



PLANS OF PROPOSED IMPROVEMENT ON THE
**PRIMARY ROAD SYSTEM
WRIGHT COUNTY**
PIPE CULVERTS
0.5 mi W of Clarion

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
18

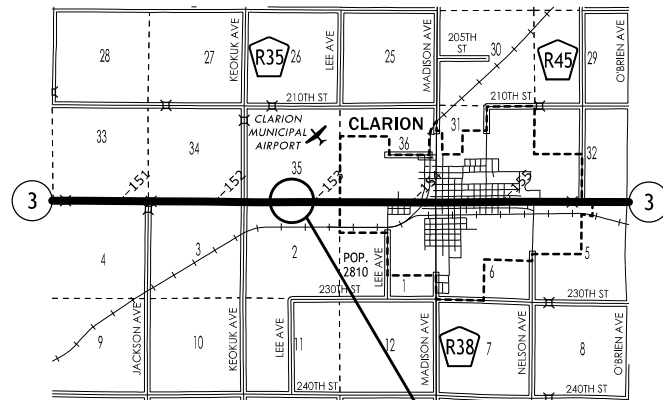
PROJECT IDENTIFICATION NUMBER

25-99-003-030

PROJECT NUMBER

NHSX-003-4(050)--3H-99

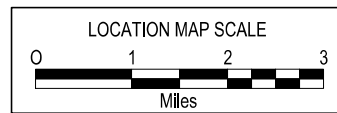
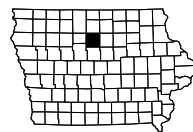
R.O.W. PROJECT NUMBER



M.P. 152.76
PROJECT LOCATION

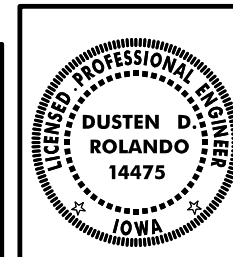
INDEX OF SHEETS	
*A.1	Title Sheet and Location Map
C.1	Estimate of Quantities and General Notes
C.2-C.8	Tabulations
D.1	As-Built Information Sheet
G.1-G.3	Survey Informaton/ Project Control
J.1-J.3	Traffic Control and Coordinated Operations
U.1-U.2	Detail Sheets
* Denotes Color Sheets	

C.1 is color sheet
Add asterisk for it



Co Rd R33 to WCL Clarion			
DESIGN DATA RURAL			
20 24	AADT	2920	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
	TRUCKS	13.25	%
Total			
Design	ESALs	--	

INDEX OF SEALS		
SHEET NO.	NAME	TYPE
A.1	Dusten D. Rolando	Primary Signature Block



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 _____

Printed or Typed Name _____

My license renewal date is December 31, 20 27

Pages or sheets covered by this seal:
A.1, C.1-C.8, D.1, G.1-G.3, J.1-J.3, U.1-U.2

Sheet A.1

ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Roadway Items : Roadway Items

Item no.	Item Code	Item	Unit	Quantities		Estimate Reference Notes
				Estimated	Roadway Items	
1	2416-0100060	APRONS, CONCRETE, 60 IN. DIA.	EACH	2		Refer to Tabulation 104-03.
2	2416-1263060	CULVERT, CONCRETE PIPE, 3000D, TRENCHLESS, 60 IN. DIA.	LF	100		
3	2507-3250005	ENGINEERING FABRIC	SY	40		Refer to Tab. 100-23.
4	2507-6800061	REVETMENT, CLASS E	TON	24.8		Refer to Tab. 100-23.
5	2528-8445110	TRAFFIC CONTROL	LS	1		
6	2528-8445113	FLAGGERS	EACH	0		See Proposal.
7	2533-4980005	MOBILIZATION	LS	1		--
8	2602-0000312	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 12 IN. DIA.	LF	200		Refer to Tab. 100-19. The tabulation includes estimated locations for placement of "Perimeter and Slope Sediment Control Device, 12 in. dia." to address erosion to be encountered during construction. Verify the specific locations with the Engineer prior to beginning placement.
9	2602-0000351	REMOVAL OF PERIMETER AND SLOPE OR DITCH CHECK SEDIMENT CONTROL DEVICE	LF	200		

Dusten Rolando



PROJECT DESCRIPTION

100_01D
8/15/22

An 60" RCP and two aprons will be installed by using trenchless construction eliminating the need for a road closure and detour.

