














SURVEY SYMBOLS

UTILITY LEGEND







- T1 — Windstream Communications (ILEC)
Joy Matthews
11101 Anderson Dr. Suite 100
Little Rock, AR 72212
WCI.OSP.Permits@Windstream.com
(501) 748-7654

- W — Iowa Regional Utilities Association
Les Morgan
1351 Iowa Speedway
Newton, IA 50208
lmorgan@ciawa.com
(641) 792-7011


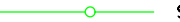
PLAN VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS


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.	
Yellow	(4)		Highlight for Critical Notes or Features
Red	(3)		Delineates Restricted Areas
Lavender	(9)		Temporary Pavement Shading
Gray, Light	(48)		Proposed Pavement Shading
Gray, Med	(80)		Proposed Granular Shading
Gray, Dark	(112)		Proposed Grade and Pave Shading "In conjunction with a paving project"
Brown, Light	(236)		Grading Shading
Tan	(8)		Proposed Sidewalk Shading
Blue, Light	(230)		Proposed Sidewalk Landing Shading
Pink	(11)		Proposed Sidewalk Ramp Shading

PROFILE VIEW COLOR LEGEND OF PLAN AND PROFILE SHEETS

LINEWORK		Design Color No.	
Green	(2)		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

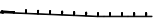
Reference Point


Station  Survey Line 


 Section Corner


--- Ground Line Intercept



— Saw Cut

 Guardrail









 Trench Drain

 High Tension Cable Guardrail

 Sheet Pile

 Pavement Removal  Clearing & Grubbing Area

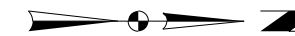
RIGHT-OF-WAY LEGEND

-  Proposed Right-of-Way
-  Existing Right of Way
-  Existing and Proposed Right-of-Way
-  Easement and Existing Right-of-Way
-  Easement (Temporary)
-  Easement
-  Access Control
-  Property Line

**PLAN AND PROFILE
LEGEND AND SYMBOL
INFORMATION SHEET**

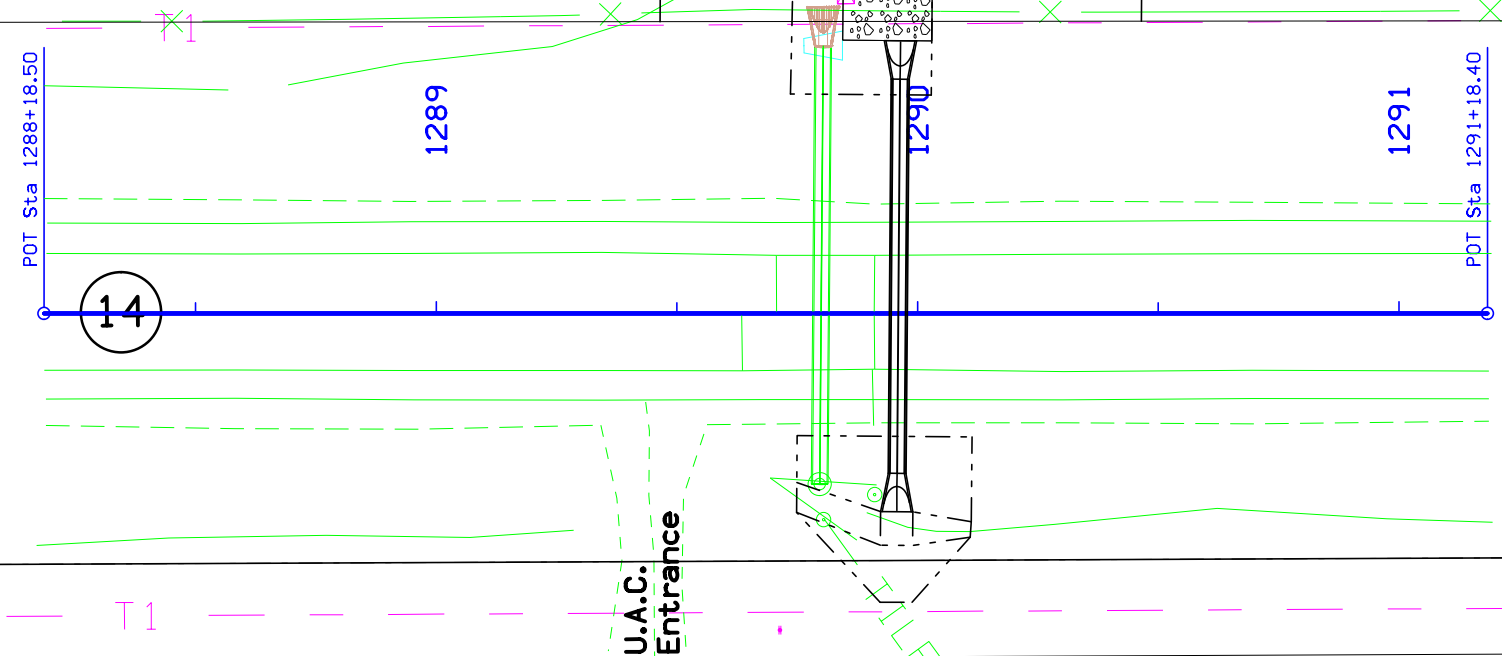
(COVERS SHEET SERIES D, E, F, & K)

