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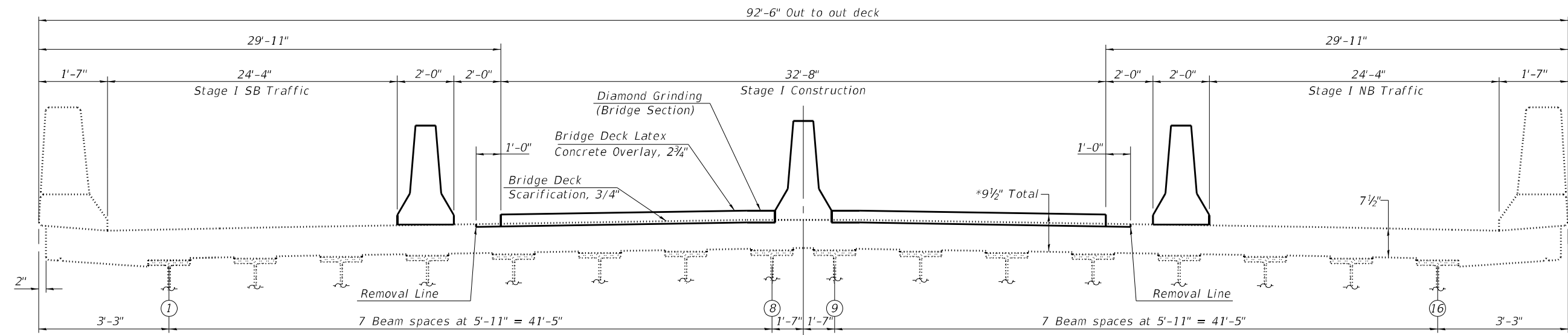
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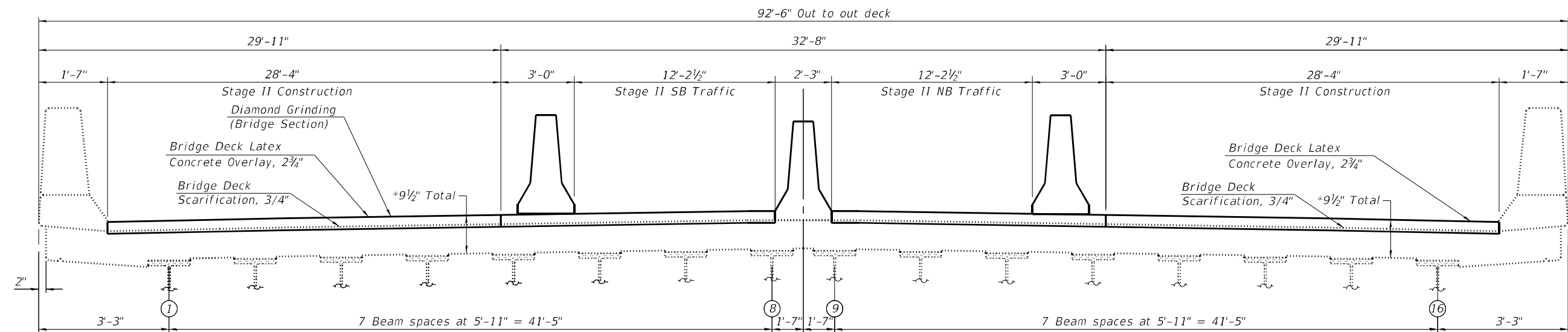
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING AND PROPOSED TYPICAL CROSS SECTIONS
S.N. 092-0038
 SHEET 4 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	401
CONTRACT NO. 70A29				
		ILLINOIS	FED. AID PROJECT	



STAGE I CONSTRUCTION
(Looking North)



STAGE II CONSTRUCTION
(Looking North)

*Prior to grinding

MODEL: 2D Sheet H
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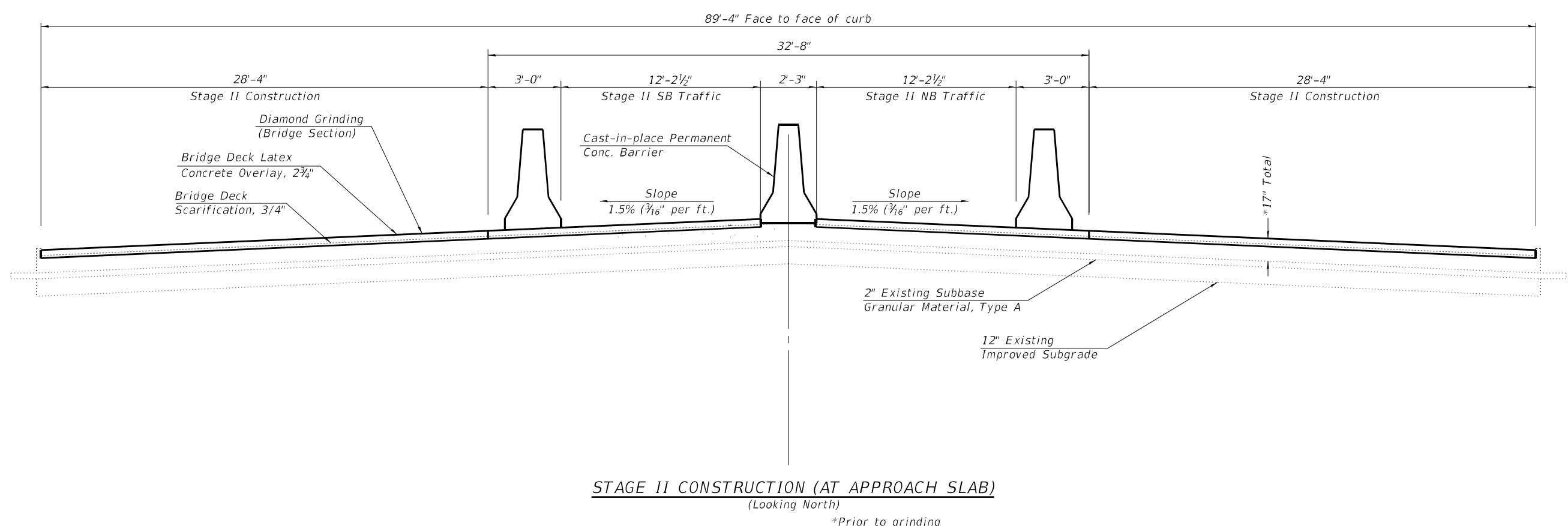
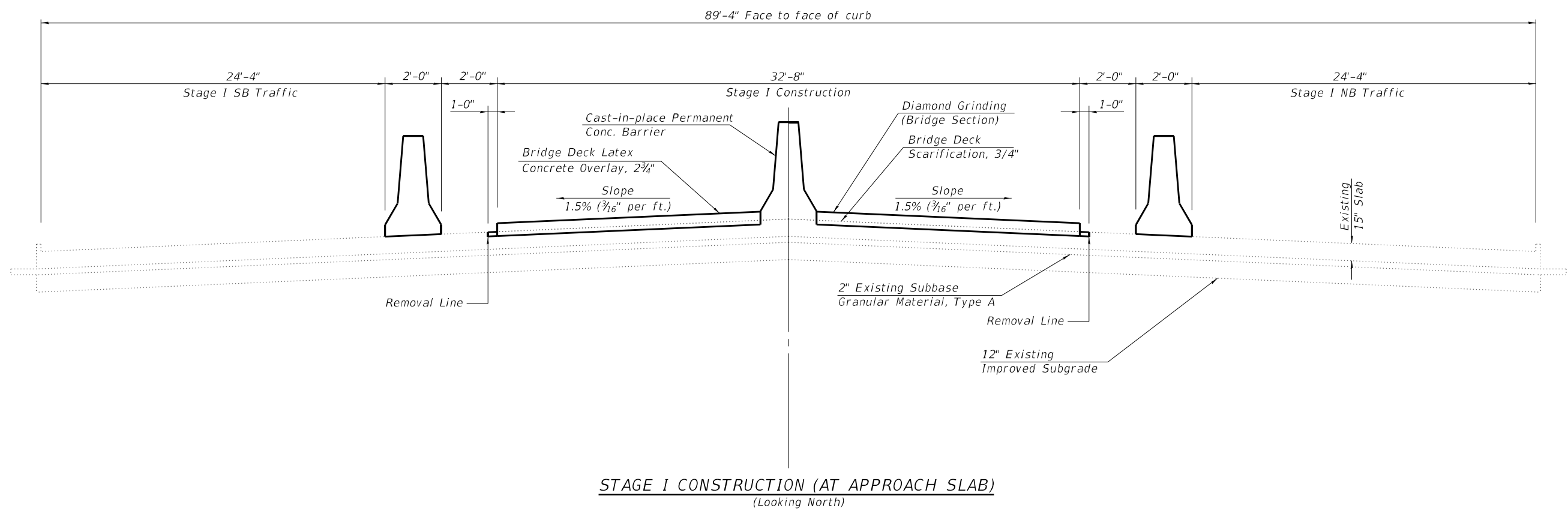
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STAGE CONSTRUCTION DETAILS - BRIDGE
S.N. 092-0038
 SHEET 5 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	402
CONTRACT NO. 70A29				
		ILLINOIS	FED. AID PROJECT	



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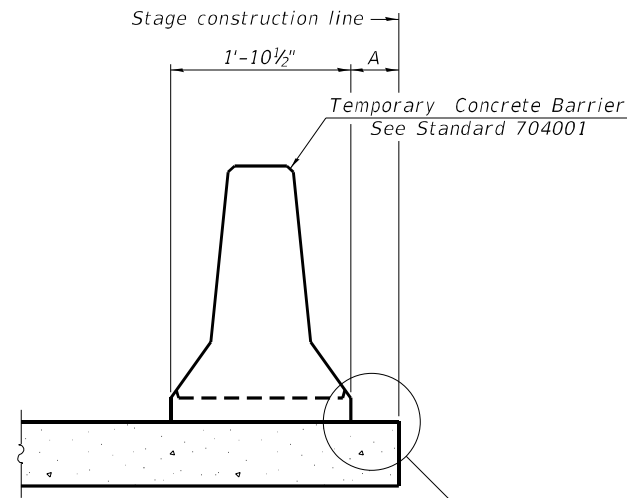
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DEPARTMENT OF TRANSPORTATION

STAGE CONSTRUCTION DETAILS - APPROACH SLAB
S.N. 092-0038
 SHEET 6 OF 26 SHEETS

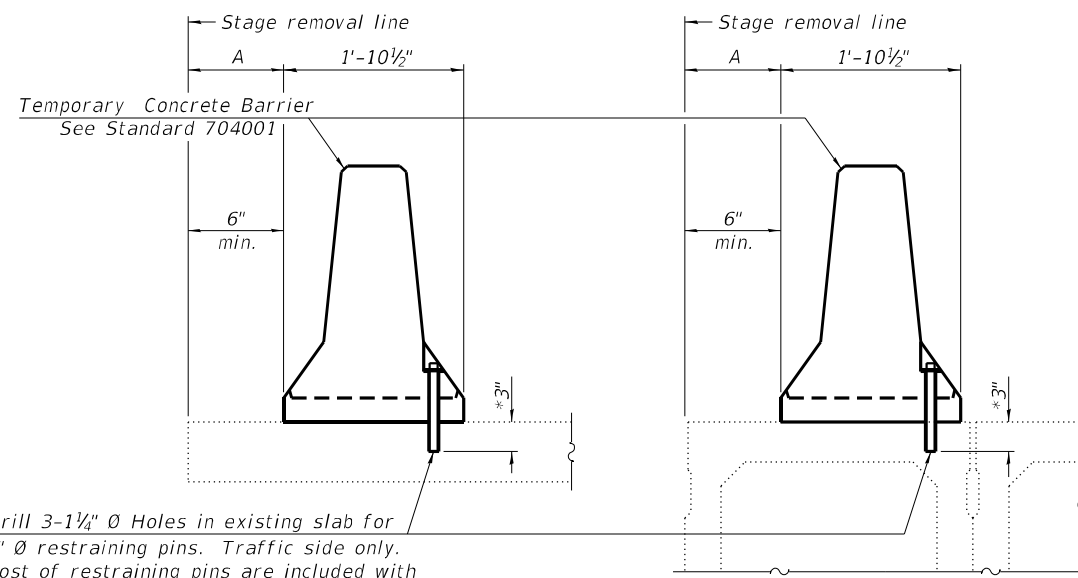
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CONTRACT NO. 70A29				
		ILLINOIS	FED. AID PROJECT	

MODEL: 2D Sheet H
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When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM

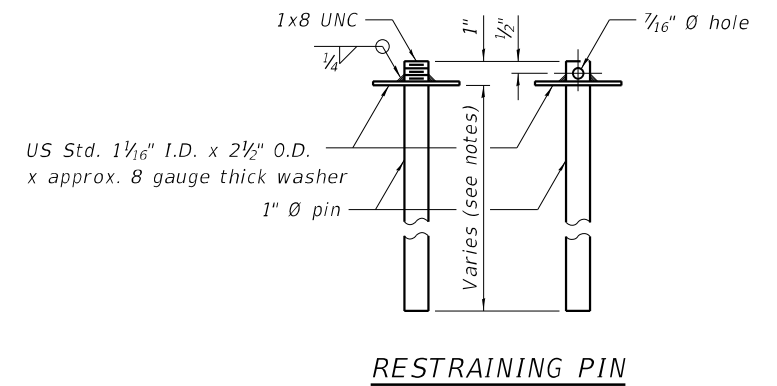


Drill 3-1/4" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

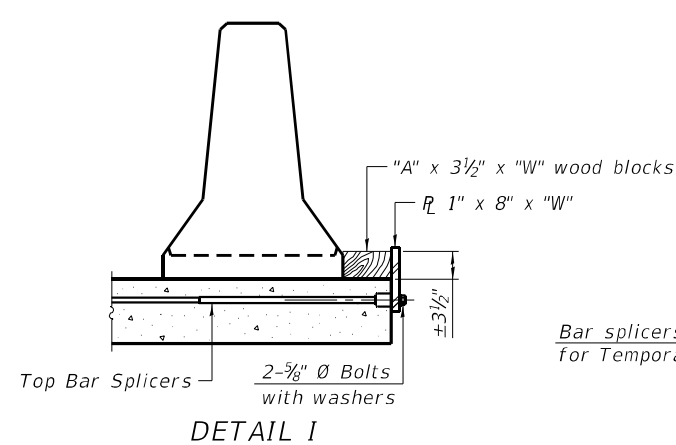
EXISTING SLAB

EXISTING DECK BEAM

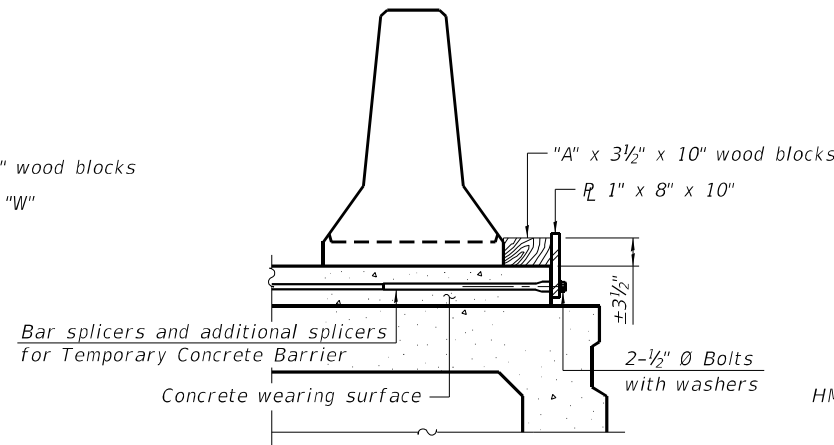
SECTIONS THRU SLAB OR DECK BEAM



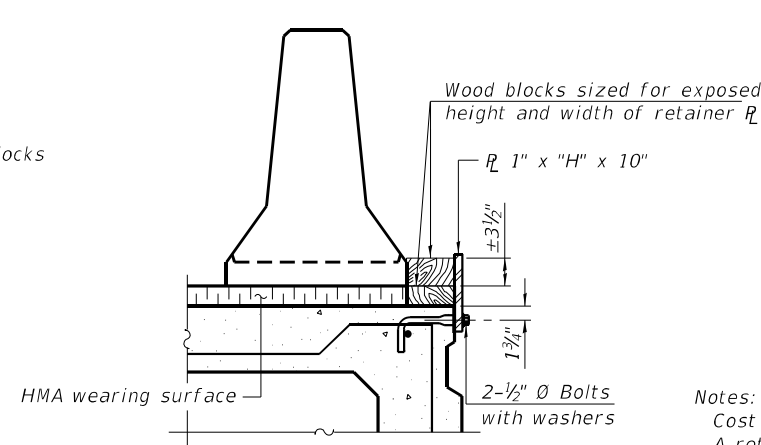
US Std. 1 1/16" I.D. x 2 1/2" O.D. x approx. 8 gauge thick washer



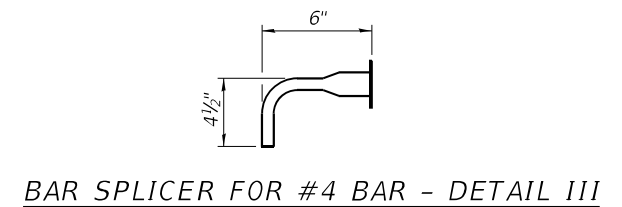
DETAIL I



DETAIL II



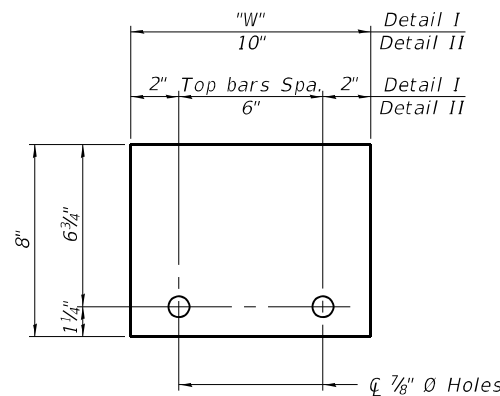
DETAIL III



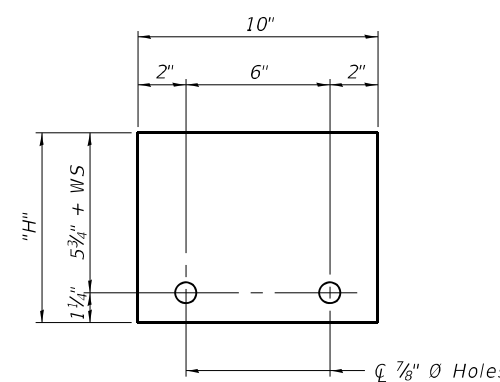
BAR SPLICER FOR #4 BAR - DETAIL III

Notes:
 Cost of retainer assembly is included with Temporary Concrete Barrier.
 A retainer assembly shall be located at the approximate center of each temporary concrete barrier.
 The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
 When the 'A' dimension is less than 1 1/2', the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.
Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.
Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.



STEEL RETAINER R 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER R 1" x "H" x 10"
(Detail III)

RAILING CRITERIA

NCHRP 350 Test Level	3
Railing Weight (plf)	440

R-27 10-12-2021

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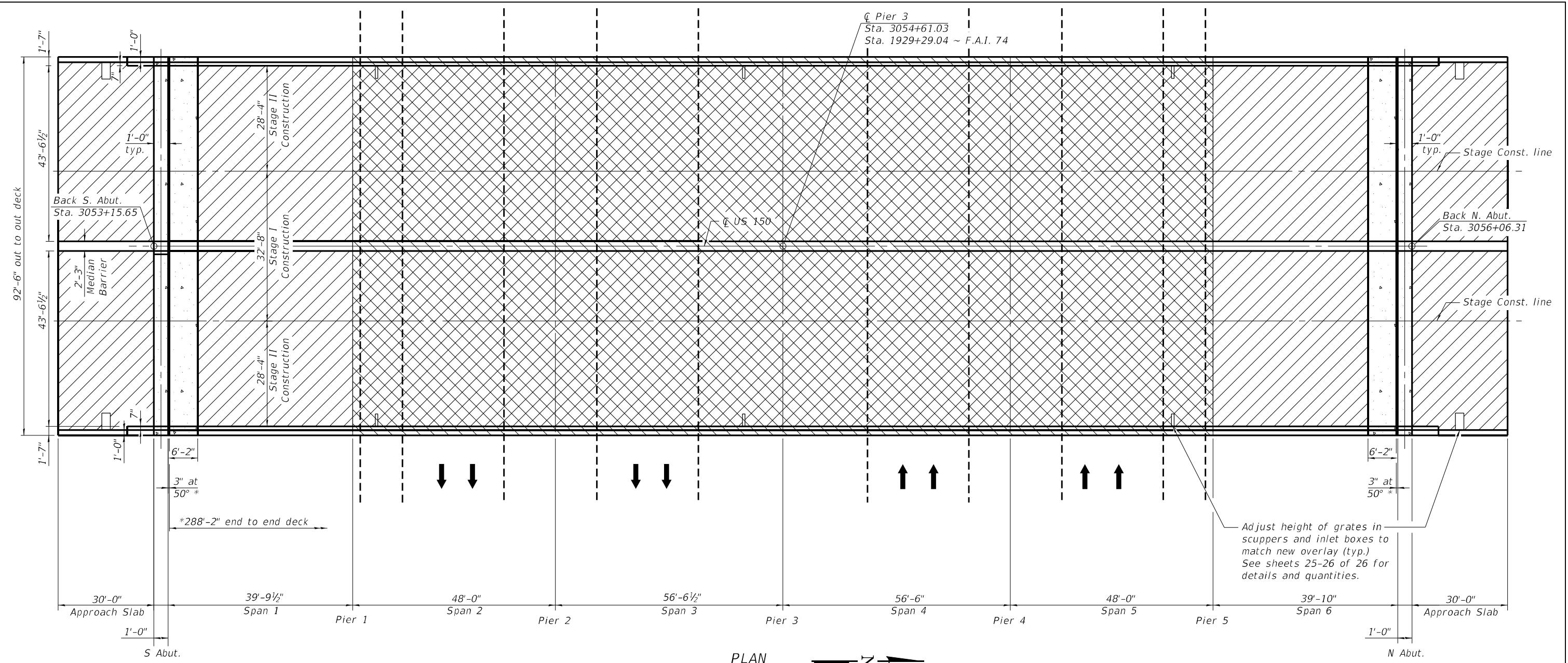
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**TEMPORARY CONCRETE BARRIER
 STRUCTURE NO. 092-0038**

SHEET 7 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	404
CONTRACT NO. 70A29				
ILLINOIS		FED. AID PROJECT		

MODEL: 2D Sheet H
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*See sheet 11 of 26 for deck end spacing options with various preformed joint strip seal rails. Adjust the dimensions as necessary for rail type selected.

**Bridge Deck Grooving (Longitudinal) to include driving lanes only.

LEGEND

- Protective Shield
- Bridge Deck Scarification 3/4", Deck Latex Concrete Overlay 2 3/4", Diamond Grinding (Bridge Section), **Bridge Deck Grooving (Longitudinal), (typ. deck & approach slabs)
- Abutment joint replacement, Diamond Grinding (Bridge Section), **Bridge Deck Grooving (Longitudinal)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Bridge Deck Latex Concrete Overlay 2 3/4"	Sq. Yd.	3,258
Bridge Deck Scarification 3/4"	Sq. Yd.	3,258
Protective Shield	Sq. Yd.	2,148
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	2,805
Protective Coat	Sq. Yd.	3,414
Deck Slab Repair (Full Depth Type I)	Sq. Yd.	17
Diamond Grinding (Bridge Section)	Sq. Yd.	2,958

Notes:
 The actual sizes and locations of deck slab repairs are to be determined by the Engineer and shall be documented on As-Built Plans. Full Depth Deck Slab Repair quantities have been estimated as 0.5% of the deck and approach slab areas.

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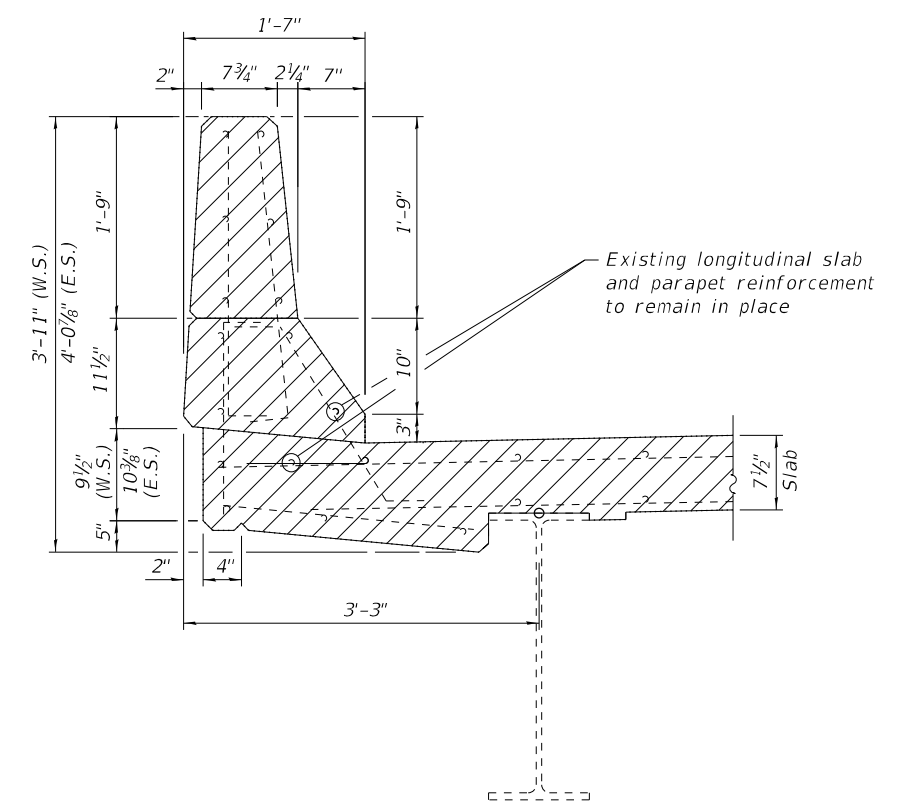
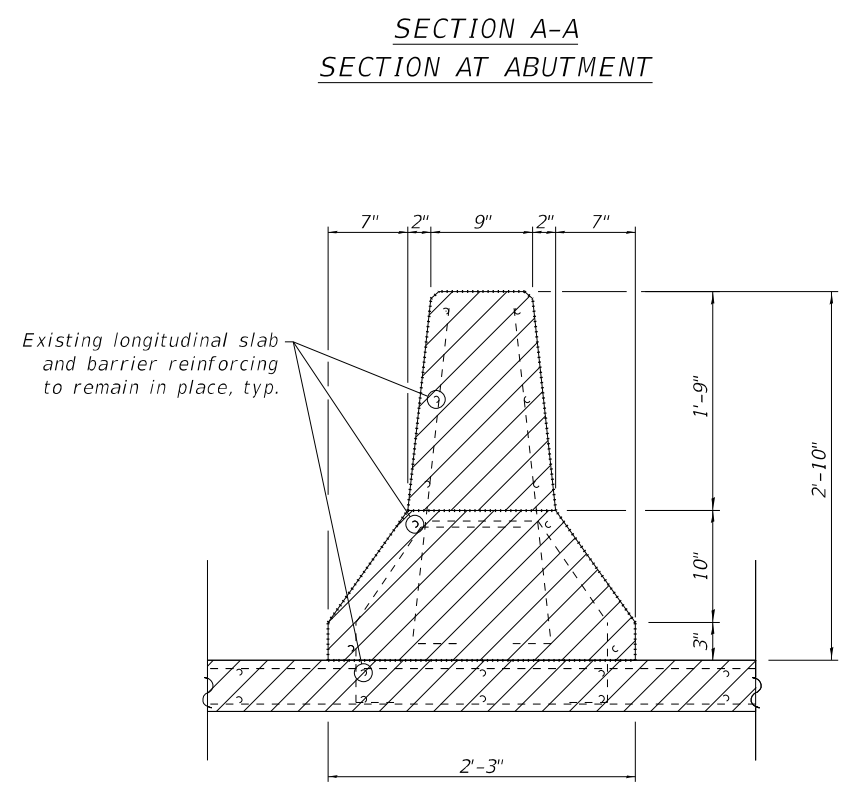
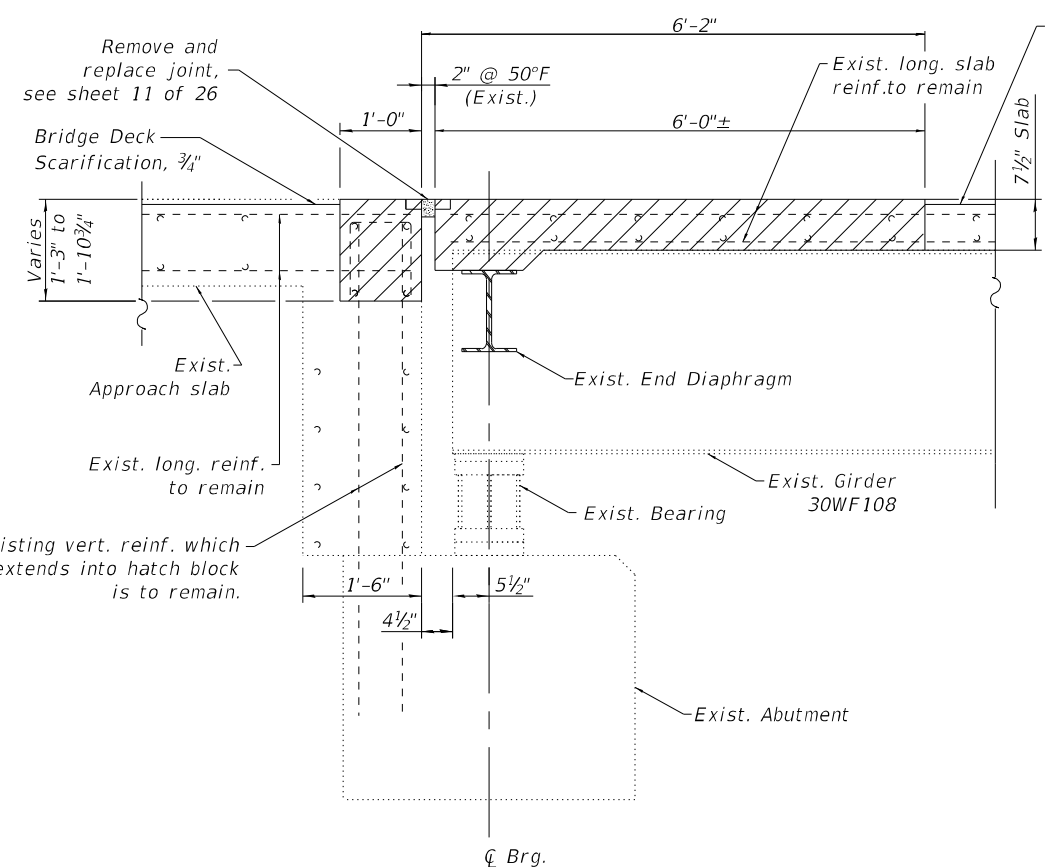
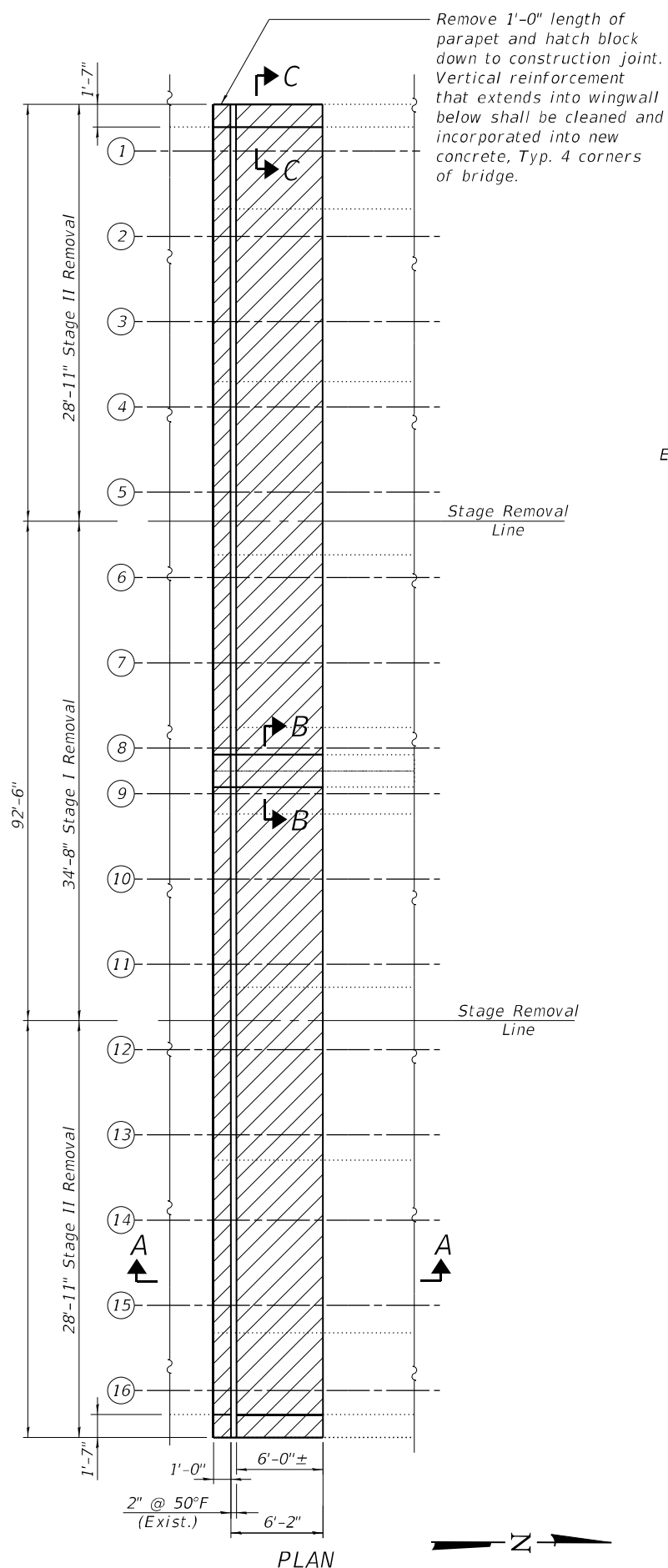
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 DEPARTMENT OF TRANSPORTATION

DECK PLAN - OVERLAY
 S.N. 092-0038

SHEET 8 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	405
CONTRACT NO. 70A29				
ILLINOIS FED. AID PROJECT				

MODEL: 2D Sheet H
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BILL OF MATERIAL
(for both Abutments)

Item	Unit	Total
Concrete Removal	Cu. Yd.	48.8

LEGEND
 Concrete Removal

Notes:
 South Abutment shown, North Abutment similar.
 Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
 The contractor shall use extreme care during concrete removal so as not to damage the Steel beam.
 See sheets 3-4 of 26 for typical cross sections.

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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

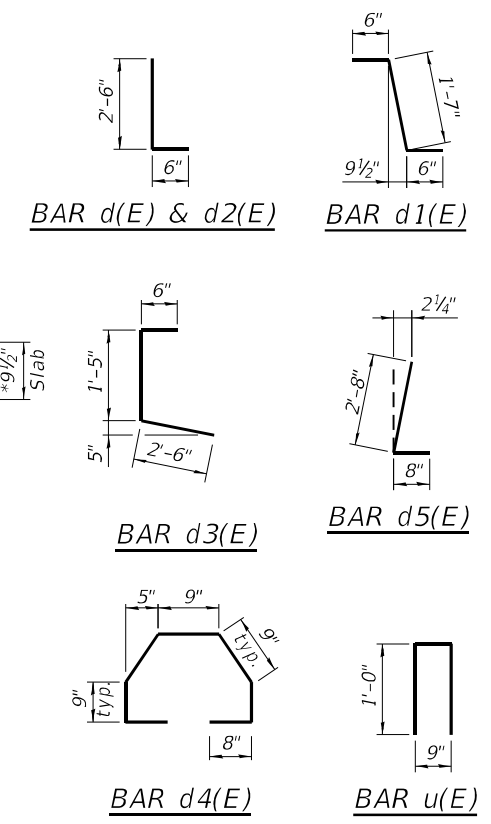
**ABUTMENT JOINT REPLACEMENT DETAILS
 S.N. 092-0038**

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CONTRACT NO. 70A29				
ILLINOIS FED. AID PROJECT				

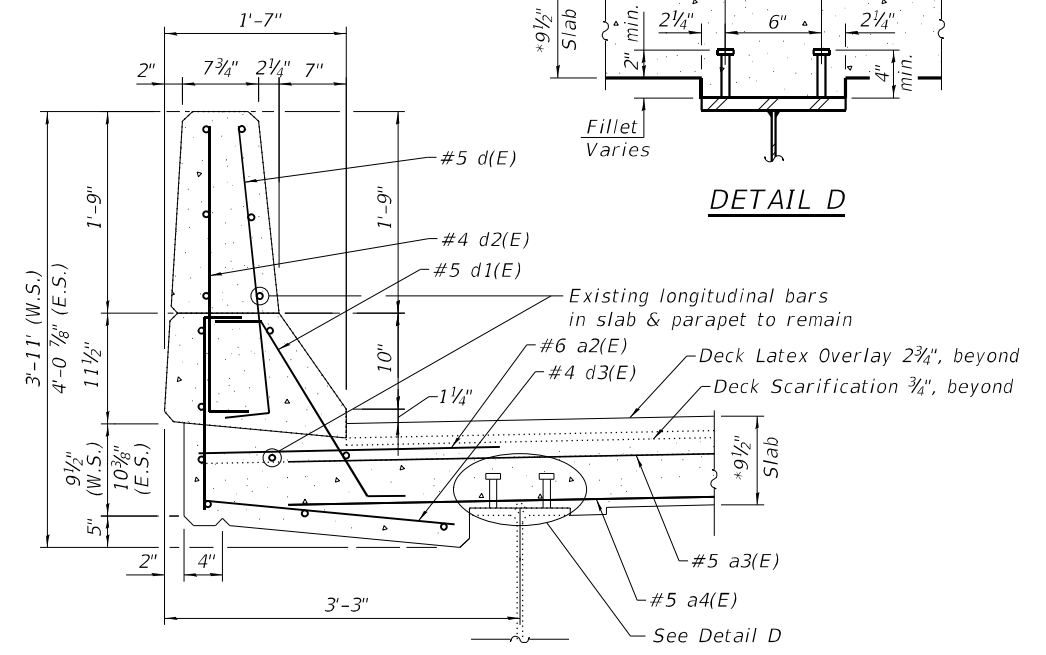
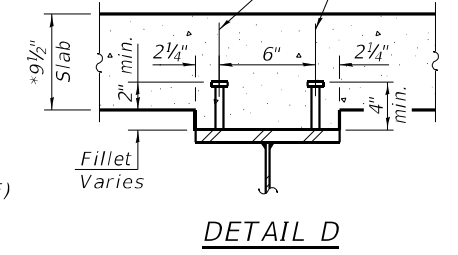
BILL OF MATERIAL

(For Both Abutments)

Bar	No.	Size	Length	Shape
a(E)	20	#5	32'-4"	—
a1(E)	16	#5	32'-4"	—
a2(E)	20	#6	4'-0"	—
a3(E)	40	#5	29'-4"	—
a4(E)	32	#5	28'-10"	—
d(E)	36	#5	3'-0"	┌
d1(E)	36	#5	2'-7"	┌
d2(E)	36	#4	3'-0"	┌
d3(E)	36	#4	4'-5"	┌
d4(E)	18	#4	5'-1"	┌
d5(E)	36	#4	3'-4"	┌
h(E)	8	#5	32'-4"	—
h1(E)	16	#5	29'-7"	—
u(E)	186	#5	2'-9"	┌
Reinforcement Bars, Epoxy Coated			Lbs.	5350
Concrete Superstructure			Cu. Yds.	56.8
Stud Shear Connectors			Each	448



3/4" Ø Granular or solid flux filled headed studs, automatically end welded to flange. (448 Required)



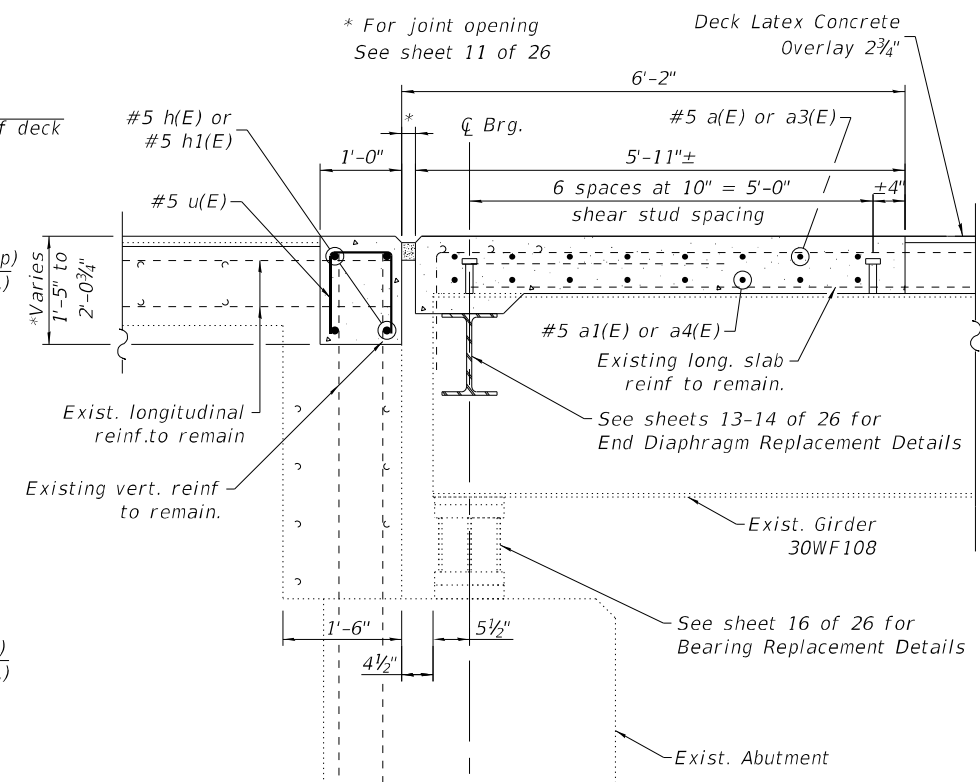
SECTION C-C
(W.S. = West side, E.S. = East side)

*Prior to grinding

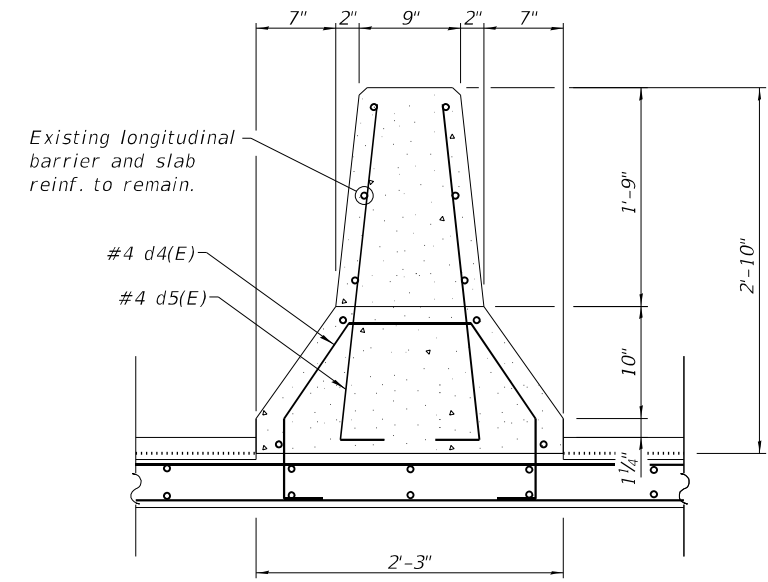
Notes:
South Abutment shown, North Abutment similar.
Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

See sheets 3-4 of 26 for typical cross sections.

* For joint opening See sheet 11 of 26
Deck Latex Concrete Overlay 2 3/4"

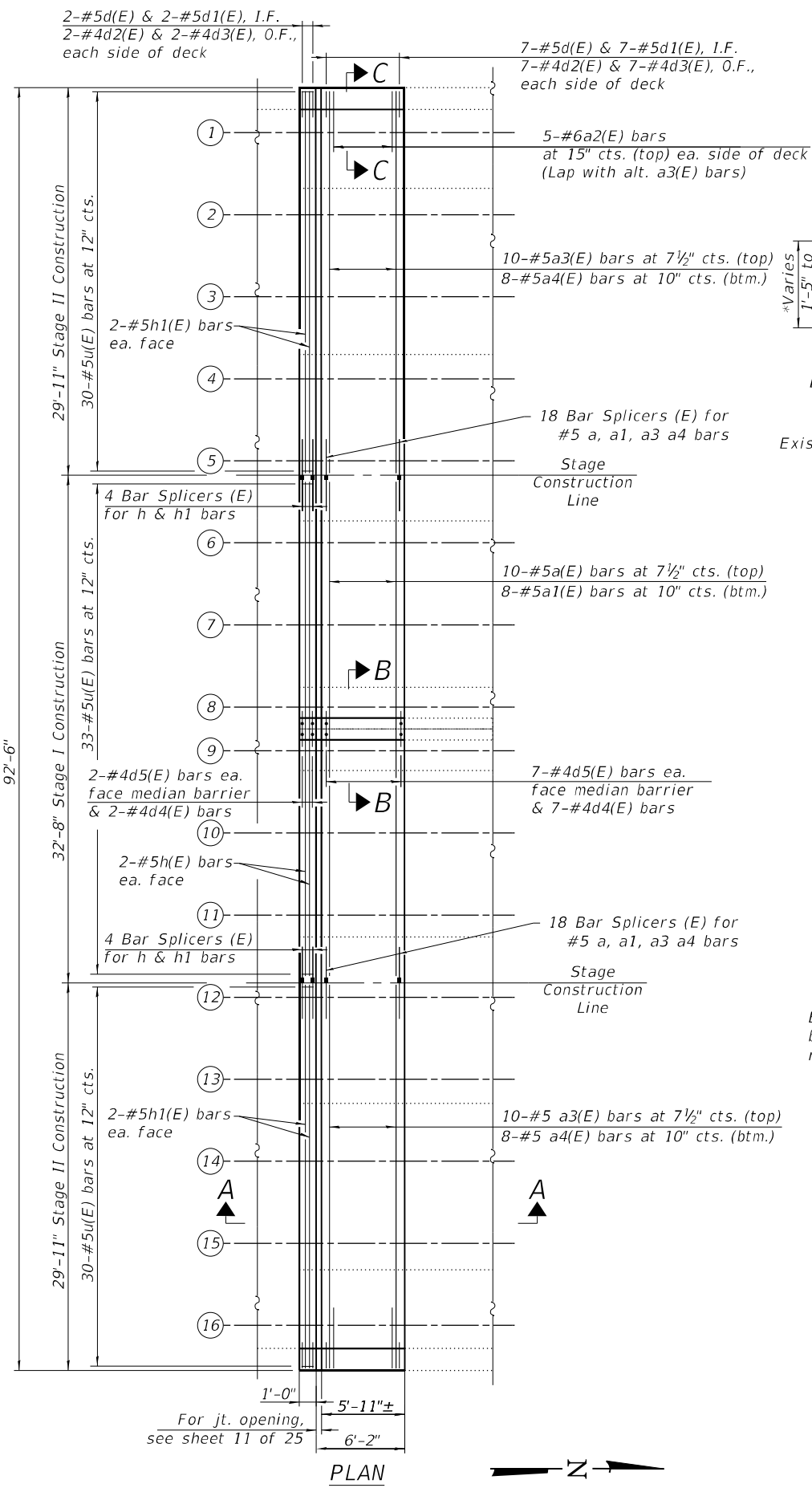


SECTION A-A
SECTION AT ABUTMENT



SECTION B-B

LEGEND
Concrete Superstructure



PLAN

MODEL: 2D Sheet H
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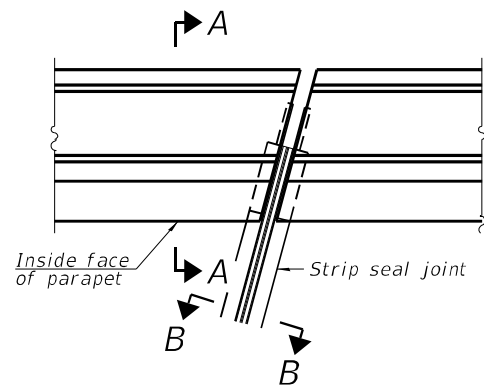
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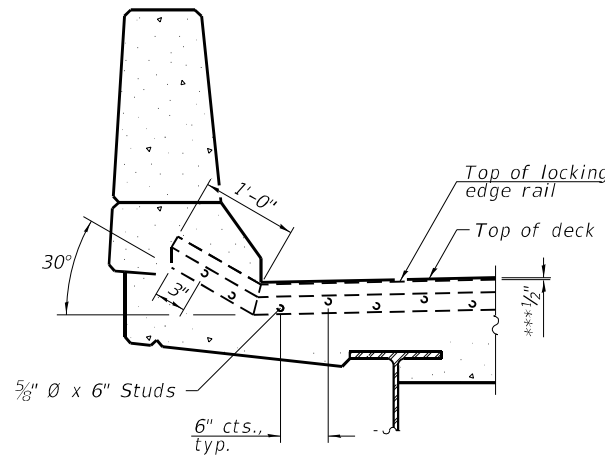
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DEPARTMENT OF TRANSPORTATION

ABUTMENT JOINT REPLACEMENT DETAILS
S.N. 092-0038

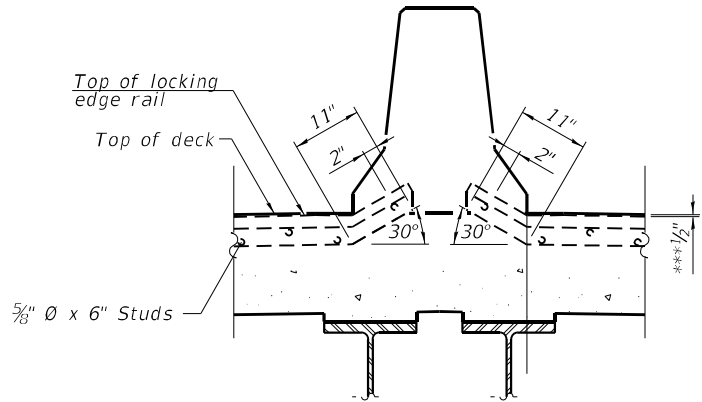
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74	(92-10.11,12)R	VERMILION	698	407
CONTRACT NO. 70A29				
ILLINOIS FED. AID PROJECT				



PLAN
(For Skews ≤ 30°)

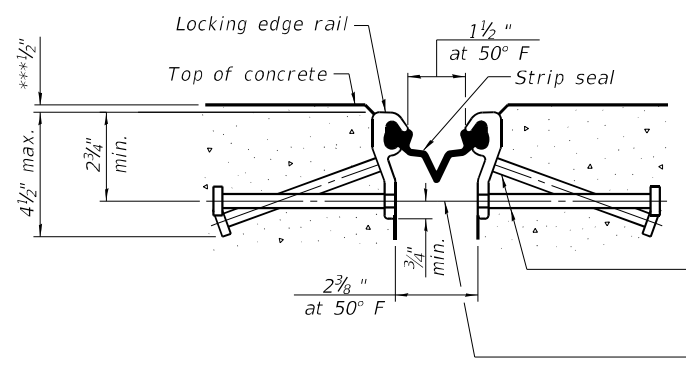


SECTION A-A



SECTION THRU MEDIAN

*** Prior to 1/4" Diamond Grinding



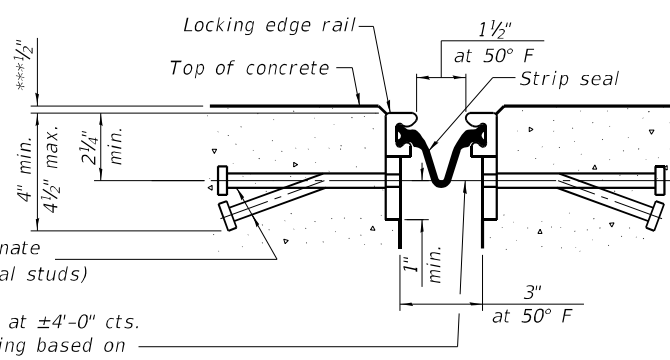
SHOWING ROLLED RAIL JOINT

* 5/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

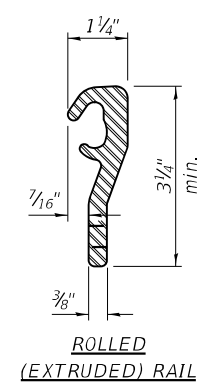
3/8" Ø threaded rods in 1/16" Ø holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION B-B

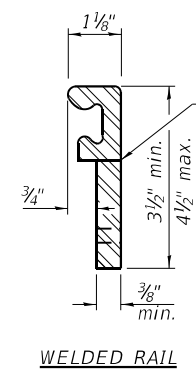
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



SHOWING WELDED RAIL JOINT



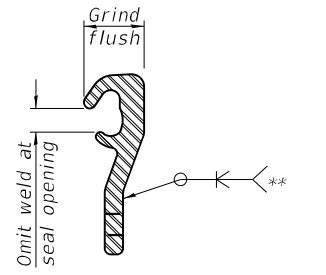
ROLLED (EXTRUDED) RAIL



WELDED RAIL

LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	183.0

Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.
 The manufacturer's recommended installation methods shall be followed.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
 The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.
 The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

MODEL: 2D Sheet H
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PREFORMED JOINT STRIP SEAL DETAILS
S.N. 092-0038
 SHEET 11 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	408
CONTRACT NO. 70A29				
ILLINOIS FED. AID PROJECT				

Remainder of parapet to remain, typ.

Remainder of parapet to remain, typ.

1'-0" removal and replacement of parapet, typ. 4 corners, see sheet 8 of 26

Existing Traffic Barrier Terminal, See sheet 1 of 26.

Existing Traffic Barrier Terminal, See sheet 1 of 26.

Stage Const. Line

☉ F.A. Rte. 332

Stage Const. Line

Inlet boxes to be adjusted (4 places), see sheet 26 of 26 for details

Longitudinal cracks in approach slab, typ., see note.

Shld.

Merge Lane

Travel Lane

Travel Lane

Travel Lane

Travel Lane

Merge Lane

Shld.

APPROACH SLAB PLAN VIEW



BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Epoxy Crack Injection	Foot	120

Notes:

An estimated quantity has been included for epoxy crack injection of longitudinal cracks in the approach slabs. Locations shown on plan are representative of the type of cracks. The actual extent and locations of crack repairs are to be determined by the Engineer after scarification has been completed. Crack repairs shall be documented on As-Built drawings. See sheet 8 of 26 for limits of scarification and overlay.

MODEL: 2D Sheet H
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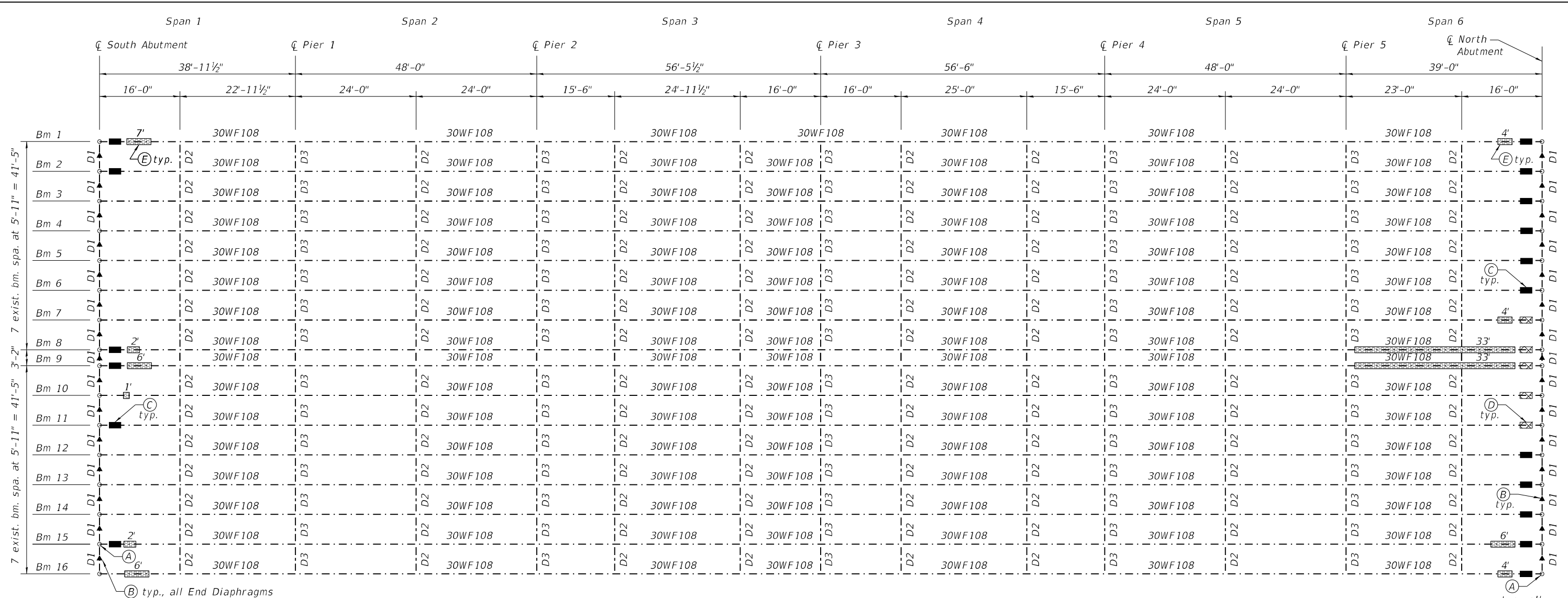
**APPROACH SLAB REPAIR DETAILS
S.N. 092-0038**

SHEET 12 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	409

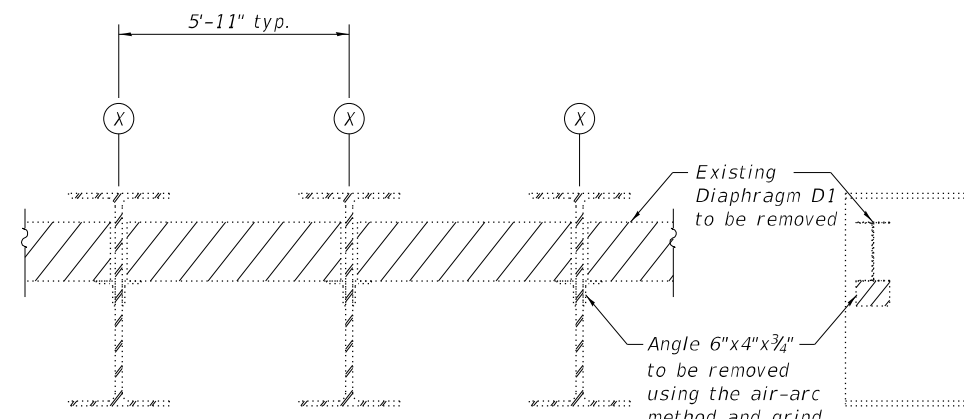
CONTRACT NO. 70A29

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KEY

- (A) Remove and replace all Abutment Bearings - See Sheet 16 of 26.
- ▲ (B) Remove and replace all End Diaphragms - See Section B-B
- (C) Repair Beam Ends (Webs) - See Section D-D
- ▣ (D) Repair Beam Ends (Webs and extended bottom flanges) - See Section E-E
- ▤ (E) Epoxy Injection between bottom of deck and top flange of beam - See note.
- D1 = W12x40 End Diaphragm



EXISTING DIAPHRAGM REMOVAL

Note:
The Contractor shall obtain dimensions from the existing diaphragms and connection angles for use in the fabrication of the proposed replacement diaphragms, except as must be adjusted for new beam web repair plates.
(Estimated weight of steel removal = 8030 Pounds)

FRAMING PLAN

Notes:

All structural steel shall conform to AASHTO Classification M 270 Gr. 36, unless noted otherwise. Fasteners shall be high strength bolts. Bolts 3/4" dia., open holes 13/16" dia., unless otherwise noted. Cost of furnishing and erecting steel diaphragms and diaphragm support angles shall be included with Furnishing and Erecting Structural Steel. Cost of furnishing and erecting steel for beam end repairs shall be included with Structural Steel Repair.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work. However, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Upon completion of the beam repairs and placement of new Concrete Superstructure, the Engineer in the field shall check to see that the top flange is tight against the existing portion of the slab. If not, the Contractor shall inject epoxy between the existing concrete deck and the top flange of the beam. See Special Provision "Epoxy Injection". Locations shown in the plan are estimates. Actual locations and extent of repair shall be determined by the Engineer and shall be documented on As-Built plans.

Existing Structural steel that will be in contact with new Structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surfaces Areas of Existing Steel Structures".

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Furnishing & Erecting Structural Steel	Pound	8250
Structural Steel Repair	Pound	5940
Structural Steel Removal	Pound	8030
Epoxy Injection	Foot	108

(Sheet 1 of 2)

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FRAMING PLAN
S.N. 092-0038

SHEET 13 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	410

CONTRACT NO. 70A29

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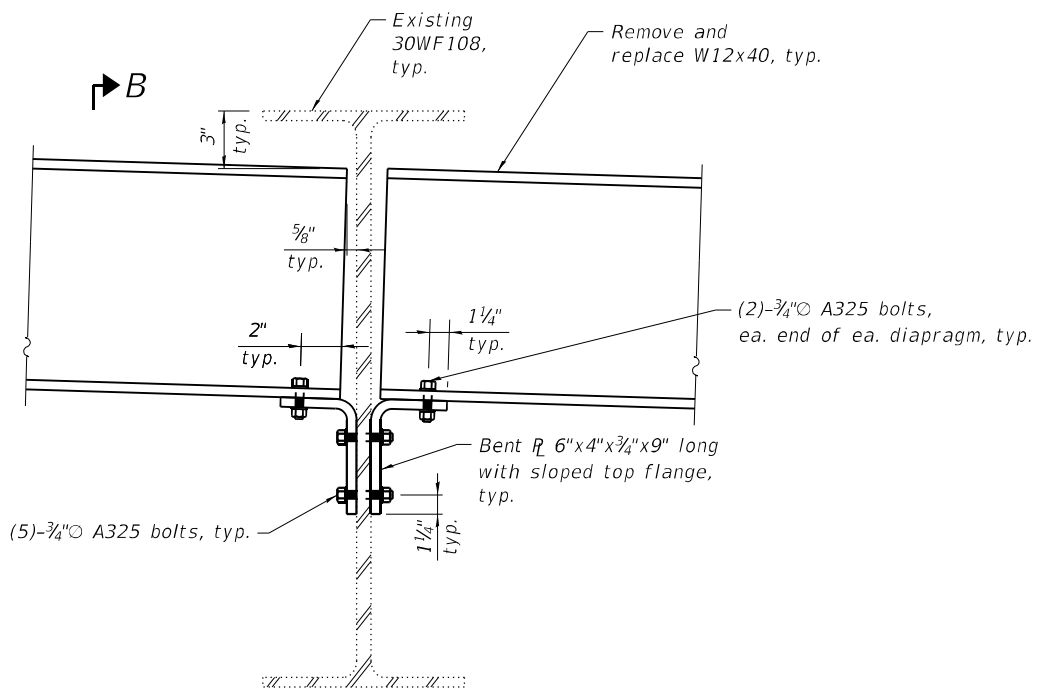
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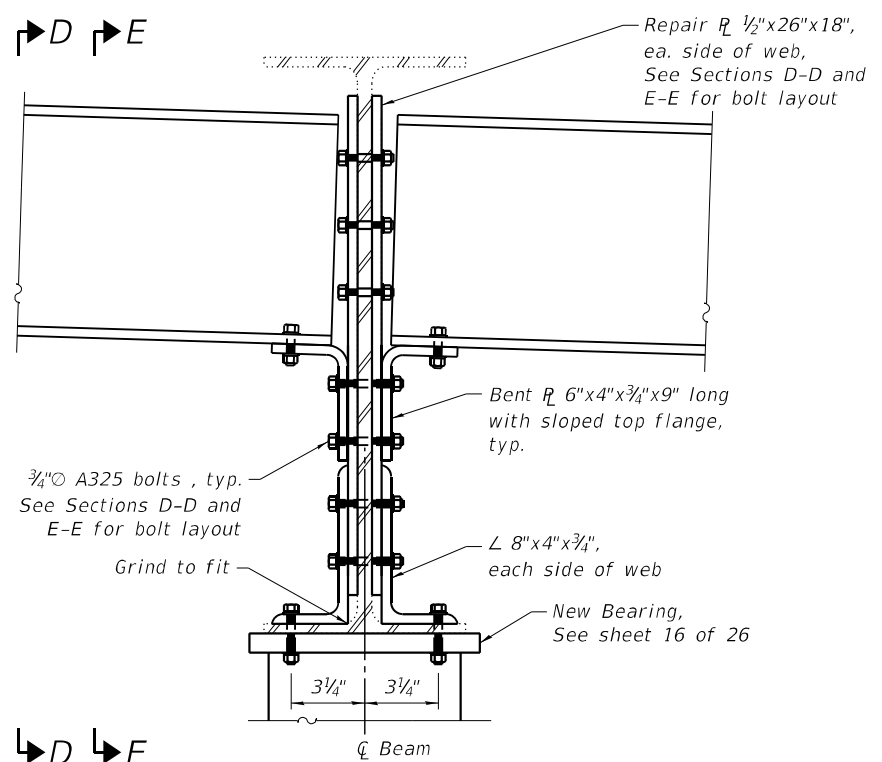
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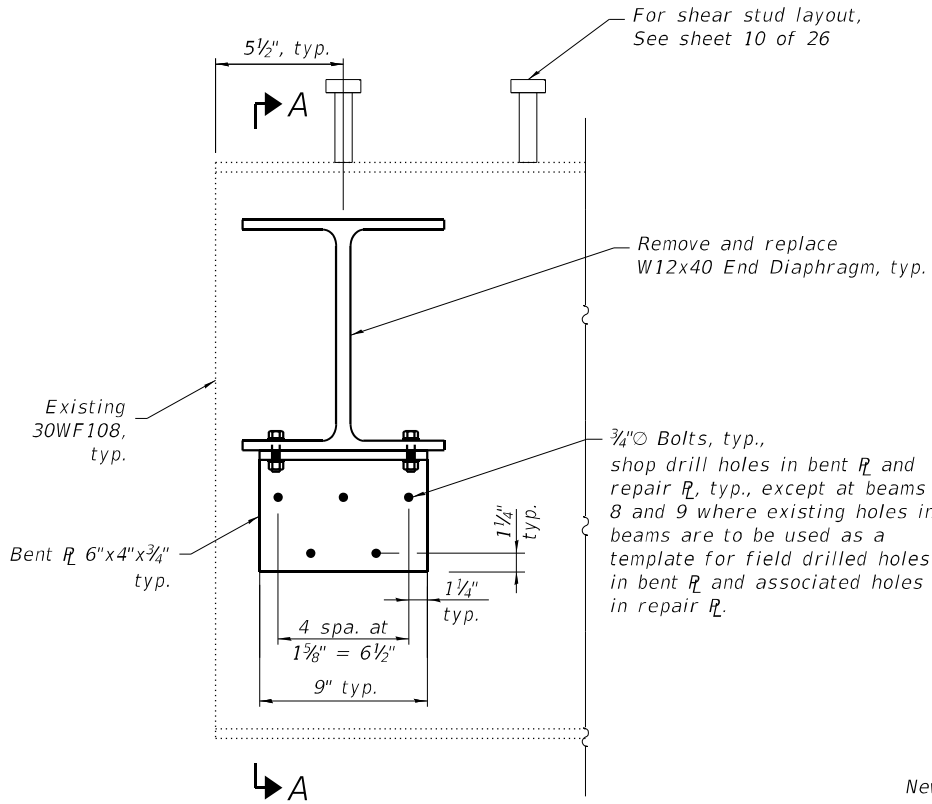
SECTION A-A



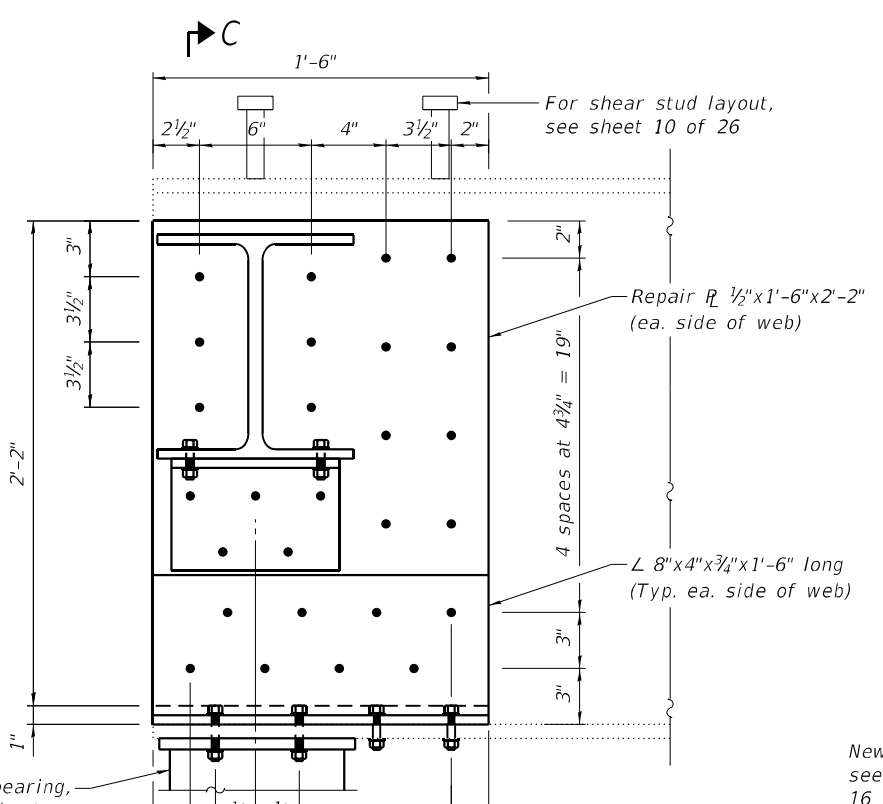
SECTION C-C

Bolt Hole Legend

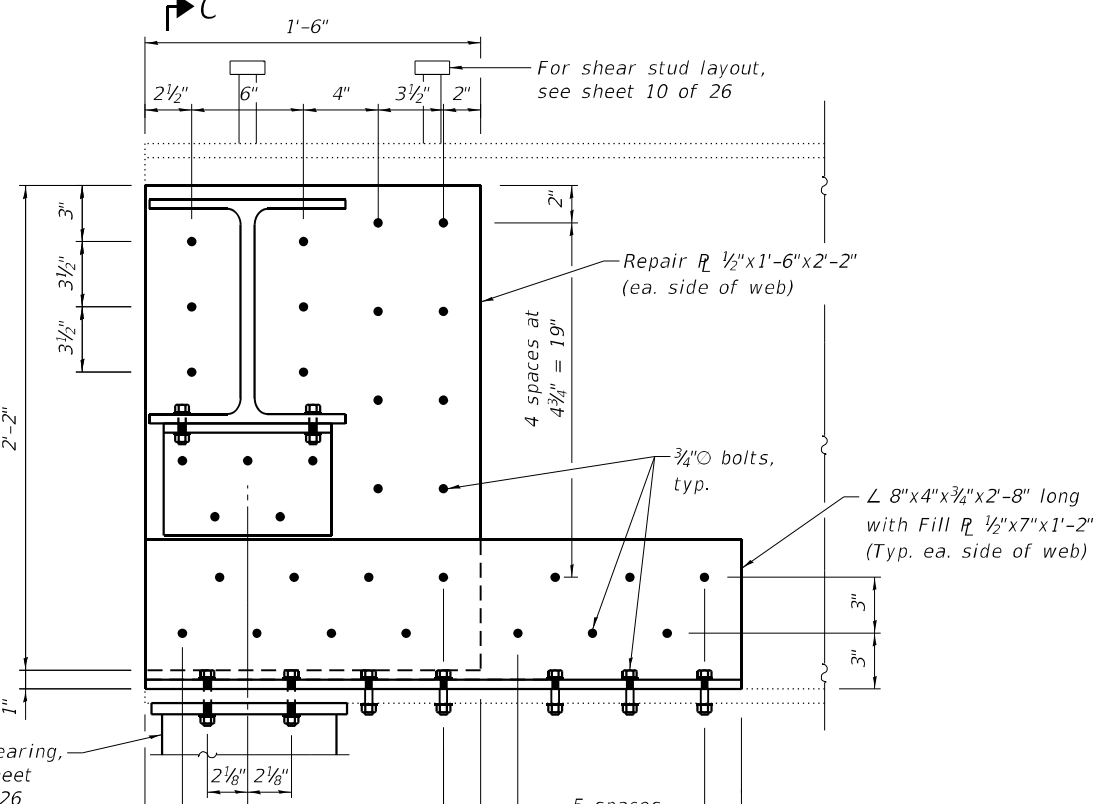
- Field drill holes
- Shop drill holes



SECTION B-B



SECTION D-D



SECTION E-E

(Sheet 2 of 2)

MODEL: 2D Sheet H
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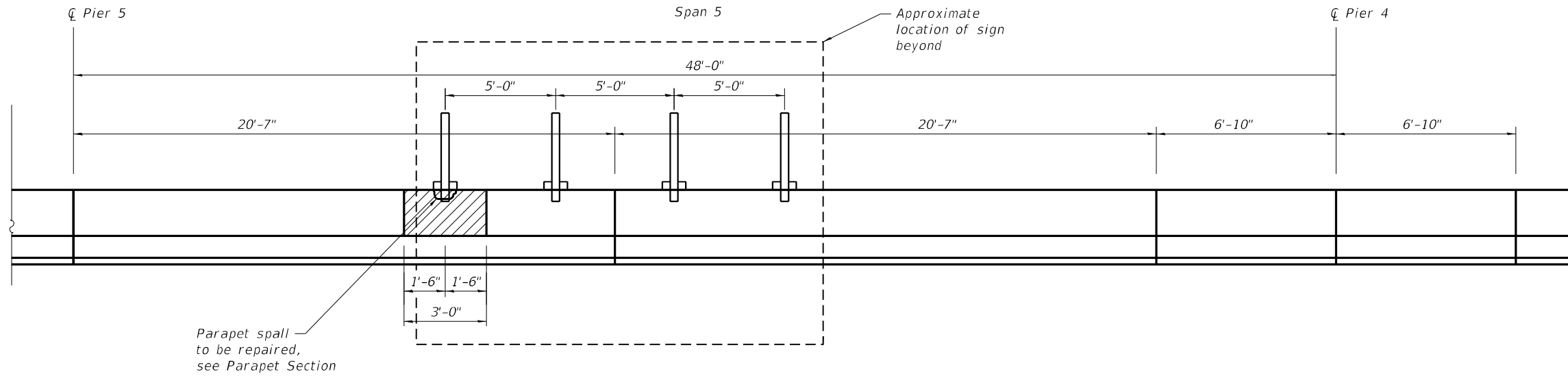
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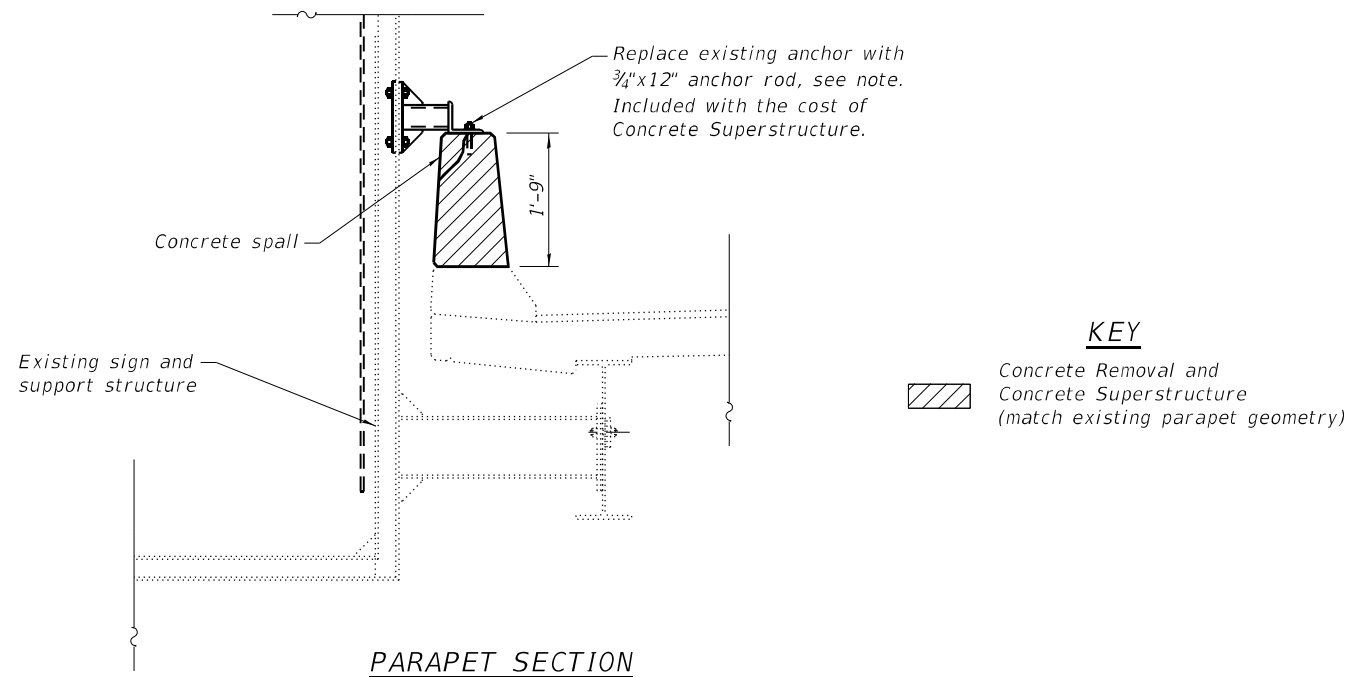
**DIAPHRAGM REPLACEMENT AND BEAM END REPAIR
S.N. 092-0038**

SHEET 14 OF 26 SHEETS

F.A.I. RTE. 74	SECTION (92-10.11,12)R	COUNTY VERMILION	TOTAL SHEETS 698	SHEET NO. 411
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70A29	



PARTIAL ELEVATION: EAST PARAPET (INSIDE VIEW)



KEY
 Concrete Removal and Concrete Superstructure (match existing parapet geometry)

Notes:
 Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.

