STANDARD DRAWING GUIDANCE (SDG) (do not show on plans)

Select the appropriate 1st and 2nd sheet. Draw typical section as required and scale to fit within attached border replacing the provided example. Modify other details and notes as required (match orientation of actual reinforcement).

Transverse repair zoning over intermediate bents is required for these structures. Longitudinal repair zoning in spans is required only when hydro demolition is required and is based on anticipated quantity of deck repair if not overlayed, confidence of anticipated quantity of deck repair if overlayed, deck rating (e.g. 6 or better may not need zoning), See EPG 751.40 (If only transverse zoning is required, Zones shall be called "Special Repair Zones").

Wearing surface thickness can vary according to grade elevation requirements and minimum barrier curb height requirements. Maximum thickness should be limited to 3" (Ref. Organizational Results Research Report ORO6.004, May 2006). Limit excludes reinforced concrete slab wearing surfaces.

Will need to adjust wearing surface thickness when detailing a thin wearing surface (1" or less), but it is a preferred detailing practice to show a discernable thickness on the plans. No thickness is shown for crack filler application.

(A) Show difference as plus/minus X"±, see Bridge Memo or SPM. e.g. Match existing grade plus 2¼"±

(B) Identify new wearing surface (See Bridge Memo or SPM). Specify minimum thickness in deck details. Typically 1/4" thicker outside special repair zones for Hydro Case 1 & 2.

(C) Identify existing wearing surface and thickness, see Bridge Memo or existing plans.

(D) See Bridge Memo or SPM, typically 1/2". Use 1" if more than 30% of existing deck needs repair. Verify there will be a minimum of 1/2" of concrete above the top bars after scarification.

(E) See Bridge Memo or SPM, typically 1/4" inside special repair zones to avoid deeper penetration into newly repaired areas and 1/2" outside special repair zones.

(F) See existing plans.

(G) Use appropriate reference (℄ Structure, ℄ Roadway, ℄ Median, etc.)

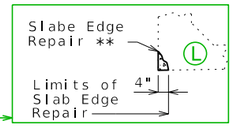
(H) Two types of overhang rehabilitation are shown. Cleaning and epoxy coating is preferred because of the relative short life of slab edge repair and unformed repair especially when over traffic. However in urban regions repairing the overhang may be preferred. Consult with SPM or SLE.

(I) Scarification prior to adding first wearing surface or removing a portion of the deck when removing an existing wearing surface is not required for seal coat, asphalt, UBAWS, epoxy polymer or MMA polymer slurry wearing surfaces.

(J) Monolithic deck repair should only be allowed where longitudinal zoning is not required.

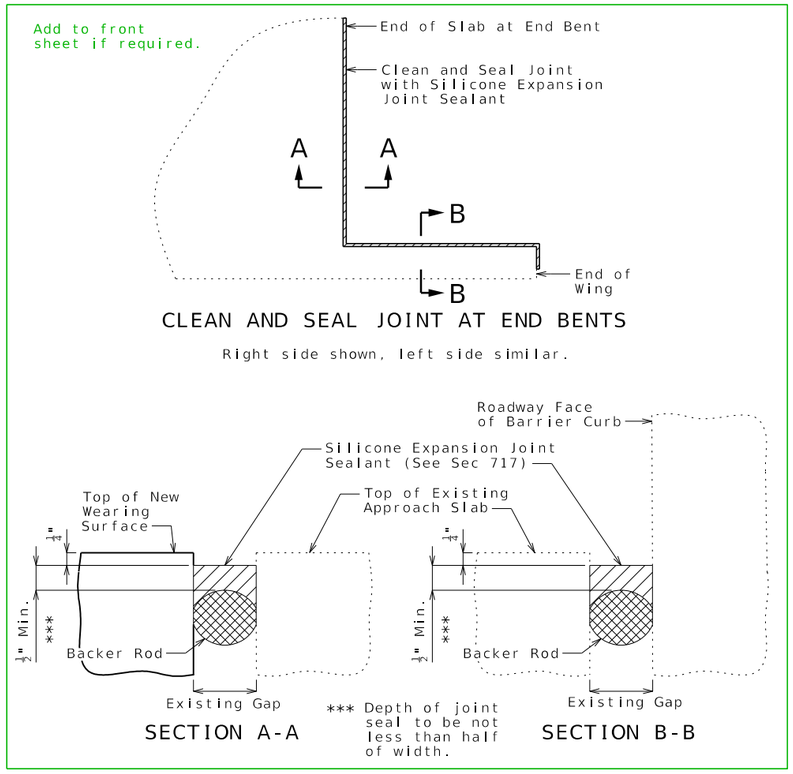
(K) May be used for aesthetics when there will be an extensive patchwork of repairs visible to the public.

(L) If deterioration is within 4 inches of edge then slab edge repair may be used instead of unformed superstructure repair.



(M) Note is required only when shop drawings will be required (For example, expansion device replacement, diaphragm replacement, etc.)

Detach all unused Drawing Models & Sheet Models before requesting PDFs for sign and seal.

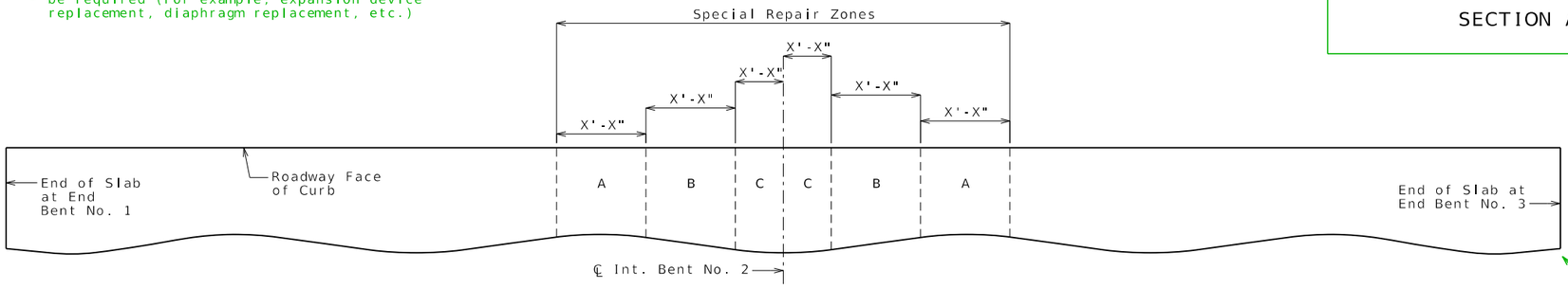


CLEAN AND SEAL JOINT AT END BENTS

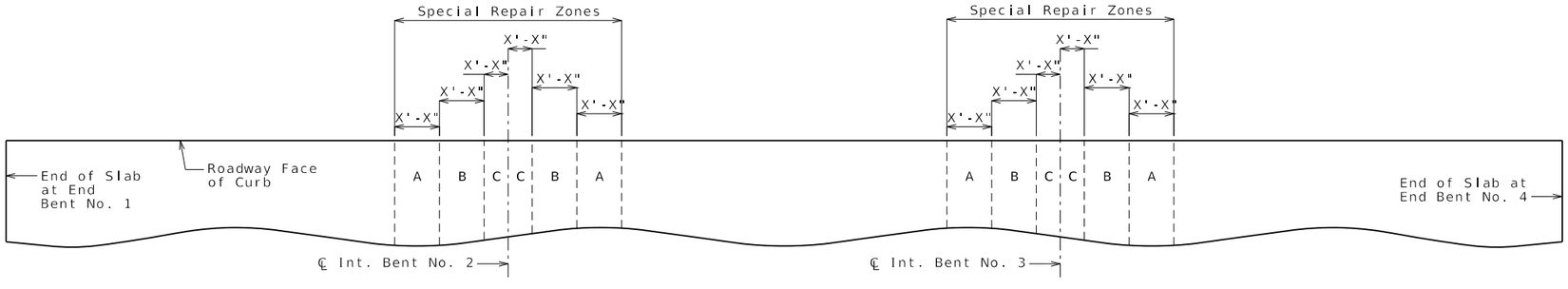
Right side shown, left side similar.

SECTION A-A

SECTION B-B



PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

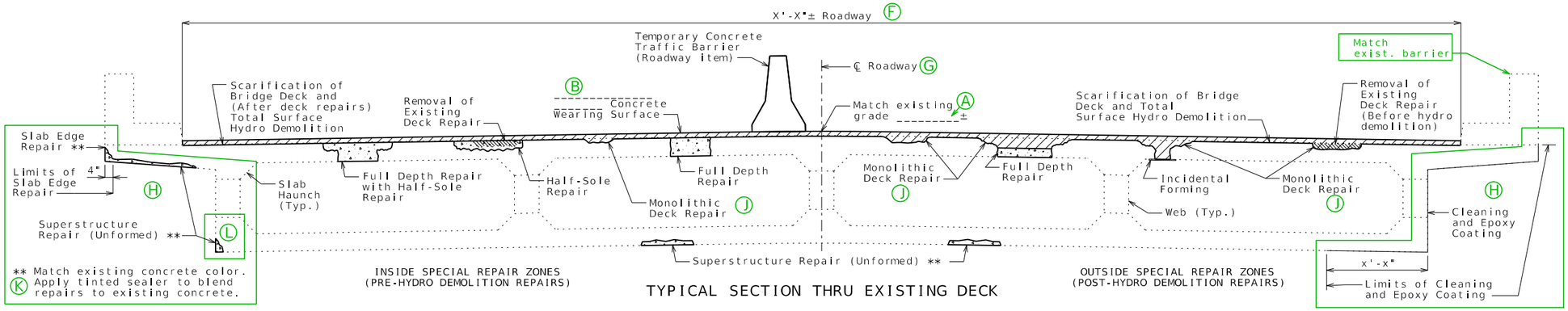


PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

Two spans and three spans shown. These details can be used on Sheets RHB03j and RHB03L for conventional deck repair only projects.

