

Village of Ephraim ***Streetscape Project Report***



Element Cost Breakdowns

10/10/2017



Village of Ephraim

Streetscape Project

Cost Breakdown of Plan Elements

Element	Cost
Roadway reconstruction from Public Beach to Old Firehouse (Includes pavement removal, excavation, base, new pavement, curb and gutter, concrete walk, storm sewer excavation, plus contingency , mobilization, design engineering, and construction engineering	\$ 2,100,000.00
Moravia Street Intersection <i>No grade change, just a tightening of the intersection</i> (If done as a part of a highway reconstruction project with curb and gutter, and walk)	\$ -
Moravia Street Intersection <i>No grade change, just a tightening of the intersection</i> (If NOT done as a part of a highway reconstruction project with curb and gutter, and walk)	\$ 150,000.00
Moravia Street Intersection <i>Re-grade intersection to flatten the grade (Price varies by desired grade)</i> (If done as a part of a highway reconstruction project with curb and gutter, and walk)	\$300,000.00
Moravia Point Retaining Wall <i>Needed if adding parking to the non bay side of highway</i> (Stone stacked wall similar to Hillside Inn)	\$ 45,946.00
Moravia Point Retaining Wall <i>Needed if adding parking to the non bay side of highway</i> (Concrete retaining wall with stone veneer)	\$ 192,500.00
Moravia Point Excavation and Cleanup <i>Needed if adding parking to the non bay side of highway</i> (Needed if persuing any type of wall)	\$ 19,948.00
Burying of Utility Lines from Wetlands to German (WPS, Frontier, Charter)	\$ 1,886,517.00
Streetlight Replacement	\$ 600,000.00
Greenspace in front of Village Hall <i>Price varies based on amount to be added</i> (Price for excavation and topsoil - not seeding)	\$ 6,052.50
Stormwater Alternative <i>Bauhduin-subcommittee project</i>	\$ 344,844.00
Beach Wall Project	\$ 140,000.00



Streetscape Project

Estimated Financial Impact Report & Calculator

10/10/2017

Our current general obligation debt will be retired in 2019 which will leave the village with approximately \$200,000 annually that could be applied to new debt by way of the streetscape project, reallocated for additional capital projects, or for additional capital savings contributions. Principal and Interest payments, or new capital savings, in excess of the current level of \$200,000 annually would result in tax increases.

The calculator below can be used to provide a snapshot financial impact of potential costs of undertaking the various projects, and possible financial liabilities as outlayed in the 20 year financial plan and streetscape project report.

Capital reserve planning is straight forward. Replacement cost divided by the number of years to replacement gives you your yearly liability. A borrowing estimation requires assumption but the calculator provided below can calculate the yearly P&I. Also shown is a calculator for the impact to the village portion of the mill rate which will show an approximation of what a property owners village tax liability will look like for different levels of annual payments/savings in excess of \$200,000.

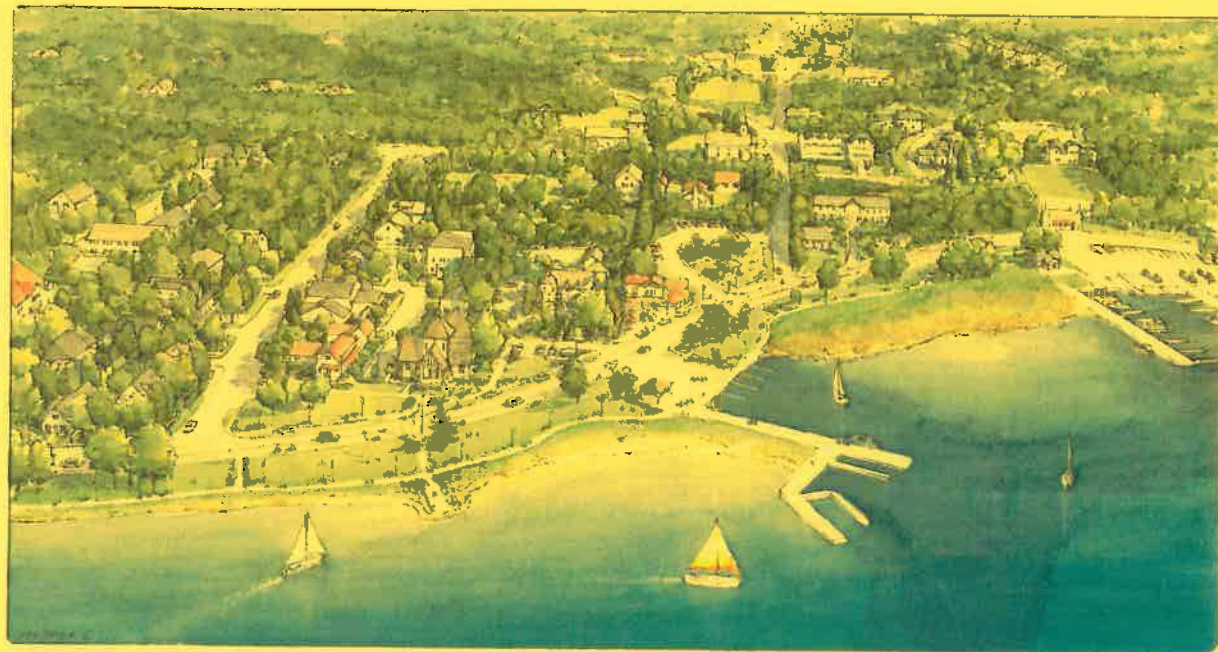
I will have my laptop at meetings so that we can run some conceptual numbers in real time, and will email this calculator to anyone who wants it so you can run some numbers on your own. Only the orange highlighted cells are able to be changed. Formulas within are locked.

Amortization Calculator			
Loan Amount	\$ 2,000,000.00	Annual P&I Payment:	\$140,722.15
Term(years)	20		
Rate(%)	4%		

Mill Rate Calculator				
New Annual Payment/Reserve Payment (Above current \$200,000 P&I)			\$	140,722
Resulting New Total Levy			\$	1,128,463
2017 Assessed Value			\$	346,887,500
New Mill Rate				3.25
Property Value	2016 Village Taxes	New Village Taxes	Increase	% of Previous
	2017 Mill Rate	New Mill Rate		
	\$ 2.86	\$ 3.25		
\$ 200,000.00	\$ 572.00	\$ 650.62	\$ 78.62	113.75%
\$ 400,000.00	\$ 1,144.00	\$ 1,301.24	\$ 157.24	113.75%
\$ 600,000.00	\$ 1,716.00	\$ 1,951.87	\$ 235.87	113.75%
\$ 800,000.00	\$ 2,288.00	\$ 2,602.49	\$ 314.49	113.75%
\$ 1,000,000.00	\$ 2,860.00	\$ 3,253.11	\$ 393.11	113.75%

42

Reconstruction



Ephraim - estimated cost for Water St (WIS 42) village financing

From: Becker, Nick

Sent: Thu, Sep 7, 2017 at 2:47 pm

To: Bristol, Brent

Estimate 2017-09-07.pdf (7.8 KB)

Hi Brent,

Attached is a PDF showing the estimated cost for Water St (WIS 42) village financing. This includes the following

- Current conceptual Construction Cost
- Estimated Design engineering Fees (note this is an Estimate...not what we are proposing. This will change based on actual scope)
- Estimated Construction engineering Fees (note this is an Estimate...not what we are proposing. This will change based on actual scope)
- An additional 30% Contingency for Village additions/changes etc that may occur from scope changes.

If you have any questions, comments, revisions you want to the estimate, please let me know.

Thanks!

Nicholas J. Becker, PE, STS

Project Manager

(414) 944-6124

nick.becker@aecom.com

*PE in WI, IL, ND, SD, MN

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Milwaukee, WI 53212

(414) 944-6080

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Village of Ephraim
Roadway Reconstruction
Door County
Conceptual Engineer's Estimate 2017-09-07

Unit	Item Description	Quantity	Unit Price	Sarah
SY	Removing Pavement	8000	\$10.00	\$80,000.00
CY	Excavation Common	5400	\$20.00	\$108,000.00
CY	Excavation Rock	540	\$35.00	\$18,900.00
TON	Base Aggregate Dense 1 1/4-Inch	5800	\$13.00	\$75,400.00
TON	HMA Pavement	2525	\$80.00	\$202,000.00
GAL	Tack Coat	875	\$5.00	\$4,375.00
LF	Concrete Curb & Gutter 18-Inch Type D	2683	\$18.00	\$48,294.00
SF	Concrete Sidewalk 4-Inch	14197	\$5.00	\$70,985.00
CY	Storm Sewer Rock Excavation	800	\$80.00	\$64,000.00
LS	Drainage 5%	1	\$34,000.00	\$34,000.00
LS	Erosion Control 5%	1	\$34,000.00	\$34,000.00
LS	Traffic Control 5%	1	\$34,000.00	\$34,000.00
LS	Restoration 5%	1	\$34,000.00	\$34,000.00
Subtotal				\$807,954.00
30% Miscellaneous Unquantified				\$242,386.00
15% Mobilization				\$157,551.00
Construction Total				\$1,207,891.00
Say				\$1,210,000.00

*** Utilities relocation, temporary grading, etc. not included in this estimate

ESTIMATE (Actual scope not yet determined) Design Engineering (Depends what village ultimately has AECOM do) 150K to 250K could be a preliminary range.....	\$200,000.00
ESTIMATE (schedule not yet determined) Construction Engineering (Assumes two staff for nine months)	\$200,000.00
Say for design and construction engineering	\$400,000.00

Total for Construction plus design and construction engineering	\$1,610,000.00
Contingency (30%)	\$483,000.00
Total	\$2,093,000.00
Total for financing	\$2,100,000.00

R/L
STH 42

4' 12' 12' 1.5' 0.5'

2% 2% 2% 1.5%

3:1 MAX 3:1 MAX

11-INCH BASE AGGREGATE
DENSE 1 1/2-INCH (TYP)

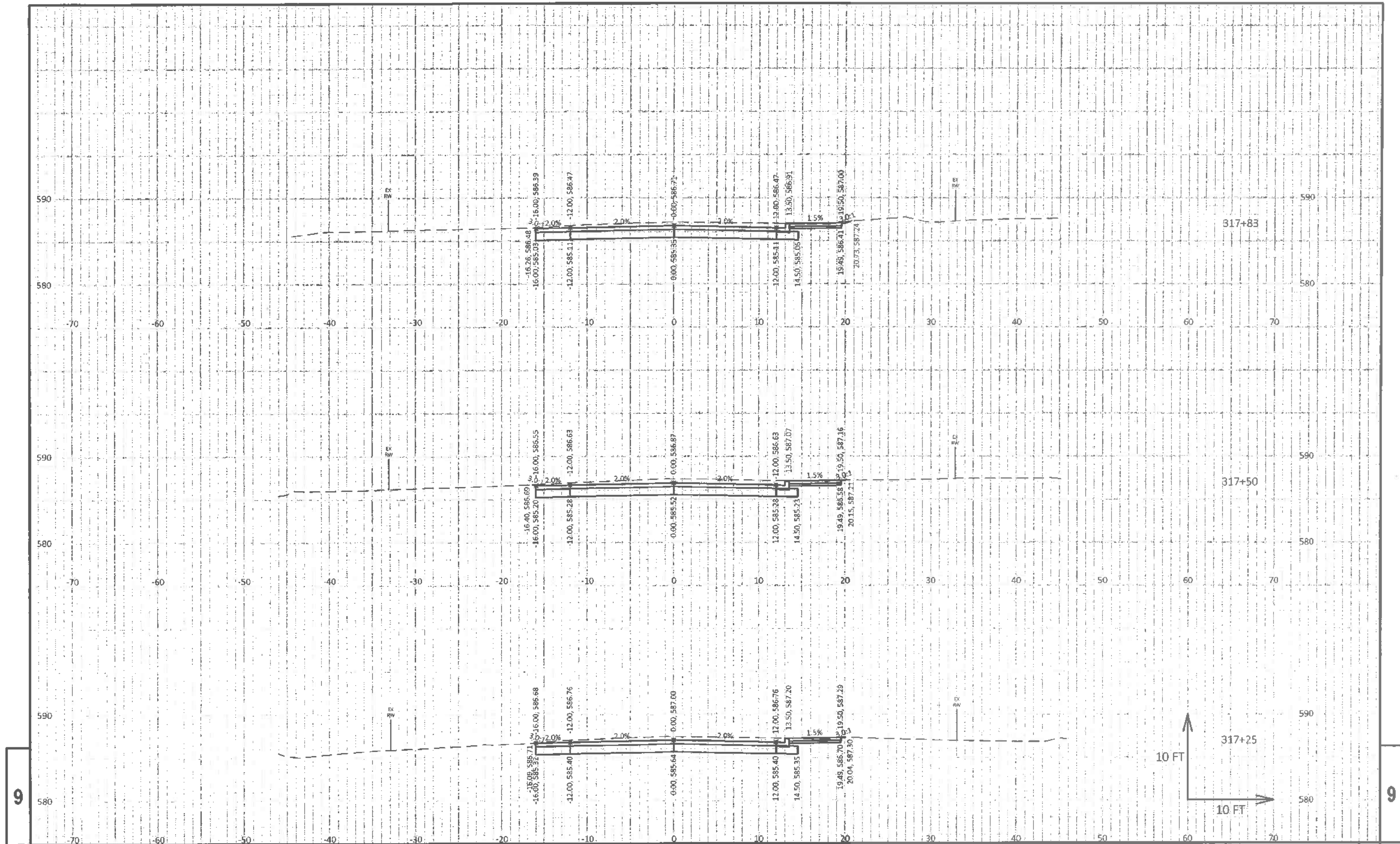
5 1/2-INCH HMA PAVEMENT

CONCRETE SIDEWALK
4-INCH

3-INCH BASE AGGREGATE
DENSE 1 1/2-INCH

CONCRETE CURB & GUTTER
18-INCH

PROPOSED STH 42 TYPICAL SECTION
STA 317+25 TO 342+25

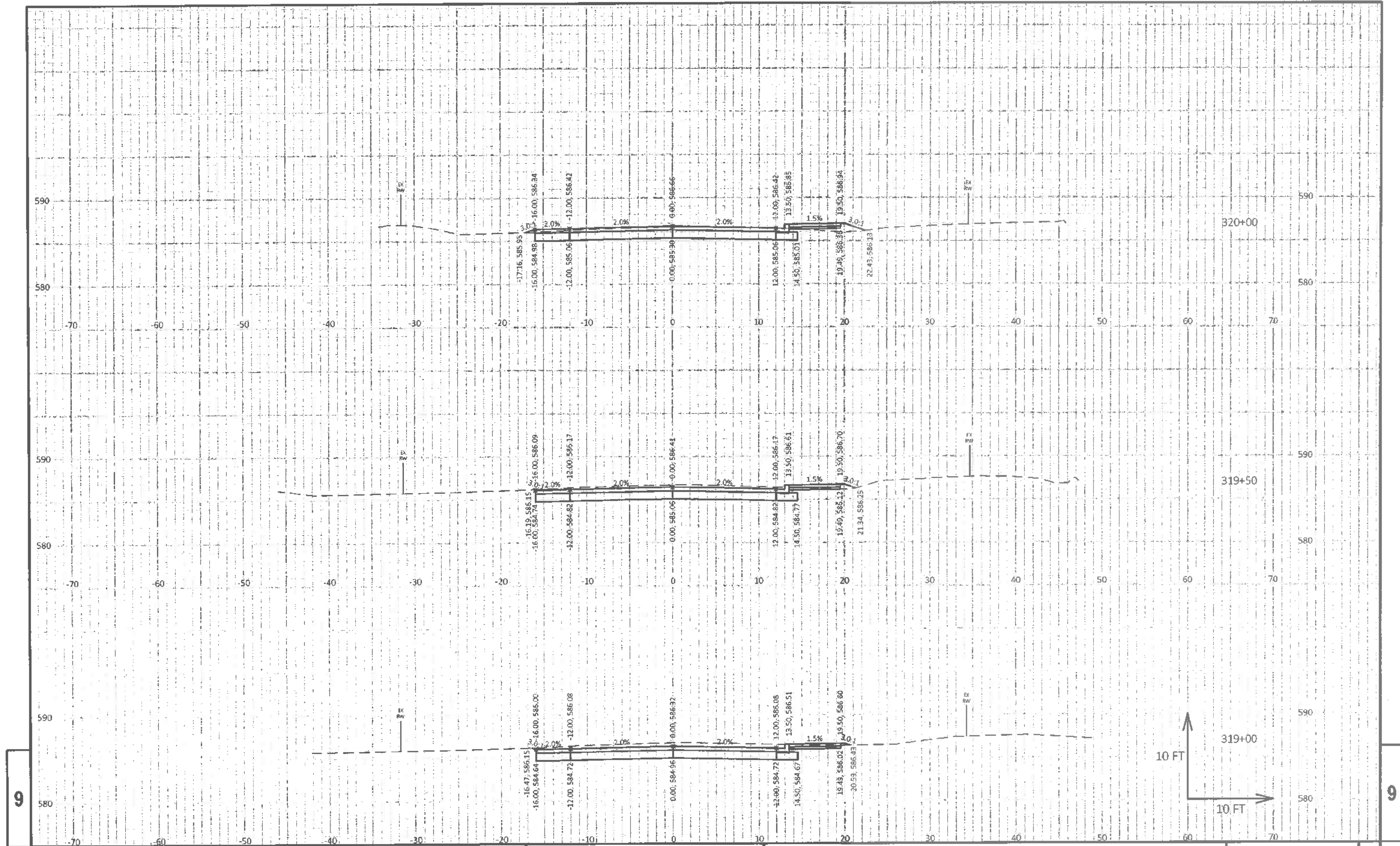


PROJECT NO: N/A	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET E
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PROJECT NO:	N/A	HWY:	STH 42	COUNTY:	DOOR	CROSS SECTIONS:	STH 42	SHEET	E
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PROJECT NO: N/A

HWY: STH 42

COUNTY: DOOR

CROSS SECTIONS: STH 42

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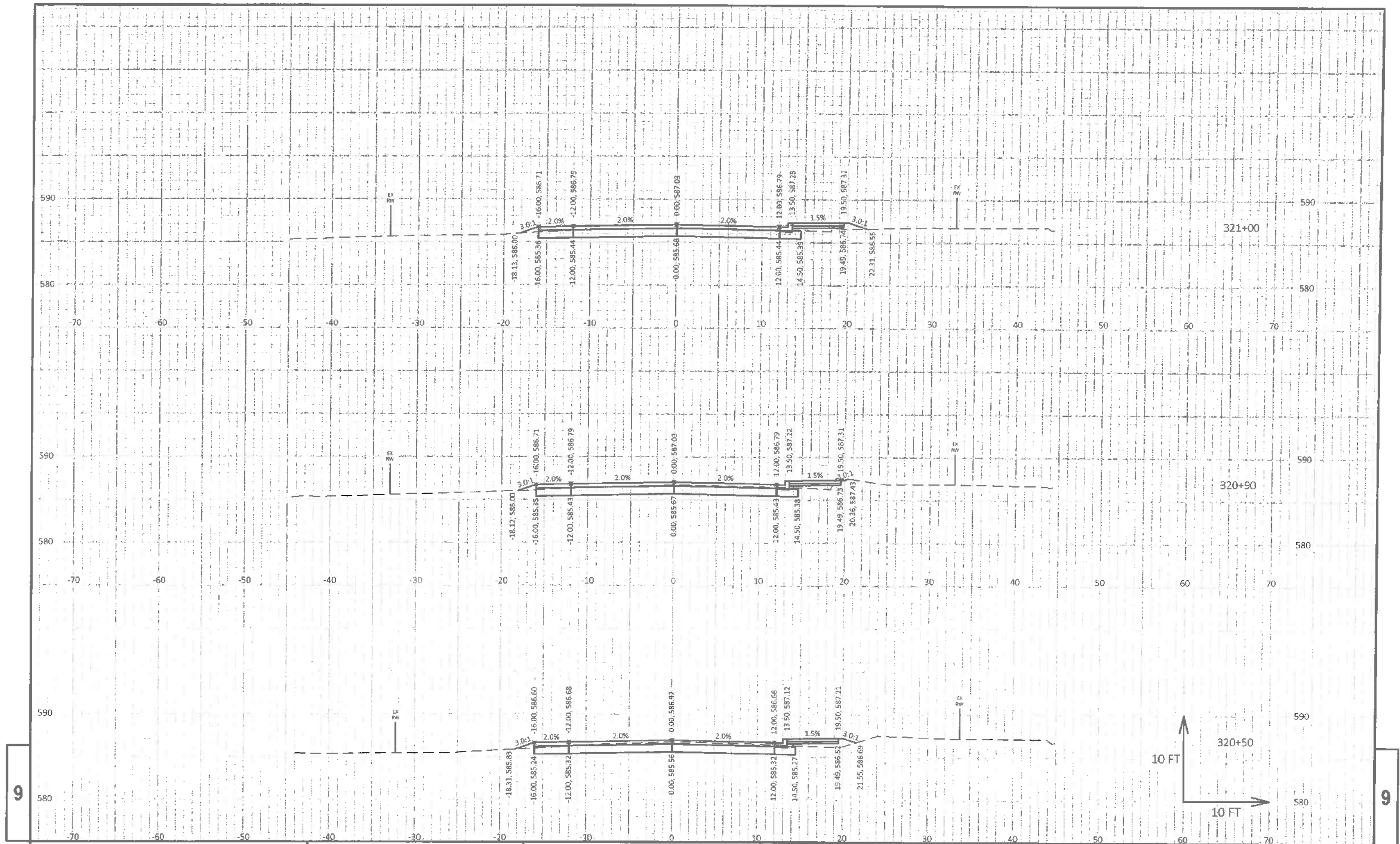
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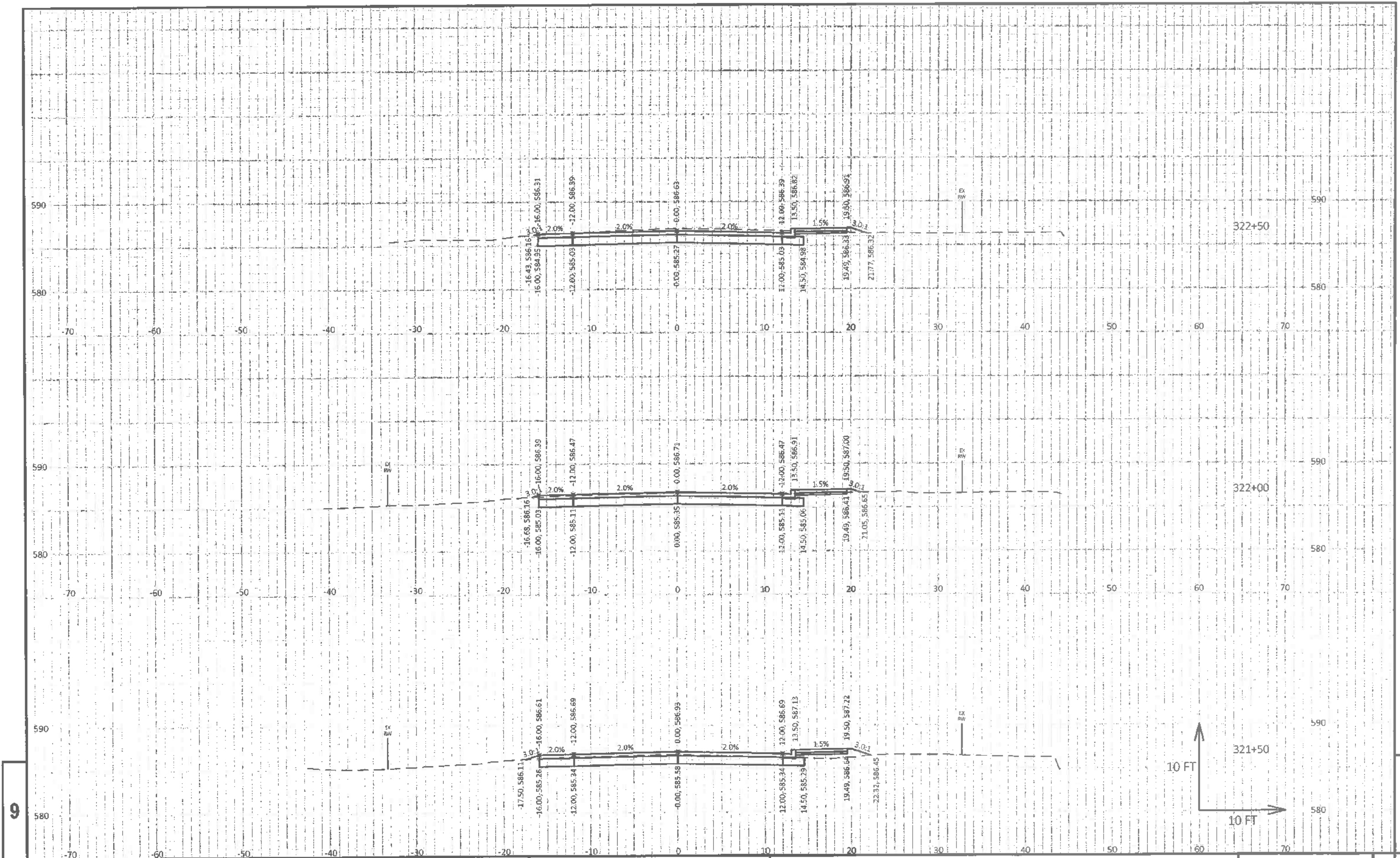
PLOT BY: MROZ, ZACHARY T.