The contractor shall use extreme care during concrete removal so as not to damage existing reinforcing.

Anchor rods shall be All-threaded rod conforming to ASTM F1554 Grade 105, 3/4" Ø x 12" long, each with one plate washer and locknut and be hot dip galvanized per AASHTO M232. They shall be either cast into the concrete or epoxy grouted in accordance with Section 584 of the Standard Specifications. Minimum embedment in concrete shall be 9".

The Contractor shall submit a Temporary Support System design for review and acceptance by the Engineer. The Temporary Support System shall support the sign structure during parapet repair operations. See special provisions.

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Protective Coat	Sq. Yd.	1
Concrete Removal	Cu. Yd.	0.2
Concrete Superstructure	Cu. Yd.	0.2
Temporary Support System	L Sum	1

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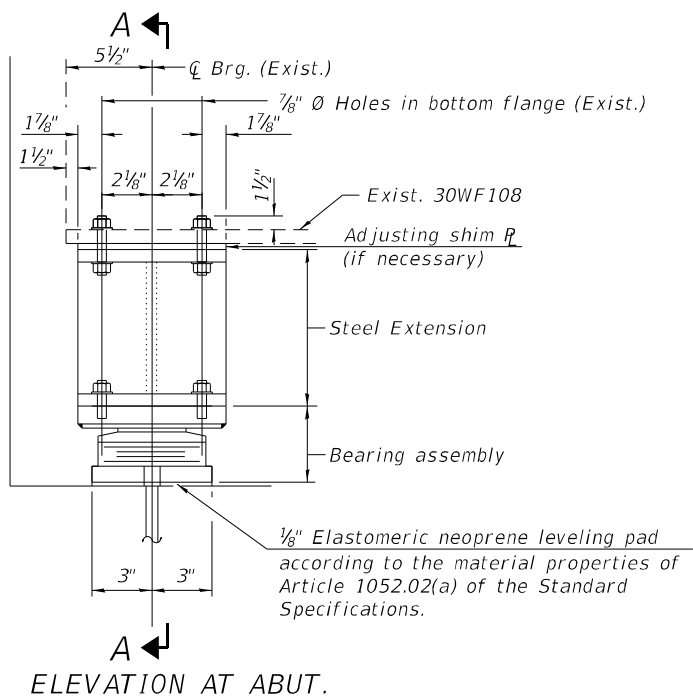
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**PARAPET REPAIRS
 S.N. 092-0038**

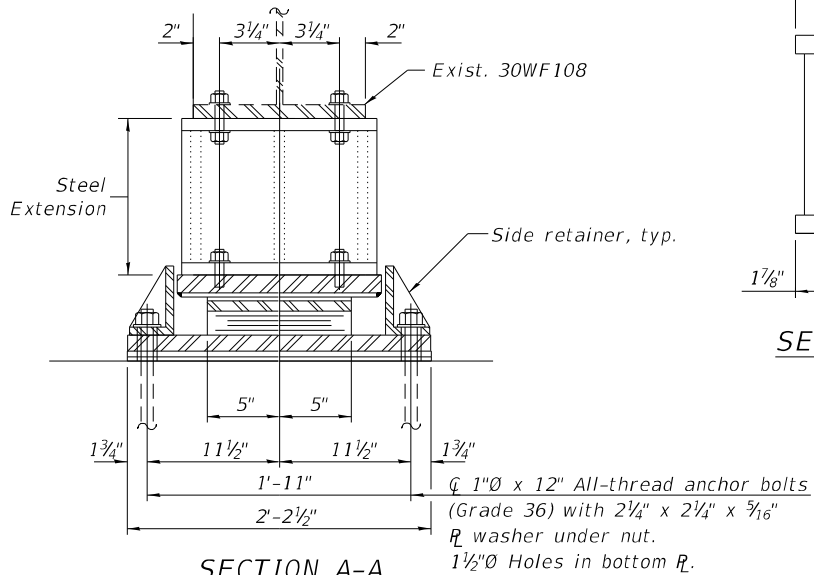
SHEET 15 OF 26 SHEETS

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CONTRACT NO. 70A29				
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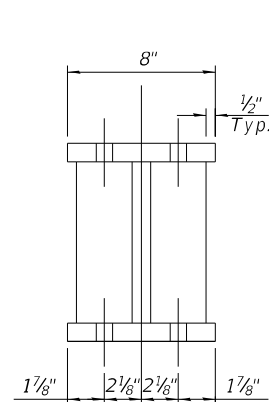


ELEVATION AT ABUT.

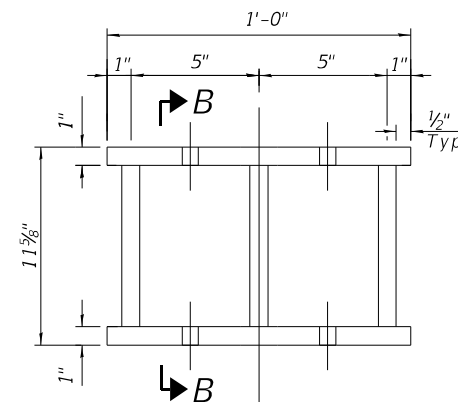
TYPE II ELASTOMERIC EXP. BRG.



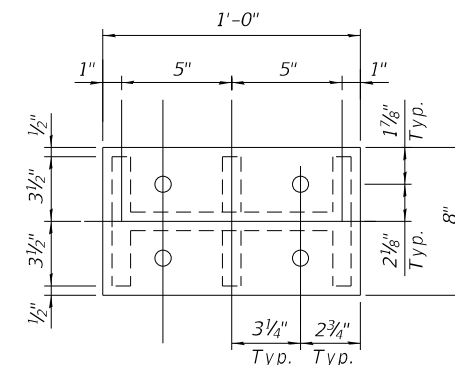
SECTION A-A



SECTION B-B



END VIEW STEEL EXTENSION



PLAN VIEW STEEL EXTENSION

BEAM REACTIONS

R _∅	(k)	16.5
R _⊥	(k)	27.1
Imp.	(k)	8.1
R (Total)	(k)	51.7

BILL OF MATERIAL

Item	Unit	Total
Jack and Remove Existing Bearings	Each	32
Elastomeric Bearing Assembly Type II	Each	32
Furnishing & Erecting Structural Steel	Pound	4,590
Anchor Bolts 1"	Each	64

Notes:

Side retainers and leveling pad required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.

Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.

Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

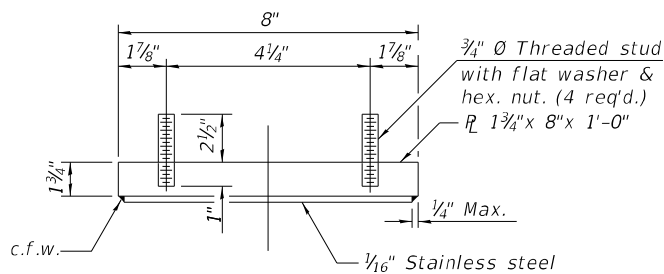
Min. jack capacity = 26 Tons Min.

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

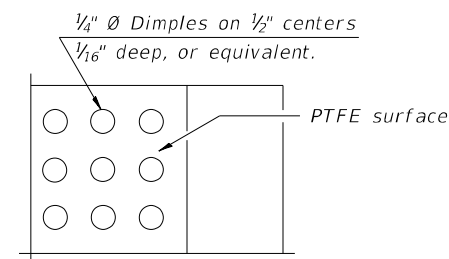
Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

All H.S. bolts in bearing assembly and steel extensions, side retainers, anchor bolts, nuts, and washers shall be hot dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".

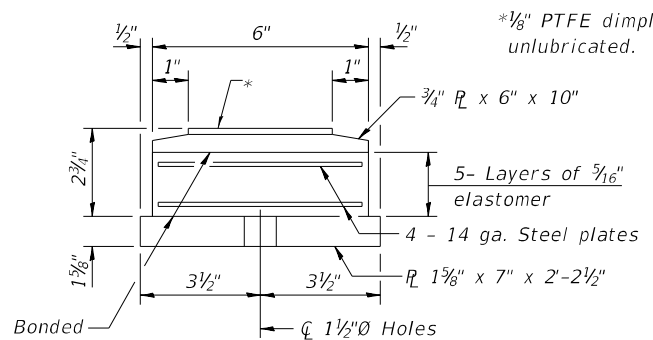
The top and bottom plates of the Elastomeric Bearings shall be shop painted with the inorganic zinc rich primer per AASHTO M300 Type I. Cost to be included with Elastomeric Bearing Assembly Type II.



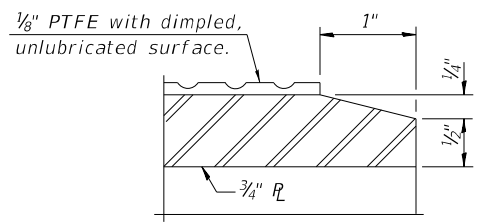
TOP BEARING ASSEMBLY



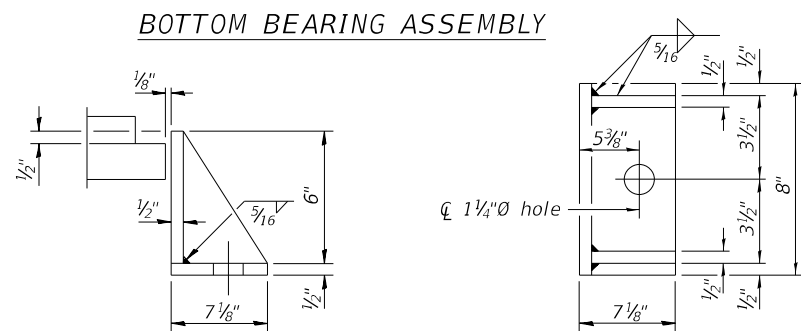
PLAN-PTFE SURFACE



BOTTOM BEARING ASSEMBLY

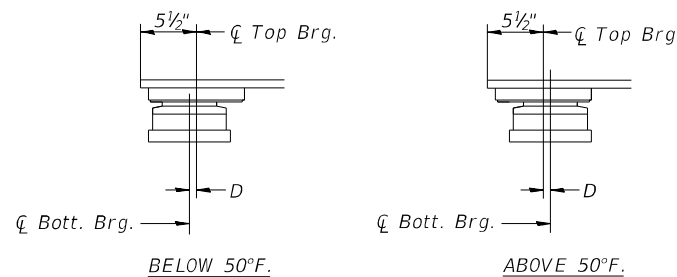


SECTION THRU PTFE



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

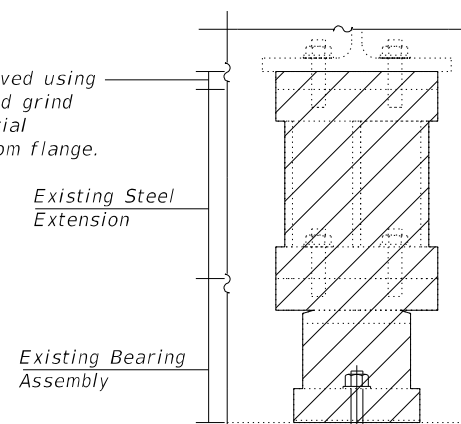


D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

EXPANSION BEARING ORIENTATION

The above diagrams are for informational purposes only to show the amount of expected offset "D" for the current temperature in the field.

Existing P to be removed using the air-arc method and grind smooth all weld material remaining on the bottom flange.



Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy. Cost to be included with Jack and Remove Existing Bearings.

EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

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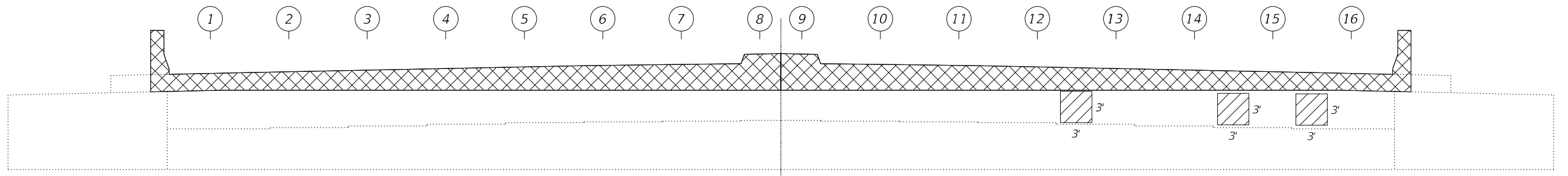
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ABUTMENT BEARING REPLACEMENT DETAILS
 S.N. 092-0038

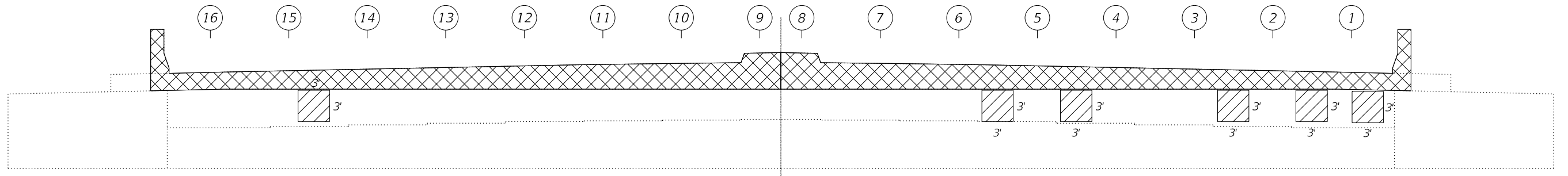
SHEET 16 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70A29				

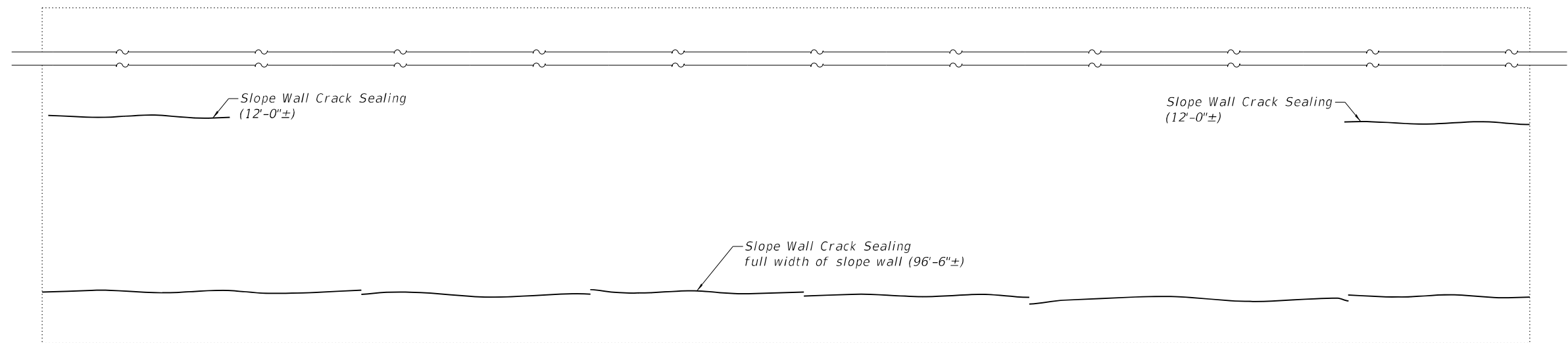
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NORTH ABUTMENT ELEVATION
(Looking North)



SOUTH ABUTMENT ELEVATION
(Looking South)



SOUTH SLOPE WALL PLAN

LEGEND

- Structural Repair of Concrete Depth $\leq 5"$
- Concrete Removal, see sheet 9 of 26

Notes:
Repair areas and locations are estimated.
The actual size and locations of repairs shall be determined by the Engineer and shall be shown on As-Built plans.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete Depth $\leq 5"$	Sq. Ft.	81.0
Slope Wall Crack Sealing	Foot	120.5

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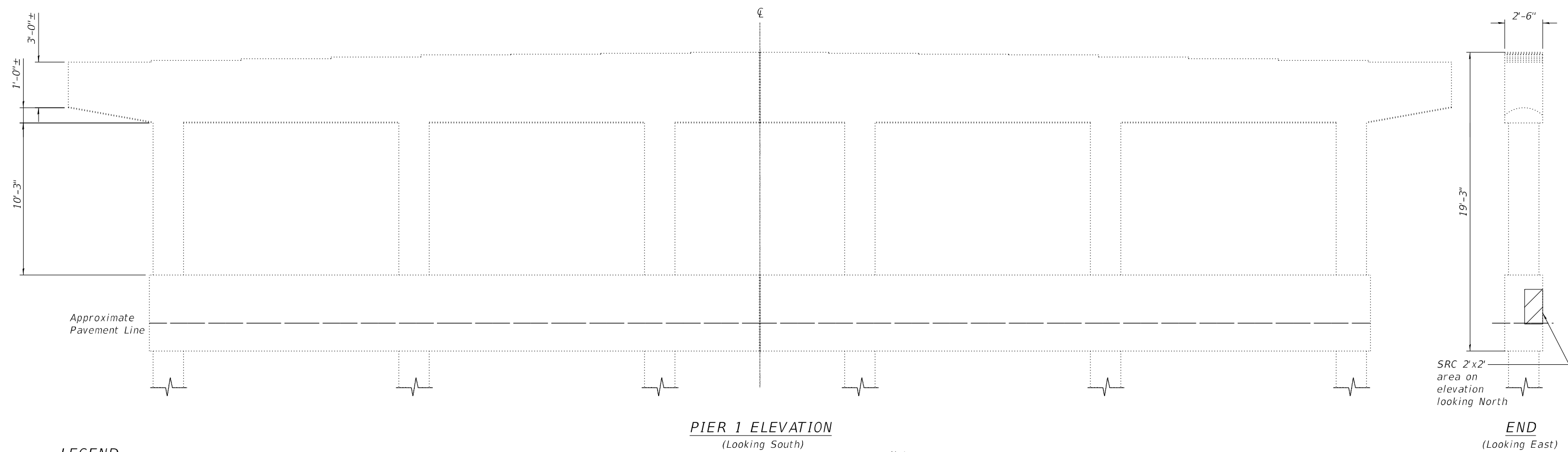
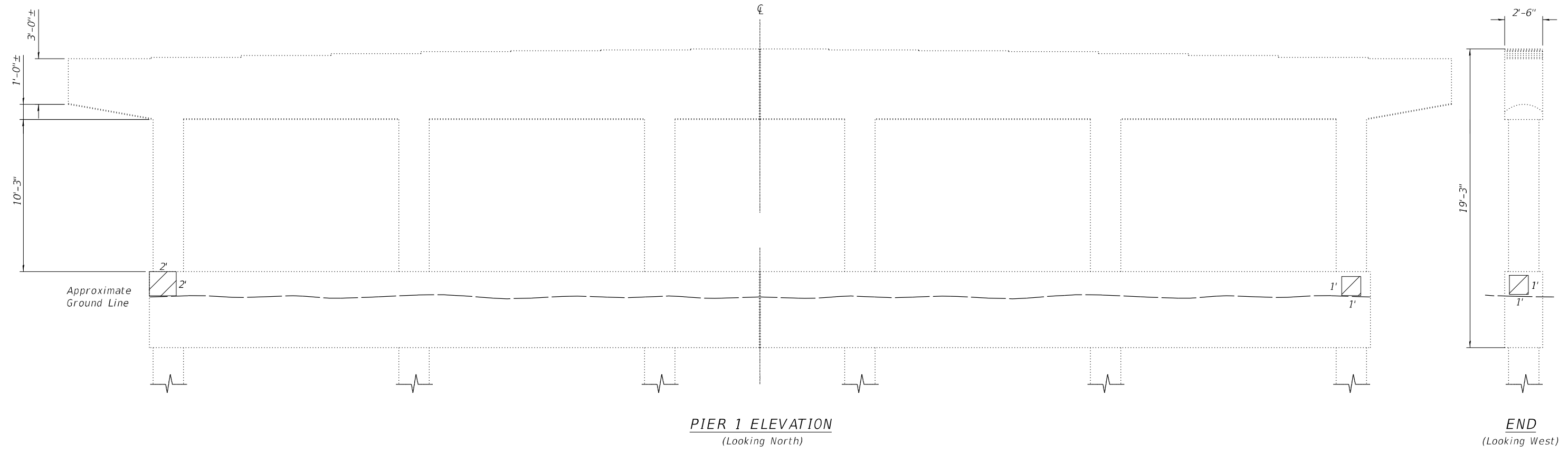
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ABUTMENT AND SLOPE WALL REPAIR PLAN
S.N. 092-0038
SHEET 17 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	414
CONTRACT NO. 70A29				
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LEGEND

Structural Repair of Concrete Depth <=5" (SRC)

Notes:
 Repair areas and locations are estimated.
 The actual size and locations of repairs shall be determined by the Engineer and shall be shown on As-Built plans.

BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete Depth <=5"	Sq. Ft.	6.0
Concrete Sealer	Sq. Ft.	6.0

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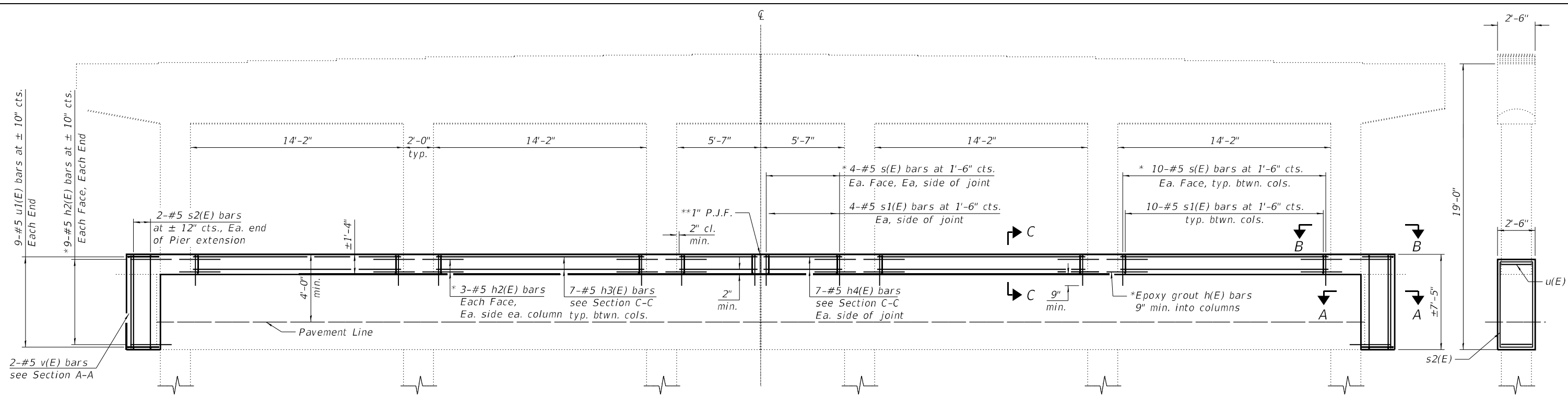
PIER 1 REPAIR PLAN
S.N. 092-0038

SHEET 18 OF 26 SHEETS

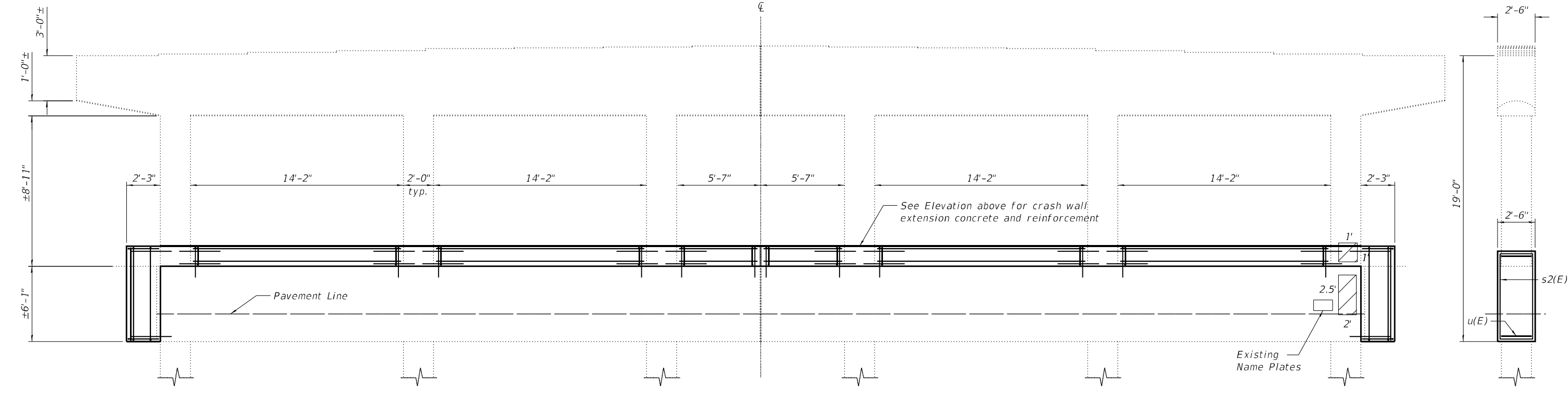
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74	(92-10.11,12)R	VERMILION	698	415
CONTRACT NO. 70A29				

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*Epoxy grout bars in 9" min. holes according to Article 584 of the Standard Specifications.
 **PJF included in the cost of Concrete Structures.



Notes:
 Repair areas and locations are estimated. The actual size and locations of repairs shall be determined by the Engineer and shall be shown on As-Built plans.
 See sheet 23 of 26 for Section A-A, B-B, C-C, bar details, and bar list.

LEGEND
 Structural Repair of Concrete Depth <=5" (SRC)

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Structures	Cu. Yd.	12.0
Reinforcement Bars, Epoxy Coated	Pound	1550
Structural Repair of Concrete Depth <=5"	Sq. Ft.	6
Concrete Sealer	Sq. Ft.	539

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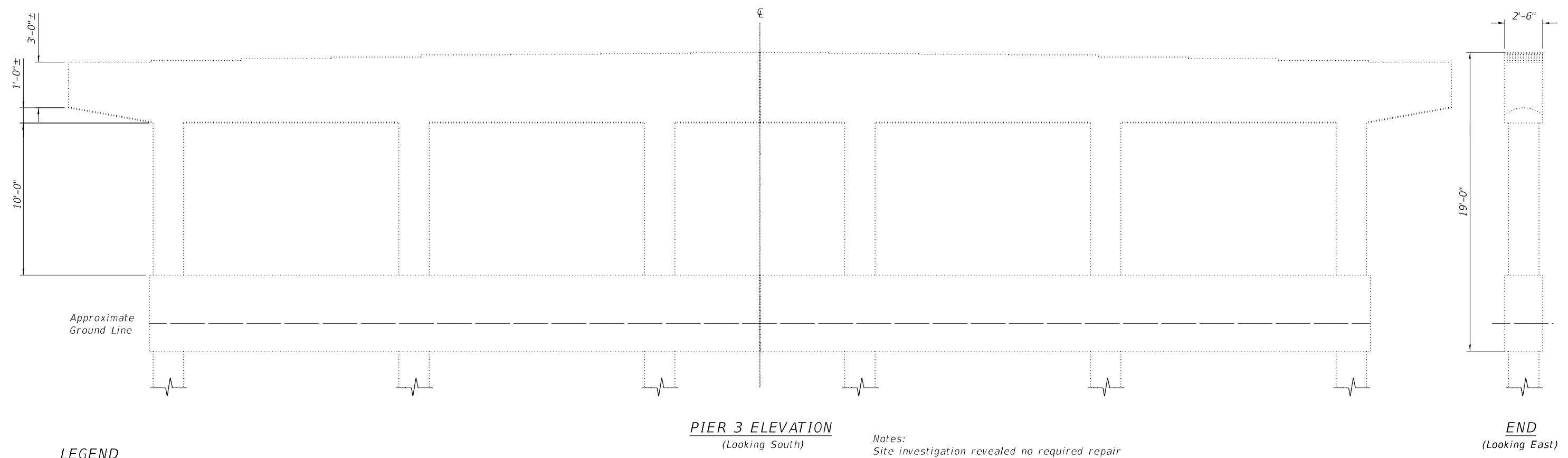
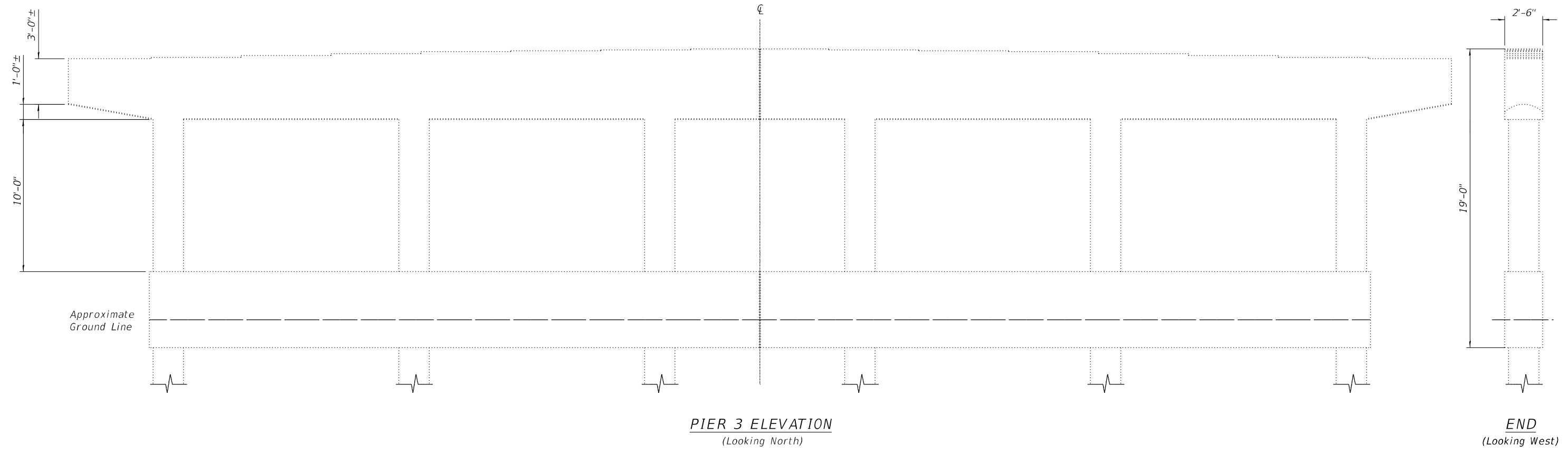
PIER 2 REPAIR PLAN
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SHEET 19 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	416

CONTRACT NO. 70A29
 ILLINOIS FED. AID PROJECT

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LEGEND

Structural Repair of Concrete Depth <=5" (SRC)

Notes:
 Site investigation revealed no required repair areas on this pier. However, the pier shall be sounded during construction, and newly discovered soft concrete or delaminations shall be repaired. The actual size and locations of repairs shall be determined by the Engineer and shall be shown on As-Built plans.

BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete Depth <=5"	Sq. Ft.	0.0
Concrete Sealer	Sq. Ft.	0.0

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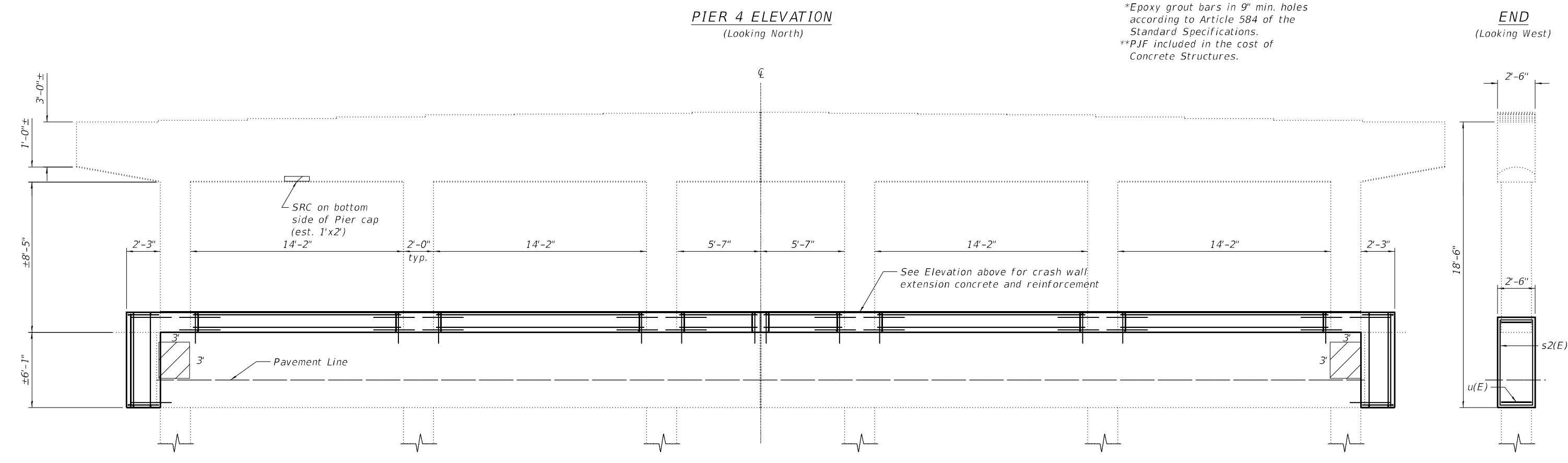
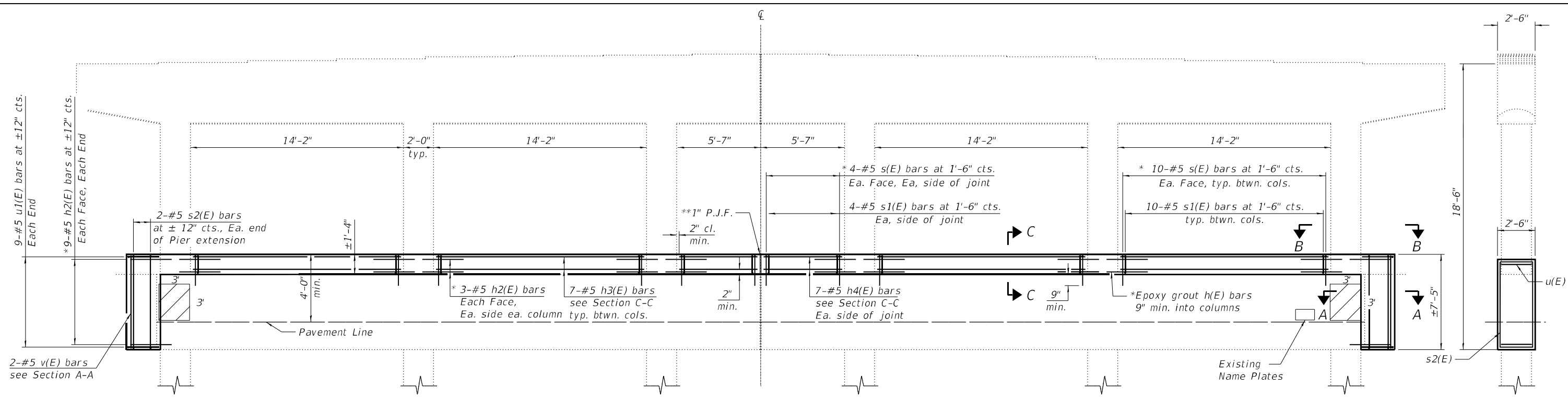
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DEPARTMENT OF TRANSPORTATION

PIER 3 REPAIR PLAN
S.N. 092-0038
 SHEET 20 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	417
CONTRACT NO. 70A29				
		ILLINOIS	FED. AID PROJECT	

MODEL: 2D Sheet H
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Notes:
 Repair areas and locations are estimated. The actual size and locations of repairs shall be determined by the Engineer and shall be shown on As-Built plans.
 See sheet 23 of 26 for Section A-A, B-B, C-C, bar details, and bar list.

LEGEND
 Structural Repair of Concrete Depth <=5" (SRC)

BILL OF MATERIAL

Item	Unit	Quantity
Concrete Structures	Cu. Yd.	12.0
Reinforcement Bars, Epoxy Coated	Pound	1550
Structural Repair of Concrete Depth <=5"	Sq. Ft.	38
Concrete Sealer	Sq. Ft.	571

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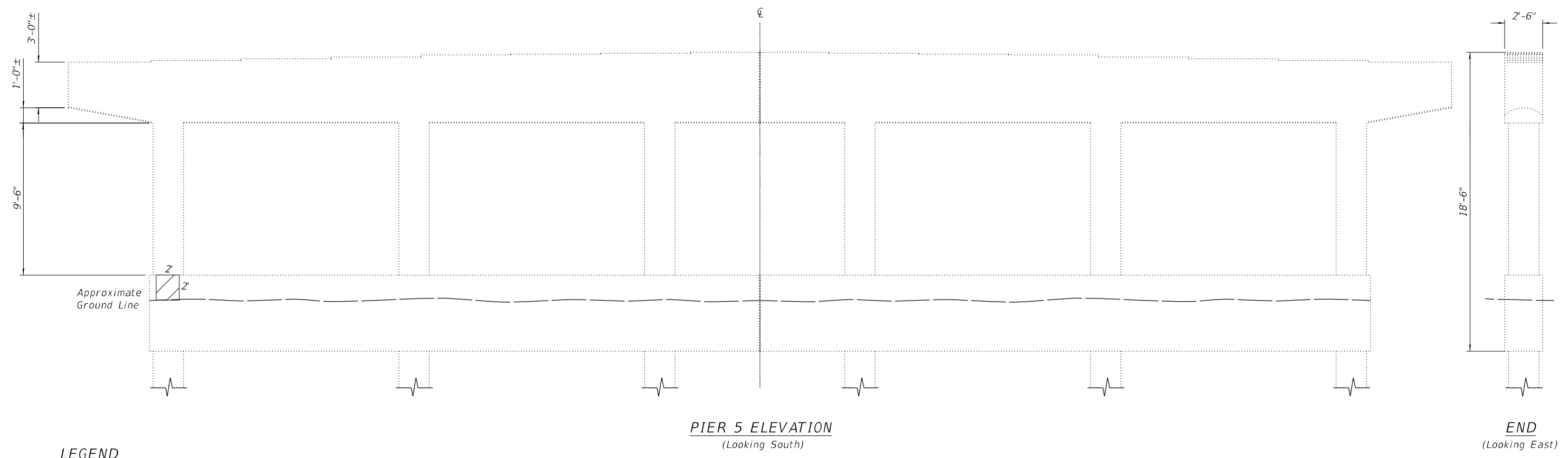
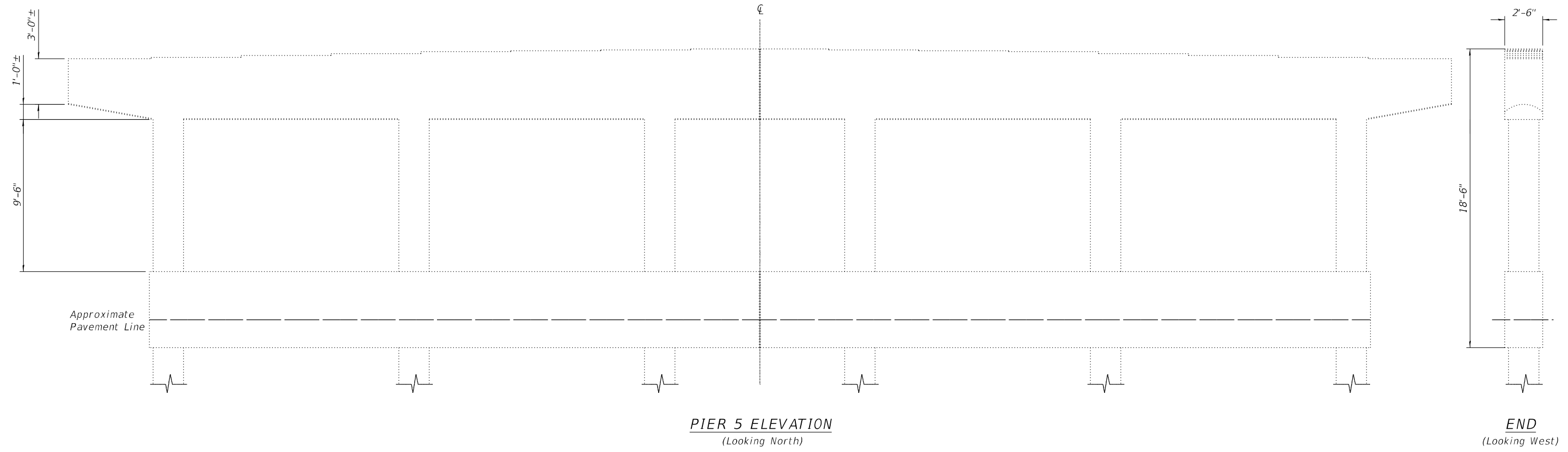
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 4 REPAIR PLAN
S.N. 092-0038
 SHEET 21 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	418
CONTRACT NO. 70A29			ILLINOIS FED. AID PROJECT	

MODEL: 2D Sheet H
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LEGEND

Structural Repair of Concrete Depth <=5" (SRC)

Notes:
 Repair areas and locations are estimated.
 The actual size and locations of repairs shall be determined by the Engineer and shall be shown on As-Built plans.

BILL OF MATERIAL

Item	Unit	Quantity
Structural Repair of Concrete Depth <=5"	Sq. Ft.	4.0
Concrete Sealer	Sq. Ft.	4.0

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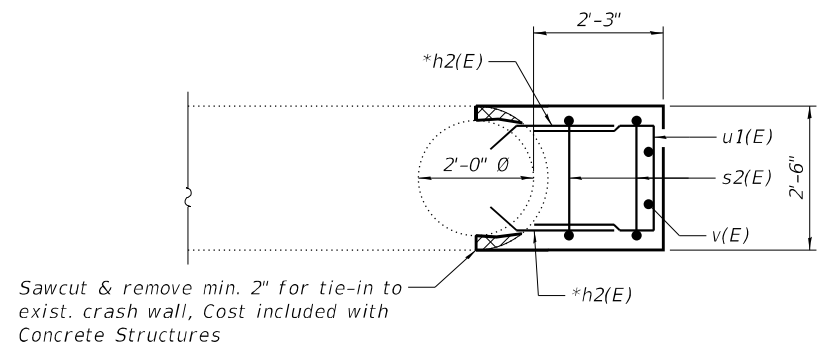
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STATE OF ILLINOIS
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PIER 5 REPAIR PLAN
S.N. 092-0038
 SHEET 22 OF 26 SHEETS

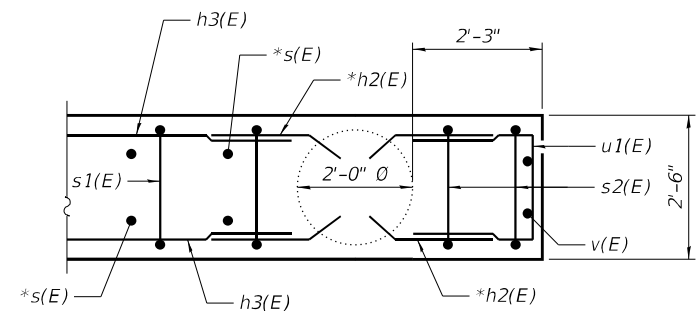
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74	(92-10.11,12)R	VERMILION	698	419
CONTRACT NO. 70A29				
		ILLINOIS	FED. AID PROJECT	

MODEL: 2D Sheet H
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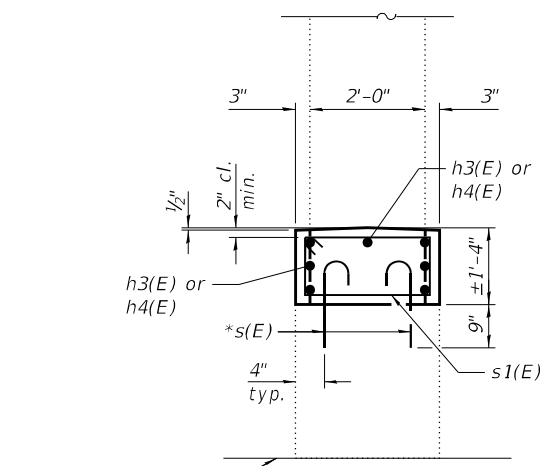


SECTION A-A

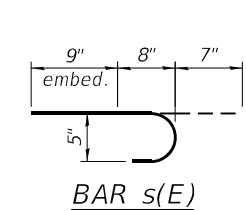
Sawcut & remove min. 2" for tie-in to exist. crash wall, Cost included with Concrete Structures



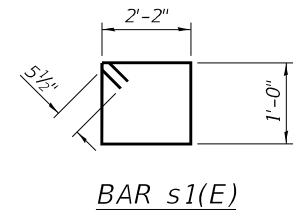
SECTION B-B



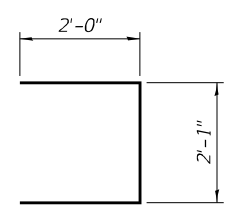
SECTION C-C



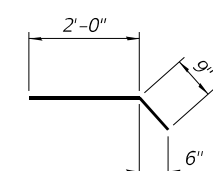
BAR s(E)



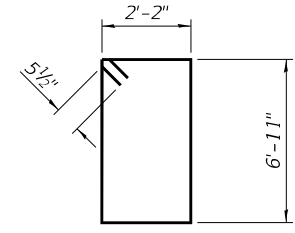
BAR s1(E)



BAR u1(E)



BAR h2(E)



BAR s2(E)

*Epoxy grout bars in 9" min. holes according to Article 584 of the Standard Specifications.

PIER 2
 BAR LIST

Bar	No.	Size	Length	Shape
h2(E)	96	#5	2'-9"	
h3(E)	28	#5	14'-1"	
h4(E)	14	#5	5'-4"	
s(E)	96	#5	2'-0"	
s1(E)	48	#5	7'-3"	
s2(E)	4	#5	19'-1"	
u1(E)	18	#5	6'-1"	
v(E)	4	#5	7'-0"	

PIER 4
 BAR LIST

Bar	No.	Size	Length	Shape
h2(E)	96	#5	2'-9"	
h3(E)	28	#5	14'-1"	
h4(E)	14	#5	5'-4"	
s(E)	96	#5	2'-0"	
s1(E)	48	#5	7'-3"	
s2(E)	4	#5	19'-1"	
u1(E)	18	#5	6'-1"	
v(E)	4	#5	7'-0"	

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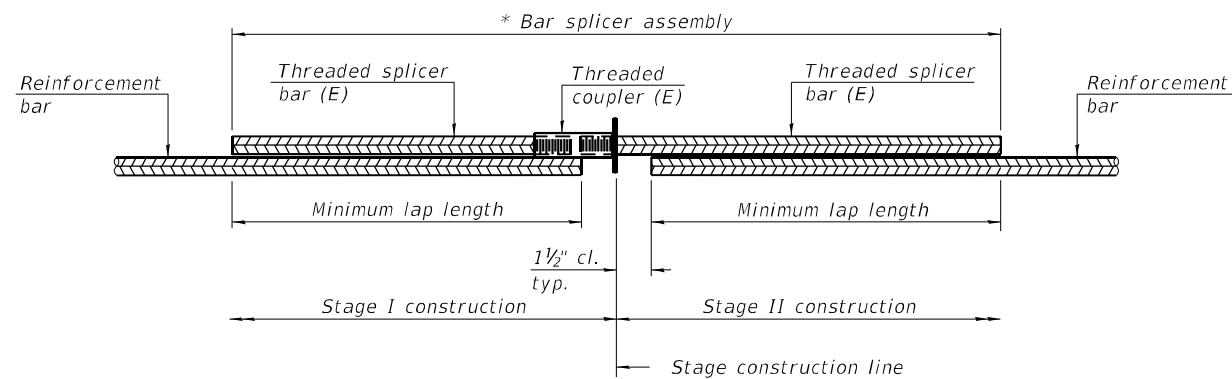
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STATE OF ILLINOIS
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PIER REPAIR DETAILS
 S.N. 092-0038

SHEET 23 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	420
CONTRACT NO. 70A29				
ILLINOIS FED. AID PROJECT				

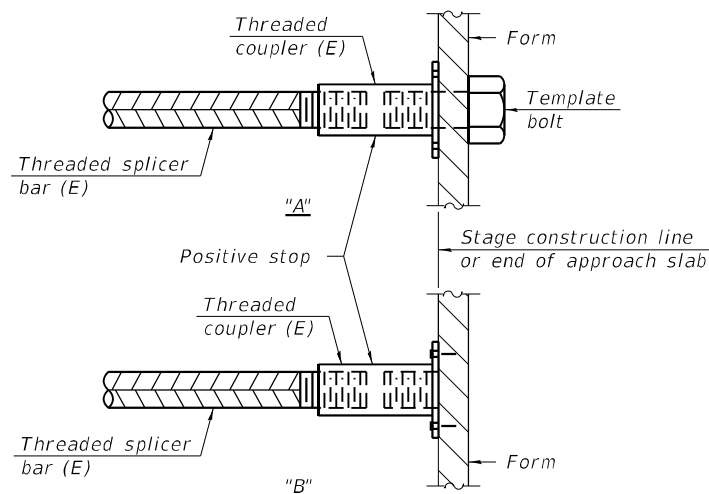


STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length

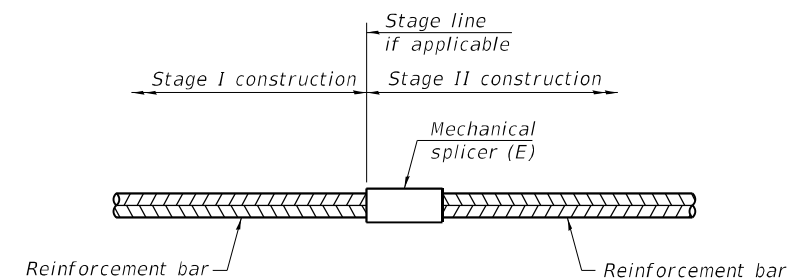
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Hatch Block	#5	16	3'-6"
Slab	#5	72	3'-6"



INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:
 Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

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I-2E-2

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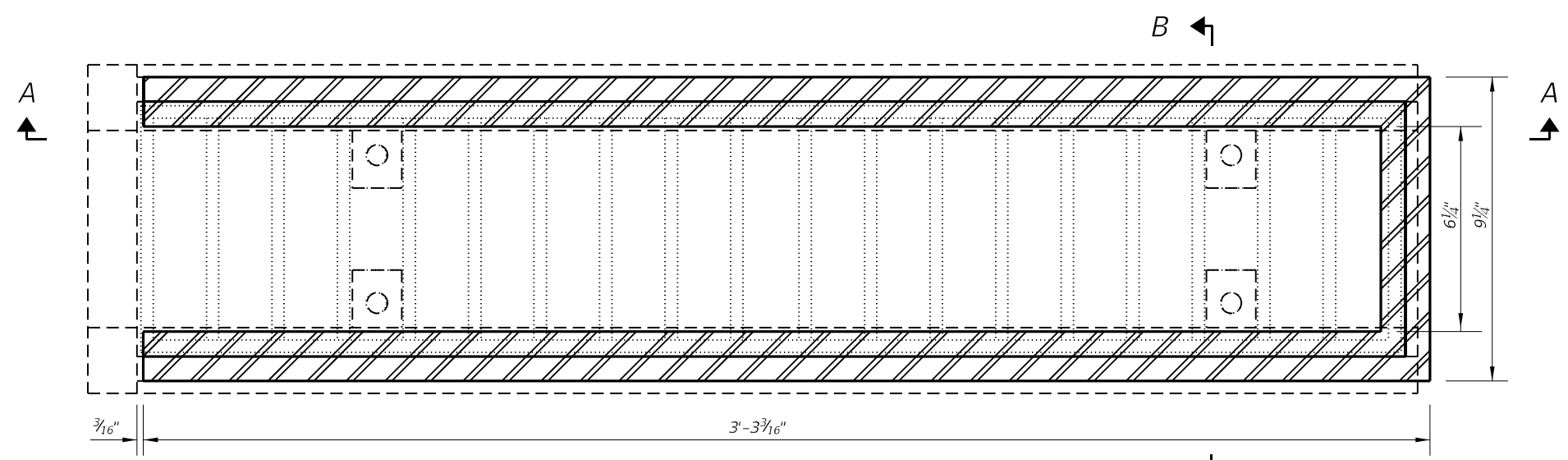
**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 S.N. 092-0038**

SHEET 24 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	421
CONTRACT NO. 70A29				
ILLINOIS		FED. AID PROJECT		

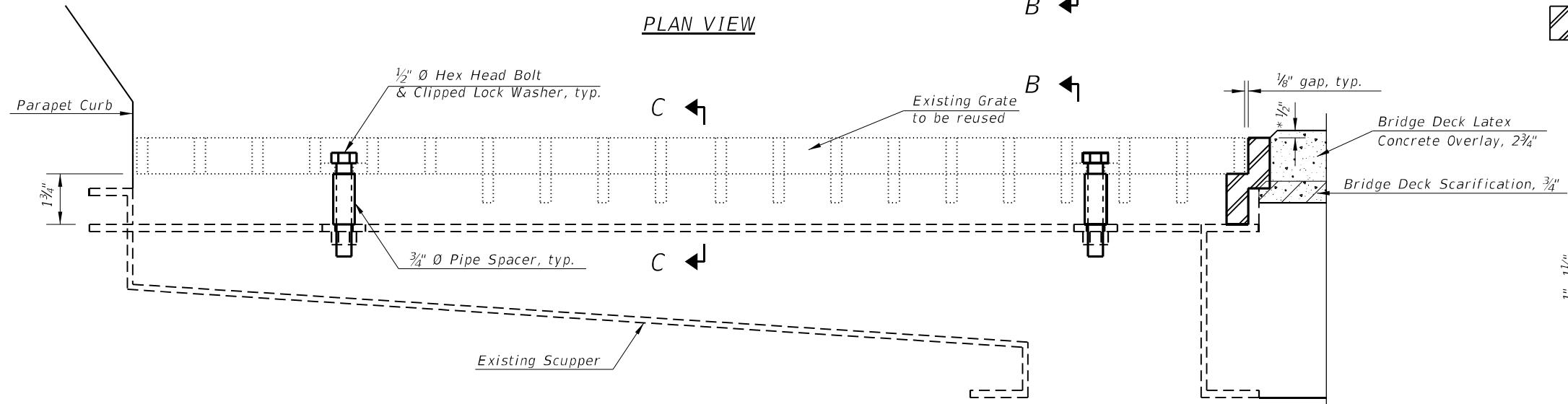
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Notes:
 All structural steel shall be AASHTO M270 Grade 36. The adjusting scupper ring and $\frac{3}{4}$ " \varnothing pipe sleeve spacers shall be galvanized.
 Bolts shall be $\frac{1}{2}$ " \varnothing AASHTO M164 Type 1, mechanically galvanized.
 Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished based at the unit price bid for the work.
 Shop plans for proposed adjusting scupper ring shall be submitted for approval prior to fabrication.
 Contractor shall ensure that no damage is done to existing grates to be reused.
 Cost of all labor and materials necessary to remove existing grates, clean existing scuppers, install adjusting scupper rings and reinstalling grates is included in the cost per unit Each for Drainage Scuppers to be Adjusted.

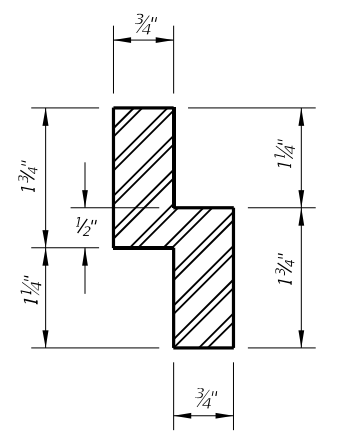


PLAN VIEW

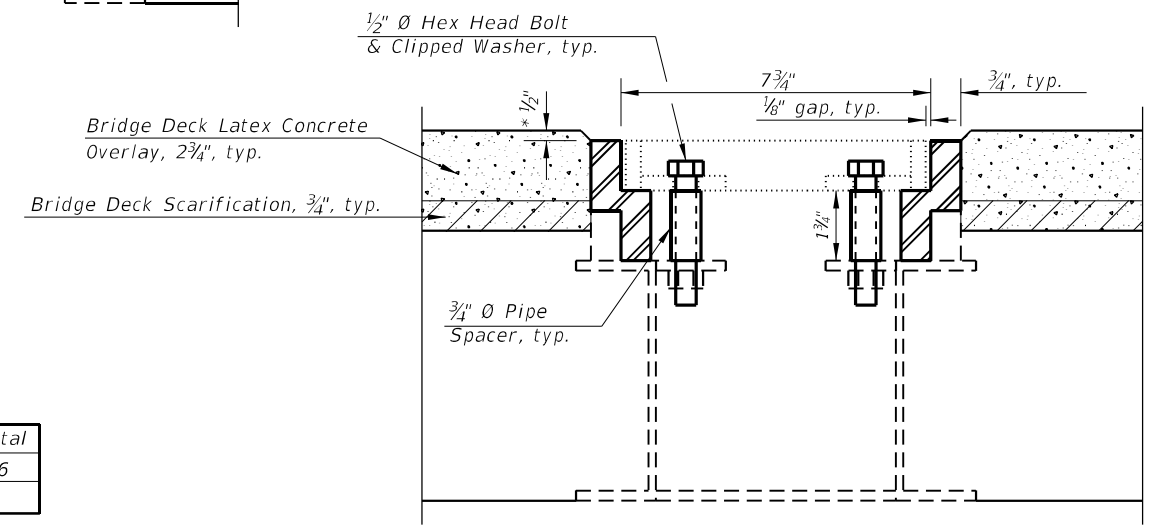
LEGEND



SECTION C-C



ADJUSTING SCUPPER RING



SECTION B-B

BILL OF MATERIAL

Item	Unit	Total
Drainage Scuppers To Be Adjusted	Each	6

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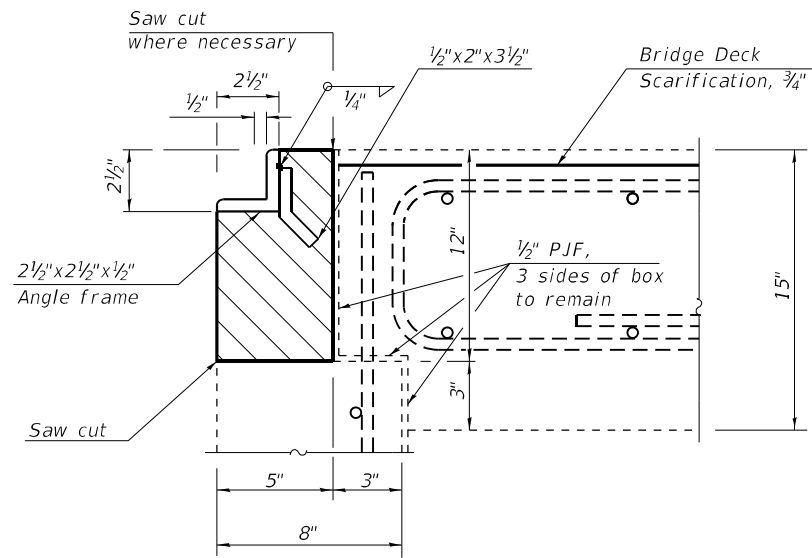
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 DEPARTMENT OF TRANSPORTATION**

**DRAINAGE SCUPPER ADJUSTMENT RING DETAIL
 S.N. 092-0038**

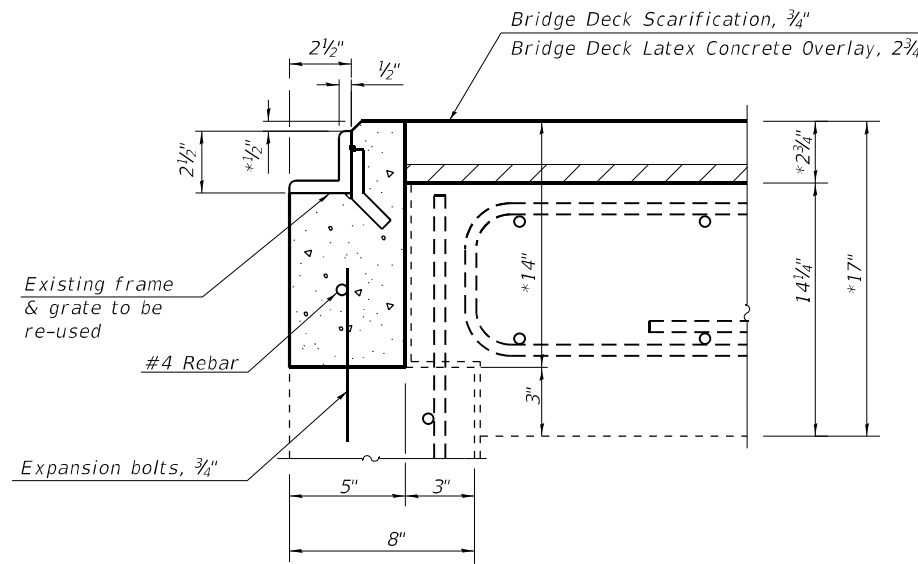
SHEET 25 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	422
CONTRACT NO. 70A29			ILLINOIS FED. AID PROJECT	



DETAIL "A" - EXISTING

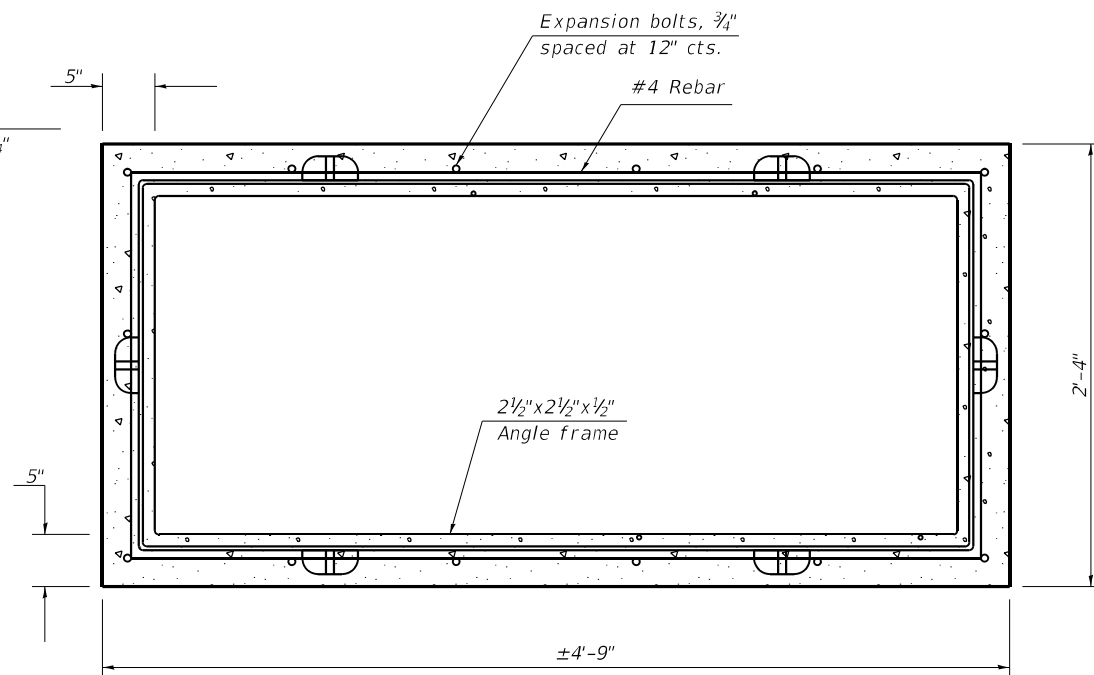
Concrete Removal



DETAIL "A" - PROPOSED

Class S.I. Concrete

*Prior to grinding



**PLAN - PROPOSED
(GRATING OMITTED FOR CLARITY)**

Notes:
Expansion bolts shall extend a minimum of 4" into the proposed concrete.

All work and materials shall be in accordance with applicable portions of Section 602.

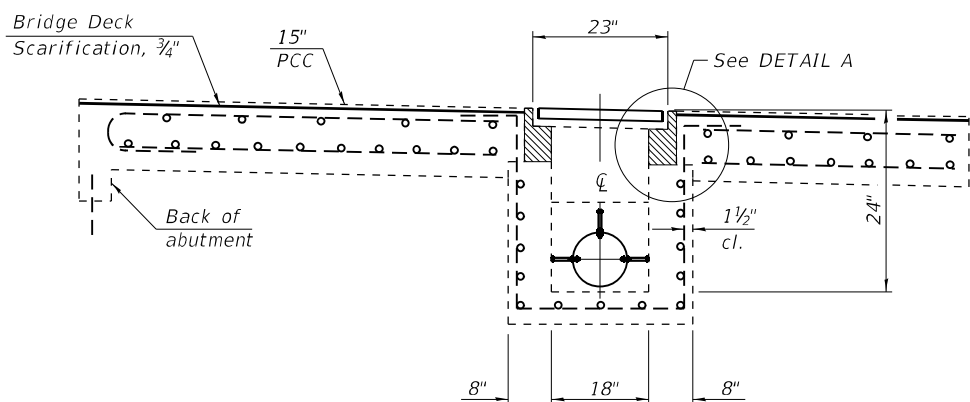
This work will be paid for at the Contract unit price each for "Inlet Boxes to be Adjusted (Special)" which shall include all labor, equipment and material necessary to complete the work.

ESTIMATED QUANTITIES
(for information only)

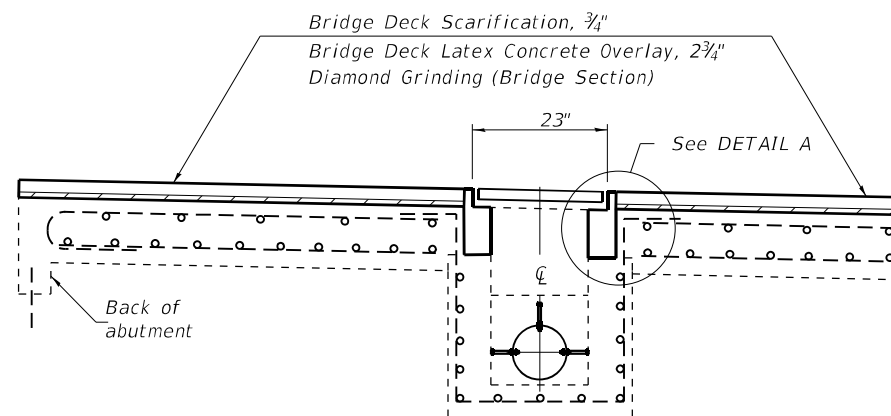
ITEM	UNIT	TOTAL
Concrete Removal	Cu Yd	0.17
Reinforcement Bars (Epoxy)	Pound	8.6
Class S.I. Concrete	Cu Yd	0.20
Expansion Bolts, 3/4"	Each	14.0

BILL OF MATERIALS

ITEM	UNIT	TOTAL
Inlet Boxes to be Adjusted (Special)	Each	4.0



**EXISTING TYPE C INLET BOX PROFILE
BRIDGE APPROACH SHOULDER PAVEMENT AND DRAIN**
(Existing Approach Slab Std. 2442, Drain Std. 2443)



**PROPOSED PROFILE
BRIDGE APPROACH SHOULDER PAVEMENT AND DRAIN**

MODEL: 2D Sheet H
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DEPARTMENT OF TRANSPORTATION**

**INLET BOX TO BE ADJUSTED
S.N. 092-0038**

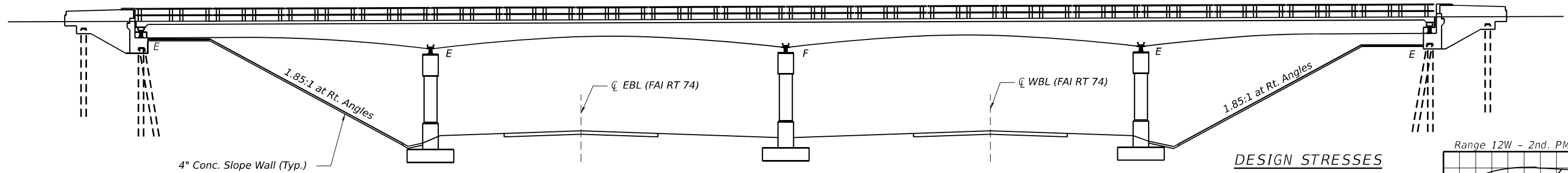
SHEET 26 OF 26 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	423
CONTRACT NO. 70A29				
ILLINOIS FED. AID PROJECT				

Structure 092-0126 was originally constructed under FAI 74, Section 92-11HB-1; Contract 20973. The structure is a 4 span continuous concrete tee beam structure with open stub abutments on concrete piles and multi column reinforced concrete piers on spread footings. In 1991 steel bridge rail was placed across the structure as FAI 74 Section 92(11RS, 11BR, 11VB-BR, 11VB-1-BR); Contract 90165.

The existing structure has a back to back of abutment length of 251'-9", an out to out width of 30'-4" and a roadway width of 24'-0". The structure has a 35°49'20" skew left forward.

Note:
See Sheet 2 of 21 for Proposed Work, Bill of Material, and General Notes.

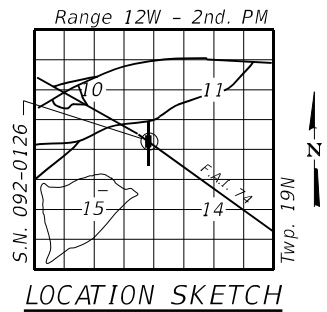


ELEVATION

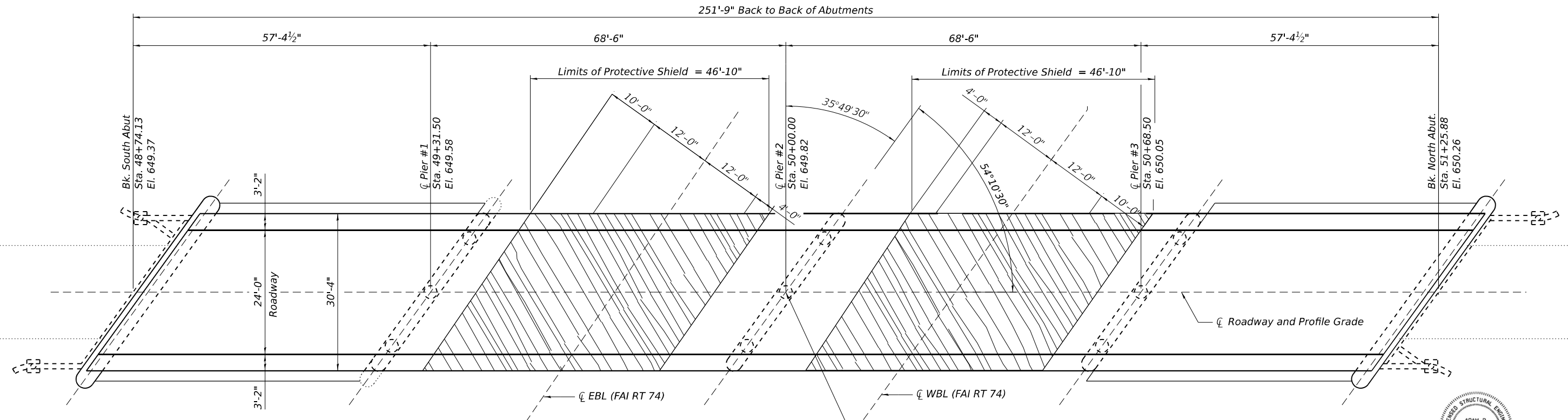
**DESIGN STRESSES
FIELD UNITS**

New Construction
 $f_c = 4,000$ psi
 $f_y = 60,000$ psi (Reinforcement)

Existing Structure
 $f_c = 1,400$ psi
 $f_s = 20,000$ psi (Reinforcement)
 $f_c = 18,000$ (Structural Steel)



LOCATION SKETCH



PLAN



Adam D. Bohnhoff 4-4-22
 Adam D. Bohnhoff Date
 Licensed Structural Engineer
 State of Illinois No. 081-007431
 Expires 11-30-2022

MODEL: 01 GPE
 FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0126\570A29_0126_Combined.dgn
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**GENERAL PLAN AND ELEVATION
 S.N. 092-0126**

SHEET 1 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	424
CONTRACT NO. 70A29			ILLINOIS FED. AID PROJECT	

INDEX OF SHEETS

1. General Plan & Elevation
2. General Data
3. Existing & Proposed Cross Sections
4. Stage Construction Details
5. Wearing Surface Details
6. Floor Drain & Patching Details
7. Floor Drain Details
8. Drainage Scupper, DS-11
9. Parapet Repair Plan
10. Substructure Plan - Concrete Removal Details
11. Superstructure Plan - Deck Reinforcement Details
12. Preformed Joint Strip Seal
13. Framing Plan
14. Beam 1 Repairs
15. Beam 2 Repairs
16. Beam 3 Repairs
17. Beam 4 Repairs
18. Substructure Repair Plan Sheet 1 of 2
19. Substructure Repair Plan Sheet 2 of 2
20. Slope Wall Repair
21. Bar Splicer Assembly & Mechanical Splicer Details

PROPOSED WORK

1. Bridge deck and approach slabs scarification.
2. Remove deck and curb end, and hatch block.
3. Remove existing bridge floor drains.
4. Repair bridge deck slab and install new floor drains and drainage scuppers.
5. Repair concrete superstructure beams.
6. Place latex concrete overlay on approach slabs and bridge deck.
7. Repair substructure and slopewall.
8. Install preformed joint strip seal.

GENERAL NOTES

Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make the necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of work. However, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

Reinforcement bars designated (E) shall be epoxy coated.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.

Protective Shield shall be required in accordance with Section 501. No drill and epoxy shall be allowed in the bottom 12" of the concrete beams to avoid tension reinforcement.

Synthetic fibers shall be included in the bridge deck concrete overlay specified. See Special Provisions.

The Contractor shall use extreme care during concrete removal so as not to damage the existing concrete beam.

TOTAL BILL OF MATERIAL

Item	Unit	Total
* Protective Coat	Sq. Yd.	798
Concrete Removal	Cu. Yd.	9.8
Protective Shield	Sq. Yd.	316
Floor Drains	Each	10
Concrete Superstructures	Cu. Yd.	9.8
Bridge Deck Grooving	Sq. Yd.	762
Drainage Scuppers, DS-11	Each	2
Reinforcement Bars, Epoxy Coated	Pound	805
Bar Splicers	Each	16
Preformed Joint Strip Seal	Foot	64
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.	762
Slope Wall Repair	Sq. Yd.	110
Acrylic Coating	Sq. Yd.	28.9
Bridge Deck Scarification 3/4"	Sq. Yd.	762
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	41
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	34
Epoxy Crack Injection	Foot	55
Fiber Wrap	Sq. Ft.	260
Structural Repair of Concrete (Depth Greater than 5")	Sq. Ft.	20
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.	225
Slope Wall Slurry Pumping	Cu. Yd.	53

* Protective Coat shall be applied to all new concrete superstructure and all new concrete overlays as specified in Article 503.19 of the Standard Specifications.

