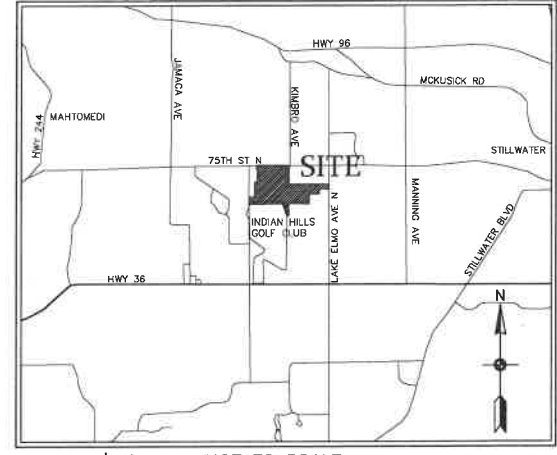


ELLIOTT CROSSING

GRANT, MINNESOTA

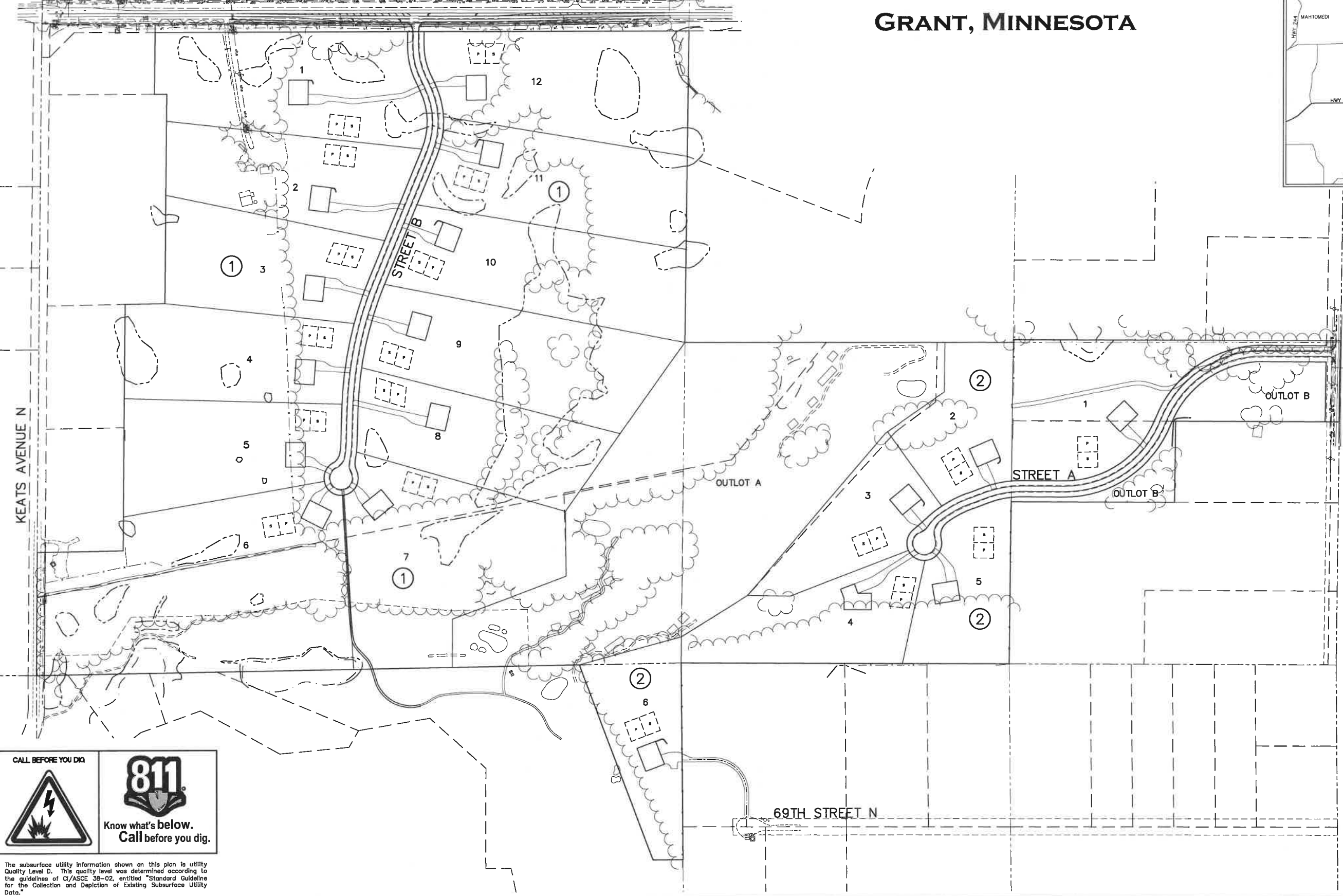
VICINITY MAP



75TH STREET N (C.S.A.H. 12)

KEATS AVENUE N

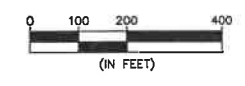
LAKE ELMO AVENUE N (C.S.A.H. 17)



NOT TO SCALE

SHEET INDEX

- 1. COVER
- 2. EXISTING CONDITIONS
- 3. PRELIMINARY PLAT INDEX
- 4-6. PRELIMINARY PLAT LIVABILITY PLAN
- 7-10. LIVABILITY PLAN
- 11. TURN LANE LAYOUT
- 12. GRADING INDEX
- 13-24. PRELIMINARY GRADING & EROSION CONTROL PLANS
- 25. DETAILS
- 26. RETAINING WALL PROFILES



BENCHMARK	
1. Minnesota Department of Transportation Geodetic GSD Station No. 106364 (MnDot Name Lake) - Elevation 965.17 ft. (NAVD88)	
2. Minnesota Department of Transportation Geodetic GSD Station No. 106365 (MnDot Name Long) - Elevation 978.18 ft. (NAVD88)	

CALL BEFORE YOU DIG

Know what's below.
Call before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of CI/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

CARLSON MCCAIN
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2890 PHEASANT RIDGE DR NE
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TEL 763.489.7900
FAX 763.489.7959
CARLSONMCCAIN.COM

I hereby certify that this plan, specification or report was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Minnesota

Print Name: Brian J. Krystofal, P.E.
Signature: *Brian J. Krystofal*
Date: 3/22/24 License #: 25063

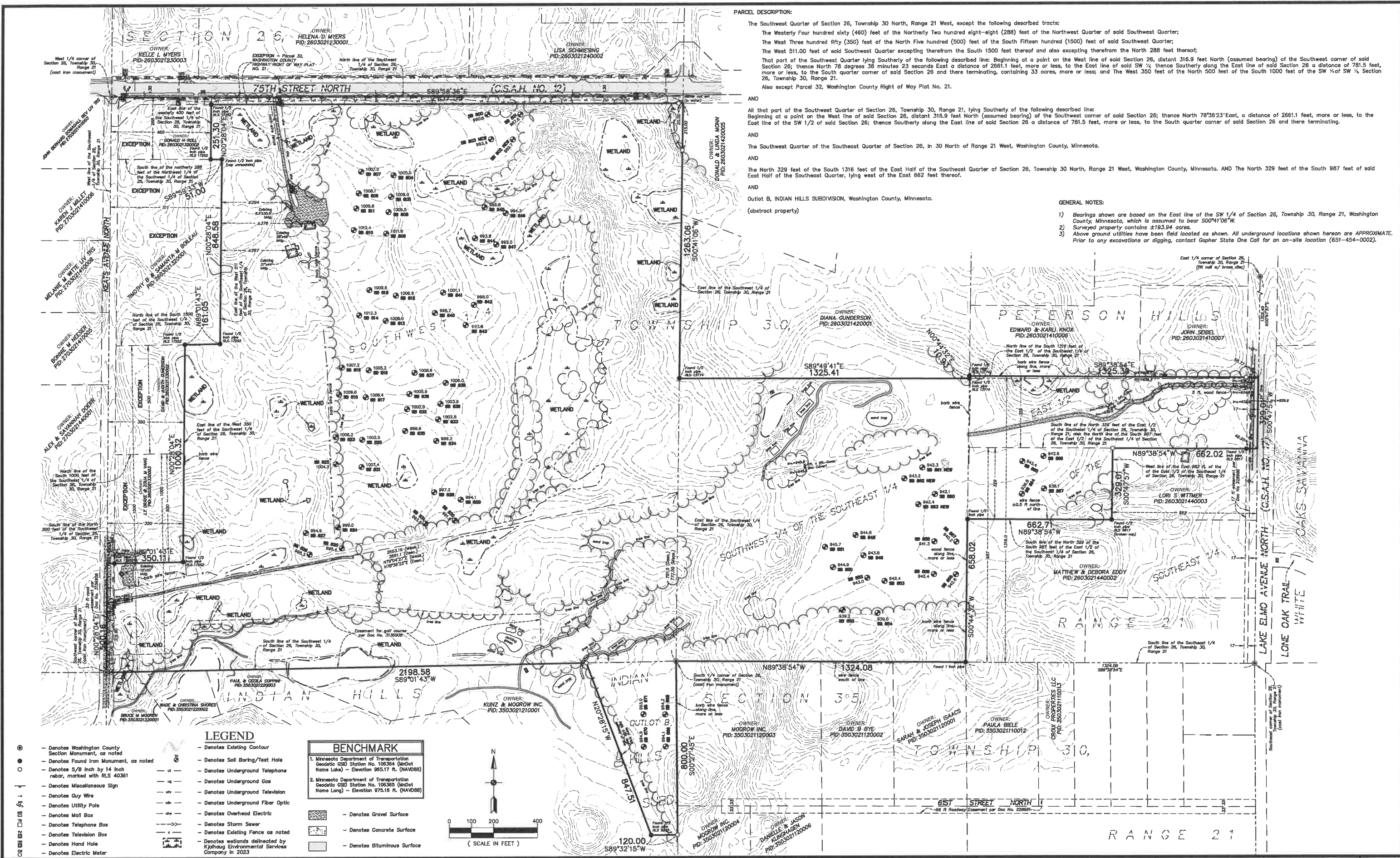
Drawn: KRO
Designed: BJK
Date: 3/22/24

Revisions:
1.

MOR DEVELOPMENT, LLC
6667 Keats Avenue N
Stillwater, MN 55082

ELLIOTT CROSSING
Grant, MN

COVER SHEET



PARCEL DESCRIPTION:

The Southwest Quarter of Section 26, Township 30 North, Range 21 West, except the following described tracts:

The Westerly Four hundred sixty (460) feet of the Northerly Two hundred eight-eight (288) feet of the Northwest Quarter of said Southwest Quarter;

The West Three hundred fifty (350) feet of the North Five hundred (500) feet of the South Fifteen hundred (1500) feet of said Southwest Quarter;

The West 511.00 feet of said Southwest Quarter excepting therefrom the South 1500 feet thereof and also excepting therefrom the North 288 feet thereof;

That part of the Southwest Quarter lying Southerly of the following described line: Beginning at a point on the West line of said Section 26, distant 316.9 feet North (assumed bearing) of the Southwest corner of said Section 26; thence North 78 degrees 36 minutes 23 seconds East a distance of 2661.1 feet, more or less, to the East line of said Section 26 a distance of 781.5 feet, more or less, to the South quarter corner of said Section 26 and there terminating, containing 33 acres, more or less; and The West 350 feet of the North 500 feet of the South 1000 feet of the SW 1/4 of SW 1/4, Section 26, Township 30, Range 21.

Also except Parcel 32, Washington County Right of Way Plat No. 21.

AND

All that part of the Southwest Quarter of Section 26, Township 30 North, Range 21 West, lying Southerly of the following described line: Beginning at a point on the West line of said Section 26, distant 316.9 feet North (assumed bearing) of the Southwest corner of said Section 26; thence North 78°36'23" East, a distance of 2661.1 feet, more or less, to the East line of the SW 1/2 of said Section 26; thence Southerly along the East line of said Section 26 a distance of 781.5 feet, more or less, to the South quarter corner of said Section 26 and there terminating.

AND

The Southwest Quarter of the Southeast Quarter of Section 26, in 30 North of Range 21 West, Washington County, Minnesota.

AND

The North 329 feet of the South 1316 feet of the East Half of the Southeast Quarter of Section 26, Township 30 North, Range 21 West, Washington County, Minnesota. AND The North 329 feet of the South 987 feet of said East Half of the Southeast Quarter, lying west of the East 662 feet thereof.

AND

Outlot B, INDIAN HILLS SUBDIVISION, Washington County, Minnesota.

(abstract property)

GENERAL NOTES:

- 1) Bearings shown are based on the East line of the SW 1/4 of Section 26, Township 30, Range 21, Washington County, Minnesota, which is assumed to bear S00°41'06" W.
- 2) Surveyed property contains ±193.94 acres.
- 3) Above ground utilities have been field located as shown. All underground locations shown herein are APPROXIMATE. Prior to any excavations or digging, contact Gopher State One Call for an on-site location (651-454-0002).

