

HAMILTON CO.

LETTING DATE
7-21-2020

PIPE CULVERTS
STPN-175-7(22)--2J-40



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM
HAMILTON COUNTY
PIPE CULVERTS

0.45 mi E of Young Ave

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

8

PROJECT IDENTIFICATION NUMBER

20-40-175-010

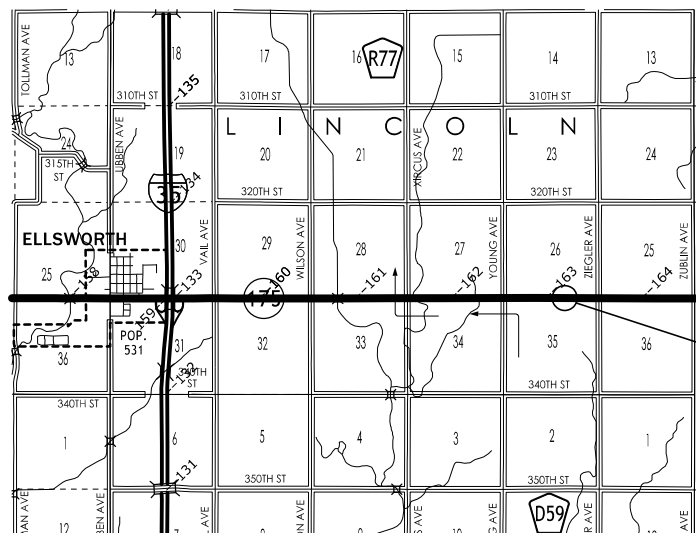
PROJECT NUMBER

STPN-175-7(22)--2J-40

R.O.W. PROJECT NUMBER

INDEX OF SHEETS

No.	DESCRIPTION
A Sheets	Title Sheets
A.1	Title Sheet & Location Map Sheet
D Sheets	Mainline Plan and Profile Sheets
* D.1	Plan & Profile Legend & Symbol Information Sheet
* D.2	IA 175
G Sheets	Survey Sheets
G.1 - 3	Reference Ties and Bench Marks
J Sheets	Traffic Control and Staging Sheets
* J.1	Traffic Control Plan
W Sheets	Mainline Cross Sections
W.1	Mainline Cross Sections
	* Color Plan Sheets



Project Location
Sta. 404+50
Ref. Loc. 163.01

D9 PLAN - Date: 5-5-2020
Letting - Date: 7-21-2020

PRELIMINARY PLANS

Subject to change by final design.

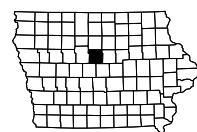
D2/D5 PLAN - Date: 4-13-2020

DESIGN DATA RURAL

2017 AADT	1,880	V.P.D.
20-- AADT	--	V.P.D.
20-- DHV	--	V.P.H.
TRUCKS	13	%
Total Design ESALs	--	

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	X	Primary Signature Block
X	X	X



SURVEY SYMBOLS

- BL Topo Breakline
- C Centerline BL of Road (ML or SR)
- CP Control Point
- EP Edge of Paved Roads (ML or SR)
- FO1D Radcliffe Telephone Co. Fiber Optic - Quality D
- GR Ground Shot
- PIP Pipe Culvert
- PRO Profile Shot
- REF Reference Tie Point
- ▲ SCR Section Corner
- SNP Unpaved Shoulder
- TIL Tile Line
- WC Wild Card (Misc. Field Shot)