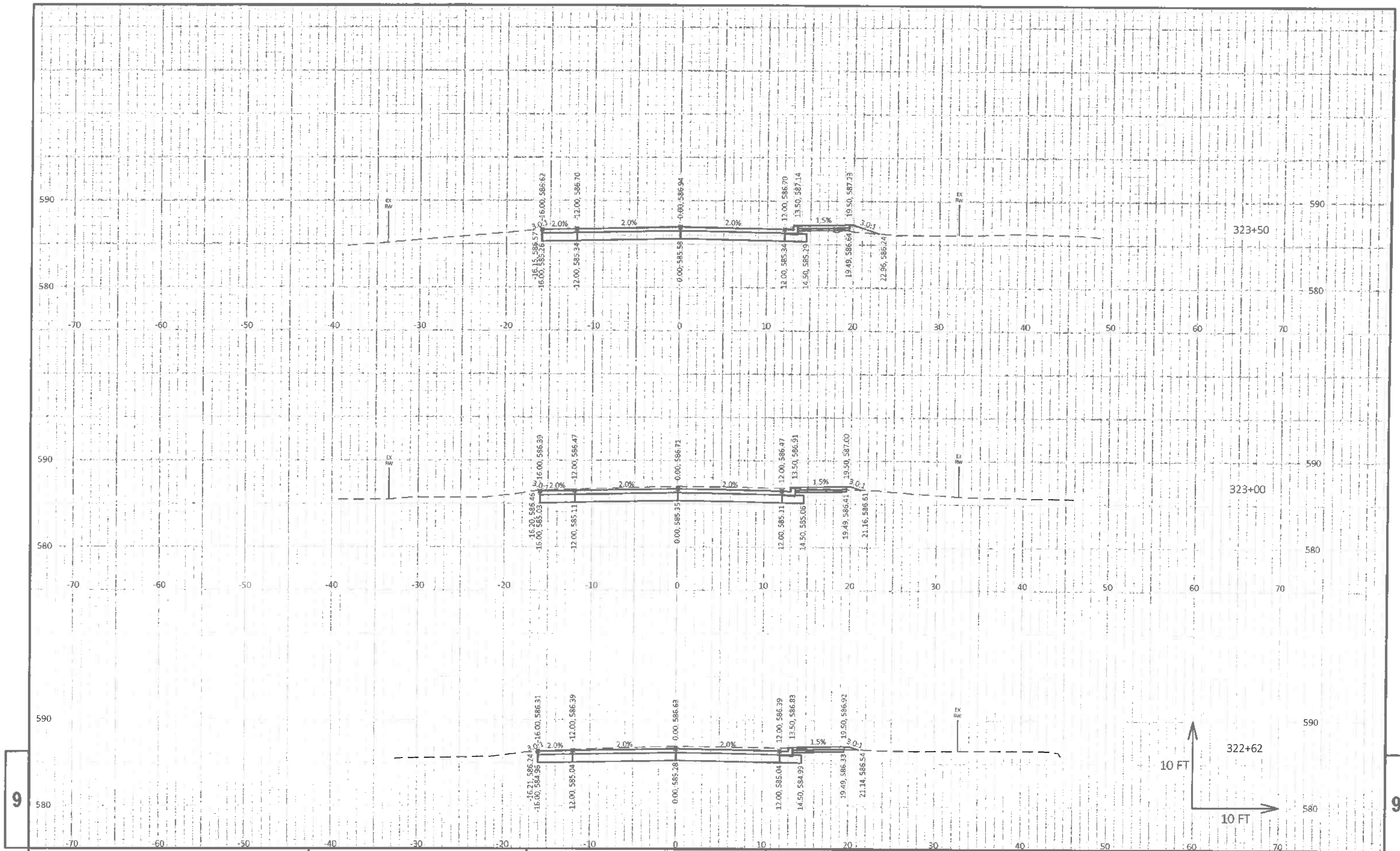
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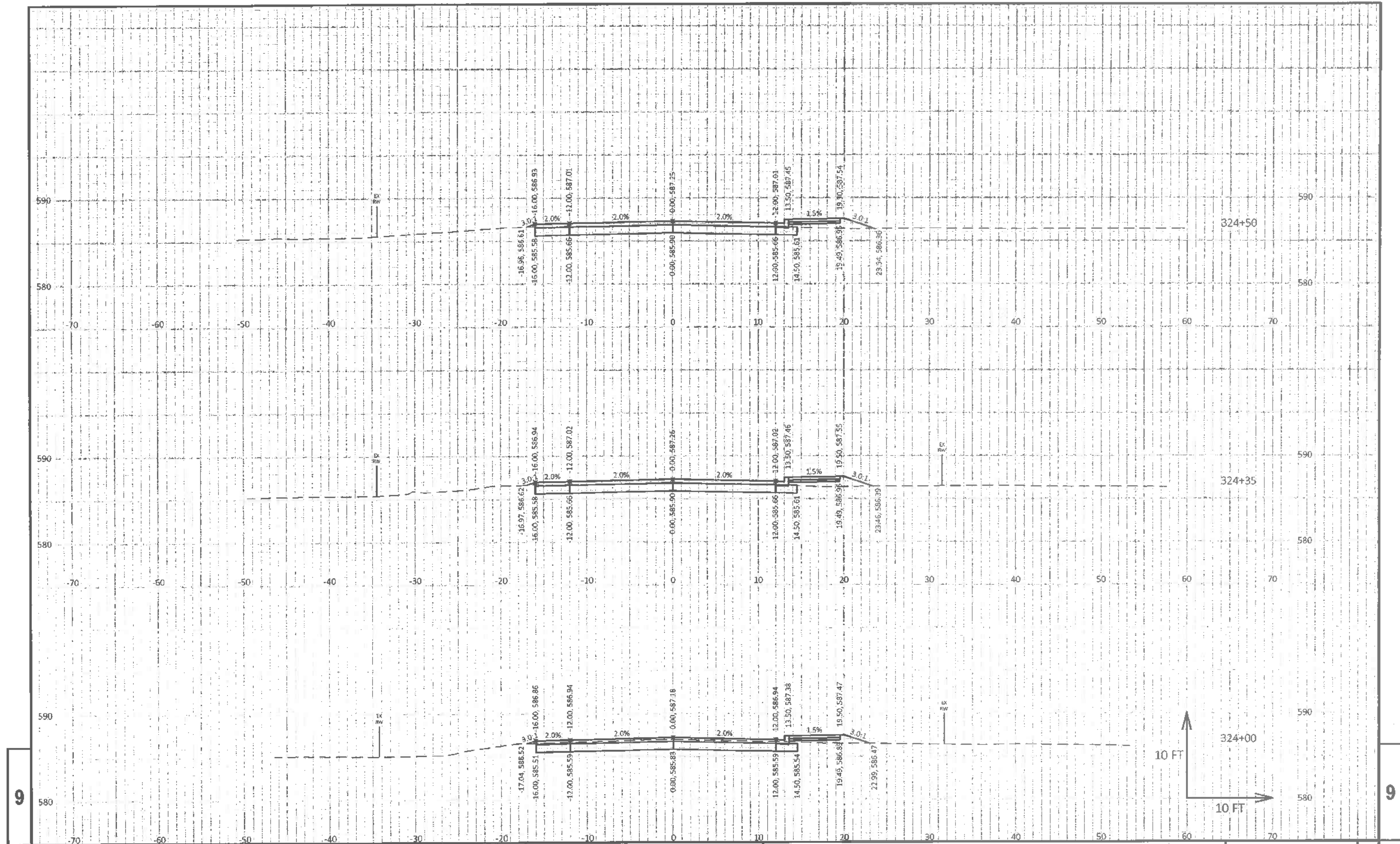
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WISDOT/CADD5 SHEET 49









PROJECT NO: N/A

HWY: STH 42

COUNTY: DOOR

CROSS SECTIONS: STH 42

SHEET

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FILE NAME : \\S1102K306\PROJECTS\TRANSPORTATION\EPHRAIM WIS 42\00000000\DESIGN\CORRIDORS\CORRIDOR_317-942.DWG
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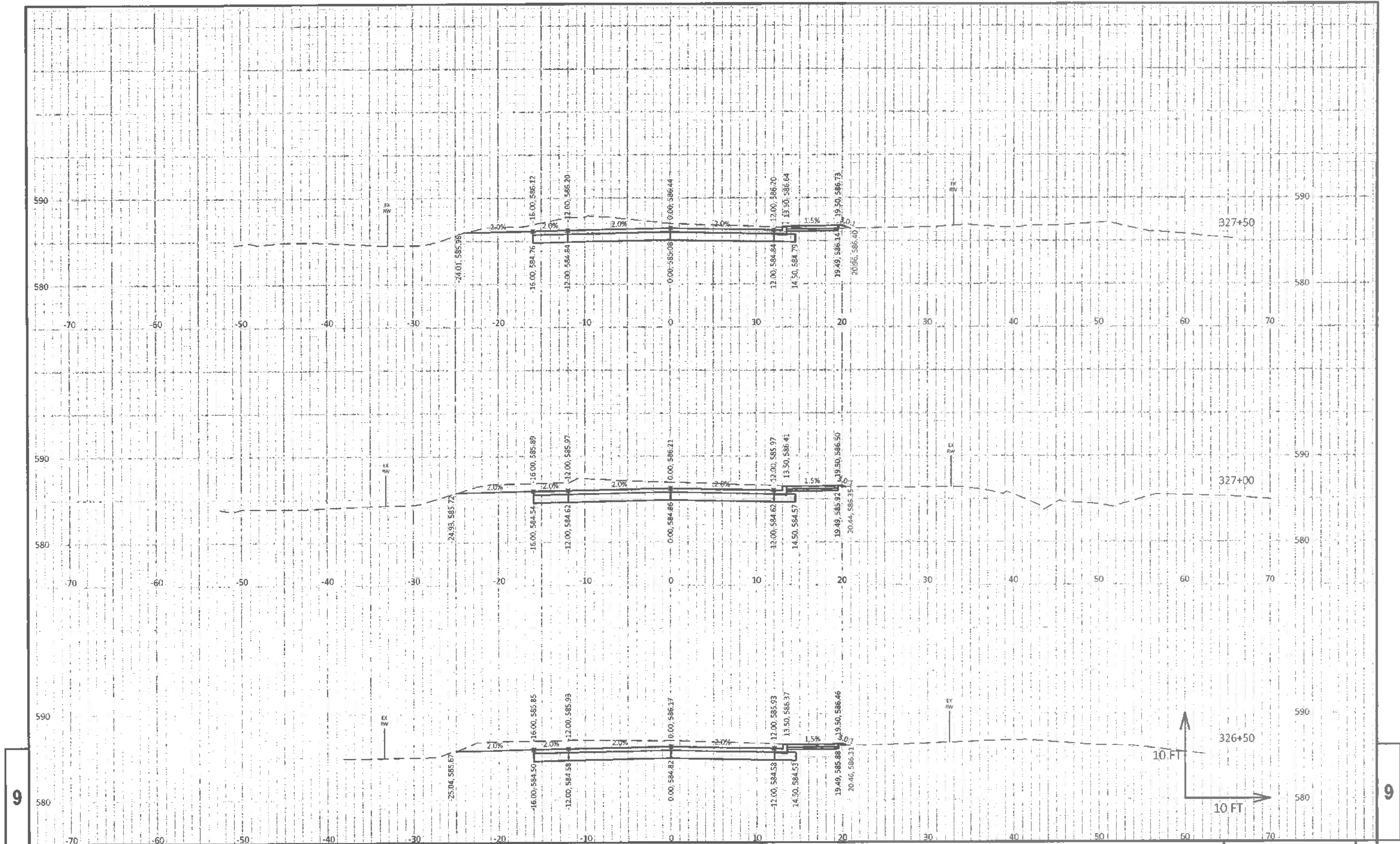
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PLOT BY: MROZ, ZACHARY T.

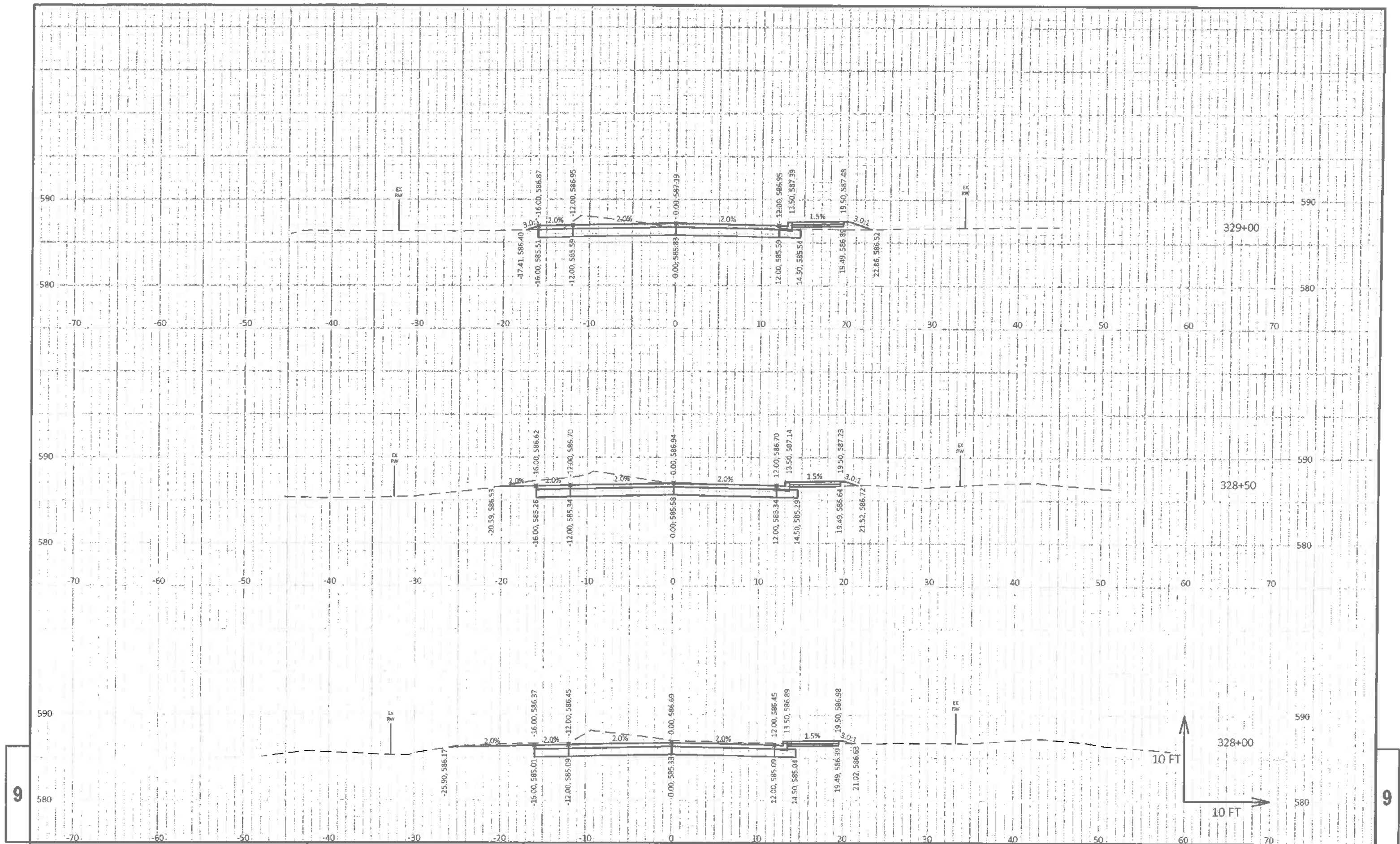
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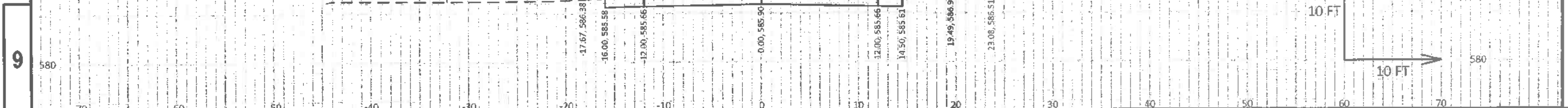
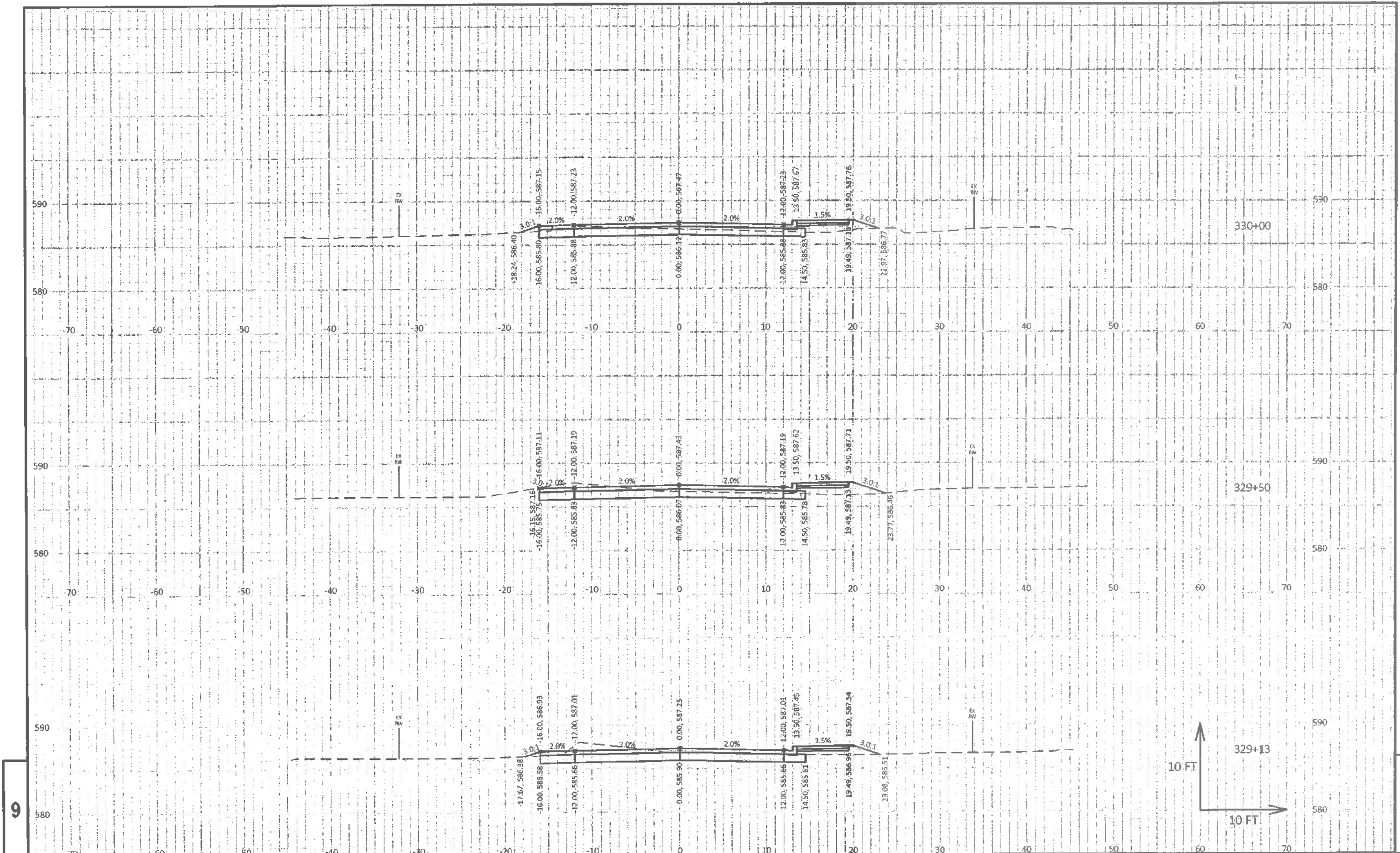
WISDOT/CADD SHEET 49



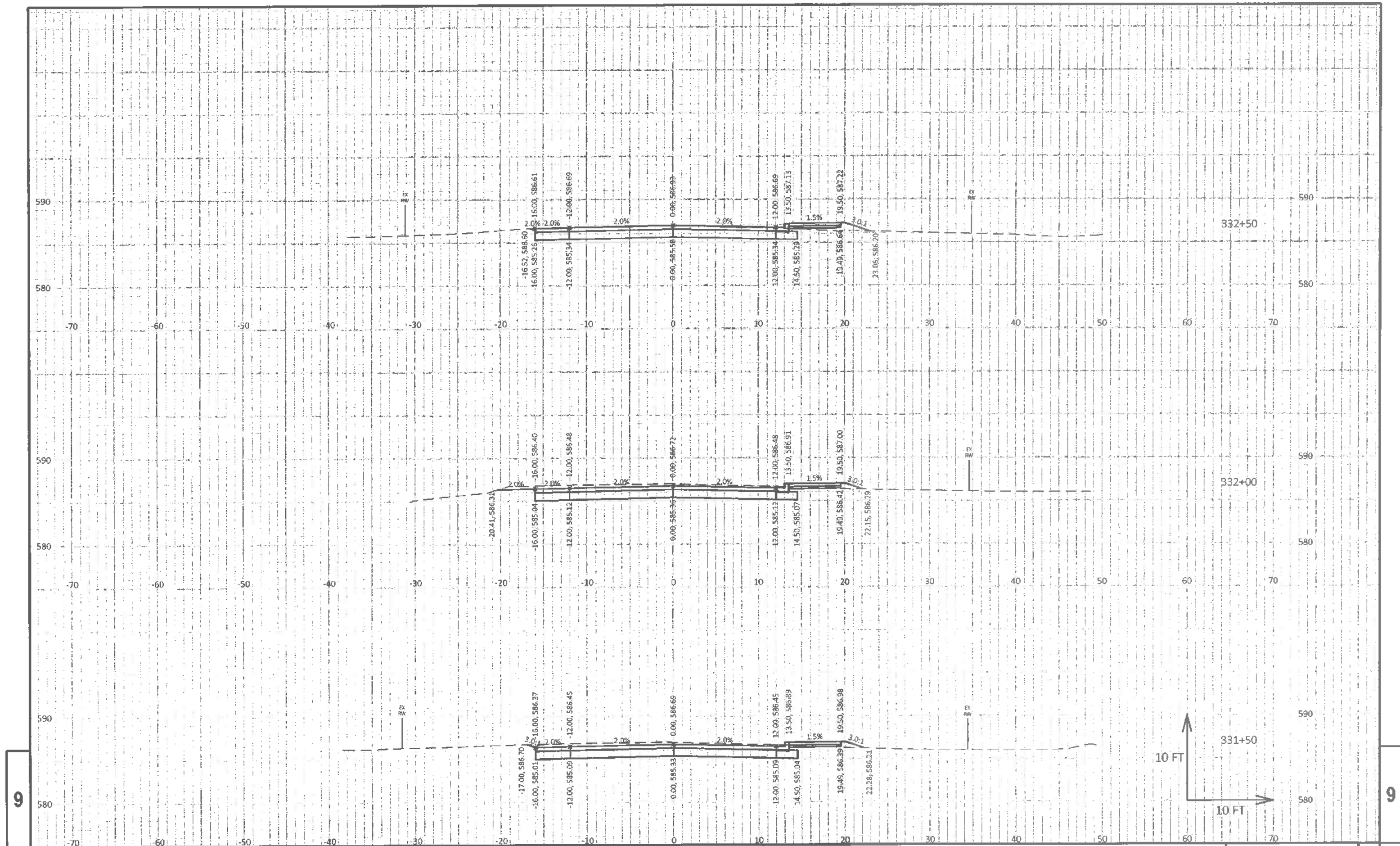
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PROJECT NO: N/A	HWY: STH 42	COUNTY: DOOR	CROSS SECTIONS: STH 42	SHEET E
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PROJECT NO: N/A

