Date MAR 2 4 1987

F. R. LAFAYETTE, INC.
Contractor

Elaine P. Lafayette
Signature

Vice President
Title

Joseph C Carpenter
Transportation Secretary's Signature

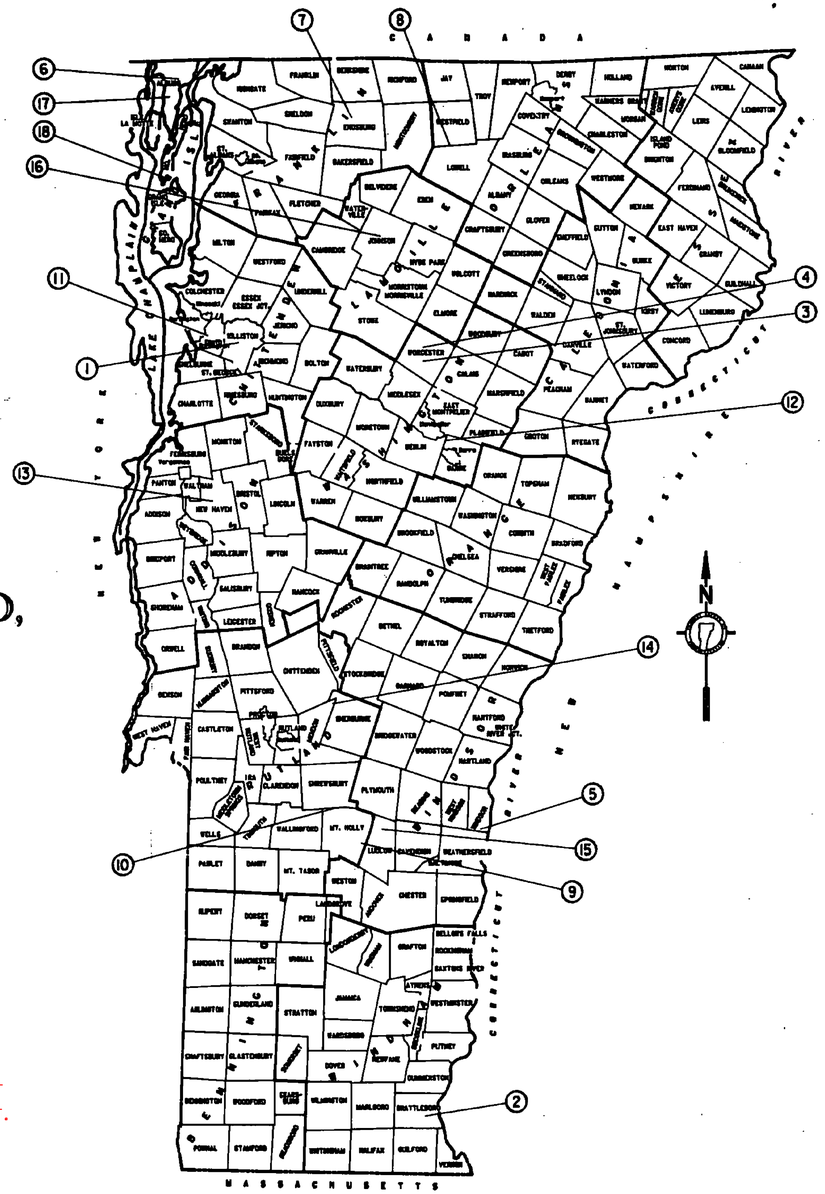
# STATE OF VERMONT
# AGENCY OF TRANSPORTATION

## PROPOSED IMPROVEMENT

# TOWNS OF WILLISTON, BRATTLEBORO, NEW HAVEN, WORCESTER, NORTH HERO-GRAND ISLE, BERLIN-BARRE, WEATHERSFIELD-WINDSOR, ALBURG, LUDLOW-MT. HOLLY-SHREWSBURY, ENOSBURG-LOWELL-WESTFIELD, SO. BURLINGTON, MENDON-SHERBURNE, AND JOHNSON

WORK PERFORMED UNDER THIS PROJECT INCLUDES UPGRADING SUBSTANDARD GUARD RAIL, UPGRADING SUBSTANDARD BRIDGE RAIL, LEDGE REMOVAL OR LEDGE PROTECTION, TREE CUTTING, UPGRADING SIGNS AND SIGN SUPPORTS, AND OTHER SAFETY IMPROVEMENTS WITHIN THE LIMITS OF THE 1985 PAVING PROGRAM.

| | |
|---|---|
| 1 | WILLISTON VT 2-A MM 0.000-1.528 |
| 2 | BRATTLEBORO US 5 MM 4.519-5.497 |
| 3 | WORCESTER SECT. 1 VT 12 MM 1.400-1.761 |
| 4 | WORCESTER SECT. 2 VT 12 MM 1.903-3.973 |
| 5 | WEATHERSFIELD-WINDSOR US 5 WEATHERSFIELD MM 6.389 TO WINDSOR MM 1.278 |
| 6 | ALBURG US 2 MM 2.759-3.422 |
| 7 | ENOSBURG VT 105 MM 0.000-0.464 |
| 8 | LOWELL-WESTFIELD VT 100 LOWELL MM 2.650 TO WESTFIELD MM 4.686 |
| 9 | LUDLOW-MT HOLLY-SHREWSBURY VT 103 SECT 1 LUDLOW MM 4.059 TO MT HOLLY MM 1.626 |
| 10 | LUDLOW-MT HOLLY-SHREWSBURY VT 103 SECT 2 SHREWSBURY MM 2.176-3.942 |
| 11 | SOUTH BURLINGTON US 7 MM 0.529-1.738 |
| 12 | BERLIN-BARRE VT 63 BERLIN MM 0.000 TO BARRE MM 2.910 |
| 13 | NEW HAVEN VT 17 MM 3.455-5.000 |
| 14 | MENDON-SHERBURNE US 4 MENDON MM 1.254 TO SHERBURNE MM 2.350 |
| 15 | LUDLOW VT 100 MM 5.040-5.191 |
| 16 | JOHNSON VT 15 MM 3.927-4.277 |
| 17 | ALBURG US 2 MM 4.683-4.825 |
| 18 | NORTH HERO - GRAND ISLE US 2 NORTH HERO MM 9.050 TO GRAND ISLE MM 0.200 |




CONTRACT PLANS

THESE PLANS DO NOT REFLECT CHANGES MADE ON THE PROJECT.

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

THESE PLANS ARE SUBJECT TO SUCH ENGINEERING CHANGES AS MAY BE REQUIRED BY THE FHWA OR THE DIRECTOR OF PLANNING AND PRECONSTRUCTION DEPT.
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.

SUBMITTED BY ORDER OF THE STATE TRANSPORTATION BOARD
APPROVED Arthur Goss DATE 12-8-86
DIRECTOR of PLANNING & PRECONSTRUCTION DEPT.

DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
APPROVED _____ DATE _____
DIVISION ADMINISTRATOR

PROJECT F SFTY (85)S
RS NH SFTY (85)
M SFTY (85)S
SHEET 1 OF 200 SHEETS

D-10

S.R.S. 12/17/70

DRAWING 44-151-40282-1

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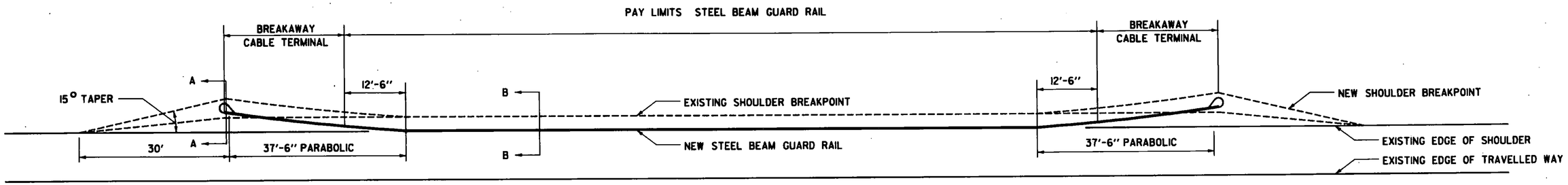
DATUM
VERTICAL _____
HORIZONTAL _____

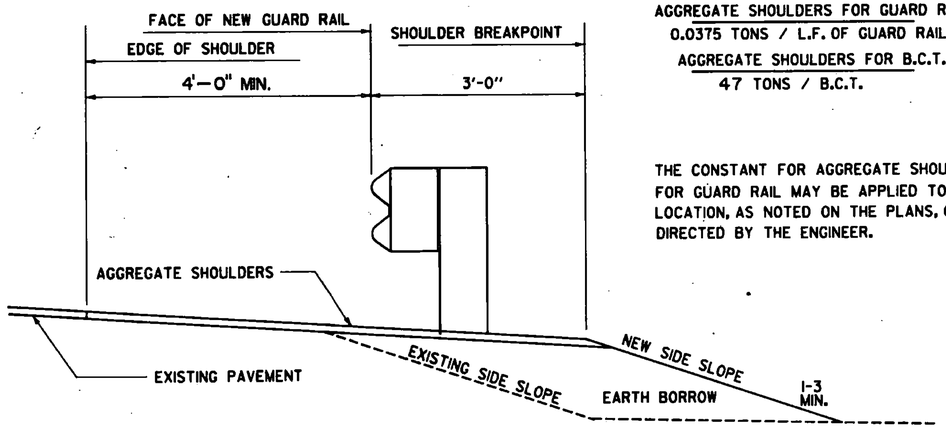
SURVEYED BY _____ DATE _____
DRAWN BY BEYOR DATE 3-86
TRACED BY _____ DATE _____

1985 STATEWIDE SAFETY PROJECT
PROJ. NO.
SHEET 2 OF 200

# GUARD RAIL DETAILS




TYPICAL GUARD RAIL INSTALLATION

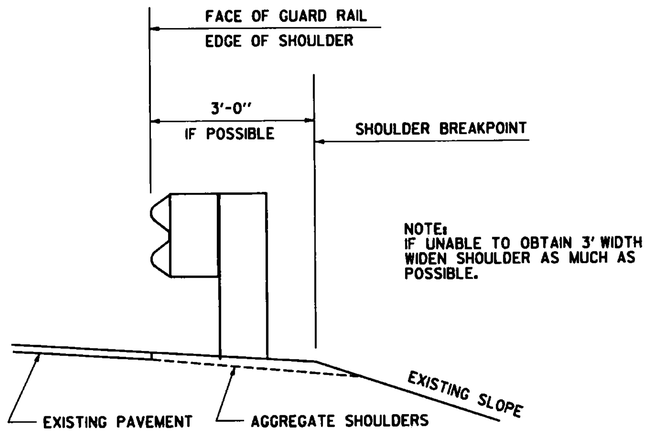



SECTION A-A

**ESTIMATING CONSTANTS**

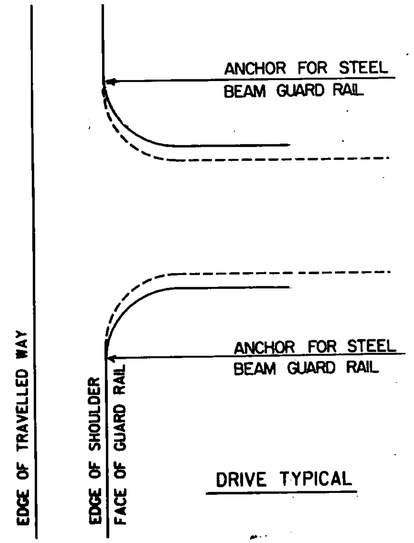
AGGREGATE SHOULDERS FOR GUARD RAIL
0.0375 TONS / L.F. OF GUARD RAIL
AGGREGATE SHOULDERS FOR B.C.T.
47 TONS / B.C.T.

THE CONSTANT FOR AGGREGATE SHOULDERS FOR GUARD RAIL MAY BE APPLIED TO ANY SHOULDER LOCATION, AS NOTED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.




SECTION B-B

NOTE:
IF UNABLE TO OBTAIN 3' WIDTH WIDEN SHOULDER AS MUCH AS POSSIBLE.




DRIVE TYPICAL

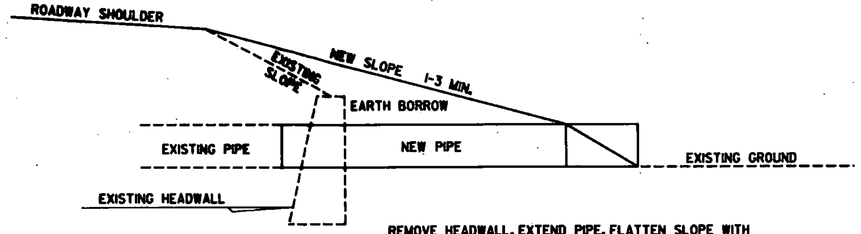
NOTE:
CONTRACTOR WILL ENSURE THAT DRAINAGE WILL FLOW THROUGH GUARD RAIL TERMINAL WIDENING AREAS.

DATUM
VERTICAL
HORIZONTAL

SURVEYED BY _____ DATE _____
DRAWN BY BEYOR DATE 6-86
TRACED BY _____ DATE _____

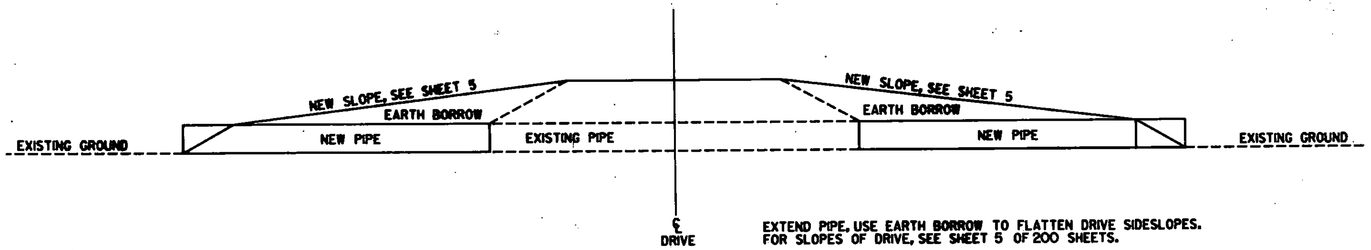
STATEWIDE SAFETY PROJECT
PROJ. F SFTY (85)S
SHEET 3 OF 200

# DRAINAGE DETAILS



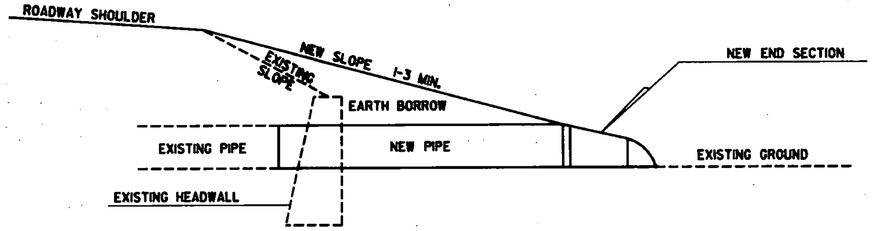

REMOVE HEADWALL, EXTEND PIPE, FLATTEN SLOPE WITH EARTH BORROW. NEW SLOPE SHOULD BE NO STEEPER THAN 1-3.

DRAINAGE DETAIL "A"




EXTEND PIPE, USE EARTH BORROW TO FLATTEN DRIVE SIDESLOPES. FOR SLOPES OF DRIVE, SEE SHEET 5 OF 200 SHEETS.

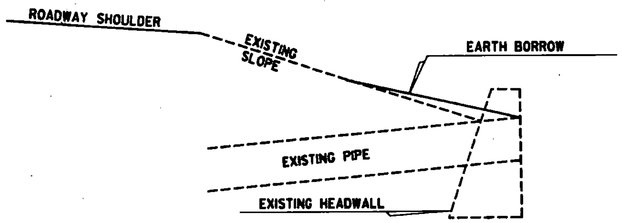
DRAINAGE DETAIL "D"




REMOVE HEADWALL, EXTEND PIPE, ADD END SECTION, FLATTEN SLOPE WITH EARTH BORROW. NEW SLOPE SHOULD BE NO STEEPER THAN 1-3.

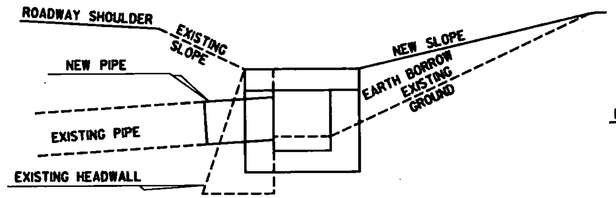
NOTE: METAL END SECTIONS OF THE NECESSARY SIZE MAY BE USED IN PLACE OF REINFORCED CONCRETE END SECTIONS, AND PAID AS METAL END SECTIONS AT THE DISCRETION OF THE RESIDENT ENGINEER.

DRAINAGE DETAIL "B"



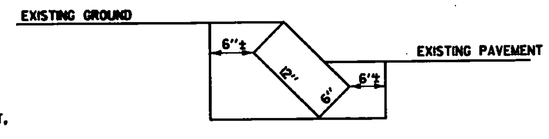

REMOVE PORTION OF HEADWALL ABOVE PIPE, USE EARTH BORROW TO PROTECT ANY EXPOSED PORTIONS OF HEADWALL

DRAINAGE DETAIL "C"




REMOVE HEADWALL, CONSTRUCT DROP INLET, USE EARTH BORROW TO REGRADE DITCH. (EXTEND PIPE, IF NECESSARY)

DRAINAGE DETAIL "E"




NOTE: EXISTING SLOPE EDGING WHICH FORMS A "BULLNOSE" AT OFF RAMPS OF SIDEROADS SHALL BE REMOVED. PAYMENT FOR REMOVAL SHALL BE TRENCH ROCK AT THE RATE OF 1.68 SQ. FEET PER LINEAR FOOT OF CURB. EARTH BORROW SHALL BE USED TO REGRADE THE AREA.

CURB DETAIL

## SEEDING FORMULA, ITEM 651.10
## RURAL AREAS

| % WT. | LBS./A. | NAME | PUR % | GERM % |
|---|---|---|---|---|
| 3.33 | 2 | CROWN VETCH | 97 | 75 |
| 50.00 | 30 | CREEPING RED FESCUE | 98 | 85 |
| 8.33 | 5 | TIMOTHY | 99 | 85 |
| 16.67 | 10 | PERENNIAL RYE GRASS (VAR.PENNFINE) | 95 | 85 |
| 8.34 | 5 | ALFAFA (VAR. SARANAC) | 99 | 85 |
| 8.33 | 5 | BIRDSFOOT TREFOIL(VAR.EMPIRE) | 98 | 85 |
| 5.00 | 3 | HIGHLAND BENT GRASS | 92 | 85 |
| 100.00 | 60 | | | |

THE SEED MIXTURE SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS WEED SEED.

SEED- TO BE APPLIED PER SEEDING FORMULAS DIRECTED BY THE ENGINEER.

FERTILIZER- FORMULA 10-20-10 TO BE USED WITH SEED, APPLIED AT THE RATE OF 500 LBS./ACRE.

AGRICULTURAL LIMESTONE- TO BE APPLIED AT THE RATE OF 2 TONS/ACRE OR AS DIRECTED BY THE ENGINEER.

HAY MULCH- TO BE PLACED ON EARTH SLOPES AT THE RATE OF 2 TONS/ACRE, OR AS DIRECTED BY THE ENGINEER.

ALL AREAS WHERE SOIL IS DISTURBED TO BE SEEDED PER THIS FORMULA. COST TO BE SUBSIDIARY TO OTHER ITEMS ON THIS PROJECT.

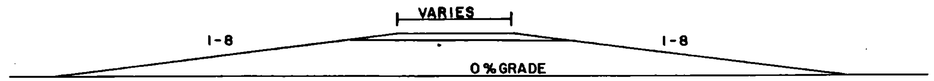
DATUM
VERTICAL
HORIZONTAL

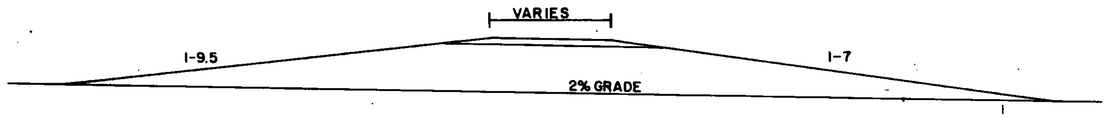
SURVEYED BY _____ DATE _____
DRAWN BY REDMOND DATE 5-86
TRACED BY BEYOR DATE 6-86

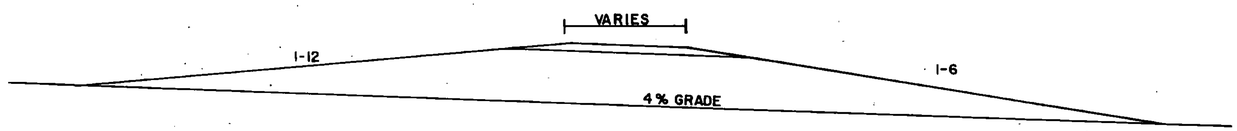
STATEWIDE SAFETY PROJECT
PROJ. F SFTY (85)
SHEET 4 OF 200

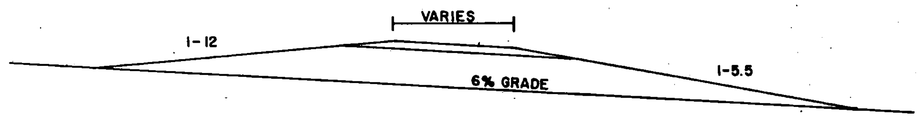
REVISIONS 334.20.3

# SUGGESTED DRIVEWAY TYPICALS




NOTE: SIDESLOPES TO BE CONSTRUCTED AT A 1-8 (12.5%) SLOPE RELATIVE TO MAIN HIGHWAY GRADELINE. HOWEVER, IN NO CASE WILL THE SIDESLOPE DRAIN AT A RATE OF LESS THAN 1-12 (8.3%). TYPICALS ON THIS SHEET ARE FOR REFERENCE ONLY.

NOTE: IF THE SURFACE OF A DRIVE IS DISRUPTED DURING CONSTRUCTION IT SHALL BE REPAIRED. ROUNDINGS OF ITEM 402.12 AGGREGATE SHOULDERS AND ITEM 406.25, BITUMINOUS CONCRETE PAVEMENT HAVE BEEN ADDED TO PROJECT QUANTITIES FOR THIS USE. TYPE OF GRANULAR MATERIAL USED SHALL BE DETERMINED BY THE RESIDENT ENGINEER AND PAID AS ITEM 402.12 AGGREGATE SHOULDERS.

# QUANTITY SHEET 1985 STATEWIDE SAFETY PROJECT

## APPROXIMATE SUMMARY OF QUANTITIES

| STATEWIDE M SFTY (85) | | | STATEWIDE RS SFTY (85) | | | | STATEWIDE F SFTY (85) | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WILLISTON | BRATTLEBORO | M SFTY (85) TOTALS | WORCESTER | WEATHERSFIELD-WINDSOR | RS SFTY (85) ROUNDINGS | RS SFTY (85) TOTAL | ALBURG | ENOSBURG | LOWELL-WESTFIELD | LUDLOW-MT. HOLLY-SHREWSBURY | SO. BURLINGTON | BERLIN-BARRE | NEW HAVEN | MENDON-SHERBURN | LUDLOW | JOHNSON | NORTH HERO GRAND ISLE | F SFTY (85) ROUNDING | F SFTY (85) TOTALS | COMPOSITE TOTAL | UNIT | ITEMS | ITEM NO. |
| | | | | | 3 | 3 | | | | | | | | | | | | 7 | 7 | 10 | EA | REMOVING SMALL TREES | 201.15 |
| | | | | | 2 | 2 | | | | | | | | | | | | 3 | 3 | 5 | EA | REMOVING LARGE TREES | 201.16 |
| | | | | | 10 | 10 | | | | | | | | 5 | | 10 | | 10 | 25 | 35 | CY | UNCLASSIFIED EXCAVATION | 203.17 |
| | | | | 160 | 15 | 175 | | | 20 | | | | 315 | 770 | | 10 | | 115 | 1160 | 1335 | CY | EARTH BORROW | 203.30 |
| | | | | | | | | | | | | | | | | 130 | | | 130 | 130 | CY | GRANULAR BORROW | 203.32 |
| | | | | 25 | 15 | 40 | | | | | | | 27 | 103 | | | | 30 | 160 | 200 | CY | TRENCH EXCAVATION OF EARTH | 204.20 |
| | | | | 16 | 4 | 20 | | | | | | | 4 | 131 | | | | 15 | 150 | 170 | CY | TRENCH EXCAVATION OF ROCK | 204.21 |
| | | | 260 | 497 | 18 | 775 | | | 667 | 198 | | | 10 | 2615 | 184 | 5 | 338 | 38 | 4085 | 4830 | TON | AGGREGATE SHOULDERS | 402.12 |
| | | | | | 25 | 25 | | | | | | | | | | 10 | | 25 | 35 | 60 | TON | BITUMINOUS CONCRETE PAVEMENT | 406.25 |
| | | | | | | | | | | | | | | | | | | 5 | 5 | 5 | CY | CONCRETE CLASS AA | 501.21 |
| | | | | | | | | | 4 | 1 | | | | 2 | 1 | | | | 8 | 8 | CY | CONCRETE, CLASS A | 501.22 |
| | | | | 7.0 | 3.0 | 10.0 | | | | | | | | 55.0 | | 1.0 | | 4.0 | 60.0 | 70.0 | CY | CONCRETE, CLASS B | 501.25 |
| | | | | 700 | 300 | 1000 | | | 140 | 20 | | | | 5700 | 20 | | | 120 | 6000 | 7000 | LBS | REINFORCING STEEL | 507.15 |
| | | | | | | | | | 2 | 1 | | | | 1 | 1 | | | | 5 | 5 | GAL | WATER REPELLENT | 514.10 |
| | | | | | | | | | | 1 | | | | 1 | 1 | | | | 3 | 3 | GAL | JOINT SEALER POLYURETHANE | 524.20 |
| | | | | | | | | | | 198 | | | | 224 | 228 | | | | 670 | 670 | LF | REMOVAL OF EXISTING RAILING | 525.10 |
| | | | | | | | | | | 209 | | | | 282 | 239 | | | | 730 | 730 | LF | BRIDGE RAILING - 2 RAIL GALV. BOX BEAM | 525.31 |
| | | | | | | | | | 100 | | | | | | | 100 | | | 200 | 200 | LF | BRIDGE RAILING - HD STEEL BEAM BEAM / FASCIA MOUNTED | 525.41 |
| | | | | | | | | | | | | | | 1 | | | | | 1 | 1 | EA | PARTIAL REMOVAL OF STRUCTURE | 529.20 |
| | | | | | | | | | 5 | | | | | | | | | | 5 | 5 | CY | REMOVAL OF CONCRETE OR MASONRY | 529.25 |
| | | | | | | | | | | | | | | | | | | 15 | 15 | 15 | GAL | EPOXY MORTAR COMPOUND | 530.30 |
| | | | | | | | | | | | | | 16 | 24 | | | | | 30 | 30 | LF | 15" CSP .064 | 601.0010 |
| | | | | 22 | 22 | 22 | | | | | | | 30 | 50 | | | | 8 | 88 | 110 | LF | 18" CSP .064 | 601.0015 |
| | | | | | | | | | | | | | 8 | 26 | | | | 6 | 40 | 40 | LF | 24" CSP .064 | 601.0025 |
| | | | | | | | | | | | | | 18 | | | | | | 18 | 18 | LF | 42" CSP .109 | 601.0052 |
| | | | | | | | | | | | | | 16 | | | | | | 16 | 16 | LF | 48" CSP .109 | 601.0057 |
| | | | | | | | | | | | | | 96 | | | | | | 96 | 96 | LF | 60" CSP .138 | 601.0068 |

1985 STATEWIDE
SAFETY PROJECT

SHEET 6 OF 200 SHEETS

STUNING 53429 3

# QUANTITY SHEET 1985 STATEWIDE SAFETY PROJECT

## APPROXIMATE SUMMARY OF QUANTITIES

| STATEWIDE M SFTY (85) | | | STATEWIDE RS SFTY (85) | | | | STATEWIDE F SFTY (85) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WILLISTON | BRATTLEBORO | M SFTY (85) TOTALS | WORCESTER | WEATHERSFIELD-WINDSOR | RS SFTY (85) ROUNDINGS | RS SFTY (85) TOTAL | ALBURG | ENOSBURG | LOWELL-WESTFIELD | LUDLOW-MT. HOLLY-SHREWSBURY | SO. BURLINGTON | BERLIN-BARRE | NEW HAVEN | MENDON-SHERBURN | LUDLOW | JOHNSON | NORTH HERO GRAND ISLE | F SFTY (85) ROUNDING | F SFTY (85) TOTALS | COMPOSITE TOTAL | UNIT | ITEMS | ITEM NO. |
| | | | | 36 | | 36 | | | | | | | | | | | | | | 36 | LF | 15" RCP III | 601.0810 |
| | | | | 12 | | 12 | | | | | | | | 28 | | | | | 28 | 40 | LF | 18" RCP III | 601.0815 |
| | | | | 4 | | 4 | | | | | | | | 16 | | | | | 16 | 20 | LF | 24" RCP III | 601.0825 |
| | | | | | | | | | | | | | | 24 | | | | | 24 | 24 | LF | 36" RCP III | 601.0845 |
| | | | | | | | | | | | | | | 16 | | | | | 16 | 16 | LF | 48" RCP III | 601.0855 |
| | | | | 16 | | 16 | | | | | | | | | | | | | | 16 | LF | 77" X 52" CSPA .168 | 601.3074 |
| | | | | | | | | | | | | | | 1 | | | | 1 | 2 | 2 | EA | 15" CSPES .064 | 601.6010 |
| | | | | | 1 | 1 | | | | | | | 2 | 3 | | | | 1 | 6 | 7 | EA | 18" CSPES .064 | 601.6015 |
| | | | | | | | | | | | | | 4 | 3 | | | | 1 | 8 | 8 | EA | 24" CSPES .064 | 601.6025 |
| | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | EA | 30" CSPES .079 | 601.6036 |
| | | | | | | | | | | | | | | 1 | | | | | 1 | 1 | EA | 36" CSPES .079 | 601.6046 |
| | | | | | | | | | | | | | 1 | | | | | | 1 | 1 | EA | 42" CSPES .109 | 601.6052 |
| | | | | | | | | | | | | | 1 | 1 | | | | | 2 | 2 | EA | 48" CSPES .109 | 601.6057 |
| | | | 1 | | 1 | | | | | | | | | 2 | | | | | 2 | 3 | EA | 18" RCPES III | 601.6815 |
| | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | EA | 24" RCPES III | 601.6825 |

1985 STATEWIDE
SAFETY PROJECT

SHEET 7 OF 200 SHEETS

# QUANTITY SHEET 1985 STATEWIDE SAFETY PROJECT

## APPROXIMATE SUMMARY OF QUANTITIES

| STATEWIDE M SFTY (85) | | | STATEWIDE RS SFTY (85) | | | | STATEWIDE F SFTY (85) | | | |

# QUANTITY SHEET 1985 STATEWIDE SAFETY PROJECT

## APPROXIMATE SUMMARY OF QUANTITIES

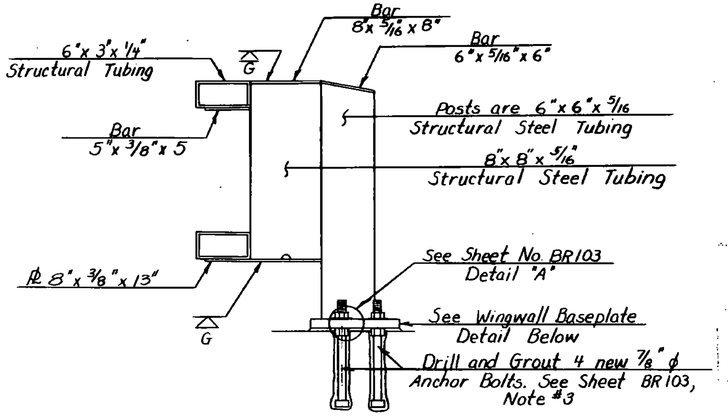
| STATEWIDE M SFTY (85) | | | STATEWIDE RS SFTY (85) | | | | STATEWIDE F SFTY (85) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WILLISTON | BRATTLEBORO | M SFTY (85) TOTALS | WORCESTER | WEATHERSFIELD-WINDSOR | RS SFTY (85) ROUNDINGS | RS SFTY (85) TOTAL | ALBURG | ENOSBURG | LOWELL-WESTFIELD | LUDLOW-MT. HOLLY-SHREWSBURY | SO. BURLINGTON | BERLIN-BARRE | NEW HAVEN | MENDON-SHERBURN | LUDLOW | JOHNSON | NORTH HERO GRAND ISLE | F SFTY (85) ROUNDING | F SFTY (85) TOTALS | COMPOSITE TOTAL | UNIT | ITEMS | ITEM NO. |
| | | | | | | | 12 | | | | | | | | | | | | 12 | 12 | LF | DURABLE 24" STOP BAR | 646.40 |
| | | | | | | | 4 | | | | | | | | | | | | 4 | 4 | EA | DURABLE LETTER IN WORD MARKING | 646.44 |
| | | | | | | | | | | | | | | 1000 | | 50 | | | 1050 | 1050 | LF | TEMPORARY 4" WHITE LINE | 646.50 |
| | | | | | | | | | | | | | | 2,600 | | | | | 2600 | 2600 | LF | TEMPORARY 4" YELLOW LINE | 646.51 |
| | | | | | | | | | | | | | | 200 | | | | | 200 | 200 | LF | TEMPORARY 8" WHITE LINE | 646.54 |
| | | | | | | | | | | | | | | 500 | | | | | 500 | 500 | LF | TEMPORARY 8" YELLOW LINE | 646.55 |
| | | | | | | | | | | | | | | 16 | | | | | 16 | 16 | LF | TEMPORARY 24" STOP BAR | 646.60 |
| | | | | | | | | | | | | | | 4 | | | | | 4 | 4 | EA | TEMPORARY ARROW MARKING | 646.62 |
| | | | | | | | | | | | | | | 20 | | | | | 20 | 20 | EA | TEMPORARY LETTER IN WORD MARKING | 646.64 |
| | | | | | | | | | | | | | | 100 | | | | | 100 | 100 | SF | REMOVAL OF EXISTING PAVEMENT MARKING | 646.80 |
| 40 | 42 | 82 | 139 | 105 | | 244 | 172 | 61 | 325 | 350 | 22 | 530 | 56 | 735 | 62 | 64 | | | 2377 | 2703 | SF | TRAFFIC SIGNS TYPE A | 675.20 |
| | | | | | | | | | | | | 550 | | 50 | | | | | 600 | 600 | SF | TRAFFIC SIGNS TYPE B | 675.21 |
| 244 | 332 | 576 | 873 | 284 | | 1137 | 534 | 396 | 1266 | 2193 | 407 | 1966 | 420 | 4240 | 124 | 388 | | | 11934 | 13647 | LB | FLANGED CHANNEL SIGN POSTS | 675.30 |
| | | | | 70 | | 70 | 76 | | 235 | 145 | 31 | 510 | | 350 | 120 | | | | 1467 | 1537 | LB | TUBULAR ALUMINUM SIGN POSTS | 675.32 |
| 9 | 19 | 28 | 25 | 24 | | 49 | 37 | 17 | 83 | 89 | 15 | 92 | 10 | 140 | 27 | 18 | | | 528 | 605 | EA | REMOVING SIGNS | 675.50 |
| | 5 | 5 | 4 | 6 | | 10 | | 7 | 7 | 5 | 11 | | 4 | 20 | 1 | 1 | | | 56 | 71 | EA | ERECTING SALVAGED SIGNS | 675.60 |
| | | | | | | | | | | | | 26 | | | | | | | 26 | 26 | EA | DELINEATORS WITH STEEL POSTS | 676.10 |
| | | | | | | | | | | | | 200 | | | | | | | 200 | 200 | EA | REMOVAL OF EXISTING DELINEATORS | 676.12 |
| | | | | | | | | | 20 | | | 30 | | | | | | | 50 | 50 | EA | REMOVE AND REPLACE REFLECTOR UNITS (MODIFIED) | 676.15 |
| | | | | | | | | | | | | 30 | | | | | | | 30 | 30 | EA | DELINEATORS WITH FLEXIBLE POSTS | 676.20 |
| | | | | | | | 1 | | | | | | | | | | | | 1 | 1 | LS | STREET LIGHTING | 679.15 |
| | 24 | 24 | | 5 | | 5 | 10 | 5 | | 10 | 15 | 10 | | 34 | | 20 | | | 104 | 133 | SF | TRAVEL INFORMATION SIGNS (NON. GOVT. PARTICIPATION) | 680.20 |

1985 STATEWIDE
SAFETY PROJECT

SHEET 9 OF 200 SHEETS

| ITEM Nº | ITEM | U/I | VT103 BR 33 | VT 100 BR 99 | US 4 BR 24 | VT100 BR234 | TOTALS |
|---|---|---|---|---|---|---|---|
| 406.25 | BITUMINOUS CONCRETE PAVEMENT | TON | | | | 3 | 3 |
| 501.21 | CONCRETE, CLASS AA ✱ | CY. | | | | | 5 |
| 501.22 | CONCRETE, CLASS A | CY | 1 | 1 | 2 | 4 | 8 |
| 507.15 | REINFORCING STEEL | LB | 20 | 20 | 200 | 140 | 380 |
| 514.10 | WATER REPELLENT | GAL | 1 | 1 | 1 | 2 | 5 |
| 524.20 | JOINT SEALER, POLYURETHANE | GAL | 1 | 1 | 1 | | 3 |
| 525.10 | REMOVAL OF EXISTING RAILING | LF | 198 | 228 | 244 | | 670 |
| 525.31 | BRIDGE RAILING, 2 RAIL GALV. BOX BEAM | LF | 209 | 239 | 282 | | 730 |
| 525.41 | BRIDGE RAILING-HD STEEL BEAM/FASCIA MOUNTED | LF | | | | 100 | 100 |
| 529.20 | PARTIAL REMOVAL OF STRUCTURE | EA. | | | 1 | | 1 |
| 529.25 | REMOVAL OF CONCRETE OR MASONRY | CY | | | | 5 | 5 |
| 530.30 | EPOXY MORTAR COMPOUND ✱ | GAL. | | | | | 15 |
| 621.70 | GUARD RAIL APPROACH SECTION, TYPE I | EA | 4 | 4 | 4 | | 12 |

✱ THESE ITEMS SHALL BE USED AS DIRECTED BY THE RESIDENT ENGINEER. THE QUANTITY SHOWN IS THE ESTIMATED TOTAL NEEDED AND THE AMOUNT REQUIRED FOR EACH BRIDGE WILL VARY. REFER TO GENERAL NOTES Nº 16 AND Nº 22.




MODIFIED POST FOR WINGWALL

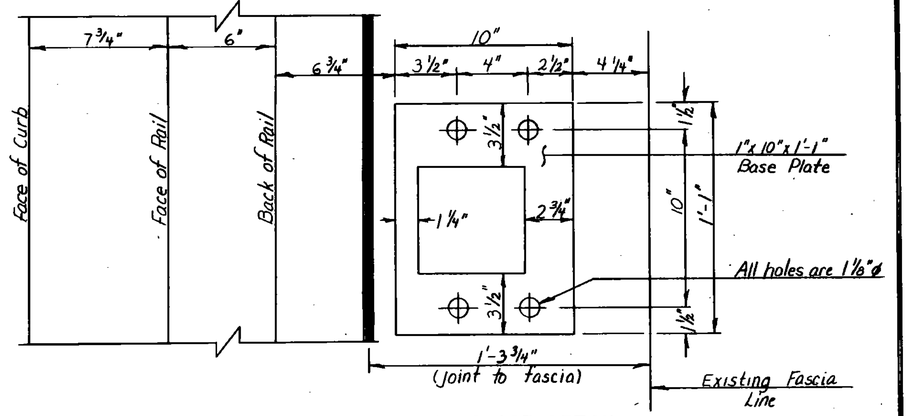
SCALE: 1½" = 1'-0"

(To be used on VT 103, Br. 33 - downstream curb only)

| ITEM | NO. PIECES | SIZE | LENGTH | MARK | TYPE | A | B | C | D | E | F | G | H | J |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | | | U.S. 4, BR. 24 (MENDON) | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | |
| 3 | 4 | 5 | 1-1 | EB501 | STR | | | | | | | | | |
| 4 | 8 | 5 | 1-6 | EB502 | STR | | | | | | | | | |
| 5 | #13 | 5 | 7-8 | 24501 | STR | | | | | | | | | |
| 6 | 92 | 5 | 2-3 | X501 | 510 | | 0-9 | 0-9 | 0-9 | | | | | |
| 7 | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | |
| 9 | | | | VT. 103, BR. 33 (MT. HOLLY) | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | |
| 11 | 4 | 5 | 1-1 | EB501 | STR | | | | | | | | | |
| 12 | 8 | 5 | 1-6 | EB502 | STR | | | | | | | | | |
| 13 | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | |
| 15 | | | | VT. 100, BR. 99 (LUDLOW) | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | |
| 17 | 4 | 5 | 1-1 | EB501 | STR | | | | | | | | | |
| 18 | 8 | 5 | 1-6 | EB502 | STR | | | | | | | | | |
| 19 | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | |
| 21 | | | | VT. 100, BR. 234 (LOWELL) | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | |
| 23 | 3 | 5 | 42-0 | 234501 | STR | | | | | | | | | |

✱ DENOTES ONE EXTRA BAR ADDED FOR TESTING PURPOSES.

NOTE: UNLESS OTHERWISE DESIGNATED ALL BAR REINFORCEMENT FOR CONCRETE IN SIZES UP TO AND INCLUDING Nº 18 SHALL CONFORM TO THE REQUIREMENTS OF THE "SPECIFICATIONS FOR DEFORMED BILLET STEEL BARS FOR CONCRETE REINFORCEMENT", AASHTO M31 (ASTM A 615-51), GRADE 60.




WINGWALL BASE PLATE DETAIL

SCALE: 3" = 1'-0

(To be used on VT 103, Br. 33 - downstream curb only)

STATEWIDE FSFTY(85) STWDFSFTY.DOC 1/86 AUTHOR: NEWTON

1. FOR ADDITIONAL GENERAL NOTES, SEE STD. SCB-D1-75, NOTES 3, 4, 6, 7, 14 & 16.

2. ALL CONCRETE WILL BE "CONCRETE, CLASS A", EXCEPT AS NOTED IN GENERAL NOTE 16 ON THIS SHEET.

3. PYLONS SHALL BE REMOVED TO ONE FOOT (1'-0") BELOW EXISTING SUPERSTRUCTURE CURB GRADE. REPLACE TO ELEVATION OF TOP OF EXISTING SUPERSTRUCTURE CURB GRADE. U.S. 4, BR. 24 IN MENDON IS THE ONLY STRUCTURE THAT HAS PYLONS.

4. REMOVAL OF THE CONCRETE PYLONS TO THE LIMITS SHOWN AND REMOVAL OF THE GRANITE END BLOCKS ON U.S. 4, BR. 24 IN MENDON SHALL BE PAID FOR AS THE ITEM "PARTIAL REMOVAL OF STRUCTURE".

5. WHEN REMOVING THE EXISTING PYLONS, RETAIN THE EXISTING VERTICAL REINFORCING STEEL AND CUT AS DETAILED.

6. THE EXISTING CONCRETE SHALL BE THOROUGHLY COATED WITH NEAT CEMENT GROUT BEFORE PLACING NEW CONCRETE AS PER SUBSECTION 501.13(b).

7. CONCRETE AT THE JOINTS SHALL BE CLEANED AND PREPARED AS PER SUBSECTION 524.05(b).

8. NEW BRIDGE RAILING POSTS SHALL BE SET NORMAL TO GRADE.

9. FOR BRIDGE RAILING DETAILS AND RELATED NOTES NOT SHOWN ON THESE PLANS, SEE STD. SB-R4A-82 AND STD. SB-R6-82.

10. THE STANDARD BASE PLATE DETAILS SHOWN ON STD. SB-R4A-82 HAVE BEEN MODIFIED TO ACCOMODATE REVISED ANCHOR BOLT PATTERNS AS DETAILED ON THESE PLANS, EXCEPT FOR MENDON, U.S. 4, BR. 24, WHICH IS PER STANDARD EXCEPT THAT THE 8 INCH OFFSET FROM FACE OF CURB TO FACE OF RAIL IS CHANGED TO 9 INCHES.

11. THE MODIFIED POSTS, BASE PLATES, AND RELATED HARDWARE SHALL BE PAID FOR AS THE ITEM "BRIDGE RAILING - 2 RAIL GALVANIZED BOX BEAM".

12. THE CONTRACTOR SHALL FIELD CHECK POST LAYOUT DIMENSIONS PRIOR TO SUBMISSION OF SHOP DETAILS FOR APPROVAL.

13. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT ALL LANES SHALL BE OPEN TO TRAFFIC DURING NON-WORKING HOURS. THEREFORE, NO GAPS BETWEEN EXISTING RAILING AND NEW RAILING WILL BE PERMITTED. DETAILS FOR TEMPORARY BARRIER RAIL, IF REQUIRED TO BRIDGE THESE GAPS, SHALL BE SUBMITTED FOR APPROVAL.

14. THE EXISTING BRIDGE RAILING POSTS AND HARDWARE ON U.S. 4, BR. 24; VT. 100, BR. 99; AND VT. 103, BR. 33 SHALL REMAIN THE PROPERTY OF THE STATE OF VERMONT UPON THEIR REMOVAL AND SHALL BE STOCKPILED ON THE PROJECT IN LOCATIONS SELECTED BY THE ENGINEER FOR DISPOSAL BY STATE FORCES. THE COST OF REMOVING AND STOCKPILING THIS MATERIAL SHALL BE PAID FOR AS THE ITEM "REMOVAL OF EXISTING RAILING".

15. THE EXISTING STATE OF VERMONT BRONZE BRIDGE MARKERS SHALL BE CAREFULLY REMOVED FROM PYLONS ON U.S. 4, BR. 24 AND RESET IN NEW CONCRETE FASCIA AS DIRECTED BY THE ENGINEER. THIS WORK SHALL BE SUBSIDIARY TO THE ITEM "CONCRETE, CLASS A".

16. "EPOXY MORTAR COMPOUND" OR "CONCRETE, CLASS AA", SHALL BE USED TO REPAIR ANY SPALLED OR CRACKED AREAS ON THE EXISTING CURBS. ALL DETERIORATED OR UNSOUND CONCRETE SHALL BE REMOVED TO THE LIMITS DEEMED NECESSARY BY THE ENGINEER. THE REMOVAL SHALL BE SUBSIDIARY TO THE ITEMS "EPOXY MORTAR COMPOUND" OR "CONCRETE, CLASS AA". THE CURBS SHALL BE PATCHED AS FOLLOWS:

A. CRACKS OR SPALLED AREAS IN THE CURBS WITH A DEPTH OF LESS THAN 1 INCH ARE TO BE FILLED WITH "EPOXY MORTAR COMPOUND".

B. CRACKS OR SPALLED AREAS IN THE CURBS WITH A DEPTH OF GREATER THAN 1 INCH ARE TO HAVE THEIR EDGES CUT SO AS TO PROVIDE A MINIMUM DEPTH OF 1 INCH. THEY THEN WILL BE COATED WITH NEAT CEMENT AND PATCHED WITH "CONCRETE, CLASS AA".

17. RAILING JOINT SPLICES SHALL BE LOCATED AT ALL SUPERSTRUCTURE JOINTS OVER PIERS AND AT THE EXPANSION END OF ALL BRIDGES AT THE JOINT BETWEEN THE SUPERSTRUCTURE AND THE WINGWALLS. THE BRIDGE RAILING JOINT OPENING SHALL BE A MINIMUM OF 1 INCH.

18. NEW CORK EXPANSION MATERIAL SHALL BE SUBSIDIARY TO THE ITEM "CONCRETE, CLASS A".

19. ON VT. RTE. 103, BRIDGE 33; AND VT. RTE. 100, BR. 99, THERE ARE NO PYLONS TO BE REMOVED; HOWEVER, THE EXISTING GRANITE END BLOCKS WILL BE REMOVED AND REPLACED. REMOVAL OF THE EXISTING END BLOCKS SHALL BE SUBSIDIARY TO ALL OTHER ITEMS IN THE CONTRACT. THE NEW END BLOCKS SHALL BE PAID UNDER THE ITEM "CONCRETE, CLASS A".

20. VT. 100, BR. 234, HAS NEITHER PYLONS NOR GRANITE END BLOCKS TO BE REMOVED; HOWEVER, THE EXISTING CONCRETE POSTS AND EXISTING CURB SHALL BE REMOVED ON THE DOWNSTREAM (LEFT) SIDE TO THE LIMITS SHOWN ON SHEET BR 101. THE EXISTING CONCRETE POSTS SHALL BE REMOVED ON THE UPSTREAM (RIGHT) SIDE, AS DETAILED ON SHEET BR 101. THIS WORK SHALL BE PAID FOR AS "REMOVAL OF CONCRETE AND MASONRY (C.Y.)". EXISTING CURB STEEL ON DOWNSTREAM SIDE SHALL BE RETAINED AND CLEANED AS REQUIRED. ADDITIONAL #5 BARS HAVE BEEN INCLUDED ON THE REBAR SCHEDULE TO BE USED TO SUPPLEMENT EXISTING CURB STEEL AS DETERMINED BY THE ENGINEER. EXISTING REBAR STEEL IN CONCRETE POSTS UPSTREAM SHALL BE CUT OFF 2" BELOW CURB GRADE AND THE CURB REPAIRED.

21. FOR APPROACH RAIL DETAILS AND RELATED NOTES NOT SHOWN ON THESE PLANS, SEE STD. DWG. SB-R4B-82 AND SB-R6-82.

22. EXISTING GRANITE CURB JOINTS THAT NEED REPOINTING, AS DETERMINED BY THE ENGINEER, SHALL BE RAKED OUT TO A DEPTH OF 2" AND REPOINTED WITH EPOXY MORTAR COMPOUND.

LIST OF SHEETS


BR 100 GENERAL NOTES; BRIDGE QUANTITY SHEET; AND REINFORCING SCHEDULE; BR 33 WINGWALL BASE PLATE AND POST DETAILS (DOWNSTREAM CURB ONLY)
BR 101 BRIDGE RAILING PLANS, BR # 24 & 234
BR 102 BRIDGE RAILING PLANS, BR # 33 & 99
BR 103 POST AND CURB DETAILS

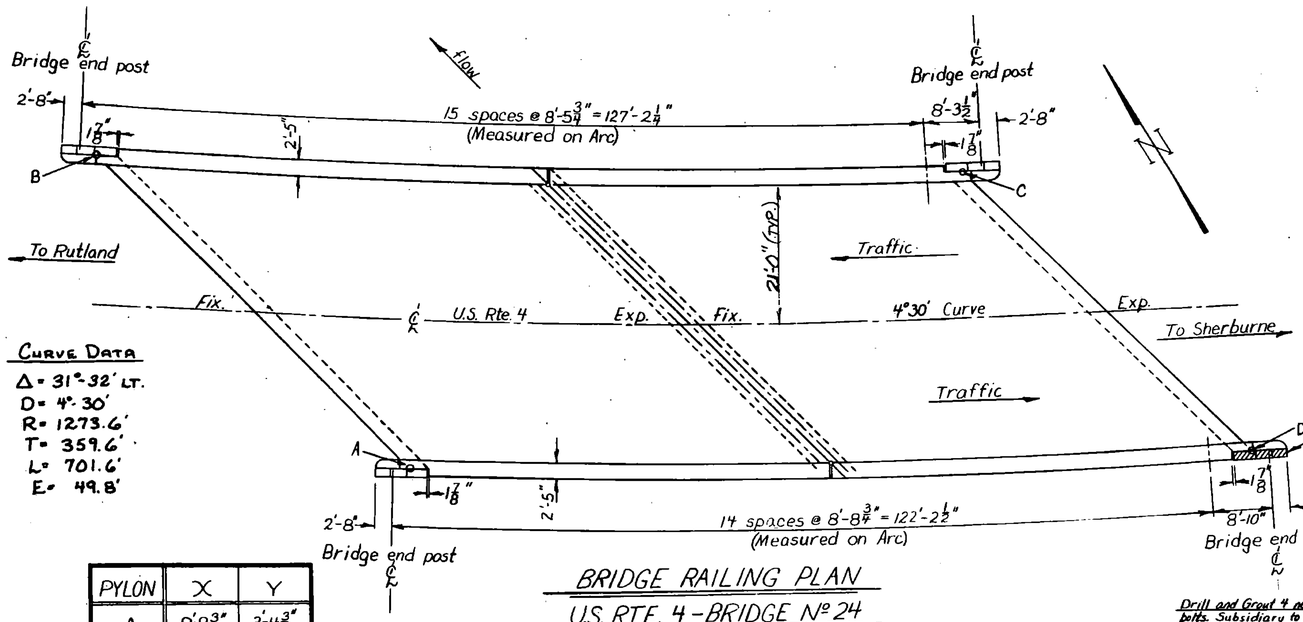

STANDARDS

| | | |
|---|---|---|
| STD. DWG. | SCB-D1-75 | 9/14/81 R |
| STD. DWG. | SB-R4A-82 | 12/13/84 R |
| STD. DWG. | SB-R4B-82 | 12/13/84 R |
| STD. DWG. | SB-R6-82 | 12/13/84 R |

**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

| | |
|---|---|
| Town of Mendon, Mt. Holly Ludlow, Lowell | Bridge No. —— Log Sta. —— Surv. Sta. —— |
| Highway No. | |
| General Notes, Quantity Sheet, Reinforcing Schedule | |
| Designed By G.S. ROGERS Checked By D.W. NEWTON Date JAN '86 | Drawn By M.P. KEENE Bridge Design Supervisor F.W. Balkum Date 3/86 |
| PROJECT STATEWIDE | PROJECT NO. FSFTY (85) |
| U.S.C. Intc. | |
| Bridge Sheet No. BR100 | Sheet 14 of 200 |

BR-6

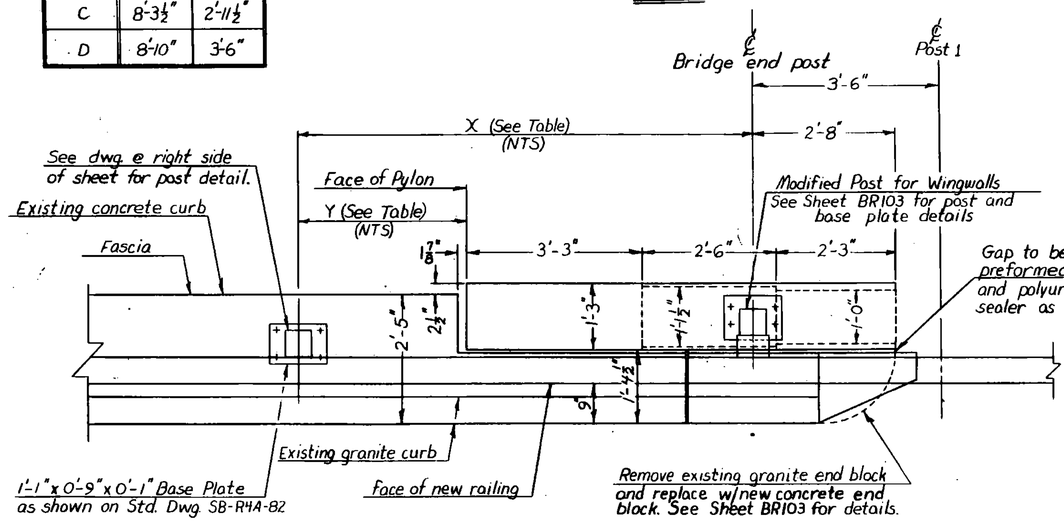



**CURVE DATA**

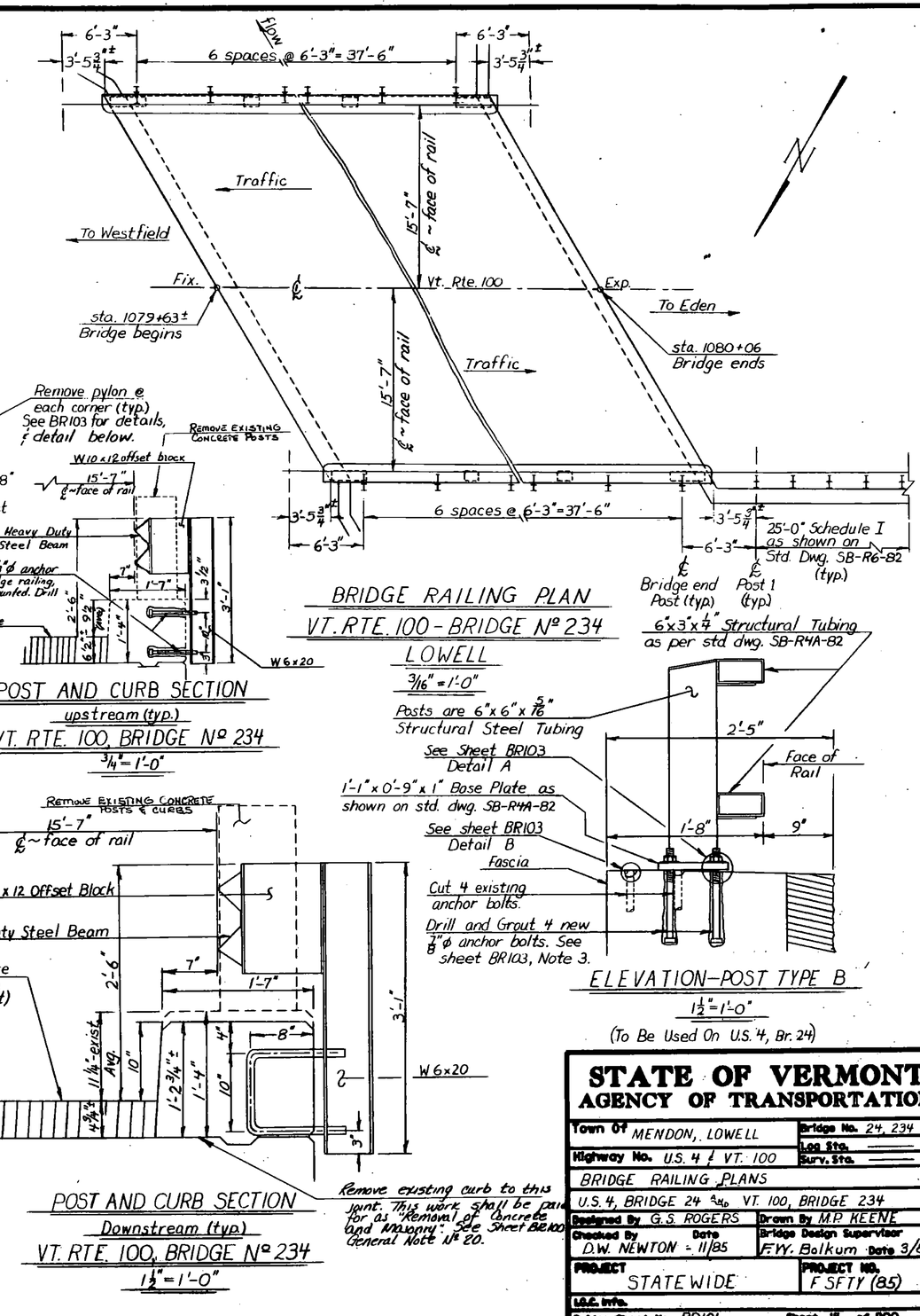
Δ = 31°-32' LT.
D = 4°-30'
R = 1273.6'
T = 359.6'
L = 701.6'
E = 49.8'

| PYLON | X | Y |
|---|---|---|
| A | 8'-8 3/4" | 3'-4 3/4" |
| B | 8'-5 3/4" | 3'-1 3/4" |
| C | 8'-3 1/2" | 2'-11 1/2" |
| D | 8'-10" | 3'-6" |

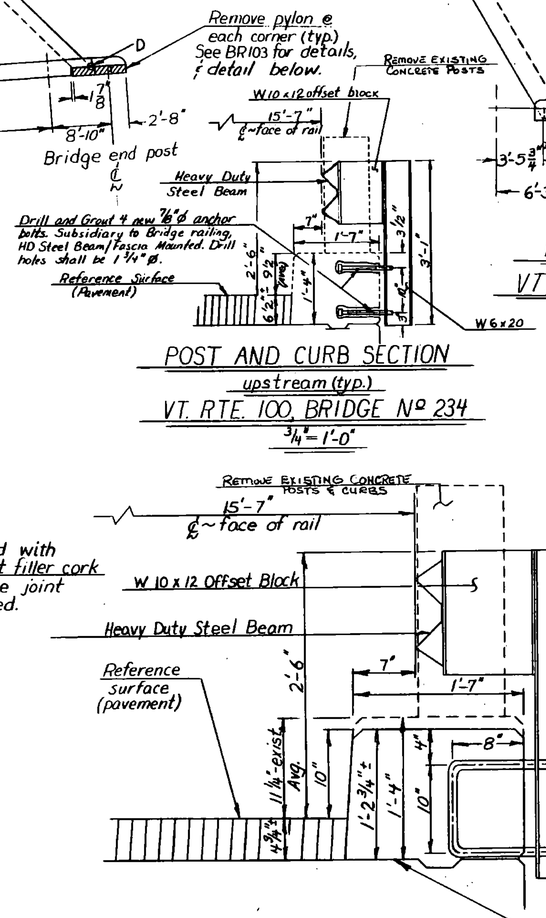
## BRIDGE RAILING PLAN
## U.S. RTE. 4 - BRIDGE Nº 24
## MENDON
3/32" = 1'-0"



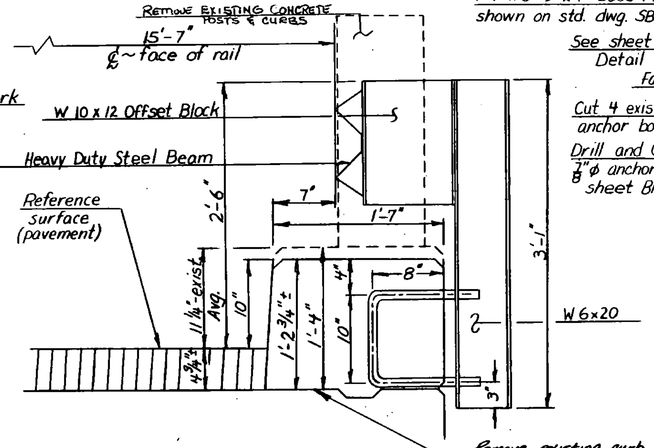

## PYLON REMOVAL PLAN
## U.S. RTE. 4 - BRIDGE Nº 24
3/4" = 1'-0"




## BRIDGE RAILING PLAN
## VT. RTE. 100 - BRIDGE Nº 234
## LOWELL
3/16" = 1'-0"




## POST AND CURB SECTION
upstream (typ.)
## VT. RTE. 100, BRIDGE Nº 234
3/4" = 1'-0"




## POST AND CURB SECTION
Downstream (typ.)
## VT. RTE. 100, BRIDGE Nº 234
1 1/2" = 1'-0"

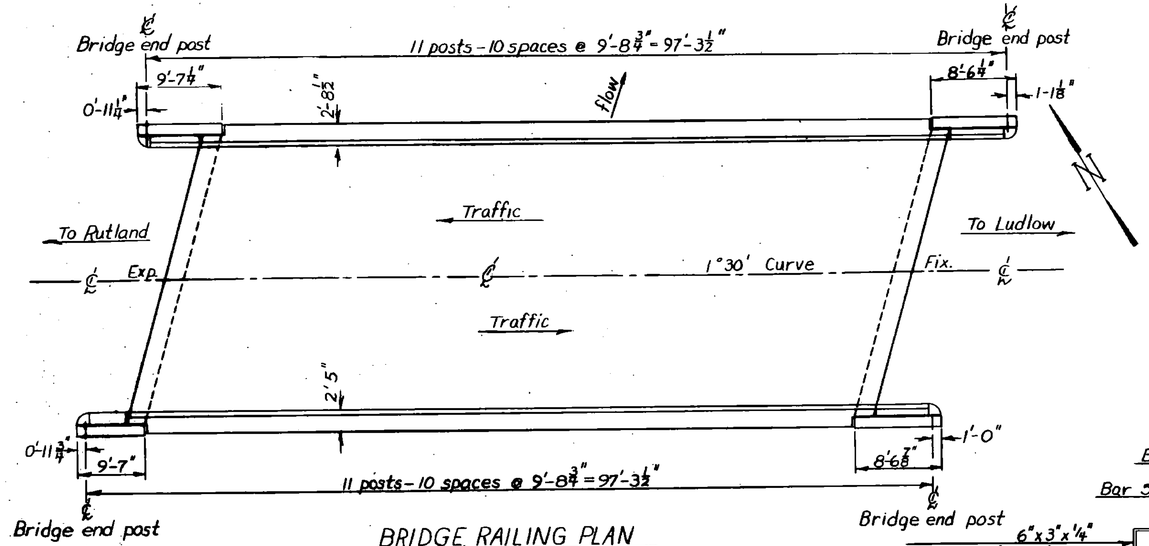



## ELEVATION - POST TYPE B
1 1/2" = 1'-0"
(To Be Used On U.S. 4, Br. 24)

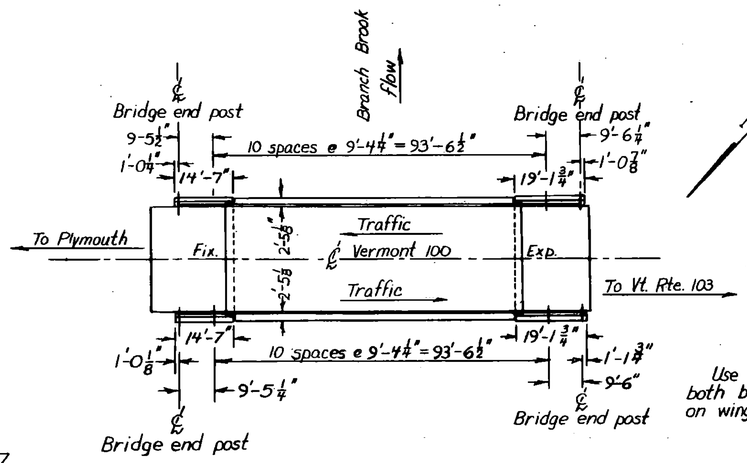
# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| Town Of MENDON, LOWELL | Bridge No. 24, 234 |
| Highway No. U.S. 4 & VT. 100 | Log Sta. / Surv. Sta. |
| BRIDGE RAILING PLANS | |
| U.S. 4, BRIDGE 24 & VT. 100, BRIDGE 234 | |
| Designed By G.S. ROGERS | Drawn By M.P. KEENE |
| Checked By D.W. NEWTON Date 11/85 | Bridge Design Supervisor F.W. Balkum Date 3/86 |
| PROJECT STATE WIDE | PROJECT NO. F SFTY (85) |
| L&C Info. | |
| Bridge Sheet No. BR101 | Sheet 15 of 200 |

BR-6



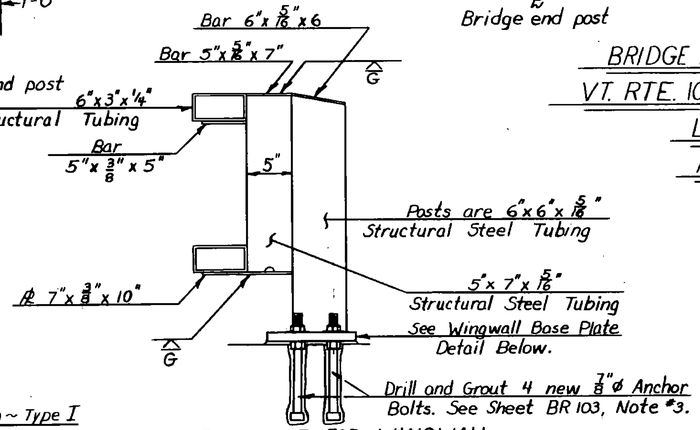

BRIDGE RAILING PLAN
VT. RTE. 103-BRIDGE Nº 33
MT. HOLLY
1"/8" = 1'-0"



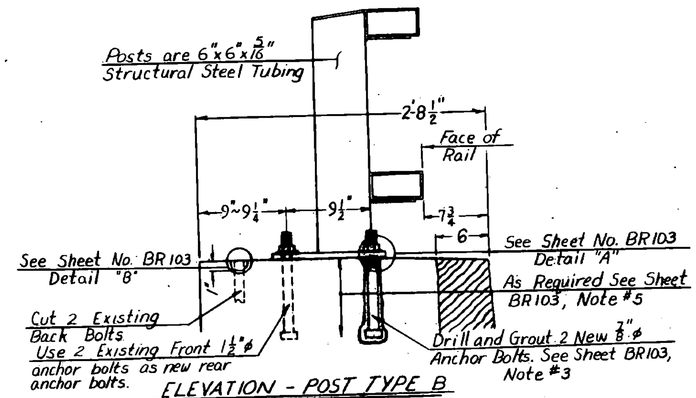

BRIDGE RAILING PLAN
VT. RTE. 100-BRIDGE Nº 99
LUDLOW
1"=20'-0"

NOTES

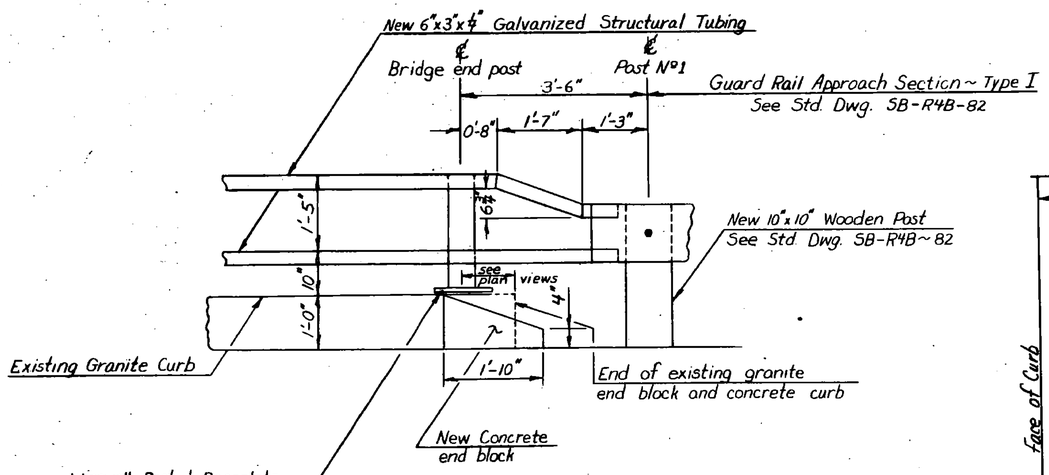
Use Post & Base Plate - Type B for both bridges on this sheet, except on on wingwalls.



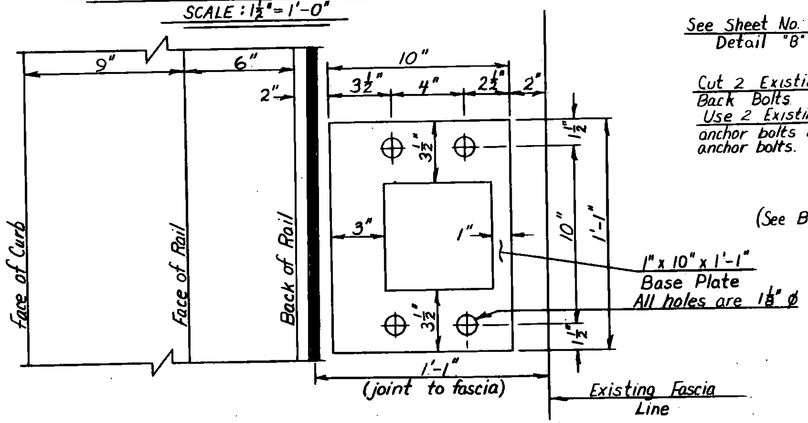

MODIFIED POST FOR WINGWALL
SCALE: 1½"=1'-0"




ELEVATION - POST TYPE B
SCALE: 1½"=1'-0"
(To Be Used On VT. 103, Br. 33)
— Downstream Curb Only —
(See BR103 for Details concerning upstream curb)




TRANSITION DETAILS
VT. RTE. 103-BRIDGE Nº 33
VT. RTE. 100-BRIDGE Nº 99
¾"=1'-0"

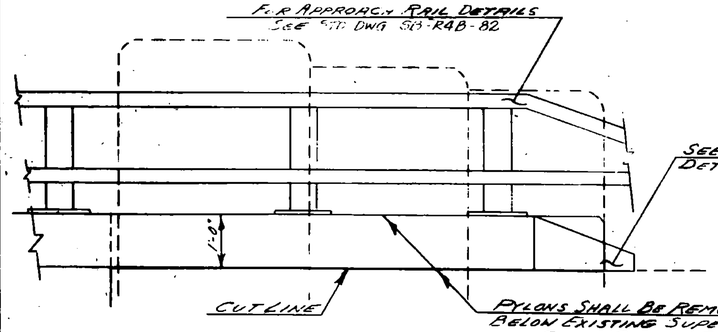



WINGWALL BASE PLATE DETAIL
SCALE: 3"=1'-0"
(To be used on VT. 100, Br. 99 - both curbs)
(VT. 103, Br. 33 - upstream curb only)

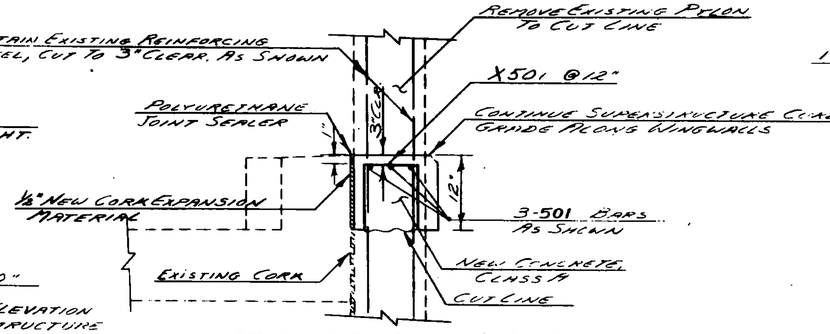
**STATE OF VERMONT**
**AGENCY OF TRANSPORTATION**

| | |
|---|---|
| Town Of MT. HOLLY, LUDLOW | Bridge No. 33, 99 |
| Highway No. VT. 103 & VT. 100 | Leg. Sta. —— Surv. Sta. —— |
| BRIDGE RAILING PLANS | |
| VT. 100, BRIDGE 99 And VT. 103, BRIDGE 33 | |
| Designed By G.S. ROGERS | Drawn By M.P. KEENE |
| Checked By Date D.W. NEWTON 11/85 | Bridge Design Supervisor F.W. Bolkum Date 3/86 |
| PROJECT STATEWIDE | PROJECT NO. F SFTY (85) |
| M.S. Info. | |
| Bridge Sheet No. BR102 | Sheet 16 of 200 |

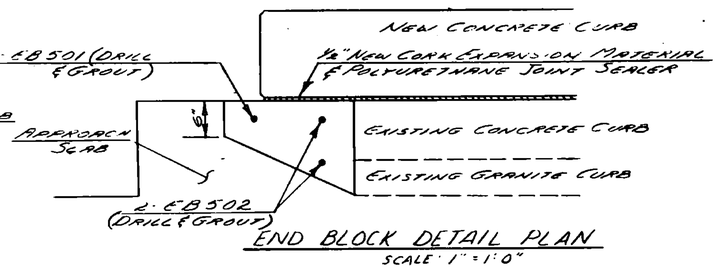
BR-6



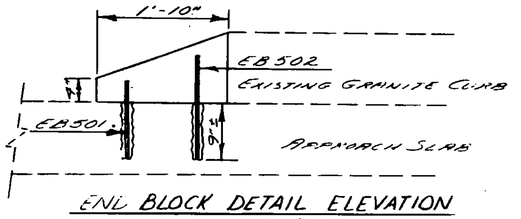

PYLON REMOVAL ELEVATION
NOT TO SCALE
(Applies to Mendon, US. 4., Br. 24 only.)



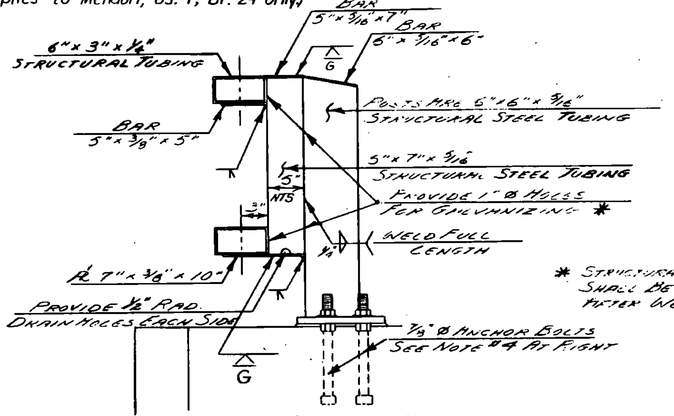

SECTION THROUGH NEW CURB
SCALE 1" = 1'-0"
(Applies to Mendon, US. 4, Br. 24 only.)




END BLOCK DETAIL PLAN
SCALE: 1" = 1'-0"




END BLOCK DETAIL ELEVATION
SCALE: 1" = 1'-0"

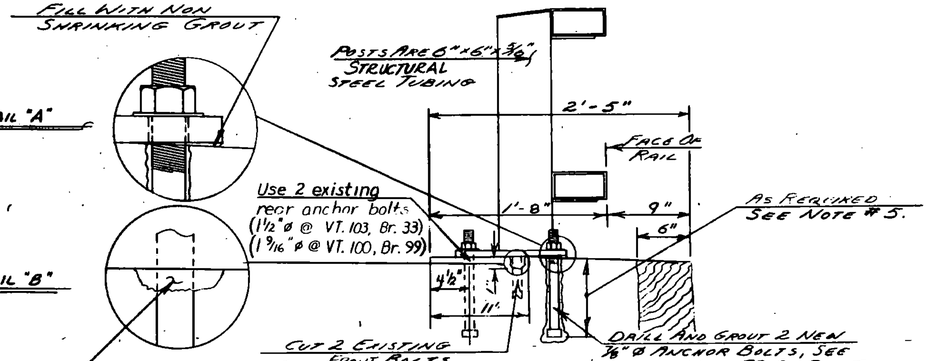



MODIFIED POST FOR WINGWALLS
SCALE: 1 1/2" = 1'-0"
(To be used on Mendon, US. 4, Br. 24 only.)

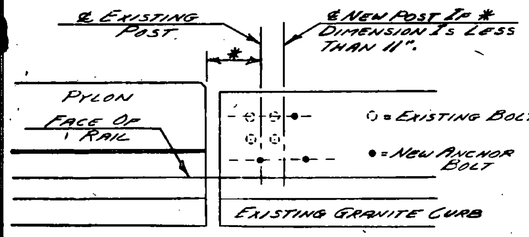
* STRUCTURAL STEEL TUBING SHALL BE GALVANIZED AFTER WELDING.

## NOTES

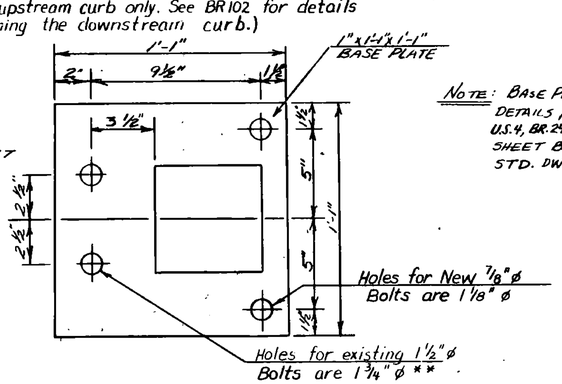
1. FOR POST DETAILS AND RELATED NOTES NOT SHOWN ON THESE PLANS, SEE STD. SHEET SB-R4A-82.
2. NEW ASTM A449 7/8" Ø ANCHOR BOLTS USED ON THE SUPERSTRUCTURE SHALL BE FURNISHED WITH 1 NUT & 1 WASHER. NEW ASTM A449 7/8" Ø ANCHOR BOLTS USED ON THE WINGWALLS SHALL BE FURNISHED WITH 2 NUTS & 1 WASHER. BOLTS, NUTS, & WASHERS SHALL BE FURNISHED UNDER The Item , BRIDGE RAILING - 2 Rail GALVANIZED Box Beam.
3. GROUT NEW BOLTS WITH EPOXY MORTAR, (VT. SPEC. TP401). DRILL HOLES SHALL BE 1 3/4" Ø. DRILLING & GROUTING NEW ANCHOR BOLTS SHALL BE SUBSIDIARY TO BRIDGE RAILING, 2 Rail Galvanized Box Beam.
4. ANCHOR BOLTS ON THE WINGWALLS ARE TO BE CAST IN THE CONCRETE. THE POSTS ARE TO BE SET SO THAT THE NEW FACE OF RAILING ALIGNS WITH THAT ON THE SUPERSTRUCTURE.
5. A MINIMUM PULLOUT STRENGTH OF 30,000 LBS. SHALL BE ATTAINED ON THE NEW BOLTS FOR POSTS TYPE B. A SAMPLE GROUTED BOLT WILL BE TESTED BEFORE MATERIALS ARE APPROVED FOR USE AND THEN RANDOM BOLTS WILL BE FIELD TESTED BY THE STATE OF VERMONT TO INSURE THIS STRENGTH IS BEING ATTAINED.




ELEVATION - POST TYPE B
SCALE: 1 1/2" = 1'-0"
(To be used on Ludlow, VT. 100, Br. 99-both curbs-and Mt. Holly, VT. 103, Br. 33-upstream curb only. See BR102 for details concerning the downstream curb.)



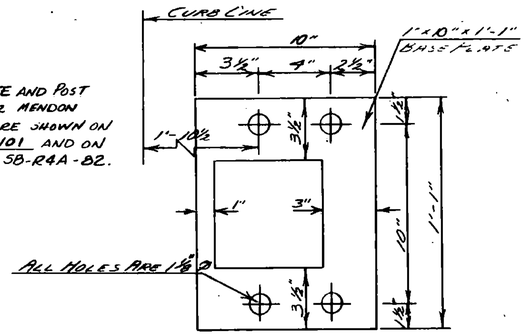

* IF THIS DIMENSION IS 11" OR GREATER, USE EXISTING FRONT ANCHOR BOLTS AND DRILL 2 NEW FRONT ANCHOR BOLTS. IF DIMENSION IS LESS THAN 11" USE ONLY ONE OF THE EXISTING REAR ANCHOR BOLTS AND DRILL 3 NEW ANCHOR BOLTS AS SHOWN. CUT OFF BOLTS NOT USED TO 1" BELOW TOP OF CONCRETE, FILL WITH NON-SHRINKING GROUT. IF A NEW 7/8" Ø REAR ANCHOR BOLT IS REQUIRED A SPECIAL 2 1/16" x 2 1/4" x 2 1/4" WASHER WILL BE REQUIRED BECAUSE OF 1 13/16" Ø OR 1 1/2" Ø HOLE IN BASE PLATE.



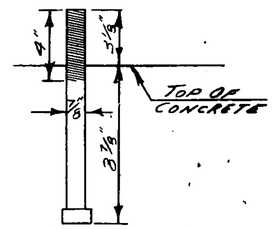

BASE PLATE TYPE B DETAIL
SCALE: 3" = 1'-0"
(TO BE USED ON VT. 103-BR. 33-FOR BOTH UPSTREAM AND DOWNSTREAM CURBS; VT. 100-BR. 99;)

** VT. 100, Br. 99 - HOLES FOR EXISTING 1 9/16" Ø BOLTS ARE 1 13/16" Ø.

NOTE: BASE PLATE AND POST DETAILS FOR MENDON U.S.4, BR.24 ARE SHOWN ON SHEET BR 101 AND ON STD. DWG. SB-R4A-82.



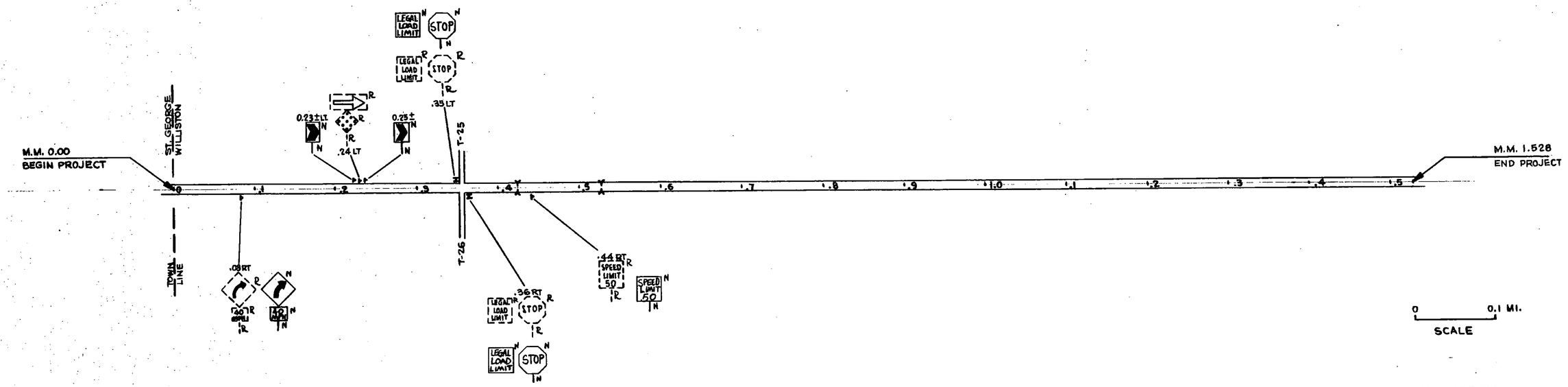

WINGWALL BASE PLATE DETAIL
SCALE: 3" = 1'-0"
(To Be Used On Mendon U.S. 4 - Br. 24)




NEW ANCHOR BOLT DETAIL FOR WINGWALLS
(TO BE USED ON MENDON-U.S.4-BR.24)

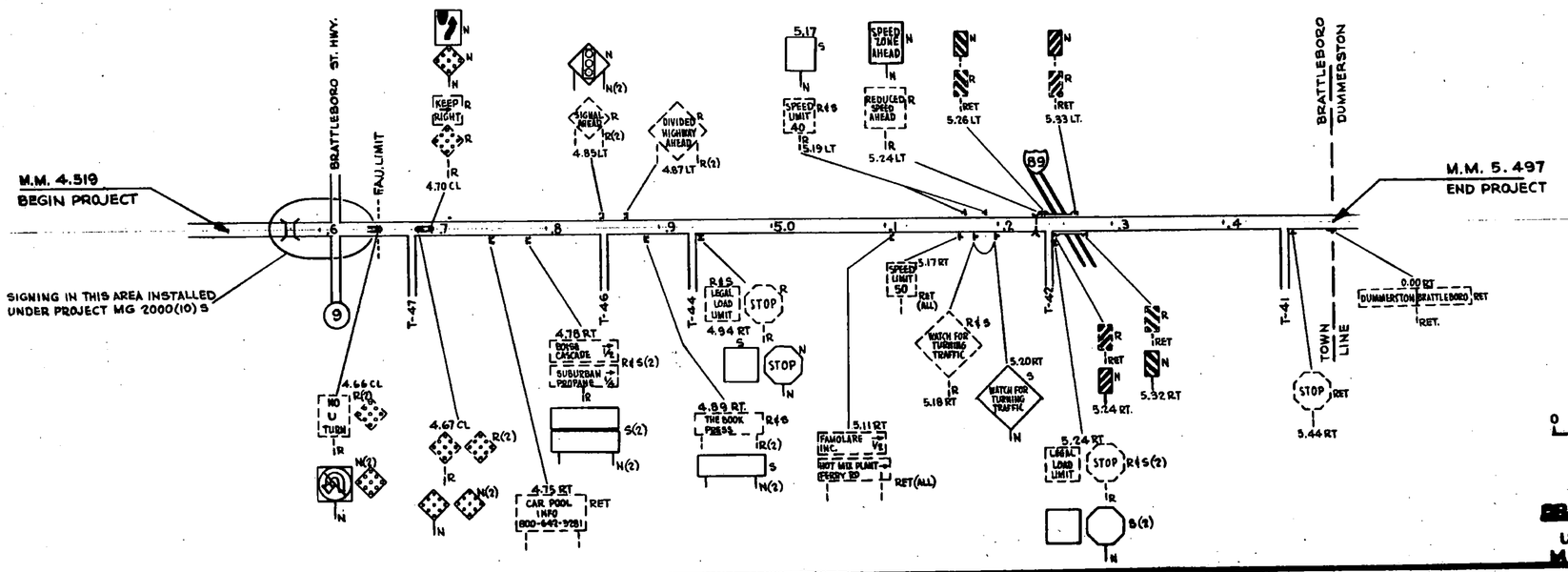
# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

| | |
|---|---|
| TOWN OF | Bridge No. |
| HIGHWAY NO. | Log Sta. / Surv. Sta. |
| POST & CURB DETAILS | |
| Designed by G.S. ROGERS | Drawn by PEABODY |
| Checked by D.W. NEWTON date 1/86 | Bridge Design Supervisor F.W. Bolkum date 3/86 |
| PROJECT STATEWIDE | PROJECT NO. FSFTY(85) |
| Bridge Sheet No. BR 103 , Sheet 17 of 200 | |




WILLISTON
VT. RTE. 2A
M 5500(5) S

LEGEND
R - REMOVE
N - NEW
R & S - REMOVE AND SALVAGE
S - SALVAGED
RET - RETAINED




BRATTLEBORO
U.S. RTE. 5
M 2000(12) S

DATUM
VERTICAL
HORIZONTAL

SURVEYED BY _____ DATE _____
DRAWN BY S.H.M. DATE 9/10/88
TRACED BY _____ DATE _____

WILLISTON
BRATTLEBORO
PROJ. M 5500(5)S
NO. 2000(10)S
SHEET 21 OF 200

# TRAFFIC ITEM AND TRAFFIC SIGN SUMMARY SHEET, NOTES AND DETAILS

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE X | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" ∅ | 3.0" □ | 4.0" ∅ | 4.0" ∅ MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WILLISTON .08 RT. | 40 MPH | 30" x 30" | 1 | | | 6.3 | | | | | | X | | 1 | | | × | | | | | | | | | | | | E-19A |
| | | 18" x 18" | 1 | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | | E-19B |
| .24 LT. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| .24 LT. | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| .23 LT. | | 18" x 24" | | | | 3 | | | | | | | | 1 | × | | | | | | | | | | | | | | E-19 |
| .25 LT. | | 18" x 24" | | | 1 | 3 | | | | | | | | 1 | × | | | | | | | | | | | | | | E-19 |
| .35 LT. | LEGAL LOAD LIMIT | 24" x 24" | 1 | | | 4 | | | | | | X | | 1 | × | | | | | | | | | | | | | | E-15A |
| .35 LT. | STOP | 30" x 30" | 1 | | | 6.3 | | | | | | | | | | | | | | | | | | | | | | | E-15C |
| .36 RT. | LEGAL LOAD LIMIT | 24" x 24" | 1 | | | 4 | | | | | | X | | 1 | × | | | | | | | | | | | | | | E-15A |
| .36 RT. | STOP | 30" x 30" | 1 | | | 6.3 | | | | | | | | | | | | | | | | | | | | | | | E-15C |
| .44 RT. | SPEED LIMIT 50 | 24" x 30" | 1 | | | 5 | | | | | | X | | 1 | × | | | | | | | | | | | | | | E-15B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TOTALS | | 9 | | | 40.2 | | | | | | | | | | 196 | | | | | | | | | | | | | |

## TRAFFIC ITEM SUMMARY

| ITEM NO. | ITEM |
|---|---|
| | SEE TRAFFIC SHEET #TD504 FOR PROJECT SUMMARY OF QUANTITIES AND REVISION NOTE FOR LEGAL LOAD LIMIT SIGNS. |

## NOTES AND DETAILS

WILLISTON

TRAFFIC SHEET NO: TD502 SHEET ___ OF ___

DRAWN BY _____ DATE _____

CHKED. BY _____ DATE _____

WILLISTON, BRATTLEBORO

PROJ. M NO. 5500 (3)S 2000 (15)S

SHEET 22 OF 206

BRUNING 53428-3

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | \| | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRATTLEBORO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.65 CL | NO U TURN | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| " " | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | | 24" x 24" | | | | 4 | | | | | | | | 1 | X | | | | | | | | | | | | FACES NORTHBOUND TRAFFIC | | E-15C |
| " " | | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | MOUNT BACK TO BACK WITH "NO U TURN" SYMBOL | | E-19B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | MOUNT HAZARD MARKERS BACK TO BACK | | |
| 4.69 CL | | 18" x 18" | 1 | | | 2.3 | | | | | | X | | 1 | X | | | | | | | | | | | | | | E-19B |
| | | 18" x 18" | 1 | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | | E-19B |
| 4.70 CL | KEEP RIGHT | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| " " | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | | 24" x 30" | | | | 5 | | | | | | | | 1 | X | | | | | | | | | | | | | | E-15B |
| " " | | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | | E-19B |
| 4.75 RT. | CAR POOL INFO 800-642-3281 | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | |
| 4.78 RT. | BOISE CASCADE 1/8 | | (1) | X | | | | | 8 | | | X | | (2) | | | X | | | | | | | | | | PAY ALL WORK AS ITEM 680.20 MOD. (NON-FED. PART.) | | |
| | SUBURBAN PROPANE 1/4 | | (1) | X | | | | | 8 | | | | | | | | | | | | | | | | | | | | |
| 4.85 LT. | SIGNAL AHEAD | 36" x 36" | 1 | | | | | | | | | X(2) | | 1 | | | X | | | | | | | | | | | | |
| 4.87 LT. | DIVIDED HIGHWAY AHEAD | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | | |
| 4.89 RT. | THE BOOK PRESS | | (1) | X | | | | | 8 | | | X(2) | | (2) | | | X | | | | | | | | | | RE-INSTALL AS FAR FROM EDGE OF PAVEMENT AS POSSIBLE. PAY ALL WORK AS ITEM 680.20 MOD. (NON-FED. PART.) | | |
| 4.94 RT. | STOP | 30" x 30" | 1 | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | | | E-15C |
| " " | LEGAL LOAD LIMIT 24000 | (24" x 24") | 1 | X | | | | 1 | | | | | | | | | | | | | | | | | | | | | |
| 5.11 RT. | FINOLARE INC. | | | | X | | | | | X(2) | | | | | | | | | | | | | | | | | | | |
| | HOT MIX PLANT FERRY RD. | | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.17 RT. | SPEED LIMIT 50 | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | |
| 5.18 RT. | WATCH FOR TURNING VEHICLES | (36" x 36") | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | | |
| 5.19 LT. | SPEED LIMIT 40 | (24" x 30") | 1 | X | | | | @ 5.17 1 | | | | X | | 1 | X | | | | | | | | | | | | RE-ERECT SALV. SIGN ON NEW POST AT 5.17 | | |
| 5.24 LT. | REDUCED SPEED AHEAD / SPEED ZONE AHEAD | 24" x 30" | 1 | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | | | E-15B |
| 5.24 RT. | STOP | (30" x 30") | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT 24000 | (24" x 24") | 1 | X | | | | 1 | | | | | | | | | | | | | | | | | | | | | |
| SUB-TOTALS | | | 15 | | | 29.5 | | 5 | 24 | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | | | | | | | | | | | | | | 260 | | | | | | | | | | | | | |

FINAL 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".

BRATTLEBORO

PREPARED BY SHM DATE 9/86

CHECKED BY _____ DATE _____

WILLISTON - BRATTLEBORO

PROJ. M NO. 5500(5)S

M 2000(13)S

TRAFFIC SHEET NO. 10 SHEET 23 OF 30

1988

# TRAFFIC ITEM AND TRAFFIC SIGN SUMMARY SHEET, NOTES AND DETAILS

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS RET. | DRILL | REM. | SALV. | NEW SIGN POSTS NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BRATTLEBORO 5.24 LT. | | 12" x 36" | 1 | | | 3 | | | | x | | | | | | | | | | | | | | | | | | |
| 5.26 RT. | | 12" x 36" | 1 | | | 3 | | | | x | | | | | | | | | | | | | | | | | | |
| 5.32 LT. | | 12" x 36" | 1 | | | 3 | | | | x | | | | | | | | | | | | | | | | | | |
| 5.33 RT. | | 12" x 36" | 1 | | | 3 | | | | x | | | | | | | | | | | | | | | | | | |
| 5.44 RT. | STOP | | | | X | | | | | x | | | | | | | | | | | | | | | | | | |
| 5.497 = 0.00 RT. | DUMMERSTON BRATTLEBORO | | | | X | | | | | x | | | | | | | | | | | | | | | | | | |
| | SUB-TOTALS | | 4 | | | 12 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TOTALS | | 19 | | | 41.5 | | 5 | 24 | | | | | | | | 260 | | | | | | | | | | | |

## TRAFFIC ITEM SUMMARY

| ITEM NO. | ITEM | WILLISTON | | BRATTLEBORO | | UNIT | RND. | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 675.20 | TRAFFIC SIGNS, TYPE A | 40.2 | | 41.5 | | S.F. | 0.3 | 82 |
| 675.30 | FLANGED CHANNEL SIGN POSTS | 196 | | 260 | | LB. | | 456 |
| 675.50 | REMOVING SIGNS | 9 | | 19 | | EA. | | 28 |
| 675.60 | ERECTING SALVAGED SIGNS | | | 5 | | EA | | 5 |
| 680.20 | TRAVEL INFORMATION SIGNS | | | 24 | | S.F. | | 24 |

SPECIAL NOTE: THE CONTRACTORS ATTENTION IS DIRECTED TO A RECENT CHANGE IN AGENCY POLICY WHICH REQUIRES LEGAL LOAD LIMIT SIGNS TO BE ERECTED ON THE DRIVERS RIGHT FOR VEHICLES ENTERING A TOWN HIGHWAY FROM A STATE HIGHWAY. AT ALL LOCATIONS ON THIS PROJECT WHERE THE DESIGN INDICATES LEGAL LOAD LIMIT SIGNS TO BE MOUNTED ON THE BACK OF STOP SIGNS ON THE DRIVERS LEFT LEAVING THE STATE HIGHWAY, THE LEGAL LOAD LIMIT SIGN WILL BE INSTALLED ON ITS OWN POST ON THE DRIVERS RIGHT. WHERE EXISTING STOP-LEGAL LOAD ASSEMBLIES ARE SHOWN AS RETAINED THE LEGAL LOAD SIGN WILL BE REMOVED, SALVAGED AND REMOUNTED ON ITS OWN POST ON THE OPPOSITE SIDE OF THE TOWN HIGHWAY. AN ESTIMATED QUANTITY OF FLANGED CHANUEL SIGN POSTS HAS BEEN ADDED TO THE PROJECT TOTAL. THE ENGINEER IS ALSO AUTHORIZED TO PAY REMOVAL AND SALVAGE FOR LEGAL LOAD LIMIT SIGNS WHICH MUST BE MOVED.