Red Rock TWP.
T-77N R-20W
SEC. 24



Temporary Easement for
Trenchless Construction

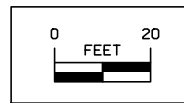
UAC Standpipe
Place Rip Rap
around Standpipe
Shape to Drain



Sta. 1289+80 (Plan FN-231)
36"x91' RCP
D.A.=12 A-R (From Plan FN-231)
(Plug and Abandon)

Sta. 1289+96.00
Install 82' x 36" RCP
(Trenchless Construction)
F.L. = Lt. 858.79
Rt. 863.73

Summit TWP.
T-77N R-19W
SEC. 19



Survey Information

County: Marion
PIN: 19-63-014-010
Project Number: NHSN-014-3(54)--2R-63
Location: 0.6 mi S of Co Rd G18
Type of Work: Pipe Culverts
Project Directory: 6301401019
SAP 0619.2

Party Personnel

Nels Sutherland- Party Chief
Myron Fox- Assistant Survey Party Chief

Date(s) of Field Survey

Begin Date 02/5/2019
End Date 02/6/2019

General Information

Measurement units for this survey are US survey feet. This survey is for conc. pipe modification. No aerial survey was used.

Vertical Control

Vertical datum for this survey is NAVD88 (Computed using Geoid12A). GRS80 Ellipsoidal Height was transferred to the project from Iowa RTN reference stations by Network RTK observations.

Horizontal Control

The project coordinate system is Iowa Regional Coordinate System Zone 9. (U.S. Survey Feet). Horizontal datum is NAD83 (2011) for Epoch 2010.00. Coordinates were transferred to the project from Iowa RTN reference stations by Network RTK observations.

