

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	L01
FRANKLIN	5-10043.00	L01

037B00052L/R LOCATION MAP



BRIDGE NOS. 037B00052L/R

037B00052L/R – I-64 – INDEX OF SHEETS

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	I01
FRANKLIN	5-10043.00	I01

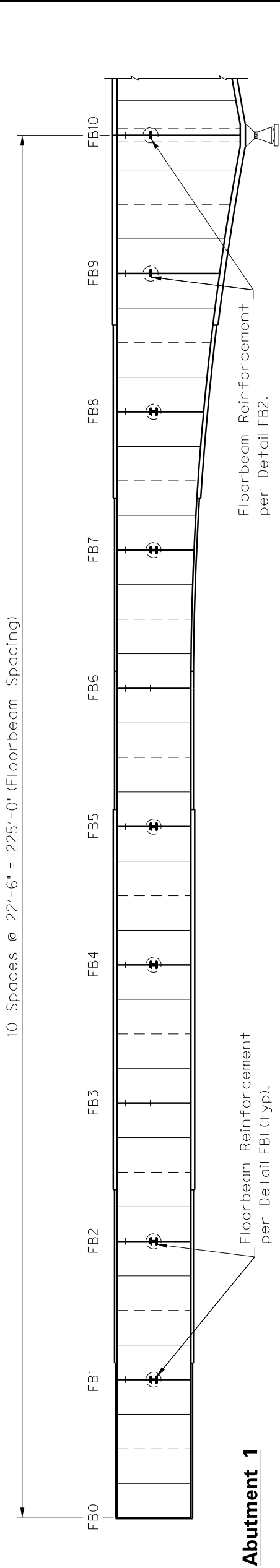
Index of Sheets - I-64 over Kentucky River (037B00052L/R)		
Sheet No.	Bridge ID	Sheet Name
I01	037B00052L/R	Index of Sheets
R01	037B00052L	Span 1 - Plan and Elevation
R02	037B00052L	Span 2 - Plan and Elevation (1 of 2)
R03	037B00052L	Span 2 - Plan and Elevation (2 of 2)
R04	037B00052L	Span 3 - Plan and Elevation
R05	037B00052L	Repair Summary Table (1 of 2)
R06	037B00052L	Repair Summary Table (2 of 2)
R07	037B00052R	Span 1 - Plan and Elevation
R08	037B00052R	Span 2 - Plan and Elevation (1 of 2)
R09	037B00052R	Span 2 - Plan and Elevation (2 of 2)
R10	037B00052R	Span 3 - Plan and Elevation
R11	037B00052R	Repair Summary Table (1 of 2)
R12	037B00052R	Repair Summary Table (2 of 2)
R13	037B00052L/R	Typical Section View at Floorbeam - Proposed Conditions
R14	037B00052R	Stringer and Web Crack Arrest Detail - "CA1"
R15	037B00052R	Stringer and Web Crack Arrest Detail - "CA2"
R16	037B00052L	Floorbeam End and Web Crack Arrest Detail - "CA3"
R17	037B00052R	Bolt Replacement Detail - "RB1"
R18	037B00052L/R	Floorbeam Strengthening Detail - "FB1"
R19	037B00052L/R	Floorbeam Strengthening Detail - "FB2"
R20	037B00052L/R	Existing Conditions - Stringer Ends Under Previous Deck Joint Elimination
R21	037B00052L/R	Proposed Conditions - Stringer End Reinforcement Detail - "SE1"
R22	037B00052L/R	Existing Conditions - Transverse Joint Elimination Details
R23	037B00052L/R	Proposed Conditions - Stringer End Reinforcement Detail - "SE2"
R24	037B00052L/R	Proposed Conditions - Joint Elimination Detail - "X" (1 of 2)
R25	037B00052L/R	Proposed Conditions - Joint Elimination Detail - "X" (2 of 2)
R26	037B00052L/R	Stringer Reinforcement at Support Detail - "SRS"
R27	037B00052L/R	Stringer Reinforcement at Mid-Span Detail - "SMS"
R28	037B00052L/R	Transverse Joint Replacement Details at FB0'
R29	037B00052L/R	Concrete Coating and Repair Limits at Piers

BRIDGE NOS. 037B00052L/R

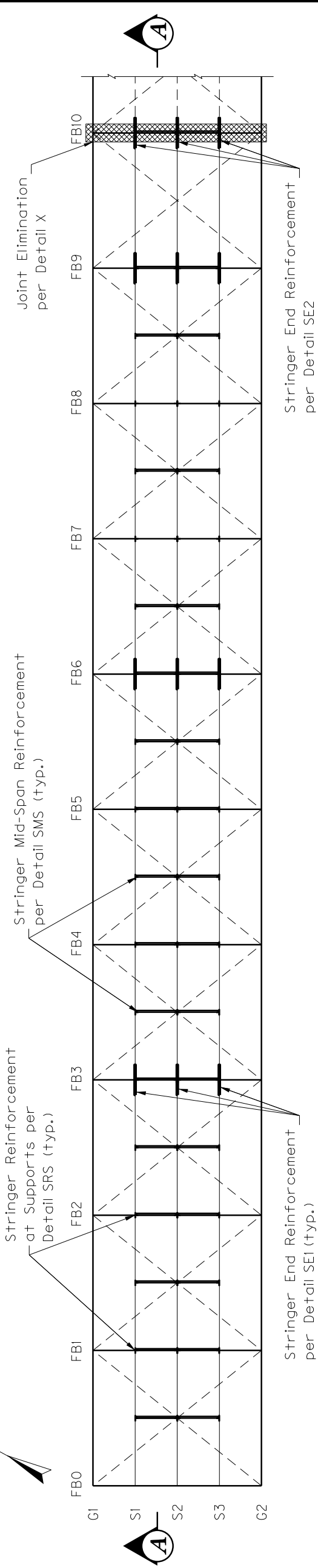
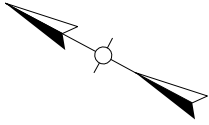


037B00052L – I-64 WESTBOUND

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R01



SPAN 1 SECTION A-A



SPAN 1 FRAMING PLAN

BRIDGE NO. 037B00052L



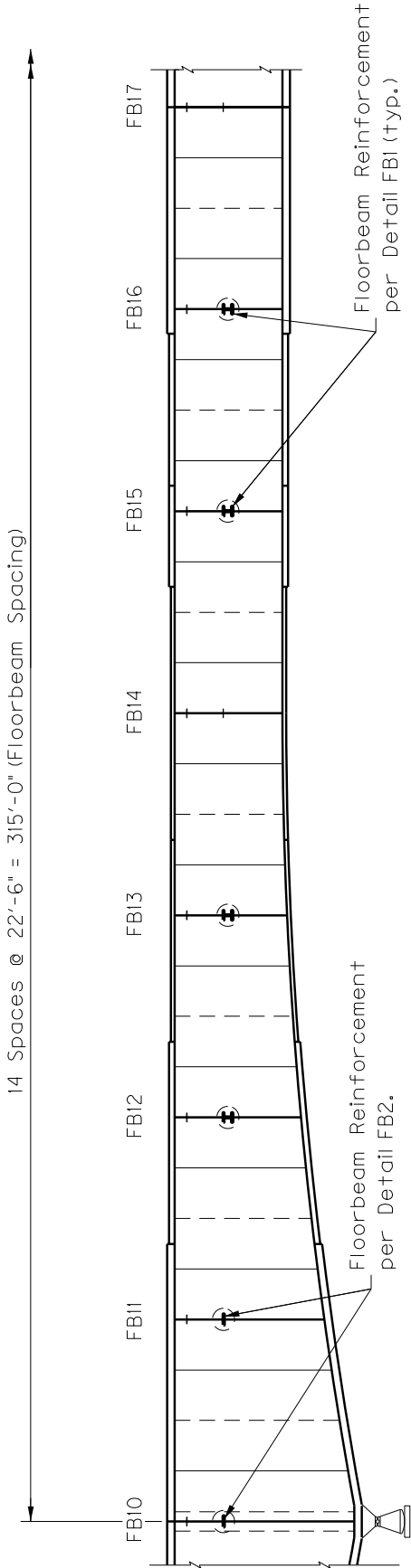
COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



I-64 OVER KENTUCKY RIVER BRIDGE NO. 037B00052L - BRIDGE REPAIRS
SPAN 1 - PLAN AND ELEVATION

037B00052L – I-64 WESTBOUND

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R02

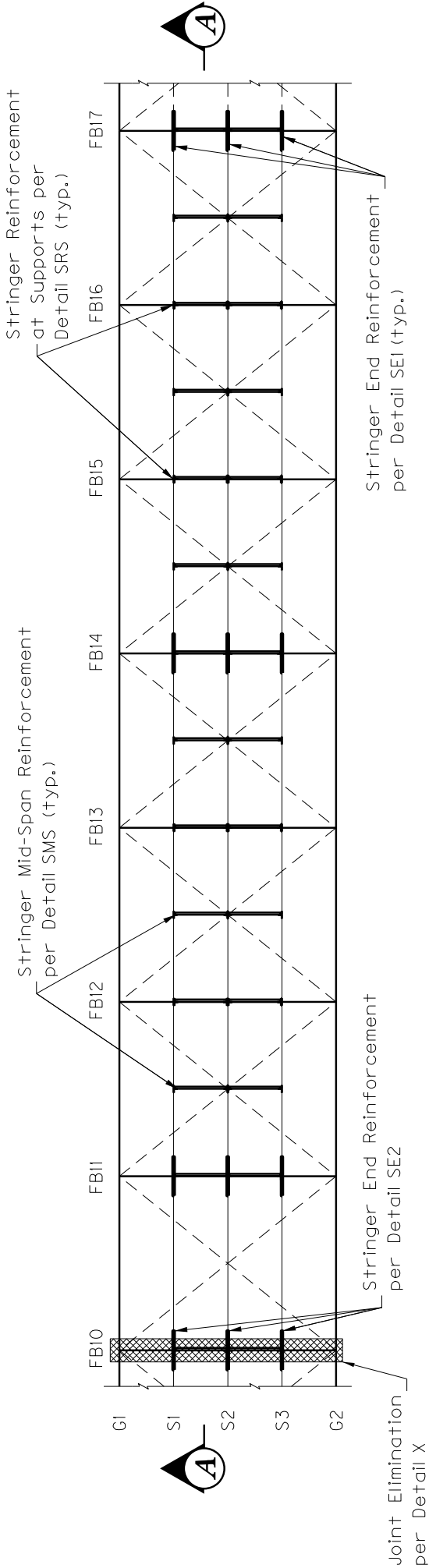


Pier 2

SPAN 2 SECTION A-A

Floorbeam Strengthening Legend

- Per Detail "FB1"
- Per Detail "FB2"



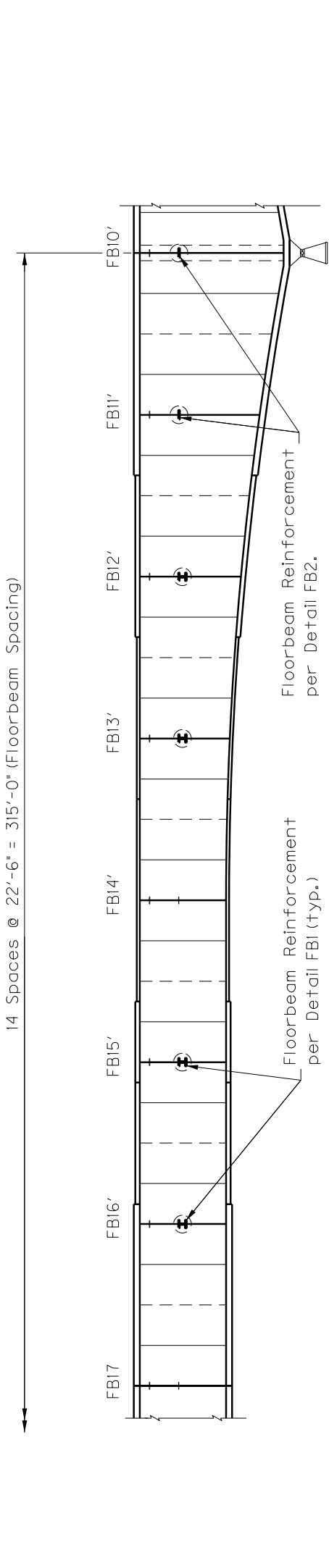
SPAN 2 FRAMING PLAN

BRIDGE NO. 037B00052L



037B00052L – I-64 WESTBOUND

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R03

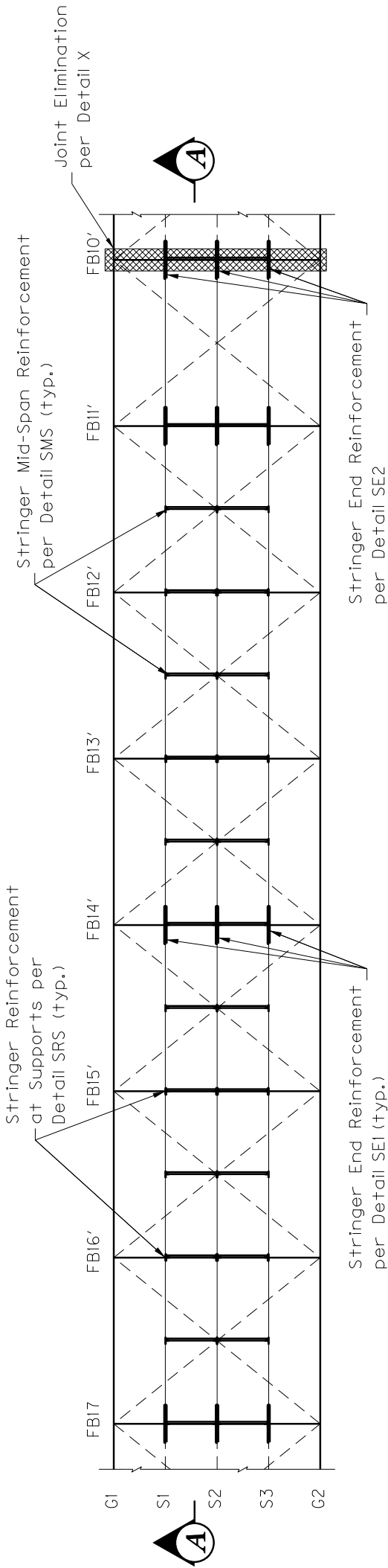
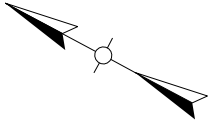


