



WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
Division Of Highways

1900 Kanawha Boulevard East • Building Five • Room 110
Charleston, West Virginia 25305-0440 • 304/558-3505

Joe Manchin III
Governor

February 20, 2007

MEMORANDUM

TO: ALL HOLDERS OF STANDARD DETAILS BOOK, VOLUME 3

FROM: GREGORY L. BAILEY, DIRECTOR *Gregory Bailey*
ENGINEERING DIVISION *2-20-07*

SUBJECT: ERRATA TO ADDENDUM 1 OF THE 1999 STANDARD DETAILS BOOK,
VOLUME 3

Attached for your use is an errata sheet that is to be changed in the Engineering Division's newly published Addendum 1 to the 1999 Standard Details Book, Volume 3. This page will replace a duplicate copy of the sheet titled "BRD-IV 54X20".

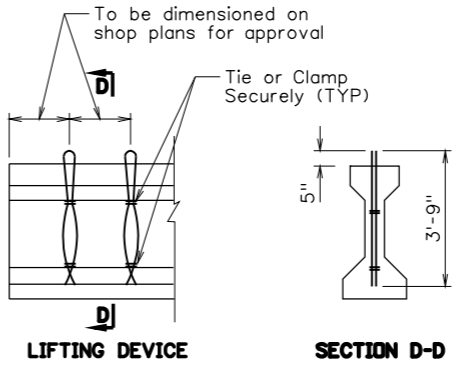
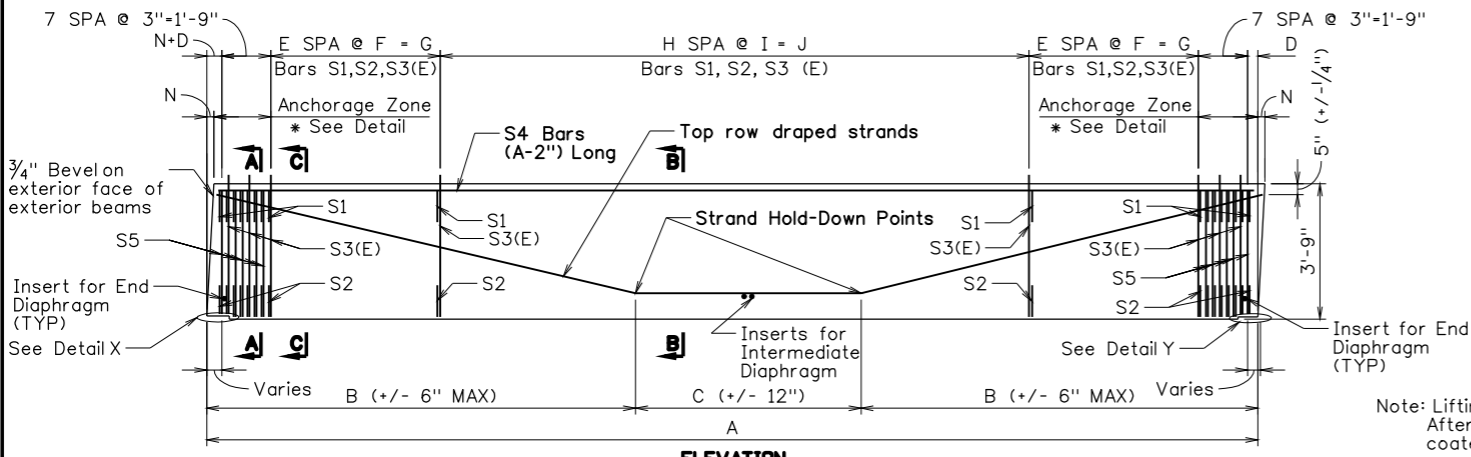
Remove and destroy the first copy of BRD-IV 54X20 and replace it with the errata sheet title "BRD-III 45X16".

Any questions concerning this addendum should be directed to Mr. Lovell Facemire at (304) 558-9752.

