

GENERAL NOTES

Expansion joint material shall meet AASHTO Specification M213.

Grade 60 reinforcing steel is required.

All reinforcing steel shall be epoxy coated unless otherwise noted.

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.

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

The contractor shall be responsible for the stability of the structure during construction.

Dimensions contained in these plans are calculated from "as constructed plans". These dimensions may be adjusted to meet the existing structure. The contractor shall verify all dependant dimensions in the field before ordering or fabricating any material.

All falsework shall conform to the requirements of Subsection 601.11 of the 2011 CDDT Standard Specifications for Road and Bridge Construction.

The information shown on these plans concerning the type and location of underground utilities is not guaranteed to be accurate or all inclusive. The contractor is responsible for making his own determination as to type and location of underground utilities as may be necessary to avoid damage thereto. The contractor shall contact the utility notification center of Colorado at 811 (1-800-922-1987) at least 2 days (not including the day of notification) prior to any excavation or other earthwork.

Deck rehabilitation locations and quantities shown are approximate. Final locations shall be determined by the Engineer. Payment will be for the actual area repaired and material used as approved by the Engineer.

The bituminous pavement shall be removed from the existing structure as indicated on the plans and replaced to the grade and cross slope of the existing concrete deck.

Roadway alignment stationing shown on the General Layout sheets are shown for information only.

DECK REPAIR NOTES

The Contractor shall identify, in the presence of the Engineer, remove and dispose of all existing unsound concrete, unsound patches and all asphalt concrete patches on the bridge deck. The Engineer shall approve all removal locations and limits.

Unsound concrete is generally concrete that emits a relatively dead or hollow sound when a chain is dragged over its surface in accordance with ASTM D4580-86. Concrete encased corroded reinforcing steel beyond the limits identified by the sound may be considered as unsound concrete. The Engineer shall determine the soundness of all concrete.

Equipment and tools shall not be used to remove unsound concrete, which, in the opinion of the Engineer, cause removal of excess quantities of sound concrete along with the unsound concrete.

Equipment used shall be fitted with suitable traps, filters, drip pans, or other devices to prevent oil or other deleterious matter from being deposited on the deck.

Exposed reinforcing steel shall be cleaned of deleterious materials, such as, rust and corrosive products including oil, dirt, concrete fragments, loose scale and other coating, of any character, which would destroy or reduce the bond with the patch material.

Deck drains shall be protected during any removal operations.

DESIGN DATA

AASHTO, Sixth Edition LRFD with current interims

Design Method: Load and Resistance Factor Design.

Live Load: HL-93 (design truck or tandem, and design lane load)
Dead Load: Assumes 36 lbs. per sq. ft. for bridge deck overlay.

Reinforced Concrete: Class D Concrete: $f'_c = 4,500$ psi
Reinforcing Steel: $f_y = 60,000$ psi

BRIDGE WORK DESCRIPTION

J-15-E
Remove 1.5-inches of the asphalt and replace with 1.5-inches of Hot Mix Asphalt, HMA.

J-15-F
No work planned at Str. No. J-15-F.

J-15-A
Remove the existing asphalt mat to bare deck. Perform deck evaluation and Class 2 and Class 3 deck repairs. Replace joints. Place waterproofing (membrane) and asphalt. Flow-fill along bottom of abutment cap.

