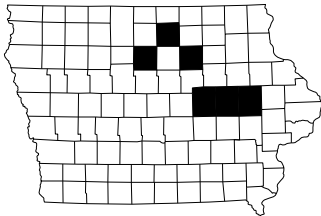


Index of Sheets	
No.	Description
Sheets Bridge Plan	
A.1	Title Sheet
A.2 - A.9	Location Map Sheets
V.1	Estimated Quantities - Tama Design 327
V.2 - V.4	Tama Design 327
V.5	Estimated Quantities - Butler Design 127
V.6 - V.9	Butler Design 127
V.10	Estimated Quantities - Cerro Gordo Design 427
V.11 - V.13	Cerro Gordo Design 427
V.14	Estimated Quantities - Wright Design 127
V.15 - V.17	Wright Design 127
V.18	Estimated Quantities - Benton Design 427
V.19 - V.21	Benton Design 427
V.22	Estimated Quantities - Linn Design 327
V.23 - V.33	Linn Design 327
V.34	Estimated Quantities - Linn Design 427
V.35 - V.37	Linn Design 427
V.38	Estimated Quantities - Linn Design 527
V.39 - V.41	Linn Design 527
Road Sheets Road Plan	
A.10 - J.11	Road Plans
C.1	Total Estimated Quantities - Road
C.2	Estimated Quantities - Road - Tama Design 327
C.2	Standard Plans - Road - Tama Design 327
C.3	Estimated Quantities - Road - Butler Design 127
C.3	Standard Plans - Road - Butler Design 127
C.4	Estimated Quantities - Road - Cerro Gordo Design 427
C.4	Standard Plans - Road - Cerro Gordo Design 427
C.5	Estimated Quantities - Road - Wright Design 127
C.5	Standard Plans - Road - Wright Design 127
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C.6	Standard Plans - Road - Benton Design 427
C.7	Estimated Quantities - Road - Linn Design 327
C.7	Standard Plans - Road - Linn Design 327
C.8	Estimated Quantities - Road - Linn Design 427
C.8	Standard Plans - Road - Linn Design 427
C.9	Estimated Quantities - Road - Linn Design 527
C.9	Standard Plans - Road - Linn Design 527



Standard Road Plans

Standard Road Plans are listed on Sheet No. C.2 - C.9.

Design Data Rural

Refer to individual Situation Plans for Traffic Data information.



PLANS OF PROPOSED IMPROVEMENT ON THE  
**PRIMARY ROAD SYSTEM**  
**STATEWIDE COUNTY**  
**Bridge Repair**  
Various Locations Statewide

Refer to the Plan Sheets for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.



Iowa DOT Bridges and Structures  
Consultant Coordinator Contact:  
Christian Yi

Index of Seals

Sheet No.	Name	Type
A.1	J. Scott Ingersoll *	Structural Design
A.10	Jordan L. Provost *	Roadway Design

\* Foth Infrastructure & Environment, LLC

Structural Design



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

Signature J. Scott Ingersoll Date 04-20-2026

Printed or Typed Name

My license renewal date is December 31, 2026

Pages or sheets covered by this seal: A.1 - A.9 & V.1 - V.41

Revisions

TOTAL  
71

PROJECT IDENTIFICATION NUMBER

26-00-000-150

PROJECT NUMBER

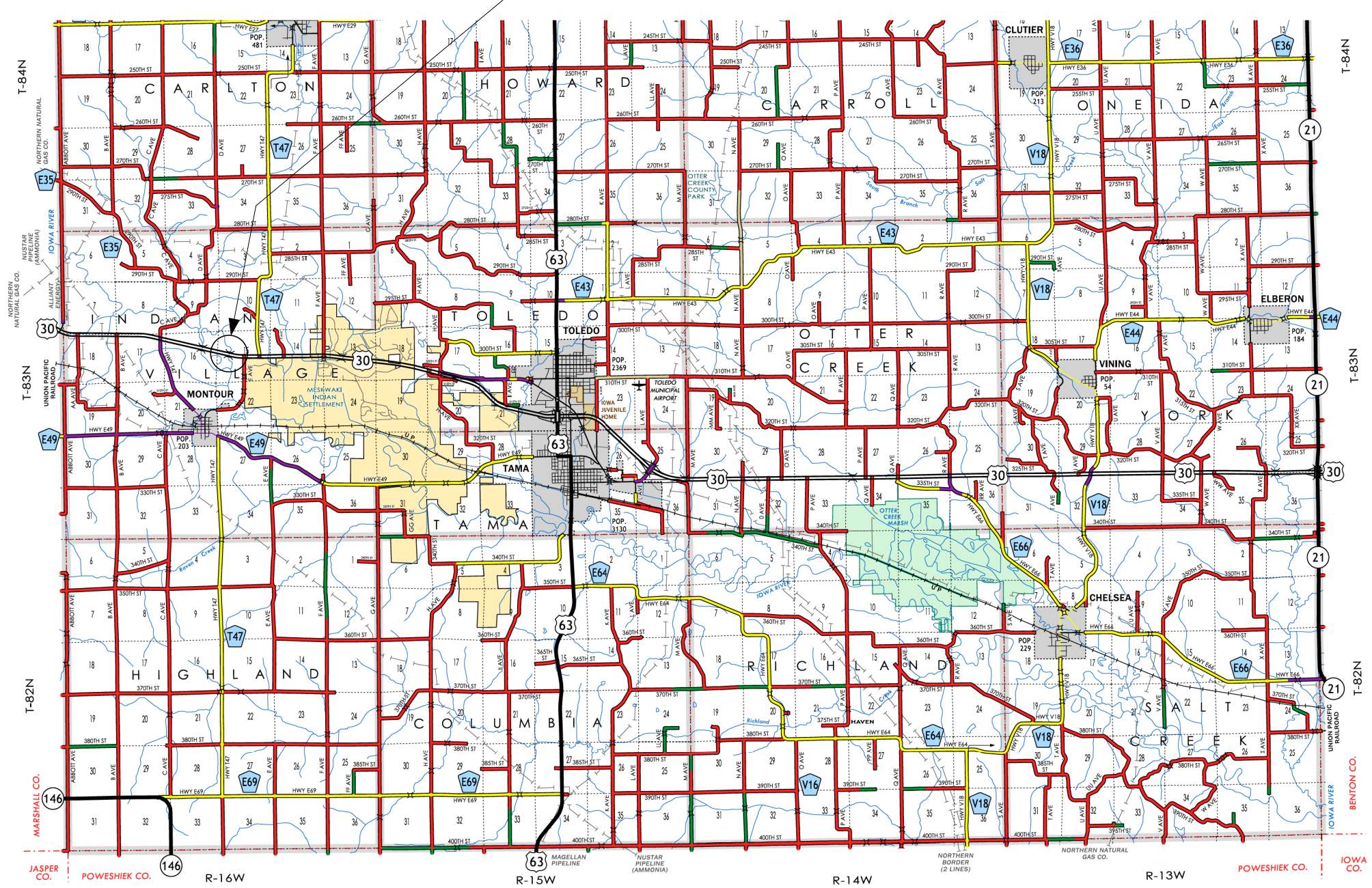
BRFN-000-T(460)--39-00

R.O.W. PROJECT NUMBER

PROJECT DIRECTORY NUMBER

0000015026

Design No. 327  
FHWA No. 700950



LEGEND

INTERSTATE HIGHWAY

PRIMARY HIGHWAY-DIVIDED

PRIMARY HIGHWAY

PORTLAND CEMENT CONCRETE ROAD

ASPHALT ROAD

BITUMINOUS ROAD

GRAVEL ROAD

EARTHEN ROAD

INTERSTATE HIGHWAY

UNITED STATES HIGHWAY

STATE HIGHWAY

COUNTY HIGHWAY

RAILROAD

PIPELINE

AIRPORT

HYDROLOGY

BRIDGE

STATE BOUNDARY

COUNTY BOUNDARY

CORPORATE BOUNDARY

TOWNSHIP LINE

SECTION LINE

ROAD NAMES

UNINCORPORATED PLACE

STATE PARKS

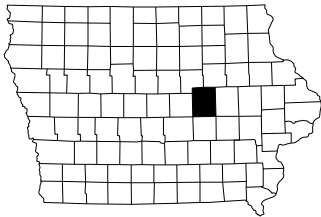
STATE INSTITUTIONS

FEDERAL LAND



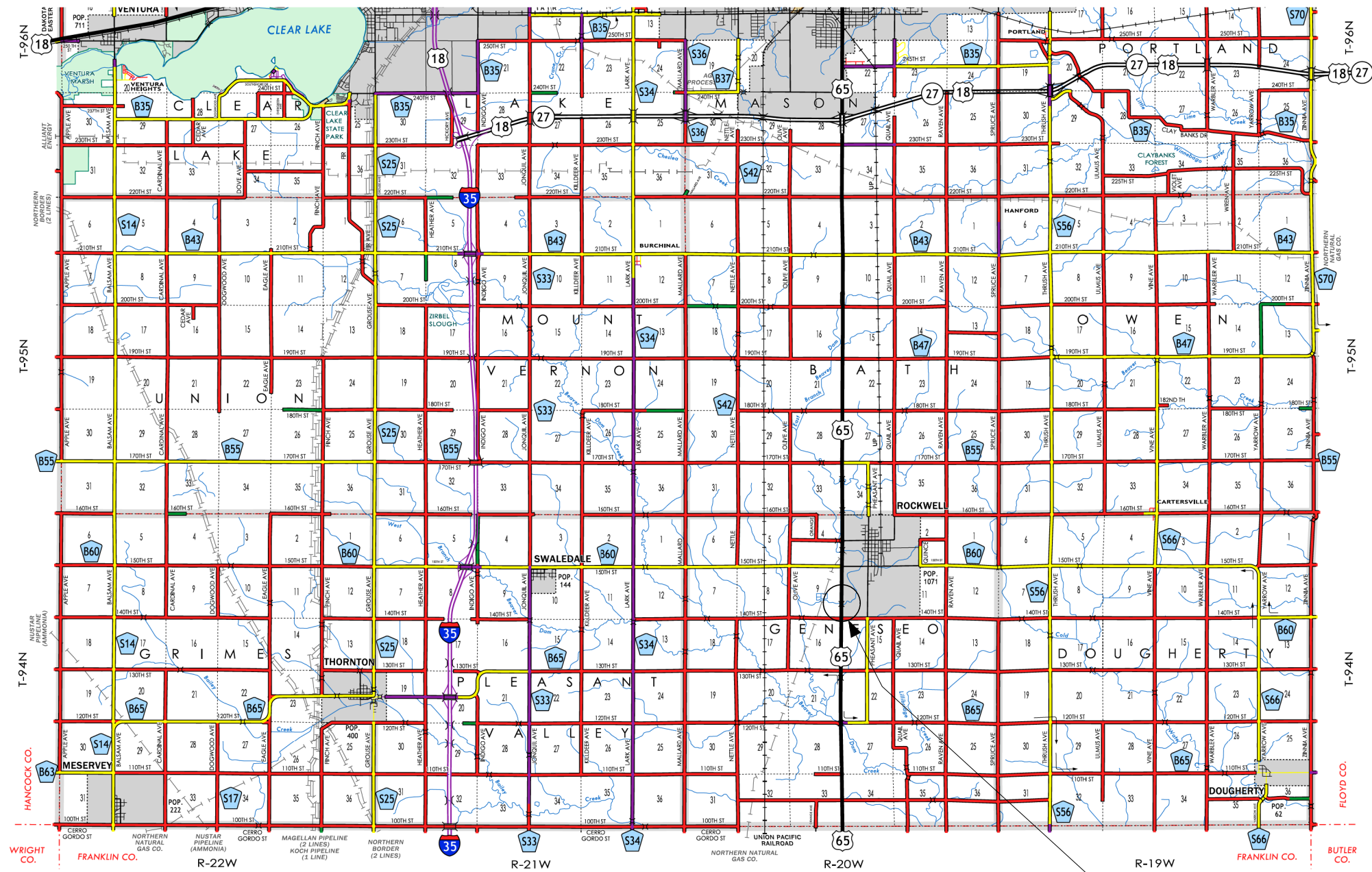
Tama County Location Map

Not To Scale









**Cerro Gordo County Location Map**

Not To Scale

Design No. 427  
FHWA No. 18881

**LEGEND**

INTERSTATE HIGHWAY

PRIMARY HIGHWAY-DIVIDED

PRIMARY HIGHWAY

PORTLAND CEMENT CONCRETE ROAD

ASPHALT ROAD

BITUMINOUS ROAD

GRAVEL ROAD

EARTHEN ROAD

INTERSTATE HIGHWAY

UNITED STATES HIGHWAY

STATE HIGHWAY

COUNTY HIGHWAY

RAILROAD

PIPELINE

AIRPORT

HYDROLOGY

BRIDGE

STATE BOUNDARY

COUNTY BOUNDARY

CORPORATE BOUNDARY

TOWNSHIP LINE

SECTION LINE

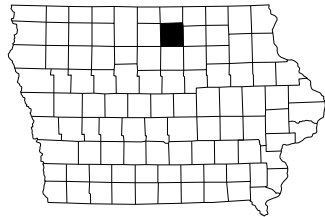
ROAD NAMES

UNINCORPORATED PLACE

STATE PARKS

STATE INSTITUTIONS

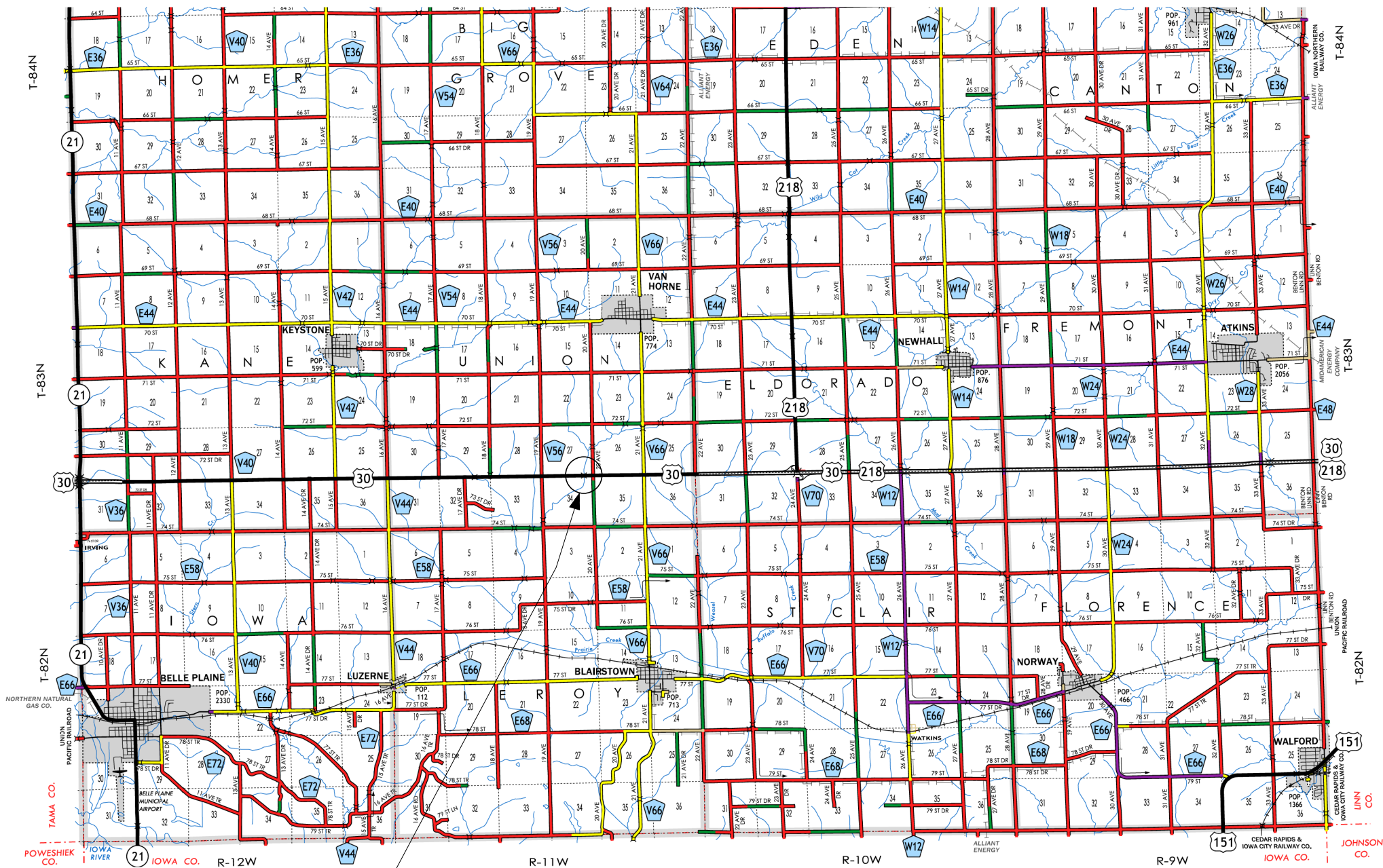
FEDERAL LAND











LEGEND

INTERSTATE HIGHWAY

PRIMARY HIGHWAY-DIVIDED

PRIMARY HIGHWAY

PORTLAND CEMENT CONCRETE ROAD

ASPHALT ROAD

BITUMINOUS ROAD

GRAVEL ROAD

EARTHEN ROAD

INTERSTATE HIGHWAY

UNITED STATES HIGHWAY

STATE HIGHWAY

COUNTY HIGHWAY

RAILROAD

PIPELINE

AIRPORT

HYDROLOGY

BRIDGE

STATE BOUNDARY

COUNTY BOUNDARY

CORPORATE BOUNDARY

TOWNSHIP LINE

SECTION LINE

ROAD NAMES

UNINCORPORATED PLACE

STATE PARKS

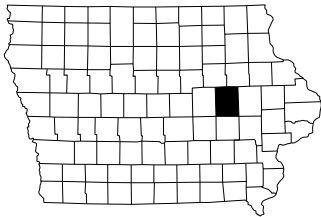
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FEDERAL LAND

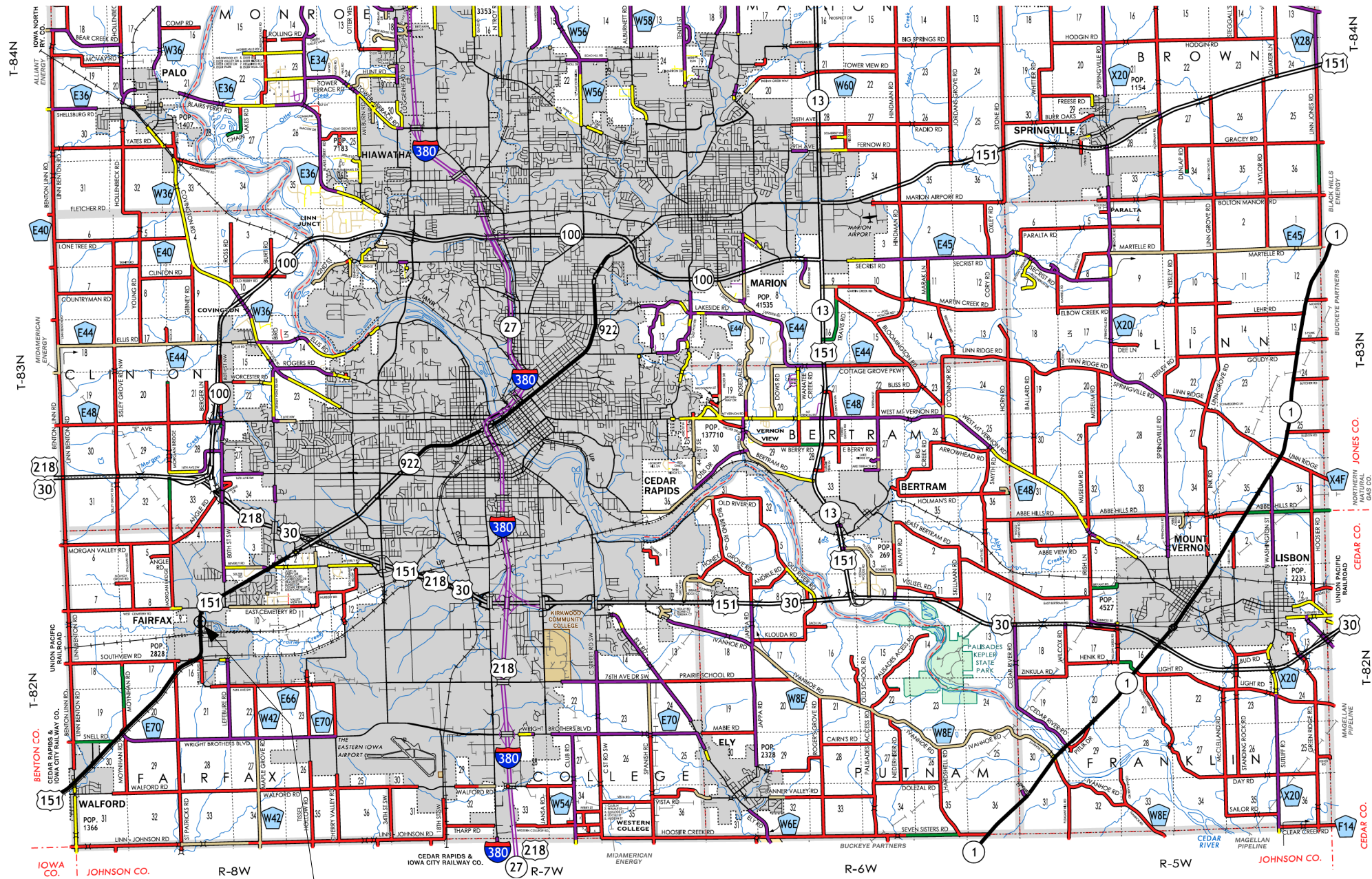
Design No. 427  
FHWA No. 700495

Benton County Location Map

Not To Scale







LEGEND

INTERSTATE HIGHWAY

PRIMARY HIGHWAY-DIVIDED

PRIMARY HIGHWAY

PORTLAND CEMENT CONCRETE ROAD

ASPHALT ROAD

BITUMINOUS ROAD

GRAVEL ROAD

EARTHEN ROAD

80

65

237

327

INTERSTATE HIGHWAY

UNITED STATES HIGHWAY

STATE HIGHWAY

COUNTY HIGHWAY

RAILROAD

PIPELINE

AIRPORT

HYDROLOGY

BRIDGE

+

+

+

+

+

STATE BOUNDARY

COUNTY BOUNDARY

CORPORATE BOUNDARY

TOWNSHIP LINE

SECTION LINE

ROAD NAMES

UNINCORPORATED PLACE

+

+

+

+

+

STATE PARKS

STATE INSTITUTIONS

FEDERAL LAND

+

+

+

+

+

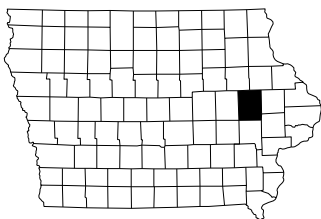
ABBEY ROAD

ELWOOD

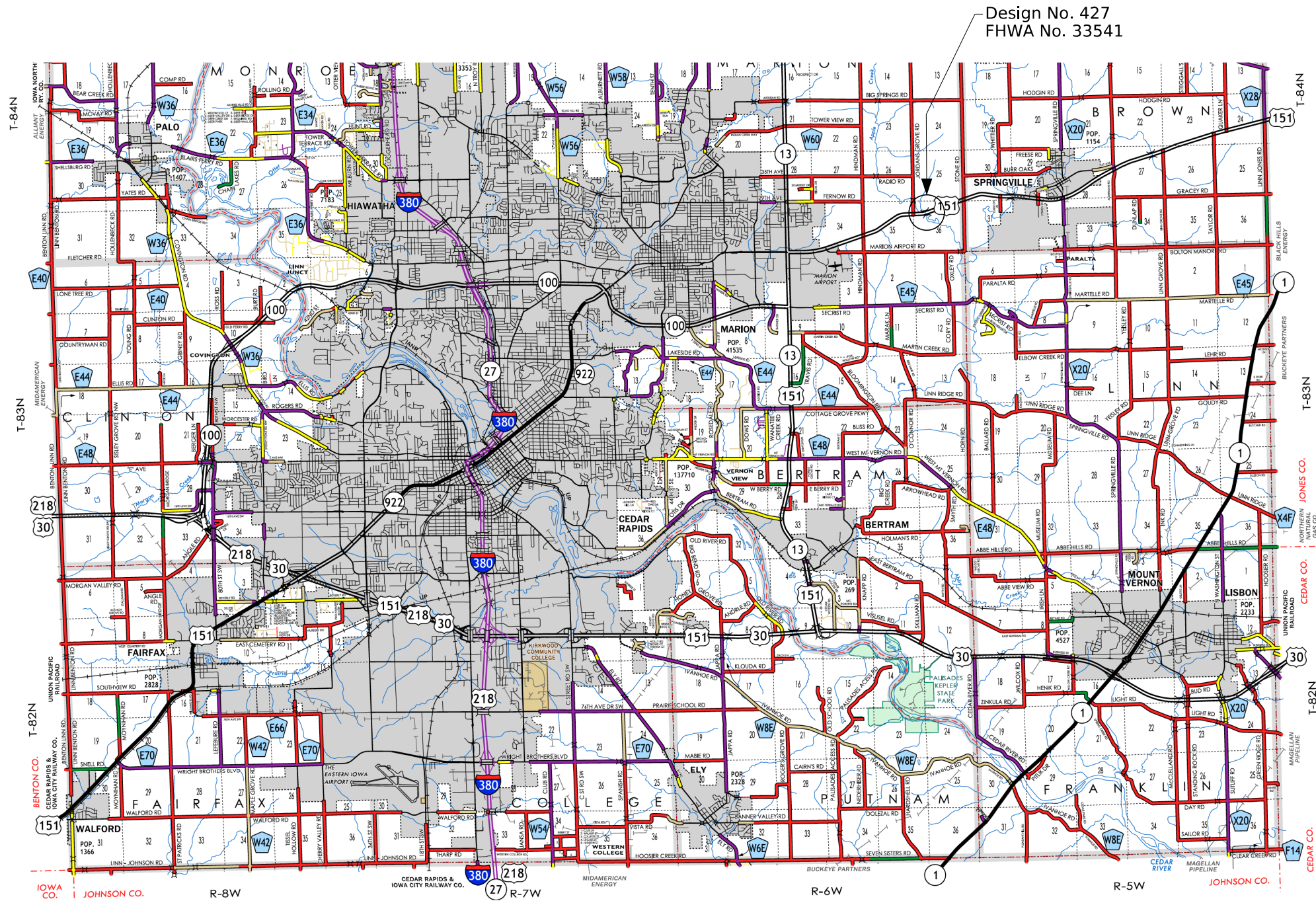
Design No. 527  
FHWA No. 33781

### Linn County Location Map

Not To Scale







**LEGEND**

INTERSTATE HIGHWAY  
PRIMARY HIGHWAY-DIVIDED  
PRIMARY HIGHWAY  
PORTLAND CEMENT CONCRETE ROAD  
ASPHALT ROAD  
BITUMINOUS ROAD  
GRAVEL ROAD  
EARTHEN ROAD

INTERSTATE HIGHWAY  
UNITED STATES HIGHWAY  
STATE HIGHWAY  
COUNTY HIGHWAY

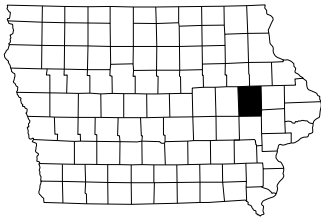
RAILROAD  
PIPELINE  
AIRPORT  
HYDROLOGY  
BRIDGE

STATE BOUNDARY  
COUNTY BOUNDARY  
CORPORATE BOUNDARY  
TOWNSHIP LINE  
SECTION LINE  
ROAD NAMES  
UNINCORPORATED PLACE

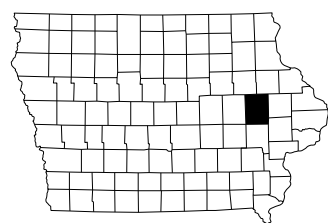
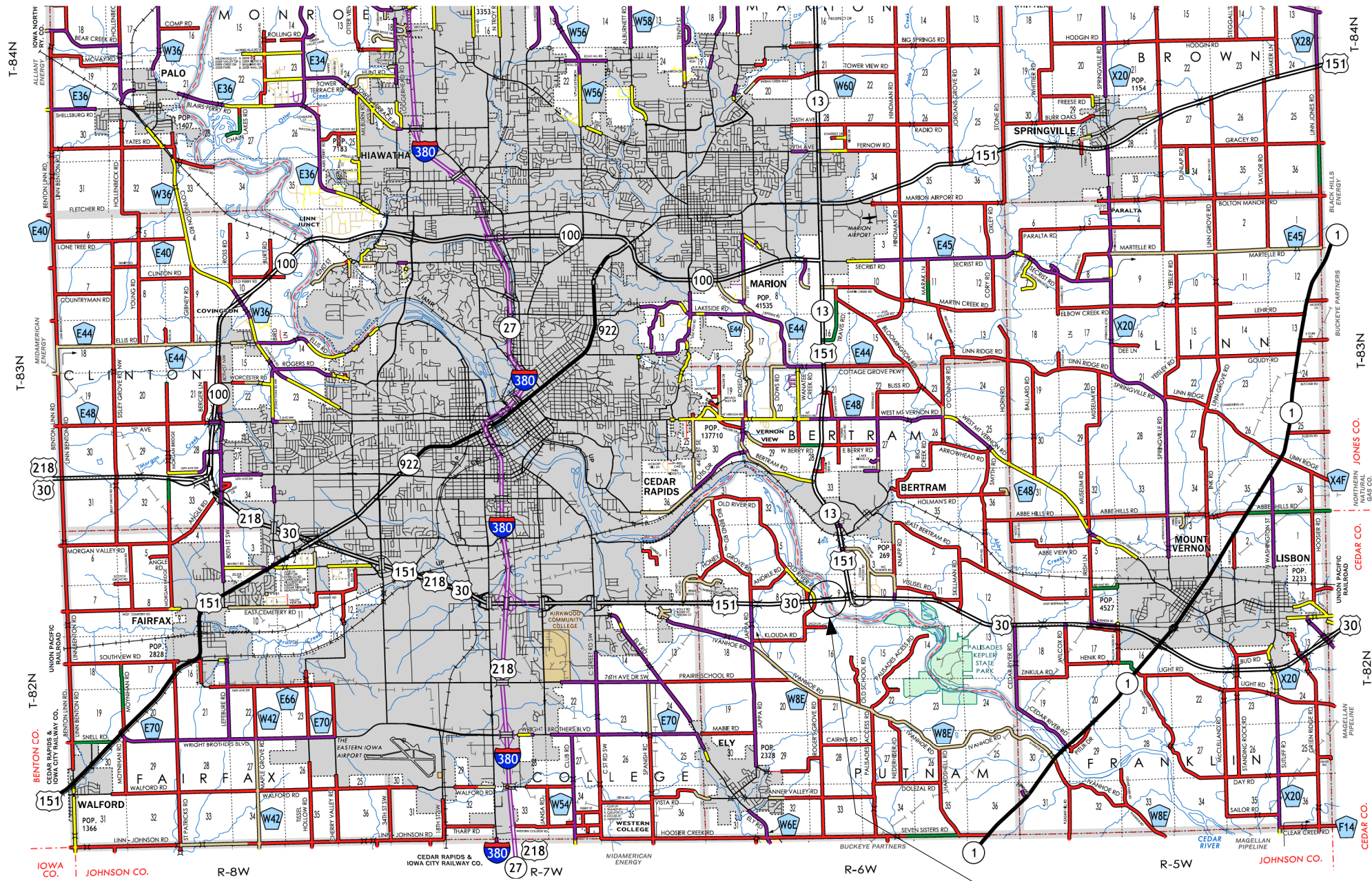
STATE PARKS  
STATE INSTITUTIONS  
FEDERAL LAND

**Linn County Location Map**

Not To Scale







LEGEND

INTERSTATE HIGHWAY

PRIMARY HIGHWAY-DIVIDED

PRIMARY HIGHWAY

PORTLAND CEMENT CONCRETE ROAD

ASPHALT ROAD

BITUMINOUS ROAD

GRAVEL ROAD

EARTHEN ROAD

80

65

237

327

INTERSTATE HIGHWAY

UNITED STATES HIGHWAY

STATE HIGHWAY

COUNTY HIGHWAY

80

65

237

327

RAILROAD

PIPELINE

AIRPORT

HYDROLOGY

BRIDGE

+

+

+

+

STATE BOUNDARY

COUNTY BOUNDARY

CORPORATE BOUNDARY

TOWNSHIP LINE

SECTION LINE

ROAD NAMES

UNINCORPORATED PLACE

+

+

+

+

STATE PARKS

STATE INSTITUTIONS

FEDERAL LAND

+

+

+

+

Linn County Location Map

Not To Scale

Design No. 327  
FHWA No. 33471

Estimate Bridge Repair Quantities and Reference Notes - Design #327					
Item No.	Item Code	Item	Unit	Quantities Estimated Design No. 327	Estimate Reference Notes
1	2533-4980005	MOBILIZATION	LS	1	----
2	2599-9999006	FURNISH HMWM BRIDGE DECK TREATMENT MATERIAL	GAL	72	Includes furnishing HMWM deck treatment in accordance with the application rates stated in the Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
3	2599-9999014	BRIDGE DECK SEALING, HMWM	SF	6120	Includes surface preparation and application of HMWM in accordance with Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
4	2599-9999014	BRIDGE RAIL SEALING	SF	1208	Includes cleaning existing barriers, furnishing and placing concrete sealer in accordance with Article 2403.03,P,3, of the Standard Specifications.