Switch to "Nie"



STANDARDS

The following Standards apply to construction work on this project.

Number	Date	Title
DR-101	04-18-17	Pipe Culvert (Bedding and Backfill)
DR-102	04-21-15	Pipe Culvert (Cover and Camber)
DR-103	04-21-15	Pipe Culvert (Installation Details)
DR-104	04-19-16	Depth of Cover Tables for Concrete and Corrugated Pipe
DR-121	04-18-23	Connected Pipe Joints
DR-201	10-17-23	Concrete Aprons
DR-601	04-18-17	Reinforced Concrete Pipe Culvert
EC-204	10-19-21	Perimeter, Slope and Ditch Check Sediment Control Devices
EC-301	10-18-22	Rock Erosion Control (REC)
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-213	04-18-23	Lane Closure with Flaggers

Switch to "Nie"



Rolando **Johnson**

PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE

Possible Standards: EC-204

100_19
10/15/24

Line No.	Station From	Side	Sediment Control Device Type	Diameter Size	Length (LF)	Remarks
1.0	633+63.00	Left	Perimeter and Slope	12 inch	160.00	for pit excavation protection
3.0	633+03.00	Right	Perimeter and Slope	12 inch	40.00	see U sheets
Total:					200	

We will need to add the tabs for Erosion Control(Rural Seeding) and Erosion Control(Stabilizing Crop Seeding)
This are the tabs that we typically have in there for all the other projects.

ROCK EROSION CONTROL

Refer to EC-301 and Detail 570-8

100_23
8/15/22

Line No.	Road Identification	Station From	Side	Length (FT)	Width (FT)	Rock Erosion Control Type	Engineering Fabric (SY)	Class E Revetment (TON)	Remarks
2.0	IA 3	633+03.00	Right	15.00	15.0	Type 4 - Rock Splash Basin	40.0	24.800	see U sheets
Total:							40	24.8	

DRAINAGE STRUCTURE BY ROAD CONTRACTOR

Length of unclassified pipe calculated is based on using Reinforced Concrete Pipe.

* Not a bid item

(1) Diameter or equivalent diameter

(2) UNCL = Unclassified Pipe CMP = Corrugated Metal Pipe RCP = Reinforced Concrete Pipe LCP = Arch or Elliptical Low Clearance Pipe SARC = Steel Arch Pipe

(3) Backfill according to DR-101

Drainage Area (ACRE)	Location	Type	Size (IN) (1)	Pipe Classification	Kind of Pipe (2)	Length New Const. (LF)	Length of total that is Trenchless Bedding Class	Design Cover (H) (FT)	Camber* (DR-102) (FT)	Apron No. (IN)	Apron No. (OUT)	Apron Guard* (DR-213) (No.)	Elbow* (DR-141) (No.)	Diaphragm* (DR-501) (No.)	Tee Section* (DR-142) (No.)	"D" Section* (DR-141) (No.)	Reducer* (No.)	Type 'C' Conn.* (DR-122)	Type 'C' Conn.* (No.)	Connected Pipe Joint* (DR-121)	4" Perforated Subdrain* (FT)	Flow Line Elevation LT.	Flow Line Elevation RT.	Flow Line Elevation Other	Flow Line Elevation Other	Dimensions Lineal Feet Total (Left)	Dimensions Lineal Feet Total (Right)	Dimensions Lineal Feet Extensions	Dimensions Lineal Feet Extensions	Skew Ahead Degrees (Left)	Skew Ahead Degrees (Right)	Dike Location	Dike Station	Dike Elevation	Dike Type	Class 20 (CY)	Flowable Mortar	Floodable Backfill* (A)	Porous Backfill* (B)	Flooded Backfill (A+B)	Remarks	
	633+40.00	3000D	60.0		RCP	100.0	100.0			1	1									Type 3																						see U sheets

