETROREFLECTIVE SHEETING SHALL BE ASTM TYPE III OR TYPE VI.



REFLECTORIZED PLASTIC DRUM

SAND BAGS OR AN APPROPRIATE BALLASTING DEVICE, WHICH DOES NOT PRESENT A HAZARD TO THE IMPACTING VEHICLE OR BECOME A PROJECTILE UPON IMPACT, SHALL BE USED TO WEIGHT DRUMS. RETROREFLECTIVE SHEETING SHALL BE ASTM TYPE III OR TYPE VI.

CHANNELIZING DEVICES

TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATION:

L = WS FOR DESIGN SPEEDS OF 45 MPH OR GREATER

L = $WS^2/60$ FOR DESIGN SPEEDS OF 40 MPH OR LESS

WHERE: L = MINIMUM LENGTH OF TAPER IN FEET

W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET

S = DESIGN SPEED IN MPH

POSTED SPEED OR 85th PERCENTILE (mph)	DESIGN SPEED (mph)	TAPER LENGTHS (ft)			TANGENT SECTION LENGTHS (L/2) (ft)	MINIMUM BUFFER SPACE LENGTH (ft)	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		BARRIER FLARE RATE (MIN)
		MERGING 12ft LANE (L)	SHIFTING W=16ft (L/2)	SHOULDER W=10ft (L/3)			TAPER	ALONG LANE LINE & WORK ZONE	
≤40	40	320	215	90	160	160	35	70	1:9
45	45	540	360	150	270	270	40	80	1:9
50	50	600	400	170	300	300	50	100	1:11
55	55	660	440	185	330	330	55	110	1:13
60 & 65	60	720	480	200	360	360	60	120	1:13
70	70	840	560	235	420	440	65	130	1:13

OTHER STDS. REQUIRED: E-101, E-102, E-102A, E-103, E-107A, E-110, E-121, E-136, E-150, E-175

REVISIONS AND CORRECTIONS

APR 12, 1988 - DATE OF ORIGINAL ISSUE
JAN 23, 1989 - REVISED EXIT SIGN - CLARIFIED EXIT TAPER
SEPT 20, 1993 - REVISED RAMP CLOSURES, FLASHING BEACON DETAILS AND MOVED TYPE III BARRICADE (MOD) TO STDE-107A
AUG 08, 1995 - REVISED BEACON SIZE
MAR. 01, 2004 - ADDED ADVANCED WARNING SIGN PACKAGE FOR COLD PLANED TWO WAY HIGHWAYS, CHANNELIZING DEVICES CHART

APPROVED

DIRECTOR OF PROGRAM DEVELOPMENT

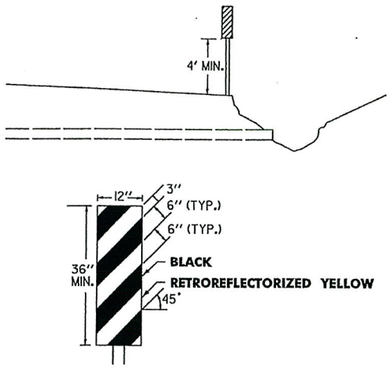
TRAFFIC OPERATIONS ENGINEER

FEDERAL HIGHWAY ADMINSTRATION

TRAFFIC CONTROL MISCELLANEOUS DETAILS

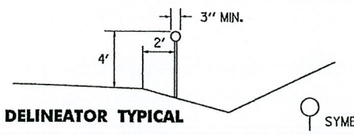
VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-106



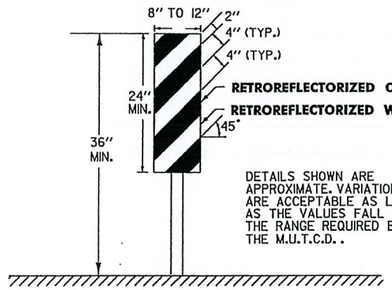
OBJECT MARKER TYPICAL

OBJECTS MARKERS ARE USED TO MARK OBSTRUCTIONS WITHIN OR ADJACENT TO THE ROADWAY. IN SOME CASES THERE MAY NOT BE A PHYSICAL OBJECT INVOLVED, BUT OTHER ROADSIDE CONDITIONS SUCH AS NARROW SHOULDER DROP-OFFS, GORES, D.I. EXCAVATIONS, AND ABRUPT CHANGES IN THE ROADWAY ALIGNMENT MAY MAKE IT UNDESIRABLE FOR A DRIVER TO LEAVE THE ROADWAY. THE INSIDE EDGE OF THE OBJECT MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION, WHENEVER POSSIBLE.
OBJECT MARKERS SHALL HAVE ALTERNATING BLACK AND RETROREFLECTORIZED YELLOW STRIPES. (SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS).