MODEL: 02 General Notes
FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0126\DS70A29_0126_Combined.dgn



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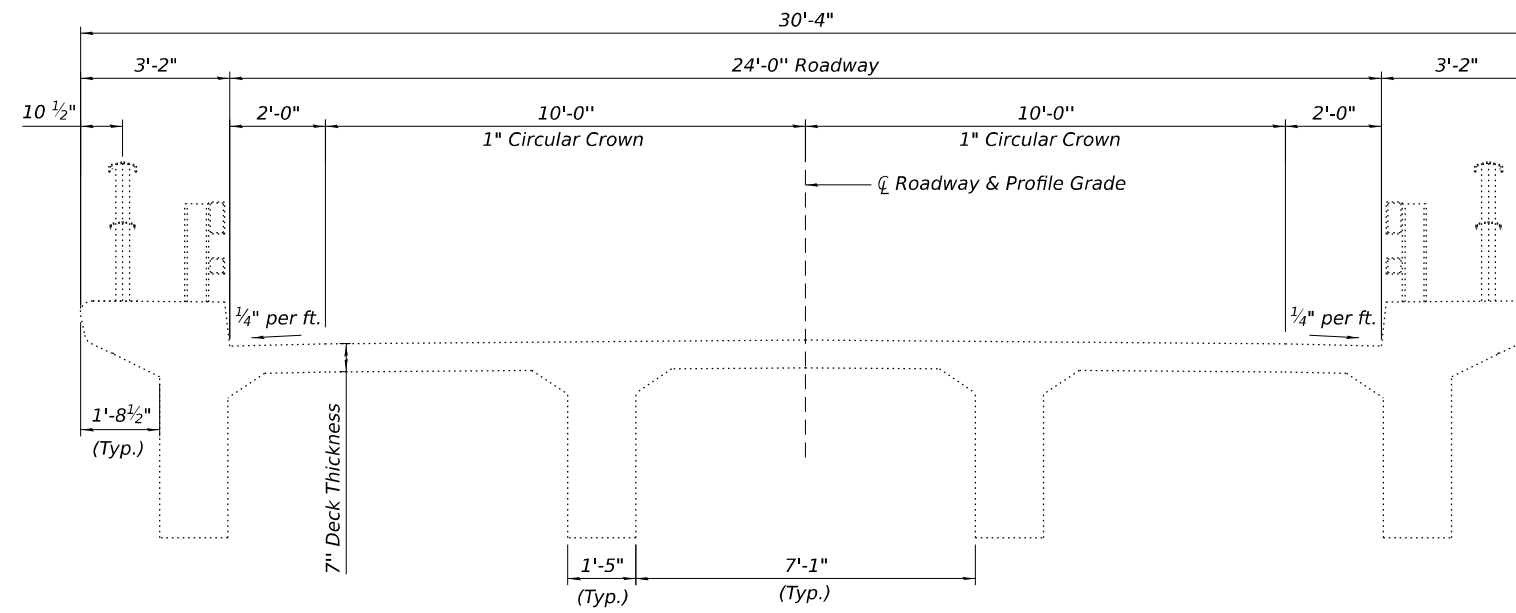
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
S.N. 092-0126

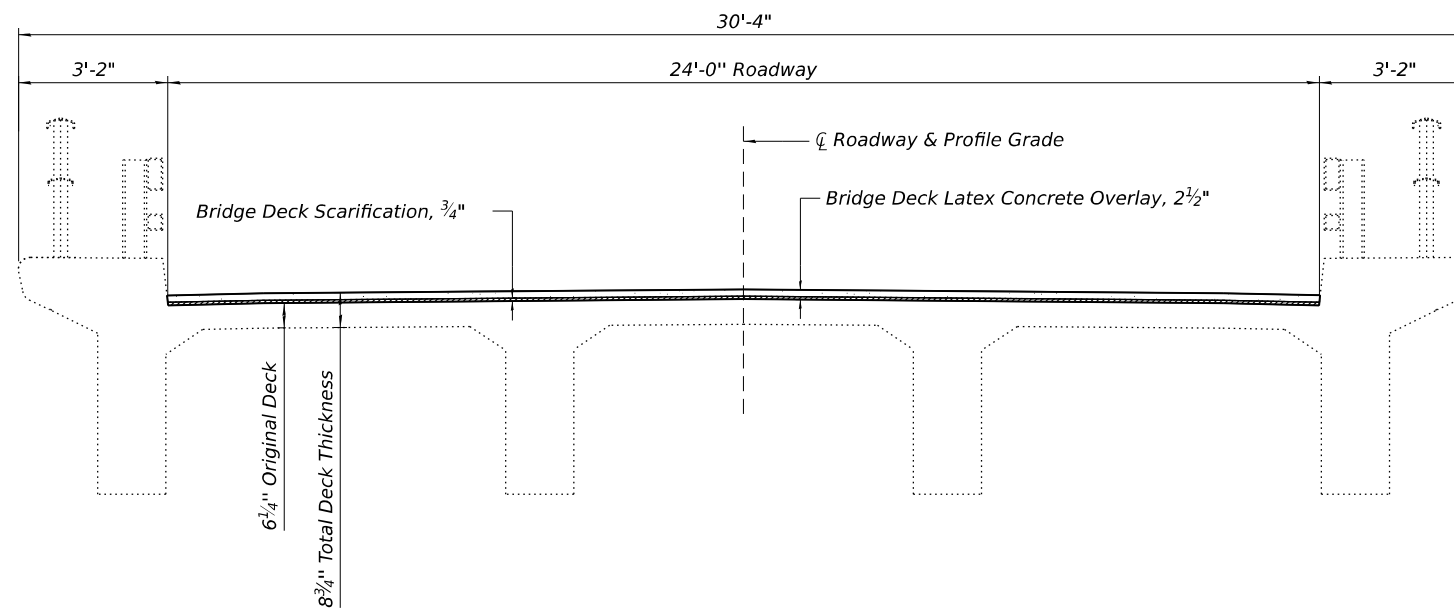
SHEET 2 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	425
			CONTRACT NO. 70A29	
		ILLINOIS FED. AID PROJECT		

EXISTING CROSS SECTION



PROPOSED CROSS SECTION



MODEL: 03 Cross Sections
FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0126\570A29_0126_Combined.dgn



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	CHECKED - TJZ	REVISED -
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PLOT DATE =	CHECKED - KAS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

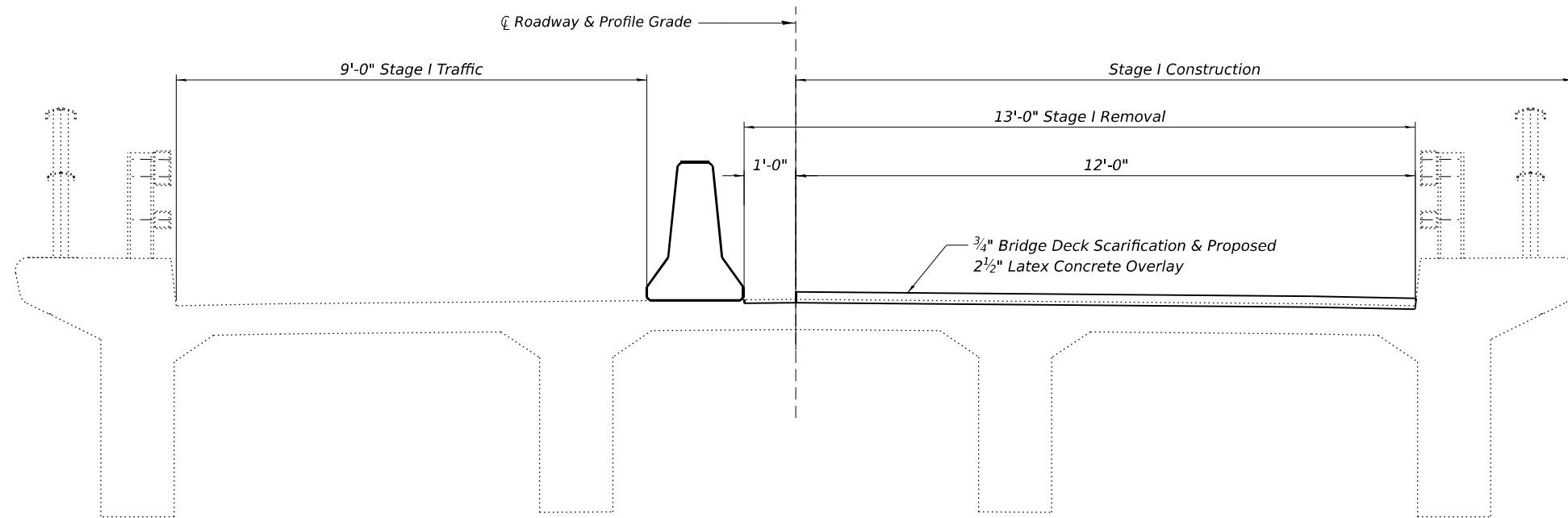
**EXISTING & PROPOSED CROSS SECTIONS
S.N. 092-0126**

SHEET 3 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11.12)R	VERMILION	698	426
CONTRACT NO. 70A29				
ILLINOIS FED. AID PROJECT				

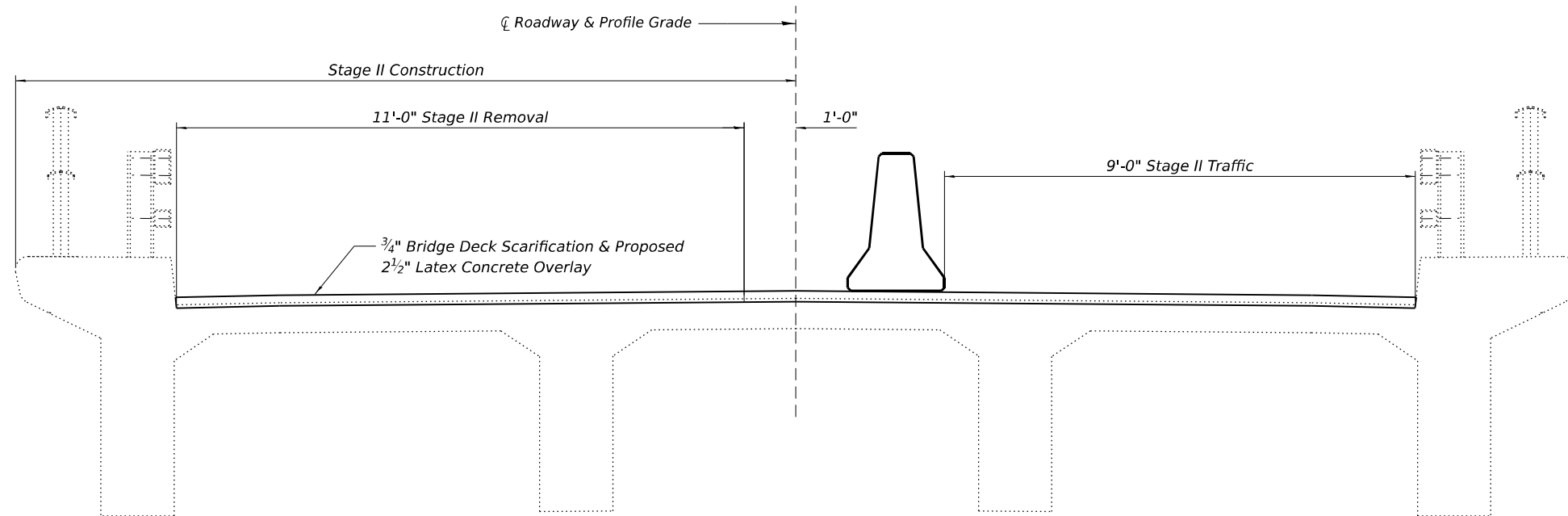
STAGE I CONSTRUCTION DETAILS

(Looking North)



STAGE II CONSTRUCTION DETAILS

(Looking North)



MODEL: 04 Stage Construction
FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0126\ID570A29_0126_Combined.dgn



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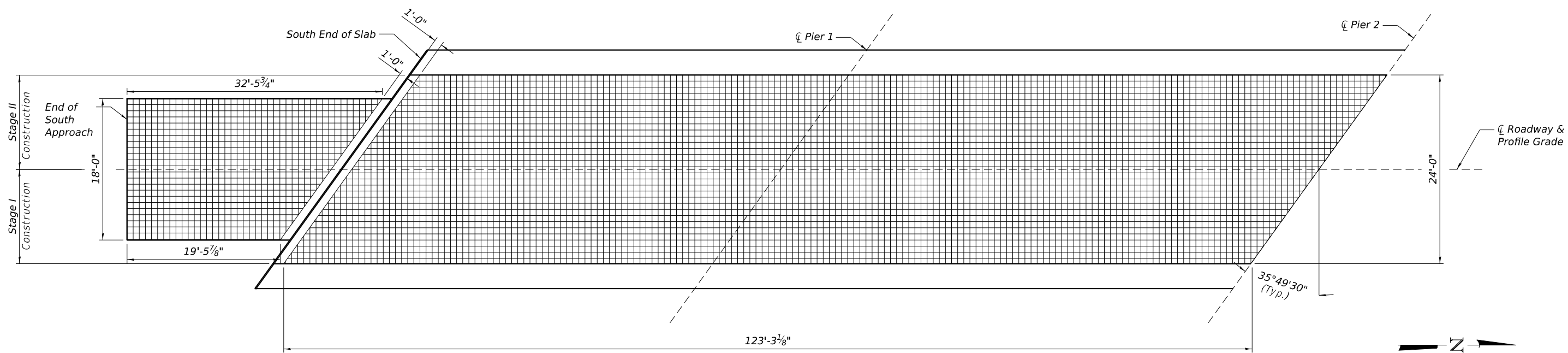
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

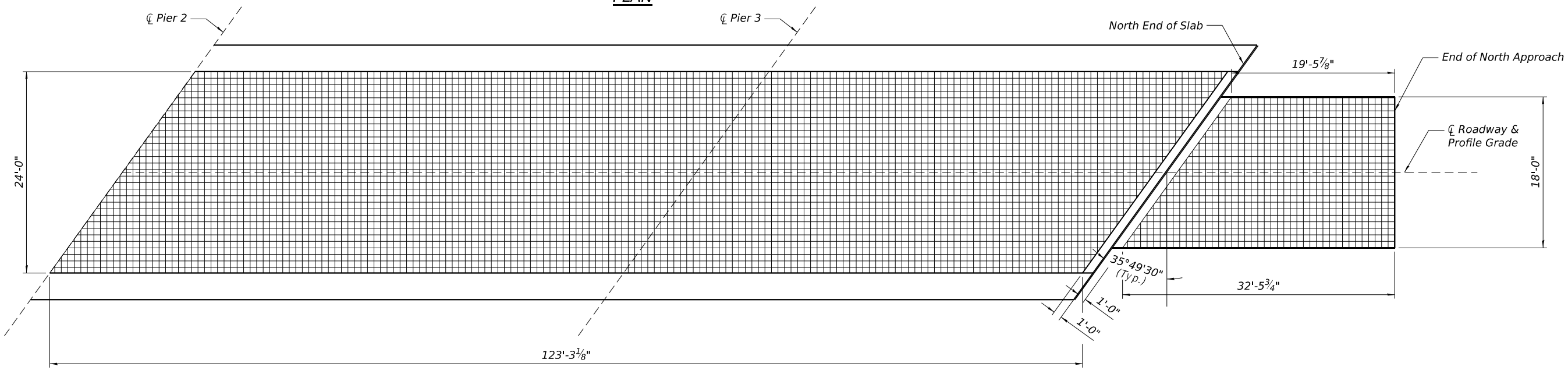
STAGE CONSTRUCTION DETAILS
S.N. 092-0126

SHEET 4 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	427
CONTRACT NO. 70A29				
ILLINOIS FED. AID PROJECT				



PLAN



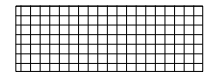
PLAN

NOTES:

The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the drainage scuppers and floor drains.

BILL OF MATERIAL

Item	Unit	Total
Bridge Deck Grooving	Sq. Yd.	762
Bridge Deck Scarification, 3/4"	Sq. Yd.	762
Bridge Deck Latex Concrete Overlay, 2 1/2"	Sq. Yd.	762



Bridge Deck Scarification, 3/4", Bridge Deck Latex Concrete Overlay, 2 1/2", & Bridge Deck Grooving

MODEL: 05 Wearing Surface
FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0126\570A29_0126_Combined.dgn



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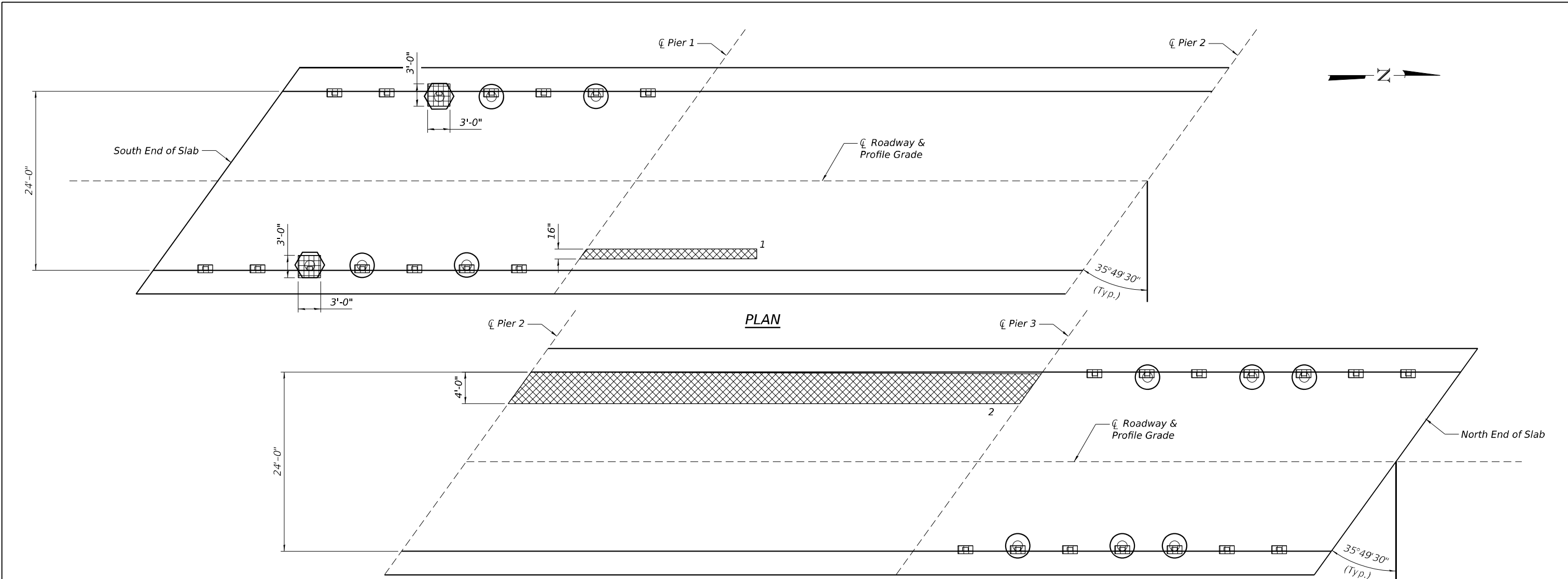
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WEARING SURFACE DETAILS
S.N. 092-0126

SHEET 5 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	428
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70A29	



PATCH NO.	SIZE	Deck Slab Repair (Full Depth)	
		Type I) Sq. Ft.	Type II) Sq. Ft.
1	16" x 20'-0"		27
2	4'-0" x 68'-6"		274
Repair at Drain, 28 ea.		74.3	

PATCH NO.	SIZE	Deck Slab Repair (Full Depth)	
		Type I) Sq. Ft.	Type II) Sq. Ft.

PATCH NO.	SIZE	Deck Slab Repair (Full Depth)	
		Type I) Sq. Ft.	Type II) Sq. Ft.

PATCH NO.	SIZE	Deck Slab Repair (Full Depth)	
		Type I) Sq. Ft.	Type II) Sq. Ft.

LEGEND

- Proposed Drainage Scupper Location
- Proposed Floor Drain Location
- Deck Slab Repair (Full Depth, Type II)
- Deck Slab Repair (Full Depth, Type I) at all Drain Locations
All repair areas 2'-0" x 1'-1" unless otherwise noted.

NOTES:

Patch sizes shown represent conditions at the time the plans were completed. Quantity for Deck Slab Repair (Full Depth, Type I) includes the above areas and 5% of the deck area as an allowance for increase in deterioration.

The actual sizes and locations of patching shall be determined by the engineer. The Engineer Shall show the actual locations of the deck repairs on this sheet.

The existing 28 drains and extensions shall be removed. Cost included with "Deck Slab Repair (Full Depth, Type I)".

BILL OF MATERIAL

Item	Unit	Total
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	41
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	34

MODEL: 06 Deck Patching
FILE NAME: P:\E\ng\ham\40688 - IDOT PTB 193-26 D5 1-74 at Danville\CADD\SN 092-0126\D570A29_0126_Combined.dgn

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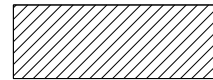
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

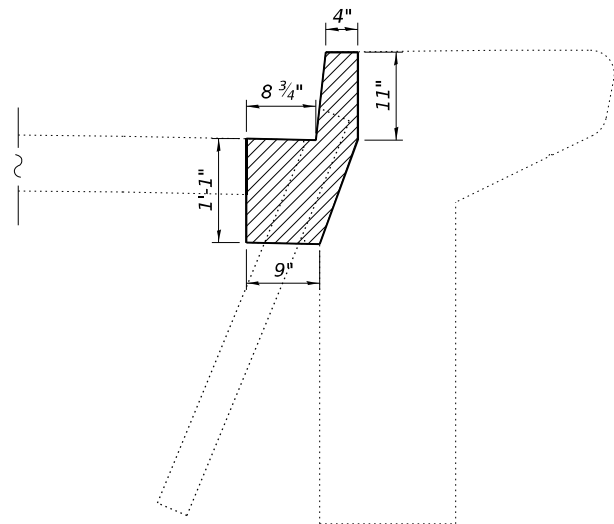
FLOOR DRAIN AND PATCHING DETAILS
S.N. 092-0126

SHEET 6 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	429
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70A29	

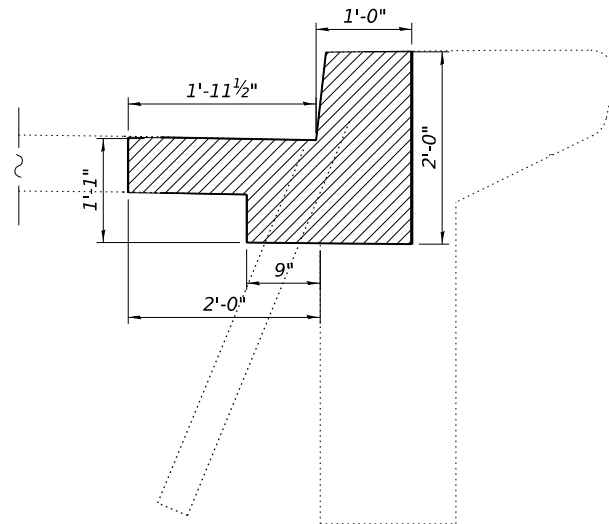


Removal Limits for Deck Slab Repair (Full-Depth, Type I) at Drain Locations



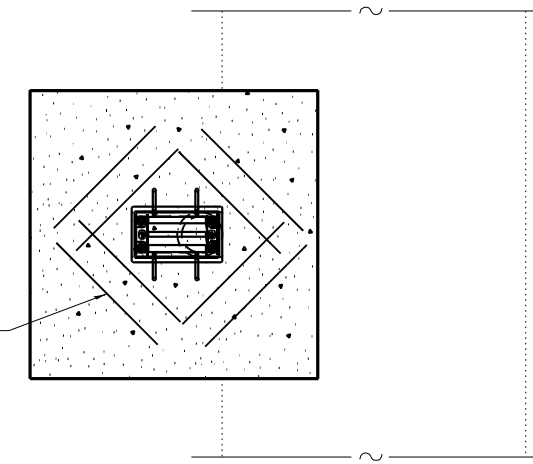
TYPICAL REMOVAL LIMITS AT NEW FLOOR DRAIN

(Bridge rail not shown for clarity)



TYPICAL REMOVAL LIMITS AT NEW DRAINAGE SCUPPER

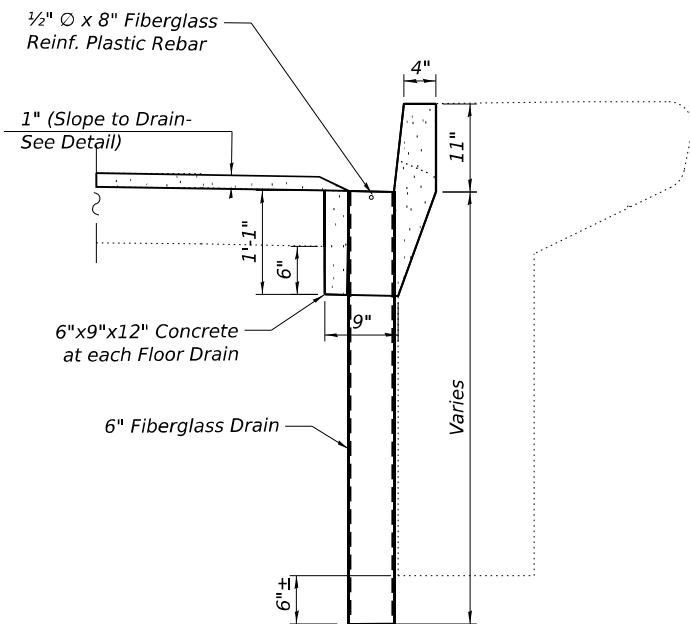
(Bridge rail not shown for clarity)



2-#5 a(E) bars @ 4" cts.
(1'-6" long) tied to bottom of top reinforcement mat (Typ.)

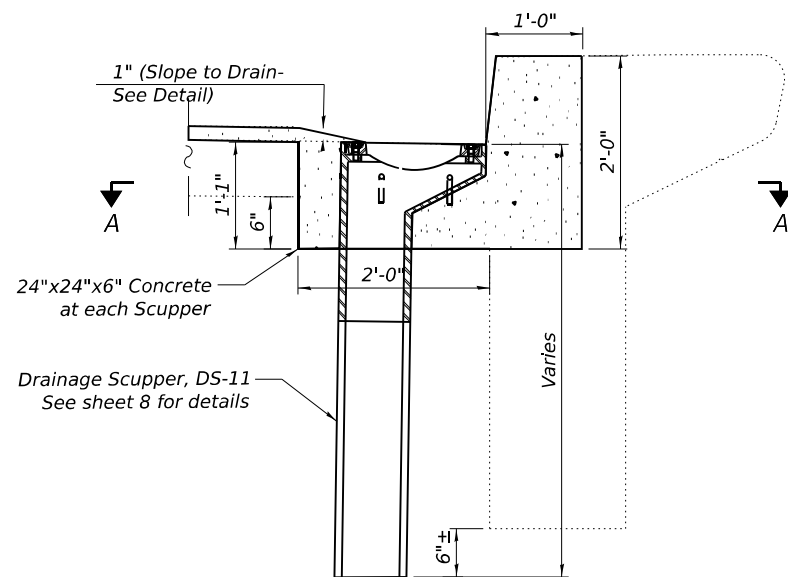
SECTION A-A

Note:
Cut longitudinal reinforcement to clear drainage scuppers.



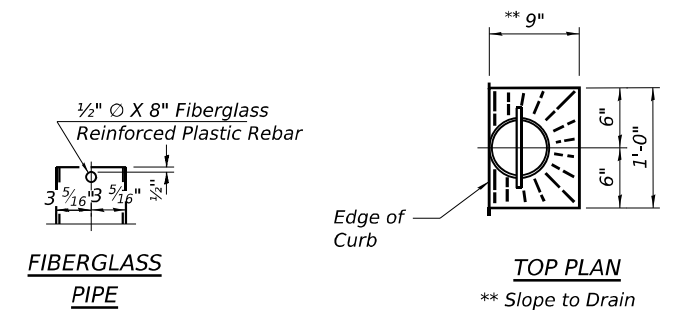
PARAPET SECTION AT NEW FLOOR DRAIN

(Bridge rail not shown for clarity)



PARAPET SECTION AT NEW DRAINAGE SCUPPER

(Bridge rail not shown for clarity)



Notes:
All dimensions shall be field verified by the contractor prior to ordering of materials.

BILL OF MATERIAL

Item	Unit	Total
Floor Drains	Each	10
Reinforcement Bars, Epoxy Coated	Pound	25

Cost of removal of existing drains and extensions is included in Deck Slab Repair (Full Depth, Type I)

MODEL: 07 Deck Drain Details
FILE NAME: P:\E\ng\ham\4068 - IDOT PTB_193-26 D5 1-74 at Danville\CAD\SN 092-0126\570A29_0126_Combined.dgn

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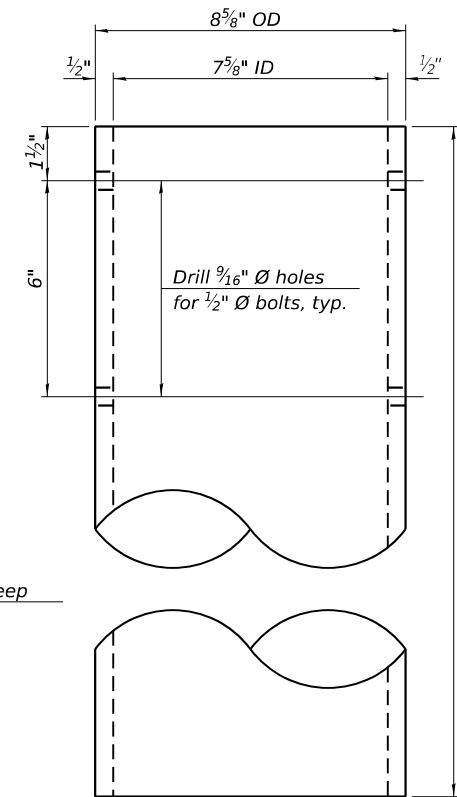
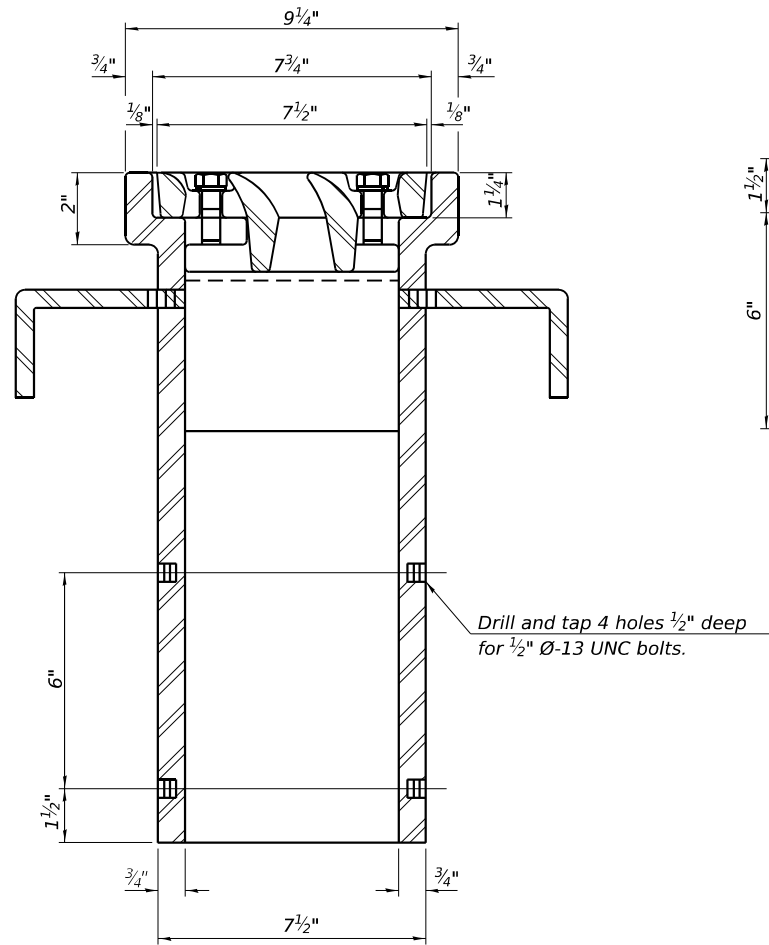
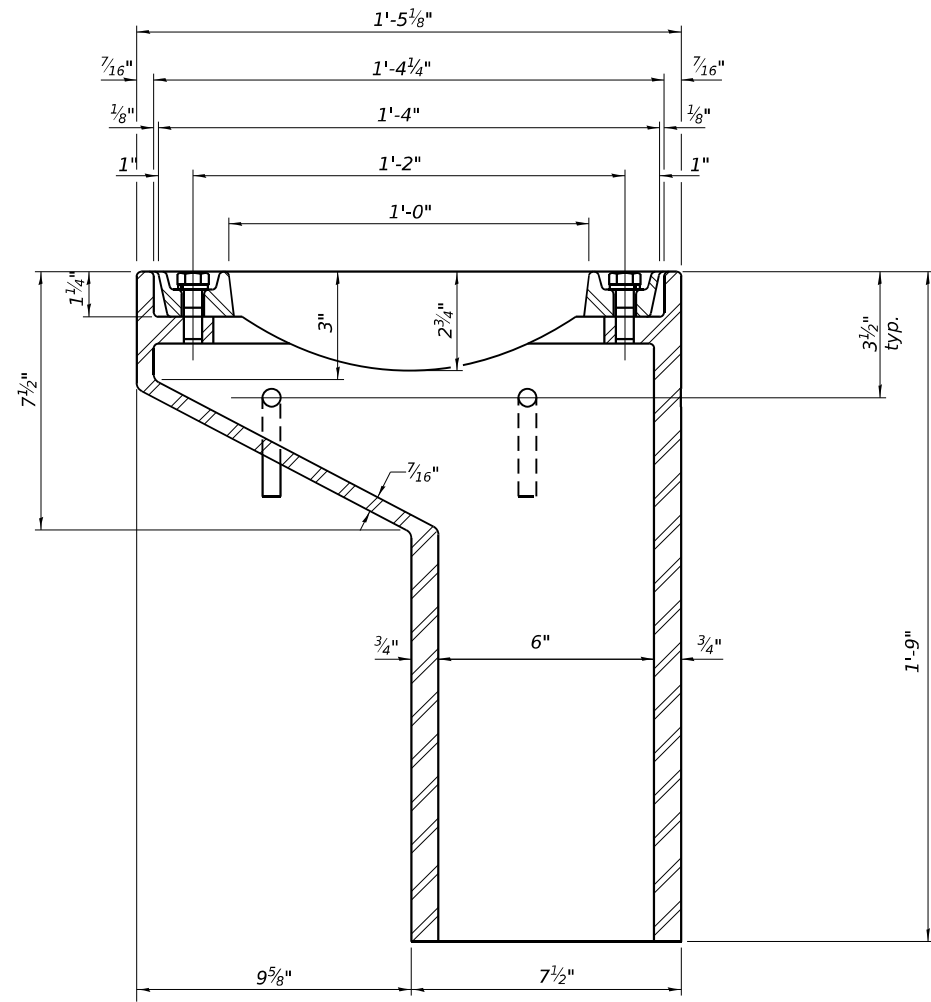
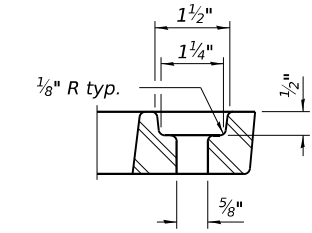
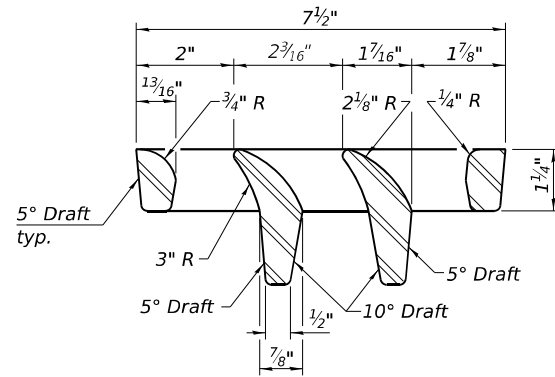
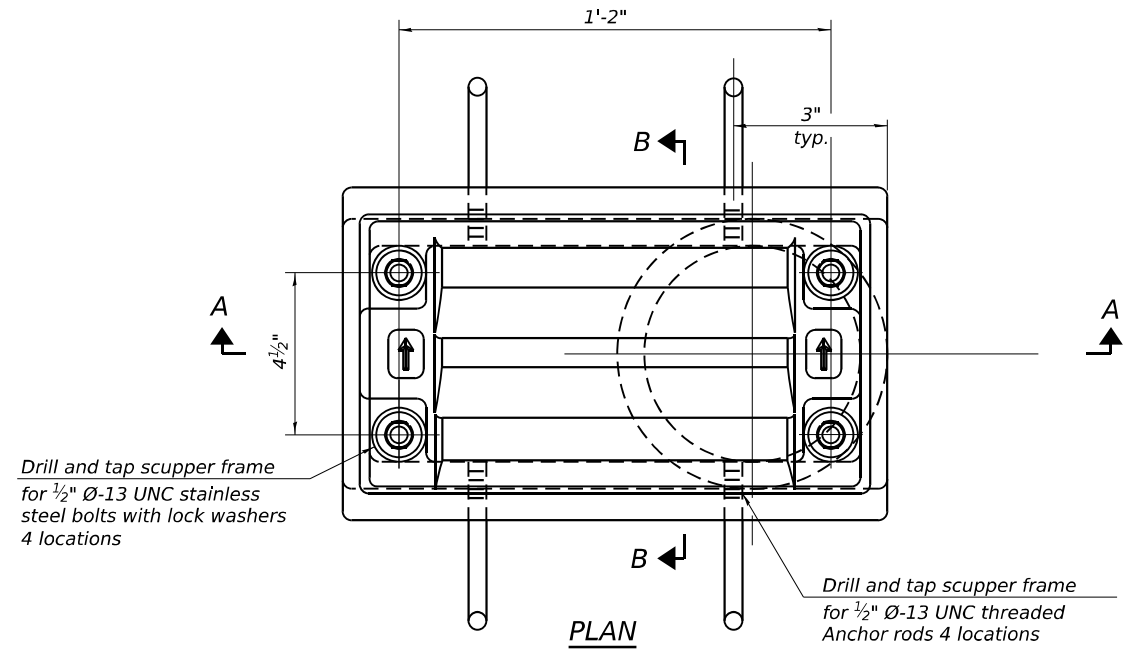
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PLOT DATE =	CHECKED - KAS	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**FLOOR DRAIN DETAILS
S.N. 092-0126**

SHEET 7 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	430
CONTRACT NO. 70A29			ILLINOIS FED. AID PROJECT	



Notes:
 All cast iron parts shall be gray iron conforming to the requirements of AASHTO M105, Class 35B and AASHTO M306.
 Bolts, anchor rods, nuts and washers shall be according to ASTM A307 and shall be galvanized according to AASHTO M232. As an alternate stainless steel may be used.
 Stainless steel hardware shall be according to Article 1006.29(d) of the Standard Specifications.
 Structural steel weldments of equal sections and of the same configuration may be substituted for the cast iron scupper frames and downspouts; however, the scupper grates shall remain cast iron. Fillet or full penetration welds shall be used for the weldments. Details shall be submitted to the Engineer for approval.
 Structural steel scupper frames and downspouts, when utilized, shall be galvanized according to AASHTO M111.
 As an alternate, fiberglass may be used for downspouts according to ASTM D2996 with a short-time rupture strength hoop tensile stress of 30,000 psi min. in lieu of the cast iron or structural steel.
 Exterior surfaces of downspouts and exterior exposed surfaces of the scupper frame below deck shall be treated as specified on sheet of .
 The Contractor shall take appropriate measures to assure that Protective Coat is not applied to the scupper.
 Cost of the grate, frame, downspout, anchor rods, nuts and washers including complete installation of the scupper shall be paid for at the contract unit price for Drainage Scupper, DS-11.

SECTION A-A
 See sheet of DS-11 scupper location relative to parapet.

SECTION B-B

DOWNSPOUT

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Drainage Scupper, DS-11	Each	2

DS-11

1-1-2020

MODEL: 08 Drainage Scupper
 FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0126\DS70A29_0126_Combined.dgn

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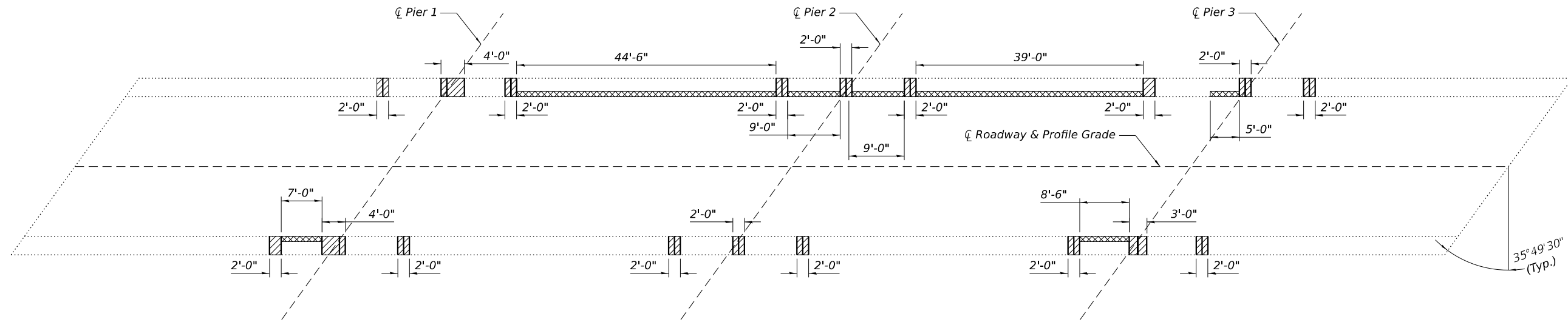
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DEPARTMENT OF TRANSPORTATION

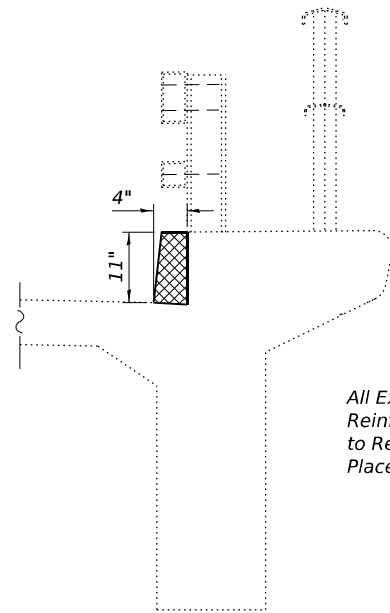
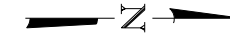
DRAINAGE SCUPPER, DS-11
S.N. 092-0126

SHEET 8 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11.12)R	VERMILION	698	431
			CONTRACT NO. 70A29	
ILLINOIS FED. AID PROJECT				



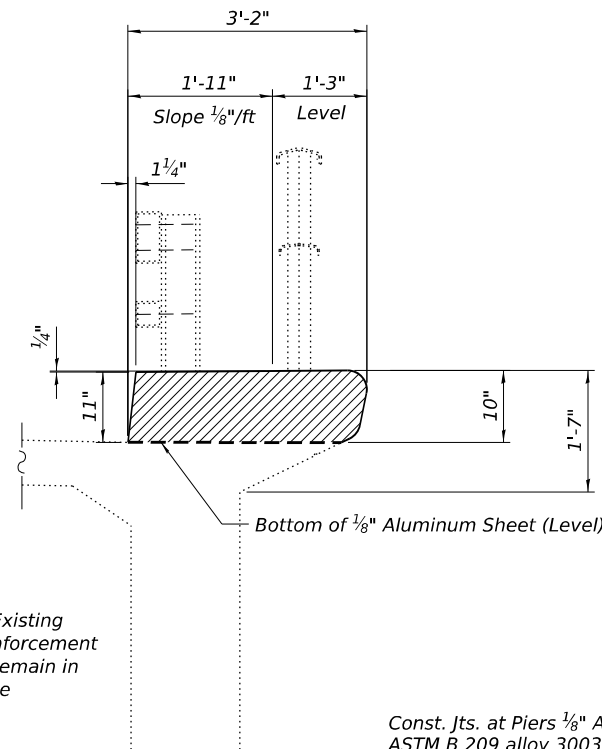
PLAN



All Existing Reinforcement to Remain in Place

SECTION AT CURB

Showing Typical Removal Limits for Structural Repair of Concrete on Curb



All Existing Reinforcement to Remain in Place

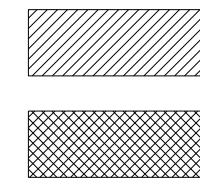
SECTION AT PARAPET

Const. Jts. at Piers 1/8" Aluminum sheet ASTM B 209 alloy 3003-H14, coated to minimize reaction with wet concrete. Cost to be included with Concrete Superstructure.

NOTES:

The Rail Posts within the parapet removal and replacement limits shall be removed to allow for the repair work to be completed. Following completion of the parapet ends, the Rail Posts shall be re-attached. It is the option of the contractor to either save and reuse the existing cast-in-place anchor system or use epoxy-grouted threaded rods. The cost of this work shall be included in Concrete Superstructure. See As-Built Plans for railing detail.

Areas of Concrete Removal and Superstructure were identified September 15, 2020. The engineer shall determine if additional areas require removal and replacement at time of construction.



Concrete Removal & Concrete Superstructure

Structural Repair of Concrete, Depth < 5"

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	4.4
Concrete Superstructures	Cu. Yd.	4.4
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.	112

MODEL: 09 Parapet Repair Plan
FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0126\570A29_0126_Combined.dgn



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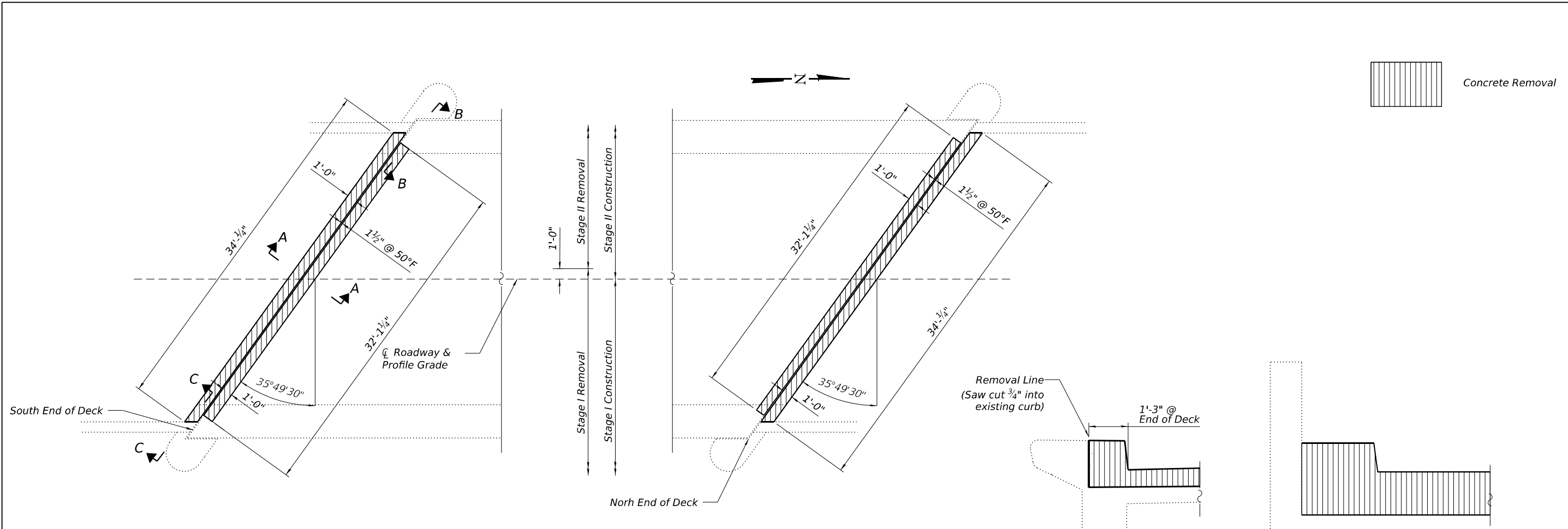
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PARAPET REPAIR PLAN
S.N. 092-0126

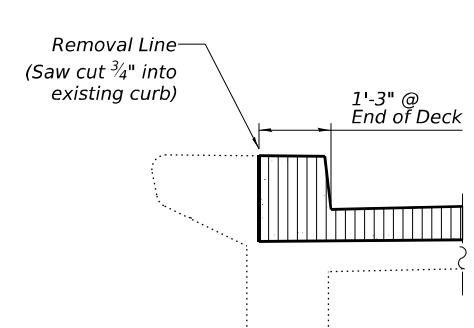
SHEET 9 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70A29			ILLINOIS FED. AID PROJECT	

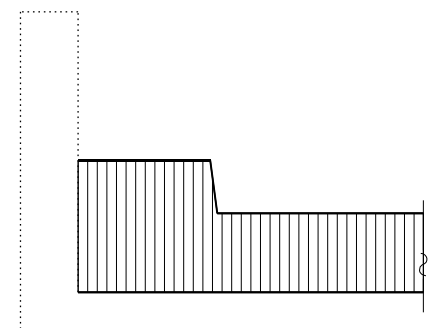
MODEL: 10 Concrete Removal Details
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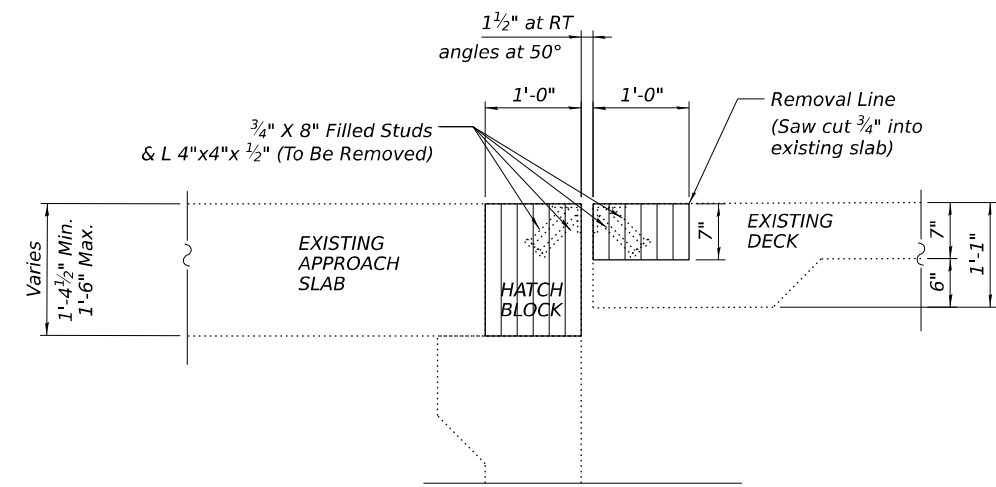
PLAN



SECTION B-B



SECTION C-C



SECTION A-A

NOTES

- The work, material, and equipment involved in saw cutting shall be considered included in Concrete Removal.
- Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the New Construction. Any reinforcement bars that are damaged during Concrete Removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- The existing expansion joint system shall be removed completely, as well as any foreign material that has accumulated or been placed in the joint openings. The cost for this work is included in Concrete Removal and no additional compensation will be allowed.
- The rail posts within the removal limits shall be removed to allow for the repair work to be completed. Following completion of the slab ends, the rail posts shall be re-attached. It is the option of the contractor to either save and reuse the existing cast-in-place anchor system or use epoxy-grouted threaded rods.

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	5.4

Note:
 All Existing Reinforcement
 to Remain in Place



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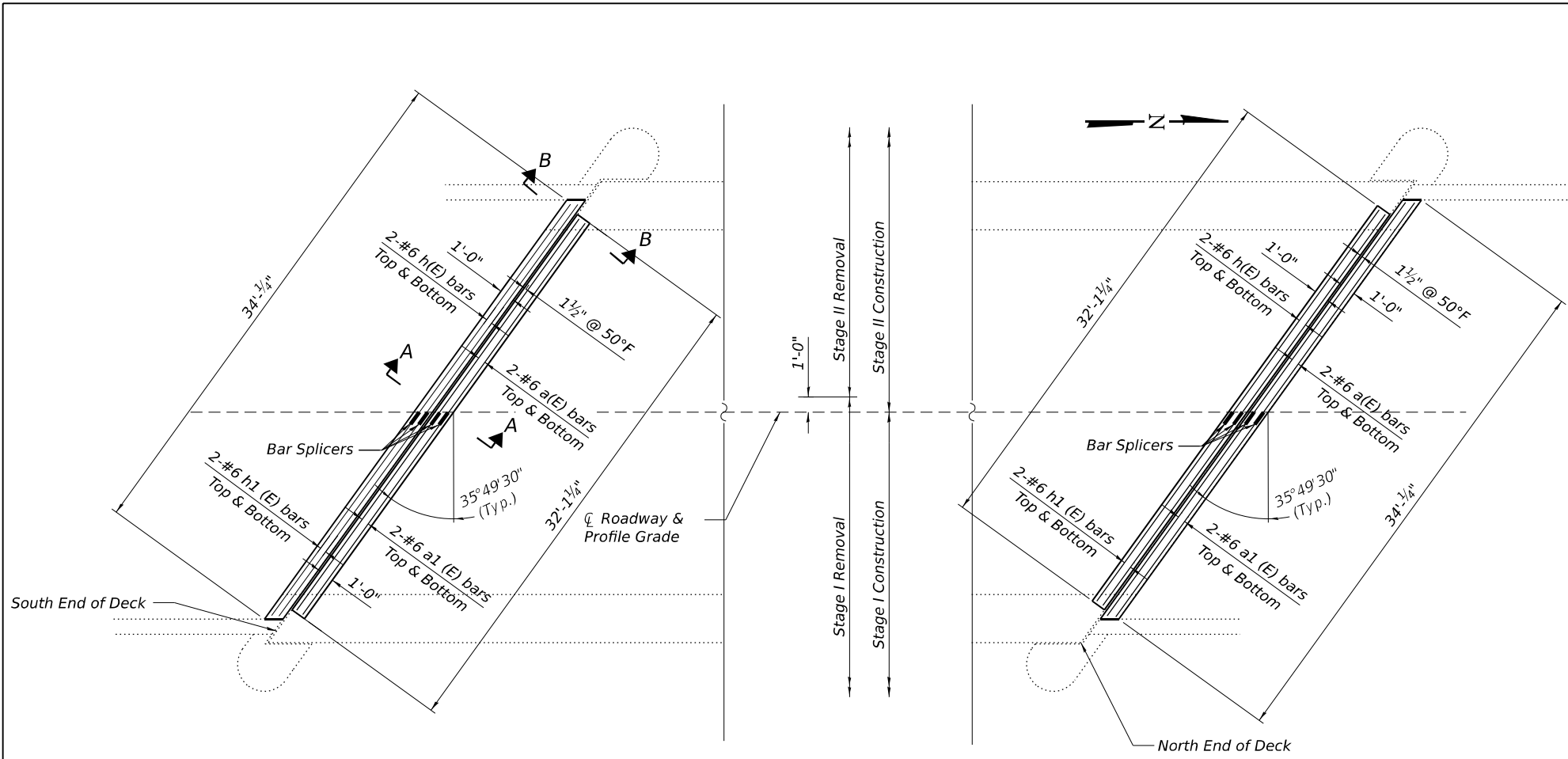
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 DEPARTMENT OF TRANSPORTATION

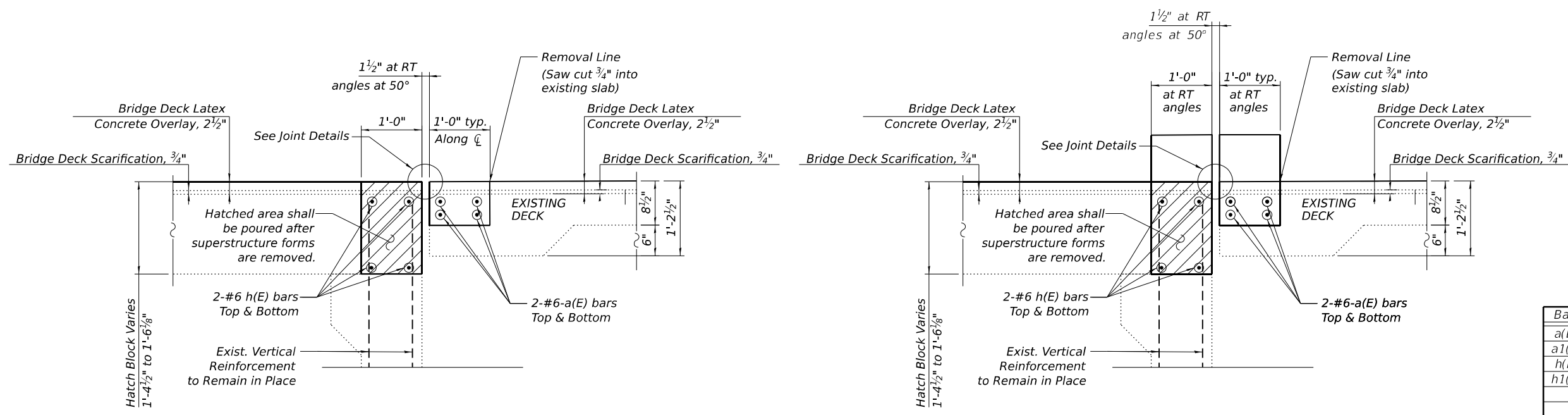
SUPERSTRUCTURE PLAN - CONCRETE REMOVAL DETAILS
 S.N. 092-0126

SHEET 10 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	433
			CONTRACT NO. 70A29	
		ILLINOIS FED. AID PROJECT		



PLAN



SECTION A-A

SECTION B-B

BILL OF MATERIAL

Bar	No.	Size	Length	Shape	
a(E)	8	#6	15'-2"	—	
a1(E)	8	#6	16'-2"	—	
h(E)	8	#6	16'-9"	—	
h1(E)	8	#6	16'-4"	—	
Reinforcement Bars, Epoxy Coated				Pound	780
Concrete Superstructure				Cu. Yd.	5.4

MODEL: 11 Deck Reinforcement
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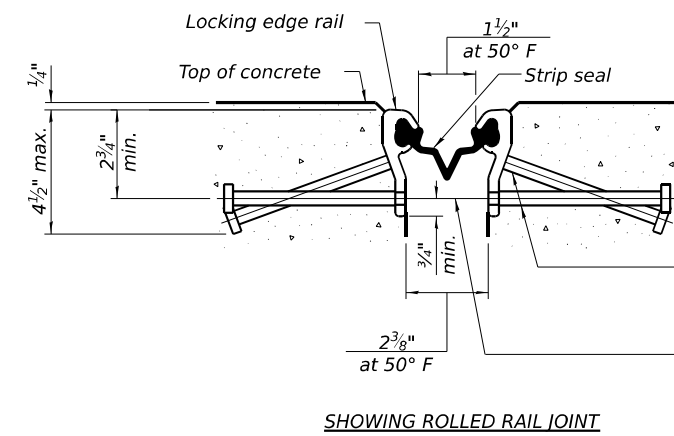
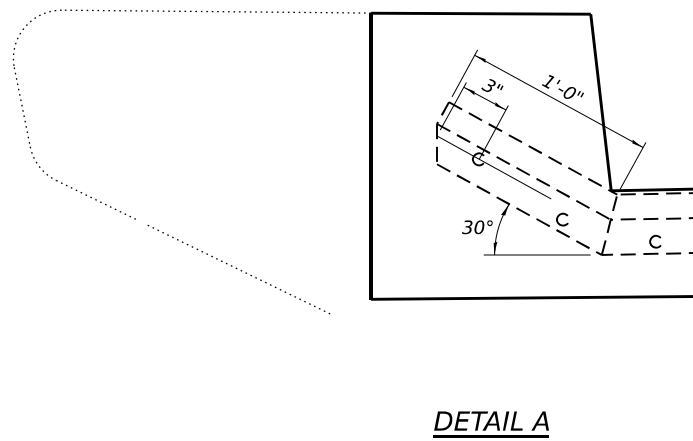
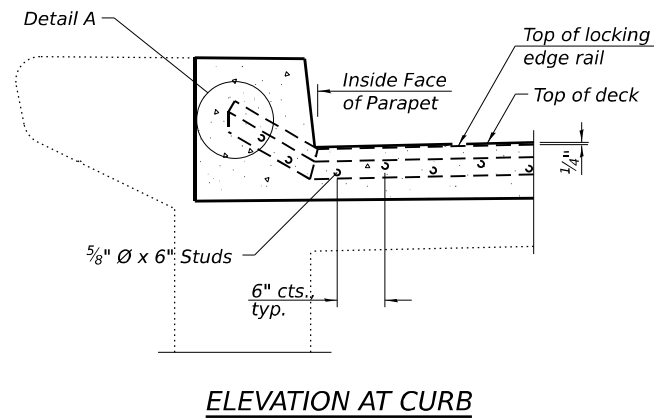
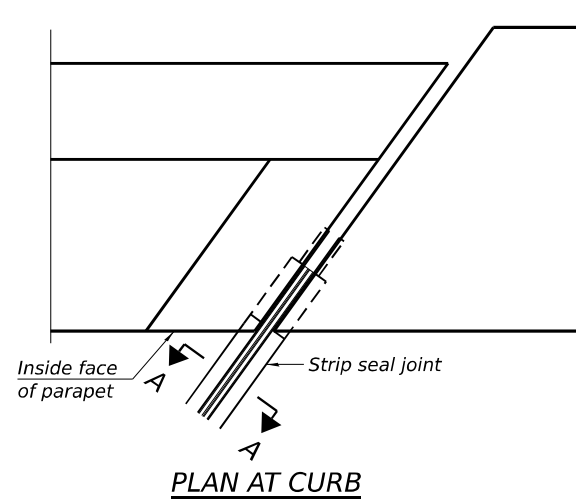
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PLOT DATE =	DRAWN - DCS	REVISED -
	CHECKED - KAS	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE PLAN - DECK REINFORCEMENT DETAILS
S.N. 092-0126

SHEET 11 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	434
			CONTRACT NO. 70A29	
ILLINOIS FED. AID PROJECT				

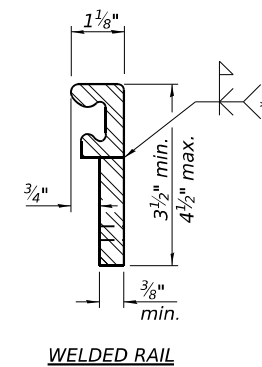
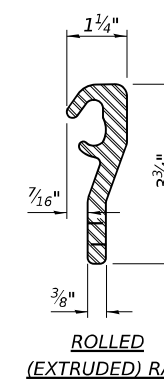
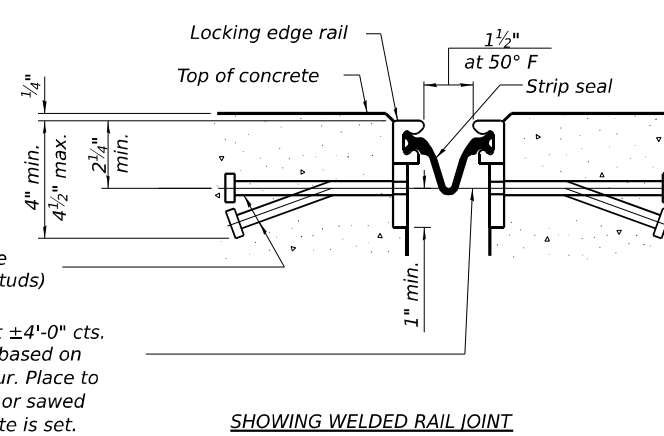


* 5/8" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

3/8" Ø threaded rods in 7/16" φ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

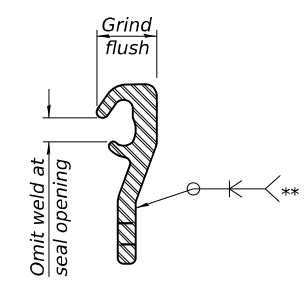
SECTION A-A

* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



LOCKING EDGE RAILS

** Back gouge not required if complete joint penetration is verified by mock-up.



LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue. Rolled rail shown, welded rail similar.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	64

Notes:
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.
 The manufacturer's recommended installation methods shall be followed.
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.
 The Maximum space between locking edge rail segments shall be 3/16" and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.
 Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal. 34" F-shape barrier shown, 42" F-shape similar as noted.
 The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.

MODEL: 13 Strip Seal
 FILE NAME: P:\E\ng\ham\40688 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0126\ID570A29_0126_Combined.dgn
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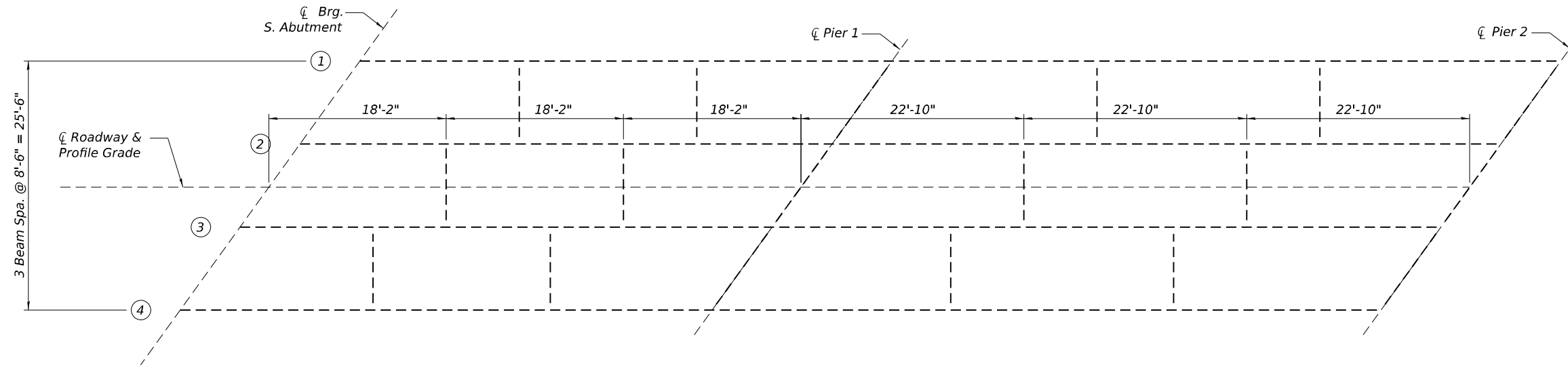
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PREFORMED JOINT STRIP SEAL
 S.N. 092-0126

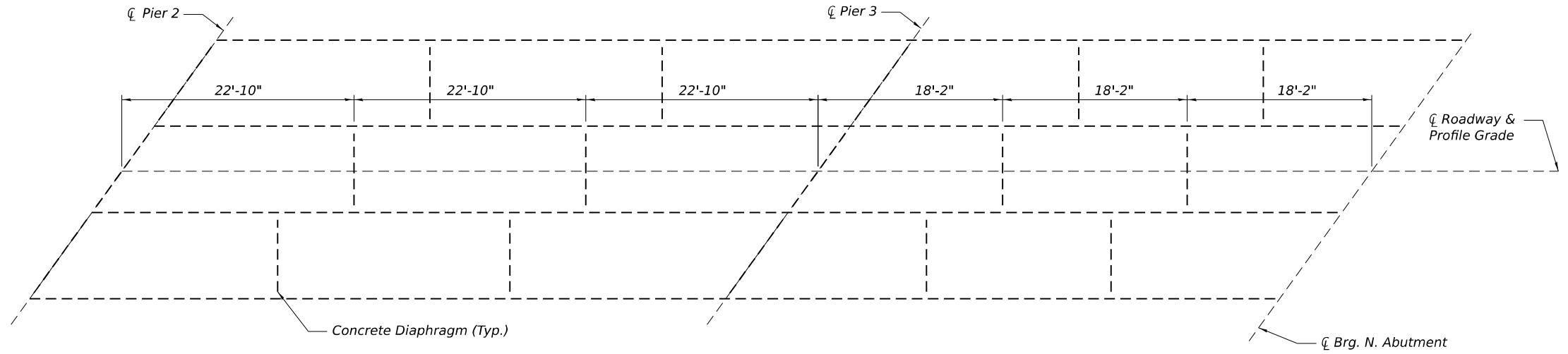
SHEET 12 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	435

CONTRACT NO. 70A29
 ILLINOIS FED. AID PROJECT



FRAMING PLAN SPAN 1 & 2



FRAMING PLAN SPAN 3 & 4

MODEL: 14 Framing Plan
 FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0126\ID570A29_0126_Combined.dgn



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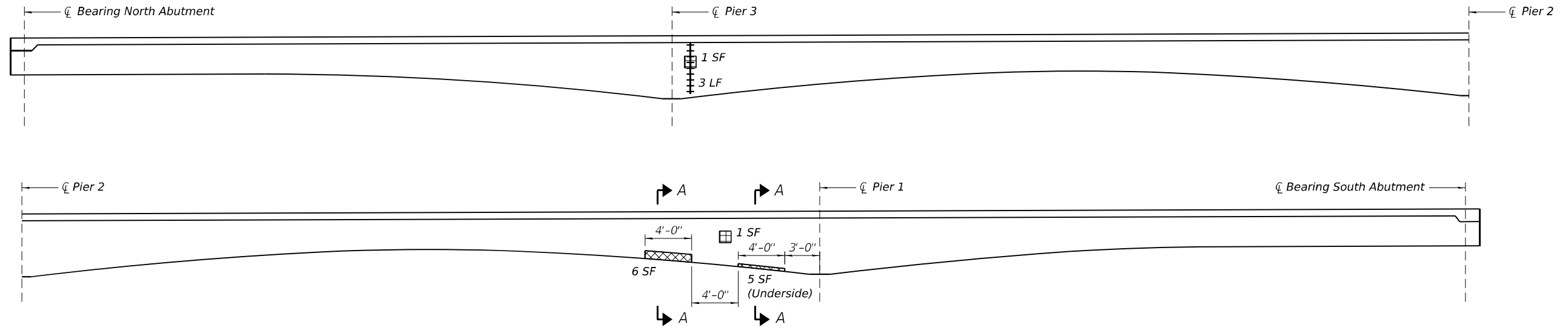
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

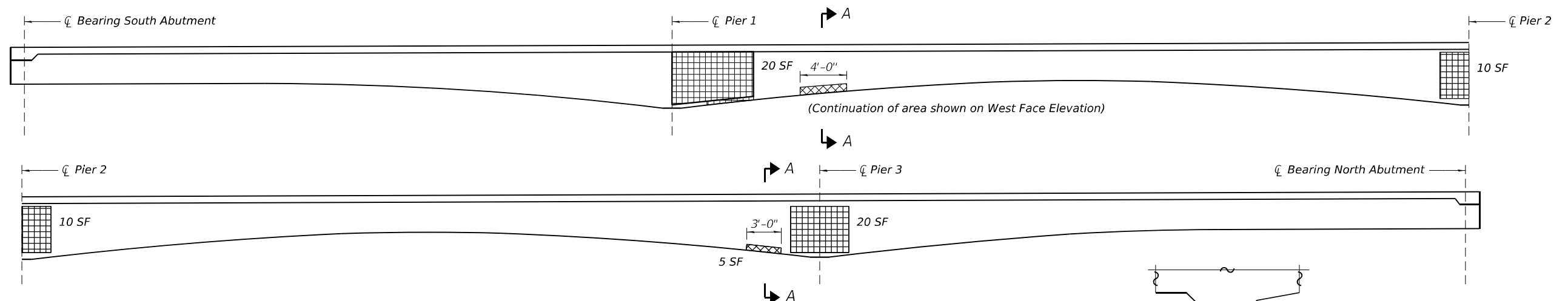
FRAMING PLAN
S.N. 092-0126

SHEET 13 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	436
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70A29	



BEAM 1 LOOKING EAST AT WEST FACE OF BEAM

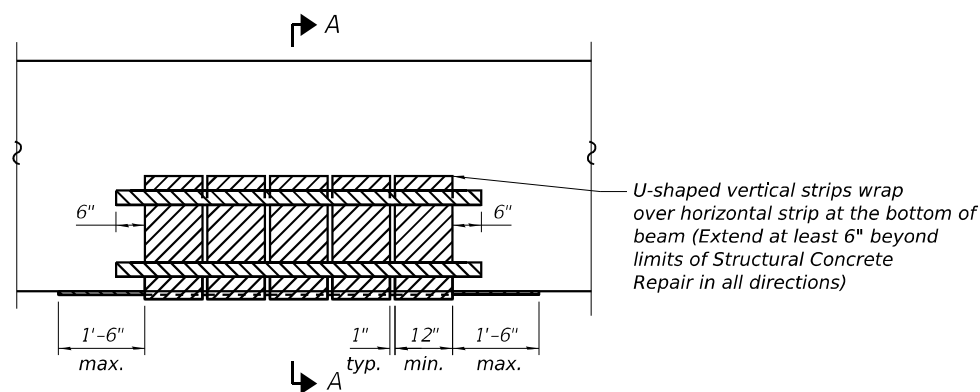


BEAM 1 LOOKING WEST AT EAST FACE OF BEAM

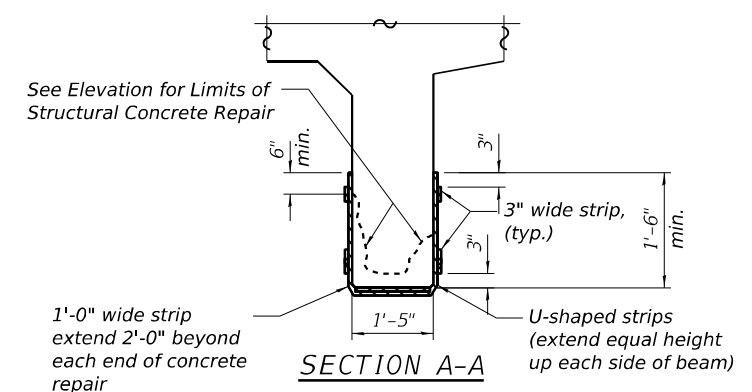
- Structural Repair of Concrete, (Depth Greater than 5"), Fiber Wrap & Acrylic Coating
- Structural Repair of Concrete, (Depth Equal to or Less than 5"), Fiber Wrap & Acrylic Coating*
- Epoxy Crack Injection

* Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

Notes:
 Beam repair areas shown are estimated from inspection notes on September 14, 2020. Actual locations and quantities of completed repairs shall be shown by the Engineer on as-built plans.
 Apply FRP Strengthening reinforcement to all portions of concrete beams being repaired after the concrete repairs are completed.
 The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions for "FRP Strengthening".
 Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied.
 Fiber Wrap and Acrylic Coating need not extend beyond face of abutment or pier diaphragms.
 3-inch strips shall be installed parallel to the bottom curvature of the beams. Wrap 6" onto interior diaphragms within the span.
 Color of Acrylic Coating shall be chosed to best match the appearance of the existing concrete.



UNDERSIDE DAMAGE REPAIR WITH FRP



BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete, (Depth Equal to or Less than 5")	Sq. Ft.	62
Structural Repair of Concrete, (Depth Greater than 5")	Sq. Ft.	16
Epoxy Crack Injection	Foot	3
Fiber Wrap	Sq. Ft.	149
Acrylic Coating	Sq. Yd.	16.5

MODEL: 15 Beam 1 Repairs
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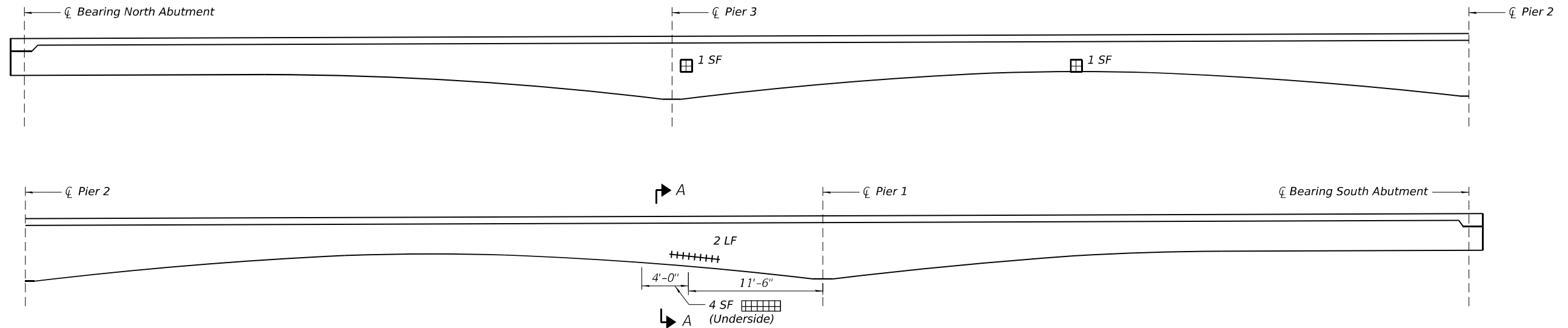
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

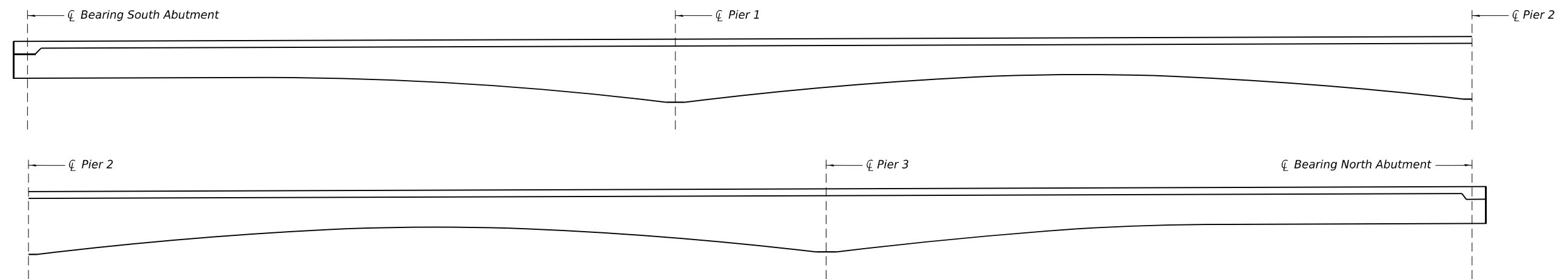
BEAM 1 REPAIRS
 S.N. 092-0126

SHEET 14 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	437
			CONTRACT NO. 70A29	
ILLINOIS FED. AID PROJECT				



BEAM 2 LOOKING EAST AT WEST FACE OF BEAM



BEAM 2 LOOKING WEST AT EAST FACE OF BEAM

Structural Repair of Concrete, (Depth Equal to or Less than 5"), Fiber Wrap & Acrylic Coating*

Epoxy Crack Injection

*Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

Notes:

Beam repair areas shown are estimated from inspection notes on September 14, 2020. Actual locations and quantities of completed repairs shall be shown by the Engineer on as-built plans.

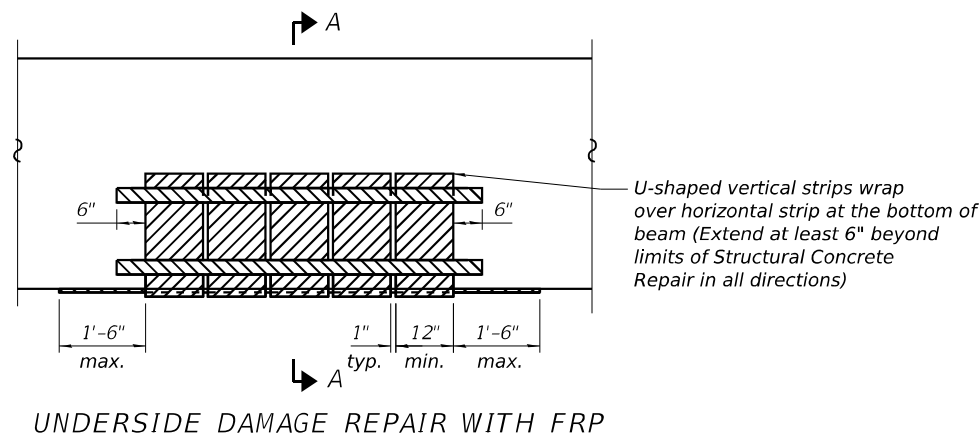
Apply FRP Strengthening reinforcement to all portions of concrete beams being repaired after the concrete repairs are completed.

The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions for "FRP Strengthening".

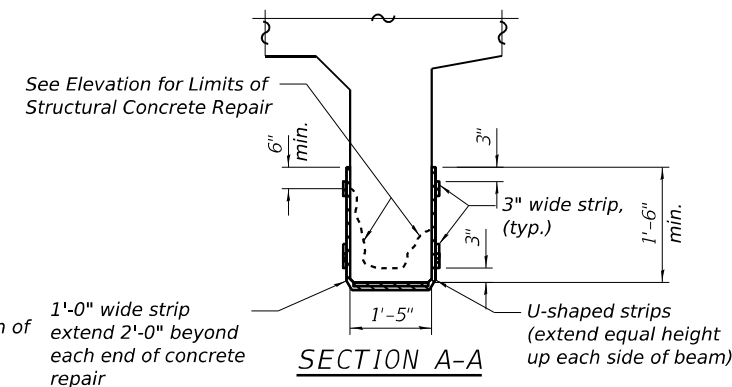
Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied. Fiber Wrap and Acrylic Coating need not extend beyond face of abutment or pier diaphragms.