EXISTING PAVEMENT

Line No.	County	Route	Direction of Travel	Begin Ref. Location Sign	End Ref. Location Sign	Year	Type	Project Number	Surface Type	Surface Depth (IN)	Base Type	Base Depth (IN)	Subbase Type	Subbase Depth (IN)	Removal Type	Removal Depth (IN)	Coarse Aggregate Source	Coarse Aggregate Type	Course Aggregate Durability Class	Reinforcement Type	Remarks	
1.0	Wright	IA 3	Both	152.46	153.03	1987		RRP-3-4(23)--48-99	PCC	9.5							FT. DODGE MINE	C.LST.				
2.0	Wright	IA 3	Both	152.46	153.03	2015		NHSX-003-4(42)--3H-99	HMA	1.5	HMA	1.5	CIP		MIL	2.5						
3.0	Wright	IA 3	Both	152.46	153.03	2015		NHSX-003-4(42)--3H-99	HMA	1.5	HMA	2.0	CIP		MIL	2.5						
3.0	Wright	IA 3	Both	152.46	153.03	2019		MP-003-2(709)129-76-46					CIP								HMA Joint & crack sealing	

Switch to "Nie"



UTILITIES

Line No.	Company	Contact	Phone	Email
1.0	CENTURYLINK	SADIE HULL	9185470147	sadie.hull@lumen.com
2.0	GOLDFIELD TELEPHONE & COMMUNIC	OFFICE	5158253887	rickdyer@ganiowa.com
3.0	MIDAMER-ELEC	BRIAN SEWELL	5155745042	brian.sewell@midamerican.com
4.0	BLACK HILLS ENERGY WEB CTY	Chuck Woods	5153432037	chuck.woods@blackhillscorp.com

Need to add the tab Utilities(Not a Point 25 Project)

Switch to "Nie"

