

Bench Mark: Chiseled square on northwest corner of southwest wingwall at South Abutment. Elev. 473.12

Existing Structure: The Murray Baker Bridge, S.N. 090-0001, was constructed in 1958 (F.A.I. Route 5, F.A. Route 9, Section 10D-E-F-P) and the north approach was reconstructed in 2005 (F.A.I. Route 74, Section 90-10D-1-BRY). The 13-span structure consists of a three-span continuous multi-girder unit on the north approach, a five-span cantilevered through truss, and a four-span continuous multi-girder unit and one simply supported multi-girder span on the south approach. The total structure length is approximately 3,245' back-to-back of abutments and has a typical width of 60'-7 1/2" out-to-out of deck. The maximum out-to-out width of the flared deck section at the north abutment is approximately 136'-5". The structure carries two eastbound and two westbound lanes separated by a concrete median barrier. The minimum clear width between the median barrier and parapet for eastbound and westbound lanes is 27'-7 1/4".

The substructure units consist of concrete abutments and piers. The abutments and piers within the north and south approaches are supported on steel piles and the piers within the channel are supported on spread footings keyed into bedrock.

Traffic: Bridge to be closed to traffic during construction.

Salvage: No salvage.

DESIGN SCOUR ELEVATION TABLE

Event/Limit State	Design Scour Elevations (ft.)						Item 113
	Pier 3	Pier 4	Pier 5	Pier 6	Pier 7	Pier 8	
Q100	450.8	447.2	393.9	396.4	410.2	422.5	5
Q200	449.6	445.9	392.7	395.2	409.1	421.3	
Design	448.1	409.2	402.3	402.3	397.5	398.7	

DRAINAGE SCUPPER STATIONS - WESTBOUND AND EASTBOUND

141+02.00	145+07.00	149+66.00	152+16.00	157+25.00	164+70.00
141+14.00	145+58.00	149+90.00	152+46.00	157+83.00	165+30.00
141+25.00	146+07.00	150+15.00	152+76.00	158+40.00	165+90.00
141+44.00	146+54.00	150+35.00	153+06.00	158+98.00	166+30.00
141+57.00	146+97.00	*150+50.00	153+34.00	159+55.00	166+70.00
141+78.00	147+44.00	*150+65.00	153+54.00	160+12.00	167+10.00
142+04.00	147+86.00	*150+75.00	153+96.00	160+69.00	167+39.00
142+34.00	147+96.00	*150+90.00	154+42.00	161+26.00	167+59.00
142+64.00	148+32.00	151+05.00	154+86.00	161+84.00	167+75.00
143+11.00	148+62.00	151+26.00	155+32.00	162+25.00	167+86.00
143+61.00	148+94.00	151+50.00	155+76.00	162+87.00	-
144+16.00	149+24.00	151+74.00	156+25.00	163+49.00	-
144+74.00	149+46.00	151+97.00	156+66.00	164+10.00	-

* 6" Ø floor drain

Drainage scuppers will not be permitted to free fall from Station 141+02.00 to Station 144+16.00. A drainage system will be utilized within these limits.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications for Highway Bridges, 17th Edition.

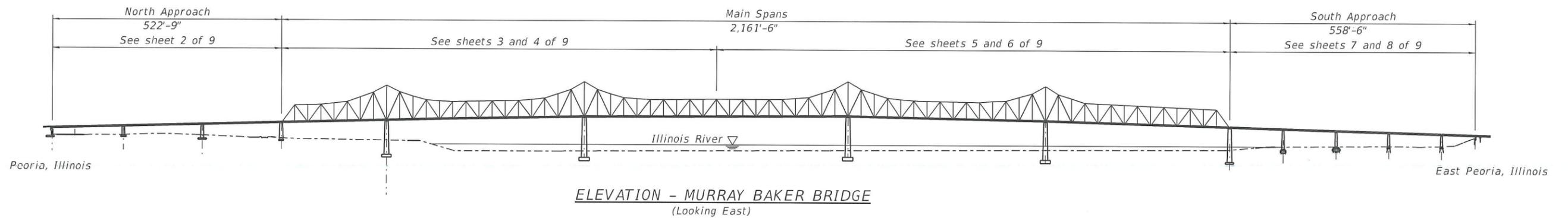
DESIGN STRESSES

FIELD UNITS
f'c = 4,000 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)

HIGHWAY CLASSIFICATION

F.A.I. 74 (Illinois Route 29)
Functional Class: Interstate
ADT: 59,300 (2017); 63,720 (2032)
ADTT: 3,558 (2017); 3,823 (2032)
DHV: 6,370 (2032)
Design Speed: 55 m.p.h.
Posted Speed: 55 m.p.h.
2-Way Traffic
Directional Distribution: 47:53 (WB:EB)

LOADING HS20-44 AND ALTERNATE MILITARY LOADING



Note:
Modification and/or repair to the existing highway, navigation and decorative lighting will be developed by Others.

DESIGN STRESSES (ORIGINAL CONSTRUCTION)

Loading: HS20-44
Reinforced Concrete: f'c = 800 psi, N=10 (Substructure)
fs = 20,000 psi (Reinforcement)
Structural Steel: fy = 33,000 psi (Carbon)
fy = 50,000 psi (Low Alloy)

DESIGN STRESSES (1984 REHABILITATION)

Design Specifications: 1977 AASHTO Standard Specifications for Highway Bridges with 1978 through 1982 Interims

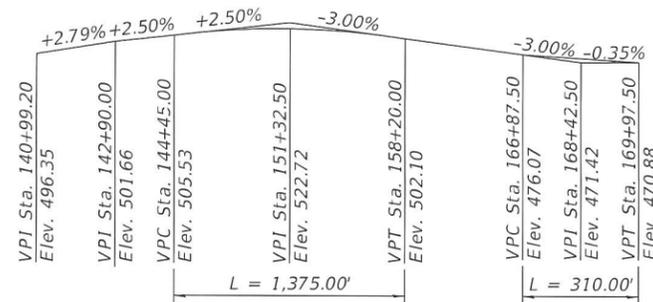
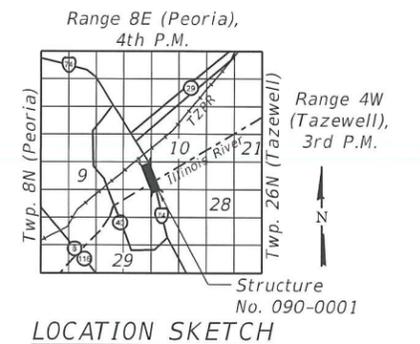
Loading: HS20-44
Reinforced Concrete: f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
Structural Steel: fy = 36,000 psi

DESIGN STRESSES (2005 RECONSTRUCTION)

Design Specifications: 1996 AASHTO Standard Specifications for Highway Bridges with 1997 through 2000 Interims
2003 AASHTO Guide Specifications for Horizontally Curved Highway Bridges
Loading: HS20-44 and Alternate Military Loading
Reinforced Concrete: f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)
Structural Steel: fy = 50,000 psi (M270 Grade 50)
fy = 36,000 psi (M270 Grade 36)
Seismic Data: Seismic Performance Zone (SPC) = A
Bedrock Acceleration Coefficient (A) = 0.04g
Site Coefficient (S) = 1.0