General Notes:

This design is for repairs to the existing 150'-0" x 40'-0" Concrete Slab Bridge on W.B. US 30 over Iowa River East Overflow. Electronic copies of original design plans are available to the Contractor as part of the e-files supplied with the contract documents.

See Design Sheet No. 2 for list of repair items.

All dimensions and details shown on these plans pertinent to new construction shall be verified in the field by the Contractor before starting construction.

Faint lines on plans indicate existing portions of the bridge.

Utility companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Bridge Contractor of the starting date.

The top and interior faces of the existing concrete railing are to be cleaned and sealed in accordance with Article 2403.03, P, of the Standard Specifications. If new sections of rail are constructed, the new sections shall not be sealed. All costs associated with cleaning and sealing of the concrete rails shall be included in the unit price bid item "Bridge Rail Sealing".

Construction shall be done in stages with at least one lane traffic maintained at all times in accordance with "Traffic Control Plan" note.

Construction Stages 1 & 2 as detailed on these plans may be reversed at the Contractor's option subject to the Engineer's approval.

Specifications:

Design:  
AASHTO Series of 2002.

Construction:

Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project, including:

- Special provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment

Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO Standard Specifications for Highway Bridges, Series of 2002.

Roadway Quantities shown elsewhere in these plans.

Traffic Control Plan

The roadway will be open to thru traffic. Refer to the Traffic Control Plan shown elsewhere in these plans.

Design History at this Site	
(Includes this Design)	
Des. No.	Type of Work
218	Original Design
327	Bridge Repair

Design For Repair To 0 Degree Skew

150'-0" x 40'-0" Continuous Concrete Slab Bridge

45'-6" End Spans59'-0" Interior Span

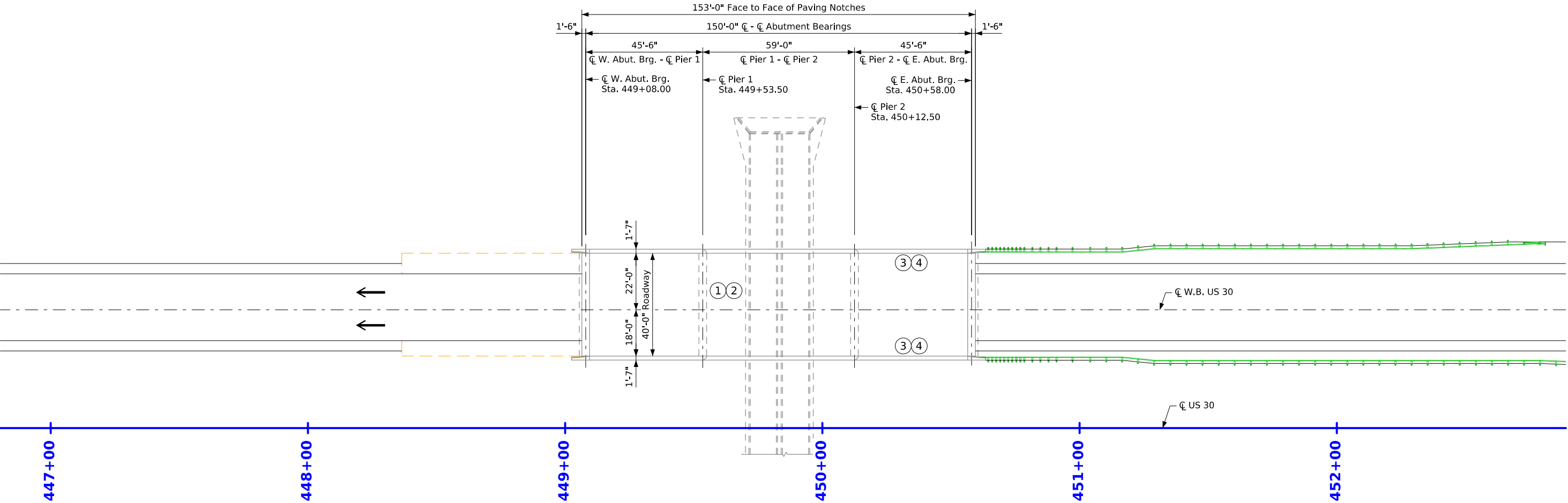
General Notes & Quantities

STA. 449+83.00 (W.B. US 30, 46.00' Lt.)Turn-in Date: May 2026

Tama County

IOWA DEPARTMENT OF TRANSPORTATION

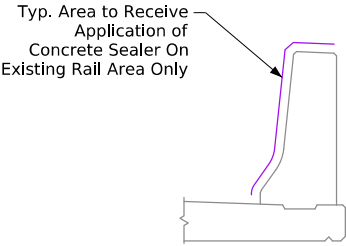
Design No. 327Design Sheet No. 1 of 4FHWA No. 700950



Situation Plan

Repairs Shall Consist of:

- 1 Clean and prepare existing bridge slab.
- 2 Apply High Molecular Weight Methacrylate (HMWM) sealer to the existing bridge slab.
- 3 Clean and prepare existing barrier rails.
- 4 Apply sealer to the existing barrier rails.



Detail of Concrete Sealer Area

Traffic Estimate

2024 AADT	6000	V.P.D.	
2040 AADT	17,800	V.P.D.	
2040 DHV	1840	V.P.H.	
TRUCKS	12	%	
Total Design ESALs	4,239,840		

Location

W.B. US 30 over Iowa River  
East Overflow  
T-83N R-16W  
Section 15  
Indian Village Township  
Tama County  
FHWA No. 700950  
Bridge Maint. No. 8696.3L030  
Latitude 42.000569°  
Longitude -92.703934°

Design For Repair To 0 Degree Skew

150'-0" x 40'-0" Continuous Concrete Slab Bridge

45'-6" End Spans59'-0" Interior Span

Situation Plan

STA. 449+83.00 (W.B. US 30, 46.00' Lt.)Turn-in Date: May 2026

Tama County



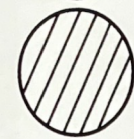

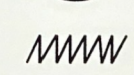


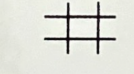
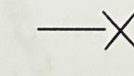
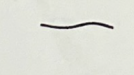

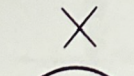
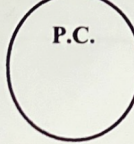
IOWA DEPARTMENT OF TRANSPORTATION

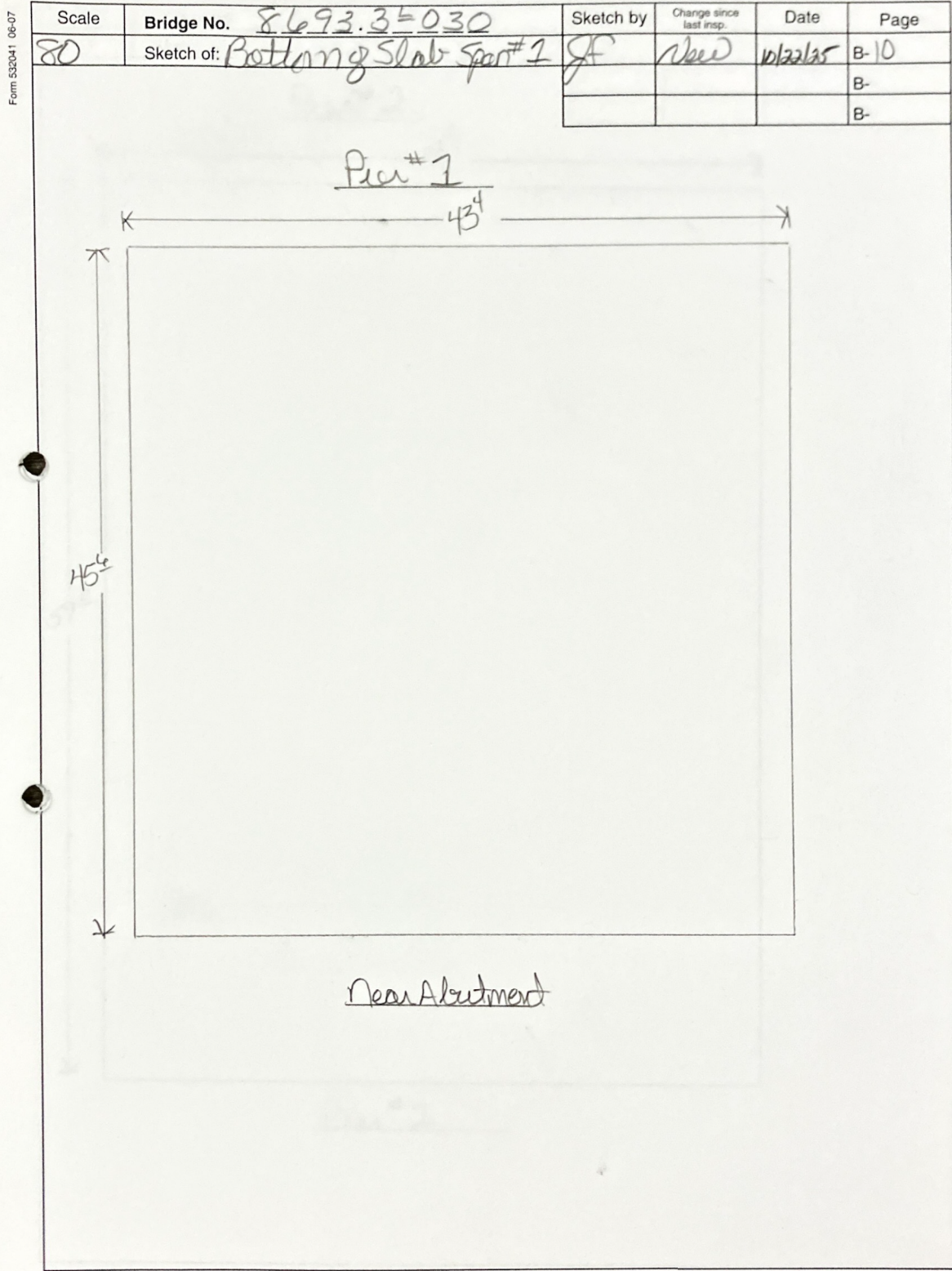
Design No. 327Design Sheet No. 2 of 4FHWA No. 700950



LEGEND SHEET

Bridge # 8693.3L-030

- A.C. Patches
- Scaling (L, M, S)
- Hollow
- Spalled
- Leaching
- Stalactite
- Stain
- Map Cracking
- Reinforced Steel
- Cracks (Hairline or Noted)
- Floor Drain
- Bearing Location
- P.C. Patches

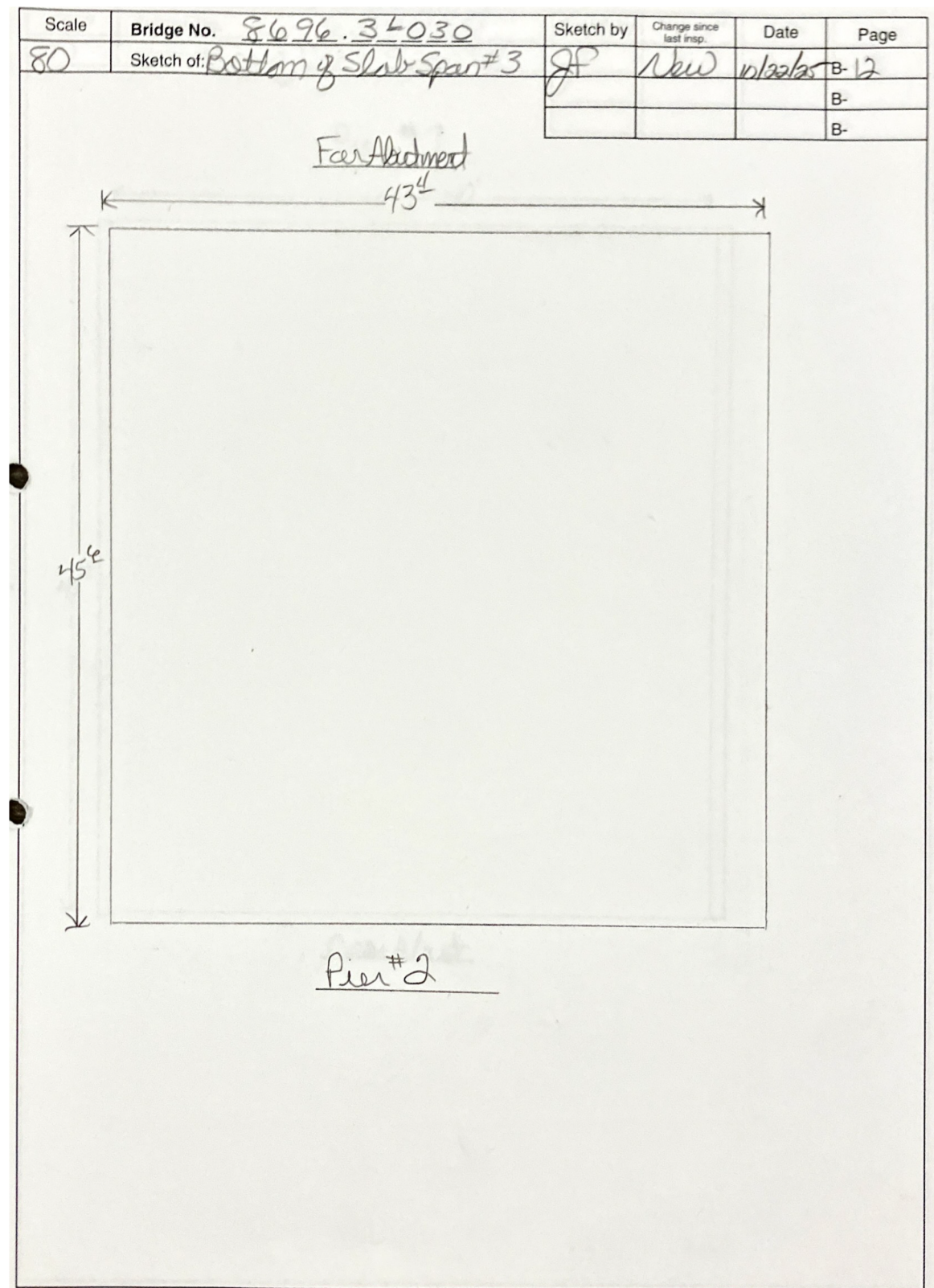
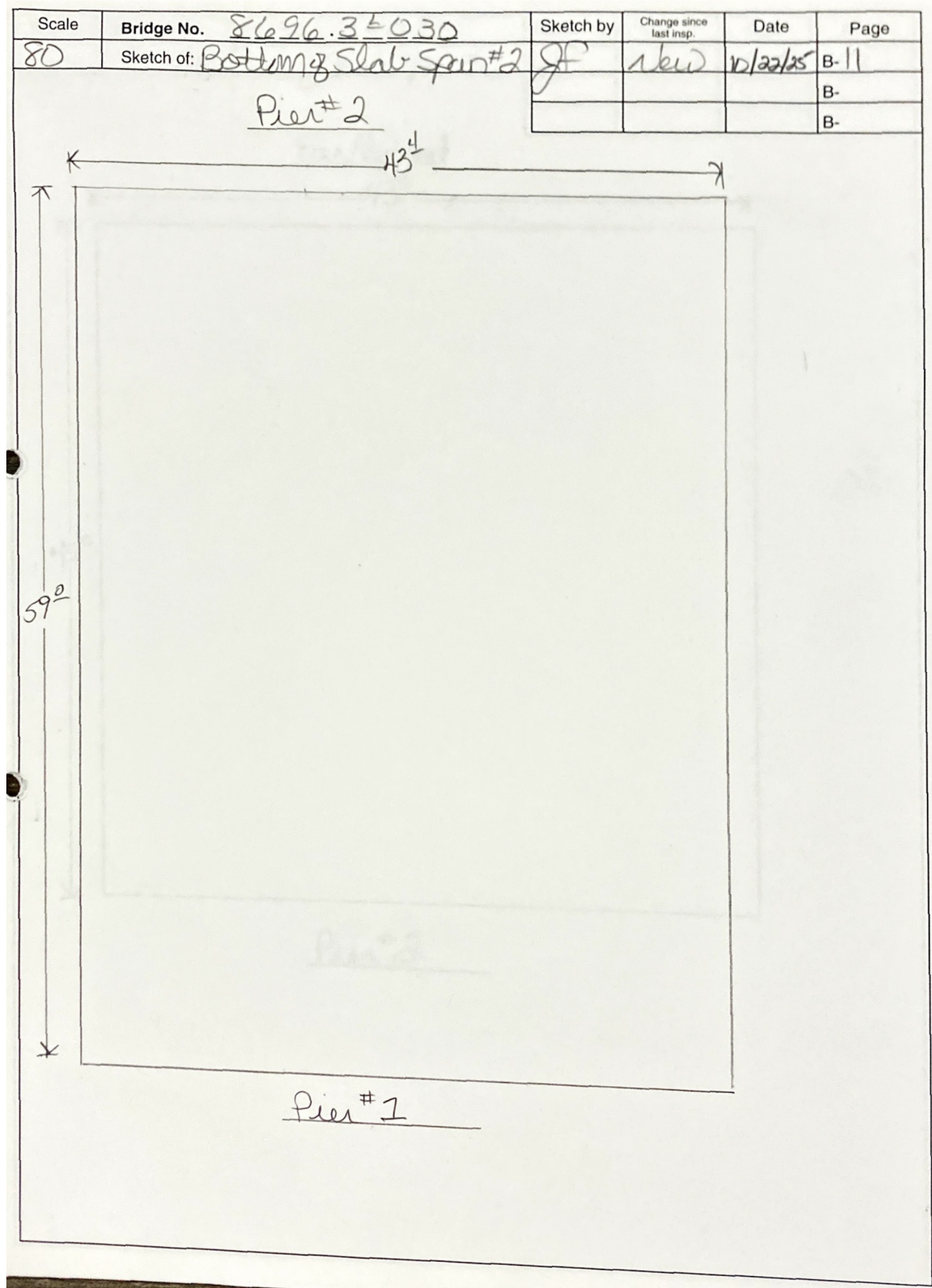


Bottom of Slab Inspection Sketches  
(For Information Only)

Note:  
Total estimated crack length on bottom of slab based on the 2025 inspection sketches is 0 L.F.  
This measurement is provided for information only.

Design For Repair To 0 Degree Skew  
150'-0" x 40'-0" Continuous  
Concrete Slab Bridge  
45'-6" End Spans 59'-0" Interior Span  
Inspection Sketches  
STA. 449+83.00 (W.B. US 30, 46.00' Lt.) Turn-in Date: May 2026  
Tama County  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 327 Design Sheet No. 3 of 4 FHWA No. 700950





**Bottom of Slab Inspection Sketches**  
(For Information Only)

Design For Repair To 0 Degree Skew  
**150'-0" x 40'-0" Continuous  
Concrete Slab Bridge**  
45'-6" End Spans 59'-0" Interior Span  
**Inspection Sketches**  
STA. 449+83.00 (W.B. US 30, 46.00' Lt.) Turn-in Date: May 2026  
**Tama County**  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 327 Design Sheet No. 4 of 4 FHWA No. 700950



Estimate Bridge Repair Quantities and Reference Notes - Design #127					
Item No.	Item Code	Item	Unit	Quantities Estimated Design No. 127	Estimate Reference Notes
1	2533-4980005	MOBILIZATION	LS	1	----
2	2599-9999006	FURNISH HMWM BRIDGE DECK TREATMENT MATERIAL	GAL	259	Includes furnishing HMWM deck treatment in accordance with the application rates stated in the Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
3	2599-9999014	BRIDGE DECK SEALING, HMWM	SF	21,980	Includes surface preparation and application of HMWM in accordance with Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
4	2599-9999014	BRIDGE RAIL SEALING	SF	3964	Includes cleaning existing barriers, furnishing and placing concrete sealer in accordance with Article 2403.03,P,3, of the Standard Specifications.

General Notes:

This design is for repairs to the existing 498'-0" x 44'-0" Pretensioned Prestressed Concrete Beam Bridge on IA 3 over West Fork Cedar River. Electronic copies of original design plans are available to the Contractor as part of the e-files supplied with the contract documents.

See Design Sheet No. 2 for list of repair items.

All dimensions and details shown on these plans pertinent to new construction shall be verified in the field by the Contractor before starting construction.

Faint lines on plans indicate existing portions of the bridge.

Utility companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Bridge Contractor of the starting date.

The top and interior faces of the existing concrete railing are to be cleaned and sealed in accordance with Article 2403.03, P, of the Standard Specifications. If new sections of rail are constructed, the new sections shall not be sealed. All costs associated with cleaning and sealing of the concrete rails shall be included in the unit price bid item "Bridge Rail Sealing".

Construction shall be done in stages with at least one lane traffic maintained at all times in accordance with "Traffic Control Plan" note.

Construction Stages 1 & 2 as detailed on these plans may be reversed at the Contractor's option subject to the Engineer's approval.

Specifications:

Design:  
AASHTO Series of 2002.

Construction:

Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project, including:

- Special provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment

Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO Standard Specifications for Highway Bridges, Series of 2002.

Roadway Quantities shown elsewhere in these plans.

Traffic Control Plan

The roadway will be open to thru traffic. Refer to the Traffic Control Plan shown elsewhere in these plans.

Design History at this Site (Includes this Design)	
Des. No.	Type of Work
1427	Original Pony Truss
131	Steel Beam Approaches
157	PPCB Widening
182	Overlay and Repair
118	Bridge Replacement - PPCB
127	Bridge Repair

Design For Repair To 15 Degree Skew RA

498'-0" x 44'-0" Pretensioned Prestressed Concrete Beam Bridge

86'-0", 106'-0" End Spans87'-0", 112'-0", 107'-0" Interior Spans

General Notes & Quantities

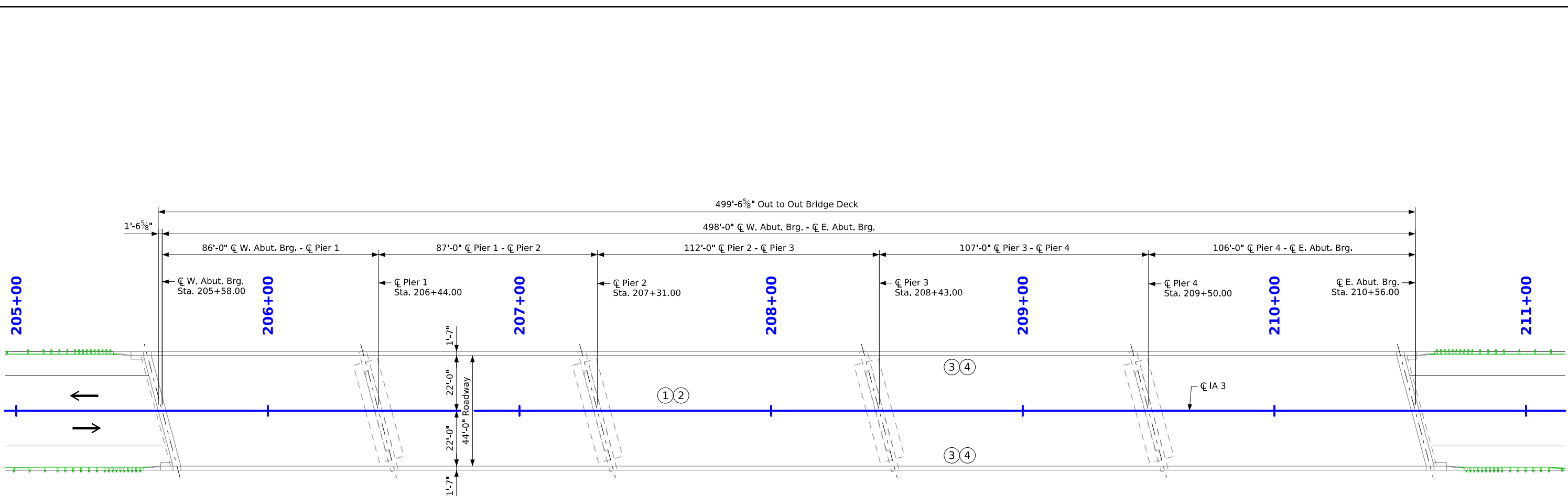
STA. 208+07.00 (IA 3)Turn-in Date: May 2026

Butler County

IOWA DEPARTMENT OF TRANSPORTATION

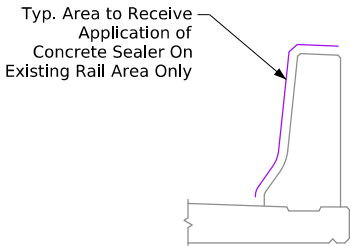
Design No. 127Design Sheet No. 1 of 5FHWA No. 16501





Repairs Shall Consist of:

- ① Clean and prepare existing bridge deck.
- ② Apply High Molecular Weight Methacrylate (HMWM) sealer to the existing bridge deck.
- ③ Clean and prepare existing barrier rails.
- ④ Apply sealer to the existing barrier rails.



Detail of Concrete Sealer Area

Traffic Estimate

2024 AADT	1110 V.P.D.
2039 AADT	2100 V.P.D.
TRUCKS	18 %

Location

IA 3 over West Fork Cedar River  
T-92N R-18W  
Sections 27 & 34  
Pittsford Township  
Butler County  
FHWA No. 16501  
Bridge Maint. No. 1295.7S003  
Latitude 42.744880°  
Longitude -92.948446°

Design For Repair To 15 Degree Skew RA

498'-0" x 44'-0" Prestressed

Prestressed Concrete Beam Bridge

86'-0", 106'-0" End Spans 87'-0", 112'-0", 107'-0" Interior Spans

Situation Plan

Butler County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 127 Design Sheet No. 2 of 5 FHWA No. 16501

STA. 208+07.00 (IA 3) Turn-in Date: May 2026

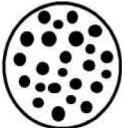
IOWA DEPARTMENT OF TRANSPORTATION  
**LEGEND SHEET**

Bridge # 1295.7<sup>S</sup> 003

NEW IN 2022



A.C. Patches



Scaling (L,M,S)



Hollow (delaminations)



Spalled



Leaching (L, H)



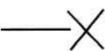
Stalactite



Stain



Map Cracking



Reinforced Steel



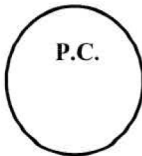
Cracks (All Hairline or Noted)



Floor Drain



Bearing Location

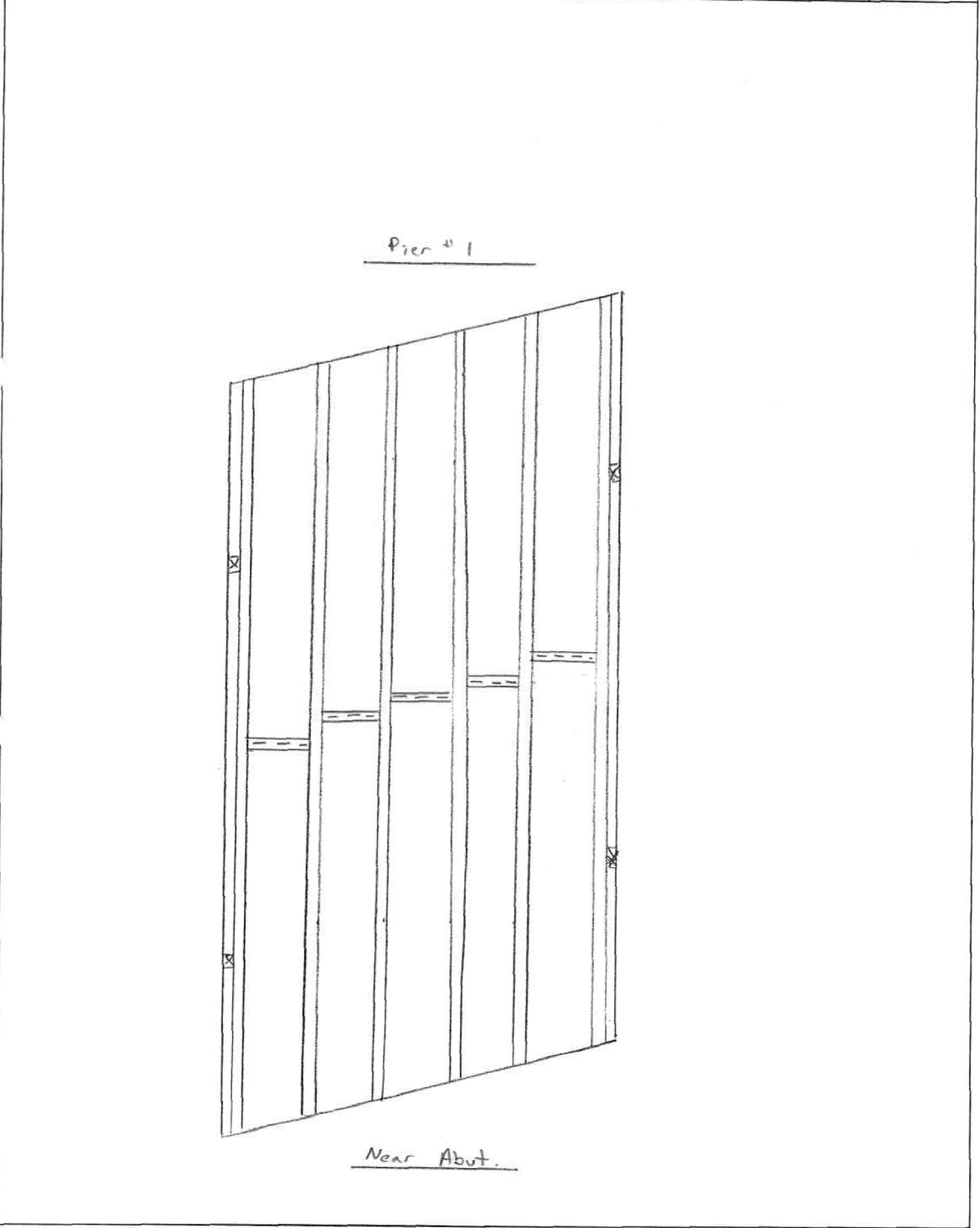


P.C. Patches

NC – No Change  
MC – Minor Change  
Not → - Not Checked

Sketch by	Date	B1
Team 2	9-26-22	
Team 2	9-24-24	

Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
150	1295.7 <sup>S</sup> 003	DCH GP	Initial NC	9-26-27 9-24-24	B- 14
					B-
					B-

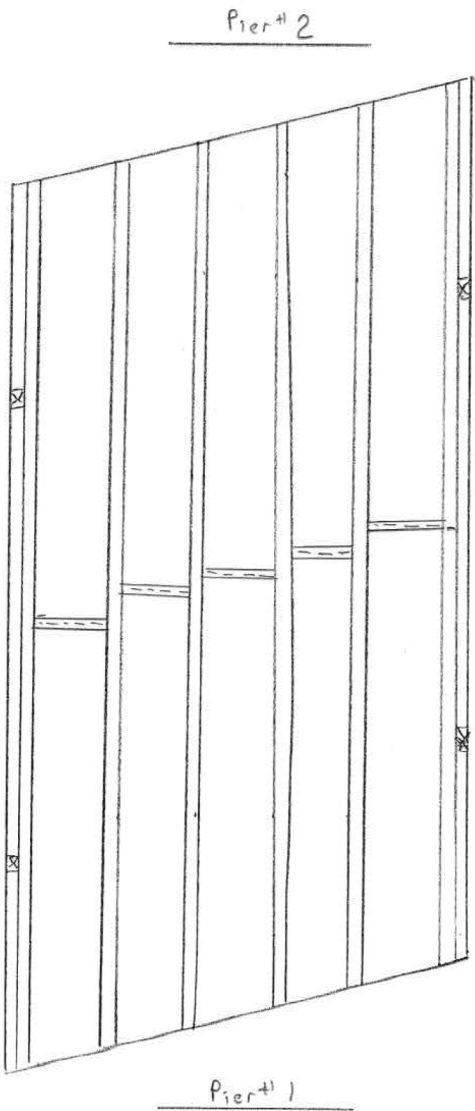


**Bottom of Deck Inspection Sketches**  
(For Information Only)

Note:  
Total estimated crack length on bottom of deck based on the 2024 inspection sketches is 26.6 L.F. This measurement is provided for information only.

