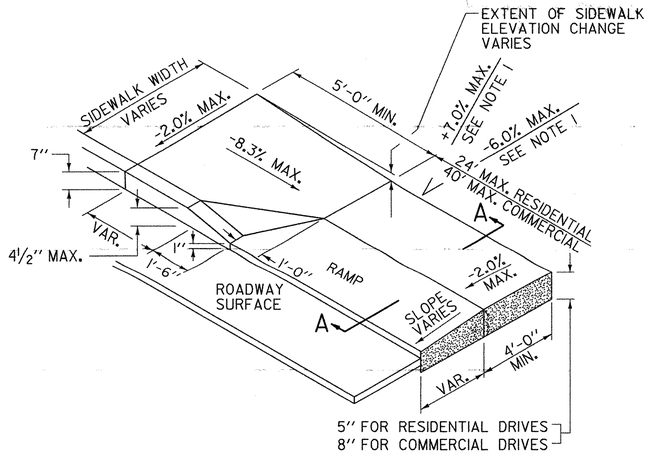
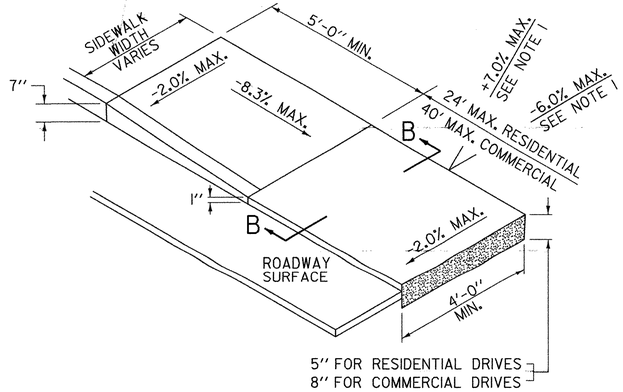
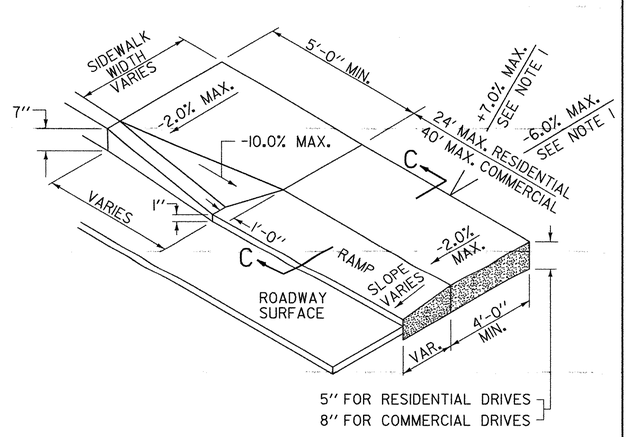


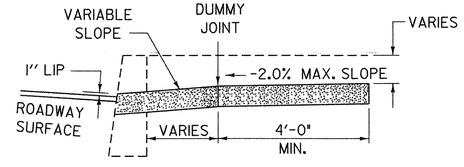
TYPE 1 – COMBINATION CROSSING WITH FLARE



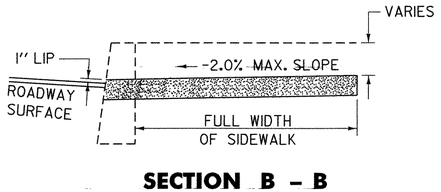
TYPE 2 – PARALLEL CROSSING WITH LANDING



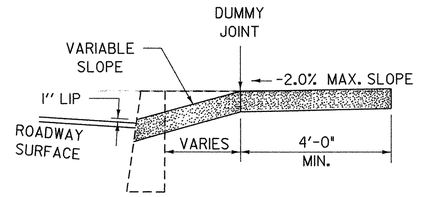
TYPE 3 – LEVEL LANDING WITH FLARE



SECTION A – A



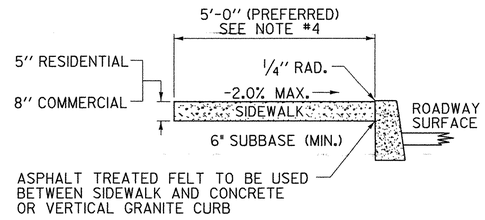
SECTION B – B



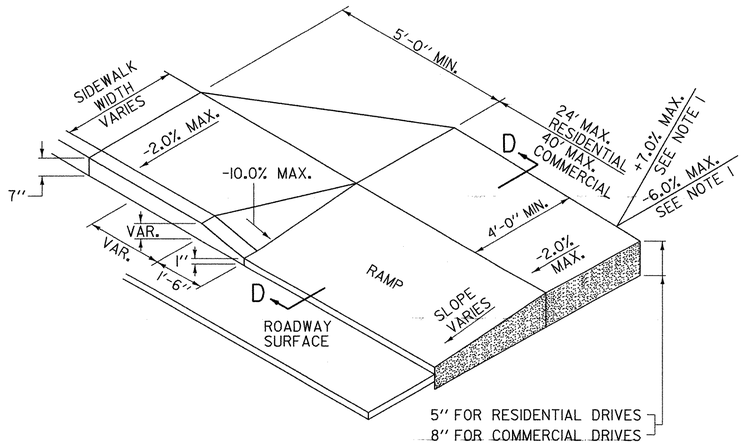
SECTION C – C

GENERAL NOTES :

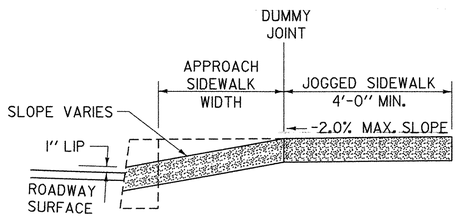
1. THESE TYPICALS APPLY WHERE GRADE OF DRIVE IS BETWEEN -6.0% AND +7.0%. FOR GRADES IN EXCESS OF THESE, ALTERNATIVE CROSS SECTION OF RAMP AND SIDEWALK MAY BE APPROVED BY THE ENGINEER.
2. DUMMY JOINTS SHALL BE PROVIDED AT TRANSITIONS (GRADE CHANGES) OF RAMPS AND FLARES.
3. DRIVEWAY RAMPS TO BE PAID FOR AS PORTLAND CEMENT CONCRETE SIDEWALK.
4. SIDEWALKS THAT ARE LESS THAN 5' WIDE REQUIRE 5' WIDE BY 5' LONG PASSING AREAS (NO GREATER THAN 2.0% CROSS SLOPE) AT INTERVALS NOT TO EXCEED 200'. DRIVEWAYS MEETING THESE REQUIREMENTS MAY BE USED AS A WHEELCHAIR PASSING AREA.
5. IN NO CASE SHALL THE CROSS SLOPE OF AN ACCESSIBLE ROUTE EXCEED 2.0%.



PORTLAND CEMENT CONCRETE SIDEWALK



TYPE 4 – JOGGED CROSSING



SECTION D–D

REVISIONS AND CORRECTIONS

DEC. 14, 1971 - ORIGINAL APPROVAL DATE

OCT. 25, 1985 - REVISED TO CONFORM TO 1986 SPECIFICATIONS

JUNE 1, 1994 - REISSUED WITHOUT CHANGE, UNDER NEW SIGNATURES.

JAN. 3, 2000 - UPDATED TO REFLECT METRIC STD. CHANGES.

OCT. 14, 2005 - UPDATED TO REFLECT REVISED ADAAG STANDARDS

APPROVED

Asst DIRECTOR OF PROGRAM DEVELOPMENT

ROADWAY PROGRAM MANAGER

FEDERAL HIGHWAY ADMINISTRATION

PORTLAND CEMENT CONCRETE SIDEWALK DRIVE ENTRANCES WITH SIDEWALK ADJACENT TO CURB

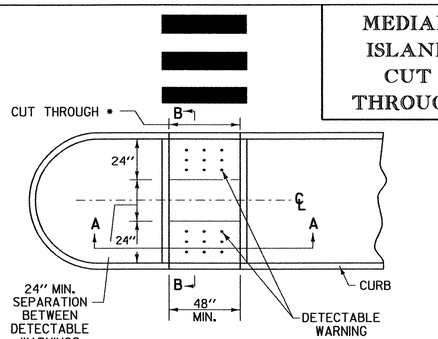
OTHER STANDARDS REQUIRED: B-71

VERMONT AGENCY OF TRANSPORTATION

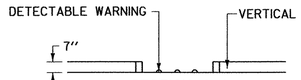
STANDARD

C-2A

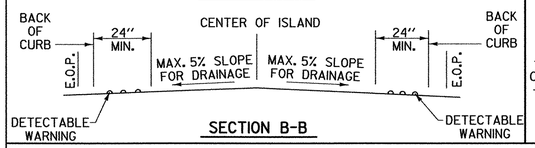
MEDIAN ISLAND CUT THROUGH



• IT IS PREFERRED TO PROVIDE A CUT THROUGH THAT IS THE SAME WIDTH AS THE APPROACHING CROSSWALK

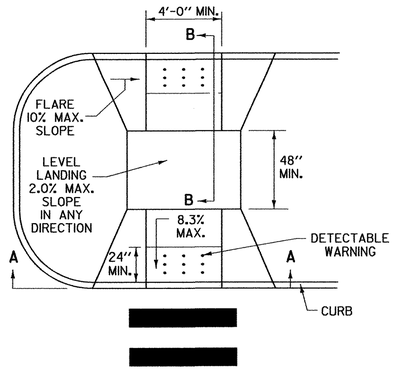


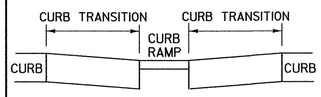
SECTION A-A



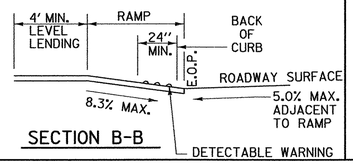
SECTION B-B

RAMPS AT WIDE MEDIAN ISLANDS



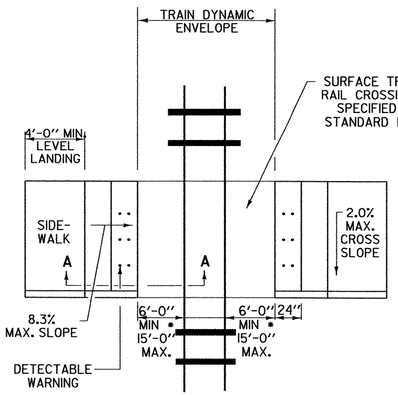


SECTION A-A



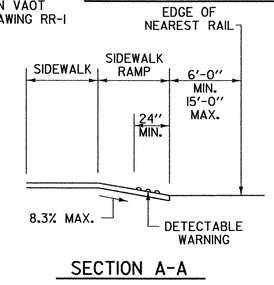
SECTION B-B

DETECTABLE WARNING AT RAILROAD CROSSING



• WHERE THIS DISTANCE CANNOT BE MET, A CLEARANCE DISTANCE BETWEEN THE TOE OF THE SIDEWALK RAMP AND THE FACE OF RAIL WILL BE UPON AGREEMENT BETWEEN THE REQUESTING PARTY AND THE RAILROAD. HOWEVER, THE DETECTABLE WARNING SHALL BE OUTSIDE THE EDGE OF THE DYNAMIC ENVELOPE.

NOTE: WHERE A PEDESTRIAN GATE IS PROVIDED ACROSS THE SIDEWALK, THE NEAREST EDGE OF THE DETECTABLE WARNING SHALL BE A MINIMUM OF 2'-0" FROM THE FACE OF THE GATE ARM.

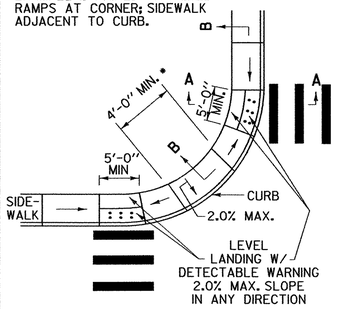


SECTION A-A

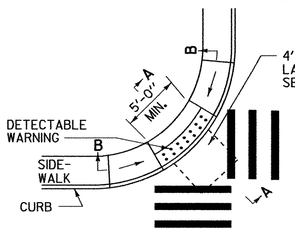
GENERAL NOTES:

1. THE DIMENSIONS AND GRADES SHOWN ON THIS STANDARD WILL BE ADHERED TO IN THE DESIGN AND THE CONSTRUCTION OF SIDEWALK RAMPS. WHERE SIDEWALKS RUN ADJACENT TO ROADWAYS ON STEEP (5% OR GREATER) GRADES, RAMP GRADES WILL BE AS FLAT AS POSSIBLE. (ON LOW SIDE OF DRIVES AND INTERSECTING SIDE STREETS, RAMPS SHALL SLOPE TOWARDS DRIVE OR SIDE STREET @ 2%)
2. NOMINAL RAMP DIMENSIONS AND GRADES:
   RAMP WIDTH - 4'-0" MINIMUM
   RAMP SLOPE - 8.3% MAXIMUM
   FLARE SLOPE - 10% MAXIMUM
   RAMP CROSS SLOPE - 2.0% MAXIMUM
3. A LEVEL LANDING (NO GREATER THAN 2.0% SLOPE IN ANY DIRECTION) SHALL BE PROVIDED AT THE TOP OF SIDEWALK RAMPS TO ALLOW FOR STOPPING AND MANEUVERING OF WHEELCHAIRS.
4. LEVEL LANDINGS (NO GREATER THAN 2.0% SLOPE IN ANY DIRECTION) AT THE BOTTOM OF PERPENDICULAR RAMPS SHALL BE WHOLLY CONTAINED WITHIN MARKED CROSSWALKS.
5. DUMMY JOINTS SHALL BE PROVIDED AT TRANSITIONS (GRADE CHANGES) AT TOPS AND BOTTOMS OF RAMPS AND FLARES.
6. VERTICAL DROP-OFF EDGES TO RAMPS WILL NOT BE BUILT UNLESS THE RAMP ABUTS AN AREA WHICH WILL NOT BE USED BY PEDESTRIANS.
7. NO VERTICAL "LIP" OR "CURB REVEAL" WILL BE PROVIDED WHERE THE RAMP ADJOINS THE ROADWAY.
8. AT MARKED CROSSWALKS, THE FULL WIDTH OF THE RAMP OR LANDING SHALL BE CONTAINED WITHIN THE PAVEMENT MARKINGS.
9. WHERE POSSIBLE, RAMP FLARES SHOULD BE LOCATED OUTSIDE THE DIRECT LINE OF TRAVEL MOST LIKELY TO BE FOLLOWED BY THE VISUALLY IMPAIRED.
10. SIGNS, POLES, PLANTERS, MAILBOXES, ETC. SHALL NOT BE LOCATED WHERE THEY WILL INTERFERE WITH THE USE OF SIDEWALK RAMPS.
11. WHERE POSSIBLE, SIDEWALK RAMPS SHOULD NOT BE LOCATED WHERE USERS MUST CROSS DROP INLET GRATES, MANHOLE COVERS OR OTHER ACCESS LIDS. IF THIS CANNOT BE AVOIDED THEN GRATE DESIGN AND PLACEMENT SHALL CONFORM TO ADA REQUIREMENTS.
12. CURB DRAINAGE SHOULD BE CONSTRUCTED SO AS TO PRECLUDE THE FLOW OF WATER PAST THE SIDEWALK RAMP.
13. WHEREVER FEASIBLE, TWO SIDEWALK RAMPS ARE RECOMMENDED IN PREFERENCE TO A SINGLE RAMP.
14. JOINTS WILL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT SIDEWALK SPECIFICATIONS, HOWEVER EXPANSION JOINTS WITHIN THE SIDEWALK RAMP AREA WILL BE AVOIDED WHEREVER POSSIBLE.
15. SIDEWALKS THAT ARE LESS THAN 5' WIDE REQUIRE 5' WIDE BY 5' LONG PASSING AREAS (NO GREATER THAN 2.0% CROSS SLOPE) AT INTERVALS NOT TO EXCEED 200 FEET.
16. E.O.P. = EDGE OF PAVEMENT
17. THE PUBLIC SIDEWALK CURB RAMP STANDARDS DEPICTED HERE MAY NOT BE APPROPRIATE FOR ALL LOCATIONS. FIELD CONDITIONS AT INDIVIDUAL LOCATIONS MAY REQUIRE SPECIFIC DESIGNS. DESIGNS MUST BE CONSISTENT WITH THE PROVISIONS OF THIS SHEET TO THE MAXIMUM EXTENT FEASIBLE ON ALTERATION PROJECTS AND WHEN STRUCTURALLY PRACTICABLE ON NEW CONSTRUCTION PROJECTS AS REQUIRED BY THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES.

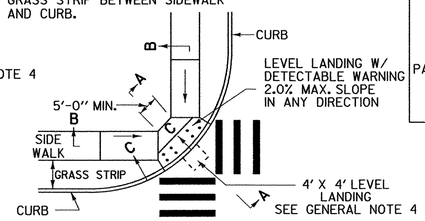
EXAMPLE 1: PAIRED PARALLEL RAMPS AT CORNER; SIDEWALK ADJACENT TO CURB.



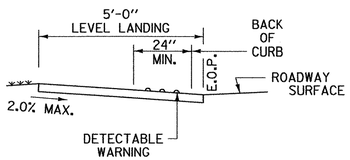
EXAMPLE 2: SINGLE RAMP ON CORNER RADIUS: SIDEWALK ADJACENT TO CURB.



EXAMPLE 3: SINGLE PARALLEL RAMP ON CORNER RADIUS; NARROW GRASS STRIP BETWEEN SIDEWALK AND CURB.

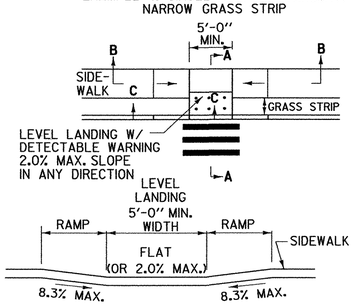


• WHERE A 4' MINIMUM SEPARATION BETWEEN RAMPS CANNOT BE ATTAINED, THE SIDEWALK SHOULD REMAIN AT THE SAME ELEVATION AS ADJOINING LEVEL LANDINGS.



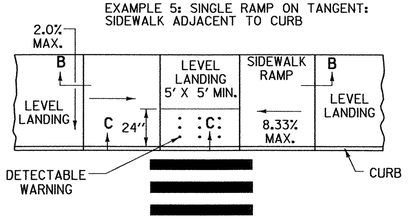
SECTION A-A

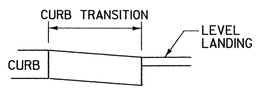
EXAMPLE 4: SINGLE RAMP ON TANGENT: NARROW GRASS STRIP



SECTION B-B

EXAMPLE 5: SINGLE RAMP ON TANGENT: SIDEWALK ADJACENT TO CURB

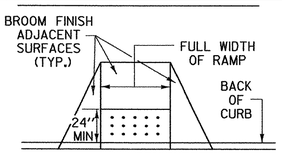




SECTION C-C

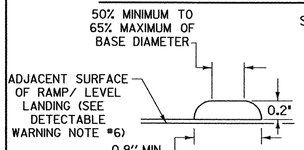
SIDEWALK RAMP TYPE 6

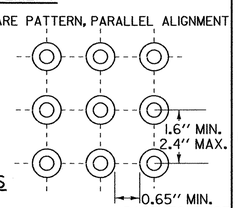
NARROW SIDEWALK PARALLEL RAMPS AND LEVEL LANDINGS WITHIN WALKWAY.



