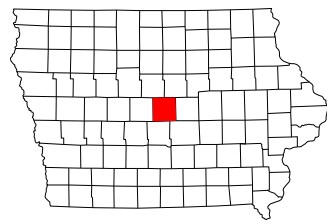


Index of Sheets	
No.	Description
A Sheets	Title Sheets
A.1	Title Sheet
A.2	Location Map Sheet
B Sheets	Typical Cross Section and Details
B.1 - B.2	Typical Cross Section and Details
D Sheets	Mainline Plan and Profile Sheets
D.1	Plan & Profile Legend & Symbol Information Sheet
D.2	US 65 Plan and Profile
G Sheets	Survey Sheets
G.1	Survey Information
G.2	Control Point Vicinity Map
G.3	Horizontal and Vertical Project Control Coordinate Listing
J Sheets	Traffic Control and Staging Sheets
J.1	Traffic Control Plan
J.2	511 Travel Restrictions
J.3	Coordinated Operations
J.4	Detour Details
W Sheets	Cross Sections
W.1	US 65 Cross Section



PLANS OF PROPOSED IMPROVEMENT ON THE
PRIMARY ROAD SYSTEM
STORY COUNTY
Pipe Culvert
 on US 65,
 0.2 mi S of Co Rd E41 in Colo

Refer to the Plan Sheets for list of applicable specifications.

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

Revisions

TOTAL	
14	
PROJECT IDENTIFICATION NUMBER	25-85-065-020
PROJECT NUMBER	STP-065-5(044)--2C-85
R.O.W. PROJECT NUMBER	-
PROJECT DIRECTORY NUMBER	856502025



Preliminary
 Not For Construction


Revisions to this Design Plan and/or Project Specifications should be submitted by _____

Design Data Urban			
2027 AADT	2,500	V.P.D.	
2047 AADT	2,900	V.P.D.	
2047 DHV	290	V.P.H.	
TRUCKS	14	%	

Index of Seals		
Sheet No.	Name	Type
A.1	Mark C. Currie	Roadway Design

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.

