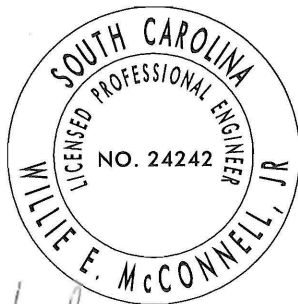


REFERENCES

WORK ZONE TRAFFIC  
CONTROL ENGINEER



*Willie F. McConnell*  
SIGNATURE  
7/1/10  
DATE

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2	4-20-10	JCS	ANCHORAGE REVISIONS
1	6-2-08	JCS	ANCHORAGE REVISIONS
0	11-19-07	JCS	ANCHORAGE REVISIONS
#	DATE	CHK	DESCRIPTION



SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION  
DESIGN STANDARDS OFFICE  
955 PARK STREET  
ROOM 405  
COLUMBIA, SC 29201

STANDARD DRAWING

TEMPORARY  
CONCRETE BARRIER  
CONNECTION  
REQUIREMENTS TO  
BRIDGE RAILINGS &  
PERMANENT BARRIER  
WALLS

605-305-00

EFFECTIVE LETTING DATE JAN 2011

THIS DRAWING IS NOT TO SCALE

TEMPORARY CONCRETE BARRIER WALL  
Requirements  
for  
Connection to Bridge Railings and Permanent Barrier Walls