- LEGEND**
- - Denotes Washington County Section Monument, as noted
 - - Denotes Found Iron Monument, as noted
 - - Denotes 5/8 inch by 1/4 inch rebar, marked with RLS 40361
 - ⊕ - Denotes Miscellaneous Sign
 - ⊕ - Denotes Guy Wire
 - ⊕ - Denotes Utility Pole
 - ⊕ - Denotes Mail Box
 - ⊕ - Denotes Telephone Box
 - ⊕ - Denotes Television Box
 - ⊕ - Denotes Hand Hole
 - ⊕ - Denotes Electric Meter
 - - Denotes Existing Contour
 - - Denotes Soil Boring/Test Hole
 - - Denotes Underground Telephone
 - - Denotes Underground Gas
 - - Denotes Underground Television
 - - Denotes Underground Electric
 - - Denotes Overhead Electric
 - - Denotes Storm Sewer
 - - Denotes Existing Fence as noted
 - - Denotes Wetlands delineated by Kijohaug Environmental Services Company in 2023
 - - Denotes Gravel Surface
 - - Denotes Concrete Surface
 - - Denotes Bituminous Surface

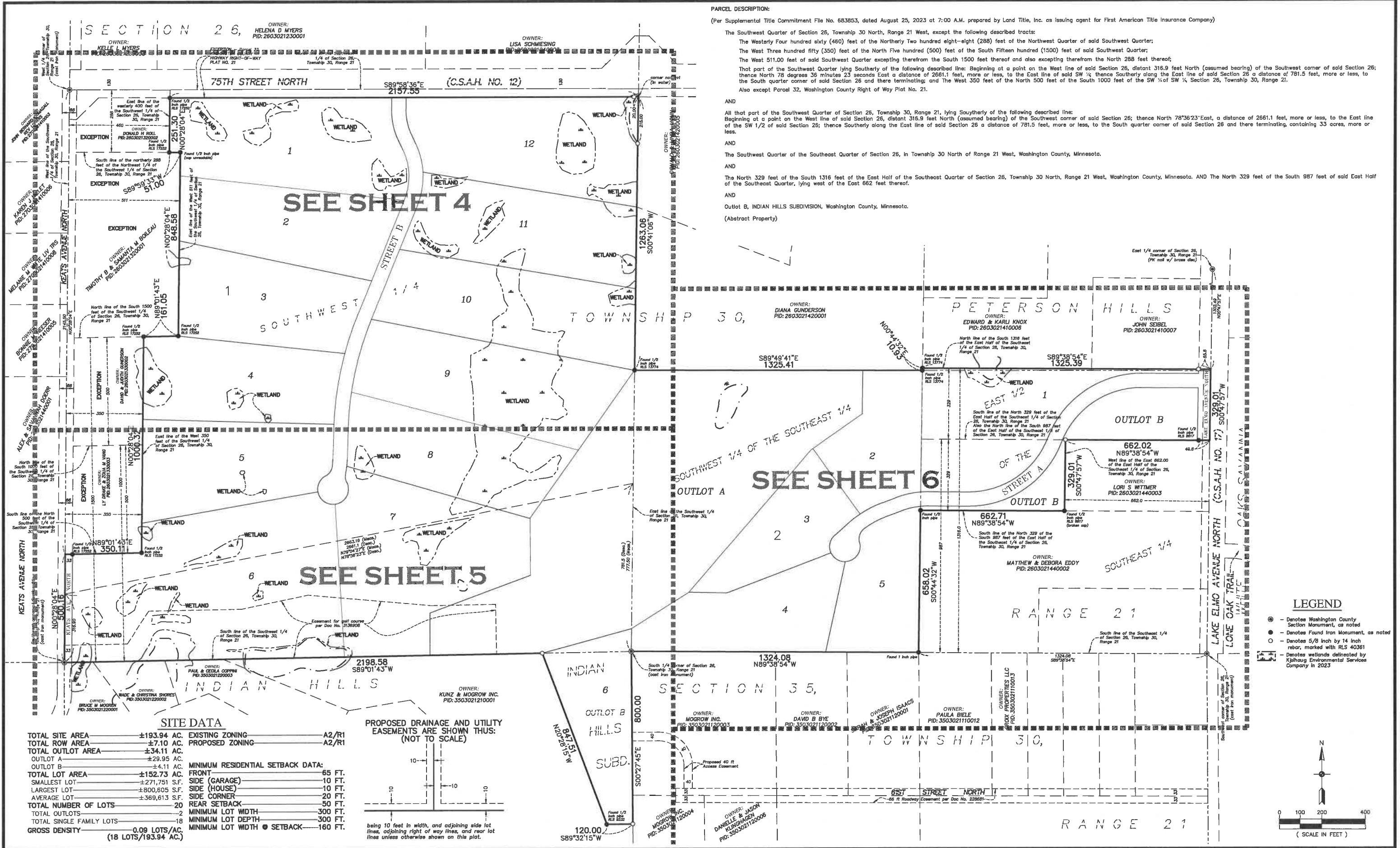
BENCHMARK

1. Minnesota Department of Transportation Geodetic GSD Station No. 106364 (MnDot Name Lake) - Elevation 965.17 ft. (NAVD88)
2. Minnesota Department of Transportation Geodetic GSD Station No. 106365 (MnDot Name Lake) - Elevation 976.18 ft. (NAVD88)

Scale: 0 100 200 400 (SCALE IN FEET)

Save Date: 01/01/24 11:07:21 F:\Users\10721\Documents\grant township parcelcad.ctb\survey\pre-plot\10723_2024.dwg

REVIEW DRAFT



PARCEL DESCRIPTION:
 (Per Supplemental Title Commitment File No. 683853, dated August 25, 2023 at 7:00 A.M. prepared by Land Title, Inc. as issuing agent for First American Title Insurance Company)

The Southwest Quarter of Section 26, Township 30 North, Range 21 West, except the following described tracts:
 The Westerly Four hundred sixty (460) feet of the Northerly Two hundred eight-eight (288) feet of the Northwest Quarter of said Southwest Quarter;
 The West Three hundred fifty (350) feet of the North Five hundred (500) feet of the South Fifteen hundred (1500) feet of said Southwest Quarter;
 The West 511.00 feet of said Southwest Quarter excepting therefrom the South 1500 feet thereof and also excepting therefrom the North 288 feet thereof;
 That part of the Southwest Quarter lying Southerly of the following described line: Beginning at a point on the West line of said Section 26, distant 316.9 feet North (assumed bearing) of the Southwest corner of said Section 26; thence North 78 degrees 36 minutes 23 seconds East a distance of 2661.1 feet, more or less, to the East line of said Section 26 a distance of 781.5 feet, more or less, to the South quarter corner of said Section 26 and there terminating; and the West 350 feet of the North 500 feet of the South 1000 feet of the SW 1/4 of Section 26, Township 30, Range 21.
 Also except Parcel 32, Washington County Right of Way Plat No. 21.

AND

All that part of the Southwest Quarter of Section 26, Township 30 North, Range 21 West, lying Southerly of the following described line: Beginning at a point on the West line of said Section 26, distant 316.9 feet North (assumed bearing) of the Southwest corner of said Section 26; thence North 78°36'23" East, a distance of 2661.1 feet, more or less, to the East line of the SW 1/2 of said Section 26; thence Southerly along the East line of said Section 26 a distance of 781.5 feet, more or less, to the South quarter corner of said Section 26 and there terminating, containing 33 acres, more or less.

AND

The Southwest Quarter of the Southeast Quarter of Section 26, in Township 30 North of Range 21 West, Washington County, Minnesota.

AND

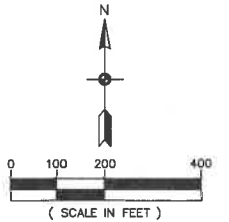
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AND

Outlot B, INDIAN HILLS SUBDIVISION, Washington County, Minnesota.
 (Abstract Property)

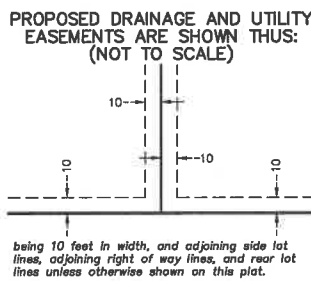
LEGEND

- ⊙ - Denotes Washington County Section Monument, as noted
- - Denotes Found Iron Monument, as noted
- - Denotes 5/8 inch by 14 inch rebar, marked with RLS 40361
- ▭ - Denotes wetlands delineated by Kjaahug Environmental Services Company in 2023



SITE DATA

TOTAL SITE AREA	±193.94 AC.	EXISTING ZONING	A2/R1
TOTAL ROW AREA	±7.10 AC.	PROPOSED ZONING	A2/R1
TOTAL OUTLOT AREA	±34.11 AC.		
OUTLOT A	±28.95 AC.		
OUTLOT B	±4.11 AC.		
TOTAL LOT AREA	±152.73 AC.	MINIMUM RESIDENTIAL SETBACK DATA:	
SMALLEST LOT	±271,751 S.F.	FRONT	65 FT.
LARGEST LOT	±600,605 S.F.	SIDE (GARAGE)	10 FT.
AVERAGE LOT	±369,613 S.F.	SIDE (HOUSE)	10 FT.
TOTAL NUMBER OF LOTS	20	SIDE CORNER	20 FT.
TOTAL OUTLOTS	2	REAR SETBACK	50 FT.
TOTAL SINGLE FAMILY LOTS	18	MINIMUM LOT WIDTH	300 FT.
GROSS DENSITY	0.09 LOTS/AC. (18 LOTS/193.94 AC.)	MINIMUM LOT DEPTH	300 FT.
		MINIMUM LOT WIDTH @ SETBACK	160 FT.



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 SUITE 100
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 TEL 763.489.7900
 FAX 763.489.7959
 CARLSONMCCAIN.COM

I hereby certify that this survey, plan or report was prepared by me or under my direct supervision and that I am a duly Licensed Land Surveyor under the laws of the State of Minnesota

Print Name: Thomas R. Balluff, L.S.
 Signature: *Thomas R. Balluff*
 Date: 3/22/24 License #: 40361

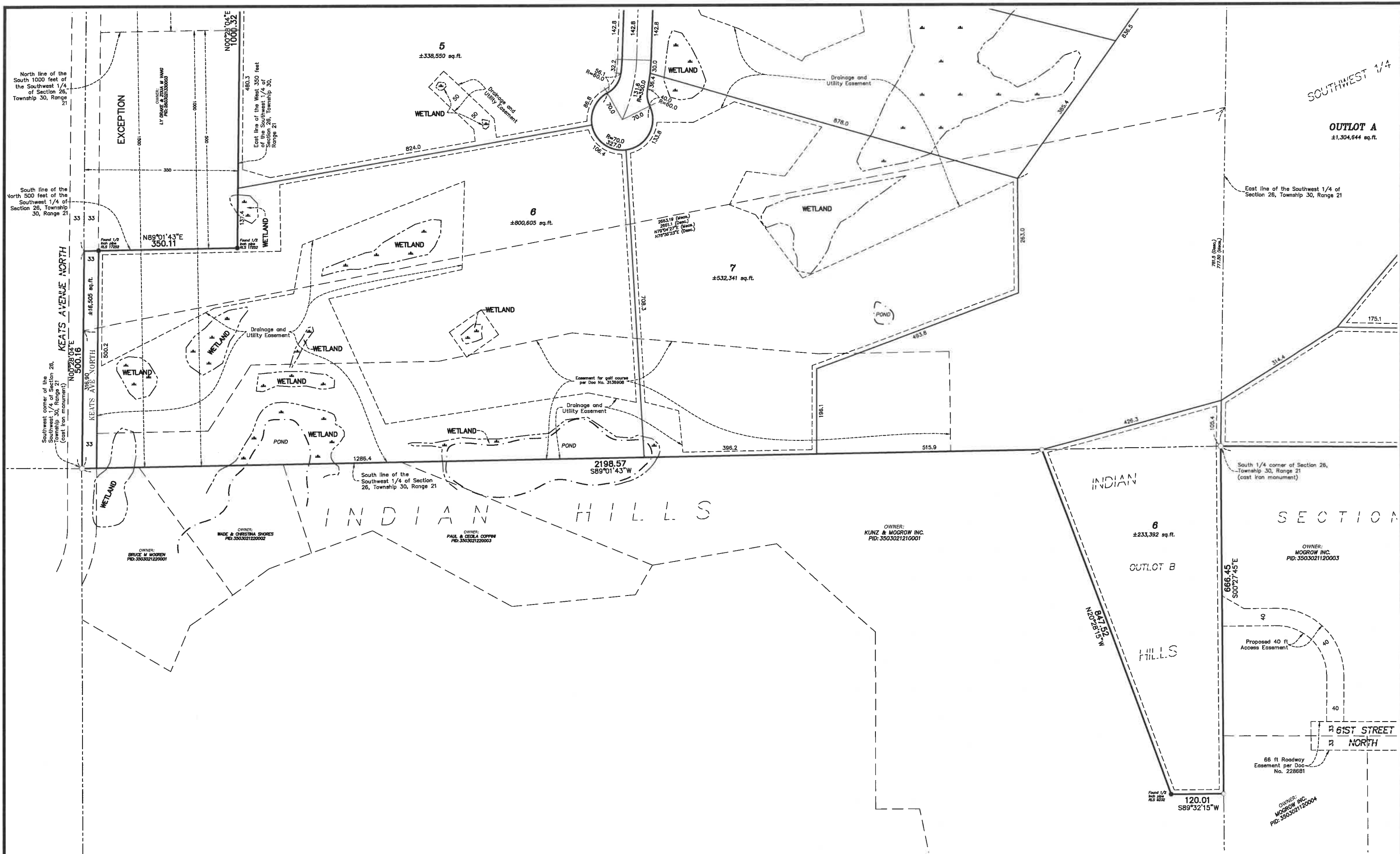
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Revisions:

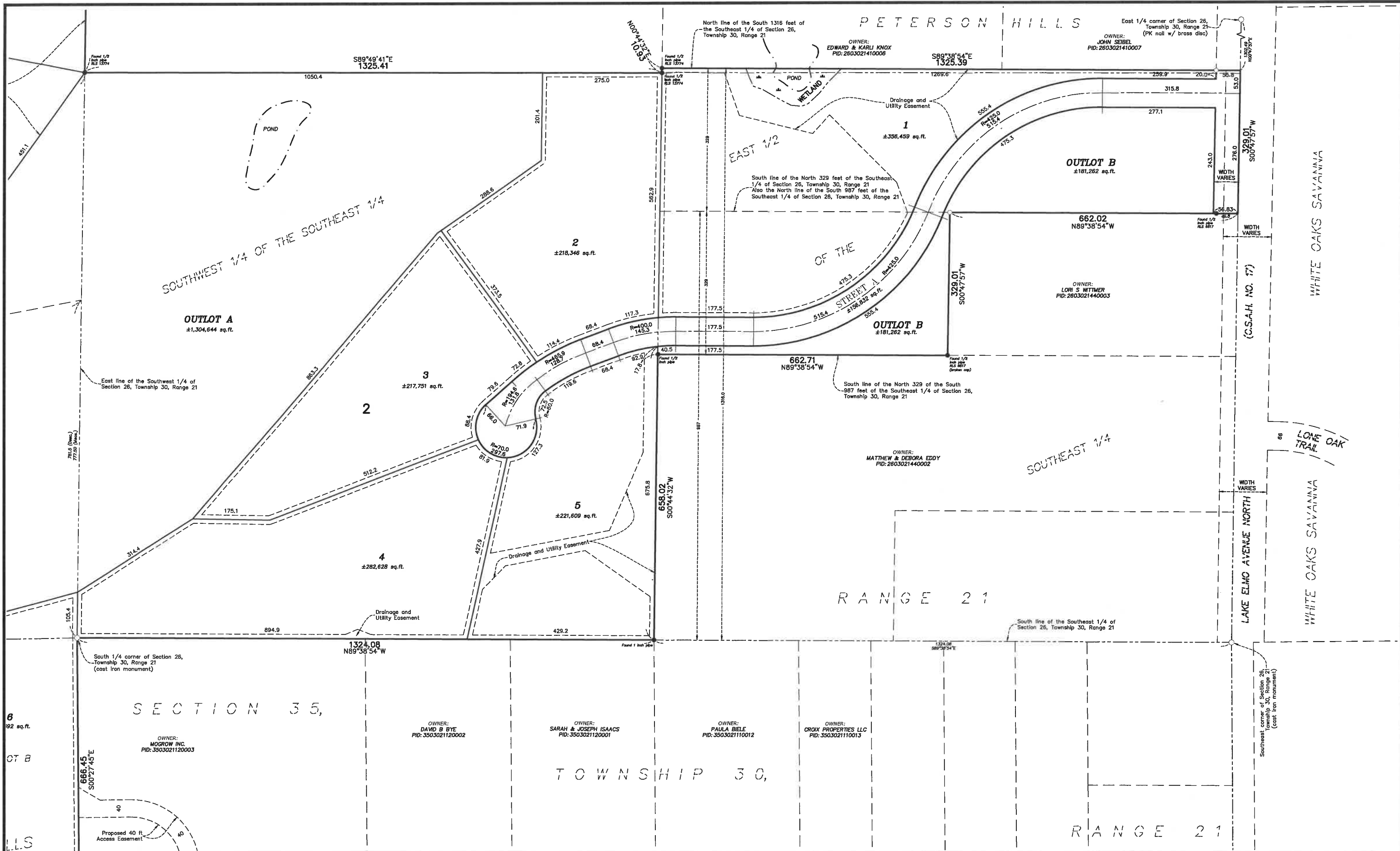
MOR DEVELOPMENT, LLC
 6667 Keats Avenue N
 Stillwater, MN 55082

ELLIOTT CROSSING
 Grant, MN

PRELIMINARY PLAT INDEX



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3890 PHEASANT RIDGE DR NE
SUITE 100
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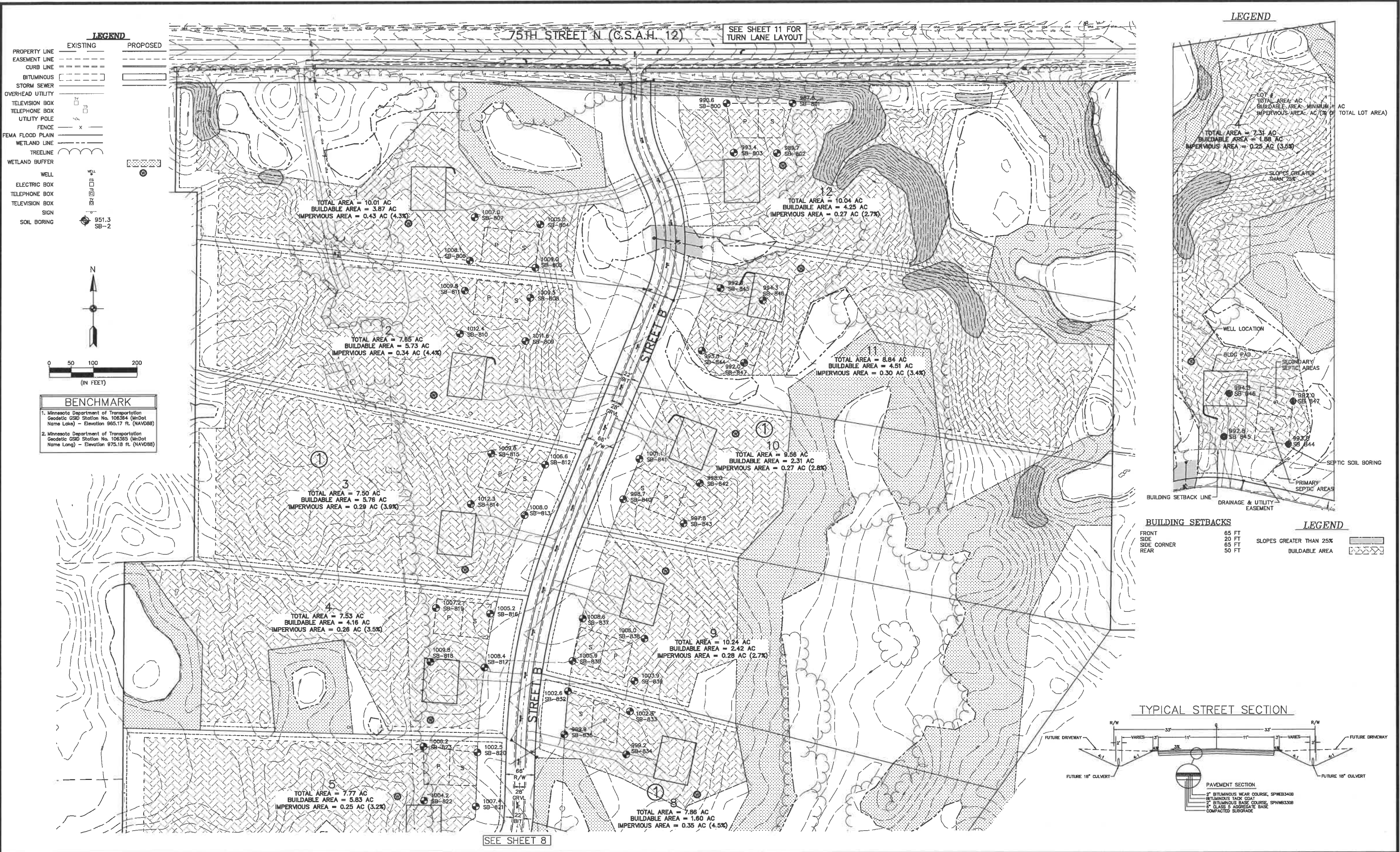
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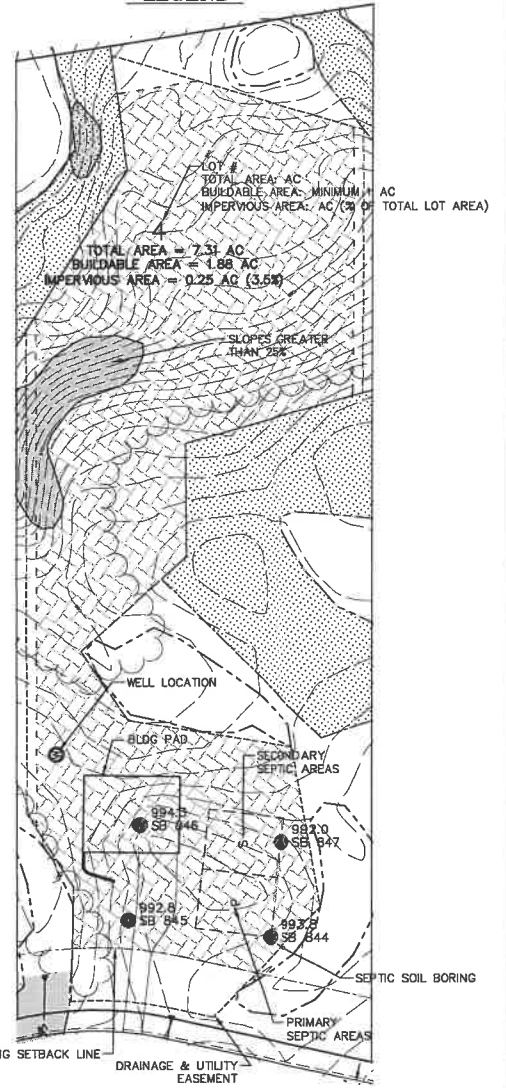
MOR DEVELOPMENT, LLC
6667 Keats Avenue N
Stillwater, MN 55082

ELLIOTT CROSSING
Grant, MN

PRELIMINARY PLAT



LEGEND



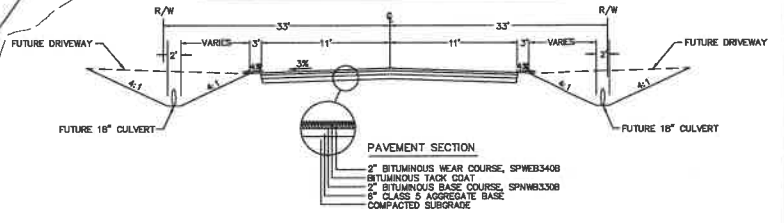
BUILDING SETBACKS

FRONT	65 FT
SIDE	20 FT
SIDE CORNER	65 FT
REAR	50 FT

LEGEND

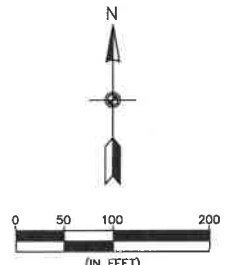
SLOPES GREATER THAN 25%	[Hatched Pattern]
BUILDABLE AREA	[Cross-hatched Pattern]

TYPICAL STREET SECTION



LEGEND

PROPERTY LINE	EXISTING	PROPOSED
EASEMENT LINE		
CURB LINE		
BITUMINOUS		
STORM SEWER		
OVERHEAD UTILITY		
TELEVISION BOX		
TELEPHONE BOX		
UTILITY POLE		
FENCE		
FEMA FLOOD PLAIN		
WETLAND LINE		
TREELINE		
WETLAND BUFFER		
WELL		
ELECTRIC BOX		
TELEPHONE BOX		
TELEVISION BOX		
SIGN		
SOIL BORING		



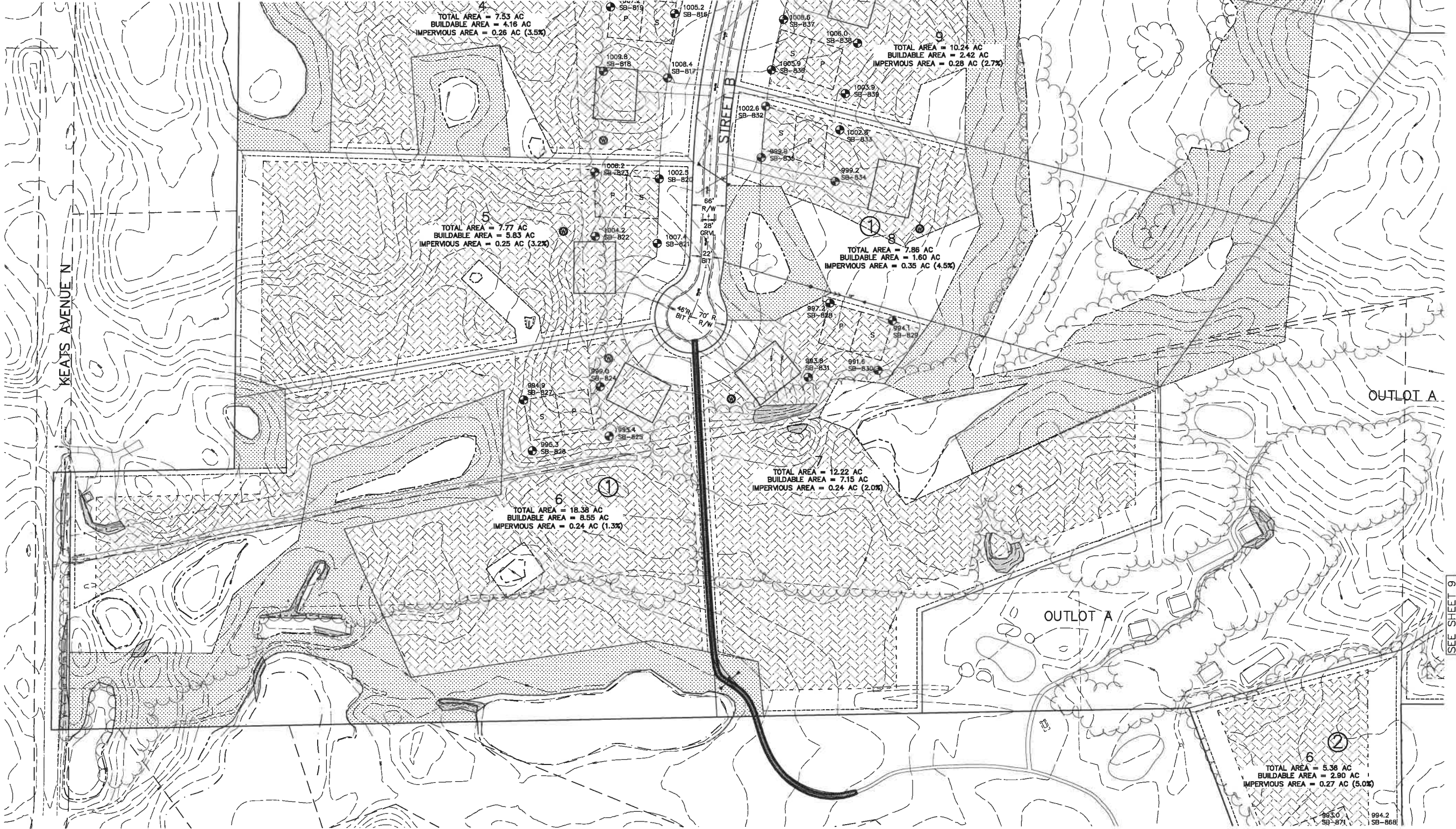
BENCHMARK

- Minnesota Department of Transportation Geodetic GSD Station No. 106364 (MnDot Name Lake) - Elevation 965.17 ft. (NAVD88)
- Minnesota Department of Transportation Geodetic GSD Station No. 106365 (MnDot Name Long) - Elevation 975.18 ft. (NAVD88)