3-inch strips shall be installed parallel to the bottom curvature of the beams. Wrap 6" onto interior diaphragms within the span.

Color of Acrylic Coating shall be chosen to best match the appearance of the existing concrete.



UNDERSIDE DAMAGE REPAIR WITH FRP



BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete, (Depth Equal to or Less than 5")	Sq. Ft.	6
Epoxy Crack Injection	Foot	2
Fiber Wrap	Sq. Ft.	25
Acrylic Coating	Sq. Yd.	2.8

MODEL: 16 Beam 2 Repairs
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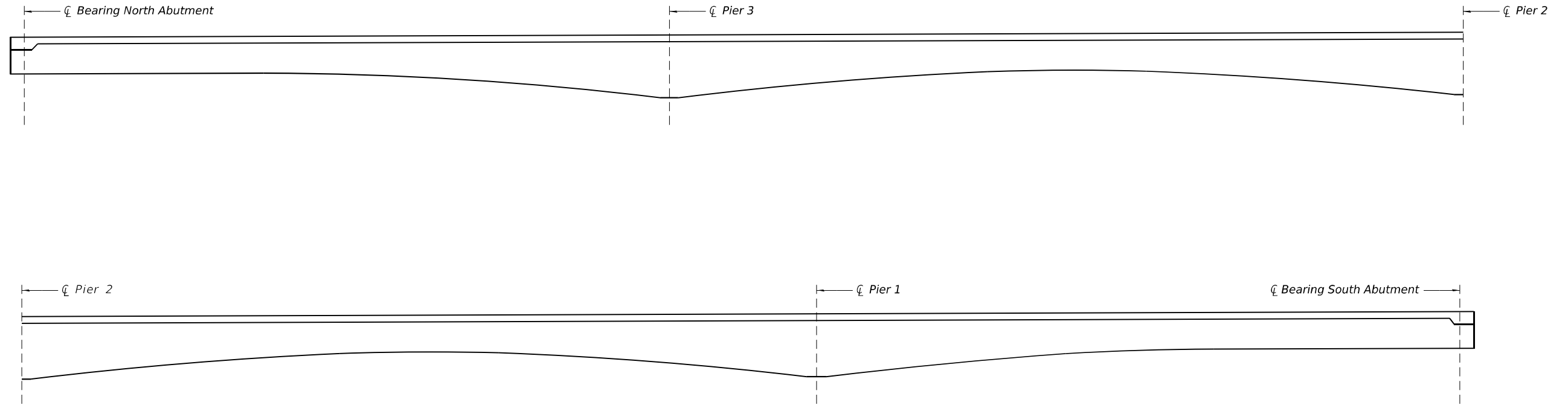
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

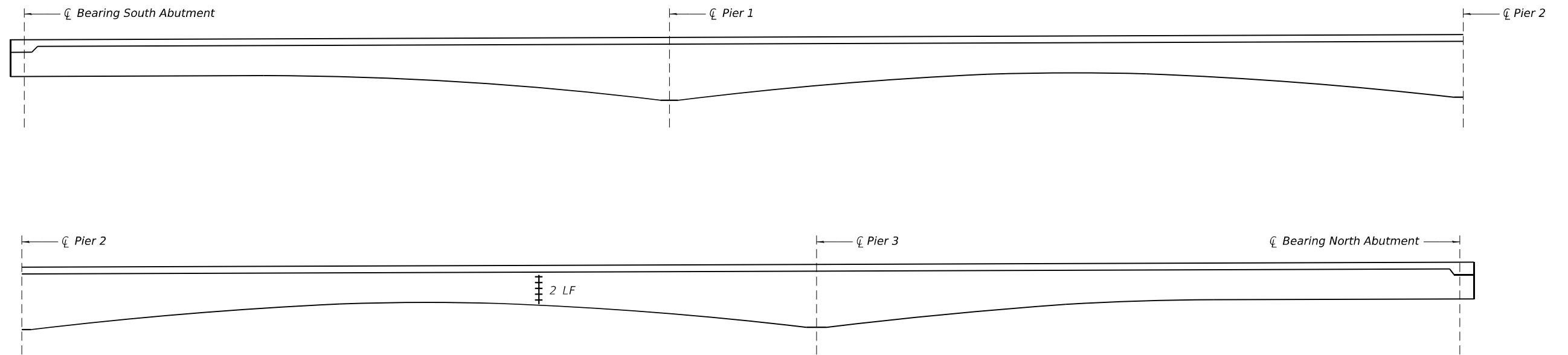
**BEAM 2 REPAIRS
S.N. 092-0126**

SHEET 15 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	438
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70A29	



BEAM 3 LOOKING EAST AT WEST FACE OF BEAM



BEAM 3 LOOKING WEST AT EAST FACE OF BEAM

+++++ Epoxy Crack Injection

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Injection	Foot	2

MODEL: 17 Beam_3 Repairs
 FILE NAME: P:\E\ng\ham\4068 - IDOT PTB_193-26 D5 1-74 at Danville\CAD\SN_092-0126\ID570A29_0126_Combined.dgn



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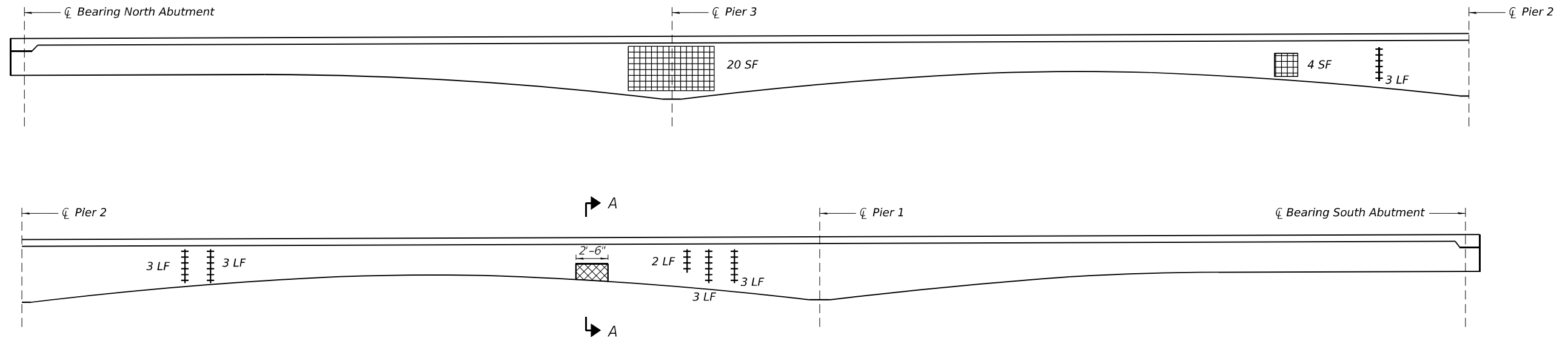
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

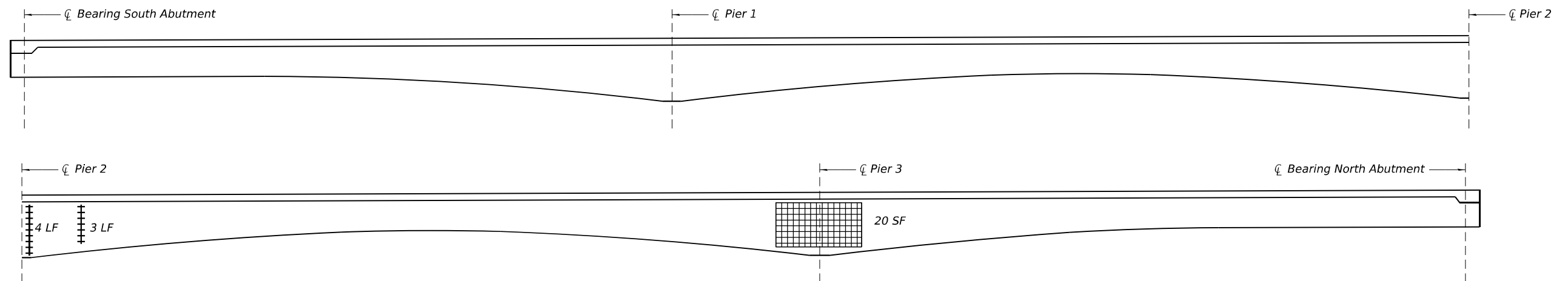
BEAM 3 REPAIRS
 S.N. 092-0126

SHEET 16 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	439
			CONTRACT NO. 70A29	
ILLINOIS FED. AID PROJECT				



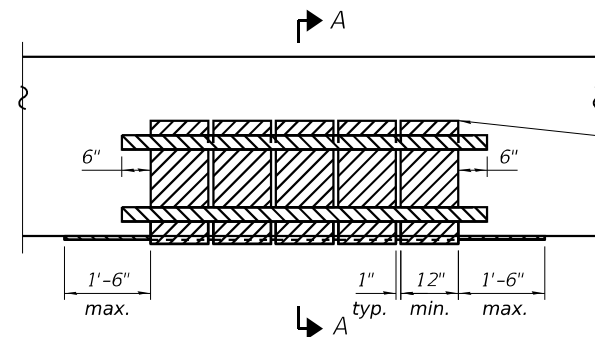
BEAM 4 LOOKING EAST AT WEST FACE OF BEAM



*Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

- Structural Repair of Concrete, (Depth Greater than 5"),
Fiber Wrap & Acrylic Coating
- Structural Repair of Concrete, (Depth Equal to or Less than 5"),
Fiber Wrap & Acrylic Coating*
- Epoxy Crack Injection

Notes:
 Beam repair areas shown are estimated from inspection notes on September 14, 2020. Actual locations and quantities of completed repairs shall be shown by the Engineer on as-built plans.
 Apply FRP Strengthening reinforcement to all portions of concrete beams being repaired after the concrete repairs are completed.
 The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions for "FRP Strengthening".
 Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied.
 Fiber Wrap and Acrylic Coating need not extend beyond face of abutment or pier diaphragms.
 3-inch strips shall be installed parallel to the bottom curvature of the beams. Wrap 6" onto interior diaphragms within the span.
 Color of Acrylic Coating shall be chosen to best match the appearance of the existing concrete.

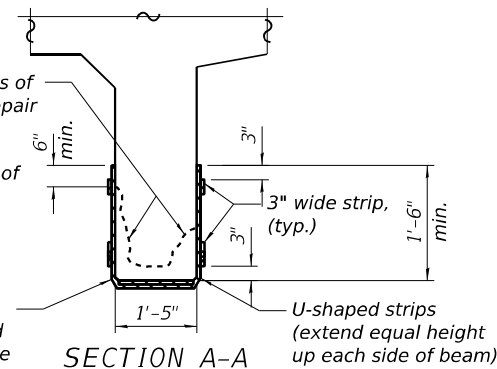


UNDERSIDE DAMAGE REPAIR WITH FRP

See Elevation for Limits of Structural Concrete Repair

U-shaped vertical strips wrap over horizontal strip at the bottom of beam (Extend at least 6" beyond limits of Structural Concrete Repair in all directions)

1'-0" wide strip extend 2'-0" beyond each end of concrete repair



SECTION A-A

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete, (Depth Equal to or Less than 5")	Sq. Ft.	44
Structural Repair of Concrete, (Depth Greater than 5")	Sq. Ft.	4
Epoxy Crack Injection	Foot	24
Fiber Wrap	Sq. Ft.	86
Acrylic Coating	Sq. Yd.	9.6

BEAM 4 LOOKING WEST AT EAST FACE OF BEAM

MODEL: 18 Beam 4 Repairs
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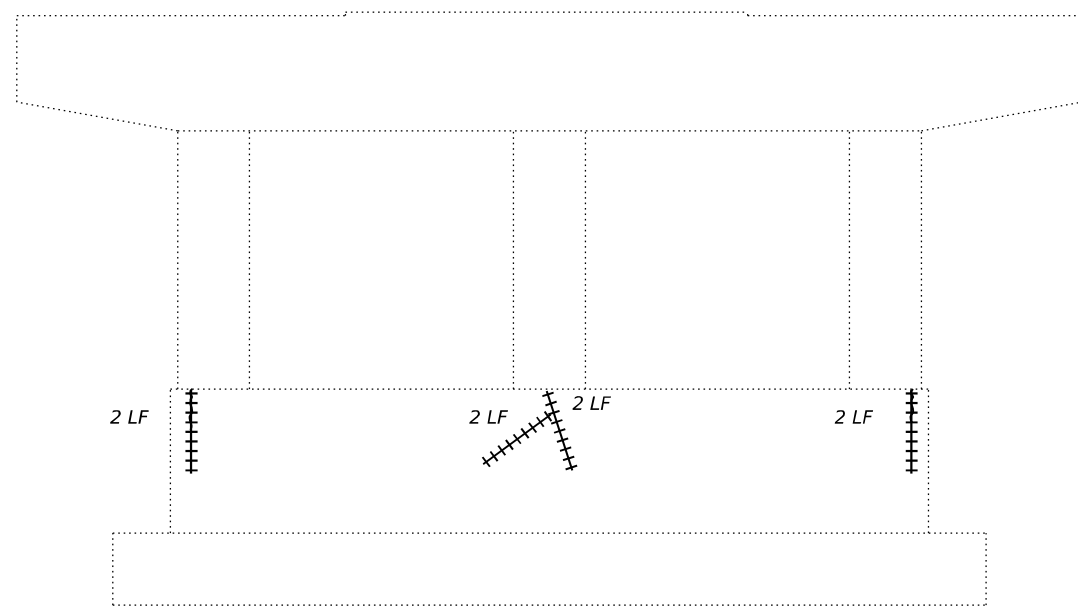
STATE OF ILLINOIS
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BEAM 4 REPAIRS
 S.N. 092-0126

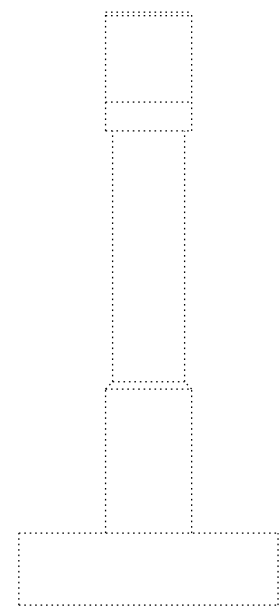
SHEET 17 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 70A29	
ILLINOIS FED. AID PROJECT				

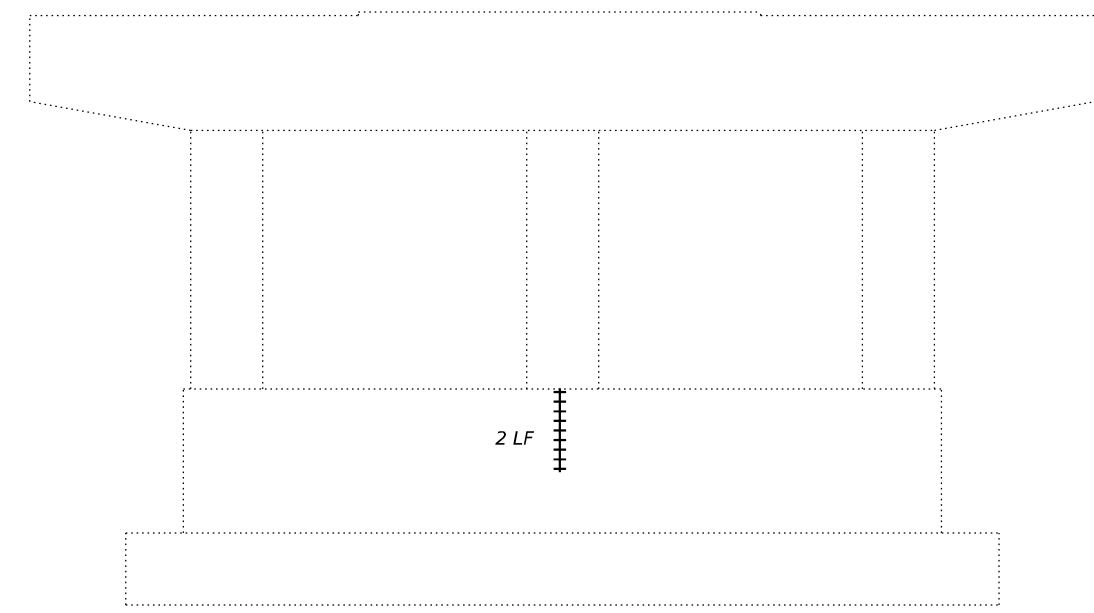
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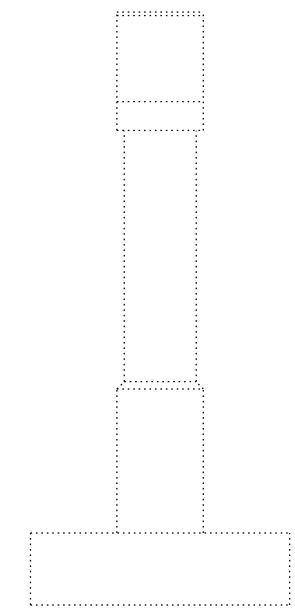
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 (Looking South)



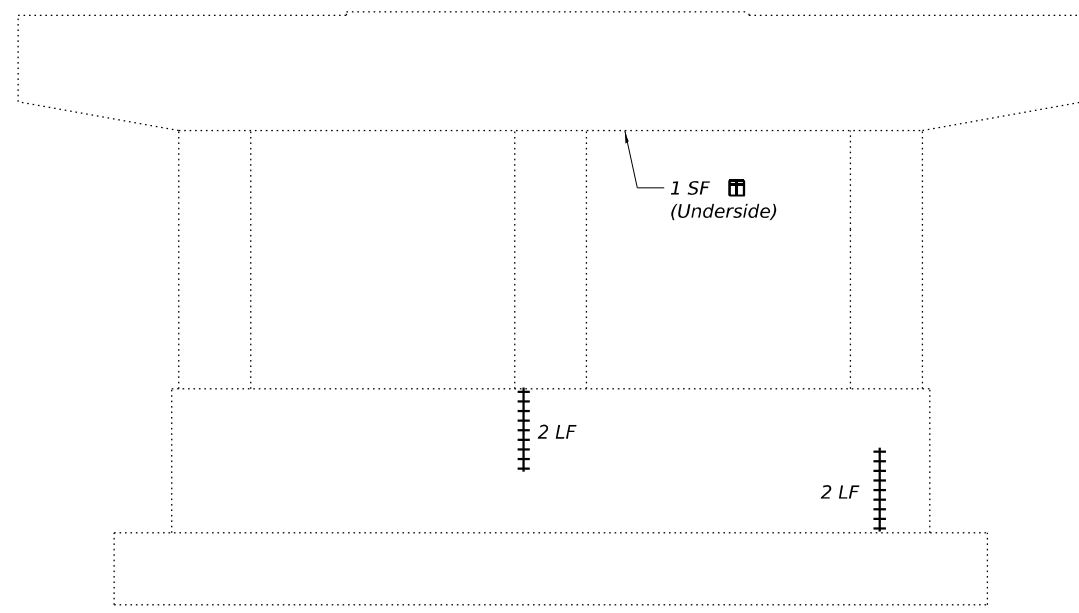
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 (Looking West)



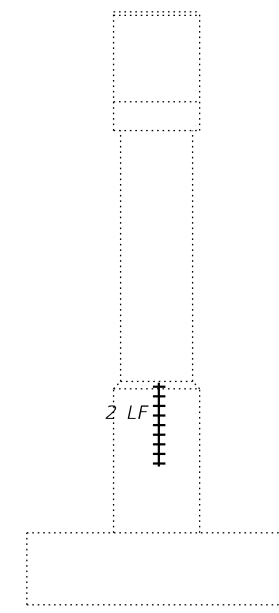
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 (Looking South)



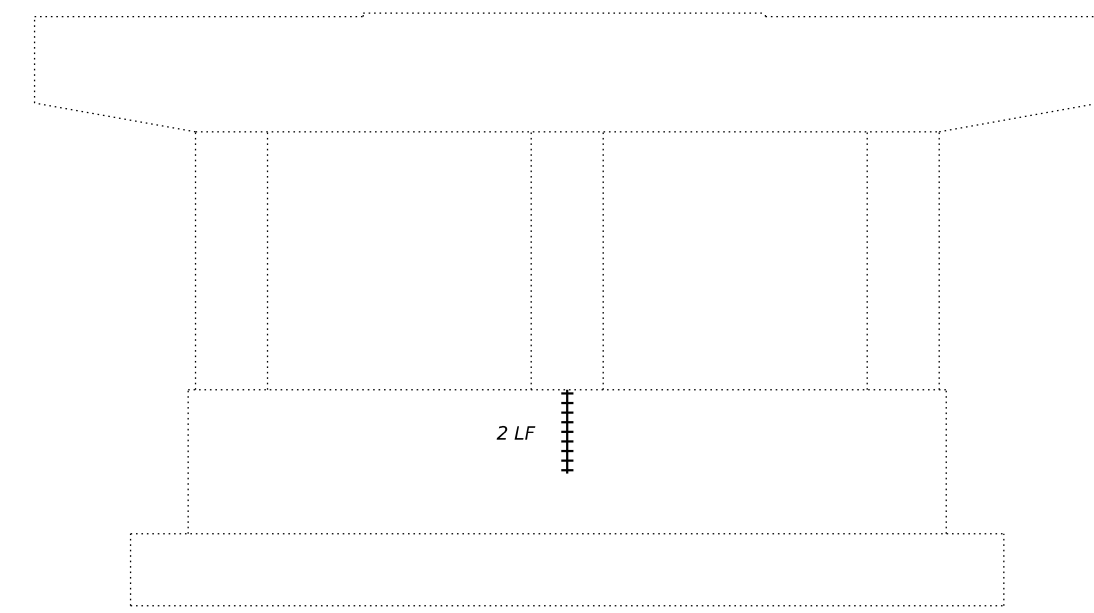
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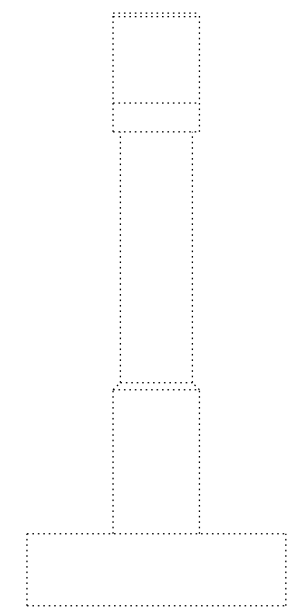
PIER 1 ELEVATION
 (Looking North)



PIER 1 ELEVATION
 (Looking East)



PIER 2 ELEVATION
 (Looking North)



PIER 2 ELEVATION
 (Looking East)

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete, (Depth Equal to or Less than 5")	Sq. Ft.	1
Epoxy Crack Injection	Foot	18

Structural Repair of Concrete, (Depth Equal to or Less than 5")
 Epoxy Crack Injection



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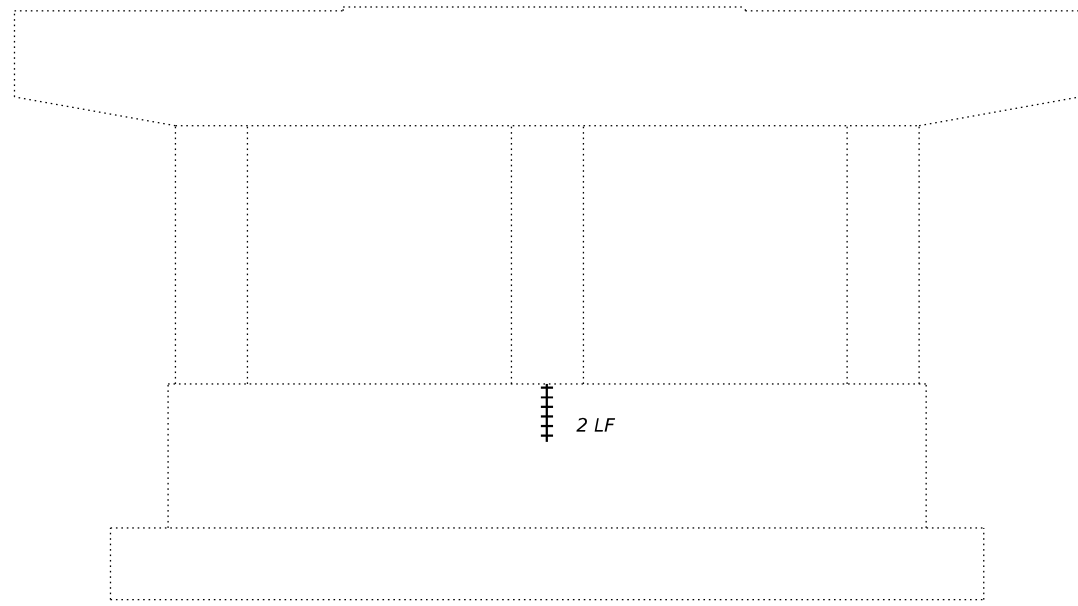
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIR PLAN SHEET 1 OF 2
 S.N. 092-0126

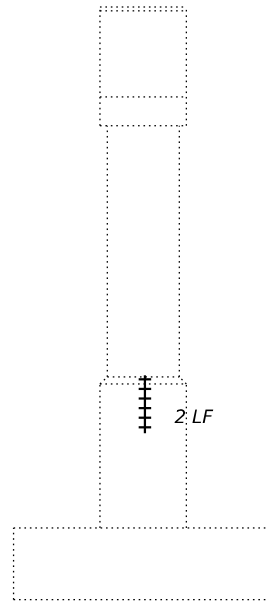
SHEET 18 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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ILLINOIS FED. AID PROJECT			CONTRACT NO. 70A29	

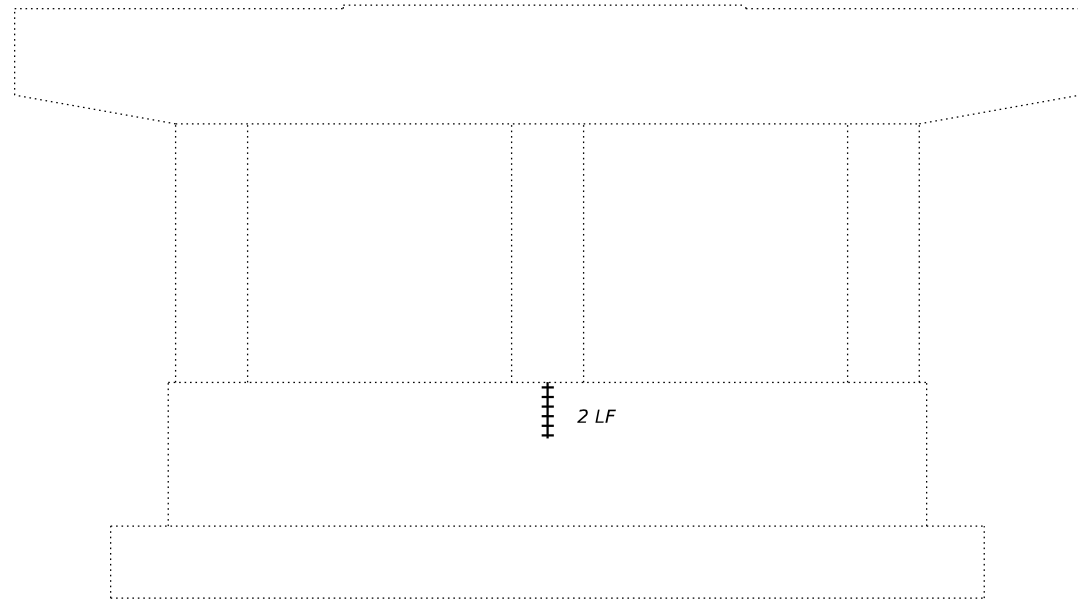
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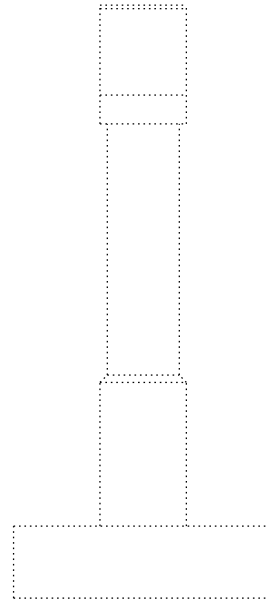
PIER 3 ELEVATION
 (Looking South)



PIER 3 ELEVATION
 (Looking West)



PIER 3 ELEVATION
 (Looking North)



PIER 3 ELEVATION
 (Looking East)

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Injection	Foot	6

+++++ Epoxy Crack Injection



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SUBSTRUCTURE REPAIR PLAN SHEET 2 OF 2
 S.N. 092-0126

SHEET 19 OF 21 SHEETS

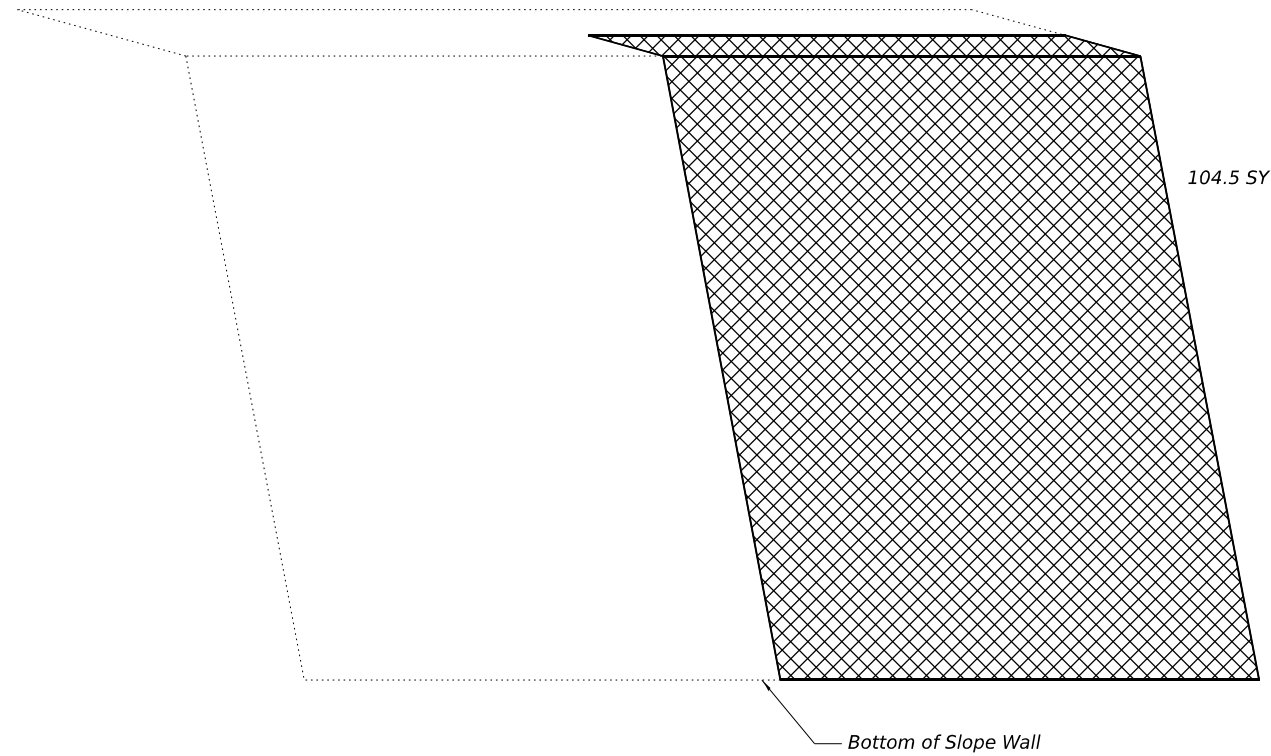
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74	(92-10,11,12)R	VERMILION	698	442
			CONTRACT NO. 70A29	
		ILLINOIS	FED. AID PROJECT	

Voids beneath the existing concrete slope wall shall be filled with Controlled Low Strength Material (CLSM) in accordance with the special provision "Slope Wall Slurry Pumping", and as directed by the Engineer. Existing dislodged concrete slope wall may be broken and used to partially fill voids before CLSM is placed. Sawed openings may be required. The cost of any new opening is included in the cost of Slope Wall Slurry Pumping.

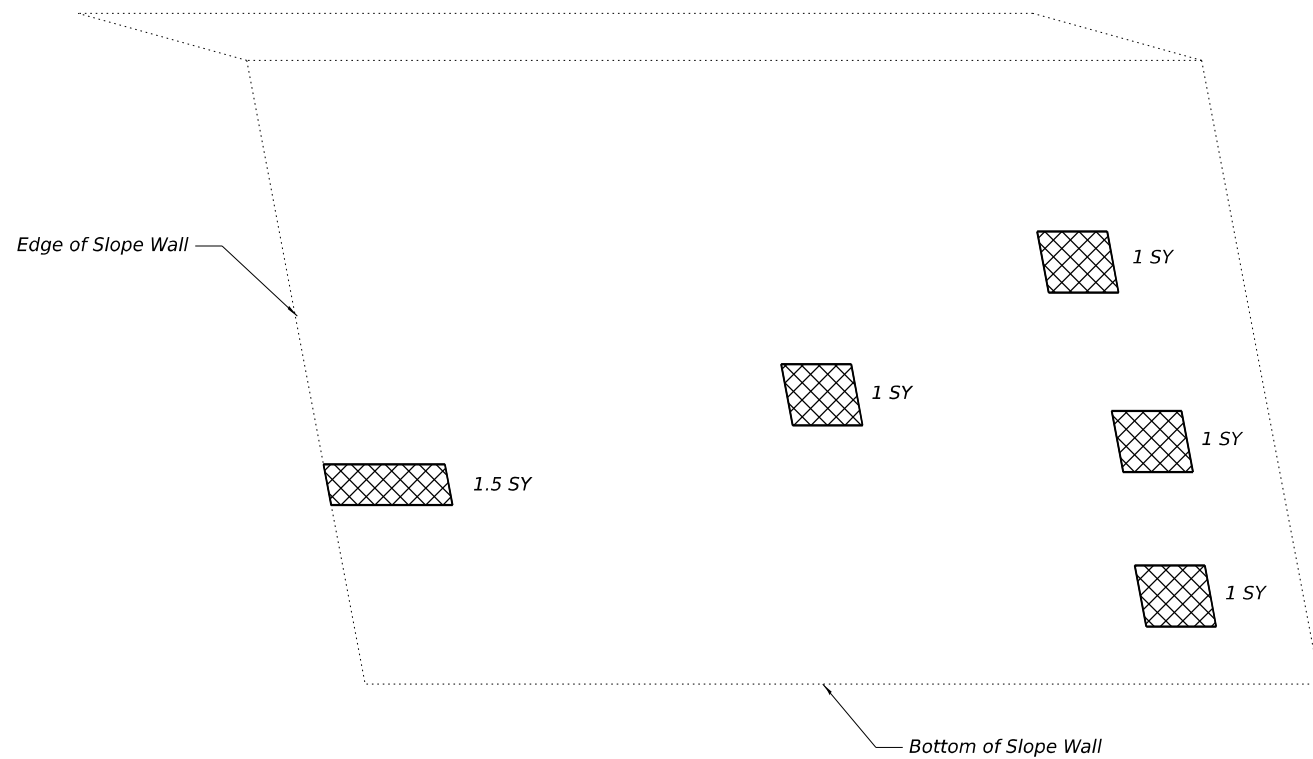
After the Controlled Low Strength Material has set, the slope wall shall be cast in accordance with Section 511 of the Standard Specifications. Slope wall repair area shall be rectangular in shape. The cost of welded wire fabric, dowel bars, supports, saw cuts, and all labor, equipment, and material for slope wall repair are included in the cost of Slope Wall Repair measured in place in square yards.

The location and quantities of Slope Wall Slurry Pumping and Slope Wall Repair are based on a field survey done at the time of plan preparation. The exact locations and actual quantities will be determined in the field by the Engineer. The Contractor will be paid for the actual quantity at the contract unit price bid for the item.

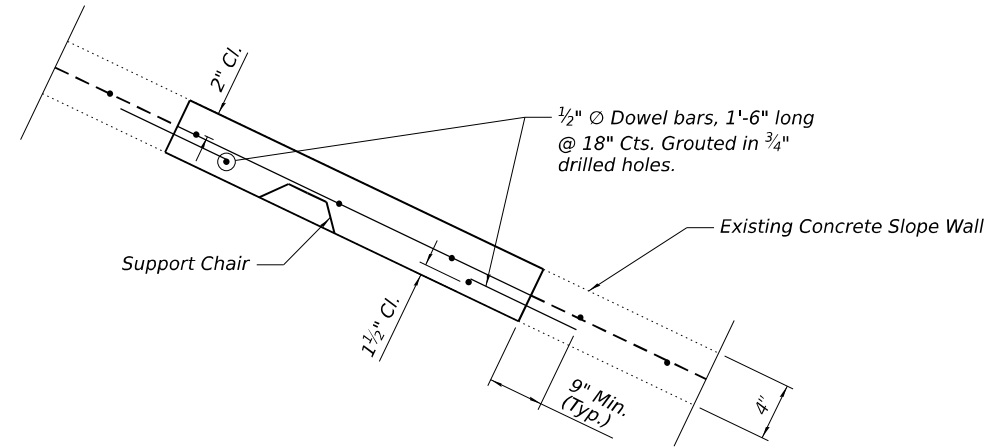
All drainage system components shall extend parallel to the abutment back wall until they intersect the wingwalls or 2'-0" from the end of the wingwalls when the wings are parallel to the abutment. The pipe shall extend under the wingwall, if necessary, until intersecting the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



SOUTH ABUTMENT SLOPE WALL REPAIR



NORTH ABUTMENT SLOPE WALL REPAIR



SLOPE WALL REPAIR DETAIL



BILL OF MATERIAL

Item	Unit	Total
Slope Wall Repair	Sq. Yd.	110
Slope Wall Slurry Pumping	Cu. Yd.	53

MODEL: 21 SlopeWall Repair
FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0126\570A29_0126_Combined.dgn



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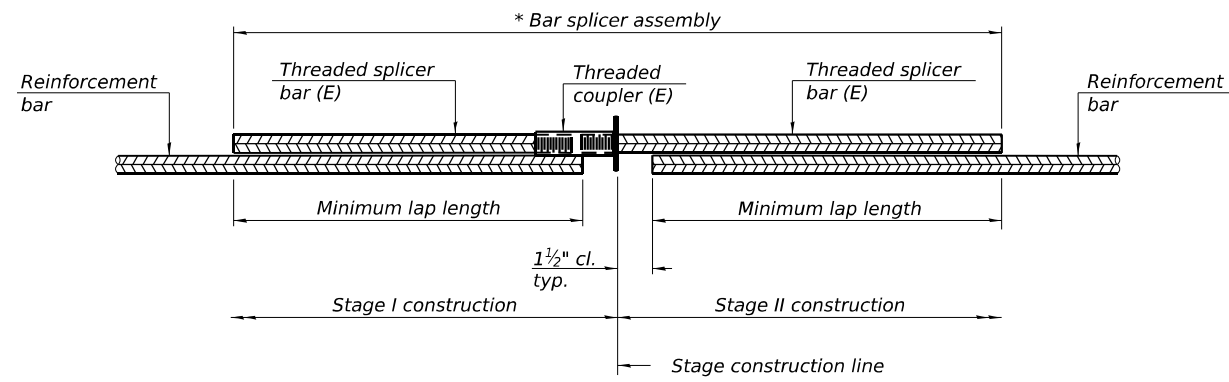
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DEPARTMENT OF TRANSPORTATION

SLOPE WALL REPAIR
S.N. 092-0126

SHEET 20 OF 21 SHEETS

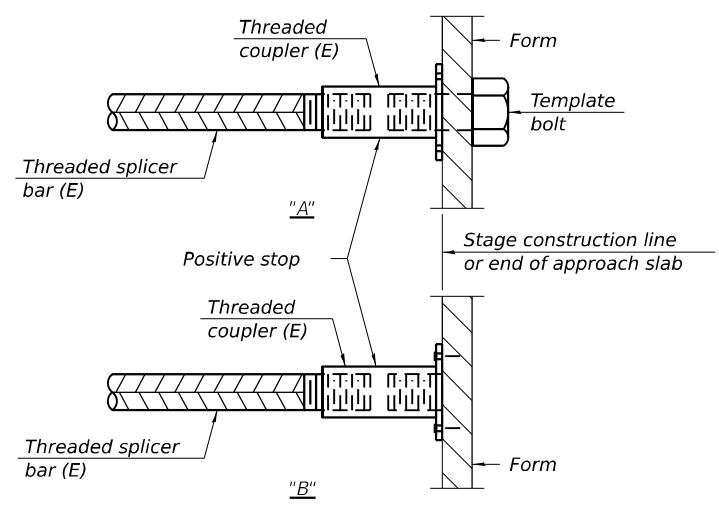
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			CONTRACT NO. 70A29	
		ILLINOIS FED. AID PROJECT		



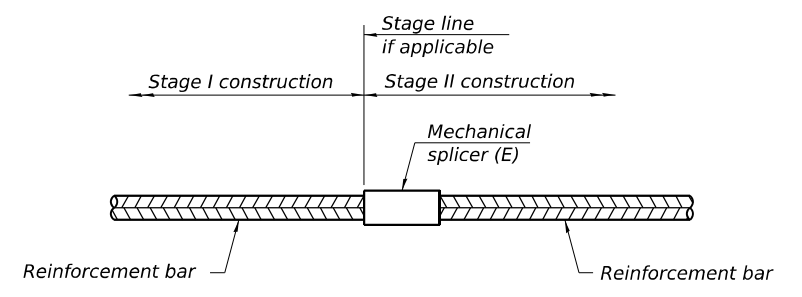
STANDARD BAR SPLICER ASSEMBLY PLAN
 (All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length + 1 1/2" + thread length
 * Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck End	#6	16	4'-10"



INSTALLATION AND SETTING METHODS
 "A" : Set bar splicer assembly by means of a template bolt.
 "B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
 (E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required

Notes:
 Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
 All reinforcement shall be lapped and tied to the splicer bars.
 Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
 See approved list of bar splicer assemblies and mechanical splicers for alternatives.

MODEL: 23 Bar Splicers
 FILE NAME: P:\E\ng\ham\4068 - IDOT PTB_193-26 D5 1-74 at Danville\CAD\SN 092-0126\0570A29_0126_Combined.dgn
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 S.N. 092-0126

SHEET 21 OF 21 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	444
CONTRACT NO. 70A29			ILLINOIS FED. AID PROJECT	

Structure 092-0128 was originally constructed under FAI 74, Section 92-11HB-2; Contract 20959. The structure is a 4 span continuous concrete tee beam structure with open stub abutments on concrete piles and multi column reinforced concrete piers on spread footings supported by timber piles. In 1991 steel bridge rail was placed across the structure as FAI 74 Section 92(11RS,11BR,11VB-BR, 11VB-1-BR); Contract 90165.

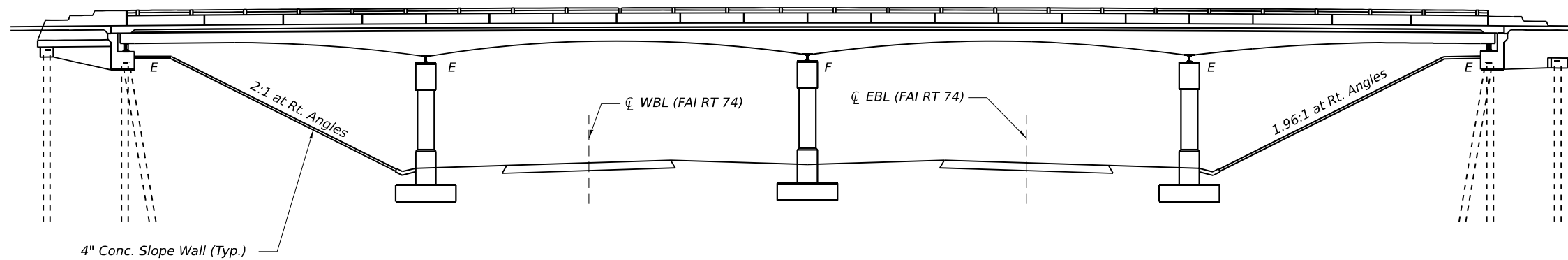
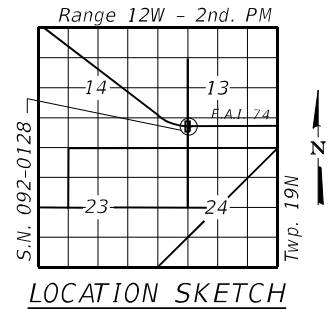
The existing structure has a back to back of abutment length of 205'-4 1/4" an out to out width of 30'-0" and a roadway width of 24'-0". The structure has a 11°37'30" skew left forward.

Note:
See Sheet 2 of 15 for Proposed Work, Bill of Material, and General Notes.

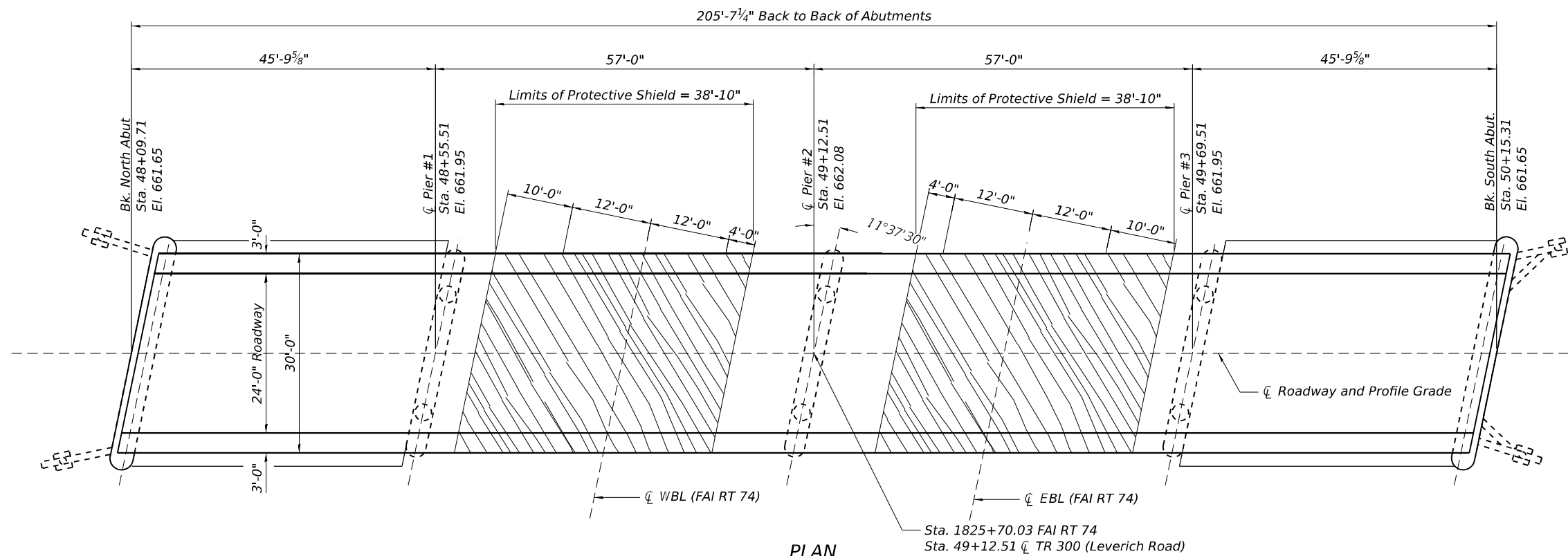
DESIGN STRESSES
FIELD UNITS

New Construction
f_c = 4,000 psi
f_y = 60,000 psi (Reinforcement)

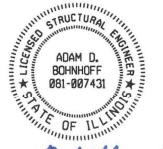
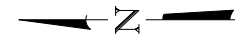
Existing Structure
f_c = 1,400 psi
f_s = 20,000 psi (Reinforcement)
f_c = 18,000 (Structural Steel)



ELEVATION



PLAN



Adam D. Bohnhoff 4-4-22
Adam D. Bohnhoff Date
Licensed Structural Engineer
State of Illinois No. 081-007431
Expires 11-30-2022

MODEL: 01 GPE
FILE NAME: P:\E\ng\ham\40688 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0128\570A29_0128_Combined.dgn
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DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
S.N. 092-0128
SHEET 1 OF 15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	445
CONTRACT NO. 70A29			ILLINOIS FED. AID PROJECT	

INDEX OF SHEETS

1. General Plan & Elevation
2. General Data
3. Existing & Proposed Cross Sections
4. Stage Construction Details
5. Wearing Surface Details
6. Floor Drain & Patching Details
7. Floor Drain Details
8. Parapet Repair Plan
9. Framing Plan
10. Beam 1 Repairs
11. Beam 2 Repairs
12. Beam 3 Repairs
13. Beam 4 Repairs
14. Substructure Repair Plan Sheet 1 of 2
15. Substructure Repair Plan Sheet 2 of 2

PROPOSED WORK

1. Bridge deck scarification.
2. Remove existing bridge floor drains.
3. Repair bridge deck slab and install new floor drains.
4. Repair parapet.
5. Repair concrete superstructure beams.
6. Place polymer concrete over existing steel armor at bridge ends.
7. Place bridge deck latex concrete overlay.
8. Repair substructure.
9. HMA rundowns for transition at approaches.

GENERAL NOTES

Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make the necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of work. However, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

Reinforcement bars designated (E) shall be epoxy coated.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.

Protective Shield shall be required in accordance with Section 501. No drill and epoxy shall be allowed in the bottom 9" of the concrete beams to avoid tension reinforcement.

Synthetic fibers shall be included in the bridge deck concrete overlay specified. See Special Provisions.

The Contractor shall take extreme care during Concrete Removal so as not to damage the existing concrete beam.

TOTAL BILL OF MATERIAL

Item	Unit	Total
* Protective Coat	Sq. Yd.	570
Concrete Removal	Cu. Yd.	5.2
Protective Shield	Sq. Yd.	265
Floor Drains	Each	8
Concrete Superstructures	Cu. Yd.	5.2
Bridge Deck Grooving	Sq. Yd.	549
Bridge Deck Latex Concrete Overlay, 2 1/4"	Sq. Yd.	549
Acrylic Coating	Sq. Yd.	17.0
Bridge Deck Scarification 3/4"	Sq. Yd.	549
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft.	39
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	34
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	36
Epoxy Crack Injection	Foot	23
Fiber Wrap	Sq. Ft.	153
Polymer Concrete	Cu. Ft.	2.0
Slope Wall Crack Sealing	Foot	40

* Protective Coat shall be applied to all new concrete superstructure and all new concrete overlays as specified in Article 503.19 of the Standard Specifications.

MODEL: 02 General Notes
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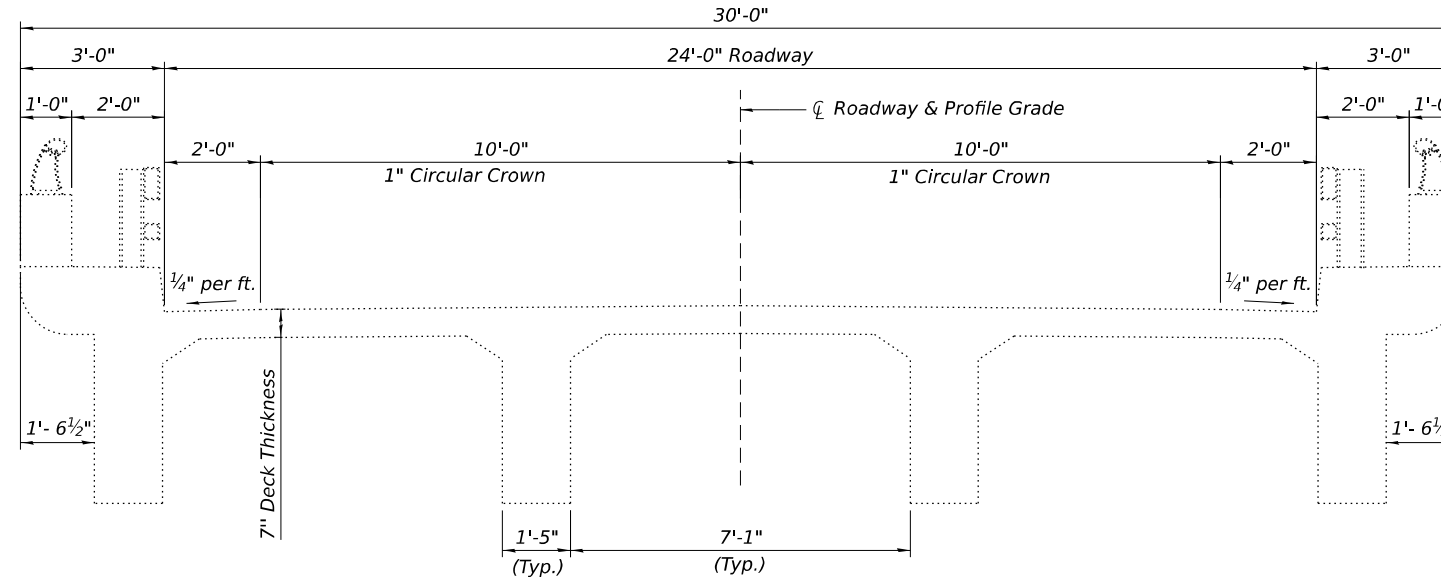
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
S.N. 092-0128

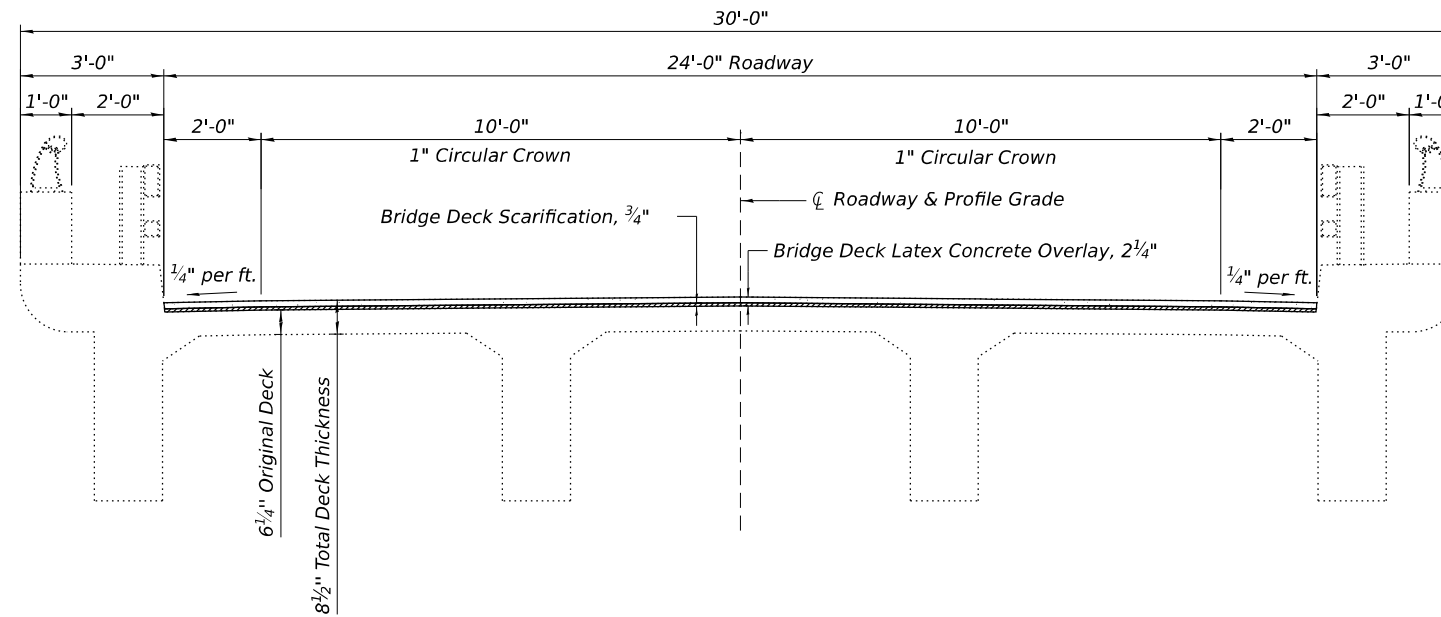
SHEET 2 OF 15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	446
			CONTRACT NO. 70A29	
		ILLINOIS	FED. AID PROJECT	

EXISTING CROSS SECTION



PROPOSED CROSS SECTION



MODEL: 03 Cross Sections
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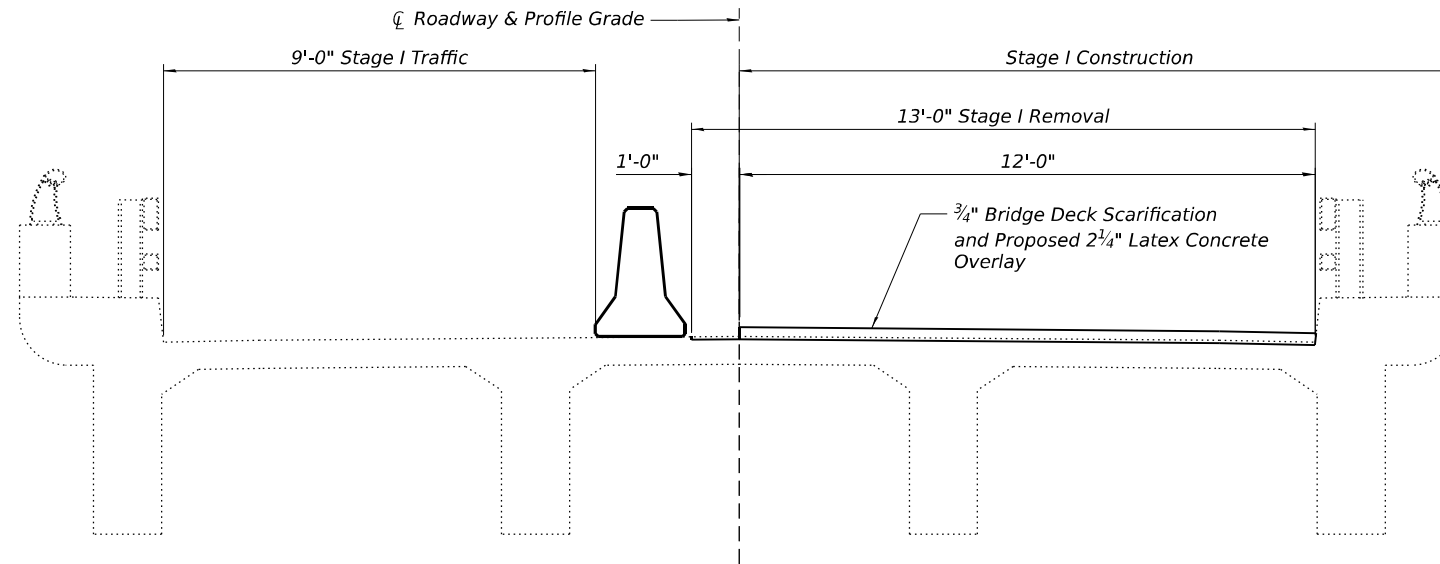
**EXISTING & PROPOSED CROSS SECTIONS
 S.N. 092-0128**

SHEET 3 OF 15 SHEETS

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74	(92-10,11,12)R	VERMILION	698	447
			CONTRACT NO. 70A29	
ILLINOIS FED. AID PROJECT				

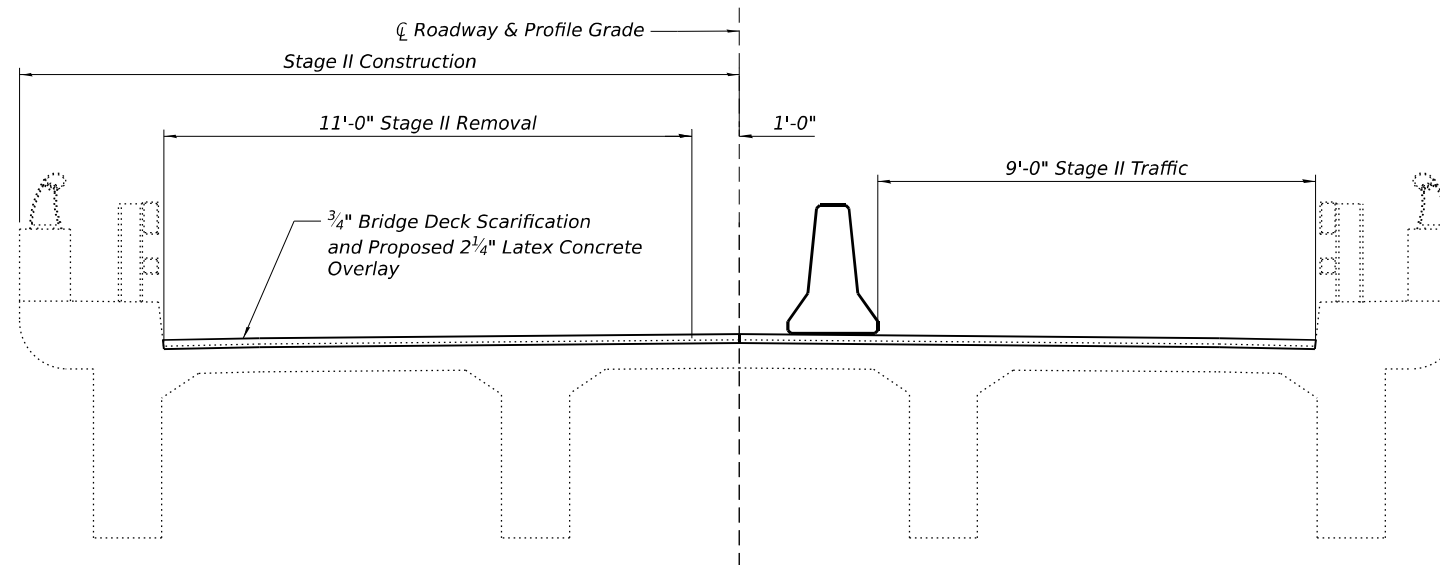
STAGE I CONSTRUCTION DETAILS

(Looking South)



STAGE II CONSTRUCTION DETAILS

(Looking South)



MODEL: 04 Stage Construction
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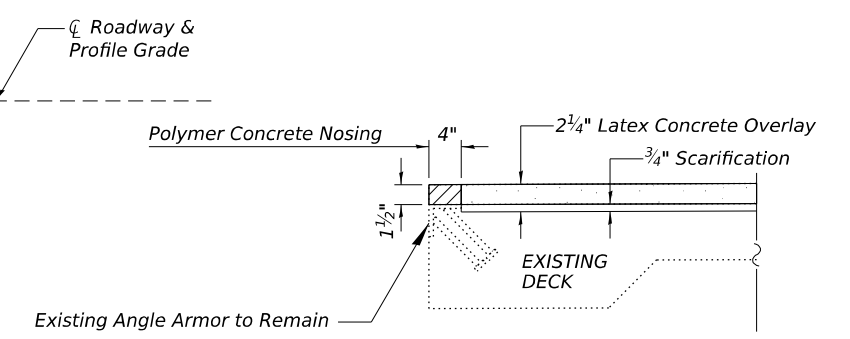
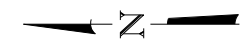
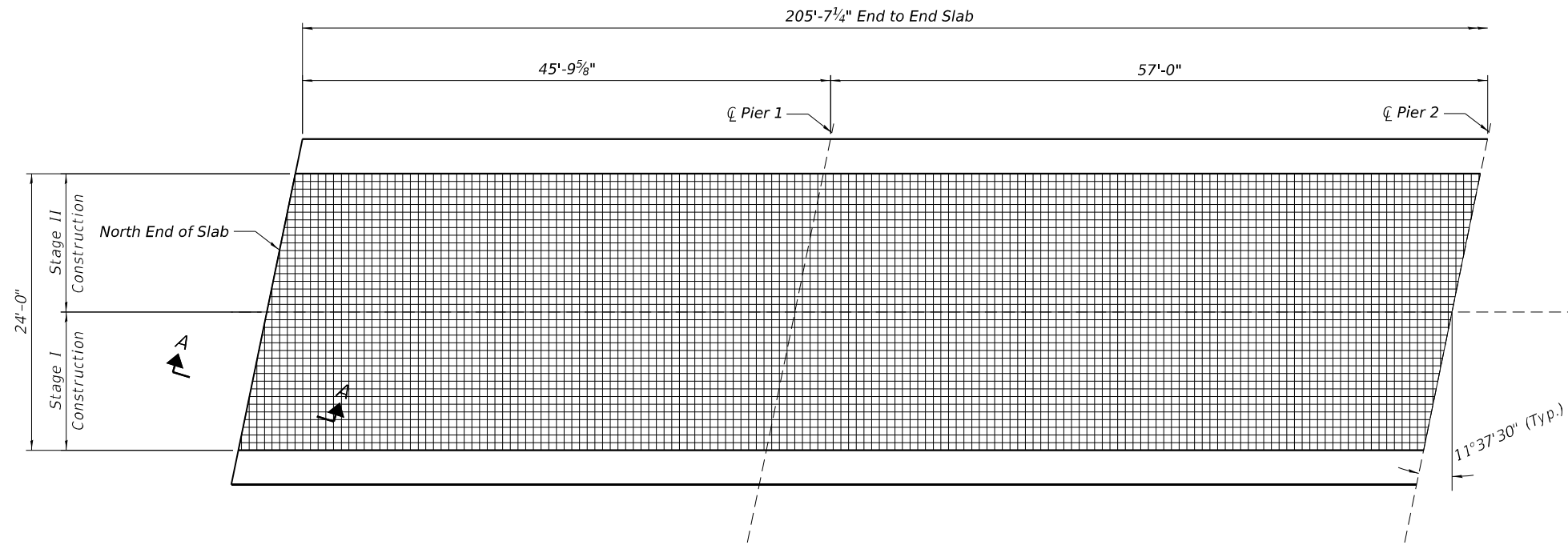
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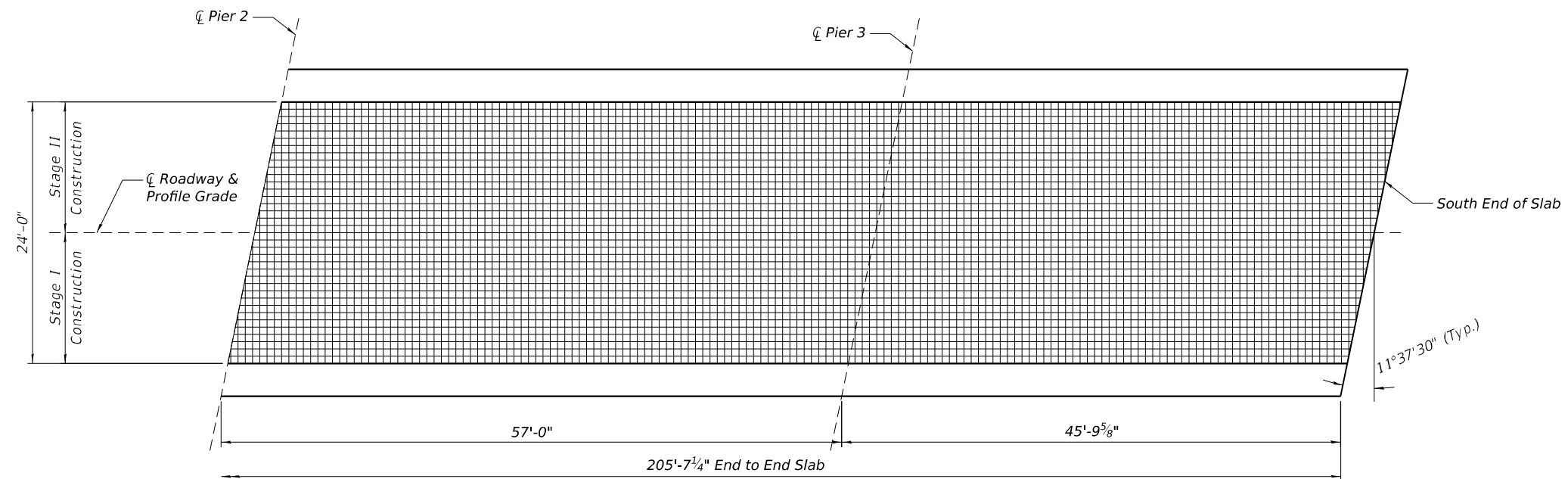
STAGE CONSTRUCTION DETAILS
S.N. 092-0128

SHEET 4 OF 15 SHEETS

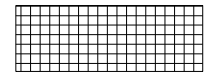
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74	(92-10,11,12)R	VERMILION	698	448
			CONTRACT NO. 70A29	
ILLINOIS FED. AID PROJECT				



PLAN



PLAN



Bridge Deck Scarification, 3/4", Bridge Deck Latex Concrete Overlay, 2 1/4", & Bridge Deck Grooving

BILL OF MATERIAL

Item	Unit	Total
Bridge Deck Grooving	Sq. Yd.	549
Bridge Deck Scarification, 3/4"	Sq. Yd.	549
Bridge Deck Latex Concrete Overlay, 2 1/4"	Sq. Yd.	549
Polymer Concrete	Cu. Ft.	2.0

MODEL: 05 Wearing Surface
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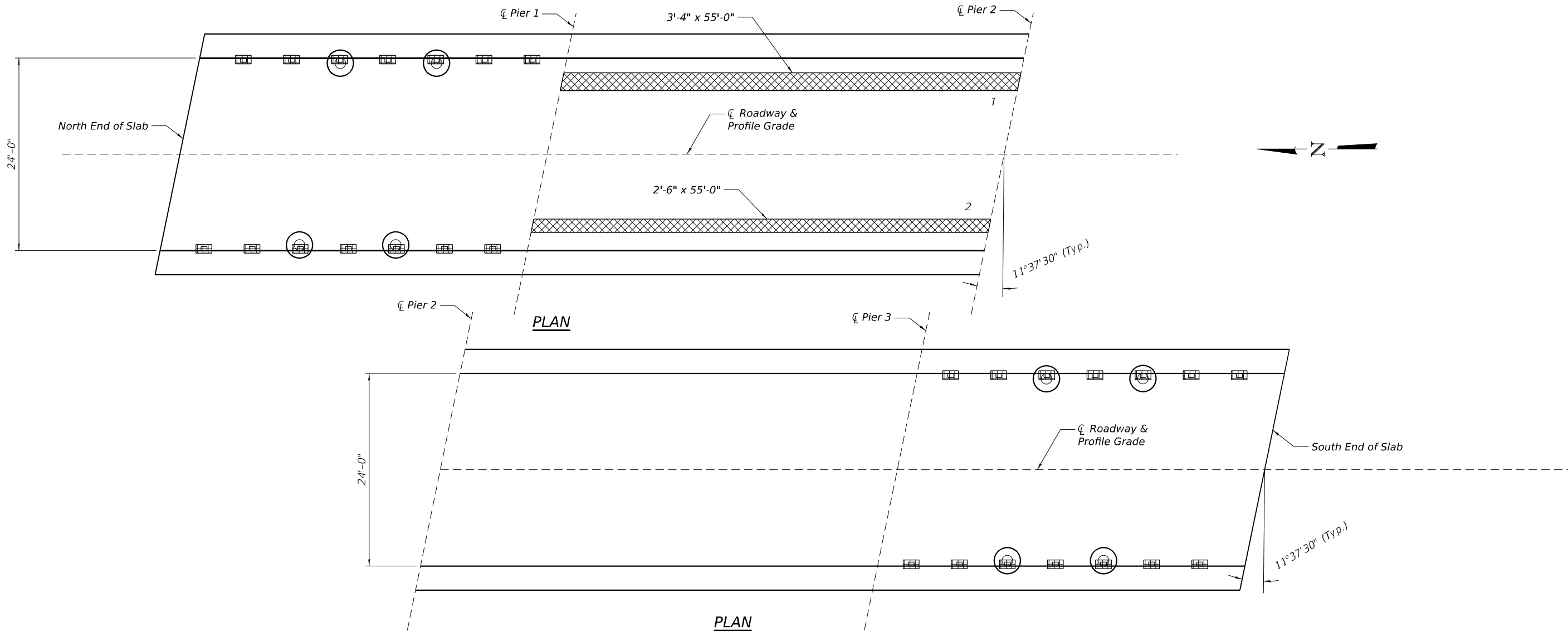
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**WEARING SURFACE DETAILS
S.N. 096-0128**

SHEET 5 OF 15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	449
CONTRACT NO. 70A29			ILLINOIS FED. AID PROJECT	



PATCH NO.	SIZE	Deck Slab Repair (Full Depth)	
		Type I	Type II
1	3'-4" x 55'-0"	183	
2	2'-6" x 55'-0"	138	
Repair at Drain, 28 ea.		60.6	

PATCH NO.	SIZE	Deck Slab Repair (Full Depth)	
		Type I	Type II

PATCH NO.	SIZE	Deck Slab Repair (Full Depth)	
		Type I	Type II

PATCH NO.	SIZE	Deck Slab Repair (Full Depth)	
		Type I	Type II

LEGEND

- Proposed floor drain location
- Deck Slab Repair (Full Depth, Type II)
- Deck Slab Repair (Full Depth, Type I) at all Drain Locations. All repair areas are 2'-0" x 1'-1", unless otherwise noted.

NOTES:

Patch sizes shown represent conditions at the time the plans were completed. Quantity for Deck Slab Repair (Full Depth, Type I) includes the above areas and 5% of the deck area as an allowance for increase in deterioration.

The actual sizes and locations of patching shall be determined by the engineer. The Engineer shall show the actual locations of the deck repairs on this sheet.

The existing drains and extensions shall be removed. Cost included with "Deck Slab Repair (Full Depth, Type I)".

BILL OF MATERIAL

Item	Unit	Total
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	34
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	36

MODEL: 06 Floor Drain and Patching
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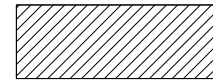
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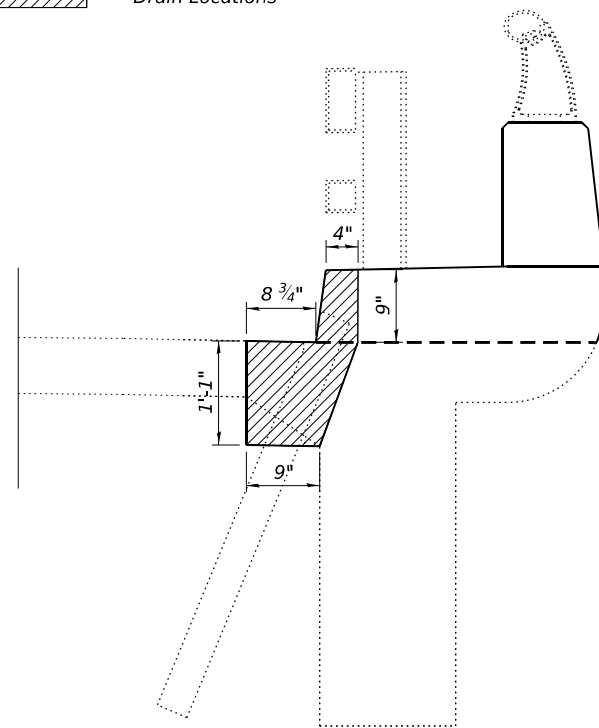
**FLOOR DRAIN AND PATCHING DETAILS
S.N. 092-0128**

SHEET 6 OF 15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	450
			CONTRACT NO. 70A29	
		ILLINOIS FED. AID PROJECT		

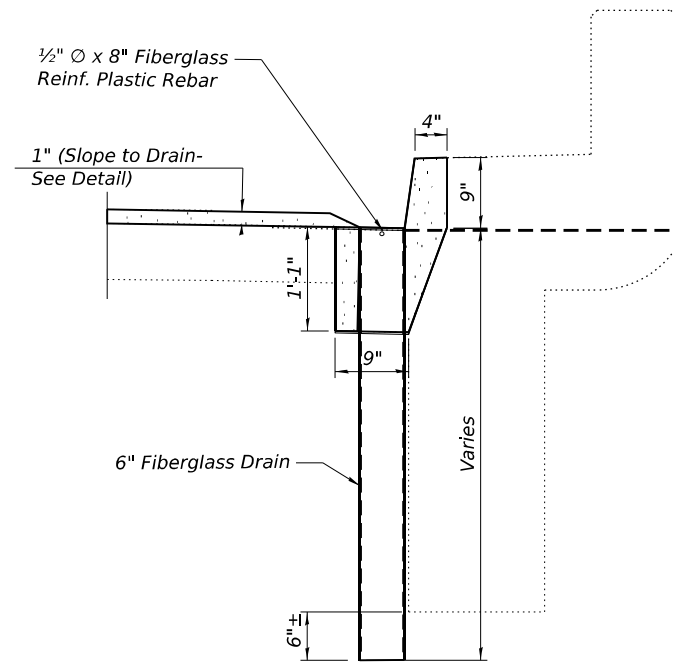


Removal Limits for Deck Slab Repair (Full-Depth, Type I) at Drain Locations



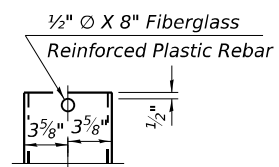
TYPICAL REMOVAL LIMITS

(Bridge rail not shown for clarity)

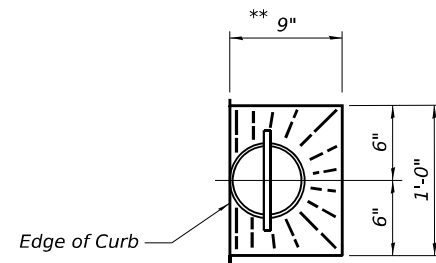


FLOOR DRAIN PLACEMENT

(Bridge rail not shown for clarity)



FIBERGLASS PIPE



TOP PLAN

** Slope to Drain

BILL OF MATERIAL

Item	Unit	Total
Floor Drains	Each	8

Notes:
All dimensions shall be field verified by the contractor prior to ordering of materials.

