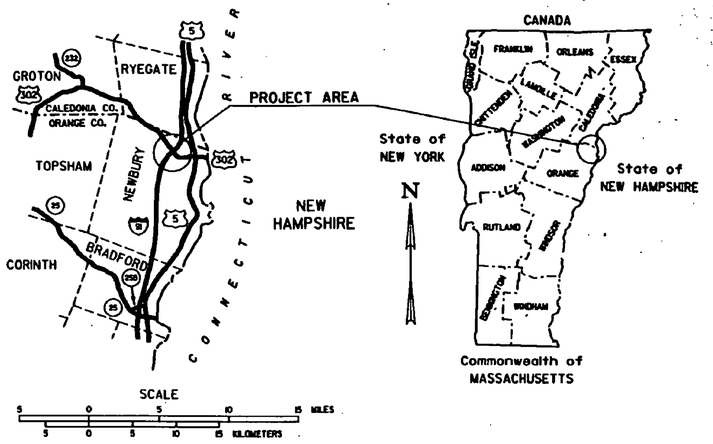
INDEX OF SHEETS

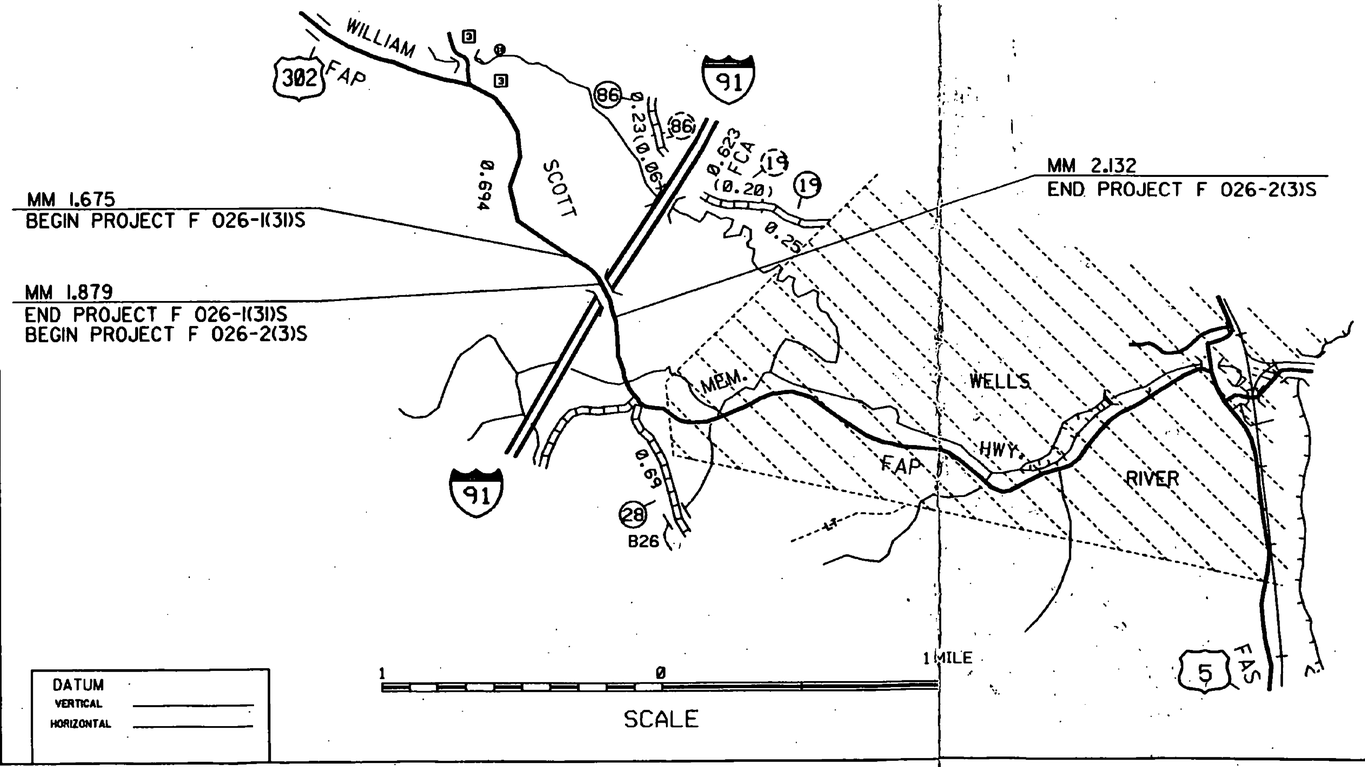
STATE OF VERMONT
AGENCY OF TRANSPORTATION

PROPOSED IMPROVEMENT
TOWN OF NEWBURY
COUNTY OF ORANGE

WORK PERFORMED UNDER THIS PROJECT INCLUDES REPAIRING AND RESURFACING OF THE EXISTING ROADWAY, PLACING NEW SIGNS, AND PLACING NEW PAVEMENT MARKINGS.

NEWBURY	F 026-1(31)S	US. 302	MM 1.675 - 1.879	0.204	MILES	ADT=3850
NEWBURY	F 026-2(3)S	US. 302	MM 1.879 - 2.132	0.253	MILES	ADT=3850





CONVENTIONAL SIGNS

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

DATUM
VERTICAL
HORIZONTAL

Date MAY 5 1988

PIKE INDUSTRIES, INC.
Contractor

Roger D. Martin
Signature

Roger D. Martin, Vice President
Title

Transportation Secretary's Signature

CONTRACT PLANS

THESE PLANS DO NOT REFLECT CHANGES MADE ON THE PROJECT.

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FEDERAL HIGHWAY ADMINISTRATION OR THE CHIEF ENGINEER.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 1986, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON NOVEMBER 21, 1985 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

PAVE87TC

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD

APPROVED Grant D. Kelley DATE 1/29/88
CHIEF ENGINEER

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED _____ DATE _____
DIVISION ADMINISTRATOR

PROJECT NEWBURY
F no. 026-1(31)S
F 026-2(3)S

SHEET 1 OF 43 SHEETS

TYPICAL SECTIONS 1988 PAVING PROGRAM

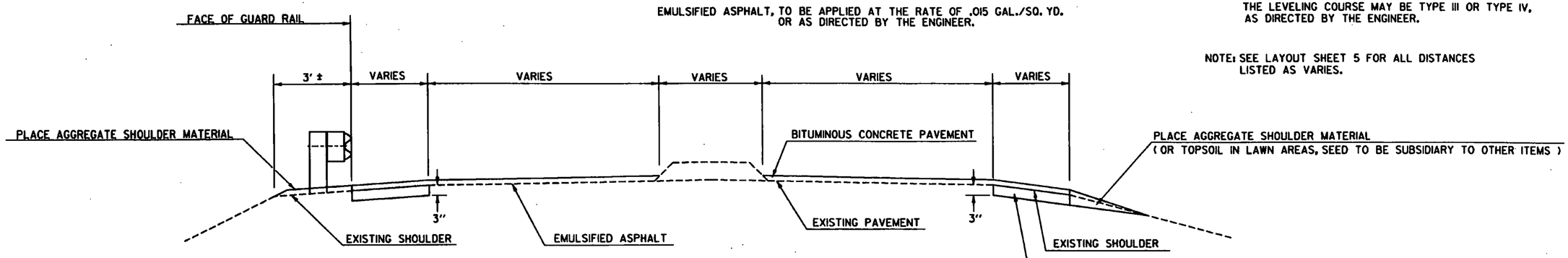
1¼" BITUMINOUS CONCRETE PAVEMENT (± ¼")

436 AVERAGE TONS, PER/MILE LEVELING COURSE OF BITUMINOUS CONCRETE PAVEMENT

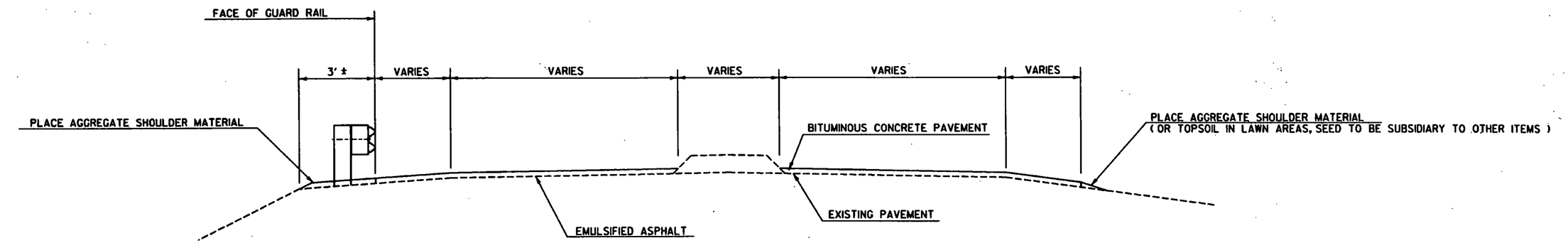
EMULSIFIED ASPHALT, TO BE APPLIED AT THE RATE OF .015 GAL./SQ. YD. OR AS DIRECTED BY THE ENGINEER.

NOTE: THE WEARING COURSE WILL BE TYPE III. THE LEVELING COURSE MAY BE TYPE III OR TYPE IV, AS DIRECTED BY THE ENGINEER.

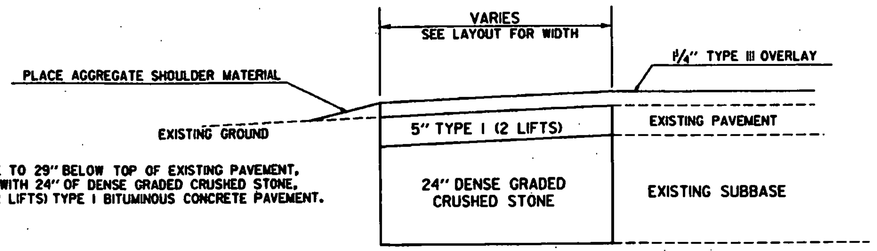
NOTE: SEE LAYOUT SHEET 5 FOR ALL DISTANCES LISTED AS VARIES.



NEW PAVED SHOULDERS OVER EXISTING GRAVEL SHOULDERS

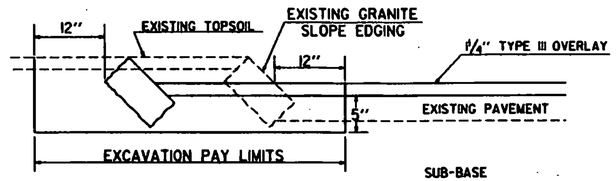


NEW PAVED SHOULDERS OVER EXISTING PAVED SHOULDERS



EXCAVATE TO 29" BELOW TOP OF EXISTING PAVEMENT, REPLACE WITH 24" OF DENSE GRADED CRUSHED STONE, AND 5" (2 LIFTS) TYPE I BITUMINOUS CONCRETE PAVEMENT.

LOCATION
MM 1.797 - MM 1.808 LT



RELOCATE CURB, EXCAVATE TOPSOIL TO 5" BELOW EXISTING PAVEMENT REPLACE WITH 5" (2 LIFTS) TYPE I BITUMINOUS CONCRETE PAVEMENT.

EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.

JOINTS BETWEEN STONES TO BE MORTARED. SEE SUBSECTION 616.03C.

LOCATION
MM 1.789 - MM 1.808 LT

DATUM
VERTICAL
HORIZONTAL

PAVE87X.PRF

SURVEYED BY		DATE	
DRAWN BY	BEYOR	DATE	8-87
SQUAD LEADER	HALE		
DESIGN FILE NO.	PAVE87	DATE PLOTTED	8-29-87
PROJ. NAME	NEWBURY		
PROJ. NO.	F 026-1(31)S		
SHEET 2 OF 43 SHEETS			

TYPICAL SECTIONS 1988 PAVING PROGRAM

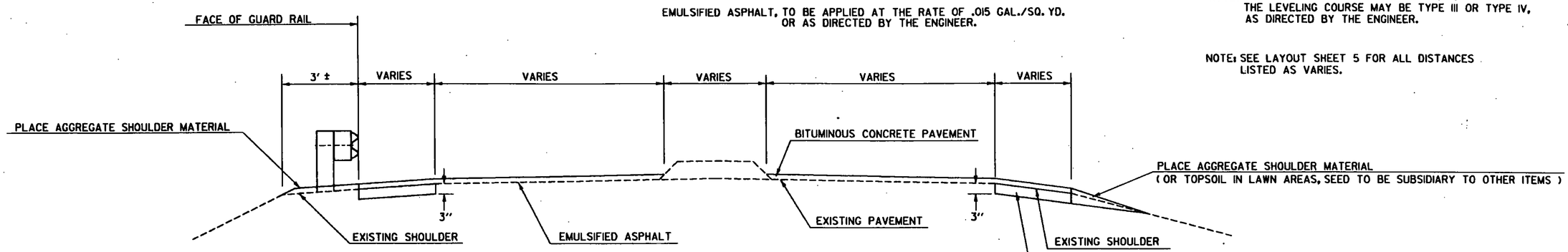
1¼" BITUMINOUS CONCRETE PAVEMENT (± ¼")

459 AVERAGE TONS, PER/MILE LEVELING COURSE OF BITUMINOUS CONCRETE PAVEMENT

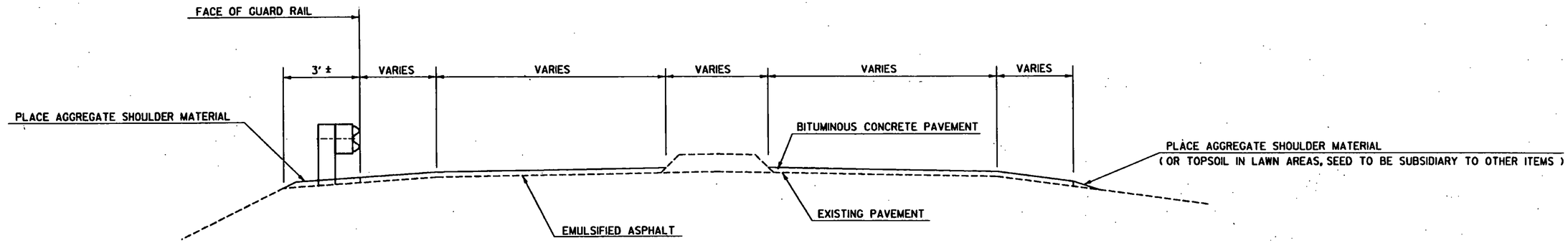
EMULSIFIED ASPHALT, TO BE APPLIED AT THE RATE OF .015 GAL./SQ. YD. OR AS DIRECTED BY THE ENGINEER.

NOTE: THE WEARING COURSE WILL BE TYPE III. THE LEVELING COURSE MAY BE TYPE III OR TYPE IV, AS DIRECTED BY THE ENGINEER.

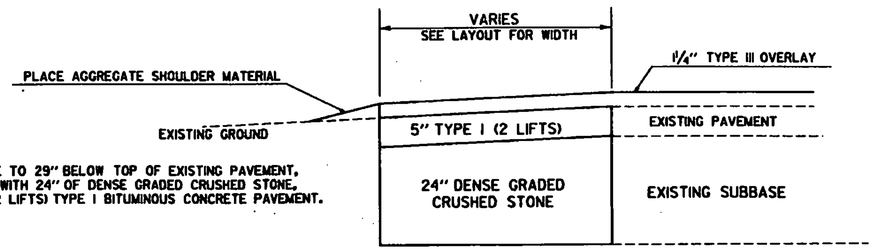
NOTE: SEE LAYOUT SHEET 5 FOR ALL DISTANCES LISTED AS VARIES.



NEW PAVED SHOULDERS OVER EXISTING GRAVEL SHOULDERS



NEW PAVED SHOULDERS OVER EXISTING PAVED SHOULDERS



EXCAVATE TO 29" BELOW TOP OF EXISTING PAVEMENT, REPLACE WITH 24" OF DENSE GRADED CRUSHED STONE, AND 5" (2 LIFTS) TYPE I BITUMINOUS CONCRETE PAVEMENT.

DATUM
VERTICAL _____
HORIZONTAL _____

LOCATION
MM 1.938 LT (RAMP B)
MM 1.941 - MM 1.970 LT

PAVE87Y.PRF

SURVEYED BY		DATE
DRAWN BY	BEYOR	DATE 8-87
SQUAD LEADER	HALE	
DESIGN FILE NO.	PAVE87	DATE PLOTTED 8-29-87
PROJ. NAME	NEWBURY	
PROJ. NO.	F 026-2(3)S	

SHEET 3 OF 43 SHEETS

QUANTITY SHEET

STATE OF VERMONT
AGENCY OF TRANSPORTATION

APPROXIMATE SUMMARY OF QUANTITIES

F 026-1(31)S	F 026-2(3)S	QUANTITIES GRAND TOTAL	UNIT	ITEMS	ITEM NO.	ROUNDING
35	335	370	CY	DENSE GRADED CRUSHED STONE	301.35	7
50	35	85	TON	AGGREGATE SHOULDERS	402.12	3
10	10	20	CWT	EMULSIFIED ASPHALT	404.65	4
500	625	1125	TON	BITUMINOUS CONCRETE PAVEMENT	406.25	33
15	30	45	HR	POWER GRADER RENTAL	608.15	EST.
25	55	80	HR	ALL PURP. EXCAVATOR RENTAL, TYPE I	608.25	EST.
10	10	20	HR	POWER BROOM RENTAL	608.30	EST.
25	55	80	HR	TRUCK RENTAL	608.37	EST.
115	0	115	LF	REMOVING AND RESETTING CURB	616.40	-
50	50	100	HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST.
100	100	200	HR	FLAGGERS	630.15	EST.
0.5	0.5	1	LS	FIELD TESTING	631.15	EST.
0.5	0.5	1	LS	MOBILIZATION	635.10	EST.
330	705	1035	LF	PAINTED CURB	646.21	5
510	470	980	LF	DURABLE 4'' WHITE LINE	646.30	4
1520	1430	2950	LF	DURABLE 4'' YELLOW LINE	646.31	11
125	200	325	LF	DURABLE 8'' WHITE LINE	646.34	5
190	210	400	LF	DURABLE 8'' YELLOW LINE	646.35	18
50	0	50	LF	DURABLE 24'' STOP BAR	646.40	4
2	4	6	EA	DURABLE ARROW MARKING	646.42	-
12	21	33	EA	DURABLE LETTER IN WORD MARKING	646.44	-
2370	3130	5500	LF	TEMPORARY 4'' WHITE LINE	646.50	20
2420	3280	5700	LF	TEMPORARY 4'' YELLOW LINE	646.51	10
100	150	250	LF	TEMPORARY 8'' WHITE LINE	646.54	10
50	0	50	LF	TEMPORARY 24'' STOP BAR	646.60	4
2	4	6	EA	TEMPORARY ARROW MARKING	646.62	-
0	40	40	SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.80	-
5	5	10	CY	TOPSOIL	651.35	-
65	185	250	SF	TRAFFIC SIGNS, TYPE A	675.20	1.4
380	160	540	SF	TRAFFIC SIGNS, TYPE B	675.21	12
220	750	970	LB	FLANGED CHANNEL SIGN POST	675.30	11.5
0	750	750	LB	W-SHAPED STEEL SIGN POST	675.31	3
0	60	60	LB	TUBULAR ALUMINUM SIGN POSTS	675.32	3
0	2	2	EA	FOUNDATION FOR W-SHAPE STEEL POST 24'' DIAMETER	675.41	-
24	38	62	EA	REMOVING SIGNS	675.50	-
0	1	1	EA	ERECTING SALVAGED SIGNS	675.60	-
0	40	40	EA	REM. & REPLACE REFLECTOR UNITS (MOD)	676.15	3

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		F 026-1(31)S BITUMINOUS CONCRETE PAVEMENT
22	TON	SHOULDER AND ISLAND REPAIR 5'' (2-LIFTS) TYPE I
89	TON	LEVELING TYPE III
364	TON	PAVEMENT 1-1/4'' TYPE III
25	TON	ROUNDING
500	TON	TOTAL
		F 026-2(3)S BITUMINOUS CONCRETE PAVEMENT
79	TON	SHOULDER AND ISLAND REPAIR 5'' (2-LIFTS) TYPE I
18	TON	SHOULDERS 2'' TYPE II
106	TON	LEVELING TYPE III
412	TON	PAVEMENT 1-1/4'' TYPE III
10	TON	ROUNDING
625	TON	TOTAL

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS

STATIONS FROM	STATIONS TO	PAVEMENT WIDTHS			EQUATIONS +	EQUATIONS -	FEET	MILES	REMARKS
TOTALS									

PROJECT NAME NEWBURY
PROJECT NUMBER F 026-1(31)S F 026-2(3)S

1-19-88 PAVE87QS
SHEET 4 OF 43 SHEETS

MM 1.75

R=60'

RAMP "C"

MM 1.811

1.707

MATCH LINE A

A

112.5'

7.5'

R=2'

AA

MATCH LINE AA

AREA TO BE GRADED AS TO PREVENT PONDING ON SHOULDER

TH 8

GROTON

MATCH LINE A

A

MM 1.675
BEGIN
F 026-1(31)S

END
F 026-1(31)S

BEGIN
F 026-2(3)S

RAMP "D"

MM 1.901
END BRIDGE

MM 1.910
END BRIDGE
APPROACH

1.871

AA

MATCH LINE AA

MM 1.879
BEGIN BRIDGE
APPROACH

MM 1.886
BEGIN BRIDGE

BRIDGE 42C

SOUTH I-91

NORTH

B

MATCH LINE B

RAMP "B"

R=56'

MATCH LINE B

B

MM 1.930

MM 1.973

CEMETERY DRIVE

MM 2.00

RAMP "A"

NOTE: SHADED AREA INDICATES AREA THAT IS NOT TO BE PAVED.

MATCH LINE C

C

WELLS RIVER

MM 2.101

MM 2.132
END
F 026-2(3)S

C

MATCH LINE C

WESTBOUND

EASTBOUND

US 302

2.054

SCALE

0 30 60

1" = 30'

RELOCATE CURB, EXCAVATE TOPSOIL, TO 5" BELOW EXIST. PVT.: REPLACE WITH 5" (2-LIFTS) TYPE I, BIT. CONC. PVT.

1.789 ~ 1.808 LT

NEW PAVED SHOULDERS
EXCAVATE UNSUITABLE MATERIAL TO 3" BELOW TOP OF PVT. REPLACE WITH AGGREGATE SHOULDER MATERIAL

1.675~1.707 LT 5' WIDE
1.812 ~1.871 LT 4' WIDE
2.054~ 2.132 RT 4' WIDE

EXCAVATE TO 29" BELOW EXIST. PVT.: REPLACE WITH 24" DENSE GRADED CRUSHED STONE, AND 5"(2-LIFTS) TYPE I BIT. CONC. PVT.

1.797 ~ 1.808 LT (RAMP "C")
1.938 LT (RAMP "B")
1.941 ~1.970 LT

1-1/4" BITUMINOUS CONCRETE PVT. TYPE III

1.675 - 1.879
1.879 - 1.886
1.901 - 2.132
RAMP "B" 1.925 ~ 1.977 LT
RAMP "C" + 60'

DATUM
VERTICAL
HORIZONTAL

SURVEYED BY _____ DATE _____
DRAWN BY GRUCHACZ DATE 6/26/87
SQUAD A HALE
NEWBURY
PROJ. NO. F 026-1(31)S
F 026-2(3)S
SHEET 5 OF 43

SEE SHEET 504 OF 510 FOR STATION TO STATION LISTINGS OF CONSTRUCTION ITEMS.

= RAISED ISLAND

END PROJECT M.M. 2.132
STA. 1000+64

LEGEND
- EXISTING
R- REMOVE
RET- RETAIN

EXISTING SIGNS AND REMOVALS

PREPARED BY LSW DATE 5/87
CHECKED BY _____ DATE _____
DESIGN SUPERVISOR _____ DATE _____
PROJ. NEWBURY
F 026-1(31)S F 026-2(3)S
TRAFFIC SHEET NO. 501 OF 510
SHEET 6 OF 43 SHEETS

NOTE: ANY EXISTING SIGNS NOT SHOWN ON THIS SHEET ARE TO BE RETATTED. THEY MUST BE WASHED. (PAYMENT SUBSIDIARY TRAFFIC SIGNS, TYPE 'A' - ITEM 675.20)

SPEED LIMIT 50 N
RLT
STRAIGHTEN POST
978+12 LT.

BEGIN PROJECT MM 1.675
F026-1(31)S

TO BARRE

977 978 979 980 981 982 983 984

M.M. 1.75
979+77

WEST 302
980+82 LT. N

N DO NOT ENTER STOP RET.
RET. ONE-WAY 382+43 LT. ONE-WAY RET.

Ramp 'C'

AA MATCH LINE

STOP
980+04 RT.
LEGAL LOAD LIMIT 24,000#
979+62 RT.
T.H. #8
980+60

982+80
983+53

Ramp 'D'

NOTE:
SHADED AREA INDICATES AREA THAT IS NOT TO BE PAVED.

SEE SHEET 504 OF 510 FOR STATION TO STATION LISTINGS OF CONSTRUCTION ITEMS.

SOME EXISTING SIGNS INSTALLED UNDER PROJECT "NEWBURY IR 091-2(3)" AT RAMP LOCATIONS MAY NOT BE SHOWN ON THESE PLANS. THEY ARE TO BE RETAINED.

= RAISED ISLAND

GROTON 9 Rt S
BARRE 28 N
BRADFORD 13 RET.
WHITE RIVER JCT. 41 RET.
RET. POST

SEE SHEET #510

Begin Bridge

LEFT LANE MUST TURN LEFT N
986+75 LT.

985+07 LT.
END PROJECT F 0216-1(31)S
M.M. 1.879

End Bridge

① E-B ② ③ W-B ④
91 NORTH St. Johnsbury LEFT LANE
EAST 302
91 SOUTH White River Jct. LEFT LANE
WEST 302

MAINTAIN EXISTING CLEARANCE BUT NO LESS THAN 15'-9"
985+65 RT.

985 986 987 988 989 & Rte 302 990

AA MATCH LINE

BEGIN PROJECT
F 026-2(3)S

LEFT LANE MUST TURN LEFT N
N 986+75 RT.

988+35 RT.

B MATCH LINE

RAMP "B"

NORTH 91
991+65 LT.

YIELD N
991+90 LT.

NORTH 91 N N N
991+52 LT

91 NORTH Barnet St. Johnsbury
991+17± RT.
SEE DIMENSION BELOW

CEMETERY DRIVE

994+38

995+87

GROTON 7
BARRE 28
BARNET 11
ST. JOHNSBURY 22
996+98 LT.

JCT. N 91 N N
998+88 LT.
RET. POST

999+95 LT.
ADJUST HEIGHT OF SIGN
RET. POST

991 992 993 994 995 996 997 998 999 1000 1000+65

END PROJECT MM 2.132
F026-2(3)S

B MATCH LINE

18'
EXISTING LIGHT POLE

990+90
991+45
992+85
M.H. 1.973
993+25
993+32

EAST 302 N
993+87 RT.

RAMP "A"

SCHOOL ENTRANCE N 000FT.
RET. POST
994+87 RT

995+00

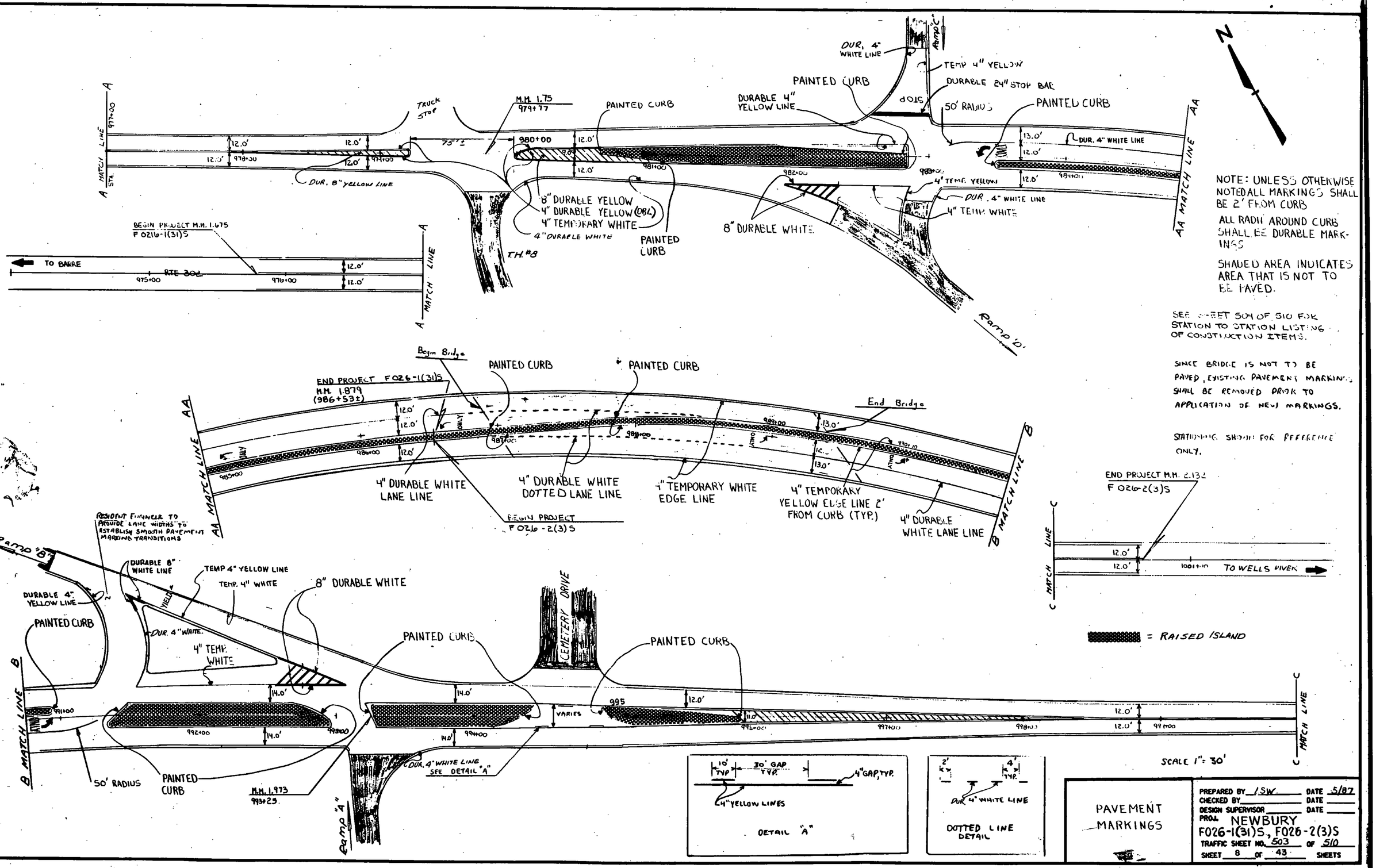
WELLS RIVER 3
WOODSVILLE N.H.
996+31 RT.

SPEED LIMIT 50 N
RET.
997+07 RT.

LEGEND
- NEW
RET- RETAIN
S- SALVAGE

NEW AND SALVAGED SIGNS

PREPARED BY LSW DATE 5/87
CHECKED BY ____ DATE ____
DESIGN SUPERVISOR ____ DATE ____
PROJ. NEWBURY F026-1(31)S, F026-2(3)S
TRAFFIC SHEET NO. 502 OF 510
SHEET 7 OF 43 SHEETS


A MATCH LINE
STA. 977+00
12.0'
12.0'
977+30
978+00
12.0'
DUR. 8" YELLOW LINE
TRUCK STOP
M.M. 1.75
979+77
PAINTED CURB
75'±
980+00
12.0'
981+00
12.0'
8" DURABLE YELLOW
4" DURABLE YELLOW (DBL)
4" TEMPORARY WHITE
4" DURABLE WHITE
PAINTED CURB
TH #8
DUR. 4" WHITE LINE
TEMP 4" YELLOW
DURABLE 24" STOP BAR
50' RADIUS
PAINTED CURB
PAINTED CURB
DURABLE 4" YELLOW LINE
8" DURABLE WHITE
982+00
983+00
4" TEMP. YELLOW
DUR. 4" WHITE LINE
4" TEMP. WHITE
Ramp 'C'
Ramp 'D'
13.0'
12.0'
DUR. 4" WHITE LINE
984+00
12.0'
A MATCH LINE
AA
AA MATCH LINE
BEGIN PROJECT M.M. 1.675
F 026-1(31)S
TO BARRE
RTE 302
975+00
976+00
12.0'
12.0'
A MATCH LINE
A
NOTE: UNLESS OTHERWISE NOTED ALL MARKINGS SHALL BE 2' FROM CURB
ALL RADII AROUND CURB SHALL BE DURABLE MARKINGS
SHADED AREA INDICATES AREA THAT IS NOT TO BE PAVED.
SEE SHEET 504 OF 510 FOR STATION TO STATION LISTING OF CONSTRUCTION ITEMS.
SINCE BRIDGE IS NOT TO BE PAVED, EXISTING PAVEMENT MARKINGS SHALL BE REMOVED PRIOR TO APPLICATION OF NEW MARKINGS.
STATIONING SHOWN FOR REFERENCE ONLY.
Begin Bridge
PAINTED CURB
PAINTED CURB
END PROJECT F026-1(31)S
M.M. 1.879
(986+53±)
End Bridge
12.0'
12.0'
ONLY
985+00
986+00
987+00
988+00
989+00
990+00
990+10
13.0'
13.0'
12.0'
ATMD
AA MATCH LINE
B MATCH LINE
B
4" DURABLE WHITE LANE LINE
4" DURABLE WHITE DOTTED LANE LINE
4" TEMPORARY WHITE EDGE LINE
4" TEMPORARY YELLOW EDGE LINE 2' FROM CURB (TYP.)
4" DURABLE WHITE LANE LINE
BEGIN PROJECT F026-2(3)S
END PROJECT M.M. 2.132
F 026-2(3)S
C MATCH LINE
C
12.0'
12.0'
1001+00
TO WELLS RIVER
= RAISED ISLAND
RESIDENT ENGINEER TO PROVIDE LANE WIDTHS TO ESTABLISH SMOOTH PAVEMENT MARKING TRANSITIONS
Ramp 'B'
DURABLE 8" WHITE LINE
TEMP 4" YELLOW LINE
TEMP. 4" WHITE
8" DURABLE WHITE
DURABLE 4" YELLOW LINE
PAINTED CURB
YIELD
DUR. 4" WHITE
4" TEMP. WHITE
CEMETERY DRIVE
PAINTED CURB
PAINTED CURB
14.0'
14.0'
991+00
992+00
993+00
14.0'
994+00
14.0'
VARIES
995
12.0'
11.0'
997+00
998+00
12.0'
12.0'
99 m00
B MATCH LINE
C MATCH LINE
50' RADIUS
PAINTED CURB
M.M. 1.973
993+25
Ramp 'A'
DUR. 4" WHITE LINE SEE DETAIL "A"
10' TYP
30' GAP TYP.
4" GAP, TYP.
4" YELLOW LINES
DETAIL "A"
2'
4'
TYP.
DUR 4" WHITE LINE
DOTTED LINE DETAIL
SCALE 1" = 30'
PAVEMENT MARKINGS
PREPARED BY JSW DATE 5/87
CHECKED BY DATE
DESIGN SUPERVISOR DATE
PROJ. NEWBURY
F026-1(31)S, F026-2(3)S
TRAFFIC SHEET NO. 503 OF 510
SHEET 8 OF 43 SHEETS

TEMPORARY 4" YELLOW LINE

* 975+79 ℄ - 977+90 ℄ (DBL SOLID)
983+00, 30'-75'LT. RAMP 'C'
983+51, 2'RT.-990+92, 10'LT. (MED. LT.)
CONT. BRK. 983+51, 10'RT.-990+92, 2'LT. (MED. RT.)
986+53 990+92-990+96, 2'LT.-10'LT.(RAD.)
991+36-992+94, 8'RT.
991+48-992+66, 10'LT.
993+21-994+42, 9'LT.
993+30-994+13, 8'RT.
* 998+50-1000+60 ℄ (DBL.)
991+65, 82'LT.-992+76, 36'LT.(RAMP "B")

PAINTED CURB

PAINTED CURB AS PER DETAIL ON TRAFFIC SHEET # 510.

DURABLE 24" STOP BAR

* 982+57-983+00, 31' LT.

DURABLE LETTER IN WORK MARK IS

985+55 6' LT. "O,N,L,Y" [illegible] 5' RT. "O,N,L,Y"
985+15 6' LT. "O,N,L,Y" 991+84 5' RT. "O,N,L,Y"
986+75 6' LT. "O,N,L,Y" 990+83 5' RT "O,N,L,Y"
RAMP 'C' (AS SHOWN) "S,T,O,P"
RAMP 'E' (AS SHOWN) "Y,I,E,L,D"

TEMPORARY 4" WHITE LINE

975+79 RT.-979+37 RT. (AS SHOWN)
980+15 RT.-982+28 RT. (AS SHOWN)
982+33 RT.-982+30 RT. (AS SHOWN)
CONT. BRK. 982+10 RT.-993+10 RT. (AS SHOWN)
986+53 993+90 RT.-1000+[illegible] RT (AS SHOWN)
975+71 LT.-[illegible] LT (AS SHOWN)
983+[illegible] LT.-991+[illegible] LT. (AS SHOWN)
991+65 LT.-992+76 LT. (AS SHOWN)
993+30 LT.-[illegible] LT (AS SHOWN)
991+17, 116 LT.-993+30.35' LT. (RAMP B)

* INDICATES PAVEMENT MARKING ITEMS WHICH MUST ALSO BE APPLIED TO THE LEVELING COURSE AS TEMPORARY MARKINGS. NO DIAGONAL LINES NECESSARY ON LEVELING COURSE.