UTILITY LEGEND

----- FO1D Radcliffe Telephone Co. Fiber Optic - Quality D

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

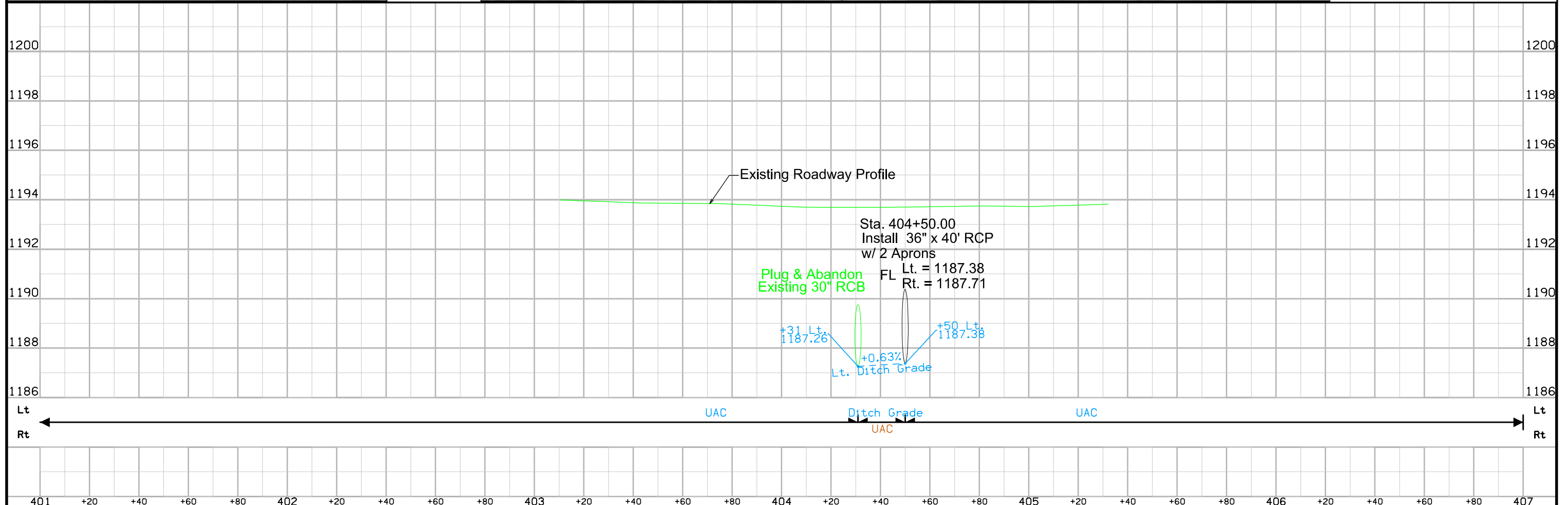
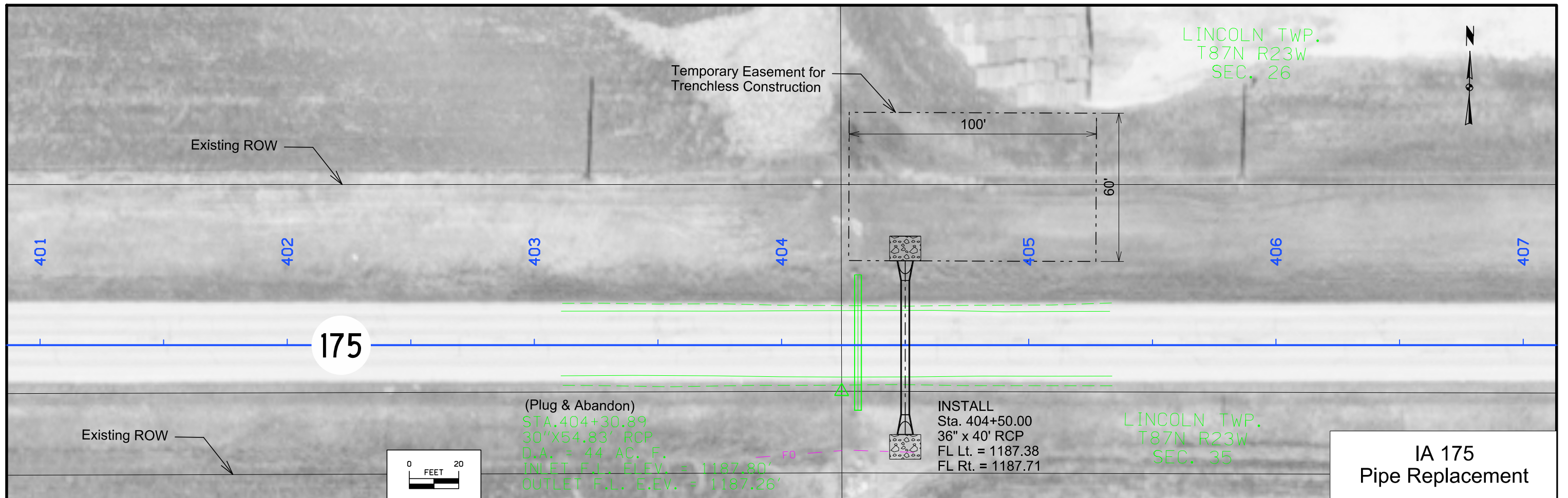
- Reference Point
- Station
- Survey Line
- Section Corner
- Ground Line Intercept
- Saw Cut
- Guardrail
- Trench Drain
- HighTension Cable Guardrail
- Sheet Pile
- Pavement Removal
- Clearing & Grubbing Area