## NOTES AND DETAILS

| | | 646.40 DURABLE 24" STOP BAR | 646.54 DURABLE LETTER IM WORD MARK. | 646.50 TEMP. 4" REFLECT. WHITE LINE | 646.51 TEMP. 4" REFL. YELLOW LINE | 646.54 TEMP. 8" REFL. WHITE LINE | 646.55 TEMP. 8" REFL. YELLOW LINE | 646.60 TEMP. 24" STOP BAR | 646.62 TEMP. ARROW MARKING | 646.64 TEMP. LETTER IN WORD MARKING | 646.80 REMOVAL OF EXIST. PAVE MRKG. | 675.2 TRAFFIC SIGNS TYPE A | 675.21 TRAFFIC SIGNS TYPE B | 675.30 FLANGED CHAN. SIGN POSTS | 675.33 TUBULAR ALUM. SIGN POSTS | 675.50 REMOVING SIGNS | 675.60 ERECTING SALVAGED SIGNS | 676.10 REMOVE EXIST. STEEL POSTS | 676.12 REMOVE EXIST. DELINEATORS | 676.20 DELINEATOR W/ FLEXIBLE POST | 679.15 STREET LIGHT | 680.20 TRAVEL INFORMATION SIGN | | | | * 676.15 REMOVE AND RE-PLACE REFLECTOR UNITS ON INDIVIDUAL POSTS SEE SHEETS LISTED | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| F-SFTY | ALBURG | 12 | 4 | | | | | | | | 172 | | 534 | 76 | 37 | | | * | 1 | 10 | | | | | | TD 511 - TD 517 |
| | ENOSBURG | | | | | | | | | | 61 | | 396 | | 17 | 7 | | | | 5 | | | | | | TD 511 - TD 517 |
| | JOHNSON | | | | | | | | | | 64 | | 388 | | 18 | 1 | | | | 20 | | | | | | TD 511 - TD 517 |
| | LUDLOW | | | | | | | | | | 62 | | 124 | 120 | 27 | 1 | | | | | | | | | | TD 511 - TD 517 |
| | LOWELL - WESTFIELD | | | | | | | | | | 325 | | 1266 | 235 | 83 | 7 | | | | | | | | | 80 | TD 518 TD 522 |
| | LUDLOW - MT. HOLLY - SHREWSBURY SECT. I | | | | | | | | | | 290 | | 1557 | 145 | 72 | 2 | | | | 10 | | | | | | TD 523 TD 529 |
| | LUDLOW - MT. HOLLY - SHREWSBURY SECT. II | | | | | | | | | | 60 | | 636 | | 17 | 3 | | | | | | | | | | TD 523 TD 529 |
| | NEW HAVEN | | | | | | | | | | 56 | | 420 | | 10 | 4 | | | | | | | | | | TD 530 TD 532 |
| | SOUTH BURLINGTON | | | | | | | | | | 22 | | 907 | 31 | 15 | 11 | | | | 15 | | | | | | TD 530 TD 532 |
| | BERLIN - BARRE | | | | | | | | | | 330 | 550 | 1964 | 510 | 92 | | 26 | 200 | 30 | 10 | | | | | 30 | TD 533 TD 543 |
| | MENDON - SHERBURNE | | | 1000 | 2600 | 200 | 500 | 16 | 4 | 20 | 100 | 735 | 50 | 4810 | 350 | 140 | 20 | | | | 34 | | | | | | TD 544 TD 558 |
| RS-SFTY | WORCESTER SECT I | | | | | | | | | | 38 | | 160 | | 8 | 1 | | | | | | | | | | TD 506 TD 507 |
| | WORCESTER SECT II | | | | | | | | | | 101 | | 713 | | 17 | 3 | | | | | | | | | | TD 505 TD 507 |
| | WEATHERSFIELD - WINDSOR | | | | | | | | | | 105 | | 264 | 70 | 24 | 6 | | | | 5 | | | | | | TD 508 TD 510 |
| M | WILLISTON M 5500(5) | | | | | | | | | | 40 | | 244 | | 9 | | | | | | | | | | | TD 501 - TD 502 |
| | BRATTLEBORO M 2000(13) | | | | | | | | | | 42 | | 332 | | 19 | 5 | | | | 24 | | | | | | TD 501 - TD 504 |
| | UNITS | LF | EA | LF | LF | LF | LF | LF | EA | EA | LF | SF | SF | LB | LB | EA | EA | EA | EA | EA | LS | SF | | | | EA | |
| COMPOSITE TOTALS | | 12 | 4 | 1000 | 2600 | 200 | 500 | 16 | 4 | 20 | 100 | 2703 | 600 | 13697 | 1537 | 605 | 71 | 26 | 200 | 30 | 1 | 133 | | | | 50 | |
| F-SFTY | | 12 | 4 | 1000 | 2600 | 200 | 500 | 16 | 4 | 20 | 100 | 2377 | 600 | 11934 | 1467 | 528 | 56 | 26 | 200 | 30 | 1 | 104 | | | | 50 | |
| RS-SFTY | | | | | | | | | | | | 244 | | 1137 | 70 | 49 | 10 | | | | | 5 | | | | | |
| M | | | | | | | | | | | | 82 | | 576 | | 28 | 5 | | | | | 24 | | | | | |

INDIVIDUAL AND COMPOSITE TOTALS FOR STATEWIDE(85) PROJECT

TRAFFIC SHEET NO. TD 504

DRAWN BY _____ DATE _____

CHKED BY _____ DATE _____

WILLISTON, BRATTLEBORO

PROJ. M NO. 5500(5)
M 2000(13)

SHEET 24 OF 200

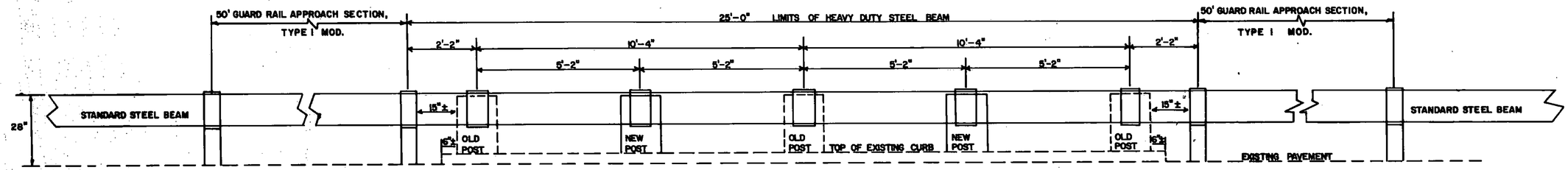
BRUNING 53428 3

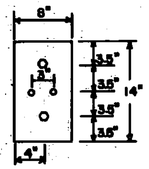
# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS. | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S | RCPES | CONC | STEEL | REHAB. DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | 621.81 | | 621.20 | 621.70 | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.49-3.50 | RT | | | | | | | 50 | | | | | | | | | | | | | | | | | 71 | | | 25 | 1 | | 1 | | REMOVE EXISTING RAIL CONNECT GUARD RAIL APPROACH SECTION, TYPE I TO HEAVY DUTY BEAM ON BRIDGE. SEE SHEETS 3 AND 30 FOR DETAILS. |
| 3.50-3.51 | RT | | | | | | | | | | | | | | | | | | | | | | | | | 25 | | | | | | | SEE SHEET 30 FOR DETAILS. |
| 3.51-3.52 | RT | | | | | | | 3 | | | | | | | | | | | | | | | | | 38 | | | 25 | 1 | 1 | | | REMOVE EXISTING RAIL, CONNECT GUARD RAIL APPROACH SECTION, TYPE I TO THE HEAVY DUTY BEAM ON THE BRIDGE. WRAP NLY END AROUND DRIVE. SEE SHEETS 3 AND 30 FOR DETAILS. |
| 3.48-3.49 | LT | | | | | | | 50 | | | | | | | | | | | | | | | | | 71 | | | 25 | 1 | | 1 | | REMOVE EXISTING RAIL, CONNECT GUARD RAIL APPROACH SECTION, TYPE I MOD. TO THE HEAVY DUTY BEAM ON THE BRIDGE, SEE SHEETS 3 AND 30 FOR DETAILS. |
| 3.49-3.50 | LT | | | | | | | | | | | | | | | | | | | | | | | | | 25 | | | | | | | SEE SHEET 30 FOR DETAILS. |
| 3.50-3.51 | LT | | | | | | | 49 | | | | | | | | | | | | | | | | | 40 | | | | 1 | | 1 | | REMOVE EXISTING GUARD RAIL. CONNECT GUARD RAIL APPROACH SECTION, TYPE I MOD. TO THE HEAVY DUTY BEAM ON THE BRIDGE. SEE SHEETS 3 AND 30 FOR DETAILS. |
| 3.94-3.96 | RT | | | | | | | 5 | | | | | | | | | | | | | | | | | 106 | | | 75 | 1 | 1 | | | REMOVE EXISTING RAIL, CONNECT 621.70 MOD. TO HEAVY DUTY BEAM ON BRIDGE. WRAP SLY END OF STEEL BEAM AROUND PULLOUT. SEE SHEETS 3 AND 31 FOR DETAILS. |
| 3.96-3.98 | RT | | | | | | | | | | | | | | | | | | | | | | | | | 87.5 | | | | | | | SEE SHEET 31 FOR DETAILS |
| 3.98-3.99 | RT | | | | | | | 3 | | | | | | | | | | | | | | | | | 50 | | | 25 | 1 | 1 | | | REMOVE EXISTING RAIL, CONNECT 621.70 MOD. TO HEAVY DUTY BEAM ON BRIDGE. WRAP NLY END AROUND DRIVE. SEE SHEETS 3 AND 31 FOR DETAILS. |
| 3.94-3.96 | LT | | | | | | | 50 | | | | | | | | | | | | | | | | | 65 | | | 25 | 1 | | 1 | | REMOVE EXISTING RAIL, CONNECT 621.70 MOD. TO HEAVY DUTY BEAM ON BRIDGE. SEE SHEETS 3 AND 31 FOR DETAILS. |
| 3.96-3.98 | LT | | | | | | | | | | | | | | | | | | | | | | | | | 87.5 | | | | | | | SEE SHEET 31 FOR DETAILS |
| 3.98-3.99 | LT | | | | | | | 50 | | | | | | | | | | | | | | | | | 75 | | | 25 | 1 | | 1 | | REMOVE EXISTING RAIL, CONNECT 621.70 MOD. TO HEAVY DUTY BEAM ON BRIDGE. SEE SHEETS 3 AND 31 FOR DETAILS. |
| WORCESTER TOTALS | | | | | | | | 260 | | | | | | | | | | | | | | | | | 516 | 225 | | 225 | 8 | 3 | 5 | | |

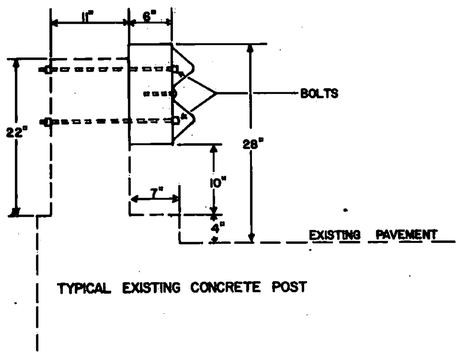
WORCESTER
1985 STATEWIDE SAFETY PROJECT
SHEET 29 OF 200 SHEETS

# WORCESTER VT. 12 AT MILE MARKER 3.50

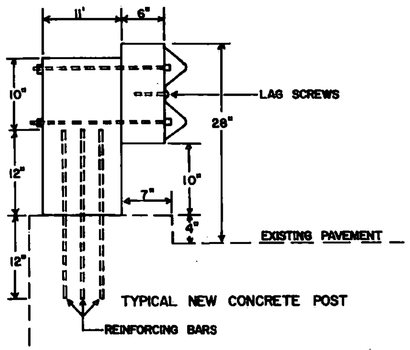


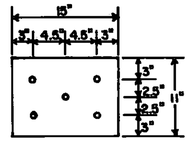

TYPICAL FRONT VIEW OF OFFSET TO BE USED ON CONCRETE POSTS




TYPICAL EXISTING CONCRETE POST




TYPICAL NEW CONCRETE POST

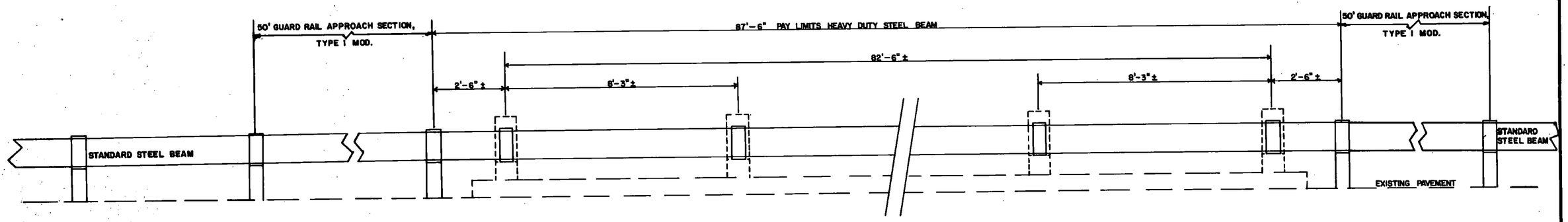


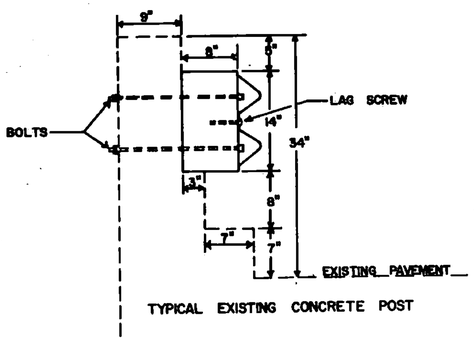

TYPICAL REINFORCING BAR PLACEMENT FOR NEW CONCRETE POST

NOTES:

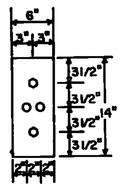
1. ALL WORK AND MATERIALS NECESSARY TO INSTALL THE RAILING SHALL BE PAID FOR UNDER THE ITEM GUARD RAIL, HEAVY DUTY STEEL BEAM.
2. ALL EXISTING FITTINGS WILL BE CUT FLUSH WITH POST FACES.
3. EXISTING POSTS SHALL BE REPAIRED WITH MORTAR, AS NECESSARY, TO INSURE THAT THE OFFSET BLOCK FITS.
4. BOLTS USED TO ATTACH OFFSET BLOCKS TO EXISTING POSTS SHALL BE 3/4" WITH WASHERS, BOLTS TO BE PLACED IN EXISTING POSTS THROUGH 1" DRILLED AND GROUTED HOLES.
5. LAG SCREWS TO BE 5/8" X 4" WITH WASHER.
6. MATERIAL USED TO CONSTRUCT NEW POSTS SHALL CONFORM TO THE SPECIFICATIONS FOR CONCRETE CLASS B.
7. REINFORCING BARS SHALL BE NO. 5 BARS. BARS SHALL BE DRILLED AND GROUTED TO A DEPTH OF AT LEAST 12".
8. OFFSET BLOCKS TO BE 6" X 8" X 14" TREATED TIMBER.
9. SEE STANDARD SB-R4B-82 FOR GUARD RAIL APPROACH SECTION, TYPE I DETAILS.

WORCESTER VT. RTE. 12 AT MILE MARKER 3.97



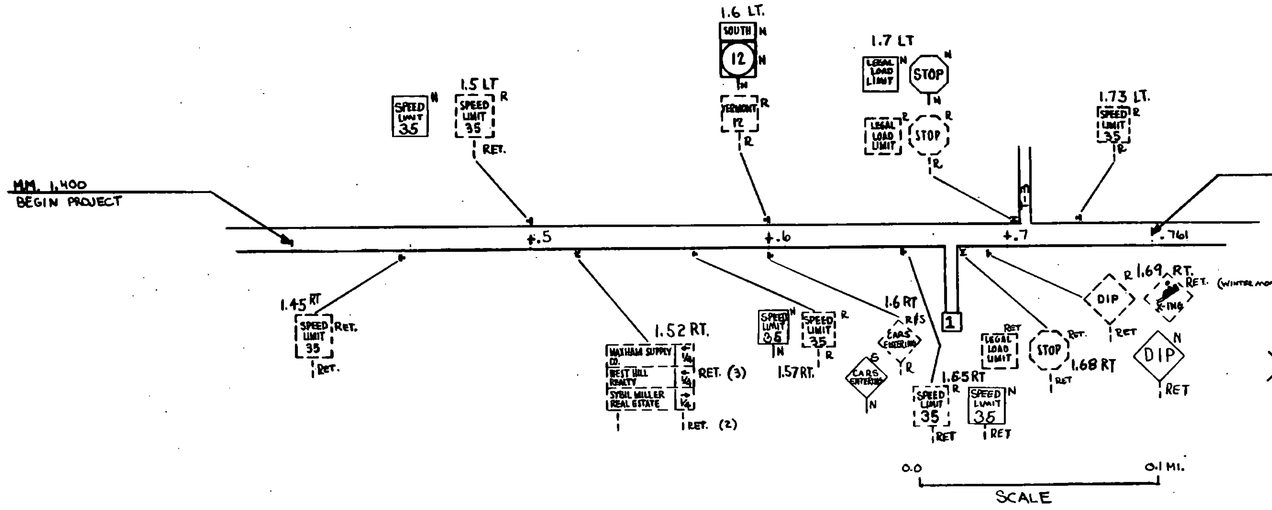

TYPICAL EXISTING CONCRETE POST

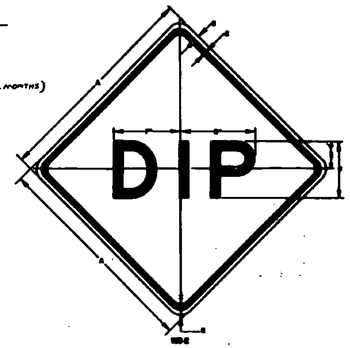


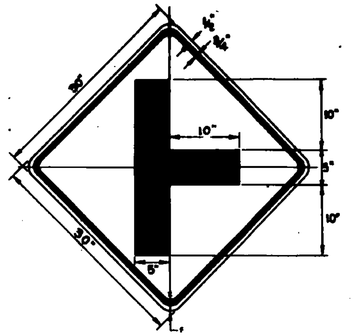

TYPICAL FRONT VIEW OF OFFSET BLOCK TO BE USED ON CONCRET POSTS

NOTES:

1. ALL WORK AND MATERIALS NECESSARY TO INSTALL THE RAILING SHALL BE PAID FOR UNDER THE ITEM GUARD RAIL, HEAVY DUTY STEEL BEAM.
2. ALL EXISTING FITTINGS WILL BE CUT FLUSH WITH POST FACES.
3. EXISTING POSTS SHALL BE REPAIRED WITH MORTAR, AS NECESSARY, TO INSURE THAT OFFSET BLOCKS FIT.
4. BOLTS USED TO ATTACH OFFSET BLOCKS TO EXISTING POSTS SHALL BE 3/4" WITH NUTS AND WASHERS. BOLTS TO BE PLACED IN EXISTING POSTS THROUGH 1" DRILLED AND GROUTED HOLES.
5. LAG SCREWS TO BE 5/8" X 4" WITH WASHER.
6. OFFSET BLOCKS TO BE 6"X6"X14" TREATED TIMBER.
7. SEE STANDARD SB-R48-82 FOR GUARD RAIL APPROACH SECTION, TYPE I DETAILS.
8. TRANSITION GUARD RAIL TO STANDARD HEIGHT WITH FIRST PANEL (12'-6") OFF THE END OF THE BRIDGE.



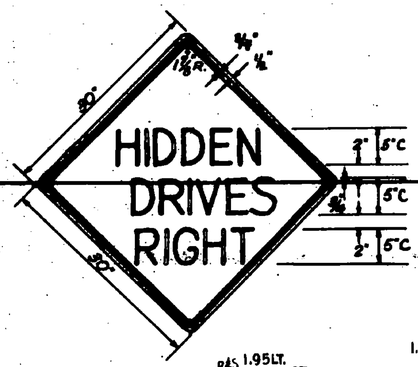



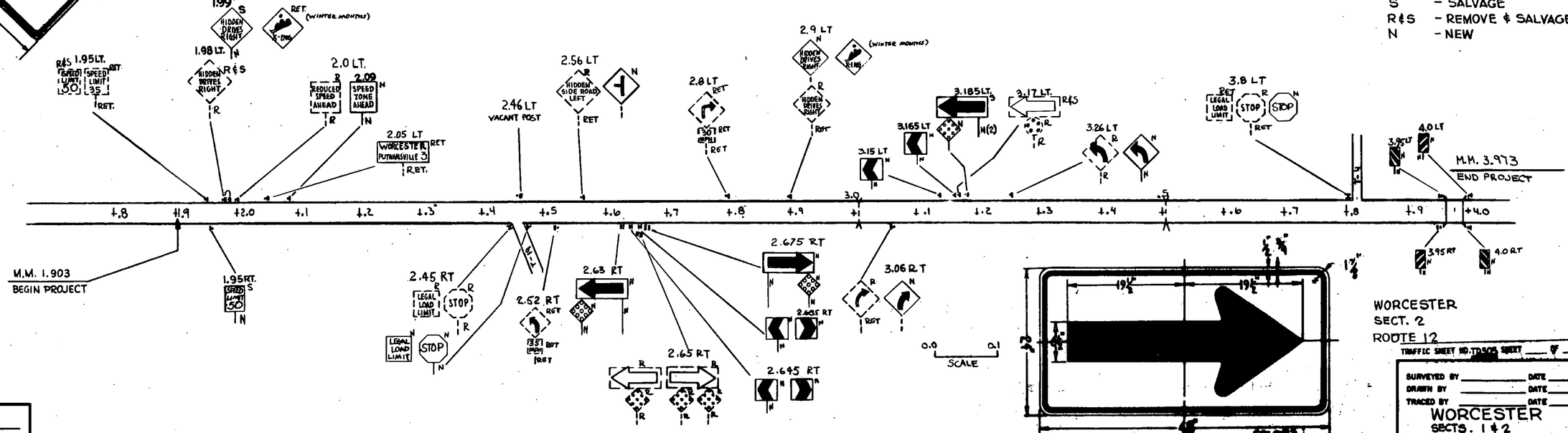




MOUNT SIGN WITH SPUR TO LEFT FOR INSTALLATION AT 2.56 LT.

WORCESTER
SECT. 1
RS-SFTY(85)

ROUTE 12







LEGEND

| | |
|---|---|
| RET | – RETAIN |
| R | – REMOVE |
| S | – SALVAGE |
| R&S | – REMOVE & SALVAGE |
| N | – NEW |

WORCESTER
SECT. 2
ROUTE 12

TRAFFIC SHEET NO. TP5105 SHEET ___ OF ___

DATUM
VERTICAL _____
HORIZONTAL _____

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

WORCESTER
SECTS. 1 & 2

STATEWIDE RS-SFTY(85)S
SHEET 32 OF 200

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | X | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.400 BEGIN SECTION 1<br>1.45 RT | SPEED LIMIT 35 | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 1.5 LT | SPEED LIMIT 35 | 24" X 30" | 1 | | | 5 | | | | X | | | | | | | | | | | | | | | | | | E-15 B |
| 1.52 RT | MAXHAM SUPPLY CO. ← 1/4 | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 1.52 RT | WEST HILL REALTY ← 1/4 | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 1.52 RT. | SYBIL MILLER REAL ESTATE → 1/4 | | | | X | | | | | X × (2) | | | | | | | | | | | | | | | | | | |
| 1.57 RT | SPEED LIMIT 35 | 24" X 30" | 1 | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15 B |
| 1.6 RT | CARS ENTERING | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| 1.6 LT | VERMONT 12 | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 1.6 LT | SOUTH / 12 | 12" x 24" | | | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | | 24" x 24" | | | | 4 | | | | | | | | 1 | X | | | | | | | | | | | | | E-13 |
| 1.65 RT | SPEED LIMIT 35 | 24" x 30" | 1 | | | 5 | | | | X | | | | | | | | | | | | | | | | | | E-15 B |
| 1.68 RT | LEGAL LOAD LIMIT / STOP | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 1.7 LT | LEGAL LOAD LIMIT / STOP | 24" x 24" | 1 | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-15 A |
| | | 30" x 30" | 1 | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15 C |
| 1.69 RT | DIP | 30" x 30" | 1 | | | 6.3 | | | | X | | | | | | | | | | | | | | | | | SNOWMOBILE CROSSING SIGN IN PLACE DURING WINTER MONTHS ONLY | TD 505 | |
| 1.73 LT | SPEED LIMIT 35 | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 1.761 END SECTION 1<br>1.903 BEGIN SECTION 2<br>1.95 LT | SPEED LIMIT 50 * NOTE / SPEED LIMIT 35 | | 1 | X | | | | | | | | | | | | | | | | | | | | | | | MOVE 50 M.P.H. SIGN TO 2.05 RT. | | |
| | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 1.95 RT | SPEED LIMIT 60 * NOTE | | | | | | | 1 | | | | | | 1 | X | | | | | | | | | | | | SIGN SALVAGED FROM 1.95 LT. | | |
| 1.98 LT<br>1.99 LT. | HIDDEN DWNEL ROAD | | 1 | X | | | | 1 | | | | X | | 1 | | | X | | | | | | | | | | SNOWMOBILE CROSSING SIGN IN PLACE DURING WINTER MONTHS ONLY. RE-INSTALL SALV. SIGN AT 1.99. | | |
| 2.0 LT | REDUCE SPEED AHEAD EXIST. / SPEED ZONE AHEAD NEW | 24" x 30" | 1 | | | 5 | | | | X | | | | | | | | | | | | | | | | | | E-15 B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.05 LT | WORCESTER PUTNAMSVILLE 3 | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 2.45 RT | LEGAL LOAD LIMIT / STOP | 24" x 30" | 1 | | | 5 | | | | | | | | 1 | X | | | | | | | | | | | | INSTALL ON SOUTH SIDE OF TOWN HIGHWAY | | E-15 A |
| | | 30" x 30" | 1 | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | INSTALL ON NORTH SIDE OF TOWN HIGHWAY | | E-15 C |
| 2.52 RT | 35 MPH | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 2.56 LT | HIDDEN SIDE ROAD LEFT (EXIST.) / (NEW) | EXIST. | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | NEW 30" x 30" | | | | 6.3 | | | | | | | | 1 | X | | | | | | | | | | | | INSTALL 2' FURTHER OFF ROAD. DETAIL ON SHEET TD 505 | | |
| SUB-TOTALS | | | 14 | | | 60.2 | | 3 | | | | | | | | | | | | | | | | | | | | |

FINAL 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".

PREPARED BY D.F. DATE 11 MAR

CHECKED BY _____ DATE _____

PROJ. WORCESTER SECTS 1 & 2

NO. STATEWIDE RS-SFTY.(85)S

TRAFFIC SHEET NO. TD 504 SHEET 33 OF 200

[redacted] 1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.65 RT | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | 3 | | | | | | | | | 3 | | | | | | | | | | | | | | | | | |
| 2.645 RT | * NOTE | 18" x 24" | | | | 3 | | | | | | | | | | | | | | | | | | | | * NOTE MOUNT ON SINGLE POSTS, BACK TO BACK | | E-19 |
| | | 18" x 24" | | | | 3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-19 |
| 2.655 RT | * NOTE | 18" x 24" | | | | 3 | | | | | | | | | | | | | | | | | | | | | | E-19 |
| | | 18" x 24 | | | | 3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-19 |
| 2.8 LT | 30 MPH | | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | |
| 2.63 RT | | 48" x 24" | | | | 8 | | | | | | | | 2 | | | X | | | | | | | | | | | | |
| 2.675 RT | | 48" x 24" | | | | 8 | | | | | | | | 2 | | | X | | | | | | | | | | | | |
| 2.63 RT | | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | | E-19 B |
| 2.675 RT | | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | | E-19 B |
| 2.9 LT | * NOTE | 30" x 30" | 1 | | | 6.3 | | | | X | | | | | | | | | | | | | | | | | SNOWMOBILE CROSSING SIGN IN PLACE DURING WINTER MONTHS ONLY | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.06 RT | | 30" x 30" | 1 | | | 6.3 | | | | X | | | | | | | | | | | | | | | | | | | E-19 A |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.17 LT | * NOTE | | 1 | X | | | | | | | | | | | | | | | | | | | | | | | * NOTE RELOCATE TO 3.185 | | |
| | | | 1 | | | | | | | | | 1 | | | | | | | | | | | | | | | | | |
| 3.15 LT | | 18" x 24" | | | | 3 | | | | | | | | 1 | X | | | | | | | | | | | | | | E-19 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.165 LT | | 18" x 24 | | | | 3 | | | | | | | | 1 | X | | | | | | | | | | | | | | E-19 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.185 LT | | | | | | | | 1 | | | | | | 2 | X | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.23 LT | * NOTE | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | * MOUNT ON LEFT POST OF ARROW (3.17 LT) | | E-19 B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.26 LT | | 30" x 30" | 1 | | | 6.3 | | | | | | 1 | | 1 | | | | | | | | | | | | | | | E-19 A |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.8 LT | LEGAL LOAD LIMIT / STOP | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | |
| | | 30" x 30" | 1 | | | 6.3 | | | | | | | | | | | | | | | | | | | | | | | E-15 C |
| 3.95 LT | | 12" x 36" | | | | 3 | | | | | | | | 1 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 LT | | 12" x 36" | | | | 3 | | | | | | | | 1 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.95 RT | | 12" x 36" | | | | 3 | | | | | | | | 1 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.0 RT | | 12" x 36" | | | | 3 | | | | | | | | 1 | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SUB TOTALS | | 11 | | | 78.1 | | 1 | | | | | | | | | | | | | | | | | | | | | |
| | TOTALS | | 25 | | | 138.3 | | 4 | | | | | | | | | | | | | | | | | | | | | |

| ITEM NUMBER | ITEM | QUANTITY | RND | UNIT | TOTAL |
|---|---|---|---|---|---|
| 675.20 | TRAFFIC SIGNS, TYPE A | 138.3 | 0.7 | S.F. | 139 |
| 675.30 | FLANGED CHANNEL SIGN POSTS | 754 | | LB. | 754 |
| 675.50 | REMOVING SIGNS | 25 | - | EA. | 25 |
| 675.60 | ERECTING SALVAGED SIGN | 4 | - | EA. | 4 |

SEE SHEET TD 504 FOR PROJECT SUMMARY OF QUANTITIES AND REVISION NOTE FOR LEGAL LOAD LIMIT SIGNS.

TOTALS

FINAL 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".

PREPARED BY D.F. DATE 11 MAR. 1986

CHECKED BY WORCESTER DATE SECTS 1 & 2

PROJ. STATEWIDE NO. RS-SFTY (85)S

TRAFFIC SHEET NO. TD 507 SHEET 34 OF 200

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S | RCPES | CONC | STEEL | REHAB DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.60 | GUARD RAIL ITEMS | GUARD RAIL ITEMS 621.20 | GUARD RAIL ITEMS | GUARD RAIL ITEMS 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WEATHERSFIELD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.38 | LT | | | | 15 | | 2 | | | | | 18 | 12 | III | | 1-18 | | | | | | | | | | | | | | | | REMOVE HEADWALL, ADD 8'± NEW PIPE AND RCPES USE EARTH BORROW TO FLATTEN SLOPE SEE DETAIL "B" SHEET 4 |
| 6.45 | LT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | RECONSTRUCT D.I. |
| 6.53 | LT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | RECONSTRUCT D.I. |
| 6.72 | LT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | RECONSTRUCT D.I. |
| WINDSOR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.24 | LT | | | | 25 | 2 | 2 | | | | | 24 | 4 | III | | | 2.0 | 200 | | 1 | | | | | | | | | | | | REMOVE HEADWALL ADD 4'± NEW PIPE CONSTRUCT D.I. SEE DETAIL "E" SHEET 4 |
| 0.56 | LT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | RECONSTRUCT DI |
| 0.60-0.62 | LT | | | | | | | 100 | | | | | | | | | | | | | | | | | 125 | | 150 | | 2 | | | REPLACE EXISTING GUARD RAIL SEE SHEET 3 FOR DETAILS |
| 0.67 | LT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | RECONSTRUCT DI |
| 0.76 | LT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | RECONSTRUCT DI |
| 0.85 | LT | | | | 90 | 6 | 4 | | 52X77 | 16 | .109 | | | | | | | | | | 15 | | | | | | | | | | | REMOVE HEADWALL EXTEND PIPE FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| 0.91 | LT | | | | 50 | 15 | | | 18 | 22 | .064 | | | | | | 3.0 | 300 | | 2 | 20 | | | | | | | | | | | CONNECT PIPES W/ 4'X6' DI W/2 GRATES |
| 0.99 | LT | | | | 10 | 8 | 2 | | | | | | | | | | 2.0 | 200 | | 1 | | | | | | | | | | | | REMOVE HEADWALL CONSTRUCT DI REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| SHEET TOTAL | | | | | 190 | 85 | 10 | 100 | 18 | 22 | .064 | 18 | 12 | III | | 1-18 | 7.0 | 700 | 6 | 4 | 35 | | | | | 125 | | 150 | | 2 | | |
| | | | | | | | | | 52X77 | 16 | .109 | 24 | 4 | III | | | | | | | | | | | | | | | | | | |
| TOTAL FROM SHEET | | | | | 80 | | 6 | 397 | | | | 15 | 36 | III | | | | | | | | | | | | 2305 | | 3975 | | 1 | 5 | |
| PROJECT TOTAL | | | | | 270 | 25 | 16 | 497 | 18 | 22 | .064 | 15 | 36 | III | | 1-18 | 7.0 | 700 | 6 | 4 | 35 | | | | | 2430 | | 4125 | | 1 | 7 | |
| | | | | | | | | | 52X77 | 16 | .109 | 18 | 12 | III | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 24 | 4 | III | | | | | | | | | | | | | | | | | |

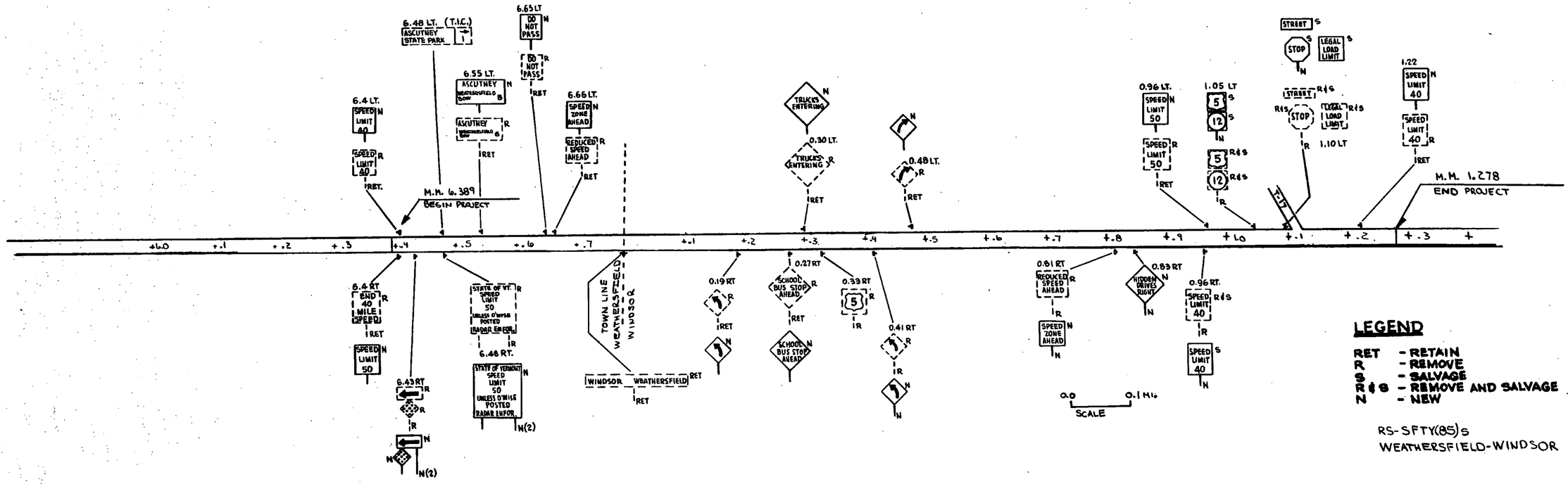
WEATHERSFIELD—WINDSOR
1985 STATEWIDE SAFETY PROJECT
SHEET 3 OF 200 SHEETS

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

NORTHBOUND

| MILE MARKER | POS. | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S | R.C.P.E.S | CONC | STEEL | REHAB. DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | | | 621.20 | | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| WEATHERSFIELD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 6.33-6.38 | RT | | | | | | | 121 | | | | | | | | | | | | | | | | | 420 | | | 725 | | | 2 | | PAY REMOVAL OF GUIDE POSTS AS REMOVAL AND DISPOSAL OF GUARD RAIL BEGIN NEW GUARD RAIL 300'+/- SOUTHERLY SEE SHEET 3 FOR DETAILS |
| 6.46 | RT | | | | 10 | | 2 | | | | | 15 | 12 | III | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 8'± USE EARTH BORROW TO FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| 6.52 | RT | | | | 10 | | 2 | | | | | 15 | 12 | III | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL EXTEND PIPE 8'± USE EARTH BORROW TO FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| 6.60 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | CUT OFF POLE STUB COST SUBSIDIARY TO OTHER ITEMS |
| 6.73 | RT | | | | 10 | | 2 | | | | | 15 | 12 | III | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL EXTEND PIPE 8'± USE EARTH BORROW TO FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| WINDSOR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.23-0.85- | RT | | | | | | | 169 | | | | | | | | | | | | | | | | | | | | 3250 | | 1 | 1 | | | WRAP NEW GUARD RAIL AROUND DRIVE TO SEWER PLANT AT 0.85+/- SEE SHEET 3 FOD DETAILS |
| 0.59-0.71 | RT | | | | | | | | | | | | | | | | | | | | | | | | 775 | | | | | | | | | PAY REMOVAL OF GUIDE POSTS AS REMOVAL AND DISPOSAL OF EXISTING GUARD RAIL |
| 0.71-0.85 | RT | | | | | | | | | | | | | | | | | | | | | | | | 760 | | | | | | | | | REMOVE EXISTING GUARD RAIL |
| 0.91-0.98 | RT | | | | | | | 107 | | | | | | | | | | | | | | | | | | | | 350 | | | 2 | | | NEW SECTION OF GUARD RAIL SEE SHEET 3 FOR DETAILS |
| SHEET TOTAL | | | | | 30 | | 6 | 397 | | | | 15 | 36 | III | | | | | | | | | | | 1955 | | | 4325 | | 1 | 5 | | | |

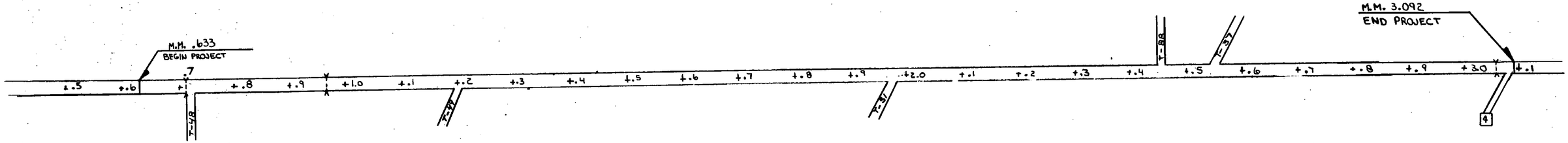
WEATHERSFIELD—WINDSOR
1985 STATEWIDE SAFETY PROJECT
SHEETS




## LEGEND

RET - RETAIN
R - REMOVE
S - SALVAGE
R & S - REMOVE AND SALVAGE
N - NEW

RS-SFTY(85)S
WEATHERSFIELD-WINDSOR




WILLIAMSTOWN
(DELETED FROM PROGRAM)

TRAFFIC SHEET NO. TS-SCR SHEET ___ OF ___

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

WEATHERSFIELD-WINDSOR

FED. PROJ. NO. RS-SFTY(85)S
STATEWIDE
SHEET 41 OF 200

DATUM
VERTICAL _____
HORIZONTAL _____

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | LEGEND | TYPE | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: 675.20 NEW "A" (S.F.) | 675.21 NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S. (S.F.) | EXISTING POSTS: RETAIN | DRILL | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB/FT | 2.5 LB/FT | 3.0 LB/FT | TUBULAR ALUMINUM: 3" Ø | 3" □ | 4" Ø | 4" Ø MOD. | W SHAPE STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SEE: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.4 LT. | SPEED LIMIT 40 | A | 24" x 30" | X | | | 5 | | | | X | | | | | | | | | | | | | | | | | E-15B |
| 6.4 RT. | SPEED LIMIT 50 | A | 24" x 30" | X | | | 5 | | | | X | | | | | | | | | | | | | | | | | E-15B |
| 6.43 RT. | ← | A | 4' x 2' | X | | | 8 | | | | | | | 2 | X | | | | | | | | | | | | | E-6 |
| " " | | A | 18" x 18" | X | | | 2.3 | | | | | | | | | | | | | | | | | | | | | E-19B |
| 6.46 LT. | ASCUTNEY STATE PARK → | A | | X | X | | | | | 5 | | | | 2 | | | (X) | | | | | | | | | PAID AS ITEM 680.20 WHICH INCLUDES ALL WORK AND MATERIALS REQUIRED | | |
| 6.48 RT. | STATE OF VERMONT SPEED LIMIT 50 UNLESS OTHERWISE POSTED RADAR ENFORCED | A | 4' x 5' | X | | | 20 | | | | | | | 2 | | | | X | | | | | | | | | TD 510 | |
| 6.55 LT. | ASCUTNEY WEATHERSFIELD BOWL | A | 30" x 18" | X | | | 3.8 | | | | X | | | | | | | | | | | | | | | | TD 510 | |
| 6.65 LT. | DO NOT PASS | A | 24" x 30" | X | | | 5 | | | | X | | | | | | | | | | | | | | | | | E-15A |
| 6.66 LT. | REDUCED SPEED AHEAD | A | | X | | | | | | | X | | | | | | | | | | | | | | | | | |
| " " | SPEED ZONE AHEAD | A | 24" x 30" | | | | 5 | | | | | | | | | | | | | | | | | | | | | E-15B |
| 6.78 = 0.00 TOWN LINE | WINDSOR WEATHERSFIELD | A | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| 0.19 RT. | 5 | A | 30" x 30" | X | | | 6.3 | | | | X | | | | | | | | | | | | | | | | | E-19A |
| 0.27 RT. | SCHOOL BUS STOP AHEAD | A | 30" x 30" | X | | | 6.3 | | | | X | | | | | | | | | | | | | | | | TD 510 | |
| 0.30 LT. | TRUCKS ENTERING | A | 30" x 30" | X | | | 6.3 | | | | X | | | | | | | | | | | | | | | | TD 510 | |
| 0.33 RT. | 5 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.41 RT. | | A | 30" x 30" | X | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | E-19A |
| 0.46 LT. | | A | 30" x 30" | X | | | 6.3 | | | | X | | | | | | | | | | | | | | | | | E-19A |
| 0.81 RT. | REDUCED SPEED AHEAD | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | SPEED ZONE AHEAD | A | 24" x 30" | | | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | E-15B |
| 0.83 RT. | HIDDEN DRIVE RIGHT | A | 30" x 30" | | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | TD 510 | 1 |
| 0.98 LT. | SPEED LIMIT 50 | A | 24" x 30" | X | | | 5 | | | | X | | | | | | | | | | | | | | | | | E-15B |
| 0.98 RT. | WARD ZONE 40 | A | | X | X | | | | 1 | | | | | 1 | X | | | | | | | | | | | | | |
| 1.19 LT. | (STREET NAME) | A | | X | X | | | | 1 | | | | | 1 | X | | | | | | | | | | | | | |
| " " | STOP | A | | X | X | | | | 1 | | | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT SPEED LIMIT 40 | A | | X | X | | | | 1 | | | | | | | | | | | | | | | | | | | |
| 1.22 LT. | | A | 24" x 30" | X | | | 5 | | | | X | | | | | | | | | | | | | | | | | E-15B |
| 1.08 LT. | 5 | A | | X | X | | | | 1 | | | | | 1 | X | | | | | | | | | | | | | |
| " " | 12 | A | | X | X | | | | 1 | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | | 24 | | | 106.9 | | 6 | 5 | | | | | 240 | | | 68.4 | | | | | | | | | | |

POST LENGTHS ARE APPROXIMATE. FINAL LENGTHS TO BE DETERMINED IN THE FIELD IF FINAL LENGTHS VARY BY MORE THAN 2 FEET, RECOMPUTE THE POST SIZE BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS.

PREPARED BY S.M. DATE 11/85
CHECKED BY _____ DATE _____
PROJ. WEATHERSFIELD - WINDSOR NO. STATEWIDE RS-SFTY(85)S
SHEET 42 OF 200

# TRAFFIC ITEM AND TRAFFIC SIGN SUMMARY SHEET, NOTES AND DETAILS

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED | | | NEW AND SALVAGED SIGNS | | | | EXISTING POSTS | | | | NEW SIGN POSTS | | | | | | | | | | | REMARKS | FOR SIGN DETAIL SHEET | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | REMOVE (EA.) | | RETAIN (X) | NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | RET. | DRILL | REM. | SALV. | NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB./FT. | FLANGED CHANNEL 2.5 LB./FT. | FLANGED CHANNEL 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" ∅ | TUBULAR ALUMINUM 3.0" □ | TUBULAR ALUMINUM 4.0" ∅ | TUBULAR ALUMINUM 4.0" ∅ MOD. | W SHAPED STEEL POST SIZE | W SHAPED STEEL WEIGHT | W SHAPED STEEL FTG. SIZE 24" | W SHAPED STEEL FTG. SIZE 30" | | PLAN SHEET NUMBER | STD. SHEET NUMBER |
| --------- | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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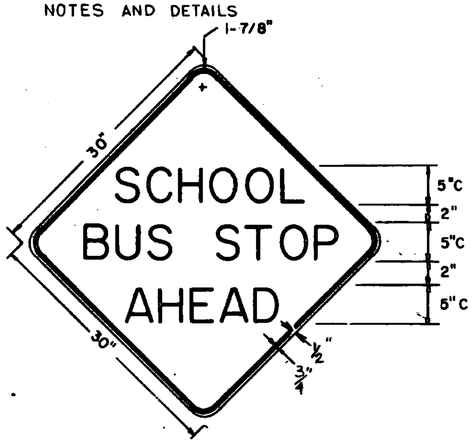
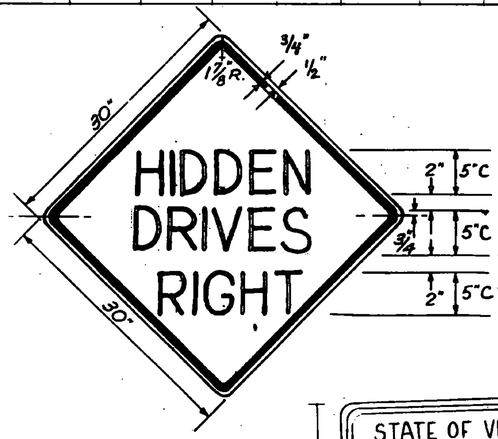
## TRAFFIC ITEM SUMMARY

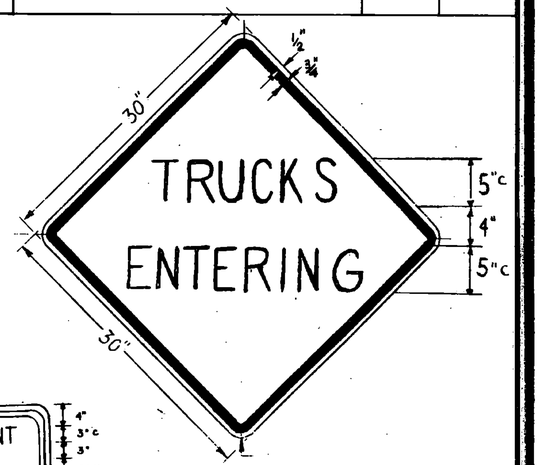
| ITEM NO. | ITEM | | | | | UNIT | RND. | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 675.20 | TRAFFIC SIGNS, TYPE A | 104.9 | | | | S.F. | 0.1 | 105 |
| 675.30 | FLANGED CHANNEL SIGN POSTS | 240. | | | | LB. | | 240 |
| 675.32 | TUBULAR ALUMINUM SIGN POSTS | 68.4 | | | | LB. | 1.6 | 70 |
| 675.50 | REMOVING SIGNS | 24 | | | | EA. | | 24 |
| 675.60 | ERECTING SALVAGED SIGNS | 6 | | | | EA. | | 6 |
| 680.20 | TRAVEL INFORMATION SIGN | 5 | | | | S.F. | | 5 |

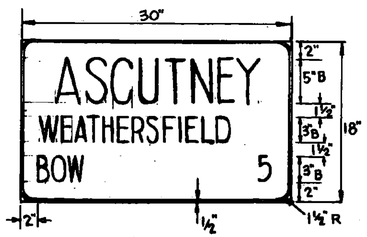
SEE SHEET TD 504 FOR PROJECT SUMMARY OF QUANTITIES AND REVISION NOTE FOR LEGAL LOAD LIMIT SIGNS

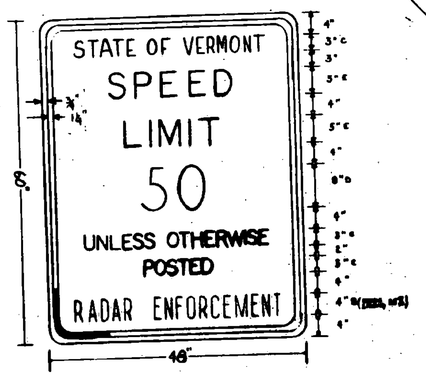
## NOTES AND DETAILS




TRAFFIC SHEET NO. TD 510 SHEET ___ OF ___

DRAWN BY _____ DATE _____

CHKED BY _____ DATE _____

WEATHERSFIELD-WINDSOR

PROJ. STATEWIDE HQ RS-SFTY (85) S

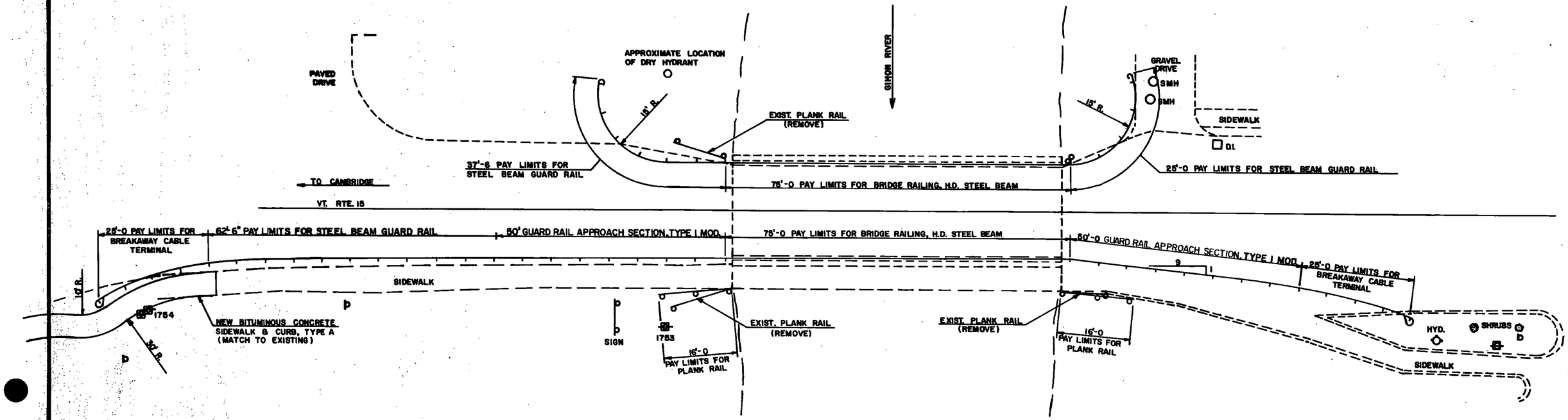
SHEET 43 OF 200

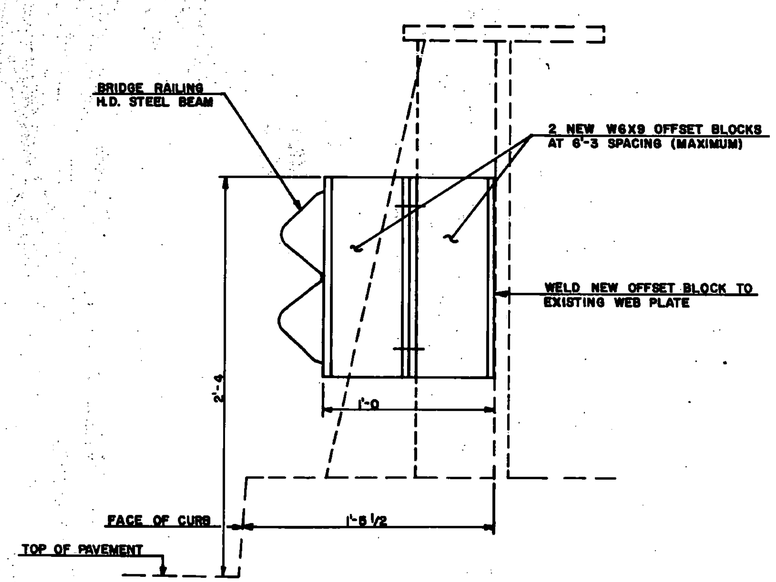
BRUNING 53428.3

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

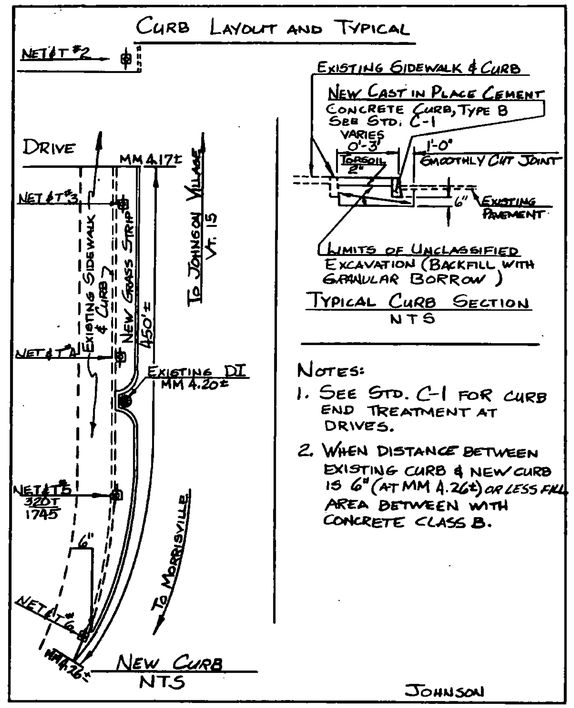
| MILE MARKER | POS. | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RCP PIPES D | RCP PIPES L | RCP PIPES CL | M.E.S | R.C.P.E.S. | CONC. | STEEL | REHAB. DI: | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.15 | 621.20 | 621.70 | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.94 | RT. | | | 10 | 10 | | | 5 | | | | | | | | | | | | | | | | | | 32 | 112.5 | 1 | | 2 | | CONNECT GUARD RAIL APPROACH SECTION, TYPE I MOD. TO H.D. BEAM ON BRIDGE. CONNECT 112.5FT. OF NEW STEEL BEAM TO APPROACH SECTION. INSTALL BCT. |
| 3.94 | LT. | | | | | | | | | | | | | | | | | | | | | | | | | | 12.5 | | 2 | | | CONNECT GUARD RAIL APPROACH SECTION TYPE I MOD. TO H.D. BEAM ON BRIDGE. CONNECT 112.5FT. OF NEW STEEL BEAM TO APPROACH SECTION. INSTALL BCT. |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | | | | |
| JOHNSON TOTALS | | | | 10 | 10 | | | 5 | | | | | | | | | | | | | | | | | | 32 | 125 | 2 | 2 | 2 | | |

JOHNSON
1985 STATEWIDE SAFETY PROJECT
SHEET 47 OF [illegible] SHEETS




BRIDGE RAIL CONNECTION DETAIL
SCALE 1"=1'




NOTES:
1. SEE STD. C-1 FOR CURB END TREATMENT AT DRIVES.
2. WHEN DISTANCE BETWEEN EXISTING CURB & NEW CURB IS 6" (AT MM 4.26±) OR LESS FILL AREA BETWEEN WITH CONCRETE CLASS B.

JOHNSON

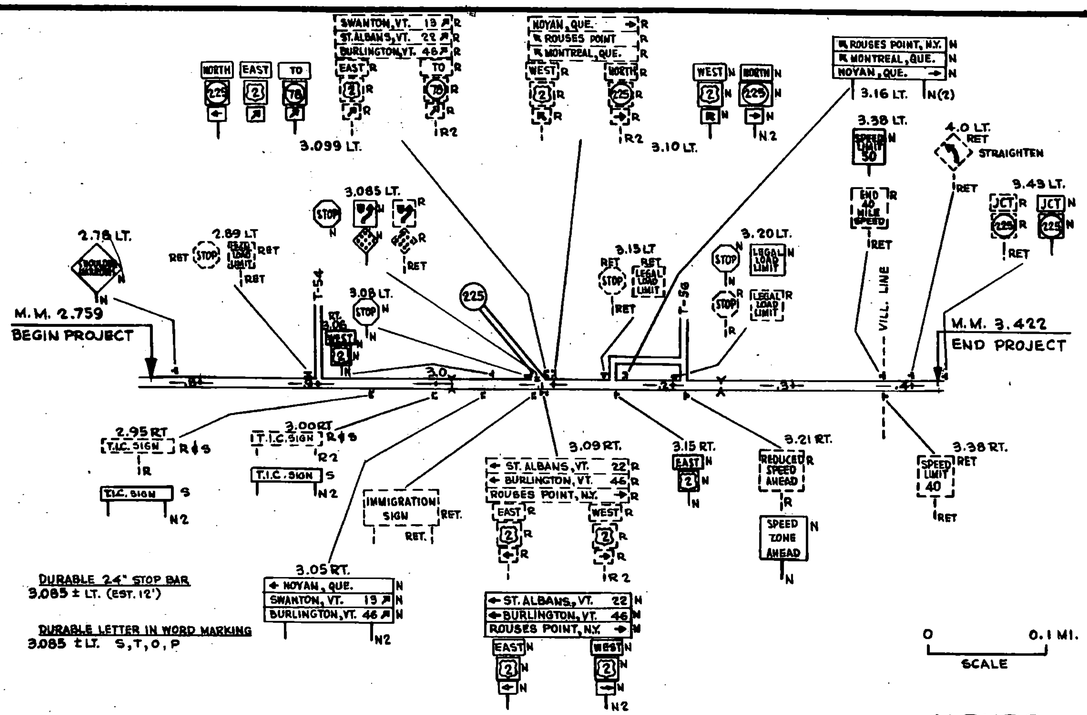
0 10 20

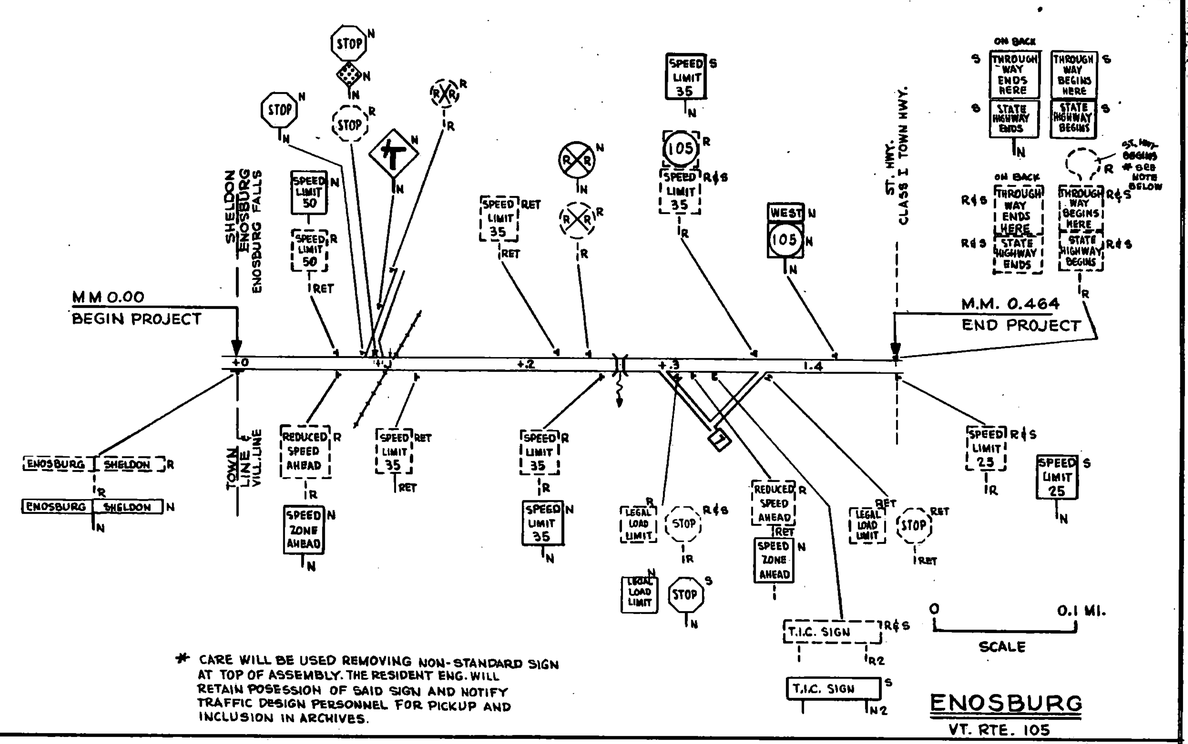
DATUM
VERTICAL N. A.
HORIZONTAL N. A.

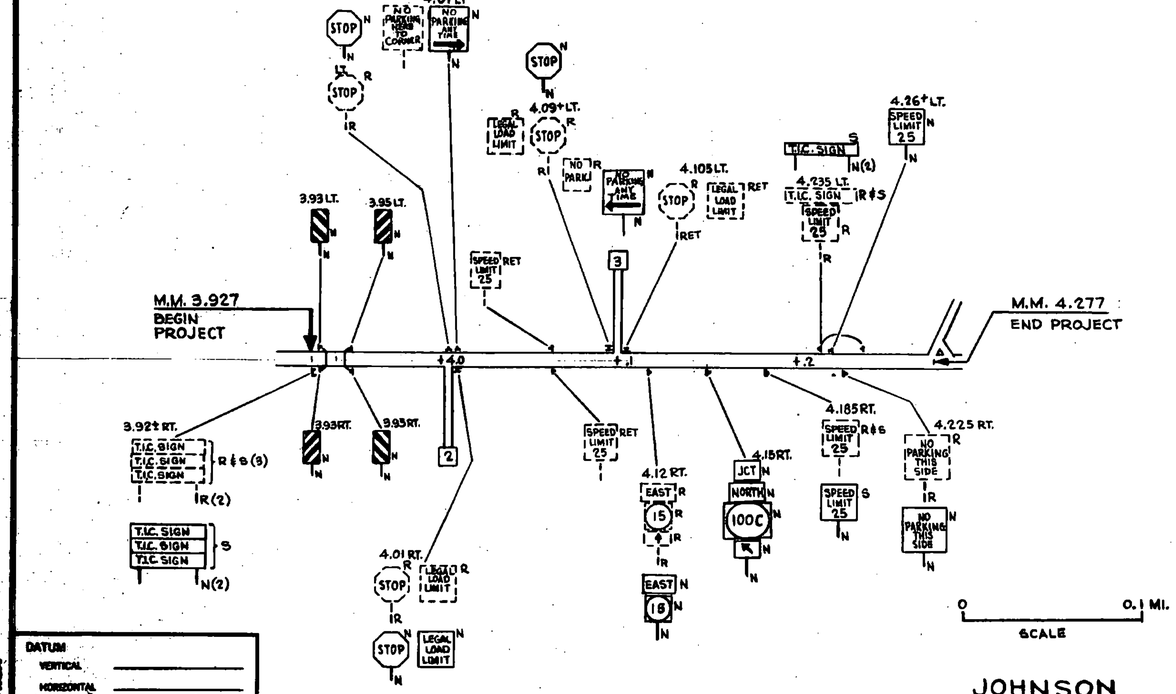
SURVEYED BY BEYOR DATE 8-86
DRAWN BY WILLEY DATE 8-86
TRACED BY WILLEY DATE 8-86
JOHNSON
1985 STATEWIDE SAFETY PROJECT
PROJ.F SFTY NO. (85) S
SHEET 48 OF 200

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS. | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S | RC.P.E.S. | CONC | STEEL | REHAB. DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | | | 621.20 | | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| RTE. 100 5.06 | RT | | | | | | | 80 | | | | | | | | | | | | | | | | | 2125 | | | 2075 | | 1 | | | REMOVE EXISTING GUARD RAIL FROM FOX RUN ROAD ON VT 103 TO BRIDGE AT MM 5.06 ON VT 100 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | REPLACE WITH NEW STEEL BEAM WRAP END AROUND FOX RUN ROAD SEE SHEET 3 FOR DETAILS |
| RTE 100 5.08 | RT | | | | | | | 2 | | | | | | | | | | | | | | | | | 16 | | | | | 1 | | | PLACE 621.60 TYPE ANCHOR ON END OF APPROACH SECTION TYPE I WRAP APPROACH SECTION |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | AROUND DRIVE SEE SHEET 3 FOR DETAILS |
| RTE 100 5.06 | LT | | | | | | | 51 | | | | | | | | | | | | | | | | | 85 | | | 50 | | | 1 | | USE APPROACH SECTION AND 50' OF NEW BEAM FROM BRIDGE TO VT. RTE 103 SEE SHEET |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 FOR DETAILS |
| RTE 100 5.08 | LT | | | | | | | 51 | | | | | | | | | | | | | | | | | 55 | | | 50 | | | 1 | | USE APPROACH SECTION AND 50' OF NEW BEAM SEE SHEET 3 FOR DETAILS |
| LUDLOW TOTALS | | | | | | | | 184 | | | | | | | | | | | | | | | | | 2281 | | | 2175 | | 2 | 2 | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | NOTE: FOR BRIDGE DETAILS SEE BRIDGE SHEETS 14–17 |

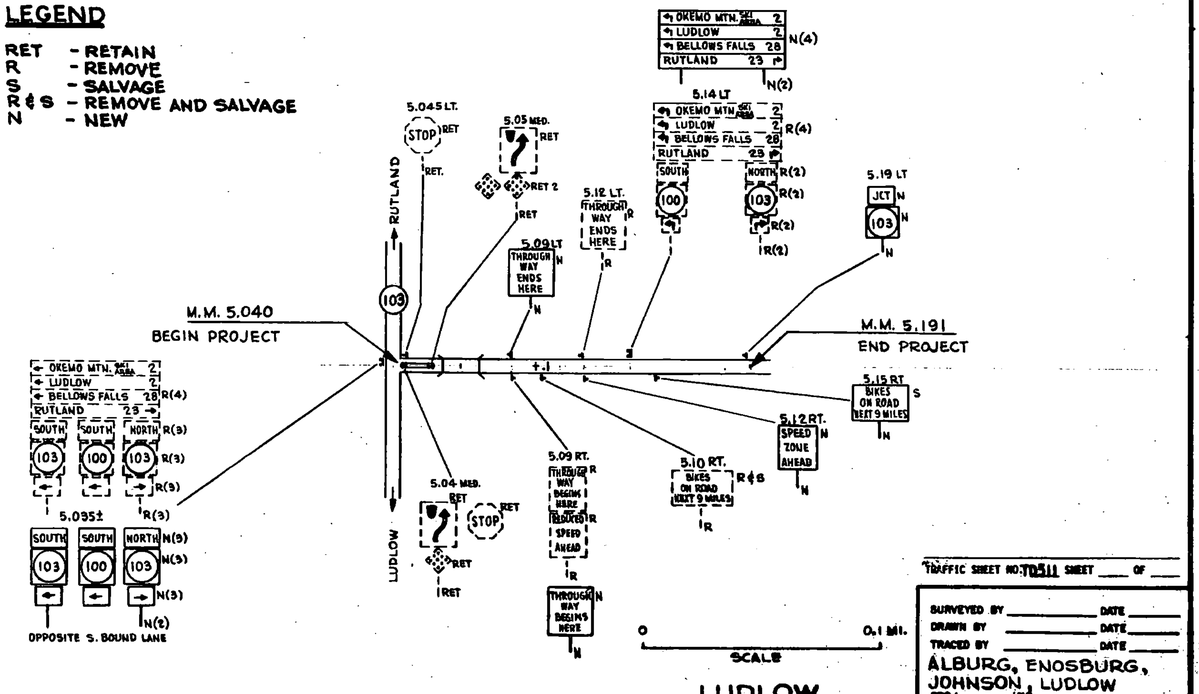



## LEGEND

RET - RETAIN
R - REMOVE
S - SALVAGE
R$S - REMOVE AND SALVAGE
N - NEW




TRAFFIC SHEET NO. T0511 SHEET ___ OF ___

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

ALBURG, ENOSBURG, JOHNSON, LUDLOW
PROJ. STATEWIDE F-SFTY(85)S
SHEET 50 OF 200

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | LEGEND | TYPE | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | V | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S. (S.F.) | EXISTING POSTS: RETAIN | DRILL | SALV. | NEW POSTS: NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB/FT | 2.5 LB/FT | 3.0 LB/FT | TUBULAR ALUMINUM 3"Ø | 3" □ | 4" Ø | 4"Ø MOD | W SHAPE (BREAKAWAY) POST SIZE | WEIGHT | FTG. SIZE 24" | 30" | REMARKS | FOR SIGN DETAIL SEE: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALBURG | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.78 LT. | SHOULDER NARROWS | A | 3' x 3' | | | | 9 | | | | | | | 1 | | | X | | | | | | | | | | | E-19A |
| 2.89 LT. | STOP | A | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT | A | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| 2.95 RT | (T.I.S.) | A | | (X) | X | | | | | 5 | | | | (2) | (X) | | | | | | | | | | | PAY AS ITEM 680.20 MOD. (NON-FED. PART.) | | |
| 3.00 RT. | (T.I.S.) | A | | (X) | X | | | | | 5 | | | | (2) | (X) | | | | | | | | | | | PAY AS ITEM 680.20 MOD. (NON-FED. PART.) | | |
| 3.05 RT | ← NOYAN, QUE. (SEE NEXT SHEET FOR 3.06 RT.) | A | 72" x 10" | | | | 5 | | | | | | | 2 | | | X | | | | | | | | | | | E-23 |
| " " | SWANTON, VT. 13 ↗ | A | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | E-23 |
| " " | BURLINGTON, VT. 46 ↗ | A | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | E-23 |
| 3.08 LT. | STOP | A | 30" x 30" | | | | 6.9 | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| 3.085 LT. | | A | | X | | | | | | | X | | | | | | | | | | | | | | | | | |
| " " | | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | | A | 24" x 30" | | | | 5 | | | | X | | | | | | | | | | | | | | | | | E-15B |
| " " | | A | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | E-19B |
| " " | STOP | A | 30" x 30" | | | | 6.9 | | | | | | | | | | | | | | | | | | | | | E-15C |
| 3.08 RT. | IMMIGRATION SIGN | A | | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| 3.099 LT. | SWANTON, VT. 13 ↗ | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | ST. ALBANS, VT. 22 ↗ | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | BURLINGTON, VT. 46 ↗ | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | EAST | A | 2' x 1' | X | | | 2 | | | | | | | 2 | | | X | | | | | | | | | | ROUTE MARKER ASSEMBLY FACES TRAFFIC EASTBOUND ON U.S. 2 | | E-12 |
| " " | (2) | A | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | E-12 |
| " " | ↗ | A | 21" x 15" | X | | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-12 |
| " " | TO | A | 2' x 1' | X | | | 2 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | (78) | A | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | ↗ | A | 21" x 15" | X | | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | NORTH | A | 2' x 1' | | | | 2 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | (225) | A | 24" x 30" | | | | 5 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | ← | A | 21" x 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-18 |
| 3.09 RT. | ← ST. ALBANS, VT. 22 | A | 72" x 10" | X | | | 5 | | | | | | | 2 | | | | X | | | | | | | | | | E-23 |
| " " | ← BURLINGTON, VT. 46 | A | 72" x 10" | X | | | 5 | | | | | | | | | | | | | | | | | | | | | E-23 |
| " " | ROUSES POINT, N.Y. → | A | 72" x 10" | X | | | 5 | | | | | | | | | | | | | | | | | | | | | E-23 |
| " " | WEST | A | 2' x 1' | X | | | 2 | | | | | | | | | | | | | | | | | | | | | E-12 |
| " " | (2) | A | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | E-12 |
| " " | → | A | 21" x 15" | X | | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-12 |
| " " | EAST | A | 2' x 1' | X | | | 2 | | | | | | | | | | | | | | | | | | | | | E-12 |
| " " | (2) | A | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | E-12 |
| " " | ← | A | 21" x 15" | X | | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-12 |
| 3.10 LT. | NOYAN, QUE. → | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | ROUSES POINT, N.Y. | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | MONTREAL, QUE. | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | WEST | A | 2' x 1' | X | | | 2 | | | | | | | | | | | | | | | | | | | | MOUNT ON BACK OF ASSEMBLY AT 3.099 LT. FACING TRAFFIC WESTBOUND ON U.S. 2 | | E-12 |
| " " | (2) | A | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | E-12 |
| " " | ↖ | A | 21" x 15" | X | | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-12 |
| " " | NORTH | A | 2' x 1' | X | | | 2 | | | | | | | | | | | | | | | | | | | | | E-18 |
| " " | (225) | A | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | |
| " " | → | A | 21" x 15" | X | | | 2.2 | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

POST LENGTHS ARE APPROXIMATE. FINAL LENGTHS TO BE DETERMINED IN THE FIELD IF FINAL LENGTHS VARY BY MORE THAN 2 FEET, RECOMPUTE THE POST SIZE BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS.

TRAFFIC SHEET 18 OF 19 SHEETS

B-19
E-19

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____

ALBURG, ENOSBURG, JOHNSON, LUDLOW
PROJ. NO. STATEWIDE F-SFTY(86)S
SHEET 81 OF 200

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | LEGEND | TYPE | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | X | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.C. (S.F.) | EXISTING POSTS: RETAIN | DRILL | SALV. | NEW POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB/FT | 2.5 LB/FT | 3.0 LB/FT | TUBULAR ALUMINUM: 3"Ø | 3" □ | 4" Ø | 4"Ø MOD | W SHAPE (BREAKAWAY): POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SEE: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.15 LT. | STOP | A | | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT | A | | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| 3.16 LT. SEE BELOW FOR 3.15 RT. | ← ROUSES POINT, N.Y. | A | 72" x 10" | | | | 5 | | | | | | | 2 | X | | | | | | | | | | | | | E-23 |
| " " | ← MONTREAL, QUE. | A | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | E-23 |
| " " | MOYAN, QUE. → | A | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | E-23 |
| 3.20 LT. | STOP | A | 30" x 30" | X | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| " " | LEGAL LOAD LIMIT | A | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | E-15A |
| 3.21 RT. | REDUCED SPEED AHEAD | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | SPEED ZONE AHEAD | A | 24" x 30" | | | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | E-15B |
| 3.38 LT. | BIG MAC SPEED LIMIT 50 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | | A | 24" x 30" | | | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | E-15B |
| 3.38 RT. | SPEED LIMIT 40 | A | | X | | | | | | | X | | | | | | | | | | | | | | | | | |
| 3.40 LT | NOTE RIGHT | A | | X | | | | | | | X | | | | | | | | | | | | | | | STRAIGHTEN POST | | |
| 3.45 LT. | JCT | A | 2' x 1' | X | | | 2 | | | | X | | | | | | | | | | | | | | | | | E-13 |
| " " | 225 | A | 30" x 24" | X | | | 5 | | | | | | | | | | | | | | | | | | | | | E-13 |
| 3.06 LT. | WEST | A | 2' x 1' | | | | 2 | | | | | | | 1 | | | | | | | | | | | | | | E-12 |
| " " | 2 | A | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | E-12 |
| 3.15 RT | EAST | A | 2' x 1' | | | | 2 | | | | | | | 1 | | | | | | | | | | | | | | E-12 |
| " " | 2 | A | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | E-12 |
| | | | | 37 | | | 171.6 round 0.4 to 172 | | | 10 | | | | | | | | | | | | | | | | | | | |
| ENOSBURG | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.0 RT. | ENOSBURG SHELDON | A | 72" x 10" | X | | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | E-23 |
| 0.07 LT. | SPEED LIMIT 50 | A | 24" x 30" | X | | | 5 | | | | X | | | | | | | | | | | | | | | | | E-15B |
| 0.07 RT. | REDUCED SPEED AHEAD | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | SPEED ZONE AHEAD | A | 24" x 30" | | | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | E-15B |
| 0.09 LT. | STOP | A | 30" x 30" | | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| 0.10 LT. | STOP | A | 30" x 30" | X | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| " " | | A | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | E-19B |
| ORCHARD ST. | | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | T | A | 30" x 30" | | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | |
| 0.15 RT. | SPEED LIMIT 35 | A | | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| 0.12 LT. | SPEED LIMIT 35 | A | | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| 0.25 LT. | | A | 36" DIA. | X | | | 9 | | | | | | | 1 | X | | | | | | | | | | | | | E-45 |
| 0.26 RT. | SPEED LIMIT 35 | A | 24" x 30" | X | | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | E-15B |
| 0.31 RT. | STOP | A | 30" x 30" | X | X | | | | 1 | | | | | 1 | X | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT | A | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | E-15A |
| 0.32 RT. | REDUCED SPEED AHEAD | A | | X | | | | | | | X | | | | | | | | | | | | | | | | | |
| " " | SPEED ZONE AHEAD | A | 24" x 30" | | | | 5 | | | | | | | | | | | | | | | | | | | | | E-15B |
| 0.34 RT. | T.I.S. SIGN | A | | (X) | (X) | | | | | 5 | | | | (2) | (X) | | | | | | | | | | | PAY AS ITEM 680.20 MOD. (NON-FED. PART.) | | |
| 0.365 LT. | 105 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | SPEED LIMIT 35 | A | 24" x 30" | X | X | | | | 1 | | | | | 1 | X | | | | | | | | | | | | | |
| 0.375 RT. | STOP | A | | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT | A | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| 0.42 LT. | WEST | A | 2' x 1' | | | | 2 | | | | | | | 1 | X | | | | | | | | | | | | | E-19 |
| " " | 105 | A | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

POST LENGTHS ARE APPROXIMATE. FINAL LENGTHS TO BE DETERMINED IN THE FIELD IF FINAL LENGTHS VARY BY MORE THAN 2 FEET, RECOMPUTE THE POST SIZE BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS.

TRAFFIC SIGN SUMMARY SHEET ___ OF ___

E-19

PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

ALBURG, ENOSBURG, JOHNSON, LUDLOW

PROJ. NO. STATEWIDE F-SFTY(88)

SHEET 32 OF 200

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | LEGEND | TYPE | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.C. (S.F.) | EXISTING POSTS: RETAIN | DRILL | SALV. | NEW POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB/FT | 2.5 LB/FT | 3.0 LB/FT | TUBULAR ALUMINUM: 3" ∅ | 3" □ | 4" ∅ | 4" ∅ MOD. | W SHAPE (BREAKAWAY): POST SIZE | WEIGHT | FTG. SIZE: 24" | 30" | REMARKS | FOR SIGN DETAIL SEE: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.60 LT. | THROUGH HWY BEGINS SIGNS (FACES EAST) | A | 2' x 2' | X | X | | | | 1 | | | | | 1 | | | | | | | | | | | | | | | |
| " " | STATE HIGHWAY BEGINS " | A | 24" x 18" | X | X | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| " " | THROUGH HWY ENDS SIGNS (FACES WEST) | A | 2' x 2' | X | X | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| " " | STATE HIGHWAY ENDS " | A | 24" x 18" | X | X | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| 0.60 RT. | SPEED LIMIT 25 | A | 24" x 30" | X | X | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| | | | SUB-TOT. | 17 | | | 65.2 ROUND 0.8 TO 66 | | 7 | 5 | | | | | | | | | | | | | | | | | | | |
| JOHNSON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.92± RT | T.I.S. SIGN | A | | (X) | (X) | | | | | 5 | | | | (2) | (X) | | | | | | | | | | | INSTALL NEW POSTS AND REMOUNT SIGNS AT PROPER HEIGHT. PAY AS ITEM 680.20 MOD. (NON-FED. PART.) | | | |
| " " | T.I.S. SIGN | | | (X) | (X) | | | | | 5 | | | | | | | | | | | | | | | | | | | |
| " " | T.I.S. SIGN | | | (X) | (X) | | | | | 5 | | | | | | | | | | | | | | | | | | | |
| 3.93 LT. | | A | 1' x 3' | X | | | 3 | | | | | | | 1 | X | | | | | | | | | | | | TD 517 | |
| 3.93 RT. | | A | 1' x 3' | | | | 3 | | | | | | | 1 | X | | | | | | | | | | | MOUNT AT END OF PLATE GIRDER BETWEEN SIDEWALK AND ROADWAY | TD 517 | |
| 3.95 LT. | | A | 1' x 3' | X | | | 3 | | | | | | | 1 | X | | | | | | | | | | | | TD 517 | |
| 3.95 RT. | | A | 1' x 3' | X | | | 3 | | | | | | | 1 | X | | | | | | | | | | | MOUNT AT END OF PLATE GIRDER BETWEEN SIDEWALK AND ROADWAY. | TD 517 | |
| 4.0+ LT. | STOP | A | 30" x 30" | X | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| " " | NO PARKING ANY TIME EXCEPT SUNDAYS | A | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.01 LT. | PARKING ONLY TIME LIMITED | A | 12" x 18" | | | | 1.5 | | | | | | | 1 | X | | | | | | | | | | | | TD 517 | |
| 4.01 RT. | STOP | A | 2' x 2' | X | | | 4 | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| " " | LEGAL LOAD LIMIT | A | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | E-15A |
| 4.06 LT. & RT. | SPEED LIMIT 25 | A | | | | X (2) | | | | | | | | | | | | | | | | | | | | | | | |
| 4.09+ LT. | STOP | A | 30" x 30" | X | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | MOUNT BEHIND SIDEWALK | | E-15C |
| " " | LEGAL LOAD LIMIT | A | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | NO (OSB) PARK. PARKING TIME LIMIT | A | 12" x 18" | X | | | 1.5 | | | | | | | 1 | X | | | | | | | | | | | MOUNT ON SEPARATE POST BEHIND SIDEWALK | TD 517 | |
| 4.10+ LT. | STOP | A | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT | A | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 4.12 RT. | EAST | A | 2' x 1' | X | | | 2 | | | | | | | 1 | X | | | | | | | | | | | | | E-13 |
| " " | 15 | A | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | ↑ | A | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.13 RT. | JCT | A | 21" x 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-13 | |
| " " | NORTH | A | 2' x 1' | | | | 2 | | | | | | | | | | | | | | | | | | | | | E-13 | |
| " " | 100C | A | 30" x 24" | | | | 5 | | | | | | | | | | | | | | | | | | | | | E-13 | |
| " " | R | A | 21" x 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-13 | |
| 4.18+ RT. | SPEED LIMIT 25 | A | 24" x 30" | X | X | | 5 | | 1 | | | | | 1 | X | | | | | | | | | | | REMOUNT SIGN ON NEW POST AT PROPER HEIGHT BEHIND SIDEWALK | | |
| 4.235 LT. | T.I.S. SIGN | A | | X | | | | | | 5 | | | | (2) | (X) | | | | | | | | | | | REINSTALL THESE SIGNS WITH MORE CLEARANCE AS FIELD CONDITIONS PERMIT | | |
| " " | SPEED LIMIT 25 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.26+ LT | SPEED LIMIT 25 | A | 24" x 30" | | | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | E-15B | |
| 4.22+ RT. | NO (OSB) PARK. THIS SIDE / R NO (MPC) PARKING | A | 12" x 12" | X | | | 1 | | | | | | | 1 | X | | | | | | | | | | | | | E-15C | |
| | | | SUB-TOT. | 18 | | | 64 | | 1 | 20 | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

PAY AS ITEM 680.20 MOD. (NON-FED. PART.)

POST LENGTHS ARE APPROXIMATE. FINAL LENGTHS TO BE DETERMINED IN THE FIELD IF FINAL LENGTHS VARY BY MORE THAN 2 FEET, RECOMPUTE THE POST SIZE BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS.

TRAFFIC SIGN SUMMARY SHEET ____ OF ____

PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

ALBURG, ENOSBURG, JOHNSON, LUDLOW

PROJ. NO. STATEWIDE F-SFTY(85)S

SHEET 83 OF 200

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | LEGEND | TYPE | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | EXISTING SIGNS TO BE SALVAGED: RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.C. (S.F.) | EXISTING POSTS: RETAIN | DRILL | SALV. | NEW POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3" Ø | 3" □ | 4" Ø | 4" Ø MOR. | W SHAPE (BREAKAWAY): POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SEE: PLAN SHEET NUMBER | FOR SIGN DETAIL SEE: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | GENERAL NOTE: MOST OF THE EXISTING SIGNS ARE TOO CLOSE TO THE EDGE OF SHOULDER. REFER TO STD. DWG. E-29 FOR REQUIRED CLEARANCES. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LUDLOW | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.035± OPPOSITE END OF S.B. LANE | ← OKEMO MTN SKI AREA 2 | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| " " | ← LUDLOW 2 | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| " " | ← BELLOWS FALLS 28 | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| " " | RUTLAND 29 → | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| " " | SOUTH | A | 2' x 1' | X | | 2 | | | | | | | 2 | | | | X | | | | | | | | | | E-13 |
| " " | 103 | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | ← | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | SOUTH | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 100 | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | MOUNT ON S. SIDE OF VT 103 FACING THE END OF THE VT. 100 S. BOUND LANE | | E-13 |
| " " | ← | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | NORTH | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 103 | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | → | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-13 |
| 5.045± LT. | STOP | A | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| 5.04 ± MED. | | A | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| " " | STOP | A | | | X | | | | | | | | | | | | | | | | | | | | | | |
| " " | | A | | | X | | | | | | | | | | | | | | | | | | | | | | |
| 5.05± MED. | | A | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| " " | | A | | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | | A | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.09± RT. | THROUGH TRAFFIC BEGINS HIGH SPEED REDUCED SPEED AHEAD | A | 2' x 2' | X | | 4 | | | | | | | 1 | X | | | | | | | | | | | | | E-15A |
| " " | | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 5.09± LT. | THROUGH TRAFFIC ENDS HIGH SPEED AREA BEGINS REDUCED SPEED AHEAD | A | 2' x 2' | | | 4 | | | | | | | 1 | X | | | | | | | | | | | | | E-15A |
| 5.10 RT. | BIKERS ON ROAD NEXT 9 MILES | A | | X | X | | | | | | | | | | | | | | | | | | | | | REINSTALL SALVAGE SIGN AT 5.15 RT. | |
| 5.12 LT. | THROUGH TRAFFIC ENDS HIGH SPEED REDUCED SPEED AHEAD | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 5.12 RT. | | A | 24" x 30" | | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | E-15B |
| 5.14 LT. | ← OKEMO MTN SKI AREA 2 | A | 72" x 10" | X | | 5 | | | | | | | 2 | | | | X | | | | | | | | | | E-23 |
| " " | ← LUDLOW 2 | A | 72" x 10" | X | | 5 | | | | | | | | | | | | | | | | | | | | | E-23 |
| " " | ← BELLOWS FALLS 28 | A | 72" x 10" | X | | 5 | | | | | | | | | | | | | | | | | | | | | E-23 |
| " " | RUTLAND 29 → | A | 72" x 10" | X | | 5 | | | | | | | | | | | | | | | | | | | | | E-23 |
| 5.14 LT. | SOUTH | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| " " | 100 | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| " " | ← | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| " " | NORTH | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| " " | 103 | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| " " | → | A | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 5.15 RT. | BIKERS ON ROAD NEXT 9 MILES | A | | | | | | 1 | | | | | 1 | X | | | | | | | | | | | | INSTALL SIGN FROM 5.10 RT. | | |
| 5.19 LT. | JCT | A | 21" x 15" | | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 103 | A | 24" x 30" | | | 5 | | | | | | | | | | | | | | | | | | | | | E-13 |
| TOTALS | | | | 27 | | 64.8 ROUND 0.2 TO 65 | | 1 | | | | | | | | | | | | | | | | | | | | |

POST LENGTHS ARE APPROXIMATE. FINAL LENGTHS TO BE DETERMINED IN THE FIELD IF FINAL LENGTHS VARY BY MORE THAN 2 FEET, RECOMPUTE THE POST SIZE BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS.

TRAFFIC SHEET NO. TO SIS SHEET ___ OF ___

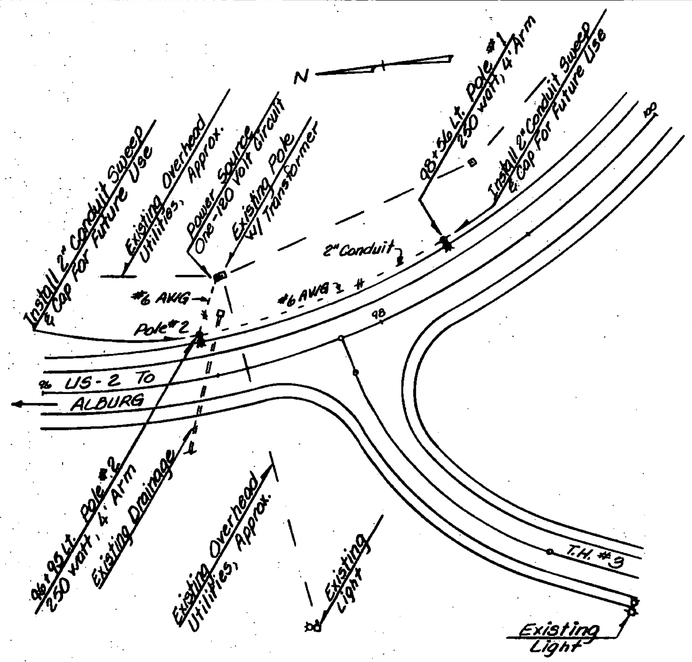
PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

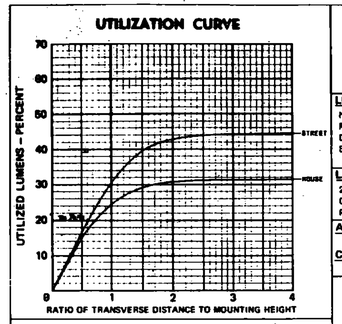
ALBURG, ENOSBURG, JOHNSON, LUDLOW

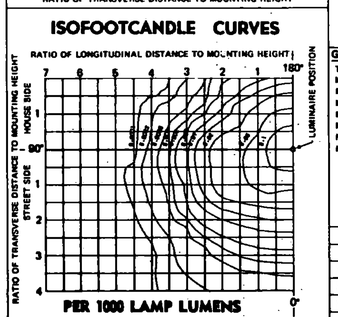
PROJ. NO. STATEWIDE F-SFTY (85) S

SHEET 54 OF 200




NOTE:
THE METER SOCKET AND OVERLOAD DISCONNECT BOX SHALL HAVE A NEMA CLASSIFICATION OF RAINTIGHT. WITH APPROVAL OF THE UTILITY COMPANY THE CONTRACTOR MAY ATTACH THE BOX TO THE EXISTING UTILITY POLE WHICH HAS A TRANSFORMER ON IT.




NOTE: 1 FOOTCANDLE = 10.76 LUX

MOUNTING HEIGHT CORRECTION FACTORS FOR OTHER THAN 30 FEET.
USE TABLE BELOW OR FACTOR = 800 / (ACTUAL MH)²

| MOUNTING HEIGHT - FEET | 20 | 25 | 30 | 35 | 40 | 45 | 50 |
|---|---|---|---|---|---|---|---|
| FACTOR | 2.25 | 1.44 | 1.00 | 0.73 | 0.56 | 0.44 | 0.36 |

GENERAL ELECTRIC

**PHOTOMETRIC DATA**

LIGHTING SYSTEMS BUSINESS DEPARTMENT
HENDERSONVILLE, N.C. U.S.A. 28739

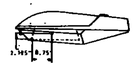
**PER 1000 LAMP LUMENS**

**LUMINAIRE**
M400R CUTOFF
REFLECTOR 35-222629-01
CLEAR GLASS 35-222646-01
SOCKET POSITION C

**LAMP**
200.250.310 + 400 WATT MPS
OR NO LU200.LU250.LU310 + LU400
ANSI NO 866.850. MA . + 851

**ANSI/IES TYPE** 1872
SHORT/ CUT-OFF /TYPE II

**CIE TYPE**
CUT-OFF



**GENERAL INFORMATION**

| | |
|---|---|
| TEST DISTANCE | 7 METERS |
| MAX CANDELA | 398 |
| MAX CONE | 67.5° |
| MAX VERTICAL PLANE | 82.5°/297.5° |
| MAX CANDELA AT 90° | 0 |
| MAX CANDELA AT 80° | 6 |
| NADIR FOOTCANDLES | 0.18380 |
| NADIR CANDELA | 165 |

MULTIPLY ALL LUMEN, CANDELA, AND FOOTCANDLE VALUES BY THIS RATIO

RATIO = ACTUAL LAMP LUMENS / 1000

PHOTOMETRIC TEST IN ACCORDANCE WITH IES GUIDE

**LIGHT FLUX VALUES**

| | LUMENS | PERCENT OF LAMP |
|---|---|---|
| DOWNWARD STREET SIDE | 448 | 44.8 |
| UPWARD STREET SIDE | 0 | 0 |
| DOWNWARD HOUSE SIDE | 314 | 31.4 |
| UPWARD HOUSE SIDE | 0 | 0 |
| TOTAL | 763 | 76.3 |

TESTED [signature] DATE 11/21/78
APPROVED [signature] DATE 11-21-78
[signature] DATE 12/6/78

Drawing No 35-176565 | DATE | REVISION

LEGEND

- PROPOSED NEW POLE AND LUMINAIRE
- PROPOSED POWER SOURCE
- EXISTING POLE AND LUMINAIRE
- PROPOSED CONDUIT
- EXISTING AERIAL UTILITIES

## STREET LIGHTING NOTES

**CONCRETE BASES**
THE OFFSET AND LOCATION OF THE CONCRETE BASES SHALL BE AS SHOWN ON THE PLAN.
CARE SHALL BE TAKEN WHERE CONCRETE BASE AND DRAINAGE STRUCTURES ARE CLOSE TOGETHER.

**CONDUIT**
2" CONDUIT SHALL BE USED AT ALL LOCATIONS. ALL CONDUIT SHALL BE AT LEAST SCHEDULE 40 GALVANIZED STEEL ELECTRICAL CONDUIT.
THE FINAL CONDUIT DEPTH SHALL BE 3' OR AS DIRECTED BY THE RESIDENT ENGINEER.
A 6" WIDE YELLOW MARKING TAPE (PLASTIC) SHALL BE INSTALLED 6" TO 12" BELOW FINISH GRADE OVER THE CONDUIT RUNS.

**GROUNDING**
IN ADDITION TO A GROUND ROD AT EACH POLE BASE, A CONTINUOUS GROUNDING CIRCUIT SHALL BE RUN BACK TO A CURCUIT PROTECTIVE DEVICE AT THE TRANSFORMER.
ALUMINUM WIRE SHALL NOT BE USED FOR GROUND WIRE.

**POLES, ANCHOR BASES AND ARMS**
NO POLE SHAFT WALL THICKNESS SHALL BE LESS THAN 0.188" AND SHALL HAVE A MINIMUM 8" O.D. BOTTOM DIMENSION.
ALL NEW STREET LIGHT POLES AND LUMINAIRE ARMS SHALL BE ALUMINUM IN ACCORDANCE WITH SUBSECTION 753.01(B).
THE TWO LIGHT POLE BASES SHALL HAVE A BREAKAWAY DESIGN FEATURE ADDED, SUCH AS BREAKAWAY COUPLINGS.

**WIRE**
ALL WIRING BETWEEN THE METER AND THE FIRST POLE AND BETWEEN POLES SHOULD BE ALUMINUM, SIZE AS INDICATED ON THE PLAN.
USE #10 AWG STRANDED COPPER WIRES IN EACH POLE BETWEEN THE POLE BASE AND THE LUMINAIRE.
ALL CONDUIT MUST INCLUDE A GROUNDING CONDUCTOR AND ACT AS ONE.
VOLTAGE LOSSES GREATER THAT 3% IN THE SECONDARY CIRCUIT REQUIRE LARGER WIRE.

**LUMINAIRES**
LUMINAIRES SHALL BE DESIGNED FOR STREET LIGHTING AND THE INDICATED LIGHT DISTRIBUTION. THEY SHALL HAVE AN ALUMINUM HOUSING WITH EASY ACCESS TO THE BALLAST ASSEMBLY, A PHOTO-ELECTRIC CONTROL, FILTERED OPTICAL ASSEMBLY, MEDIUM CUT OFF DISTRIBUTION AND REGULATOR BALLAST FOR 120 VOLT HIGH PRESSURE SODIUM LAMPS.
LIGHT DISTRIBUTION IS BASED ON GENERAL ELECTRIC PHOTOMETRIC DATA DRAWING #35-176565, SHORT CUTOFF, TYPE II DISTRIBUTION, DATED 12-10-79. THE ABOVE PHOTOMETRIC DATA DRAWING WAS USED FOR DESIGN PURPOSES ONLY.
THE INSTALLED LUMINAIRE LIGHT UTILIZATION AND MINIMUM FOOTCANDLES ON THE ROADWAY AND SHOULDER SHALL BE AT LEAST AS GREAT AS INDICATED BY THE ABOVE PHOTOMETRIC.

**GENERAL**
ALL ELECTRICAL MATERIAL AND INSTALLATION SHALL MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES AND THE LOCAL UTILITY COMPANY.
ALL STREET LIGHT POLES SHALL HAVE A METAL TAG ATTACHED TO THE HANDHOLE WITH THE POLE NUMBER, WATTAGE AND TYPE OF LAMP. EXAMPLE, #2-250W-H.P.S., (HPS= HIGH PRESSURE SODUIM). MINIMUM LETTER SIZE 1/2" HIGH. PAYMENT FOR TAGS SHALL BE SUBSIDIARY TO ITEM 679.15, STREET LIGHTING.

**STREET LIGHTING DESIGN PARAMETERS**

AVERAGE MAINTAINED ILLUMINATION: 1.0 FC MIN.
EXISTING ON PROJECT: UNKNOWN.
FILTERED LUMINAIRE: 0.95
LAMP DEPRECIATION: 0.73@24,000 HOURS.
COMBINED LAMP FACTOR: 0.7
MOUNTING HEIGHT FACTOR: 38/M.H.)
UNIFORMITY RATIO: 4:1 (AVE./MIN.)
MINIMUM FOOTCANDLES ON ROADWAY: 0.28 FC. MIN.

**WORK TO BE PERFORMED BY THE CONTRACTOR**
THE CONTRACTOR SHALL: 1. INSTALL NEW CONCRETE BASES, POLES, LUMINAIRES, WIRING, CONDUIT, POLE RISER, WEATER HEAD, METER SOCKET, RAIN TIGHT BOX WITH OVERLOAD DISCONNECT AND OTHER RELATED MATERIAL. 2. INSTALL METAL TAGS TO THE HANDHOLE OF THE NEW POLES WITH THE INFORMATION AS NOTED ON THE PLANS. 3. MAKE CONTACT WITH AND PERFORM WORK IN COMPLIANCE WITH THE LOCAL UTILITY COMPANY.
PAYMENT FOR THE ABOVE WORK WILL BE SUBSIDIARY TO ITEM 679.15, STREET LIGHTING.

ALBURG,
INTERSECTION OF US-ROUTE 2 & T.H.-3

STREET LIGHTING DESIGN CRITERIA AND GENERAL NOTES

SURVEYED BY _____ DATE _____
DRAWN BY R. Davis DATE 9-85
TRACED BY _____ DATE _____

STATEWIDE
PROJ. F NO. SFTY (85) 9
SHEET 55 OF 200

TRAFFIC SHEET NO. TD516 SHEET ___ OF ___

# TRAFFIC ITEM AND TRAFFIC SIGN SUMMARY SHEET, NOTES AND DETAILS

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
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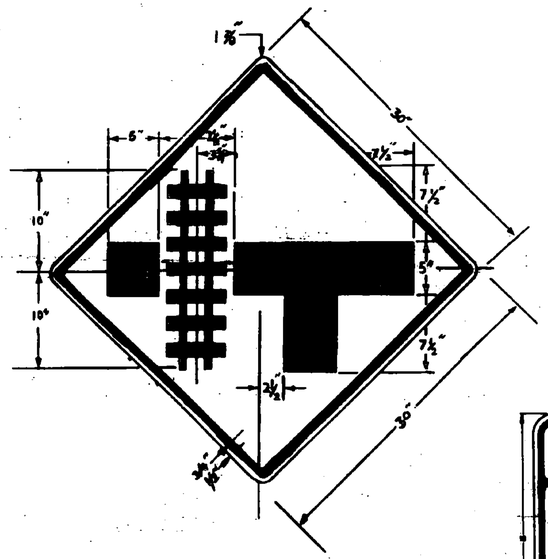
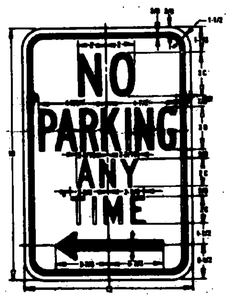
## TRAFFIC ITEM SUMMARY

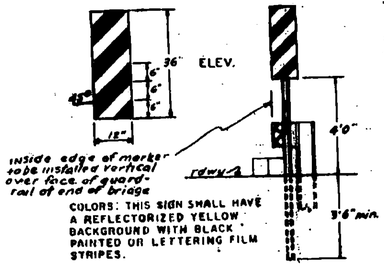
| ITEM NO. | ITEM | Alburg | Enosburg | Johnson | Ludlow | Alburg Street Light | UNITS | RND. | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 646.40 | DURABLE 24" STOP BAR | 12 | | | | | L.F. | | 12 |
| 646.44 | DURABLE LETTER IN WORD MARKING | 4 | | | | | EA. | | 4 |
| 675.20 | TRAFFIC SIGNS, TYPE A | 160 | 61 | 70 | 62 | | S.F. | | 353 |
| 675.30 | FLANGED CHANNEL SIGN POSTS | 398 | 324 | 364 | 124 | | L.F. | | 1210 |
| 675.32 | TUBULAR ALUMINUM SIGN POSTS | 76 | | | 120 | | L.F. | | 196 |
| 675.50 | REMOVING SIGNS | 37 | 17 | 17 | 27 | | EA. | | 98 |
| 675.60 | ERECTING SALVAGED SIGNS | | 7 | 1 | 1 | | EA. | | 9 |
| 679.15 | STREET LIGHTING | | | | | 1 | L.S. | | 1 |
| 680.20 | TRAVEL INFORMATION SIGNS, MOD. | 10 | 5 | 15 | | | S.F. | | 30 |

SEE SHEET TD 504 FOR PROJECT SUMMARY OF QUANTITIES AND REVISION NOTE FOR LEGAL LOAD LIMIT SIGNING.

## NOTES AND DETAILS



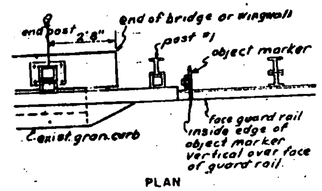




COLORS: THIS SIGN SHALL HAVE A REFLECTORIZED YELLOW BACKGROUND WITH BLACK PAINTED OR LETTERING FILM STRIPES.

**OBJECT MARKER**

MATERIALS: THE SIGN BASE MATERIAL USED FOR THIS SIGN MAY BE EITHER 5/8" HIGH DENSITY PLYWOOD OR 0.080 FLAT SHEET ALUMINUM WITH A REFLECTORIZED SHEETING BACKGROUND.




PLACEMENT OF OBJECT MARKERS

TRAFFIC SHEET NO. TD 517 SHEET 1 OF

DRAWN BY DATE

CHKED BY DATE

ALBURG, ENOSBURG, JOHNSON, LUDLOW

PROJ. STATEWIDE NO. F-SFTY (85)S

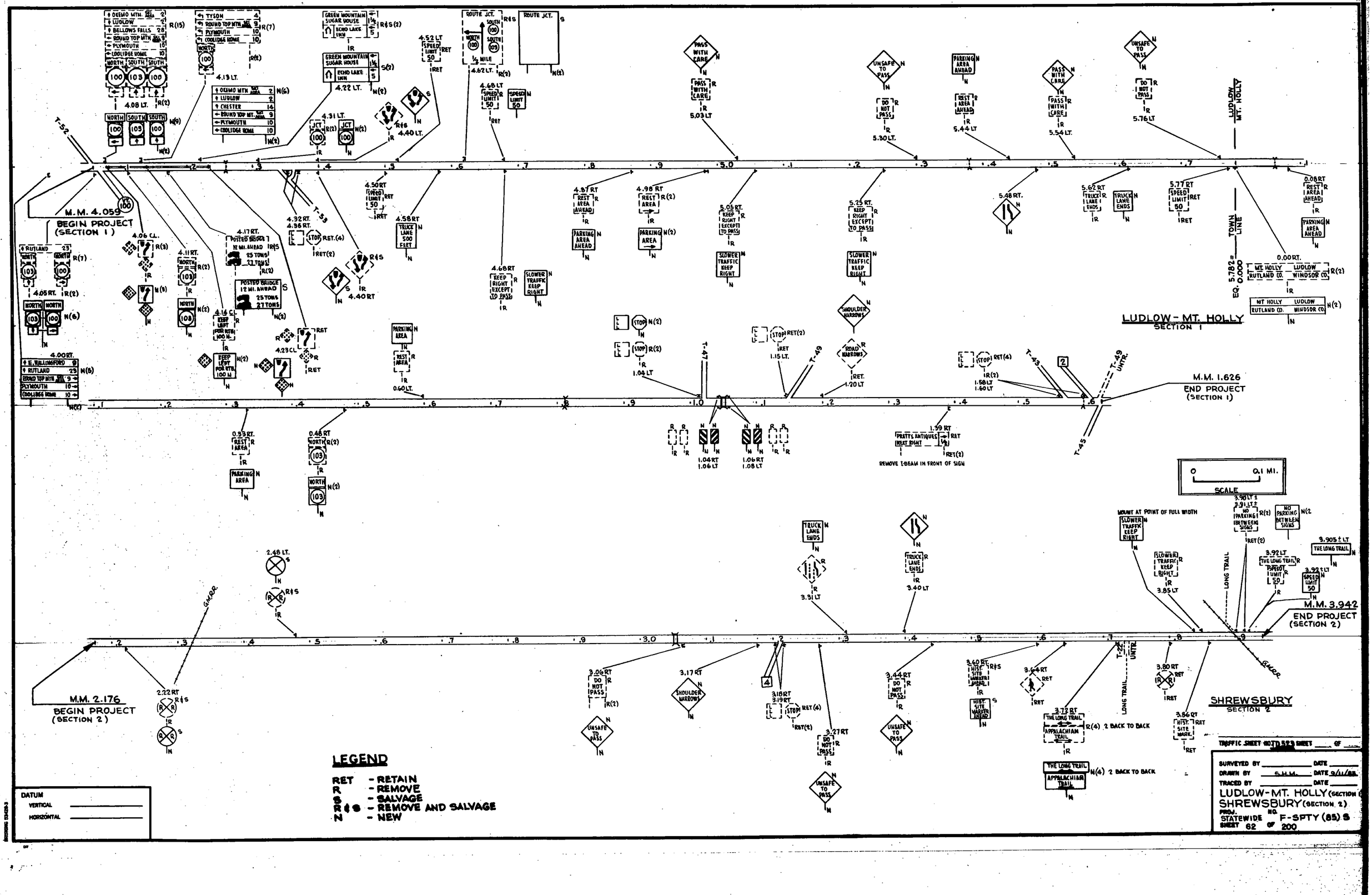
SHEET 56 OF 200

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS. | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S. | RCPES. | CONC | STEEL | REHAB. DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | | | 621.20 | | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MT. HOLLY | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.04 | RT | | | | | | | 49 | | | | | | | | | | | | | | | | | 40 | | | | | | 1 | | REMOVE EXISTING GUARD RAIL, REPLACE WITH APPROACH SECTION TYPE I AND B.C.T. SEE SHEET 3 FOR DETAILS. |
| 1.07 | RT | | | | | | | 49 | | | | | | | | | | | | | | | | | 40 | | | | | | 1 | | REMOVE EXISTING GUARD RAIL, REPLACE WITH APPROACH SECTION TYPE I AND B.C.T. SEE SHEET 3, FOR DETAILS. |
| 1.04 | LT | | | | | | | 49 | | | | | | | | | | | | | | | | | 40 | | | | | | 1 | | REMOVE EXISTING GUARD RAIL, REPLACE WITH APPROACH SECTION TPYE I AND B.C.T. SEE SHEET 3 FOR DETAILS. |
| 1.07 | LT | | | | | | | 51 | | | | | | | | | | | | | | | | | 40 | | | 75 | | | 1 | | REMOVE EXISTING GUARD RAIL, REPLACE WITH APPROACH SECTION TYPE I 75' OF NEW BEAM AND B.C.T. SEE SHEET FOR DETAILS |
| MT. HOLLY TOTALS | | | | | | | | 198 | | | | | | | | | | | | | | | | | 160 | | | 75 | | | 4 | | |

NOTE: FOR BRIDGE DETAILS SEE BRIDGE SHEETS 14–17

LUDLOW–MT. HOLLY–SHREWSBURY
1985 STATEWIDE SAFETY PROJECT
SHEET 61 OF 200 SHEETS


M.M. 4.059
BEGIN PROJECT
(SECTION 1)
LUDLOW - MT. HOLLY
SECTION 1
M.M. 1.626
END PROJECT
(SECTION 1)
M.M. 2.176
BEGIN PROJECT
(SECTION 2)
SHREWSBURY
SECTION 2
M.M. 3.942
END PROJECT
(SECTION 2)
TOWN LINE
EQ. 5.782 = 0.000
LUDLOW
MT. HOLLY
LONG TRAIL
SCALE
0 0.1 MI.
REMOVE I-BEAM IN FRONT OF SIGN
MOUNT AT POINT OF FULL WIDTH
LEGEND
RET - RETAIN
R - REMOVE
S - SALVAGE
R & S - REMOVE AND SALVAGE
N - NEW
DATUM
VERTICAL
HORIZONTAL
SURVEYED BY
DRAWN BY S.H.M. DATE 9/11/88
TRACED BY
DATE
LUDLOW-MT. HOLLY (SECTION 1)
SHREWSBURY (SECTION 2)
PROJ. NO. F-SPTY (85) S
STATEWIDE
SHEET 62 OF 200

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BEGIN SECT 1 | ↑ S.WALLINGFORD 9 | 72" x 10" | | | | 5 | | | | | | | | 2 | | | X | | | | | | | | | | | E-23 |
| 4.00 RT. | ↑ RUTLAND 23 | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| | ROUND TOP MTN SKI AREA 9 → | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| | PLYMOUTH 10 → | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| | COOLIDGE HOME 10 → | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.05 RT. | ↑ RUTLAND 23 | | X | | | | | | | | | X (2) | | | | | | | | | | | | | | | | |
| | NORTH | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 109 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ↑ | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NORTH | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 100 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | → | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NORTH | 2' x 1' | | | | 2 | | | | | | | | 2 | | X | | | | | | | | | | | | E-13 |
| | 109 | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | ↑ | 21" x 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | NORTH | 2' x 1' | | | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | 100 | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | → | 21" x 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.08 LT. | ↑ OKEMO MTN. SKI AREA 2 | | X | | | | | | | | | X (2) | | | | | | | | | | | | | | | | |
| | ↑ LUDLOW 2 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ↑ BELLOWS FALLS 28 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ← ROUND TOP MTN. SKI AREA 9 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ← PLYMOUTH 10 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ← COOLIDGE HOME 10 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NORTH | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 100 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ← | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SOUTH | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 103 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ↑ | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SOUTH | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 100 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ↑ | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NORTH | 2' x 1' | | | | 2 | | | | | | | | 2 | | | X | | | | | | | | | | | E-13 |
| | 100 | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | ← | 21" x 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | SOUTH | 2' x 1' | | | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | 103 | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | ↑ | 21" x 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | SOUTH | 2' x 1' | | | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | 100 | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | ↑ | 21" x 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 22 | | | 66 | | | | | | | | | | | | | | | | | | | | | | |

FINAL 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".

PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

LUDLOW - MT. HOLLY (SECT. 1)
SHREWSBURY (SECT. 2)
PROJ. NO.
STATEWIDE F-SFTY (85)S

TRAFFIC SHEET NO. [redacted] SHEET 63 OF 200

[redacted] 1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S. (S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" ∅ | 3.0" □ | 4.0" ∅ | 4.0" ∅ MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.06 CL | | 24" x 30" | X | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 18" x 18" | X | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| | | 18" x 18" | X | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| 4.11 RT | NORTH | 2' x 1' | X | | | 2 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-13 |
| | 103 | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 4.13 LT | TYSON 4 | | X | | | | | | | | | X (2) | | | | | | | | | | | | | | | | |
| | ROUND TOP MTN. SKI AREA 9 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PLYMOUTH 10 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | COOLIDGE HOME 10 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | NORTH | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 100 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | ← | | X | | | | | | | | | | | | | | | | | | | | | | | | | E-23 |
| | ← OKEMO MTN. SKI AREA 2 | 72" x 10" | | | | 5 | | | | | | | | 2 | | | | X | | | | | | | | | | E-23 |
| | ← LUDLOW 2 | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| | ← CHESTER 14 | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| | ← ROUND TOP MTN SKI AREA 9 | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| | ← PLYMOUTH 10 | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| | ← COOLIDGE HOME | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.14 CL | KEEP LEFT FOR RTE. 100 NORTH | 24" x 30" | X | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | E-19B |
| | | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.31 RT | POSTED BRIDGES 1/2 MI. AHEAD 25 TONS 27 TONS | 60" x 30" | X | X | | | | 1 | | | | X | | 2 | | | X | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.22 LT | GREEN MOUNTAIN SUGAR HOUSE 1/4 | | X | X | | | | | 5 | | | X | | 2 | | | X | | | | | | | | | | | |
| | ECHO LAKE INN 5 | | X | X | | | | | 5 | | | | | | | | | | | | | | | | | | | |
| 4.23 CL | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | E-19B |
| | | 18" x 18" | X | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| | | 18" x 18" | X | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| 4.31 LT | JCT | 2' x 1' | X | | | 2 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-23 |
| | 100 | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | | |
| 4.32 RT | STOP | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| | LEGAL LOAD LIMITS | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 4.36 RT | STOP | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| | LEGAL LOAD LIMITS | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 4.40 LT | | | X | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.40 RT | | | X | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.50 RT | SPEED LIMIT 50 | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.52 LT | SPEED LIMIT 50 | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 22 | | | 63.5 | | 3 | 10 | | | | | | | | 1 | | | | | | | | | | | |

FINAL 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".

PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

LUDLOW-MT. HOLLY (SECT 1)
SHREWSBURY (SECT 2)
PROJ. NO.
STATEWIDE F-SFTY (85)S

TRAFFIC SHEET NO. [redacted] SHEET 84 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S. (S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB./FT. | FLANGED CHANNEL 2.5 LB./FT. | FLANGED CHANNEL 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" Ø | TUBULAR ALUMINUM 3.0" □ | TUBULAR ALUMINUM 4.0" Ø | TUBULAR ALUMINUM 4.0" Ø MOD. | W SHAPED STEEL POST SIZE | W SHAPED STEEL WEIGHT | W SHAPED STEEL FTG. SIZE 24" | W SHAPED STEEL FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | FOR SIGN DETAIL SHEET: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.58 RT. | TRUCK LANE 500 FEET | 24" x 30" | | | | 5 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15A |
| 4.62 LT. | ROUTE JCT. 100 N 100 S 103 | | X | X | | | | 1 | | | | X(2) | | 2 | | | X | | | | | | | | | | | |
| 4.68 LT. | SPEED LIMIT 50 | 24" x 30" | X | | | 5 | | | | X | | | | | | | | | | | | | | | | | | E-15B |
| 4.68 RT. | KEEP RIGHT EXCEPT TO PASS EXIST. / SLOWER TRAFFIC KEEP RIGHT NEW | 24" x 30" | X | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15A |
| 4.87 RT. | REST AREA AHEAD EXIST. / PARKING AREA AHEAD NEW | 24" x 30" | X | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 4.98 RT. | REST AREA → (↔) EXIST. - 2 SIGNS BACK TO BACK / PARKING AREA → (↔) NEW - 2 SIGNS - OPPOSITE ARROWS | 2@ 3' x 3' | X(2) | | | 9<br>9 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 5.03 LT. | PASS WITH CARE EXIST. / PASS WITH CARE NEW | 30" x 30" | X | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 5.05 RT. | KEEP RIGHT EXCEPT TO PASS EXIST. / SLOWER TRAFFIC KEEP RIGHT NEW | 24" x 30" | X | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15A |
| 5.25 RT. | KEEP RIGHT EXCEPT TO PASS EXIST. / SLOWER TRAFFIC KEEP RIGHT NEW | 24" x 30" | X | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15A |
| 5.30 LT. | DO NOT PASS EXIST. / UNSAFE TO PASS NEW | 30" x 30" | X | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 5.44 LT. | REST AREA AHEAD EXIST. / PARKING AREA AHEAD NEW | 24" x 30" | X | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 5.48 RT. | | 3' x 3' | | | | 9 | | | | | | | | 1 | | | X | | | | | | | | | | | E-19A |
| 5.54 LT. | PASS WITH CARE / PASS WITH CARE | 30" x 30" | X | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | | |
| 5.62 RT. | TRUCK LANE ENDS | 24" x 30" | X | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15A |
| 5.76 LT. | DO NOT PASS / UNSAFE TO PASS | 30" x 30" | X | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 5.77 RT. | SPEED LIMIT 50 | | | X | | | | | | X | | | | | | | | | | | | | | | | | | |
| 5.782 = 0.00 RT. TOWN LINE | MT. HOLLY LUDLOW / RUTLAND CO. WINDSOR CO. | 2@ 60" x 7½" | X<br>X | | | 3.1<br>3.1 | | | | | | X | | 1 | | | X | | | | | | | | | | | |
| 0.08 RT. | REST AREA AHEAD EXIST. / PARKING AREA AHEAD NEW | 24" x 30" | X | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 0.33 RT. | REST AREA EXIST. / PARKING AREA NEW | 3' x 3' | X | | | 9 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 0.48 RT. | NORTH | 2' x 1' | X | | | 2 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-13 |
| | 103 | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 0.60 LT. | REST AREA ← / PARKING AREA ← | 3' x 3' | X | | | 9 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.04 LT. | STOP | 30" x 30" | X | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15C |
| | LEGAL LOAD LIMIT | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-15A |
| TOTALS | | | 23 | | | 137.7 | | 1 | | | | | | | | | | | | | | | | | | | | |

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PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

LUDLOW - MT. HOLLY (SECT. 1)
SHREWSBURY (SECT. 2)
PROJ. NO. STATEWIDE F-SFTY(85)S

TRAFFIC SHEET NO. TD 529 SHEET 65 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | ‖ | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.L.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.04 RT. | | 1' x 3' | X | | | 3 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 1.06 LT. | | 1' x 3' | X | | | 3 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 1.06 RT. | | 1' x 3' | X | | | 3 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 1.08 LT. | | 1' x 3' | X | | | 3 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 1.15 LT. | STOP; LIGHT LOAD LIMIT | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 1.20 LT. | EXIST. ROAD NARROWS / NEW SHOULDER NARROWS | 3' x 3' | X | | | 9 | | | | X | | | | | | | | | | | | | | | | | | E-19A |
| 1.39 RT. | PRATTS ANTIQUES NEXT RIGHT ½ | | | | X | | | | | X (2) | | | | | | | | | | | | | | | | REMOVE I-BEAM IN FRONT OF SIGN | | |
| 1.58 LT. | STOP; LIGHT LOAD LIMIT | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| | | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 1.60 LT. | STOP; LIGHT LOAD LIMIT | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| | | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| END SECT. 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BEGIN SECT 2 2.22 RT. | R/R | | X | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| 2.48 LT. | R/R | | X | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| 3.06 RT. | DO NOT PASS EXIST. / UNSAFE TO PASS NEW | 30" x 30" | X | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | | |
| 3.17 RT. | SHOULDER HAZARDS | 30" x 30" | | | | 6.3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-19A |
| 3.18 RT. & 3.19 RT. | STOP; LIGHT LOAD LIMIT | | | | X (2) | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | X (2) | | | | | | | | | | | | | | | | | | | | | | | |
| 3.27 RT. | DO NOT PASS EXIST. / UNSAFE TO PASS NEW | 30" x 30" | X | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 3.31 LT. | EXIST. / TRUCK LANE ENDS NEW | 24" x 30" | X | | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15A |
| 3.40 LT. | TRUCK LANE ENDS EXIST. / NEW | 3' x 3' | X | | | 9 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-19A |
| 3.44 RT. | DO NOT PASS EXIST. / UNSAFE TO PASS NEW | 30" x 30" | X | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 3.60 RT (BELOW) 3.64 RT. | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 3.72 RT. | 2 BACK TO BACK THE LONG TRAIL | SEE NOTE RIGHT | X (2) | | | | | | | | | X | | 1 | | | | | | | | | | | | NEW SIGNS TO BE FURNISHED BY V.A.O.T. | | |
| | 2 BACK TO BACK APPALACHIAN TRAIL | SEE NOTE RIGHT | X (2) | | | | | | | | | | | | | | | | | | | | | | | NEW SIGNS TO BE FURNISHED BY V.A.O.T. | | |
| 3.80 RT. | HISTORIC SITE MARKER AHEAD | | X | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| 3.80 RT. | R/R | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 17 | | | 60.2 | | 3 | | | | | | | | | | | | | | | | | | | | |

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PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

LUDLOW-MT. HOLLY (SECT. 1)
SHREWSBURY (SECT. 2)
PROJ. NO. STATEWIDE F-SFTY(85)S

TRAFFIC SHEET NO. TD-527 SHEET 66 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED REMOVE (EA.) | RETAIN (X) | NEW AND SALVAGED SIGNS NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS RET. | DRILL | REM. | SALV. | NEW SIGN POSTS NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" ∅ | 3.0" □ | 4.0" ∅ | 4.0" ∅ MOD. | W SHAPED STEEL POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.85 LT. | SLOWER TRAFFIC KEEP RIGHT | 24" x 30" | X | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | REINSTALL SIGN AT FULL WIDTH END OF TAPER | | E-13A |
| 3.86 RT. | HWY SITE MARKER | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 3.90 LT. | NO PARKING BETWEEN SIGNS | 24" x 30" | X | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 3.91 LT. | | 24" x 30 | X | | 5 | | | | | | X | | 1 | X | | | | | | | | | | | | TD 529 | |
| 3.905± LT. | THE LONG TRAIL | | | | | | | | | | | | 1 | X | | | | | | | | | | | NEW SIGN TO BE FURNISHED BY V.A.O.T. | | |
| 3.92 LT. | THE LONG TRAIL | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| | SPEED LIMIT 50 | 24" x 30" | X | | 5 | | | | | | | | 1 | X | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | SHEET TD 524 | | 22 | | 66 | | | | | | | | | | | | | | | | | | | | | | |
| | SHEET TD 525 | | 22 | | 63.5 | | 2 | 10 | | | | | | | | | | | | | | | | | | | |
| | SHEET TD 526 | | 23 | | 137.7 | | | | | | | | | | | | | | | | | | | | | | |
| | SHEET TD 527 | | 17 | | 80.2 | | 3 | | | | | | | | | | | | | | | | | | | | |
| | SHEET TD 528 | | 5 | | 20 | | | | | | | | | | | | | | | | | | | | | | |
| | TOTALS | | 89 | | 347.4 | | 5 | 10 | | | | | | 2049 | | | | | | 144.4 | | | | | | | |

| ITEM NUMBER | ITEM | QUANTITY | RND | UNIT | TOTAL |
|---|---|---|---|---|---|
| 675.20 | TRAFFIC SIGNS, TYPE A | 347.4 | 2.6 | S.F. | 350 |
| 675.30 | FLANGED CHANNEL SIGN POSTS | 2049 | | LB. | 2049 |
| 675.32 | TUBULAR ALUMINUM SIGN POSTS | 144.4 | 0.6 | LB. | 145 |
| 675.50 | REMOVING SIGNS | 89 | | EA. | 89 |
| 675.60 | ERECTING SALVAGED SIGN | 5 | | EA. | 5 |
| 680.20 | TRAVEL INFORMATION SIGN | 10 | | S.F. | 10 |

SEE SHEET TD 504 FOR PROJECT SUMMARY OF QUANTITIES AND REVISION NOTE FOR LEGAL LOAD LIMIT SIGNING

TOTALS

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PREPARED BY _____ DATE _____

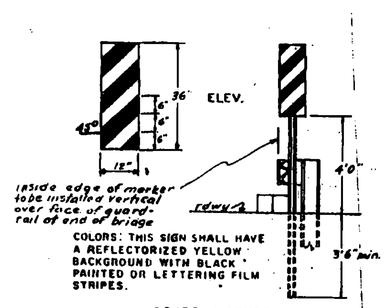
CHECKED BY _____ DATE _____

LUDLOW - MT. HOLLY (SECT 1)
SHREWSBURY (SECT 2)

PROJ. STATEWIDE NO. F-SFTY(85)S

TRAFFIC SHEET NO. TD-525 SHEET 87 OF 200

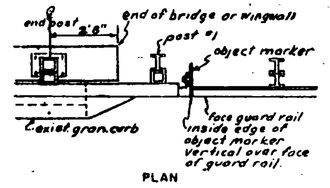
1986



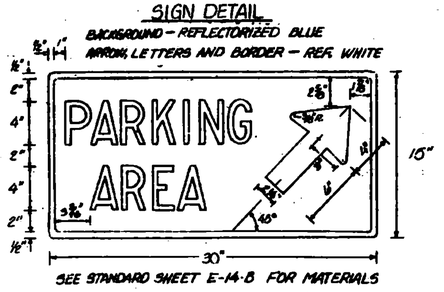

COLORS: THIS SIGN SHALL HAVE A REFLECTORIZED YELLOW BACKGROUND WITH BLACK PAINTED OR LETTERING FILM STRIPES.

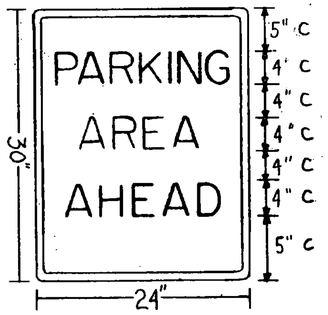
**OBJECT MARKER**

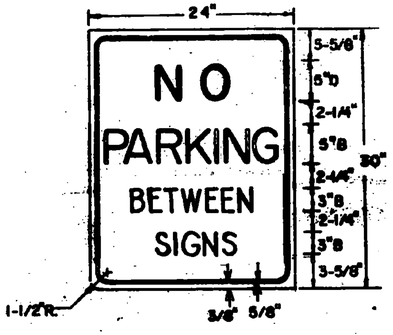
MATERIALS: THE SIGN BASE MATERIAL USED FOR THIS SIGN MAY BE EITHER 5/8" HIGH DENSITY PLYWOOD OR 0.080 FLAT SHEET ALUMINUM WITH A REFLECTORIZED SHEETING BACKGROUND.



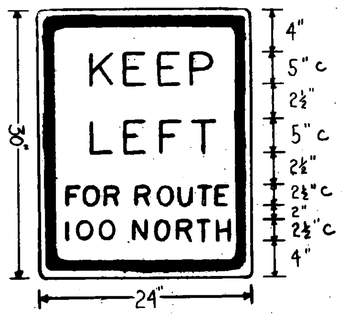

PLACEMENT OF OBJECT MARKERS




COLORS
LEGEND - RED (REFL.)
BACKGROUND - WHITE (REFL.)



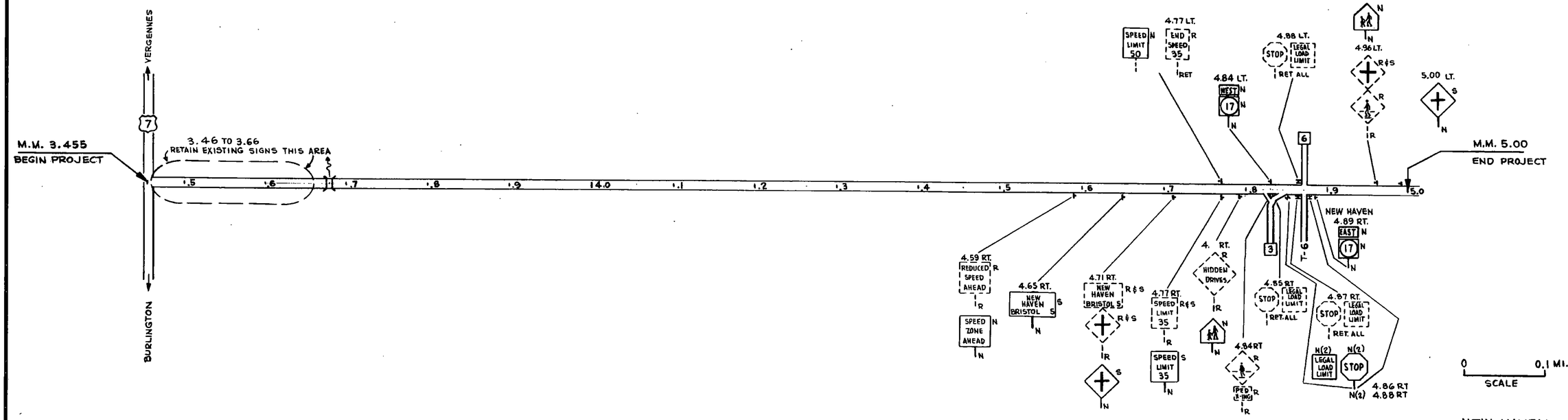

CHECKED BY LUDLOW - MT. HOLLY (SECTION 1) SCHEWS & LAY (SECTION 2) DATE
PROJ. NO. STATEWIDE F-SFTY (85) S
TRAFFIC SHEET NO. 579 SHEET 58 OF 200

GRUNING 53439-3

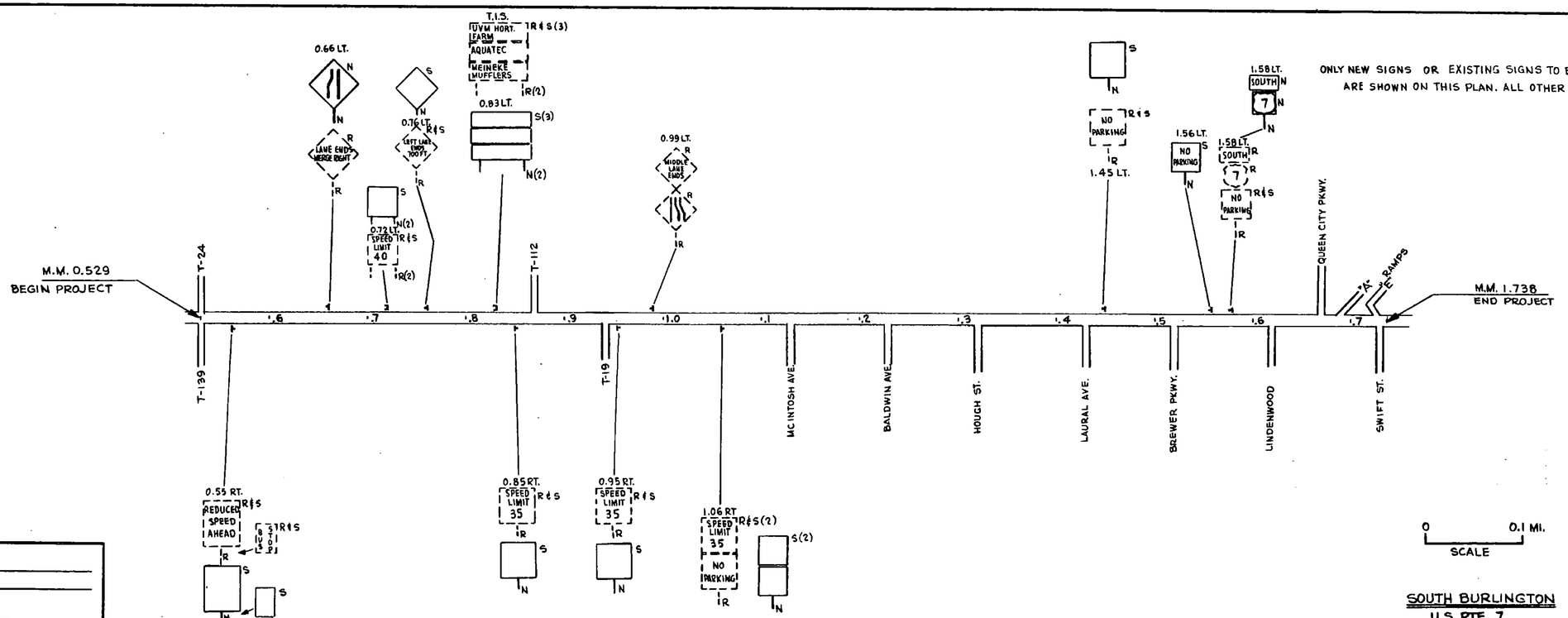
# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS. | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S | RCPES | CONC | STEEL | REHAB. DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | GUARD RAIL ITEMS 621.20 | GUARD RAIL ITEMS 621.60 | GUARD RAIL ITEMS 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.63 | RT | | | | 30 | 4 | | | 24 | 8 | .064 | | | | 1-24 | | | | | | | | | | | | | | | | EXTEND PIPE 8'± ADD MES AND REGRADE SLOPE SEE DETAIL "B" SHEET 4 |
| 3.69 | RT | | | | 30 | | | | 60 | 48 | .138 | | | | | | | | | | 50 | | | | | 40 | | | | | EXTEND PIPES 16'± USE EARTH BORROW AND STONE FILL TO FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| 4.10 | RT | | | | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | USE EARTH BORROW TO COVER LEDGE OUTCROP |
| 4.19 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE EXISTING GUIDE POSTS COST TO BE SUBSIDIARY TO OTHER ITEMS IN CONTRACT |
| 4.22 | RT | | | | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | USE EARTH BORROW TO FLATTEN DRIVE SIDESLOPES SEE SHEET 5 FOR DETAILS |
| 4.51 | RT | | | | 10 | 2 | | | 15 | 8 | .064 | | | | | | | | | | | | | | | | | | | | EXTEND PIPE 8'± FLATTEN SLOPE WITH EARTH BORROW SEE DETAIL "A" SHEET 4 |
| 4.55 | RT | | | | 10 | 2 | | | 15 | 8 | .064 | | | | | | | | | | | | | | | | | | | | EXTEND PIPE 8'± FLATTEN SLOPE WITH EARTH BORROW SEE DETAIL "A" SHEET 4 |
| 4.63 | RT | | | | 30 | 2 | 2 | | 42 | 10 | 109 | | | | 1-42 | | | | | | | | | | | | | | | | REMOVE TOP OF HEADER, GROUT 42" PIPE INTO EXISTING CONC. BOX. USE 10'± NEW PIPE AND MES FLATTEN SIDE SLOPE WITH EARTH BORROW SEE DETAIL "B" SHEET 4 |
| 4.98 | RT | | | | 20 | 2 | | | 48 | 8 | 109 | | | | 1-48 | | | | | | | | | | | | | | | | EXTEND PIPE 8'± ADD MES USE EARTH BORROW TO FLATTEN SLOPE SEE SHEET "B" SHEET 4 |
| 3.62 | LT | | | | 10 | | | | | | | | | | 1-24' | | | | | | | | | | | | | | | | ADD MES TO PIPE AND FLATTEN SIDE SLOPE SEE DETAIL "B" SHEET 4 |
| 3.68 | LT | | | | 30 | | | | 60 | 48 | .138 | | | | | | | | | | 50 | | | | | 40 | | | | | EXTEND PIPES 16'± USE EARTH BORROW AND STONE FILL TO FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| 3.72 | LT | | | | 20 | 10 | | 10 | 18 | 30 | .064 | | | | 2-18' | | | | | | | | | | | | | | | | USE NEW PIPE AND RECONSTRUCT DRIVE SEE DETAIL "D" SHEET 4 |
| 3.74 | LT | | | | 15 | | | | | | | | | | 2-24 | | | | | | | | | | | | | | | | ADD END SECTIONS AND FLATTEN DRIVE SIDE SLOPES SEE DETAIL "D" SHEET 4 |
| 4.18 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE LARGE GUIDE POSTS COST SUBSIDIARY TO OTHER ITEMS IN CONTRACT |
| 4.62 | LT | | | | 25 | 5 | 2 | | 42 | 8 | .109 | | | | | | | | | | 10 | | | | | | | | | | REMOVE TOP OF HEADER, GROUT 42" PIPE INTO EXISTING CONC. BOX. USE 8'± NEW PIPE AND REGRADE AREA TO DRAIN SEE DETAIL "A" SHEET 4 |
| 4.97 | LT | | | | 15 | | | | 48 | 8 | .109 | | | | | | | | | | 5 | | | | | | | | | | EXTEND PIPE 8'± AND FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| NEW HAVEN-TOTALS | | | | | 315 | 27 | 4 | 10 | 15 | 16 | .064 | | | | 2-18 | | | | | | 115 | | | | | 80 | | | | | |
| | | | | | | | | | 18 | 30 | .064 | | | | 4-24 | | | | | | | | | | | | | | | | |
| | | | | | | | | | 24 | 8 | .064 | | | | 1-42 | | | | | | | | | | | | | | | | |
| | | | | | | | | | 42 | 18 | .109 | | | | 1-48 | | | | | | | | | | | | | | | | |
| | | | | | | | | | 48 | 16 | .109 | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 60 | 96 | 138 | | | | | | | | | | | | | | | | | | | | |

NEW HAVEN
1985 STATEWIDE SAFETY PROJECT
SHEET 78 OF 200 SHEETS




NEW HAVEN
VT. RTE. 17




ONLY NEW SIGNS OR EXISTING SIGNS TO BE REMOVED, SALVAGED OR REPLACED, AND INCLUDED POSTS, ARE SHOWN ON THIS PLAN. ALL OTHER EXISTING SIGNS AND POSTS TO BE RETAINED

## LEGEND

RET - RETAIN
R - REMOVE
S - SALVAGE
R & S - REMOVE AND SALVAGE
N - NEW

SOUTH BURLINGTON
U.S. RTE. 7

DATUM
VERTICAL _____
HORIZONTAL _____

BRUNING 53429-3

TRAFFIC SHEET NO. T0530 SHEET ___ OF ___

SURVEYED BY _____ DATE _____
DRAWN BY S.H.M. DATE 9/9/85
TRACED BY _____ DATE _____

NEW HAVEN,
SOUTH BURLINGTON
PROJ. STATEWIDE NO. F-SFTY(85)S
SHEET 76 OF 200

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | LEGEND | TYPE | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.C. (S.F.) | EXISTING POSTS: RETAIN | DRILL | SALV. | NEW POSTS: NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB/FT | 2.5 LB/FT | 3.0 LB/FT | TUBULAR ALUMINUM 3" ∅ | 3" □ | 4" ∅ | 4" ∅ MOD. | W SHAPE BREAKAWAY POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SEE: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NEW HAVEN | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.46~3.66 LT.& RT. | RETAIN SIGNS IN THIS AREA | | | | | | | | | | | | | | | | | | | | | | | | | SIGNS IN THIS AREA RECENTLY REPLACED UNDER U.S.7 PROJECT. REVIEW FOR CONDITION AT TIME OF CONSTRUCTION | | |
| 4.59 RT. | REDUCED SPEED AHEAD | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | SPEED ZONE AHEAD | A | 24" x 30" | | | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | E-15B |
| 4.65 RT. | NEW HAVEN BRISTOL 5 | A | 30" x 18" | | | | | | 1 | | | | | 1 | X | | | | | | | | | | | INSTALL SIGN SALVAGED FROM 4.71 RT. | | |
| 4.71 RT. | NEW HAVEN BRISTOL 5 | A | | X | X | | | | | | | | | | | | | | | | | | | | | RE-INSTALL AT 4.65 RT. | | |
| " " | + | A | 30" x 30" | X | X | | | | 1 | | | | | 1 | X | | | | | | | | | | | REMOUNT SIGN ON NEW POST | | |
| 4.77 LT. | END SPEED 35 | A | | X | | | | | | | X | | | | | | | | | | | | | | | | | |
| " " | SPEED LIMIT 40 | A | 24" x 30" | | | | 5 | | | | | | | | | | | | | | | | | | | | | E-15B |
| 4.77 RT. | SPEED LIMIT 35 | A | 24" x 30" | X | X | | | | 1 | | | | | 1 | X | | | | | | | | | | | REMOUNT SIGN ON NEW POST | | |
| 4.79 RT. | HIDDEN DRIVES | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | M | A | 30" x 30" | | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | TD 532 | |
| 4.84 RT. #1 | 8 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | PED X-ING | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.85 RT. | STOP | A | | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT (24,000 LB) | A | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| 4.87 RT. #2 | STOP | A | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT (24,000 LB) | A | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| 4.88 LT. #3 | STOP | A | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT (24,000 LB) | A | | | | X | | | | | | | | | | | | | | | | | | | | | | |
| 4.96 LT. #4 | + | A | | X | X | | | | | | | | | | | | | | | | | | | | | RE-INSTALL AT 4.99 LT. | | |
| " " | 4 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | M | A | 30" x 30" | | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | TD 532 | |
| 4.99 LT | + | A | 30" x 30" | | | | | | 1 | | | | | 1 | X | | | | | | | | | | | INSTALL SALVAGED SIGN FROM 4.96 LT. | | |
| 4.84 ± LT #1 | WEST 17 | A | 2' x 1' | | | | 2 | | | | | | | 1 | X | | | | | | | | | | | | | E-13 |
| | a. LEGAL LOAD LIMIT b. STOP | A | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | E-15A |
| 4.86 ± RT #2 | a. LEGAL LOAD LIMIT b. STOP | A | a. 2' x 2' | | | | 4 | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| | | A | b. 30" x 30" | | | | 6.9 | | | | | | | | | | | | | | | | | | | | | E-15A |
| 4.88 ± RT #3 | a. LEGAL LOAD LIMIT b. STOP | A | a. 2' x 2' | | | | 4 | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| | | A | b. 30" x 30" | | | | 6.9 | | | | | | | | | | | | | | | | | | | | | E-13 |
| 4.89 ± RT #4 | EAST 17 | A | 2' x 1' | | | | 2 | | | | | | | 1 | X | | | | | | | | | | | | | |
| | | A | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | |
| | | | | 10 | | | 55.2 | | 4 | | | | | | 300 | | | | | | | | | | | | | |
| SOUTH BURLINGTON 0.55 RT. | REDUCED SPEED AHEAD | | | X | X | | | | 1 | | | | | 1 | | | | | X | | | | | | | | | |
| " " | 85 55 | | | X | X | | | | 1 | | | | | | | | | | | | | | | | | | | |
| 0.66 LT. | EXIST. LANE ENDS KEEP RIGHT | NEW 11 | 4' x 4' | X | | | 16 | | | | | | | 2 | | X | | | | | | | | | | | | E-19A |
| 0.72 LT. | SPEED LIMIT 40 | | | X | X | | | | 1 | | | | | 1 | | | | X | | | | | | | | | | |
| 0.76 LT. | LEFT LANE ENDS 1000 FT. | | | X | X | | | | 1 | | | | | 1 | | X | | | | | | | | | | | | |
| 0.83 LT | UVM HORT. FARM | | | (X) | X | | | | | 5' | | | | (2) | | | | (X) | | | | | | | | | | |
| | AQUATEC | | | (X) | X | | | | | 5 | | | | | | | | | | | | | | | | | | |
| | MEINERZE MUFFLERS | | | (X) | X | | | | | 5 | | | | | | | | | | | | | | | | | | |
| 0.85 RT. | SPEED LIMIT 35 | | | X | X | | | | 1 | | | | | 1 | | | | X | | | | | | | | | | |
| TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

POST LENGTHS ARE APPROXIMATE. FINAL LENGTHS TO BE DETERMINED IN THE FIELD IF FINAL LENGTHS VARY BY MORE THAN 2 FEET, RECOMPUTE THE POST SIZE BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS.

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
NEW HAVEN, SOUTH BURLINGTON
PROJ. NO. STATEWIDE F-SFTY(85)S
SHEET 77 OF 200

# TRAFFIC ITEM AND TRAFFIC SIGN SUMMARY SHEET, NOTES AND DETAILS

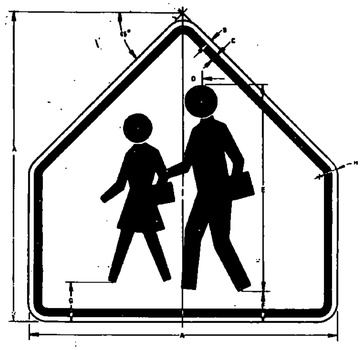
| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S. (S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.95 RT. | SPEED LIMIT 35 | | X | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| 0.99 LT. | MIDDLE LANE ENDS | | X | | | | | | | | | X | | | | | | | | | | | | | | | | |
| " " | | | X | X | | | | 1 | | | | | | 1 | | | X | | | | | | | | | | | |
| 1.06 RT. | SPEED LIMIT 35 | | X | X | | | | 1 | | | | X | | 1 | | | X | | | | | | | | | | | |
| " " | NO PARKING | | X | X | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| 1.45 LT. | NO PARKING | | X | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| 1.56 LT. | NO PARKING FROM 1.58 LT. | | | | | | | 1 | | | | | | 1 | X | | | | | | | | | | | | | |
| 1.58 LT. | SOUTH | 2' x 1' | X | | | 2 | | | | | | | | 1 | X | | | | | | | | | | | | E-12 | |
| | 7 | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | E-12 | |
| " " | NO PARKING | | X | X | | | | | | | | | | | | | | | | | | | | | | | REINSTALL AT 1.56 LT. | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SUB-TOTALS | | | 15 | | | 22 | | 11 | 15 | | | | | | | all flan. char. 407 | | 30.4 | | | | | | | | | | | |

## TRAFFIC ITEM SUMMARY

| ITEM NO. | ITEM | NEW HAVEN | | SO. BURLINGTON | | UNIT | RND. | TOTAL |
|---|---|---|---|---|---|---|---|---|
| 675.20 | TRAFFIC SIGNS, TYPE A | 55.6 | | 22 | | S.F. | 0.4 | 78 |
| 675.30 | FLANGED CHANNEL SIGN POSTS | 300 | | 407 | | LB | | 707 |
| 675.32 | TUBULAR ALUMINUM SIGN POST | | | 30.4 | | LB | 0.6 | 31 |
| 675.50 | REMOVING SIGNS | 10 | | 15 | | EA | | 25 |
| 675.60 | ERECTING SALVAGED SIGNS | 4 | | 11 | | EA | | 15 |
| 680.20 | TRAVEL INFORMATION SIGN | | | 15 | | S.F. | | 15 |

SEE SHEET TD 504 FOR PROJECT SUMMARY OF QUANTITIES AND REVISION NOTE FOR LEGAL LOAD LIMIT SIGNING

## NOTES AND DETAILS



S1-1

| DIMENSIONS (INCHES) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H |
| STD. & REG. | 36 | 1/2 | 3/4 | 2 | 25 | 3 | 3-3/4 | 1-7/8 |
| EXTRA. | 30 | 5/8 | 7/8 | 2-1/2 | 24 | 3-1/2 | 4-1/2 | 2-1/4 |
| SPECIAL | 48 | 3/4 | 1-1/4 | 3-1/4 | 32 | 5 | 6 | 3 |

COLORS

TRAFFIC SHEET NO. TD 532

DRAWN BY _____ DATE _____

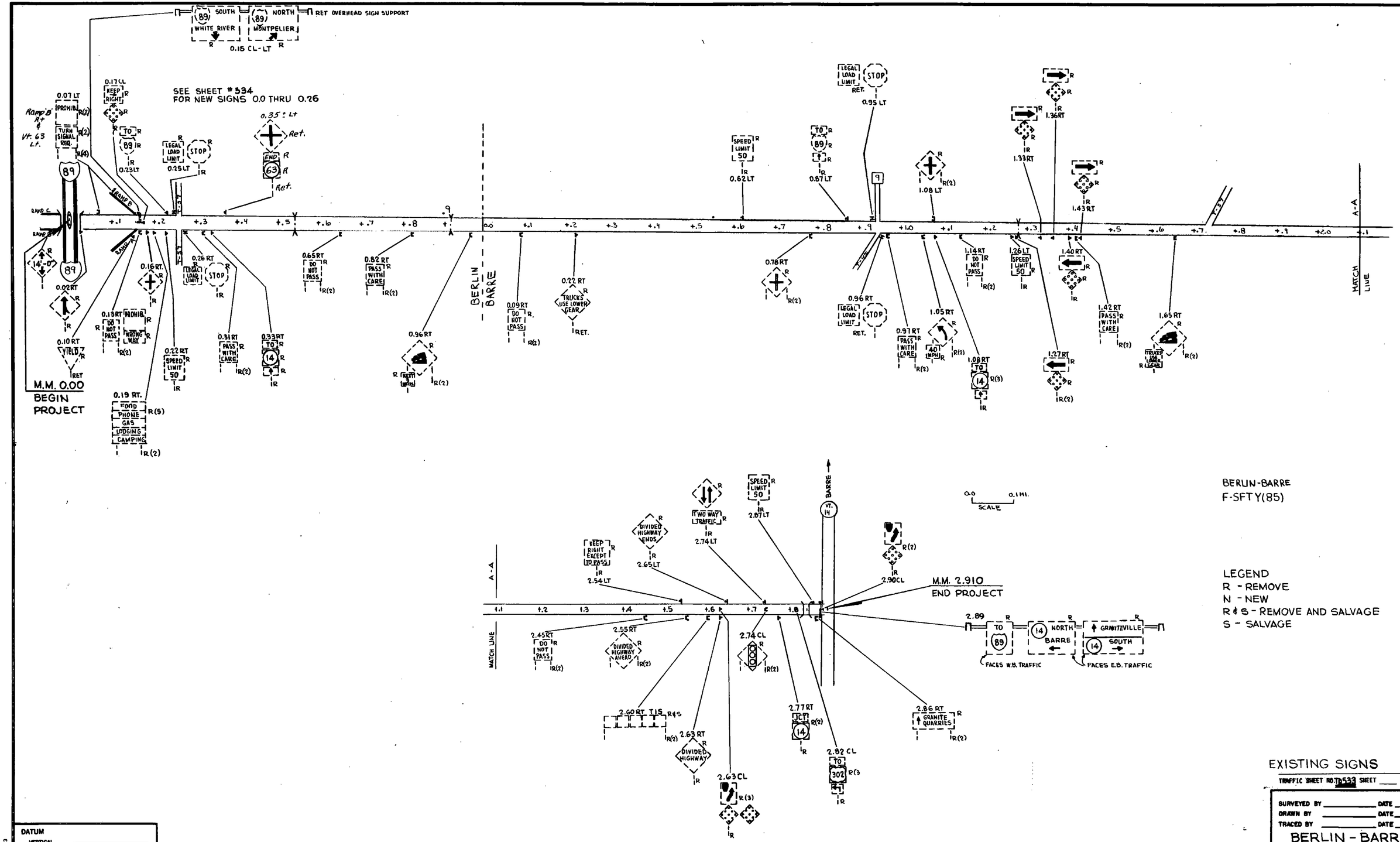
CHKED BY _____ DATE _____

NEW HAVEN, SOUTH BURLINGTON

PROJ. NO. STATEWIDE F-SFTY (85) S

SHEET 78 OF 200

BRUNING 53428.3




BERLIN-BARRE
F-SFTY(85)

LEGEND
R - REMOVE
N - NEW
R & S - REMOVE AND SALVAGE
S - SALVAGE

DATUM
VERTICAL _____
HORIZONTAL _____

EXISTING SIGNS

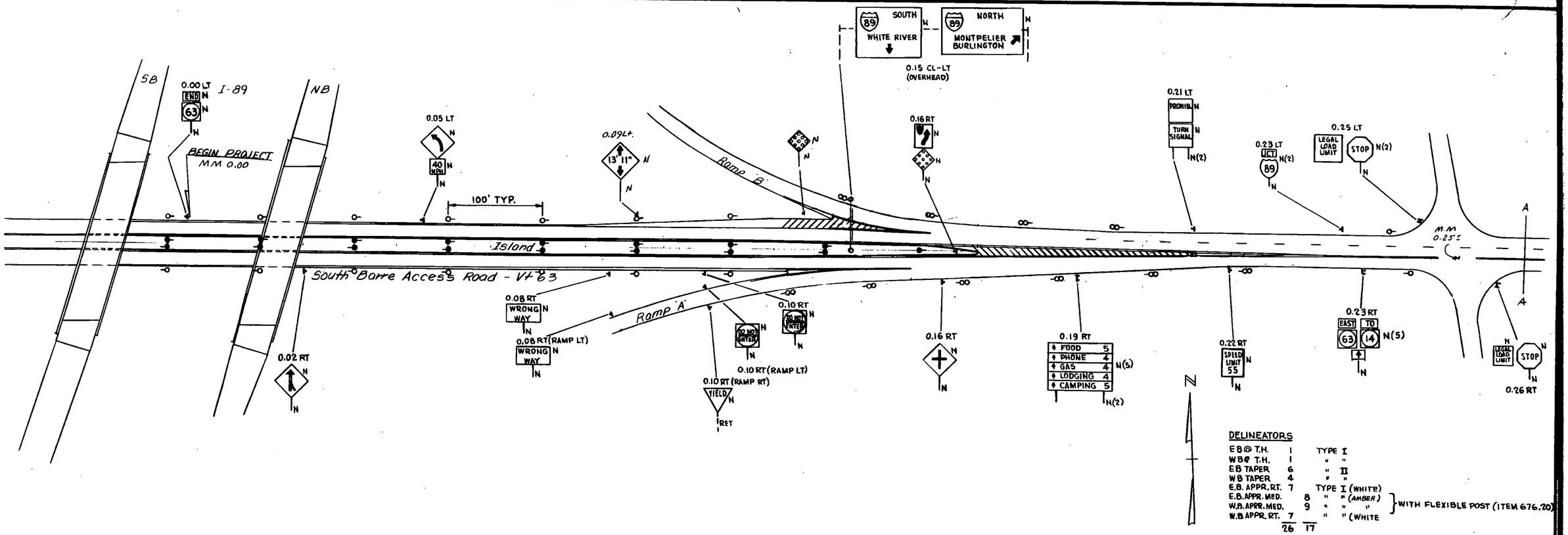
TRAFFIC SHEET NO. T533 SHEET ___ OF ___

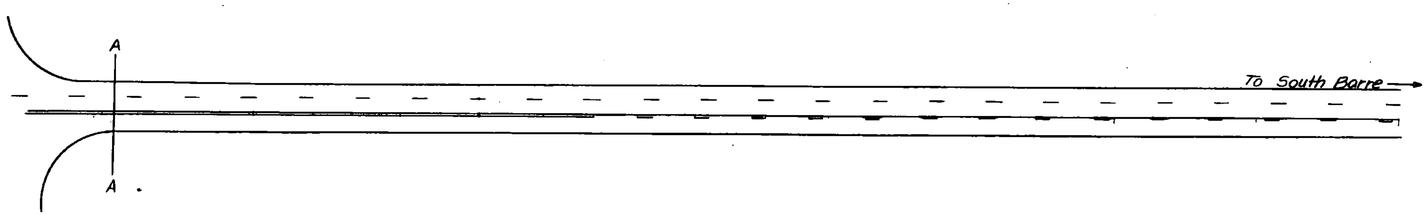
SURVEYED BY _____ DATE _____
DRAWN BY _____ DATE _____
TRACED BY _____ DATE _____

BERLIN - BARRE

PROJ. STATEWIDE NO. F-SFTY (85)
SHEET 87 OF 200

BROWNING 5X428-3
07




## DELINEATORS

| | | |
|---|---|---|
| EB @ T.H. | 1 | TYPE I |
| WB @ T.H. | 1 | " " |
| EB TAPER | 6 | " II |
| WB TAPER | 4 | " " |
| E.B. APPR. RT. | 7 | TYPE I (WHITE) |
| E.B. APPR. MED. | 8 | " " (AMBER) } WITH FLEXIBLE POST (ITEM 676.20) |
| W.B. APPR. MED. | 9 | " " " |
| W.B APPR. RT. | 7 | " " (WHITE |
| | 26 | 17 |

REMOVE AND REPLACE REFLECTOR UNITS (GUARDRAIL)
W.B. LANE TO RAMP "B" - RT. 7

LEGEND

- TYPE I (WHITE)
- TYPE II
- TYPE I (AMBER)

N - NEW
RET - RETAIN

NOT TO SCALE

NEW AND SALVAGED SIGNS
0.0 THRU 0.26

DATUM
VERTICAL
HORIZONTAL

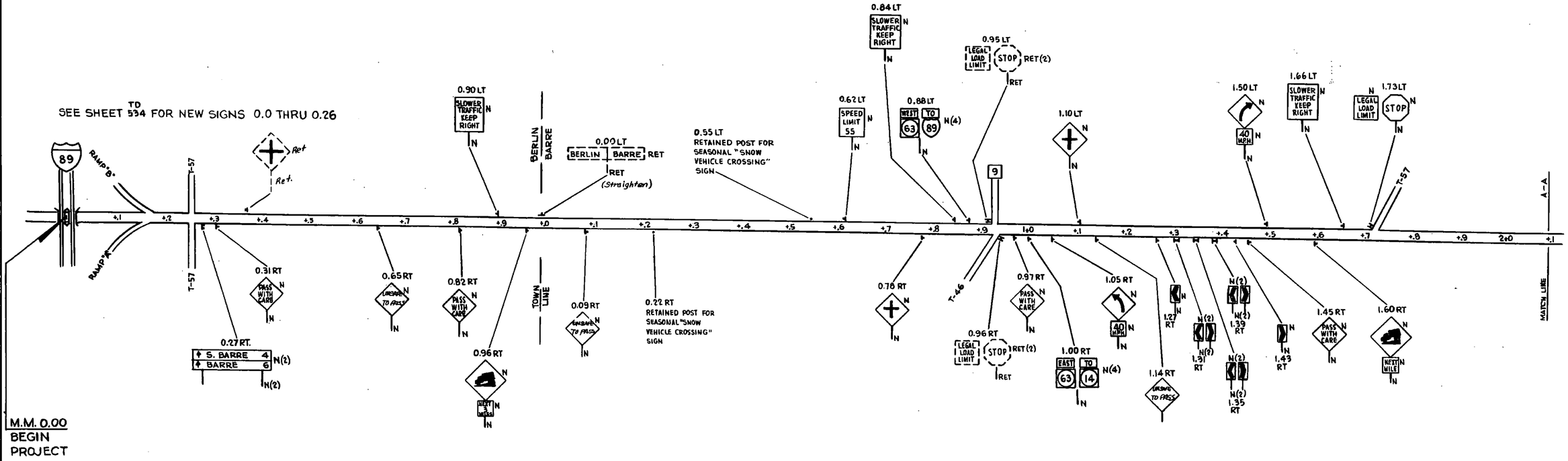
SURVEYED BY _____ DATE _____
DRAWN BY JB DATE 2-85
TRACED BY JB DATE 2-85

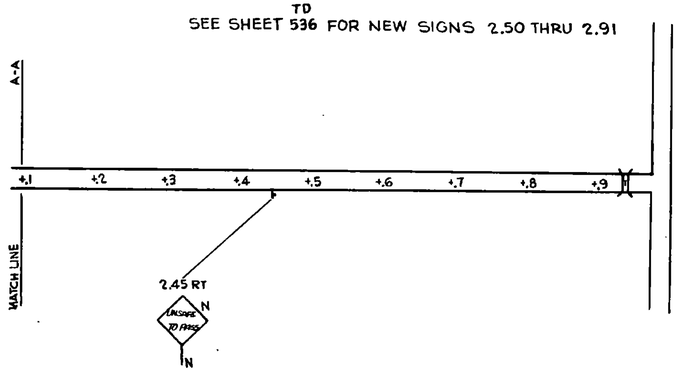
BERLIN ~ BARRE

PROJ. STATEWIDE NO. F-SFTY (85) S

TRAFFIC SHEET NO. TS-24 SHEET ___ OF ___

SHEET 88 OF 200




REMOVE AND REPLACE REFLECTOR UNITS (GUARDRAIL)
INTERSECTION TH 9, TH 46 & VT. 63 19

NEW AND SALVAGED SIGNS
0.26 TO 2.50

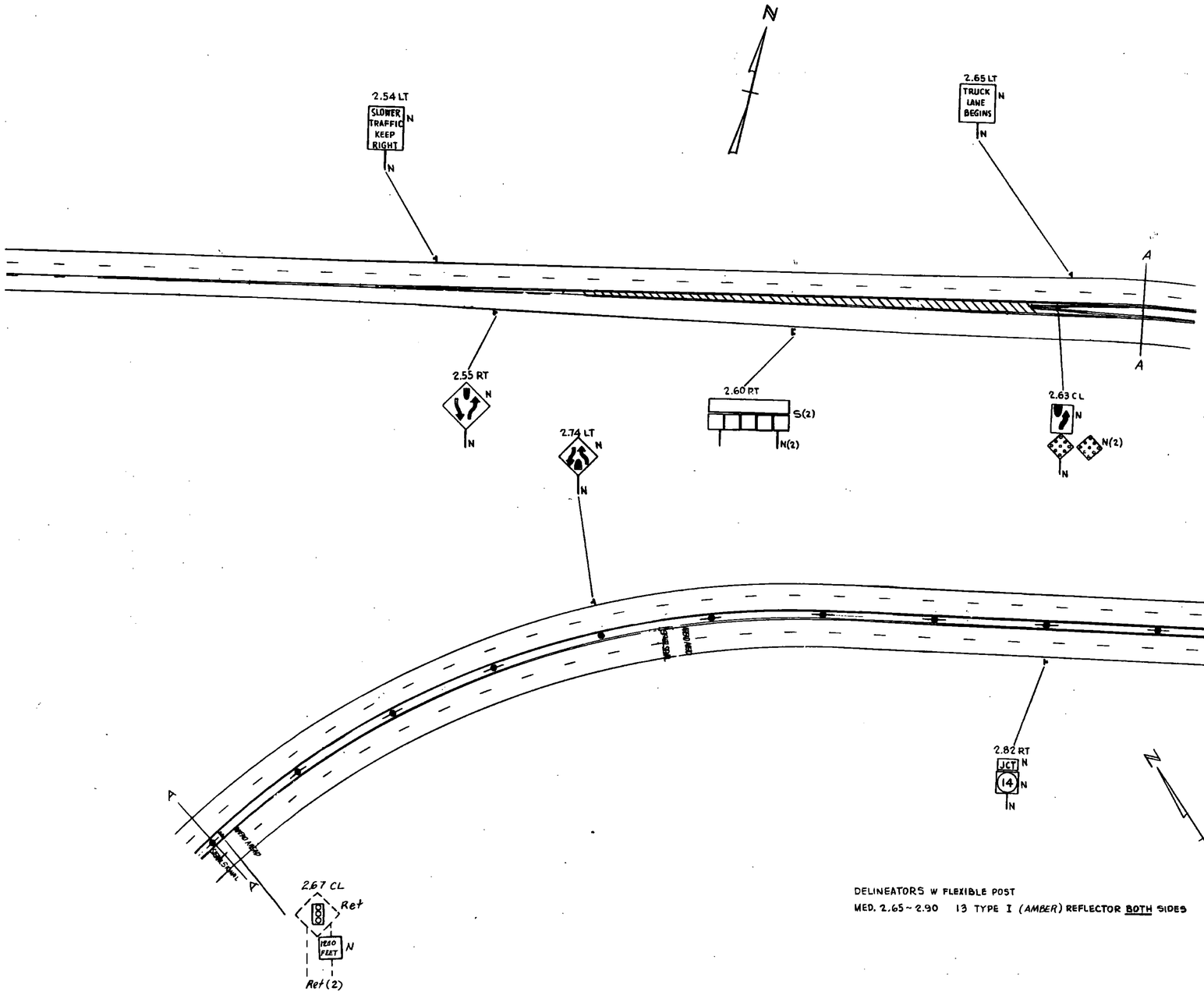
DATUM
VERTICAL
HORIZONTAL

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

BERLIN - BARRE
PROJ. STATEWIDE NO. F-SFTY(65)S
SHEET 89 OF 200

TRAFFIC SHEET NO. 535 SHEET ____ OF ____

BRUNING 53428-3
07




REMOVE & REPLACE REFLECTOR UNITS (GUARDRAIL)

WEST BOUND VT. 63 - RT. 4

DELINEATORS W FLEXIBLE POST

MED. 2.65 ~ 2.90 13 TYPE I (AMBER) REFLECTOR BOTH SIDES

NEW AND SALVAGED SIGNS

2.50 TO 2.91

DATUM

VERTICAL _____

HORIZONTAL _____

NOT TO SCALE

SURVEYED BY _____ DATE _____

DRAWN BY IB DATE 2-85

TRACED BY IB DATE 2-85

BERLIN ~ BARRE

PROJ. STATEWIDE NO. F-SFTY(85)S

SHEET 90 OF 200

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | X | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S. (S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.00 LT | END | 2' x 1' | | | | 2 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15 |
| | 63 | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 0.02 RT | | 3' x 3' | X | | | 9 | | | | | | X | | 1 | | X | | | | | | | | | | | | E-19 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.05 LT | | 3' x 3' | | | | 9 | | | | | | | | 1 | | | X | | | | | | | | | | | E-19A |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 40 MPH | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| 0.09 Lt. | 13'-11" | 3' x 3' | | | | 9 | | | | | | | | 1 | | | X | | | | | | | | | | | TD542 | |
| 0.07 LT | PROHIB. | | X | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| | TURN SIG. | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.08 RT | ML WRONG WAY | 3' x 2' | | | | 6 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| | RAMP LT WRONG WAY | 3' x 2' | | | | 6 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| 0.10 RT | ML DO NOT ENTER | 30" x 30" | | | | 6.3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | RAMP LT DO NOT ENTER | 30" x 30" | | | | 6.3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | RAMP RT YIELD | 3' x 3' x 3' | | | | 4.5 | | | | X | | | | | | | | | | | | | | | | | | E-15C |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.13 RT | DO NOT PASS | | X | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PROHIB. | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | WRONG WAY | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.15 CL-LT | 89 SOUTH WHITE RIVER | 15' x 10' | X | | | | 150 | | | | | | | | | | | | | | | | | | | MOUNT NEW SIGN ON EXISTING OVERHEAD SIGN SUPPORT | TD 543 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 89 NORTH MONTPELIER | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 89 NORTH MONTPELIER BURLINGTON | 16 x 9'-6" | | | | | 152 | | | | | | | | | | | | | | | | | | | MOUNT NEW SIGN ON EXISTING OVERHEAD SIGN SUPPORT | TD 543 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.18 RT | | 3' x 3' | X | | | 9 | | | | | | X | | 1 | | | X | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.16 CL | | 3' x 4' | | | | 12 | | | | | | | | 1 | | | X | | | | | | | | | | | E-15B |
| | | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.17 CL | KEEP RIGHT | | X | | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.19 RT. | FOOD 5 | 54" x 7½" | X | | | 2.8 | | | | | | | | 2 | | X | | | | | | | | | | | | |
| | PHONE 4 | 54" x 7½" | X | | | 2.8 | | | | | | | | | | | | | | | | | | | | | | |
| | GAS 4 | 54" x 7½" | X | | | 2.8 | | | | | | | | | | | | | | | | | | | | | | |
| | LODGING 4 | 54" x 7½" | X | | | 2.8 | | | | | | | | | | | | | | | | | | | | | | |
| | CAMPING 5 | 54" x 7½" | X | | | 2.8 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 16 | | | 101.7 | 302 | | | | | | | | | | | | | | | | | | | | | |

FINAL 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".

PREPARED BY SM DATE 1/30/86

CHECKED BY _____ DATE _____

PROJ. BERLIN - BARRE

NO. STATEWIDE F-SFTY (85)

TRAFFIC SHEET NO. TS-87 SHEET 91 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | X | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB./FT. | FLANGED CHANNEL 2.5 LB./FT. | FLANGED CHANNEL 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" Ø | TUBULAR ALUMINUM 3.0" □ | TUBULAR ALUMINUM 4.0" Ø | TUBULAR ALUMINUM 4.0" Ø MOD. | W SHAPED STEEL POST SIZE | W SHAPED STEEL WEIGHT | W SHAPED STEEL FTG. SIZE 24" | W SHAPED STEEL FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | FOR SIGN DETAIL SHEET: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.21 LT. | PROHIB | 3' x 3' | | | | 9 | | | | | | | | 2 | | | X | | | | | | | | | | | E-15B |
| --------- | TURN SIGNAL REQ. | 3' x 3' | | | | 9 | | | | | | | | | | | | | | | | | | | | | | E-15B |
| 0.22 RT | SPEED LIMIT 50 EXIST. / SPEED LIMIT 55 NEW | | X | | | | | | | | | X | | | | | | | | | | | | | | | | E-15B |
| | | 3' x 4' | | | | 12 | | | | | | | | 1 | | | | X | | | | | | | | | | E-11 |
| 0.23 LT. | TO EXIST / JCT NEW | 21" x 15" | X | | | 2.2 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-11 |
| | 89 " / 89 " | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 0.23 RT. | EAST | 2' x 1' | | | | 2 | | | | | | | | 1 | | | | X | | | | | | | | | | E-13 |
| | 63 | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| --------- | TO | 2' x 1' | | | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | 14 | 2' x 2' | | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| --------- | ↑ | 21" x 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-15C |
| 0.25 LT. | STOP | 30" x 30" | X | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15A |
| --------- | LEGAL LOAD LIMIT 24000 | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-15B |
| 0.26 RT. | STOP | 2' x 2' | X | | | 4 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15B |
| --------- | LEGAL LOAD LIMIT 24000 | 2' x 2' | X | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| 0.27 RT. | 45 BARRE 4 | 72" x 10" | | | | 5 | | | | | | | | 2 | X | | | | | | | | | | | | | E-23 |
| | 4 BARRE 6 | 72" x 10" | | | | 5 | | | | | | | | | | | | | | | | | | | | | | TD 543 |
| 0.31 RT. | PASS WITH CARE EXIST / PASS WITH CARE NEW | 3' x 3' | X | | | 9 | | | | | | X(2) | | 1 | | | X | | | | | | | | | | | |
| 0.33 RT. | TO / 14 / ↑ | | XX | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 0.35 LT. | ◆ | | | X | | | | | | X | | | | | | | | | | | | | | | | | | |
| --------- | END | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 63 | | X | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.65 RT. | DO NOT PASS EXIST. / UNSAFE TO PASS NEW | 3' x 3' | X | | | 9 | | | | | | X(2) | | 1 | | | X | | | | | | | | | | | TD 543 |
| 0.82 RT. | PASS WITH CARE EXIST. / PASS WITH CARE NEW | 3' x 3' | X | | | 9 | | | | | | X(2) | | 1 | | | X | | | | | | | | | | | TD 543 |
| 0.90 LT. | SLOWER TRAFFIC KEEP RIGHT | 3' x 4' | | | | 12 | | | | | | | | 1 | | | | X | | | | | | | | | | E-15A |
| 0.96 RT. | ◆ | 3' x 3' | X | | | 9 | | | | | | X (2) | | 1 | | | | X | | | | | | | | | | E-19B |
| --------- | NEXT 3 MILES | 18" x 18" | X | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | |
| | | | | X | | | | | | | | | | | | | | | | | | | | | | | | STRAIGHTEN SIGN<br>PAYMENT TO BE SUBSIDIARY TO OTHER ITEMS |
| 0.00 (BERLIN) (BARRE) LT. | BERLIN / BARRE | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.09 RT. | DO NOT PASS / UNSAFE TO PASS | 3' x 3' | X | | | 9 | | | | | | X(2) | | 1 | | | X | | | | | | | | | | | TD 543 |
| 0.22 RT. | TRUCKS USE LOWER GEAR | | X | | | | | | | X | | | | | | | | | | | | | | | | | | RETAIN POST FOR SEASONAL MOUNTING OF SNOWMOBILE CROSSING SIGN |
| 0.55 LT. | VACANT POST | | | | | | | | | X | | | | | | | | | | | | | | | | | | RETAIN POST FOR SEASONAL MOUNTING OF SNOWMOBILE CROSSING SIGN |
| TOTALS | | | 19 | | | 138 | | | | | | | | | | | | | | | | | | | | | | |

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PREPARED BY SM DATE 1/30/86

CHECKED BY _____ DATE _____

PROJ. BERLIN - BARRE NO. STATEWIDE F-SFTY(85)

TRAFFIC SHEET NO. TD538 SHEET 92 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | EXISTING SIGNS TO BE SALVAGED: RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW AND SALVAGED SIGNS: NEW "B" (S.F.) | NEW AND SALVAGED SIGNS: SALV. SIGN (EA.) | NEW AND SALVAGED SIGNS: SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | EXISTING POSTS: DRILL | EXISTING POSTS: REM. | EXISTING POSTS: SALV. | NEW SIGN POSTS: NUMBER OF POSTS | NEW SIGN POSTS: FLANGED CHANNEL 2.0 LB./FT. | FLANGED CHANNEL 2.5 LB./FT. | FLANGED CHANNEL 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" Ø | TUBULAR ALUMINUM 3.0" □ | TUBULAR ALUMINUM 4.0" Ø | TUBULAR ALUMINUM 4.0" Ø MOD. | W SHAPED STEEL POST SIZE | W SHAPED STEEL WEIGHT | W SHAPED STEEL FTG. SIZE 24" | W SHAPED STEEL FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | FOR SIGN DETAIL SHEET: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.62 LT. | SPEED LIMIT 50 EXIST / SPEED LIMIT 55 NEW | 3' x 4' | X | | 12 | | | | | | X | | 1 | | | | X | | | | | | | | | | E-15B |
| 0.78 RT. | | 3' x 3' | X | | 9 | | | | | | X(2) | | 1 | | | X | | | | | | | | | | TD 543 | |
| 0.84 LT. | SLOWER TRAFFIC KEEP RIGHT | 3' x 4' | | | 12 | | | | | | | | 1 | | | | X | | | | | | | | | | E-15A |
| 0.87 LT. | TO / 89 / ↑ | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| _____ | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.88 LT. | WEST | 2' x 1' | | | 2 | | | | | | | | 1 | | | | X | | | | | | | | | | E-13 |
| | 63 | 2' x 2' | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| _____ | TO / 89 | 2' x 1' / 2' x 2' | | | 2 / 4 | | | | | | | | | | | | | | | | | | | | | | E-11 / E-11 |
| 0.95 LT. | STOP / LEGAL LOAD LIMIT | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 0.96 RT. | STOP / LEGAL LOAD LIMIT | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 0.97 RT. | PASS WITH CARE EXIST / PASS WITH CARE NEW | 3' x 3' | X | | 9 | | | | | | X | | 1 | | | X | | | | | | | | | | TD 543 | |
| 1.00 RT. | EAST / 63 / TO / 14 | 2' x 1' / 2' x 2' / 2' x 1' / 2' x 2' | | | 2 / 4 / 2 / 4 | | | | | | | | 1 | | | | X | | | | | | | | | | E-13 / E-13 / E-13 / E-13 |
| 1.05 RT. | ↰ / 40 MPH | 3' x 3' / 18" x 18" | X / X | | 9 / 2.3 | | | | | | X | | 1 | | | X | | | | | | | | | | | E-19A / E-19B |
| 1.08 LT. | | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| 1.10 LT. | | 3' x 3' | | | 9 | | | | | | | | 1 | | | X | | | | | | | | | | TD 543 | |
| 1.08 RT. | TO / 89 / ↑ | | X / X / X | | | | | | | | X | | | | | | | | | | | | | | | | |
| _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.14 RT. | DO NOT PASS EXIST. / UNSAFE TO PASS NEW | 3' x 3' | X | | 9 | | | | | | X(2) | | 1 | | | X | | | | | | | | | | TD 543 | |
| 1.26 RT. | SPEED LIMIT 50 | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| 1.27 RT. | ⇦ / ⇦ | | X / X | | | | | | | | X | | | | | | | | | | | | | | | | |
| 1.27 RT. | FACES E.B. TRAFF. | 18" x 24" | | | 3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-19 |
| 1.31 RT. | FACES E.B. TRAFF. / FACES W.B. TRAFF. | 18" x 24" / 18" x 24" | | | 3 / 3 | | | | | | | | 1 / 1 | X / X | | | | | | | | | | | | | E-19 / E-19 |
| TOTALS | | | 16 | | 104.3 | | | | | | | | | | | | | | | | | | | | | | |

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E-19
E-19

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____
PROJ. NO. BERLIN-BARRE STATEWIDE F-SFTY (85)
TRAFFIC SHEET NO. TD 539 SHEET 93 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S. (S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.33 RT. | | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.35 RT. | FACES E.B. TRAFFIC | 18" x 24" | | | 3 | | | | | | | | 1 | X | | | | | | | | | | | | | |
| | FACES W.B. TRAFF | 18" x 24" | | | 3 | | | | | | | | 1 | X | | | | | | | | | | | | | |
| 1.36 RT. | | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.39 RT. | FACES E.B. TRAFF. | 18" x 24" | | | 3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-19 |
| | FACES W.B. TRAFF. | 18" x 24" | | | 3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-19 |
| 1.40 RT. | | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.42 RT. | PASS WITH CARE | | X | | | | | | | | X (2) | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.43 RT. | | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 18" x 24" | | | 3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-19 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.45 RT. | PASS WITH CARE | 3' x 3' | | | 9 | | | | | | | | 1 | | | X | | | | | | | | | | TD 543 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.50 LT. | | 3' x 3' | | | 9 | | | | | | | | 1 | | | | X | | | | | | | | | | E-19A |
| | 40 MPH | 18" x 18" | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| 1.60 RT. | | 3' x 3' | | | 9 | | | | | | | | 1 | | | | X | | | | | | | | | | E-19B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | HEAVY VEHICLE | 18" x 18" | | | 2.3 | | | | | | | | | | | | | | | | | | | | | TD 543 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.65 RT. | | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | TRUCKS CAN LOWER SPEED | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.66 LT. | FLOWER TRAFFIC KEEP RIGHT | 3' x 4' | | | 12 | | | | | | | | 1 | | | | X | | | | | | | | | | E-15A |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.73 LT. | STOP | 2' x 2' | | | 4 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| | LEGAL LOAD LIMIT | 2' x 2' | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-15A |
| 2.45 RT. | DO NOT PASS EXIST. / NEW UNSAFE TO PASS | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | 3' x 3' | | | 9 | | | | | | | | 1 | | | X | | | | | | | | | | | |
| 2.54 LT. | KEEP RIGHT EXCEPT TO PASS EXIST. / SLOWER TRAFFIC KEEP RIGHT NEW | 3' x 4' | X | | 12 | | | | | | X | | 1 | | | | X | | | | | | | | | | E-15A |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.55 RT. | DIVIDED HIGHWAY AHEAD | 3' x 3' | X | | 9 | | | | | | X (2) | | 1 | | | X | | | | | | | | | | | E-19A |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.60 RT. | | | X | X | | | | 5 | | | X (2) | | 2 | | | X | | | | | | | | | | NON-FEDERAL-PARTICIPATION ITEM 680.20 | |
| | | | X | X | | | | 5 | | | | | | | | | | | | | | | | | | | |
| 2.63 RT. | DIVIDED HIGHWAY | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.63 CL. | | 3' x 4' | X | | 12 | | | | | | X | | 1 | | | X | | | | | | | | | | | E-15B |
| | | 18" x 18" | X | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| | | 18" x 18" | X | | 2.3 | | | | | | | | | | | | | | | | | | | | | E-19B | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 20 | | 113.2 | | | 10 | | | | | | | | | | | | | | | | | | | |

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PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

BERLIN - BARRE

PROJ. STATEWIDE NO. F-SFTY(85)

TRAFFIC SHEET NO. TD 540 SHEET 94 OF 200

[redacted] 1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | EXISTING SIGNS TO BE SALVAGED: RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW AND SALVAGED SIGNS: NEW "B" (S.F.) | NEW AND SALVAGED SIGNS: SALV. SIGN (EA.) | NEW AND SALVAGED SIGNS: SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | EXISTING POSTS: DRILL | EXISTING POSTS: REM. | EXISTING POSTS: SALV. | NEW SIGN POSTS: NUMBER OF POSTS | NEW SIGN POSTS: FLANGED CHANNEL 2.0 LB./FT. | FLANGED CHANNEL 2.5 LB./FT. | FLANGED CHANNEL 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" ∅ | TUBULAR ALUMINUM 3.0" □ | TUBULAR ALUMINUM 4.0" ∅ | TUBULAR ALUMINUM 4.0" ∅ MOD. | W SHAPED STEEL POST SIZE | W SHAPED STEEL WEIGHT | W SHAPED STEEL FTG. SIZE 24" | W SHAPED STEEL FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | FOR SIGN DETAIL SHEET: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.65 LT. | DIVIDED HIGHWAY ENDS / TRUCK LANE BEGINS | 3' x 4' | X | | 12 | | | | | | X | | 1 | | | | X | | | | | | | | | | E-15A |
| 2.74 LT. | TWO WAY TRAFFIC | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| " " | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 3' x 3' | | | 9 | | | | | | | | 1 | | | X | | | | | | | | | | | E-19A |
| 2.66 CL | | | | X | | | | | X | | | | | | | | | | | | | | | | | | E-19B |
| 2.77 RT. | JCT 14 | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.82 RT. | JCT 14 | 21" x 15" | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | | 2' x 2' | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 2.82 CL | TO 302 | | X | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.86 RT. | GRANITE QUARRIES | | X | | | | | | | | X(2) | | | | | | | | | | | | | | | RETAIN FOOTINGS | | |
| | FOOD | 54" x 7½" | X | | 2.8 | | | | | | | | 2 | X | | | | | | | | | | | | | TD 543 | |
| | GAS | 54" x 7½" | X | | 2.8 | | | | | | | | | | | | | | | | | | | | | | TD 543 | |
| | LODGING | 54" x 7½" | X | | 2.8 | | | | | | | | | | | | | | | | | | | | | | TD 543 | |
| | CAMPING 1 | 54" x 7½" | X | | 2.8 | | | | | | | | | | | | | | | | | | | | | | TD 543 | |
| | CAMPING 6 | 54" x 7½" | X | | 2.8 | | | | | | | | | | | | | | | | | | | | | | TD 543 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.87 LT. | SPEED LIMIT 50 EXIST. / SPEED LIMIT 55 NEW | 3' x 4' | X | | 12 | | | | | | | | 1 | | | | X | | | | | | | | | | E-15B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.90 CL | | 3' x 4' | X | | 12 | | | | | | X | | 1 | | | X | | | | | | | | | | | E-15B |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | 18" x 18" | X | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| | | 18" x 18" | X | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| 2.89 O'HD. | TO 89 FACES W.B. TRAFF. 5' x 7' | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| | 14 NORTH BARRE FACES E.B. TRAFF. 10' x 8.5 | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| | GRANITVILLE 14 SOUTH FACES E.B. TRAFF. 14' x 9' | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| | 63 WEST TO 89 MOUNT FACING WEST BOUND TRAFF. | 7'-6" x 5'-6" | | | | 41.3 | | | | | | | | | | | | | | | | | | | | MOUNT NEW SIGN ON EXISTING OVERHEAD SIGN SUPPORT | TD 543 | |
| | 14 NORTH TO 89 BARRE MOUNT OVER LEFT LANE FACING EAST BOUND TRAFF. | 9' x 9' | | | | 81 | | | | | | | | | | | | | | | | | | | | | TD 543 | |
| | GRANITVILLE GRANITE QUARRIES 14 SOUTH MOUNT ON RT FACING EAST BOUND TRAFF. | 15' x 8' | | | | 120 | | | | | | | | | | | | | | | | | | | | | TD 543 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 21 | | 69.8 | 242.3 | | | | | | | | | | | | | | | | | | | | | | |

FINAL 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'.

PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

PROJ. BERLIN - BARRE

NO. STATEWIDE F-SFTY (85)

TRAFFIC SHEET NO. TD 541 SHEET 95 OF 200

[redacted] 1986

## TRAFFIC ITEM AND TRAFFIC SIGN SUMMARY SHEET, NOTES AND DETAILS

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | EXISTING SIGNS TO BE SALVAGED: RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW AND SALVAGED SIGNS: NEW "B" (S.F.) | NEW AND SALVAGED SIGNS: SALV. SIGN (EA.) | NEW AND SALVAGED SIGNS: SALV. T.I.S. (S.F.) | EXISTING POSTS: RET. | EXISTING POSTS: DRILL | EXISTING POSTS: REM. | EXISTING POSTS: SALV. | NEW SIGN POSTS: NUMBER OF POSTS | NEW SIGN POSTS: FLANGED CHANNEL 2.0 LB./FT. | FLANGED CHANNEL 2.5 LB./FT. | FLANGED CHANNEL 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" ∅ | TUBULAR ALUMINUM 3.0" □ | TUBULAR ALUMINUM 4.0" ∅ | TUBULAR ALUMINUM 4.0" ∅ MOD. | W SHAPED STEEL POST SIZE | W SHAPED STEEL WEIGHT | W SHAPED STEEL FTG. SIZE 24" | W SHAPED STEEL FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | FOR SIGN DETAIL SHEET: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| --------- | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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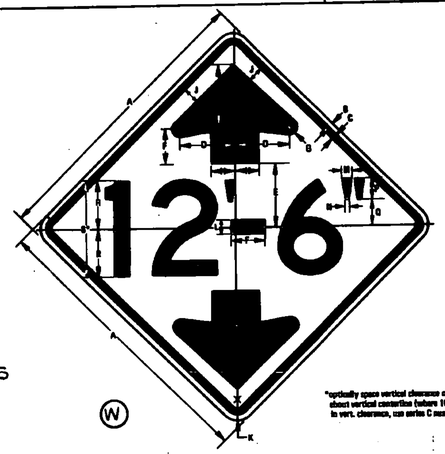
### TRAFFIC ITEM SUMMARY

| ITEM NO. | ITEM | SHEET TD 537 | SHEET TD 538 | SHEET TD 539 | SHEET TD 540 | SHEET TD 541 | UNIT | RND. | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 675.10 | TRAFFIC SIGNS, TYPE A | 101.7 | 138 | 104.3 | 113.2 | 69.8 | S.F. | 3 | 530 |
| 675.21 | TRAFFIC SIGNS, TYPE B | 302 | | | | 242.3 | S.F. | 5.7 | 550 |
| 675.30 | FLANGED CHANNEL SIGN POSTS | 371 | 521 | 322 | 446 | 210 | LBS. | | 1870 |
| 675.32 | TUBULAR ALUMINUM SIGN POSTS | | 106.4 | 136.8 | 152 | 114 | LBS. | 0.8 | 510 |
| 675.50 | REMOVING SIGNS | 16 | 19 | 16 | 20 | 21 | EA. | | 92 |
| 676.10 | DELINEATORS WITH STEEL POSTS | | | | | | EA. | | 26 |
| 676.12 | REMOVAL OF EXIST. DELINEATORS | | | | | | EA | | 200 |
| 676.15 | REMOVE AND REPLACE REFLECTOR UNITS (GUARDRAIL) | | | | | | EA | | 30 |
| 676.20 | DELINEATORS W/ FLEXIBLE POST | | | | | | EA | | 30 → 13 UNITS TO BE FURNISHED WITH REFLECTOR ON BOTH SIDES. |
| 680.20 | TRAVEL INFORMATION SIGN | | | | 10 | | S.F. | | 10 |

SEE SHEET TD 504 FOR PROJECT SUMMARY OF QUANTITIES AND REVISION NOTE FOR LEGAL LOAD LIMIT SIGNING.

NOTES AND DETAILS




12'-6" IS EXAMPLE ONLY. ACTUAL CLEARANCE FOR SIGN IS 13'-11". COMPRESS SPACING AND/OR CHANGE TO "C" SERIES IF NECESSARY.

*optically space vertical clearance numerals about vertical centerline (where 16" is used in vert. clearance, use series C numerals)

| SIGN | DIMENSIONS (INCHES) A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R | S |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| STD. & EXPWY. | 36 | 6-1/2 | 7/8 | 6-7/8 | 8 | 4-1/2 | 1 | 3 | 2 | 2-1/4 | 1-7/8 | 1-1/4 | 1/2 | 2-3/4 | 4 | 8 | 120 |

TRAFFIC SHEET NO. TD 542 SHEET ___ OF ___

DRAWN BY _____ DATE _____

CHKED BY _____ DATE _____

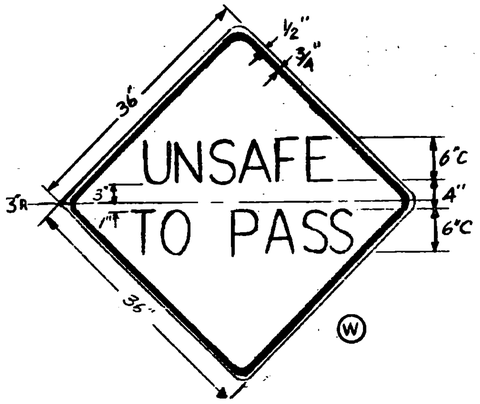
BERLIN - BARRE

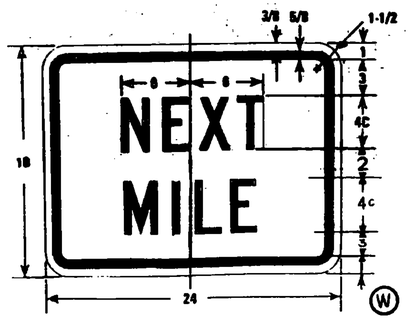
PROJ. STATEWIDE NO. F-SFTY(85)

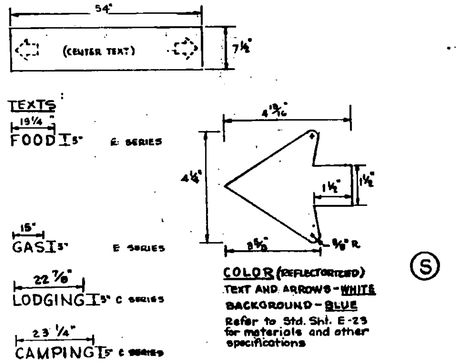
SHEET 96 OF 200

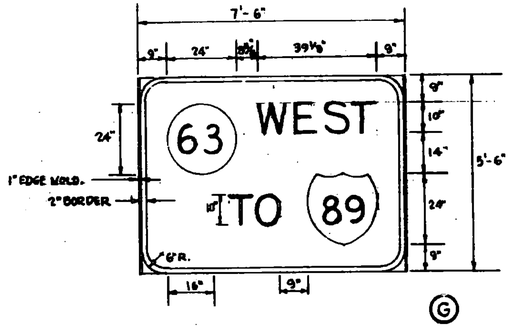
BRUNING 53428-3

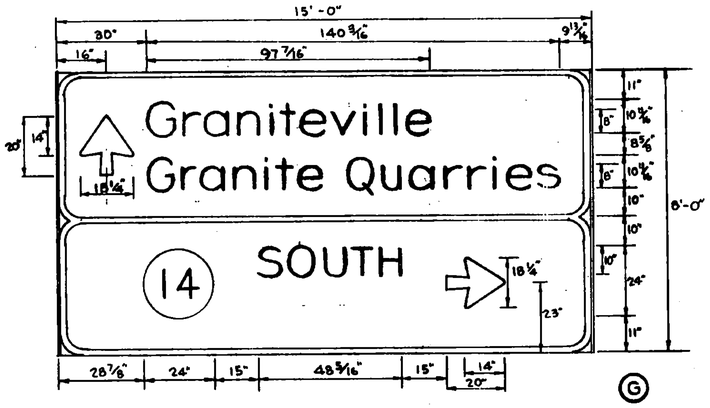
97

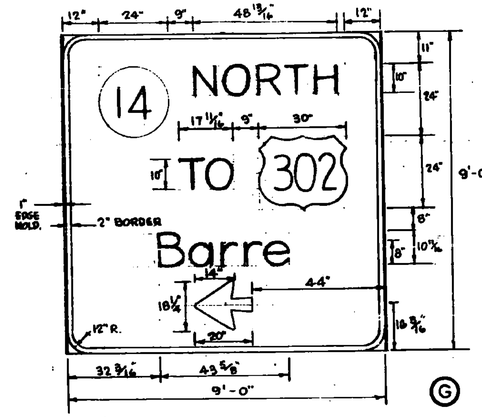


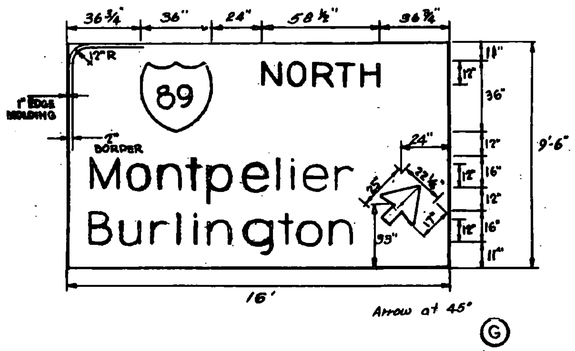



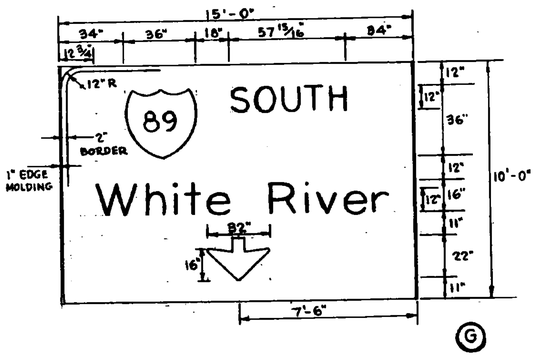




LEGEND

- (G) GUIDE SIGN
- (S) SERVICES SIGN
- (W) WARNING SIGN

SEE STANDARD SHTS. E-14, E-19 AND E-23 FOR APPROPRIATE COLORS, MATERIALS AND OTHER DETAILS.

SIGN DETAIL SHEET

CHECKED BY _____ DATE _____
PROJ. BERLIN - BARRE
STATEWIDE NO. F-SFTY (85)
TRAFFIC SHEET NO. 154 SHEET 97 OF 200

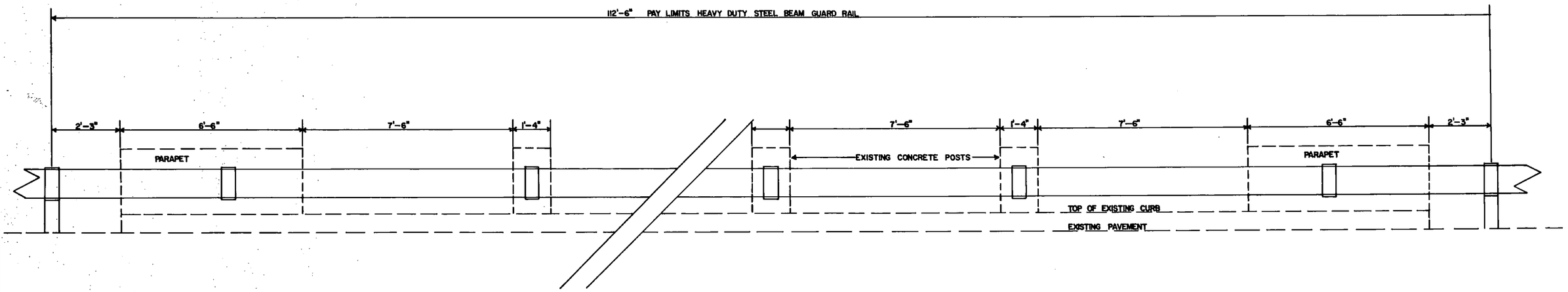
BERLIN/ 53428-3

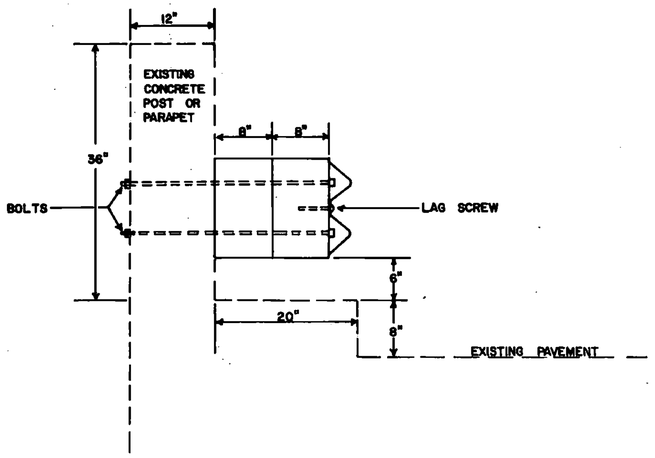
# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

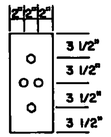
| MILE MARKER | POS. | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S | R.C.P.E.S. | CONC | STEEL | REHAB. DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | 621.21 | | 621.20 | 621.70 | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| LOWELL | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.90 | RT | | | | | | | 48 | | | | | | | | | | | | | | | | | | | | | 35 | | | 1 | | CONNECT 25' NEW STEEL BEAM AND BCT TO STEEL BEAM AND BCT TO H.D. BEAM ON BRIDGE. SEE SHEETS 3, 14, 15, 16, 17, FOR DETAILS. USE 3 1.5 POST SPACING AND FACTOR OF 1.4. |
| 2.91-2.94 | RT | | | | | | | 49 | | | | | | | | | | | | | | | | | | 142 | | | | 1 | | 1 | | CONNECT GUARD RAIL APPROACH SECTION, TYPE I MOD. TO H.D. BEAM ON BRIDGE. SEE SHEETS 3, 14, 15, 16, AND 17 FOR DETAILS. |
| 2.82-2.89 | LT | | | | | | | 69 | | | | | | | | | | | | | | | | | | 390 | | | 350 | 1 | | 1 | | CONNECT G.R. APPROACH SECTION, TYPE I MOD. TO H.D. BEAM ON BRIDGE, TO THIS ADD 350FT. NEW STEEL BEAM AND BCT, SEE SHEETS 3, 14, 15, 16, AND 17 FOR DETAILS. |
| 2.91 | LT | | | | | | | 50 | | | | | | | | | | | | | | | | | | | | | | 1 | | 1 | | CONNECT GUARD RAIL APPROACH SECTION, TYPE I MOD. TO H.D. BEAM ON BRIDGE. SEE SHEETS 3, 14, 15, 16, AND 17 FOR DETAILS. |
| 3.59 | RT | | | | | | | 3 | | | | | | | | | | | | | | | | | | 55 | 112.5 | | | | 2 | | | REMOVE GUARD RAIL ON AND OFF THE BRIDGE. LEAVE STEEL POSTS ON BRIDGE, REPLACE WITH HEAVY DUTY STEEL BEAM BEGIN SOUTHERN END 37'± FROM BRIDGE WITH AN OFFSET OF 11'± FROM LINE OF NORMAL GUARD RAIL (ALONG BRUSH LINE). WRAP NORTHERN END OF GUARD RAIL AROUND DRIVE USE 621.60 TYPE ANCHORS. OFFSET BLOCKS ON POSTS ON BRIDGE WILL HAVE TO EXTEND ABOVE EXISTING POSTS. |
| 3.59 | LT | | | | | | | 50 | | | | | | | | | | | | | | | | | | 50 | 100 | | | | 1 | 1 | | REMOVE GUARD RAIL ON AND OFF THE BRIDGE LEAVE STEEL POSTS ON BRIDGE. REPLACE WITH HEAVY DUTY STEEL BEAM. WRAP SOUTHERLY END AROUND DRIVE AND USE 621.60 TYPE ANCHOR END NORTHERLY END 37'± NORTH OF BRIDGE WITH BCT. OFFSET BLOCKS ON EXISTING POSTS ON BRIDGE WILL HAVE TO EXTEND ABOVE THE TOP OF THE POSTS. |
| 6.20 | RT | | | | | | | 47 | | | | | | | | | | | | | | | | | | 25 | | | | | | 1 | | REPLACE FIRST 25' OF GUARD RAIL WITH B.C.T. SEE SHEET 3 FOR DETAILS |
| 6.25 | RT | | | | | | | 47 | | | | | | | | | | | | | | | | | | 25 | | | | | | 1 | | REPLACE LAST 25' OF GUARD RAIL WITH B.C.T. SEE SHEET 3 FOR DETAILS |
| 6.20 | LT | | | | | | | 47 | | | | | | | | | | | | | | | | | | 25 | | | | | | 1 | | REPLACE FIRST 25' OF GUARD RAIL WITH B.C.T. SEE SHEET 3 FOR DETAILS |
| 6.25 | LT | | | | | | | 47 | | | | | | | | | | | | | | | | | | 25 | | | | | | 1 | | REPLACE LAST 25' OF GUARD RAIL WITH B.C.T. SEE SHEET 3 FOR DETAILS |
| WESTFIELD | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.10-0.12 | RT | | | | | | | 50 | | | | | | | | | | | | | | | | | | 80 | | | 25 | 1 | | 1 | | REPLACE EXISTING GUARD RAIL WITH GUARD RAIL APPROACH SECTION, TYPE I MOD. AND 25FT. OF STEEL BEAM. SEE SHEETS 3 AND 104 FOR DETAILS. |
| 0.12-0.14 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | 112.5 | | | | | | | SEE SHEET 104 FOR DETAILS |
| 0.14-0.15 | RT | | | | | | | 50 | | | | | | | | | | | | | | | | | | 65 | | | 12.5 | 1 | | 1 | | REPLACE EXISTING GUARD RAIL WITH GUARD RAIL APPROACH SECTION, TYPE I MOD. AND 12.5FT. OF STEEL BEAM. SEE SHEETS 3 AND 104 FOR DETAILS. |
| 0.09-0.12 | LT | | | | | | | 52 | | | | | | | | | | | | | | | | | | 106 | | | 75 | 1 | | 1 | | REPLACE EXISTING GUARD RAIL WITH GUARD RAIL APPROACH SECTION, TYPE I MOD. AND 75FT. OF STEEL BEAM. SEE SHEETS 3 AND 104 FOR DETAILS. |
| 0.12-0.14 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | 112.5 | | | | | | | SEE SHEET 104 FOR DETAILS |
| 0.14-0.15 | LT | | | | | | | 52 | | | | | | | | | | | | | | | | | | 63 | | | 12.5 | 1 | | 1 | | REPLACE EXISTING GUARD RAIL WITH GUARD RAIL APPROACH SECTION, TYPE I MOD. AND 12.5FT. OF STEEL BEAM. SEE SHEETS 3 AND 104 FOR DETAILS. |
| 3.74 | RT | | | | | | | 3 | | | | | | | | | | | | | | | | | | 56 | | | 62.5 | | 2 | | | REPLACE GUARD RAIL IN SAME LOCATION WRAP BOTH ENDS AND USE 621.60 TYPE ANCHORS SEE SHEET 3 |
| 3.74 | LT | | | | 20 | | | 3 | | | | | | | | | | | | | | | | | | 68 | | | 75 | | 2 | | | REPLACE GUARD RAIL IN SAME LOCATION WRAP BOTH ENDS AND USE 621.60 TYPE ANCHORS USE EARTH BORROW TO BUILD UP SHOULDER BEHIND EXISTING GUARD RAIL AND MOVE NEW RAIL BACK 2'+/- |
| LOWELL-WESTFIELD TOTALS | | | | | 20 | | | 667 | | | | | | | | | | | | | | | | | | 1,175 | 437.5 | | 847.5 | 7 | 7 | 13 | | NOTE: FOR DETAILS OF BRIDGE AT LOWELL MILE MARKER 2.90 SEE BRIDGE SHEETS 14-17 |

LOWELL-WESTFIELD
1985 STATEWIDE SAFETY PROJECT
SHEET 103 OF 200 SHEETS

# WESTFIELD VT. RTE. 100 AT MILE MARKER 0.13




TYPICAL FRONT VIEW OF OFFSET BLOCK TO BE PLACED ON EXISTING CONCRETE POSTS OR PARAPETS.

NOTES:

1. ALL WORK AND MATERIALS NECESSARY TO INSTALL THE RAILING SHALL BE PAID FOR UNDER THE ITEM GUARD RAIL, HEAVY DUTY STEEL BEAM.
2. EXISTING POSTS SHALL BE REPAIRED WITH MORTAR, AS NECESSARY, TO INSURE OFFSET BLOCKS FIT.
3. BOLTS USED TO ATTACH OFFSET BLOCKS TO EXISTING CONCRETE SHALL BE 3/4" WITH NUTS AND WASHERS. BOLTS TO BE PLACED IN EXISTING CONCRETE THROUGH 1" DRILLED AND GROUTED HOLES.
4. LAG SCREWS TO BE 5/8" X 4" WITH WASHER.
6. OFFSET BLOCKS TO BE 6" X 8" X 14" TREATED TIMBER.
7. ADD 50' OF GUARD RAIL APPROACH SECTION, TYPE I MOD. TO EACH CORNER OF THE BRIDGE. SEE STANDARD SB-R48-82 FOR DETAILS.

LOWELL — WESTFIELD

1985 STATEWIDE SAFETY

SHEET 104 OF 200 SHEETS

BRUNING 5X426.3

M.M. 2.650
BEGIN PROJECT

2.55 T-21

2.89 LT. RET. 2.89 RT.
2.91 LT. RET. 2.91 RT.
3.27 LT. RET. STOP RET. LEGAL LOAD LIMIT RET. RET.
T-57
4.19 LT. RET. STOP RET. LEGAL LOAD LIMIT RET. RET.
4.24 LT. BAYLEY HAZEN MILITARY ROAD RET. RET.
4.25 LT. SPEED LIMIT 50 R RET.
4.35 LT. SOUTH 100 RET RET.
SPEED LIMIT 50 N
RET STOP RET LEGAL LOAD LIMIT RET
4.39 LT & 4.42 LT
MONTGOMERY 11 R
MORRISVILLE 22 R
BURLINGTON 57 R
NEWPORT 19 → R
SOUTH 100 WEST 58 R3 R2
4.42 LT FACES EAST
MONTGOMERY 11 N
NEWPORT 19 → N
MORRISVILLE 22 N
BURLINGTON 57 N
SOUTH 100 WEST 58 NORTH 100 N3 N2
MORRISVILLE 22 R
BURLINGTON 57 R
MONTGOMERY 11 → R
IRASBURG 10 R
EAST 58 SOUTH 100 WEST 58 R3 R2
4.42 LT FACES NORTH
N EAST 58 N SOUTH 100 N WEST 58 N
4.48 LT.
MORRISVILLE 22 N
BURLINGTON 57 N
MONTGOMERY 11 → N
IRASBURG 10 N2
JCT R 58 JCT N 58 N
4.52 LT
SPEED LIMIT 35 R
4.63 LT
SPEED LIMIT 35 N
LOWELL EDEN 10 R&S
4.70 LT.
LOWELL EDEN 10 S
4.78 LT. REDUCED SPEED AHEAD R RET
SPEED ZONE AHEAD N
T-25
A-A
MATCH LINE
58 1
58 2
N SPEED ZONE AHEAD
4.06 RT. REDUCED SPEED AHEAD R RET.
RET. LOWELL WESTFIELD 6 RET. 4.16 RT.
RET. BAYLEY HAZEN MILITARY ROAD RET. 4.23 RT.
4.26 RT. SPEED LIMIT 35 RET. RET.
T-29
R STOP R LEGAL LOAD LIMIT R 4.24 RT
N STOP N LEGAL LOAD LIMIT N
JCT N 58 N 4.19 RT.
4.31 RT.
WESTFIELD 6 N
NEWPORT 19 N
IRASBURG 10 → N
MONTGOMERY 11 N N2
4.38 RT.
WESTFIELD 6 R
NEWPORT 19 R
MONTGOMERY 11 R
IRASBURG 10 → R
WEST 58 NORTH 100 EAST 58 R3 R2
WEST 58 NORTH 100 EAST 58 N N2
4.43 RT. NORTH 100 RET RET
RET. STOP RET. LEGAL LOAD LIMIT RET RET
4.40 RT.
4.38 RT.
IRASBURG 10 N
MORRISVILLE 22 → N
BURLINGTON 57 → N
← NEWPORT 19 N
NORTH 100 EAST 58 SOUTH 100 N
FACES WEST
IRASBURG 10 R
NEWPORT 19 R
BURLINGTON 57 → R
MORRISVILLE 22 → R
NORTH 100 EAST 58 SOUTH 100 R3 R2
T-33
R STOP R LEGAL LOAD LIMIT R
N STOP N LEGAL LOAD LIMIT N 4.90 RT.
MATCH LINE

REMOVE AND REPLACE GUARD-RAIL DELINEATORS, MOD.
6.22± 12 UNITS
1.87 ± 8 UNITS

LOWELL N WESTFIELD N
LOWELL WESTFIELD
0.11 LT. RET. 0.13 LT. RET.
0.12 RT 0.14 RT
EQ. 7.091 = 0.000
TOWN LINE
A-A
MATCH LINE
6.14 RT RET STOP RET LEGAL LOAD LIMIT RET RET
T-35

B-B
MATCH LINE
RET STOP RET LEGAL LOAD LIMIT RET 2.62 LT.
T-19
SPEED LIMIT 50 N
END 35 MILE SPEED R RET
3.52 LT.
3.64 LT. SPEED LIMIT 35 RET RET
3.36 RT REDUCED SPEED AHEAD R
SPEED ZONE AHEAD N
3.48 RT WESTFIELD TROY 6 R
WESTFIELD TROY 6 N
3.52 RT. SPEED LIMIT 35 RET RET
3.65 RT. SPEED LIMIT 35 RET RET
3.72 RT R N
T-15
T-91
3.92 LT
3.89± LT
4.19 LT. SPEED LIMIT 35 S
SPEED LIMIT 35 R&S
RET. HIDDEN DRIVE RET. 4.31 LT.
WESTFIELD RET. LOWELL 7 RET. 4.35 LT.
REDUCED SPEED AHEAD R 4.40 LT.
REDUCED SPEED AHEAD N 4.39
END 35 MILE SPEED R RET 4.19 RT.
SPEED LIMIT 50 N
LOOP RD. R&S R
LOOP RD. S N 4.40 RT.
T-4
STOP N IN 4.40 RT.
STOP R LEGAL LOAD LIMIT R 4.41 RT.
STOP N LEGAL LOAD LIMIT N
M.M. 4.686
END PROJECT

JAY 5 S
JAY PEAK S
JAY 5 R&S
JAY PEAK R&S
NORTH 100 N
3.80 LT.
3.81 LT. NORTH 100 R
STOP N LEGAL LOAD LIMIT
3.84 LT. STOP R LEGAL LOAD LIMIT R
2 S STOP N
2 R&S STOP R
3.78 LT & 3.79 LT
RTE. 100
JAY 5 → N
SOUTH 100 N
3.84 LT.
NO SCALE

LEGEND
RET - RETAIN
R - REMOVE
S - SALVAGE
R&S - REMOVE AND SALVAGE
N - NEW

0 0.1 0.2 MI.
SCALE

DATUM
VERTICAL
HORIZONTAL

SURVEYED BY ____ DATE ____
DRAWN BY S.M. DATE 9/25/85
TRACED BY ____ DATE ____
LOWELL-WESTFIELD
PROJ. STATEWIDE NO. F-SFTY(85)S
SHEET 105 OF 200
TRAFFIC SHEET NO. TS10 SHEET ____ OF ____

BRUNING 53428-3
07

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | LEGEND | TYPE | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | EXISTING SIGNS TO BE SALVAGED: RETAIN (EA.) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW AND SALVAGED SIGNS: NEW "B" (S.F.) | NEW AND SALVAGED SIGNS: SALV. SIGN (EA.) | NEW AND SALVAGED SIGNS: SALV. T.I.C. (S.F.) | EXISTING POSTS: RETAIN | EXISTING POSTS: DRILL | EXISTING POSTS: SALV. | NEW POSTS: NUMBER OF POSTS | NEW POSTS: FLANGED CHANNEL 2.0 LB/FT | NEW POSTS: FLANGED CHANNEL 2.5 LB/FT | NEW POSTS: FLANGED CHANNEL 3.0 LB/FT | NEW POSTS: TUBULAR ALUMINUM 3" Ø | NEW POSTS: TUBULAR ALUMINUM 3" □ | NEW POSTS: TUBULAR ALUMINUM 4" Ø | NEW POSTS: TUBULAR ALUMINUM 4" Ø MOD | NEW POSTS: W SHAPE (BREAKAWAY) POST SIZE | NEW POSTS: W SHAPE (BREAKAWAY) WEIGHT | NEW POSTS: W SHAPE (BREAKAWAY) FTG. SIZE 24" | NEW POSTS: W SHAPE (BREAKAWAY) FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SEE: PLAN SHEET NUMBER | FOR SIGN DETAIL SEE: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.89 LT. & RT. | | A | | | X | | | | | X | | | | | | | | | | | | | | | | INSPECT FOR REPLACEMENT AT TIME OF CONSTRUCTION | | |
| 2.91 LT. & RT. | | A | | | X | | | | | X | | | | | | | | | | | | | | | | INSPECT FOR REPLACEMENT AT TIME OF CONSTRUCTION | | |
| 3.27 LT. | STOP | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 4.06 RT. | EXIST. REDUCED SPEED AHEAD / NEW SPEED LIMIT 40 AHEAD | A | 24" x 30" | X | | 5 | | | | X | | | | | | | | | | | | | | | | | | E-15B |
| 4.16 RT. | LOWELL WESTFIELD 6 | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 4.19 LT. | STOP | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 4.19 RT. | JCT | A | 21" x 15" | | | 2.2 | | | | | | | 1 | X | | | | | | | | | | | | | | E-13 |
| | 58 | A | 2' x 2' | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 4.23 RT. | BAYLEY-HAZEN MILITARY ROAD | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 4.24 LT. | BAYLEY-HAZEN MILITARY ROAD | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 4.24 RT. | STOP | A | 30" x 30" | X | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | | E-15C |
| " " | LEGAL LOAD LIMIT | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | E-15A |
| 4.25 LT. | SPEED LIMIT 50 | A | 24" x 30" | X | | 5 | | | | X | | | | | | | | | | | | | | | | | | E-15B |
| 4.26 RT. | SPEED LIMIT 35 | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 4.31 RT. | ← WESTFIELD 6 | A | 72" x 10" | | | 5 | | | | | | | 2 | | | X | | | | | | | | | | | | E-23 |
| " " | ← NEWPORT 19 | A | 72" x 10" | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| " " | IRASBURG 10 → | A | 72" x 10" | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| " " | ← MONTGOMERY 11 | A | 72" x 10" | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| 4.35 LT. | SOUTH | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| " " | 100 | A | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 4.38 RT. (FACES N.B. TRAFFIC) | ← WESTFIELD 6 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | ← NEWPORT 19 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | ← MONTGOMERY 11 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | IRASBURG 10 → | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | WEST | A | 2' x 1' | X | | 2 | | | | | | | 2 | | | X | | | | | | | | | | | | E-13 |
| " " | 58 | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | ← | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | NORTH | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 100 | A | 30" x 24" | X | | 5 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | ↑ | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | EAST | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 58 | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | → | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 4.38 + RT. (FACES E.B. TRAFFIC) | ↑ IRASBURG 10 | A | 72" x 10" | X | | 5 | | | | | | | 3 | | | | X | | | | | | | | | | TOP SIGN ON NEW ASSEMBLY | | E-23 |
| " " " | ← NEWPORT 19 | A | 72" x 10" | X | | 5 | | | | | | | | | | | | | | | | | | | | | FOURTH SIGN FROM TOP ON NEW ASSEMBLY | | E-23 |
| " " " | BURLINGTON 57 → | A | 72" x 10" | X | | 5 | | | | | | | | | | | | | | | | | | | | | THIRD SIGN FROM TOP ON NEW ASSEMBLY | | E-23 |
| " " " | MORRISVILLE 22 → | A | 72" x 10" | X | | 5 | | | | | | | | | | | | | | | | | | | | | SECOND SIGN FROM TOP ON NEW ASSEMBLY | | E-23 |
| " " " | NORTH | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " " | 100 | A | 30" x 24" | X | | 5 | | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " " | ← | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " " | EAST | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " " | 58 | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " " | ↑ | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " " | SOUTH | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | | | E-13 |
| TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

POST LENGTHS ARE APPROXIMATE. FINAL LENGTHS TO BE DETERMINED IN THE FIELD IF FINAL LENGTHS VARY BY MORE THAN 2 FEET, RECOMPUTE THE POST SIZE BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS.