DURABLE 4" YELLOW LINE

* 977+90 ℄ - 979+20, 2' LT. & 2' RT. (DBL. LT. & RT.)
* 979+52 LT. & RT - 979+57 ℄ (DBL. RAD.)
* 979+98, 2' RT. - 980+60, 5' LT. (DBL.)
* 979+98, 2'RT-981+20, 6' RT. (DBL.)
980+60, 5' LT. - 981+82, 9' LT.
981+20, 6' RT. - 982+82, 10' RT
981+82, 9' LT - 982+82, 10' LT. (DBL.)
982+82, 10' LT. & RT. - 982+85 ℄
983+00, 30' LT - 983+06, 24' LT. (RAD.)
CONT. BRK. 983+47 ℄ - 983+51, 3' RT - 10' RT (RAD.)
986+53 990+92, 2' LT. - 10' LT. - 990+96 ℄ (RAD.)
991+31 - 991+36, 3' RT. - 10' RT. (RAD.)
991+33, 3' RT. - 991+48, 10' LT.
992+66, 10' LT. - 992+96, 3' RT. (RAD.)
992+96, 3' RT - 8' RT. - 992+94, 6' RT. (RAD.)
993+21, 9' LT. - 993+30, 8' RT.
994+13, 8' RT. - 995+94, 5' RT. (SOLID & 2 DASHES)
994+42, 9' LT. - 995+34, 7' LT. (SOLID & 1 DASH)
* 995+34, 7' LT. - 998+50. ℄ (DBL.)
* 995+94, 5' RT. - 998+50 ℄ (DBL.)
991+17, 98' LT. - 991+25, 22' LT. (RAMP RAD.)

DURABLE ARROW MARKING

983+43 6' LT. * 983+98 6' RT. *
985+03 6' LT. * 990+00 6' RT *
986+63 6' LT. * 990+92 6' RT. *

DURABLE 8" WHITE LINE

981+95, 20' RT. - 982+34, 20' & 36' RT. (W/DIAG) *

992+55, 22' & 42' LT. - 993+10 22' LT. (W/DIAG). *
991+57, 90' LT - 991+60, 76' LT. *
991+57, 90' LT. - 991+65, 83' LT. *

DURABLE 4" WHITE LINE

979+37, 13' RT. - 979+62, 28' RT. (RAD.) TH 8
979+96, 28' RT. - 980+13, 17' RT. (RAD.) TH 5
982+44, 23' LT. - 982+85, 74' LT. (RAD) RAMP C
* 982+94, 10' RT. - 983+20, 10' LT. (RAD.) LANE LINE
983+03, 33' RT. - 983+11, 23' RT. (RAD.) RAMP C
* 983+20 - 986+76, 10' LT. - LANE LINE
986+78 - 988+43, 10' LT. (DOTTED)
987+00 - 988+85, 10' RT. (DOTTED)
* 988+84 - 990+90, 10' RT. - LANE LINE
990+90, 10' RT. - 991+25, 3' RT. (RAD.)
991+57, 76' LT. - 991+55, 21' LT. (RAMP RAD.)
993+05, 23' RT. - 993+10, 28' RT. (RAD.) — RAMP A
993+57, 28' RT. - 993+88, 23' RT. (RAD.)

DURABLE 8" YELLOW LINE (DIAG.)

978+48 - 979+20 (MED.)
979+98 - 980+98 (MED.)
993+94 - 998+04 (MED.)

TRAFFIC SIGNS, TYPE B

985+65 (MOUNTED ON OVERHEAD STRUCTURE)
991+17 RT.± SEE SHEET #502 FOR LOCATION

ERECTING SALVAGED SIGNS

985+07 LT.

REMOVE AND REPLACE REFLECTOR UNITS (MOD.)

BRIDGE NO. 42-C (SPECIAL PROVISION)
SEE NOTE ON T.S. 502

W-SHAPE STEEL SIGN POSTS (MOD.)

991+17 RT. (2)

FOUNDATION FOR W-SHAPE STEEL POSTS, 24" DIA.

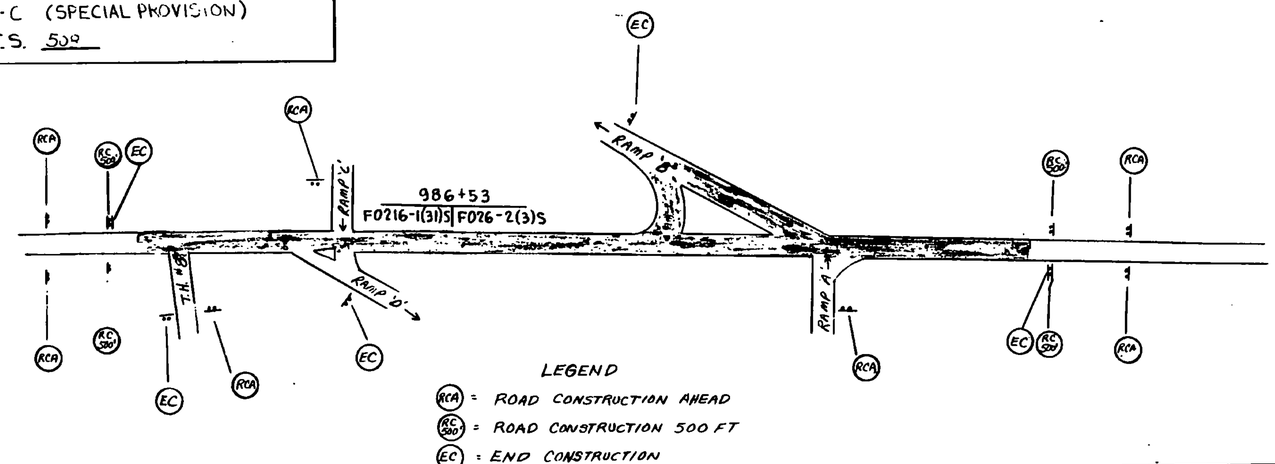
991+17 RT. (2)

REMOVING SIGNS

978+12 LT.	992+85 RI. (3)
979+17 LT.	993+21 RI. (3) 994+15 LT.
980+12 RT. (2)	994+35 RT. (5)
980+50 LT.	994+35 RI. (3)
980+60 RI (4)	994+87 RT.
981+80 LT. (4)	994+97 RI. (3)
982+85 RI (3)	995+90 RI. (3)
983+55 RI (3)	996+00 RT.
985+07 LT.	996+70 RT.
F0216-1(31)S F026-2(3)S 985+65 (OVERHEAD STRUCTURE) (4)	
986+75 RI (2)	998+90 LT. (2)
990+90 RI (3)	999+07 RT.
991+27 LT.	999+95 LT.
991+45 RI (3)	
991+75 LT.	

RI = RAISED ISLAND

= CONSTRUCTION AREA



CONSTRUCTION APPROACH SIGNING
REFER TO STD. E-100

PREPARED BY ASW DATE 5/87
CHECKED BY ___ DATE ___
DESIGN SUPERVISOR ___ DATE ___
PROJ. NEWBURY
F 026-1(31)S F 026-2(3)S
TRAFFIC SHEET NO. 504 OF 510
SHEET 9 OF 43 SHEETS

SUNSHEET 5-1004

TRAFFIC SIGN SUMMARY SHEET

1986

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS	EXISTING SIGNS			NEW AND SALVAGED SIGNS				EXISTING POSTS				NEW SIGN POSTS														REMARKS	FOR SIGN DETAIL SHEET	
			TO BE SALV.	REMOVE	RETAIN	"A"	"B"	SALV. SIGN	SALV. T.I.S.	RET.	DRILL	REM.	SALV.	NUMBER OF POSTS	FLANGED CHANNEL LB./FT.			TUBULAR ALUMINUM				TUBULAR STEEL				W SHAPED STEEL		FTG. SIZE			PLAN SHEET NUMBER	STD. SHEET NUMBER
															2.0	2.5	3.0	3.0"ø	3.0"□	4.0"ø	4.0"øM.	3"ø	3.5"ø	4.0"ø	5.0"ø	POST SIZE	WEIGHT	24"	30"		
978+12 Lt.	SPEED LIMIT 50	24" x 30"				5				X																					E-142
979+62 Rt.	LEGAL LOAD LIMIT 24,000 lbs	24" x 30"				5								1		X															E-141
980+04 Rt.	STOP	30" x 30"				6.25				X																					E-143

980+60 Med.		24" x 30"				5								1			X															E-142
----"-----		18"x18" 18"x18"				5																										E-150
980+82 Lt.	WEST 302	12"x24" 30"x24"				7								1		X															E-136
982+43 Lt.	DO NOT ENTER	30" x 30"				6.25				X																		MOUNT ON BACK OF EXISTING "STOP-ONE WAY" ASSEMBLY			E-143

982+80 Med. Lt.		18"x18" 18"x18"				5								1			X															E-150
----"-----		24" x 30"				5																										E-142
983+53 Med. Rt.		24" x 30"				5								1			X															E-142
---------		18"x18" 18"x18"				5																										E-150
985+07 Lt.	Sch. GROTON 7 NEW BARRE 28	72" x 10"				5		1		X																		REMOVE AND SALVAGE "GROTON" PANEL AND REMOUNT OVER NEW "BARRE" PANEL ON EXTENSIONS PER DETAIL ON SHEET # 510			E-23
985+65 Rt.	EAST 302	6'x9'					51																					MOUNT ON OVERHEAD SIGN SUPPORT	SEE SHT. 510		
985+65 Rt.	91 NORTH St. Johnsbury LEFT LANE	15' x 8.5'					127.5																					" "	SEE SHT. 510		
985+65 Lt.	WEST 302	6' x 9'					51																					" "	SEE SHT. 510		
985+65 Lt.	91 SOUTH White River Jct. LEFT LANE	17' x 8.5'					144.5			END PROJECT F026-1(31)S																		" "	SEE SHT. 510		
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE DESIGN DIVISION'S "SIGN POST DESIGN MANUAL". TOTALS			EA.			SF. 64.5	SF. 374	EA. 1	SF.					— 72.5 144 216.5																		

PREPARED BY LSW DATE 5/87
CHECKED BY _____ DATE ____
DESIGN SUPERVISOR _____ DATE ____
PROJ. NEWBURY
F026-1(31)S
TRAFFIC SHEET NO. 505 OF 510
SHEET 10 OF 43 SHEETS

TRAFFIC SIGN SUMMARY SHEET

SUMSHEET3.DGN

TRAFFIC SIGN SUMMARY SHEET

1986

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS	EXISTING SIGNS			NEW AND SALVAGED SIGNS				EXISTING POSTS				NEW SIGN POSTS																REMARKS	FOR SIGN DETAIL SHEET	
			TO BE SALV.	REMOVE	RETAIN	"A"	"B"	SALV. SIGN	SALV. T.I.S.	RET.	DRILL	REM.	SALV.	NUMBER OF POSTS	FLANGED CHANNEL LB./FT.			TUBULAR ALUMINUM				TUBULAR STEEL				W SHAPED STEEL		FTG. SIZE			PLAN SHEET NUMBER	STD. SHEET NUMBER
															2.0	2.5	3.0	3.0"ø	3.0"□	4.0" ø	4.0"øM.	3" Ø	3.5" Ø	4.0" Ø	5.0" Ø	POST SIZE	WEIGHT	24"	30"			
----------	BEGIN PROJECT F 026-2(3)S																															
986+75 Rt.	LEFT LANE MUST TURN LEFT	30" x 30"				6.25								1		X															E-140
986+75 Lt.	LEFT LANE MUST TURN LEFT	30" x 30"				6.25								1		X															E-140
988+05 Rt.		12"x36"				3								1	X															TS# 510	
990+90 Med.Lt.		24" x 30"				5								1			X														E-142
"	/	18"x18" 18"x18"				5																										E-150

991+17 Rt.	91 NORTH Barnet St. Johnsbury	14'x 11'					154							2												W8x18	74?	2		SEE SHEET # 504 FOR CROSS SECTION SEE SHEET # 502 FOR EXACT LOCATION	SEE SHT. 510	E-131
991+42 Med. Rt		24" x 30"				5								1			X														E-142
"	/	18"x18" 18"x18"				5																										E-150
991+65 Lt.	NORTH 91	24"x12" 24"x24" 21"x15"				8.2								1			X														E-135
991+90 Lt.	YIELD	36" x 36"				9								1			X														E-143
992+85		24" x 30"				5																										E-142
"	/	18"x18" 18"x18"				5								1			X															E-150

991+52 Lt	NORTH 91	24"x12" 24"x24" 21"x15"				8.2								1			X														E-135
993+32 Med.Rt.		24"x 30"				5																										E-142
"	/	18"x18" 18"x18"				5								1			X															E-150
993+87 Rt.	EAST 302	12"x24" 30"x24"				7								1		X																E-136
994+38 Med.Lt.		24"x30"				5																										E-142
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE DESIGN DIVISION'S "SIGN POST DESIGN MANUAL". TOTALS				EA.		SF. 92.9	SF. 154	EA.	SF.						30	107.5	286										747	2					
															425.5												747					

TRAFFIC SIGN SUMMARY SHEET

PREPARED BY LSW DATE 5/27
CHECKED BY _____ DATE _____
DESIGN SUPERVISOR _____ DATE _____
PROJ. NEWBURY F 026-2(3)S
TRAFFIC SHEET NO. 506 OF 510
SHEET 11 OF 43 SHEETS

TRAFFIC SIGN SUMMARY SHEET

1986

MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS	EXISTING SIGNS: TO BE SALV.	EXISTING SIGNS: REMOVE	EXISTING SIGNS: RETAIN	NEW AND SALVAGED SIGNS: "A"	"B"	SALV. SIGN	SALV. T.I.S.	EXISTING POSTS: RET.	DRILL	REM.	SALV.	NEW SIGN POSTS: NUMBER OF POSTS	FLANGED CHANNEL LB./FT. 2.0	2.5	3.0	TUBULAR ALUMINUM 3.0"ø	3.0"□	4.0"ø	4.0"øM.	TUBULAR STEEL 3"ø	3.5"ø	4.0"ø	5.0"ø	W SHAPED STEEL POST SIZE	WEIGHT	FTG. SIZE 24"	FTG. SIZE 30"	REMARKS	FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER	STD. SHEET NUMBER
ASSEMBLY CONTINUED 994+38 Med. Lt.						5								1			X															E-150
994+81 Rt.		48 x 48				16				X																				TS= 510	E-150
995+00 Med. Lt.		24" x 30"				5																									E-142
"		18"x18"				5								1			X															E-150
995+89 Med. Rt.		24" x 30"				5																									E-142
"		18"x18" / 18"x18"				5								1			X															E-150
996+31 Rt	WELLS RIVER 3 / [illegible]VILLE N.H	72" x 10" / 72" x 10"				10								2		X															E-23
996+98 Lt.	GROTON 7 / BARRE 28	72"x10" / 72 x 10"				10																									E-23
996+98 Lt.	BARNET 11 / ST. JOHNSBURY 22	72"x10" / 72" x 10"				10								2				X													E-23
998+88 Lt.	JCT. / 91	21"x15" / 24"x24"				6.2				X																					E-135
999+07 Rt.	SPEED LIMIT 50	24" x 30"				5				X																					E-142
999+95 Lt.		36" x 36"				9				X																					E-151
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE DESIGN DIVISION'S "SIGN POST DESIGN MANUAL". TOTALS		EA.		SF. 91.2	SF.	EA.	S'.							—	145	171.5	57															
														316.5			57															

TRAFFIC SIGN SUMMARY SHEET

PREPARED BY L S W DATE 5/87
CHECKED BY _____ DATE _____
DESIGN SUPERVISOR _____ DATE _____
PROJ. NEWBURY
F 026-2(3)S
TRAFFIC SHEET NO. 507 OF 510
SHEET 12 OF 43 SHEETS

TRAFFIC SIGN SUMMARY SHEET

1986

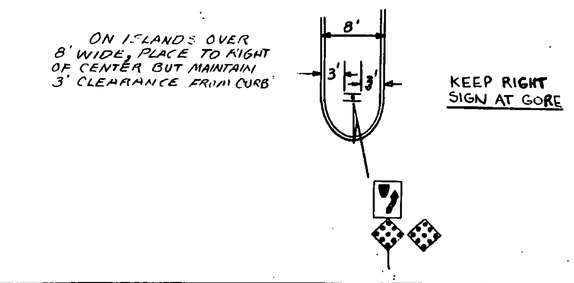
MILEMARKER, STATION, OR SIGN NUMBER	SIGN LEGEND	SIGN DIMENSIONS	EXISTING SIGNS: TO BE SALV.	EXISTING SIGNS: REMOVE	EXISTING SIGNS: RETAIN	NEW AND SALVAGED SIGNS: "A"	NEW AND SALVAGED SIGNS: "B"	NEW AND SALVAGED SIGNS: SALV. SIGN	NEW AND SALVAGED SIGNS: SALV. T.S.S.	EXISTING POSTS: RET.	EXISTING POSTS: DRILL	EXISTING POSTS: REM.	EXISTING POSTS: SALV.	NEW SIGN POSTS: NUMBER OF POSTS	FLANGED CHANNEL LB./FT.: 2.0	FLANGED CHANNEL LB./FT.: 2.5	FLANGED CHANNEL LB./FT.: 3.0	TUBULAR ALUMINUM: 3.0"ø	TUBULAR ALUMINUM: 3.0"□	TUBULAR ALUMINUM: 4.0" ø	TUBULAR ALUMINUM: 4.0"øM.	TUBULAR STEEL: 3" Ø	TUBULAR STEEL: 3.5" Ø	TUBULAR STEEL: 4.0" Ø	TUBULAR STEEL: 5.0" Ø	W SHAPED STEEL: POST SIZE	W SHAPED STEEL: WEIGHT	FTG. SIZE: 24"	FTG. SIZE: 30"	REMARKS	FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER	FOR SIGN DETAIL SHEET: STD. SHEET NUMBER
FINAL POST LENGTHS ARE TO BE DETERMINED IN THE FIELD. POST SIZES ARE COMPUTED BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS AND THE DESIGN DIVISION'S 'SIGN POST DESIGN MANUAL'. TOTALS				EA.		SF.	SF.	EA.	SF.																								

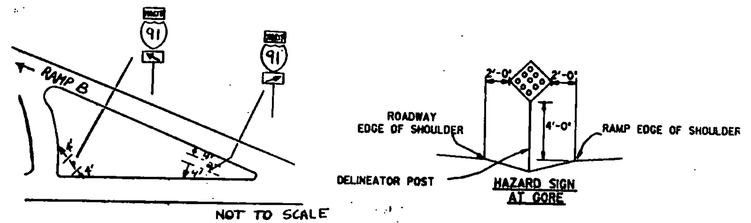
TRAFFIC ITEM SUMMARY

ITEM NO.	ITEM	UNIT	F0216-1(31)S	F026-2(3)S	(31) RNDG.	(3) RNDG.	TOTAL
646.31	DURABLE 4" YELLOW LINE	LF.	1514	1425	6	5	2950
646.34	DURABLE 8" WHITE LINE	LF.	125	200	5	-	325
646.35	DURABLE 8" YELLOW LINE	LF.	172	210	18	-	400
646.42	DURABLE ARROW MARKING	EA.	2	4	-	-	6
646.44	DURABLE LETTER IN WORD MARKING	EA.	12	21	-	-	33
646.50	TEMP. 4" WHITE LINE	LF.	2359	3121	16	4	5500
646.51	TEMP. 4" YELLOW LINE	LF.	2416	3274	4	6	5700
646.54	TEMP. 8" WHITE LINE	LF.	90	150	10	-	250
675.32	TUBULAR ALUMINUM SIGN POSTS	LB.	-	57	-	3	60
646.62	TEMP. ARROW MARKING	EA.	2	4	-	-	6
646.60	TEMP. 24" STOP BAR	LF	46	-	4	-	50
675.20	TRAFFIC SIGNS, TYPE A	SF.	64.5	184.1	0.5	0.9	250
675.21	TRAFFIC SIGNS, TYPE B	SF.	374	154.	6	6	540
675.30	FLANGED CHANNEL SIGN POSTS	LB.	216.5	742.	3.5	8	970
675.31 (MOD.)	W-SHAPE STEEL SIGN POSTS	LB.		747	-	3	750
675.41	FOUNDATIONS FOR W-SHAPE STEEL POSTS 24" DIA	EA.		2	-	-	2
675.50	REMOVING SIGNS	EA.	24	38	-	-	62
676.15	REMOVE AND REPLACE REFLECTOR UNITS (MOD)	EA.		37		3	40

NOTES AND DETAILS

THE ITEM REMOVE AND REPLACE REFLECTOR UNITS (MOD.) SHALL BE NEW REFLECTOR UNITS ONLY. THERE ARE NO EXISTING UNITS TO REMOVE.



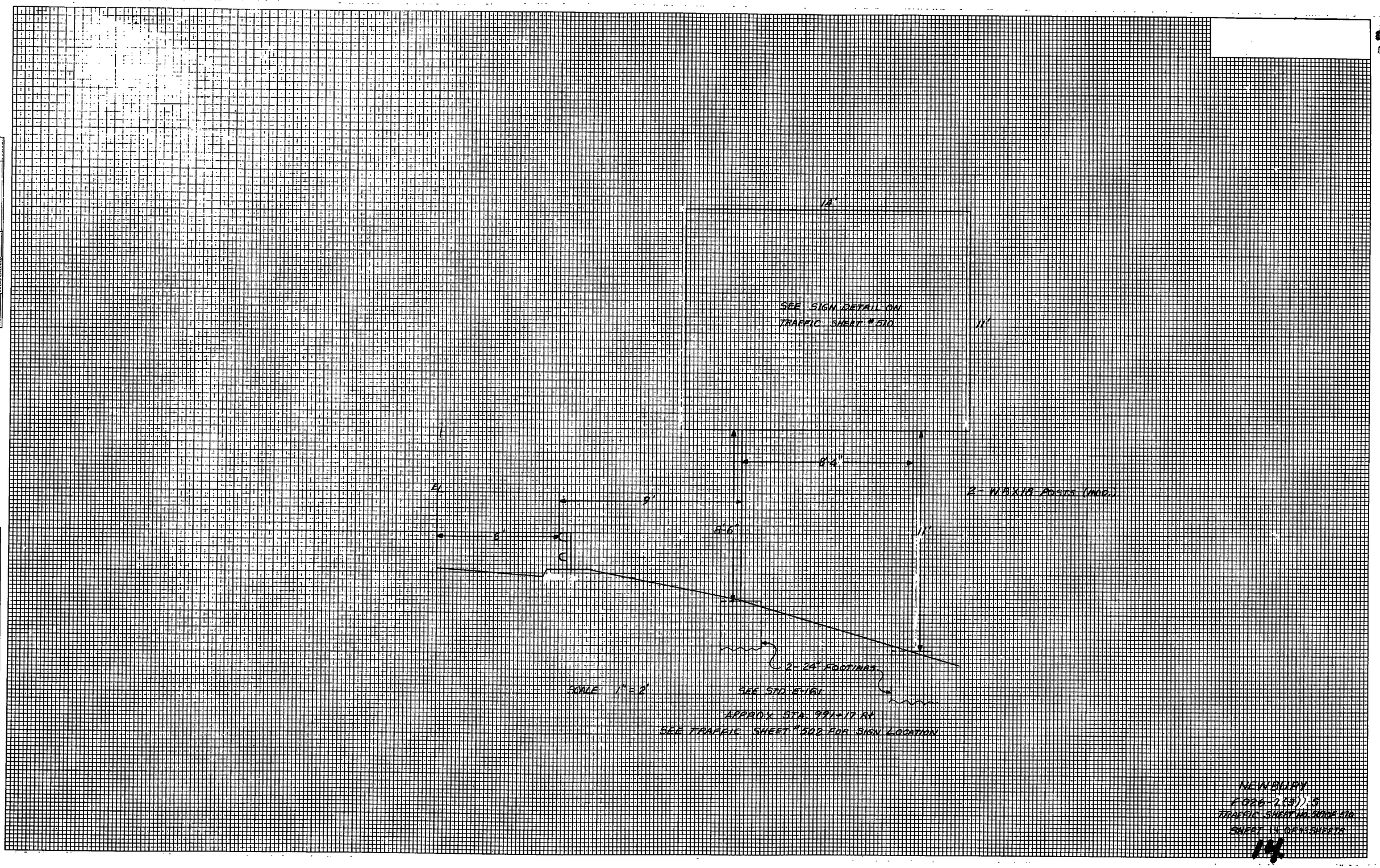


SIGN LOCATION DETAIL

ITEM NO.	ITEM	UNIT	(31)	(3)	(31) RNDG.	(3) RNDG.	TOTAL
646.40	DURABLE 24" STOP BAR	LF	46	-	4	-	50
646.21	PAINTED CURB	LF	330	705	-	-	1035
675.60	ERECTING SALVAGED SIGN	EA.	1		-	-	1
646.30	DURABLE 4" WHITE LINE	LF	506	470	4	-	980
646.80	REMOVAL OF EXISTING PAV'T MARKING	SF	-	40	-	-	40

TRAFFIC SIGN SUMMARY SHEET

PREPARED BY LSW DATE 5/87
CHECKED BY _____ DATE ____
DESIGN SUPERVISOR _____ DATE ____
PROJ. NEWBURY
F026-1(31)S F 026-2(3)S
TRAFFIC SHEET NO. 508 OF 510
SHEET 13 OF 43 SHEETS

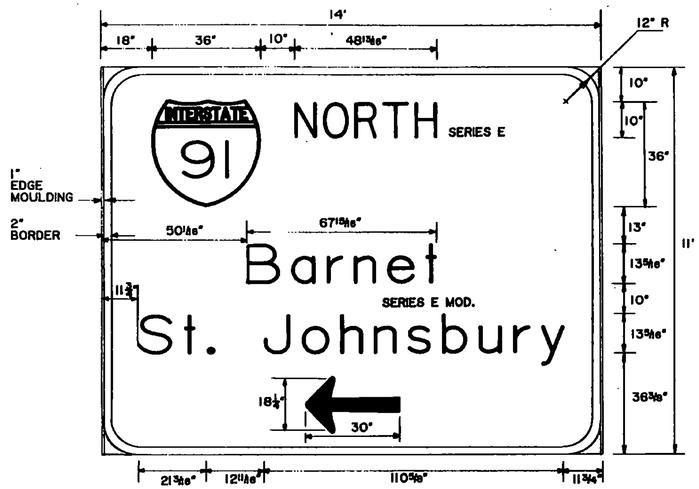


FINAL SURVEY
SUBMITTED
PLOTTED
TEMPLATE
NOTE BOOK
AREAS
AREAS CHECKED
NO.
DATE
BY

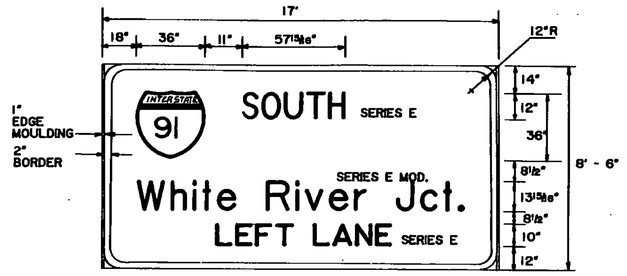
SURVEY
PLOTTED
TEMPLATE
NOTE BOOK
AREAS
AREAS CHECKED
NO.

NEW BURY
C-026-2.69) ,S
TRAFFIC SHEET NO. 508
SHEET 114 OF 115 SHEETS

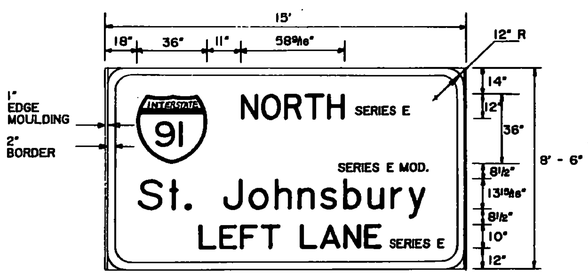
114



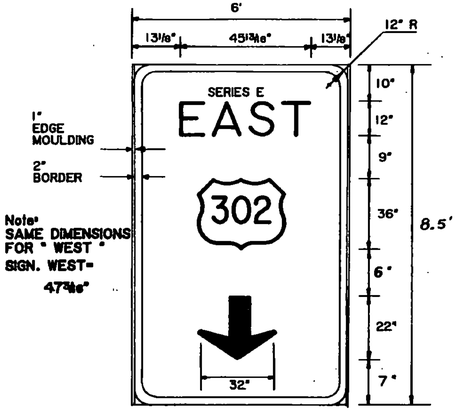
FOR SIGN LOCATION, SEE SHEET #502



WB OVERHEAD



EB OVERHEAD

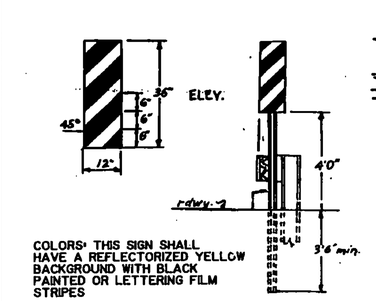


Note: SAME DIMENSIONS FOR "WEST" SIGN. WEST- 47 9/16"

EB & WB OVERHEAD

ALL TYPE B SIGNS SHALL HAVE ENCAPSULATED LENS LEGEND AND BACKING.
BACKGROUND: GREEN
TEXT & BORDER } WHITE
SEE STD. E-131 FOR OTHER MATERIALS NOTES.

DATUM
VERTICAL _____
HORIZONTAL _____

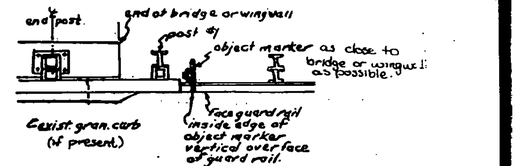


COLORS: THIS SIGN SHALL HAVE A REFLECTORIZED YELLOW BACKGROUND WITH BLACK PAINTED OR LETTERING FILM STRIPES

OBJECT MARKER

MATERIALS: THE SIGN BASE MATERIAL USED FOR THIS SIGN MAY BE EITHER ¾" HIGH DENSITY PLYWOOD OR 0.100 FLAT SHEET ALUMINUM WITH A REFLECTORIZED SHEETING BACKGROUND.

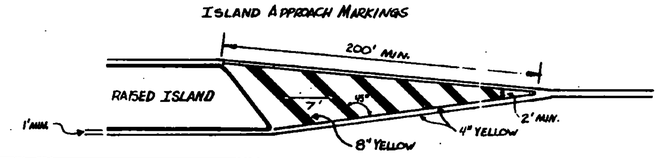
NOTE: SIGNS SHALL BE INSTALLED ON FLANGED CHANNEL STEEL POSTS. SIGN MAY BE OFF-SET FROM POST SO THAT THE EDGE OF SIGN IS DIRECTLY OVER THE ROADWAY HAZARD.



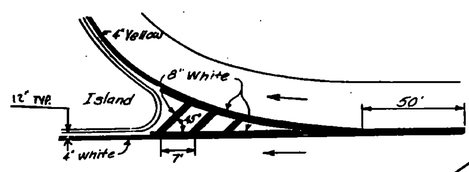
PLACEMENT OF OBJECT MARKERS

OBJECT MARKER NOTE: OBJECTS NOT ACTUALLY IN THE ROADWAY MAY BE SO CLOSE TO THE EDGE OF THE ROAD THEY NEED A MARKER. THESE INCLUDE UNDERPASS PIERS, BRIDGE ABUTMENTS, HAND RAILS, AND CULVERT WALLS. IN SOME CASES THERE MAY NOT BE A PHYSICAL OBJECT INVOLVED, BUT OTHER ROADSIDE CONDITIONS SUCH AS NARROW SHOULDER DROP OFFS, GORES, SMALL ISLAND OR ABRUPT CHANGES IN THE ROADWAY MAY MAKE IT UNDESIRABLE FOR A DRIVER TO LEAVE THE ROADWAY. OBJECT MARKERS ARE INTENDED FOR USE AT SUCH LOCATIONS. THE INSIDE EDGE OF THE MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION, IF POSSIBLE.

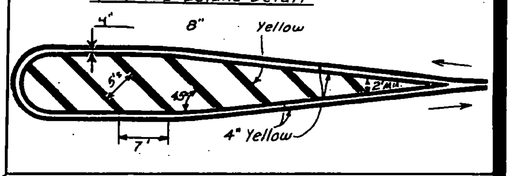
ISLAND APPROACH MARKINGS



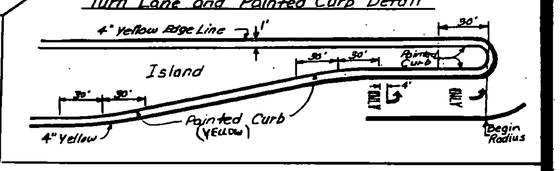
Gore Marking Detail - Exit

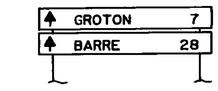


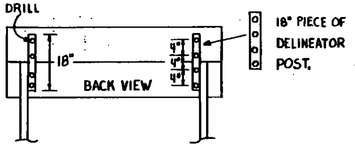
Painted Island Detail



Turn Lane and Painted Curb Detail

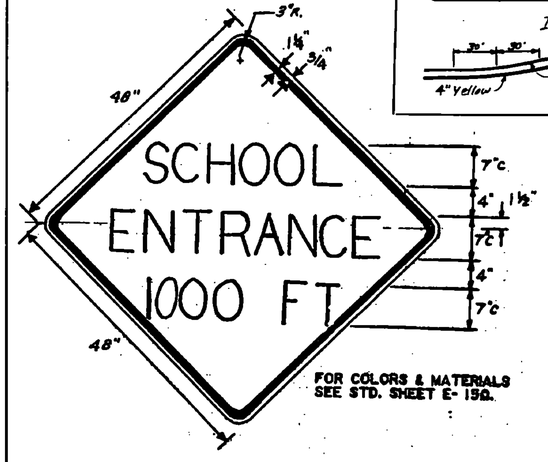






SIGN POST EXTENSION DETAIL

PAYMENT FOR ADJUSTING AND PROVIDING MOUNTING HARDWARE IS SUBSIDIARY TO OTHER ITEMS.



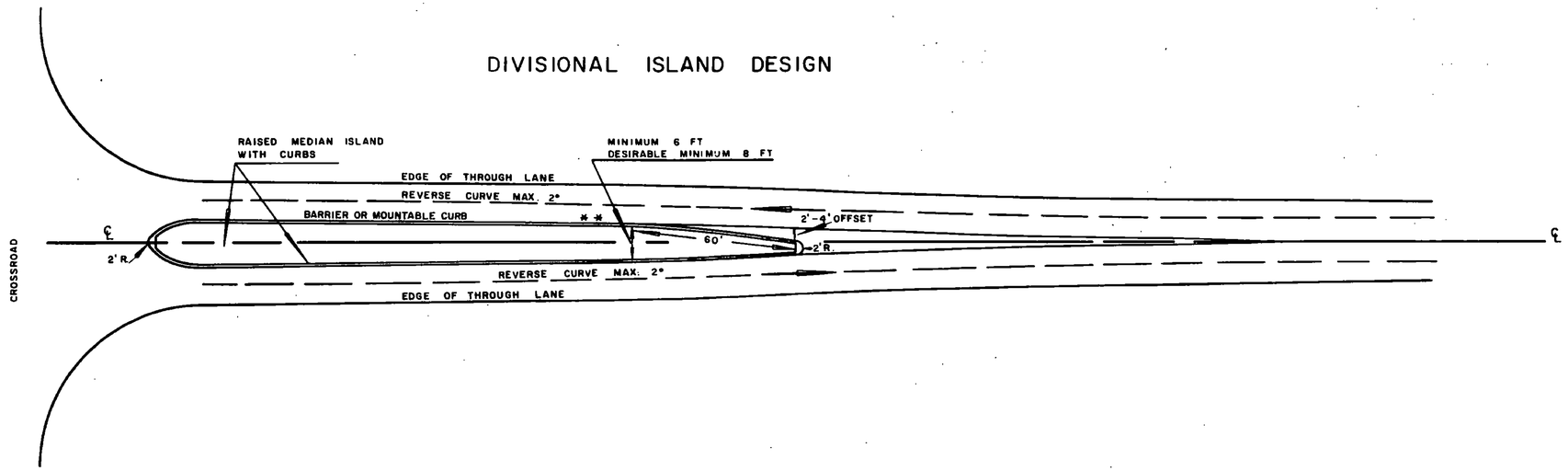
FOR COLORS & MATERIALS SEE STD. SHEET E-150.

