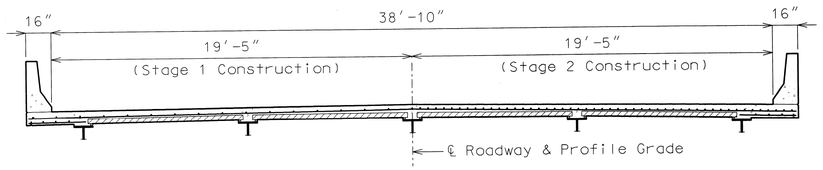
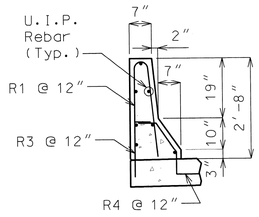
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

U.I.P. (125'-133'-125')(125'-133'-133'-125') CONTINUOUS COMPOSITE STEEL PLATE GIRDER SPANS AND REPLACE EXPANSION JOINT AT BENT NO. 1

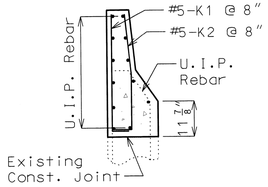
SEC/SUR 4 TWP 41N RGE 1E



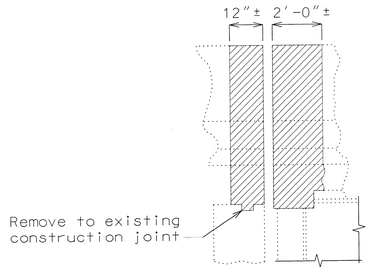
TYPICAL SECTION THRU SLAB



TYPICAL SECTION THRU BARRIER CURB ON NEW SLAB



TYPICAL SECTION THRU BARRIER CURB ON EXISTING WING



PART SECTION AT END BENT NO. 1 SHOWING LIMITS OF REMOVAL

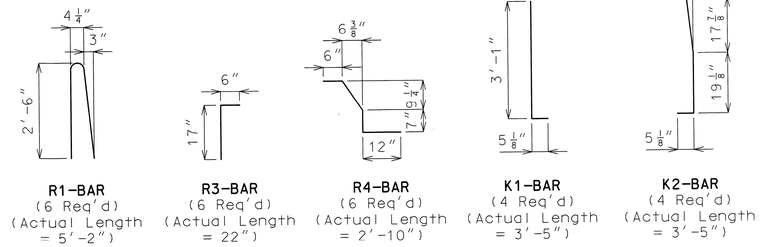
Notes:

The contractor shall remove top of backwall, slab and barrier curb concrete to the limits shown and across the width of the bridge at End Bent No. 1.

Any existing epoxy coated bars that are to remain and are damaged during construction shall be repaired in accordance with Sec 710.

The removal of concrete shall be in accordance with Sec 704.

Barrier curb bars that are not embedded in old concrete not removed shall be replaced with new epoxy coated reinforcement as shown in Barrier Curb Details.



R1-BAR (6 Req'd) (Actual Length = 5'-2")

R3-BAR (6 Req'd) (Actual Length = 22")

R4-BAR (6 Req'd) (Actual Length = 2'-10")

K1-BAR (4 Req'd) (Actual Length = 3'-5")

K2-BAR (4 Req'd) (Actual Length = 3'-5")

BARRIER CURB DETAILS

Notes:

Match existing barrier curb dimensions.

Top of safety barrier curb shall be built parallel to grade with barrier curb joints (except at end bents) normal to grade.

All exposed edges of safety barrier curb shall have either a $\frac{1}{2}$" radius or a $\frac{3}{8}$" bevel, unless otherwise noted.

Concrete in the safety barrier curb shall be Class B-1.

All bar dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual lengths are measured along centerline of bar to the nearest inch.

All bars shall be epoxy coated.

GENERAL NOTES:

Design Specifications:
2002 - AASHTO 17th Edition
Load Factor Design
Seismic Performance Category A
Acceleration Coefficient = 0.1

Design Loading:
HS20-44
Military 24,000# Tandem Axle
Fatigue Stress - Case II

Design Unit Stresses:

Class B-2 Concrete (Superstructure, except Safety Barrier Curb)	f'c = 4,000 psi
Class B-1 Concrete Safety Barrier Curb)	f'c = 4,000 psi
Reinforcing Steel (Grade 60)	fy = 60,000 psi
Structural Carbon Steel(ASTM A709 Grade 36)	fy = 36,000 psi

Fabricated Steel Connections:
Field connections shall be made with $\frac{3}{4}$" diameter high strength bolts and $\frac{13}{16}$" diameter holes, except as noted.

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be $1\frac{1}{2}$", unless otherwise shown.

Traffic Control:
One lane of traffic over structure to be maintained during construction. The Commission will provide all traffic control, including temporary signals.

Backwall:
Top of backwall for End Bent No. 1 shall be formed to the crown and grade of the roadway. Top of backwall shall not be poured until the superstructure slab has been poured in the adjacent span.

Pay Items:
Payment for all work necessary to complete the project, except the Traffic Control supplied by the Commission, will be considered completely covered by the contract price for "Replace Joint with Strip Seal Joint System". See Special Provisions.

Miscellaneous:
"Sec" refers to the sections in the standard and supplemental specifications unless specified otherwise.

Rapid set concrete shall be used for slab. See Special Provisions.

Outline of old work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before ordering new material.

Bars bonded in old concrete not removed shall be cleanly stripped and embedded into new concrete where possible. If length is available, old bars shall extend into new concrete at least 40 diameters for smooth bars and 30 diameters for deformed bars, unless otherwise noted.

Estimated Quantities

Item		Total
Replace Joint with Strip Seal Joint System	lump sum	1

REPAIRS TO BRIDGE: ROUTE 30/47 OVER MERAMEC RIVER

STATE ROAD FROM ROUTE K TO ROUTE 30/47 JUNCTION
ABOUT 2.8 MILES EAST OF ROUTE K
STA. 218+20.20

STD 706.35

STATE OF MISSOURI
THOMAS P. LOHMAR
NUMBER PE-2001018777
PROFESSIONAL ENGINEER
9-21-2011

DATE PREPARED 9/21/2011
ROUTE 30 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY FRANKLIN
JOB NO. J6P2354
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A49751

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HORNER & SHIFRIN, INC. ENGINEERS
3500 DeMenil Blvd. St. Louis, MO 63118-1848
314-531-4321 FAX: 314-531-6966
Disciplines: Professional Engineering
Certificate of Authority #2001193
Expiration Date: December 31, 2012

Designed: TPL
Detailed: TPL
Checked: MAB

Note: This drawing is not to scale. Follow dimensions.

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