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)



Survey Information

County: Hamilton
PIN: 20-40-175-010
Project Number: STPN-175-7(22)--2J-40
Location: In Hamilton County 0.45 miles east of Young Ave.
Type of Work: Pipe/Culverts
Project Directory: 4017501020

General Information

Measurement units for this survey are U.S. survey feet. This survey was completed to assist in the design of a solution to a failed pipe 0.45 east of Young Ave. under Ia175 at Sta. 404+31+/-, in Hamilton Co., Iowa.

Vertical Control

The vertical datum for this survey is NAVD88. The vertical control for this project is relative to said datum, computed using GEOID 12b, and is dependent on the Iowa Real-Time Network (IaRTN) reference stations. Control point elevations were established by 5 redundantly averaged RTK GPS shots utilizing the IaRTN.

Horizontal Control

The horizontal project coordinate system basis for this survey is from the Iowa Regional Coordinate System Zone 4 projection. The Geodetic Datum is NAD83 (2011) EPOCH 2010.0. Control Point horizontal coordinate positions were established by 5 redundantly averaged RTK GPS shots utilizing the Iowa Real-Time Network.

Alignment Information

The horizontal centerline alignment for Ia175 is a retrace of as-built plan WPMS-597ABCD. Stationing was held at PI 397+35.7 and was ran ahead without equation.