Cost of removal of existing drains and extensions is included in Deck Slab Repair (Full Depth, Type I)

MODEL: 07 Floor Drain Details
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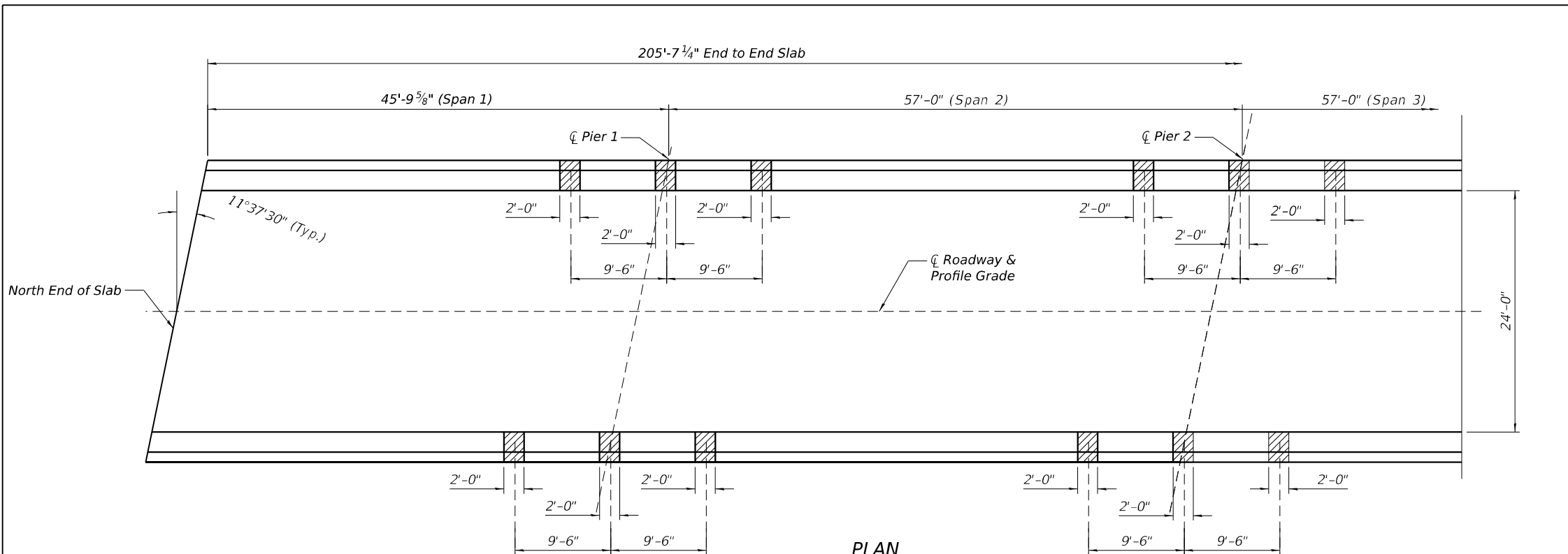
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DEPARTMENT OF TRANSPORTATION

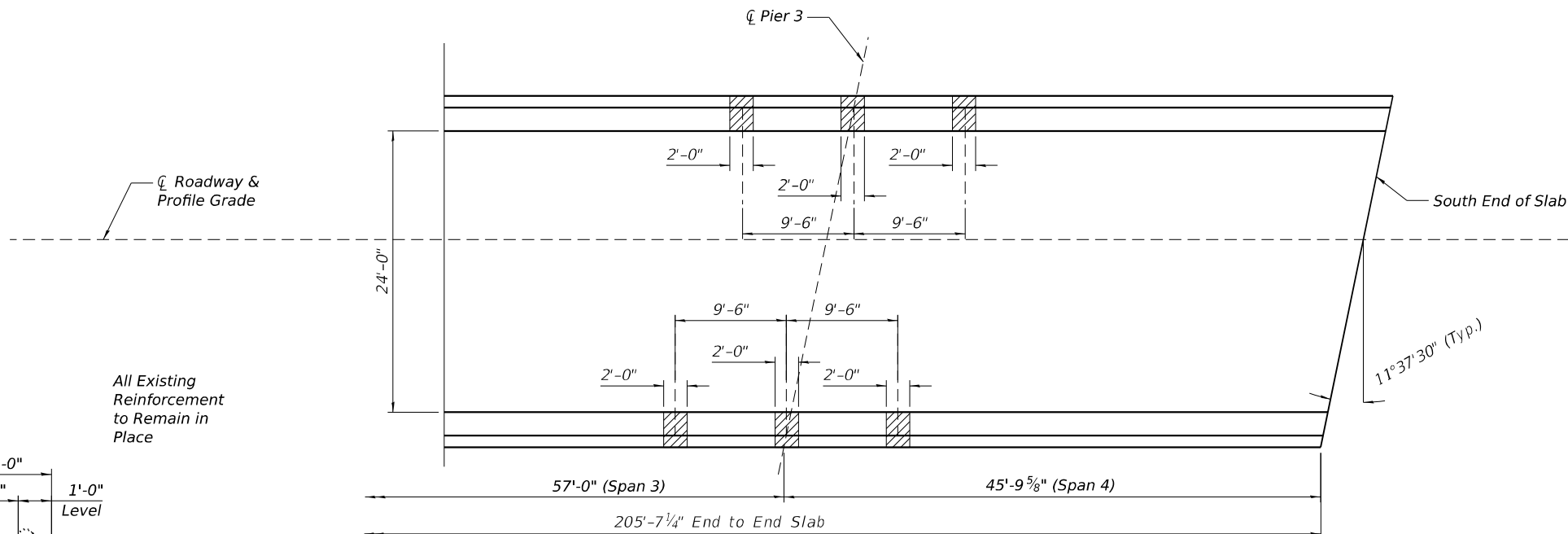
FLOOR DRAIN DETAILS
S.N. 092-0128

SHEET 7 OF 15 SHEETS

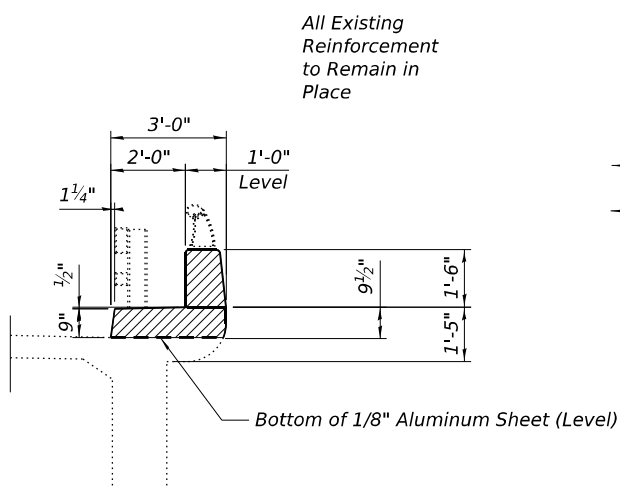
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	451
CONTRACT NO. 70A29			ILLINOIS FED. AID PROJECT	



PLAN



PLAN



Const. Jts. at Piers 1/8" Aluminum sheet ASTM B 209 Alloy 3003-H14, coated to minimize reaction with wet concrete. Cost to be included with Concrete Superstructure.

SECTION AT PARAPET

NOTES:

The rail posts within the parapet removal and replacement limits shall be removed to allow for the repair work to be completed. Following completion of the parapet ends, the rail posts shall be re-attached. It is the option of the contractor to either save and reuse the existing cast-in-place anchor system or use epoxy-grouted threaded rods. The cost of this work shall be included in Concrete Superstructure. See As-Built Plans for bridge rail and aluminum handrail details.

Areas of Concrete Removal and Superstructure were identified July 28, 2020. The engineer shall determine if additional areas require removal and replacement at time of construction.

	Concrete Removal & Concrete Superstructures
--	---

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	5.2
Concrete Superstructures	Cu. Yd.	5.2

MODEL: 08 Parapet Repair Plan
FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0128\570A29_0128_Combined.dgn



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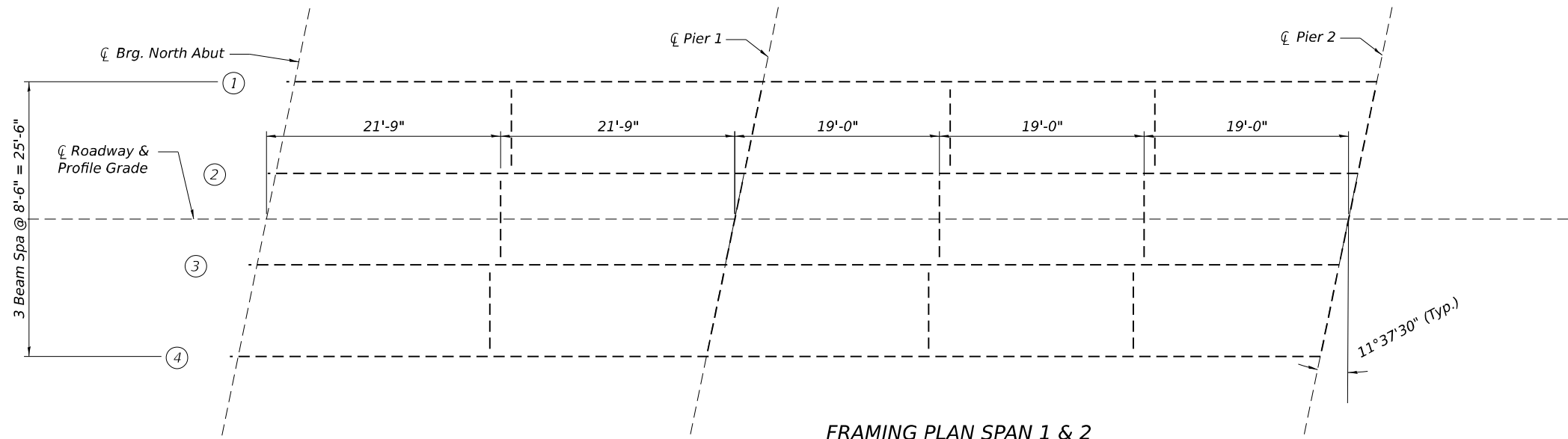
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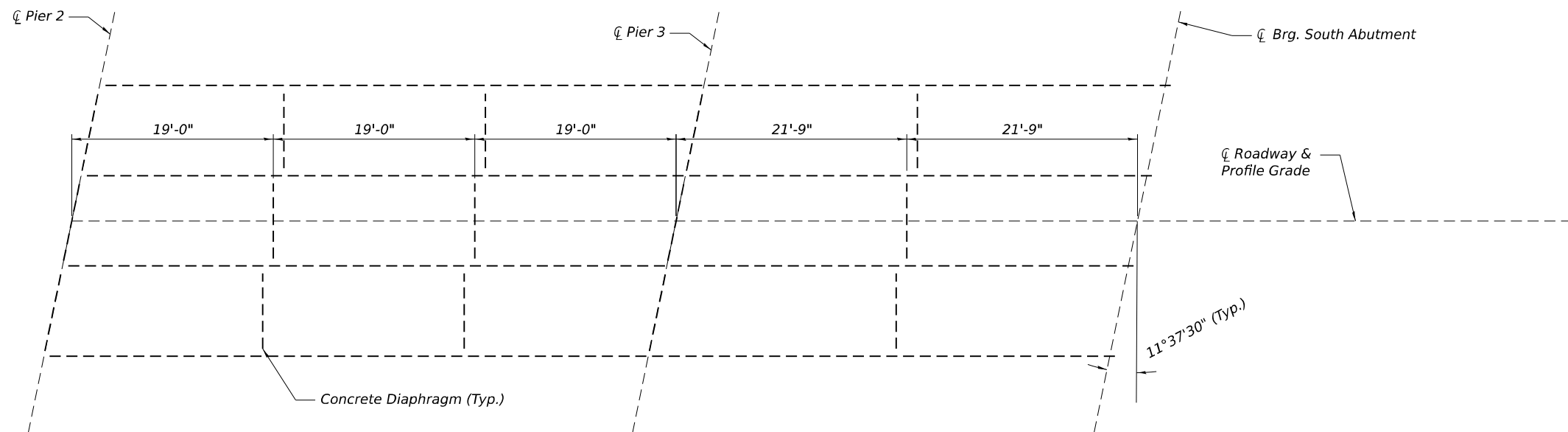
PARAPET REPAIR PLAN
S.N. 092-0128

SHEET 8 OF 15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	452
CONTRACT NO. 70A29			ILLINOIS FED. AID PROJECT	



FRAMING PLAN SPAN 1 & 2



FRAMING PLAN SPAN 3 & 4

MODEL: 09 Framing Plan
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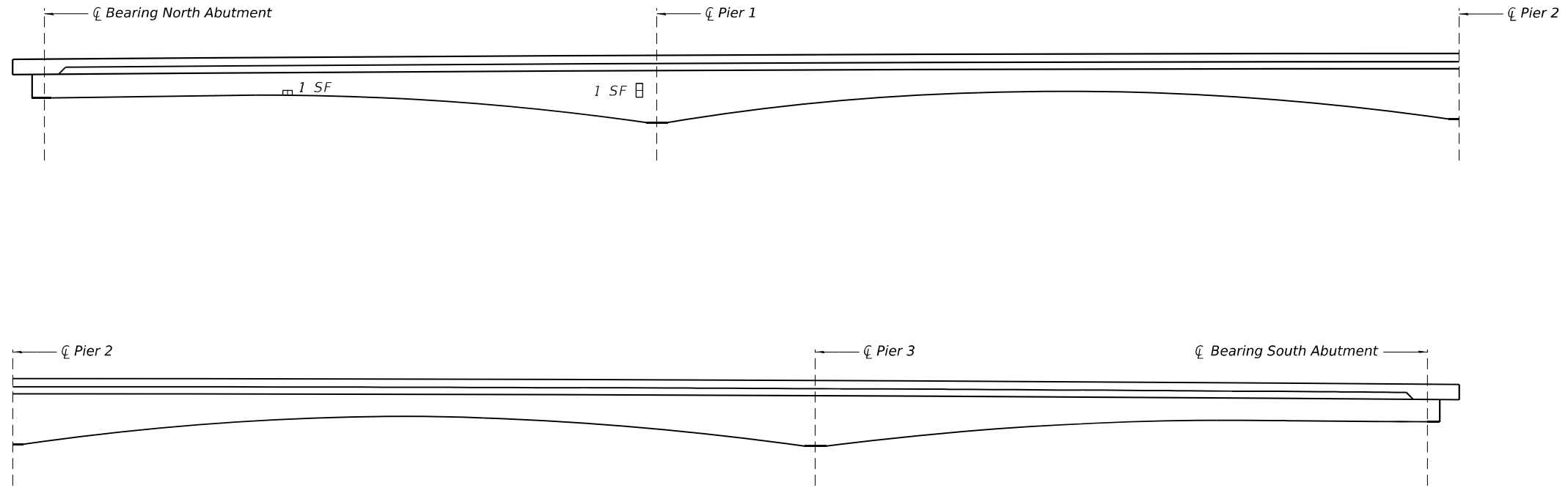
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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

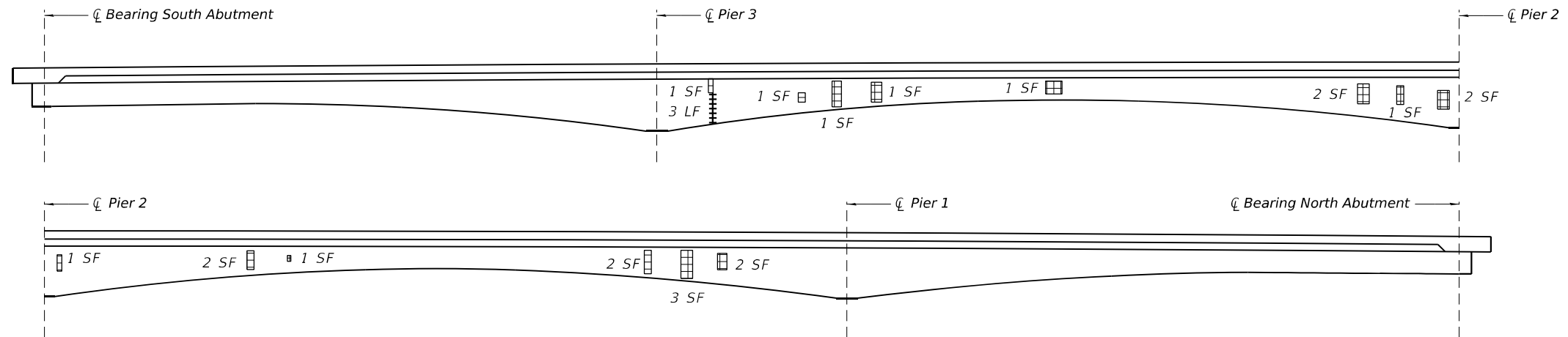
FRAMING PLAN
 S.N. 092-0128

SHEET 9 OF 15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	453
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70A29	



BEAM 1 LOOKING EAST AT WEST FACE OF BEAM



BEAM 1 LOOKING WEST AT EAST FACE OF BEAM

Notes:

Beam repair areas shown are estimated from inspection notes on September 14, 2020. Actual locations and quantities of completed repairs shall be shown by the Engineer on as-built plans.
 Apply FRP Strengthening reinforcement to all portions of concrete beams being repaired after the concrete repairs are completed.
 The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions for "FRP Strengthening".
 Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied.
 Fiber Wrap and Acrylic Coating need not extend beyond face of abutment or pier diaphragms.
 3-inch strips shall be installed parallel to the bottom curvature of the beams. Wrap 6" onto interior diaphragms within the span.
 Color of Acrylic Coating shall be chosen to best match the appearance of the existing concrete.



Structural Repair of Concrete, (Depth Equal to or Less than 5"), Fiber Wrap and Acrylic Coating*



Epoxy Crack Injection

*Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete, (Depth Equal to or Less than 5")	Sq. Ft.	23
Epoxy Crack Injection	Foot	3
Fiber Wrap	Sq. Ft.	93
Acrylic Coating	Sq. Yd.	10.3

MODEL: 10 Beam 1 Repairs
 FILE NAME: P:\E\ng\ham\40688 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0128\570A29_0128_Combined.dgn

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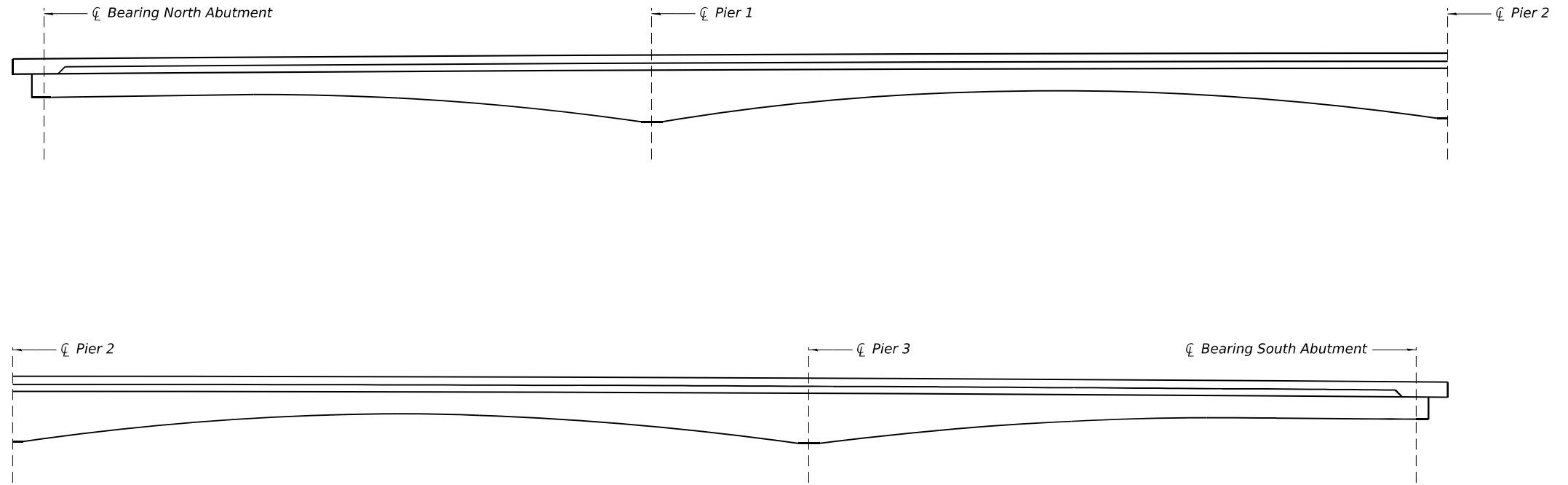
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**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

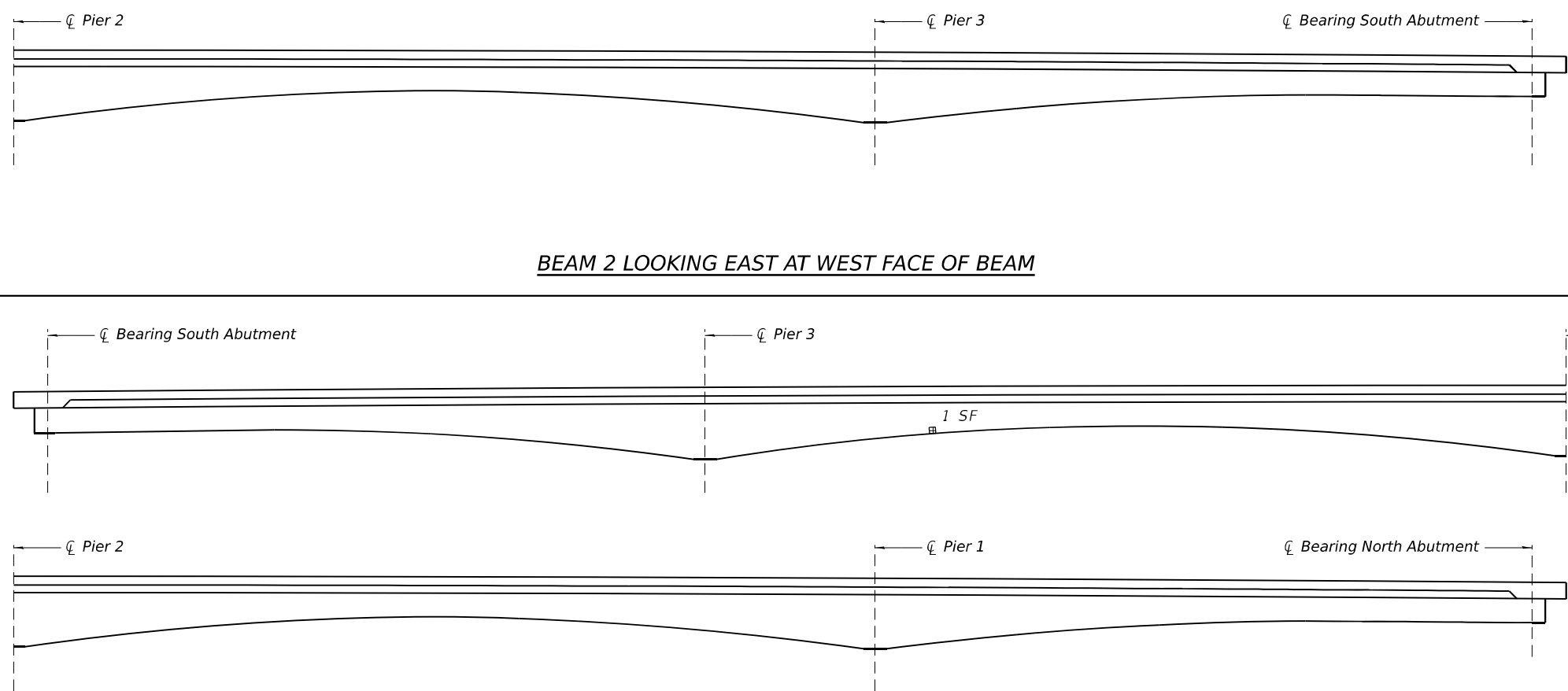
**BEAM 1 REPAIRS
 S.N. 092-0128**

SHEET 10 OF 15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10.11,12)R	VERMILION	698	454
			CONTRACT NO. 70A29	
ILLINOIS FED. AID PROJECT				





BEAM 2 LOOKING EAST AT WEST FACE OF BEAM



BEAM 2 LOOKING WEST AT EAST FACE OF BEAM

Notes:

Beam repair areas shown are estimated from inspection notes on September 14, 2020. Actual locations and quantities of completed repairs shall be shown by the Engineer on as-built plans.
 Apply FRP Strengthening reinforcement to all portions of concrete beams being repaired after the concrete repairs are completed.
 The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions for "FRP Strengthening".
 Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied. Fiber Wrap and Acrylic Coating need not extend beyond face of abutment or pier diaphragms.
 3-inch strips shall be installed parallel to the bottom curvature of the beams. Wrap 6" onto interior diaphragms within the span.
 Color of Acrylic Coating shall be chosen to best match the appearance of the existing concrete.

-  Structural Repair of Concrete, (Depth Equal to or Less than 5"), Fiber Wrap & Acrylic Coating*
-  Epoxy Crack Injection

*Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete, (Depth Equal to or less than 5")	Sq. Ft.	1
Fiber Wrap	Sq. Ft.	4
Acrylic Coating	Sq. Yd.	0.4

MODEL: 11 Beam 2 Repairs
 FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0128\570A29_0128_Combined.dgn



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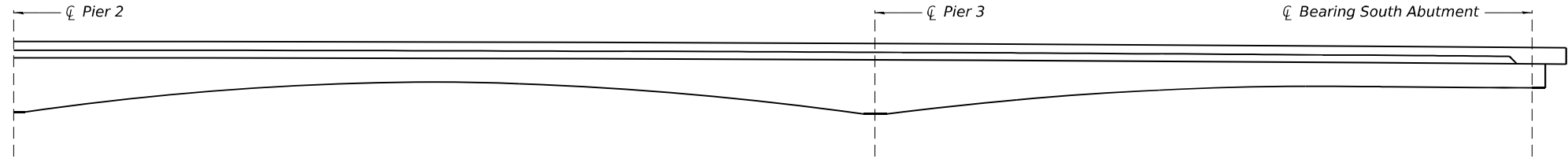
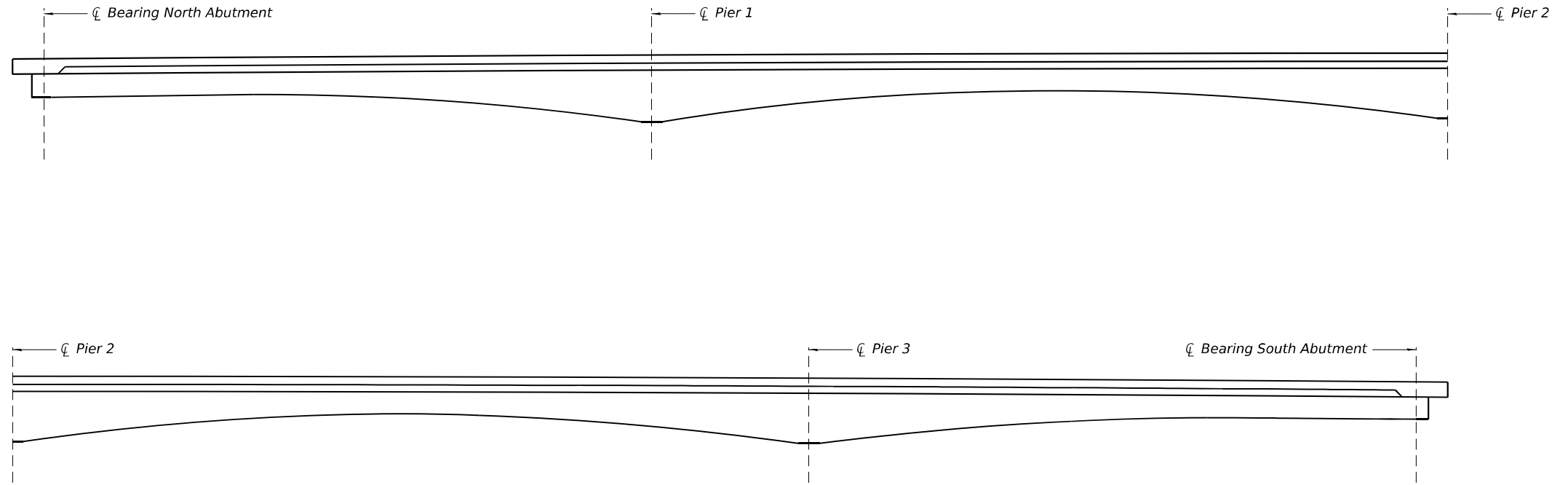
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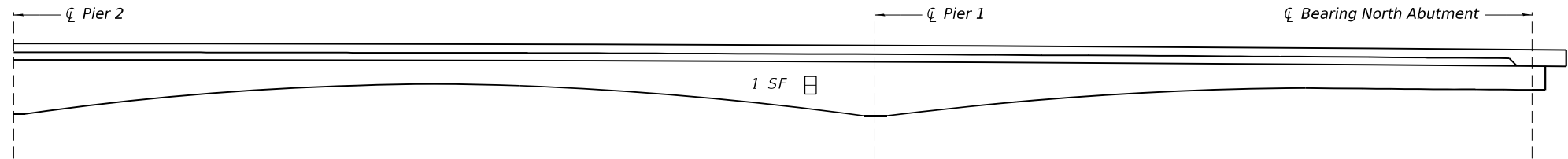
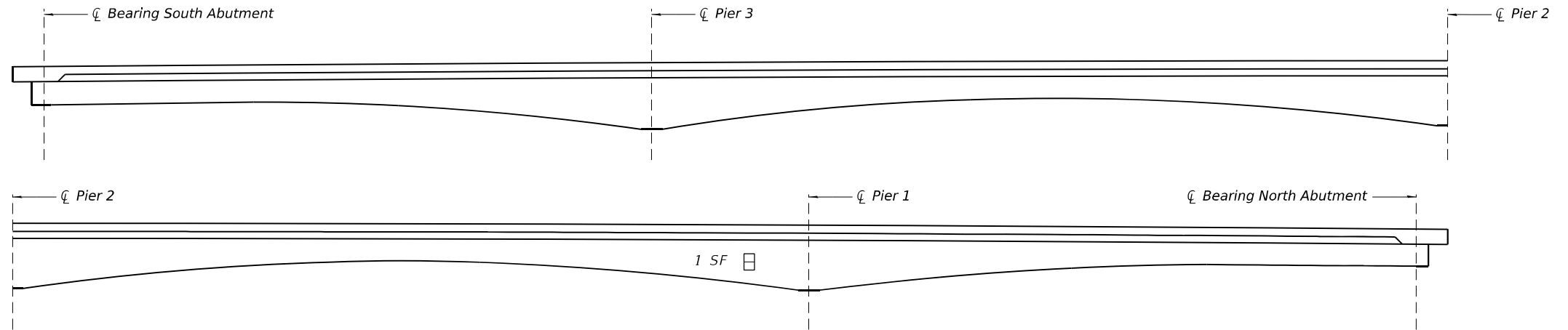
BEAM 2 REPAIRS
 S.N. 092-0128

SHEET 11 OF 15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	455
			CONTRACT NO. 70A29	
		ILLINOIS FED. AID PROJECT		



BEAM 3 LOOKING EAST AT WEST FACE OF BEAM



BEAM 3 LOOKING WEST AT EAST FACE OF BEAM

Notes:

Beam repair areas shown are estimated from inspection notes on September 14, 2020. Actual locations and quantities of completed repairs shall be shown by the Engineer on as-built plans.
 Apply FRP Strengthening reinforcement to all portions of concrete beams being repaired after the concrete repairs are completed.
 The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions for "FRP Strengthening".
 Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied.
 Fiber Wrap and Acrylic Coating need not extend beyond face of abutment or pier diaphragms.
 3-inch strips shall be installed parallel to the bottom curvature of the beams. Wrap 6" onto interior diaphragms within the span.
 Color of Acrylic Coating shall be chosen to best match the appearance of the existing concrete.



Structural Repair of Concrete, (Depth Equal to or Less than 5"), Fiber Wrap & Acrylic Coating*



Epoxy Crack Injection

*Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete, (Depth Equal to or Less than 5")	Sq. Ft.	1
Fiber Wrap	Sq. Ft.	4
Acrylic Coating	Sq. Yd.	0.4

MODEL: 12 Beam_3 Repairs
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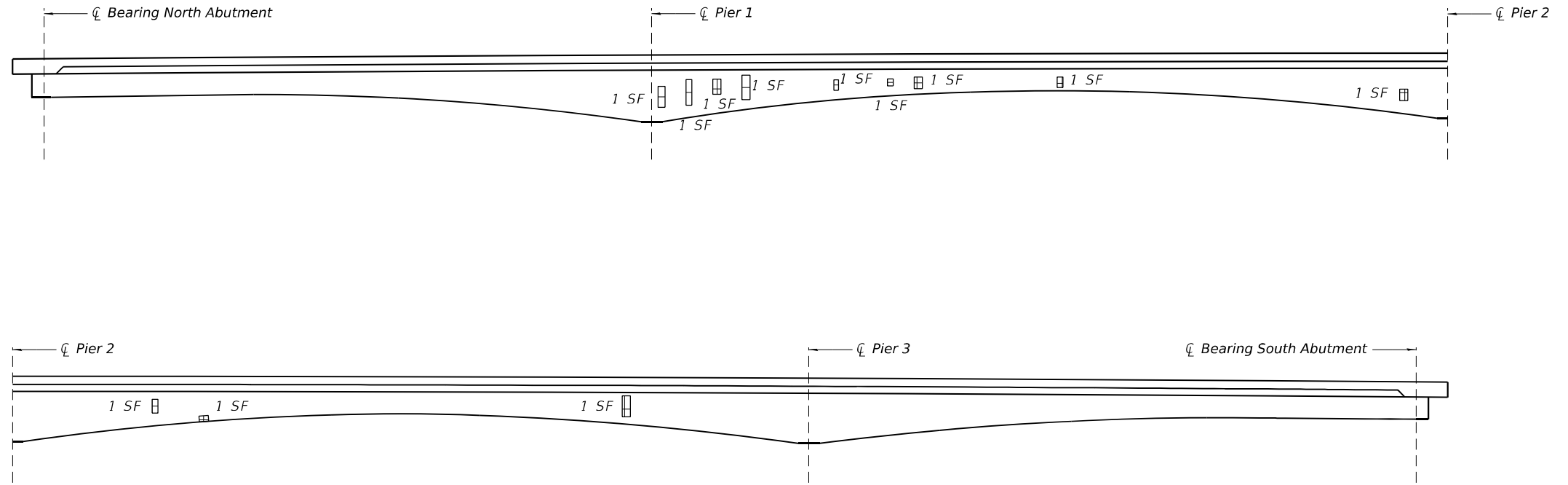
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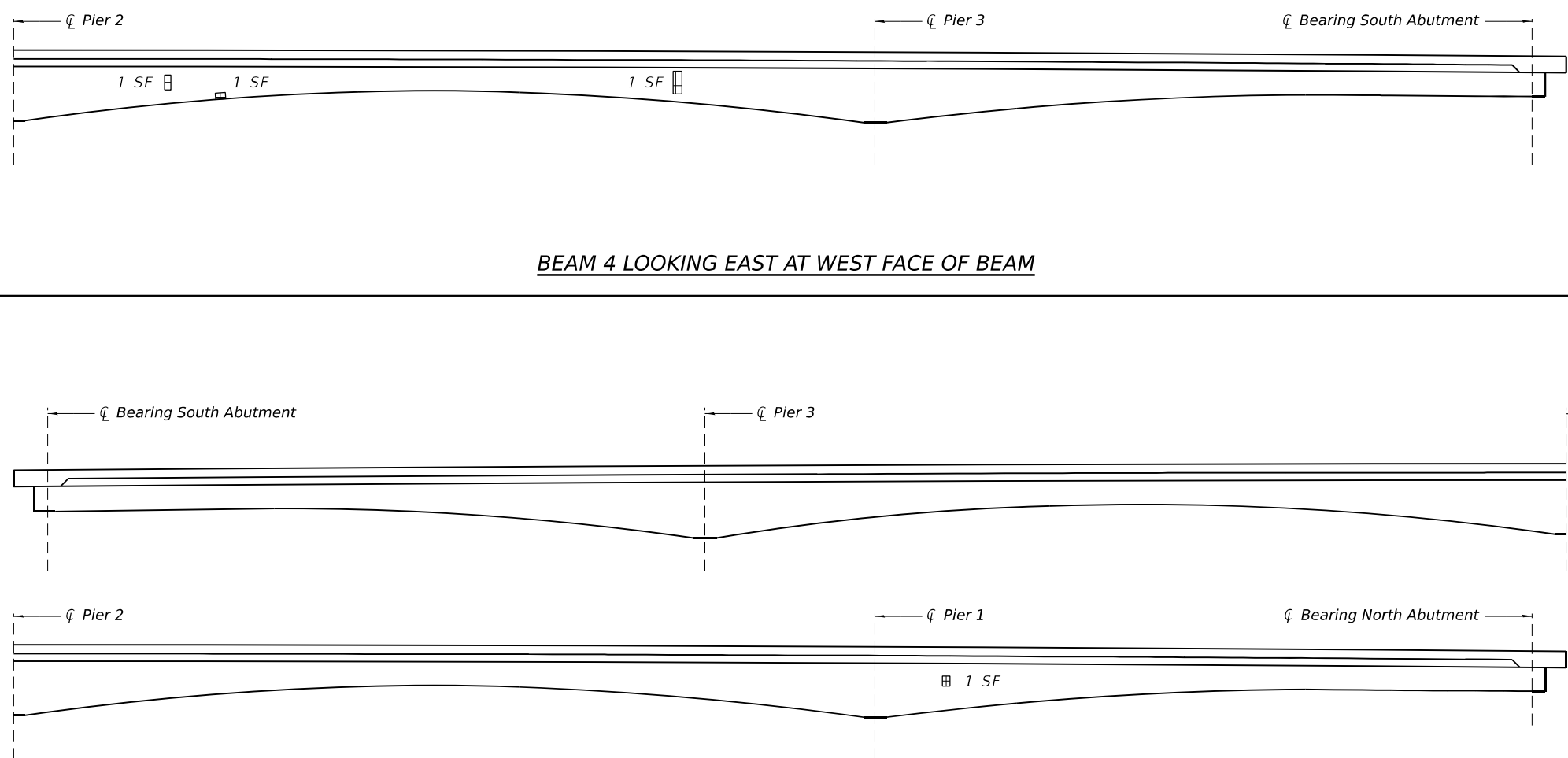
BEAM 3 REPAIRS
 S.N. 092-0128

SHEET 12 OF 15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(92-10,11,12)R	VERMILION	698	456
			CONTRACT NO. 70A29	
ILLINOIS FED. AID PROJECT				



BEAM 4 LOOKING EAST AT WEST FACE OF BEAM



BEAM 4 LOOKING WEST AT EAST FACE OF BEAM

Notes:

Beam repair areas shown are estimated from inspection notes on September 14, 2020. Actual locations and quantities of completed repairs shall be shown by the Engineer on as-built plans.
 Apply FRP Strengthening reinforcement to all portions of concrete beams being repaired after the concrete repairs are completed.
 The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions for "FRP Strengthening".
 Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied.
 Fiber Wrap and Acrylic Coating need not extend beyond face of abutment or pier diaphragms.
 3-inch strips shall be installed parallel to the bottom curvature of the beams. Wrap 6" onto interior diaphragms within the span.
 Color of Acrylic Coating shall be chosen to best match the appearance of the existing concrete.



Structural Repair of Concrete, (Depth Equal to or Less than 5"), Fiber Wrap, & Acrylic Coating*



Epoxy Crack Injection

*Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete, (Depth Equal to or Less than 5")	Sq. Ft.	13
Fiber Wrap	Sq. Ft.	52
Acrylic Coating	Sq. Yd.	5.9

MODEL: 13 Beam 4 Repairs
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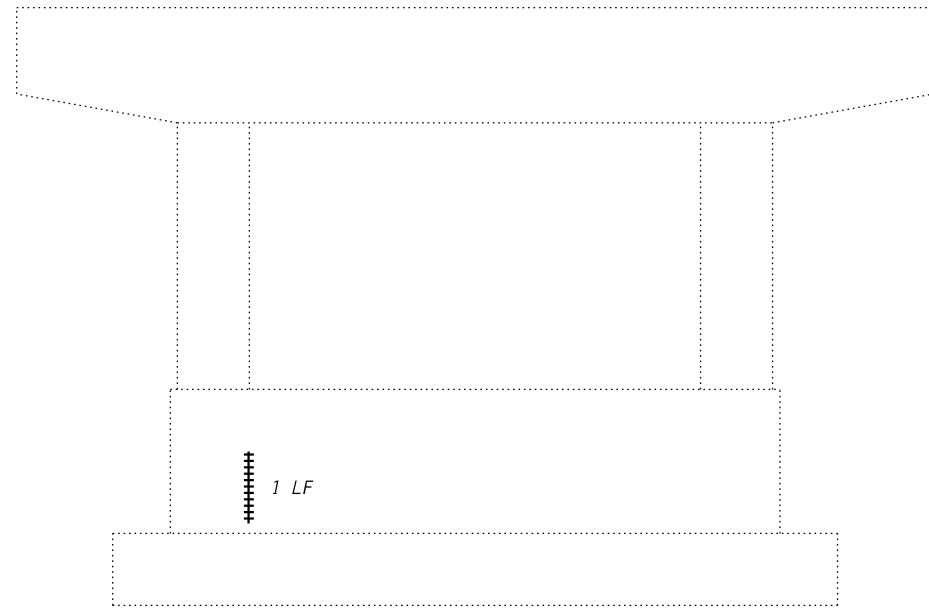
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BEAM 4 REPAIRS
S.N. 092-0128

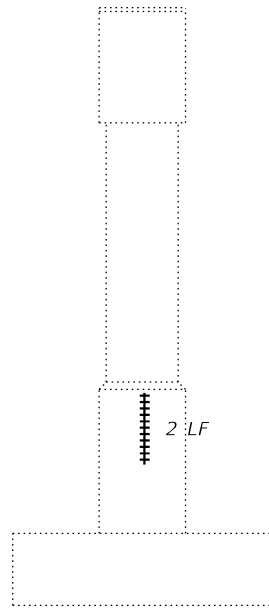
SHEET 13 OF 15 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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			CONTRACT NO. 70A29	
		ILLINOIS FED. AID PROJECT		

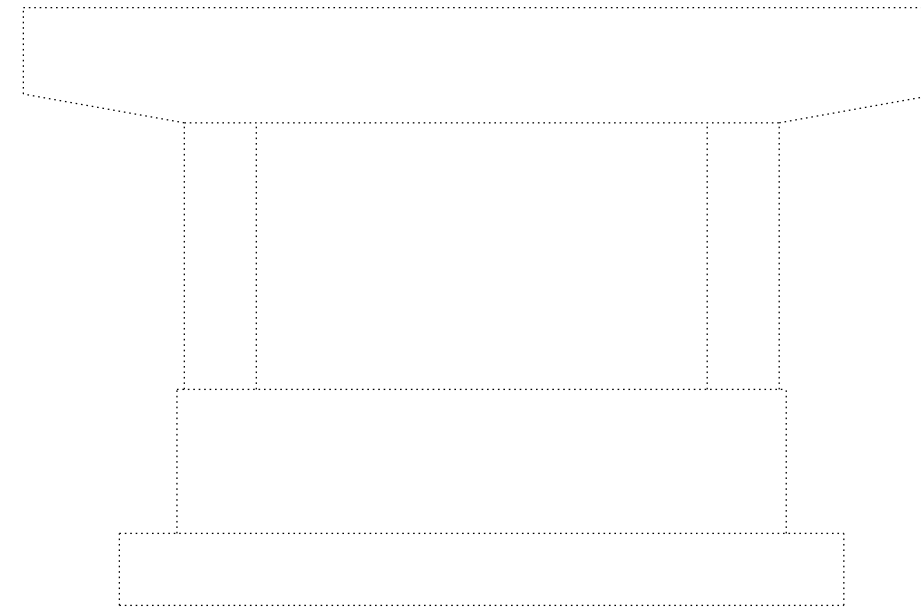
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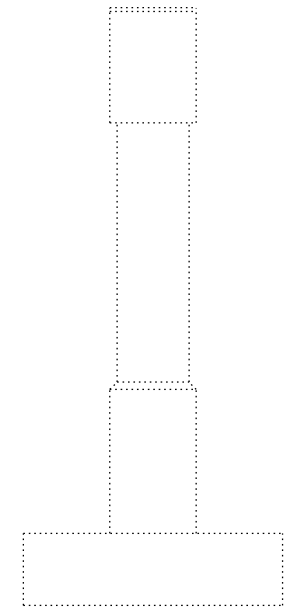
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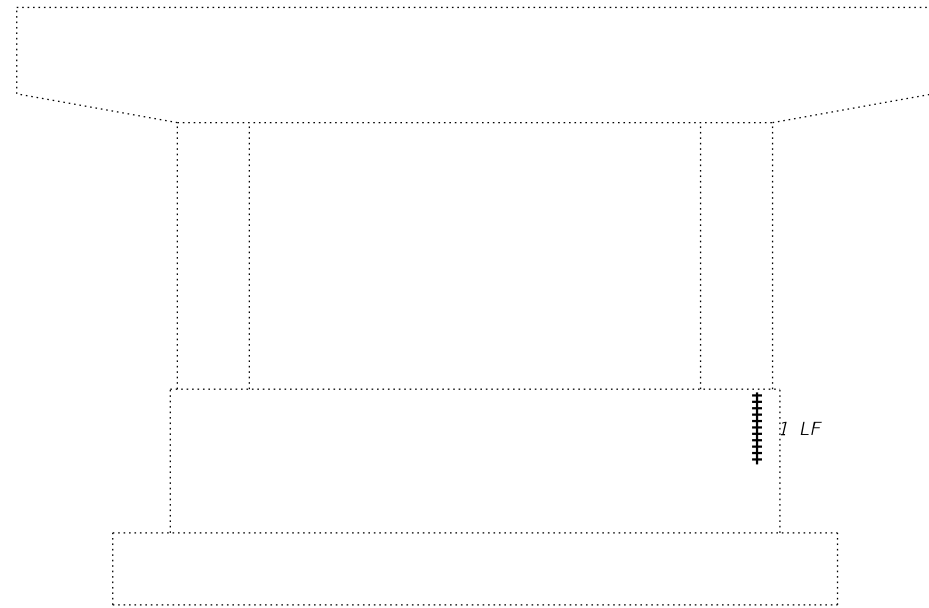
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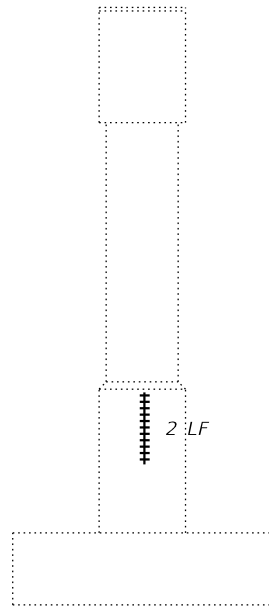
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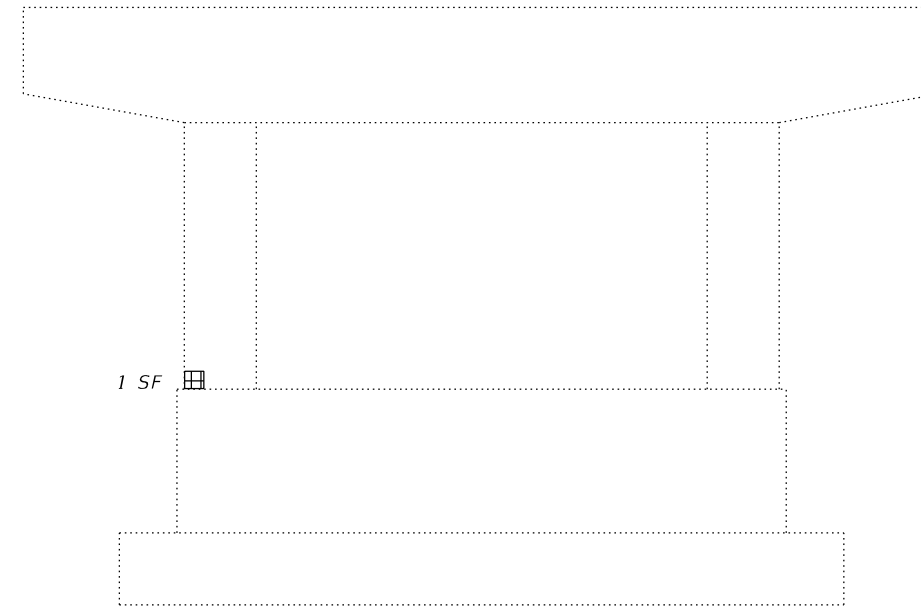
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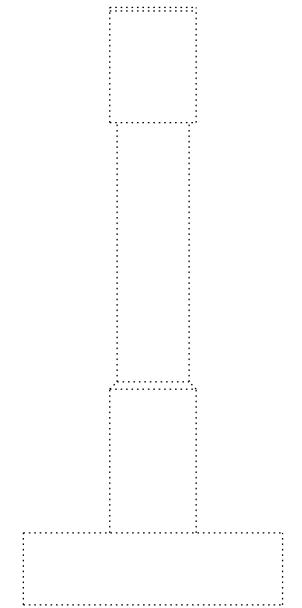
PIER 1 ELEVATION
 (Looking South)



PIER 1 ELEVATION
 (Looking West)



PIER 2 ELEVATION
 (Looking South)



PIER 2 ELEVATION
 (Looking West)



Structural Repair of Concrete, (Depth Equal to or Less than 5")



Epoxy Crack Injection

BILL OF MATERIAL

Item	Unit	Total
Structural Repair of Concrete, (Depth Equal to or Less than 5")	Sq. Ft.	1
Epoxy Crack Injection	Foot	6



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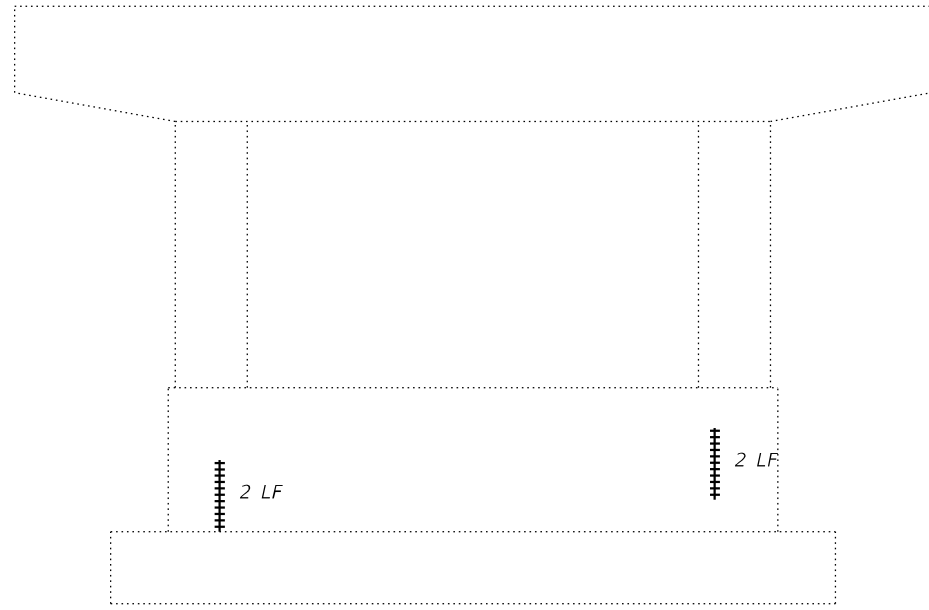
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 DEPARTMENT OF TRANSPORTATION

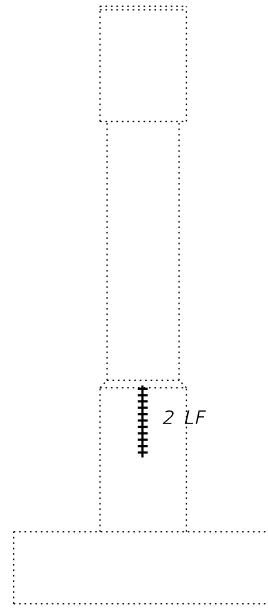
SUBSTRUCTURE REPAIR PLAN SHEET 1 OF 2
 S.N. 092-0128

SHEET 14 OF 15 SHEETS

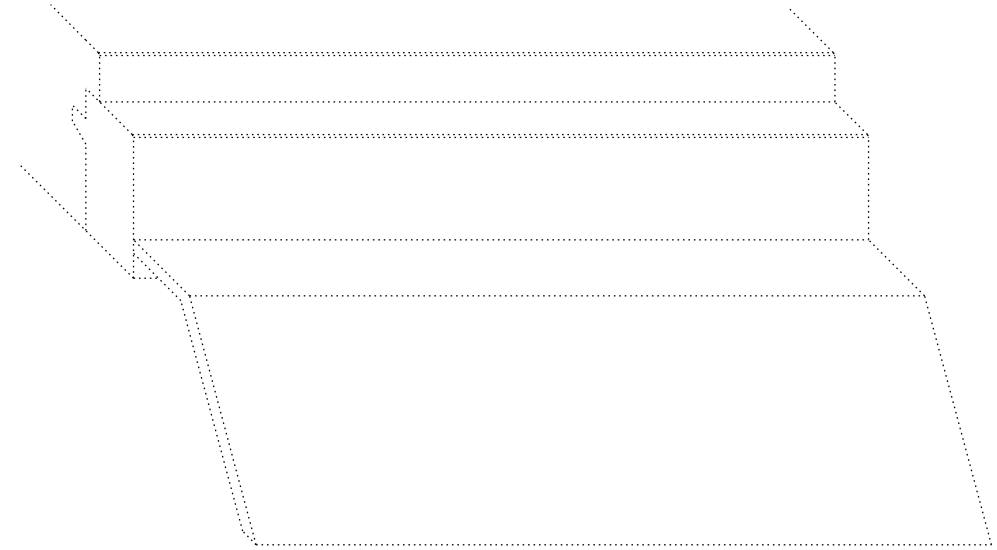
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			CONTRACT NO. 70A29	
ILLINOIS FED. AID PROJECT				



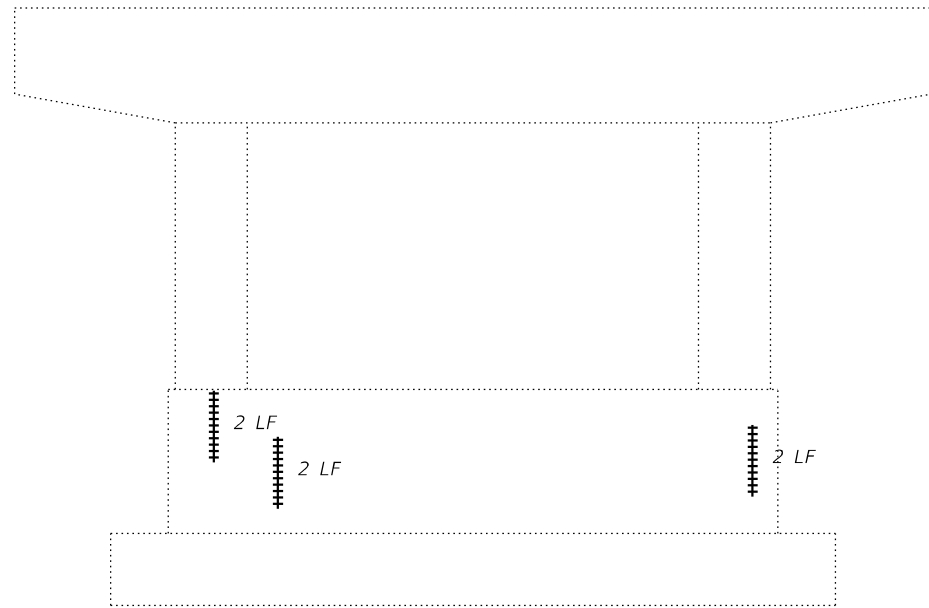
PIER 3 ELEVATION
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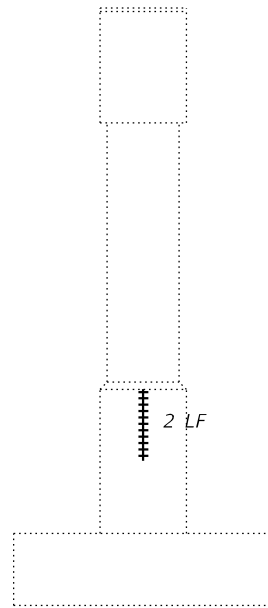
PIER 3 ELEVATION
(Looking East)



NORTH SLOPE WALL



PIER 3 ELEVATION
(Looking South)



PIER 3 ELEVATION
(Looking West)