SIGN DETAIL SHEET

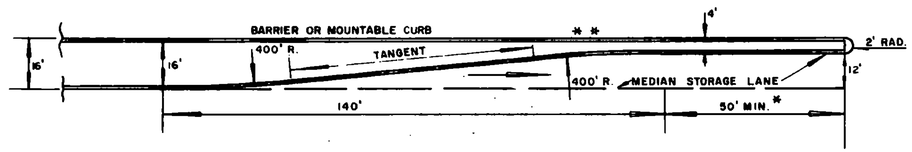
SURVEYED BY _____ DATE _____
DRAWN BY _____ DATE _____
TRACED BY _____ DATE _____

NEWBURY
F 026-1 (31) S F 026-2 (3) S
PROJ. NO.
TRAFFIC SHEET NO. 510 OF 510
SHEET 15 OF 43

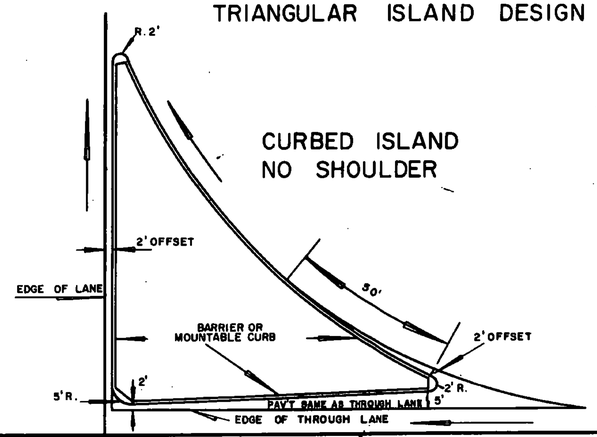
DIVISIONAL ISLAND DESIGN

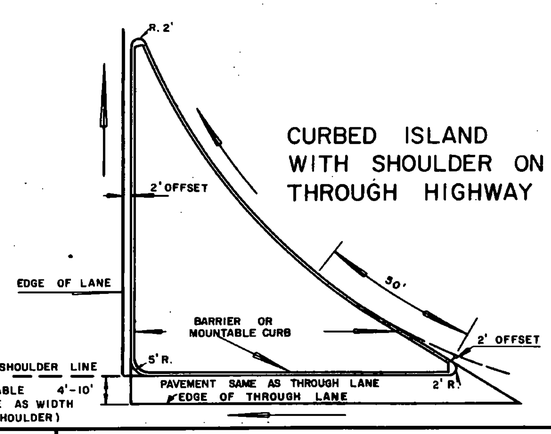


DESIGN OF MEDIAN STORAGE LANE TAPER (SEE NOTE #3)



TRIANGULAR ISLAND DESIGN





1. * REFER TO A.A.S.H.O. POLICY ON GEOMETRIC DESIGN OF RURAL HIGHWAYS PAGE 433
2. * * BARRIER CURB TO BE USED IN URBAN AREAS WHERE PEDESTRIAN MOVEMENT ACROSS MEDIAN IS HEAVY. OTHERWISE MOUNTABLE CURB TO BE USED.
3. WHERE THROUGH TRAFFIC VOLUMES AND SPEEDS ARE HIGH, THE MEDIAN LANE AND TAPER SHALL HAVE AT LEAST THE LENGTH SHOWN IN TABLE VII - 10, PAGE 351 A.A.S.H.O. POLICY ON GEOMETRIC DESIGN OF RURAL HIGHWAYS AND THE VALUES GIVEN FOR A STOP CONDITION SHALL APPLY. IF THE LEFT TURNING VOLUME IS HIGH, ADDITIONAL STORAGE LENGTH SHALL BE PROVIDED.

REVISIONS AND CORRECTIONS

APPROVED

DATE December 14, 1971

R. H. Crandall
CHIEF ENGINEER

E. J. Hackney
ASST. CHIEF ENGINEER

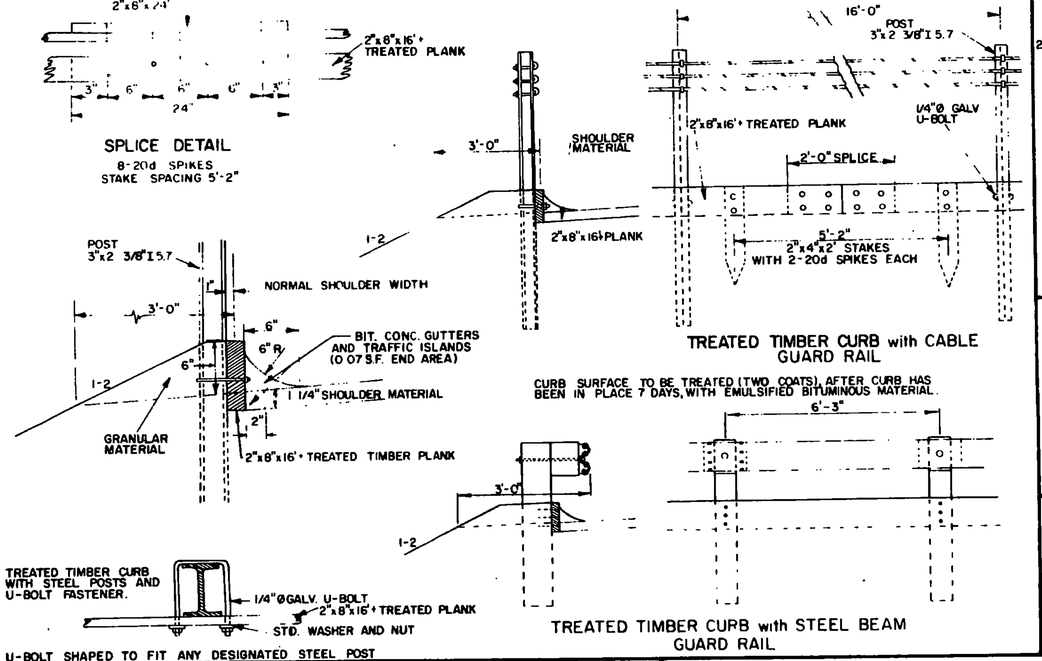
G. M. Lane
HIGHWAY ENGINEER

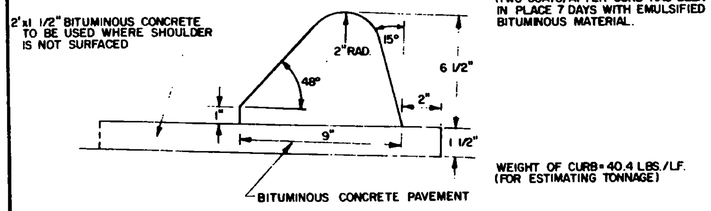
DRAWN: J.O.C.
TRACED: GUS AJA

DIVISIONAL ISLAND, STORAGE LANES, AND TRIANGULAR ISLAND DESIGNS

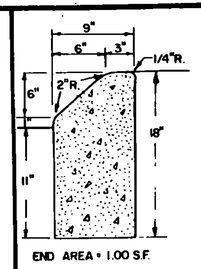
VERMONT
DEPARTMENT
OF HIGHWAYS
STANDARD

B-16





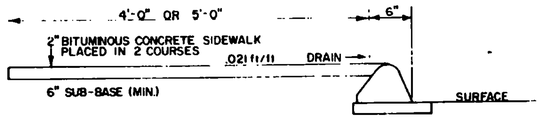
BITUMINOUS CONCRETE CURB, TYPE A



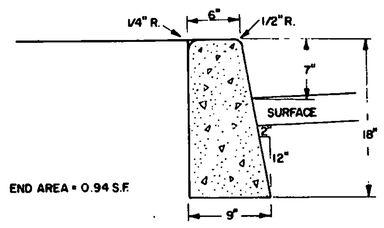
WHEN CONCRETE CURB IS CONSTRUCTED ADJACENT TO CONCRETE SIDEWALK, ASPHALT TREATED FELT SHALL BE PLACED BETWEEN THE SIDEWALK AND CURB.

SEE SPECIFICATIONS FOR DETAILS ON EXPANSION AND CONSTRUCTION JOINTS.

CAST IN PLACE CONCRETE CURB, TYPE A



BITUMINOUS CONCRETE SIDEWALK



WHEN CONCRETE CURB IS CONSTRUCTED ADJACENT TO CONCRETE SIDEWALK, ASPHALT TREATED FELT SHALL BE PLACED BETWEEN THE SIDEWALK AND CURB.

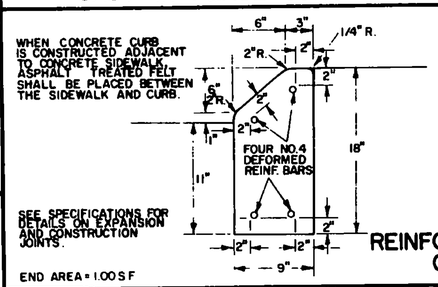
SEE SPECIFICATIONS FOR DETAILS ON EXPANSION AND CONSTRUCTION JOINTS.

CAST IN PLACE CONCRETE CURB, TYPE B

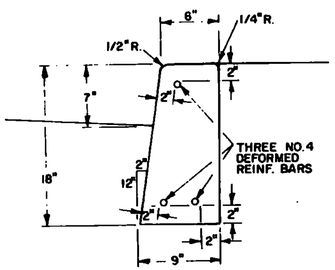
CURB SURFACE TO BE TREATED (TWO COATS), AFTER CURB HAS BEEN IN PLACE 7 DAYS, WITH EMULSIFIED BITUMINOUS MATERIAL

WEIGHT OF CURB = 45.0 LBS./LF. (FOR ESTIMATING TONNAGE)

BITUMINOUS CONCRETE CURB, TYPE B



PRECAST REINFORCED CONCRETE CURB, TYPE A

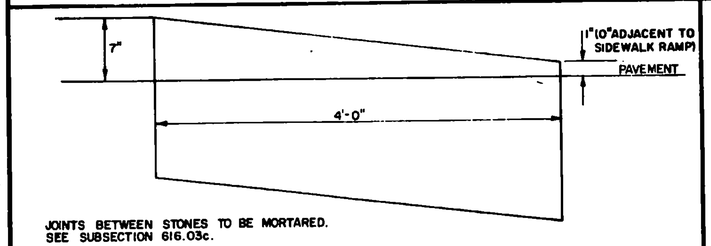


WHEN CONCRETE CURB IS CONSTRUCTED ADJACENT TO CONCRETE SIDEWALK, ASPHALT TREATED FELT SHALL BE PLACED BETWEEN THE SIDEWALK AND CURB.

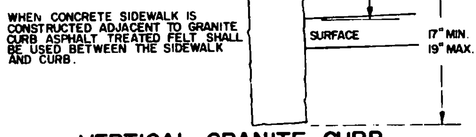
SEE SPECIFICATIONS FOR DETAILS ON EXPANSION AND CONSTRUCTION JOINTS.

END AREA = 0.94 S.F.

PRECAST REINFORCED CONCRETE CURB, TYPE B



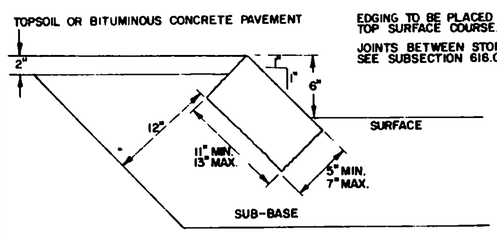
DETAIL OF CONCRETE CURB END FOR PRECAST REINFORCED CONCRETE CURB OR CAST IN PLACE CONCRETE CURB



VERTICAL GRANITE CURB

JOINTS BETWEEN STONES TO BE MORTARED. SEE SUBSECTION 616.03c.

DETAIL OF GRANITE CURB END FOR VERTICAL GRANITE CURB



EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.

JOINTS BETWEEN STONES TO BE MORTARED. SEE SUBSECTION 616.03c.

GRANITE SLOPE EDGING

REVISIONS AND CORRECTIONS

AUG. 30, 1973 – TREATED TIMBER PLANK INCREASED TO 8" SIZE.
MAY 7, 1976 – TREATED TIMBER CURB HEIGHT INCREASED FROM 4 1/2" TO 6".
DEC. 16, 1980 – INCREASED SHOULDER WIDENING FOR GUARD RAIL.
OCT. 25, 1985 – REVISED TO CONFORM TO 1986 SPECIFICATIONS REPLACED DETAILS OF TIMBER CURB WITH 2 CABLE GUARD RAIL TO ONE WITH STEEL BEAM GUARD RAIL

APPROVED:

DATE: Dec. 8, 1971

R. H. Arnold
CHIEF ENGINEER

E. B. Stickney
ASST. CHIEF ENGINEER

R. M. Lane
HIGHWAY ENGINEER

GRANITE SLOPE EDGING
VERTICAL GRANITE CURB
PRECAST REINFORCED CONCRETE CURB
CAST IN PLACE CONCRETE CURB
BITUMINOUS CONCRETE CURB
TREATED TIMBER CURB

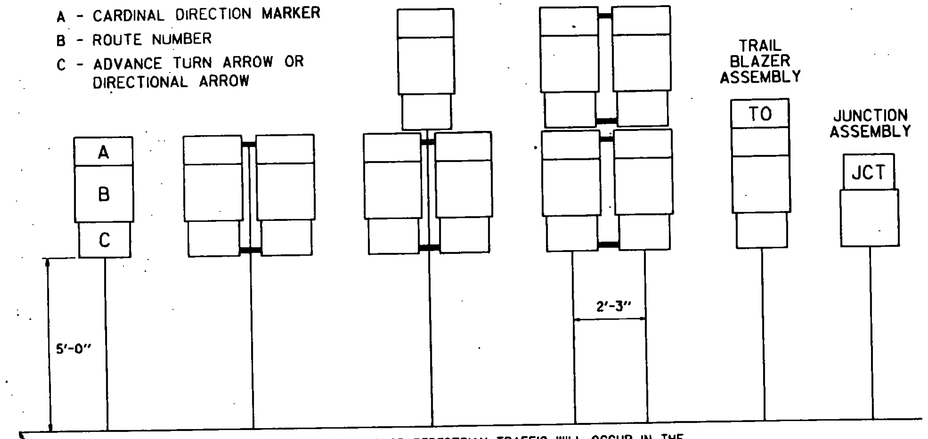
VERMONT AGENCY OF TRANSPORTATION

STANDARD

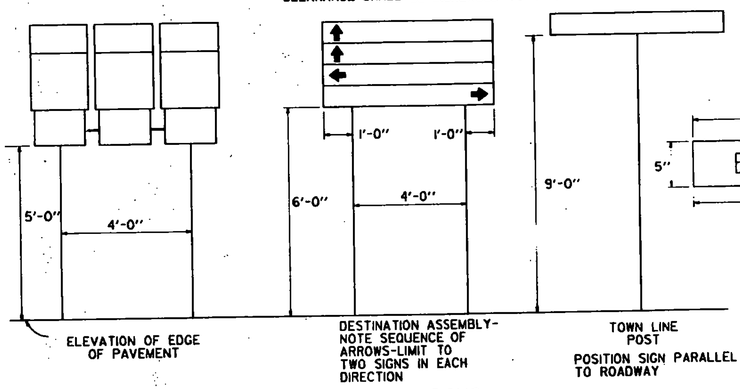
C-1

STANDARD MOUNTING OF ROUTE MARKER ASSEMBLIES, DESTINATION ASSEMBLIES AND TOWN LINE POSTS

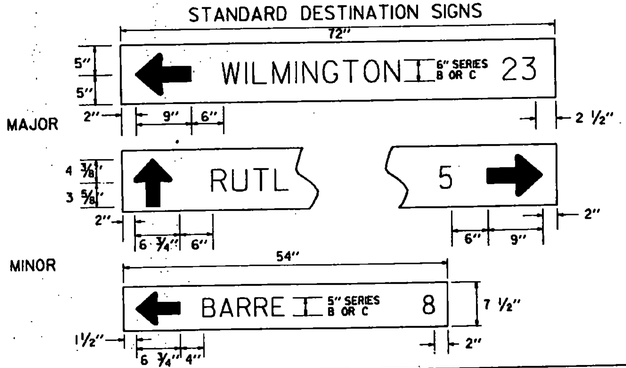
A - CARDINAL DIRECTION MARKER
B - ROUTE NUMBER
C - ADVANCE TURN ARROW OR DIRECTIONAL ARROW

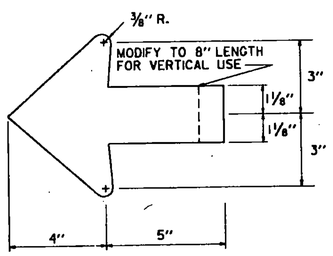


WHERE PARKING OR PEDESTRIAN TRAFFIC WILL OCCUR IN THE IMMEDIATE VICINITY OF THESE SIGNS MINIMUM VERTICAL CLEARANCE SHALL BE INCREASED TO 7'-0"



STANDARD DESTINATION SIGNS





ARROW DETAIL
REDUCE PROPORTIONALLY TO 6 ¾" LENGTH FOR USE ON MINOR SIGN

STREET SIGNS:

MATERIALS

THE SIGN BASE MATERIALS USED FOR THE STREET SIGNS MAY BE EITHER OF THE FOLLOWING:
A - EXTRUDED ALUMINUM BLADES WITH REFLECTIVE SHEETING
B - FLAT ALUMINUM BLADES WITH REFLECTIVE SHEETING

COLORS

THE SIGNS SHALL HAVE A REFLECTORIZED WHITE OR SILVER TEXT (STICK ON REFLECTIVE LETTERS) ON A REFLECTORIZED GREEN BACKGROUND. THE COLORS SHALL CONFORM WITH THOSE FOUND IN STANDARD COLOR TOLERANCE CHARTS AS APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

LETTERING

LETTERS AND DIGITS SHALL CONFORM WITH THE STANDARD ALPHABETS FOR HIGHWAY SIGNS PRINTED BY THE FEDERAL HIGHWAY ADMINISTRATION.

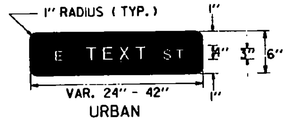
SPECIFICATIONS

THE SIGN SHALL MEET THE STANDARD STATE SPECIFICATIONS FOR "TRAFFIC SIGNS". THE MATERIAL FOR THE BLADES SHALL BE EITHER EXTRUDED ALUMINUM WITH A 0.25 INCH FLANGE THICKNESS AND A 0.090 INCH WEBB (MIN.) OR FLAT SHEET ALUMINUM WITH A MINIMUM THICKNESS OF 0.125 INCH. THE PREFERRED MOUNTING METHOD FOR STREET SIGNS IS THE POST TOP MOUNTING BRACKETS. HARDWARE FOR MOUNTING SIGNS TO POST SHALL BE SUBSIDIARY TO OTHER ITEMS. MOUNTING METHOD WILL BE AS SHOWN ON THE PLANS AND SHOULD HAVE A VERTICAL CLEARANCE OF 8 FEET TO THE BOTTOM OF THE SIGN. FOR POST TOP MOUNTINGS, SIGNS SHALL HAVE TEXT ON BOTH SIDES.

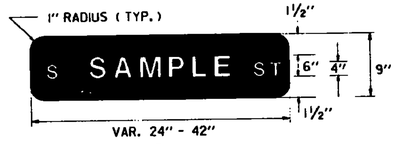
SIZES ARE AS FOLLOWS

RURAL AREAS - USE A 9 INCH HIGH BLADE IN LENGTHS OF 24", 30", 36" OR 42". USE SERIES "B" LETTERING (MINIMUM) WITH 6 INCH HIGH LETTERS FOR STREET NAME, 4 INCH OTHER.
URBAN AREAS - USE A 6 INCH HIGH BLADE IN LENGTHS OF 24", 30", 36" OR 42". USE SERIES "B" LETTERING (MINIMUM) WITH 4 INCH HIGH LETTERS FOR STREET NAME, 3 INCH OTHER.

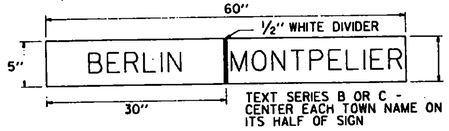
DESIGN SAMPLE



URBAN

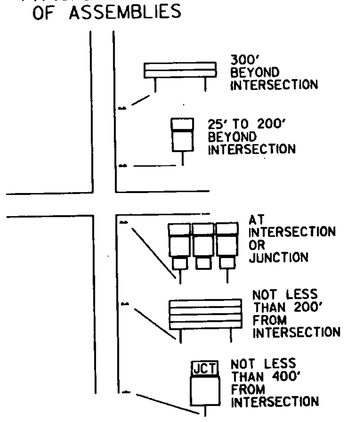


RURAL



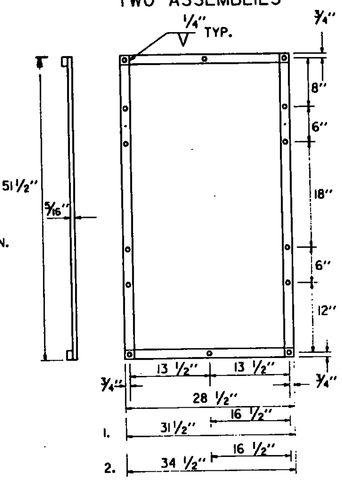
TOWN LINE SIGN

TYPICAL LOCATION OF ASSEMBLIES

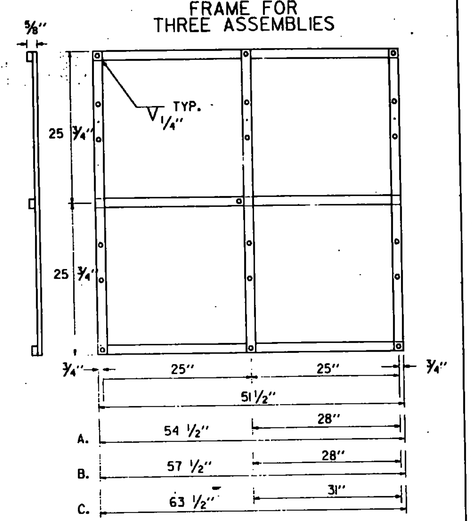


ROUTE MARKER ASSEMBLY FRAMES

FRAME FOR TWO ASSEMBLIES



FRAME FOR THREE ASSEMBLIES



STANDARD FRAMES SHALL BE ⅝" x 1½" WROUGHT IRON WELDED. ALL HOLES SHALL BE 7/16" DIAMETER. FOR OTHER SIGN COMBINATIONS THAN ABOVE, THE FRAME DIMENSIONS AND HOLE SPACING SHALL BE MODIFIED AS NECESSARY THE FRAME SHALL BE PAINTED WITH ONE COAT OF PRIMER AND A SECOND COAT OF GOOD GRADE BLACK PAINT.

ROUTE AND DESTINATION SIGNS:

MATERIALS

THE SIGN BASE MATERIAL FOR STANDARD DESTINATION SIGNS SHALL BE HIGH DENSITY OVERLAID PLYWOOD ⅝ INCH THICK OR FLAT SHEET ALUMINUM 0.125 INCH THICK. THE REFLECTIVE MATERIAL SHALL BE GREEN REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND OF THE SIGN. THE TEXT SHALL BE CUT-OUT REFLECTORIZED WHITE OR SILVER LETTERS.

COLORS

DESTINATION SIGNS SHALL HAVE A REFLECTORIZED WHITE OR SILVER TEXT ON A REFLECTORIZED GREEN BACKGROUND.

LETTERING

LETTERS AND DIGITS SHALL CONFORM WITH THE STANDARD ALPHABETS FOR HIGHWAY SIGNS APPROVED BY THE NATIONAL JOINT COMMITTEE ON UNIFORM TRAFFIC CONTROL DEVICES.

SPECIFICATIONS

DESTINATION SIGNS SHALL MEET THE STATE SPECIFICATIONS FOR "TRAFFIC SIGNS". FOR DESIGNS, COLORS OR MATERIALS OF ROUTE MARKERS AND AUXILIARY MARKERS, SEE STANDARD SHEETS E-11, E-12, AND E-13.

REVISIONS AND CORRECTIONS

REVISIONS AND CORRECTIONS

12/1/82
ADDED 2 FRAME ASSEMBLY TO 2 POST ASSEMBLY
ADDED MINOR DESTINATION SIGN, MOUNTING HEIGHT REVISED
2/10/83
SIGN HEIGHT CHANGED TO 7 FT.
FEB. 3, 1986 - UPDATED TO 1986 SPECIFICATIONS
DEC. 3, 1986 MAJOR REVISIONS

APPROVED: DATE Dec 29, 1971

R.H. Arnold
CHIEF ENGINEER

E.W. Stickney
ASST. CHIEF ENGINEER

G.M. Lane
HIGHWAY ENGINEER

GUIDE SIGNS

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E - 23

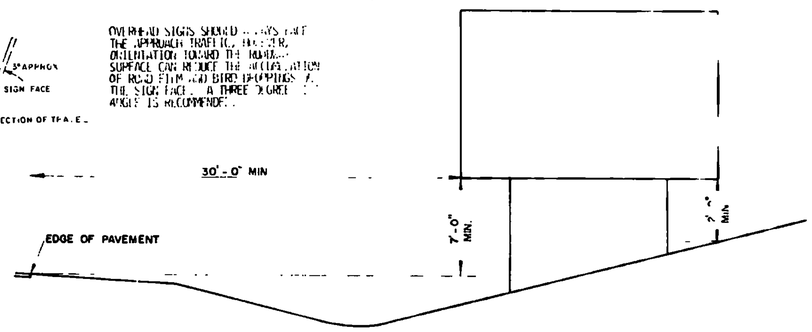
SIGNS SHOULD BE MOUNTED AT
[illegible] DIRECTION OF TRAFFIC.
[illegible] INDICATES THE ANGLE OF
[illegible] SHOULD BE DETERMINED BY
[illegible] OF APPROACHING TRAFFIC
[illegible] BY THE ROADSIDE EDGE
[illegible] AND THE SIGN IS
[illegible].

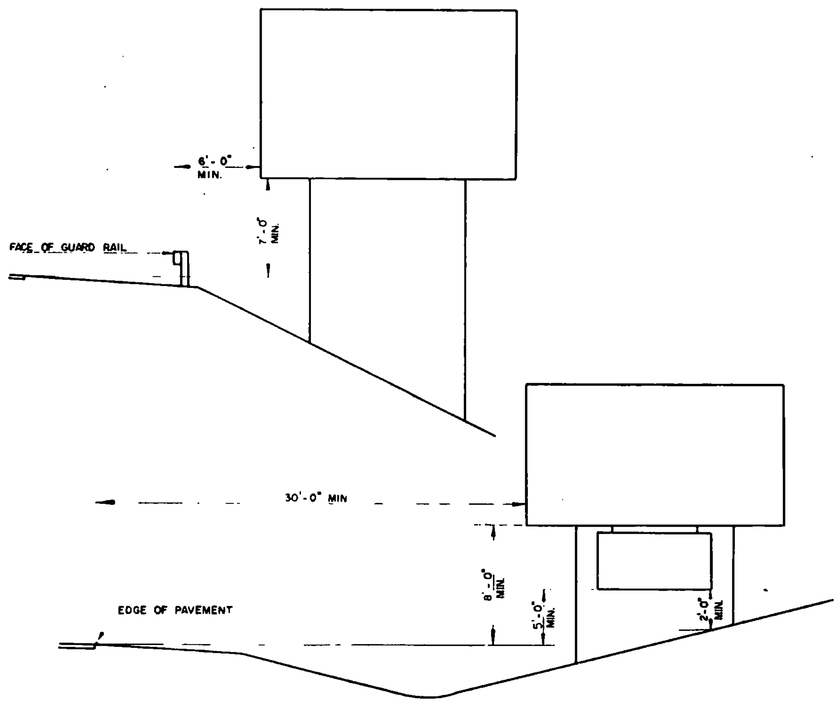
DIRECTION OF TRAVEL
EDGE OF PAVEMENT
EDGE OF SHOULDER
SIGN FACE

GUIDE SIGNS

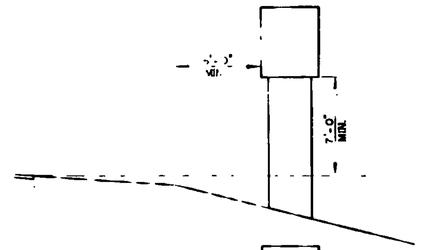
OVERHEAD SIGNS SHOULD [illegible] THE APPROACH TRAFFIC, PROPER ORIENTATION TOWARD THE ROADWAY SURFACE CAN REDUCE THE OCCURRENCE OF ROAD FROM HEAD BIRD DROPPINGS ON THE SIGN FACE. A THREE DEGREE [illegible] ANGLE IS RECOMMENDED.

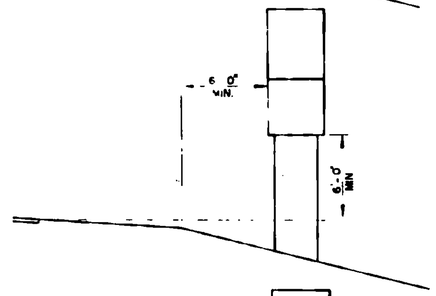
SIGN FACE
DIRECTION OF TRAVEL

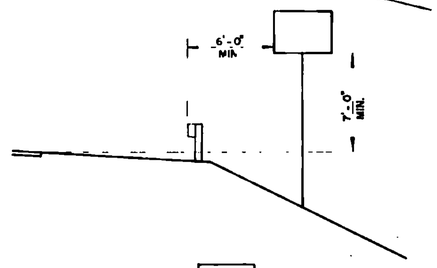


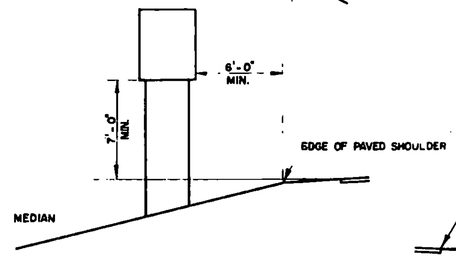


REGULATORY SIGNS

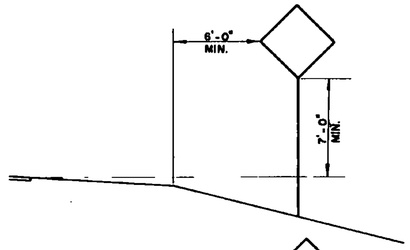


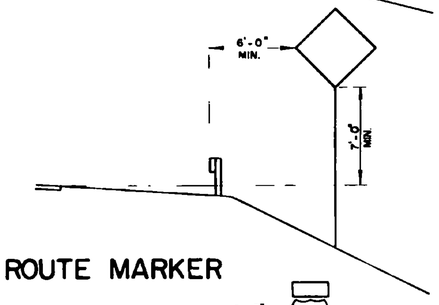




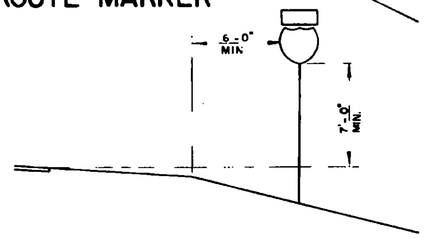


WARNING SIGNS

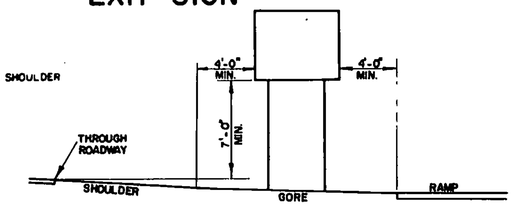




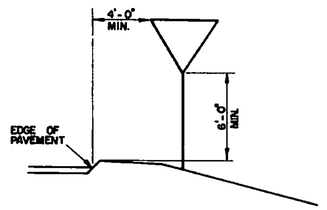
ROUTE MARKER

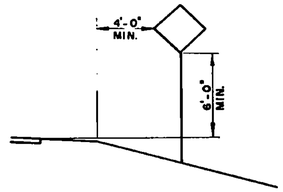


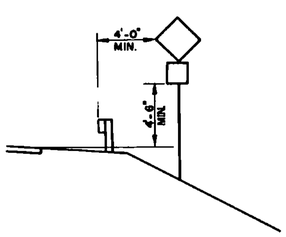
EXIT SIGN



SIGNS ON RAMPS







REVISIONS AND CORRECTIONS

DEC. 19, 1972 DIMENSION CHANGE
JAN 24 1983 SIGN INSTALLATION DETAILS ADDED
FEB. 3, 1986 – UPDATED TO 1986 SPECIFICATIONS

APPROVED:
Dec. 29, 1971
DATE

R H Crandall
CHIEF ENGINEER
E H Dickney
ASST. CHIEF ENGINEER
G. M. Lane
HIGHWAY ENGINEER

TRAFFIC SIGNS

STANDARD SIGN PLACEMENT

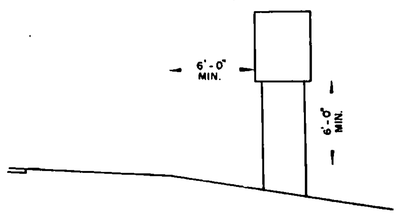
EXPRESSWAY TYPE

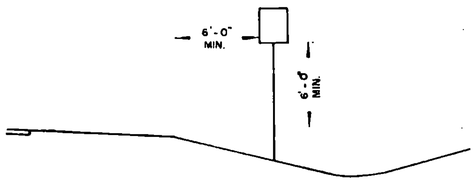
VERMONT AGENCY OF TRANSPORTATION

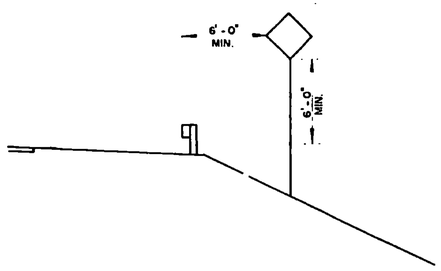
STANDARD

E-27

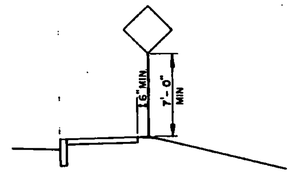
RURAL

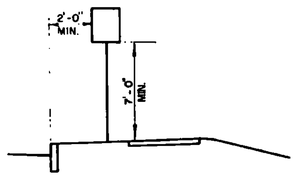


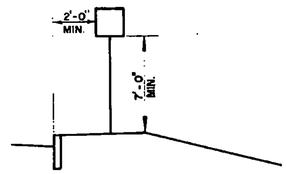




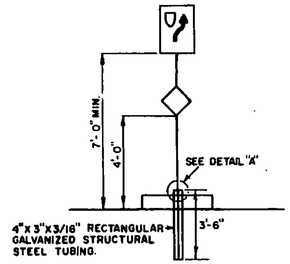
URBAN

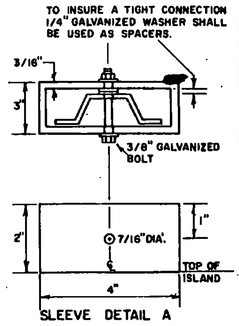






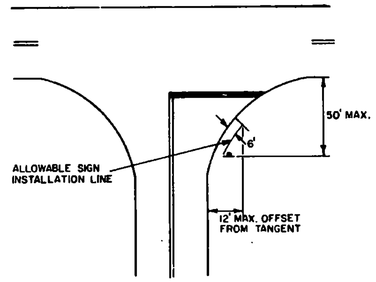
WARNING SIGNS
ON ISLAND IN THE LINE OF TRAFFIC





SLEEVE DETAIL A

STOP OR YIELD SIGNS
AT WIDE THROAT INTERSECTIONS



NOTES 1) IN BOTH RURAL AND URBAN LOCATIONS, IF A SECONDARY SIGN IS MOUNTED BELOW ANOTHER SIGN, THE MINIMUM CLEARANCE MAY BE REDUCED BY ONE FOOT.
2) IN RURAL AREAS WITH NO SHOULDER, THE MINIMUM LATERAL CLEARANCE SHOULD BE 12' FROM EDGE OF THE TRAVELED WAY.

REVISIONS AND CORRECTIONS
JAN. 23, 1978 – DIMENSION FROM SHOULDER TO SIGN CHANGED PER FHWA.
AUG. 25, 1981 – ADDED STOP AND ISLAND DETAILS, REVISED CURB OFFSET
FEB. 3, 1986 – UPDATED TO 1986 SPECIFICATIONS

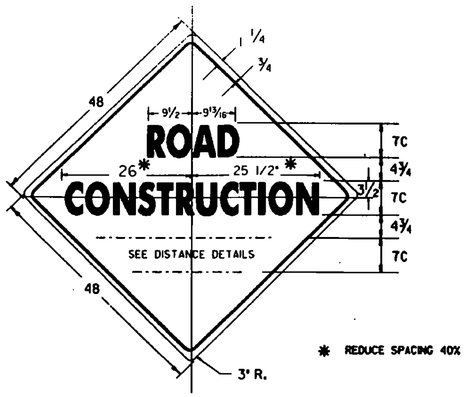
APPROVED
Dec. 29, 1971

R.N. Arnold
CHIEF ENGINEER
E.W. Blackmer
ASST. CHIEF ENGINEER
G.M. Lane
HIGHWAY ENGINEER

STANDARD SIGN PLACEMENT
CONVENTIONAL ROAD

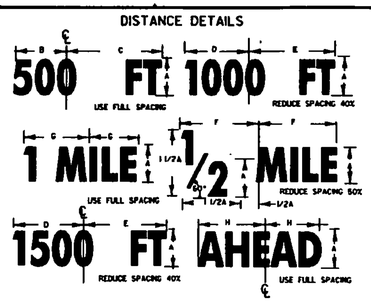
VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-29

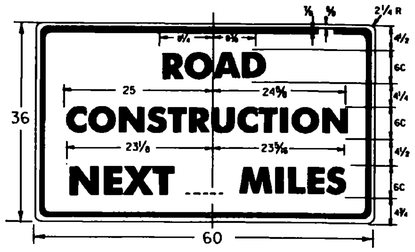


WHEN APPROPRIATE, EXISTING 'BRIDGE CONSTRUCTION___' SIGNS MAY BE USED UNTIL THE EXISTING SIGNS NEED REPLACEMENT. NEW SIGNS SHALL SHOW REFERENCE TO ROAD CONSTRUCTION. SIGN TEXT SHALL BE CONSISTENT THROUGHOUT THE PROJECT.

DISTANCE DETAILS

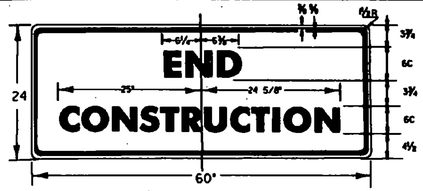


DIMENSIONS(INCHES)							
A	B	C	D	E	F	G	H
7C	12	12 3/16	13 1/8	14	14 9/16	10 5/8	12 1/4
5D	10 3/16	10 3/16	8 5/8	8 1/4	11 1/4	9 1/2	10 1/8
8D	16 1/4	17 1/4	17	18	18	14 3/8	17 7/16



THIS SIGN TO BE USED WHEN PROJECT LENGTH EXCEEDS 2 MILES OR AS REQUESTED BY THE RESIDENT ENGINEER. SHOW MILEAGE TO NEAREST ¼ MILE. HAND LETTERING OF MILEAGE WILL NOT BE ALLOWED.

