

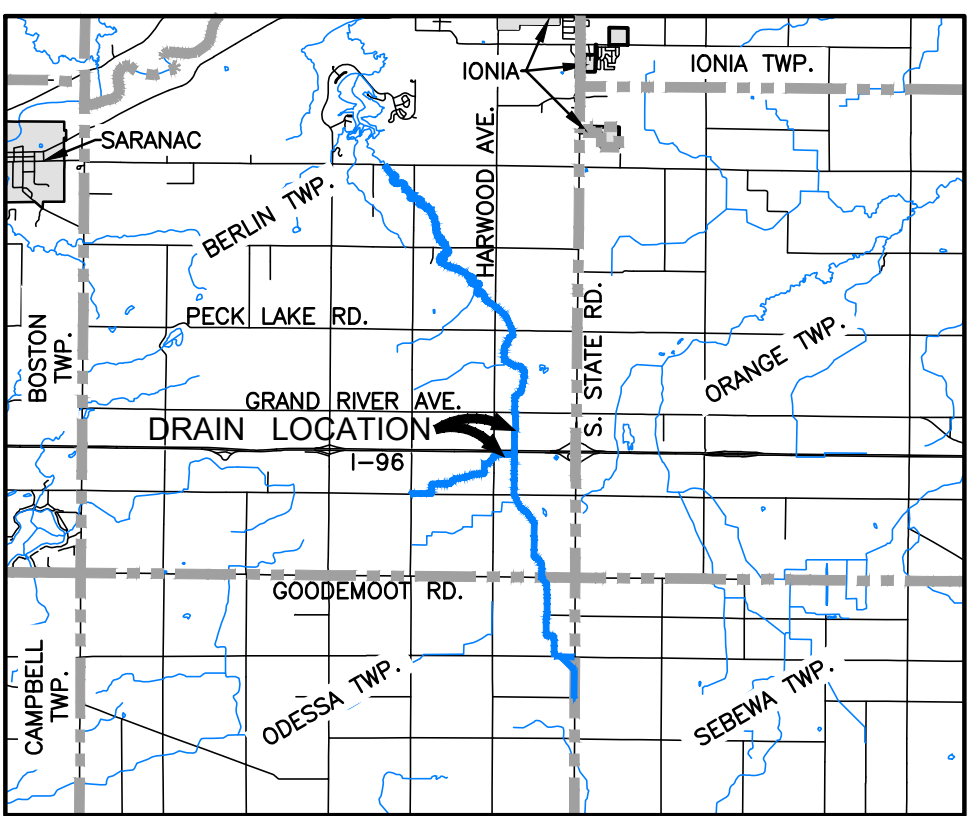


Peacock Drain & Badgley Drain

Ionia County Drain Commissioner - Robert Rose

Sections 25-26 , T6N, R7W

Berlin Township, Ionia County, Michigan



2121 3 Mile Rd. NW
Walker, MI 49544
Ph: 616-301-7888
www.LREMI.com

LRE
ENGINEERS & SURVEYORS

REVISIONS:		NO.	ISSUED FOR	DATE
1.	PRELIMINARY REVIEW	1.	11/21/2025	
2.	BIDS AND CONSTRUCTION	2.		

Ionia County Drain Commissioner
100 W. Main Street, Ionia, Michigan

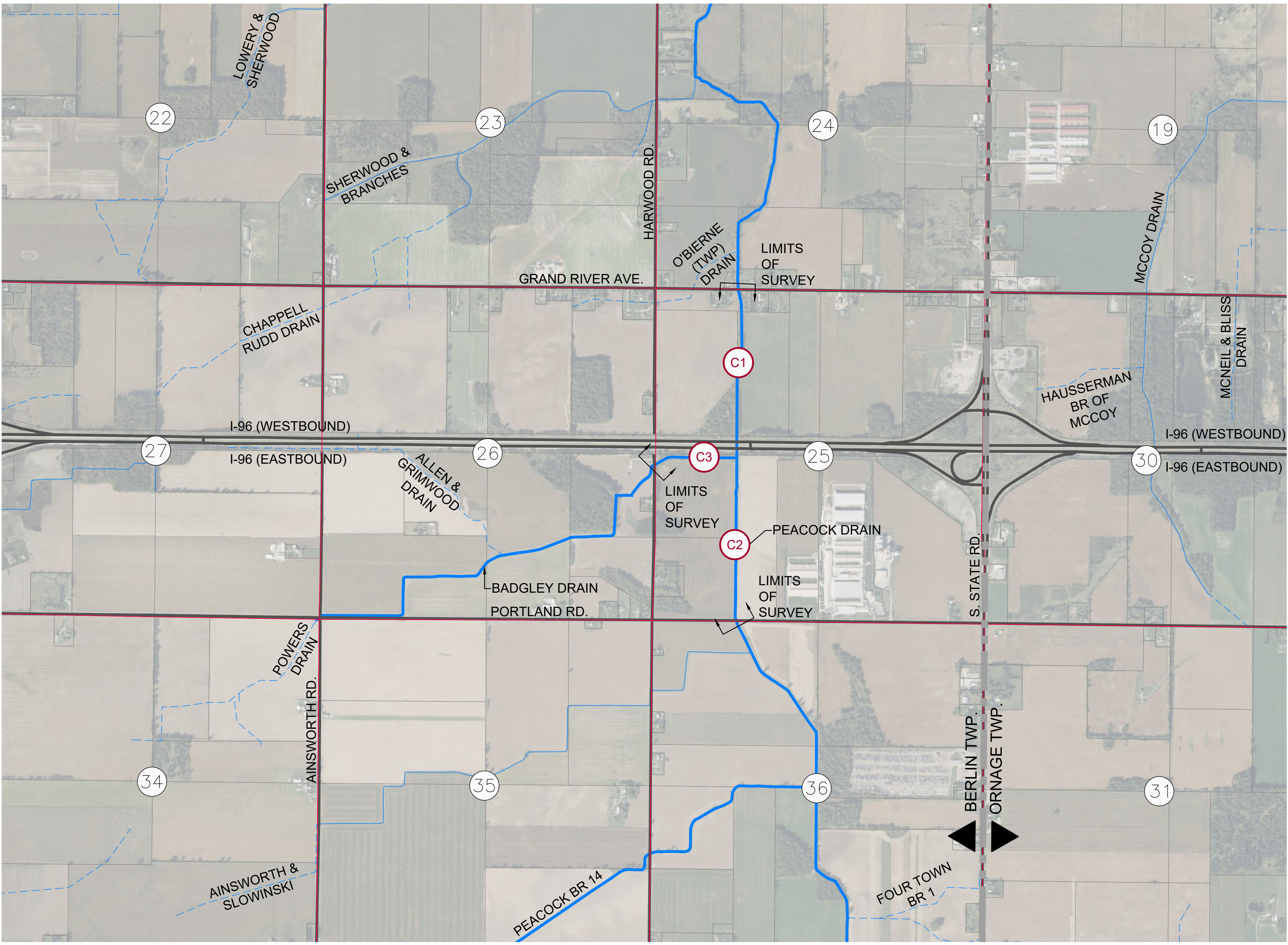
Peacock & Badgley Drain
Berlin Township, Ionia County, Michigan

