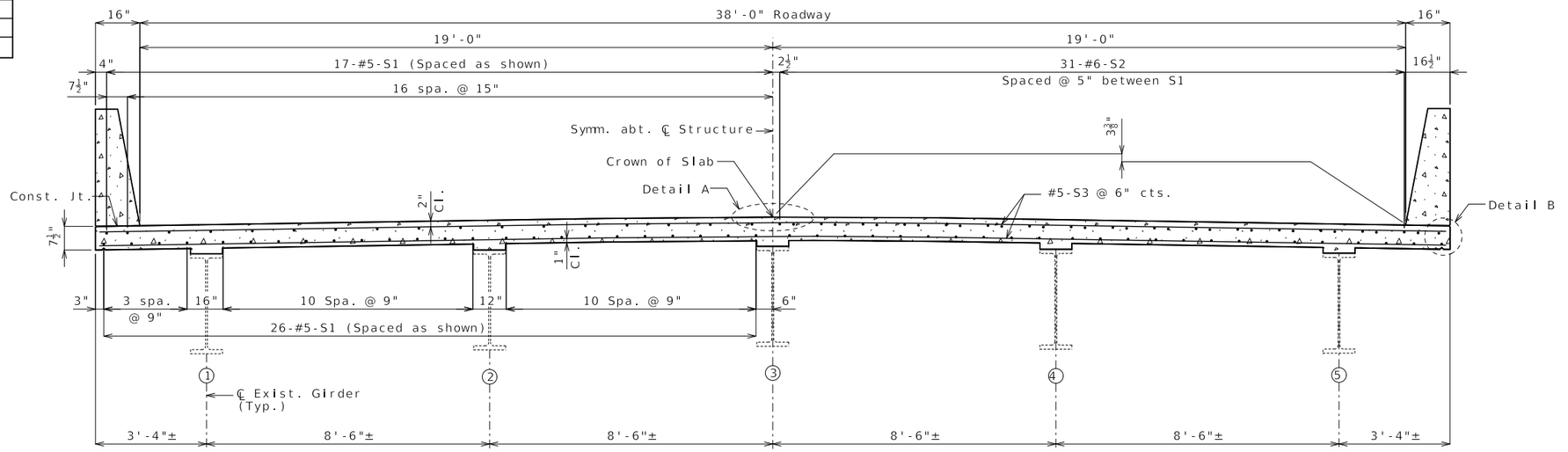
SEC/SUR 10 TWP 50 RGE 33W

U.I.P. & REDECK EXISTING (35'- 80'- 35') CONTINUOUS COMPOSITE PLATE GIRDER SPANS

Table Showing S2 Bar Lengths			
Int. Bent No. 2		Int. Bent No. 3	
Span 1	Span 2	Span 2	Span 3
10'-9"	20'-3"	20'-3"	10'-9"

Required Lap Length For Bar Splices **	
Bar Size	Splice Length
4	3'-0"
5	3'-3"
6	3'-10"
7	4'-11"

** Unless otherwise shown.



HALF SECTION NEAR MIDSPAN HALF SECTION NEAR INT. BENT

TYPICAL SECTION THRU SLAB

General Notes:

Design Specifications:
2002 AASHTO LFD (17th Ed.) Standard Specifications
Seismic Performance Category A

Design Loading:
HS20-44 (1965) (Existing)
HS20-44 (New Construction)
35 #/sf Future Wearing Surface
Earth - 120 #/cf, Equivalent Fluid Pressure 45 lb/cf
Fatigue Stress - Case III

Design Unit Stresses:

Class B-1 Concrete (Barrier)	f'c = 4,000 psi
Class B-2 Concrete (End Bents & Superstructure, except Barrier)	f'c = 4,000 psi
Reinforcing Steel (Grade 60)	fy = 60,000 psi

Joint Filler:
All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

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

Roadway surfacing adjacent to bridge ends shall match new bridge slab surface. (Roadway item)

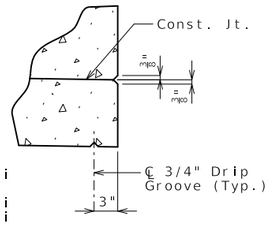
Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

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

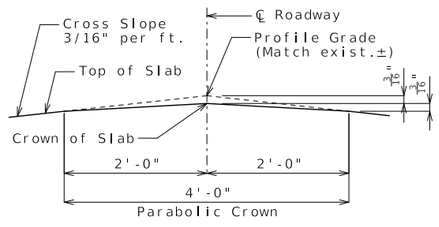
The area exposed by the removal of concrete and not covered with new concrete shall be coated with an approved qualified special mortar in accordance with Sec 704.

Rubblized concrete from the existing bridge deck that qualifies as clean fill may be placed on spill slopes at end bents above ordinary high water line (Roadway item).

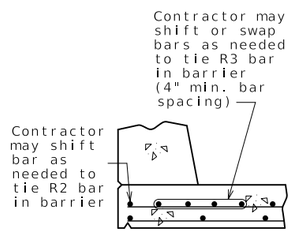
Traffic Handling:
Structure to be closed during construction. Traffic to be maintained on other routes during construction. See roadway plans for traffic control.