SOUTH SLOPE WALL
Approximately 40 linear feet of crack to seal

BILL OF MATERIAL

Item	Unit	Total
Epoxy Crack Injection	Foot	14
Slope Wall Crack Sealing	Foot	40

+++++ Epoxy Crack Injection
 ~~~~~ Slope Wall Crack Sealing

MODEL: 15 Sub Repair 2  
 FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0128\DS70A29\_0128\_Combined.dgn



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| PLOT SCALE = | DRAWN - DCS    | REVISED - |
| PLOT DATE =  | CHECKED - KAS  | REVISED - |

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 DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIR PLAN SHEET 2 OF 2  
 S.N. 092-0128

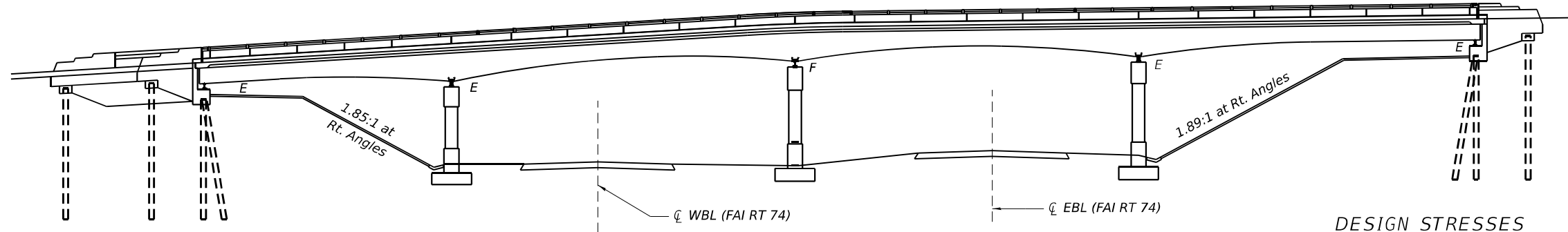
SHEET 15 OF 15 SHEETS

| F.A.I. RTE. | SECTION        | COUNTY    | TOTAL SHEETS       | SHEET NO. |
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|             |                |           | CONTRACT NO. 70A29 |           |
|             |                | ILLINOIS  | FED. AID PROJECT   |           |

Structure 092-0129 was originally constructed under FAI 74, Section 92-12HB; Contract 22098. The structure is a 4 span continuous concrete tee beam structure with open stub abutments on concrete piles and multi column reinforced concrete piers on spread footings supported by piles. In 1993 steel bridge rail was placed across the structure as FAI 74 Section 92(11,12,12-1)RS & (92-12 HB-2)BRK; Contract 91216.

The existing structure has a back to back of abutment length of 258'-11<sup>3</sup>/<sub>4</sub>", and out to out width of 30'-0" and a roadway width of 24'-0". The structure has a 36°04'50" skew right forward.

Note:  
See Sheet 2 of 14 for Proposed Work, Bill of Material, and General Notes.

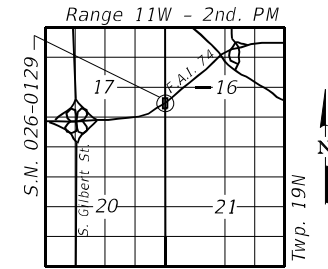


**ELEVATION**

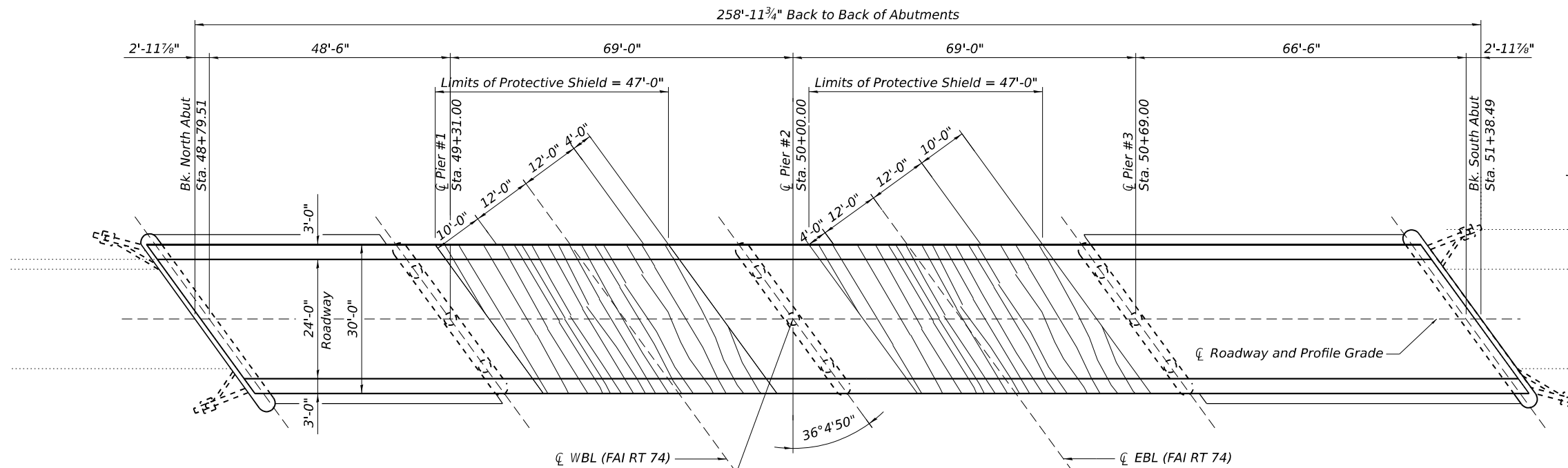
**DESIGN STRESSES  
FIELD UNITS**

New Construction  
 $f_c = 4,000$  psi  
 $f_y = 60,000$  psi (Reinforcement)

Existing Structure  
 $f_c = 1,400$  psi  
 $f_s = 20,000$  psi (Reinforcement)  
 $f_c = 18,000$  (Structural Steel)

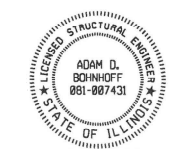
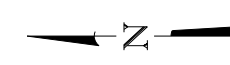


**LOCATION SKETCH**



**PLAN**

Sta. 1971+24.72 FAI RT 74 =  
 Sta. 50+00 CL FAU 7019 (TR 354 Greenwood Cemetery Road)



*Adam D. Bohnhoff* 4-4-22  
 Adam D. Bohnhoff Date  
 Licensed Structural Engineer  
 State of Illinois No. 081-007431  
 Expires 11-30-2022

MODEL: 01 GPE  
 FILE NAME: P:\E:\ng\ham\40688 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0129\0570A29\_0129\_Combined.dgn

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|              | CHECKED - KAS  | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN & ELEVATION  
 S.N. 092-0129**

SHEET 1 OF 14 SHEETS

| F.A.I. RTE.        | SECTION        | COUNTY    | TOTAL SHEETS              | SHEET NO. |
|--------------------|----------------|-----------|---------------------------|-----------|
| 74                 | (92-10,11,12)R | VERMILION | 698                       | 460       |
| CONTRACT NO. 70A29 |                |           | ILLINOIS FED. AID PROJECT |           |



**INDEX OF SHEETS**

1. General Plan & Elevation
2. General Data
3. Existing & Proposed Cross Sections
4. Wearing Surface Details
5. Floor Drain & Patching Details
6. Parapet Repair
7. Floor Drain Details
8. Framing Plan
9. Beam 1 Repairs
10. Beam 2 Repairs
11. Beam 3 Repairs
12. Beam 4 Repairs
13. Substructure Repair Plan Sheet 1 of 2
14. Substructure Repair Plan Sheet 2 of 2

**PROPOSED WORK**

1. Bridge deck scarification.
2. Remove existing bridge floor drains.
3. Repair bridge deck slab and install new floor drains.
4. Repair parapet.
5. Repair concrete superstructure beams.
6. Weld plate to existing deck end armor.
7. Place microsilica concrete overlay on bridge deck.
8. Repair substructure.
9. HMA rundowns for transition at approaches.

**GENERAL NOTES**

Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. It shall be the Contractor's responsibility to verify such dimensions and details in the field and make the necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of work. However, the Contractor will be paid for the quantity actually furnished at the unit price for the work.

Reinforcement bars designated (E) shall be epoxy coated.

Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during concrete removal shall be replaced with approved bar splicer or anchorage system. Cost included with Concrete Removal.

Joint openings shall be adjusted according to article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50°F.

Synthetic fibers shall be added to the Bridge Deck Microsilica Concrete Overlay, see Special Provisions.

Protective Shield shall be required in accordance with Section 501. No drill and epoxy shall be allowed in the bottom 12" of concrete beams to avoid tension reinforcement.

The Contractor shall take extreme care during Concrete Removal so as to not damage the existing concrete beam.

**TOTAL BILL OF MATERIAL**

| Item                                                           | Unit    | Total |
|----------------------------------------------------------------|---------|-------|
| * Protective Coat                                              | Sq. Yd. | 710   |
| Concrete Removal                                               | Cu. Yd. | 5.2   |
| Protective Shield                                              | Sq. Yd. | 388   |
| Floor Drains                                                   | Each    | 12    |
| Concrete Superstructures                                       | Cu. Yd. | 5.2   |
| Bridge Deck Grooving                                           | Sq. Yd. | 688   |
| Bridge Deck Microsilica Concrete Overlay, 1 1/4"               | Sq. Yd. | 688   |
| Acrylic Coating                                                | Sq. Yd. | 7.6   |
| Bridge Deck Scarification 3/4"                                 | Sq. Yd. | 688   |
| Deck Slab Repair (Full Depth, Type I)                          | Sq. Yd. | 41    |
| Deck Slab Repair (Full Depth, Type II)                         | Sq. Yd. | 59    |
| Fiber Wrap                                                     | Sq. Ft. | 68    |
| Structural Repair of Concrete (Depth Equal to or Less than 5") | Sq. Ft. | 47    |
| Epoxy Crack Injection                                          | Foot    | 41    |
| Slope Wall Crack Sealing                                       | Foot    | 90    |
|                                                                |         |       |
|                                                                |         |       |
|                                                                |         |       |

\* Protective Coat shall be applied to all new concrete superstructure and all new concrete overlays as specified in Article 503.19 of the Standard Specifications.

MODEL: 02 General Notes  
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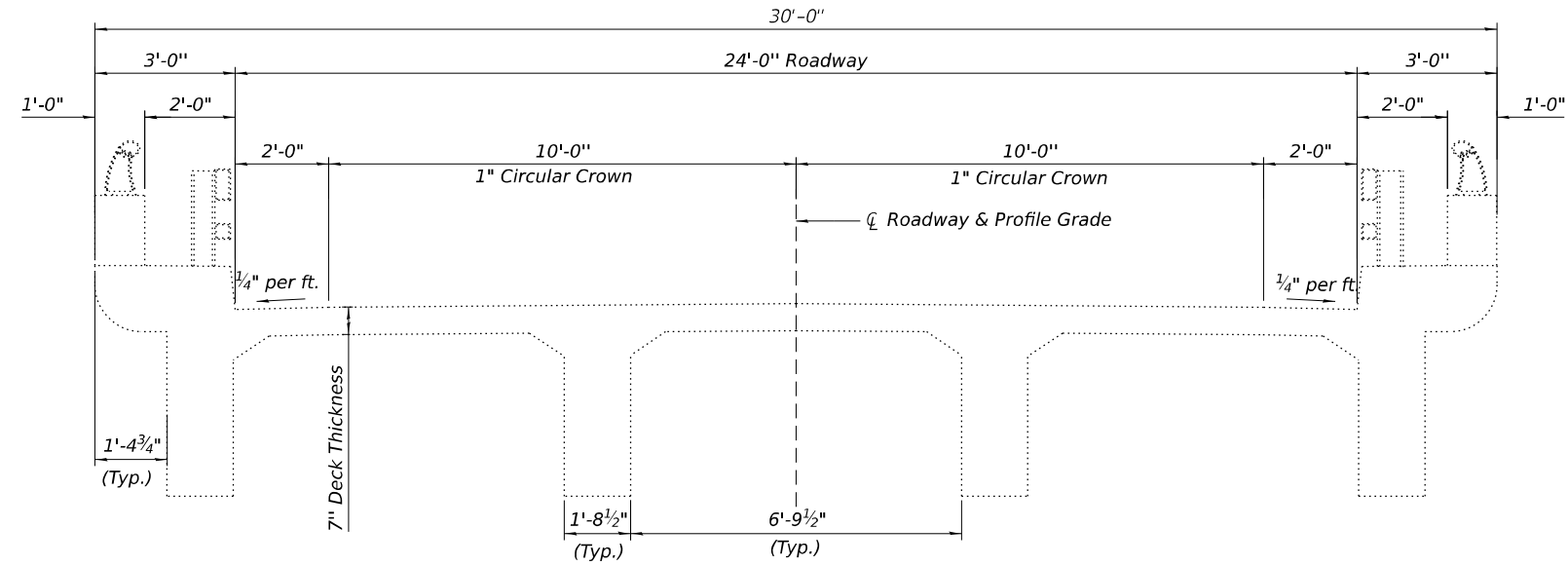
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DEPARTMENT OF TRANSPORTATION**

**GENERAL DATA  
S.N. 092-0129**

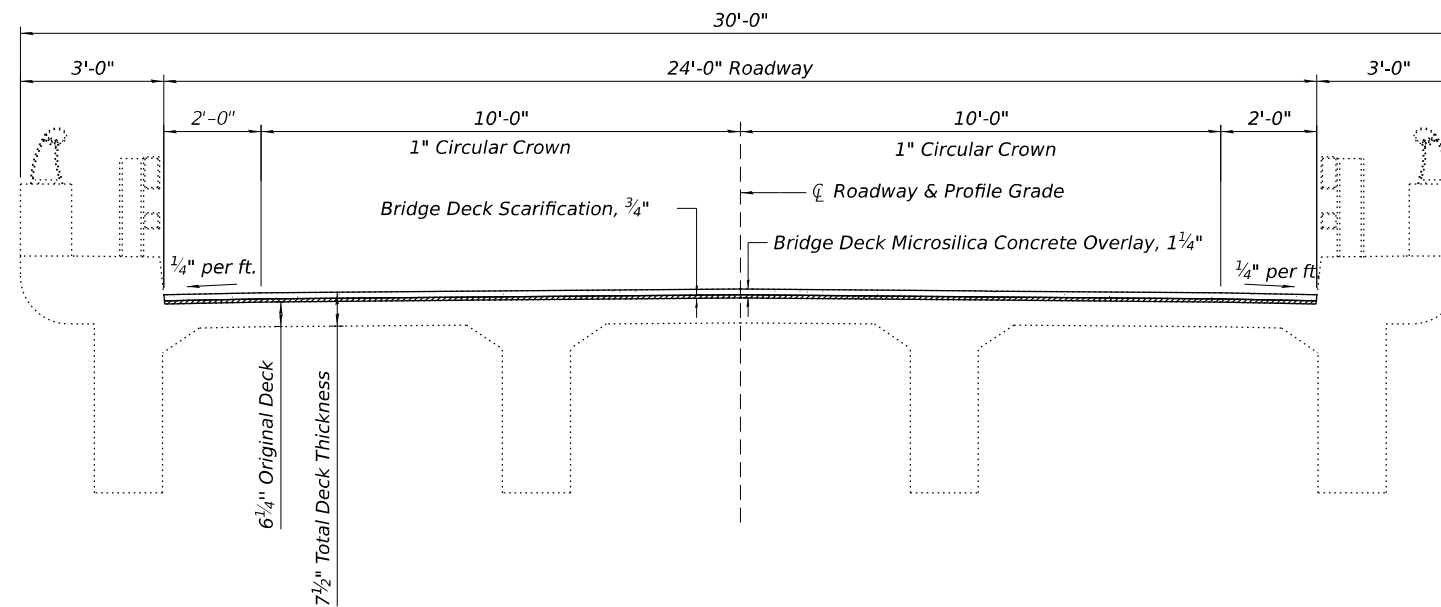
SHEET 2 OF 14 SHEETS

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS       | SHEET NO. |
|---------------------------|----------------|-----------|--------------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698                | 461       |
| ILLINOIS FED. AID PROJECT |                |           | CONTRACT NO. 70A29 |           |

EXISTING CROSS SECTION



PROPOSED CROSS SECTION



MODEL: 03 Cross Sections  
 FILE NAME: P:\E\ng\ham\40688 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\ISN 092-0129\570A29\_0129\_Combined.dgn



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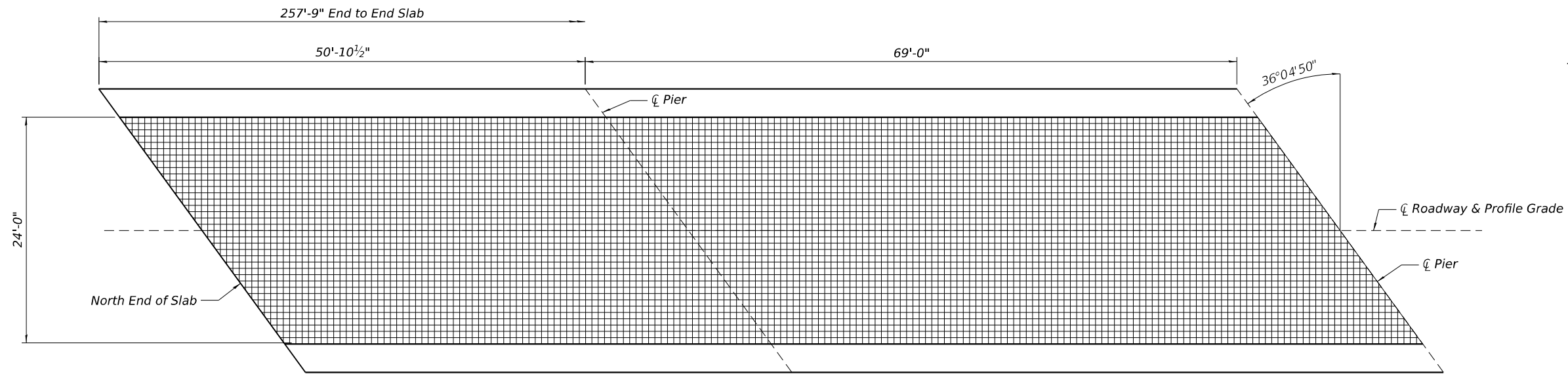
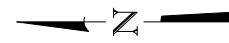
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

EXISTING & PROPOSED CROSS SECTIONS  
 S.N. 092-0129

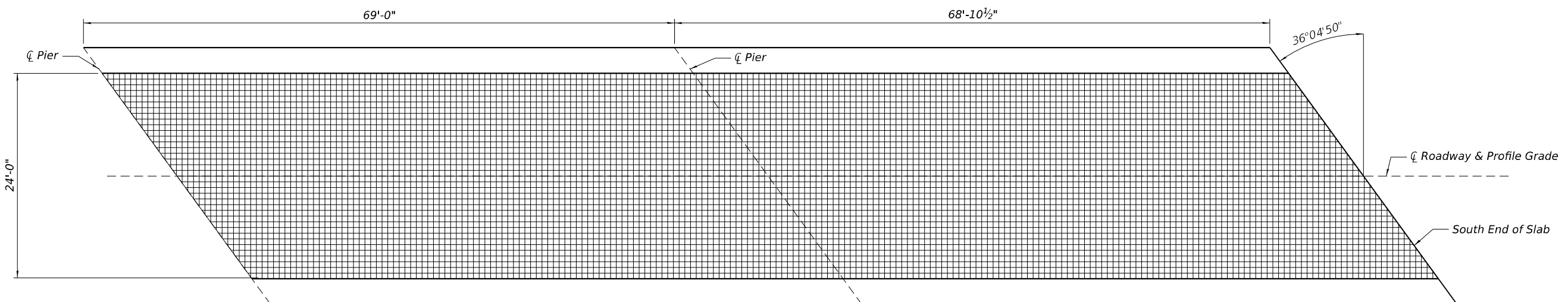
SHEET 3 OF 14 SHEETS

| F.A.I. RTE. | SECTION        | COUNTY    | TOTAL SHEETS       | SHEET NO. |
|-------------|----------------|-----------|--------------------|-----------|
| 74          | (92-10,11,12)R | VERMILION | 698                | 462       |
|             |                |           | CONTRACT NO. 70A29 |           |

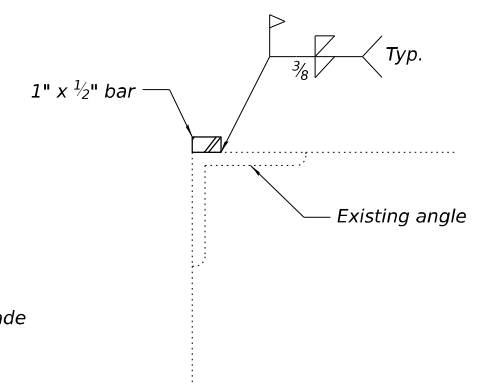
ILLINOIS FED. AID PROJECT



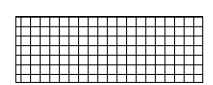
**PLAN**



**PLAN**



**DETAIL OF BAR AT END OF SLAB**  
(Typical both ends of deck)



Bridge Deck Scarification, 3/4", Bridge Deck Microsilica Concrete Overlay, 1 1/4", & Bridge Deck Grooving

**BILL OF MATERIAL**

| Item                                             | Unit    | Total |
|--------------------------------------------------|---------|-------|
| Bridge Deck Grooving                             | Sq. Yd. | 688   |
| Bridge Deck Microsilica Concrete Overlay, 1 1/4" | Sq. Yd. | 688   |
| Bridge Deck Scarification, 3/4"                  | Sq. Yd. | 688   |

Steel bar shall be blast cleaned to SSPC SP 10 and shop primed with inorganic zinc rich primer.

Cost of steel bars complete in place at deck ends shall be included in the cost of Bridge Deck Microsilica Concrete Overlay.

MODEL: 04 Wearing Surface  
FILE NAME: P:\E\ng\ham\4068 - IDOT PTB\_193-26 D5 1-74 at Danville\CAD\SN\_092-0129\570A29\_0129\_Combined.dgn



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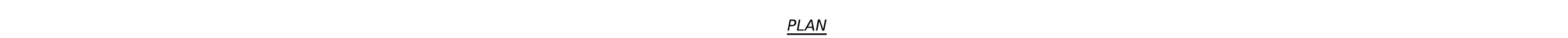
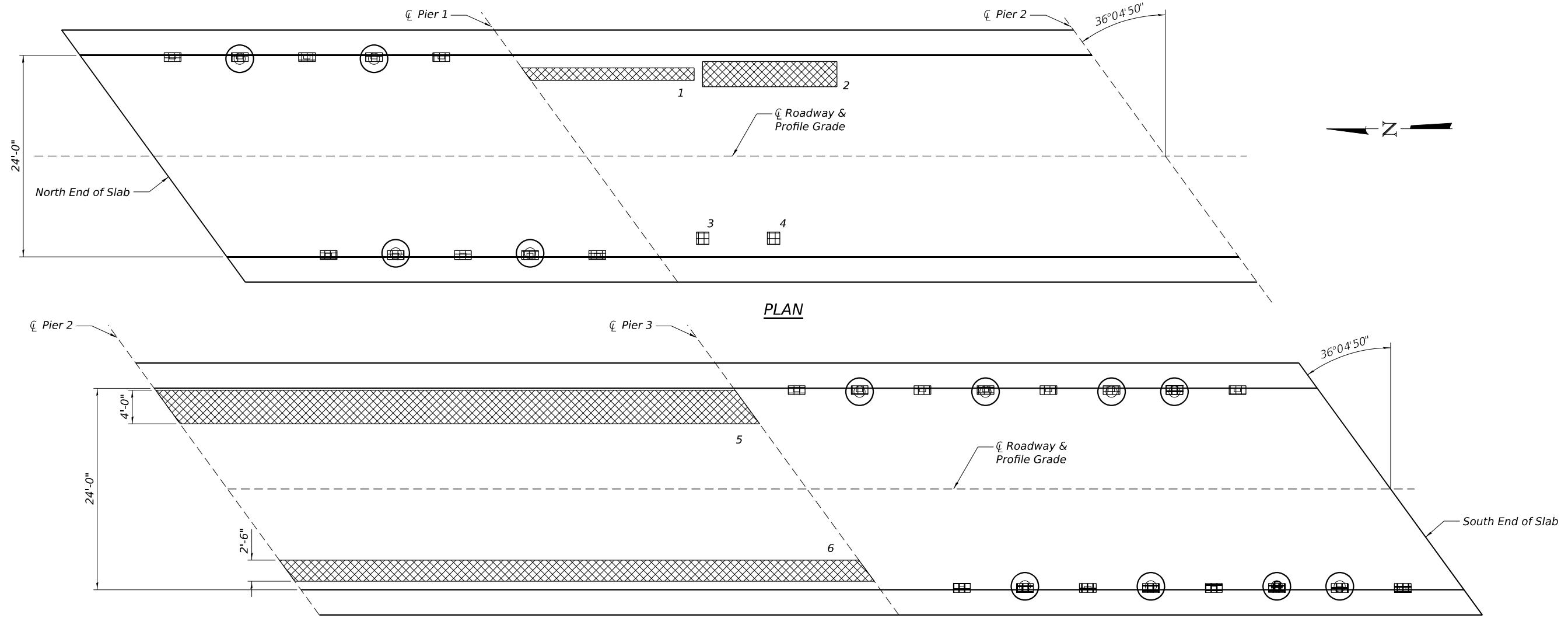
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| PLOT SCALE = | CHECKED - TJZ  | REVISED - |
| PLOT DATE =  | DRAWN - DCS    | REVISED - |
|              | CHECKED - KAS  | REVISED - |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

WEARING SURFACE DETAILS  
S.N. 092-0129

SHEET 4 OF 14 SHEETS

|                    |                |           |                           |           |
|--------------------|----------------|-----------|---------------------------|-----------|
| F.A.I. RTE.        | SECTION        | COUNTY    | TOTAL SHEETS              | SHEET NO. |
| 74                 | (92-10,11,12)R | VERMILION | 698                       | 463       |
| CONTRACT NO. 70A29 |                |           | ILLINOIS FED. AID PROJECT |           |



| PATCH NO.               | SIZE           | Deck Slab Repair (Full Depth) |                    |
|-------------------------|----------------|-------------------------------|--------------------|
|                         |                | Type I<br>Sq. Ft.             | Type II<br>Sq. Ft. |
| 1                       | 18" x 20'-0"   |                               | 30                 |
| 2                       | 3'-0" x 16'-0" |                               | 48                 |
| 3                       | 18" x 18"      | 2.25                          |                    |
| 4                       | 18" x 18"      | 2.25                          |                    |
| 5                       | 4'-0" x 69'-0" |                               | 276                |
| 6                       | 2'-6" x 69'-0" |                               | 172.5              |
| Repair at Drain, 26 ea. |                | 56.3                          |                    |

| PATCH NO. | SIZE | Deck Slab Repair (Full Depth) |                    |
|-----------|------|-------------------------------|--------------------|
|           |      | Type I<br>Sq. Ft.             | Type II<br>Sq. Ft. |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |

| PATCH NO. | SIZE | Deck Slab Repair (Full Depth) |                    |
|-----------|------|-------------------------------|--------------------|
|           |      | Type I<br>Sq. Ft.             | Type II<br>Sq. Ft. |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |

| PATCH NO. | SIZE | Deck Slab Repair (Full Depth) |                    |
|-----------|------|-------------------------------|--------------------|
|           |      | Type I<br>Sq. Ft.             | Type II<br>Sq. Ft. |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |
|           |      |                               |                    |

**LEGEND**

- Proposed floor drain location
- Deck Slab Repair (Full Depth, Type II)
- Deck Slab Repair (Full Depth, Type I) at all Drain Locations  
All repair areas are 2'-0" x 1'-1" unless otherwise noted.

**NOTES:**

Patch sizes shown represent conditions at the time the plans were completed. Quantity for Deck Slab Repair (Full Depth, Type I) includes the above areas and 5% of the deck area as an allowance for increase in deterioration.

The actual sizes and locations of patching shall be determined by the engineer. The Engineer Shall show the actual locations of the deck repairs on this sheet.

The existing 26 drains and extensions shall be removed. Cost included with "Deck Slab Repair (Full Depth, Type I)".

**BILL OF MATERIAL**

| Item                                   | Unit    | Total |
|----------------------------------------|---------|-------|
| Deck Slab Repair (Full Depth, Type I)  | Sq. Yd. | 41    |
| Deck Slab Repair (Full Depth, Type II) | Sq. Yd. | 59    |

MODEL: 05 Floor Drain and Patching  
FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CADD\SN 092-0129\D570A29\_0129\_Combined.dgn



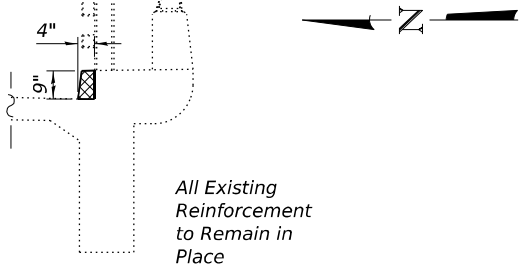
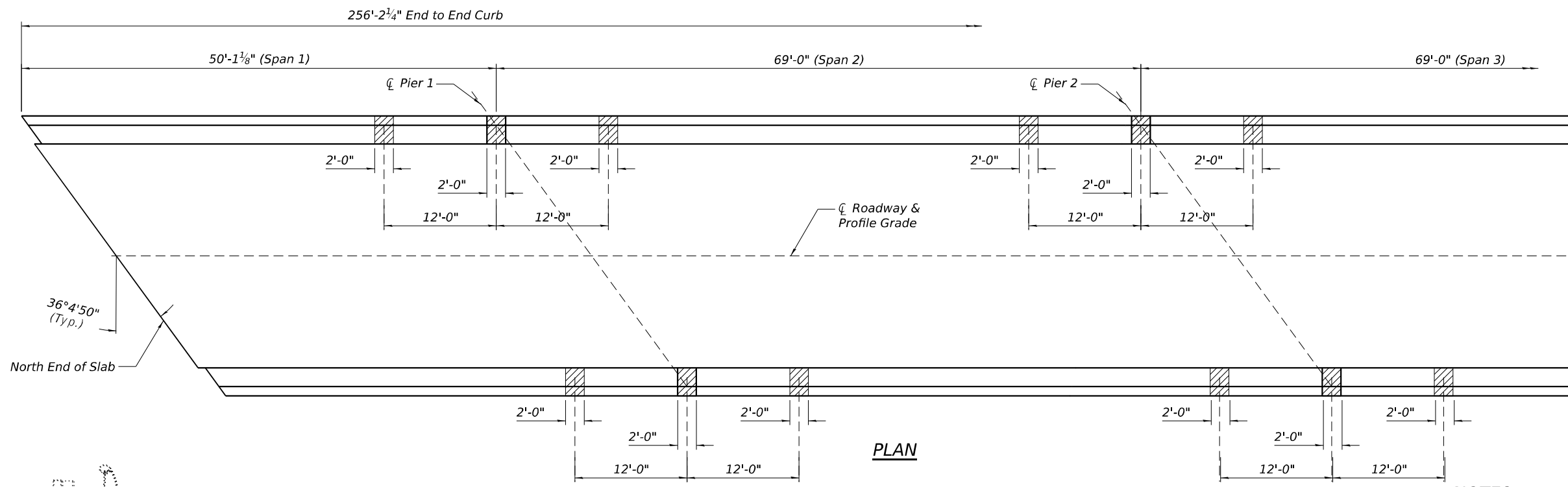
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|              | CHECKED - TJZ  | REVISED - |
| PLOT SCALE = | DRAWN - DCS    | REVISED - |
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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

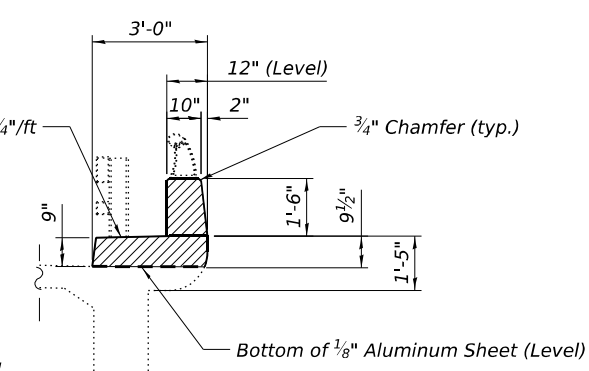
**FLOOR DRAIN & PATCHING DETAILS  
S.N. 092-0129**

SHEET 5 OF 14 SHEETS

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 464       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |

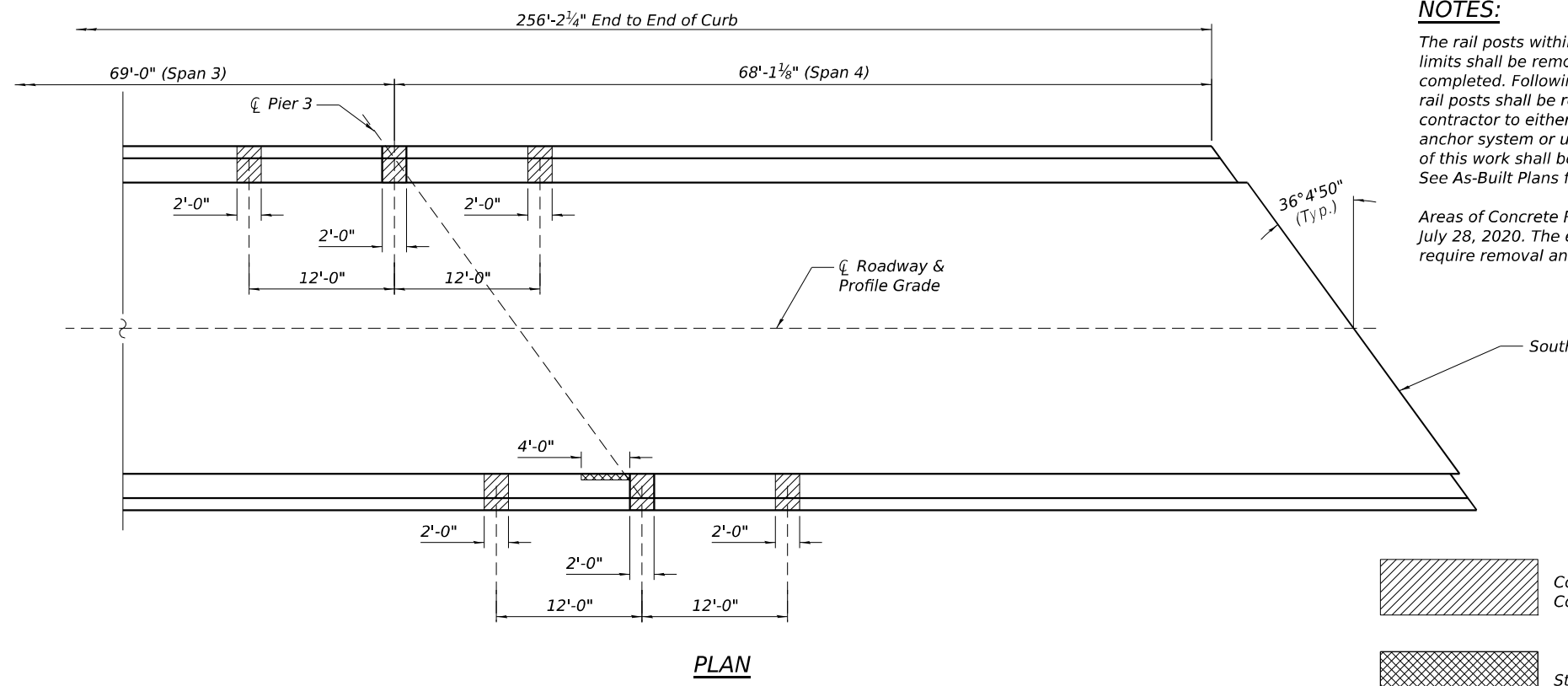


**SECTION AT CURB**  
Showing Typical Removal Limits for Structural Repair of Concrete on Curb

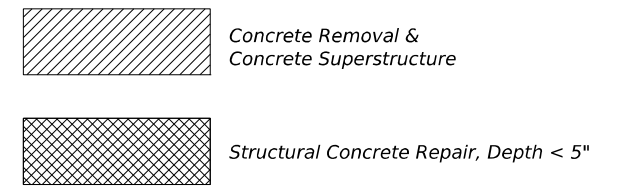


**SECTION AT PARAPET**

Const. Jts. at Piers 1/8" Aluminum sheet ASTM B 209 Alloy 3003-H14, coated to minimize reaction with wet concrete. Cost to be included with Concrete Superstructure.



**NOTES:**  
The rail posts within the parapet removal and replacement limits shall be removed to allow for the repair work to be completed. Following completion of the parapet ends, the rail posts shall be re-attached. It is the option of the contractor to either save and reuse the existing cast-in-place anchor system or use epoxy-grouted threaded rods. The cost of this work shall be included in Concrete Superstructure. See As-Built Plans for bridge rail and aluminum handrail details.  
Areas of Concrete Removal and Superstructure were identified July 28, 2020. The engineer shall determine if additional areas require removal and replacement at time of construction.



**BILL OF MATERIAL**

| Item                                                           | Unit    | Total |
|----------------------------------------------------------------|---------|-------|
| Concrete Removal                                               | Cu. Yd. | 5.2   |
| Concrete Superstructures                                       | Cu. Yd. | 5.2   |
| Structural Repair of Concrete (Depth Equal to or Less than 5") | Sq. Ft. | 3     |

MODEL: 06 Parapet Repair Plan  
FILE NAME: P:\E\ng\ham\40688 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0129\570A29\_0129\_Combined.dgn



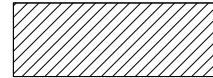
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STATE OF ILLINOIS  
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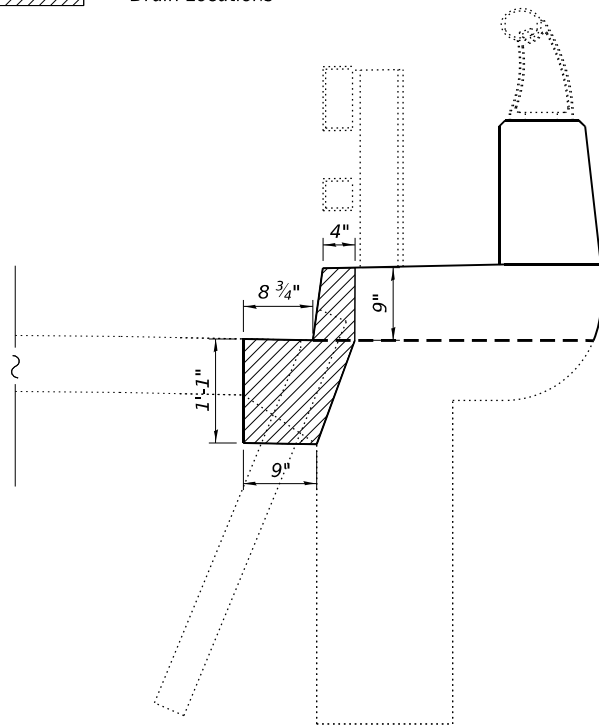
PARAPET REPAIR  
S.N. 092-0129

SHEET 6 OF 14 SHEETS

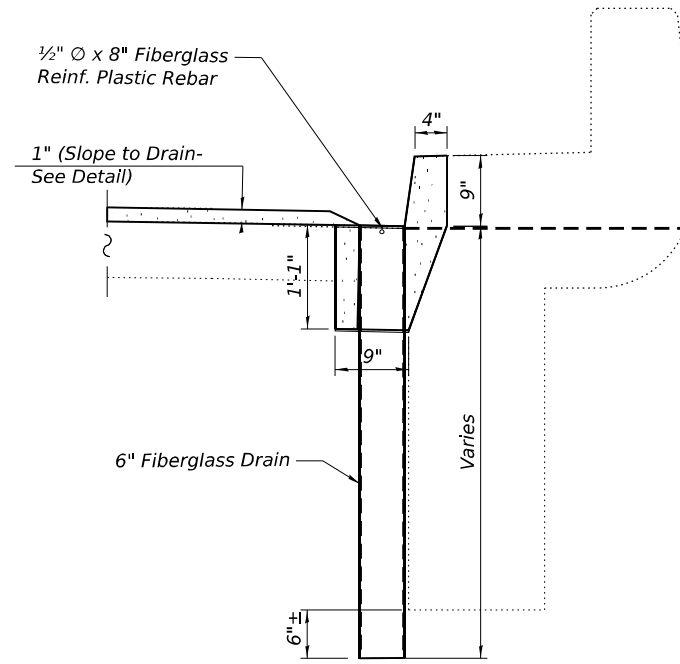
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| F.A.I. RTE. | SECTION        | COUNTY                    | TOTAL SHEETS       | SHEET NO. |
| 74          | (92-10,11,12)R | VERMILION                 | 698                | 465       |
|             |                |                           | CONTRACT NO. 70A29 |           |
|             |                | ILLINOIS FED. AID PROJECT |                    |           |



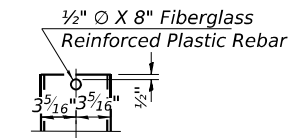
Removal Limits for Deck Slab Repair (Full-Depth, Type I) at Drain Locations



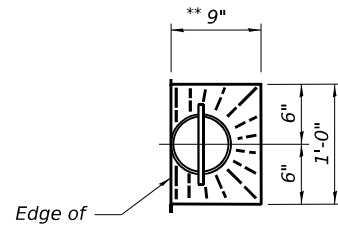
**TYPICAL REMOVAL LIMITS**  
(Bridge rail not shown for clarity)



**TYPICAL REMOVAL LIMITS**  
(Bridge rail not shown for clarity)



**FIBERGLASS PIPE**



**TOP PLAN**  
\*\* Slope to Drain

Notes:  
All dimensions shall be field verified by the contractor prior to ordering of materials.

**BILL OF MATERIAL**

| Item         | Unit | Total |
|--------------|------|-------|
| Floor Drains | Each | 12    |

Cost of removal of existing drains and extensions is included in Deck Slab Repair (Full Depth, Type I)

MODEL: 07 Floor Drain Details  
FILE NAME: P:\E\ng\ham\40688 - IDOT PTB\_193-26 D5 1-74 at Danville\CAD\SN 092-0129\0570A29\_0129\_Combined.dgn



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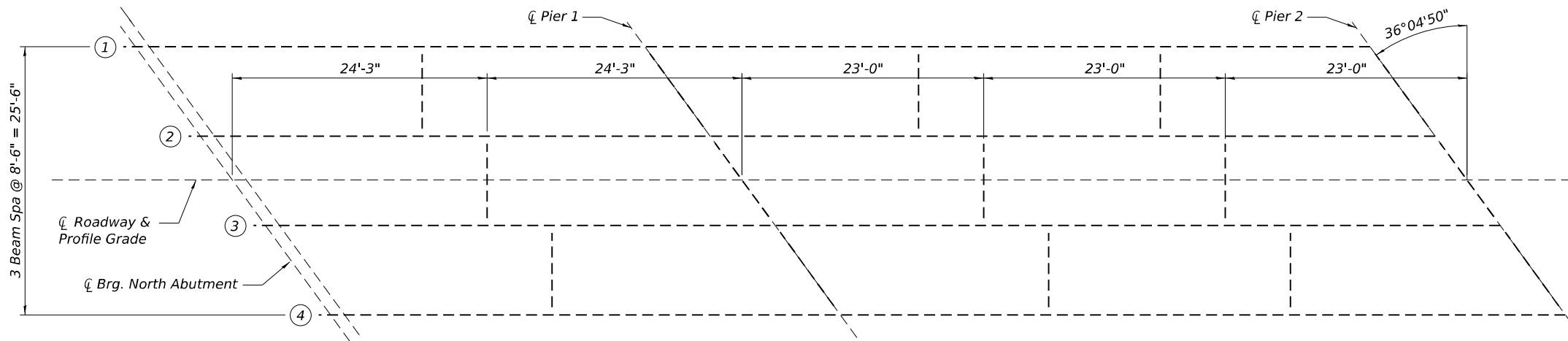
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

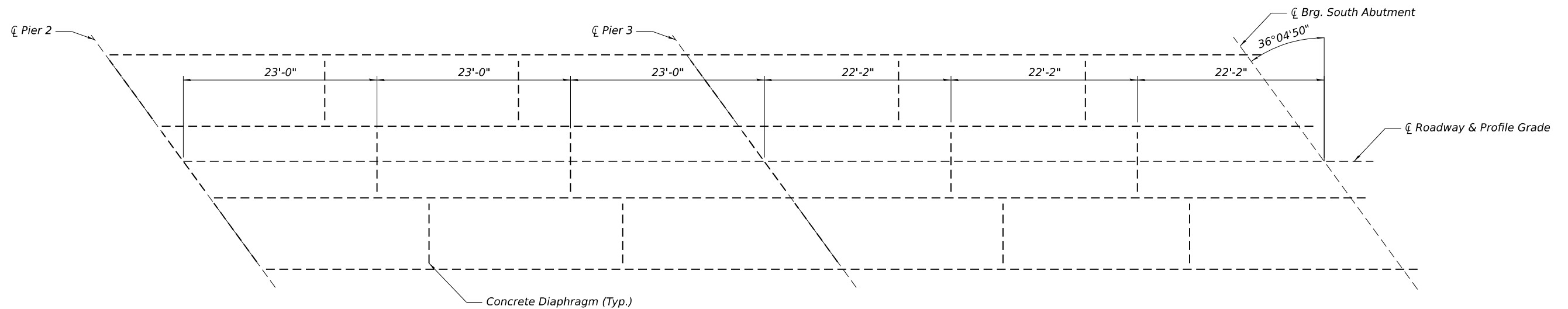
FLOOR DRAIN DETAILS  
S.N. 092-0129

SHEET 7 OF 14 SHEETS

|                    |                |           |                           |           |
|--------------------|----------------|-----------|---------------------------|-----------|
| F.A.I. RTE.        | SECTION        | COUNTY    | TOTAL SHEETS              | SHEET NO. |
| 74                 | (92-10,11,12)R | VERMILION | 698                       | 466       |
| CONTRACT NO. 70A29 |                |           | ILLINOIS FED. AID PROJECT |           |



**FRAMING PLAN SPAN 1 & 2**



**FRAMING PLAN SPAN 3 & 4**

MODEL: 08 Framing Plan  
 FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0129\570A29\_0129\_Combined.dgn  
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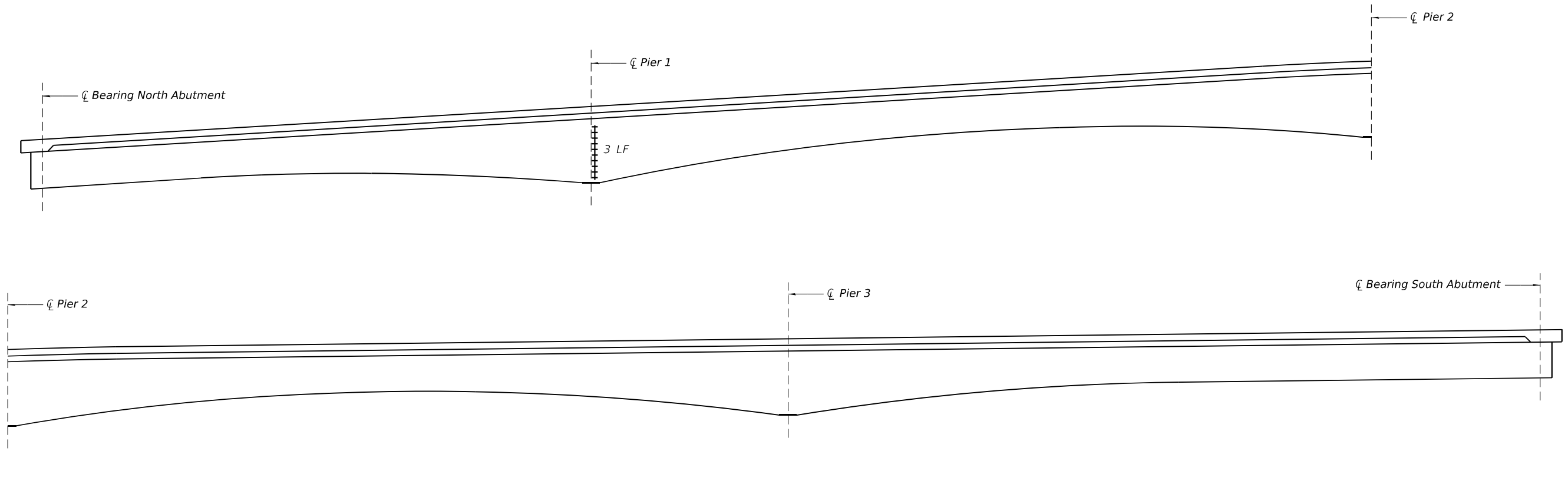
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

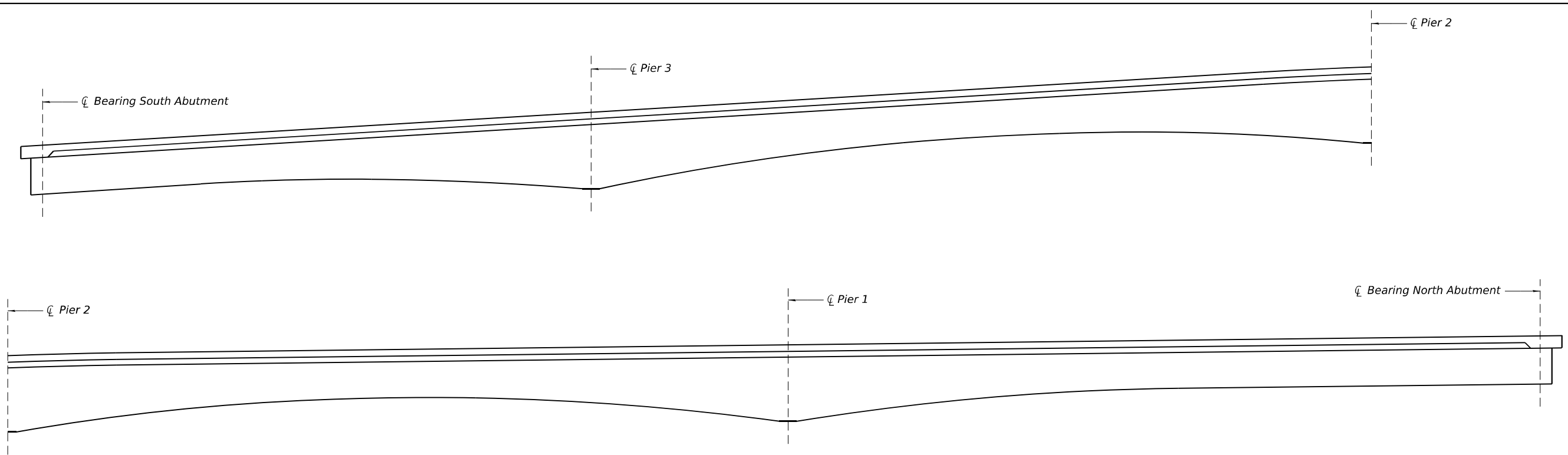
**FRAMING PLAN  
 S.N. 092-0129**

SHEET 8 OF 14 SHEETS

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS       | SHEET NO. |
|---------------------------|----------------|-----------|--------------------|-----------|
| 74                        | (92-10.11,12)R | VERMILION | 698                | 467       |
| ILLINOIS FED. AID PROJECT |                |           | CONTRACT NO. 70A29 |           |



**BEAM 1 LOOKING EAST AT WEST FACE OF BEAM**



**BEAM 1 LOOKING WEST AT EAST FACE OF BEAM**

+++++ Epoxy Crack Injection

**BILL OF MATERIAL**

| Item                  | Unit | Total |
|-----------------------|------|-------|
| Epoxy Crack Injection | Foot | 3     |

MODEL: 09 Beam 1 Repairs  
 FILE NAME: P:\E\ng\ham\40688 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0129\570A29\_0129\_Combined.dgn



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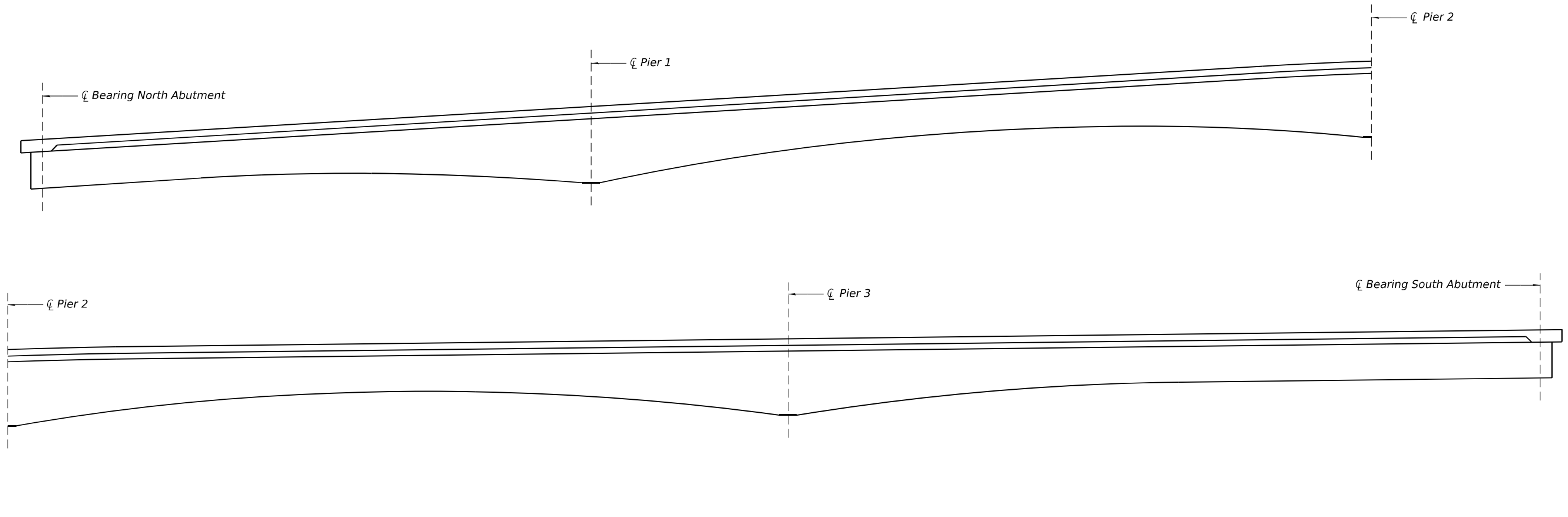
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BEAM 1 REPAIRS  
 S.N. 092-0129

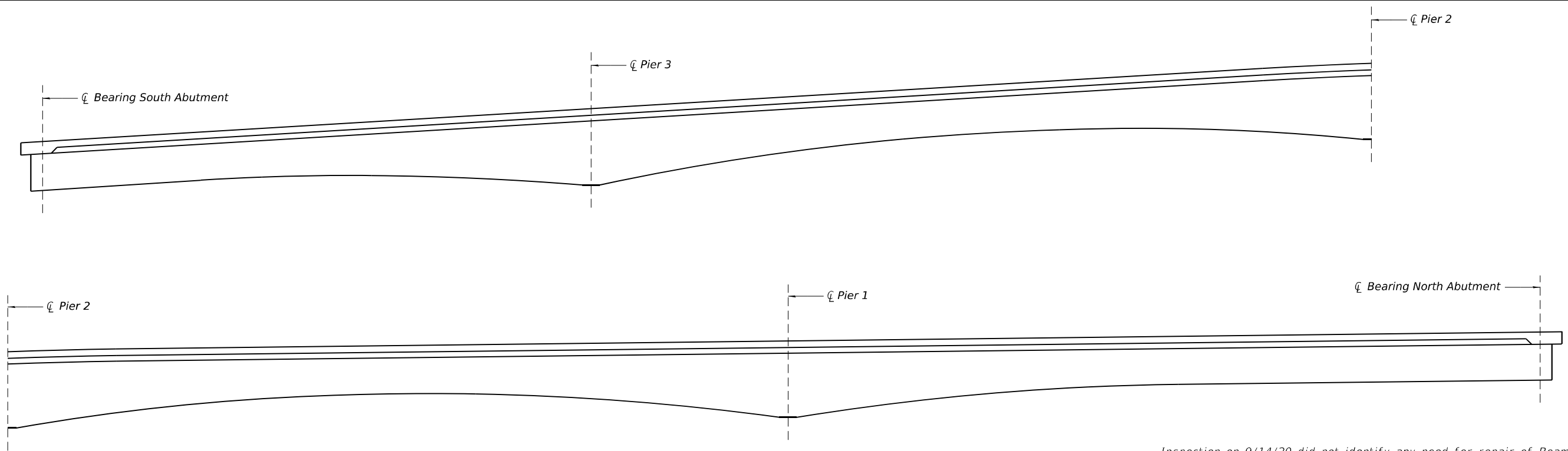
SHEET 9 OF 14 SHEETS

|                           |                |           |                    |           |
|---------------------------|----------------|-----------|--------------------|-----------|
| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS       | SHEET NO. |
| 74                        | (92-10.11,12)R | VERMILION | 698                | 468       |
|                           |                |           | CONTRACT NO. 70A29 |           |
| ILLINOIS FED. AID PROJECT |                |           |                    |           |





**BEAM 2 LOOKING EAST AT WEST FACE OF BEAM**



**BEAM 2 LOOKING WEST AT EAST FACE OF BEAM**

Inspection on 9/14/20 did not identify any need for repair of Beam 2

MODEL: 10 Beam 2 Repairs  
 FILE NAME: P:\E\ng\ham\4068 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0129\570A29\_0129\_Combined.dgn



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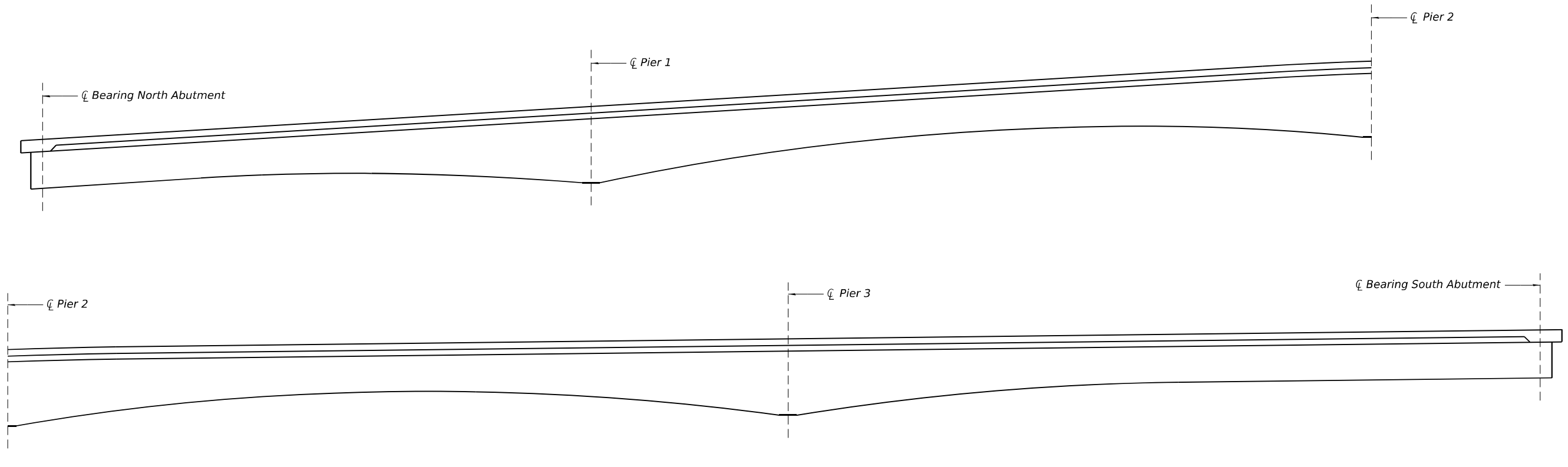
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

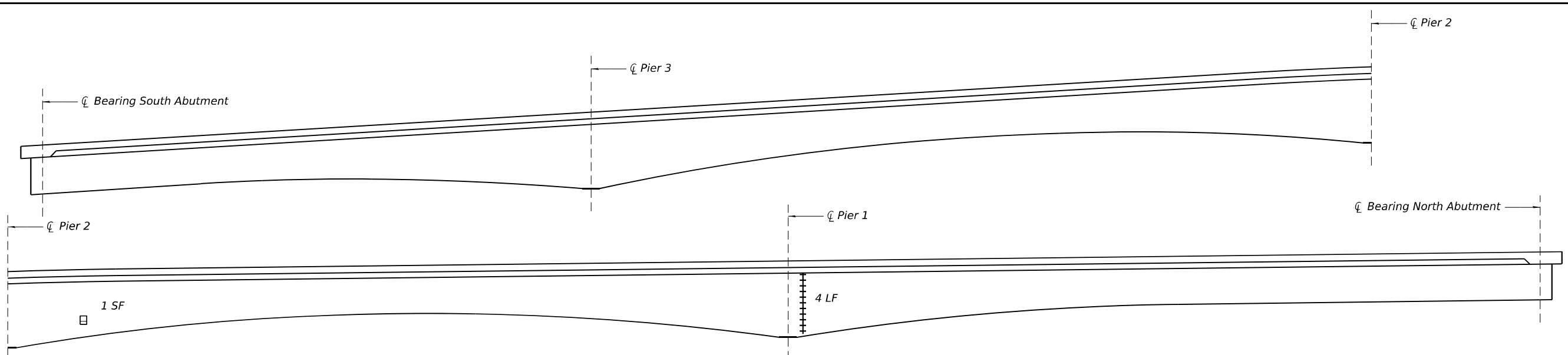
**BEAM 2 REPAIRS**  
**S.N. 092-0129**

SHEET 10 OF 14 SHEETS

| F.A.I. RTE.        | SECTION        | COUNTY    | TOTAL SHEETS              | SHEET NO. |
|--------------------|----------------|-----------|---------------------------|-----------|
| 74                 | (92-10.11,12)R | VERMILION | 698                       | 469       |
| CONTRACT NO. 70A29 |                |           | ILLINOIS FED. AID PROJECT |           |



**BEAM 3 LOOKING EAST AT WEST FACE OF BEAM**



**BEAM 3 LOOKING WEST AT EAST FACE OF BEAM**

**Notes:**

Beam repair areas shown are estimated from inspection notes on September 14, 2020. Actual locations and quantities of completed repairs shall be shown by the Engineer on as-built plans.

Apply FRP Strengthening reinforcement to all portions of concrete beams being repaired after the concrete repairs are completed.

The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions for "FRP Strengthening".

Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied. Fiber Wrap and Acrylic Coating need not extend beyond face of abutment or pier diaphragms.

3-inch strips shall be installed parallel to the bottom curvature of the beams. Wrap 6" onto interior diaphragms within the span.

Color of Acrylic Coating shall be chosen to best match the appearance of the existing concrete.



Structural Repair of Concrete, (Depth Equal to or Less than 5"), Fiber Wrap & Acrylic Coating\*



Epoxy Crack Injection

\* Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

**BILL OF MATERIAL**

| Item                                                           | Unit    | Total |
|----------------------------------------------------------------|---------|-------|
| Structural Repair of Concrete (Depth Equal to or Less than 5") | Sq. Ft. | 1     |
| Epoxy Crack Injection                                          | Foot    | 4     |
| Fiber Wrap                                                     | Sq. Ft. | 4     |
| Acrylic Coating                                                | Sq. Yd. | 0.4   |

MODEL: 11 Beam\_3 Repairs  
FILE NAME: P:\E:\ng\ham\40688 - IDOT\_PTB\_193-26 D5 1-74 at Danville\CAD\SN 092-0129\570A29\_0129\_Combined.dgn



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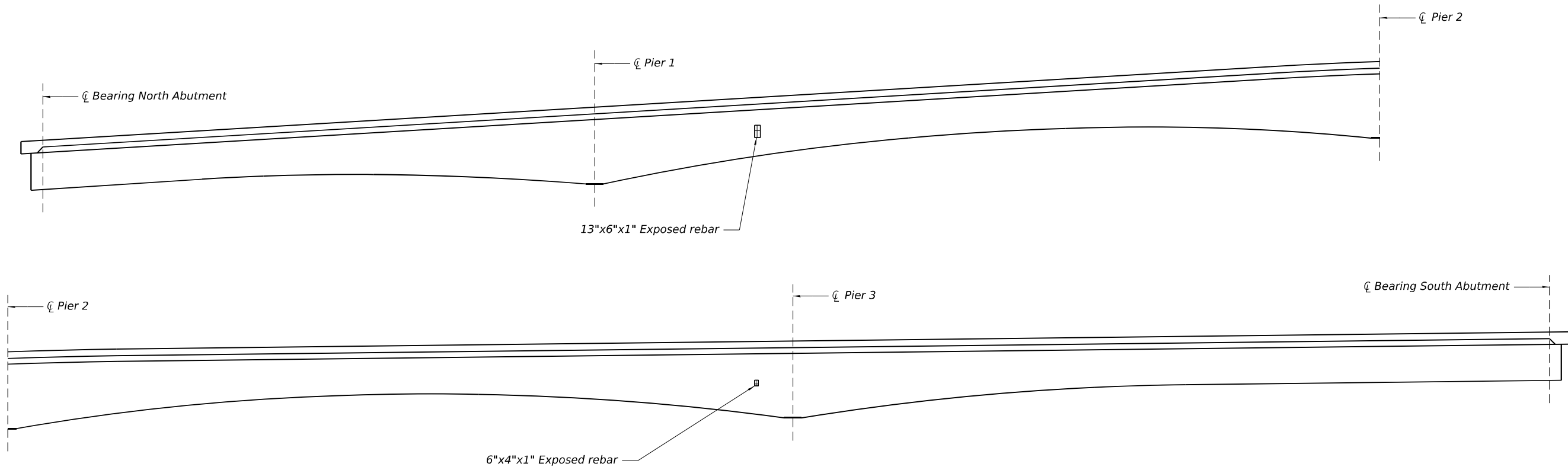
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| PLOT SCALE = | DRAWN - DCS    | REVISED - |
| PLOT DATE =  | CHECKED - KAS  | REVISED - |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

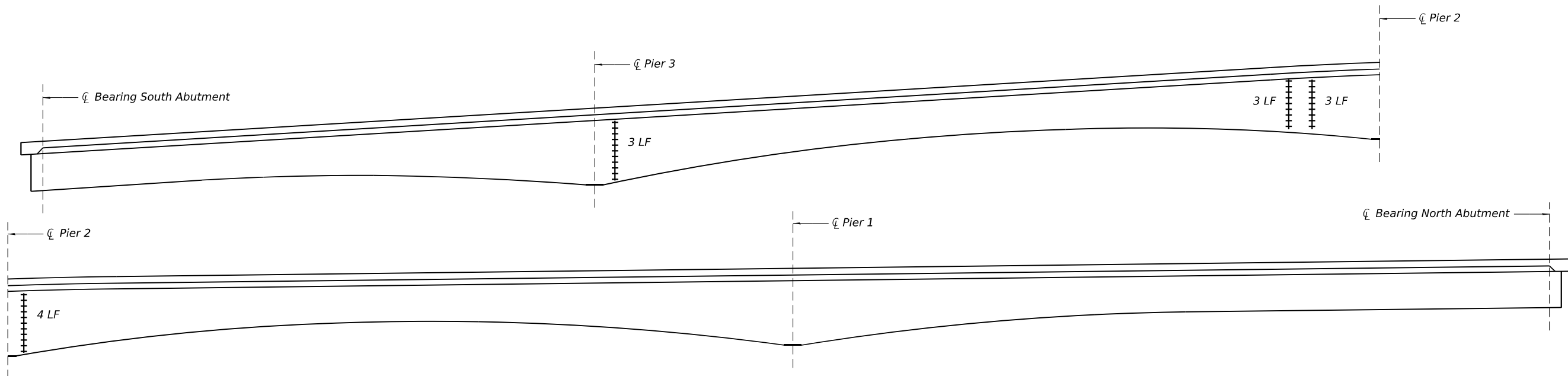
BEAM 3 REPAIRS  
S.N. 092-0129

SHEET 11 OF 14 SHEETS

|                           |                |           |                    |           |
|---------------------------|----------------|-----------|--------------------|-----------|
| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS       | SHEET NO. |
| 74                        | (92-10,11,12)R | VERMILION | 698                | 470       |