PROJECT NUMBER: 25-493		DATE
SURVEYED BY: LGS	DESIGNED BY: CLW	08/2025
DRAFTED BY: LGG	QA/QC: ANS	08/2025

COVER SHEET

SHEET NUMBER

CS



- INDEX OF SHEETS
- CS - COVER SHEET
- C1 - PLAN & PROFILE
PEACOCK (STA. 0+00 - 28+50)
- C2 - PLAN & PROFILE
PEACOCK (STA. 28+50 - 55+00)
- C3 - PLAN & PROFILE
BADGLEY (STA. 100+00 - 115+00)
- C4 - DETAILS
- C5 - SESC PLAN

MISCELLANEOUS QUANTITIES
MOBILIZATION 1 LS
RIPRAP (CONTINGENT) 100 SY

- LEGEND
- ENCLOSED DRAIN

OPEN CHANNEL DRAIN

SECTION LINE

TOWNSHIP LINE

ROADS

PROPERTY LINES

#

SECTION NUMBERS

C1

SHEET NUMBERS

- SURVEY LEGEND
- BM

BENCHMARK

W

WELL

M

MONUMENT

FIS

FOUND IRON STAKE

SIS

SET IRON STAKE

SWS

SET WOOD STAKE

S

SIGN

RRS

RR SIGN

G

GUY POLE

GA

GUY ANCHOR

UP

UTILITY POLE

LP

LIGHT POLE

P

POST

SB#

SOIL BORING

MB

MAILBOX

AC

AC UNIT

FP

FLAGPOLE

FH

FIRE HYDRANT

WV

WATER VALVE

ET

ELECTRIC TRANSFORMER

G

GAS METER

W

WATER METER

T

TELEPHONE RISER

E

ELECTRIC METER

C

CATCH BASIN

R

ROUND CATCH BASIN

UM

UTILITY MANHOLE

SM

STORM MANHOLE

FE

FLARED END SECTION

SMH

SANITARY MANHOLE

EMH

ELECTRIC MANHOLE

TMH

TELEPHONE MANHOLE

D

DECIDUOUS TREE

C

CONIFEROUS TREE

W

WATER UTILITY LINE

T

TELEPHONE UTILITY LINE

E

ELECTRIC UTILITY LINE

G

GAS UTILITY LINE

S

STEAM UTILITY LINE

ST

STORM UTILITY LINE

S

SANITARY UTILITY LINE

FO

FIBER OPTIC UTILITY LINE

OH

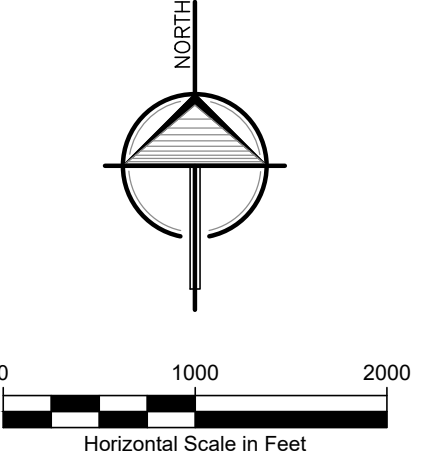
OVERHEAD UTILITY LINE

L

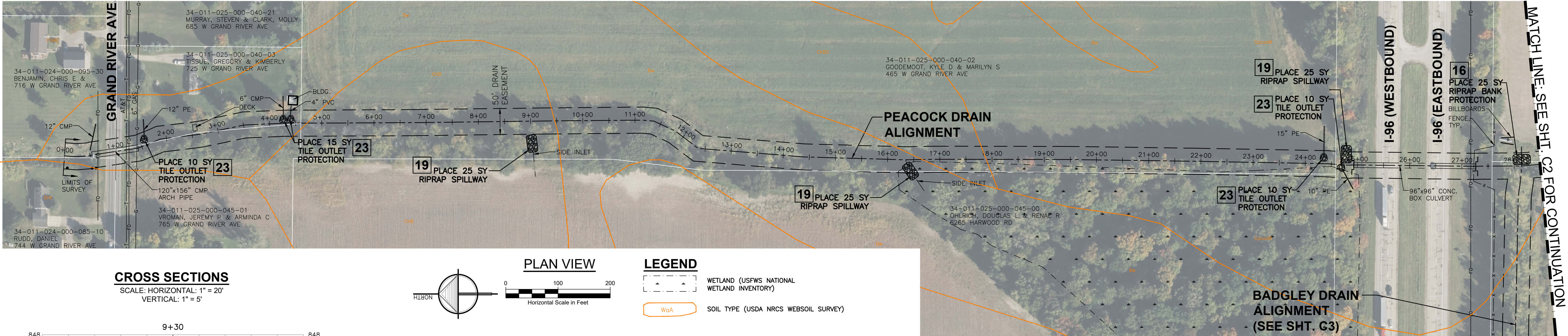
LAKE LINE

E

EXISTING CONTOUR

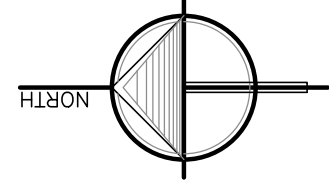
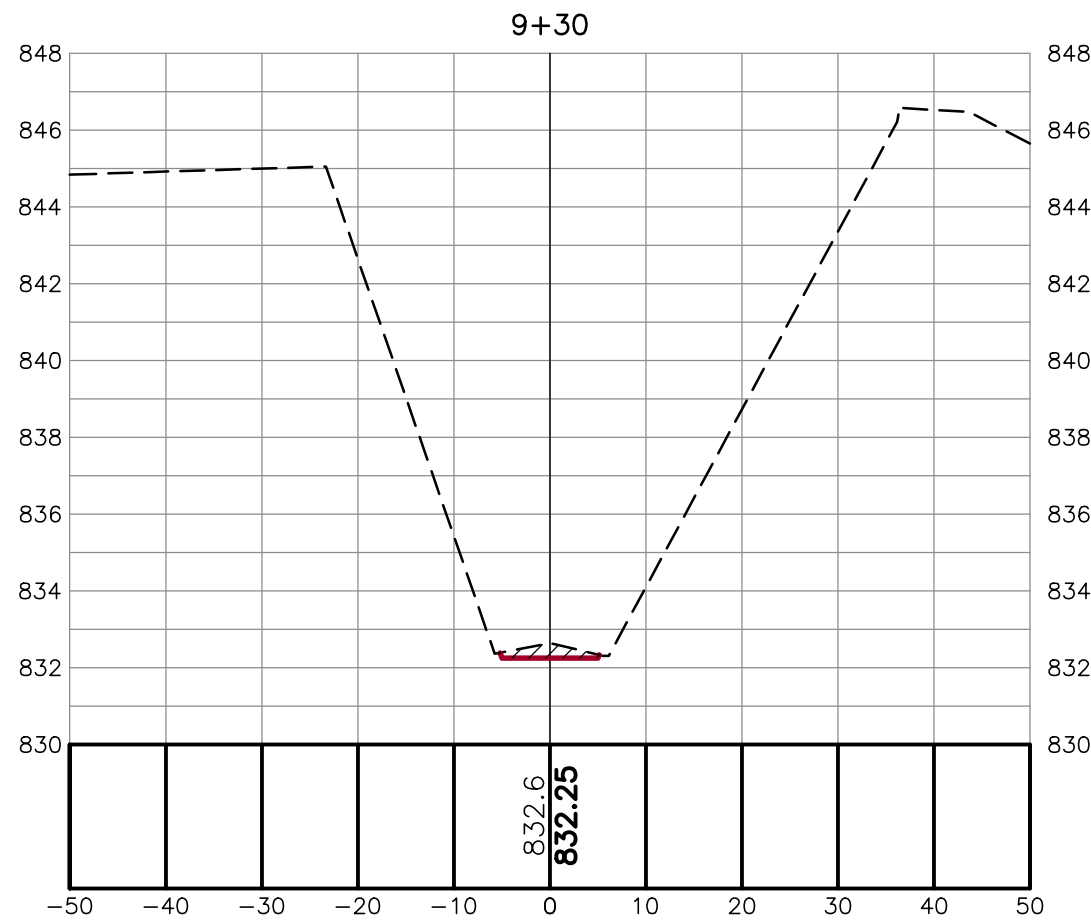


