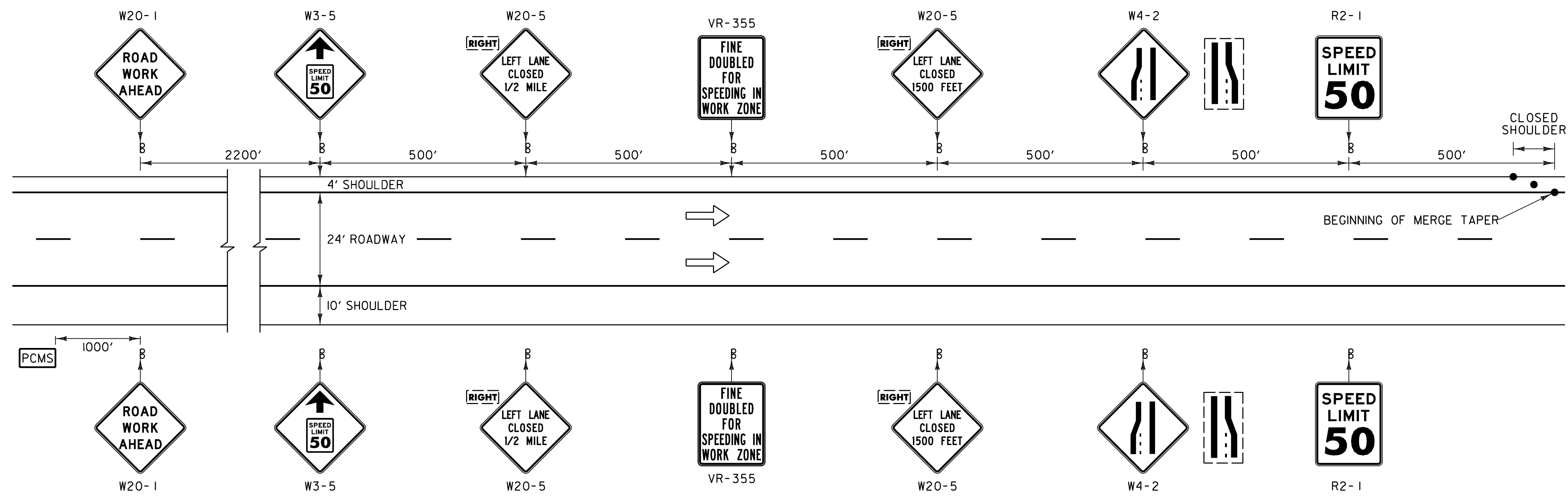
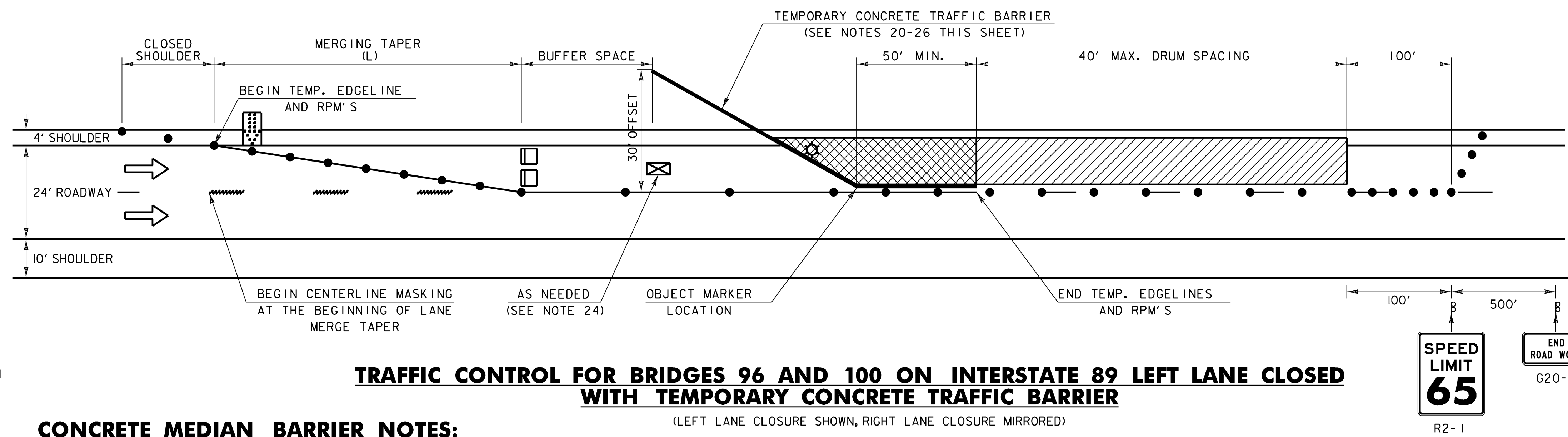