Design For Repair To 15 Degree Skew RA  
**498'-0" x 44'-0" Pretensioned  
Prestressed Concrete Beam Bridge**  
86'-0", 106'-0" End Spans      87'-0", 112'-0", 107'-0" Interior Spans  
**Inspection Sketches**  
STA. 208+07.00 (IA 3)      Turn-in Date: May 2026  
**Butler County**  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 127      Design Sheet No. 3 of 5      FHWA No. 16501

Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
150	1295.7 <sup>s</sup> 003	DEH BO	Initial NC	9-26-22 9-24-21	B- 15
Sketch of: Bottom of Deck - Span <sup>#</sup> 2					B-
					B-



Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
150	1295.7 <sup>s</sup> 003	DEH BO	Initial HL Cracks	9-26-22 9-24-21	B- 16
Sketch of: Bottom of Deck - Span <sup>#</sup> 3					B-
					B-

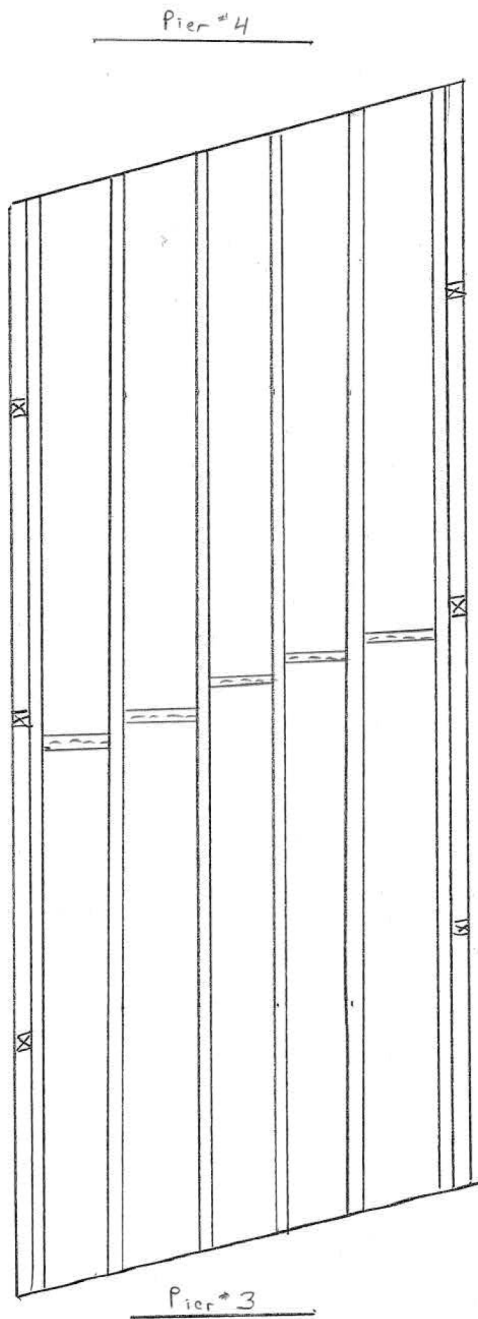


Bottom of Deck Inspection Sketches  
(For Information Only)

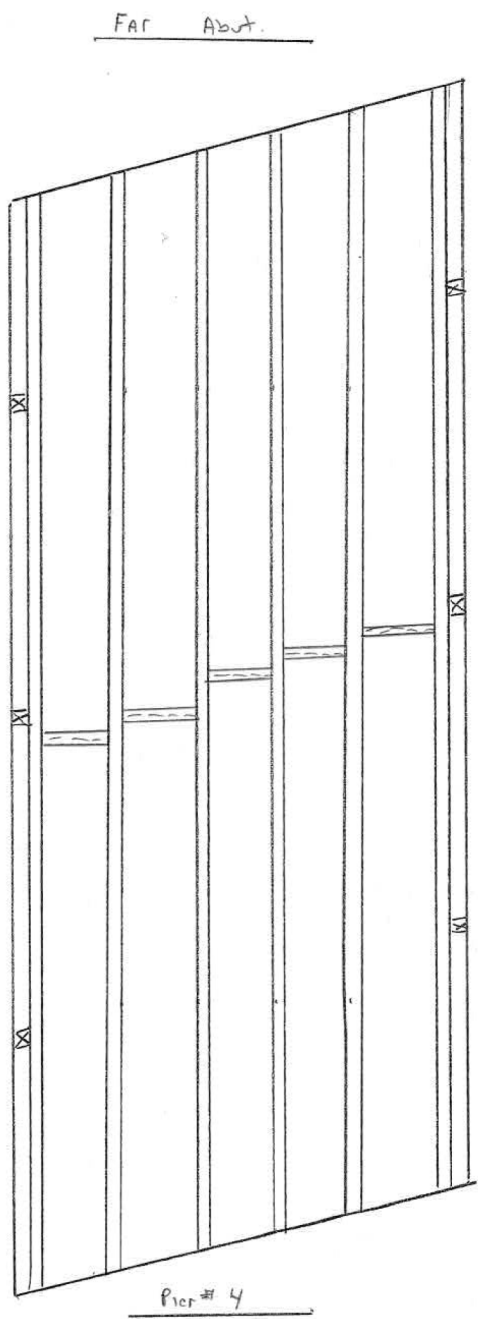
Design For Repair To 15 Degree Skew RA  
498'-0" x 44'-0" Prestensioned  
Prestressed Concrete Beam Bridge  
86'-0", 106'-0" End Spans 87'-0", 112'-0", 107'-0" Interior Spans  
Inspection Sketches  
STA. 208+07.00 (IA 3) Turn-in Date: May 2026  
Butler County  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 127 Design Sheet No. 4 of 5 FHWA No. 16501



Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
150	1295.7 <sup>s</sup> 003	DCH Bo	Initial NC	9-26-22 9-24-24	B- 17
	Sketch of: Bottom of Deck - Span # 4				B-
					B-



Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
150	1295.7 <sup>s</sup> 003	DCH Bo	Initial NC	9-26-22 9-24-24	B- 18
	Sketch of: Bottom of Deck - Span # 5				B-
					B-



**Bottom of Deck Inspection Sketches**  
(For Information Only)

Design For Repair To 15 Degree Skew RA  
**498'-0" x 44'-0" Pretensioned  
Prestressed Concrete Beam Bridge**  
86'-0", 106'-0" End Spans      87'-0", 112'-0", 107'-0" Interior Spans  
**Inspection Sketches**  
STA. 208+07.00 (IA 3)      Turn-in Date: May 2026  
**Butler County**  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 127      Design Sheet No. 5 of 5      FHWA No. 16501

Estimate Bridge Repair Quantities and Reference Notes - Design #427					
Item No.	Item Code	Item	Unit	Quantities Estimated Design No. 427	Estimate Reference Notes
1	2533-4980005	MOBILIZATION	LS	1	----
2	2599-9999006	FURNISH HMWM BRIDGE DECK TREATMENT MATERIAL	GAL	79	Includes furnishing HMWM deck treatment in accordance with the application rates stated in the Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
3	2599-9999014	BRIDGE DECK SEALING, HMWM	SF	6732	Includes surface preparation and application of HMWM in accordance with Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
4	2599-9999014	BRIDGE RAIL SEALING	SF	1358	Includes cleaning existing barriers, furnishing and placing concrete sealer in accordance with Article 2403.03,P,3, of the Standard Specifications.

General Notes:

This design is for repairs to the existing 150'-0" x 44'-0" Pretensioned Prestressed Concrete Beam Bridge on US 65 over East Branch Beaverdam Creek. Electronic copies of original design plans are available to the Contractor as part of the e-files supplied with the contract documents.

See Design Sheet No. 2 for list of repair items.

All dimensions and details shown on these plans pertinent to new construction shall be verified in the field by the Contractor before starting construction.

Faint lines on plans indicate existing portions of the bridge.

Utility companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Bridge Contractor of the starting date.

The top and interior faces of the existing concrete railing are to be cleaned and sealed in accordance with Article 2403.03, P, of the Standard Specifications. If new sections of rail are constructed, the new sections shall not be sealed. All costs associated with cleaning and sealing of the concrete rails shall be included in the unit price bid item "Bridge Rail Sealing".

Construction shall be done in stages with at least one lane traffic maintained at all times in accordance with "Traffic Control Plan" note.

Construction Stages 1 & 2 as detailed on these plans may be reversed at the Contractor's option subject to the Engineer's approval.

Specifications:

Design:  
AASHTO Series of 2002.

Construction:

Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project, including:

- Special provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment

Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO Standard Specifications for Highway Bridges, Series of 2002.

Roadway Quantities shown elsewhere in these plans.

Traffic Control Plan

The roadway will be open to thru traffic. Refer to the Traffic Control Plan shown elsewhere in these plans.

Design History at this Site (Includes this Design)	
Des. No.	Type of Work
531	Original Design
655	Widening
782	Overlay
401	Rail
221	Bridge Replacement - PPCB
427	Bridge Repair

Design For Repair To 5 Degree Skew LA

150'-0" x 44'-0" Pretensioned Prestressed Concrete Beam Bridge

150'-0" Span

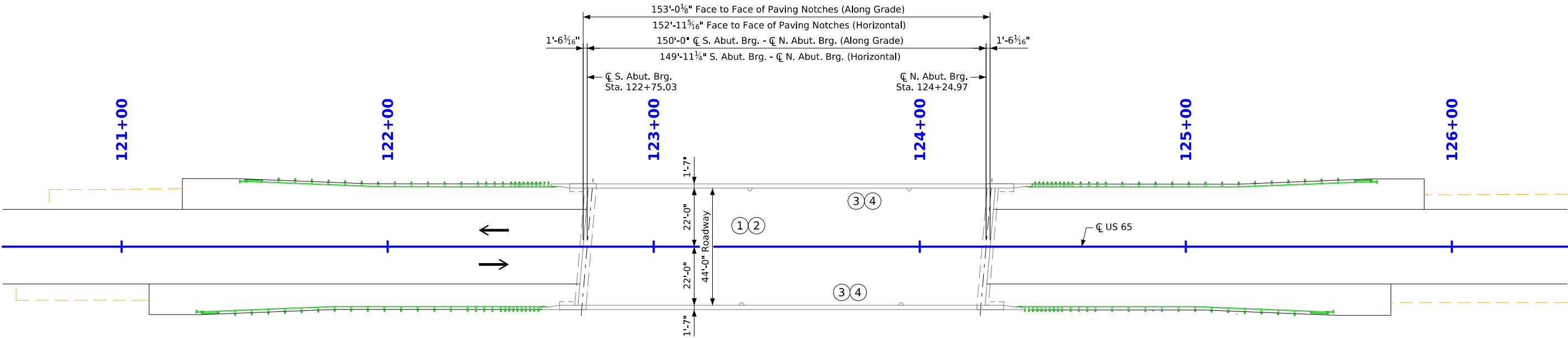
General Notes & Quantities

STA. 123+50.00 (US 65)Turn-in Date: May 2026

Cerro Gordo County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 427Design Sheet No. 1 of 4FHWA No. 18881

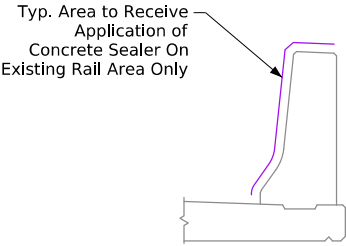


Situation Plan



Repairs Shall Consist of:

- 1 Clean and prepare existing bridge deck.
- 2 Apply High Molecular Weight Methacrylate (HMWM) sealer to the existing bridge deck.
- 3 Clean and prepare existing barrier rails.
- 4 Apply sealer to the existing barrier rails.



Detail of Concrete Sealer Area

Traffic Estimate

2024 AADT	2240	V.P.D.	
2041 AADT	3600	V.P.D.	
TRUCKS	15	%	
Total Design ESALs	1,156,320		

Location

US 65 over East Branch  
Beaverdam Creek  
T-94N R-20W  
Sections 9 & 10  
Geneseo Township  
Cerro Gordo County  
FHWA No. 18881  
Bridge Maint. No. 1783.8S065  
Latitude 42.969540°  
Longitude -93.202206°

Design For Repair To 5 Degree Skew LA

150'-0" x 44'-0" Pretensioned  
Prestressed Concrete Beam Bridge

150'-0" Span

Situation Plan

STA. 123+50.00 (US 65)

Cerro Gordo County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 427

Design Sheet No. 2 of 4

Turn-in Date: May 2026

FHWA No. 18881



## LEGEND SHEET



#

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X

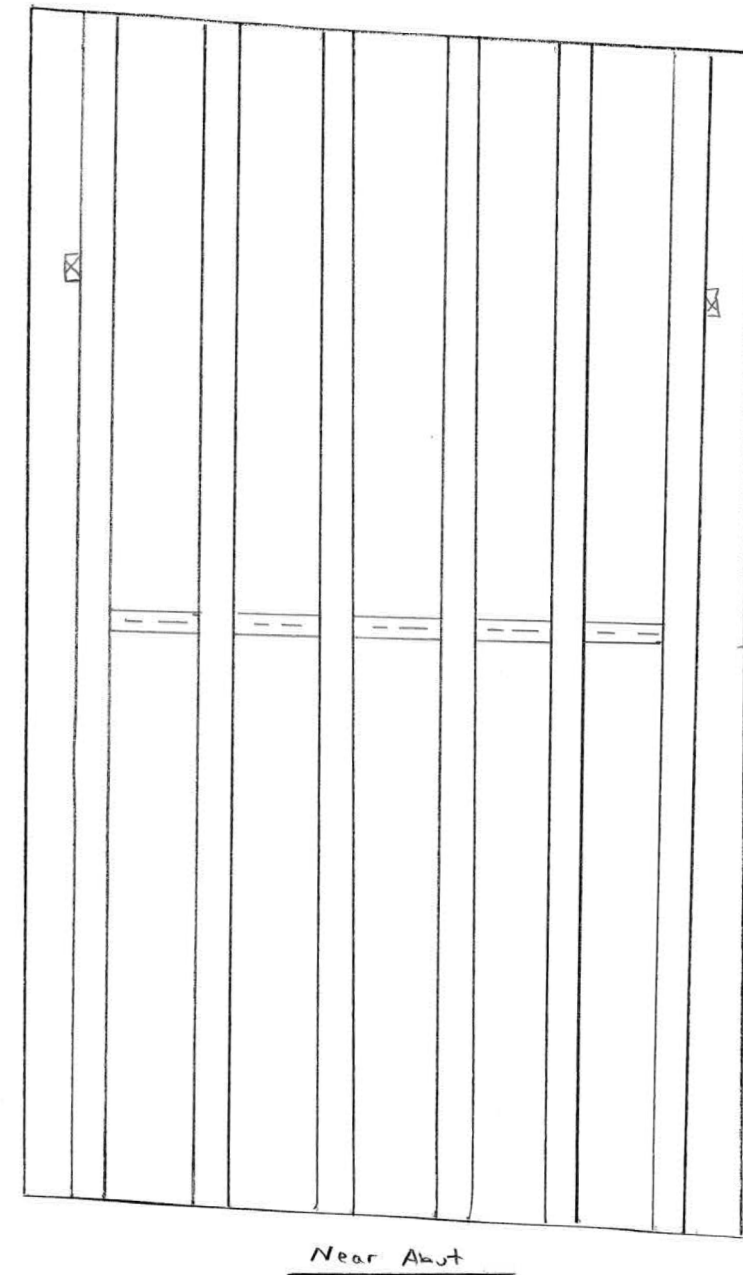
P.C.

NC – No Change  
MC – Minor Change  
Not → - Not Checked

[illegible]

Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
100	1783.5 ± 065	DCH KP	Invent NL	7-1-23 7-31-25	B- 6
					B-
					B-

mid-span

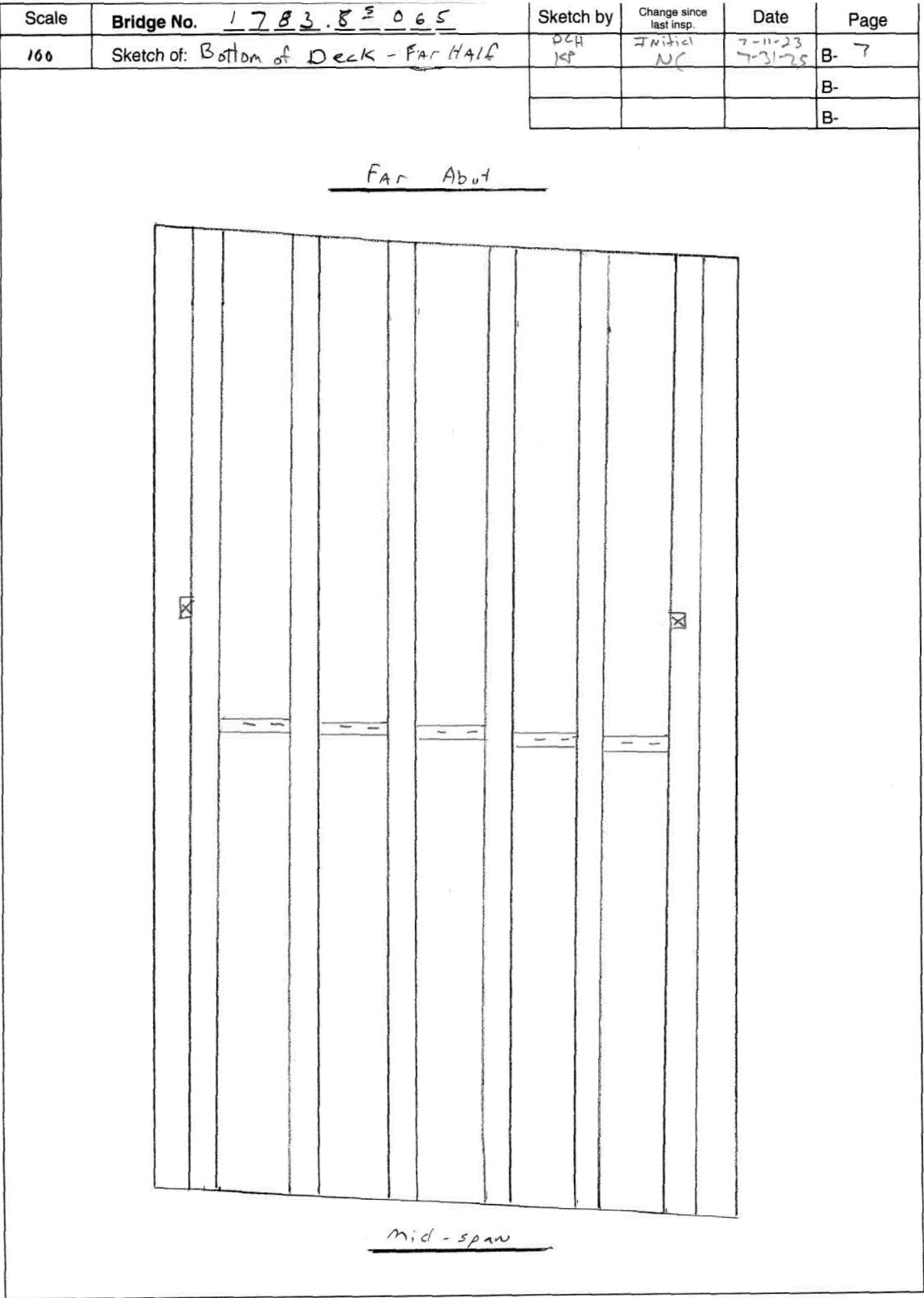


Near Abut

(For Information Only)

Design For Repair To 5 Degree Skew LA  
150'-0" x 44'-0" Pretensioned  
Prestressed Concrete Beam Bridge  
150'-0" Span

Inspection Sketches		
STA. 123+50.00 (US 65)	Turn-in Date: May 2026	
Cerro Gordo County		
IOWA DEPARTMENT OF TRANSPORTATION		
Design No. 427	Design Sheet No. 3 of 4	FHWA No. 18881



**Bottom of Deck Inspection Sketch**  
(For Information Only)

Design For Repair To 5 Degree Skew LA

150'-0" x 44'-0" Prestressed  
Prestressed Concrete Beam Bridge

150'-0" Span

Inspection Sketches

STA. 123+50.00 (US 65) Turn-In Date: May 2026

Cerro Gordo County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 427 Design Sheet No. 4 of 4 FHWA No. 18881



Estimate Bridge Repair Quantities and Reference Notes - Design #127					
Item No.	Item Code	Item	Unit	Quantities Estimated Design No. 127	Estimate Reference Notes
1	2533-4980005	MOBILIZATION	LS	1	----
2	2599-9999006	FURNISH HMWM BRIDGE DECK TREATMENT MATERIAL	GAL	84	Includes furnishing HMWM deck treatment in accordance with the application rates stated in the Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
3	2599-9999014	BRIDGE DECK SEALING, HMWM	SF	7173	Includes surface preparation and application of HMWM in accordance with Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
4	2599-9999014	BRIDGE RAIL SEALING	SF	1450	Includes cleaning existing barriers, furnishing and placing concrete sealer in accordance with Article 2403.03,P,3, of the Standard Specifications.

General Notes:

This design is for repairs to the existing 176'-4" x 40'-0" Pretensioned Prestressed Concrete Beam Bridge on IA 17 over Prairie Creek. Electronic copies of original design plans are available to the Contractor as part of the e-files supplied with the contract documents.

See Design Sheet No. 2 for list of repair items.

All dimensions and details shown on these plans pertinent to new construction shall be verified in the field by the Contractor before starting construction.

Faint lines on plans indicate existing portions of the bridge.

Utility companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Bridge Contractor of the starting date.

The top and interior faces of the existing concrete railing are to be cleaned and sealed in accordance with Article 2403.03, P, of the Standard Specifications. If new sections of rail are constructed, the new sections shall not be sealed. All costs associated with cleaning and sealing of the concrete rails shall be included in the unit price bid item "Bridge Rail Sealing".

Construction shall be done in stages with at least one lane traffic maintained at all times in accordance with "Traffic Control Plan" note.

Construction Stages 1 & 2 as detailed on these plans may be reversed at the Contractor's option subject to the Engineer's approval.

Specifications:

Design:  
AASHTO Series of 2002.

Construction:

Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project, including:

- Special provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment

Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO Standard Specifications for Highway Bridges, Series of 2002.

Roadway Quantities shown elsewhere in these plans.

Traffic Control Plan

The roadway will be open to thru traffic. Refer to the Traffic Control Plan shown elsewhere in these plans.

Design History at this Site (Includes this Design)	
Des. No.	Type of Work
548	Original Design
779	Bridge Deck Overlay
195	A.C.C. Resurfacing
---	2011 Painting
223	Bridge Replacement - PPCB
127	Bridge Repair

Design For Repair To 0 Degree Skew

176'-4" x 40'-0" Pretensioned Prestressed Concrete Beam Bridge

55'-9" End Spans64'-10" Interior Span

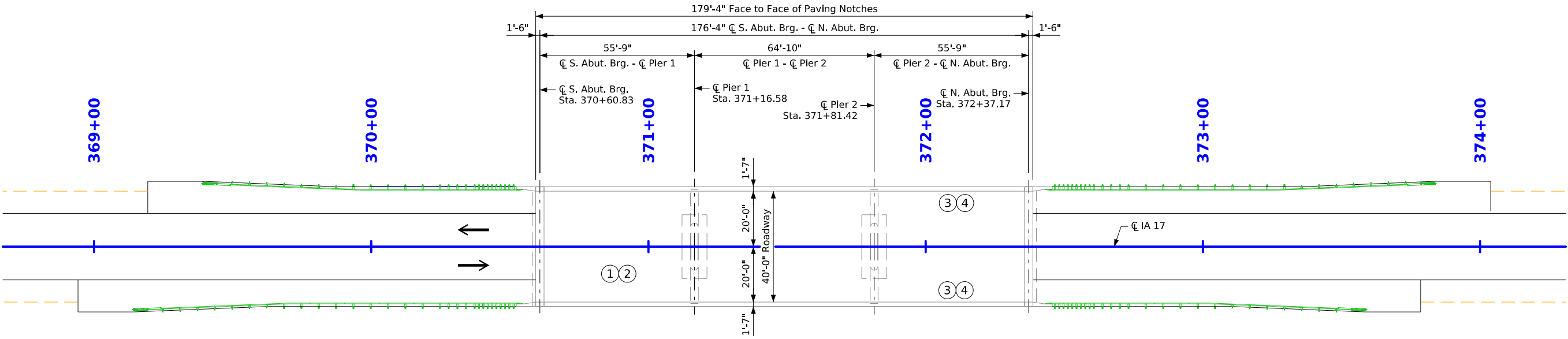
General Notes & Quantities

STA. 371+49.00 (IA 17)Turn-in Date: May 2026

Wright County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 127Design Sheet No. 1 of 4FHWA No. 54471

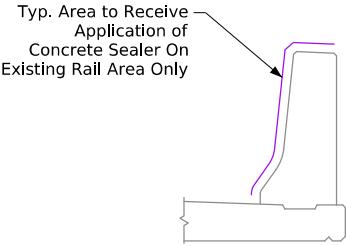


Situation Plan



Repairs Shall Consist of:

- ① Clean and prepare existing bridge deck.
- ② Apply High Molecular Weight Methacrylate (HMWM) sealer to the existing bridge deck.
- ③ Clean and prepare existing barrier rails.
- ④ Apply sealer to the existing barrier rails.



Detail of Concrete Sealer Area

Traffic Estimate

2024 AADT	1240 V.P.D.
2040 AADT	1200 V.P.D.
TRUCKS	46 %

Location

IA 17 over Prairie Creek  
T-93N R-26W  
Section 30  
Boone Township  
Wright County  
FHWA No. 54471  
Bridge Maint. No. 9985.4S017  
Latitude 42.848042°  
Longitude -93.971450°

Design For Repair To 0 Degree Skew

176'-4" x 40'-0" Prestensioned  
Prestressed Concrete Beam Bridge

55'-9" End Spans 64'-10" Interior Span

Situation Plan

Wright County

Turn-in Date: May 2026

STA. 371+49.00 (IA 17)

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 127 Design Sheet No. 2 of 4 FHWA No. 54471



## IOWA DEPARTMENT OF TRANSPORTATION

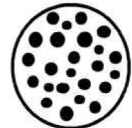
## LEGEND SHEET

Bridge # 9985.4<sup>S</sup> 017

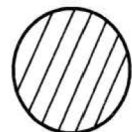
54471



### A.C. Patches



## Scaling (L,M,S)



Hollow (delaminations)



Spalled



Leaching ( L, H )



## Stalactite



## Stain



## Map Cracking



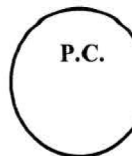
## Reinforced Steel

Cracks (All Hairline or Noted)

## Floor Drain



### Bearing Location



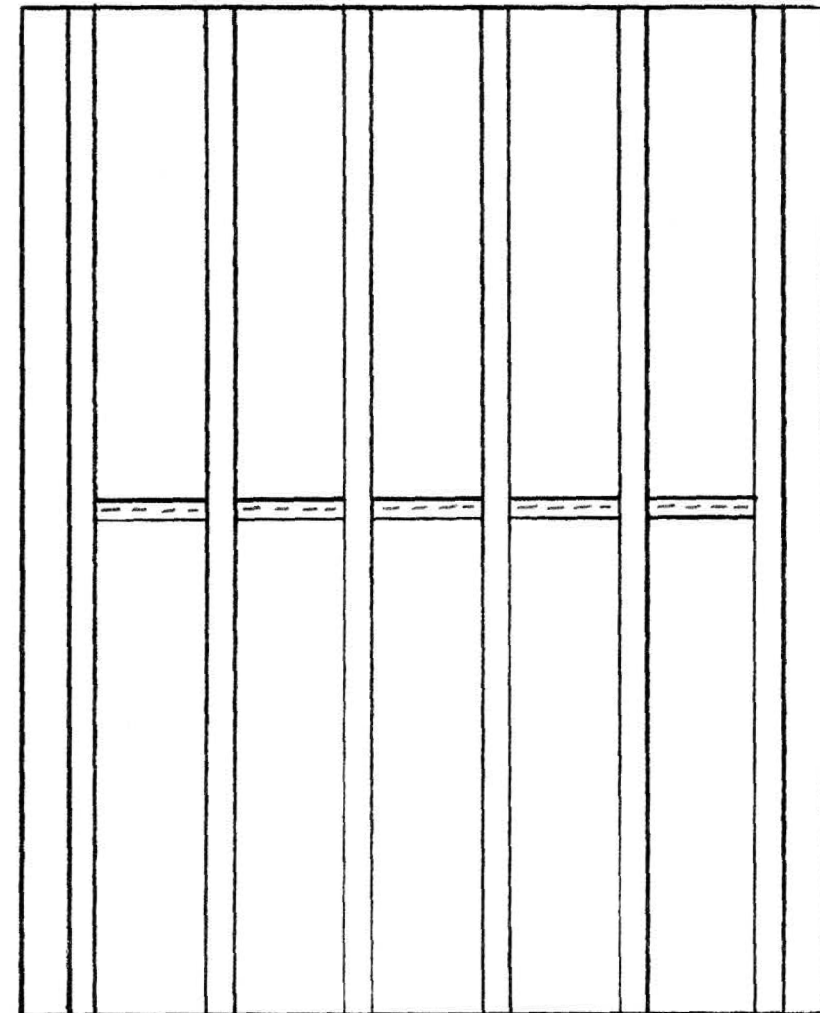
## P.C. Patches

NC – No Change  
MC – Minor Change  
Not → - Not Checked

[illegible]

Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
80	9985.4 <sup>5</sup> 017	DCH BDO	ML N.C.	2-28-23 2-18-25	B-12
					B-
					B-

Prior #1



Near About

### Bottom of Deck Inspection Sketches

(For Information Only)

Note:  
Total estimated crack length on bottom of deck  
based on the 2025 inspection sketches is 0 L.F.  
This measurement is provided for information only.

Design For Repair To 0 Degree Skew  
**176'-4" x 40'-0" Pretensioned**  
**Prestressed Concrete Beam Bridge**

55'-9" End Spans	64'-10" Interior Span
------------------	-----------------------

**Inspection Sketches**

STA 371+49.00 (IA 17) Turn-in Date: May 2026

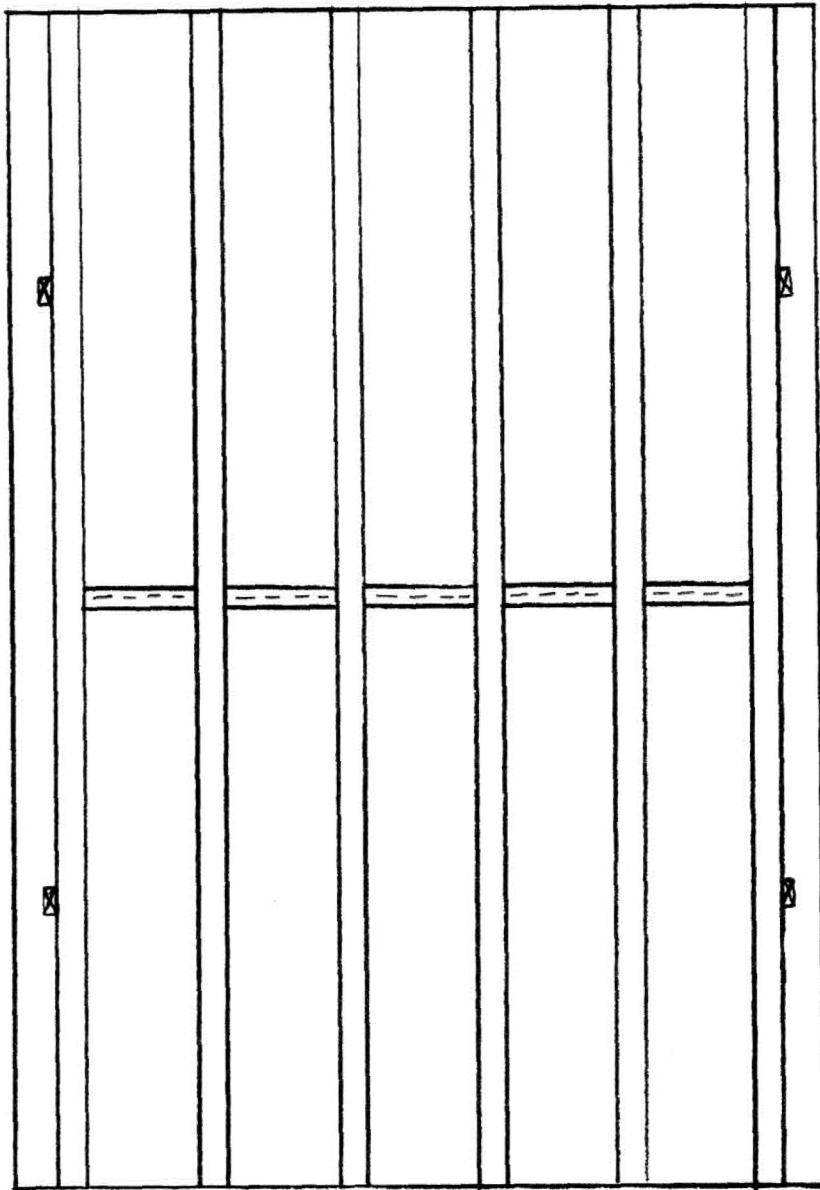
**Wright County**  
IOWA DEPARTMENT OF TRANSPORTATION

Design No. 127	Design Sheet No. 3 of 4	FHWA No. 54471
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FILE NO. 32889	ENGLISH	DESIGN TEAM Foth	Wright COUNTY	PROJECT NUMBER BRFN-000-T(460)--39-00	SHEET NUMBER V.16
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Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
80	9985.4 <sup>S</sup> 017	DCH BO	NC NC	2-28-23 2-18-25	B- 13
Sketch of: BOTTOM OF DECK - SPAN 2					B-
					B-

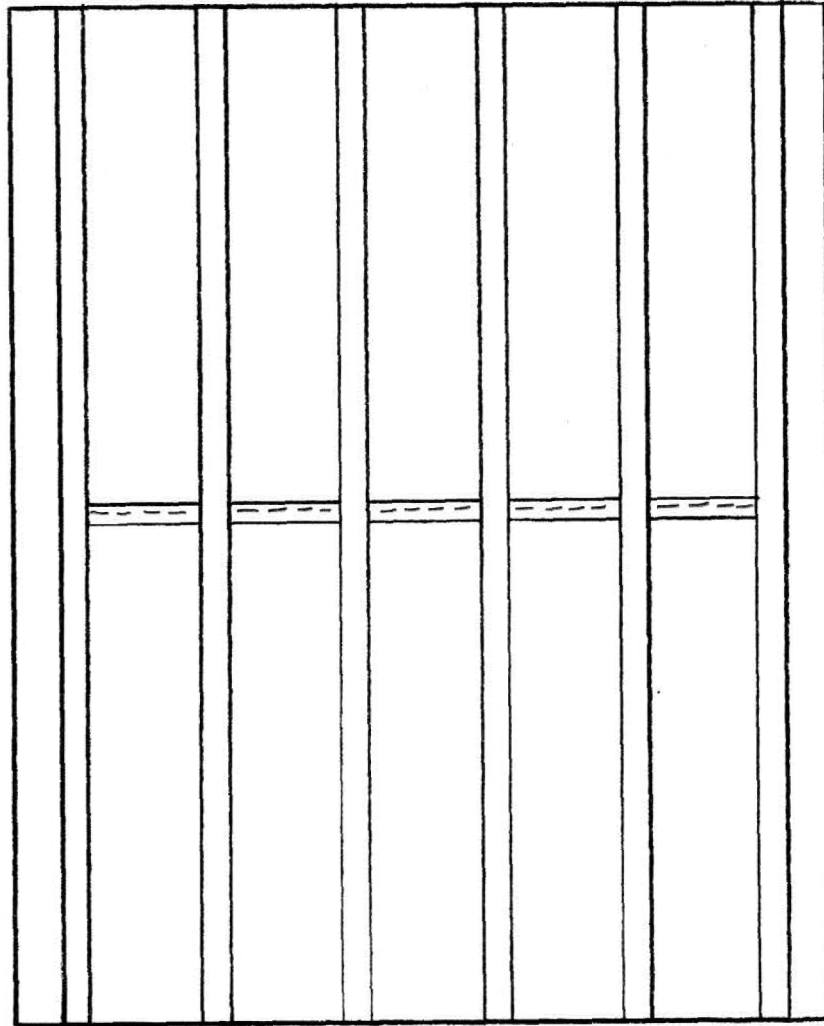
Pier # 2



Pier # 1

Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
80	9985.4 <sup>S</sup> 017	DCH BO	NC NC	2-28-23 2-18-25	B- 14
Sketch of: BOTTOM OF DECK - SPAN #3					B-
					B-

Far Abutment



Pier # 2

**Bottom of Deck Inspection Sketches**  
(For Information Only)

Design For Repair To 0 Degree Skew  
**176'-4" x 40'-0" Pretensioned  
Prestressed Concrete Beam Bridge**  
55'-9" End Spans 64'-10" Interior Span  
**Inspection Sketches**  
STA. 371+49.00 (IA 17) Turn-in Date: May 2026  
**Wright County**  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 127 Design Sheet No. 4 of 4 FHWA No. 54471



Estimate Bridge Repair Quantities and Reference Notes - Design #427					
Item No.	Item Code	Item	Unit	Quantities Estimated Design No. 427	Estimate Reference Notes
1	2533-4980005	MOBILIZATION	LS	1	----
2	2599-9999006	FURNISH HMWM BRIDGE DECK TREATMENT MATERIAL	GAL	43	Includes furnishing HMWM deck treatment in accordance with the application rates stated in the Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
3	2599-9999014	BRIDGE DECK SEALING, HMWM	SF	3633	Includes surface preparation and application of HMWM in accordance with Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
4	2599-9999014	BRIDGE RAIL SEALING	SF	758	Includes cleaning existing barriers, furnishing and placing concrete sealer in accordance with Article 2403.03,P,3, of the Standard Specifications.

