

| INDEX OF SHEETS |                                                    |
|-----------------|----------------------------------------------------|
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| <b>A Sheets</b> | <b>Title Sheets</b>                                |
| A.1             | Title Sheet                                        |
| A.2             | Location Map Sheet                                 |
| <b>B Sheets</b> | <b>Typical Cross Sections and Details</b>          |
| B.1 - 2         | Typical Cross Sections and Details                 |
| <b>D Sheets</b> | <b>Mainline Plan and Profile Sheets</b>            |
| * D.1           | Plan & Profile Legend & Symbol Information Sheet   |
| * D.2           | IA 38                                              |
| <b>G Sheets</b> | <b>Survey Sheets</b>                               |
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| G.?             | Horizontal Control Tab. & Super for all Alignments |
| <b>J Sheets</b> | <b>Traffic Control and Staging Sheets</b>          |
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| J.2             | 511 Travel Restrictions                            |
| J.3             | Coordinated Operations                             |
| * J.4           | Detour Route                                       |
| <b>V Sheets</b> | <b>Bridge and Culvert Situation Plans</b>          |
| V.1 - 2         | Bridge and Culvert Situation Plans                 |
| <b>W Sheets</b> | <b>Mainline Cross Sections</b>                     |
| W.1             | Cross Sections Legend & Symbol Information Sheet   |
| W.2 - 9         | Mainline Cross Sections                            |
|                 | * Color Plan Sheets                                |



PLANS OF PROPOSED IMPROVEMENT ON THE  
PRIMARY ROAD SYSTEM  
JONES COUNTY  
Bridge-Unspecified  
Sibles Creek 0.3 mi S  
of Co Rd E53

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

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



REVISIONS

|                               |  |
|-------------------------------|--|
| TOTAL                         |  |
| 22                            |  |
| PROJECT IDENTIFICATION NUMBER |  |
| 22-53-038-030                 |  |
| PROJECT NUMBER                |  |
| BRF-038-3(063)--38-53         |  |
| R.O.W. PROJECT NUMBER         |  |
|                               |  |
|                               |  |
|                               |  |

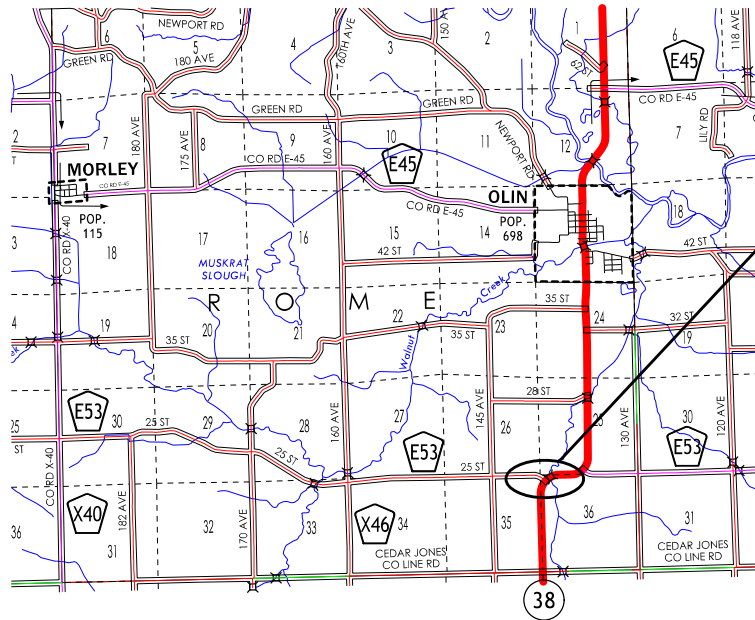
| DESIGN DATA RURAL |       |      |        |
|-------------------|-------|------|--------|
| 2027              | AADT  | 1100 | V.P.D. |
| 2047              | AADT  | 1100 | V.P.D. |
| 20                | - DHV | -    | V.P.H. |
| TRUCKS            |       | 22   | %      |
| Total             |       |      |        |
| Design ESALs      |       | -    |        |

| INDEX OF SEALS |            |                         |                     |
|----------------|------------|-------------------------|---------------------|
| SHEET NO.      | NAME       | TYPE                    | BID QUANTITY SHEETS |
| A.1            | Dung T. Ta | Primary Signature Block | X                   |
| X              | X          | X                       | X                   |
|                |            |                         |                     |
|                |            |                         |                     |
|                |            |                         |                     |
|                |            |                         |                     |

PRELIMINARY PLANS

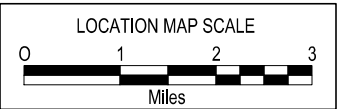
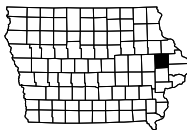
Subject to change by final design.

