

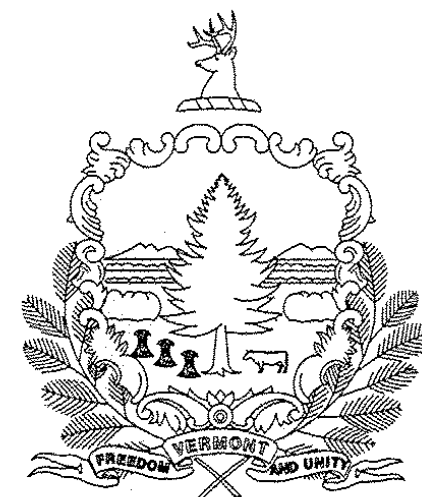
**INDEX OF SHEETS**

- 1. TITLE SHEET
- 2. QUANTITY SHEET
- 3. - 5. TRAFFIC CONTROL SHEETS
- 6. PROJECT NOTES AND DETAILS
- 7. - 10. REFERENCE PLANS - BRIDGES 70 N&S

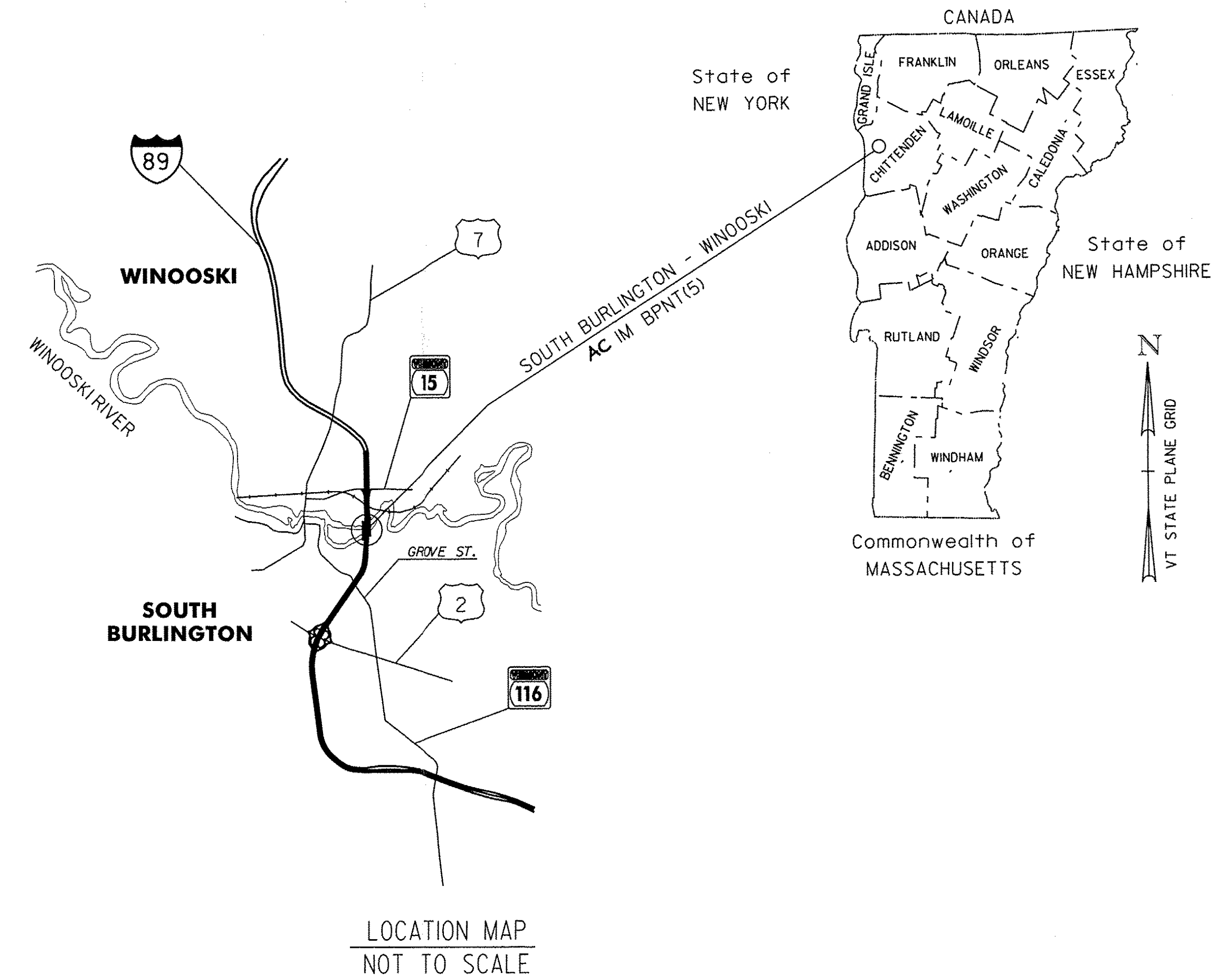
**VAOT STANDARD SHEETS**

- E-100 01/02/04
- E-101 05/30/03
- E-102 06/30/03
- E-102A 05/01/04
- E-103 03/01/04
- E-106 03/01/04
- E-107 06/30/03
- E-107A 06/08/09
- E-110 08/08/95
- E-120 08/08/95
- E-121 08/08/95

# STATE OF VERMONT AGENCY OF TRANSPORTATION



## PROPOSED IMPROVEMENT BRIDGE PROJECT TOWNS OF SOUTH BURLINGTON, WINOOSKI COUNTY OF CHITTENDEN PROJECT IM BPNT(5)



ROUTE NO.: INTERSTATE 89  
BRIDGE NO.: 70N&S  
PROJECT LOCATION: BR 70N&S OVER WINOOSKI RIVER (MM 90.008)

PROJECT DESCRIPTION: THIS PROJECT INVOLVES CLEANING AND REPAINTING THE EXISTING STEEL SUPERSTRUCTURE MEMBERS AND MINOR RELATED WORK.

SURVEYED BY : N/A  
SURVEYED DATE : N/A

DATUM  
VERTICAL N/A  
HORIZONTAL N/A

**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	

**RECORD PLANS**

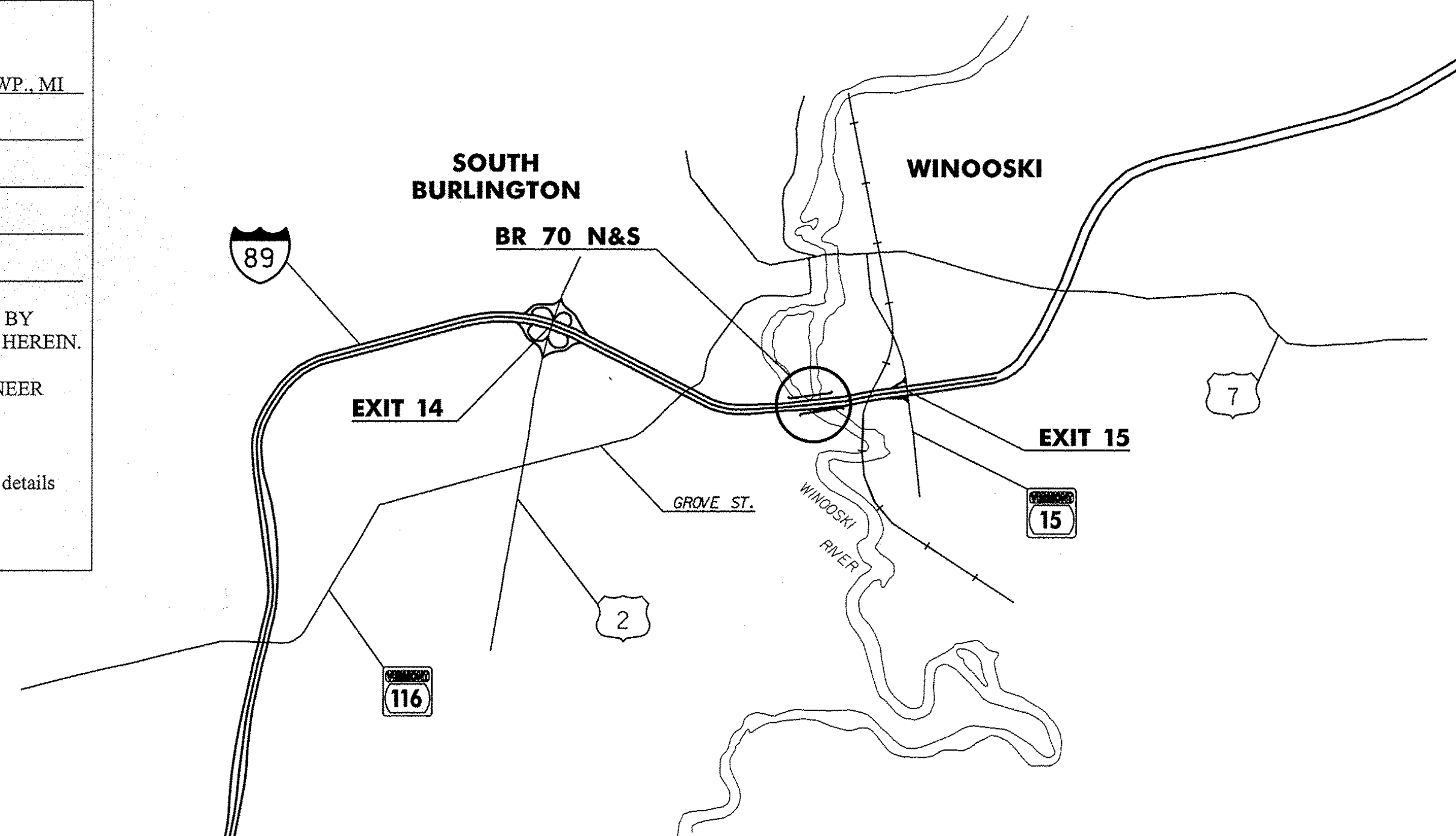
CONTRACTOR: ATSA LIS BROTHERS PAINTING CO. - CLINTON TWP., MI  
RESIDENT ENGINEER: SCOTT WHEATLEY  
CONSTRUCTION BEGAN: SEPTEMBER 7, 2010  
CONSTRUCTION COMPLETE: MARCH 23, 2012  
RECORD PLANS BY: SCOTT WHEATLEY

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Scott Wheatley RESIDENT ENGINEER

DATE 7/9/12

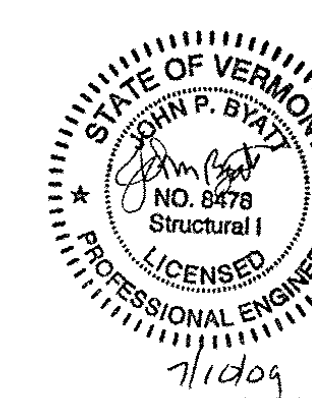
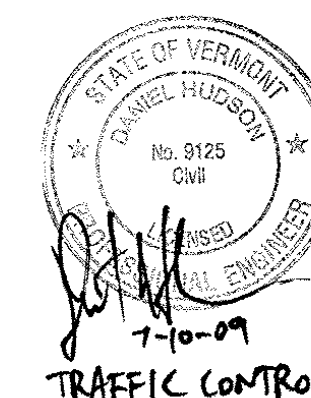
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.



