



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
1401 EAST BROAD STREET
RICHMOND, VIRGINIA 23219 2000

David S. Ekern, P.E.
COMMISSIONER

January 23, 2009

MEMORANDUM

To: All Holders of the Virginia Department of Transportation's 2008 Road and Bridge Standards

The following is a list of revised standards to the 2008 Road and Bridge Standards that require an insertable sheet to be included in your plan assembly until the next edition of the imperial standards is published. Please add these pages to your copy of the standards. The respective insertable sheet number has been placed with the revised standard. An insertable sheet is available for each of these revised standards. The insertable sheets are available on VDOT's web site on the FTP server and in Falcon DMS for VDOT personnel. These insertable sheets will be required in plan assemblies for projects advertised June 9, 2009 and later.

PAGE	INSERT	STANDARD	REVISION
502.11	IIS05_01	MB-10A	Removed 45 degree beveled slot design requirement.
502.13	IIS05_02	MB-11A	Removed 45 degree beveled slot design requirement.
502.14	IIS05_02	MB-11A	Removed 45 degree beveled slot design requirement.
502.15	IIS05_03	MB-11A	Removed 45 degree beveled slot design requirement.

If you have any questions or comments regarding this revision to the publication, please contact Chuck Patterson, at (804) 786-1805, of the Standards and Special Design Section.

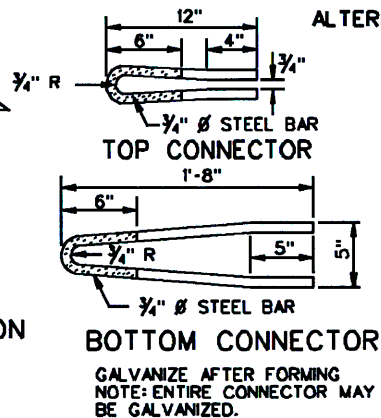
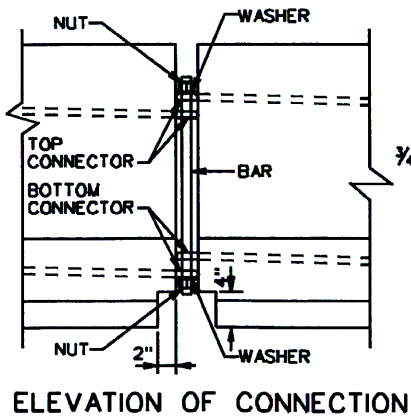
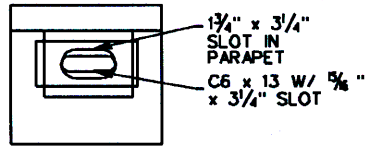
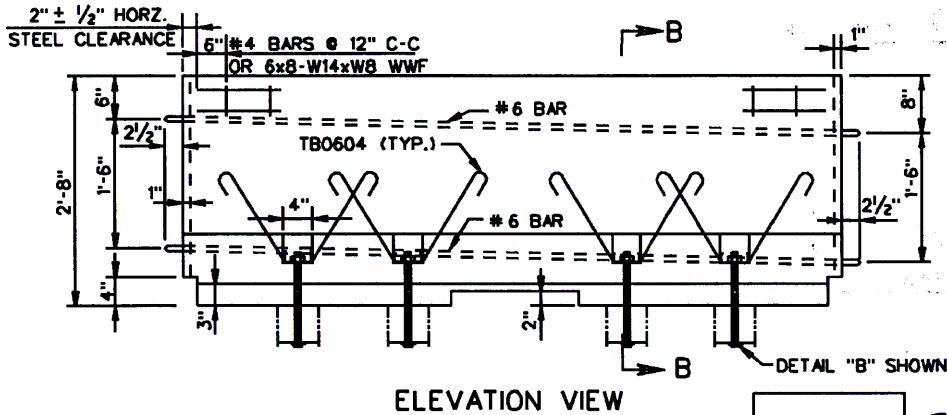
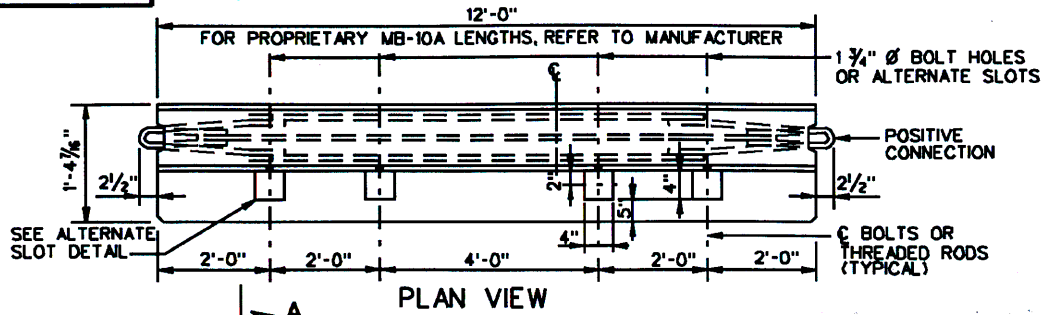
Sincerely,