TRAFFIC SHEET NO. TOTAL SHEET ___ OF ___

PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

LOWELL - WESTFIELD

PROJ. NO.

STATEWIDE F-SFTY(85)S

SHEET 106 OF 200

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | LEGEND | TYPE | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | EXISTING SIGNS TO BE SALVAGED: RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.C. (S.F.) | EXISTING POSTS: RETAIN | EXISTING POSTS: DRILL | EXISTING POSTS: SALV. | NEW POSTS: NUMBER OF POSTS | NEW POSTS: FLANGED CHANNEL 2.0 LB/FT | FLANGED CHANNEL 2.5 LB/FT | FLANGED CHANNEL 3.0 LB/FT | TUBULAR ALUMINUM 3" Ø | TUBULAR ALUMINUM 3" □ | TUBULAR ALUMINUM 4" Ø | TUBULAR ALUMINUM 4" Ø MOD. | W SHAPE (BREAKAWAY) POST SIZE | W SHAPE (BREAKAWAY) WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SEE: PLAN SHEET NUMBER | FOR SIGN DETAIL SEE: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4.38 + RT. | 100 | A | 30" x 24" | X | | 5 | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " " | → | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | E-13 |
| 4.39 LT. | ○ STOP | A | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| " " | □ LEGAL LOAD LIMIT | A | | | X | | | | | | | | | | | | | | | | | | | | | | |
| 4.40 RT. | ○ STOP | A | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| " " | □ LEGAL LOAD LIMIT | A | | | X | | | | | | | | | | | | | | | | | | | | | | |
| 4.42 LT | ○ STOP | A | | | X | | | | | X | | | | | | | | | | | | | | | | | |
| 4.42 LT. (FACES W.B. TRAFFIC) | ← MONTGOMERY 11 | A | 72" x 10" | X | | 5 | | | | | | | 3 | | | | X | | | | | | | | | TOP SIGN - NEW ASSEMBLY | | E-23 |
| " " | ← MORRISVILLE 22 | A | 72" x 10" | X | | 5 | | | | | | | | | | | | | | | | | | | | THIRD SIGN FROM TOP ON NEW ASSEMBLY | | E-23 |
| " " | ← BURLINGTON 57 | A | 72" x 10" | X | | 5 | | | | | | | | | | | | | | | | | | | | FOURTH SIGN FROM TOP ON NEW ASSEMBLY | | E-23 |
| " " | NEWPORT 19 → | A | 72" x 10" | X | | 5 | | | | | | | | | | | | | | | | | | | | SECOND SIGN FROM TOP ON NEW ASSEMBLY | | E-23 |
| " " | SOUTH | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 100 | A | 30" x 24" | X | | 5 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | ← | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | WEST | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 58 | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | ↑ | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | NORTH | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 100 | A | 30" x 24" | X | | 5 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | → | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 4.42 LT (FACES S.B. TRAFFIC) | ← MORRISVILLE 22 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | ← BURLINGTON 57 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | MONTGOMERY 11 → | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | ← IRASBURG 10 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | EAST | A | 2' x 1' | X | | 2 | | | | | | | 2 | | | X | | | | | | | | | | | | E-13 |
| " " | 58 | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | ← | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | SOUTH | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 100 | A | 30" x 24" | X | | 5 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | ↑ | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | WEST | A | 2' x 1' | X | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 58 | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | → | A | 21" x 15" | X | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 4.45 RT. | NORTH | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| " " | 100 | A | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 4.48 LT | ← MORRISVILLE 22 | A | 72" x 10" | | | 5 | | | | | | | 2 | | | X | | | | | | | | | | | | E-23 |
| " " | ← BURLINGTON 57 | A | 72" x 10" | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| " " | MONTGOMERY 11 → | A | 72" x 10" | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| " " | ← IRASBURG 10 | A | 72" x 10" | | | 5 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| 4.52 LT | JCT | A | 21" x 15" | X | | 2.2 | | | | | | | 1 | X | | | | | | | | | | | | | | E-13 |
| " " | 58 | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 4.63 LT | □ SPEED LIMIT 35 | A | 24" x 30" | X | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | | E-15B |
| 4.70 LT | □ LOWELL EDEN 10 | A | 30" x 18" | X | X | | | | | | 1 | | 1 | X | | | | | | | | | | | | | TD 522 | |
| 4.78 LT | EXIST. □ REDUCED SPEED AHEAD / NEW □ SPEED ZONE AHEAD | A | 24" x 30" | X | | 5 | | | | X | | | | | | | | | | | | | | | | | | |
| 4.90 RT | ○ STOP | A | 30" x 30" | X | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | | |
| " " | □ LEGAL LOAD LIMIT | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

POST LENGTHS ARE APPROXIMATE. FINAL LENGTHS TO BE DETERMINED IN THE FIELD IF FINAL LENGTHS VARY BY MORE THAN 2 FEET, RECOMPUTE THE POST SIZE BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS.

TRAFFIC SHEET 98 OF 200 SHEET

E-15C
E-15A

PREPARED BY _____ DATE _____
CHECKED BY _____ DATE _____

LOWELL - WESTFIELD
PROJ. STATEWIDE NO. F-SFTY(85)S
SHEET 107 OF 200

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | LEGEND | TYPE | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | EXISTING SIGNS TO BE SALVAGED: RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW AND SALVAGED SIGNS: NEW "B" (S.F.) | NEW AND SALVAGED SIGNS: SALV. SIGN (EA) | NEW AND SALVAGED SIGNS: SALV. T.I.C. (S.F.) | EXISTING POSTS: RETAIN | EXISTING POSTS: DRILL | EXISTING POSTS: SALV. | NEW POSTS: NUMBER OF POSTS | NEW POSTS: FLANGED CHANNEL 2.0 LB/FT | NEW POSTS: FLANGED CHANNEL 25 LB/FT | NEW POSTS: FLANGED CHANNEL 30 LB/FT | NEW POSTS: TUBULAR ALUMINUM 3" ∅ | NEW POSTS: TUBULAR ALUMINUM 3" □ | NEW POSTS: TUBULAR ALUMINUM 4" ∅ | NEW POSTS: TUBULAR ALUMINUM 4" ∅ MOD. | NEW POSTS: W SHAPE (BREAKAWAY) POST SIZE | NEW POSTS: W SHAPE (BREAKAWAY) WEIGHT | NEW POSTS: W SHAPE (BREAKAWAY) FTG. SIZE 24" | NEW POSTS: W SHAPE (BREAKAWAY) FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SEE: PLAN SHEET NUMBER | FOR SIGN DETAIL SEE: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 6.14 RT. | STOP | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT | A | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 7.031 = 0.00 | LOWELL WESTFIELD | A | 60" x 7½" | | | 3.1 | | | | | | | 1 | X | | | | | | | | | | | | | TD 522 | |
| 0.11 LT & 0.12 RT | | A | | | X(2) | | | | | X(2) | | | | | | | | | | | | | | | | INSPECT FOR REPLACEMENT AT TIME OF CONSTRUCTION | | |
| 0.13 LT. & 0.14 RT | | A | | | X(2) | | | | | X(2) | | | | | | | | | | | | | | | | INSPECT FOR REPLACEMENT AT TIME OF CONSTRUCTION | | |
| 2.62 LT. | STOP | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| " " | LEGAL LOAD LIMIT | A | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 3.38 RT. | REDUCED (DIST.) SPEED AHEAD / SPEED ZONE AHEAD (NEW) | A | 24" x 30" | X | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | | E-15B |
| 3.48 RT. | WESTFIELD TROY 6 | A | 30" x 18" | X | | 3.8 | | | | | | | 1 | X | | | | | | | | | | | | | | |
| 3.52 LT. | END 35 MILE SCHOOL SPEED LIMIT 50 | A | | X | | | | | | X | | | | | | | | | | | | | | | | | | |
| 3.52 RT. | SPEED LIMIT 35 | A | 24" x 30" | | | 5 | | | | | | | | | | | | | | | | | | | | MOUNT ON RETAINED POST | | E-15B |
| 3.64 LT. | SPEED LIMIT 35 | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 3.65 RT. | SPEED LIMIT 35 | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 3.72 RT. | | A | 30" x 30" | X | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | TD 522 | |
| 3.78 LT. | STOP | A | 30" x 30" | X | X | | | 1 | | | | | 1 | X | | | | | | | | | | | | | | |
| 3.79 LT. | STOP | A | 30" x 30" | X | X | | | 1 | | | | | 1 | X | | | | | | | | | | | | | | |
| 3.80 LT. | JAY 5 | A | 54" x 7½" | X | X | | | 1 | | | | | 2 | | | X | | | | | | | | | | | | |
| " " | JAY PEAK | A | 54" x 7½" | X | X | | | 1 | | | | | | | | | | | | | | | | | | | | |
| " " | NORTH | A | 2' x 1' | | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 100 | A | 2' x 2' | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | | A | 21" x 15" | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 3.81 LT. | NORTH | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | 100 | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.84 LT. | STOP | A | 30" x 30" | X | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | | E-15C |
| " " | LEGAL LOAD LIMIT | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | E-15A |
| 3.84+ LT. | | A | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| " " | JAY 5 | A | 54" x 7½" | | | 2.8 | | | | | | | 2 | X | | | | | | | | | | | | | | E-23 |
| " " | SOUTH | A | 2' x 1' | | | 2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | 100 | A | 2' x 2' | | | 4 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| " " | | A | 21" x 15" | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 3.88± LT. | | A | 30" x 30" | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | | E-19A |
| 3.92 LT. | | A | 30" x 30" | X | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | TD 522 | |
| 4.19 LT. | SPEED LIMIT 35 END 35 MILE SCHOOL SPEED LIMIT 50 | A | 24" x 30" | X | X | | | 1 | | | | | 1 | X | | | | | | | | | | | | | | |
| 4.19 RT. | | A | | X | | | | | | X | | | | | | | | | | | | | | | | | | |
| " " | | A | 24" x 30" | | | 5 | | | | | | | | | | | | | | | | | | | | MOUNT SIGN ON RETAINED POST | | E-15B |
| 4.31 LT. | HIDDEN DRIVES | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 4.35 LT. | WESTFIELD LOWELL 7 | A | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 4.39 LT. FROM 4.40 LT. | REDUCED SPEED AHEAD / SPEED ZONE AHEAD | A | 24" x 30" | X | | 5 | | | | | | | 1 | X | | | | | | | | | | | | | | E-15B |
| 4.40 RT. | LOOP RD | A | 24" x 6" | X | X | | | 1 | | | | | 1 | X | | | | | | | | | | | | | | |
| 4.40+ RT. | STOP | A | 30" x 30" | | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | | E-15C |
| 4.41 RT. | STOP | A | 30" x 30" | X | | 6.3 | | | | | | | 1 | X | | | | | | | | | | | | | | E-15C |
| " " | LEGAL LOAD LIMIT | A | 2' x 2' | X | | 4 | | | | | | | | | | | | | | | | | | | | | | E-15A |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

POST LENGTHS ARE APPROXIMATE. FINAL LENGTHS TO BE DETERMINED IN THE FIELD IF FINAL LENGTHS VARY BY MORE THAN 2 FEET, RECOMPUTE THE POST SIZE BASED ON INFORMATION FURNISHED ON THE STANDARD SHEETS.

TRAFFIC SHEET NO. ___ OF ___ TOTAL SHEET ___ OF ___

PREPARED BY _____ DATE _____

CHECKED BY _____ DATE _____

LOWELL - WESTFIELD

PROJ. NO. STATEWIDE F-SFTY(85)S

SHEET 108 OF 200

## COMPOSITE SHEET - TRAFFIC ITEM SUMMARY - TRAFFIC SIGN SUMMARY SHEET - NOTES AND DETAILS

| MILEMARKER, STATION, OR SIGN NUMBER | LEGEND | TYPE | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | EXISTING SIGNS TO BE SALVAGED: RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW AND SALVAGED SIGNS: NEW "B" (S.F.) | NEW AND SALVAGED SIGNS: SALV. SIGN (EA.) | NEW AND SALVAGED SIGNS: SALV. T.I.C. (S.F.) | EXISTING POSTS: RETAIN | EXISTING POSTS: DRILL | EXISTING POSTS: SALV. | NEW POSTS: NUMBER OF POSTS | NEW POSTS: FLANGED CHANNEL 2.0 LB/FT | NEW POSTS: FLANGED CHANNEL 2.5 LB/FT | NEW POSTS: FLANGED CHANNEL 3.0 LB/FT | NEW POSTS: TUBULAR ALUMINUM 3"Ø | NEW POSTS: TUBULAR ALUMINUM 3" □ | NEW POSTS: TUBULAR ALUMINUM 4" Ø | NEW POSTS: TUBULAR ALUMINUM 4"Ø MOD. | NEW POSTS: W SHAPE POST SIZE | NEW POSTS: W SHAPE WEIGHT | NEW POSTS: (BREAKAWAY) FTG. SIZE 24" | NEW POSTS: (BREAKAWAY) FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SEE: PLAN SHEET NUMBER | FOR SIGN DETAIL SEE: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | SHEET TD 519 | | | 28 | | 111.5 | | | | | | | | | 236 | | 114 | | | | | | | | | | | |
| | SHEET TD 520 | | | 34 | | 115.9 | | 1 | | | | | | | 280 | | 114 | | | | | | | | | | | |
| | SHEET TD 521 | | | 21 | | 93.9 | | 6 | | | | | | | 524 | | | | | | | | | | | | | |
| TOTALS | COMMAN PROJECT | | | 83 | | 322.3 | | 7 | | | | | | | 1040 | | 228 | | | | | | | | | | | |

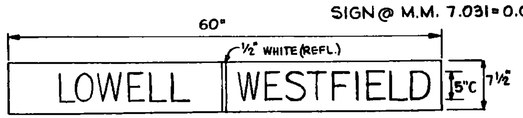
### TRAFFIC ITEM SUMMARY

| ITEM NUMBER | ITEM | | | | | | ROUNDING | UNIT | TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| 675.20 | TRAFFIC SIGNS, TYPE A | 322.3 | | | | | 2.7 | SF | 325 |
| 675.30 | FLANGED CHANNEL SIGN POSTS | 1040 | | | | | 10 | LB. | 1050 |
| 675.32 | TUBULAR ALUMINUM SIGN POSTS | 228 | | | | | 7 | LB. | 235 |
| 675.50 | REMOVING SIGNS | 83 | | | | | - | EA. | 83 |
| 675.60 | ERECTING SALVAGED SIGNS, | 7 | | | | | - | EA | 7 |
| 676.13 | REMOVE AND REPLACE GUARD RAIL DELINEATOR, TYPE A, MOD. | 20 | | | | | - | EA. | 20 |

SEE SHEET TD 504 FOR PROJECT SUMMARY OF QUANTITIES AND REVISION NOTE FOR LEGAL LOAD LIMIT SIGNING

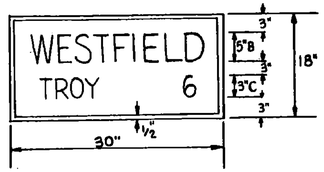
### NOTES AND DETAILS

SIGN @ M.M. 7.031 = 0.00 LT.



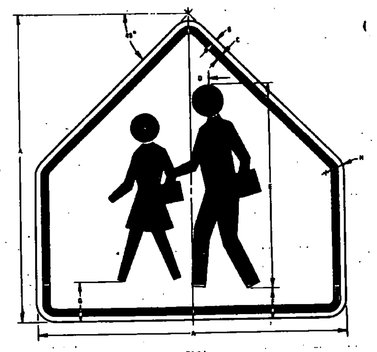

REDUCE LETTER SPACING 50%

COLORS:
TEXT - WHITE (REFL.)
BACKGROUND - GREEN (REFL.)
SEE STD. DWG. E-23 FOR MATERIALS




SIGN @ M.M. 3.48 RT.

COLORS:
TEXT & BORDER - WHITE (REFL.)
BACKGROUND - GREEN (REFL.)
SEE STD. DWG. E-23 FOR MATERIALS



S1-1

| SIGN | DIMENSIONS (INCHES) A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| STD. & MED. | 30 | 1/2 | 3/4 | 2 | 30 | 3 | 3-3/4 | 1-1/2 |
| EXPRY. | 36 | 5/8 | 7/8 | 2-1/2 | 36 | 3-1/2 | 4-1/2 | 2-1/4 |
| SPECIAL | 48 | 3/4 | 1-1/4 | 3-1/2 | 42 | 5 | 6 | 3 |

COLORS
LEGEND - BLACK (NON-REFL)
BACKGROUND - YELLOW

SIGNS @ M.M.S 3.72 Rt & 3.92 Lt.

ITEM SUMMARY AND SIGN DETAILS SHEET

TRAFFIC SHEET NO. TD 522 SHEET ___ OF ___

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

LOWELL-WESTFIELD

PROJ. STATEWIDE NO. F-SFTY(85)S
SHEET 109 OF 200

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S | RC P.E.S | CONC | STEEL | REHAB. DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | | | GUARD RAIL ITEMS 621.20 | | GUARD RAIL ITEMS 621.60 | GUARD RAIL ITEMS 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MENDON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.26 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 7 | REMOVE STEEL GUIDE POST REPLACE WITH DELINEATORS, COST OF REMOVING GUIDEPOSTS TO BE SUBSIDIARY |
| 1.27 | LT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 3 | REMOVE STEEL GUIDE POSTS REPLACE WITH DELINEATORS, COST OF REMOVING GUIDE POSTS TO BE SUBSIDIARY |
| 1.31-1.54 | LT | | | | | | | 141 | | | | | | | | | | | | | | | | | | 1230 | | | 1250 | | | 2 | | REPLACE GUARD RAIL IN APPROXIMATELY THE SAME LOCATION SEE SHEET 3 FOR DETAILS |
| 1.66-1.92 | LT | | | | | | | 146 | | | | | | | | | | | | | | | | | | 1375 | | | 1375 | | | 2 | | REPLACE GUARD RAIL IN APPROXIMATELY THE SAME LOCATION SEE SHEET 3 FOR DETAILS |
| 2.00-2.21 | LT | | | | | | | 135 | | | | | | | | | | | | | | | | | | 1100 | | | 1100 | | | 2 | | REPLACE GUARD RAIL IN APPROXIMATELY THE SAME LOCATION SEE SHEET 3 FOR DETAILS |
| 2.28-2.36 | LT | | | | | | | 112 | | | | | | | | | | | | | | | | | | 420 | | | 475 | | | 2 | | BEGIN NEW GUARD RAIL 50'+/- EASTERLY OF EXISTING SEE SHEET 3 FOR DETAILS |
| 2.41-2.42 | LT | | | | | | | 5 | | | | | | | | | | | | | | | | | | 50 | | | | | | | | REMOVE FIRST 50' FROM BRIDGE, REPLACE WITH APPROACH SECTION TYPE I REMOVE AND RESET REMAINING RAIL TO CONNECT APPROACH SECTION WITH EXISTING B.C.T. COST OF REMOVING AND RESETTING TO BE SUBSIDIARY TO OTHER ITEMS |
| 2.44-2.45 | LT | | | | | | | | | | | | | | | | | | | | | | | | | 50 | | | | | | | | REMOVE FIRST 50' FROM BRIDGE, REPLACE WITH APPROACH SECTION TYPE I, REMOVE AND RESET REMAINING RAIL TO CONNECT APPROACH SECTION WITH EXISTING B.C.T. COST OF REMOVING AND RESETTING TO BE SUBSIDIARY TO OTHER ITEMS |
| 2.52 | LT | | | | 5 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-13 | | | | | | | | | | | | | | REMOVE HEADWALL CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 2.60 | LT | | | | | | | 100 | | | | | | | | | | | | | | | | | | | | | 150 | | | 2 | | USE GUARD RAIL TO SHIELD BOX INLET SEE SHEET 3 FOR DETAILS |
| 2.70 | LT | | | | 10 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | | REMOVE HEADWALL CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 2.77 | LT | | | | 10 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | | REMOVE HEADWALL CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 2.84 | LT | | | | 15 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | | REMOVE HEADWALL OCNSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 2.89 | LT | | | | 15 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | | REMOVE HEADWALL CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 2.97 | LT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | RECONSTRUCT DROP INLET |
| 3.02 | LT | | | | 20 | 4 | 2 | | | | | 36 | 12 | III | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL EXTEND PIPE 12'± USE EARTH BORROW TO FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| 3.31 | LT | | | | 30 | 4 | 2 | | | | | 48 | 12 | III | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL EXTEND PIPE 12'± USE EARTH BORROW TO FLATTEN SIDE SLOPE SEE DETAIL "A" SHEET 4 |
| 3.44 | LT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | RECONSTRUCT DROP INLET |
| 3.49-3.52 | LT | | | | | | | 102 | | | | | | | | | | | | | | | | | | 180 | | | 200 | | | 2 | | EXTEND NEW GUARD RAIL 25'+/- EASTERLY OF EXISTING SEE SHEET 3 FOR DETAILS |
| 3.59 | LT | | | | 10 | 2 | 2 | | | | | 24 | 8 | III | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL EXTEND PIPE 8'± USE EARTH BORROW TO FLATTEN SIDE SLOPE SEE DETAIL "A" SHEET 4 |
| 3.60 | LT | | | | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE PROJECT MARKER PAY AS TRENCH ROCK |
| 3.66 | LT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | RECONSTRUCT DROP INLET |
| 3.67 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 3.72 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 3.79 | LT | | | | 10 | | 2 | | 18 | 8 | .064 | | | | | 1-18" | | | | | | | | | | | | | | | | | | REMOVE HEADWALL EXTEND PIPE 8'± ADD MES FLATTEN SLOPE (EAST SIDE OF DRIVE) SEE DETAIL "B" SHEET 4 |
| 3.79 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL (WEST SIDE OF DRIVE) SEE DETAIL "C" SHEET 4 |
| SHEET TOTALS | | | | | 125 | 20 | 25 | 741 | 18 | 8 | .064 | 24 | 8 | III | 1-18 | | 10.0 | 1,000 | 3 | 5 | | | | | | 4405 | | | 4550 | | | 12 | 10 | NOTE: FOR DETAILS OF BRIDGE AT MILE MARKER 2.43 SEE BRIDGE SHEETS 14-17 |
| | | | | | | | | | | | | 36 | 12 | III | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 48 | 12 | III | | | | | | | | | | | | | | | | | | | |

MENDON—SHERBURN
1985 STATEWIDE SAFETY PROJECT
SHEET 114 OF 200 SHEETS

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S | RCPES | CONC | STEEL | REHAB. DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | | | 621.20 | | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MENDON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.81 | LT | | | | 20 | 2 | 2 | | | | | 18 | 8 | III | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL EXTEND PIPE 8'± FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| 3.84 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 3.86 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 3.88 | LT | | | | | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | REMOVE HEADWALL, OCNSTRUCT DI, REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 3.90 | LT | | | | | | 4 | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALLS FROM DRIVE PIPE SEE DETAIL "C" SHEET 4 |
| 3.91 | LT | | | | 15 | 4 | 4 | | 15 | 16 | .064 | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 8'± FLATTEN SIDESLOPE (BOTH SIDES OF DRIVE) SEE DETAIL "D" SHEET 4 |
| 3.93 | LT | | | | 10 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | REMOVE HEADWALL, CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 3.99 | LT | | | | 15 | 2 | 2 | | 24 | 8 | .064 | | | | 1-18" | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 8'±, ADD MES REGRADE SLOPE SEE DETAIL "B" SHEET 4 |
| 4.06 | LT | | | | 15 | 2 | 2 | | | | | 24 | 8 | III | | 1-18" | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 8'±, ADD MES REGRADE SLOPE SEE DETAIL "B" SHEET 4 |
| 4.12 | LT | | | | 20 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | REMOVE HEADWALL, CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 4.14 | LT | | | | 15 | | 2 | | 15 | 8 | .064 | | | | 1-15 | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 8'± AND ADD MES REGRADE APEA SEE DETAIL "B" SHEET 4 |
| 4.15 | LT | | | | 15 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | REMOVE HEADWALL, CONSTRUCT DROP INLET REGRAD DITCH SEE DETAIL "E" SHEET 4 |
| 4.21 | LT | | | | 15 | 4 | 2 | | 18 | 8 | .064 | | | | | | 3.0 | 300 | | 1-B | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND 18" PIPE 8'., CONSTRUCT 4'X6' DROP INLET, REGRADE DITCH SEE DETAIL "E" SHEE |
| 4.35 | LT | | | | 5 | 2 | 2 | | | | | | | | 1-18" | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, ADD MES REGRADE AREA SEE DETAIL "B" SHEET 4 |
| 4.51 | LT | | | | 10 | 2 | 2 | | | | | 18 | 8 | 111 | | 1-18" | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 8'±, ADD END SECTION REGRADE SLOPE SEE DETAIL "B" SHEET 4 |
| 4.58 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 4.58 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 4.61 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 4.63 | LT | | | | 10 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | REMOVE HEADWALL, CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 4.66 | LT | | | | 40 | 4 | 4 | | 18 | 24 | III | | | | 2-18" | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 12'±, ADD MES, FLATTEN SIDE SLOPE (BOTH SIDES OF DRIVE) SEE DETAIL "D" SHEET 4 |
| 4.75 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 4.86 | LT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | RECONSTRUCT DROP INLET |
| 4.91 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 4.96 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 4.98 | LT | | | | 15 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | REMOVE HEADWALL, CONSTRUCT DROP INLET, REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 5.05 | LT | | | | 40 | 4 | 2 | | | | | 36 | 12 | III | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 12'± USE EARTH BORROW TO FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| 5.36 | LT | | | | 25 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | REMOVE HEADWALL, CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 5.48 | LT | | | | 15 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | REMOVE HEADWALL, OCNSTRUCT DROP INLET, REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| SHEET TOTALS | | | | | 300 | 42 | 60 | | 15 | 24 | .064 | 18 | 16 | III | 1-15 | 2-18 | 19.0 | 1900 | 1 | 9-B | | | | | | | | | | | | | |
| | | | | | | | | | 18 | 32 | .064 | 24 | 8 | III | 4-18 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 24 | 8 | .064 | 36 | 12 | III | | | | | | | | | | | | | | | | | | | |

MENDON-SHERBURN
1985 STATEWIDE SAFETY PROJECT
SHEET 115 OF 200 SHEETS

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | MES | RCPES | CONC | STEEL | REHAB DI | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | | | 621.20 | | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MENDON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5.68 | LT | | | | 15 | 2 | 2 | | 24 | 8 | .064 | | | | 1-24" | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 8± ADD MES AND FLATTEN SLOPE SEE DETAIL "B" SHEET 4 |
| 5.77 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 5.87 | LT | | | | 15 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | | REMOVE HEADWALL, CONSTRUCT DROP INLET, REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 5.92 | LT | | | | 15 | 2 | 2 | | | | | 18 | 4 | III | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 4±, OCNSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| SHERBURNE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.02 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 0.16 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, FROM EAST SIDE OF DRIVE PIPE SEE DETAIL "C" SHEET 4 |
| 0.20 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 0.33-0.44 | LT | | | | | | | 118 | | | | | | | | | | | | | | | | | | 590 | | | 650 | | | 2 | | EXTEND NEW GUARD RAIL 25'+/- IN EACH DIRECTION SEE SHEET 3 FOR DETAILS |
| 0.58-0.65 | LT | | | | | | | 61 | | | | | | | | | | | | | | | | | | 335 | | | 375 | | 1 | 1 | | WRAP WESTERLY END AROUND DRIVE AND EXTEND EASTERLY END 25'+/- SEE SHEET 3 FOR DETAILS |
| 0.83 | LT | | | | 15 | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | RECONSTRUCT DROP INLET REGRADE DITCH |
| 0.91 | LT | | | | 5 | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | RECONSTRUCT DROP INLET REGRADE DITCH |
| 0.98 | LT | | | | 5 | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | RECONSTRUCT DROP INLET REGRADE DITCH |
| 1.21 | LT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL FROM EAST SIDE OF DRIVE PIPE SEE DETAIL "C" SHEET 4 |
| 1.50-1.54 | LT | | | | | 5 | | | | | | | | | | | | | | | 60 | | | | | | | | | | | | | USE STONE FILL TO REGRADE DITCH |
| 1.54 | LT | | | | 5 | | 2 | | | | | | | | | 1-36 | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, ADD MES REGRADE SLOPE SEE DETAIL "B" SHEET 4 |
| 1.58 | LT | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE BOULDER FROM DITCH |
| 1.84-1.89 | | | | | | | | 59 | | | | | | | | | | | | | | | | | | 305 | | | 325 | | 1 | 1 | | WRAP WESTERLY END AROUND DRIVE SEE SHEET 3 FOR DETAILS |
| 2.06-2.18 | | | | | | | | 118 | | | | | | | | | | | | | | | | | | | | | 650 | | | 2 | | NEW GUARD RAIL TO PROTECT SLOPE RAIL WILL END ON VT. 100 SEE SHEET 3 FOR DETAILS |
| SHEET TOTALS | | | | 5 | 75 | 11 | 18 | 356 | 24 | 8 | .064 | 18 | 4 | III | 1-24" 1-36" | | 4.0 | 400 | 3 | 2-B | 60 | | | | | 1230 | | | 2,000 | | 2 | 6 | | |

MENDON-SHERBURN
1985 STATEWIDE SAFETY PROJECT
SHEET 118 OF 200 SHEETS

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | MES | RCPES | CONC | STEEL | REHAB DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604 40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | | | 621.20 | | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MENDON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1.36 | RT | | | | 30 | | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | | REMOVE HEADWALL OCNSTRUCT DROP INLET USE EARTH BORROW TO REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 1.44 | RT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | RECONSTRUCT DROP INLET |
| 1.52 | RT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | RECONSTRUCT DROP INLET |
| 1.68 | RT | | | | 20 | | | | | | | 48 | 4 | III | | | | | | | | | | | | | | | | | | | | EXTEND PIPE 4'± USE EARTH BORROW TO FLATTEN SLOPE SEE DETAIL "A" SHEET 4 |
| 1.73 | RT | | | | 10 | 2 | 2 | | 24 | 4 | .064 | | | | 1-24" | | | | | | | | | | | | | | | | | | | EXTEND PIPE 4 ± ADD MES FLATTEN SIDE SLOPE SEE DETAIL "B" SHEET 4 |
| 1.76 | RT | | | | 20 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | | REMOVE HEADWALL CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 1.81 | RT | | | | 20 | 2 | 2 | | | | | | | | | | 2.0 | 200 | 1-B | | | | | | | | | | | | | | | REMOVE HEADWALL CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 1.84 | RT | | | | 20 | 2 | 2 | | | | | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | | | REMOVE HEADWALL CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 1.90 | RT | | | | 20 | 3 | 2 | | | | | | | | | | 3.0 | 300 | | 2-B | | | | | | | | | | | | | | REMOVE HEADWALL CONSTRUCT 4'X6' DROP INLET W/2 GRATES REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 1.96 | RT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE EXISTING HEADWALL SEE DETAIL "C" SHEET 4 |
| 2.15 | RT | | | | 30 | 2 | 2 | | 24 | 6 | .064 | | | | 1-24" | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE 6'±, ADD MES AND FLATTEN SLOPE SEE DETAIL "B" SHEET 4 |
| 2.24 | RT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | | | RECONSTRUCT DROP INLET |
| 2.25 | RT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE BROKEN LEDGE FROM DITCH COST TO BE SUBSIDIARY TO OTHER ITEMS |
| 2.33 | RT | | | | 10 | 2 | 2 | | | | | | | | | | 2.0 | 200 | 1-B | | | | | | | | | | | | | | | REMOVE HEAD WALL CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 2.38 | RT | | | | 20 | 2 | 2 | | | | | | | | | | 2.0 | 200 | 1-B | | | | | | | | | | | | | | | REMOVE HEADWALL, CONSTRUCT DROP INLET, REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 2.80-2.41 | RT | | | | | | | 50 | | | | | | | | | | | | | | | | | 50 | | 12.5 | | | 1 | | | | REPLACE EXISTING GUARD RAIL W/APPROACH SECTION TYPE I, 12.5' NEW RAIL AND B.C.T. SEE SHEET 3 FOR DETAILS |
| 2.43-2.46 | RT | | | | | | | 5 | | | | | | | | | | | | | | | | | 50 | | | | | | | | | REMOVE FIRST 50' FROM BRIDGE, AND REPLACE WITH APPROACH SECTION, REMOVE AND RESET REMAINING GUARD RAIL TO CONNECT NEW APPROACH SECTION AND EXISTING B.C.T. COST OF REMOVING AND RESETING GUARD RAIL TO BE SUBSIDARY TO THE COST OF OTHER ITEMS |
| 2.53 | RT | | | | | | | 10 | | | | | | | | | | | | | | | | | 187 | | 262.5 | | 2 | | | | | REMOVE EXISTING GUARD RAIL FROM WHEELERVILL ROAD BEGIN NEW RAIL ON TOWN ROAD AND EXTEND TO TURN OUT AREA ON US 4. USE 621.60 TYPE ANCHORS SEE SHEET 3 FOR DETAILS |
| 2.55-2.58 | RT | | | | | | | 59 | | | | | | | | | | | | | | | | | 220 | | 325 | | 1 | 1 | | | | REMOVE EXISTING GUARD RAIL FROM TOWN ROAD AND SHORT SECTION AT 2.58 U.S. 4 REPLACE WITH ONE NEW SECTION EXTENDING 25' +/- EASTERLY OF EXISTING SEE SHEET 3 FOR DETAILS |
| 2.72-2.82 | RT | | | | | | | 114 | | | | | | | | | | | | | | | | | 475 | | 525 | | | 2 | | | | EXTEND NEW GUARD RAIL 50'+/- WESTERLY OF EXISTING SEE SHEET 3 FOR DETAILS |
| 2.95 | RT | | | | | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE AND RESET LAST 8' OF PIPE ONLY PAY ITEM WILL BE TRENCH EARTH |
| 3.23-3.20 | RT | | | | | | | 109 | | | | | | | | | | | | | | | | | 310 | | 400 | | | 2 | | | | EXTEND NEW GUARD RAIL 50' +/- WESTERLY SEE SHEET 3 FOR DETAILS |
| 3.43-3.48 | RT | | | | | | | 105 | | | | | | | | | | | | | | | | | 260 | | 300 | | | 2 | | | | EXTEND NEW GUARD RAIL 40'+/- WESTERLY SEE SHEET 3 FOR DETAILS |
| 3.61 | RT | | | | 5 | | | | | | | | | | 2-18" | | | | | | | | | | | | | | | | | | | ADD MES TO EACH END OF DRIVE PIPE REGRADE SLOPES SEE DETAIL "D" SHEET 4 |
| 3.93-3.98 | RT | | | | | | | 107 | | | | | | | | | | | | | | | | | 250 | | 350 | | | 2 | | | | EXTEND NEW GUARD RAIL 50'+/- ON EACH END SEE SHEET 3 FOR DETAILS |
| SHEET TOTAL | | | | | 205 | 22 | 20 | 559 | 24 | 10 | .064 | 48 | 4 | III | 2-18" 2-24" | | 15.0 | 1,500 | 3 | 8-B | | | | | | 1832 | | 2175 | | 3 | 10 | | | | NOTE: FOR DETAILS OF BRIDGE AT MILE MARKER 2.42 SEE BRIDGE SHEETS 14-17 |

MENDON-SHERBURN
1985 STATEWIDE SAFETY PROJECT
SHEET 117 OF 200 SHEETS

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | MES | RCPES | CONC | STEEL | RE-HAB DI | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604 40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | 621.20 | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MENDON | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4.74-4.83 | RT | | | | | | | 112 | | | | | | | | | | | | | | | | | | 480 | | 475 | | 2 | | REPLACE EXISTING GUARD RAIL AT APPROXIMATELY THE SAME LOCATION SEE SHEET 3 FOR DETAILS |
| 5.03-5.07 | RT | | | | | | | 104 | | | | | | | | | | | | | | | | | | 210 | | 275 | | 2 | | EXTEND NEW GUARD RAIL 60'+/- EASTERLY SEE SHEET 3 FOR DETAILS |
| 5.33-5.37 | RT | | | | | | | 102 | | | | | | | | | | | | | | | | | | | | 200 | | 2 | | USE NEW GUARD RAIL TO PROTECT STEEP SLOPE SEE SHEET 3 FOR DETAILS |
| SHERBURN | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.34-0.44 | RT | | | | | | | 132 | | | | | | | | | | | | | | | | | | 556 | | 1025 | | 2 | | BEGIN NEW GUARD RAIL 475' WESTERLY OF EXISTING SEE SHEET 3 FOR DETAILS |
| 0.58-0.61 | RT | | | | | | | 117 | | | | | | | | | | | | | | | | | | 330 | | 600 | | 2 | | EXTEND NEW GUARD RAIL 175'+/- WESTERLY AND 100'+/- EASTERLY SEE SHEET 3 FOR DETAILS |
| 0.82 | RT | | | | | | | | | | | | | | | | | | | | | | | | | 25 | | | | | | REMOVE EXISTING GUARD RAIL |
| 0.81 | RT | | | | | | | | | | | | | | | | | | | | 10 | | | | | | | | | | | USE STONE FILL TO FILL HOLE AT END OF PIPE |
| 1.04-1.10 | RT | | | | | | | 112 | | | | | | | | | | | | | | | | | | 325 | | 475 | | 2 | | EXTEND NEW GUARD RAIL 100'+/- WESTERLY AND 50'+/- EASTERLY SEE SHEET 3 FOR DETAILS |
| 1.29-1.41 | RT | | | | | | | 77 | | | | | | | | | | | | | | | | | | 620 | | 800 | 1 | 1 | | BEGIN NEW GUARD RAIL 125'+/- WESTERLY AND EXTEND EASTERLY TO WRAP AROUND DRIVE SEE 3 FOR DETAILS |
| 1.43-1.53 | RT | | | | | | | 77 | | | | | | | | | | | | | | | | | | 490 | | 800 | 1 | 1 | | WRAP WESTERLY END AROUND DRIVE EXTEND EASTERLY END 175'± SEE SHEET 3 FOR DETAILS |
| 1.72-1.87 | RT | | | | | | | 126 | | | | | | | | | | | | | | | | | | 850 | | 850 | | 2 | | REPLACE IN APPROXIMATELY THE SAME LOCATION SEE SHEET 3 FOR DETAILS |
| 1.93 | RT | | | | 20 | 2 | 2 | | 18 | 6 | .064 | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | REMOVE HEADWALL, EXTEND PIPE, CONSTRUCT DROP INLET AND REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 1.96 | RT | | | | 25 | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | RECONSTRUCT DROP INLET, REGRADE AREA |
| 2.03 | RT | | | | | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | REMOVE HEADWALL SEE DETAIL "C" SHEET 4 |
| 2.09 | RT | | | | 15 | 4 | 2 | | | | | 18 | 8 | III | | | 3.0 | 300 | | 2-B | | | | | | | | | | | | REMOVE HEADWALL EXTEND 18" PIPE 8'± CONSTRUCT 4'X6' DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 2.15 | RT | | | | 5 | 2 | 2 | | 18 | 4 | .064 | | | | | | 2.0 | 200 | | 1-B | | | | | | | | | | | | REMOVE HEADWALL EXTEND PIPE 4'± CONSTRUCT DROP INLET REGRADE DITCH SEE DETAIL "E" SHEET 4 |
| 2.18 | RT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | RECONSTRUCT DROP INLET |
| 2.21 | RT | | | | | | | | | | | | | | | | | | 1 | | | | | | | | | | | | | RECONSTRUCT DROP INLET |
| SHEET TOTALS | | | | | 65 | 8 | 8 | 959 | 18 | 10 | .064 | 18 | 8 | III | | | 7.0 | 700 | 3 | 4-B | 10 | | | | | 3,886 | | 5,500 | 2 | 16 | | |

MENDON-SHERBURN
1985 STATEWIDE SAFETY PROJECT
SHEET 118 OF 200 SHEETS

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

| MILE MARKER | POS | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S | RCPES | CONC | STEEL | REHAB. DI | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | | GUARD RAIL ITEMS 621.20 | | GUARD RAIL ITEMS 621.60 | GUARD RAIL ITEMS 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MENDON-SHERBURNE | TOTALS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SHEET 114 | | | | | 125 | 20 | 25 | 741 | 18 | 8 | .064 | 24 | 8 | III | 11-18 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 36 | 12 | III | | | 10.0 | 1,000 | 3 | 5-B | | | | | | 4,550 | | 4,550 | | 12 | 10 | | |
| | | | | | | | | | | | | 48 | 12 | III | | | | | | | | | | | | | | | | | | |
| SHEET 115 | | | | | 300 | 42 | 60 | | 15 | 24 | .064 | 18 | 16 | III | 1-15 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 18 | 32 | .064 | 24 | 8 | III | 1-48" | 2-18" | 19.0 | 1,900 | 1 | 9-B | | | | | | | | | | | | |
| | | | | | | | | | 24 | 8 | .064 | 36 | 12 | III | | | | | | | | | | | | | | | | | | |
| SHEET 116 | | | | 5 | 75 | 11 | 18 | 356 | 24 | 8 | .064 | 18 | 4 | III | 1-24 | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 1-36 | | 4.0 | 400 | 3 | 2-B | 60 | | | | | 4,230 | | 2,000 | | 2 | 6 | | |
| SHEET 117 | | | | | 205 | 22 | 20 | 559 | 24 | 10 | .064 | 48 | 4 | III | 2-18" | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 2-24" | | 15.0 | 1,500 | 3 | 8-B | | | | | | 1,832 | | 2,175 | | 3 | 10 | | |
| SHEET 118 | | | | | 65 | 8 | 8 | 959 | 18 | 10 | .064 | 18 | 8 | III | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | 7.0 | 700 | 3 | 4-B | 10 | | | | | 3,886 | | 5,500 | | 2 | 16 | | |
| PROJECT TOTALS | | | | 5 | 770 | 103 | 131 | 2615 | 15 | 24 | .064 | 18 | 28 | III | 1-15" | 2-18" | 55.0 | 5,500 | 13 | 28-B | 70 | | | | | 11,355 | | 14,225 | | 7 | 141 | 10 | |
| | | | | | | | | | 18 | 50 | .064 | 24 | 16 | III | 3-18" | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | 24 | 26 | .064 | 36 | 24 | III | 3-24" | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | 48 | 16 | III | 1-36" | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | 1-48" | | | | | | | | | | | | | | | | | | |

MENDON—SHERBURN
1985 STATEWIDE SAFETY PROJECT
SHEET 119 OF 200 SHEETS.

M.M. 1.254
BEGIN PROJECT

E. PITTSFORD 2
CHITTENDEN 6
CHITTENDEN (VIA CLARENDON) 8
RET. 3

TULIP TREE INN
MOUNTAINTOP INN
MT. TOP SKI TOURING CTR.
SCHOOL BUS STOP AHEAD
MENDON RUTLAND 4
WATCH FOR TURNING VEH.
DO NOT PASS
UNSAFE TO PASS
STOP
LEGAL LOAD
SLOWER TRAFFIC KEEP RIGHT
TRUCK LANE 900 FEET
MEADOW LAKE RD
MEDWAY RD
BLIP WHEN WET
JOURNEYS END
RED CLOVER INN
THE VERMONT INN
HIDDEN SIDE RD.
SPEED LIMIT 50
LEGAL LOAD LIMIT
WOODWARD RD
THE VERMONT INN ON RIGHT
WHEELERVILLE RD
RELOCATE FOR BETTER VISABILITY
EIDELWEISS MOTEL ON RIGHT
PASS WITH CARE
MENDON
SHERBURNE
PICO PEAK SKI AREA 1200 FT.
HIDDEN DRIVE RT.
WINTERBERRY RD
WINTERBERRY PROPERTY VILLAGE
LEFT TURN OR U-TURN
U-TURN AHEAD
2-TYPE "A" ASSEMBLIES 1.20 Rt & 1.21 Rt.
REDUCED SPEED AHEAD
T.I.S.
SPEED LIMIT 40
THRU TRAFFIC KEEP RIGHT
SEE 1.83 RT AT RIGHT
NORTH SIDE DR.
OLD COACH RD
BROAD AHEAD DR.
WATCH FOR SUDDEN STOPS AND TURNS
FORM SINGLE LINE
TRUCK LANE ENDS
THE LONG TRAIL
APPALACHIAN TRAIL
SHERBURNE PASS ELEV. 2150 FT.
MILE
ROUTE JCT.
FILLINGTON BASIN
KILLINGTON BASIN
PICO PEAK SKI AREA
RUTLAND
PITTSFIELD
BARRE
MONTPELIER
PRES. COOLIDGE HOME
WOODSTOCK
WHITE RIVER JCT.
PACES WEST
PACES EAST
SOUTH
NORTH
ON BACK
TOWN LINE
EQ 5.928= 0.000

New Signs to be Supplied by State.
Erect As Salvaged Signs

SIGN READS E. BOUND & W. BOUND
THE LONG TRAIL A FOOTPATH IN THE WILDERNESS
APPALACHIAN TRAIL

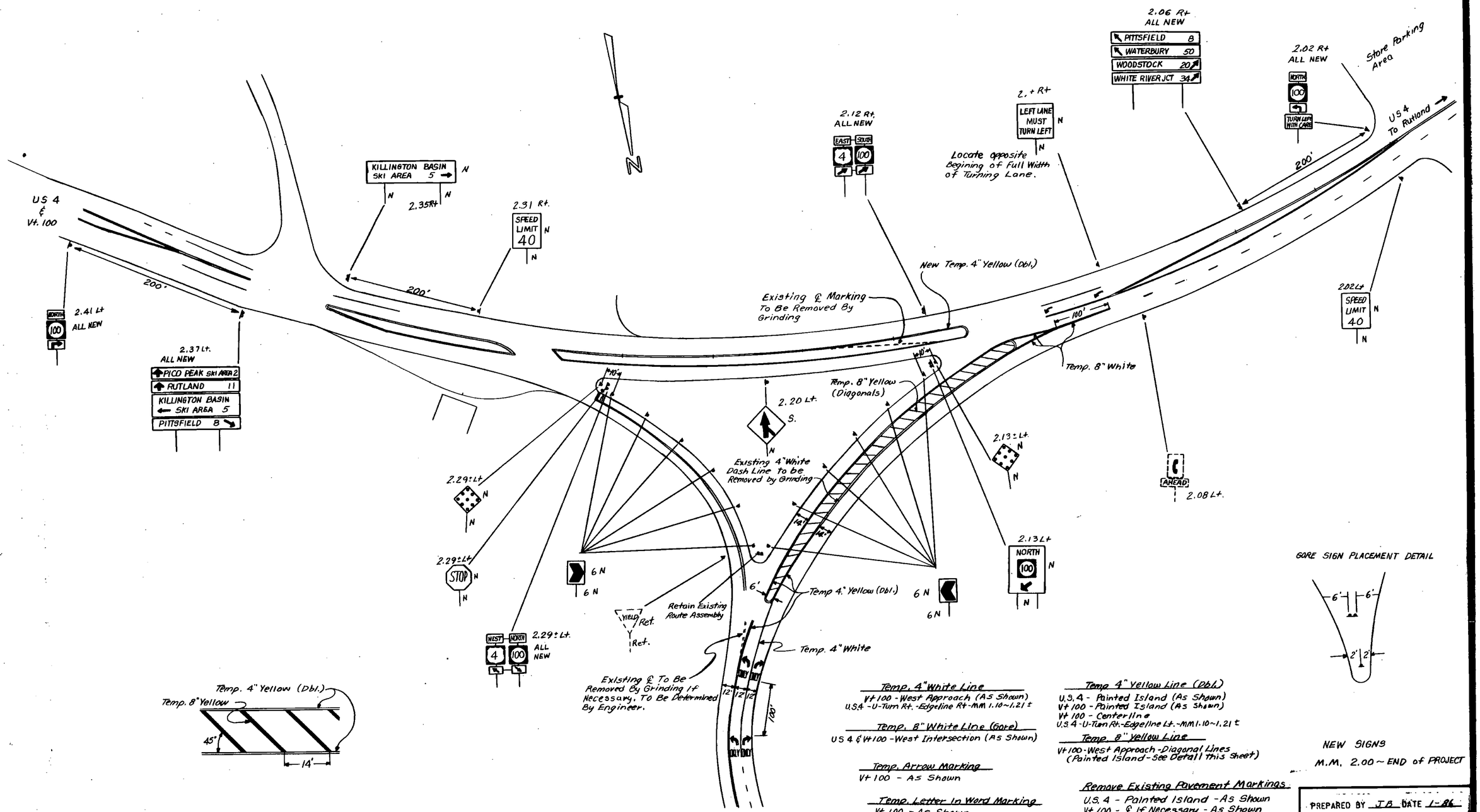
NOTE:
For New Signs mm 2.00 to End of Project, See Sh. # 545

LEGEND
R - REMOVE
RET - RETAIN
R & S - REMOVE & SALVAGE
N - NEW
S - SALVAGED
[ ] - EXISTING SIGN
[ ] - NEW OR SALVAGED SIGN

DATUM
VERTICAL
HORIZONTAL

SURVEYED BY
DRAWN BY S.H.M. DATE 9/10/85
TRACED BY DATE

MENDON - SHERBURNE
PROJ. STATEWIDE NO. F-SFTY(85)S
TRAFFIC SHEET NO. 72 SHEET NO. OF




GORE SIGN PLACEMENT DETAIL




**Temp. 4" White Line**
Vt 100 - West Approach (As Shown)
U.S.4 - U-Turn Rt. - Edgeline Rt - MM 1.10~1.21 ±

**Temp. 8" White Line (Gore)**
U.S.4 & Vt 100 - West Intersection (As Shown)

**Temp. Arrow Marking**
Vt 100 - As Shown

**Temp. Letter In Word Marking**
Vt 100 - As Shown
U.S.4 - U-Turn Rt. - MM 1.20 ± "STOP"

**Temp. 24" Stop Bar**
U.S.4 - U-Turn Rt - MM 1.20 ±

**Temp. 4" Yellow Line (Dbl.)**
U.S.4 - Painted Island (As Shown)
Vt 100 - Painted Island (As Shown)
Vt 100 - Centerline
U.S.4 - U-Turn Rt. - Edgeline Lt. - MM 1.10~1.21 ±

**Temp. 8" Yellow Line**
Vt 100 - West Approach - Diagonal Lines
(Painted Island - See Detail This Sheet)

**Remove Existing Pavement Markings**
U.S. 4 - Painted Island - As Shown
Vt 100 - ℄ If Necessary - As Shown

NEW SIGNS
M.M. 2.00 ~ END of PROJECT

DATUM
VERTICAL _____
HORIZONTAL _____

PREPARED BY JB DATE 1-86
CHECKED BY _____ DATE _____
MENDON - SHERBURNE
PROJ. STATEWIDE NO. F-SFTY(85)S
TRAFFIC SHEET NO. 7 OF 41 SHEET 21 OF 36

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" ∅ | 3.0" □ | 4.0" ∅ | 4.0" ∅ MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| L.26 Lt. | STOP | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| L.27 Lt. | STOP | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| L.27 Lt. | E. PITTSFORD 2 → | | | | X | | | | | X(2) | | | | | | | | | | | | | | | | | | |
| L.27 Lt. | CHITTENDEN 6 → | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| L.27 Lt. | CHITTENDEN NATIONAL FISH GAME 8 → | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| L.27 Lt. | MEADOW LAKE RD. | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | Relocate For Better Visibility | | |
| L.34 Lt. | E. PITTSFORD 2 ↱ | 72" X 10" | | | | 5.0 | | | | | | | | 2 | X | | | | | | | | | | | | | E-23 |
| L.34 Lt. | CHITTENDEN 6 ↱ | 72" X 10" | | | | 5.0 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| L.38 Lt. | MENDON RUTLAND 4 | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| L.39 Lt. | | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| L.40 Lt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| L.42 Lt. | SCHOOL BUS STOP AHEAD | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| L.46 Lt. | TULIP TREE INN →5 | * 75" X 16" | * 1 | * X | | | | | B.3 | | | X | | * 2 | | | X | | | | | | | | | *Note: All quantities to be included in T.I.S. = Item 680.20 MOB. (NON-PARTICIPATING) | | |
| L.46 Lt. | MOUNTAINTOP INN →5 | * 75" X 16" | * 1 | * X | | | | | B.3 | | | | | | | | | | | | | | | | | | | |
| L.50 Lt. | Mt Top Ski Touring Ctr →6 | | | | X | | | | | X(2) | | | | | | | | | | | | | | | | | | |
| L.55 Lt. | WATCH FOR TURNING VEH. | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| L.59 Lt. | STOP / LEGAL LOAD LIMIT | 30" X 30" | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| | | 24" X 24" | 1 | X | | | | 1 | | | | | | | | | | | | | | | | | | | | |
| L.59 Rt. | TRUCK LANE 700 FEET | 24" X 30" | | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15A |
| L.62 Lt. | MEDWAY RD | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| L.69 Rt. | SLOWER TRAFFIC KEEP RIGHT | 24" X 30" | 1 | | | 5.0 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15A |
| L.78 Lt. | DO NOT PASS | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| L.78 Lt. | UNSAFE TO PASS | 36" X 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 7 | | | 29.0 # | | 4 | 16.6 # | | | | | 8 | 184 # | | 48 * | | | | | | | | | | TD 557 | |

FINAL 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".

PREPARED BY JB DATE 1-86

CHECKED BY _____ DATE _____

MENDON ~ SHERBURNE PROJ. STATEWIDE NO. F-SFTY (85)S

TRAFFIC SHEET NO. TD 557 SHEET 122 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE X | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB./FT. | FLANGED CHANNEL 2.5 LB./FT. | FLANGED CHANNEL 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" ∅ | TUBULAR ALUMINUM 3.0" □ | TUBULAR ALUMINUM 4.0" ∅ | TUBULAR ALUMINUM 4.0" ∅ MOD. | W SHAPED STEEL POST SIZE | W SHAPED STEEL WEIGHT | W SHAPED STEEL FTG. SIZE 24" | W SHAPED STEEL FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | FOR SIGN DETAIL SHEET: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| _____. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| __L82_Lt. | | 30" x 30" | 1 | | | 6.3 | | | | | | X | | 1 | | X | | | | | | | | | | | | E-19A |
| __L84_Lt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| __L94_Lt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| __2.09_Lt. | | 30" x 30" | | | | 6.3 | | | | | | | | 1 | | X | | | | | | | | | | | | E-19A |
| __2.13_Lt. | DO NOT PASS | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | TD557 | |
| __2.13_Lt. | UNSAFE TO PASS | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | | | | | | | | | | | | | |
| __2.24_Rt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| | SLIPPERY WHEN WET | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| __2.41_Lt. | | 12" x 36" | | | | 3.0 | | | | | | | | 1 | X | | | | | | | | | | | | | TD558 | E-7 |
| __241_Rt. | | 12" x 36" | | | | 3.0 | | | | | | | | 1 | X | | | | | | | | | | | | | TD558 | E-7 |
| __2.44_Lt. | | 12" x 36" | | | | 3.0 | | | | | | | | 1 | X | | | | | | | | | | | | | TD558 | E-7 |
| __244_Rt. | | 12" x 96" | | | | 30 | | | | | | | | 1 | X | | | | | | | | | | | | | TD558 | E-7 |
| __2.46_Rt. | SLOWER TRAFFIC KEEP RIGHT | 24" x 30" | 1 | | | 5.0 | | | | | | X | | 1 | X | | | | | | | | | | | | | | E-15A |
| __2.50_Rt. | STOP / LEGAL LOAD LIMIT | 30" x 30" / 24" x 24" | 1 | | | 6.3 / 4.0 | | | | | | X | | 1 | X | | | | | | | | | | | | | | E-15C / E-15A |
| __2.50_Rt. | WHEELERVILLE RD | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | | |
| __2.54_Lt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| __2.54_Lt. | SLIP WHEN WET | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| __2.56_Rt. | SPEED LIMIT 50 | 24" x 30" | 1 | | | 5.0 | | | | | | X(2) | | 1 | X | | | | | | | | | | | | | | E-15B |
| __2.61_Rt. | HIDDEN SIDE ROAD | | 1 | | | | | | | X | | | | | | | | | | | | | | | | | | | |
| __2.61_Rt. | | 30" x 30" | | | | 6.3 | | | | | | | | | | | | | | | | | | | | | | Mount on Retained Post | TD557 | |
| _____. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| _____. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 13 | | | 60.2# | | 1 | | | | | | 11 | 228# | 80# | 48# | | | | | | | | | | | | |

FINAL 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".

PREPARED BY JB DATE 1-86

CHECKED BY _____ DATE _____

PROJ. MENDON ~ SHERBURNE STATEWIDE NO. F-SFTY (85)S

TRAFFIC SHEET NO. TD447 SHEET 125 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS RET. | DRILL | REM. | SALV. | NEW SIGN POSTS NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET PLAN SHEET NUMBER | FOR SIGN DETAIL SHEET STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.62 Lt. | | 30" x 30" | 1 | | | 6.3 | | | | | | X | | 1 | | X | | | | | | | | | | | | E-19A |
| 2.62 Lt. | 40 MPH | 18" X 18" | 1 | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| 2.77 Lt. | JOURNEYS END | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| 2.77 Lt. | STOP / LEGAL LOAD LIMIT | 30" x 30" | 1 | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15C |
| | | | 1 | X | | | | 1 | | | | | | | | | | | | | | | | | | | TD557 | |
| 2.88 Lt. | | 30" x 30" | | | | 6.3 | | | | | | | | 1 | X | | | | | | | | | | | | | |
| 2.88 Lt. | HIDDEN SIDE RD | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 2.94 Rt. | Red Clover Inn ½ | | | | X | | | | | X(2) | | | | | | | | | | | | | | | | | | |
| 2.94 Rt. | The Vermont Inn ½ | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 3.00 Lt. | DO NOT PASS | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | TD557 | |
| 3.00 Lt. | UNSAFE TO PASS | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | E-15A |
| 3.00 Rt. | SLOWER TRAFFIC KEEP RIGHT | 24" x 30" | 1 | | | 5.0 | | | | | | X(2) | | 1 | X | | | | | | | | | | | | | |
| 3.04 Rt. | STOP / LEGAL LOAD LIMIT | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| | | | | | X | | | | | | | | | | | | | | | | | | | | | | | |
| 3.04 Rt. | WOODWARD RD | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| 3.13 Lt. | Red Clover Inn 300 Ft ½ | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 3.40 Lt. | DO NOT PASS | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | TD557 | |
| 3.40 Lt. | UNSAFE TO PASS | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | |
| 3.51 Lt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | Chevrons to be placed @ 6' offset | | E-19 |
| 3.51 Lt. | | 24" x 30" | | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | | | |
| 3.52 Lt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | " " " " " " " | | E-19 |
| | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.52 Lt. | | 24" x 30" | | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | | " " " " " " " | | E-19 |
| 3.53 Lt. | | 24" x 30" | | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | | | | E-15C |
| 3.53 Lt. | STOP / LEGAL LOAD LIMIT | 30" x 30" | 1 | | | 6.3 | | | | X | | | | | | | | | | | | | | | | | | E-15A |
| | | 24" x 24" | 1 | | | 4.0 | | | | | | | | | | | | | | | | | | | | | | |
| --------- | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 16 | | | 69.5# | | 3 | | | | | | 11 | 220# | | 40# | | | | 96# | | | | | | | |

FINAL 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".

PREPARED BY JB DATE 1-86

CHECKED BY _____ DATE _____

MENDON ~ SHERBURNE

PROJ. STATEWIDE NO. F-SFTY(85)S

TRAFFIC SHEET NO. 72548 SHEET 124 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S. (S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3.52 Lt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.52 Lt. | | 24" x 30" | | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | Chevrons to be placed @ 6' offset | | E-19 |
| 3.60 Lt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3.60 Lt. | | 24" x 30" | | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | " " " " " " | | E-19 |
| 3.74 Lt. | 40 MPH | 30" x 30" | 1 | | | 6.3 | | | | | | X | | 1 | | X | | | | | | | | | | | | E-19A |
| | | 18" x 18" | 1 | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | E-19B |
| 3.86 Lt. | The Vermont Inn on Right 1½ | | | X | | | | | | X (2) | | | | | | | | | | | | | | | | | | |
| 3.92 Lt. | DO NOT PASS | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| 3.92 Lt. | UNSAFE TO PASS | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | TD 557 | |
| 4.00 Rt. | SLOWER TRAFFIC KEEP RIGHT | 24" x 30 | | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15A |
| 4.14 Lt. | PASS WITH CARE | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | TD 557 | |
| 4.55 Lt. | DO NOT PASS | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 4.55 Lt. | UNSAFE TO PASS | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | TD 557 | |
| 4.62 Lt. | DO NOT PASS | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 4.62 Lt. | UNSAFE TO PASS | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | TD 557 | |
| 4.95 Lt. | DO NOT PASS | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 4.95 Lt. | UNSAFE TO PASS | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | TD 557 | |
| 5.11 Lt. | Eidelweiss Motel on Right 1¼ | | | X | | | | | | X (2) | | | | | | | | | | | | | | | | | | |
| 5.25 Lt. | | 30" x 30" | 1 | | | 6.3 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-19A |
| 5.32 Rt. | SLOWER TRAFFIC KEEP RIGHT | 24" x 30" | 1 | | | 5.0 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15A |
| 5.45 Lt. | PASS WITH CARE | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 5.45 Lt. | PASS WITH CARE | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | TD 557 | |
| 5.47 Lt. | STOP | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 14 | | | 88.9# | | | | | | | | 12 | 140# | 40# | 288# | | | | | | | | | | | |

FINAL 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".

PREPARED BY JB DATE 1-86

CHECKED BY _____ DATE _____

PROJ. STATEWIDE MENDON ~ SHERBURNE NO. F-SFTY(85)S

TRAFFIC SHEET NO. TD542 SHEET 125 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS RET. | DRILL | REM. | SALV. | NEW SIGN POSTS NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" ∅ | 3.0" □ | 4.0" ∅ | 4.0" ∅ MOD. | W SHAPED STEEL POST SIZE | WEIGHT | FTG. SIZE 24" | 30" | REMARKS | FOR SIGN DETAIL SHEET PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 5.75 Lt. | | 30" x 30" | 1 | | | 6.3 | | | | X | | | | | | | | | | | | | | | | | | E-19A |
| 5.78 Lt. | DO NOT PASS | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 5.81 Lt. | UNSAFE TO PASS | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | TD557 | |
| 5.80 Rt. | WATCH FOR TURNING VEH | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 5.85 Rt. | PICO FRWY 5N1 AREA 1000 FT | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 5.928 = 0.000 | MENDON SHERBURNE | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 0.05 Lt. | PASS WITH CARE | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | TD557 | |
| 0.09 Lt. | STOP / LEGAL LOAD LIMIT | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| 0.11 Lt. | OLD COACH RD | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| 0.20 Lt. | STOP / LEGAL LOAD LIMIT | 30" x 30" | | | | 6.3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15C |
| | | 24" x 24" | | | | 4.0 | | | | | | | | | | | | | | | | | | | | | | E-15A |
| 0.21 Lt. | NORTH SIDE DR. | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | |
| 0.25 Lt. | HIDDEN DRIVE Rt | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 0.25 Lt. | | 30" x 30" | | | | 6.3 | | | | | | | | 1 | X | | | | | | | | | | | | TD557 | |
| 0.34 Lt. | DO NOT PASS | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 0.34 Lt. | UNSAFE TO PASS | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | TD557 | |
| 0.40 Lt. | PICO FRWY 5N1 AREA 1200 FT | 36" x 36" | 1 | | | 9.0 | | | | | | X | | 1 | | | X | | | | | | | | | | TD558 | |
| 0.46 Rt. | SPEED LIMIT 50 | 24" x 30" | | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | | | E-15B |
| 0.48 Rt. | SPEED LIMIT 50 | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| 0.50 Rt. | PED X-INS | | 1 | | | | | | | X | | | | | | | | | | | | | | | | | | |
| | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.50 Rt. | | 36" x 36" | | | | 9.0 | | | | | | | | | | | | | | | | | | | | | Mount on Retained Post. | | E-19B |
| 0.52 Lt. | PASS WITH CARE | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| 0.52 Lt. | PASS WITH CARE | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | TD557 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 11 | | | 81.9# | | 2 | | | | | | 10 | 132# | | 240# | | | | | | | | | | | |

FINAL 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".

PREPARED BY JB DATE 1-86

CHECKED BY _____ DATE _____

PROJ. MENDON ~ SHERBURNE STATEWIDE NO. F-SAFTY(85)S

TRAFFIC SHEET NO. TD550 SHEET 126 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | X | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" ∅ | 3.0" □ | 4.0" ∅ | 4.0" ∅ MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| __0.53_Rt. | STOP / LEGAL LOAD LIMIT | | | | X | | | | | X | | | | | | | | | | | | | | | | | | | |
| | | | | | X | | | | | | | | | | | | | | | | | | | | | | | | |
| __0.53_Rt. | BRAD MEAD DR. | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | | |
| __0.54_Rt. | FORK SINGLE LINE | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| __0.54_Rt. | | 36" x 36" | | | | 9.0 | | | | | | | | 2 | X | | | | | | | | | | | | | E-19A | |
| __0.59_Rt. | WHEN WET SLIPPERY WHEN DRY | 48" x 48" | 1 | X | | | | 1 | | | | X | | 2 | | | X | | | | | | | | | | | | |
| __0.61_Lt. | 7% GRADE | 48" x 48" | 1 | X | | | | | | | | X | | | | | | | | | | | | | | | Mount at MM 0.69 Lt. | | |
| | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| __0.64_Lt. | SPEED LIMIT 50 | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| __0.65_Rt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| __0.65_Rt. | TRUCK LANE ENDS | 36" x 48" | | | | 12.0 | | | | | | | | 2 | | X | | | | | | | | | | | Use "Special" Size Due to Crest of Mt. | | E-15A |
| __0.68_Lt. | 2 MILES | 48" x 48" | | | | | | 1 | | | | | | 2 | | | X | | | | | | | | | | | TD557 | |
| | SHERBURNE PASS ELEV. 2150 FT. 2 EA. | 18" x 18" (2 EA.) | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | | |
| __0.70_Rt. | | 24" x 24" | | | | 8.0 | | | | | | | | 1 | X | | | | | | | | | | | | Mount 2 signs Back to Back | TD558 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | E-19B |
| __0.72_Rt. | 1 MILE | 48" x 48" | | | | 16.0 | | | | | | | | 2 | | X | | | | | | | | | | | | TD557 | |
| | | 18" x 18" | | | | 2.3 | | | | | | | | | | | | | | | | | | | | | | | |
| __0.76_Lt. | SHERBURNE PASS ELEV. 2150 FT. | | 2 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| __0.77_Lt. | THE LONG TRAIL A FOOTPATH IN THE WILDERNESS 2 EA. | (2 EA.) 30" x 18" | 2 | | | | | 2 | | | | X | | 1 | | | X | | | | | | | | | | Mount Back to Back. Signs to be furnished by State. Erect as Salv. Signs. Same post. " " " " " Mount Back to Back. | | |
| __0.77_Lt. | APPALACHIAN TRAIL 2 EA. | (2 EA.) 30" x 18" | 2 | | | | | 2 | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| __0.78_Rt. | 7% GRADE | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | | |
| | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | Use "Special" Size Due to Crest of Mt. | | E-15A |
| __0.80_Lt. | TRUCK LANE ENDS | 36" x 48" | | | | 12.0 | | | | | | | | 2 | X | | | | | | | | | | | | | | |
| __0.81_Lt. | WHEN FOG TURNING VEH. | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | TD557 | |
| __0.84_Lt. | WHEN FOG TURNING VEHICLES | 36" x 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 16 | | | 70.6# | | 7 | | | | | | 16 | 188# | 170# | 294# | | | | | | | | | | | | |

FINAL 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".

PREPARED BY JB DATE 1-86

CHECKED BY _____ DATE _____

MENDON ~ SHERBURNE

PROJ STATEWIDE NO. F-SFTY(85)S

TRAFFIC SHEET NO. TD551 SHEET 27 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE (X) | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" ∅ | 3.0" □ | 4.0" ∅ | 4.0" ∅ MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| -0.85- Rt. | DO NOT PASS | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| -0.85- Rt. | UNSAFE TO PASS | 36" X 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | TD557 | |
| -0.87- Lt. | | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | | |
| -0.89- Lt. | PED X-ING | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| -0.89- Lt. | | 36" X 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | | E-19B |
| -0.90- Rt. | Winterberry Resort Village | | | | X | | | | | X(2) | | | | | | | | | | | | | | | | | | | |
| -0.92- Lt. | FORM SINGLE LINE | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| -0.95- Lt. | | 36" X 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | | E-19A |
| -0.95- Rt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| -0.94- Rt. | LEFT TURN OR U-TURN AHEAD | 48" X 48" | | | | 16.0 | | | | | | | | 2 | | | X | | | | | | | | | | | TD557 | |
| -1.00- Rt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| -1.03- Rt. | | 18" X 18" | | | | 2.3 | | | | | | | | 1 | X | | | | | | | | | | | | | | E-19B |
| -1.03- Rt. | LEFT TURN OR U-TURN | 48" X 48" | | | | 16.0 | | | | | | | | 2 | | | X | | | | | | | | | | | TD557 | |
| -1.16- Lt. | SLOWER TRAFFIC KEEP RIGHT | 24" X 30" | | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | | | | E-15A |
| -1.20- Lt. | STOP / LEGAL LOAD LIMIT | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | | |
| | | 24" X 24" | | | | 4.0 | | | | | | | | | | | | | | | | | | | | | | | E-15A |
| -1.20- Lt. | WINTERBERRY RD. | | 1 | X | | | | 1 | | | | X | | 1 | X | | | | | | | | | | | | | | |
| -1.20- Rt. | STOP / DO NOT ENTER | 30" X 30" | | | | 6.3 | | | | | | | | 1 | | | | | X | | | | | | | | Type "A" Assembly | TD538 | E-15C |
| | | 30" X 30" | | | | 6.3 | | | | | | | | | | | | | | | | | | | | | " | E-15C |
| -1.20- Rt. | ONE WAY / ONE WAY | 12" X 36" | | | | 3.0 | | | | | | | | | | | | | | | | | | | | | " | E-15B |
| | | 12" X 36" | | | | 3.0 | | | | | | | | | | | | | | | | | | | | | " | E-15B |
| -1.21- Rt. | ONE WAY / ONE WAY | 12" X 36" | | | | 3.0 | | | | | | | | 1 | | | | | X | | | | | | | | " | E-15B |
| | | 12" X 36" | | | | 3.0 | | | | | | | | | | | | | | | | | | | | | " | E-15B |
| -1.21- Rt. | STOP / DO NOT ENTER | 30" X 30" | 1 | | | 6.3 | | | | | | X | | | | | | | | | | | | | | | " | E-15C |
| | | 30" X 30" | | | | 6.3 | | | | | | | | | | | | | | | | | | | | | " | E-15C |
| -1.22- Lt. | | 30" X 30" | 1 | | | 6.3 | | | | | | X | | 1 | | X | | | | | | | | | | | | E-15C |
| -1.26- Lt. | SLOWER TRAFFIC KEEP RIGHT | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 12 | X | | 113.8 sq | | 2 | | X | X | X | X | 14 | 96# | 40# | 258# | | 70# | | | | | | | | FINAL 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". | | |

PREPARED BY JB DATE 1-86

CHECKED BY _____ DATE _____

MENDON ~ SHERBURNE

PROJ. STATEWIDE NO. F-SFTY(85)S

TRAFFIC SHEET NO. 72532 SHEET 28 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE ⊥ X | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| __.32_Lt. | | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| __.55_Rt. | DO NOT PASS | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| __.55_Rt. | UNSAFE TO PASS | 36" X 36" | | | | 9.0 | | | | | | | | 1 | | | X | | | | | | | | | | | |
| __.63_Rt. | REDUCED SPEED AHEAD | 24" X 30" | 1 | | | 5.0 | | | | | | X(2) | | 1 | X | | | | | | | | | | | | E-15B |
| ---------. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| __.62_Rt. | 3-Travel Information Signs | | | | X | | | | | X | | | | | | | | | | | | | | | | | | |
| __.73_Rt. | 2-Travel Information Signs | See * Note @ Rt. * (2 Ea.) 72" X 16" | *2 | * X | | | | | *16.6 | | | *X | | *2 | | | *X | | | | | | | | | *Note: All Quantities to be included in T.I.S. = Item 680.20 MAD. (NON-PARTICIPATING) | | |
| __.78_Lt. | END 40 MILE SPEED | | 1 | | | | | | | X | | | | | | | | | | | | | | | | | | |
| __.78_Lt. | SPEED LIMIT 50 | 24" X 30" | | | | 5.0 | | | | | | | | | | | | | | | | | | | | Mount on Retained Post | | E-15B |
| __.78_Rt. | SPEED LIMIT 40 | 24" X 30" | 1 | | | 5.0 | | | | | | X(2) | | 1 | X | | | | | | | | | | | | | E-15B |
| __.80_Rt. | AHEAD | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| __.82_Rt. | AHEAD | 24" X 30" | 1 | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | | | TD55B |
| | | 24" X 8" | | | | 1.3 | | | | | | | | | | | | | | | | | | | | | | TD55B |
| __.83_Rt. | ROUTE JCT EAST 68 NORTH 680 SOUTH 1020 1000 FEET | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| __.84_Rt. | ROUTE JCT EAST 68 NORTH 680 SOUTH 1020 1000 FEET | 48" X 78" | | | | | 26.0 | | | | | | | 2 | | | | X | | | | | | | | | | TD55B |
| __.85_Rt. | SPEED LIMIT 40 | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| __.88_Lt. | SLOWER TRAFFIC KEEP RIGHT | 24" X 30" | 1 | | | 5.0 | | | | | | X | | 1 | X | | | | | | | | | | | | | E-15A |
| __.94_Rt. | THRU TRAFFIC KEEP RIGHT | 24" X 30" | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| __.98_Rt. | SPEED LIMIT 40 | 24" X 30" | 1 | | | 5.0 | | | | | | X(2) | | 1 | X | | | | | | | | | | | | | E-15B |
| __2.02_Lt. | SPEED LIMIT 40 | 24" X 30" | 1 | | | 5.0 | | | | | | X(2) | | 1 | X | | | | | | | | | | | | | E-15B |
| __2.02_Rt. | NORTH 1020 500 FEET TURN LEFT WITH ORRE | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| __2.02_Rt. | NORTH | 24" X 12" | | | | 2.0 | | | | | | | | 1 | | | | X | | | | | | | | | | E-13 |
| __2.02_Rt. | 100 | 24" X 24" | | | | 4.0 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| ---------. | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 14 | | | 51.3# | 26# | | 16.6# | | | | | 10 | 184# | | 48# | 126# | | | | | | | | | | |

FINAL 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".

PREPARED BY JB DATE 1-86

CHECKED BY _____ DATE _____

MENDON ~ SHERBURNE

PROJ. STATEWIDE NO. F-SFTY(85)S

TRAFFIC SHEET NO. 72533 SHEET 29 OF 202

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | EXISTING SIGNS TO BE SALVAGED: RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW AND SALVAGED SIGNS: NEW "B" (S.F.) | NEW AND SALVAGED SIGNS: SALV. SIGN (EA.) | NEW AND SALVAGED SIGNS: SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | EXISTING POSTS: DRILL | EXISTING POSTS: REM. | EXISTING POSTS: SALV. | NEW SIGN POSTS: NUMBER OF POSTS | NEW SIGN POSTS: FLANGED CHANNEL 2.0 LB./FT. | FLANGED CHANNEL 2.5 LB./FT. | FLANGED CHANNEL 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" Ø | TUBULAR ALUMINUM 3.0" □ | TUBULAR ALUMINUM 4.0" Ø | TUBULAR ALUMINUM 4.0" Ø MOD. | W SHAPED STEEL POST SIZE | W SHAPED STEEL WEIGHT | W SHAPED STEEL FTG. SIZE 24" | W SHAPED STEEL FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | FOR SIGN DETAIL SHEET: STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.02 Rt. | | 21" X 15" | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 2.02 Rt. | TURN LEFT WITH CARE | 36" X 24" | | | 6.0 | | | | | | | | | | | | | | | | | | | | | TD 557 | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.06 Rt. | PITTSFIELD 8 | 72" X 10" | | | 5.0 | | | | | | | | 2 | | | X | | | | | | | | | | | E-23 |
| 2.06 Rt. | WATERBURY 50 | 72" X 10" | | | 5.0 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| 2.06 Rt. | WOODSTOCK 20 | 72" X 10" | | | 5.0 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| 2.06 Rt. | WHITE RIVER JCT 34 | 72" X 10" | | | 5.0 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| 2.06 ± Lt. | AHEAD | | | X<br>X | | | | | X | | | | | | | | | | | | | | | | | | |
| 2 Rt. | LEFT LANE MUST TURN LEFT | 30" X 30" | | | 6.3 | | | | | | | | 1 | X | | | | | | | | | | | | SEE SHEET TD 545 FOR LOCATION | | E-15 |
| 2.10 Lt. | YIELD | | 1 | | | | | | | | X | | | | | | | | | | | | | | | | |
| 2.10 Rt. | PITTSFIELD 8 | | 1 | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| 2.10 Rt. | BARRE 53 | | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.10 Rt. | MONTPELIER 56 | | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.10 Rt. | PRES. COOLIDGE HOME 13 | | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.10 Rt. | WOODSTOCK 20 | | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.10 Rt. | WHITE RIVER JCT 34 | | 1 | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.12 Rt. | EAST / SOUTH | 24" X 12" | | | 2.0 | | | | | | | | 2 | | | X | | | | | | | | | | | E-12 |
| | | 24" X 12" | | | 2.0 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 2.12 Rt. | 4 / 100 | 24" X 24" | | | 4.0 | | | | | | | | | | | | | | | | | | | | | | E-12 |
| | | 24" X 24" | | | 4.0 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 2.12 Rt. | | 21" X 15" | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E12 |
| | | 21" X 15" | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 2.13 ± Lt. | | 18" X 18" | | | 2.3 | | | | | | | | 1 | X | | | | | | | | | | | | | E-19B |
| 2.13 ± Lt. | 2 EA. / 2 EA. | | 2<br>2 | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 11 | | 532# | | | | | | | | 6 | 52# | 70# | 96# | | | | | | | | | | | |

FINAL 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".

PREPARED BY JB DATE 1-86

CHECKED BY _____ DATE _____

MENDON ~ SHERBURNE

PROJ. STATEWIDE NO. F 019 (85) S

TRAFFIC SHEET NO. TD 528 SHEET 50 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | X | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2.13 Lt. | NORTH 100 | 48" x 72" | 1 | | | | 24.0 | | | | | X(2) | | 2 | | | | X | | | | | | | | | | TD557 | |
| 2.13 Lt. | 2 EA | | 2 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.13 Lt. | SPEED LIMIT 40 | 24" x 30" | 1 | | | | | | | | | | | | | | | | | | | | | | | | Mount on back of "North 100" sign at mm 2.13 Lt. | | E-15 |
| 2.20 Lt. | | 36" x 36" | | | | | | 1 | | | | | | 1 | | | X | | | | | | | | | | | |
| 2.21 Rt. | SPEED LIMIT 40 | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | | |
| 2.25 Lt. | EAST 4 | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | | |
| 2.25 Lt. | SOUTH 100 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.25 Lt. | | | 1 | X | | | | | | | | | | | | | | | | | | | | | | | Mount Salvaged Sign @ mm 2.20 Lt. | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.29 Lt. | PICO PEAK SKI AREA 2 | | 1 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | | |
| 2.29 Lt. | RUTLAND 11 | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.29 Lt. | PITTSFIELD 8 | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.29 Lt. | WEST 4 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.29 Lt. | NORTH 100 | | 3 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2.29± Lt. | | 18" x 18" | | | | 2.3 | | | | | | | | 1 | X | | | | | | | | | | | | | | E-19B |
| 2.29± Lt. | STOP | 30" x 30" | | | | 6.3 | | | | | | | | 1 | X | | | | | | | | | | | | | | E-15C |
| 2.29± Lt. | WEST / NORTH | 24" x 12" | | | | 2.0 | | | | | | | | 2 | | | X | | | | | | | | | | | | E-12 |
| | | 24" x 12" | | | | 2.0 | | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 2.29± Lt. | 4 / 100 | 24" x 24" | | | | 4.0 | | | | | | | | | | | | | | | | | | | | | | | E-12 |
| | | 24" x 24" | | | | 4.0 | | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 2.29± Lt. | | 21" x 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | | E-12 |
| | | 21" x 15 | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 2.31 Rt. | SPEED LIMIT 40 | 24" x 30" | | | | 5.0 | | | | | | | | 1 | X | | | | | | | | | | | | | | E-15B |
| 2.35 Rt. | KILLINGTON BASIN SKI AREA 5 | 72" x 20" | 2 | | | 10.0 | | | | | | X(2) | | 2 | | | X | | | | | | | | | | | | E-23 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 21 | | | 40 ft | 24.0 ft | 1 | | | | | | 10 | 76 ft | | 60 ft | 156 ft | 84 ft | | | | | | | | | | |

FINAL 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".

PREPARED BY JB DATE 1-86

CHECKED BY _____ DATE _____

MENDON ~ SHERBURNE

PROJ. STATEWIDE NO. F-SFTY (65)S

TRAFFIC SHEET NO. 71233 SHEET 151 OF 200

1986

# TRAFFIC SIGN SUMMARY SHEET

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED: REMOVE (EA.) | REMOVE X | RETAIN (X) | NEW AND SALVAGED SIGNS: NEW "A" (S.F.) | NEW "B" (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS: RET. | DRILL | REM. | SALV. | NEW SIGN POSTS: NUMBER OF POSTS | FLANGED CHANNEL: 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM: 3.0" Ø | 3.0" □ | 4.0" Ø | 4.0" Ø MOD. | W SHAPED STEEL: POST SIZE | WEIGHT | FTG. SIZE 24" | FTG. SIZE 30" | REMARKS | FOR SIGN DETAIL SHEET: PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 237 Lt. | KILLINGTON BASIN ← 5 SKI AREA | | 2 | | | | | | | | | X(2) | | | | | | | | | | | | | | | | |
| 237 Lt. | PICO PEAK SKI AREA 2 | 72" X 10" | | | | 5.0 | | | | | | | | 2 | | | | X | | | | | | | | | | E-23 |
| 237 Lt. | RUTLAND 11 | 72" X 10" | | | | 5.0 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| 237 Lt. | KILLINGTON BASIN ← 5 SKI AREA | 72" X 20" | | | | 10.0 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| 237 Lt. | PITTSFIELD 8 ↘ | 72" X 10" | | | | 5.0 | | | | | | | | | | | | | | | | | | | | | | E-23 |
| 240 Lt. | (100) ↱ | | 1 | | | | | | | | | X | | | | | | | | | | | | | | | | |
| | | | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |
| 241 Lt. | NORTH | 24" X12" | | | | 2.0 | | | | | | | | 1 | | | X | | | | | | | | | | | E-13 |
| 241 Lt. | (100) | 24" X 24" | | | | 4.0 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| 241 Lt. | ↱ | 21" X 15" | | | | 2.2 | | | | | | | | | | | | | | | | | | | | | | E-13 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WEST APPROACH TO Vt 100-NORTH | 6 EA. | (6 EA.) 18" X 24" | | | | 18.0 | | | | | | | | 6 | X | | | | | | | | | | | | | E-19 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | Chevrons to be evenly spaced as shown on traffic sheet #2 | | |
| EAST APPROACH TO Vt. 100-NORTH | 6 EA. | (6 EA.) 18" X 24" | | | | 18.0 | | | | | | | | 6 | X | | | | | | | | | | | | | E-19 |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TOTALS | | | 4 | X | | 69.2# | | | | X | X | X | | 15 | 336# | | 54.# | 68.# | | | | | | | | | | |

FINAL 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".

PREPARED BY JB DATE 1-86

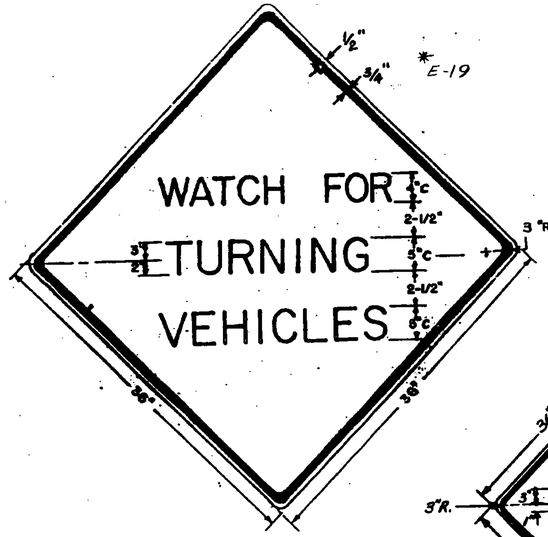
CHECKED BY _____ DATE _____

PROJ. MENDON ~ SHERBURNE STATEWIDE NO. F-SFTY(85)S

TRAFFIC SHEET NO. TDR86 SHEET 182 OF 200

1986

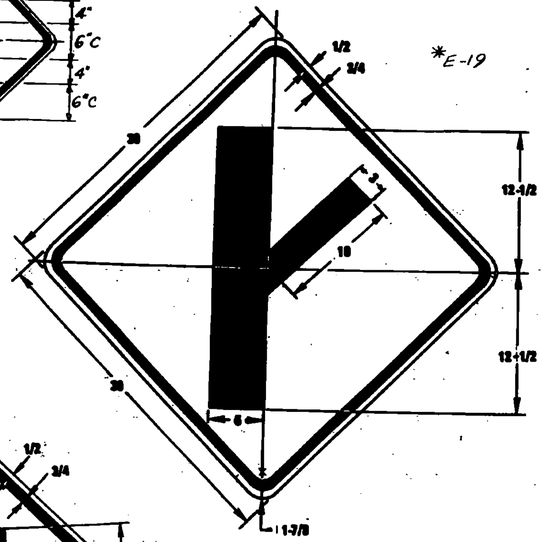
For Materials, see Standard *E-



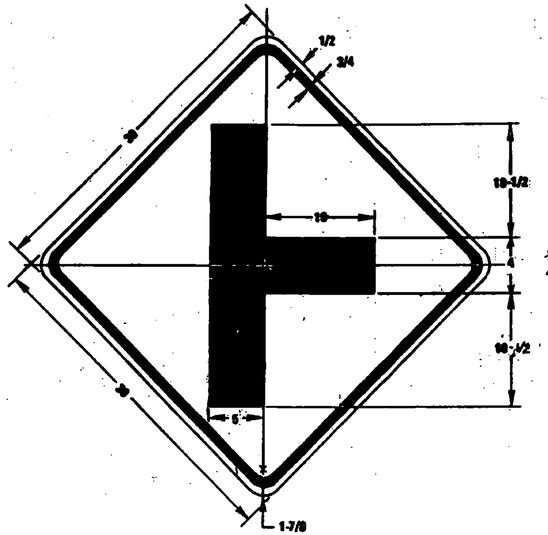
*E-19

*E-19

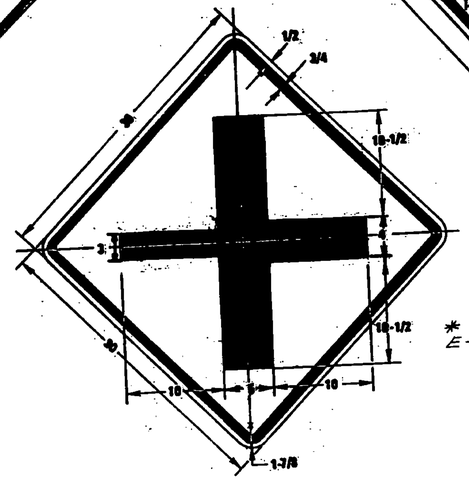
*E-19



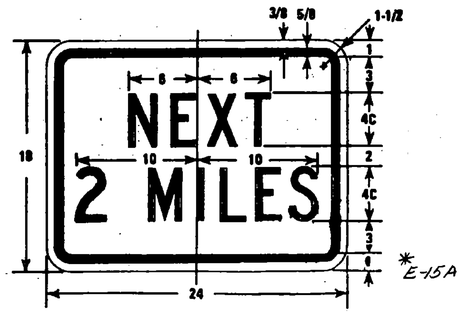
*E-19



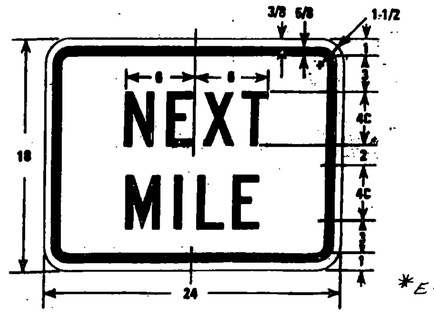
*E-19



*E-19



*E-15A



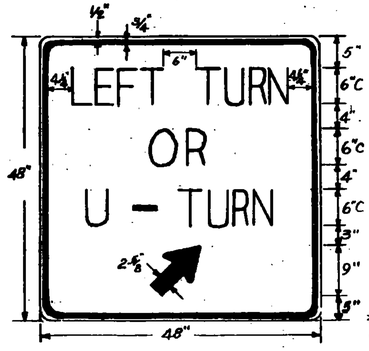
*E-15A

COLORS

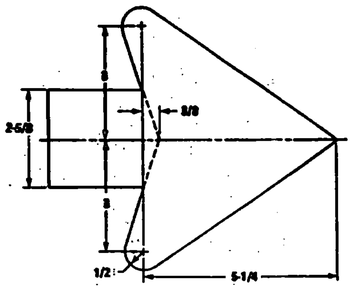
LEGEND – BLACK (NON-REFL)
BACKGROUND – YELLOW (REFL)

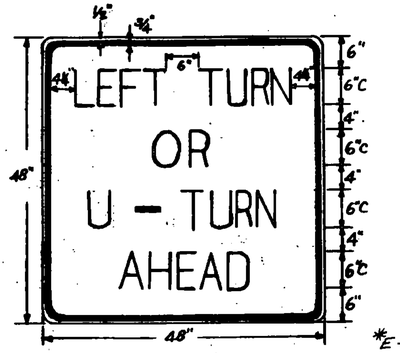
COLORS

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

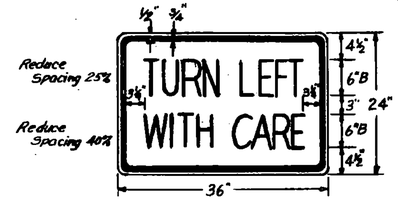


*E-15B

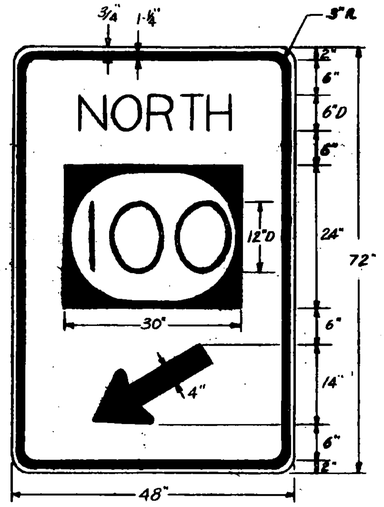


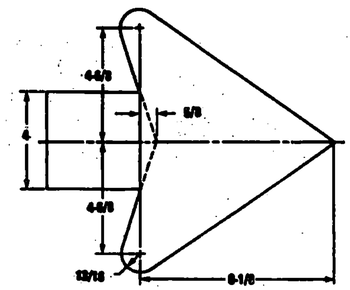
*E-15B



*E-15C




* FLAT SHEET ALUMINUM – 0.125"
HIGH DENSITY OVERLAID PLYWOOD – 5/8"
GALVANIZED FLAT SHEET STEEL – 12 GAGE




SURVEYED BY _____ DATE _____
DRAWN BY TB DATE 3-86
TRACED BY _____ DATE _____

MENDON ~ SHERBURNE
PROJ. STATEWIDE NO. F-SFTY (85)S
TRAFFIC SHEET NO. 72537 SHEET 135 OF 200

DRGDNG 53423-3

# TRAFFIC ITEM AND TRAFFIC SIGN SUMMARY SHEET, NOTES AND DETAILS

| MILEMARKER, STATION, OR SIGN NUMBER | SIGN LEGEND | SIGN DIMENSIONS | EXISTING SIGNS TO BE SALVAGED REMOVE (EA.) | X | RETAIN (X) | NEW AND SALVAGED SIGNS NEW 'A' (S.F.) | NEW 'B' (S.F.) | SALV. SIGN (EA.) | SALV. T.I.S.(S.F.) | EXISTING POSTS RET. | DRILL | REM. | SALV. | NEW SIGN POSTS NUMBER OF POSTS | FLANGED CHANNEL 2.0 LB./FT. | 2.5 LB./FT. | 3.0 LB./FT. | TUBULAR ALUMINUM 3.0" ∅ | 3.0" □ | 4.0" ∅ | 4.0" ∅ MOD. | W SHAPED STEEL POST SIZE | WEIGHT | FTG. SIZE 24" | 30" | REMARKS | FOR SIGN DETAIL SHEET PLAN SHEET NUMBER | STD. SHEET NUMBER |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
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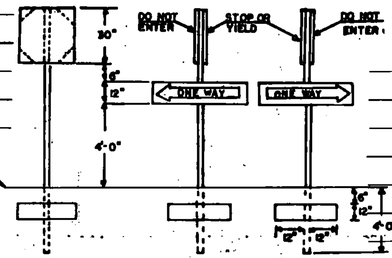
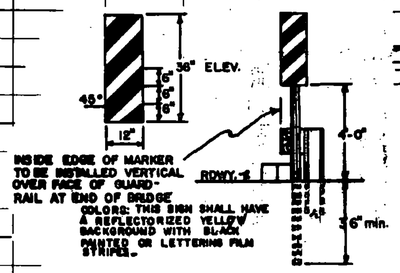
"A" ASSEMBLY (STOP SIGN)
"B" ASSEMBLY (YIELD SIGN)

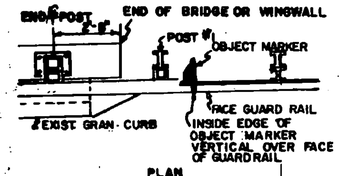



REGULATORY SIGN ASSEMBLY DETAIL




OBJECT MARKER

MATERIALS: THE SIGN BASE MATERIAL USED OR THIS SIGN MAY BE EITHER 5/8" HIGH DENSITY PLYWOOD OR 0.080 FLAT SHEET ALUMINUM WITH A REFLECTORIZED SHEETING BACKGROUND.




PLACEMENT OF OBJECT MARKERS

For Materials, see Standard *E-

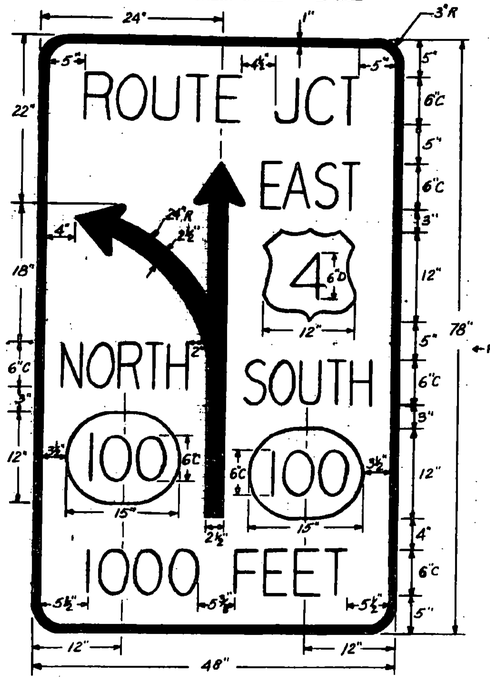
## TRAFFIC ITEM SUMMARY

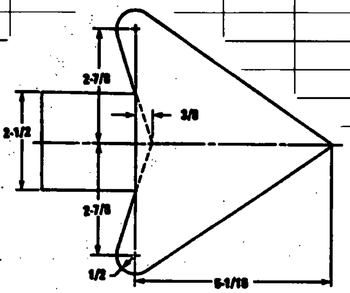
| ITEM NO. | ITEM | UNIT | | | QUANTITY | RND. | TOTAL |
|---|---|---|---|---|---|---|---|
| 646.50 | Temp. 4" White Line | L.F. | | | 1000 | | 1000 |
| 646.51 | Temp. 4" Yellow Line | L.F. | | | 2550 | 50 | 2600 |
| 646.54 | Temp. 8" White Line | L.F. | | | 200 | | 200 |
| 646.55 | Temp. 8" Yellow Line | L.F. | | | 500 | | 500 |
| 646.60 | Temp. 24" Stop Bar | L.F. | | | 16 | | 16 |
| 646.62 | Temp. Arrow Markings | EA. | | | 4 | | 4 |
| 646.64 | Temp. Letter In Word Marking | EA. | | | 20 | | 20 |
| 646.80 | Removal of Existing Pavement Markings | S.F. | | | 100 | | 100 |
| 675.20 | Traffic Signs, Type A | S.F. | | | 727.6 | 7.4 | 735.0 |
| 675.21 | Traffic Signs, Type B | S.F. | | | 50.0 | | 50.0 |
| 675.30 | Flanged Channel Sign Posts | L.B. | | | 3962. | 38 | 4000 |
| 675.38 | Tubular Aluminum Sign Posts | L.B. | | | 348 | 2 | 350 |
| 675.50 | Removing Signs | EA. | | | 139 | 1 | 140 |
| 675.60 | Erecting Salvaged Signs | EA. | | | 20 | | 20 |
| 680.20 MOD. | Travel Information Signs (NON-participating Fed. Funds) | S.F. | | | 33.2 | 0.8 | 34 |

SEE SHEET TD 504 FOR PROJECT SUMMARY OF QUANTITIES AND REVISION NOTE FOR LEGAL LOAD LIMIT SIGNING.