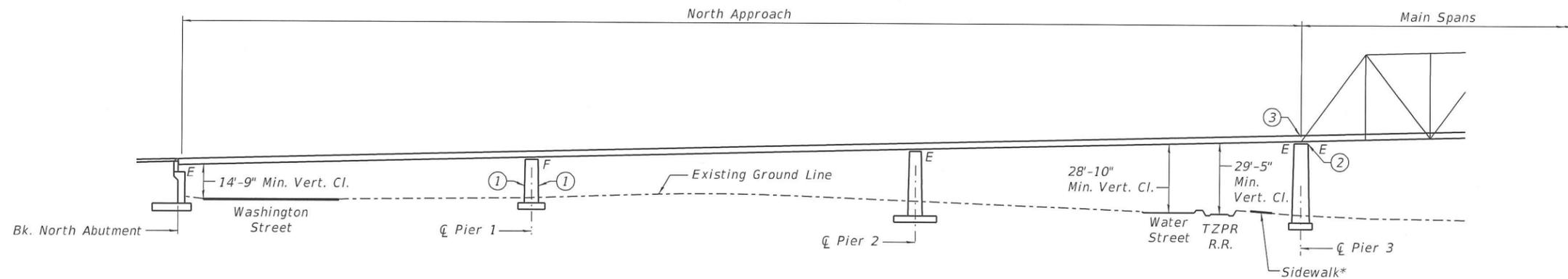
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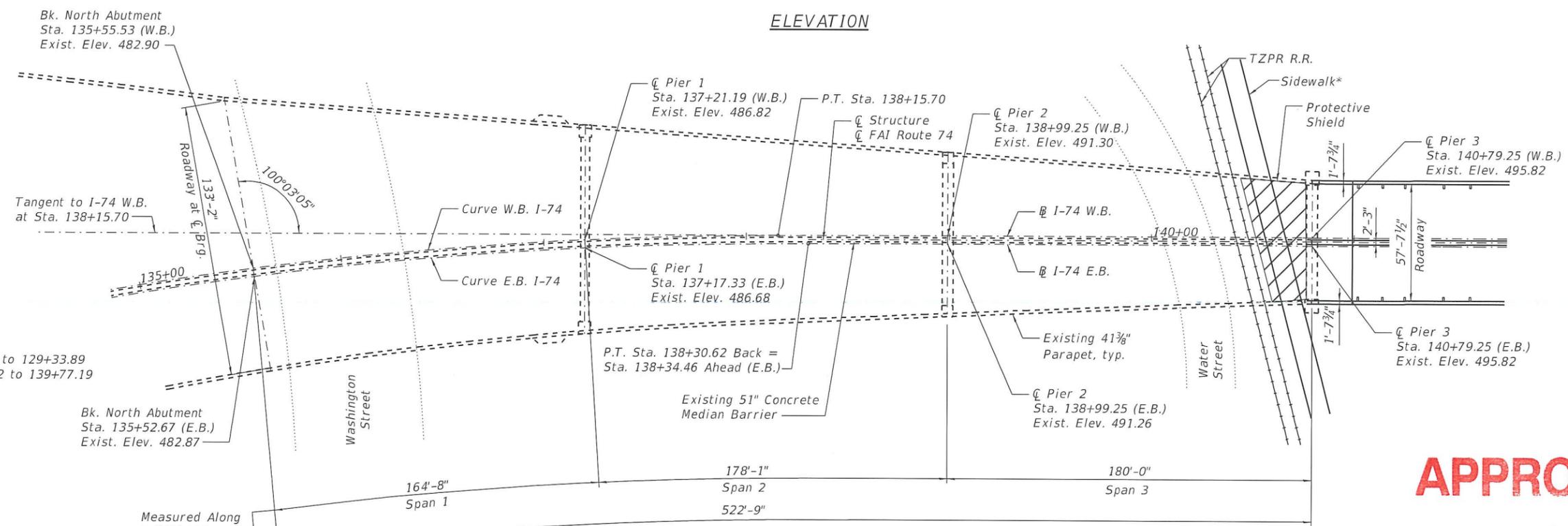


The profile grade shows the final elevations after grinding.
Up to 1/4 inch may be ground off the bridge deck.

GENERAL PLAN
MURRAY BAKER BRIDGE
OVER ILLINOIS RIVER (PUBLIC WATER)
F.A.I. ROUTE 74 - SEC. 90(10D-1)BRR
PEORIA AND TAZEWELL COUNTIES
STATION 151+76.00
STRUCTURE NO. 090-0001



ELEVATION



PLAN

CURVE DATA
W.B. I-74

P.I. Sta. = 133+51.41
 $\Delta = 25^\circ 56' 34''$ (RT)
 $R = 2,089.13'$
 $T = 481.22'$
 $L = 945.93'$
 $E = 54.71'$
 $e = 0.055$
 P.C. Sta. = 128+70.20
 P.T. Sta. = 138+16.13
 Transition In 127+07.51 to 129+33.89
 Transition Out 137+50.82 to 139+77.19

CURVE DATA
E.B. I-74

P.I. Sta. = 133+73.16
 $\Delta = 25^\circ 56' 35''$ (RT)
 $R = 2,076.06'$
 $T = 478.21'$
 $L = 940.02'$
 $E = 54.36'$
 $e = 0.055$
 P.C. Sta. = 128+94.96
 P.T. Sta. = 138+34.98 (Back)
 Transition In 127+30.48 to 129+56.86
 Transition Out 137+67.22 to 139+64.07

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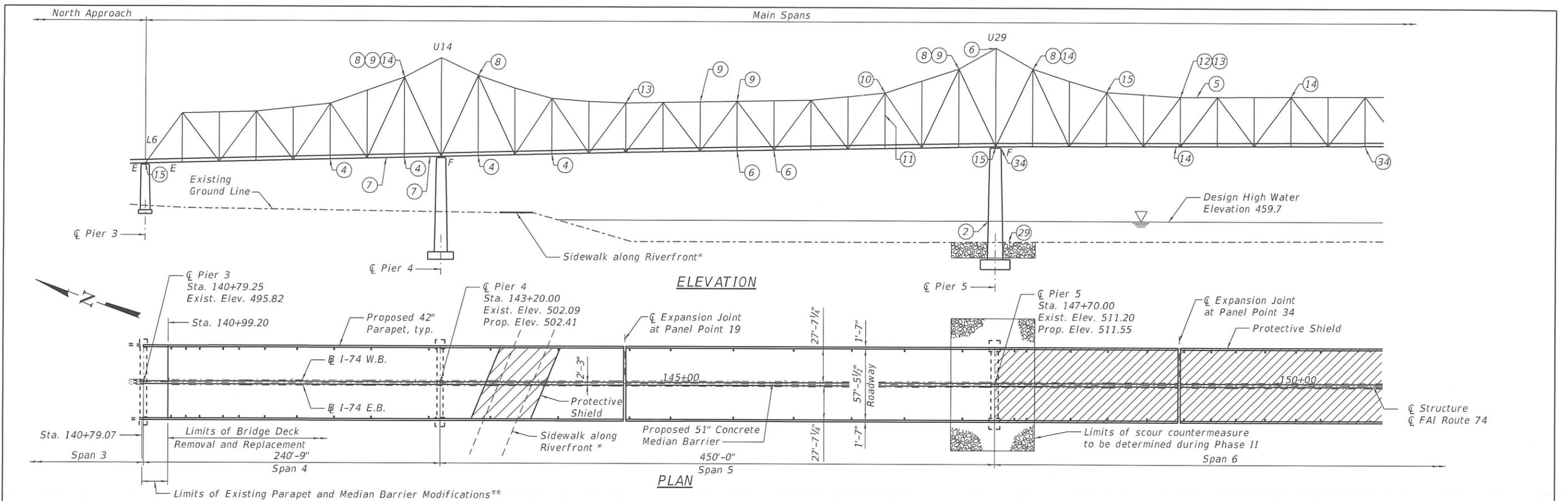
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* Maintain pedestrian access during construction.