DETECTABLE WARNING DETAILS

DETECTABLE WARNING PLACEMENT





DETECTABLE WARNING DETAILS

DETECTABLE WARNING NOTES:

1. DETECTABLE WARNING SURFACES SHALL BE PAID FOR AS SPECIFIED IN THE CONTRACT.
2. CONCRETE ADJACENT TO ALL DETECTABLE WARNINGS SHALL HAVE A BROOM FINISH.
3. THE COLOR OF THE DETECTABLE WARNING SHALL PROVIDE A VISUAL CONTRAST TO THE SURROUNDING SURFACE AND SHALL BE AS SPECIFIED IN THE CONTRACT.
4. WHERE FEASIBLE, TRUNCATED DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF PEDESTRIAN TRAVEL.
5. WHERE A RAMP OR LEVEL LANDING MEETS A CURB RADIUS, ALIGN THE EDGE OF THE DETECTABLE WARNING AREA PARALLEL TO THE CURB TO THE MAXIMUM EXTENT FEASIBLE.
6. FOR SURFACE APPLIED TRUNCATED DOME PRODUCTS, A MAXIMUM 0.25" VERTICAL CHANGE IN ELEVATION IS ALLOWED. FOR CHANGES IN ELEVATION BETWEEN 0.25" AND 0.50", A BEVEL WITH A MAXIMUM 1:2 SLOPE IS REQUIRED. CHANGES IN ELEVATION GREATER THAN 0.50" MUST BE TREATED AS A RAMP- 8.3% MAXIMUM SLOPE.
7. IF ANY PORTION OF THE EDGE OF THE DETECTABLE WARNING CLOSEST TO THE CURB WILL BE GREATER THAN 5'-0" FROM THE BACK OF CURB, THEN THE PANEL(S) SHALL BE LOCATED ON THE LEVEL LANDING AS CLOSE TO PARALLEL TO THE CURB LINE AS POSSIBLE.

OTHER STANDARDS REQUIRED: C-2A, C-2B, C-3A, C-10 AND RR-1

REVISIONS AND CORRECTIONS

FEB. 2, 2004 - DATE OF ORIGINAL ISSUE
SEPT. 1, 2004 - MINOR REVISIONS TO COMPLY WITH ADAAG
MAR. 10, 2008 - MINOR REVISIONS TO COMPLY WITH ADA STANDARDS

APPROVED

LOCAL TRANSPORTATION FACILITIES PROGRAM MANAGER

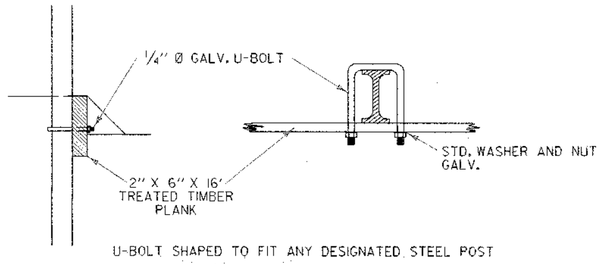
DIRECTOR OF PROGRAM DEVELOPMENT

FEDERAL HIGHWAY ADMINISTRATION

SIDEWALK RAMPS AND MEDIAN ISLANDS

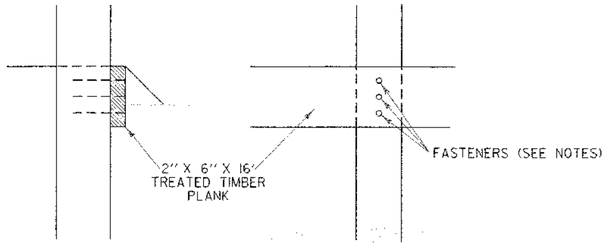
VERMONT AGENCY OF TRANSPORTATION

STANDARD C-3B

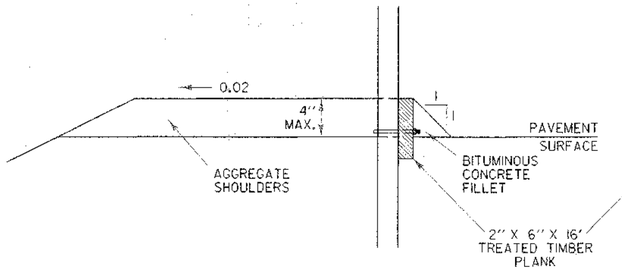


U-BOLT SHAPED TO FIT ANY DESIGNATED STEEL POST

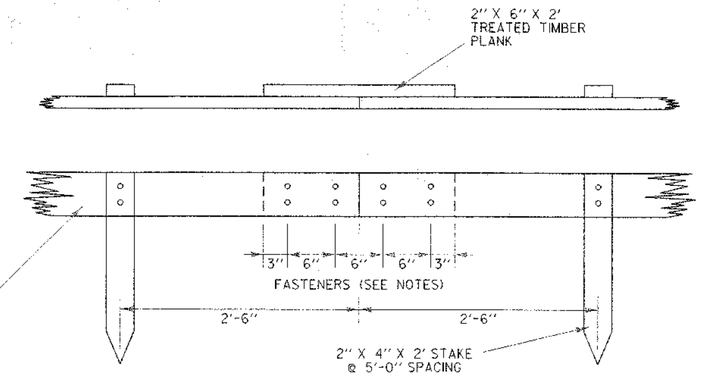
WITH STEEL POSTS



WITH WOOD POSTS (EXISTING CONDITION)

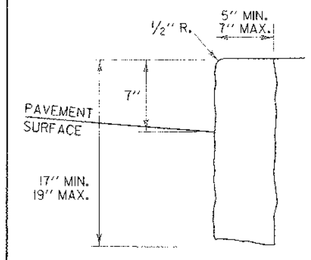


BITUMINOUS CONCRETE FILLET DETAIL

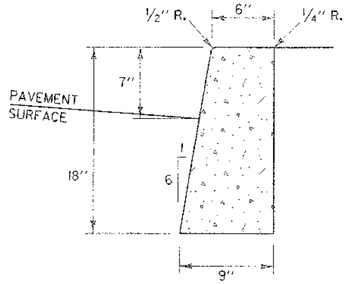


SPLICE DETAIL

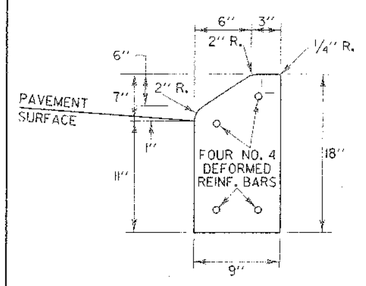
TREATED TIMBER CURB



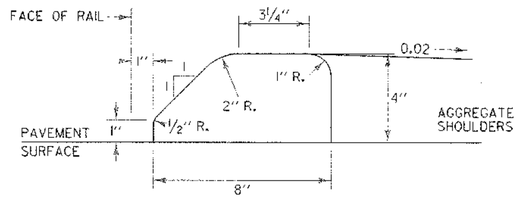
VERTICAL GRANITE CURB



CAST IN PLACE CONCRETE CURB, TYPE B

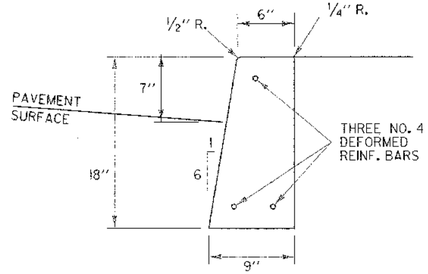


PRECAST REINFORCED CONCRETE CURB, TYPE A

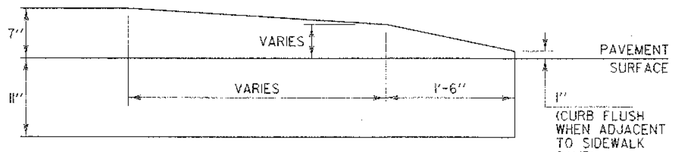


USE ONLY WITH STEEL BEAM GUARDRAIL

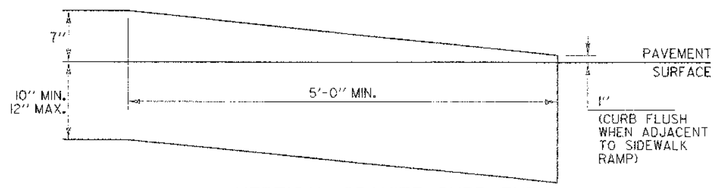
BITUMINOUS CONCRETE CURB, TYPE A



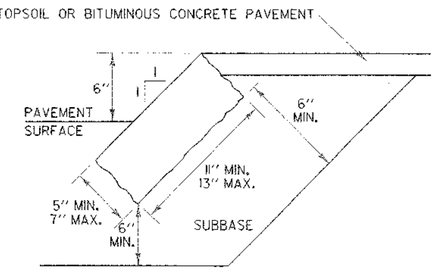
PRECAST REINFORCED CONCRETE CURB, TYPE B



CONCRETE CURB END



VERTICAL GRANITE CURB END



EDGING TO BE PLACED PRIOR TO PLACING TOP SURFACE COURSE.

GRANITE SLOPE EDGING

GENERAL NOTES:

1. HEIGHT OF REVEAL OF CURB SHALL NOT EXCEED FOUR INCHES WHERE DESIGN OR POSTED SPEED IS EQUAL TO OR GREATER THAN 40 MPH AND WHEN INSTALLED WITH GUARDRAIL (STANDARD SHAPE TO BE BURIED TO THIS DEPTH).
2. WHEN CONCRETE SIDEWALK IS CONSTRUCTED ADJACENT TO CONCRETE OR VERTICAL GRANITE CURB, ASPHALT TREATED FELT SHALL BE PLACED BETWEEN THE SIDEWALK AND CURB FOR THE TOTAL DEPTH OF THE SIDEWALK.
3. FASTENERS (20d NAILS OR SCREWS) SHALL BE CORROSION RESISTANT TO THE TREATED LUMBER.
4. FOR SPECIFICATIONS FOR EXPANSION/CONTRACTION JOINTS AND LENGTHS OF SECTIONS, SEE SECTION 616.
5. JOINTS BETWEEN CURB SECTIONS SHALL BE MORTARED IN CONFORMANCE WITH SECTION 616.
6. BITUMINOUS CONCRETE AND TREATED TIMBER CURB SHALL BE IN CONFORMANCE WITH SECTION 616.
7. TWO INCH MINIMUM CLEARANCE FROM FACE OF CONCRETE TO EDGE OF REINFORCING STEEL.

OTHER STDS. REQUIRED: **NONE**

REVISIONS AND CORRECTIONS

FEB. 11, 2008 - ORIGINAL APPROVAL DATE

APPROVED

Kevin S. Marchie
ROADWAY, TRAFFIC & SAFETY ENGINEER

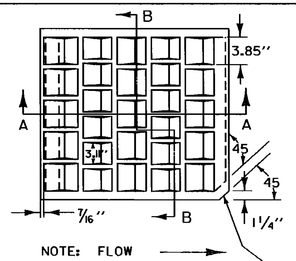
DIRECTOR OF PROGRAM DEVELOPMENT

Mark B. Richter
FEDERAL HIGHWAY ADMINISTRATION

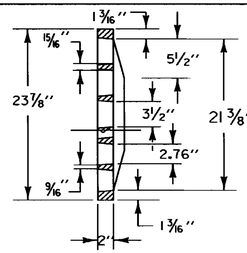
CURBING

VERMONT AGENCY OF TRANSPORTATION

STANDARD C-10

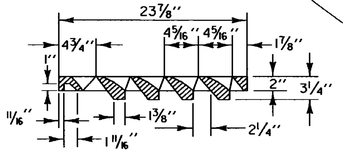


NOTE: FLOW →



SECTION B-B

NOTE: THIS CORNER LEFT OFF FOR "RIGHT" GRATE DIAGONALLY OPPOSITE CORNER FOR "LEFT" GRATE TO FIT IN KEYED FRAMES.

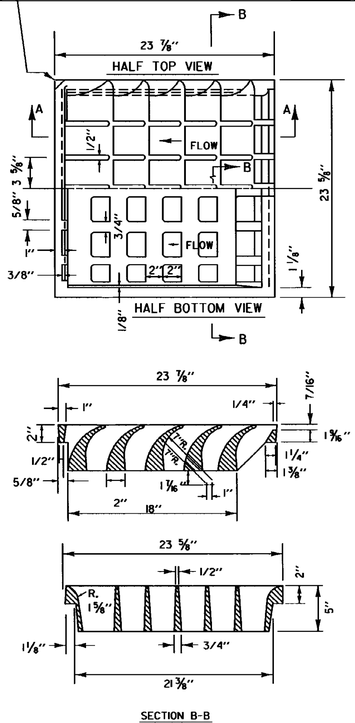


SECTION A-A

THIS CORNER LEFT OFF FOR "RIGHT" GRATE, DIAG. OPPOSITE CORNER FOR "LEFT" GRATE, TO FIT IN KEYED FRAMES.

TYPE "E" GRATE
(NOT TO SCALE)

NOTE: ALTERNATE TYPE E GRATE BELOW



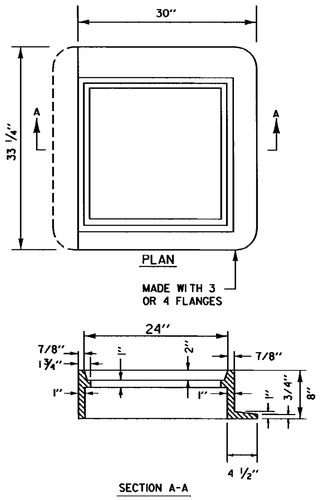
SECTION B-B

CAST IRON GRATE
TYPE E

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

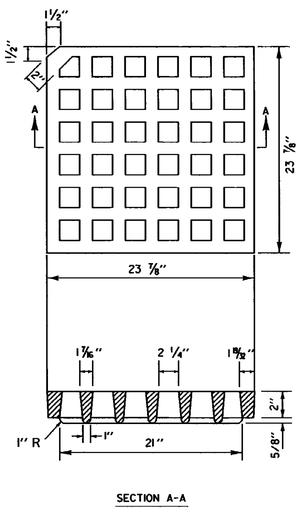
4 FLANGES UNLESS OTHERWISE INDICATED.

FRAMES TO BE FURNISHED WITH 3 FLANGES WHEH USED IN CONJUNCTION WITH CURB OR AS DIRECTED BY THE ENGINEER.



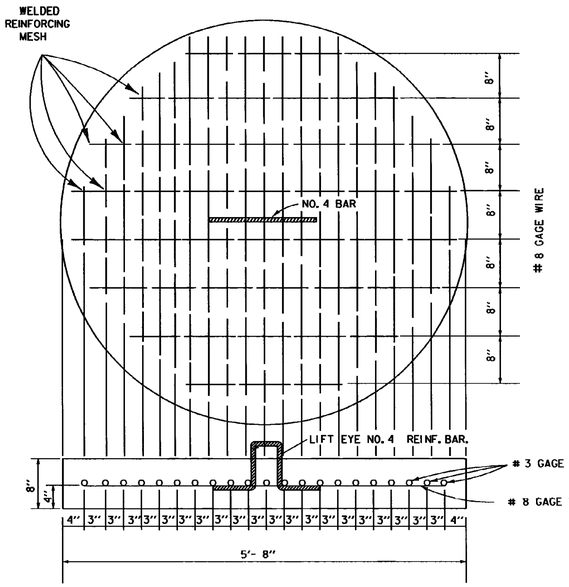
SECTION A-A

FRAME
FOR
TYPE D OR TYPE E
GRATE

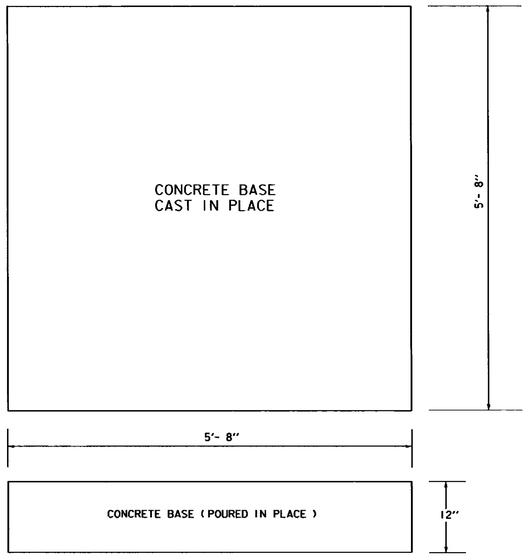


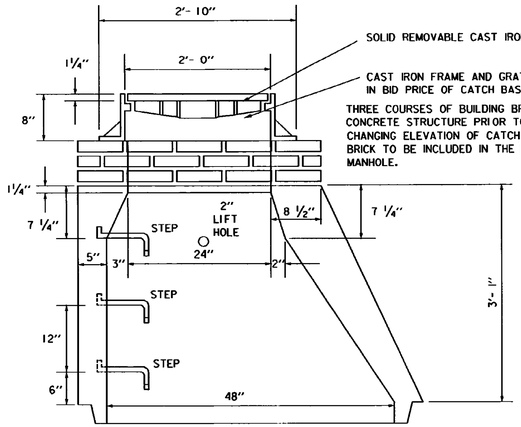
SECTION A-A

CAST IRON GRATE
TYPE D



PRECAST REINFORCED CONCRETE BASE

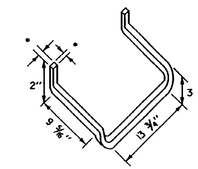




SOLID REMOVABLE CAST IRON COVER OR GRATE

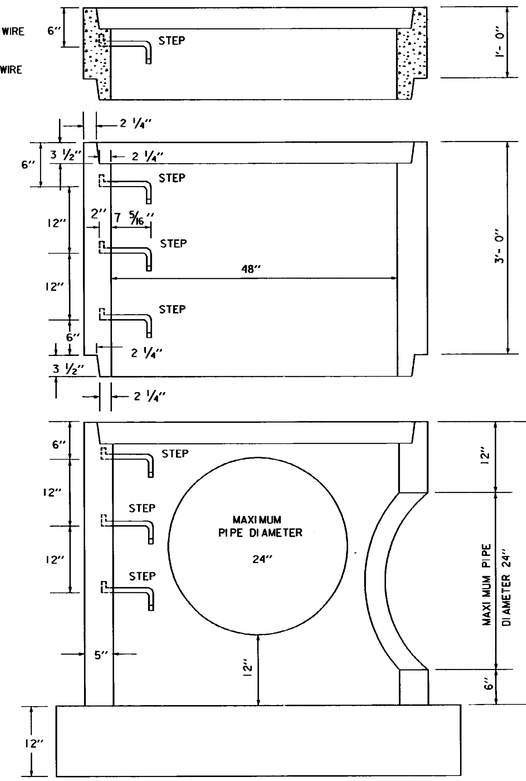
CAST IRON FRAME AND GRATE, OR COVER, TO BE INCLUDED IN BID PRICE OF CATCH BASIN OR MANHOLE.

