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A.2	Location Map Sheet
V.1	Estimated Quantities - Design 527
V.1 - V.3	Design 527
Road Sheets	Road Plan
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C.1	Estimated Quantities - Road
C.3	Standard Plans - Road



PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM WEBSTER COUNTY

Bridge Repair

2nd Ave S over Des
Moines River 0.6 mi
S of N Jct US 169

Refer to the Plan Sheets for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.13 of the Specifications.



Iowa DOT Bridges and Structures
Consultant Coordinator Contact:
Zahrah Alghalibi

Standard Road Plans

Standard Road Plans are listed on Sheet Number C.3

Design Data Urban

2nd Ave S / IA 926 (EB & WB)

2023 AADT 2850 V,P,D.

TRUCKS 0 %

Index of Seals		
Sheet No.	Name	Type
A.1	Casey V. Faber	Structural Design
A.3	Lucas D. Fatka	Roadway Design

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 Date **8-21-2026**

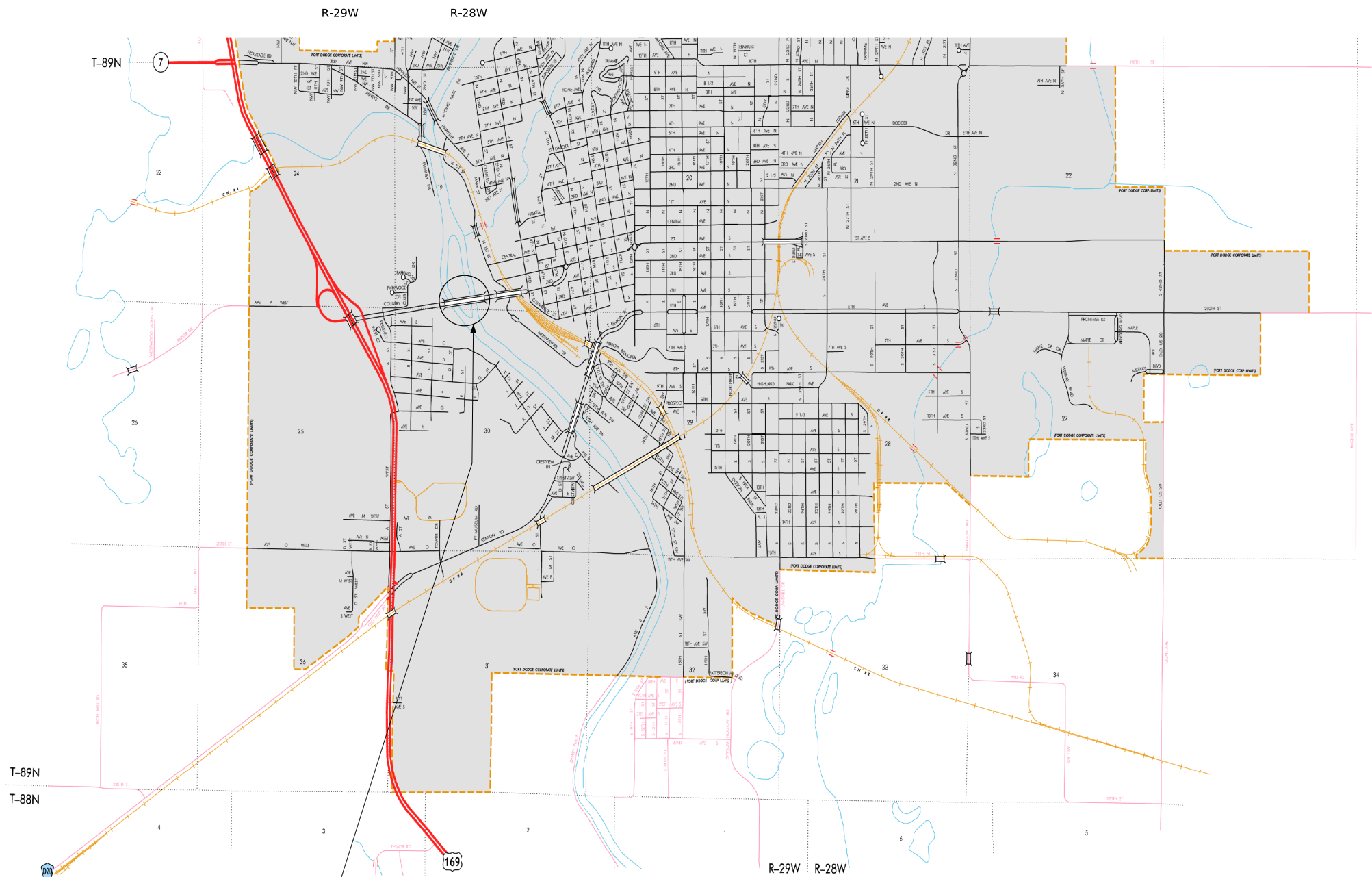
Printed or Typed Name **Casey V. Faber**