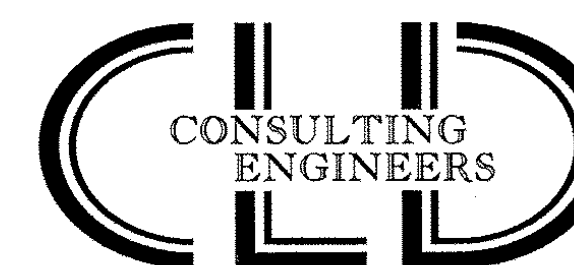
2009 AADTs	
NORTHBOUND	SOUTHBOUND
26,700	26,700

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.



PLANS PREPARED BY:



540 Commercial Street Manchester, NH 03101  
(603) 668-8223 • Fax: (603) 668-8802  
email: [old@oldengineers.com](mailto:old@oldengineers.com) • [www.oldengineers.com](http://www.oldengineers.com)  
Moine • New Hampshire • Vermont

DEPARTMENT OF TRANSPORTATION  
FEDERAL HIGHWAY ADMINISTRATOR

APPROVED Tom Knudsen DATE 8/24/09

DIRECTOR OF PROGRAM DEVELOPMENT

APPROVED John Weaver DATE 7-22-09

PROJECT MANAGER : JOHN WEAVER

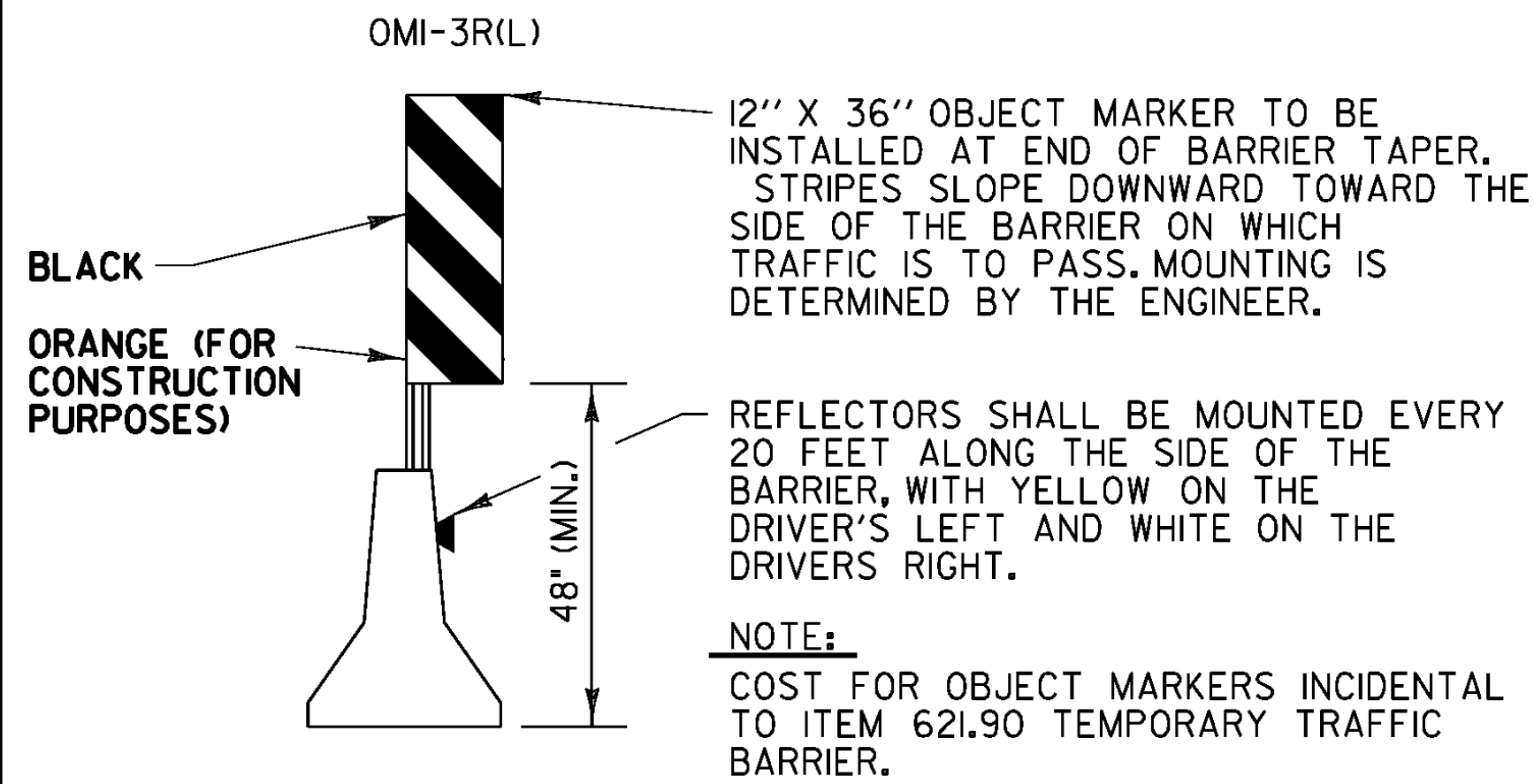
PROJECT NAME : SOUTH BURLINGTON - WINOOSKI

PROJECT NUMBER : AC IM BPNT(5)

SHEET 1 OF 10 SHEETS

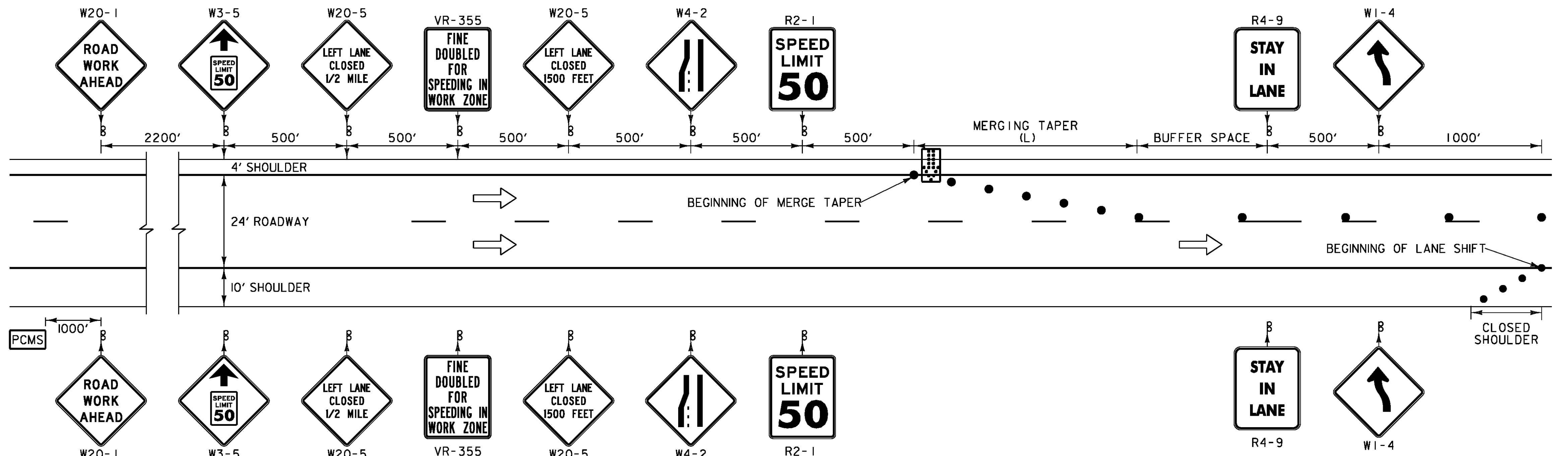
# QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES										TOTALS		DESCRIPTIONS				DETAILED SUMMARY OF QUANTITIES		
					ROADWAY	EROSION CONTROL	BRIDGE NO. 70N	FULL C.E. ITEMS	BRIDGE NO. 70S	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	-			
							125		125	250		HR	TRUCK-MOUNTED ATTENUATOR	608.45	EST.			
							1300		1300	2600		LF	TEMPORARY TRAFFIC BARRIER	621.90	EST.			
							650		650	1300		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST.			
								1		1		LS	FIELD OFFICE, ENGINEERS	631.10	-			
								1		1		LS	TESTING EQUIPMENT, PROTECTIVE COATINGS	631.18	-			
								1		1		LU	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.25	-			
					1					1		LS	MOBILIZATION/DEMOBILIZATION	635.11	-			
							1			1		LS	TRAFFIC CONTROL (I-89 - BRIDGE NO. 70N)	641.10	-			
									1	1		LS	TRAFFIC CONTROL (I-89 - BRIDGE NO. 70S)	641.10	-			
							1		1	2		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	-			
							1		1	2		EACH	PORTABLE ARROW BOARD	641.16	-			
							6030		7370	13400		LF	TEMPORARY 6 INCH WHITE LINE, TYPE II TAPE	646.621	EST.			
							2835		3440	6275		LF	TEMPORARY 6 INCH YELLOW LINE, TYPE II TAPE	646.631	EST.			
							3925		4825	8750		SF	PAVEMENT MARKING MASK	646.86	EST.			
						50				50		SY	GEOTEXTILE FOR SILT FENCE	649.51	EST.			
						50				50		SY	TEMPORARY EROSION MATTING	653.20	EST.			
							1			1		LS	SPECIAL PROVISION (CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES) (I-89-BR. NO. 70N)	900.645	-			
									1	1		LS	SPECIAL PROVISION (CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES) (I-89-BR. NO. 70S)	900.645	-			
							1			1		LS	SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL) (I-89-BR. NO. 70N)	900.645	-			
									1	1		LS	SPECIAL PROVISION (QC/QA CLEAN AND PAINT EXISTING STEEL STRUCTURES, BARE STEEL) (I-89-BR. NO. 70S)	900.645	-			