DELINEATOR TYPICAL

THE STANDARD COLOR FOR DELINEATORS USED ALONG BOTH SIDES OF TWO-WAY STREETS AND HIGHWAYS AND THE RIGHT SIDE OF ONE-WAY STREETS SHALL BE WHITE. DELINEATORS USED ALONG THE LEFT SIDE OF ONE-WAY ROADWAYS SHALL BE YELLOW THEY SHALL HAVE A MINIMUM AREA OF 7 SQUARE INCHES. THEY MAY BE ROUND, SQUARE OR OBLONG, FOR ALTERNATES SEE STD. E-198

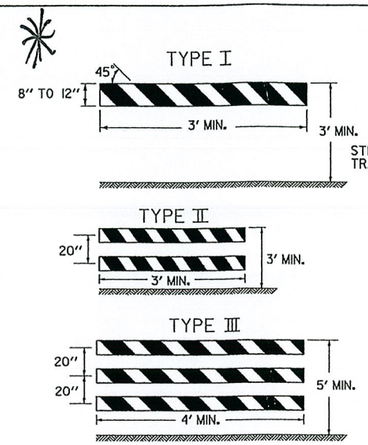


DETAILS SHOWN ARE APPROXIMATE. VARIATIONS ARE ACCEPTABLE AS LONG AS THE VALUES FALL IN THE RANGE REQUIRED BY THE M.U.T.C.D..

VERTICAL PANEL

VERTICAL PANELS SHALL HAVE ALTERNATING ORANGE AND WHITE RETROREFLECTORIZED STRIPES (SLOPING DOWNWARD IN THE DIRECTION TRAFFIC IS TO PASS). THESE DEVICES MAY BE USED FOR TRAFFIC SEPARATION, CHANNELIZING OR BARRICADING WHERE SPACE IS AT A MINIMUM.

DELINEATOR, VERTICAL PANEL AND OBJECT MARKER DETAILS FOR CONSTRUCTION AREAS WHERE TRAFFIC IS MAINTAINED



A TYPE III(MODIFIED) BARRICADE SHALL CONSIST OF TYPE II RAILS MOUNTED ON A BREAKAWAY BARRICADE AS SHOWN ON STANDARD SHEET E-107A.

BARRICADE CHARACTERISTICS			
	I	II	III
WIDTH OF RAIL	8" MIN. 12" MAX.	8" MIN. 12" MAX.	8" MIN. 12" MAX.
LENGTH OF RAIL	3' MIN.	3' MIN.	4' MIN.
WIDTH OF STRIPES	6"	6"	6"
HEIGHT	3' MIN.	3' MIN.	5' MIN.
TYPE OF FRAME	SEE E-107A	SEE E-107A	SEE E-107A
FLEXIBILITY	PORTABLE	PORTABLE	PORTABLE
ANGLE OF STRIPE	45°	45°	45°
COLOR OF STRIPES	ORANGE AND WHITE	ORANGE AND WHITE	ORANGE AND WHITE

BARRICADE CHARACTERISTICS

BARRICADES

APPLICATION NOTES

TYPE I BARRICADES SHALL BE USED ON CONVENTIONAL ROADS OR URBAN STREETS AND ARTERIALS TO MARK A SPECIFIC HAZARD.

TYPE II BARRICADES SHALL BE USED ON EXPRESSWAYS AND FREEWAYS, SERVING THE SAME FUNCTIONS AS TYPE I BARRICADES.

TYPE III BARRICADES (SEE STD. E-107A) SHALL ONLY BE USED WHEN A ROAD SECTION OR LANE IS CLOSED TO TRAFFIC AND ARE TO BE ERECTED AT THE POINT OF CLOSURE.

MATERIALS

THE BARRICADES SHOWN ON THIS SHEET SHOULD BE OF LIGHTWEIGHT MATERIAL. IF WOOD IS USED THE FOLLOWING CONDITIONS SHALL APPLY:

1. WOODEN BARRICADES (TYPE I AND II)
   - A) SHALL NOT BE USED TO CHANNELIZE OR DELINEATE WORK AREAS WITHIN THE CLEAR ZONE OF ANY HIGHWAY WHERE OPERATING SPEEDS IN EXCESS OF 20 M.P.H. ARE EXPECTED UNLESS INSTALLED FOR PEDESTRIAN CONTROL BEHIND APPROVED POSITIVE BARRIERS.
   - B) MAY BE USED WHERE OPERATING SPEEDS OF 20 M.P.H. OR LESS ARE EXPECTED.
2. TYPE III WOODEN BARRICADES SHALL NOT BE USED.