NOTES AND DETAILS

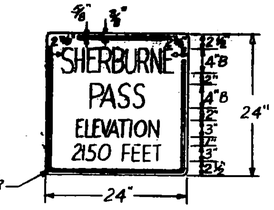
* FLAT SHEET ALUMINUM - 0.125"
HIGH DENSITY OVERLAID PLYWOOD - 5/8"
GALVANIZED FLAT SHEET STEEL - 12 GAGE



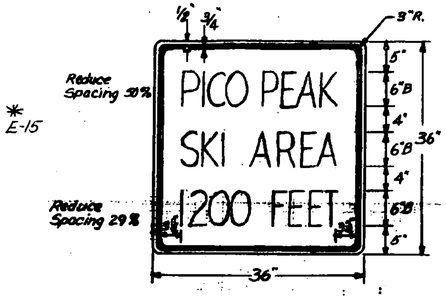




COLORS

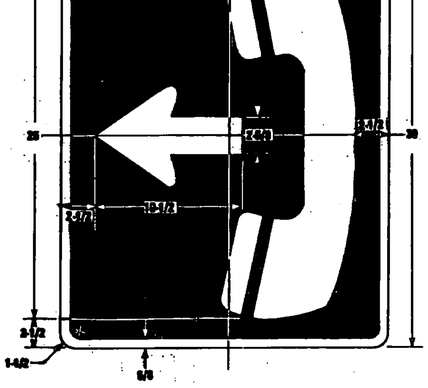
LEGEND - WHITE (REFL)
BACKGROUND - GREEN
← ROUTE NUMERALS - BLACK




* E-15




* E-15




* E-15

* E-15

COLORS

LEGEND - WHITE (REFL)
BACKGROUND - BLUE

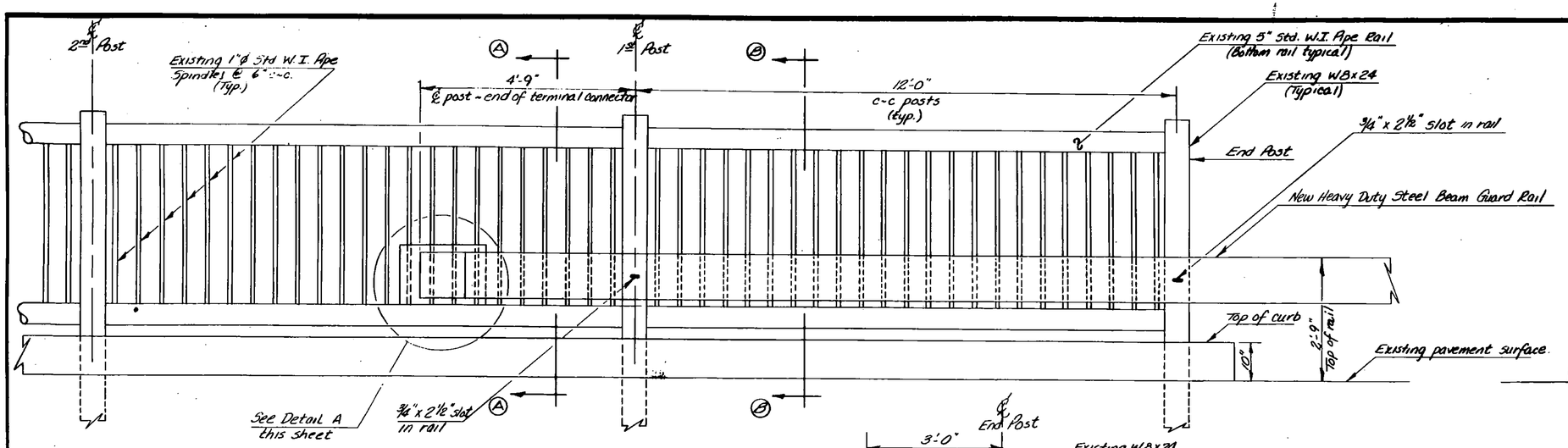
DRAWN BY JB DATE 3-86
CHKED BY DATE
MENDON ~ SHERBURNE
PROJ. STATEWIDE NO. F-SFTY (85)S
TRAFFIC SHEET NO. TD 503 SHEET 134 OF 200

BRUNING 53428.3
07

# 1985 STATEWIDE SAFETY PROJECT ITEM DETAIL SHEET

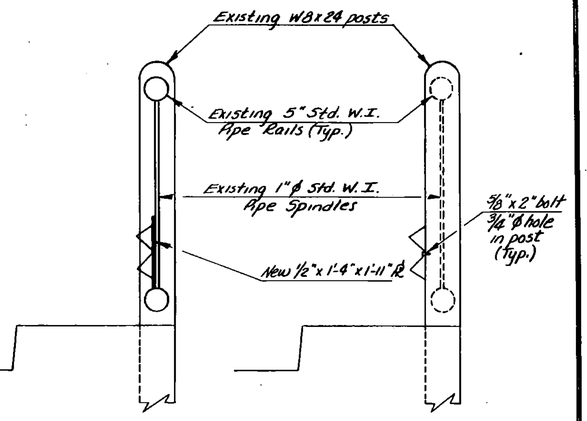
| MILE MARKER | POS | REMOVING TREES SMALL | REMOVING TREES LARGE | UNCLASSIFIED EXCAVATION | EARTH BORROW | TRENCH EARTH | TRENCH ROCK | GRAVEL SHOULDERS | METAL PIPE D | METAL PIPE L | METAL PIPE TH | RC PIPES D | RC PIPES L | RC PIPES CL | M.E.S | RCPES | CONC | STEEL | REHAB DI. | GRATE TYPE B | STONE FILL I | STONE FILL II | TIMBER CURB | ITEM 604.40 | SELECTIVE THINNING | GUARD RAIL ITEMS 621.80 | | 621.21 | 621.20 | 621.70 | 621.60 | 621.50 | DELINEATORS | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| NORTH-HERO | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 9.06-9.32 | RT. | | | | | | | 97 | | | | | | | | | | | | | | | | | 1325 | | 18.75 | 1268.75 | 1 | | 1 | | REPLACE EXISTING GUARD RAIL WITH NEW STEEL BEAM. CONNECT TO BRIDGE WITH HEAVY DUTY STEEL BEAM. SEE SHEET 142 FOR BRIDGE CONNECTION DETAILS, & SHEET 3 FOR B.C.T. USE GUARD RAIL APPROACH SECTION, TYPE I (MOD.) |
| 9.13-9.32 | LT. | | | | | | | 85 | | | | | | | | | | | | | | | | | 1010 | | 18.75 | 956.25 | 1 | | 1 | | REPLACE EXISTING GUARD RAIL WITH NEW STEEL BEAM, CONNECT TO BRIDGE WITH HEAVY DUTY STEEL BEAM. SEE SHEET 142 FOR BRIDGE CONNECTION DETAILS, AND SHEET 3 FOR B.C.T. USE GUARD RAIL APPROACH SECTION, TYPE I MOD. |
| GRAND-ISLE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 0.02-0.17 | RT | | | | | | | 78 | | | | | | | | | | | | | | | | | 810 | | 18.75 | 756.25 | 1 | | 1 | | REPLACE EXISTING GUARD RAIL WITH NEW STEEL BEAM, CONNECT TO BRIDGE WITH HEAVY DUTY STEEL BEAM. SEE SHEET 142 FOR BRIDGE CONNECTION DETAILS, AND SHEET 3 FOR B.C.T. USE GUARD RAIL APPROACH SECTION, TYPE I MOD. |
| 0.03 | LT. | | | | | | | | | | | | | | | | | | | | | | | | 24 | | 45.8 | | | 1 | | | CONNECT NEW HEAVY DUTY STEEL BEAM TO BRIDGE. USE RADIUS BEAM TO RUN GUARD RAIL 90° +/- TO ROAD. SEE SHEET 142 FOR BRIDGE CONNECTION DETAILS. USE 621.60 TYPE ANCHOR. QUANTITY COMPUTATION: 16.75+20.75+1.4=45.8. ACTUAL LENGTH=37.5FT. |
| 0.03-0.18 | LT. | | | | | | | 78 | | | | | | | | | | | | | | | | | 770 | | | 825 | | 1 | 1 | | REPLACE EXISTING GUARD RAIL WITH NEW STEEL BEAM WRAP NORTHERN END AROUND PARKING AREA AND USE A 621.60 TYPE ANCHOR, USE A B.C.T. ON SOUTH END. |
| NORTH HERO—GRAND ISLE | | TOTALS | | | | | | 338 | | | | | | | | | | | | | | | | | 3939 | | 102.05 | 3806.25 | 3 | 2 | 4 | | |

NORTH HERO — GRAND ISLE
1985 STATEWIDE SAFETY PROJECT
SHEET 141 OF 200 SHEETS




## TYPICAL RAILING ELEVATION

3/4" = 1'-0"

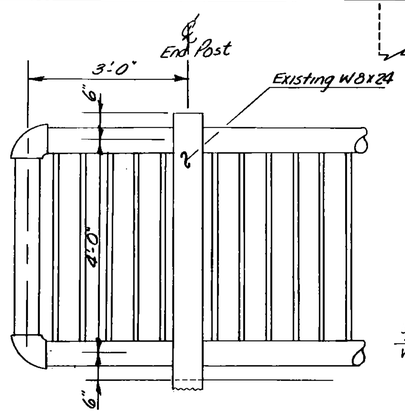



## SECTION A-A

3/4" = 1'-0"

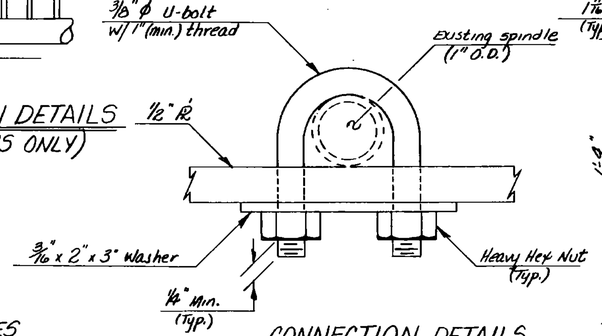
## SECTION B-B

3/4" = 1'-0"



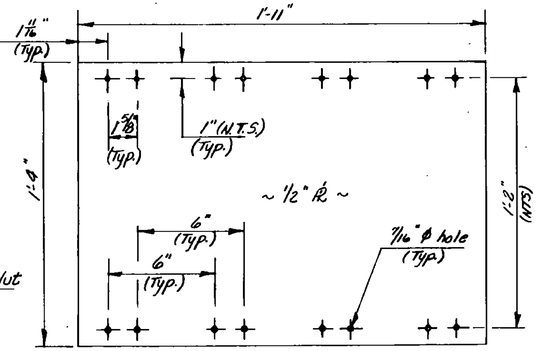

## EXISTING RAIL EXTENSION DETAILS (@ NE & SW CORNERS ONLY)

3/4" = 1'-0"



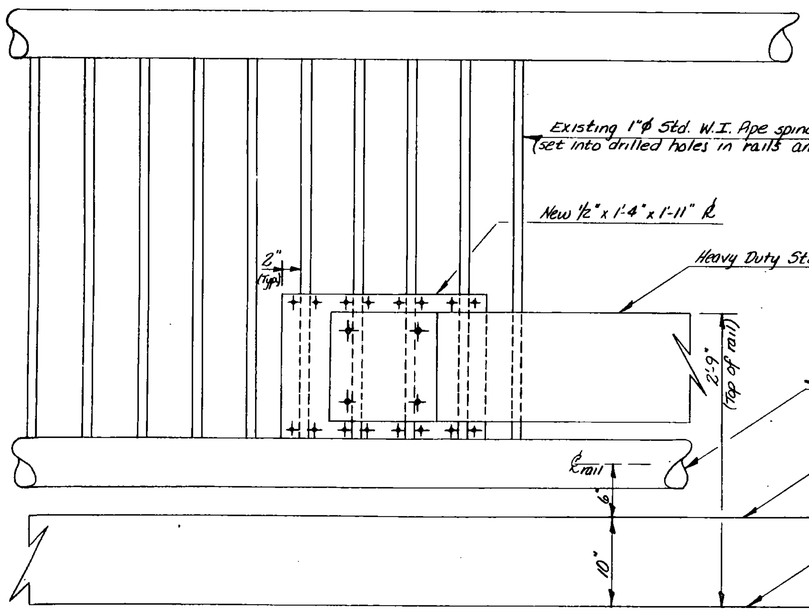

## CONNECTION DETAILS

1" = 1"




## ANCHORAGE PLATE DETAILS

3" = 1'-0"

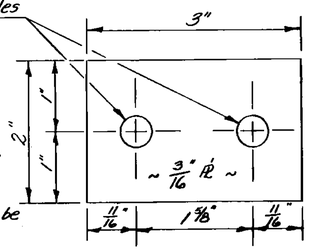



## DETAIL A

1 1/2" = 1'-0"

## NOTES

1. The 1/2" x 1'-4" x 1'-11" PL and the 3/16" x 2" x 3" PL washer shall be A-36 steel.
2. The anchorage plates and plate washers shall be galvanized in accordance with ASTM A 123.
3. The anchor bolts and heavy hex nuts shall be galvanized in accordance with ASTM A153.
4. The unit price bid per linear foot of Heavy Duty Steel Beam Guard Rail shall include the cost of furnishing, fabricating and galvanizing the anchorage plates, plate washers, terminal connectors and all related hardware.
5. Any field alterations to galvanized members shall be painted with two (2) coats of zinc rich paint. (See Section 708.02 d).
6. Terminal connectors shall be standard MM-TF-13/RE-B.
7. Only one side of the bridge may be worked on at any one time.
8. All hardware including U-bolts shall conform to ASTM A 307.
9. Add 50 LF of Guard Rail Approach Section, Type I (Mod.) to the SW, NW, and NE corners of the bridge. For details, see Standard Dwg. 58-R4B-82.




## PLATE WASHER DETAILS

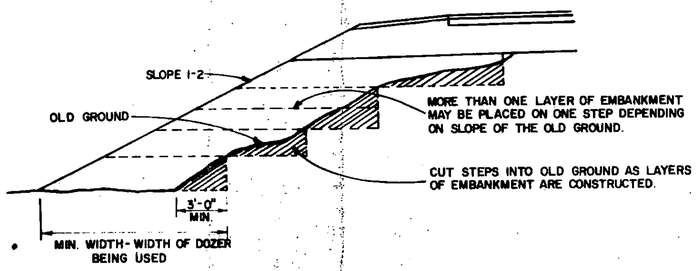
1" = 1"

# STATE OF VERMONT
## AGENCY OF TRANSPORTATION

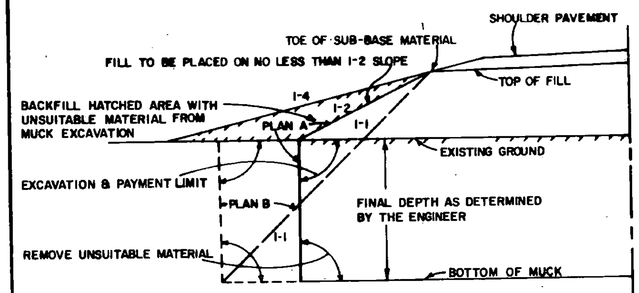
| | |
|---|---|
| Town Of GRAND ISLE ~ No. HERO | Bridge No. 8 |
| Highway No. U.S. ROUTE 2 | Leg Sta. / Surv. Sta. |
| U.S. 2 OVER LAKE CHAMPLAIN | |
| GUARD RAIL ANCHORAGE DETAILS | |
| Designed By D.W. NEWTON | Drawn By D.W. NEWTON |
| Checked By G.S. ROGERS Date 6/86 | Bridge Design Supervisor F.W. Balkum Date 6/86 |
| PROJECT STATEWIDE | PROJECT NO. F 5FTY(85) |
| L&C. Info. | |
| Bridge Sheet No. | Sheet 142 of 200 |

DRAWING 44-232 (4442)

BR-6




## METHOD FOR CONSTRUCTING AN EMBANKMENT ON EARTH SLOPE

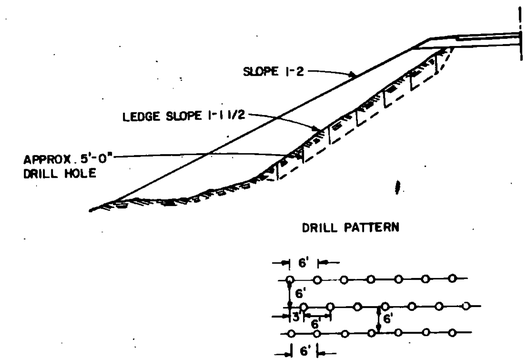



GENERAL NOTES:
THE MUCK OR UNSUITABLE MATERIAL SHALL BE EXCAVATED TO THE NEAT LINES SHOWN ON THE PLANS OR AS DETERMINED BY THE ENGINEER.

EXCAVATION AND PAYMENT LIMIT WILL BE DETERMINED FROM EITHER PLAN "A" OR PLAN "B", WHICHEVER PRODUCES THE GREATER WIDTH IN A GIVEN MUCK AREA.

BACKFILL MATERIAL MUST MEET THE REQUIREMENTS SET FORTH UNDER MUCK EXCAVATION, SECTION 203.

## TYPICAL NEAT PAY LINES FOR MUCK EXCAVATION

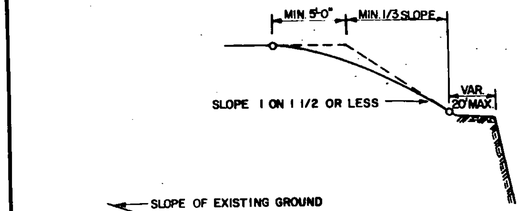



DRILLING AND BLASTING OF SOLID ROCK.

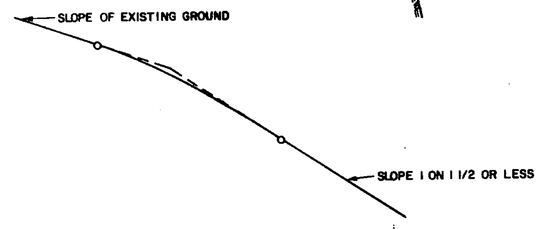
PROCEDURE TO BE FOLLOWED WHEN LEDGE SLOPE ON OLD GROUND IS BETWEEN A 1 ON 1 AND A 1 ON 5 SLOPE.

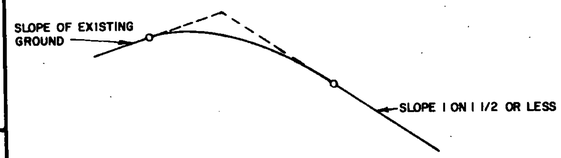
ALL HOLES TO BE APPROXIMATELY 5'-0" DEEP. HOLES TO BE IN ROWS, SPACED AND STAGGERED AS SHOWN IN DRILL PATTERN, OR AS DIRECTED BY THE ENGINEER, SEE SECTION 205.

## A METHOD FOR PREPARING LEDGE SLOPE BEFORE CONSTRUCTING AN EMBANKMENT




EARTH SECTIONS ABOVE STABLE ROCK OR EQUIVALENT OUTCROPS TO BE ROUNDED, AS FAR AS POSSIBLE AS THOUGH TOTAL HEIGHT OF SLOPE WAS IN EARTH CUT.

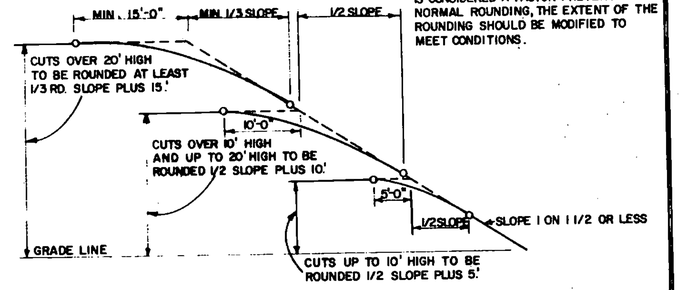



SLOPES TO BE ROUNDED AS SHOWN IN ORDER TO ALLOW FOR PERSPECTIVE FORESHORTENING AS SEEN FROM THE ROAD AND SO THAT FINISHED SLOPES WILL BETTER SUPPORT VEGETATIVE COVER.

ROUNDING TO MERGE WITH EXISTING GROUND SURFACE SO THAT NO HARD GRADE LINE WILL REMAIN WITHIN THE LINE OF SIGHT.

WHEN STEEPNESS OF EXISTING GROUND OR PRESENCE OF EXISTING VEGETATION IS CONSIDERED A FACTOR PREVENTING NORMAL ROUNDING, THE EXTENT OF THE ROUNDING SHOULD BE MODIFIED TO MEET CONDITIONS.




## TYPICAL SLOPE ROUNDING

REVISIONS AND CORRECTIONS

APPROVED:

DATE Dec 6, 1971

R.N. Arnold
CHIEF ENGINEER

E.H. Whitney
ASST. CHIEF ENGINEER

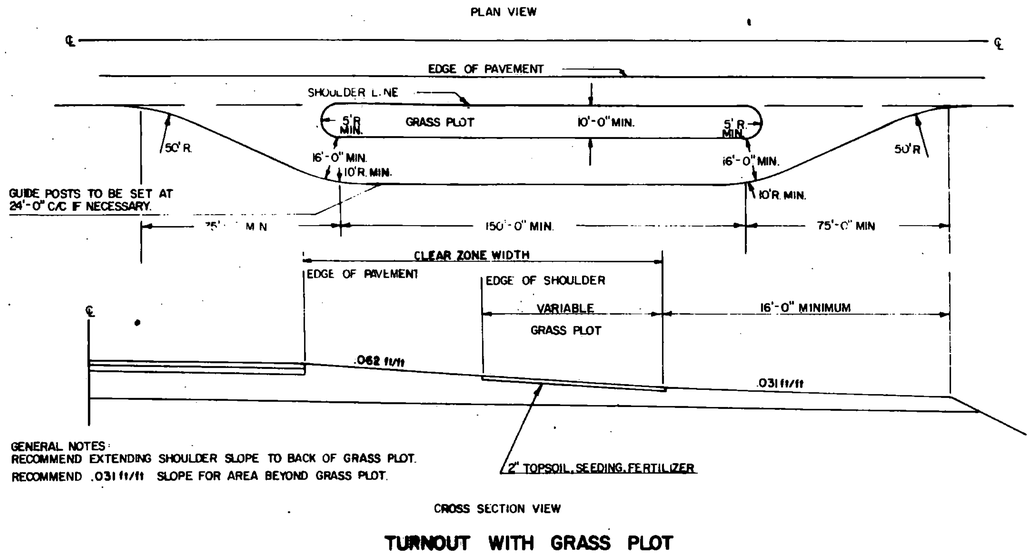
G.M. Lane
HIGHWAY ENGINEER

# EMBANKMENT ON EARTH SLOPE
# EMBANKMENT ON ROCK SLOPE
# MUCK EXCAVATION
# TYPICAL SLOPE ROUNDING

VERMONT AGENCY OF TRANSPORTATION

STANDARD

B-5

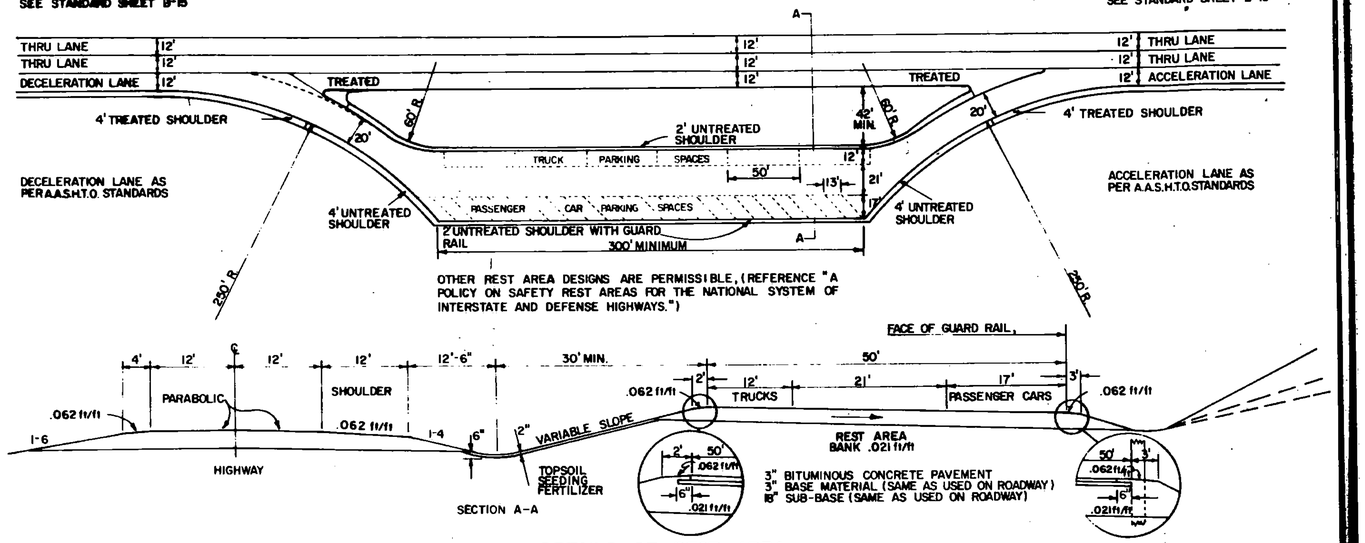



GENERAL NOTES:
RECOMMEND EXTENDING SHOULDER SLOPE TO BACK OF GRASS PLOT.
RECOMMEND .031 ft/ft SLOPE FOR AREA BEYOND GRASS PLOT.

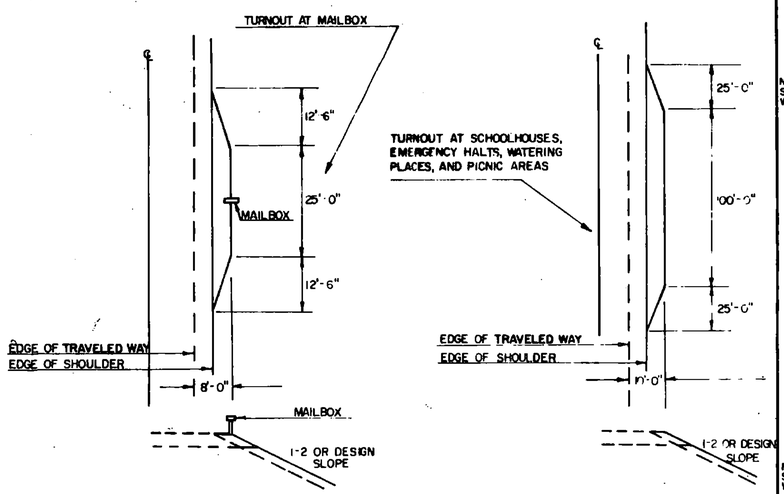
## TURNOUT WITH GRASS PLOT

FOR EXIT TERMINAL DETAILS SEE STANDARD SHEET B-15

FOR ENTRANCE TERMINAL DETAILS SEE STANDARD SHEET B-15




## DETAILS OF REST AREA

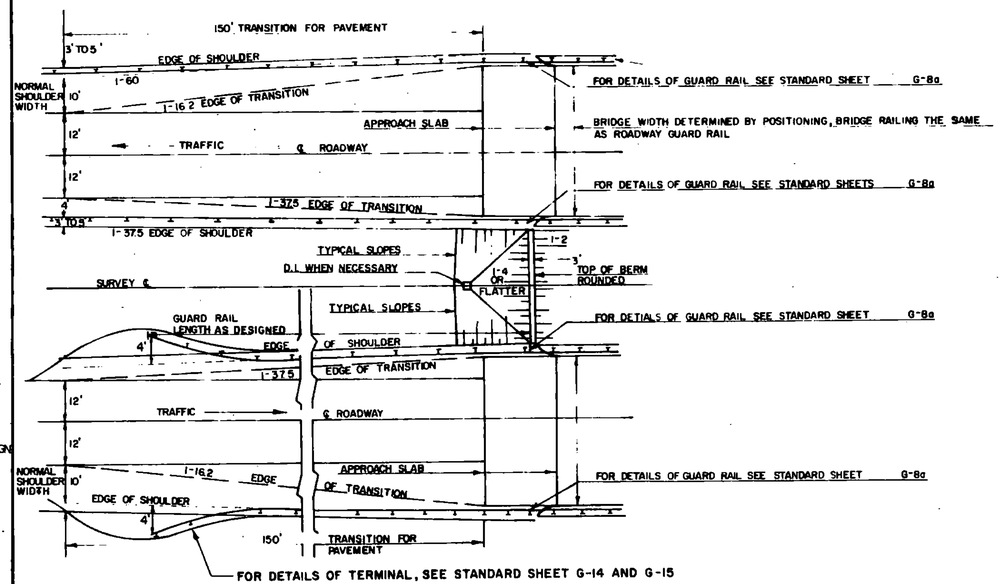



TURNOUT AT MAILBOX, NOT NECESSARY IF SHOULDER WIDTH IS 8'-0" OR GREATER.

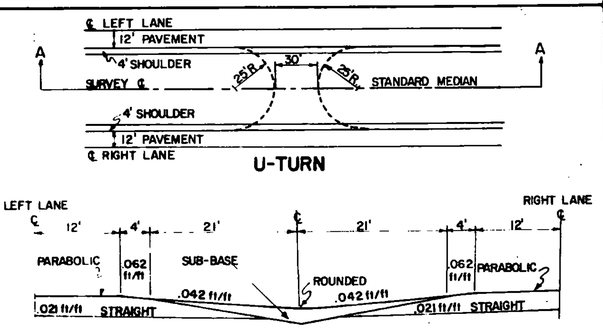
TURNOUT AT SCHOOLHOUSES, EMERGENCY HALTS, WATERING PLACES, AND PICNIC AREAS, NOT NECESSARY IF SHOULDER WIDTH IS 10'-0" OR GREATER.

## TURNOUTS

TRANSITIONS AT BRIDGE APPROACH: PROJECTS DESIGNED WITH BITUMINOUS CONCRETE SHOULDERS, NO BOTTOM COURSE TRANSITION OF BITUMINOUS CONCRETE IS TO BE CONSTRUCTED. TRANSITION TO BE DELINEATED WITH USE OF BITUMINOUS SURFACE TREATMENT TYPE VI. PROJECTS DESIGNED WITH HIGHER TYPE SURFACE THAN CALLED FOR ON THE SHOULDER WILL REQUIRE TRANSITIONS TO BE CONSTRUCTED WITH THE SURFACE ITEM.




## DETAIL OF GUARD RAIL AT BRIDGE APPROACH



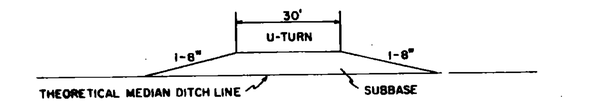

## U-TURN




## CROSS-SECTION OF U-TURN (STANDARD MEDIAN)

SURFACE TREATMENT OF U-TURN SAME AS USED ON SHOULDERS

U-TURNS ON VARIED MEDIAN:
U-TURNS IN VARIED OR WIDENED MEDIANS SHALL BE CONSTRUCTED WITH THE RADII AND WIDTH OF THROAT AS U-TURN ON A STANDARD MEDIAN, BUT SHOULD BE TAPERED TO A TWENTY FOOT ROADWAY IN THE MEDIAN WHENEVER POSSIBLE.




SECTION A-A

*SIDE SLOPE STEEPER THAN 1-8 PERMITTED WHEN NOT FACING APPROACHING TRAFFIC.

REVISIONS AND CORRECTIONS

| | |
|---|---|
| DEC. 19, 1972 | REFERENCE TO G-8 REMOVED. CEDAR LOG GUARD RAIL REMOVED FROM REST AREA. |
| JUNE 11, 1973 | G-8 ADDED TO EXIT SIDE OF STRUCTURES. |
| DEC. 16, 1980 | INCREASED SHOULDER WIDENING FOR GUARDRAIL; ADDED CLEAR ZONE WIDTH TO DETAIL OF TURNOUT W/GRASS PLOT; ADDED SECTION A-A FOR U-TURN. |
| OCT. 25, 1985 | REVISED TO CONFORM TO 1986 SPECIFICATIONS, GUARD RAIL AT BRIDGE APPROACHES |

APPROVED

DATE: Dec. 8, 1971

R. N. Arnold
CHIEF ENGINEER

E. H. Dickerney
ASST. CHIEF ENGINEER

R. M. Lane
HIGHWAY ENGINEER

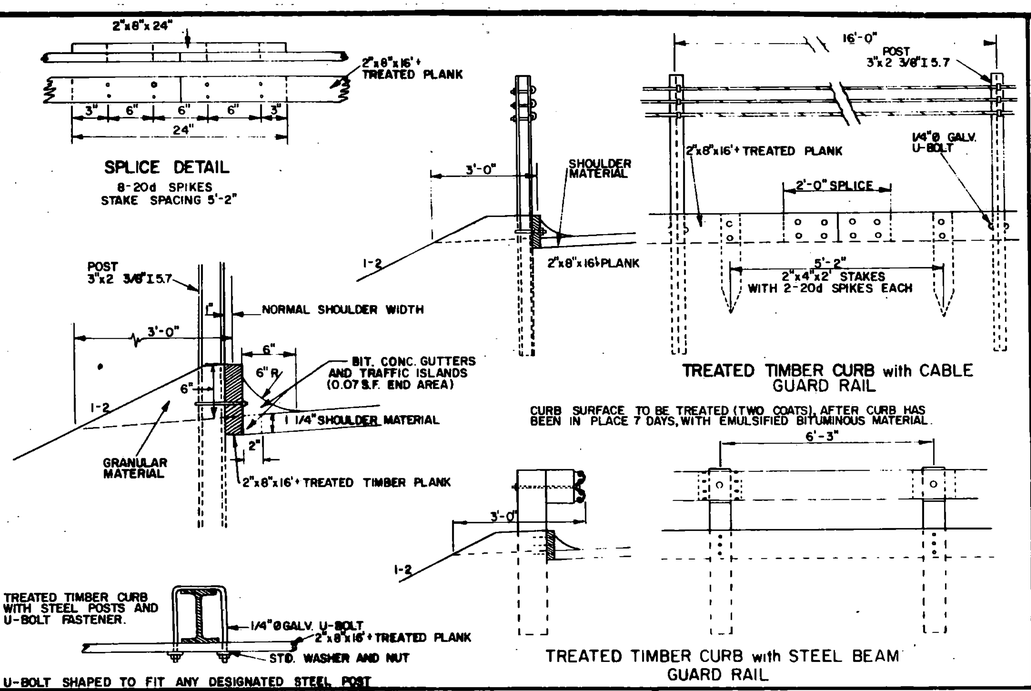
# DETAIL OF GUARD RAIL AT BRIDGE APPROACH
# DETAIL OF REST AREA
# DETAIL OF U-TURN
# TURNOUTS

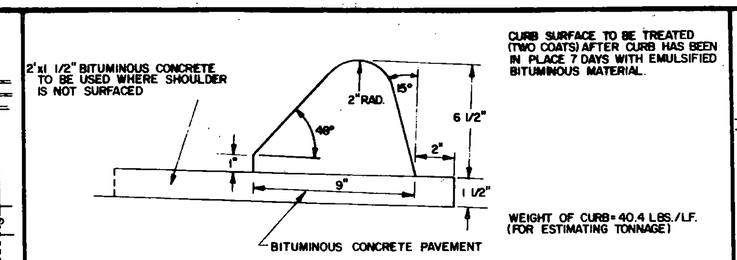
VERMONT AGENCY OF TRANSPORTATION

STANDARD

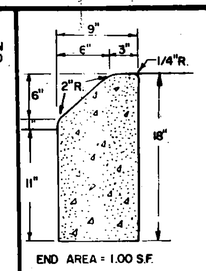
B-17

D-8



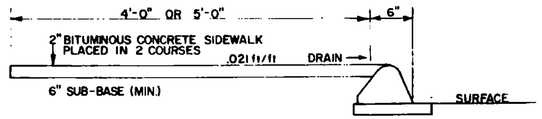

## BITUMINOUS CONCRETE CURB, TYPE A




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

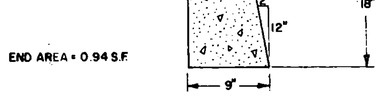
SEE SPECIFICATIONS FOR DETAILS ON EXPANSION AND CONSTRUCTION JOINTS.

## CAST IN PLACE CONCRETE CURB, TYPE A




## BITUMINOUS CONCRETE SIDEWALK

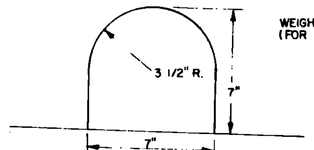
CURB SURFACE TO BE TREATED (TWO COATS), AFTER CURB HAS BEEN IN PLACE 7 DAYS, WITH EMULSIFIED BITUMINOUS MATERIAL.




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

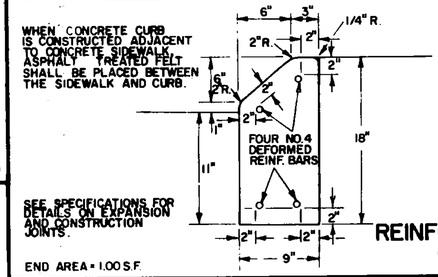
SEE SPECIFICATIONS FOR DETAILS ON EXPANSION AND CONSTRUCTION JOINTS.

## CAST IN PLACE CONCRETE CURB, TYPE B

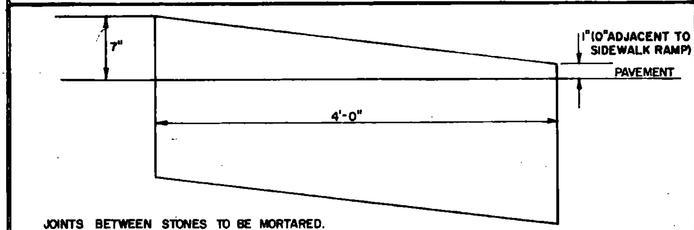



WEIGHT OF CURB = 45.0 LBS./LF. (FOR ESTIMATING TONNAGE)

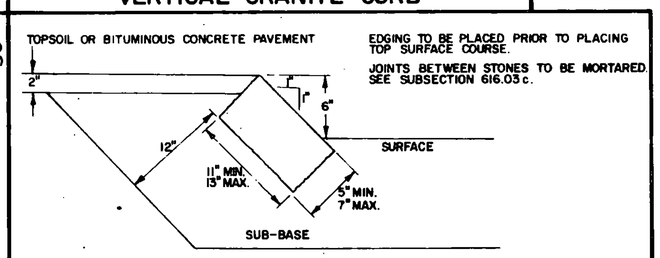
## BITUMINOUS CONCRETE CURB, TYPE B



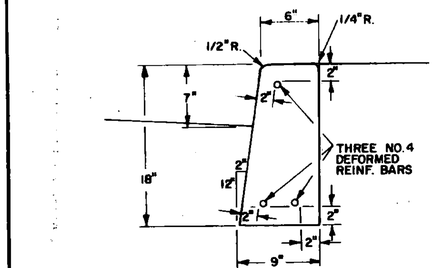

## PRECAST REINFORCED CONCRETE CURB, TYPE A




## DETAIL OF GRANITE CURB END FOR VERTICAL GRANITE CURB




## GRANITE SLOPE EDGING

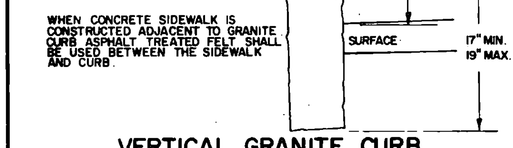



WHEN CONCRETE CURB IS CONSTRUCTED ADJACENT TO CONCRETE SIDEWALK, ASPHALT TREATED FELT SHALL BE PLACED BETWEEN THE SIDEWALK AND CURB.

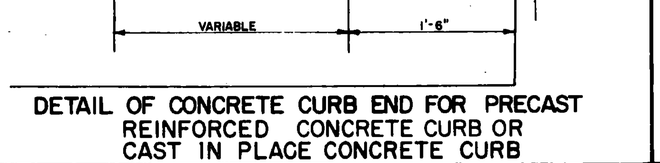
SEE SPECIFICATIONS FOR DETAILS ON EXPANSION AND CONSTRUCTION JOINTS.

END AREA = 0.94 S.F.

## PRECAST REINFORCED CONCRETE CURB, TYPE B




## VERTICAL GRANITE CURB




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

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. H. Stickney
ASST. CHIEF ENGINEER

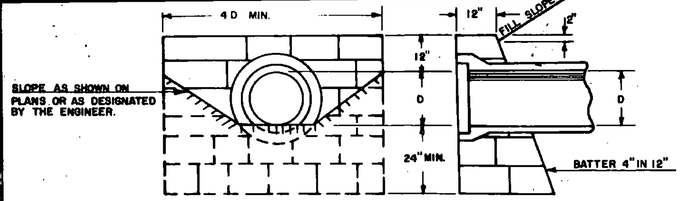
G. M. Lane
HIGHWAY ENGINEER

# 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



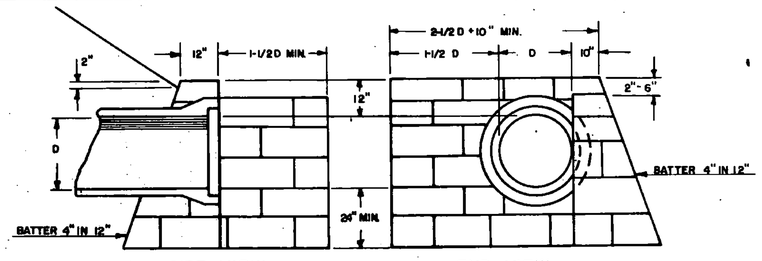

END VIEW SIDE VIEW

QUANTITY SCHEDULE FOR CEMENT RUBBLE MASONRY

| PIPE DIAMETER | 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" |
|---|---|---|---|---|---|---|---|---|---|---|
| C.R.M. QUANTITY | 1.0 | 1.3 | 1.8 | 2.7 | 3.5 | 4.9 | 6.4 | 8.0 | 10.0 | 12.3 |

C.R.M. QUANTITIES EXCLUDE PIPE DIAMETERS FOR 30" AND OVER.
SAME DEDUCTION MADE FOR CONCRETE PIPE AS IS FOR METAL PIPE.

## CEMENT RUBBLE MASONRY STRAIGHT HEADWALL




SIDE VIEW END VIEW

QUANTITY SCHEDULE FOR CEMENT RUBBLE MASONRY

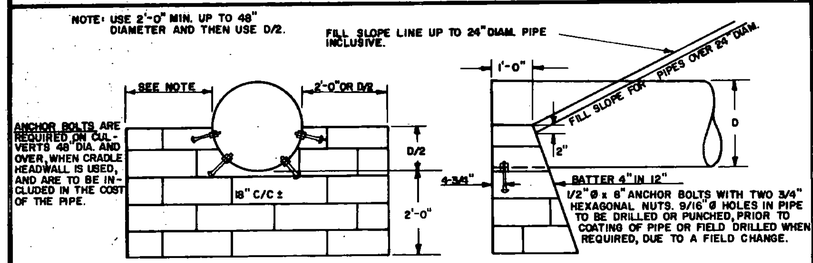
| PIPE DIAMETER | 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" |
|---|---|---|---|---|---|---|---|---|
| C.R.M. QUANTITY | 1.5 | 1.7 | 2.1 | 3.2 | 4.1 | 5.5 | 7.1 | 8.9 |

C.R.M. QUANTITIES EXCLUDE PIPE DIAMETERS FOR 30" AND OVER.
SAME DEDUCTION MADE FOR CONCRETE PIPE AS FOR METAL PIPE.

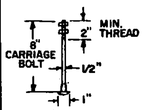
## CEMENT RUBBLE MASONRY "L" TYPE HEADWALL

NOTE: USE 2'-0" MIN. UP TO 48" DIAMETER AND THEN USE D/2.

FILL SLOPE LINE UP TO 24" DIAM. PIPE INCLUSIVE.




END VIEW SIDE VIEW




GALV. ANCHOR BOLTS TO BE PLACED 18" C/C.

QUANTITY SCHEDULE FOR CEMENT RUBBLE MASONRY

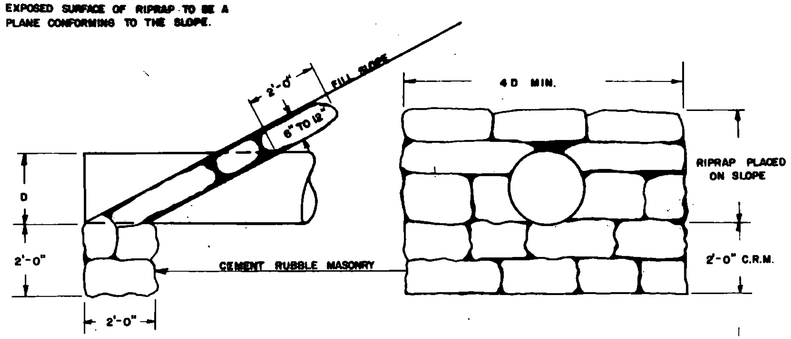
| PIPE DIAMETER | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" | 66" | 72" |
|---|---|---|---|---|---|---|---|---|---|---|
| C.R.M. QUANTITY | 0.8 | 1.0 | 1.2 | 1.4 | 1.5 | 1.7 | 2.0 | 2.4 | 2.8 | 3.3 |

C.R.M. QUANTITIES ARE DEDUCTED WHEN PIPE DIAMETER 42" OR LARGER
SAME DEDUCTION MADE FOR CONCRETE PIPE AS FOR METAL PIPE.

WHEN CONCRETE CLASS B IS USED, TWO PIECES OF REINFORCING STEEL WILL BE PLACED BELOW THE CULVERT SIMILAR TO THOSE SHOWN ON REINFORCED CONCRETE STRAIGHT HEADWALL.

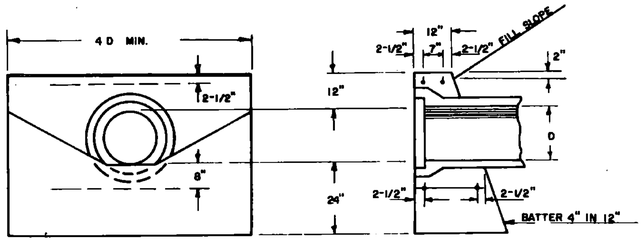
## CEMENT RUBBLE MASONRY CRADLE HEADWALL

EXPOSED SURFACE OF RIPRAP TO BE A PLANE CONFORMING TO THE SLOPE.




SIDE VIEW END VIEW

## RIPRAP LIGHT TYPE SLOPE HEADWALL WITH CEMENT RUBBLE MASONRY FOOTING




END VIEW SIDE VIEW

QUANTITY SCHEDULE FOR REINFORCED CONCRETE HEADWALL, CLASS B

| PIPE DIAMETER | 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" |
|---|---|---|---|---|---|---|---|---|---|---|
| CONCRETE QUANTITY | 1.0 | 1.3 | 1.8 | 2.7 | 3.5 | 4.9 | 6.4 | 8.0 | 10.0 | 12.3 |

STEEL SCHEDULE FOR REINFORCED CONCRETE HEADWALL

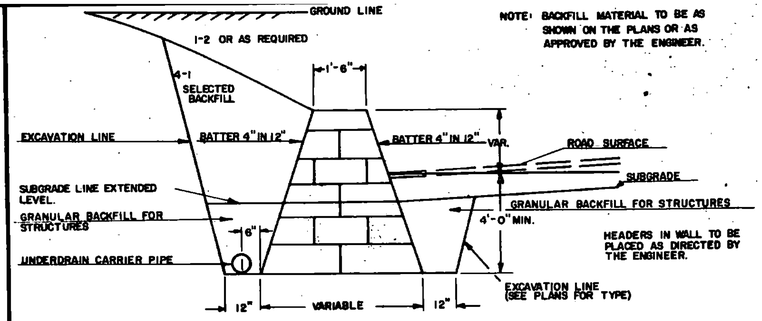
| PIPE DIAMETER | 12" | 15" | 18" | 24" | 30" | 36" | 42" | 48" | 54" | 60" |
|---|---|---|---|---|---|---|---|---|---|---|
| NUMBER | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| LENGTH OF BARS | 3'-0" | 3'-0" | 3'-0" | 3'-0" | 4'-0" | 4'-0" | 5'-0" | 5'-0" | 6'-0" | 6'-0" |

ALL REINFORCING STEEL TO BE 5/8" DIAMETER DEFORMED BARS.
CONCRETE QUANTITIES EXCLUDE PIPE DIAMETERS FOR 30" AND OVER.
SAME DEDUCTION MADE FOR CONCRETE PIPE AS IS MADE FOR METAL PIPE.

## REINFORCED CONCRETE STRAIGHT HEADWALL

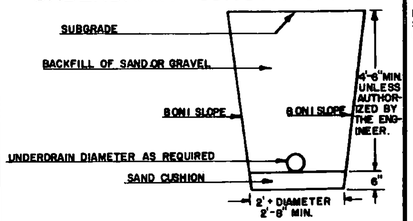
GENERAL NOTES – HEADWALLS:

1. THE HEIGHT OF HEADWALLS ON DRIVEWAY PIPES IS TO BE REDUCED TO 6" ABOVE THE TOP OF PIPE.
2. BELL AND SPIGOT PIPE IS TO BE LAID WITH THE BELL UPSTREAM.
3. HEADWALL QUANTITIES, FOR THE SAME TYPE HEADWALLS ON PIPES OF EQUAL DIAMETER, ARE THE SAME FOR BOTH CONCRETE AND METAL PIPE. LENGTH OF HEADWALLS ARE BASED ON INSIDE DIAMETER OF PIPES.
4. THE NECESSITY OF CONSTRUCTING A FLOOR AT THE ENTRANCE TO AN L TYPE HEADWALL SHALL BE DETERMINED IN THE FIELD BY THE ENGINEER AND ANY INSTALLATION THEREOF SHALL BE AT HIS DIRECTION.

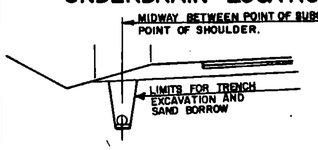



## CEMENT RUBBLE MASONRY RETAINING WALL

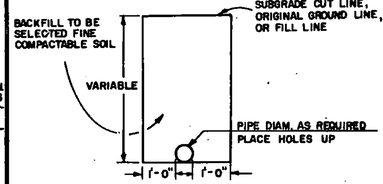
## UNDERDRAIN CONSTRUCTION




## UNDERDRAIN LOCATION




UNDERDRAIN TO BE LAID MIDWAY BETWEEN SUBGRADE LINE AND POINT OF SHOULDER OR AS DIRECTED BY THE ENGINEER.




## UNDERDRAIN CARRIER PIPE CONSTRUCTION

GENERAL NOTES – UNDERDRAIN:

1. GRADE FOR UNDERDRAIN PIPE SHALL BE PARALLEL WITH THE GRADE OF THE ROAD UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
2. A FLUSHING BASIN IS TO BE INSTALLED AT INLET WHEN LESS THAN 3% GRADE IS USED OR AS ORDERED BY THE ENGINEER.
3. THE UNDERDRAIN SHALL BE TAKEN TO A PROPER OUTLET AND PROTECTED WITH A HEADWALL OF CEMENT RUBBLE MASONRY IF SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER.
4. ELBOWS, Te, AND OTHER JUNCTION UNITS NECESSARY FOR PROPER INSTALLATION OF UNDERDRAIN, AS DIRECTED BY THE ENGINEER, ARE TO BE INCLUDED IN THE UNIT BID PRICE FOR UNDERDRAIN OR CARRIER PIPE.

REVISIONS AND CORRECTIONS

MAR. 8, 1972: CHANGED ANCHOR BOLTS FROM 10" "L" TO 8" CARRIAGE BOLTS.
DEC. 16, 1976: NOTE ADDED ON REINFORCING STEEL FOR CRADLE HEADWALLS
OCT. 30, 1985: REVISED TO CONFORM TO 1986 SPECIFICATIONS.

APPROVED: DATE: Dec. 6, 1971

R. W. Arnold
CHIEF ENGINEER

E. H. Stickney
ASST. CHIEF ENGINEER

G. M. Lane
HIGHWAY ENGINEER

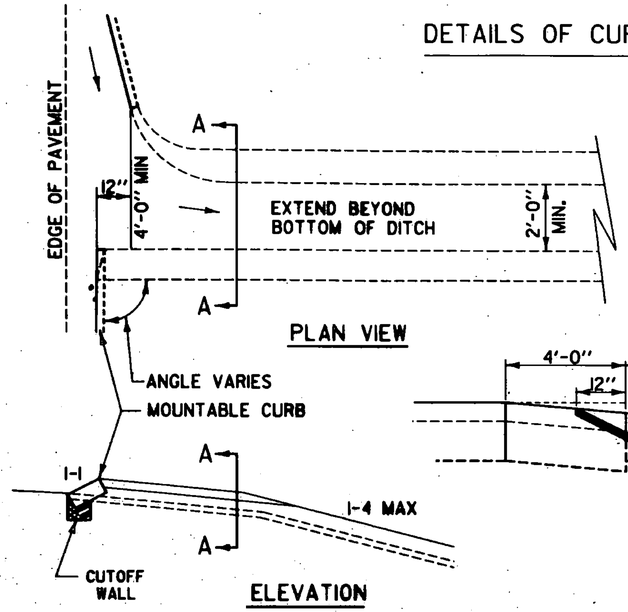
# CEMENT RUBBLE MASONRY HEADWALLS & RETAINING WALL
# RIPRAP LIGHT TYPE SLOPE HEADWALL
# REINFORCED CONCRETE HEADWALL
# UNDERDRAIN & CARRIER PIPE CONSTRUCTION DETAILS

VERMONT AGENCY OF TRANSPORTATION

STANDARD

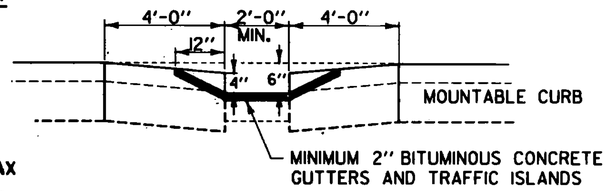
D-2

## DETAILS OF CURB DRAINS



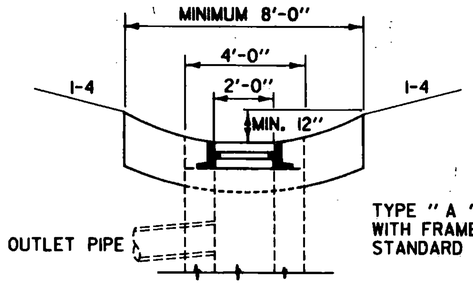

NOT TO BE USED ON ROADWAY GRADES EXCEEDING 2%

A 6" DEPTH OF COARSE SAND OR GRAVEL SHALL BE USED TO REPLACE UNSUITABLE MATERIAL ENCOUNTERED BELOW SUBGRADE AT THE DIRECTION OF THE ENGINEER.



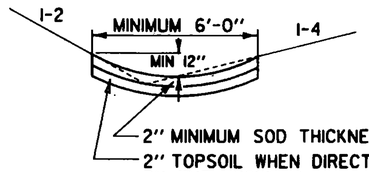

SECTION A-A

## DROP INLET WITH GRATE IN TREATED GUTTER

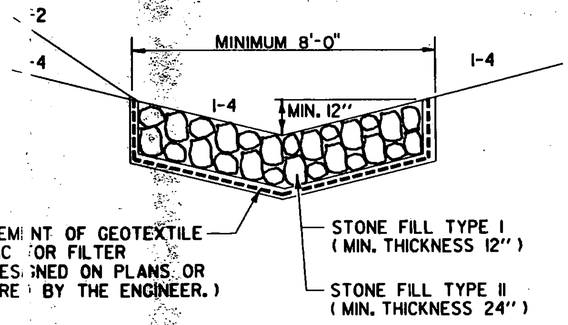



TYPE " A " RCDI WITH FRAME , SEE STANDARD SHEET D-6

## SODDING

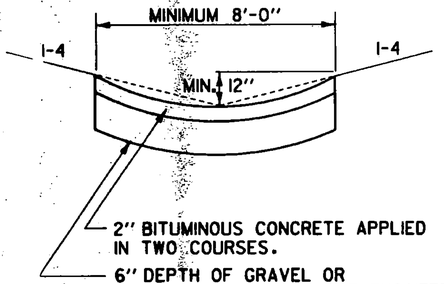



## STONE FILL TYPE I
## STONE FILL TYPE II

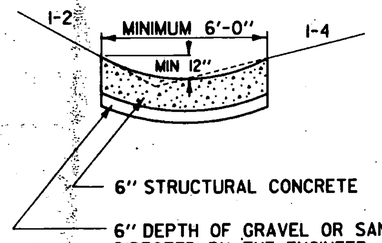



EXCAVATION PAID FOR AS COMMON EXCAVATION.

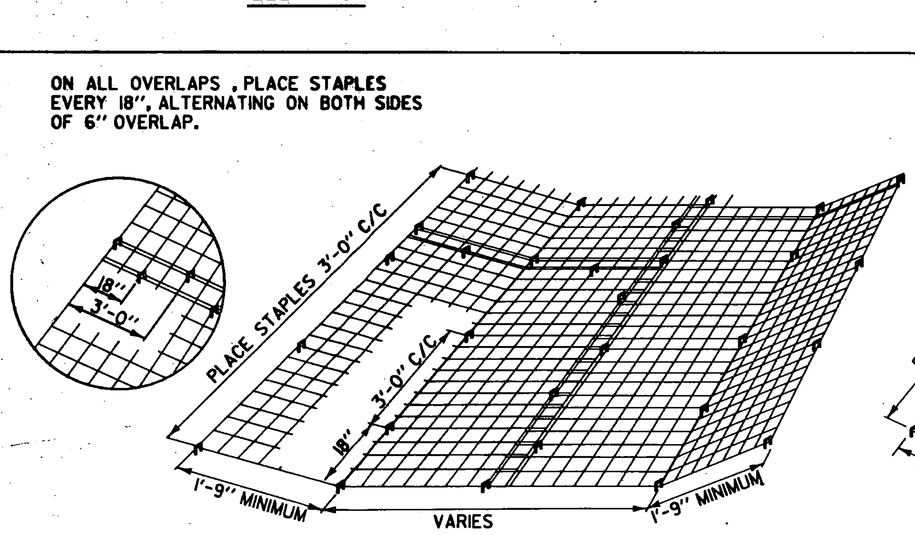
## BITUMINOUS CONCRETE GUTTERS AND TRAFFIC ISLANDS



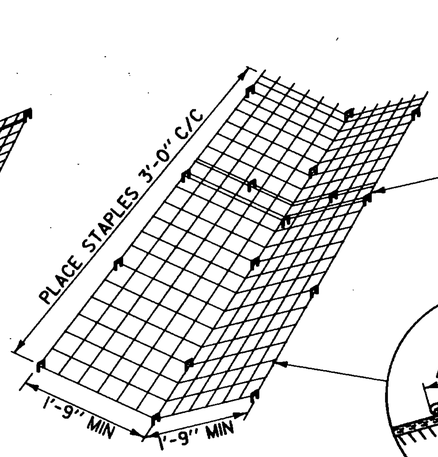

## PORTLAND CEMENT CONCRETE GUTTER



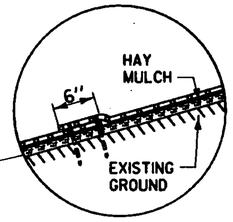

ON ALL OVERLAPS , PLACE STAPLES EVERY 18", ALTERNATING ON BOTH SIDES OF 6" OVERLAP.



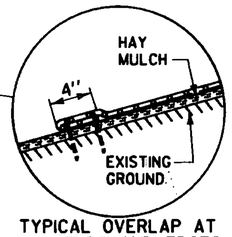

TYPICAL FLAT BOTTOM DITCH




TYPICAL " V " DITCH




TYPICAL OVERLAP




TYPICAL OVERLAP AT ALL ENDS AND EDGES

## DETAILS OF PLACING EROSION MATTING

REVISIONS AND CORRECTIONS

APPROVED

APRIL 2, 1986
DATE

CHIEF ENGINEER

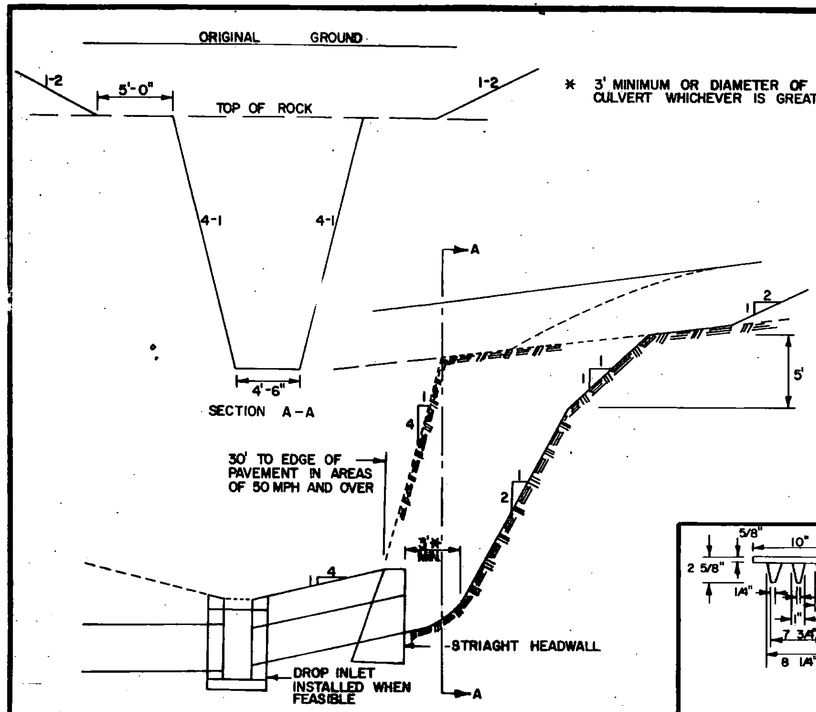
CHIEF OF DESIGN

SURVEY AND PLANS ENGINEER

# TREATED GUTTERS

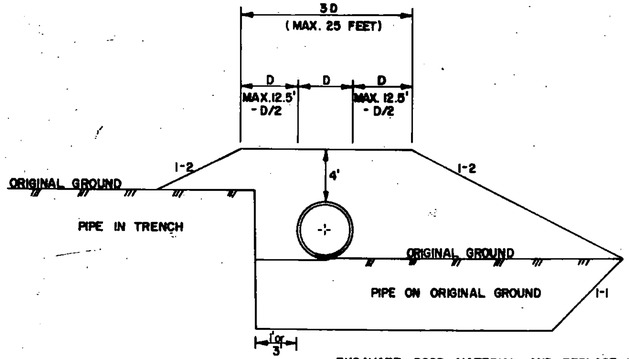
VERMONT AGENCY OF TRANSPORTATION

STANDARD
D-3



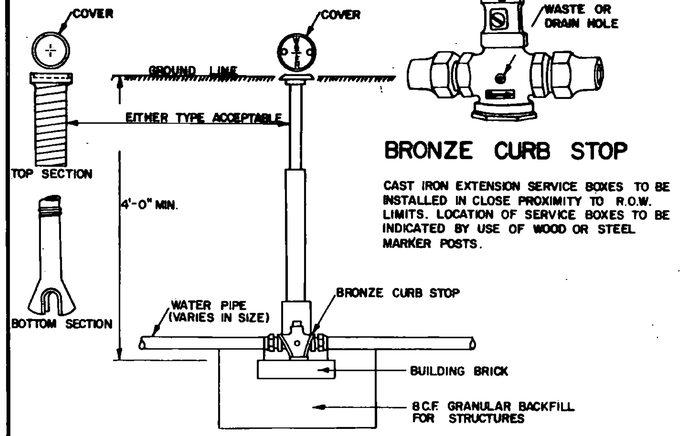

* 3' MINIMUM OR DIAMETER OF CULVERT WHICHEVER IS GREATER.

## TYPICAL WATERFALL FOR CULVERTS UP TO AND INCLUDING 48" DIAMETER




EXCAVATE POOR MATERIAL AND REPLACE WITH GRANULAR BACKFILL FOR STRUCTURES, OR SAND BORROW AS DIRECTED BY THE ENGINEER.

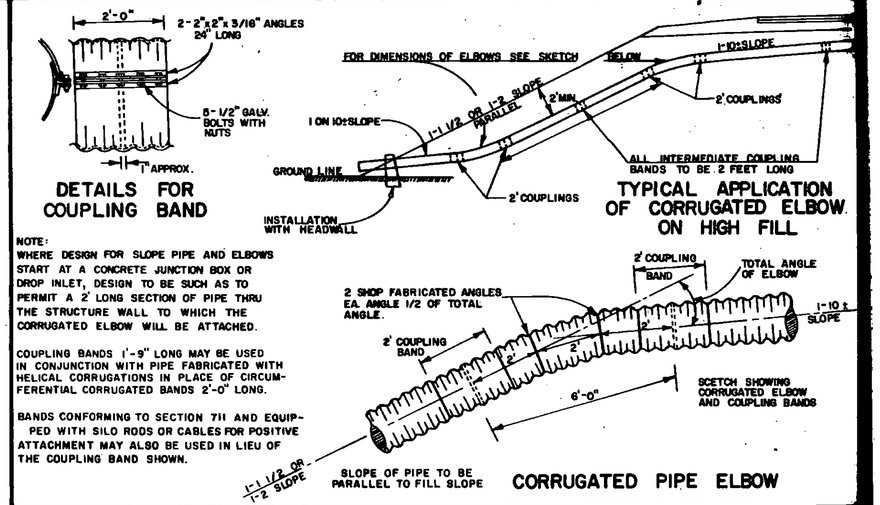
## GRANULAR MATERIAL AT CULVERT LOCATIONS




## BRONZE CURB STOP

CAST IRON EXTENSION SERVICE BOXES TO BE INSTALLED IN CLOSE PROXIMITY TO R.O.W. LIMITS. LOCATION OF SERVICE BOXES TO BE INDICATED BY USE OF WOOD OR STEEL MARKER POSTS.

## EXTENSION SERVICE BOX AND CURB STOP




## DETAILS FOR COUPLING BAND

NOTE:
WHERE DESIGN FOR SLOPE PIPE AND ELBOWS START AT A CONCRETE JUNCTION BOX OR DROP INLET, DESIGN TO BE SUCH AS TO PERMIT A 2' LONG SECTION OF PIPE THRU THE STRUCTURE WALL TO WHICH THE CORRUGATED ELBOW WILL BE ATTACHED.

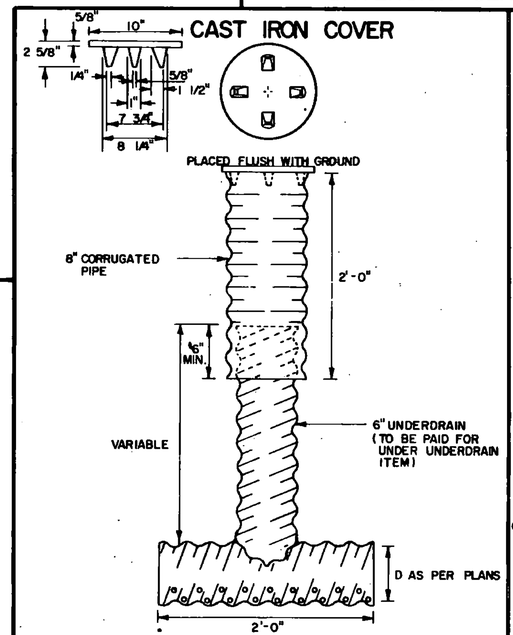
COUPLING BANDS 1'-9" LONG MAY BE USED IN CONJUNCTION WITH PIPE FABRICATED WITH HELICAL CORRUGATIONS IN PLACE OF CIRCUMFERENTIAL CORRUGATED BANDS 2'-0" LONG.

BANDS CONFORMING TO SECTION 711 AND EQUIPPED WITH SILO RODS OR CABLES FOR POSITIVE ATTACHMENT MAY ALSO BE USED IN LIEU OF THE COUPLING BAND SHOWN.

## TYPICAL APPLICATION OF CORRUGATED ELBOW ON HIGH FILL

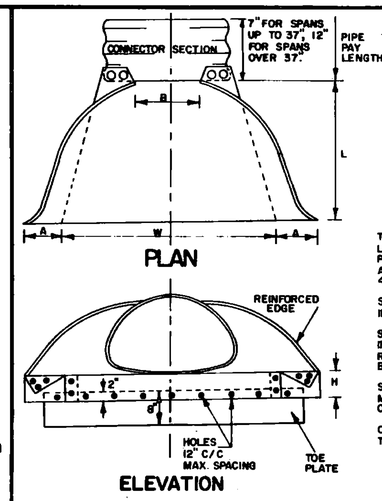
SLOPE OF PIPE TO BE PARALLEL TO FILL SLOPE

## CORRUGATED PIPE ELBOW

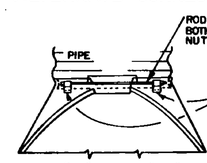



FLUSHING BASINS AT BEGINNING OF LINE SHALL HAVE A 90° ELBOW RATHER THAN A T AS SHOWN ABOVE. (ELBOW TO BE PAID FOR UNDER UNDERDRAIN ITEM)

## UNDERDRAIN FLUSHING BASIN




## ALTERNATE CONNECTION




FOR 18"x 11" THRU 58"x 36" ONLY

TOE PLATE TO BE PUNCHED TO MATCH HOLES IN SKIRT LIP. 3/8" GALV. BOLTS TO BE FURNISHED. LENGTH OF TOE PLATE W=10" FOR PIPE-ARCHES WITH RISE 11" TO 27" INCL AND W=18" MIN. FOR PIPE-ARCHES WITH RISE OF 31" TO 44" INCL.

SKIRT SECTION FOR PIPE-ARCHES WITH RISE OF 11" TO 27" INCL. TO BE MADE IN ONE PIECE.

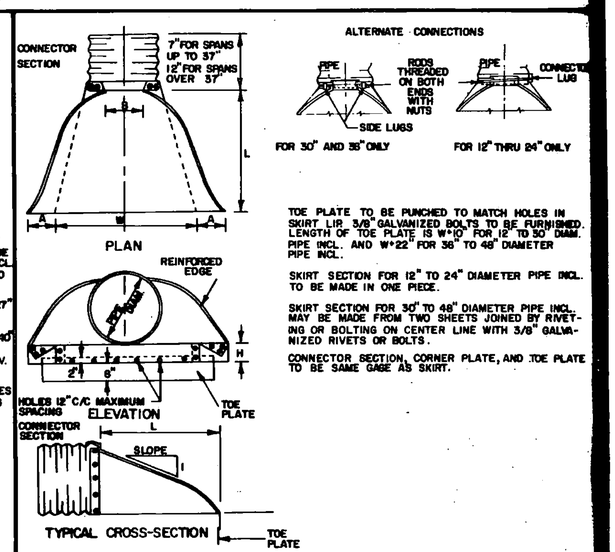
SKIRT SECTION FOR PIPE-ARCHES WITH RISE OF 31" TO 40" INCL. MAY BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTERLINE WITH 3/8" GALV. BOLTS OR RIVETS.

SKIRT SECTIONS FOR PIPE-ARCHES WITH RISE OF 44 INCHES MAY BE MADE FROM THREE SHEETS JOINED BY RIVETING OR BOLTING AT EQUAL DISTANCES FROM CENTERLINE.

CONNECTOR SECTION, CORNER PLATE, AND TOE PLATE TO BE SAME GAGE AS SKIRT.

## CORRUGATED STEEL PIPE ARCH END SECTION

| PIPE ARCH DIMENSIONS SPAN | RISE | THICK | DIMENSIONS A (1" ±) | B (MAX.) | H (1" ±) | L (1 1/2") | W (2" ±) | APPROX SLOPE | | BODY |
|---|---|---|---|---|---|---|---|---|---|---|
| 18 | 11 | .064 | 7 | 9 | 6 | 19 | 30 | 2 | 1/2 | 1 Pc |
| 22 | 13 | .064 | 7 | 10 | 6 | 23 | 36 | 2 | 1/2 | 1 Pc |
| 29 | 18 | .064 | 9 | 14 | 6 | 32 | 48 | 2 | 1/2 | 1 Pc |
| 36 | 22 | .079 | 10 | 16 | 6 | 39 | 60 | 2 | 1/2 | 1 Pc |
| 45 | 27 | .079 | 12 | 18 | 8 | 46 | 75 | 2 | 1/2 | 1 Pc |
| 50 | 31 | .109 | 13 | 21 | 9 | 53 | 85 | 2 | 1/2 | 2 Pc |
| 58 | 36 | .109 | 18 | 26 | 12 | 65 | 90 | 2 | 1/2 | 2 Pc |
| 65 | 40 | .109 | 18 | 30 | 12 | 70 | 102 | 2 | 1/4 | 2 Pc |
| 72 | 44 | .109 | 18 | 33 | 12 | 77 | 114 | 2 | 1/4 | 3 Pc |




TOE PLATE TO BE PUNCHED TO MATCH HOLES IN SKIRT LIP. 3/8" GALVANIZED BOLTS TO BE FURNISHED. LENGTH OF TOE PLATE IS W=10" FOR 12" TO 30" DIAM. PIPE INCL. AND W=22" FOR 36" TO 48" DIAMETER PIPE INCL.

SKIRT SECTION FOR 12" TO 24" DIAMETER PIPE INCL. TO BE MADE IN ONE PIECE.

SKIRT SECTION FOR 30" TO 48" DIAMETER PIPE INCL. MAY BE MADE FROM TWO SHEETS JOINED BY RIVETING OR BOLTING ON CENTER LINE WITH 3/8" GALVANIZED RIVETS OR BOLTS.

CONNECTOR SECTION, CORNER PLATE, AND TOE PLATE TO BE SAME GAGE AS SKIRT.

## CORRUGATED STEEL PIPE END SECTION

| PIPE DIAM. | THICK | DIMENSIONS A (1" ±) | B (MAX.) | H (1" ±) | L (1 1/2") | W (2" ±) | APPROX SLOPE | | BODY |
|---|---|---|---|---|---|---|---|---|---|
| 12 | .064 | 6 | 6 | 6 | 21 | 24 | 2 | 1/2 | 1 Pc |
| 15 | .064 | 7 | 8 | 6 | 26 | 30 | 2 | 1/2 | 1 Pc |
| 18 | .064 | 8 | 10 | 6 | 31 | 36 | 2 | 1/2 | 1 Pc |
| 21 | .064 | 9 | 12 | 6 | 36 | 42 | 2 | 1/2 | 1 Pc |
| 24 | .064 | 10 | 13 | 6 | 41 | 48 | 2 | 1/2 | 1 Pc |
| 30 | .079 | 12 | 16 | 8 | 51 | 60 | 2 | 1/2 | 1 Pc |
| 36 | .079 | 14 | 19 | 9 | 60 | 72 | 2 | 1/2 | 2 Pc |
| 42 | .109 | 16 | 22 | 11 | 69 | 84 | 2 | 1/2 | 2 Pc |
| 48 | .109 | 18 | 27 | 12 | 78 | 90 | 2 | 1/4 | 2 Pc |

REVISIONS AND CORRECTIONS

JULY 17, 1972 HELICAL CORRUGATED COUPLING BAND NOTE ADDED.
JULY 24, 1975 GRANULAR MATERIAL AT CULVERT LOCATIONS CORRECTED.
OCT 30, 1985 REVISED TO CONFORM WITH 1986 SPECIFICATIONS.

APPROVED:

DATE: Dec 6, 1971

R.H. Arnold
CHIEF ENGINEER

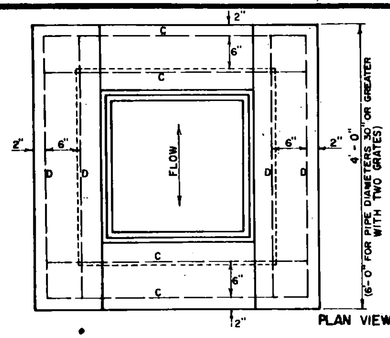
E.W. Stickney
ASST CHIEF ENGINEER

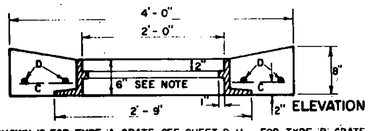
G.M. Lane
HIGHWAY ENGINEER

TYPICAL WATERFALL FOR CULVERTS UP TO AND INCLUDING 48" DIAMETER
EXTENSION SERVICE BOX AND CURB STOP
CORRUGATED PIPE ELBOW
GRANULAR BORROW AT CULVERT LOCATIONS
UNDERDRAIN FLUSHING BASIN
CORRUGATED STEEL PIPE END SECTION
CORRUGATED STEEL PIPE ARCH END SECTION

VERMONT AGENCY OF TRANSPORTATION

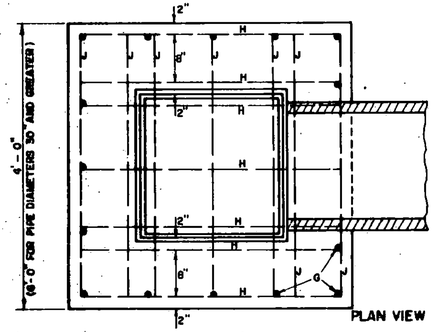
STANDARD
D-4



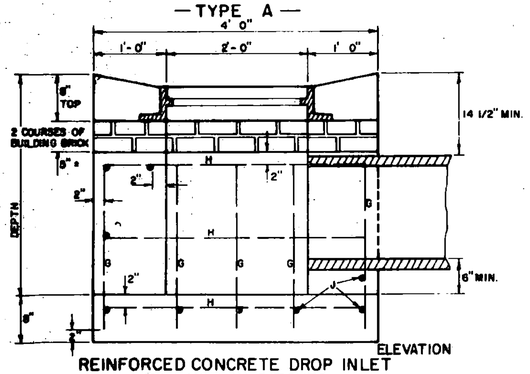




NOTE – FRAME SHOWN IS FOR TYPE A GRATE, SEE SHEET D-11. FOR TYPE B GRATE AND FRAME, SEE SHEET D-16 (EXCEPT THE FRAME DEPTH DIMENSION SHALL BE 6").

TOP FOR REINFORCED CONCRETE
DROP INLET WITH GRATE
FOR USE IN DITCHES




— TYPE A —




REINFORCED CONCRETE DROP INLET
FOR USE IN DITCHES

## STEEL SCHEDULE

| 4'x4' DROP INLET TYPE A 12", 15", 18", 24" | | | | | | | 4'x6' DROP INLET WITH TWO GRATES TYPE B 30", 36" | | | | | | | | | TYPE C | 4'x6' DROP INLET WITH ONE GRATE WITH 4'x6' TOP 30", 36" | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEPTH | G | LENGTH | H, J | LENGTH | C, D | LENGTH | G | LENGTH | H | LENGTH | J | LENGTH | C | LENGTH | D | LENGTH | DEPTH | G | LENGTH | H | LENGTH | J | LENGTH | C | LENGTH | D | LENGTH | DEPTH |
| 3'-0" | 15 | 2'-3" | 22 | 3'-8" | 8 | 3'-8" | | | | | | | | | | | 3'-0" | | | | | | | | | | | |
| 3'-6" | 15 | 2'-9" | 22 | 3'-8" | 8 | 3'-8" | | | | | | | | | | | 3'-6" | | | | | | | | | | | |
| 4'-0" | 15 | 3'-3" | 29 | 3'-8" | 8 | 3'-8" | 17 | 3'-3" | 19 | 3'-8" | 10 | 5'-8" | 4 | 3'-8" | 4 | 5'-8" | 4'-0" | 17 | 3'-8" | 19 | 3'-8" | 10 | 5'-8" | 6 | 3'-8" | 4 | 5'-8" | 4'-0" |
| 4'-6" | 15 | 3'-9" | 29 | 3'-8" | 8 | 3'-8" | 17 | 3'-9" | 19 | 3'-8" | 10 | 5'-8" | 4 | 3'-8" | 4 | 5'-8" | 4'-6" | 17 | 4'-2" | 19 | 3'-8" | 10 | 5'-8" | 6 | 3'-8" | 4 | 5'-8" | 4'-6" |
| 5'-0" | 15 | 4'-3" | 35 | 3'-8" | 8 | 3'-8" | 17 | 4'-3" | 23 | 3'-8" | 13 | 5'-8" | 4 | 3'-8" | 4 | 5'-8" | 5'-0" | 17 | 4'-8" | 23 | 3'-8" | 13 | 5'-8" | 6 | 3'-8" | 4 | 5'-8" | 5'-0" |
| 5'-6" | 15 | 4'-9" | 35 | 3'-8" | 8 | 3'-8" | 17 | 4'-9" | 23 | 3'-8" | 13 | 5'-8" | 4 | 3'-8" | 4 | 5'-8" | 5'-6" | 17 | 5'-2" | 23 | 3'-8" | 13 | 5'-8" | 6 | 3'-8" | 4 | 5'-8" | 5'-6" |
| 6'-0" | 15 | 5'-3" | 41 | 3'-8" | 8 | 3'-8" | 17 | 5'-3" | 27 | 3'-8" | 15 | 5'-8" | 4 | 3'-8" | 4 | 5'-8" | 6'-0" | 17 | 5'-8" | 27 | 3'-8" | 15 | 5'-8" | 6 | 3'-8" | 4 | 5'-8" | 6'-0" |
| 6'-6" | 15 | 5'-9" | 41 | 3'-8" | 8 | 3'-8" | 17 | 5'-9" | 31 | 3'-8" | 15 | 5'-8" | 4 | 3'-8" | 4 | 5'-8" | 6'-6" | 17 | 6'-2" | 31 | 3'-8" | 15 | 5'-8" | 6 | 3'-8" | 4 | 5'-8" | 6'-6" |
| 7'-0" | 15 | 6'-3" | 47 | 3'-8" | 8 | 3'-8" | 17 | 6'-3" | 35 | 3'-8" | 17 | 5'-8" | 4 | 3'-8" | 4 | 5'-8" | 7'-0" | 17 | 6'-8" | 35 | 3'-8" | 17 | 5'-8" | 6 | 3'-8" | 4 | 5'-8" | 7'-0" |
| 7'-6" | 15 | 6'-9" | 47 | 3'-8" | 8 | 3'-8" | 17 | 6'-9" | 35 | 3'-8" | 17 | 5'-8" | 4 | 3'-8" | 4 | 5'-8" | 7'-6" | 17 | 7'-2" | 35 | 3'-8" | 17 | 5'-8" | 6 | 3'-8" | 4 | 5'-8" | 7'-6" |
| 8'-0" | 15 | 7'-3" | 53 | 3'-8" | 8 | 3'-8" | 17 | 7'-3" | 39 | 3'-8" | 19 | 5'-8" | 4 | 3'-8" | 4 | 5'-8" | 8'-0" | 17 | 7'-8" | 39 | 3'-8" | 19 | 5'-8" | 6 | 3'-8" | 4 | 5'-8" | 8'-0" |

## STEEL AND CONCRETE QUANTITIES

| 4'x4' DROP INLET TYPE A 12"-15"-18"-24" | | | 4'x6' DROP INLET WITH TWO GRATES 30" TYPE B | | | | | 4'x6' DROP INLET WITH ONE GRATE WITH 4'x6' TOP 30" TYPE C 36" | | | | | STEEL SCHEDULE TYPE D 4'x6' DROP INLET WITH ONE GRATE WITH 4'x4' TOP 30", 36" | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEPTH | CONCRETE C.Y. | STEEL LBS. | CONCRETE C.Y. | STEEL LBS. | CONCRETE C.Y. | STEEL LBS. | DEPTH | CONCRETE C.Y. | STEEL LBS. | CONCRETE C.Y. | STEEL LBS. | DEPTH | G | LENGTH | H | LENGTH | J | LENGTH | C | LENGTH | D | LENGTH | DEPTH |
| 3'-0" | 1.7 | 150 | | | | | 3'-0" | | | | | | 17 | 3'-7" | 23 | 3'-8" | 13 | 5'-8" | 12 | 3'-8" | 4<br>4 | 5'-8"<br>3'-8" | 5'-0" |
| 3'-6" | 1.9 | 158 | | | | | 3'-6" | | | | | | 17 | 4'-1" | 23 | 3'-8" | 13 | 5'-8" | 12 | 3'-8" | 4<br>4 | 5'-8"<br>3'-8" | 5'-6" |
| 4'-0" | 2.1 | 193 | 2.7 | 228 | | | 4'-0" | 2.8 | 244 | | | | 17 | 4'-7" | 27 | 3'-8" | 15 | 5'-8" | 12 | 3'-8" | 4<br>4 | 5'-8"<br>3'-8" | 6'-0" |
| 4'-6" | 2.3 | 200 | 3.0 | 237 | 2.9 | 237 | 4'-6" | 3.1 | 252 | 3.0 | 252 | 4'-6" | 17 | 5'-1" | 31 | 3'-8" | 15 | 5'-8" | 12 | 3'-8" | 4<br>4 | 5'-8"<br>3'-8" | 6'-6" |
| 5'-0" | 2.6 | 231 | 3.3 | 279 | 3.2 | 279 | 5'-0" | 3.4 | 294 | 3.3 | 294 | 5'-0" | 17 | 5'-7" | 35 | 3'-8" | 17 | 5'-8" | 12 | 3'-8" | 4<br>4 | 5'-8"<br>3'-8" | 7'-0" |
| 5'-6" | 2.8 | 239 | 3.6 | 288 | 3.5 | 288 | 5'-6" | 3.7 | 303 | 3.6 | 303 | 5'-6" | | | | | | | | | | | |
| 6'-0" | 3.0 | 270 | 3.9 | 324 | 3.8 | 324 | 6'-0" | 4.0 | 339 | 3.9 | 339 | 6'-0" | 17 | 6'-:" | 35 | 3'-8" | 17 | 5'-8" | 12 | 3'-8" | 4<br>4 | 5'-8"<br>3'-8" | 7'-6" |
| 6'-6" | 3.2 | 278 | 4.2 | 348 | 4.1 | 348 | 6'-6" | 4.3 | 363 | 4.2 | 363 | 6'-6" | | | | | | | | | | | |
| 7'-0" | 3.5 | 308 | 4.5 | 384 | 4.4 | 384 | 7'-0" | 4.6 | 399 | 4.5 | 399 | 7'-0" | 17 | 6'-7" | 39 | 3'-8" | 19 | 5'-8" | 12 | 3'-8" | 4<br>4 | 5'-8"<br>3'-8" | 8'-0" |
| 7'-6" | 3.7 | 316 | 4.8 | 393 | 4.7 | 393 | 7'-6" | 4.9 | 408 | 4.8 | 408 | 7'-6" | | | | | | | | | | | |
| 8'-0" | 3.9 | 347 | 5.1 | 429 | 5.0 | 429 | 8'-0" | 5.2 | 444 | 5.1 | 444 | 8'-0" | | | | | | | | | | | |

FOR 2nd 30" PIPE DEDUCT 0.18 C.Y.
FOR 2nd 36" PIPE DEDUCT 0.26 C.Y.

FOR 2nd 42" PIPE DEDUCT 0.36 C.Y., OR 0.18 FOR 1 PIPE
FOR 2nd 48" PIPE DEDUCT 0.47 C.Y.; OR 0.24 FOR 1 PIPE

ALL REINFORCING STEEL TO BE NO. 5 DEFORMED BARS, EVENLY SPACED WITH A MAXIMUM SPACING OF 12" C/C.

ALL STEEL TO HAVE 2 INCH MIN. COVER.

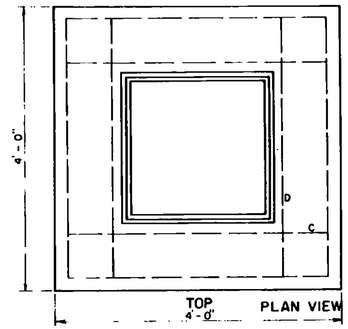
DROP INLET TO BE CONSTRUCTED IN ACCORDANCE WITH STRUCTURAL CONCRETE, SECTION 501.

GRATES TO CONFORM TO DROP INLETS, CATCH BASINS, AND MANHOLES, SECTION 604.

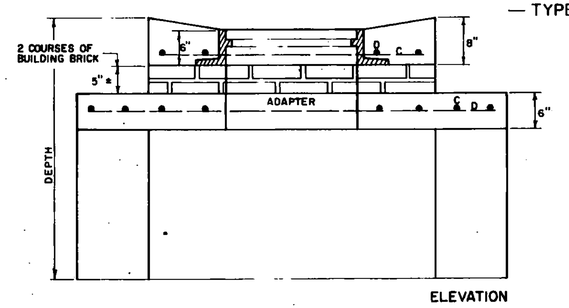
FURNISHING AND LAYING OF BRICKS FOR ADJUSTING ELEVATION OF GRATE SHALL BE INCLUDED IN UNIT BID PRICE FOR CONCRETE, CLASS B, PAY ITEM 501.25, AND THEIR VOLUME TO BE INCLUDED IN THE FINAL QUANTITIES.

MORTAR, TYPE II, TO BE USED AS JOINT FILLER AND LAYING OF BRICK.

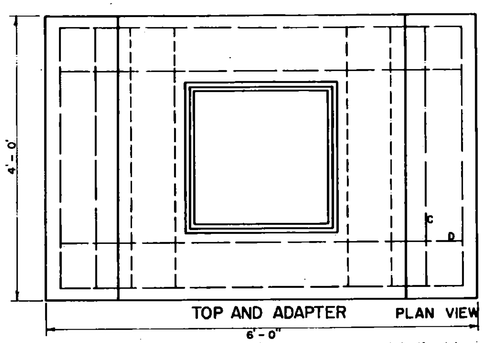
FOR PIPES OF 30" OR MORE IN DIAMETER, ALLOWANCE SHALL BE MADE FOR THE OPENING IN COMPUTING CONCRETE VOLUMES. THIS DEDUCTION WILL BE BASED ON THE RATED DIAMETER OF THE PIPE USED, WITH THE SAME DEDUCTION FOR CONCRETE AND METAL PIPE. ABOVE TABLES INDICATE DEDUCTION FOR ONE PIPE.



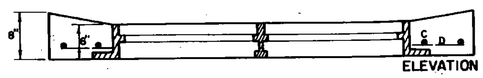

— TYPE D —

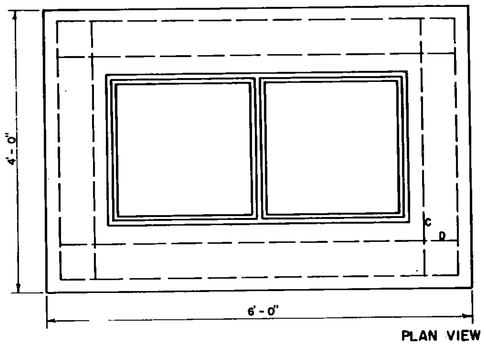



4'x6' DROP INLET
WITH 4'x4' TOP
TOP WITH ONE CAST IRON GRATE




— TYPE B —



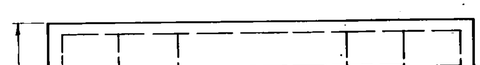

4'x6' DROP INLET
TOP WITH TWO CAST IRON GRATES

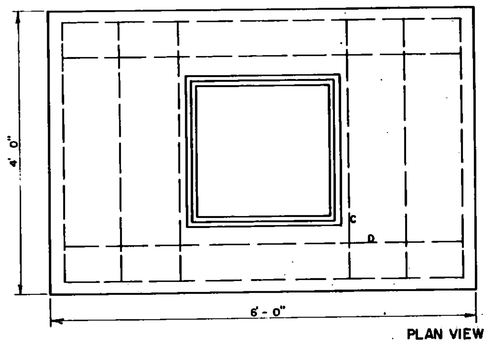
## STEEL AND CONCRETE QUANTITIES

4'x6' DROP INLET WITH ONE GRATE WITH 4'x4' TOP TYPE D

| DEPTH | 30" CONCRETE C.Y. | 30" STEEL LBS | 36" CONCRETE C.Y. | 36" STEEL LBS |
|---|---|---|---|---|
| 5'-0" | 3.2 | 313 | 3.1 | 313 |
| 5'-6" | 3.5 | 322 | 3.4 | 322 |
| 6'-0" | 3.8 | 358 | 3.7 | 358 |
| 6'-6" | 4.1 | 382 | 4.0 | 382 |
| 7'-0" | 4.4 | 418 | 4.3 | 418 |
| 7'-6" | 4.7 | 427 | 4.6 | 427 |
| 8'-0" | 5.0 | 463 | 4.9 | 463 |

— TYPE C —




4'x6' DROP INLET
TOP WITH ONE CAST IRON GRATE

REVISIONS AND CORRECTIONS
APR. 2, 1973 – ORIGINAL D-6 REDRAWN.

APPROVED
April 4, 1973
DATE

R J Arnoldes
CHIEF ENGINEER

E H Steinmetz by P
ASST. CHIEF ENGINEER

J M Low g
HIGHWAY ENGINEER

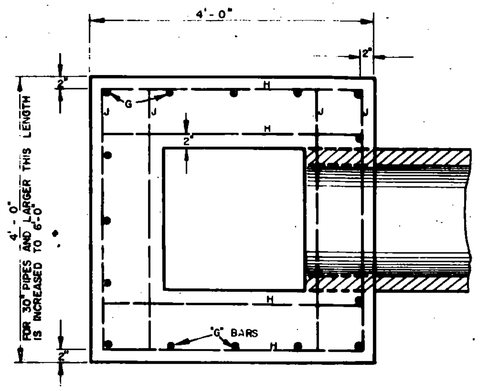
# REINFORCED CONCRETE DROP INLET WITH GRATE
## FOR USE IN DITCHES

VERMONT AGENCY OF TRANSPORTATION

STANDARD
D-6

## REINFORCED CONCRETE DROP INLET WITH GRATE (BOTTOM SECTION)

SEE SHEETS D-9, D-10, D-11 AND D-16 FOR TOP SECTION




TOP VIEW

| STEEL SCHEDULE FOR DROP INLET (BOTTOM SECTION ONLY) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DEPTH | 12" TO 24" DIAMETER 4' X 4' D.I. | | | | | | 30" DIAMETER 4' X 6' D.I. | | | | | |
| | NO. J | LENGTH | NO. H | LENGTH | NO. G | LENGTH | NO. J | LENGTH | NO. H | LENGTH | NO. G | LENGTH |
| 3'-0" | 12 | 3'-8" | 13 | 3'-8" | 15 | 2'-8" | | | | | | |
| 3'-6" | 12 | 3'-8" | 13 | 3'-8" | 15 | 3'-2" | | | | | | |
| 4'-0" | 14 | 3'-8" | 15 | 3'-8" | 15 | 3'-8" | | | | | | |
| 4'-6" | 14 | 3'-8" | 15 | 3'-8" | 15 | 4'-2" | | | | | | |
| 5'-0" | 16 | 3'-8" | 17 | 3'-8" | 15 | 4'-8" | 12 | 5'-8" | 17 | 3'-8" | 17 | 4'-8" |
| 5'-6" | 16 | 3'-8" | 17 | 3'-8" | 15 | 5'-2" | 14 | 5'-8" | 19 | 3'-8" | 17 | 5'-2" |
| 6'-0" | 18 | 3'-8" | 19 | 3'-8" | 15 | 5'-8" | 16 | 5'-8" | 21 | 3'-8" | 17 | 5'-8" |

MINIMUM DEPTH FOR
15" 3'-6"
18" 3'-6"
24" 4'-0"

| DEPTH | 36" DIAMETER 4' X 6' D.I. | | | | | |
|---|---|---|---|---|---|---|
| | NO. J | LENGTH | NO. H | LENGTH | NO. G | LENGTH |
| 5'-0" | 14 | 5'-8" | 19 | 3'-8" | 17 | 4'-8" |
| 5'-6" | 14 | 5'-8" | 19 | 3'-8" | 17 | 5'-2" |
| 6'-0" | 16 | 5'-8" | 21 | 3'-8" | 17 | 5'-8" |

BRICKS ARE INCLUDED IN CONCRETE QUANTITIES IN CHART

| CONCRETE AND STEEL QUANTITIES FOR DROP INLETS (BOTTOM SECTION ONLY) | | | | | | |
|---|---|---|---|---|---|---|
| DEPTH | 12"-24" DIA. | | 30" DIA. | | 36" DIA. | |
| | CONC. B C.Y. | STEEL | CONC. B C.Y. | STEEL | CONC. B C.Y. | STEEL |
| 3'-0" | 1.73 | 138 | | | | |
| 3'-6" | 1.95 | 145 | | | | |
| 4'-0" | 2.17 | 168 | | | | |
| 4'-6" | 2.40 | 176 | 3.08 | 210 | | |
| 5'-0" | 2.62 | 199 | 3.37 | 238 | 3.29 | 238 |
| 5'-6" | 2.84 | 207 | 3.67 | 247 | 3.59 | 247 |
| 6'-0" | 3.06 | 230 | 3.97 | 276 | 3.89 | 276 |

TO FIND VOLUME OF CONCRETE FOR THE ENTIRE STRUCTURE, ADD THE VOLUME FOR THE TOP USED, TO THE VOLUME IN THIS TABLE. FOR VOLUME IN TOP, SEE SHEETS D-9, D-10

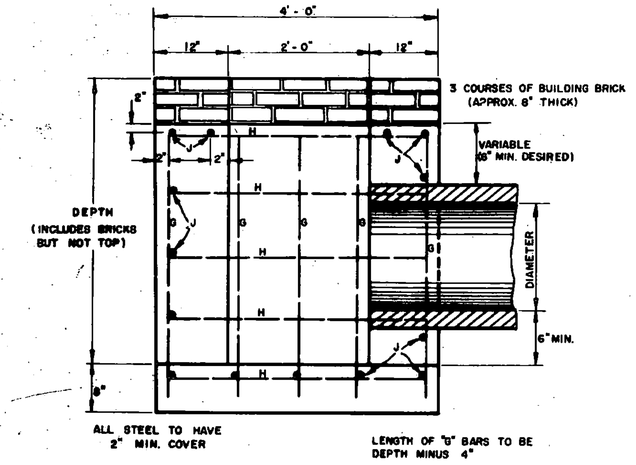
ALL REINFORCING STEEL TO BE NO.5 Ø DEFORMED BARS, EVENLY SPACED, WITH A MAXIMUM SPACING OF 12" CENTER TO CENTER.

DROP INLET TO BE CONSTRUCTED IN ACCORDANCE WITH STRUCTURAL CONCRETE, SECTION 501.

FURNISHING AND LAYING OF BRICKS FOR ADJUSTING ELEVATION OF GRATE, SHALL BE INCLUDED IN UNIT BID PRICE FOR CONCRETE, CLASS B, PAY ITEM 501.25, AND THEIR VOLUME TO BE INCLUDED IN THE FINAL QUANTITIES.

MORTAR, TYPE II, TO BE USED FOR JOINT FILLER AND LAYING OF BRICK.

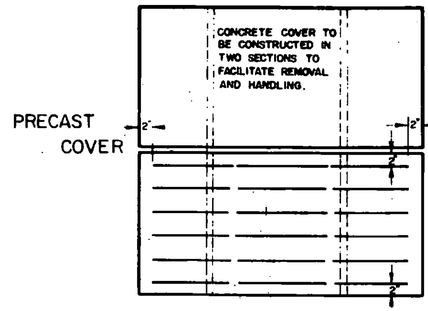
FOR PIPES OF 30" OR MORE IN DIAMETER, ALLOWANCE SHALL BE MADE FOR THE OPENING IN COMPUTING CONCRETE VOLUMES. THIS DEDUCTION WILL BE BASED ON THE RATED DIAMETER OF THE PIPE USED, WITH THE SAME DEDUCTION FOR CONCRETE AND METAL PIPE.




SIDE VIEW

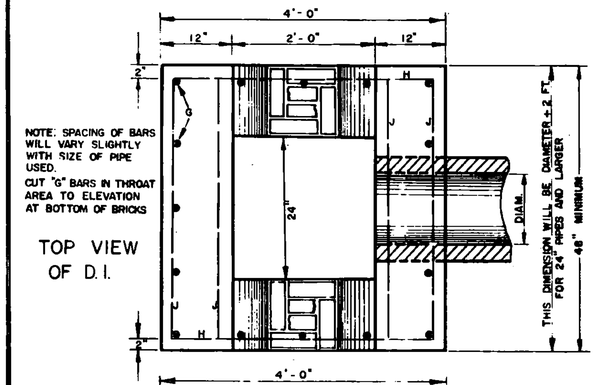
## REINFORCED CONCRETE DROP INLET WITH PRECAST COVER

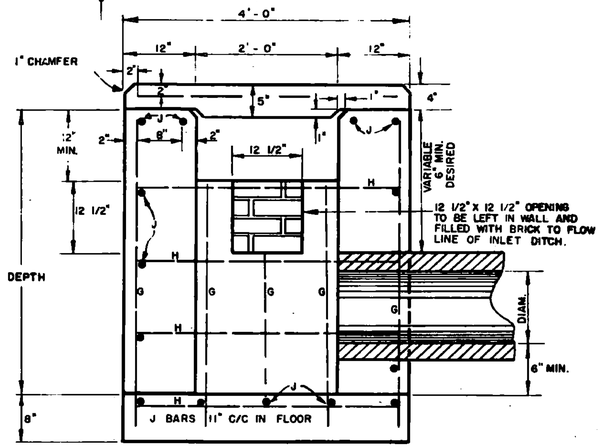
DROP INLET AND COVER TO BE CONSTRUCTED IN ACCORDANCE WITH STRUCTURAL CONCRETE, SECTION 501




| STEEL SCHEDULE FOR DROP INLETS WITH PRECAST COVERS | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| DEPTH | 12" TO 24" DIAMETER | | | | 30" DIAMETER | | | | | |
| | G | LENGTH | H-J | LENGTH | G | LENGTH | J | LENGTH | H | LENGTH |
| 2'-0" | 15 | 2'-4" | 31 | 3'-8" | | | | | | |
| 2'-6" | 15 | 2'-10" | 33 | 3'-8" | | | | | | |
| 3'-0" | 15 | 3'-4" | 36 | 3'-8" | | | | | | |
| 3'-6" | 15 | 3'-10" | 36 | 3'-8" | 16 | 3'-10" | 12 | 4'-2" | 23 | 3'-8" |
| 4'-0" | 15 | 4'-4" | 39 | 3'-8" | 16 | 4'-4" | 14 | 4'-2" | 23 | 3'-8" |
| 4'-6" | 15 | 4'-10" | 39 | 3'-8" | 16 | 4'-10" | 14 | 4'-2" | 25 | 3'-8" |
| 5'-0" | 15 | 5'-4" | 42 | 3'-8" | 16 | 5'-4" | 16 | 4'-2" | 25 | 3'-8" |
| 5'-6" | 15 | 5'-10" | 42 | 3'-8" | 16 | 5'-10" | 16 | 4'-2" | 27 | 3'-8" |
| 6'-0" | 15 | 6'-4" | 45 | 3'-8" | 16 | 6'-4" | 18 | 4'-2" | 27 | 3'-8" |

| DEPTH | 36" DIAMETER | | | | | |
|---|---|---|---|---|---|---|
| | G | LENGTH | J | LENGTH | H | LENGTH |
| 4'-0" | 16 | 4'-4" | 14 | 4'-8" | 28 | 3'-8" |
| 4'-6" | 16 | 4'-10" | 14 | 4'-8" | 28 | 3'-8" |
| 5'-0" | 16 | 5'-4" | 16 | 4'-8" | 30 | 3'-8" |
| 5'-6" | 16 | 5'-10" | 16 | 4'-8" | 30 | 3'-8" |
| 6'-0" | 16 | 6'-4" | 18 | 4'-8" | 32 | 3'-8" |




ALL REINFORCING STEEL TO HAVE 2" MIN. COVER EXCEPT IN COVER

SIDE VIEW OF D.I.

| CONCRETE AND STEEL QUANTITIES FOR DROP INLETS OF VARIOUS DEPTHS | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| DROP INLETS WITH PRECAST COVERS | | | | | | | | |
| DEPTH | 12" 15" 18" | | 24" | | 30" | | 36" | |
| | CONC B C.Y. | STEEL LBS | CONC B C.Y. | STEEL LBS. | CONC B C.Y. | STEEL LBS. | CONC B C.Y. | STEEL LBS. |
| 2'-0" | 1.4 | 155 | | | | | | |
| 2'-6" | 1.6 | 171 | 1.6 | 171 | | | | |
| 3'-0" | 1.8 | 190 | 1.8 | 190 | | | | |
| 3'-6" | 2.0 | 198 | 2.0 | 198 | 2.1 | 204 | | |
| 4'-0" | 2.3 | 217 | 2.3 | 217 | 2.3 | 221 | 2.5 | 248 |
| 4'-6" | 2.5 | 225 | 2.5 | 226 | 2.6 | 237 | 2.7 | 256 |
| 5'-0" | 2.7 | 244 | 2.7 | 244 | 2.8 | 254 | 3.0 | 282 |
| 5'-6" | 2.9 | 252 | 2.9 | 252 | 3.0 | 270 | 3.2 | 290 |
| 6'-0" | 3.2 | 271 | 3.2 | 271 | 3.3 | 287 | 3.5 | 316 |

ALL REINFORCING BARS SHALL BE NO.5 Ø DEFORMED BARS, EVENLY SPACED, WITH A MAXIMUM SPACING OF 12" CENTER TO CENTER, EXCEPT IN THE COVER, WHERE THE MAXIMUM SPACING IS 4" CENTER TO CENTER.

FOR PIPES OF 30" OR MORE IN DIAMETER, ALLOWANCE SHALL BE MADE FOR THE OPENING IN COMPUTING CONCRETE VOLUMES. THIS DEDUCTION WILL BE BASED ON THE RATED DIAMETER OF THE PIPE USED, WITH THE SAME DEDUCTION FOR CONCRETE AND METAL PIPE.

FURNISHING AND LAYING OF BRICKS, SHALL BE INCLUDED IN THE UNIT BID PRICE FOR CONCRETE, CLASS B, AND THEIR VOLUME TO BE INCLUDED IN THE FINAL QUANTITIES. ONLY SUFFICIENT MORTAR TO BE USED TO PROVIDE A VERY LIGHT BOND TO ALLOW WITH EASE, FUTURE REMOVAL, FOR CORRECTION OF ELEVATION OF FLOW LINE.

MORTAR, TYPE II, TO BE USED FOR JOINT FILLER AND LAYING OF BRICK.