(ALL DIMENSIONS SHOWN IN INCHES)



NOTES

THE APPROACH CONSTRUCTION SIGNS SHOWN ON THIS SHEET ARE INTENDED FOR USE IN PROVIDING ADVANCE WARNING AND INFORMATION ON CONSTRUCTION PROJECTS OVER WHICH TRAFFIC WILL BE MAINTAINED. WHEN ADDITIONAL APPROACH SIGNS OR OTHER TYPES OF ADVANCE SIGNING OR CONTROL ARE NECESSARY, THE PLANS AND/OR THE SPECIFICATIONS FOR THAT PROJECT WILL GIVE THE DETAILS OF THE SIGNS AND DEVICES REQUIRED. FOR ON-PROJECT CONSTRUCTION SIGNS, REFER TO APPROPRIATE STANDARD SHEETS.

APPLICATION OF STANDARDS
SINCE IT IS NOT POSSIBLE TO PRESCRIBE DETAILED STANDARDS OF APPLICATION FOR ALL OF THE SITUATIONS THAT MAY CONCEIVABLY ARISE ON A CONSTRUCTION PROJECT, REFERENCE SHALL BE MADE TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" FOR THE PRINCIPLES, PROCEDURES, AND STANDARDS THAT WILL BE REQUIRED IN CONNECTION WITH ADVANCED WARNING AND, ON-PROJECT CONSTRUCTION SIGNS AND BARRICADES. THE SIGNS SHOWN IN E-101 AND E-102 REPRESENT A SAMPLE OF THOSE MORE COMMONLY USED.

LOCATION
CONSTRUCTION APPROACH SIGNS SHALL BE LOCATED AS DETAILED ON THIS SHEET OR AS OTHERWISE SHOWN ON THE PLANS. THEY SHALL APPEAR AT EACH END OF THE HIGHWAY UNDER CONSTRUCTION AND ON ALL INTERSECTING PUBLIC HIGHWAYS. THE EXACT PLACEMENT OF ANY SIGN WILL DEPEND UPON THE ALIGNMENT OF THE HIGHWAY AND THE CHARACTER OF THE ROADSIDES. THE LOCATION MEASUREMENTS ON THIS SHEET ARE INTENDED TO INDICATE THE SEQUENCE TO BE FOLLOWED, AND THE SPACING TO BE OBSERVED. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS.

DESIGN
THE DESIGN OF THE SIGNS SHALL CONFORM WITH THE DETAILS SHOWN ON THIS SHEET AND WITH THE STANDARDS PRESCRIBED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

MATERIALS
THE SIGN BASE MATERIAL USED FOR THE WARNING SIGNS ON THIS SHEET MAY BE ANY OF THE FOLLOWING, WITH MINIMUM THICKNESS AS NOTED.

FLAT SHEET ALUMINUM	0.125	INCHES
HIGH DENSITY OVERLAYED PLYWOOD	⅜	INCHES
GALVANIZED SHEET STEEL	12	GAGE

REFLECTORIZATION
ALL REFLECTORIZED MATERIAL SHALL CONSIST OF ENCAPSULATED LENS REFLECTIVE SHEETING.

COLORS
THE COLORS SHALL CONFORM WITH THE STANDARD COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION. COLORS SHOWN ON THIS SHEET CONSIST OF BLACK TEXT, BORDER AND ARROWS ON A REFLECTORIZED ORANGE BACKGROUND.

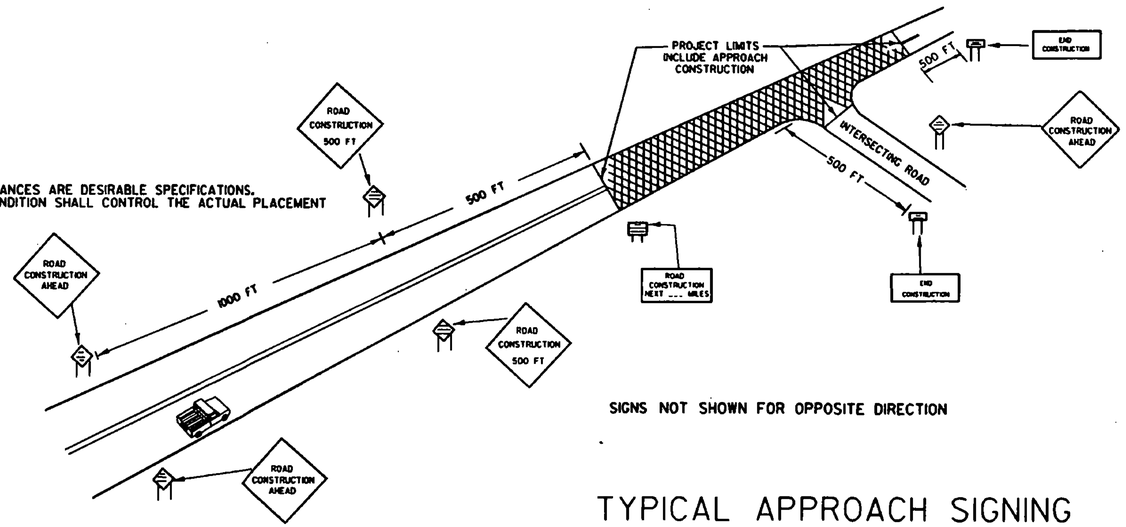
INSTALLATION
THE SIGNS SHALL BE IN PLACE AT THE TIME THE PROJECT OFFICIALLY COMMENCES, HOWEVER THE SIGNS SHALL BE COVERED UNTIL SUCH TIME AS THEY ARE ACTUALLY NEEDED. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER ON METAL POSTS SET SECURELY IN THE GROUND. THE BOTTOM OF A SIGN SHALL BE AT LEAST 5 FEET ABOVE ROAD LEVEL, AND THE NEAREST EDGE OF A SIGN SHALL BE AT LEAST 6 FEET OUTSIDE THE SHOULDER POINT OR 2 FEET OUTSIDE GUARD RAIL, CURBING OR SIDEWALK. THE INSTALLATION OF SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER. IN URBAN AREAS, THE BOTTOM OF THE SIGN SHALL BE AT LEAST 7 FEET ABOVE THE SIDEWALK.

MAINTENANCE
SIGNS SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. THEY SHALL BE COMPLETELY VISIBLE TO APPROACHING TRAFFIC AT ALL TIMES. THEY SHALL BE KEPT PLUMB AND LEVEL, AND ALWAYS PRESENT A NEAT APPEARANCE. DAMAGED, DEFACED OR DIRTY SIGNS SHALL BE REPAIRED, CLEANED OR REPLACED AS ORDERED BY THE ENGINEER.

GENERAL
THE COST OF FURNISHING, ERECTING, MAINTAINING AND REMOVING ALL CONSTRUCTION APPROACH SIGNS WILL BE CONSIDERED SUBSIDIARY WORK PERTAINING TO THE PROJECT AS A WHOLE AND SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE BID FOR VARIOUS ITEMS INVOLVED IN THE CONTRACT. DURING ALL PHASES OF CONSTRUCTION THE REQUIREMENTS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" SHALL BE MET (SEE STANDARD SPECIFICATIONS, SECTION 107.08). WHEN THE PROJECT IS CLOSED DOWN FOR TEMPORARY PERIODS THE SIGNS SHALL BE COVERED IN A WORKMANLIKE MANNER.

SIGN COVERS
SIGNS MAY BE ERECTED PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, BUT SHALL BE COVERED UNTIL SUCH A TIME AS CONSTRUCTION ACTIVITIES BEGIN. SIGN COVERS SHALL CONSIST OF A PANEL PAINTED FLAT BLACK, THE SAME SIZE AS THE SIGN IT COVERS. THE PANEL SHALL BE OF WOOD, PLYWOOD, HARDBOARD OR ANY MATERIAL SATISFACTORY TO THE ENGINEER. NO MATERIAL WILL BE APPROVED THAT WILL DETERIORATE BY EXPOSURE TO THE WEATHER DURING THE PROJECT. MOUNTING OF THE PANEL SHALL BE DONE IN SUCH A WAY AS NOT TO DAMAGE THE SIGN FACE MATERIAL.

CONTRACTORS SHALL COORDINATE THEIR SIGNING ACTIVITIES WITH OTHER CONTRACTORS WITHIN THE PROJECT LIMITS AS DIRECTED BY THE REGIONAL CONSTRUCTION ENGINEER.



SIGNS NOT SHOWN FOR OPPOSITE DIRECTION

TYPICAL APPROACH SIGNING

REVISIONS AND CORRECTIONS

APPROVED

SEPT. 10, 1987
DATE

David B. Kelley
CHIEF ENGINEER

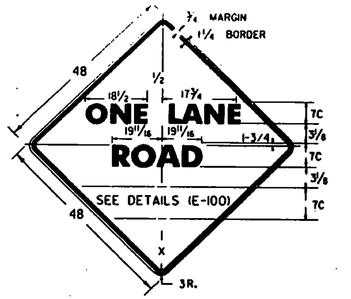
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

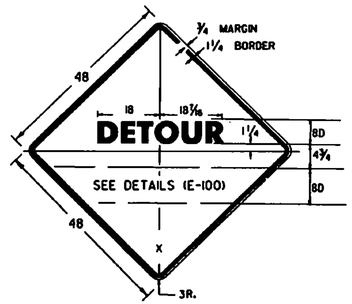
Gordon B. MacArthur
TRAFFIC AND SAFETY ENGINEER

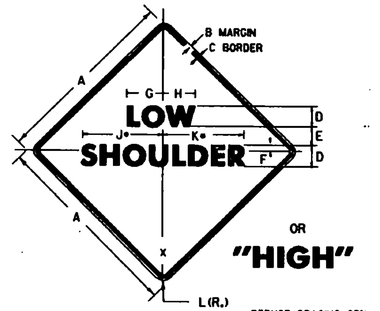
CONSTRUCTION APPROACH SIGNS

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-100

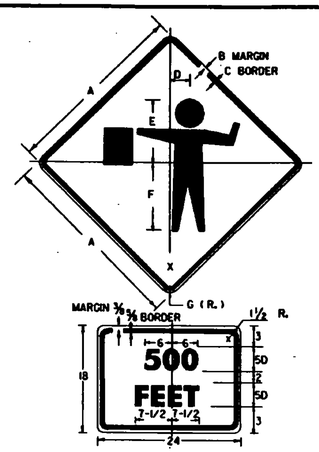


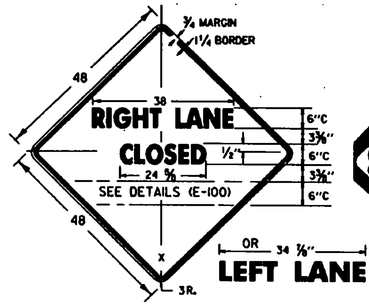


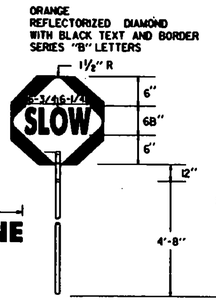


• REDUCE SPACING 25%

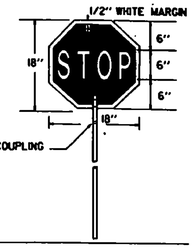
SIGN	DIMENSIONS(INCHES)										
	A	B	C	D	E	F	G	H	J	K	L
STD.	30	½	¾	5C	3	¾	5-3/16	5-5/8	13-11/16	13-1/16	1-7/8
FWY.	48	¾	1-1/4	8C	5	1-1/4	8-1/4	9	21-7/8	20-7/8	3





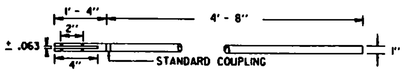


ORANGE REFLECTORIZED DIAMOND WITH BLACK TEXT AND BORDER SERIES "B" LETTERS



RED REFLECTORIZED OCTAGON WITH 6" SERIES "C" WHITE REFLECTORIZED TEXT

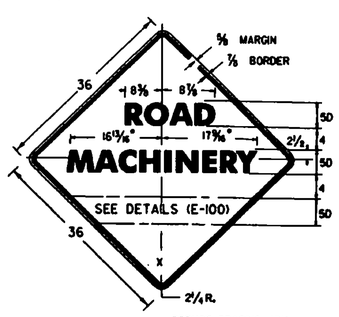
SIGN DETAIL



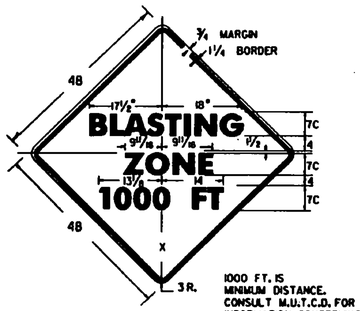
STAFF DETAIL

MATERIALS
THE SIGN MATERIALS SHALL BE 0.063" ALUMINUM WITH COLORS AS INDICATED ON DETAILS.
THE STAFF SHALL BE RIGID ALUMINUM CONDUIT OR TUBING WITH A WALL THICKNESS OF 0.125".

MOUNTING
THE STAFF SHALL BE MOUNTED WITH EITHER TWO 1/4" DIAMETER ALUMINUM BOLTS OR TWO 1/4" DIAMETER ALUMINUM RIVETS.

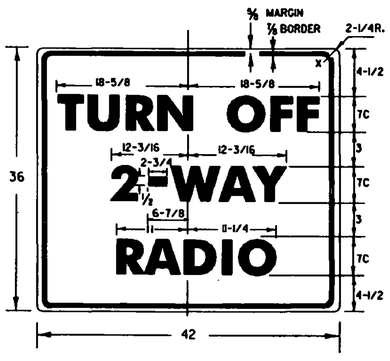


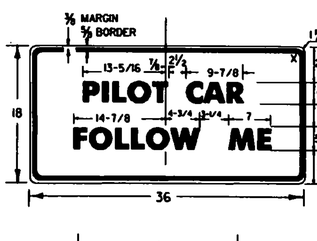
• REDUCE SPACING 40%

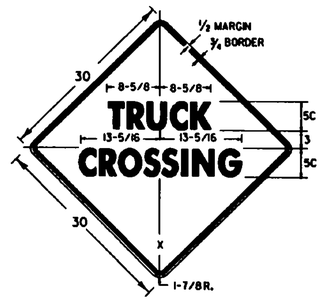


• REDUCE SPACING 40%

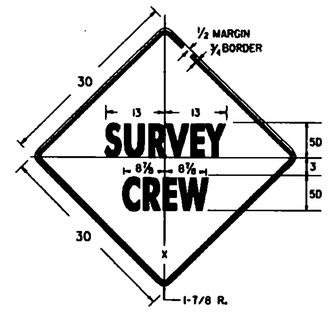
1000 FT. IS MINIMUM DISTANCE. CONSULT M.U.T.C.D. FOR INFORMATION CONCERNING BLASTING SIGNS.

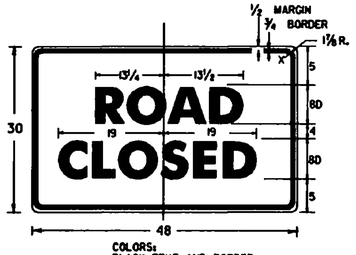




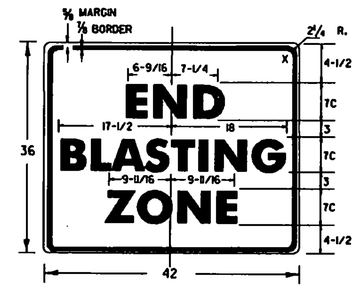


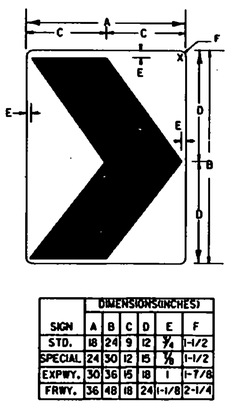
SIGN PADDLE FOR FLAGPERSON





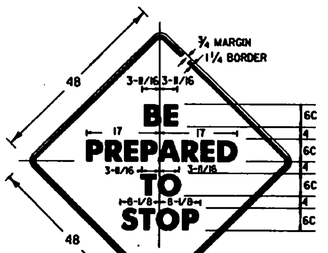
COLORS:
BLACK TEXT AND BORDER
WHITE REFLECTORIZED BACKGROUND

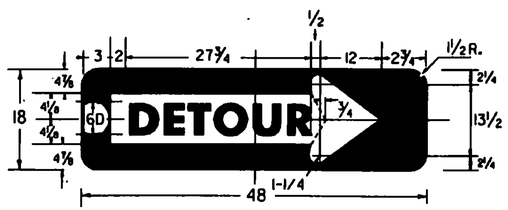




SIGN	DIMENSIONS(INCHES)					
	A	B	C	D	E	F
STD.	18	24	9	12	¾	1-1/2
SPECIAL	24	30	12	15	⅝	1-1/2
EXPWY.	30	36	15	18	1	1-7/8
FRWY.	36	48	18	24	1-1/8	2-1/4

COLORS
CHEVRON -BLACK
BACKGROUND-YELLOW(REFL.)





COLORS:
ORANGE ARROW

(ALL DIMENSIONS ARE IN INCHES)

NOTES

SEE STANDARD SHEET E-100 FOR NOTES AND TEXT DETAILS

COLORS FOR SIGNS SHOWN ON THIS SHEET SHALL BE BLACK TEXT, BORDER AND SYMBOLS ON A REFLECTORIZED (ENCAPSULATED LENS) ORANGE BACKGROUND, UNLESS OTHERWISE NOTED. THE EXCEPTIONS ARE THE CHEVRON, ROAD CLOSED, AND PADDLE SIGNS. SIGN DETAILS INDICATE THE APPROPRIATE COLOR.

EXISTING "BRIDGE" SIGNS MAY BE USED UNTIL THE SIGN NEEDS REPLACEMENT. NEW SIGNS SHALL SHOW REFERENCE TO "ROAD" CONSTRUCTION. HOWEVER, SIGN TEXT SHALL BE CONSISTENT THROUGHOUT THE PROJECT.

SIGNS USED ONLY FOR DAYTIME MAINTENANCE OPERATIONS DO NOT NEED TO BE REFLECTORIZED, HOWEVER, THESE SIGNS SHALL BE LABELED "DAYTIME USE ONLY" ON THE BACK OF THE SIGN PANEL WITH 3" SERIES C LETTERS.

REVISIONS AND CORRECTIONS

APPROVED

OCT. 30, 1987
DATE

David B. Kelley
CHIEF ENGINEER

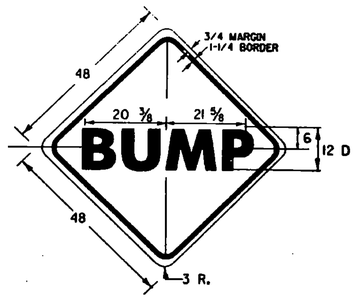
Arthur J. Gosse
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

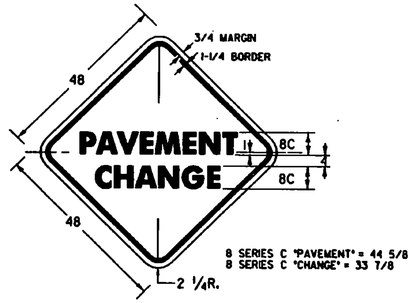
Gordon R. MacArthur
TRAFFIC AND SAFETY ENGINEER

CONSTRUCTION SIGN DETAILS

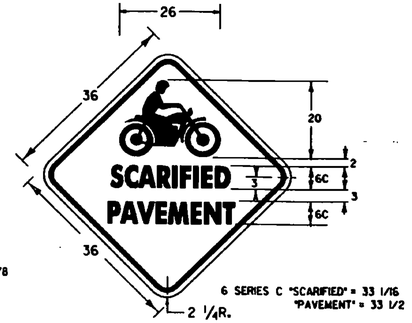
VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-101

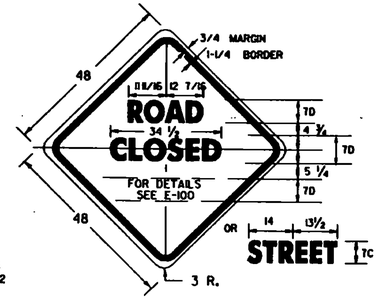


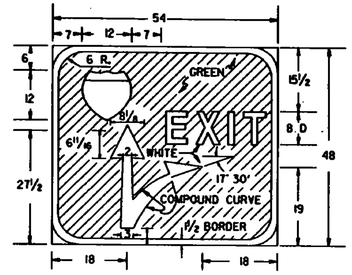


8 SERIES C "PAVEMENT" = 44 5/8
8 SERIES C "CHANGE" = 33 7/8



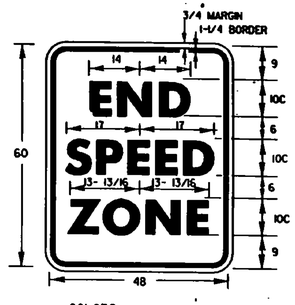
6 SERIES C "SCARIFIED" = 33 1/16
"PAVEMENT" = 33 1/2



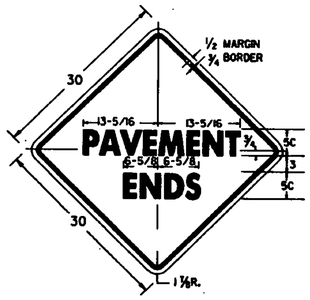


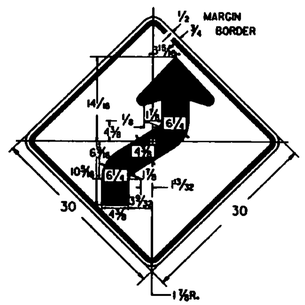
COLORS:
BACKGROUND - GREEN (REFL.)
BORDER, ARROW AND LEGEND - WHITE (REFL.)
SHIELD - BORDER - WHITE (REFL.)

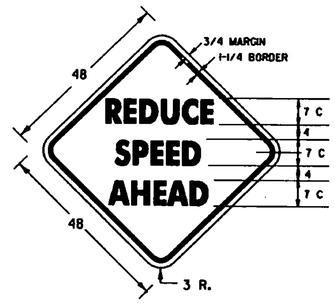
TOP PORTION - RED (REFL.)
BOTTOM PORTION - BLUE (REFL.)
SHIELD DIMENSION REDUCED FROM DETAILS SHOWN ON STD. SHEET E-135.

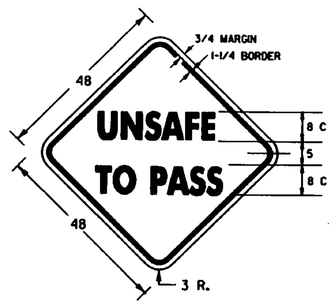


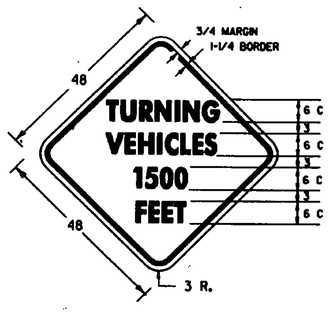
COLORS:
TEXT AND BORDER - BLACK
BACKGROUND - WHITE (REFL.)

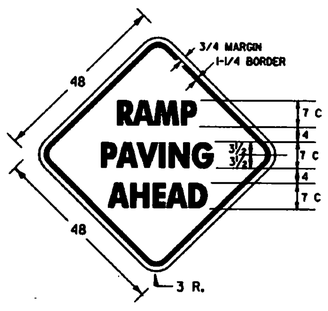


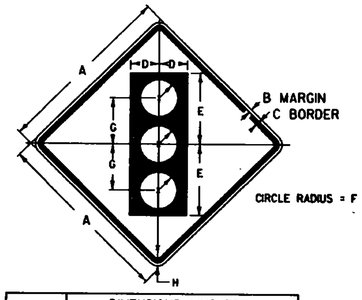








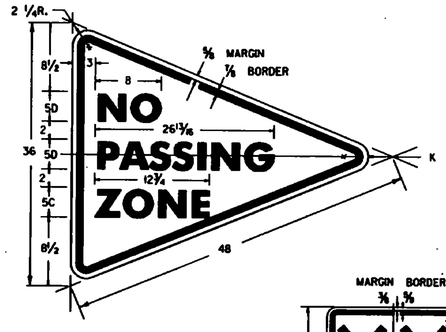


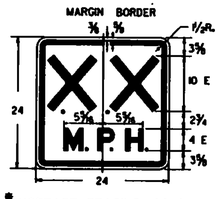


SIGN	DIMENSIONS (INCHES)							
	A	B	C	D	E	F	G	H
STD. & MIN.	36	5/8	1/8	5 3/4	15 3/4	4 1/4	10	2 1/4
SPECIAL	48	3/4	1 1/4	7 1/2	20	5	12 1/2	3

COLORS

SYMBOL & LEGEND - BLACK (NON-REFL) BOTTOM CIRCLE GREEN (REFL)
TOP CIRCLE RED (REFL) BACKGROUND - ORANGE (REFL)





*INCREASE SPACING 100 %

NOTES

SEE STANDARD SHEET E-100 FOR NOTES AND TEXT DETAILS

COLORS FOR SIGNS SHOWN ON THIS SHEET SHALL BE BLACK TEXT, BORDER AND SYMBOLS ON A REFLECTORIZED (ENCAPSULATED LENS) ORANGE BACKGROUND, UNLESS OTHERWISE NOTED.

SIGNS USED ONLY FOR DAYTIME MAINTENANCE OPERATIONS DO NOT NEED TO BE REFLECTORIZED, HOWEVER, THESE SIGNS SHALL BE LABELED "DAYTIME USE ONLY" ON THE BACK OF THE SIGN PANEL WITH 3" SERIES C LETTERS.

REVISIONS AND CORRECTIONS

APPROVED

OCT. 30, 1987
DATE

David B Kelley
CHIEF ENGINEER

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Gordon B. MacArthur
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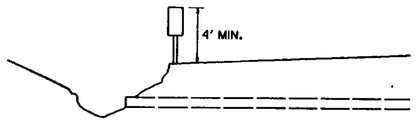
CONSTRUCTION SIGN DETAILS

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-102

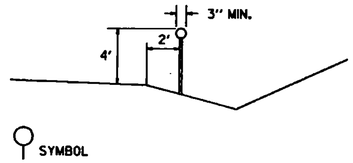
DELINEATOR AND OBJECT MARKER DETAILS FOR CONSTRUCTION AREAS WHERE TRAFFIC IS MAINTAINED



OBJECT MARKER TYPICAL

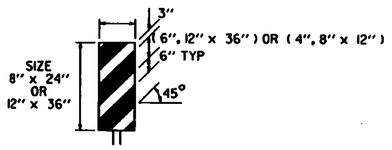
OBJECTS ADJACENT TO THE ROADWAY SHALL REQUIRE A OBJECT MARKER TO MARK THE OBSTRUCTION. IN SOME CASES THERE MAY NOT BE A PHYSICAL OBJECT INVOLVED BUT OTHER ROADSIDE CONDITIONS SUCH AS NARROW SHOULDER DROP-OFFS. GORES, D.I. EXCAVATIONS OR ABRUPT CHANGE IN THE ROADWAY ALIGNMENT MAY MAKE IT UNDESIRABLE FOR 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 ARE 1' x 3' AND YELLOW WITH BLACK STRIPES WITH A DESIGN SIMILAR TO THE 12" x 36" VERTICAL PANEL.



DELINEATOR TYPICAL

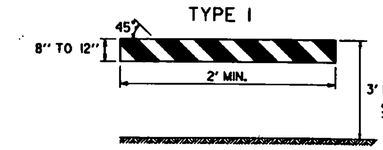
DELINEATORS SHALL BE REFLECTORIZED WHITE IN COLOR. THEY SHALL HAVE A MINIMUM OF 7 SQUARE INCHES. THEY MAY BE ROUND, SQUARE, OR OBLONG.

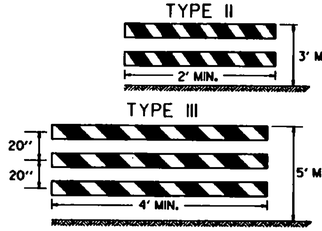


VERTICAL PANEL

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

BARRIER CHARACTERISTICS





BARRICADE CHARACTERISTICS	I	II	III
WIDTH OF RAIL	8" MIN 12" MAX	8" MIN 12" MAX	8" MIN 12" MAX
LENGTH OF RAIL	2' MIN.	2' MIN.	4' MIN.
WIDTH OF STRIPES*	6"	6"	6"
HEIGHT	3' MIN.	3' MIN.	5' MIN.
TYPE OF FRAME	LIGHT 'A' FRAME NO STAY BRACE	LIGHT 'A' FRAME NO STAY BRACE	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

* FOR RAILS LESS THAN 3 FEET LONG 4" WIDE STRIPES SHALL BE USED.

BARRICADES

APPLICATION NOTES

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

TYPE II BARRICADES ARE TO BE USED ON EXPRESSWAYS AND FREEWAYS, SERVING THE SAME FUNCTONS AS THE TYPE I BARRICADES.

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

MATERIALS

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

1. WOODEN BARRICADES (TYPES 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 MILES PER HOUR ARE EXPECTED UNLESS INSTALLED FOR PEDESTRIAN CONTROL BEHIND APPROVED POSITIVE BARRIERS.
   - B. MAY BE USED IF OPERATING SPEEDS OF 20 M.P.H. OR LESS ARE EXPECTED.
2. TYPE III WOODEN BARRICADES SHALL NOT BE USED WITHIN THE CLEAR ZONE OF ANY HIGHWAY REGARDLESS OF THE TRAFFIC OPERATING SPEED.

DESIGN

THE DESIGN OF THE BARRICADES SHALL CONFORM WITH THE DETAILS SHOWN ON THIS SHEET AND THE MARKINGS ON THE BARRICADES SHALL BE ALTERNATE ORANGE AND WHITE STRIPES (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS.

COLORS

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

REFLECTORIZATION

THE BARRICADES SHALL BE REFLECTORIZED WITH REFLECTIVE SHEETING.

LOCATION

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

MAINTENANCE

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

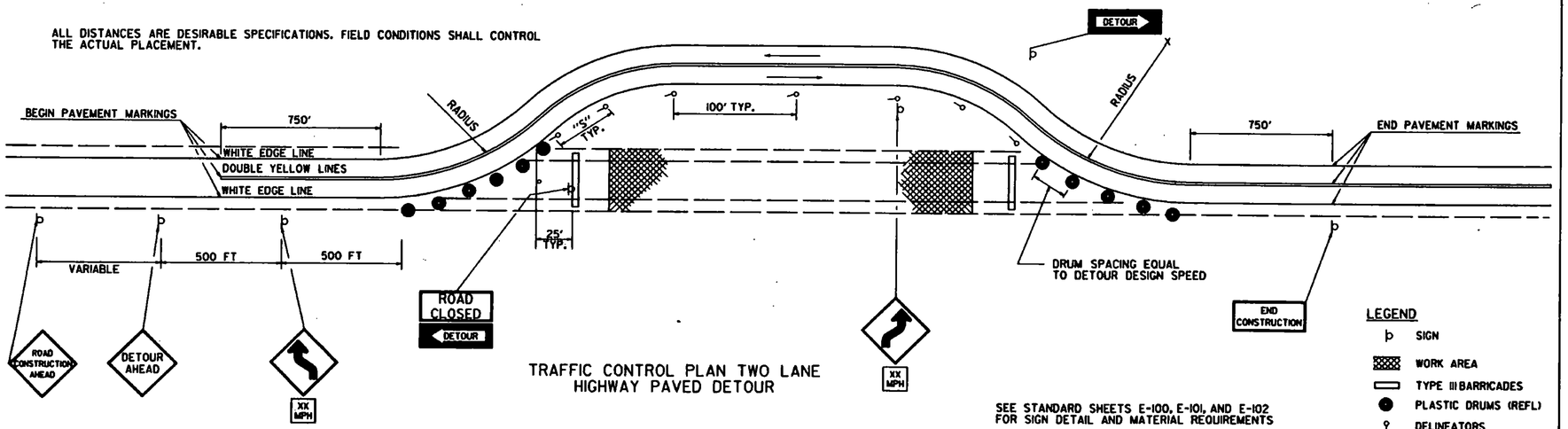
LIGHTING

FOR NIGHTTIME USE ADD FLASHING WARNING LIGHTS WHEN BARRICADES ARE USED SINGLY AND STEADY BURN LIGHTS WHEN BARRICADES ARE USED IN A SERIES FOR CHANNELIZATION. THE LIGHTING DEVICES SHALL CONFORM TO THOSE SPECIFIED IN THE M.U.T.C.D.

DETOUR DESIGN SPEED MPH	RADIUS FT	SPACING - "S" FT
25	150	30
30	250	40
40	460	60
50	760	75

1. SIGNS AND DELINEATION SHOWN FOR ONE DIRECTION OF TRAFFIC ONLY.
2. CHANNELIZING DEVICES SHALL CONSIST OF TYPE II BARRICADES WITH STEADY BURN LIGHTS EXCEPT ON THE FIRST AND LAST BARRICADES WHICH SHALL HAVE A FLASHING LIGHT.
3. FLASHING WARNING LIGHTS MAY BE USED TO CALL ATTENTION TO THE EARLY WARNING SIGNS.
4. CONTRACTOR IS RESPONSIBLE FOR PAVEMENT MARKING AND SHALL REMOVE ANY CONFLICTING OR CONFUSING EXISTING MARKINGS.
5. ADDITIONAL SIGNING MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER.
6. UNPAVED DETOURS REQUIRE PAVEMENT MARKINGS FOR TRANSITIONS ON EXISTING PAVEMENT.

ALL DISTANCES ARE DESIRABLE SPECIFICATIONS. FIELD CONDITIONS SHALL CONTROL THE ACTUAL PLACEMENT.



TRAFFIC CONTROL PLAN TWO LANE HIGHWAY PAVED DETOUR

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

REVISIONS AND CORRECTIONS

APPROVED

SEPT. 10, 1987
DATE

David B. Kelley
CHIEF ENGINEER

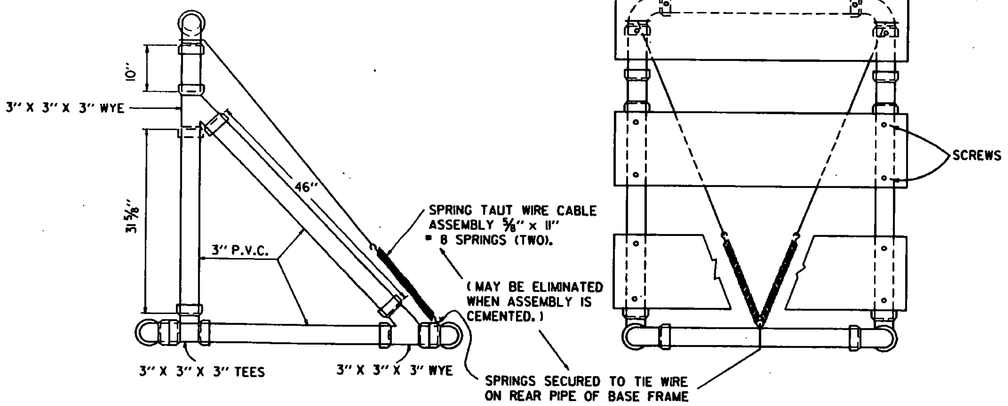
Arthur Gross
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

Gordon B. MacArthur
TRAFFIC AND SAFETY ENGINEER

DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS

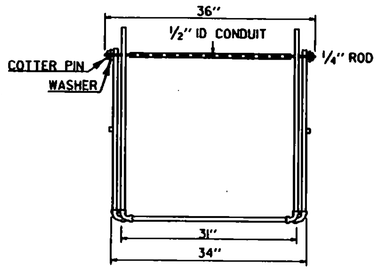
VERMONT AGENCY OF TRANSPORTATION

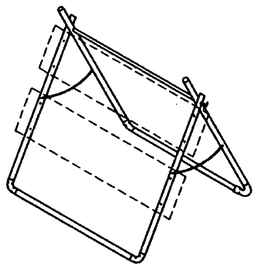
STANDARD
E-107

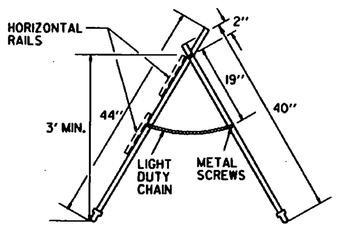


SIDE VIEW
TYPE III BARRICADE

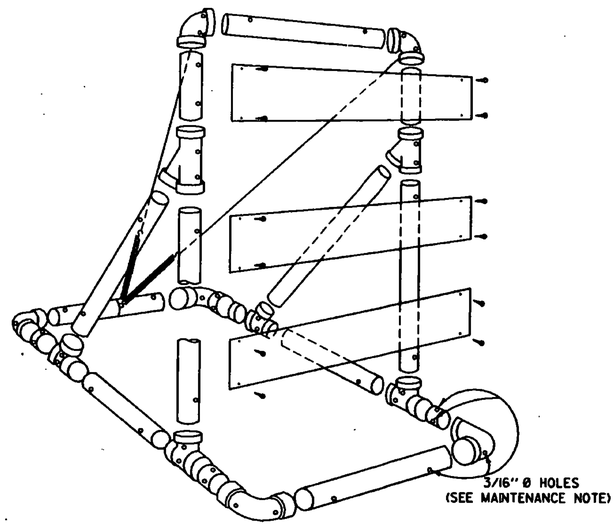
FRONT VIEW
TYPE III BARRICADE



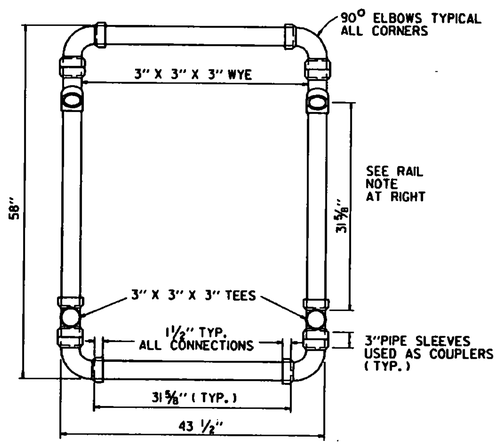




TYPE I AND II BARRICADE DETAIL



TYPE III BARRICADE ASSEMBLY
EXPLODED VIEW



TYPE III BARRICADE

TOP VIEW OF
BASE

MATERIALS

THE PIPE, WYES, TEES AND ELBOWS USED TO CONSTRUCT BARRICADES SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 2241 FOR P.V.C. 1120 OR 1220 SDR-21, PRESSURE RATING 200 PSI. THE WYES, TEES AND ELBOWS SHALL CONFORM TO THE REQUIREMENTS OF ASTM DESIGNATION D 2466, TYPE II, GRADE I. ALL JOINTS SHALL BE SLIP-FIT AND MAY BE LIGHTLY CEMENTED. THE BARRICADE RAILS SHALL BE FABRICATED FROM 0.025" ANODIZED, ALUMINUM AND SHALL HAVE REFLECTORIZED ALTERNATING ORANGE AND WHITE STRIPS (SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION TRAFFIC IS TO PASS).