75TH STREET N (C.S.A.H. 12) SEE SHEET 11 FOR TURN LANE LAYOUT

SEE SHEET 8

SEE SHEET 7



KEATS AVENUE N

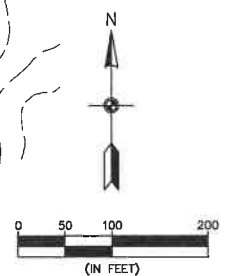
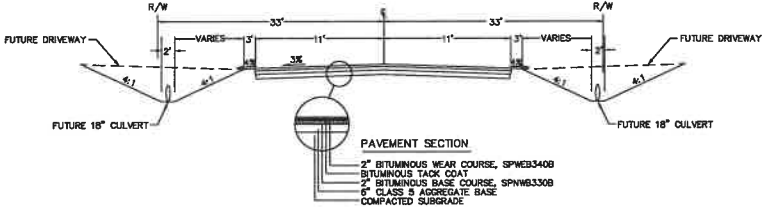
STREET B

OUTLOT A

OUTLOT A

SEE SHEET 9

TYPICAL STREET SECTION



BENCHMARK	
1.	Minnesota Department of Transportation Geodetic GSD Station No. 106364 (MnDot Name Lake) - Elevation 965.17 ft. (NAVD88)
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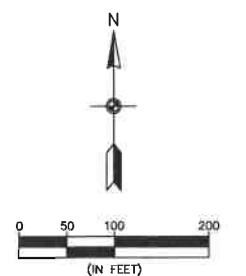
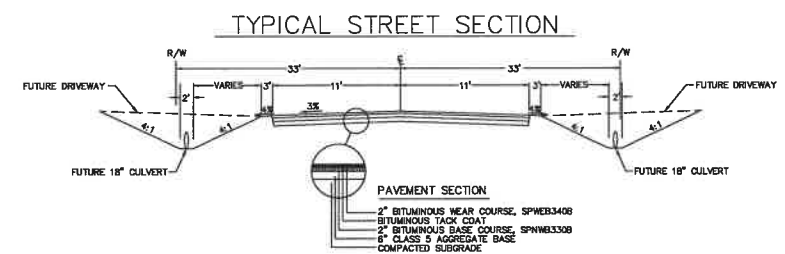
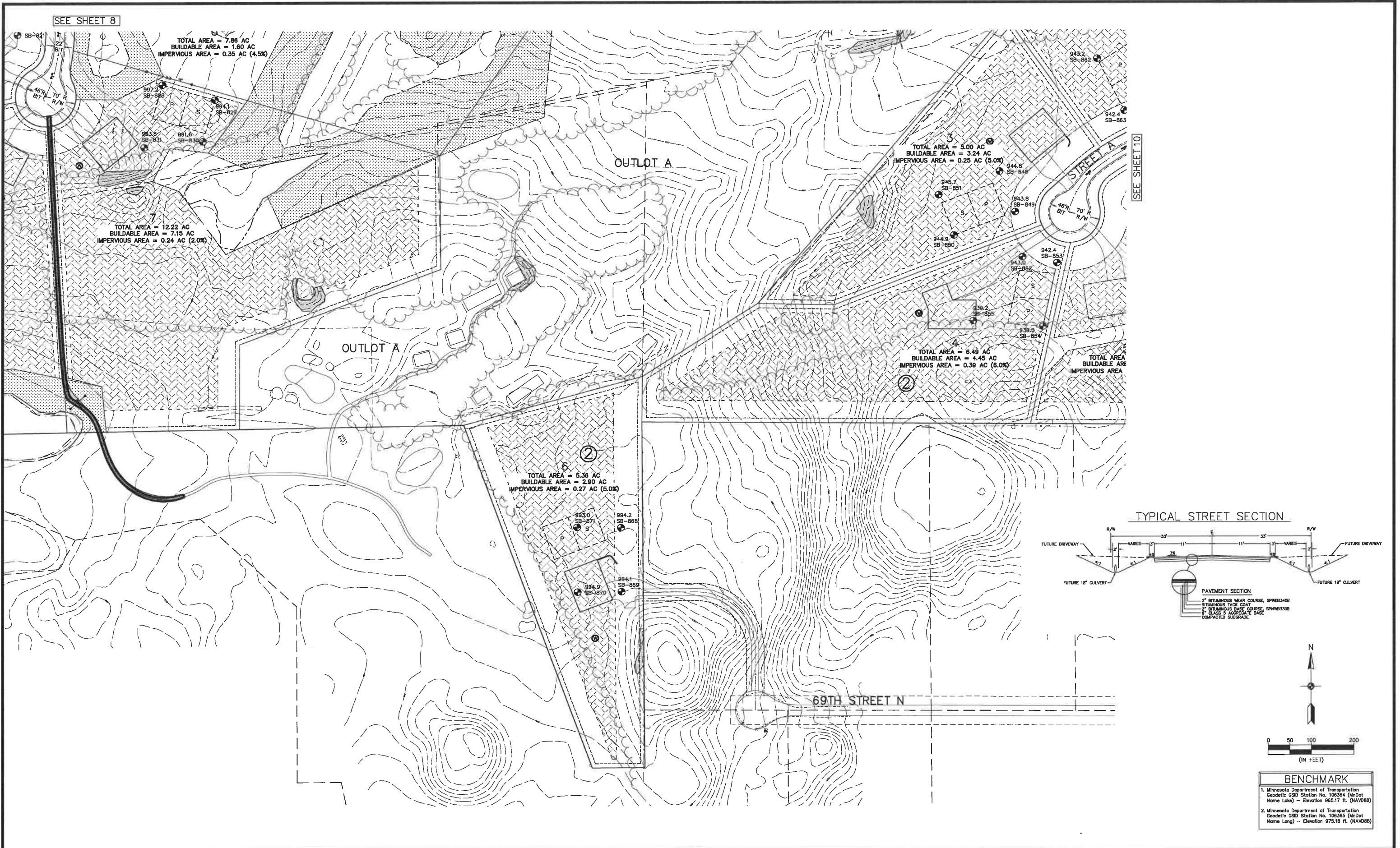
TJD
DRAWn: KRO
Designed: BJK
Date: 3/22/24

Revisions:
1.

MOR DEVELOPMENT, LLC
6667 Keats Avenue N
Stillwater, MN 55082

ELLIOTT CROSSING
Grant, MN

LIVABILITY PLAN



BENCHMARK	
1.	Minnesota Department of Transportation Geodetic GSID Station No. 106364 (MnDot Name Lake) - Elevation 965.17 ft. (NAVD88)
2.	Minnesota Department of Transportation Geodetic GSID Station No. 106365 (MnDot Name Long) - Elevation 975.18 ft. (NAVD88)

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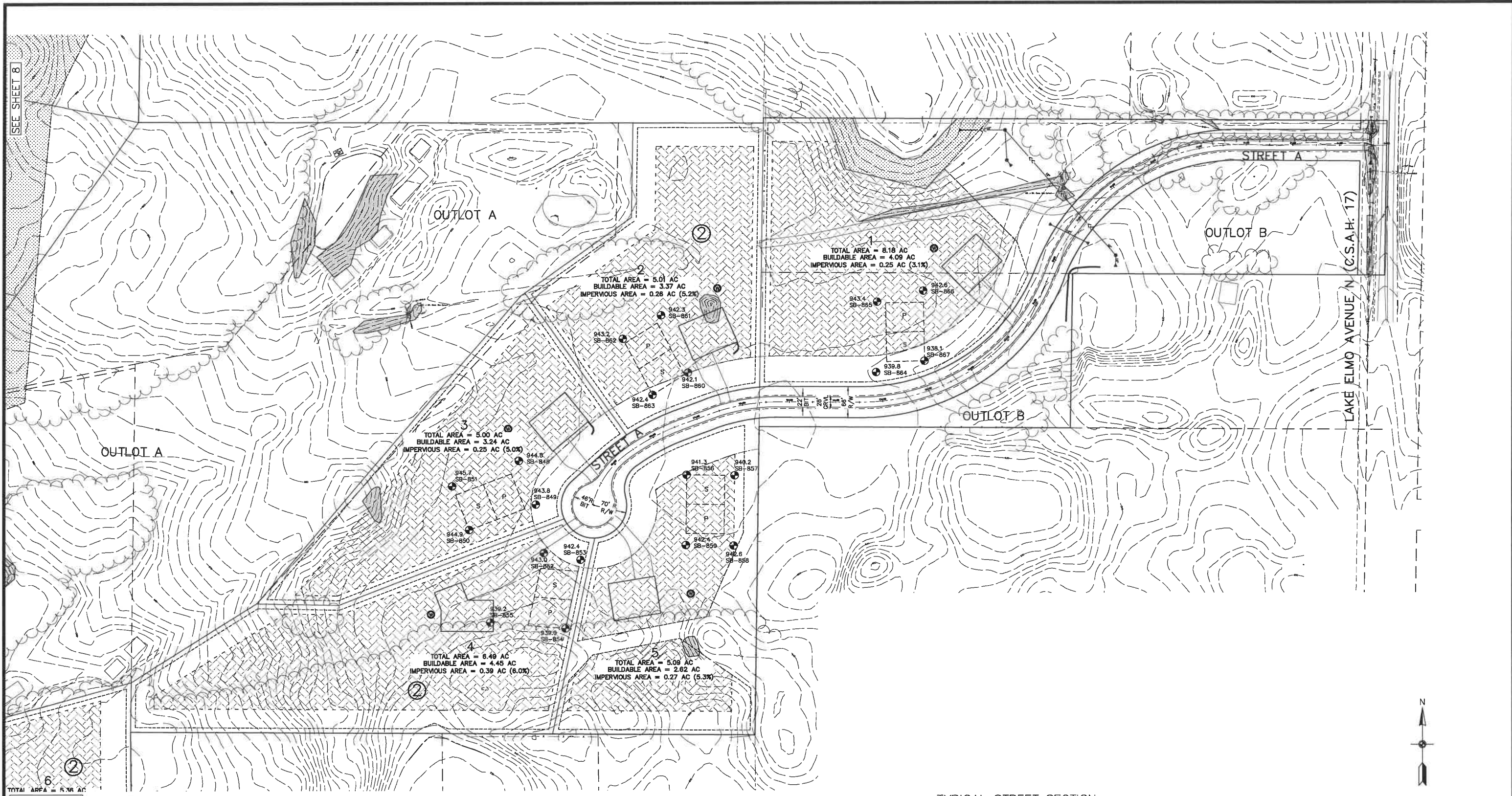
Print Name: Brian J. Krystofiak, P.E.
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Drawn: KRO
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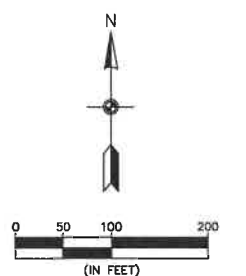
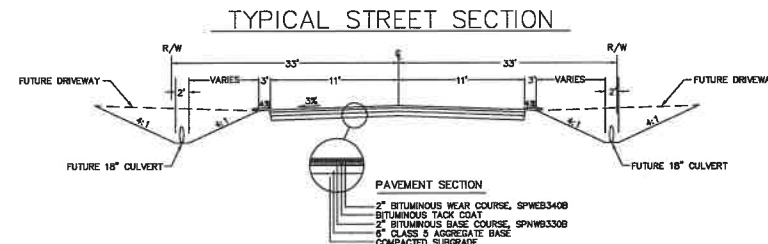
ELLIOTT CROSSING
 Grant, MN

LIVABILITY PLAN



SEE SHEET 8

TOTAL AREA = 5.36 AC
SEE SHEET 9



BENCHMARK	
1.	Minnesota Department of Transportation Geodetic (SD) Station No. 106364 (MeDot Name Lake) - Elevation 965.17 ft. (NAVD88)
2.	Minnesota Department of Transportation Geodetic (SD) Station No. 106365 (MeDot Name Long) - Elevation 975.18 ft. (NAVD88)