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CROSS SECTIONS

SCALE: HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'



PLAN VIEW

0 100 200
Horizontal Scale in Feet

LEGEND

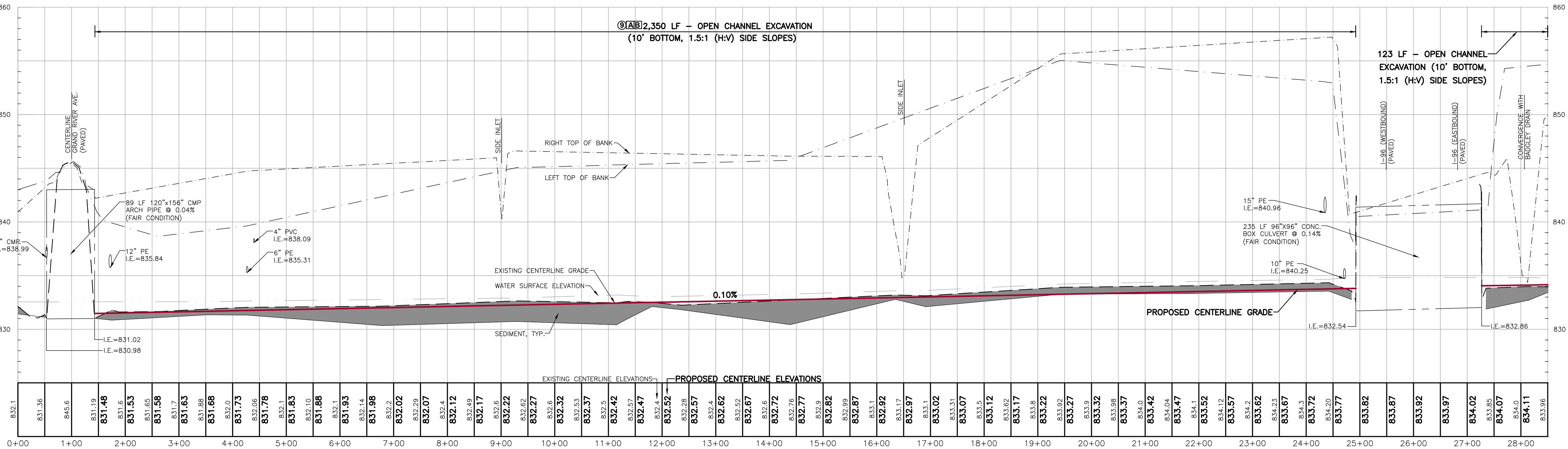
- WETLAND (USFWS NATIONAL
WETLAND INVENTORY)
- WcA SOIL TYPE (USDA NRCS WEBSOIL SURVEY)

MISCELLANEOUS QUANTITIES

OPEN CHANNEL SEEDING 2,973 LF ①③
OPEN CHANNEL EXCAVATION (10' BOTTOM) (CONTINGENT) 500 LF

NOTES:

- SELECTIVE CLEAR, GRUB AND SNAG THE DRAIN EASEMENT AS NECESSARY TO ACCESS AND COMPLETE THE WORK. DISPOSE OF WOODY DEBRIS BY WIND ROWING, BURNING, OR CHIPPING UP TO A DEPTH NO GREATER THAN 6 INCHES. CONTRACTOR SHALL NOT PLACE WOOD CHIPS IN WETLANDS OR IN EXCESS AROUND LIVE VEGETATION.
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CENTERLINE PROFILE

SCALE: HORIZONTAL: 1" = 100'
VERTICAL: 1" = 5'