REVISIONS AND CORRECTIONS

APPROVED: DATE Dec. 6, 1971

R.N. Arnold
CHIEF ENGINEER

E.H. Stickney
ASST. CHIEF ENGINEER

G.M. Lane
HIGHWAY ENGINEER

DRAWN: R.N.
TRACED: AJA

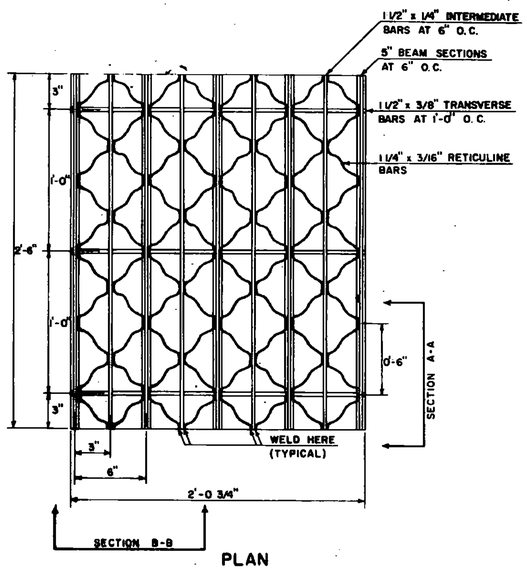
# REINFORCED CONCRETE DROP INLET WITH PRECAST COVER
# REINFORCED CONCRETE DROP INLET WITH GRATE (BOTTOM SECTION)
# (SEE SHEETS D-9, D-10 & D-11 FOR TOP SECTION)

VERMONT AGENCY OF TRANSPORTATION

STANDARD

D-8

## STEEL GRATE

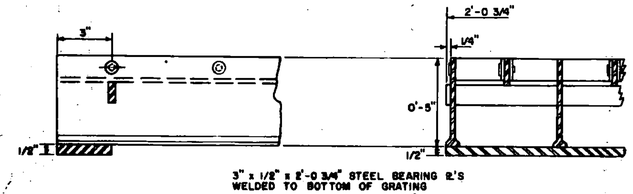



PLAN

GRATE SIZE SINGLE 24 3/4" x 30"
DOUBLE 24 3/4" x 54"

WEIGHT 95 LBS OR MORE
GRATES SHALL BE CAPABLE OF SUPPORTING H-20 (32,000 LB. AXLE LOAD) INCLUDING 30% IMPACT.

| UNIT STRESSES (LBS PER SQ. IN.) | | 18,000 | 20,000 |
|---|---|---|---|
| MAIN BAR PARALLEL TO TRAFFIC | H-20 | 49" | 53" |
| MAIN BAR PERPENDICULAR TO TRAFFIC | H-20 | 39" | 42" |



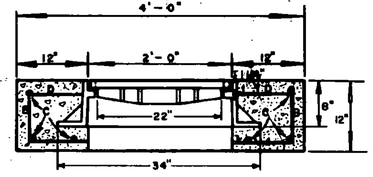

3" x 1/8" x 2'-0 3/4" STEEL BEARING 2's WELDED TO BOTTOM OF GRATING

SECTION A-A

SECTION B-B

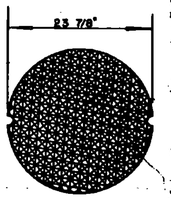
## CAST IRON COVER WITH FRAME

| BAR | NO. | LENGTH | |
|---|---|---|---|
| B | 4 | | 2'-8" |
| C | 6 | 2'-8" | STRAIGHT |
| D | 4 | 3'-8" | STRAIGHT |




ELEVATION

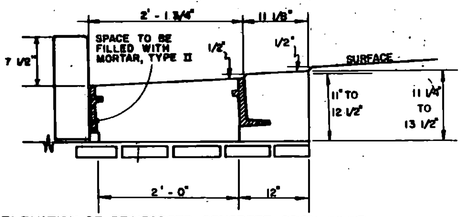
ALL REINFORCING STEEL TO BE No. 5 DEFORMED BARS




PLAN

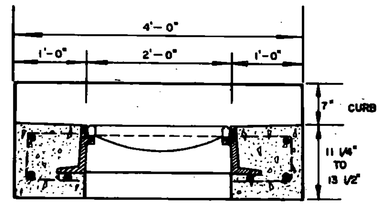
GENERAL NOTES:
WEIGHT OF FRAME AND COVER = 425 LBS

## CAST IRON GRATE WITH FRAME



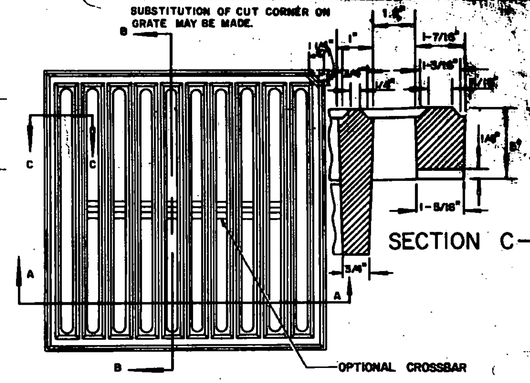

ELEVATION OF REINFORCED CONCRETE DROP INLET WITH VERTICAL GRANITE CURB AND 3 FLANGE CAST IRON FRAME FOR CAST IRON GRATE.

SEE STANDARD D-9 FOR CONCRETE VOLUME, REINFORCING STEEL SCHEDULE AND CURB JOINT DETAIL.



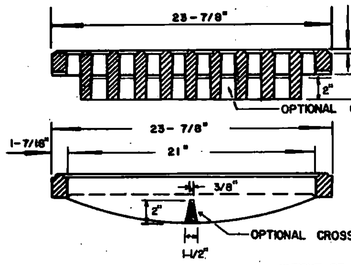

ELEVATION

SUBSTITUTION OF CUT CORNER ON GRATE MAY BE MADE.




PLAN

SECTION C-C




SECTION A-A

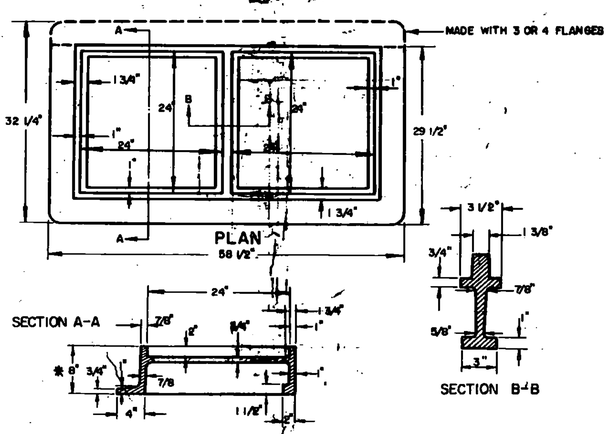
SECTION B-B

WEIGHT OF 3 FLANGED FRAME AND GRATE

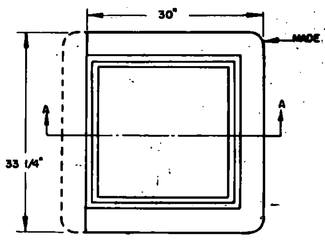
| | |
|---|---|
| GRATE | 220 LBS |
| FRAME | 260 LBS |
| TOTAL | 480 LBS |

## CAST IRON GRATE, TYPE A

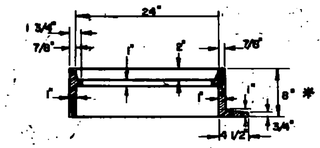
USE OF THE TYPE A GRATE IS PROHIBITED WHERE BICYCLE TRAFFIC IS EXPECTED.




RECTANGULAR CAST IRON FRAME FOR TWO 24" SQUARE CAST IRON GRATES




PLAN




SECTION A-A

SQUARE CAST IRON FRAME FOR CAST IRON GRATE TYPE A

THIS FRAME TO BE PLACED IN DROP INLET TOP BEFORE CONCRETE IS POURED.

4 FLANGES UNLESS OTHERWISE INDICATED. FRAMES TO BE FURNISHED WITH 3 FLANGES WHEN USED IN CONJUNCTION WITH CURB OR AS DIRECTED BY THE ENGINEER.

* NOTE: FRAME DEPTH TO BE "6" WHEN USED IN CONJUNCTION WITH DROP INLET DETAILED ON STANDARD D-6.

REVISIONS AND CORRECTIONS

APRIL 25, 1972. CAST IRON COVER CHANGED FROM SQUARE TO CIRCULAR
SEPT. 4, 1980. OPTIONAL CROSSBAR ADDED TO 'A' GRATE; NOTE ADDED TO 'A' GRATE FRAME DETAIL.
AUG 24, 1981. NOTE ADDED RESTRICTING USE OF TYPE A GRATE

APPROVED DATE Dec. 6, 1971

R. F. Carroll
CHIEF ENGINEER

E. H. Stuckney
ASST. CHIEF ENGINEER

G. M. Lane
HIGHWAY ENGINEER

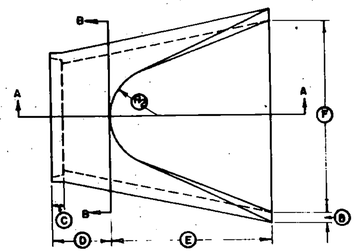
DRAWN: G. A. J.
TRACED: A. A. A.

# STEEL GRATE
# CAST IRON GRATE TYPE A
# CAST IRON COVER

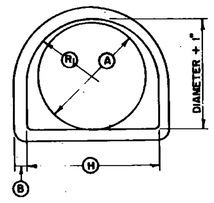
VERMONT AGENCY OF TRANSPORTATION

STANDARD

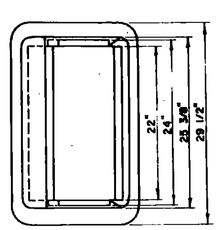
D-11



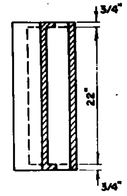

PLAN



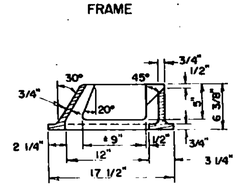

SECTION B-B



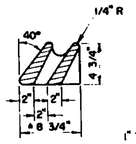

FRAME

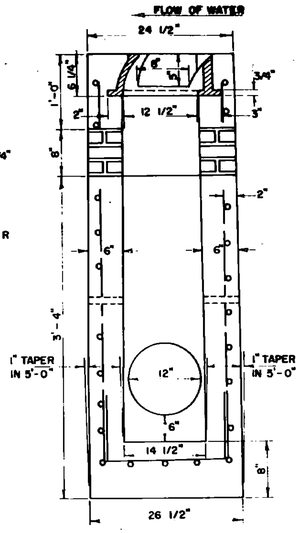



GRATE



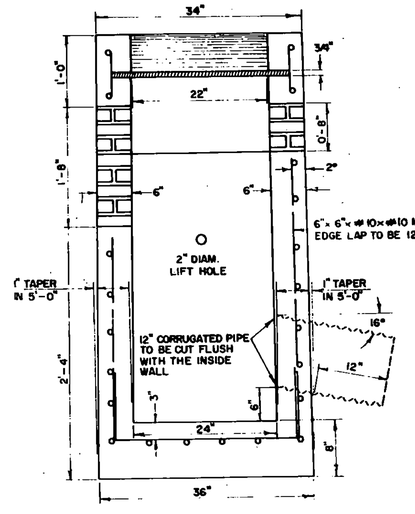

ALTERNATE GRATE AND FRAME



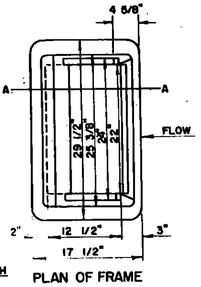




END ELEVATION

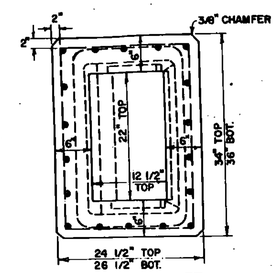
FURNISHING AND LAYING OF BRICKS SHALL BE INCLUDED IN THE UNIT BID PRICE FOR EACH DROP INLET.



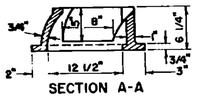

SIDE ELEVATION



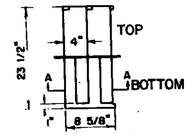

PLAN OF FRAME



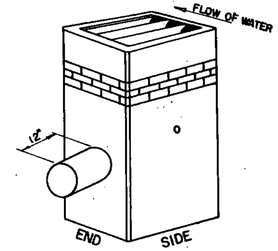

PLAN OF DROP INLET BARREL



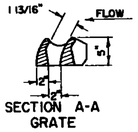

SECTION A-A



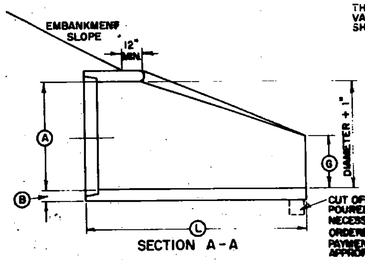

PLAN OF GRATE




ISOMETRIC

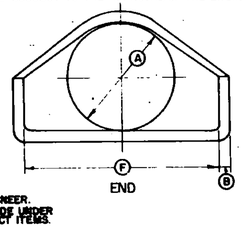



SECTION A-A
GRATE




SECTION A - A

CUT OFF WALL TO BE POURED IN FIELD IF NECESSARY AND AS ORDERED BY THE ENGINEER. PAYMENT WILL BE MADE UNDER APPROPRIATE CONTRACT ITEMS.




END

THE USE OF REINFORCED CONCRETE END SECTIONS HAVING VARIATIONS IN BASIC DIMENSIONS FROM THOSE SHOWN ON THIS SHEET SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.

NOTE: JOINTS SHALL BE TONGUE AND GROOVE OR BELL AND SPIGOT AS REQUIRED AND DIMENSIONS SHALL CONFORM TO STANDARD REINFORCED CONCRETE PIPE SPECIFICATIONS.

BASIC DIMENSIONS

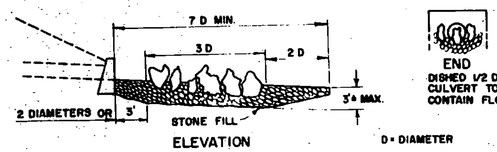
| A | B | C | D | E | F | G | H | DIAM. + 1" | SLOPE | R1 | R2 | M RATIO $\frac{A-1}{A-2}$ | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 12" | 2" | SEE NOTE | 48 3/8" | 24" | 24" | 4" | 19 15/16" | 13" | 2.7:1 | 10 1/8" | 9" | 1.92 | 6'-0 3/8" |
| 18" | 2 1/2" | | 46" | 27" | 36" | 9" | 29" | 19" | 2.7:1 | 15 1/2" | 12" | 1.88 | 6'-1" |
| 24" | 3" | | 30" | 43 1/2" | 48" | 9 1/2" | 33 3/16" | 25" | 2.8:1 | 16 13/16" | 14" | 1.58 | 6'-1 1/2" |
| 30" | 3 1/2" | | 19 3/4" | 54" | 60" | 12" | 37" | 31" | 2.8:1 | 16 1/2" | 15" | 1.41 | 6'-1 3/4" |
| 36" | 4" | | 34 3/4" | 63" | 72" | 15" | 47 13/16" | 37" | 2.9:1 | 24 5/16" | 20" | 1.50 | 6'-1 3/4" |
| 42" | 4 1/2" | | 35" | 63" | 78" | 21" | 53 7/8" | 43" | 2.9:1 | 27 1/2" | 22" | 1.46 | 6'-2" |
| 48" | 5" | | 26" | 72" | 87" | 24" | 59 1/2" | 49" | 2.9:1 | 30" | 22" | 1.40 | 6'-2" |

* AREA-1 = AREA OF NOMINAL DIAMETER
AREA-2 = AREA THRU SECTION B-B

REINFORCED CONCRETE PIPE END SECTION

ALLOW FOR 1'-6" OF BRICKS ON SIDE OPPOSITE OUTLET PIPE
0'-6" BRICKS ON OTHER 3 SIDES.

PRECAST REINFORCED CONCRETE CURB DROP INLET WITH CAST IRON GRATE

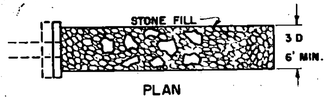



ELEVATION



END
DISHED 1/2 D OF CULVERT TO CONTAIN FLOW

D = DIAMETER




PLAN

FOR USE ONLY AT LOCATIONS OF VERY HIGH DISCHARGE AND ERODABLE SOIL CONDITIONS.

IRREGULAR COBBLES APPROXIMATING THE MAXIMUM SIZE FOR TYPE OF SPECIFIED STONE FILL TO BE PLACED IN GENERAL PATTERN AS SHOWN. NO STONE TO BE CLOSER THAN 2D TO OUTLET OF PIPE. STONES SHOULD NOT BE PLACED TO DAM FLOW, BUT TO INDUCE TURBULENCE AND REDUCE VELOCITY. PLAN MAY BE ADAPTED TO FIELD CONDITIONS PREVAILING AT OUTLET. WHERE FLOW IS TO ULTIMATELY FOLLOW TOE OF SLOPE, DESIGN MAY BE SHORTENED OR WIDENED TO ACT AS A STILLING BASIN, AND DIRECT FLOW INTO DITCH.

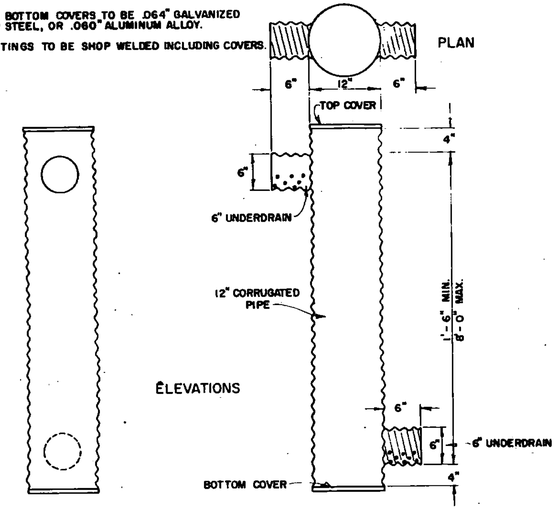
STONES FORMING BREAK SHOULD PROJECT ABOVE AND BELOW SURFACE OF STONE FILL APPROXIMATELY 3/4 THE DIAMETER OF THE PIPE.

STONE FILL TYPE TO BE SPECIFIED ON PLANS.

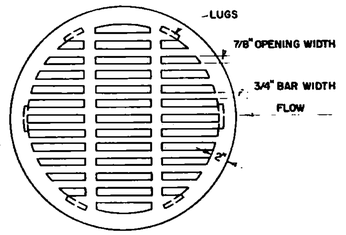
ENERGY DISSIPATOR FOR CULVERTS

TOP AND BOTTOM COVERS TO BE .064" GALVANIZED IRON OR STEEL, OR .080" ALUMINUM ALLOY.

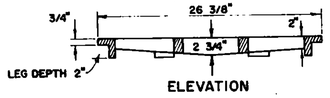
ALL FITTINGS TO BE SHOP WELDED INCLUDING COVERS.




UNDERDRAIN RISER



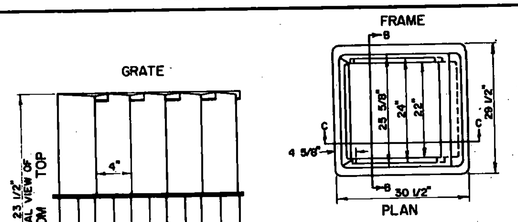

PLAN

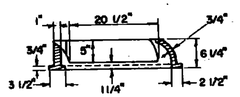



ELEVATION

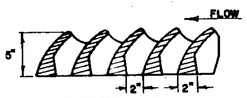
CAST IRON GRATE, TYPE C

TO BE USED IN CONJUNCTION WITH 24" CORRUGATED STEEL PIPE

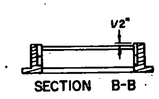



SECTION C-C




SECTION A-A




SECTION B-B

CAST IRON GRATE WITH FRAME, TYPE B

REVISIONS & CORRECTIONS

NOV. 14, 1972 - RCP END SECTION DIMENSION VARIANCE NOTE ADDED.
30 OCT 1985 - REVISED TO CONFORM WITH 1986 SPECIFICATIONS.

APPROVED

DATE Dec. 8, 1971

R. H. Arnold
CHIEF ENGINEER

E. H. Chickney
ASST. CHIEF ENGINEER

G. M. Lane
HIGHWAY ENGINEER

PRECAST REINFORCED CONCRETE CURB DROP INLET WITH CAST IRON GRATE
CAST IRON GRATE, TYPE B
CAST IRON GRATE, TYPE C
UNDERDRAIN RISER
REINFORCED CONCRETE PIPE END SECTION
ENERGY DISSIPATOR FOR CULVERT

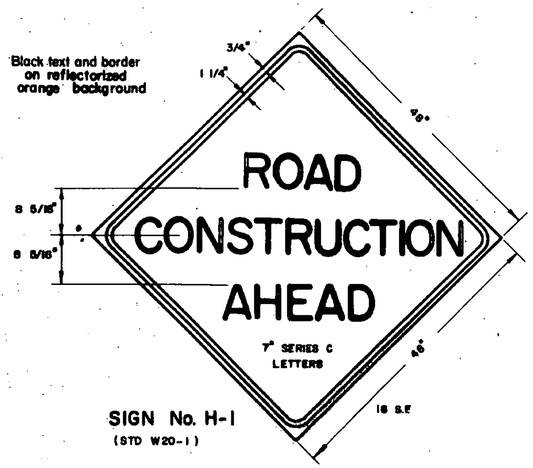
VERMONT AGENCY OF TRANSPORTATION

STANDARD

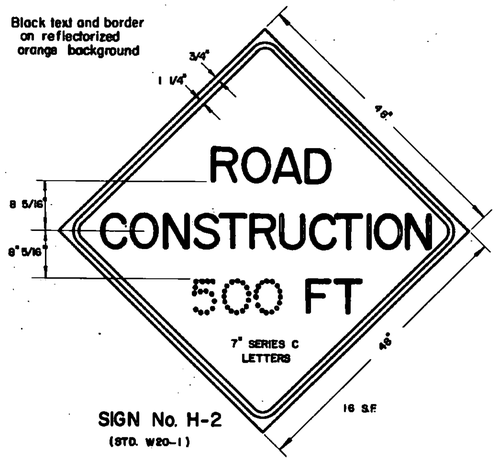
D-16

SIGN H-3 IS TO BE USED WHEN PROJECT LENGTH EXCEEDS 2 MILES, OR AS REQUESTED BY THE RESIDENT ENGINEER. THE TEXT MAY BE AS SHOWN OR MAY READ AS FOLLOWS "CONSTRUCTION AREA NEXT __ MILES"

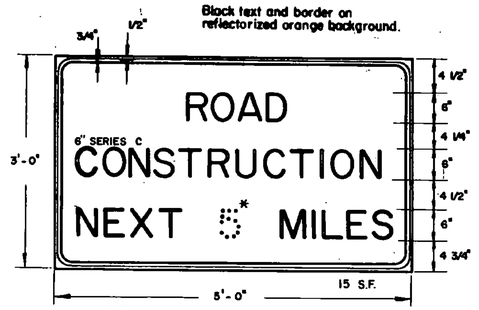
* Show mileage to nearest 1/4 mile



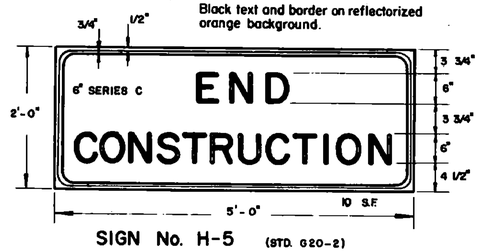

SIGN No. H-1
(STD W20-1)



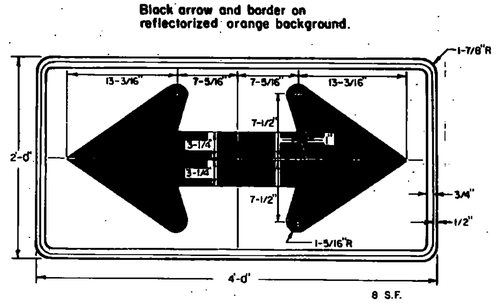

SIGN No. H-2
(STD. W20-1)




SIGN No. H-3 (STD. G20-1)

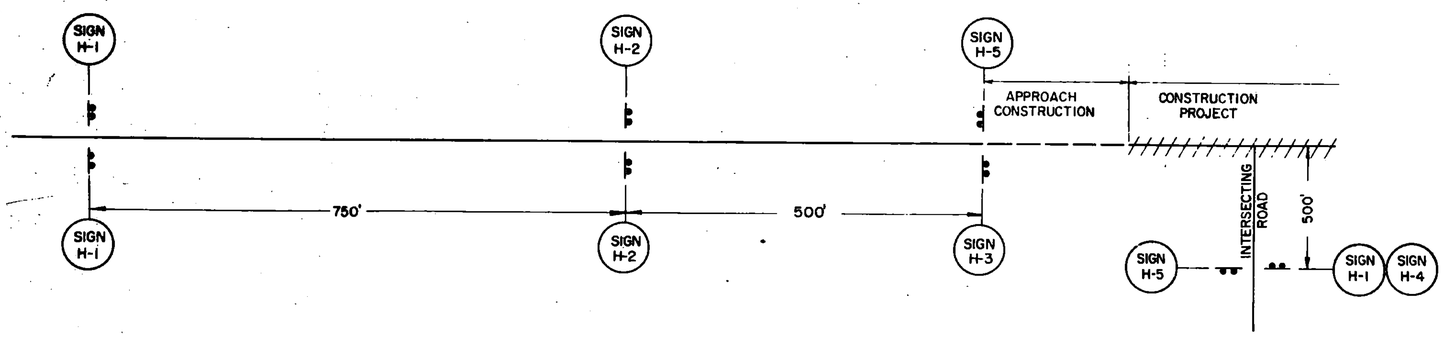



SIGN No. H-5 (STD. G20-2)




SIGN No. H-4 (STD. WI-7)

The road construction approach 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.




## NOTES

LOCATION

Construction approach signs shall be located as detailed on this sheet or 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 minimum spacing to be observed by the Engineer in determining exact locations.

DESIGN

The designs 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 prepared by National Joint Committee on Uniform Traffic Control Devices.

MATERIALS

The signs shall be of metal, wood, plywood, hardboard or any other material satisfactory to the Engineer. No material will be approved that will deteriorate by exposure to the weather during the required life of the sign.

REFLECTORIZATION

All reflectorized material shall consist of encapsulated lens reflective sheeting.

INSTALLATION

The signs shall be in place at the time the project officially commences. Each sign shall be erected in a neat and workmanlike manner on wood or 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. Posts and signs shall be braced or reinforced in back as necessary. 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' 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. In all phases of construction of approach signing, the requirements set forth in the Manual on Uniform Traffic Control Devices shall be met (See Standard Specifications, Section 107, Article 107.08 Traffic Control Devices.

When project is closed down for temporary periods the signs shall be covered in a workmanlike manner.

REVISIONS AND CORRECTIONS

SEPT. 11, 1973 – REVISED PER ORDER OF FHWA, SEPT. 11, 1973
OCT. 19, 1973 – SIGN H-6 REMOVED.
MAY 14, 1974 – REFLECTIVE MATERIAL CHANGE.
JUNE 7, 1977 – REFLECTIVE MATERIAL NOTE CHANGED.
DEC. 15, 1978 – ILLUMINATION DELETED.
DEC. 17, 1979 – SIGN H-3 REVISED, SIGN H-4 ADDED.
MAR. 4, 1981 – SIGN H-3 TEXT CHANGED, NOTE ADDED.
FEB. 3, 1986 – UPDATED TO 1986 SPECIFICATIONS

APPROVED
Dec. 14, 1971 DATE
R. H. Arnold CHIEF ENGINEER
E. W. Stickney ASST. CHIEF ENGINEER
G. M. Lane HIGHWAY ENGINEER

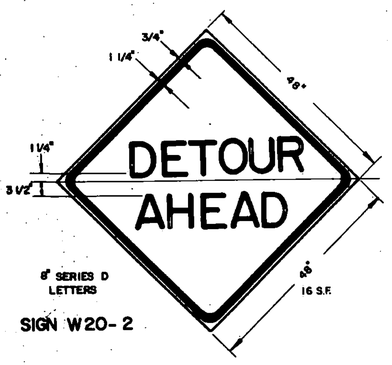
TRAFFIC SIGNS

# ROAD CONSTRUCTION APPROACH SIGNS

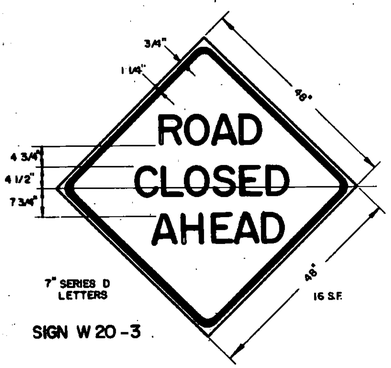
VERMONT AGENCY OF TRANSPORTATION

STANDARD

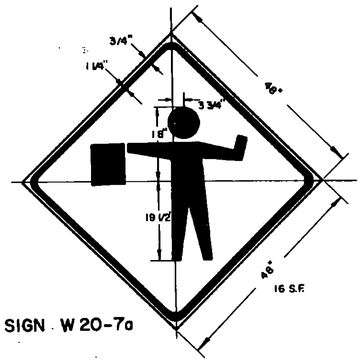
E-2



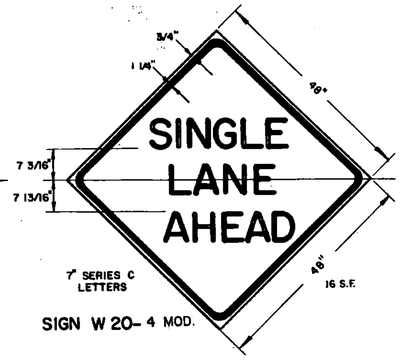
SIGN W20-2



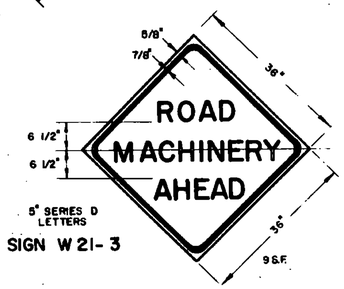
SIGN W20-3



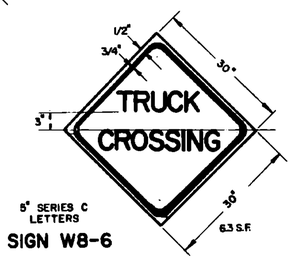
SIGN W20-7a



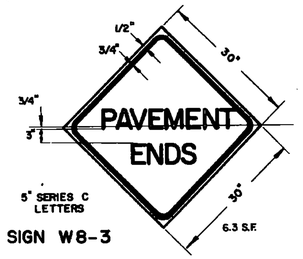
SIGN W20-4 MOD.



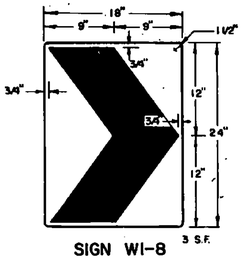
SIGN W21-3



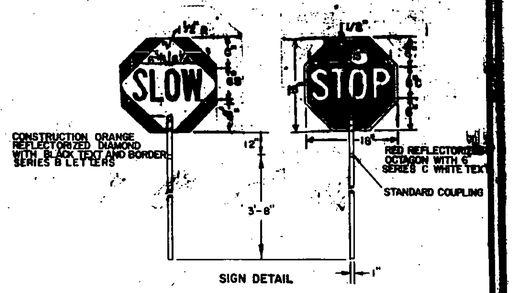
SIGN W8-6



SIGN W8-3



SIGN W1-8



SIGN DETAIL

STAFF DETAIL

MATERIALS

The sign materials shall be 0.063 aluminum with colors as indicated on details.

The staff shall be 1" ridged aluminum conduit or tubing with a wall thickness of 1/8 inch.

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.

MOUNTING

The staff shall be mounted with either 2-1/4" aluminum bolts or 2-1/4" aluminum rivets.

SIGN PADDLE FOR FLAGPERSON

## NOTES

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 must be made to the ~ Manual on Uniform Traffic Control Devices for the principles, procedures and and standards that will be required in connection with on-project construction signs and barricades. The signs here shown represent a sample of those that probably will be most used.

DESIGN

The designs of the signs and barricades shall conform with the details shown on this sheet and with the standards prescribed in the Manual. Deviations will not be permitted.

MATERIALS

The signs shall be of metal, wood, plywood, hardwood or any other material satisfactory to the Engineer. No material will be approved that will deteriorate by exposure to the weather during the required life of the sign.

REFLECTORIZATION AND COLORS

All signs except sign R11-2 and the sign paddle shall have black texts and borders on an encapsulated lens reflective orange background. Sign R11-2 shall have black text and border on an encapsulated lens reflective white background.

INSTALLATION

Signs and barricades shall be in place prior to the start of the construction 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 all signs and barricades shall be subject to the approval of the Engineer.

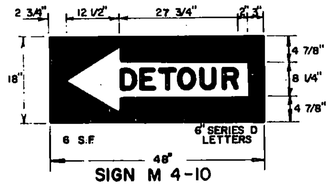
MAINTENANCE

Signs shall be kept in a clean and legible condition at all times with the reflective quality completely unimpaired. Signs, sign supports, and barricades shall be repaired, cleaned, repainted or replaced whenever necessary.

Weeds, shrubbery, construction materials, equipment, and snow shall not be allowed to obscure any sign or barricade.

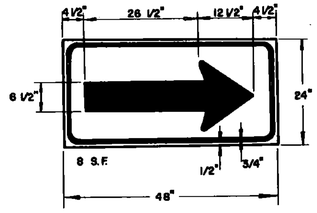
The maintenance of all traffic control devices shall be subject to the orders of the Engineer.

SIGN R11-2



SIGN M4-10

ARROW LEFT OR RIGHT AS REQUIRED.



SIGN W1-6

ARROW RIGHT OR LEFT AS REQUIRED

The on-project construction signs covered by this sheet are intended to be used as the situations apply within normal two-lane highway construction areas, for the protection of the public and workmen and for the guidance of traffic through or around construction operations. When messages other than those shown here are needed, the signs and their applications shall conform with the standards set forth in the Manual on Uniform Traffic Control Devices.

The cost of furnishing, erecting, maintaining and removing all construction approach signs shall be considered as 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.

REVISIONS AND CORRECTIONS

DEC. 14, 1973 – BEADS ON PAINT FOR BACKGROUND MATERIAL REMOVED.
MAY 14, 1974 – REFLECTIVE MATERIAL CHANGE.
JUNE 7, 1977 – REFLECTIVE MATERIAL NOTE CHANGED.
JUNE 7, 1977 – SIGNS REFERENCED TO NUMBERS IN M.U.T.C.D.
APR. 20, 1978 – FLAGPERSON SIGN CHANGED TO SYMBOL.
DEC. 15, 1978 – ILLUMINATION DELETED.
FEB. 27, 1980 – SIGN W1-8 AND SIGN PADDLE ADDED. SIGN DETAILS REVISED.
APR. 1, 1980 – SIGN PADDLE SIGN REVISED.
FEB. 3, 1986 – UPDATED TO 1986 SPECIFICATIONS

APPROVED
Dec. 14, 1971 DATE
R. H. Arnold CHIEF ENGINEER
E. V. Stickney ASST. CHIEF ENGINEER
G. M. Lane HIGHWAY ENGINEER

TRAFFIC SIGNS

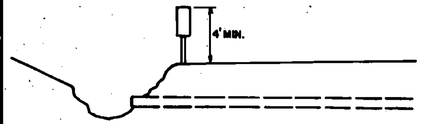
# ON-PROJECT CONSTRUCTION SIGNS

VERMONT AGENCY OF TRANSPORTATION

STANDARD

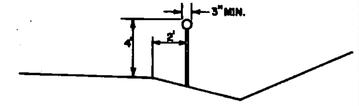
E-6

# DELINEATOR AND HAZARD MARKER DETAILS FOR CONSTRUCTION AREAS WHERE TRAFFIC IS MAINTAINED




HAZARD MARKER TYPICAL

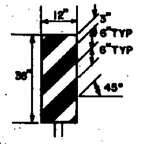
OBJECTS ADJACENT TO THE ROADWAY SHALL REQUIRE A HAZARD MARKER TO MARK THE OBSTRUCTION. IN SOME CASES THERE MAY NOT BE A PHYSICAL OBJECT INVOLVED BUT OTHER ROADSIDE CONDITIONS SUCH AS NARROW SHOULDER DROP-OFFS, GORES, D.I. EXCAVATIONS OR ABRUPT CHANGE IN THE ROADWAY ALIGNMENT MAY MAKE IT UNDESIRABLE FOR A DRIVER TO LEAVE THE ROADWAY. THE INSIDE EDGE OF THE HAZARD MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION, WHENEVER POSSIBLE.




SYMBOL

DELINEATOR TYPICAL

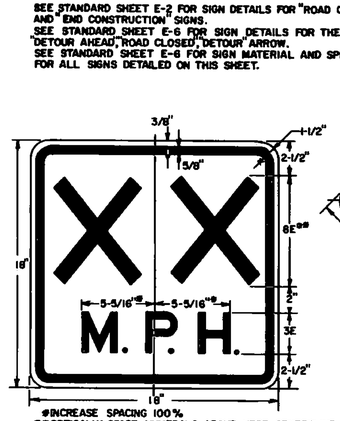
DELINEATORS SHALL BE OF A REFLECTORIZED WHITE COLOR. THEY SHALL HAVE A MINIMUM OF 7 SQUARE INCHES. THEY MAY BE ROUND, SQUARE, OR OBLONG. THEY SHALL BE OF THE FOLLOWING:
1- REFLECTORIZED TAPE WITH METAL BACKING.
2- REFLECTORIZED TAPE APPLIED DIRECTLY TO POSTS.
3- REFLECTORIZED PAINT APPLIED DIRECTLY TO POSTS WHEN PAINT OR TAPE IS APPLIED DIRECTLY TO POST, A SURFACE OF 3" MINIMUM WIDTH FACING TRAFFIC IS REQUIRED.



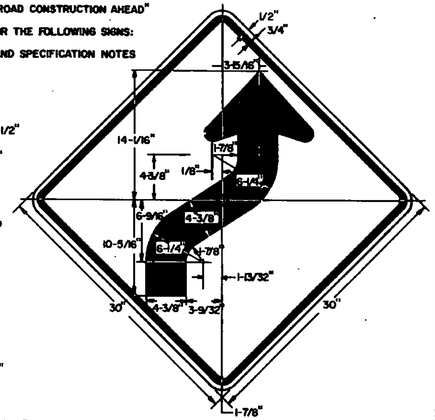

VERTICAL PANEL

VERTICAL PANELS SHALL HAVE ALTERNATING ORANGE AND WHITE REFLECTORIZED STRIPS (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.

SEE STANDARD SHEET E-2 FOR SIGN DETAILS FOR "ROAD CONSTRUCTION AHEAD" AND "END CONSTRUCTION" SIGNS.
SEE STANDARD SHEET E-6 FOR SIGN DETAILS FOR THE FOLLOWING SIGNS: "DETOUR AHEAD," "ROAD CLOSED," "DETOUR" ARROW.
SEE STANDARD SHEET E-8 FOR SIGN MATERIAL AND SPECIFICATION NOTES FOR ALL SIGNS DETAILED ON THIS SHEET.



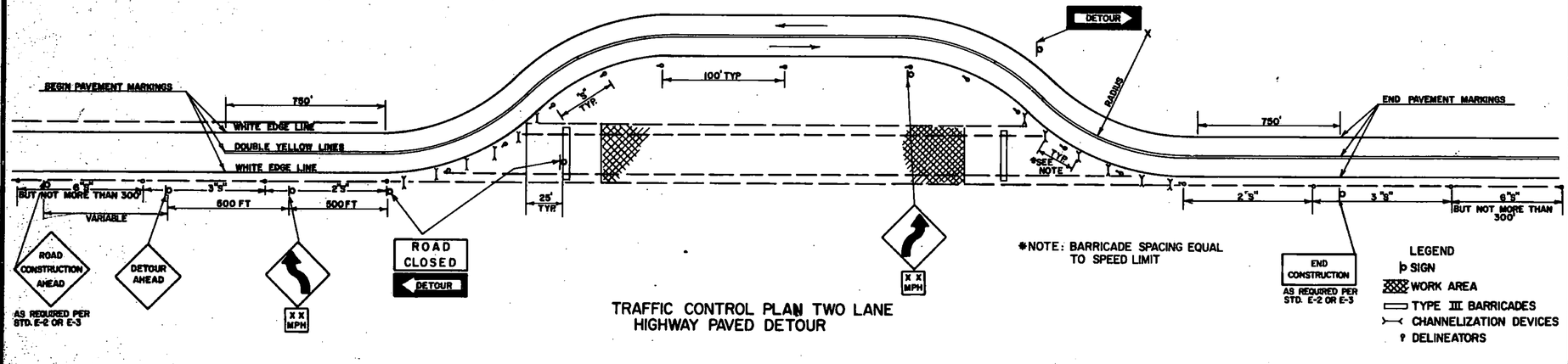

*INCREASE SPACING 100%
**OPTICALLY SPACE NUMERALS ABOUT VERT. CENTERLINE.




## DELINEATOR SPACING

| DESIGN SPEED MPH | REQUIRED RADIUS FT | SPACING -"S" FT |
|---|---|---|
| 25 | 150 | 30 |
| 30 | 250 | 40 |
| 40 | 450 | 60 |
| 50 | 750 | 75 |

NOTES
1. SIGNS & DELINEATION SHOWN FOR ONE DIRECTION OF TRAVEL 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.




AS REQUIRED PER STD. E-2 OR E-3

AS REQUIRED PER STD. E-2 OR E-3

*NOTE: BARRICADE SPACING EQUAL TO SPEED LIMIT

TRAFFIC CONTROL PLAN TWO LANE HIGHWAY PAVED DETOUR

## BARRICADES

### APPLICATION NOTES

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

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

TYPE III (SEE STANDARD E-7A) SHALL ONLY BE USED WHEN A ROAD SECTION IS CLOSED TO TRAFFIC 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 BARRICADES 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 & TRANSPORTATION OFFICIALS 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.

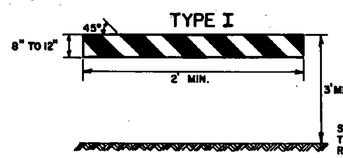
REFLECTORIZATION

THE BARRICADES SHALL BE REFLECTORIZED WITH REFLECTIVE SHEETING.

LOCATION

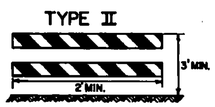
THE BARRICADES SHOWN ON THIS SHEET WILL BE LOCATED BY THE ENGINEER IN THE FIELD OR AS SHOWN ON THE PLANS. THE LOCATION OF THE BARRICADES SHALL FOLLOW THE PROCEDURES SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, OR AS OTHERWISE NOTED.

TYPE I

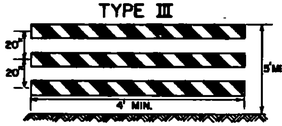



STRIPPING IS SHOWN WITH TRAFFIC PASSING TO THE RIGHT.

TYPE II




TYPE III




| BARRICADE | CHARACTERISTICS | |
|---|---|---|
| | I | II |
| WIDTH OF RAIL | 6" MIN. 12" MAX. | 6" MIN. 12" MAX. |
| LENGTH OF RAIL | 2' MIN. | 2' MIN. |
| WIDTH OF STRIPS* | 6" | 6" |
| HEIGHT | 3' MIN. | 3' MIN. |
| TYPE OF FRAME | DEMOUNTABLE OR 'A' FRAME | LIGHT 'A' FRAME NO STAY BRACE |
| FLEXIBILITY | ESSENTIALLY MOVEABLE | PORTABLE |
| ANGLE OF STRIPE | 45° | 45° |
| COLOR OF STRIPS | ORANGE AND WHITE | ORANGE AND WHITE |

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

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 MUTCD.

REVISIONS AND CORRECTIONS

FEB. 12, 1982 : MATERIALS NOTE CLARIFIED, SIGN ADDITIONS.
FEB. 2, 1983 NOTE 4 & 6 RE: UNPAVED DETOURS ADDED.
FEB. 2, 1984 - UPDATED TO 1986 SPECIFICATIONS

APPROVED:

SEPT. 22, 1981
DATE

DIRECTOR OF ENGINEERING AND CONSTRUCTION

CHIEF OF DESIGN

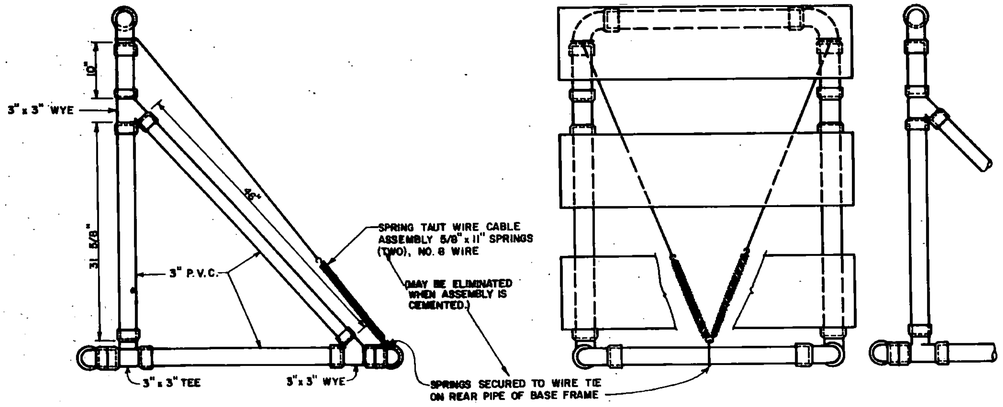
TRANSPORTATION DESIGN ENGINEER

# DELINEATION, BARRICADES AND DETOURS FOR CONSTRUCTION AREAS

VERMONT AGENCY OF TRANSPORTATION

STANDARD

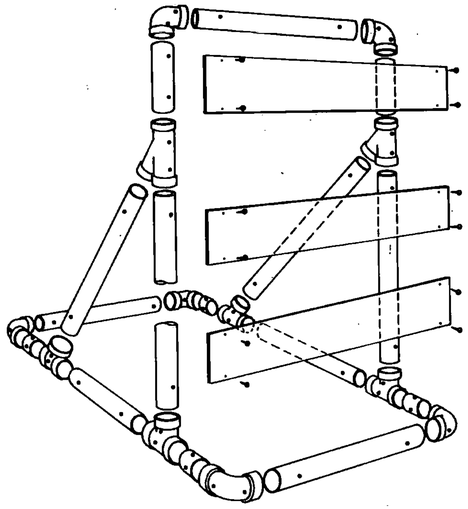
E-7




SIDE VIEW

BARRICADES SHALL BE STABILIZED WITH SAND BAGS OF MINIMUM WEIGHT WHICH WILL NOT CONSTITUTE A HAZARD WHEN BARRICADE IS HIT. THEY SHALL BE PLACED ONLY ON THE BASE FRAME OF THE BARRICADE. STABILIZERS SHALL BE SO PLACED AS NOT TO BE A HAZARD TO VEHICLES PASSING ON EITHER SIDE.

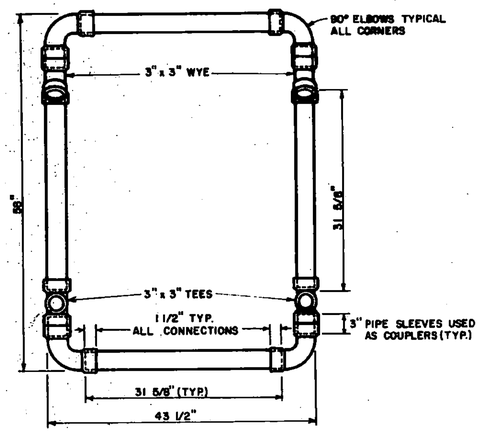
IF BARRICADE REPLACEMENT COSTS CAN BE CONSIDERED NEGLIGIBLE, GLUED JOINTS MAY PROVIDE ADDITIONAL STABILITY TO THE INSTALLATION.



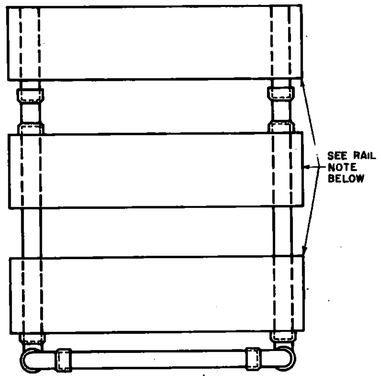
BARRICADE ASSEMBLY

MATERIALS LIST
FOR ONE BARRICADE

| | |
|---|---|
| 3" Diameter Pipe | 30 LF |
| 3" 1/4 Bend Elbow | 6 EA |
| 3" Tees | 2 EA |
| 3" Wyes | 4 EA |
| 8" x 48" x.0 25 Barricade Panels | 2 EA |
| 5/8" x 11" No. 8 Spring | 2 EA |
| 1" No. 14 Pan Head Metal Screws | 12 EA |
| No. 14 Black Annealed Tie Wire | 15 LF |




TOP VIEW OF BASE



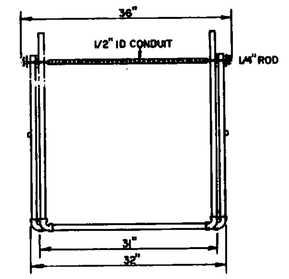

SEE STANDARD E-7 FOR RAIL DETAILS.

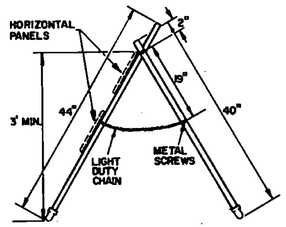
RAILS ATTACHED WITH 1" NO. 14 PAN HEAD METAL SCREW.

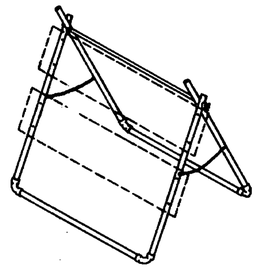
FRONT VIEW

WARNING LIGHTS

WARNING LIGHTS, IF REQUIRED BY THE PLANS OR RESIDENT ENGINEER, SHALL BE AFFIXED TO THE TOP OF THESE BREAKAWAY BARRICADES WITH A MINIMUM MOUNTING HEIGHT OF 36 INCHES TO THE BOTTOM OF THE LENS. A FLASHING WARNING LIGHT SHOULD BE PLACED ON BARRICADES USED SINGLY AND STEADY BURN WARNING LIGHTS SHOULD BE PLACED ON BARRICADES USED IN A SERIES FOR TRAFFIC CHANNELIZATION. THE WARNING LIGHTS SHALL CONFORM TO THE REQUIREMENTS FOUND IN THE M.U.T.C.D. WHEN THE INTEGRAL WARNING LIGHT UNIT IS USED, THE BATTERY PACK SHALL CONTAIN A LIGHT WEIGHT DRY CELL BATTERY AND THE UNIT SHALL BE RESTRAINED WITH A TETHER CABLE OR WIRE (12" LENGTH) SECURELY FASTENED TO THE BARRICADES SO AS TO AVOID HAVING THE UNIT BECOME A DANGEROUS FLYING OBJECT IF THE BARRICADE IS HIT.



TYPE I & II BARRICADE DETAILS

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 p.s.i. The Wyes, tees and elbows shall conform to the requirements of ASTM Designation D 2466, Type II, Grade 1. All joints shall be slip-fit and may be lightly cemented.

The 8" x 48" barricade rails shall be fabricated from 0.025" anodized aluminum and shall have reflectorized alternating, orange and white stripes (sloping downward at an angle of 45 degrees in the direction traffic is to pass).

COLORS

The barricades shown on the sheet shall have reflectorized orange and white stripes.
The orange shall conform with the standard color adopted by by the American Association of State Highway And Transportation Officials and approved by the U.S. Department of Transportation, Federal Highway Administration.

LOCATION

The barricades shown on this sheet will be located by the Engineer in the field or as shown on the plans. The locations of the barricades shall follow the procedures set forth in the Manual on Uniform Traffic Control Devices.

MAINTENANCE

Barricades shall be maintained in clean and legible conditions satisfactory to the Engineer.
They shall be completely visible to approaching traffic at all times. Damages, 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
If the fittings are not available, other colors may be substituted.
At least two (2) holes shall be drilled (3/16" to 1/4") in each section of pipe and fittings if the assembly is not cemented.

MATERIALS FOR TYPE I & 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
4-METAL SCREWS
2-3/4" COTTER PINS

TYPE I BARRICADES SHALL CONSIST OF ONE HORIZONTAL PANEL.

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

SEE STD E-7 FOR USE REQUIREMENTS.

REVISIONS & CORRECTIONS

JAN. 11, 1977 - REVISED ACCORDING TO FHWA REQUIREMENTS.
JUNE 8, 1977 - MATERIALS LIST ADDED.
APR. 8, 1982 - CEMENTING NOTE AND BARRICADES TYPE I & II ADDED.
JUNE 13, 1984 - RAILS CHANGED FROM 9" TO 8".
DEC. 3, 1985 - SAND AND WARNING LIGHT NOTE ADDED.
FEB. 3, 1986 - UPDATED TO 1986 SPECIFICATIONS

APPROVED

Dec 30, 1976
DATE

C.H. McKinney
CHIEF ENGINEER

R.O. Munn
ASST. CHIEF ENGINEER

Leon L. Corse
HIGHWAY ENGINEER

TRAFFIC SIGNS

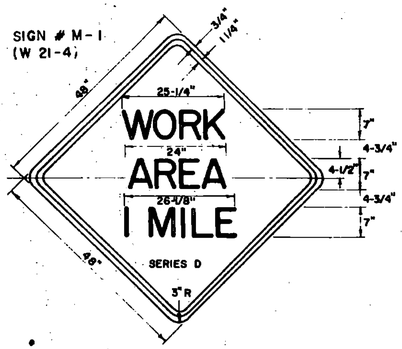
# BREAKAWAY BARRICADE DETAILS

VERMONT AGENCY OF TRANSPORTATION

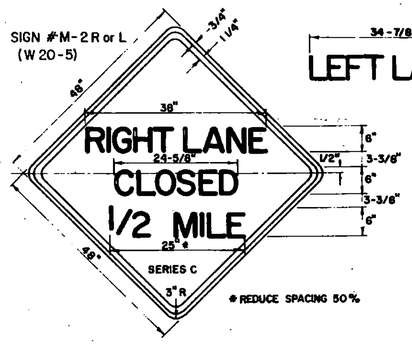
STANDARD

E-7a

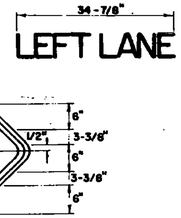
SIGN # M-1
(W 21-4)



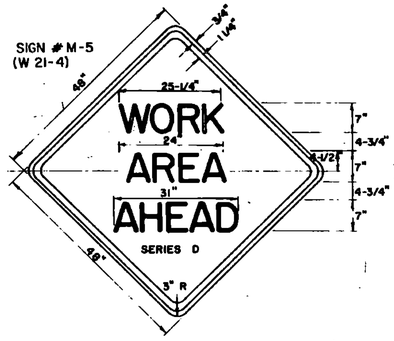

SIGN #M-2R or L
(W 20-5)



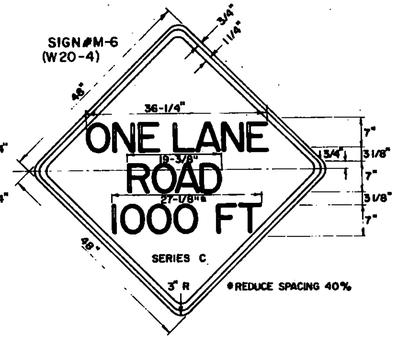

* REDUCE SPACING 50%




SIGN #M-5
(W 21-4)

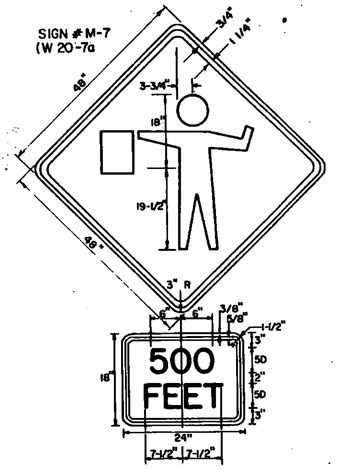



SIGN #M-6
(W20-4)

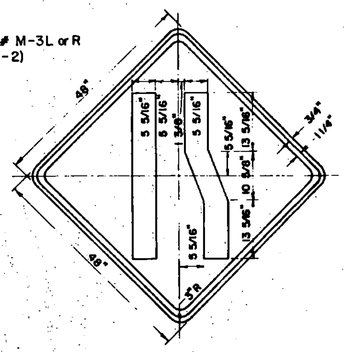



* REDUCE SPACING 40%

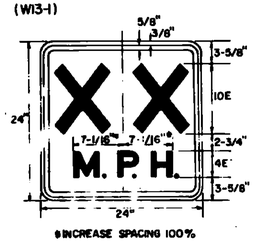
SIGN #M-7
(W 20-7a)



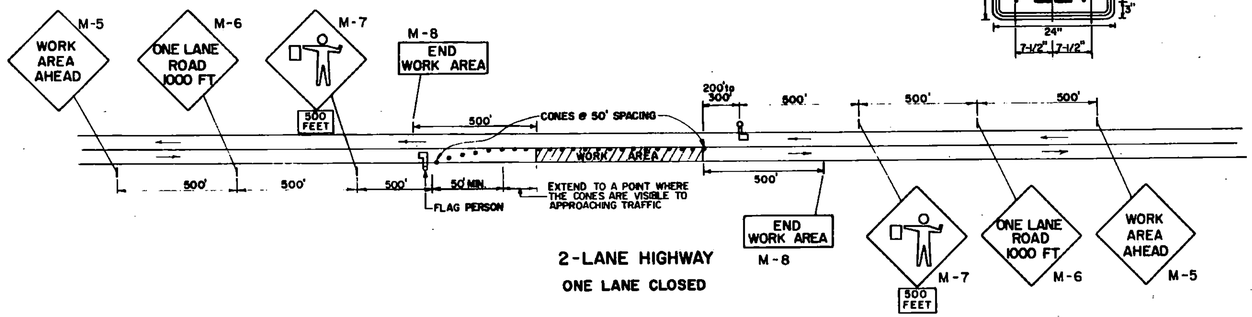

SIGN # M-3L or R
(W 4-2)



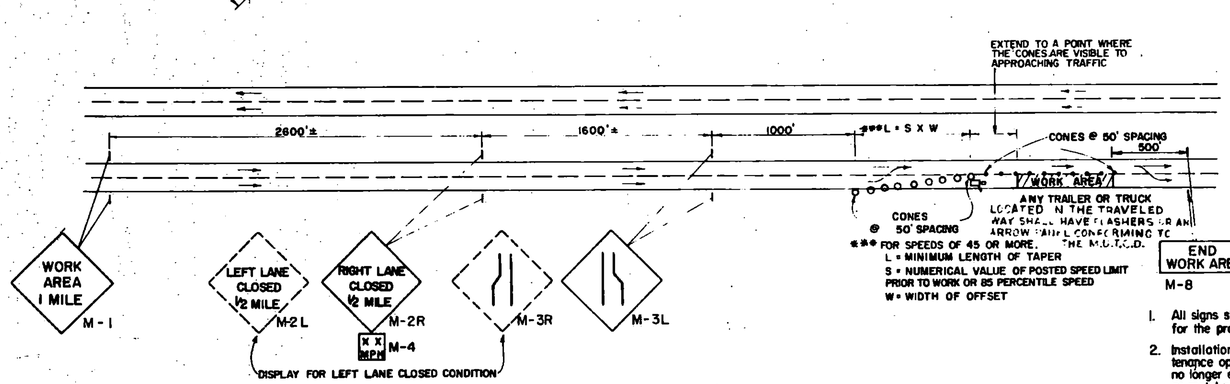
SIGN # M-4
(W13-1)




* INCREASE SPACING 100%

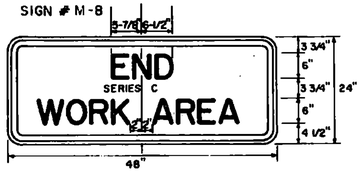



2-LANE HIGHWAY
ONE LANE CLOSED




4-LANE DIVIDED HIGHWAY
ONE LANE CLOSED

SIGN # M-8




NOTES

1. 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.
2. 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 all signs and barricades shall be subject to the approval of the Engineer.
3. Numbers in parenthesis indicate M.U.T.C.D. sign designations.
4. "ROAD WORK" or "BRIDGE WORK" may be substituted as the appropiate legend for signs # M-1 or M-5.
5. ON TOWN, CITY AND INCORPORATED VILLAGE HIGHWAY SYSTEMS THE MINIMUM NUMBER OF SIGNS IS AS FOLLOWS:
   MINIMUM NUMBER OF SIGNS REQUIRED ARE M-6 AND M-7.
   MINIMUM SIZE OF THE SIGNS SHALL BE 36" x 36".
   THIS SIGN SIZE REDUCTION IS FOR DAYTIME MAINTENANCE OPERATIONS OF SHORT DURATION.

**Reflectorization**
All reflectorized material shall consist of encapsulated lens reflective sheeting.
The text and borders may be screened, lettering film, or hand painted.
Cones used for traffic control at night shall have a minimum 6" wide reflectorized material.

**Colors**
The warning signs shown on this sheet shall have black text, border, and symbols on a reflectorized orange background. 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 and design prescribed 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 | 0.125 | Inches |
| High density overlayed plywood | 3/4 | Inches |
| Galvanized sheet steel | 12 | Gage |

REVISIONS & CORRECTIONS

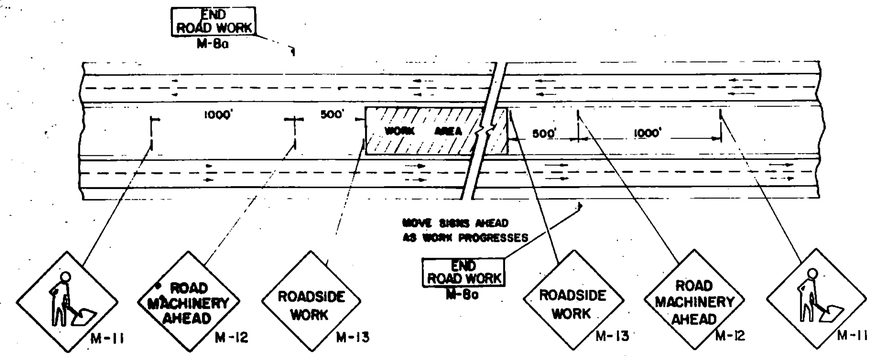
FEB. 29, 1972: SIGN ADDED UNDER DIRECTION OF FEDERAL HIGHWAY ADMINISTRATION
MAY 14, 1974 REFLECTIVE MATERIAL CHANGE.
JUNE 8, 1977 - REFLECTIVE MATERIAL NOTE CHANGED. SIGNS REFERENCED TO NUMBERS IN M.U.T.C.D. SIGNS NUMBERED.
AUG. 4, 1977 FLAGPERSON SIGN CHANGED TO SYMBOL.
SEPT. 12, 1977 NOTE ADDED FOR REDUCED NUMBER AND SIZE OF SIGNS.
JUNE 8, 1978 REVISED REDUCED SPEED SIGN PER FHWA.
NOV. 23, 1981 "WORK AREA" LEGEND AND NOTES ADDED, GENERAL SIGN REVISIONS.
JUNE 15, 1983 TRUCK/TRAILER W/ FLASHER NOTE CLARIFIED
FEB. 2, 1988 - UPDATED TO 1986 SPECIFICATIONS

APPROVED:
Jan. 26, 1972 DATE
R. V. Arnold CHIEF ENGINEER
E. F. Stickney ASST. CHIEF ENGINEER
G. M. Lane HIGHWAY ENGINEER

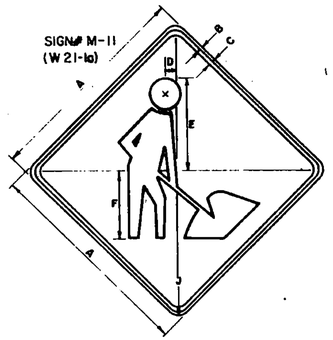
# TYPICAL MAJOR MAINTENANCE OPERATION
## (BRIDGE AND ROADWAY) APPROACH SIGNS

VERMONT AGENCY OF TRANSPORTATION

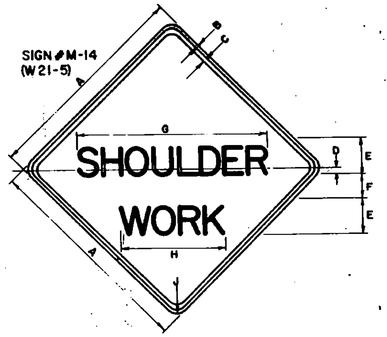
STANDARD
E-8



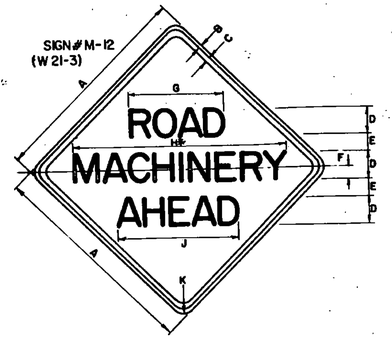

## 4-LANE DIVIDED HIGHWAY
### MEDIAN MAINTENANCE




| SIGN | DIMENSIONS (INCHES) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | | | J |
| 2 LANE | 36 | 5/8 | 7/8 | 2-1/4 | 16-7/8 | 12 | | | 2 1/4 |
| 4 LANE | 48 | 3/4 | 11/4 | 3 | 22 3/8 | 16 | | | 3 |

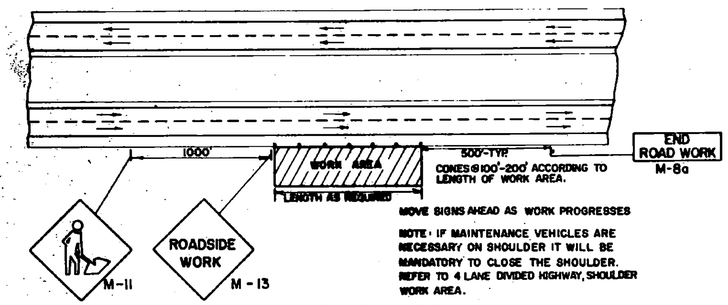



| SIGN | DIMENSIONS (INCHES) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J |
| 2 LANE | 36 | 5/8 | 7/8 | 1 | 5-D | 3 1/2 | 34 | 15/16 17 23/32 | 2 1/4 |
| 4 LANE | 48 | 3/4 | 11/4 | 1 | 7-C | 4 | 38 23/32 | 20 1/8 | 3 |

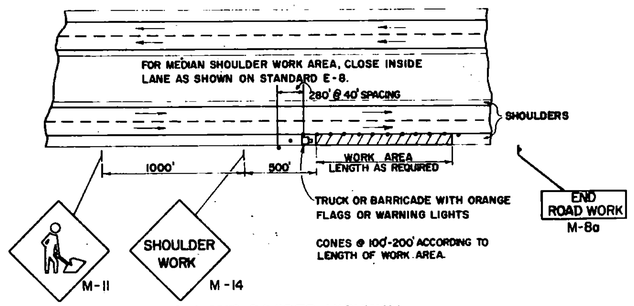



*REDUCE SPACING BY 40%

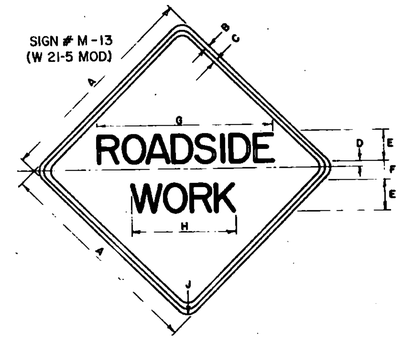
| SIGN | DIMENSIONS (INCHES) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K |
| 2 LANE | 36 | 5/8 | 7/8 | 5-D | 4 | 2-1/2 | 17-1/4 | 34 15/16 | 23 23/32 | 2 1/4 |
| 4 LANE | 48 | 5/4 | 1 1/4 | 7-D | 5 | 3-1/2 | 24 1/8 | 48 1/16 | 31 | 3 |



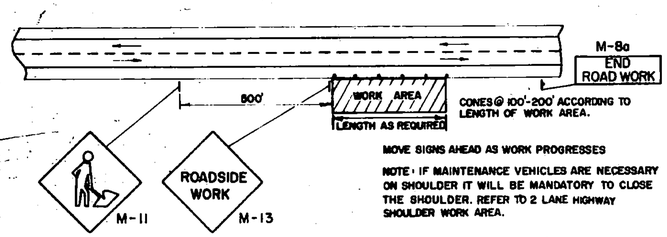

## 4-LANE DIVIDED HIGHWAY
### MAINTENANCE OUTSIDE RIGHT SHOULDER



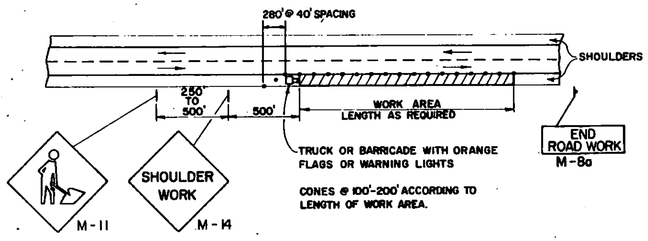

## 4-LANE DIVIDED HIGHWAY
### SHOULDER WORK AREA




| SIGN | DIMENSIONS (INCHES) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J |
| 2 LANE | 36 | 5/8 | 7/8 | 1/2 | 5-D | 3 1/2 | 31 29/64 | 17 23/32 | 2 1/4 |
| 4 LANE | 48 | 3/4 | 11/4 | 1 | 7-C | 4 | 33 47/64 | 20 1/8 | 3 |

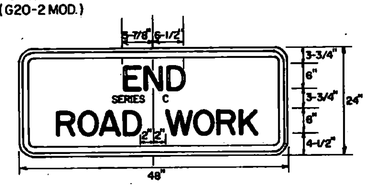



## 2-LANE HIGHWAY
### MAINTENANCE OUTSIDE SHOULDER




## 2-LANE HIGHWAY
### SHOULDER WORK AREA

SIGN # M-8a
(G20-2 MOD.)




**Reflectorization**
All reflective material shall consist of encapsolated lens reflective sheeting. The text and borders may be screened, lettering film, or hand painted.

**Colors**
The warning signs shown on this sheet shall have a black text and border on a reflectorized orange background. 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. Dept. of Transportation, Federal Highway Administration.

**Text Design**
Letters, spacing, and text dimensions shall conform with the standard alphabets and design prescribed 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 shown on this sheet may be of any of the following, with minimum thickness as noted:

| | 36x36 | 48x48 | Inches |
|---|---|---|---|
| (1) Flat Sheet Aluminum | 0.100 | 0.125 | inches |
| (2) High Density Overlayed Plywood | 5/8 | 3/4 | inches |
| (3) Galvanized Sheet Steel | 14 | 12 | gage |

**REVISIONS & CORRECTIONS**
FEB. 29, 1972: REVISED PER DIRECTION OF THE FEDERAL HIGHWAY ADMINISTRATION.
MAY 14, 1976 – REFLECTIVE MATERIAL CHANGE.
JUNE 8, 1977 – REFLECTIVE MATERIAL NOTE CHANGED. SIGNS REFERENCED TO NUMBERS IN M.U.T.C.D.
AUG. 10, 1977 – PERSON WORKING SIGN CHANGED TO SYMBOL.
DEC. 9, 1981 – MINOR SIGN DIMENSION CHANGES.
[illegible] – UPDATED TO 1986 SPECIFICATIONS

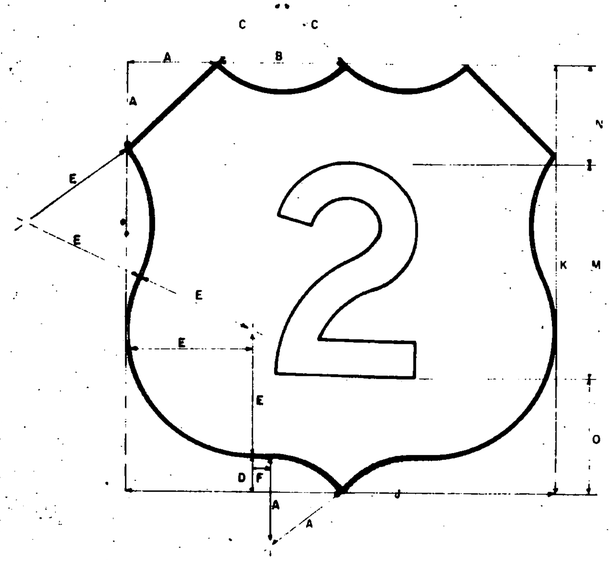
APPROVED
DATE Nov. 26, 1978
R.H. Arnold
CHIEF ENGINEER
E.H. Dickerney
ASST. CHIEF ENGINEER
G.M. Lane
HIGHWAY ENGINEER

# TRAFFIC SIGNS
# TYPICAL MINOR MAINTENANCE OPERATION
## APPROACH SIGNS

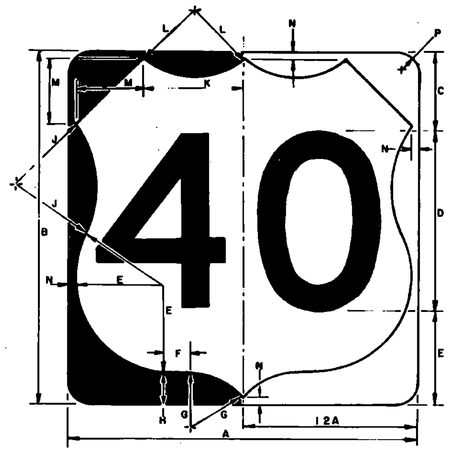
VERMONT AGENCY OF TRANSPORTATION

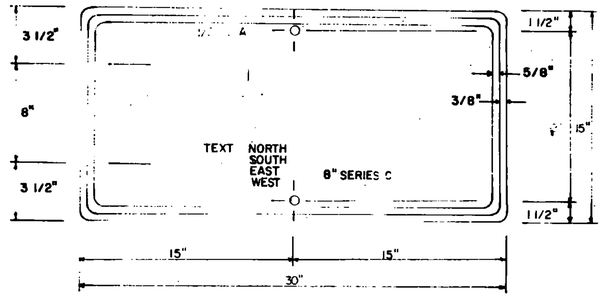
STANDARD E-10

U.S. ROUTE MARKER
FOR USE ON INTERSTATE GUIDE SIGNS




U.S. ROUTE MARKER
FOR INDEPENDENT USE WITH MARKER ASSEMBLIES




## MATERIALS

The sign base material may be any of the following, of the minimum thickness noted:

FLAT SHEET ALUMINUM
- Less than 24" x 24" - 0.060"
- 24" x 24", 30" x 24" - 0.080"

HIGH DENSITY OVERLAID PLYWOOD
- Less than 24" x 24" - 3/8"
- 24" x 24", 30" x 24" - 1/2"

GALVANIZED FLAT SHEET STEEL
- Less than 24" x 24" - 18 gage
- 24" x 24", 30" x 24" - 16 gage

Route markers to be mounted on large guide signs, shall be of a thickness as for signs less than 24" x 24"

The reflective material shall be white or silver reflective sheeting, applied to the entire background. The texts may be lettering film, silk screened, or hand painted.

## COLORS

State route markers and auxiliary 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 Advisory Committee on Uniform Traffic Control Devices.

## SPECIFICATIONS

State route markers and auxiliary route markers shall meet the standard state specifications for "Traffic Signs", DESIGNS.

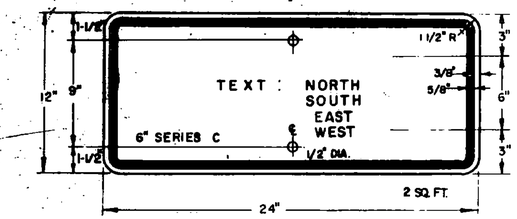
The designs of U.S. Route Markers and auxiliary markers conform with the requirements set forth in the Manual on Uniform Traffic Control Devices prepared by the National Advisory Committee on Uniform Traffic Control Devices.

| SHIELD SIZE NO. DIGITS | A | B | C | D | E | F | J | K | M | N | O |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 24 x 24 1, 2 | 5 | 7 | 5 | 2 | 7 | 1 | 24 | 24 | 12D | 5 1/2 | 6 1/2 |
| 30 x 24 3 | 5 | 10 | 9 | 2 | 7 | 4 | 30 | 24 | 12 D | 5 1/2 | 6 1/2 |
| 36 x 36 1, 2 | 7 1/2 | 10 1/2 | 7 1/2 | 3 | 10 1/2 | 1 1/2 | 36 | 36 | 18D | 8 1/4 | 9 3/4 |
| 45 x 36 3 | 7 1/2 | 15 | 13 1/2 | 3 | 10 1/2 | 5 1/2 | 45 | 36 | 18 D | 8 1/4 | 9 3/4 |
| 48 x 48 1, 2 | 10 | 14 | 10 | 4 | 14 | 2 | 48 | 48 | 24 D | 11 | 13 |
| 60 x 48 3 | 10 | 20 | 18 | 4 | 14 | 8 | 60 | 48 | 24D | 11 | 13 |

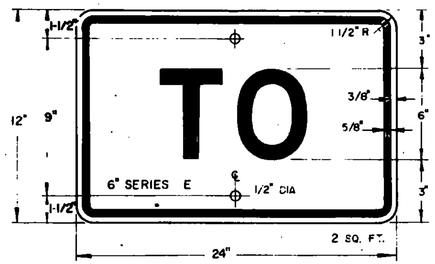
| DIGITS | SHIELD SZ. A | SHIELD SZ. B | C | D | E | F | G | H | J | K | L | M | N | P |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1, 2 | 24 | 24 | 5-1/2 | 12D | 6-1/2 | 1 | 5-1/2 | 2-1/2 | 7-1/2 | 7 | 5-1/2 | 4-1/2 | 1/2 | 1-1/2 |
| 3 | 30 | 24 | 5-1/2 | 12D | 6-1/2 | 4 | 5-1/2 | 2-1/2 | 7-1/2 | 10 | 9-1/2 | 4-1/2 | 1/2 | 1-1/2 |

NOTE: DIMENSIONS IN INCHES

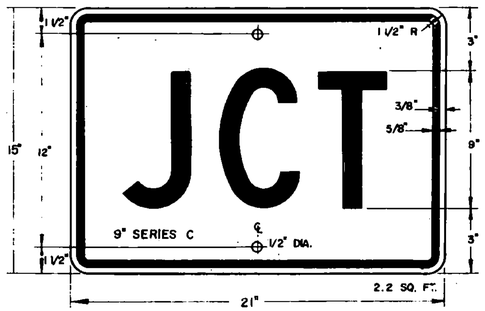
CARDINAL DIRECTION MARKER



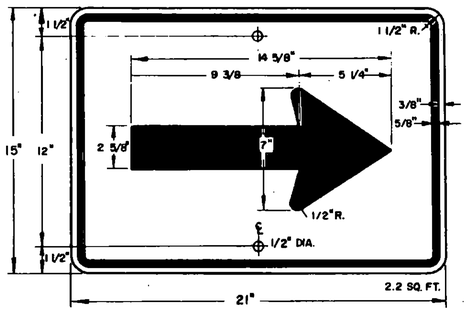

TRAILBLAZER




JUNCTION MARKER




DIRECTION ARROW OR
ADVANCE TURN ARROW
(SEE STANDARD E-11 FOR ARROW DESIGN DETAILS)




NOTE.
FOR ADDITIONAL ADVANCE TURN ARROWS SEE STANDARD SHEET E-13

REVISIONS AND CORRECTIONS

MAY 3, 1982 - ADDED NOTE, CHANGED BORDER DIMENSION ON GUIDE SIGNS.
DEC. 3, 1982 - REVISED DIMENSIONING BOTH U.S. RTE. MARKERS
[illegible]

APPROVED: Dec. 17, 1971

R.H. Arnold
CHIEF ENGINEER
E.H. Stickney
ASST. CHIEF ENGINEER
J.M. Lane
HIGHWAY ENGINEER

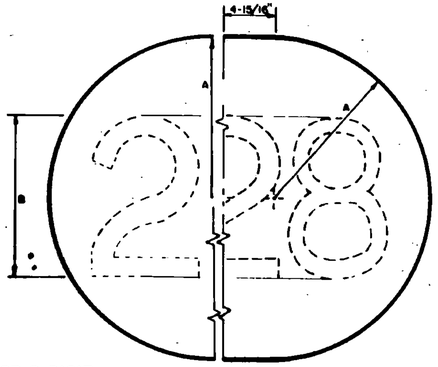
DRAWN A.M.C.
TRACED A.J.A.

# TRAFFIC SIGNS (GUIDE SIGNS)
# U.S. ROUTE MARKERS AND AUXILIARY MARKERS

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-12

STATE ROUTE MARKER
FOR USE ON INTERSTATE GUIDE SIGNS

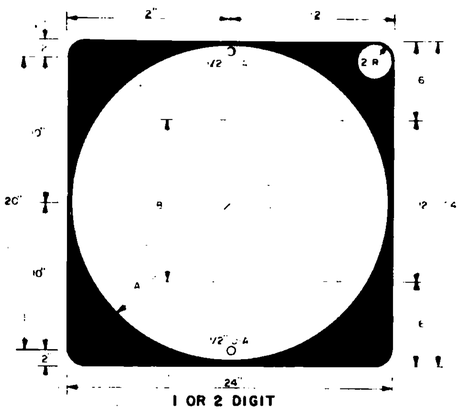



1 OR 2 DIGIT (HALF SIGN)

3 DIGIT (HALF SIGN)

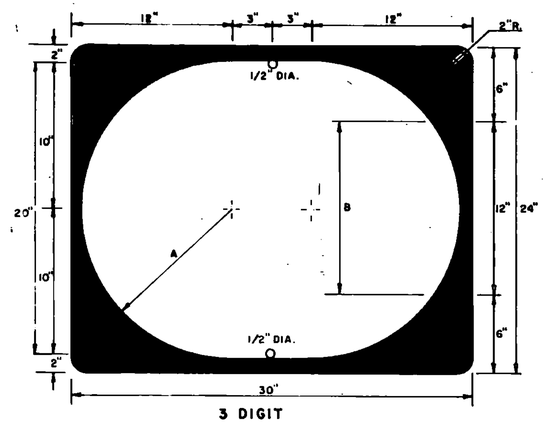
| ROUTE NUMBER | A | B | SERIES |
|---|---|---|---|
| 1 DIGIT | 18" | 18" | D |
| 2 DIGITS | 18" | 18" | D |
| 3 DIGITS | 18" | 18" | B |

STATE ROUTE MARKER
FOR INDEPENDANT USE WITH MARKER ASSEMBLIES




1 OR 2 DIGIT

| ROUTE NUMBER | A | B | SERIES |
|---|---|---|---|
| 1 DIGIT | 11" | 12" | D |
| 2 DIGITS | 11" | 12" | D |
| 3 DIGITS | 11" | 12" | D |




3 DIGIT
SEE CHART AT LEFT

MATERIALS

The sign base material may be any of the following, of the minimum thickness noted:

FLAT SHEET ALUMINUM
Less than 24" x 24" – 0.060"
24" x 24", 24" x 30" – 0.080"

HIGH DENSITY OVERLAID PLYWOOD
Less than 24" x 24" – 3/8"
24" x 24", 24" x 30" – 1/2"

GALVANIZED FLAT SHEET STEEL
Less than 24" x 24" – 18 gage
24" x 24", 24" x 30" – 16 gage

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 sheeting, applied to the entire background. The texts may be lettering film, silk screened, or hand painted.

COLORS

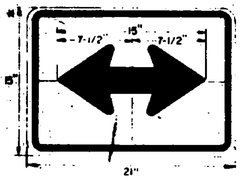
State route markers and auxiliary markers shall have black texts on reflectorized white or silver backgrounds.

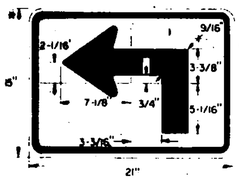
LETTERING

Letters and digits shall conform with the standard alphabets for highway signs approved by the National Joint Committee on Uniform Traffic Control Devices.

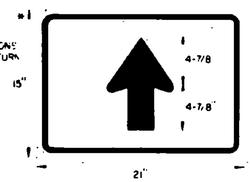
SPECIFICATIONS

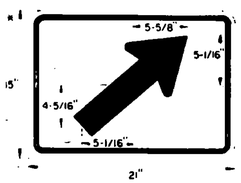
State route markers and auxiliary route markers shall meet the standard state specifications for "Traffic Signs".




* OTHER DIMENSIONS SEE ADVANCE TURN ARROW.

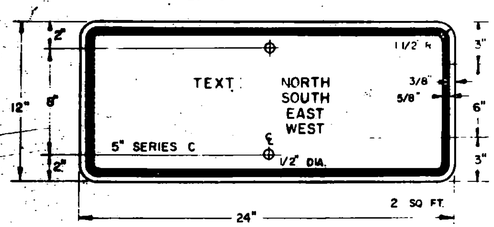


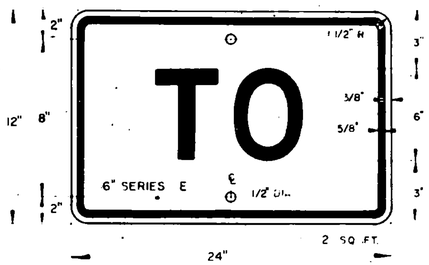

SIGNS

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

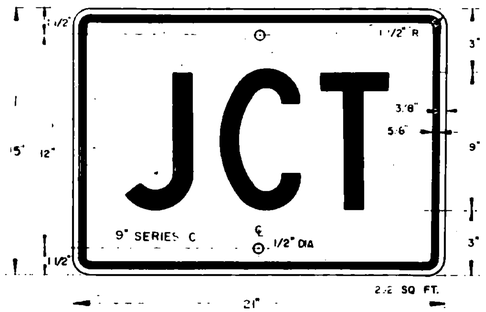
CARDINAL DIRECTION MARKER



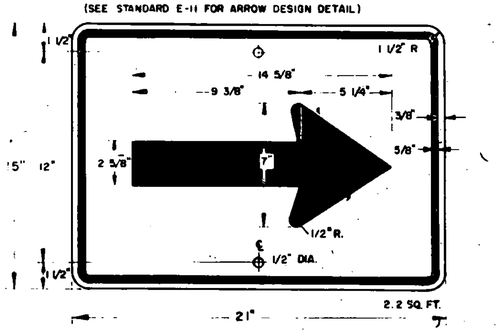

TRAILBLAZER




JUNCTION MARKER




DIRECTION ARROW OR
ADVANCE TURN ARROW
(SEE STANDARD E-11 FOR ARROW DESIGN DETAIL)




REVISIONS AND CORRECTIONS

MAY 3, 1982 – ADDITIONAL ADVANCE TURN ARROWS ADDED, BORDER DIMENSION CHANGED ON GUIDE SIGNS.

12/2/82 – ADDED THREE DIGIT DETAILS

FEB. 5, 1988 – UPDATED TO 1988 SPECIFICATIONS

APPROVED. DATE Dec. 29 1971

R. H. Crandall
CHIEF ENGINEER

E. W. Stickney
ASST. CHIEF ENGINEER

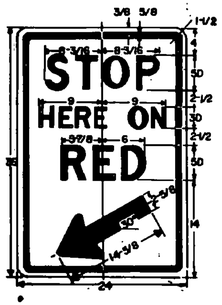
G. M. Lane
HIGHWAY ENGINEER

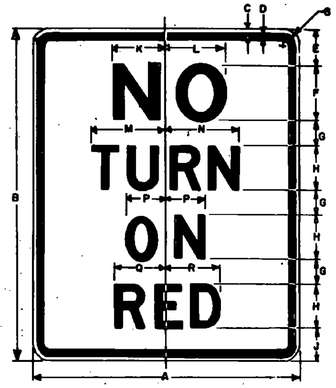
DRAWN A.W.C.
TRACED A.L.A.

# TRAFFIC SIGNS (GUIDE SIGNS)
# STATE ROUTE MARKERS AND AUXILIARY MARKERS

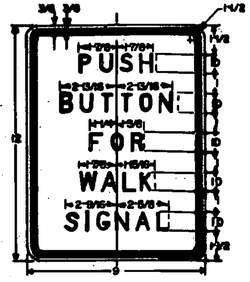
VERMONT AGENCY OF TRANSPORTATION

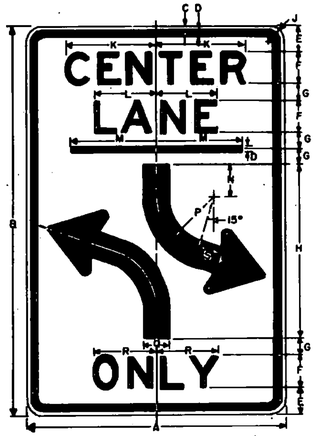
STANDARD
E-13

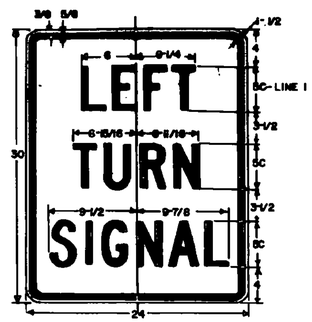


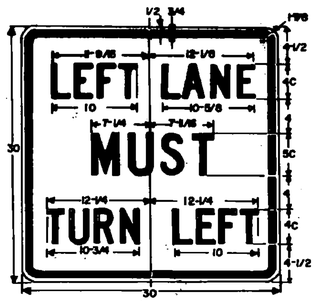

| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R | S |
| SML. | 18 | 24 | 3/8 | 5/8 | 3 | 4E | 1-3/4 | 3D | 2-3/4 | 3-7/8 | 4-1/8 | 5 | 4-7/8 | 2-5/8 | 3-7/16 | 3-11/16 | 1-1/2 |
| STD. | 24 | 30 | 3/8 | 5/8 | 3-1/4 | 5E | 2-1/4 | 4D | 3 | 4-13/16 | 5-3/16 | 6-5/8 | 6-1/2 | 3-1/2 | 4-5/8 | 4-7/8 | 1-1/2 |
| SPECIAL | 30 | 48 | 5/8 | 7/8 | 6 | 8E | 3-1/2 | 6D | 5-1/2 | 7-3/4 | 8-1/4 | 10 | 9-3/4 | 5-1/4 | 6-7/8 | 7-3/8 | 2-1/4 |

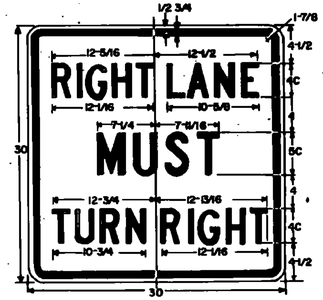


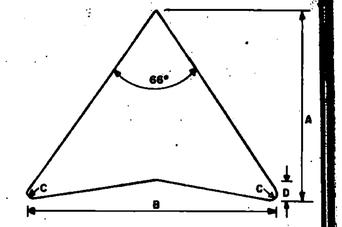



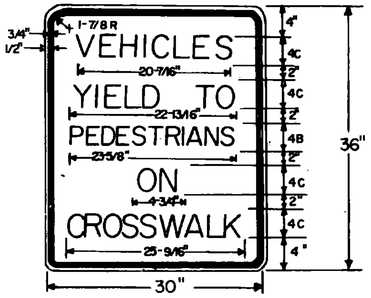

LINE 1 ALTERNATE

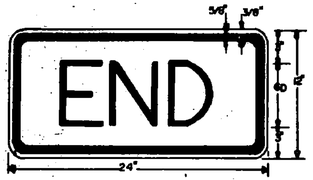



| ARROW HEAD | DIMENSIONS (INCHES) | | | | |
|---|---|---|---|---|---|
| | SIZE | A | B | C | D |
| MINIMUM & STD. | 24 X 36 | 4-3/4 | 5-5/8 | 1/2 | 3/4 |
| SPECIAL | 36X 48 | 7-1/8 | 8-1/2 | 5/8 | 1 1/8 |



| SIGN | DIMENSION (INCHES) | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R | S |
| STD. & MIN. | 24 | 36 | 3/8 | 5/8 | 2-1/2 | 3E | 1-1/2 | 16 | 1-1/2 | 8-7/16 | 5-3/4 | 8 | 2-1/2 | 6 | 2 | 5-5/16 | 1-1/2 |
| SPECIAL | 36 | 48 | 5/8 | 7/8 | 3-1/2 | 5E | 1-1/2 | 20 | 2-1/2 | 11-1/16 | 9-1/2 | 12 | 3 | 8 | 3 | 9-7/8 | 2 |




| 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 | 2-5/16 | 3-1/16 | 5 | 4-7/8 | 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 | 6-3/8 | 6-1/2 | 9-1/2 | 6-1/2 | 1-1/2 | | |
| SPECIAL | 30 | 1/2 | 3/4 | 4-1/2 | 5E | 30 | 50 | 4-13/16 | 5-3/16 | 8-1/4 | 8-1/8 | 11-7/8 | 7-3/4 | 1-7/8 | | |




( ) INDICATES DIMENSIONS FOR "DO NOT BLOCK DRIVE" SIGN

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.

| | 9"X12"<br>18"X18"<br>24"X12" | 24"X24"<br>24"X30"<br>30"X30"<br>30"X36" | 36"X36"<br>36"X48" |
|---|---|---|---|
| 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 REFECTIVE 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 HIGH INTENSITY 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 PREPARED BY THE NATIONAL JOINT COMMITTE ON UNIFORM TRAFFIC CONTROL DEVICES.

SPECIFICATIONS

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

REVISIONS AND CORRECTIONS

JULY 2, 1984 -ADDITIONAL SIGNS ADDED

FEB. 5, 1988--UPDATED TO 1986 SPECIFICATIONS

APPROVED: JULY 29, 1981
DATE

S. J. Gage P.E.
DIRECTOR OF ENGINEERING AND CONSTRUCTION

Arthur Goss
CHIEF OF DESIGN

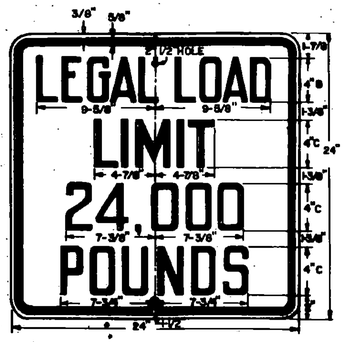
Irene O. Jones
TRANSPORTATION DESIGN ENGINEER

# REGULATORY SIGNS

VERMONT AGENCY OF TRANSPORTATION

STANDARD

E-15

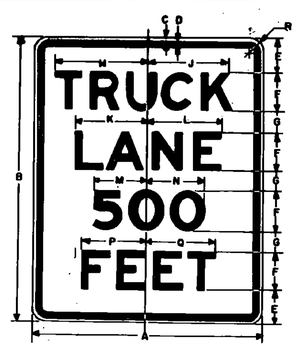



LINE 3 ALTERNATE - 16,000

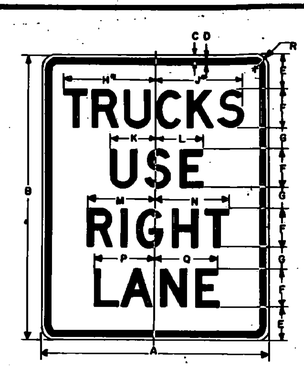
| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M | N |
| STD&MIN | 24 | 30 | 3/8 | 5/8 | 3-5/8 | 4D | 2-1/4 | 9-1/4 | 9-5/8 | 8-9/16 | 31/2 | 10 | 1-1/2 |
| SPECIAL | 36 | 48 | 5/8 | 7/8 | 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 | 6D | 4-1/2 | 18-1/2 | 19-1/4 | 11-1/8 | 7 | 20 | 3 |

*REDUCE SPACING 25%

| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | P |
| MIN. & STD. | 24 | 30 | 3/8 | 5/8 | 3-5/8 | 4D | 2-1/4 | 9-3/4 | 10 | 6 | 6-9/16 | 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 |

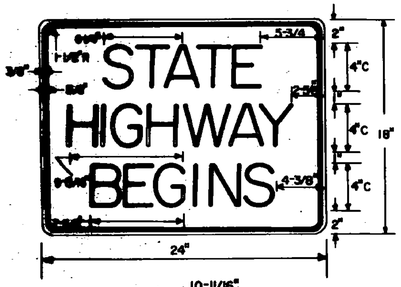



| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | R |
| MIN. & STD. | 24 | 30 | 3/8 | 5/8 | 3-5/8 | 4E | 2-1/4 | 9-3/16 | 9-11/16 | 7-9/16 | 7-11/16 | 5-11/16 | 5-13/16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




*REDUCE SPACING 32%

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




OR ENDS

OR ENDS

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.

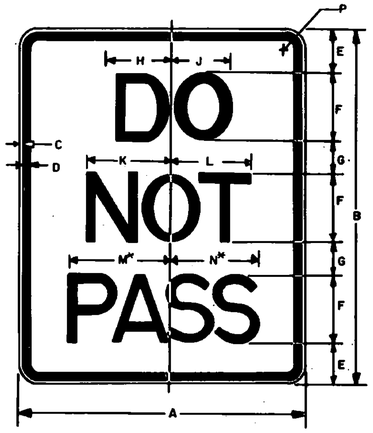
MATERIALS:
THE SIGN BASE MATERIALS USED FOR THE REGULATORY SIGNS SHOWN ON THIS SHEET MAY BE ANY OF THE FOLLOWING OF THE MINIMUM THICKNESS NOTED.

| | 18"X24" | 24"X18" 24"X24" 24"X30" | 36"X48" 48"X60" |
|---|---|---|---|
| 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.
THE TEXT OF THE SIGNS MAY BE LETTERING FILM, SILK SCREENED OR HAND PAINTED. WHEN HAND PAINTED, POOR WORKMANSHIP SHALL BE CAUSE FOR REJECTION.

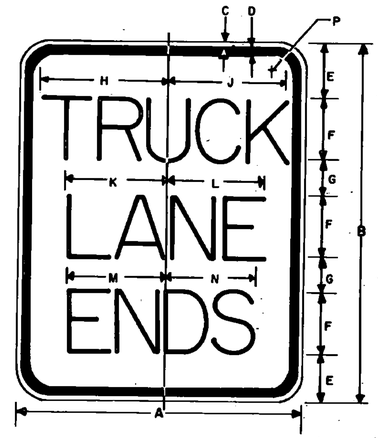
SPECIFICATIONS:
REGULATORY SIGNS SHALL MEET THE STANDARD STATE SPECIFICATIONS FOR TRAFFIC SIGNS.

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 PREPARED BY THE NATIONAL JOINT COMMITTEE ON UNIFORM TRAFFIC CONTROL DEVICES.




* REDUCE SPACING 40%

| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | P |
| MIN. | 18 | 24 | 3/8 | 5/8 | 3-1/2 | 4D | 2-1/2 | 3-1/8 | 3-5/16 | 4-3/4 | 4-7/8 | 6-1/4 | 6-1/2 | 1-1/2 |
| STD. | 24 | 30 | 3/8 | 5/8 | 3-1/2 | 6D | 2-1/2 | 4-1/16 | 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 | 11-7/8 | 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 |
| MIN. & 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 | 10-5/8 | 10-5/8 | 10-11/16 | 10-1/16 | 2-1/4 |
| FWY. | 48 | 60 | 3/4 | 1-1/4 | 8 | 10D | 7 | 20-5/8 | 20-5/8 | 15-7/8 | 15-5/16 | 16-1/16 | 16-1/16 | 3 |

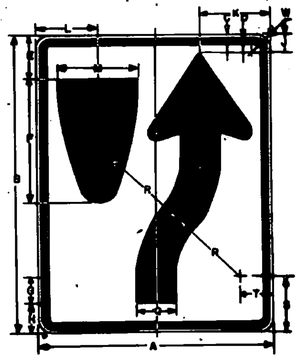
REVISIONS AND CORRECTIONS

APPROVED
DATE JULY 18, 1984
S. J. Gye
DIRECTOR OF ENGINEERING AND CONSTRUCTION
Arthur J. Gross
CHIEF OF DESIGN
SURVEY AND PLANS ENGINEER

# REGULATORY SIGNS

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-15 A

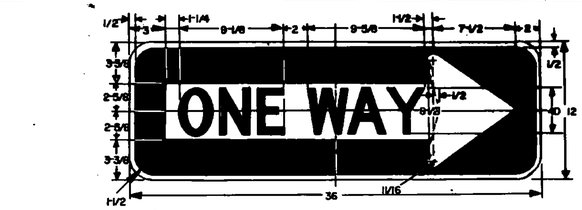


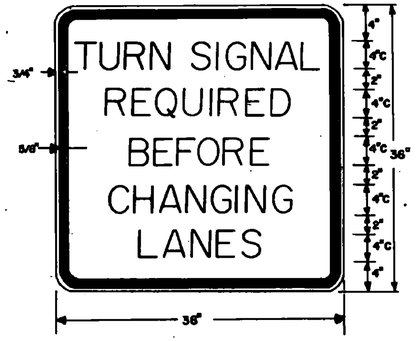
| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | M |
| MIN. | 18 | 24 | 3/8 | 5/8 | 3-5/8 | 9-3/8 | 1-7/8 | 2-1/4 | 1-3/8 | 8-1/2 | |
| STD. | 24 | 30 | 3/8 | 5/8 | 4-1/2 | 12-1/2 | 2-1/2 | 3 | 1-7/8 | 7-3/8 | |
| EXPWY. | 36 | 48 | 5/8 | 7/8 | 6-3/4 | 18-3/4 | 3-3/4 | 4-1/2 | 2-13/16 | 11-1/8 | |
| FWY. | 48 | 60 | 3/4 | 1-1/4 | 9 | 25 | 5 | 6 | 3-3/4 | 14-13/16 | |

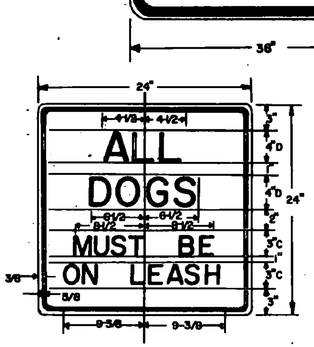
| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | L | M | N | P | Q | R | S | T | U | V | W |
| MIN. | 4-11/16 | 6 | 22-1/2 | 1-1/2 | 3 | 6-3/4 | 4-1/8 | 2-1/4 | 1-1/16 | 7/16 | 1-1/8 |
| STD. | 6-1/4 | 8 | 30 | 2 | 4 | 9 | 5-1/2 | 3 | 1-3/8 | 2-13/16 | 2-1/8 |
| EXPWY. | 9-3/8 | 12 | 45 | 3 | 6 | 13-1/2 | 8-1/4 | 4-1/2 | 2 | 2-3/8 | 2-1/8 |
| FWY. | 12-1/2 | 16 | 60 | 4 | 8 | 18 | 11 | 6 | 2-11/16 | 8 | 3 |

| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L |
| MIN. | 18 | 24 | 3/8 | 5/8 | 3-1/2 | 4C | 2-1/2 | 8-13/16 | 9-1/2 | 7 | 1-1/2 |
| STD. | 24 | 30 | 3/8 | 5/8 | 3-1/2 | 6C | 2-1/2 | 9-5/16 | 7-9/16 | 9-3/4 | 1-1/2 |
| EXPWY. | 36 | 48 | 5/8 | 7/8 | 7 | 8C | 5 | 13-5/8 | 11-1/16 | 14 | 2-1/4 |
| FWY. | 48 | 60 | 3/4 | 1-1/4 | 9 | 10C | 6 | 17 | 13-15/16 | 17-1/2 | 3 |

* FOR STD SIZE, REDUCE SPACING 40%.





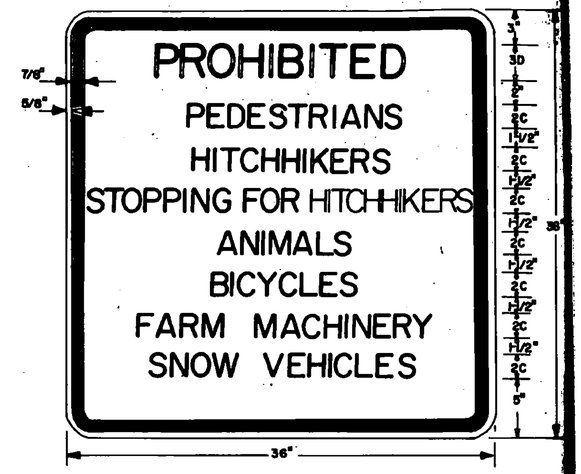


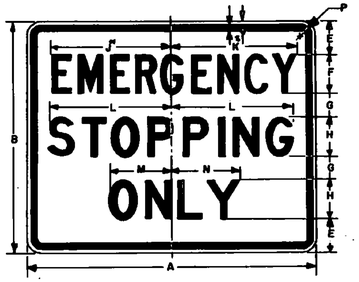
| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L |
| MIN | 18 | 24 | 3/8 | 5/8 | 3 | 3E | 2 | 6E | 1-1/2 | 7-3/16 | 8-1/2 |
| STD | 24 | 30 | 3/8 | 5/8 | 4 | 4E | 2 | 10E | 1-1/2 | 9-9/16 | 7-5/16 |
| EXPWY | 36 | 48 | 5/8 | 7/8 | 6 | 6E | 3 | 14E | 2-1/4 | 14-3/8 | 11 |
| FWY. | 48 | 60 | 3/4 | 1-1/4 | 8 | 8E | 4 | 20E | 3 | 19-1/8 | 14-5/8 |

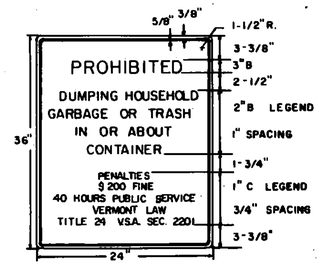
* OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTERLINE.