DETAIL B



DETAIL A



OPTIONAL SHIFTING TOP BARS AT BARRIER

Estimated Quantities		
Item		Total
Removal of Miscellaneous ACM (Non-Friable)	sq. foot	16
Class 1 Excavation	cu. yard	110
Temporary Shoring	lump sum	1
Removal of Existing Bridge Deck	sq. foot	6,194
Bridge Approach Slab (Major)	sq. yard	172
Slab on Steel	sq. yard	682
Type D Barrier	linear foot	348
Shear Connectors	each	840
Slab Drain	each	12
Surface Preparation for Appling Epoxy-Mustic Primer	lump sum	1
Gray Epoxy-Mustic Primer	lump sum	1
Vertical Drain at End Bents	each	2

1 Deleted

Estimated Quantities for Slab on Steel		
Item		Total
Class B-2 Concrete	cu. yard	141
Reinforcing Steel (Epoxy Coated)	pound	63,190

The table of Estimated Quantities for Slab on Steel represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (or with the horizontal dimensions as shown on the plan of slab). Payment for stay-in-place corrugated steel forms, conventional forms, all concrete and epoxy coated reinforcing steel will be considered completely covered by the contract unit price for the slab. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

Method of forming the slab shall be in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness Class SC 4 and a finish Type I, II or III.

Slab shall be cast-in-place with conventional forming or stay-in-place corrugated steel forms. Precast prestressed panels will not be permitted.

For Optional Stay-In-Place Form Details, see Sheet No. 2.

1 REVISED 1/15/25

REPAIRS TO BRIDGE: ROUTE 9 SB OVER NW BRIARCLIFF PRWY

ROUTE 9 FROM ROUTE I-655 TO ROUTE 169
ABOUT 1.4 MILES EAST OF ROUTE I-655
BEGINNING STATION 7+26.5± (MATCH EXISTING)

STATE OF MISSOURI
TED S. KOESTER
NUMBER PE-2013000591
PROFESSIONAL ENGINEER
01/14/2025 9:59:48 AM
TED S. KOESTER - CIVIL
MO-PE-2013000591

DATE PREPARED 1/14/2025
ROUTE 9 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY CLAY
JOB NO. J4S3496
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A20203

DESCRIPTION | DATE

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

Detailed Feb. 2024
Checked Feb. 2024

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

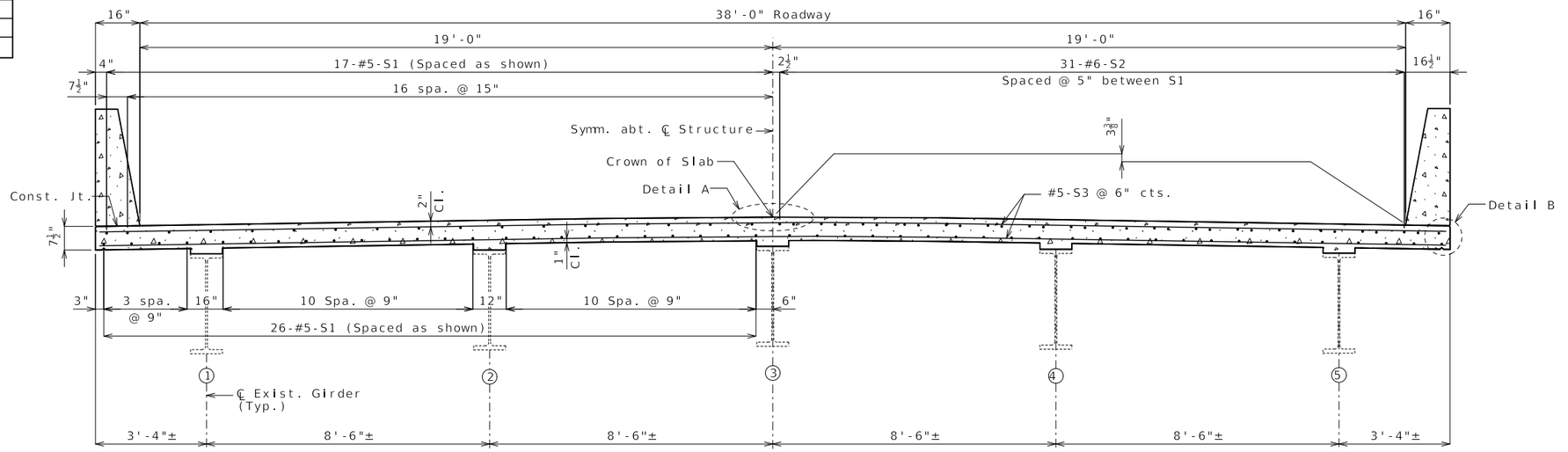
SEC/SUR 10 TWP 50 RGE 33W

U.I.P. & REDECK EXISTING (35'- 80'- 35') CONTINUOUS COMPOSITE PLATE GIRDER SPANS

Table Showing S2 Bar Lengths			
Int. Bent No. 2		Int. Bent No. 3	
Span 1	Span 2	Span 2	Span 3
10'-9"	20'-3"	20'-3"	10'-9"

Required Lap Length For Bar Splices **	
Bar Size	Splice Length
4	3'-0"
5	3'-3"
6	3'-10"
7	4'-11"

** Unless otherwise shown.



HALF SECTION NEAR MIDSPAN

HALF SECTION NEAR INT. BENT

TYPICAL SECTION THRU SLAB

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications
Seismic Performance Category A

Design Loading:

HS20-44 (1965) (Existing)
HS20-44 (New Construction)
35 #/sf Future Wearing Surface
Earth - 120 #/cf, Equivalent Fluid Pressure 45 lb/cf
Fatigue Stress - Case III

Design Unit Stresses:

Class B-1 Concrete (Barrier)	f'c = 4,000 psi
Class B-2 Concrete (End Bents & Superstructure, except Barrier)	f'c = 4,000 psi
Reinforcing Steel (Grade 60)	fy = 60,000 psi

Joint Filler:

All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

Miscellaneous:

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

Roadway surfacing adjacent to bridge ends shall match new bridge slab surface. (Roadway item)

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

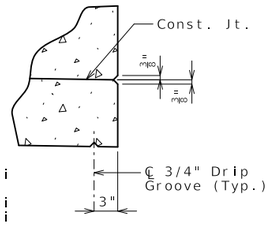
Contractor shall verify all dimensions in field before ordering new material.