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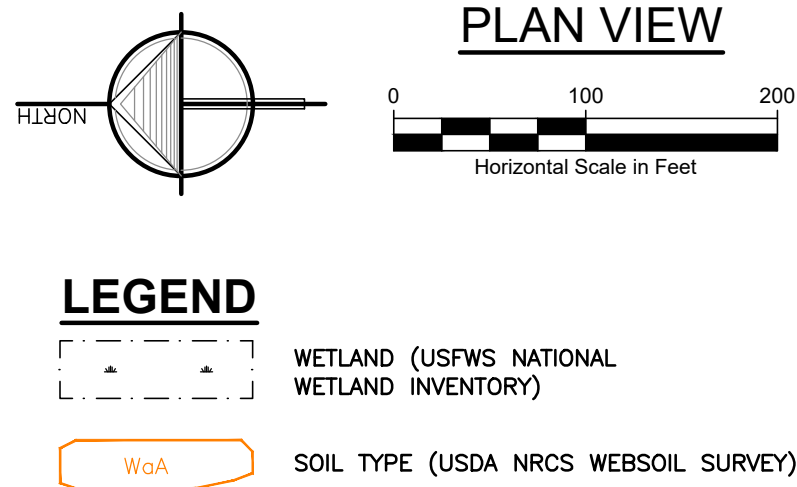
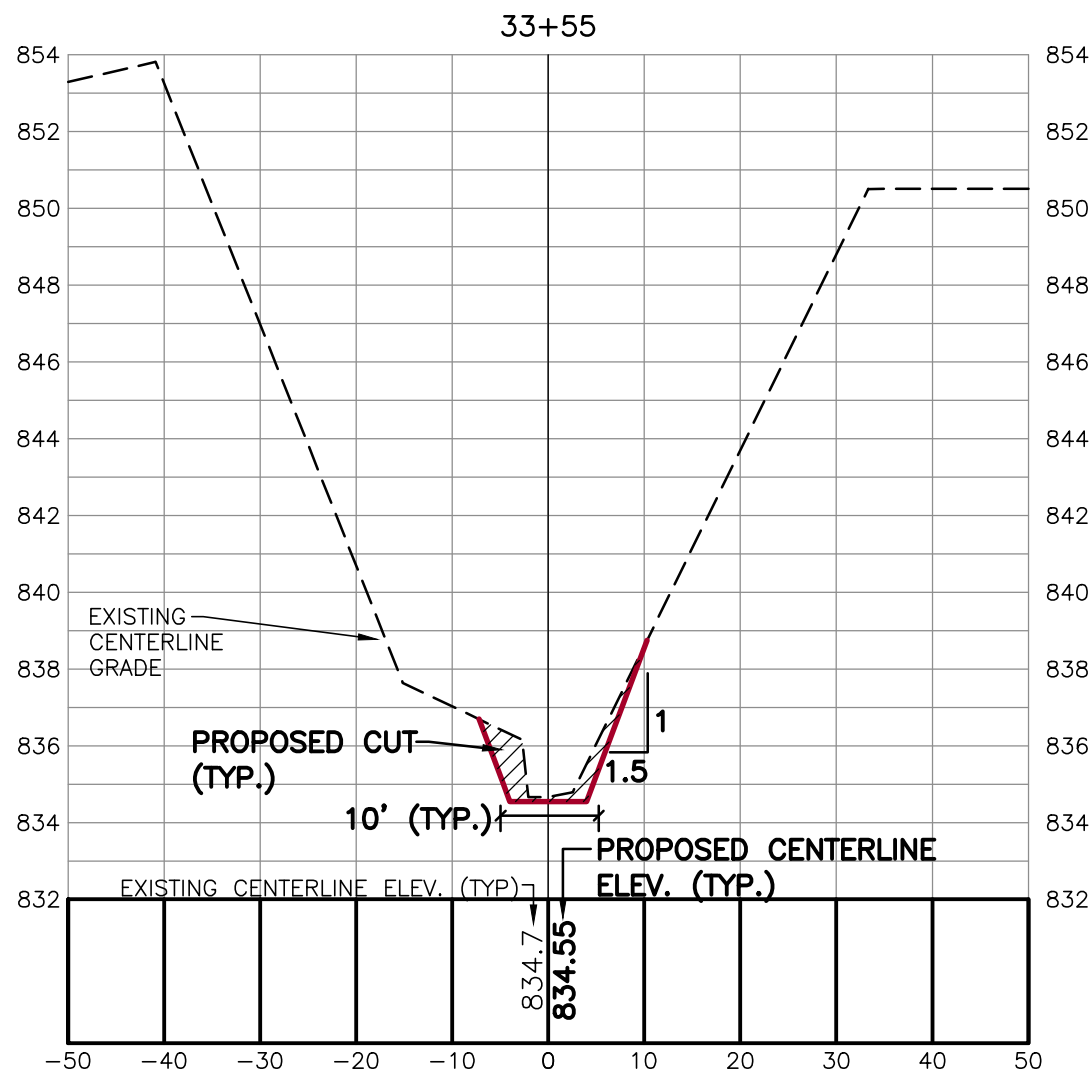
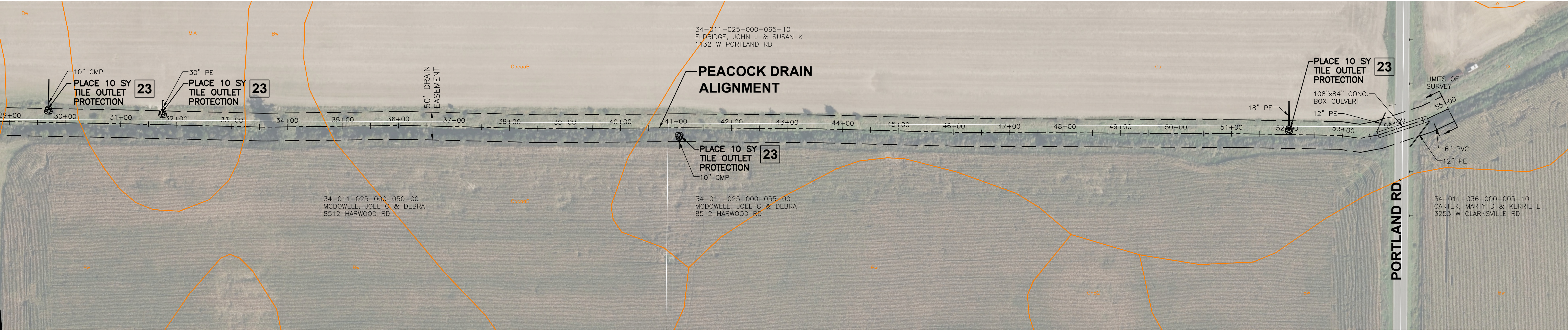
NO.	ISSUED FOR	DATE
1.	PRELIMINARY REVIEW	10/20/2025
2.	BIDS AND CONSTRUCTION	11/21/2025

PROJECT NUMBER: 25-483	CLIENT: Ionia County Drain Commissioner 100 W. Main Street, Ionia, Michigan
SHEET NAME: PLAN & PROFILE PEACOCK DRAIN STA: 0+00 - 28+50	PROJECT: Peacock & Badgley Drain Berlin Township, Ionia County, Michigan

DATE	DATE
08/2025	08/2025
DESIGNED BY: LGS	DRAFTED BY: LGS
QA/QC: AVS	

SHEET NUMBER
C1

MATCHLINE: SEE SHT. C2 FOR CONTINUATION



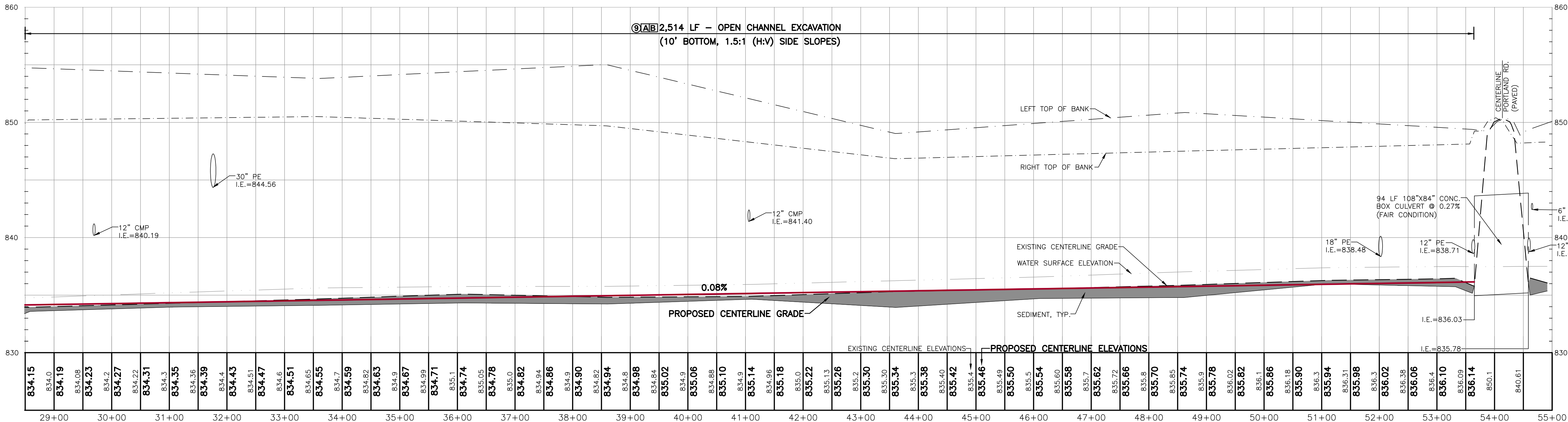
CROSS SECTIONS
SCALE: HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

MISCELLANEOUS QUANTITIES

OPEN CHANNEL SEEDING 2,514 LF ①⑬

NOTES:

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CENTERLINE PROFILE

SCALE: HORIZONTAL: 1" = 100'
VERTICAL: 1" = 5'



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Walker, MI 49544
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NO.	ISSUED FOR	DATE
1.	PRELIMINARY REVIEW	10/22/2025
2.	BIDS AND CONSTRUCTION	11/21/2025

IONIA COUNTY DRAIN COMMISSIONER
100 W. Main Street, Ionia, Michigan
Peacock & Badgley Drain
Berlin Township, Ionia County, Michigan

PROJECT NUMBER: 25-083	DATE
SURVEYED BY: LGS	08/2025
DESIGNED BY: CLW	09/2025
DRAFTED BY: LGG	09/2025
QA/QC: AVS	11/2025

PLAN & PROFILE
PEACOCK DRAIN
STA: 0+00 - 28+50

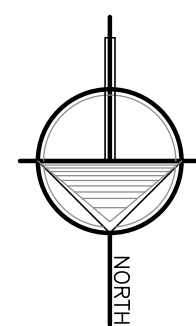
SHEET NUMBER

C2

MISCELLANEOUS QUANTITIES

OPEN CHANNEL SEEDING

1,120 LF (1)(13)