MAINTENANCE

BARRICADES SHALL BE MAINTAINED IN CLEAN CONDITION SATISFACTORY TO THE ENGINEER. THEY SHALL BE COMPLETELY VISIBLE TO APPROACHING TRAFFIC AT ALL TIMES. DAMAGED, DEFACED, OR DIRTY BARRICADES SHALL BE REPAIRED, CLEANED OR REPLACED AS ORDERED BY THE ENGINEER. THE P.V.C. PIPE AND FITTINGS SHALL BE WHITE IN COLOR. AT LEAST TWO (2) HOLES SHALL BE DRILLED (3/16") IN EACH SECTION OF PIPE AND FITTINGS IF THE ASSEMBLY IS NOT CEMENTED.

BARRICADES SHALL BE STABILIZED WITH SAND BAGS OF MINIMUM WEIGHT WHICH WILL NOT CONSTITUTE A HAZARD IF THE BARRICADE IS HIT. THESE SHALL BE PLACED ONLY ON THE FRONT AND REAR PIPES OF THE BASE FRAME OF THE BARRICADE. SAND BAG STABILIZERS SHALL BE SO PLACED AS NOT TO BE A HAZARD TO VEHICLES PASSING ON EITHER SIDE. IF BARRICADE REPLACEMENT COSTS CAN BE CONSIDERED NEGLIGIBLE, GLUED JOINTS MAY PROVIDE ADDITIONAL STABILITY TO THE INSTALLATION.

TYPE I BARRICADES SHALL UTILIZE ONE HORIZONTAL RAIL.

TYPE II BARRICADES SHALL CONSIST OF AN ADDITIONAL HORIZONTAL RAIL MOUNTED BELOW THE OTHER.

TYPE III BARRICADES (MODIFIED) SHALL CONSIST OF THE BREAKAWAY 3" PVC DESIGN SHOWN ON THIS SHEET WITH THE TWO RAIL LAYOUT DETAILED BELOW.

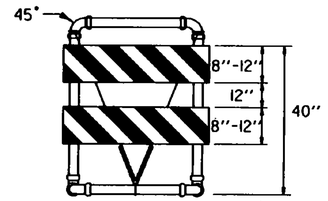
SEE STD E-107 FOR ADDITIONAL INFORMATION.

MATERIALS FOR TYPE I AND II BARRICADES

20' - 1" PVC
4 - 1" PVC 90° ELBOWS
30" - 1/2" ID THINWALL CONDUIT
36" - 1/4" STEEL ROD
4 - 1" WASHERS
24" - LIGHT DUTY CHAIN
METAL SCREWS (AS REQUIRED)
2 - 3/4" COTTER PINS

MATERIALS FOR TYPE III BARRICADE

30' - 3" I.D. PVC PIPE
6 - 3" 90° ELBOWS
2 - 3" TEES
4 - 3" WYES
4 - 8" x 48" x 0.025" BARRICADE RAILS
2 - 5/16 " x 11" @ 8 SPRING (IF ASSEMBLY IS NOT CEMENTED)
12 - 1" @ 14 PAN HEAD METAL SCREWS
15 LF - @ 14 BLACK ANNEALED TIE WIRE (IF ASSEMBLY IS NOT CEMENTED)



TYPE III (MODIFIED) BARRICADE
(STRIPING DOWN WHERE TRAFFIC PASSES ON RIGHT).

SEE STANDARD E-107 FOR RAIL DETAILS.
RAILS ATTACHED WITH 1" NO. 14 PAN HEAD METAL SCREWS.

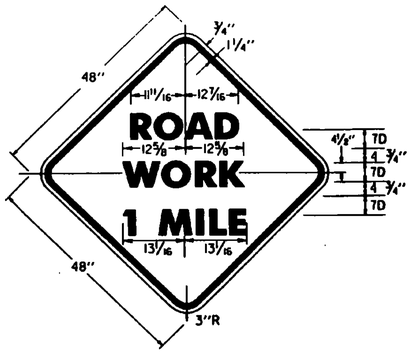
REVISIONS AND CORRECTIONS

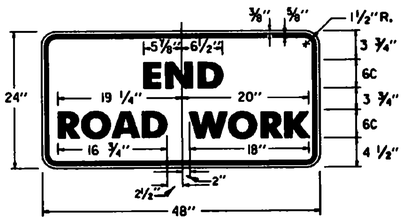
APPROVED SEPT. 10, 1987
DATE
David W Kelley
CHIEF ENGINEER
Arthur Gove
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION
Gordon B. MacArthur
TRAFFIC AND SAFETY ENGINEER

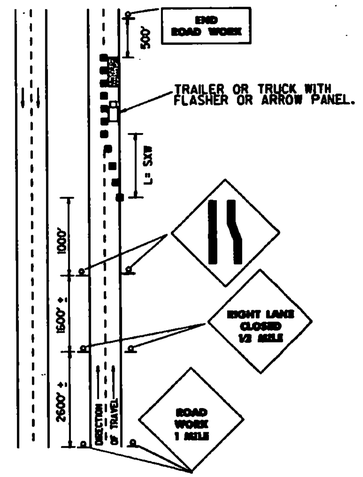
BREAKAWAY BARRICADE DETAILS

VERMONT AGENCY OF TRANSPORTATION

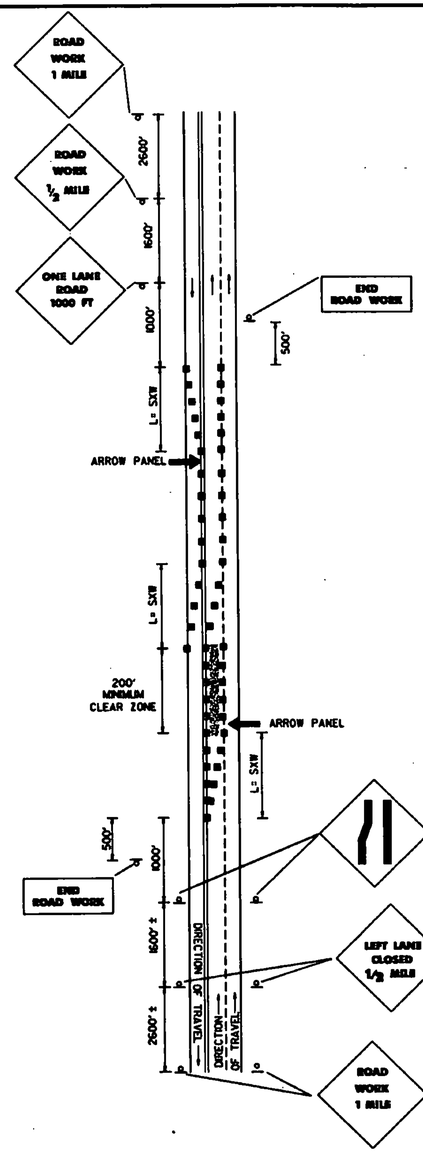
STANDARD
E-107a



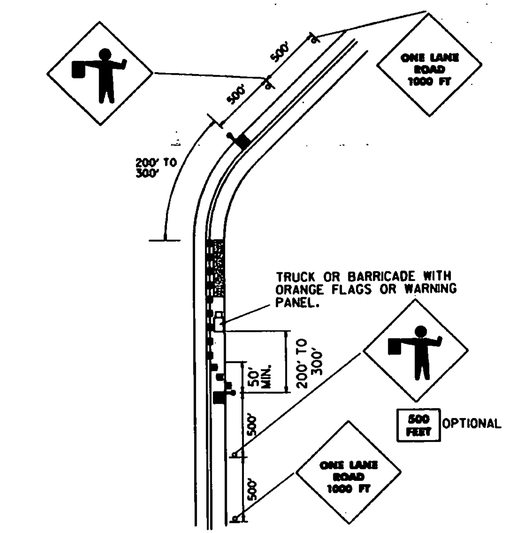




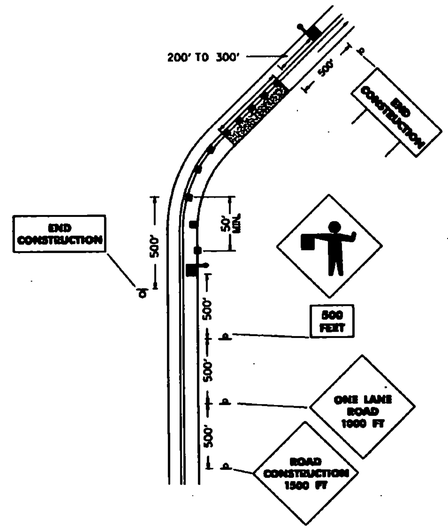
TYPICAL APPLICATION - DAYTIME MAINTENANCE OPERATIONS OF SHORT DURATION ON A 4-LANE DIVIDED ROADWAY WHERE HALF OF ROADWAY IS CLOSED.



TYPICAL APPLICATION - DAYTIME MAINTENANCE OPERATION OF SHORT DURATION ON A 3 LANE ROADWAY WHERE CENTER LANE IS USED FOR OPPPOSING TRAFFIC



TYPICAL APPLICATION - DAYTIME MAINTENANCE OPERATIONS OF SHORT DURATION ON A 2-LANE ROADWAY WHERE FLAGGING IS PROVIDED.



TYPICAL APPLICATIONS OF TRAFFIC CONTROL DEVICES ON 2-LANE HIGHWAY WHERE ONE LANE IS CLOSED AND FLAGGING IS PROVIDED.

NOTES:

REFLECTORIZATION

ALL SIGNS INTENDED TO BE USED DURING THE HOURS OF DARKNESS SHALL BE EITHER REFLECTORIZED OR ILLUMINATED TO SHOW APPROXIMATELY THE SAME SHAPE AND COLOR DAY AND NIGHT. CONES USED FOR TRAFFIC CONTROL AT NIGHT SHALL HAVE A MINIMUM 6" WIDE WHITE REFLECTORIZED BAND PLACED A MAXIMUM OF 2" FROM THE TOP.

COLORS

THE WARNING SIGNS SHOWN ON THIS SHEET SHALL HAVE BLACK TEXT, BORDER, AND SYMBOLS ON AN ORANGE BACKGROUND. THE TEXT AND BORDERS MAY BE SCREENED, LETTERING FILM, OR HAND PAINTED. THE ORANGE SHALL CONFORM WITH THE STANDARD COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

TEXT DESIGN

LETTERS, DIGITS, SPACING, AND TEXT DIMENSIONS SHALL CONFORM WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS" AS REFERENCED IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".

SPECIFICATIONS

WARNING SIGNS SHALL MEET THE STANDARD STATE SPECIFICATIONS FOR TRAFFIC SIGNS.

SIGN BASE MATERIAL

THE SIGN BASE MATERIAL USED FOR THE WARNING SIGNS ON THIS SHEET MAY BE OF ANY OF THE FOLLOWING, WITH MINIMUM THICKNESS AS NOTED:

FLAT SHEET ALUMINUM	0.025	INCHES
HIGH DENSITY OVERLAYED PLYWOOD	3/4	INCHES
GALVANIZED SHEET STEEL	12	GAGE

1. SIGNS WITH "ROAD CONSTRUCTION 1500 FT" AND "END CONSTRUCTION" TEXT SHALL BE USED WHEN THE WORK IS NOT COMPLETE AND A HAZARD REMAINS OVERNIGHT.
2. FLAGPERSON SHALL USE THE SIGN PADDLE DETAIL ON STANDARD SHEET E-102.
3. ALL SIGNS SHALL BE COVERED OR REMOVED AT THE END OF THE WORKING DAY UNLESS REQUIRED FOR THE PROTECTION AND SAFETY OF THE TRAVELING PUBLIC..
4. INSTALLATION: SIGNS AND BARRICADES SHALL BE IN PLACE PRIOR TO THE START OF THE MAINTENANCE OPERATION TO WHICH THEY APPLY AND SHALL BE REMOVED PROMPTLY WHEN THE NEED NO LONGER EXISTS. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER ON WOOD OR METAL POSTS SET SECURELY IN THE GROUND, OR ON PORTABLE SUPPORTS FOR TEMPORARY USE, OR ON BARRICADES WHEN APPROPRIATE. AS A GENERAL RULE, ROADSIDE SIGNS SHALL BE 5 FEET ABOVE ROAD LEVEL WITH THE NEAREST EDGE AT LEAST 6 FEET OUTSIDE THE SHOULDER POINT. THE INSTALLATION OF SIGNS AND BARRICADES SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
5. ALTHOUGH LISTED AS A MAINTENANCE OPERATION STANDARD SIGN SHEET, THE APPROACH SIGNS SHOWN SHALL BE USED BY CONTRACTORS WHEN WORKING WITHIN OR OUTSIDE PROJECT LIMITS.
6. ALL DISTANCES ARE DESIRABLE SPECIFICATIONS. FIELD CONDITION SHALL CONTROL THE ACTUAL PLACEMENT.
7. SIGN DETAILS NOT SHOWN ON THIS SHEET CAN BE FOUND ON STANDARD SHEETS E-100, E-101, AND E-102.
8. TAPER FORMULA
   L=SXW FOR SPEEDS OF 45 OR MORE.
   $L = \frac{WS^2}{60}$ FOR SPEEDS OF 40 OR LESS.
   WHERE
   L=MINIMUM LENGTH OF TAPER.
   S=NUMERICAL VALUE OF POSTED SPEED LIMIT PRIOR TO WORK OR 85 PERCENTILE SPEED.
   W=WIDTH OF OFFSET.
9. THE MAXIMUM SPACING BETWEEN CHANNELIZING DEVICES IN A TAPER SHOULD BE APPROXIMATELY EQUAL IN FEET TO THE SPEED LIMIT.
10. FLOOD LIGHTS SHOULD BE PROVIDED TO MARK FLAGPERSON STATIONS AT NIGHT AS NEEDED.
11. IF ENTIRE WORK AREA IS VISIBLE FROM ONE STATION, A SINGLE FLAGPERSON MAY BE USED.
12. CHANNELIZING DEVICES ARE TO BE EXTENDED TO A POINT WHERE THEY ARE VISIBLE TO APPROACHING TRAFFIC.

KEY:
- FLAGPERSON
- CHANNELIZING DEVICES

REVISIONS AND CORRECTIONS

APPROVED

SEPT. 10, 1987
DATE

David B. Kelley
CHIEF ENGINEER

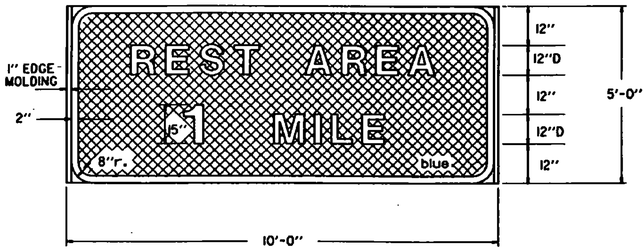
Arthur J. Gross
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

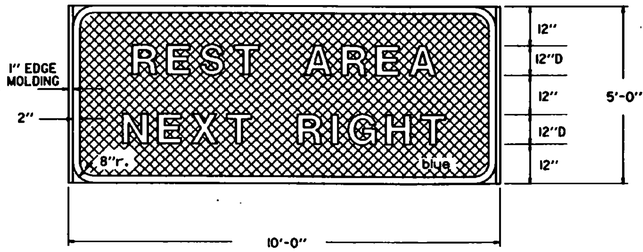
Gordon S. MacArthur
TRAFFIC AND SAFETY ENGINEER

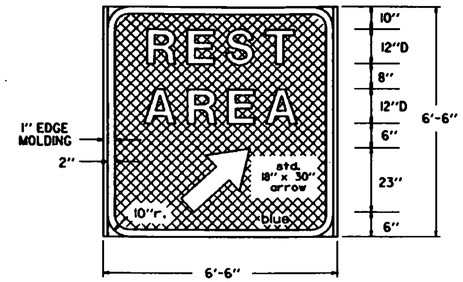
MAJOR MAINTENANCE OPERATION
LANE CLOSURE

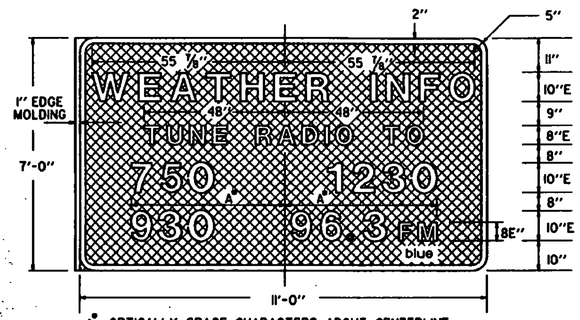
VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-110

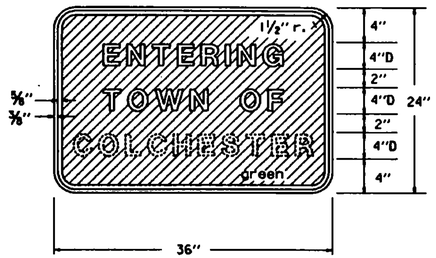


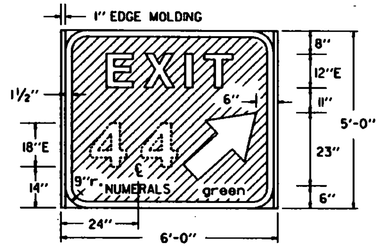


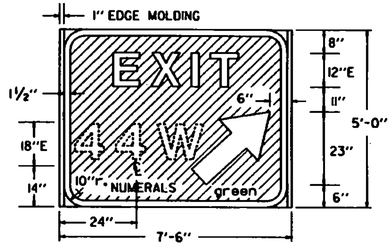




A OPTICALLY SPACE CHARACTERS ABOUT CENTERLINE. ACTUAL DIMENSIONS VARY.

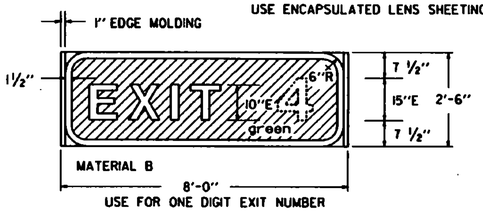




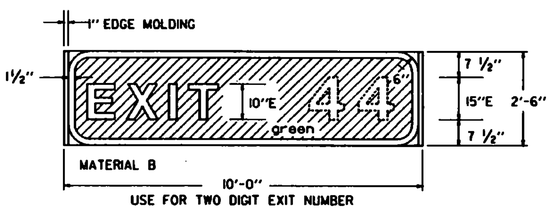


USE ENCAPSULATED LENS SHEETING OR EQUIVALENT

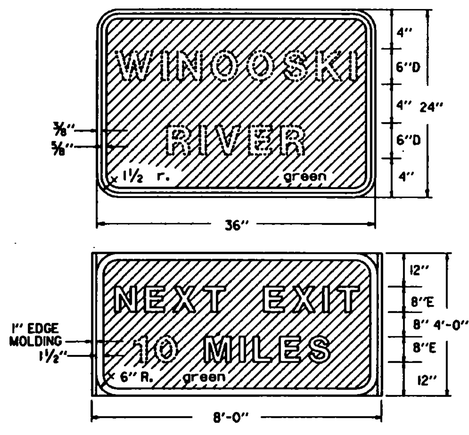
NOTE: DOTTED LINES AND NUMERALS INDICATE TEXT THAT VARIES.



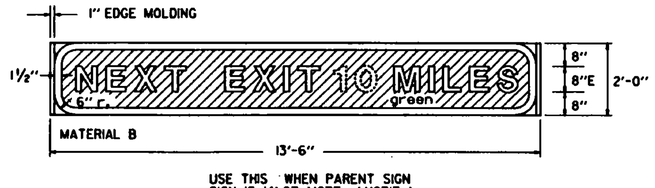
USE FOR ONE DIGIT EXIT NUMBER



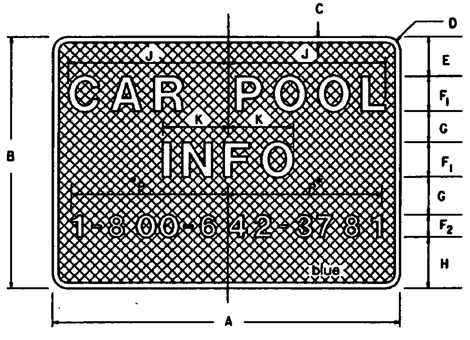
USE FOR TWO DIGIT EXIT NUMBER



USE THIS SIGN WHEN PARENT SIGN IS LESS THAN 14' (HORIZ.)



USE THIS WHEN PARENT SIGN SIGN IS 14' OR MORE (HORIZ.)



* REDUCE NUMERAL TO NUMERAL SPACING 20 %. TOTAL DASH SPACE : FWY. 3 1/2 ; STD. 3 1/8.

SIGN	DIMENSIONS (INCHES)													
	A	B	C	D	E	F1	F2	G	H	J	K	L	M	N	P
STD. AND EXPWY.	54	42	3/4	1 1/4	6	6E	6C	5	8	20 5/8	8 5/8	6 3/4	1	1/8	24
FWY.	72	54	1 1/4	1 3/4	8	8E	8C	6	10	31 5/8	13 1/4	8 1/2	1 1/2	1/2	32

MATERIALS

THE SIGN BASE MATERIAL USED FOR THE GUIDE SIGNS ON THIS SHEET MAY BE ANY OF THE FOLLOWING EXCEPT AS NOTED:

A - HIGH DENSITY OVERLAID PLYWOOD, 3/4" MINIMUM THICKNESS WITH REFLECTIVE SHEETING. (MAY BE USED FOR TYPE A SIGNS ONLY)

B - EXTRUDED ALUMINUM PANELS, WITH REFLECTIVE SHEETING.

C - FORMED GALVANIZED STEEL PANELS, WITH REFLECTIVE SHEETING.

TEXT AND BORDER

THE MATERIAL FOR THE TEXT AND BORDER AND SYMBOLS OF THESE SIGNS SHALL BE OF FLAT SHEET ALUMINUM 0.040 THICKNESS WITH WHITE OR SILVER ENCAPSULATED SHEETING.

COLORS

THE SIGNS SHALL HAVE A REFLECTORIZED WHITE TEXT ON A REFLECTORIZED GREEN OR BLUE BACKGROUND AS INDICATED FOR EACH SIGN. THE GREEN AND BLUE SHALL CONFORM WITH THOSE FOUND IN STANDARD COLOR TOLERANCE CHARTS AS APPROVED BY THE U.S. DEPT. OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

LETTERING

LETTERS AND DIGITS SHALL CONFORM WITH THE REQUIREMENTS FOUND IN THE PUBLICATION "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" PRINTED BY THE FEDERAL HIGHWAY ADMINISTRATION.

DESIGNS

THE DESIGN OF THESE SIGNS SHALL CONFORM WITH THE DETAILS SET FORTH IN THE MANUAL "STANDARD HIGHWAY SIGNS" AS SPECIFIED IN "THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."

SPECIFICATIONS

THE SIGNS SHALL MEET THE STANDARD STATE SPECIFICATIONS FOR "TRAFFIC SIGNS."

REVISIONS AND CORRECTIONS

APPROVED

SEPT. 10, 1987
DATE

David B Kelley
CHIEF ENGINEER

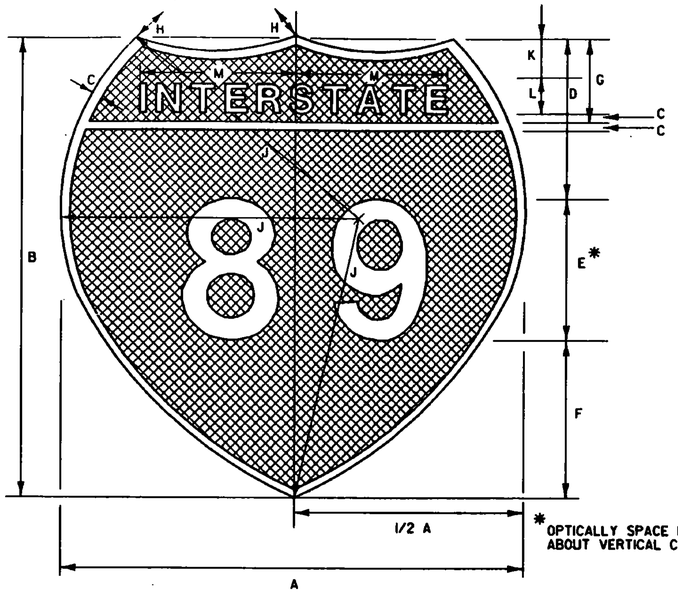
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

Gordon B. MacArthur
TRAFFIC AND SAFETY ENGINEER

GUIDE SIGN DETAILS

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-131



TYPICAL SIGN TEXTS

INTERSTATE SHIELD FOR INDEPENDENT AND GUIDE SIGN USE

SIGN	DIMENSIONS (INCHES)											
	A	B	C	D	E	F	G	H	J	K	L	M
1,2-DIGITS	24	24	1/2	6 1/2	12 D	5 1/2	5	15	15	2	2 1/2C	7 13/16
1,2-DIGITS	36	36	3/4	9 3/4	18 D	8 1/4	7 1/2	22 1/2	22 1/2	3	3 3/4C	8 1/16
1,2-DIGITS	48	48	1	13	24 D	11	10	30	30	4	5C	15 5/16
3-DIGITS	30	24	1/2	6 1/2	12 D	5 1/2	5	24	17	2	2 1/2C	7 13/16
3-DIGITS	45	36	3/4	9 3/4	18 D	8 1/4	7 1/2	36	25 1/2	3	3 3/4C	8 1/16
3-DIGITS	60	48	1	13	24 D	11	10	48	34	4	5C	15 5/16

COLORS

LEGEND -WHITE (REFL)
TOP -RED (REFL)
BOTTOM -BLUE (REFL)

MATERIALS

THE SIGN BASE MATERIAL MAY BE ANY OF THE OF THE FOLLOWING, OF THE MINUMUM THICKNESS NOTED:

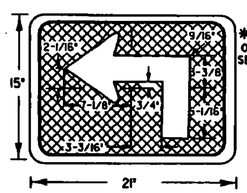
FLAT SHEET ALUMINUM

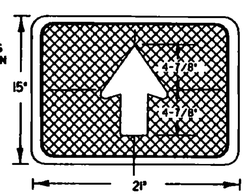
24" X 24"	0.080"
36" X 36"	0.100"
WHEN USED ON GUIDE SIGNS	0.060"

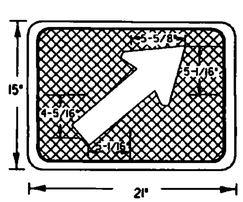
GALVANIZED FLAT SHEET STEEL

24" X 24"	16 GAGE
36" X 36"	14 GAGE

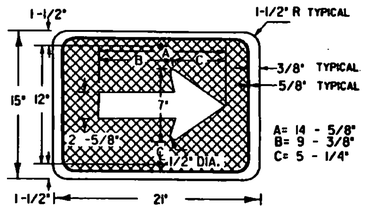
THE REFLECTIVE MATERIAL SHALL BE ENCAPSULATED LENS SILVER REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND OF THE MARKER. THE TEXTS OF THE INTERSTATE ROUTE MARKERS, AND OF THE AUXILIARY MARKERS EXCEPT TRAILBLAZER AUXILIARIES, SHALL BE REVERSE SCREENED.

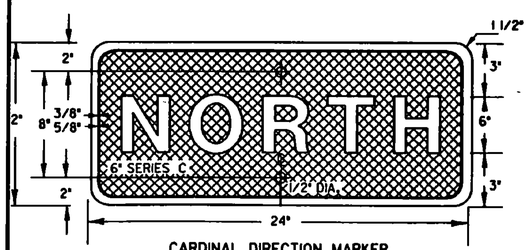




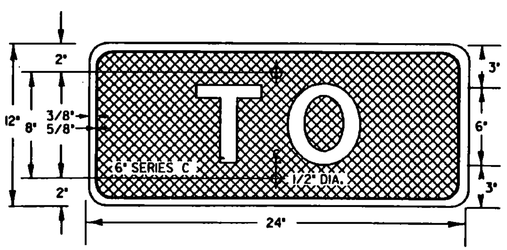


DIRECTION ARROW OR ADVANCE TURN ARROW

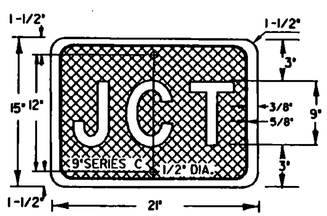




CARDINAL DIRECTION MARKER
LEGEND MAY ALSO BE SOUTH, EAST, OR WEST



TRAILBLAZER



JUNCTION MARKER

COLORS

THE OFFICIAL INTERSTATE ROUTE MARKER SHALL HAVE A REFLECTORIZED WHITE OR SILVER TEXT AND BORDER ON A REFLECTORIZED RED AND BLUE BACKGROUND. AUXILIARY MARKERS USED WITH INTERSTATE ROUTE MARKERS SHALL HAVE A REFLECTORIZED WHITE AND SILVER TEXT AND BORDER ON A REFLECTORIZED BLUE BACKGROUND.

THE RED AND BLUE SHALL CONFORM WITH THE STANDARD COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE U.S. DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

LETTERING

LETTERS AND DIGITS SHALL CONFORM WITH THE "STANDARD ALPHABETS FOR HIGHWAY SIGNS" APPROVED BY THE NATIONAL JOINT COMMITTEE ON UNIFORM TRAFFIC CONTROL DEVICES.

SPECIFICATIONS

INTERSTATE ROUTE MARKERS AND AUXILIARY ROUTE MARKERS SHALL MEET THE STANDARD STATE SPECIFICATIONS FOR "TRAFFIC SIGNS."

DESIGNS

THE DESIGNS OF INTERSTATE ROUTE MARKERS AND AUXILIARY MARKERS SHALL CONFORM WITH THE REQUIREMENTS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICALS.

REVISIONS AND CORRECTIONS

APPROVED

SEPT. 10, 1987
DATE

David K. Kelley
CHIEF ENGINEER

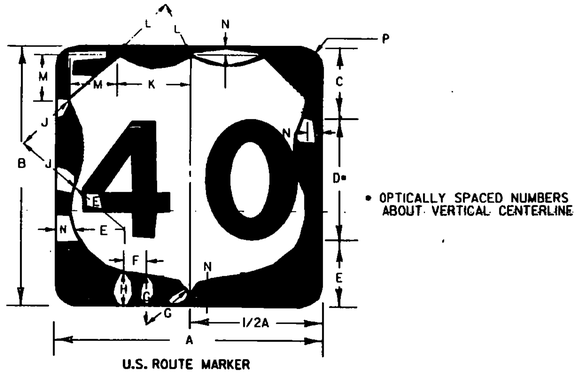
Arthur J. Gross
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

Gordon D. MacArthur
TRAFFIC AND SAFETY ENGINEER

INTERSTATE ROUTE MARKER SIGN DETAILS

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-135

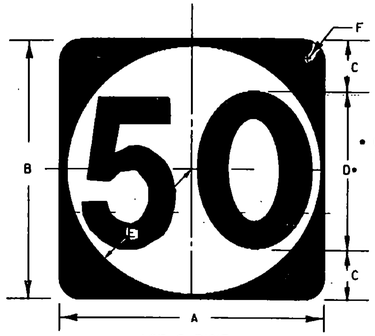


U.S. ROUTE MARKER

SIGN	DIMENSIONS (INCHES)													
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
1,2-digits	24	24	5-1/2	12D	6-1/2	1	5-1/2	2-1/2	7-1/2	7	5-1/2	4-1/2	1/2	1-1/2
1,2-digits	36	36	8-1/4	18D	9-3/4	1-1/2	8-1/4	3-3/4	11-1/4	10-1/2	8-1/4	6-1/2	3/4	2-1/4
3,-digits	30	24	5-1/2	12D	6-1/2	4	5-1/2	2-1/2	7-1/2	10	9-1/2	4-1/2	1/2	1-1/2
3,-digits	45	36	8-1/4	18D	9-3/4	5-1/2	8-1/4	3-3/4	11-1/4	15	14-1/4	6-1/2	3/4	2-1/4

COLORS

SHIELD - WHITE (REFL.)
BACKGROUND AND NUMERALS- BLACK (NON-REFL.)

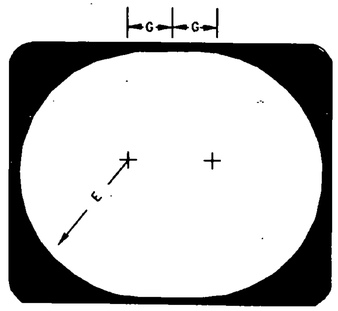


1 OR 2 DIGIT
STATE ROUTE MARKERS

SIGN	DIMENSIONS (INCHES)						
	A	B	C	D	E	F	G
1,2-DIGIT(S)	24	24	6	12D	11	1-1/2	-
1,2-DIGIT(S)	36	36	9	18D	16-1/2	2-1/4	-
3-DIGITS	30	24	6	12D	11	1-1/2	3
3-DIGITS	45	36	9	18D	16-1/2	2-1/4	4-1/2

COLORS

LEGEND -BLACK (NON. REFL.)
BACKGROUND - WHITE (REFL)



3 DIGIT
STATE ROUTE MARKER

DESIGNS

THE DESIGNS OF STATE ROUTE MARKERS AND AUXILIARY MARKERS SHALL CONFORM WITH THE REQUIREMENTS SET FORTH IN THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" PREPARED BY THE NATIONAL JOINT COMMITTEE ON "TRAFFIC CONTROL DEVICES."

MATERIALS

THE SIGN BASE MATERIAL MAY BE ANY OF THE OF THE FOLLOWING, OF THE MINUMUM THICKNESS NOTED:

FLAT SHEET ALUMINUM

LESS THAN 24" X 24"	0.060"
24" X 24", 24" X 30"	0.080"

GALVANIZED FLAT SHEET STEEL

LESS THAN 24" X 24"	18 GAGE
24" X 24", 24" X 30"	16 GAGE

U.S. AND STATE ROUTE MARKERS TO BE MOUNTED ON INTERSTATE GUIDE SIGNS, SHALL BE OF A THICKNESS AS FOR SIGNS LESS THAN 24" X 24"

THE REFLECTIVE MATERIAL SHALL BE WHITE OR SILVER REFLECTIVE SHEEETING, APPLIED TO THE ENTIRE BACKGROUND. THE TEXTS MAY BE LETTERING FILM, SILK SCREENED, OR HAND PAINTED.

COLORS

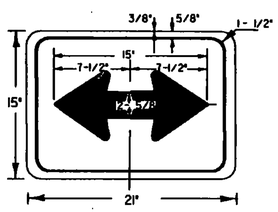
U.S. AND STATE ROUTE MARKERS SHALL HAVE BLACK TEXTS ON REFLECTORIZED WHITE OR SILVER BACKGROUNDS.

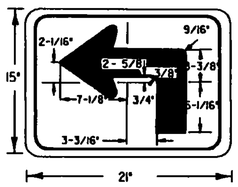
LETTERING

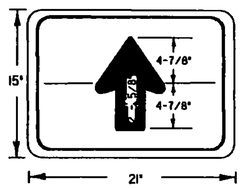
LETTERS AND DIGITS SHALL CONFORM WITH THE STANDARD ALPHABETS FOR HIGHWAY SIGNS APPROVED BY THE NATIONAL JOINT COMMITTEE ON UNIFORM TRAFFIC CONTROL DEVICES.

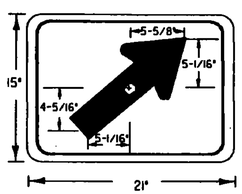
SPECIFICATIONS

U.S. AND STATE ROUTE MARKERS AND AUXILIARY ROUTE MARKERS SHALL MEET THE STANDARD STATE SPECIFICATIONS FOR "TRAFFIC SIGNS".