The area exposed by the removal of concrete and not covered with new concrete shall be coated with an approved qualified special mortar in accordance with Sec 704.

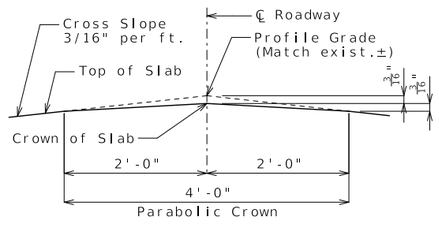
Rubblized concrete from the existing bridge deck that qualifies as clean fill may be placed on spill slopes at end bents above ordinary high water line (Roadway item).

Traffic Handling:

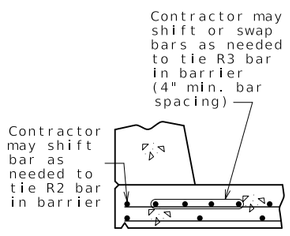
Structure to be closed during construction. Traffic to be maintained on other routes during construction. See roadway plans for traffic control.



DETAIL B



DETAIL A



OPTIONAL SHIFTING TOP BARS AT BARRIER

Estimated Quantities		
Item		Total
Removal of Miscellaneous ACM (Non-Friable)	sq. foot	16
Class 1 Excavation	cu. yard	110
Temporary Shoring	lump sum	1
Removal of Existing Bridge Deck	sq. foot	6,194
Bridge Approach Slab (Major)	sq. yard	172
Slab on Steel	sq. yard	682
Type D Barrier	linear foot	348
Shear Connectors	each	840
Slab Drain	each	12
Surface Preparation for Appling Epoxy-Mustic Primer	lump sum	1
Gray Epoxy-Mustic Primer	lump sum	1
Vertical Drain at End Bents	each	2

1 Deleted

Estimated Quantities for Slab on Steel		
Item		Total
Class B-2 Concrete	cu. yard	141
Reinforcing Steel (Epoxy Coated)	pound	63,190

The table of Estimated Quantities for Slab on Steel represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (or with the horizontal dimensions as shown on the plan of slab). Payment for stay-in-place corrugated steel forms, conventional forms, all concrete and epoxy coated reinforcing steel will be considered completely covered by the contract unit price for the slab. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

Method of forming the slab shall be in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness Class SC 4 and a finish Type I, II or III.

Slab shall be cast-in-place with conventional forming or stay-in-place corrugated steel forms. Precast prestressed panels will not be permitted.

For Optional Stay-In-Place Form Details, see Sheet No. 2.

1 REVISED 1/15/25

REPAIRS TO BRIDGE: ROUTE 9 NB OVER NW BRIARCLIFF PRWY

ROUTE 9 FROM ROUTE 169 TO ROUTE I-655
ABOUT 0.6 MILES WEST OF ROUTE 169
BEGINNING STATION 7+26.5± (MATCH EXISTING)

Detailed Feb. 2024
Checked Feb. 2024

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

STATE OF MISSOURI
TED S. KOESTER
NUMBER PE-2013000591
PROFESSIONAL ENGINEER
01/14/2025 10:00:33 AM
TED S. KOESTER - CIVIL
MO-PE-2013000591

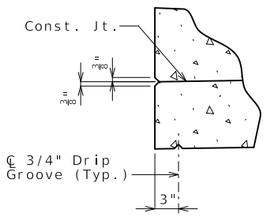
DATE PREPARED 1/14/2025
ROUTE 9 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY CLAY
JOB NO. J4S3496
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A20204

DESCRIPTION | DATE

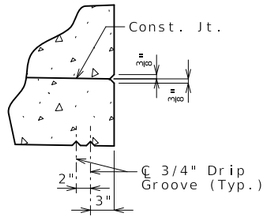
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SEC/SUR 4 TWP 50N RGE 33W

