A500 BAR CONTRACTION JOINT **EXPANSION JOINT** A400 BAR (TYP.) A400 BAR (TYP.) • • 2" WIDE EXPANSION JOINT 3" DIA. **PLAN PLAN** WEEP HOLE SEE NOTE (L) A400 BAR 4 SPACES AT 6" 4 SPACES AT 6" AT 12" C-C A500 BAR (TYP.) 2.5" CLEAR 2.5" CLEAR 2" WIDE EXPANSION JOINT 8" (TYP.) 3" DIA. WEEP HOLE 10" SEE NOTE (I) FINISHED GRADE OR CONTRACTION —— 1/8" TO 3/8"\ SURFACE OF SHOULDER A600 BAR AT 6'-0" **ELEVATION ELEVATION DETAILS OF REINFORCING AT CONTRACTION DETAILS OF REINFORCING AT WALL ENDS JOINT FOR CONCRETE BARRIER** OR EXPANSION JOINT FOR CONCRETE BARRIER RETAINING WALL **PRECAST** - SECTIONAL **NOISE WALL** 3/4" CHAMFER A400 BAR AT 12" C-C #57 (LENGTH 35") STONE A400 BAR A500 BAR STONE 2" CLEAR 3" DIA WEEP HOLES SEE NOTE(I) CLEAR 4" Ø PERFORATED **PERFORATED EDGE OF** POLYETHYLENE POLYETHYLENE PAVED SHOULDER PIPE  $1\frac{1}{2}$ " ±  $\frac{1}{4}$ " ASPHALT (MIN.) **EXISTING OR** 18" MIN. PROPOSED BASE 30" - NO.6 OR GREATER REINFORCING 48" - A600 OR GREATER BARS DRIVEN 18" DEEP AS REINFORCING BARS DRIVEN 18" DEEP AS NEEDED, AT EVERY 6'-0" TYPICAL TREATMENT **REINFORCING STEEL AT SECTION A-A** FOR BARRIER WALL AT PRECAST **SECTIONAL NOISE WALL** M (AT RETAINING WALL)

(SEE S-SSMB-2)

NOTE: ALL A400, A500, AND A600 REINFORCING STEEL BARS ARE TO BE EPOXY COATED MEETING ALL REQUIREMENTS OF ASTM D3963

REINFORCING STEEL LEGEND 47.5" A400 **VARIABLE** A500 A600

## **GENERAL NOTES**

- HALF SIZE SINGLE SLOPE CONCRETE BARRIER WALL IS TO BE USED IN CONJUNCTION WITH NOISE BARRIER OR RETAINING WALL INSIDE THE CLEAR ZONE AS SHOWN ON THIS DRAWING.
- CONCRETE BARRIER WALL SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. SECTION 711 AND/OR CURRENT SPECIAL PROVISIONS.
- CONCRETE: F'<sub>C</sub> = 3,000 POUNDS PER SQUARE INCH AT 28 DAYS REINFORCING STEEL: ASTM A615, Fy= 60,000 POUNDS PER SQUARE INCH ALL REINFORCING IS TO BE INSTALLED AS DETAILED ON THIS DRAWING.
- THE CONCRETE BARRIER WALL SHALL BE GIVEN AN APPLIED TEXTURE FINISH. THE COLOR OF THE FINISH SHALL BE WHITE, FEDERAL SPECIFICATION NO. 37886. THE COST OF MATERIALS AND LABOR FOR THE TEXTURE FINISH SHALL BE INCLUDED IN THE BID PRICE FOR CONCRETE MEDIAN BARRIER.
- THE TWO (2) INCH OPEN EXPANSION JOINTS SHALL BE PLACED IN THE PROPOSED SINGLE SLOPE BARRIER WALL AT A MAXIMUM SPACING NOT TO EXCEED 300 FEET. IF FIXED OBJECTS SUCH AS BRIDGE PIERS BRIDGE ENDS, OVERHEAD SIGN SUPPORTS, OR OTHER FEATURES PROJECTING THROUGH, INTO OR AGAINST THE BARRIER EXIST THAT REQUIRE TWO INCH EXPANSION JOINTS, THEN THE DISTANCE BETWEEN THE EXPANSION JOINTS IS TO BE REDUCED IN ORDER TO ALLOW AN EQUAL DISTANCE BETWEEN JOINTS THAT IS LESS THAN 300 FEET. ALL ADDITIONAL STEEL REQUIRED AT EXPANSION JOINTS TO BE EPOXY COATED REINFORCING STEEL. THE COST OF MATERIAL AND LABOR FOR THE JOINT INSTALLATION INCLUDING SAWING EXPANSION JOINTS SHALL BE INCLUDED IN THE BID PRICE FOR CONCRETE MEDIAN BARRIER.