D5 PLAN - Date: 12/3/2024



PROJECT LOCATION  
Sta. 267+15.00  
Maint. #: 5340.1S038  
FHWA #: 32290

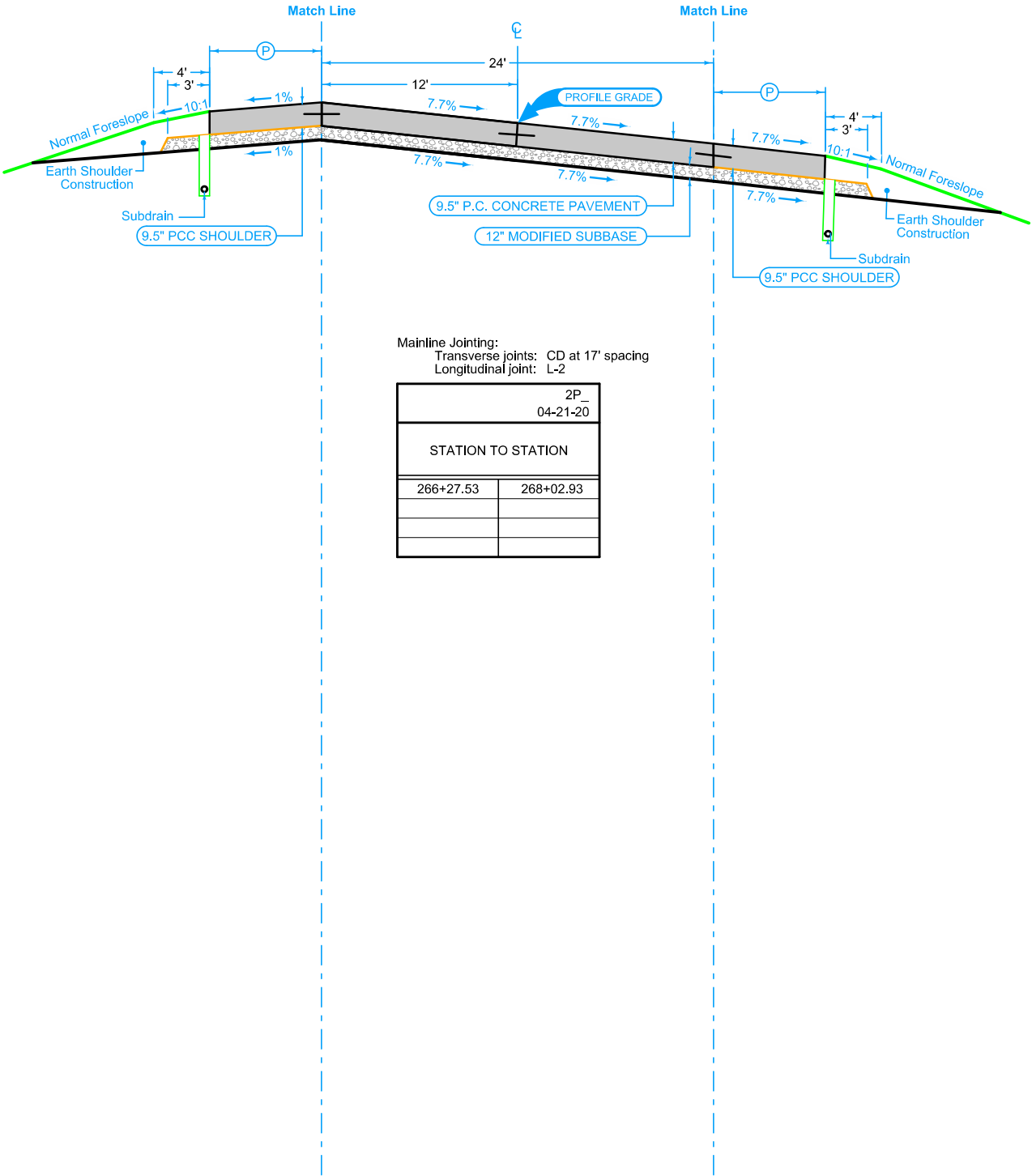
R-3W



Full Depth PCC Shoulder

Shoulder Jointing:  
Longitudinal joint: BT-2, L-2 or KT-2  
Transverse joints: C at 17' spacing

| 2_P_FullPCC_04-20-21 |           |          |
|----------------------|-----------|----------|
| STATION TO STATION   |           | (P) Feet |
| 266+27.53            | 268+02.93 | 10       |
|                      |           |          |
|                      |           |          |



Mainline Jointing:  
Transverse joints: CD at 17' spacing  
Longitudinal joint: L-2

| 2P_04-21-20        |           |
|--------------------|-----------|
| STATION TO STATION |           |
| 266+27.53          | 268+02.93 |
|                    |           |
|                    |           |

Full Depth PCC Shoulder

Shoulder Jointing:  
Longitudinal joint: BT-2, L-2 or KT-2  
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| STATION TO STATION   |           | (P) Feet |
| 266+27.53            | 268+02.93 | 10       |
|                      |           |          |
|                      |           |          |

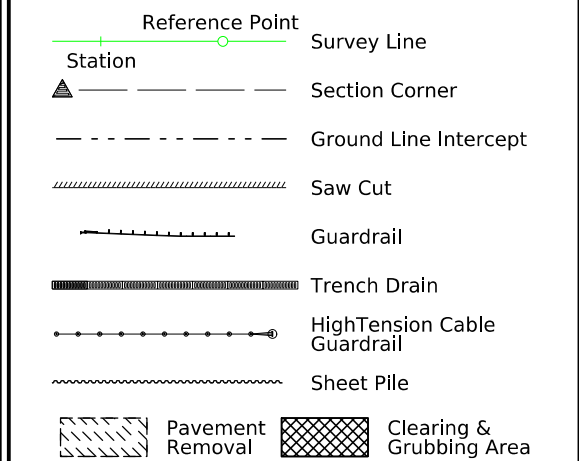


|  |                                   |
|--|-----------------------------------|
|  | Interstate Highway Symbol         |
|  | U.S. Highway Symbol               |
|  | Iowa Highway Symbol               |
|  | County Road Highway Symbol        |
|  | Evergreen Tree                    |
|  | Deciduous 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                 |

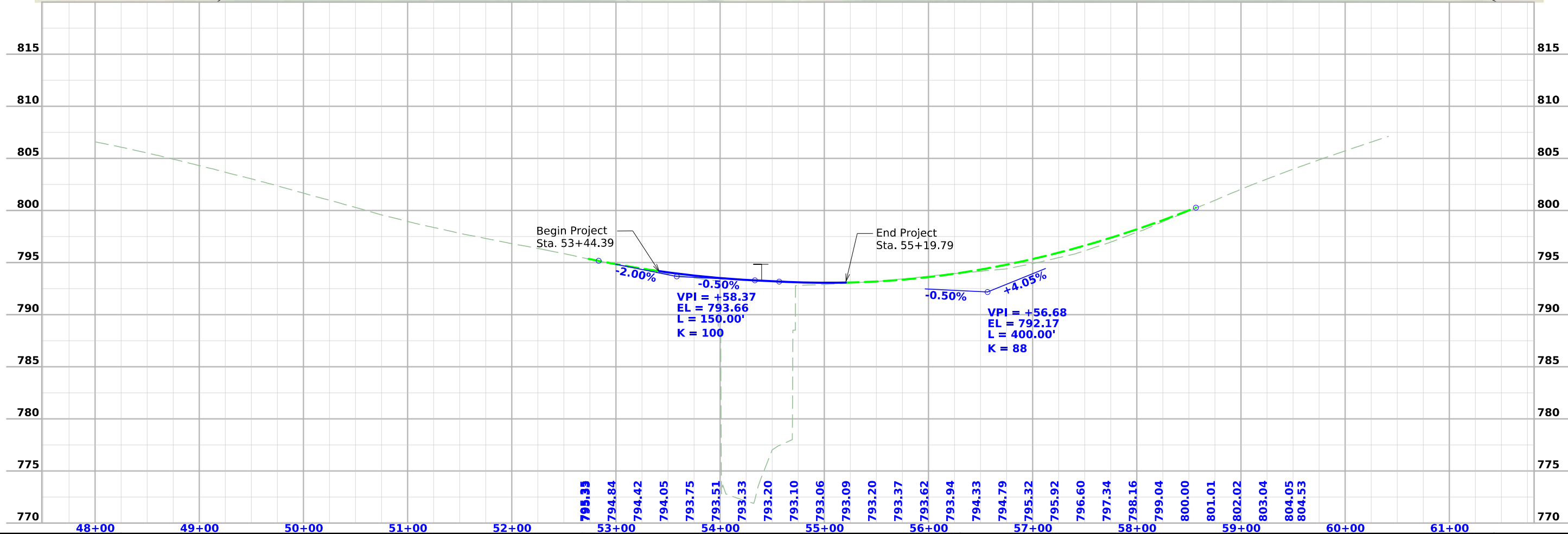
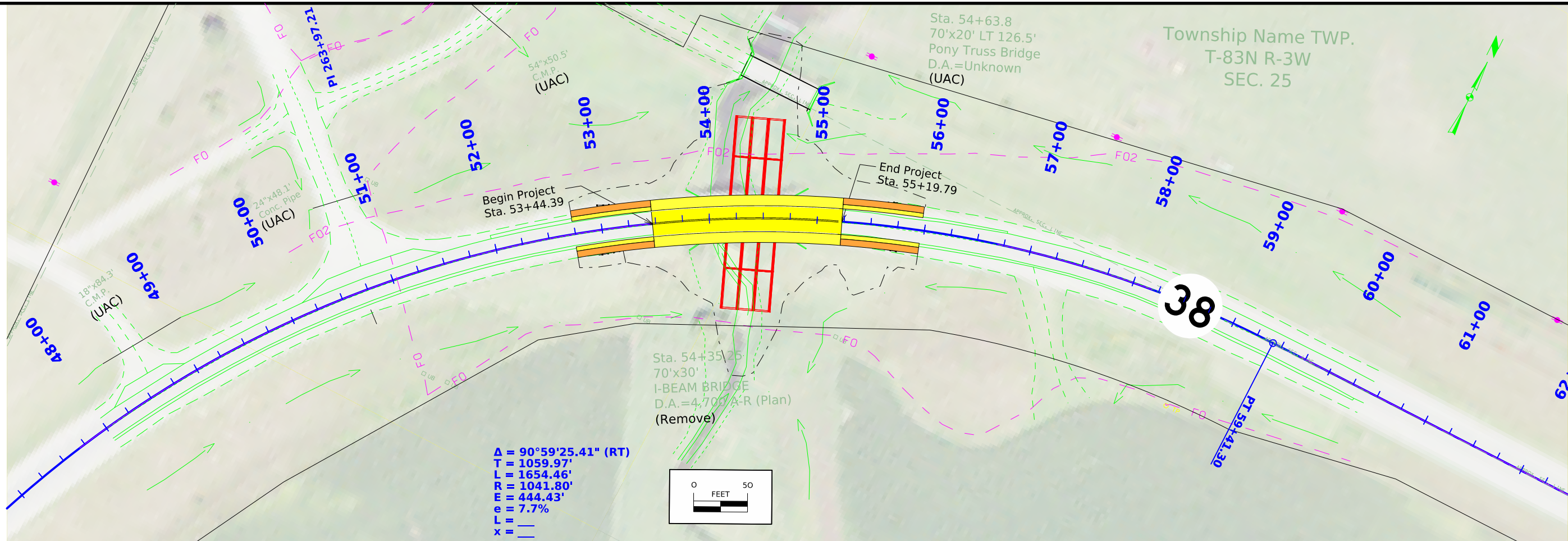
| LINEWORK      |       | Design Color No.                                                                    |                                                                     |              |
|---------------|-------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------|--------------|
| 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    |