Floorbeam Strengthening Legend

(⊕) Per Detail "FB1"

(⊙) Per Detail "FB2"

SPAN 2 SECTION A-A

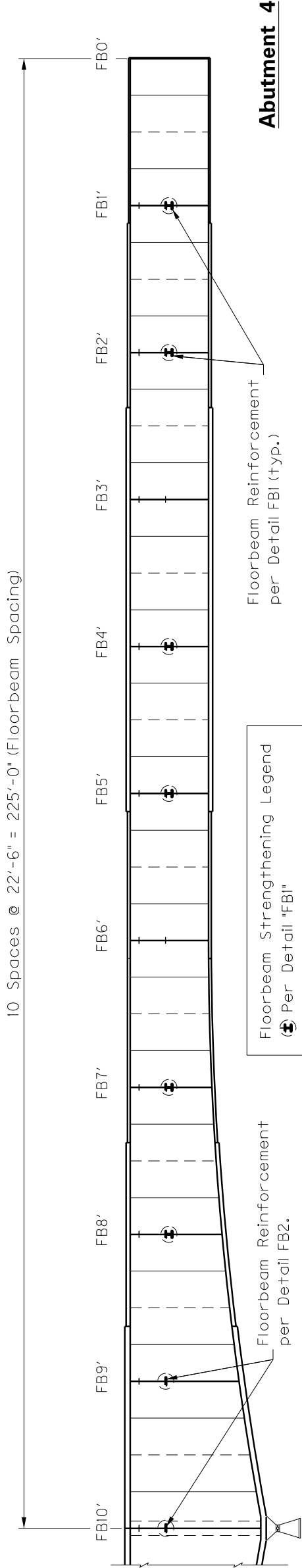


SPAN 2 FRAMING PLAN

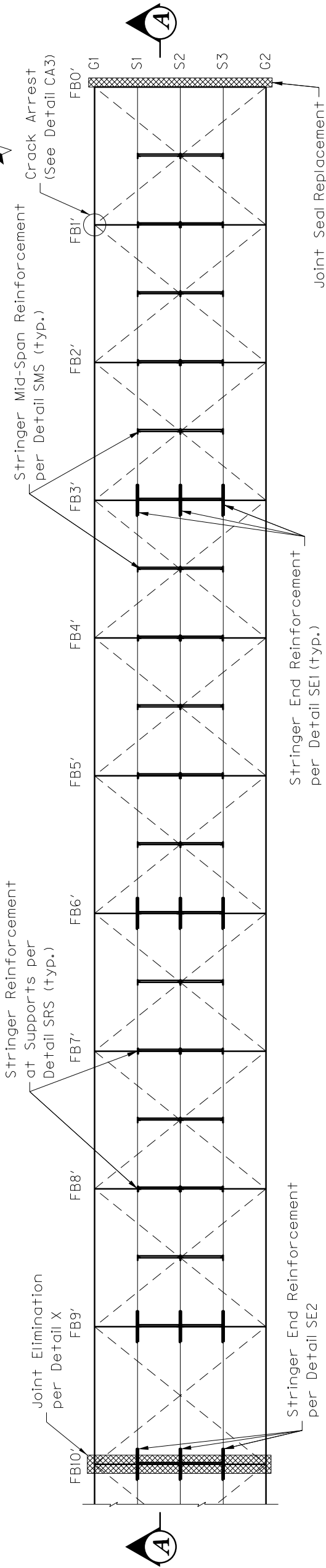
BRIDGE NO. 037B00052L

037B00052L – I-64 WESTBOUND

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R04



SPAN 3 SECTION A-A



SPAN 3 FRAMING PLAN

BRIDGE NO. 037B00052L



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



I-64 OVER KENTUCKY RIVER BRIDGE NO. 037B00052L - BRIDGE REPAIRS
SPAN 3 - PLAN AND ELEVATION

037B00052L – I-64 WESTBOUND

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R05

Bridge Repair Summary Table - I-64 WB over Kentucky River (037B00052L)					Bridge Repair Summary Table - I-64 WB over Kentucky River (037B00052L)				
Location	Member Type	Repair Type	Repair Detail	Description	Location	Member Type	Repair Type	Repair Detail	Description
FB0	Floorbeam	None	N/A		FB17-FB16'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB0-FB1	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB16'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB1	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange	FB16'-FB15'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB1	Stringer	Strengthening	SRS	Add Diaphragms at Support	FB15'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB1-FB2	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB15'-FB14'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB2	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange	FB14'	Floorbeam	None	N/A	
FB2	Stringer	Strengthening	SRS	Add Diaphragms at Support	FB14'	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB2-FB3	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB14'-FB13'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB3	Floorbeam	None	N/A		FB13'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB3	Stringer	Strengthening	SE1	Add web plates & end diaphragms	FB13'-FB12'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB3-FB4	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB12'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB4	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange	FB12'-FB11'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB4-FB5	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB11'	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange
FB5	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange	FB11'	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB5-FB6	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB10'	Deck Joint	Joint elimination	X	Eliminate Deck Joint
FB6	Floorbeam	None	N/A		FB10'	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange
FB6	Stringer	Strengthening	SE1	Add web plates & end diaphragms	FB10'	Stringer	Strengthening	SE2	Add web plates & end diaphragms
FB6-FB7	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB9'	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange
FB7	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange	FB9'	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB7-FB8	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB9'-FB8'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB8	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange	FB8'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB8-FB9	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB8'-FB7'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB9	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange	FB7'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB9	Stringer	Strengthening	SE1	Add web plates & end diaphragms	FB7'-FB6'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB10	Deck Joint	Joint elimination	X	Eliminate Deck Joint	FB6'	Floorbeam	None	N/A	
FB10	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange	FB6'	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB10	Stringer	Strengthening	SE2	Add web plates & end diaphragms	FB6'-FB5'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB11	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange	FB5'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB11	Stringer	Strengthening	SE1	Add web plates & end diaphragms	FB5'-FB4'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB11-FB12	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB4'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB12	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange	FB4'-FB3'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB12-FB13	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB3'	Floorbeam	None	N/A	
FB13	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange	FB3'	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB13-FB14	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB3'-FB2'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB14	Floorbeam	None	N/A		FB2'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB14	Stringer	Strengthening	SE1	Add web plates & end diaphragms	FB2'-FB1'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB14-FB15	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB1'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB15	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange	FB1'	Floorbeam	Crack arrest (FT#5)	CA3	Verify end of crack and drill crack arrest hole
FB15-FB16	Stringer	Strengthening	SMS	Add Int. Diaphragms	FB1'-FB0'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB16	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange					
FB16-FB17	Stringer	Strengthening	SMS	Add Int. Diaphragms					
FB17	Floorbeam	None	N/A						
FB17	Stringer	Strengthening	SE1	Add web plates & end diaphragms					

BRIDGE NO. 037B00052L

037B00052L – I-64 WESTBOUND

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R06

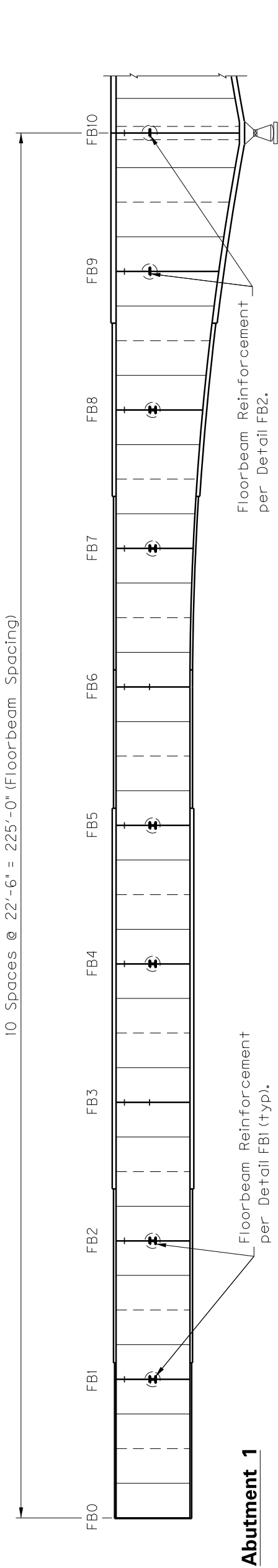
Bridge Repair Summary Table - I-64 WB over Kentucky River (037B00052L)				
Location	Member Type	Repair Type	Repair Detail	Description
Abut. 4/FB0'	Deck Joint	Replace Joint Seal	Per. Std.s. & Specs.	
Pier 2	Cap& Columns	Concrete coating	Per. Std.s. & Specs.	Concrete coating above uppermost column rustication joint
Pier 2	Column 2	Epoxy injection	Per. Std.s. & Specs.	Inject epoxy into cracks
Pier 2	Column 2	Concrete patch	Per. Std.s. & Specs.	Remove unsound concrete and repair spalls
Pier 3	Cap& Columns	Concrete coating	Per. Std.s. & Specs.	Concrete coating above uppermost column rustication joint
Pier 3	Column 1	Epoxy injection	Per. Std.s. & Specs.	Inject epoxy into cracks
Pier 3	Column 1	Concrete patch	Per. Std.s. & Specs.	Remove unsound concrete and repair spalls
Pier 3	Strut	Epoxy injection	Per. Std.s. & Specs.	Inject epoxy into cracks
Pier 3	Strut	Concrete patch	Per. Std.s. & Specs.	Remove unsound concrete and repair spalls
Pier 3	Column 2	Epoxy injection	Per. Std.s. & Specs.	Inject epoxy into cracks
Pier 3	Column 2	Concrete patch	Per. Std.s. & Specs.	Remove unsound concrete and repair spalls
Pier 3	Column 2	Concrete coating	Per. Std.s. & Specs.	Concrete coating

BRIDGE NO. 037B00052L



037B00052R – I-64 EASTBOUND

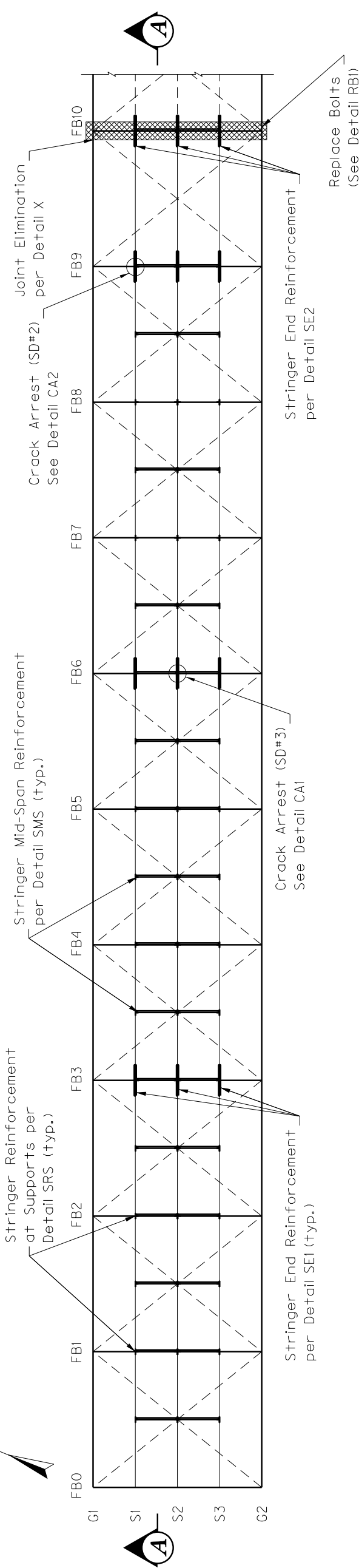
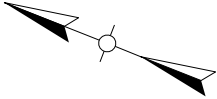
COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10043.00	R07