My license renewal date is December 31, 2027

Pages or sheets covered by this seal: A.1-A.2, V.1-V.3

Revisions

	TOTAL
	19
PROJECT IDENTIFICATION NUMBER	
26-94-926-020	
PROJECT NUMBER	
STPN-926-0(025)--2J-94	
R.O.W. PROJECT NUMBER	
PROJECT DIRECTORY NUMBER	
9492602026	



LEGEND

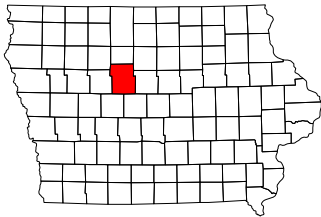
INTERSTATE ROUTE	
FREEWAY OR EXPRESSWAY ROUTE	
U.S. NUMBERED ROUTE	
BUSINESS ROUTE	
STATE NUMBERED ROUTE	
UNSIGNED ROUTE	
COUNTY NUMBERED ROUTE	
SECONDARY ROAD OR ADJOINING CITY STREET	
CITY STREET	
PARK, INSTITUTION, OR FEDERAL ROAD	
RAILROAD	
CORPORATION LINE	
SECTION LINE	
CUL-DE-SAC	
SECTION, TOWNSHIP & RANGE NUMBERS	

9, T-81N, R-30W

Part City of Fort Dodge Location Map

Not To Scale

Design No. 527
FHWA No. 52300



ESTIMATED BRIDGE REPAIR QUANTITIES				
ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL
1	2533-4980005	MOBILIZATION	LS	1
2	2599-9999009	('LINEAR FEET' ITEM) Timber Protective Shield	LF	63

ESTIMATE REFERENCE INFORMATION		
ITEM NO.	ITEM CODE	ITEM DESCRIPTION
1	2533-4980005	MOBILIZATION - -
2	2599-9999009	Timber Protective Shield This Method of Measurement is Linear Feet. The Basis of Payment is per Linear Foot of Timber Protective Shield installed in accordance with this Plan. See Design Sheet No. 3 for additional information.

General Notes:

This design is for repairs to the existing 1110'-3" x 58'-0" Multispan Continuous Welded Plate Girder Plus 90'-0" x 58'-0" Slab Bridge on 2nd Ave South and IA 926 over the Des Moines River in the City of Fort Dodge.

Electronic copies of original design plans are available to the Contractor as part of the E-Files supplied with the contract documents. Dimensions shown on these plans are based on design plans (Design Nos. 1457, 163, 1471, 177, 679, 382, 682, 198, 108, 322).

Repairs shall consist of constructing a timber protective shield below the median curb joint over the limits shown on the Situation Plan on Design Sheet No. 2.

2nd Avenue South will be open to traffic during construction. The trails will be closed to traffic during work overhead. See Traffic Control Plan note on this sheet.

The City and 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 construction starting date.

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 the existing structure.