SEC/SUR * TWP * RGE *

U.I.P. AND REHABILITATE EXISTING (X'-X'-X') CONTINUOUS CONCRETE BOX GIRDER SPANS (SKEW: X)



TYPICAL SECTION THRU EXISTING DECK

Hydro Demolition Case 1A:

Zoned Conventional Deck Repair Before Hydro Demolition and Non-Zoned Monolithic Deck Repair After Hydro Demolition

(Adding First Wearing Surface)

STANDARD DRAWING GUIDANCE (do not show on plans):

Use for the following concrete wearing surfaces:
(B) 1 3/4" to 3" Latex Modified
2 1/4" to 3" Silica Fume
1 3/4" to 3" Latex Modified Very Early Strength
1 3/4" to 3" CSA Cement Very Early Strength
3" to 4" Steel Fiber Reinforced

If optional concrete wearing surface is specified and low slump or polyester polymer is an option:
1. Add the allowed options in parentheses to the typical section title below and also to the RHB03e sheet title.
2. Add to this sheet the typical section from Sheet RHB03e with "(Low Slump Concrete)" added to the title.
3. Add "(Low Slump Concrete)" to the RHB03f sheet title and revise the sheet number from two to three. Sheet RHB03e will not be used.

Replace as required → * Supplementary Wearing Surface Material

Estimated Quantities

Item			Total
Scarification of Bridge Deck	216-10.00	sq. yard	X
Total Surface Hydro Demolition	216-10.01	sq. yard	X
Removal of Existing Deck Repair	216-15.03	sq. foot	X
* Supplementary Wearing Surface Material	505-00.04	cu. yard	X
Latex Modified Concrete Wearing Surface	505-20.00	sq. yard	X
Substructure Repair (Formed)	704-01.01	sq. foot	X
Substructure Repair (Unformed)	704-01.02	sq. foot	X
Superstructure Repair (Unformed)	704-01.03	sq. foot	X
Half-Sole Repair	704-01.04	sq. foot	X
Full Depth Repair	704-01.06	sq. foot	X
Slab Edge Repair (Bridges)	704-01.07	linear foot	X
Cleaning and Epoxy Coating	704-01.13	sq. foot	X

B3.8 * Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.
B3.9 (If required)

General Notes:

A1.1 **Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating =

A1.2 **Design Loading:**

HS20-44 Modified (Year) and Military 24,000 lb Tandem Axle (Year)

A1.3 **Design Unit Stresses:**

Class B-1 Concrete (Half-Sole and Full Depth Repair) f'c = 4,000 psi

Miscellaneous:

I1.0.1 Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

I1.0.2 All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

I1.0.3 (If required) →

I1.1 Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

I1.2 (M) Contractor shall verify all dimensions in field before finalizing the shop drawings.

I1.10 In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

Traffic Handling:

A3.8 Structure to be closed during construction. Traffic to be maintained on ___ during construction. See roadway plans for traffic control and Sheet No. ___ for staged construction details.

REPAIRS TO BRIDGE: ROUTE *
OVER *

ROUTE * FROM * TO *
ABOUT * MILES * OF *
BEGINNING STATION _____± (Match Existing)

DATE PREPARED 3/7/2024
ROUTE | STATE MO
DISTRICT | SHEET NO. 3
COUNTY
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

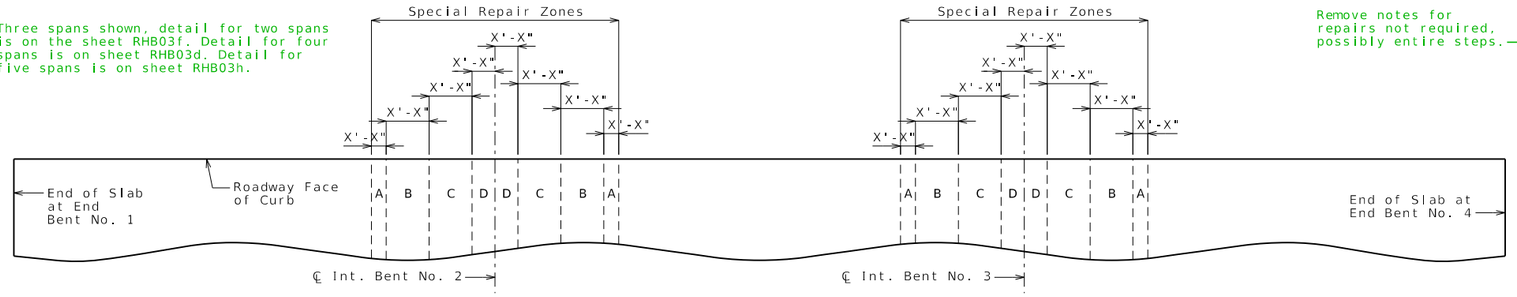
DESCRIPTION | DATE

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

Detailed
Checked

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

Three spans shown, detail for two spans is on the sheet RHB03f. Detail for four spans is on sheet RHB03d. Detail for five spans is on sheet RHB03h.



PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

Remove notes for repairs not required, possibly entire steps.

Deck Repair Notes:

Order of Repair:

1. Scarify existing deck Ⓓ___".
2. Power wash deck to identify sound and unsound existing deck repair.
3. Inside special repair zones, complete the following repairs:
   a. Removal of existing deck repair
   b. Half-sole repair
   c. Full depth repair
4. Outside special repair zones, remove existing deck repair.
5. Complete total surface hydro demolition, removing Ⓔ___" minimum of sound concrete inside special repair zones and removing ___" minimum of sound concrete and all deteriorated concrete outside special repair zones. Ⓔ
6. Sound deck and if needed complete incidental concrete removal.
7. Outside special repair zones, complete full depth repair.
8. Place new wearing surface including additional material for areas of monolithic deck repair.

Special Repair Zones:

I3.2 Deck repair required in the areas designated as special repair zones shall be completed before hydro demolition in alphabetical sequence beginning with Zone A. Zones with the same letter designation may be repaired at the same time. Hydro demolition shall not move forward until the repairs in all special repair zones are completed and properly cured.

I3.4 Any deck repair in areas not designated as a special repair zone shall be completed after hydro demolition.

I3.5 Removal and deck repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone.

I3.16 Total width of full depth repair shall not exceed 1/3 of the deck width at one time. For any area of deck repair that extends over a web and is more than 18 inches in length along the web, the concrete removal including removal with hydro demolition shall stop at the centerline of web and repair completed in this area. Prior to continuing work in this area, the concrete shall have attained a compressive strength of 3200 psi. No traffic shall be permitted over the web that is undergoing repair.

I3.17 When the full depth repair extends over a diaphragm or web and the deteriorated concrete extends into the diaphragm or web, all deteriorated concrete shall be removed and replaced as full depth repair. Concrete in webs shall not be removed below the slab haunch of the girder without prior review and approval from the engineer.

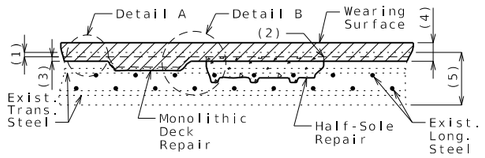
I3.20 Interior falsework installed by the contractor resting on the bottom slab shall be removed where entry access is available.

I3.21 If any single repair area does not exceed 9 square feet in size and the total repair area within a special repair zone does not exceed 27 square feet, the special repair zone may repaired at the same time as an adjacent zone.

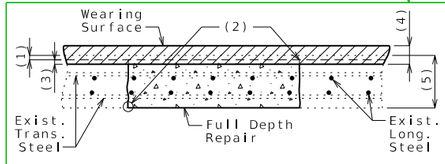
I3.22 Half-sole repair in the special repair zone, on either side of the intermediate bents, shall be to a depth that will not expose half the diameter of the longitudinal reinforcing bar. Full depth repair shall be made when removal of deteriorated concrete exposes half or more of the diameter of the longitudinal reinforcing bar.

Remove if repair is not required.

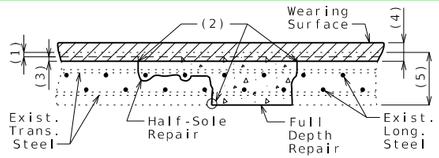
Replace with Note I3.3 for structures with single column bents.