General Notes:

This design is for repairs to the existing 90'-0" x 40'-0" Continuous Concrete Slab Bridge on E.B. US 30 over Unnamed Creek. Electronic copies of original design plans are available to the Contractor as part of the e-files supplied with the contract documents.

See Design Sheet No. 2 for list of repair items.

All dimensions and details shown on these plans pertinent to new construction shall be verified in the field by the Contractor before starting construction.

Faint lines on plans indicate existing portions of the bridge.

Utility companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Bridge Contractor of the starting date.

The top and interior faces of the existing concrete railing are to be cleaned and sealed in accordance with Article 2403.03, P, of the Standard Specifications. If new sections of rail are constructed, the new sections shall not be sealed. All costs associated with cleaning and sealing of the concrete rails shall be included in the unit price bid item "Bridge Rail Sealing".

Construction shall be done in stages with at least one lane traffic maintained at all times in accordance with "Traffic Control Plan" note.

Construction Stages 1 & 2 as detailed on these plans may be reversed at the Contractor's option subject to the Engineer's approval.

Specifications:

Design:  
AASHTO Series of 2002.

Construction:

Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project, including:

- Special provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment

Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO Standard Specifications for Highway Bridges, Series of 2002.

Roadway Quantities shown elsewhere in these plans.

Traffic Control Plan

The roadway will be open to thru traffic. Refer to the Traffic Control Plan shown elsewhere in these plans.

Design History at this Site	
(Includes this Design)	
Des. No.	Type of Work
216	Original Design
427	Bridge Repair

Design For Repair To 0 Degree Skew

90'-0" x 40'-0" Continuous Concrete Slab Bridge

27'-6" End Spans35'-0" Interior Span

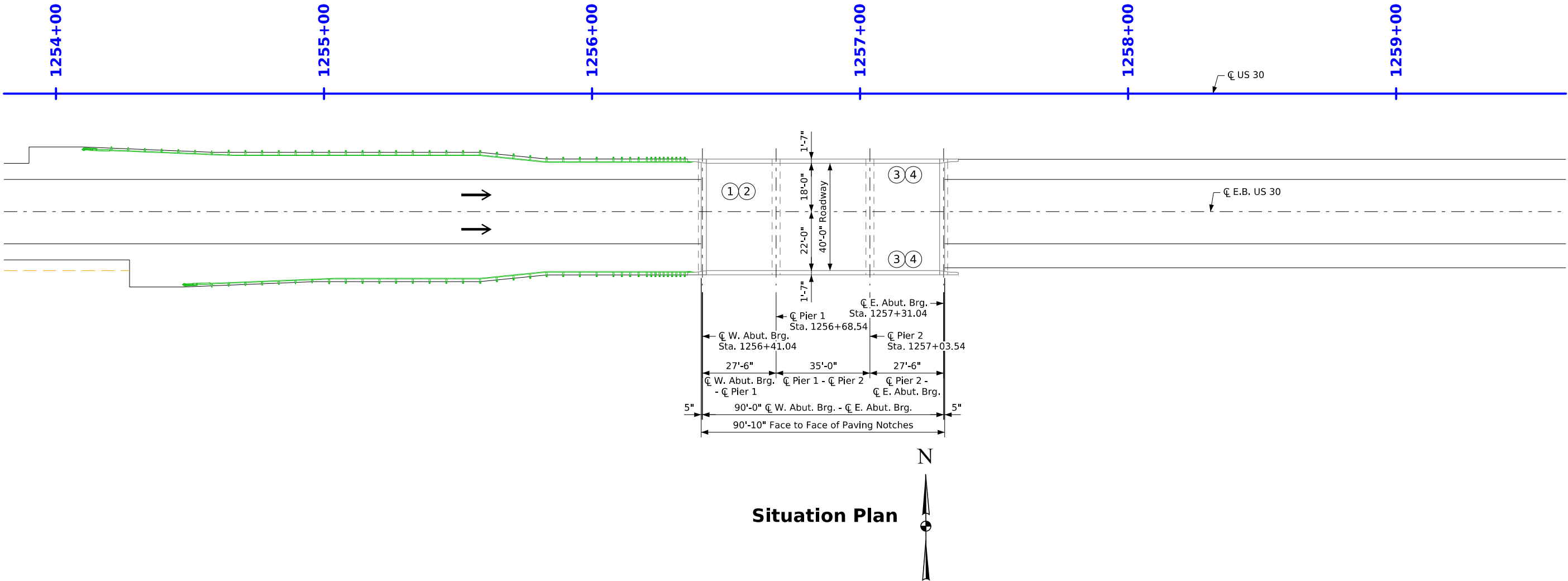
General Notes & Quantities

STA. 1256+86.04, 44.00' Rt. (E.B. US 30)Turn-in Date: May 2026

Benton County

IOWA DEPARTMENT OF TRANSPORTATION

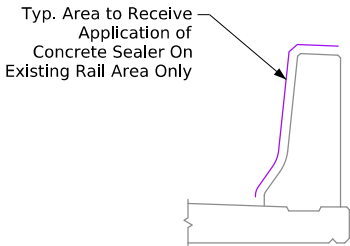
Design No. 427Design Sheet No. 1 of 4FHWA No. 700495



Situation Plan

Repairs Shall Consist of:

- 1 Clean and prepare existing bridge slab.
- 2 Apply High Molecular Weight Methacrylate (HMWM) sealer to the existing bridge slab.
- 3 Clean and prepare existing barrier rails.
- 4 Apply sealer to the existing barrier rails.



Detail of Concrete Sealer Area

Traffic Estimate

2024 AADT	7700 V.P.D.
2037 AADT	8500 V.P.D.
2037 DHV	880 V.P.H.
TRUCKS	26 %
Total Design ESALs	3,000,000

Location

E.B. US 30 over  
Unnamed Creek  
T-83N R-11W  
Section 34  
Union Township  
Benton County  
FHWA No. 700495  
Bridge Maint. No. 0627.8R030  
Latitude 41.963369°  
Longitude -92.108117°

Design For Repair To 0 Degree Skew

**90'-0" x 40'-0" Continuous Concrete Slab Bridge**

27'-6" End Spans 35'-0" Interior Span

**Situation Plan**

STA. 1256+86.04, 44.00' Rt. (E.B. US 30) Turn-in Date: May 2026

**Benton County**


IOWA DEPARTMENT OF TRANSPORTATION

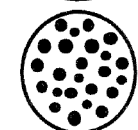
Design No. 427 Design Sheet No. 2 of 4 FHWA No. 700495




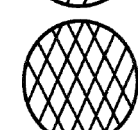
IOWA DEPARTMENT OF TRANSPORTATION  
**LEGEND SHEET**


Bridge # 0627.8A030


- 


A.C. Patches
- 

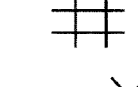
Scaling (L,M,S)
- 


Hollow (delaminations)
- 


Spalled
- 

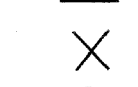
Leaching ( L, H )
- 


Stalactite
- 


Stain
- 

Map Cracking
- 

Reinforced Steel
- 

Cracks (All Hairline or Noted)
- 

Floor Drain
- 

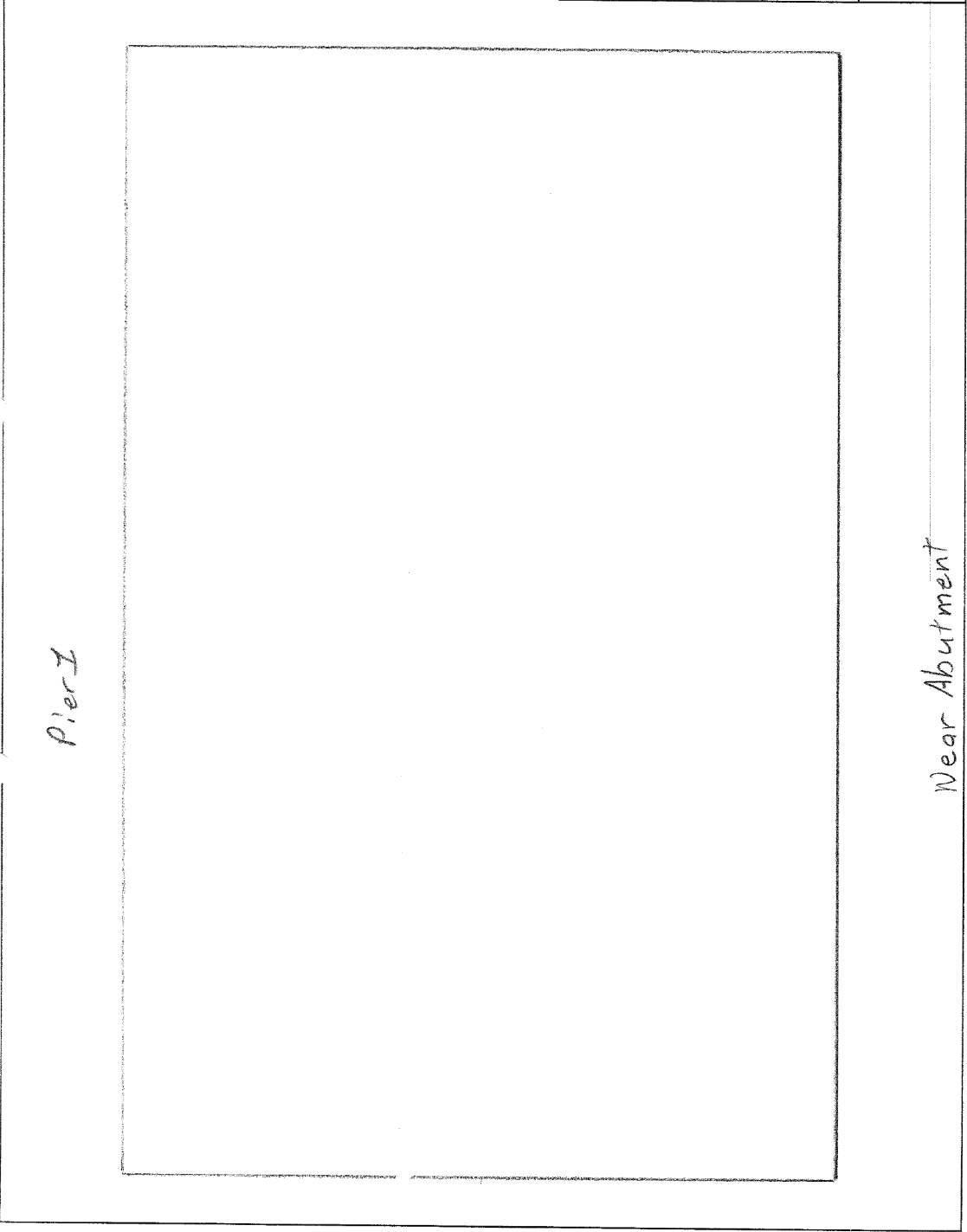
Bearing Location
- 

P.C. Patches

NC – No Change  
MC – Minor Change  
Not → - Not Checked

Sketch by	Date	B1
Team 4	2-15-23	
Team 4	2-3-25	

Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
50	0627.8A030	MH	Initial	2-15-23	B-14
	Sketch of: Bottom of Deck, Span 1	MH		2-3-25	B-
					B-



**Bottom of Slab Inspection Sketches**  
(For Information Only)

Note:  
Total estimated crack length on bottom of slab based on the 2025 inspection sketches is 0 L.F.  
This measurement is provided for information only.

Design For Repair To 0 Degree Skew  
**90'-0" x 40'-0" Continuous Concrete Slab Bridge**  
27'-6" End Spans 35'-0" Interior Span  
**Inspection Sketches**  
STA. 1256+86.04, 44.00' Rt. (E.B. US 30) Turn-in Date: May 2026  
**Benton County**  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 427 Design Sheet No. 3 of 4 FHWA No. 700495

Scale	Bridge No. 0627.8 <sup>R</sup> 030	Sketch by	Change since last insp.	Date	Page
50	Sketch of: Bottom of Deck, Span 2	MH	Initial NL	2-15-23 2-3-25	B-15
					B-
					B-

Pier 2

Pier 1

Scale	Bridge No. 0627.8 <sup>R</sup> 030	Sketch by	Change since last insp.	Date	Page
50	Sketch of: Bottom of Deck, Span 3	MH	NL	2-3-25	B-16
					B-
					B-

Far Abutment

Pier 2

Bottom of Slab Inspection Sketches  
(For Information Only)

Design For Repair To 0 Degree Skew

90'-0" x 40'-0" Continuous Concrete Slab Bridge

27'-6" End Spans35'-0" Interior Span

Inspection Sketches

STA. 1256+86.04, 44.00' Rt. (E.B. US 30)Turn-In Date: May 2026

Benton County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 427Design Sheet No. 4 of 4FHWA No. 700495

Estimate Bridge Repair Quantities and Reference Notes - Design #327					
Item No.	Item Code	Item	Unit	Quantities Estimated Design No. 327	Estimate Reference Notes
1	2533-4980005	MOBILIZATION	LS	1	----
2	2599-9999006	FURNISH HMWM BRIDGE DECK TREATMENT MATERIAL	GAL	536	Includes furnishing HMWM deck treatment in accordance with the application rates stated in the Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
3	2599-9999014	BRIDGE DECK SEALING, HMWM	SF	45,600	Includes surface preparation and application of HMWM in accordance with Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
4	2599-9999014	BRIDGE RAIL SEALING	SF	8759	Includes cleaning existing barriers, furnishing and placing concrete sealer in accordance with Article 2403.03,P,3, of the Standard Specifications.

General Notes:

This design is for repairs to the existing 1134'-0" x 40'-0" Pretensioned Prestressed Concrete Beam Bridge on E.B. US 30 over Cedar River. Electronic copies of original design plans are available to the Contractor as part of the e-files supplied with the contract documents.

See Design Sheet No. 2 for list of repair items.

All dimensions and details shown on these plans pertinent to new construction shall be verified in the field by the Contractor before starting construction.

Faint lines on plans indicate existing portions of the bridge.

Utility companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Bridge Contractor of the starting date.

The top and interior faces of the existing concrete railing are to be cleaned and sealed in accordance with Article 2403.03, P, of the Standard Specifications. If new sections of rail are constructed, the new sections shall not be sealed. All costs associated with cleaning and sealing of the concrete rails shall be included in the unit price bid item "Bridge Rail Sealing".

Construction shall be done in stages with at least one lane traffic maintained at all times in accordance with "Traffic Control Plan" note.

Construction Stages 1 & 2 as detailed on these plans may be reversed at the Contractor's option subject to the Engineer's approval.

Specifications:

Design:  
AASHTO Series of 2002.

Construction:

Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project, including:

- Special provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment

Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO Standard Specifications for Highway Bridges, Series of 2002.

Roadway Quantities shown elsewhere in these plans.

Traffic Control Plan

The roadway will be open to thru traffic. Refer to the Traffic Control Plan shown elsewhere in these plans.

Design History at this Site	
(Includes this Design)	
Des. No.	Type of Work
151	Original Design
220	Bridge Replacement - PPCB
327	Bridge Repair

Design For Repair To 0 Degree Skew

1134'-0" x 40'-0" Pretensioned Prestressed Concrete Beam Bridge

111'-0" End Spans152'-0" Interior Spans

General Notes & Quantities

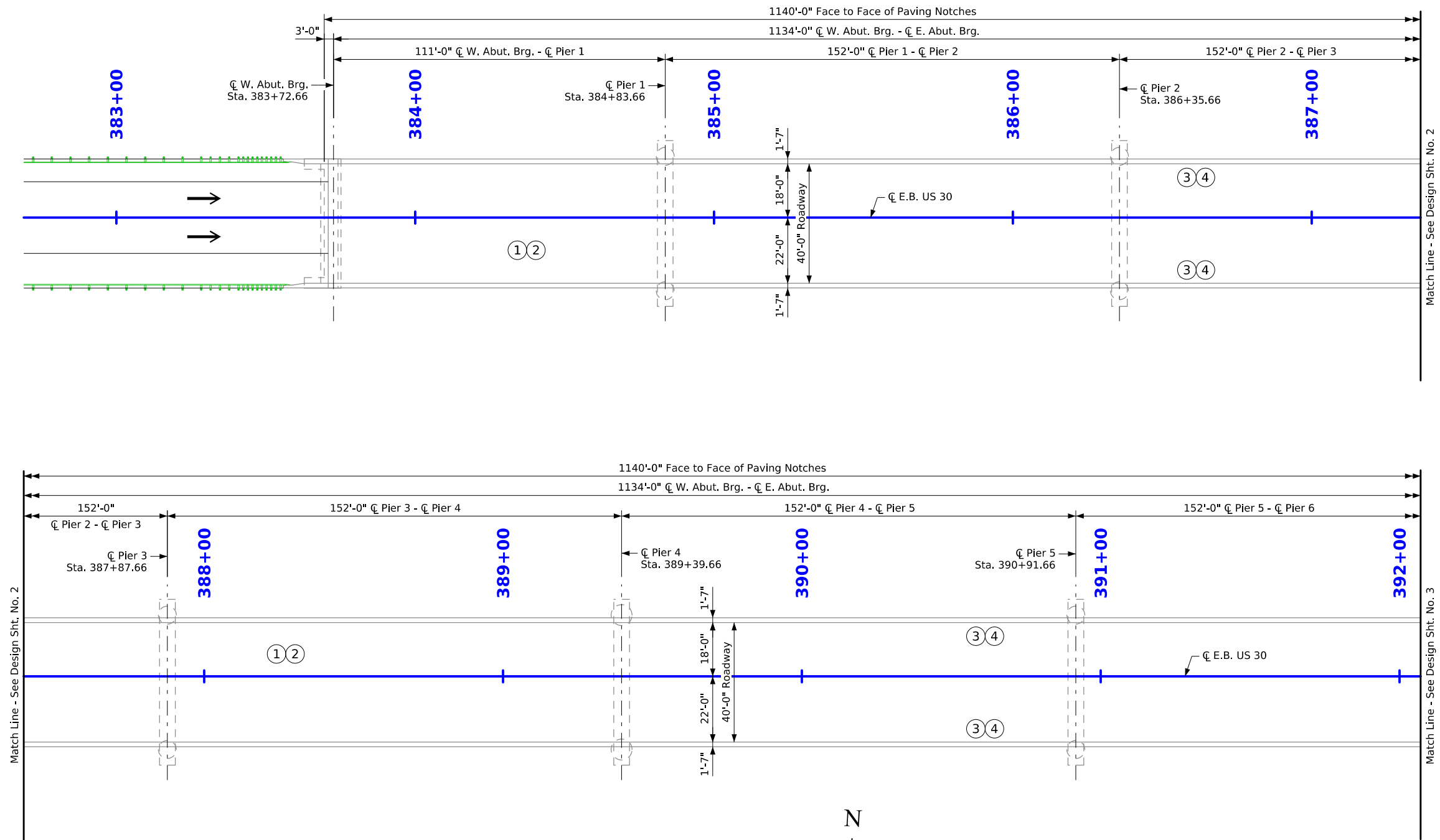
STA. 389+39.66 (E.B. US 30)Turn-in Date: May 2026

Linn County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 327Design Sheet No. 1 of 12FHWA No. 33471





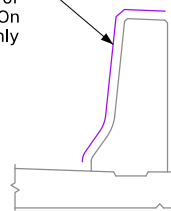
### Situation Plan



### Repairs Shall Consist of:

- ① Clean and prepare existing bridge deck.
- ② Apply High Molecular Weight Methacrylate (HMWM) sealer to the existing bridge deck.
- ③ Clean and prepare existing barrier rails.
- ④ Apply sealer to the existing barrier rails.

Typ. Area to Receive  
Application of  
Concrete Sealer On  
Existing Rail Area Only



### Detail of Concrete Sealer Area

### Traffic Estimate

2024 AADT	24,100 V.P.D.
2040 AADT	39,800 V.P.D.
TRUCKS	13 %

### Location

E.B. US 30 over Cedar River  
T-82N R-6W  
Section 9  
Putnam Township  
Linn County  
FHWA No. 33471  
Bridge Maint. No. 5758.9R030  
Latitude 41.926005°  
Longitude -91.550627°

Design For Repair To 0 Degree Skew

**1134'-0" x 40'-0" Pretensioned Prestressed Concrete Beam Bridge**

111'-0" End Spans 152'-0" Interior Spans

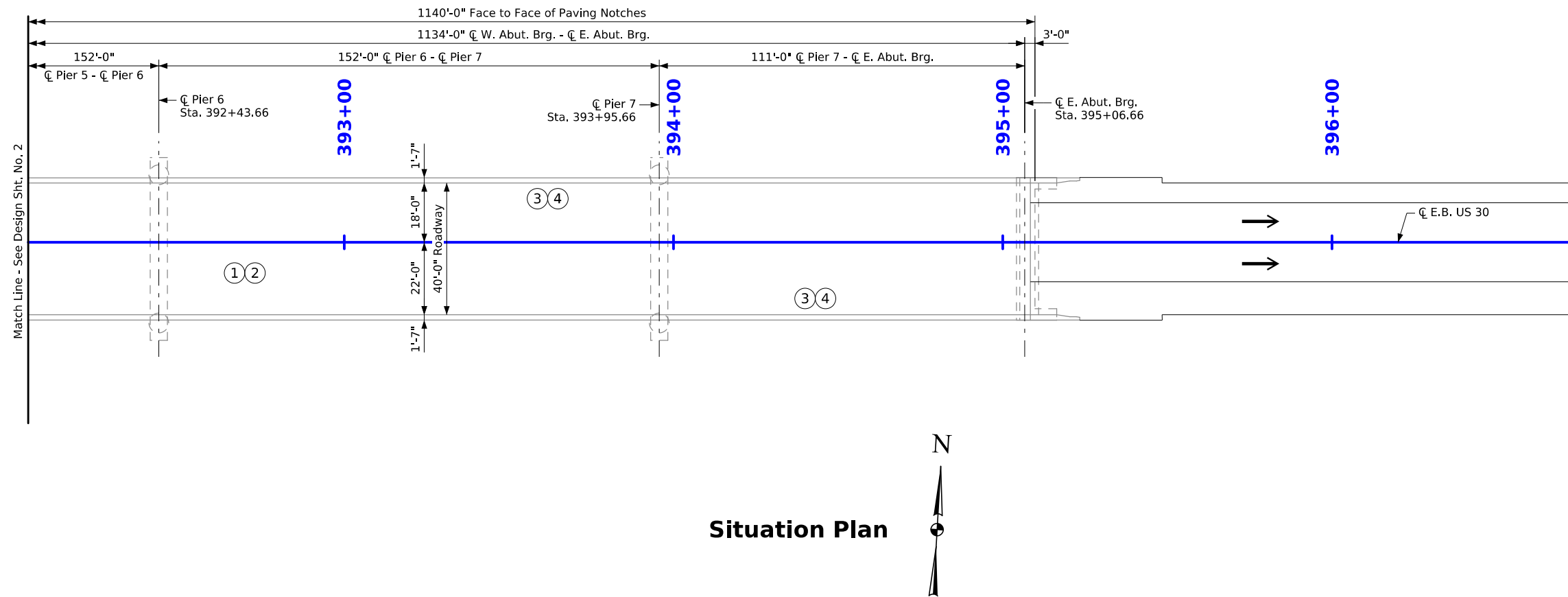
**Situation Plan**

STA. 389+39.66 (E.B. US 30) Turn-in Date: May 2026

**Linn County**

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 327 Design Sheet No. 2 of 12 FHWA No. 33471



### Repairs Shall Consist of:

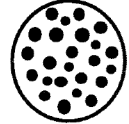
- ① Clean and prepare existing bridge deck.
- ② Apply High Molecular Weight Methacrylate (HMWM) sealer to the existing bridge deck.
- ③ Clean and prepare existing barrier rails.
- ④ Apply sealer to the existing barrier rails.

Design For Repair To 0 Degree Skew		
<b>1134'-0" x 40'-0" Prestressed Concrete Beam Bridge</b>		
111'-0" End Spans		152'-0" Interior Spans
<b>Situation Plan</b>		
STA. 389+39.66 (E.B. US 30)		Turn-in Date: May 2026
<b>Linn County</b>		
IOWA DEPARTMENT OF TRANSPORTATION		
Design No. 327	Design Sheet No. 3 of 12	FHWA No. 33471

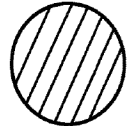
## LEGEND SHEET



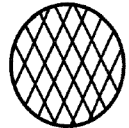
### A.C. Patches



Scaling (L,M,S)



Hollow (delaminations)



Spalled

Leaching ( L, H )



## Stalactite



## Stain



## Map Cracking



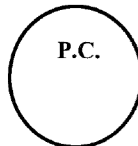
## Reinforced Steel

Cracks (All Hairline or Noted)

## Floor Drain



### Bearing Location

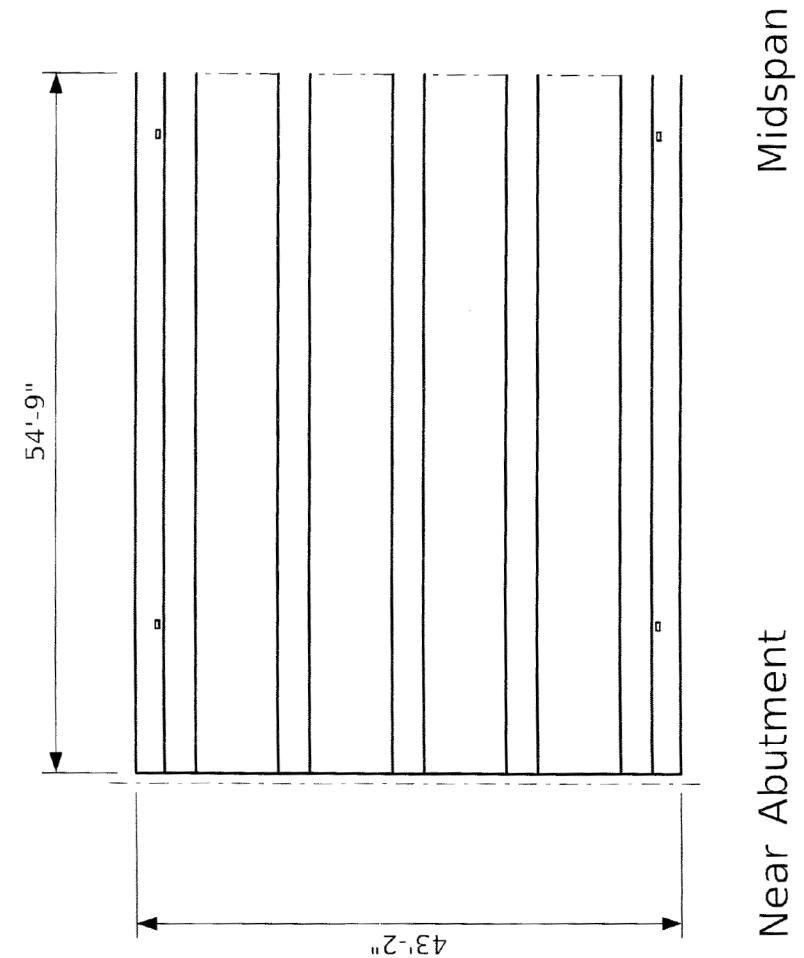


## P.C. Patches

NC – No Change  
MC – Minor Change  
Not → - Not Checked

[illegible]

Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 1		MA 14	NC	7-29-29	34



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### Bottom of Deck Inspection Sketches

(For Information Only)

Note:  
Total estimated crack length on bottom of deck  
based on the 2024 inspection sketches is 0 L.F.  
This measurement is provided for information only.