- 1.) THESE NOTES APPLY TO THE REQUIREMENTS FOR THE CONNECTION OF A TEMPORARY CONCRETE BARRIER WALL TO A PERMANENT BARRIER WALL AND A BRIDGE RAILING WALL WITH THE SAFETY SHAPE, A BRIDGE RAILING WALL WITH A VERTICAL FACE, A BRIDGE RAILING WALL WITH AN ADJACENT SIDEWALK, AND A BRIDGE RAIL & POST WITH A SAFETY CURB. IMPLEMENT THESE CONNECTIONS WITH THRIE BEAM GUARDRAIL AND THRIE BEAM TERMINAL CONNECTORS WITH SUPPLEMENTAL BLOCKOUTS WHEN REQUIRED. W-BEAM GUARDRAIL IS PROHIBITED FOR USE AS CONNECTION HARDWARE.
- 2.) WHEN CONNECTING THE END OF A LINE OF TEMPORARY CONCRETE BARRIER WALL TO A STRUCTURE SUCH AS PERMANENT BARRIER WALL OR A BRIDGE RAILING, ANCHOR THE LAST TWO (2) SECTIONS OF THE LINE OF TEMPORARY CONCRETE BARRIER WALL ADJACENT TO THE STRUCTURE TO ENSURE STABILIZATION OF THE TEMPORARY CONCRETE BARRIER WALL AND INTEGRITY OF THE CONNECTION HARDWARE. IMPLEMENT THE ANCHORAGE OF THE TEMPORARY CONCRETE BARRIER WALL, INCLUDING INSTALLATION OF THE CONNECTION HARDWARE, MATERIALS, ETC., IN ACCORDANCE WITH THE REQUIREMENTS OF THE "STANDARD DRAWINGS FOR ROAD CONSTRUCTION" AND AS DIRECTED BY THE ENGINEER.
- 3.) UTILIZE AND INSTALL ONLY THOSE TEMPORARY CONCRETE BARRIER WALLS DESIGNED AND APPROVED FOR ANCHORAGE WHEN THE ROADWAY CONDITIONS, THE PLANS, THE SPECIFICATIONS, OR THE ENGINEER INDICATES OR DIRECTS ANCHORAGE IS NECESSARY. WHEN ANCHORAGE IS REQUIRED FOR ANY SECTIONS OF TEMPORARY CONCRETE BARRIER WALL WITHIN A LINE OF TEMPORARY CONCRETE BARRIER WALL, ALL SECTIONS OF THE TEMPORARY CONCRETE BARRIER WALL THAT REQUIRES ANCHORAGE SHALL BE THE SAME TYPE AND DESIGN AND SHALL HAVE THE SAME TYPE OF CONNECTION APPARATUS OR HARDWARE.
- 4.) ANCHORAGE FOR THE LAST TWO (2) SECTIONS OF A LINE OF TEMPORARY CONCRETE BARRIER WALL SHALL BE INSTALLED ON EITHER OF FOUR (4) TYPES OF FOUNDATION PADS.
- (A) TYPE I FOUNDATION - A PORTABLE PAD CONSTRUCTED OF 8 INCHES OF CLASS 4000 PORTLAND CEMENT CONCRETE, REINFORCED WITH #5 REBAR SPACED ON NO GREATER THAN A 12 INCH X 24 INCH GRID. THE 8 INCH DEPTH FOR THE CONCRETE IS A MINIMUM THICKNESS REQUIREMENT FOR THIS FOUNDATION.
- (B) TYPE II FOUNDATION - A CONCRETE ROADWAY WITH A MINIMUM THICKNESS OF 8 INCHES.
- (C) TYPE III FOUNDATION - A BRIDGE WITH A BRIDGE DECK THICKNESS OF 14 INCHES OR GREATER.
- (D) TYPE IV FOUNDATION - A BRIDGE WITH A BRIDGE DECK THICKNESS LESS THAN 14 INCHES.
- 5.) UTILIZE EITHER THE "ADHESIVE BONDING METHOD" OR THE "BOLT THROUGH DECK METHOD" BASED ON SITE CONDITIONS AND THE FOUNDATION TYPE. FOR ANCHORAGE TO A REINFORCED PORTABLE CONCRETE PAD OR A CONCRETE ROADWAY, UTILIZE THE "ADHESIVE BONDING METHOD" AND INSTALL THE ANCHORS AT A DEPTH OF 6½ INCHES. FOR ANCHORAGE TO BRIDGE DECKS, INSTALL EACH ANCHOR IN ACCORDANCE WITH THE ANCHORAGE AND ATTACHMENT REQUIREMENTS FOR TEMPORARY CONCRETE BARRIER WALLS TO BRIDGE DECKS IN ACCORDANCE WITH THE BARRIER WALL TYPE AND AS SPECIFIED BY THE "STANDARD DRAWINGS FOR ROAD CONSTRUCTION".
- 6.) ONLY INSTALL ANCHORS ON THE TRAFFIC SIDE OF THE TEMPORARY CONCRETE BARRIER WALL. ANCHOR EACH OF THE TWO SECTIONS OF TEMPORARY CONCRETE BARRIER WALL WITH FIVE (5) OR SIX (6) ANCHORS IN ACCORDANCE WITH THE BARRIER WALL TYPE AND AS SPECIFIED BY THE "STANDARD DRAWINGS FOR ROAD CONSTRUCTION".
- 7.) EXCAVATE THE SITE LOCATION PRIOR TO THE INSTALLATION OF A TYPE I FOUNDATION. UTILIZE THE TYPE I FOUNDATION AT ALL TIMES WHEN THE EXISTING PAVEMENT STRUCTURE IS NOT CONCRETE OR IN COMPLIANCE WITH THE REQUIREMENTS OF A TYPE II, III, OR IV FOUNDATION. INSTALL THE TYPE I FOUNDATION TO PROVIDE THE SAME GRADE ELEVATION OF THE TOP OF THE TYPE I FOUNDATION AS THE ADJACENT TRAVEL LANE OR SHOULDER. BACKFILL AND DRESS THE AREAS ADJACENT TO THE EDGES OF THE TYPE I FOUNDATION.
- 8.) INSTALL, ATTACH, AND MAINTAIN ALL THRIE BEAM GUARDRAIL AND THRIE BEAM TERMINAL CONNECTORS UTILIZED FOR CONNECTING THE END OF A LINE OF TEMPORARY CONCRETE BARRIER WALL TO A STRUCTURE SUCH AS A PERMANENT BARRIER WALL OR A BRIDGE RAILING AS DIRECTED BY THE "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" LATEST EDITION, ALL SUPPLEMENTAL SPECIFICATIONS, THE "STANDARD DRAWINGS FOR ROAD CONSTRUCTION", THE SPECIAL PROVISIONS, THE PLANS, AND THE ENGINEER. FOR ADDITIONAL INFORMATION REGARDING INSTALLATION AND ATTACHMENT DETAILS OF THE THRIE BEAM GUARDRAIL AND THE THRIE BEAM TERMINAL CONNECTORS, CONTACT ROADWAY DESIGN.
- 9.) INSTALL BLOCKOUTS AS ILLUSTRATED TO MAINTAIN STRENGTH AND INTEGRITY OF THE THRIE BEAM GUARDRAIL. INSTALL BLOCKOUTS AS DIRECTED BY THE "STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION" LATEST EDITION, ALL SUPPLEMENTAL SPECIFICATIONS, THE "STANDARD DRAWINGS FOR ROAD CONSTRUCTION", THE SPECIAL PROVISIONS, THE PLANS, AND THE ENGINEER.