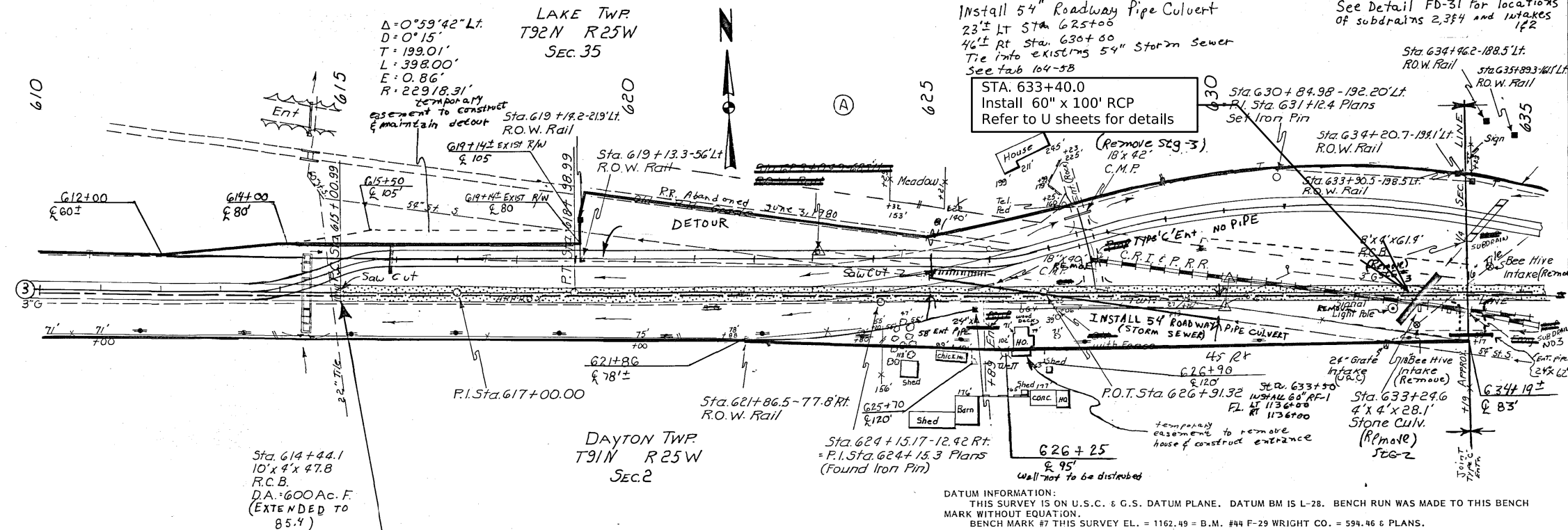


Prop. Owners:
 R. Keller's Family Farms Inc.
 B. Melvin Mosker

LAKE TWP
 T92N R25W
 SEC. 35

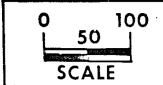
Install 54" Roadway Pipe Culvert
 23" LT STA 625+00
 46" RT STA. 630+00
 Tie into existing 54" storm sewer
 See tab 104-5B

See Detail FD-31 for locations
 of subdrains 2,3,4 and intakes
 1,2



DAYTON TWP
 T91N R25W
 SEC. 2

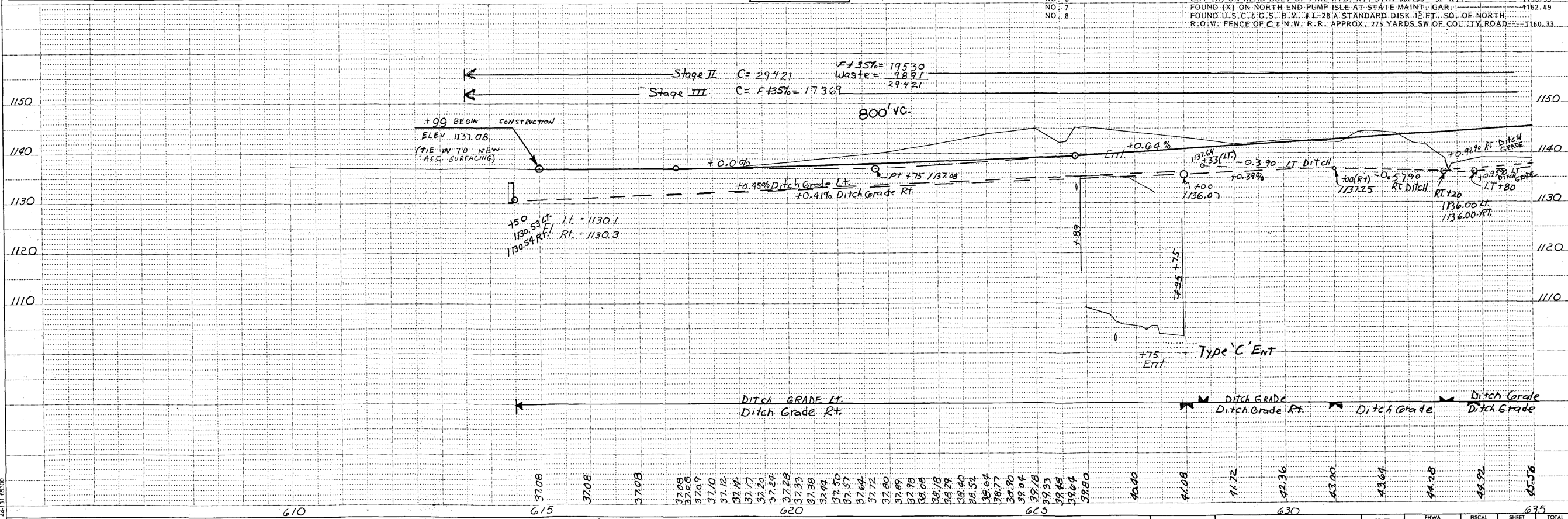
STA. 614+99
 BEGIN CONSTRUCTION



DATUM INFORMATION:
 THIS SURVEY IS ON U.S.C. & G.S. DATUM PLANE. DATUM BM IS L-28. BENCH RUN WAS MADE TO THIS BENCH MARK WITHOUT EQUATION.
 BENCH MARK #7 THIS SURVEY EL. = 1162.49 = B.M. #44 F-29 WRIGHT CO. = 594.46 & PLANS.
 BENCH MARK:

NO.	DESCRIPTION	ELEV.
NO. 1A	STA. 614+50 48' LT.	1135.99
NO. 1B	STA. 618+75 75' RT.	1137.45
NO. 2A	STA. 627+15 200' LT.	1150.90
NO. 5	STA. 651+73 59' RT.	1155.89
NO. 6		1156.99
NO. 7	FOUND (X) ON NORTH END PUMP ISLE AT STATE MAINT. GAR.	1162.49
NO. 8	FOUND U.S.C. & G.S. B.M. # L-28 A STANDARD DISK 13 FT. SO. OF NORTH R.O.W. FENCE OF C.E.N.W. R.R. APPROX. 275 YARDS SW OF COLONY ROAD	1160.33

LEGEND
 - Northwestern Bell Tel. Co. Webster City, Ia.
 - Iowa Power Service, Clarion, Ia.
 - Northern Natural Gas, Ventura, Ia.



PLAN

DATE	
BY	
SURVEYED	
ALIGNED	
CHECKED	
RT. OF WAY CHECKED	
NOTE BOOK NO.	

PROFILE

DATE	
BY	
SURVEYED	
PLOTTED	
CHECKED	
BY	
NOTE BOOK NO.	
STRUCTURE NOTATION OK'D	

BRUNING 44131 65300

I.D.O.T. # 000-316980

Wright COUNTY

PROJECT NUMBER	STATE	FHWA Region	FISCAL YEAR	SHEET NO.	TOTAL SHEETS

AS-BUILT PLANS, FOR INFORMATION ONLY 26

Survey Information

SURVEY INDEX

County: Wright
PIN: 25-99-003-030
Project Number: NHSN-003-4(051)—2R-99
Location: 0.5 mi W of Clarion
Type of Work: T1
Project Directory: 9900303025

Survey Personnel

Jason Page – Engineering Tech. Sr.

Date(s) of Survey

Begin Date 07/01/2025
End Date 07/03/2025

General Information

This survey is for Iowa Hwy. 3 right-of-way information.

Project Control

Nearby Iowa Real Time Network reference stations were utilized to obtain horizontal and vertical control on primary project control points. Three six-minute observations were taken with a minimum two-hour time span between and used in a weighted average to obtain final coordinate values. For additional details of the control survey, contact the District 2 ROW department.

PROJECT DATUM: NAD83(2011) for EPOCH 2010.00 (IaRTN 2019 ADJUSTMENT)
COORDINATE SYSTEM: IOWA REGIONAL COORDINATE SYSTEM ZONE 04
(U.S. SURVEY FOOT)
VERTICAL DATUM: NAVD88
GEOID MODEL: 2018u3

Alignment Information

ROWMLA003

The horizontal alignment for existing Iowa Hwy 3 this survey is a retrace of As-built Plans No. RRP-3-4(23)—48-99. Survey stationing was equated to the plan PI at Sta. 617+00.0 and carried back and ahead with equation throughout the survey.

Survey stationing relates to as built plan stationing as follows:

Equation Station

POT Sta. 645+99.4 Bk = POT Sta. 646+27.9 Ah
As-built Plans Project No. RRP-3-4(23)—48-99.

ROWMLFA-29

The horizontal alignment for old Iowa Hwy. 3 this survey is a retrace of As-built Plans No. FA-29. Survey stationing was equated to the plan PI at Sta. 607+74.5 and carried ahead with equation throughout the survey.