HWY: STH 42

COUNTY: DOOR

CROSS SECTIONS: STH 42

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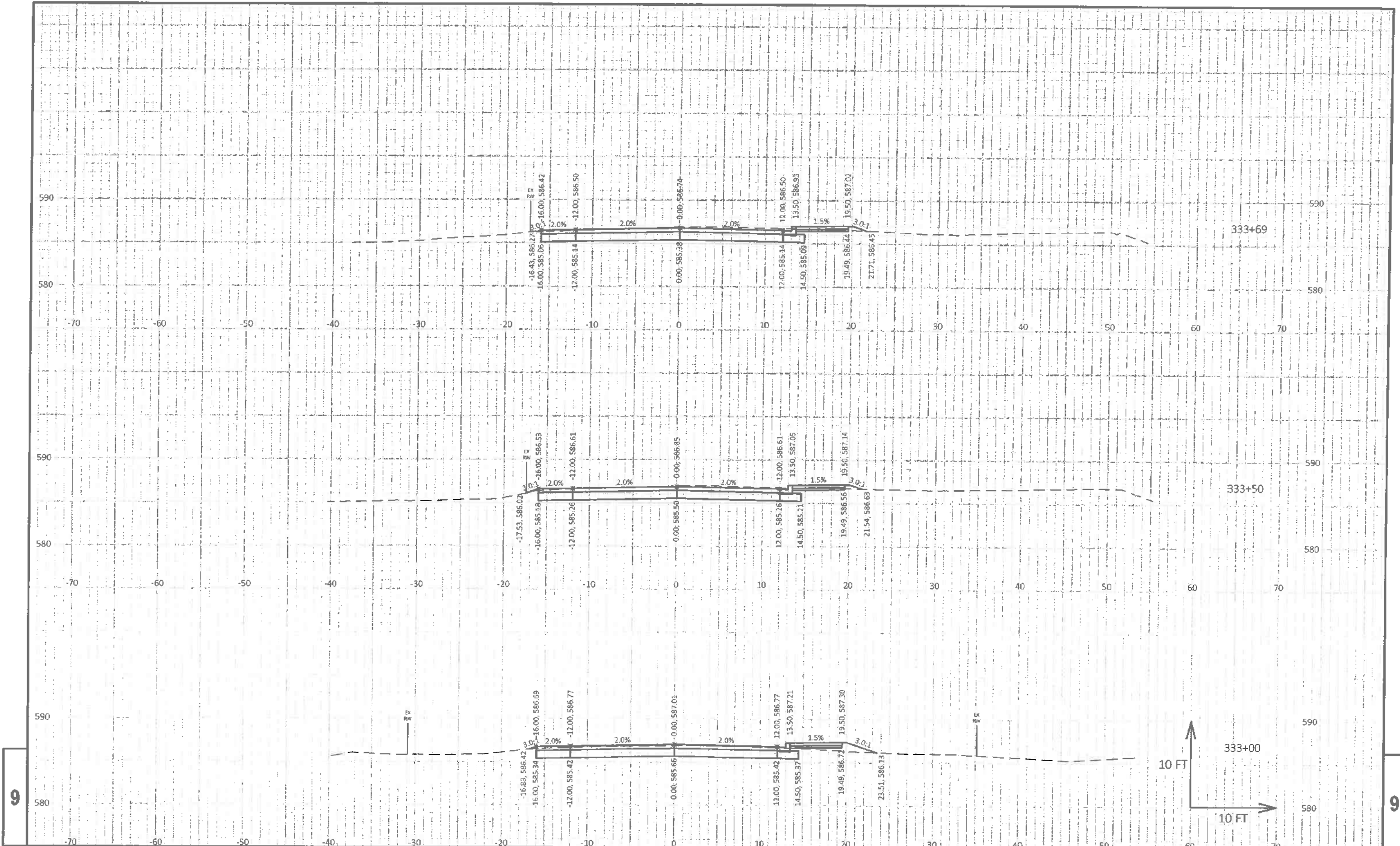
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PLOT BY: MROZ, ZACHARY T.

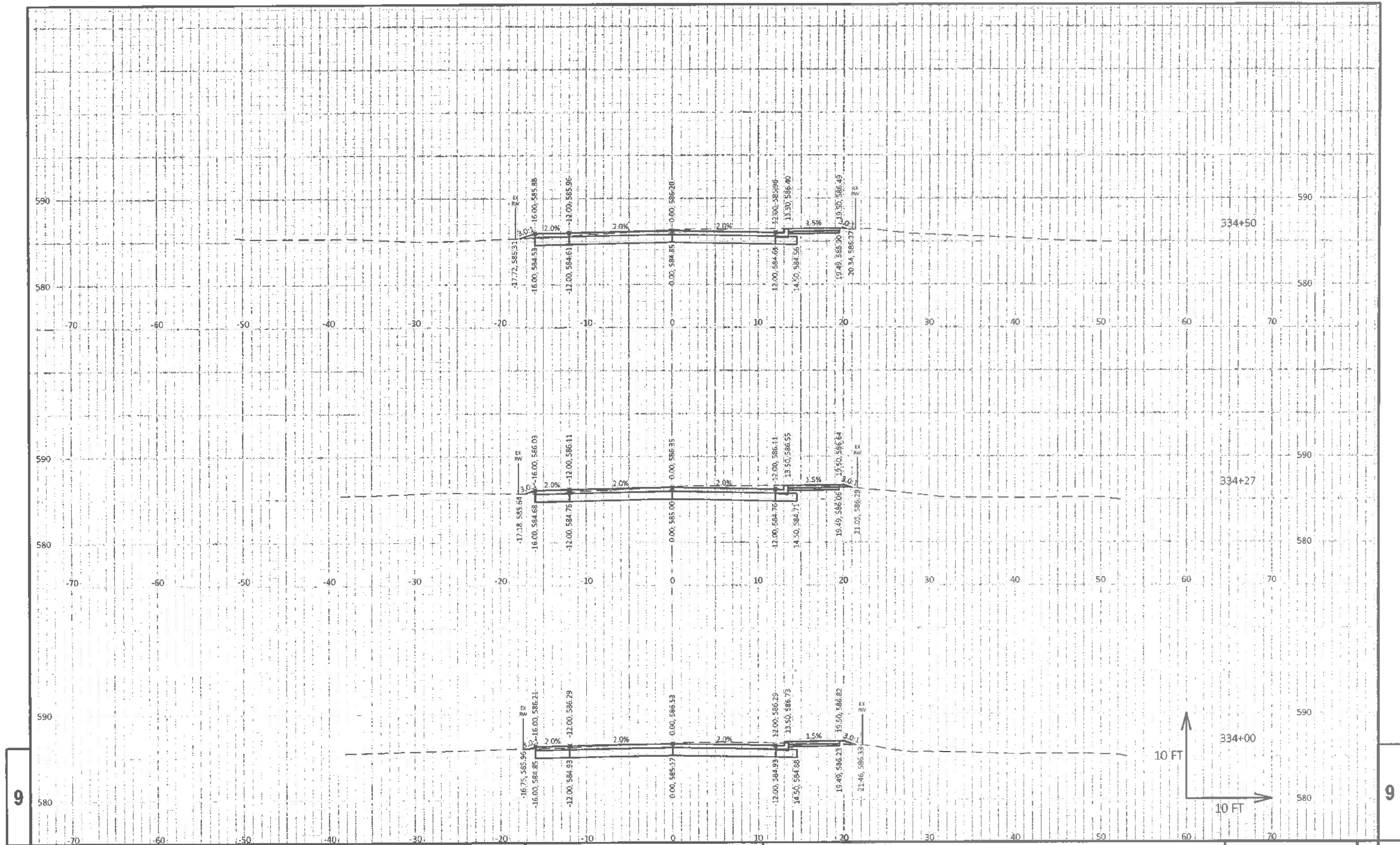
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WISDOT/CADD SHEET 49

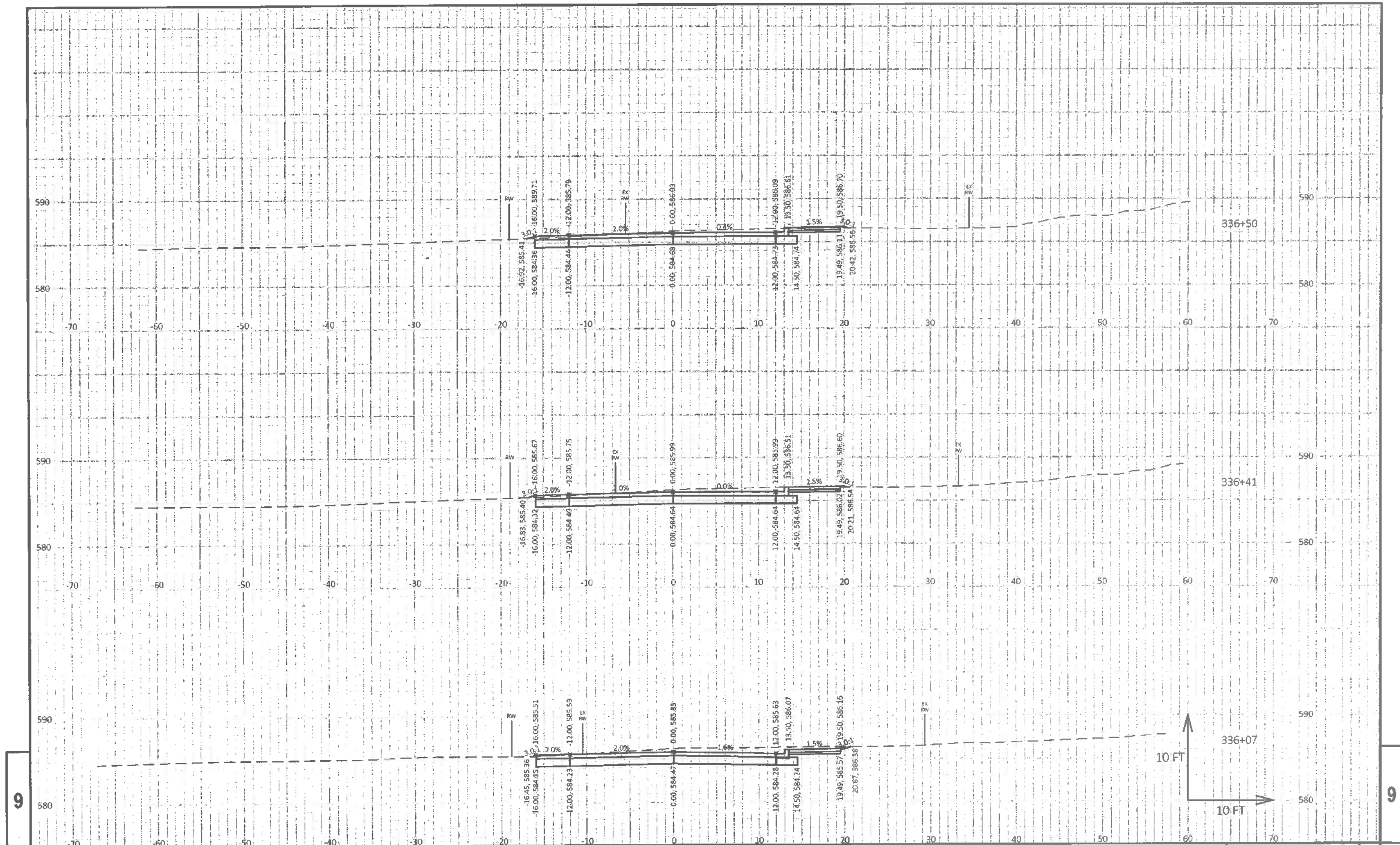


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PROJECT NO: N/A HWY: STH 42 COUNTY: DOOR CROSS SECTIONS: STH 42 SHEET E

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PROJECT NO: N/A

HWY: STH 42

COUNTY: DOOR

CROSS SECTIONS: STH 42

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FILE NAME : \\S1102K306\PROJECTS\TRANSPORTATION\EPHRAIM WIS 42\00000000\DESIGN\CORRIDORS\CORRIDOR_317-342.DWG
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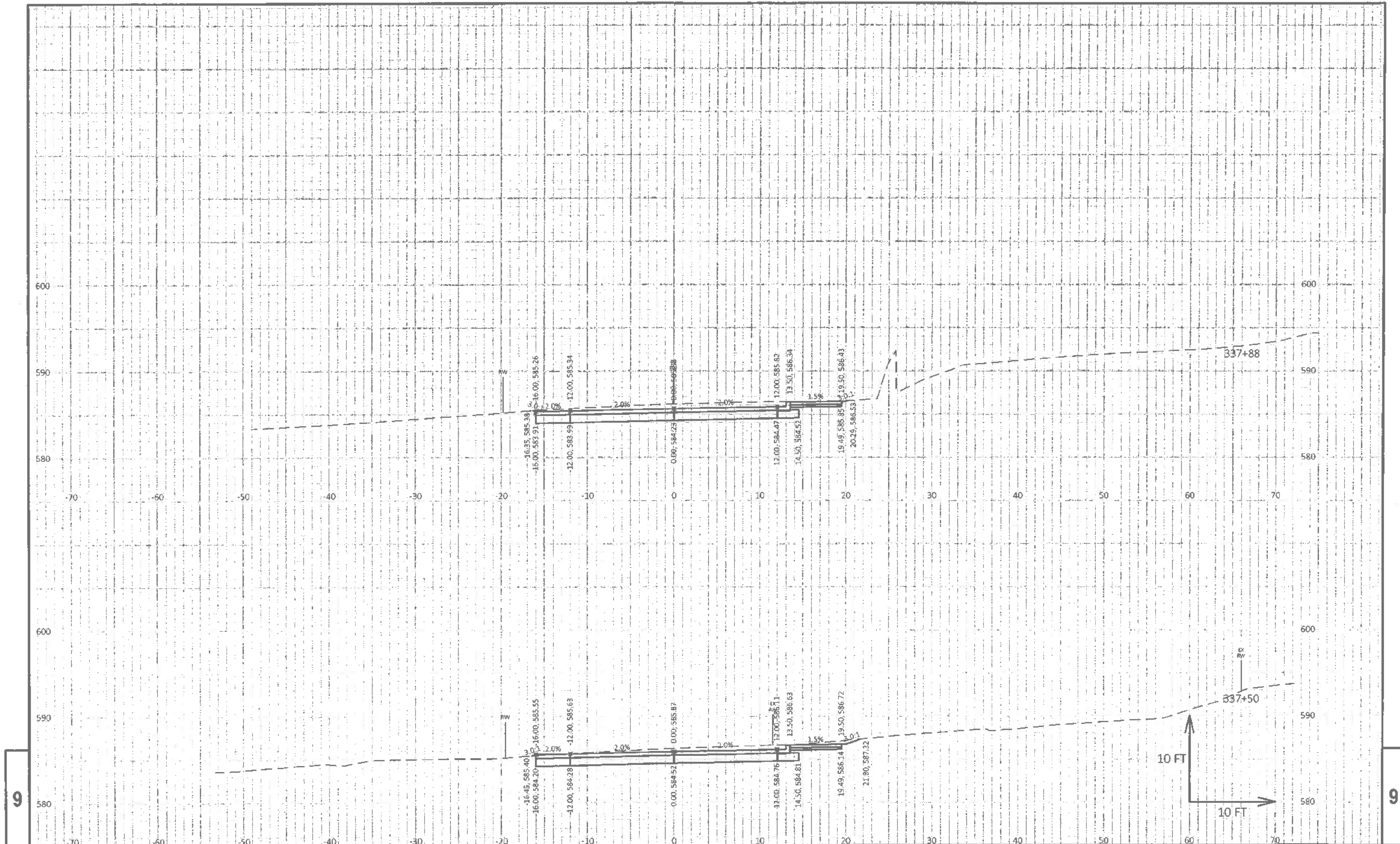
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PLOT BY : MROZ, ZACHARY T.

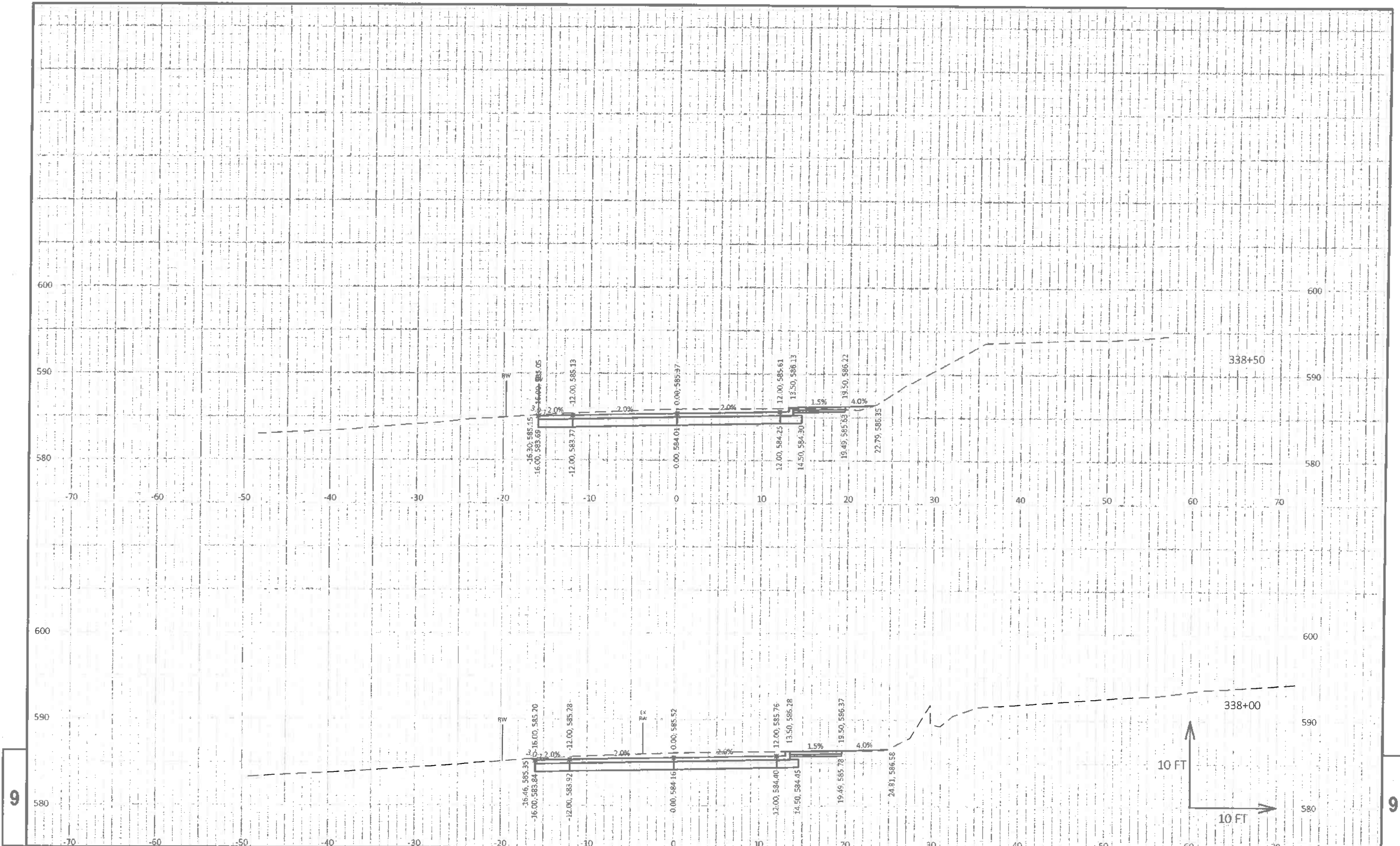
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PLOT SCALE : 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