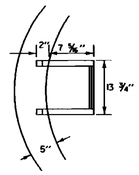
THREE COURSES OF BUILDING BRICK TO BE PLACED ON TOP OF CONCRETE STRUCTURE PRIOR TO PLACING FRAME TO FACILITATE CHANGING ELEVATION OF CATCH BASIN OR MANHOLE WHEN REQUIRED. BRICK TO BE INCLUDED IN THE BID PRICE FOR CATCH BASIN OR MANHOLE.



ALUMINUM STEP
(DROP FRONT)

• - INDIVIDUAL METAL RUNGS SHALL HAVE A MINIMUM DIMENSION OF 1" OR SHALL BE PAINTED OR OTHERWISE TREATED TO RESIST CORROSION AND RUSTING.





STEP DETAIL
TOP VIEW

REVISIONS AND CORRECTIONS

DEC. 6, 1971 - ORIGINAL APPROVAL
OCT. 22, 1976 - CAST IRON GRATE WITH FRAME, TYPE E ADDED
OCT. 6, 1978 - TYPE D GRATE ADDED
OCT. 30, 1985 - IMPERFECT TRENCH DETAILS DELETED
FEB. 17, 1993 - SECOND CAST IRON GRATE TYPE E ADDED.
MAR. 23, 1994 - ADDED NOTE FOR STEP DETAILS
JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

APPROVED

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.

Gordon B. MacArthur
DIRECTOR OF ENGINEERING

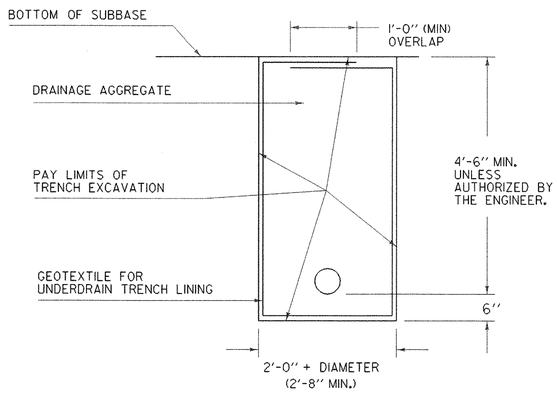
Robert M. Murphy
DESIGN ENGINEER

PRECAST REINFORCED CONCRETE CATCH BASIN W/ CAST IRON GRATE
PRECAST REINFORCED CONCRETE MANHOLE W/ CAST IRON COVER

CAST IRON GRATE WITH FRAME, TYPE D
CAST IRON GRATE WITH FRAME, TYPE E

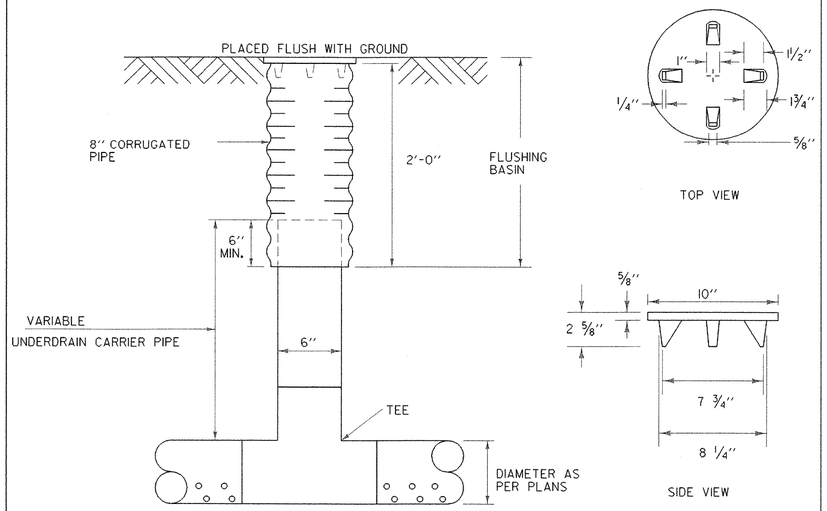
VERMONT AGENCY OF TRANSPORTATION

STANDARD
D-15



DRAINAGE AGGREGATE SHALL MEET THE REQUIREMENTS OF SECTION 704.

UNDERDRAIN



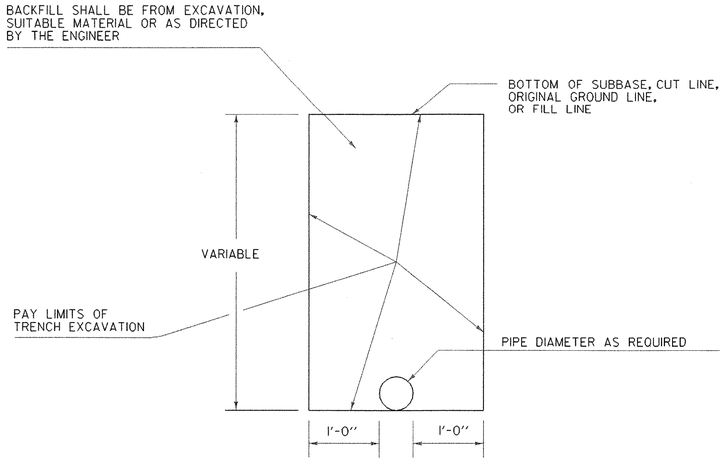
A FLUSHING BASIN AT THE BEGINNING OF A RUN SHALL BE A 90° ELBOW.

TOP VIEW

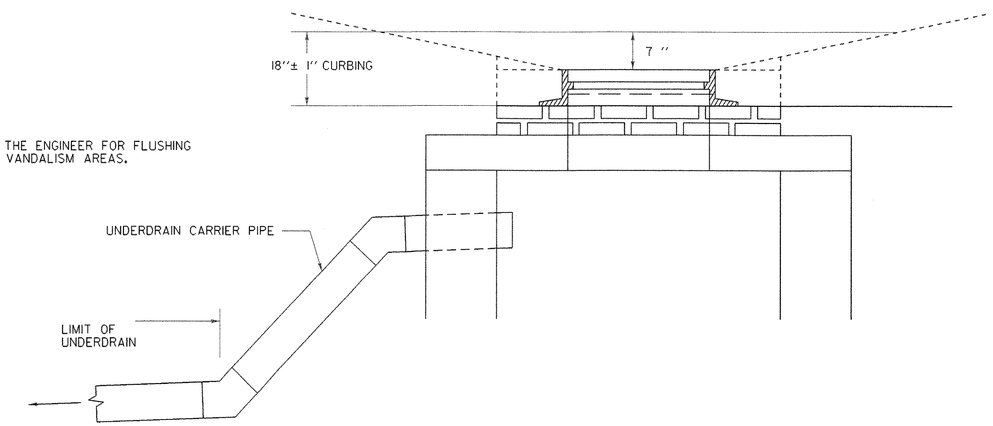
SIDE VIEW

CAST IRON COVER

UNDERDRAIN FLUSHING BASIN

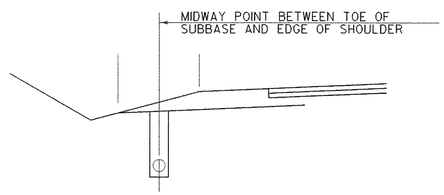


UNDERDRAIN CARRIER PIPE



TO BE USED AS SHOWN OR AS DIRECTED BY THE ENGINEER FOR FLUSHING IN AREAS OF LAWNS, SCHOOLS, AND POSSIBLE VANDALISM AREAS.

URBAN TYPE FLUSHING INSTALLATION



UNDERDRAIN TO BE LAID AS SHOWN ABOVE, AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER

UNDERDRAIN LOCATION

GENERAL NOTES

1. GRADE FOR UNDERDRAIN PIPE SHALL BE PARALLEL WITH THE GRADE OF THE ROAD UNLESS OTHERWISE SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
2. THE UNDERDRAIN SHALL BE TAKEN TO A PROPER OUTLET AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
3. ELBOWS, T'S, AND OTHER JUNCTION UNITS NECESSARY FOR PROPER INSTALLATION OF THE UNDERDRAIN, AS DIRECTED BY THE ENGINEER, SHALL BE INCLUDED IN THE UNIT BID PRICE FOR UNDERDRAIN OR CARRIER PIPE.
4. A YIELDING MARKER POST SHALL BE PLACED NEXT TO THE FLUSHING BASIN OR AS DIRECTED BY THE ENGINEER.

NOT TO SCALE

REVISIONS AND CORRECTIONS

AUG 13, 2007 - ORIGINAL APPROVAL DATE

APPROVED

Kevin L. Marshia
ROADWAY, TRAFFIC & SAFETY ENGINEER

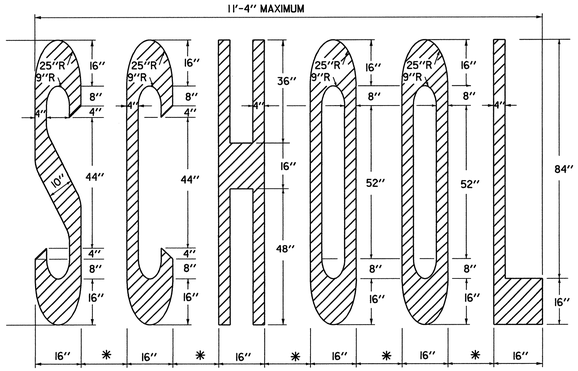
Richard Fetherolf
DIRECTOR OF PROGRAM DEVELOPMENT

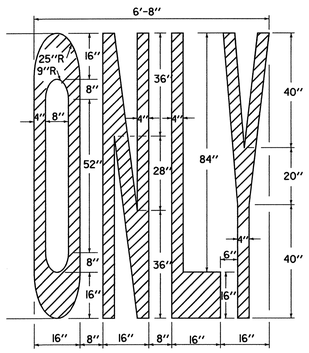
Mark D. Richter
FEDERAL HIGHWAY ADMINISTRATION

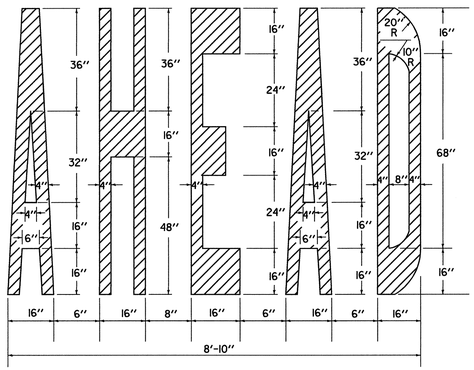
UNDERDRAIN CONSTRUCTION DETAILS

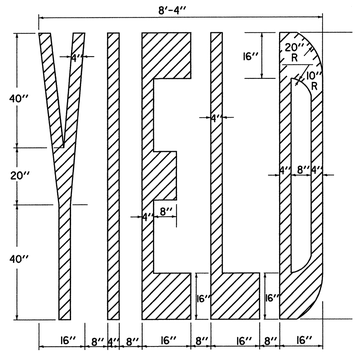
VERMONT AGENCY OF TRANSPORTATION

STANDARD D-30



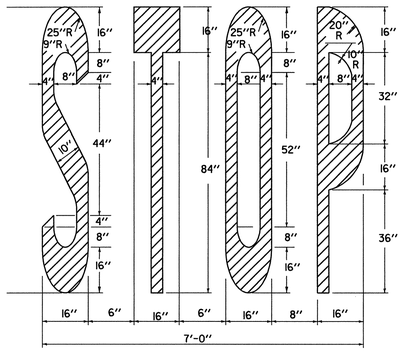


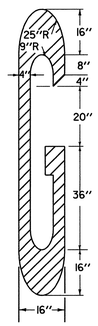




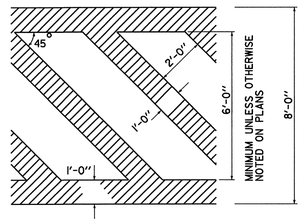
LETTER HEIGHT

DIMENSIONS ARE FOR 8' - 4" LETTER HEIGHTS. A LESSER HEIGHT OF 8' - 0" IS ACCEPTABLE AS LONG AS THE DIMENSIONS ARE PROPORTIONAL TO THE DETAILS SHOWN SEE NOTE BELOW.



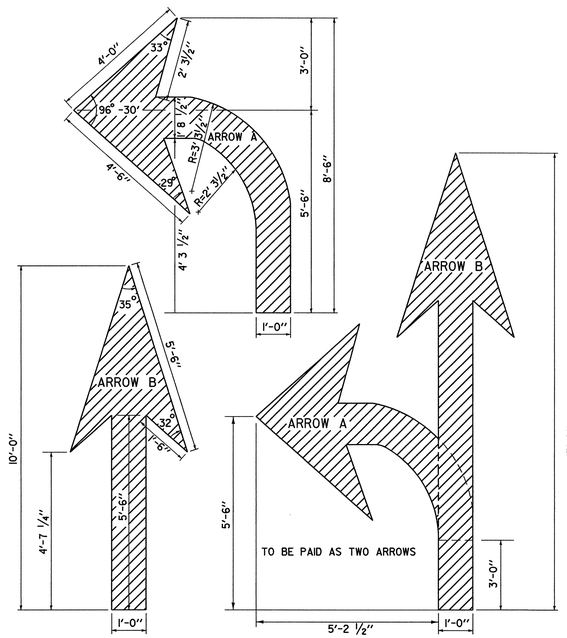


THE LETTER "G" PERTAINS TO THE WORD "SIGNAL" FOR OTHER LETTERS, SEE ABOVE.

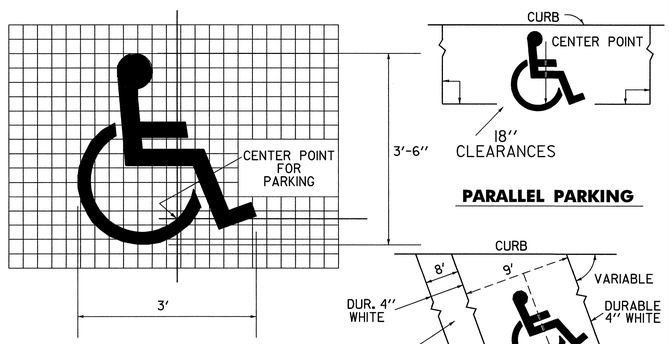


ARROWS AND WORD MARKINGS THAT CONFORM TO THE DIMENSIONS SHOWN ON THIS SHEET OR AS DETAILED IN THE BOOKLET ENTITLED "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS" AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (CURRENT EDITION) PREPARED BY THE FEDERAL HIGHWAY ADMINISTRATION WILL BE ACCEPTABLE.

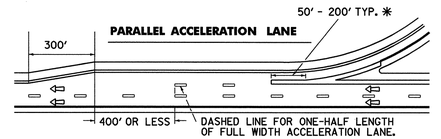
LETTER IN WORD MARKING AND CROSSWALK DETAILS



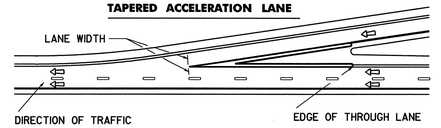
ARROW DETAILS

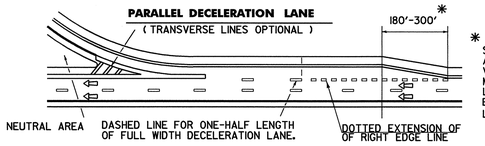


HANDICAPPED PAVEMENT MARKING DETAILS

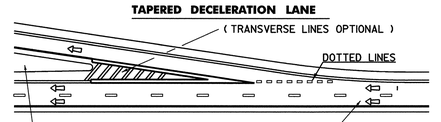


* USE LONGER LENGTH TO EMPHASIZE SITUATIONS WHERE THE CROSSING REQUIRES UNUSUAL CARE SUCH AS HIGH VOLUME MERGE AREAS.





* SHORTER TAPERS GIVE A BETTER TARGET VALUE, HOWEVER ALIGNMENT MAY DICTATE A LONGER TAPER. RESIDENT ENGINEER SHALL ESTIMATE LENGTH.

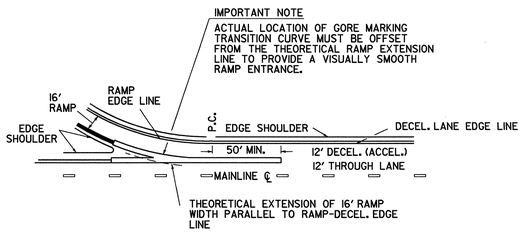


TRANSVERSE LINES SHALL CONSIST OF A WHITE LINE 2 TIMES WIDER THAN THE MAIN LINE MARKING WIDTH SPACED 5'-0" C-C AND SET AT 45° TO MAIN LINE EDGE LINES. THESE MARKINGS SHALL BE USED TO INCREASE VISIBILITY DUE TO DIFFICULT VERTICAL OR HORIZONTAL ALIGNMENT, AS DIRECTED BY THE RESIDENT ENGINEER.