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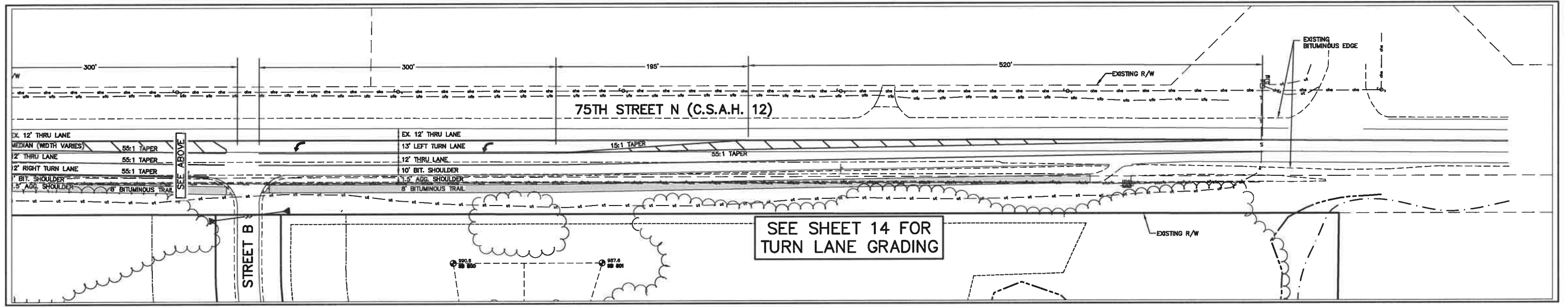
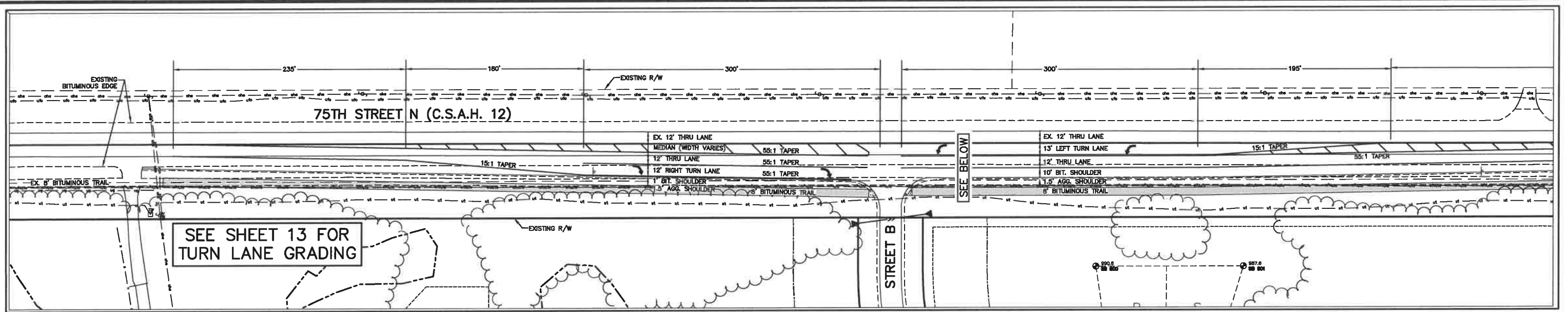
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Date: 3/22/24

MOR DEVELOPMENT, LLC
6667 Keats Avenue N
Stillwater, MN 55082

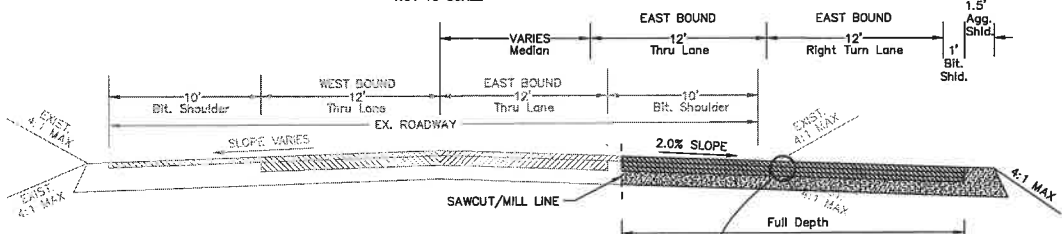
ELLIOTT CROSSING
Grant, MN

LIVABILITY PLAN

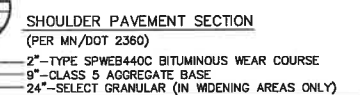
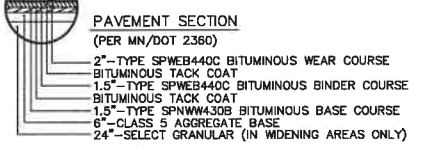
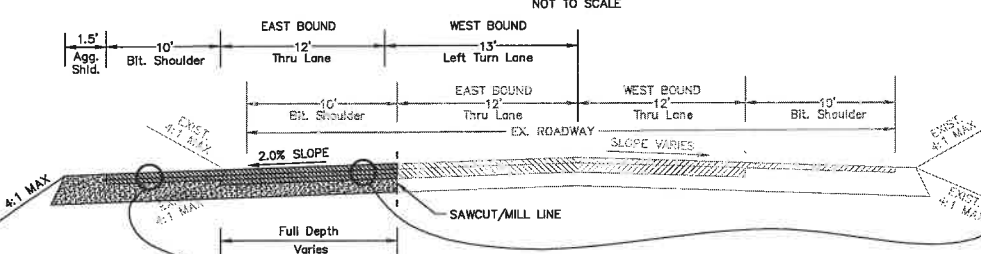
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TYPICAL RIGHT TURN LANE SECTION (EAST BOUND)
NOT TO SCALE

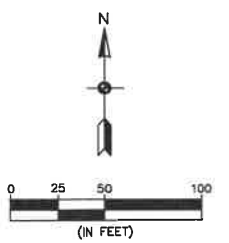


TYPICAL LEFT TURN LANE SECTION (WEST BOUND)
NOT TO SCALE



LEGEND

	EXISTING	PROPOSED
PROPERTY LINE	---	---
EASEMENT LINE	---	---
BITUMINOUS	---	---
GRAVEL	---	---
CONCRETE	---	---
SANITARY SEWER	---	---
STORM SEWER	---	---
WATER MAIN	---	---
OVERHEAD UTILITY	---	---
UNDERGROUND TELEPHONE	---	---
UNDERGROUND FIBEROPTIC	---	---
UNDERGROUND GAS	---	---
FLARED END SECTION	---	---
TELEVISION BOX	---	---
TELEPHONE BOX	---	---
UTILITY POLE	---	---
FENCE	---	---
STRIPING	---	---
WETLAND LINE	---	---
SIGN	---	---
TREELINE	---	---



BENCHMARK

1. Minnesota Department of Transportation
Geodetic GSID Station No. 106364 (MnDot
Name Lake) - Elevation 955.17 ft. (NAVD88)

2. Minnesota Department of Transportation
Geodetic GSID Station No. 106365 (MnDot
Name Long) - Elevation 975.18 ft. (NAVD88)

CALL BEFORE YOU DIG

811

Know what's below.
Call before you dig.

CARLSON McCAIN

ENGINEERING SURVEYING ENVIRONMENTAL

3990 PHEASANT RIDGE DR NE
SUITE 100
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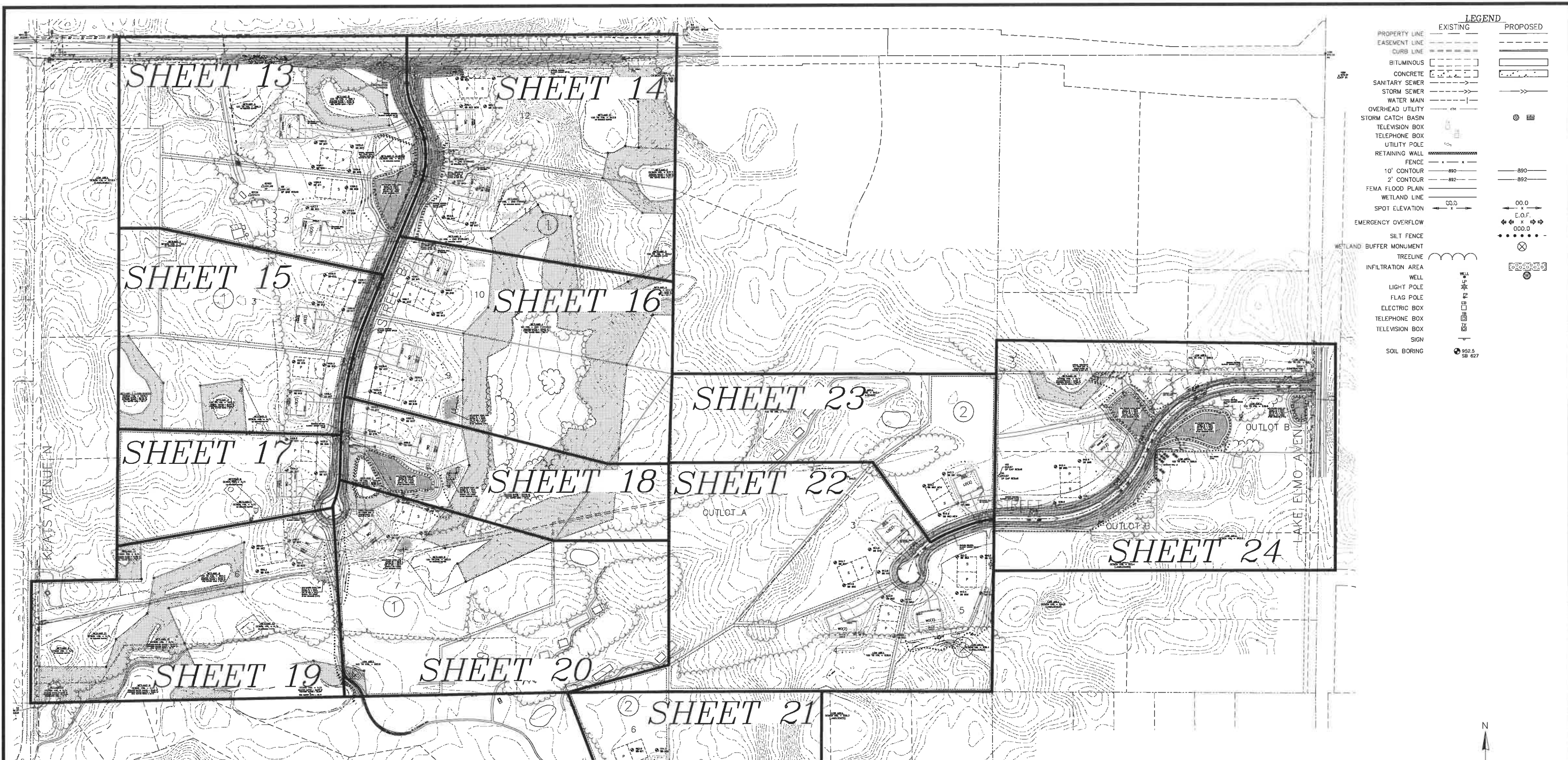
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Designed: BJK
Date: 3/22/24

Revisions:
1.

MOR DEVELOPMENT, LLC
6667 Keats Avenue N
Stillwater, MN 55082

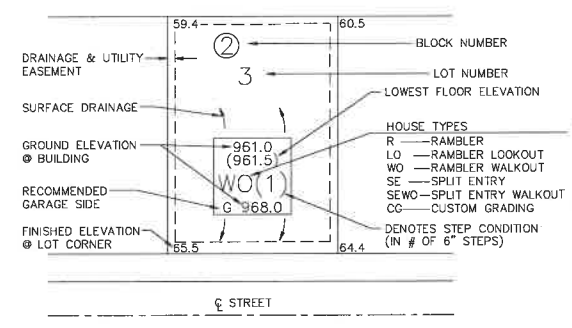
ELLIOTT CROSSING
Grant, MN

TURN LANE LAYOUT

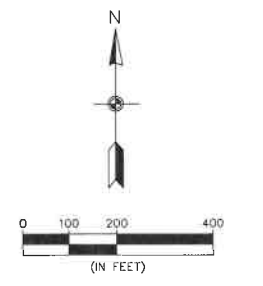


LEGEND		
	EXISTING	PROPOSED
PROPERTY LINE	---	---
EASEMENT LINE	---	---
CURB LINE	---	---
BITUMINOUS	---	---
CONCRETE	---	---
SANITARY SEWER	---	---
STORM SEWER	---	---
WATER MAIN	---	---
OVERHEAD UTILITY	---	---
STORM CATCH BASIN	---	---
TELEVISION BOX	---	---
TELEPHONE BOX	---	---
UTILITY POLE	---	---
RETAINING WALL	---	---
FENCE	---	---
10' CONTOUR	---	---
2' CONTOUR	---	---
FEMA FLOOD PLAIN	---	---
WETLAND LINE	---	---
SPOT ELEVATION	---	---
EMERGENCY OVERTFLOW	---	---
SILT FENCE	---	---
WETLAND BUFFER MONUMENT	---	---
TREELINE	---	---
INFILTRATION AREA	---	---
WELL	---	---
LIGHT POLE	---	---
FLAG POLE	---	---
ELECTRIC BOX	---	---
TELEPHONE BOX	---	---
TELEVISION BOX	---	---
SIGN	---	---
SOIL BORING	---	---

GRADING PLAN LOT KEY



WETLAND FILL SUMMARY	
WETLAND FILL:	AREA
WETLAND FILL:	6,719 S.F.
TOTAL WETLAND IMPACT:	6,719 S.F.
NOTE: WETLAND REPLACEMENT CREDITS TO BE PURCHASED IN LIEU OF ONSITE REPLACEMENT.	
WETLAND BUFFER:	AREA
WETLAND BUFFER:	1,053,918 S.F.
WETLAND BUFFER REQUIRED:	800,395 S.F.



BENCHMARK	
1.	Minnesota Department of Transportation Geodetic GSD Station No. 106364 (MnDot Name Lake) - Elevation 965.17 ft. (NAVD88)
2.	Minnesota Department of Transportation Geodetic GSD Station No. 106365 (MnDot Name Long) - Elevation 875.18 ft. (NAVD88)

CALL BEFORE YOU DIG

Know what's below. Call before you dig.

The subsurface utility information shown on this plan is utility Quality Level D. This quality level was determined according to the guidelines of C/ASCE 38-02, entitled "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data."