NORTH APPROACH REPAIR SCHEDULE			
ID. NO.	Item	Location	Action
-	Protective Coat	Entire Deck from North Abutment to South Bridge Approach Slab	Apply protective coat to top of deck, parapets and median barrier
-	Concrete Sealer	North Abutment and Pier 3	Apply concrete sealer to abutment and pier caps under expansion joints
-	Structure Painting	Structural Steel near Expansion Joints at North Abutment and Pier 3	Clean and paint structural steel 5' from expansion joint at North Abutment; clean and paint structural steel 5' from expansion joint at Pier 3 on approach side
-	Drainage System	North Approach	Clean out drains and drainage system; Repair/replace broken pipes and hangers
1	Pier	Pier 1	Epoxy resin crack injection
2	Pier	Pier 3	Formed concrete repair
3	Joint	Pier 3	Replace missing bolts in finger plate trough; clean trough

**NORTH APPROACH REPAIRS
MURRAY BAKER BRIDGE
OVER ILLINOIS RIVER (PUBLIC WATER)
F.A.I. ROUTE 74 - SEC. 90(10D-1)BRR
PEORIA AND TAZEWELL COUNTIES
STATION 151+76.00
STRUCTURE NO. 090-0001**

	USER NAME =	DESIGNED - CSG	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	NORTH APPROACH REPAIRS MURRAY BAKER BRIDGE OVER ILLINOIS RIVER	F.A.I. RTE. = 74	SECTION = 90(10D-1)BRR	COUNTY = *	TOTAL SHEETS =	SHEET NO. =
	PLOT SCALE =	DRAWN - AEC	REVISED -			SHEET 2 OF 10 SHEETS	CONTRACT NO. 68C89			
FILE NAME:	PLOT DATE = 04/02/2019	CHECKED - RLM	REVISED -			ILLINOIS FED. AID PROJECT				



MAIN SPAN REPAIR SCHEDULE - 1

ID. NO.	Item	Location	Action
-	Bridge Deck	Pier 3 to South Abutment	Modify parapets/median barrier and remove and replace bridge deck/parapets/median barrier to the limits shown. Install shear studs on existing stringers as part of this work.
-	Expansion Joints	Expansion Joints at Span 5, PP19 and Span 6, PP34	Replace expansion joints within limits of deck replacement
-	Protective Coat	Entire Deck from North Abutment to South Bridge Approach Slab	Apply protective coat to top of deck, parapets and median barrier
-	Structure Painting	Floorsystem near Expansion Joints at Pier 3; Span 5, PP19; Span 6, PP34	Clean and paint floorsystem 10' from expansion joint at Pier 3 on main span side; clean and paint floorsystem 10' on each side of expansion joints at PP19 and PP34
-	Structure Painting	Splash Zone	Clean and paint structure from bottom of lower chord to 22' above deck, including portal and sway bracing bottom struts; from outside face of lower chord to the second stringer; and, the interior surfaces of the box shaped members within this zone.
-	Drainage System	Main Spans and South Approach	Clean out drains and drainage system within limits of existing deck to remain; install new drains within limits of deck replacement, replace portion of existing drainage system
-	Miscellaneous Fastener Repairs	Various Members, Various Locations	Replace defective or missing fasteners; fill misdrilled holes with bolts
2	Pier	Pier 5	Formed concrete repair
4	Hangers	L11W-U11W at L11W, L13E-U13E at L13E, L15E-U15E at L15E, L15W-U15W at L15W, L17E-U17E at L17E and L17W-U17W at L17W	Install repair plates
5	Upper Chord Cleaning and Painting	U34W-U35W, 7' from U34W	Spot clean and paint at location of deterioration
6	Gusset Plate Repair/Strengthening	L22E, O.S.; L23E, I.S.; L23E, O.S.; U29E, O.S. and I.S.; U29W, O.S. and I.S.	Install repair plates at location of deterioration; replace select rivets with high strength bolts at U29
7	Truss Member Strengthening	L12E-L14E, L12W-L14W	Install strengthening plates
8	Sway Bracing	at U13W, at U13E, at U15E, Midpt. U15E-U15W, at U15W, at U28W, Midpt. U28E-U28W, at U28E, at U30W	Stay plate/lacing bar replacement
9	Sway Bracing - Upper K-Brace	at U13E, at U21E, at U22E, at U22W, at U28E	Stay plate/lacing bar replacement
10	Sway Bracing	at U26E	Replace bent plate
11	Sway Brace Connection Plate	PP26, West End	Remove cracked weld and/or repair connection plate
12	Upper Chord	U34E-U35E 5' from U34E	Remove cracked welds
13	Guide Pins	at U19E, at U19W, at U34E, at U34W	Retrofit for wear grooves
14	Welds	Gusset Pl. at U13W, Gusset Pl. at U30E, L33W-L34W 6' from L34W, Gusset Pl. at U37E	Remove or repair cracked welds
15	Plug Welds	L6W-L7W at L6W, Gusset Pl. at L29W and U32E	Remove plug welds
29	Pier	Pier 5	Install filter mattress and riprap
34	Access Platform	at L29E, L29W, L39E, and L39W	Reconstruct navigation light access platforms

*Maintain pedestrian access during construction.
 ** Existing tapered parapets and median barrier shall be modified with a reinforced concrete extension to match the heights of the new parapets and median barrier on the deck replacement.

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 AS A BASIS FOR
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MAIN SPAN REPAIRS - 1
 MURRAY BAKER BRIDGE
 OVER ILLINOIS RIVER (PUBLIC WATER)
 F.A.I. ROUTE 74 - SEC. 90(10D-1)BRR
 PEORIA AND TAZEWELL COUNTIES
 STATION 151+76.00
 STRUCTURE NO. 090-0001

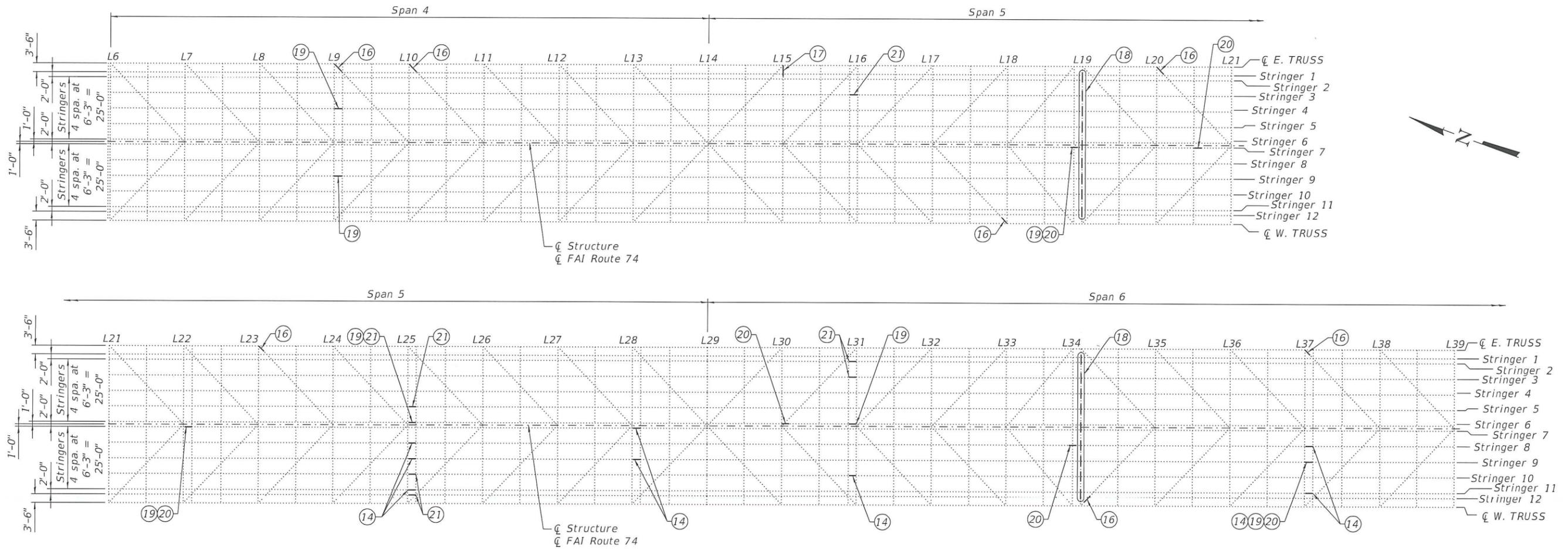


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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

MAIN SPAN REPAIRS - 1
 MURRAY BAKER BRIDGE OVER ILLINOIS RIVER
 SHEET 3 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	90(10D-1)BRR	*		
CONTRACT NO. 68C89				
ILLINOIS FED. AID PROJECT				



FRAMING PLAN

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AS A BASIS FOR
PREPARATION OF DETAILED PLANS

Note:
Truss joint and panel numbering coincide with original truss geometry prior to truss modifications made in 2005. Floorbeam numbering aligns with truss joint numbering shown in framing plan. Panel numbering starts with Panel 7 at the north end of Span 4.