The Bridge Contractor shall work in such a manner that equipment and materials shall not be allowed to interfere with trail traffic or be allowed to fall on the trail.

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.

Special Provisions for Environmental Protection.

Developmental Specification for Electronic Ticketing.

Design Stresses:

Lumber design stresses are in accordance with Structural Class Material Grades per Section 4162 of the Standard Specifications.



Design History at this Site	
(Includes this Design)	
Des. No.	Type of Work
1457	Original Design
1471	Bridge Extension
177	Overlay and Repair
679	Pier Repair
382	Bridge Repair
682	Bridge Repair
198	Add Frost Cushion to Pier 4
108	Overlay and Repair
322	Pier Repair & Joint Replacement
527	Bridge Repair - Protective Shield

Roadway Quantities shown elsewhere in these plans.

Traffic Control Plan
2nd Avenue South will be open to thru traffic. The trails will be closed to traffic during work overhead. Refer to the Traffic Control Plan shown elsewhere in these plans.

Design For Repairs to Variable Skew (R.A)

Multispan Continuous Welded Plate Girder Bridge Plus 90'-0"" x 58'-0"" Concrete Slab Bridge

Estimated Quantities and General Notes

STA. 212+21.00 (CL 2nd Ave South) Turn-in Date: Aug, 2026

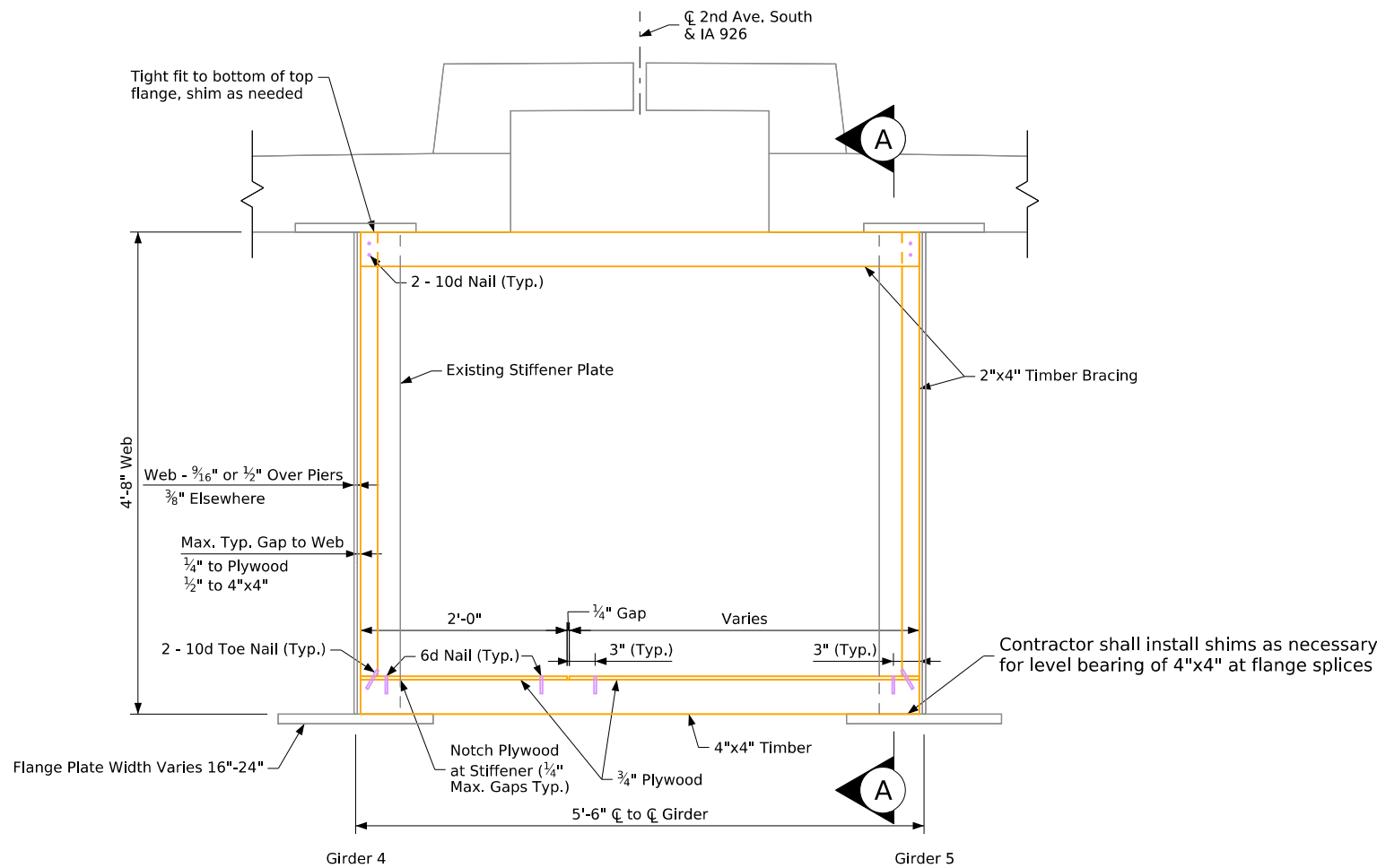
Webster County

IOWA DEPARTMENT OF TRANSPORTATION

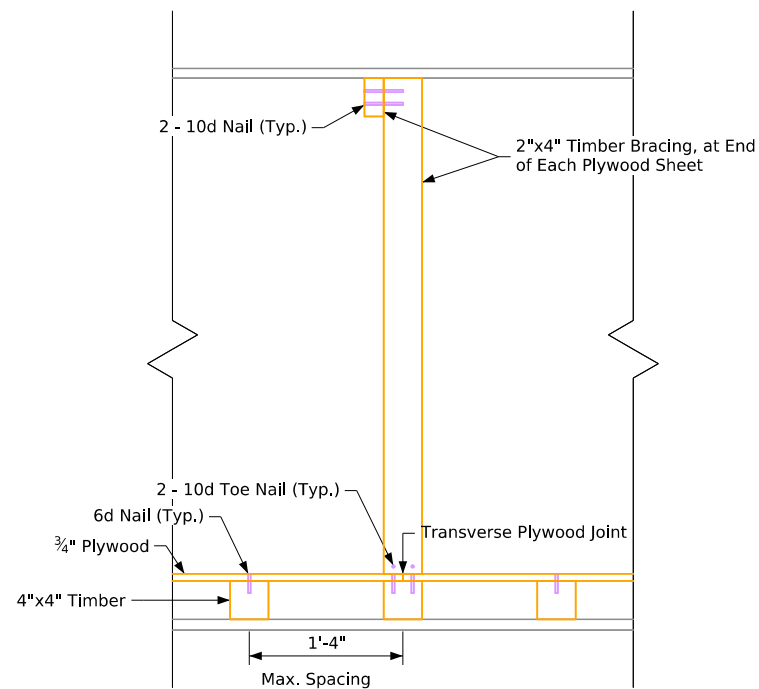
Design No. 527 Design Sheet No. 1 of 3 FHWA No. 52300

Timber Protective Shield Notes:

Install protective shield over the limits shown on the Situation Plan on Design Sheet No. 2.
Timber shall be in accordance with Section 2409 of the Standard Specifications.
Timber sizes shown are nominal sizes. Rough sawn timber of the dimensions shown will also be considered acceptable.
The timber spacings shown have been determined using allowable stresses (Structural Class) with all adjustment factors necessary for the anticipated service conditions. Design load includes selfweight of the protective shield, concrete curbs and decks from gutterline to edge (for future demolition), and construction live load of 50 psf.
All timber shall be treated. Plywood shall be "Exterior" use.
Plywood shall be placed such that the face grain is perpendicular to the timber supports.
Transverse plywood joints shall be supported by timbers.
Nails shall be ring shanked galvanized in accordance with 4153.07, D, of the Standard Specifications.