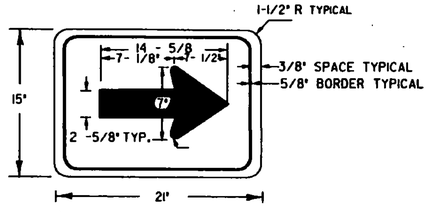




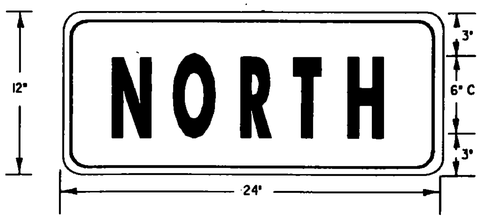




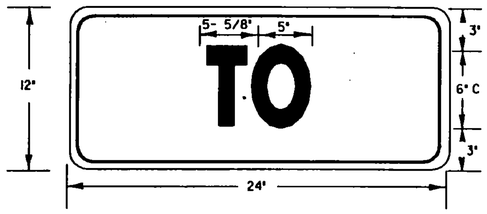
DIRECTION ARROW OR ADVANCE TURN ARROW



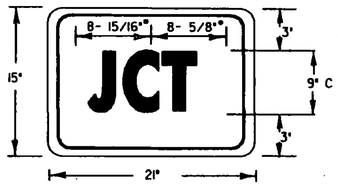
ALSO "SOUTH," "EAST," AND "WEST"



CARDINAL DIRECTION MARKER



TRAILBLAZER



• INCREASE SPACING 25%
1 1/2 " R. TYPICAL
3/8" SPACE TYPICAL
5/8" BORDER TYPICAL

JUNCTION MARKER

REVISIONS AND CORRECTIONS

APPROVED

SEPT. 10, 1987
DATE

David B Kelley
CHIEF ENGINEER

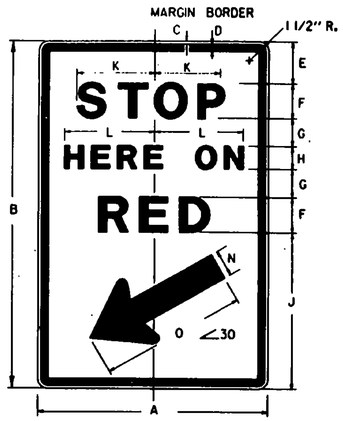
Arthur J Gross
DIRECTOR OF PLANNING AND PRECONSTRUCTION

Gordon B. MacArthur
TRAFFIC AND SAFETY ENGINEER

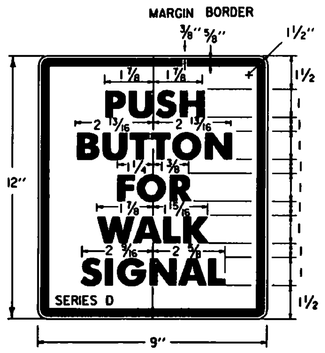
U.S. AND STATE ROUTE MARKER SIGN DETAILS

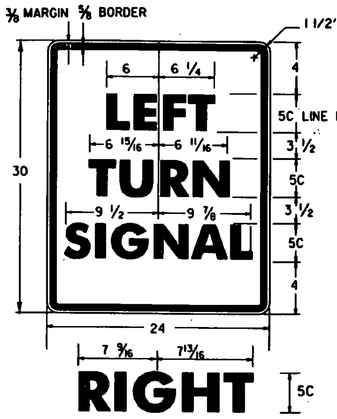
VERMONT AGENCY OF TRANSPORTATION

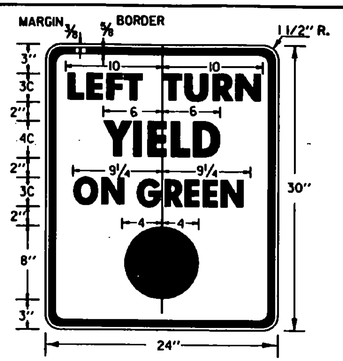
STANDARD
E-136

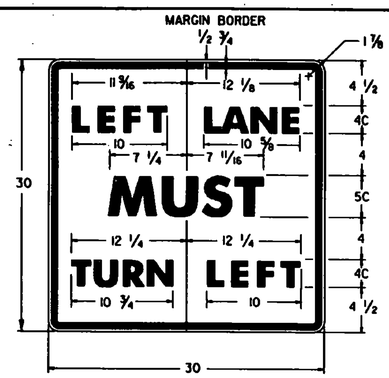


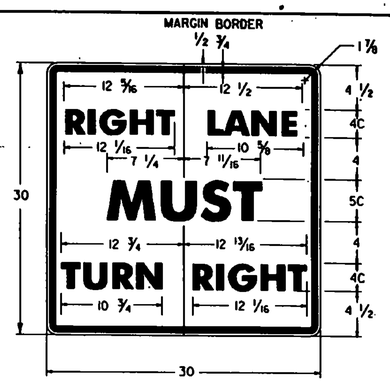
SIGN	A	B	C	D	E	F	G	H
STD.	24	36	3/8	5/8	4	5D	2 1/2	3D
SPECIAL	36	48	5/8	7/8	6	6D	4	4D
	J		K		L	M	N	O
STD.	14		4 3/16		8 3/16	6	2 5/8	14 5/16
SPECIAL	18		7 3/4		9 13/16	7 1/8	2 3/4	6

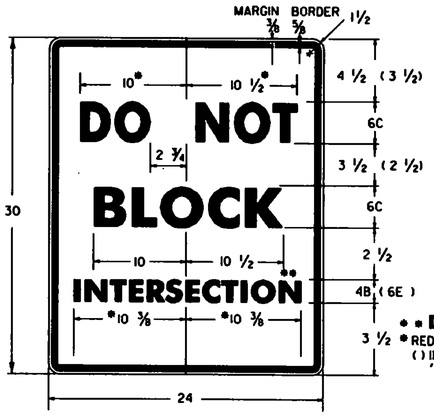




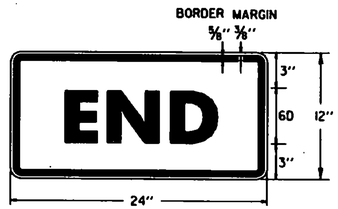


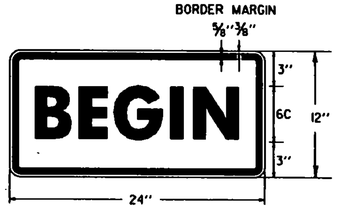


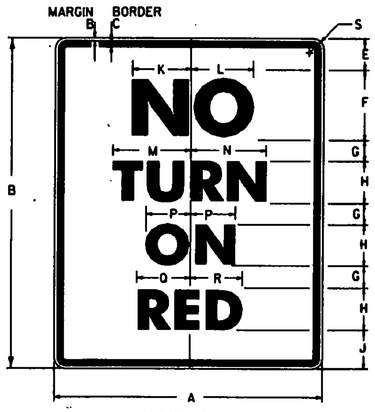




**** DRIVE**
* REDUCE SPACING 50 %
( ) INDICATES DIMENSIONS FOR "DO NOT BLOCK DRIVE" SIGN

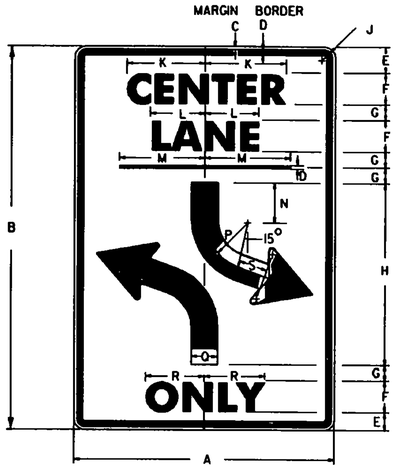




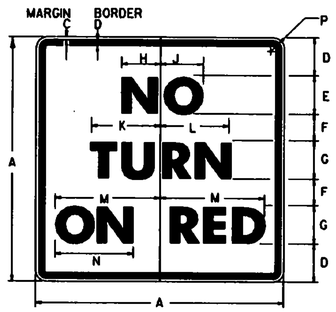


POST MOUNTING

SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	J	K
STD.	24	30	3/8	5/8	3 1/4	5E	2 1/4	4D	3	4 13/16
SPECIAL	36	48	5/8	7/8	6	8E	3 1/2	6D	5 1/2	7 3/4
	L		M		N	P	Q		R	S
STD.	5 3/16		6 5/8		6 1/2	3 1/2	4 5/8		4 7/8	1 1/2
SPECIAL	8 1/4		10		9 3/4	5 1/4	6 7/8		7 3/8	2 1/4



SIGN	DIMENSIONS (INCHES)									
	A	B	C	D	E	F	G	H	J	K
MIN. AND STD.	24	36	3/8	5/8	2 1/2	3E	1 1/2	16	1 1/2	8 7/16
SPECIAL	36	48	5/8	7/8	3 1/2	5E	1 1/2	20	2 1/4	14 1/16
	L		M		N	P	Q		R	S
MIN. AND STD.	5 3/4		8		2 1/2	6	2		5 5/16	1 1/2
SPECIAL	9 1/2		12		3	8	3		9 7/8	2



OVERHEAD MOUNTING

SIGN	DIMENSIONS (INCHES)													
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
MIN.	18	3/8	5/8	2 3/4	3E	1 3/4	3D	2 15/16	3 1/16	5	4 1/8	7 1/8	5 1/4	1 1/2
STD.	24	3/8	5/8	3 1/2	4E	2 1/2	4D	3 7/8	4 1/8	5 5/8	6 1/2	9 1/2	6 1/2	1 1/2
SPECIAL	30	1/2	3/4	4 1/2	5E	3D	5D	4 13/16	5 5/16	8 1/4	8 1/8	11 7/8	7 3/4	1 7/8

COLORS:

THE REGULATORY SIGNS SHOWN ON THIS SHEET SHALL HAVE BLACK TEXT ON REFLECTORIZED WHITE BACKGROUND, UNLESS OTHERWISE NOTED. THE COLORS SHALL CONFORM WITH THE COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

MATERIALS:

THE SIGN BASE MATERIALS USED FOR THE REGULATORY SIGNS SHOWN ON THIS SHEET MAY BE ANY OF THE FOLLOWING, OF THE MINIMUM THICKNESS NOTED.

	9" x 12" / 18" x 18"	24" x 12" / 24" x 24" / 24" x 30" / 24" x 36" / 30" x 30"	36" x 36" / 36" x 48"
FLAT SHEET ALUMINUM	0.060"	0.080"	0.100"
HIGH DENSITY OVERLAID PLYWOOD	1/2"	1/2"	5/8"
GALVANIZED FLAT SHEET STEEL	18 GAGE	16 GAGE	14 GAGE

THE REFLECTIVE MATERIAL FOR GROUND MOUNTED SIGNS SHALL BE FLAT TOP WHITE REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND OF THE SIGN. WHEN MOUNTED OVERHEAD, ALL SIGNS SHALL HAVE ENCAPSULATED LENS REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND OF THE SIGN. THE TEXT OF THE SIGNS MAY BE LETTERING FILM, SILK SCREENED OR HAND PAINTED. WHEN HAND PAINTED, POOR WORKMANSHIP SHALL BE CAUSE FOR REJECTION.

TEXT DESIGN:
LETTERS, DIGITS, ARROWS, SPACINGS AND TEXT DIMENSIONS SHALL CONFORM WITH THE STANDARD ALPHABETS AND DESIGNS PRESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SPECIFICATIONS:
REGULATORY SIGNS SHALL MEET THE VERMONT STANDARD SPECIFICATIONS FOR "TRAFFIC SIGNS".

REVISIONS AND CORRECTIONS

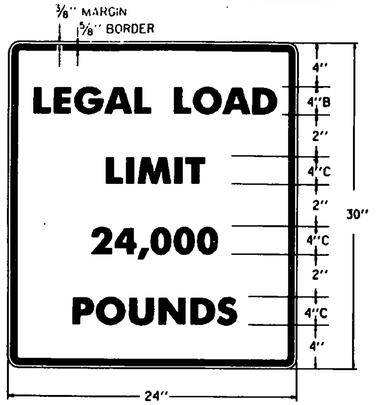
APPROVED

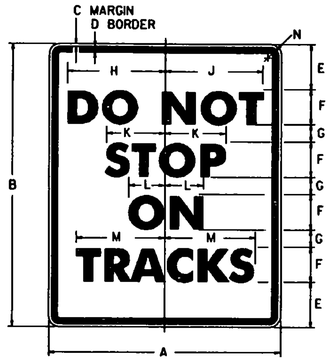
OCT. 30, 1987
DATE
David B. Kelley
CHIEF ENGINEER
Arthur J. Gess
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION
Gordon S. MacArthur
TRAFFIC AND SAFETY ENGINEER

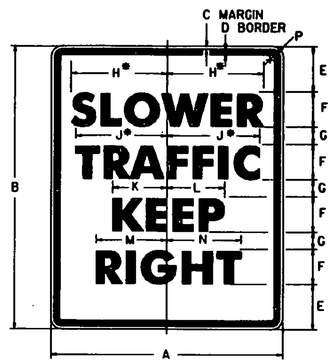
REGULATORY SIGN DETAILS

VERMONT AGENCY OF TRANSPORTATION

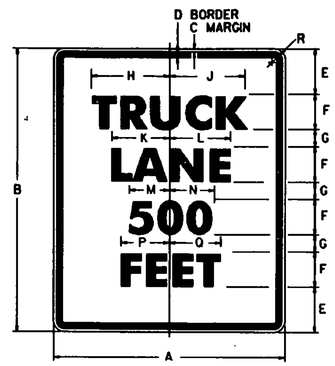
STANDARD
E-140

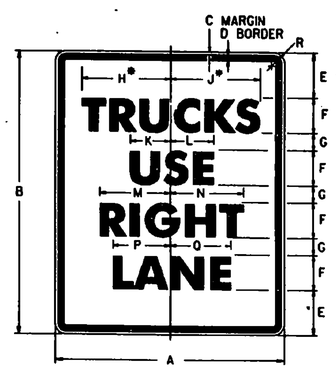






*REDUCE SPACING 25 %





*REDUCE SPACING 32 %

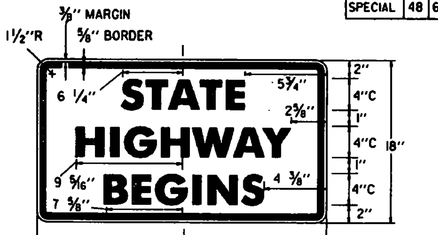
LINE 3 ALTERNATE - **16,000**

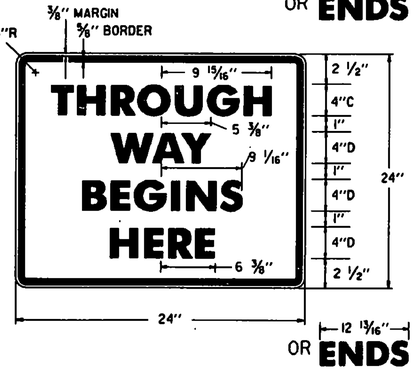
SIGN	DIMENSIONS (INCHES)												
	A	B	C	D	E	F	G	H	J	K	L	M	N
STD.	24	30	3/8	5/8	3 5/8	4D	2 1/4	9 1/4	9 5/8	6 9/16	3 1/2	10	1 1/2
SPECIAL	36	48	5/8	7/8	6	6D	4	14	14 7/16	9 3/4	5 1/4	15	2 1/4
SPECIAL	48	60	3/4	1 1/4	7 1/4	8D	4 1/2	18 1/2	19 1/4	13 1/8	7	20	3

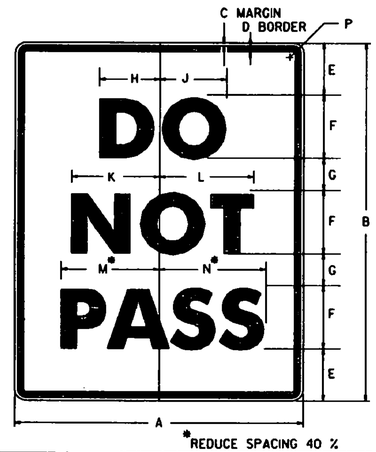
SIGN	DIMENSIONS (INCHES)													
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
STD.	24	30	3/8	5/8	3 5/8	4D	2 1/4	9 3/4	10	6	6 3/16	7 1/8	7 5/8	1 1/2
EXPWY.	36	48	5/8	7/8	6	6D	4	14 5/8	15	9	9 13/16	10 11/16	11 3/8	2 1/4
FWY.	48	60	3/4	1 1/4	7 1/4	8D	4 1/2	19 1/2	20	12	13 1/8	14 1/4	15 1/4	3

SIGN	DIMENSIONS (INCHES)														
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
STD.	24	30	3/8	5/8	4E	2 1/4	9 13/16	9 11/16	7 9/16	7 11/16	5 11/16	5 13/16	6 7/8	7 1/16	1 1/2	
EXPWY.	36	48	5/8	7/8	6	6E	4	14 3/4	14 1/2	11 5/16	11 1/2	8 1/2	8 3/4	10 5/16	10 5/8	2 1/4
FWY.	48	60	3/4	1 1/4	7 1/4	8E	4 1/2	19 5/8	19 3/8	15 1/8	15 3/8	11 3/8	11 5/8	13 3/4	14 1/8	3

SIGN	DIMENSIONS (INCHES)															
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
STD.	24	30	3/8	5/8	3 5/8	4D	2 1/4	9 9/16	9 3/16	4 3/4	5	7 1/8	7 5/8	6 1/4	6 5/8	1 1/2
EXPWY.	36	48	5/8	7/8	6	6D	4	14 5/16	13 13/16	7 1/8	7 1/2	10 11/16	11 3/8	9 3/8	9 15/16	2 1/4
FWY.	48	60	3/4	1 1/4	7 1/4	8D	4 1/2	19 1/8	18 3/8	9 1/2	10	14 1/4	15 1/4	12 1/2	13 1/4	3

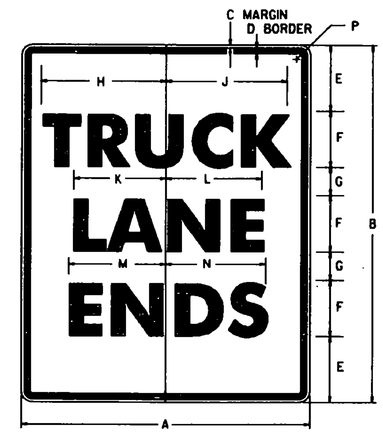




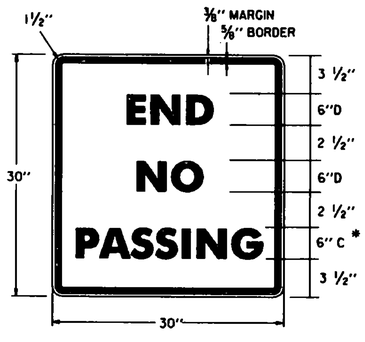


*REDUCE SPACING 40 %

SIGN	DIMENSIONS (INCHES)													
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
STD.	24	30	3/8	5/8	3 1/2	6D	2 1/2	4 11/16	5	7 1/8	7 3/8	9 3/8	9 3/4	1 1/2
EXPWY.	36	48	5/8	7/8	7	8D	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13	2 1/4
FWY.	48	60	3/4	1 1/4	8	10D	7	7 3/4	8 5/16	11 5/8	12 1/4	15 5/8	16 1/4	3



SIGN	DIMENSIONS (INCHES)													
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
STD.	24	30	3/8	5/8	3 1/2	6C	2 1/2	10 1/4	10 3/16	7 3/4	7 3/4	7 15/16	8	1 1/2
EXPWY.	36	48	5/8	7/8	7	8C	5	13 11/16	13 5/8	10 3/8	10 5/16	10 11/16	10 11/16	2 1/4
FWY.	48	60	3/4	1 1/4	8	10D	7	20 5/8	20 5/8	15 7/8	15 15/16	16 1/16	16 1/16	3



*REDUCE SPACING 49 %

COLORS:

THE REGULATORY SIGNS SHOWN ON THIS SHEET SHALL HAVE BLACK TEXT ON REFLECTORIZED WHITE BACKGROUND. THE COLORS SHALL CONFORM WITH THE COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

MATERIALS:

THE SIGN BASE MATERIALS USED FOR THE REGULATORY SIGNS SHOWN ON THIS SHEET MAY BE ANY OF THE FOLLOWING OF THE MINIMUM THICKNESS NOTED.

	24" x 18" 24" x 24" 24" x 30" 30" x 30"	36" x 48" 48" x 60"
FLAT SHEET ALUMINUM	0.080"	0.100"
HIGH DENSITY OVERLAID PLYWOOD	1/2"	3/4"
GALVANIZED FLAT SHEET STEEL	16 GAGE	14 GAGE

THE REFLECTIVE MATERIAL FOR GROUND MOUNTED SIGNS SHALL BE FLAT TOP WHITE REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND OF THE SIGN. THE TEXT OF THE SIGNS MAY BE LETTERING FILM, SILK SCREENED OR HAND PAINTED. WHEN HAND PAINTED, POOR WORKMANSHIP SHALL BE CAUSE FOR REJECTION.

SPECIFICATIONS:

REGULATORY SIGNS SHALL MEET THE VERMONT STANDARD SPECIFICATIONS FOR "TRAFFIC SIGNS".

TEXT DESIGN:

LETTERS, DIGITS, ARROWS, SPACINGS, AND TEXT DIMENSIONS SHALL CONFORM WITH THE STANDARD ALPHABETS AND DESIGNS PRESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

REVISIONS AND CORRECTIONS

APPROVED

OCT. 30, 1987
DATE

David B. Kelley
CHIEF ENGINEER

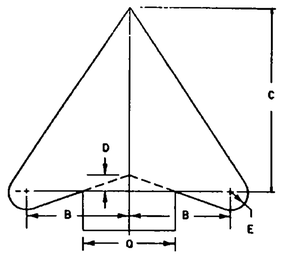
Arthur J. Gross
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

Gordon B. MacArthur
TRAFFIC AND SAFETY ENGINEER

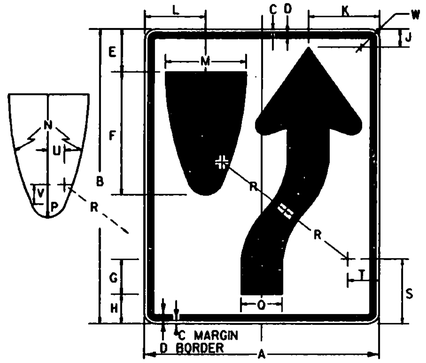
REGULATORY SIGN DETAILS

VERMONT AGENCY OF TRANSPORTATION

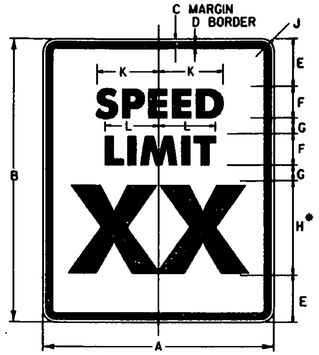
STANDARD
E-141



ARROW HEAD	DIMENSIONS (INCHES)				
	SIZE	B	C	D	E
MINIMUM	18x24	3½	6⅛	7/16	9/16
STANDARD	24x30	4⅜	8⅛	⅝	13/16
EXPRESSWAY	36x48	6⅞	12 3/16	15/16	1 3/16
FREEWAY	48x60	9 3/16	16¼	1¼	1⅝

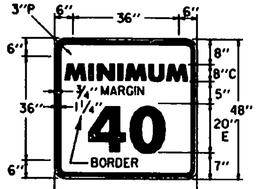


SIGN	DIMENSIONS (INCHES)										
	A	B	C	D	E	F	G	H	J	K	
MIN	18	24	3/8	5/8	3⅜	9⅜	1⅞	2¼	1⅜	5½	
STD	24	30	3/8	5/8	4½	12½	2½	3	1⅞	7⅜	
EXPWY	36	48	5/8	⅞	6¾	18¾	3¾	4½	2 13/16	11⅞	
FWY	48	60	¾	1¼	9	25	5	6	3¾	14 13/16	
	L	M	N	P	Q	R	S	T	U	V	W
MIN	4 11/16	6	22½	1½	3	6¾	4⅛	2¼	1 1/16	7/16	1½
STD	6¼	8	30	2	4	9	5½	3	1⅜	2 13/16	1½
EXPWY	9⅜	12	45	3	6	13½	8¼	4½	2	2¾	2¼
FWY	12½	16	60	4	8	18	11	6	2 11/16	5	3

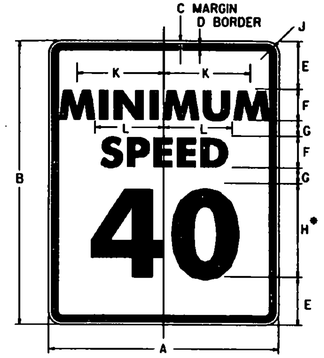


SIGN	DIMENSIONS (INCHES)										
	A	B	C	D	E	F	G	H	J	K	L
MIN	18	24	3/8	5/8	3	3E	2	8E	1½	7 3/16	5½
STD	24	30	3/8	5/8	4	4E	2	10E	1½	9 9/16	7 5/16
EXPWY	36	48	5/8	⅞	6	6E	5	14E	2¼	14⅜	11
FWY	48	60	¾	1¼	8	8E	4	20E	3	19⅛	14 5/8

* OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTERLINE.

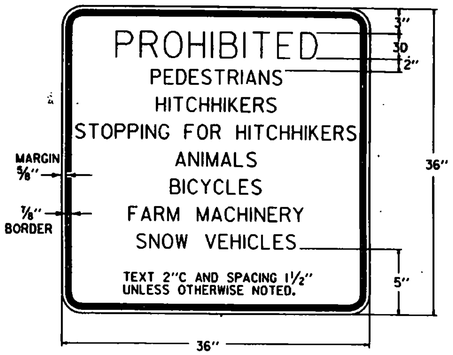


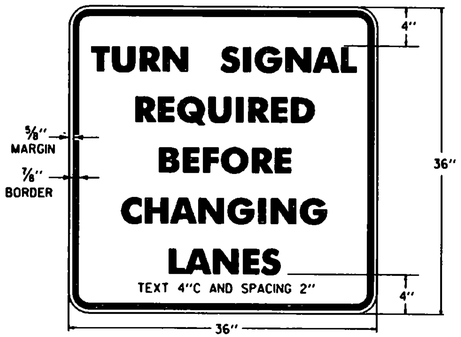
TO BE USED WITH "SPEED LIMIT 65 OR 55" SIGN-FWY ONLY.

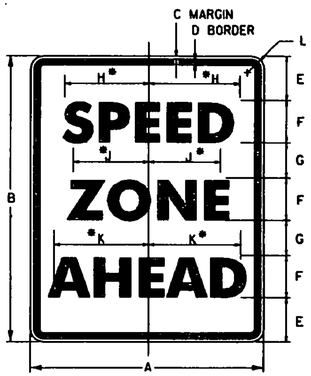


SIGN	DIMENSIONS (INCHES)										
	A	B	C	D	E	F	G	H	J	K	L
MIN & STD	24	30	3/8	5/8	4	4C	2	10D	1½	9 3/16	6 13/16
EXPWY	36	48	5/8	⅞	6	6C	5	14D	2¼	13¾	10 3/16
FWY	48	60	¾	1¼	8	8C	6	16D	3	18⅜	13⅝

* OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTERLINE.

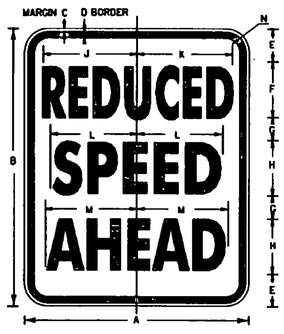






SIGN	DIMENSIONS (INCHES)											
	A	B	C	D	E	F	G	H	J	K	L	
MIN.	18	24	3/8	5/8	3½	4C	2½	6 13/16	5½	7	1½	
STD.	24	30	3/8	5/8	3½	6C	2½	9⅜	7⅞	9¾	1½	
EXPWY.	36	48	5/8	⅞	7	8C	5	13⅝	11 1/16	14	2¼	
FWY.	48	60	¾	1¼	9	10C	6	17	13 13/16	17½	3	

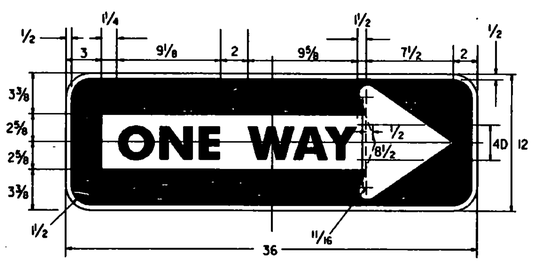
* FOR STD SIZE, REDUCE SPACING 40 %



SIGN	DIMENSIONS (INCHES)												
	A	B	C	D	E	F	G	H	J	K	L	M	N
MIN.	18	24	3/8	5/8	3½	4B	2½	4C	6⅞	7	6 13/16	7	1½
STD.	24	30	3/8	5/8	3½	6B	2½	6C	10	10¾	9 3/16	9¾	1½
EXPWY.	36	48	5/8	⅞	7	8B	5	8C	14¼	14¾	13⅜	14	2¼
FWY.	48	60	¾	1¼	9	10B	6	10C	17¾	18 7/16	17	17½	3

SIGN	DIMENSIONS (INCHES)												
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
EXPWY.	30	24	3/8	5/8	3½	4C	2½	4D	12½	13	12¾	6 7/16	7	1½
FWY.	48	36	5/8	⅞	5	6D	4	6D	20 7/16	21⅛	19⅛	10 1/16	10 9/16	2¼

* FOR FWY SIZE, REDUCE SPACING 50 %



COLORS:

THE REGULATORY SIGNS SHOWN ON THIS SHEET SHALL HAVE BLACK TEXT ON REFLECTORIZED WHITE BACKGROUND. THE COLORS SHALL CONFORM WITH THE COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

MATERIALS:

THE SIGN BASE MATERIALS USED FOR THE REGULATORY SIGNS SHOWN ON THIS SHEET MAY BE ANY OF THE FOLLOWING OF THE MINIMUM THICKNESS NOTED.

	18" x 24"	24" x 30"	30" x 24"	36" x 12" 36" x 36" 36" x 48" 48" x 36" 48" x 48"	48" x 60"
FLAT SHEET ALUMINUM	0.060"	0.080"	0.080"		0.100"
HIGH DENSITY OVERLAID PLYWOOD	½"	½"	½"		¾"
GALVANIZED FLAT SHEET STEEL	18 GAGE	16 GAGE	16 GAGE		14 GAGE

THE REFLECTIVE MATERIAL FOR GROUND MOUNTED SIGNS SHALL BE FLAT TOP WHITE REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND OF THE SIGN.

THE TEXT OF THE SIGNS MAY BE LETTERING FILM, SILK SCREENED OR HAND PAINTED. WHEN HAND PAINTED, POOR WORKMANSHIP SHALL BE CAUSE FOR REJECTION.

SPECIFICATIONS:

REGULATORY SIGNS SHALL MEET THE VERMONT STANDARD SPECIFICATIONS FOR "TRAFFIC SIGNS".

TEXT DESIGN:

LETTERS, DIGITS, ARROWS, SPACINGS, AND TEXT DIMENSIONS SHALL CONFORM WITH THE STANDARD ALPHABETS AND DESIGNS PRESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

REVISIONS AND CORRECTIONS

APPROVED

OCT. 30, 1987
DATE

David B Kelley
CHIEF ENGINEER

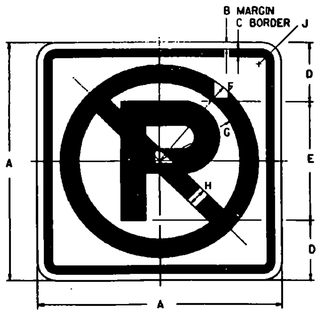
Arthur J Gosse
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

Gordon A. MacArthur
TRAFFIC AND SAFETY ENGINEER

REGULATORY SIGN DETAILS

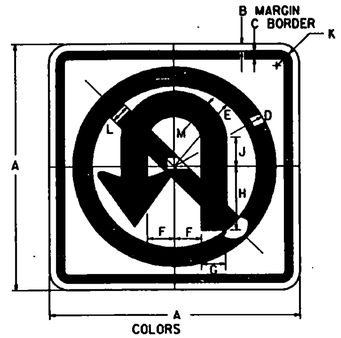
VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-142



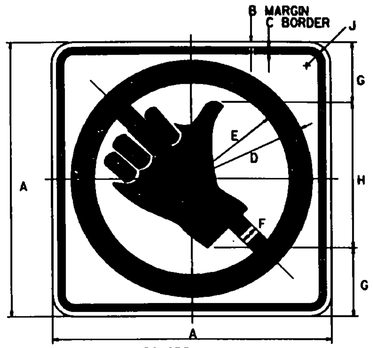
COLORS
CIRCLE AND DIAGONAL - RED (REFL - RURAL)
SYMBOL AND BORDER - BLACK (NON - REFL)
BACKGROUND - WHITE (REFL - RURAL)

SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
URBAN MIN. AND STD.	12	3/8	3/8	3	6E(M)	4 1/8	3 1/8	1	1/2
RURAL MIN. AND STD.	24	3/8	3/8	6	12E(M)	10 1/2	8 1/2	2	1/2
EXPWY.	36	5/8	1/8	9	18E(M)	15 3/4	12 3/4	3	2 1/4
FWY.	48	3/4	1/4	12	24E(M)	21	17	4	3



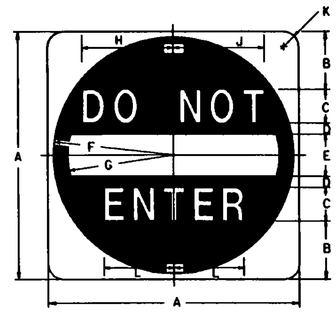
COLORS
CIRCLE AND DIAGONAL - RED (REFL)
ARROW AND BORDER - BLACK (NON - REFL)
BACKGROUND - WHITE (REFL)

SIGN	DIMENSIONS (INCHES)												
	A	B	C	D	E	F	G	H	J	K	L	M
MIN. AND STD.	24	3/8	3/8	10 1/2	8 1/2	2 1/2	2 1/2	6	2 1/4	1 1/2	2	5
SPECIAL	30	1/2	3/4	13 1/8	10 5/8	3 1/8	3 1/8	7 1/2	2 13/16	1 7/8	2 1/2	6 1/4
EXPWY.	36	5/8	1/8	15 3/4	12 3/4	3 3/4	3 3/4	9	3 5/16	2 1/4	3	7 1/2
SPECIAL	48	3/4	1 1/4	21	17	5	5	12	4 1/8	3	4	10



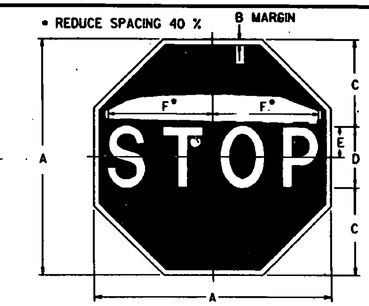
COLORS
CIRCLE AND DIAGONAL - RED (REFL)
SYMBOL AND BORDER - BLACK (NON - REFL)
BACKGROUND - WHITE (REFL)

SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
MIN.	18	3/8	5/8	7 1/8	6 5/8	1 1/2	3 3/4	10 1/2	1 1/2
STD.	24	3/8	5/8	10 1/2	8 1/2	2	5	14	1 1/2



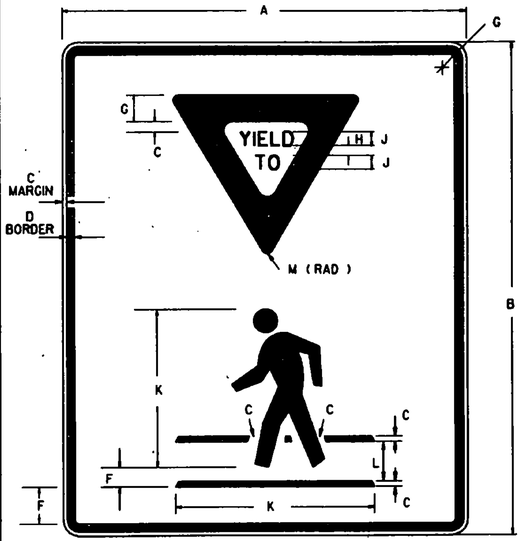
COLORS
SYMBOL - RED (REFL)
LEGEND AND BACKGROUND - WHITE (REFL)
ENCAPSULATED LENS

SIGN	DIMENSIONS (INCHES)										
	A	B	C	D	E	F	G	H	J	K	L
MIN. AND STD.	30	6 1/2	4D	2	5	14 1/2	12 1/2	9 3/4	10	1 1/8	7 1/8
EXPWY.	36	7 1/2	5D	2 1/2	6	17 1/2	15	12	12 3/8	2 1/4	9 13/16
SPECIAL	48	11	6D	3	8	23 1/2	20	14 1/2	15	3	11 3/4



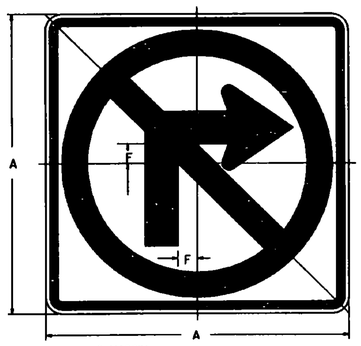
COLORS
LEGEND - WHITE (REFL)
BACKGROUND - RED (REFL)
ENCAPSULATED LENS

SIGN	DIMENSIONS (INCHES)					
	A	B	C	D	E	F
BIKE	18	3/8	6	6C	3	7 3/4
MIN.	24	5/8	8	8C	4	10
STD.	30	3/4	10	10C	5	12 1/2
EXPWY.	36	7/8	12	12C	6	15
SPECIAL	48	1 1/4	16	16C	8	20

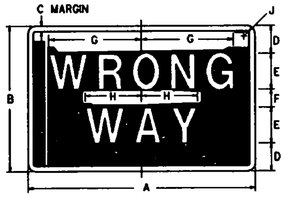


COLORS
LEGEND, SYMBOL, BORDER - BLACK
BACKGROUND - WHITE (REFL)
TRIANGLE - RED (REFL)

SIGN	DIMENSIONS (INCHES)												
	A	B	C	D	E	F	G	H	J	K	L	M
SMALL	18	24	3/8	5/8	11	3/4	1 1/8	5/8	1 1/2C	9	1 3/4	1/4
LARGE	24	30	1/2	13/16	13 3/4	15/16	1 1/2	7/8	2 C	11 1/4	2 7/16	5/16

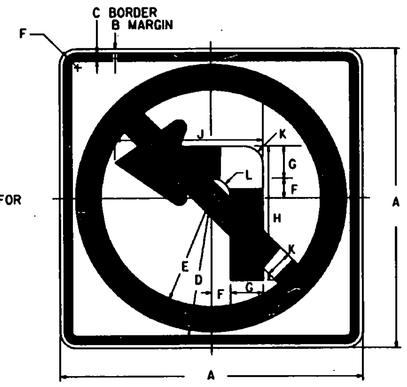


DETAILS SAME FOR EACH SIGN



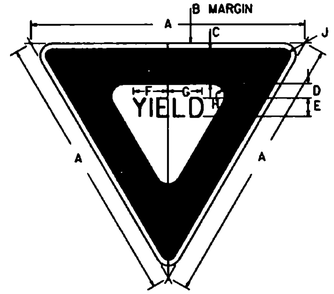
COLORS
LEGEND - WHITE (REFL)
BACKGROUND - RED (REFL)
ENCAPSULATED LENS

SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
MIN.	30	18	5/8	3	5D	2	8 1/16	6 11/16	1 1/2
STD.	36	24	3/4	4 1/2	6D	3	13 5/16	8 1/16	1 1/2
SPECIAL	42	30	1/8	5	8D	4	17 3/4	10 3/4	1 1/8



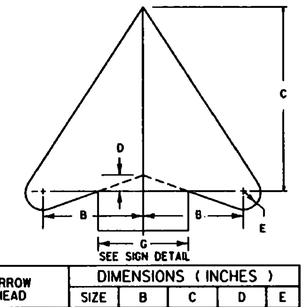
COLORS
CIRCLE AND DIAGONAL - RED (REFL)
ARROW AND BORDER - BLACK (NON - REFL)
BACKGROUND - WHITE (REFL)

SIGN	DIMENSIONS (INCHES)											
	A	B	C	D	E	F	G	H	J	K	L	
MIN. AND STD.	24	3/8	5/8	10 1/2	8 1/2	1 1/2	2 1/2	10 1/2	11 1/2	2	1/2	
SPECIAL	30	1/2	3/4	13 1/8	10 5/8	1 7/8	3 1/8	13 1/8	14 1/2	2 1/2	5/8	
EXPWY.	36	5/8	7/8	15 3/4	12 3/4	2 1/4	3 3/4	15 3/4	17 1/4	3	3/4	
SPECIAL	48	3/4	1 1/4	21	17	3	5	21	23	4	1	



COLORS
LEGEND AND BORDER - RED (REFL)
BACKGROUND - WHITE (REFL)
ENCAPSULATED LENS

SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
BIKE	24	3/8	3	1 3/8	2C	3 1/4	3	7/8	1 1/2
MIN.	30	5/8	4	1 3/4	2 1/2C	3 15/16	3 3/4	7/8	1 1/2
STD.	36	3/4	5	2	3C	4 11/16	4 1/2	1 1/4	2
EXPWY.	48	1	6	2 3/4	4C	6 1/4	5 7/8	2	3
SPECIAL	60	1 1/2	8	3 1/2	5C	7 7/8	7 1/4	2 1/2	4



ARROW HEAD	DIMENSIONS (INCHES)				
	SIZE	B	C	D	E
MIN. AND STD.	24x24	2 1/8	5/16	3/8	1/2
SPECIAL	30x30	3 5/8	6 3/8	1/2	5/8
EXPWY.	36x36	4 5/16	7 5/8	9/16	3/4
SPECIAL	48x48	5 3/4	10 1/8	3/4	1

COLORS:

THE REGULATORY SIGNS SHOWN ON THIS SHEET SHALL BE AS DETAILED FOR EACH SIGN. THE COLORS SHALL CONFORM WITH THE COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

MATERIALS:

THE SIGN BASE MATERIALS USED FOR THE REGULATORY SIGNS SHOWN ON THIS SHEET MAY BE ANY FOLLOWING OF THE MINIMUM THICKNESS NOTED.

