

HOSPERS, IOWA

CONSTRUCTION PLANS

ISG PROJECT # 23-30403



RURAL WATER SYSTEM #1 WETLAND COMPLEX

LEGEND

EXISTING	
	WATERSHED BOUNDARY
	CITY LIMITS
	SECTION LINE
	QUARTER SECTION LINE
	RIGHT OF WAY LINE
	PROPERTY / LOTLINE
	EASEMENT LINE
	ACCESS CONTROL
	WATER EDGE
	WETLAND BOUNDARY
	FENCE LINE
	EXISTING OPEN DITCH
	CULVERT
	TILE
	PRIVATE TILE
	WATER
	GAS
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
	UNDERGROUND TELEPHONE
	UNDERGROUND TV
	OVERHEAD UTILITY
	UNDERGROUND FIBER OPTIC
	CONTOUR (MAJOR)
	CONTOUR (MINOR)
	DECIDUOUS TREE
	CONIFEROUS TREE
	TREE LINE
	DROP INTAKE
	HYDRANT
	POWER POLE
PROPOSED	
	EASEMENT
	PROPOSED OPEN DITCH
	OPEN DITCH REPAIR
	CULVERT (RCP)
	CULVERT (CMP)
	CULVERT (HDPE)
	TILE
	TILE (PIPE WIDTH)
	PRIVATE TILE
	WATER
	GAS
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
	UNDERGROUND TV
	CONTOUR (MAJOR)
	CONTOUR (MINOR)
	DROP INTAKE
	SLOUGH REPAIR
	SPOIL PLACEMENT
	TREE CLEARING
	REMOVE TREE
	BUFFER



LOCATION MAP

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SEAL

I hereby certify that this engineering document was prepared by me or under direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

(signature) *Caleb Rasmussen* 4/28/2025 (date)

Printed or typed name: CALEB RASMUSSEN

License number: 25713

My license renewal date is December 31, 2026

Pages or sheets covered by this seal: ALL SHEETS

GIS DISCLAIMER:

INFORMATION FOR THE BOUNDARY / LOT LINES, AND UNDERGROUND UTILITIES SHOWN WAS DERIVED FROM DIGITAL DATABASES AND IS FOR INFORMATIONAL PURPOSES ONLY. DATA MAY NOT HAVE BEEN PREPARED FOR, OR BE SUITABLE FOR, LEGAL, ENGINEERING, OR SURVEYING PURPOSES.

PROJECT INDEX:

OWNER:	PROJECT ADDRESS / LOCATION:	MANAGING OFFICE:	
RURAL WATER SYSTEM #1 44381 380TH ST HOSPERS, IA 51238	S14 T96N R43W LYNN TWP HOSPERS, IOWA	STORM LAKE OFFICE 1725 LAKE AVE. NORTH STORM LAKE, IA 50588 PHONE: 712.732.7745	
SPECIFICATIONS REFERENCE		B.M. ELEVATION = 1361.90	
ALL CONSTRUCTION SHALL COMPLY WITH SIoux COUNTY'S REQUIREMENTS AND WITH THE IOWA NRCS STANDARD SPECIFICATIONS, COMPLIANCE WITH THE 2024 EDITION OF THE STATEWIDE URBAN DESIGN AND SPECIFICATIONS (SUDAS) SHALL BE MADE AS SUPPLEMENT WHEN INDICATED OR UNLESS DIRECTED OTHERWISE.		ALUMINUM CAP IN BRIDGE RAIL NORTH WEST SIDE OF BRIDGE ON 360TH ST, 0.3 MILES WEST OF INTERSECTION SB STATE HWY 60 AND 360TH ST	
PROJECT DATUM		TOPOGRAPHIC SURVEY	
HORIZONTAL COORDINATES HAVE BEEN REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83), ON THE IOWA REGIONAL COORDINATE SYSTEM (ZONE 1), IN U.S. FEET.		THIS PROJECT'S TOPOGRAPHIC SURVEY CONSISTS OF DATA COLLECTED IN APRIL 2024 BY ISG.	
VERTICAL COORDINATES FOR THIS PROJECT.			
TITLE	TITLE		
	C0-10		

REVISION SCHEDULE	
DATE	DESCRIPTION
BY	
PROJECT NO.	23-30403
FILE NAME	30403-C0-TITLE
DRAWN BY	JAT
DESIGNED BY	RAM/HRT
REVIEWED BY	CDH
ORIGINAL ISSUE DATE	4/28/2025
CLIENT PROJECT NO.	

RURAL WATER SYSTEM #1 WETLAND COMPLEX

HOSPERS IOWA



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PROJECT

RURAL WATER SYSTEM #1 WETLAND COMPLEX

HOSPERS IOWA

DATE	REVISION SCHEDULE DESCRIPTION	BY

PROJECT NO.	23-30403
FILE NAME	30403-C0-NOTES
DRAWN BY	JMT
DESIGNED BY	RAM/HPT
REVIEWED BY	CDH
ORIGINAL ISSUE DATE	4/28/2025
CLIENT PROJECT NO.	-

TITLE

ESTIMATE REFERENCES

SHEET

C0-21

ESTIMATE REFERENCE INFORMATION		DESCRIPTION
ITEM NO.	SPECIFICATION NO.	ITEM
WETLAND COMPLEX		
1	IA CS-001	Site stripping & preparation
2	IA CS-001	Crop damage
3	IA CS-001	Temp Access
4	IA-CS-005	Pollution Control
5	IA CS-006	Buffer seeding
6	CS-008	Mobilization and demobilization
7	IA CS-021	Excavation (General)
8	IA CS-023	Earthfill (General)
9	IA CS-023	Earthfill (Wasting)
10	IA CS-026	Topsoil Placement
11	IA CS-031	Tied Concrete Block Mat
12, 13	IA CS-046	Corrugated profile well (Dual wall) Polyethylene pipe, 12" - 24"
14, 15	IA CS-046	2&3-Chamber Water Control Structure Assembly
16	IA CS-051	Perforated CMP Riser with Trash Guard, 18"
17	IA CS-051	CMP tile outlets (20 LF each) with Animal Guard, 15" x 20"
18	IA CS-061	Class E Riprap

Total quantity of material to be stripped is 32,304 CY. Stripping associated with pipe and structure installation is considered incidental to those bid items and not included in referenced quantity.

No crop damages are anticipated. Work limits and haul routes privately negotiated by contractor for haul routes outside the easement area.

This item will consist of work to provide temporarily access to the site and spoil stockpile areas. Including securing local permits from the county. 3 construction exits per SUDAS 9040.120 are included in this item, along with regular removal of sediment from public roads as it occurs. Additional entrances constructed at the contractors discretion are to have sediment trackout controls. No additional payment is to be made for additional construction entrances. Work limits and access routes privately negotiated by contractor shall not bind the engineer or owner for any compensation or restoration efforts. Any private access agreement shall be made known the owner and engineer.

Haul routes over existing water lines are to be monitored on a weekly basis. Report any rutting or wetspots near water lines immediately to all parties.

At this time no road use agreements are required with Sioux County Engineer or Iowa DOT. ISG will document existing road conditions at the pre-construction meeting. If for any reason the contractor is required to obtain a road use agreement, the contractor shall notify the engineer and owner immediately. Maintenance of roads beyond the management of sediment trackout is not anticipated.

Includes all pre and post construction control necessary. Contractor is required to stabilize disturbed areas per site restoration plan within 14 days after final disturbance. Partial substantial completion walk throughs may be requested as groups to initiate seeding and restoration work:

- Wetland #1
- Wetland #2 & #3
- Wetland #4 & #5
- East Disposal Areas
- West Disposal Areas

Contractor to minimize overall disturbed areas as responsible work progression dictates. Temporary sediment controls are required for unfinished, inactive grading areas that remain bare longer than 14 days. No additional compensation will be made for temporary controls. Temporary controls will be prescribed by the engineer based on review of site conditions.

Structural Controls included with this item are:
Straw Mattes: Refer SUDAS 9040.105- 113 linear feet, 9" nominal.
Silt Fence: Refer SUDAS 9040.119 - 5,526 linear feet of silt fence, reference length does not account for hooking or overlap.
Sediment Barriers: Refer SUDAS 9040.117 - 2 baffles locations, totaling 235 linear feet.
No additional compensation will be made for structural controls. Perimeter controls are to be installed prior to ground disturbance. Allowance for work progression and access will be made for partial installation.

Includes all final seeding for the job. Temporary stabilization seeding associated with open excavation not actively worked in times of fair weather is not included. This item also includes crimped straw mulching of the stockpile areas, 13.2 acres total. Mulch shall be in conformance with IA CS-006 and applied at a rate of 1.5 tons/acre. No separate payment will be made for crimped straw mulching.
Seeding shall not be done in the floodplain when any cumulative precipitation of 4 inches or more is projected in the 10 day forecast, or 2.5 inches or precipitation is projected in a 24 hour period.

Contractor is responsible to monitor river conditions and move equipment and materials if risk of flood is imminent. Loss of materials stored on site due to negligence shall be replaced by the contractor at no additional cost.

Excavation depths based on geotechnical exploration and high permeivity aquifer areas. Removal of water to facilitate excavations is considered subsidiary to this item. Pumping and disposal of water to be in accordance with state requirements. Hauling over public roads with equipment other than dump truck or tractor-trailer (such as scraper) to be negotiated with the jurisdictional entity.

Earthfill in constructed wetland areas shall be by method 1 per IA CS-023. Does not include construction of future well heads.

Includes all material disposed of designated sites. Contractor to generally segregate dissimilar materials within the stockpiles. Contractor has limited discretion to place and shape materials in various stockpiles. Stockpiles must not pool water and not encroach within 20 feet of any property line. Stockpiles have been modeled to hold a 10% swell volume at 3H:1V slopes. It is preferred that slopes taller than 12 feet be benched 10 feet horizontally, but not required unless slopes are steeper than 3H:1V.

Topsoil stockpile areas shall not be incorporated with other spoils. Excess topsoil to be spread on top of finished stockpiles.

This item shall consist of all necessary materials, labor, and transportation necessary for the installation of tied concrete block matting (TCBM). TCBM shall be Flexamat standard or equivalent. Installation shall be "perpendicular to flow" for spillways and overflows. Measure and payment will be based on plan quantity. Plan quantity does not account for overlap or key ins, but does include 2 feet over run in length and width to account for variability in manufacture dimensions. Where specified, this item includes all labor, transportation, and materials necessary for the installation of bedding material. Items subsidiary to the installation include excavation for structures and dewatering.

Includes time to locate all crossed utilities. Contractor to notify engineer of any elevation conflicts between raw water mains and wetland piping. All piping shall be gasketed and water tight. Alternate pipe trench to have prior approval from engineer.

Water Control Structures to be AgriDrain or equivalent, 4 tons of surrounding aggregate is assumed for each structure. Check couplers are fully tightened prior to placing surrounding aggregate.

Minimum gauge to be 14. Includes 3 feet long welded stub per detail. Includes a dissimilar pipe connection such as a Marmac or equivalent, or concrete collar per SUDAS 4020.211.

Installation per specification. Includes metal pipe apron per SUDAS 4030.225, where specified on plans. Includes a dissimilar pipe connection such as a Marmac or equivalent, or concrete collar per SUDAS 4020.211.

No fabric or crushed stone to be used as bedding or blanket material. Contractor may elect to use either erosion stone or Class E riprap to surround the slotted risers. Only Class E riprap can be used to construct rock riffles.