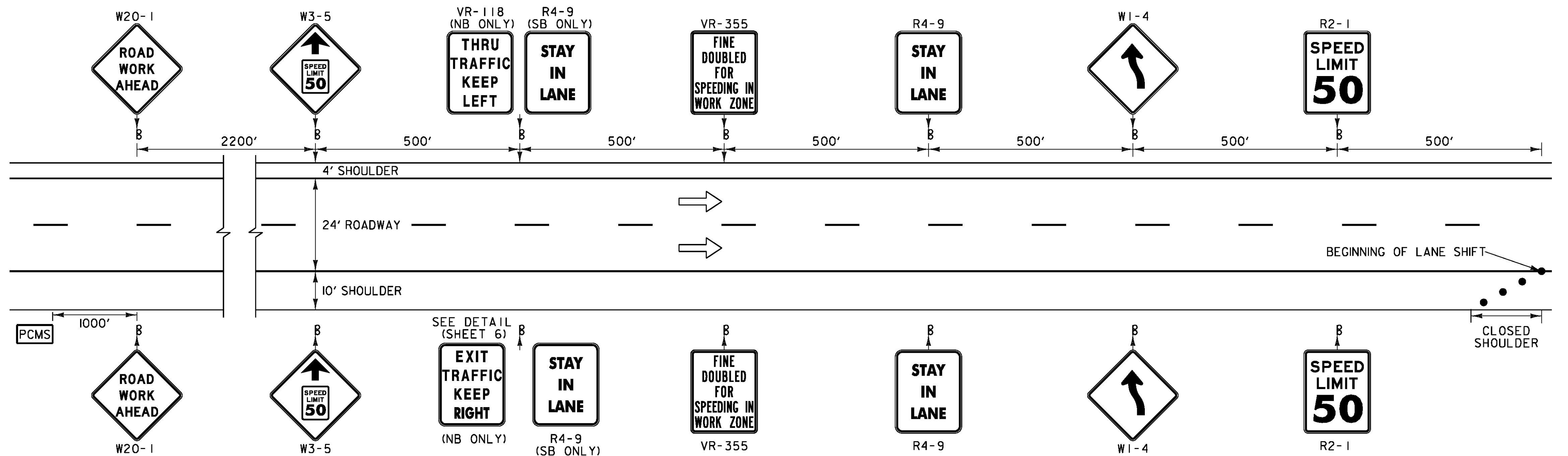


**TRAFFIC CONTROL NOTES:**

- A LEFT LANE CLOSURE IS SHOWN, HOWEVER, LANE CAN ONLY BE CLOSED FOR NIGHT OPERATIONS (7:00 PM TO 5:00 AM).
- THE EXISTING SPEED LIMIT IS 55 MPH, THE SPEED LIMIT WILL BE REDUCED TO 50 MPH IN THE WORK ZONE FOR THIS PROJECT. ANY EXISTING SPEED LIMIT SIGNS WITHIN THE SPEED REDUCTION AREA SHALL BE COMPLETELY COVERED. ANY SIGNS CONFLICTING WITH TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED.
- SIGNS SHALL BE INSTALLED SO AS NOT TO OBSTRUCT EXISTING SIGNS.
- 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).
- SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING AASHTO M 268 REQUIREMENTS, UNLESS OTHERWISE NOTED.
- ROLL UP SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING AASHTO M 268.
- 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.
- 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.
- 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.
- 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.
- THE CONTRACTOR SHALL HAVE SIGNS FOR CLOSURE OF RIGHT AND LEFT LANES ON PROJECT BEFORE WORK COMMENCES.
- 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.
- 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.
- 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.
- 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".
- TRAVEL LANE SHALL BE A MINIMUM OF 11' FEET WIDE.
- ALL TRAFFIC CONTROL EQUIPMENT SHOULD BE USED AND SET UP IN A MANNER TO ACCOMMODATE TRUCK TRAFFIC.
- LIGHTING SHALL BE PROVIDED ON BARRIER SIDE OF LANE SHIFT.



**CONSTRUCTION APPROACH SIGNING ON INTERSTATE 89 LANE SHIFT RIGHT WITH TEMPORARY LEFT LANE CLOSURE (NIGHT WORK ONLY)**



**CONCRETE MEDIAN BARRIER NOTES:**

- IT IS ASSUMED EXISTING TRAVEL LANE WIDTHS CANNOT BE MAINTAINED (SEE NOTE 16).
- TEMPORARY TAPE EDGELINES SHALL BE APPLIED AND SHALL MAINTAIN A ONE FOOT MINIMUM DISTANCE FROM THE BARRIER WITH TWO FEET BEING DESIRABLE.
- REFLECTORIZED PAVEMENT MARKINGS (RPM'S) SHALL BE PLACED TO THE OUTSIDE OF THE TEMPORARY TAPE AT 20 FOOT SPACING.
- 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.
- THE END OF THE BARRIER FACING APPROACHING TRAFFIC SHALL MEET THE FOLLOWING REQUIREMENTS.
  - 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).
  - 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.)
- ALL EQUIPMENT SHALL BE PARKED BEHIND TEMPORARY CONCRETE TRAFFIC BARRIERS WHEN NOT IN USE.
- RETROREFLECTIVE PLASTIC DRUM SPACING SHALL BE 40 FOOT MAX. BETWEEN TEMPORARY CONCRETE TRAFFIC BARRIER AND END OF WORK ZONE.

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)	
	MERGING 12 FT LANE (L)	SHIFTING W=16 FT (L/2)	SHOULDER W=10 FT (L/3)				TAPER (S)	TANGENT (2S)
≤40	320	215	90	160	1:9	305	40	80
45	540	360	150	270	1:9	360	45	90
50	600	400	170	300	1:11	425	50	100
55	660	440	185	330	1:13	495	55	110
60	720	480	200	360	1:13	570	60	120
65	780	560	215	390	1:13	645	65	130

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

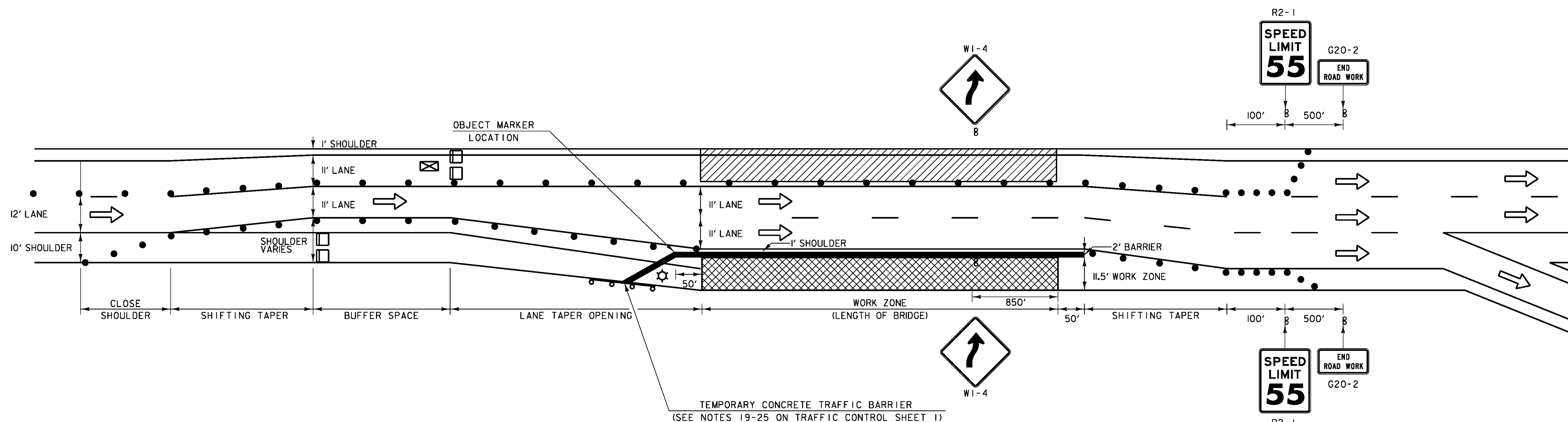
L = MINIMUM LENGTH OF TAPER  
 W = WIDTH OF OFFSET IN FEET. (TYPICAL)  
 S = POSTED SPEED IN MPH