Section Thru Timber Protective Shield at Median



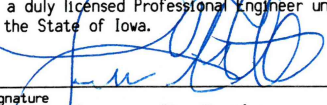
Section A-A



Design For Repairs to Variable Skew (R.A)
**Multispan Continuous Welded
Plate Girder Bridge Plus
90'-0" x 58'-0" Concrete Slab Bridge
Protective Shield Details**
STA. 212+21.00 (CL 2nd Ave South) Turn-in Date: Aug, 2026
Webster County
IOWA DEPARTMENT OF TRANSPORTATION
Design No. 527 Design Sheet No. 3 of 3 FHWA No. 52300

FILE NO. 32973	ENGLISH	DESIGN TEAM TJL/EJT/CVF	WEBSTER COUNTY	PROJECT NUMBER STPN-926-0(025)--2-J-94	SHEET NUMBER V.3
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INDEX OF SHEETS	
No.	DESCRIPTION
A Sheets	Title Sheets
* A.3	Title Sheet
C Sheets	Quantities and General Information
* C.1	Estimated Project Quantities
* C.1	Estimate Reference Information
C.2	Project Description
C.3	Standards
C.4	Index of Tabulations
C.5	Safety Closures
D Sheets	Mainline Plan Sheets
* D.1	Legend Sheet
* D.2	Plan Sheets
J Sheets	Traffic Control and Staging Sheets
J.1	Traffic Control Plan
J.2	Coordinated Operations
* J.3	Traffic Control Legend and Symbol Information Sheet
* J.4 - 6	Traffic Control Plan Sheets
	 *Color Plan Sheets

	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.	
		8/20/2026
	Signature	Date
	Printed or Typed Name <u>Lucas D. Fatka</u>	
	My license renewal date is December 31, <u>2027</u>	
Pages or sheets covered by this seal: <u>A.3, C.1-5, D.1-2, J.1-6</u>		

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Roadway Items : Roadway Items

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Roadway Items	
1	2528-2518000	SAFETY CLOSURE	EACH	4	Refer to Tab. 108_13A and the J Sheets for details.
2	2528-8445110	TRAFFIC CONTROL	LS	1	Refer to the J Sheets for details.

100_01D
8/15/22

PROJECT DESCRIPTION

This project involves traffic control for bridge repairs for the 1110'-3 x 58' multispan continuous welded plate girder plus a 90' x 58' slab bridge (FHWA NO. 52300) on IA-926 over the Des Moines River, 0.6 miles East of West Junction US 169. The work under this contract has the potential to impact an environmentally sensitive area, see D.2 and Special Provisions for Environmental Protection for additional information.

105_04 10/20/26 STANDARDS The following Standards apply to construction work on this project.		
Number	Date	Title
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-202	04-18-23	Work Within 15 ft of Traveled Way
TC-418	04-18-23	Lane Closure on Divided Highway
TC-601	10-15-19	Pedestrian Detour

111_25 10/20/26		
INDEX OF TABULATIONS		
Tabulation	Tabulation Title	Sheet No.
100_01A	ESTIMATED PROJECT QUANTITIES	C.1
100_04A	ESTIMATE REFERENCE INFORMATION	C.1
100_01D	PROJECT DESCRIPTION	C.2
105_04	STANDARD ROAD PLANS	C.3
111_25	INDEX OF TABULATIONS	C.4
108_13A	SAFETY CLOSURES	C.5
108_23A	TRAFFIC CONTROL PLAN	J.1
111_01	COORDINATED OPERATIONS	J.2

108_13A
3/27/25

SAFETY CLOSURES

Road Closure Qty.	Hazard Closure Qty.	Remarks
1		Phinney Park Trail - North
1		Phinney Park Trail - South
1		Unnamed Park Trail (East Side of River) - North
1		Unnamed Park Trail (East Side of River) - South
4		TOTAL

