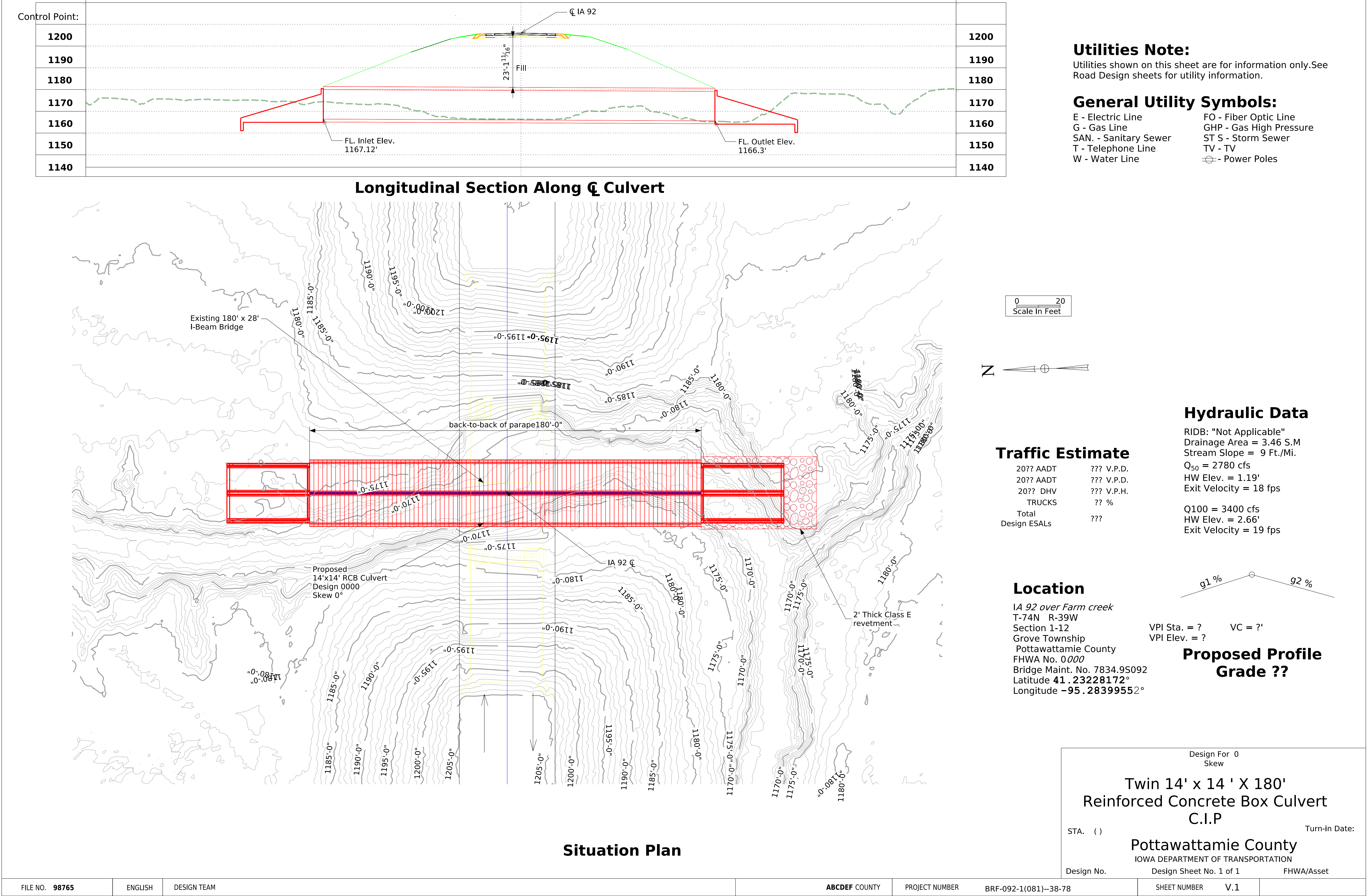




NOTE: THIS PROJECT WAS ORIGINALLY PROGRAMMED AS AN OVERLAY, BUT IT IS INSTEAD MOVING FORWARD AS A BRIDGE REPLACEMENT.

IOWA DEPARTMENT OF TRANSPORTATION

To Office	District 4	Date	November 25, 2025
Attention	Wes Mayberry, PE	Ref No.	Pottawattamie County BRFN-092-1(081)--39-78
From	Samantha Wermager, Burns & McDonnell		PIN 24-78-092-010
Bureau	Bridges and Structures		Design No. 329
			File No. 32790
			FHWA No. 43900
Subject	Final Concept for Bridge Replacement of 183'-0 x 28'-0 Continuous I-Beam Bridge Bridge Maintenance No. 7834.9S092		

The bridge on IA 92 over Farm Creek, 6.3 mi E of US 59, was programmed for an overlay to be let on November 21, 2028. The programmed repair amount was \$520,000. The current replacement cost estimate is \$4,500,000 including inflation, presuming a FY 2031 letting. The bridge field exam on August 20, 2025 was attended by Travis Malone, Brad Garside, and Tanner Powers of District 4 and Samantha Wermager and Seth Hensarling of Burns & McDonnell.