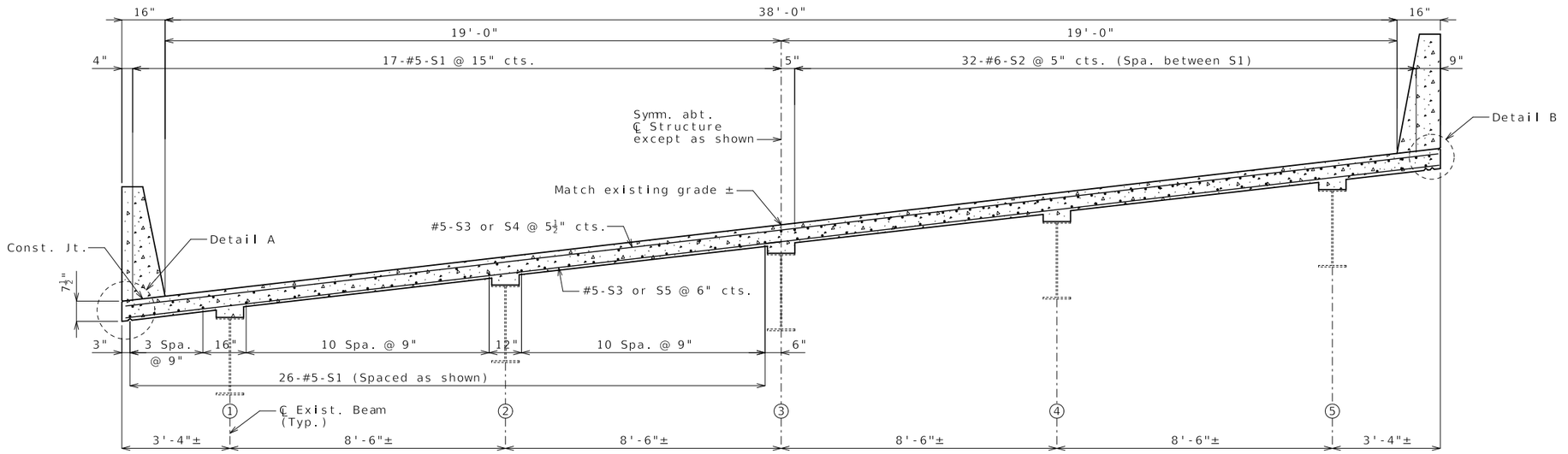
U.I.P. REDECK AND MAKE COMPOSITE EXISTING (39'- 56'- 39') CONTINUOUS WIDE FLANGE BEAM SPANS (SKEW: 12°47'00" R.A.)



DETAIL A



DETAIL B



TYPICAL SECTION THRU SLAB

General Notes:

Design Specifications:
2002 AASHTO LFD (17th Ed.) Standard Specifications
Seismic Performance Category A

Design Loading:
HS20-44 (1965), HS20-44 (New Construction)
35 lb/sf Future Wearing Surface
Earth - 120 lb/cf, Equivalent Fluid Pressure 45 lb/cf
Fatigue Stress - Case III

Design Unit Stresses:

Class B-1 Concrete (Barrier)	f'c = 4,000 psi
Class B-2 Concrete (End Bents & Superstructure, except Barrier)	f'c = 4,000 psi
Reinforcing Steel (ASTM A615 Grade 60)	fy = 60,000 psi

Joint Filler:
All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

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

Roadway surfacing adjacent to bridge ends shall match new bridge slab surface. (Roadway item)

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

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

The area exposed by the removal of concrete and not covered with new concrete shall be coated with an approved qualified special mortar in accordance with Sec 704.

Rubblized concrete from the existing bridge deck that qualifies as clean fill may be placed on spill slopes at end bents above ordinary high water line (Roadway item).

Traffic Handling:
Structure to be closed during construction. Traffic to be maintained on other routes during construction. See roadway plans for traffic control.

Detailed Feb. 2024
Checked Nov. 2024

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

Estimated Quantities for Slab on Steel

Item		Total
Class B-2 Concrete	cu. yard	145
Reinforcing Steel (Epoxy Coated)	pound	49,150

Table Showing S2 Bar Lengths

Int. Bent No. 2		Int. Bent No. 3	
Span 1	Span 2	Span 2	Span 3
15'-3"	15'-3"	15'-3"	15'-3"

Required Lap Length For Bar Splices **

Bar Size	Splice Length
4	2'-7"
5	3'-3"
6	3'-10"
7	4'-11"

** Unless otherwise shown.

Estimated Quantities

Item		Total
Removal of Miscellaneous ACM (Non-Friable)	sq. foot	14
Class 1 Excavation	cu. yard	85
Temporary Shoring	lump sum	1
Removal of Existing Bridge Deck	sq. foot	5544
Bridge Approach Slab (Major)	sq. yard	171
Slab on Steel	sq. yard	610
Type D Barrier	linear foot	306
Slab Drain	each	6
Surface Preparation for Epoxy-Mastic Primer	lump sum	1
Gray Epoxy-Mastic Primer	lump sum	1
Vertical Drains At End Bents	each	2

1 Deleted

Cost of any required excavation for bridge will be considered completely covered by the contract unit price for other items.

The table of Estimated Quantities for Slab on Steel represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (or with the horizontal dimensions as shown on the plan of slab). Payment for stay-in-place corrugated steel forms, conventional forms, all concrete and epoxy coated reinforcing steel will be considered completely covered by the contract unit price for the slab. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

Method of forming the slab shall be in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness Class SC 4 and a finish Type I, II or III.

Slab shall be cast-in-place with conventional forming or stay-in-place corrugated steel forms. Precast prestressed panels will not be permitted.

For Optional Stay-In-Place Form Details, see Sheet No. 2.

1 REVISED 1/15/25

REPAIRS TO BRIDGE: ROUTE 9 SB OVER US 69

ROUTE 9 FROM ROUTE 169 TO ROUTE 635
ABOUT 1.3 MILES WEST OF ROUTE 169
BEGINNING STATION 413+92.73± (MATCH EXISTING)

STATE OF MISSOURI
TED S. KOESTER
NUMBER PE-2013000591
PROFESSIONAL ENGINEER
01/14/2025 10:01:09 AM
TED S. KOESTER - CIVIL
MO-PE-2013000591

DATE PREPARED 1/14/2025

ROUTE	STATE
9	MO
DISTRICT	SHEET NO.
BR	1

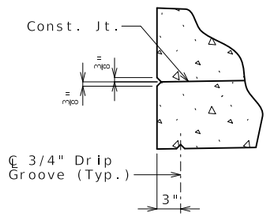
COUNTY PLATTE
JOB NO. J4S3497
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A20192