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PROJECT

**RURAL WATER
SYSTEM #1
WETLAND
COMPLEX**

HOSPERS IOWA

DATE	REVISION SCHEDULE	DESCRIPTION	BY

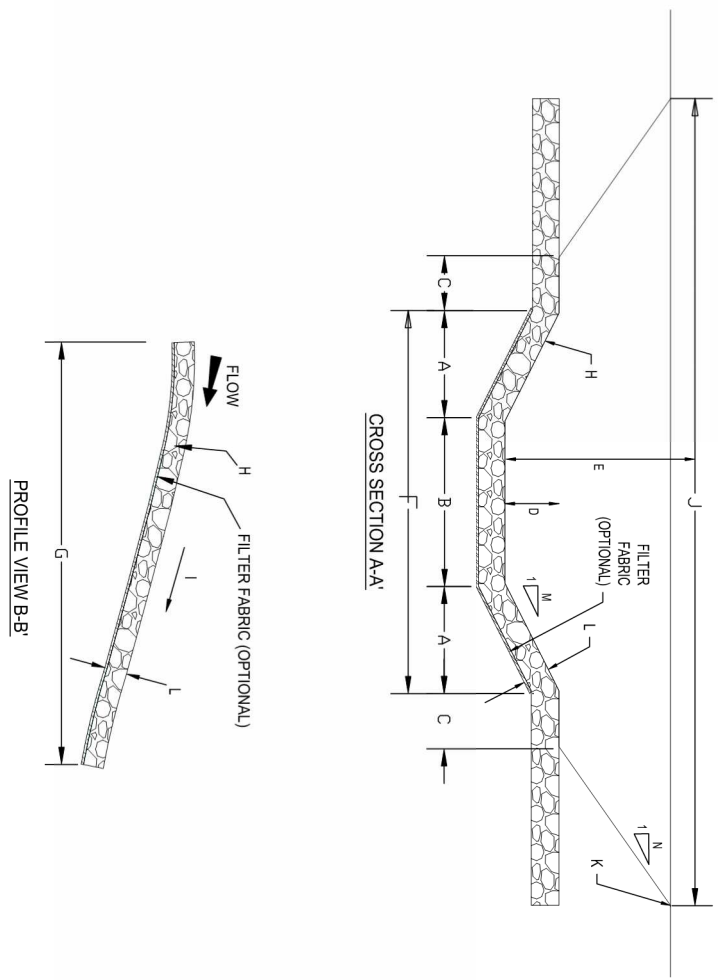
PROJECT NO.	23-30403
FILE NAME	30403-C0-DETAILS
DRAWN BY	JAT
DESIGNED BY	RAM/HFT
REVIEWED BY	CDH
ORIGINAL ISSUE DATE	4/28/2025
CLIENT PROJECT NO.	-

SITE DETAILS

SHEET

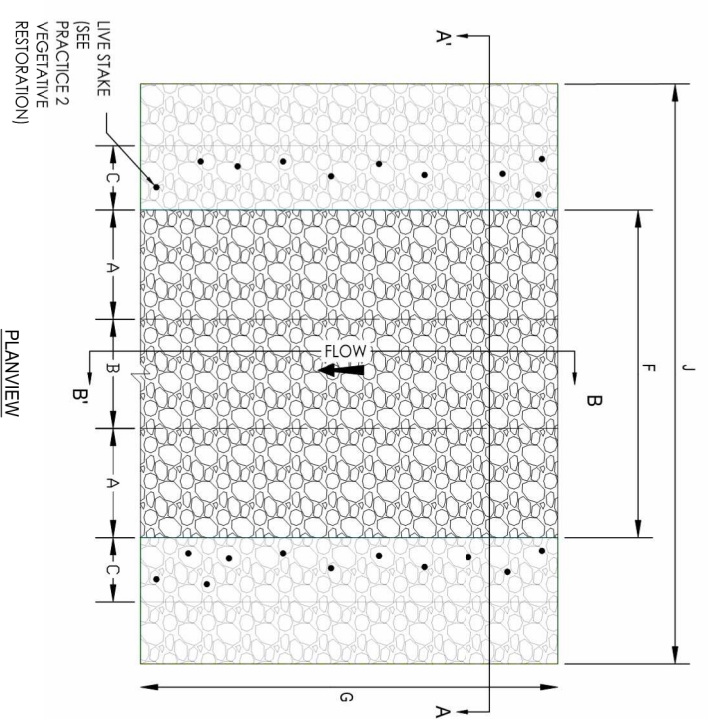
C0-22

	SOUTH RIFFLE	NORTH RIFFLE
A	6.30	6.30
B	21.51	21.50
C	10.00	10.00
D	2.10	2.10
E	7.95	5.85
F	34.10	34.10
G	35.00	35.00
H	1A DOT CLASS E	
I	2.29%	2.29%
J	77.26	62.27
K	1351.80	1350.09
L	2.25	2.25
M	3:1	3:1
N	2:1 MAX	2:1 MAX

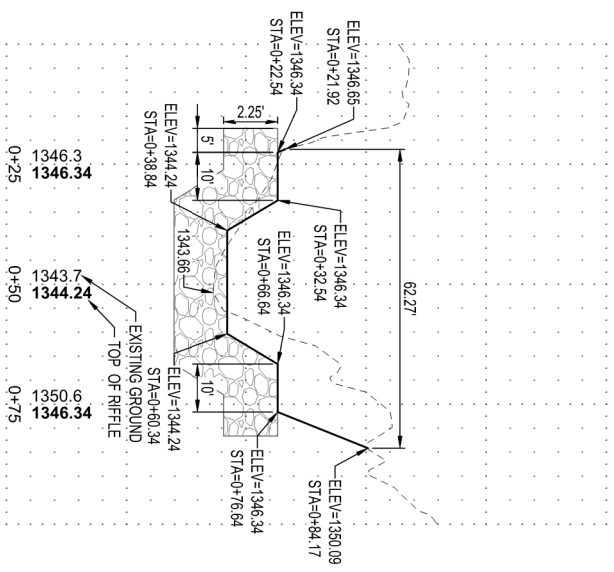


ROCK RIFFLE

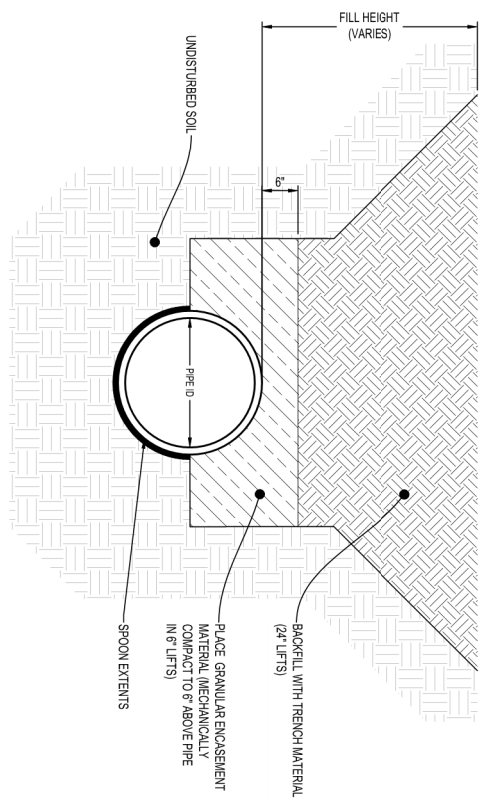
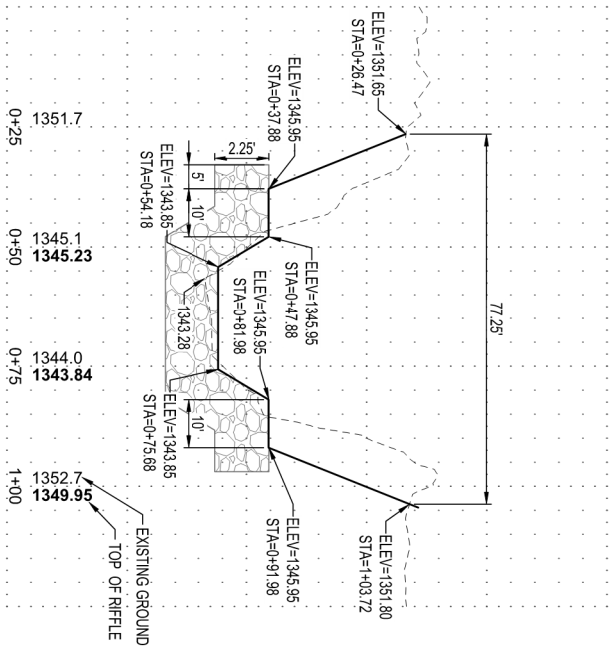
NTS



NORTH RIFFLE



SOUTH RIFFLE

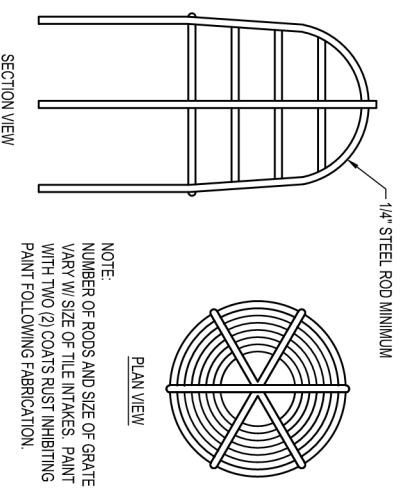
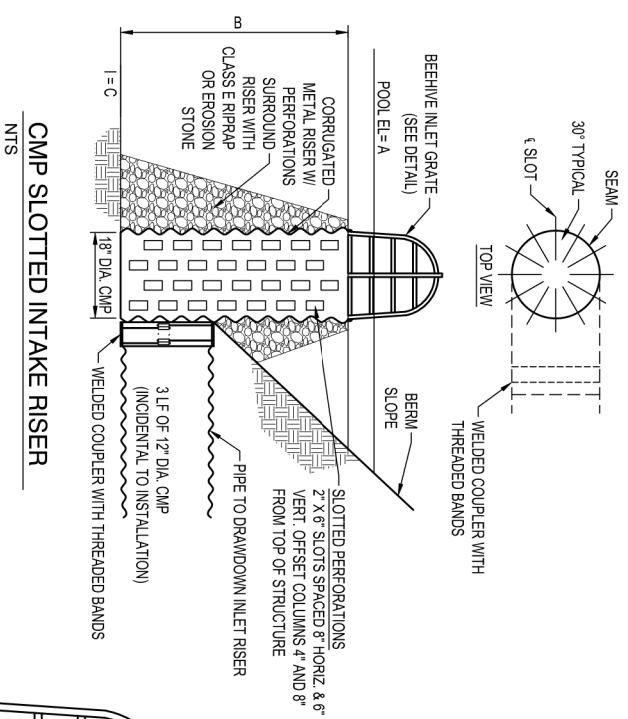


- NOTES:**
1. GRANULAR ENCASUREMENT AND BACKFILL SHALL BE INCIDENTAL TO CONSTRUCTION.
 2. SPOON DIMENSIONS SHALL COMPLY WITH PIPE MANUFACTURERS SPECIFICATIONS.
 3. ALL PIPE WITH A FILL HEIGHT GREATER THAN 15 FEET SHALL BE FULLY ENCASED IN ASTM CLASS II MATERIAL.

HDPE SPOON TRENCH

NTS

STRUCTURE	A	B (FT)	C	RIPPRAP (TN)
W1-A	1350.00	2.39	1347.61	84
W1-B	1351.00	3.52	1347.48	124
EXP-A	1353.00	3.89	1349.11	137
W2-A	1345.00	3.31	1341.69	98
W3-A	1345.78	1.89	1343.89	67
W3-B	1345.00	3.77	1341.23	133
W3-C	1345.23	2.22	1343.01	74
W4-A	1346.00	2.12	1343.88	72
W5-A	1344.50	2.46	1342.04	87
W5-B	1346.00	4.22	1341.78	151

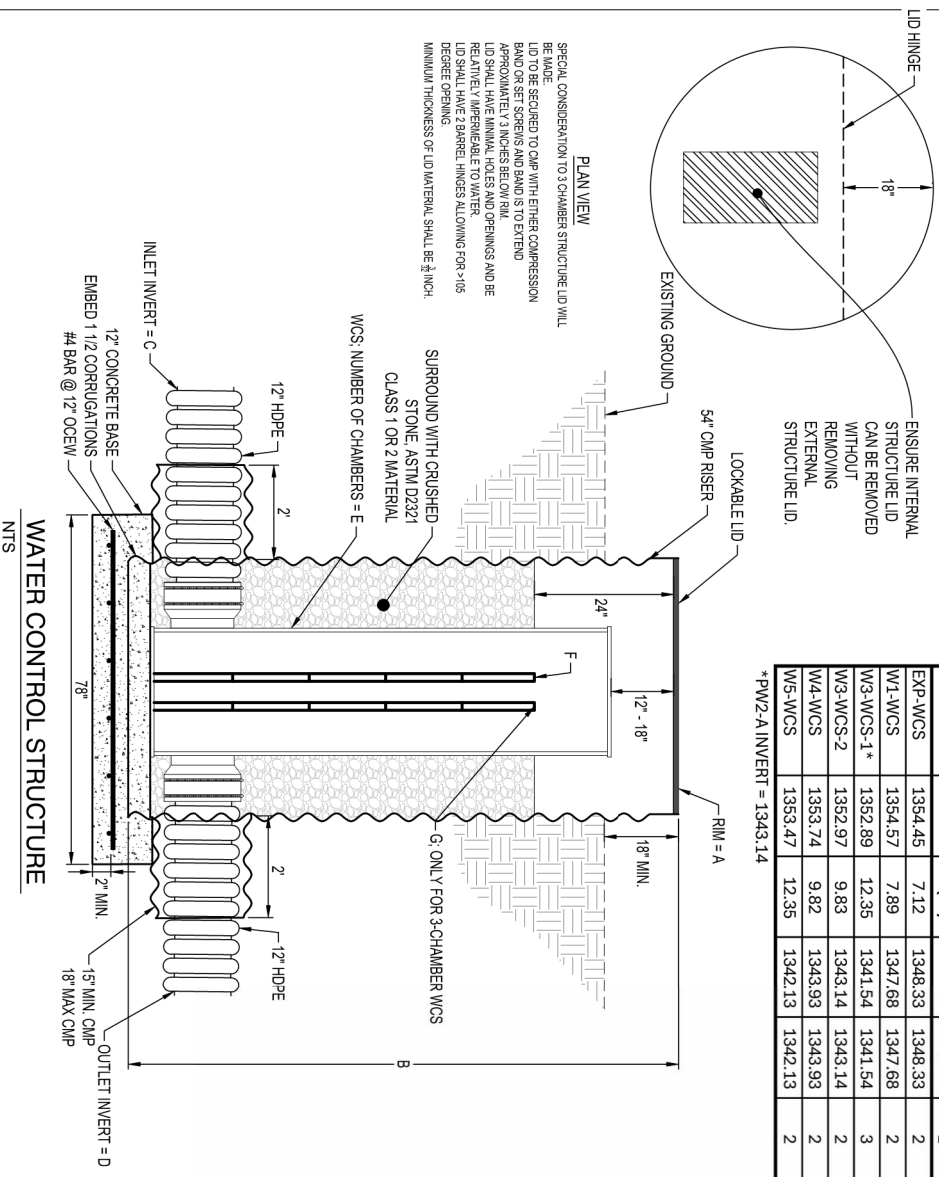


NOTE:
NUMBER OF RODS AND SIZE OF GRATE VARY W/ SIZE OF TILE INTAKES. PAINT WITH TWO (2) COATS RUST INHIBITING PAINT FOLLOWING FABRICATION.