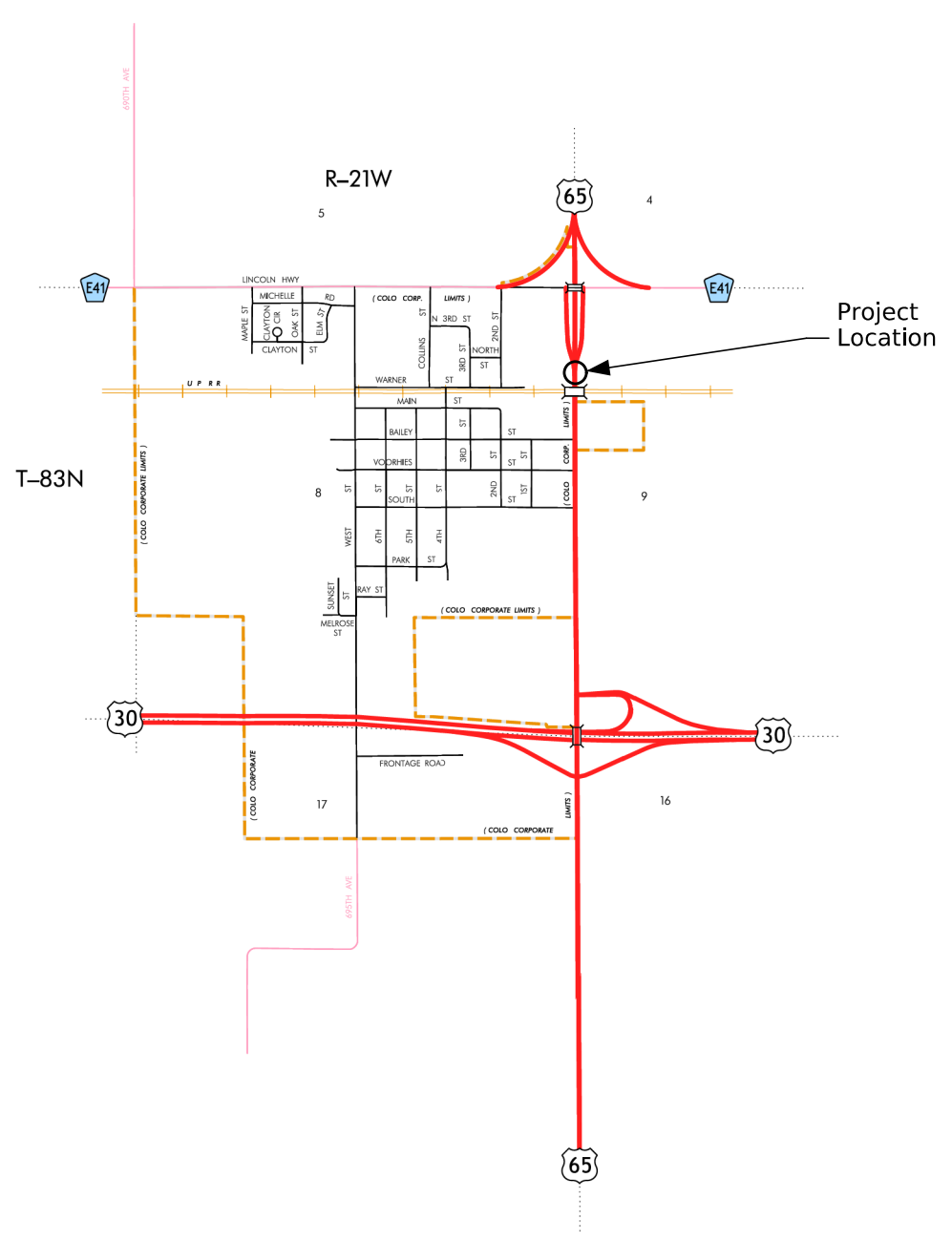


Preliminary Plans 04-03-2026
 Signature Date
 Mark C. Currie
 Printed or Typed Name
 My license renewal date is December 31, 2027