DESCRIPTION	DATE

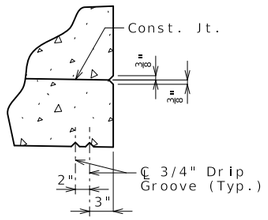
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SEC/SUR 4 TWP 50N RGE 33W

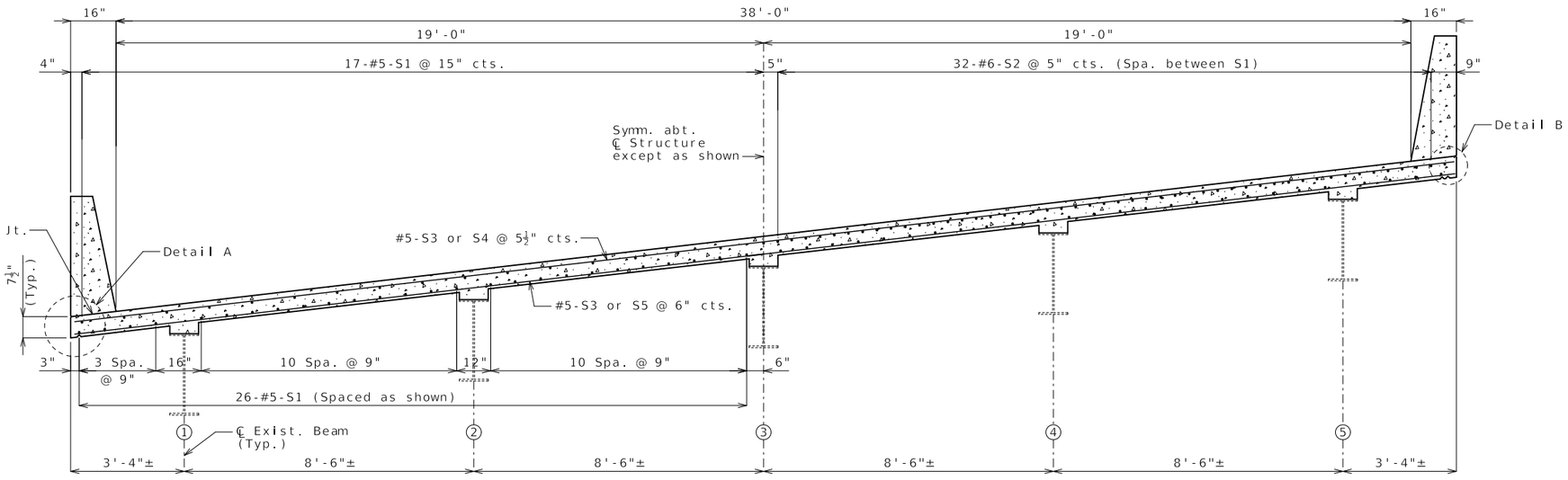
U.I.P. REDECK AND MAKE COMPOSITE EXISTING (39'- 56'- 39') CONTINUOUS WIDE FLANGE BEAM SPANS (SKEW: 12°47'00" R.A.)



DETAIL A



DETAIL B



HALF SECTION NEAR MIDSPAN HALF SECTION NEAR INT. BENT

TYPICAL SECTION THRU SLAB

General Notes:

Design Specifications:
2002 AASHTO LFD (17th Ed.) Standard Specifications
Seismic Performance Category A

Design Loading:
HS20-44 (1965), HS20-44 (New Construction)
35 lb/sf Future Wearing Surface
Earth - 120 lb/cf, Equivalent Fluid Pressure 45 lb/cf
Fatigue Stress - Case III

Design Unit Stresses:

Class B-1 Concrete (Barrier)	f'c = 4,000 psi
Class B-2 Concrete (End Bents & Superstructure, except Barrier)	f'c = 4,000 psi
Reinforcing Steel (ASTM A615 Grade 60)	fy = 60,000 psi

Joint Filler:
All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

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

Roadway surfacing adjacent to bridge ends shall match new bridge slab surface. (Roadway item)

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

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

The area exposed by the removal of concrete and not covered with new concrete shall be coated with an approved qualified special mortar in accordance with Sec 704.

Rubblized concrete from the existing bridge deck that qualifies as clean fill may be placed on spill slopes at end bents above ordinary high water line (Roadway item).

Traffic Handling:
Structure to be closed during construction. Traffic to be maintained on other routes during construction. See roadway plans for traffic control.

Table Showing S2 Bar Lengths

Int. Bent No. 2		Int. Bent No. 3	
Span 1	Span 2	Span 2	Span 3
15'-3"	15'-3"	15'-3"	15'-3"

Required Lap Length For Bar Splices **

Bar Size	Splice Length
4	2'-7"
5	3'-3"
6	3'-10"
7	4'-11"

** Unless otherwise shown.

Estimated Quantities for Slab on Steel

Item		Total
Class B-2 Concrete	cu. yard	145
Reinforcing Steel (Epoxy Coated)	pound	49,150

Estimated Quantities

Item		Total
Removal of Miscellaneous ACM (Non-Friable)	sq. foot	14
Class 1 Excavation	cu. yard	85
Temporary Shoring	lump sum	1
Removal of Existing Bridge Deck (Composite)	sq. foot	5544
Bridge Approach Slab (Major)	sq. foot	171
Slab on Steel	sq. yard	610
Type D Barrier	linear foot	306
Slab Drain	each	6
1 Deleted → Surface Preparation for Epoxy-Mastic Primer	lump sum	1
Gray Epoxy-Mastic Primer	lump sum	1
Vertical Drains At End Bents	each	2

Cost of any required excavation for bridge will be considered completely covered by the contract unit price for other items.