LEGEND

RAMP MARKINGS

- WHITE LINES
- YELLOW LINES
- CHANNELIZATION WHITE LINES
- WHITE DOTTED LINES (2' SOLID - 4' GAP)
- DIRECTION OF TRAFFIC FLOW



DETAIL - GORE MARKING TRANSITION CURVE

THIS SHEET IS NOT TO SCALE

OTHER STDS. REQUIRED

REVISIONS AND CORRECTIONS

SEPT. 10, 1987 - DATE OF ORIGINAL ISSUE
JAN. 23, 1989 - ADDED DOTTED LINES, "SIGNAL" DIMENSIONS, CLARIFIED LETTER HEIGHT.
AUG. 18, 1995 - MISC. NOTE CHANGES
FEB. 1, 1999 - CHANGED NOTES FOR ACCELERATION & DECELERATION LANES

APPROVED

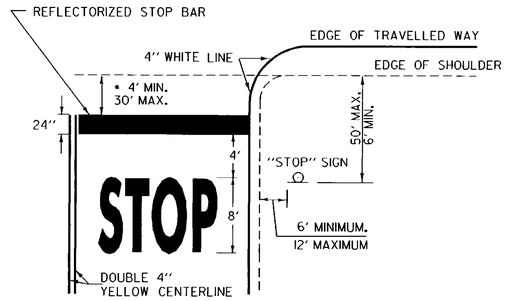
Robert F. Stattler Actg.
DIRECTOR OF PROJECT DEVELOPMENT

PAVEMENT MARKING DETAILS

/traf/std/stdel91.dgn/stdel91.1

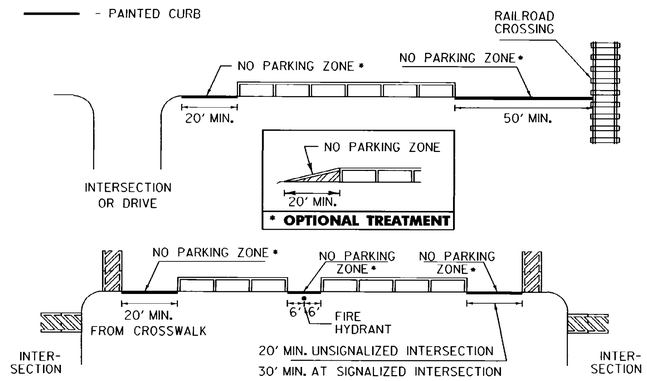
VERMONT AGENCY OF TRANSPORTATION

STANDARD E-191

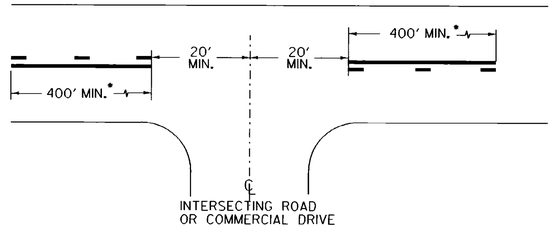


• THE "DESIRED STOPPING POINT" IS THE LOCATION BASED ON SITE CONDITIONS THAT BEST ALLOWS THE STOPPED VEHICLE TO VIEW THE APPROACHING TRAFFIC.

STOP BAR LAYOUT



NO PARKING LAYOUT DETAILS



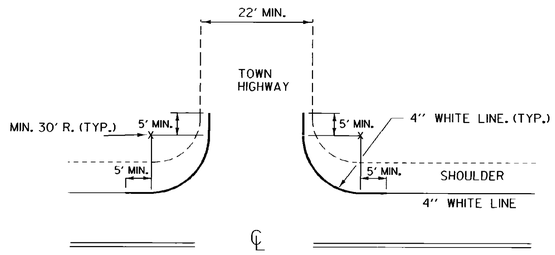
• THE SOLID LINE SHALL BE PAIRED WITH EITHER A SOLID OR DASHED LINE DEPENDING ON SIGHT DISTANCE AVAILABILITY IN THE OPPOSING DIRECTION. ADJUSTMENTS TO THE 40 FOOT CENTERLINE OPENING MAY BE MADE TO ACCOMMODATE SKEWED INTERSECTIONS.

CENTERLINE BREAKES:

A. AT ALL STATE HIGHWAYS AND TOWN HIGHWAYS, INCLUDING CLASS 4 TH'S. THAT HAVE STOP AND LEGAL LOAD LIMIT SIGNS INSTALLED

B. COMMERCIAL DRIVES:
   1. WHERE A SEPERATE TURN LANE EXISTS ON THE MAIN LINE (LT. OR RT.)
   2. SIGNIFICANT TRAFFIC VOLUMES EXISTS.
   3. IF MOTORISTS NEED ASSISTANCE TO DEFINE ENTRANCE POINTS.

CENTERLINE LAYOUT

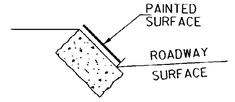


EDGELINES SHALL BE APPLIED TO ALL STATE HIGHWAYS AND SHOULD BE MAINTAINED AT A CONSTANT DISTANCE FROM THE CENTERLINE UNLESS PAVEMENT WIDTH INCREASES TO ALLOW WIDER LANES.

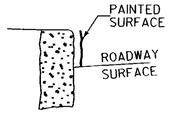
APPLY EDGELINE AS DETAILED ON ALL PAVED CLASS 1 & CLASS 2 TOWN HIGHWAYS AND ANY CLASS 3 TOWN HIGHWAY 22 FEET OR MORE IN WIDTH.

IF MIN. 30 FOOT RADIUS CANNOT BE OBTAINED, OR THE TOWN HIGHWAY IS NOT PAVED, BREAK THE EDGELINE USING AN 80 FOOT GAP AT INTERSECTION.

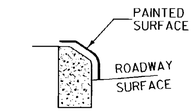
EDGELINE LAYOUTS



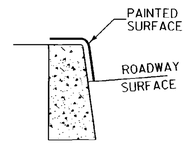
GRANITE SLOPE EDGING



VERTICAL GRANITE CURB

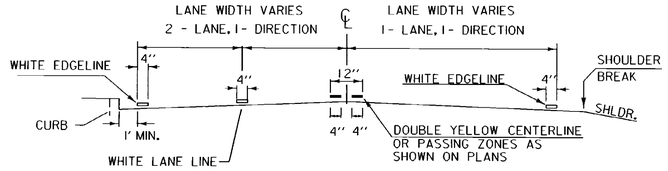


TYPE A (CONCRETE)

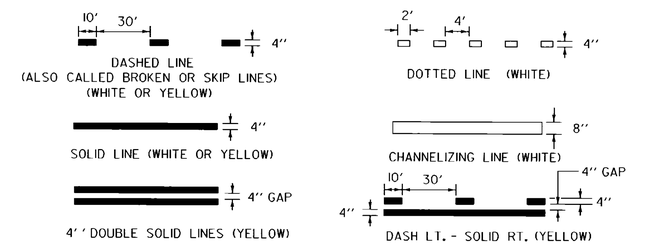


TYPE B (CONCRETE)

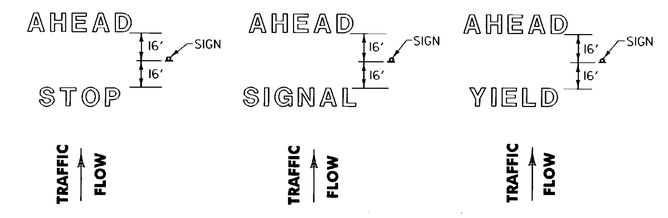
PAINTED CURB



PAVEMENT MARKING PLACEMENT DETAIL

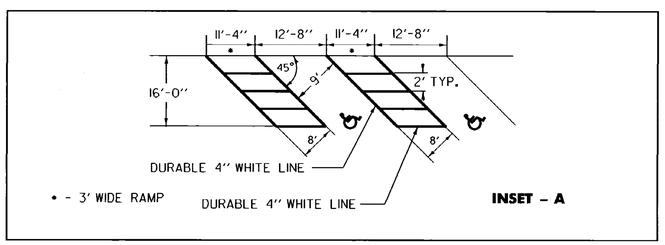


PAVEMENT MARKING LINE DETAILS



LETTER IN WORD MARKING SPACING DETAIL

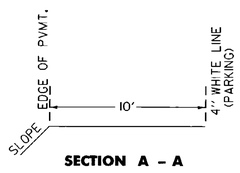
NOTE: SINGLE WORDS CENTERED ON SIGN ie: SCHOOL OR YIELD



INSET - A

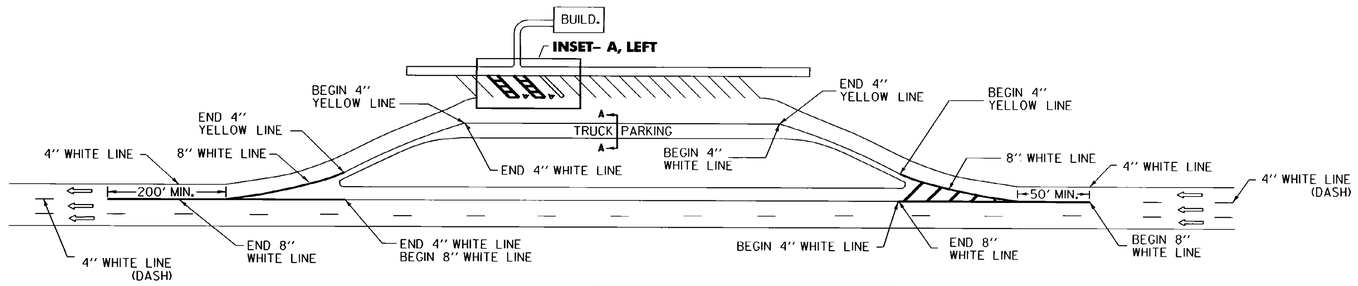
NOTE:

SEE STANDARD SHEET E-191 FOR HANDICAP SYMBOL POSITIONING AND DETAIL.



SECTION A - A

TRUCK PARKING DETAIL



REST AREA PARKING DETAILS

THIS SHEET IS NOT TO SCALE

OTHER STDS. E - 191, E - 192 REQUIRED

REVISIONS AND CORRECTIONS

AUG. 18, 1995 - DATE OF ORIGINAL ISSUE

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.

APPROVED

DIRECTOR OF ENGINEERING

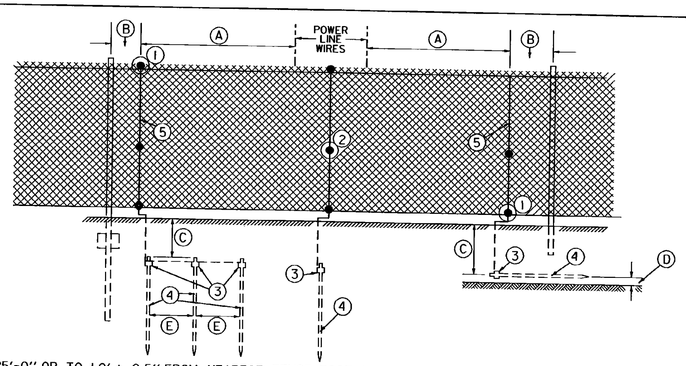
TRAFFIC AND SAFETY ENGINEER

PAVEMENT MARKING DETAILS

/traf/std/stdel93.dgn/stdel93.i

VERMONT AGENCY OF TRANSPORTATION

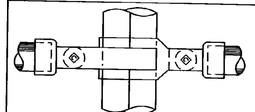
STANDARD E-193



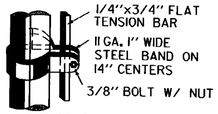
(A) 25'-0" OR TO 1.0' ± 0.5" FROM NEAREST FENCE POST (AT RIGHT ANGLE TO POWER LINE)
(B) MAXIMUM DISTANCE 1.0' (± 0.5")
(C) MINIMUM DISTANCE 1.0' (± 1.0")
(D) 2.0" (± 0.5")
(E) MINIMUM DISTANCE 6.0
(1) CONNECTOR, (2) CONNECTOR, } SUITABLE FOR WIRE GAUGES UTILIZED AND FOR DISSIMILAR METALS
(3) GROUND ROD CLAMP
(4) COPPER CLAD STEEL CORE GROUND ROD 5/8" X 8'-0"
(5) CONDUCTOR NO. 6 AWG COPPER SOFT DRAWN OR NO. 4 AWG ALUMINUM

INSTALLATION METHOD OF PROTECTIVE GROUNDING AT POWER LINE CROSSINGS

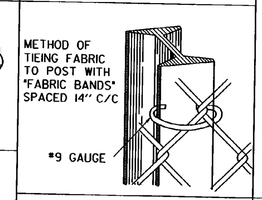
END CLAMP

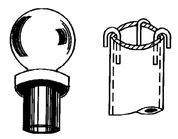


CORNER CLAMP (ADJUSTABLE)



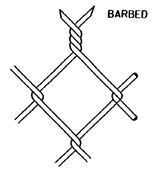
TENSION BAR BAND



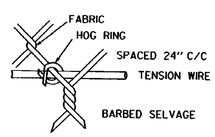


FOR END, CORNER, PULL AND GATE POSTS

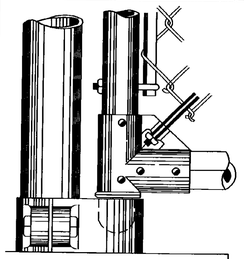
BALL TOP



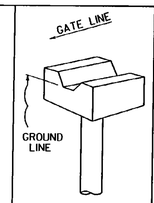
CHAIN LINK FABRIC
#9 GAUGE STEEL WIRE
2" MESH



HOG RING FASTENER

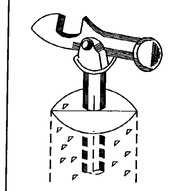


BOTTOM CORNER & HINGE FOR DRIVE GATE

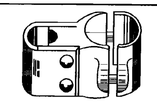


CENTER STOP FOR TWO PANEL GATES

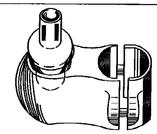
FORK LATCH



HOLDBACK TO HOLD A DRIVE GATE OPEN



TOP HINGE



WALK GATE BOTTOM HINGE

GENERAL NOTES

HEIGHT - AS NOTED ON PLANS

FABRIC - CHAIN LINK, # 9 GAUGE WIRE, WOVEN IN A 2" MESH. TOP AND BOTTOM SELVAGES TO BE BARBED. THE BOTTOM SELVAGE TO BE 2" ABOVE THE GROUND LINE, THE TOP SELVAGE TO BE 1" ABOVE THE TENSION WIRE. WHERE FENCE IS 4 FT. THE TOP EDGE SHALL BE KNUCKLED.

LINE POSTS - 2"x2 1/4" "H" COLUMN, WEIGHT 4.1 LBS. PER FOOT OR 2 3/8" O.D. PIPE, WEIGHT 3.65 LBS. PER FOOT OR APPROVED EQUAL FOR FENCE 6'-0" AND OVER IN HEIGHT. FOR FENCE LESS THAN 6'-0" IN HEIGHT, "H" COLUMNS WEIGHING 2.70 LBS. PER FOOT SHALL BE USED.

TERMINAL POSTS - END, CORNER, AND PULL POSTS, SHALL BE 2 7/8" O.D. PIPE, WEIGHT 5.79 LBS. PER FOOT FOR FENCE 6'-0" AND OVER IN HEIGHT. FOR FENCE LESS THAN 6'-0" IN HEIGHT, 2 3/8" O.D. PIPE, WEIGHING 3.65 LBS. PER FOOT, SHALL BE USED.

POST SPACING - POSTS SHALL BE SPACED EQUIDISTANT ON A MAXIMUM OF 10 FEET CENTER TO CENTER EXCEPT GATE POSTS, WHICH SHALL BE SPACED ACCORDING TO THE REQUIRED GATE OPENING.

POST FOOTINGS - ALL POSTS SHALL BE SET TO A DEPTH OF 2 FEET 10 INCHES IN A 10" DIAMETER CYLINDRICAL SHAPED HOLE 3'-6", FILLED WITH CONCRETE.

ALL FITTINGS AND HARDWARE SHALL BE SHOWN ON THIS SHEET OR EQUAL.

THE EXPOSED SURFACE OF ALL TOPS OF FOOTINGS TO BE SLOPED TO SHED WATER AND PROVIDE A NEAT APPEARANCE WHEN COMPLETED.

FABRIC TIES - FABRIC TO BE FASTENED TO POSTS AND GATE FRAMES WITH # 9 GAUGE WIRE.

TRUSS RODS - SHALL BE 3/8" DIAMETER DIAGONAL BARS WITH TURNBUCKLE.

BRACE RODS - SHALL BE 1 5/8" O.D. PIPE.

TENSION BARS - SHALL BE FLAT 1/4" x 5/4" BARS WITH SQUARE EDGES.

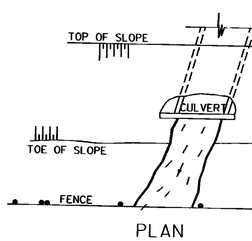
TENSION WIRE - SHALL BE # 9 GAUGE WIRE ATTACHED 1" BELOW TOP SELVAGE AND 2" ABOVE BOTTOM SELVAGE OF FABRIC BY MEANS OF HOG RINGS ON 24" CENTERS.

GATES - GATE FRAMES SHALL BE 1.90" O.D. PIPE ASSEMBLED BY WELDING, RIVETING OR BOLTING AND TO BE FURNISHED WITH ALL THE NECESSARY FITTINGS OVER 6'-0."

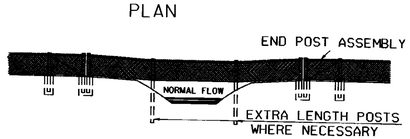
GATE FRAMES SHALL BE 1.66 " O.D. PIPE ASSEMBLED BY WELDING, RIVETING OR BOLTING AND TO BE FURNISHED WITH ALL THE NECESSARY FITTINGS 6'-0" AND LESS.

END SECTION ASSEMBLY - TO BE ERECTED ON A MAXIMUM OF 200 FEET CENTER TO CENTER.

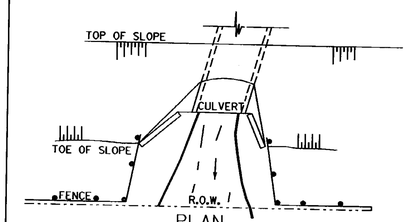
THE WEIGHT TOLERANCE IS 5 PERCENT ABOVE AND 5 PERCENT BELOW. THE TUBULAR SIZES ARE NOMINAL.



PLAN

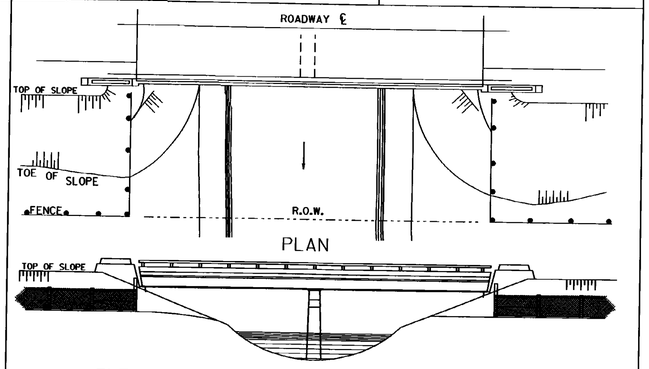


CROSSING AT STREAMS



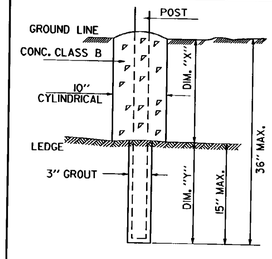
PLAN

ELEVATION AT CULVERT

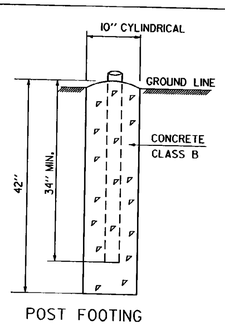


PLAN

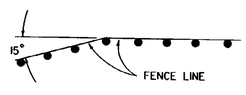
ELEVATION AT BRIDGE WITH PARAPET WALLS



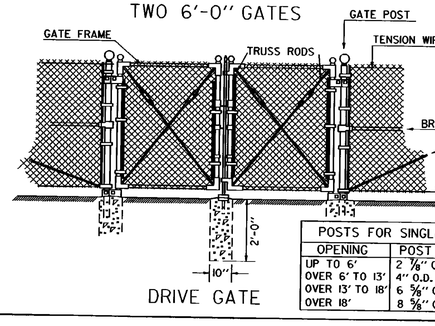
DIM. "Y"= 15" WHEN DIM. "X" VARIES BETWEEN 0" AND 24". WHEN DIM "X" EXCEEDS 24", DIM. "Y" DECREASES ACCORDINGLY.