MONOLITHIC AND HALF-SOLE REPAIR



FULL DEPTH REPAIR



FULL DEPTH REPAIR WITH HALF-SOLE REPAIR

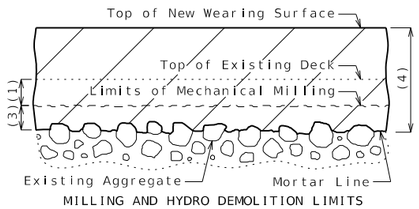
DECK REPAIR INSIDE SPECIAL REPAIR ZONES (BEFORE HYDRO DEMOLITION)

MONOLITHIC DECK REPAIR

MONOLITHIC DECK REPAIR
REQUIRING INCIDENTAL FORMING

MONOLITHIC DECK REPAIR
REQUIRING FULL DEPTH REPAIR

DECK REPAIR OUTSIDE SPECIAL REPAIR ZONES (AFTER HYDRO DEMOLITION)



MILLING AND HYDRO DEMOLITION LIMITS

DETAIL A

(1) Ⓓ___" scarification of existing deck

(2) 1" vertical side shall be established outside the deteriorated area.

(3) Total surface hydro demolition of sound concrete, measured to mortar line:

Ⓔ___" minimum inside special repair zones

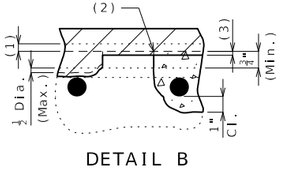
___" minimum outside special repair zones

(4) Ⓑ_____ concrete wearing surface:

___" minimum inside special repair zones

___" minimum outside special repair zones

(5) Original thickness of top slab



DETAIL B

Monolithic deck repair shall be used when only half the diameter or less of the top bar is exposed.

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

DECK REPAIR DETAILS

Detailed
Checked

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

Sheet No. of

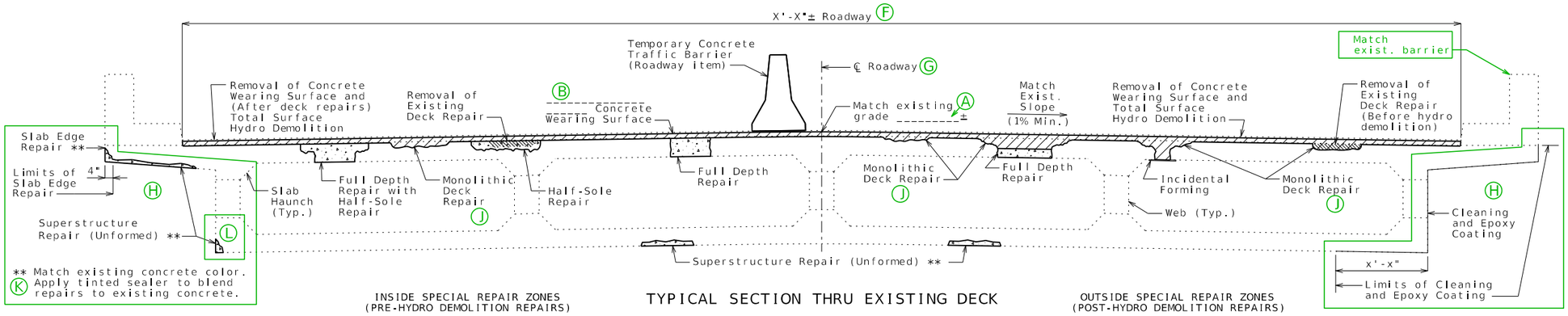
DATE PREPARED 3/7/2024
ROUTE
STATE MO
DISTRICT
SHEET NO. 4
COUNTY
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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

SEC/SUR * TWP * RGE *

U.I.P. AND REHABILITATE EXISTING (X'-X'-X') CONTINUOUS CONCRETE BOX GIRDER SPANS (SKEW: X)



INSIDE SPECIAL REPAIR ZONES (PRE-HYDRO DEMOLITION REPAIRS)

TYPICAL SECTION THRU EXISTING DECK

OUTSIDE SPECIAL REPAIR ZONES (POST-HYDRO DEMOLITION REPAIRS)

Hydro Demolition Case 1B:

Zoned Conventional Deck Repair Before Hydro Demolition and Non-Zoned Monolithic Deck Repair After Hydro Demolition

(Replacing Existing Wearing Surface)

STANDARD DRAWING GUIDANCE (do not show on plans):

Use for the following concrete wearing surfaces:
(B) 1 3/4" to 3" Latex Modified
2 1/4" to 3" Silica Fume
1 3/4" to 3" Latex Modified Very Early Strength
1 3/4" to 3" CSA Cement Very Early Strength
3" to 4" Steel Fiber Reinforced

If optional concrete wearing surface is specified and low slump or polyester polymer is an option:
1. Add the allowed options in parentheses to the typical section title below and also to the RHB03h sheet title.
2. Add to this sheet the typical section from Sheet RHB03g with "(Low Slump Concrete)" added to the title.
3. Add "(Low Slump Concrete)" to the RHB03h sheet title and revise the sheet number from two to three. Sheet RHB03g will not be used.

Replace as required

Estimated Quantities

	Item			Total
	Total Surface Hydro Demolition	216-10.01	sq. yard	X
	Removal of Concrete Wearing Surface	216-15.02	sq. foot	X
	Removal of Existing Deck Repair	216-15.03	sq. foot	X
*	Supplementary Wearing Surface Material	505-00.04	cu. yard	X
	Latex Modified Concrete Wearing Surface	505-20.00	sq. yard	X
	Substructure Repair (Formed)	704-01.01	sq. foot	X
	Substructure Repair (Unformed)	704-01.02	sq. foot	X
	Superstructure Repair (Unformed)	704-01.03	sq. foot	X
	Half-Sole Repair	704-01.04	sq. foot	X
	Full Depth Repair	704-01.06	sq. foot	X
	Slab Edge Repair (Bridges)	704-01.07	linear foot	X
	Cleaning and Epoxy Coating	704-01.13	sq. foot	X

B3.8 * Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.
B3.9 (If required)

General Notes:

A1.1 **Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating =

A1.2 **Design Loading:**

HS20-44 Modified (Year) and Military 24,000 lb Tandem Axle (Year)

A1.3 **Design Unit Stresses:**

Class B-1 Concrete (Half-Sole and Full Depth Repair) f'c = 4,000 psi

Miscellaneous:

I1.0.1 Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

I1.0.3 (If required) → I1.0.2 All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

I1.1 Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

(M) I1.2 Contractor shall verify all dimensions in field before finalizing the shop drawings.

I1.10 In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

Traffic Handling:

A3.8 Structure to be closed during construction. Traffic to be maintained on ___ during construction. See roadway plans for traffic control and Sheet No. ___ for staged construction details.

REPAIRS TO BRIDGE: ROUTE * OVER *
ROUTE * FROM * TO *
ABOUT * MILES * OF *
BEGINNING STATION _____± (Match Existing)

DATE PREPARED 3/7/2024
ROUTE | STATE MO
DISTRICT | SHEET NO. 5
COUNTY
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

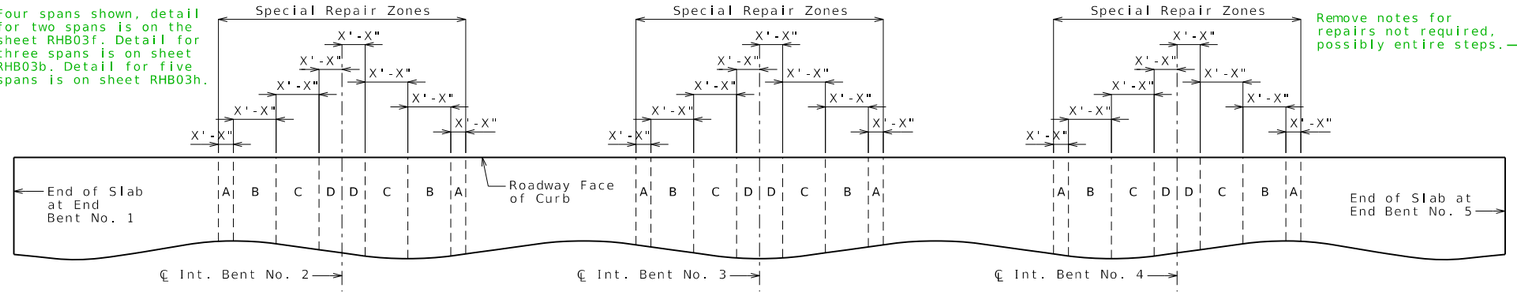
DESCRIPTION | DATE

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

Detailed
Checked

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

Four spans shown, detail for two spans is on the sheet RHB03f. Detail for three spans is on sheet RHB03b. Detail for five spans is on sheet RHB03h.



PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

Remove notes for repairs not required, possibly entire steps.

Deck Repair Notes:

Order of Repair:

1. Remove existing wearing surface plus Ⓓ___" of existing deck.
2. Power wash deck to identify sound and unsound existing deck repair.
3. Inside special repair zones, complete the following repairs:
   a. Removal of existing deck repair
   b. Half-sole repair
   c. Full depth repair
4. Outside special repair zones, remove existing deck repair.
5. Complete total surface hydro demolition, removing Ⓔ___" minimum of sound concrete inside special repair zones and removing Ⓔ___" minimum of sound concrete and all deteriorated concrete outside special repair zones.
6. Sound deck and if needed complete incidental concrete removal.
7. Outside special repair zones, complete full depth repair.
8. Place new wearing surface including additional material for areas of monolithic deck repair.