MAIN SPAN REPAIR SCHEDULE - 2			
ID. NO.	Item	Location	Action
14	Welds	Str. 8, Str. 9 and Str. 11 at FB. 25, Pan. 26; Str. 7 and Str. 9 at FB. 28, Pan. 29; Str. 10 at FB. 31, Pan. 31; Str. 8, Str. 9 and Str. 11 at FB. 37, Pan. 38	Repair cracked welds
16	Lower Lateral Bracing	1' from L9E, at L10E, at L18W, at L20E, at L23E, 8' from L34W, at L37E	Install repair plates and/or angles
17	Floorbeam	FB. 15, East End	Install bottom flange repair plates
18	Stringer Seat to Floorbeam Connection	All Stringer Seats in Panel 19 at FB. 19 and Panel 34 at FB. 34	Remove stringer seat to floorbeam web welds
19	Stringer Web	Str. 4 and Str. 9 at FB. 9, Pan. 10; Str. 7 at FB. 19, Pan. 19; Str. 7 at FB. 22, Pan. 23; Str. 6 at FB. 25, Pan. 26; Str. 6 at FB. 31, Pan. 31; Str. 9 at FB. 37, Pan. 38	Install web repair plates and/or angles
20	Stringer Flange	Str. 7 at FB. 19, Pan. 19; Str. 7, 11' from FB. 21, Pan. 21; Str. 7 at FB. 22, Pan. 23; Str. 6, 4' from FB. 30, Pan. 31; Str. 8 at Strut, Pan. 34; Str. 9 at FB. 37, Pan. 38	Install flange repair plates and/or angles
21	Stringer Seat	Str. 3 at FB. 16, Pan. 16; Str. 5, Str. 6, Str. 10 and Str. 12 at FB. 25, Pan. 26; Str. 2 and Str. 3 at FB. 31, Pan. 31	Replace stringer seat

MAIN SPAN REPAIRS - 2
MURRAY BAKER BRIDGE
OVER ILLINOIS RIVER (PUBLIC WATER)
F.A.I. ROUTE 74 - SEC. 90(10D-1)BRR
PEORIA AND TAZEWELL COUNTIES
STATION 151+76.00
STRUCTURE NO. 090-0001

FILE NAME:



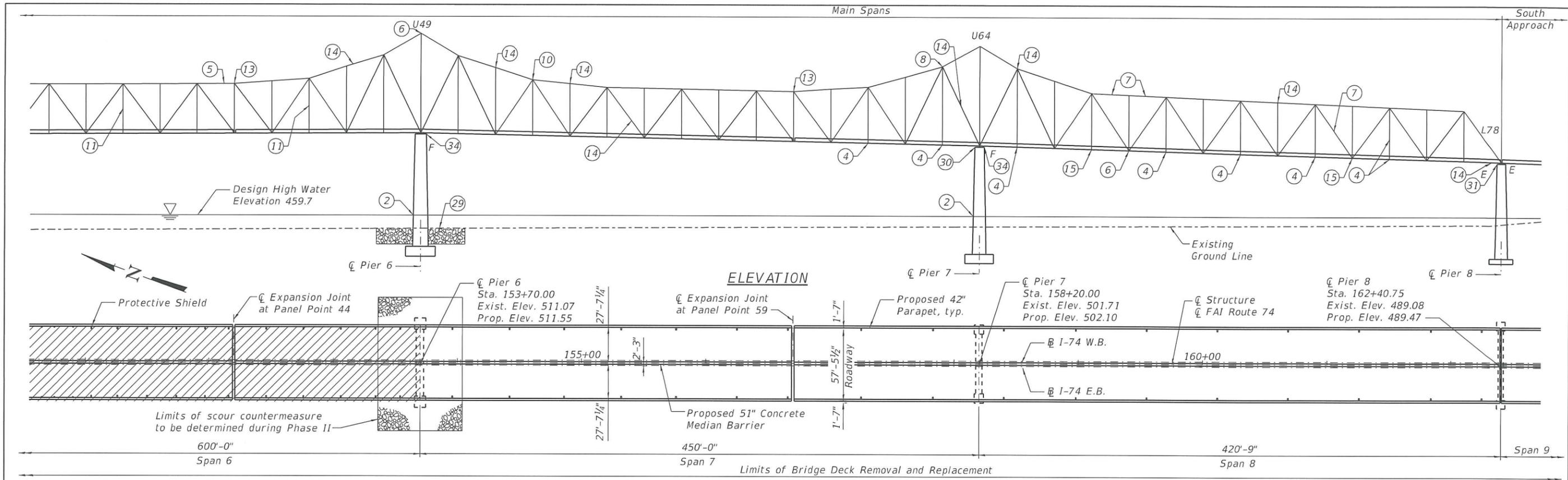
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN SPAN REPAIRS - 2
MURRAY BAKER BRIDGE OVER ILLINOIS RIVER

SHEET 4 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	90(10D-1)BRR			
			CONTRACT NO. 68C89	
ILLINOIS		FED. AID PROJECT		



PLAN

MAIN SPAN REPAIR SCHEDULE - 3

ID. NO.	Item	Location	Action
-	Bridge Deck	Pier 3 to South Abutment	Modify parapets/median barrier and remove and replace bridge deck/parapets/median barrier to the limits shown. Install shear studs on existing stringers as part of this work.
-	Expansion Joints	Expansion Joints at Span 6, PP44; Span 7, PP59; and Pier 8	Replace expansion joints within limits of deck replacement
-	Protective Coat	Entire Deck from North Abutment to South Bridge Approach Slab	Apply protective coat to top of deck, parapets and median barrier
-	Concrete Sealer	Pier 8	Apply concrete sealer to pier cap under expansion joint
-	Structure Painting	Floorsystem near Expansion Joints at Span 6, PP44; Span 7, PP59; and Pier 8	Clean and paint floorsystem 10' on each side of expansion joints at PP44 and PP59; clean and paint floorsystem 10' from expansion joint at Pier 8 on main span side
-	Structure Painting	Splash Zone	Clean and paint structure from bottom of lower chord to 22' above deck, including portal and sway bracing bottom struts; from outside face of lower chord to the second stringer; and, the interior surfaces of the box shaped members within this zone
-	Drainage System	Main Spans and South Approach	Install new drains within limits of deck replacement
-	Miscellaneous Fastener Repairs	Various Members, Various Locations	Replace defective or missing fasteners; fill misdrilled holes with bolts
2	Pier	Piers 6 and 7	Formed concrete repair
4	Hangers	L61W-U61W at L61W, L63E-U63E at L63E, L65W-U65W at L65W, L65E-U65E at L65E, L69W-U69W at L69W, L71W-U71W at L71W, L73W-U73W at L73W, L75E-U75E below Sway Brace Connection and at L75E	Install repair plates
5	Upper Chord Cleaning and Painting	U43W-U44W, 3' from U44W	Spot clean and paint at location of deterioration
6	Gusset Plate Repair/Strengthening	U49E, O.S. and I.S.; U49W, O.S. and I.S.; L68E, I.S.	Install repair plates at location of deterioration; replace select rivets with high strength bolts at U49
7	Truss Member Strengthening	U67E-U69E, U67W-U69W, U73E-L74E, U73W-L74W	Install strengthening plates
8	Sway Bracing	at U63E and U63W	Stay plate/lacing bar replacement
10	Sway Bracing	at U52W	Replace bent plate
11	Sway Brace Connection Plate	PP41, East End; PP46, West End	Remove cracked weld and/or repair connection plate
13	Guide Pins	at U44E, at U44W, at U59E, at U59W	Retrofit for wear grooves
14	Welds	U47E-U48E 8' from U47E, Gusset Pl. at U51W, U52E-U53E at U53E, U54E-L55E 10' above deck, U63E-L64E at Portal Brace connection, Gusset Pl. at U65W, Gusset Pl. at U65E, L72E-U72E at U72E, L77W-L78W at L78W	Repair or remove cracked welds
15	Plug Welds	L66W-L67W 3' from L67W, L74E-U75E at L74E	Remove plug welds
29	Pier	Pier 6	Install filter mattress and riprap
30	Navigation Light	at L64E	Replace broken bracket
31	Bearings	Truss Span Rocker Bearings at Pier 8	Replace bearings
34	Access Platforms	at L49E, L49W, L64E and L64W	Reconstruct navigation light access platforms