	Interstate Highway Symbol
	U.S. Highway Symbol
	Iowa Highway Symbol
	County Road Highway Symbol
	Evergreen Tree
	Deciduous Tree
	Fruit Tree
	Shrub (Bushes)
	Timber
	Hedge
	Stump
	Swamp
	Rock Outcrop
	Broken Concrete
	Revetment (Rip Rap)
	Cemetery
	Grave
	Cave
	Sink Hole
	Board Fence
	Chain Link or Security Fence
	Wire Fence
	Terrace
	Earth Dam or Dike (Existing)
	Tile Outlet
	Edge of Water
	Existing Drainage
	Right of Way Rail or Lot Corner
	Concrete Monument
	Well
	Windmill
	Beehive Intake
	Existing Intake
	Existing Utility Access (Manhole)
	Fire Hydrant
	Water Hydrant (Rural)

	Septic Tank
	Cistern
	L.P. Gas Tank (No Footing)
	Underground Storage Tank
	Latrine
	Satellite TV Dish
	Water Hook Up
	Radio Tower
	Tower Anchor
	Guardrail (Beam or Cable)
	Guard Post (one or two)
	Guard Post (over two)
	Filler Pipe
	Gas Valve
	Water Valve
	Speed Limit Sign
	Mile Marker Post
	Sign
	Traffic Signal Control Box
	Rail Road Signal Control Box
	Telephone Switch Box
	Electric Box

— G — MIDAMER-GAS
MATT HARTMAN
515-972-6138
matthew.hartman@midamerican.com

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frontierlocatemapsia@ftr.com

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— ST S — Brett Daniel
— W — 515-573-5071
iowaonecall@fortdodgeiowa.org

— FO — AUREON NETWORK SERVICES
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INVESTIGATIONS
469-886-4090
INVESTIGATIONS@VERIZON.COM

MEDIACOM
Mike Lawler
515-571-2183
mlawler@mediacomcc.com

LINEWORK	Design Color No.			
Green	(2)		Existing Topographic Features and Labels	
Blue	(1)		Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation	
Magenta	(5)		Existing Utilities	
SHADING	Design Color No.		Transparency	
Pink, Dark	(13)		Temporary Pavement Shading	50%
Yellow	(4)		Proposed Pavement Shading	50%
Orange	(6)		Proposed Granular Shading	50%
Orange	(70)		Proposed Shoulder Granular Shading	50%
Yellow	(68)		Proposed Shoulder Paved Full Depth Shading	50%
Yellow	(132)		Proposed Shoulder Paved Partial Depth Shading	50%
Brown, Light	(236)		Grading Shading	50%
Orange, Light	(134)		Proposed Granular Entrance Shading	50%
Yellow	(220)		Proposed Paved Entrance Shading	50%
Tan	(8)		Proposed Sidewalk Shading	50%
Blue, Light	(230)		Proposed Sidewalk Landing Shading	50%
Pink	(11)		Proposed Sidewalk Ramp Shading	50%
Red	(3)		Proposed Structure Shading	50%
Red	(3)		Delineates Restricted Areas	0%

LINEWORK	Design Color No.	
Green	(10)	Existing Ground Line Profile
Blue	(1)	Proposed Profile and Annotation
Magenta	(5)	Existing Utilities
Blue, Light	(230)	Proposed Ditch Grades, Left
Black	(0)	Proposed Ditch Grades, Median
Rust	(14)	Proposed Ditch Grades, Right