|                                                                                       |                                    |
|---------------------------------------------------------------------------------------|------------------------------------|
|  | Proposed Right-of-Way              |
|  | Existing Right of Way              |
|  | Existing and Proposed Right-of-Way |
|  | Easement and Existing Right-of-Way |
|  | Easement (Temporary)               |
|  | Easement                           |
| <b>C/A</b>                                                                            | Access Control                     |
|  | Property Line                      |

(COVERS SHEET SERIES D, E, F, & K)



Survey Information

SURVEY INDEX

County: Jones  
PIN: 22-53-038-030  
Project Number: BRF-038-3(063)--38-53  
Location: IA 38 Bridge over Sibles Creek 0.3 mi S of Co Rd E53  
Type of Work: Bridge Replacement  
Project Directory: 5303803022

Survey Personnel

Myron Fox – Survey Party Chief  
Sam Schilb – Assistant Survey Party Chief

Date(s) of Survey

Begin Date 04/16/2024  
End Date 05/15/2024

General Information

This survey is for a Bridge Replacement over Sibles Creek 0.3 mi S of Co. Rd. E53.  
This survey request was for the US Hwy 38 corridor only. This project is a Full Field  
DTM survey.

Utility Information

For logging data and other utility details see Utility Survey and Ownership Report in the  
Utility folder of the PrelimSurvey project directory.

Project Control

Coordinates were determined for primary project control points by conducting  
concurrent six-hour static observations. Post processing is constrained to nearby Iowa  
Real Time Network reference stations. For additional details of the control survey,  
contact the Preliminary Survey department.

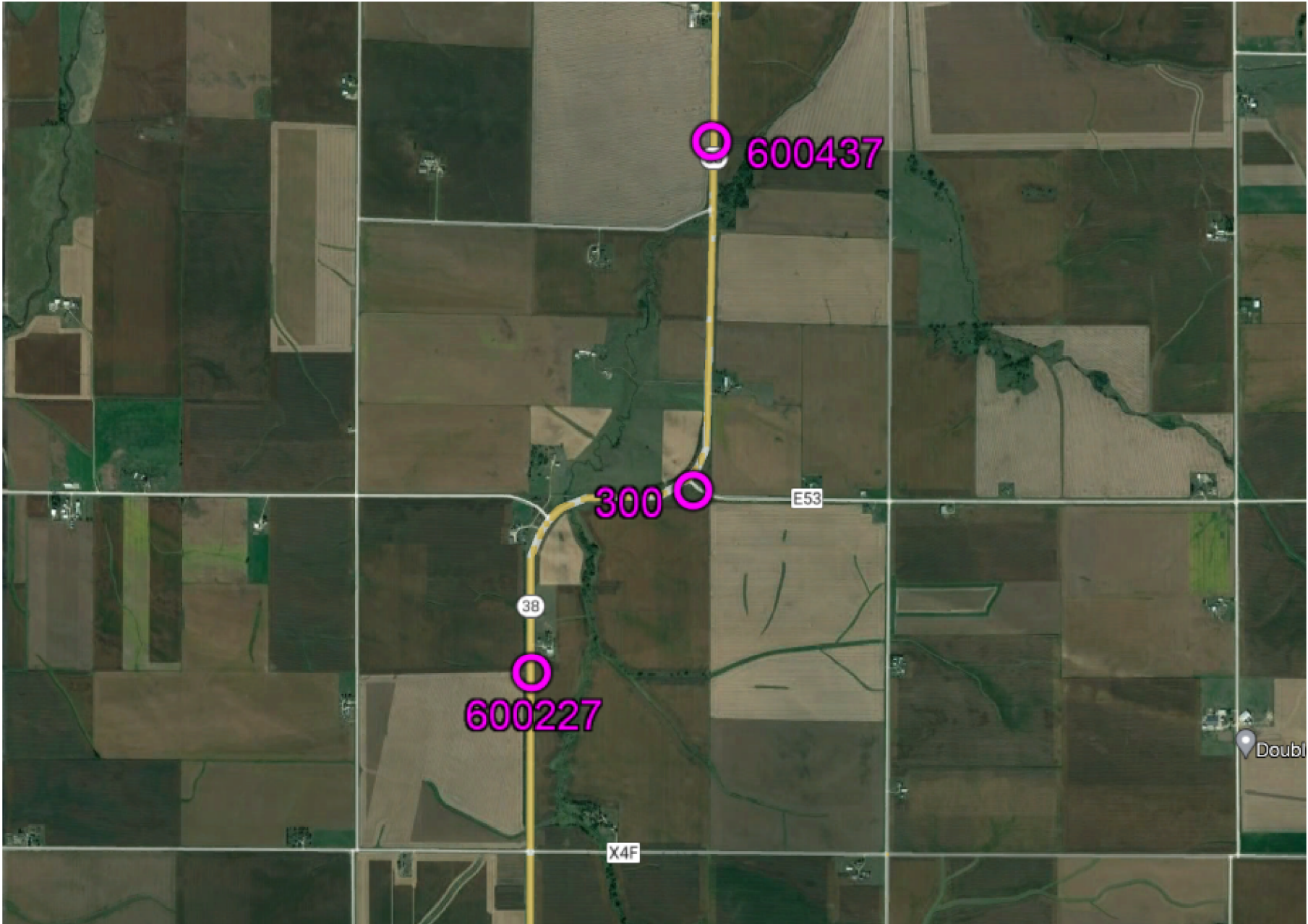
PROJECT DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 ADJUSTMENT)  
COORDINATE SYSTEM: IOWA REGIONAL COORDINATE SYSTEM ZONE 10  
(U.S. SURVEY FOOT)  
VERTICAL DATUM: NAVD88  
GEOID MODEL: 2018u3

Alignment Information

The alignment for this project was provided by the District 6 Land Survey Office.

CONTROL POINT VICINITY MAP

This map is a guide to the vicinity of the primary project control points. Primary control is for use with RTK base stations and for RTN validation. Future surveys will use primary project control to establish temporary control as needed for construction or other surveying applications.