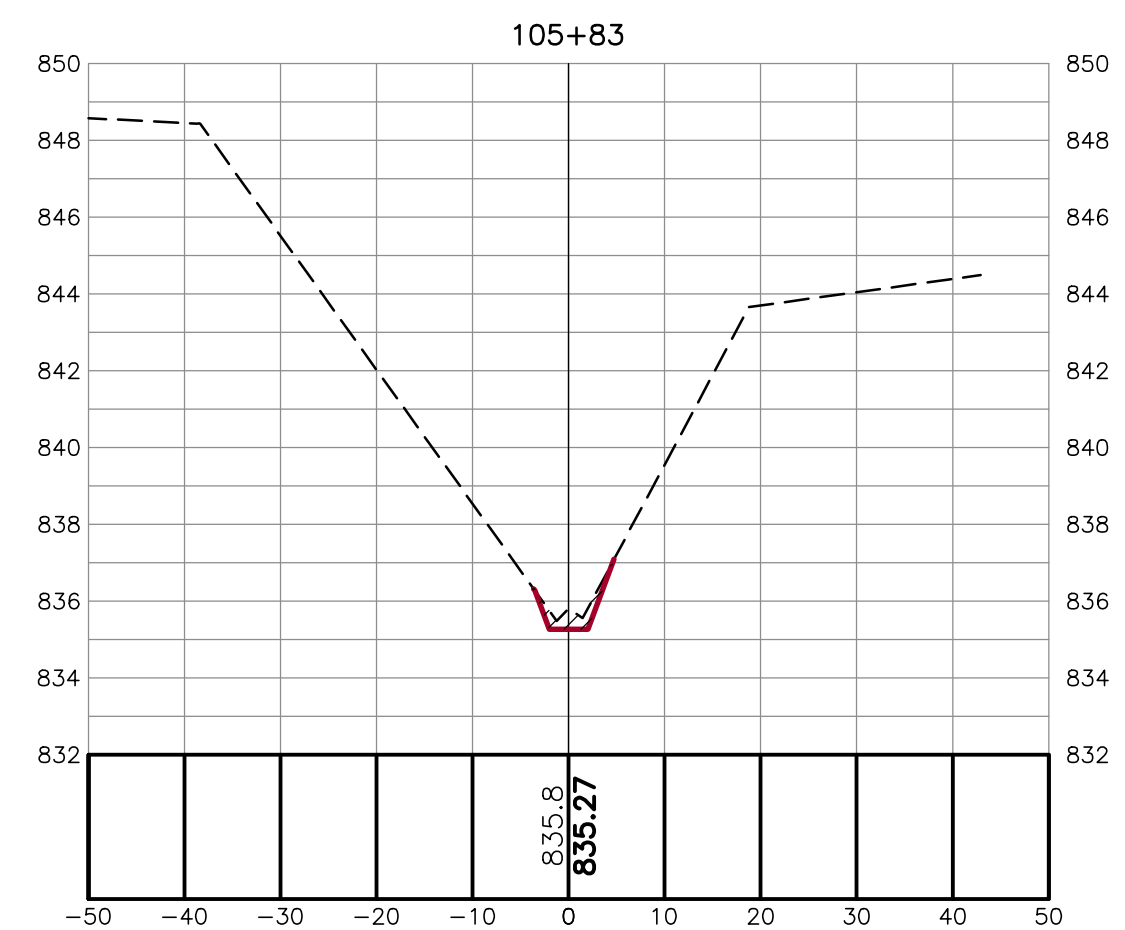
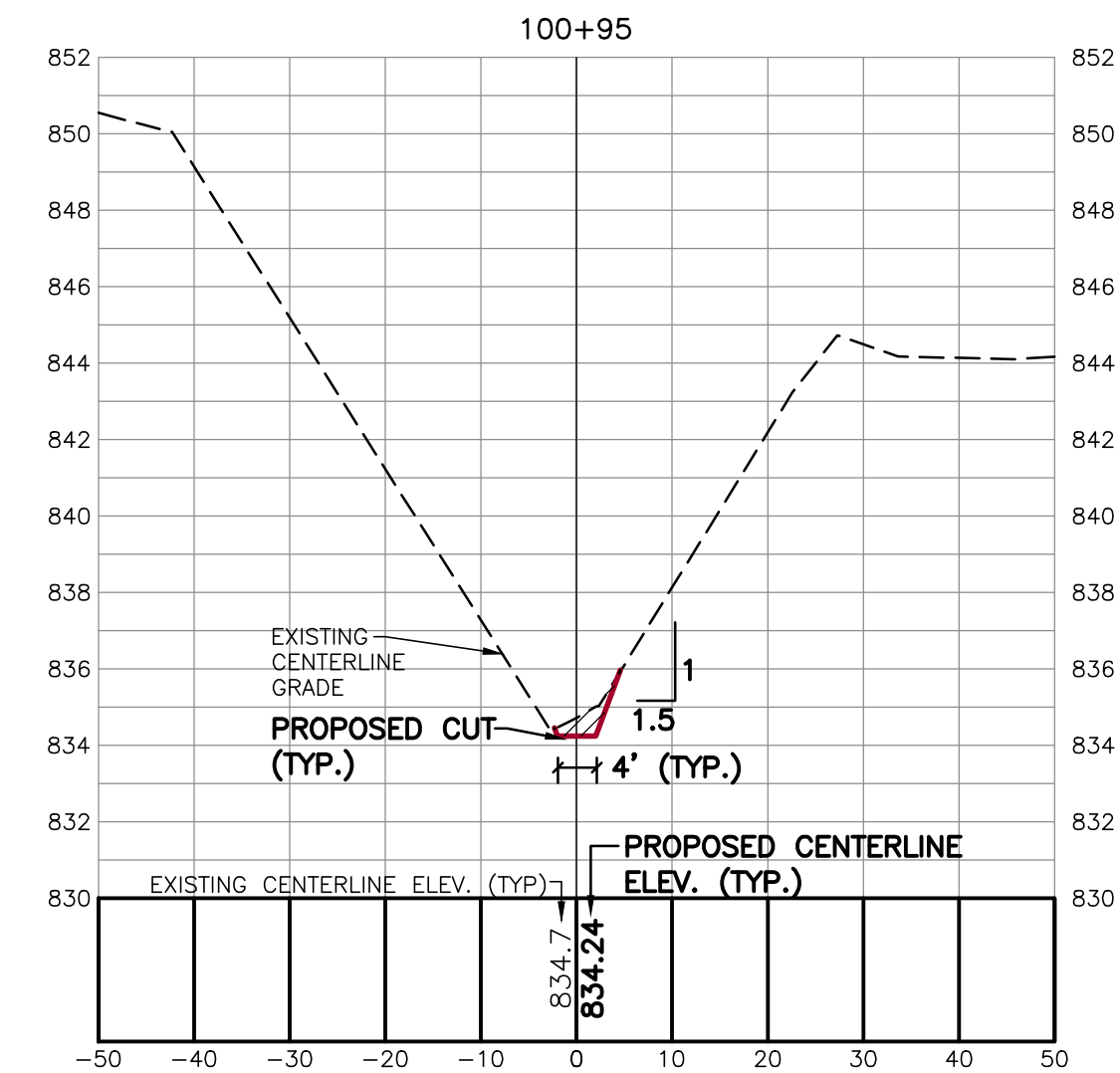
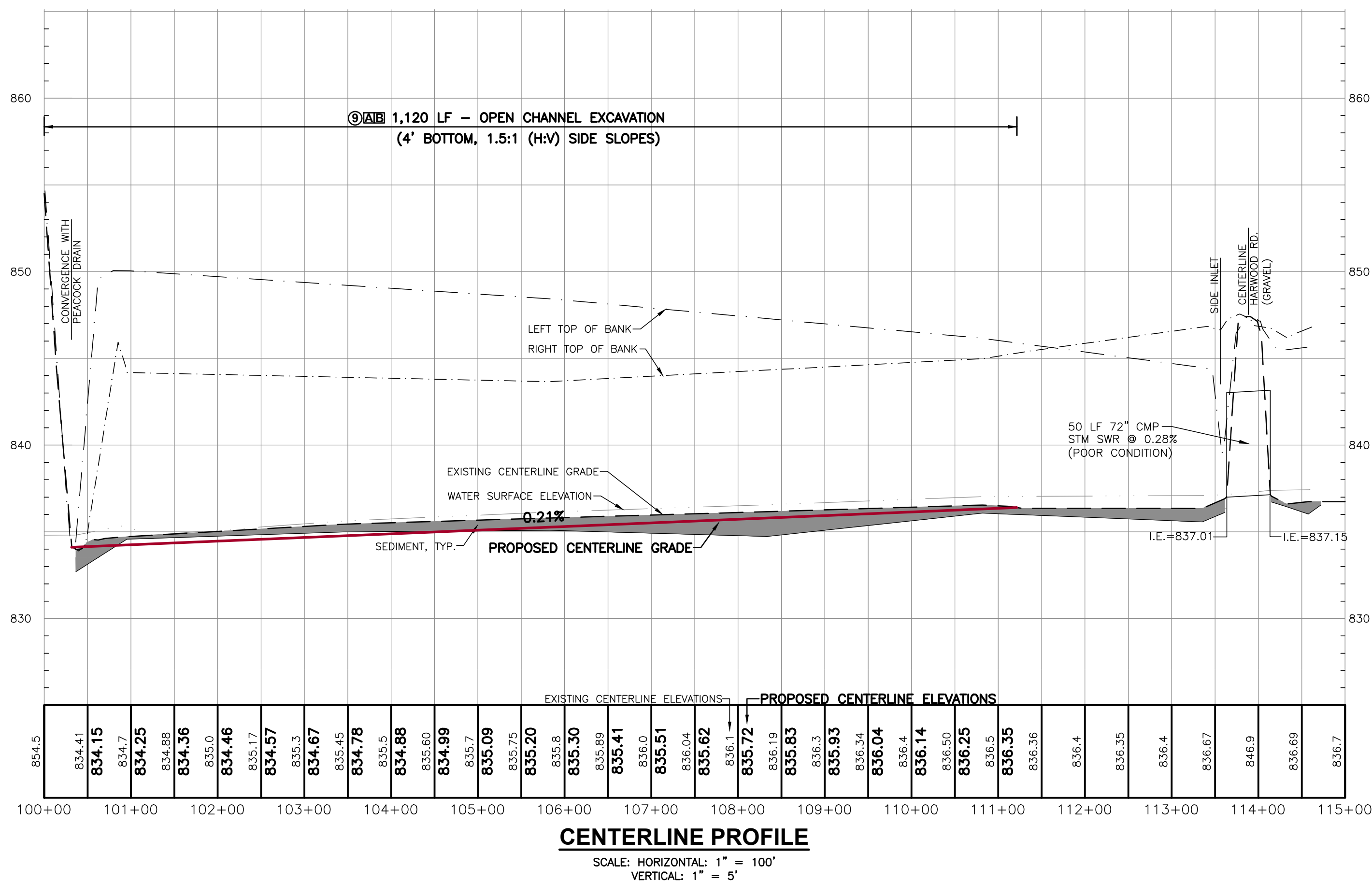
PLAN VIEW