Design For Repair To 0 Degree Skew  
**1134'-0" x 40'-0" Pretensioned  
 Prestressed Concrete Beam Bridge**  
 111'-0" End Spans                      152'-0" Interior Spans

## Inspection Sketches

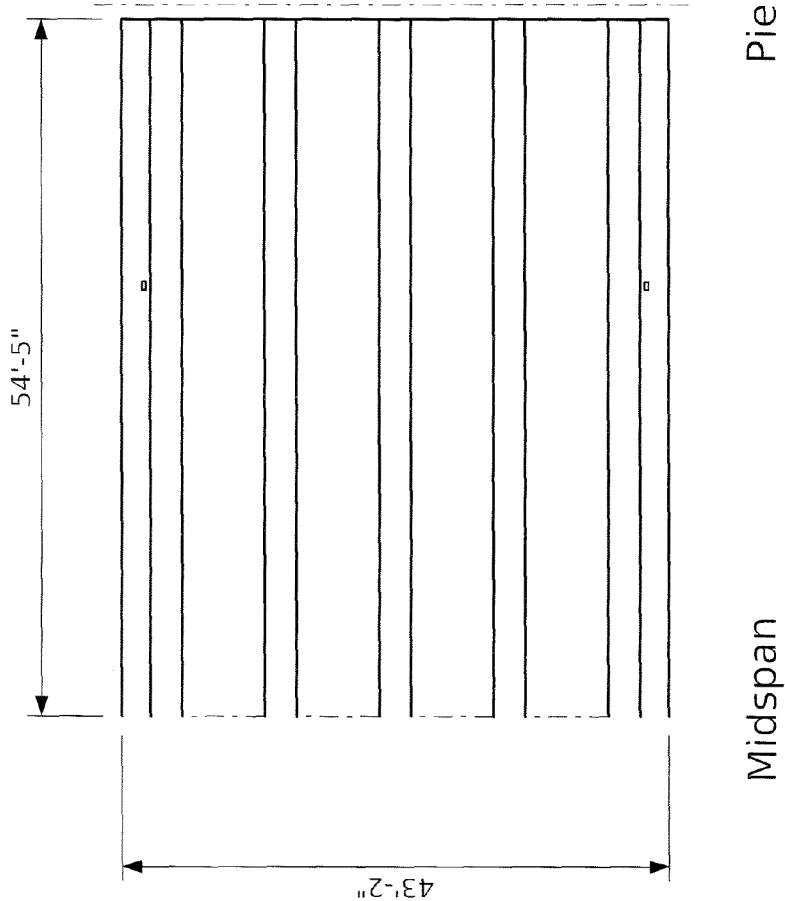
STA. 389+39.66 (E.B. US 30)	Turn-in Date: May 2026
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Linn County

IOWA DEPARTMENT OF TRANSPORTATION  
 Design No. 327      Design Sheet No. 4 of 12      FHWA No. 33471

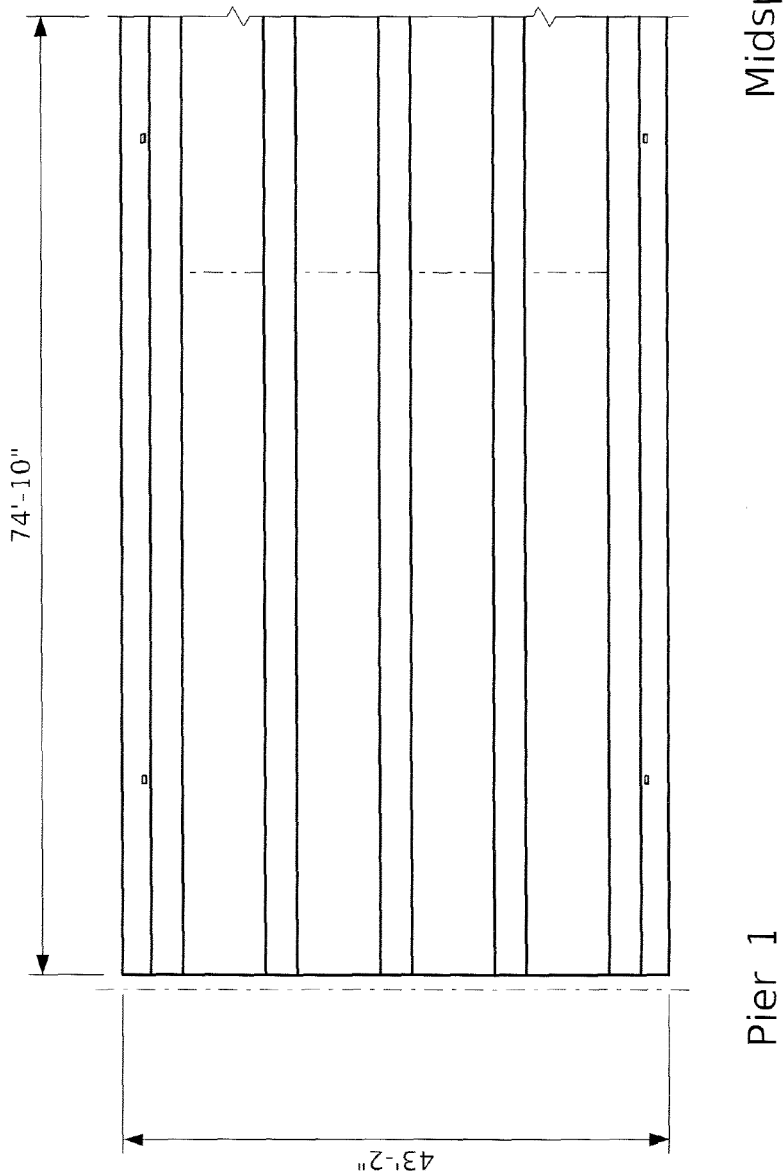


Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 1		MH	NC	7-29-24	35



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Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 2		MH	NC	7-29-24	36

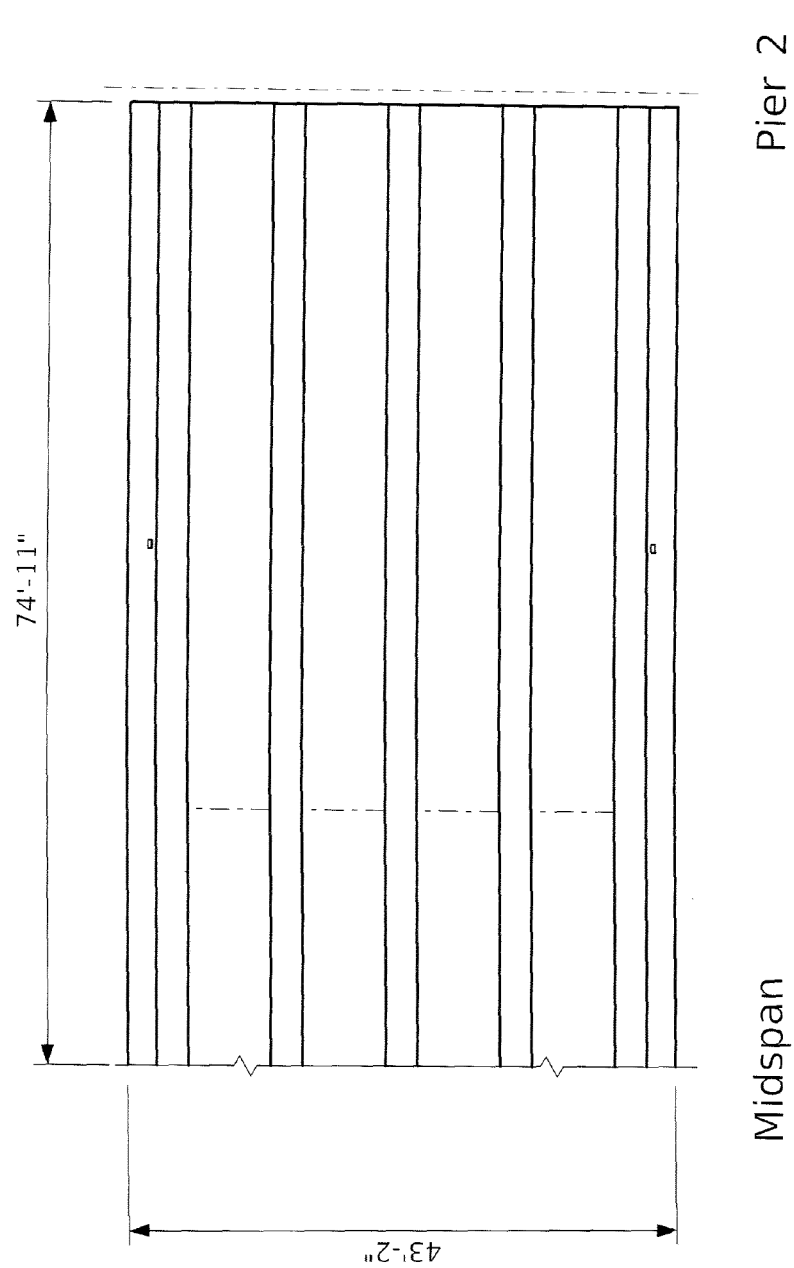


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Bottom of Deck Inspection Sketches  
(For Information Only)

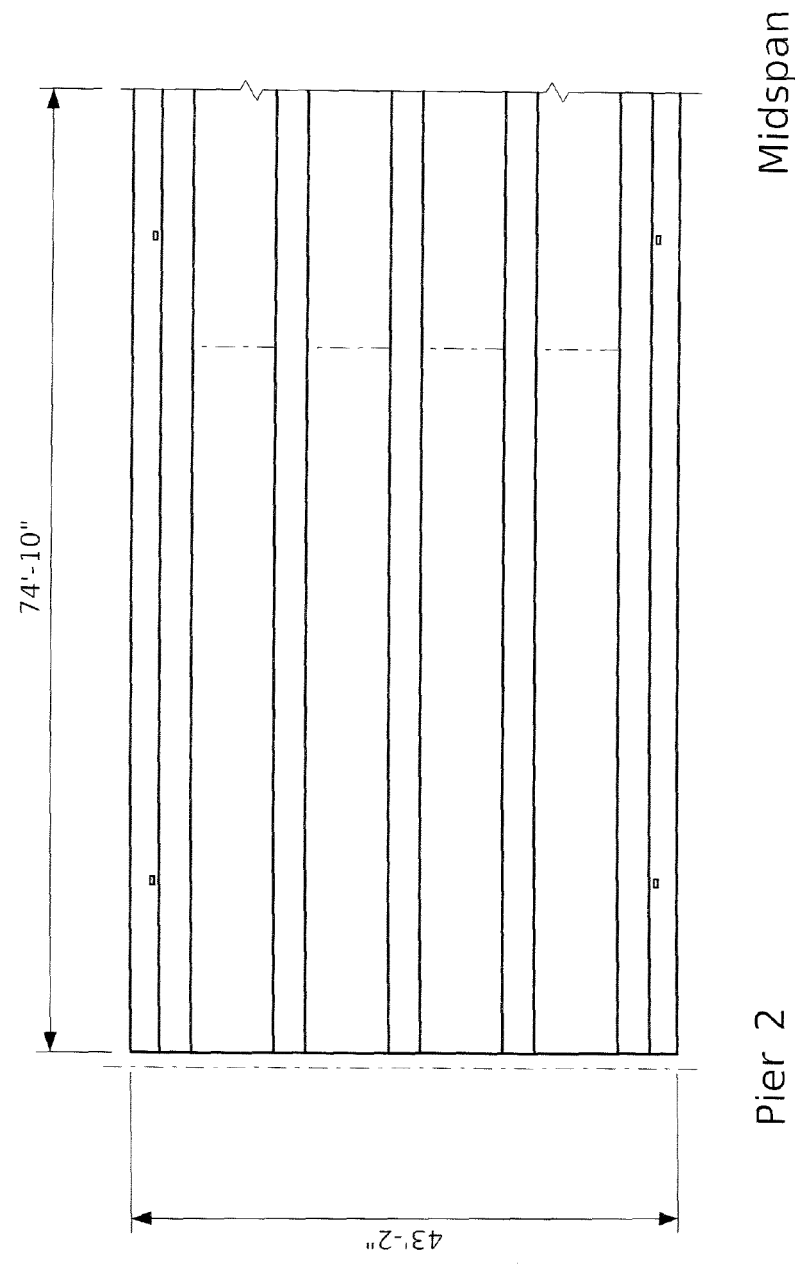
Design For Repair To 0 Degree Skew  
1134'-0" x 40'-0" Prestensioned  
Prestressed Concrete Beam Bridge  
111'-0" End Spans 152'-0" Interior Spans  
Inspection Sketches  
STA. 389+39.66 (E.B. US 30) Turn-in Date: May 2026  
Linn County  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 327 Design Sheet No. 5 of 12 FHWA No. 33471

Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 2		MH	NL	7-29-24	37



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Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 3		MH	NL	7-29-24	38



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Bottom of Deck Inspection Sketches  
(For Information Only)

Design For Repair To 0 Degree Skew

1134'-0" x 40'-0" Prestensioned  
Prestressed Concrete Beam Bridge

111'-0" End Spans152'-0" Interior Spans

Inspection Sketches

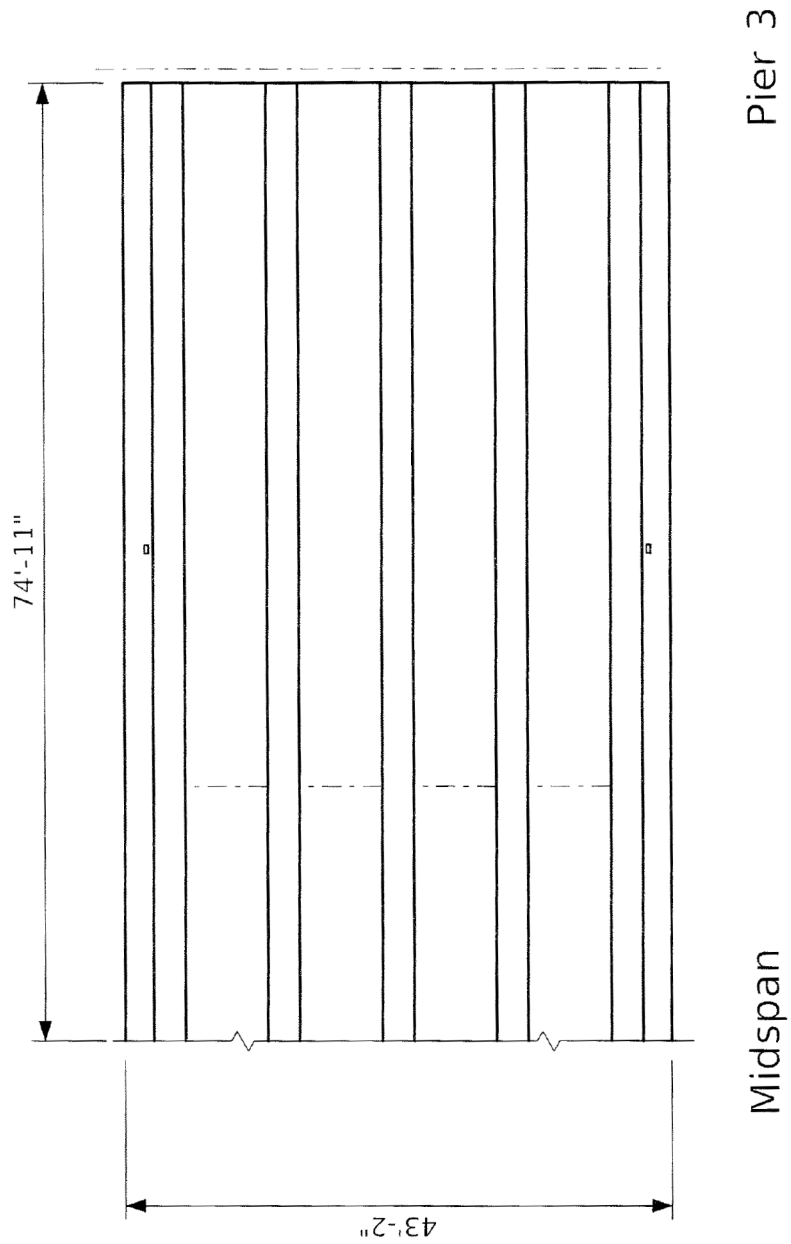
STA. 389+39.66 (E.B. US 30)Turn-in Date: May 2026

Linn County

IOWA DEPARTMENT OF TRANSPORTATION

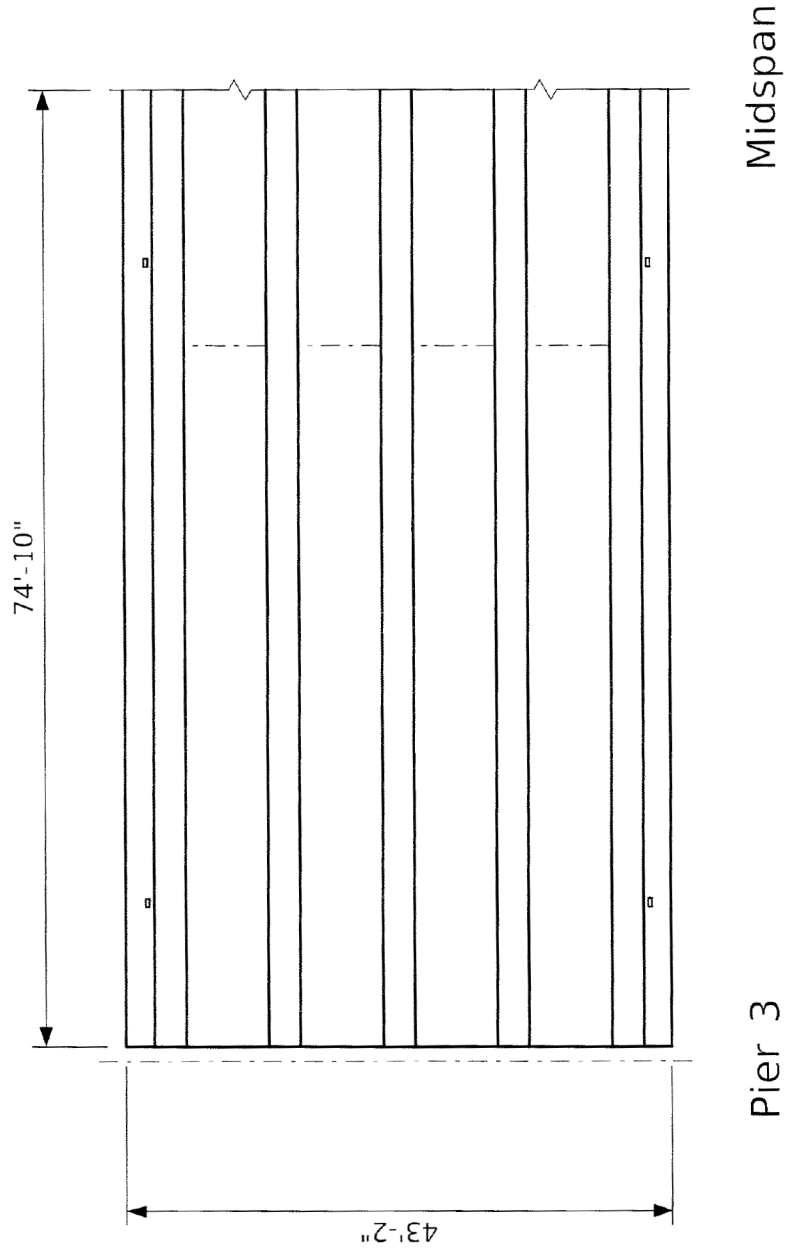
Design No. 327Design Sheet No. 6 of 12FHWA No. 33471

Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 3		MH	NC	7-29-24	39



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Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 4		MH	NC	7-29-24	40



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Bottom of Deck Inspection Sketches  
(For Information Only)

Design For Repair To 0 Degree Skew

1134'-0" x 40'-0" Prestensioned  
Prestressed Concrete Beam Bridge

111'-0" End Spans152'-0" Interior Spans

Inspection Sketches

STA. 389+39.66 (E.B. US 30)Turn-In Date: May 2026

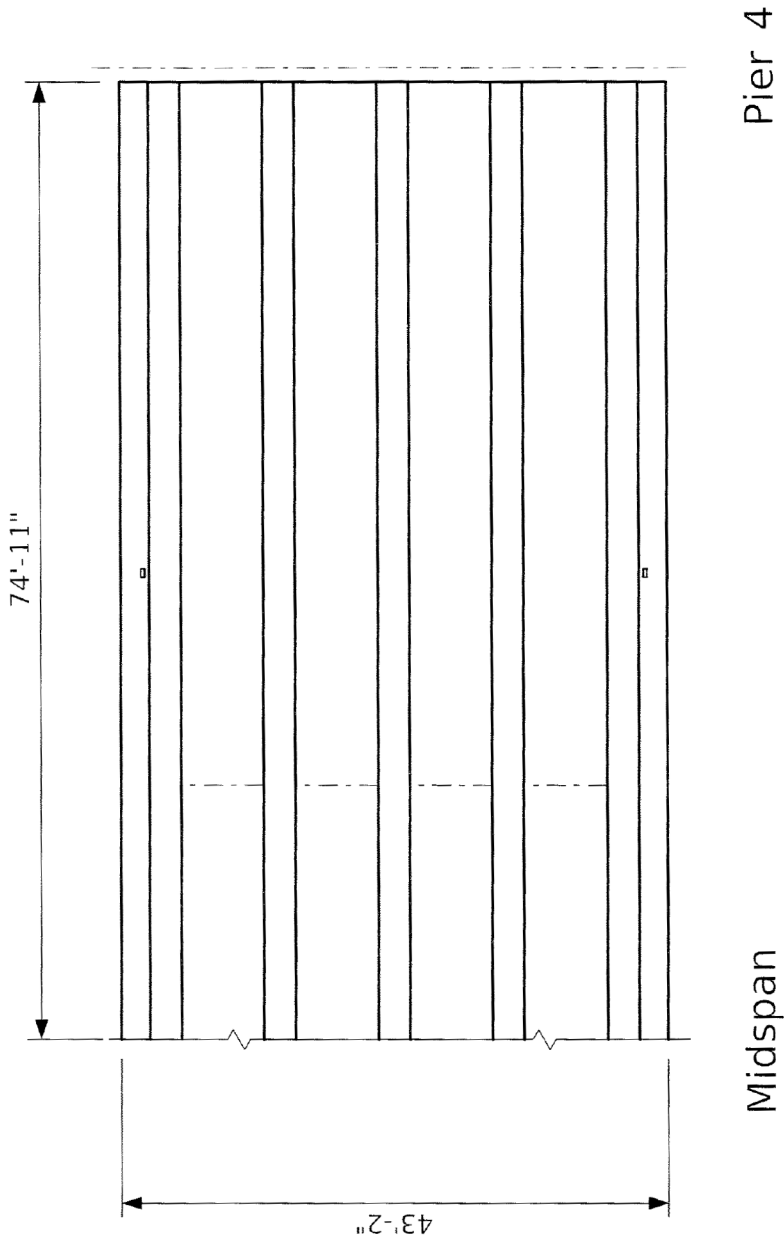
Linn County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 327Design Sheet No. 7 of 12FHWA No. 33471

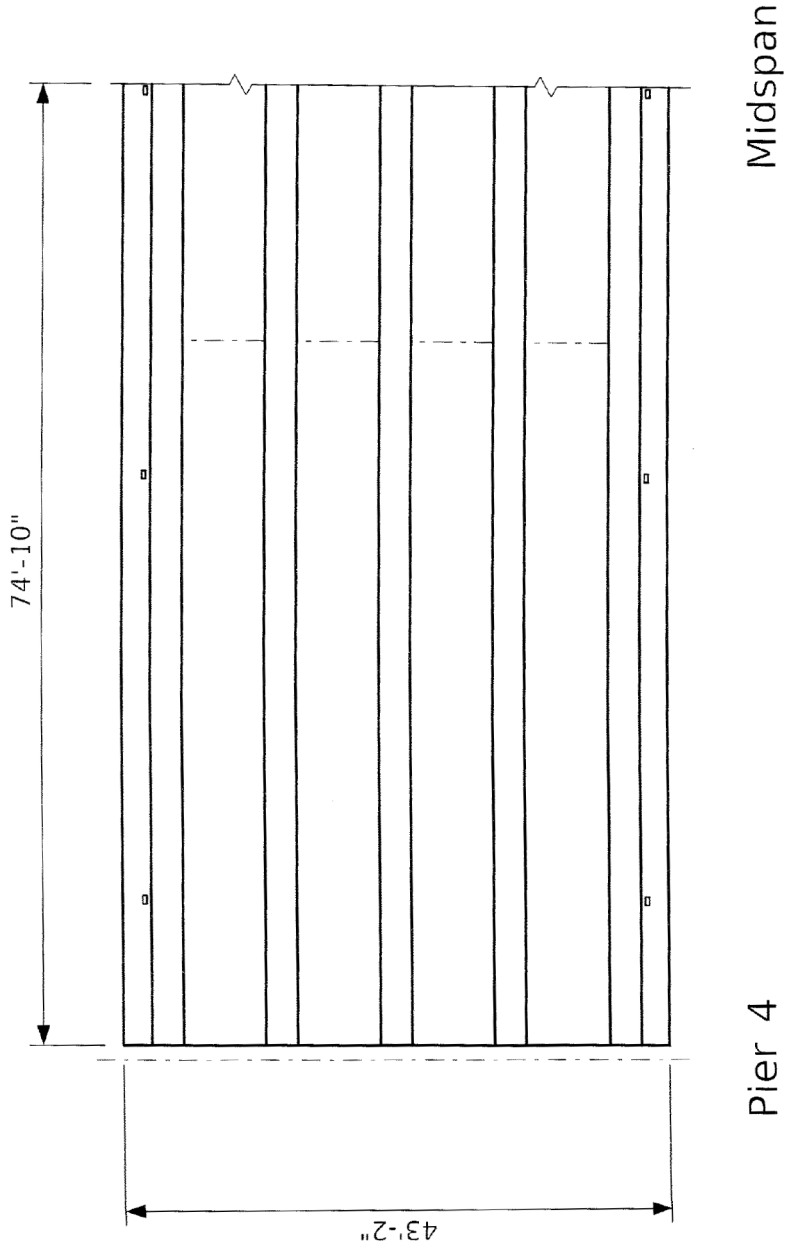


Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No.Bottom of Deck, Span 4		MH	NC	7-29-24	41



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Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 5		MH	NC	7-29-24	42

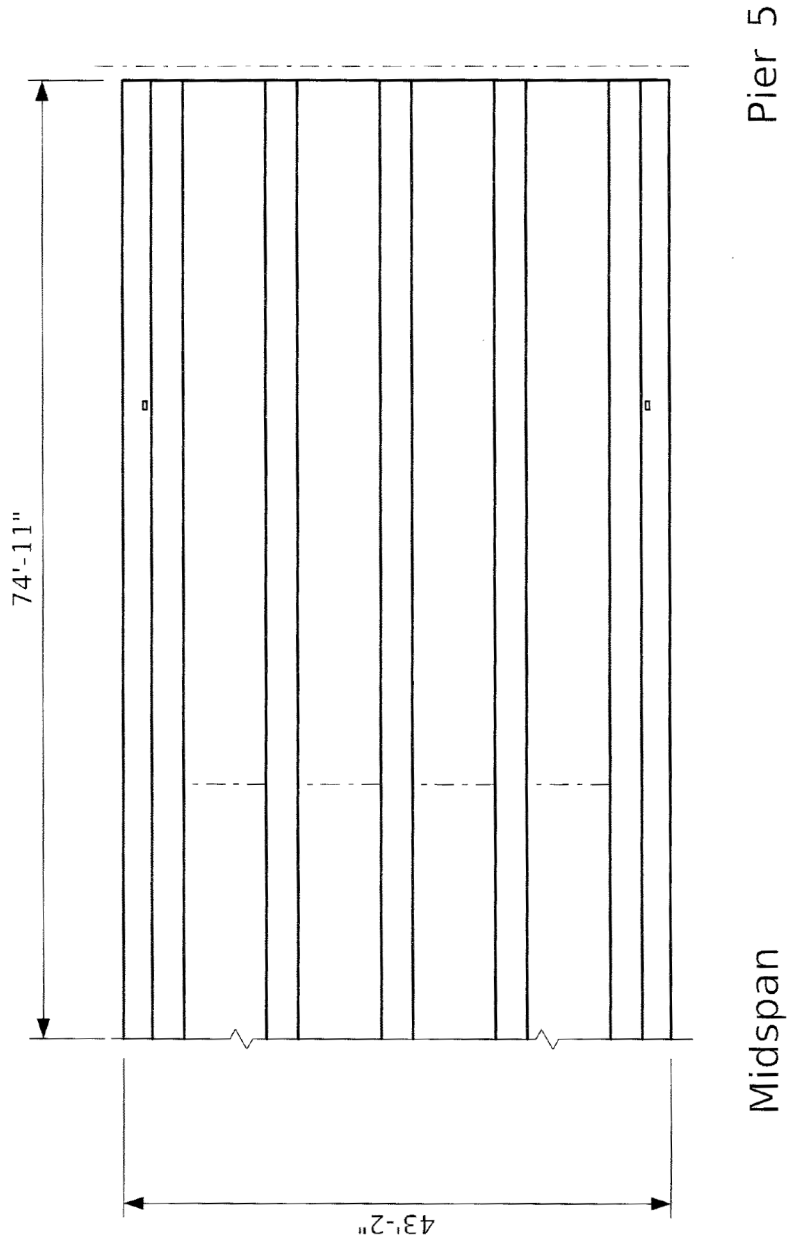


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Bottom of Deck Inspection Sketches  
(For Information Only)

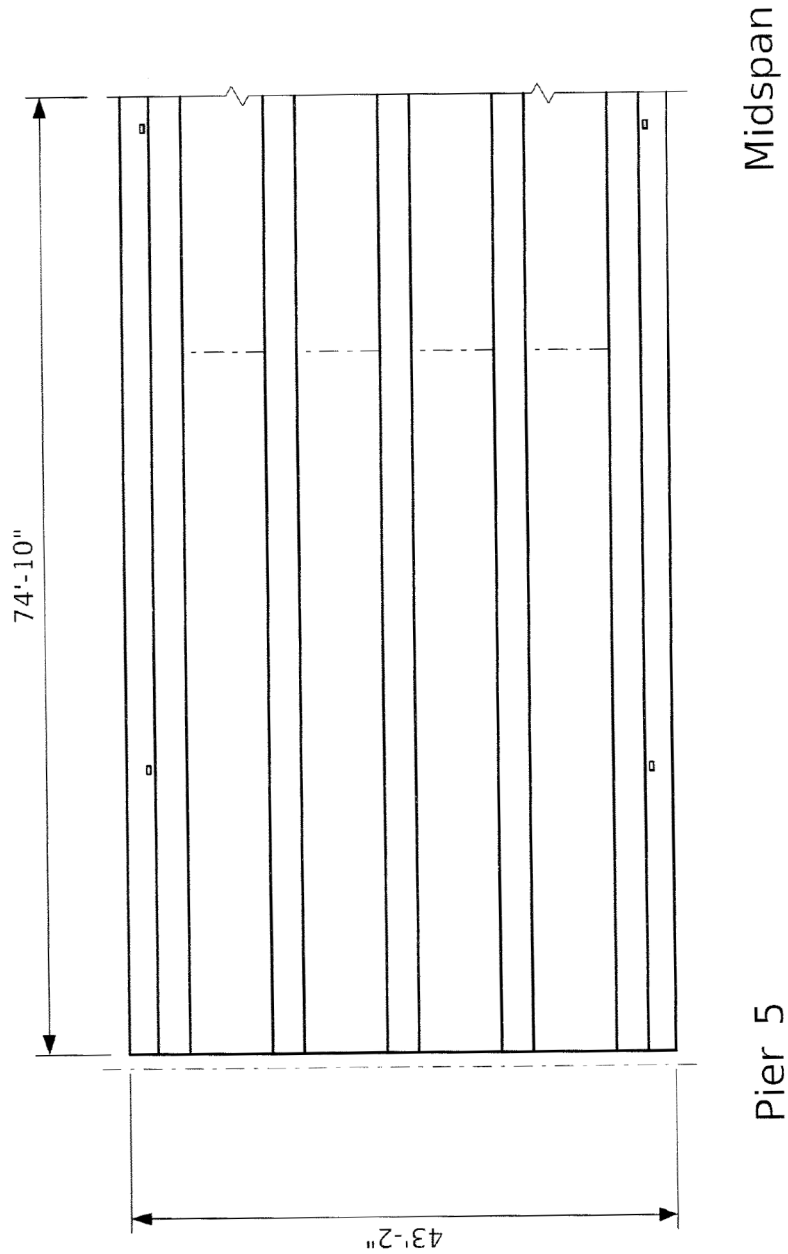
Design For Repair To 0 Degree Skew  
1134'-0" x 40'-0" Prestensioned  
Prestressed Concrete Beam Bridge  
111'-0" End Spans 152'-0" Interior Spans  
Inspection Sketches  
STA. 389+39.66 (E.B. US 30) Turn-In Date: May 2026  
Linn County  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 327 Design Sheet No. 8 of 12 FHWA No. 33471

Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No.Bottom of Deck, Span 5		MH	NL	7-29-24	43



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Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No.Bottom of Deck, Span 6		MH	NL	7-29-24	44

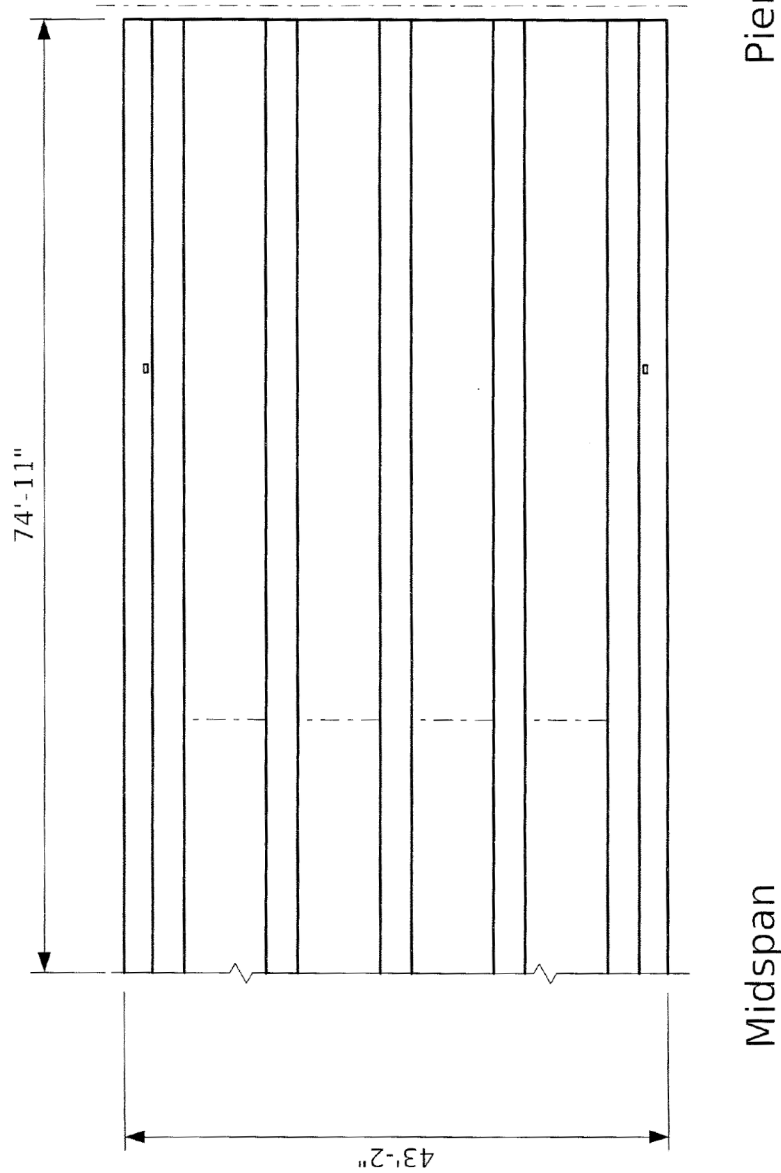


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Bottom of Deck Inspection Sketches  
(For Information Only)