HORIZ. DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 Adjustment) - Iowa RCS Zone 10 (U.S. Survey Foot)

VERT. DATUM: NAVD88 - Geoid Model: 2018u3

Coordinate listing from next sheet will be used with IaRTN for monument recovery. No other reference ties are given.

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING  
HORIZ. DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 Adjustment)  
Ia. Regional Coordinate System Zone 10 (U.S. Survey Foot)  
VERT. DATUM: NAVD88  
Geoid Model: 2018u3

| Point Name | Northing   | Easting     | Elevation | Code Description                                                                                                                         |
|------------|------------|-------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------|
| 600227     | 8044472.65 | 20640059.17 | 795.12    | CP SCR E 1/4 SEC 35-T83N-R3W FND AS DESCRIBED                                                                                            |
| 600437     | 8052455.62 | 20642703.67 | 772.53    | CP SCR N 1/4 COR SEC 25-T83N FND AS DESCRIBED                                                                                            |
| 300        | 8047219.20 | 20642464.40 | 818.32    | CP SET 5/8th" x 42" rebar from the intersection of Hwy 38 and Co Rd E53 proceed SE 168' point is 75' SW of CL Co Rd E53 4" below surface |

NO ACCESS RIGHTS ARE TO BE ACQUIRED ON THIS PROJECT.

Jones

STPN-038-3(064)--2J-53

Sibles Creek 0.3 mi S of Co Rd E53

[5303803022](#)

Project Code

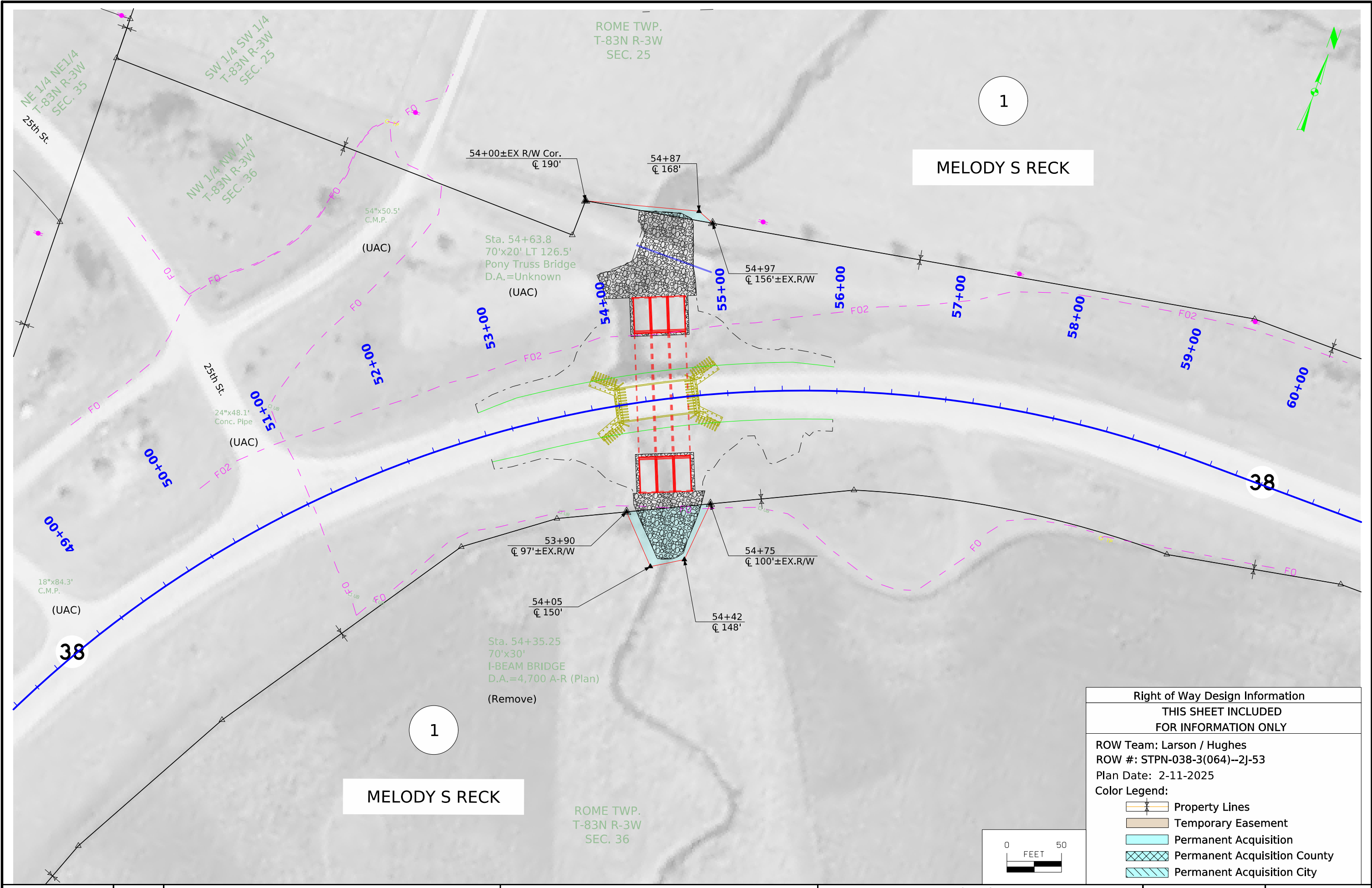
22-53-038-030

Route

IA 38

|           |               | State   |      | County |      |     | City |        |  |  | Temp Ease  |       |       |             |          |           |  |  |  |
|-----------|---------------|---------|------|--------|------|-----|------|--------|--|--|------------|-------|-------|-------------|----------|-----------|--|--|--|
| Parcel No | Owner Name    | Fee     | Ease | Fee    | Ease | Fee | Ease | Excess |  |  | Mitigation | Other | House | Building(s) | A/C Only | Total Acq |  |  |  |
| 1         | Melody S Reck | 0.07 AC |      |        |      |     |      |        |  |  |            |       |       |             |          |           |  |  |  |

1 Parcels



108\_23A  
8/15/22

TRAFFIC CONTROL PLAN

Traffic on IA 38 shall be maintained at all times during construction through the use of an offsite detour as shown in the following J sheets.

| 511 TRAVEL RESTRICTIONS |       |           |        |                         |                 |                        |                                                     |                        |                         |                             |                                          |                                      | 108_25<br>3/28/24 |
|-------------------------|-------|-----------|--------|-------------------------|-----------------|------------------------|-----------------------------------------------------|------------------------|-------------------------|-----------------------------|------------------------------------------|--------------------------------------|-------------------|
| Line No.                | Route | Direction | County | Location Description    | Feature Crossed | Object Type            | Maint. Bridge No.<br>or Structure ID<br>or FHWA No. | Type of<br>Restriction | Existing<br>Measurement | Construction<br>Measurement | Construction<br>Measurement as<br>Signed | Projected As<br>Built<br>Measurement | Remarks           |
| 1.0                     | IA 38 | Both      | Jones  | IA 38 over Sibles Creek |                 | Traffic Control Device | 32290                                               | Road Closure           |                         |                             |                                          |                                      |                   |