**LEGEND**

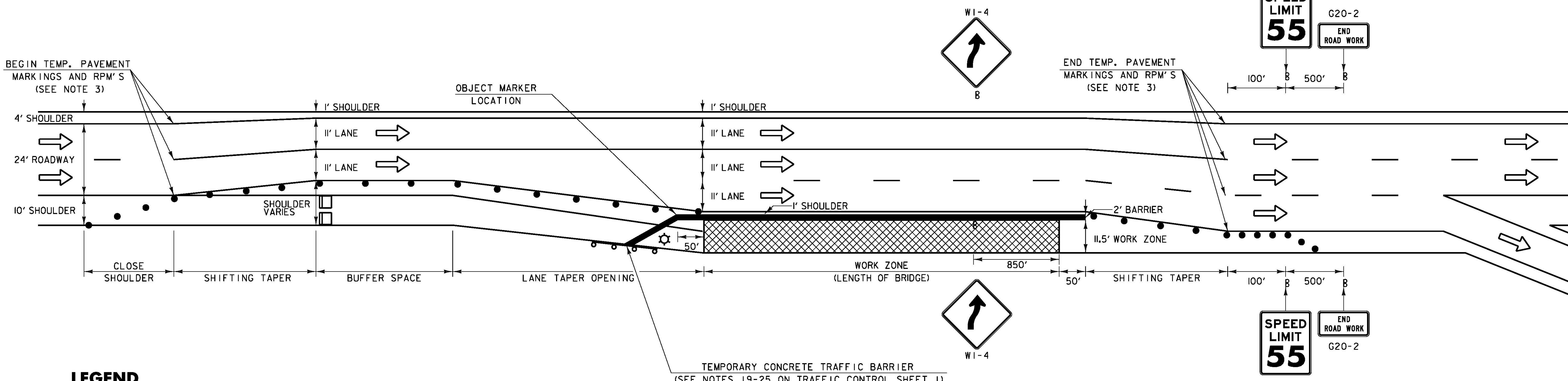
- FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- PORTABLE ARROW BOARD
- TYPE III BARRICADE
- WORK AREA
- TRUCK/TRAILER MOUNTED ATTENUATOR
- PORTABLE CHANGEABLE MESSAGE SIGN (SEE NOTE 15)
- CONSTRUCTION STAGING/ STORAGE AREA (SEE NOTE 24 THIS SHEET)

PROJECT NAME: SOUTH BURLINGTON - WINOOSKI  
 PROJECT NUMBER: IM BPNT(5)  
 FILE NAME: 03-TCP BR 70.dgn  
 PROJECT LEADER: JPB  
 DESIGNED BY: JJB  
**TRAFFIC CONTROL SHEET 1**

PLOT DATE: 8/16/2009  
 DRAWN BY: NCF/JJB  
 CHECKED BY: DH  
 SHEET 3 OF 10



**TRAFFIC CONTROL FOR BRIDGE 70 NORTHBOUND ON INTERSTATE 89 LANE SHIFT LEFT WITH TEMPORARY LEFT LANE CLOSURE (NIGHT WORK ONLY) AND CONCRETE TRAFFIC BARRIER**



**TRAFFIC CONTROL FOR BRIDGE 70 NORTHBOUND ON INTERSTATE 89 LANE SHIFT LEFT WITH TEMPORARY CONCRETE TRAFFIC BARRIER**

**LEGEND**

- FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- PORTABLE ARROW BOARD
- TYPE III BARRICADE
- LIGHTING
- TEMPORARY WORK AREA
- TRUCK/TRAILER MOUNTED ATTENUATOR
- PORTABLE CHANGEABLE MESSAGE SIGN (SEE NOTE 15 ON TRAFFIC CONTROL SHEET 1)
- CONSTRUCTION STAGING/ STORAGE AREA/ PERMANENT WORK AREA (SEE NOTE 24 ON TRAFFIC CONTROL SHEET 1)

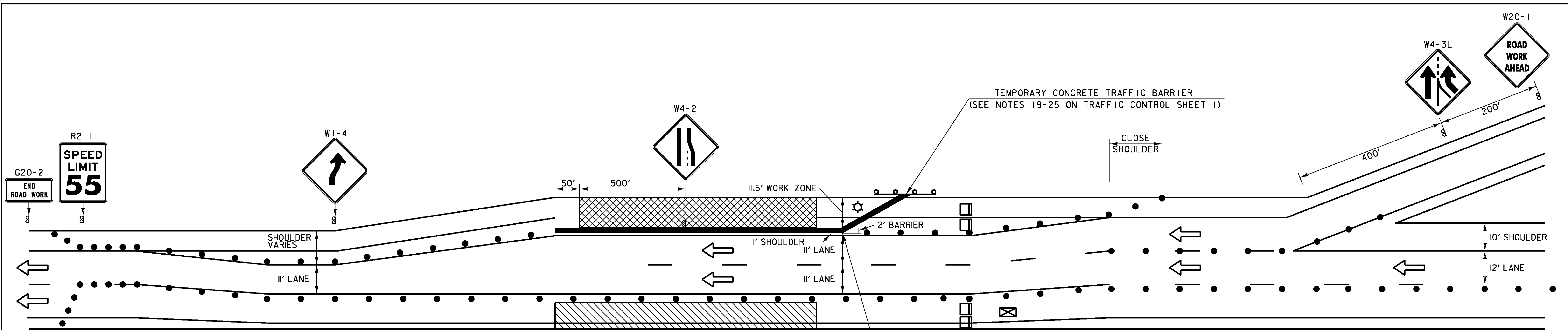
POSTED SPEED (MPH)	TAPER LENGTHS (FT)			TANGENT W=12 FT (L/2)	BARRIER FLARE RATE (MINIMUM)	MINIMUM BUFFER SPACE LENGTH (FT)	MAXIMUM CHANNELIZING DEVICE SPACING (FT)	
	MERCING 12 FT LANE (L)	SHIFTING 16 FT LANE (L/2)	SHOULDER W=10 FT (L/3)				TAPER (S)	TANGENT (2S)
≤40	320	215	90	160	1:9	305	40	80
45	540	360	150	270	1:9	360	45	90
50	600	400	170	300	1:11	425	50	100
55	660	440	185	330	1:13	495	55	110
60	720	480	200	360	1:13	570	60	120
65	780	560	215	390	1:13	645	65	130

TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATION:  
 $L = WS$  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

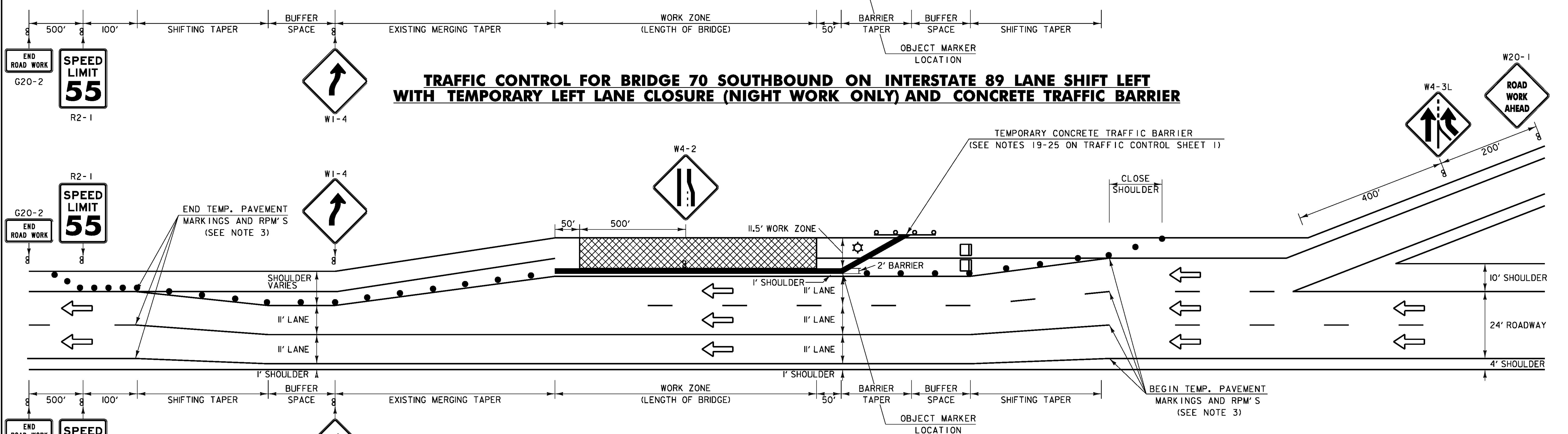
**TRAFFIC CONTROL NOTES:**

1. SEE THE TRAFFIC CONTROL NOTES ON TRAFFIC CONTROL SHEET 1 FOR ADDITIONAL NOTES AND APPROACH SIGNING FOR LANE CLOSURES.
2. SEE THE CONCRETE MEDIAN BARRIER NOTES ON THE PREVIOUS SHEET (TRAFFIC CONTROL SHEET 1) FOR ADDITIONAL NOTES FOR LANE CLOSURES.
3. EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY LANE SHIFT LAYOUT SHALL BE MASKED FOR DURATION OF PROJECT.