Pages or sheets covered by this seal: _____

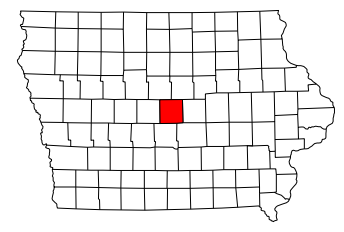
LEGEND

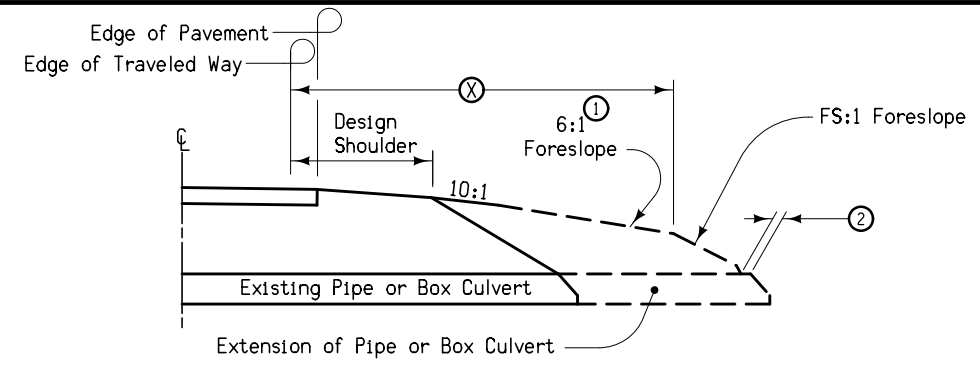
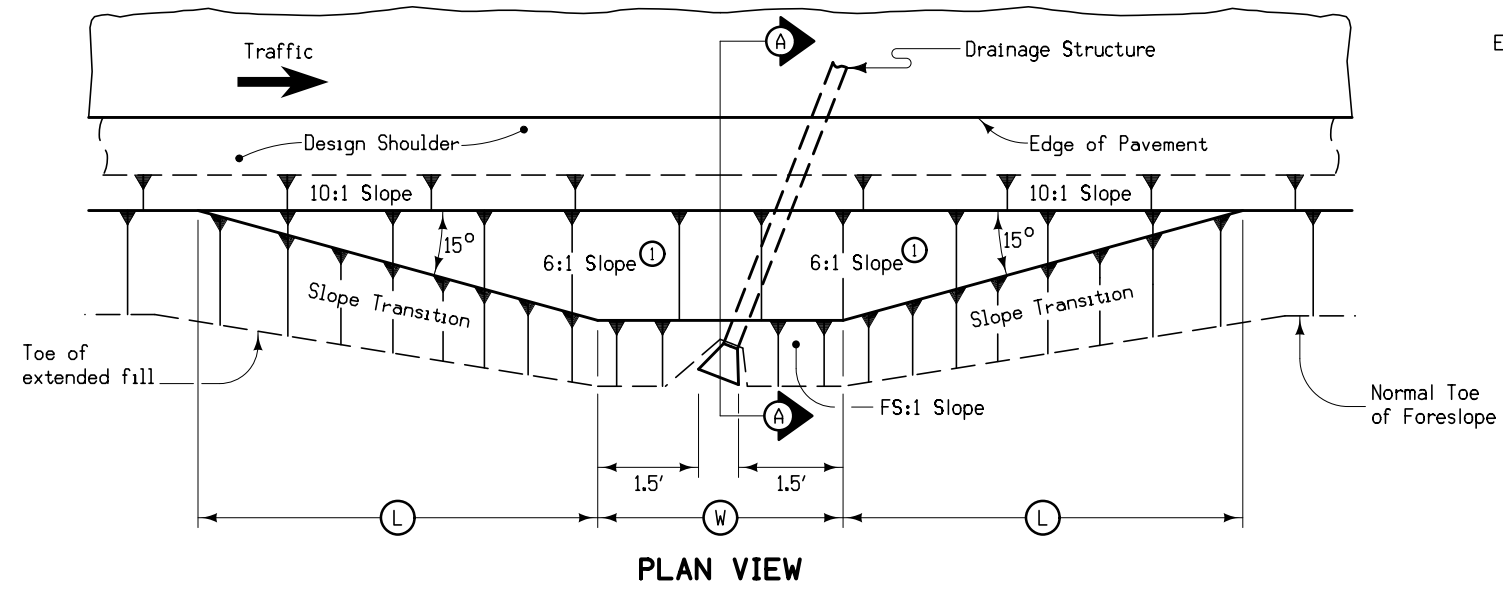
INTERSTATE ROUTE	
FREEWAY OR EXPRESSWAY ROUTE	
U.S. NUMBERED ROUTE	
BUSINESS ROUTE	
STATE NUMBERED ROUTE	
UNSIGNED ROUTE	
COUNTY NUMBERED ROUTE	
SECONDARY ROAD OR ADJOINING CITY STREET	
CITY STREET	
PARK, INSTITUTION, OR FEDERAL ROAD	
RAILROAD	
CORPORATION LINE	
SECTION LINE	
CUL-DE-SAC	
SECTION, TOWNSHIP & RANGE NUMBERS	9, T-81N, R-30W



Story County Location Map

Not To Scale
City of Colo





SECTION A-A

STRUCTURE LOCATION		W	L	X	FS
STATION ③	SIDE	Feet	Feet	Feet	
1815+58.00	L	5	15	16	4
1815+58.00	R	5	15	16	4

- At locations where an extended or newly constructed drainage structure extends beyond the normal foreslope cover, flatten as indicated so as to cover the structure. Minimum earth cover is 6 inches.
- ① Slope may be flatter than 6:1.
 - ② 6 inch minimum for pipe installations or to top of headwall on RCB.
 - ③ At \bar{C} of roadway.
 - Ⓜ = Pipe or RCB opening width plus 1.5 feet each side.

BARNROOF FORESLOPE AT SKEWED DRAINAGE STRUCTURE

SURVEY SYMBOLS

- 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 Sign
- TCB Traffic Signal Control Box
- RRB Rail Road Signal Control Box
- TSB Telephone Switch Box
- EB Electric Box