Signature on file: January 23, 2009

Mohammad Mirshahi, P.E.
State Location and Design Engineer

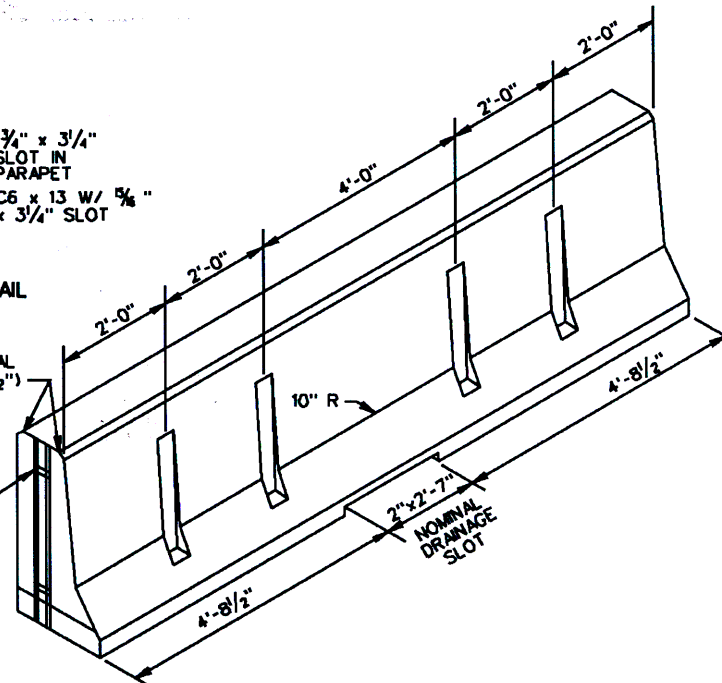
MB-10A

A



ALL ENDS OPTIONAL CHAMFER (1/2" x 1/2")

POSITIVE CONNECTION

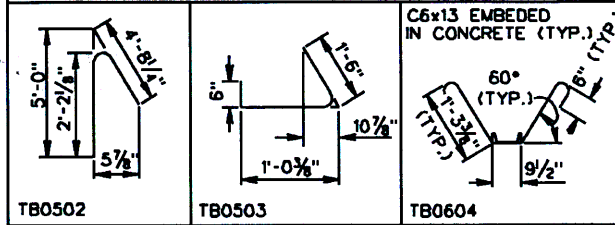


REINFORCING STEEL SCHEDULE

FOR ONE (1) SECTION

MARK	No.	SIZE	LENGTH	PIN Ø	LOCATION
TB0401	8	4	11'-5"	—	TEMP. PARAPET
TB0502	12	5	4'-3"	2 1/2"	"
TB0503	12	5	2'-8"	2 1/2"	"
TB0604	8	6	4'-8"	4 1/2"	"

BENDING DIAGRAM



DIMENSIONS IN BENDING DIAGRAMS ARE OUT-TO-OUT OF BARS, EXCEPT AS SHOWN.
POUNDS OF REINFORCING STEEL = 202
REINFORCING SCHEDULE BASED ON 12'-0" UNIT LENGTH.