PROJECT NAME: SOUTH BURLINGTON - WINOOSKI  
 PROJECT NUMBER: IM BPNT(5)  
 FILE NAME: 04-TCP BR 70.dgn PLOT DATE: 8/16/2009  
 PROJECT LEADER: JPB DRAWN BY: NCF/JJB  
 DESIGNED BY: JJB CHECKED BY: DH  
**TRAFFIC CONTROL SHEET 2** SHEET 4 OF 10



**TRAFFIC CONTROL FOR BRIDGE 70 SOUTHBOUND ON INTERSTATE 89 LANE SHIFT LEFT WITH TEMPORARY LEFT LANE CLOSURE (NIGHT WORK ONLY) AND CONCRETE TRAFFIC BARRIER**



**TRAFFIC CONTROL FOR BRIDGE 70 SOUTHBOUND ON INTERSTATE 89 LANE SHIFT LEFT WITH TEMPORARY CONCRETE TRAFFIC BARRIER**

**LEGEND**

- FLOW OF TRAFFIC
- RETROREFLECTIVE PLASTIC DRUM
- PORTABLE ARROW BOARD
- TYPE III BARRICADE
- LIGHTING
- TEMPORARY WORK AREA
- TRUCK/TRAILER MOUNTED ATTENUATOR
- PORTABLE CHANGEABLE MESSAGE SIGN (SEE NOTE 15 ON TRAFFIC CONTROL SHEET 1)
- CONSTRUCTION STAGING/ STORAGE AREA/ PERMANENT WORK AREA (SEE NOTE 24 ON TRAFFIC CONTROL SHEET 1)

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)	
	MERGING 12 FT LANE (L)	SHIFTING 16 FT LANE (L/2)	SHOULDER W=10 FT (L/3)				TAPER (S)	TANGENT (2S)
≤40	320	215	90	160	1:9	305	40	80
45	540	360	150	270	1:9	360	45	90
50	600	400	170	300	1:11	425	50	100
55	660	440	185	330	1:13	495	55	110
60	720	480	200	360	1:13	570	60	120
65	780	560	215	390	1:13	645	65	130

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

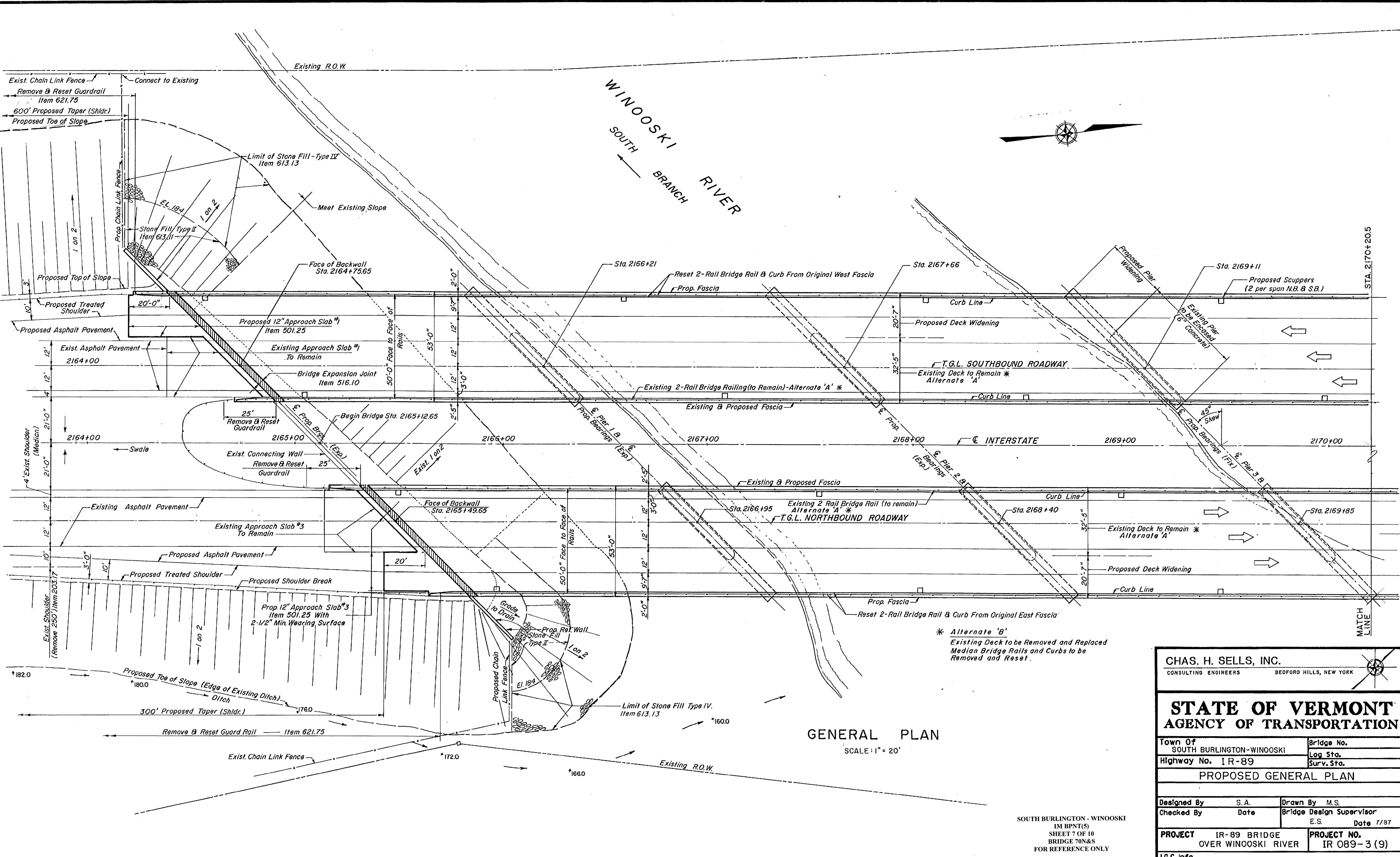
**TRAFFIC CONTROL NOTES:**

1. SEE THE TRAFFIC CONTROL NOTES ON TRAFFIC CONTROL SHEET 1 FOR ADDITIONAL NOTES AND APPROACH SIGNING FOR THE LANE CLOSURES.
2. SEE THE CONCRETE MEDIAN BARRIER NOTES ON TRAFFIC CONTROL SHEET 1 FOR ADDITIONAL NOTES FOR LANE CLOSURES.
3. EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH TEMPORARY LANE SHIFT LAYOUT SHALL BE MASKED FOR DURATION OF PROJECT.

PROJECT NAME: SOUTH BURLINGTON - WINOOSKI  
PROJECT NUMBER: IM BPNT(5)

FILE NAME: 04-TCP BR 70.dgn PLOT DATE: 8/16/2009  
PROJECT LEADER: JPB DRAWN BY: NCF/JJB  
DESIGNED BY: JJB CHECKED BY: DH  
**TRAFFIC CONTROL SHEET 3** SHEET 5 OF 10



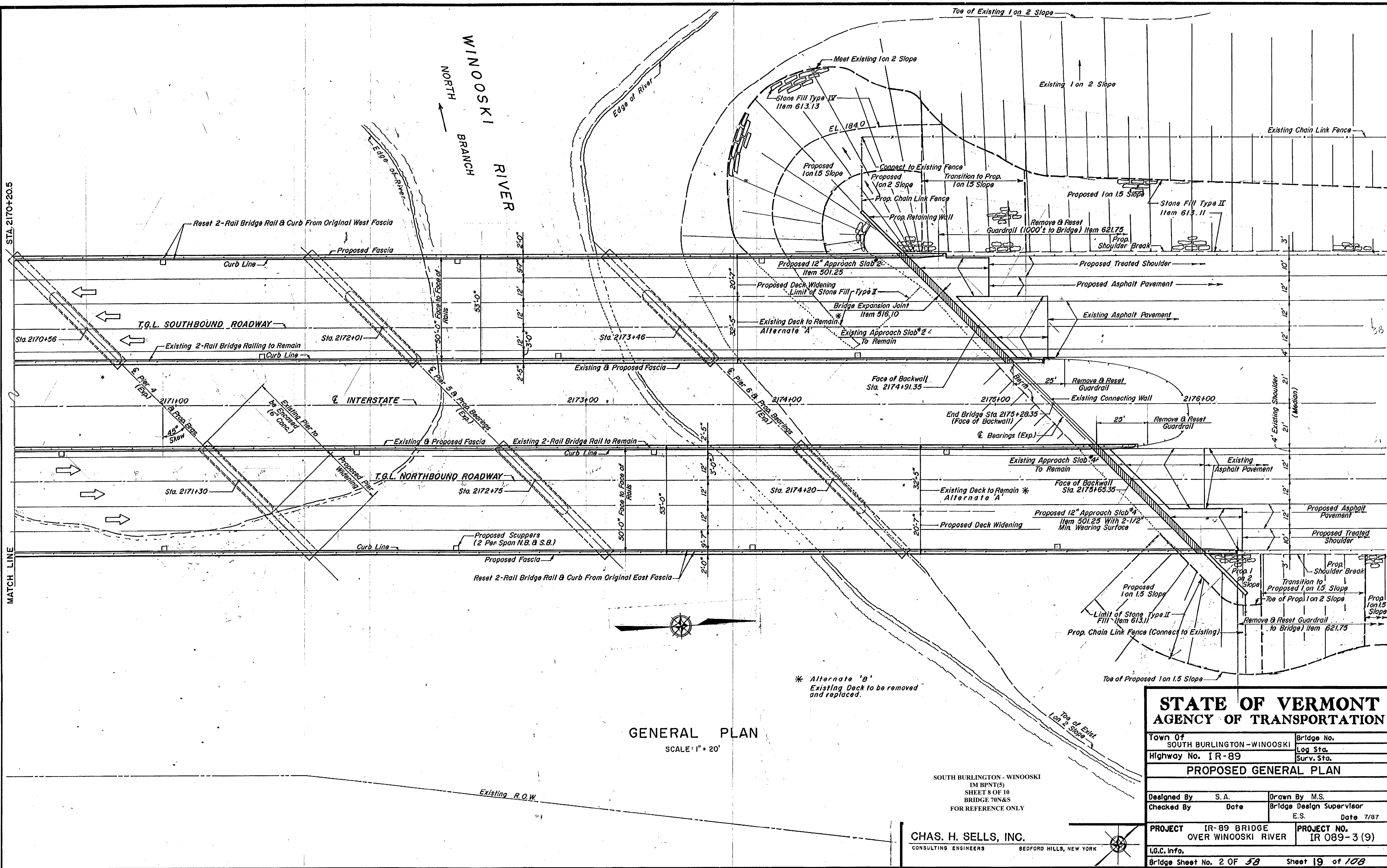


**GENERAL PLAN**  
SCALE: 1" = 20'

\* Alternate 'B'  
Existing Deck to be Removed and Replaced  
Median Bridge Rails and Curbs to be  
Removed and Reset.