Abutment 1

Pier 2

SPAN 1 SECTION A-A

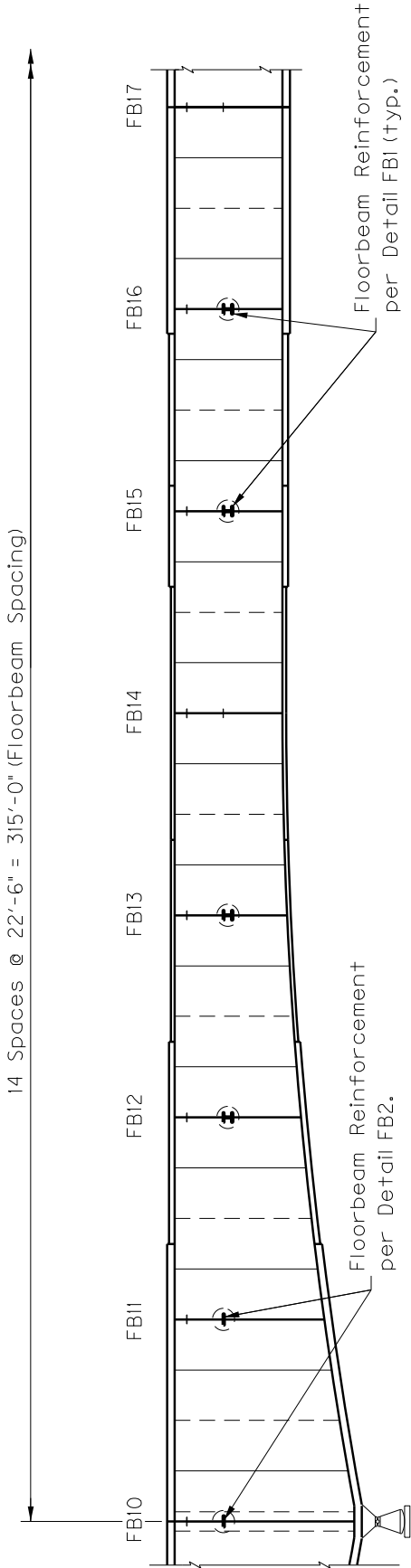


SPAN 1 FRAMING PLAN

BRIDGE NO. 037B00052R

037B00052R – I-64 EASTBOUND

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10043.00	R08

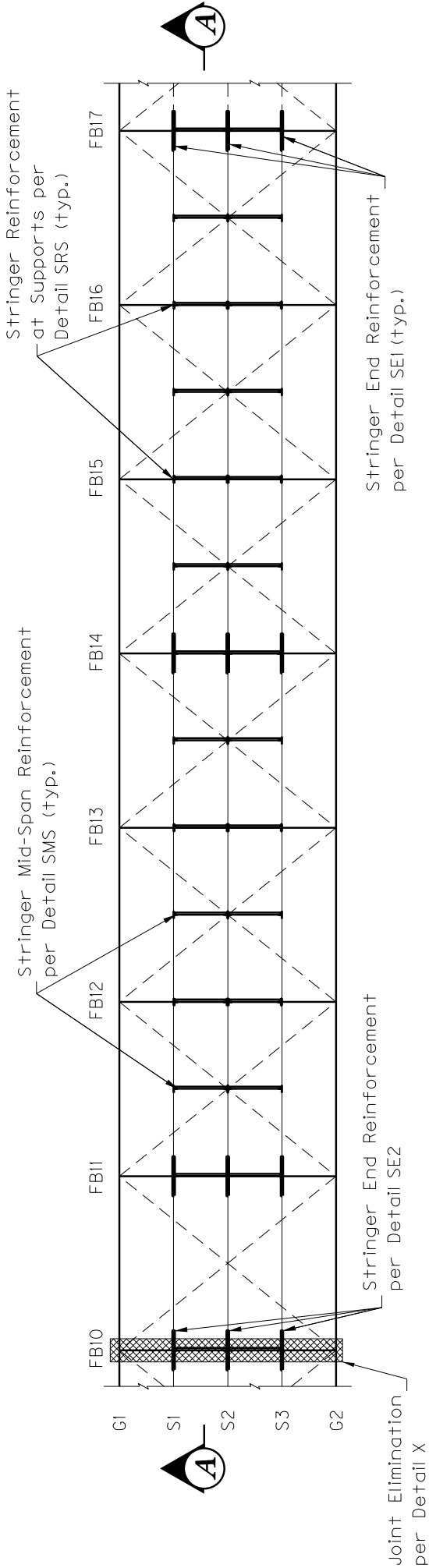
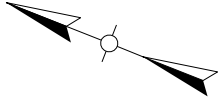


Floorbeam Strengthening Legend

- Per Detail "FB1"
- Per Detail "FB2"

Pier 2

SPAN 2 SECTION A-A



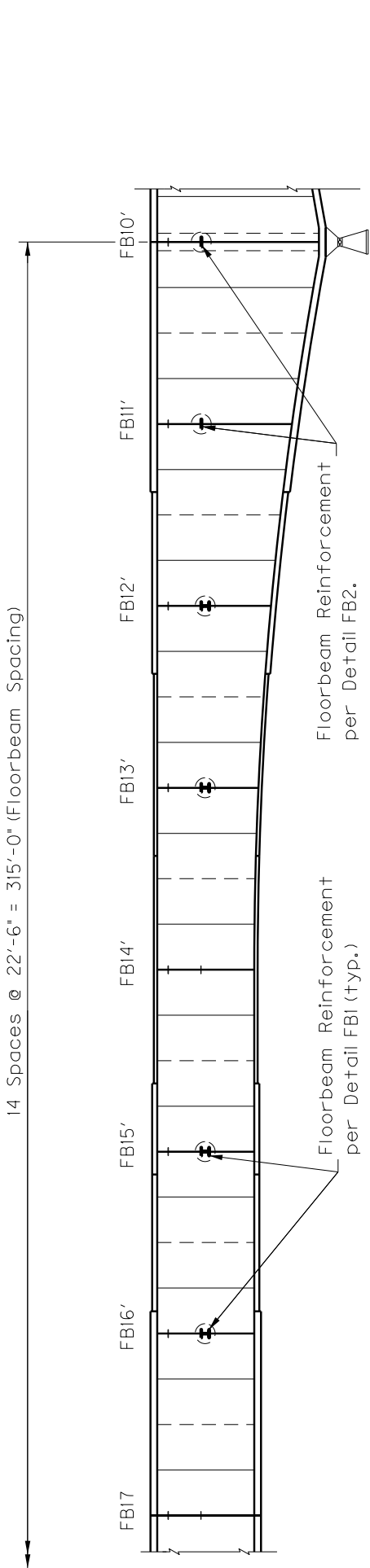
SPAN 2 FRAMING PLAN

BRIDGE NO. 037B00052R



037B00052R – I-64 EASTBOUND

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10043.00	R09



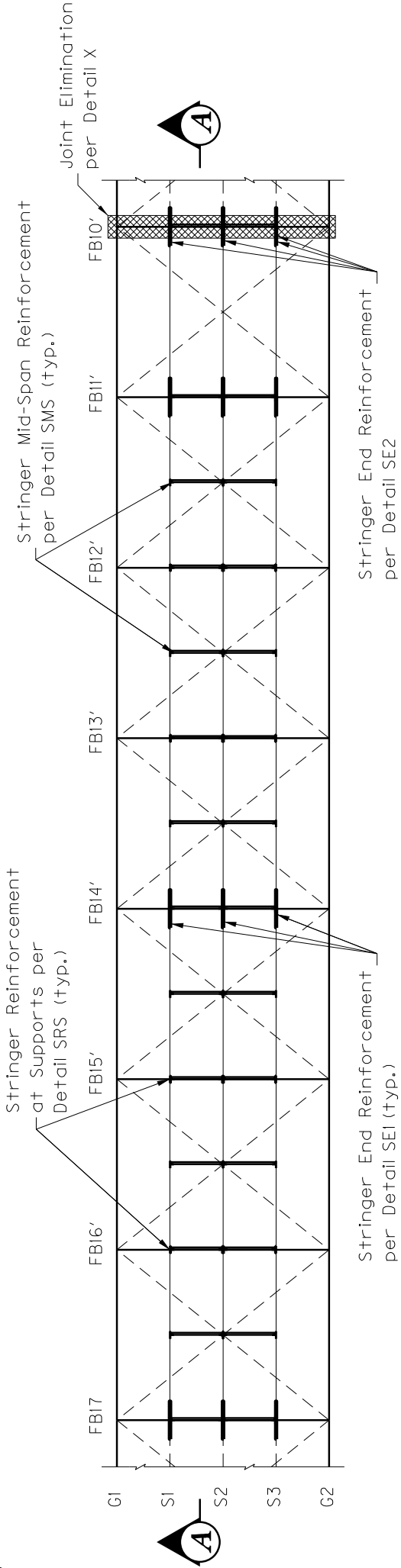
Floorbeam Strengthening Legend

Per Detail "FBI"

Per Detail "FB2"

SPAN 2 SECTION A-A

Pier 3

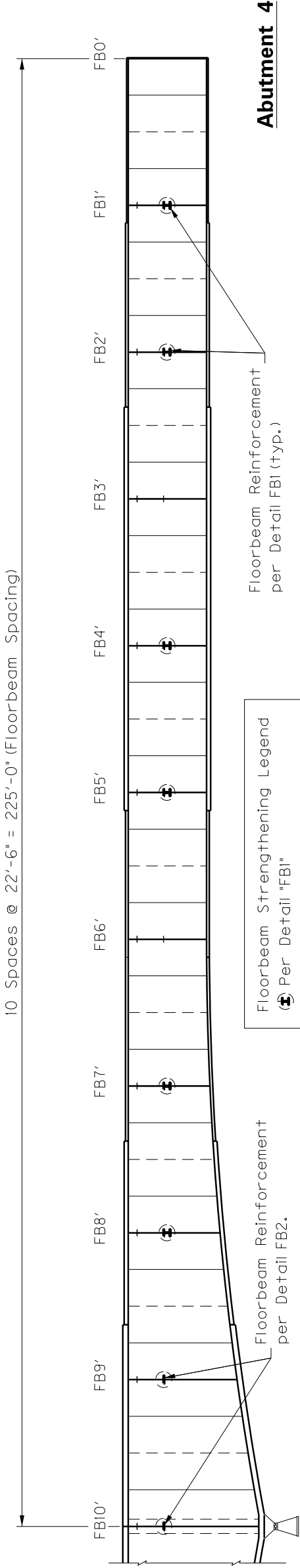


SPAN 2 FRAMING PLAN

BRIDGE NO. 037B00052R

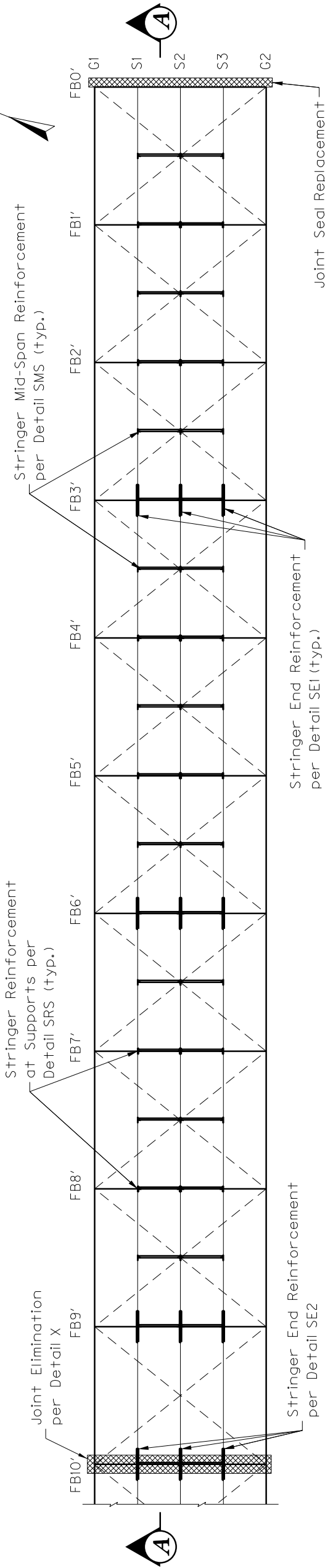
037B00052R – I-64 EASTBOUND

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10043.00	R10



Pier 3

SPAN 3 SECTION A-A



SPAN 3 FRAMING PLAN

BRIDGE NO. 037B00052R



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



I-64 OVER KENTUCKY RIVER BRIDGE NO. 037B00052R - BRIDGE REPAIRS
SPAN 3 - PLAN AND ELEVATION

Bridge Repair Summary Table - I-64 EB over Kentucky River (037B00052R)				
Location	Member Type	Repair Type	Repair Detail	Description
FB0	Floorbeam	None	N/A	
FB0-FB1	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB1	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB1	Stringer	Strengthening	SRS	Add Diaphragms at Support
FB1-FB2	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB2	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB2	Stringer	Strengthening	SRS	Add Diaphragms at Support
FB2-FB3	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB3	Floorbeam	None	N/A	
FB3	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB3-FB4	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB4	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB4-FB5	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB5	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB5-FB6	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB6	Floorbeam	None	N/A	
FB6	Stringer	Crack arrest (SD#3)	CA1	Cope stringer web and grind to round out edge beyond end of crack in S2 prior to web plate work
FB6	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB6-FB7	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB7	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB7-FB8	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB8	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB8-FB9	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB9	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange
FB9	Stringer	Crack arrest (SD#2)	CA2	Locate end of crack & drill crack arrest hole prior to web plate work
FB9	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB10	Deck Joint	Joint elimination	X	Eliminate Deck Joint
FB10	Connection	Replace bolts	RB1	Replace broken bolts at top of FB to Girder connection
FB10	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange
FB10	Stringer	Strengthening	SE2	Add web plates & end diaphragms
FB11	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange
FB11	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB11-FB12	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB12	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB12-FB13	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB13	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB13-FB14	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB14	Floorbeam	None	N/A	
FB14	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB14-FB15	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB15	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB15-FB16	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB16	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB16-FB17	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB17	Floorbeam	None	N/A	
FB17	Stringer	Strengthening	SE1	Add web plates & end diaphragms

Bridge Repair Summary Table - I-64 EB over Kentucky River (037B00052R)				
FB17-FB16'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB16'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB16'-FB15'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB15'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB15'-FB14'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB14'	Floorbeam	None	N/A	
FB14'	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB14'-FB13'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB13'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB13'-FB12'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB12'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB12'-FB11'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB11'	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange
FB11'	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB10'	Deck Joint	Joint elimination	X	Eliminate Deck Joint
FB10'	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange
FB10'	Stringer	Strengthening	SE2	Add web plates & end diaphragms
FB9'	Floorbeam	Strengthening	FB2	Add 7/8"x1'-0"x6'-0" Plate to Btm Flange
FB9'	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB9'-FB8'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB8'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB8'-FB7'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB7'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB7'-FB6'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB6'	Floorbeam	None	N/A	
FB6'	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB6'-FB5'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB5'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB5'-FB4'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB4'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB4'-FB3'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB3'	Floorbeam	None	N/A	
FB3'	Stringer	Strengthening	SE1	Add web plates & end diaphragms
FB3'-FB2'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB2'-FB1'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB2'-FB1'	Stringer	Strengthening	SMS	Add Int. Diaphragms
FB1'	Floorbeam	Strengthening	FB1	Add HP12x53 to Btm Flange
FB1'-FB0'	Stringer	Strengthening	SMS	Add Int. Diaphragms
Abut. 4/FB0'	Deck Joint	Replace Joint Seal	Per. Stds. &	