Special Repair Zones:

I3.2 Deck repair required in the areas designated as special repair zones shall be completed before hydro demolition in alphabetical sequence beginning with Zone A. Zones with the same letter designation may be repaired at the same time. Hydro demolition shall not move forward until the repairs in all special repair zones are completed and properly cured.

I3.4 Any deck repair in areas not designated as a special repair zone shall be completed after hydro demolition.

I3.5 Removal and deck repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone.

I3.16 Total width of full depth repair shall not exceed 1/3 of the deck width at one time. For any area of deck repair that extends over a web and is more than 18 inches in length along the web, the concrete removal including removal with hydro demolition shall stop at the centerline of web and repair completed in this area. Prior to continuing work in this area, the concrete shall have attained a compressive strength of 3200 psi. No traffic shall be permitted over the web that is undergoing repair.

I3.17 When the full depth repair extends over a diaphragm or web and the deteriorated concrete extends into the diaphragm or web, all deteriorated concrete shall be removed and replaced as full depth repair. Concrete in webs shall not be removed below the slab haunch of the girder without prior review and approval from the engineer.

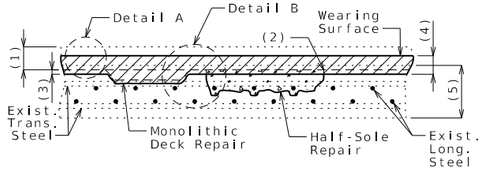
I3.20 Interior falsework installed by the contractor resting on the bottom slab shall be removed where entry access is available.

I3.21 If any single repair area does not exceed 9 square feet in size and the total repair area within a special repair zone does not exceed 27 square feet, the special repair zone may repaired at the same time as an adjacent zone.

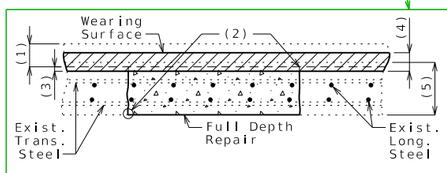
I3.22 Half-sole repair in the special repair zone, on either side of the intermediate bents, shall be to a depth that will not expose half the diameter of the longitudinal reinforcing bar. Full depth repair shall be made when removal of deteriorated concrete exposes half or more of the diameter of the longitudinal reinforcing bar.

Replace with Note I3.3 for structures with single column bents.

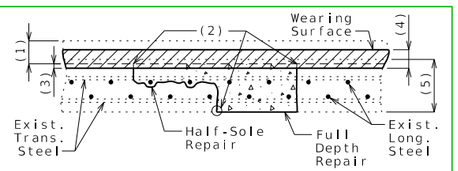
Remove if repair is not required.



MONOLITHIC AND HALF-SOLE REPAIR

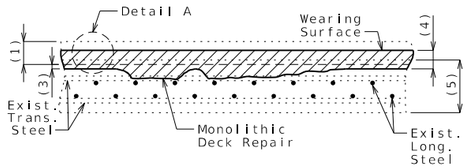


FULL DEPTH REPAIR

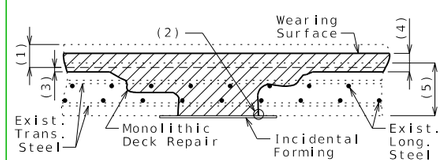


FULL DEPTH REPAIR WITH HALF-SOLE REPAIR

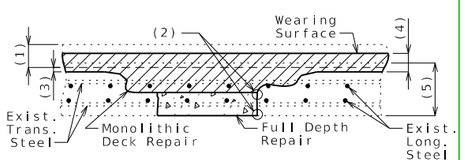
DECK REPAIR INSIDE SPECIAL REPAIR ZONES (BEFORE HYDRO DEMOLITION)



MONOLITHIC DECK REPAIR

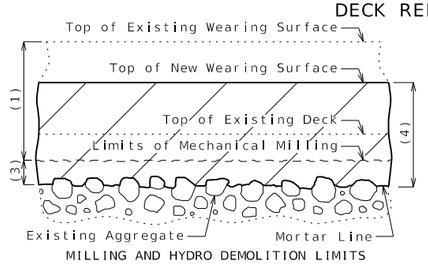


MONOLITHIC DECK REPAIR
REQUIRING INCIDENTAL FORMING



MONOLITHIC DECK REPAIR
REQUIRING FULL DEPTH REPAIR

DECK REPAIR OUTSIDE SPECIAL REPAIR ZONES (AFTER HYDRO DEMOLITION)



MILLING AND HYDRO DEMOLITION LIMITS

DETAIL A

(1) Removal of existing Ⓓ___"± Ⓒ_____ wearing surface plus ___" of existing deck

(2) 1" vertical side shall be established outside the deteriorated area.

(3) Total surface hydro demolition of sound concrete, measured to mortar line:

Ⓔ___" minimum inside special repair zones

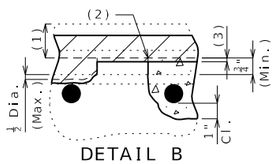
Ⓔ___" minimum outside special repair zones

(4) Ⓑ_____ concrete wearing surface:

___" minimum inside special repair zones

___" minimum outside special repair zones

(5) Original thickness of top slab minus previous scarification



DETAIL B

Monolithic deck repair shall be used when only half the diameter or less of the top bar is exposed.

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

DECK REPAIR DETAILS

Detailed
Checked

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

Sheet No. of

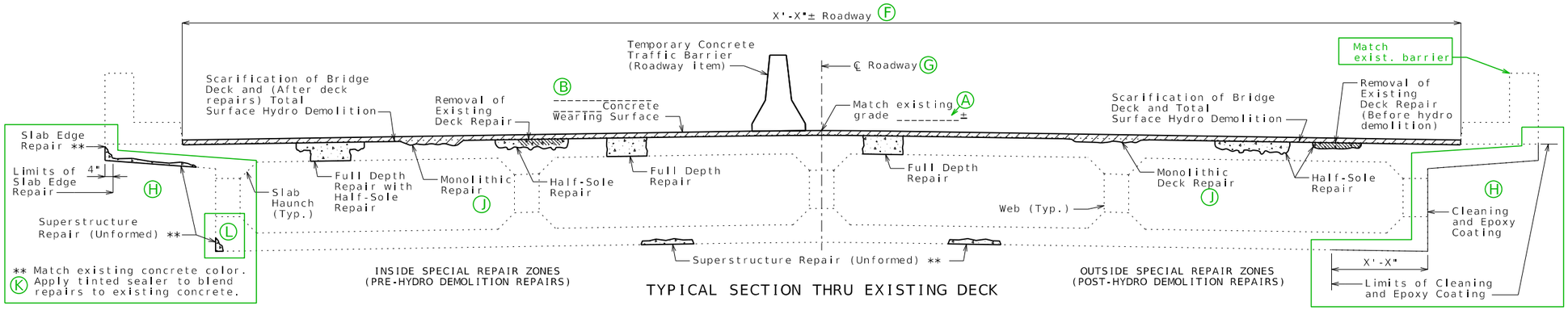
DATE PREPARED 3/7/2024
ROUTE | STATE MO
DISTRICT | SHEET NO. 6
COUNTY
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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

SEC/SUR * TWP * RGE *

U.I.P. AND REHABILITATE EXISTING (X'-X'-X') CONTINUOUS CONCRETE BOX GIRDER SPANS (SKEW: X)



TYPICAL SECTION THRU EXISTING DECK

Hydro Demolition Case 2A:

Zoned Conventional Deck Repair Before Hydro Demolition and Non-Zoned Conventional Deck Repair After Hydro Demolition

(Adding First Wearing Surface)

STANDARD DRAWING GUIDANCE (do not show on plans):

Use for the following concrete wearing surfaces:
(B) 2 1/4" to 3" Low Slump
3/4" to 3" Polyester Polymer

If optional concrete wearing surface is specified and low slump or polyester polymer is an option follow guidance on Sheet RHB03a.

Estimated Quantities

Item			Total
Scarification of Bridge Deck	216-10.00	sq. yard	X
Total Surface Hydro Demolition	216-10.01	sq. yard	X
Removal of Existing Deck Repair	216-15.03	sq. foot	X
* Supplementary Wearing Surface Material	505-00.04	cu. yard	X
Low Slump Concrete Wearing Surface	505-10.00	sq. yard	X
Substructure Repair (Formed)	704-01.01	sq. foot	X
Substructure Repair (Unformed)	704-01.02	sq. foot	X
Superstructure Repair (Unformed)	704-01.03	sq. foot	X
Half-Sole Repair	704-01.04	sq. foot	X
Full Depth Repair	704-01.06	sq. foot	X
Slab Edge Repair (Bridges)	704-01.07	linear foot	X
Cleaning and Epoxy Coating	704-01.13	sq. foot	X

Replace as required → * (B3.8)

B3.8 * Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.
B3.9 (If required)

General Notes:

A1.1 Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating =

A1.2 Design Loading: (Year) (Year)

HS20-44 Modified ( ) and Military 24,000 lb Tandem Axle ( )

A1.3 Design Unit Stresses:

Class B-1 Concrete (Half-Sole and Full Depth Repair) f'c = 4,000 psi

Miscellaneous:

I1.0.1 Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

I1.0.3 (If required) → I1.0.2 All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

I1.1 Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

I1.2 (M) Contractor shall verify all dimensions in field before finalizing the shop drawings.