CHAS. H. SELLS, INC. CONSULTING ENGINEERS BEDFORD HILLS, NEW YORK	
<b>STATE OF VERMONT AGENCY OF TRANSPORTATION</b>	
Town Of SOUTH BURLINGTON-WINOOSKI	Bridge No.
Highway No. IR-89	Log Sta. Surv. Sta.
PROPOSED GENERAL PLAN	
Designed By S.A.	Drawn By M.S.
Checked By Date	Bridge Design Supervisor E.S. Date 7/87
PROJECT IR-89 BRIDGE OVER WINOOSKI RIVER	PROJECT NO. IR 089-3 (9)
I.G.C. info.	
Bridge Sheet No. 1 OF 58	Sheet 18 of 108

SOUTH BURLINGTON - WINOOSKI  
IM BPNT(5)  
SHEET 7 OF 10  
BRIDGE 70N&S  
FOR REFERENCE ONLY



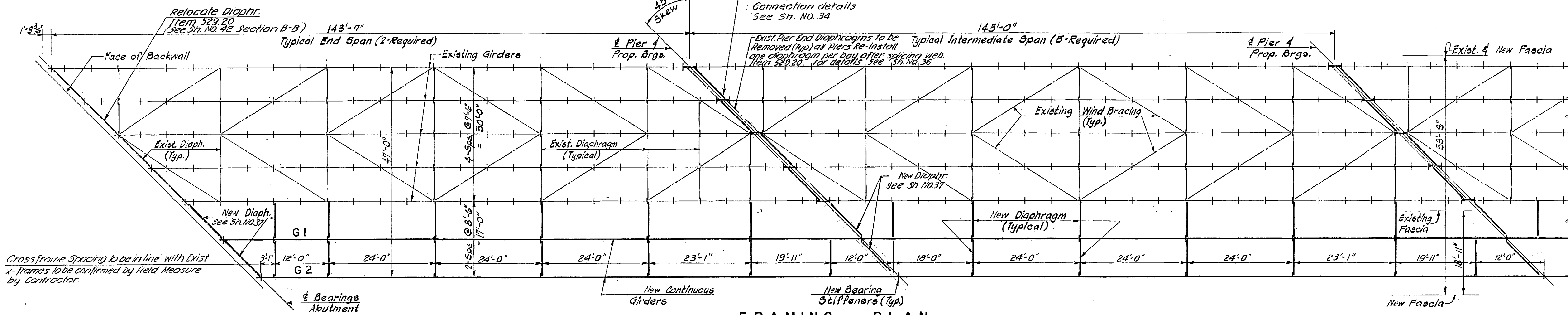
GENERAL PLAN  
SCALE: 1" = 20'

SOUTH BURLINGTON - WINOSKI  
IM BPNT(S)  
SHEET 8 OF 10  
BRIDGE 70N&S  
FOR REFERENCE ONLY

CHAS. H. SELLS, INC.  
CONSULTING ENGINEERS BEDFORD HILLS, NEW YORK

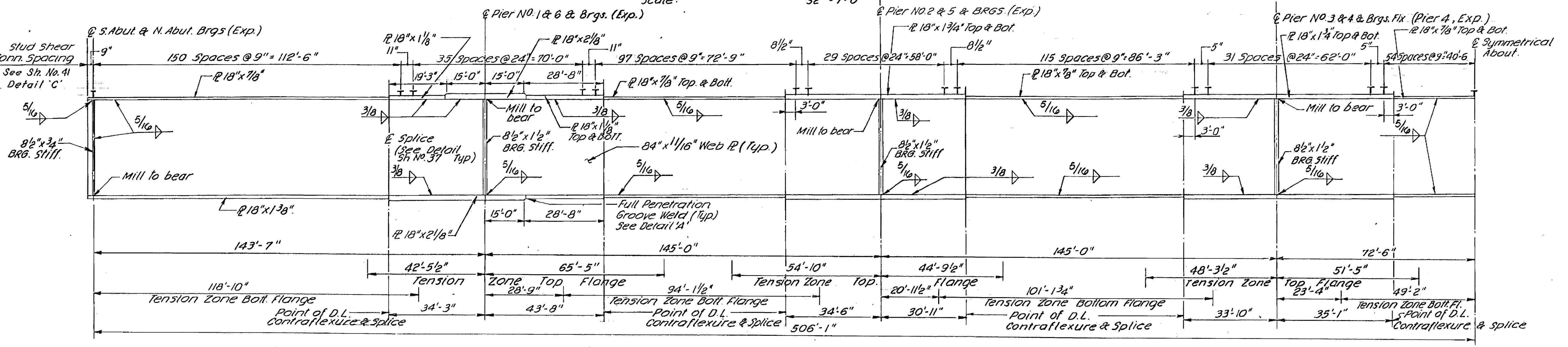
\* Alternate 'B'  
Existing Deck to be removed  
and replaced.

<b>STATE OF VERMONT AGENCY OF TRANSPORTATION</b>	
Town of SOUTH BURLINGTON - WINOSKI	Bridge No.
Highway No. IR-89	Log Sta. Surv. Sta.
<b>PROPOSED GENERAL PLAN</b>	
Designed By S.A.	Drawn By M.S.
Checked By Date	Bridge Design Supervisor E.S. Date 7/87
<b>PROJECT</b> IR-89 BRIDGE OVER WINOSKI RIVER	<b>PROJECT NO.</b> IR 089-3 (9)
I.G.C. info. Bridge Sheet No. 2 OF 58 Sheet 19 of 108	