The bridge location map and asset information can be viewed in SIIMS using the following link:

https://iowadot-it.bentley.com/bridgedetail.aspx?type=0&as_id=69153

EXISTING CONDITIONS

<u>Year of Construction</u>	<u>Design Number</u>	<u>Work</u>
1957	156	Original Construction
1984	2784	Overlay
1992	3091	Barrier Rail Retrofit
2016	716	Joint Replacement

The posted speed limit is 55 mph and 2024 AADT is 1,290 with 14% trucks.

RECOMMENDATIONS

During the 10/13/25 virtual discussion with BSB and District 4, it was determined that the re-overlay project **should be transitioned to a full bridge replacement** due to the age of the structure and the amount of repair work needed. Mike Nop has directed Mark Swenson to update the letting date to FY31 and to update the project type to a bridge replacement.

In general, the work identified for repair included a re-overlay, extensive concrete surface repairs, expansion joint gland replacement, sandblasting and repainting of bearings and girder ends, updating guardrail, tree removal and extensive erosion repair/streambank stabilization to repair undermined abutments. It was noted that this bridge has a very narrow deck (28 ft).

FY31 estimated bridge replacement cost is $(6250 \text{ SF}) * (\$580/\text{SF}) * (1.045^5) = \$4.5\text{M}$ (includes inflation).

The following utilities have been identified by One Call (811) Design Information Request:

(GWT) GRISWOLD COOPERATIVE TELEPHONE

Contact Name: BRIAN COOK

Contact Phone: 7127782121

Contact Email: brian.c@griswoldcommunications.com

(INS) AUREON NETWORK SERVICES

Contact Name: Jeff Klocko

Contact Phone: 5158300445

Contact Email: jeff.klocko@aureon.com

(MC1) VERIZON

Contact Name: INVESTIGATIONS

Contact Phone: 4698864090

Contact Email: INVESTIGATIONS@VERIZON.COM

(NVR) NISHNABOTNA VALLEY REC

Contact Name: KERT BARNUM

Contact Phone: 7127552166

Contact Email: kbarnum@nvrec.com

(WCG) CENTURYLINK

Contact Name: Tech On Duty

Contact Phone: 8773668344

Contact Email: Nationalrelo@Centurylink.com

No utilities were observed during the field exam.

SLW

Distributed to:

Scott Schram, District 4

Wes Mayberry, District 4

Jason Sallach, District 4

Dan Redmond, District 4

Brad Garside, District 4

Chris Haynes, District 4

Nathaniel Epperson, District 4

Todd Frank, District 4

Orest Lechnowsky, District 4
Travis Malone, District 4
Austin Yates, District 4 TSMO
Charlie Purcell, Transportation Development
Wes Musgrove, Systems Operations
Kent Nicholson, Design
Yanxiao Jia, Design
Stuart Nielson, Design
Dan Harness, Design
Dung Ta, Design
Shawn Majors, Program Management
Mark A Swenson, Project Scheduling
Brian Smith, Project Management
Brennan Dolan, Location and Environment
Jacob Woodcock, Location and Environment
Chelsea Duncan, Location and Environment
Marc Solberg, Location and Environment
Claire Asberry, Location and Environment
DeeAnn Newell, Location and Environment
Chris Schwienebart, Location and Environment
Don Johnson, Location and Environment
Kenneth Brink, Location and Environment
Greg Cagle, Right of Way
Mark Van Dyke, Traffic Operations
James Nelson, Bridges and Structures
Mike Nop, Bridges and Structures
David Evans, Bridges and Structures
Logan Grothus, Bridges and Structures
Jim Ellis, Bridges and Structures
Mike Todsen, Bridges and Structures
Joe Stanisz, Bridges and Structures
Linda Narigon, Bridges and Structures
Steven Schroder, Bridges and Structures
Samantha Wermager, Burns & McDonnell
Curtis Carter, Construction and Materials
Jesse Peterson, Construction and Materials
Brian Worrel, Construction and Materials
Willy Sorenson, Traffic and Safety

Appendix



Image 1: Near Approach Guardrail (South Side)



Image 2: Near Approach Slope Protection (South Side)



Image 3: Near Approach (Looking North)



Image 4: Near End Barrier Seal (South Side)



Image 5: Near Abutment Joint (Looking North)



Image 6: Far Abutment Joint (Looking South)



Image 7: Near Abutment Spalling (South Side)



Image 8: Near Abutment Spalling (Looking Northwest)



Image 9: Near Abutment Bearing Rusting, Typ.



Image 10: Section Loss at Near Abutment Exterior Girder



Image 11: Near Berm Erosion (South Side)



Image 12: Near Abutment Undermining (South Side)



Image 13: Near Berm Erosion below Drain (North Side)



Image 14: Near Berm Erosion (North Side)



Image 15: Near Abutment Undermining (North Side)



Image 16: Near Abutment Spalling (North Side)



Image 17: Near Abutment Spalling (North Side)



Image 18: Drain Leakage (North Side)



Image 19: Near Berm Erosion (Looking East)



Image 20: Near Berm Erosion (Looking West)



Image 21: Deck Cracking, Typ.



Image 22: Far Berm Erosion (Looking East)



Image 23: Channel (Looking North)



Image 24: Far Abutment Cracking (Looking East)



Image 25: Far Berm Erosion (Looking West)



Image 26: Exterior Girder Rusting (South Side)



Image 27: Deck Cracking (South Side)



Image 28: Deck Cracking in Middle Span, Typ.



Image 29: Deck Edge Spalling (South Side)