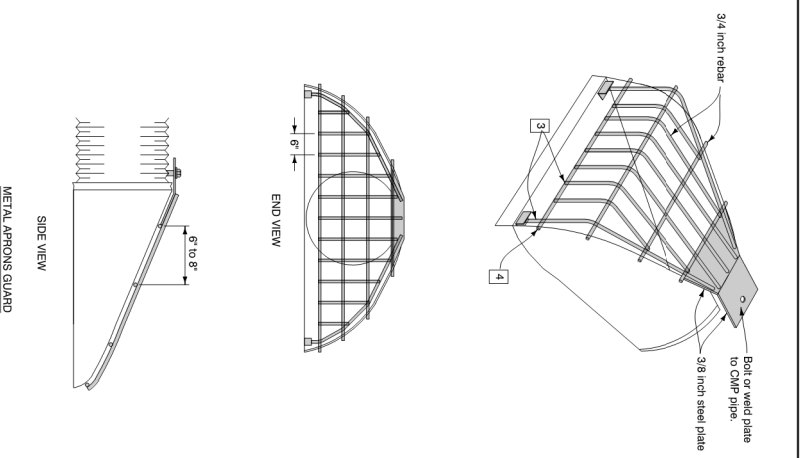
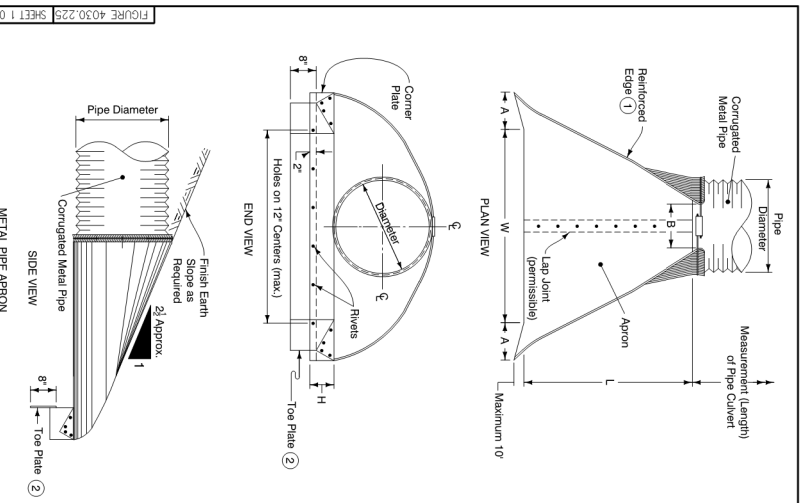
BEEHIVE INLET GRATE (STEEL BARS)
NTS

STRUCTURE	A	B (FT)	C	D	E	F	G
EXP-WCS	1354.45	7.12	1348.33	1348.33	2	1353.50	-
W1-WCS	1354.57	7.89	1347.68	1347.68	2	1350.50	-
W3-WCS-1*	1352.89	12.35	1341.54	1341.54	3	1344.00	1346.00
W3-WCS-2	1352.97	9.83	1343.14	1343.14	2	1345.73	-
W4-WCS	1353.74	9.82	1343.93	1343.93	2	1346.50	-
W5-WCS	1353.47	12.35	1342.13	1342.13	2	1345.00	-

*PW2-A INVERT = 1343.14



WATER CONTROL STRUCTURE
NTS



- On sizes 60 inches and larger, supplement the reinforced edge with a galvanized stiffener to CMP pipe.
- Install a galvanized toe plate (of the same diameter and larger).
- Hold inside bars up 3 inches off bottom of apron to allow for drainage and attach to 2 inch by 1/4 inch steel angle.
- When specified, extend bottom cross bar through apron.

PIPE SIZE (A)	DIMENSIONS			
	B	H	L	W
6"	12"	12"	12"	12"
8"	14"	14"	14"	14"
10"	16"	16"	16"	16"
12"	18"	18"	18"	18"
15"	21"	21"	21"	21"
18"	24"	24"	24"	24"
21"	27"	27"	27"	27"
24"	30"	30"	30"	30"
30"	36"	36"	36"	36"
36"	42"	42"	42"	42"
42"	48"	48"	48"	48"
48"	54"	54"	54"	54"
54"	60"	60"	60"	60"
60"	66"	66"	66"	66"
72"	78"	78"	78"	78"
78"	84"	84"	84"	84"
84"	90"	90"	90"	90"
90"	96"	96"	96"	96"
96"	102"	102"	102"	102"

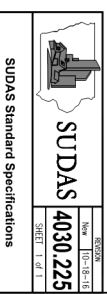


FIGURE 4030.225 SHEET 1 OF 1



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PROJECT

RURAL WATER SYSTEM #1 WETLAND COMPLEX

IOWA

HOSPERS	REVISION SCHEDULE	BY
DATE	DESCRIPTION	

PROJECT NO.	23-30403
FILE NAME	30403-CO-DETAILS
DRAWN BY	JAT
DESIGNED BY	RAM/HPT
REVIEWED BY	CDH
ORIGINAL ISSUE DATE	4/28/2025
CLIENT PROJECT NO.	-

SITE DETAILS

C0-23

SHEET



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PROJECT
RURAL WATER SYSTEM #1 WETLAND COMPLEX

HOSPERS IOWA

DATE	REVISION SCHEDULE	DESCRIPTION	BY

PROJECT NO. 23-30403
 FILE NAME 30403-C2-EXIST
 DRAWN BY JAT
 DESIGNED BY RAM/HPT
 REVIEWED BY CDH
 ORIGINAL ISSUE DATE 4/28/2025
 CLIENT PROJECT NO. -

TITLE
EXISTING SITE

SHEET
C2-10



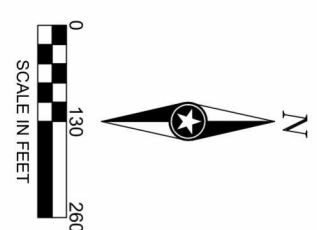
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PROJECT
RURAL WATER SYSTEM #1 WETLAND COMPLEX
 IOWA

DATE	REVISION SCHEDULE	DESCRIPTION	BY

PROJECT NO. 23-30403
FILE NAME 30403-C3-OVERALL SITE
DRAWN BY JAT
DESIGNED BY RAM/HPT
REVIEWED BY CDH
ORIGINAL ISSUE DATE 4/28/2025
CLIENT PROJECT NO. -

TITLE
OVERALL SITE



SHEET
C3-10



PROJECT
RURAL WATER SYSTEM #1 WETLAND COMPLEX
 IOWA

HOSPERS

DATE	REVISION SCHEDULE	DESCRIPTION	BY

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 DRAWN BY JAT
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 CLIENT PROJECT NO. -

TITLE
PROPOSED SITE

SHEET
C3-21

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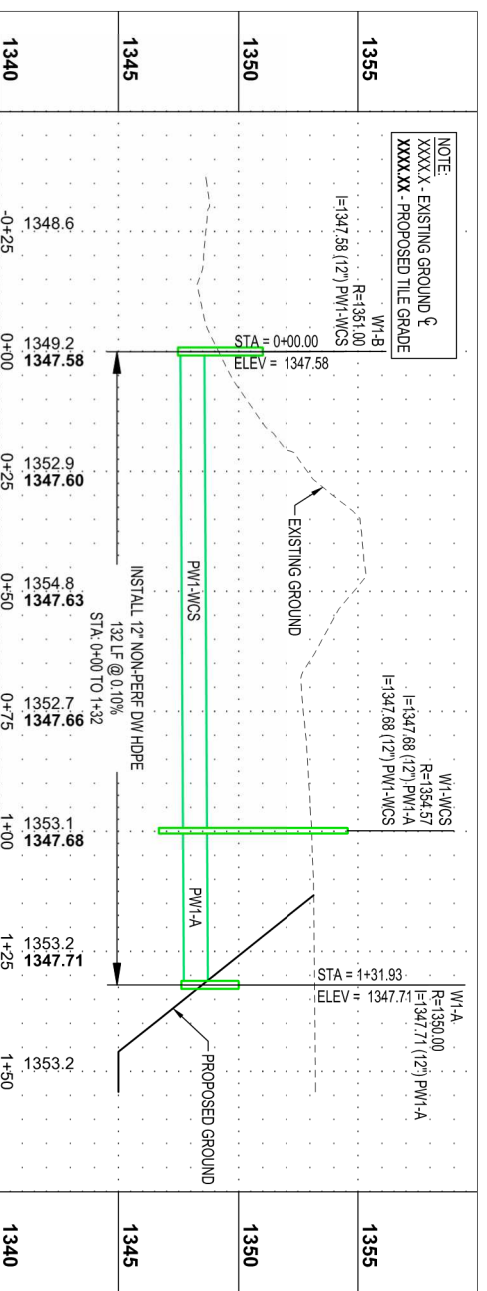
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PIPE PROFILES