111\_01  
10/14/22

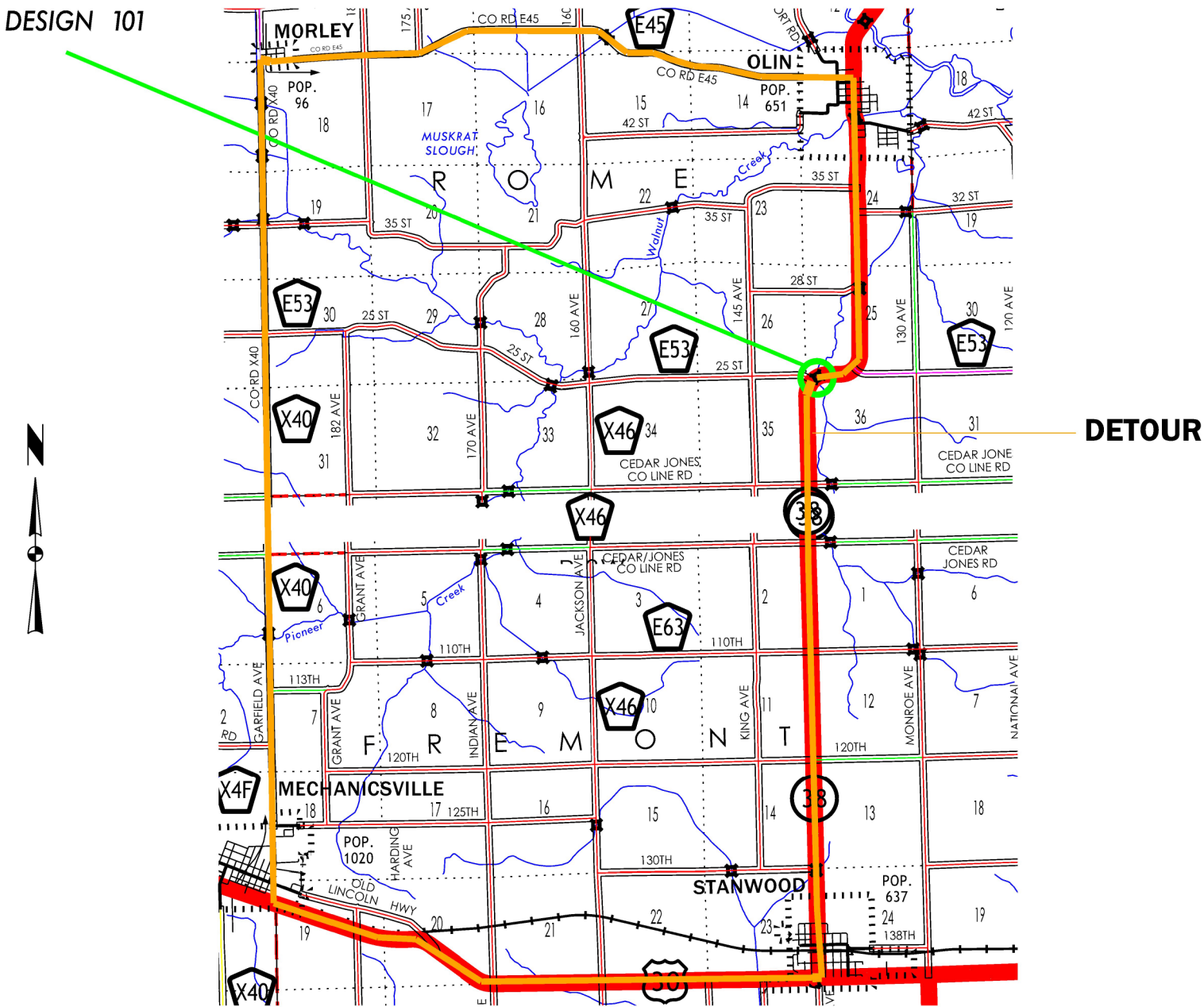
COORDINATED OPERATIONS

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 |
| None Provided |              |
|               |              |

STA 267+15.00  
FHWA 32290  
MAINT. NO. 5340.1S038  
DESIGN 101

# JONES COUNTY



OVER SIBLES CREEK ON IA 38, 0.3 MIS OF  
CO RD E53  
BRF-038-3(063)--38-53  
PROJECT CODE: 22-53-038-030

53

Control Point: CP300, N 8047219.20, E 20642464.40, CP Set 5/8" x 42" rebar from the intersection of Hwy 38 and Co Rd E53 proceed SE 168' point is 75' SW of C Co Rd E53 4" below surface, Elev. = 818.32

General Notes:  
This design is for the replacement of the existing 71'-3" x 30'-0" steel I-beam bridge, Jones Design No. 1351, FHWA No. 032290, Maint. No. 5340.15038.

Design Notes:  
Inlet revetment is proposed at the culvert due to the velocity exceeding policy limits. Outlet revetment is proposed at the culvert due to the creek channel shaping.

Flow line of the culvert has been set 1' below streambed.

Span length exceeds the maximum span length for standard triple cell culverts. Therefore, the structure will require a non-standard design.

Assumed culvert top slab depth is 12" and assumed wall thickness is 12".

Clearances to the existing structure are derived from existing drawings. It is the responsibility of the contractor to verify the dimensions as needed.

The west abutment of the existing bridge, located at the downstream side of the culvert, shall be well protected from stream velocity using Class E Revetment.

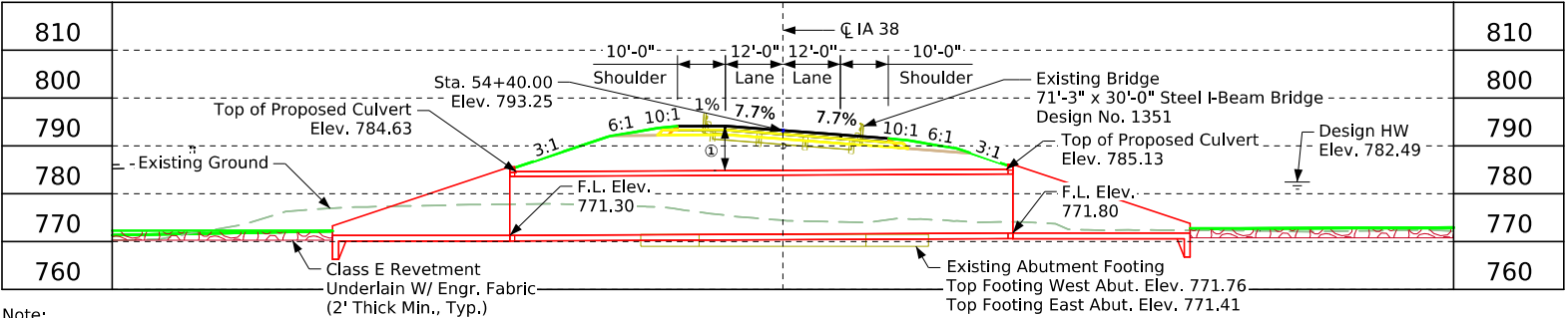
### Profile Grade on C IA 38 & P.G.L.