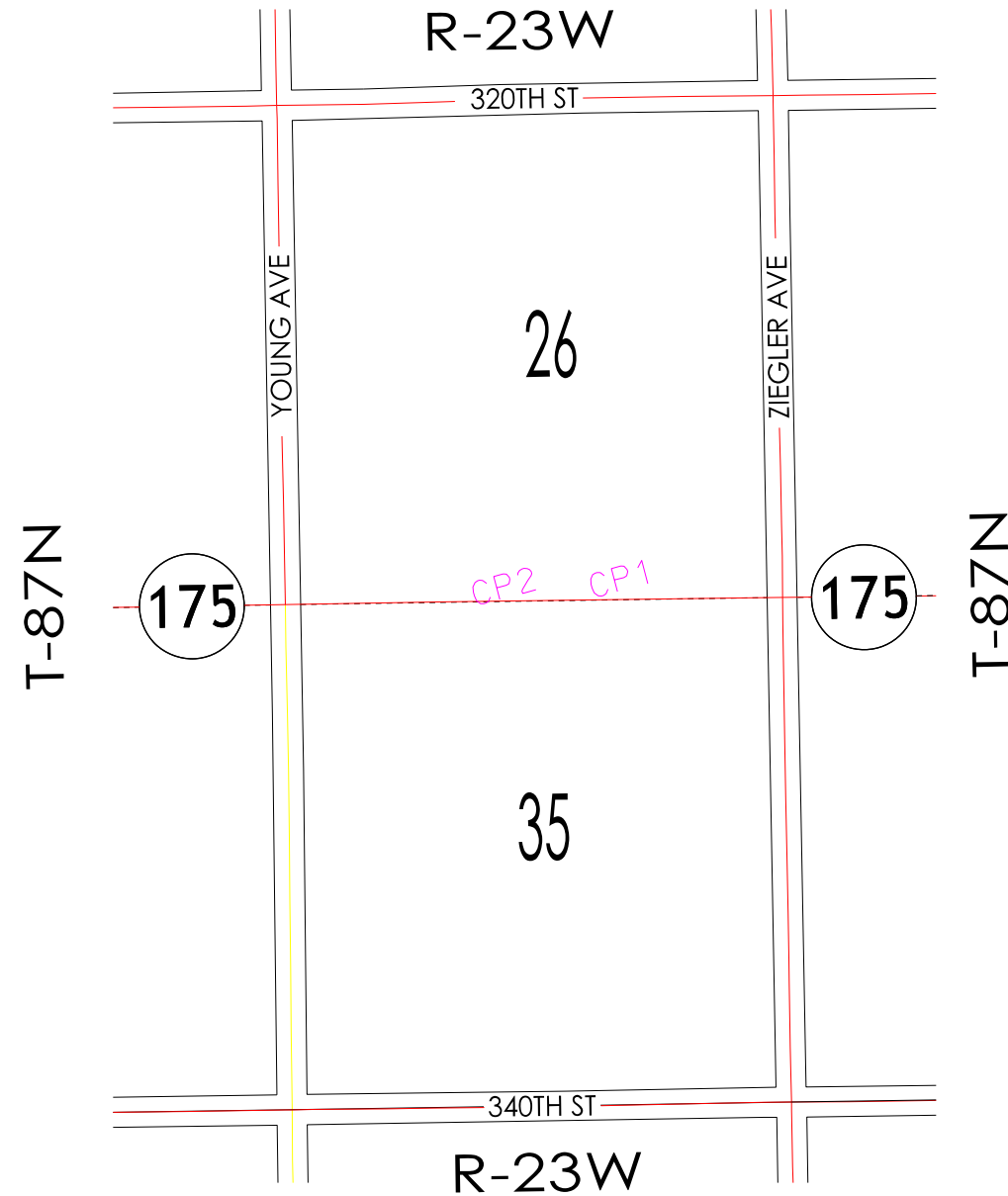
Survey stationing relates to as-built stationing as follows:

PI Sta. 397+35.7 (WPMS-597ABCD) = PI Sta. 397+35.7 (this survey)
Found "MAG" nail in A/C mat. surface.

PI Sta. 475+06.6 (WPMS-597ABCD) = PI Sta. 475+02.18 (this survey)
Found "MAG" nail in A/C mat. surface.