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MAIN SPAN REPAIRS - 3
MURRAY BAKER BRIDGE
OVER ILLINOIS RIVER (PUBLIC WATER)
F.A.I. ROUTE 74 - SEC. 90(10D-1)BRR
PEORIA AND TAZEWELL COUNTIES
STATION 151+76.00
STRUCTURE NO. 090-0001

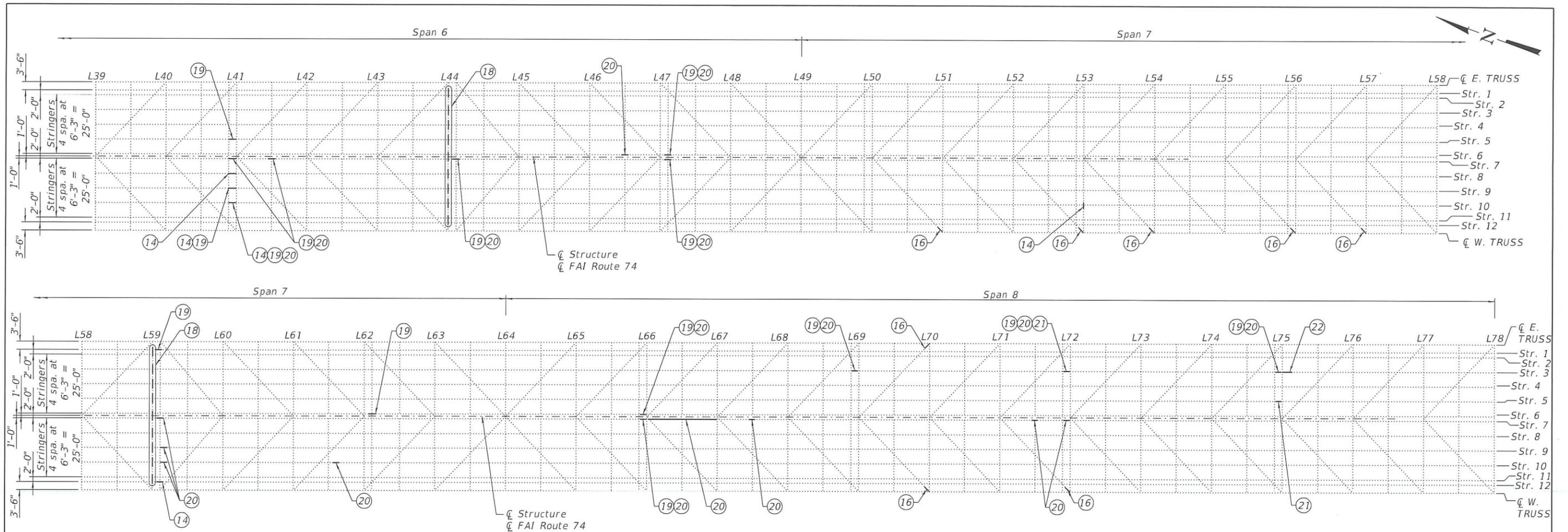


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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MAIN SPAN REPAIRS - 3
MURRAY BAKER BRIDGE OVER ILLINOIS RIVER
SHEET 5 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	90(10D-1)BRR			
CONTRACT NO. 68C89				
ILLINOIS FED. AID PROJECT				



FRAMING PLAN

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AS A BASIS FOR
PREPARATION OF DETAILED PLANS

Note:
Floorbeam numbering coincides with truss joint numbering shown in the framing plan.

MAIN SPAN REPAIR SCHEDULE - 4			
ID. NO.	Item	Location	Action
14	Welds	FB. 53 at Str. 10, Pan. 53; Str. 8, Str. 9 and Str. 10 at FB. 41, Pan. 41; Str. 12 at FB. 59, Pan. 60	Remove cracked tack welds; Repair cracked welds
16	Lower Lateral Bracing	at L51W, at L53W, at L54W, at L56W, 3' from L57W, at L70W, at L70E and at L72W	Install repair plates and/or angles
18	Stringer Seat to Floorbeam Connection	All Stringer Seats in Panel 45 at FB. 44 and Panel 60 at FB. 59	Remove stringer seat to floorbeam web welds
19	Stringer Web	Str. 5, Str. 7, Str. 9 and Str. 10 at FB. 41, Pan. 41; Str. 7 at Midspan, Pan. 42; Str. 7 at FB. 44, Pan. 45; Str. 6 and Str. 7 at FB. 47, Pan. 48; Str. 1 at FB. 59, Pan. 60; Str. 6 at FB. 62, Pan. 63; Str. 6 and Str. 7 at FB. 66, Pan. 66; Str. 3 at FB. 69, Pan. 69; Str. 3 at FB. 72, Pan. 72; Str. 3 at FB. 75, Pan. 75	Install web repair plates and/or angles
20	Stringer Flange	Str. 7 and Str. 10 at FB. 41, Pan. 41; Str. 7 at Midspan, Pan. 42; Str. 7 at FB. 44, Pan. 45; Str. 6 at Midspan, Pan. 47; Str. 6 and Str. 7 at FB. 47, Pan. 48; Str. 7 at FB. 59, Pan. 60; Str. 9 and Str. 10, 5' from FB. 59, Pan. 60; Str. 10 near Midspan, Pan. 62; Str. 6 and Str. 7 at FB. 66, Pan. 66; Str. 7, Full length, Pan. 67; Str. 7 at Midspan, Pan. 68; Str. 3 at FB. 69, Pan. 69; Str. 7 at FB. 72 and Midspan, Pan. 72; Str. 3 at FB. 72, Pan. 72; Str. 3 at FB. 75, Pan. 75	Install flange repair plates and/or angles
21	Stringer Seat	Str. 3 at FB. 72, Pan. 72; Str. 5 at FB. 75, Pan. 75	Replace stringer seat
22	Stringer	Str. 3 at FB. 75, Pan. 76	Drill arrest hole at end of sawcut

MAIN SPAN REPAIRS - 4
MURRAY BAKER BRIDGE
OVER ILLINOIS RIVER (PUBLIC WATER)
F.A.I. ROUTE 74 - SEC. 90(10D-1)BRR
PEORIA AND TAZEVELL COUNTIES
STATION 151+76.00
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MAIN SPAN REPAIRS - 4
MURRAY BAKER BRIDGE OVER ILLINOIS RIVER