BRIDGE NO. 037B00052R



037B00052R – I-64 EASTBOUND

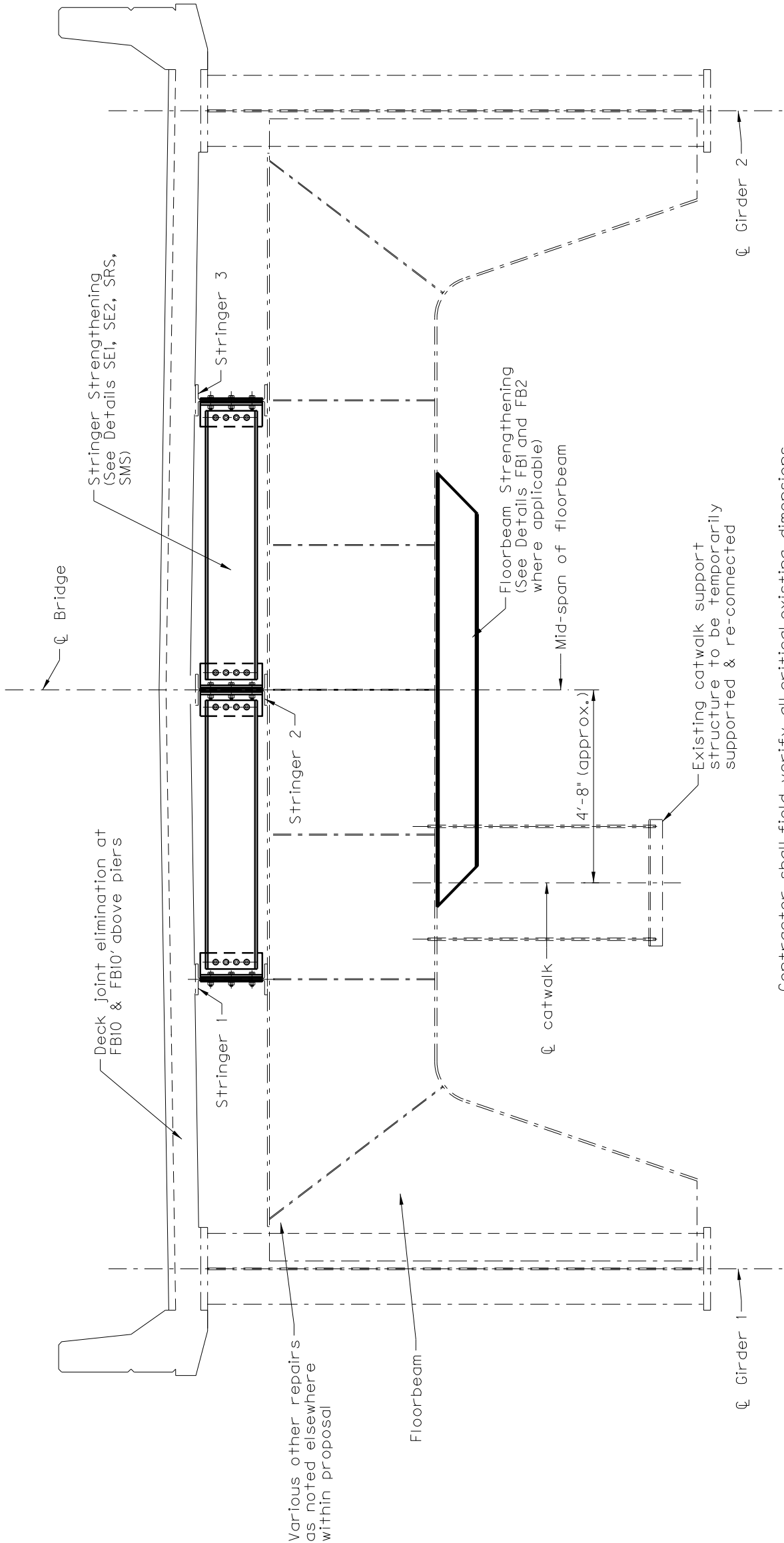
COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10043.00	R12

Bridge Repair Summary Table - I-64 EB over Kentucky River (037B00052R)				
Location	Member Type	Repair Type	Repair Detail	Description
Abut. 4/FB0'	Deck Joint	Replace Joint Seal	Per. Std's. & Specs.	
Pier 2	Cap& Columns	Concrete coating	Per. Std's. & Specs.	Concrete coating above uppermost column rustication joint
Pier 2	Top strut	Concrete patch	Per. Std's. & Specs.	Remove unsound concrete and repair spalls (East Face)
Pier 3	Cap& Columns	Concrete coating	Per. Std's. & Specs.	Concrete coating above uppermost column rustication joint
Pier 3	Column 1	Epoxy injection	Per. Std's. & Specs.	Inject epoxy into cracks
Pier 3	Column 2	Epoxy injection	Per. Std's. & Specs.	Inject epoxy into cracks
Pier 3	Column 2	Concrete patch	Per. Std's. & Specs.	Remove unsound concrete and repair spalls (Multiple Faces)

BRIDGE NO. 037B00052R



COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R13
FRANKLIN	5-10043.00	R13

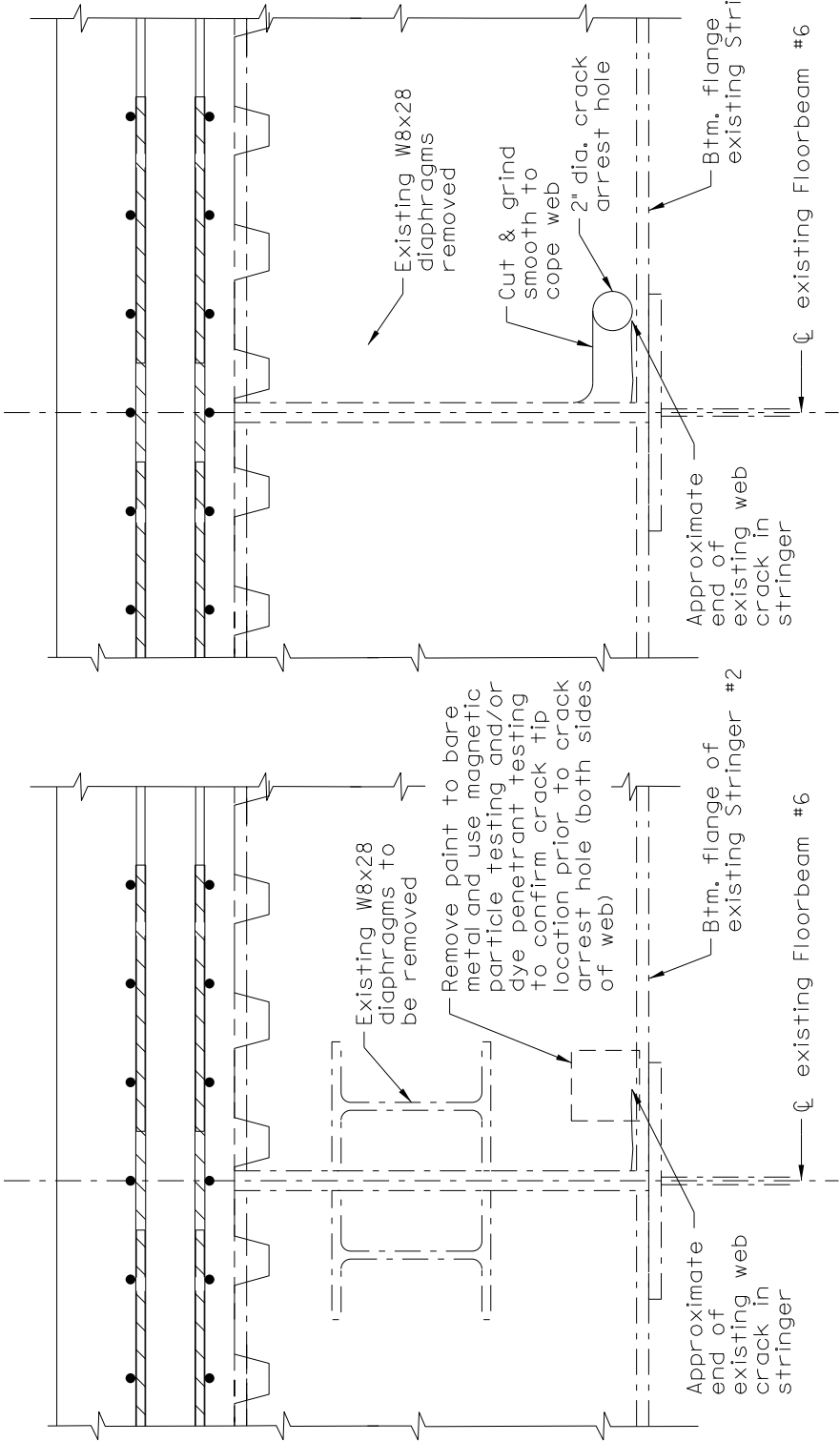


Note: Load carrying capacity of the existing catwalk structure has not been verified. Contractor shall be solely responsible for means and methods for installation of new strengthening members including any equipment and/or temporary supports/walkways or other means of access for the safe completion and inspection of the work.

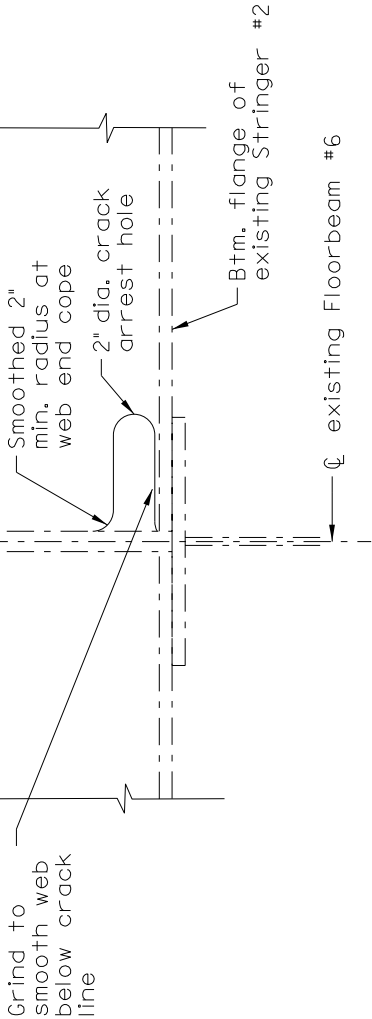
Contractor shall field verify all critical existing dimensions and coordinate fabrication of proposed new retrofit & repair components for best fit and to avoid conflicts with existing elements accordingly.

Contractor shall provide temporary support as needed for existing catwalk structure throughout work, and shall coordinate details for reattaching the permanent catwalk support structure through the proposed floorbeam/stringer strengthening components as necessary and subject to the approval of the engineer.

BRIDGE NOS. 037B00052L/R



PARTIAL ELEVATION at Stringer End Crack
after removal of W8x28's



PARTIAL ELEVATION at Stringer End Crack
after Crack Arrest Hole

USE THIS DETAIL AT THE FOLLOWING LOCATIONS:

BRIDGE NO. 037B00052R AT PANEL POINT FB6
This detail may be applied per the Engineer at other similar stringer end crack locations if other such cracks are discovered during the work.

This work shall be completed prior to proceeding to the stringer end strengthening work.

BRIDGE NO. 037B00052R

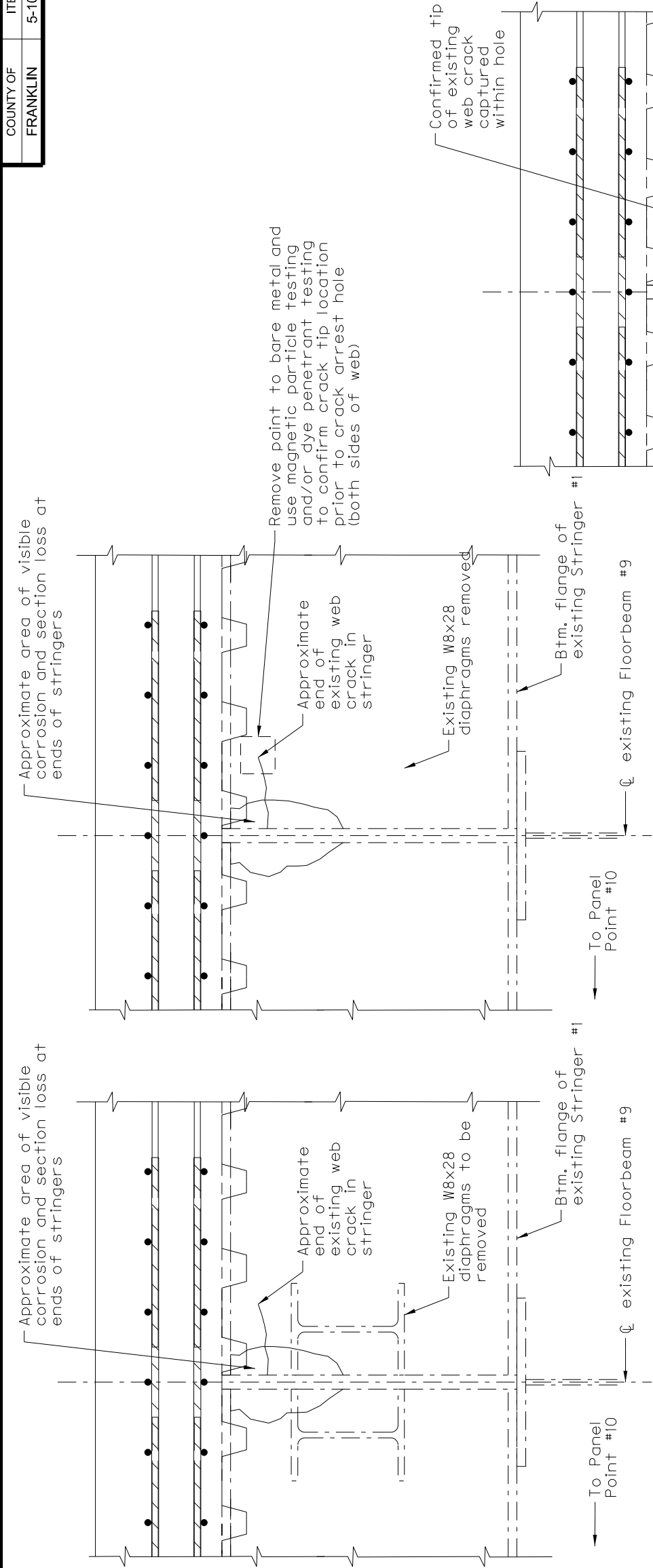


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



I-64 OVER KENTUCKY RIVER BRIDGE NO. 037B00052R - BRIDGE REPAIRS
STRINGER END WEB CRACK ARREST DETAIL "CA1"
EXISTING AND PROPOSED CONDITIONS

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10043.00	R15



USE THIS DETAIL AT THE FOLLOWING LOCATIONS:

BRIDGE NO. 037B00052R AT PANEL POINT FB9
This detail may be applied per the Engineer at other similar stringer end crack locations if other such cracks are discovered during the work.

