

TRAFFIC MANAGEMENT NOTES:

1. THE EXISTING SPEED LIMIT IS 65 MPH. THE SPEED LIMIT WILL BE REDUCED TO 55 MPH IN THE WORK ZONE FOR THIS PROJECT. ANY EXISTING SPEED LIMIT SIGNS WITHIN THE SPEED REDUCTION AREA SHALL BE COMPLETELY COVERED. CONTRACTOR SHALL OBTAIN A TEMPORARY SPEED CERTIFICATE FROM THE VERMONT AGENCY OF TRANSPORTATION (VTRANS).
2. SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS. ANY EXISTING SIGNS NOT APPLICABLE TO VARIOUS STAGES OF CONSTRUCTION SHALL BE REMOVED OR COVERED.
3. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS" (SHS) BOOK PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).
4. SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING "AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) TYPE VII, VIII, OR IX REQUIREMENTS, UNLESS OTHERWISE NOTED.
5. ROLL UP SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING ASTM TYPE VI.
6. SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY, OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
7. 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.
8. PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY, AND A ONE FOOT MINIMUM ABOVE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VIABILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.
9. WHERE SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGNS AND POST INSTALLATIONS SHALL BE "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 COMPLIANT AND 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.
10. THE CONTRACTOR SHALL HAVE SIGNS FOR CLOSURE FOR RIGHT AND LEFT LANES ON PROJECT BEFORE WORK COMMENCES.
11. THE NUMBER OF CHANNELIZING DEVICES, TYPE THREE BARRICADES, AND OTHER TRAFFIC CONTROL DEVICES SHOWN ARE FOR ILLUSTRATIVE PURPOSE ONLY. THE ACTUAL NUMBER REQUIRED ARE TO BE DETERMINED BASED ON INDIVIDUAL DETOUR CONDITIONS (TAPERS, SPEED LIMITS, LENGTHS OF DETOUR, CURVE, ETC.). WARNING LIGHTS SHALL NOT BE USED ON CHANNELIZING DEVICES.
12. PLACE LAST CHANNELIZING DEVICE 100 FEET BEYOND THE ANTICIPATED WORK ZONE TERMINAL POINT EACH DAY AND THEN START THE END TAPER. THE END TAPER SHALL BE CONSTRUCTED OF 5 ADDITIONAL RETROREFLECTIVE DRUMS SPACED AT 10 FEET ON CENTER.
13. THE ARROW BOARD SHALL BE PLACED ON THE SHOULDER OF THE ROADWAY, OR IF PRACTICAL, FURTHER FROM THE TRAVELED LANE AT THE END OF THE SHOULDER TAPER.
14. THE PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE USED AT THE DISCRETION OF THE ENGINEER. THE PCMS SHALL BE USED IN ACCORDANCE WITH SECTION 6F.60 OF THE MUTCD. SUGGESTED SIGN MESSAGES ARE SHOWN IN THE PCMS SIGN MESSAGE DETAIL.

15. TRAVEL LANE SHALL BE 12 FEET WIDE.
16. DURING NON-WORK PERIODS, ALL EQUIPMENT SHALL BE MOVED TO A DESIGNATED STORAGE AREA OR AT LEAST 30 FT FROM THE EDGE OF TRAVEL. EQUIPMENT PROTECTED BY GUARDRAIL MUST BE AT LEAST 4 FT BEHIND GUARDRAIL.
17. ALL WORK IS TO BE PERFORMED WITHIN THE LEGAL RIGHT-OF-WAY. THE CONTRACTOR SHALL OBTAIN PERMISSION FROM THE STATE OF VERMONT TO ACCESS THE WORK ZONE FROM ROADS OUTSIDE THE HIGHWAY RIGHT-OF-WAY, OR TO UTILIZE INTERSTATE TURN-AROUNDS.
18. THE CONTRACTOR SHALL MAINTAIN ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES.
19. EXISTING UTILITIES ARE SHOWN IN ACCORDANCE WITH THE BEST INFORMATION AVAILABLE AND ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY. THE ACCURACY AND COMPLETENESS OF EXISTING UTILITY INFORMATION IS NOT GUARANTEED AND SHALL BE VERIFIED BY THE CONTRACTOR. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO ENSURE THE PROTECTION OF THE UTILITIES AND SERVICES.
20. THE CONTRACTOR SHALL COORDINATE WORK SUCH THAT NO ONE WORK AREA WILL HAVE ADVERSE EFFECT ON ANOTHER WORK AREA. ADVERSE EFFECTS INCLUDE, BUT ARE NOT LIMITED TO, PROBLEMS ARISING FROM CONFLICT IN MAINTENANCE OF TRAFFIC SET-UPS, BLOCKING OF OR DELAYING MATERIAL DELIVERIES, OVERLAPPING CONSTRUCTION ACTIVITIES, DISRUPTING THE FLOW OF TRAFFIC, ETC.