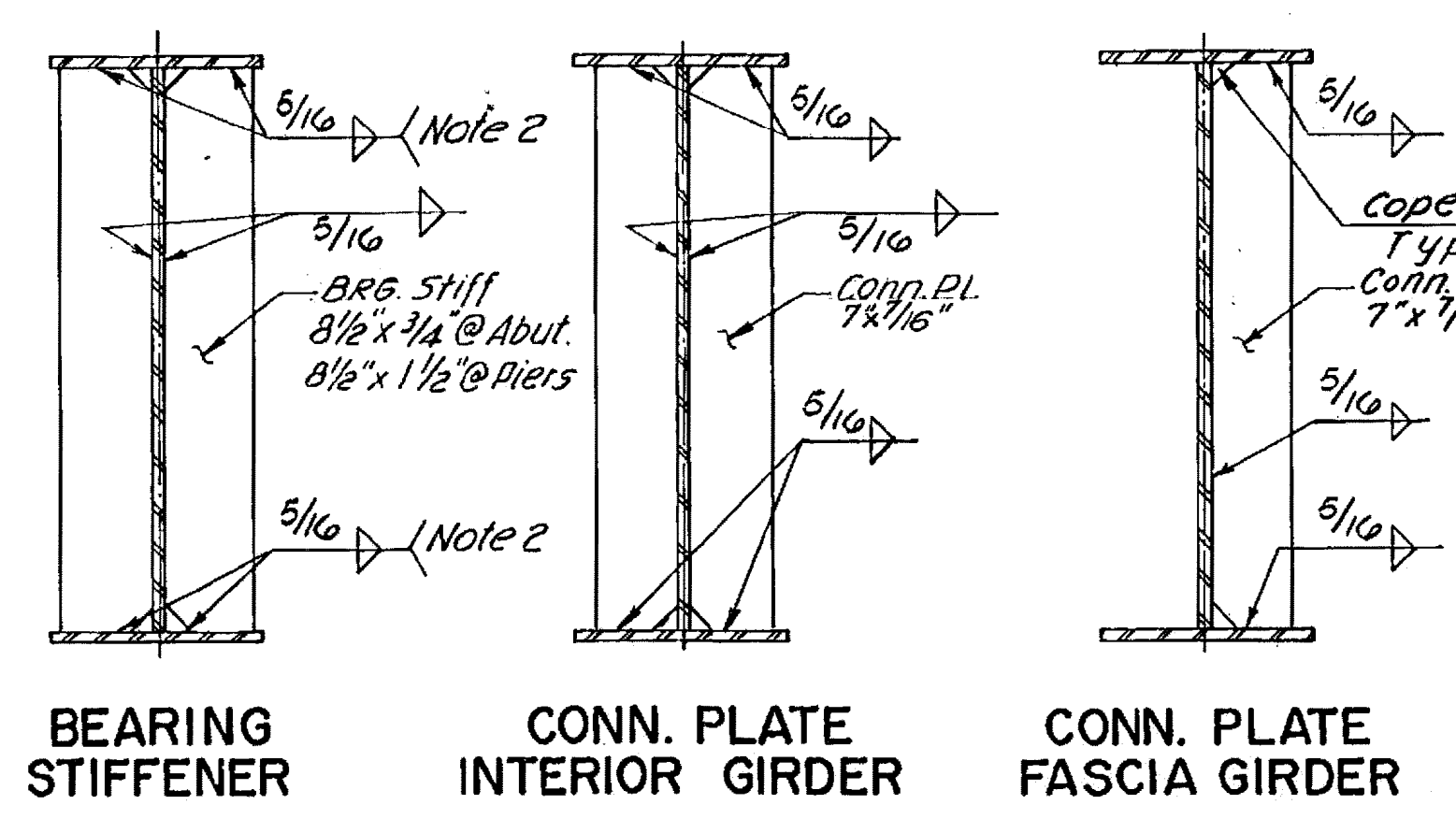


**FRAMING PLAN**  
Scale: 3/32" = 1'-0"

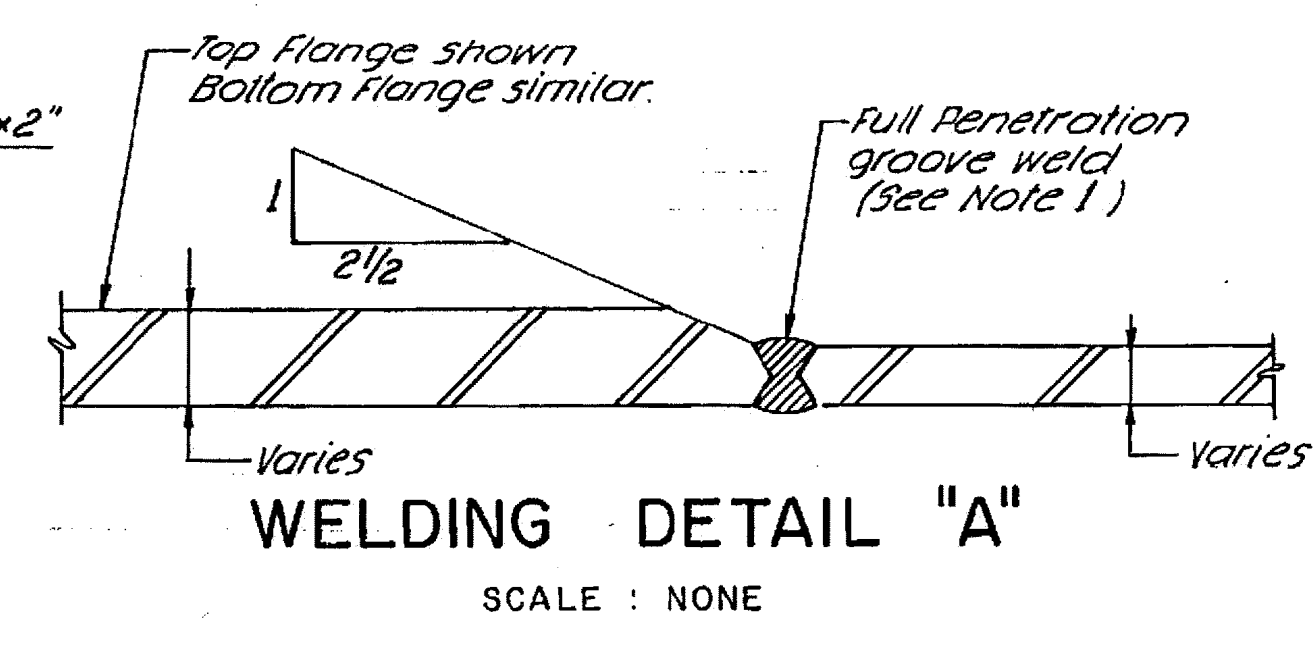
DESIGN LOAD TABLE		
UNIT	G1	G2
	KIPS/FT	KIPS/FT
D. L.		
SLAB	.903	.950
MISC. MET.	.025	.013
GIRDER	.305	.305
HAUNCH	.038	.019
TOTALS	1.271	1.287
S. D. L.		
WEARING SURFACE	.266	.266
BRUSH CURB	.086	.086
RAILING	.011	.011
TOTALS	.363	.363
LIVE LOAD	HS 25	



**NEW GIRDER DETAIL**  
NOT TO SCALE



**GIRDER SECTIONS**  
SCALE: NONE



**WELDING DETAIL "A"**  
SCALE: NONE

**NOTES:**

- The cost of radiographic inspection and of preparation for radiography, together with the cost of providing access and of furnishing adequate facilities for the review of radiographs in the shop or field, shall be included in the price bid for structural steel.
- No welding of bearing stiffeners to tension flanges. Plates shall be "Milled to bear" for bearing stiffeners.
- Within the tension zones delineated, there shall be no welding permitted other than what is detailed on the Plans. Welding for the attachment of forms, ties etc. shall not be permitted.
- For painting of structural steel, see Note 3. "General Notes" Sh. NO. 20
- All new steel to be A36 in accordance with AASHTO M 183, unless otherwise noted.

**JACKING LOADS (EXISTING BEAMS)**  
FASCIA BEAMS: 111 KIPS (ea. end)  
INTERIOR BEAMS: 117 KIPS (ea. end)  
(Payment Item 502.11' Shoring Superstructure bearings')

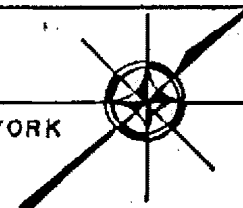
SOUTH BURLINGTON - WINOOSKI  
IM BPT(S)  
SHEET 9 OF 10  
BRIDGE 70N&S  
FOR REFERENCE ONLY

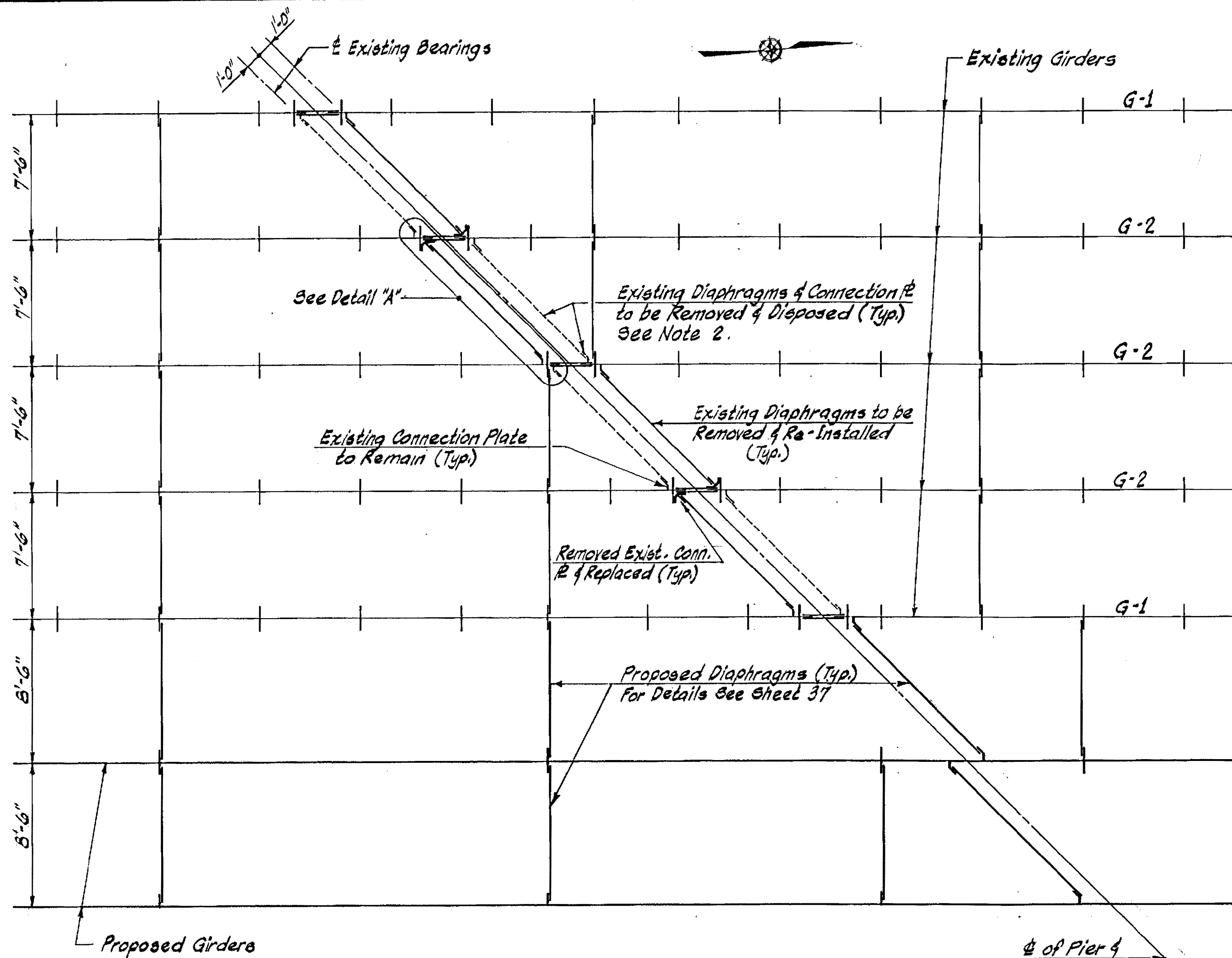
BR 18 OF 58  
PORTATION  
IR 089-3 (9)