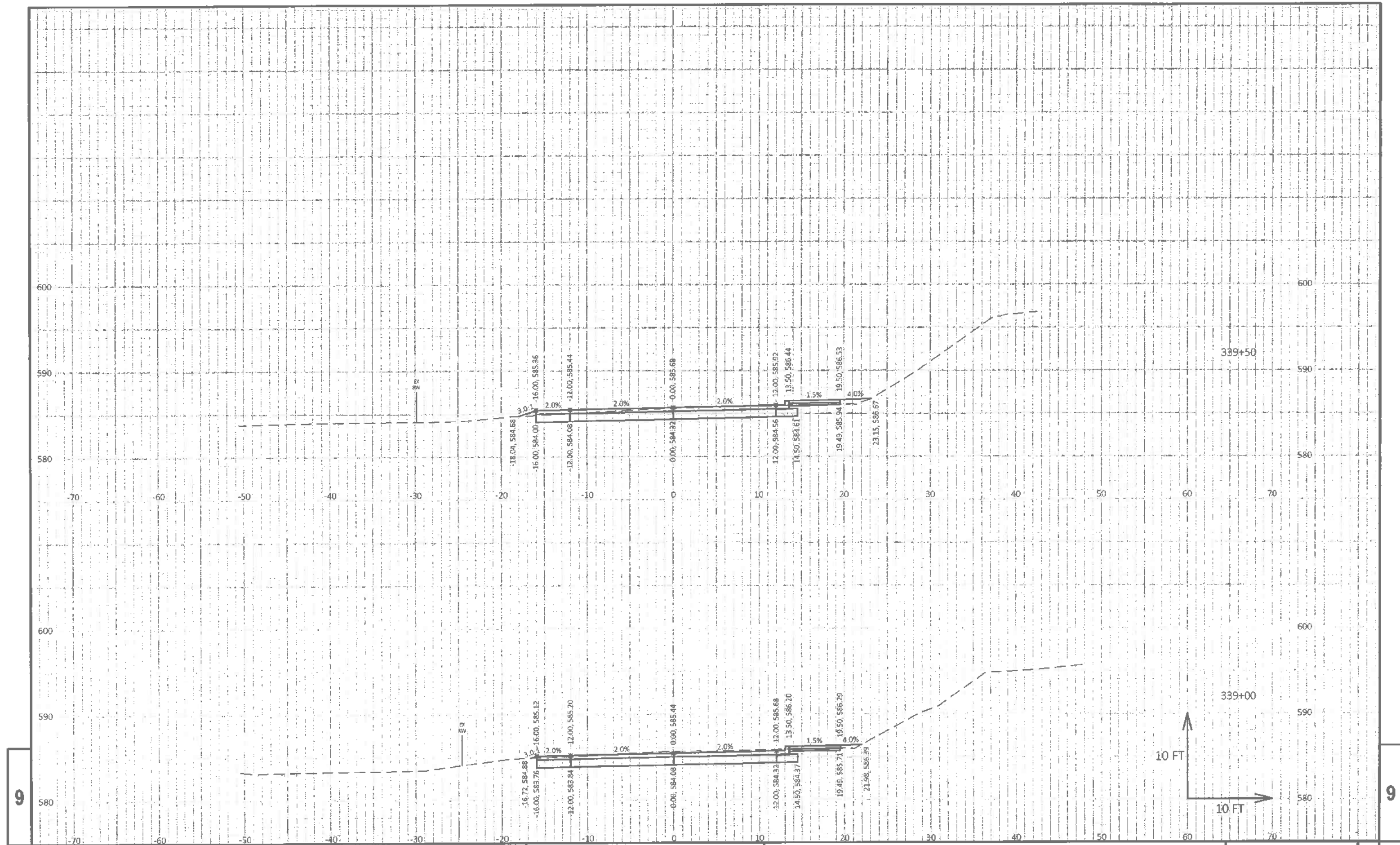
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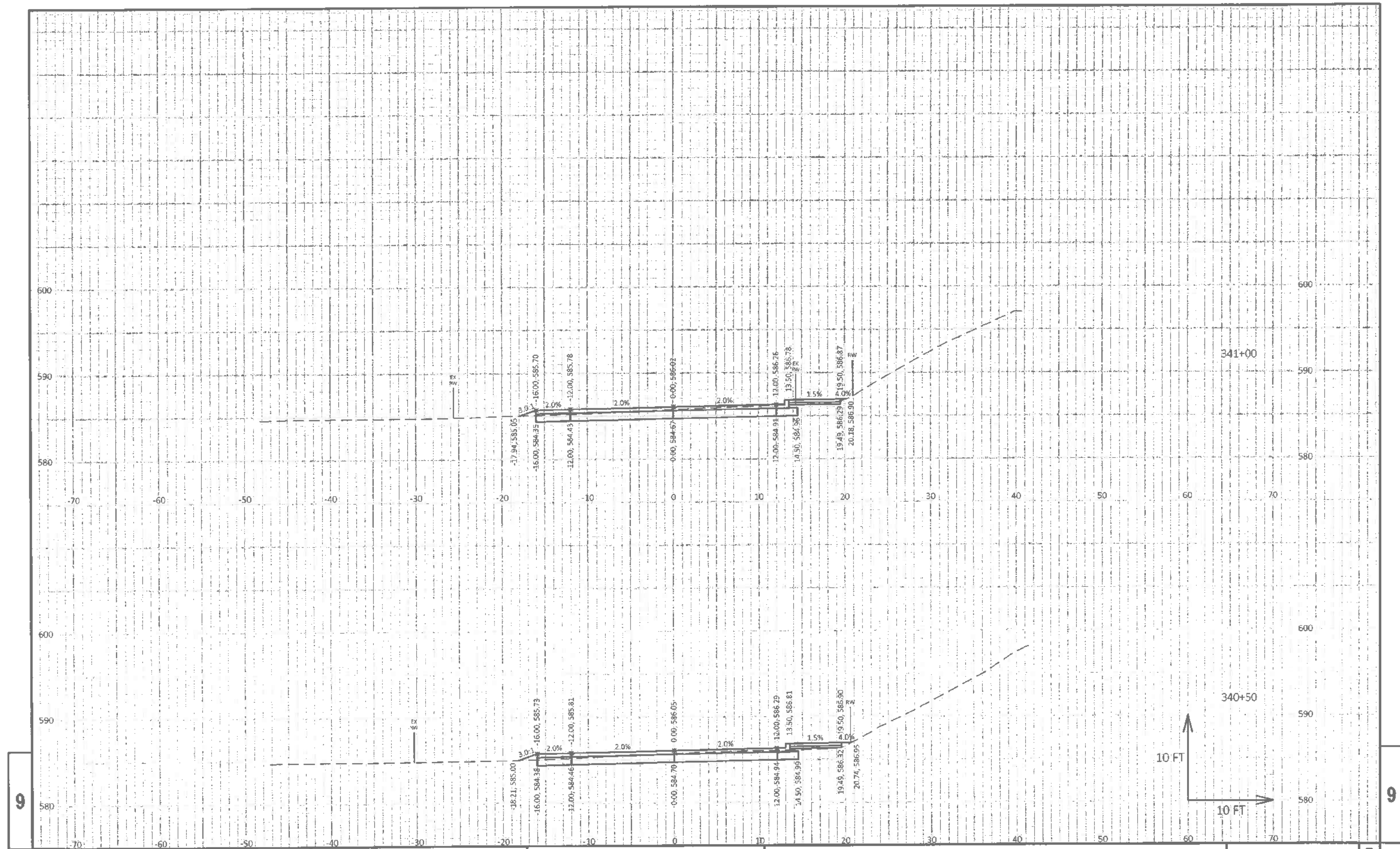
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PROJECT NO: N/A HWY: STH 42 COUNTY: DOOR CROSS SECTIONS: STH 42 SHEET E

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PROJECT NO: N/A

HWY: STH 42

COUNTY: DOOR

CROSS SECTIONS: STH 42

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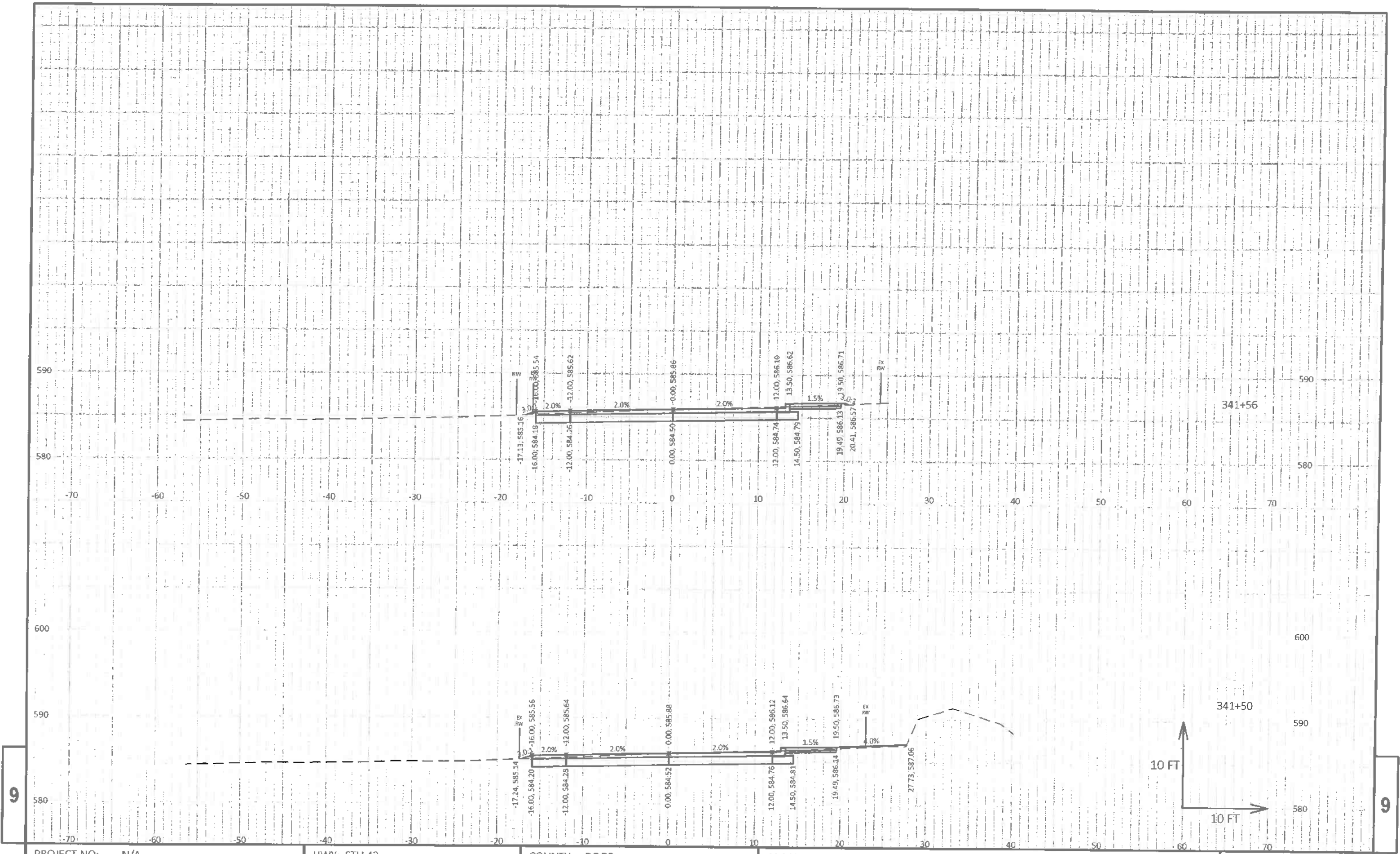
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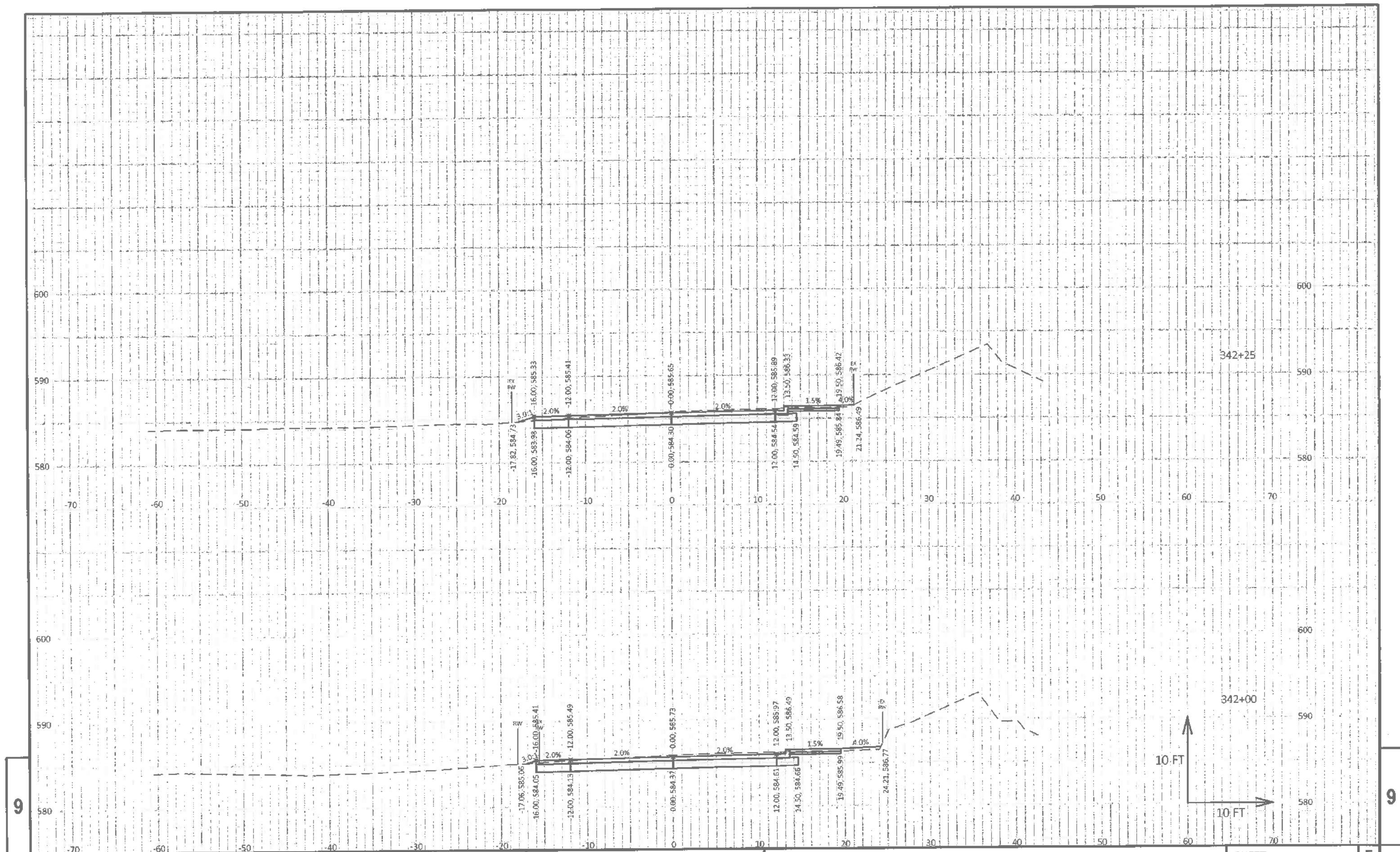
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PLOT NAME:

PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDs SHEET 49





PROJECT NO: N/A

HWY: STH 42

COUNTY: DOOR

CROSS SECTIONS: STH 42

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FILE NAME: \\S1102K306\PROJECTS\TRANSPORTATION\EPHRAIM WIS 42\00000000\DESIGN\CORRIDORS\CORRIDOR_317-342.DWG
LAYOUT NAME: Section Sheet - (25)

PLOT DATE: 6/30/2017 11:57 AM

PLOT BY: MIROZ, ZACHARY T.

PLOT NAME:

PLOT SCALE: 1 IN:10 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADD SHEET 49

30% Meeting Follow Up - WIS 42, Village of Ephraim

From: Ashauer, Jeremy J - DOT

Sent: Tue, Jul 18, 2017 at 4:24 pm

To: Becker, Nick, Brent Bristol, mmccutcheon@ephrain-wisconsin.com

Cc: Ashauer, Jeremy J - DOT, Thompson, James -DOT, Kirst, Douglas P - DOT, Haefs, Matthew - DOT

RECONST_Credit Calculation_20170718.pdf (111 KB)

Nick/Brent/Mike –

Below is a follow up on some discussion items from the 30% meeting held on July 13th. Based on the discussion held at the meeting, the plans for reconstruction and the limits of which the village is looking to complete has been reduced significantly to the beach area north to the fire station (versus the originally proposed limits of the Wetland Preserve to Anderson Lane). As such, the below answers are based on the modified limits from the beach to the fire station.

Lane Width

- The lane width shall remain at 12' minimum.

Curb Offset

- As previously agreed, the minimum curb offset from the lane line to the face of curb shall be 1' minimum.

Shoulder Width

- Discussion was brought forth by WisDOT to allow reducing the left side (water side) paved shoulder to be reduced to 2' minimum versus the 4' proposed by the village. We have discussed this further internally and there is no issue with this proposal. The village may proceed with a 2' minimum paved shoulder on the left side (water side) of the roadway.

Parking Regulation

- The village inquired whether there would be changes in parking required along the route. When the state highway falls within the limits of village, parking declarations are the responsibility of the village. The state prefers that parking regulation be on the local level. With that said, if there are uncorrected problems due to complaints (EX: Sight distances around access points) the state does reserve the right to correct such issues.
- Parking along a state highway cannot impede the flow of traffic. As such, if there is not adequate room to park or vehicles are continually into the travel lanes, WisDOT would also look to have this issue corrected.
- There are general state statues that do need to be followed for parking regulation (EX: fire hydrants).
- Any changes in parking regulations and declarations should be forwarded to WisDOT for record keeping purposes. We do not approve or deny these, it is simply for tracking purposes.

Alignment Shift

- AECOM noted that there was desire to do some shifting of the alignment through this section to avoid certain aspects such as trees and landscaping. WisDOT is accepting of this as long as the new alignment follows WisDOT standards.
- It is recommended this be looked at further in terms of how it affects the parking areas as well. As noted by the village during the meeting, parking is used by those along this area. Changing the

alignment may reduce some current available parking areas to be too tight. As noted above, parking areas cannot result in impeding the flow of traffic on the highway.

- Additionally, these areas should be evaluated from a “clear zone” type standpoint to ensure existing structures and items along the highway don’t become hazards.

Sidewalk Surface

- The village has inquired what surface is required for sidewalk facilities and may want to look at alternative surfaces. Any sidewalk surface needs to follow current ADA standards for a hard surface. WisDOT generally considers this to be a pavement such as concrete or asphalt.

Schedule

- There seemed to be some confusion during discussion as to the timeframe of a village project. It is not likely that the village’s proposed work can be completed concurrent with WisDOT’s resurfacing project in 2019. As noted, WisDOT will be letting the project in December 2018, which requires final plans by August 1, 2018 and 90% plans by around March 1, 2018. It is unlikely that the village’s design would be able to meet this schedule due to the steps of the design process. Additionally, the coordination effort for this type of project related to access and detours is much more intense than a resurfacing level project due to the impacts on the local economy.
- As part of the commitment by the village due November 1, 2017 WisDOT would require that a village reconstruction project be completed by a certain date. This schedule would be in place to ensure that if there were any changes that caused the village to not uphold the agreement, that the highway does not surpass a deterioration level that requires additional cost and effort in comparison to the resurfacing level improvement. Additionally, if the village does not uphold the agreement there would also be additional costs due to additional project letting and oversight needs that would be billed back to the village. I have asked our pavement engineer to evaluate the pavement condition to see how much further it could be extended beyond our project before additional deterioration would be detrimental. I will forward that date as well once I receive that from him and it will also be included in the State-Municipal Agreement.

WisDOT Funding

- As part of previous coordination with the village, WisDOT provided a draft funding estimate (dated June 22, 2017) for what the Department would fund for a village alternative project. This was based on the original limits from the Wetland Preserve to Anderson Lane.
- Attached is a revised estimate that reduces the limits to those from the beach to the fire station.
- It is recommended that the village look at options that would complete this work without a WisDOT letting. While the village would lose the WisDOT funding portion, there could be overall savings by doing this work via other processes such as a locally let project and through the Work in Highway Right of Way Permit process.

Other Items

- I noticed in the x-sections that a 3:1 max is shown. While this isn’t a standards issue, it may be an issue with the adjacent property owners with the final product as mowing these slopes is more difficult. I generally use 4:1 max in urban areas.

If you have any further questions, please let me know.

Thanks,
Jeremy

Jeremy Ashauer, P.E.

Ephraim Funding Estimate for WisDOT Resurfacing Project
DRAFT - For discussion purposes only (June 29, 2017)

The following calculations for Ephraim funding are being completed to determine the Village's participation in the currently scoped WisDOT Resurfacing project. If the Village does not commit to an alternative project scope, WisDOT plans to continue forward with a resurfacing level improvement. The below computations are for all additional asphalt outside of the area that WisDOT will complete as part of the project's highway needs (12' lane + 4' shoulder).

EPHRAIM ASPHALT AREAS						
(All areas outside of a 12' lane and 4' shoulder)						
Area	Station	-	Station	SF	SY	Tons
1	300+32	-	371+50	43,369.00	4,818.78	578.25
Total				43,369.00	4,818.78	578.25

- Quantity is based on an improvement concept of mill 2" and pave 2" asphalt, per the project plans for I.D. 4140-19-71
- Limits are from the Wetland Preserve to Anderson Lane, per the village's 30% Conceptual Plans dated April 18, 2017.

The following two projects are recent asphalt paving projects in Door County. The computations below are the computed cost of Ephraim funding towards WisDOT's scoped resurfacing level improvement based on the unit costs of these recent area projects. The final calculated Village Funding estimate is an average of these projects. Actual costs to the village will be based on the quantity at the actual bid unit cost of these items. Other items may be necessary that are not included in this estimate.

EPHRAIM ASPHALT AREAS					
STH 57 PROJECT 4150-17-71 (Let 2017)					
BAILEYS HARBOR - SISTER BAY					
Item No.	Item Desc.	Units	Qty	Bid Price	Amount
204.0120	Milling	SY	4,818.8	\$1.55	\$7,469.11
460.5224	4 LT 58-28 S	TON	578.3	\$59.90	\$34,637.37
				Total	\$42,106.48

EPHRAIM ASPHALT AREAS					
STH 42 PROJECT 4140-29-60 (Let 2014)					
STURGEON BAY - EGG HARBOR					
Item No.	Item Desc.	Units	Qty	Bid Price	Amount
204.0120	Milling	SY	4,818.8	\$1.28	\$6,168.04
460.5224	4 LT 58-28 S	TON	578.3	\$67.14	\$38,823.93
				Total	\$44,991.96

Average of Projects = \$43,549.22

WisDOT Funding Estimate for Ephraim Reconstruction Alternative
DRAFT - For Discussion Purposes (July 18, 2017)

The following calculations for WisDOT funding are being completed to determine the Department's participation in a potential reconstruction project being studied by the Village of Ephraim. If the Village of Ephraim commits to an alternative project scope and agrees to pay additional costs of construction for a project beyond the scope of the Department's project, this funding amount will be applied to the Village's alternative project.

WISDOT PAY AREA CALCULATIONS (12' Travel Lane + 4' Shoulder)						
Area	Station	-	Station	SF	SY	Tons
1	317+25	-	342+25	85,296.4	9,477.4	1,137.3
Total				85,296.4	9,477.4	1,137.3

- Quantity is based on an improvement concept of mill 2" and pave 2" asphalt, per the project plans for I.D. 4140-19-71
- Limits are from the Ephraim Beach to the Fire Station, per the village's REVISED 30% Conceptual Plans dated July 3, 2017.

The following two projects are recent asphalt paving projects in Door County. The computations below are the computed cost of WisDOT funding towards an Ephraim Alternative Scope project based on the unit costs of these recent area projects. The final calculated WisDOT Funding is an average of these projects.

STH 57 PROJECT 4150-17-71 (Let 2017) BAILEYS HARBOR - SISTER BAY (14,455 Tons of asphalt)					
Item No.	Item Desc.	Units	Qty	Bid Price	Amount
204.0120	Milling	SY	9,477.4	\$1.55	\$14,689.93
460.5224	4 LT 58-28 S	TON	1,137.3	\$59.90	\$68,123.38
				Total	\$82,813.32

STH 42 PROJECT 4140-29-60 (Let 2014) STURGEON BAY - EGG HARBOR (33,435 Tons of asphalt)					
Item No.	Item Desc.	Units	Qty	Bid Price	Amount
204.0120	Milling	SY	9,477.4	\$1.28	\$12,131.04
460.5224	4 LT 58-28 S	TON	1,137.3	\$67.14	\$76,357.33
				Total	\$88,488.37

Average of Projects = \$85,650.84

WisDOT Funding = \$85,000

Moravia/42 Intersection



RE: Moravia Profile options

From: Becker, Nick
Sent: Thu, Sep 7, 2017 at 9:52 am
To: Bristol, Brent

Previous intersection from spring 2017.pdf (269.6 KB)

Moravia Profile Options.pdf (126 KB)

– Download all

Sorry, use these options....