THE CONTRACTION JOINTS ARE TO BE SPACED AT 20 TO 25 FOOT INTERVALS WHEN CONSTRUCTED ON ASPHALT PAVEMENT. WHEN THE CONCRETE BARRIER WALL IS ATTACHED TO CONCRETE PAVEMENT THE CONTRACTION JOINTS WILL RESPOND TO THE JOINTS IN THE CONCRETE PAVEMENT. THE COST OF MATERIAL AND LABOR FOR THE JOINT INSTALLATION SHALL BE INCLUDED IN THE BID PRICE FOR CONCRETE MEDIAN BARRIER. IF SAWED CONTRACTION JOINTS ARE USED, THE JOINTS MUST BE SAWED WITHIN FOUR (4) HOURS AFTER THE CONCRETE IS PLACED.

- THE COST OF FURNISHING AND INSTALLING BARRIER WALL DELINEATORS, INCLUDING ALL MATERIALS, LABOR AND INCIDENTALS NECESSARY TO COMPLETE THE INSTALLATION, SHALL BE INCLUDED IN PRICE BID FOR CONCRETE BARRIER WALL. SEE STANDARD DRAWING T-M-18A FOR DELINEATOR MOUNTING DETAILS BARRIER WALL DELINEATOR WILL NOT BE REQUIRED IN AREAS WHERE ROADWAY IS LIGHTED.
- CHAMFER ALONG TOP EDGES 3/4".
- FOR CONCRETE PAVEMENT: ANY METHOD DEVISED BY THE CONTRACTOR AND APPROVED BY THE ENGINEER THAT WILL ASSURE THE LONGITUDINAL ROADWAY REINFORCING STEEL WILL BE FIXED AGAINST MOVEMENT AND POSITIONED ± 0.5" AS DIMENSIONED WHEN TIED TO THE TRANSVERSE ROADWAY REINFORCING STEEL WILL BE SATISFACTORY
- 3" DIAMETER WEEP HOLES AT 10"-0" CENTER-TO-CENTER MAXIMUM ARE TO BE PLACED AT LOWEST POINT PRACTICAL FOR PROPER DRAINAGE WITH MIN. 4% SLOPE. WEEP HOLES SHOULD ALIGN WITH THE RETAINING WALL WEEP HOLES IF EXIST. CONSTRUCTION OF WEEP HOLES ARE TO BE PAID FOR UNDER THE PRICE BID FOR OTHER ITEMS OF CONSTRUCTION.
- FIBER EXPANSION JOINT FILLER MATERIAL TO BE 0.5" OR 1.0" PREMOLDED FIBER IN ACCORDANCE WITH SECTION 905 OF STANDARD SPECIFICATIONS.
- PAYMENT WILL BE MADE UNDER ITEM NO .:

711-05.72, SINGLE SLOPE HALF CONCRETE BARRIER WALL,

- MIN. SAFETY PERFORMANCE OF 52 1/2" SINGLE TO THE TL-3 EVALUATION CRITERIA SPECIFIED IN NCHRP REPORT 350. SEE TTI STUDY TPF-5(114).
- DO NOT USE HALF SIZE WALL WITH PRECAST SECTIONAL NOISE WALL SEE S-SSMB-2.
- FOR MSE RETAINING WALL OFFSET MAY BE 18" FOR CONCRETE RETAINING WALL OFFSET SHALL BE 6".

■ APPROVED BY FHWA (ALL OTHERS APPROVED BY TDOT)

■ REV. 7-30-10: REVISED REINFORCING STEEL

REV. 1-15-13: REVISED SECTION A-A, ADDED

WALL AT PRECAST NOISE WALL DETAIL.

REV. 7-16-13: ADDED 12" GAP AT NOISE

REV. 10-29-2021: REVISED # 57 STONE FILL WIDTH ON SECTIONS. GENERAL NOTES (F)

DETAILS AND GENERAL NOTES.

WALL AND EDITED NOTE N.

AND (N) WERE REVISED.

REV. 05-01-20: REDREW SHEET.

**STATE OF TENNESSEE** STANDARD DRAWING DEPARTMENT OF TRANSPORTATION

> HALF SIZE SINGLE SLOPE CONCRETE **BARRIER WALL**

S-SSMB-3

NOT TO SCALE

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STANDAR

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10-15-2009