GLB:Ts

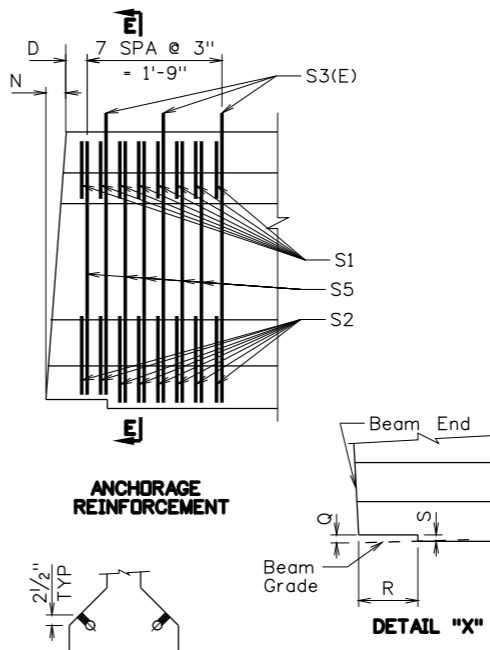
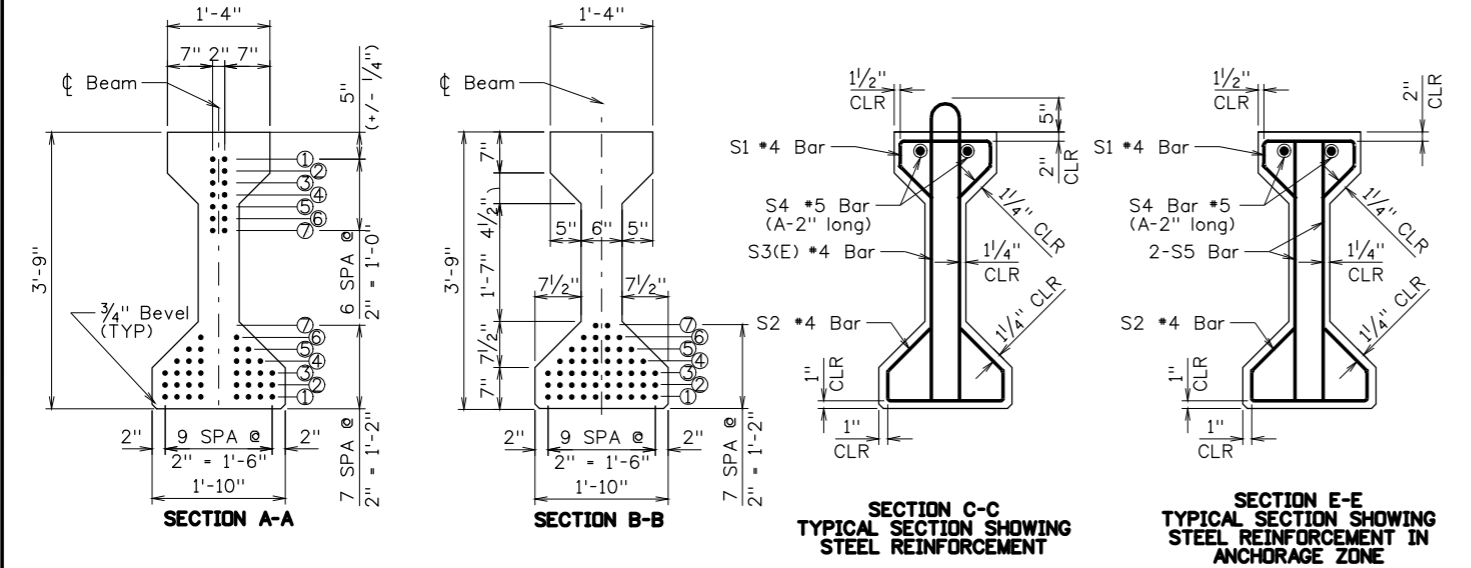
Attachment

PROJECT NUMBERS		DISTRICT	COUNTY	SHEET NO.	TOTAL
STATE	FEDERAL				



Note: Lifting shall be by equal loads to each pair of loops. After erection, the loops shall be cut flush, and ends coated with asphaltic material.

- NOTES:
- The concrete shall attain a compressive strength of at least XXX psi, as shown by standard cylinders cured identically with the beams, before transferring bond stress to the concrete; or before releasing the end anchors. Cylinder strength shall be YYYYY psi within 28 days.
 - The Department will reject the beams if the finished units contained honeycombed concrete to the extent that the Engineer determines the strength or deterioration resistance is reduced. Beam shortening due to shrinking and elastic changes is limited to 0.0005L.
 - Roughen the top surface of each beam to an amplitude of approximately 1/4 inch and maintain clean and free of laitance.
 - Shop drawings shall show the densening plan by numbering the sequence of the strand pattern.
 - Prestressing strands shall be stabilized strand (1/2 inch nominal diameter) low relaxation uncoated seven wire strand in accordance with AASHTO M 203 grade 270. An initial stress of 202.5 psi shall be applied to the strand.
 - Uncoated seven wire stress relieved strand may be substituted. However, if the Contractor chooses this alternate, he shall provide the design for the stress relieved strand and shall revise the original plans to reflect these changes. This design and plan modification shall be made at the Contractor's expense.
 - Deformed wire fabric is permitted instead of reinforcing steelbars provided an equal steel area is provided. Wire fabric must conform to the requirements of AASHTO Section M225.
 - The Elastomeric bearing pads under the prestressed beams shall conform to AASHTO Division 2, Section 18 Duro 60. Section 18.2.3.2 specifies laminate material to be:
 - ASTM A245
 - ASTM A570, Grade 36
 - Payment for Elastomeric bearing pads and any preformed joint material specified shall be included in Item 603-01. See pier & abutment sheets for details.
 - The threaded inserts shall have a minimum safe work load of 2500 lb in tension. All inserts shall be plugged to prevent concrete intrusion. Omit inserts on exterior face of exterior beams.
 - All threaded inserts and anchorage dowels are to be hot-dip galvanized after fabrication. Include the cost in Item 603-01.
 - 7 S5 vertical reinforcing bars placed at the ends of the beam is designed for bursting resistance as per LRFD 5.10.10.1. Refer to S5 bar table.