|                           |                |           | CONTRACT NO. 70A29 |           |
| ILLINOIS FED. AID PROJECT |                |           |                    |           |



**BEAM 4 LOOKING EAST AT WEST FACE OF BEAM**



**BEAM 4 LOOKING WEST AT EAST FACE OF BEAM**

**Notes:**

Beam repair areas shown are estimated from inspection notes on September 14, 2020. Actual locations and quantities of completed repairs shall be shown by the Engineer on as-built plans.  
 Apply FRP Strengthening reinforcement to all portions of concrete beams being repaired after the concrete repairs are completed.  
 The existing concrete surface shall be cleaned and prepared in accordance with the Special Provisions for "FRP Strengthening".  
 Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied. Fiber Wrap and Acrylic Coating need not extend beyond face of abutment or pier diaphragms.  
 3-inch strips shall be installed parallel to the bottom curvature of the beams. Wrap 6" onto interior diaphragms within the span.  
 Color of Acrylic Coating shall be chosen to best match the appearance of the existing concrete.



Structural Repair of Concrete, (Depth Equal to or Less than 5"), Fiber Wrap & Acrylic Coating\*



Epoxy Crack Injection

\* Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

**BILL OF MATERIAL**

| Item                                                           | Unit    | Total |
|----------------------------------------------------------------|---------|-------|
| Structural Repair of Concrete (Depth Equal to or Less than 5") | Sq. Ft. | 1     |
| Epoxy Crack Injection                                          | Foot    | 13    |
| Fiber Wrap                                                     | Sq. Ft. | 5     |
| Acrylic Coating                                                | Sq. Yd. | 0.6   |

MODEL: 12\_Beam\_4\_Repairs.dwg  
 FILE NAME: P:\E\ng\ham\40688 - IDOT PTB 193-26 D5 1-74 at Danville\CAD\SN 092-0129\570A29\_0129\_Combined.dgn  
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| PLOT SCALE = | CHECKED - TJZ  | REVISED - |
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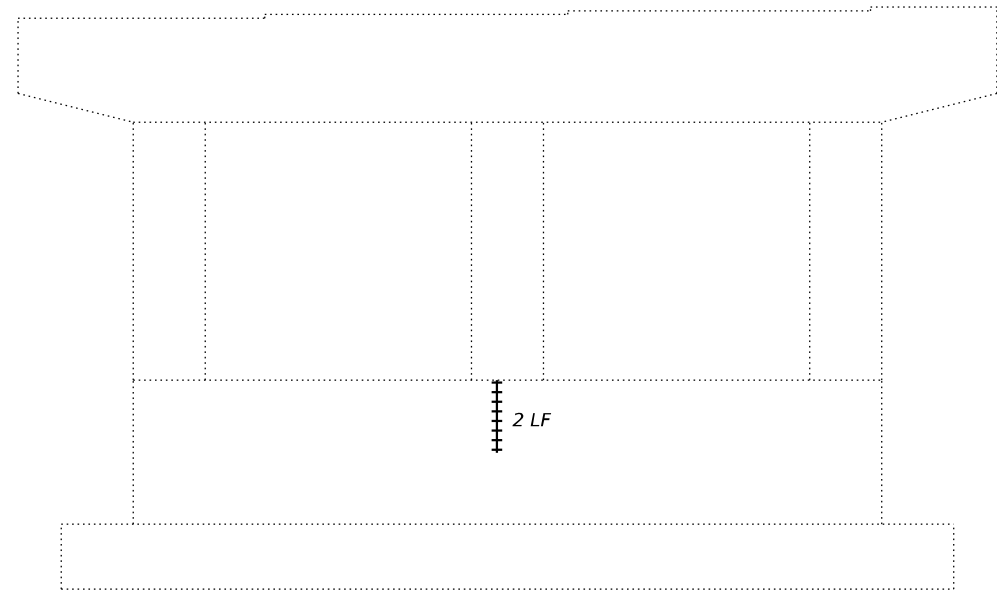
STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BEAM 4 REPAIRS  
 S.N. 092-0129

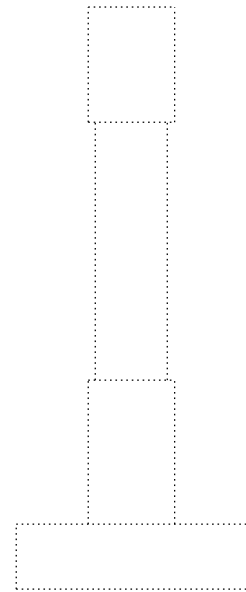
SHEET 12 OF 14 SHEETS

|                           |                |           |                    |           |
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|                           |                |           | CONTRACT NO. 70A29 |           |
| ILLINOIS FED. AID PROJECT |                |           |                    |           |

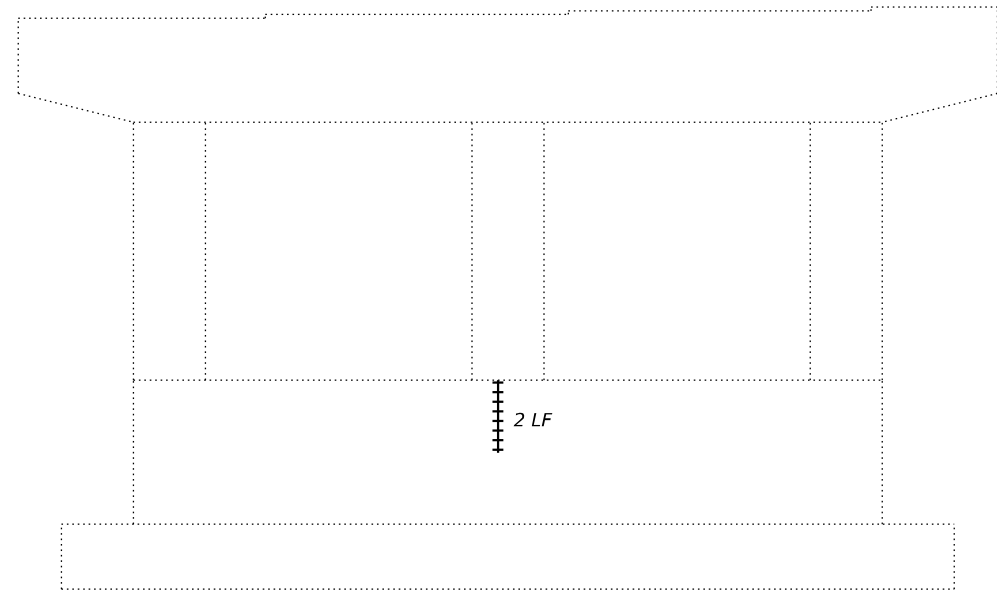
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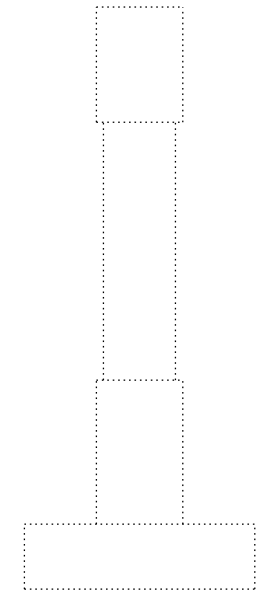
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 (Looking South)



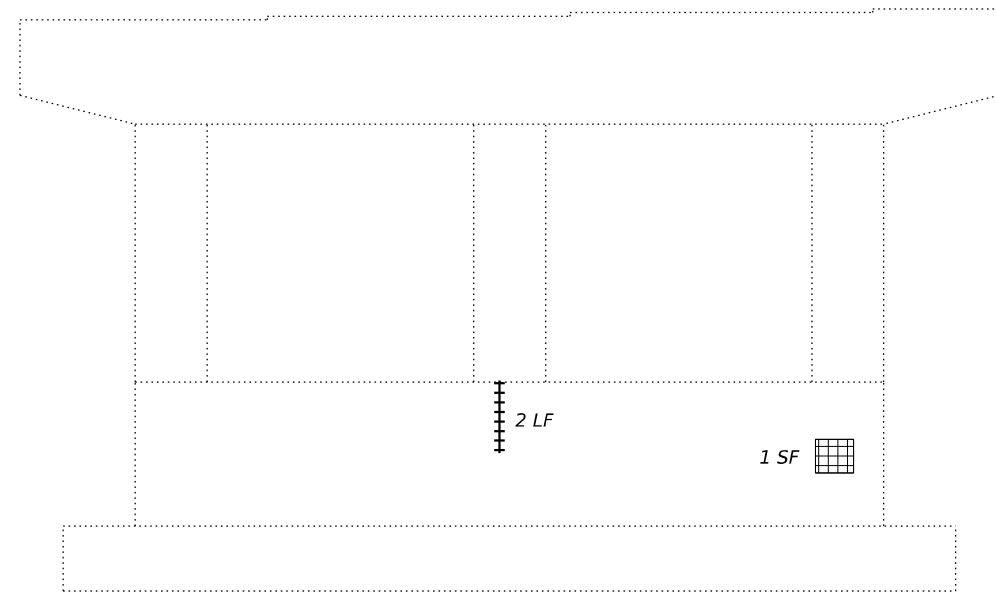
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 (Looking West)



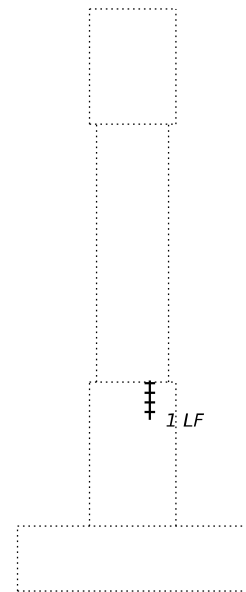
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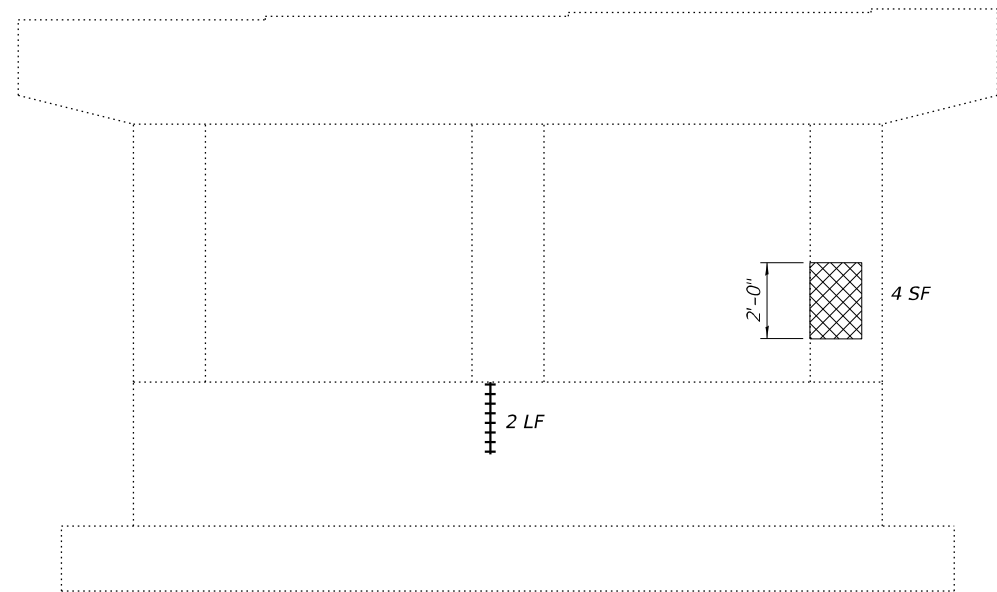
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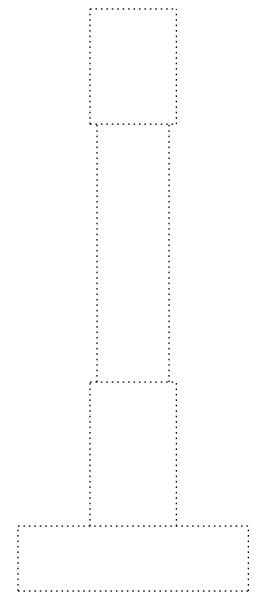
**PIER 1 ELEVATION**  
 (Looking North)



**PIER 1 ELEVATION**  
 (Looking East)



**PIER 2 ELEVATION**  
 (Looking North)



**PIER 2 ELEVATION**  
 (Looking East)

- Structural Repair of Concrete, (Depth Equal to or Less than 5 Inches) with Fiber Wrap and Acrylic Coat\*
- Structural Repair of Concrete, (Depth Equal to or Less than 5 Inches)
- Epoxy Crack Injection

\* Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

**NOTES:**

The quantities shown are for estimating purposes only. The area to be repaired will be determined by the engineer at the time of construction. Actual repair locations shall be shown on the as-built plans.

Areas on columns designated Structural Repair of Concrete (Depth Equal to or Less than 5 Inches) with Fiber Wrap and Acrylic Coat shall have Fiber Wrap and Acrylic Coat applied around entire circumference of column to the depth shown.

**BILL OF MATERIAL**

| Item                                                           | Unit    | Total |
|----------------------------------------------------------------|---------|-------|
| Structural Repair of Concrete (Depth Equal to or Less than 5") | Sq. Ft. | 5     |
| Epoxy Crack Injection                                          | Foot    | 9     |
| Fiber Wrap                                                     | Sq. Ft. | 13    |
| Acrylic Coating                                                | Sq. Yd. | 1.4   |



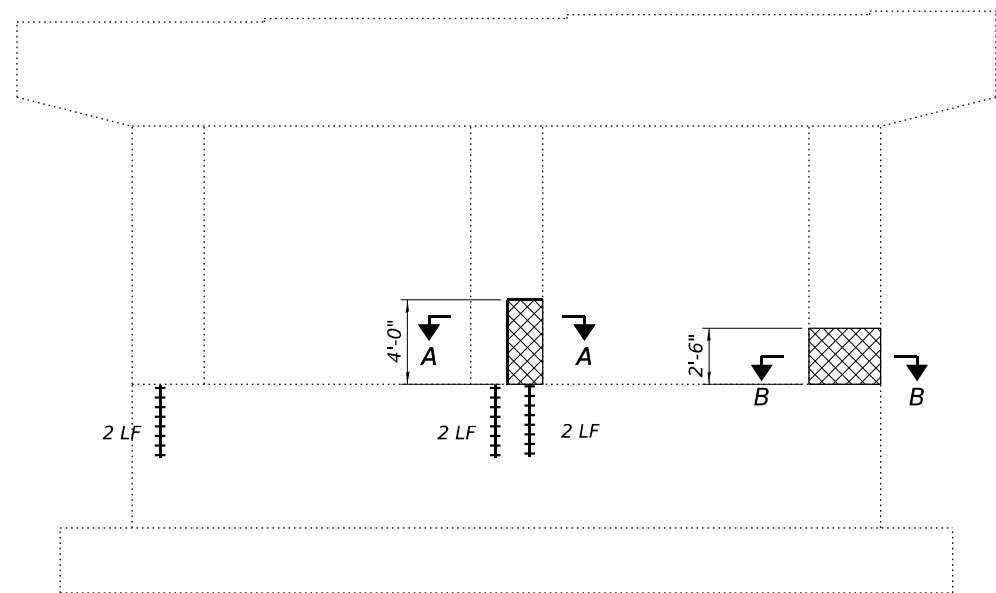
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| PLOT DATE =  | CHECKED - KAS  | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

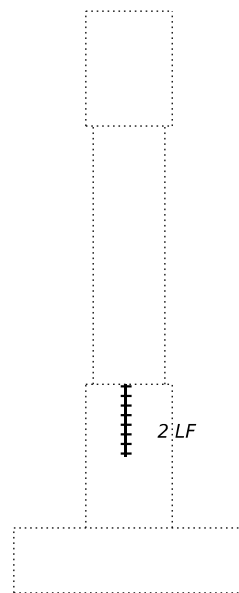
**SUBSTRUCTURE REPAIR PLAN SHEET 1 OF 2  
 S.N. 092-0129**

SHEET 13 OF 14 SHEETS

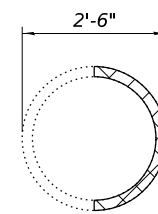
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| F.A.I. RFE.               | SECTION        | COUNTY    | TOTAL SHEETS       | SHEET NO. |
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|                           |                |           | CONTRACT NO. 70A29 |           |
| ILLINOIS FED. AID PROJECT |                |           |                    |           |



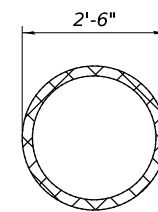
**PIER 3 ELEVATION**  
(Looking South)



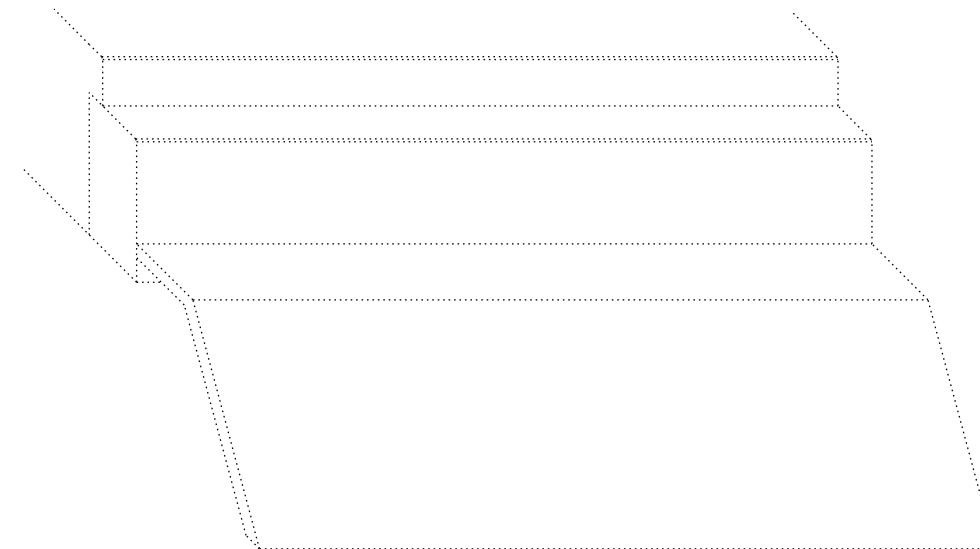
**PIER 3 ELEVATION**  
(Looking West)



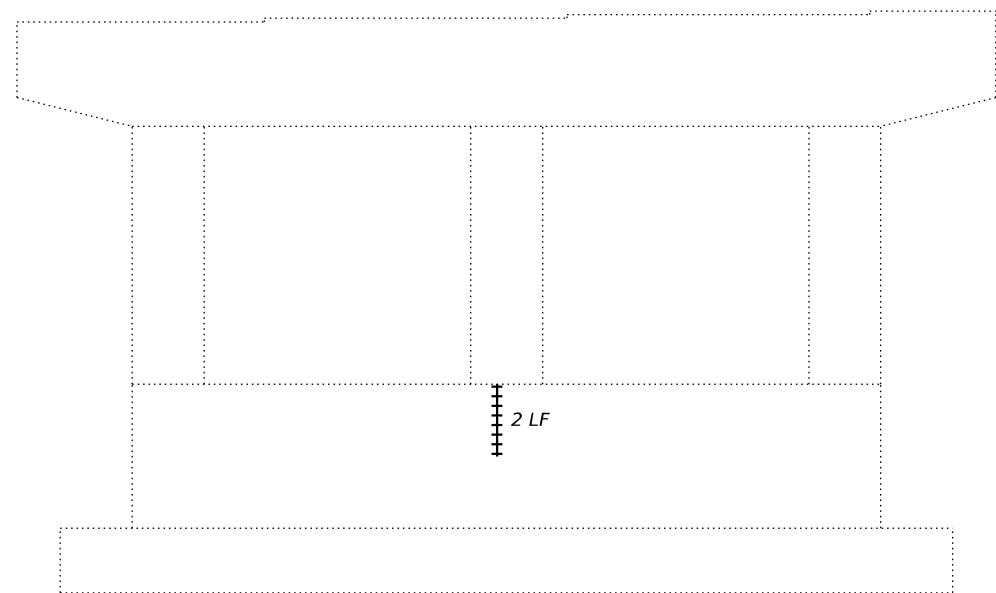
**SECTION A-A**



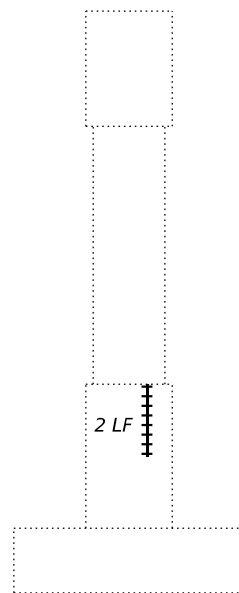
**SECTION B-B**



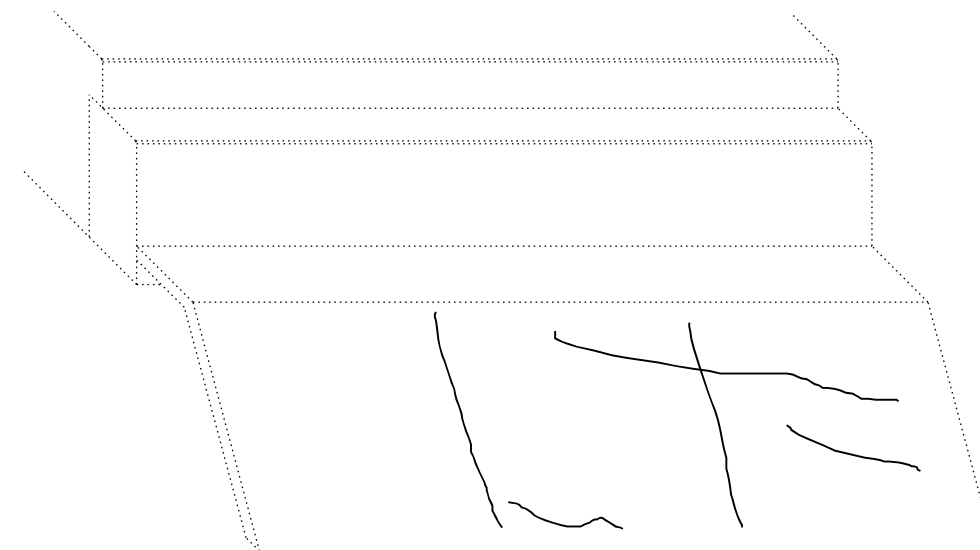
**NORTH SLOPE WALL**



**PIER 3 ELEVATION**  
(Looking North)



**PIER 3 ELEVATION**  
(Looking East)



**SOUTH SLOPE WALL**  
Estimate 90 linear feet of crack to seal

**NOTES:**

The quantities shown are for estimating purposes only. The area to be repaired will be determined by the engineer at the time of construction. Actual repair locations shall be shown on the as-built plans.

Areas on columns designated Structural Repair of Concrete (Depth Equal to or Less than 5 Inches) with Fiber Wrap and Acrylic Coat shall have Fiber Wrap and Acrylic Coat applied around entire circumference of column to the depth shown.

**BILL OF MATERIAL**

| Item                                                           | Unit    | Total |
|----------------------------------------------------------------|---------|-------|
| Structural Repair of Concrete (Depth Equal to or Less than 5") | Sq. Ft. | 37    |
| Epoxy Crack Injection                                          | Foot    | 12    |
| Fiber Wrap                                                     | Sq. Ft. | 46    |
| Acrylic Coating                                                | Sq. Yd. | 5.2   |
| Slope Wall Crack Sealing                                       | Foot    | 90    |

- Structural Repair of Concrete, (Depth Equal to or Less than 5 Inches) with Fiber Wrap and Acrylic Coat\*
- Epoxy Crack Injection
- Slope Wall Crack Sealing (See Special Provisions)

\* Apply single 12" wide strip horizontally across repair extending 6" below and beyond each end of repair area.

MODEL: 14 Sub Repair 2  
FILE NAME: P:\E nghan\4068 - IDOT PTB 193-26 D5 I-74 at Danville\CAD\SN 092-0129\ID570A29\_0129\_Combined.dgn



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EFFINGHAM, IL  
LICENSE #184.003222

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| PLOT SCALE = | CHECKED - TJZ  | REVISED - |
| PLOT DATE =  | DRAWN - DCS    | REVISED - |
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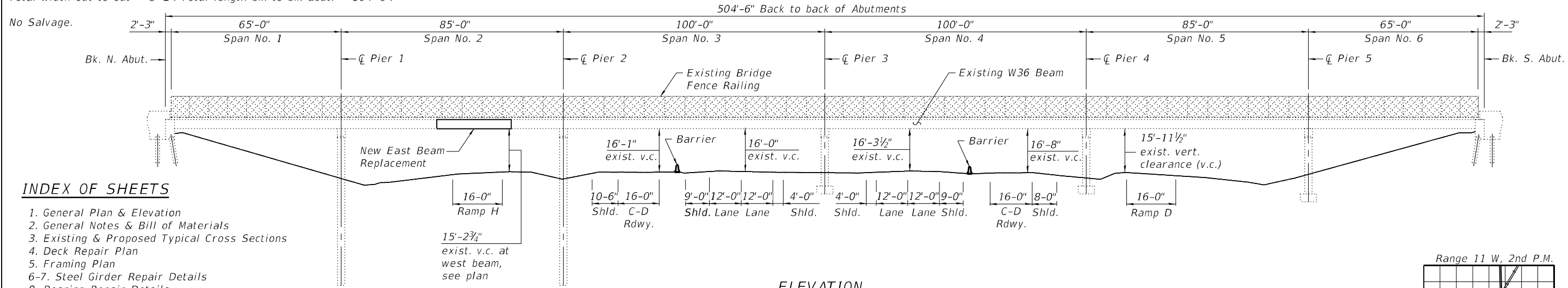
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE REPAIR PLAN SHEET 2 OF 2  
S.N. 092-0129

SHEET 14 OF 14 SHEETS

|                           |                |           |                    |           |
|---------------------------|----------------|-----------|--------------------|-----------|
| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS       | SHEET NO. |
| 74                        | (92-10.11.12)R | VERMILION | 698                | 473       |
| ILLINOIS FED. AID PROJECT |                |           | CONTRACT NO. 70A29 |           |

Existing Structure S.N. 092-0150 built in 1963. 6-Span Steel Beam R.C. Deck.  
Total width out to out = 8'-2". Total length bk. to bk. abut. = 504'-6".



ELEVATION

INDEX OF SHEETS

1. General Plan & Elevation
2. General Notes & Bill of Materials
3. Existing & Proposed Typical Cross Sections
4. Deck Repair Plan
5. Framing Plan
- 6-7. Steel Girder Repair Details
8. Bearing Repair Details

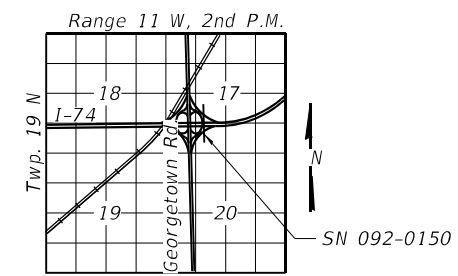
DESIGN STRESSES (Prop.)

FIELD UNITS

$f'_c = 4,000$  psi  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 36,000$  psi (M270 Grade 36)

SCOPE OF WORK

1. Complete steel beam repairs at impact damage.
2. Complete bearing anchor bolt repairs.
3. Complete Deck Slab repairs at deck edges.



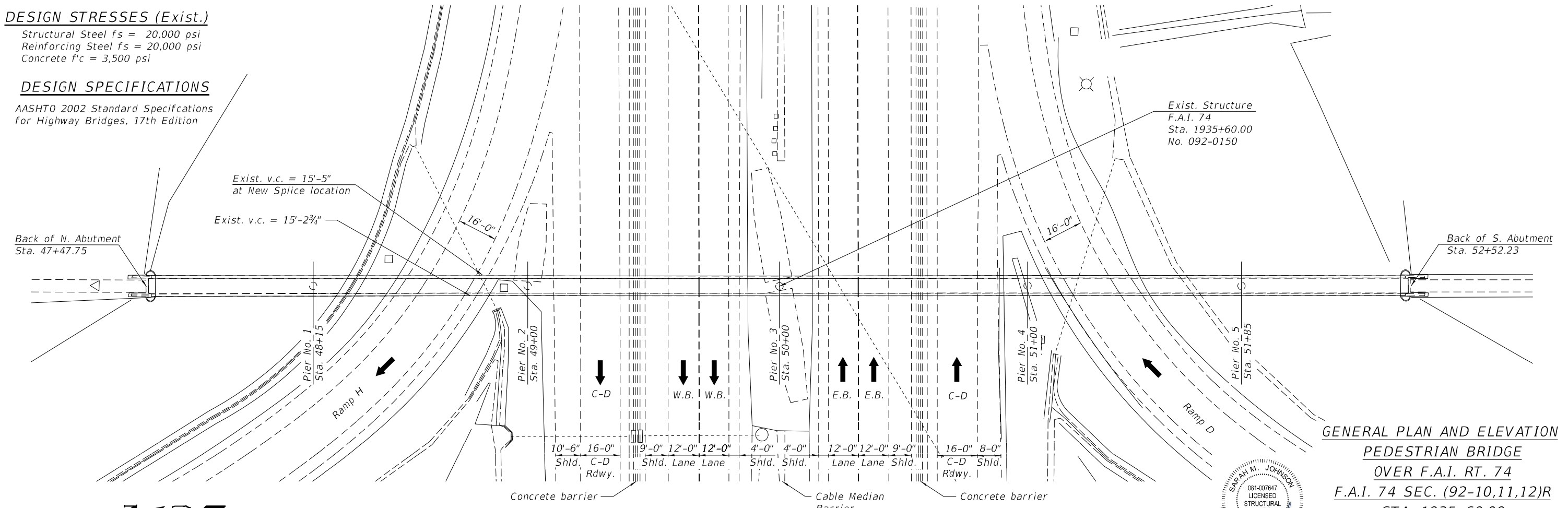
LOCATION SKETCH

DESIGN STRESSES (Exist.)

Structural Steel  $f_s = 20,000$  psi  
Reinforcing Steel  $f_s = 20,000$  psi  
Concrete  $f'_c = 3,500$  psi

DESIGN SPECIFICATIONS

AASHTO 2002 Standard Specifications for Highway Bridges, 17th Edition



PLAN

(Stations shown per original bridge drawings.)

GENERAL PLAN AND ELEVATION  
PEDESTRIAN BRIDGE  
OVER F.A.I. RT. 74  
F.A.I. 74 SEC. (92-10,11,12)R  
STA. 1935+60.00  
VERMILION COUNTY  
S.N. 092-0150

081-007847  
SARAH M. JOHNSON  
LICENSED STRUCTURAL ENGINEER  
STATE OF ILLINOIS  
DATE: 04/26/2022  
LIC. EXP: 11/30/2022

MODEL: 2D Sheet H  
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|              |                 |            |     |           |  |
|--------------|-----------------|------------|-----|-----------|--|
| USER NAME =  | jmasset         | DESIGNED - | SMJ | REVISED - |  |
| CHECKED -    | BAS             | CHECKED -  | BAS | REVISED - |  |
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| PLOT DATE =  | 4/26/2022       | CHECKED -  | SMJ | REVISED - |  |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SHEET 1 OF 8 SHEETS

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 474       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |

**GENERAL NOTES**

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

All new fasteners shall be high strength bolts. Flange splice holes shall be 15/16" dia. for 7/8" dia. bolts. Web splice holes shall be 13/16" dia. for 3/4" dia. bolts. Diaphragm connection holes shall be 15/16" dia. for 3/4" dia. bolts. Two hardened washers shall be required at diaphragm connections.

No field welding is permitted except as specified in the contract documents.

The Contractor shall provide support and/or shoring systems for the slab, conduit, and beam in the area of existing beam removal and at other locations as required in order to maintain the existing deck profile. The support and/or shoring systems shall be approved by the Engineer. Such approval will not relieve the Contractor of responsibility for the safety of the structure. The cost of the support system for the existing slab and conduit shall be included in the cost of "Temporary Slab Support System." See Special Provisions for "Temporary Shoring & Cribbing" and "Temporary Slab Support System."

After the new beam is in its final position and/or beam straightening operations have been completed, the Engineer in the field shall check to see that the top flange is tight against the slab. If not, the Contractor shall inject an approved epoxy between the existing concrete deck and the top flange of the beam. Cost to be included with Furnishing and Erecting Structural Steel. See special provision for Epoxy Injection.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures." All longitudinal and vertical web and flange splices are primary connections.

The Organic Zinc Rich Primer / Epoxy / Urethane Paint System shall be used for shop and field painting of new and existing structural steel except where otherwise noted. The color of the final finish coat shall be Interstate Green, Munsell No. 7.5G 4/8.

The steel components of all expansion bearings shall be blasted and painted according to the Special Provision "Cleaning and Painting Existing Steel Structures."

Containment of cleaning residue is required to control nuisance dust. See special provisions.

SSPC QP1 Certification is required for this Contract.

Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

Deck slab curb repairs to be completed over closed lane, with protection for falling debris to be included in the cost of corresponding Deck Slab Repair.

Protective Coat shall be applied to all deck slab repairs.

Existing structure plans are available from the District upon request.

**TOTAL BILL OF MATERIAL**

| ITEM                                     | UNIT    | SUPER | SUB | TOTAL |
|------------------------------------------|---------|-------|-----|-------|
| † Deck Slab Repair (Full Depth, Type I)  | Sq. Yd. | 0.4   | -   | 2.3   |
| † Deck Slab Repair (Full Depth, Type II) | Sq. Yd. | 2.7   | -   | 5.5   |
| Anchor Bolts 1"                          | Each    | 40    | -   | 40    |
| † Structural Steel Removal               | Pound   | 3,190 | -   | 3,190 |
| † Structural Steel Repair                | Pound   | 640   | -   | 640   |
| † Temporary Shoring and Cribbing         | Each    | 2     | -   | 2     |
| † Cleaning and Painting Bearings         | Each    | 14    | -   | 14    |
| † Temporary Slab Support System          | L Sum   | 1     | -   | 1     |
| Protective Coat                          | Sq. Yd. | 4.7   | -   | 4.7   |
| Furnishing & Erecting Structural Steel   | Pound   | 4,610 | -   | 4,610 |

† Special Provision

MODEL: 2D Sheet H  
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|                              |                |           |
|------------------------------|----------------|-----------|
| USER NAME = jmasset          | DESIGNED - SMJ | REVISED - |
| PLOT SCALE = 0.166666" / in. | CHECKED - BAS  | REVISED - |
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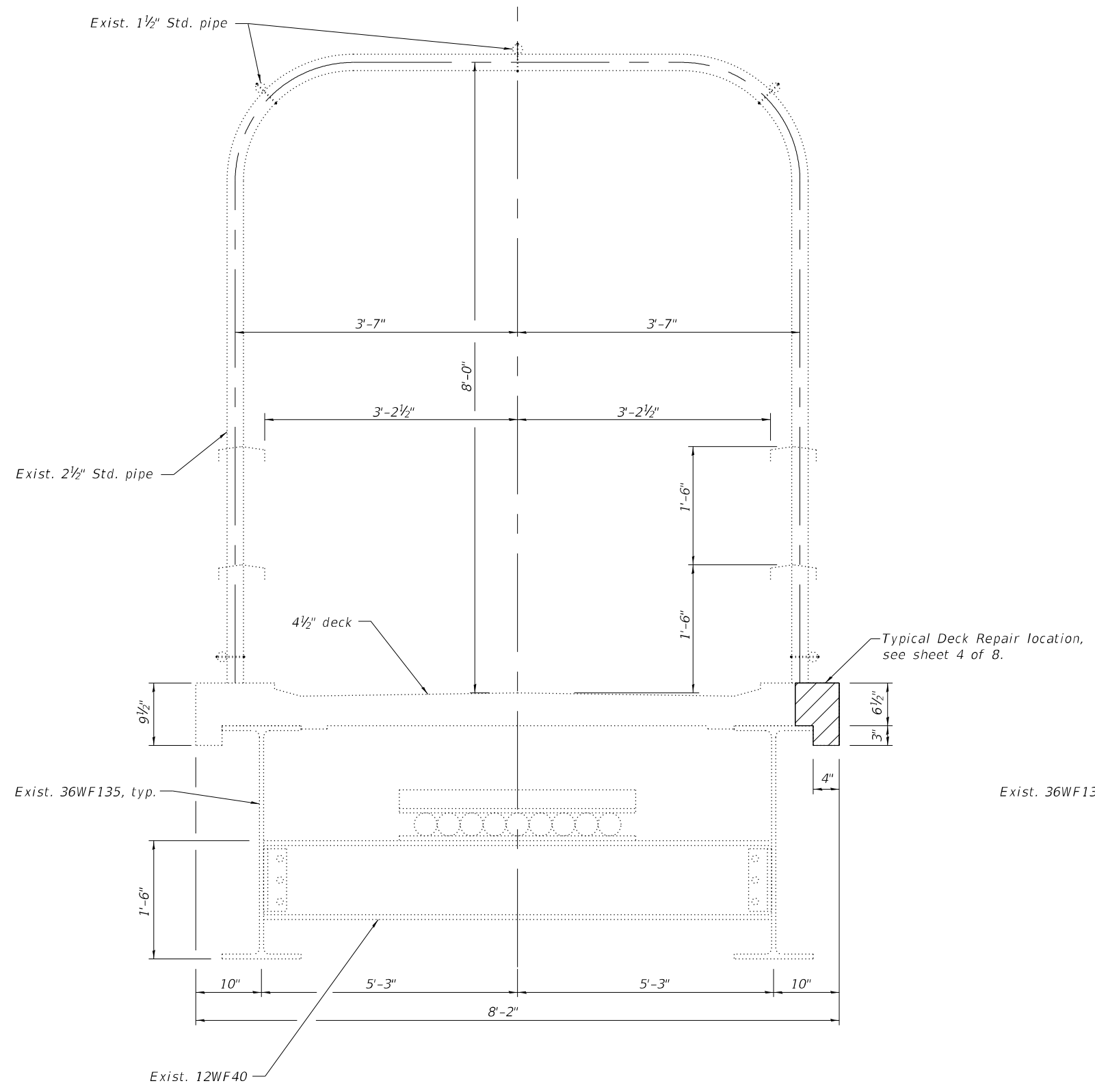
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES AND BILL OF MATERIALS  
S.N. 092-0150**

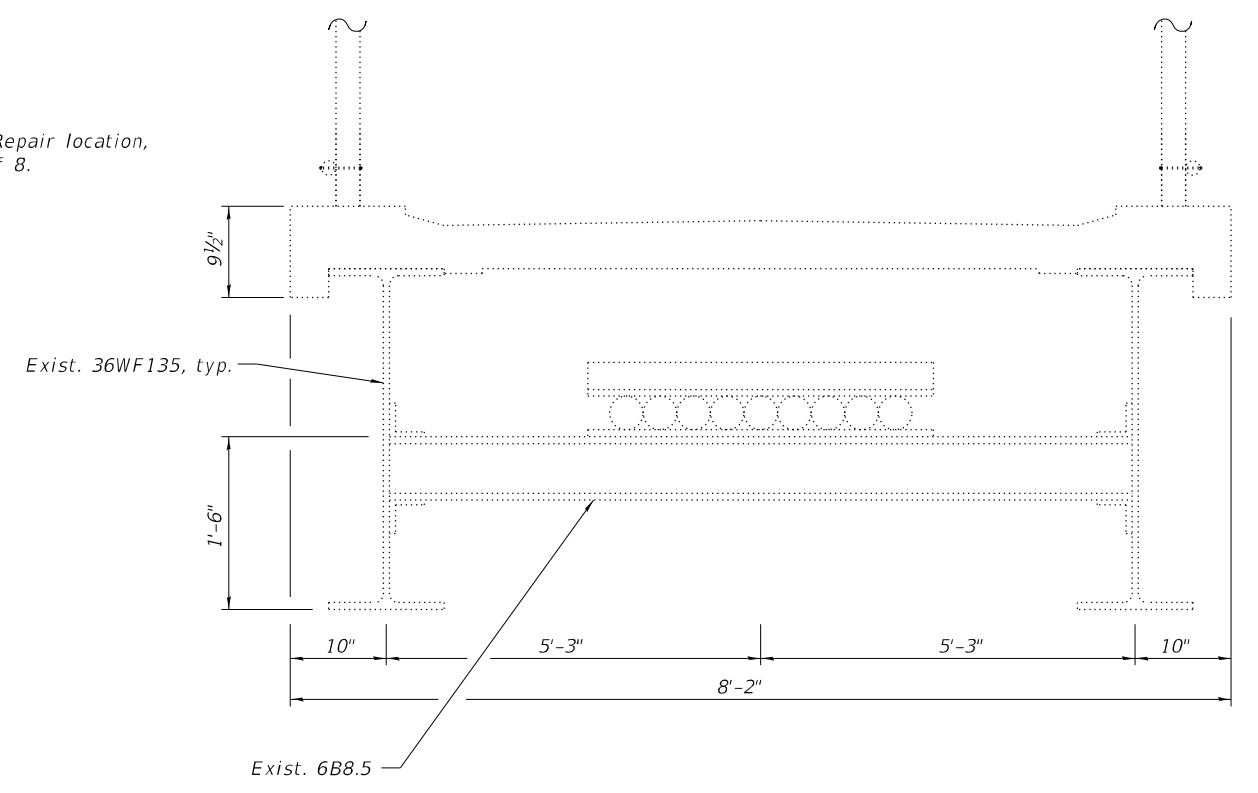
SHEET 2 OF 8 SHEETS

| F.A.I. RTE.        | SECTION        | COUNTY    | TOTAL SHEETS     | SHEET NO. |
|--------------------|----------------|-----------|------------------|-----------|
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| CONTRACT NO. 70A29 |                |           |                  |           |
|                    |                | ILLINOIS  | FED. AID PROJECT |           |

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EXISTING & PROPOSED PEDESTRIAN BRIDGE SECTION



PEDESTRIAN BRIDGE SECTION AT UTILITY SUPPORTS

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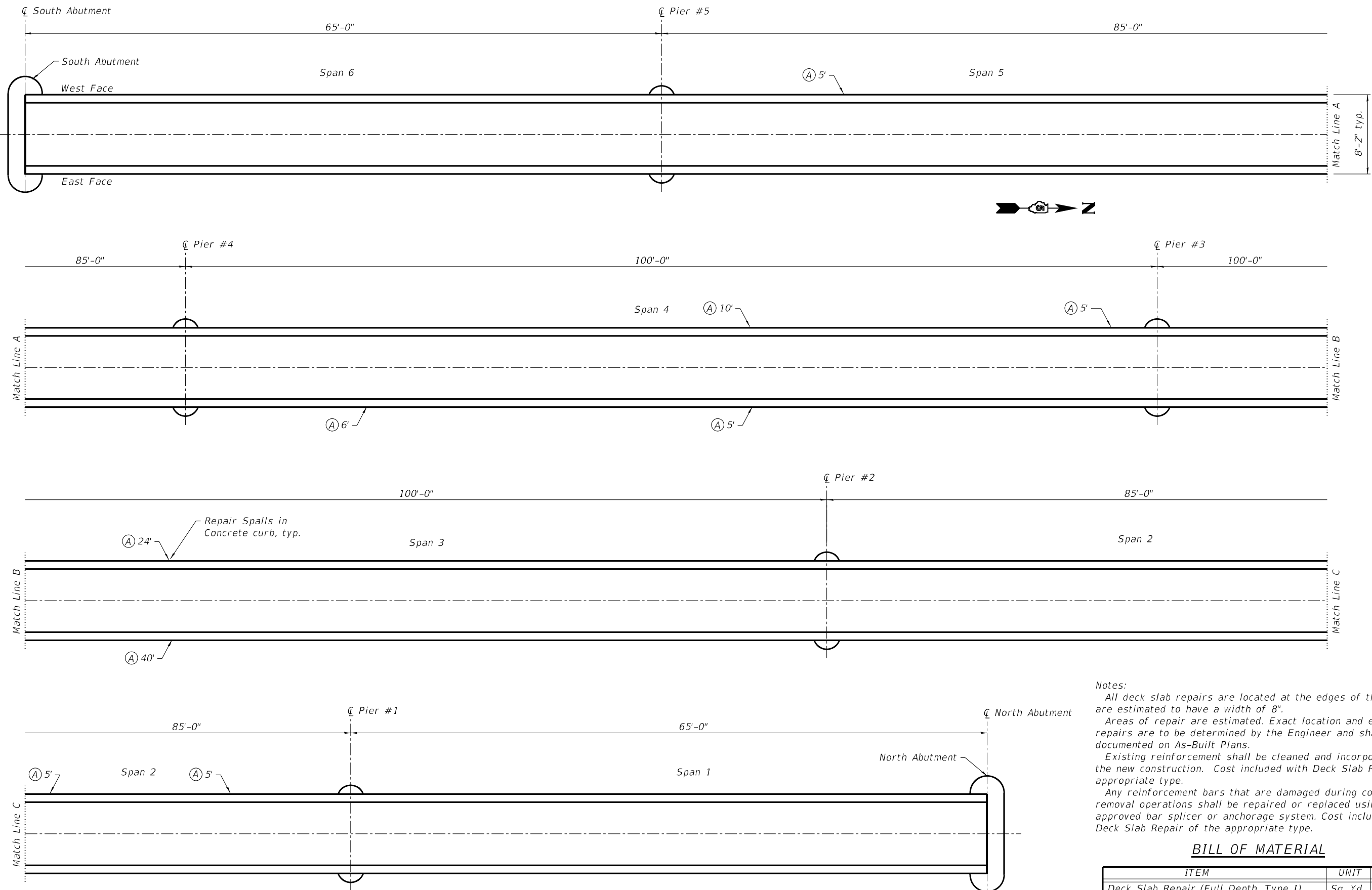
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|                              | CHECKED - SMJ  | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**EXISTING AND PROPOSED TYPICAL CROSS SECTIONS  
 S.N. 092-0150**  
 SHEET 3 OF 8 SHEETS

| F.A.I. RTE.        | SECTION        | COUNTY    | TOTAL SHEETS     | SHEET NO. |
|--------------------|----------------|-----------|------------------|-----------|
| 74                 | (92-10.11,12)R | VERMILION | 698              | 476       |
| CONTRACT NO. 70A29 |                |           |                  |           |
|                    |                | ILLINOIS  | FED. AID PROJECT |           |





Notes:  
 All deck slab repairs are located at the edges of the deck and are estimated to have a width of 8".  
 Areas of repair are estimated. Exact location and extent of repairs are to be determined by the Engineer and shall be documented on As-Built Plans.  
 Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Deck Slab Repair of the appropriate type.  
 Any reinforcement bars that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Deck Slab Repair of the appropriate type.

**BILL OF MATERIAL**

| ITEM                                   | UNIT    | TOTAL |
|----------------------------------------|---------|-------|
| Deck Slab Repair (Full Depth, Type I)  | Sq. Yd. | 2.3   |
| Deck Slab Repair (Full Depth, Type II) | Sq. Yd. | 5.5   |

**KEY**

(A) = Full Depth Deck Slab Repair

MODEL: 2D Sheet H  
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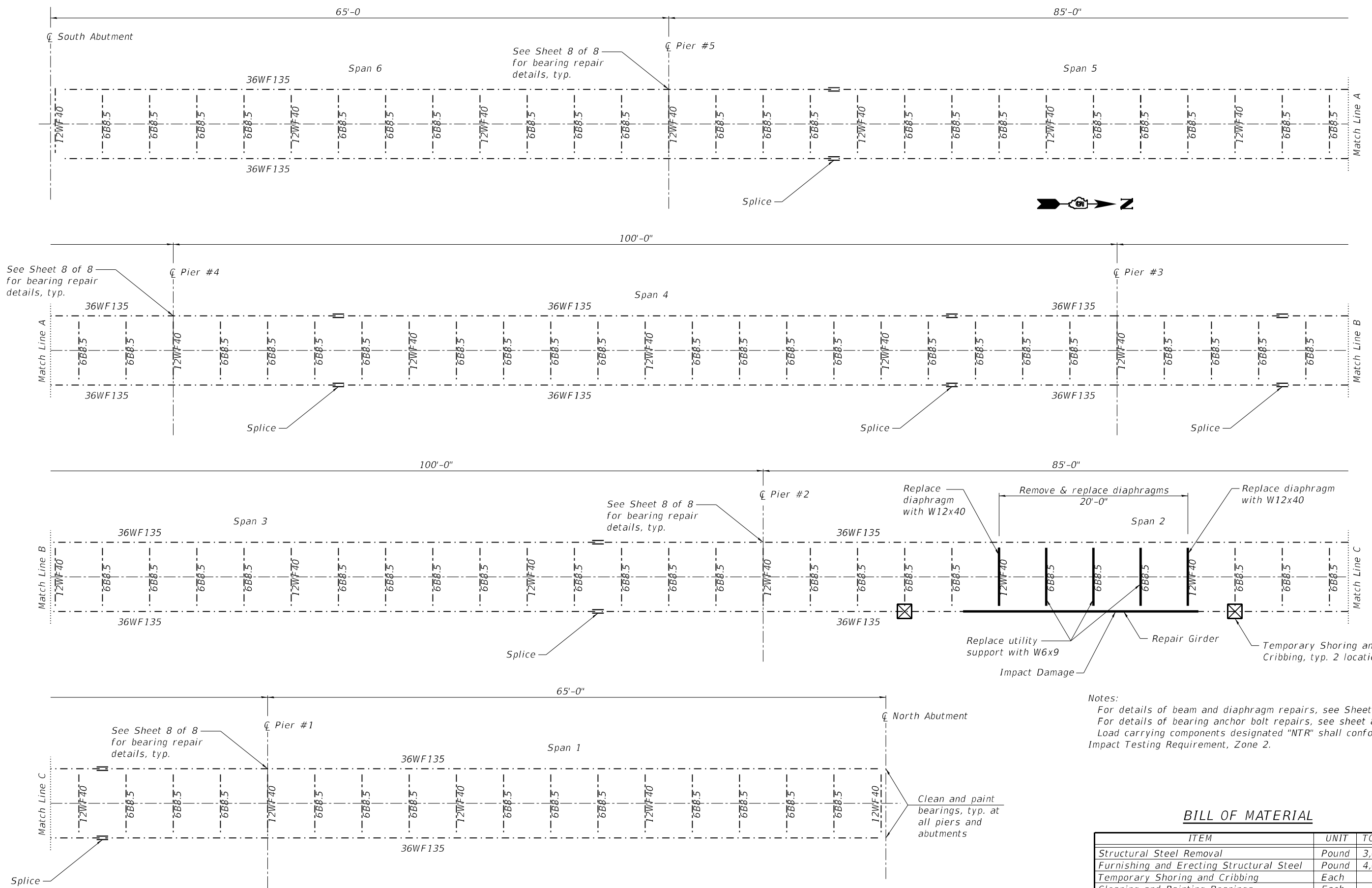
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| PLOT DATE = 4/25/2022        | DRAWN - JLM    | REVISED - |
|                              | CHECKED - SMJ  | REVISED - |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DECK REPAIR PLAN**  
**S.N. 092-0150**  
 SHEET 4 OF 8 SHEETS

|                           |                |           |              |           |
|---------------------------|----------------|-----------|--------------|-----------|
| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
| 74                        | (92-10.11,12)R | VERMILION | 698          | 477       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |



Notes:  
 For details of beam and diaphragm repairs, see Sheets 6-7 of 8.  
 For details of bearing anchor bolt repairs, see sheet 8 of 8.  
 Load carrying components designated "NTR" shall conform to the Impact Testing Requirement, Zone 2.

**BILL OF MATERIAL**

| ITEM                                     | UNIT  | TOTAL |
|------------------------------------------|-------|-------|
| Structural Steel Removal                 | Pound | 3,090 |
| Furnishing and Erecting Structural Steel | Pound | 4,610 |
| Temporary Shoring and Cribbing           | Each  | 2     |
| Cleaning and Painting Bearings           | Each  | 14    |

**PEDESTRIAN BRIDGE FRAMING PLAN**

MODEL: 2D Sheet H  
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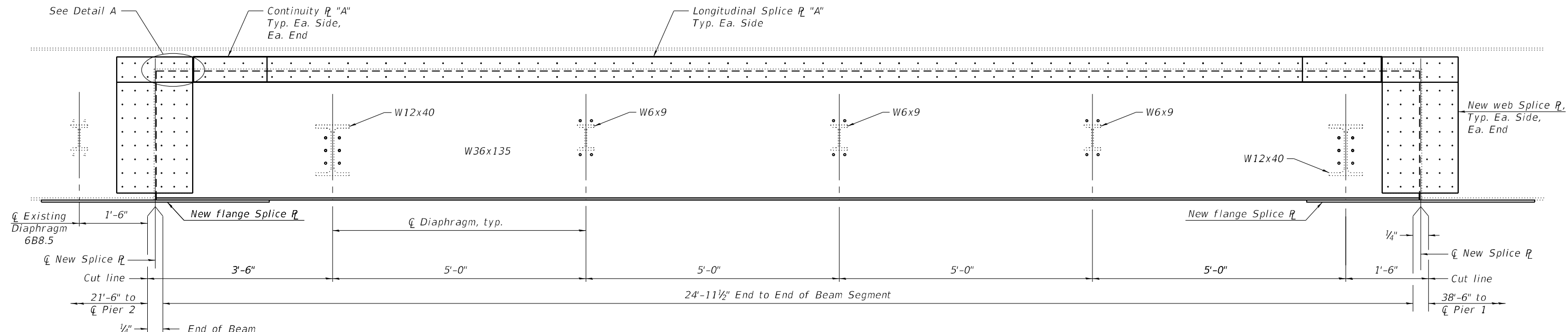
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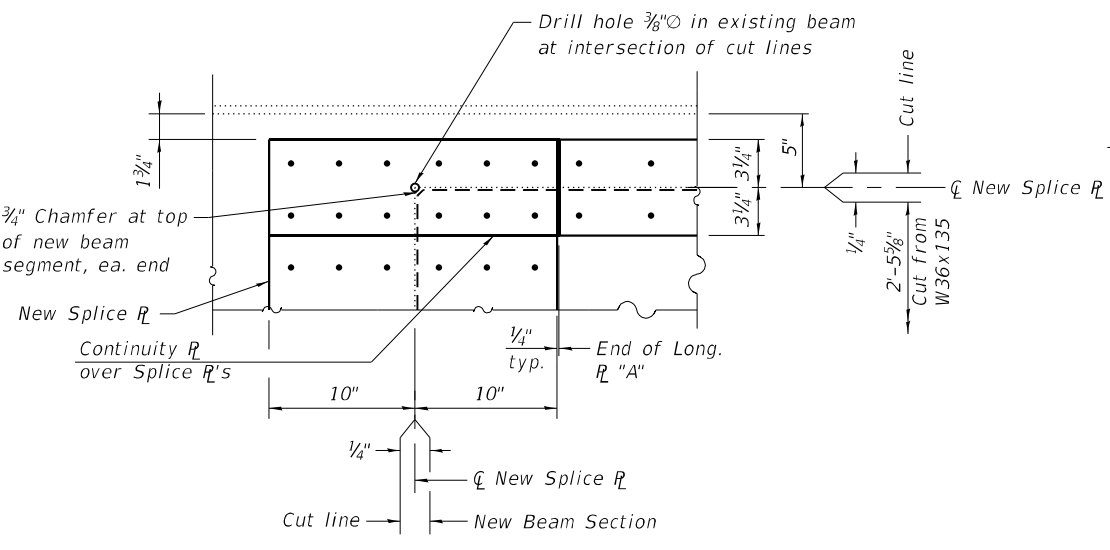
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**FRAMING PLAN  
 S.N. 092-0150**  
 SHEET 5 OF 8 SHEETS

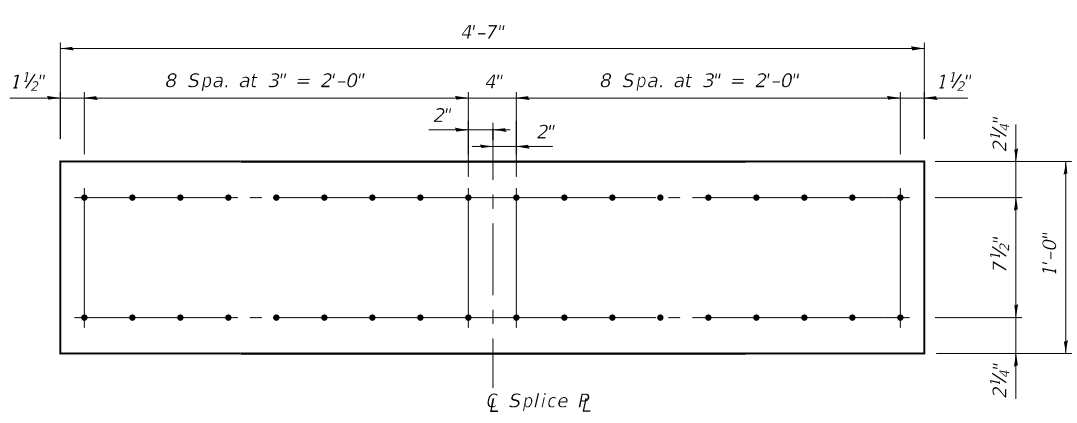
|                    |                |                  |              |           |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.I. RTE.        | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
| 74                 | (92-10.11,12)R | VERMILION        | 698          | 478       |
| CONTRACT NO. 70A29 |                |                  |              |           |
| ILLINOIS           |                | FED. AID PROJECT |              |           |



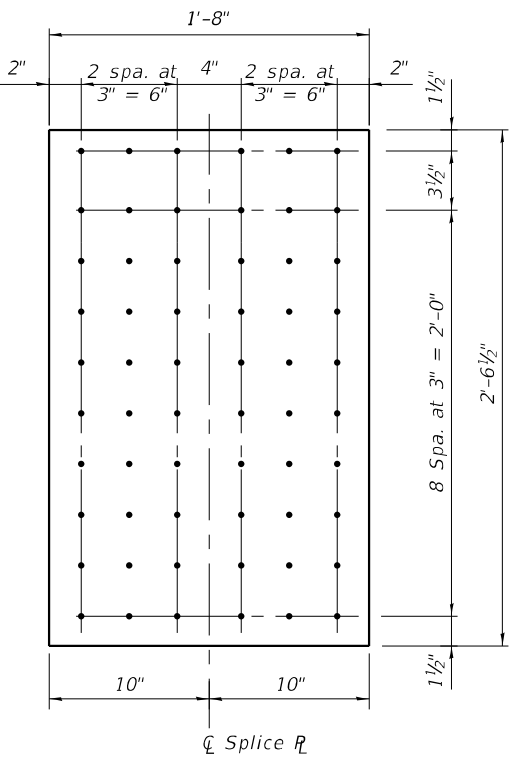
**ELEVATION**  
(Looking North)



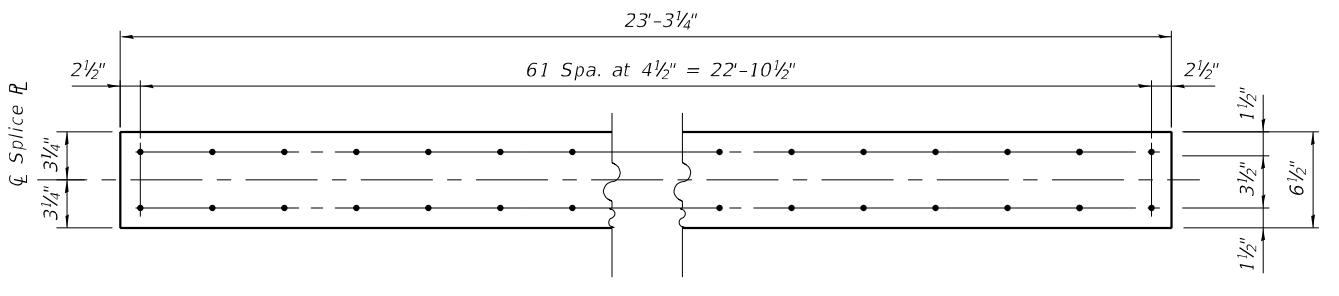
**DETAIL A**



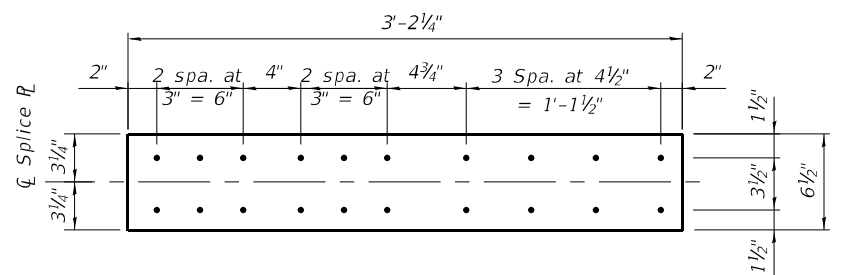
**NEW FLANGE SPLICE PLATE**  
 $R \frac{3}{4} \times 1'-0 \times 4'-7$  (N.T.R.)  
(2 Required)



**NEW WEB SPLICE PLATE**  
 $R \frac{1}{2} \times 1'-8 \times 2'-6 \frac{1}{2}$  (N.T.R.)  
(4 Required)



**LONGITUDINAL SPLICE PLATE "A"**  
 $R \frac{1}{2} \times 6 \frac{1}{2} \times 23'-3 \frac{1}{4}$  (N.T.R.)  
(2 Required)



**CONTINUITY PLATE "A"**  
 $R \frac{1}{2} \times 6 \frac{1}{2} \times 3'-2 \frac{1}{4}$  (N.T.R.)  
(4 Required)

**BOLT HOLE LEGEND**

- ⊙ - Existing Holes
- - Field drill holes in new steel using existing steel as template
- - Shop drill holes in new steel. Use new steel as template to field drill holes in existing steel.

Notes:  
See sheet 5 of 8 for quantities.  
Cleaning and painting of all connections on this sheet except at diaphragms and utility supports shall meet the requirements for Primary Connections as specified in the special provision for "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

(Sheet 1 of 2)

MODEL: 2D Sheet H  
FILE NAME: I:\jobs\2019\1901\_PTB\_193-026-1-74\_Reconstruction\Drawings\CAD\_Sheets\Pedestrian Bridge\_092-0150\0920150-D570A29-006-RepairDetails.dgn  
4/25/2022 2:35:23 PM

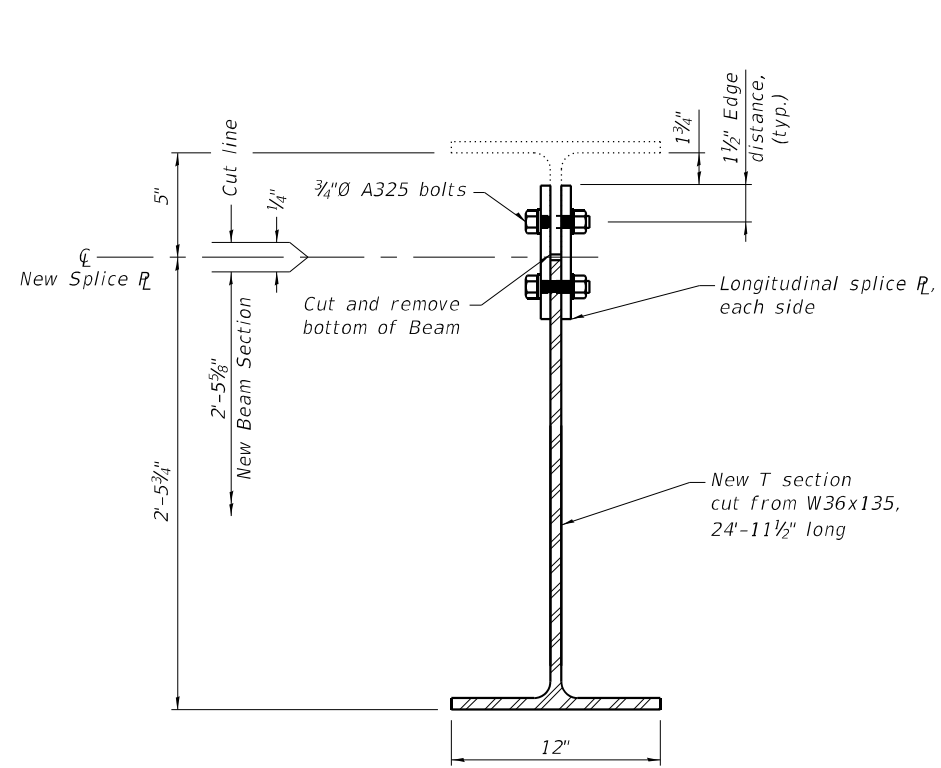
**Prairie Engineers, P.C.**  
22484 Grossbach Road  
Washington, IL 61571  
(217) 605-0403  
www.prairieengineers.com  
Professional Design Firm No. 154-005965  
Illinois State Board of Engineers, P.C. 2021

|                              |                |           |
|------------------------------|----------------|-----------|
| USER NAME = jmasset          | DESIGNED - SMJ | REVISED - |
| PLOT SCALE = 0.1666667 / in. | CHECKED - BAS  | REVISED - |
| PLOT DATE = 4/25/2022        | DRAWN - JLM    | REVISED - |
|                              | CHECKED - SMJ  | REVISED - |

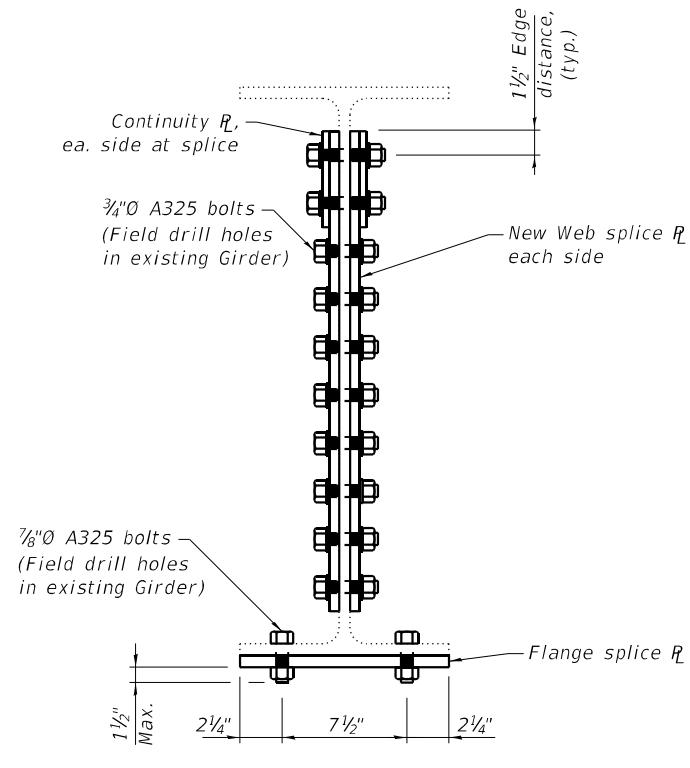
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**STEEL GIRDER REPAIR DETAILS**  
**S.N. 092-0150**  
SHEET 6 OF 8 SHEETS

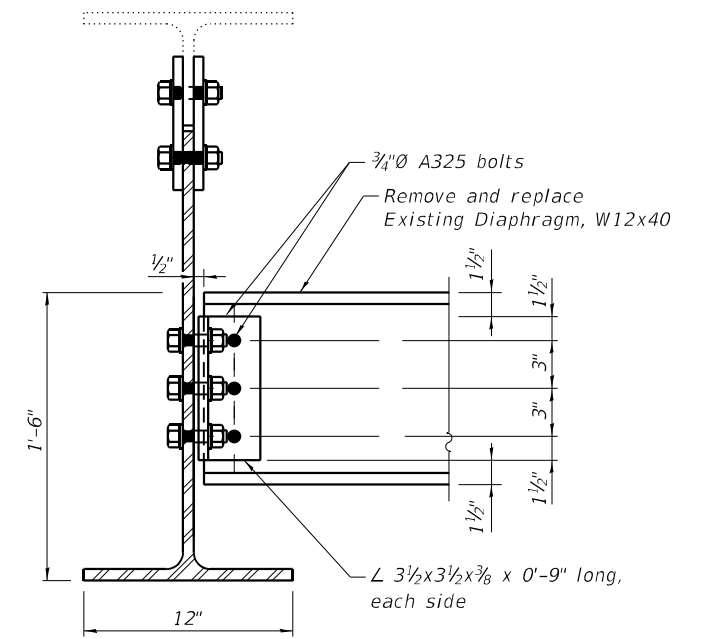
| F.A.I. RTE.        | SECTION        | COUNTY    | TOTAL SHEETS     | SHEET NO. |
|--------------------|----------------|-----------|------------------|-----------|
| 74                 | (92-10.11,12)R | VERMILION | 698              | 479       |
| CONTRACT NO. 70A29 |                |           |                  |           |
|                    |                | ILLINOIS  | FED. AID PROJECT |           |



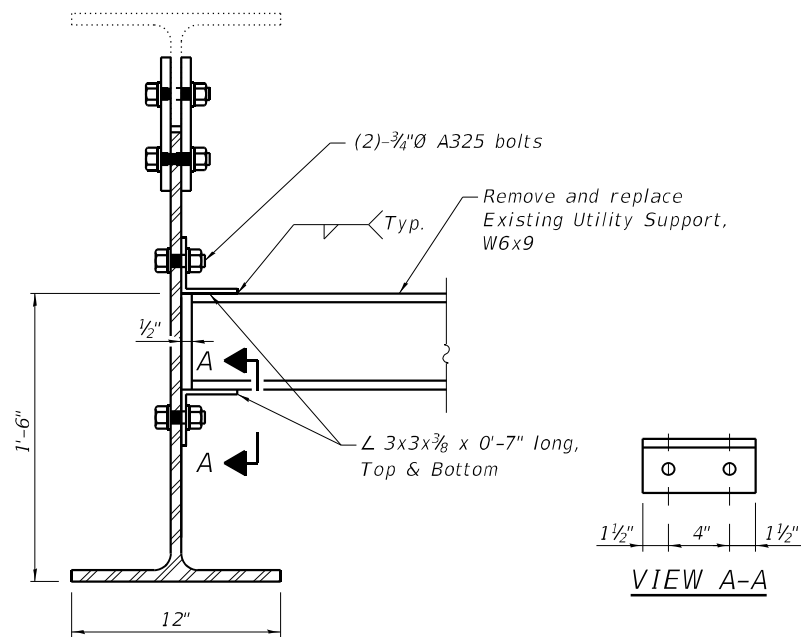
**SECTION AT REPLACED BEAM BOTTOM**



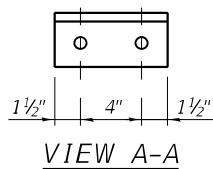
**36WF135 SECTION AT NEW SPLICE AT EACH END OF REPLACED BEAM BOTTOM**



**SECTION AT REPLACED MAIN DIAPHRAGMS**



**SECTION AT INTERMEDIATE DIAPHRAGMS/UTILITY SUPPORTS**



**BOLT HOLE LEGEND**

- ⊙ - Existing Holes
- - Field drill holes in new steel using existing steel as template
- - Shop drill holes in new steel. Use new steel as template to field drill holes in existing steel.

**Notes:**

See sheet 5 of 8 for quantities.

Cleaning and painting of all connections on this sheet except at diaphragms and utility supports shall meet the requirements for Primary Connections as specified in the special provision for "Cleaning and Painting Contact Surface Areas of Existing Steel Structures".

(Sheet 2 of 2)

MODEL: 2D Sheet H  
FILE NAME: I:\jobs\2019\1901\_PTB\_193-026 I-74 Reconstruction\Drawings\CAD\_Sheets\Pedestrian Bridge\_092-0150\0920150-D570A29-007-GirderRepair.dgn

**Prairie Engineers, P.C.**  
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Professional Design Firm No. 154-005955  
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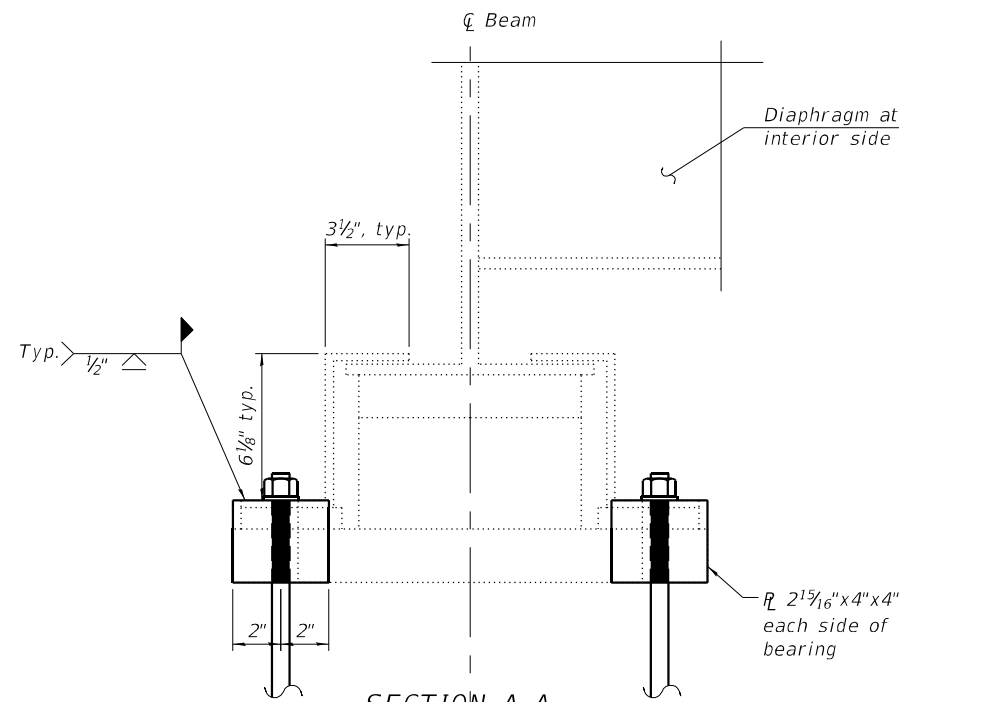
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| PLOT DATE = 4/25/2022        | DRAWN - JLM    | REvised - |
|                              | CHECKED - SMJ  | REvised - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

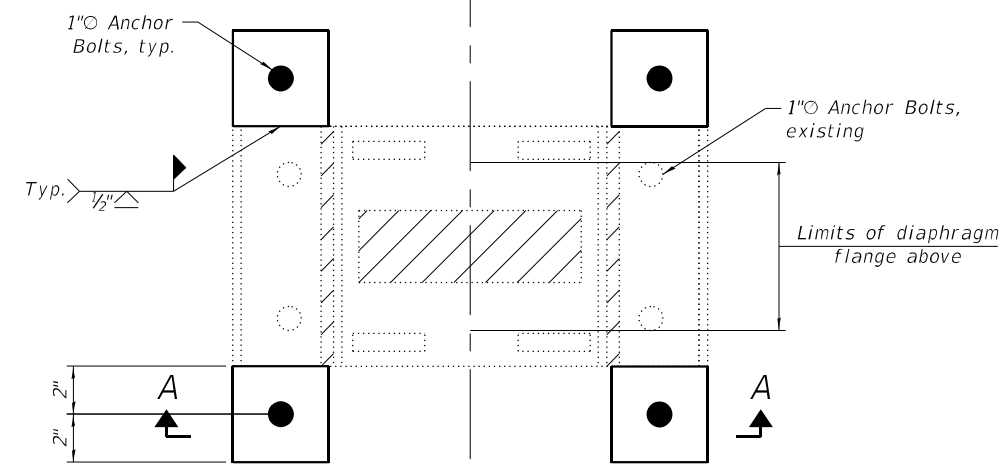
**STEEL GIRDER REPAIR DETAILS  
S.N. 092-0150**

SHEET 7 OF 8 SHEETS

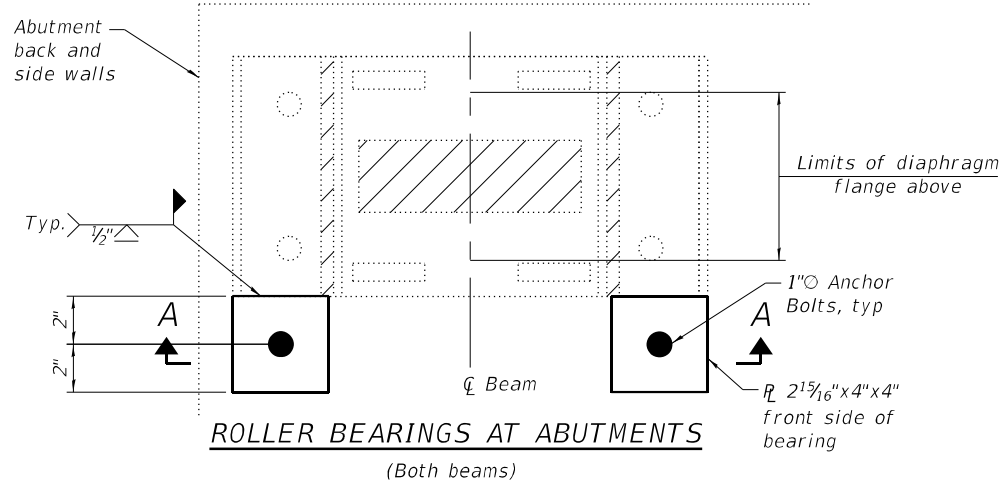
| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
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| 74                        | (92-10.11,12)R | VERMILION | 698          | 480       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |



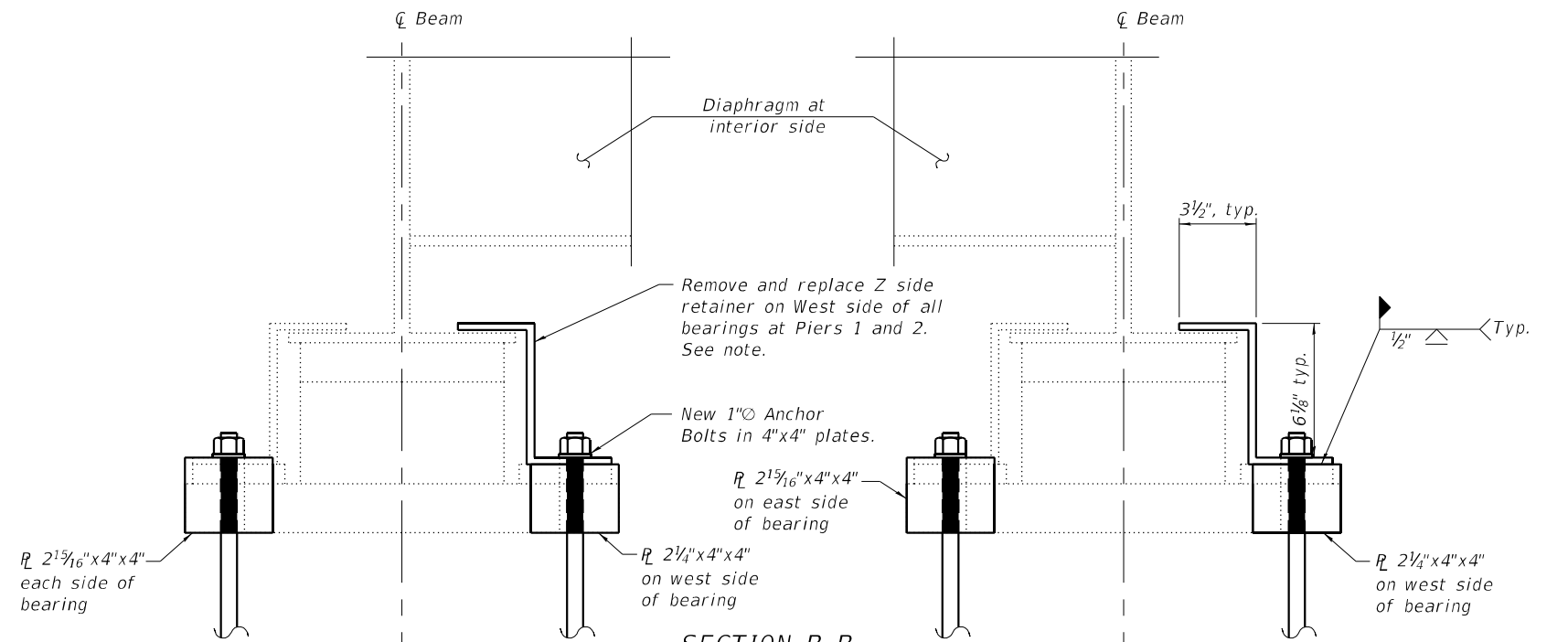