The table of Estimated Quantities for Slab on Steel represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (or with the horizontal dimensions as shown on the plan of slab). Payment for stay-in-place corrugated steel forms, conventional forms, all concrete and epoxy coated reinforcing steel will be considered completely covered by the contract unit price for the slab. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

Method of forming the slab shall be in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness Class SC 4 and a finish Type I, II or III.

Slab shall be cast-in-place with conventional forming or stay-in-place corrugated steel forms. Precast prestressed panels will not be permitted.

For Optional Stay-In-Place Form Details, see Sheet No. 2.

1 REVISED 1/15/25

REPAIRS TO BRIDGE: ROUTE 9 NB OVER US 69

ROUTE 9 FROM ROUTE 169 TO ROUTE 635
ABOUT 0.7 MILES EAST OF ROUTE 635
BEGINNING STATION 413+75.92± (MATCH EXISTING)

STATE OF MISSOURI
TED S. KOESTER
NUMBER PE-2013000591
PROFESSIONAL ENGINEER
01/14/2025 10:01:47 AM
TED S. KOESTER - CIVIL
MO-PE-2013000591

DATE PREPARED 1/14/2025

ROUTE	STATE
9	MO
DISTRICT	SHEET NO.
BR	1

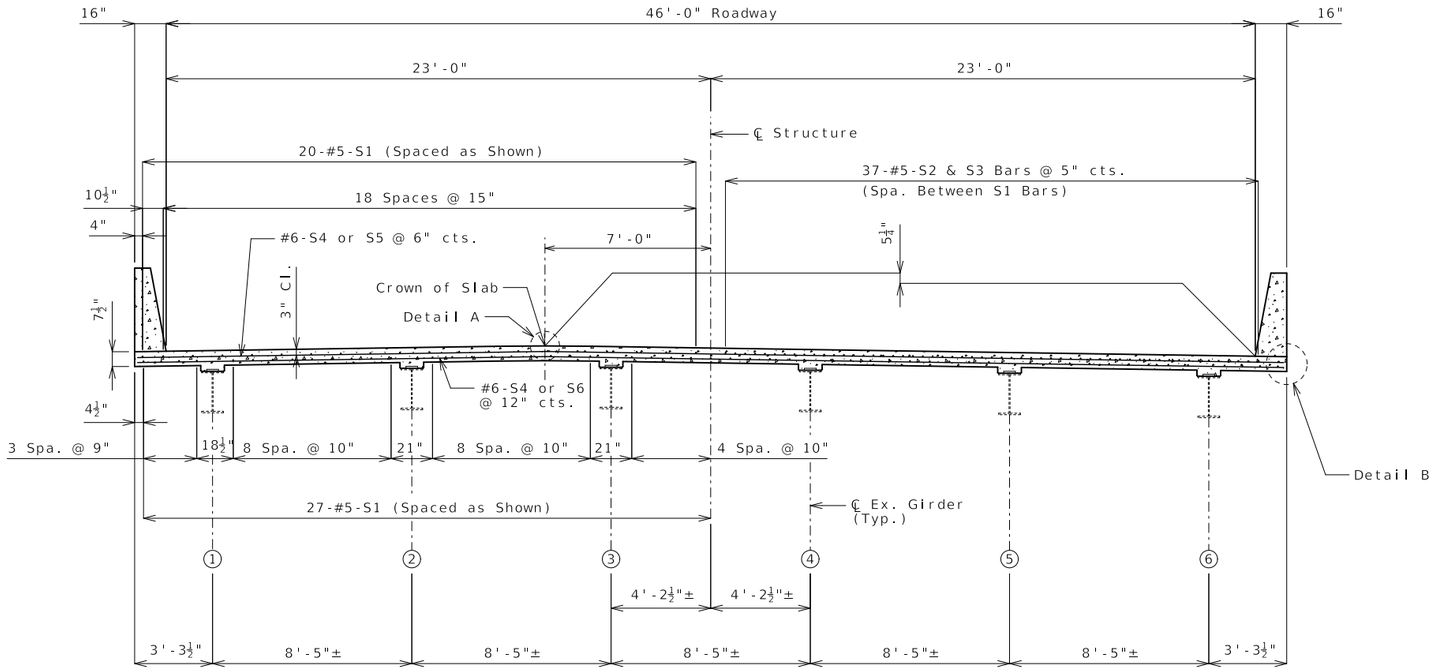
COUNTY PLATTE
JOB NO. J4S3497
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A20193

DESCRIPTION | DATE

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

SEC/SUR 4 TWP 50N RGE 33W

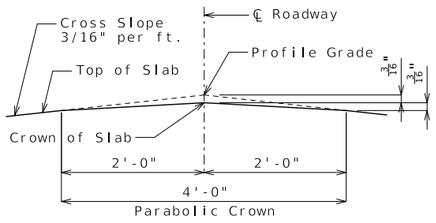
U.I.P. & REDECK EXISTING (94')(121')(94') CONTINUOUS COMPOSITE PLATE GIRDER SPAN (SKEW 32° R.A.)