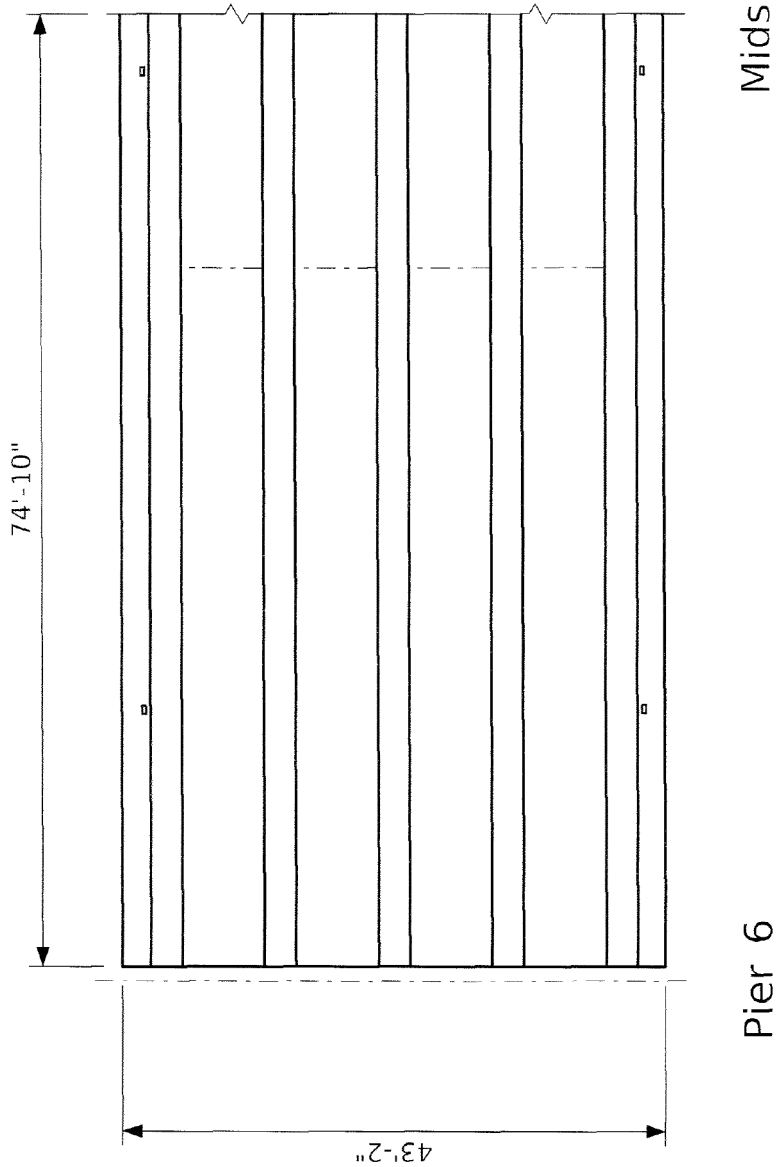
Design For Repair To 0 Degree Skew  
1134'-0" x 40'-0" Pretensioned  
Prestressed Concrete Beam Bridge  
111'-0" End Spans 152'-0" Interior Spans  
Inspection Sketches  
STA. 389+39.66 (E.B. US 30) Turn-in Date: May 2026  
Linn County  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 327 Design Sheet No. 9 of 12 FHWA No. 33471

Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 6		MH	NC	7-29-24	45



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Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 7		MH	NC	7-29-24	46



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Bottom of Deck Inspection Sketches  
(For Information Only)

Design For Repair To 0 Degree Skew

1134'-0" x 40'-0" Prestensioned  
Prestressed Concrete Beam Bridge

111'-0" End Spans152'-0" Interior Spans

Inspection Sketches

STA. 389+39.66 (E.B. US 30)Turn-in Date: May 2026

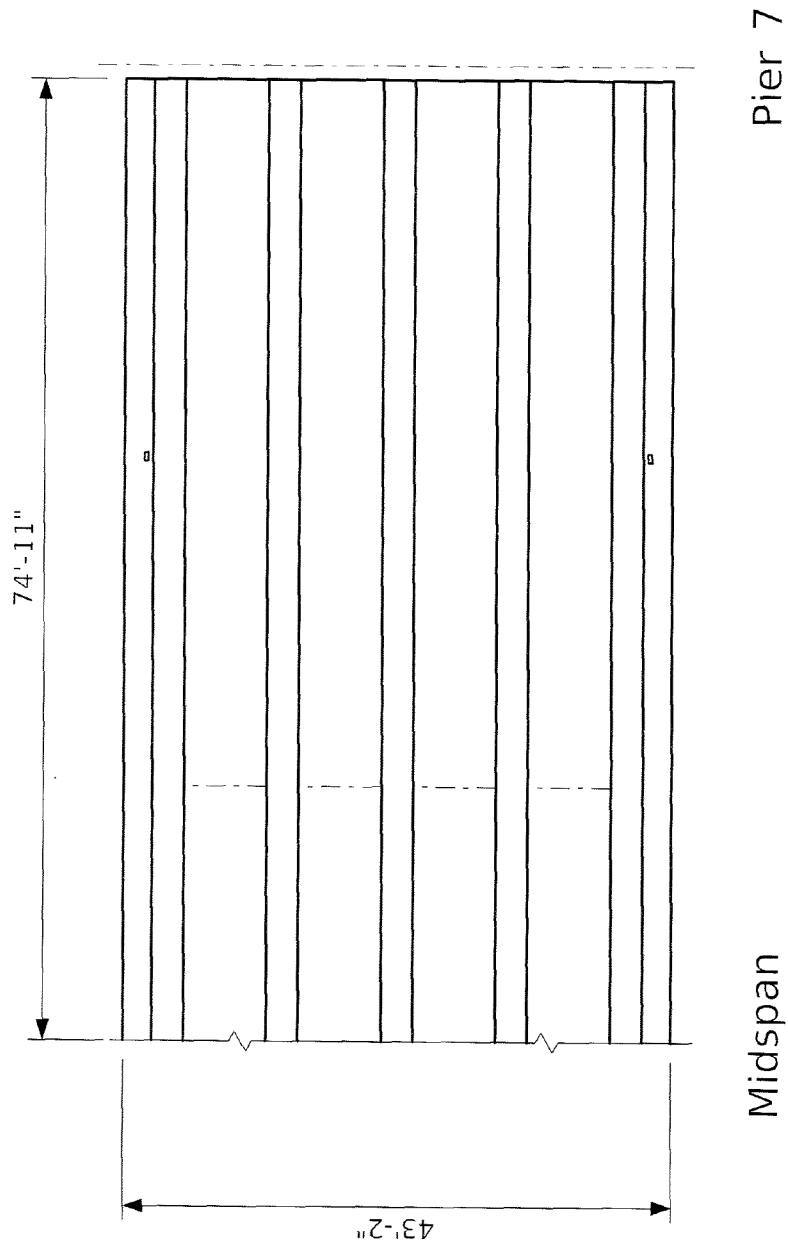
Linn County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 327Design Sheet No. 10 of 12FHWA No. 33471

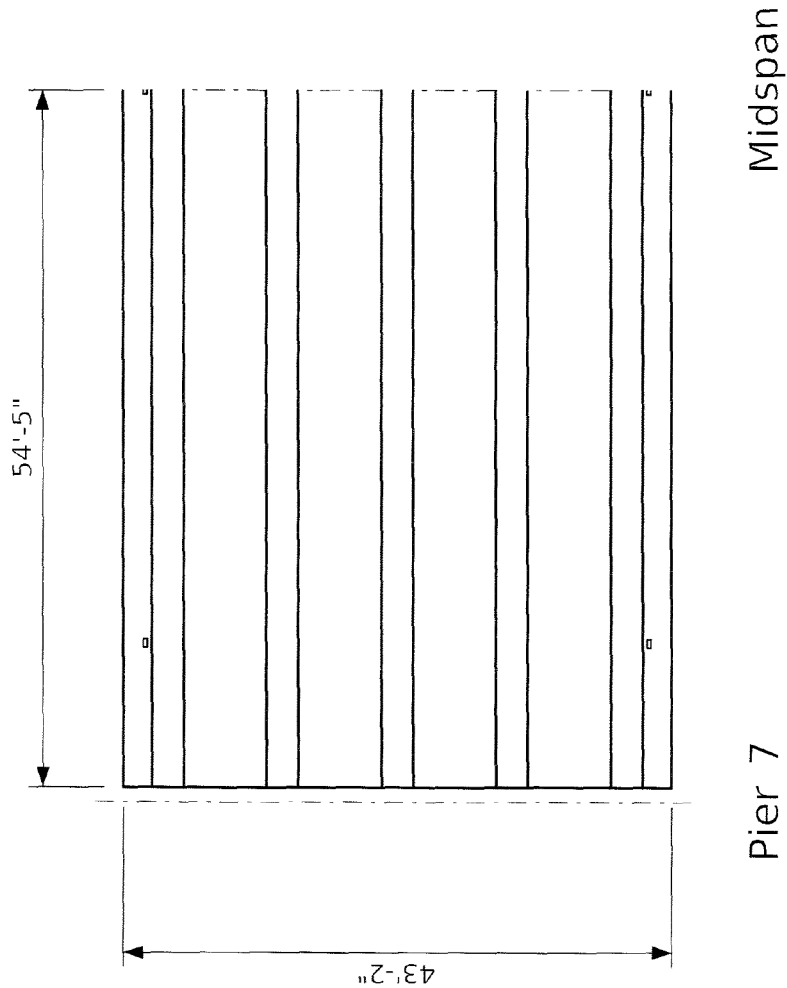


Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 7		M.H.	IVC	7-29-24	47



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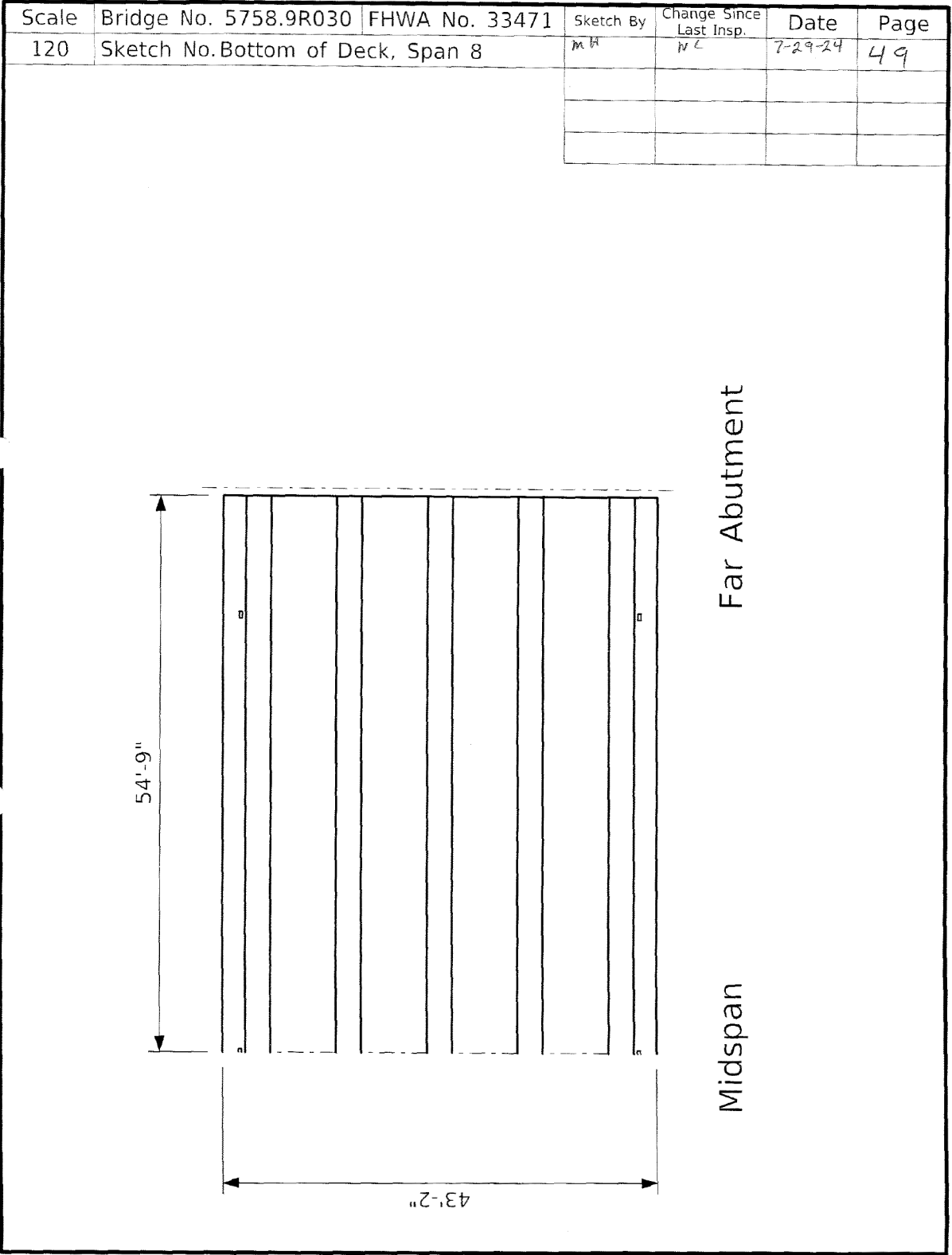
Scale	Bridge No. 5758.9R030	FHWA No. 33471	Sketch By	Change Since Last Insp.	Date	Page
120	Sketch No. Bottom of Deck, Span 8		MH	IVC	7-29-24	48



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**Bottom of Deck Inspection Sketches**  
(For Information Only)

Design For Repair To 0 Degree Skew  
**1134'-0" x 40'-0" Pretensioned**  
**Prestressed Concrete Beam Bridge**  
111'-0" End Spans 152'-0" Interior Spans  
**Inspection Sketches**  
STA. 389+39.66 (E.B. US 30) Turn-In Date: May 2026  
**Linn County**  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 327 Design Sheet No. 11 of 12 FHWA No. 33471



**Bottom of Deck Inspection Sketch**  
(For Information Only)

Design For Repair To 0 Degree Skew

1134'-0" x 40'-0" Prestensioned  
Prestressed Concrete Beam Bridge

111'-0" End Spans152'-0" Interior Spans

Inspection Sketches

STA. 389+39.66 (E.B. US 30)Turn-in Date: May 2026

Linn County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 327Design Sheet No. 12 of 12FHWA No. 33471

Estimate Bridge Repair Quantities and Reference Notes - Design #427					
Item No.	Item Code	Item	Unit	Quantities Estimated Design No. 427	Estimate Reference Notes
1	2533-4980005	MOBILIZATION	LS	1	----
2	2599-9999006	FURNISH HMWM BRIDGE DECK TREATMENT MATERIAL	GAL	49	Includes furnishing HMWM deck treatment in accordance with the application rates stated in the Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
3	2599-9999014	BRIDGE DECK SEALING, HMWM	SF	4140	Includes surface preparation and application of HMWM in accordance with Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
4	2599-9999014	BRIDGE RAIL SEALING	SF	836	Includes cleaning existing barriers, furnishing and placing concrete sealer in accordance with Article 2403.03,P,3, of the Standard Specifications.

General Notes:

This design is for repairs to the existing 100'-0" x 41'-0" Continuous Concrete Slab Bridge on N.B US 151 over Crabapple Creek. Electronic copies of original design plans are available to the Contractor as part of the e-files supplied with the contract documents.

See Design Sheet No. 2 for list of repair items.

All dimensions and details shown on these plans pertinent to new construction shall be verified in the field by the Contractor before starting construction.

Faint lines on plans indicate existing portions of the bridge.

Utility companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Bridge Contractor of the starting date.

The top and interior faces of the existing concrete railing are to be cleaned and sealed in accordance with Article 2403.03, P, of the Standard Specifications. If new sections of rail are constructed, the new sections shall not be sealed. All costs associated with cleaning and sealing of the concrete rails shall be included in the unit price bid item "Bridge Rail Sealing".

Construction shall be done in stages with at least one lane traffic maintained at all times in accordance with "Traffic Control Plan" note.

Construction Stages 1 & 2 as detailed on these plans may be reversed at the Contractor's option subject to the Engineer's approval.

Specifications:

Design:  
AASHTO Series of 2002.

Construction:

Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project, including:

- Special provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment

Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO Standard Specifications for Highway Bridges, Series of 2002.

Roadway Quantities shown elsewhere in these plans.

Traffic Control Plan

The roadway will be open to thru traffic. Refer to the Traffic Control Plan shown elsewhere in these plans.

Design History at this Site	
(Includes this Design)	
Des. No.	Type of Work
1059	Original Design
322	Bridge Replacement - CCS
427	Bridge Repair

Design For Repair To 30 Degree Skew RA

100'-0" x 41'-0" Continuous Concrete Slab Bridge

30'-6" End Spans39'-0" Interior Span

General Notes & Quantities

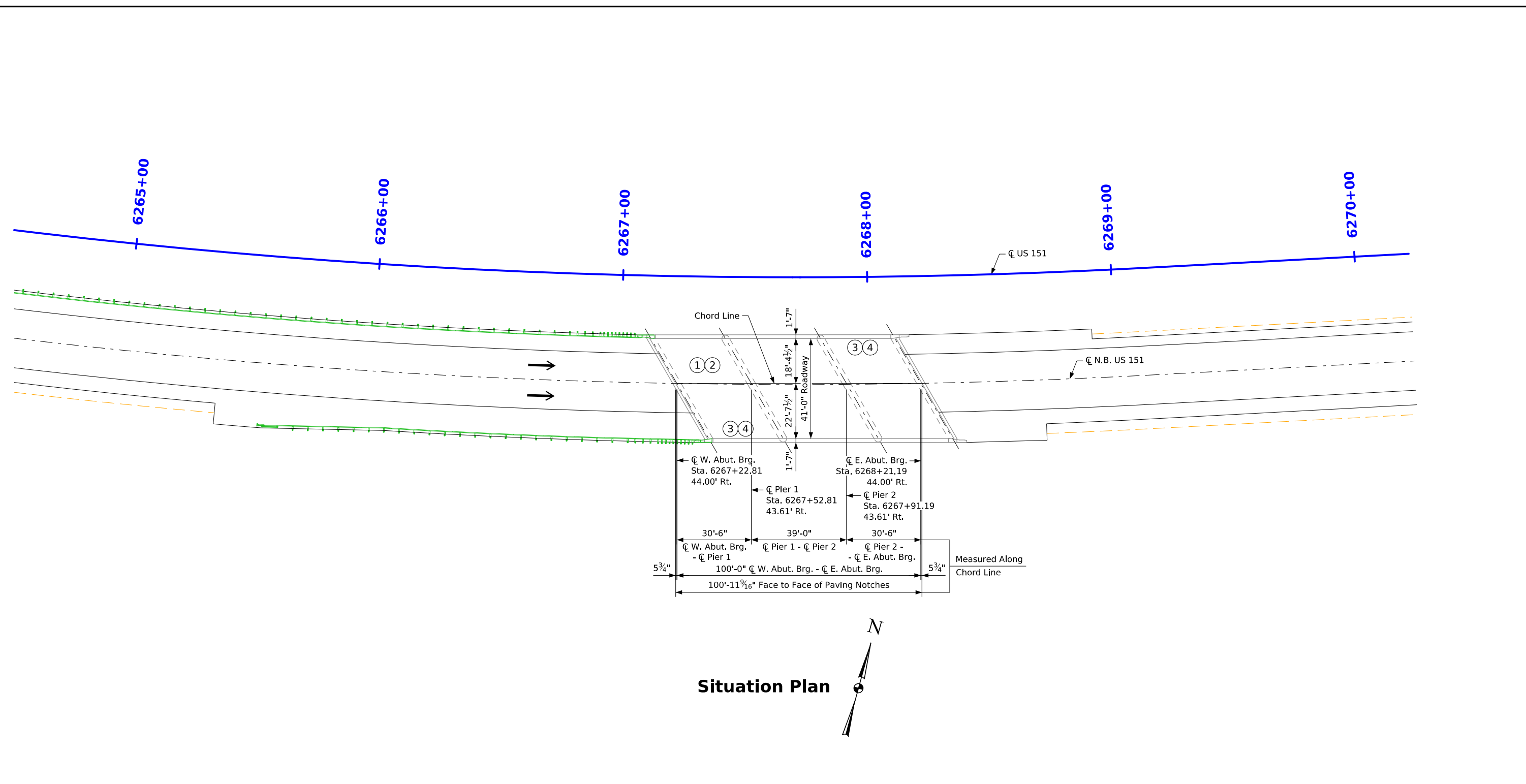
STA. 6267+72.00, 43.54' Rt. (N.B. US 151)Turn-in Date: May 2026

Linn County

IOWA DEPARTMENT OF TRANSPORTATION

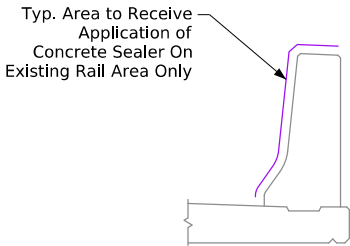
Design No. 427Design Sheet No. 1 of 4FHWA No. 33541





Repairs Shall Consist of:

- 1 Clean and prepare existing bridge slab.
- 2 Apply High Molecular Weight Methacrylate (HMWM) sealer to the existing bridge slab.
- 3 Clean and prepare existing barrier rails.
- 4 Apply sealer to the existing barrier rails.



Detail of Concrete Sealer Area

Traffic Estimate

2024 AADT	14,400 V.P.D.
2041 AADT	23,100 V.P.D.
TRUCKS	12 %

Location

N.B. US 151 over  
Crabapple Creek  
T-84N R-6W  
Section 36  
Marion Township  
Linn County  
FHWA No. 33541  
Bridge Maint. No. 5740.8R151  
Latitude 42.045683°  
Longitude -91.496389°

Design For Repair To 30 Degree Skew RA

100'-0" x 41'-0" Continuous Concrete Slab Bridge

30'-6" End Spans39'-0" Interior Span

Situation Plan

STA. 6267+72.00, 43.54' Rt. (N.B. US 151)Turn-in Date: May 2026


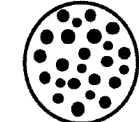
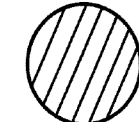

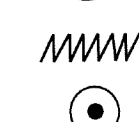

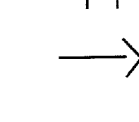

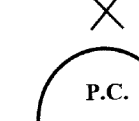

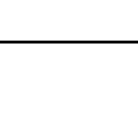


Linn County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 427Design Sheet No. 2 of 4FHWA No. 33541

IOWA DEPARTMENT OF TRANSPORTATION  
**LEGEND SHEET**

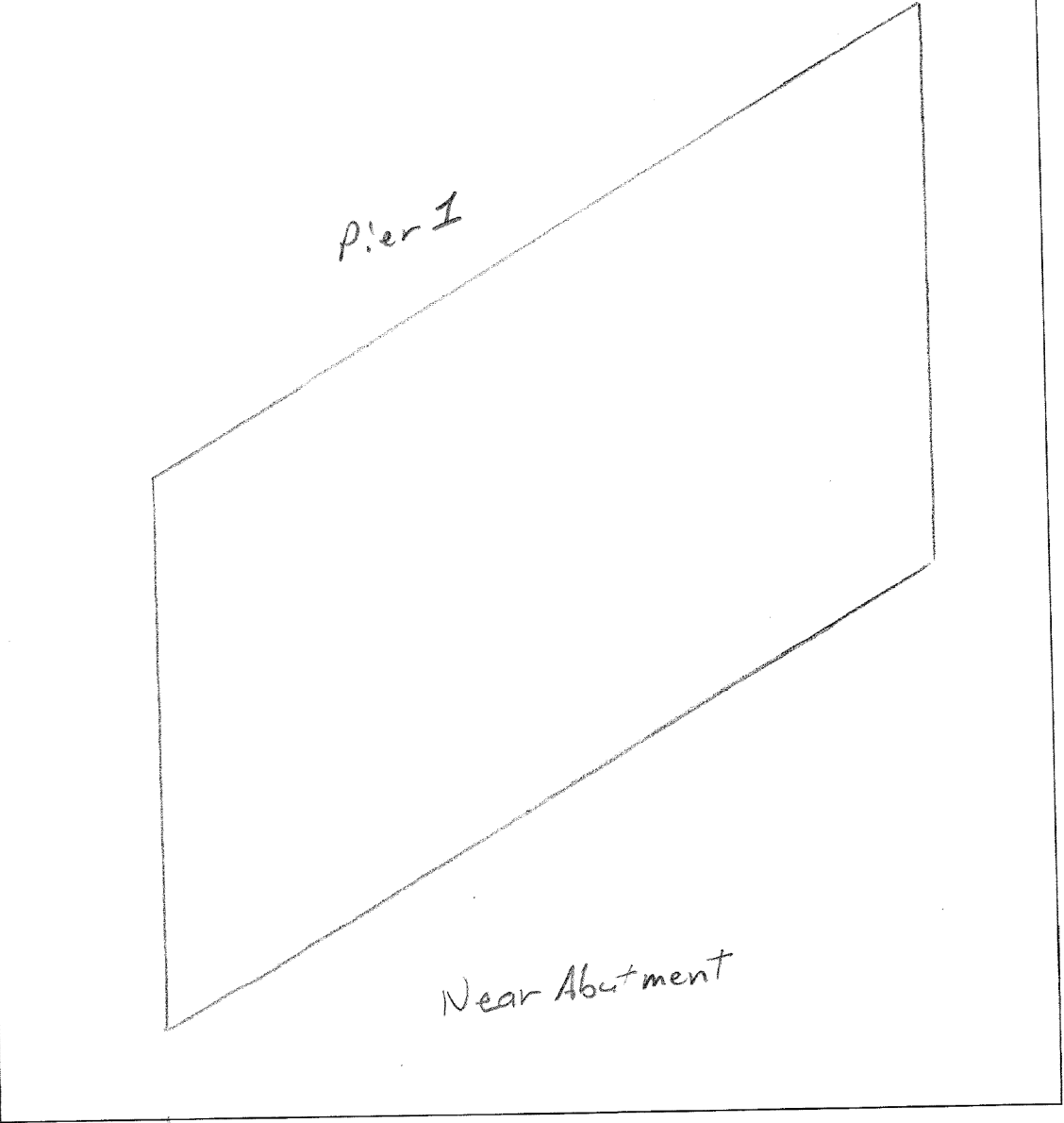
Bridge # 5740.8<sup>R</sup>151  
33541

-  A.C. Patches
-  Scaling (L,M,S)
-  Hollow (delaminations)
-  Spalled
-  Leaching (L, H)
-  Stalactite
-  Stain
-  Map Cracking
-  Reinforced Steel
-  Cracks (All Hairline or Noted)
-  Floor Drain
-  Bearing Location
-  P.C. Patches

NC – No Change  
MC – Minor Change  
Not → - Not Checked

Sketch by	Date	B1
Team 4	3-8-22	

Scale	Bridge No.	Sketch by	Change since last insp.	Date	Page
80	5740.8R151	MIT MC	Initial NC	3-8-22 3-4-24	B-14
	Sketch of: Bottom of Deck Span 1				B-
					B-



**Bottom of Slab Inspection Sketches**  
(For Information Only)

Note:  
Total estimated crack length on bottom of slab based on the 2024 inspection sketches is 0 L.F.  
This measurement is provided for information only.

Design For Repair To 30 Degree Skew RA  
**100'-0" x 41'-0" Continuous Concrete Slab Bridge**  
30'-6" End Spans 39'-0" Interior Span  
**Inspection Sketches**  
STA. 6267+72.00, 43.54' Rt. (N.B. US 151) Turn-in Date: May 2026  
**Linn County**  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 427 Design Sheet No. 3 of 4 FHWA No. 33541

Scale	Bridge No. 5740.8RL51	Sketch by	Change since last insp.	Date	Page
80	Sketch of: Bottom of Deck, Span 2	MH MC	Initial NC	3-8-22 3-4-24	B- 15
					B-
					B-

Pier 2

2022  
The Bottom  
of Deck is  
Sealed  
at the  
joints

Pier 1

Scale	Bridge No. 5740.8RL51	Sketch by	Change since last insp.	Date	Page
80	Sketch of: Bottom of Deck, Span 3	MH MC	Initial NC	3-8-22 3-4-24	B- 16
					B-
					B-

Far Abutment

Pier 2

Bottom of Slab Inspection Sketches  
(For Information Only)

Design For Repair To 30 Degree Skew RA  
100'-0" x 41'-0" Continuous  
Concrete Slab Bridge  
30'-6" End Spans 39'-0" Interior Span  
Inspection Sketches  
STA. 6267+72.00, 43.54' Rt. (N.B. US 151) Turn-in Date: May 2026  
Linn County  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 427 Design Sheet No. 4 of 4 FHWA No. 33541

Estimate Bridge Repair Quantities and Reference Notes - Design #527					
Item No.	Item Code	Item	Unit	Quantities Estimated Design No. 527	Estimate Reference Notes
1	2533-4980005	MOBILIZATION	LS	1	----
2	2599-9999006	FURNISH HMWM BRIDGE DECK TREATMENT MATERIAL	GAL	151	Includes furnishing HMWM deck treatment in accordance with the application rates stated in the Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
3	2599-9999014	BRIDGE DECK SEALING, HMWM	SF	12,801	Includes surface preparation and application of HMWM in accordance with Special Provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment.
4	2599-9999014	BRIDGE RAIL SEALING	SF	1862	Includes cleaning existing barriers, furnishing and placing concrete sealer in accordance with Article 2403.03,P,3, of the Standard Specifications.

General Notes:

This design is for repairs to the existing 209'-0" x 46'-0" Pretensioned Prestressed Concrete Beam Bridge with 14'-0" trail on US 151 over Prairie Creek. Electronic copies of original design plans are available to the Contractor as part of the e-files supplied with the contract documents.

See Design Sheet No. 2 for list of repair items.

All dimensions and details shown on these plans pertinent to new construction shall be verified in the field by the Contractor before starting construction.

Faint lines on plans indicate existing portions of the bridge.

Utility companies whose facilities are shown on the plans or known to be within the construction limits shall be notified by the Bridge Contractor of the starting date.

The top and interior faces of the existing concrete railing are to be cleaned and sealed in accordance with Article 2403.03, P, of the Standard Specifications. If new sections of rail are constructed, the new sections shall not be sealed. All costs associated with cleaning and sealing of the concrete rails shall be included in the unit price bid item "Bridge Rail Sealing".

Construction shall be done in stages with at least one lane traffic maintained at all times in accordance with "Traffic Control Plan" note.

Construction Stages 1 & 2 as detailed on these plans may be reversed at the Contractor's option subject to the Engineer's approval.

Specifications:

Design:  
AASHTO Series of 2002.

Construction:

Iowa Department of Transportation Standard Specifications for Highway and Bridge Construction, Series 2023, plus applicable General Supplemental Specifications, Developmental Specifications, Supplemental Specifications and Special Provisions shall apply to construction work on this project, including:

- Special provisions for High Molecular Weight Methacrylate Resin Bridge Deck Treatment

Design Stresses:

Design stresses for the following materials are in accordance with the AASHTO Standard Specifications for Highway Bridges, Series of 2002.

Roadway Quantities shown elsewhere in these plans.

Traffic Control Plan

The roadway will be open to thru traffic. Refer to the Traffic Control Plan shown elsewhere in these plans.