Survey stationing relates to as built plan stationing as follows:

Equation Station

PT Sta. 634+41.76 Bk (survey) = PT Sta. 634+47.2 Ah
As-built Plans Project No. FA-29.

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 04 (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 04 (U.S. Survey Foot)
 VERT. DATUM: NAVD88
 Geoid Model: 2018u3

Point Name	Northing	Easting	Elevation	Feature Code - Description
1000	8672906.56	14797778.05	1179.58	CP FND FENO MON 99002 8IN DEEP Proj. No. NHSX-003-4(42)--3H-99
1001	8674189.90	14792257.80	1163.89	CP FND DIMPLE TOP BHIVE INTK CP21 Proj. No. NHSX-003-4(42)--3H-99
1002	8673972.05	14781778.01	1131.93	CP FND DIMPLED RBR IN CM CP22 Proj. No. NHSX-003-4(42)--3H-99
1003	8674118.67	14787125.78	1143.53	CP SET 5/8X40 RBR W/ ORNG CNTRL PT CAP
1004	8674092.37	14785119.96	1136.02	BM FND IDOT BRASS BUTTON TOP OUTLET HDWL BM 1A Proj. No. RFP-3-4(23)--48-99

TRAFFIC CONTROL PLAN

108_23A
8/15/22

Eastbound and Westbound IA 3 lanes will be open to traffic during construction. TC-213 may be used for intermittent lane closures as needed.

Switch to "Nie"

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	Remarks
1.0	IA 3	Both	Wright	None				None		

Switch to "Nie"