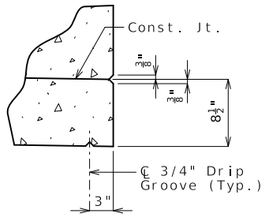
HALF SECTION NEAR MIDSPAN & END BENTS

HALF SECTION NEAR INT. BENT

TYPICAL SECTION THRU SLAB



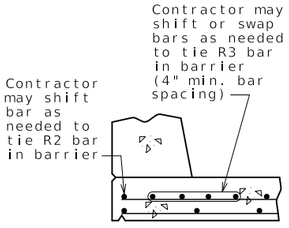
DETAIL A



DETAIL B

Table Showing S2 & S3 Total Bar Length *			
Int. Bent No. 2		Int. Bent No. 3	
Span 1	Span 2	Span 2	Span 3
30'-9"	30'-9"	30'-9"	30'-9"

Required Lap Length For Bar Splices **	
Bar Size	Splice Length
4	2'-7"
5	3'-3"
6	3'-10"
7	4'-11"



OPTIONAL SHIFTING TOP BARS AT BARRIER

* S3 Bar shall be placed on Span 2 side of each Int. Bent and be spliced with S2 bars per Required Lap Length Table

** Unless Otherwise Noted

Estimated Quantities		
Item		Total
Removal of Miscellaneous ACM (Non-Friable)	sq. foot	31
Class 1 Excavation	cu. yard	140
Temporary Shoring	lump sum	1
Removal of Existing Bridge Deck	sq. foot	15,294
Bridge Approach Slab (Major)	sq. yard	205
Slab on Steel	sq. yard	1,682
Type D Barrier	linear foot	692
Protective Coating - Concrete Bents & Piers (Epoxy)	lump sum	1
Strengthening Existing Beams	lump sum	1
Slab Drain	each	54
Surface Preparation for Applying Epoxy-Mastic Primer	lump sum	1
Gray Epoxy-Mastic Primer	lump sum	1
Vertical Drain at End Bents	each	2
Open Cell Foam Joint Seal	linear foot	115

△1 Deleted →

Estimated Quantities for Slab on Steel		
Item		Total
Class B-2 Concrete	cu. yard	348
Reinforcing Steel (Epoxy Coated)	pound	119,950

The table of Estimated Quantities for Slab on Steel represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (or with the horizontal dimensions as shown on the plan of slab). Payment for prestressed panels, stay-in-place corrugated steel forms, conventional forms, all concrete and epoxy coated reinforcing steel will be considered completely covered by the contract unit price for the slab. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

Method of forming the slab shall be as shown on the plans and in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with ASTM A123 or ASTM B633 with a thickness class SC 4 and a finish type I, II or III.

General Notes:

Design Specifications:
2002 AASHTO LFD (17th Ed.) Standard Specifications
Seismic Performance Category A

Design Loading:
H10-44 (1953) (Existing)
HS20-44 (New Construction, except beam strengthening plate)
2022 Missouri Posting Loads (H20L & 3S2)
35 lb/sf Future Wearing Surface
Earth - 120 lb/cf. Equivalent Fluid Pressure 45 lb/cf
Fatigue Stress - Case III

Design Unit Stresses:

Class B-1 Concrete (Barrier)	f'c = 4,000 psi
Class B-2 Concrete (End Bents & Superstructure, except Barrier)	f'c = 4,000 psi
Reinforcing Steel (ASTM A615 Grade 60)	fy = 60,000 psi
Structural Steel (ASTM A709 Grade 50)	fy = 50,000 psi
Structural Steel (Existing)	fy = 32,000 psi

Joint Filler:
All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

Reinforcing Steel:
Minimum clearnace to reinforcing steel shall be 1 1/2", unless otherwise shown.

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

Roadway surfacing adjacent to bridge ends shall match new bridge slab surface. (Roadway Item)

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

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

The area exposed by the removal of concrete and not covered with new concrete shall be coated with an approved qualified special mortar in accordance with Sec 704.

Rubblized concrete from the existing bridge deck that qualifies as clean fill may be placed on spill slopes at end bents above ordinary high water line. (Roadway Item)

Traffic Handling:
Structure to be closed during construction. Traffic to be maintained on other routes during construction. See Roadway plans for Traffic Control.

B.M. (U.S.C. & G.S.) Elev 758.08 -"o" on S.W. Corner of Bridge over Line Creek, Approx. 1310 ft. Lt. Sta. 393+30±

△1 REVISED 1/15/25

BRIDGE: ROUTE 9 NB OVER LINE CREEK

ROUTE 9 FROM ROUTE 169 TO ROUTE i-635
ABOUT 1.6 MILES WEST OF ROUTE 169
BEG. STATION 400+95.0±

Detailed Aug 2024
Checked Aug 2024

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

STATE OF MISSOURI
TED S. KOESTER
NUMBER PE-2013000591
PROFESSIONAL ENGINEER
01/14/2025 10:02:20 AM
TED S. KOESTER - CIVIL
MO-PE-2013000591