Design History at this Site	
(Includes this Design)	
Des. No.	Type of Work
1060	Original Design
518	Bridge Replacement - PPCB
527	Bridge Repair

Design For Repair To 30 Degree Skew RA

209'-0"x46'-0" Pretensioned Prestressed Concrete Beam Bridge with 14'-0" Trail

66'-0" End Spans77'-0" Interior Span

General Notes & Quantities

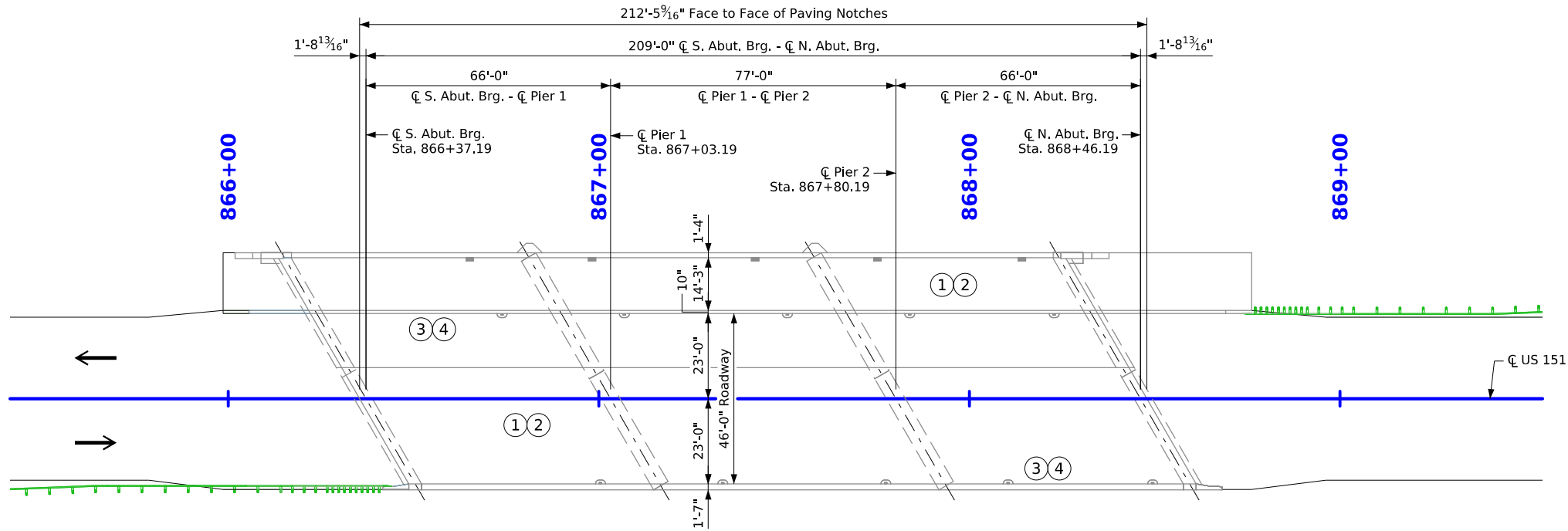
STA. 867+41.69 (US 151)Turn-in Date: May 2026

Linn County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 527Design Sheet No. 1 of 4FHWA No. 33781

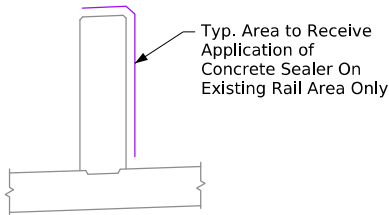




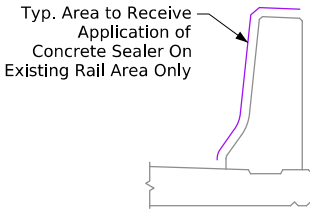
Situation Plan

Repairs Shall Consist of:

- 1 Clean and prepare existing bridge deck and trail surface.
- 2 Apply High Molecular Weight Methacrylate (HMWM) sealer to the existing bridge deck and trail surface.
- 3 Clean and prepare the existing separation and east barrier rails, traffic face only.
- 4 Apply sealer to the existing separation and east barrier rails, traffic face only.



Detail of Concrete Sealer Area (Separation Barrier Rail)



Detail of Concrete Sealer Area (East Barrier Rail)

Traffic Estimate

2024 AADT	8000	V.P.D.
2040 AADT	12,010	V.P.D.
2040 DHV	1255	V.P.H.
TRUCKS	7	%

Location

US 151 over Prairie Creek  
T-82N R-8W  
Section 9  
Fairfax Township  
Linn County  
FHWA No. 33781  
Bridge Maint. No. 5722.0S151  
Latitude 41.923186°  
Longitude -91.783847°

Design For Repair To 30 Degree Skew RA  
209'-0"x46'-0" Pretensioned Prestressed Concrete Beam Bridge with 14'-0" Trail  
66'-0" End Spans 77'-0" Interior Span

Situation Plan

STA. 867+41.69 (US 151)

Turn-in Date: May 2026

Linn County


IOWA DEPARTMENT OF TRANSPORTATION

Design No. 527

Design Sheet No. 2 of 4

FHWA No. 33781

## LEGEND SHEET



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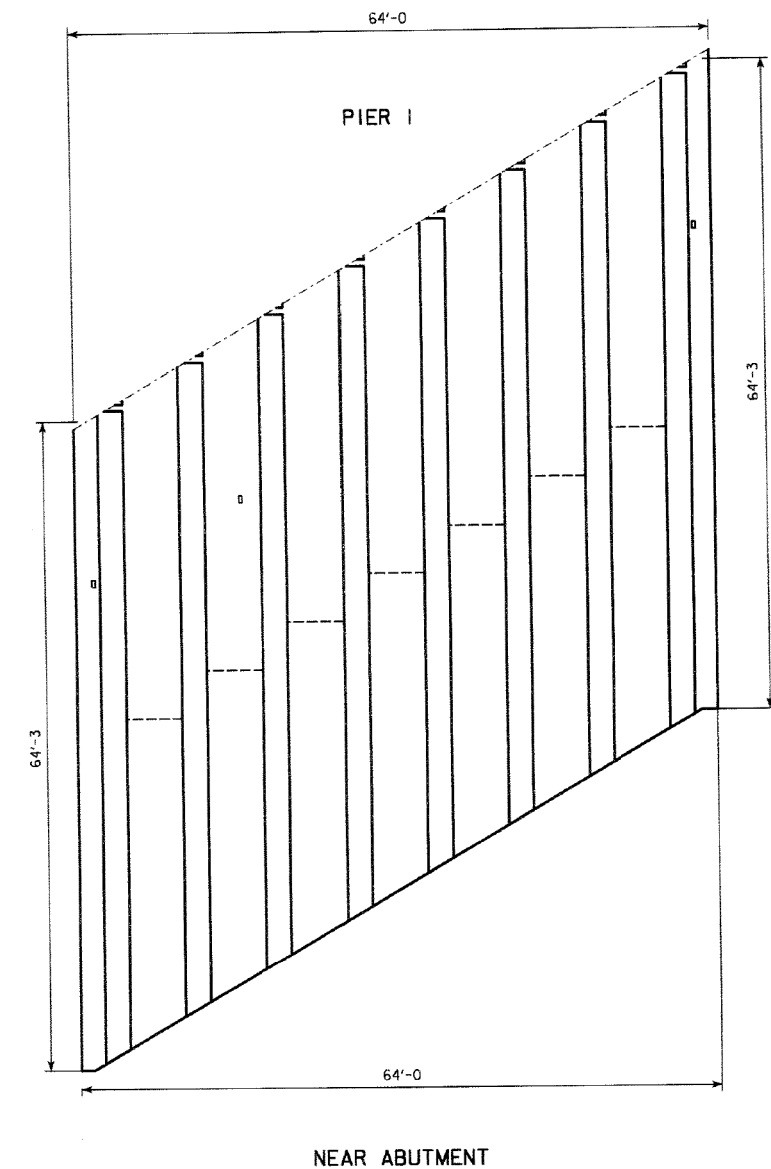
X

P.C.

NC – No Change  
MC – Minor Change  
Not → - Not Checked

[illegible]

SCALE	BRIDGE NO. 5722.0S151	SKETCH BY	CHANGE SINCE LAST INSP.	DATE	PAGE
150	FHWA NO. 33781	ML	ML	7-3-24	12
	SKETCH OF: BOTTOM OF DECK - SPAN 1				



(For Information Only)

Note:  
Total estimated crack length on bottom of deck  
based on the 2024 inspection sketches is 0 L.F.  
This measurement is provided for information only.

Design For Repair To 30 Degree Skew RA

209'-0"x46'-0" Pretensioned Prestressed  
Concrete Beam Bridge with 14'-0" Trail  
66'-0" End Spans 77'-0" Interior Span

## Inspection Sketches

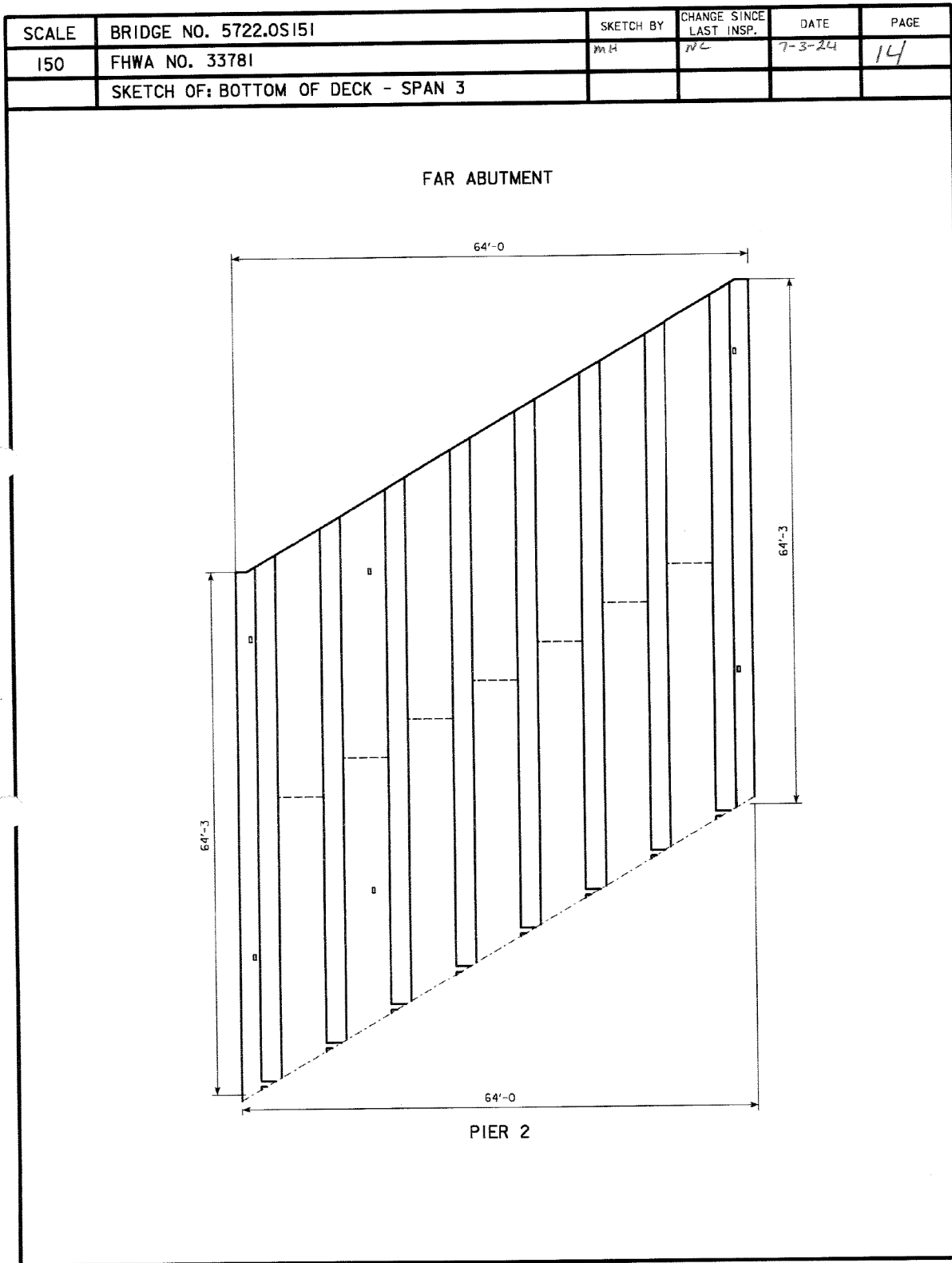
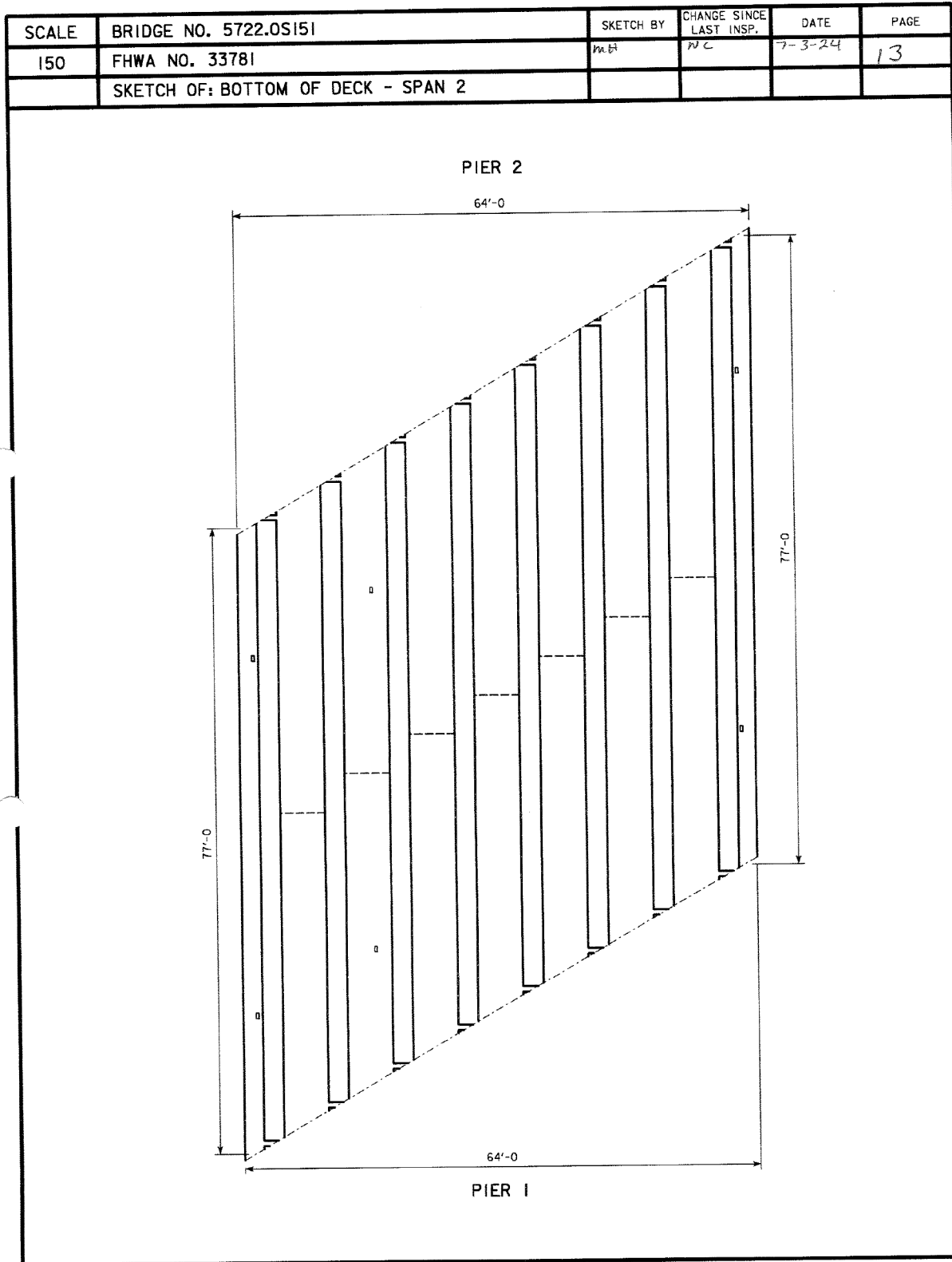
STA. 867+41.69 (US 151)	Turn-in Date: May 2026
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Linn County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 527      Design Sheet No. 3 of 4      FHWA No. 33781

FILE NO. 32889	ENGLISH	DESIGN TEAM Foth	Linn COUNTY	PROJECT NUMBER BRFN-000-T(460)--39-00	SHEET NUMBER V.40
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**Bottom of Deck Inspection Sketches**  
(For Information Only)


Design For Repair To 30 Degree Skew RA  
209'-0"x46'-0" Pretensioned Prestressed  
Concrete Beam Bridge with 14'-0" Trail  
66'-0" End Spans 77'-0" Interior Span  
Inspection Sketches  
STA. 867+41.69 (US 151) Turn-In Date: May 2026  
Linn County  
IOWA DEPARTMENT OF TRANSPORTATION  
Design No. 527 Design Sheet No. 4 of 4 FHWA No. 33781

Index of Sheets	
No.	Description
A Sheets	Title Sheets
A.10	Roadway Design Seal
C Sheets	Quantities and General Information
C.1	Estimated Project Quantities - Overall Project Totals
C.2	Estimated Road Quantities - Tama Design 327
C.3	Estimated Road Quantities - Butler Design 127
C.4	Estimated Road Quantities - Cerro Gordo Design 427
C.5	Estimated Road Quantities - Wright Design 127
C.6	Estimated Road Quantities - Benton Design 427
C.7	Estimated Road Quantities - Linn Design 327
C.8	Estimated Road Quantities - Linn Design 427
C.9	Estimated Road Quantities - Linn Design 527
J Sheets	Traffic Control and Staging Sheets
J.1	Traffic Control and Staging - Tama Design 327
J.2	Traffic Control and Staging - Butler Design 127
J.3	Traffic Control and Staging - Cerro Gordo 427
J.4	Traffic Control and Staging - Wright Design 127
J.5	Traffic Control and Staging - Benton Design 427
J.6	Traffic Control and Staging - Linn Design 327
J.7	Traffic Control and Staging - Linn Design 427
J.8 - J.11	Traffic Control and Staging - Linn Design 527

ROADWAY DESIGN



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.



Signature

04-20-2026

Date

JORDAN PROVOST

Printed or Typed Name

My license renewal date is December 31, 2026

Pages or sheets covered by this seal: A.10, C.1-C.9, J.1-J.11



ESTIMATED PROJECT QUANTITIES														100-01C Modified
Item No.	Item Code	Item	Unit	Quantities										
				Tama 327	Butler 127	Cerro Gordo 427	Wright 127	Benton 427	Linn 327	Linn 427	Linn 527	Total	As Built	
1	2527-9263181	PAVEMENT MARKINGS REMOVED	STA		41.52	17.98	14.72					74.22		
2	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	3.38	41.52	17.98	14.72	2.03	25.52	2.25	9.41	116.81		
3	2527-9263231	REMOVABLE TAPE MARKINGS, WET RETROREFLECTIVE	STA		0.96	0.96	0.96				0.96	3.84		
4	2528-8400256	TEMPORARY TRAFFIC SIGNALS	EA		1	1	1				1	4		
5	2528-8445110	TRAFFIC CONTROL	LS	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125	1		
6	2528-8445113	FLAGGERS	EA		8	8	8					24		

PROJECT DESCRIPTION - TAMA 327					100-01D Modified
This project is for the roadway plans for the bridge repair and the associated traffic control for WB US 30 over Iowa River East Overflow 0.6 miles west of Co. Rd. T47 in Tama County.					

ESTIMATED PROJECT QUANTITES						100-01A Modified
Item No.	Item Code	Item	Unit	Total	As-Built Quantity	
1	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	3.38		
2	2528-8445110	TRAFFIC CONTROL	LS	0.125		

STANDARDS			105-04 Modified
The following Standards apply to construction work on this project.			
NUMBER	DATE	TITLE	
PM-110	10-15-24	Line Types	
SI-881	04-16-19	Special Signs for Workzones	
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)	
TC-402	04-18-23	Work Within 15 ft of Traveled Way	
TC-418	04-18-23	Lane Closure on Divided Highway	
TC-433	10-17-17	Pavement Marking Operations	

INDEX OF TABULATIONS			111-25 Modified
Tabulation	Tabulation Title	Sheet No.	
C Sheets			
100-1A	Estimated Project Quantities	C.2	
100-1D	Project Description	C.2	
105-4	Standard Road Plans	C.2	
108-22	Pavement Marking Line Types	C.2	
111-25	Index of Tabulations	C.2	
J Sheets			
108-23A	Traffic Control Plan	J.1	
108-26A	Staging Notes	J.1	

PAVEMENT MARKING LINE TYPES										108-22 Modified
Road Identification	Station		Direction Of Travel	Side	Marking Type	Length	Line Type	Factor	Factored Quantity	Remarks
	Begin	End				STA				
WB US 30	449+08.00	450+58.00	WB	Center	Waterborne/Solvent Paint	1.5	Broken Lane Line White (BLW6)	0.25	0.38	
WB US 30	449+08.00	450+58.00	WB	Left	Waterborne/Solvent Paint	1.5	Edge Line Left Yellow (ELY6)	1.00	1.5	
WB US 30	449+08.00	450+58.00	WB	Right	Waterborne/Solvent Paint	1.5	Edge Line Right White (ELW6)	1.00	1.5	
								TOTAL	3.38	



PROJECT DESCRIPTION - CERRO GORDO 427					100-01D Modified
This project is for the roadway plans for the bridge repair and the associated traffic control for US 65 over East Branch Beaverdam Creek, 0.7 miles south of Co. Rd. B60 in Cerro Gordo County.					

ESTIMATED PROJECT QUANTITES						100-01A Modified
Item No.	Item Code	Item	Unit	Total	As-Built Quantity	
1	2527-9263181	PAVEMENT MARKINGS REMOVED	STA	17.98		
2	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	17.98		
3	2527-9263231	REMOVABLE TAPE MARKINGS, WET RETROREFLECTIVE	STA	0.96		
4	2528-8400256	TEMPORARY TRAFFIC SIGNALS	EA	1		
5	2528-8445110	TRAFFIC CONTROL	LS	0.125		
6	2528-8445113	FLAGGERS	EA	8		

STANDARDS			105-04 Modified
The following Standards apply to construction work on this project.			
NUMBER	DATE	TITLE	
PM-110	10-15-24	Line Types	
SI-881	04-16-19	Special Signs for Workzones	
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)	
TC-213	04-18-23	Lane Closure with Flaggers	
TC-216	04-18-23	Lane Closure with Signals	
TC-233	10-17-17	Pavement Marking Operations Two-Lane	

INDEX OF TABULATIONS			111-25 Modified
Tabulation	Tabulation Title	Sheet No.	
C Sheets			
100-1A	Estimated Project Quantities	C.4	
100-1D	Project Description	C.4	
105-4	Standard Road Plans	C.4	
108-22	Pavement Marking Line Types	C.4	
111-25	Index of Tabulations	C.4	
J Sheets			
108-23A	Traffic Control Plan	J.3	
108-26A	Staging Notes	J.3	
108-28	Temporary Traffic Signals	J.3	

PAVEMENT MARKING LINE TYPES											108-22 Modified
Road Identification	Station		Direction Of Travel	Side	Marking Type	Length	Line Type	Factor	Factored Quantity	Remarks	
	Begin	End				STA					
US 65	120+05.00	122+50.00	Both	Center	Waterborne/Solvent Paint	2.45	No Passing Zone Line Yellow (NPY6)	1.25	3.06	Pavement Marking Removal Limits, per TC-216	
US 65	122+50.00	126+95.00	Both	Center	Waterborne/Solvent Paint	4.45	Broken Centerline Yellow (BCY6)	0.25	1.11	Pavement Marking Removal Limits, per TC-216	
US 65	120+05.00	126+95.00	SB	Left	Waterborne/Solvent Paint	6.90	Edge Line Right White (ELW6)	1.00	6.90	Pavement Marking Removal Limits, per TC-216	
US 65	120+05.00	126+95.00	NB	Right	Waterborne/Solvent Paint	6.90	Edge Line Right White (ELW6)	1.00	6.90	Pavement Marking Removal Limits, per TC-216	
US 65	120+05.00		NB		Wet Retroreflective Removable Tape	0.12	Stop Line White (SLW2)	4.00	0.48	Temporary Stop Bar, per TC-216	
US 65	126+95.00		SB		Wet Retroreflective Removable Tape	0.12	Stop Line White (SLW2)	4.00	0.48	Temporary Stop Bar, per TC-216	
								TOTAL	17.98	Pavement Markings Removed	
									17.98	Waterborne/Solvent Paint	
									0.96	Removable Tape Markings, Wet Retroreflective	

CERRO GORDO 427





PROJECT DESCRIPTION - BENTON 427					100-01D Modified
This project is for the roadway plans for the bridge repair and the associated traffic control for EB US 30 over unnamed stream, 1.2 miles west of Co. Rd. V66 in Benton County.					

ESTIMATED PROJECT QUANTITIES						100-01A Modified
Item No.	Item Code	Item	Unit	Total	As-Built Quantity	
1	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	2.03		
2	2528-8445110	TRAFFIC CONTROL	LS	0.125		

STANDARDS			105-04 Modified
The following Standards apply to construction work on this project.			
NUMBER	DATE	TITLE	
PM-110	10-15-24	Line Types	
SI-881	04-16-19	Special Signs for Workzones	
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)	
TC-402	04-18-23	Work Within 15 ft of Traveled Way	
TC-418	04-18-23	Lane Closure on Divided Highway	
TC-433	10-17-17	Pavement Marking Operations	

INDEX OF TABULATIONS			111-25 Modified
Tabulation	Tabulation Title	Sheet No.	
C Sheets			
100-1A	Estimated Project Quantities	C.6	
100-1D	Project Description	C.6	
105-4	Standard Road Plans	C.6	
108-22	Pavement Marking Line Types	C.6	
111-25	Index of Tabulations	C.6	
J Sheets			
108-23A	Traffic Control Plan	J.5	
108-26A	Staging Notes	J.5	

PAVEMENT MARKING LINE TYPES										108-22 Modified
Road Identification	Station		Direction Of Travel	Side	Marking Type	Length	Line Type	Factor	Factored Quantity	Remarks
	Begin	End				STA				
EB US 30	1256+41.00	1257+31.00	WB	Center	Waterborne/Solvent Paint	0.9	Broken Lane Line White (BLW6)	0.25	0.23	
EB US 30	1256+41.00	1257+31.00	WB	Left	Waterborne/Solvent Paint	0.9	Edge Line Left Yellow (ELY6)	1.00	0.90	
EB US 30	1256+41.00	1257+31.00	WB	Right	Waterborne/Solvent Paint	0.9	Edge Line Right White (ELW6)	1.00	0.90	
								TOTAL	2.03	

PROJECT DESCRIPTION - LINN 327					100-01D Modified
This project is for the roadway plans for the bridge repair and the associated traffic control for EB US 30 over Cedar River, 0.5 miles west of east Junction US 151 in Linn County.					

ESTIMATED PROJECT QUANTITES						100-01A Modified
Item No.	Item Code	Item	Unit	Total	As-Built Quantity	
1	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	25.52		
2	2528-8445110	TRAFFIC CONTROL	LS	0.125		

STANDARDS			105-04 Modified
The following Standards apply to construction work on this project.			
NUMBER	DATE	TITLE	
PM-110	10-15-24	Line Types	
SI-881	04-16-19	Special Signs for Workzones	
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)	
TC-402	04-18-23	Work Within 15 ft of Traveled Way	
TC-418	04-18-23	Lane Closure on Divided Highway	
TC-433	10-17-17	Pavement Marking Operations	

INDEX OF TABULATIONS			111-25 Modified
Tabulation	Tabulation Title	Sheet No.	
C Sheets			
100-1A	Estimated Project Quantities	C.7	
100-1D	Project Description	C.7	
105-4	Standard Road Plans	C.7	
108-22	Pavement Marking Line Types	C.7	
111-25	Index of Tabulations	C.7	
J Sheets			
108-23A	Traffic Control Plan	J.6	
108-23B	Traffic Control Closure Table	J.6	
108-26A	Staging Notes	J.6	

PAVEMENT MARKING LINE TYPES											108-22 Modified
Road Identification	Station		Direction Of Travel	Side	Marking Type	Length	Line Type	Factor	Factored Quantity	Remarks	
	Begin	End				STA					
EB US 30	383+72.66	395+06.66	EB	Center	Waterborne/Solvent Paint	11.34	Broken Lane Line White (BLW6)	0.25	2.84		
EB US 30	383+72.66	395+06.66	EB	Left	Waterborne/Solvent Paint	11.34	Edge Line Left Yellow (ELY6)	1.00	11.34		
EB US 30	383+72.66	395+06.66	EB	Right	Waterborne/Solvent Paint	11.34	Edge Line Right White (ELW6)	1.00	11.34		
								TOTAL	25.52		

PROJECT DESCRIPTION - LINN 427					100-01D Modified
This project is for the roadway plans for the bridge repair and the associated traffic control for NB US 151 over Crabapple Creek, 2.9 miles north of north Junction IA 13 in Linn County.					

ESTIMATED PROJECT QUANTITES					100-01A Modified
Item No.	Item Code	Item	Unit	Total	As-Built Quantity
1	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	2.25	
2	2528-8445110	TRAFFIC CONTROL	LS	0.125	

STANDARDS			105-04 Modified
The following Standards apply to construction work on this project.			
NUMBER	DATE	TITLE	
PM-110	10-15-24	Line Types	
SI-881	04-16-19	Special Signs for Workzones	
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)	
TC-402	04-18-23	Work Within 15 ft of Traveled Way	
TC-418	04-18-23	Lane Closure on Divided Highway	
TC-433	10-17-17	Pavement Marking Operations	

INDEX OF TABULATIONS			111-25 Modified
Tabulation	Tabulation Title	Sheet No.	
C Sheets			
100-1A	Estimated Project Quantities	C.8	
100-1D	Project Description	C.8	
105-4	Standard Road Plans	C.8	
108-22	Pavement Marking Line Types	C.8	
111-25	Index of Tabulations	C.8	
J Sheets			
108-23A	Traffic Control Plan	J.7	
108-26A	Staging Notes	J.7	

PAVEMENT MARKING LINE TYPES										108-22 Modified
Road Identification	Station		Direction Of Travel	Side	Marking Type	Length	Line Type	Factor	Factored Quantity	Remarks
	Begin	End				STA				
NB US 151	6267+22.00	6268+22.00	NB	Center	Waterborne/Solvent Paint	1.00	Broken Lane Line White (BLW6)	0.25	0.25	
NB US 151	6267+22.00	6268+22.00	NB	Left	Waterborne/Solvent Paint	1.00	Edge Line Left Yellow (ELY6)	1.00	1.00	
NB US 151	6267+22.00	6268+22.00	NB	Right	Waterborne/Solvent Paint	1.00	Edge Line Right White (ELW6)	1.00	1.00	
								TOTAL	2.25	

LINN 427

PROJECT DESCRIPTION - LINN 527					100-01D Modified
This project is for the roadway plans for the bridge repair and the associated traffic control for US 151 over Prairie Creek, 3.0 miles south of US 30 junction in Linn County.					

ESTIMATED PROJECT QUANTITES						100-01A Modified
Item No.	Item Code	Item	Unit	Total	As-Built Quantity	
1	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	9.41		
2	2527-9263231	REMOVABLE TAPE MARKINGS, WET RETROREFLECTIVE	STA	0.96		
3	2528-8400256	TEMPORARY TRAFFIC SIGNALS	EA	1		
4	2528-8445110	TRAFFIC CONTROL	LS	0.125		

STANDARDS			105-04 Modified
The following Standards apply to construction work on this project.			
NUMBER	DATE	TITLE	
PM-110	10-15-24	Line Types	
SI-881	04-16-19	Special Signs for Workzones	
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)	
TC-216	04-18-23	Lane Closure with Signals	
TC-233	10-17-17	Pavement Marking Operations Two-Lane	

INDEX OF TABULATIONS			111-25 Modified
Tabulation	Tabulation Title	Sheet No.	
C Sheets			
100-1A	Estimated Project Quantities	C.9	
100-1D	Project Description	C.9	
105-4	Standard Road Plans	C.9	
108-22	Pavement Marking Line Types	C.9	
111-25	Index of Tabulations	C.9	
J Sheets			
108-23A	Traffic Control Plan	J.8	
108-26A	Staging Notes	J.8	
108-28	Temporary Traffic Signals	J.8	

PAVEMENT MARKING LINE TYPES											108-22 Modified
Road Identification	Station		Direction Of Travel	Side	Marking Type	Length	Line Type	Factor	Factored Quantity	Remarks	
	Begin	End				STA					
US 151	866+37.19	868+46.19	SB	Center	Waterborne/Solvent Paint	2.09	No Passing Zone Line Yellow (NPY6)	1.25	2.61		
US 151	866+37.19	868+46.19	NB	Center	Waterborne/Solvent Paint	2.09	No Passing Zone Line Yellow (NPY6)	1.25	2.61		
US 151	866+37.19	868+46.19	SB	Left	Waterborne/Solvent Paint	2.09	Edge Line Right White (ELW6)	1.00	2.09		
US 151	866+37.19	868+46.19	NB	Right	Waterborne/Solvent Paint	2.09	Edge Line Right White (ELW6)	1.00	2.09		
US 151	863+67.19		NB		Wet Retroreflective Removable Tape	0.12	Stop Line White (SLW2)	4.00	0.48	Temporary Stop Bar, per TC-216	
US 151	871+16.19		SB		Wet Retroreflective Removable Tape	0.12	Stop Line White (SLW2)	4.00	0.48	Temporary Stop Bar, per TC-216	
								TOTAL	9.41	Waterborne/Solvent Paint	
									0.96	Removable Tape Markings, Wet Retroreflective	

LINN 527



108-23A Modified
TRAFFIC CONTROL PLAN - TAMA 327
Traffic will be maintained on westbound US 30 over Iowa River East Overflow at all times. Construction will be performed in 2 stages of single lane closures per the J-sheets. See J-sheets for staging details.