UTILITY LEGEND

- Alliant Energy
- City of Colo

PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

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%

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

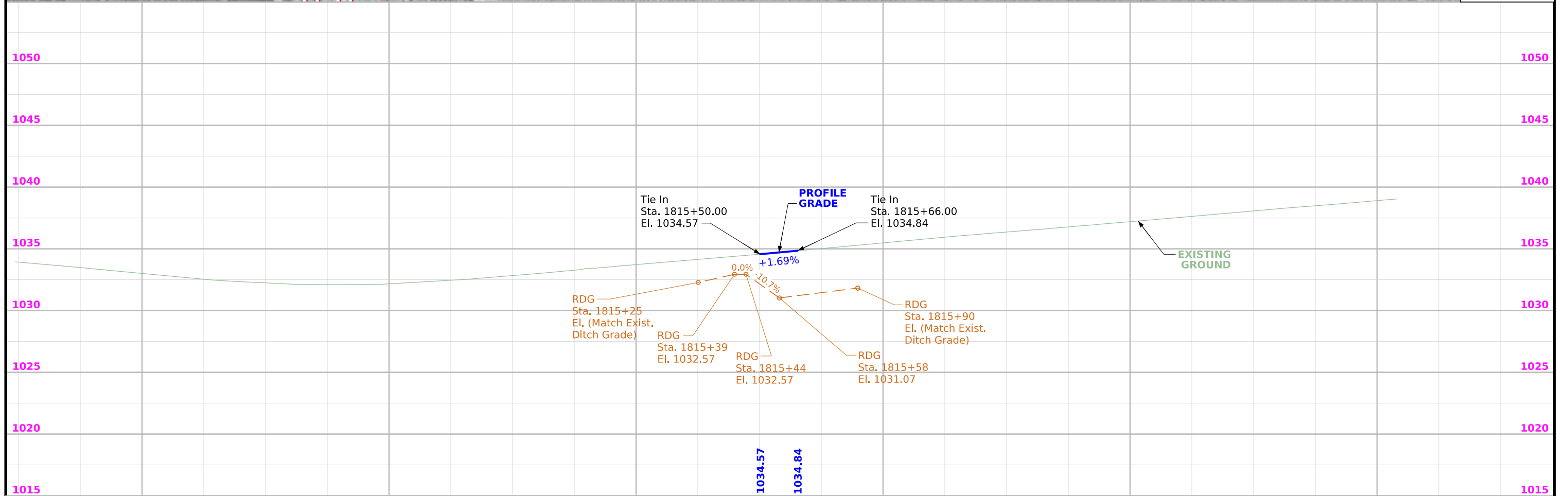
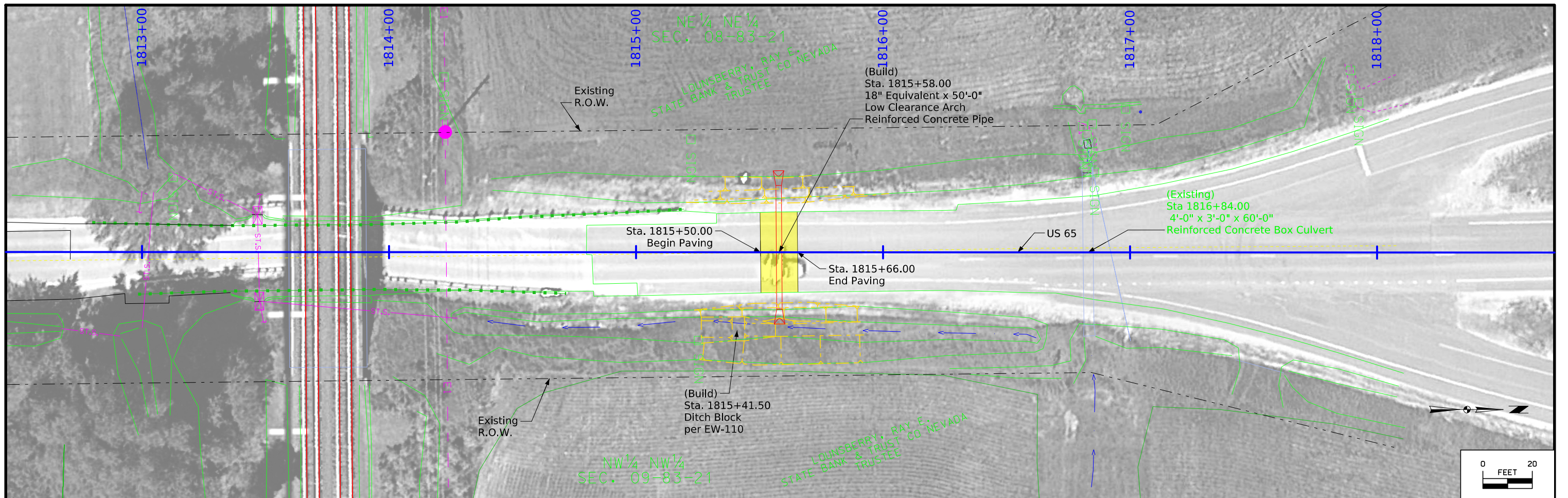
LINEWORK		Design Color No.	
Green	(10)		Existing Ground Line Profile
Blue	(1)		Proposed Profile and Annotation
Magenta	(5)		Existing Utilities
Blue, Light	(230)		Proposed Ditch Grades, Left
Black	(0)		Proposed Ditch Grades, Median
Rust	(14)		Proposed Ditch Grades, Right

