# GENERAL NOTES

All work shall be done in accordance with the latest edition of the Colorado Department of Transportation Standard Specifications for Road and Bridge Construction and as noted in the drawinas.

The following table gives the minimum lap splice length for epoxy coated reinforcing bars placed in accordance with Subsection 602.06. These splice lengths shall be increased by 25% for bars spaced at less than 6" on center or less than 3" lateral

#9 #10 Bar size Splice length for Class D Concrete 1'-3" 1'-7" 2'-5" 2'-10" 3'-8" 4'-8" 5'-11" 7'-3"

When the Contractor elects to substitute epoxy coated reinforcement for black reinforcing bars, the minimum lap splice shall be as described above

Unless otherwise noted in the plans, the following table gives the minimum lap splice length for black reinforcing bars placed in accordance with Subsection 602.06. These splice lengths shall be increased by 25% for bars spaced at less than 6" on center or less than 3" lateral cover.

#4 #5 #6 #7 #8 #9 #10 #11 Bar size Splice length for Class D Concrete 1'-1" 1'-4" 1'-7" 1'-11" 2'-6" 3'-1" 3'-11" 4'-10"

Splice criteria for Class D Concrete shall also apply to Class DR Concrete, Class DT Concrete, and Concrete (Patching).

All the provisions for bridge deck concrete shall also apply to approach slab concrete.

All reinforcing steel shall be epoxy coated unless otherwise noted.

(N) denotes non-coated reinforcing steel.

Grade 60 reinforcing steel is required.

Expansion joint material shall meet AASHTO Specification M213.

The following structural steel shall be AASHTO M270 Grade 36 (ASTM A709) or Grade 50 (ASTM A709): expansion device anchor bars, cover plates, temporary bridge deck plates and asphaltic joint bridging plates.

The following structural steel shall be AASHTO M270 (ASTM A709) Grade 36 or Grade 50 (ASTM A709): expansion device rails for strip seals.

The following structural steel shall be AASHTO M270 (ASTM A709) Grade 50: expansion device rails for modulars.

Field welding of any kind shall not be permitted on the steel girders unless specifically called for in the plans.

The Contractor shall be responsible for the stability of the structure during all phases of construction.

Falsework and forming may be required.

All falsework shall conform to the requirements of Subsection 601.11 of the 20-- CDI Standard Specifications for Road and Bridge Construction.

Unless otherwise noted, dimensions contained in these plans are calculated "As Constructed Plans". These dimensions may be adjusted to meet the ex structure. The Contractor shall verify all dependent dimensions in the field ordering or fabricating any material.

All longitudinal and transverse dimensions are measured horizontally and include correction for grade.

Before removal, the Contractor shall verify the existing HMA thickness on the bridge deck and approach slabs in accordance with the special provisions Removal of Asphalt Mat (Planing)(Special).

All asphalt material and remaining membrane per phase shall be removed from the surface of the concrete deck prior to concrete removalin accordance with the special provisions Removal of Asphalt Mat (Planing)(Special).

After the removal of asphalt and membrane per phase, the entire bridge deck per phase shall be sounded for delamination according to ASTM D-4580. All unsound concrete shall be marked and removed as directed by the Engineer. Costs for sounding shall be included in the work.

Overlay of planed deck areas shall be completed within 14 calendar days following the removal of asphalt planing, unless otherwise approved by the

Deck rehabilitation quantities are approximate. Final location shall be determined by the Engineer. Payment will be for the actual area repaired and material used as approved by the Engineer Rehabilitation quantities in addition to plan quantities will be measured and paid for at the unit price for the appropriate bid item.

The Contractor may stockpile deck repair material at own risk. All unused material shall remain property of the Contractor. CDDT will not purchase leftover materials or pay any restocking fees.

After removal of concrete, all exposed rebar shall be cleaned of all concrete by chipping and/or sandblasting, and this shall be included cost of the work. Sandblasting shall not be performed on epax reinforcing steel.