POST FOOTING

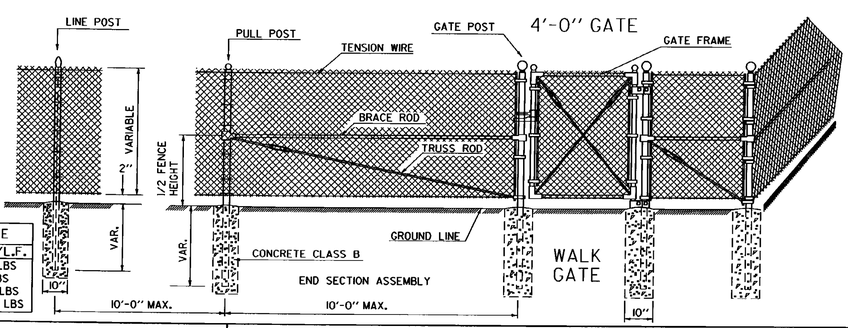


WHERE FENCE LINE HAS A CHANGE OF DIRECTION OF 15 DEGREES OR MORE, CORNER POSTS WITH BRACING SHALL BE ERECTED. WHERE ANGLE IN FENCE LINE IS LESS THAN 15 DEGREES AND EXISTING CONDITIONS REQUIRE TERMINAL POSTS, THEY SHALL BE ERECTED AS DIRECTED BY THE ENGINEER



DRIVE GATE

POSTS FOR SINGLE SWING GATE		
OPENING	POST SIZE	WGT./L.F.
UP TO 6'	2 7/8" O.D.	5.79 LBS
OVER 6' TO 13'	4" O.D.	9.11 LBS
OVER 13' TO 18'	6 5/8" O.D.	18.97 LBS
OVER 18'	8 5/8" O.D.	24.70 LBS



END SECTION ASSEMBLY

WALK GATE

REVISIONS AND CORRECTIONS

DEC. 6, 1971- ORIGINAL APPROVAL DATE
JULY 28, 1975- VINYL COATED FABRIC ADDED
FEB. 1, 1979- CHANGE TOP RAIL TO TENSION WIRE
JUNE 1, 1994 - REISSUED, WITHOUT CHANGE, UNDER NEW SIGNATURES.

APPROVED

APPROVED FOR THIS PROJECT AND/OR DESIGN IMPLEMENTATION. FHWA FINAL APPROVAL PENDING.

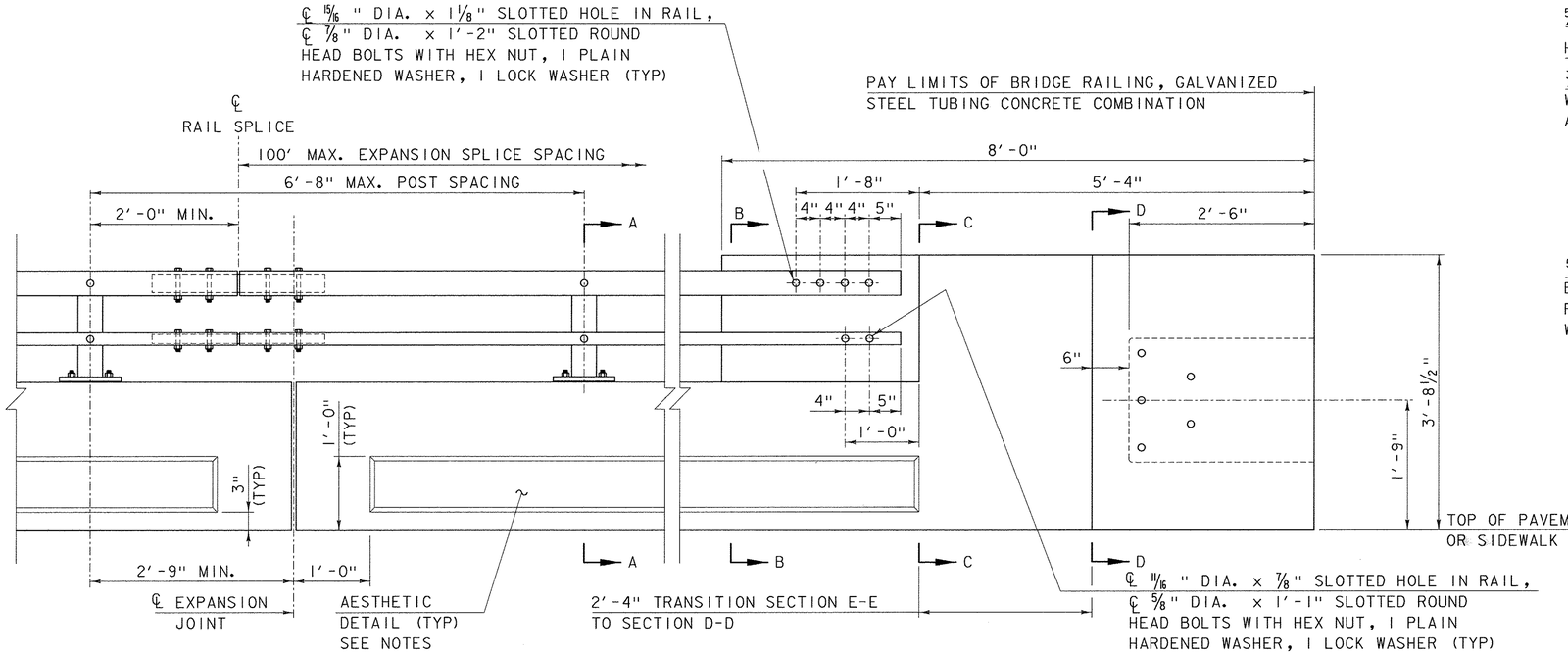
Gordon R. MacArthur, P.E.
DIRECTOR OF ENGINEERING

Robert M. Murphy, P.E.
DESIGN ENGINEER

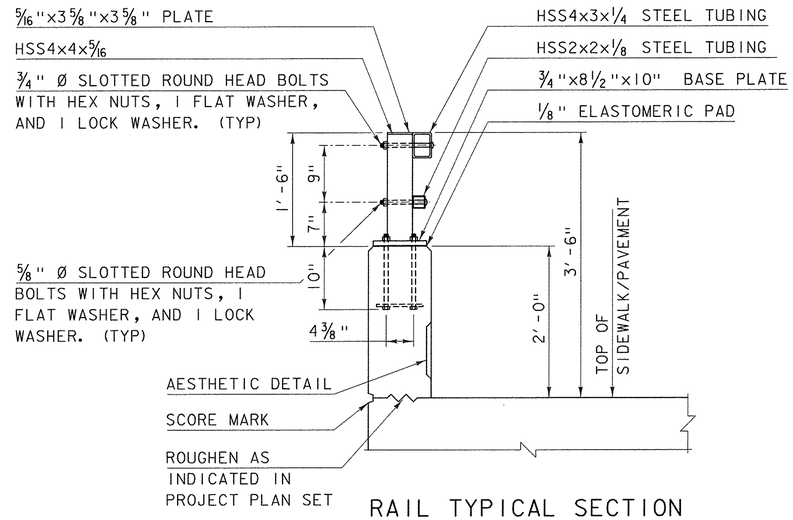
CHAIN LINK FENCE (TYPE 1)
DRIVE GATE FOR CHAIN-LINK FENCE (TYPE 1)
WALK GATE FOR CHAIN-LINK FENCE (TYPE 1)

VERMONT AGENCY OF TRANSPORTATION

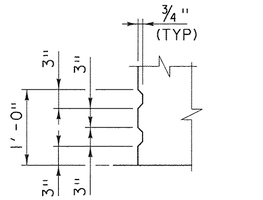
STANDARD
F-2



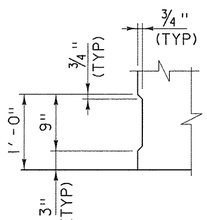
RAILING & END WALL APPROACH



RAIL TYPICAL SECTION

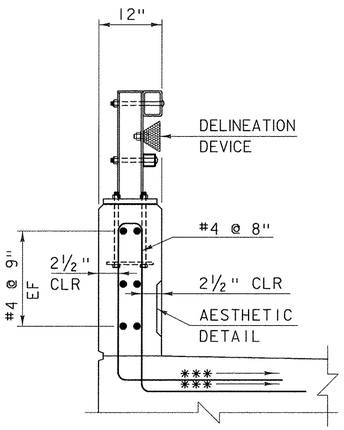


AESTHETIC DETAIL A

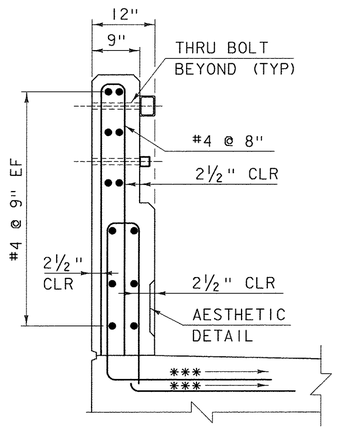


AESTHETIC DETAIL B

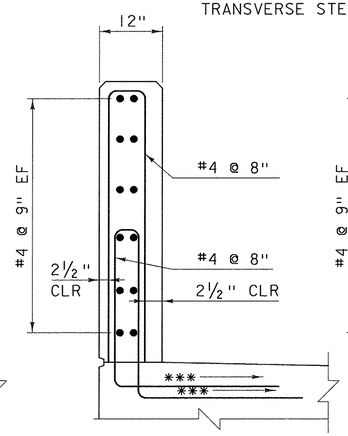
NOTE:
EF = EACH FACE
3" CLEAR, UNLESS OTHERWISE
SPECIFIED ON THE PLANS.
2'-2" BAR LAP UNLESS OTHERWISE
SPECIFIED ON THE PLANS.
*** MATCH SLOPE OF NEAREST
TRANSVERSE STEEL



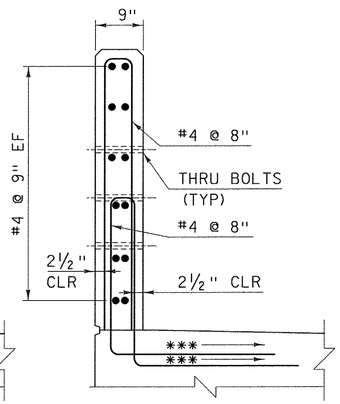
SECTION A-A



SECTION B-B



SECTION C-C



SECTION D-D

NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
2. PRIOR TO GALVANIZING THE ASSEMBLED POST, GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16".
3. ALL POSTS SHALL BE SET NORMAL TO GRADE.
4. SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO BRIDGE POSTS AND PREFERABLY TO AT LEAST 4 POSTS.
5. HOLES IN RAILS FOR TUBE ATTACHMENT MAY BE FIELD-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
6. BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 100 FT-LB).
7. RAIL TUBES SHALL BE ATTACHED USING 3/4" FULL DIAMETER BODY ASTM A 449 (TYPE I) ROUND HEAD BOLTS INSERTED THROUGH THE FACE OF THE TUBE.
8. SEE STANDARD DRAWING G-1 FOR DETAILS OF DELINEATORS. A DELINEATOR SHALL BE INSTALLED AT 30 FOOT SPACING OR THE NEAREST POST. WHITE IS TO BE INSTALLED ON THE DRIVER'S RIGHT. FOR ONE WAY BRIDGES, YELLOW IS TO BE INSTALLED ON THE DRIVER'S LEFT. PAYMENT FOR DELINEATORS SHALL BE INCIDENTAL TO OTHER ITEMS.
9. AESTHETIC TREATMENT TYPE SHALL BE APPLIED AS SPECIFIED IN THE CONTRACT PLANS. IF NONE IS SPECIFIED IT SHALL NOT BE USED. AESTHETIC TREATMENT DETAILED ON THIS SHEET MAY ALSO BE APPLIED ON THE FASCIA SIDE OF THE RAIL, IF SPECIFIED IN THE CONTRACT PLANS.
10. BRIDGE RAILING SHALL HAVE A RUBBED FINISH IN ACCORDANCE WITH SECTION 501.
11. THIS RAILING MEETS THE REQUIREMENTS FOR A NCHRP REPORT 350 TL-4 SERVICE LEVEL.

OTHER STDS. REQUIRED: G-1

REVISIONS AND CORRECTIONS

AUGUST 22, 2012 - ORIGINAL APPROVAL

APPROVED

Wm. Michael Hedges
STRUCTURES ENGINEER

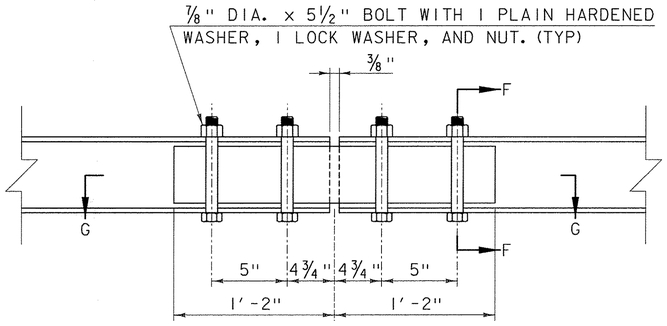
Richard Tetreault
DIRECTOR OF PROGRAM DEVELOPMENT

Mark D Richter
FEDERAL HIGHWAY ADMINISTRATION

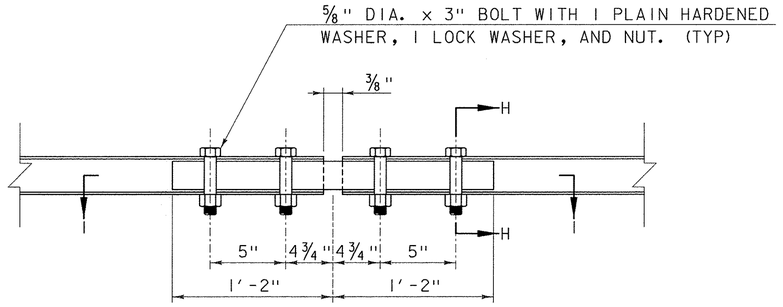
BRIDGE RAILING, GALVANIZED STEEL TUBING / CONCRETE COMBINATION

VERMONT AGENCY OF TRANSPORTATION

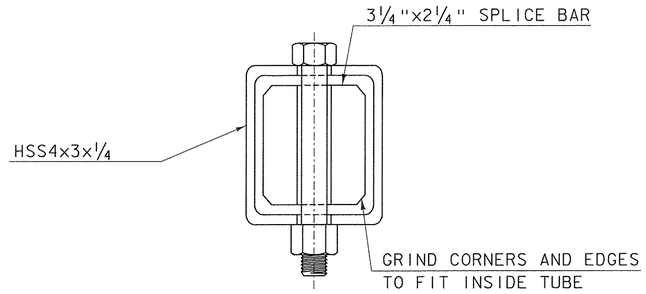
STANDARD S-352A



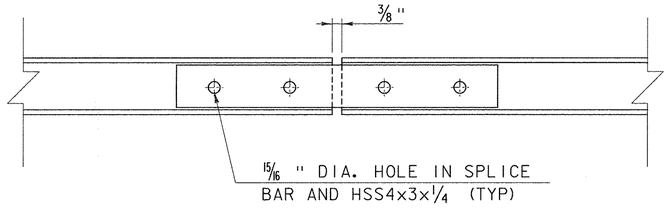
TOP RAIL FIXED SPLICE DETAIL



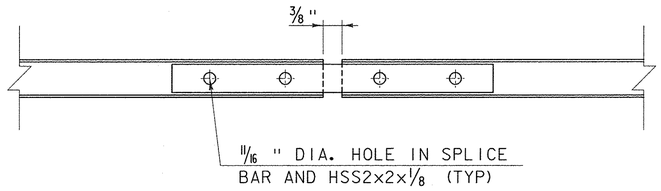
BOTTOM RAIL FIXED SPLICE DETAIL



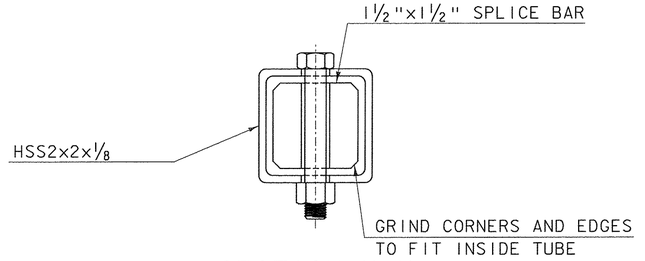
SECTION F-F



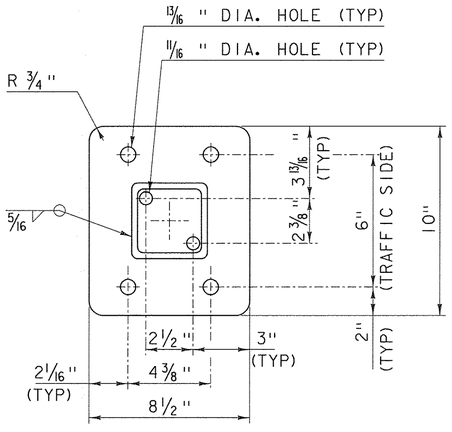
SECTION G-G



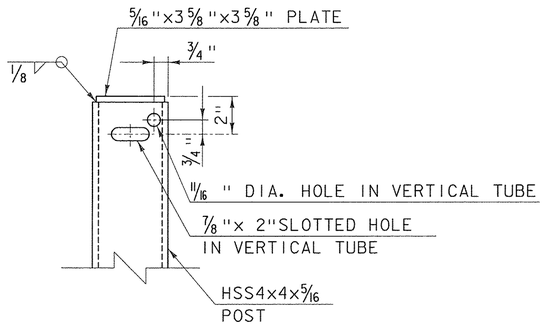
SECTION I-I



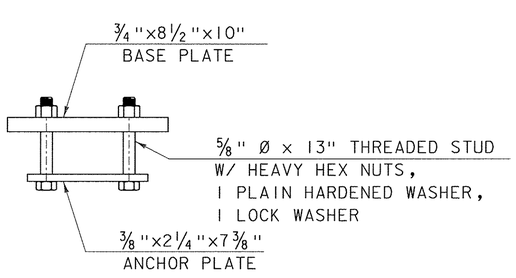
SECTION H-H



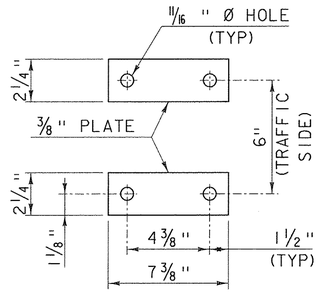
BASE PLATE



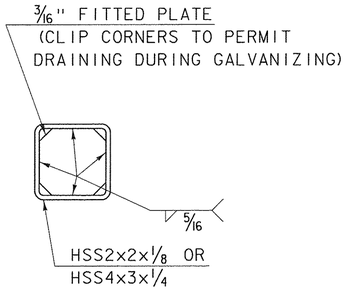
VERTICAL TUBE DETAIL (FRONT VIEW)