CARLSON McCAIN
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FAX 763.489.7959
CARLSONMCCAIN.COM

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Print Name: Brian J. Krystofak, P.E.
Signature: *Brian J. Krystofak*
Date: 3/22/24 License #: 25063

Drawn: KRO
Designed: BJK
Date: 3/22/24

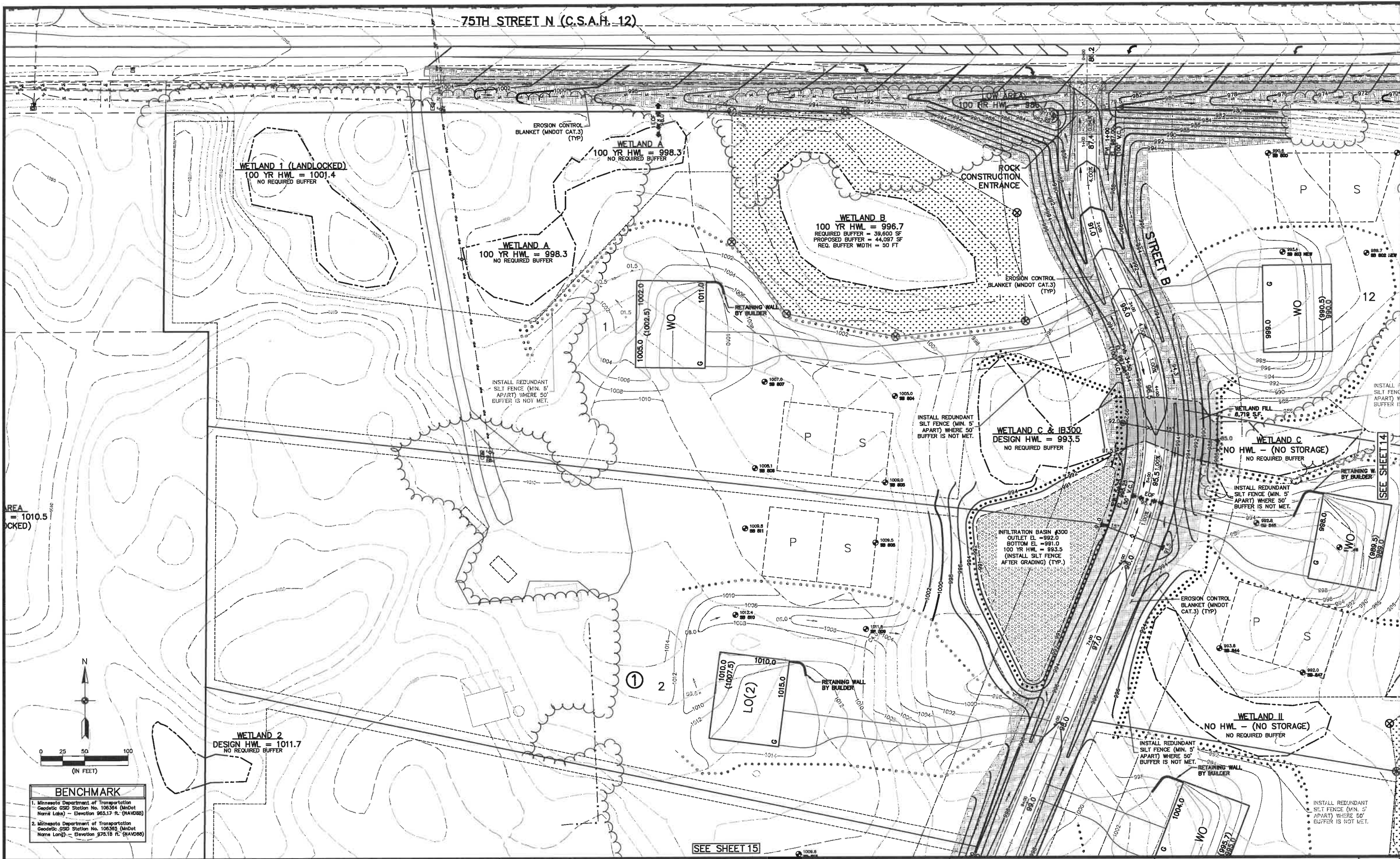
Revisions:
1.

MOR DEVELOPMENT, LLC
6667 Keats Avenue N
Stillwater, MN 55082

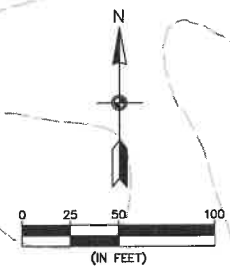
ELLIOTT CROSSING
Grant, MN

GRADING INDEX

75TH STREET N (C.S.A.H. 12)



AREA = 1010.5 (LOCKED)



BENCHMARK

- Minnesota Department of Transportation Geodetic GSD Station No. 106394 (MnDot Name Lake) - Elevation 965.17 ft. (NAVD88)
- Minnesota Department of Transportation Geodetic GSD Station No. 106395 (MnDot Name Long) - Elevation 976.16 ft. (NAVD88)

SEE SHEET 15

SEE SHEET 14

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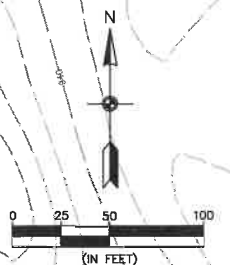
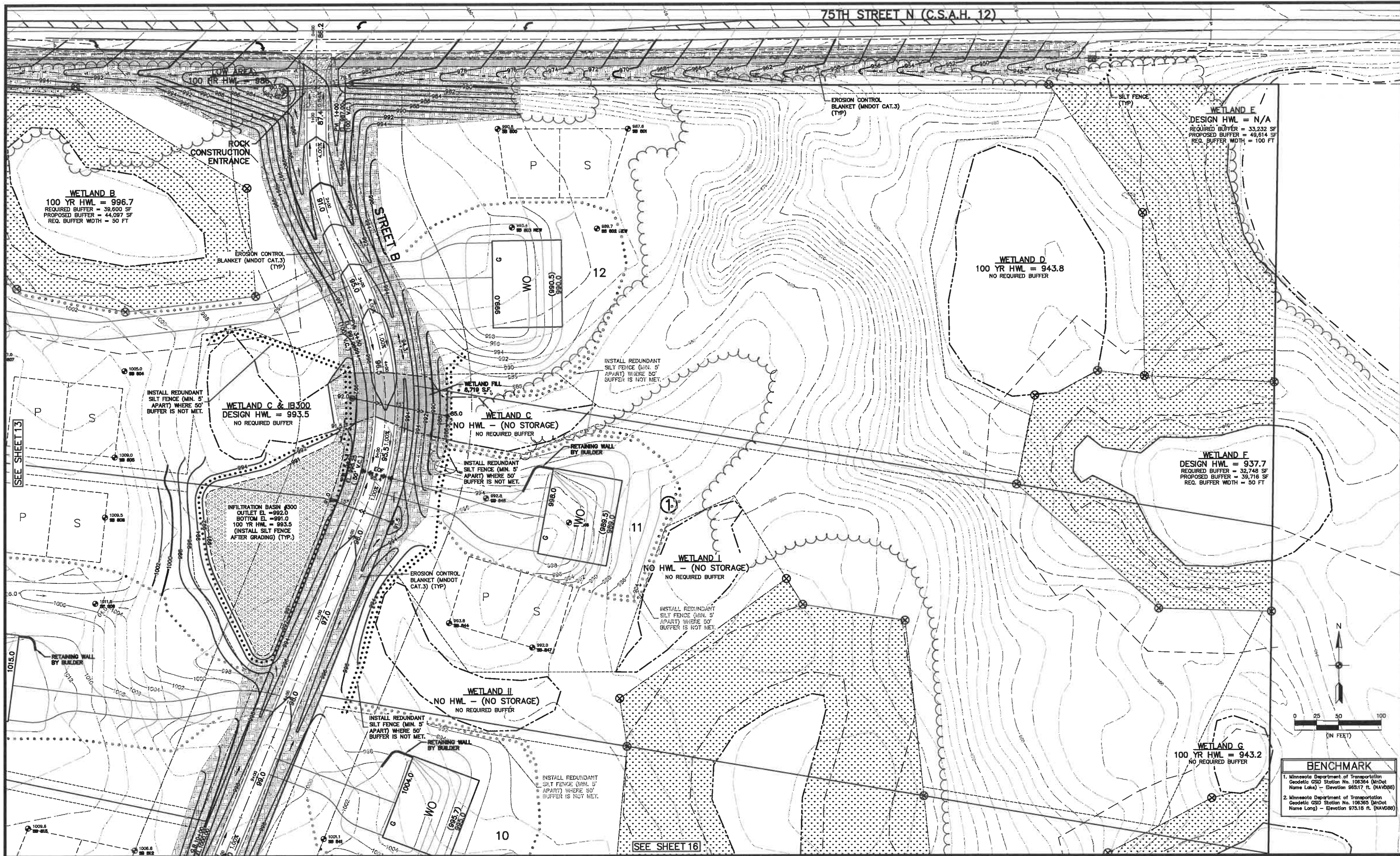
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ELLIOTT CROSSING
Grant, MN

GRADING, DRAINAGE & EROSION CONTROL PLAN



BENCHMARK

- Minnesota Department of Transportation
Geodetic GSD Station No. 106364 (MnDot Name Lake) - Elevation 965.17 ft. (NAVD88)
- Minnesota Department of Transportation
Geodetic GSD Station No. 106365 (MnDot Name Long) - Elevation 970.16 ft. (NAVD88)

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Grant, MN

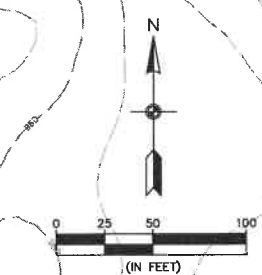
GRADING, DRAINAGE & EROSION CONTROL PLAN

Save Date: 03/21/24 F:\Jobs\10721 - 10740\10728 - grant township parcel\cad c3d\engineering\preliminary\10728_gr.dwg



BENCHMARK

- Minnesota Department of Transportation
Geodetic GSD Station No. 100384 (M-Dot
Narre Lake) - Elevation 965.17 ft. (NAY088)
- Minnesota Department of Transportation
Geodetic GSD Station No. 100365 (M-Dot
Narre Lake) - Elevation 975.18 ft. (NAY088)



BENCHMARK

- Minnesota Department of Transportation
Geodetic CSO Station No. 106364 (MnDOT Name Lake) - Elevation 985.17 ft. (NAV88)
- Minnesota Department of Transportation
Geodetic CSO Station No. 106365 (MnDOT Name Long) - Elevation 975.18 ft. (NAV88)

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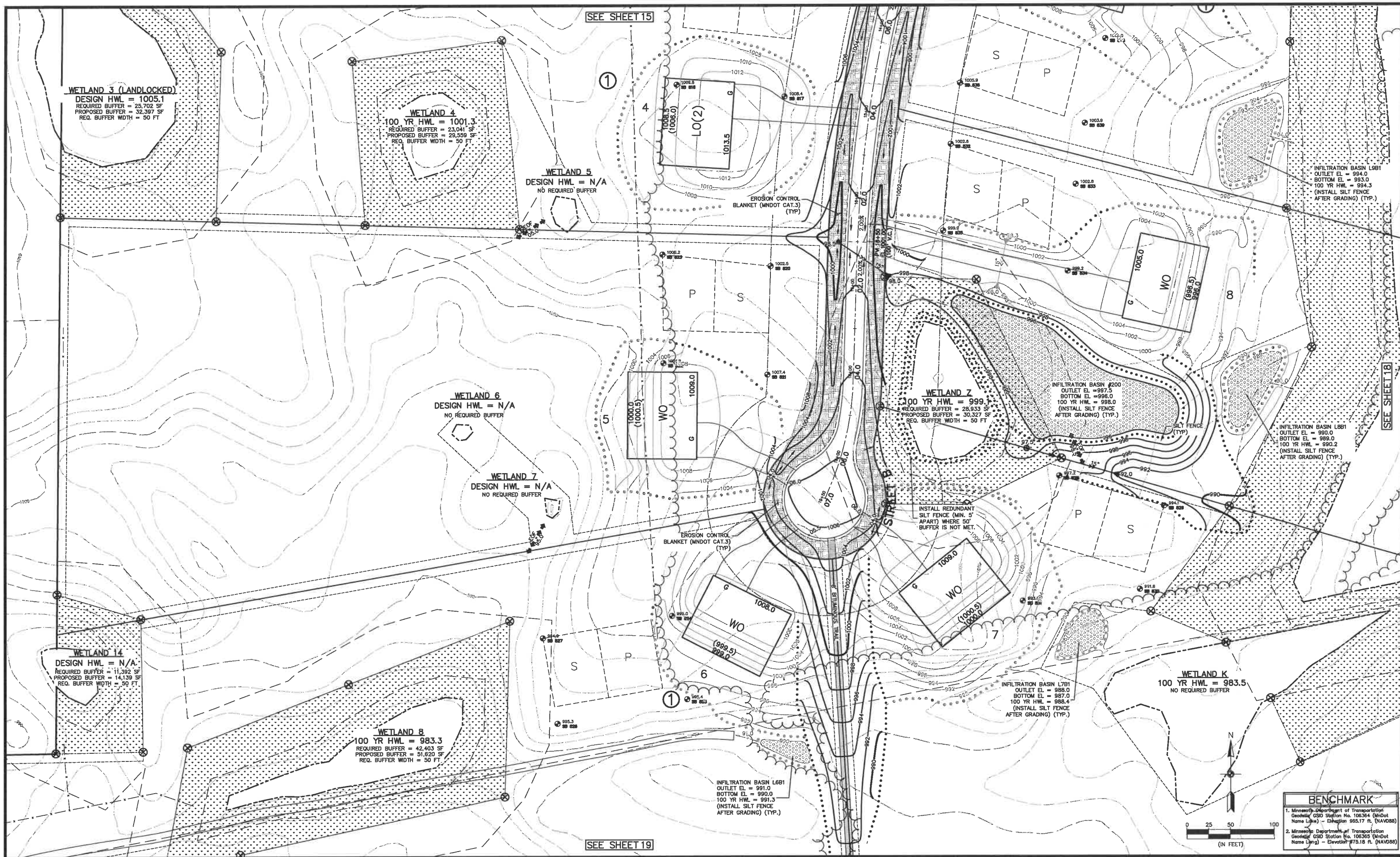
Drawn: KRO
Designed: BJK
Date: 3/22/24

Revisions:
1.