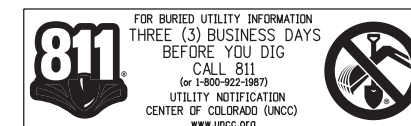
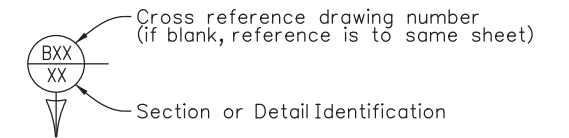
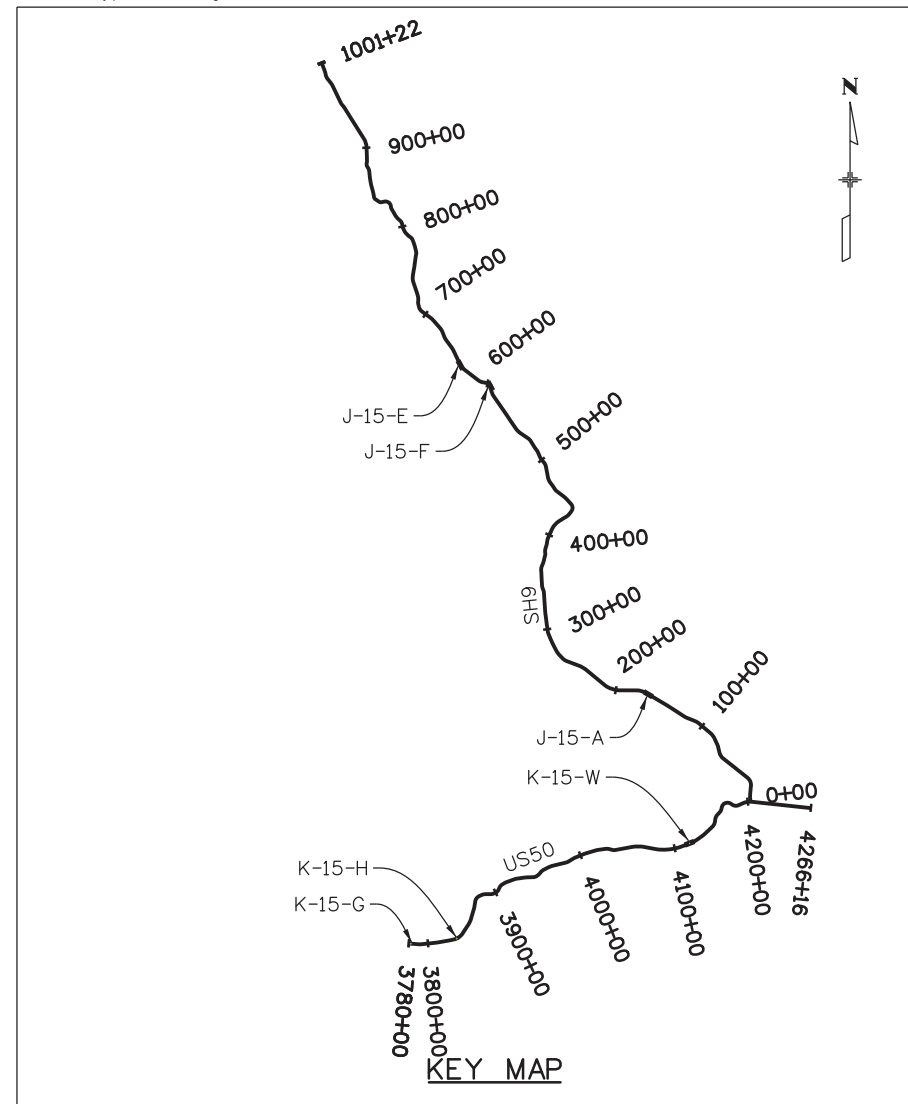
K-15-W
Remove the existing asphalt mat to bare deck. Perform deck evaluation and Class 2 and Class 3 deck repairs. Place waterproofing (membrane) and asphalt. Repair the chain link fence. Replace the impacted bridge rail, reset one railpost and perform concrete repair to the spalled curb. Replace bolts on the two adjacent railposts.

K-15-H
Remove the existing asphalt mat to bare deck. Perform deck evaluation and Class 2 and Class 3 deck repairs. Place waterproofing (membrane) and asphalt. Extend curbs at the NE and NW corners of the bridge to direct drainage away from the bridge.

K-15-G
Remove the existing asphalt mat to bare deck. Perform deck evaluation and Class 2 and Class 3 deck repairs. Place waterproofing (membrane) and asphalt. Remove the concrete doghouse rail, attached w-beam, and concrete curb and construct new curb and Type 10R bridge rail.

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Design		Detail		Quantities	
INITIAL	DATE	INITIAL	DATE	INITIAL	DATE
Designed By	11/16	Detailed By	11/16	Quantities By	11/16
Checked By	GM	Checked By	GMM	Checked By	GMM

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Colorado Department of Transportation
Region 2
1480 Quail Lake, Suite A
Colorado Springs, CO 80906
Phone: 719-634-2323 FAX: 719-227-3298
DW

As Constructed
No Revisions:
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GENERAL INFORMATION	
Designer: M. SUELAU	Structure Numbers
Detailer: R. WHITCHER	Subset Sheets: B1 of B15

Project No./Code
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