SEQUENCE OF CONSTRUCTION:

21. SEQUENCING OF CONSTRUCTION ACTIVITIES SHALL BE SUCH THAT DISRUPTIONS TO TRAFFIC ARE MINIMIZED. REFER TO THE SPECIAL PROVISIONS FOR GUIDELINES REGARDING ALLOWABLE WORK PERIODS, LANE RESTRICTION TIMES, AND COMPLETION DETAILS.
22. SET/RESET TRAFFIC CONTROL DEVICES AS NEEDED TO MATCH WITHIN THE ACTIVE WORK ZONE.

MAINTENANCE AND PROTECTION OF TRAFFIC:

23. DESIGN OF TRAFFIC CONTROL AND DEVICES SHALL CONFORM TO STATE OF VERMONT AGENCY OF TRANSPORTATION (VTRANS) STANDARDS AND THE LATEST EDITION OF THE MUTCD. THE CONTRACTOR SHALL INCLUDE ALL VERMONT TRAFFIC STANDARD PLANS THAT APPLY TO THIS PROJECT. WHERE CONFLICTS EXISTS, THE MUTCD SHALL GOVERN.
  24. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH SEVEN CALENDAR DAYS ADVANCE NOTICE PRIOR TO ANY LANE CLOSURES.
  25. THE CONTRACTOR SHALL PROVIDE ONE WORKER TO MAINTAIN TRAFFIC CONTROL DEVICES AT ALL THE TIMES AND VEHICLE EQUIPPED WITH A ROTATING OR STROBE LIGHT.
  26. ALL WORKERS SHALL WEAR RETROREFLECTIVE SAFETY VESTS AND HARD HATS.
  27. WORK SHALL NOT COMMENCE UNTIL NCHRP 350 APPROVED TRUCK MOUNTED ATTENUATORS (TMA) ARE IN PLACE AS INDICATED OR AS DIRECTED BY THE ENGINEER. THE TMA'S SHALL HAVE A FLASHING ARROW PANEL AND SHALL REMAIN 100' TO 250' BEHIND WORK CREW AT ALL TIMES. THE TMA SHOULD BE USED IN "CAUTION" MODE WHEN IT IS NOT USED FOR A LANE CLOSURE.
  28. A 96" X 48" ARROW SIGN (W1-6) SHALL BE KEPT WITH THE FLASHING ARROW PANEL TO BE USED IN CASE OF MALFUNCTION.
  29. TRAFFIC CONTROL SETUPS SHALL BE SHORT-TERM AND SHALL BE REMOVED AT THE END OF THE WORK PERIOD WITH THE EXCEPTION OF WORK AREAS IN WHICH ALL OPEN EXCAVATION HAS NOT BEEN BACK FILLED OR COVERED TO THE SATISFACTION OF THE ENGINEER. TRAFFIC CONTROL FOR LONG-TERM OPERATION (SEE VAOT STANDARD E-103) SHALL BE USED IF OPEN EXCAVATION HAS NOT BEEN FILLED OR COVERED. SEE VAOT STANDARD TO DETERMINE WHEN BARRIER IS REQUIRED TO PROTECT A DROP-OFF.
  30. CONTRACTOR SUBMITTED TRAFFIC CONTROL PLANS SHALL INCLUDE DETAIL AND METHODS FOR ALL STATE HIGHWAYS AND LOCAL TOWN ROADS AFFECTED.
  31. PAYMENT FOR TRAFFIC CONTROL, INCLUDING PREPARING, IMPLEMENTING INSPECTING, MAINTAINING AND REMOVING ALL TRAFFIC CONTROL DEVICES SHALL BE PAID AS ITEM 900.645, SPECIAL PROVISION (TRAFFIC CONTROL, ALL-INCLUSIVE).
- WORK ZONE TAPER NOTES
32. TAPER FORMULA  

$$L = \frac{WS}{60} \text{ FOR } S \geq 45 \text{ MPH}$$

$$L = \frac{WS^2}{60} \text{ FOR } S < 40 \text{ MPH}$$

WHERE:  
L = MINIMUM LENGTH OF TAPER (IN FEET)  
S = NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK ZONE OR 85% SPEED (MPH)  
W = WIDTH OF OFFSET (IN FEET)
  33. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SELECTED S.
  34. THE FINAL LOCATION OF PROPOSED SIGNS SHALL BE DETERMINED IN THE FIELD AS DEEMED APPROPRIATE.
  35. TYPE III BARRICADES SHALL BE USED AS REQUIRED BY THE ENGINEER OR STANDARD VAOT STANDARD DRAWING E-103.
  36. USE FLASHING ARROW BOARD AS REQUIRED.
  37. SPEED LIMIT SHALL BE APPROVED BY THE GOVERNING AGENCY PRIOR TO INSTALLATION.

PROJECT NAME: HARTFORD SHARON  
PROJECT NUMBER: FITS503

FILE NAME: z06e142TNT.dgn  
PROJECT LEADER: J. YOUNG  
DESIGNED BY: P. VASILIOU  
TRAFFIC MANGEMENT NOTES

PLOT DATE: 10/1/2010  
DRAWN BY: S. GUNN  
CHECKED BY: J. WILSON  
SHEET 66 OF 70