RAIL POST ANCHORAGE



ANCHOR PLATES



END OF RAIL DETAIL

OTHER STDS. REQUIRED: G-1

REVISIONS AND CORRECTIONS

AUGUST 22, 2012 - ORIGINAL APPROVAL

APPROVED

Wm. Michael Hedges
STRUCTURES ENGINEER

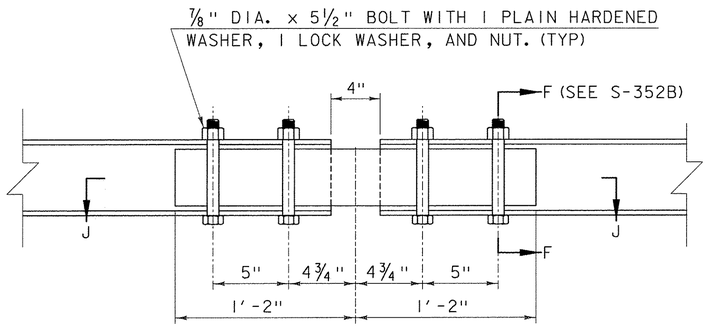
Richard Fetherston
DIRECTOR OF PROGRAM DEVELOPMENT

Mark D. Richter
FEDERAL HIGHWAY ADMINISTRATION

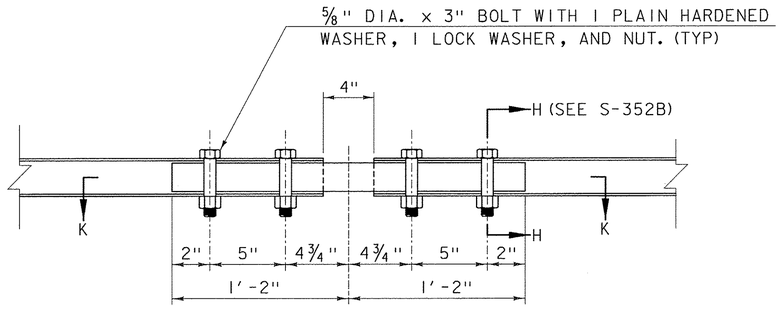
BRIDGE RAILING, GALVANIZED STEEL TUBING / CONCRETE COMBINATION

VERMONT AGENCY OF TRANSPORTATION

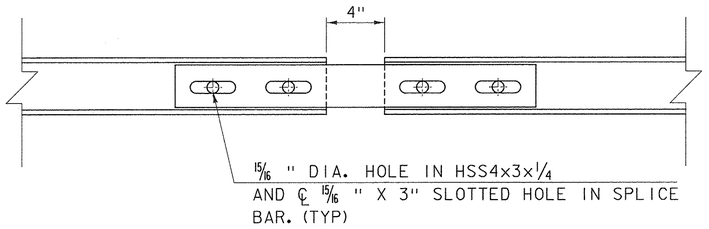
STANDARD S-352B



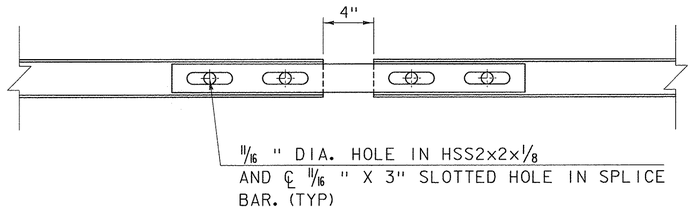
TOP RAIL EXPANSION SPLICE DETAIL



BOTTOM RAIL EXPANSION SPLICE DETAIL



SECTION J-J



SECTION K-K

OTHER STDS. REQUIRED: G-1

REVISIONS AND CORRECTIONS

AUGUST 22, 2012 - ORIGINAL APPROVAL

APPROVED

STRUCTURES ENGINEER

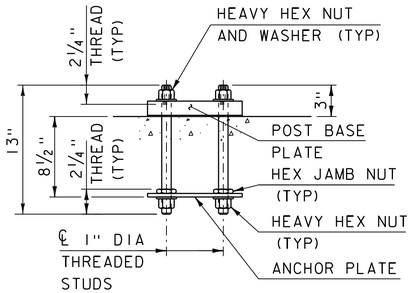
DIRECTOR OF PROGRAM DEVELOPMENT

FEDERAL HIGHWAY ADMINISTRATION

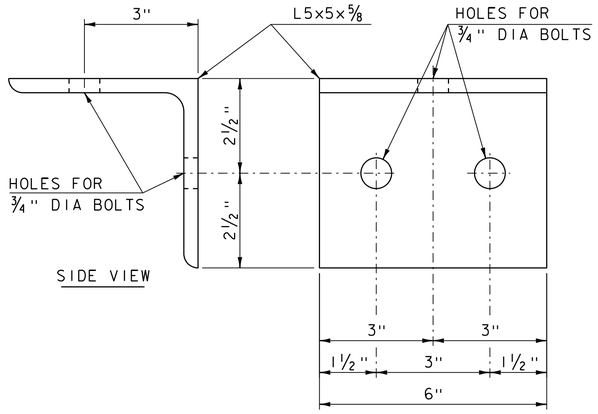
BRIDGE RAILING, GALVANIZED STEEL TUBING / CONCRETE COMBINATION

VERMONT AGENCY OF TRANSPORTATION

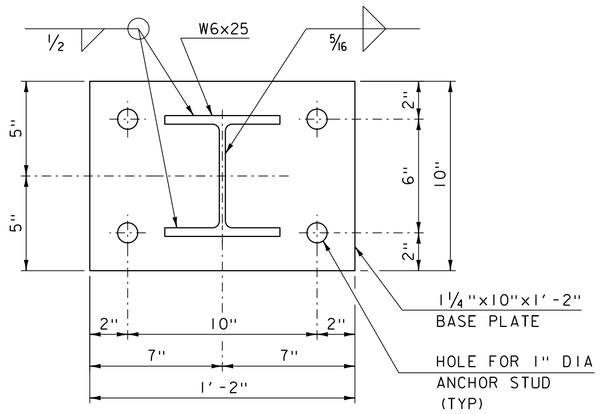
STANDARD S-352C



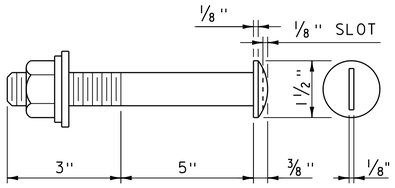
RAILING POST ANCHORAGE



RAILING ANGLE DETAILS

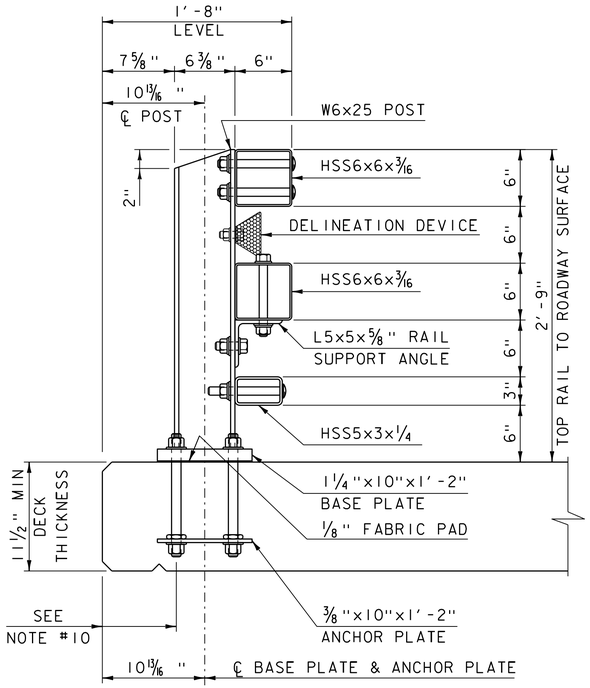


BASE PLATE DETAIL

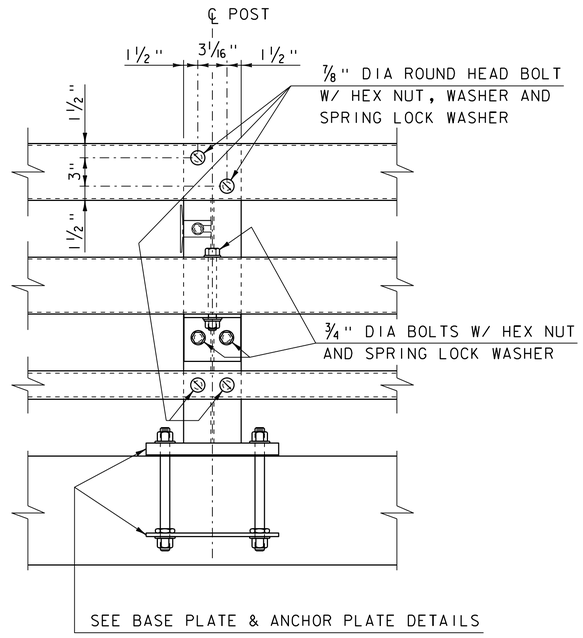


ROUND HEAD BOLT DETAIL

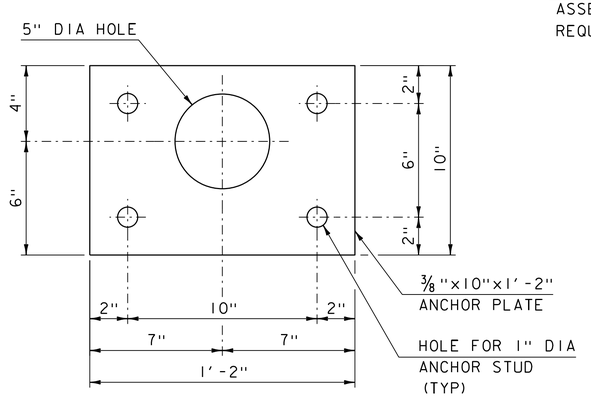
⅞" DIA ROUND HEAD BOLT (A449 TYPE 1), W/ HEX NUT, WASHER AND SPRING LOCK WASHER



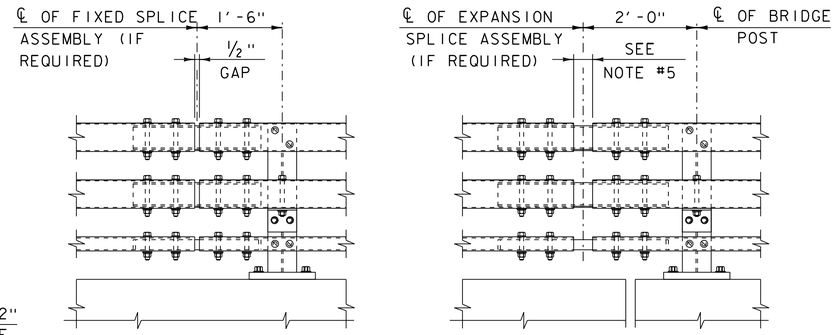
RAILING SECTION



RAILING ELEVATION



ANCHOR PLATE DETAIL



FIXED SPLICE

EXPANSION SPLICE

RAILING SPLICE DETAIL ELEVATION

A RAILING EXPANSION SPLICE IS REQUIRED IN ANY POST SPACING THAT CONTAINS A SUPERSTRUCTURE EXPANSION JOINT

NOTES:

1. ALL WORK AND MATERIALS SHALL CONFORM TO SECTION 525.
2. PRIOR TO GALVANIZING, GRIND ALL EDGES TO A MINIMUM RADIUS OF 1/16".
3. ALL POSTS SHALL BE SET NORMAL TO GRADE. THE MAXIMUM CENTER TO CENTER SPACING OF BRIDGE RAIL POSTS IS 8'-3".
4. SECTIONS OF RAIL TUBE SHALL BE ATTACHED TO A MINIMUM OF TWO BRIDGE POSTS AND PREFERABLY TO AT LEAST 4 POSTS.
5. RAIL TUBE EXPANSION JOINTS SHALL BE PROVIDED IN ANY RAIL BAY SPANNING THE END OF AN INTEGRAL ABUTMENT BRIDGE AND AT ALL SUPERSTRUCTURE EXPANSION JOINTS. EXPANSION JOINT WIDTH SHALL BE 4" @ 68°F AND WILL BE ADJUSTED IN THE FIELD BY THE ENGINEER FOR OTHER TEMPERATURES.
6. HOLES IN RAILS FOR TUBE ATTACHMENT MAY BE FIELD-DRILLED. HOLES SHALL BE COATED WITH AN APPROVED ZINC-RICH PAINT PRIOR TO INSTALLATION.
7. BOLTS SHALL BE TORQUED SNUG TIGHT (APPROXIMATELY 100 FT-LB).
8. SEE STANDARD DRAWING G-1 FOR DETAILS OF DELINEATORS. A DELINEATOR SHALL BE INSTALLED AT 30 FOOT SPACING OR THE NEAREST POST. WHITE IS TO BE INSTALLED ON THE DRIVER'S RIGHT. FOR ONE WAY BRIDGES, YELLOW IS TO BE INSTALLED ON THE DRIVER'S LEFT. PAYMENT SHALL BE INCIDENTAL TO OTHER ITEMS.
9. ANY BENDING OF RAIL SHALL BE DONE AT THE FABRICATION PLANT ACCORDING TO A PROCEDURE PROVIDED BY THE FABRICATOR.
10. THE MINIMUM DISTANCE FROM THE POST TO AN EXPANSION JOINT SHALL BE DETERMINED BY THE MINIMUM EDGE DISTANCE OF 5" FROM ANY ANCHOR STUD TO THE END OF THE SLAB OR TO THE EXPANSION JOINT RECESS POUR IF ONE IS USED.
11. THIS RAILING MEETS THE REQUIREMENTS FOR A TL-4 SERVICE LEVEL.

REV.	DATE	DESCRIPTION
0	AUGUST 9, 2010	ORIGINAL APPROVAL
1	APRIL 23, 2012	GENERAL UPDATE 2012
2	FEBRUARY 10, 2014	REVISED NOTE 2
3	FEBRUARY 2, 2017	BORDER UPDATE, MISC. REVISIONS
OTHER STANDARDS REQUIRED: G-1, S-364C		
VTRANS AND FHWA APPROVAL ON FILE WITH CONTRACT ADMINISTRATION		

BRIDGE RAILING, GALVANIZED 3 RAIL BOX BEAM

VTrans Working to Get You There VERMONT AGENCY OF TRANSPORTATION

STANDARD

S-364A

1. TRAFFIC CONTROL DEVICES NOT DETAILED IN THE VERMONT AGENCY OF TRANSPORTATION (VAOT) "STANDARD DRAWINGS" OR THE PROJECT PLANS SHALL BE IN ACCORDANCE WITH THE CURRENT "MANUAL ON TRAFFIC CONTROL DEVICES" (MUTCD) AND THE "STANDARD HIGHWAY SIGNS AND MARKINGS" BOOK, AND THEIR LATEST REVISIONS, (SHSM) PUBLISHED BY THE FEDERAL HIGHWAY ADMINISTRATION (FHWA).

2. CONSTRUCTION SIGNS SHALL BE ERECTED BEFORE THE START OF ANY WORK AND SHALL BE COVERED UNTIL WORK COMMENCES, DURING PERIODS OF INACTIVITY OR UPON COMPLETION OF THE WORK. EACH SIGN SHALL BE ERECTED IN A NEAT AND WORKMANLIKE MANNER.

3. DIAMOND SHAPED CONSTRUCTION SIGNS SHALL BE 48 INCH BY 48 INCH.

4. CONSTRUCTION SIGN COVERS SHALL CONSIST OF A PANEL, PAINTED FLAT BLACK, THE SAME SIZE AS THE SIGN IT COVERS. THE PANEL SHALL BE OF WOOD, PLYWOOD, HARDBOARD OR ANY MATERIAL SATISFACTORY TO THE ENGINEER. NO MATERIAL WILL BE APPROVED THAT WILL DETERIORATE BY EXPOSURE TO THE WEATHER DURING THE PROJECT. MOUNTING OF THE PANEL SHALL BE DONE IN SUCH A WAY AS NOT TO DAMAGE THE SIGN FACE MATERIAL.

5. SIGNS SHALL BE MAINTAINED IN A CLEAN AND LEGIBLE CONDITION SATISFACTORY TO THE ENGINEER. 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.

6. NO CROSS-BRACING OR BACK-BRACING TO KEEP POSTS PLUMB WILL BE ALLOWED. CONCRETE FOUNDATIONS, COLLARS OR SOIL BEARING PLATES ARE NOT PERMITTED.

7. CONSTRUCTION SIGNS INSTALLED ON POSTS SHALL BE SET SECURELY IN THE GROUND ON TWO POSTS. THE BOTTOM OF A SIGN SHALL BE AT LEAST FIVE FEET ABOVE THE EDGE OF PAVEMENT AND THE NEAREST EDGE OF A SIGN SHALL BE AT LEAST SIX FEET OUTSIDE THE SHOULDER POINT, FOUR FEET OUTSIDE GUARDRAIL, OR TWO FEET OUTSIDE CURBING OR SIDEWALK. THE INSTALLATION OF SIGNS SHALL BE SUBJECT TO APPROVAL OF THE ENGINEER. IN URBAN AREAS, THE BOTTOM OF THE SIGN SHALL BE AT LEAST SEVEN FEET ABOVE THE SIDEWALK OR EDGE OF PAVEMENT, WHICHEVER IS HIGHER.

8. PORTABLE SIGNS SHALL BE PLACED ON THE EDGE OF ROADWAY AND A MINIMUM OF ONE FOOT ABOVE THE TRAVELED WAY. ALL VEGETATION THAT INTERFERES WITH VISIBILITY OF THE SIGNS SHALL BE REMOVED. WHEN PLACED BEHIND GUARDRAIL, THE BOTTOM OF THE SIGN FACE SHALL BE ABOVE THE TOP OF THE GUARDRAIL.

9. SIGNS SHALL BE REMOVED UPON COMPLETION OF THE WORK AT THE DISCRETION OF THE ENGINEER.

10. ROLL UP CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE VI AND TYPE VII UNLESS OTHERWISE NOTED.

11. SOLID SUBSTRATE CONSTRUCTION SIGNS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) M 268 ["AMERICAN SOCIETY FOR TESTING AND MATERIALS" (ASTM) D 4956] TYPE VIII OR IX REQUIREMENTS UNLESS OTHERWISE NOTED.