Reference Point



Station



Section Corner



Ground Line Intercept



Saw Cut



Guardrail



Trench Drain



High Tension Cable Guardrail



Sheet Pile



Pavement Removal



Clearing & Grubbing Area

RIGHT-OF-WAY LEGEND



Proposed Right-of-Way Symbol



Proposed Right-of-Way Line



Existing Right of Way



Existing and Proposed Right-of-Way



Easement and Existing Right-of-Way



Easement (Temporary) Symbol



Easement (Temporary) Line



Easement

C/A Access Control

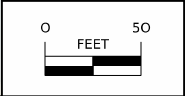
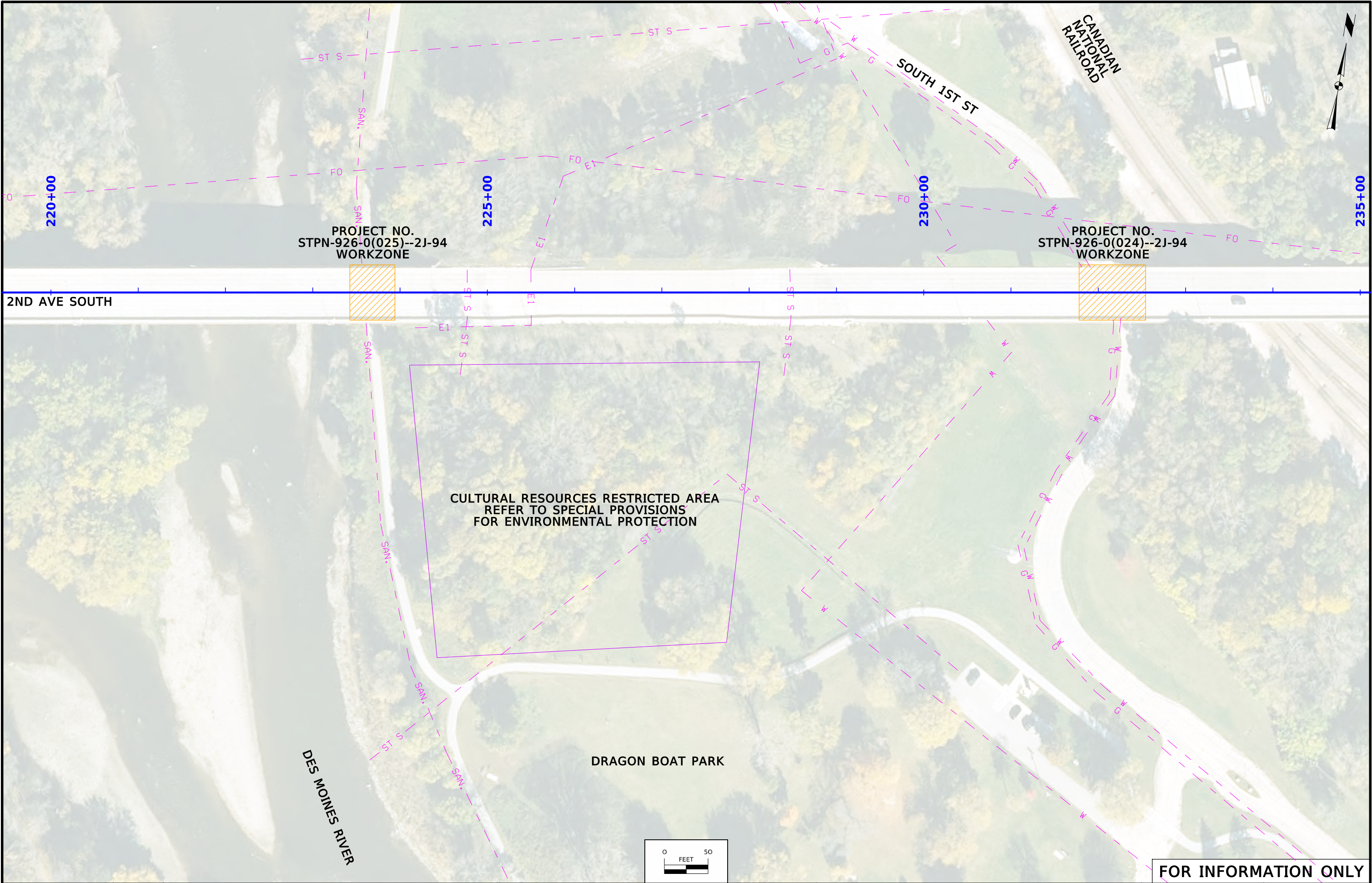


Property Line Symbol



Property Line

(COVERS SHEET SERIES D)



FOR INFORMATION ONLY

TRAFFIC CONTROL PLAN

Traffic on IA 926 at the Bridge over the Des Moines River will be maintained per Standard Road Plans listed on Tab. 105-4 and as detailed on the J Sheets.