LEGEND

WETLAND (USFWS NATIONAL
WETLAND INVENTORY)

SOIL TYPE (USDA NRCS WEBSOIL SURVEY)



CROSS SECTIONS

SCALE: HORIZONTAL: 1" = 20'
VERTICAL: 1" = 5'

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www.LREMI.com



REVISIONS:		DATE
1.	PRELIMINARY REVIEW	10/28/2025
2.	BIDS AND CONSTRUCTION	11/21/2025

CLIENT: **Ionia County Drain Commissioner**
100 W. Main Street, Ionia, Michigan

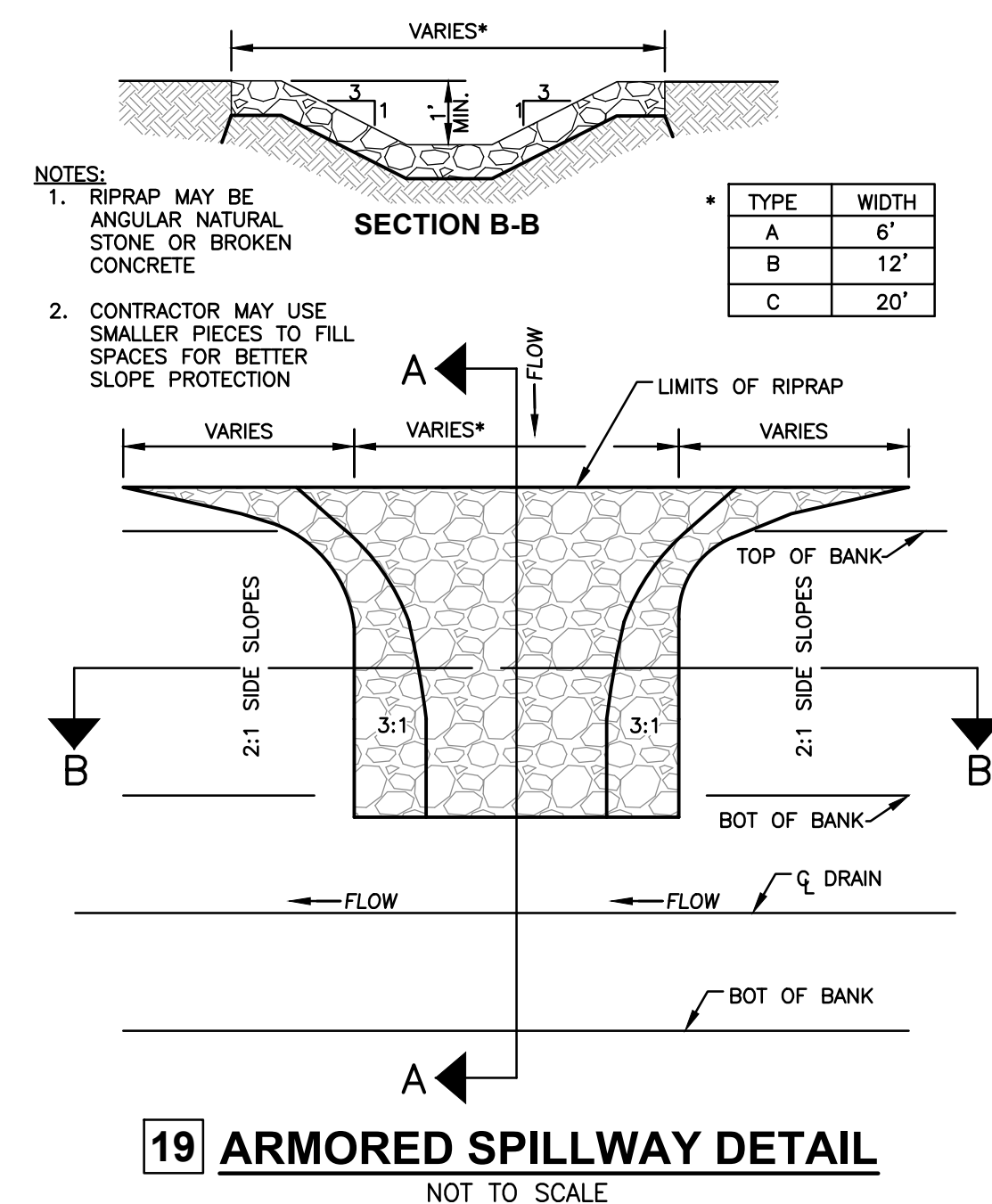
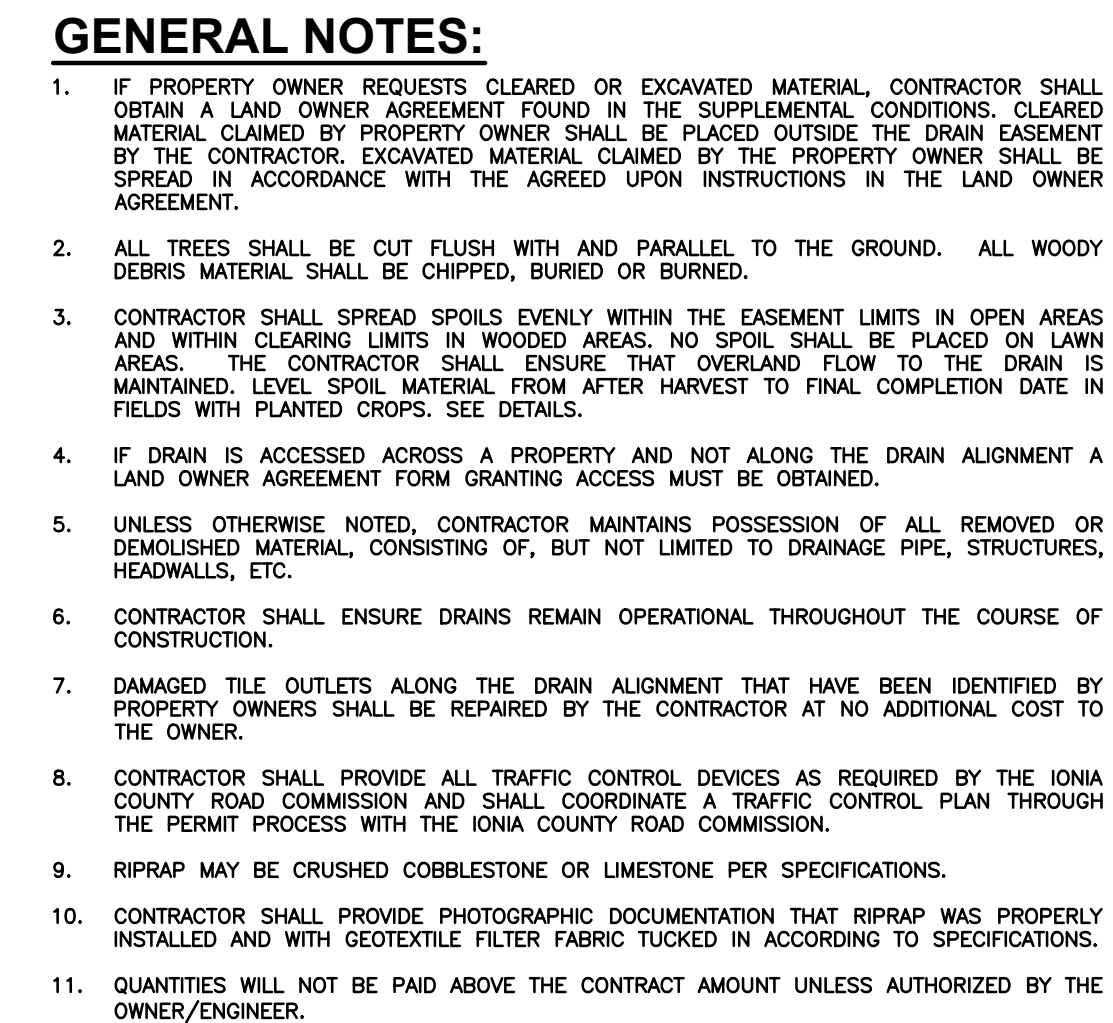