From: Becker, Nick
Sent: Thursday, September 07, 2017 8:47 AM
To: 'Bristol, Brent'
Subject: Moravia Profile options

Hi Brent,

There are a couple different profiles in the attached. Here is a summary:

- Survey
 - Overall we do not have enough survey to determine a perfect earthwork count, however, the GIS data (county 2 foot contours) are within several feet of the survey and do not work well enough final design for the realignment of Moravia but gives us an overall idea of earthwork magnitude.
- Profiles
 - Overall I the cross walk distance is about the same for existing and realigned. Difference is angle with 42
 - Based on existing conditions, existing or realigned it our recommendation to use a 10% on Moravia. 8% or 6% creates too many impacts on the properties to the east of Moravia, unless the village is willing to add a retaining wall at a cost of \$20K to \$50K depending on alternative.
 - Overall the difference in cost between the two 10% alternatives is the earthwork or about \$10,000ish
- Crosswalk distance
 - Both Cross walk distances are about the same....or 40-45 feet depending on design vehicle

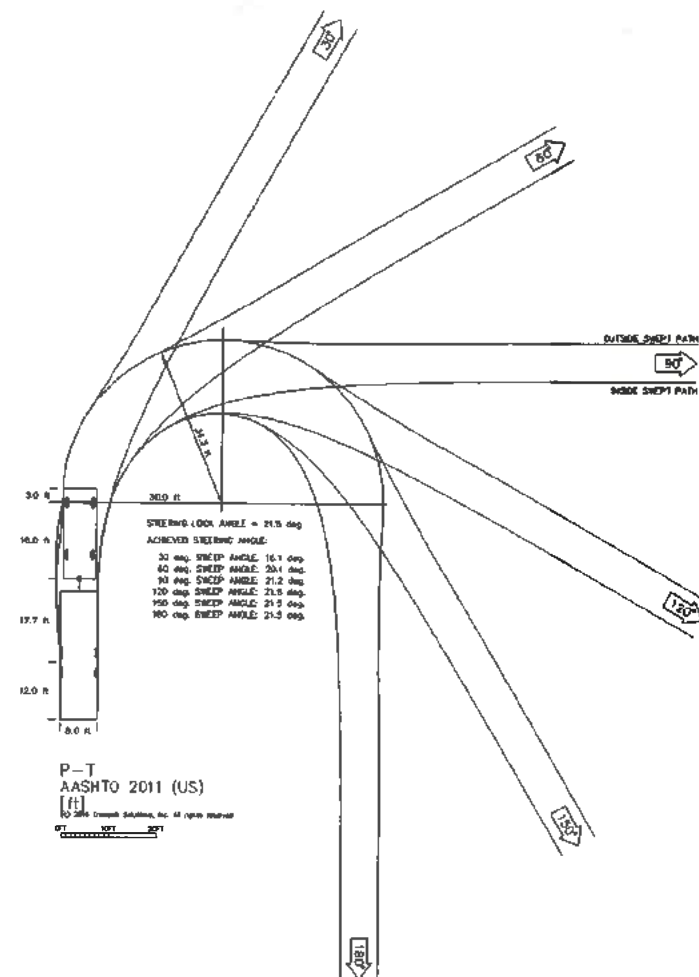
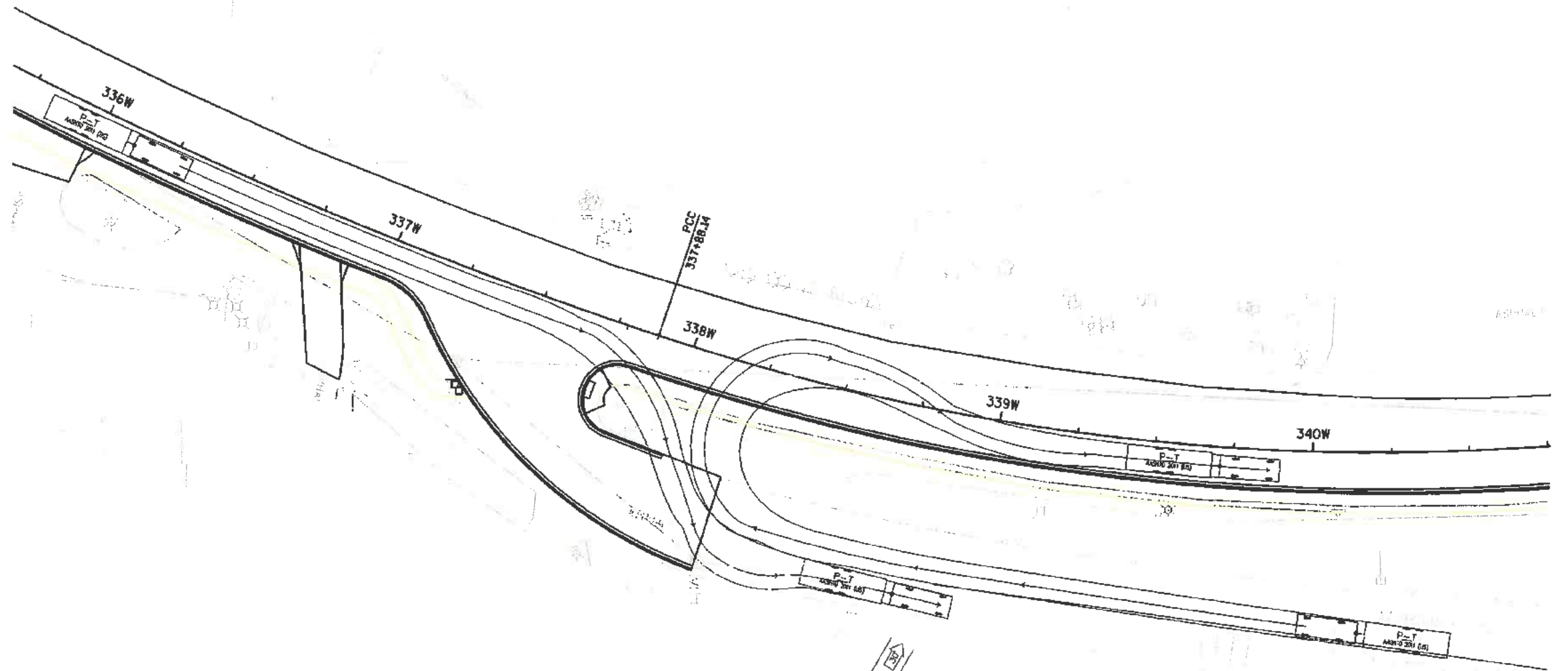
If you have any questions, please let me know.

Thanks!

Nick

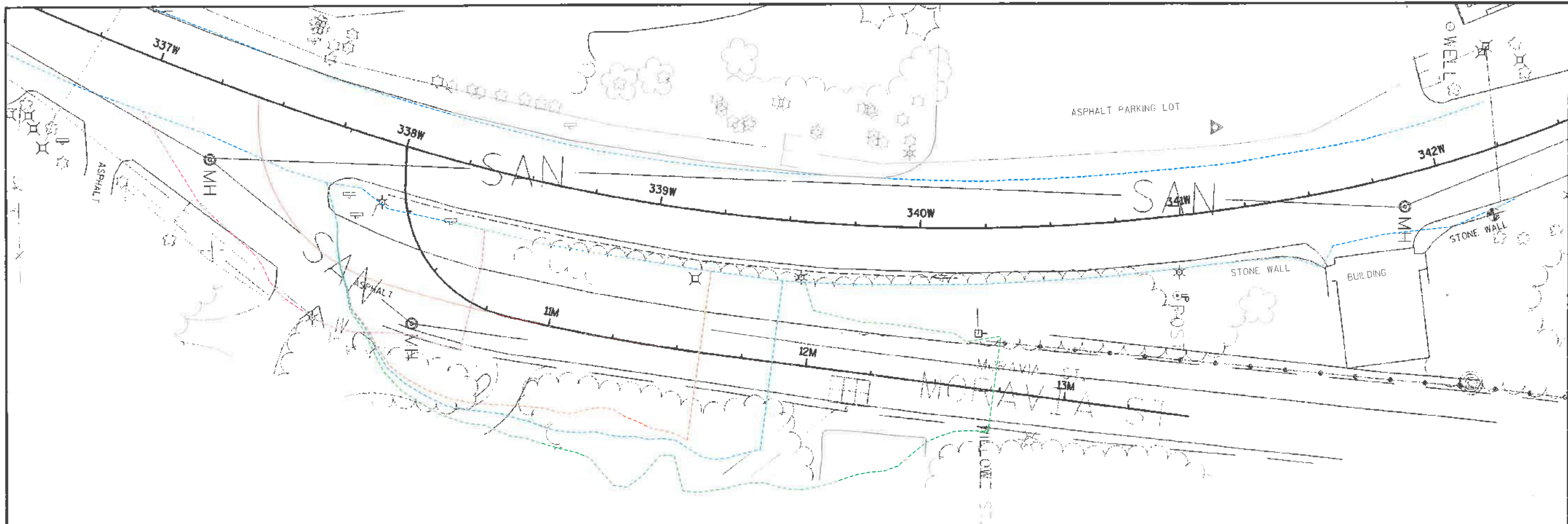
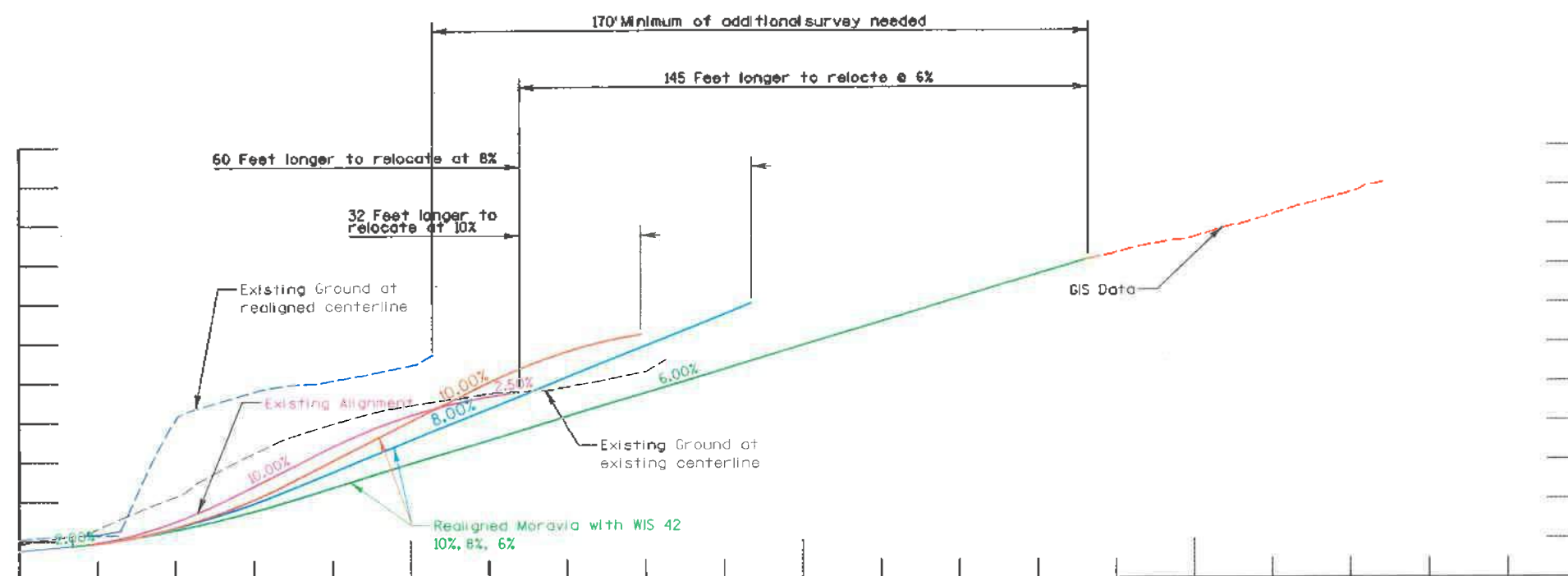
From: Becker, Nick
Sent: Wednesday, September 06, 2017 10:40 AM
To: 'Bristol, Brent'
Subject: RE: Moravia St Turning template

From: Becker, Nick
Sent: Wednesday, September 06, 2017 10:34 AM
To: 'Bristol, Brent'
Subject: RE: Moravia St Turning template



PI 340+70.65

P-T
AASHTO 2011 (US)
[ft]
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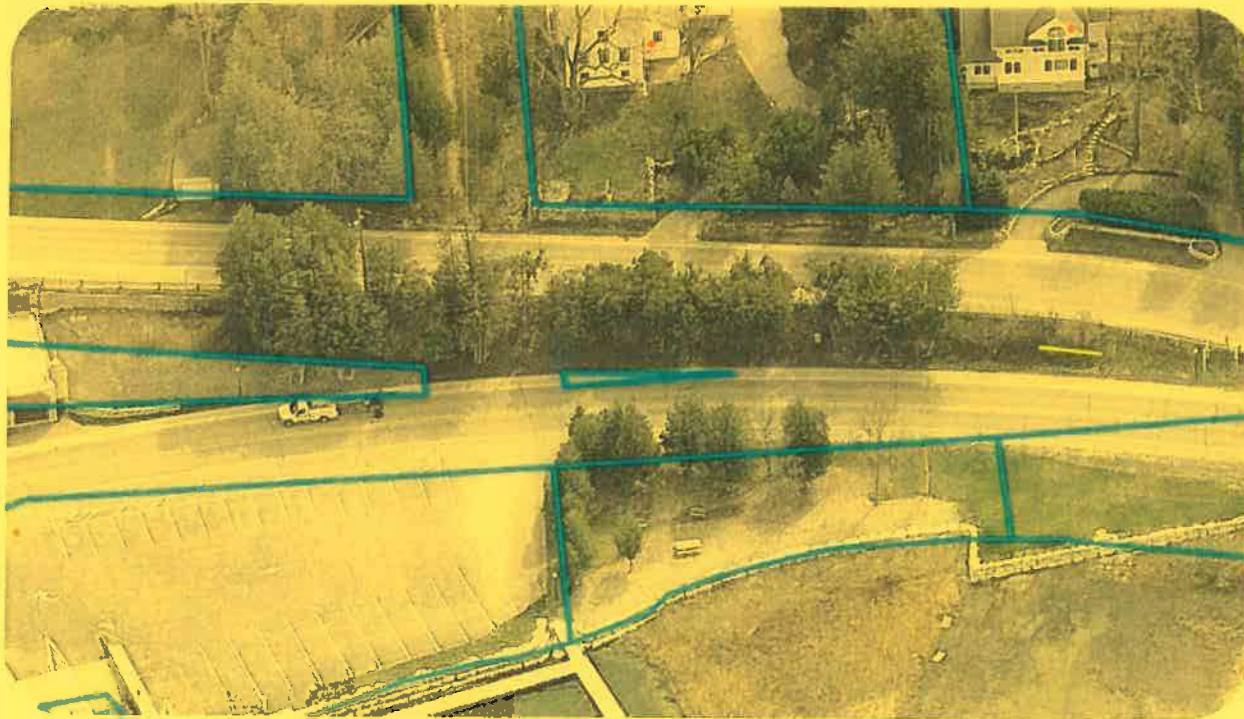
**Village of Ephraim
Water Street (WIS 42)
Ephraim, Wisconsin**

PROJECT START DATE (M / Y)	September 2017
PROJECT NO.	Ephraim
FILENAME	\$\backslash\$gahra, "hwgrndm")
SHEET NO.	
DRAWING NO.	

AECOM
1535 N RiverCenter Drive, Suite 214
Milwaukee, WI 53212
(414) 944-6090
www.aecom.com

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Moravia Point



Hockers Excavating, Inc
10673 County ZZ
Sister Bay, WI 54234

Estimate

Name/Address
Village of Ephraim 10005 Norway P. O. Box 138 Ephraim, WI 54211

Date	Estimate No.	Project
09/03/17	3998	Retaining Wall...

Item	Description	Quantity	Cost	Total
	RUBBLE - BRUSH REMOVAL - CLEAN TO ROCK LEDGE			
Site Labor	Hr. Sawing	24	60.00	1,440.00
312 Backhoe	Hr.	40	125.00	5,000.00
305.5 Backhoe	Hr.	16	100.00	1,600.00
259 Cat	Hr.	8	100.00	800.00
Trucking	Hr.	92	95.00	8,740.00
Gravel	Yd.	148	16.00	2,368.00
	JOB WILL INCLUDE Remove all trees/brush Remove estimated 900 yards rock rubble Expose bluff line Determine extent of rock wall and estimate			
Total				\$19,948.00

Estimate

Hockers Excavating, Inc
10673 County ZZ
Sister Bay, WI 54234

Name/Address
Village of Ephraim 10005 Norway P. O. Box 138 Ephraim, WI 54211

Date	Estimate No.	Project
06/16/17	3953	Retaining Wall

Stone wall like Hillside

Item	Description	Quantity	Cost	Total
	CLEAR ALL TREES FROM MORAVIAN ST. TO HWY 42/RETAINING WALL ALONG HWY 42 SOUTH OF FIRE STATION 5' TALL			
Rocks	Per Ton	328	75.00	24,600.00
312 Backhoe	Hr.	60	125.00	7,500.00
Site Labor	Hr.	80	55.00	4,400.00
Trucking	Hr.	64	95.00	6,080.00
Gravel	Yd.	126	16.00	2,016.00
Breaker Run	Yd.	90	15.00	1,350.00
C. Hockers 421 - 0264				
Total				\$45,946.00

Hockers Concrete, Inc.

Paul Hockers (920) 421-0444 P.O. Box 896 Sister Bay, Wi. 54234

Date: 9/7/2017

If the payment is not received 30 days from the date the total will increase 1% a month.

Name:	Village of Ephraim
Address:	
City, State, Zip:	

Ship To:	
Address:	
City, State, Zip:	

Item #		Quantity		
1	Footings,walls, re-rod mat,stone ledge			\$97,500.00
2	Stone veneer, 6" thick,w/stone cap			\$95,000.00
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40		Total		\$192,500.00

August 14, 2017

SHUMWAY MASONRY
1599 Ranch Lane
Ellison Bay, WI 54210
(920)854-4937

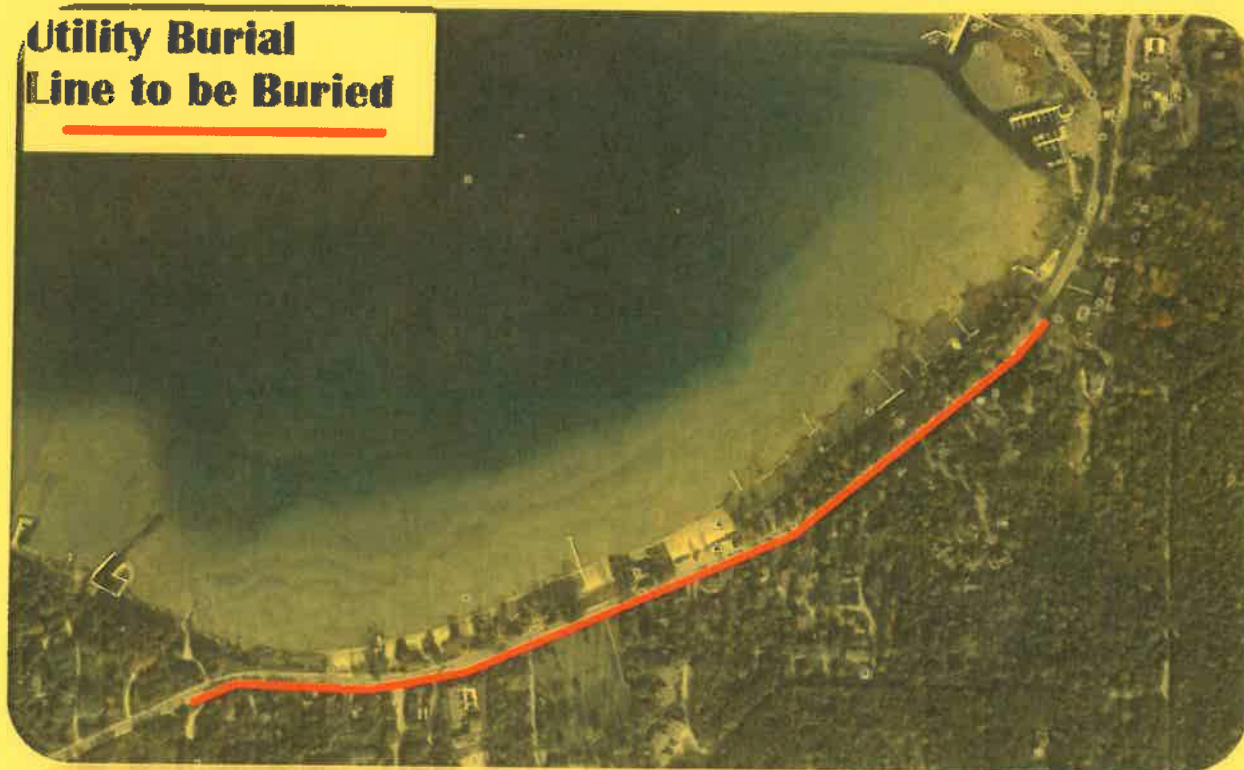
Village of Ephraim-Estimate

6 inch fieldstone veneer on concrete wall, roughly 4 feet high and 385 feet long, with stone top. The cost will be roughly \$45 per square foot.

Thank you for your consideration in this job.

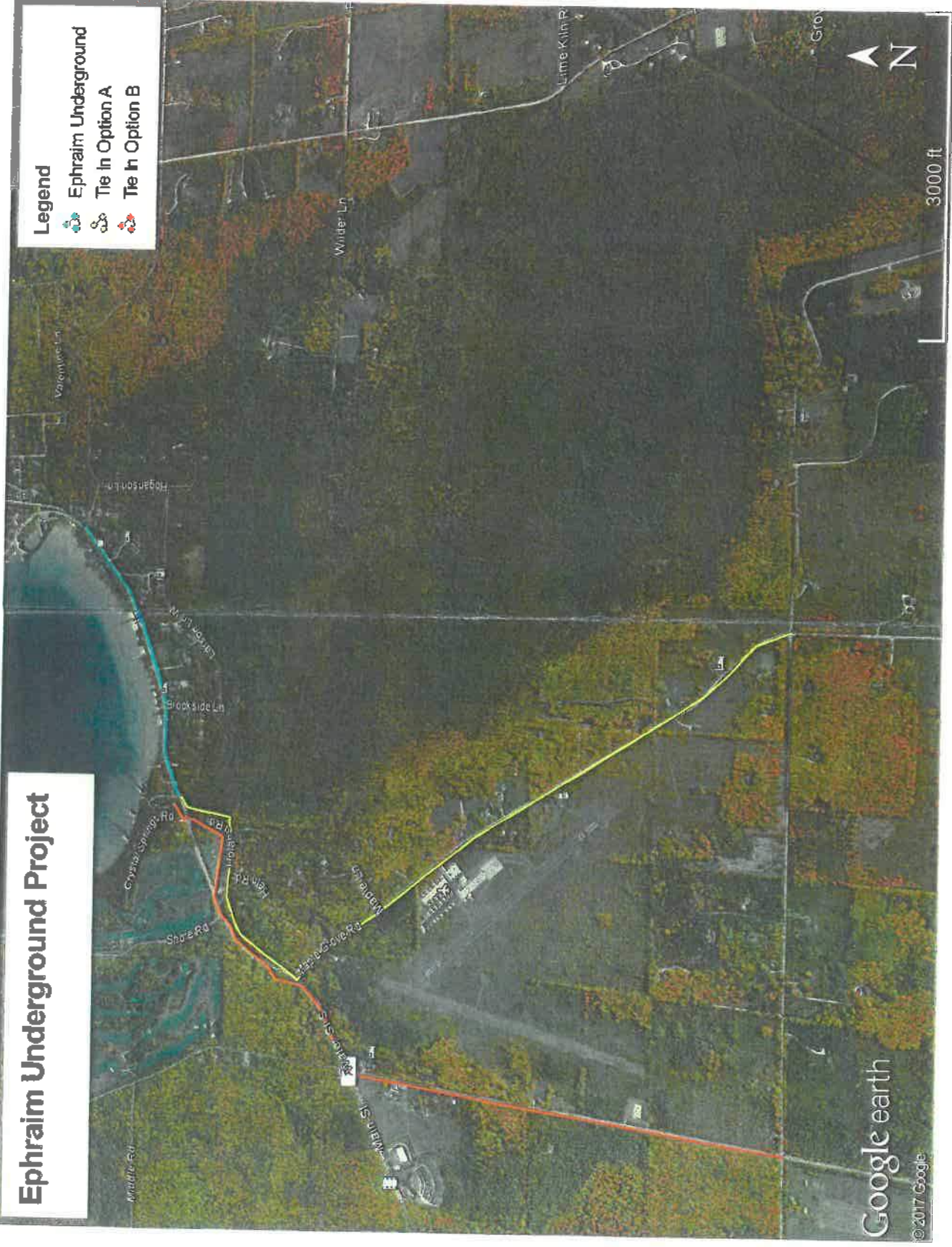
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\$69,000

Utility Burial



Ephraim Underground Project

- Legend
- Ephraim Underground
 - Tie In Option A
 - Tie In Option B



Hwy 42 wetlands to German Rd

Jon Joanis 715 923-5533

Jeff Pelicheck, Dave Welch & AL engineers

Bury underground utilities 12 - 1.5 million

Bury Frontier

Bury Charter

" Streetlights

\$ 175,000

\$ 211,517

IF Trenching is not rock will credit
back to Ephraim

Homeowner

a) 100 Feet \$1100 \$11.15/foot after 100 Feet

b) Responsible for meter & connection

Frontier Ryan Osness 920-246-3530

Charter Bruce Henry 920 263 0074

Mike Action Electric worked with
property owners

James Peterman

James Peterman - search your mailbox

Ephraim Estimates (2)

Hi Jim,

This is what I came up with for our estimates. Assuming we'll be going joint with WPS, but if we were to go solo, it will be considerably more. Sorry for the delay for this it has been a little crazy this year. Thanks for your patience!