**EXISTING & PROPOSED FRAMING PLAN AND NEW GIRDER DETAILS**

DATE JULY 1987 SCALE AS NOTED SHEET NO. 35

**CHAS. H. SELLS, INC.**  
CONSULTING ENGINEERS  
BEDFORD HILLS, NEW YORK  
REV. 3/23/88

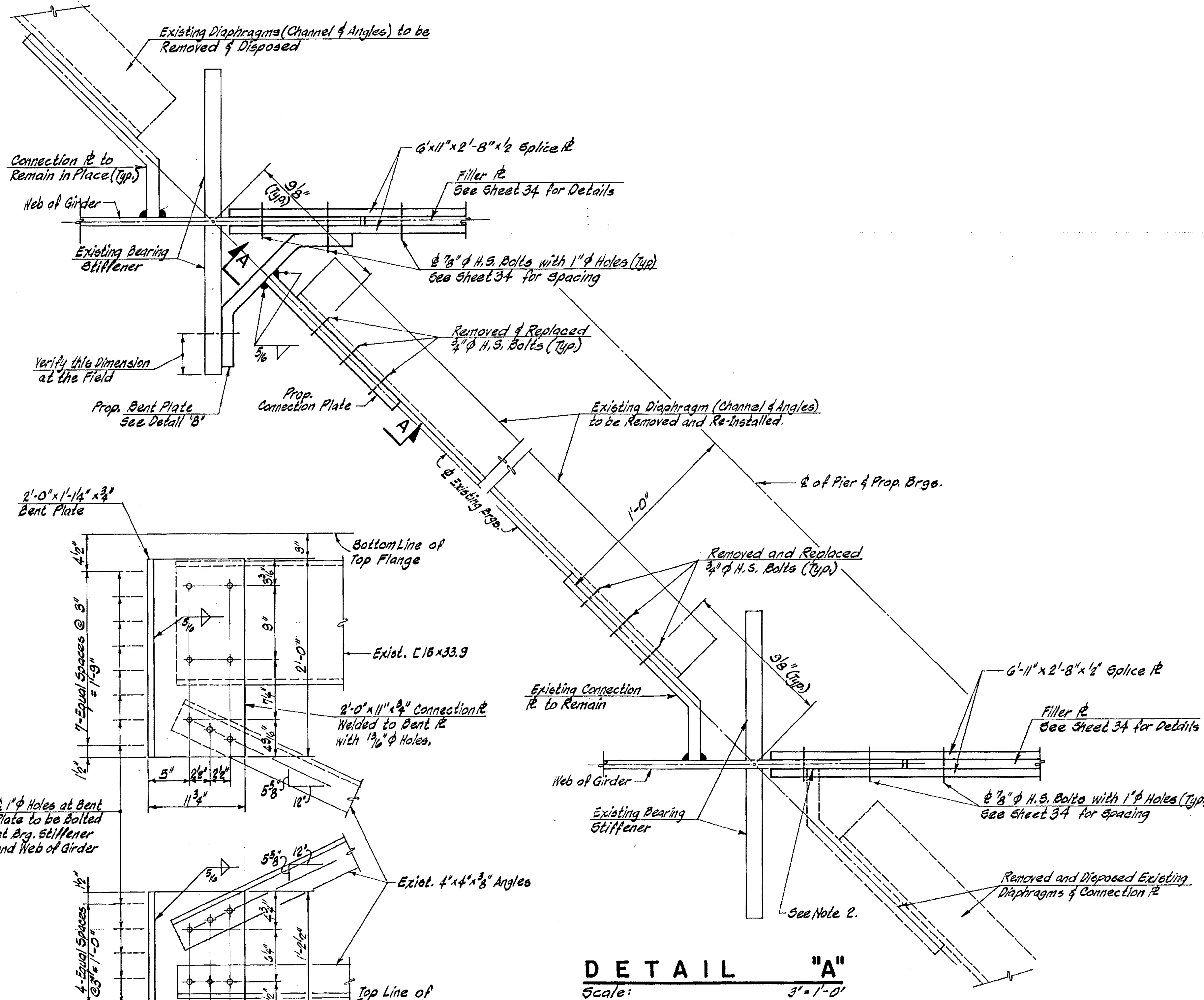




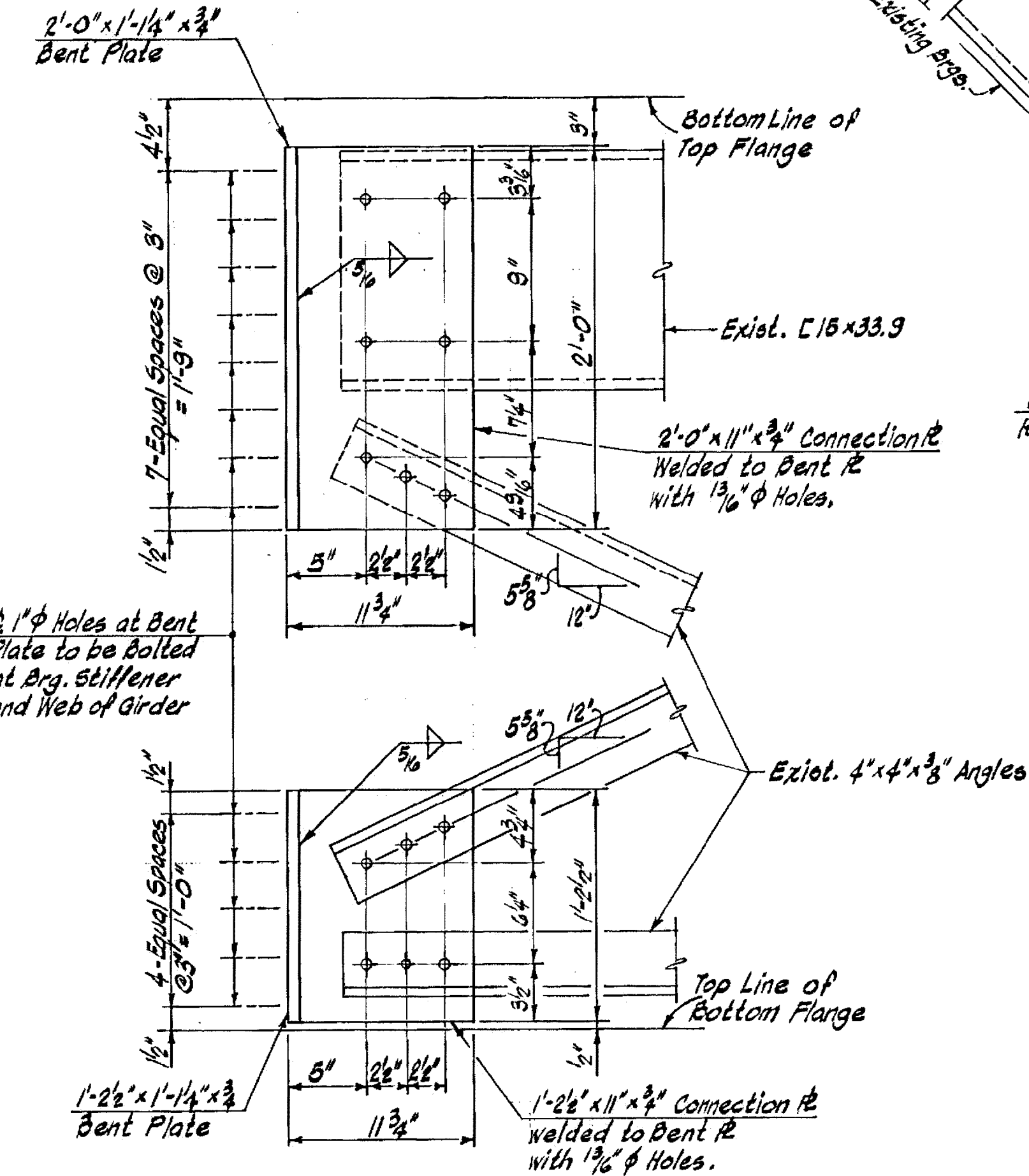
**PARTIAL FRAMING PLAN AT PIERS**  
(NORTHBOUND SHOWN)  
Scale:  $\frac{3}{16}'' = 1'-0''$

**NOTES:**

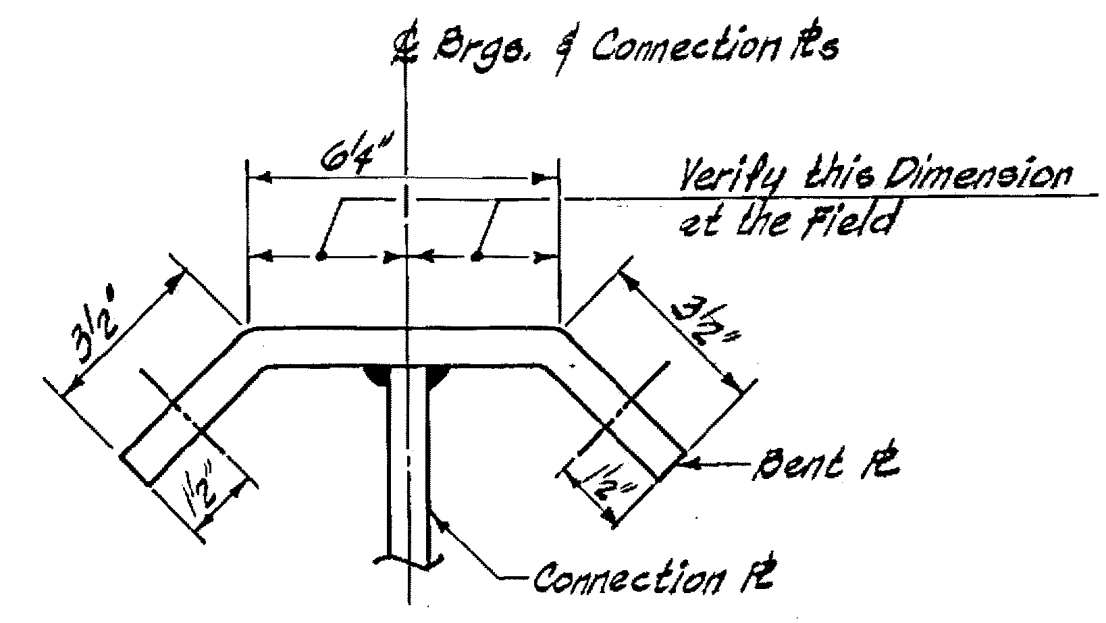
1. Dimensions shown are based on Original Plans and Shop Drawings. Contractor to verify all dimensions in the field prior to fabrication.
2. Burn Off Connection Plates Between Existing Bearing Stiffener and Grind Smooth (Typ).
3. Payment for Each Diaphragm Removed and Disposed, or Each Diaphragm Removed and Re-Installed, to be Under Item 829.20



**DETAIL "A"**  
Scale:  $3'' = 1'-0''$



**SECTION A-A**  
Scale:  $\frac{1}{2}'' = 1'-0''$



**DETAIL "B"**  
Scale:  $3'' = 1'-0''$

SOUTH BURLINGTON - WINOOSKI  
IM BPNT(5)  
SHEET 10 OF 10  
BRIDGE 70N&S  
FOR REFERENCE ONLY

CHAS. H. SEI  
CONSULTING ENGINEER

**STATE OF VERMONT  
AGENCY OF TRANSPORTATION**

Town Of SOUTH BURLINGTON - WINOOSKI	Bridge No.
Highway No. IR - 89	Log Sta. Surv. Sta.
<b>DIAPHRAGM DETAILS AT PIERS</b>	

Designed By VAT	Drawn By MMC
Checked By S.A. Date	Bridge Design Supervisor E.S. Date 7/87
<b>PROJECT</b> IR-89 BRIDGE OVER WINOOSKI RIVER	<b>PROJECT NO.</b> IR 089-3 (9)
I.G.C. Info.	
Bridge Sheet No. 19 OF 58	Sheet 36 of 108

BRUNING 44-532 64442