111_01
10/14/22

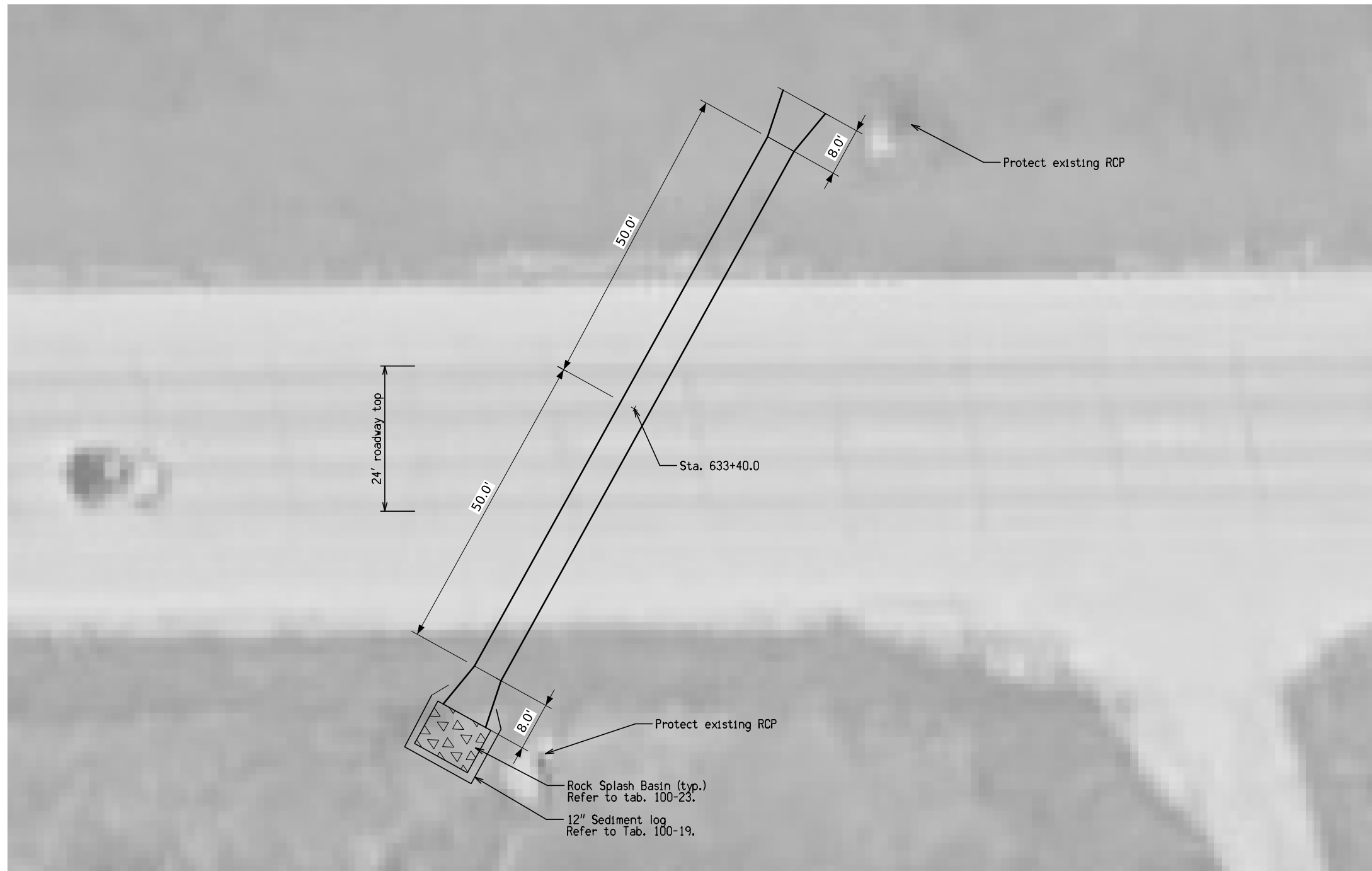
COORDINATED OPERATIONS

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.

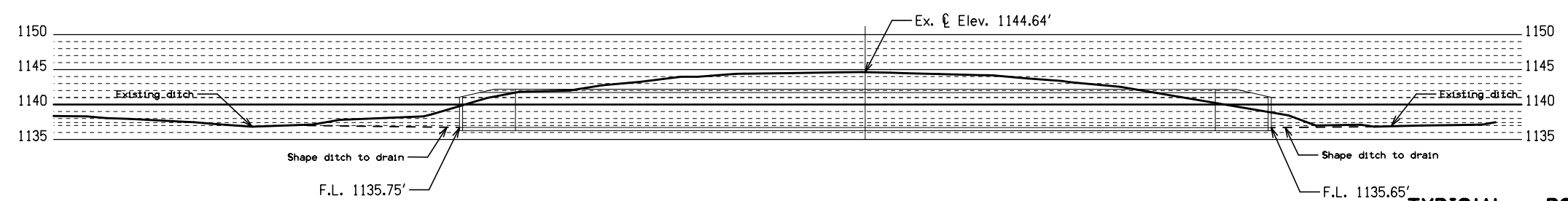
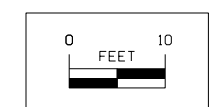
Project	Type of Work
	To be discussed at PreCon

Switch to "Nie"