Moravia St: \$9000.00

Hwy 42 211,517



The contents of this e-mail message and any attachments are intended solely for the addressee(s) and may contain confidential and/or legally privileged information. If you are not the intended recipient of this message or if this message has been addressed to you in error, please immediately alert the sender by reply e-mail and then delete this message and any attachments. If you are not the intended recipient, you are notified that any use, dissemination, distribution, copying, or storage of this message or any attachment is strictly prohibited.

Reply Reply to All Forward More

Hi Jim,

This is what I came up with for our estimates. Assuming we'll be going joint with WPS, but if we were to go solo, it will be considerably more. Sorry for the delay for this it has been a little crazy this year. Thanks for your patience!

Moravia St:

Hwy 42

Again, thanks for your patience! Have a great day.

Bruce



The contents of this e-mail message and

Midsize car. Family-size fun.
The 2017 Volkswagen
Passat
Continue to explore | Create MSRP
Starting at \$22,440
Excludes destination charge

Ryan Osness
Construction Detailer
920-893-7455 (office)
920-246-3530 (cell)

 Reply Reply to All Forward More

1. Name	2. Address	3. City	4. State	5. Zip
6. Phone	7. E-mail	8. Fax	9. Telex	10. Cable

com/neo/launch?.partner=sbc&.rand=3p55177cp5t

Phone 8
for 10'

00000000

KEY POINTS

Legal >

Streetlights



Ephraim Lighting

From: cnelson@ephraim-wisconsin.com

Sent: Tue, Sep 5, 2017 at 3:13 pm

To: bbristol@ephraim-wisconsin.com, brasmusson@ephraim-wisconsin.com

Cc: docmikefly@charter.net

Brad and Brent -

Below is a copy of the email I received from McMahon.

Using his rough estimate and our current count of 120 lights the cost is around \$600,000
I realize this is simply a guestimate, but I thought it would be helpful when we are
talking numbers next week at the board meeting.

Cindy:

Sorry, I've been out of town for a stretch. What are you thinking in terms of
additional information?

As to cost, a quick estimate might be something like \$5000 per new pole. (For the
light, the pole, and installation.) But that's just a rough number.

Thank you,

Scott R. Mahnke, P.E.

Sr. Electrical Engineer, Associate

The McMAHON Way...Values. Culture. Relationships.

1445 McMAHON DRIVE NEENAH, WI 54956
920.751.4200 EXT 265 MCMGRP.COM

FW: RE: Ephraim Lighting

From: cnelson@ephraim-wisconsin.com
Sent: Tue, Aug 15, 2017 at 9:00 am
To: bbristol@ephraim-wisconsin.com, brasmusson@ephraim-wisconsin.com

image001.jpg (6.1 KB) image002.jpg (32.5 KB) image003.jpg (15.6 KB) image004.jpg (7.1 KB)
image005.jpg (35.4 KB) image006.jpg (74.5 KB) image007.jpg (45.8 KB) image008.jpg (4.3 KB)
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image013.png (4.4 KB) image014.jpg (22.2 KB) ANP_Specification_Sheet_LA774_LED.PDF (776.8 KB)
ANP_Specification_Sheet_LA601.pdf (690.4 KB) ANP_Specification_Sheet_CB0101.pdf (783.6 KB)
ANP_Specification_Sheet_BVF3002-H.PDF (1.4 MB) ANP_Specification_Sheet_BVA07-PDLC.PDF (1.7 MB) — Download all

-----Original Message-----
From: "Scott Mahnke" <SMahnke@mcmgrp.com>
Sent: Monday, August 14, 2017 3:50pm
To: "cnelson@ephraim-wisconsin.com" <cnelson@ephraim-wisconsin.com>
Cc: "Mike Simon" <MSimon@mcmgrp.com>, "Tom Kispert" <TKispert@mcmgrp.com>
Subject: RE: Ephraim Lighting

Cindy:

We regretfully are not able to pull very much together within the time frame for your meeting tomorrow. We can offer this:

There appear to be about 120 or so existing light poles in the Village (including those on utility poles, at the outskirts of the Village), just by our rough count of the yellow pins.

- There are so many ways to go with street lighting.
- Below are just some examples.
 - Attached are just a few example data sheets.
 - Many different looks, styles, colors available.
 - These days, LED is preferred. Still a cost premium, but it's the way the industry is going.

The fixtures that are shown here, and attached, are represented by the same rep firm that provided street lights for both Egg Harbor, and Fish Creek.

- Here are some typical prices, for these lights:
- LA774 LED in the 46 watt size\$2200.00
 - LA601 LED in the 24 watt size \$900.00

- o BVF3002-H LED in the 37 watt size.....\$1600.00
- o BVA07-PDLC (not available in LED).....\$1450.00

Accessories:

- o CB101-16-foot pole, Standard Paint color\$1600.00
- o Banner arms for above\$300.00
- o Ladder Rests for above \$120.00
- o Flag pole holder for above\$120.00

Those are not competitive prices, so a budget cost per pole is something in the range of \$2500 - \$3000, plus installation (concrete base and wiring).

Regarding that this is a State Highway, the State will accept pretty much whatever you want to do, provided that the design meets the State minimum photometric requirements. That would need to be proven with computer-generated lighting calculations.

Within the Village, you have existing post-top lights, on short poles. But on the outskirts of the Village, there are "cobra head" lights, at the top of utility poles. I don't know if it is desired to replace those cobra head fixtures with new LED, or not. (Are those cobra head fixtures owned by the Village?) If it is desired to replace those too, those can actually be directly replaced with a new LED head. One State-approved fixture for that is the Leotek LED street light. (I'm looking for that data sheet, and will send it subsequently.)

Just a few examples, of decorative options:

[cid:image020.jpg@01D314DB.67C7B150] [cid:image021.jpg@01D314DB.67C7B150]
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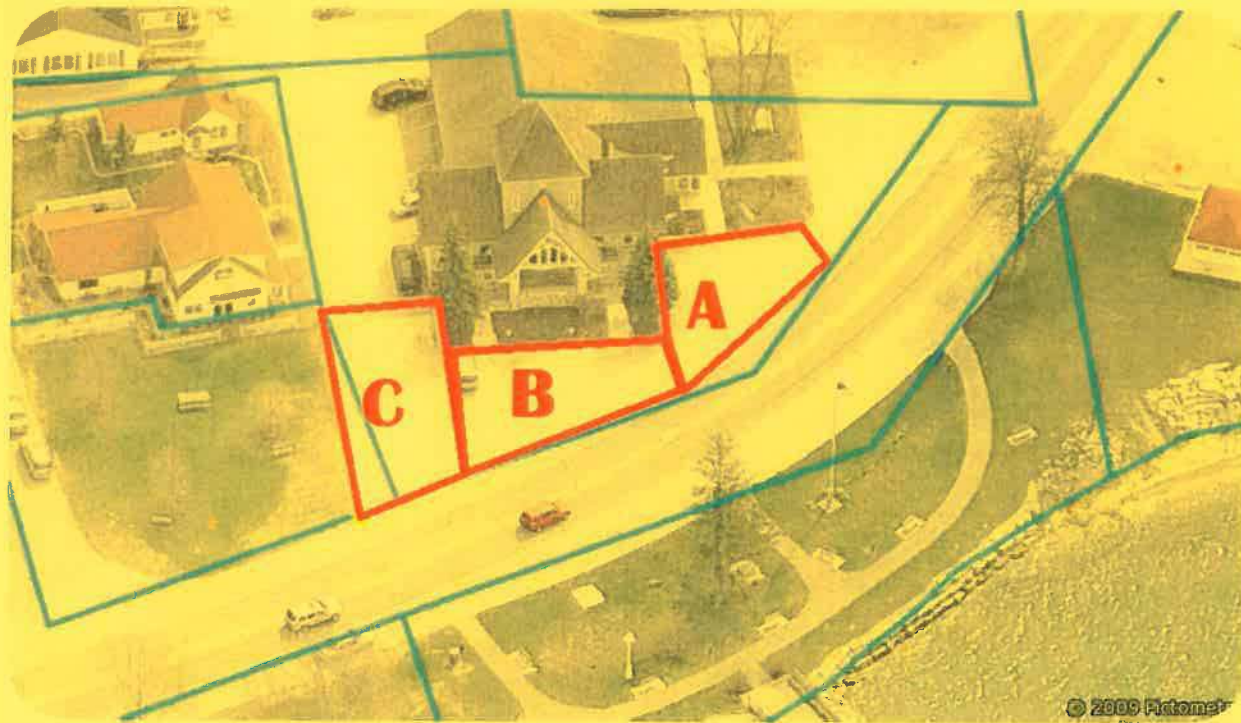
Thank you,

Scott R. Mahnke, P.E.
Sr. Electrical Engineer; Associate
[Description: Description: Description: 105-mcm logo for email-logo only]
The McMAHON Way..Values. Culture. Relationships.

McMahon Associates, Inc.
1445 McMAHON DRIVE NEENAH, WI 54956
920.751.4200 EXT 265 MCMGRP.COM<<http://www.mcmgrp.com/>>

[Description: Description: Description: Description: Facebook-Logo-for email signature]
<<https://www.facebook.com/McMahonFA>> [Description: Description: Description: Description: LinkedIn
logo for email signature] <<https://www.linkedin.com/company/mcmahon-engineers-architects>>
[Description: Description: Description: Description: twitter logo for email signature]
<<https://twitter.com/McMahonGrp>>

Village Hall Greenspace



Estimate

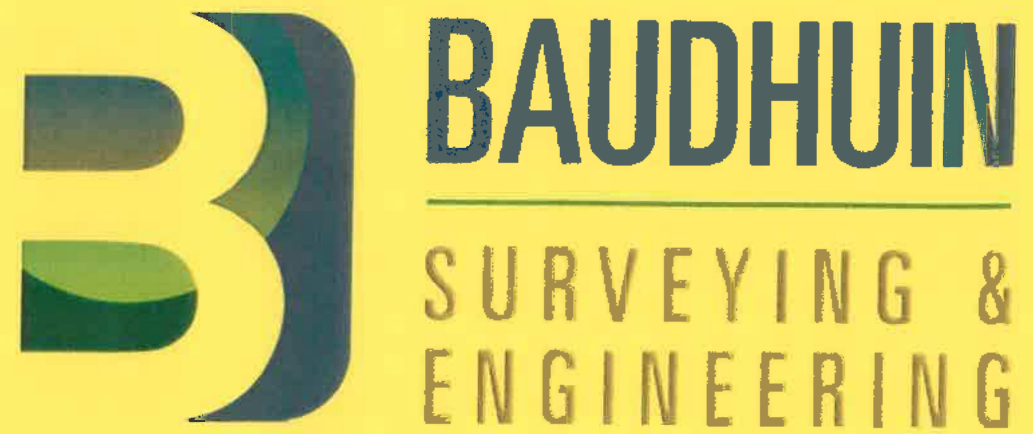
Hockers Excavating, Inc
10673 County ZZ
Sister Bay, WI 54234

Name/Address
Village of Ephraim 10005 Norway P. O. Box 138 Ephraim, WI 54211

Date	Estimate No.	Project
10/04/17	4010	Black Top Re...

Item	Description	Quantity	Cost	Total
Miscellaneous	SECTION A - SOUTH BLACKTOP REMOVAL Blacktop Removal (Machine Time, Labor, and Trucking)		450.00	450.00
Screened Top Soil	Yd.	28	30.00	840.00
259 Cat	Hr.	2	100.00	200.00
Site Labor	Hr.	2	55.00	110.00
Miscellaneous	SECTION B - CENTER BLACKTOP REMOVAL Blacktop Removal (Machine Time, Labor, and Trucking)		540.00	540.00
Screened Top Soil	Yd.	34	30.00	1,020.00
259 Cat	Hr.	2.5	100.00	250.00
Site Labor	Hr.	2.5	55.00	137.50
Miscellaneous	SECTION C - NORTH BLACKTOP REMOVAL Blacktop Removal (Machine Time, Labor, and Trucking)		720.00	720.00
Screened Top Soil	Yd.	44	30.00	1,320.00
259 Cat	Hr.	3	100.00	300.00
Site Labor	Hr.	3	55.00	165.00
	*Grass Seed And Labor To Spread/Rake Seed Not Included In This Estimate			
Total				\$6,052.50

Stormwater



Cost Estimates

From: Steve Parent

Sent: Fri, Oct 6, 2017 at 2:48 pm

To: Brad Rasmusson (brasmusson@ephraim-wisconsin.com), bbristol@ephraim-wisconsin.com

SKMBT_C284e17100614000.pdf (188.4 KB)

Attached are rough costs for most of the recommendations I presented Wednesday. Included are:

- Full Reconstruction Area (Beach to Fire Station) – I don't know if Ayres has piping included in their costs but this covers what was presented to the sub-committee.
- STH 42 (Outside of Reconstruction Area) – This covers the area from the Wetlands Preserve to the Beach and from the Fire Station to Anderson Lane.
- German Road – This is just the additional storm sewer, inlet and asphalt patch for the top of the hill. The intersection upgrades are included in the Reconstruct Area.
- Cherry Street – This is the area outside of the STH ROW and includes the trench drain, stubs and piping over to the rain garden.
- Private Property & Easements – This would be the piping run from the STH to the wetlands, along the Shorewood Village lot line with a possible cost sharing with the property owners.

I did not include CTH Q or Moravia Street as those seem to be less of a priority. Let me know if you have any questions or need additional information.

Thanks.

Steve

Steven J. Parent, P.E.
Baudhuin Incorporated
312 North Fifth Avenue
PO Box 105
Sturgeon Bay, WI 54235

Phone (920) 743-8211
Fax (920) 743-8217

Village of Ephraim

Full Reconstruction Area Beach to Fire Station

<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
Remove Asphalt	1,280 SY	\$6.00	\$7,680.00
Remove 15" CMP	40 LF	\$20.00	\$800.00
Remove 24" CMP	80 LF	\$23.00	\$1,840.00
Remove Catch Basin	1 EA	\$400.00	\$400.00
8" Stub	20 LF	\$36.00	\$720.00
15" Concrete Pipe	125 LF	\$60.00	\$7,500.00
18" Concrete Pipe	280 LF	\$70.00	\$19,600.00
24" Concrete Pipe	705 LF	\$90.00	\$63,450.00
27" Concrete Pipe	40 LF	\$110.00	\$4,400.00
36" Concrete Pipe	65 LF	\$140.00	\$9,100.00
27" Endwall	1 EA	\$500.00	\$500.00
36" Endwall	1 EA	\$900.00	\$900.00
Pipe Connections	3 EA	\$400.00	\$1,200.00
Manhole	4 EA	\$2,500.00	\$10,000.00
Catch Basins	4 EA	\$2,000.00	\$8,000.00
Patch Asphalt	1,280 SY	\$18.00	\$23,040.00
Restoration	1 LS	\$10,000.00	\$10,000.00
Subtotal			\$169,130.00
20% Construction & Engineering Contingency			\$33,826.00
Estimated Total Cost			\$202,956.00

STH 42 (Outside of Reconstruction Area)

<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
Remove Asphalt	110 SY	\$6.00	\$660.00
Remove 27" CMP	90 LF	\$24.00	\$2,160.00
15" Concrete Pipe	60 LF	\$60.00	\$3,600.00
27" Concrete Pipe	90 LF	\$110.00	\$9,900.00
27" Endwall	1 EA	\$500.00	\$500.00
Pipe Connections	3 EA	\$400.00	\$1,200.00
Manhole	3 EA	\$2,500.00	\$7,500.00
Catch Basins	5 EA	\$2,000.00	\$10,000.00
Patch Asphalt	110 SY	\$18.00	\$1,980.00
Restoration	1 LS	\$5,000.00	\$5,000.00
Subtotal			\$42,500.00
20% Construction & Engineering Contingency			\$8,500.00
Estimated Total Cost			\$51,000.00

German Road (Outside of Reconstruction Area)

<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
Remove Asphalt	330 SY	\$6.00	\$1,980.00
18" Concrete Pipe	130 LF	\$70.00	\$9,100.00
Pipe Connections	1 EA	\$400.00	\$400.00
Catch Basins	1 EA	\$2,000.00	\$2,000.00
Patch Asphalt	330 SY	\$18.00	\$5,940.00
Restoration	1 LS	\$1,000.00	\$1,000.00
Subtotal			\$20,420.00
20% Construction & Engineering Contingency			\$4,084.00
Estimated Total Cost			\$24,504.00

Cherry Street (Outside of STH 42 ROW)

<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
Remove Asphalt	120 SY	\$6.00	\$720.00
10" PVC	415 LF	\$36.00	\$14,940.00
4" Stub	20 LF	\$30.00	\$600.00
Trench Drain	20 LF	\$175.00	\$3,500.00
Pipe Connections	1 EA	\$400.00	\$400.00
Manhole	1 EA	\$2,500.00	\$2,500.00
Catch Basins	2 EA	\$2,000.00	\$4,000.00
Patch Asphalt	120 SY	\$18.00	\$2,160.00
Restoration	1 LS	\$1,000.00	\$1,000.00
Subtotal			\$29,820.00
20% Construction & Engineering Contingency			\$5,964.00
Estimated Total Cost			\$35,784.00

Private Property & Easements (Outside of ROW)

<u>Description</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total Price</u>
Remove Trees	1 LS	\$5,000.00	\$5,000.00
18" Concrete Pipe	210 LF	\$70.00	\$14,700.00
18" Endwall	1 EA	\$400.00	\$400.00
Pipe Connections	1 EA	\$400.00	\$400.00
Restoration	1 LS	\$5,000.00	\$5,000.00
Subtotal			\$25,500.00
20% Construction & Engineering Contingency			\$5,100.00
Estimated Total Cost			\$30,600.00

Drainage - Area 1

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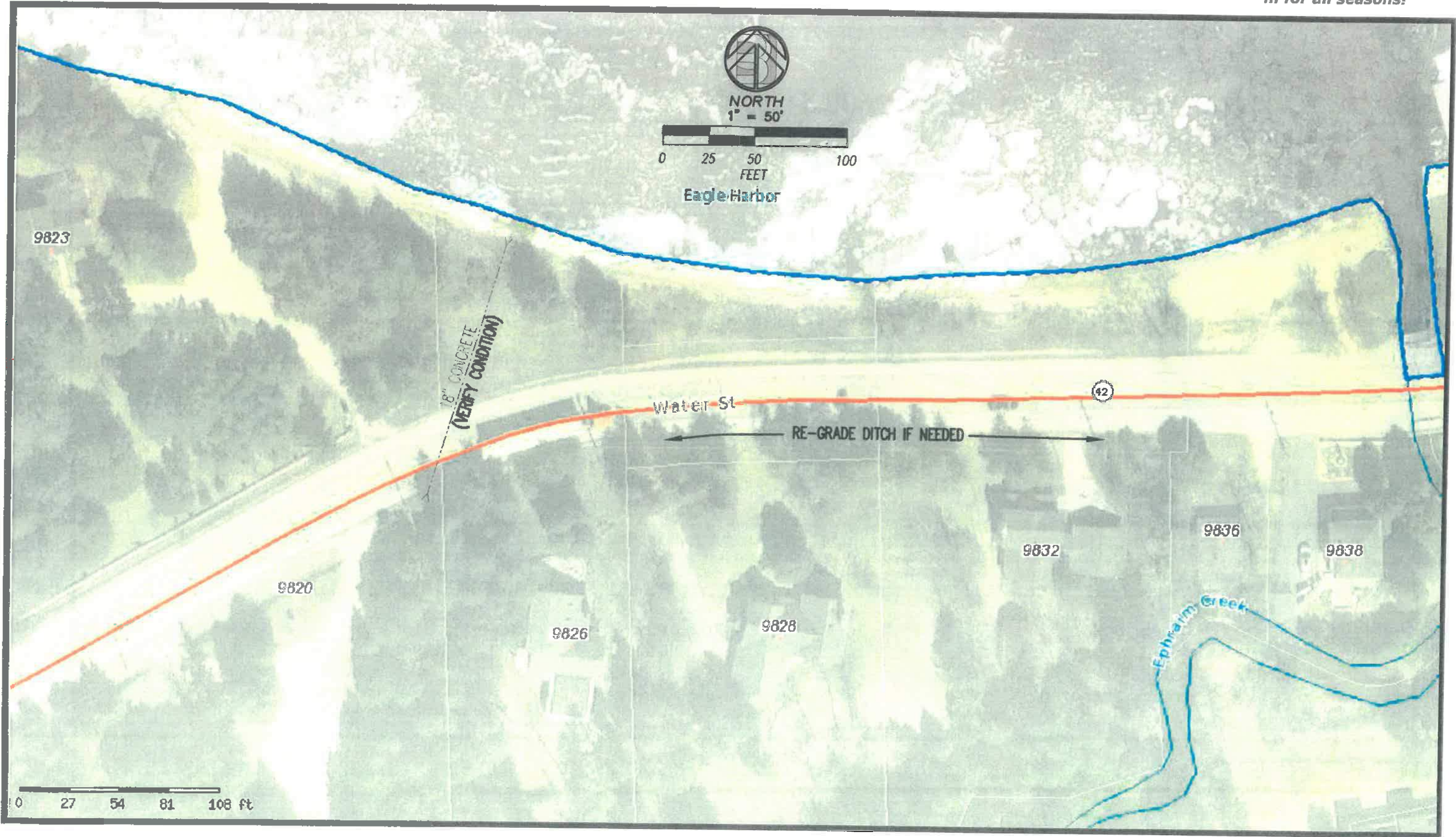
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JOB NO. 23106
10-2-17