I1.10 In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

Traffic Handling:

A3.8 Structure to be closed during construction. Traffic to be maintained on __ during construction. See roadway plans for traffic control and Sheet No. for staged construction details.

REPAIRS TO BRIDGE: ROUTE *
OVER *

ROUTE * FROM * TO *
ABOUT * MILES * OF *
BEGINNING STATION _____± (Match Existing)

DATE PREPARED 3/7/2024
ROUTE | STATE MO
DISTRICT | SHEET NO. 7
COUNTY
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

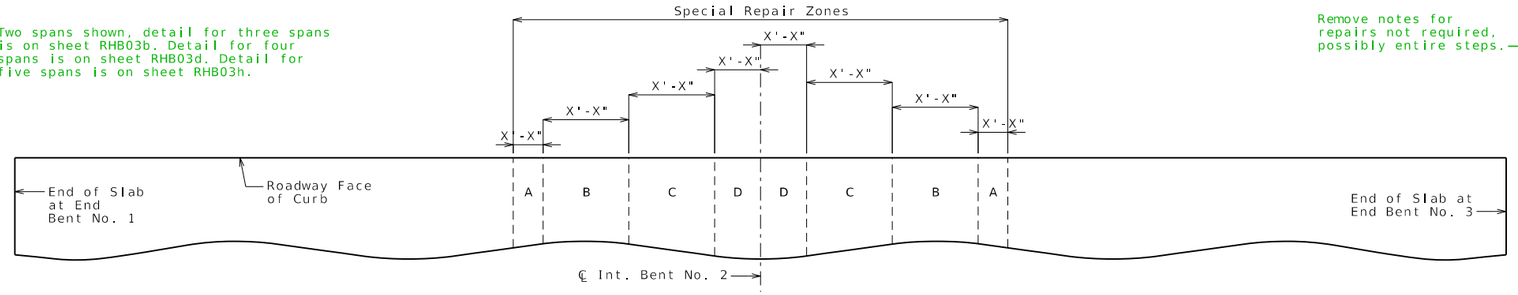
DESCRIPTION | DATE

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

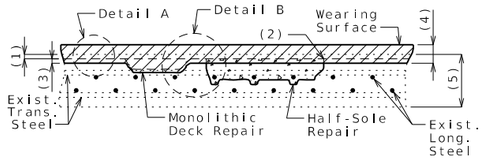
Detailed
Checked

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

Two spans shown, detail for three spans is on sheet RHB03b. Detail for four spans is on sheet RHB03d. Detail for five spans is on sheet RHB03h.

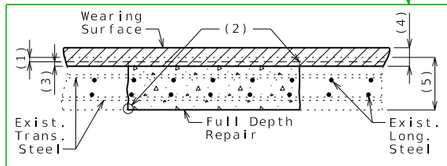


PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES



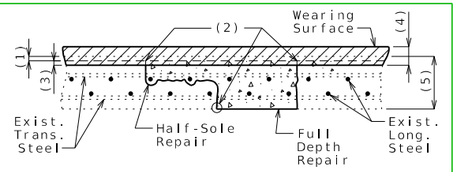
MONOLITHIC AND HALF-SOLE REPAIR

Remove if repair is not required.



FULL DEPTH REPAIR

Replace with Note I3.3 for structures with single column bents.



FULL DEPTH REPAIR WITH HALF-SOLE REPAIR

DECK REPAIR INSIDE SPECIAL REPAIR ZONES (BEFORE HYDRO DEMOLITION)

MONOLITHIC AND HALF-SOLE REPAIR

FULL DEPTH REPAIR

FULL DEPTH REPAIR WITH HALF-SOLE REPAIR

DECK REPAIR OUTSIDE SPECIAL REPAIR ZONES (AFTER HYDRO DEMOLITION)

MILLING AND HYDRO DEMOLITION LIMITS

DETAIL A

DETAIL B DETAIL C

Monolithic deck repair shall be used when only half the diameter or less of the top bar is exposed.

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

DECK REPAIR DETAILS

Deck Repair Notes:

Remove notes for repairs not required, possibly entire steps.

Order of Repair:

1. Scarify existing deck (D)___".
2. Power wash deck to identify sound and unsound existing deck repair.
3. Inside special repair zones, complete the following repairs:
   a. Removal of existing deck repair
   b. Half-sole repair
   c. Full depth repair
4. Outside special repair zones, remove existing deck repair.
5. Complete total surface hydro demolition, removing (E)___" minimum of sound concrete inside special repair zones and removing ___" minimum of sound concrete and all deteriorated concrete outside special repair zones. (E)
6. Sound deck and if needed complete incidental concrete removal.
7. Outside special repair zones, complete the following repairs:
   a. Half-sole repair
   b. Full depth repair
8. Place new wearing surface including additional material for areas of monolithic deck repair.

Special Repair Zones:

I3.2 Deck repair required in the areas designated as special repair zones shall be completed before hydro demolition in alphabetical sequence beginning with Zone A. Zones with the same letter designation may be repaired at the same time. Hydro demolition shall not move forward until the repairs in all special repair zones are completed and properly cured.

I3.4 Any deck repair in areas not designated as a special repair zone shall be completed after hydro demolition.

I3.5 Removal and deck repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone.

I3.16 Total width of full depth repair shall not exceed 1/3 of the deck width at one time. For any area of deck repair that extends over a web and is more than 18 inches in length along the web, the concrete removal including removal with hydro demolition shall stop at the centerline of web and repair completed in this area. Prior to continuing work in this area, the concrete shall have attained a compressive strength of 3200 psi. No traffic shall be permitted over the web that is undergoing repair.

I3.17 When the full depth repair extends over a diaphragm or web and the deteriorated concrete extends into the diaphragm or web, all deteriorated concrete shall be removed and replaced as full depth repair. Concrete in webs shall not be removed below the slab haunch of the girder without prior review and approval from the engineer.

I3.20 Interior falsework installed by the contractor resting on the bottom slab shall be removed where entry access is available.

I3.21 If any single repair area does not exceed 9 square feet in size and the total repair area within a special repair zone does not exceed 27 square feet, the special repair zone may repaired at the same time as an adjacent zone.

I3.22 Half-sole repair in the special repair zone, on either side of the intermediate bents, shall be to a depth that will not expose half the diameter of the longitudinal reinforcing bar. Full depth repair shall be made when removal of deteriorated concrete exposes half or more of the diameter of the longitudinal reinforcing bar.

DATE PREPARED 3/7/2024
ROUTE | STATE MO
DISTRICT | SHEET NO. 8
COUNTY
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

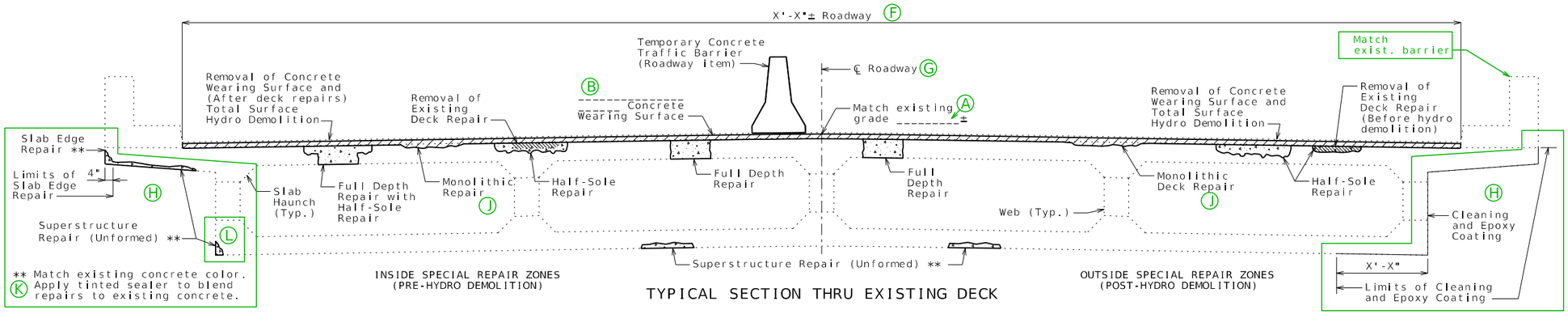
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

Detailed
Checked

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

SEC/SUR * TWP * RGE *

U.I.P. AND REHABILITATE EXISTING (X'-X'-X') CONTINUOUS CONCRETE BOX GIRDER SPANS (SKEW: X)



TYPICAL SECTION THRU EXISTING DECK

Hydro Demolition Case 2B:

Zoned Conventional Deck Repair Before Hydro Demolition and Non-Zoned Conventional Deck Repair After Hydro Demolition

(Replacing Existing Wearing Surface)

STANDARD DRAWING GUIDANCE (do not show on plans):

Use for the following concrete wearing surfaces:
(B) 2 1/4" to 3" Low Slump
3/4" to 3" Polyester Polymer

If optional concrete wearing surface is specified and low slump or polyester polymer is an option follow guidance on Sheet RHB03c.