	12" x 12"	18" x 18"	24" ▽ 24" x 24" 24" x 30" 30" ▽ 30" x 18" 30" x 30"	36" ▽ 36" x 24" 36" x 36" 48" x 48"	48" ▽ 60" ▽
FLAT SHEET ALUMINUM	0.050"	0.080"	0.100"		0.125"
HIGH DENSITY OVERLAID PLYWOOD	1/2"	1/2"	3/4"		3/4"
GALVANIZED FLAT SHEET STEEL	18 GAGE	16 GAGE	14 GAGE		12 GAGE

ENCAPSULATED LENS REFLECTIVE SHEETING SHALL BE USED FOR THE SIGN BACKGROUND WHERE NOTED.

THE BLACK PORTIONS OF THE SIGNS MAY BE LETTERING FILM, SILK SCREENING OR HAND PAINTED. WHEN HAND PAINTED, POOR WORKMANSHIP SHALL BE CAUSE FOR REJECTION.

SPECIFICATIONS:

REGULATORY SIGNS SHALL MEET THE VERMONT STANDARD SPECIFICATIONS FOR "TRAFFIC SIGNS".

TEXT DESIGN:

LETTERS, DIGITS, ARROW, SPACINGS AND TEXT DIMENSIONS SHALL CONFORM WITH THE STANDARD ALPHABETS AND DESIGNS PRESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

REVISIONS AND CORRECTIONS

APPROVED

OCT. 30, 1987
DATE

David B Kelley
CHIEF ENGINEER

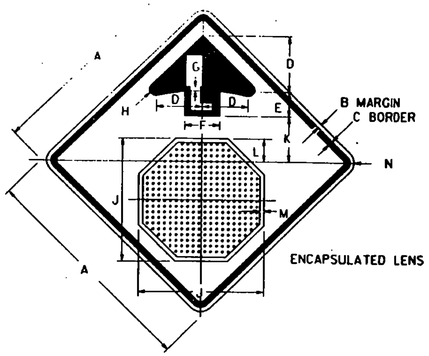
Arthur Jones
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

Gordon B. MacArthur
TRAFFIC AND SAFETY ENGINEER

REGULATORY SIGN DETAILS

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-143

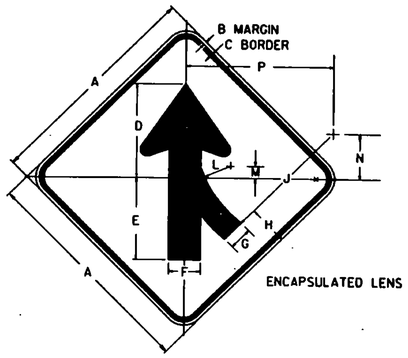


ENCAPSULATED LENS

COLORS

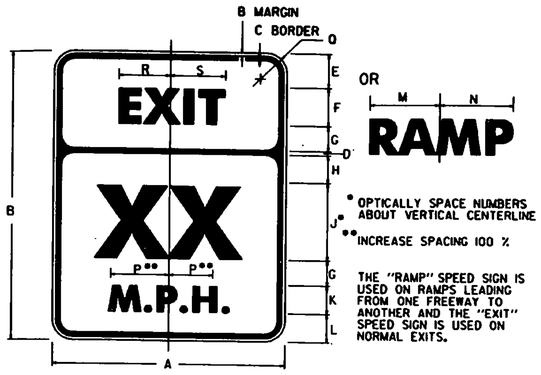
BORDER AND ARROW - BLACK (NON-REFL)
SYMBOL - WHITE BORDER ON RED BACKGROUND (REFL)

SIGN	DIMENSIONS (INCHES)											
	A	B	C	D	E	F	G	H	J	K	L	M	N
MIN.	30	1/2	3/4	7 1/2	3 3/4	5	5/8	3/8	15 3/4	6 1/4	2 1/8	1/2	1 1/8
STD.	36	5/8	7/8	9	4 1/2	6	3/4	3/8	19	7 1/2	3 1/2	5/8	2 1/4
SPECIAL	48	3/4	1 1/4	12	6	8	1	1/2	25 1/8	10	4 1/2	3/4	3



ENCAPSULATED LENS

SIGN	DIMENSIONS (INCHES)													
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
MIN.	24	3/8	5/8	10 1/4	8 3/4	3 1/2	2 3/8	4 3/16	22 1/4	1 1/2	6 3/8	2 5/8	10 3/8	22 3/16
STD.	30	1/2	3/4	13	11	4 3/8	3	5 1/4	28	1 7/8	8	3	13	27 3/4
EXPWY.	36	5/8	7/8	15 3/4	13 1/4	5 1/4	3 1/8	6 5/16	33 3/8	2 1/4	9 3/8	4	15 3/8	33 3/16
FWY.	48	3/4	1 1/4	20 1/2	17 1/2	7	4 1/2	8 1/16	45	3	12 13/16	5 1/4	20 3/4	44 3/16



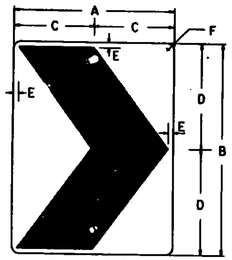
OR

* OPTICALLY SPACE NUMBERS ABOUT VERTICAL CENTERLINE

** INCREASE SPACING 100 %

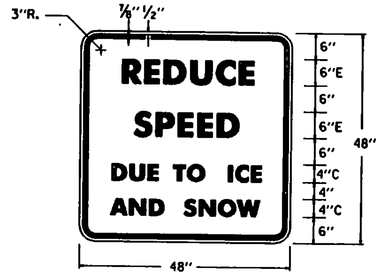
THE "RAMP" SPEED SIGN IS USED ON RAMPS LEADING FROM ONE FREEWAY TO ANOTHER AND THE "EXIT" SPEED SIGN IS USED ON NORMAL EXITS.

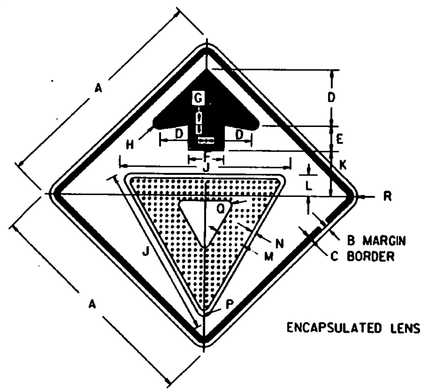
SIGN	DIMENSIONS (INCHES)															
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S
MIN. & STD.	24	30	3/8	5/8	3 1/2	4E	2 1/2	2 1/8	8E	3E	3	8 1/4	8 1/2	5 5/16	1 1/2	6 1/8	6 3/8
EXPWY.	36	48	5/8	1/8	6	6E	4	5 1/8	12E	4E	6	12 3/8	12 3/4	7 1/16	2 1/4	9 1/4	9 1/2
FWY.	48	60	3/4	1 1/4	7	8E	5	5 3/4	16E	6E	6	16 1/2	17	10 5/8	3	12 1/4	12 3/4



ENCAPSULATED LENS

SIGN	DIMENSIONS (INCHES)					
	A	B	C	D	E	F
MIN.	12	18	6	9	1/2	1 1/2
STD.	18	24	9	12	3/4	1 1/2
SPECIAL	24	30	12	15	7/8	1 1/2
EXPWY.	30	36	15	18	1	1 1/8
FWY.	36	48	18	24	1 1/8	2 1/4



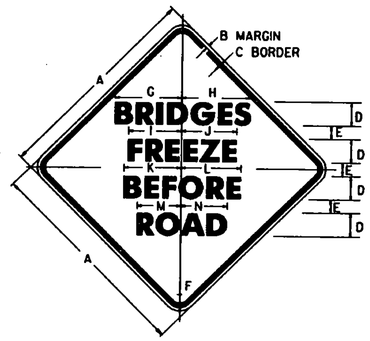


ENCAPSULATED LENS

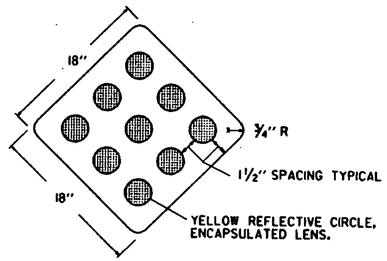
COLORS

BORDER AND ARROW - BLACK (NON-REFL)
SYMBOL - RED BORDER ON WHITE BACKGROUND (REFL)

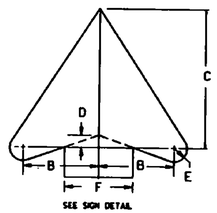
SIGN	DIMENSIONS (INCHES)														
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R
MIN.	30	1/2	3/4	7 1/2	3 3/4	5	3/8	5/16	25	6 1/4	3	3 3/8	1/2	1/4	3/8	1 1/8
STD.	36	3/8	1/8	9	4 1/2	6	3/4	1/8	28	7 1/2	3 3/8	3 3/4	3/8	1 3/8	3/4	2 1/4
SPECIAL	48	3/4	1 1/4	12	6	8	1	1/2	38	10	4 1/2	5	3/4	1 1/8	1	3



SIGN	DIMENSIONS (INCHES)													
	A	B	C	D	E	F	G	H	I	J	K	L	M	N
STD.	36	3/8	5/8	5C	2	2	11 1/2	11 1/2	9 13/16	9 1/8	10 1/4	10 1/4	6 1/8	6 1/8
FWY./EXP.	48	3/4	1 1/4	6C	3	3	13 1/2	13 1/2	11 13/16	11 3/16	12 1/4	12 5/16	8 5/16	8 5/16



HAZARD MARKERS SHALL BE OF 0.060 FLAT SHEET ALUMINUM OR 18 GAGE GALVANIZED FLAT SHEET STEEL, WITH A NON-REFLECTIVE YELLOW BACKGROUND AND NINE 4" DIA. CIRCLES EVENLY SPACED WITH MATERIALS AS NOTED ABOVE.



SEE SIGN DETAIL

ARROW HEAD	DIMENSIONS (INCHES)				
	SIZE	B	C	D	E
MIN. AND STD.	24x24	4	7 1/8	5/16	11/16
SPECIAL	30x30	5	8 7/8	11/16	7/8
EXPWY.	36x36	6	10 5/8	13/16	1 1/16
SPECIAL	48x48	8	14 3/16	1/16	1 3/8

COLORS

ALL THE WARNING SIGNS SHOWN ON THIS SHEET SHALL HAVE BLACK TEXT AND SYMBOLS ON REFLECTORIZED YELLOW BACKGROUND EXCEPT AS OTHERWISE NOTED. THE COLORS SHALL CONFORM WITH THE COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

MATERIALS

THE SIGN BASE MATERIALS USED FOR THE WARNING SIGNS SHOWN ON THIS SHEET MAY BE ANY OF THE FOLLOWING, OF THE MINIMUM THICKNESS NOTED.

	12" x 18" / 18" x 24"	24" x 24" / 24" x 30" / 30" x 30" / 30" x 36"	36" x 36" / 36" x 48"	48" x 48" / 48" x 60"
FLAT SHEET ALUMINUM	0.060"	0.080"	0.100"	0.125"
HIGH DENSITY OVERLAID PLYWOOD	1/2"	1/2"	3/4"	7/8"
GALVANIZED FLAT SHEET STEEL	18 GAGE	16 GAGE	14 GAGE	12 GAGE

THE TEXT, BORDER, AND SYMBOL SHALL BE LETTERING FILM, SILK SCREENED OR HAND PAINTED. WHEN HAND PAINTED, POOR WORKMANSHIP SHALL BE CAUSE FOR REJECTION. ENCAPSULATED LENS REFLECTIVE SHEETING SHALL BE USED FOR THE SIGN BACKGROUND WHERE NOTED.

TEXT DESIGN

LETTERS, DIGITS, SYMBOLS, SPACINGS, AND TEXT DIMENSIONS SHALL CONFORM WITH THE STANDARD ALPHABETS AND DESIGNS PRESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SPECIFICATIONS

WARNING SIGNS SHALL MEET THE VERMONT STANDARD SPECIFICATIONS FOR "TRAFFIC SIGNS".

REVISIONS AND CORRECTIONS

APPROVED

OCT. 30, 1987
DATE

Leland B Kelley
CHIEF ENGINEER

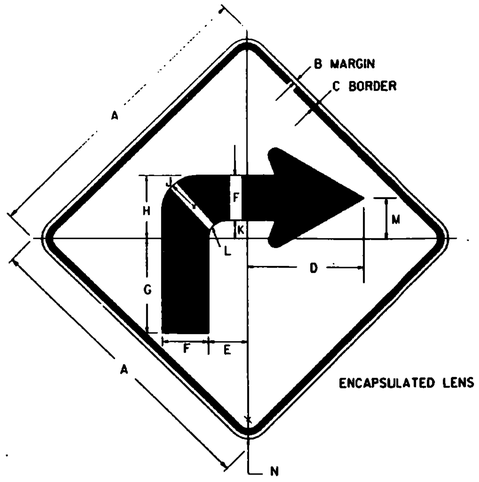
Arthur J Gosse
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

Gordon S MacArthur
TRAFFIC AND SAFETY ENGINEER

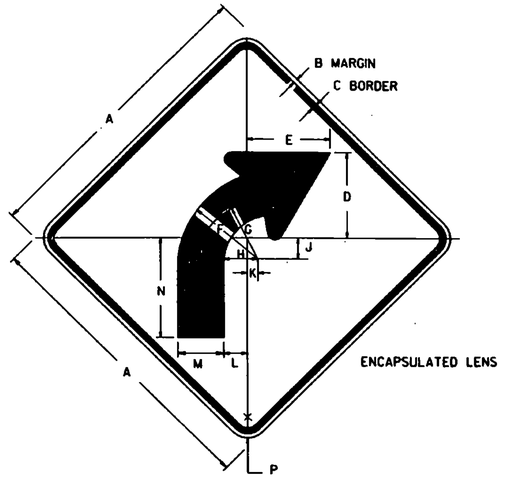
WARNING SIGN DETAILS

VERMONT AGENCY OF TRANSPORTATION

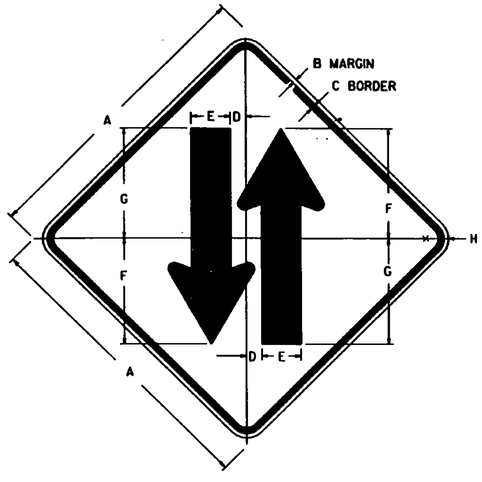
STANDARD
E-150



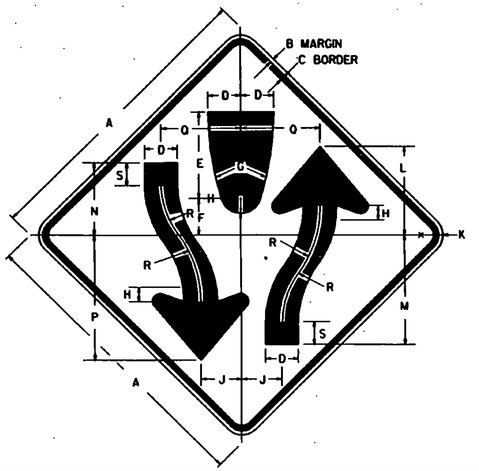
SIGN	DIMENSIONS (INCHES)												
	A	B	C	D	E	F	G	H	J	K	L	M	N
BIKE	18	3/8	5/8	7 1/4	2 1/4	2 5/8	5 7/8	3 3/4	1 7/8	1	5/8	2 1/2	1 1/2
MIN.	24	3/8	5/8	9 5/8	3	3 1/2	7 3/4	5	2 1/2	1 1/2	13/16	3 1/4	1 1/2
STD.	30	1/2	3/4	12	3 3/4	4 3/8	9 11/16	6 1/4	3	1 7/8	1	4 1/16	1 7/8
EXPWY.	36	5/8	7/8	14 3/8	4 1/2	5 1/4	11 5/8	7 1/2	3 5/8	2 1/4	1 1/4	4 7/8	2 1/4
SPECIAL	48	3/4	1 1/4	19 3/16	6	7	15 1/2	10	4 7/8	3	1 5/8	6 1/2	3



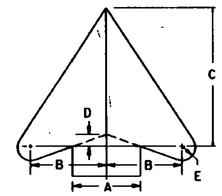
SIGN	DIMENSIONS (INCHES)													
	A	B	C	D	E	F	G	H	J	K	L	M	N	P
BIKE	18	3/8	5/8	5 3/8	5 1/2	6	4 3/4	3 3/8	1 3/4	1 1/4	2	2 5/8	6 1/4	1 1/2
MIN.	24	3/8	5/8	7 1/8	7 1/4	8	6 1/4	4 1/2	2 11/32	1 3/4	2 3/4	3 1/2	8 1/4	1 1/2
STD.	30	1/2	3/4	8 7/8	9 1/16	10	7 13/16	5 5/8	2 15/16	2 3/16	3 7/16	4 3/8	10 5/16	1 7/8
EXPWY.	36	5/8	7/8	10 5/8	10 7/8	12	9 3/8	6 3/4	3 1/2	2 5/8	4 1/8	5 1/4	12 3/8	2 1/4
FWY.	48	3/4	1 1/4	14 3/16	14 1/2	16	12 1/2	9	4 11/16	3 1/2	5 1/2	7	16 1/2	3



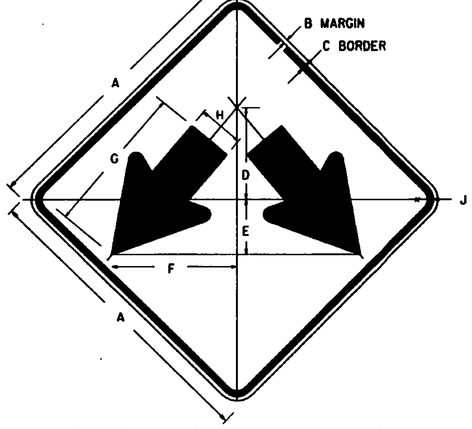
SIGN	DIMENSIONS (INCHES)							
	A	B	C	D	E	F	G	H
MIN.	24	3/8	5/8	2	3	9	8 1/2	1 1/2
STD.	30	1/2	3/4	2 7/16	3 3/4	11 1/4	10 3/8	1 7/8
EXPWY.	36	5/8	7/8	2 15/16	4 1/2	13 1/2	12 3/4	2 1/4
SPECIAL	48	3/4	1 1/4	3 7/8	6	18	17	3



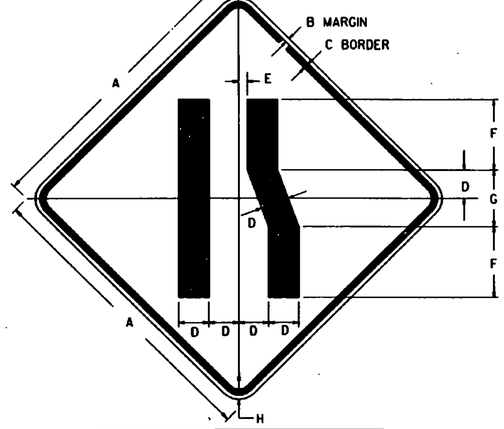
SIGN	DIMENSIONS (INCHES)														
	A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	S
MIN.	30	1/2	3/4	3 5/16	8 5/16	4 1/8	25	1 11/16	4 1/8	1 7/8	10	11 5/8	7 15/16	13 11/16	7 7/8	8 5/16	2 1/16
STD. & EXPWY.	36	5/8	7/8	4	10	5	30	2	5	2 1/4	12	14	9 1/2	16 1/2	9 1/2	10	2 1/2
SPECIAL	48	3/4	1 1/4	5 1/4	13 1/8	6 3/16	39 5/16	2 5/8	6 3/16	3	16	18 11/16	12 11/16	22	12 7/16	13 1/8	3 5/16



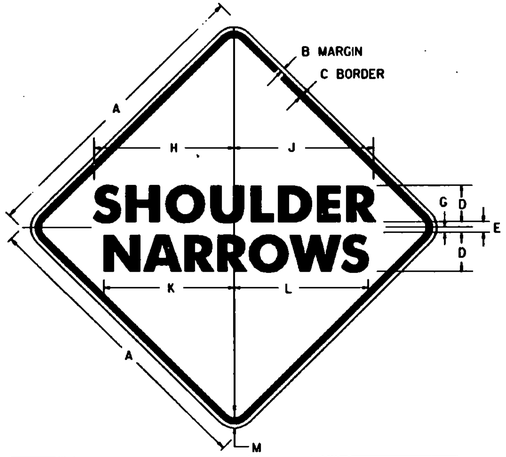
DIMENSIONS (INCHES)				
A	B	C	D	E
2 3/8	3	5 1/4	3/8	1/2
3	3 1/2	6 1/8	7/16	9/16
3 1/8	1 3/8	6 3/8	1/2	3/4
3 5/16	3 13/16	6 11/16	1/2	11/16
3 1/2	4	7 1/8	9/16	11/16
3 3/4	4 5/16	7 5/8	9/16	3/4
4	4 5/8	8 1/8	5/8	15/16
5 1/4	6	10 5/8	13/16	1 1/16
6	6 7/8	12 3/16	15/16	1 3/16
7	8	14 3/16	1 1/16	1 3/8



SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H	J
STD. & MIN.	24	3/8	5/8	8	4 1/8	9 3/4	11 5/8	3 1/8	1 1/2
SPECIAL	30	1/2	3/4	10	5 1/4	12 3/8	14 11/16	4	1 7/8
SPECIAL	36	5/8	7/8	12	6 1/8	14 5/8	17 1/2	4 3/4	2 1/4



SIGN	DIMENSIONS (INCHES)							
	A	B	C	D	E	F	G	H
MIN.	30	1/2	3/4	3 3/8	13/16	8 7/16	6 3/4	1 7/8
STD. & EXPWY.	36	5/8	7/8	4	1	10	8	2 1/4
FWY.	48	3/4	1 1/4	5 5/16	1 3/8	13 5/16	10 5/8	3



SIGN	DIMENSIONS (INCHES)											
	A	B	C	D	E	F	G	H	J	K	L	M
MIN & STD.	36	5/8	7/8	5C	3	6D	1	13 11/16	13 1/16	17 5/8	18 1/4	2 1/4
EXPWY.	48	3/4	1 1/4	7D	3 1/2	7D	1	23 13/16	23 7/8	21 1/2	21 3/16	3

COLORS

ALL THE WARNING SIGNS SHOWN ON THIS SHEET SHALL HAVE BLACK TEXT AND SYMBOLS ON REFLECTORIZED YELLOW BACKGROUND EXCEPT AS OTHERWISE NOTED. THE COLORS SHALL CONFORM WITH THE COLORS ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS AND APPROVED BY THE DEPARTMENT OF TRANSPORTATION, FEDERAL HIGHWAY ADMINISTRATION.

MATERIALS

THE SIGN BASE MATERIALS USED FOR THE WARNING SIGNS SHOWN ON THIS SHEET MAY BE ANY OF THE FOLLOWING, OF THE MINIMUM THICKNESS NOTED.

	18" x 18"	24" x 24" 30" x 30"	36" x 36"	48" x 48"
FLAT SHEET ALUMINUM	0.060"	0.080"	0.100"	0.125"
HIGH DENSITY OVERLAID PLYWOOD	1/2"	1/2"	5/8"	5/8"
GALVANIZED FLAT SHEET STEEL	18 GAGE	16 GAGE	14 GAGE	12 GAGE

THE TEXT, BORDER AND SYMBOLS SHALL BE LETTERING FILM, SILK SCREENED OR HAND PAINTED. WHEN HAND PAINTED, POOR WORKMANSHIP SHALL BE CAUSE FOR REJECTION. THE REFLECTIVE MATERIAL SHALL BE REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND OF THE SIGN. ENCAPSULATED LENS REFLECTIVE SHEETING SHALL BE USED FOR THE SIGN BACKGROUND WHERE NOTED.

TEXT DESIGN

LETTERS, DIGITS, SYMBOLS, SPACINGS, AND TEXT DIMENSIONS SHALL CONFORM WITH THE STANDARD ALPHABETS AND DESIGNS PRESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

SPECIFICATIONS

WARNING SIGNS SHALL MEET THE VERMONT STANDARD SPECIFICATIONS FOR "TRAFFIC SIGNS".

REVISIONS AND CORRECTIONS

APPROVED

OCT. 30, 1987
DATE

CHIEF ENGINEER

DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

TRAFFIC AND SAFETY ENGINEER

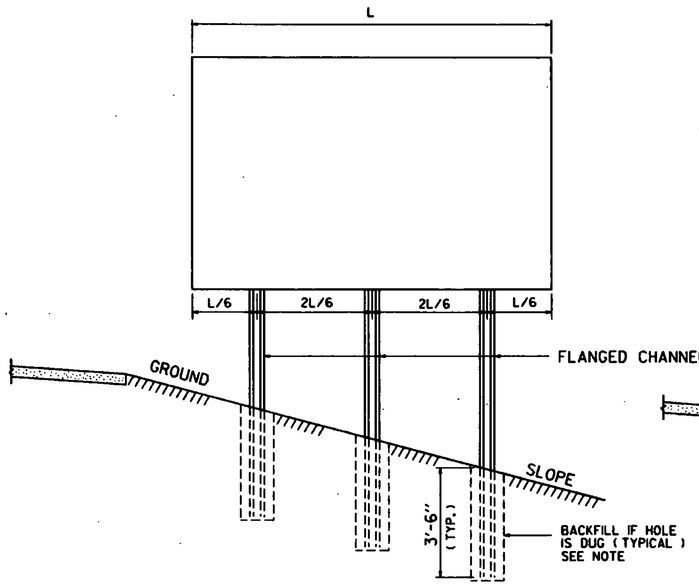
WARNING SIGN DETAIL

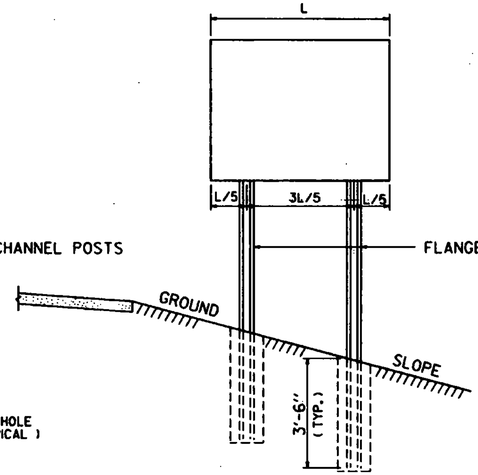
VERMONT AGENCY OF TRANSPORTATION

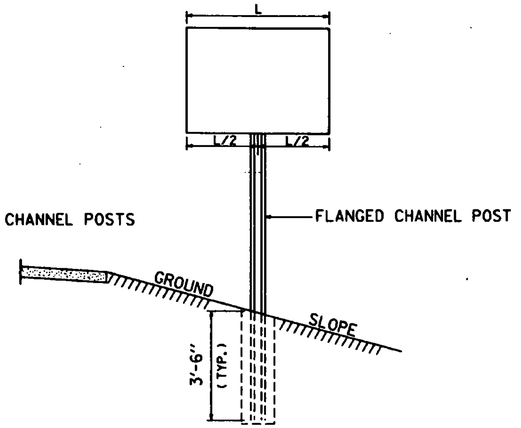
STANDARD
E-151

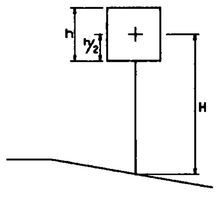
GENERAL NOTES

CONSTRUCTION METHODS - POSTS MAY BE DRIVEN OR SET IN A DUG HOLE AND BACKFILLED. IF DRIVEN, A DRIVING CAP SHALL BE USED. THE DUG HOLE INSTALLATION SHALL BE USED IN AREAS OF POOR SOIL CONDITIONS OR AS DIRECTED BY THE ENGINEER. BACKFILL SHALL BE COMPACTED AS DIRECTED BY THE ENGINEER.







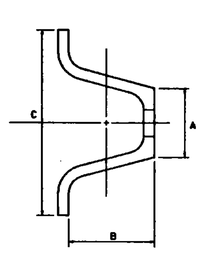


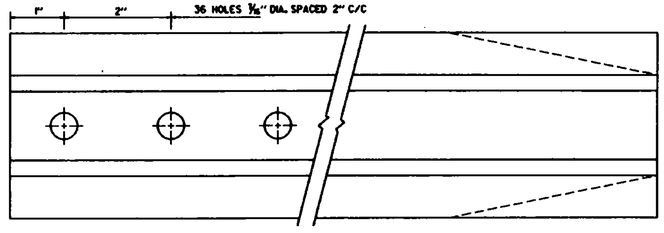
POST SELECTION CHART		
SIGN AREA (FT ^{2}) x H (FT) ≤SV (SELECTION VALUE)		
POST SIZE	Sv	DESIGN CRITERIA
2 LB/FT.	32	WIND SPEED = 60 MPH (10-YEAR MEAN RECURRENCE INTERVAL) WIND PRESSURE = 12 PSF STEEL MIN YIELD Fy = 50,000 PSI ALLOWABLE STRESS = (1.4) 0.55 Fy
2 1/2 LB/FT.	77	
3 LB/FT.	107	

POST SIZE POUNDS PER LINEAR FOOT	DIMENSIONS			PLASTIC SECTION MODULUS, Z
	A	B	C	
2	1 3/32"	1 31/64"	3 1/16"	0.26 IN.^{3}
2 1/2	1 9/32"	1 35/64"	3 1/16"	0.40 IN.^{3}
3	1 5/16"	1 1/8"	3 1/2"	0.53 IN.^{3}

SIMILAR DIMENSIONS ARE ACCEPTABLE, HOWEVER PLASTIC SECTION MODULUS VALUES MUST NOT BE EXCEEDED.

POST SPACING DETAILS





POST MAY BE SQUARE OR TAPERED ON BOTTOM END

REVISIONS AND CORRECTIONS

APPROVED

SEPT. 10, 1987
DATE

David B. Keller
CHIEF ENGINEER

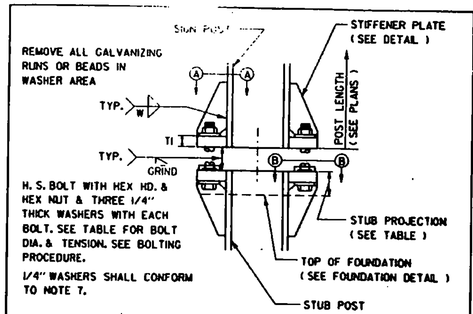
Arthur J. Gross
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

Gordon S. MacArthur
TRAFFIC AND SAFETY ENGINEER

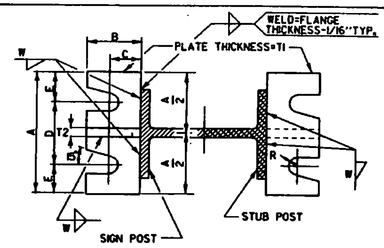
FLANGED CHANNEL STEEL SIGN POST

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-160



SLIP BASE DETAIL
(ELEVATION)



SECTION A-A SECTION B-B

(SEE TABLE FOR DIMENSIONS)

SECTIONS SHOWN ARE FOR INSTALLATIONS ON RIGHT SHOULDER AND IN CORE. PLATE SLOT BEVELS ARE OPPOSITE FOR INSTALLATIONS IN THE MEDIAN OF DIVIDED HIGHWAYS AND TWO WAY RAMPS.

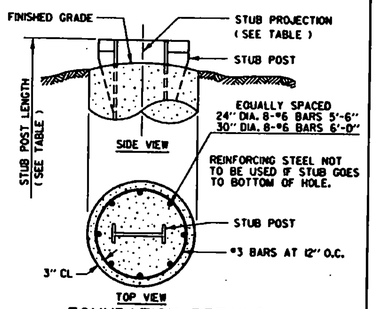
SLIP BASE DETAIL
(SECTION)

POST SIZE	BOLT SIZE	A	B	C	D	E	TI	T2	W	R
W6X9										
W6X12	5/8" Ø X 3 1/2" *	5"	2"	1 1/4"	2 3/4"	1 1/8"	3/4"	1/2"	1/4"	11/32"
W6X15										
W8X18										
W8X21										
W10X22	3/4" Ø X 4 1/2" **	6"	2 1/4"	1 3/8"	3 1/2"	1 1/4"	1"	3/4"	5/16"	13/32"
W10X26										
W12X30		7"			4"	1 1/2"				

POST SIZE	FUSE PLATE DATA TABLE									BOLT DIA.	FOUNDATION DATA				
	F	G	H	J	K	L	N	DI	T3		BASE DIA.	BASE DEPTH	MIN. STUB LENGTH	STUB PROJ.	VOLUME OF SINGLE BASE
W6X9	3 5/16"	2"	1 1/8"	4"	2 1/4"	7/8"	1/2"	9/16"	1/4"	1/2"	24"	6'-0"	3'-0"	2 1/2"	0.70 C.Y.
W6X12 W6X15 W8X18 W8X21	4 3/16"	2 1/2"	1 1/4"	6"	3 1/4"	1 1/4"	5/16"	11/16"	3/8"	5/8"					
W10X22 W10X26	4 3/16"	2 1/2"	1 1/4"	5 1/4"	2 3/4"	1 1/4"	7/16"	11/16"	1/2"	5/8"					
	4 3/4"	2 1/2"	1 1/2"	5 1/4"	2 3/4"	1 1/4"	3/4"	13/16"	1/2"	3/4"					
W12X30	5 1/4"	3"	1 1/2"	5 3/4"	2 3/4"	1 1/2"	3/4"	13/16"	1/2"	3/4"					
	5 1/4"	3"	1 1/2"	6 1/2"	3 1/2"	1 1/2"	1 1/4"	15/16"	1/2"	3/4"	30"	6'-6"	3'-0"	2 1/2"	1.2 C.Y.