CAD: \\DH\LDWG\EPHRAIM STORM 23106\DWG\23106-B
SHEET 1 OF 1



Drainage - Area 2

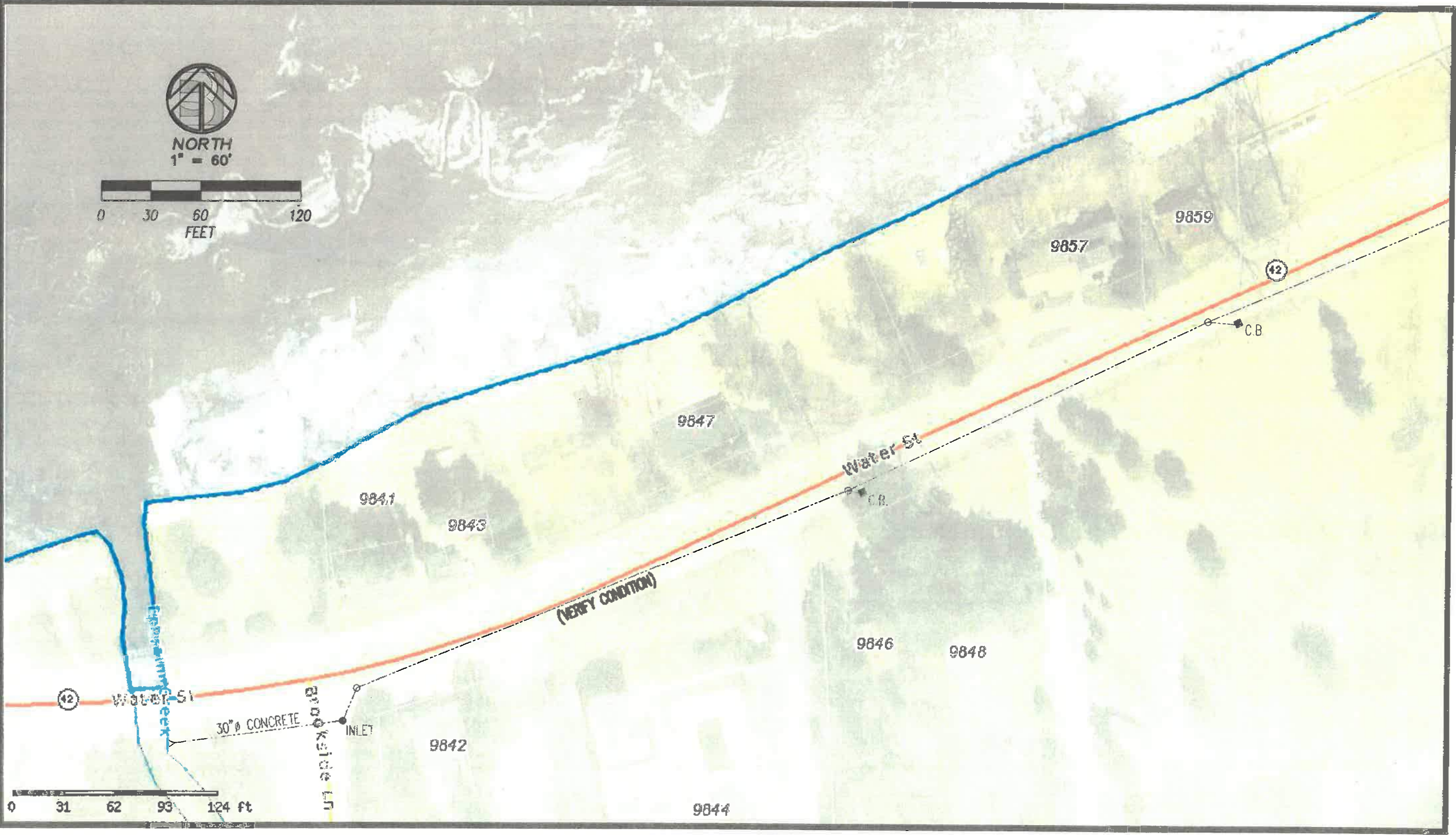
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Drainage - Area 3

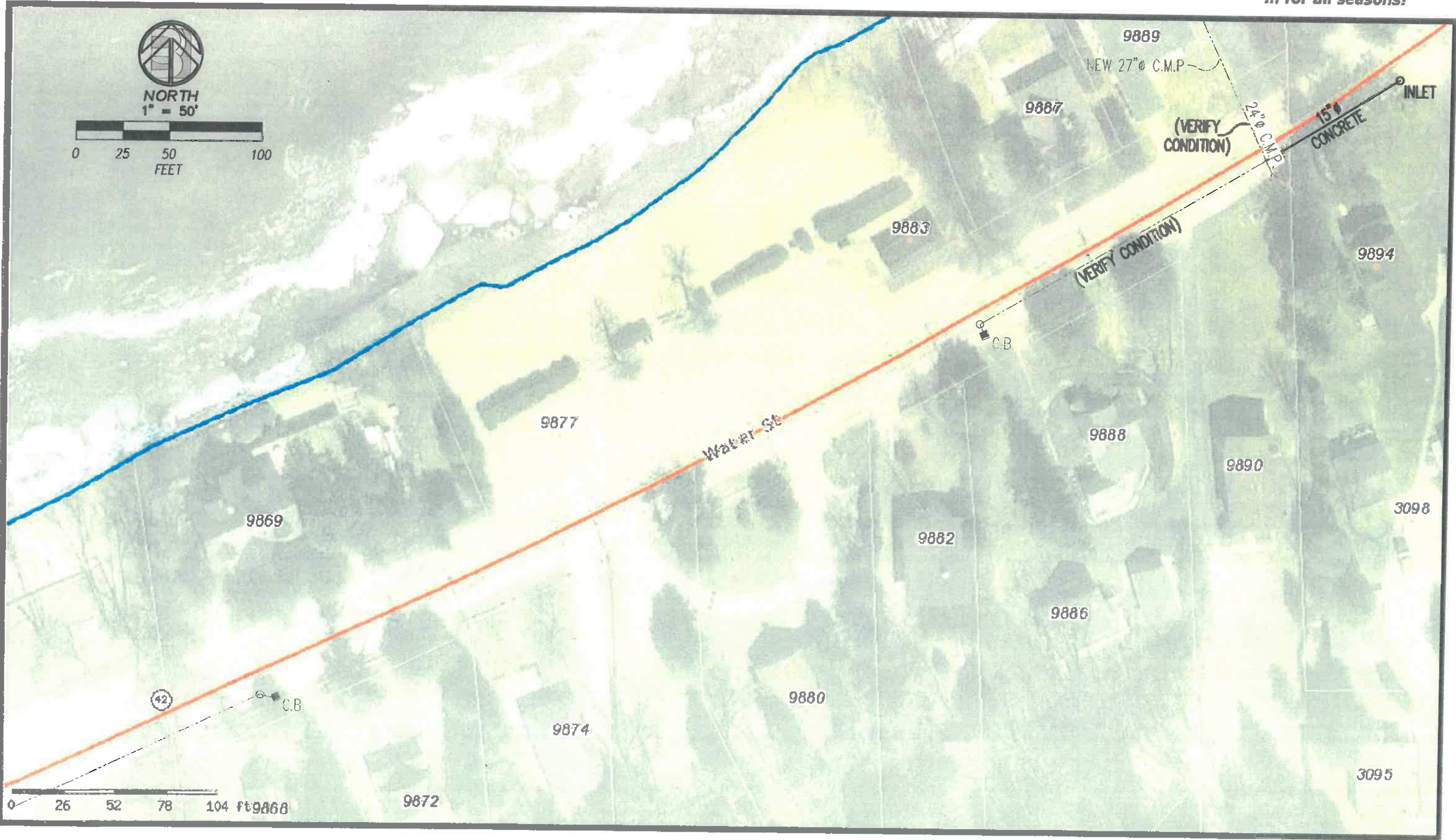
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Drainage - Area 4

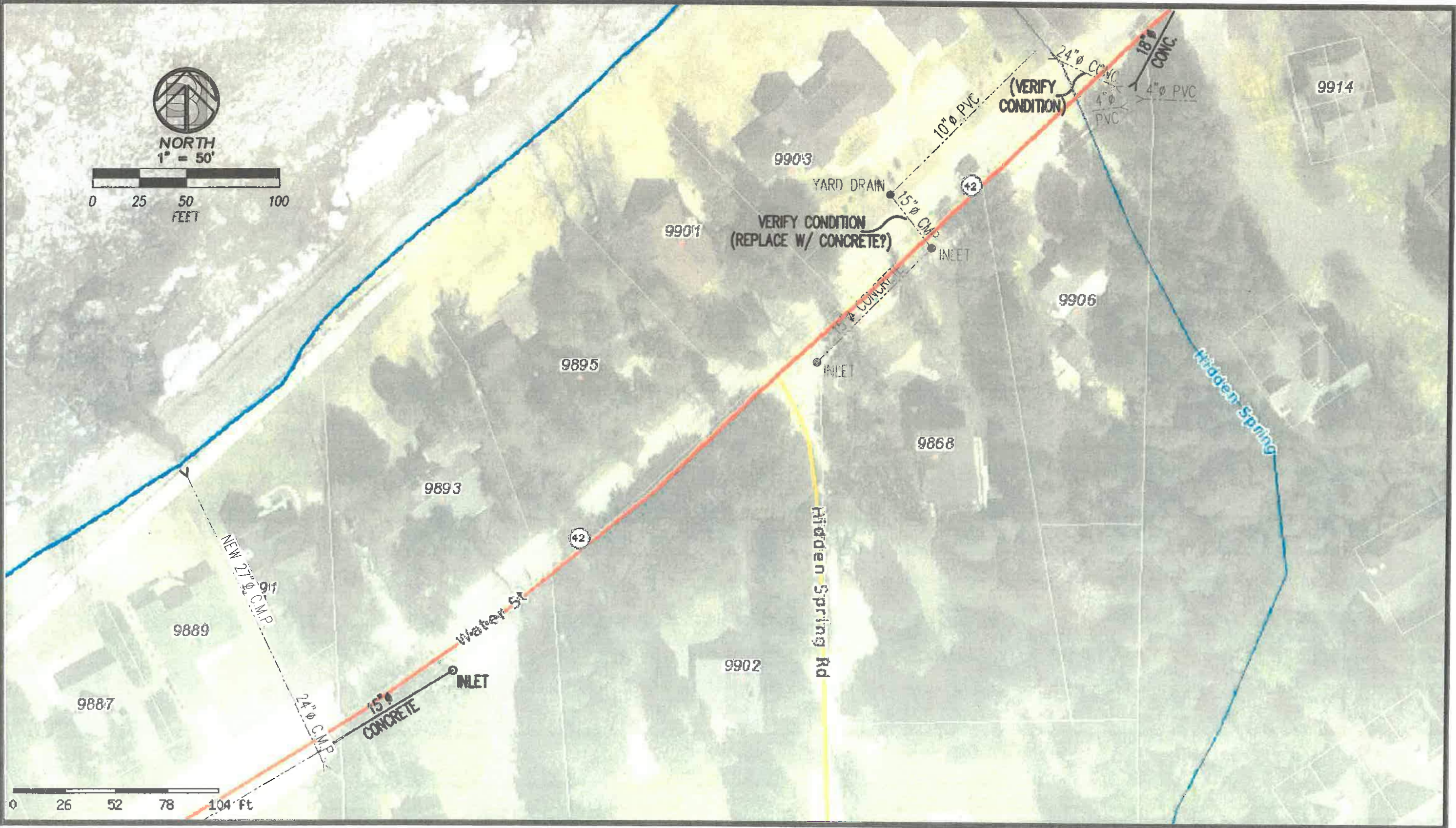
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Drainage - Area 5

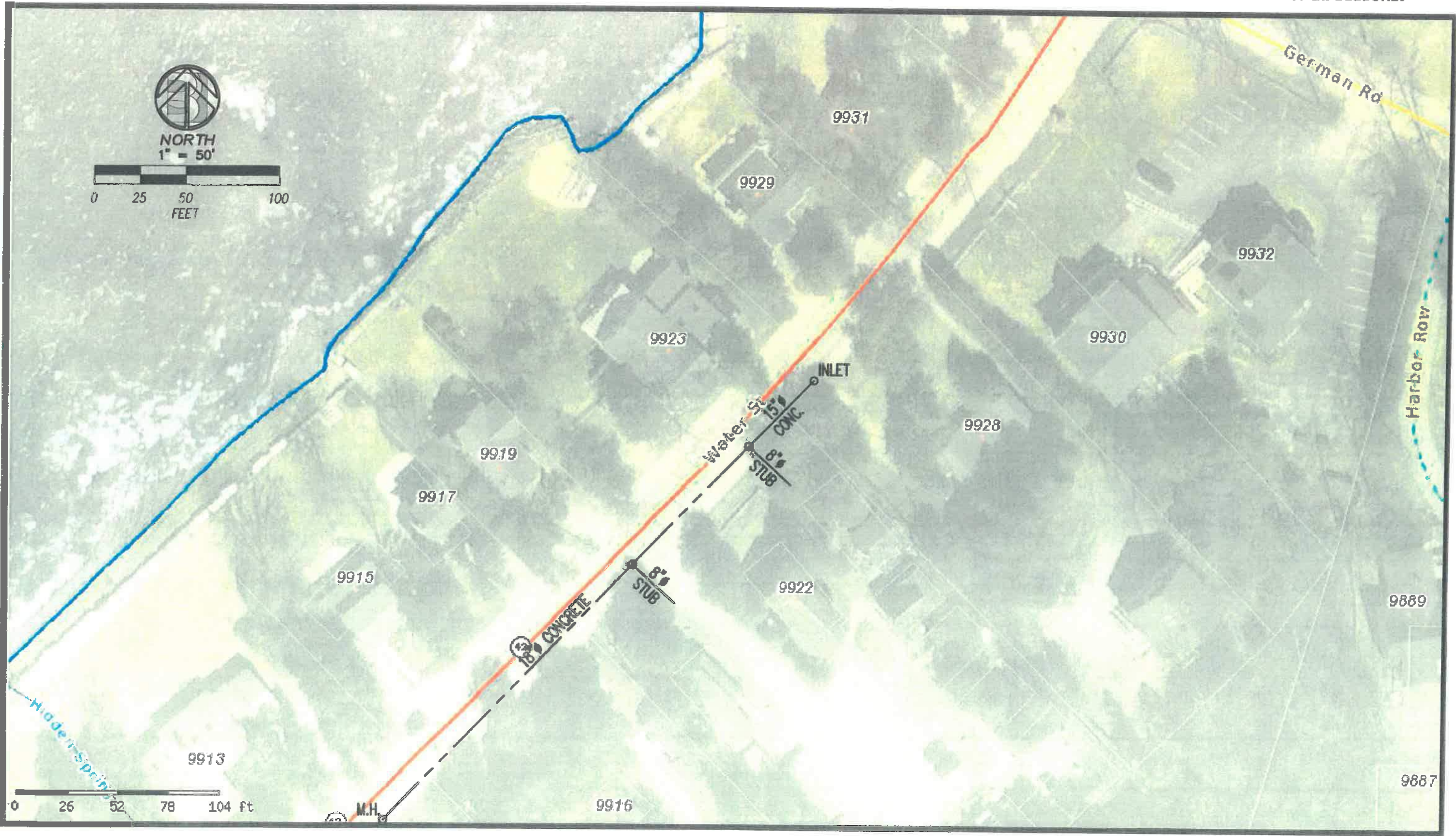
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Drainage - Area 6

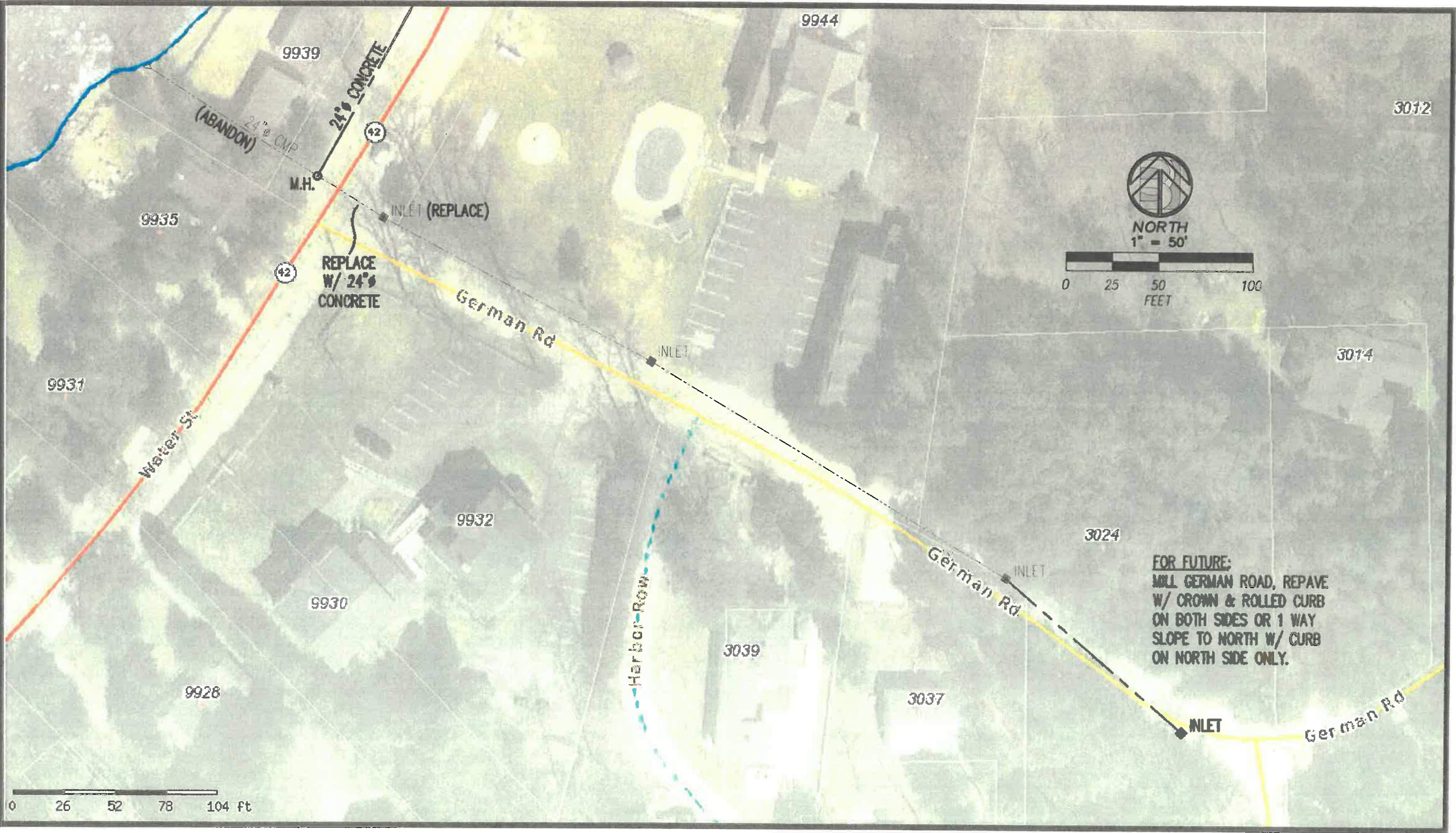
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Drainage - Area 7

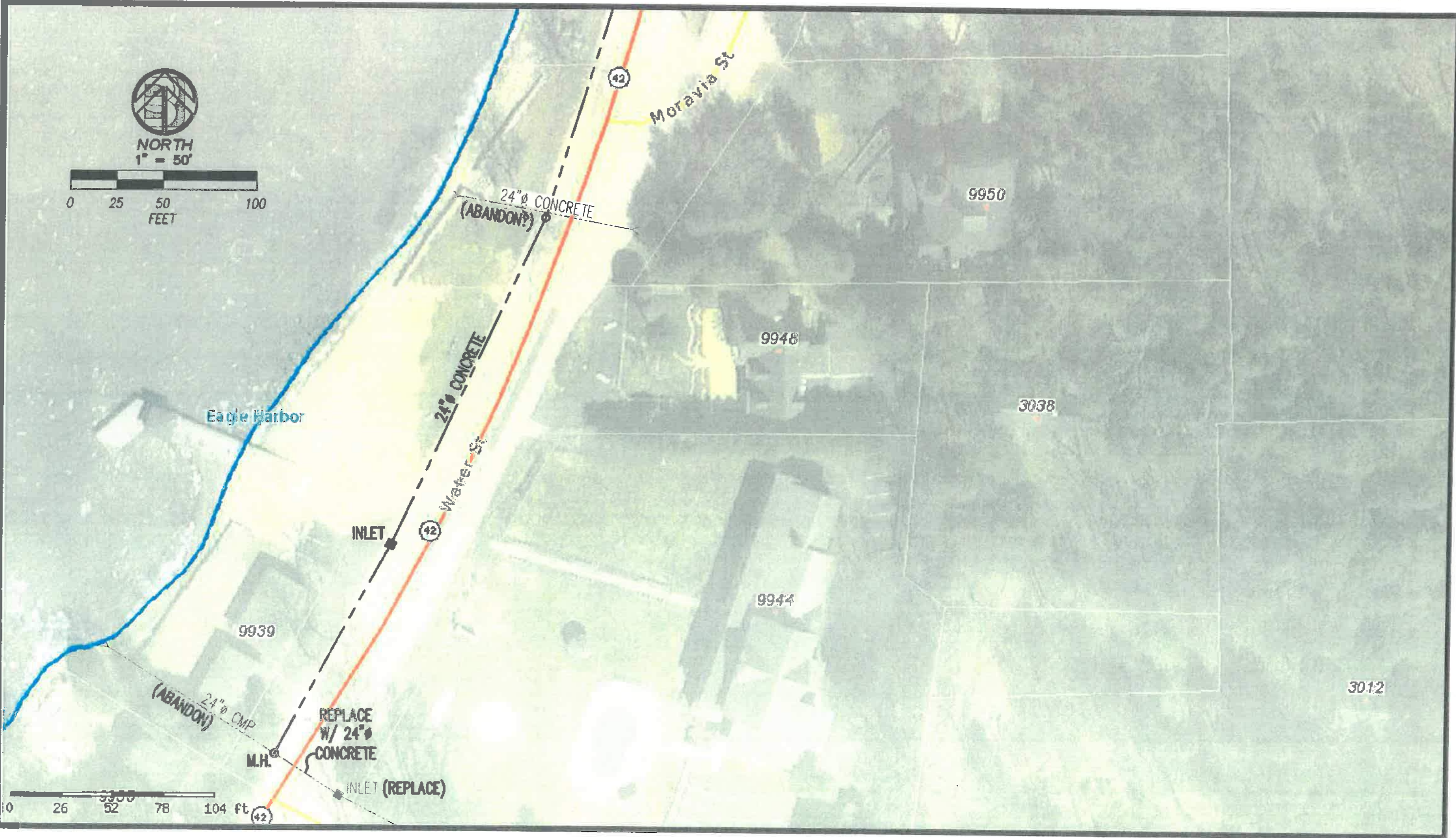
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Drainage - Area 8

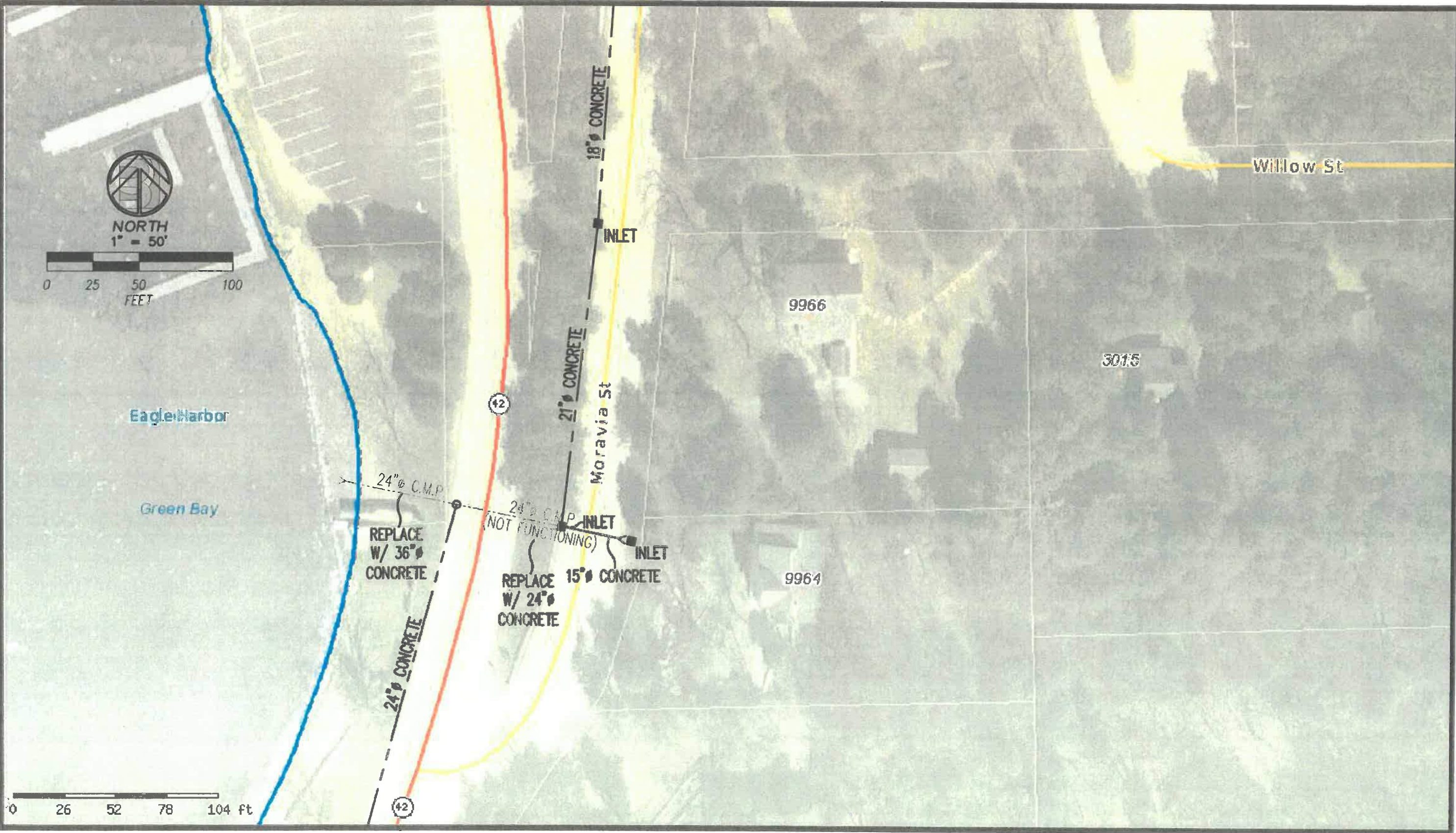
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Drainage - Area 9