Estimated Quantities

Item			Total
Total Surface Hydro Demolition	216-10.01	sq. yard	X
Removal of Concrete Wearing Surface	216-15.02	sq. foot	X
Removal of Existing Deck Repair	216-15.03	sq. foot	X
* Supplementary Wearing Surface Material	505-00.04	cu. yard	X
Low Slump Concrete Wearing Surface	505-10.00	sq. yard	X
Substructure Repair (Formed)	704-01.01	sq. foot	X
Substructure Repair (Unformed)	704-01.02	sq. foot	X
Superstructure Repair (Unformed)	704-01.03	sq. foot	X
Half-Sole Repair	704-01.04	sq. foot	X
Full Depth Repair	704-01.06	sq. foot	X
Slab Edge Repair (Bridges)	704-01.07	linear foot	X
Cleaning and Epoxy Coating	704-01.13	sq. foot	X

Replace as required → *

B3.8 * Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.
B3.9 (If required)

General Notes:

A1.1 Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating =

A1.2 Design Loading:

HS20-44 Modified (Year) and Military 24,000 lb Tandem Axle (Year)

A1.3 Design Unit Stresses:

Class B-1 Concrete (Half-Sole and Full Depth Repair) f'c = 4,000 psi

Miscellaneous:

I1.0.1 Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

I1.0.3 (If required) → I1.0.2 All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

I1.1 Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

I1.2 (M) Contractor shall verify all dimensions in field before finalizing the shop drawings.

I1.10 In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

Traffic Handling:

A3.8 Structure to be closed during construction. Traffic to be maintained on __ during construction. See roadway plans for traffic control and Sheet No. __ for staged construction details.

REPAIRS TO BRIDGE: ROUTE *
OVER *

ROUTE * FROM * TO *
ABOUT * MILES * OF *
BEGINNING STATION _____± (Match Existing)

DATE PREPARED 3/7/2024
ROUTE STATE MO
DISTRICT SHEET NO. 9
COUNTY
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

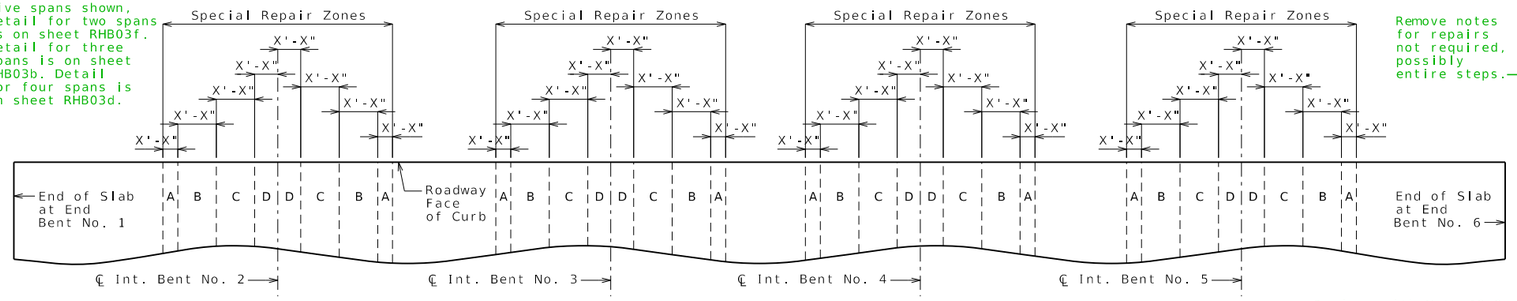
DESCRIPTION | DATE

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

Detailed
Checked

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

Five spans shown, detail for two spans is on sheet RHB03f. Detail for three spans is on sheet RHB03b. Detail for four spans is on sheet RHB03d.



PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

Remove notes for repairs not required, possibly entire steps.

Deck Repair Notes:

Order of Repair:

1. Remove existing wearing surface plus Ⓓ ___" of existing deck.
2. Power wash deck to identify sound and unsound existing deck repair.
3. Inside special repair zones, complete the following repairs:
   a. Removal of existing deck repair
   b. Half-sole repair
   c. Full depth repair
4. Outside special repair zones, remove existing deck repair.
5. Complete total surface hydro demolition, removing Ⓔ ___" minimum of sound concrete inside special repair zones and removing Ⓔ ___" minimum of sound concrete and all deteriorated concrete outside special repair zones.
6. Sound deck and if needed complete incidental concrete removal.
7. Outside special repair zones, complete the following repairs:
   a. Half-sole repair
   b. Full depth repair
8. Place new wearing surface including additional material for areas of monolithic deck repair.

Special Repair Zones:

I3.2 Deck repair required in the areas designated as special repair zones shall be completed before hydro demolition in alphabetical sequence beginning with Zone A. Zones with the same letter designation may be repaired at the same time. Hydro demolition shall not move forward until the repairs in all special repair zones are completed and properly cured.

I3.4 Any deck repair in areas not designated as a special repair zone shall be completed after hydro demolition.

I3.5 Removal and deck repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone.

I3.16 Total width of full depth repair shall not exceed 1/3 of the deck width at one time. For any area of deck repair that extends over a web and is more than 18 inches in length along the web, the concrete removal including removal with hydro demolition shall stop at the centerline of web and repair completed in this area. Prior to continuing work in this area, the concrete shall have attained a compressive strength of 3200 psi. No traffic shall be permitted over the web that is undergoing repair.

I3.17 When the full depth repair extends over a diaphragm or web and the deteriorated concrete extends into the diaphragm or web, all deteriorated concrete shall be removed and replaced as full depth repair. Concrete in webs shall not be removed below the slab haunch of the girder without prior review and approval from the engineer.

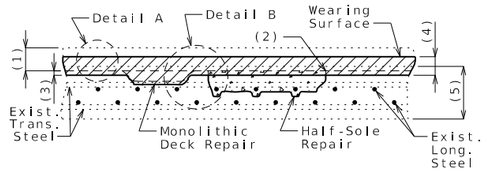
I3.20 Interior falsework installed by the contractor resting on the bottom slab shall be removed where entry access is available.

I3.21 If any single repair area does not exceed 9 square feet in size and the total repair area within a special repair zone does not exceed 27 square feet, the special repair zone may repaired at the same time as an adjacent zone.

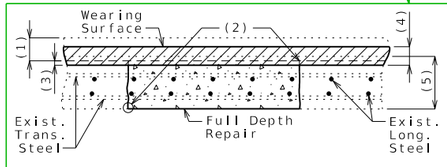
I3.22 Half-sole repair in the special repair zone, on either side of the intermediate bents, shall be to a depth that will not expose half the diameter of the longitudinal reinforcing bar. Full depth repair shall be made when removal of deteriorated concrete exposes half or more of the diameter of the longitudinal reinforcing bar.

Remove if repair is not required.

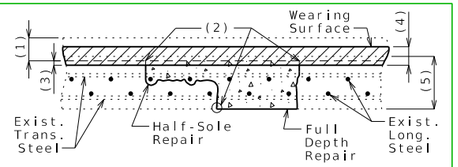
Replace with Note I3.3 for structures with single column bents.



MONOLITHIC AND HALF-SOLE REPAIR



FULL DEPTH REPAIR



FULL DEPTH REPAIR WITH HALF-SOLE REPAIR

DECK REPAIR INSIDE SPECIAL REPAIR ZONES (BEFORE HYDRO DEMOLITION)

MONOLITHIC AND HALF-SOLE REPAIR

FULL DEPTH REPAIR

FULL DEPTH REPAIR WITH HALF-SOLE REPAIR

DECK REPAIR OUTSIDE SPECIAL REPAIR ZONES (AFTER HYDRO DEMOLITION)

MILLING AND HYDRO DEMOLITION LIMITS

DETAIL A

(1) Removal of existing Ⓒ "± _____ wearing surface plus ___" of existing deck Ⓓ

(2) 1" vertical side shall be established outside the deteriorated area.

(3) Total surface hydro demolition of sound concrete, measured to mortar line

___" minimum inside special repair zones

Ⓔ ___" minimum outside special repair zones

(4) Ⓑ _____ concrete wearing surface:

___" minimum inside special repair zones

___" minimum outside special repair zones

(5) Original thickness of top slab minus previous scarification

DETAIL B

DETAIL C

Monolithic deck repair shall be used when only half the diameter or less of the top bar is exposed.