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) EPOCH 2010.00

VERT. DATUM: NAVD88

1a. Regional Coordinate System Zone 4

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

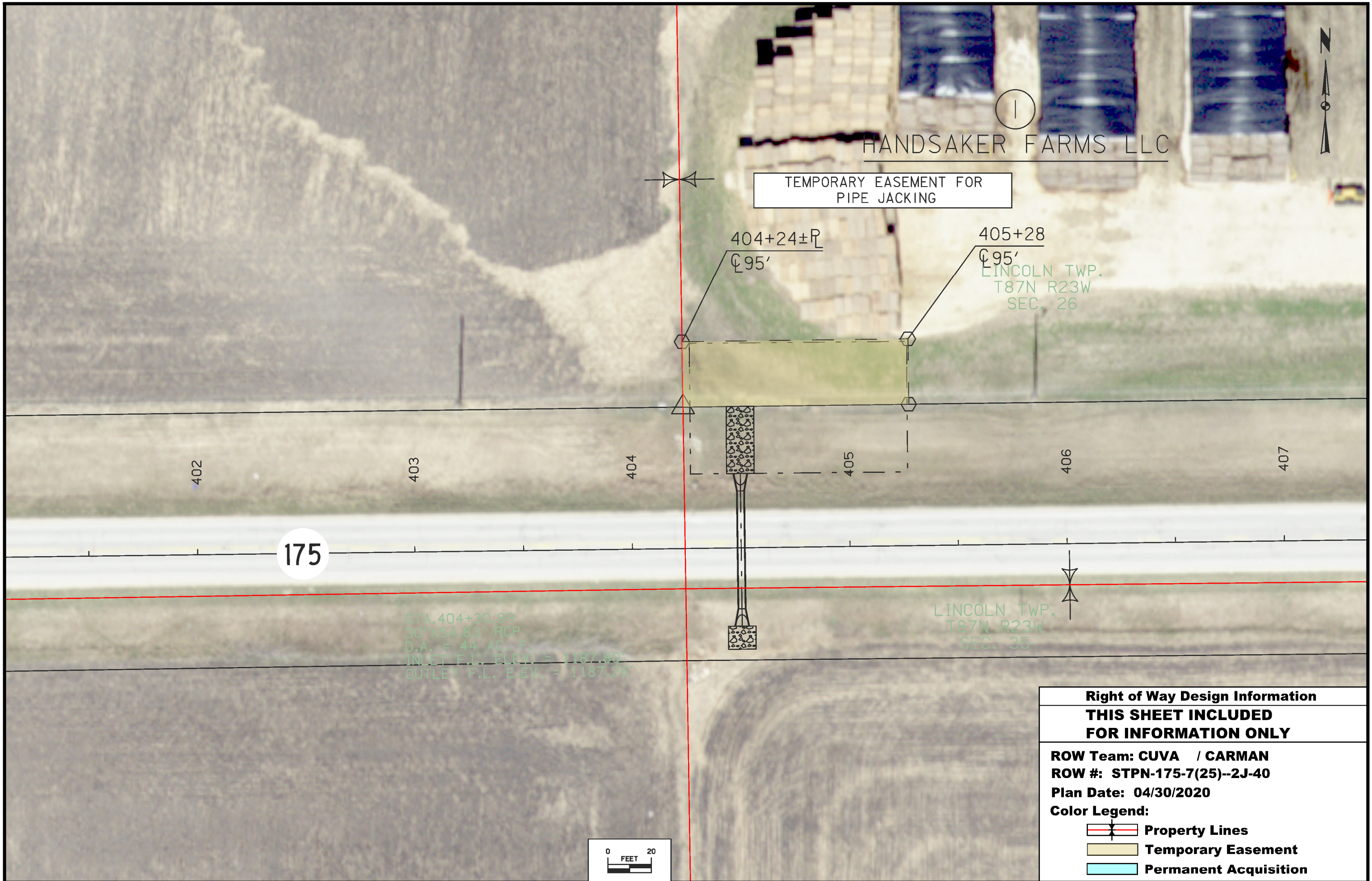
HORIZ. DATUM: NAD83(2011) EPOCH 2010.00

VERT. DATUM: NAVD88

1a. Regional Coordinate System Zone 4

<u>POINT</u>	<u>NORTHING</u>	<u>EASTING</u>	<u>ELEVATION</u>	<u>DESCRIPTION</u>
CP1	8521719.45	14863470.11	1195.14'	SET 5/8" RE-ROD (FLUSH)
CP2	8521637.14	14862234.28	1194.06'	SET 5/8" RE-ROD (FLUSH)

NO ACCESS RIGHTS ARE TO BE ACQUIRED ON THIS PROJECT.



HANDSAKER FARMS LLC

TEMPORARY EASEMENT FOR PIPE JACKING

404+24±R
C 95'

405+28
C 95'
LINCOLN TWP.
T87N R23W
SEC. 26

402

403

404

405

406

407

175

STA. 404+30.89
30' x 54.83' RCP
D.A. = 44 AC, F.
INLET F.L. ELEV. = 1187.80'
OUTLET F.L. ELEV. = 1187.26'

LINCOLN TWP.
T87N R23W
SEC. 35



Right of Way Design Information	
THIS SHEET INCLUDED FOR INFORMATION ONLY	
ROW Team: CUVA / CARMAN	
ROW #: STPN-175-7(25)--2J-40	
Plan Date: 04/30/2020	
Color Legend:	
	Property Lines
	Temporary Easement
	Permanent Acquisition

IA 175 Preliminary