PROJECT: **Peacock & Badgley Drain**

PROJECT NUMBER: 25-083	
DATE	
SURVEYED BY: LGS	08/2025
DESIGNED BY: CLW	09/2025
DRAFTED BY: LGG	08/2025

NAME: PLAN & PROFILE
BADGLEY DRAIN
STA: 100+00 - 115+00

SHEET NUMBER

C3



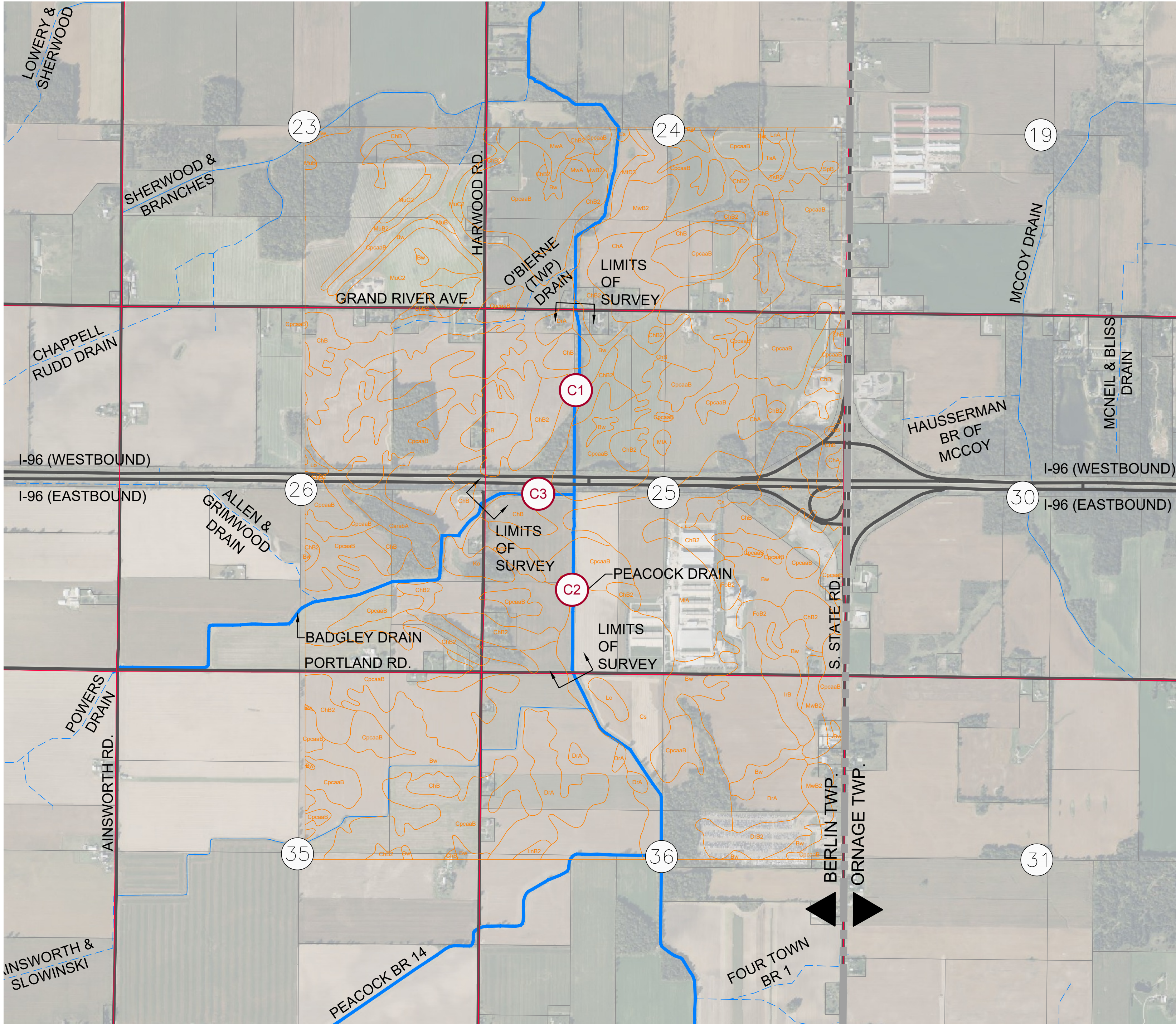
Nov 20, 2025 - 10:50am in: Project\GIS\124-003 Peacock Drain - Ionia County Drain Commission\GIS\124-003 Peacock Drain - Ionia County Drain Commission.dwg, WSET, [User: J. BEREN]