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

DECK REPAIR DETAILS

Detailed
Checked

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

Sheet No. of

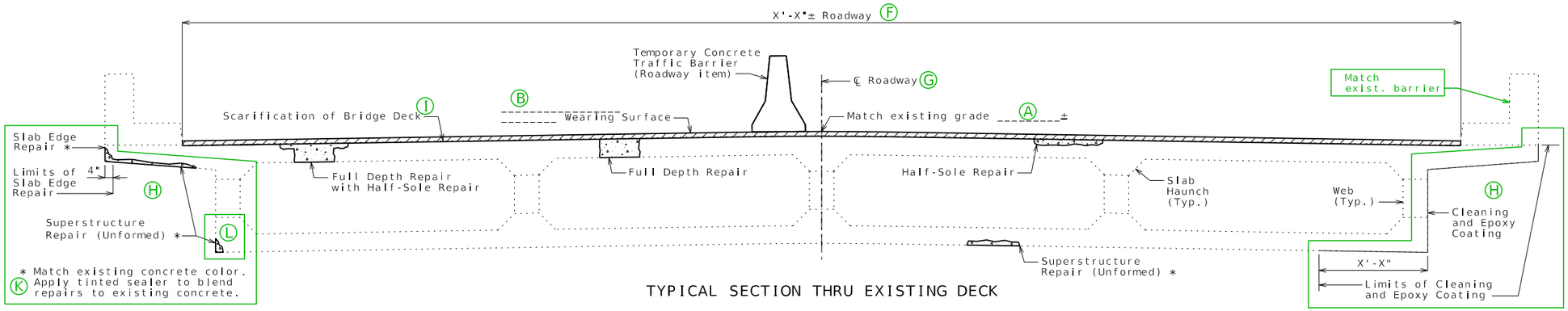
DATE PREPARED 3/7/2024
ROUTE
STATE MO
DISTRICT
SHEET NO. 10
COUNTY
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION
DATE

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

SEC/SUR * TWP * RGE *

U.I.P. AND REHABILITATE EXISTING (X'-X'-X') CONTINUOUS CONCRETE BOX GIRDER SPANS (SKEW: X)



TYPICAL SECTION THRU EXISTING DECK

Conventional Deck Repair Only (Case A)

(Adding First Wearing Surface or Applying Concrete Crack Filler)

STANDARD DRAWING GUIDANCE (do not show on plans):

May be used for all wearing surfaces and when applying concrete crack filler:

Scarification not required when applying concrete crack filler or with the following wearing surfaces:
Seal Coat
Asphalt
UBAWS
Epoxy Polymer
MMA Polymer Slurry

(B) 2 1/4" to 3" Low Slump Concrete
1 3/4" to 3" Latex Modified Concrete
2 1/4" to 3" Silica Fume Concrete
1 3/4" to 3" Latex Modified Very Early Strength Concrete
1 3/4" to 3" CSA Cement Very Early Strength Concrete
3" to 4" Steel Fiber Reinforced Concrete
1/4" Epoxy Polymer
3/4" to 3" Polyester Polymer Concrete
3/8" MMA Polymer Slurry
4" to 5" Reinforced Concrete Slab
3/8" Chip Seal Grade A1
1" to 3" Optional Asphaltic Concrete
1/2" to 3/4" Optional Ultrathin Bonded Asphalt

Replace as required →

Estimated Quantities

Item			Total
Scarification of Bridge Deck	216-10.00	sq. yard	X
Latex Modified Concrete Wearing Surface	505-20.00	sq. yard	X
Substructure Repair (Formed)	704-01.01	sq. foot	X
Substructure Repair (Unformed)	704-01.02	sq. foot	X
Superstructure Repair (Unformed)	704-01.03	sq. foot	X
Half-Sole Repair	704-01.04	sq. foot	X
Full Depth Repair	704-01.06	sq. foot	X
Slab Edge Repair (Bridges)	704-01.07	linear foot	X
Cleaning and Epoxy Coating	704-01.13	sq. foot	X

General Notes:

A1.1 **Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating =

A1.2 **Design Loading:** (Year) (Year)

HS20-44 Modified ( ) and Military 24,000 lb Tandem Axle ( )

A1.3 **Design Unit Stresses:**

Class B-1 Concrete (Half-Sole and Full Depth Repair) f'c = 4,000 psi

Miscellaneous:

I1.0.1 Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

I1.0.3 (If required) →

I1.0.2 All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

I1.1 Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

(M) I1.2 Contractor shall verify all dimensions in field before ordering finalizing the shop drawings.

I1.10 In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

Traffic Handling:

A3.8 Structure to be closed during construction. Traffic to be maintained on ___ during construction. See roadway plans for traffic control and Sheet No. ___ for staged construction details.

REPAIRS TO BRIDGE: ROUTE * OVER *

ROUTE * FROM * TO *
ABOUT * MILES * OF *
BEGINNING STATION _____± (Match Existing)

DATE PREPARED 3/7/2024
ROUTE | STATE MO
DISTRICT | SHEET NO. 11
COUNTY
JOB NO.
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

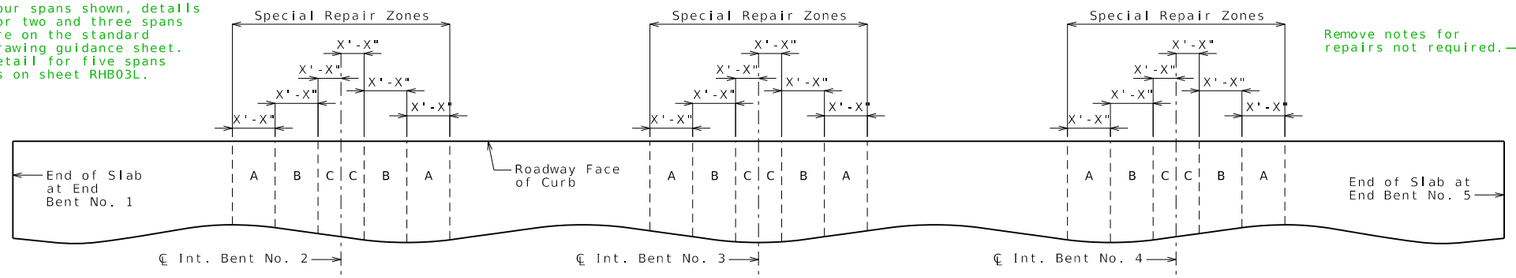
DESCRIPTION | DATE

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

Detailed
Checked

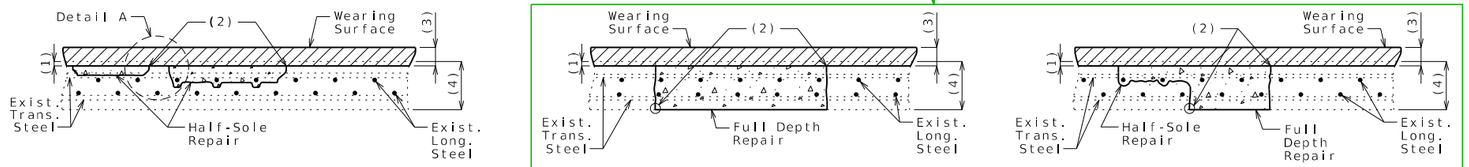
Note: This drawing is not to scale. Follow dimensions.

Four spans shown, details for two and three spans are on the standard drawing guidance sheet. Detail for five spans is on sheet RHB03L.



PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

Remove if repair is not required.

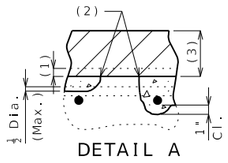


HALF-SOLE REPAIR

FULL DEPTH REPAIR

FULL DEPTH REPAIR WITH HALF-SOLE REPAIR

DECK REPAIR



DETAIL A

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

(1) Ⓓ ___" scarification of existing deck Ⓘ

(2) 1" vertical side shall be established outside the deteriorated area.

(3) Ⓑ ___" minimum _____ wearing surface

(4) Original thickness of top slab

Deck Repair Notes:

Remove notes for repairs not required.

Order of Repair:

1. Scarify existing deck Ⓓ ___". Ⓘ
2. Sound deck to identify areas in need of repair.
3. Outside special repair zones, complete the following repairs:
   a. Half-sole repair
   b. Full depth repair
4. Inside special repair zones, complete the following repairs:
   a. Half-sole repair
   b. Full depth repair
5. Place new wearing surface.

Special Repair Zones:

I3.1 Any deck repair in areas not designated as a special repair zone shall be completed prior to work in Zone A.

Replace with Note I3.3 for structures with single column bents.

I3.2 Deck repair required in the areas designated as special repair zones shall be completed in alphabetical sequence beginning with Zone A. Zones with the same letter designation may be repaired at the same time.

I3.5 Removal and deck repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone.

I3.16 Total width of full depth repair shall not exceed 1/3 of the deck width at one time. For any area of deck repair that extends over a web and is more than 18 inches in length along the web, the concrete removal shall stop at the centerline of web and repair completed in this area. Prior to continuing work in this area, the concrete shall have attained a compressive strength of 3200 psi. No traffic shall be permitted over the web that is undergoing repair.

I3.17 When the full depth repair extends over a diaphragm or web and the deteriorated concrete extends into the diaphragm or web, all deteriorated concrete shall be removed and replaced as full depth repair. Concrete in webs shall not be removed below the slab haunch of the girder without prior review and approval from the engineer.

I3.20 Interior falsework installed by the contractor resting on the bottom slab shall be removed where entry access is available.

I3.21 If any single repair area does not exceed 9 square feet in size and the total repair area within a special repair zone does not exceed 27 square feet, the special repair zone may repaired at the same time as an adjacent zone.

I3.22 Half-sole repair in the special repair zone, on either side of the intermediate bents, shall be to a depth that will not expose half the diameter of the longitudinal reinforcing bar. Full depth repair shall be made when removal of deteriorated concrete exposes half or more of the diameter of the longitudinal reinforcing bar.