This work shall be completed prior to proceeding to the stringer end strengthening work.

BRIDGE NO. 037B00052R

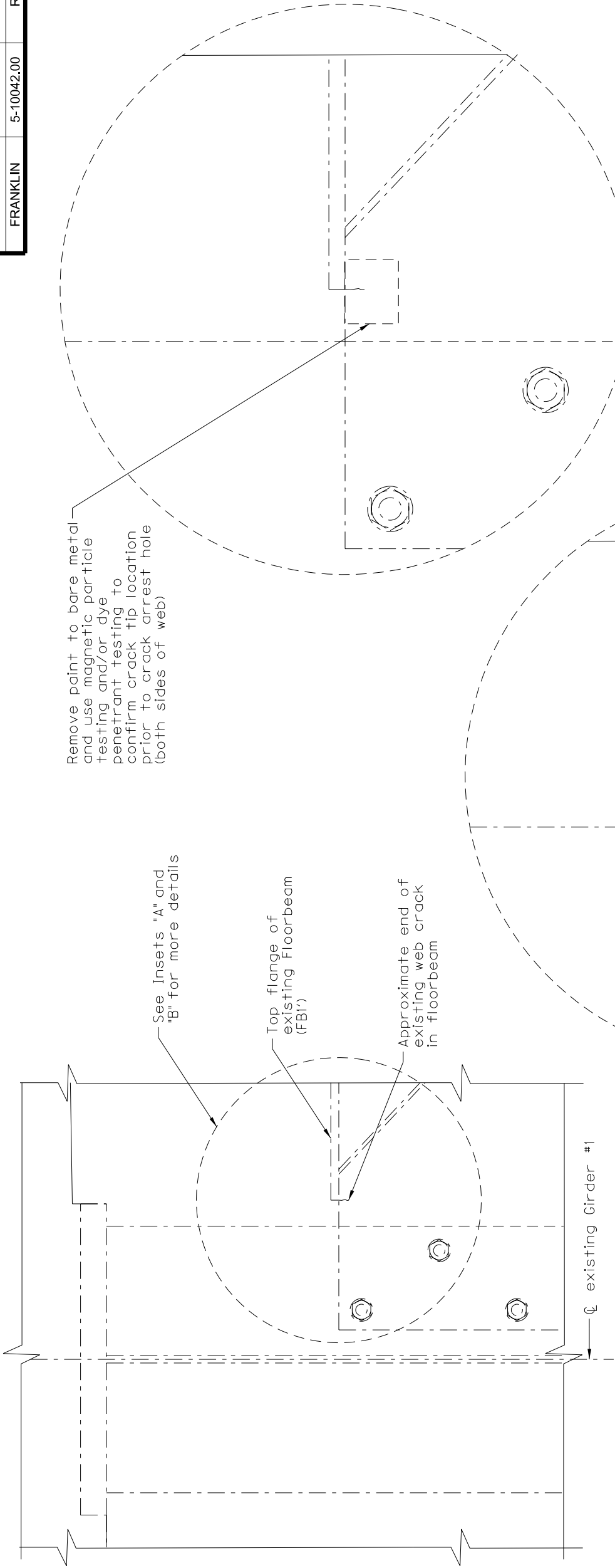


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



I-64 OVER KENTUCKY RIVER BRIDGE NO. 037B00052R - BRIDGE REPAIRS
STRINGER END WEB CRACK ARREST DETAIL "CA2"
EXISTING AND PROPOSED CONDITIONS

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R16



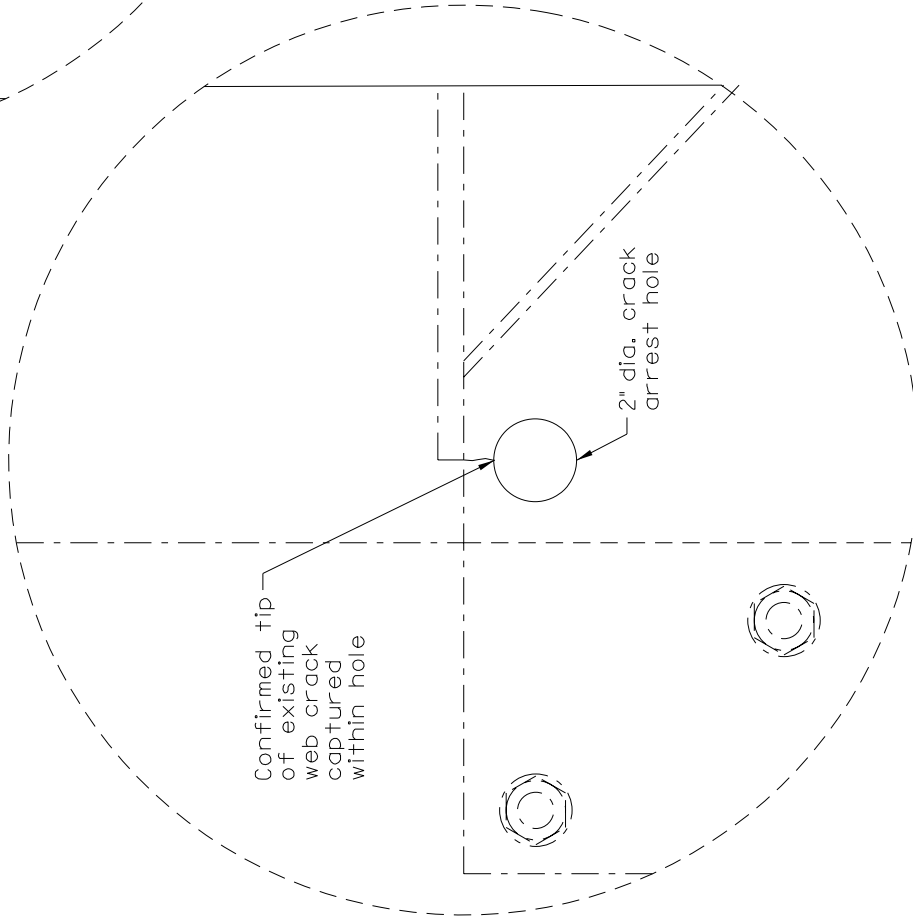
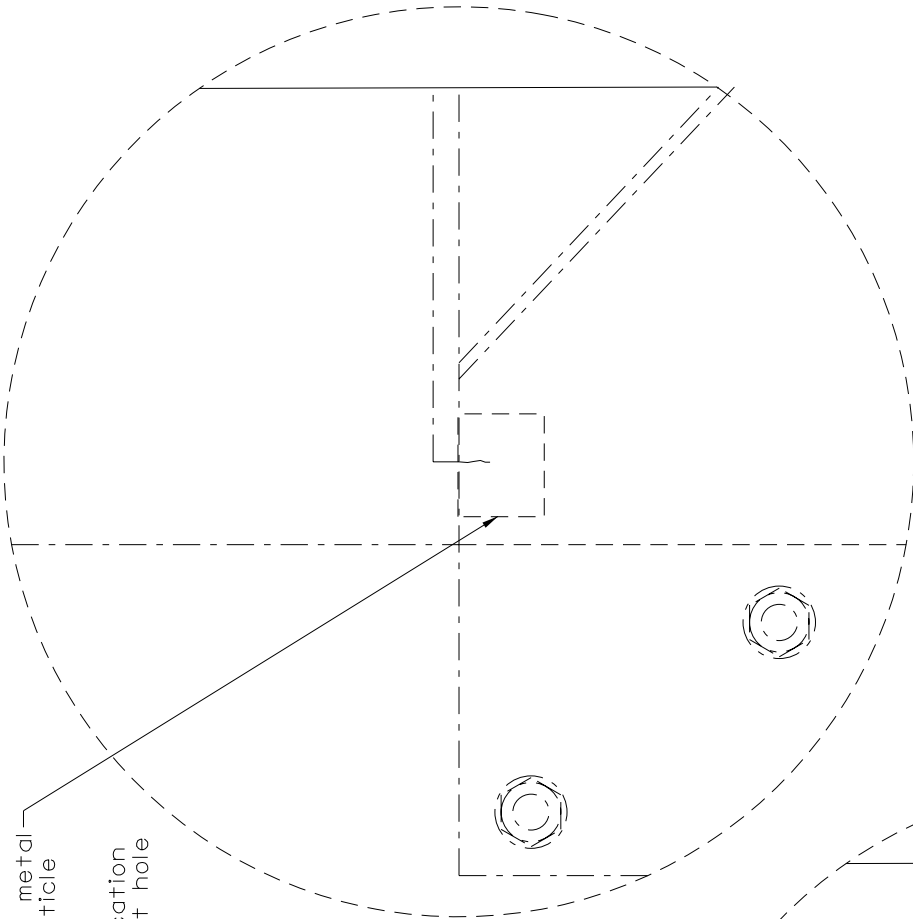
EXISTING PARTIAL ELEVATION
at Floorbeam End Crack

USE THIS DETAIL AT THE FOLLOWING LOCATIONS:

BRIDGE NO. 037B00052L AT PANEL POINT FBI'

This detail may be applied per the Engineer at other similar floorbeam web end crack locations if other such cracks are discovered during the work.

This work shall be completed prior to proceeding to the floorbeam strengthening work at this panel point.



Inset "B"
Showing Crack Arrest Hole Work

BRIDGE NO. 037B00052L

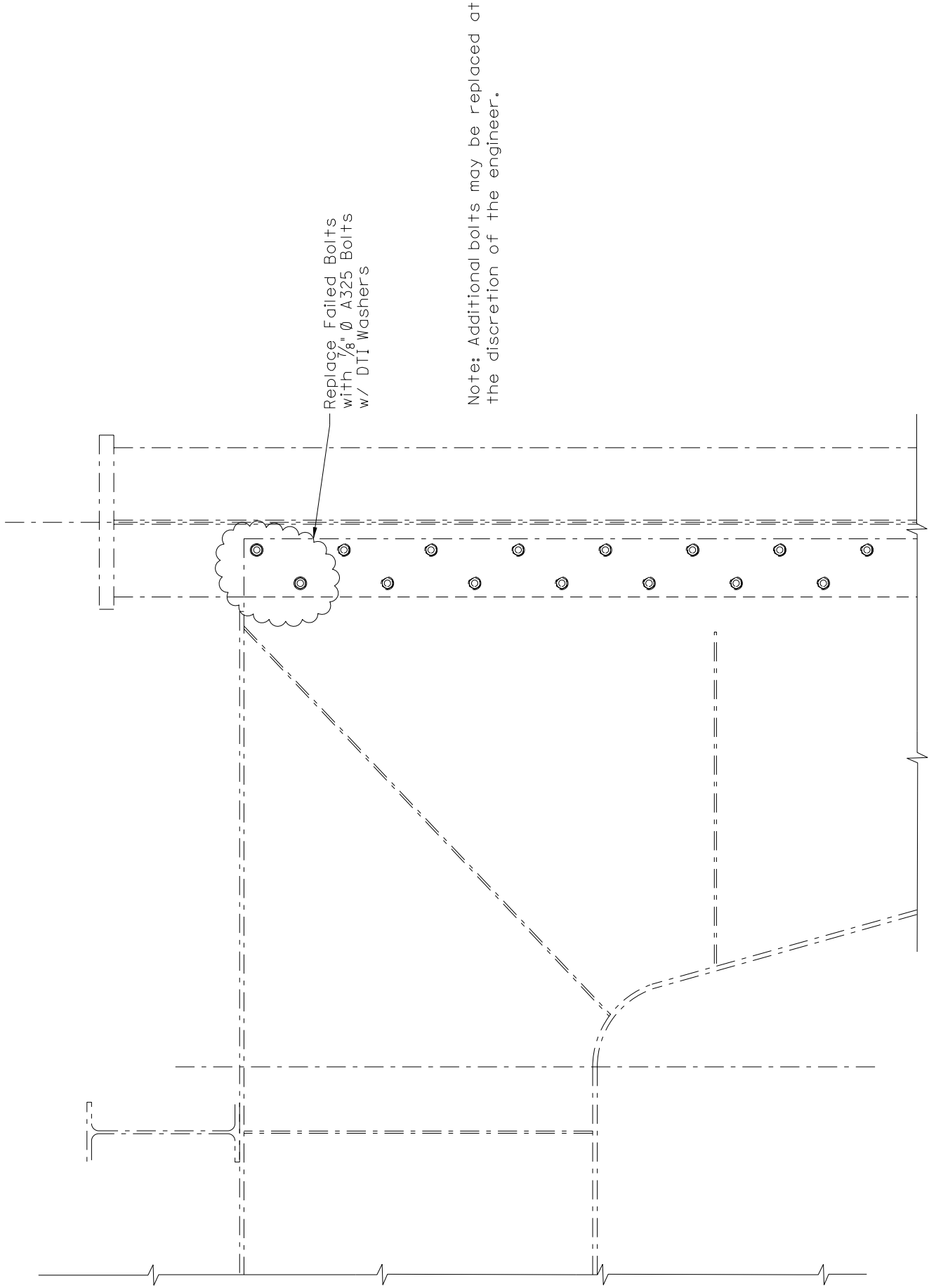


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



I-64 OVER KENTUCKY RIVER BRIDGE NO. 037B00052L - BRIDGE REPAIRS
FLOORBEAM END WEB CRACK ARREST DETAIL "CA3"
EXISTING AND PROPOSED CONDITIONS