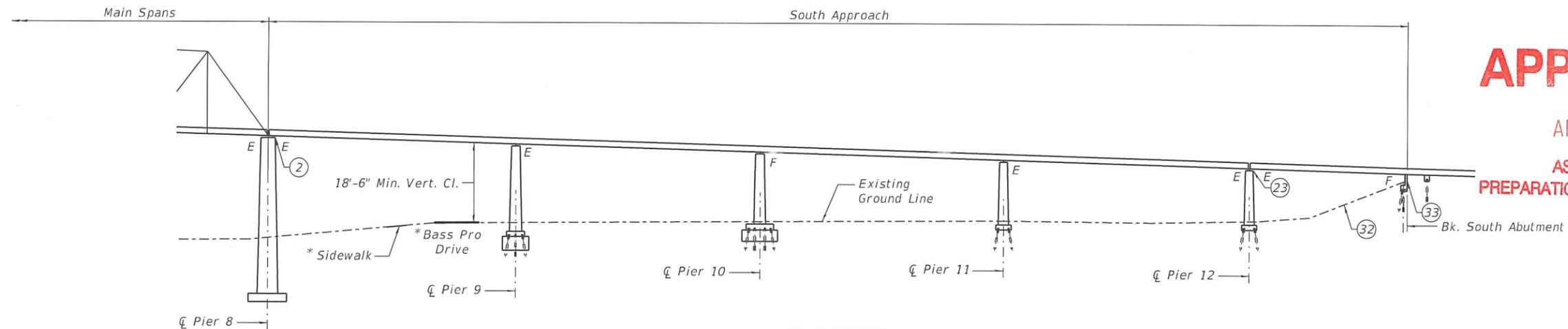
SHEET 6 OF 10 SHEETS

F.A.I. RTE. 74	SECTION 90(10D-1)BRR	COUNTY	TOTAL SHEETS	SHEET NO.
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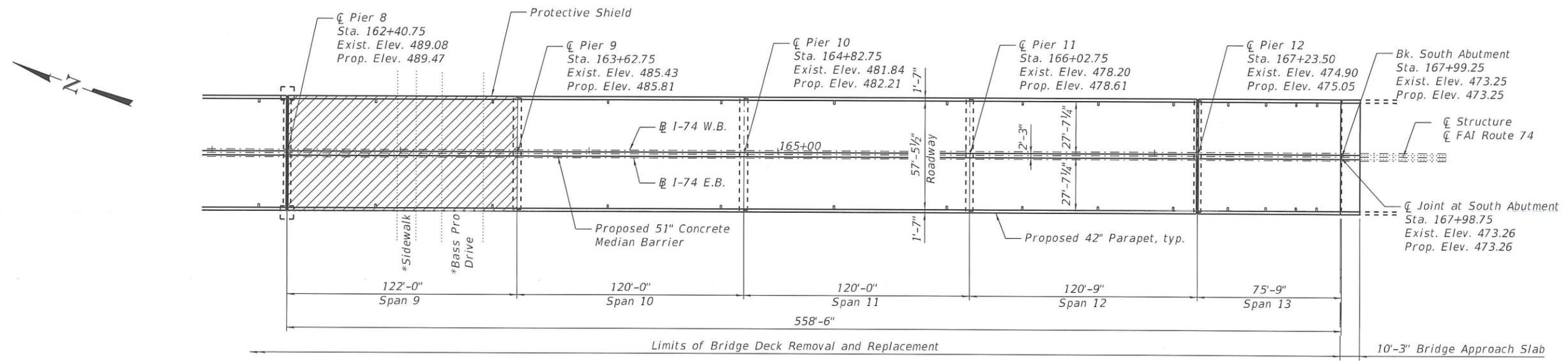
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ELEVATION



PLAN

SOUTH APPROACH REPAIR SCHEDULE - 1

ID. NO.	Item	Location	Action
-	Bridge Deck	Pier 3 to South Abutment	Modify parapets/median barrier and remove and replace bridge deck/parapets/median barrier to the limits shown. Install shear studs on existing girders as part of this work.
-	Expansion Joints	Expansion Joint at Pier 12	Replace expansion joint within limits of deck replacement
-	Protective Coat	Entire Deck from North Abutment to South Bridge Approach Slab	Apply protective coat to top of deck, parapets and median barrier
-	Concrete Sealer	Pier 12	Apply concrete sealer to pier cap under expansion joint
-	Structure Painting	Structural Steel near Expansion Joints at Pier 8 and Pier 12	Clean and paint structural steel 5' from expansion joint at Pier 8 on south approach side; clean and paint structural steel 5' on each side of expansion joint at Pier 12
-	Drainage System	Main Spans and South Approach	Install new drains within limits of deck replacement
-	Miscellaneous Fastener Repairs	Various Members, Various Locations	Replace defective or missing fasteners; fill misdrilled holes with bolts
-	Bridge Approach Slab	South End of Bridge	Remove and replace existing approach slab, parapets and median barrier.
2	Pier	Pier 8	Formed concrete repair
23	Pier	Pier 12, Bearing Seat at Girders 2 and 7	Formed concrete repair; jacking required
32	Slope Protection	Ground beneath free fall drains in Span 13	Fill eroded slope and install slope protection
33	Abutment	South Abutment, East End	Formed concrete repair

* Maintain pedestrian and vehicular access during construction.

SOUTH APPROACH REPAIRS - 1
MURRAY BAKER BRIDGE
OVER ILLINOIS RIVER (PUBLIC WATER)
F.A.I. ROUTE 74 - SEC. 90(10D-1)BRR
PEORIA AND TAZEWELL COUNTIES
STATION 151+76.00
STRUCTURE NO. 090-0001



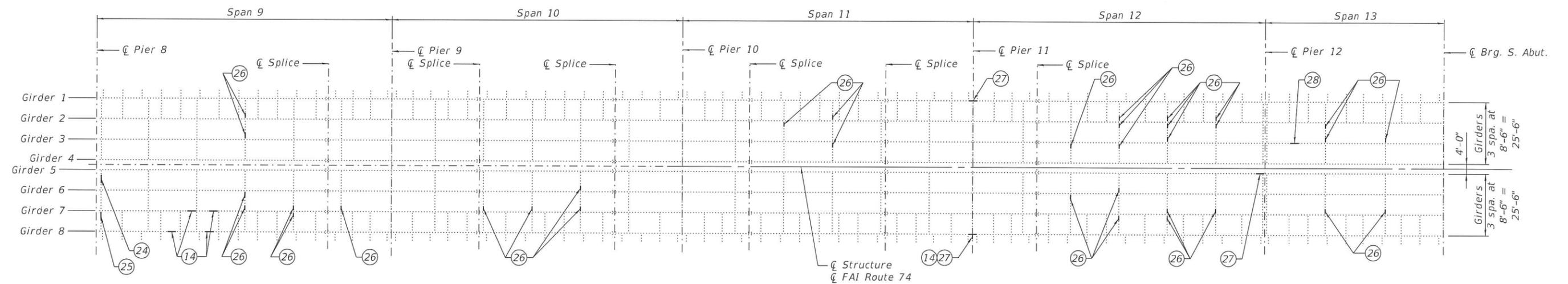
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOUTH APPROACH REPAIRS - 1
MURRAY BAKER BRIDGE OVER ILLINOIS RIVER

F.A.I. RTE. 74	SECTION 90(10D-1)BRR	COUNTY *	TOTAL SHEETS	SHEET NO.
			CONTRACT NO. 68C89	
ILLINOIS FED. AID PROJECT				

SHEET 7 OF 10 SHEETS



FRAMING PLAN

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AS A BASIS FOR
PREPARATION OF DETAILED PLANS

SOUTH APPROACH REPAIR SCHEDULE - 2

ID. NO.	Item	Location	Action
14	Welds	Girder 7, Span 9, at 3rd Crossframe from Pier 8 and between 3rd and 4th Crossframe from Pier 8; Girder 8, Span 9, 8' S. of 3rd Crossframe from Pier 8 and between 2nd and 3rd Crossframe from Pier 8; Girder 8 at Pier 11	Remove cracked tack welds
24	Cross Frame Bottom Strut	at Pier 8 between Girders 5 and 6	Install repair plates
25	Cross Frame Diagonal Bracing	at Pier 8 between Girders 7 and 8	Install repair plate
26	Cross Frame Connection Angle	Various Locations; Spans 9, 10, 11, 12 and 13	Retrofit cracked connection angles
27	Bearing Stiffeners	at Pier 11, Girders 1 and 8; at Pier 12, Girder 5	Repair stiffeners
28	Girder	Girder 3, Span 13, at 3rd stiffener from Pier 12	Remove miscellaneous welded steel

SOUTH APPROACH REPAIRS - 2
MURRAY BAKER BRIDGE
OVER ILLINOIS RIVER (PUBLIC WATER)
F.A.I. ROUTE 74 - SEC. 90(10D-1)BRR
PEORIA AND TAZEWELL COUNTIES
STATION 151+76.00
STRUCTURE NO. 090-0001

FILE NAME:



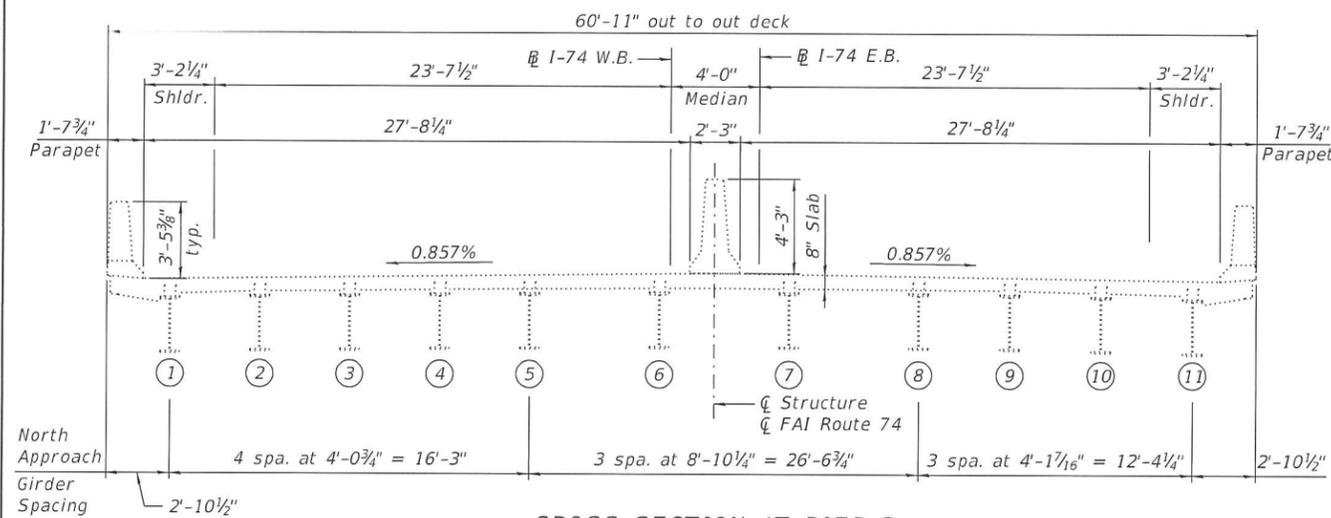
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PLOT SCALE =	CHECKED - RLM	REVISED -
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

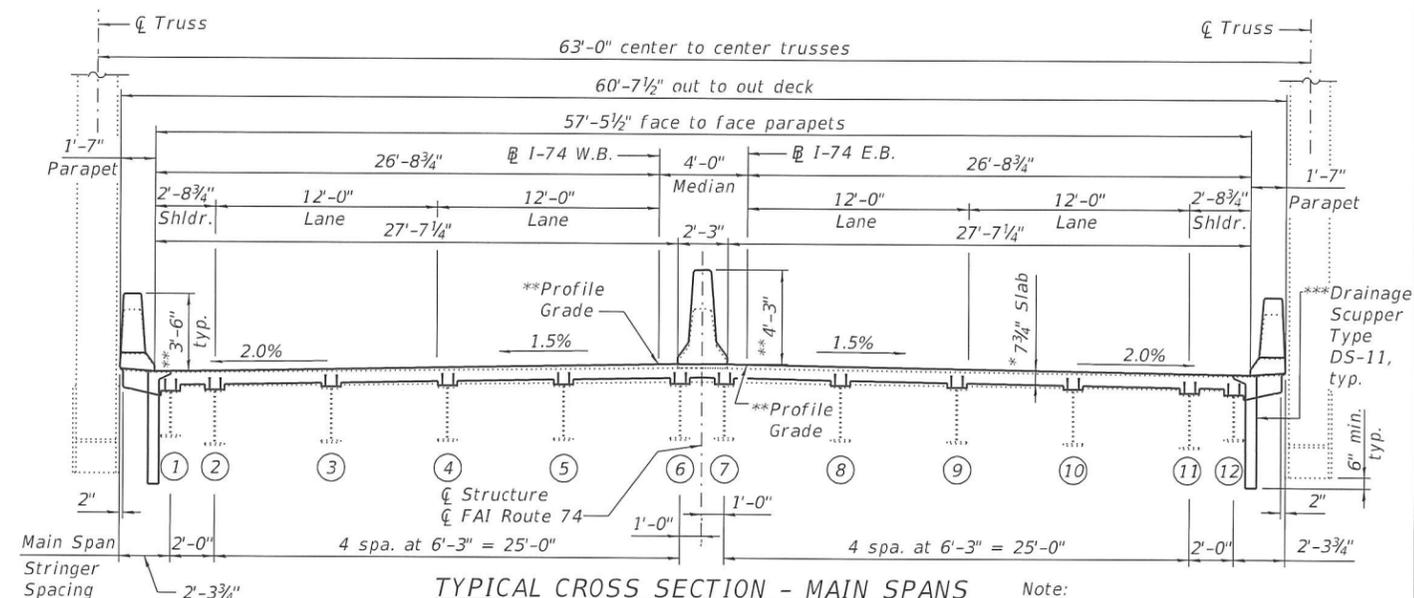
SOUTH APPROACH REPAIRS - 2
MURRAY BAKER BRIDGE OVER ILLINOIS RIVER

SHEET 8 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	90(10D-1)BRR	*		
CONTRACT NO. 68C89				
ILLINOIS FED. AID PROJECT				

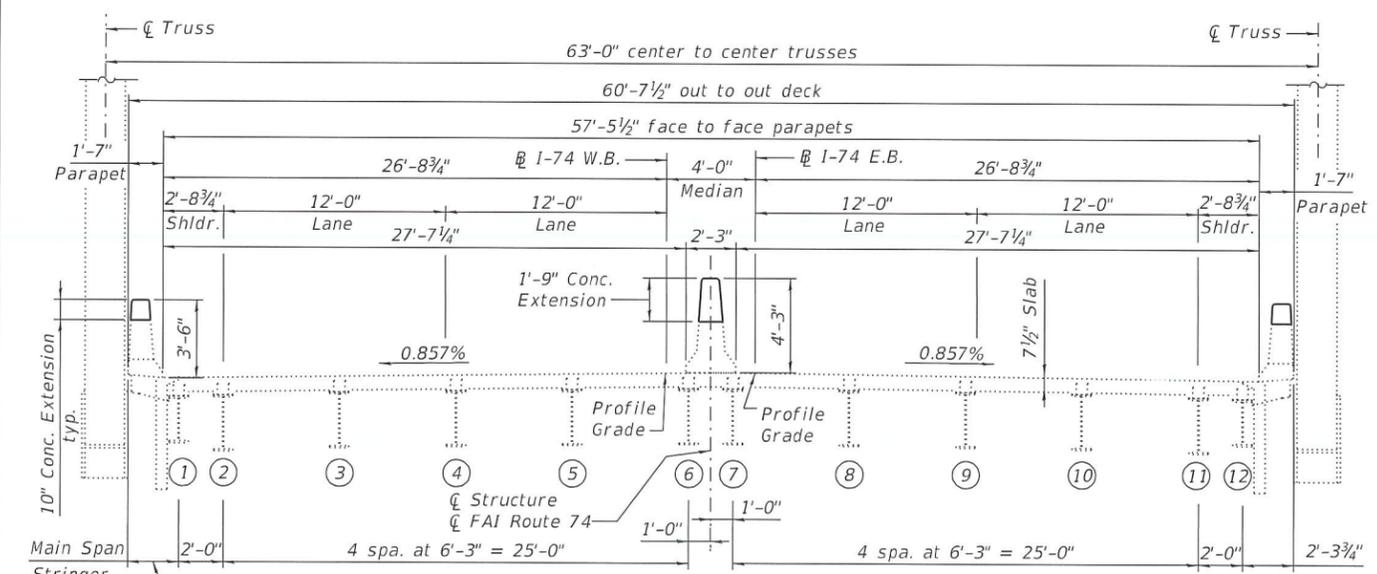


CROSS SECTION AT PIER 3
 Looking South
 Deck width and girder spacing varies from North Abutment to Pier 3