108-26A Modified
STAGING NOTES
<p>STAGE 1</p> <p>Traffic:</p> <ol style="list-style-type: none"><li>1. Close the left (south) lane of WB US 30 and maintain one-lane traffic using Standard Road Plan TC-418. Lane drop off should take place east of south leg of E Avenue to improve issues with sight distance on the crest curve near the intersection. Extend Work Area limits through the intersection with E Avenue.</li></ol> <p>Construction:</p> <ol style="list-style-type: none"><li>1. Clean and prepare existing left (south) barrier rail.</li><li>2. Apply concrete sealer to left (south) existing barrier rail.</li><li>3. Clean and prepare existing bridge deck from south rail face to centerline of WB US 30.</li><li>4. Apply High Molecular Weight Methacrylate (HMWM) sealer to left (south) lane of existing bridge deck.</li></ol> <p>STAGE 2</p> <p>Traffic:</p> <ol style="list-style-type: none"><li>1. Close the right (north) lane of WB US 30 and maintain one-lane traffic using Standard Road Plan TC-418. Utilize same Work Area limits as in Stage 1.</li></ol> <p>Construction:</p> <ol style="list-style-type: none"><li>1. Clean and prepare existing right (north) barrier rail.</li><li>2. Apply concrete sealer to right (north) existing barrier rail.</li><li>3. Clean and prepare existing bridge deck from north rail face to centerline of WB US 30.</li><li>4. Apply HMWM sealer to right (north) lane of existing bridge deck.</li></ol> <p>FINAL</p> <p>Traffic:</p> <ol style="list-style-type: none"><li>1. Open all lanes to traffic.</li><li>2. Complete pavement marking operations in accordance with Standard Road Plan TC-433.</li></ol> <p>Construction:</p> <ol style="list-style-type: none"><li>1. Complete final pavement markings.</li></ol>

TAMA 327

108-23A  
Modified

TRAFFIC CONTROL PLAN - BUTLER 127

Traffic will be maintained on IA 3 over West Fork Cedar River at all times. Construction will be performed in 2 stages of single lane closures per the J-sheets. See J-sheets for staging details. EB and WB traffic will share a single lane on the bridge. Contractor shall have the option to utilize either flaggers or temporary traffic signals, according to Standard Road Plans TC-213 or TC-216, respectively. The chosen traffic control plan shall be communicated to the Engineer and coordinated with the DOT.

TEMPORARY TRAFFIC SIGNALS					
No.	Location Station	Type			Remarks
		One Lane Traffic	Haul Road	Intersection	
1	203+88.00	x			EB traffic
1	212+26.00	x			WB traffic

108-26A  
Modified

STAGING NOTES

STAGE 1 (Westbound Lane Construction)

Traffic:

1. Close the WB lane of IA 3 and maintain one-lane alternating traffic in the EB lane using Standard Road Plan TC-213 (Flaggers) or TC-216 (Temporary Traffic Signals).

Construction:

1. Clean and prepare existing barrier rail adjacent to the WB lane.

2. Apply concrete sealer to prepared existing barrier rail.

3. Clean and prepare existing bridge deck, WB lane.

4. Apply High Molecular Weight Methacrylate (HMWM) sealer to existing bridge deck, WB lane

STAGE 2 (Eastbound Lane Construction)

Traffic:

1. Close the EB lane of IA 3 and maintain one-lane alternating traffic in the WB lane using Standard Road Plan TC-213 (Flaggers) or TC-216 (Temporary Traffic Signals).

Construction:

1. Clean and prepare existing barrier rail adjacent to the EB lane.

2. Apply concrete sealer to prepared existing barrier rail.

3. Clean and prepare existing bridge deck, EB lane.

4. Apply HMWM sealer to existing bridge deck, EB lane

FINAL

Traffic:

1. Open all lanes to traffic.

2. Complete pavement marking operations in accordance with Standard Road Plan TC-233.

Construction:

1. Complete final pavement markings.

BUTLER 127

FILE NO. 32889

ENGLISH

DESIGN TEAM FOTH

BUTLER COUNTY

PROJECT NUMBER BRFN-000-T(460)--39-00

SHEET NUMBER J.2

1:54:58 PM

4/13/2026

jlp3

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108-23A  
Modified

TRAFFIC CONTROL PLAN - CERRO GORDO 427

Traffic will be maintained on US 65 over East Branch Beaverdam Creek at all times. Construction will be performed in 2 stages of single lane closures per the J-sheets. See J-sheets for staging details. NB and SB traffic will share a single lane on the bridge. Contractor shall have the option to utilize either flaggers or temporary traffic signals, according to Standard Road Plans TC-213 or TC-216, respectively. The chosen traffic control plan shall be communicated to the Engineer and coordinated with the DOT.

TEMPORARY TRAFFIC SIGNALS					
No.	Location Station	Type			Remarks
		One Lane Traffic	Haul Road	Intersection	
1	121+05.00	x			NB traffic
1	125+95.00	x			SB traffic

108-26A  
Modified

STAGING NOTES

STAGE 1 (Northbound Lane Construction)

Traffic:

1. Close the NB lane of US 65 and maintain one-lane alternating traffic in the SB lane using Standard Road Plan TC-213 (Flaggers) or TC-216 (Temporary Traffic Signals).

Construction:

1. Clean and prepare existing barrier rail adjacent to the NB lane.  
2. Apply concrete sealer to prepared existing barrier rail.  
3. Clean and prepare existing bridge deck, NB lane.  
4. Apply High Molecular Weight Methacrylate (HMWM) sealer to existing bridge deck, NB lane

STAGE 2 (Southbound Lane Construction)

Traffic:

1. Close the SB lane of US 65 and maintain one-lane alternating traffic in the NB lane using Standard Road Plan TC-213 (Flaggers) or TC-216 (Temporary Traffic Signals).

Construction:

1. Clean and prepare existing barrier rail adjacent to the SB lane.  
2. Apply concrete sealer to prepared existing barrier rail.  
3. Clean and prepare existing bridge deck, SB lane.  
4. Apply HMWM sealer to existing bridge deck, SB lane

FINAL

Traffic:

1. Open all lanes to traffic.  
2. Complete pavement marking operations in accordance with Standard Road Plan TC-233.

Construction:

1. Complete final pavement markings.

CERRO GORDO 427

FILE NO. 32889

ENGLISH

DESIGN TEAM FOTH

CERRO GORDO COUNTY

PROJECT NUMBER BRFN-000-T(460)--39-00

SHEET NUMBER J.3

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4/13/2026

jlp3

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TRAFFIC CONTROL PLAN - WRIGHT 127		108-23A Modified
Traffic will be maintained on IA 17 over Prairie Creek at all times. Construction will be performed in 2 stages of single lane closures per the J-sheets. See J-sheets for staging details. NB and SB traffic will share a single lane on the bridge. Contractor shall have the option to utilize either flaggers or temporary traffic signals, according to Standard Road Plans TC-213 or TC-216, respectively. The chosen traffic control plan shall be communicated to the Engineer and coordinated with the DOT.		

TEMPORARY TRAFFIC SIGNALS					108-28 Modified
No.	Location Station	Type			Remarks
		One Lane Traffic	Haul Road	Intersection	
1	368+90.00	x			NB traffic
1	374+07.00	x			SB traffic

STAGING NOTES		108-26A Modified
STAGE 1 (Northbound Lane Construction)		
Traffic: 1. Close the NB lane of IA 17 and maintain one-lane alternating traffic in the SB lane using Standard Road Plan TC-213 (Flaggers) or TC-216 (Temporary Traffic Signals).		
Construction: 1. Clean and prepare existing barrier rail adjacent to the NB lane. 2. Apply concrete sealer to prepared existing barrier rail. 3. Clean and prepare existing bridge deck, NB lane. 4. Apply High Molecular Weight Methacrylate (HMWM) sealer to existing bridge deck, NB lane		
STAGE 2 (Southbound Lane Construction)		
Traffic: 1. Close the SB lane of IA 17 and maintain one-lane alternating traffic in the NB lane using Standard Road Plan TC-213 (Flaggers) or TC-216 (Temporary Traffic Signals).		
Construction: 1. Clean and prepare existing barrier rail adjacent to the SB lane. 2. Apply concrete sealer to prepared existing barrier rail. 3. Clean and prepare existing bridge deck, SB lane. 4. Apply HMWM sealer to existing bridge deck, SB lane		
FINAL		
Traffic: 1. Open all lanes to traffic. 2. Complete pavement marking operations in accordance with Standard Road Plan TC-233.		
Construction: 1. Complete final pavement markings.		

WRIGHT 127

108-23A Modified	TRAFFIC CONTROL PLAN - BENTON 427
Traffic will be maintained on eastbound US 30 over Unnamed Creek at all times. Construction will be performed in 2 stages of single lane closures per the J-sheets. See J-sheets for staging details.	

108-26A Modified	STAGING NOTES
<p>STAGE 1</p> <p>Traffic:</p> <ul style="list-style-type: none"><li>1. Close the left (north) lane of EB US 30 and maintain one-lane traffic using Standard Road Plan TC-418.</li></ul> <p>Construction:</p> <ul style="list-style-type: none"><li>1. Clean and prepare existing left (north) barrier rail.</li><li>2. Apply concrete sealer to left (north) existing barrier rail.</li><li>3. Clean and prepare existing bridge deck from north rail face to centerline of EB US 30.</li><li>4. Apply High Molecular Weight Methacrylate (HMWM) sealer to left (north) lane of existing bridge deck.</li></ul> <p>STAGE 2</p> <p>Traffic:</p> <ul style="list-style-type: none"><li>1. Close the right (south) lane of EB US 30 and maintain one-lane traffic using Standard Road Plan TC-418.</li></ul> <p>Construction:</p> <ul style="list-style-type: none"><li>1. Clean and prepare existing right (south) barrier rail.</li><li>2. Apply concrete sealer to right (south) existing barrier rail.</li><li>3. Clean and prepare existing bridge deck from south rail face to centerline of EB US 30.</li><li>4. Apply HMWM sealer to right (south) lane of existing bridge deck.</li></ul> <p>FINAL</p> <p>Traffic:</p> <ul style="list-style-type: none"><li>1. Open all lanes to traffic.</li><li>2. Complete pavement marking operations in accordance with Standard Road Plan TC-433.</li></ul> <p>Construction:</p> <ul style="list-style-type: none"><li>1. Complete final pavement markings.</li></ul>	

BENTON 427



108-23A  
Modified

TRAFFIC CONTROL PLAN - LINN 327

Traffic will be maintained on eastbound US 30 over Cedar River at all times. Construction will be performed in 2 stages of single lane closures per the J-sheets. See J-sheets for staging details.  
The bridge is on a route on the DOT District 6 Allowable Lane Closure Map. Refer to Tab 108-23B for allowable lane closure times.

108-26A  
Modified

STAGING NOTES

STAGE 1

Traffic:

1. Close the left (north) lane of EB US 30 and maintain one-lane traffic using Standard Road Plan TC-418.

Construction:

1. Clean and prepare existing left (north) barrier rail.  
2. Apply concrete sealer to left (north) existing barrier rail.  
3. Clean and prepare existing bridge deck from north rail face to centerline of EB US 30.  
4. Apply High Molecular Weight Methacrylate (HMWM) sealer to left (north) lane of existing bridge deck.

STAGE 2

Traffic:

1. Close the right (south) lane of EB US 30 and maintain one-lane traffic using Standard Road Plan TC-418.

Construction:

1. Clean and prepare existing right (south) barrier rail.  
2. Apply concrete sealer to right (south) existing barrier rail.  
3. Clean and prepare existing bridge deck from south rail face to centerline of EB US 30.  
4. Apply HMWM sealer to right (south) lane of existing bridge deck.

FINAL

Traffic:

1. Open all lanes to traffic.  
2. Complete pavement marking operations in accordance with Standard Road Plan TC-433.

Construction:

1. Complete final pavement markings.

108-23B  
Modified

TRAFFIC CONTROL CLOSURE TABLE(S)

\* This is to only be used in conjunction with Tabulation 108-23A  
"X" indicates times that lane closures are not allowed

	AM																						NOON	PM																								
DAY	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	3:00	3:30	4:00	4:30	5:00	5:30	6:00	6:30	7:00	7:30	8:00	8:30	9:00	9:30	10:00	10:30	11:00	11:30
SUN	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X											
MON													X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
TUE													X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
WED													X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
THU													X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
FRI													X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
SAT	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

LINN 327

108-23A Modified
TRAFFIC CONTROL PLAN - LINN 427
Traffic will be maintained on northbound US 151 over Crabapple Creek at all times. Construction will be performed in 2 stages of single lane closures per the J-sheets. See J-sheets for staging details.

108-26A Modified
STAGING NOTES
<div>STAGE 1</div> <div><div>Traffic:</div><div>1. Close the left (west) lane of NB US 151 and maintain one-lane traffic using Standard Road Plan TC-418.</div></div> <div><div>Construction:</div><div>1. Clean and prepare existing left (west) barrier rail. 2. Apply concrete sealer to left (west) existing barrier rail. 3. Clean and prepare existing bridge deck from west rail face to centerline of NB US 151. 4. Apply High Molecular Weight Methacrylate (HMWM) sealer to left (west) lane of existing bridge deck.</div></div> <div>STAGE 2</div> <div><div>Traffic:</div><div>1. Close the right (east) lane of NB US 151 and maintain one-lane traffic using Standard Road Plan TC-418.</div></div> <div><div>Construction:</div><div>1. Clean and prepare existing right (east) barrier rail. 2. Apply concrete sealer to right (east) existing barrier rail. 3. Clean and prepare existing bridge deck from east rail face to centerline of NB US 151. 4. Apply HMWM sealer to right (east) lane of existing bridge deck.</div></div> <div>FINAL</div> <div><div>Traffic:</div><div>1. Open all lanes to traffic. 2. Complete pavement marking operations in accordance with Standard Road Plan TC-433.</div></div> <div><div>Construction:</div><div>1. Complete final pavement markings.</div></div>

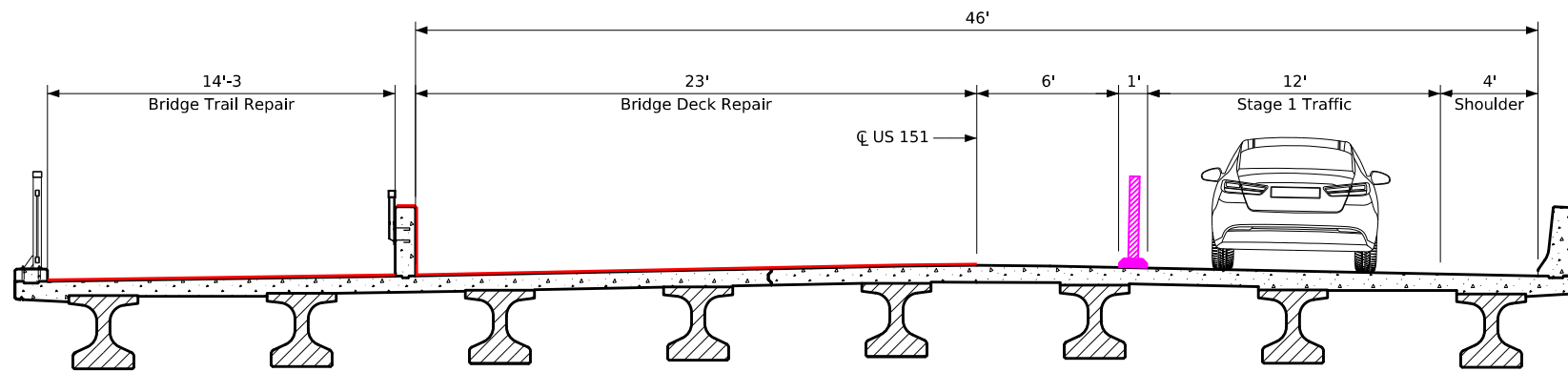
LINN 427

TRAFFIC CONTROL PLAN - LINN 527		108-23A Modified
Traffic will be maintained on US 151 over Prairie Creek at all times. Construction will be performed in 2 stages of single lane closures per the J-sheets. See J-sheets for staging details.		
NB and SB traffic will share a single lane on the bridge, utilizing Modified Standard Road Plan TC-216 in the J-sheets. Provide three-phase signalization to incorporate traffic entering US 151 from Prairie Avenue. Traffic on Prairie Avenue will remain open at all times. Coordinate traffic control operations with City of Fairfax.		

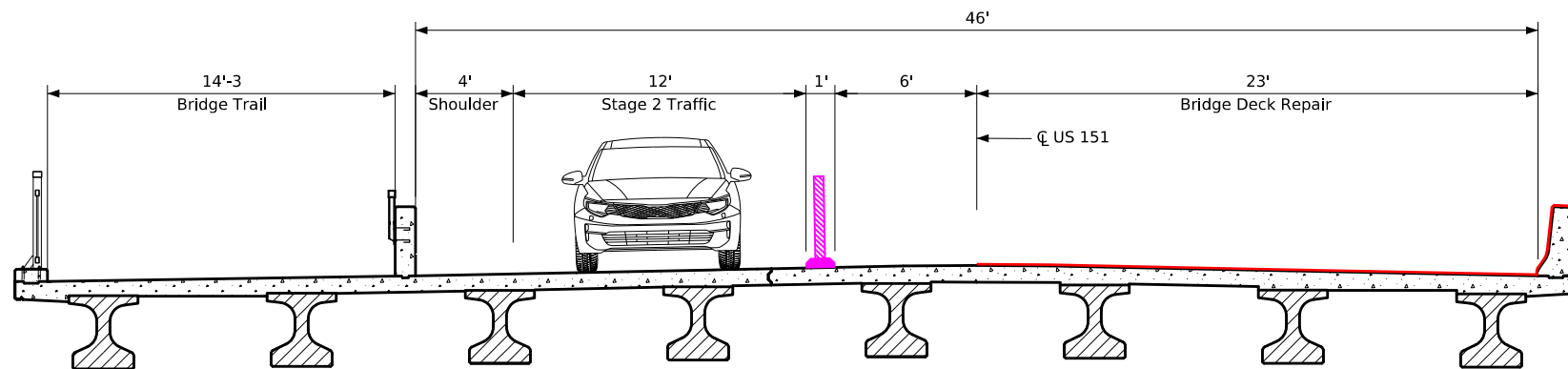
STAGING NOTES		108-26A Modified
STAGE 1 (Southbound Lane and Bridge Trail Construction)		
Traffic: 1. Close the SB lane of US 151 and maintain one-lane alternating traffic in the NB lane using Modified Standard Road Plan TC-216 in the J-sheets.		
Construction: 1. Clean and prepare existing separation rail adjacent to the SB lane. 2. Apply concrete sealer to prepared existing separation rail. 3. Clean and prepare existing bridge deck, SB lane. 4. Apply High Molecular Weight Methacrylate (HMWM) sealer to existing bridge deck, SB lane 5. Clean and prepare existing bridge trail deck. 6. Apply HMWM sealer to existing bridge trail deck.		
STAGE 2 (Northbound Lane Construction)		
Traffic: 1. Close the NB lane of US 151 and maintain one-lane alternating traffic in the SB lane using Modified Standard Road Plan TC-216 in the J-sheets.		
Construction: 1. Clean and prepare existing barrier rail adjacent to the NB lane. 2. Apply concrete sealer to prepared existing barrier rail. 3. Clean and prepare existing bridge deck, NB lane. 4. Apply HMWM sealer to existing bridge deck, NB lane		
FINAL		
Traffic: 1. Open all lanes to traffic. 2. Complete pavement marking operations in accordance with Standard Road Plan TC-233.		
Construction: 1. Complete final pavement markings.		

TEMPORARY TRAFFIC SIGNALS						108-28 Modified
No.	Location Station	Type			Remarks	
		One Lane Traffic	Haul Road	Intersection		
1	864+67.19	x			NB traffic	
1	870+16.19	x			SB traffic	
1		x			Prairie Ave	

LINN 527

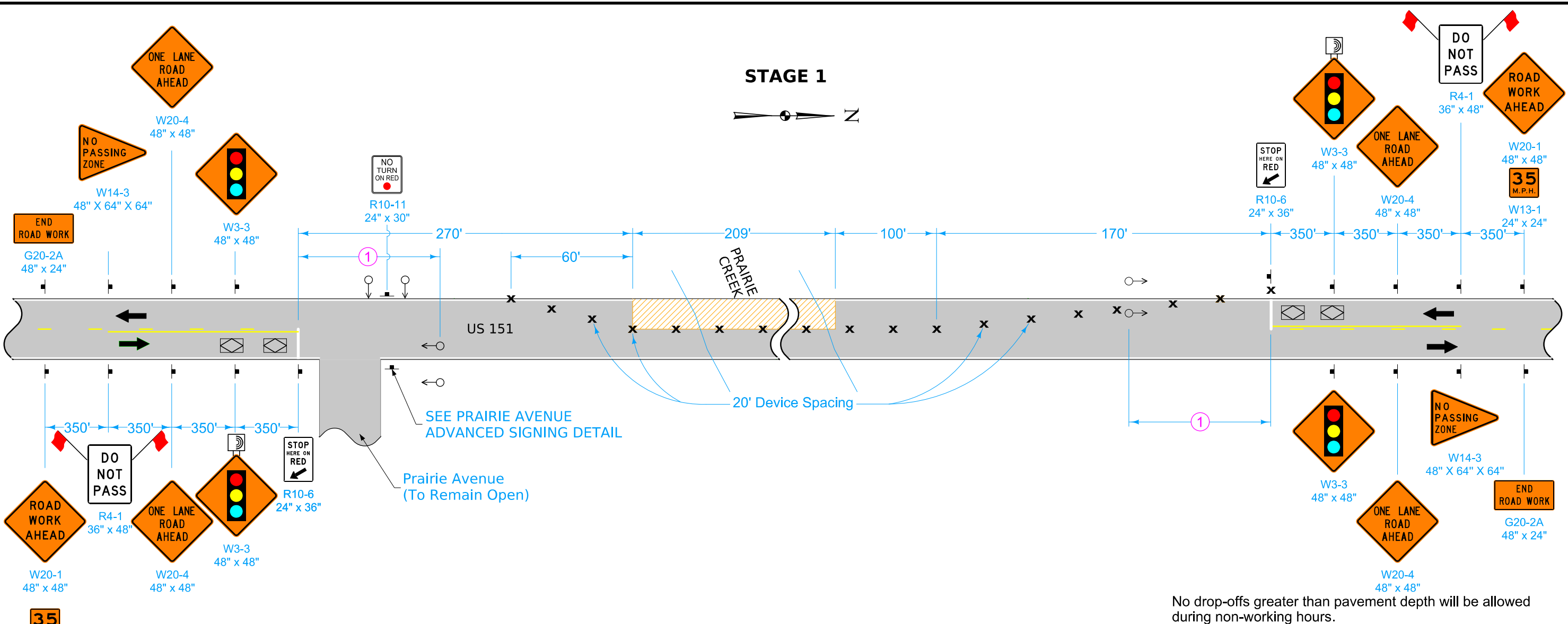


STAGE 1  
(Looking Ahead Station)



STAGE 2  
(Looking Ahead Station)

LINN 527



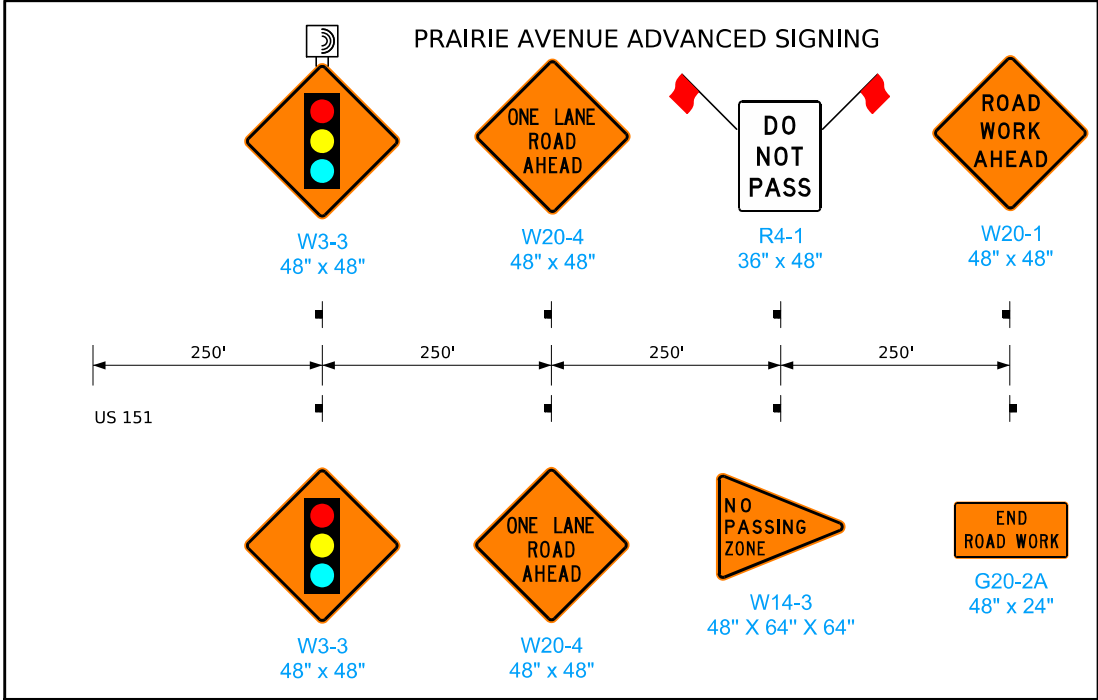
No drop-offs greater than pavement depth will be allowed during non-working hours.

No vehicles, unattended equipment, materials or stock-piled waste are permitted between the shoulder lines during non-working hours.

① Locate signal heads 70 to 100 feet beyond stop bar. Adjust location of signal heads as field conditions warrant.

**LEGEND**

- Vehicle Detection Area
- Traffic Sign
- Drum
- Type 'B' High-Intensity Flashing Warning Light
- Work Area
- Temporary Traffic Signal
- Direction of Traffic



**TIMING FOR ACTUATED SIGNALS**  
Recommended Settings, secs.

Distance Between Stop Lines	All Red (secs.)*
750'	15-27

Initial = 12.0  
Extension = 2.5  
Maximum Green = 45.0  
Yellow = 5.0  
All Red = (see table)

\* Range of values are based on operating speeds between 20 and 35 mph

**MODIFIED STANDARD ROAD PLAN**

REVISION	
8	4-18-23

**TC-216**

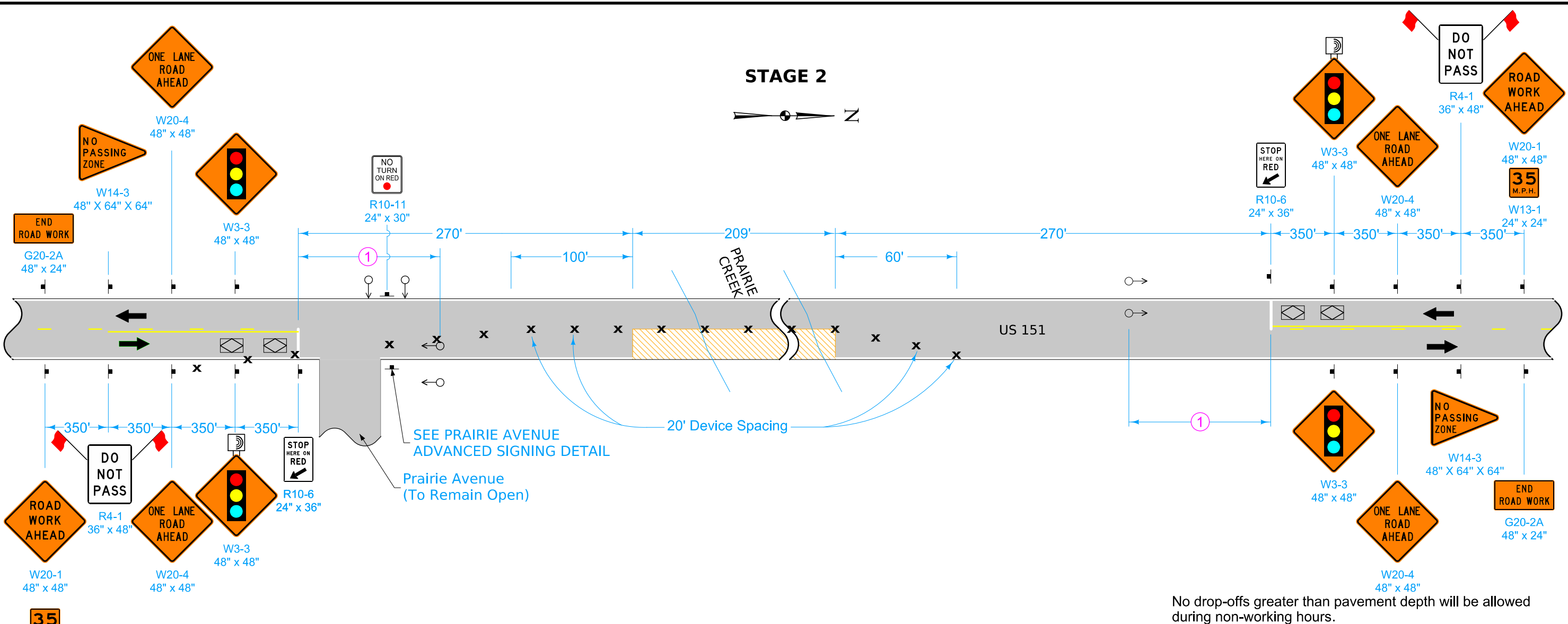
SHEET 1 of 1

REVISIONS: Added speed limit note. Formatted speed limit table.

APPROVED BY DESIGN METHODS ENGINEER

**LANE CLOSURE WITH SIGNALS**

LINN 527



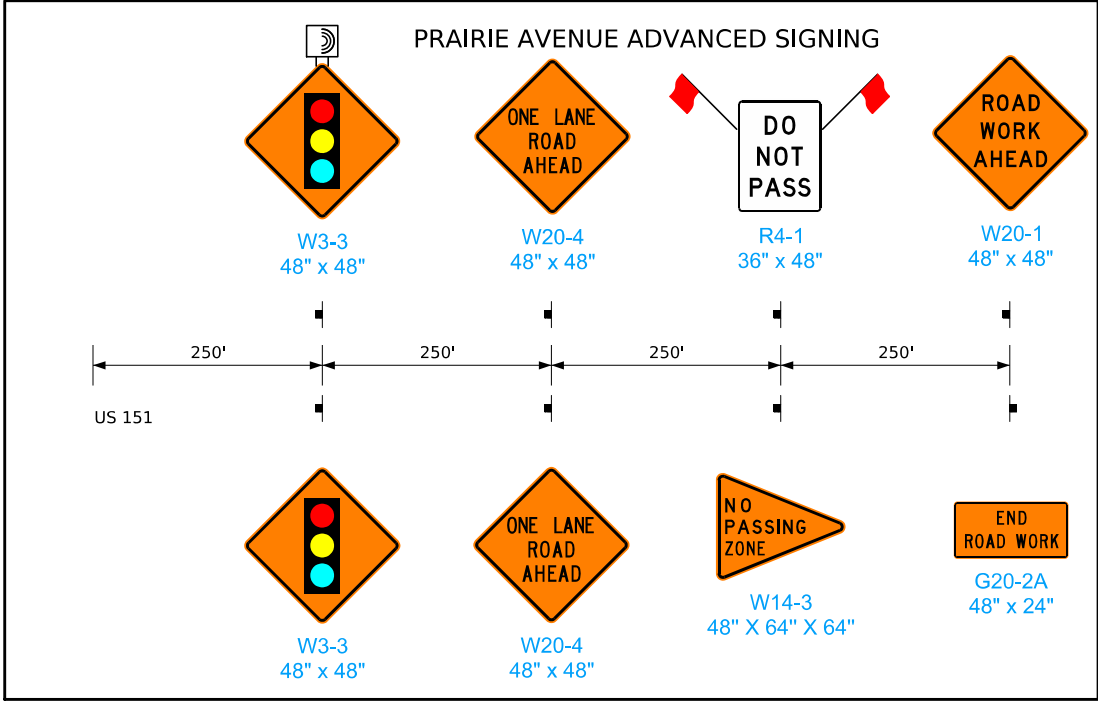
No drop-offs greater than pavement depth will be allowed during non-working hours.

No vehicles, unattended equipment, materials or stock-piled waste are permitted between the shoulder lines during non-working hours.

① Locate signal heads 70 to 100 feet beyond stop bar. Adjust location of signal heads as field conditions warrant.

**LEGEND**

- Vehicle Detection Area
- Traffic Sign
- Drum
- Type 'B' High-Intensity Flashing Warning Light
- Work Area
- Temporary Traffic Signal
- Direction of Traffic



**TIMING FOR ACTUATED SIGNALS**  
Recommended Settings, secs.

Distance Between Stop Lines	All Red (secs.)*
750'	15-27

Initial = 12.0  
Extension = 2.5  
Maximum Green = 45.0  
Yellow = 5.0  
All Red = (see table)

\* Range of values are based on operating speeds between 20 and 35 mph

<b>MODIFIED STANDARD ROAD PLAN</b>	REVISION	
	8	4-18-23
	<b>TC-216</b>	
SHEET 1 of 1		
REVISIONS: Added speed limit note. Formatted speed limit table.		
APPROVED BY DESIGN METHODS ENGINEER		
<b>LANE CLOSURE WITH SIGNALS</b>		
LINN 527		