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10043.00	R17



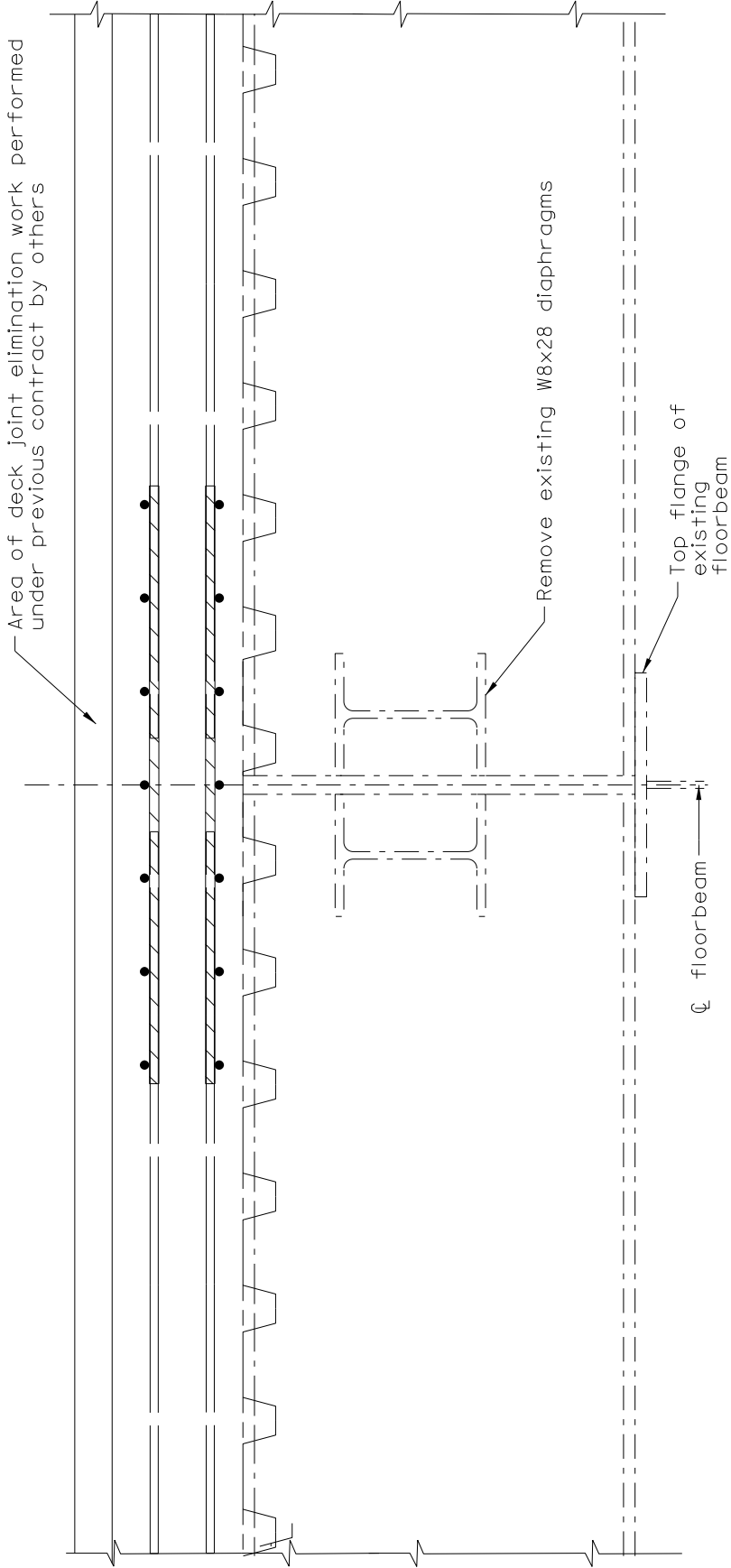
USE THIS DETAIL AT THE FOLLOWING LOCATIONS:
BRIDGE NO. 037B00052R AT PANEL POINT FB10.

BRIDGE NO. 037B00052R



I-64 OVER KENTUCKY RIVER BRIDGE NO. 037B00052R - BRIDGE REPAIRS
BOLT REPLACEMENT DETAIL "RB1"
PROPOSED CONDITIONS

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R20
FRANKLIN	5-10043.00	R20



EXISTING SECTION at Previous Transverse Slab Joint

USE THIS DETAIL AT THE FOLLOWING LOCATIONS:

BRIDGE NO. 037B00052L AT PANEL POINTS 3, 6, 9, 11, 14, 17, 14', 11', 9', 6' & 3'
BRIDGE NO. 037B00052R AT PANEL POINTS 3, 6, 9, 11, 14, 17, 14', 11', 9', 6' & 3'

BRIDGE NOS. 037B00052L/R

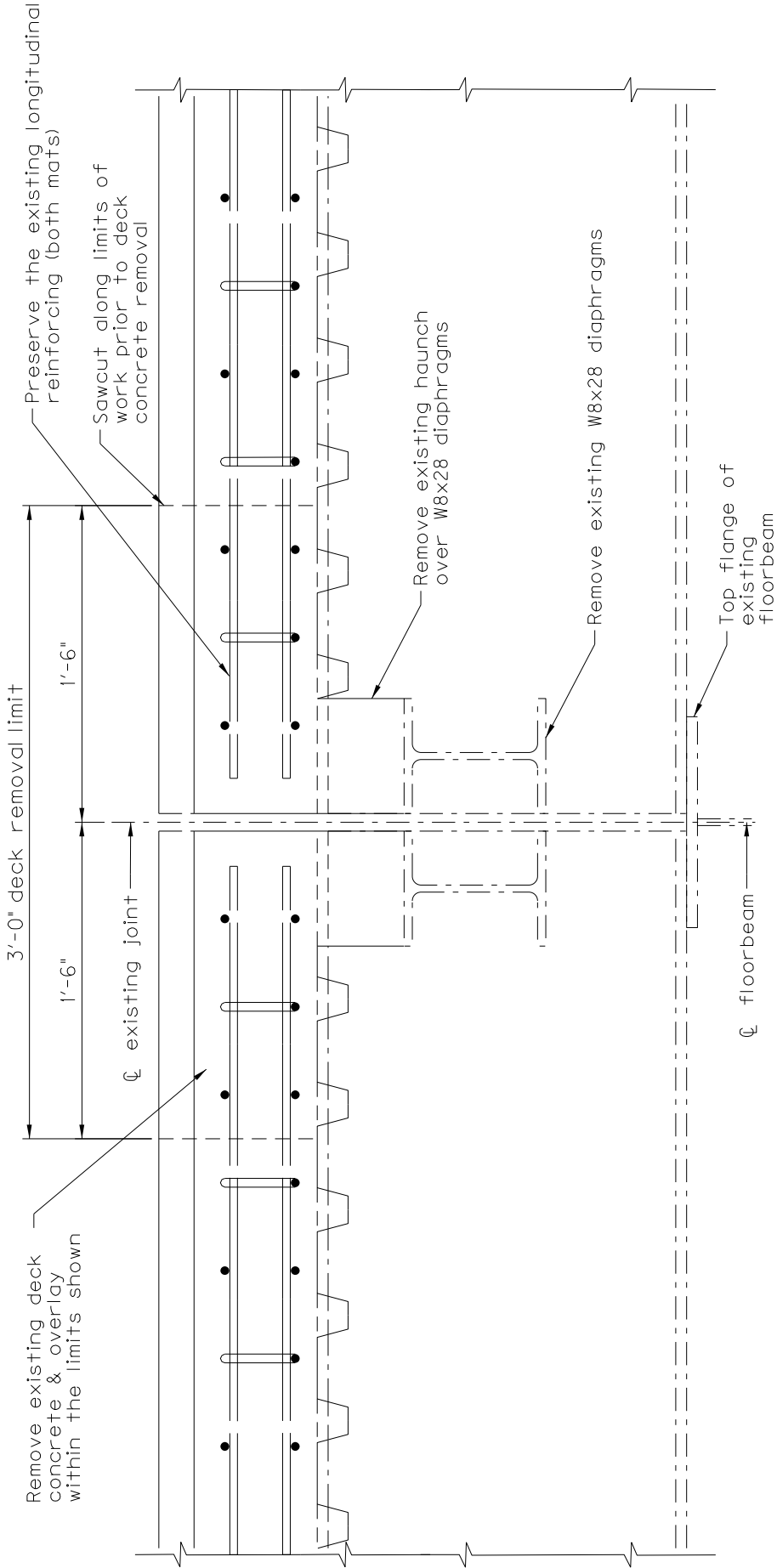


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DEPARTMENT OF HIGHWAYS



**I-64 OVER KENTUCKY RIVER BRIDGE NOS. 037B00052L/R - BRIDGE REPAIRS
STRINGER ENDS UNDER PREVIOUS DECK JOINT ELIMINATION
EXISTING CONDITIONS**

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R22
FRANKLIN	5-10043.00	R22



EXISTING SECTION at Deck Joint Elimination (over Piers)

USE THIS DETAIL AT THE FOLLOWING LOCATIONS:

BRIDGE NO. 037B00052L AT PANEL POINTS 10 & 10'
BRIDGE NO. 037B00052R AT PANEL POINTS 10 & 10'

BRIDGE NOS. 037B00052L/R

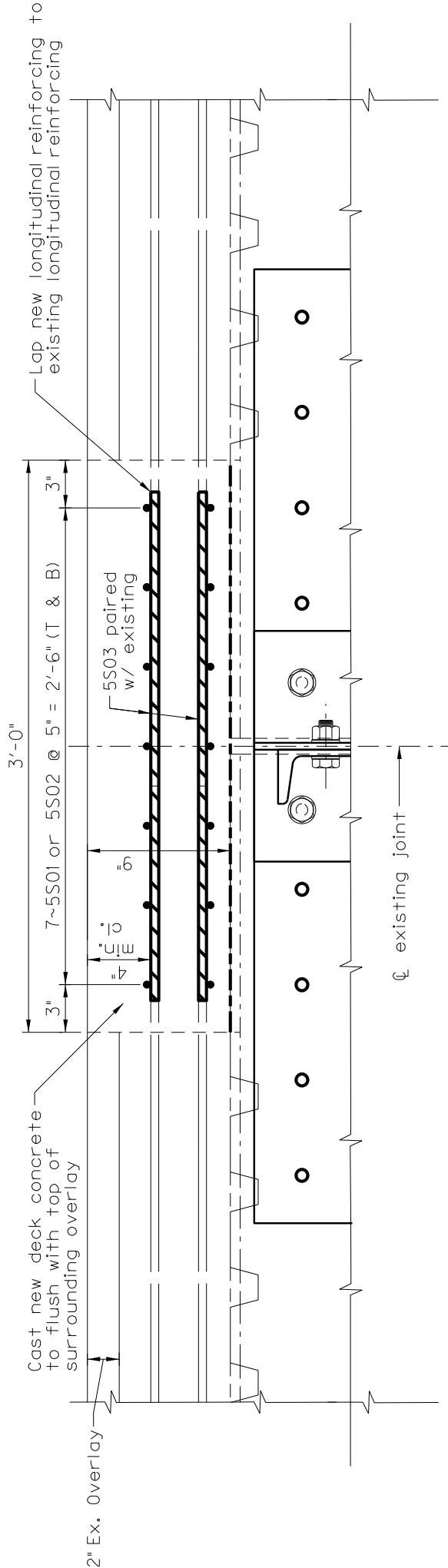


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

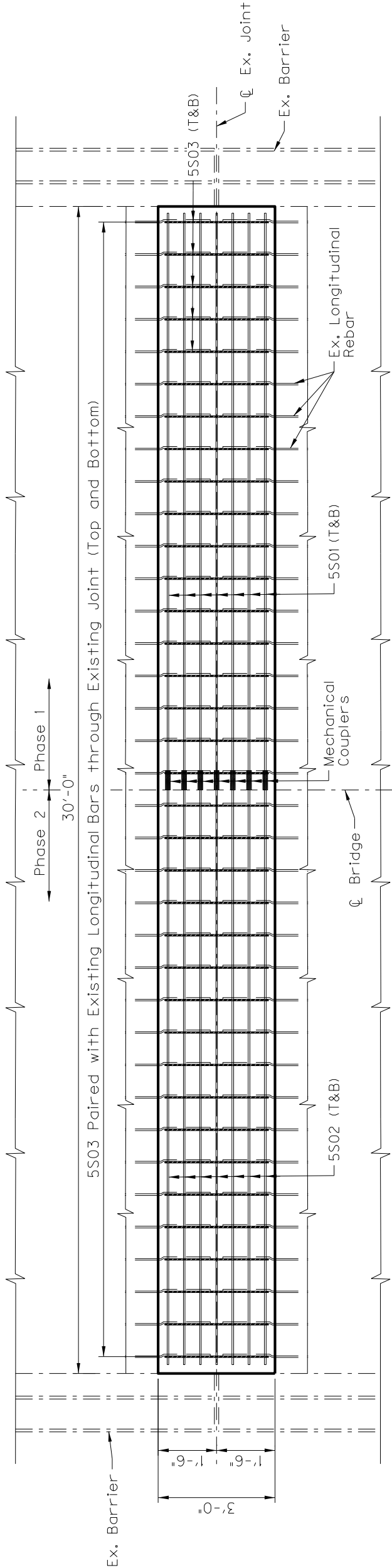


I-64 OVER KENTUCKY RIVER BRIDGE NOS. 037B00052L/R - BRIDGE REPAIRS
TRANSVERSE JOINT ELIMINATION DETAILS
EXISTING CONDITIONS