VDOT

ROAD AND BRIDGE STANDARDS

SHEET 1 OF 2

REVISION DATE

502.11

01/09

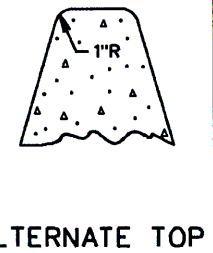
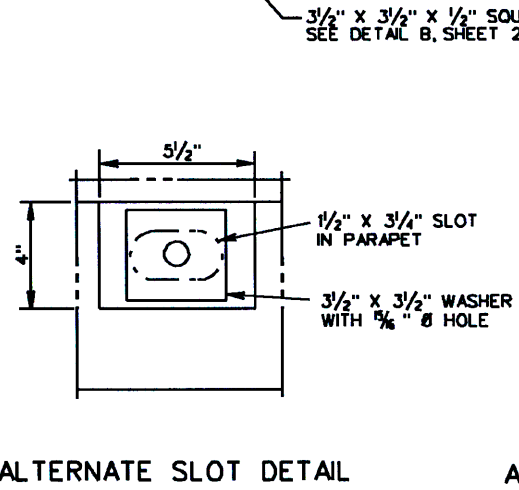
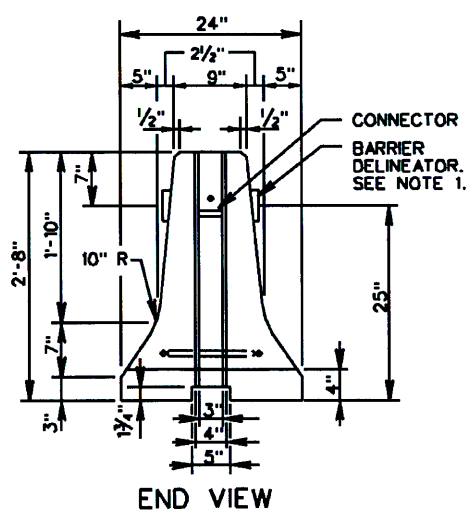
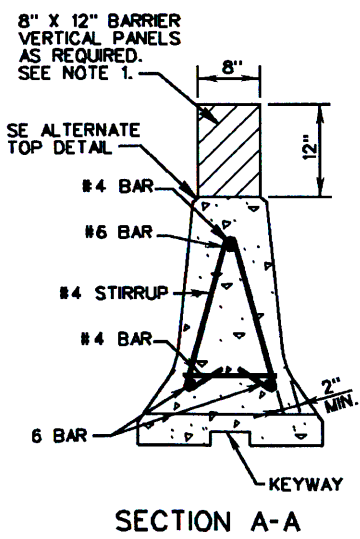
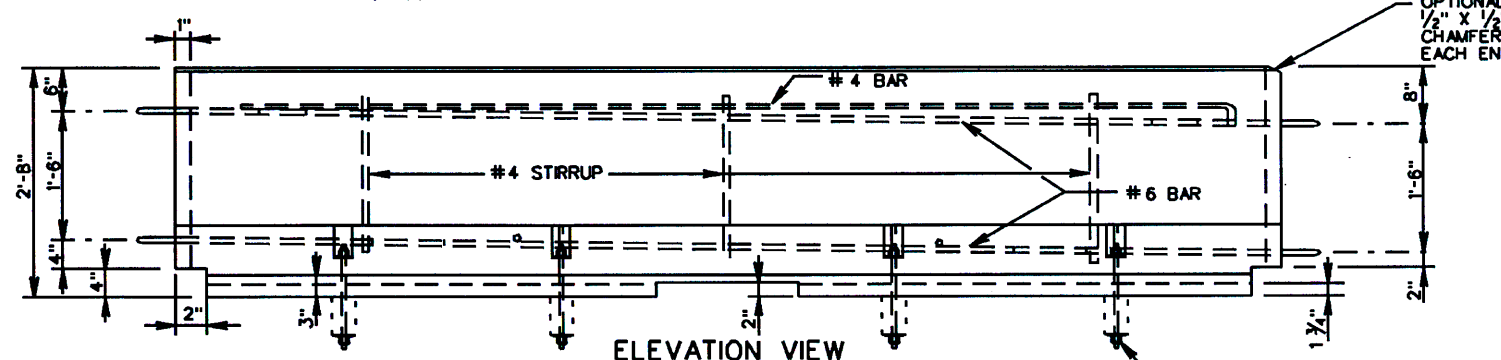
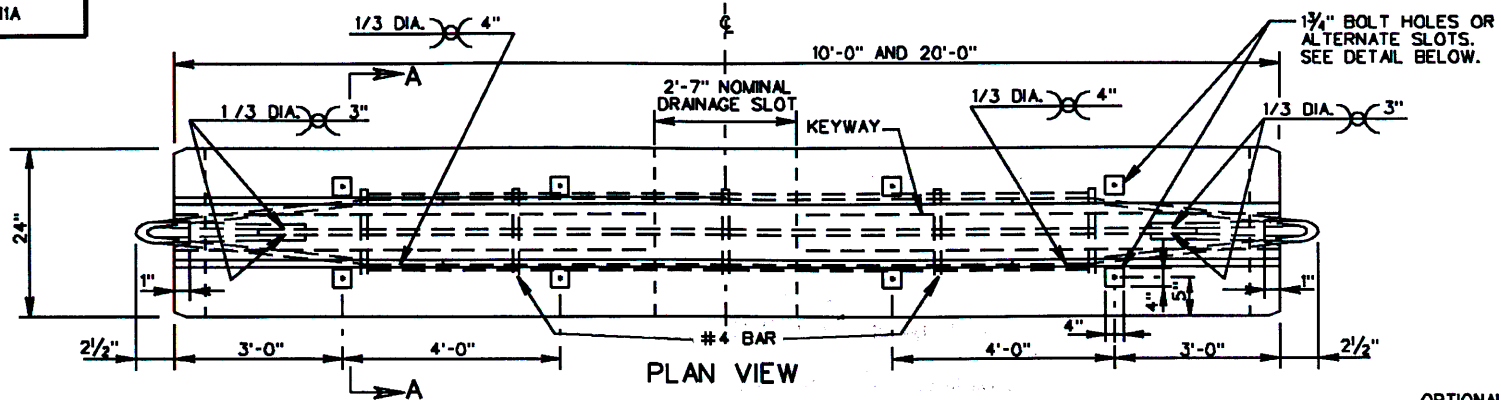
TRAFFIC BARRIER SERVICE CONCRETE PARAPET
(SINGLE FACE)