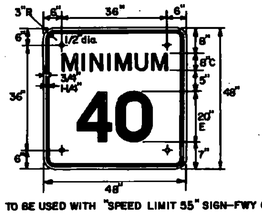
| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L |
| STD.& MIN. | 24 | 30 | 3/8 | 5/8 | 4 | 4C | 2 | 10D | 1-1/2 | 9-5/16 | 6-13/16 |
| EXPWY. | 36 | 48 | 5/8 | 7/8 | 6 | 6C | 3 | 14D | 2-1/4 | 13-3/4 | 10-5/16 |
| FWY. | 48 | 60 | 3/4 | 1-1/4 | 8 | 8C | 6 | 18D | 3 | 18-3/8 | 13-5/8 |

* OPTICALLY SPACE NUMERALS ABOUT VERTICAL CENTERLINE.

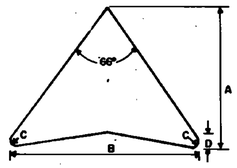




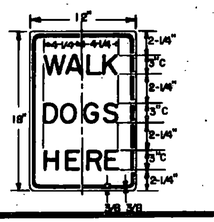




TO BE USED WITH "SPEED LIMIT 55" SIGN-FWY ONLY.



| ARROW HEAD | DIMENSIONS (INCHES) | | | | |
|---|---|---|---|---|---|
| | SIZE | A | B | C | D |
| MINIMUM | 18X24 | 7-1/8 | 8-1/2 | 5/8 | 1-1/8 |
| STANDARD | 24X30 | 9-1/2 | 11-3/8 | 1 | 1-1/2 |
| EXPRESSWAY | 36X48 | 14-1/4 | 17 | 1-3/8 | 2-1/4 |
| FREEWAY | 48X60 | 19 | 22-5/8 | 1-7/8 | 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 | 3 | 1/2 | 4C | 2-1/2 | 40 | 12-1/2 | 13 | 12-3/4 | 9-7/16 | 7 | 1-1/2 |
| FWY. | 48 | 36 | 5/8 | 7/8 | 5 | 6D | 4 | 6D | 20 | 7/16 | 21-1/8 | 19-1/8 | 10-1/16 | 10-9/16 | 2-1/4 |

* 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.

| | | | |
|---|---|---|---|
| | | 24"X24" | 36"X12" |
| | | 24"X30" | 36"X36" |
| | | 30"X24" | 36"X48" |
| | 12"X18" | 30"X30" | 48"X36" |
| | 18"X24" | 30"X30" | 48"X60" |
| 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.

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 STANDARD STATE 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 PREPARED BY THE NATIONAL JOINT COMMITTEE ON UNIFORM TRAFFIC CONTROL DEVICES.

REVISIONS AND CORRECTIONS

SEPT. 28, 1984 - ADDED "MINIMUM 40" SIGN - CHANGED "SPEED LIMIT 50" (FWY.-G 8H)
- CHANGED "PROHIBITED DUMPING HOUSEHOLD GARBAGE" SIGN

DEC. 27, 1984 - CLARIFIED KEEP RIGHT SYMBOL

FEB. 3, 1986 - UPDATED TO 1986 SPECIFICATIONS

APPROVED

DATE JULY 18, 1984

DIRECTOR OF ENGINEERING AND CONSTRUCTION

CHIEF OF DESIGN

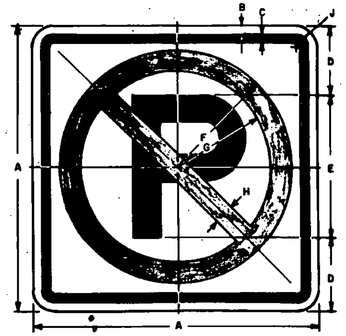
SURVEY AND PLANS ENGINEER

# REGULATORY SIGNS

VERMONT AGENCY OF TRANSPORTATION

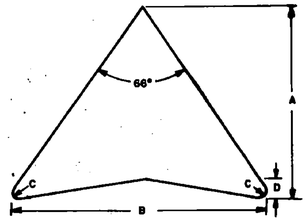
STANDARD

E-15B

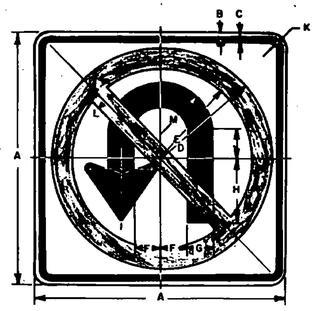


COLORS
CIRCLE AND DIAGONAL — RED (REFL-RURAL)
SYMBOL AND BORDER — BLACK (NON-REFL)
BACKGROUND — WHITE (REFL-RURAL)

| SIGN | DIMENSIONS (INCHES) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J |
| URBAN MIN.& STD. | 12 | 3/8 | 3/8 | 3 | 6E(M) | 4-7/8 | 3-7/8 | 1 | 1-1/2 |
| RURAL MIN.& STD. | 24 | 3/8 | 5/8 | 6 | 12E(M) | 10-1/2 | 8-1/2 | 2 | 1-1/2 |
| EXPWY. | 36 | 5/8 | 7/8 | 9 | 18E(M) | 15-3/4 | 12-3/4 | 3 | 2-1/4 |
| FWY. | 48 | 3/4 | 1-1/4 | 12 | 24E(M) | 21 | 17 | 4 | 3 |

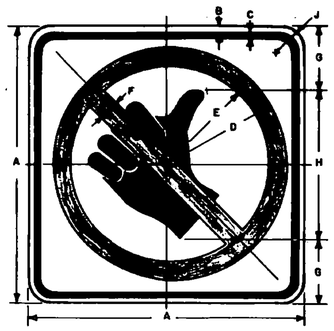


| ARROW HEAD | SIZE | DIMENSIONS (INCHES) | | | |
|---|---|---|---|---|---|
| | | A | B | C | D |
| MIN.& STD. | 24"X24" | 6 | 7-1/8 | 5/8 | 1 |
| SPECIAL | 30"X30" | 7-1/2 | 8-7/8 | 3/4 | 1-1/8 |
| EXPWY. | 36"X36" | 8-7/8 | 10-5/8 | 7/8 | 1-3/8 |
| SPECIAL | 48"X48" | 11-7/8 | 14-1/8 | 1-1/8 | 1-7/8 |



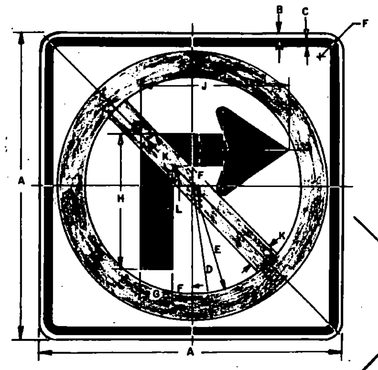
COLORS
CIRCLE AND DIAGONAL — RED (REFL)
ARROW AND BORDER — BLACK (NON-REFL)
BACKGROUND — WHITE (REFL)

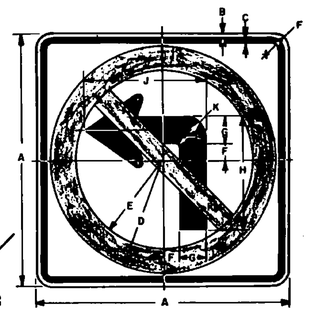
| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M |
| STD. & MIN. | 24 | 3/8 | 5/8 | 10-1/2 | 8-1/2 | 2-1/2 | 2-1/2 | 6 | 2-1/4 | 1-1/2 | 2 | 5 |
| SPECIAL | 30 | 1/2 | 3/4 | 13-1/8 | 10-5/8 | 3-1/8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

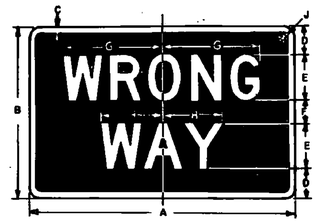




COLORS & DIMENSIONS APPLY TO BOTH SIGNS

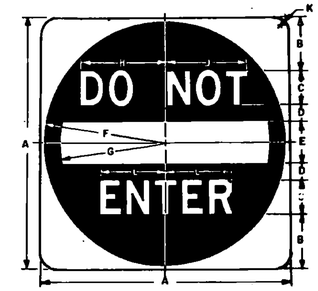
COLORS
CIRCLE & DIAGONAL — RED (REFL)
ARROW & BORDER — BLACK (NON-REFL)
BACKGROUND — WHITE (REFL)

| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | |
| STD. & MIN. | 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 | |



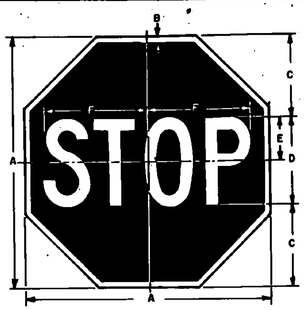

COLORS
LEGEND — WHITE (REFL)
BACKGROUND — RED (REFL)

| SIGN | DIMENSIONS (INCHES) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J |
| MIN. | 30 | 18 | 5/8 | 3 | 5D | 2 | 11-1/16 | 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 | 7/8 | 5 | 8D | 4 | 17-3/4 | 10-3/4 | 1-7/8 |



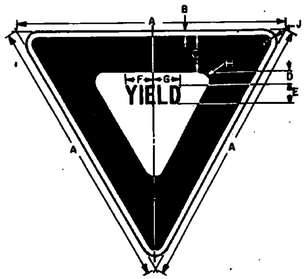

COLORS
SYMBOL — RED (REFL)
LEGEND & BACKGROUND — WHITE (REFL)

| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L |
| STD. & MIN. | 30 | 6-1/2 | 4D | 2 | 5 | 14-1/2 | 12-1/2 | 9-3/4 | 10 | 1-7/8 | 7-7/8 |
| 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)

| 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 & BORDER — RED (REFL)
BACKGROUND — WHITE (REFL)

| 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 | 3-5/8 | 7/8 | 1-1/2 |
| STD. | 36 | 3/4 | 5 | 2 | 3C | 4-11/16 | 4-3/8 | 1-1/4 | 2 |
| EXPWY. | 48 | 1 | 6 | 2-3/4 | 4C | 6-1/4 | 5-7/8 | 2 | 3 |
| FWY. | 60 | 1-1/2 | 8 | 3-1/2 | 5C | 7-7/8 | 7-1/4 | 2-1/2 | 4 |

## 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.

| | 12" X 12" 18" X 18" | 24" ▽ 24" X 24" 30" X 18" 30" X 30" | 36" ▽ 36" X 24" 36" X 36" | 48" ▽ 48" X 48" 60" ▽ |
|---|---|---|---|---|
| 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 REFLECTIVE MATERIAL SHALL BE ENCAPSULATED LENS WHITE OR SILVER REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND OF THE SIGN.

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

## 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.

## SPECIFICATIONS:

REGULATORY SIGNS SHALL MEET THE STANDARD STATE 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 PREPARED BY THE NATIONAL JOINT COMMITTEE ON UNIFORM TRAFFIC CONTROL DEVICES.

REVISIONS AND CORRECTIONS

FEB. 3, 1986— UPDATED TO 1985 SPECIFICATIONS

APPROVED

DATE JULY 18, 1984

S. J. G.
DIRECTOR OF ENGINEERING AND CONSTRUCTION

Arthur J. Gross
CHIEF OF DESIGN

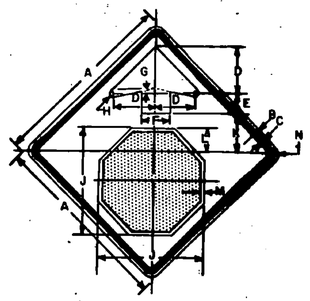
Jack Brown
SURVEY AND PLANS ENGINEER

# REGULATORY SIGNS

VERMONT AGENCY OF TRANSPORTATION

STANDARD

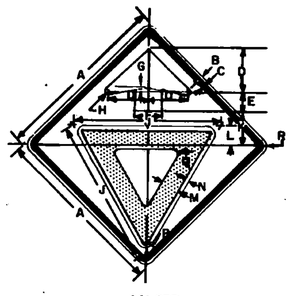
E-15C



COLORS

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

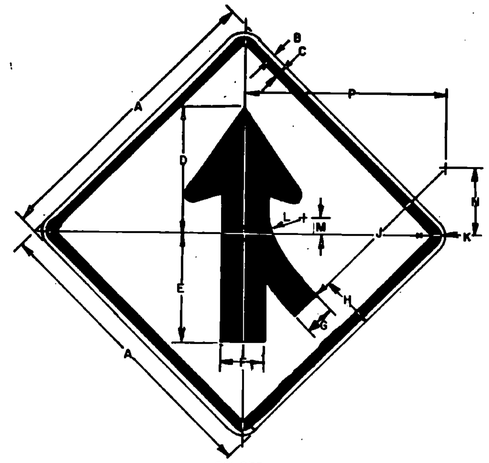
| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | |
| MIN. | 30 | 1/2 | 3/4 | 7-1/2 | 3-3/4 | 5 | 5/8 | 5/16 | 25 | 6-1/4 | 3 | 3-3/8 | 1/2 | 1-7/8 |
| STD. | 36 | 5/8 | 7/8 | 9 | 4-1/2 | 6 | 3/4 | 3/8 | 28 | 7-1/2 | 3-3/8 | 3-3/4 | 5/8 | 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 | 1-7/8 | 1 | 3 |



COLORS

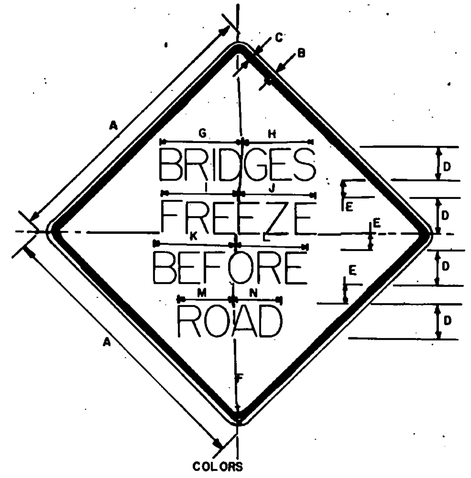
BORDER AND ARROW - BLACK (NON-REFL)
SYMBOL- RED BORDER ON WHITE BACKGROUND (REFL)
BACKGROUND - YELLOW (REFL)

| 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 | 5/8 | 5/16 | 25 | 6-1/4 | 3 | 3-3/8 | 1/2 | 1-1/4 | 5/8 | 1-7/8 |
| STD. | 36 | 5/8 | 7/8 | 9 | 4-1/2 | 6 | 3/4 | 3/8 | 28 | 7-1/2 | 3-3/8 | 3-3/4 | 5/8 | 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 | 1-7/8 | 1 | 3 |



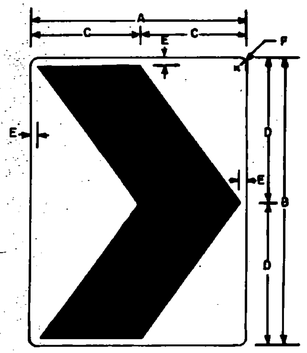
COLORS
LEGEND - BLACK (NON-REFL)
BACKGROUND - YELLOW (REFL)

| 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 | 23/8 | 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 | 3-5/8 | 6-5/16 | 33-5/8 | 2-1/4 | 9-5/8 | 4 | 15-5/8 | 33-5/16 |
| FWY. | 48 | 3/4 | 1-1/4 | 20-1/2 | 17-1/2 | 7 | 4-3/4 | 8-3/8 | 45 | 3 | 12-13/16 | 5-1/4 | 20-3/4 | 44-3/8 |



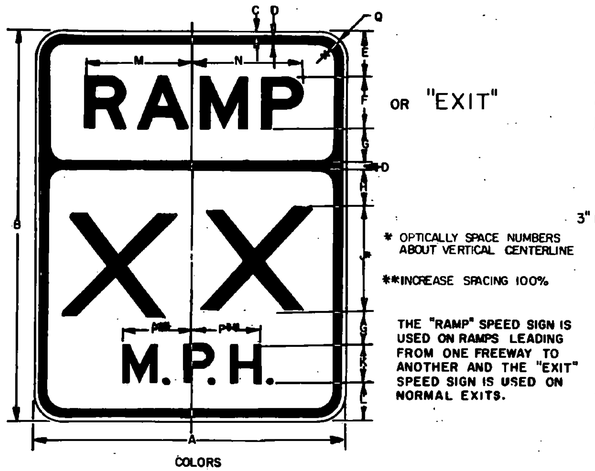

COLORS
LEGEND - BLACK (NON-REFL)
BACKGROUND - YELLOW (REFL)

| 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 | 3-13/16 | 9-7/8 | 10-1/4 | 10-1/4 | 6-7/8 | 6-7/8 |
| FWY/EXP. | 48 | 3/4 | 1-1/4 | 6C | 3 | 3 | 13-1/2 | 13-1/2 | 11-13/16 | 11-13/16 | 12-1/4 | 12-5/16 | 8-5/16 | 8-5/16 |



COLORS
CHEVRON - BLACK (NON-REFL)
BACKGROUND - YELLOW (REFL)

| 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 | 1-7/8 |
| FRWY. | 36 | 48 | 18 | 24 | 1-1/8 | 2-1/4 |




OR "EXIT"

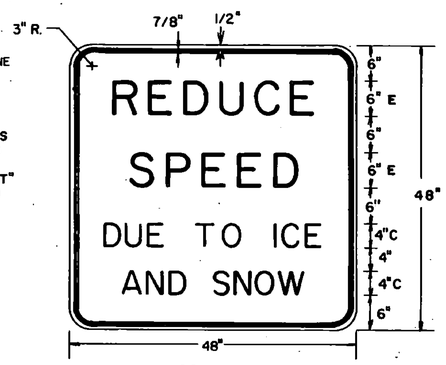
* OPTICALLY SPACE NUMBERS ABOUT VERTICAL CENTERLINE

**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.

COLORS
LEGEND - BLACK (NON-REFL)
BACKGROUND - YELLOW (REFL)

| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | P | Q | |
| MIN. & STD. | 24 | 30 | 3/8 | 5/8 | 3-1/2 | 4E | 2-1/2 | 2-7/8 | 8E | 3E | 3 | 8-1/4 | 8-1/2 | 5-5/16 | 1-1/2 | |
| E.XPWY. | 36 | 48 | 5/8 | 7/8 | 6 | 6E | 4 | 5-1/8 | 12E | 4E | 6 | 12-3/8 | 12-3/4 | 7-1/16 | 3-1/4 | |
| 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 | |




COLORS
LEGEND - BLACK ( NON-REFL.)
BACKGROUND - YELLOW (REFL.)

## COLORS

THE WARNING 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 TRANSPORTION OFFICIALS 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" | 5/8" | 5/8" |
| GALVANIZED FLAT SHEET STEEL | 18 GAGE | 16 GAGE | 14 GAGE | 12 GAGE |

THE REFLECTIVE MATERIAL SHALL BE REFLECTIVE SHEETING APPLIED TO THE ENTIRE BACKGROUND OF THE SIGN.

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

## SPECIFICATIONS

WARNING SIGNS SHALL MEET THE STANDARD STATE 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 PREPARED BY THE NATIONAL JOINT COMMITTEE ON UNIFORM TRAFFIC CONTROL DEVICES.

**REVISIONS AND CORRECTIONS**

APRIL 18, 1985 - RAMP AND EXIT SIGN USE NOTE ADDED. "REDUCE SPEED DUE TO ICE AND SNOW" SIGN ADDED.

FEB. 3, 1986 — UPDATED TO 1986 SPECIFICATIONS

APPROVED

DATE OCT. 3, 1984

DIRECTOR OF ENGINEERING AND CONSTRUCTION

CHIEF OF DESIGN

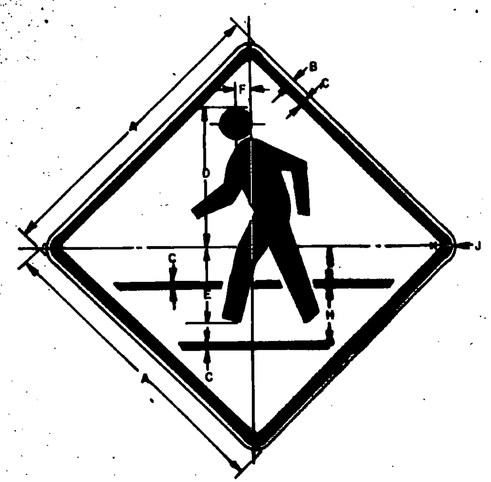
SURVEY AND PLANS ENGINEER

# WARNING SIGNS

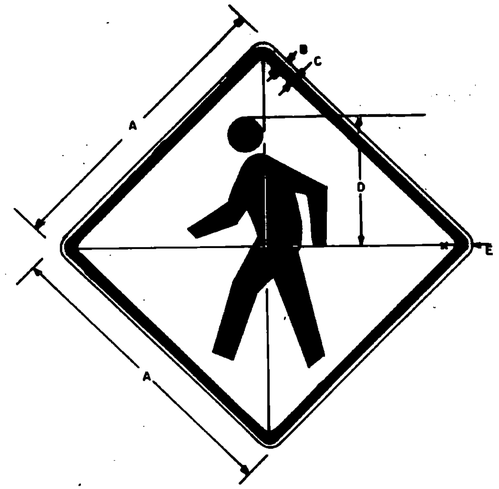
VERMONT AGENCY OF TRANSPORTATION

STANDARD

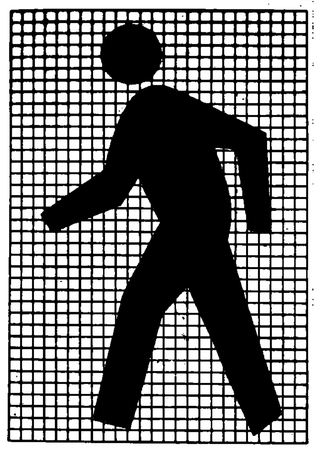
E-19

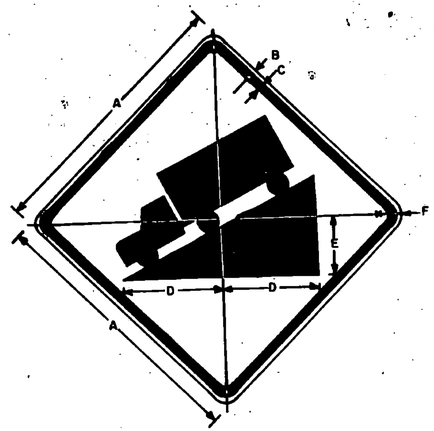



| SIGN | DIMENSIONS (INCHES) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | |
| BIKE | 18 | 3/8 | 5/8 | 8-3/4 | 4-3/4 | 3/4 | 3-3/8 | 3-3/4 | 1-1/2 | |
| MIN. | 24 | 3/8 | 5/8 | 11 | 6 | 3/4 | 4-1/2 | 5 | 1-1/2 | |
| STD. | 30 | 1/2 | 3/4 | 14 | 8 | 1 | 6 | 6 | 2 | |
| EXPWY. | 36 | 5/8 | 7/8 | 16-3/4 | 9 | 1-1/4 | 7-1/2 | 7-1/2 | 2-1/4 | |
| SPECIAL | 48 | 3/4 | 1-1/4 | 22 | 12 | 1-1/2 | 9 | 9 | 3 | |

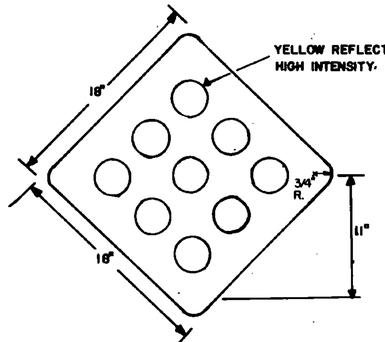



| SIGN | DIMENSIONS (INCHES) | | | | |
|---|---|---|---|---|---|
| | A | B | C | D | E |
| MIN. | 24 | 3/8 | 5/8 | 11 | 1-1/2 |
| STD. | 30 | 1/2 | 3/4 | 13-1/2 | 1-7/8 |
| EXPWY. | 36 | 5/8 | 7/8 | 16 | 2-1/4 |
| SPECIAL | 48 | 3/4 | 1-1/4 | 22 | 3 |

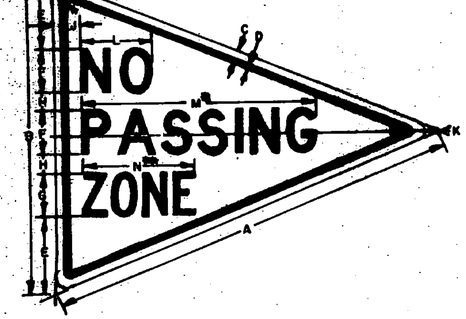





| SIGN | DIMENSIONS (INCHES) | | | | | |
|---|---|---|---|---|---|---|
| | A | B | C | D | E | F |
| MIN. | 24 | 3/8 | 5/8 | 8-3/4 | 6 | 1-1/2 |
| STD. | 30 | 1/2 | 3/4 | 11 | 7-1/2 | 1-7/8 |
| EXPWY. | 36 | 5/8 | 7/8 | 13-1/4 | 9 | 2-1/4 |
| FWY. | 48 | 3/4 | 1-1/4 | 17-1/2 | 12 | 3 |

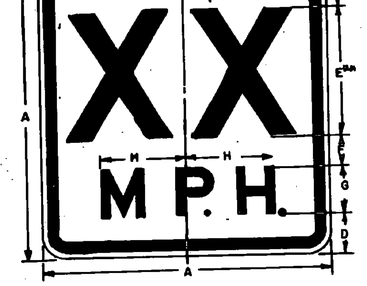



HAZARD MARKER:
HAZARD MARKERS SHALL BE OF 0.060 FLAT SHEET ALUMINUM OR 18 GAGE GALVANIZED FLAT SHEET STEEL, WITH A NON-REFLECTIVE YELLOW BACKGROUND AND NINE 3" DIA. CIRCLES EVENLY SPACED WITH MATERIALS AS NOTED ABOVE.



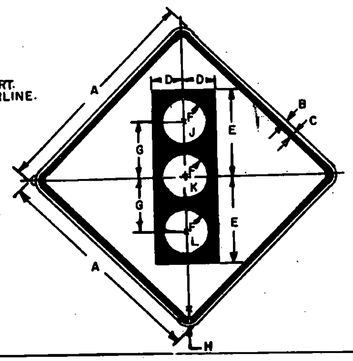

| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M | N |
| MIN. | 40 | 30 | 1/2 | 3/4 | 7-1/4 | 4D | 4C | 1-3/4 | 2-1/2 | 1-7/8 | 6-1/2 | 22-9/16 | 11-1/16 |
| STD. | 48 | 36 | 5/8 | 7/8 | 8-1/2 | 5D | 5C | 2 | 3 | 2-1/4 | 8 | 26-13/16 | 12-3/4 |
| SPECIAL | 64 | 48 | 3/4 | 1-1/4 | 12 | 6D | 6C | 3 | 4 | 3 | 10-3/4 | 33-11/16 | 16-9/16 |

% FOR STD. SIZE REDUCE SPACING 20%
%% FOR STD. SIZE REDUCE SPACING 35%




| SIGN | DIMENSIONS (INCHES) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J |
| STD. | 18 | 3/8 | 5/8 | 2-1/2 | 8E | 2 | 3E | 5-5/16 | 1-1/2 |
| SPECIAL | 24 | 3/8 | 5/8 | 3-5/8 | 10E | 2-3/4 | 4E | 7-1/16 | 1-1/2 |

%% OPTICALLY SPACE NUMERALS ABOUT VERT. CENTERLINE.




| SIGN | DIMENSIONS (INCHES) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H |
| BIKE | 18 | 3/8 | 5/8 | 3 | 8 | 2-1/4 | 5 | 1-1/2 |
| MIN. | 30 | 1/2 | 3/4 | 5 | 13-3/4 | 3-3/4 | 8-3/4 | 2-7/8 |
| STD. & MIN. | 36 | 5/8 | 7/8 | 6-3/4 | 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 |

ADDITIONAL COLORS: J - REFL. RED
K - REFL. YELLOW
L - REFL. GREEN

## COLORS SYMBOLS

THE WARNING SIGNS SHOWN ON THIS SHEET SHALL HAVE BLACK TEXT AND ON REFLECTORIZED YELLOW 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 WARNING SIGNS SHOWN ON THIS SHEET MAY BE ANY OF THE FOLLOWING, OF THE MINIMUM THICKNESS NOTED.

| | 18"X18" | 24"X24" 30"X30" | 36"X36" | 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 REFLECTIVE MATERIAL SHALL BE 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, SYMBOLS, SPACINGS, AND TEXT DIMENSIONS SHALL CONFORM WITH THE STANDARD ALPHABETS AND DESIGNS PRESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE NATIONAL JOINT COMMITTEE ON UNIFORM TRAFFIC CONTROL DEVICES.

## SPECIFICATIONS

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

REVISIONS AND CORRECTIONS

FEB. 19, 1985 - COLORS ADDED TO "SIGNAL AHEAD" SYMBOL - OTHER MINOR REVISIONS

FEB. 3, 1986 - UPDATED TO 1986 SPECIFICATIONS

APPROVED

DATE OCT. 3, 1984

DIRECTOR OF ENGINEERING AND CONSTRUCTION

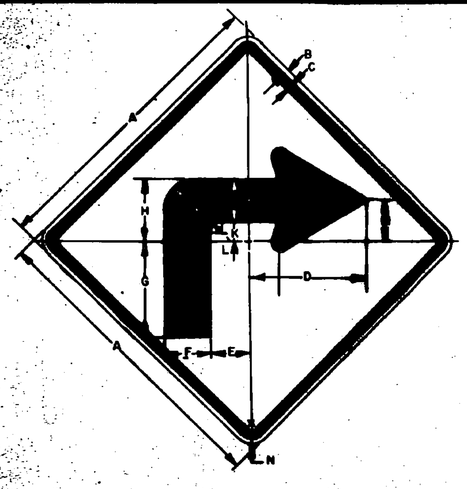
CHIEF OF DESIGN

SURVEY AND PLANS ENGINEER

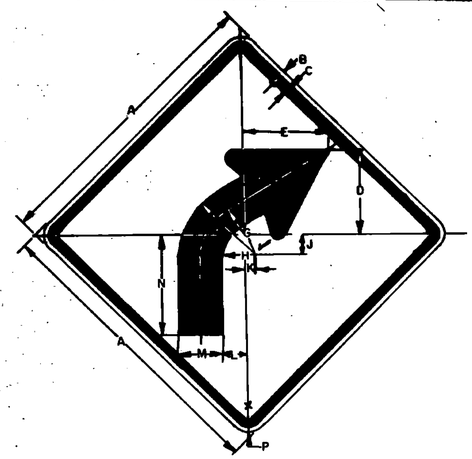
# WARNING SIGNS

VERMONT AGENCY OF TRANSPORTATION

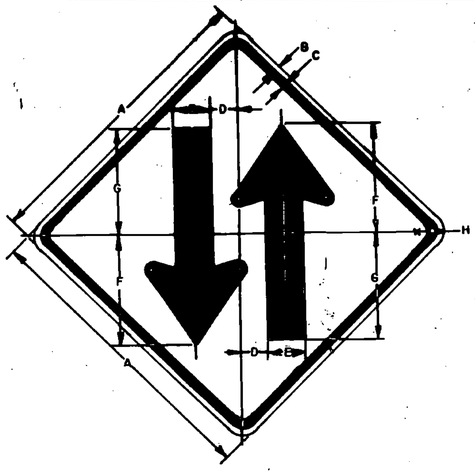
STANDARD E-19B



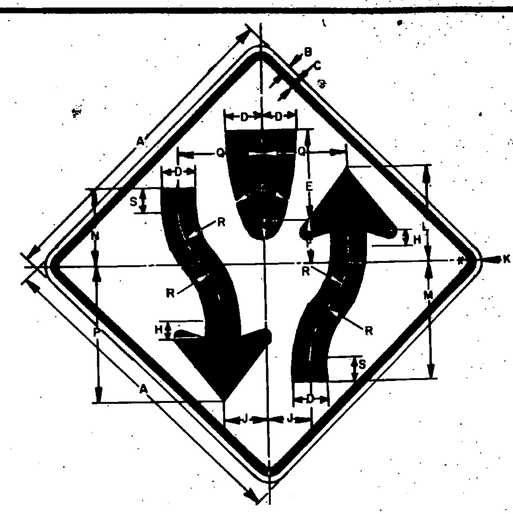
| SIGN | DIMENSIONS (INCHES) | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | A | B | C | D | E | F | G | H | J | K | L | M | N | |
| BIKE | 18 | 3/8 | 5/8 | 7-1/4 | 2-1/4 | 2-5/8 | 5-7/8 | 5-1/4 | 1-5/8 | 1 | 5/8 | 2-1/2 | 1-1/2 | |
| MIN. | 24 | 3/8 | 5/8 | 9-5/8 | 3 | 3-1/2 | 7-3/4 | 6 | 2-1/8 | 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 | 8-1/8 | 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 | 9-3/4 | 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 | 13 | 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 | 10-5/8 | 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 | 6-9/16 | 39-5/16 | 2-5/8 | 6-9/16 | 3 | 16 | 18-1/16 | 12-1/16 | 22 | 12-7/16 | 13-1/8 | 35/16 |



| 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 | 21-9/16 | 3 | |

## COLORS

SYMBOLS — THE WARNING SIGNS SHOWN ON THIS SHEET SHALL HAVE BLACK TEXT AND ON REFLECTORIZED YELLOW 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 WARNING SIGNS SHOWN ON THIS SHEET MAY BE ANY OF THE FOLLOWING, OF THE MINIMUM THICKNESS NOTED.

| | 18"X18" | 24"X24" 30"X30" | 36"X36" | 48"X48" |
|---|---|---|---|---|
| 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 REFLECTIVE MATERIAL SHALL BE 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, ARROWS, SPACINGS, AND TEXT DIMENSIONS SHALL CONFORM WITH THE STANDARD ALPHABETS AND DESIGNS PRESCRIBED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE NATIONAL JOINT COMMITTE ON UNIFORM TRAFFIC CONTROL DEVICES.

## SPECIFICATIONS

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

REVISIONS AND CORRECTIONS

FEB. 8, 1988 — UPDATED TO 1988 SPECIFICATIONS

APPROVED

DATE OCT. 3, 1984

DIRECTOR OF ENGINEERING AND CONSTRUCTION

CHIEF OF DESIGN

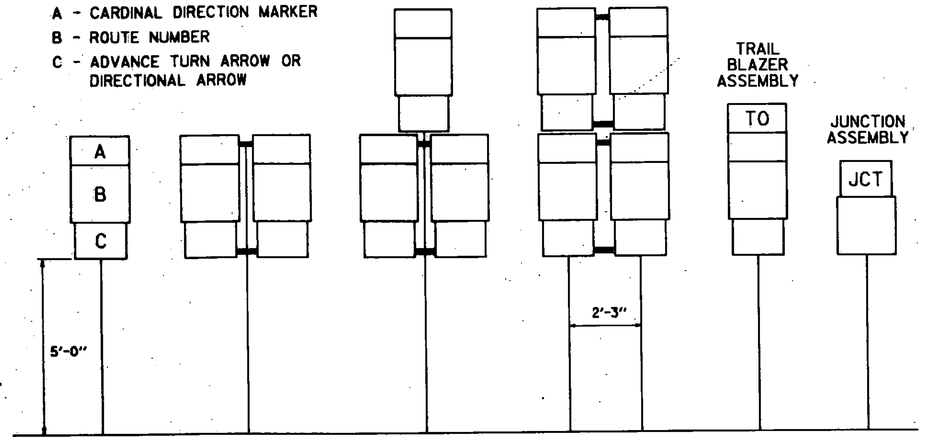
SURVEY AND PLANS ENGINEER

# WARNING SIGNS

STANDARD E-19A

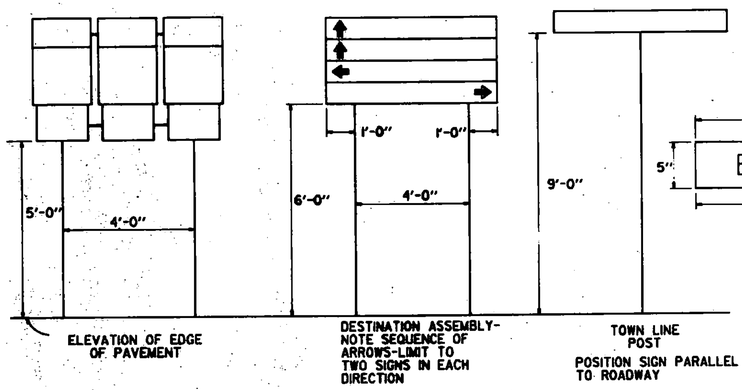
## STANDARD MOUNTING OF ROUTE MARKER ASSEMBLIES, DESTINATION ASSEMBLIES AND TOWN LINE POSTS

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




ELEVATION OF EDGE OF PAVEMENT

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

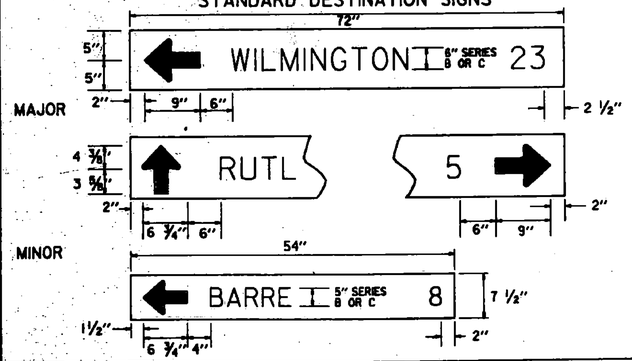


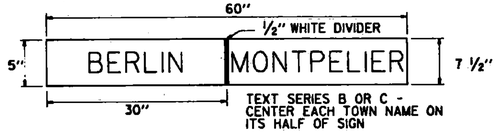

ELEVATION OF EDGE OF PAVEMENT

DESTINATION ASSEMBLY- NOTE SEQUENCE OF ARROWS-LIMIT TO TWO SIGNS IN EACH DIRECTION

TOWN LINE POST
POSITION SIGN PARALLEL TO ROADWAY

### STANDARD DESTINATION SIGNS




TEXT SERIES B OR C - CENTER EACH TOWN NAME ON ITS HALF OF SIGN

TOWN LINE 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.

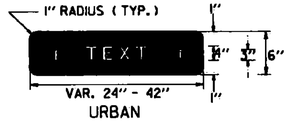
#### SPECIFICATIONS

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.

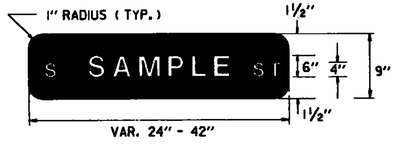
#### SIZES ARE AS FOLLOWS

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

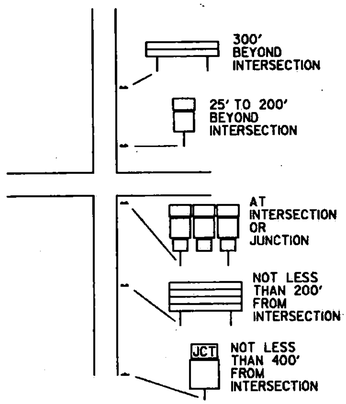


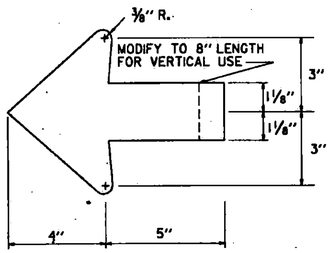

URBAN




RURAL

### TYPICAL LOCATION OF ASSEMBLIES

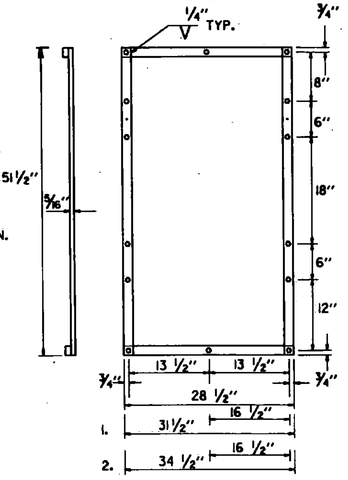



ARROW DETAIL
REDUCE PROPORTIONALLY TO 6 3/4" LENGTH FOR USE ON MINOR SIGN

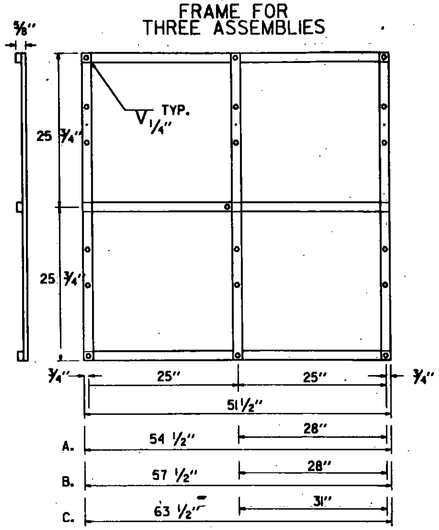
## ROUTE MARKER ASSEMBLY FRAMES

FRAME FOR TWO ASSEMBLIES




NOTE:
1. WITH ONE 30" THREE DIGIT SIGNS
2. WITH TWO 30" THREE DIGIT SIGNS

FRAME FOR THREE ASSEMBLIES




NOTE:
A. WITH ONE 30" THREE DIGIT SIGN IN AN OUTSIDE POSITION
B. WITH ONE 30" THREE DIGIT SIGN IN THE CENTER POSITION OR TWO SUCH SIGNS IN THE OUTSIDE POSTIONS
C. WITH THREE 30" THREE DIGIT SIGNS

STANDARD FRAMES SHALL BE 5/16" 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 5/8 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
8/10/83
SIGN HEIGHT CHANGED TO 7 FT.
FEB. 3, 1986 - UPDATED TO 1986 SPECIFICATIONS
DEC. 1, 1989 MAJOR REVISIONS

APPROVED: DEC 29, 1971

R.H. Conrad
CHIEF ENGINEER

E.H. Stickney
ASST. CHIEF ENGINEER

G.M. Lane
HIGHWAY ENGINEER

# GUIDE SIGNS

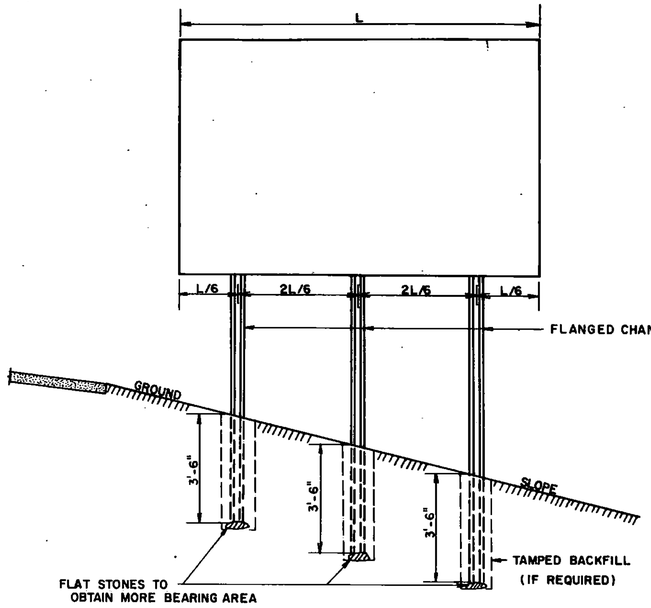
VERMONT AGENCY OF TRANSPORTATION

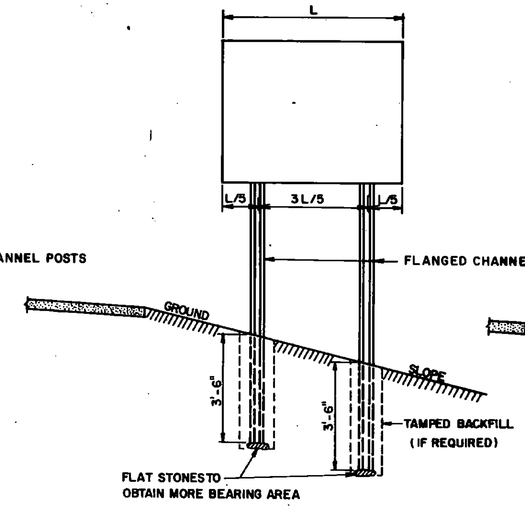
STANDARD E- 23

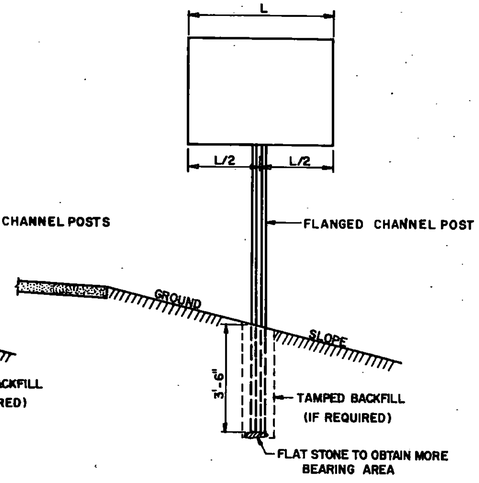
GENERAL NOTES

ALL MATERIAL SHALL BE AS SPECIFIED UNDER SECTION 675 - 675 - TRAFFIC SIGNS

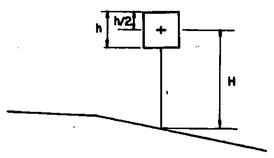
CONSTRUCTION METHODS - POSTS MAY BE DRIVEN OR SET IN A DUG HOLE AND BACKFILLED. IF DRIVEN, A DRIVING CAP SHALL BE USED. IF SET IN A DUG HOLE, THE EXCAVATION AND BACKFILL WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED AS BEING INCLUDED IN UNIT PRICES FOR OTHER ITEMS IN THE CONTRACT. THE DUG HOLE INSTALLATION SHALL BE USED IN AREAS OF POOR SOIL CONDITIONS OR AS DIRECTED BY THE ENGINEER.



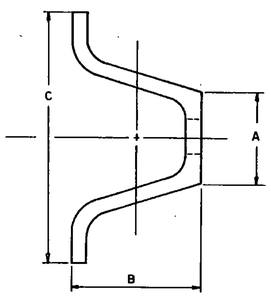

IN AREAS WHERE LEDGE ROCK IS ENCOUNTERED STEEL POSTS WILL BE SET AND GROUTED 12" DEEP IN THE LEDGE.

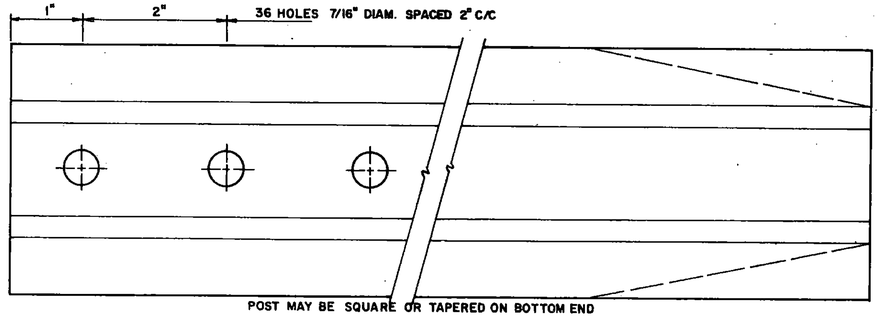



| POST SELECTION CHART | | |
|---|---|---|
| SIGN AREA $(FT^2) \times H(FT) \leq Sv$ (SELECTION VALUE) | | |
| POST SIZE | Sv | DESIGN CRITERIA |
| 2 LB/FT.<br>2 1/2 LB/FT.<br>3 LB/FT. | 62<br>77<br>107 | WIND SPEED = 60 MPH (10-YEAR MEAN RECURRENCE INTERVAL)<br>WIND PRESSURE = 12 PSF<br>STEEL MIN YIELD Fy = 50,000 PSI<br>ALLOWABLE STRESS = (1.4)0.55Fy |

| POST SIZE POUNDS PER LINEAR FOOT | DIMENSIONS | | | PLASTIC SECTION MODULUS, Z |
|---|---|---|---|---|
| | A | B | C | |
| 2 | 1 9/32" | 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 7/8" | 3 1/2" | 0.53 $IN.^3$ |

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




REVISIONS AND CORRECTIONS

FEB. 8, 1978 - HEIGHT OF SIGNS ADDED.
DEC. 15, 1978 - RAIL STEEL DELETED
JAN. 8, 1981 - ADDED POST SIZE & SELECTION CHARTS; REVISED NOTES & DIMENSIONS
FEB. 3, 1986 - UPDATED TO 1986 SPECIFICATIONS

APPROVED DATE Nov 25, 1976

C. H. Stickney
CHIEF ENGINEER

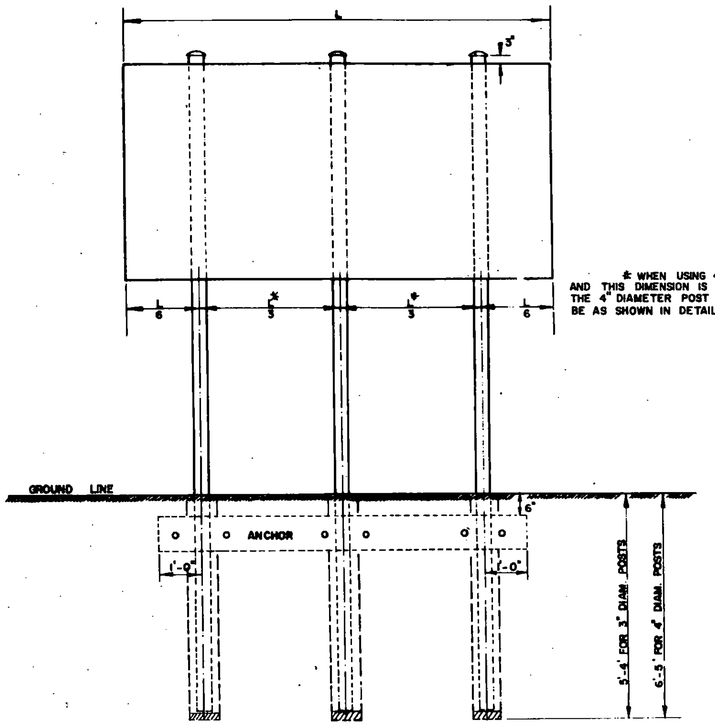
R O Munn
ASST. CHIEF ENGINEER

Leon L Jones
HIGHWAY ENGINEER

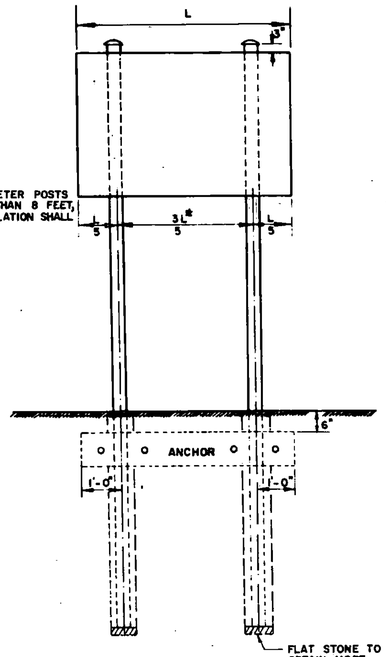
# FLANGED CHANNEL STEEL SIGN SUPPORTS

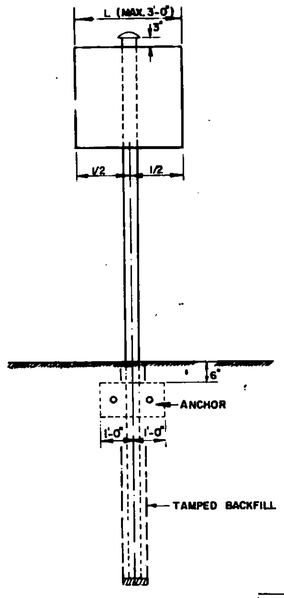
VERMONT AGENCY OF TRANSPORTATION

STANDARD E-24-A

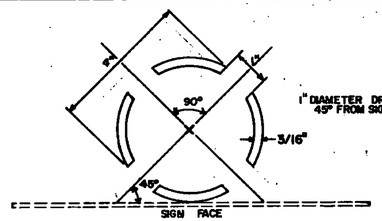



* WHEN USING 4" DIAMETER POSTS AND THIS DIMENSION IS LESS THAN 8 FEET, THE 4" DIAMETER POST INSTALLATION SHALL BE AS SHOWN IN DETAIL "A".

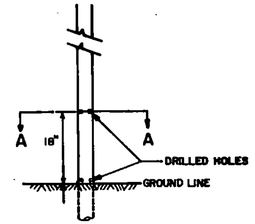



IN AREAS WHERE LEDGE ROCK IS ENCOUNTERED POSTS WILL BE SET AND GROUTED 24" DEEP IN THE LEDGE UNLESS THE POSTS PENETRATE THE GROUND 4'.

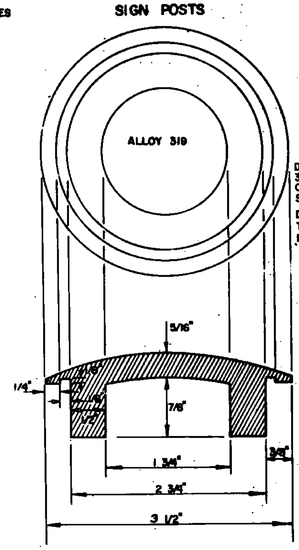



SECTION A-A



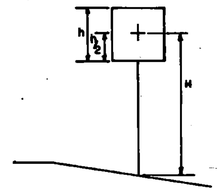

DETAIL A
4" DIAMETER POST
(MODIFIED)

CAST ALUMINUM CAP FOR SIGN POSTS




DIMENSIONS SHOWN ARE FOR 3" O.D., 2 3/4" I.D.± COMMERCIAL TOLERACES. CAPS DESIGNED FOR DRIVE FIT

DIMENSIONS ARE PROPORTIONAL FOR LARGER DIAMETER TUBING




| 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 | | |
|---|---|---|
| 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 RECURRANCE 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

**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 WELL SEASONED, STRAIGHT AND SOUND SPRUCE OR OTHER APPROVED SPECIES, CUT FROM LIVE GROWING TIMBER, FREE FROM LOOSE KNOTS OR OTHER DEFECTS. PLANKS SHALL HAVE A PRESSURE PRESERVATIVE TREATMENT COVERED BY SECTION 728.01 OF THE SPECIFICATION FOR PLANK GUARD RAIL, SECTION 728.
THESE PLANKS SHALL BE CLAMPED POST TO POST WITH A MINIMUM OF ONE (1) FOOT OVERHANG; TO BE PARALLEL TO THE SIGN FACE.
THE TOP EDGE OF THE PLANKS SHALL BE APPROXIMATELY PARALLEL TO THE GROUND.
BOLTS FOR THE ANCHORS SHALL BE 3/8" CARRIAGE BOLTS WITH NUTS AND WASHERS AND SHALL BE GALVANIZED BY THE HOT-DIPPED PROCESS IN CONFORMANCE WITH A.S.T.M. SPECIFICATION A-153 AFTER FABRICATION, AND SHALL DEVELOP THE REQUIRED JOINT STRENGTH.

**ERECTION.** ALL POSTS SHALL BE PLUMB AND LOCATED AS SPECIFIED BY DRAWINGS OR BY THE ENGINEER IN THE FIELD. LOCK NUTS ON 3/8"-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. POSTS 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.

**REVISIONS AND CORRECTIONS**

JAN 0, 1973 REVISED TO INCLUDE CHART FOR WEIGHT OF POST.
AUG. 21, 1975 - REMOVE 5" ALUMINUM TUBES PER FHWA REQUEST.
DEC. 15, 1978 - TAMPED BACKFILL NOTES ADDED.
JUNE 17, 1981 - ADDED 4" PIPE MOD. AND Sv CHART.
FEB. 3, 1986 - UPDATED TO 1986 SPECIFICATIONS

APPROVED DATE Dec. 29, 1971

R.V. Carroll
CHIEF ENGINEER

E.H. Stickney
ASST. CHIEF ENGINEER

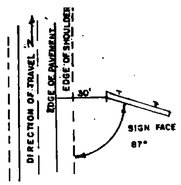
G. M. Lane
HIGHWAY ENGINEER

# TUBULAR ALUMINUM SIGN SUPPORTS

VERMONT AGENCY OF TRANSPORTATION

STANDARD

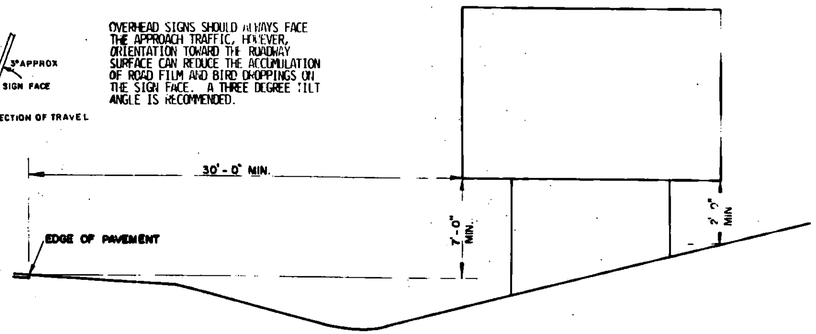
E-25

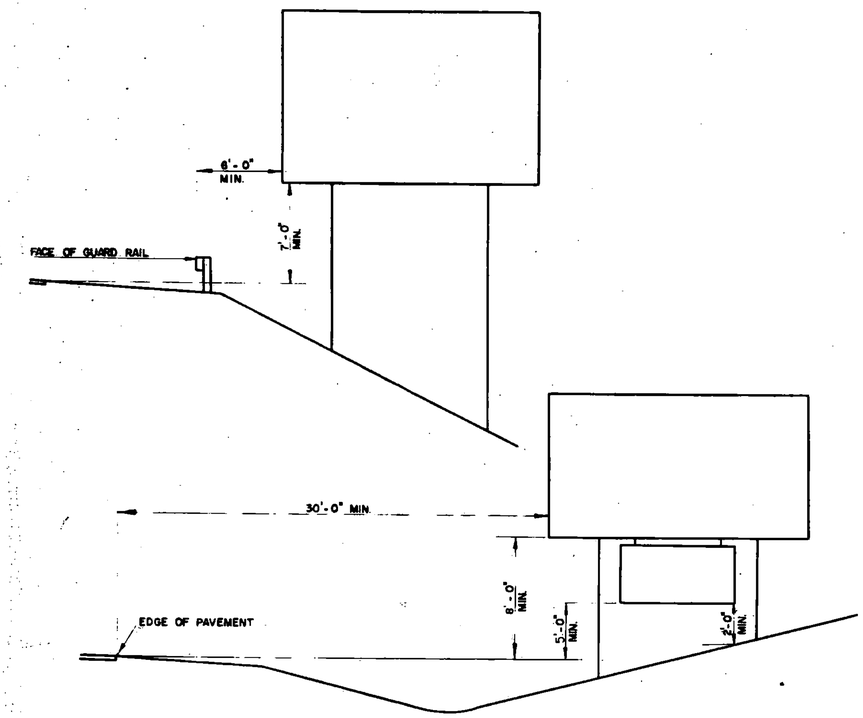



NORMALLY SIGNS SHOULD BE MOUNTED AT RIGHT ANGLES TO DIRECTION OF TRAFFIC. AT CURVED ALIGNMENTS THE ANGLE OF PLACEMENT SHOULD BE DETERMINED BY THE COURSE OF APPROACHING TRAFFIC RATHER THAN BY THE ROADSIDE EDGE AT THE POINT WHERE THE SIGN IS LOCATED.

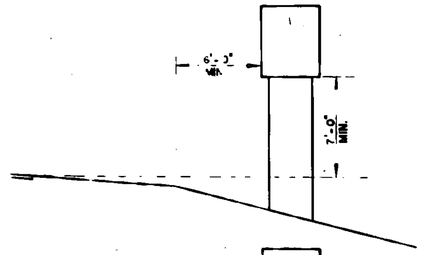
## GUIDE SIGNS

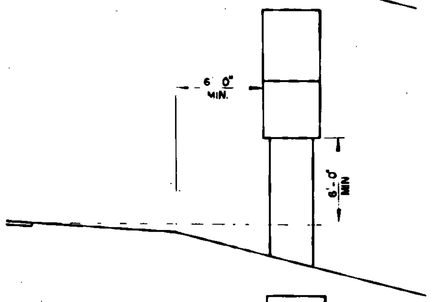
OVERHEAD SIGNS SHOULD ALWAYS FACE THE APPROACH TRAFFIC, HOWEVER, ORIENTATION TOWARD THE ROADWAY SURFACE CAN REDUCE THE ACCUMULATION OF ROAD FILM AND BIRD DROPPINGS ON THE SIGN FACE. A THREE DEGREE TILT ANGLE IS RECOMMENDED.

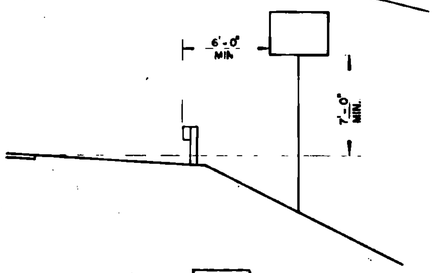


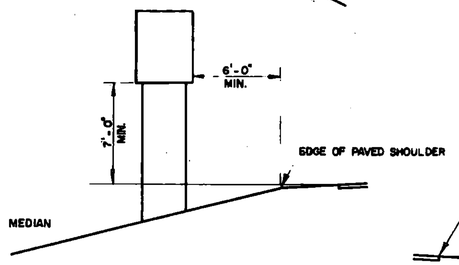




## REGULATORY SIGNS

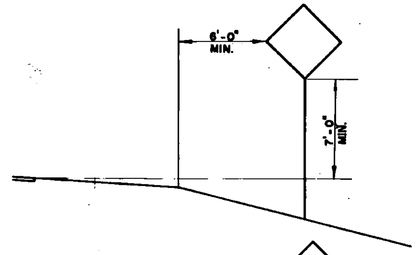


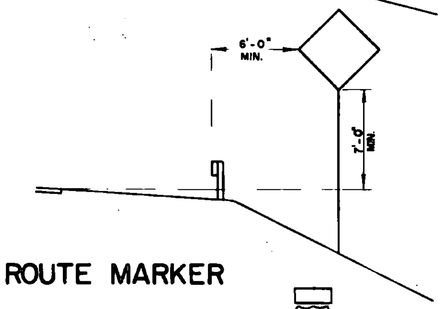



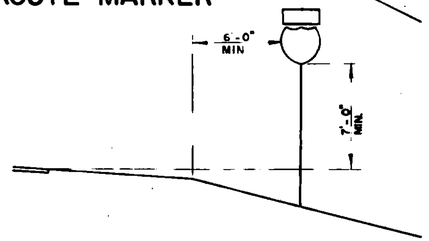




## WARNING SIGNS

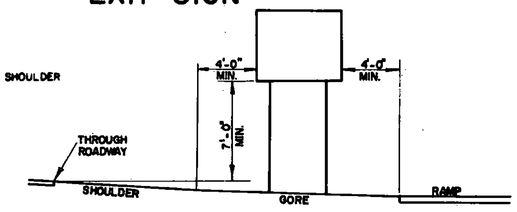


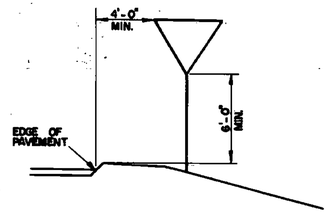

## ROUTE MARKER

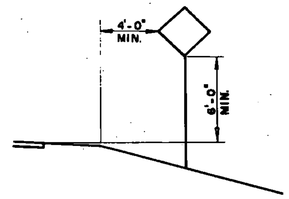


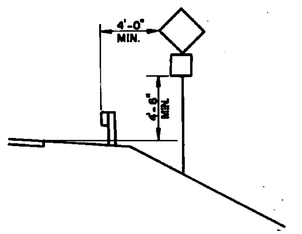

## EXIT SIGN




## 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 Crawford
CHIEF ENGINEER
E H Stickney
ASST. CHIEF ENGINEER
G. M. Lane
HIGHWAY ENGINEER

# TRAFFIC SIGNS

# STANDARD SIGN PLACEMENT

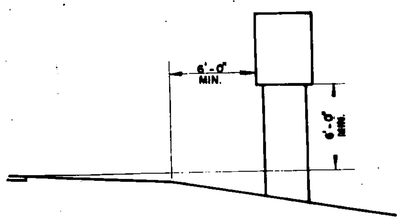
## EXPRESSWAY TYPE

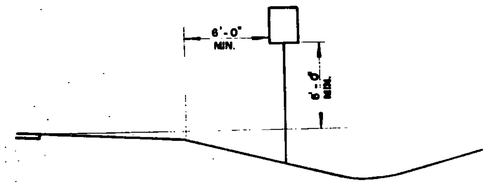
VERMONT AGENCY OF

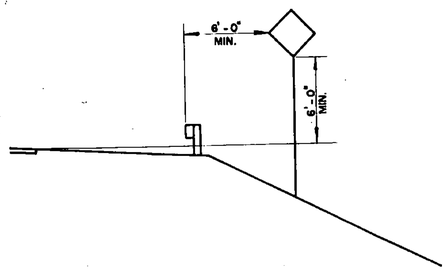
STANDARD

E-27

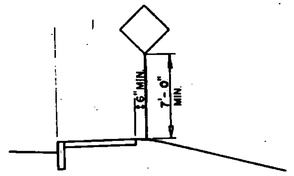
## RURAL

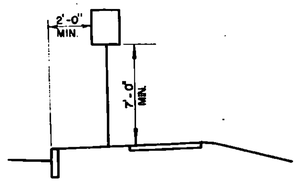


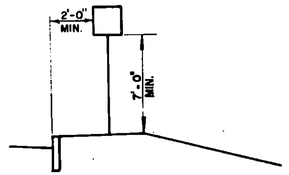



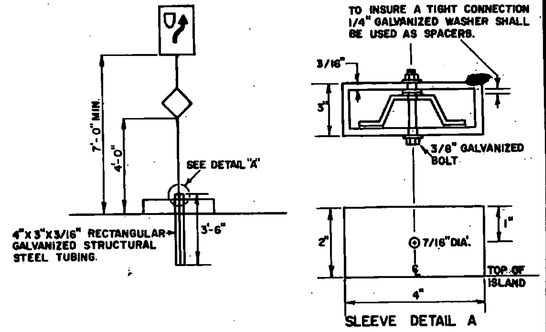

## URBAN



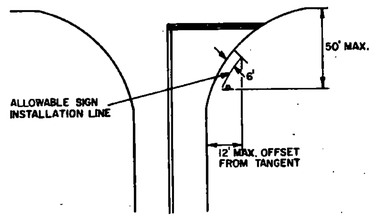




### WARNING SIGNS
ON ISLAND IN THE LINE OF TRAFFIC




### 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, 1988 – UPDATED TO 1986 SPECIFICATIONS

APPROVED Dec. 29, 1971

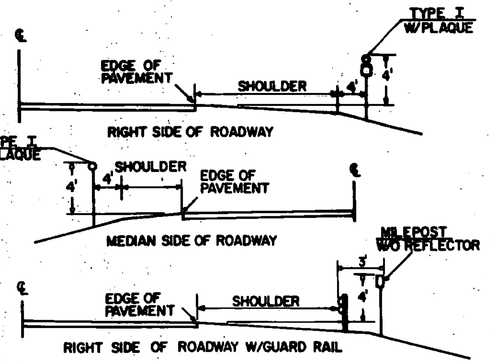
R.H. Crandel CHIEF ENGINEER
E.H. Stickney ASST. CHIEF ENGINEER
G.M. Lane HIGHWAY ENGINEER

# STANDARD SIGN PLACEMENT
## CONVENTIONAL ROAD

VERMONT AGENCY OF TRANSPORTATION

STANDARD

E-29



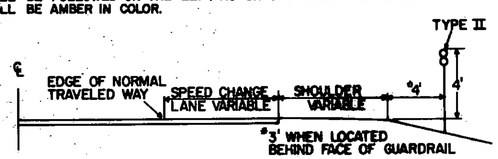

TYPICAL PLACEMENT OF TYPE I DELINEATORS AND MILEPOSTS ON INTERSTATE ROUTES

TYPE I DELINEATORS WITH WHITE REFLECTOR UNITS AND THE APPROPRIATE MILEPOST PLAQUES SHALL BE ERECTED CONTINUOUSLY ALONG THE RIGHT SIDE OF THE INTERSTATE ROADWAYS BETWEEN MILEMARKERS, EXCEPT THAT BEHIND GUARD RAIL MILEPOSTS WITHOUT REFLECTORS SHALL BE ERECTED.

THE TYPE I DELINEATORS AND MILEPOSTS SHALL BE OMITTED ALONG DECELERATION AND ACCELERATION LANES, BUT THE SUCCEEDING SPACING SHALL BE AS IF THE DELINEATORS HAD BEEN ERECTED CONTINUOUSLY AND SHALL BE SO INDICATED.

THE LOCATION OF TYPE I DELINEATORS AND MILEPOSTS ARE TO BE COMPUTED AND MARKED IN THE FIELD BY THE ENGINEER IN ACCORDANCE WITH THE LATEST REVISION OF THE AGENCY'S "POLICY ON LOCATION MARKING FOR VERMONT INTERSTATE HIGHWAYS."

TYPE I DELINEATORS WITHOUT MILEPOST PLAQUES SHALL BE ERECTED CONTINUOUSLY ALONG THE LEFT OR MEDIAN SIDE OF THE INTERSTATE HIGHWAYS EXCEPT BEHIND GUARD RAIL, SPACED OPPOSITE EVERY SECOND TYPE I DELINEATOR ON THE RIGHT SIDE, AND CONTINUED AT APPROXIMATELY THE SAME SPACING THROUGH INTERCHANGES AND REST AREAS WHERE THERE MAY NOT BE ANY TYPE I DELINEATORS ON THE RIGHT SIDE. THE SAME LATERAL PLACEMENT SHALL BE FOLLOWED ON THE LEFT AS ON THE RIGHT. THE REFLECTIVE UNITS SHALL BE AMBER IN COLOR.




TYPICAL PLACEMENT OF TYPE II DELINEATORS ON SPEED CHANGE LANES

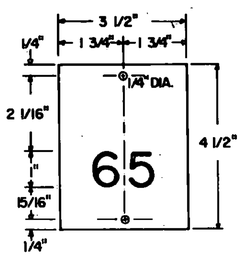
TYPE II DELINEATORS SHALL BE ERECTED CONTINUOUSLY ALONG THE RIGHT SIDE OF THE DECELERATION AND ACCELERATION LANES AT 100' INTERVALS AND SHALL NOT BE OMITTED BEHIND GUARDRAIL SECTIONS AS IS THE CASE FOR TYPE I DELINEATORS. THE DELINEATORS SHALL START AT THE BEGINING OF THE TAPER AND END AT THE NOSE OF THE EXIT OR ENTRANCE GORE. THEY SHALL HAVE WHITE REFLECTOR UNITS.

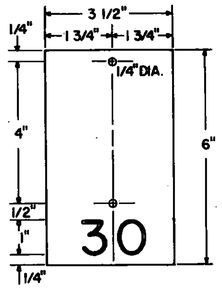
TYPE III DELINEATORS
SEE NOTE #1

TYPE III DELINEATORS SHALL BEGIN 50' FROM WRONG WAY SIGNS AND EXTEND EVERY 50' TO A POINT NOT LESS THAN 25' FROM THE INTERSECTING ROADWAY AND BE MOUNTED ON BOTH SIDES OF THE ROAD.

## DELINEATORS WITH ACRYLIC PLASTIC REFLECTORS

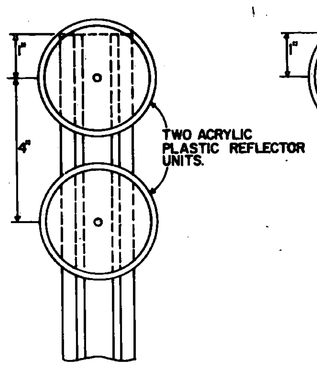
MILEPOST PLAQUE PART "A"
(THE NUMERALS ON PART "A" INDICATE THE MILE.)



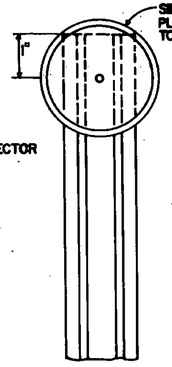




MILEPOST PLAQUE PART "B"
(THE NUMERAL ON PART "B" INDICATES UNITS OF FIVE ONE-HUNDRETHS OF A MILE BETWEEN MILE POSTS.)

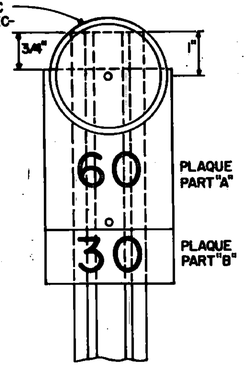
TYPE II



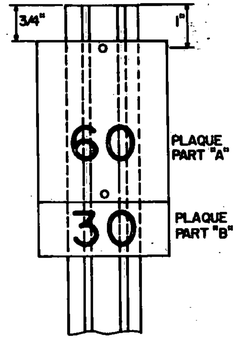

TYPE I
WITHOUT PLAQUE

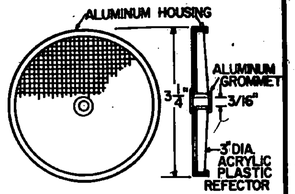



TYPE I
WITH PLAQUE




MILE POST
WITHOUT REFLECTOR




DELINEATOR PLASTIC REFLECTOR UNIT

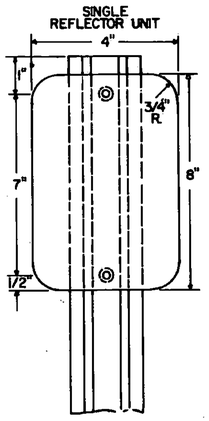
NOTES

1. TYPE III DELINEATORS WILL BE TYPE I DELINEATORS WITH AN ADDITIONAL RED REFLECTIVE UNIT MOUNTED ON THE REVERSE SIDE. THEY SHALL BE ERECTED ON THE RIGHT AND LEFT SIDE OF THE RAMPS AS INDICATED ON THE PLANS.

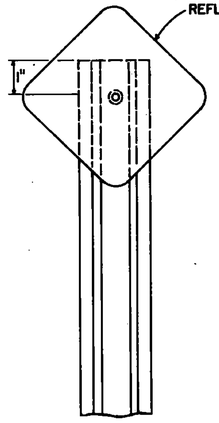
2. EACH UNIT COMPLETE IN PLACE OF DELINEATOR TYPE I WITH OR WITHOUT PLAQUE, DELINEATOR TYPE II, DELINEATOR TYPE III OR MILEPOST WITHOUT REFLECTOR SHALL BE PAID FOR AS DELINEATOR, PAY ITEM 676.10.

3. FOR MOUNTING DELINEATORS AND MILEPOSTS ON BRIDGES, SEE STANDARD E-32.

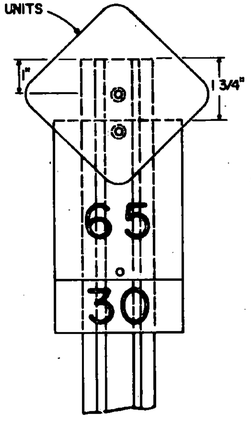
4. DELINEATOR POSTS SHALL HAVE A MINIMUM EMBEDMENT OF 2'-3' IN THE GROUND.



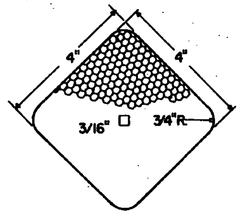

TYPE II




TYPE I
WITHOUT PLAQUE




TYPE I
WITH PLAQUE



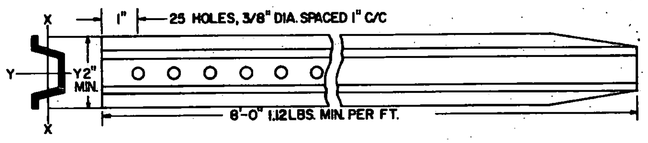

DELINEATOR REFLECTIVE SHEETING UNIT

MATERIAL FOR REFLECTIVE SHEETING DELINEATORS SHALL BE A 0.063" ALUMINUM BACKING WITH A SILVER, AMBER OR RED HIGH INTENSITY REFLECTIVE SHEETING.

DELINEATORS WITH REFLECTIVE SHEETING

A DELINEATOR REFLECTOR UNIT WITH ITS MILEPOST PLAQUE SHALL BE MOUNTED ON THE POST WITH TWO OR THREE 3/16" DIA. BY 1 1/2" LONG ALUMINUM BOLTS WITH 1/2" DIA. ALUMINUM VANDAL RESISTANT NUTS, OR A 3/16" DIA. BY 1 1/2" LONG VANDAL RESISTANT FASTENERS.

YY = 0.11 IN.$^3$ MIN.
XX = 0.08 IN.$^3$ MIN.




REVISIONS AND CORRECTIONS

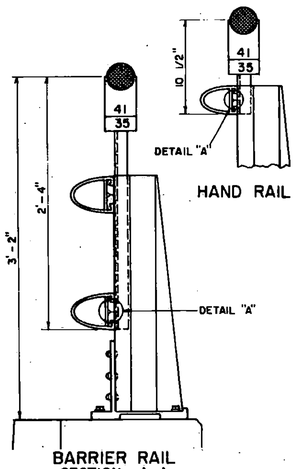
DEC. 12, 1973 - REFERENCE TO E-20A CHANGED TO E-32.
SEPT 7, 1979 - TYPE III DELINEATOR ADDED, REFLECTOR UNIT COLORS CHANGED TO CONFORM TO MUTCD
DEC. 13, 1979 - REFLECTIVE CRITERIA DELETED.
JULY 17, 1981 - POST WEIGHT CHANGE, DELINEATOR OFFSET REVISED.
AUG. 25, 1981 - CORRECTIONS MADE, POST LENGTH CHANGED.
FEB 23, 1984 - ADDED SECOND TYPE III DELINEATOR NOTE.
FEB. 3, 1986 - UPDATED TO 1986 SPECIFICATIONS

APPROVED: Dec. 29, 1971
DATE
R.N. Arnold
CHIEF ENGINEER
E.H. Stickney
ASST. CHIEF ENGINEER
G.M. Lane
HIGHWAY ENGINEER

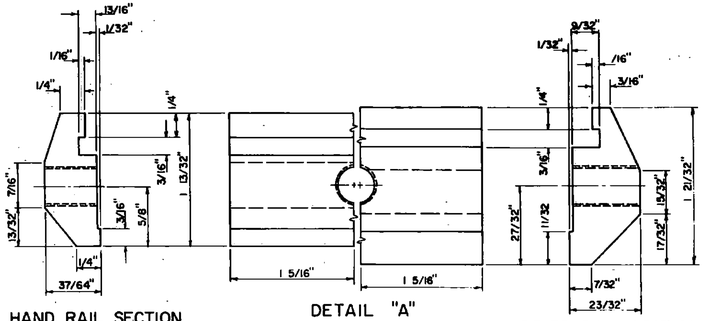
# DELINEATORS AND MILEPOSTS

VERMONT AGENCY OF TRANSPORTATION

STANDARD
E-30



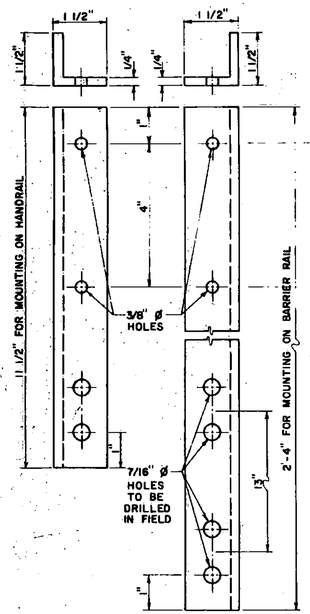

BARRIER RAIL
SECTION A-A
SCALE 1"=8"

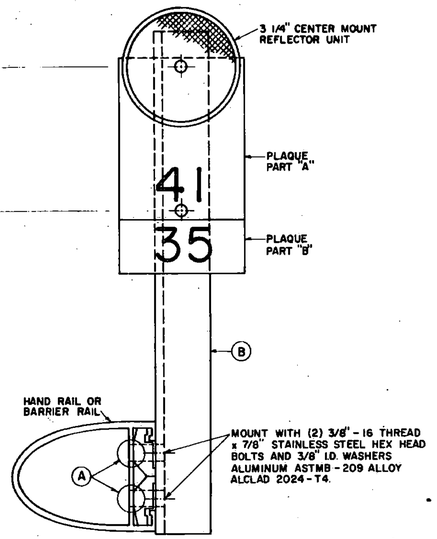



HAND RAIL SECTION

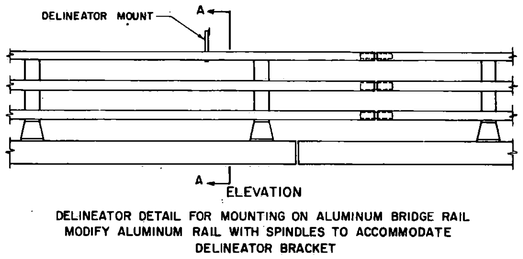
DETAIL "A"
TOTAL LENGTH 2 5/8"
ASTMB-221 ALLOY 6061T6 OR 6061T5
SCALE 1"=3/4"

BARRIER RAIL SECTION

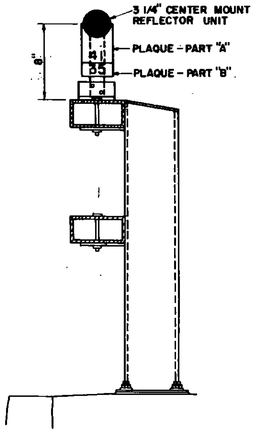


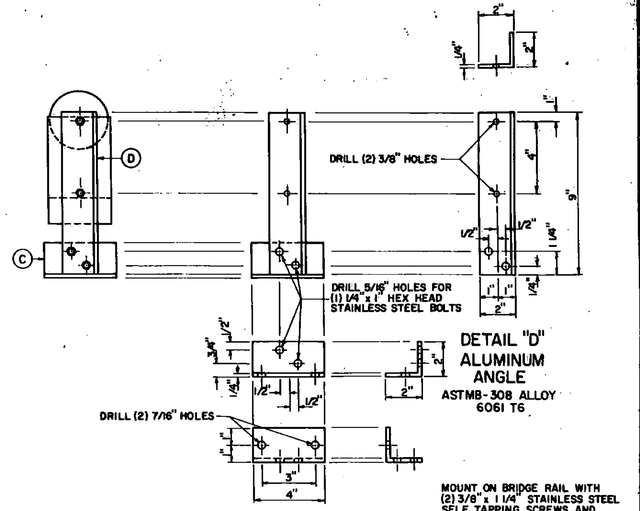

DETAIL "B"
ALUMINUM ANGLE
ASTMB-308 ALLOY 6061 T6
SCALE 1"=2"




DELINEATOR DETAIL FOR MOUNTING ON ALUMINUM BRIDGE RAIL
MODIFY ALUMINUM RAIL WITH SPINDLES TO ACCOMMODATE DELINEATOR BRACKET



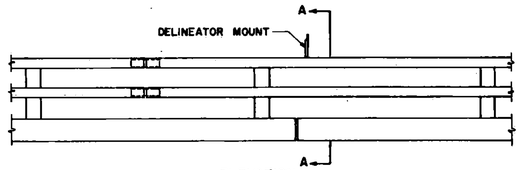

BARRIER RAIL
SECTION A-A
SCALE 1"=8"




DETAIL "C"
ALUMINUM ANGLE
ASTMB-308 ALLOY 6061 T6
SCALE 1"=4"

DETAIL "D"
ALUMINUM ANGLE
ASTMB-308 ALLOY 6061 T6

MOUNT ON BRIDGE RAIL WITH (2) 3/8" x 1 1/4" STAINLESS STEEL SELF TAPPING SCREWS AND 3/4" O.D. x 3/8" I.D. x 1/16" THICK WASHER, ALUMINUM ASTMB-209 ALLOY ALCLAD 2024-T4.




DELINEATOR DETAIL FOR MOUNTING ON BOX BEAM BRIDGE RAIL

REVISIONS AND CORRECTIONS

FEB. 3, 1986 - UPDATED TO 1986 SPECIFICATIONS

APPROVED

DATE 1-10-74

E. H. Stickney
CHIEF ENGINEER

R O Mann
ASST. CHIEF ENGINEER

G. M. Lane
HIGHWAY ENGINEER

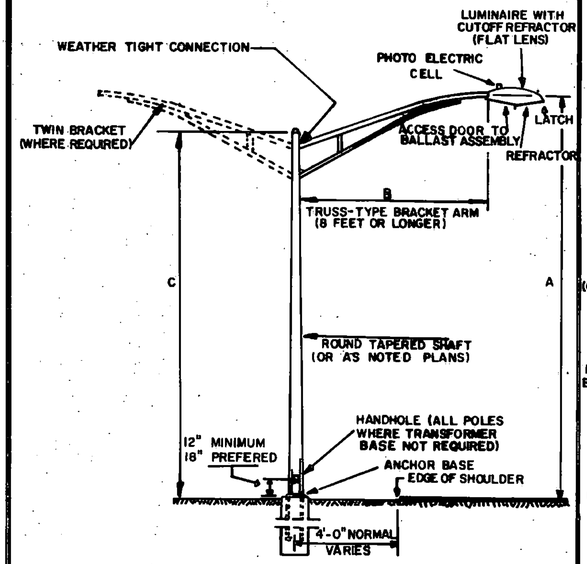
TRAFFIC SIGNS

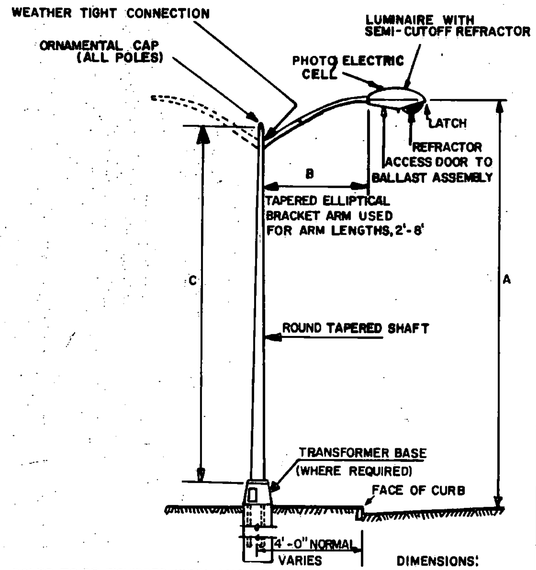
# DELINEATOR MOUNTING ON BRIDGE RAIL

VERMONT DEPARTMENT OF HIGHWAYS STANDARD

E-32

## ROUND ALUMINUM AND STEEL POLES



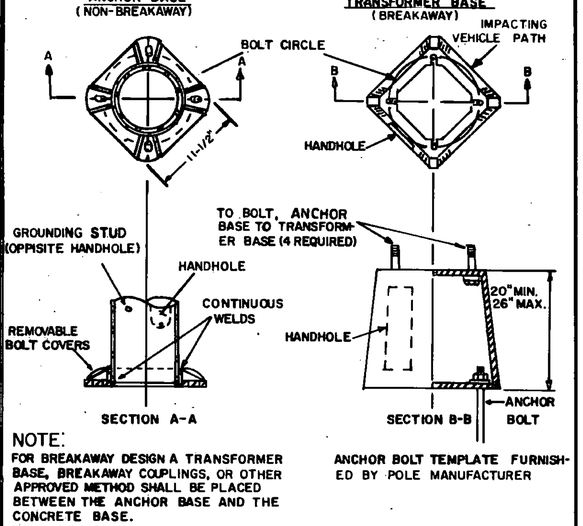

ALL POLES TO BE EQUIPPED WITH ANCHOR BASES UNLESS OTHERWISE INDICATED.

ALL BRACKETS TO BE EQUIPPED WITH 2" SLIPFITTER FOR MOUNTING LUMINAIRE UNLESS OTHERWISE INDICATED.

DIMENSIONS:
A=MOUNTING HEIGHT
B=BRACKET ARM LENGTH
C=POLE HEIGHT

## BASES

DIMENSIONS SHOWN FOR ANCHOR BASES AND TRANSFORMER BASES MAY VARY SLIGHTLY WITH DIFFERENT MANUFACTURERS.

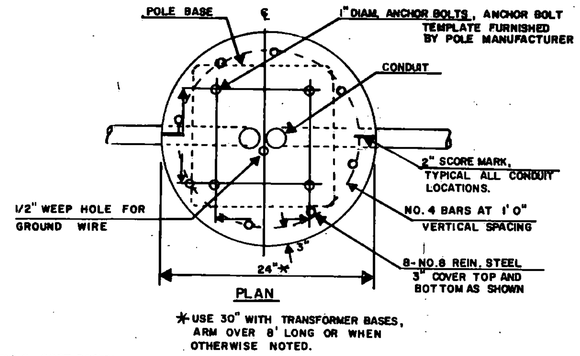



NOTE:
FOR BREAKAWAY DESIGN A TRANSFORMER BASE, BREAKAWAY COUPLINGS, OR OTHER APPROVED METHOD SHALL BE PLACED BETWEEN THE ANCHOR BASE AND THE CONCRETE BASE.

ANCHOR BOLT TEMPLATE FURNISHED BY POLE MANUFACTURER

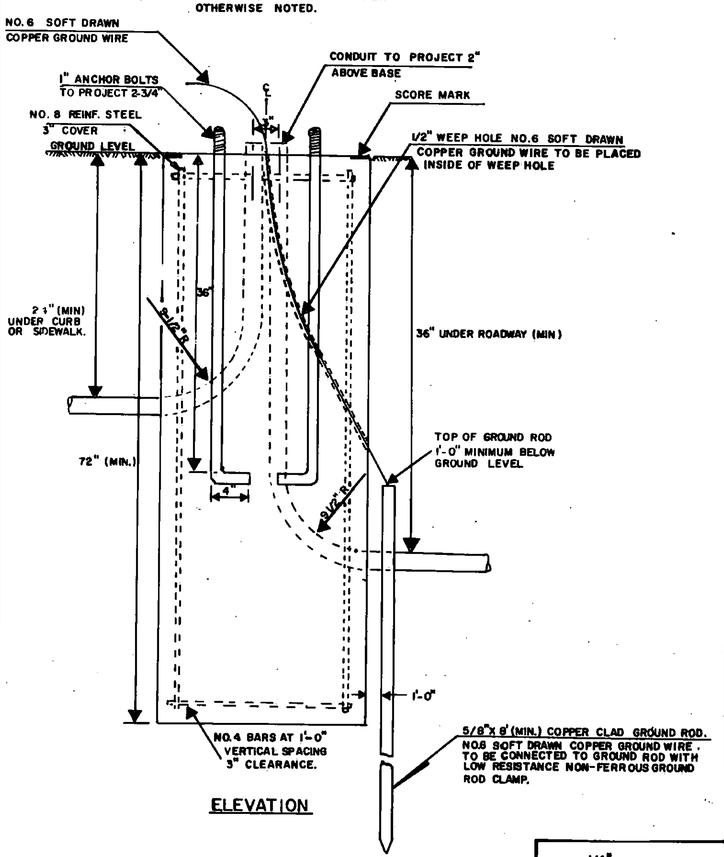
## POLES, ANCHOR BASES, ARMS, AND LUMINAIRES. GENERAL NOTES

1. NO POLE SHALL BE INSTALLED WITHOUT A LUMINAIRE.
2. ANCHOR BASE AND ANCHOR BOLT DIMENSIONS SHOWN ARE FOR A SINGLE ARM POLE OF HEIGHT 35 FEET OR LESS. SEE PLANS FOR OTHER CONDITIONS.
3. ALL POLES OF THE BREAKAWAY DESIGN SHALL YIELD OR BREAKAWAY WITH A CHANGE IN VEHICLE MOMENTUM OF LESS THAN 1100 POUND-SECONDS WHEN STRUCK BY 2250 POUNDS AT 20 M.P.H. TO 60 M.P.H.
4. A 12 FOOT OR LONGER ARM REQUIRES A 6 INCH OUTSIDE DIAMETER POLE TOP.
5. LUMINAIRES SHALL MEET SPECIFICATIONS AS SHOWN ON THE PLANS.
6. ALL ELECTRICAL MATERIAL AND ELECTRICAL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE AREA ELECTRICAL INSPECTOR AND/OR THE POWER COMPANY WITH JURISDICTION IN THE PROJECT AREA.
7. ALL WORK MUST MEET THE REQUIREMENTS OF THE NATIONAL ELECTRICAL CODE, AS WELL AS LOCAL AND STATE CODES.
8. ALL STREET LIGHT POLES SHALL HAVE A METAL TAG ATTACHED TO THE HANDHOLE WITH THE POLE NUMBER, WATTAGE AND TYPE OF LAMP, EXAMPLE, NO.2-150W.-H.P.S. (H.P.S.=HIGH PRESSURE SODIUM). MINIMUM LETTER SIZE 1/2 INCH HIGH. PAYMENT FOR TAGS WILL BE SUBSIDIARY TO ITEM 679.15, STREET LIGHTING.
9. POLES, BASE PLATES, ANCHOR BOLTS AND ARMS SHALL MEET THE SPECIFICATION OF THE LATEST EDITION OF AASHTO-AGC-ARTBA'S GUIDE TO STANDARDIZED HIGHWAY LIGHTING POLE HARDWARE.




PLAN

*USE 30" WITH TRANSFORMER BASES, ARM OVER 8' LONG OR WHEN OTHERWISE NOTED.

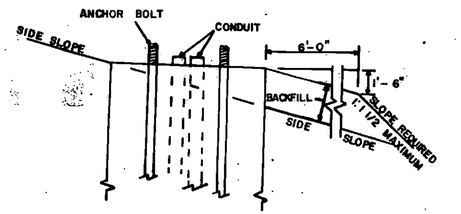



ELEVATION

## CONCRETE BASE




SCORE MARK DETAILS




SIDE SLOPE TREATMENT FOR CONCRETE BASE

## CONCRETE BASE NOTES

1. ALL CONCRETE BASES TO BE CONCRETE, CLASS B
2. ALL REINFORCING STEEL TO CONFORM TO THE REQUIREMENTS FOR "REINFORCING STEEL."
3. TEMPLATE FOR ANCHOR BOLTS, ANCHOR BOLTS, NUTS AND WASHERS TO BE OBTAINED BY CONTRACTOR FROM MANUFACTURER PRIOR TO CONSTRUCTION OF BASES.
4. SCORE TOP OF CONCRETE BASE TO SHOW LOCATION OF CONDUIT (SL
5. CONDUIT SIZE- AS SHOWN ON THE PLANS.
6. ALL EXPOSED METAL HARDWARE SHALL BE GALVANIZED OR STAINLESS STEEL.

REVISIONS AND CORRECTIONS

JUNE 17, 1985 TRANSFORMER BASE STD. VEHICLE PATH CHANGED. SLOPE TREATMENT FOR CONCRETE BASE CHANGED.
FEB. 3, 1986 – UPDATED TO 1986 SPECIFICATIONS

APPROVED

DATE JULY 20, 1984

DIRECTOR OF ENGINEERING AND CONSTRUCTION

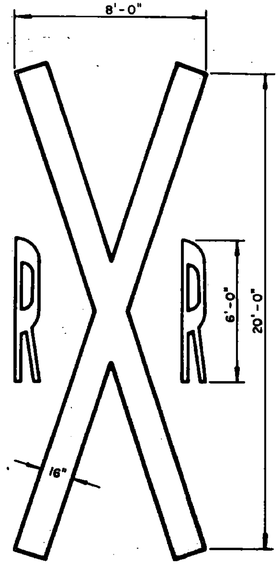
CHIEF OF DESIGN

SURVEY AND PLANS ENGINEER

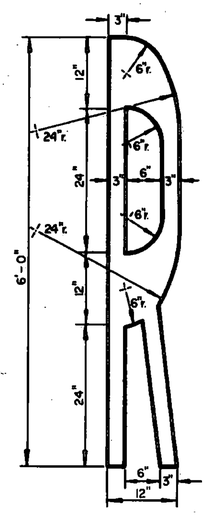
# STREET LIGHTING ITEM DETAILS

VERMONT AGENCY OF TRANSPORTATION

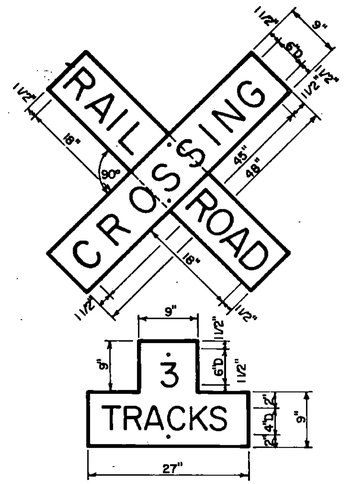
STANDARD
E-39



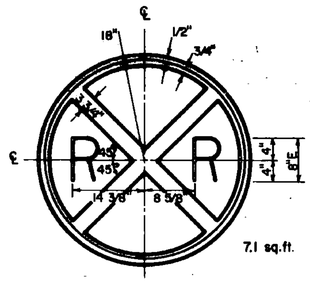

PAVEMENT MARKINGS




MATERIALS:
REFER TO SPECIAL SPECIFICATION FOR REFLECTORIZED PAVEMENT MARKINGS

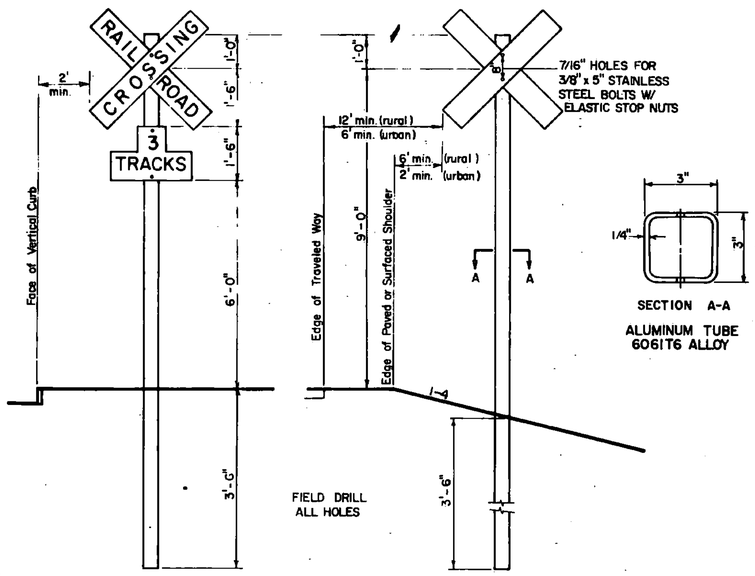


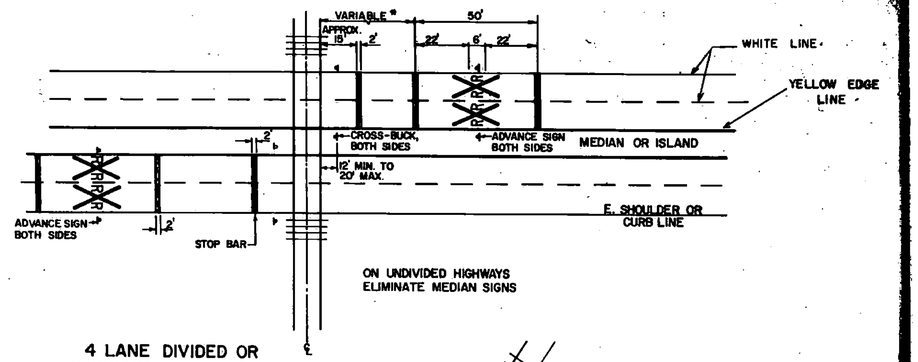

RAILROAD CROSSING SIGN (CROSSBUCK)




ADVANCE SIGN

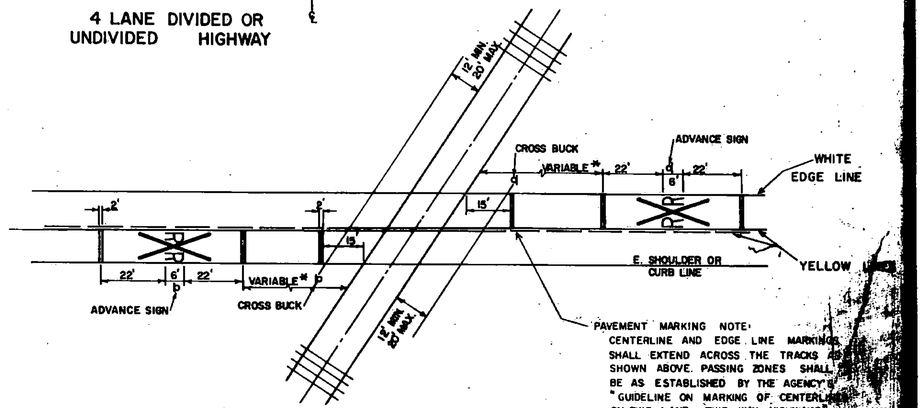
SIGN MATERIAL –
CROSS-BUCKS SHALL BE EITHER 5/8" HIGH-DENSITY OVERLAY PLYWOOD OR 0.100 ALUMINUM W/SILVER OR WHITE ENCAPSULATED REFLECTIVE SHEETING. ADVANCE SIGN SHALL BE 0.125 ALUMINUM W/YELLOW REFLECTIVE SHEETING. MULTI-TRACK SIGN SHALL BE 0.06 ALUMINUM W/SILVER OR WHITE REFLECTIVE SHEETING. TEXT, STRIPES AND BORDERS SHALL BE EITHER BLACK PAINTED OR LETTERING FILM.




ON UNDIVIDED HIGHWAYS ELIMINATE MEDIAN SIGNS

4 LANE DIVIDED OR UNDIVIDED HIGHWAY




PAVEMENT MARKING NOTE:
CENTERLINE AND EDGE LINE MARKINGS SHALL EXTEND ACROSS THE TRACKS AS SHOWN ABOVE. PASSING ZONES SHALL BE AS ESTABLISHED BY THE AGENCY'S "GUIDELINE ON MARKING OF CENTERLINES ON TWO LANE, TWO WAY HIGHWAYS."

2 WAY TRAFFIC PAVED

ALSO APPLICABLE TO UNPAVED ROADS FOR PLACEMENT OF CROSSBUCKS AND ADVANCE SIGNS

GENERAL NOTES

1. Pavement Markings
   These markings shall be placed, if physically feasible, on all paved approaches to railroad crossings, where there are signals and/or automatic gate and at all other crossings where the prevailing speed of highway traffic is 40 MPH or greater.
   The markings shall also be placed at crossings where engineering studies indicate there is a significant potential conflict between vehicles and trains. At minor crossings or in urban areas, these markings may be omitted if engineering study indicates that other devices installed provide suitable protection. Such markings shall be white except for the no passing markings. This marking shall be centered opposite the Advance Warning Sign and as indicated above.
2. Cross-bucks
   Where physically feasible and visible to approaching traffic, these signs shall be installed on the right-hand side of the roadway for each approach to the crossing.
3. Auxiliary Signs
   A number of tracks signs shall be used where there are two or more tracks at the crossing.
* 4. Advance Warning Sign
   Railroad Advance Warning signs will be provided and located in accordance with Section 6B-3 of the MUTCD.