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R24
FRANKLIN	5-10043.00	R24



PROPOSED SECTION at Deck Joint Elimination (over Piers)



PROPOSED PLAN at Deck Joint Elimination (over Piers)

BILL OF REINFORCEMENT						
Mark	Type	No.	Size	Length		Location
				ft	in	
5S01	Str.	28	5	14	8	Phase 1 Transverse
5S02	Str.	28	5	15	0	Phase 2 Transverse
5S03	Str.	136	5	2	8	Longitudinal

USE THIS DETAIL AT THE FOLLOWING LOCATIONS:

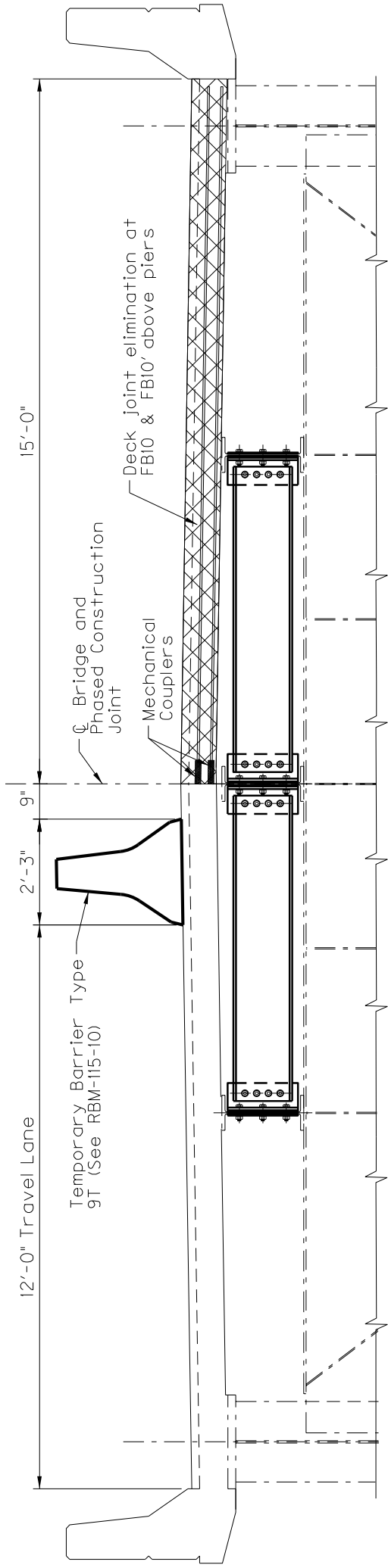
BRIDGE NO. 037B00052L AT PANEL POINTS 10 & 10'
BRIDGE NO. 037B00052R AT PANEL POINTS 10 & 10'

BRIDGE NOS. 037B00052L/R

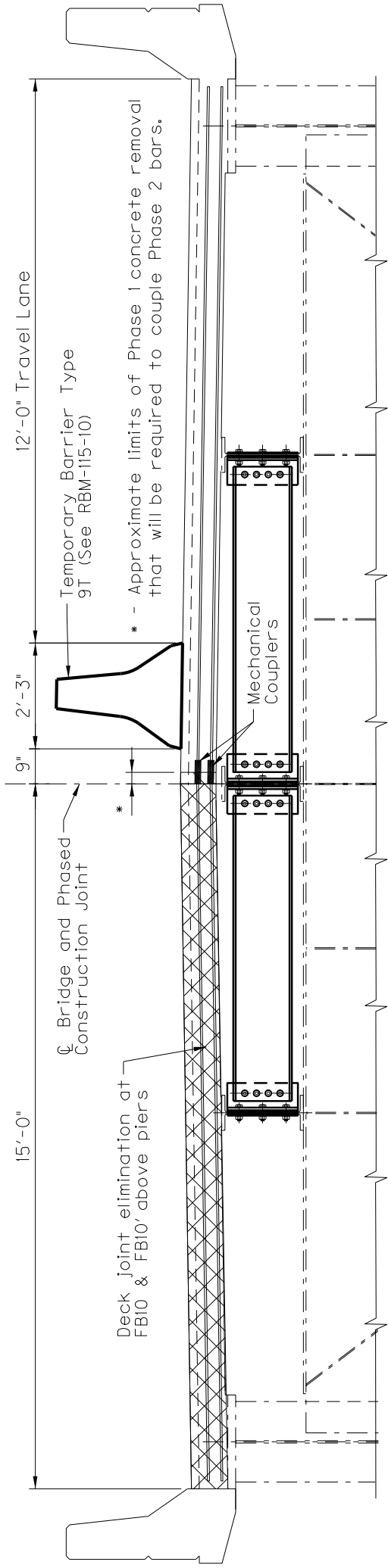


I-64 OVER KENTUCKY RIVER BRIDGE NOS. 037B00052L/R - BRIDGE REPAIRS
JOINT ELIMINATION DETAIL - "X" (1 OF 2)
PROPOSED CONDITIONS

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R25
FRANKLIN	5-10043.00	R25



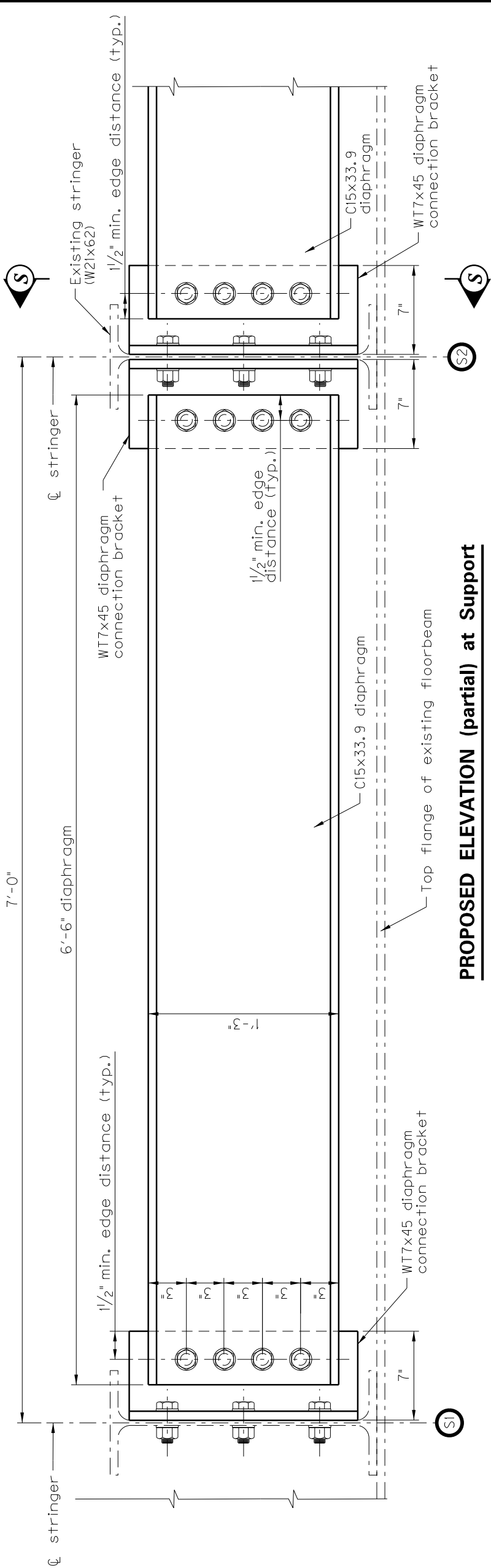
PROPOSED SECTION at Deck Joint Elimination (over Piers) (PHASE 1)



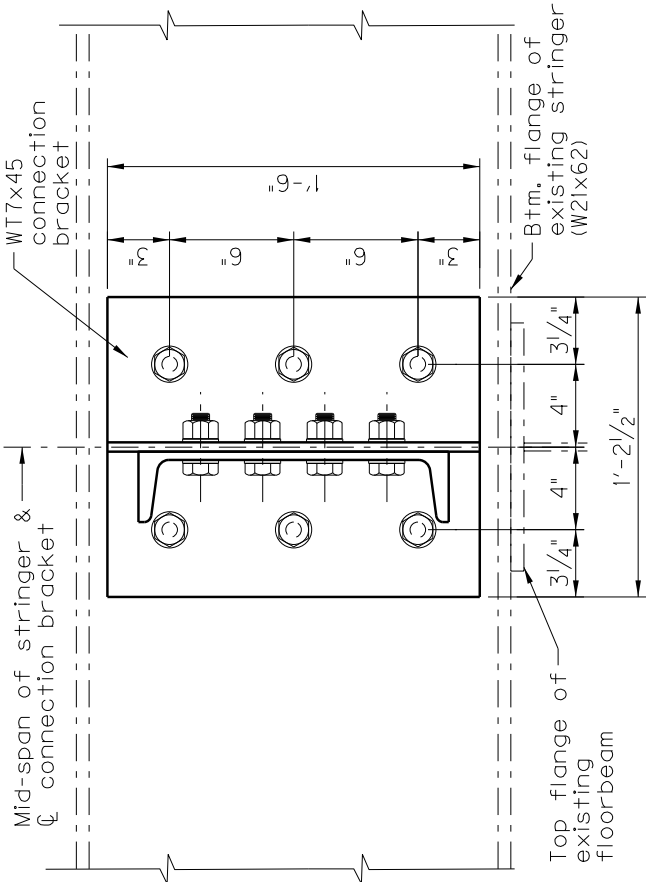
PROPOSED SECTION at Deck Joint Elimination (over Piers) (PHASE 2)

BRIDGE NOS. 037B00052L/R

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R26
FRANKLIN	5-10043.00	R26



PROPOSED ELEVATION (partial) at Support



All proposed bolt holes to be 15/16" dia. for 7/8" dia. ASTM A325 high strength bolts.
All proposed structural steel shall be ASTM Material, A709 Grade 50 Structural Steel Plates and Shapes.
All new structural steel and bolting hardware shall be fully galvanized per ASTM A123 (fabricated products) or ASTM A153 (hardware items).

USE THIS DETAIL AT THE FOLLOWING LOCATIONS:

BRIDGE NO. 037B00052L AT ALL PANEL POINTS EXCEPT FB0 AND FB0',
BRIDGE NO. 037B00052R AT ALL PANEL POINTS EXCEPT FB0 AND FB0'.