### IA 38 Traffic Estimate

2027 AADT 1,100 V.P.D.  
2047 AADT 1,100 V.P.D.  
2047 DHV ??? V.P.H.  
Trucks 22 %  
Total Design ESALS ???

### Curve Data IA 38

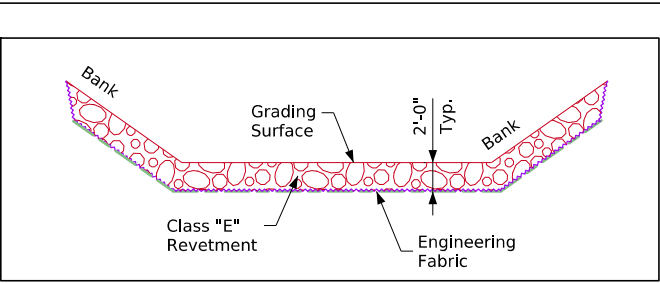
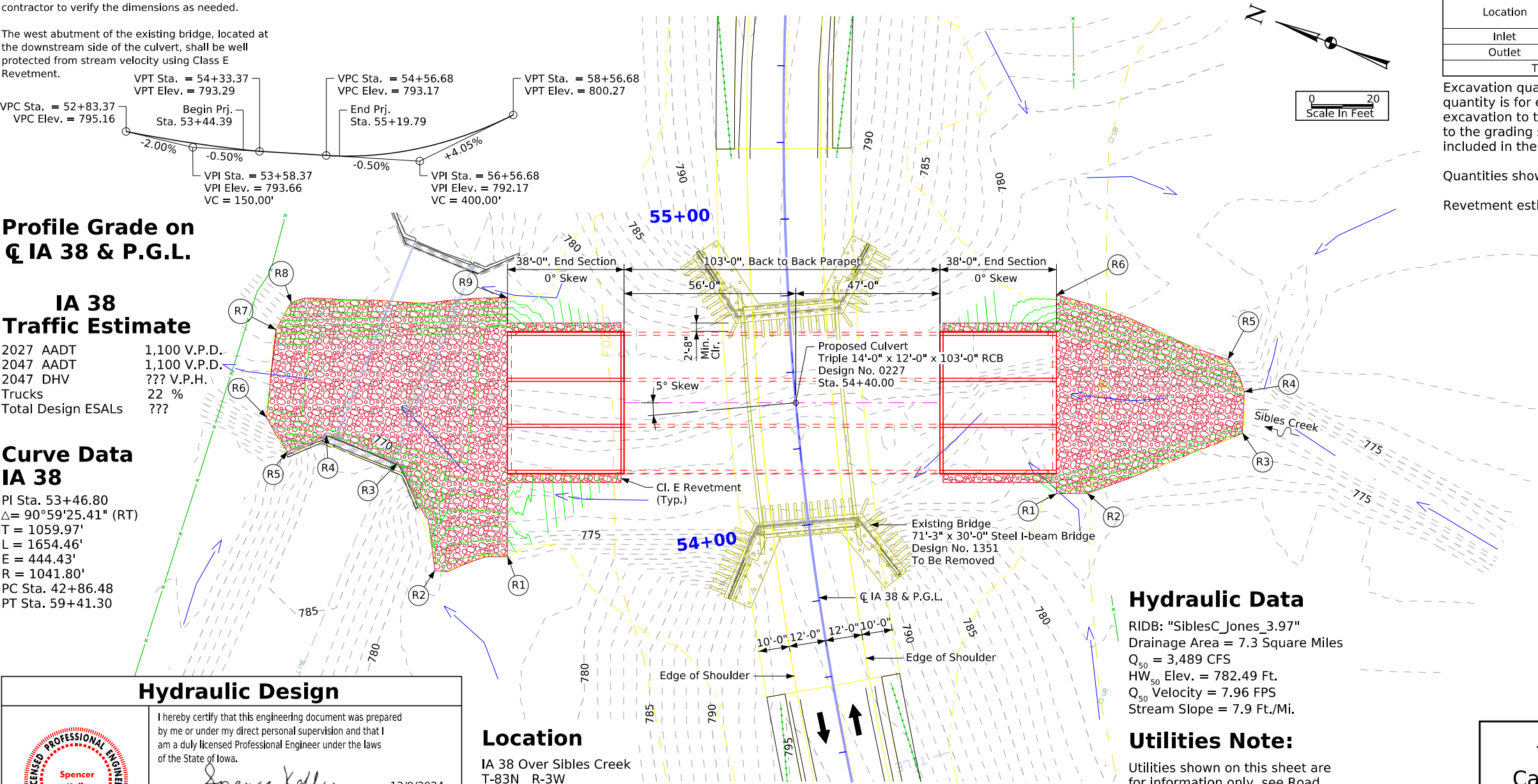
PI Sta. 53+46.80  
Δ = 90°59'25.41" (RT)  
T = 1059.97'  
L = 1654.46'  
E = 444.43'  
R = 1041.80'  
PC Sta. 42+86.48  
PT Sta. 59+41.30



Note:  
Roadway dimensions are measured perpendicular to C IA 38.

Max Fill Height = 9'-6"

### Longitudinal Section Along C Culvert



### Typical Channel Protection

### Estimated Revetment Quantities Included With Road Plans

| Location | Revetment Class "E" (Ton) | Engineering Fabric (SY) | CL 10 Channel Excavation (CY) |
|----------|---------------------------|-------------------------|-------------------------------|
| Inlet    | 370.7                     | 347.5                   | 231.6                         |
| Outlet   | 621.9                     | 583.0                   | 388.6                         |
| Totals   | 992.6                     | 930.5                   | 620.3                         |

Excavation quantity calculated from grading surface. Excavation quantity is for embedded revetment core out only, and does not include excavation to the grading surface. Excavation quantity to the grading surface is determined by Road Design and included in the Road Plans.

Quantities shown for information only. See Road Sheets.

Revetment estimated at 1.6 Ton/CY.

### Revetment Layout Table

| Points | Inlet End  |             |        |
|--------|------------|-------------|--------|
|        | Station    | Offset      | Elev.  |
| R1     | 53+99.97   | 81.39' Rt.  | 775.93 |
| R2     | 53+98.66   | 91.38' Rt.  | 777.21 |
| R3     | 54+13.90   | 143.92' Rt. | 774.01 |
| R4     | 54+29.38   | 145.93' Rt. | 773.56 |
| R5     | 54+41.96   | 141.79' Rt. | 777.92 |
| R6     | 54+70.22   | 87.35' Rt.  | 778.70 |
| Points | Outlet End |             |        |
|        | Station    | Offset      | Elev.  |
| R1     | 54+01.82   | 98.78' Lt.  | 778.04 |
| R2     | 54+00.41   | 122.80' Lt. | 777.26 |
| R3     | 54+32.55   | 131.21' Lt. | 774.74 |
| R4     | 54+42.42   | 153.44' Lt. | 772.98 |
| R5     | 54+38.75   | 166.50' Lt. | 776.59 |
| R6     | 54+48.84   | 172.34' Lt. | 771.76 |
| R7     | 54+73.21   | 167.36' Lt. | 773.55 |
| R8     | 54+80.62   | 161.92' Lt. | 777.95 |
| R9     | 54+78.95   | 91.43' Lt.  | 777.73 |

### Hydraulic Data

RIDB: "SiblesC\_Jones\_3.97"  
Drainage Area = 7.3 Square Miles  
Q<sub>50</sub> = 3,489 CFS  
HW<sub>50</sub> Elev. = 782.49 Ft.  
Q<sub>50</sub> Velocity = 7.96 FPS  
Stream Slope = 7.9 Ft./Mi.

### Utilities Note:

Utilities shown on this sheet are for information only, see Road Design sheets for final utility information.