DATE PREPARED 1/14/2025

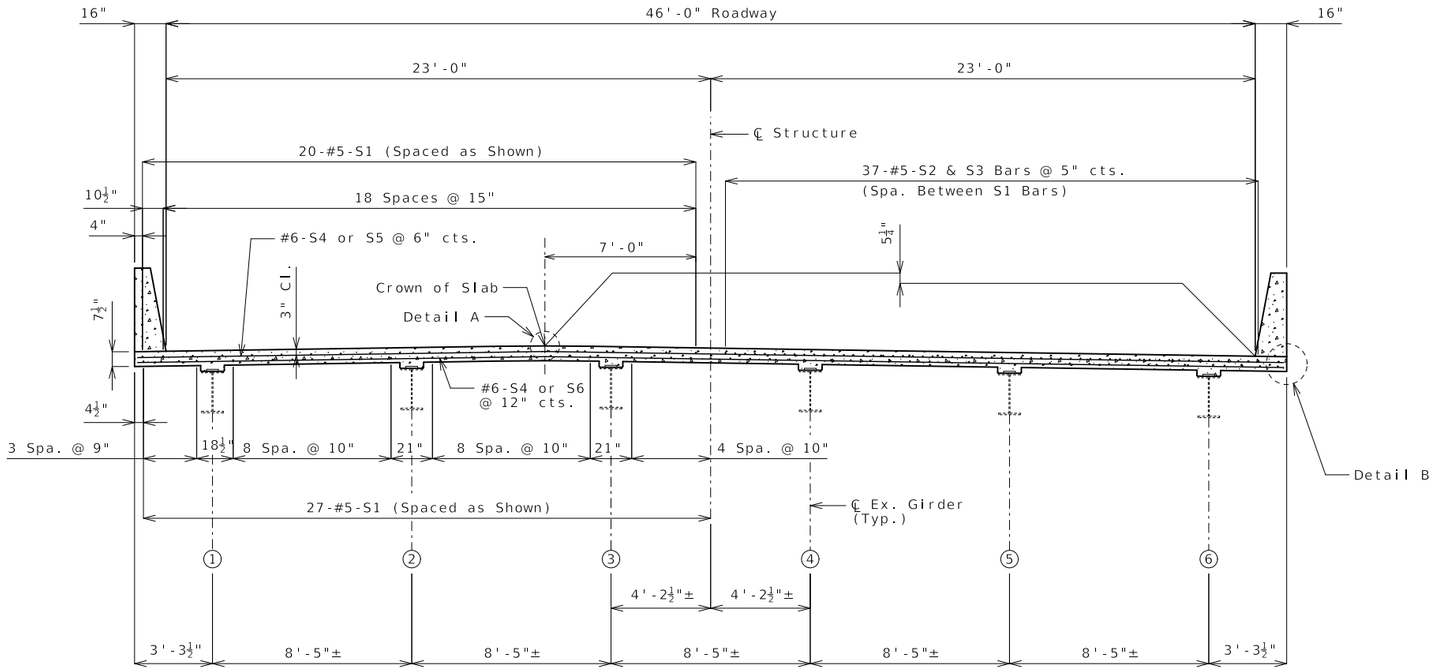
ROUTE 9 | STATE MO
DISTRICT BR | SHEET NO. 1
COUNTY PLATTE
JOB NO. J4S3498
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A20292

DESCRIPTION | DATE

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

SEC/SUR 4 TWP 50N RGE 33W

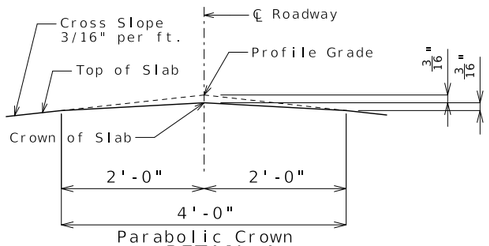
U.I.P. & REDECK EXISTING (94')(121')(94') CONTINUOUS COMPOSITE PLATE GIRDER SPAN (SKEW 32° R.A.)



HALF SECTION NEAR MIDSPAN & END BENTS

HALF SECTION NEAR INT. BENT

TYPICAL SECTION THRU SLAB



DETAIL A

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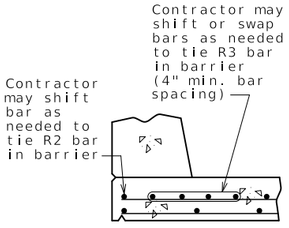
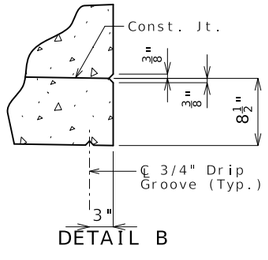


OPTIONAL SHIFTING
TOP BARS AT BARRIER



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Strengthening Existing Beams	lump sum	1
Slab Drain	each	54
Deleted → Surface Preparation for Applying Epoxy-Mastic Primer (1)	lump sum	1
Gray Epoxy-Mastic Primer	lump sum	1
Vertical Drain at End Bents	each	2
Open Cell Foam Joint Seal	linear foot	115

Estimated Quantities for Slab on Steel		
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B.M. (U.S.C. & G.S.) Elev 758.08 -"o" on S.W. Corner of Bridge over Line Creek, Approx. 1310 ft. Lt. Sta. 393+30±

(1) REVISED 1/15/25

BRIDGE: ROUTE 9 SB OVER LINE CREEK

ROUTE 9 FROM I-635 TO ROUTE 169
ABOUT 0.4 MILES SOUTH OF ROUTE I-635
BEG. STATION 400+95.0±

Detailed Aug 2024
Checked Aug 2024

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

STATE OF MISSOURI
TED S. KOESTER
NUMBER PE-2013000591
PROFESSIONAL ENGINEER
01/14/2025 10:02:53 AM
TED S. KOESTER - CIVIL
MO-PE-2013000591

DATE PREPARED 1/14/2025

ROUTE	STATE
9	MO
DISTRICT	SHEET NO.
BR	1

COUNTY PLATTE
JOB NO. J4S3498
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A20293

DESCRIPTION | DATE

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