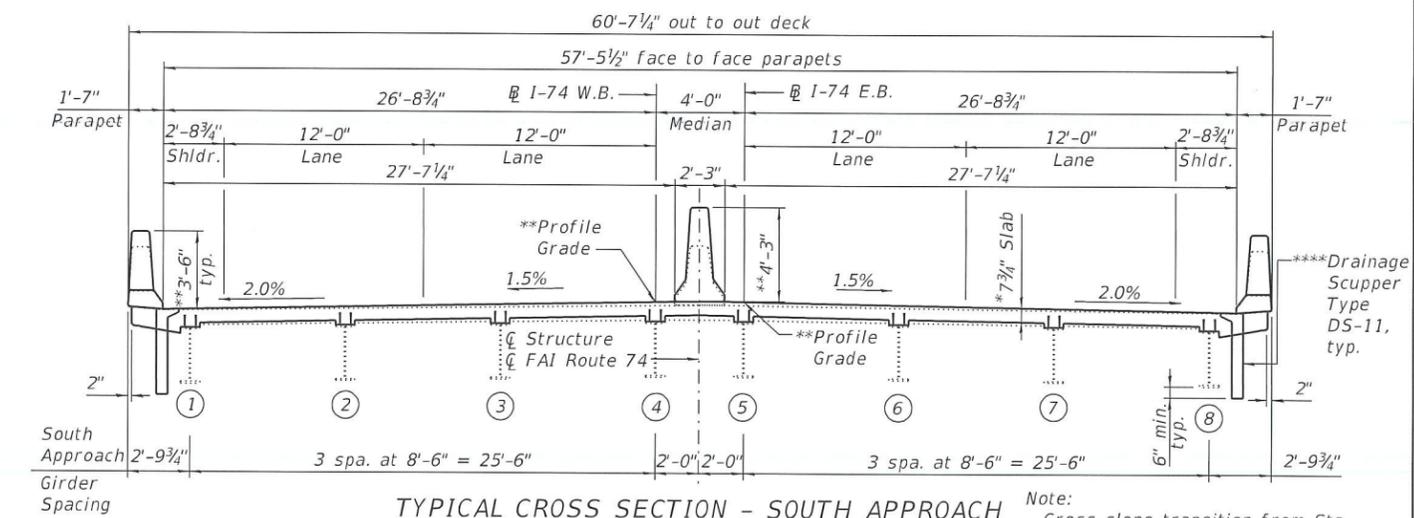


TYPICAL CROSS SECTION - MAIN SPANS
 Looking South
 Sta. 142+90.00 to Sta. 162+40.75
 Note:
 Cross slope transition from Sta. 140+99.20 to Sta. 142+90.00.

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TYPICAL CROSS SECTION - MAIN SPANS
 Looking South
 Sta. 140+79.07 to Sta. 140+99.20



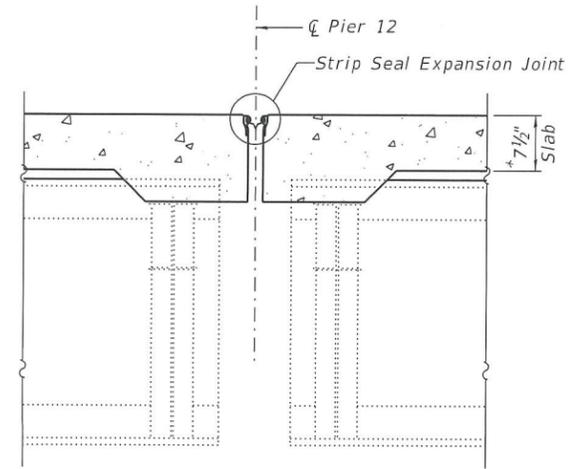
TYPICAL CROSS SECTION - SOUTH APPROACH
 Looking South
 Sta. 162+40.75 to Sta. 166+69.85
 Note:
 Cross slope transition from Sta. 166+69.85 to Sta. 168+09.00

Note:
 Conduit for highway, navigation and decorative lighting will be placed in the parapet.

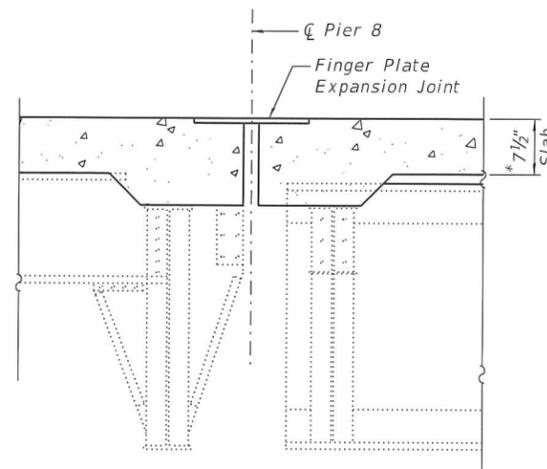
- * Prior to grinding.
- ** After grinding.
- *** Extend drainage scupper 3 1/2" under parapet to provide 1" clear between stringer flange and scupper. Parapet will be modified at scupper to allow removal of grate.
- **** Extend drainage scupper 1 3/4" under parapet to provide 1" clear between girder flange and scupper. Parapet will be modified at scupper to allow removal of grate.

MISCELLANEOUS DETAILS - 1
MURRAY BAKER BRIDGE
OVER ILLINOIS RIVER (PUBLIC WATER)
F.A.I. ROUTE 74 - SEC. 90(10D-1)BRR
PEORIA AND TAZEWELL COUNTIES
STATION 151+76.00
STRUCTURE NO. 090-0001

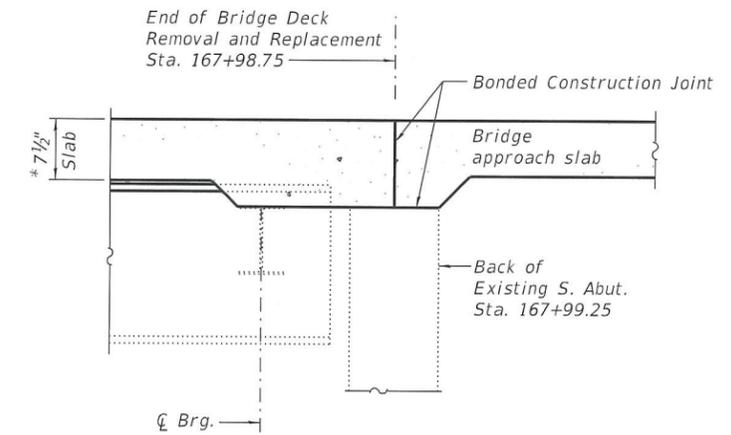
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	PLOT SCALE =	CHECKED - RLM	REVISED -			74	90(10D-1)BRR	*			
	PLOT DATE = 04/02/2019	DRAWN - AEC	REVISED -			CONTRACT NO. 68C89					
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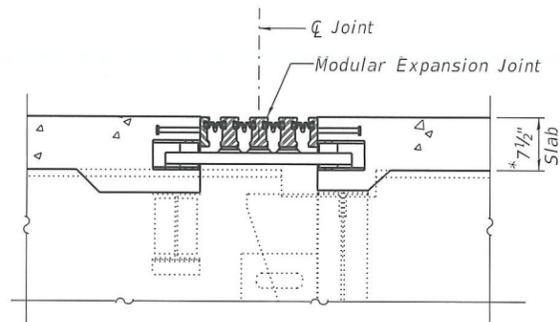
SECTION THROUGH EXPANSION JOINT
Strip Seal at Pier 12.



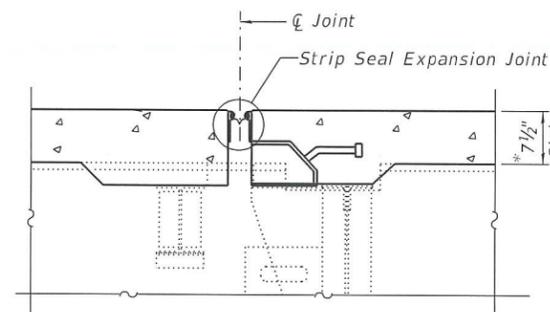
SECTION THROUGH EXPANSION JOINT
Finger Plate at Pier 8.



SECTION THROUGH CONSTRUCTION JOINT
AT SOUTH ABUTMENT



SECTION THROUGH EXPANSION JOINT
Modular Joint at Truss Panel Points 19 and 59



SECTION THROUGH EXPANSION JOINT
Strip Seals at Truss Panel Points 34 and 44

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APR 04 2019

AS A BASIS FOR
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* After grinding

MISCELLANEOUS DETAILS - 2
MURRAY BAKER BRIDGE
OVER ILLINOIS RIVER (PUBLIC WATER)
F.A.I. ROUTE 74 - SEC. 90(10D-1)BRR
PEORIA AND TAZEWELL COUNTIES
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS - 2
MURRAY BAKER BRIDGE OVER ILLINOIS RIVER

SHEET 10 OF 10 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	90(10D-1)BRR	*		
CONTRACT NO. 68C89				
ILLINOIS FED. AID PROJECT				