For post-hardware, anchors and erection information, refer to standard sheet E-24A.

REVISIONS & CORRECTIONS

MARCH 26,1979 PAVEMENT MARKINGS REVISED
SEPT. 4,1979 - NOTE 4 MODIFIED
APRIL 28, 1980 - NOTE 4 MODIFIED. EMBEDMENT DETAILS FOR CROSS-BUCK SUPPORT REVISED.
MAY 10, 1985 - CENTERLINE MARKING NOTE ADDED
[illegible] 1985 - UPDATED TO 1986 SPECIFICATIONS

APPROVED

DATE 8/17/87
CHIEF ENGINEER
CHIEF OF DESIGN
HIGHWAY ENGINEER

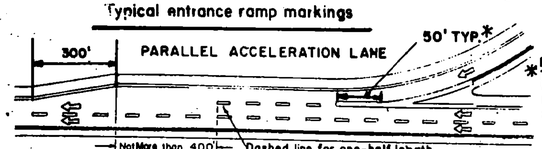
# RAILROAD CROSSING SIGNS AND PAVEMENT MARKINGS

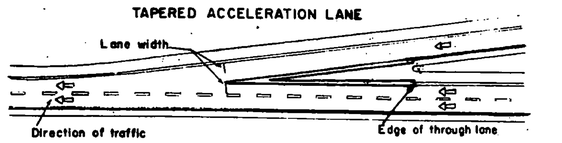
VERMONT AGENCY OF TRANSPORTATION

STANDARD

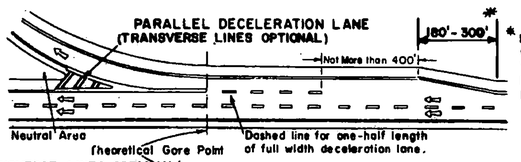
E-45

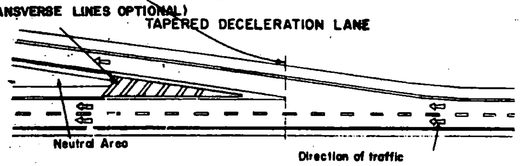
## Typical entrance ramp markings



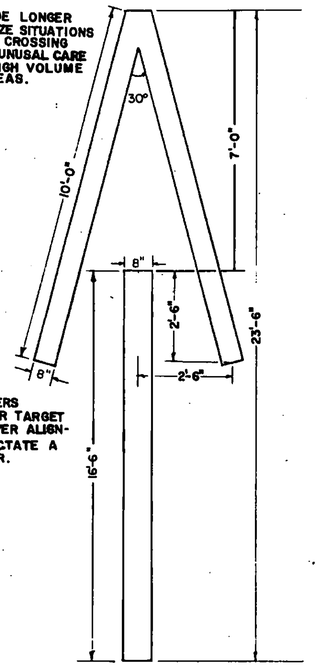

## Typical exit ramp markings



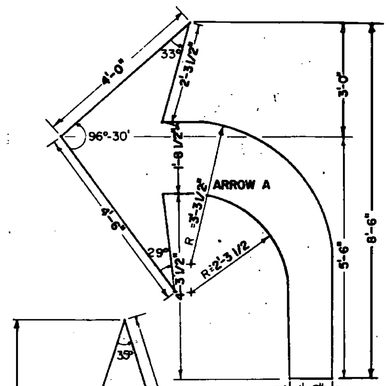

TRANSVERSE LINES SHALL CONSIST OF 8" WHITE LINES SPACED 5'-0" C-C AND SET AT 45° TO MAIN LINE EDGE LINES. THESE MARKINGS SHALL BE USED TO INCREASE VISIBILITY DUE TO DIFFICULT VERTICAL OR HORIZONTAL ALIGNMENT.

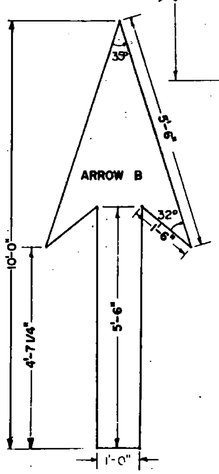
## RAMP PAVEMENT ARROW DETAIL

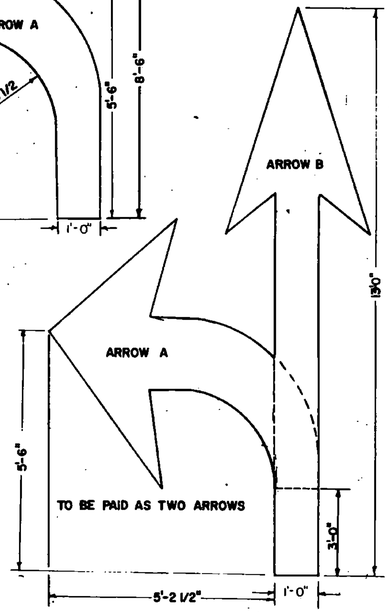


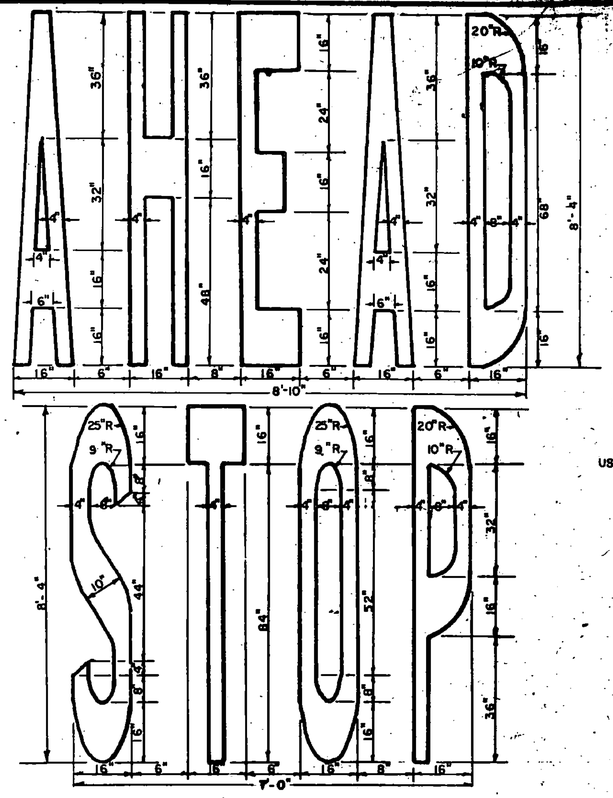

* MAY BE MADE LONGER TO EMPHASIZE SITUATIONS WHERE THE CROSSING REQUIRES UNUSAL CARE SUCH AS HIGH VOLUME MERGE AREAS.

* SHORTER TAPERS GIVE A BETTER TARGET VALUE, HOWEVER ALIGNMENT MAY DICTATE A LONGER TAPER.

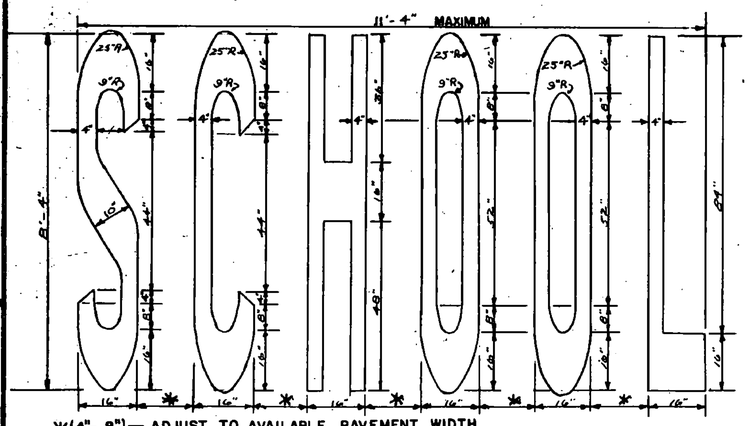


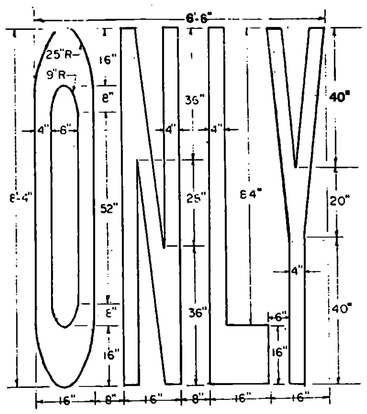



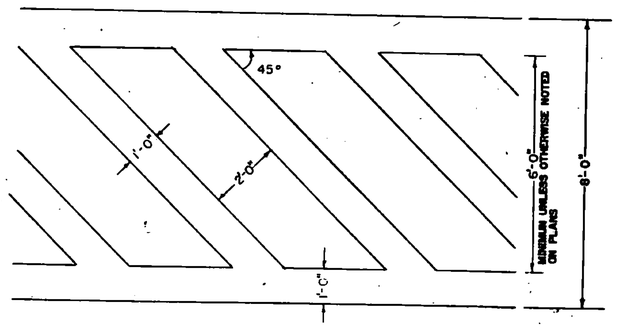




32' SPACING BETWEEN WORD
USE FOR "STOP AHE
"SIGNAL AHE
"YIELD AHEA

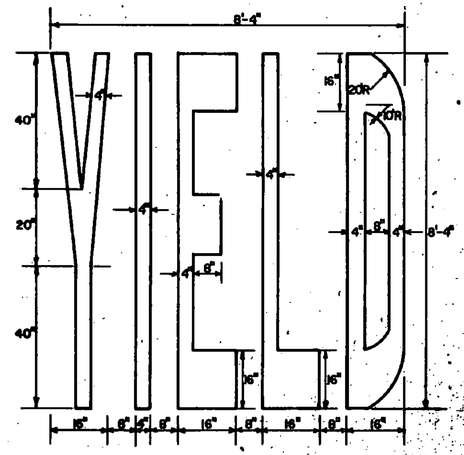



## CROSSWALK DETAIL




ARROWS AND WORD MARKINGS THAT CONFORM TO THE DIMENSIONS SHOWN ON THIS SHEET OR AS DETAILED IN THE BOOKLET ENTITLED "THE STANDARD PAVEMENT MARKING ALPHABET AND SYMBOLS, 1977" PREPARED BY THE FEDERAL HIGHWAY ADMINISTRATION WILL BE ACCEPTABLE.




REVISIONS AND CORRECTIONS

MAR. 16, 1982 YIELD ADDED.
SEPT. 20, 1985 REVISED GORE MARKINGS & "SCHOOL" SPACING
FEB. 3, 1986 — UPDATED TO 1986 SPECIFICATIONS

APPROVED: AUGUST 4, 1981 DATE

S. J. Page
DIRECTOR OF ENGINEERING AND CONSTRUCTION

CHIEF OF DESIGN

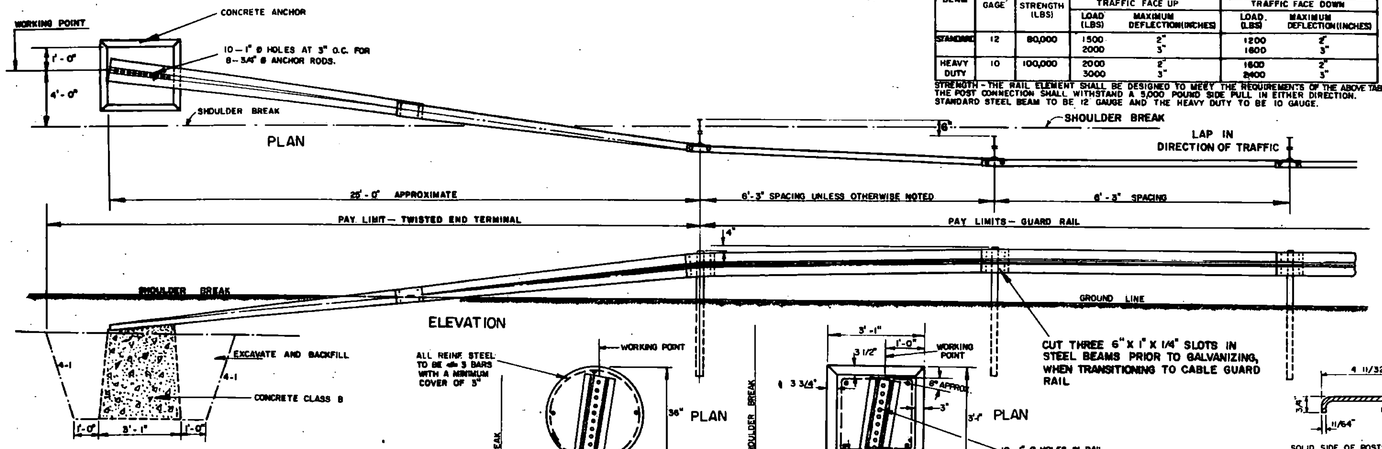
TRANSPORTATION DESIGN ENGINEER

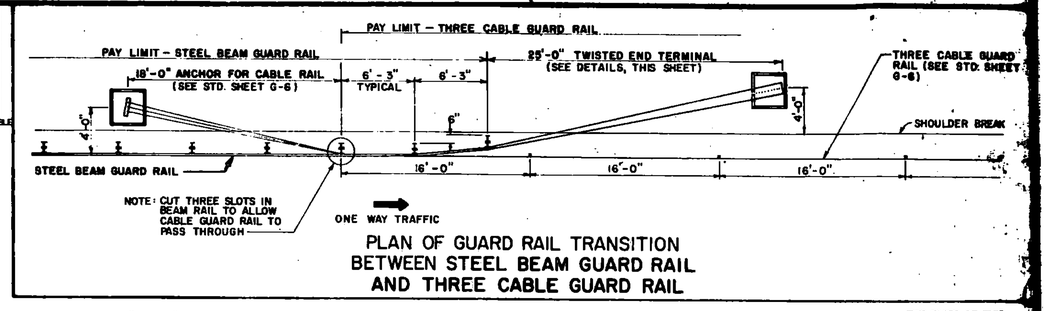
# PAVEMENT MARKING DETAILS

E-50

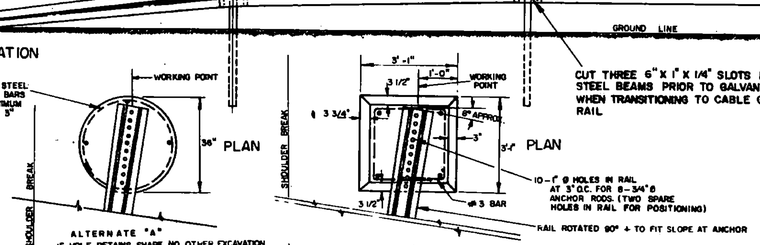
| BEAM | MIN. GAGE | TENSILE STRENGTH (LBS) | RAIL OR JOINT STRENGTH | | | |
|---|---|---|---|---|---|---|
| | | | TRAFFIC FACE UP | | TRAFFIC FACE DOWN | |
| | | | LOAD (LBS) | MAXIMUM DEFLECTION (INCHES) | LOAD (LBS) | MAXIMUM DEFLECTION (INCHES) |
| STANDARD | 12 | 80,000 | 1500<br>2000 | 2"<br>3" | 1200<br>1600 | 2"<br>3" |
| HEAVY DUTY | 10 | 100,000 | 2000<br>3000 | 2"<br>3" | 1600<br>2400 | 2"<br>3" |

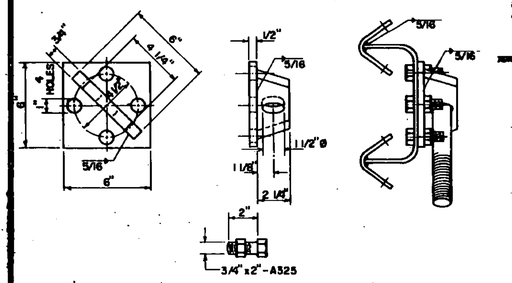
STRENGTH - THE RAIL ELEMENT SHALL BE DESIGNED TO MEET THE REQUIREMENTS OF THE ABOVE TABLE. THE POST CONNECTION SHALL WITHSTAND A 5,000 POUND SIDE PULL IN EITHER DIRECTION. STANDARD STEEL BEAM TO BE 12 GAUGE AND THE HEAVY DUTY TO BE 10 GAUGE.



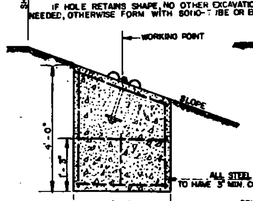



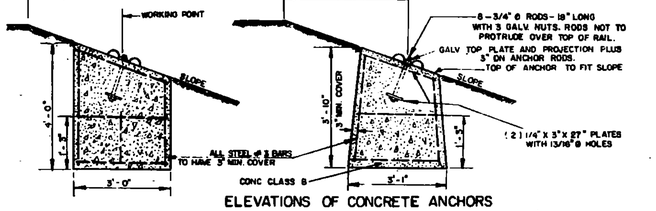

PLAN OF GUARD RAIL TRANSITION BETWEEN STEEL BEAM GUARD RAIL AND THREE CABLE GUARD RAIL



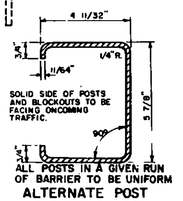




ALTERNATE ANCHOR ROD CONNECTOR

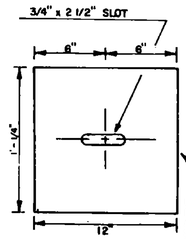


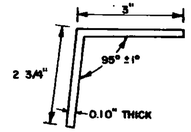

ELEVATIONS OF CONCRETE ANCHORS

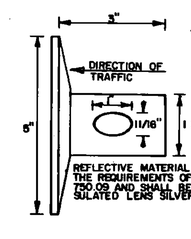


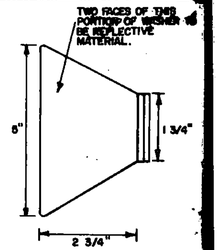

ALTERNATE POST



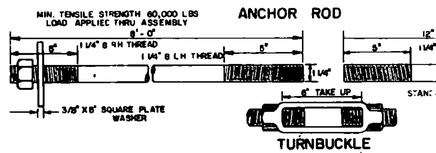

USE A 12" LONG FORMED BACK-UP PLATE OF STEEL BEAM GUARD RAIL AT EACH POST WHERE THERE IS A SINGLE THICKNESS OF BEAM RAIL. (NOT REQUIRED WITH WOOD POST SYSTEM).

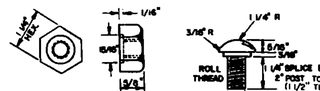


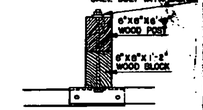



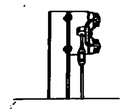

THIS REFLECTORIZED ALUMINUM WASHER IS TO BE PLACED IN VALLEY OF BEAM WHEN MOUNTING BEAM ONTO EACH FIFTH POST. WASHER SHALL MEET SPECIFICATION REQUIREMENTS FOR ASTM B 209 ALLOY 5052 - H32.



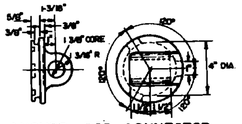



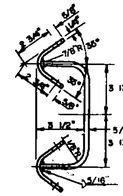

WITH 6"X8" WOOD POST



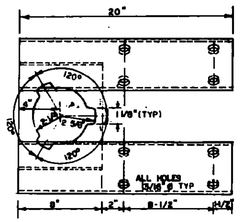
ANCHOR ROD CONNECTOR

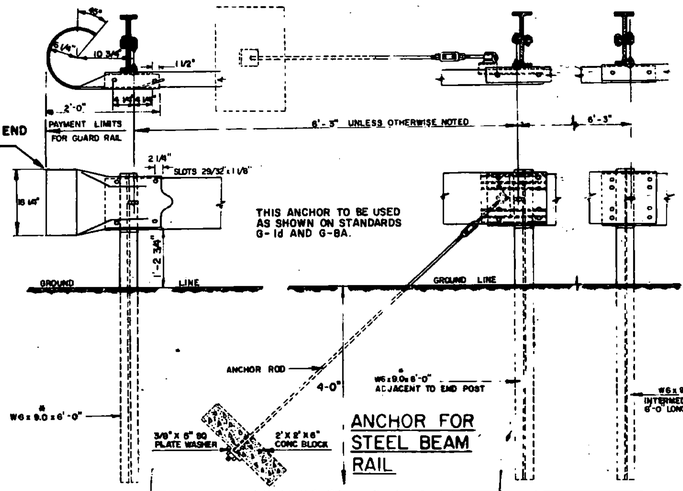



ANCHOR ROD CONNECTOR
(MALLEABLE IRON CASTING OR EQUAL)

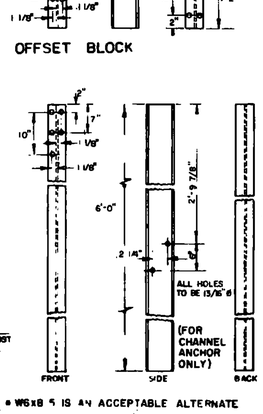



ANCHOR SPIDER
(WELDMENT)

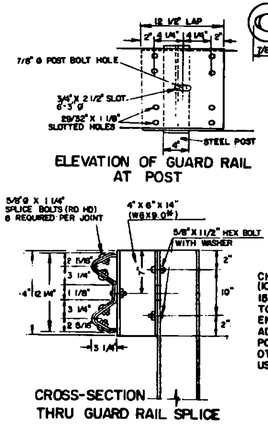



ANCHOR FOR STEEL BEAM RAIL

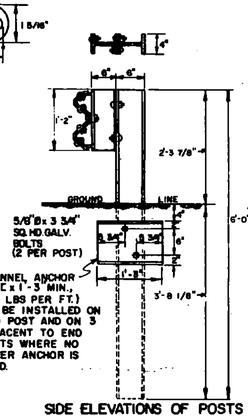


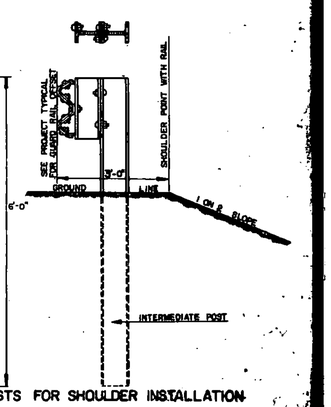

* W6 x 8.5 IS AN ACCEPTABLE ALTERNATE




ELEVATION OF GUARD RAIL AT POST

CROSS-SECTION THRU GUARD RAIL SPLICE




SIDE ELEVATIONS OF POSTS FOR SHOULDER INSTALLATION

REVISIONS AND CORRECTIONS

| | |
|---|---|
| APR. 10, 1972 | POST HEIGHT INCREASED |
| JULY 9, 1973 | NEW TRANSITION DETAIL ADDED |
| JUNE 4, 1974 | TRANSITION REVISED, ALTERNATE ANCHOR ROD CONNECTOR AND ALTERNATE POST ADDED. |
| NOV. 29, 1977 | ANCHOR DETAIL FOR STEEL BEAM GUARD RAIL WITH STEEL OR WOOD POSTS REMOVED. |
| JAN. 17, 1978 | REVISED ANCHOR DETAIL. |
| JUNE 1, 1978 | CHANNEL ANCHOR DETAILS CHANGED. |
| MAY 28, 1979 | NOTE ON REFLECTIVE MATERIAL CHANGED |
| DEC. 16, 1980 | INCREASED SHOULDER WIDENING FOR GUARD RAIL. |
| MAR 12, 1984 | REVISED ANCHOR SPIDER DETAILS |
| JUNE 5, 1984 | POST SIZE AND BACK UP PLATE NOTE CHANGED |
| DEC. 21, 1984 | REMOVED POST WASHER |
| OCT. 31, 1985 | REVISED TO CONFORM WITH 1986 SPECIFICATIONS |

APPROVED: Dec. 8, 1971

P. H. Gould
CHIEF ENGINEER

E. H. Stickney
ASST. CHIEF ENGINEER

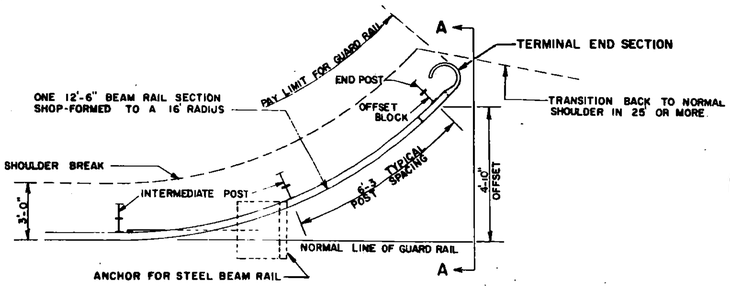
A. M. Lane
HIGHWAY ENGINEER

# STEEL BEAM GUARD RAIL
## HEAVY DUTY STEEL BEAM GUARD RAIL
## TWISTED END TERMINAL
## ANCHOR FOR STEEL BEAM RAIL

VERMONT AGENCY OF TRANSPORTATION

STANDARD

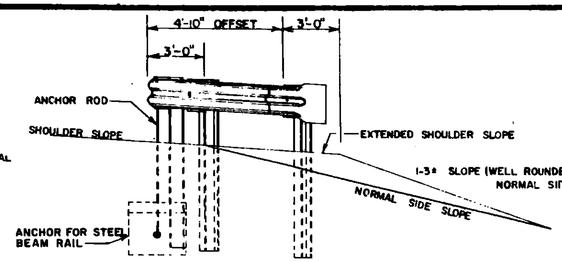
G-1



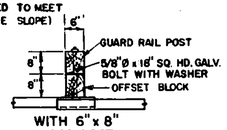

DIRECTION OF TRAFFIC

## APPROACH END DETAIL

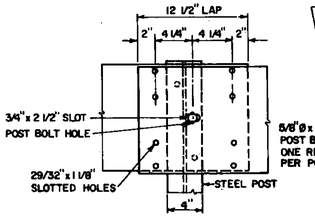
(NOT APPROVED FOR USE WHERE V > 40 MPH)



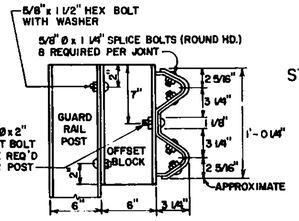

SECTION A-A



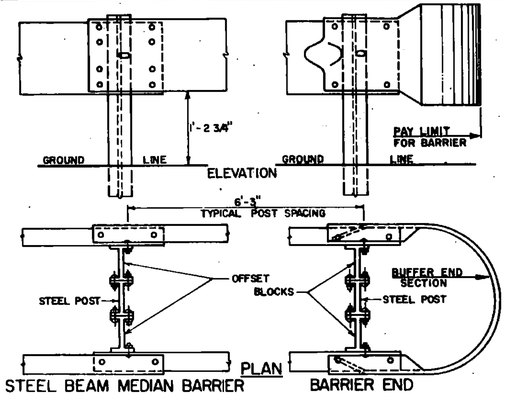

WITH 6" x 8" WOOD POST

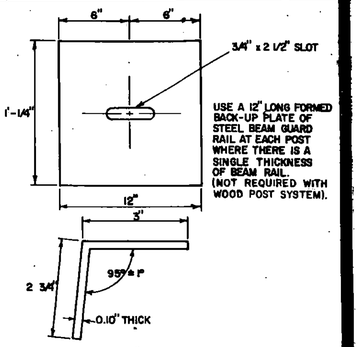


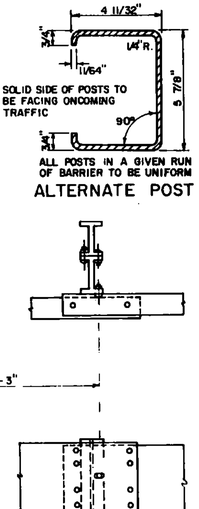

ELEVATION OF GUARD RAIL SPLICE AT POST



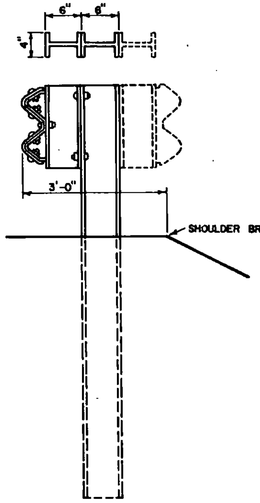

CROSS SECTION THROUGH GUARD RAIL SPLICE



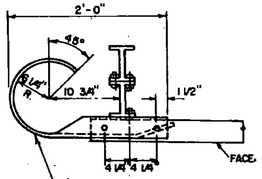



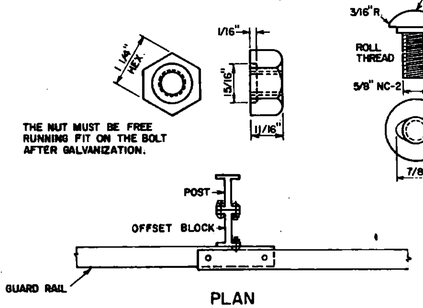




ALTERNATE POST

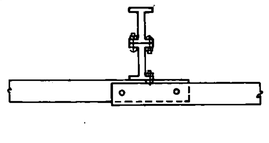


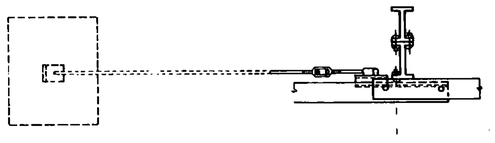

SIDE ELEVATION OF POST FOR SHOULDER OR MEDIAN INSTALLATION



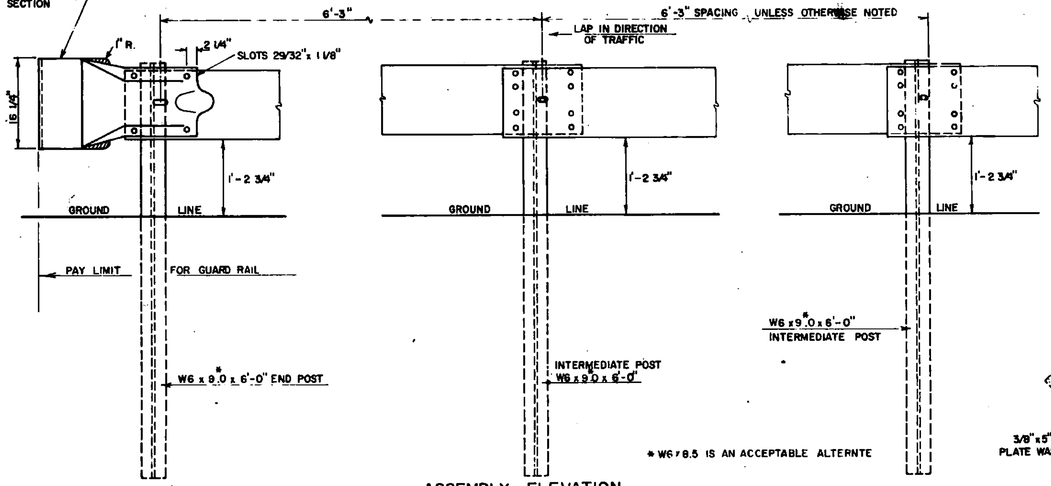




PLAN



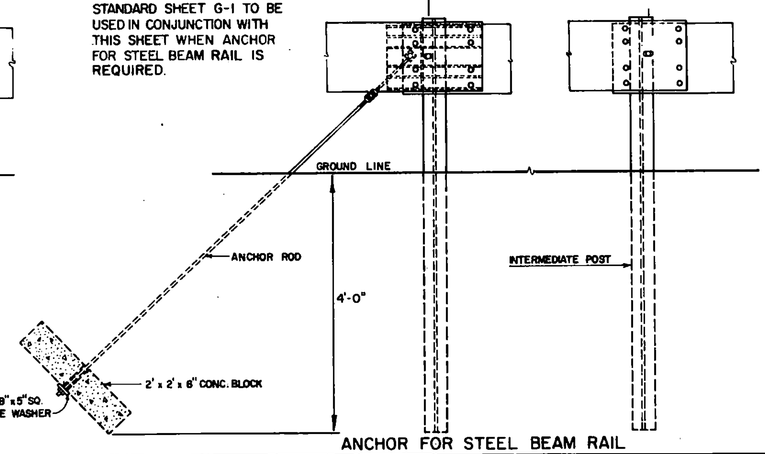







ASSEMBLY ELEVATION

STANDARD SHEET G-1 TO BE USED IN CONJUNCTION WITH THIS SHEET WHEN ANCHOR FOR STEEL BEAM RAIL IS REQUIRED.




ANCHOR FOR STEEL BEAM RAIL

| BEAM | MIN. GAGE | TENSILE STRENGTH (LBS.) | RAIL OR JOINT STRENGTH | | | |
|---|---|---|---|---|---|---|
| | | | TRAFFIC FACE UP | | TRAFFIC FACE DOWN | |
| | | | LOAD (LBS) | MAXIMUM DEFLECTION (INCHES) | LOAD (LBS) | MAXIMUM DEFLECTION (INCHES) |
| STANDARD | 12 | 60,000 | 1,500<br>2,000 | 2"<br>3" | 1,200<br>1,600 | 2"<br>3" |
| HEAVY DUTY | 10 | 100,000 | 2,000<br>3,000 | 2"<br>3" | 1,600<br>2,400 | 2"<br>3" |

STRENGTH - THE RAIL ELEMENT SHALL BE DESIGNED TO MEET THE REQUIREMENTS OF THE ABOVE TABLE.
THE POST CONNECTION SHALL WITHSTAND A 5,000 POUND SIDE PULL IN EITHER DIRECTION.
ALL METAL PARTS SHALL BE GALVANIZED.
ALL WOOD POSTS SHALL BE GIVEN A PRESERVATIVE TREATMENT.

STANDARD STEEL BEAM TO BE 12 GAGE AND THE HEAVY DUTY TO BE 10 GAGE.

REVISIONS & CORRECTIONS

SEPT. 10, 1976 - MINIMUM LENGTH & ADVANCE OF NEED NOTES REMOVED.
MAR. 2, 1977 - ROUND WOOD POSTS REMOVED.
SEPT. 12, 1977 - REFERENCE TO ROUND WOOD POSTS REMOVED.
MAY 29, 1979 - NOTE ON REFLECTIVE MATERIAL CHANGED
APRIL 28, 1980 - APPROACH END DETAILS REDRAWN
DEC. 16, 1980 - INCREASED SHOULDER WIDENING FOR GUARD RAIL.
JUNE 5, 1984 - POST SIZE AND BACK UP PLATE NOTE CHANGED.
DEC. 21, 1984 - REMOVED POST WASHER
OCT. 31, 1985 - REVISED TO CONFORM WITH 1986 SPECIFICATIONS

APPROVED:

May 6, 1976
DATE

E H Stickney by RCM
CHIEF ENGINEER

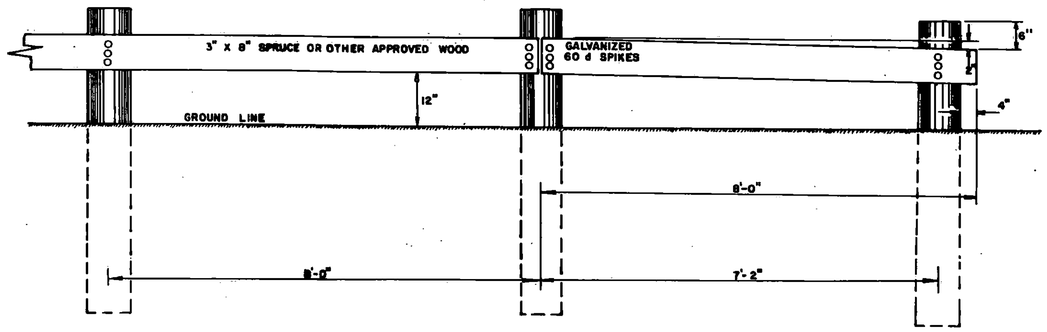
RO Munn
ASST. CHIEF ENGINEER

Leon E Jones
HIGHWAY ENGINEER

# STEEL BEAM GUARD RAIL
# HEAVY DUTY STEEL BEAM GUARD RAIL
# STEEL BEAM MEDIAN BARRIER
# ANCHOR FOR STEEL BEAM RAIL

VERMONT AGENCY OF TRANSPORTATION

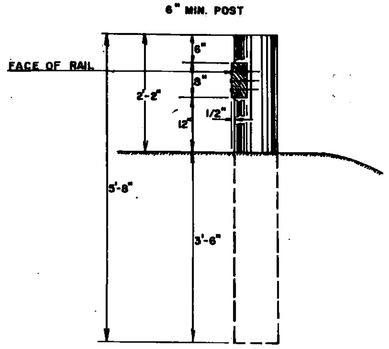
STANDARD
G-1d



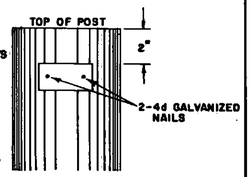

PLANK SIXTEEN FEET IN LENGTH TO BE USED WHEREVER POSSIBLE.
POSTS SIX (6) INCHES SQUARE MAY BE USED IN PLACE OF ROUND POSTS.
FIRST AND LAST POSTS OF EACH SECTION TO BE SET BACK TWELVE INCHES FROM THE GENERAL LINE OF POSTS, WHEN FOUR OR MORE POSTS ARE REQUIRED.
REFLECTIVE MATERIAL TO BE PLACED AS DIRECTED BY THE ENGINEER.
ALL WOOD MEMBERS SHALL BE GIVEN A PRESERVATIVE TREATMENT.

## PLANK RAIL
TO BE USED AS A BARRICADE OFF THE HIGHWAY

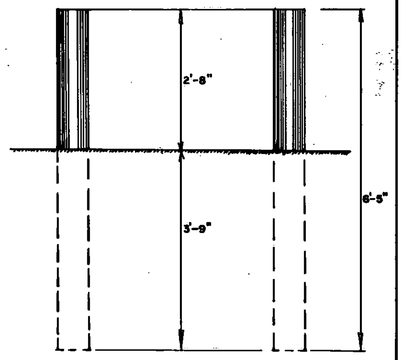
NOTCH TO BE TREATED WITH PRESERVATIVE BEFORE ERECTING PLANK.




3" X 1 1/2" REFLECTIVE ALUMINUM STRIP TO BE PLACED ON EVERY OTHER WOOD POST IN A LINE OF POSTS AND CLEARLY VISIBLE TO APPROACHING TRAFFIC.
STRIPS TO BE ATTACHED TO THE DESIGNATED RAIL POSTS ON BOTH SIDES OF THE ROAD AND VISIBLE TO TRAFFIC IN BOTH DIRECTIONS.
REFLECTIVE MATERIAL SHALL MEET THE REQUIREMENTS OF SUBSECTION 750.09 AND SHALL BE OF ENCAPSULATED LENS SILVER OR AMBER.



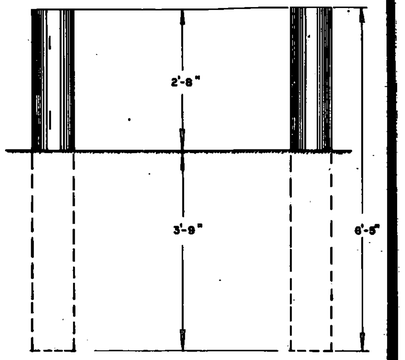

DELINEATION OF WOOD RAIL AND GUIDE POSTS




MARKER POSTS ARE TO BE 4" TO 5 1/2" IN DIAMETER AND ARE TO BE PLACED AS DIRECTED BY THE ENGINEER.

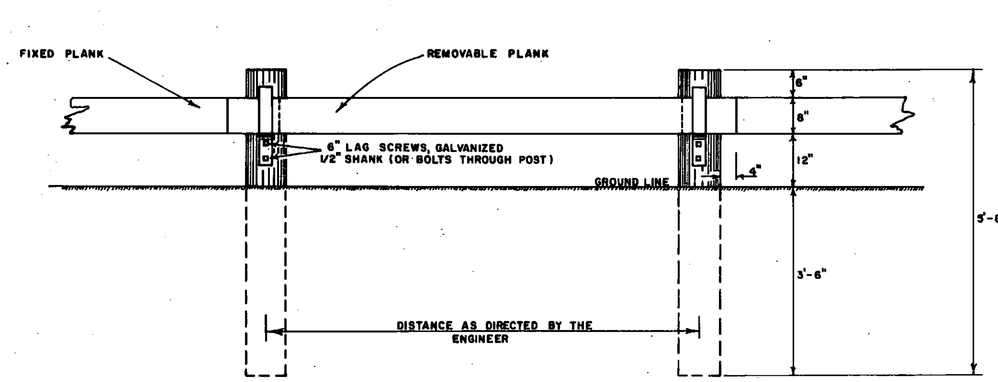
POSTS SHALL BE GIVEN A PRESERVATIVE TREATMENT.

## WOOD MARKER POSTS

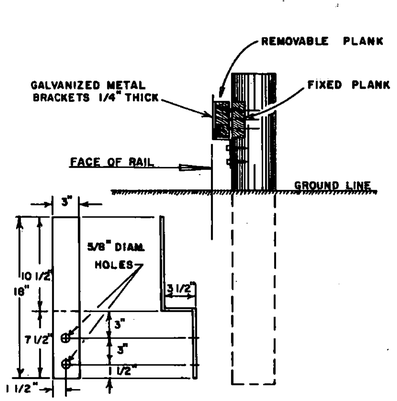



REFLECTIVE MATERIAL TO BE PLACED AS DIRECTED BY THE ENGINEER.
POSTS ARE TO BE 4" TO 5 1/2" IN DIAMETER AND ARE TO BE PLACED AS DIRECTED BY THE ENGINEER.
POSTS SHALL BE GIVEN A PRESERVATIVE TREATMENT.

## WOOD GUIDE POSTS

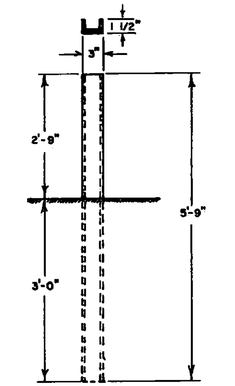



## ENTRANCE THROUGH PLANK RAIL




## BRACKET DETAIL

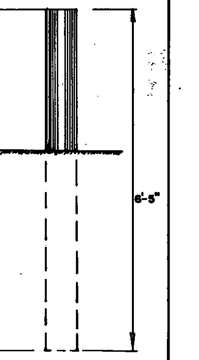
GALVANIZED METAL BRACKETS ARE TO BE INCLUDED IN THE UNIT BID PRICE FOR PLANK RAIL.



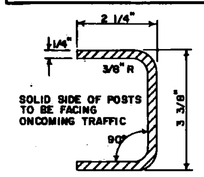

ALL STEEL MARKER POSTS TO BE GALVANIZED.
STEEL MARKER POSTS TO BE PLACED AS DIRECTED BY THE ENGINEER.

POSTS ARE TO BE AMERICAN STANDARD CHANNEL 5'-9" x 3" (4.1 LBS PER FT.)

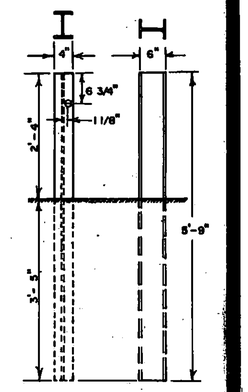
## STEEL MARKER POSTS




3" X 1 1/2" REFLECTIVE STRIP TO BE APPLIED TO EVERY OTHER POST IN A LINE OF POSTS AND CLEARLY VISIBLE TO APPROACHING TRAFFIC.
STRIPS TO BE APPLIED TO THE DESIGNATED POSTS ON BOTH SIDES OF THE ROAD AND VISIBLE TO TRAFFIC IN BOTH DIRECTIONS.
REFLECTIVE MATERIAL SHALL MEET THE REQUIREMENTS OF SUBSECTION 750.09 AND SHALL BE OF ENCAPSULATED LENS SILVER OR AMBER.




## ALTERNATE POST




ALL STEEL GUIDE POSTS TO BE GALVANIZED.
REFLECTIVE MATERIAL TO BE PLACED AS DIRECTED BY THE ENGINEER.
POSTS ARE TO BE 5'-9" x 6" x 4" (8.5 LBS PER FT.)

ALL POSTS IN A GIVEN RUN OF BARRIER TO BE UNIFORM.

## STEEL GUIDE POSTS

### REVISIONS AND CORRECTIONS

| | |
|---|---|
| MAY 23, 1974 | ALTERNATE POST ADDED |
| MAY 29, 1979 | NOTE ON REFLECTIVE MATERIAL CHANGED |
| JULY 23, 1980 | CHANGED DIAMETER OF WOOD MARKER POST AND WOOD GUIDE POST |
| MAY 25, 1982 | REMOVED ALTERNATE POST DETAIL. |
| OCT. 31, 1985 | REVISED TO CONFORM WITH 1986 SPECIFICATIONS. |

APPROVED DATE Dec. 8, 1971

R. H. Arnold
CHIEF ENGINEER

E. H. Chesney
ASST. CHIEF ENGINEER

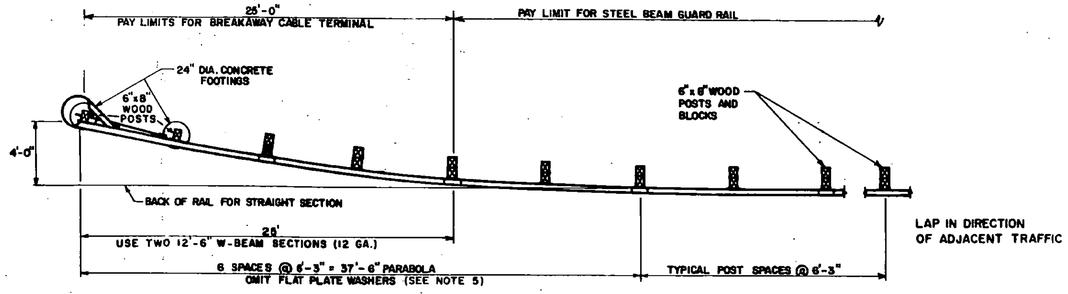
G. M. Lane
HIGHWAY ENGINEER

# PLANK RAIL
# GUIDE POSTS
# WOOD MARKER POSTS
# STEEL MARKER POSTS

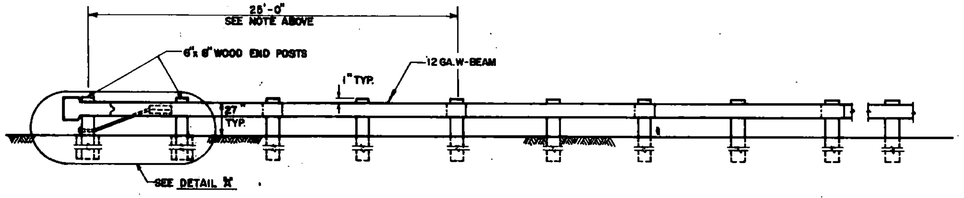
VERMONT AGENCY OF TRANSPORTATION

STANDARD
G-4

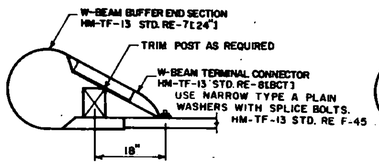
BRUNING 44-131 42032



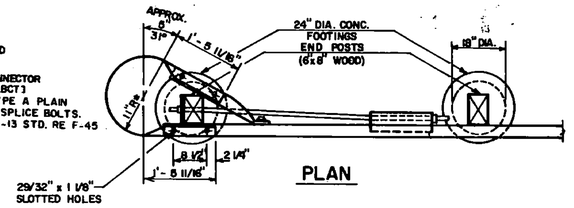

PLAN



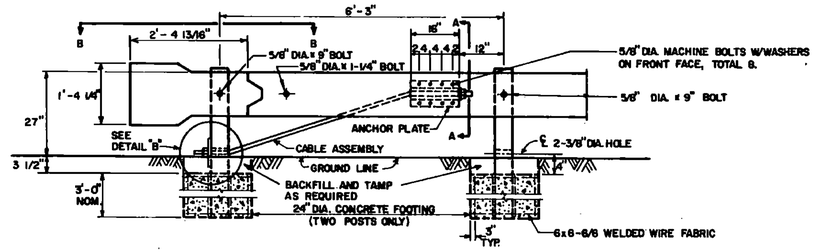

ELEVATION



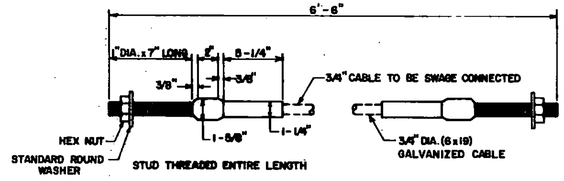

VIEW B-B



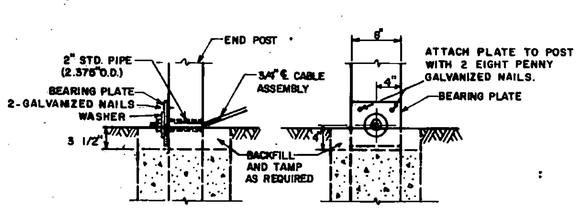

PLAN



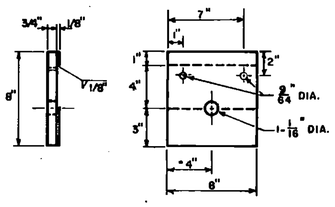

ELEVATION
DETAIL "A"




CABLE ASSEMBLY



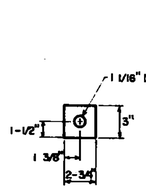

DETAIL "B"



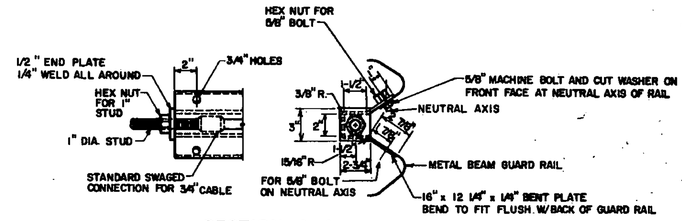

BEARING PLATE DETAILS

NOTES :

1. OTHER ANCHOR CABLE ASSEMBLIES MAY BE USED. MINIMUM BREAKING STRENGTH OF ASSEMBLY SHOULD BE 40,000 LBS.
2. CONCRETE FOOTINGS ARE CLASS B. IN SANDY FILL AREAS, CONSIDERATION TO INCREASING SIZE OF END FOOTING IS SUGGESTED.
3. A DOUBLE WRAP OF ASPHALT TREATED FELT AROUND END POSTS BEFORE CONCRETE PLACEMENT WILL FACILITATE REPLACEMENT OF DAMAGED POSTS.
4. STANDARD SHEET G-1 WILL BE USED IN CONJUNCTION WITH THIS STANDARD.
5. FLAT PLATE WASHERS ARE NOT USED ON NEW INSTALLATIONS. ON RETROFIT INSTALLATIONS THE FLAT PLATE WASHERS MUST BE OMITTED WITHIN THE 37'-6" PARABOLIC SECTION TO ENSURE PROPER PERFORMANCE UNDER IMPACT.
6. FOR ADDITIONAL DETAILS ON HARDWARE SEE THE LATEST EDITION OF AASHTO-AGC-ARTBA PUBLICATION "A GUIDE TO STANDARDIZED HIGHWAY BARRIER RAIL HARDWARE."

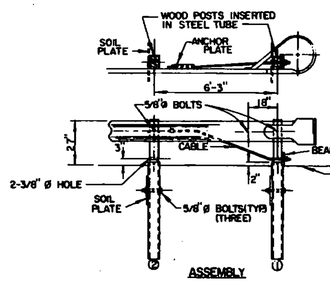


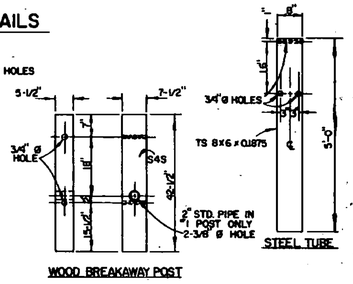

END PLATE




SECTION A-A

ANCHOR PLATE DETAILS




WOOD BREAKAWAY POST

ALTERNATE FOUNDATION DETAILS

REVISIONS AND CORRECTIONS

APR 21, 1977 – BREAKAWAY DETAIL LOWERED TO GROUND LINE.
JAN 19, 1981 – ALTERNATE FOUNDATION DETAILS ADDED, MISCELLANEOUS CLARIFICATION OF NOTES AND DETAILS.
AUG 12, 1981 – REMOVED BEARING PLATE DETAIL FROM ALTERNATE FOUNDATION DETAILS.
AUG. 27, 1984 – BACK-UP PLATE REQUIREMENT DELETED. NEW NOTE 5 ADDED.
DEC. 31, 1984 – REVISED NOTE 5, NEW NOTE 6 ADDED, REMOVED 25' W-BEAM SECTION.
OCT. 31, 1985 – REVISED TO CONFORM W/86 SPECS.

APPROVED : July 21, 1976 DATE

E.H. Stickney CHIEF ENGINEER

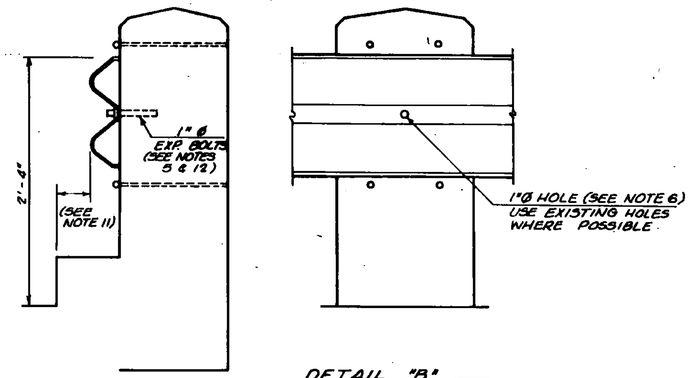
R.O. Munns ASST. CHIEF ENGINEER

Louis C. Jones HIGHWAY ENGINEER

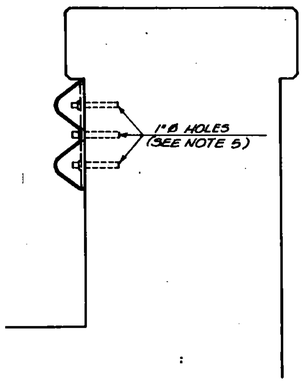
# BREAKAWAY CABLE TERMINAL WITH WOOD POSTS

STANDARD

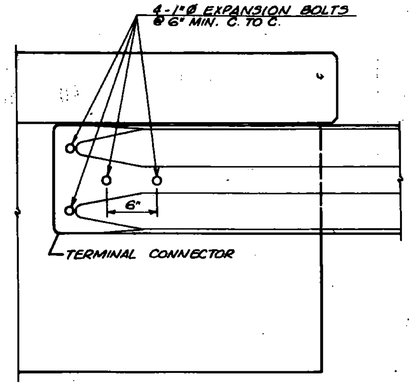
G-14

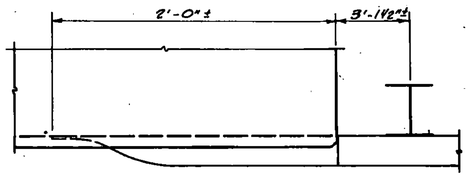


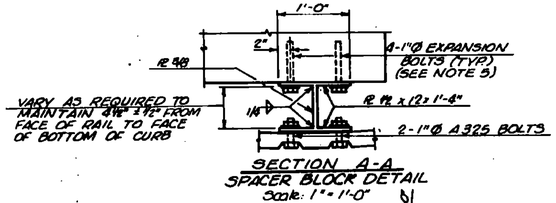

DETAIL "B"
Steel Beam Installation on Concrete Post
Scale 1½" = 1'-0"



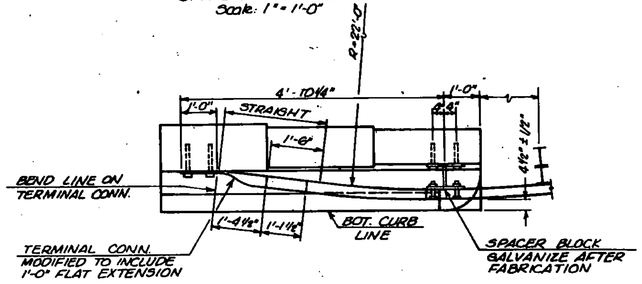

DETAIL "C"
Terminal Connection to Solid Rail
Scale 1½" = 1'-0"

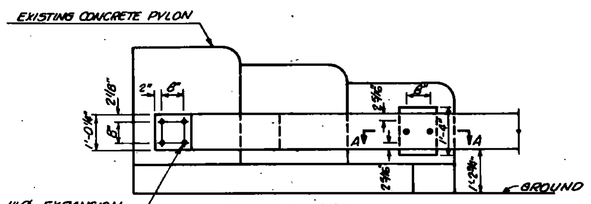


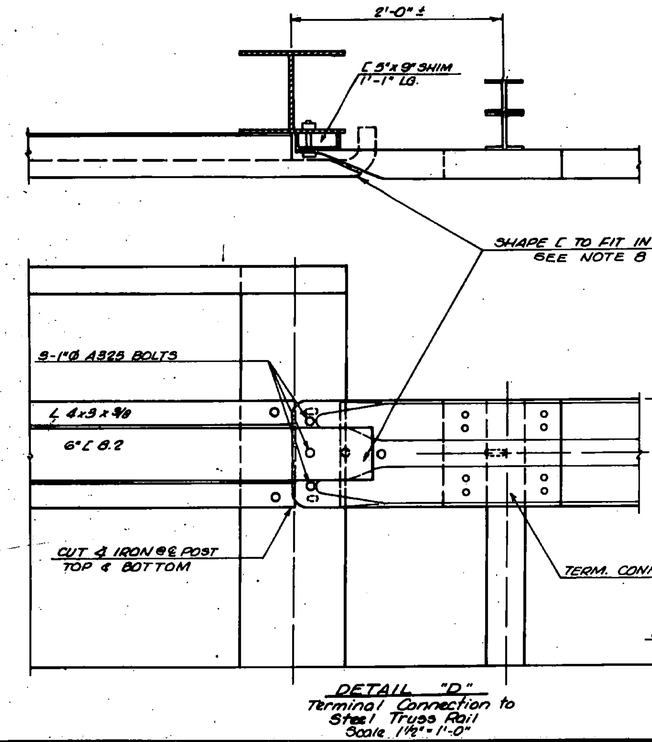




SECTION A-A
SPACER BLOCK DETAIL
Scale: 1" = 1'-0"




DETAIL "A"
Blacked-out Steel Beam Connection on Concrete Pylon with Curb
Scale ½" = 1'-0"




DETAIL "D"
Terminal Connection to Steel Truss Rail
Scale 1½" = 1'-0"

## GENERAL NOTES

1. AT LEAST 2 PANELS (25') OF RAIL AT APPROACH TO BRIDGE SHALL BE HEAVY DUTY STEEL BEAM. SEE STANDARD G-1 FOR ADDITIONAL DETAILS.
2. ALL METAL PARTS SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111. ALL FIELD ALTERATIONS TO GALVANIZED MEMBERS SHALL BE PAINTED WITH 2 COATS OF ZINC RICH PAINT (SECTION 708.07).
3. TERMINAL CONNECTORS SHALL BE STANDARD HM-TF-19/RE-8.
4. EXPANSION BOLTS SHALL BE STAINLESS STEEL, A.S.T.M. A 582 TYPE 303, 1" Ø BY 9 INCHES IN LENGTH WITH A MINIMUM THREAD LENGTH OF 2 INCHES. EXPANSION WEDGES SHALL BE A.S.T.M. A 276 TYPE 304. NUTS AND WASHERS SHALL BE TYPE 18-8. STAINLESS STEEL.
5. EXPANSION BOLTS SHALL HAVE 7" MIN. DEPTH OF EMBEDMENT INTO EXISTING CONCRETE AND SHALL BE CAPABLE OF ULTIMATE TENSILE STRENGTH = 18,000 LBS. MIN. DETAILS SHALL BE SUBMITTED FOR APPROVAL PRIOR TO INSTALLATION.
6. STEEL BEAM RAILING TO BE INSTALLED ON EXISTING CONCRETE POSTS SHALL BE DRILLED TO FIT IN THE FIELD.
7. POST SPACING TO BE 3'-1½" AT EACH CORNER OF ALL BRIDGES FOR ONE PANEL (12.5'). UNLESS OTHERWISE NOTED NORMAL LINE POST SPACING TO BE 6'-3".
8. WHEN CONNECTING NEW BEAM RAIL TO EXISTING STEEL RAIL ON TRUSS BRIDGES ANY EXISTING BRIDGE RAIL CUT SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH SECTION 513.
9. EXISTING BRIDGE RAILING SHALL NOT BE REMOVED UNTIL THE NEW BRIDGE RAILING AND ALL NECESSARY ACCESSORIES ARE ON PROJECT.
10. ONLY ONE SIDE OF EACH BRIDGE SHALL BE WORKED ON AT A TIME.
11. WHEN THE CURB TO RAIL OFFSET EXCEEDS 8", USE A SPACER BLOCK AS SHOWN IN SECTION A-A. MAINTAIN 4½" ± ½" CURB TO RAIL OFFSET.
12. THE POST MAY BE DRILLED THROUGH AND THE RAIL FASTENED WITH ONE 5/8" Ø GALVANIZED BOLT. A 6" SQUARE GALVANIZED WASHER (1/4" THICK) SHALL BE INSTALLED ON THE BACK SIDE OF THE POST.

REVISIONS & CORRECTIONS
FEB. 16, 1978 - CONSTRUCTION DETAILS REVISED.
NOV. 25, 1980 - TITLE BLOCK REVISED

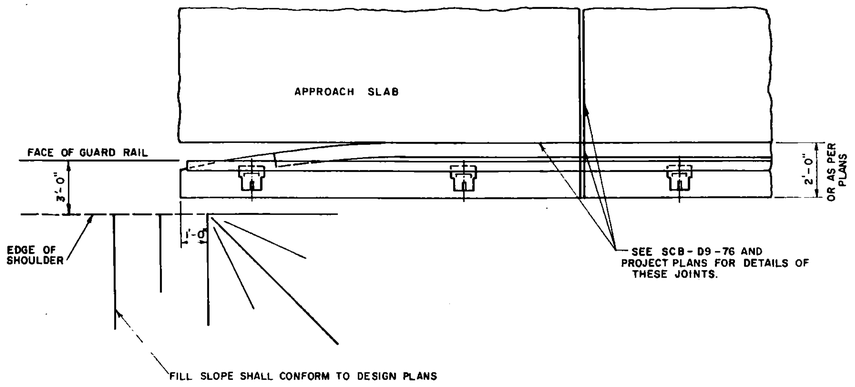
APPROVED: DATE Nov. 29, 1977
CHIEF ENGINEER
CHIEF OF DESIGN
DESIGN ENGINEER

# STEEL BEAM GUARD RAIL ATTACHMENTS TO EXISTING BRIDGE

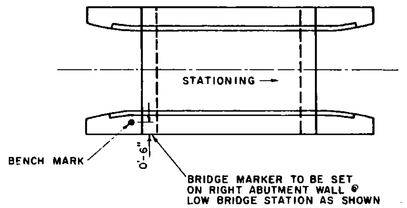
## TERMINAL CONNECTOR FOR STEEL BEAM GUARD RAIL

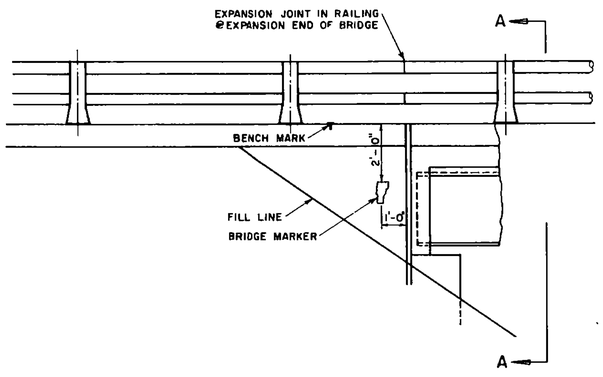
VERMONT AGENCY OF TRANSPORTATION

STANDARD G-16

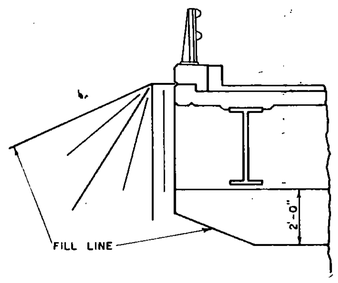



PLAN AT ABUTMENT




ELEVATION AT ABUTMENT




SECTION A-A

## GENERAL NOTES

ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO STATE OF VERMONT, DEPARTMENT OF HIGHWAYS, STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION, DATED MARCH 1976 AND ITS LATEST REVISIONS AND THE AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, DATED 1977 AND ITS LATEST REVISIONS. DESIGN IS FOR HS-20-44 LOADING MODIFIED FOR THE NATIONAL SYSTEM OF INTERSTATE HIGHWAYS, APPLIED IN ACCORDANCE WITH THE PROVISIONS OF AASHTO STANDARD SPECIFICATIONS.

THE FOLLOWING NOTES SHALL APPLY UNLESS OTHERWISE NOTED ON PROJECT PLANS.

1. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM DESIGNATION A-588 (UNPAINTED). ALL FIELD CONNECTIONS SHALL BE MADE WITH 7/8" Ø ASTM A-325, TYPE III BOLTS IN 15/16" Ø HOLES. WHERE CONNECTIONS ARE NOT DETAILED ON THE PLANS THEY SHALL BE DETAILED BY THE FABRICATOR AND SUBMITTED TO THE STATE FOR APPROVAL.
2. WHEN NOT DETAILED ON THE PLANS, SIMPLE SPAN BEAMS SHALL BE CAMBERED FOR THE DEAD LOAD DEFLECTION PLUS ONE-EIGHTH (1/8) INCH FOR EACH TEN FEET OF SPAN OR FRACTION THEREOF. THE CAMBER SHALL APPROXIMATE A SIMPLE CIRCULAR CURVE FROM END TO END OF BEAM. TOLERANCES IN CAMBER SHALL BE AS INDICATED IN THE A.I.S.C. HANDBOOK FOR ROLLED BEAMS AND AS INDICATED IN THE AWS SPECIFICATION FOR WELDED GIRDERS.
3. ALL WELDING AND DIMENSIONAL TOLERANCES OF WELDED MEMBERS SHALL CONFORM TO AWS D1.1-80 "STRUCTURAL WELDING CODE" AND ITS LATEST REVISIONS EXCEPT AS MODIFIED BY THE AASHTO STANDARD SPECIFICATIONS FOR WELDING OF STRUCTURAL STEEL HIGHWAY BRIDGES, DATED 1981 AND ITS LATEST REVISIONS.
4. ALLOWABLE DESIGN STRESSES: *

| | | | | | |
|---|---|---|---|---|---|
| CONCRETE: | CLASS A | f'c | 3,500 psi | fc | 1400 psi |
| | CLASS B | f'c | 3,500 psi | fc | 1400 psi |
| STRUCTURAL STEEL: | A-588 MAX. DESIGN STRESS | | 27,000 psi (or as per AASHTO Specs) | | |
| REINFORCING STEEL: | | GRADE 40 | | GRADE 60 | |
| | DESIGN STRESS (TENSION) | 20,000 psi | | 24,000 psi | |
| | DESIGN STRESS (COMPRESSION) | 16,000 psi | | 20,000 psi | |

5. AFTER SUPERSTRUCTURE STEEL HAS BEEN ERECTED, ELEVATIONS ALONG THE TOP OF ERECTED BEAMS SHALL BE TAKEN UNDER THE DIRECTION OF THE ENGINEER FOR USE IN DETERMINING THE FINAL GRADE.
6. MINIMUM COVER FOR REINFORCING STEEL (EXCEPT IN DECKS) SHALL BE 2" IN BACK FACES OF WALLS AGAINST EARTH AND 3" ELSEWHERE.
7. ALL EXPOSED EDGES OF CONCRETE IN THE SUBSTRUCTURE AND SUPERSTRUCTURE SHALL BE CHAMFERED 1" x 1".
8. DECK CONCRETE SHALL BE CONCRETE CLASS A. ALL OTHER CONCRETE SHALL BE CONCRETE CLASS B.
9. BRIDGE SEATS OF ALL PIERS AND ABUTMENTS SHALL BE SLOPED 1/2" PER FOOT EXCEPT UNDER BEARING PLATES WHERE THE SURFACES SHALL BE LEVEL. ABUTMENTS SHALL BE SLOPED FULL WIDTH, PIERS SHALL BE SLOPED EACH WAY FROM CENTER. THE ENTIRE BRIDGE SEAT SURFACE SHALL BE SMOOTH STEEL TROWEL FINISHED
10. ABUTMENT CONCRETE ABOVE THE ADJACENT BRIDGE SEAT ELEVATIONS SHALL PREFERABLY NOT BE PLACED UNTIL FINAL FINISHED GRADE OF DECK IS ESTABLISHED BY THE ENGINEER
11. ANY FORM BRACKET HOLES IN FASCIA BEAMS OR GIRDER WEBS SHALL BE FILLED WITH BUTTON-HEAD OR HEX-HEAD BOLTS (TYPE III ON A-588 STEEL).
12. GRANULAR BORROW USED IN AREAS THROUGH WHICH PILES ARE TO BE DRIVEN SHALL HAVE A MAXIMUM STONE SIZE OF NINE INCHES.
13. BORINGS INDICATED ON THE DRAWINGS HAVE BEEN MADE FOR DESIGN PURPOSES ONLY AND DO NOT WARRANT ACTUAL SUB-SURFACE CONDITIONS.
14. ALL DIMENSIONS ARE HORIZONTAL OR VERTICAL, AND ARE GIVEN AT 68° F.

*NOTE: SPECIFICATIONS CALL FOR A CLASS A CONCRETE WHICH WILL PRODUCE 4000 PSI AT 28 DAYS. HOWEVER, SUPERSTRUCTURE CONCRETE IS DESIGNED ON THE BASIS OF f'c = 3500 THUS PROVIDING AN ADDITIONAL FACTOR OF SAFETY IN BRIDGE SLABS.

15. IF ALL DECK CONCRETE IS NOT PLACED IN ONE WORKING DAY, A MINIMUM DELAY PERIOD OF 96 HOURS (FOLLOWING END OF PLACEMENT OF THE PREVIOUS CONCRETE) WILL BE REQUIRED BEFORE PLACING ADDITIONAL CONCRETE. THE MINIMUM DELAY PERIOD SHALL BE INCREASED WHEN SO ORDERED BY THE ENGINEER. IN ALL CASES THE PLACEMENT SEQUENCE INDICATED ON THE PLANS SHALL BE FOLLOWED.
16. REINFORCING PLACEMENT TOLERANCES SHALL BE AS FOLLOWS:
    SPACING TOLERANCE: ±1"
    CLEARANCE TOLERANCE: ± 1/4"

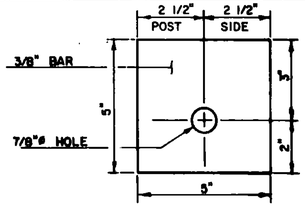
REVISIONS AND CORRECTIONS
1- Added word seat in line 3 of Note #9 J.WOOD 4-23-75
2. CHANGED VERMONT SPEC. DATE, GEN. NOTE, AND ADDED NOTE NO. 15, W. TRIPP 4-26-76.
3. REVISED NOTES, W. TRIPP, 12-15-76.
4. REVISED DATES, NOTE NO.3. W. TRIPP 4-25-77
5. REVISED NOTES W. TRIPP 4-3-78
6. REVISED NOTE NO. 3, DATES W. TRIPP 9-14-81

APPROVED
DATE Jan. 30, 1975
CHIEF ENGINEER
ASST. CHIEF ENGINEER
BRIDGE ENGINEER

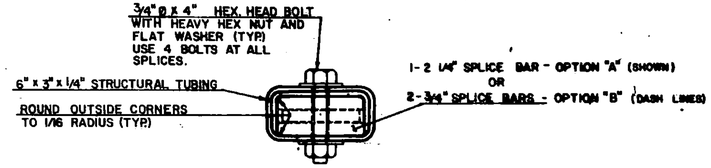
# DETAILS OF W BEAM BRIDGES GENERAL INFORMATION AND GENERAL NOTES

VERMONT DEPARTMENT OF HIGHWAYS STANDARD

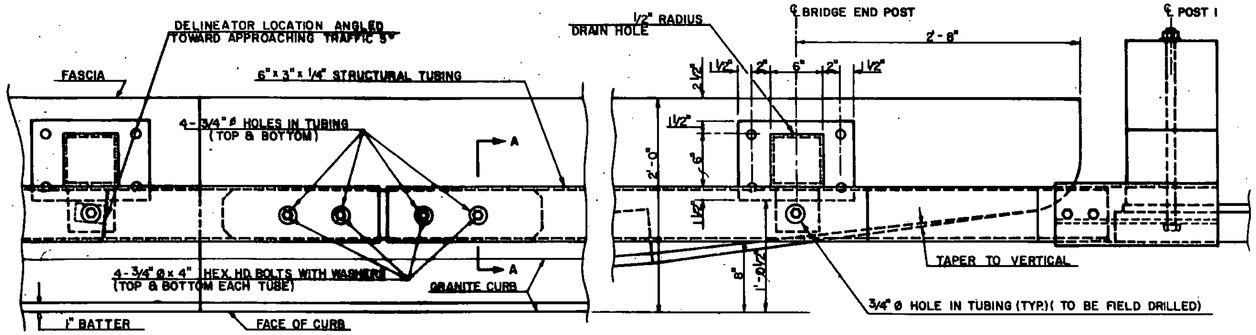
SCB-D1-75



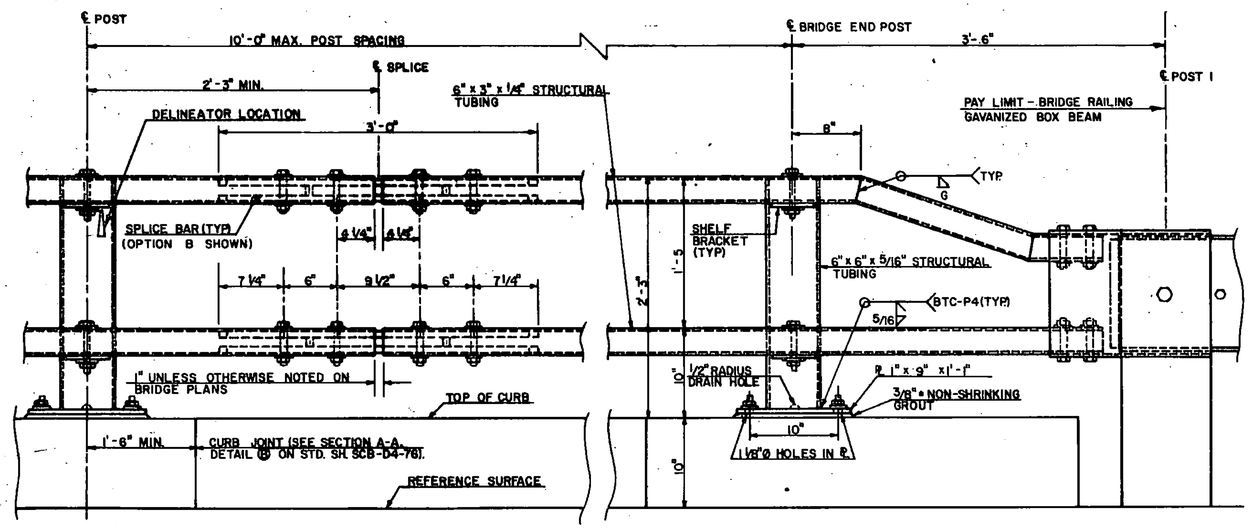

SHELF BRACKET DETAIL



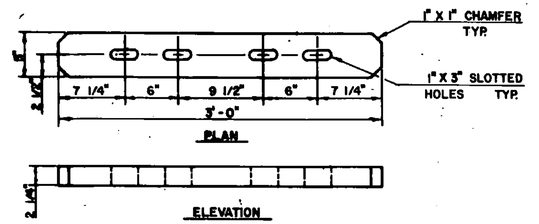

SECTION A-A



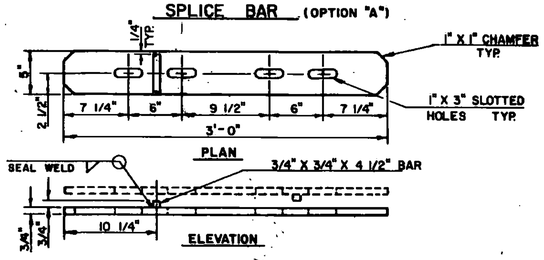

PLAN OF BOX BEAM BRIDGE RAIL



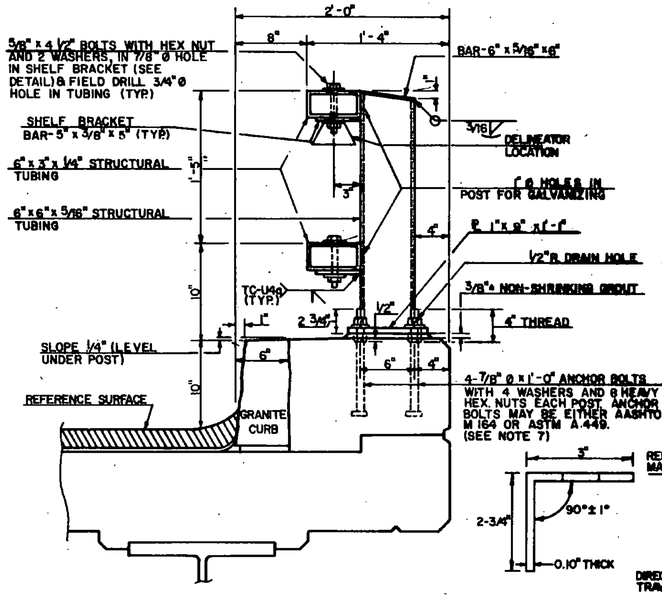

ELEVATION OF BOX BEAM BRIDGE RAIL



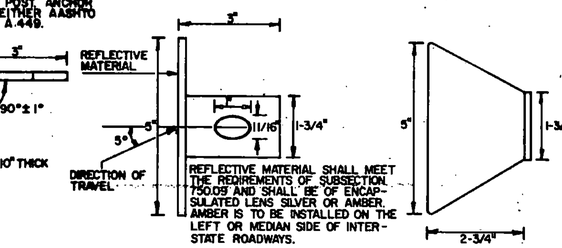

SPLICE BAR (OPTION "A")




SPLICE BAR (OPTION "B")




TYPICAL SECTION OF BOX BEAM BRIDGE RAIL




THIS REFLECTORIZED ALUMINUM DELINEATOR IS TO BE ERECTED EVERY 30 FEET OR CLOSEST POST. DELINEATOR SHALL MEET SPECIFICATION REQUIREMENTS FOR ASTM B209 ALLOY 5052-H32.

## NOTES

1. RAILING IS DESIGNED IN ACCORDANCE WITH THE 1981 AASHTO SPECIFICATIONS.
2. ALL PLATES, BARS, AND ANGLES SHALL BE ASTM A 36 STEEL UNLESS OTHERWISE SPECIFIED, ALL BOLTS SHALL BE ASTM A 307. STRUCTURAL STEEL TUBING SHALL BE ASTM A 500 COLD-FORMED GRADE B AS MODIFIED IN SECTION 732.04(a).
3. ALL BOX BEAM BRIDGE RAILING, COMPONENTS, ANCHOR BOLTS AND ATTACHMENT HARDWARE SHALL BE GALVANIZED TO ASTM A 123 AFTER FABRICATION.
4. THE FABRICATOR SHALL SUBMIT SHOP DRAWINGS, INCLUDING WELDING PROCEDURES, TO THE STRUCTURES DIVISION FOR APPROVAL IN ACCORDANCE WITH THE PROVISIONS OF SECTION 506.04 - SHOP DRAWINGS. ALL WELDING SHALL CONFORM WITH SECTION 506.24.
5. PROCEDURE QUALIFICATION FOR ALL WELDS SHALL BE PERFORMED AND APPROVED PRIOR TO FABRICATION. WELDER QUALIFICATION WILL BE REQUIRED FOR EACH PROCEDURE. PROCEDURE AND WELDER QUALIFICATION ACCEPTANCE SHALL BE APPROVED BY RADIOGRAPHIC TESTING.
6. THE RAIL SYSTEM SHALL BE CONTINOUS WITH EACH TUBE SECTION ATTACHED TO A MINIMUM OF TWO POSTS. ALL JOINTS SHALL BE SPLICED AS DETAILED, WITH ALL SPLICE CONNECTIONS IN THE SAME PANEL LOCATED ONE DIRECTLY ABOVE THE OTHER.
7. ALL POSTS SHALL BE SET NORMAL TO GRADE. NUTS PLACED IN CONCRETE ARE TO BE ROTATED WITHIN 24 HOURS AFTER CONCRETE IS PLACED TO BREAK BOND BETWEEN NUT AND CONCRETE. NUTS SHALL THEN BE USED TO ALIGN THE POSTS BOTH HORIZONTALLY AND VERTICALLY. AFTER FINAL POSITION HAS BEEN APPROVED, ALL VOIDS BETWEEN THE BASE PLATE AND CONCRETE SURFACE SHALL BE GROUTED WITH NON-SHRINK GROUT CONFORMING WITH SECTION 707.04, MORTAR, TYPE IV.
8. ANCHOR BOLTS SHALL BE PRECAST IN THE CURB SECTION, AND CONFORM WITH THE REQUIREMENTS OF SECTION 714.16.
9. FOR RADII LESS THAN 950 FEET, THE BEAM RAIL SHALL BE SHOP BENT TO FIT THE APPLICABLE CURVE.
10. RAILING JOINT SPLICES SHALL BE PROVIDED FOR ALL SUPERSTRUCTURE JOINTS. THE RAIL JOINT OPENING SHALL BE 1 INCH OR CAPABLE OF PROVIDING THE MOVEMENT SPECIFIED. SPLICE PLATE DETAILS SHALL BE MODIFIED AS REQUIRED FOR JOINTS REQUIRING MORE THAN 2 INCHES OF TOTAL MOVEMENT.
11. REFER TO STANDARD SCB-D4-76 AND SCB-D6-73 FOR CURB DETAILS.
12. REFER TO STANDARD SB-R48-82 FOR GUARD RAIL APPROACH SECTION-TYPE I & TYPE II DETAILS.
13. DELINEATORS SHALL BE MOUNTED AS SHOWN ON DETAILS. PAYMENT SHALL BE SUBSIDIARY TO OTHER ITEMS.
14. WALL THICKNESS OF THE 6" x 6" STRUCTURAL TUBING FOR THE RAIL POST SHALL BE 5/16" INCH MINIMUM, 3/8" INCH, OR 1/2" INCH THICKNESS TUBING MAY BE SUBSTITUTED AT THE OPTION OF THE FABRICATOR.

REVISIONS AND CORRECTIONS

1 REVISION DELINEATORS ADDED D.A.R. 6-18-82
2 REVISION CHANGED LOCATION OF DELINEATORS D.A.R. 8-22-83
3. REVISED NOTE # 12 TO INCLUDE TYPE II AND REVISED ANCHORAGE CONNECTOR AND SPLICE BAR. R.HAUPT 9/7/83
4. REVISED HOLE DIMENSION IN SHELF BRACKET, ADD DIMENSION TO POST NO. 1, AND ADD NOTE NO. 14. R.S.H. 12-13-84

APPROVED:

DECEMBER 28, 1981
DATE

CHIEF OF DESIGN

STRUCTURES ENGINEER

DIRECTOR OF ENGINEERING AND CONSTRUCTION

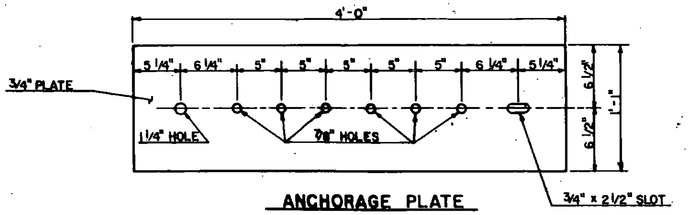
# BRIDGE RAILING GALVANIZED BOX BEAM

VERMONT AGENCY OF TRANSPORTATION

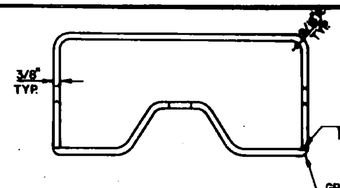
# STANDARD SB-R4A-82

BRIDGES 44-1131 40751

SB-4

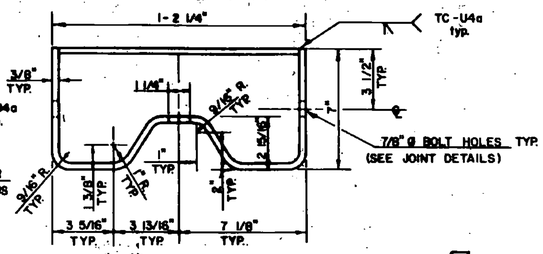



ANCHORAGE PLATE



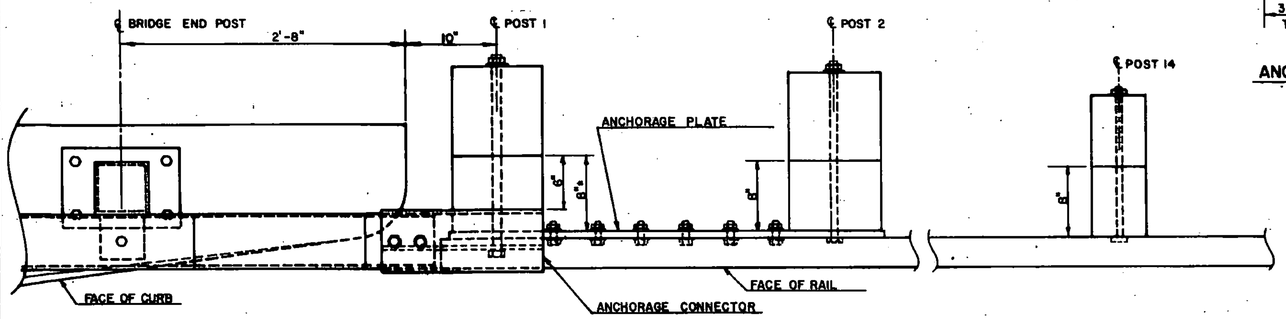

ALTERNATE DETAIL

FOR DIMENSIONS SEE DETAIL AT RIGHT




## NOTES

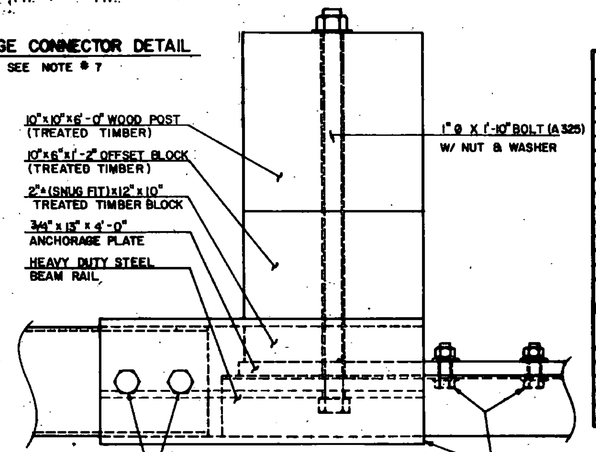
1. REFER TO STANDARD G-1 FOR DETAILS OF APPROACH GUARD RAIL.
2. APPROACH RAIL SPLICES SHALL LAP IN DIRECTION OF TRAFFIC FLOW.
3. ANCHORAGE CONNECTOR AND ANCHORAGE PLATE SHALL BE ASTM A 36 STEEL GALVANIZED TO ASTM A 123 AFTER FABRICATION.
4. REFER TO STANDARD SB-R4A-82 FOR NOTES AND DETAILS OF BRIDGE RAILING.
5. GUARD RAIL APPROACH SECTION-TYPE I & II SHALL INCLUDE ANCHORAGE PLATE. ANCHORAGE CONNECTOR, RAIL, POSTS, BLOCKS, AND ATTACHMENT HARDWARE.
6. APPROACH RAILING SHALL BE HEAVY DUTY STEEL BEAM FOR 50'-0" FROM THE ℄ OF POST 1 FOR TYPE I AND 12'-6" FROM THE ℄ OF POST 1 FOR TYPE II.
7. ALLOWABLE DIMENSIONAL TOLERANCE FOR BENT SECTIONS IS ± 1/16 OF AN INCH.




BRIDGE APPROACH PLAN

ANCHORAGE CONNECTOR DETAIL

SEE NOTE # 7



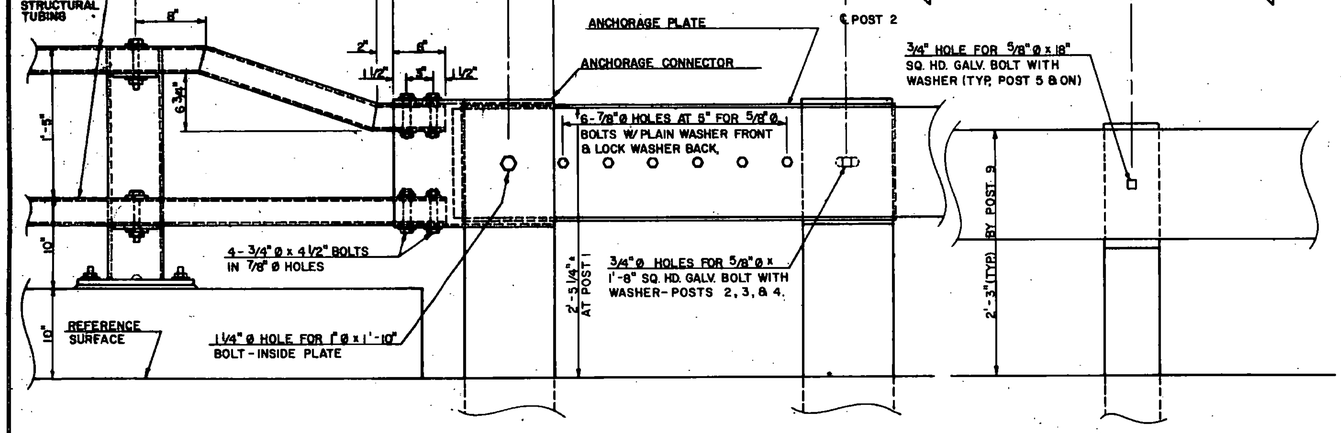

JOINT DETAILS

GUARD RAIL APPROACH SECTION TYPE I

| POST NO. | POST SIZE | OFFSET BLOCK | SPACING | |
|---|---|---|---|---|
| END POST | | | 3'-6" | GUARD RAIL APPROACH SECTION TYPE I, 50'-0" |
| 1 | 10"x10" | 10"x6" | 3'-1 1/2" | |
| 2 | 10"x10" | 10"x8" | 3'-1 1/2" | |
| 3 | 10"x10" | 10"x8" | 3'-1 1/2" | |
| 4 | 10"x10" | 10"x8" | 3'-1 1/2" | |
| 5 | 8"x8" | 8"x8" | 3'-1 1/2" | |
| 6 | 8"x8" | 8"x8" | 3'-1 1/2" | |
| 7 | 8"x8" | 8"x8" | 3'-1 1/2" | |
| 8 | 8"x8" | 8"x8" | 3'-1 1/2" | |
| 9 | 6"x8" | 6"x8" | 4'-2" | |
| 10 | 6"x8" | 6"x8" | 4'-2" | |
| 11 | 6"x8" | 6"x8" | 4'-2" | |
| 12 | 6"x8" | 6"x8" | 6'-3" | |
| 13 | 6"x8" | 6"x8" | 6'-3" | |
| 14 | 6"x8" (TYP.) | 6"x8" (TYP.) | 6'-3" (TYP.) | |

GUARD RAIL APPROACH SECTION TYPE II

| END POST | | | 3'-6" | APPROACH SECTION TYPE II 12'-6" |
|---|---|---|---|---|
| 1 | 10"x10" | 10"x6" | 3'-1 1/2" | |
| 2 | 10"x10" | 10"x8" | 4'-8 1/4" | |
| 3 | 8"x8" | 8"x8" | 4'-8 1/4" | |
| 4 | 8"x8" | 6"x8" | 6'-3" (TYP.) | |




BRIDGE APPROACH ELEVATION

REVISIONS AND CORRECTIONS

1. ADDED TYPE II APPROACH DETAILS, AND REVISED ANCHORAGE CONNECTOR DETAILS. R. HAUPT 9/7/83
2. ADDED DIMENSION TO POST NO. 1. R.S.H. 12-13-84

APPROVED:

DECEMBER 28, 1981
DATE

CHIEF OF DESIGN

STRUCTURES ENGINEER

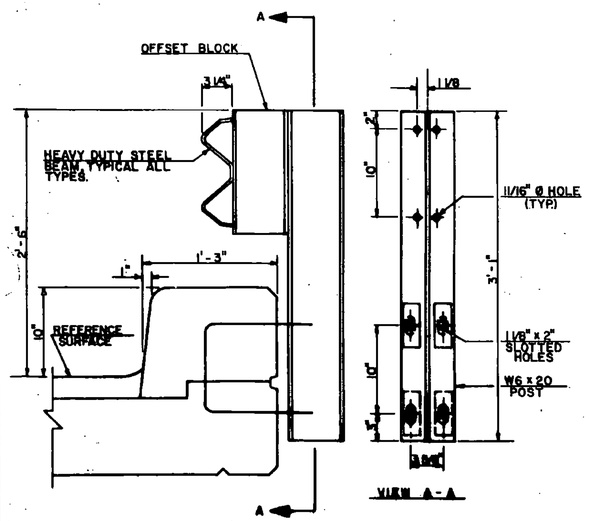
DIRECTOR OF ENGINEERING AND CONSTRUCTION

# GUARD RAIL APPROACH SECTION-TYPE I & TYPE II

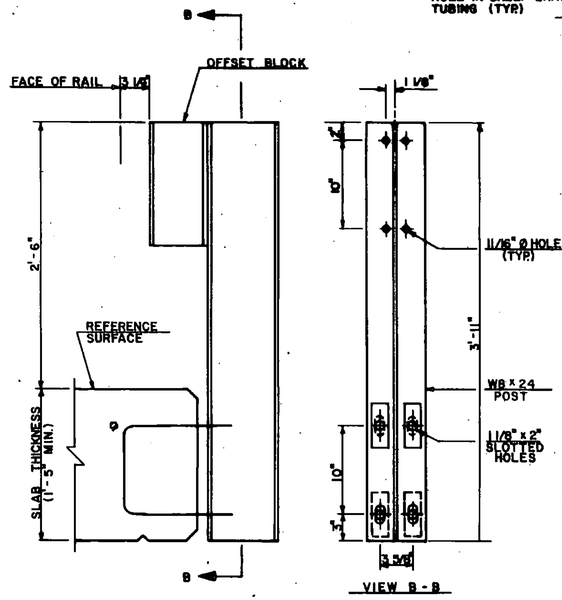
VERMONT AGENCY OF TRANSPORTATION

STANDARD

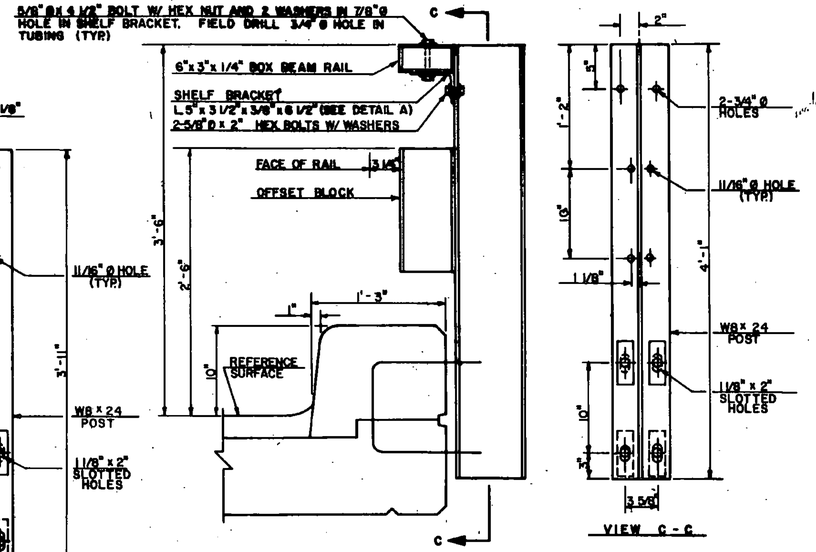
SB-R4B-82




FASCIA MOUNTED STEEL POST
TYPE A - GALVANIZED
TYPE B - A588



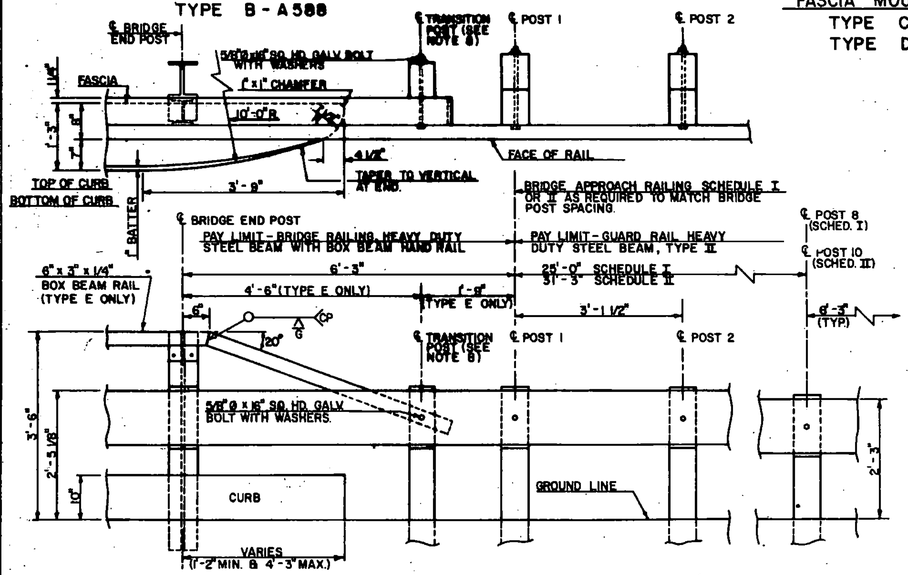

FASCIA MOUNTED STEEL POST
TYPE C - GALVANIZED
TYPE D - A588




FASCIA MOUNTED STEEL POST
WITH BOX BEAM HAND RAIL
TYPE E - GALVANIZED

## NOTES

1. SEE STANDARD DRAWING G-1 & G-1d FOR ADDITIONAL DETAILS OF STEEL BEAM GUARD RAIL AND STANDARD SB-R4d-82 FOR ADDITIONAL DETAILS OF BOX BEAM RAIL.
2. ANCHOR BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED AND CONFORM WITH SECTION 714.16.
3. BRIDGE RAIL TYPES A,C, & E: HEAVY DUTY STEEL BEAM RAIL SHALL BE AASHTO M 180, CLASS B-TYPE 2. POSTS, BRACKETS AND PLATE WASHER SHALL BE ASTM A 36 STEEL. BOLTS SHALL BE ASTM A 307. ALL MATERAL SHALL BE GALVANIZED AFTER FABRICATION TO ASTM A 123.
4. BRIDGE RAIL TYPE B & D: HEAVY DUTY STEEL BEAM RAIL SHALL BE AASHTO M 180, CLASS B-TYPE 4. POSTS, BRACKETS & PLATE WASHER SHALL BE ASTM A 588 STEEL. BOLTS SHALL BE ASTM A 325 TYPE III.
5. ALL POSTS SHALL BE SET NORMAL TO GRADE.
6. BRIDGE APPROACH RAIL HEIGHT SHALL BE TRANSITIONED TO NORMAL ROADWAY RAIL HEIGHT IN 25 FEET.
7. APPROACH RAILING SHALL BE HEAVY DUTY STEEL BEAM FOR 50 FEET FROM THE END OF THE BRIDGE.
8. FOR THE TYPE A, B, C, OR D BRIDGE RAILING, THE TRANSITION POST SHALL HAVE AN OFFSET BLOCK AND BE LOCATED AS CLOSE AS PRACTICAL TO THE MID-POINT BETWEEN THE BRIDGE END POST AND APPROACH RAIL POST 1.
9. SPLICES SHALL LAP IN DIRECTION OF TRAFFIC FLOW.
10. SEE STANDARD SHEET G-1 FOR DELINEATOR DETAILS AND PLACEMENT.
11. ERECT DELINEATOR ON EVERY FIFTH POST OR APPROXIMATETLY 30 FEET APART. PAYMENT SHALL BE SUBSIDIARY TO OTHER ITEMS.



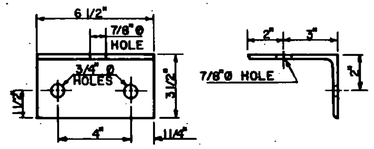

BRIDGE APPROACH DETAILS

### BRIDGE APPROACH RAILING

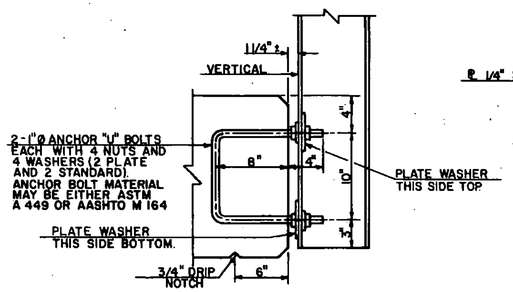
WHEN A RAIL PANEL SPLICE OCCURS AT POST NO.1 USE SCHEDULE I FOR APPROACH RAILING. WHEN A RAIL PANEL SPLICE OCCURS AT BRIDGE END POST USE SCHEDULE II FOR APPROACH RAILING.

| SCHEDULE I | | |
|---|---|---|
| POST NO. | SPACING | PAYMENT FACTOR |
| 1 | 3'-1 1/2" | 1.4 x 12'-6" |
| 2 | 3'-1 1/2" | |
| 3 | 3'-1 1/2" | |
| 4 | 3'-1 1/2" | |
| 5 | 4'-2" | 1.2 x 12'-6" |
| 6 | 4'-2" | |
| 7 | 4'-2" | |
| 8 | 6'-3" (TYP.) | 1.0 (TYP.) |
| 9 | | |

| SCHEDULE II | | |
|---|---|---|
| POST NO. | SPACING | PAYMENT FACTOR |
| 1 | 3'-1 1/2" | 1.4 x 18'-9" |
| 2 | 3'-1 1/2" | |
| 3 | 3'-1 1/2" | |
| 4 | 3'-1 1/2" | |
| 5 | 3'-1 1/2" | |
| 6 | 3'-1 1/2" | |
| 7 | 4'-2" | 1.2 x 12'-6" |
| 8 | 4'-2" | |
| 9 | 4'-2" | |
| 10 | 6'-3" (TYP.) | 1.0 (TYP.) |
| 11 | | |




DETAIL A - SHELF BRACKET




ANCHORAGE DETAIL

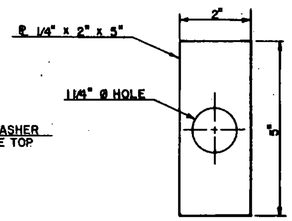



PLATE WASHER DETAIL

REVISIONS AND CORRECTIONS
REVISION DELINEATORS ADDED D.A.R 6-18-82
REVISION, BOLTS THRU BOX BEAM RAIL R.S.H. 12-13-84
REVISION, CHANGED BOLT HOLE THROUGH SHELF BRACKET R.S.H. 12-13-84

APPROVED:
DECEMBER 28, 1981
DATE
CHIEF OF DESIGN
STRUCTURES ENGINEER
DIRECTOR OF ENGINEERING AND CONSTRUCTION

# BRIDGE RAILING HEAVY DUTY STEEL BEAM (TYPE A, TYPE B, TYPE C, AND TYPE D) BRIDGE RAILING HEAVY DUTY STEEL BEAM WITH BOX BEAM HAND RAIL (TYPE E)

VERMONT AGENCY OF TRANSPORTATION

STANDARD
SB-R6-82