* 5/8" BOLTS SHALL HAVE A MINIMUM THREAD LENGTH OF 2 INCHES

** 3/4" BOLTS SHALL HAVE A MINIMUM THREAD LENGTH OF 2 1/4 INCHES THESE BOLTS SHALL BE FURNISHED WITH TWO NUTS FOR EACH BOLT.



FOUNDATION DETAILS

PROCEDURE FOR ASSEMBLY OF BASE CONNECTION

1. MAKE SURE ALL BOLTS ARE FROM THE SAME STOCK.
2. TRY NUTS ON BOLT THREADS MAKING SURE THEY TURN EASILY.
3. PLACE (3) BOLTS IN " SKIDMORE - WILHELM " DEVICE. TORQUE TO PROPER TENSION IN DEVICE. CALIBRATE TORQUE WRENCH BY CHECKING TORQUE ON THESE THREE BOLTS WHEN UNDER PROPER TENSION IN DEVICE.
4. USE THE AVERAGE OF THE THREE TORQUES ON SIMILAR BOLTS IN THE REAL SUPPORT.
5. ASSEMBLE POSTS TO STUB WITH BOLTS AND WITH THREE 1/4" FLAT WASHERS. (ONE EACH) UNDER HEAD OF BOLT , BETWEEN PLATES , AND UNDER NUT.)
6. SHIM AS REQUIRED TO PLUMB POST.
7. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" TO 15" WRENCH TO BED WASHERS AND SHIMS AND TO CLEAN BOLT THREADS. THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TENSION.
8. THE BASE PLATE BOLTS WILL BE TORQUED TO PRESCRIBED BOLT TENSION SHOWN BELOW. AFTER THE INITIAL TORQUING USE A SECOND NUT TO INSURE THAT THE FIRST NUT WILL NOT BACK OFF. THE CONTRACTOR WITH THE AGENCY INSPECTOR WILL RETURN TO THE SIGN TWO MORE TIMES AT INTERVALS OF 30 DAYS FOR THE PURPOSE OF CHECKING AND REESTABLISHING THE PRESCRIBED TORQUE. THE SECOND NUT SHALL REMAIN AS A LOCK NUT.
9. THE " SKIDMORE - WILHELM " DEVICE IS AVAILABLE THROUGH THE V.A.O.T. CONSTRUCTION DIVISION.

GENERAL NOTES

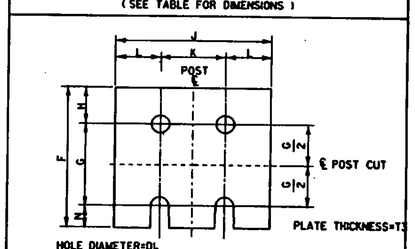
1. DESIGN CONFORMS WITH AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS , LUMINAIRES AND TRAFFIC SIGNALS.
2. MATERIAL AND FABRICATION SHALL CONFORM TO THE REQUIREMENTS OF THE STATE OF VERMONT AGENCY OF TRANSPORTATION STANDARD SHEETS AND SPECIFICATIONS.
3. ALL STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. A-36.
4. ALL STRUCTURAL STEEL , BOLTS , NUTS AND WASHERS SHALL BE GALVANIZED AS PER A.S.T.M. A-153 EXCEPT AS NOTED BELOW.
5. ALL HIGH STRENGTH BOLTS , NUTS AND WASHERS SHALL BE GALVANIZED AS PER A.S.T.M. A-123. THE POST CUT SHALL BE A SAW CUT ONLY. ALL OTHER CUTS EXCLUDING POST CUTS MAY BE FLAME CUT PROVIDED ALL EDGES ARE GROUND SMOOTH. METAL PROJECTING BEYOND THE PLATE FACE WILL NOT BE PERMITTED. ALL POST HOLES SHALL BE DRILLED.
6. ALL HIGH STRENGTH BOLTS AND NUTS SHALL CONFORM TO A.S.T.M. A-325
7. ALL 1/4" FLAT WASHERS SHALL CONFORM TO THE HARDNESS REQUIREMENTS FOR A.S.T.M. A-325 WASHERS.
8. PAINT FOR SAW CUT SHALL BE A SINGLE COMPONENT ZINC-RICH COMPOUND YIELDING A DRIED FILM OF AT LEAST 85% PURE ZINC. IT SHALL MEET OR EXCEED THE REQUIREMENT OF VT. LOS "ZINC RICH COATING".
9. MAIN SIGNS SHALL BE ERECTED A MINIMUM OF 7 FEET ABOVE EDGE OF PAVEMENT AND A MINIMUM OF 5 FEET ABOVE THE GROUND. IF AUXILIARY PANELS ARE ATTACHED BELOW THE MAIN SIGN , THE MINIMUM FOR THE MAIN SIGN ABOVE THE EDGE OF PAVEMENT SHALL BE 8 FEET AND THE MINIMUM FOR THE AUXILIARY PANELS SHALL BE 5 FEET. THE 5 FOOT MINIMUM GROUND CLEARANCE SHALL ALSO APPLY TO AUXILIARY PANELS.
10. EXTREME CARE SHOULD BE TAKEN TO KEEP THE SLIP JOINT FREE OF ANY FOREIGN MATERIAL , EITHER BY WRAPPING THE JOINT OR THOROUGH CLEANING IMMEDIATELY AFTER POURING OF CONCRETE.
11. ALL FUSE PLATE BOLTS SHALL BE TIGHTENED BY THE FABRICATOR TO THE PRESCRIBED BOLT TENSION SHOWN BELOW. THE CONTRACTOR WILL BE HELD RESPONSIBLE TO CHECK AND CERTIFY THAT THE REQUIRED RESIDUAL TENSIONS ARE OBTAINED.
12. NO MORE THAN 600 LBS. OF POST WILL BE ALLOWED BELOW THE FUSE PLATE.
13. THE AMOUNT OF TORQUE NECESSARY TO ACHIEVE THE PROPER BOLT TENSION FOR BOTH THE "FUSE PLATE" AND THE "SLIP BASE" SHALL BE DETERMINED BY USE OF A SUITABLE TORQUE WRENCH CALIBRATED IN A "SKIDMORE-WILHELM" DEVICE. THE PROCEDURE FOR CALIBRATING THE WRENCH IS OUTLINED IN THE "PROCEDURE FOR ASSEMBLY OF BASE CONNECTION" ON THIS SHEET.
14. DUE TO THE VARIABILITY OF THE GALVANIZATION ON THE BOLTS , NUTS AND WASHERS ETC., NO FORMULA OR TABLES SHALL BE USED TO CALCULATE THE REQUIRED CONVERSION FROM BOLT TENSION TO APPLIED TORQUE , UNLESS APPROVED BY THE TRAFFIC AND SAFETY DIVISION.
15. THE INSPECTION OF THE "FUSE PLATE BOLTS" SHALL BE AS OUTLINED IN THE MOST RECENT EDITION OF AASTHO "STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES", SECTION 10.17.5 "INSPECTION OF CONNECTIONS USING HIGH STRENGTH BOLTS."
16. INSPECTION OF THE "SLIP BASE BOLTS" SHALL BE AS FOLLOWS: USING A TORQUE WRENCH , WHICH HAS BEEN CALIBRATED IN THE "SKIDMORE-WILHELM" DEVICE WITH THREE BOLTS OF THE SAME GRADE , SIZE AND CONDITION AS THOSE UNDER INSPECTION , THE INSPECTOR SHALL SET THE WRENCH FOR THE MAXIMUM SETTING SHOWN BELOW FOR "SLIP BASE BOLTS" AND TEST ALL "SLIP BASE BOLTS" IN EACH ASSEMBLY.
   A. IF THE BOLT BEING TESTED TURNS MORE THAN 5° UPON APPLICATION OF THE WRENCH SET TO THE MAXIMUM , THE INSPECTOR SHALL SET THE WRENCH TO THE MINIMUM AND RETEST THE BOLT. IF THE BOLT TURNS LESS THAN 5° UPON APPLICATION OF THE WRENCH SET TO MINIMUM , IT SHALL BE CONSIDERED ACCEPTABLE. IF THE BOLT TURNS MORE THAN 5° UPON APPLICATION OF THE WRENCH SET TO MINIMUM , IT SHALL BE TIGHTENED AT LEAST TO THE MINIMUM.
   B. IF THE BOLT BEING TESTED TURNS LESS THAN 5° UPON APPLICATION OF THE WRENCH SET TO MAXIMUM , IT SHALL BE LOOSENED AND RETIGHTENED SO THAT IT FALLS WITHIN THE RANGE SPECIFIED AND REINSPECTED AS OUTLINED ABOVE.
17. BOLT TENSIONS

FUSE PLATE BOLTS

BOLT SIZE	MIN. BOLT TENSION	MAX. BOLT TENSION
1/2" DIA.	12000 LBS.	15000 LBS.
5/8" DIA.	19200 LBS.	24500 LBS.
3/4" DIA.	28400 LBS.	36000 LBS.

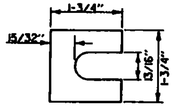
SLIP BASE BOLTS

BOLT SIZE	MIN. BOLT TENSION	MAX. BOLT TENSION
5/8" DIA.	1740 LBS.	2660 LBS.
3/4" DIA.	2400 LBS.	3600 LBS.



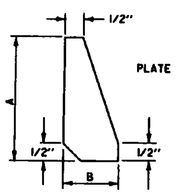
USE H. S. BOLTS WITH HEX. HD. AND HEX. NUTS , ONE 1/4" THICK FLAT WASHERS UNDER EACH BOLT HEAD , AND ONE 1/4" THICK WASHER UNDER NUT. 1/4" WASHERS SHALL CONFORM TO NOTE 7.

FUSE PLATE
(SEE TABLE FOR DIMENSIONS)

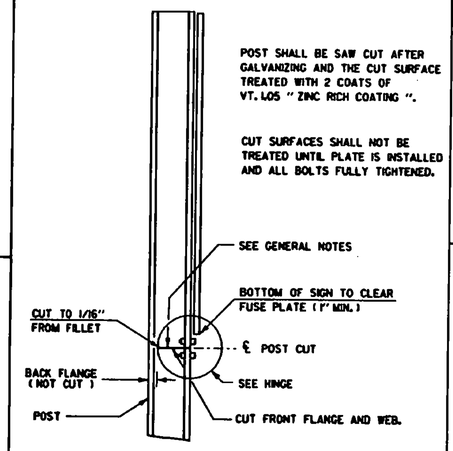


FURNISH TWO .012" ± THICK AND TWO .032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO A.S.T.M. B-36.

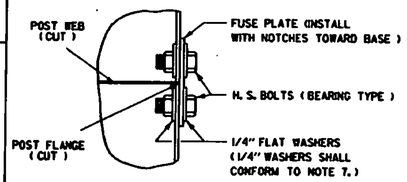
SHIM DETAIL



STIFFENER PLATE
(SEE TABLE FOR DIMENSIONS)

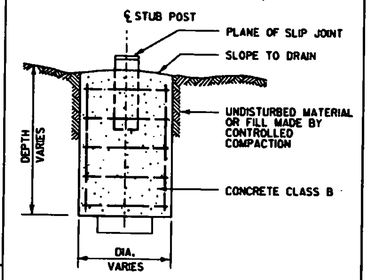


FUSE PLATE-POST DETAIL

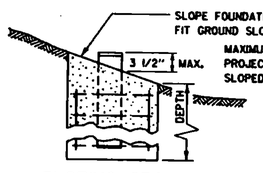


FUSE PLATE "HINGE" DETAIL
(SEE NOTE 11)

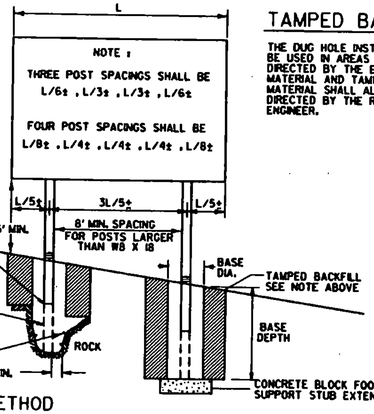
FLANGE HOLES FOR HINGE SHALL BE DRILLED



FLAT GROUND FOUNDATION DETAILS



SLOPING GROUND FOUNDATION DETAILS



TAMPED BACKFILL

THE DUG HOLE INSTALLATION SHALL BE USED IN AREAS OF POOR SOIL AS DIRECTED BY THE ENGINEER. BACKFILL MATERIAL AND TAMPING OF THE MATERIAL SHALL ALSO BE AS DIRECTED BY THE RESIDENT ENGINEER.

CONSTRUCTION METHOD

HOLES FOR POST FOOTINGS MAY BE AUGERED OR DUG. THE HOLES MAY BE LEFT WITH EARTH SIDES, IF THE MATERIAL IS FIRM, AND ALL DISTRUBED SOIL AROUND THE CIRCUMFERENCE OF THE AUGERED HOLE IS REMOVED. IF NOT , A SUITABLE FORM APPROVED BY THE ENGINEER SHALL BE USED. CORRUGATED METAL CULVERT PIPE OR PAPER FORMS MANUFACTURED FOR USE AS CONCRETE COLUMN FORMS WILL BE ACCEPTABLE. IF THE STUB IS EXTENDED TO THE BOTTOM OF THE HOLE , A CONCRETE BLOCK FOOTING SHALL BE UTILIZED TO SUPPORT THE POST AND THE POST SHALL BE HELD SECURELY IN PLACE AT THE BOTTOM. THIS MAY BE DONE BY EMBEDDING THE POST AND CONCRETE BLOCK FOOTING IN WET CONCRETE AND ALLOWING TO SET WITH THE POST SECURED IN POSITION , PLUMBED AND PROPERLY BRACED , THE REMAINING FOOTING MAY BE POURED. THE TIME BETWEEN POURS FOR THE CURING OF THE CONCRETE SHALL BE AS DETERMINED BY THE ENGINEER. THE FORM SHALL BE LEFT IN PLACE AND THE HOLE BACKFILLED, AND COMPACTED AS DIRECTED BY THE ENGINEER. NO PART OF THE FORM SHALL SHOW ABOVE THE GROUND LINE WHEN THE WORK IS COMPLETED.

REVISIONS AND CORRECTIONS

APPROVED

SEPT. 10, 1987
DATE

David B. Kelley
CHIEF ENGINEER

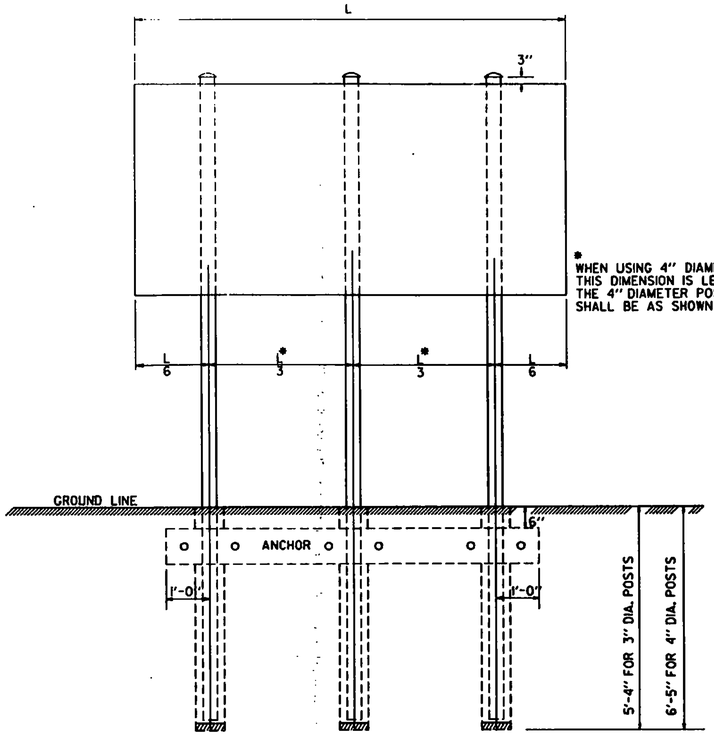
Arthur Gosse
DIRECTOR OF PLANNING AND PRECONSTRUCTION

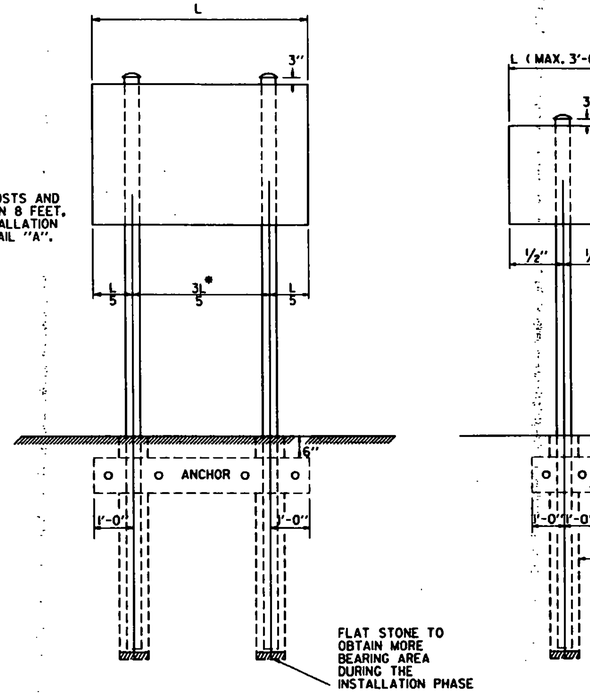
G. B. MacArthur
TRAFFIC AND SAFETY ENGINEER

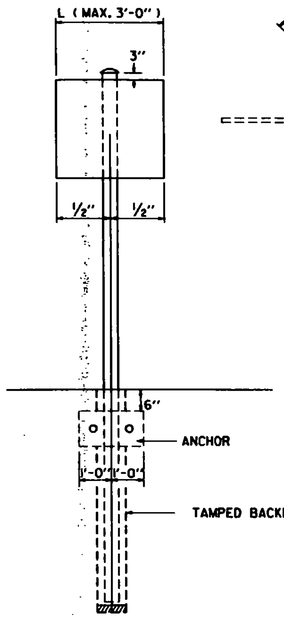
W-SHAPED STEEL SIGN POST

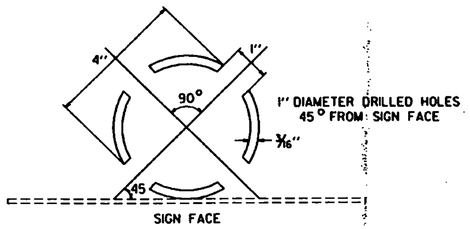
VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-161

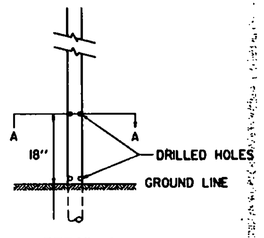








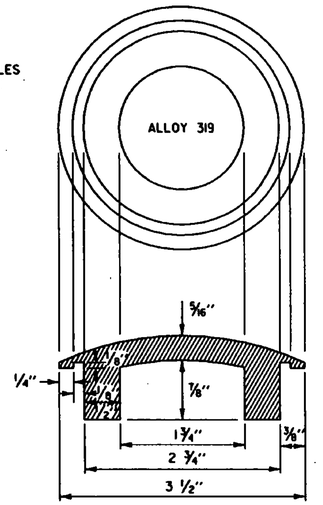
SECTION A-A



DETAIL A

4" DIAMETER POST
(MODIFIED)

CAST ALUMINUM CAP FOR SIGN POSTS



DIMENSIONS SHOWN ARE FOR 3" O.D., 2 3/4" I.D. + COMMERCIAL TOLERANCES. CAPS DESIGNED FOR DRIVE FIT DIMENSIONS ARE PROPORTIONAL FOR LARGER DIAMETER TUBING

POSTS THE POSTS FOR THESE INSTALLATIONS SHALL BE EXTRUDED TUBULAR POSTS OF ALUMINUM ALLOY 6061-T6.

HARDWARE THE ASSEMBLY HARDWARE USED TO FASTEN A SIGN TO THE POSTS SHALL BE ALUMINUM OR STAINLESS STEEL OF A STANDARD COMMERCIAL DESIGN APPROVED BY THE DEPARTMENT.

ANCHORS USE TWO (2) PIECES OF 2" x 12" ROUGH PLANK. PLANKS, UNLESS OTHERWISE NOTED, SHALL CONFORM TO " STANDARD SPECIFICATIONS FOR CONSTRUCTION " SECTION 728.02

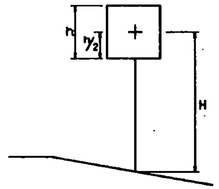
ERECTION ALL POSTS SHALL BE PLUMB AND LOCATED AS SPECIFIED BY DRAWINGS OR BY THE ENGINEER IN THE FIELD. LOCKNUTS ON 3/8" ø 16 ALUMINUM POST BOLT CLIPS SHALL BE TORQUED TO 225 INCH POUNDS USING DRY, CLEAN, UNLUBRICATED THREADS. WHERE ALUMINUM SURFACES ARE TO BE PLACED IN CONTACT WITH WOOD, THEY SHALL BE GIVEN A THICK COAT OF AN ALKALI-RESISTANT BITUMINOUS PAINT MEETING THE REQUIREMENTS OF MILITARY SPECIFICATION MIL-P-6883, WHICH SHALL BE DRY BEFORE INSTALLATION.

THE HOLE SHALL BE CAREFULLY DUG AND THE POST SET TO THE DEPTH SPECIFIED ABOVE. POST SHALL NOT BE DRIVEN. THE BACKFILL MATERIAL SHALL CONFORM TO THE REQUIREMENTS OF GRANULAR BACKFILL FOR STRUCTURES OR SHALL BE MATERIAL APPROVED BY THE ENGINEER. COMPACTION OF THE BACKFILL WILL BE DONE AS DIRECTED BY THE ENGINEER.

IN AREAS WHERE LEDGE ROCK IS ENCOUNTERED POSTS WILL BE SET AND GROUTED 24" DEEP IN THE LEDGE UNLESS THE POSTS PENETRATE THE GROUND 4'.

POST DIAMETER	WALL THICKNESS	WEIGHT PER FT.
3" ROUND	3/16"	1.9 LBS
4" ROUND	3/16"	2.6 LBS
3" SQUARE	3/16"	2.5 LBS

TUBULAR ALUMINUM POST



POST SELECTION CHART DETAIL

POST SELECTION CHART		
SIGN AREA (FT.²) x H(FT.)* SV (SELECTION VALUE)		
POST SIZE	Sv (FT.³)	DESIGN CRITERIA
3" DIA.	225	WIND VELOCITY = 60 MPH (10 YEAR
4" DIA. (MODIFIED)	276	MEAN RECURRENCE INTERVAL) WIND
		PRESSURE = 12 PSF, ALUMINUM Fy =
3" SQUARE TUBE*	307	21,000 PSI, ALLOWABLE STRESS
4" DIA.	418	= 1.4 (21,000) PSI

*USE ON SINGLE POST INSTALLATIONS ONLY

REVISIONS AND CORRECTIONS

APPROVED

SEPT. 10, 1987
DATE

David B Kelley
CHIEF ENGINEER

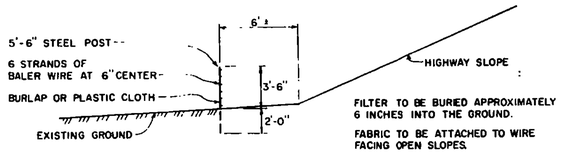
Arthur J Gosa
DIRECTOR OF PLANNING AND PRE-CONSTRUCTION

E.B. MacArthur
TRAFFIC AND SAFETY ENGINEER

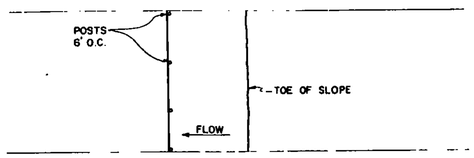
TUBULAR ALUMINUM SIGN POST

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-162

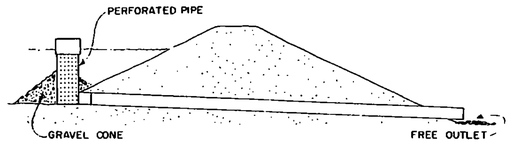


ELEVATION

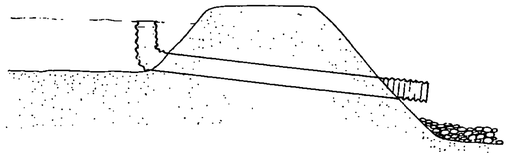


PLAN

SILT FENCE

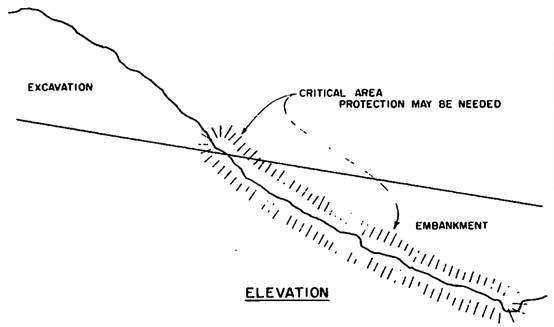


LARGE – PERMANENT INSTALLATION
PIPE RISER – STONE OUTLET

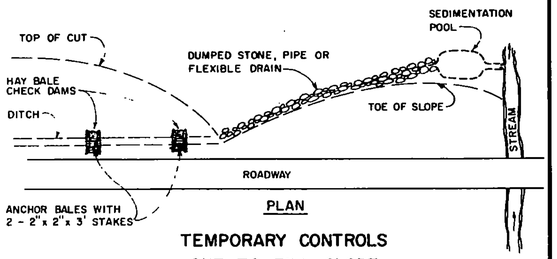


SMALL – TEMPORARY INSTALLATION
ACCM PIPE WITH RISER – STONE OUTLET

SEDIMENT DAMS

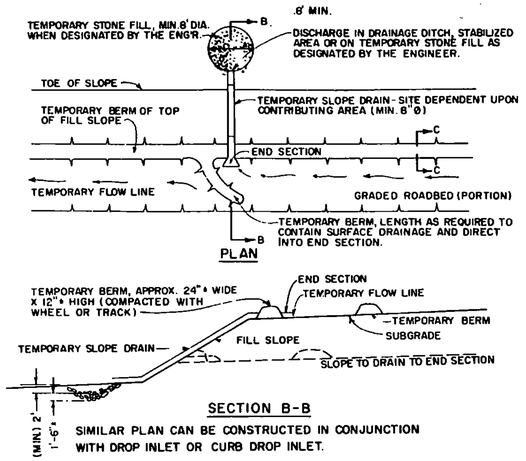


ELEVATION



PLAN

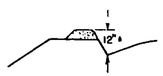
TEMPORARY CONTROLS
CUT TO FILL SLOPE



PLAN

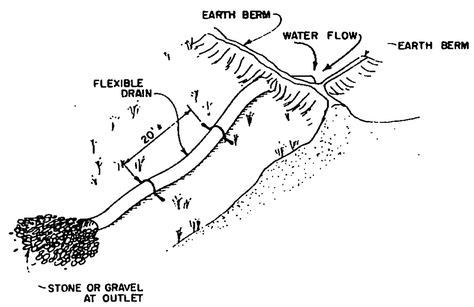
SECTION B-B

SIMILAR PLAN CAN BE CONSTRUCTED IN CONJUNCTION WITH DROP INLET OR CURB DROP INLET.

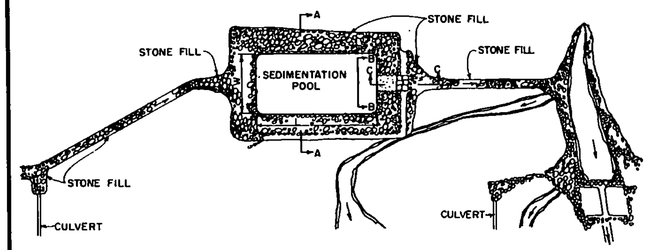


SECTION C-C

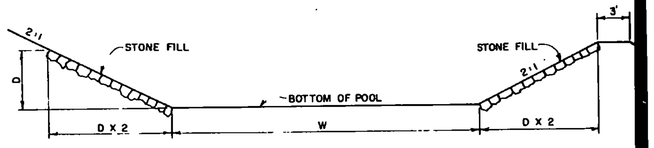
TEMPORARY BERMS AND SLOPE DRAINS
FOR FILL SLOPES



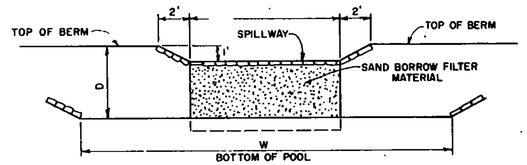
TEMPORARY FLEXIBLE SLOPE DRAIN



SEDIMENTATION POOL

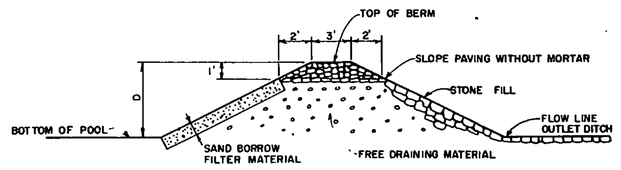


SECTION A-A



DETAILS OF SPILLWAY TO BE DETERMINED BY HYDRAULIC SECTION

SECTION B-B



SECTION C-C

CORRECTIONS & REVISIONS

JUNE 14, 1973 – SEDIMENT TRAPS REMOVED FROM TEMPORARY BERMS AND SLOPE DRAINS FOR FILL SLOPES.
FEB. 26, 1976 – SILT FENCE ADDED.
DEC. 7, 1976 – HAY BALE ANCHOR NOTE ADDED.

APPROVED: July 5, 1972
DATE

R. H. Arnold
CHIEF ENGINEER

E. H. Stickney
ASST. CHIEF ENGINEER

G. M. Lane
HIGHWAY ENGINEER

TEMPORARY EROSION CONTROL DETAILS

VERMONT AGENCY OF TRANSPORTATION

STANDARD

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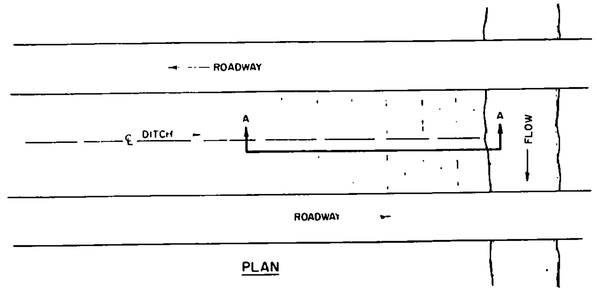
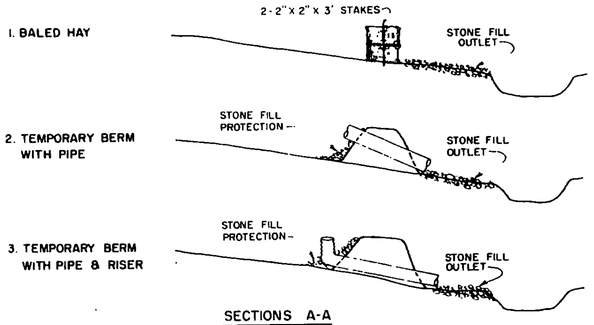
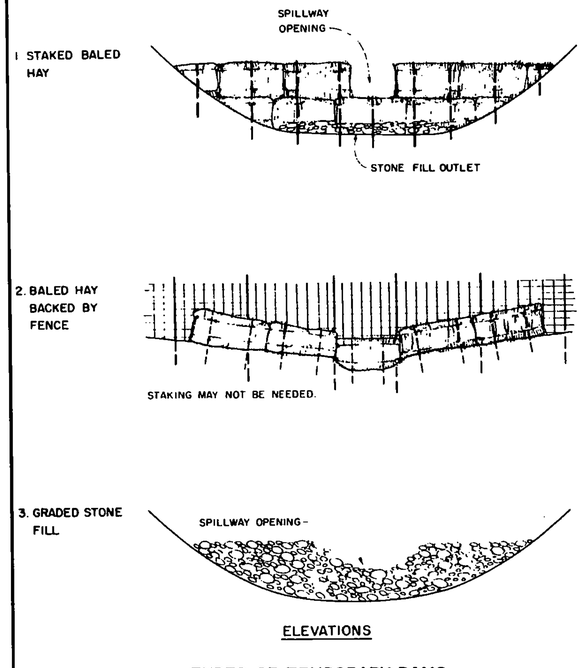


PLAN



SECTIONS A-A

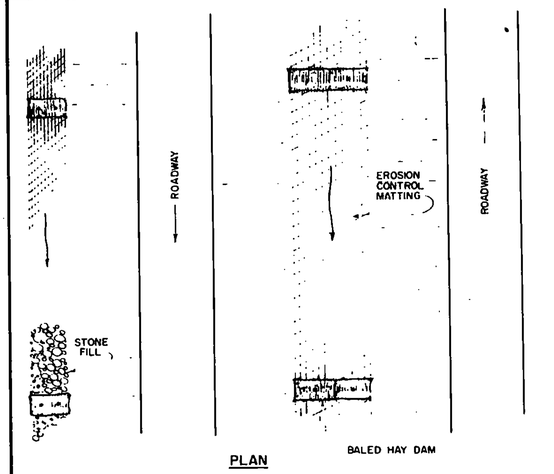
PROTECTION AT STREAM CROSSING
MEDIAN AND SIDE DITCHES



ELEVATIONS

TYPES OF TEMPORARY DAMS

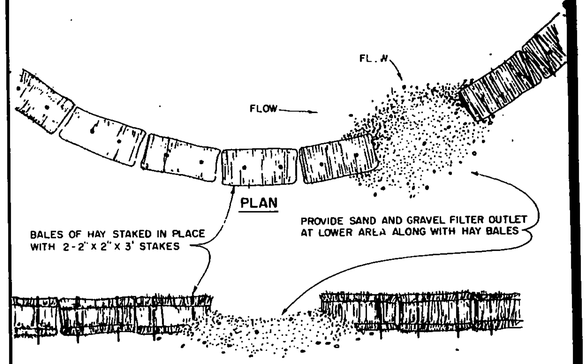
DAM SHOULD EXTEND FAR ENOUGH UP DITCH SIDE SLOPES TO EFFECTIVELY POND THE RUNOFF AND PREVENT EROSION AND WASHOUT.



PLAN

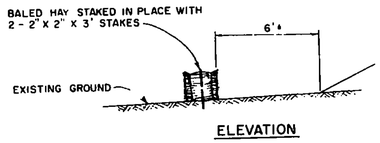
ELEVATION

BALED HAY DAMS USED IN DITCHES

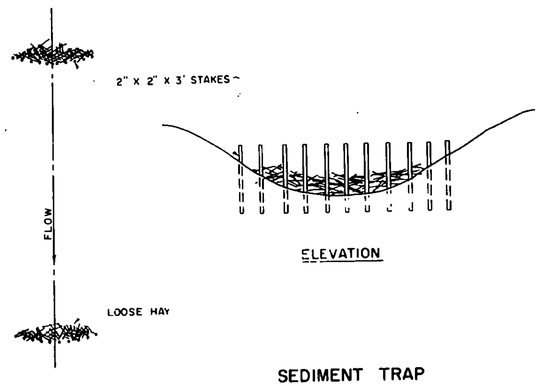


ELEVATION

BALED HAY DAMS ALONG TOE OF SLOPE



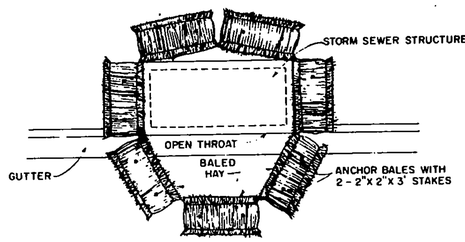
ELEVATION



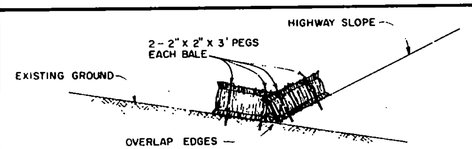
ELEVATION

PLAN

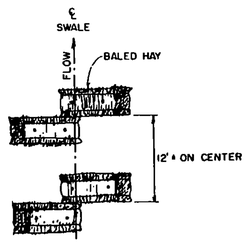
SEDIMENT TRAP
LOOSE HAY BACKED BY STAKES



INLET PROTECTION
TEMPORARY BARRIER - HAY BALES



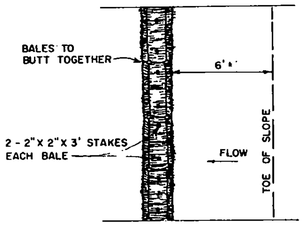
ELEVATION



PLAN

TO BE USED IN LOCATIONS WHERE THE EXISTING GROUND SLOPES IN TOWARD THE EMBANKMENT.
BALES WILL BE ALLOWED TO ROT IN PLACE.

BALED HAY EROSION CHECKS



PLAN

TO BE USED WHERE THE EXISTING GROUND SLOPES AWAY FROM THE HIGHWAY EMBANKMENT.

BALED HAY EROSION CHECKS

CORRECTIONS & REVISIONS

APPROVED: July 5, 1972
DATE
B.H. Conrad
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HIGHWAY ENGINEER

TEMPORARY EROSION CONTROL DETAILS

VERMONT AGENCY OF TRANSPORTATION

STANDARD

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