**TRAFFIC CONTROL NOTES:**

1. THE LEFT LANE CLOSURE IS SHOWN. THE RIGHT LANE APPROACH SIGNING IS SIMILAR. THE RIGHT LANE CLOSURE SHOULD BE MIRRORED.
2. THE EXISTING SPEED LIMIT IS 65 MPH ON I-89. THE SPEED LIMIT WILL BE REDUCED TO 50 MPH ON I-89 IN THE WORK ZONE FOR THIS PROJECT. ANY EXISTING SPEED LIMIT SIGNS WITHIN THE SPEED REDUCTION AREA SHALL BE COMPLETELY COVERED. THE SPEEDS SHALL REMAIN AS POSTED ON VT 207, VT 78, AND WOODS HILL ROAD.
3. SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS.
4. ALL SIGNS SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS" BOOK (SHS) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).
5. SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING AASHTO M 268 REQUIREMENTS, UNLESS OTHERWISE NOTED.
6. ROLL UP SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING AASHTO M 268.
7. 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 ERECTED IN A NEAT AND WORKMANLIKE MANNER. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.
8. 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.
9. PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY AND A ONE FOOT MINIMUM ABOVE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.
10. 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 POSTS. WHEN ANCHORS ARE INSTALLED STUB SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.
11. THE CONTRACTOR SHALL HAVE SIGNS FOR CLOSURE OF RIGHT AND LEFT LANES ON PROJECT BEFORE WORK COMMENCES.
12. THE NUMBER OF CHANNELIZING DEVICES, TYPE THREE BARRICADE AND OTHER TRAFFIC CONTROL DEVICES SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE ACTUAL NUMBER REQUIRED ARE TO BE DETERMINED BASED ON INDIVIDUAL DETOUR CONDITIONS (TAPERS, SPEED LIMITS, LENGTH OF DETOUR, CURVE, ETC.). WARNING LIGHTS SHALL NOT BE USED ON CHANNELIZING DEVICES.
13. 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.
14. 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.
15. 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.55 OF THE MUTCD. THE PCMS SHALL READ "LEFT (OR RIGHT) LANE CLOSED AHEAD, PLEASE MERGE EARLY".
16. TRAVEL LANE SHALL BE 12 FEET WIDE.
17. THE CONTRACTOR SHALL REDUCE TRAFFIC TO ONE LANE DURING WORKING HOURS IN ACCORDANCE WITH THIS SHEET. ALL EQUIPMENT SHALL BE MOVED TO A LOCATION OFF PAVED SHOULDERS DURING NON-WORK PERIODS, AND PROTECTED BY BARRELS OR CONES, UNLESS BARRIER IS USED.
18. TRAFFIC CONTROL PLANS HAVE NOT BEEN PROVIDED FOR BRIDGES 92 (NORTH & SOUTH) AND 97 (NORTH & SOUTH). BOTH BRIDGES CROSS RECREATIONAL TRAILS AND ALL WORK SHALL TAKE PLACE FROM UNDERNEATH. DURING CONSTRUCTION, TRAIL TRAFFIC MUST BE MAINTAINED IN ACCORDANCE WITH MUTCD, AASHTO, VOSH, AND ADA REQUIREMENTS. IF WORK IS TO BE PERFORMED FROM THE TOP OF THE BRIDGE, LANE CLOSURES AND SIGNING SHALL CONFORM WITH THIS SHEET.
19. ALL TRAFFIC CONTROL EQUIPMENT SHOULD BE USED AND SET UP IN A MANNER TO ACCOMMODATE TRUCK TURNING TRAFFIC.