Unless noted otherwise on the plans, the proposed overlay the grade and cross slope of the existing concrete de-

All saw water, coring waste, concrete washout and any debris shall be collected and disposed of off site in accordance with all applicable Federal, State, and Local Regulations at no additional cost to the project. Under no circumstances shall such material be allowed 'to enter anv natural or manmade water way or storm drain.

The Contractor shall protect pedestrians and traveling public from any falling debris during the construction work. Any debris which falls on paths or roadways shall be removed immediately. This work will not be measured and paid for separately, but shall be included in the cost of the work.

naking their own determination as to the be necessary to avoid damage thereto. The Contractor is responsible type and location of utilities as es as may be necessary to avoid damage thereto. ct the Utility Notification Center of Colorado at 811 The Contractor shall cont (1-800-922-1987) at least three business days (two full business days in advance not including the de of notification) prior to any excavation or other earthwork.

Manufacturer's representatives will be required on-site during installation of expansion devices and placement of polyester concrete overlay. See Project Special Prov

Lead based paint is present on the existing structure. Removal of hazardous material shall be in accordance with Section 250, as well as applicable EPA and USHA regulations. Cutting or burning of painted surfaces is prohibited unless paints are neutralized or removed prior to cutting procedures or fumes are properly contained.

The Contractor shall take all steps to avoid contaminating state waters, in accordance with subsection 107.25.

## WELDING AND STEEL REPAIR NOTES

All welding be performed by AWS Certified Welders.

All safety requirements for welding procedures by OHSA shall be followed.

The welding inspector shall be on AWS Certified Welding Inspector (CWI) in conformance with the provisions of AWS QC1.

Personnel performing nondestructive testing shall be qualified in accordance with AWS

After repair is complete, surface shall be prepared for paint per SSPC-SP1 and SSPC-

Certified surface shall be painted in accordance with SSPC-Paint 20, Type II, Level I.

#### INDEX OF DRAWINGS

B-100-1AR

BO1 GENERAL INFORMATION

Designe

various general notes and design data which are on bridge preservation and repair projects. They shall be necessary for specific projects.

The number of calendar days a deck is left open shall be discussed with the

#### DESIGN DATA

AASHTO Standard Specification for Highway Bridges, Sixteenth Edition, 1996, with 1997 interims for bar splice table.

Reinforced Concrete:

f'c = 4,500 psiClass D Concrete: Class DF Concrete: f'c = 4.500 psiClass DR Concrete: f'c = 4,500 psiClass DT Concrete: f'c = 4,500 psiConcrete (Patchina): f'c = 4,500 psi

Structural Steel: AASHTO M270 (ASTM A709) GRADE 36 fy = 36,000 psify = 50,000 psiAASHTO M270 (ASTM A709)Grade 50W AASHTO M270 (ASTM A709)Grade 50 fy = 50,000 psi

fy = 60,000 psi

#### **ABBREVIATIONS**

Reinforcing Steel:

(Per M-100-2 or as shown below)

Εa = Each = Back Face ĒF = Front Face FFBW = Front Face Backwall = Reinforced Concrete = Water Surface Elevation

### LEGEND

Section or Detail Identification



ross Reference Drawing Number if blank or dash, reference is to same sheet)



	Print Date: \$DATE\$			Sheet Revisions			Colorado Department of Transportation			As Constructed	!			Project No./Code	
All seals for this set of	File Name: Sheet_B-100-1AR.dgn			Date:	Comments	Init.	1	2829 West Howard Place, 3rd Floor Denver, CD 80204			- GENERAL INFORMATION			<del></del>	
	Horiz. Scale: None Vert. Scale: As Noted									No Revisions:				Project Number	
	Unit Information	Unit Leader Initials						Phone: 303-512-4079	Γ	Revised:	Designer:	XXXXXXX	Structure	ucture X-XX-XX	Code
			$\square \Gamma$					FAX: 303-757-9197			Detailer:	XXXXXXXX	Numbers	X-XX-XX	
			<u> </u>				Staff Bridge Bro	anch	Initials \	Void:	Sheet Subse	t: BRIDGE	Subset She	ets: BXX of XXX	Sheet Number