(FOR TEMPORARY INSTALLATION ON BRIDGE DECK EXTERIOR)

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE

105
502



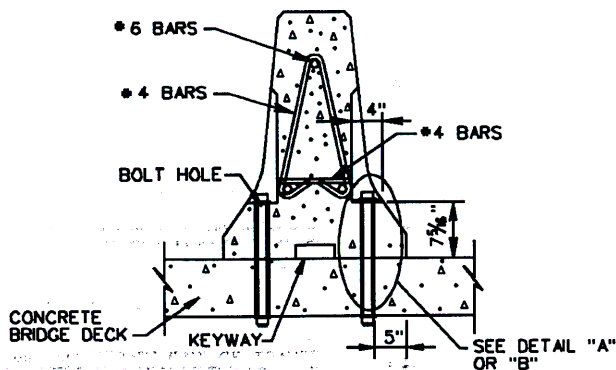
VDOT	
ROAD AND BRIDGE STANDARDS	
SHEET 1 OF 3	REVISION DATE
502.13	01/09

**TRAFFIC BARRIER SERVICE CONCRETE PARAPET
(DOUBLE FACE)**
(FOR TEMPORARY INSTALLATION ON BRIDGE DECK EXTERIOR)
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE
105 512

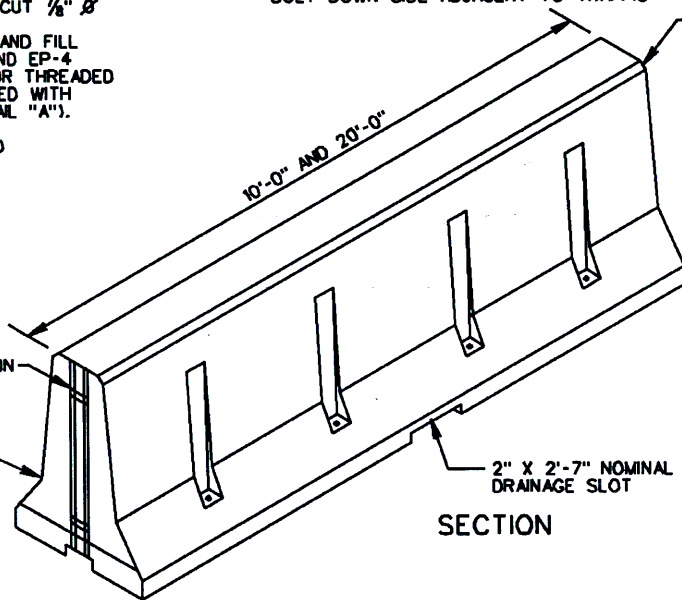
NOTES:

1. BARRIER DELINEATOR IS TO BE SPACED IN ACCORDANCE WITH SECTION 702 OF THE ROAD AND BRIDGE SPECIFICATIONS AND THE BARRIER VERTICAL PANELS ARE TO BE SPACED IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL.
2. REFLECTIVE SURFACE, IN ALL INSTANCES, ARE TO BE FACING ONCOMING TRAFFIC.
3. COST OF BARRIER DELINEATOR AND BARRIER VERTICAL PANELS ARE TO BE INCLUDED IN PRICE BID PER LINEAR FOOT OF BARRIER SERVICE.
4. ANCHOR BOLTS SHALL BE INSTALLED ON TRAFFIC SIDE.
5. CONCRETE 4000 PSI. (MIN.)
6. WELDED WIRE FABRIC MAY BE ONE SHEET BENT TO FIT CONFIGURATION OR TWO SEPARATE SHEETS, ONE ON EACH FACE.
7. AFTER REMOVING TEMPORARY BARRIER, CUT $\frac{7}{8}$ " \varnothing BOLT OR THREADED ROD AS LOW AS PRACTICAL BELOW ROADWAY SURFACE AND FILL RECESS WITH EPOXY BONDING COMPOUND EP-4 (DETAIL "A") OR REMOVE $\frac{7}{8}$ " \varnothing BOLT OR THREADED ROD AND FILL HOLE WITH GROUT BONDED WITH EPOXY BONDING COMPOUND EP-4, (DETAIL "A").
8. FOR POSITIVE CONNECTION DETAILS AND DIMENSIONS SEE STANDARD MB-INS.



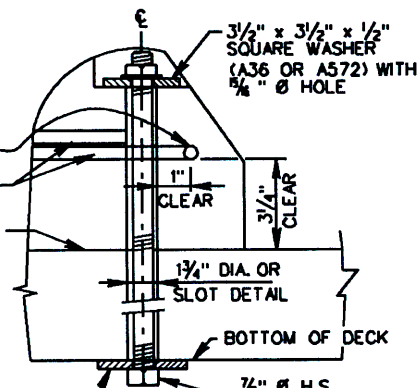
**SECTION B-B
(ANCHOR BOLT)**

BOLT DOWN SIDE ADJACENT TO TRAFFIC



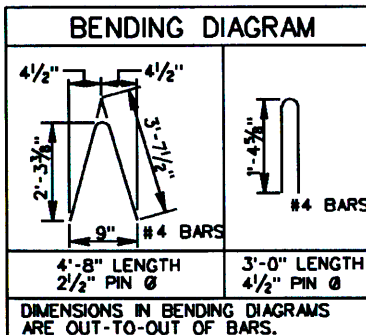
SECTION

ALL ENDS
OPTIONAL
CHAMFER
($\frac{1}{2}$ " x $\frac{1}{2}$ ")



DETAIL "A"

$\frac{3}{2}$ " x $\frac{3}{2}$ " x $\frac{1}{2}$ " SQUARE WASHER (A36 OR A572) WITH $\frac{5}{8}$ " \varnothing HOLE. AT THE DISCRETION OF THE ENGINEER, A LARGER WASHER SIZE MAY BE REQUIRED IF SPALLING IS EVIDENT AT BOTTOM OF DECK. TO PREVENT OR MINIMIZE SPALLING, PREDRILLING A PILOT HOLE USING A SMALLER DIAMETER DRILL BIT IS REQUIRED.

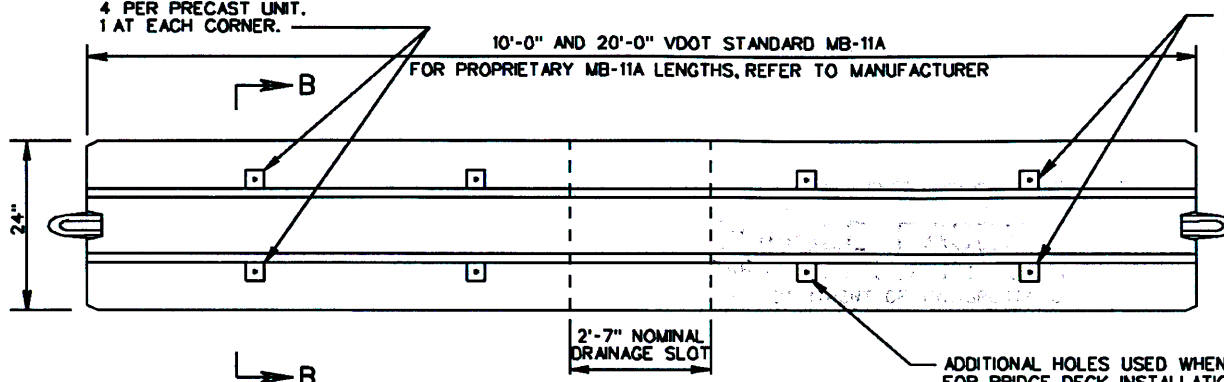


SPECIFICATION REFERENCE
105 512

**TRAFFIC BARRIER SERVICE CONCRETE PARAPET
(DOUBLE FACE)**
(FOR TEMPORARY INSTALLATION ON BRIDGE DECK EXTERIOR)
VIRGINIA DEPARTMENT OF TRANSPORTATION