**CONSTRUCTION APPROACH SIGNING FOR BRIDGES 96 AND 100 ON INTERSTATE 89 LEFT LANE CLOSED**



**TRAFFIC CONTROL FOR BRIDGES 96 AND 100 ON INTERSTATE 89 LEFT LANE CLOSED WITH TEMPORARY CONCRETE TRAFFIC BARRIER**

**CONCRETE MEDIAN BARRIER NOTES:**

20. THE EXISTING TRAVEL LANE WIDTH SHOULD BE MAINTAINED IF POSSIBLE.
21. TEMPORARY TAPE EDGELINES SHALL BE APPLIED AND SHALL MAINTAIN A ONE FOOT MINIMUM DISTANCE FROM THE BARRIER WITH TWO FEET BEING DESIRABLE.
22. LINE STRIPING TARGETS (LST'S) SHALL BE PLACED TO THE OUTSIDE OF THE TEMPORARY TAPE AT 20 FOOT SPACING.
23. PROVIDE A MINIMUM TAPER RATE AS SHOWN IN THE TABLE THIS SHEET, WITH A MINIMUM OF 50 FEET OF TANGENT SECTION PRIOR TO THE BEGINNING OF THE WORK ZONE.
24. THE END OF THE BARRIER FACING APPROACHING TRAFFIC SHALL MEET THE FOLLOWING REQUIREMENTS.
  - A. WHEN NO GUARDRAIL IS PRESENT, A 30 FOOT OFFSET SHALL BE USED FROM THE EDGE OF TRAVELED WAY. IF A 30' OFFSET IS NOT ATTAINABLE, THEN AN ENERGY ABSORPTION ATTENUATOR SHALL BE PROVIDED IN ACCORDANCE WITH SECTION 621 (COST INCIDENTAL TO ITEM 621.90 TEMPORARY TRAFFIC BARRIER).
  - B. IF GUARDRAIL IS PRESENT, THEN TEMPORARY CONCRETE TRAFFIC BARRIER SHALL BE CONNECTED TO EXISTING GUARDRAIL (COST INCIDENTAL TO ITEM 621.90 TEMPORARY TRAFFIC BARRIER) (COSTS FOR DISMANTLING BARRIER CONNECTION AND RESTORING EXISTING BARRIER TO ORIGINAL CONFIGURATION SHALL BE INCIDENTAL TO ITEM 621.90 TEMPORARY TRAFFIC BARRIER.)
25. ALL EQUIPMENT SHALL BE PARKED BEHIND TEMPORARY CONCRETE TRAFFIC BARRIERS AT NIGHT AND ON WEEKENDS WHEN NOT IN USE.
26. RETROREFLECTIVE PLASTIC DRUM SPACING SHALL BE 40 FOOT MAX. BETWEEN TEMPORARY CONCRETE TRAFFIC BARRIER AND END OF WORK ZONE.

**LEGEND**

- ➔ FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- ▢ PORTABLE ARROW BOARD
- ⚙ LIGHTING
- ▣ TYPE III BARRICADE
- ▨ WORK AREA
- ⊠ TRUCK/TRAILER MOUNTED ATTENUATOR
- PCMS PORTABLE CHANGEABLE MESSAGE SIGN (SEE NOTE 15)
- ▩ CONSTRUCTION STAGING/ STORAGE AREA (SEE NOTE 25)

POSTED SPEED (MPH)	TAPER LENGTHS (FT)		TANGENT W=12 FT (L/2)	BARRIER FLARE RATE (MINIMUM)	MINIMUM BUFFER SPACE LENGTH (FT)	MAXIMUM CHANNELIZING DEVICE SPACING (FT)	
	SHOULDER W=10 FT (L/3)	MERGING 12 FT LANE (L)				TAPER (S)	TANGENT (2S)
≤40	90	320	160	1:9	305	40	80
45	150	540	270	1:9	360	45	90
50	170	600	300	1:11	425	50	100
55	185	660	330	1:13	495	55	110
60	200	720	360	1:13	570	60	120
65	215	780	390	1:13	645	65	130

TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATION:  
 $L = WS^2/60$  FOR POSTED SPEEDS OF 45 MPH OR GREATER  
 $L = WS^2/60$  FOR POSTED SPEEDS OF 40 MPH OR LESS

L = MINIMUM LENGTH OF TAPER  
 W = WIDTH OF OFFSET IN FEET. (TYPICAL)  
 S = POSTED SPEED IN MPH

PROJECT NAME: ST. ALBANS - HIGHGATE  
 PROJECT NUMBER: IM BPNT(4)  
 FILE NAME: TCP BR 96 & 100.dgn  
 PROJECT LEADER: JPB  
 DESIGNED BY: JJB  
 PLOT DATE: 8/17/2009  
 DRAWN BY: NCF/JJB  
 CHECKED BY: DH  
**TRAFFIC CONTROL SHEET 1**  
 SHEET 6 OF 32