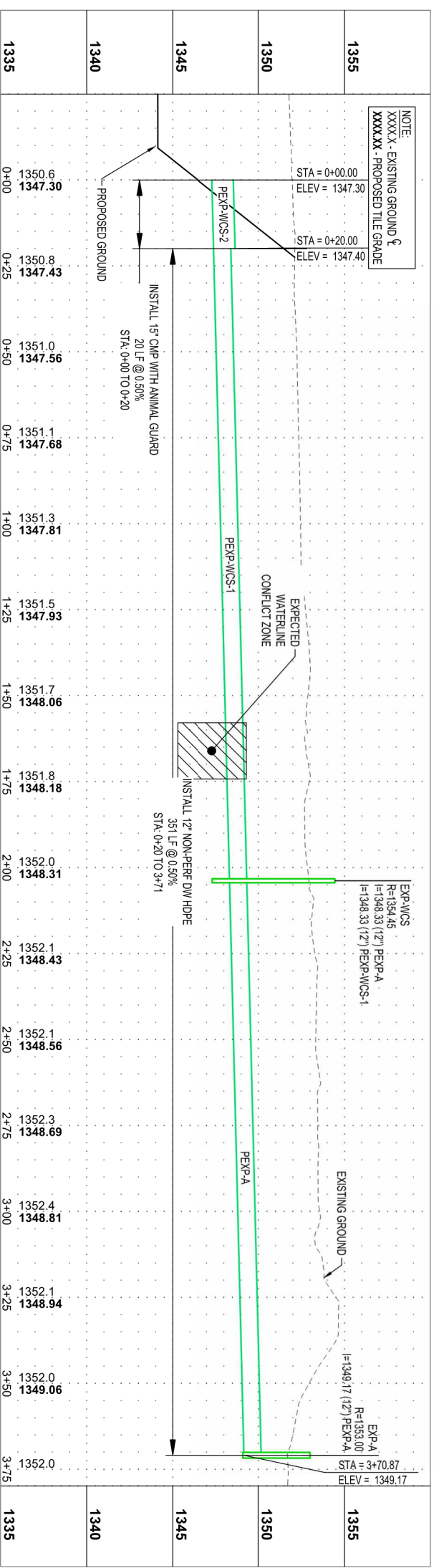
SHEET

C3-30

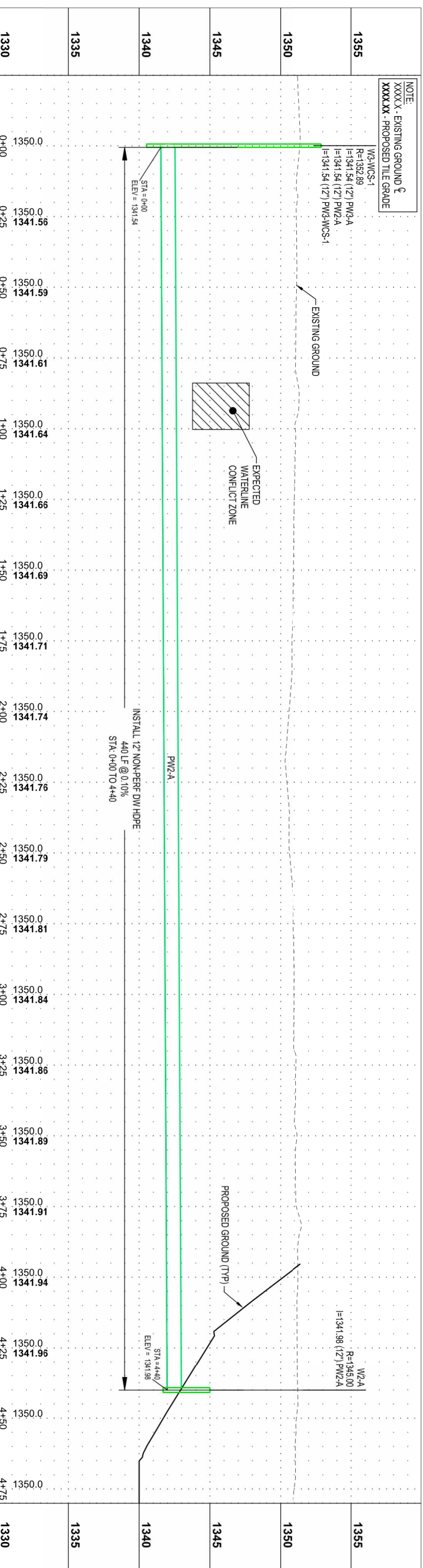
WETLAND 1 TO EXISTING NORTH POND



NORTH EXISTING POND TO WETLAND 2



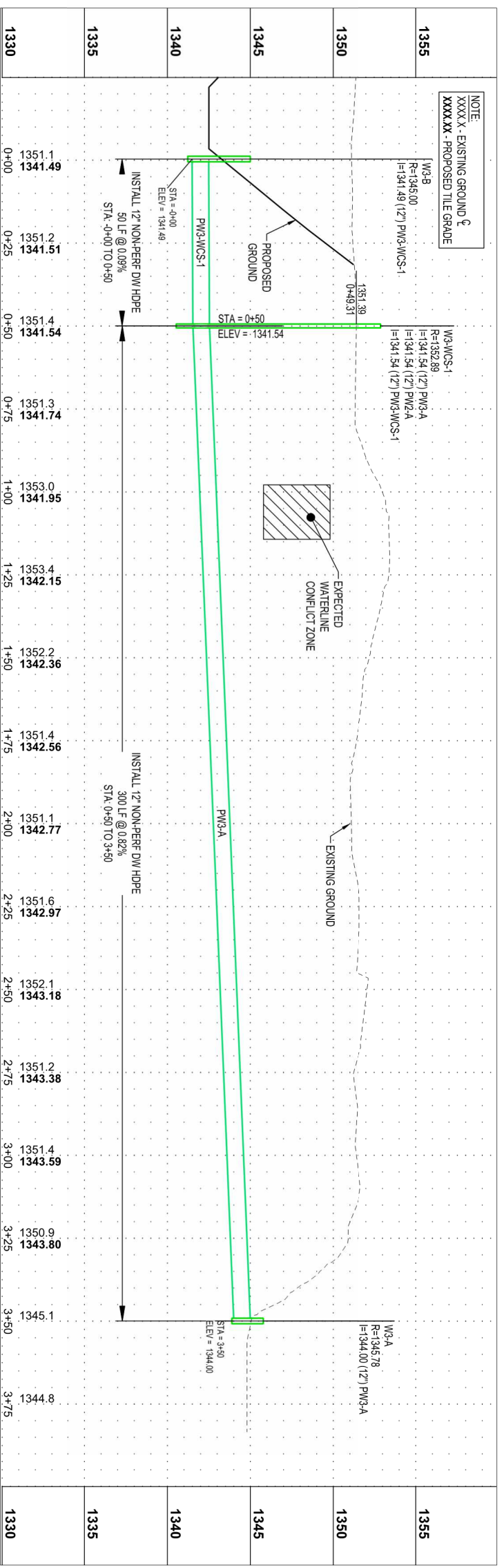
NOTE:
XXXXX - EXISTING GROUND
XXXXXX - PROPOSED TILE GRADE



WETLAND 2 OUTLET

WETLAND 3 TO EXISTING SOUTH POND

NOTE:
XXXXX - EXISTING GROUND
XXXXXX - PROPOSED TILE GRADE



PIPE PROFILES

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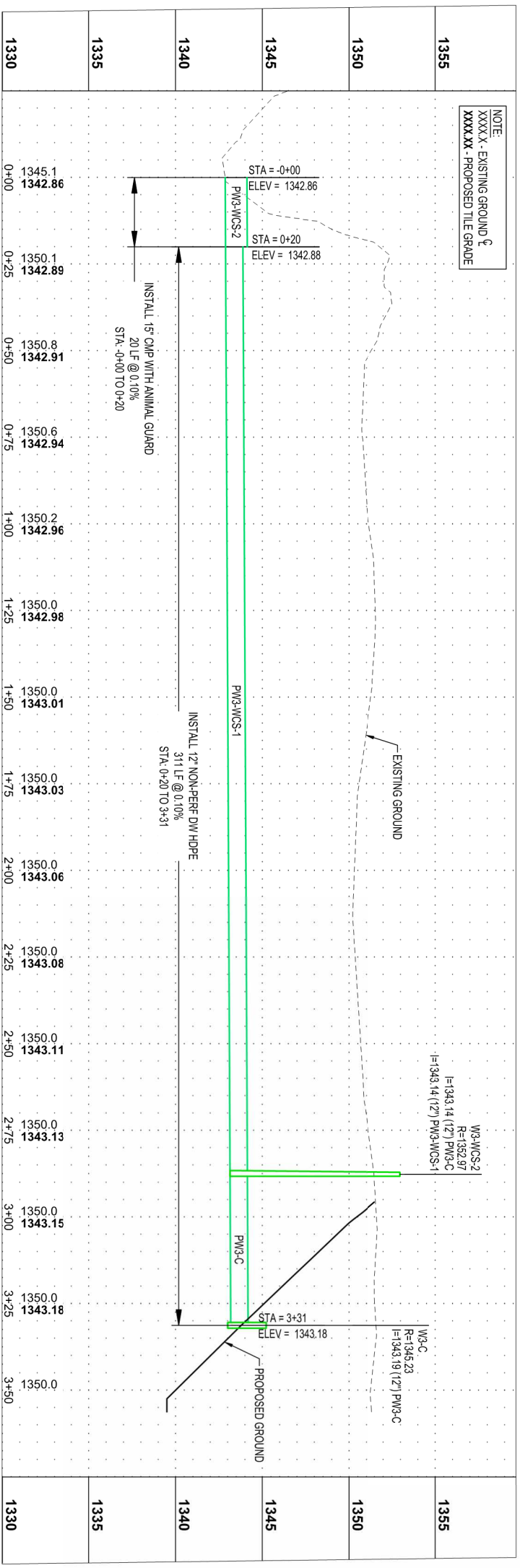
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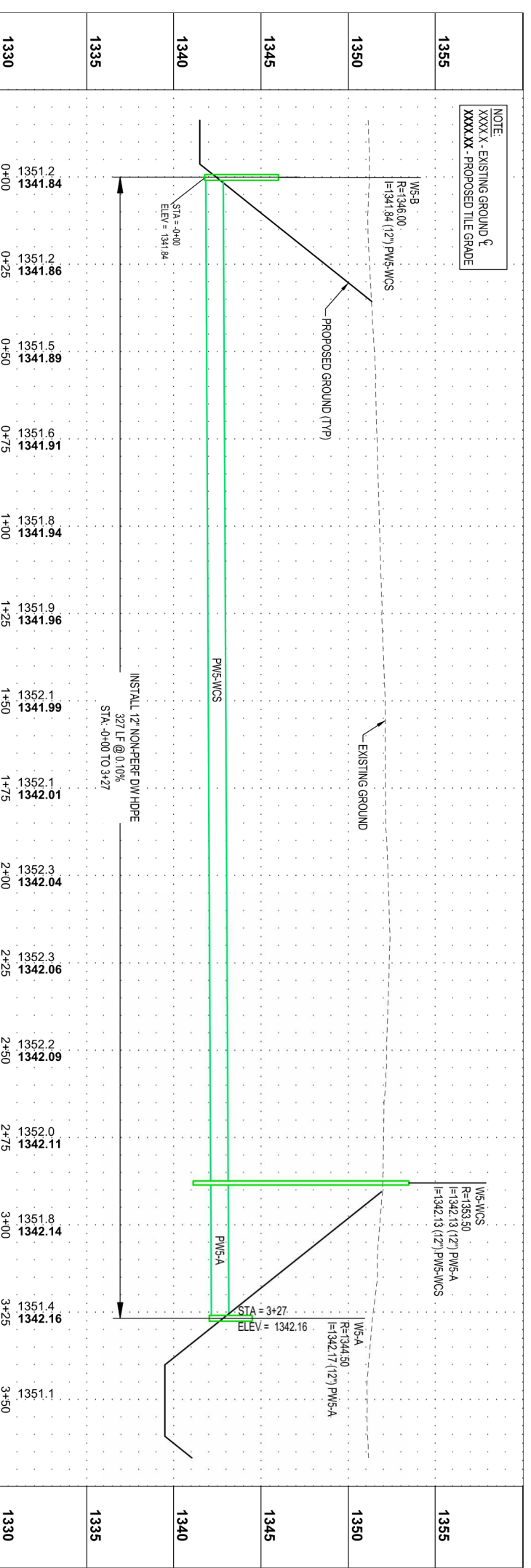
PIPE PROFILES

SHEET

C3-32

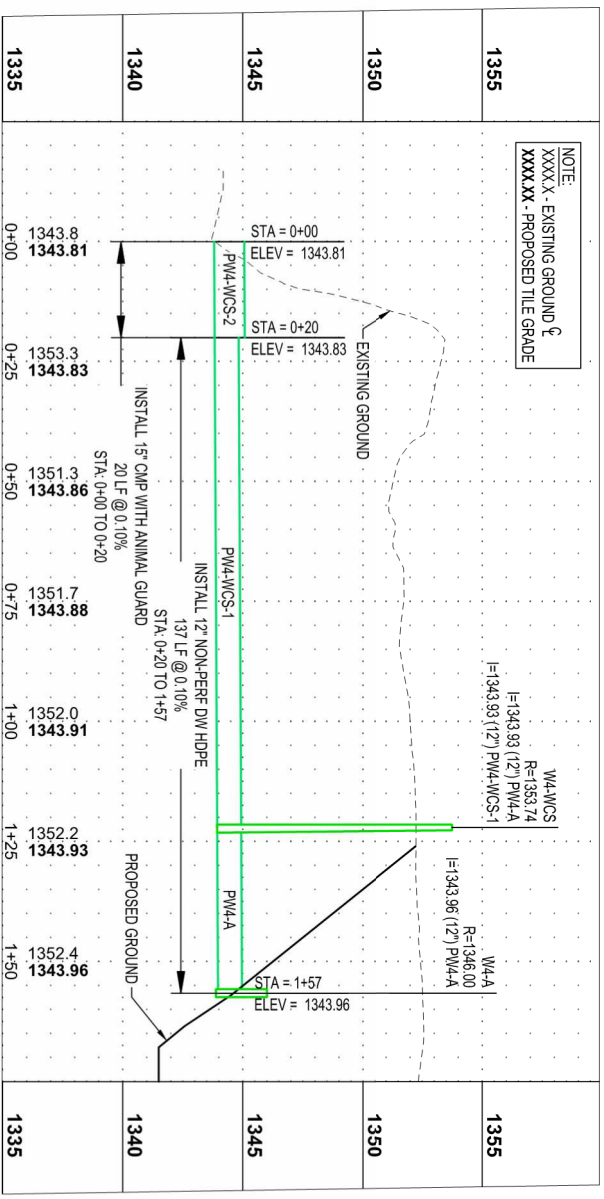


WETLAND 3 TO FLOYD RIVER



WETLAND 5 TO WETLAND 4

WETLAND 4 TO FLOYD RIVER



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RURAL WATER SYSTEM #1

WETLAND COMPLEX

HOSPERS IOWA

DATE	REVISION SCHEDULE DESCRIPTION	BY

PROJECT NO.	23-30403
FILE NAME	30403-C3-PROFILE
DRAWN BY	JAT
DESIGNED BY	RAM/HPT
REVIEWED BY	CDH
ORIGINAL ISSUE DATE	4/28/2025
CLIENT PROJECT NO.	-

PIPE PROFILES



EARTHWORK LEGEND	
	AREA OF CUT
	AREA OF FILL
	279,285 CV
	306,919 CV (MODERN)

NOTE: GRADING FOR FUTURE WELL MOUNDS IS NOT INCLUDED ON THIS PROJECT



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PROJECT

RURAL WATER SYSTEM #1

WETLAND COMPLEX

HOSPERS IOWA

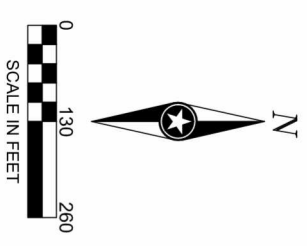
DATE	REVISION SCHEDULE	DESCRIPTION	BY

PROJECT NO.	23-30403
FILE NAME	30403-C4-OVERALL GRADE
DRAWN BY	JAT
DESIGNED BY	RAM/HPT
REVIEWED BY	CDH
ORIGINAL ISSUE DATE	4/28/2025
CLIENT PROJECT NO.	