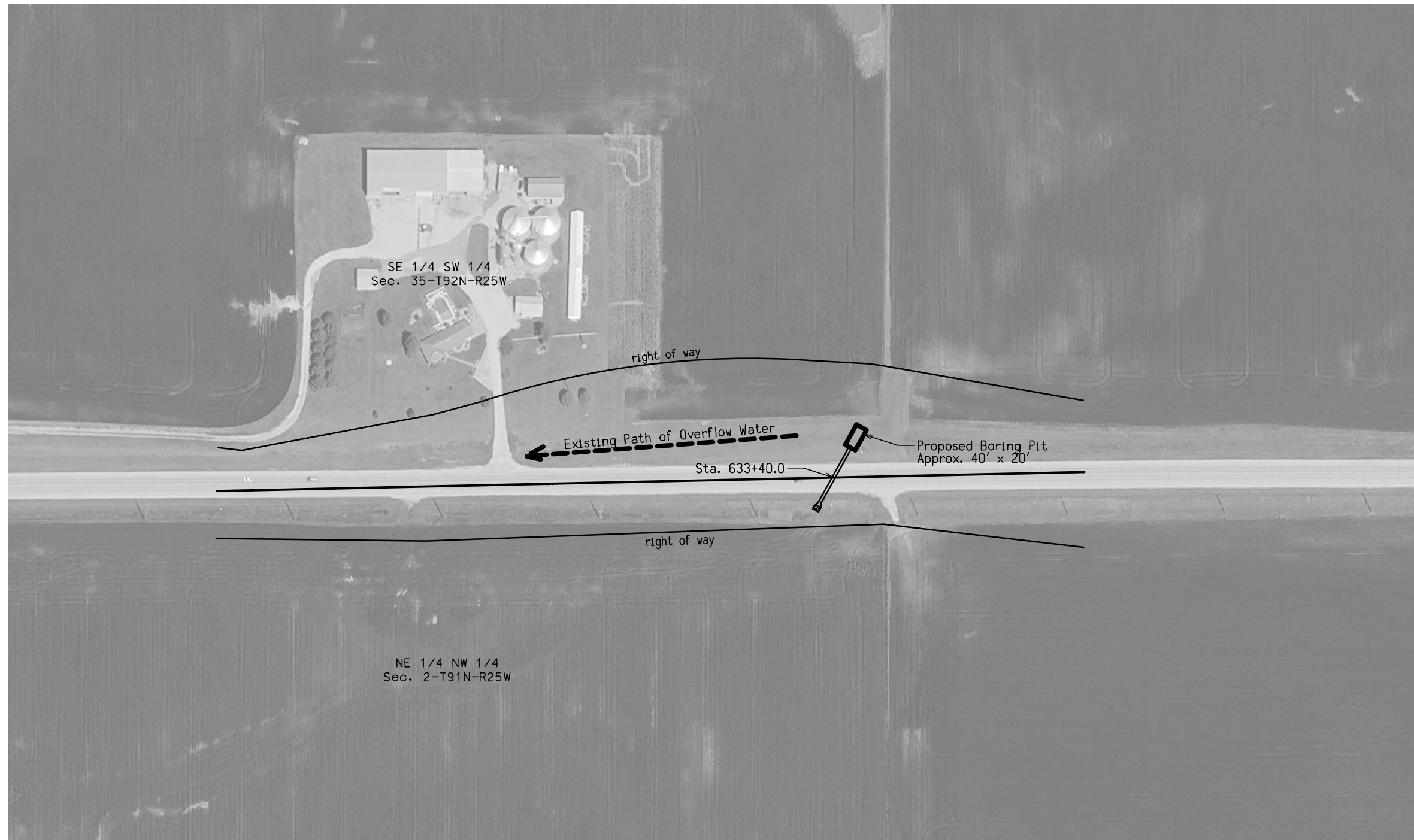


Sta. 633+40.0
 Install 60" x 100' RCP w/ aprons
 30° L.A.
 Flowline Lt. = 1135.75'
 Flowline Rt. = 1135.65'



Notes: All work to be completed within existing ROW. No equipment, materials or personel shall cross the ROW lines.
 Contractor shall restore and shape shoulders to existing conditions and grade foreslopes per Std. DR-103.
 Insatll proposed 60" x 100' RCP parallel with existing RCP.

TYPICAL - POST CULVERT CONSTRUCTION
INSTALL NEW CULVERT @ STA 633+40.0



SE 1/4 SW 1/4
Sec. 35-T92N-R25W

right of way

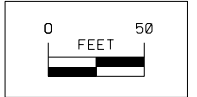
Existing Path of Overflow Water

Sta. 633+40.0

Proposed Boring Pit
Approx. 40' x 20'

right of way

NE 1/4 NW 1/4
Sec. 2-T91N-R25W



INSTALL NEW CULVERT @ STA 633+40.0

FILE NO.	ENGLISH	DESIGN TEAM Rolando/Nie	WRIGHT COUNTY	PROJECT NUMBER NHSX-003-4(050)--3H-99	SHEET NUMBER U.2
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