- Reference Point
- Station
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension 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

PLAN AND PROFILE LEGEND AND SYMBOL INFORMATION SHEET



Survey Information

SURVEY INDEX

County: Story
PIN: 25-85-065-020
Project Number: STP-065-5(044)--2C-85
Location: 0.2 mi S of Co Rd E41 in Colo
Type of Work: Culvert
Project Directory: 8506502025

Survey Personnel

Jerett Still – Party Chief
Craig Beedle – PLS
TJ Coyle – Assistant Survey Party Chief

Date(s) of Survey

Begin Date 08/19/2025
End Date 09/09/2025

General Information

Measurement units for this survey are US survey feet. This survey is for proposed revetment of Story County – Culvert under HWY65; 943.49 feet South of E41 and 1679.86 feet North of South Street in Colo, IA

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

Vertical Control

Vertical control was established by verifying one NGS monument. Vertical datum for this survey is relative to NAVD88. Geoid 2018 was used in processing. The height was computed at AE2152, NK0704, and DP4568. Vertical control was checked with IARTN checks.

This survey observed AE2152, NK0704, and DP4568.
AE2152 – disk set in concrete monument
Elevation = 1014.042
NK0704 - disk set in concrete monument
Elevation = 1149.359
DP4568 - disk set in concrete monument
Elevation = 1054.295

Horizontal Control

The project coordinate system for this survey is Iowa RCS zone 08 (U.S. Survey Feet). This survey control is relative to IARTN reference stations IARTN Reference Station coordinates are relative to the National Reference Station network datum: NAD83 (2011). Coordinates were determined by conducting a 5-minute observation in the morning, afternoon, and evening. Coordinates were then averaged between the three to determine the final coordinate.

PROJECT DATUM: NAD83(2011) for EPOCH 2010.00 (IARTN 2019 ADJUSTMENT)
COORDINATE SYSTEM: IOWA REGIONAL COORDINATE SYSTEM ZONE 08
(U.S. SURVEY FOOT)
VERTICAL DATUM: NAVD88
GEOID MODEL: 2018u3 or 2018u2

Alignment Information

The horizontal alignment for U.S. Hwy 65 is a retrace of the existing alignment. Survey stationing was equated to Sta. 1816+90.00 and carried back and ahead without equation throughout the survey.

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 08 (U.S. Survey Foot)

VERT. DATUM: NAVD88 - Geoid Model: 2018u3 or 2018u2

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 08 (U.S. Survey Foot)
 VERT. DATUM: NAVD88
 Geoid Model: 2018u3 or 2018u2

Point Name	Northing	Easting	Elevation	Code Description
cp500	7644670.72	18610639.00	1033.12	CP 5/8" rebar 1' deep; 15.32' West of edge of Asphalt; 475.67' South of edge of culvert
cp501	7644667.62	18610686.59	1033.73	CP 5/8" rebar 1' deep; 14.48' East of edge of Asphalt; 475.73' South of edge of culvert
cp502	7645536.22	18610730.99	1044.89	CP 5/8" rebar 1' deep; 4.88' West of edge of Asphalt; 391.01' North of edge of culvert
cp503	7645532.24	18610590.75	1043.52	CP 5/8" rebar 1' deep; 6.25' East of edge of Asphalt; 390.21' North of edge of culvert

108_23A
8/15/22

TRAFFIC CONTROL PLAN

US 65 will be closed to traffic during construction. Traffic shall be maintained via offsite detour. See Sheet J.4 for detour route.

All construction traffic control shall be the responsibility of the Contractor including fabrication and installation of all traffic control and alternate route signing.