OVERALL GRADING

SHEET

C4-10





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PROJECT
RURAL WATER SYSTEM #1
WETLAND COMPLEX
 IOWA

HOSPERS

DATE	REVISION SCHEDULE	DESCRIPTION	BY

CLIENT PROJECT NO. -

REVIEWED BY: CDH
 ORIGINAL ISSUE DATE: 4/28/2025

DESIGNED BY: RAM/HPT

DRAWN BY: JAT

FILE NAME: 23-30403
 30403-C4-GRADING

PROJECT NO.: 23-30403

TITLE

DETAILED GRADING

SHEET

C4-20



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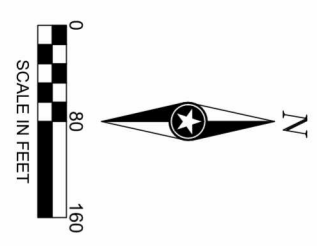
PROJECT
RURAL WATER SYSTEM #1
WETLAND COMPLEX

IOWA

HOSPERS

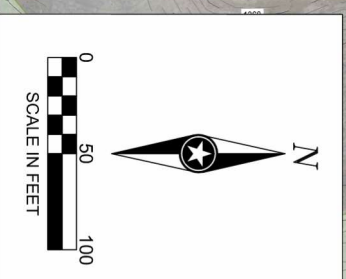
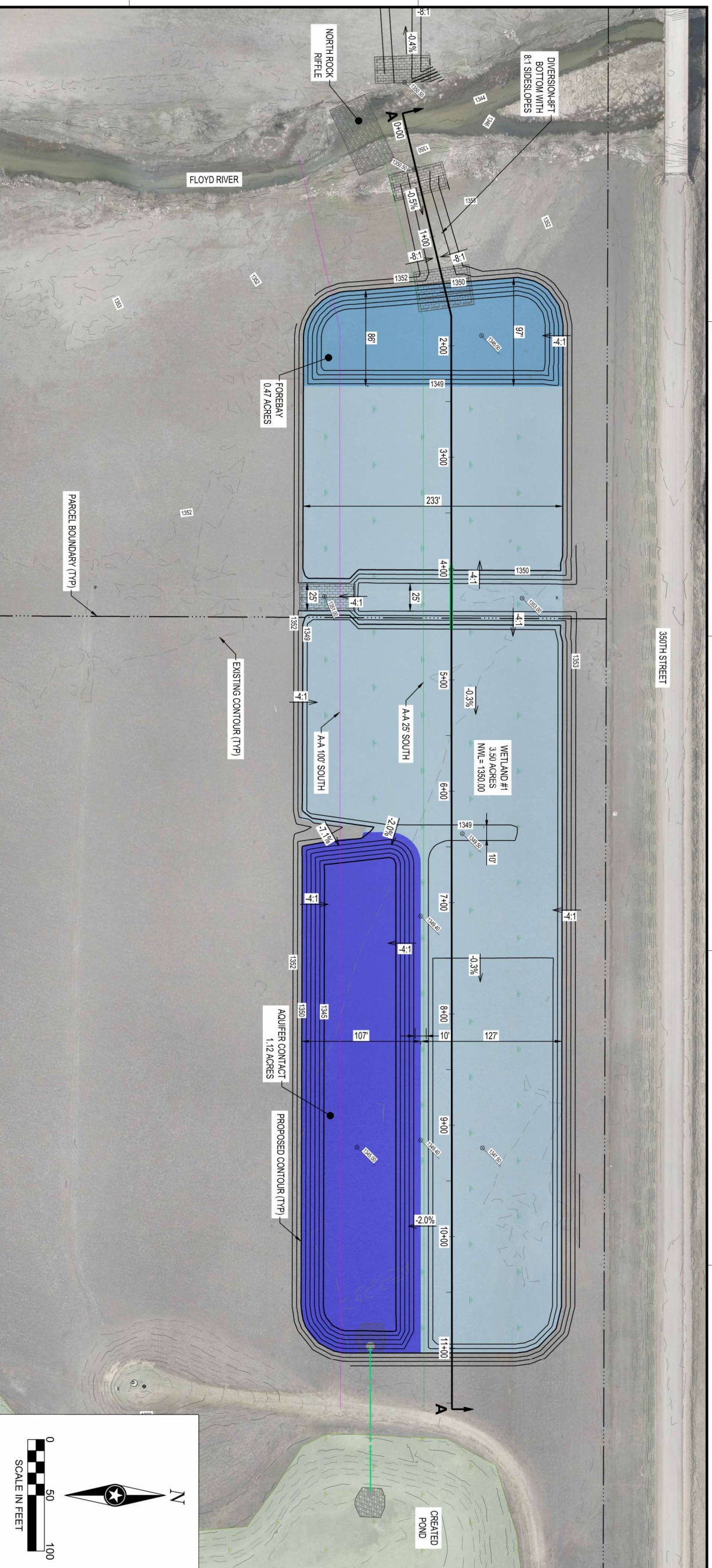
DATE	REVISION SCHEDULE	DESCRIPTION	BY

PROJECT NO.	23-30403
FILE NAME	30403-C4-GRABDE
DRAWN BY	JAT
DESIGNED BY	RAM/HPT
REVIEWED BY	CDH
ORIGINAL ISSUE DATE	4/28/2025
CLIENT PROJECT NO.	

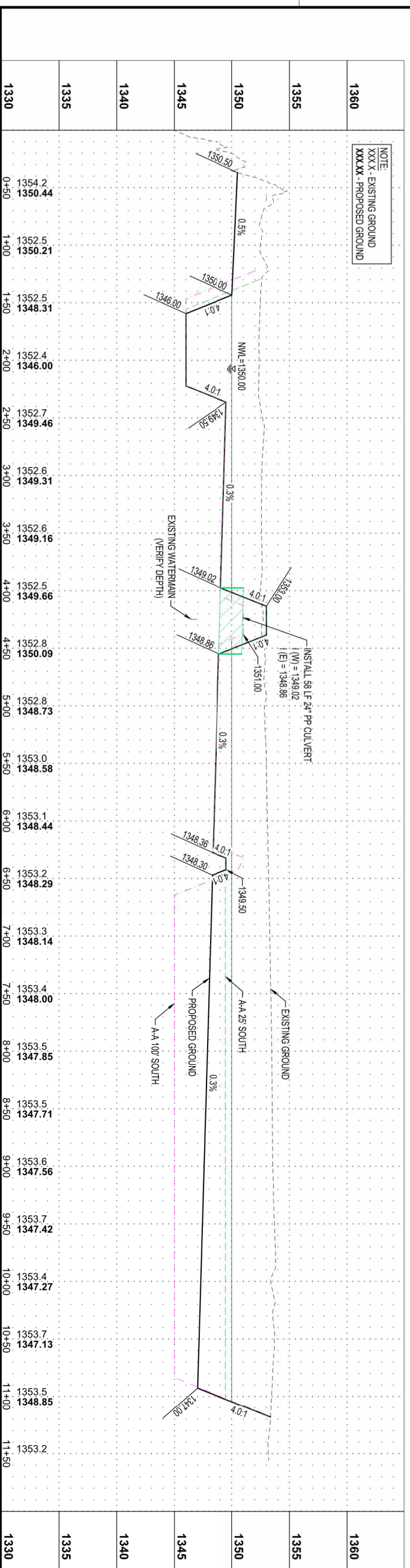



TITLE
DETAILED GRADING


SHEET
C4-21



SECTION A-A







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PROJECT
RURAL WATER SYSTEM #1 WETLAND COMPLEX

CLIENT PROJECT NO.
IOWA

HOSPERS

DATE	REVISION SCHEDULE	DESCRIPTION	BY

PROJECT NO.
23-30403

FILE NAME
30403-C4-CROSS SECTIONS

DRAWN BY
JAT

DESIGNED BY
RAM/HPT

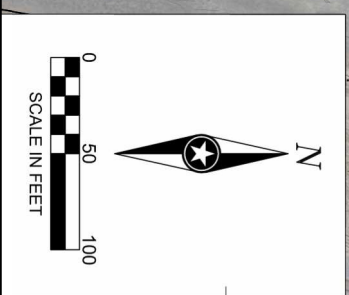
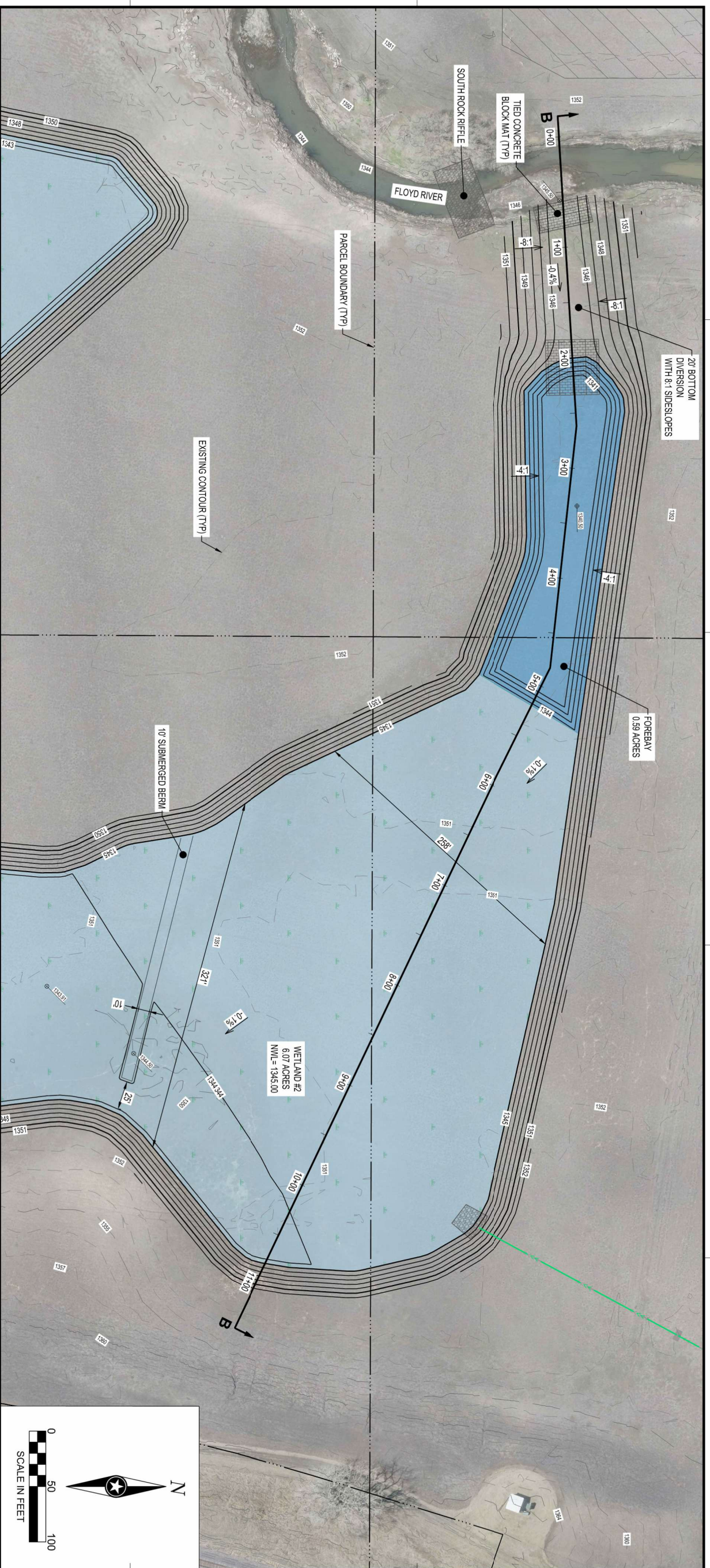
REVIEWED BY
CDH

ORIGINAL ISSUE DATE
4/28/2025

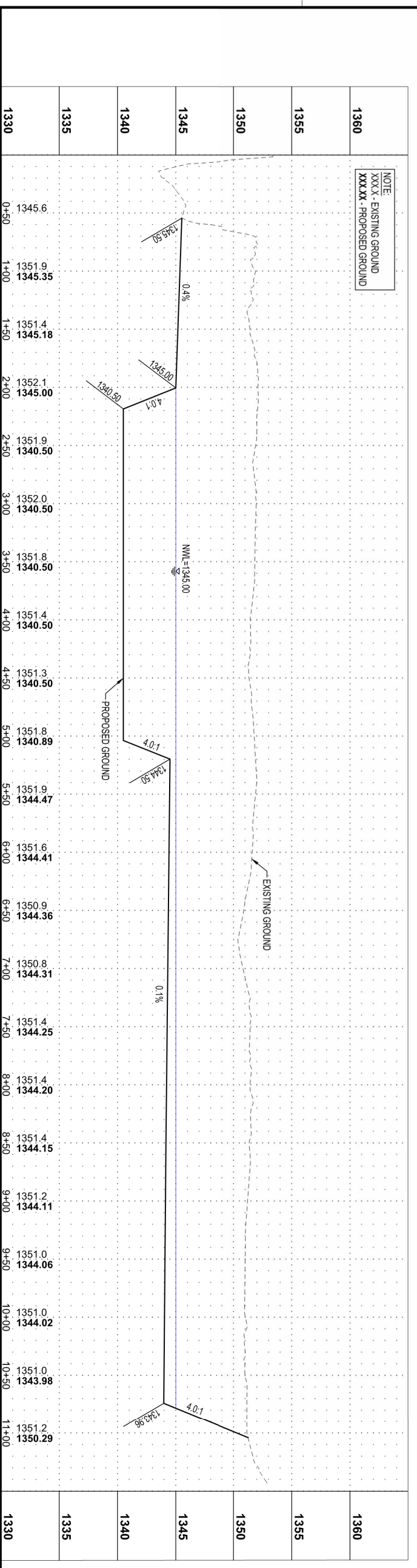
CLIENT PROJECT NO.