COLORS

THE BARRICADE PANELS SHOWN ON THIS SHEET SHALL HAVE ALTERNATING RETRO-REFLECTORIZED WHITE AND ORANGE STRIPES. THE ORANGE SHALL CONFORM WITH THE STANDARD COLORS ADOPTED BY AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICALS AND APPROVED BY THE US DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION. THE BARRICADE COMPONENTS SHALL BE WHITE UNLESS UNPAINTED METAL OR ALUMINUM IS USED.

REFLECTORIZATION

THE RETROREFLECTIVE SHEETING ON BARRICADE PANELS SHALL BE ASTM TYPE III.

LOCATION

THE BARRICADES SHOWN ON THIS SHEET WILL BE LOCATED BY THE RESIDENT ENGINEER IN THE FIELD OR AS SHOWN ON THE PLANS. THE LOCATION OF THE BARRICADES SHALL FOLLOW THE PROCEDURES SET FORTH IN THE ''MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES'', OR AS OTHERWISE NOTED.

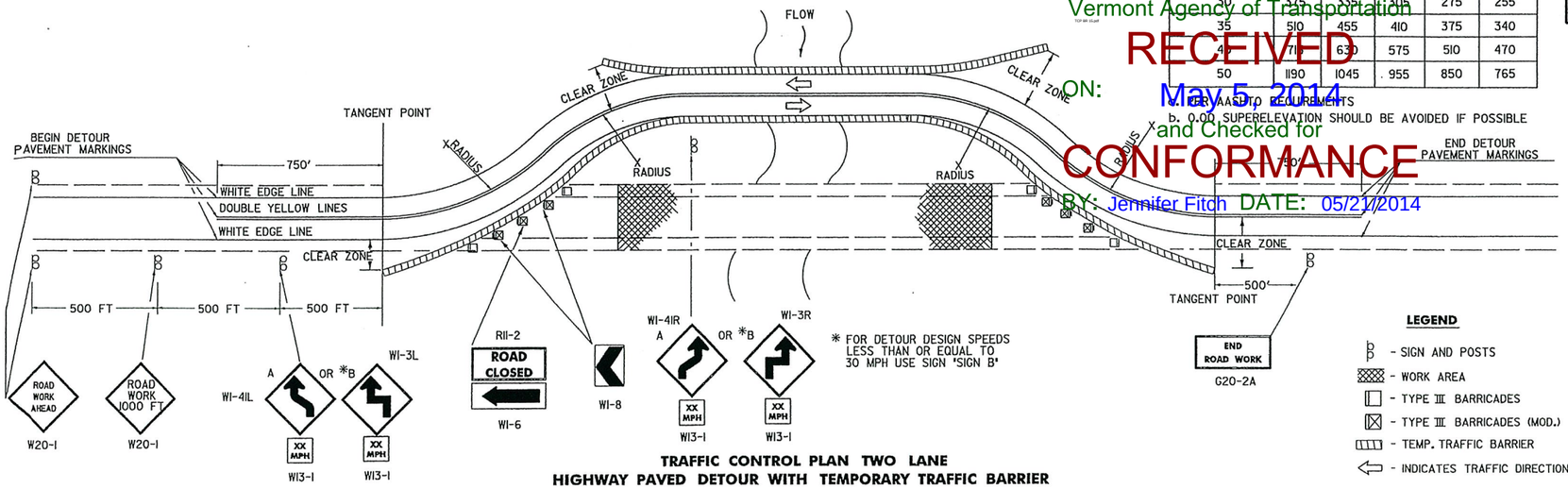
MAINTENANCE

BARRICADES SHALL BE MAINTAINED IN CLEAN CONDITION, SATISFACTORY TO THE RESIDENT ENGINEER. THEY SHALL BE COMPLETELY VISIBLE TO THE APPROACHING TRAFFIC AT ALL TIMES. DAMAGED, DEFACED, OR DIRTY BARRICADES SHALL BE REPAIRED, CLEANED, OR REPLACED AS ORDERED BY THE RESIDENT ENGINEER.