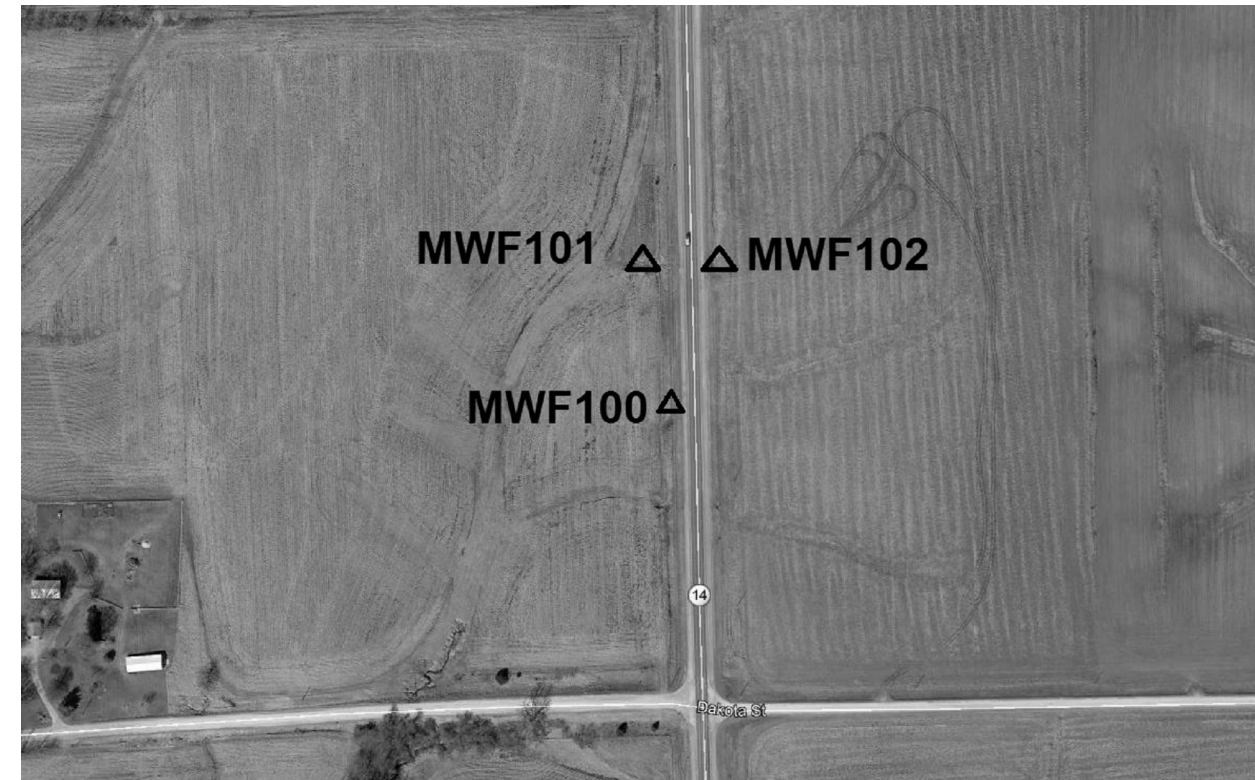
Alignment Information

The horizontal alignment for this survey is a retrace of As-built Plans No. I-IG-80-7(7)253. Survey stationing was equated to the plan at Pipe Station 1289+80 and run back and ahead without equation throughout the survey. The apparent CL roadway was used for alignment. No centerline control monuments were recovered.

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.

LOCATION MAP:



HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

1a. Regional Coordinate System Zone 9

Coordinate listing from next sheet will be used with 1aRTN for monument
 recovery. No other reference ties are given.

HORIZONTAL AND VERTICAL PROJECT CONTROL COORDINATE LISTING

HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

Ia. Regional Coordinate System Zone 9

NAME	N	E	EL.	DESCRIPTION
MWF100,	7642352.95,	19421983.96,	867.94,	CP X BALL ROW RAIL
MWF101,	7642482.91,	19421989.58,	861.49,	CP X TOP OUTLET 36IN RCP
MWF102,	7642481.52,	19422079.66,	866.50,	CP X TOP INLET 36IN RCP

Utility Information

Sub-Surface Utility Mapping Quality Level is in accordance with CI/ASCE 38-02 *Standard Guidelines for the Collection and Depiction of Existing Subsurface Utility Data.*

Remark abbreviations

QLD Quality Level D Lowest guideline quality level

A One-call design information request (Ticket# 551900498) was made Jan. 21, 2019. The following Companies were listed:

Company (Quality)	Code	Remark
Midamerican	PPA	Power Pole east ROW
Windstream (QLD)	T1	Buried Telephone Line
IRUA (QLD)	W	Buried Water Line east of ROW

Following are the list of contacts made:

(CIW) IOWA REGIONAL UTILITY ASSOC
 Contact Name : HEATHER LOSHAW
 Contact Phone: 6417927011
 Contact Email: lmorgan@ciawa.com
 Jan 21, 2019 Michael Marden of IRUA provided a map indicating 3"water approx.. 11 ft. outside the east ROW.

(M60E) MIDAMER-ELEC
 Contact Name : Jason Sandifer
 Contact Phone: 6416727008
 Contact Email: jwsandifer@midamerican.com
 Jan 21, 2019 Jason Sandifer of Mid American provided a map indicating overhead power and poles in the east ROW.

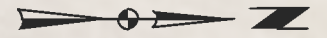
(WINIA) WINDSTREAM COMMUNICATIONS
 Contact Name : LOCATE DESK
 Contact Phone: 8002891901
 Contact Email: LOCATE.DESK@WINDSTREAM.COM
 Jan 26, 2019 Jean Lander of Windstream provided a map indicating underground telephone in the east and west ROW.

NO ACCESS RIGHTS ARE TO BE ACQUIRED ON THIS PROJECT.

①
PEGGY ELIZABETH TERPSTRA

Red Rock TWP.
T-77N R-20W
SEC. 24

TEMPORARY EASEMENT FOR
TRENCHLESS PIPE
CONSTRUCTION & SHAPING



1289+47
Ø121'

1289+79
Ø75'

1290+47
Ø121'

1290+08
Ø75'

UAC Standpipe
Place Rip Rap
around Standpipe
Shape to Drain

POT Sta 1288+18.50

1289

1291
POT Sta 1291+18.40

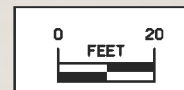
14

U.A.C.
Entrance

Sta. 1289+80 (Plan FN-231)
36"x91' RCP
D.A.=12 A-R (From Plan FN-231)
(Plug and Abandon)

DAVID & KRISTY WEYERS

Summit TWP.
T-77N R-19W
SEC. 19



Right of Way Design Information

**THIS SHEET INCLUDED
FOR INFORMATION ONLY**

ROW Team: CUVA /CARMAN
ROW #: NHSN-014-3(55)--2R-63
Plan Date: 8/20/2019

Color Legend:

- Property Lines**
- Temporary Easement**
- Permanent Acquisition**

IA 14 Preliminary