12. WHERE CONSTRUCTION SIGN INSTALLATIONS ARE NOT PROTECTED BY GUARDRAIL OR OTHER APPROVED TRAFFIC BARRIERS, ALL SIGN STANDS AND POST INSTALLATIONS SHALL MEET "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 OR THE AASHTO "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION. NO SIGN POSTS SHALL EXTEND OVER THE TOP OF THE SIGN INSTALLED ON SAID POSTS. WHEN ANCHORS ARE INSTALLED, STUBS SHALL NOT BE GREATER THAN FOUR INCHES ABOVE EXISTING GROUND.

13. ROADWAY AND SHOULDER WIDTHS DEPICTED ON THE STANDARD DRAWINGS MAY VARY.

14. THESE STANDARD DRAWINGS ARE INTENDED TO SERVE AS VTRANS STANDARD OPERATING PROCEDURE. IT IS NOTED THAT COMPONENT PARTS OF A TEMPORARY TRAFFIC CONTROL WORK ZONE MAY BE MODIFIED DUE TO FIELD CONDITIONS AT THE DISCRETION OF THE ENGINEER.

REV.	DATE	DESCRIPTION
0	AUG. 6, 2012	ORIGINAL APPROVAL
1	APR. 25, 2016	INSERTED NOTE 3, UPDATED STANDARD NAME

OTHER STANDARDS REQUIRED: NONE

VTRANS AND FHWA APPROVAL ON FILE WITH CONTRACT ADMINISTRATION

TEMPORARY TRAFFIC CONTROL GENERAL NOTES

VTrans Working to Get You There
VERMONT AGENCY OF TRANSPORTATION

STANDARD
T-1

LEGEND

(A) ROAD WORK AHEAD — W20-1

(B) ROAD WORK 500 FT — W20-1

(C) SIDE ROAD WORK AHEAD — VC-869

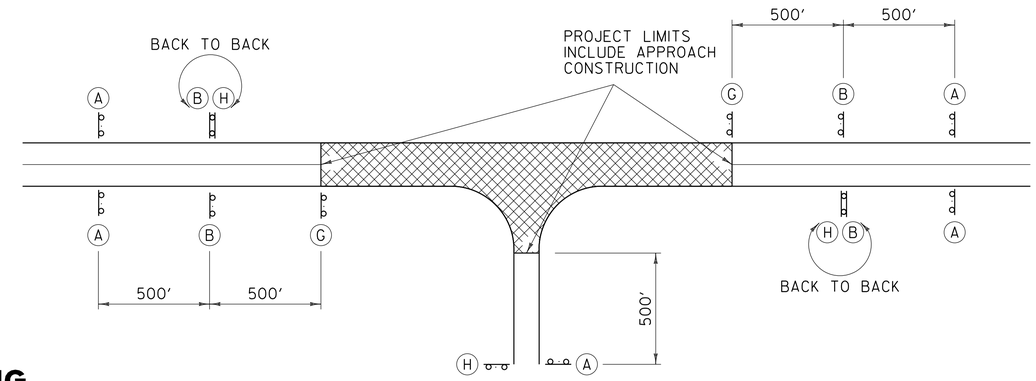
(D) SIDE ROAD WORK 500 FT — VC-869

(E) SIDE ROAD WORK LEFT — VC-869

(F) SIDE ROAD WORK RIGHT — VC-869

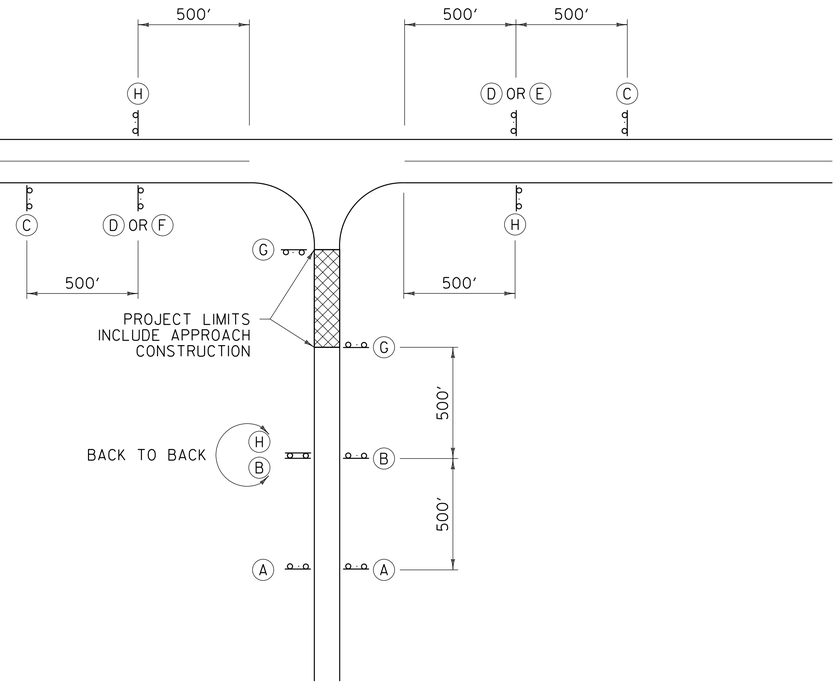
(G) ROAD WORK NEXT XX MILES — G20-1

(H) END ROAD WORK — G20-2



TYPICAL APPROACH SIGNING

FIELD CONDITIONS MAY DICTATE THE ACTUAL PLACEMENT.



SIDE ROAD APPROACH SIGNING

TO BE USED WHEN CONSTRUCTION IS UP TO 1000 FEET FROM THE INTERSECTION. FIELD CONDITIONS MAY DICTATE THE ACTUAL PLACEMENT.

GENERAL NOTES:

1. SIGNS SHOWN ON THIS SHEET ARE INTENDED FOR USE IN PROVIDING ADVANCE WARNING AND INFORMATION ON CONSTRUCTION PROJECTS OVER WHICH TRAFFIC WILL BE MAINTAINED. WHEN ADDITIONAL APPROACH SIGNS OR OTHER TYPES OF ADVANCE SIGNING OR CONTROL ARE NECESSARY, THE PLANS AND/OR THE SPECIFICATIONS FOR THAT PROJECT WILL GIVE THE DETAILS OF THE SIGNS AND DEVICES REQUIRED. FOR ON-PROJECT CONSTRUCTION SIGNS, REFER TO APPROPRIATE STANDARD SHEETS.
2. THE ''ROAD WORK NEXT XX MILES'' SIGN (G20-1) SHALL BE INSTALLED IN ADVANCE OF TEMPORARY TRAFFIC CONTROL ZONES THAT ARE MORE THAN TWO MILES IN LENGTH OR AS DIRECTED BY THE ENGINEER. DISTANCES SHALL BE STATED TO THE NEAREST WHOLE MILE.
3. SIGNS SHALL BE LOCATED AS DETAILED ON THIS SHEET OR AS OTHERWISE SHOWN ON THE PLANS. THEY SHALL APPEAR AT EACH END OF THE HIGHWAY UNDER CONSTRUCTION AND ON ALL INTERSECTING PUBLIC HIGHWAYS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS.

OTHER STDS. REQUIRED: **T–1, T–28**

REVISIONS AND CORRECTIONS

AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED

HIGHWAY SAFETY & DESIGN ENGINEER

DIRECTOR OF PROGRAM DEVELOPMENT

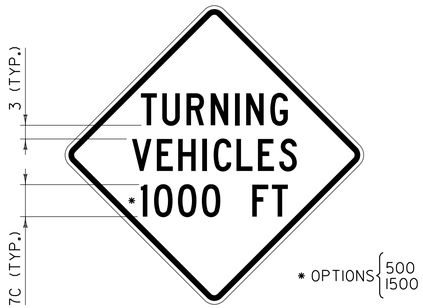
Mark D. Richter

FEDERAL HIGHWAY ADMINISTRATION

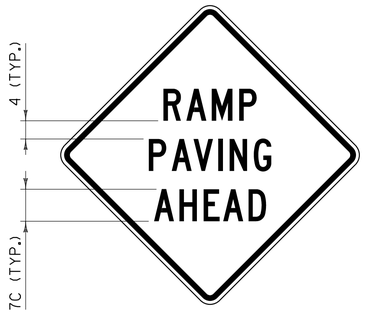
CONVENTIONAL ROADS CONSTRUCTION APPROACH SIGNING

VERMONT AGENCY OF TRANSPORTATION

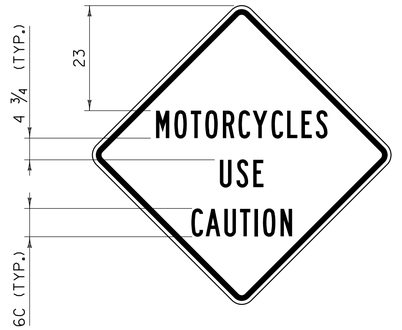
STANDARD T-10



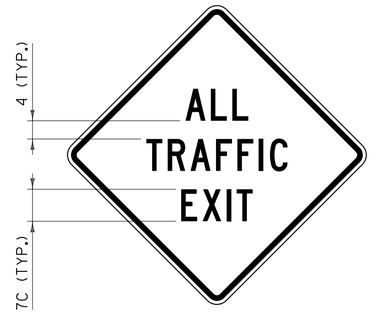
VC–001



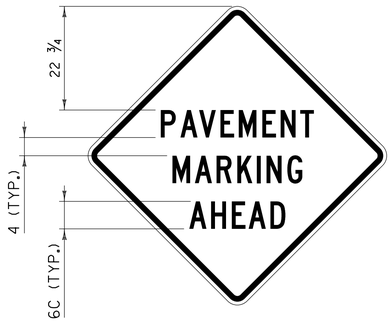
VC–003



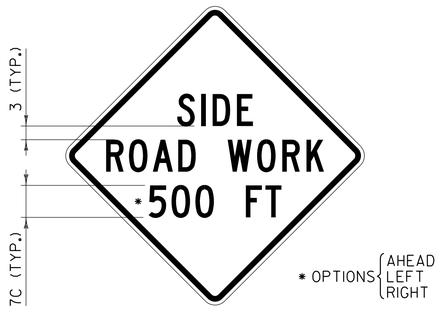
VC–004



VC–008



VC–813



VC–869

VC–874

GENERAL NOTES:

1. COLORS FOR SIGNS SHALL BE BLACK LEGEND AND BORDER ON FLUORESCENT ORANGE BACKGROUND.
2. CONSTRUCTION SIGNS SHALL BE 48 INCH BY 48 INCH. IF SOLID SUBSTRATE SIGNS ARE USED, SIGNS SHALL HAVE CORNERS ROUNDED TO A THREE INCH RADIUS.
3. SIGNS SHALL HAVE 1 1/4 INCH WIDE BORDERS THAT ARE INDENTED 3/4 INCH FROM THE EDGE OF THE SIGN.
4. SIGNS SHALL HAVE THE LEGEND CENTERED HORIZONTALLY AND VERTICALLY ON THE SIGN UNLESS OTHERWISE INDICATED.
5. ALL DIMENSIONS SHOWN IN INCHES.

OTHER STDS. REQUIRED: T–1

REVISIONS AND CORRECTIONS

AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED

HIGHWAY SAFETY & DESIGN ENGINEER

DIRECTOR OF PROGRAM DEVELOPMENT

Mark D. Richter

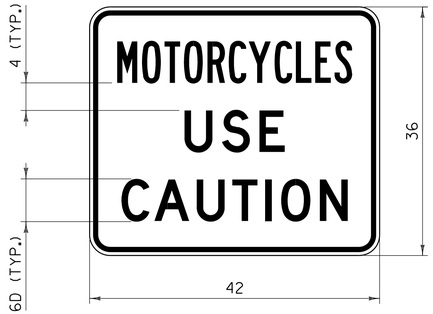
FEDERAL HIGHWAY ADMINISTRATION

CONSTRUCTION SIGN DETAILS

VERMONT AGENCY OF TRANSPORTATION

STANDARD

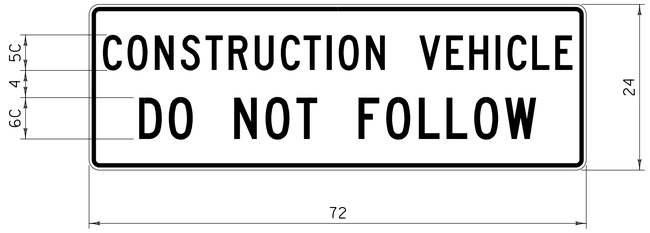
T-28



VC–004P

NOTES:

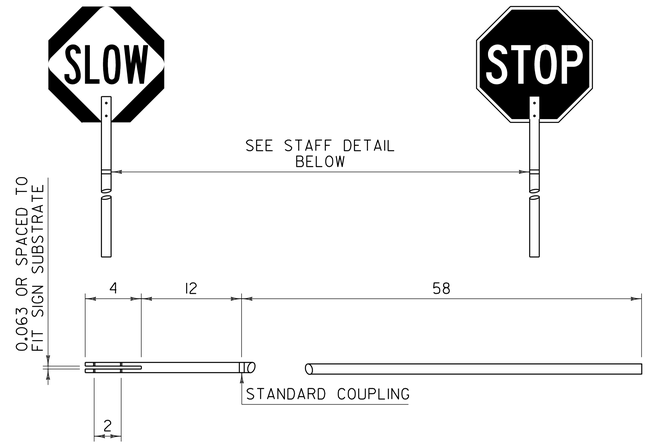
1. CORNERS SHALL BE ROUNDED TO A THREE INCH RADIUS.
2. THE BORDER SHALL BE ¾ INCH WIDE WITH A ½ INCH INDENT FROM THE EDGE OF THE SIGN.
3. ''MOTORCYCLES'' SHALL HAVE A SPECIFIED WIDTH OF 34 INCHES.
4. ''USE'' SHALL HAVE A SPECIFIED WIDTH OF 14 ½ INCHES.
5. ''CAUTION'' SHALL HAVE A SPECIFIED WIDTH OF 32 ¾ INCHES.
6. SIGN SHALL ONLY BE INSTALLED AS A SUPPLEMENTAL TO A PARENT WARNING SIGN AND SHALL NOT BE INSTALLED BY ITSELF.



VC–007

NOTES:

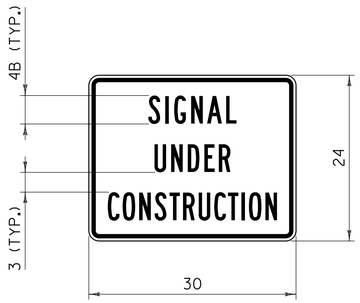
1. CORNERS SHALL BE ROUNDED TO A 1½ INCH RADIUS.
2. THE BORDER SHALL BE ⅝ INCH WIDE WITH A ⅜ INCH INDENT FROM THE EDGE OF THE SIGN.
3. ''CONSTRUCTION VEHICLE'' SHALL HAVE A SPECIFIED WIDTH OF 68 INCHES.
4. ''DO NOT FOLLOW'' SHALL HAVE A SPECIFIED WIDTH OF 57 ½ INCHES.
5. SIGN SHALL BE MOUNTED IN A CONSPICUOUS LOCATION ON THE REAR OF THE CONSTRUCTION VEHICLE.
6. THE SIGN SHALL BE MOUNTED AS NOT TO INTERFERE WITH THE VISIBILITY OF DIRECTIONAL SIGNALS OR TAIL LIGHTS AS REQUIRED BY LAW.
7. SIGN SHALL BE COVERED OR REMOVED WHEN NOT IN USE.



STOP–SLOW PADDLE & STAFF DETAIL

NOTES:

1. REFER TO THE ''STANDARD HIGHWAY SIGNS AND MARKINGS'' BOOK (SHSM) ''TEMPORARY TRAFFIC CONTROL - WARNING SIGNS'' FOR THE STOP-SLOW PADDLE DESIGN.
2. COLORS FOR THE SLOW SIDE OF THE PADDLE SHALL BE BLACK LEGEND AND BORDER ON A FLUORESCENT ORANGE DIAMOND WITH RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING AASHTO M 268 [ASTM D 4956] TYPE VII, VIII OR IX REQUIREMENTS.
3. COLORS FOR THE STOP SIDE OF THE PADDLE SHALL BE WHITE RETROREFLECTIVE LEGEND AND BORDER ON A RED RETROREFLECTIVE OCTAGON. BOTH COLORS SHALL HAVE RETROREFLECTIVE SHEETING EQUAL TO OR EXCEEDING AASHTO M 268 [ASTM D 4956] TYPE III.
4. SIGN SUBSTRATE MATERIALS SHALL BE ALUMINUM, ACRYLONITRILE BUTADIENE STYRENE (ABS) PLASTIC OR EQUIVALENT.
5. THE STAFF MAY BE RIGID ABS PLASTIC OR WOOD WITH A ONE TO 1½ INCH DIAMETER.
6. 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.



VC–820

NOTES:

1. CORNERS SHALL BE ROUNDED TO A 1½ INCH RADIUS.
2. THE BORDER SHALL BE ⅝ INCH WIDE WITH A ⅜ INCH INDENT FROM THE EDGE OF THE SIGN.
3. ''SIGNAL'' SHALL HAVE A SPECIFIED WIDTH OF 12 ¾ INCHES.
4. ''UNDER'' SHALL HAVE A SPECIFIED WIDTH OF 11 INCHES.
5. ''CONSTRUCTION'' SHALL HAVE A SPECIFIED WIDTH OF 24 ½ INCHES.
6. SIGN SHALL ONLY BE INSTALLED AS A SUPPLEMENTAL TO A PARENT WARNING SIGN AND SHALL NOT BE INSTALLED BY ITSELF.

GENERAL NOTES:

1. ALL LEGEND SHALL BE CENTERED VERTICALLY AND HORIZONTALLY UNLESS OTHERWISE NOTED.
2. COLORS FOR SIGNS SHALL BE BLACK LEGEND AND BORDER ON FLUORESCENT ORANGE BACKGROUND UNLESS OTHERWISE NOTED.
3. ALL DIMENSIONS IN INCHES.