MOR DEVELOPMENT, LLC
6667 Keats Avenue N
Stillwater, MN 55082

ELLIOTT CROSSING
Grant, MN

GRADING, DRAINAGE & EROSION CONTROL PLAN



SEE SHEET 15

SEE SHEET 18

SEE SHEET 19

WETLAND 3 (LANDLOCKED)
 DESIGN HWL = 1005.1
 REQUIRED BUFFER = 23,702 SF
 PROPOSED BUFFER = 32,397 SF
 REQ. BUFFER WIDTH = 50 FT

WETLAND 4
 100 YR HWL = 1001.3
 REQUIRED BUFFER = 23,041 SF
 PROPOSED BUFFER = 29,559 SF
 REQ. BUFFER WIDTH = 50 FT

WETLAND 5
 DESIGN HWL = N/A
 NO REQUIRED BUFFER

WETLAND 6
 DESIGN HWL = N/A
 NO REQUIRED BUFFER

WETLAND 7
 DESIGN HWL = N/A
 NO REQUIRED BUFFER

WETLAND 14
 DESIGN HWL = N/A
 REQUIRED BUFFER = 11,392 SF
 PROPOSED BUFFER = 14,139 SF
 REQ. BUFFER WIDTH = 50 FT

WETLAND 8
 100 YR HWL = 983.3
 REQUIRED BUFFER = 42,403 SF
 PROPOSED BUFFER = 51,620 SF
 REQ. BUFFER WIDTH = 50 FT

WETLAND Z
 100 YR HWL = 999.3
 REQUIRED BUFFER = 28,933 SF
 PROPOSED BUFFER = 30,327 SF
 REQ. BUFFER WIDTH = 50 FT

WETLAND K
 100 YR HWL = 983.5
 NO REQUIRED BUFFER

INFILTRATION BASIN L8B1
 OUTLET EL = 994.0
 BOTTOM EL = 993.0
 100 YR HWL = 994.3
 (INSTALL SILT FENCE AFTER GRADING) (TYP.)

INFILTRATION BASIN L8B1
 OUTLET EL = 990.0
 BOTTOM EL = 989.0
 100 YR HWL = 990.2
 (INSTALL SILT FENCE AFTER GRADING) (TYP.)

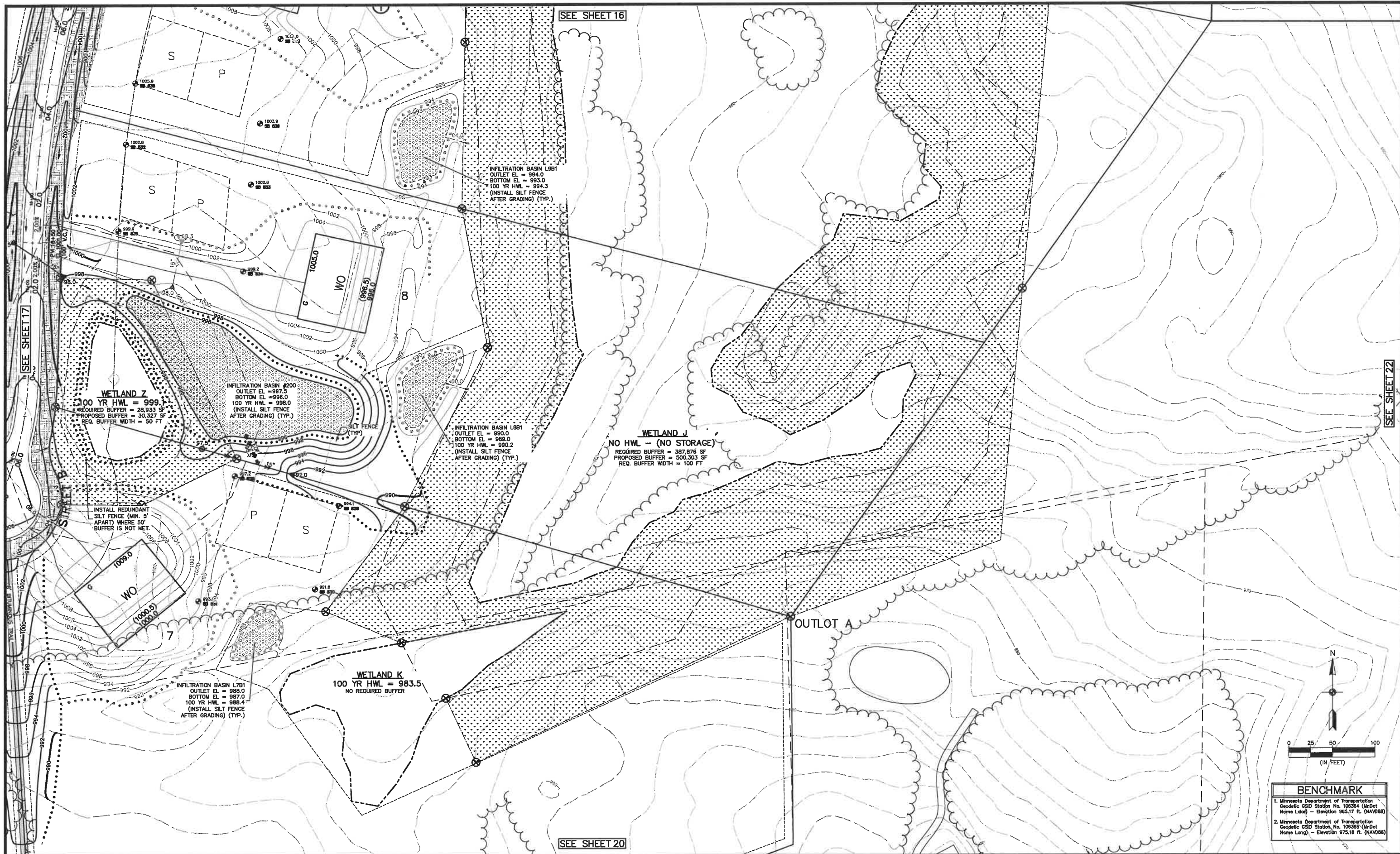
INFILTRATION BASIN #200
 OUTLET EL = 997.5
 BOTTOM EL = 996.0
 100 YR HWL = 998.0
 (INSTALL SILT FENCE AFTER GRADING) (TYP.)

INFILTRATION BASIN L7B1
 OUTLET EL = 988.0
 BOTTOM EL = 987.0
 100 YR HWL = 988.4
 (INSTALL SILT FENCE AFTER GRADING) (TYP.)

INFILTRATION BASIN L681
 OUTLET EL = 991.0
 BOTTOM EL = 990.0
 100 YR HWL = 991.3
 (INSTALL SILT FENCE AFTER GRADING) (TYP.)

BENCHMARK
 1. Minnesota Department of Transportation
 Geodetic GSD Station No. 106364 (MnDot Name Line) - Elevation 955.17 ft. (NAVD88)
 2. Minnesota Department of Transportation
 Geodetic GSD Station No. 106365 (MnDot Name Line) - Elevation 775.18 ft. (NAVD88)





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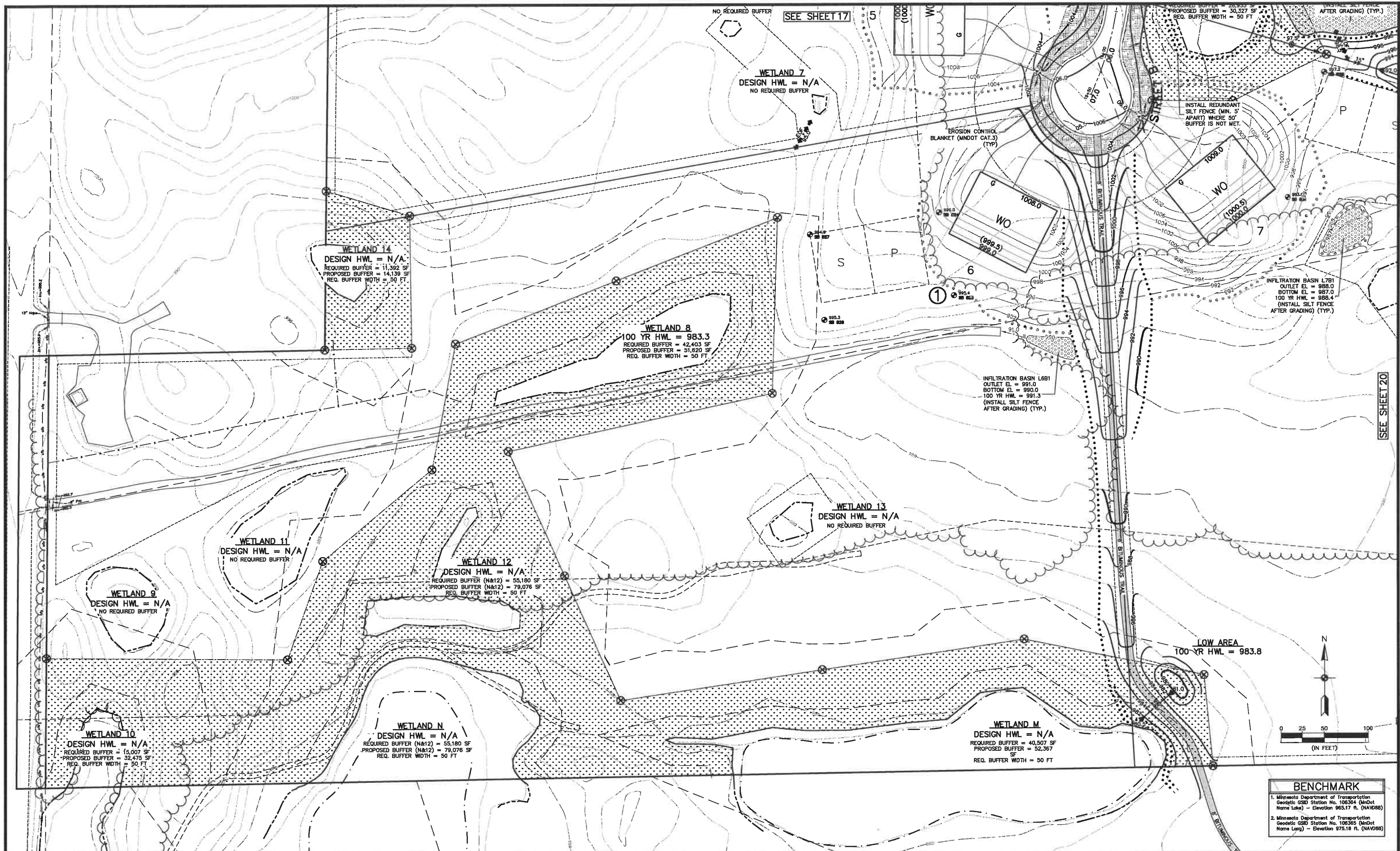
Print Name: Brian J. Krystofak, P.E.
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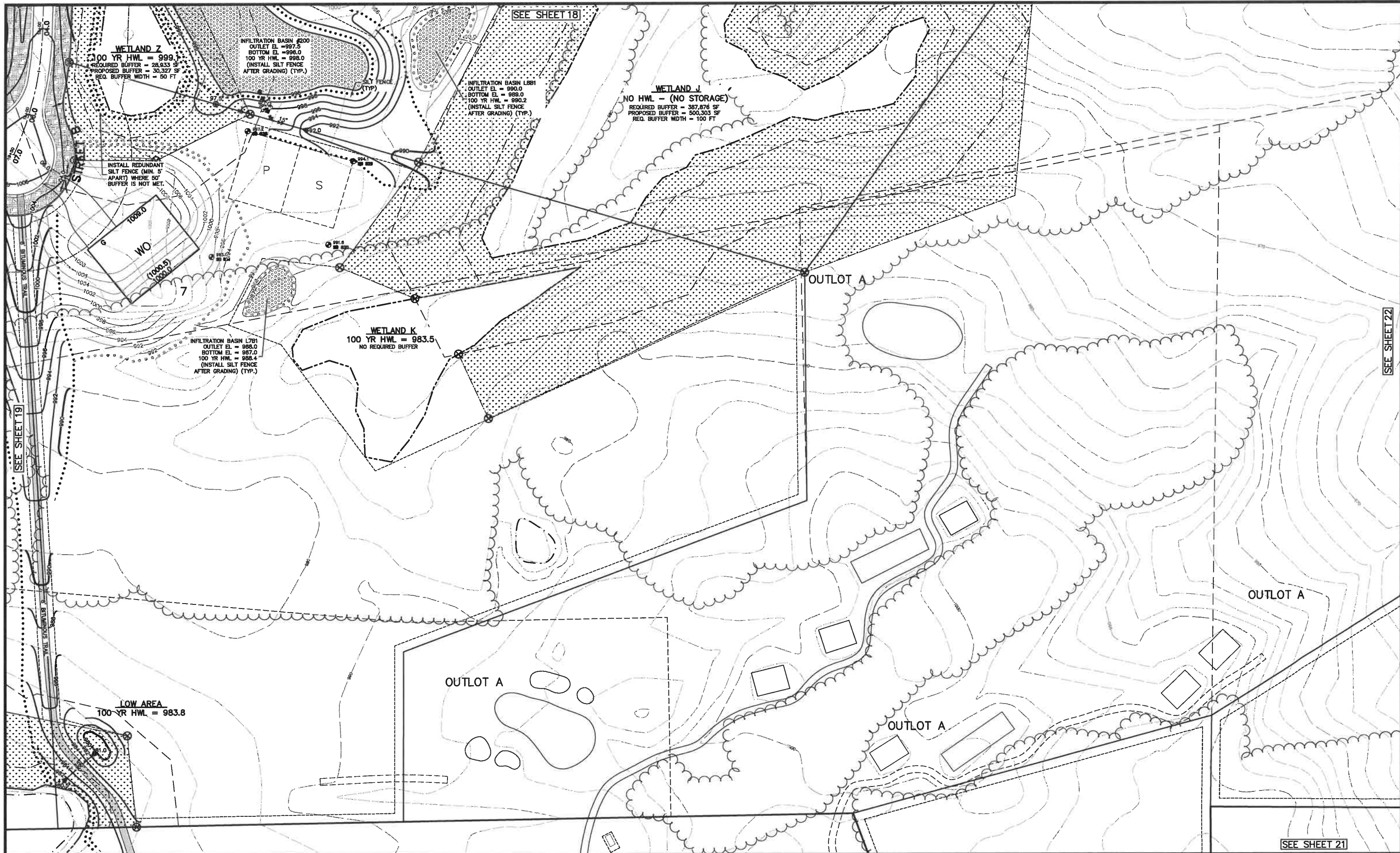
Drawn: KRO
 Designed: BJK
 Date: 3/22/24