REINFORCING BAR LIST				
MARK	SIZE	COUNT/BEAM	TOTAL	LENGTH
S1				
S2				
S3(E)				
S4				

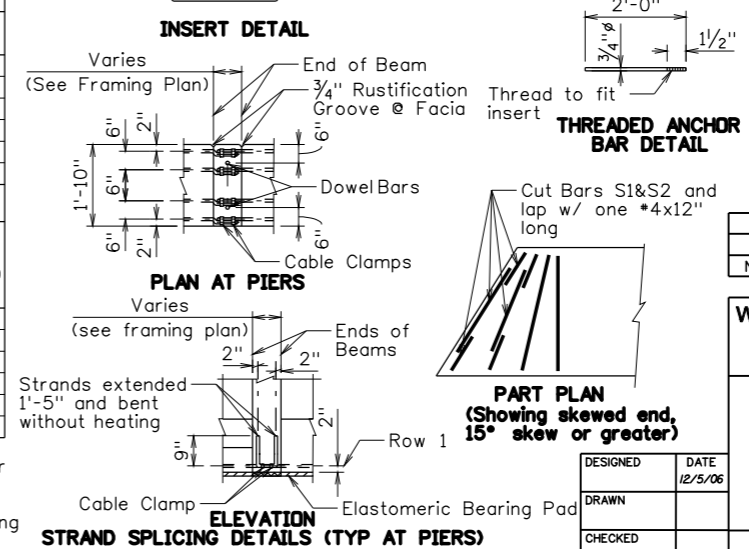
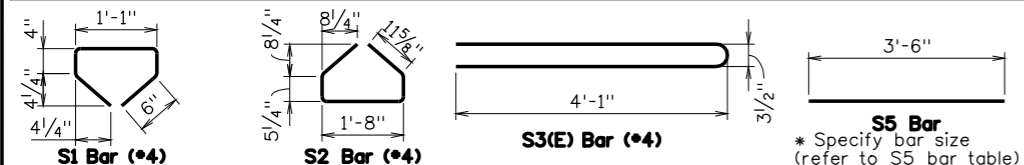
REINFORCING BAR LIST			
MARK	SIZE	COUNT/BEAM	TOTAL
*S5			

BEARING PADS		
NO.	DESCRIPTION	LOCATION

NO.	REVISION	DATE	BY:

BEAM DIMENSIONS (MEASURED ALONG ϕ BEAM)															APPOX. WT EACH (LBS)								
MARK	ND REQD	A	B	C	D	E	F	G	H	I	J	K	L	M		N	P	Q	R	S	T	U	V

MARK	NUMBER OF 1/2" Dia.-- 7 WIRE STRANDS IN INDICATED ROW														TOTAL NO. PER BEAM	CONCRETE STRENGTHS (PSI) f'ci f'c	INITIAL PRESTRESS FORCE/STRAND (LBS)										
	MIDSPAN (SECTION B-B)							END (SECTION A-A)																			
	BOTTOM							TOP																			
	①	②	③	④	⑤	⑥	⑦	①	②	③	④	⑤	⑥	⑦	⑧	①	②	③	④	⑤	⑥	⑦	⑧				



DESIGNED _____ DATE 12/5/06
 DRAWN _____
 CHECKED _____
 REVIEWED _____
 APPROVED *[Signature]* DATE 12/18/06
 DIRECTOR ENGINEERING DIVISION

WEST VIRGINIA DEPARTMENT OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 ENGINEERING DIVISION

AASHTO TYPE III
 45" PRECAST CONC. BEAM
 BRD-III 45X16

SHEET _____ OF _____
 BRIDGE NO. _____