### Utility Legend:

FO - Buried Fiber Optic, Olin Telephone Company  
FO2 - Buried Fiber Optic, Mediacom

### Hydraulic 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: Spencer Kelly, Date: 12/9/2024  
Printed or Typed Name: Spencer Kelly  
My license renewal date is December 31, 2025

Pages or sheets covered by this seal: Sheets V.1 and V.2

### Location

IA 38 Over Sibles Creek  
T-83N R-3W  
Section 36  
Rome Township  
Jones County  
FHWA No. 032291  
Bridge Maint. No. 5340.15038  
Latitude 41.961118°  
Longitude -91.149890°

### Situation Plan

### Triple 14'-0" x 12'-0" x 103'-0" Cast-in-Place Concrete Box Culvert

### Situation Plan

STA. 54+40.00 (IA 38)

December 2024

### Jones County

Design No. 0227, Design Sheet No. 1 of 1, FHWA/Asset 032291

Control Point: CP300, N 8047219.20, E 20642464.40, CP Set 5/8" x 42" rebar from the intersection of Hwy 38 and Co Rd E53 proceed SE 168' point is 75' SW of C Co Rd E53 4" below surface, Elev. = 818.32

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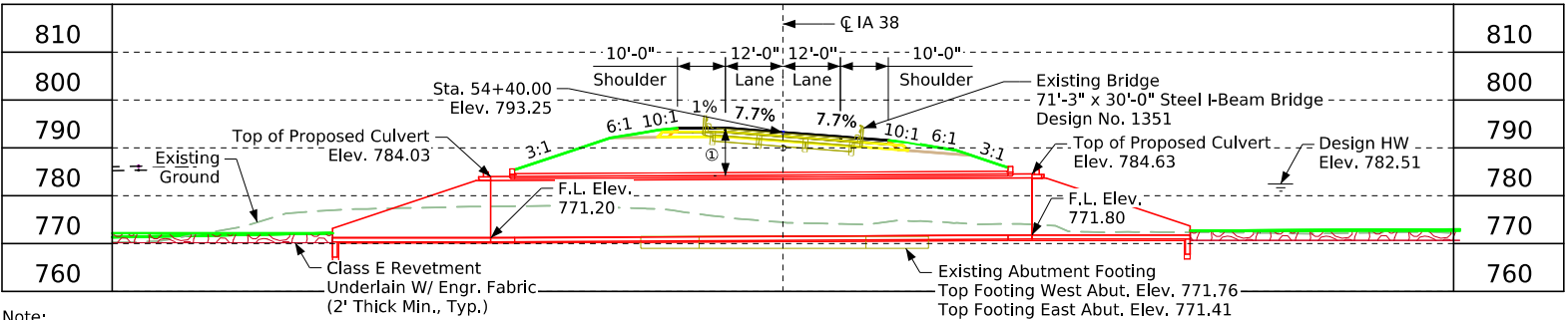
Design Notes:  
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Flow line of the culvert has been set 1' below streambed.

Assumed culvert top slab depth is 10" and assumed wall thickness is 9". Provide 6" gap between culvert barrels.

Clearances to the existing structure are derived from existing drawings. It is the responsibility of the contractor to verify dimensions as needed.

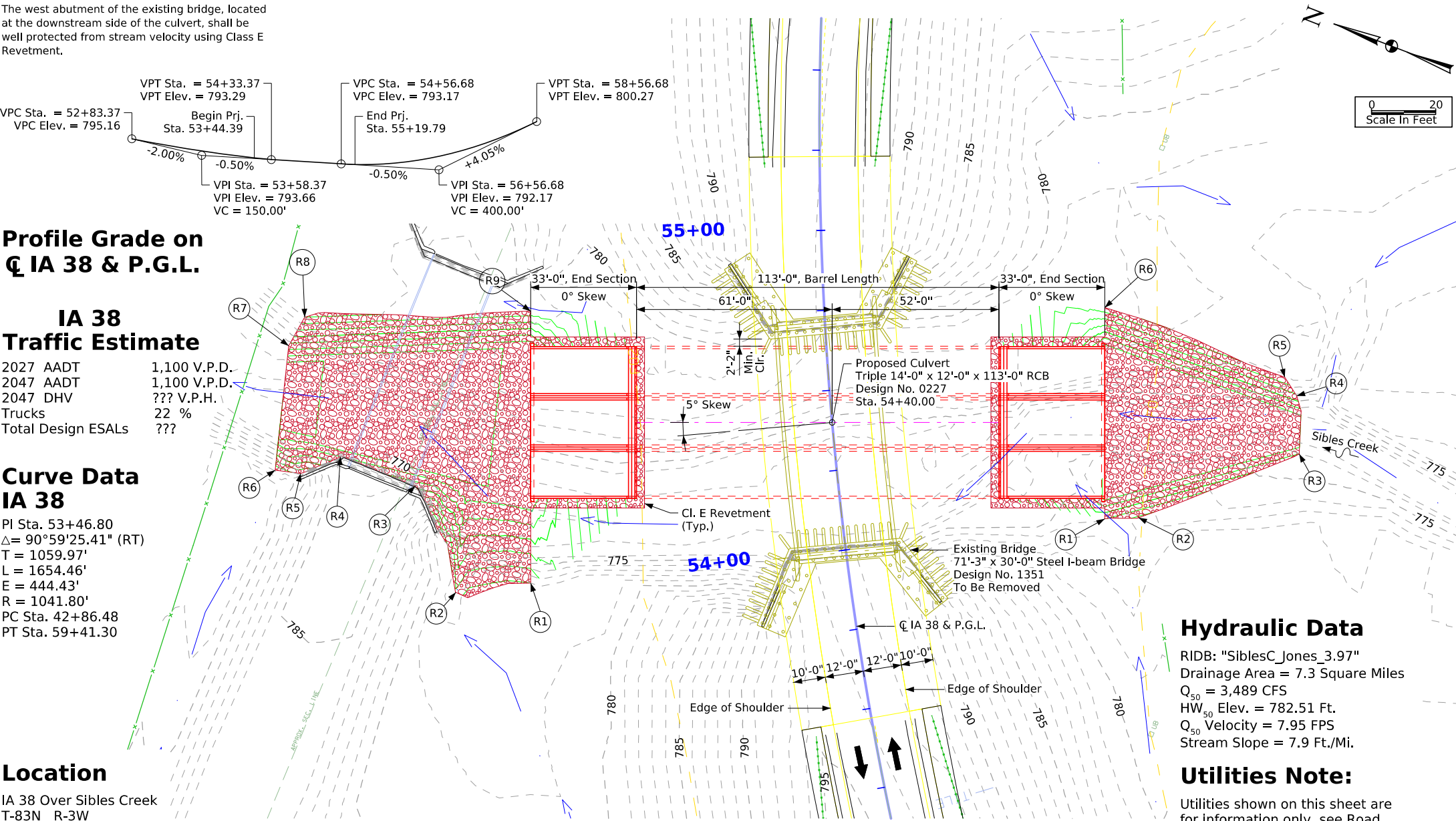
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Note:  
Roadway dimensions are measured perpendicular to C IA 38.

① Max Fill Height = 10'-0"

### Longitudinal Section Along C Culvert



### Profile Grade on C IA 38 & P.G.L.

### IA 38 Traffic Estimate

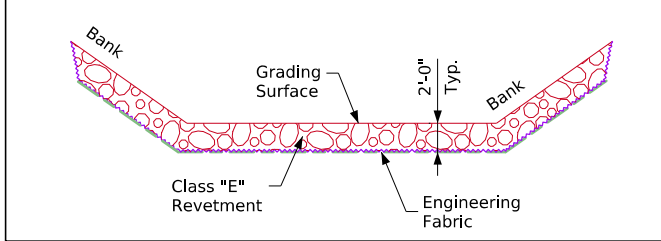
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2047 DHV ??? V.P.H.  
Trucks 22 %  
Total Design ESALS ???