SDG:

For seal coat, asphalt, UBAWS, epoxy polymer, or MMA polymer slurry wearing surfaces:

- Delete Dimension/Note (1) and renumber others
- Delete top existing line
- Adjust top of the original depth dimension to bottom of new wearing surface
- Adjust wearing surface thickness for thin wearing surfaces

For application of concrete crack filler:

- Delete Dimension/Note (1) and (3) and renumber others
- Delete top existing line & the wearing surface
- Adjust top of the original depth dimension to the remaining top line.
- Replace "Wearing Surface" with "Concrete Crack Filler" and adjust leader note to point to the remaining top line

DECK REPAIR DETAILS

Detailed
Checked

Note: This drawing is not to scale. Follow dimensions. Sheet No. of

DATE PREPARED 3/7/2024
ROUTE STATE MO
DISTRICT SHEET NO. 12
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CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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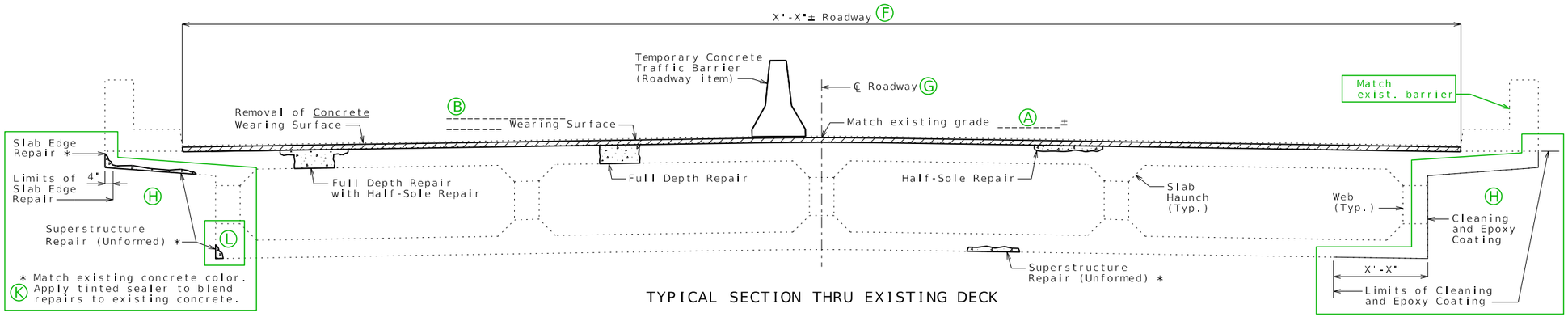
SEC/SUR * TWP * RGE *

U.I.P. AND REHABILITATE EXISTING (X'-X'-X') CONTINUOUS CONCRETE BOX GIRDER SPANS (SKEW: X)



TYPICAL SECTION THRU EXISTING DECK

Conventional Deck Repair Only (Case B)

(Replacing Existing Wearing Surface)

Replace as required

Estimated Quantities			
Item			Total
Removal of Concrete Wearing Surface	216-15.02	sq. foot	X
Latex Modified Concrete Wearing Surface	505-20.00	sq. yard	X
Substructure Repair (Formed)	704-01.01	sq. foot	X
Substructure Repair (Unformed)	704-01.02	sq. foot	X
Superstructure Repair (Unformed)	704-01.03	sq. foot	X
Half-Sole Repair	704-01.04	sq. foot	X
Full Depth Repair	704-01.06	sq. foot	X
Slab Edge Repair (Bridges)	704-01.07	linear foot	X
Cleaning and Epoxy Coating	704-01.13	sq. foot	X

STANDARD DRAWING GUIDANCE (do not show on plans):

May be used for all wearing surfaces:

Scarification not required with the following wearing surfaces:
Seal Coat
Asphalt
UBAWS
Epoxy Polymer
MMA Polymer Slurry

(B) 2 1/4" to 3" Low Slump Concrete
1 3/4" to 3" Latex Modified Concrete
2 1/4" to 3" Silica Fume Concrete
1 3/4" to 3" Latex Modified Very Early Strength Concrete
1 3/4" to 3" CSA Cement Very Early Strength Concrete
3" to 4" Steel Fiber Reinforced Concrete
1/4" Epoxy Polymer
3/4" to 3" Polyester Polymer Concrete
3/8" MMA Polymer Slurry
4" to 5" Reinforced Concrete Slab
3/8" Chip Seal Grade A1
1" to 3" Optional Asphaltic Concrete
1/2" to 3/4" Optional Ultrathin Bonded Asphalt

General Notes:

A1.1 **Design Specifications:**

2002 AASHTO LFD (17th Ed.) Standard Specifications
Bridge Deck Rating =

A1.2 **Design Loading:**

HS20-44 Modified (Year) and Military 24,000 lb Tandem Axle (Year)

A1.3 **Design Unit Stresses:**

Class B-1 Concrete (Half-Sole and Full Depth Repair) f'c = 4,000 psi

Miscellaneous:

I1.0.1 Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (roadway item).

I1.0.3 (If required) → I1.0.2 All concrete repairs shall be in accordance with Sec 704, unless otherwise noted.

I1.1 Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

(M) I1.2 Contractor shall verify all dimensions in field before finalizing the shop drawings.

I1.10 In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

Traffic Handling:

A3.8 Structure to be closed during construction. Traffic to be maintained on ___ during construction. See roadway plans for traffic control and Sheet No. ___ for staged construction details.

REPAIRS TO BRIDGE: ROUTE * OVER *

ROUTE * FROM * TO *
ABOUT * MILES * OF *
BEGINNING STATION _____± (Match Existing)

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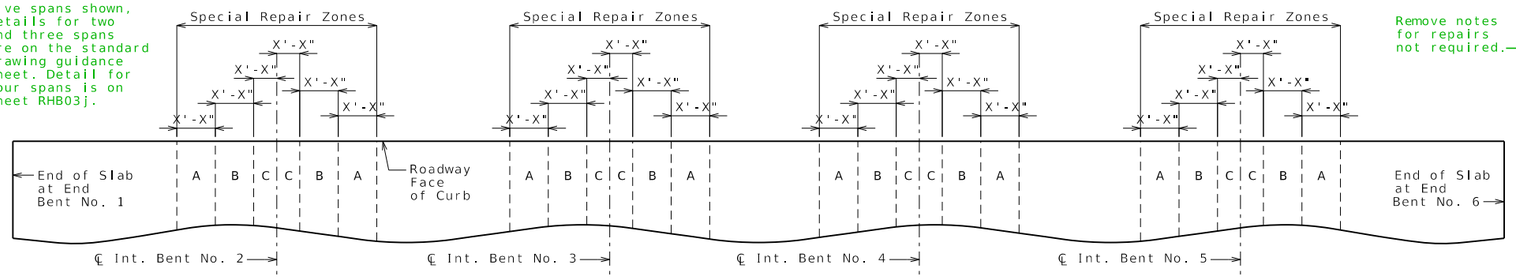
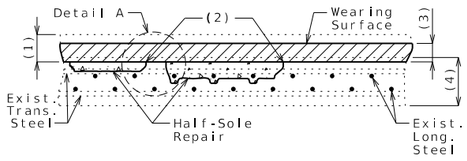
Note: This drawing is not to scale. Follow dimensions.

Five spans shown, details for two and three spans are on the standard drawing guidance sheet. Detail for four spans is on sheet RHB03j.

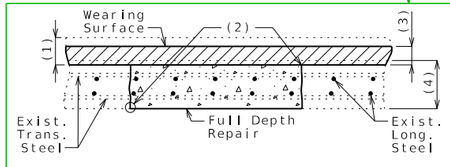


PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

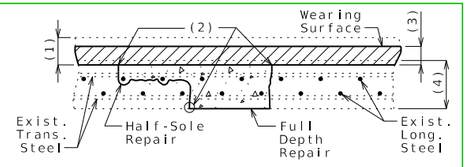


HALF-SOLE REPAIR

Remove if repair is not required.

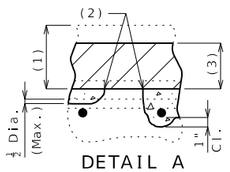


FULL DEPTH REPAIR



FULL DEPTH REPAIR WITH HALF-SOLE REPAIR

DECK REPAIR



DETAIL A

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

(1) Removal of existing Ⓒ "± _____ wearing surface plus ___ " of existing deck Ⓘ

(2) 1" vertical side shall be established outside the deteriorated area.

(3) Ⓑ " minimum _____ wearing surface

(4) Original thickness of top slab minus previous scarification

Deck Repair Notes:

Remove notes for repairs not required.

Order of Repair:

1. Remove existing wearing surface plus Ⓓ " of existing deck. Ⓘ
2. Sound deck to identify areas in need of repair.
3. Outside special repair zones, complete the following repairs:
   a. Half-sole repair
   b. Full depth repair
4. Inside special repair zones, complete the following repairs:
   a. Half-sole repair
   b. Full depth repair
5. Place new wearing surface.

Special Repair Zones:

I3.1 Any deck repair in areas not designated as a special repair zone shall be completed prior to work in Zone A.

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Replace with Note I3.3 for structures with single column bents.

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SDG:

For seal coat, asphalt, UBAWS, epoxy polymer or MMA polymer slurry wearing surfaces:

- Delete existing line inside wearing surface
- Adjust top of the original depth dimension to bottom of new wearing surface
- Adjust depth for thin wearing surfaces

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DECK REPAIR DETAILS

Detailed
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