CROSS SECTION (A-A)


SHEET C4-30




SECTION B-B



1360	1345.6	0+50	1330
1355	1345.35	1+00	1335
1350	1345.18	1+50	
1345	1345.00	2+00	
1340	1340.50	2+50	
	1340.50	3+00	
	1340.50	3+50	
	1340.50	4+00	
	1340.50	4+50	
	1340.89	5+00	
	1344.47	5+50	
	1344.41	6+00	
	1344.36	6+50	
	1344.31	7+00	
	1344.25	7+50	
	1344.20	8+00	
	1344.15	8+50	
	1344.11	9+00	
	1344.06	9+50	
	1344.02	10+00	
	1343.98	10+50	
	1350.29	11+00	





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PROJECT
RURAL WATER SYSTEM #1
WETLAND COMPLEX

CLIENT PROJECT NO. -

DESIGNED BY RAM/HPT
REVIEWED BY CDH
ORIGINAL ISSUE DATE 4/28/2025

PROJECT NO. 23-30403
FILE NAME 30403-C4-CROSS SECTIONS
DRAWN BY JAT
DATE

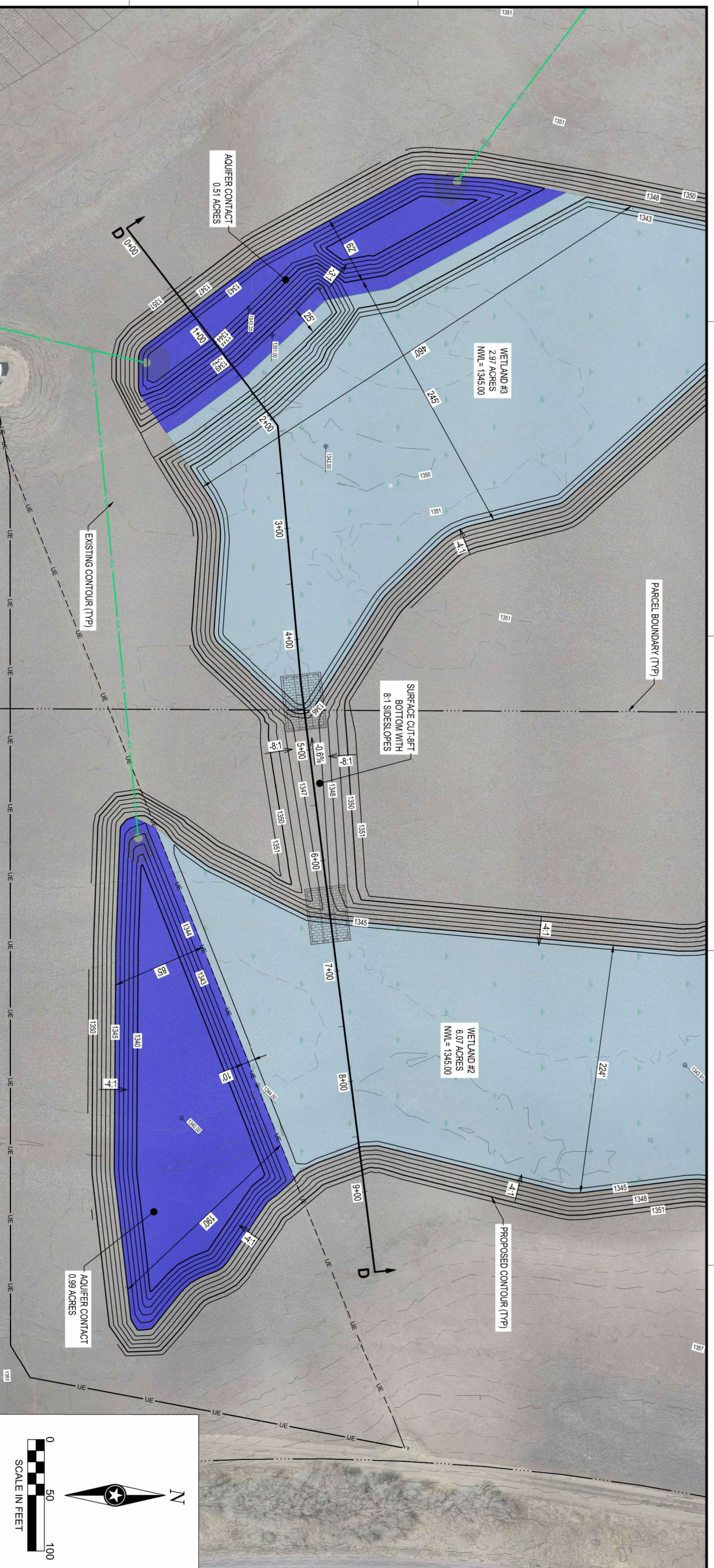
REVISION SCHEDULE

NO.	DESCRIPTION	DATE	BY

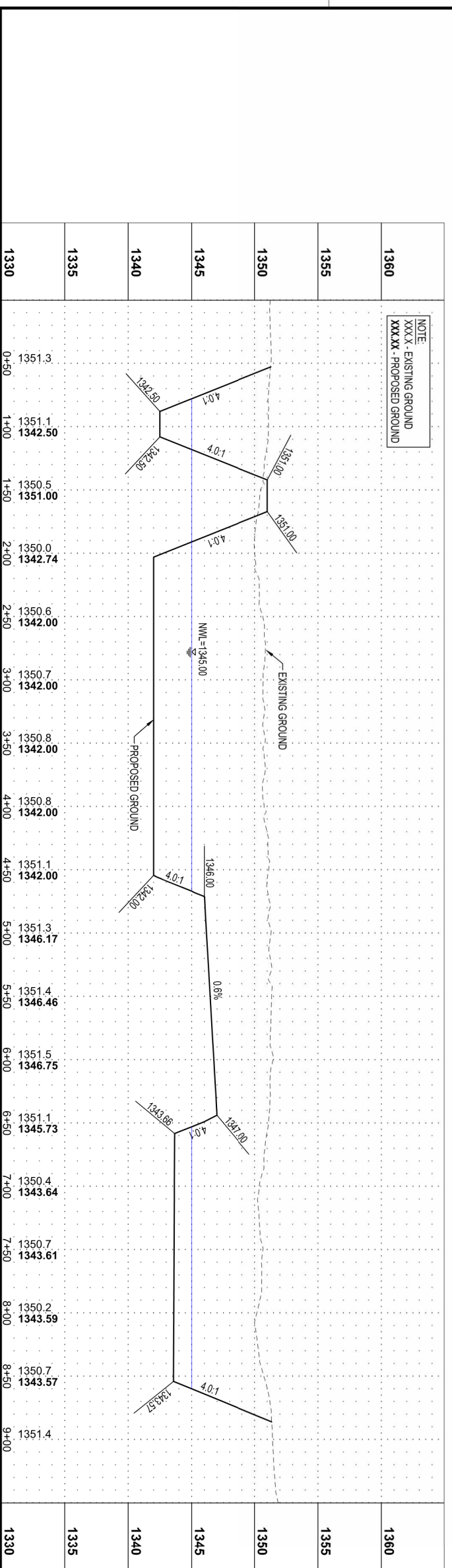
HOSPERS IOWA

TITLE
CROSS SECTION (B-B)

SHEET
C4-31



SECTION D-D



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PROJECT

**RURAL WATER
 SYSTEM #1
 WETLAND
 COMPLEX**

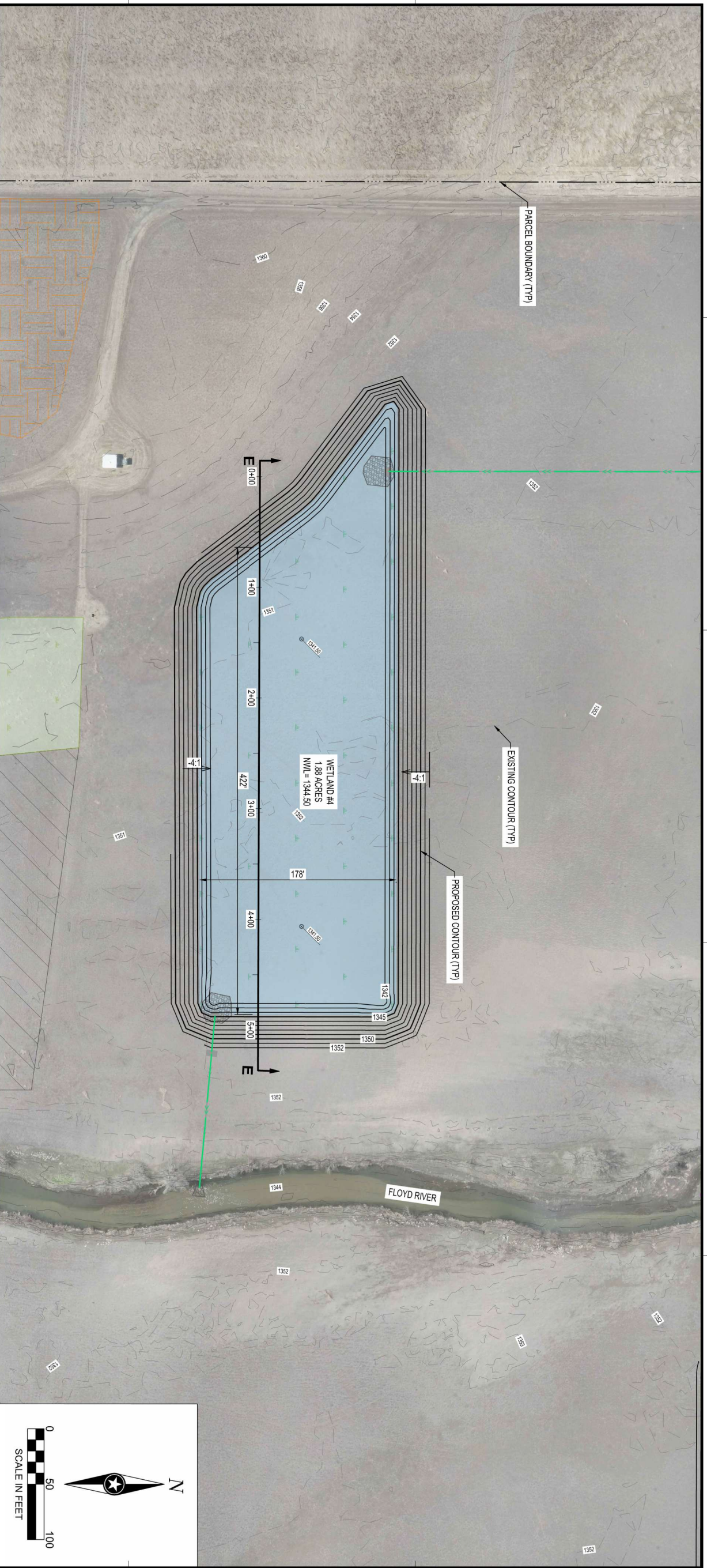
HOSPERS IOWA

REVISION SCHEDULE	
DATE	DESCRIPTION

PROJECT NO. 23-30403
 FILE NAME 30403-C4-CROSS SECTIONS
 DRAWN BY JAT
 DESIGNED BY RAM/HPT
 REVIEWED BY CDH
 ORIGINAL ISSUE DATE 4/28/2025
 CLIENT PROJECT NO. -