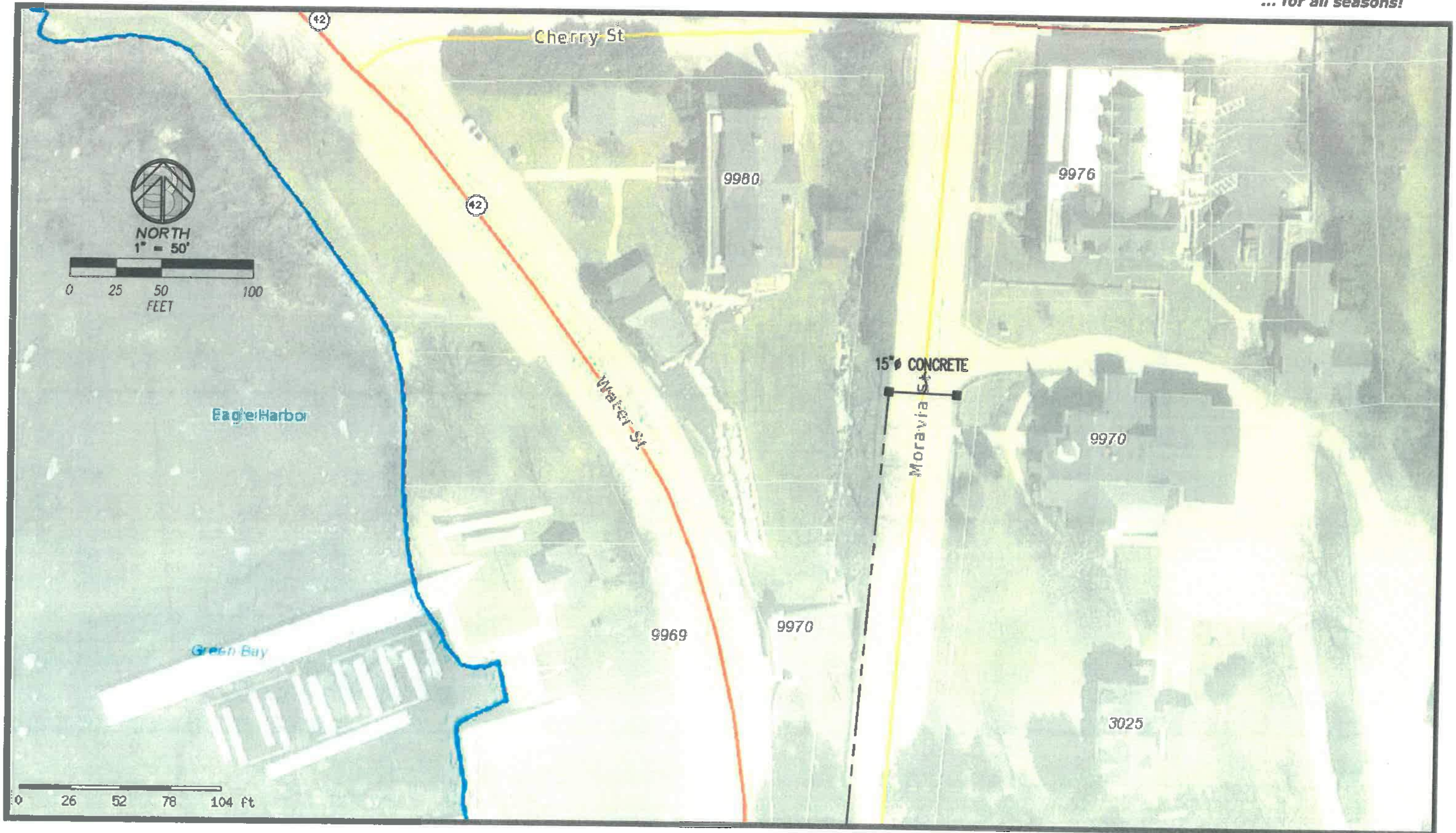
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Drainage - Area 10

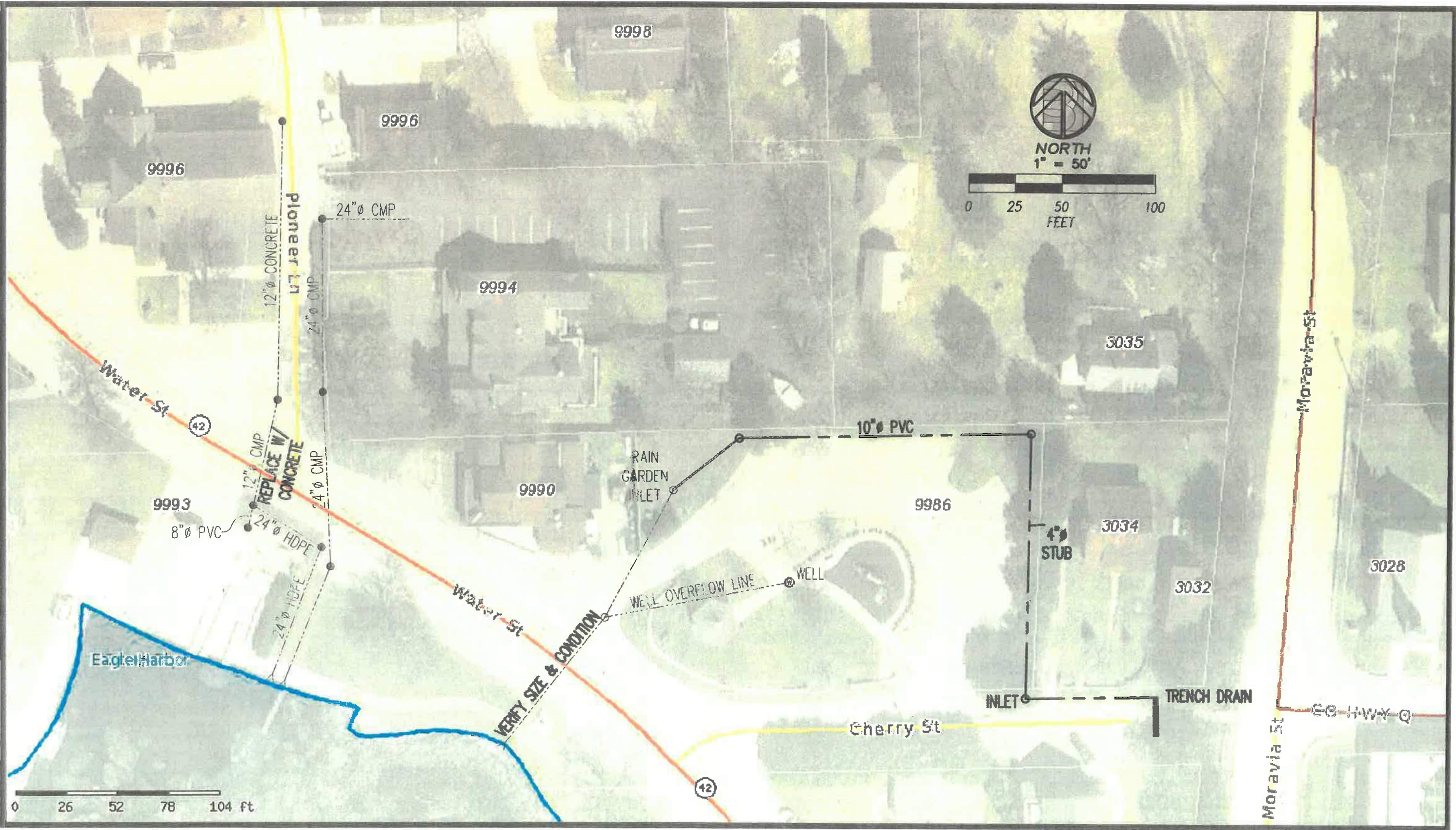
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JOB NO. 23106
10-2-17

CAD: VWS\JUNGLEPHRAM STORM 23106\DWG\23106-8
SHEET 1 OF 1

RP

Drainage - Area 11

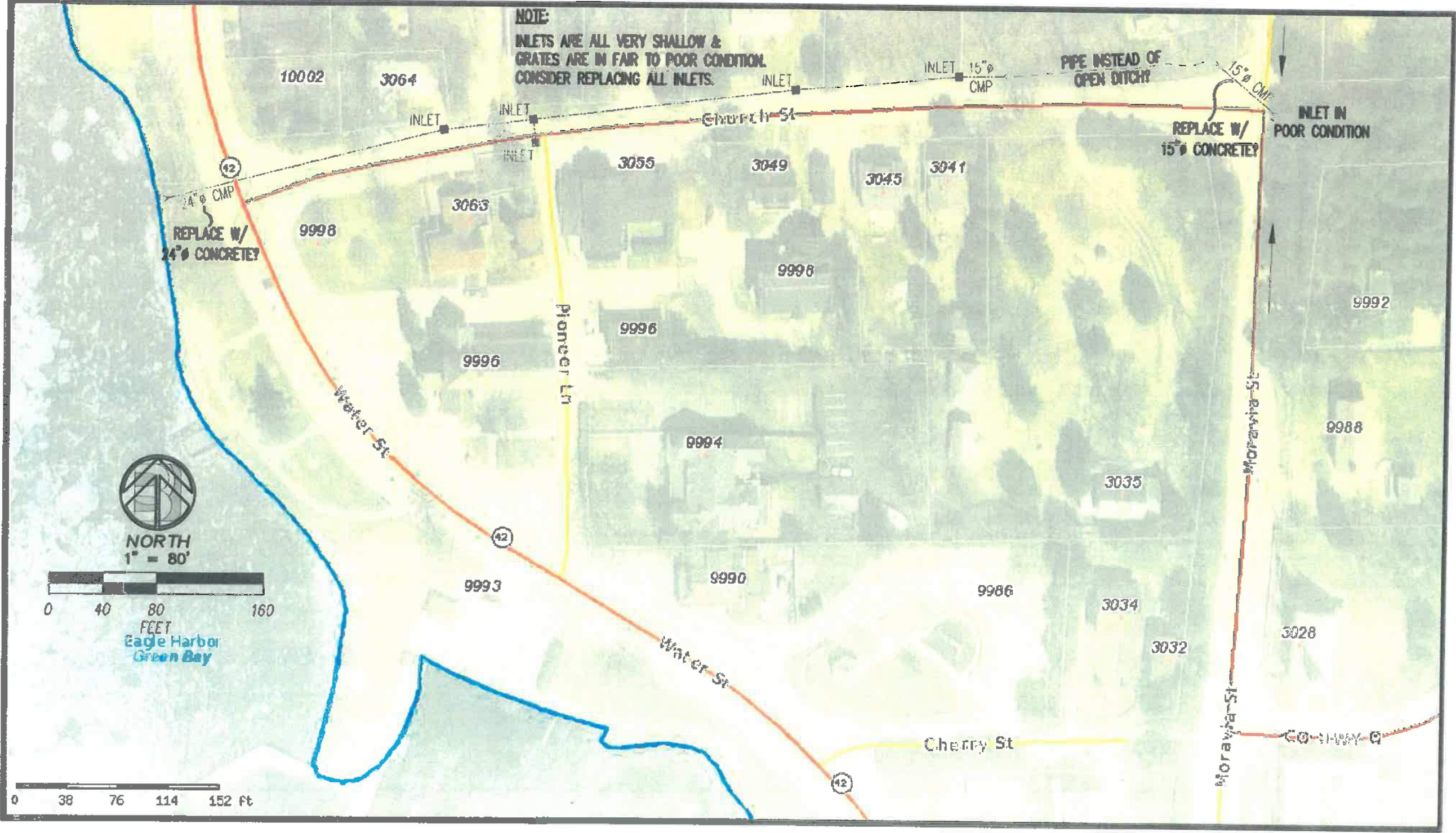
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Drainage - Area 12

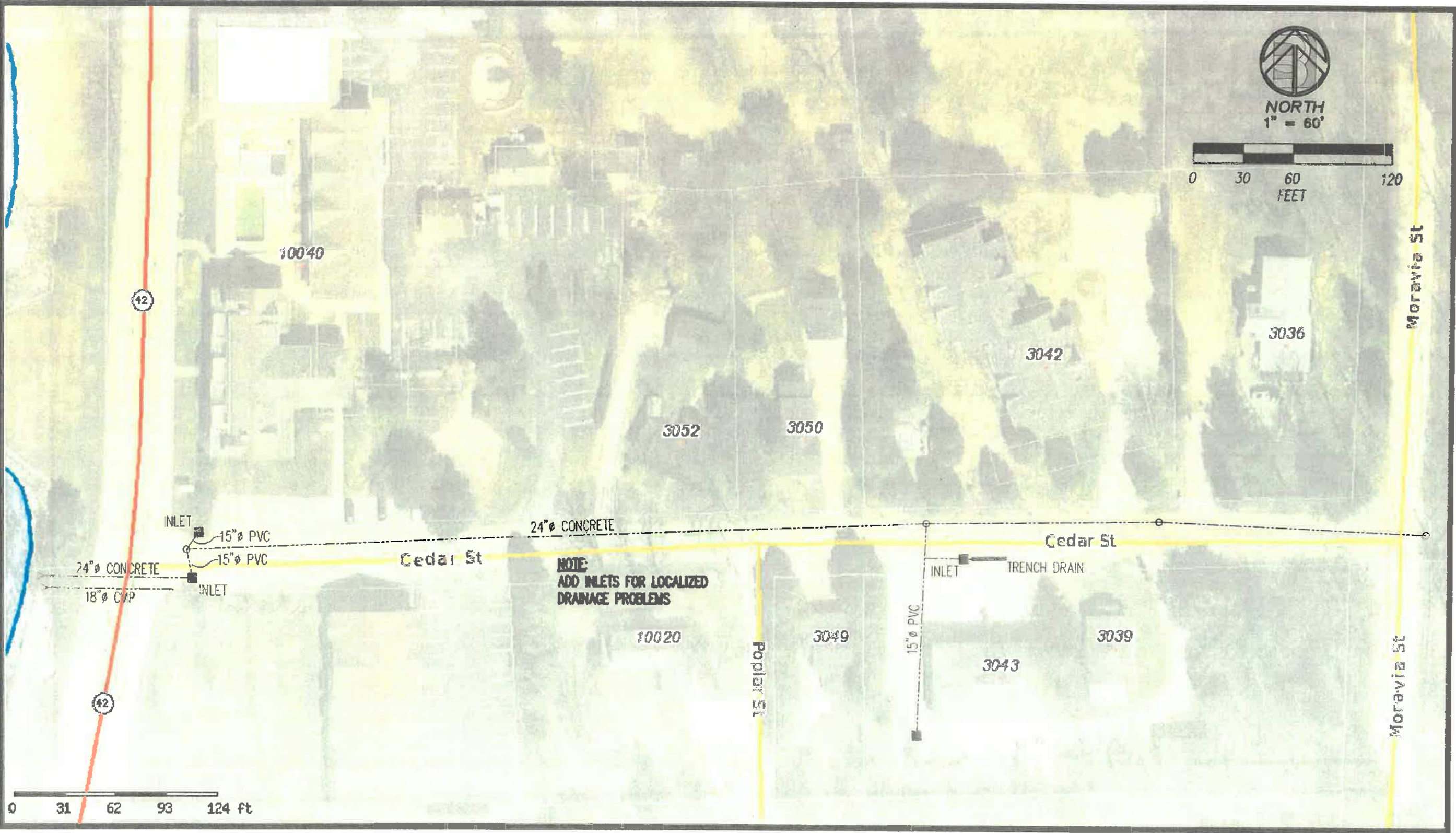
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Drainage - Area 13

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Drainage - Area 14

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Drainage - Area 15

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Wetlands - 2

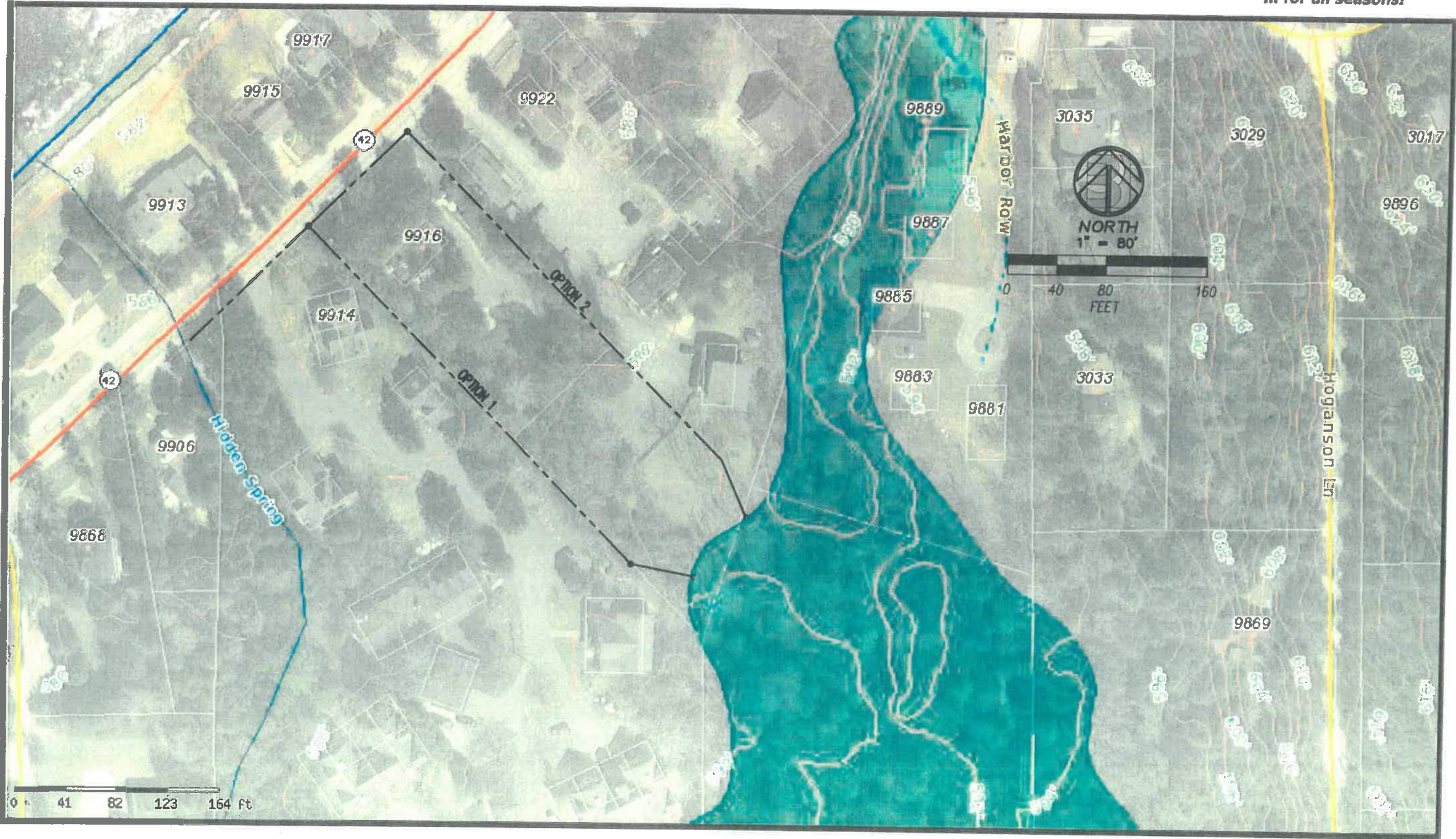
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Beach Wall





FRANKE MASONRY CONSTRUCTION

P.O. Box 224
Baileys Harbor, WI 54202
Phone 920/839-2058

Estimate

Date:8-14-17

Sent to: Brad Rasmusson /brasmusson@ephrain-wisconsin.com

Job Name: Ephraim Beach Seating wall

Door County Fieldstone Seating Wall/concrete work:

- Stone veneer with capping stone and 3 sets of short pillars.....\$ 89,500.00
- Footings and 4' foundation wall, etc.....\$ 29,500.00
- Excavation and clean stone backfill on both sides.....\$ 8,000.00

- Concrete work and ramp by bathrooms.....\$ 8,000.00

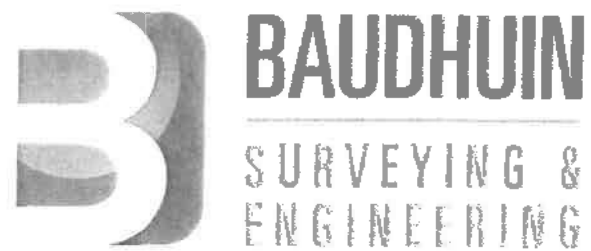
Allowance Option:

Under capping wall lighting (LED):

- \$100.00 each x 25 lights.....\$ 2,500.00
- Install and misc. wire and materials.....\$ 1,500.00

Total Estimate including lighting allowance: \$ 139,000.00

Thank you.



October 2, 2017

Brad Rasmusson
Physical Facilities/Utilities Committee
Village of Ephraim
PO Box 138
Ephraim, WI 54211

Re: *Surveying & Engineering Services
Public Beach Stone Wall Installation
Ephraim, Wisconsin*

Dear Board Members:

Baudhuin Surveying & Engineering is pleased to provide a proposal for surveying and engineering services for the above referenced project.

Statement of Understanding

It is the understanding of Baudhuin Surveying & Engineering that the Village of Ephraim intends to install a new stone wall at the public beach. The wall will replace the existing cedar hedge and will be similar to the wall at the Harborside Park. Because the work is expected to cost more than \$25,000, the Village is required to competitively bid the project in accordance with Wis. Stat. Section 61.54. Baudhuin Surveying & Engineering can assist the Village in the design and bidding of this project.

Scope of Services

1. Design & Specifications: Baudhuin will design a wall of similar size and material to the one found in Harborside Park. The intent is to provide a protective barrier between the parking lot and the beach but also to provide a sitting area for beachgoers. Specifications for footings, materials and wall construction will be provided.

Estimated Cost: \$850.00

2. Project Bidding: Baudhuin will prepare bidding documents, advertise for bids, provide plans and bidding documents to interested contractors, answer questions during the bidding process and conduct the bid opening. Bids will be reviewed and a recommendation made to the Village.

Estimated Cost: \$1,450.00