BRIDGE NOS. 037B00052L/R

SECTION S-S

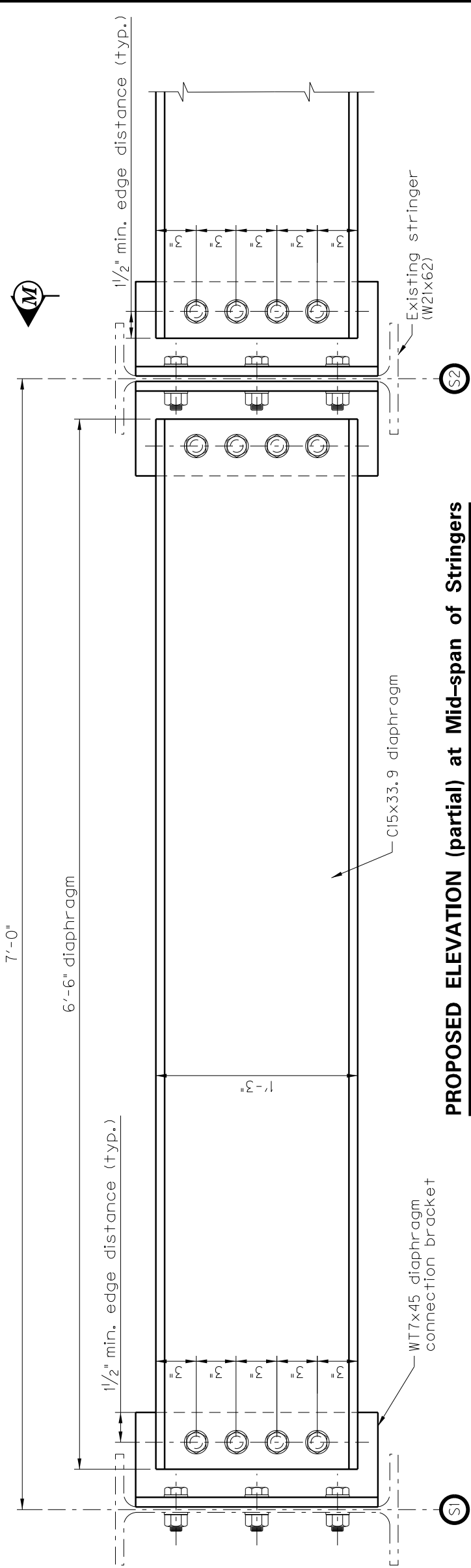


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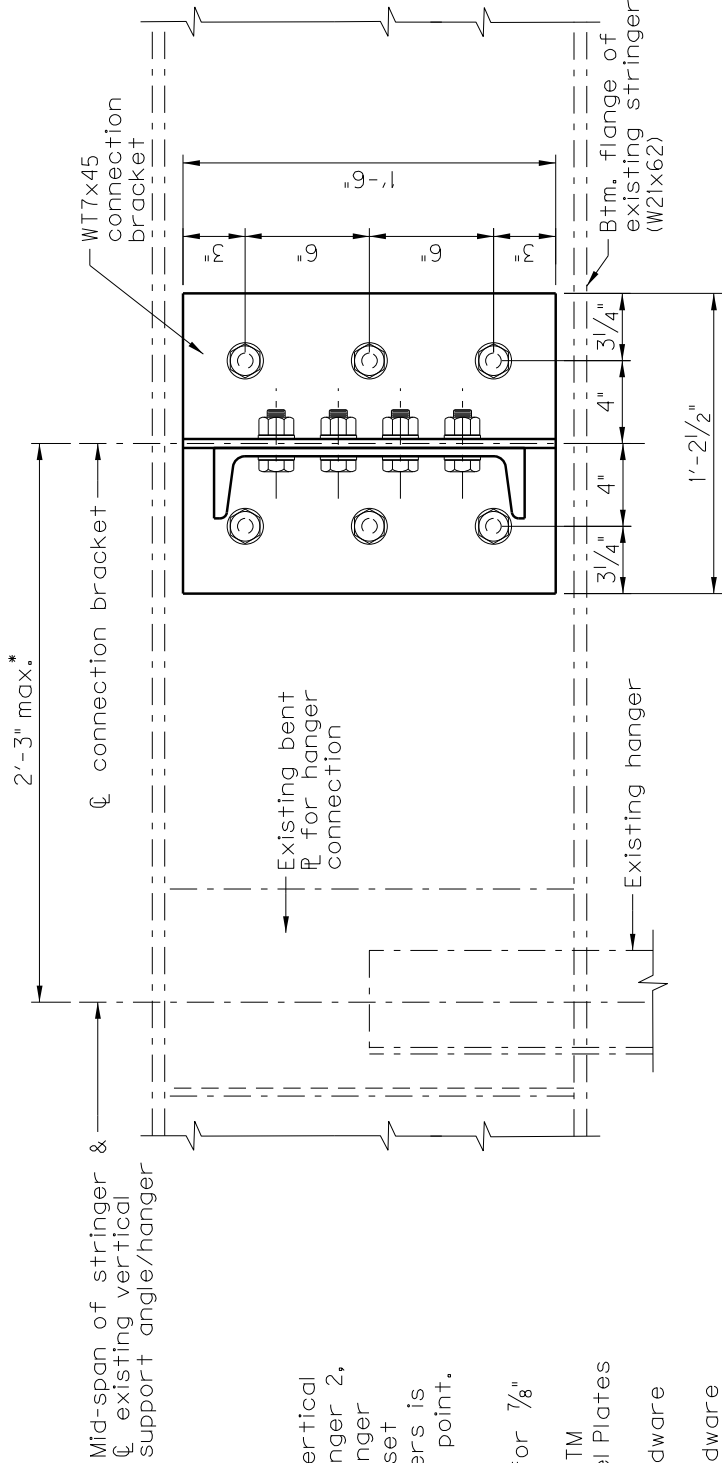


I-64 OVER KENTUCKY RIVER BRIDGE NOS. 037B00052L/R - BRIDGE REPAIRS
STRINGER REINFORCEMENT AT SUPPORT DETAIL - "SRS"
PROPOSED CONDITIONS

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R27
FRANKLIN	5-10043.00	R27



PROPOSED ELEVATION (partial) at Mid-span of Stringers



SECTION M-M near Mid-span of Stringers

USE THIS DETAIL AT THE FOLLOWING LOCATIONS:

BRIDGE NO. 037B00052L AT MID-SPAN OF STRINGERS (ALL STRINGER SPANS EXCEPT BETWEEN FB9 & FB11 AND BETWEEN FB11' & FB9')
BRIDGE NO. 037B00052R AT MID-SPAN OF STRINGERS (ALL STRINGER SPANS EXCEPT BETWEEN FB9 & FB11 AND BETWEEN FB11' & FB9')

BRIDGE NOS. 037B00052L/R

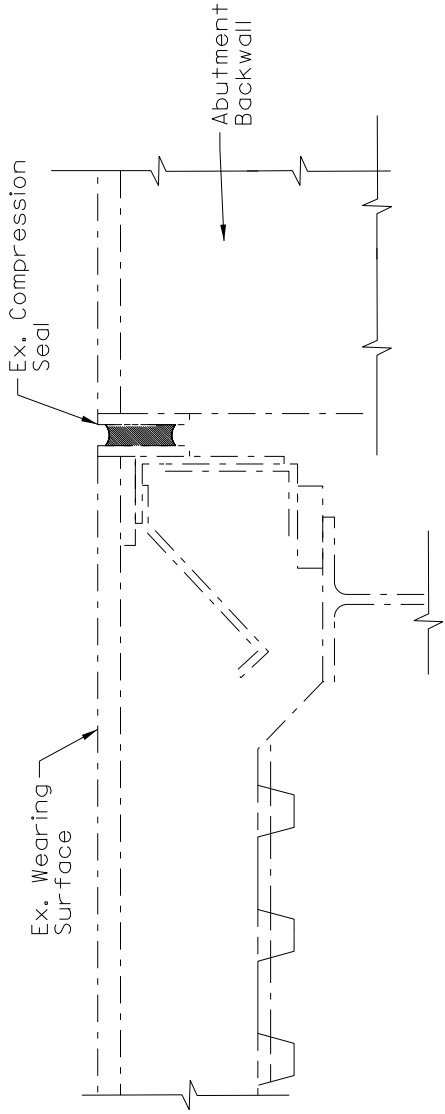


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS

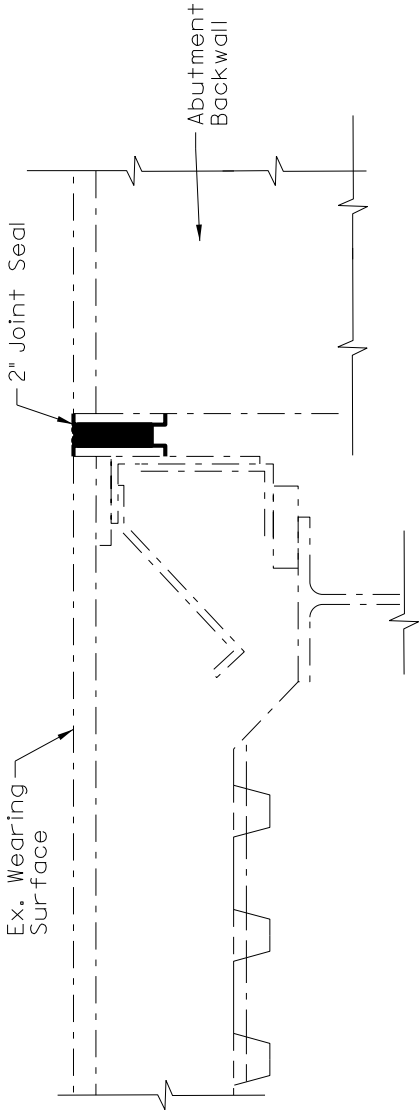


I-64 OVER KENTUCKY RIVER BRIDGE NOS. 037B00052L/R - BRIDGE REPAIRS
STRINGER REINFORCEMENT AT MID-SPAN DETAIL - "SMS"
PROPOSED CONDITIONS

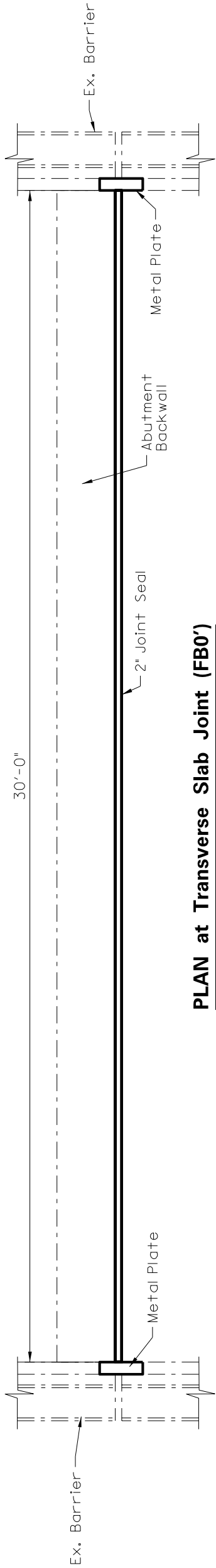
COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R28
FRANKLIN	5-10043.00	R28



EXISTING SECTION at Transverse Slab Joint (FB0')



PROPOSED SECTION at Transverse Slab Joint (FB0')



USE THIS DETAIL AT THE FOLLOWING LOCATIONS:

BRIDGE NO. 037B00052L AT PANEL POINTS FB0',
BRIDGE NO. 037B00052R AT PANEL POINTS FB0'.

BRIDGE NOS. 037B00052L/R

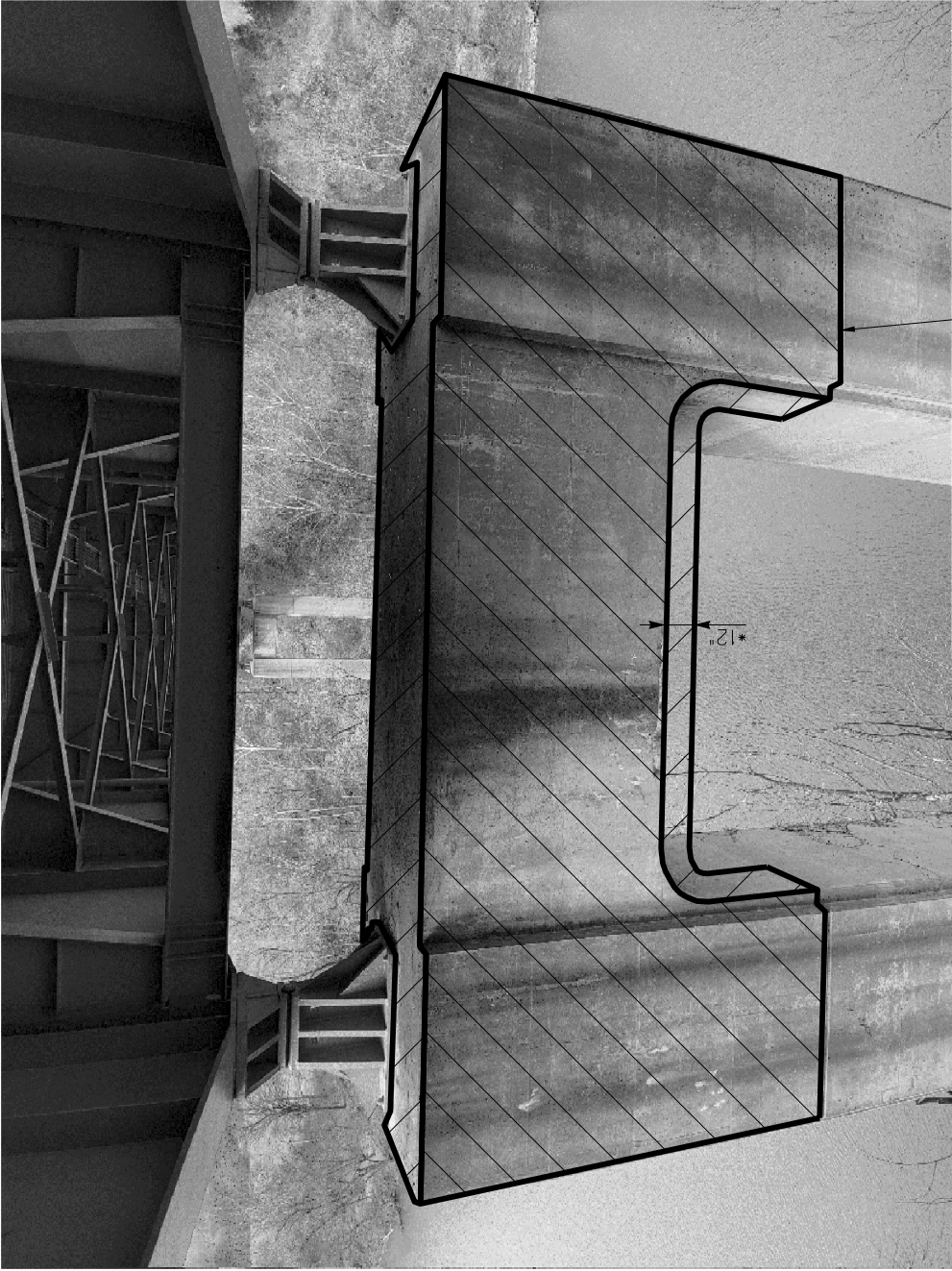


COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



I-64 OVER KENTUCKY RIVER BRIDGE NOS. 037B00052L/R - BRIDGE REPAIRS
TRANSVERSE JOINT REPLACEMENT DETAILS AT FB0'

COUNTY OF	ITEM NO.	SHEET NO.
FRANKLIN	5-10042.00	R29
FRANKLIN	5-10043.00	R29



TYPICAL FACE OF PIER

* Extend Concrete Coating 12" on inside of columns and underside of cap as shown.

Estimated Concrete Coating Quantity:
0037B00052L : 2938 SF
0037B00052R : 3178 SF

Limits Extend to Existing Rustication Joint (Typ.)



TYPICAL END OF PIER

Note : Within the limits defined and prior to the application of Concrete Coating, complete the Concrete Patching Repair and the Epoxy Injection Crack Repair as directed by the Engineer and in accordance with the Special Note for Concrete Patching Repair and the Special Note for Epoxy Injection Crack Repair.

BRIDGE NOS. 037B00052L/R



COMMONWEALTH OF KENTUCKY
DEPARTMENT OF HIGHWAYS



I-64 OVER KENTUCKY RIVER BRIDGE NOS. 037B00052L/R - BRIDGE REPAIRS
CONCRETE COATING AND REPAIR LIMITS AT PIERS