VDOT ROAD AND BRIDGE STANDARDS	
REVISION DATE 01/09	SHEET 2 OF 3 502.14

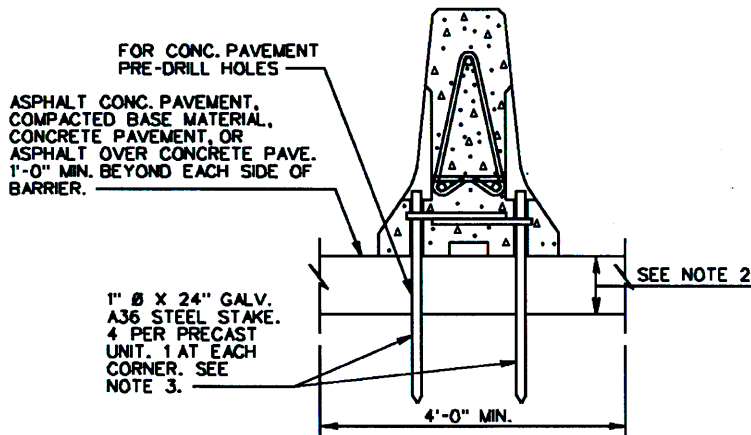
STAKE LOCATIONS WHEN STAKING STANDARD MB-11A.
NOT TO BE USED ON BRIDGE DECKS.
4 PER PRECAST UNIT.
1 AT EACH CORNER.



STAKE LOCATIONS WHEN STAKING
STANDARD MB-11A.
NOT TO BE USED ON BRIDGE DECKS.
4 PER PRECAST UNIT.
1 AT EACH CORNER.

ADDITIONAL HOLES USED WHEN BOLTING TO BRIDGE DECKS.
FOR BRIDGE DECK INSTALLATIONS, REFER TO SHEETS
501.53 & 501.54 OF THE ROAD AND BRIDGE STANDARDS.

PLAN VIEW



SECTION B-B

TEMPORARY INSTALLATION ON ASPHALT CONCRETE
PAVEMENT, COMPACTED BASE MATERIAL, CONCRETE
PAVEMENT, OR ASPHALT OVER CONCRETE PAVEMENT
(NOT TO BE USED ON BRIDGE DECKS)

NOTES:

1. STAKING OF STANDARD MB-11A TO ASPHALT CONCRETE PAVEMENT, COMPACTED BASE MATERIAL, CONCRETE PAVEMENT, OR ASPHALT OVER CONCRETE PAVEMENT IS REQUIRED WHEN TRAFFIC BARRIER SERVICE CONCRETE IS PLACED WITHIN THE TWO (2) FOOT OFFSET OF A TRENCHING OPERATION (4' OR GREATER IN DEPTH) OR WHEN DETERMINED BY THE ENGINEER.
2. 2" MIN. FOR ASPHALT CONCRETE.
6" MIN. FOR COMPACTED BASE MATERIAL.
3. DRIVE STAKE HEAD BELOW FACE OF BARRIER TO PREVENT SNAGGING.
4. CONTRACTOR TO VERIFY PAVEMENT STRUCTURE PRIOR TO PLACING STAKES.
5. UPON REMOVAL OF THE STAKES AND BARRIERS, REPAIR THE RESULTING HOLES AS FOLLOWS OR AS DIRECTED BY THE ENGINEER. CLEAN AND FILL WITH TYPE EP-4 OR EP-5 EPOXY MORTAR CONFORMING TO THE REQUIREMENTS OF SECTION 243 FOR HYDRAULIC CEMENT CONCRETE PAVEMENT AND ASPHALT CONCRETE PAVEMENT. CARE SHALL BE TAKEN NOT TO TRAP AIR WITHIN OR AT THE BOTTOM OF THE EPOXY MORTAR.



ROAD AND BRIDGE STANDARDS

TRAFFIC BARRIER SERVICE CONCRETE PARAPET
(DOUBLE FACE)

SPECIFICATION
REFERENCE

SHEET 3 OF 3

REVISION DATE

(FOR TEMPORARY INSTALLATION ON ROADWAYS)

105
512

502.15

01/09

VIRGINIA DEPARTMENT OF TRANSPORTATION