TITLE
**CROSS SECTION
 (D-D)**

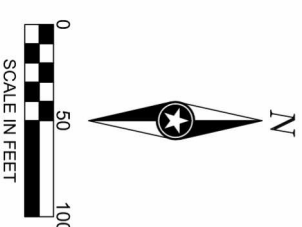
SHEET
C4-33



SECTION E-E

Station	Elevation	Ground Type
1360	1350.8	EXISTING GROUND
	1346.78	PROPOSED GROUND
1355	1350.7	EXISTING GROUND
	1341.50	PROPOSED GROUND
1350	1351.2	EXISTING GROUND
	1341.50	PROPOSED GROUND
1345	1351.6	EXISTING GROUND
	1341.50	PROPOSED GROUND
1340	1351.6	EXISTING GROUND
	1341.50	PROPOSED GROUND
1335	1351.9	EXISTING GROUND
	1341.50	PROPOSED GROUND
	1352.3	EXISTING GROUND
	1341.50	PROPOSED GROUND
	1352.4	EXISTING GROUND
	1341.50	PROPOSED GROUND
	1352.6	EXISTING GROUND
	1341.50	PROPOSED GROUND
1330	1352.6	EXISTING GROUND
	1348.00	PROPOSED GROUND

NOTE
 XXX.X - EXISTING GROUND
 XXXX.XX - PROPOSED GROUND



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PROJECT

**RURAL WATER
 SYSTEM #1
 WETLAND
 COMPLEX**

HOSPERS IOWA

DATE	REVISION SCHEDULE	DESCRIPTION	BY

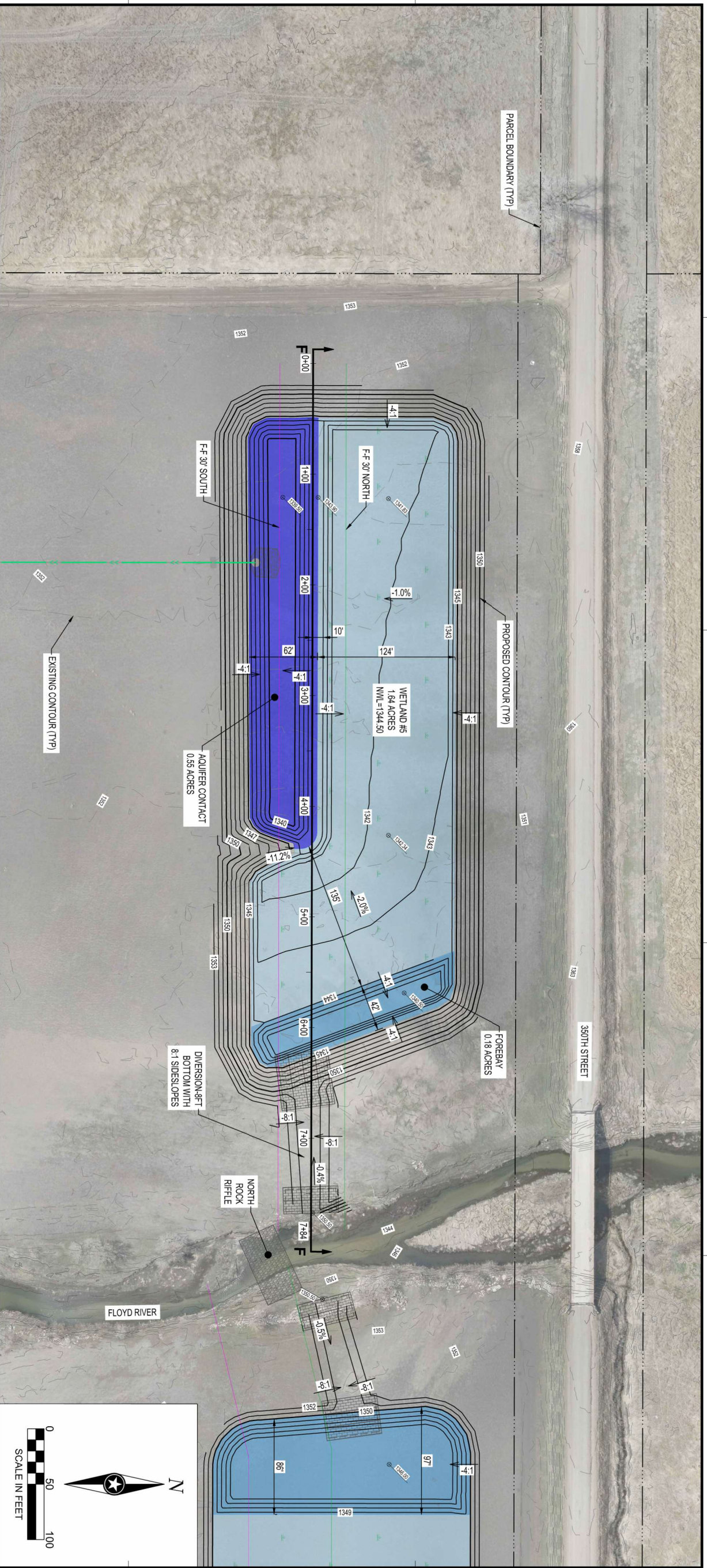
PROJECT NO. 23-30403
 FILE NAME 30403-C4-CROSS SECTIONS
 DRAWN BY JAT
 DESIGNED BY RAM/HPT
 REVIEWED BY CDH
 ORIGINAL ISSUE DATE 4/28/2025
 CLIENT PROJECT NO. -

TITLE

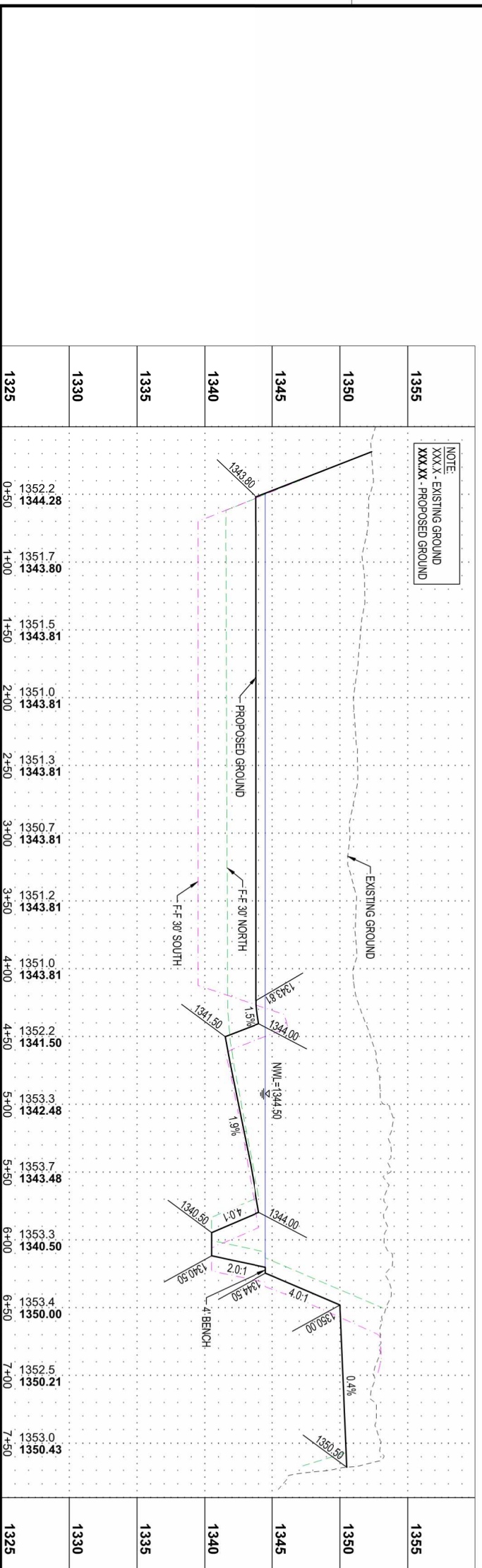
**CROSS SECTION
 (E-E)**

SHEET

C4-34



SECTION F-F



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PROJECT

RURAL WATER SYSTEM #1 WETLAND COMPLEX

WETLAND COMPLEX

HOSPERS IOWA

REVISION SCHEDULE

DATE	DESCRIPTION	BY

PROJECT NO. 23-30403
 FILE NAME 30403-C4-CROSS SECTIONS
 DRAWN BY JAT
 DESIGNED BY RAM/HPT
 REVIEWED BY CDH
 ORIGINAL ISSUE DATE 4/28/2025
 CLIENT PROJECT NO. -

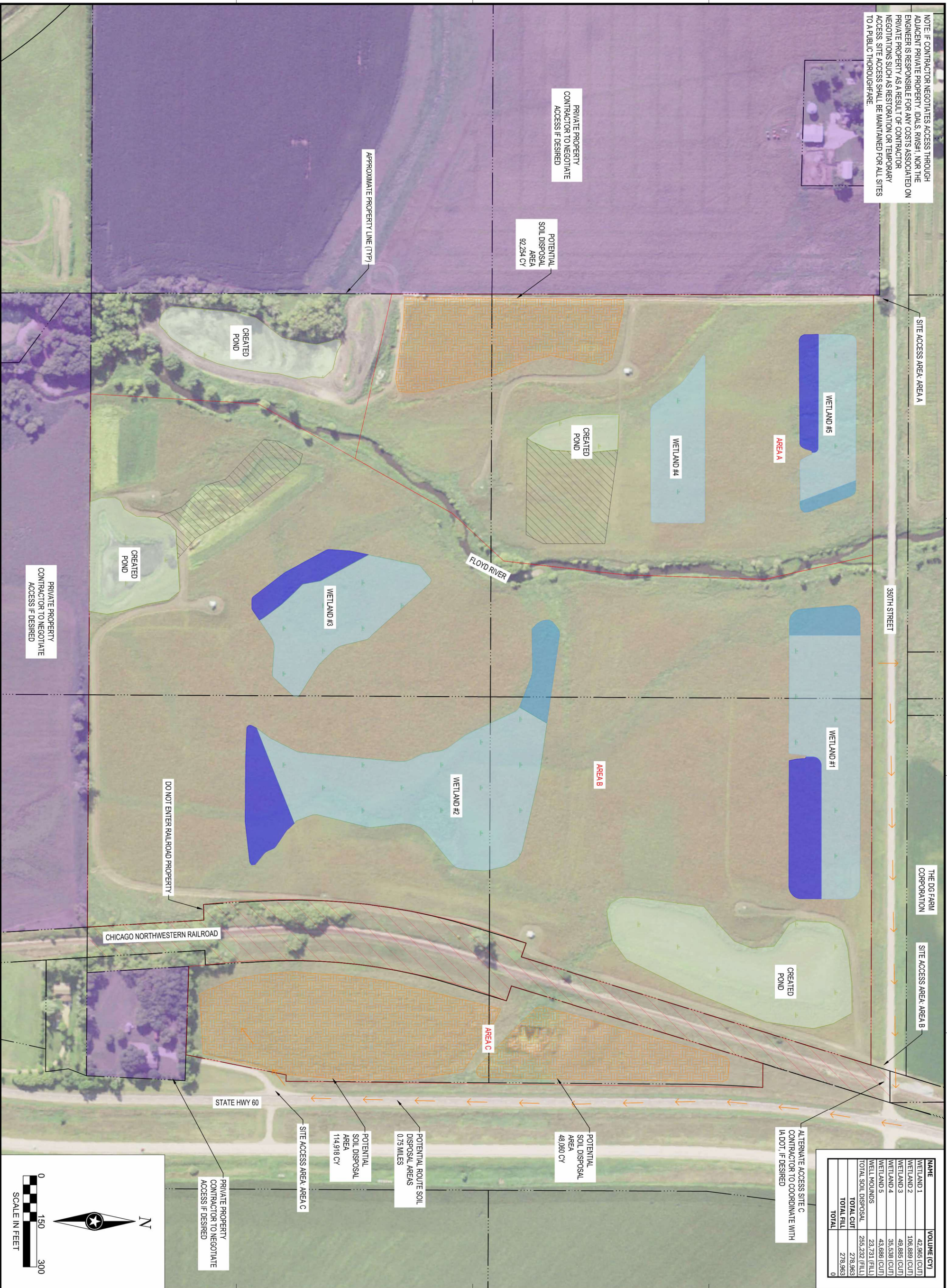
TITLE

CROSS SECTION (F-F)

SHEET

C4-35

NOTE: IF CONTRACTOR NEGOTIATES ACCESS THROUGH ADJACENT PRIVATE PROPERTY, DALS, RMS#1, NOR THE ENGINEER IS RESPONSIBLE FOR ANY COSTS ASSOCIATED ON PRIVATE PROPERTY AS A RESULT OF CONTRACTOR NEGOTIATIONS SUCH AS RESTORATION OR TEMPORARY ACCESS. SITE ACCESS SHALL BE MAINTAINED FOR ALL SITES TO A PUBLIC THOROUGHFARE.