TIMING AND SEQUENCE OF CONSTRUCTION

PROJECT START DATE: TBD DURATION OF CONSTRUCTION ACTIVITY BY MONTH/WEEKS

CONSTRUCTION ACTIVITY	MONTH 1			MONTH 2			MONTH 3		
	1	2	3	4	5	6	7	8	9
1. MOBIILIZE EQUIPMENT ON SITE									
2. PLACE TEMPORARY SESC MEASURES THROUGH OPEN CHANNEL DRAIN									
3. MAINTAIN TEMPORARY CONTROL MEASURES									
4. CLEARING AND GRUBBING									
5. OPEN CHANNEL CONSTRUCTION									
6. INSTALL PERMANENT CONTROL MEASURES THOUGH OPEN CHANNEL									
7. RESTORATION (DAILY SEEDING)									
8. REMOVE SESC CONTROL MEASURES*									

*NOTE:
TEMPORARY CONTROL MEASURES TO BE REMOVED ONCE
VEGETATION IS ESTABLISHED AND SITE IS STABILIZED.



MACDC UNIFIED KEYING SYSTEM EROSION CONTROL MEASURES (SESC)			
KEY	SESC MEASURE	SYMBOL	WHERE USED
1	Seeding		When bare soil is exposed, temporarily or permanently, to erosive forces from wind and or water on flat areas, mild slopes, grassed waterways and spillways, diversion ditches and dikes, borrow and stockpile areas, and spoil piles.
2	Mulch		On flat areas, slopes, grassed waterways and spillways, diversion ditches & dikes, borrow & stockpile areas, & spoil piles when areas are subject to raindrop impact, & erosive forces from wind or water.
9	Vegetation Removal without Grubbing		Retains existing root mat which assists in stabilizing slopes. Assists in the revegetation process by providing sprout growth. Reduces sheet flow velocities preventing rilling and gullying. Discourages off-road vehicle use.
13	Slope Stabilization		Slope stabilizing measures provide an immediate and effective cover over raw erodible slopes affording excellent protection against rain and wind erosion.
15	Riprap		Along drain banks, shorelines, or where concentrated flows occur. slows velocity, reduces erosion and sedimentation.
16	Riprap Toe of Slope		Riprap toe of slope protection is used in areas where velocities are causing drain bank erosion and are too high to stabilize using other methods.
19	Armored Spillway		When concentrated flow must be conveyed down a drain bank or slope of discharge into another drain. Where slope failure or channel scour is observed or is likely to occur, or when runoff must be redirected around work in the drain.
23	Outfall Stabilization		In the stream or drain bank usually above the ordinary high water mark where an enclosed drain or tile discharges to an open drain.

MACDC UNIFIED KEYING SYSTEM - ROUTINE MAINTENANCE ACTIVITIES		
KEY	BEST MANAGEMENT PRACTICE	SESC PLAN
A	Debris Removal	NO
B	Sediment Removal	> 100 FEET

SOILS INFORMATION

BW PARKHILL LOAM, NON DENSE TILL SUBSOIL
CARABA CARLISLE MUCK
CHA CELINA LOAM
CHB CELINA LOAM
CHB2 CELINA LOAM
CPCAAB CAPAC LOAM
CS COLWOOD LOAM
DRA DRYDEN SANDY LOAM
DRB2 DRYDEN SANDY LOAM
FOB2 FOX SANDY LOAM
IRB IONIA SANDY LOAM
KO KOKOMO CLAY LOAM
LNA LAPEER SANDY LOAM
LNB2 LAPEER SANDY LOAM
LO LINWOOD MUCK
MTD3 MIAMI CLAY LOAM
MUB WAWASEE LOAM
MUB2 WAWASEE LOAM
MUC2 WAWASEE LOAM
MWA MIAMI-OWOSSO SANDY LOAMS
MWB2 MIAMI-OWOSSO SANDY LOAMS
SPB SPINKS LOAMY SAND
TSA TUSCOLA SOILS
TSB2 TUSCOLA SOILS, MODERATELY ERODED

LEGEND

- ENCLOSED CHANNEL DRAIN
- OPEN CHANNEL DRAIN
- SECTION LINE
- TOWNSHIP LINE
- COUNTY LINE
- ROADS
- PROPERTY LINES
- SECTION NUMBERS
- SHEET NUMBERS
- SOIL TYPE

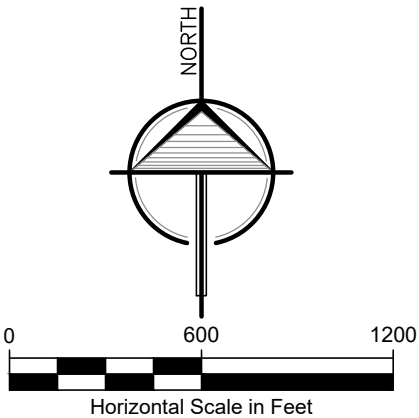
UTILITY INFORMATION

GAS/ELECTRIC:
CONSUMERS ENERGY
ADAM BERTRAM
OFFICE: 517.374.2375
ADAM.BERTRAM@CMSENERGY.COM

TELEPHONE:
ATT
JOHN E SICKREY
616-246-7317
JS1843@ATT.COM

FIBER:
LEVEL 3 (NOW LUMEN FIBER OPTICS)
877-453-8353
CL_IRTH_COMM@IRTH.COM

WINDSTREAM
LISA A ZINGULA
LISA.ZINGULA@WINDSTREAM.COM
1-800-289-1901



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1.	PRELIMINARY REVIEW	11/21/2025
2.	BIDS AND CONSTRUCTION	

Ionia County Drain Commissioner
100 W. Main Street, Ionia, Michigan
Peacock & Badgley Drain
Berlin Township, Ionia County, Michigan

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DESIGNED BY: CLW		08/2025
DRAFTED BY: LGG		08/2025
QA/QC: AVS		11/2025

SESC PLAN

SHEET NUMBER

C5