Phinney Park Trail and the Unnamed Park Trail on the east side of the Des Moines River will be closed to traffic as detailed on the J Sheets. Trail closures will only be allowed during time of active work and all closures must be removed at the end of the working day.

The Contractor will coordinate with the Iowa DOT and the City of Fort Dodge prior to beginning any work or traffic control and provide at least a seven (7) day notice prior to any closure.

Fort Dodge City Contact:
Austin Morrow, P.E.
Phone - 515-576-4551 x1239
Email - amorrow@fortdodgeiowa.org

Iowa DOT Contact:
Devendra Tamrakar, P.E.
Phone - 515-239-1635
Email - Devendra.Tamrakar@iowadot.us

111_01
10/14/22

COORDINATED OPERATIONS

Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.

Project	Type of Work
STPN-926-0(024)--2J-94	Bridge Repair

CROSS SECTION VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS		
SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Lavender	(9)	Temporary Pavement Shading
Brown, Med	(237)	Future Proposed Pavement Shading

CROSS SECTION VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS			
	Pavement Removal		Proposed Granular Shoulder
	Proposed Granular Subbase		Temporary Shoulder
	Proposed Special Backfill		Existing Shoulder Strengthening
	Temporary Barrier Rail		Permanent Barrier Rail
			Channelizing Device

PLAN VIEW COLOR LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS		
LINEWORK	Design Color No.	
Green	(2)	Existing Topographic Features and Labels
Magenta	(5)	Pavement Marking Call Outs
Blue	(1)	Proposed Alignment, Stationing, Tic Marks, and Alignment Annotation
Yellow	(4)	Pavement Markings, Yellow
Off White	(254)	Pavement Markings, White
Violet	(15)	Temporary barrier rail, Unpinned
Flush Orange	(228)	Temporary barrier rail, Pinned

SHADING	Design Color No.	
Green, Light	(225)	Existing Pavement Shading
Gray, Light	(48)	Previously Constructed Pavement Shading
Gray, Med	(6)	Proposed Granular Surface Shading
Gray, Med	(80)	Previously Constructed Granular Surface Shading
Blue, Light	(230)	Proposed Pavement Shading
Pink, Dark	(13)	Temporary Pavement Shading
Brown, Light	(236)	Proposed Grading Limits Shading
Cyan	(7)	Proposed MSE or CIP Wall Shading
Red	(3)	Proposed Bridge Shading and Sign Trusses
Black w/Gray, Light Fill	(0,48)	Previously Constructed Structure

PLAN VIEW PATTERN AND SYMBOL LEGEND OF TRAFFIC CONTROL AND STAGING SHEETS			
●	Channelizing Device		Crash Cushion (Temp or Perm)
✕	Drum		Traffic Signal
■	Temporary Lane Separator		Flagger
◆	Tubular Marker		Temporary Floodlighting
♦	Channelizer Marker		Traffic Sign
△	Concrete Barrier Marker		Type III Barricade
↵	Delineator		Type A Warning Light
—	Temporary Barrier Rail		Direction of Traffic
	Pavement Removal		Safety Closure
	Sand Barrel Layout		Lane Identification
	Vehicle Detection Area		

NOTE: Device spacing according to Standard Road Plans unless specifically dimensioned.

TRAFFIC CONTROL
AND STAGING
INFORMATION SHEET

(COVERS SHEET SERIES J)



FILE NO. 32973	ENGLISH	DESIGN TEAM WHKS & CO.	WEBSTER COUNTY	PROJECT NUMBER STPN-926-0(025)--2J-94	SHEET NUMBER J.4
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