NAME	VOLUME (CY)
WETLAND 1	42,865 (CUT)
WETLAND 2	106,889 (CUT)
WETLAND 3	49,589 (CUT)
WETLAND 4	35,538 (CUT)
WETLAND 5	43,686 (CUT)
WELL MOUNDS	23,231 (FILL)
TOTAL SOIL DISPOSAL	255,232 (FILL)
TOTAL CUT	278,963
TOTAL FILL	278,963
TOTAL	0

ALTERNATE ACCESS SITE C CONTRACTOR TO COORDINATE WITH IA DOT, IF DESIRED

POTENTIAL SOIL DISPOSAL AREA 48,060 CY

POTENTIAL ROUTE SOIL DISPOSAL AREAS 0.75 MILES

POTENTIAL SOIL DISPOSAL AREA 114,918 CY

SITE ACCESS AREA AREA C

PRIVATE PROPERTY CONTRACTOR TO NEGOTIATE ACCESS IF DESIRED

DO NOT ENTER RAILROAD PROPERTY

CHICAGO NORTHWESTERN RAILROAD

STATE HWY 60

SITE ACCESS AREA AREA A

THE OG FARM CORPORATION

SITE ACCESS AREA AREA B

AREA A

AREA B

AREA C

WETLAND #5

WETLAND #4

WETLAND #1

FLOYD RIVER

WETLAND #2

WETLAND #3

WETLAND #3

CREATED POND

CREATED POND

PRIVATE PROPERTY CONTRACTOR TO NEGOTIATE ACCESS IF DESIRED

PRIVATE PROPERTY CONTRACTOR TO NEGOTIATE ACCESS IF DESIRED

POTENTIAL SOIL DISPOSAL AREA 92,254 CY

APPROXIMATE PROPERTY LINE (TYP)



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PROJECT

RURAL WATER SYSTEM #1 WETLAND COMPLEX

HOSPERS IOWA

DATE	REVISION SCHEDULE	DESCRIPTION	BY

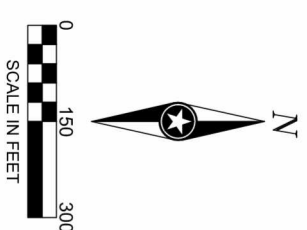
PROJECT NO.	23-30403
FILE NAME	30403-C4-SOIL DISPOSAL
DRAWN BY	JAT
DESIGNED BY	RAM/HPT
REVIEWED BY	CDH
ORIGINAL ISSUE DATE	4/28/2025
CLIENT PROJECT NO.	

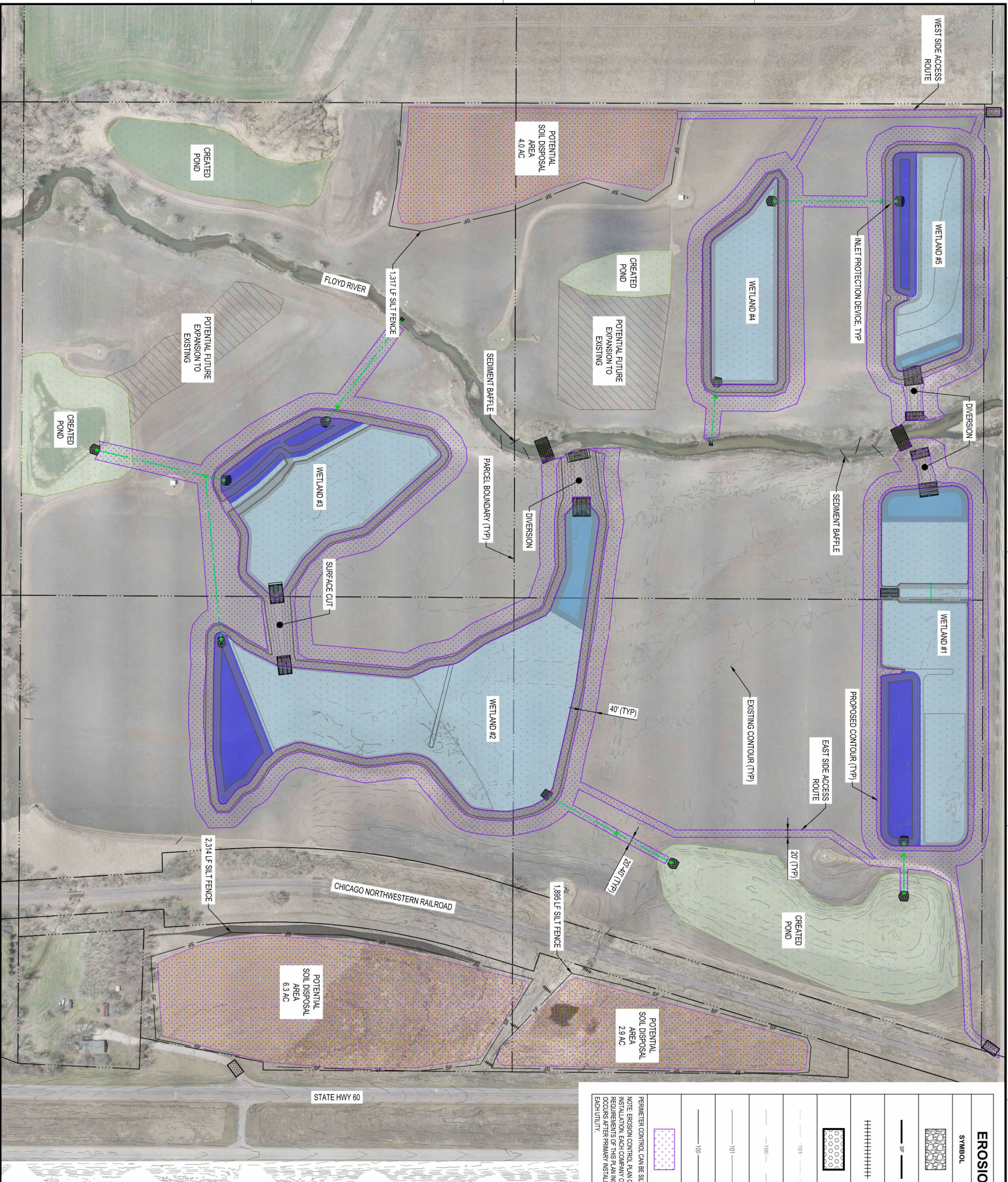
TITLE

SITE ACCESS PLAN

SHEET

C4-40





EROSION CONTROL LEGEND	
SYMBOL	DESCRIPTION
	RIp RAP, CLASS E
	SILT FENCE
	WATTLE
	STABILIZED CONSTRUCTION EXIT
	EXISTING CONTOUR (MINOR INTERVAL)
	EXISTING CONTOUR (MAJOR INTERVAL)
	PROPOSED CONTOUR (MINOR INTERVAL)
	PROPOSED CONTOUR (MAJOR INTERVAL)
	BUFFER SEEDING

PERIMETER CONTROL CAN BE SILT FENCE OR WATTLE
 NOTE: EROSION CONTROL PLAN COVERAGE INCLUDES ELECTRIC, GAS, TELEPHONE, AND CABLE INSTALLATION. EACH COMPANY OR THEIR SUBCONTRACTOR IS RESPONSIBLE TO FOLLOW THE REQUIREMENTS OF THIS PLAN INCLUDING PROVIDING THEIR OWN RESTORATION IF INSTALLATION OCCURS AFTER PRIMARY INSTALLATION OF SEEDING/SPREADING/MULCHING DURING CONSTRUCTION OF EACH UTILITY.



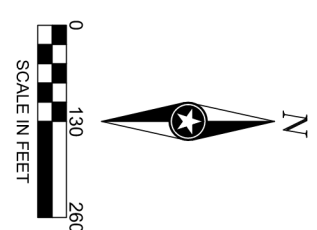
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PROJECT
RURAL WATER WETLAND SYSTEM #1 COMPLEX
 IOWA

HOSPERS
 REVISION SCHEDULE
 DATE DESCRIPTION BY

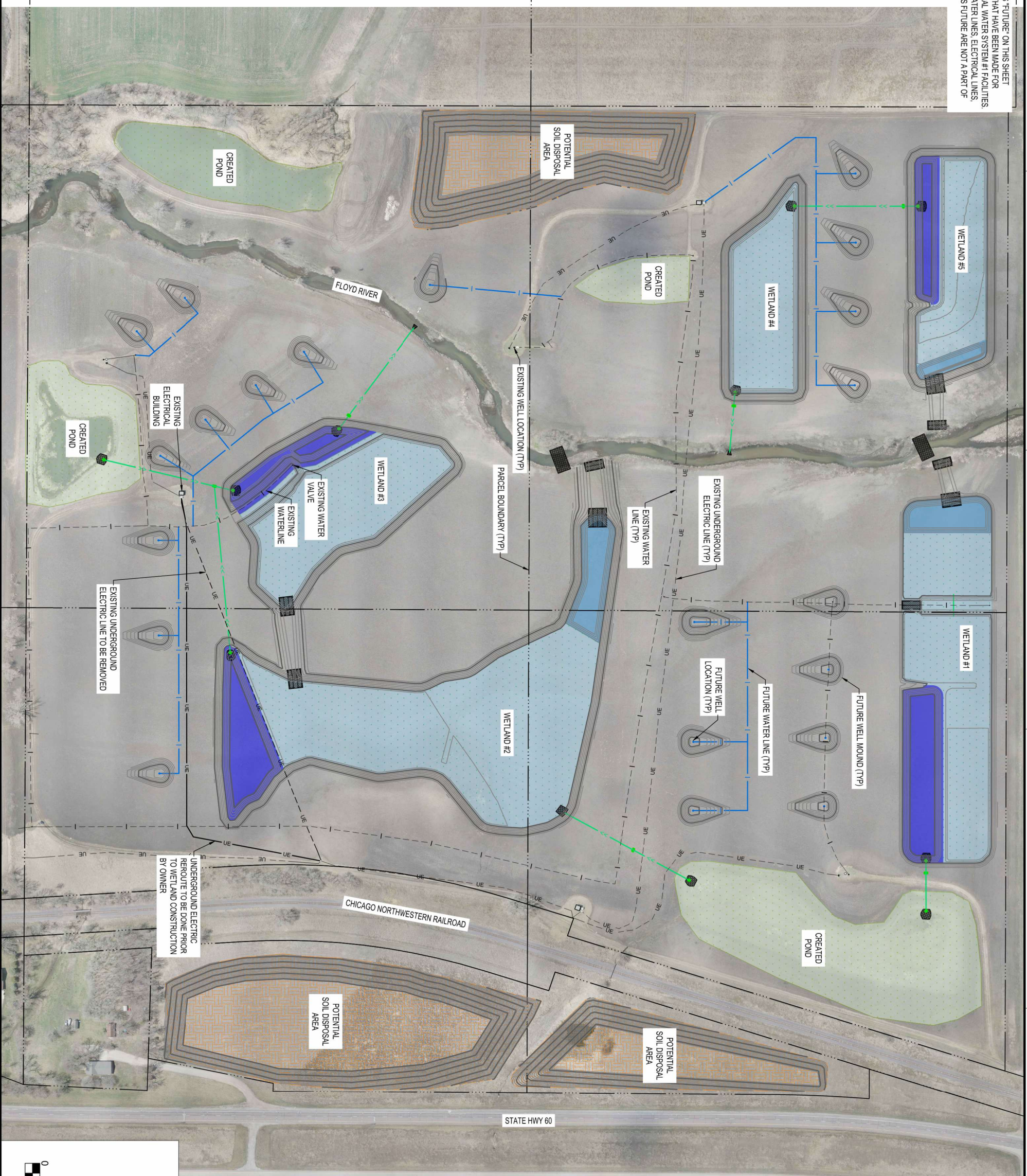
PROJECT NO. 23-30403
 FILE NAME 30403-C1-SWPPP
 DRAWN BY JAT
 DESIGNED BY RAM/HPT
 REVIEWED BY CDH
 ORIGINAL ISSUE DATE 4/28/2025
 CLIENT PROJECT NO. -

TITLE
SITE RESTORATION



SHEET
C5-10

NOTE: UTILITIES LABELED AS "FUTURE" ON THIS SHEET DENOTE CONSIDERATIONS THAT HAVE BEEN MADE FOR FUTURE EXPANSION OF RURAL WATER SYSTEM #1 FACILITIES. PLANNED WELL MOUNDS, WATER LINES, ELECTRICAL LINES, REROUTES, ETC. LABELED AS FUTURE ARE NOT A PART OF THIS PROJECT.



UNDERGROUND ELECTRIC REROUTE TO BE DONE PRIOR TO WETLAND CONSTRUCTION BY OWNER

EXISTING UNDERGROUND ELECTRIC LINE TO BE REMOVED

RURAL WATER SYSTEM #1 WETLAND COMPLEX

HOSPERS IOWA

DATE	REVISION SCHEDULE	DESCRIPTION	BY

PROJECT NO.	23-30403
FILE NAME	30403-C6-UTILITY
DRAWN BY	JAT
DESIGNED BY	RAM/HPT
REVIEWED BY	CDH
ORIGINAL ISSUE DATE	4/28/2025
CLIENT PROJECT NO.	

UTILITY

SHEET

C6-10



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