ALL SIGN PLACEMENT DISTANCES ARE DESIRABLE SPECIFICATIONS. FIELD CONDITIONS SHALL CONTROL THE ACTUAL PLACEMENT. PROJECT CONSTRUCTION APPROACH SIGNING PLACEMENT SHALL TAKE INTO CONSIDERATION SPACING REQUIREMENTS FOR THE DETOUR SIGN LAYOUT REQUIREMENTS.

DETOUR DESIGN SPEED (M.P.H.)	MINIMUM RADIUS (FT.)[a] SUPERELEVATION (FT./FT.) 0.00[b]	0.02	0.04	0.06	0.08
20	160	140	130	120	110
25	245	220	200	185	170
30	375	335	305	275	255
35	510	455	410	375	340
40	710	630	575	510	470
50	1190	1045	955	850	765

a. SEE AASHTO REQUIREMENTS
b. 0.00 SUPERELEVATION SHOULD BE AVOIDED IF POSSIBLE



* FOR DETOUR DESIGN SPEEDS LESS THAN OR EQUAL TO 30 MPH USE SIGN 'SIGN B'

LEGEND

- SIGN AND POSTS
- WORK AREA
- TYPE III BARRICADES
- TYPE III BARRICADES (MOD.)
- TEMP. TRAFFIC BARRIER
- INDICATES TRAFFIC DIRECTION

TRAFFIC CONTROL PLAN TWO LANE HIGHWAY PAVED DETOUR WITH TEMPORARY TRAFFIC BARRIER

DETOUR NOTES

1.) SIGNS AND DELINEATION SHOWN FOR ONE DIRECTION OF TRAFFIC ONLY.

2.) THE CONTRACTOR IS RESPONSIBLE FOR PAVEMENT MARKING AND SHALL REMOVE ANY CONFLICTING OR CONFUSING EXISTING MARKINGS.

3.) ADDITIONAL SIGNING MAY BE REQUIRED AT THE DISCRETION OF THE RESIDENT ENGINEER.

4.) UNPAVED DETOURS REQUIRE PAVEMENT MARKINGS FOR TRANSITIONS FROM EXISTING PAVEMENT.

5.) THE NUMBER OF CHANNELIZING DEVICES, BARRICADES AND OTHER TRAFFIC CONTROL DEVICES SHOWN ON THIS SHEET ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE ACTUAL NUMBER REQUIRED SHALL BE DETERMINED BASED ON INDIVIDUAL DETOUR CONDITIONS (TAPERS, SPEED LIMITS, LENGTH OF DETOUR CURVE, ETC.).

6.) AASHTO CLEAR ZONE REQUIREMENTS SHOULD BE MET. IF NOT THEN AN APPROVED ENERGY ABSORPTION ATTENUATOR (SUITABLE FOR THE TEMPORARY TRAFFIC BARRIER USED AND FOR THE DESIGN SPEED) SHALL BE INSTALLED PER THE CURRENT AASHTO ROADSIDE DESIGN GUIDE.

7.) THE DETOUR DESIGN SPEED SHOULD BE NO LESS THAN 10 M.P.H. BELOW THE POSTED SPEED LIMIT, UNLESS PHYSICAL RESTRICTIONS PREVENT THIS.

8.) SEE STANDARD SHEETS E-100, E-101 AND E-102 FOR SIGN DETAIL AND MATERIAL REQUIREMENTS.

9.) IF THE USE OF TEMPORARY TRAFFIC BARRIER IS NOT REQUIRED, THEN REFLECTORIZED PLASTIC DRUMS SHALL BE USED.

OTHER STDS. REQUIRED: E-100, E-101, E-102, E-102a, E-107a, E-198

REVISIONS AND CORRECTIONS

SEPT. 10, 1987 - DATE OF ORIGINAL ISSUE
APRIL 29, 1988 - FHWA REVIEW COMMENTS
SEPT. 20, 1993 - NEW RADIUS CHART, BARRICADE ALIGNMENT AND USE OF TEMPORARY TRAFFIC BARRIER
AUG. 08, 1995 - REVISED SIGNING PER MUTCD
JUNE 30, 2003 - CHANGED REFLECTIVE SHEETING TO TYPE III

APPROVED

DIRECTOR OF PROGRAM DEVELOPMENT
TRAFFIC OPERATIONS ENGINEER
FEDERAL HIGHWAY ADMINISTRATION

DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS

VERMONT AGENCY OF TRANSPORTATION

STANDARD E-107