OTHER STDS. REQUIRED: T–1

REVISIONS AND CORRECTIONS

AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED

HIGHWAY SAFETY & DESIGN ENGINEER

DIRECTOR OF PROGRAM DEVELOPMENT

Mark D. Richter

FEDERAL HIGHWAY ADMINISTRATION

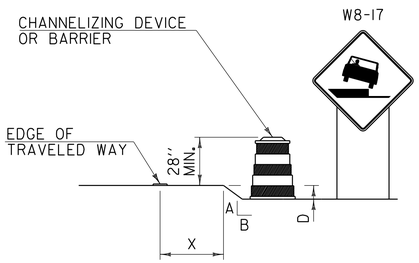
CONSTRUCTION SIGN DETAILS

VERMONT AGENCY OF TRANSPORTATION

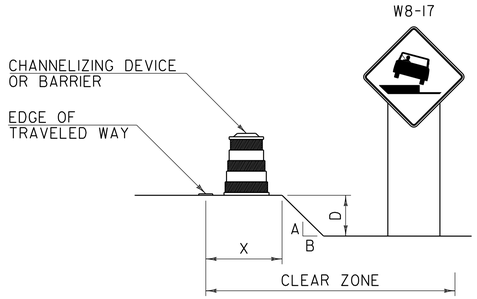
STANDARD

T-30

DROP-OFF ADJACENT TO TRAVELED WAY



TYPE 1

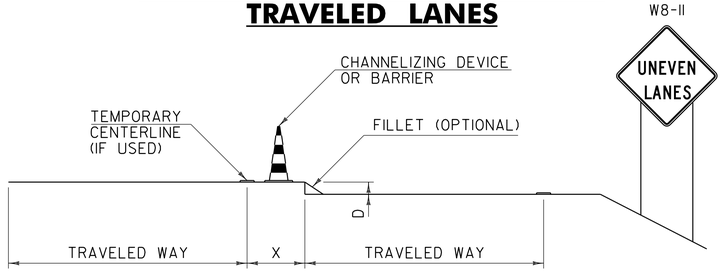


TYPE 2

NOTES:

1. CHANNELIZING DEVICES OR BARRIER SHOULD BE PLACED TO MAXIMIZE THE WIDTH OF THE TRAVELED WAY.
2. SEE CHART "A" FOR SPECIFIC REQUIREMENTS.
3. IF THE DROP-OFF REQUIRES CHANNELIZING DEVICES TO REMAIN IN PLACE OVERNIGHT, THEN "SHOULDER DROP-OFF SYMBOL" (W8-17) SIGNS SHOULD BE INSTALLED.

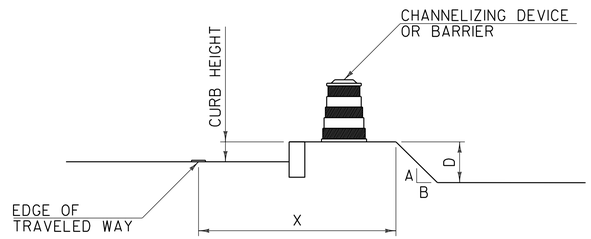
DROP-OFF BETWEEN ADJACENT TRAVELED LANES



NOTES:

1. WHENEVER A LONGITUDINAL DROP-OFF BETWEEN ADJACENT TRAVELED LANES IS TO BE LEFT OVERNIGHT, THEN "UNEVEN LANES" (W8-11) SIGNS AND CHANNELIZING DEVICES SHOULD BE INSTALLED.
2. IF REQUIRED, THE CHANNELIZING DEVICES USED SHOULD BE THOSE WHICH MAXIMIZE THE WIDTH OF THE TRAVELED LANE (I.E. CONES, VERTICAL PANELS OR TUBULAR MARKERS).
3. A BITUMINOUS CONCRETE FILLET WITH A 1.5:1 SLOPE MAY BE USED IN PLACE OF CHANNELIZING DEVICES, HOWEVER THE "UNEVEN LANES" (W8-11) SIGNS SHOULD STILL BE INSTALLED.
4. SEE CHART "A" FOR SPECIFIC REQUIREMENTS.

DROP-OFF BEYOND SHOULDER OR CURB



NOTES:

1. USE CHART "A" FOR VERTICAL CURBS UNDER SIX INCHES, MOUNTABLE CURBS OR ROADWAYS WITH A POSTED SPEED ABOVE 40 MPH.
2. USE CHART "B" FOR VERTICAL CURBS SIX INCHES OR GREATER.

CHART "A"
ALL SPEEDS WITH NO CURB OR MOUNTABLE CURB

X (FEET)	DROP (D) (INCHES)	A:B SLOPE	RECOMMENDED DEVICE
0 TO 4'	LESS THAN 2"	ANY	NONE
	2" TO 6"	1:1.5 OR FLATTER	NONE
		STEEPER THAN 1:1.5	CHANNELIZING DEVICE
	GREATER THAN 6"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER
4' TO 10'	LESS THAN 6"	ANY	NONE
	6" TO 12"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER
	GREATER THAN 12"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER
10' TO CZ	LESS THAN OR EQUAL TO 12"	ANY	NONE
	GREATER THAN 12"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER

NOTES:

1. THE MINIMUM CLEAR ZONE FOR FREEWAYS IS TO BE DETERMINED PER THE CURRENT AASHTO ROADSIDE DESIGN GUIDE. ALL OTHER HIGHWAYS WILL BE DETERMINED PER THE CURRENT "VERMONT STATE STANDARDS" BOOK.
2. CHANNELIZING DEVICES MAY BE USED INSTEAD OF BARRIER FOR SHORT TERM OPERATIONS.
3. ON BORDERLINE CONDITIONS, THE ENGINEER SHOULD DETERMINE WHICH TREATMENT IS ADEQUATE FOR THE EXISTING CONDITIONS.

CHART "B"
40 MPH OR LESS WITH VERTICAL CURB

X (FEET)	DROP (D) (INCHES)	DEVICE REQUIRED
0-10'	LESS THAN OR EQUAL TO 12"	NONE
0-10'	GREATER THAN 12"	CHANNELIZING DEVICE
GREATER THAN 10'	ANY	NONE

GENERAL NOTES:

1. THESE CONDITIONS AND TREATMENTS ARE ONLY PART OF THE TRAFFIC CONTROL SYSTEM AND SHOULD BE USED IN ADDITION TO THE PROPER WORK ZONE SIGNING.
2. THE FOLLOWING ARE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) COMPLIANT CHANNELIZING DEVICES:

   A. VERTICAL PANEL
   B. TYPE I OR TYPE II BARRICADE
   C. PLASTIC DRUM
   D. CONE - WHERE APPLICABLE
   E. TUBULAR MARKERS

   IF CHANNELIZING DEVICES ARE REQUIRED TO STAY IN PLACE DURING NIGHTTIME HOURS, THEY SHALL BE STABILIZED WHILE UNATTENDED IN ACCORDANCE WITH THE MUTCD.
3. WHERE BARRIER IS NECESSARY, THE BARRIER SHALL BE TAPERED BEYOND THE CLEAR ZONE. WHEN THE BARRIER CANNOT BE TAPERED BEYOND THE CLEAR ZONE, A MUTCD COMPLIANT END TREATMENT SHALL BE USED. BARRIER AND END TREATMENT SHALL MEET "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 OR THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION.
4. CHANNELIZING DEVICE SPACING ALONG A LONGITUDINAL DROP-OFF (TANGENT) SHALL BE AS FOLLOWS:

   TANGENT - CHANNELIZING DEVICES SHALL BE SPACED "2S" ("S" IS EQUAL TO THE POSTED SPEED LIMIT IN FEET) APART.
5. "LOW SHOULDER" (W8-9) AND "SHOULDER DROP-OFF SYMBOL" (W8-17) SIGNS, WHEN USED, SHOULD BEGIN PRIOR TO THE DROP-OFF CONDITION AND SHOULD BE REPEATED EVERY 1500 FEET.

OTHER STDS. REQUIRED: **T-1**

REVISIONS AND CORRECTIONS

AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED

HIGHWAY SAFETY & DESIGN ENGINEER

DIRECTOR OF PROGRAM DEVELOPMENT

Mark D. Richter

FEDERAL HIGHWAY ADMINISTRATION

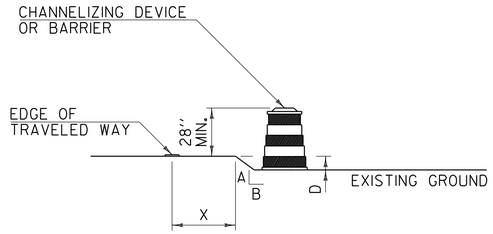
CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS

VERMONT AGENCY OF TRANSPORTATION

STANDARD

T-35

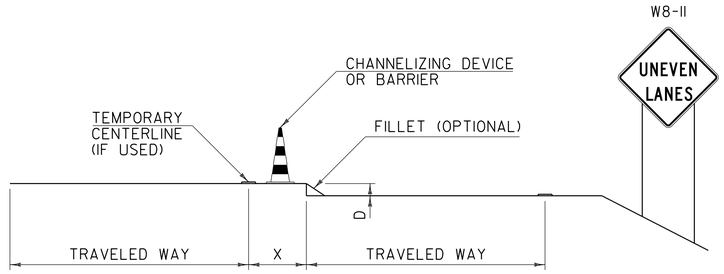
DROP-OFF ADJACENT TO TRAVELED WAY



NOTES:

1. CHANNELIZING DEVICES SHOULD BE PLACED TO MAXIMIZE THE WIDTH OF THE TRAVELED WAY.
2. SEE CHART "A" FOR SPECIFIC REQUIREMENTS.
3. IF THE DROP-OFF REQUIRES CHANNELIZING DEVICES TO REMAIN IN PLACE OVERNIGHT, THEN "LOW SHOULDER" (W8-9) OR "SHOULDER DROP-OFF SYMBOL" (W8-17) SIGNS SHOULD BE INSTALLED.

DROP-OFF BETWEEN ADJACENT TRAVELED LANES



NOTES:

1. WHENEVER A LONGITUDINAL DROP-OFF BETWEEN ADJACENT TRAVELED LANES IS TO BE LEFT OVERNIGHT, THEN "UNEVEN LANES" (W8-11) SIGNS AND CHANNELIZING DEVICES SHOULD BE INSTALLED.
2. IF REQUIRED, THE CHANNELIZING DEVICES USED SHALL BE THOSE WHICH MAXIMIZE THE WIDTH OF THE TRAVELED LANE (I.E. CONES, VERTICAL PANELS OR TUBULAR MARKERS).
3. A BITUMINOUS CONCRETE FILLET WITH A 1.5:1 SLOPE MAY BE USED IN PLACE OF CHANNELIZING DEVICES, HOWEVER THE "UNEVEN LANES" (W8-11) SIGNS SHOULD STILL BE INSTALLED.
4. SEE CHART "A" FOR SPECIFIC REQUIREMENTS.

CHART "A"
ALL SPEEDS WITH NO CURB

X (FEET)	DROP (D) (INCHES)	A:B SLOPE	DEVICE REQUIRED
0 TO 4'	LESS THAN 2"	ANY	NONE
	2" TO 6"	1:1.5 OR FLATTER	NONE
		STEEPER THAN 1:1.5	CHANNELIZING DEVICE
	GREATER THAN 6"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER
4' TO 10'	LESS THAN 6"	ANY	NONE
	6" TO 12"	1:3 OR FLATTER	NONE
		STEEPER THAN 1:3	BARRIER

NOTE:

1. ON BORDERLINE CONDITIONS, THE ENGINEER SHOULD DETERMINE WHICH TREATMENT IS ADEQUATE FOR THE EXISTING CONDITIONS.

GENERAL NOTES:

1. THESE CONDITIONS AND TREATMENTS ARE ONLY PART OF THE TRAFFIC CONTROL SYSTEM AND SHOULD BE USED IN ADDITION TO THE PROPER WORK ZONE SIGNING.
2. THE FOLLOWING ARE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) COMPLIANT CHANNELIZING DEVICES:

   A. VERTICAL PANEL
   B. TYPE I OR TYPE II BARRICADE
   C. PLASTIC DRUM
   D. CONE - WHERE APPLICABLE
   E. TUBULAR MARKERS

   IF CHANNELIZING DEVICES ARE REQUIRED TO STAY IN PLACE DURING NIGHTTIME HOURS, THEY SHALL BE STABILIZED WHILE UNATTENDED IN ACCORDANCE WITH THE MUTCD.
3. WHERE BARRIER IS NECESSARY, THE BARRIER SHALL BE TAPERED BEYOND THE CLEAR ZONE. WHEN THE BARRIER CANNOT BE TAPERED BEYOND THE CLEAR ZONE, A MUTCD COMPLIANT END TREATMENT SHALL BE USED. BARRIER AND END TREATMENT SHALL MEET "NATIONAL COOPERATIVE HIGHWAY RESEARCH PROGRAM" (NCHRP) REPORT 350 OR THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH). THE APPROPRIATE RESOURCE SHALL BE DETERMINED AS DESCRIBED IN THE MASH PUBLICATION.
4. CHANNELIZING DEVICE SPACING ALONG A LONGITUDINAL DROP-OFF (TANGENT) SHALL BE AS FOLLOWS:

   TANGENT - CHANNELIZING DEVICES SHALL BE SPACED "2S" ("S" IS EQUAL TO THE POSTED SPEED LIMIT IN FEET) APART.
5. "LOW SHOULDER" (W8-9) AND "SHOULDER DROP-OFF SYMBOL" (W8-17) SIGNS, WHEN USED, SHOULD BEGIN PRIOR TO THE DROP-OFF CONDITION AND SHOULD BE REPEATED EVERY 1500 FEET.

OTHER STDS. REQUIRED: **T-1**

REVISIONS AND CORRECTIONS

AUG. 6, 2012 - ORIGINAL APPROVAL DATE

APPROVED

HIGHWAY SAFETY & DESIGN ENGINEER

DIRECTOR OF PROGRAM DEVELOPMENT

Mark D. Richter

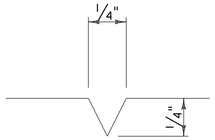
FEDERAL HIGHWAY ADMINISTRATION

CONSTRUCTION ZONE LONGITUDINAL DROP-OFFS FOR PAVING

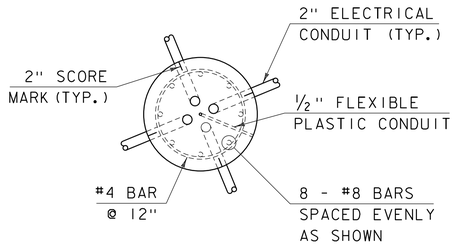
VERMONT AGENCY OF TRANSPORTATION

STANDARD

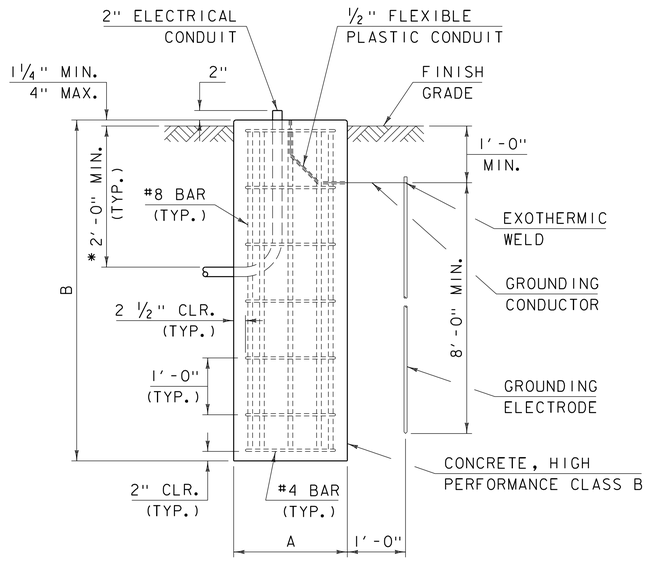
T-36



SCORE MARK DETAIL



PLAN



ELEVATION

*3'-0" WHEN UNDER ROADWAY

MOUNTING HEIGHT (H) (FT)	BRACKET ARM LENGTH (L) (FT)	A (FT)	B (FT)
H < 20	ANY LENGTH	2	6
20 ≤ H < 40	L < 8	2	6
20 ≤ H < 40	8 ≤ L < 10	2.5	6
20 ≤ H < 40	10 ≤ L ≤ 16	2.5	8

GENERAL NOTES:

1. CONCRETE SHALL MEET THE REQUIREMENTS OF CONCRETE, HIGH PERFORMANCE CLASS B AS SPECIFIED IN SECTION 501 OF THE CURRENT VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND ITS LATEST REVISIONS, AND HAVE A SMOOTH LEVEL TOP SURFACE FINISHED WITH A 1/2 INCH RADIUS EDGING TOOL.
2. REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF REINFORCING STEEL, LEVEL I AS SPECIFIED IN SECTION 507 OF THE CURRENT VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND ITS LATEST REVISIONS.
3. ANCHOR BOLTS, WASHERS, NUTS AND OTHER HARDWARE SHALL BE IN ACCORDANCE WITH SUBSECTION 714.09, OF THE CURRENT VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND ITS LATEST REVISIONS, AND OF THE SIZE, TYPE AND PLACEMENT AS SPECIFIED BY THE TRANSFORMER BASE MANUFACTURER.
4. SCORE MARKS SHALL BE ON THE TOP OF THE LIGHT POLE FOUNDATION DIRECTLY ABOVE ALL CONDUIT LOCATIONS TO SHOW LOCATION OF CONDUIT(S).
5. EACH LIGHT POLE FOUNDATION SHALL BE LIMITED TO A MAXIMUM OF FOUR ELECTRICAL CONDUITS. ELECTRICAL CONDUITS SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE LOCATION OF THE ANCHOR BOLTS.
6. THE MINIMUM SWEEP RADIUS FOR ELECTRICAL CONDUIT SHALL BE 12 INCHES.
7. WHEN LOCATED BEHIND GUARDRAIL, LIGHT POLE FOUNDATIONS SHALL BE INSTALLED OUTSIDE OF THE APPLICABLE DEFLECTION DISTANCE AS IDENTIFIED BY THE CURRENT EDITION OF THE "AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS" (AASHTO) "ROADSIDE DESIGN GUIDE", AND ITS LATEST REVISIONS.
8. DETAILS ARE FOR CAST IN PLACE LIGHT POLE FOUNDATIONS ONLY. CONSTRUCTION DRAWINGS SHALL BE SUPPLIED FOR PRE-CAST LIGHT POLE FOUNDATIONS.
9. WHERE ALUMINUM COMES INTO CONTACT WITH CONCRETE, THE CONTACTING SURFACES SHALL BE SEPARATED WITH A PREFORMED FABRIC BEARING PAD IN ACCORDANCE WITH SUBSECTION 731.01 OF THE VTRANS STANDARD SPECIFICATIONS FOR CONSTRUCTION, AND ITS LATEST REVISIONS. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO OTHER STREET LIGHTING ITEMS.

REV.	DATE	DESCRIPTION
0	DEC. 21, 2015	ORIGINAL APPROVAL
1	JUL. 25, 2016	UPDATED REBAR COVER FOR HPC, ADDED NOTE 9 REVISED NOTES 1, 2, 3, 7, UPDATED CHART
OTHER STANDARDS REQUIRED: NONE		
VTRANS AND FHWA APPROVAL ON FILE WITH CONTRACT ADMINISTRATION		

LIGHT POLE FOUNDATION DETAILS

VTrans Working to Get You There VERMONT AGENCY OF TRANSPORTATION

STANDARD
T-133