511 TRAVEL RESTRICTIONS

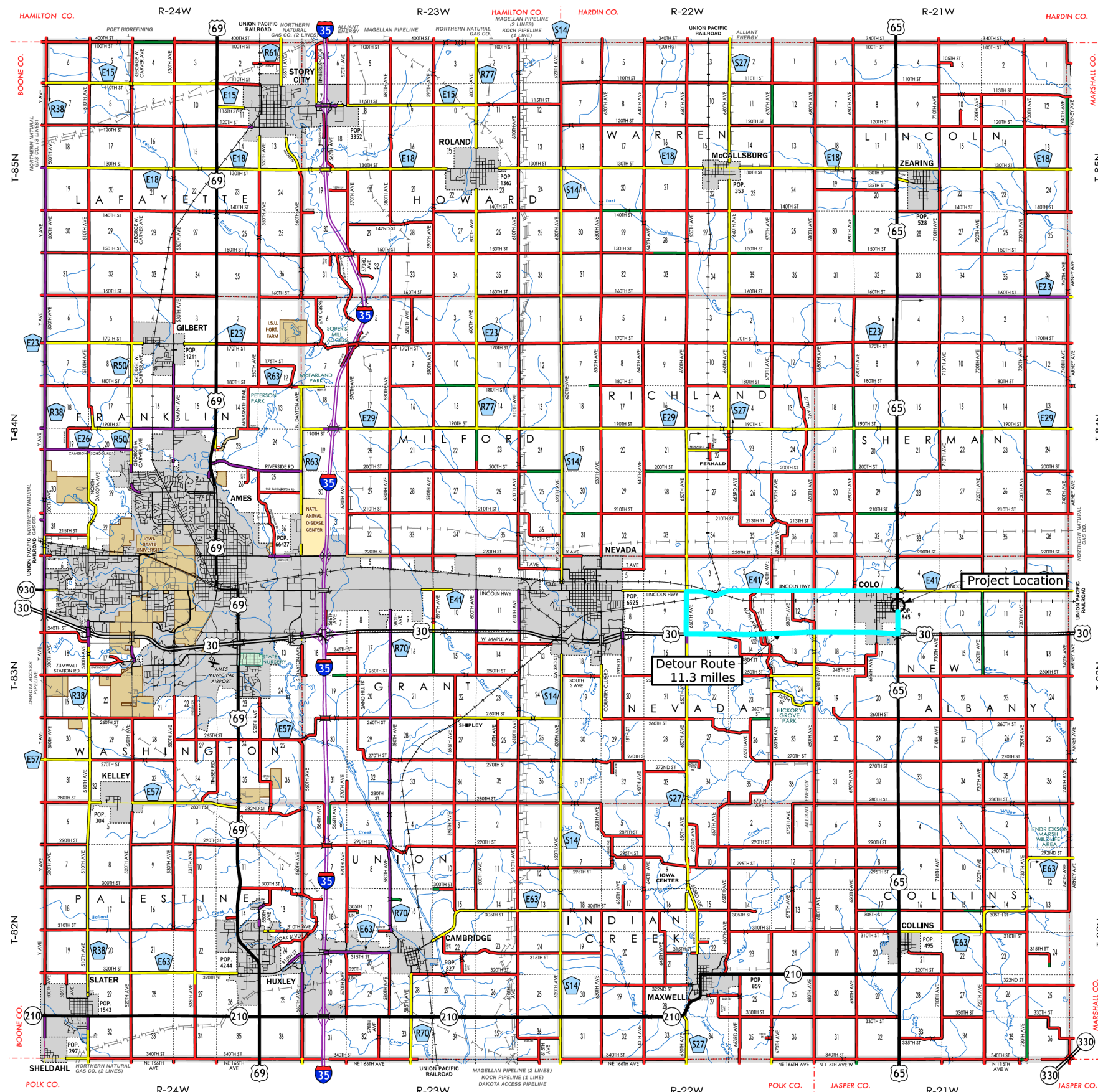
Line No.	Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No. or Structure ID or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
1.0	US 65	Both	Story	0.2 mi S of Co Rd E41		Traffic Control Device	N/A	Horizontal					Detour

111_01
10/14/22

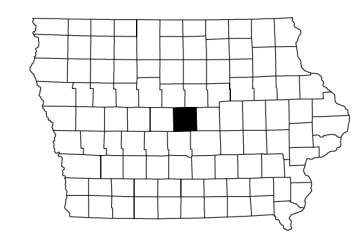
COORDINATED OPERATIONS

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
25-85-065-010	Culvert replacement



STORY COUNTY



Story County Map Not to Scale

Detour Details

FILE NO. 32912	ENGLISH	DESIGN TEAM Veenstra & Kimm, Inc.	Story COUNTY	PROJECT NUMBER STP-065-5(044)--2C-85	SHEET NUMBER J.4
9:43:29 AM	4/2/2026	RLemke	pw:\projectwise.dot.int\lan:PWMMain\Documents\Projects\8506502025\Design\CADD_Files\Sheet_Files\ORD_85065044_J1_VK_000_Z08.dgn		