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T = 1059.97'  
L = 1654.46'  
E = 444.43'  
R = 1041.80'  
PC Sta. 42+86.48  
PT Sta. 59+41.30

### Location

IA 38 Over Sibles Creek  
T-83N R-3W  
Section 36  
Rome Township  
Jones County  
FHWA No. 032291  
Bridge Maint. No. 5340.15038  
Latitude 41.961118°  
Longitude -91.149890°



### Typical Channel Protection

### Estimated Revetment Quantities Included With Road Plans

| Location | Revetment Class "E" (Ton) | Engineering Fabric (SY) | CL. 10 Channel Excavation (CY) |
|----------|---------------------------|-------------------------|--------------------------------|
| Inlet    | 389.5                     | 365.2                   | 243.4                          |
| Outlet   | 642.6                     | 602.5                   | 401.6                          |
| Totals   | 1032.1                    | 967.7                   | 645.0                          |

Excavation quantity calculated from grading surface. Excavation quantity is for embedded revetment core out only, and does not include excavation to the grading surface. Excavation quantity to the grading surface is determined by Road Design and included in the Road Plans.

Quantities shown for information only. See Road Sheets.

Revetment estimated at 1.6 Ton/CY.

### Revetment Layout Table

| Points | Inlet End  |             |        |
|--------|------------|-------------|--------|
|        | Station    | Offset      | Elev.  |
| R1     | 53+99.47   | 81.33' Rt.  | 775.95 |
| R2     | 53+98.27   | 91.31' Rt.  | 777.24 |
| R3     | 54+13.89   | 143.91' Rt. | 774.03 |
| R4     | 54+34.92   | 145.00' Rt. | 775.76 |
| R5     | 54+42.01   | 141.79' Rt. | 777.95 |
| R6     | 54+70.86   | 87.38' Rt.  | 778.69 |
| Points | Outlet End |             |        |
|        | Station    | Offset      | Elev.  |
| R1     | 54+01.86   | 98.78' Lt.  | 778.02 |
| R2     | 54+01.95   | 122.40' Lt. | 777.14 |
| R3     | 54+32.55   | 131.21' Lt. | 774.65 |
| R4     | 54+42.44   | 153.43' Lt. | 772.92 |
| R5     | 54+38.80   | 166.49' Lt. | 776.55 |
| R6     | 54+40.26   | 174.30' Lt. | 777.82 |
| R7     | 54+73.21   | 167.33' Lt. | 773.58 |
| R8     | 54+80.69   | 161.91' Lt. | 778.00 |
| R9     | 54+79.30   | 91.43' Lt.  | 777.61 |

### Hydraulic Data

RIDB: "SiblesC\_Jones\_3.97"  
Drainage Area = 7.3 Square Miles  
Q<sub>50</sub> = 3,489 CFS  
HW<sub>50</sub> Elev. = 782.51 Ft.  
Q<sub>50</sub> Velocity = 7.95 FPS  
Stream Slope = 7.9 Ft./Mi.

### Utilities Note:

Utilities shown on this sheet are for information only, see Road Design sheets for final utility information.

### Utility Legend:

FO - Buried Fiber Optic, Olin Telephone Company  
FO2 - Buried Fiber Optic, Mediacom

### Triple 14'-0" x 12'-0" x 113'-0" Precast Concrete Box Culvert

### Situation Plan

STA. 54+40.00 (IA 38)

December 2024

### Jones County

IOWA DEPARTMENT OF TRANSPORTATION

Design No. 0227

Design Sheet No. 1 of 1

FHWA/Asset 032291

|                |         |                    |              |                                     |                  |
|----------------|---------|--------------------|--------------|-------------------------------------|------------------|
| FILE NO. 32674 | ENGLISH | DESIGN TEAM Jacobs | Jones COUNTY | PROJECT NUMBER BRF-038-3(063)-38-53 | SHEET NUMBER V.2 |
|----------------|---------|--------------------|--------------|-------------------------------------|------------------|

| CROSS SECTION VIEW COLOR LEGEND |                                 |                    |                                      |
|---------------------------------|---------------------------------|--------------------|--------------------------------------|
| Design Color No.                | Feature                         | Design Color No.   | Feature                              |
| Aggregate                       |                                 | Grading            |                                      |
| (64)                            | Choke Stone                     | (8)                | Behind Curb Cut                      |
| (42)                            | Engineering Fabric              | (6)                | Granular                             |
| (8)                             | Flooded Backfill                | (13)               | Granular Back Fill                   |
| (92)                            | Macadam Stone                   | (48)               | Rock Undercut                        |
| (20)                            | Modified                        | (8)                | Shoulder Earth Fill                  |
| (12)                            | Plowing Shaping                 | (2)                | Side Slopes                          |
| (14)                            | Porous Backfill                 | (226)              | Side Slopes Dressing                 |
| (8)                             | Revetment Class A               | Substrata          |                                      |
| (6)                             | Revetment Class B               | (128)              | Boulder                              |
| (62)                            | Revetment Class C               | (209)              | Boulder Removed                      |
| (188)                           | Revetment Class D               | (48)               | Broken Weathered                     |
| (28)                            | Revetment Class E               | (210)              | Broken Weathered Removed             |
| (12)                            | Shoulder Special Backfill       | (3)                | Core Out                             |
| (12)                            | Special Backfill                | (115)              | Core Out Remove Only                 |
| (20)                            | Subbase                         | (195)              | Core Out Remove and Replace          |
| (20)                            | Subbase Lower                   | (203)              | Existing Pavement                    |
| (20)                            | Subbase Upper                   | (184)              | Existing Pavement Remove Only        |
| (118)                           | Subgrade Treatment              | (200)              | Existing Pavement Remove and Replace |
| Asphalt                         |                                 | (6)                | Loam                                 |
| (207)                           | HMA Base Course                 | (211)              | Loam Removed                         |
| (207)                           | HMA Interim Course              | (80)               | Rock                                 |
| (207)                           | HMA Surface Course              | (212)              | Rock Removed                         |
| Bridge                          |                                 | (4)                | Select Sand                          |
| (0)                             | Bridge                          | (214)              | Select Sand Removed                  |
| Concrete                        |                                 | (3)                | Shale                                |
| (0)                             | Barrier Concrete                | (215)              | Shale Removed                        |
| (0)                             | Barrier Concrete Footing        | (10)               | Topsoil                              |
| (0)                             | Curb Gutter                     | (2)                | Topsoil Remove Only                  |
| (48)                            | Flowable Mortar                 | (4)                | Topsoil Remove and Replace           |
| (0)                             | Median Concrete                 | Unsuitable / Waste |                                      |
| (0)                             | PCC Pavement                    | (3)                | Unsuitable Type A                    |
| (0)                             | Sidewalk                        | (216)              | Unsuitable Type A Removed            |
| Existing                        |                                 | (13)               | Unsuitable Type B                    |
| (0)                             | Existing Pavement               | (217)              | Unsuitable Type B Removed            |
| Shoulder                        |                                 | (11)               | Unsuitable Type C                    |
| (209)                           | Shoulder HMA                    | (218)              | Unsuitable Type C Removed            |
| (0)                             | Shoulder PCC                    | (3)                | Waste                                |
| (6)                             | Shoulder Granular               | (219)              | Waste Removed                        |
| Structural                      |                                 |                    |                                      |
| (112)                           | Noise Wall                      |                    |                                      |
| (112)                           | Noise Wall Footing              |                    |                                      |
| (112)                           | Retaining Wall Back             |                    |                                      |
| (112)                           | Retaining Wall Back Excavate    |                    |                                      |
| (112)                           | Retaining Wall Face             |                    |                                      |
| (112)                           | Retaining Wall Front Excavate   |                    |                                      |
| (112)                           | Retaining Wall Front Footing    |                    |                                      |
| (112)                           | Retaining Wall MSE Gutter       |                    |                                      |
| (112)                           | Retaining Wall Reinforced Earth |                    |                                      |

NOTES:

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NOTES:

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CROSS SECTIONS  
LEGEND AND INFORMATION SHEET

(COVERS SHEET SERIES W, X, Y, & Z)