SECTION A-A



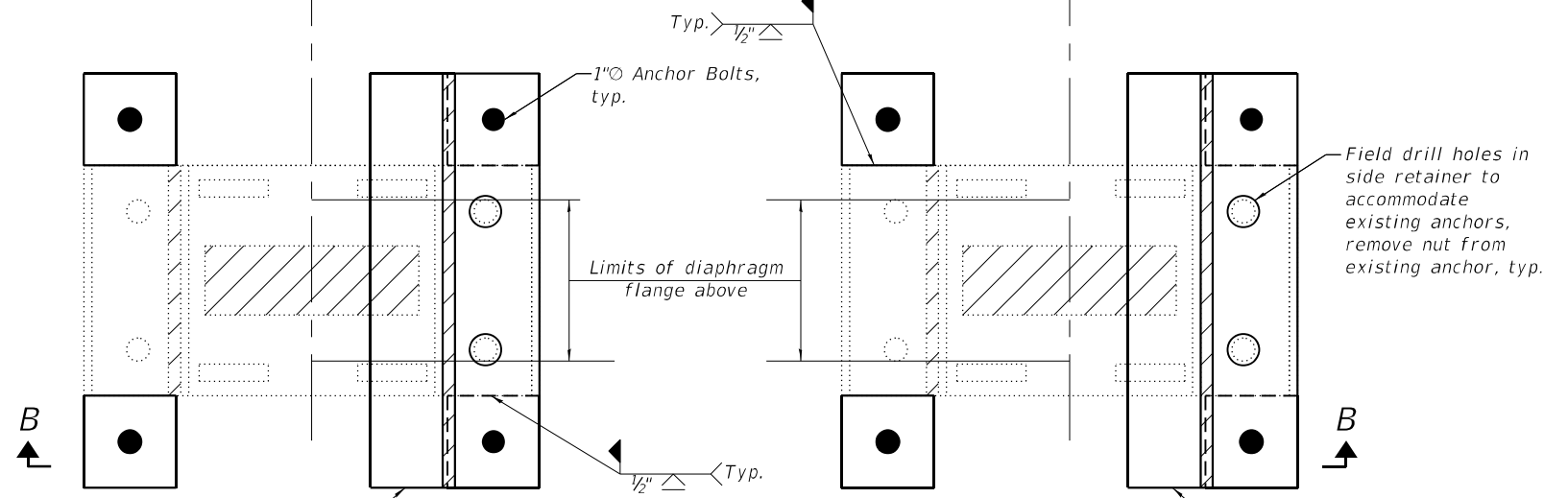
PLAN  
ROLLER BEARINGS AT PIERS 4 AND 5  
(Both beams)



ROLLER BEARINGS AT ABUTMENTS  
(Both beams)



SECTION B-B



PLAN  
ROLLER BEARINGS AT PIERS 1 AND 2  
(Looking South)

Notes:  
Z side retainers to be 6"x3 1/2"x1/2" x 1'-6" long. Contractor to measure existing side retainers prior to fabrication to verify specified thickness and bend dimensions of new side retainers match the existing retainers. Shop drill holes for new anchors. Field drill additional holes to accommodate top of existing anchors as shown.  
4"x4" plates at each corner of each bearing shall have height to match existing bearing from concrete surface to top of the bottom flange of the Z side retainer. Where new side retainers are installed, 4"x4" plate shall have reduced thickness to fit below new side retainer bottom flange. Contractor to measure existing bearings to verify specified thicknesses prior to fabrication. Shop drill holes for new anchors.  
Cost of new structural steel elements, including side retainers, anchorage plates, and the specified welding, shall be included in the cost of Structural Steel Repair.

**BOLT HOLE LEGEND**

- Field drill holes
- Shop drill holes

**BILL OF MATERIAL**

| ITEM                     | UNIT  | TOTAL |
|--------------------------|-------|-------|
| Structural Steel Removal | Pound | 100   |
| Structural Steel Repair  | Pound | 640   |
| Anchor Bolts 1"          | Each  | 40    |

MODEL: 2D Sheet H  
FILE NAME: I:\Jobs\2019\1901\_PTB\_193-026-1-74\_Reconstruction\Drawings\CAD\_Sheets\Pedestrian Bridge\_092-0150\0920150-D570A29-008-BearingRepair.dgn  
4/26/2022 9:19:27 AM

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(217) 605-0403  
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Professional design firm no. 1644-005953  
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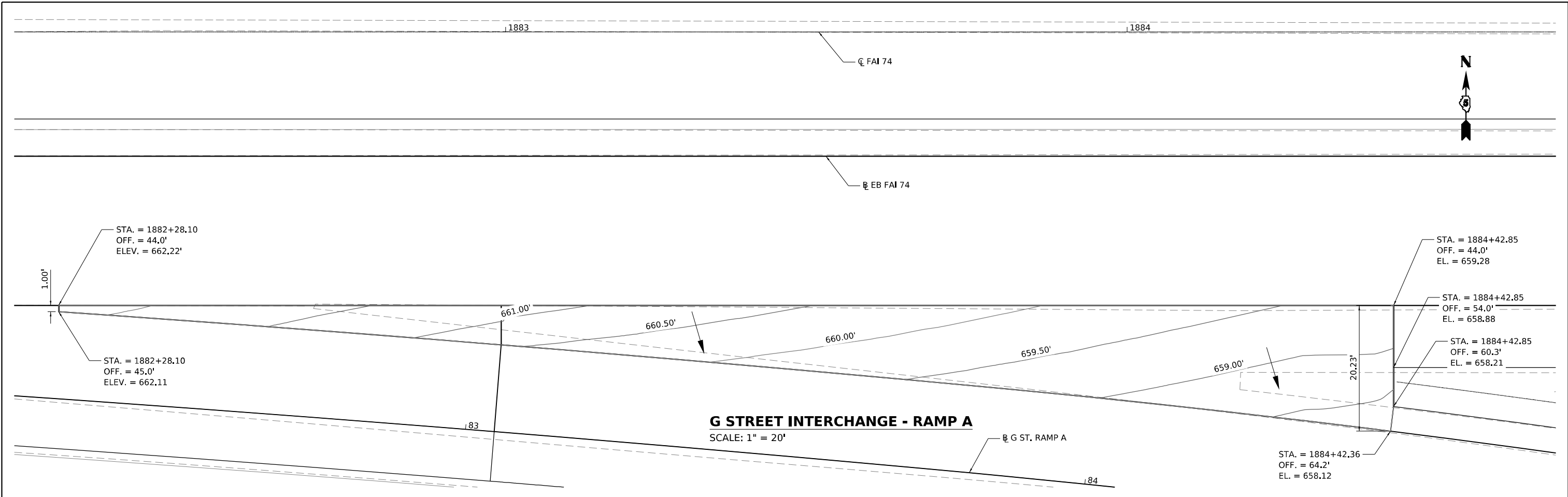
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| USER NAME = jmasset          | DESIGNED - SMJ | REVISED - |
| PLOT SCALE = 0.166666" / in. | CHECKED - BAS  | REVISED - |
| PLOT DATE = 4/26/2022        | DRAWN - JLM    | REVISED - |
|                              | CHECKED - SMJ  | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

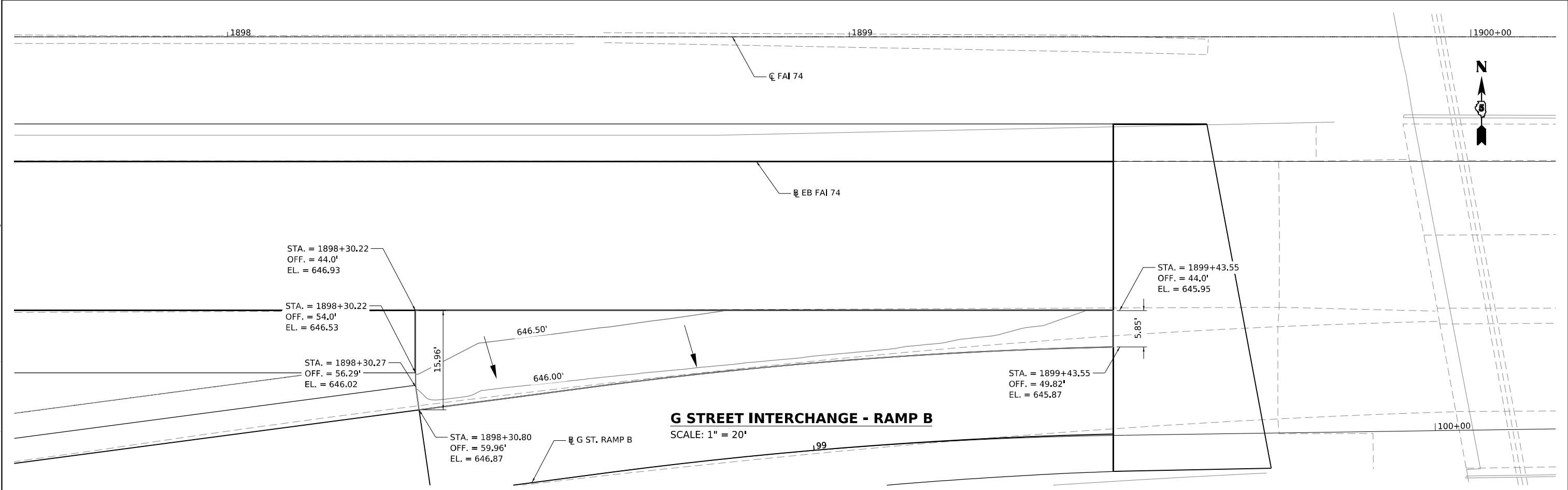
**BEARING REPAIR DETAILS  
S.N. 092-0150**

SHEET 8 OF 8 SHEETS

|                    |                |                  |              |           |
|--------------------|----------------|------------------|--------------|-----------|
| F.A.I. RTE.        | SECTION        | COUNTY           | TOTAL SHEETS | SHEET NO. |
| 74                 | (92-10.11,12)R | VERMILION        | 698          | 481       |
| CONTRACT NO. 70A29 |                |                  |              |           |
| ILLINOIS           |                | FED. AID PROJECT |              |           |



**G STREET INTERCHANGE - RAMP A**  
SCALE: 1" = 20'



**G STREET INTERCHANGE - RAMP B**  
SCALE: 1" = 20'

MODEL: SHEET: G St. Ramp A and B  
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|  | PLOT SCALE = 0.16666667 1/16 in. | DRAWN -    | REVISED - |
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|  |                                  | DATE -     | REVISED - |

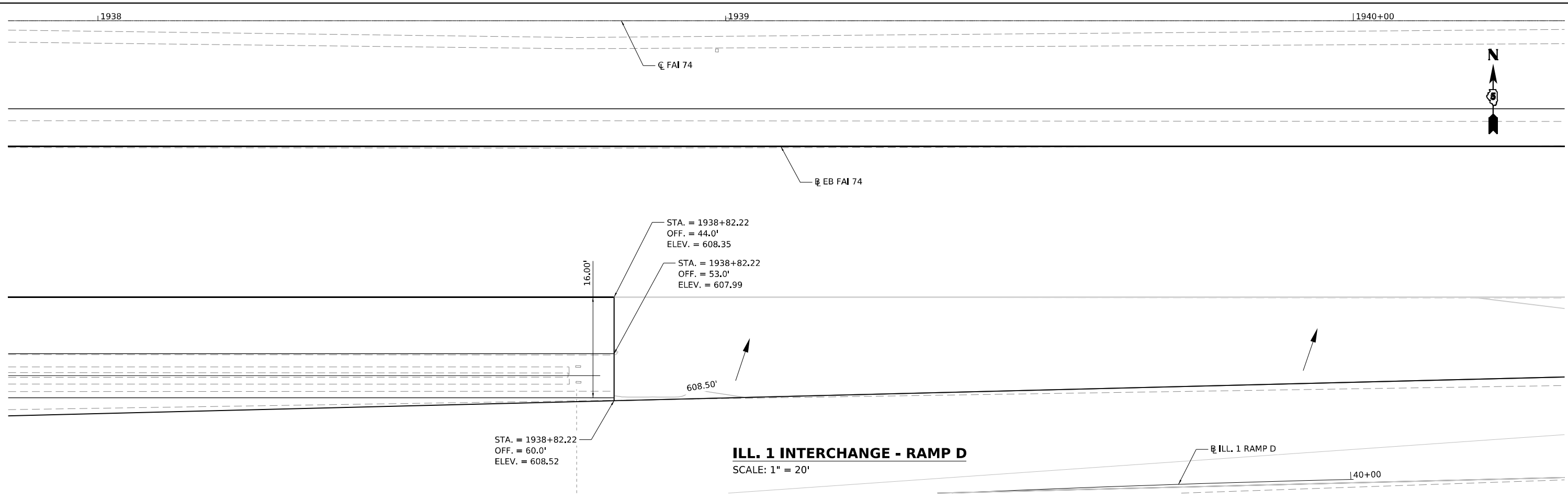
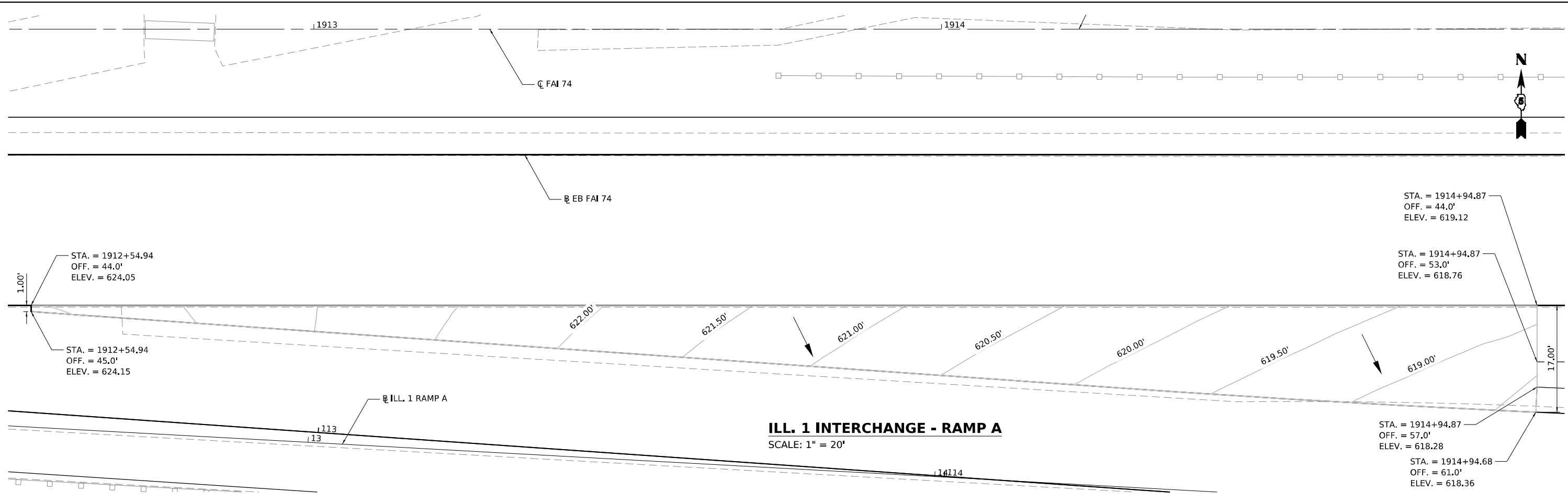
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**INTERSTATE 74 REHABILITATION**  
**GORE DETAILS - G ST. RAMPS A & D**

SCALE: 1" = 20'    SHEET 1 OF 6 SHEETS    STA. TO STA.

| F.A.I. RTE.        | SECTION        | COUNTY    | TOTAL SHEETS     | SHEET NO. |
|--------------------|----------------|-----------|------------------|-----------|
| 74                 | (92-10,11,12)R | VERMILION | 698              | 482       |
| CONTRACT NO. 70A29 |                |           |                  |           |
|                    |                | ILLINOIS  | FED. AID PROJECT |           |





MODEL SHEET: ILL. 1 EB Roadway Ramps A and D  
 FILE NAME: S:\327\303\92371902\300 (1934-26) 25-174 Danville\Ill\CAD\DD\CADD Sheets\057042\26-174-Corridor.dgn

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|  | PLOT SCALE = 0.16666667 1/ in. | DRAWN -    | REVISED - |
|  | PLOT DATE = 3/24/2022          | CHECKED -  | REVISED - |
|  |                                | DATE -     | REVISED - |

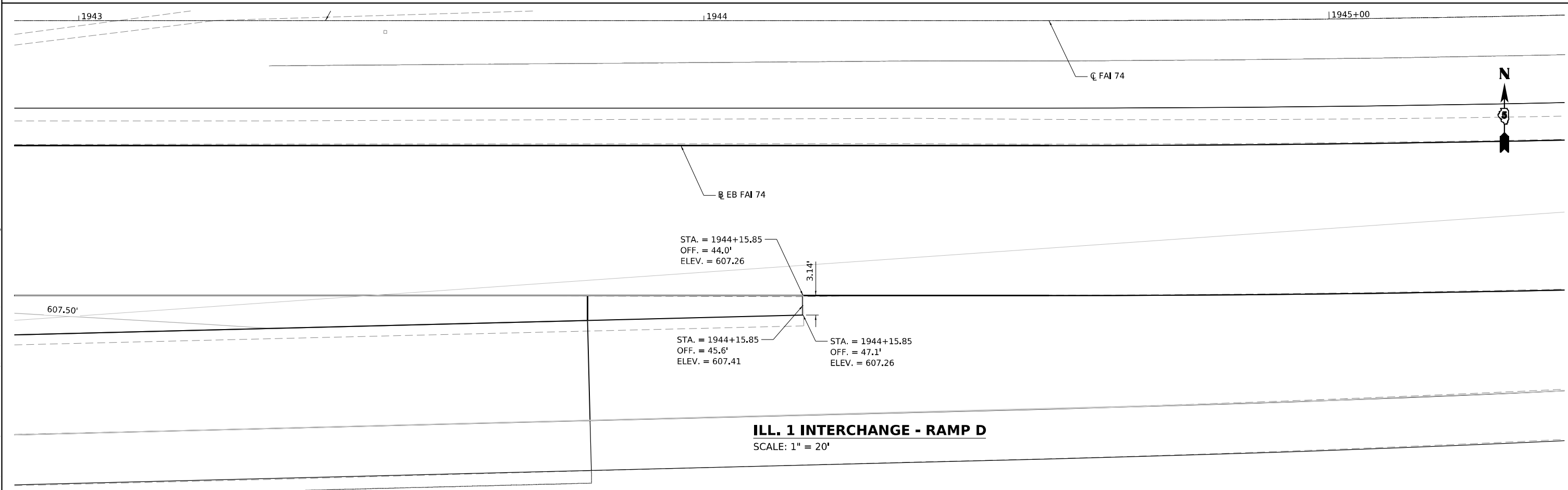
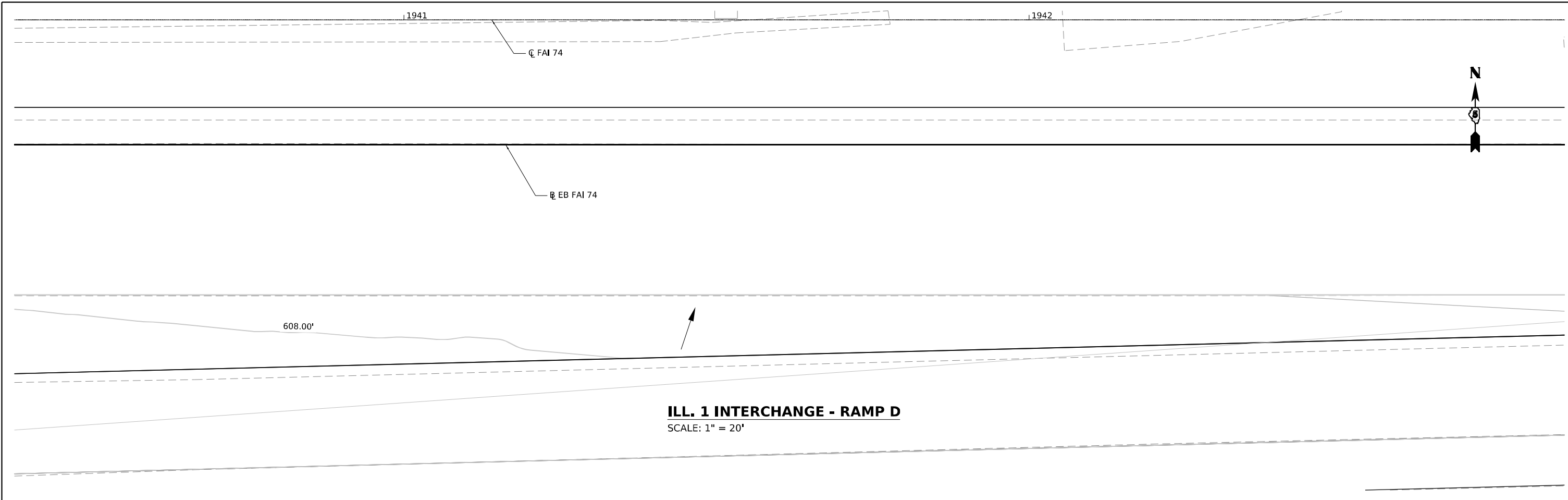
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**INTERSTATE 74 REHABILITATION**  
**GORE DETAILS - EB C-D ROADWAY**

SCALE: 1" = 20'    SHEET 3 OF 6 SHEETS    STA.    TO STA.

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 484       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |





MODEL SHEET: ILL. 1 EB Roadway Ramp D  
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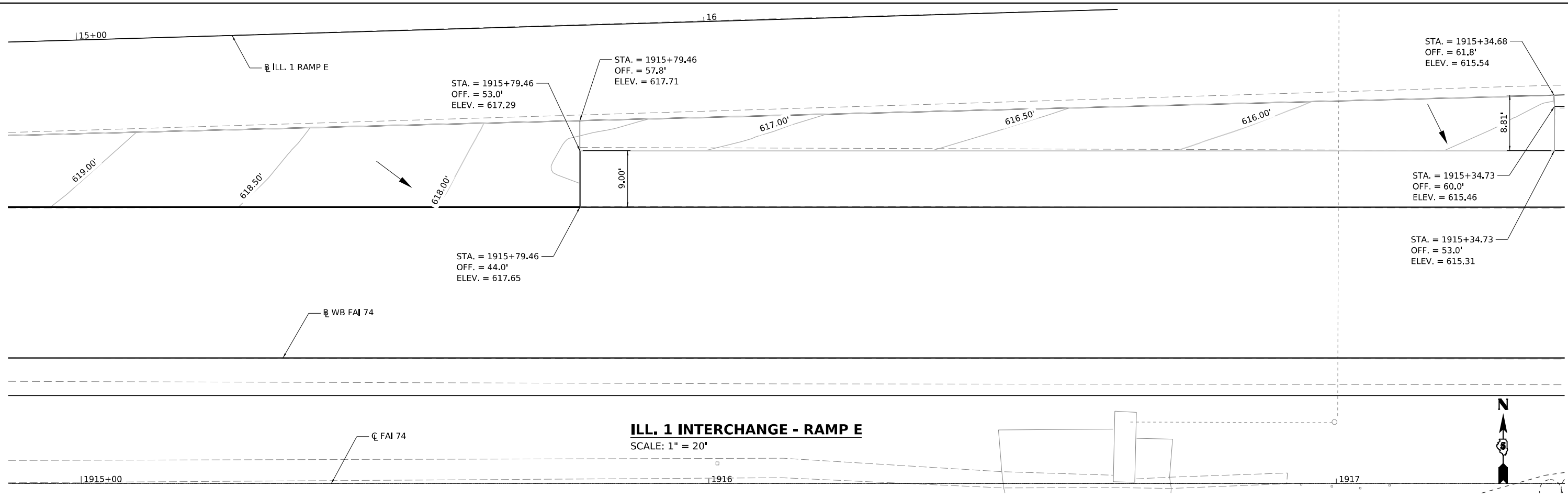
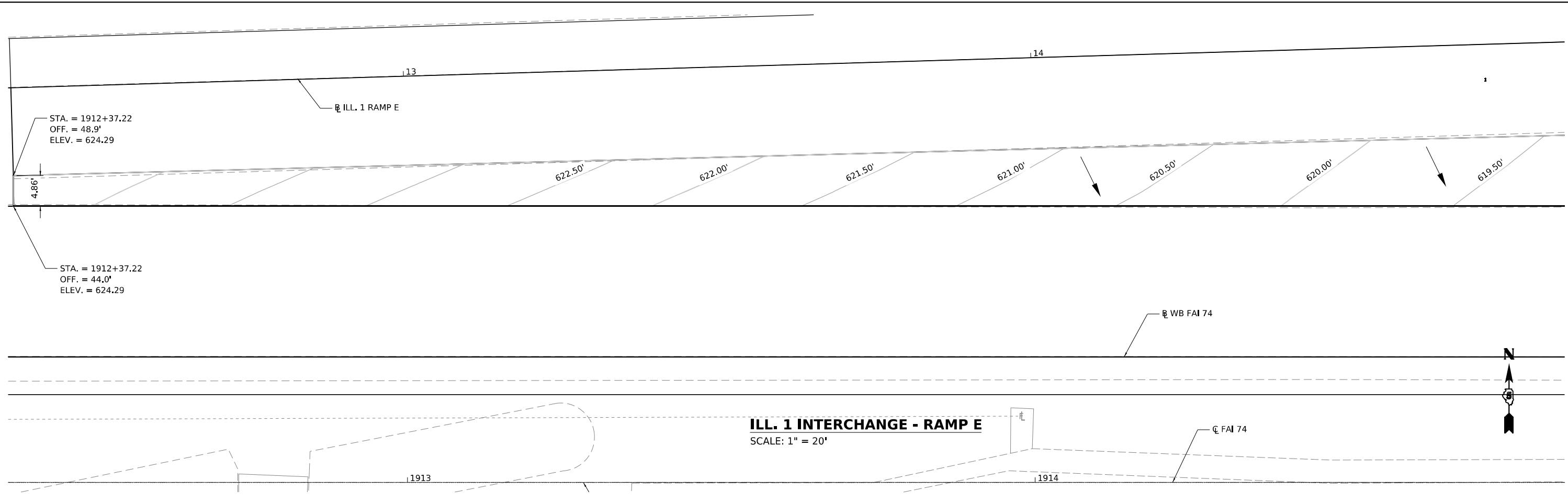
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|  | PLOT SCALE = 0.16666667 "/> in. | DRAWN -    | REVISED - |
|  | PLOT DATE = 3/24/2022           | CHECKED -  | REVISED - |
|  |                                 | DATE -     | REVISED - |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

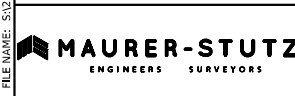
**INTERSTATE 74 REHABILITATION**  
**GORE DETAILS - EB C-D ROADWAY**

SCALE: 1" = 20'    SHEET 4 OF 6 SHEETS    STA.    TO STA.

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 485       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |



MODEL SHEET: ILL. 1 C-D Roadway Ramp E  
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| USER NAME = bmrwagehoft      | DESIGNED - | REVISED -   |
| DRAWN -                      | REVISOR -  |             |
| PLOT SCALE = 0.16666667"/in. | CHECKED -  | REVISIONS - |
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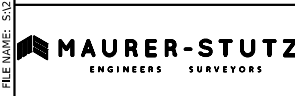
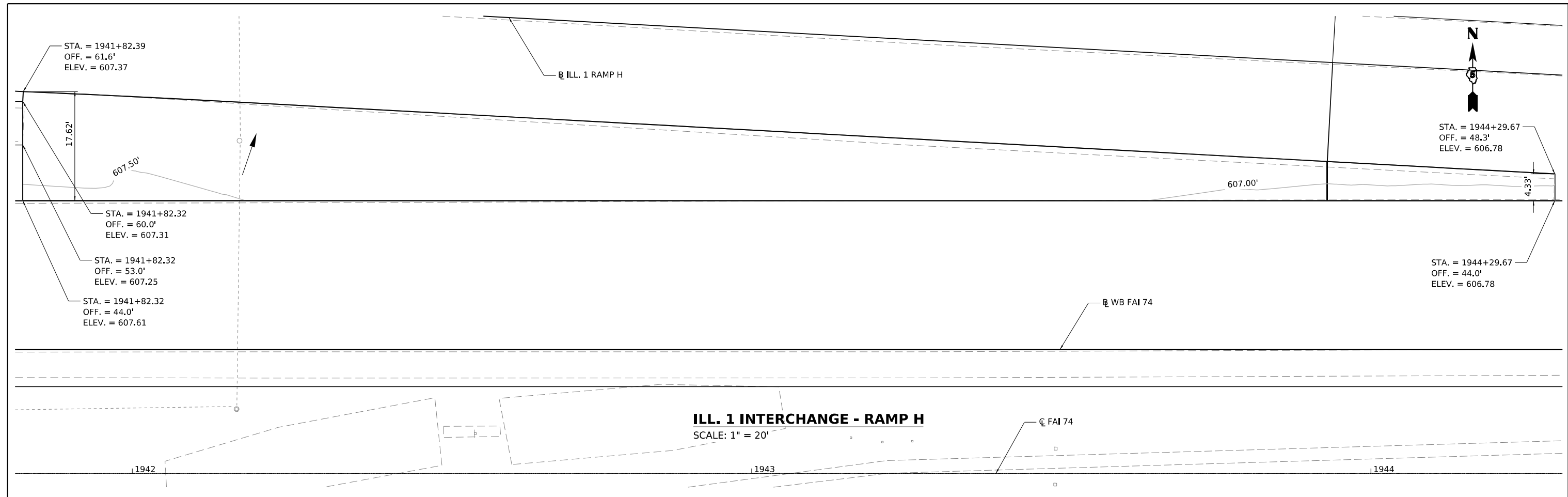
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**INTERSTATE 74 REHABILITATION**  
**GORE DETAILS - WB C-D ROADWAY**

SCALE: 1" = 20'    SHEET 5 OF 6 SHEETS    STA. TO STA.

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 486       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |

MODEL SHEET: ILL. 1 C-D Roadway Ramp H  
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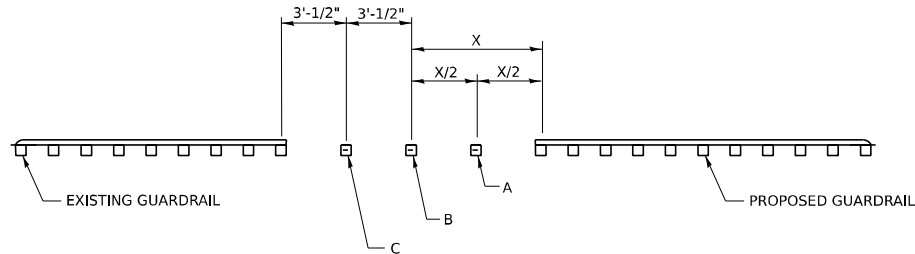
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| PLOT SCALE = 0.16666667 ' / in. | CHECKED -  | REVISED - |
| PLOT DATE = 3/24/2022           | DATE -     | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**INTERSTATE 74 REHABILITATION  
 GORE DETAILS - WB C-D ROADWAY**

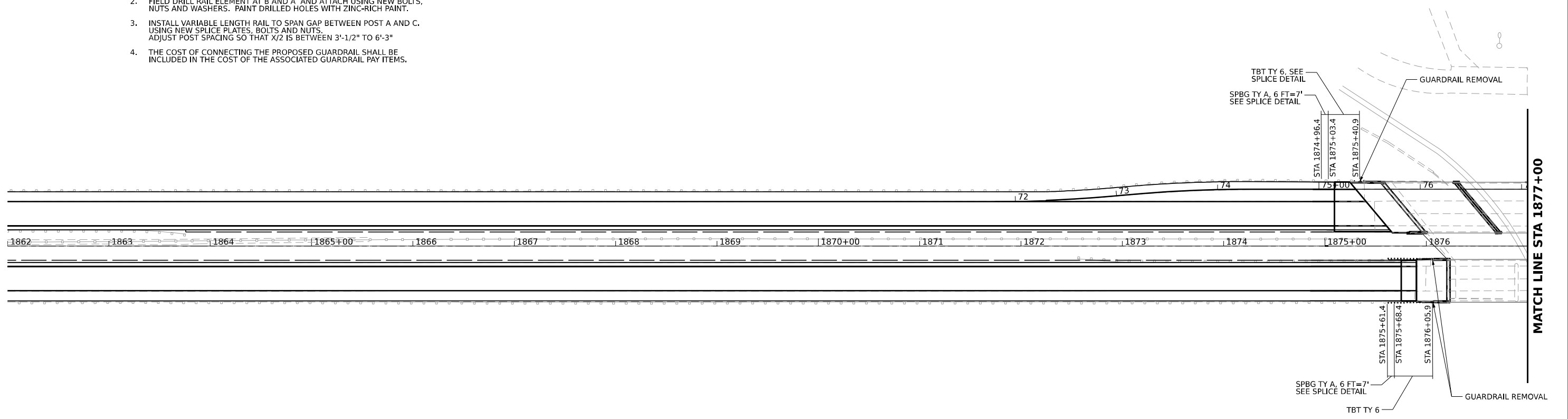
SCALE: 1" = 20'    SHEET 6 OF 6 SHEETS    STA.    TO STA.

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 487       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |



**GUARDRAIL SPLICE DETAIL**

1. INSTALL POST B HALF WAY BETWEEN POST A AND C.
2. FIELD DRILL RAIL ELEMENT AT B AND A AND ATTACH USING NEW BOLTS, NUTS AND WASHERS. PAINT DRILLED HOLES WITH ZINC-RICH PAINT.
3. INSTALL VARIABLE LENGTH RAIL TO SPAN GAP BETWEEN POST A AND C. USING NEW SPLICE PLATES, BOLTS AND NUTS. ADJUST POST SPACING SO THAT X/2 IS BETWEEN 3'-1/2" TO 6'-3"
4. THE COST OF CONNECTING THE PROPOSED GUARDRAIL SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED GUARDRAIL PAY ITEMS.



MODEL: I-74 Guardrail Sheet 0 (Sheet)  
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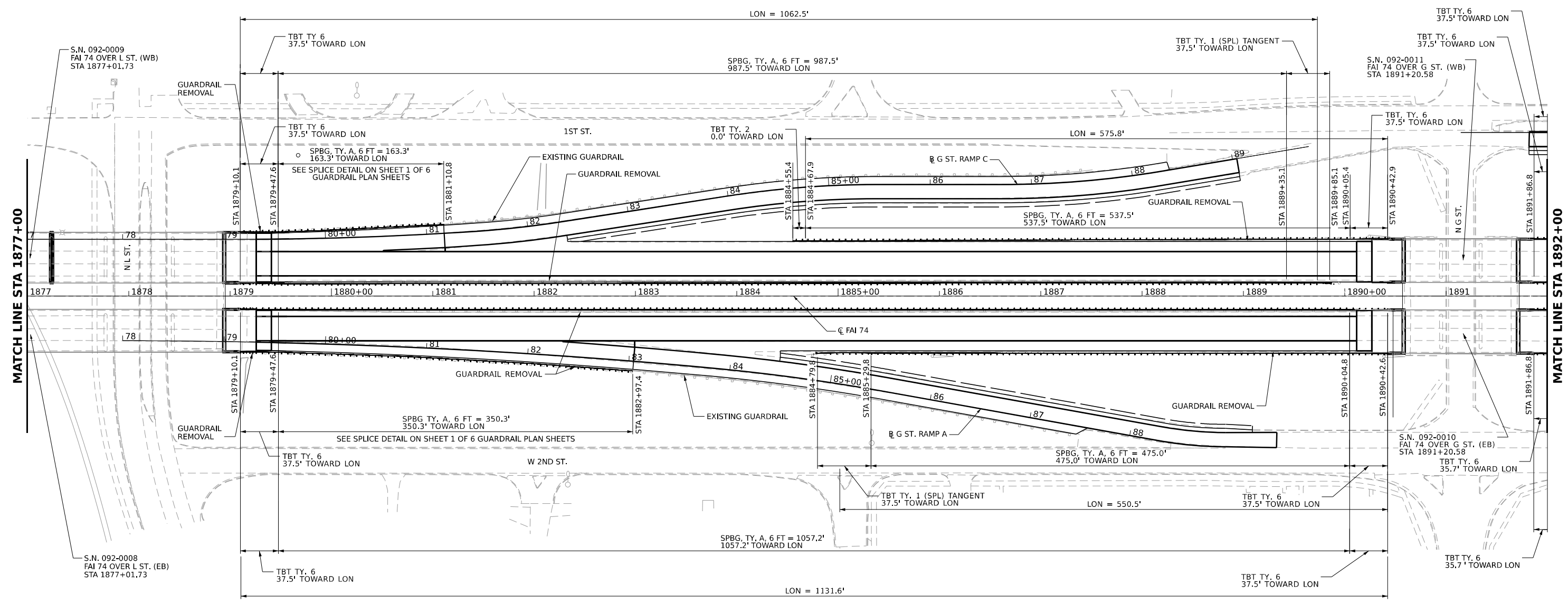
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| PLOT DATE = 3/17/2022           | CHECKED - JLS  | REVISED - |
|                                 | DATE -         | REVISED - |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL PLAN SHEETS**  
**I-74 DANVILLE**

SCALE: 1" = 50'    SHEET 1 OF 6 SHEETS    STA. 1862+00.00 TO STA. 1877+00.00

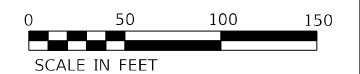
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|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10.11,12)R | VERMILION | 698          | 488       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |



MATCH LINE STA 1877+00

MATCH LINE STA 1892+00

MODEL: I-74 Guardrail Sheet 1 (Sheet)  
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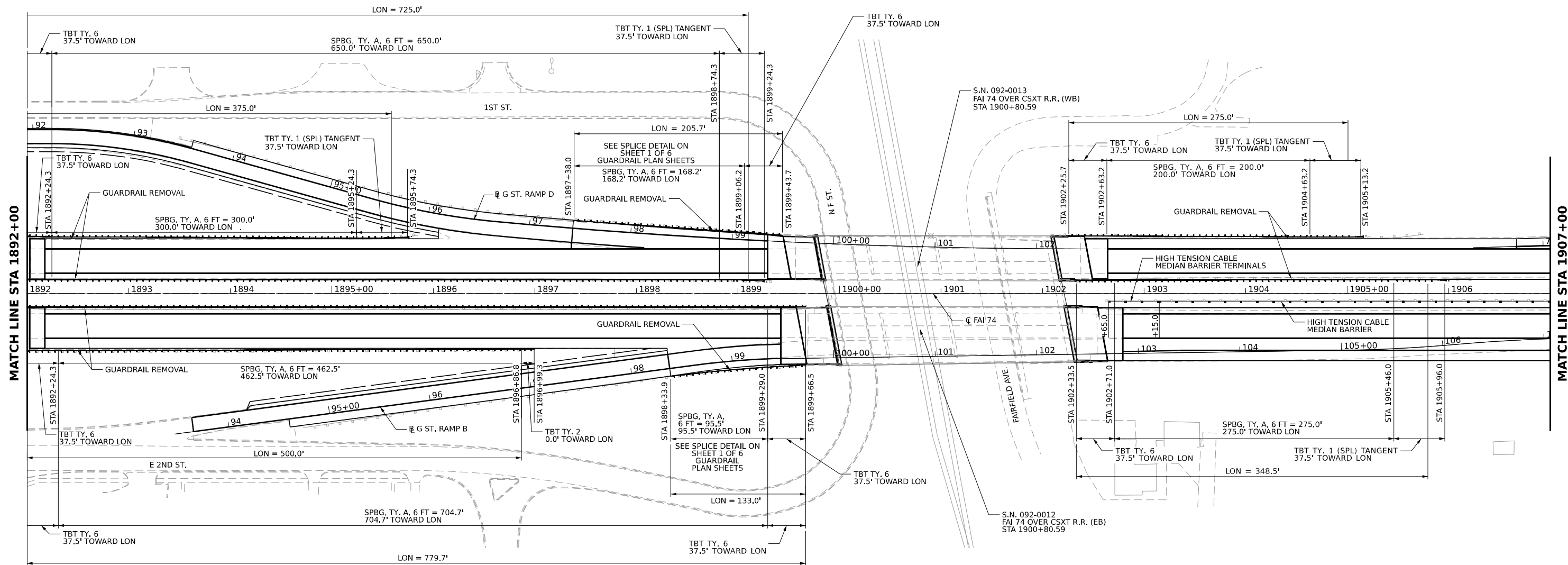
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| PLOT SCALE = 0.16666633 1/ in. | CHECKED - JLS  | REVISED - |
| PLOT DATE = 3/17/2022          | DATE -         | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL PLAN SHEETS  
I-74 DANVILLE**

SCALE: 1" = 50'    SHEET 2    OF 6    SHEETS    STA. 1877+00.00    TO STA. 1892+00.00

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 489       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |



MATCH LINE STA 1892+00

MATCH LINE STA 1907+00

MODEL: I-74 Guardrail Sheet 3 (Sheet)  
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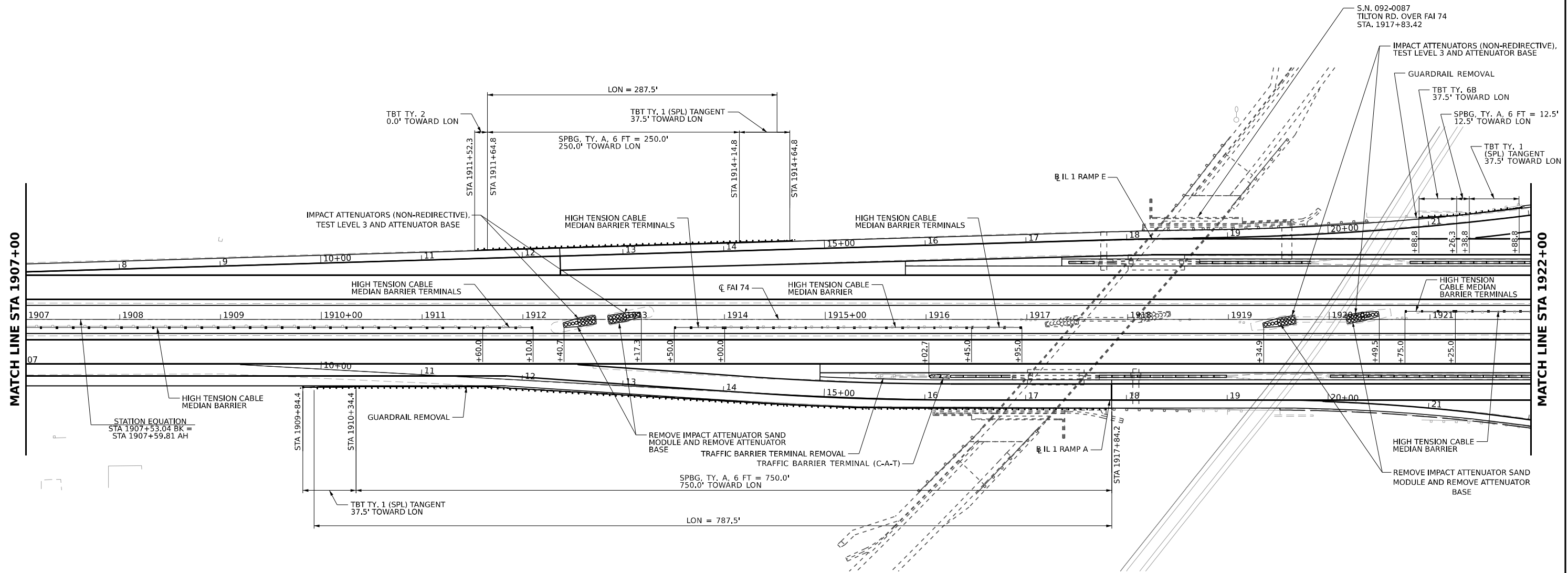


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|----------------------------------|----------------|-----------|
| USER NAME = Jennifer             | DESIGNED - AGL | REVISED - |
| PLOT SCALE = 0.16666633 1/16 in. | DRAWN - LEC    | REVISED - |
| PLOT DATE = 3/17/2022            | CHECKED - JLS  | REVISED - |
|                                  | DATE -         | REVISED - |

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

| GUARDRAIL PLAN SHEETS |         |             |                                    |
|-----------------------|---------|-------------|------------------------------------|
| I-74 DANVILLE         |         |             |                                    |
| SCALE: 1" = 50'       | SHEET 3 | OF 6 SHEETS | STA. 1892+00.00 TO STA. 1907+00.00 |

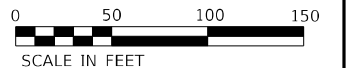
| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 490       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |



MATCH LINE STA 1907+00

MATCH LINE STA 1922+00

STATION EQUATION  
 STA 1907+53.04 BK =  
 STA 1907+59.81 AH



MODEL: I-74 Guardrail Sheet 3 (Sheet)  
 FILE NAME: X:\production\files\2018\419-0032\CADD\Phase II\CADD\_Sheets\05702425-h-Guardrail.dgn



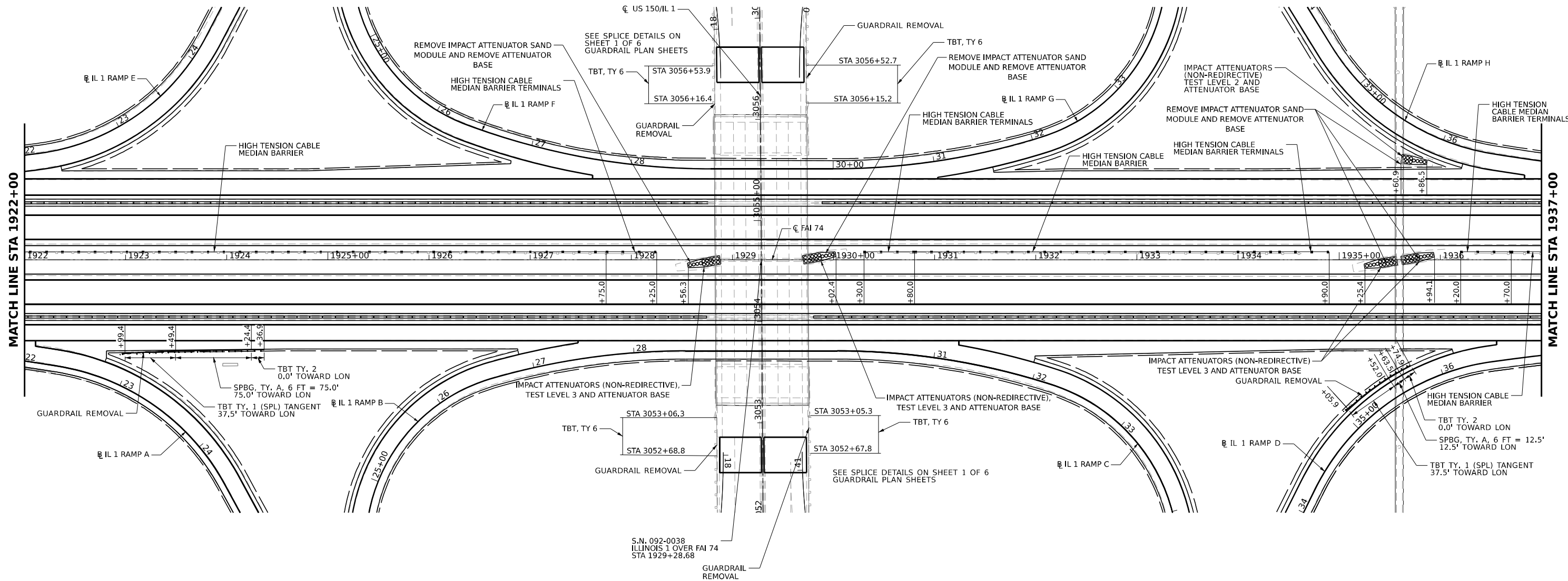
|                                  |                |           |
|----------------------------------|----------------|-----------|
| USER NAME = Jennifer             | DESIGNED - AGL | REVISED - |
| PLOT SCALE = 0.16666633 1/16 in. | DRAWN - LEC    | REVISED - |
| PLOT DATE = 3/17/2022            | CHECKED - JLS  | REVISED - |
|                                  | DATE -         | REVISED - |

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**GUARDRAIL PLAN SHEETS  
 I-74 DANVILLE**

SCALE: 1" = 50'    SHEET 4    OF 6    SHEETS    STA. 1907+00.00    TO STA. 1922+00.00

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 491       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |



MODEL: I-74 Guardrail Sheet 4 (Sheet)  
 FILE NAME: X:\production\files\2018\19-0032\CADD\Phase 1\ICADD\_Sheets\05702425e-h-Guardrail.dgn



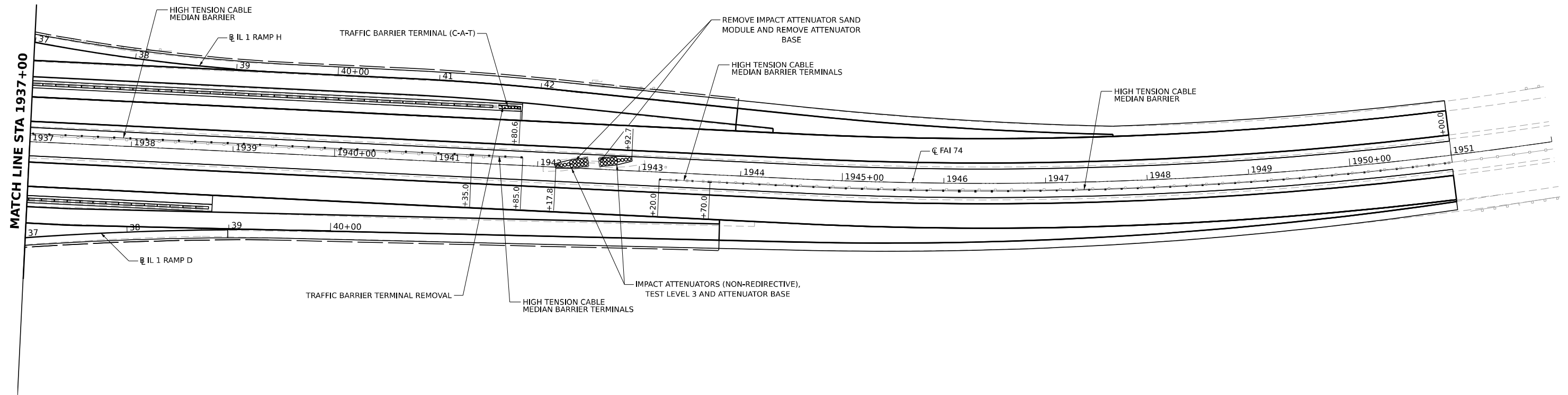
|                                |                |           |
|--------------------------------|----------------|-----------|
| USER NAME = Jennifer           | DESIGNED - AGL | REVISED - |
| PLOT SCALE = 0.16666633 1/ in. | DRAWN - LEC    | REVISED - |
| PLOT DATE = 3/17/2022          | CHECKED - JLS  | REVISED - |
|                                | DATE -         | REVISED - |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

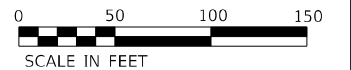
**GUARDRAIL PLAN SHEETS**  
**I-74 DANVILLE**  
 SCALE: 1" = 50'    SHEET 5 OF 6 SHEETS    STA. 1922+00.00 TO STA. 1937+00.00

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 492       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |





MATCH LINE STA 1937+00



MODEL: I-74 Guardrail Sheet 6 (Sheet)  
FILE NAME: X:\production\files\2018\19-0032\CADD\Phase II\CADD\_Sheets\0570225-ht-guardrail.dgn



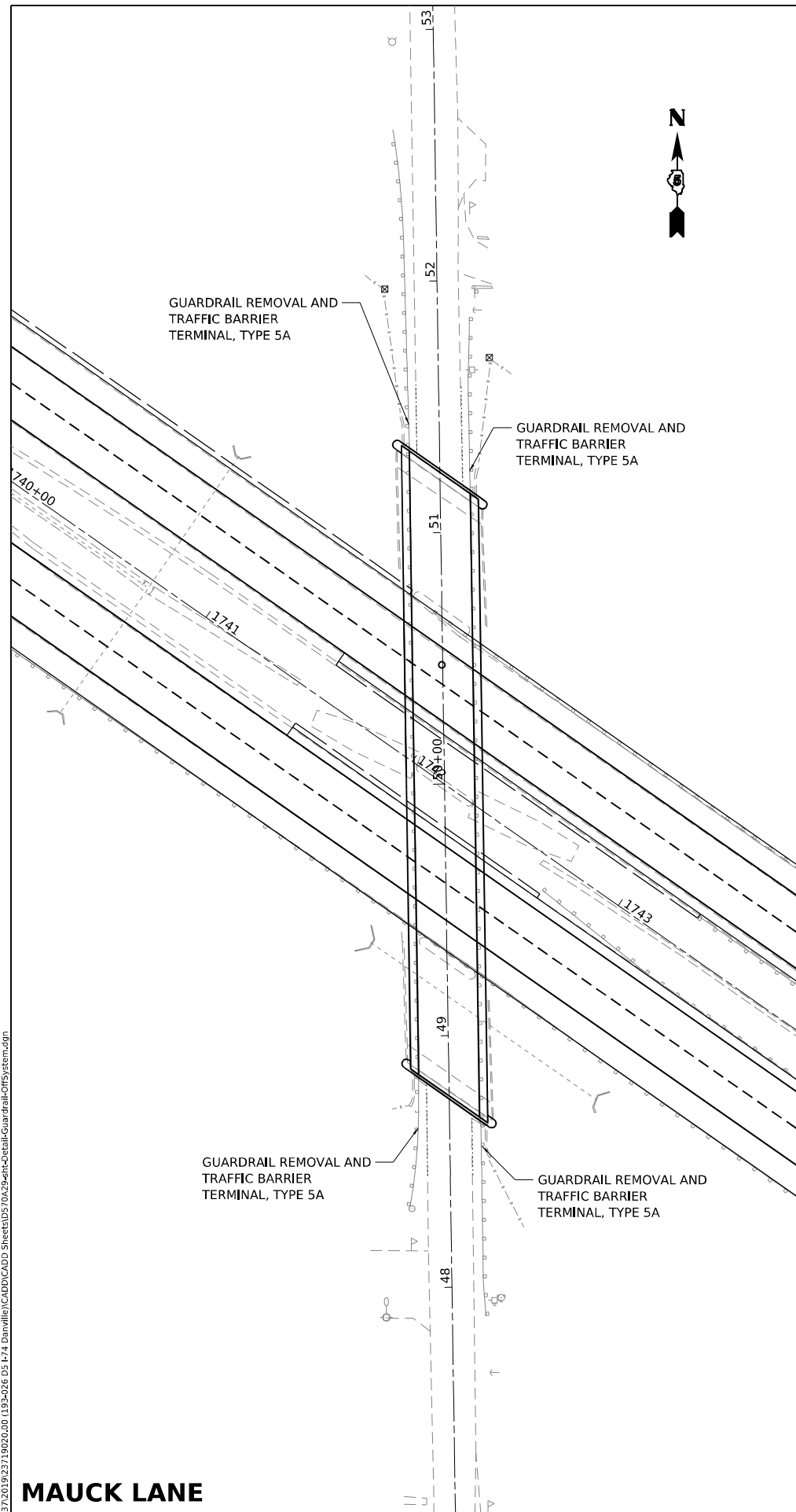
|                                  |                |           |
|----------------------------------|----------------|-----------|
| USER NAME = Jennifer             | DESIGNED - AGL | REVISED - |
| DRAWN - LEC                      | REVISED -      |           |
| PLOT SCALE = 0.16666633 1/16 in. | CHECKED - JLS  | REVISED - |
| PLOT DATE = 3/17/2022            | DATE -         | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

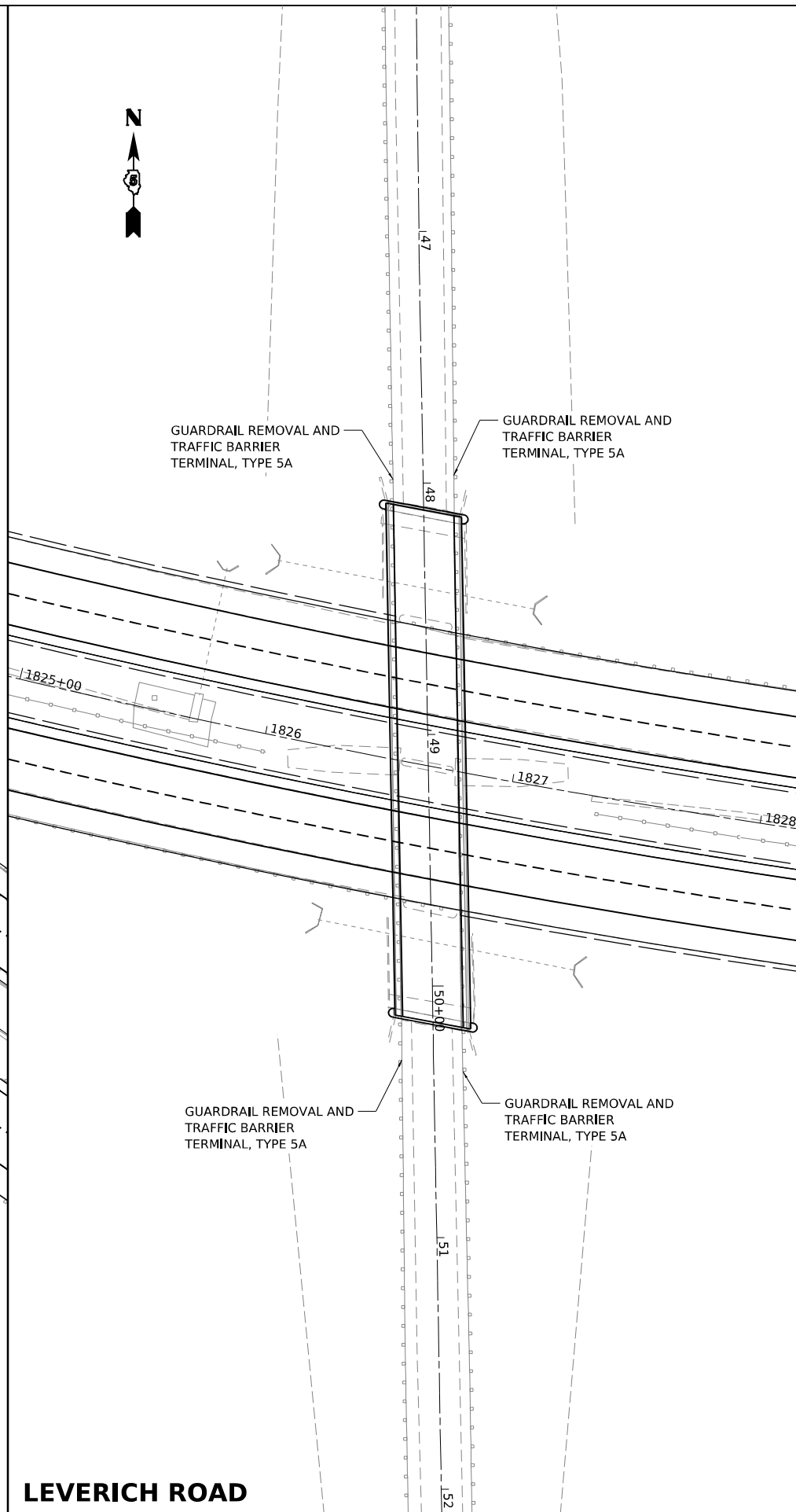
**GUARDRAIL PLAN SHEETS  
I-74 DANVILLE**

SCALE: 1" = 50'    SHEET 6    OF 6    SHEETS    STA. 1937+00.00    TO STA. 1952+00.00

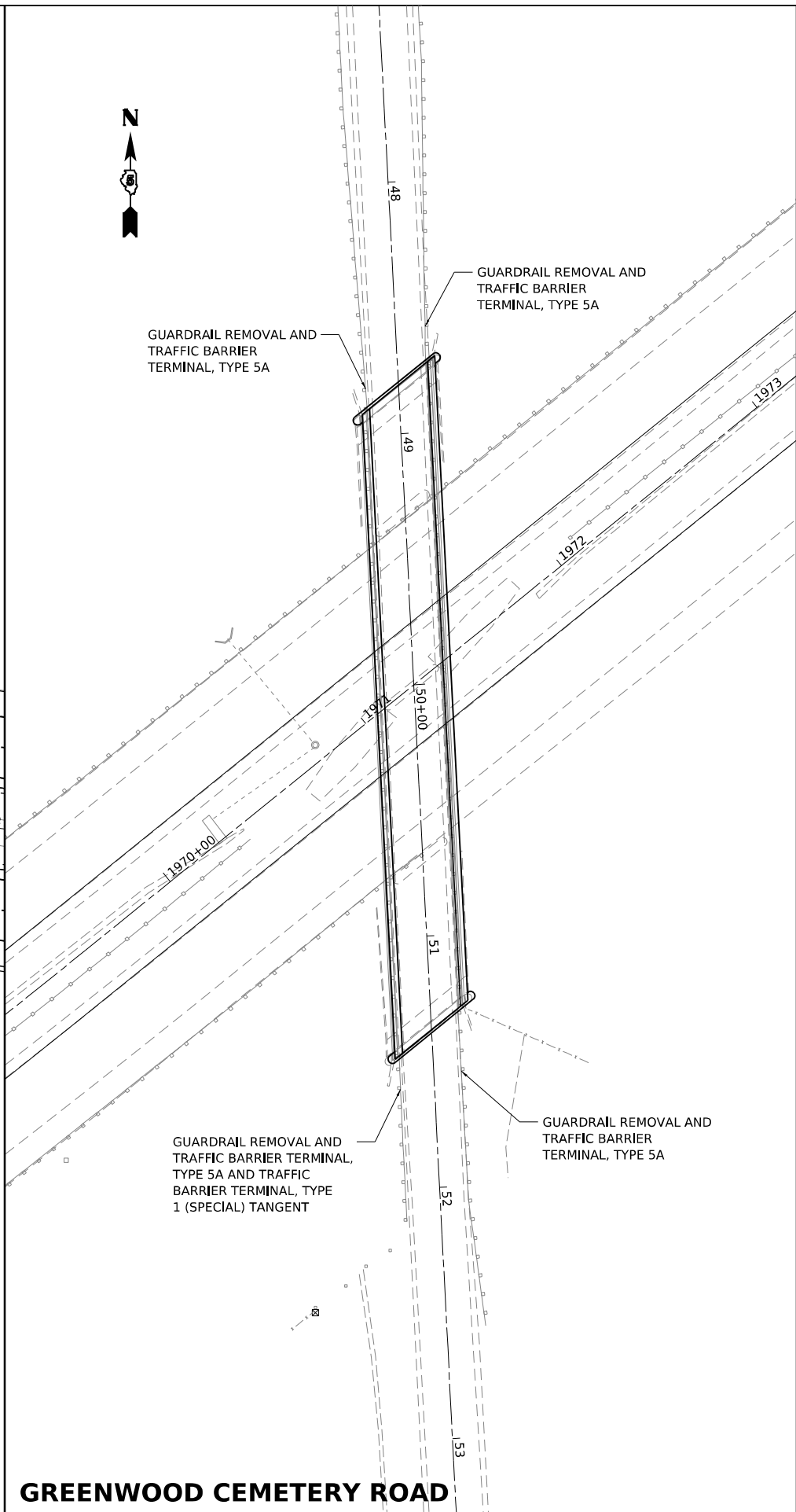
| F.A.I. RTE.                 | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|-----------------------------|----------------|-----------|--------------|-----------|
| 74                          | (92-10.11,12)R | VERMILION | 698          | 493       |
| CONTRACT NO. 70A29          |                |           |              |           |
| ILLINOIS   FED. AID PROJECT |                |           |              |           |



**MAUCK LANE**



**LEVERICH ROAD**



**GREENWOOD CEMETERY ROAD**

**MAURER-STUTZ**  
ENGINEERS SURVEYORS

|                               |            |           |
|-------------------------------|------------|-----------|
| USER NAME = bmwagehoft        | DESIGNED - | REVISED - |
| PLOT SCALE = 0.16666633 1/16" | DRAWN -    | REVISED - |
| PLOT DATE = 3/24/2022         | CHECKED -  | REVISED - |
|                               | DATE -     | REVISED - |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**INTERSTATE 74 REHABILITATION**  
**GUARDRAIL TERMINAL DETAIL**

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10.11,12)R | VERMILION | 698          | 494       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |

MODEL: C:\System\Guardrail.dgn  
 FILE NAME: S:\271030\9252719020.00 (182-026 DS 174 Damville)\CADD\CADD Sheets\0570A29\Detail-Guardrail-CMS\System.dgn

SCALE: 1" = 30' SHEET 7 OF 7 SHEETS STA. TO STA.



EX. R.O.W.

EX. ACCESS CONTROL

EX. R.O.W.

US 150 RAMP C

STA. 1695+09.57  
OFF. 209.21' LT

STA. 1695+55.69  
OFF. 85.75' LT

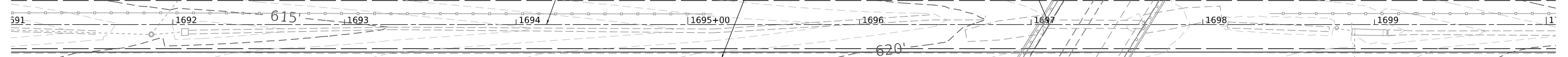
STA. 1696+23.93  
OFF. 330.28' LT

STA. 1696+86.44  
OFF. 80.32' LT

STA. 1697+75.52  
OFF. 193.82' LT

LIMITS OF PROPOSED INFIELD REGRADING

S.N. 092-0051  
US 150 OVER FAI 74



MODEL SHEET: I:\CL\74A\_NW\_01\10\_GRADE.MXD  
 FILE NAME: S:\327\303\237\10020000\_1192426\_05\_174\_Dim\11\10\CADD\CADD\_Sheets\05704262\NW-Grading-MLK-Interchange.dgn



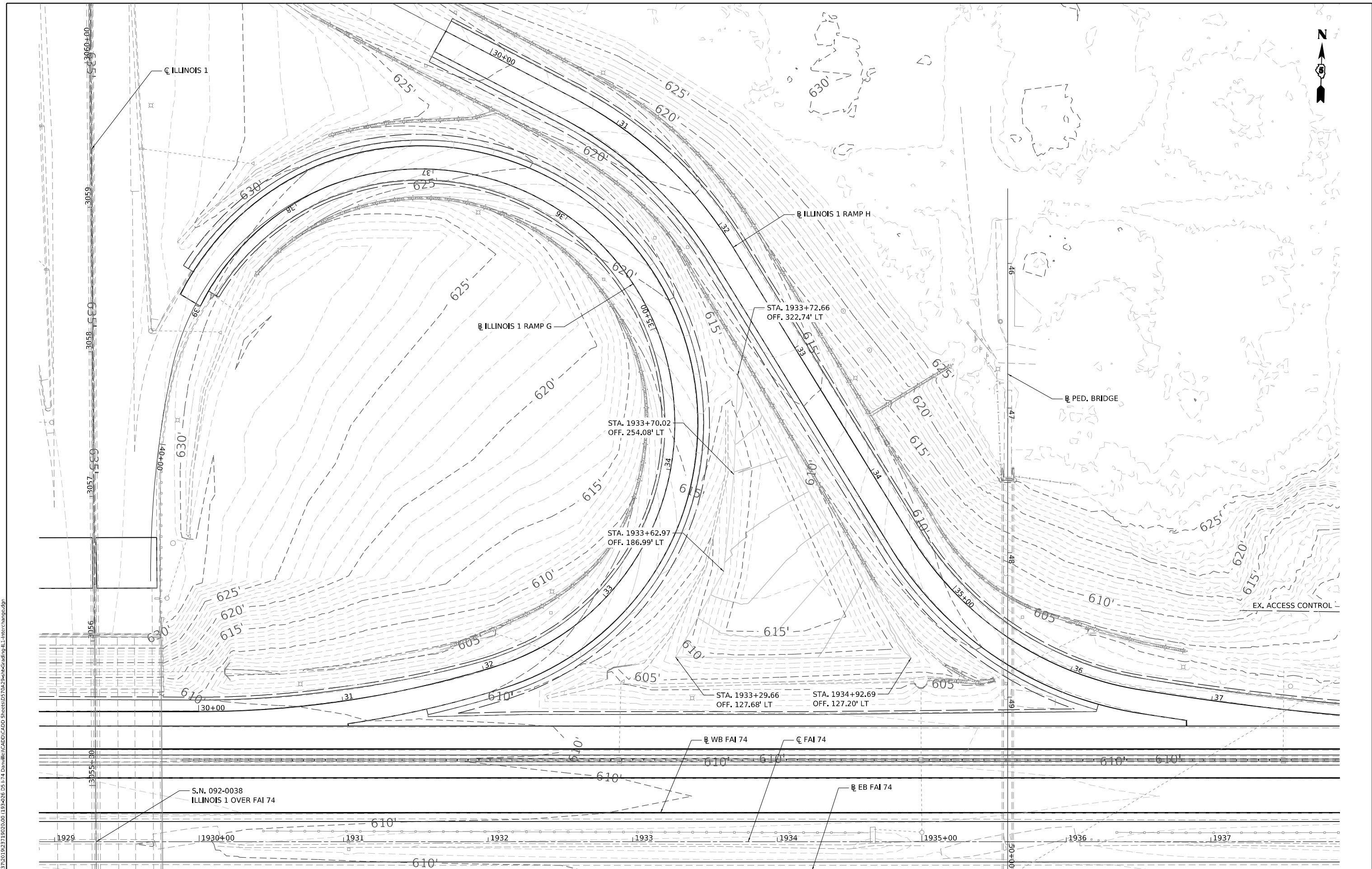
|                              |            |           |
|------------------------------|------------|-----------|
| USER NAME = bmrwagehoft      | DESIGNED - | REVISED - |
| PLOT SCALE = 0.16666667"/in. | DRAWN -    | REVISED - |
| PLOT DATE = 3/24/2022        | CHECKED -  | REVISED - |
|                              | DATE -     | REVISED - |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**INTERSTATE 74 REHABILITATION**  
**GRADING DETAIL - NW MLK/US150**

SCALE: 1" = 30'    SHEET 1 OF 3 SHEETS    STA. TO STA.

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 495       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |



MODEL SHEET: ACLEPFA, NE 8045 GRADINGS  
 FILE NAME: S:\327030237\9230200\_1132426\_DS\_174\_Dim\H\I\CADD\CADD Sheets\05704262\NE-Grading-LL-Interchange.dgn  
 S.N. 092-0038  
 ILLINOIS 1 OVER FAI 74

**MAURER-STUTZ**  
 ENGINEERS SURVEYORS

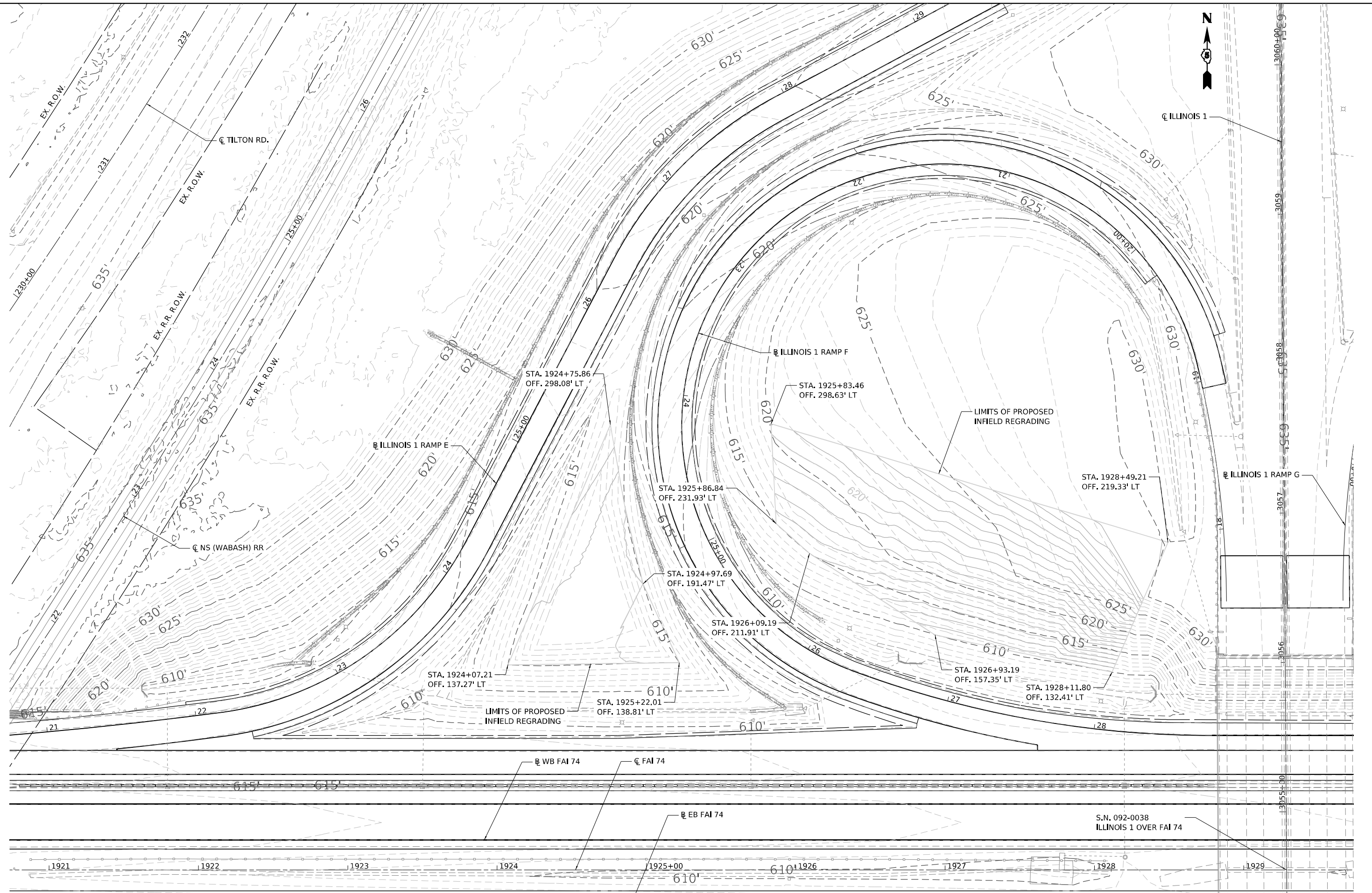
|                              |            |           |
|------------------------------|------------|-----------|
| USER NAME = bmrwagehoft      | DESIGNED - | REVISED - |
| PLOT SCALE = 0.16666667"/in. | DRAWN -    | REVISED - |
| PLOT DATE = 3/24/2022        | CHECKED -  | REVISED - |
|                              | DATE -     | REVISED - |

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**INTERSTATE 74 REHABILITATION**  
**GRADING DETAIL - NE ILLINOIS 1**

SCALE: 1" = 30'  
 SHEET 2 OF 3 SHEETS STA. TO STA.

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 496       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |



MODEL SHEET: D:\CLEPRA\_NW\_0140\_GRADE.MXD  
FILE NAME: S:\32703032371002000\_1192426.DS\_174.Dwg\Illinois1\CADD\CADD Sheets\05704262-NW-Grading\_LL-Interchange.dgn

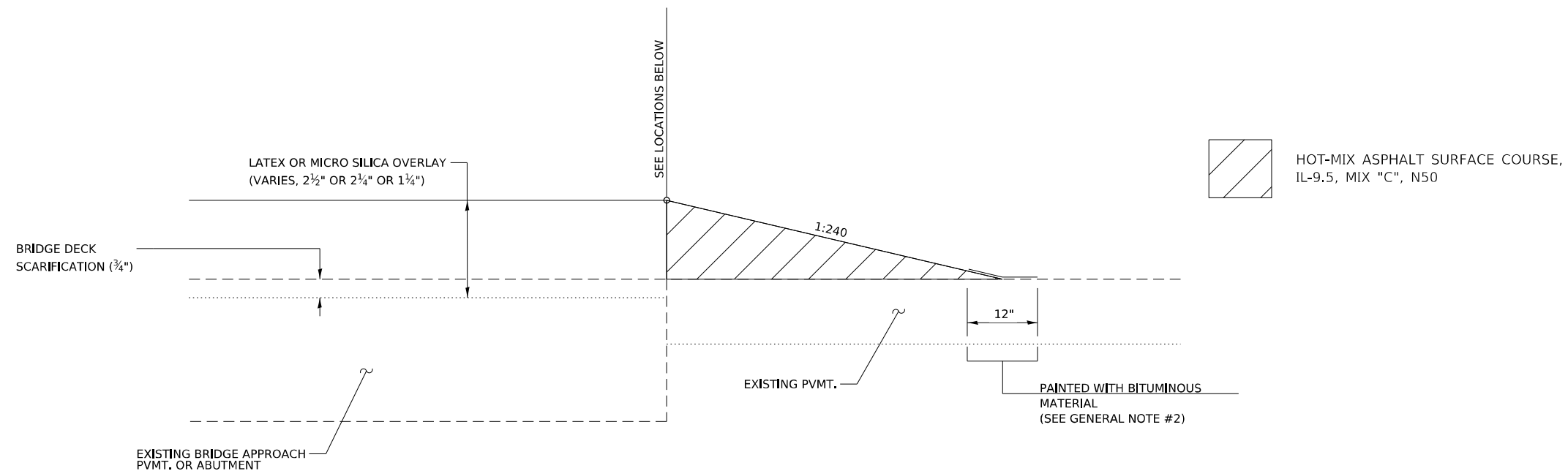



|                              |            |           |
|------------------------------|------------|-----------|
| USER NAME = bmwagehoft       | DESIGNED - | REVISED - |
| PLOT SCALE = 0.16666667"/in. | DRAWN -    | REVISED - |
| PLOT DATE = 3/24/2022        | CHECKED -  | REVISED - |
|                              | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERSTATE 74 REHABILITATION  
GRADING DETAIL - NW ILLINOIS 1**

|                                         |                        |                     |                    |                  |
|-----------------------------------------|------------------------|---------------------|--------------------|------------------|
| F.A.I. RTE. 74                          | SECTION (92-10.11,12)R | COUNTY VERMILION    | TOTAL SHEETS 698   | SHEET NO. 497    |
| S.N. 092-0038<br>ILLINOIS 1 OVER FAI 74 |                        |                     | CONTRACT NO. 70A29 |                  |
| SCALE: 1" = 30'                         |                        | SHEET 3 OF 3 SHEETS |                    | STA. TO STA.     |
|                                         |                        | ILLINOIS            |                    | FED. AID PROJECT |



 HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N50

**PROPOSED FEATHEREDGE RUNDOWN LOCATIONS**

**MAUCK LANE**  
 STA. 48+13.14 TO STA. 48+48.14 (SOUTH APPROACH)  
 STA. 51+51.87 TO STA. 51+86.87 (NORTH APPROACH)

**LEVERICH ROAD**  
 STA. 50+15.31 TO STA. 50+45.31 (SOUTH APPROACH)  
 STA. 47+79.71 TO STA. 48+09.71 (NORTH APPROACH)

**GREENWOOD CEMETERY ROAD**  
 STA. 51+38.49 TO STA. 51+54.49 (SOUTH APPROACH)  
 STA. 48+64.51 TO STA. 48+79.51 (NORTH APPROACH)

**GENERAL NOTES**

- ALL PROPOSED RUNDOWNS SHALL BE UNIFORMLY CONSTRUCTED AS FOLLOWS:  
 1:240 (20 FEET PER INCH) OF THICKNESS FOR NON-INTERSTATE IMPROVEMENTS (SEE ARTICLE 406.09)
- ON RESURFACING RUNDOWNS THAT ARE TO REMAIN IN PLACE AFTER COMPLETION OF THE SECTION, THE END OF THE FEATHEREDGE SHALL BE PAINTED WITH A UNIFORM COATING OF AC OR HFE BITUMINOUS MATERIAL APPROVED BY THE ENGINEER AFTER THE RUNDOWN IS COMPLETED. THE BITUMINOUS MATERIAL SHALL BE PAINTED ACROSS THE END OF THE RUNDOWN APPROXIMATELY 12 INCHES (300 mm) WIDE, 6 INCHES (150 mm) ON THE RUNDOWN AND 6 INCHES (150 mm) ON THE PAVEMENT. THE PAINTED STRIP SHALL BE COVERED WITH SAND. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

MODEL: Featheredge Rundown Detail  
 FILE NAME: S:\3780\9292719\202000\_1193-206\_DS\_174\_Dim\Illinois\CAADD\CADD Sheets\DS70429292719\FeatheredgeRundown.dgn



|                             |            |           |
|-----------------------------|------------|-----------|
| USER NAME = bmrwagehoft     | DESIGNED - | REVISED - |
| PLOT SCALE = 40,0000' / in. | DRAWN -    | REVISED - |
| PLOT DATE = 3/24/2022       | CHECKED -  | REVISED - |
|                             | DATE -     | REVISED - |

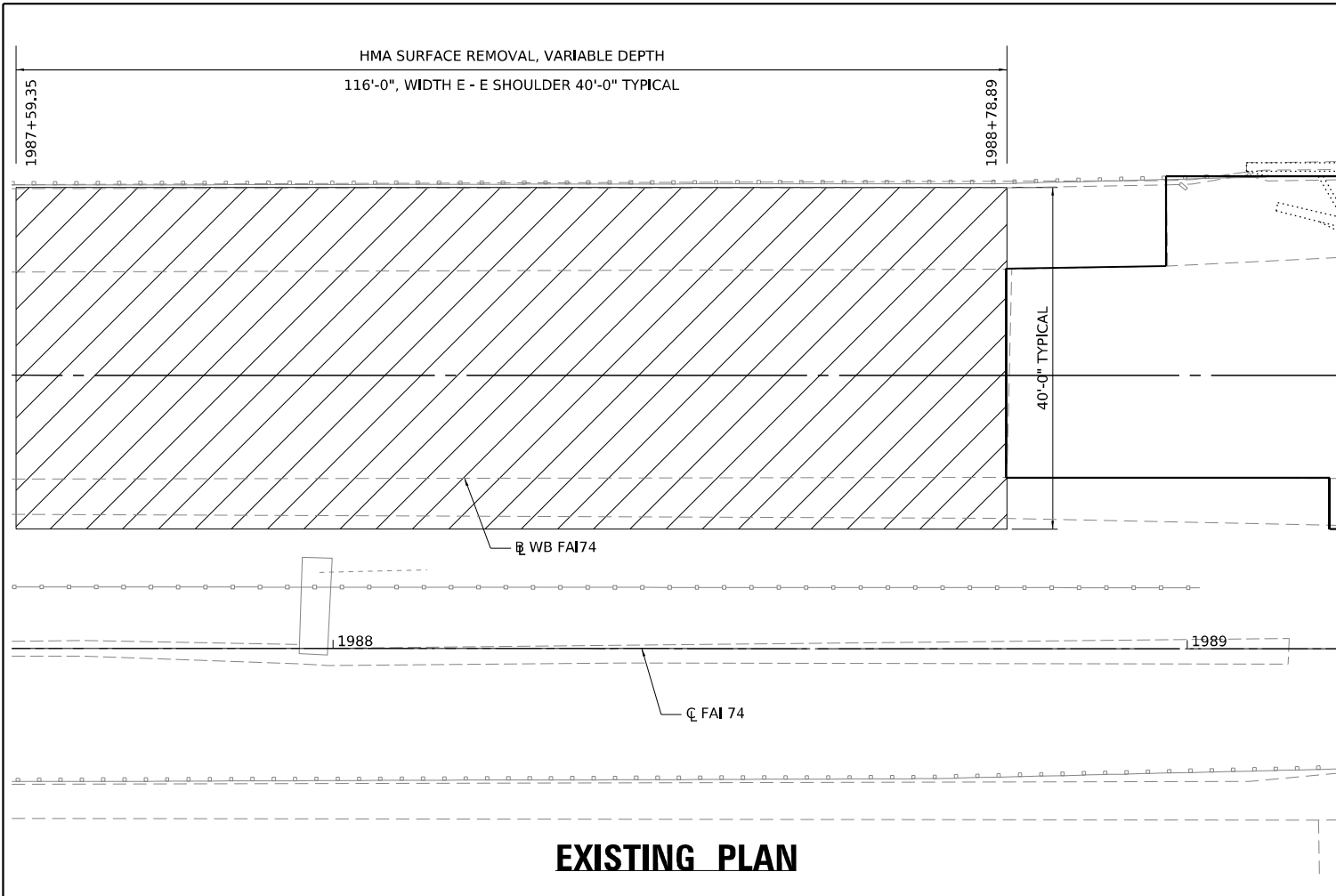
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**INTERSTATE 74 REHABILITATION  
 FEATHEREDGE RUNDOWN DETAIL**

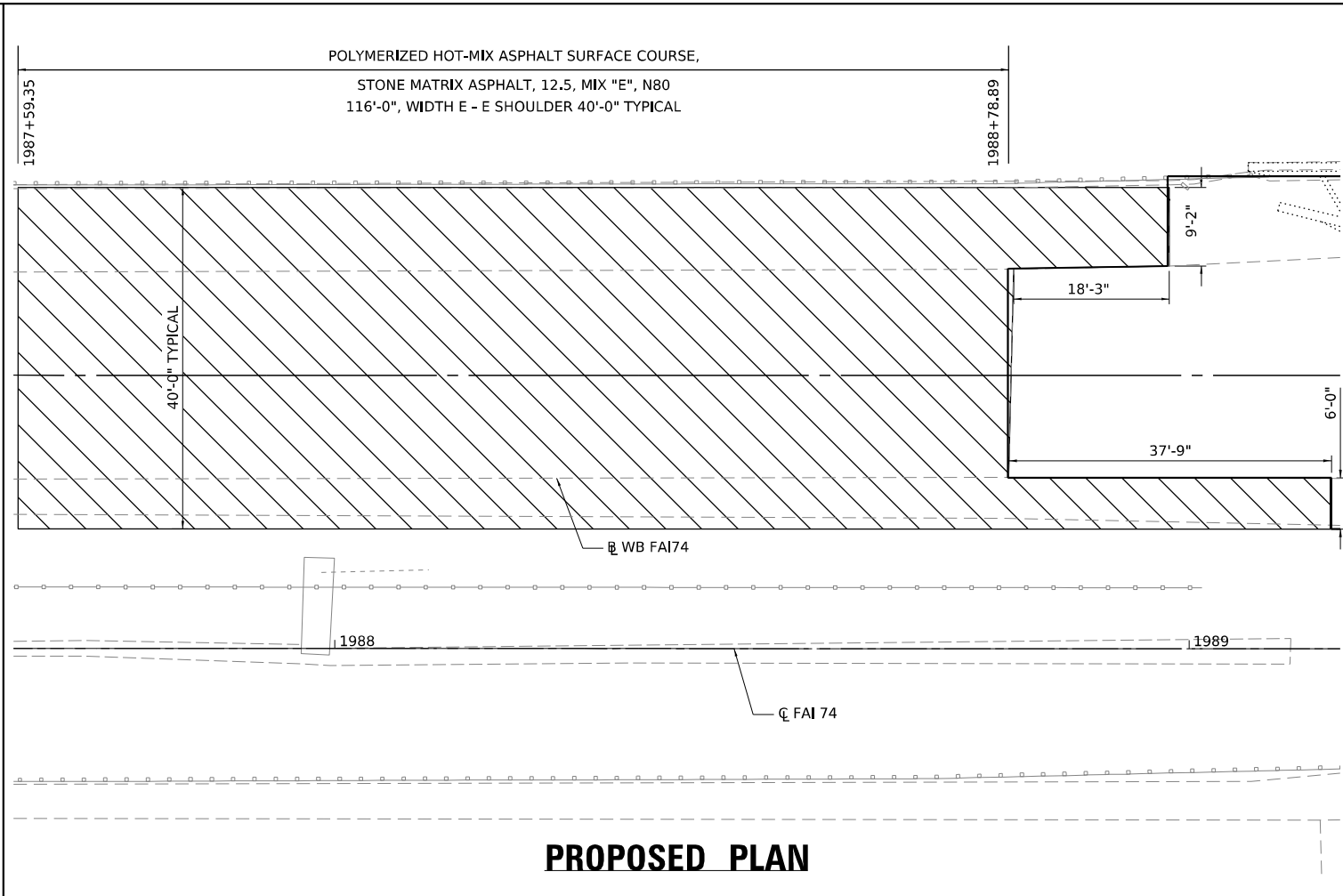
SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
|---------------------------|----------------|-----------|--------------|-----------|
| 74                        | (92-10,11,12)R | VERMILION | 698          | 498       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |

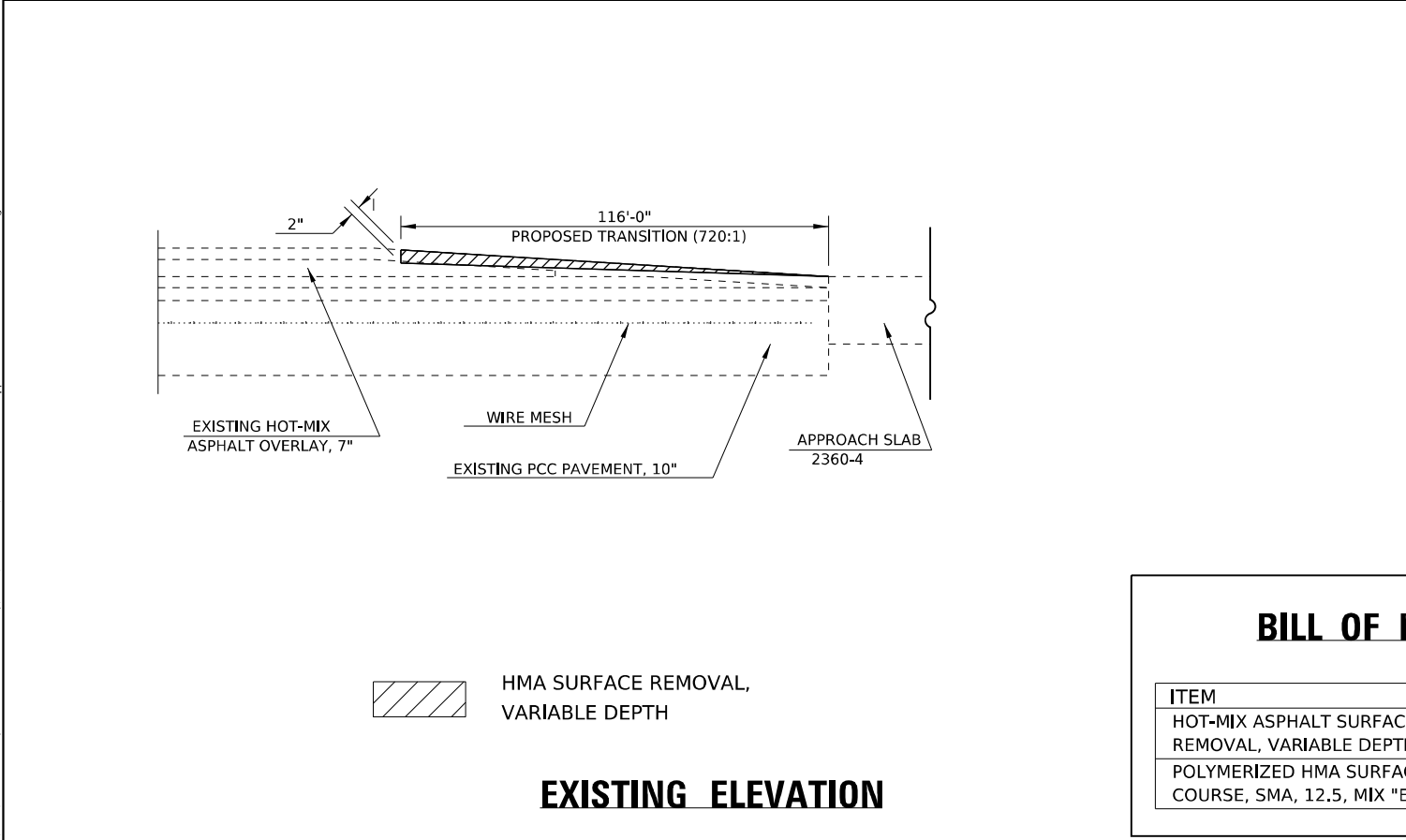




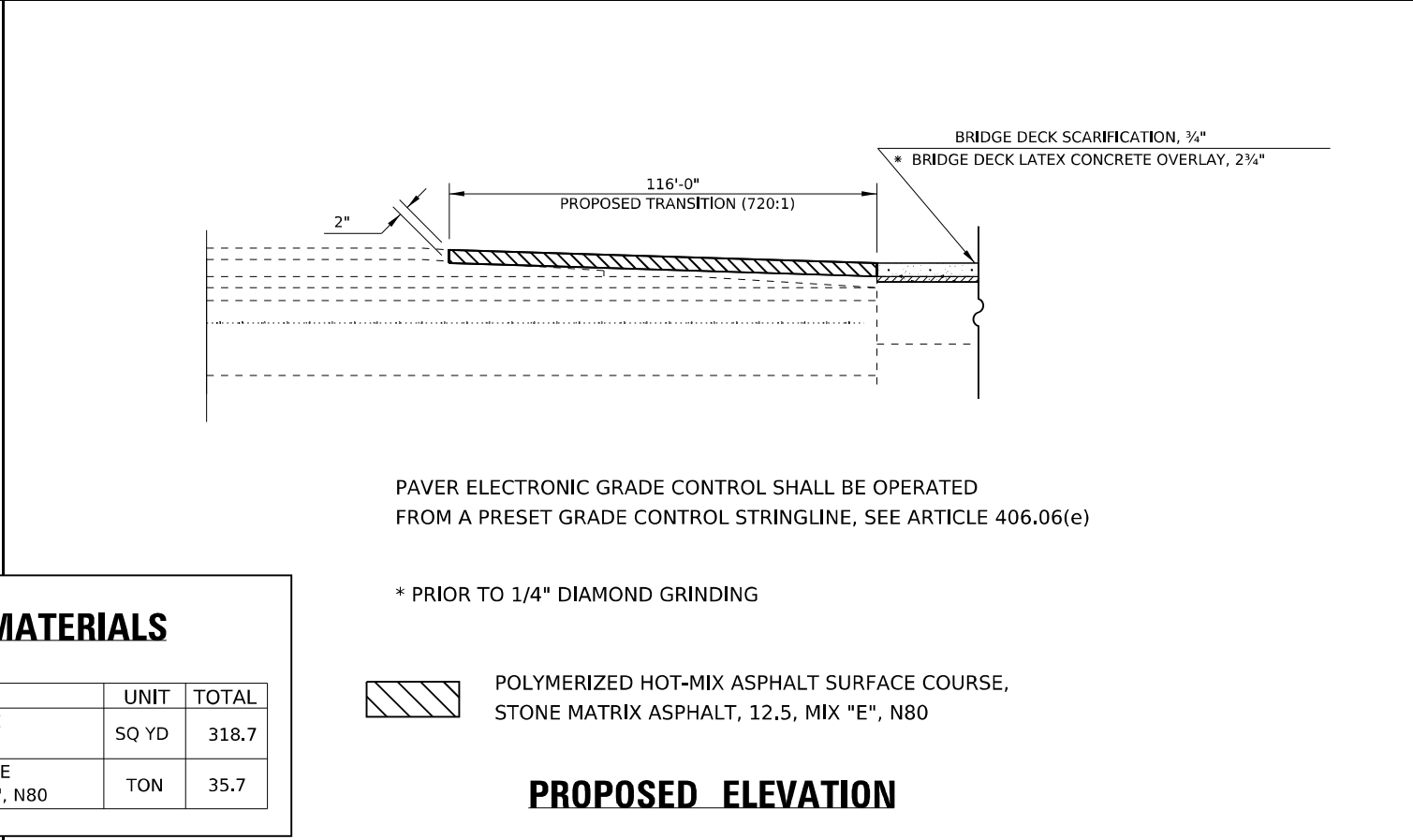
**EXISTING PLAN**



**PROPOSED PLAN**



**EXISTING ELEVATION**



**PROPOSED ELEVATION**

**BILL OF MATERIALS**

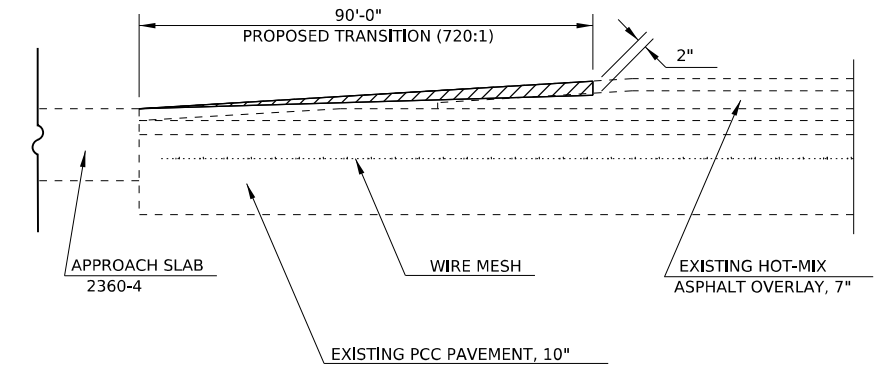
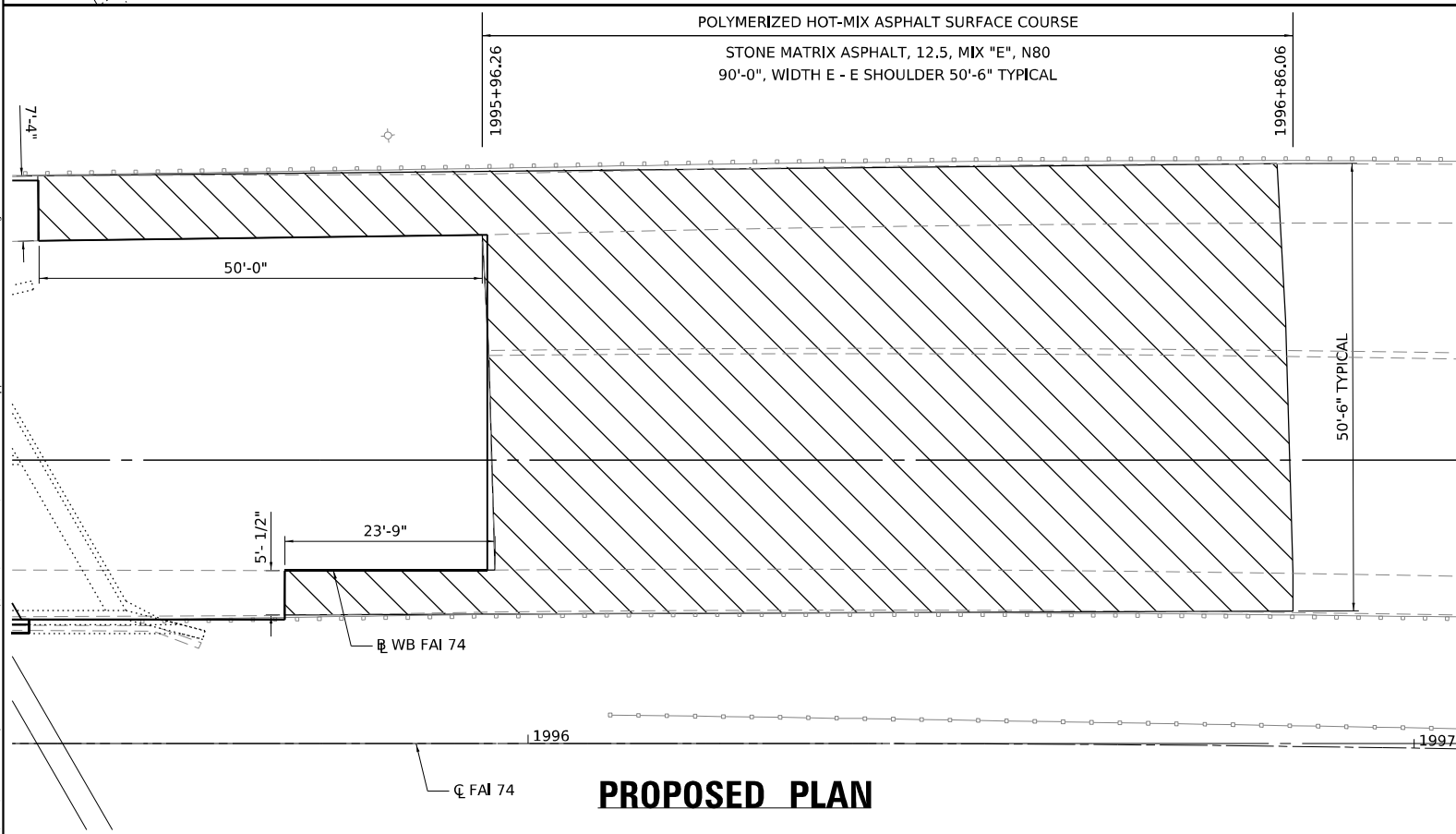
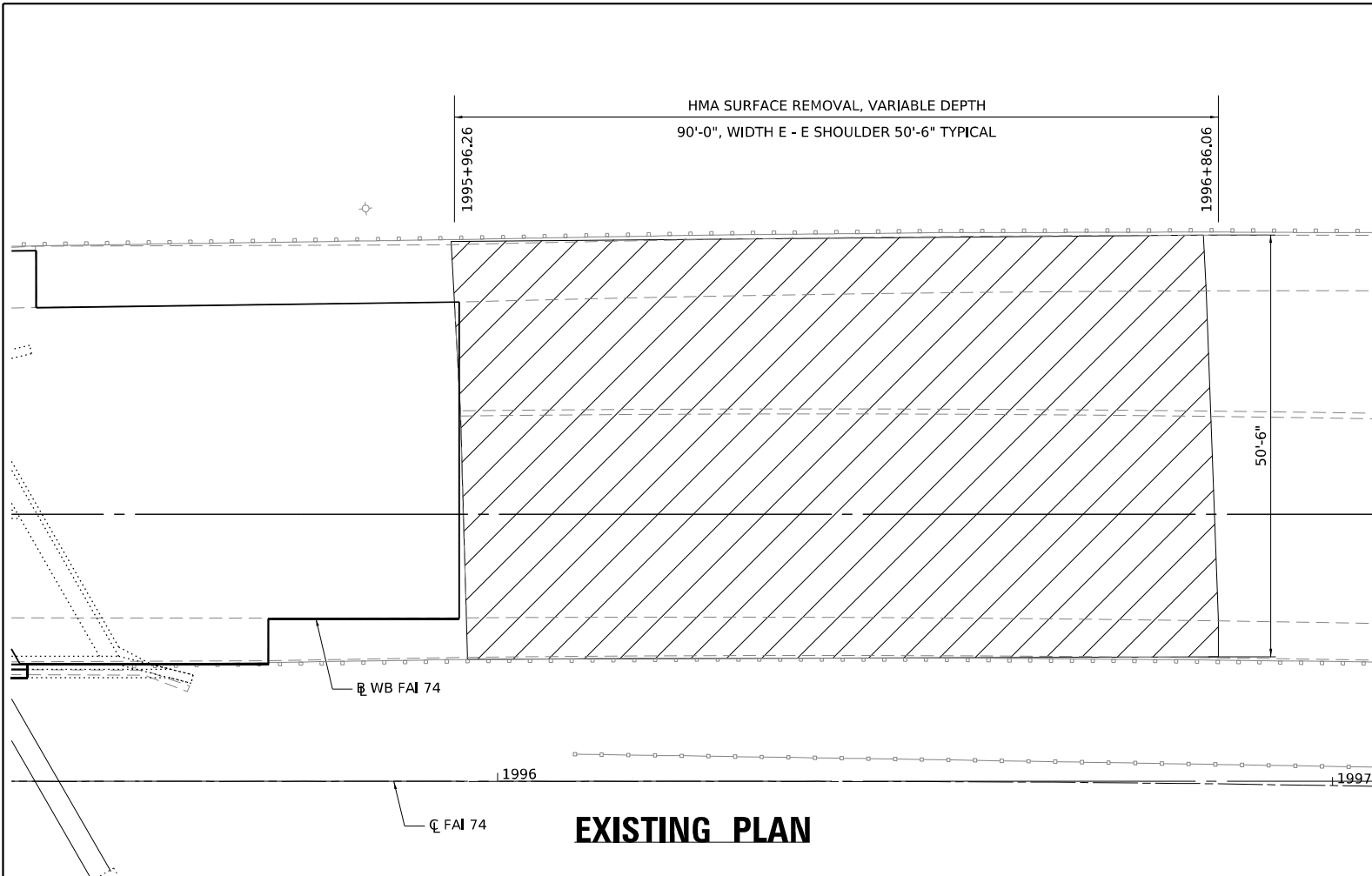
| ITEM                                                    | UNIT  | TOTAL |
|---------------------------------------------------------|-------|-------|
| HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH         | SQ YD | 318.7 |
| POLYMERIZED HMA SURFACE COURSE, SMA, 12.5, MIX "E", N80 | TON   | 35.7  |

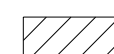
PAVER ELECTRONIC GRADE CONTROL SHALL BE OPERATED FROM A PRESET GRADE CONTROL STRINGLINE, SEE ARTICLE 406.06(e)

\* PRIOR TO 1/4" DIAMOND GRINDING

POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80

MODEL: Vermilion River Bridge West Approach Run-down  
FILE NAME: S:\2022\03\23\1902000\_1124-26\_25\_174 Danville\CAADD\CADD Sheets\05704292-1124-26\_25\_174 Danville\West-Vermilion.sgn

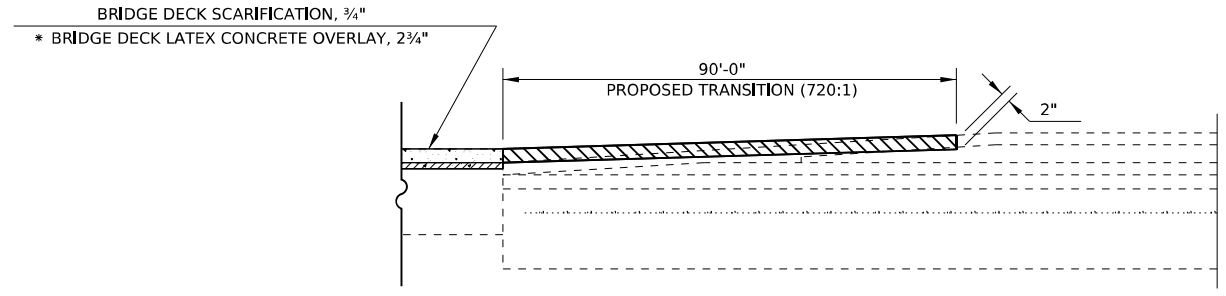


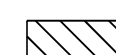
 HMA SURFACE REMOVAL, VARIABLE DEPTH

**EXISTING ELEVATION**

**BILL OF MATERIALS**

| ITEM                                                    | UNIT  | TOTAL |
|---------------------------------------------------------|-------|-------|
| HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH         | SQ YD | 389.3 |
| POLYMERIZED HMA SURFACE COURSE, SMA, 12.5, MIX "E", N80 | TON   | 43.6  |



 POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, STONE MATRIX ASPHALT, 12.5, MIX "E", N80

**PROPOSED ELEVATION**

MODEL: Vermilion\_River\_Bridge\_East\_Approach\_Runover  
FILE NAME: S:\2021\03\29\211902\009\_1139-246\_25\_174\_Dim\Plan\CADD\CADD\_Sheets\05702\26-14-2021\Approach\_Runover-East-Vermilion.dgn

|                                                                                     |                             |            |           |
|-------------------------------------------------------------------------------------|-----------------------------|------------|-----------|
|  | USER NAME = bmrwagehoft     | DESIGNED - | REVISED - |
|                                                                                     | PLOT SCALE = 20.0000' / in. | DRAWN -    | REVISED - |
|                                                                                     | PLOT DATE = 3/24/2022       | CHECKED -  | REVISED - |
|                                                                                     |                             | DATE -     | REVISED - |

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**INTERSTATE 74 REHABILITATION  
VERMILION RIVER BRIDGE EAST APPROACH DETAIL**

SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

|                           |                |           |              |           |
|---------------------------|----------------|-----------|--------------|-----------|
| F.A.I. RTE.               | SECTION        | COUNTY    | TOTAL SHEETS | SHEET NO. |
| 74                        | (92-10,11,12)R | VERMILION | 698          | 500       |
| CONTRACT NO. 70A29        |                |           |              |           |
| ILLINOIS FED. AID PROJECT |                |           |              |           |