MOR DEVELOPMENT, LLC
 6667 Keats Avenue N
 Stillwater, MN 55082

ELLIOTT CROSSING
 Grant, MN

GRADING, DRAINAGE & EROSION CONTROL PLAN





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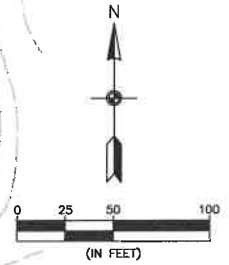
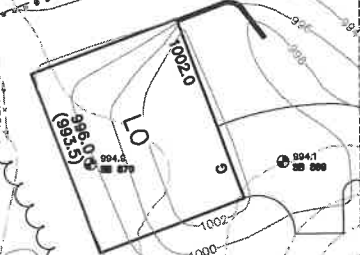
SEE SHEET 20

SEE SHEET 22

OUTLOT A

LOW AREA
DESIGN HWL = 935.2
(LANDLOCKED)

②
6



BENCHMARK	
1.	Minnesota Department of Transportation Geodetic GSD Station No. 106364 (Nodot Name Latel) - Elevation 965.17 ft. (NAVD88)
2.	Minnesota Department of Transportation Geodetic GSD Station No. 106365 (Nodot Name Long) - Elevation 975.18 ft. (NAVD88)

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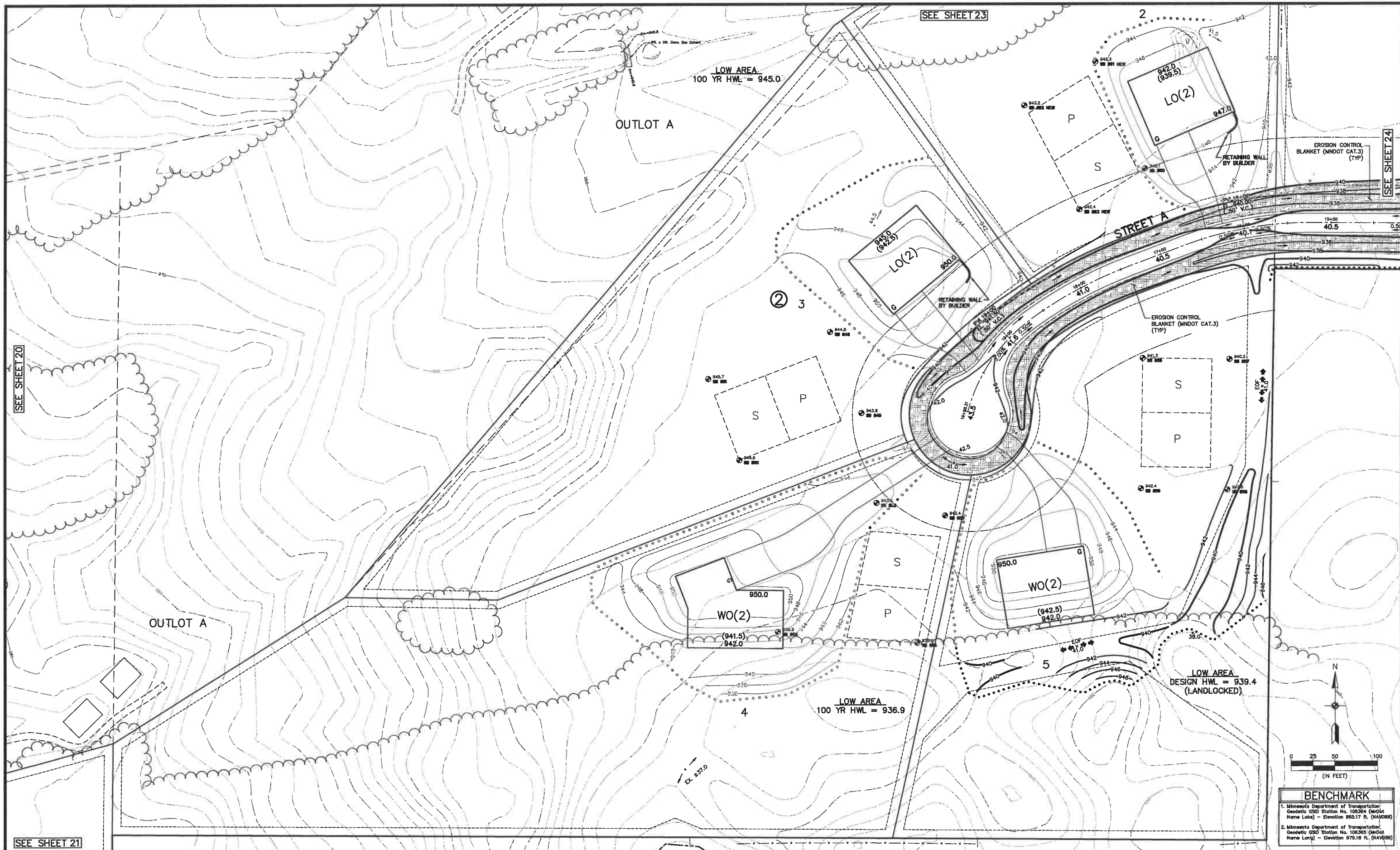
Revisions:
1.

MOR DEVELOPMENT, LLC
6667 Keats Avenue N
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ELLIOTT CROSSING
Grant, MN

GRADING, DRAINAGE & EROSION CONTROL PLAN

21 of 26
#10728



SEE SHEET 21

SEE SHEET 23

SEE SHEET 24

SEE SHEET 20



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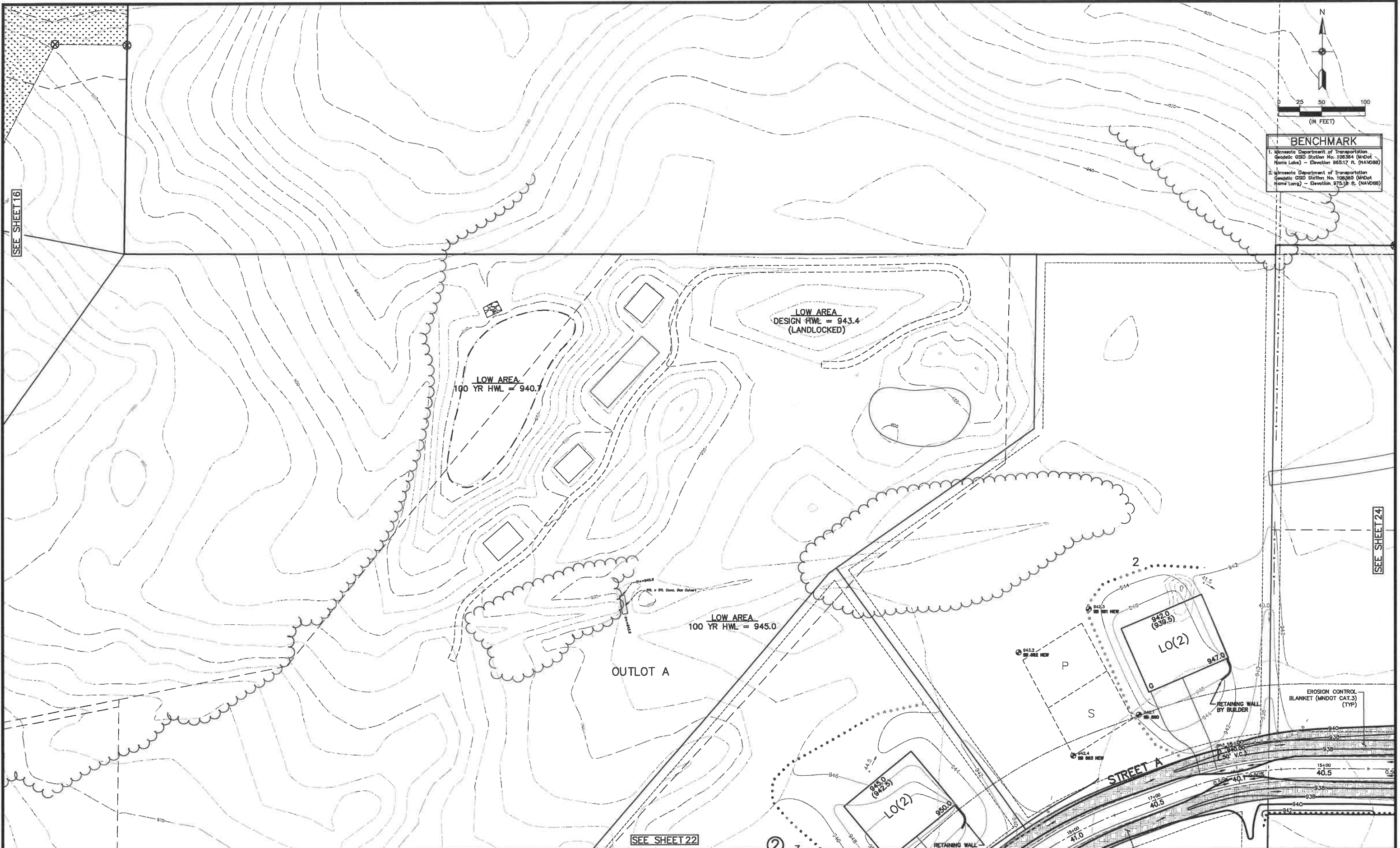
Revisions:
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MOR DEVELOPMENT, LLC
6667 Keats Avenue N
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Grant, MN

GRADING, DRAINAGE & EROSION CONTROL PLAN

22 of 26
#10728



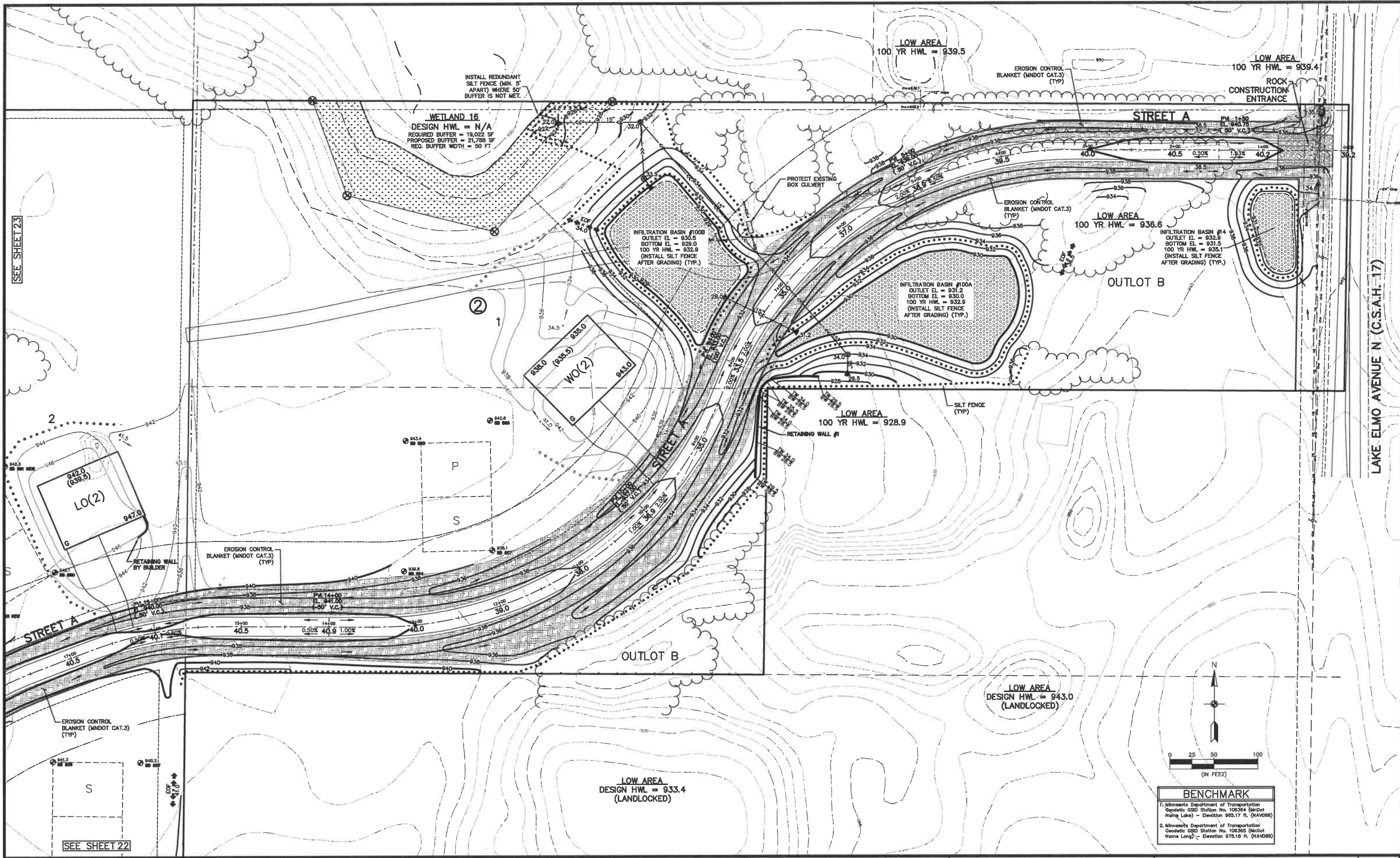
CARLSON McCAIN ENGINEERING SURVEYING ENVIRONMENTAL
 2890 PHEASANT RIDGE DR NE SUITE 100 BLAINE, MN 55449 TEL 763.489.7900 FAX 763.489.7989 CARLSONMCCAIN.COM

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MOR DEVELOPMENT, LLC
 6667 Keats Avenue N
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 Grant, MN

GRADING, DRAINAGE & EROSION CONTROL PLAN



SEE SHEET 23

SEE SHEET 22

LAKE ELMO AVENUE N (C.S.A.H. 17)

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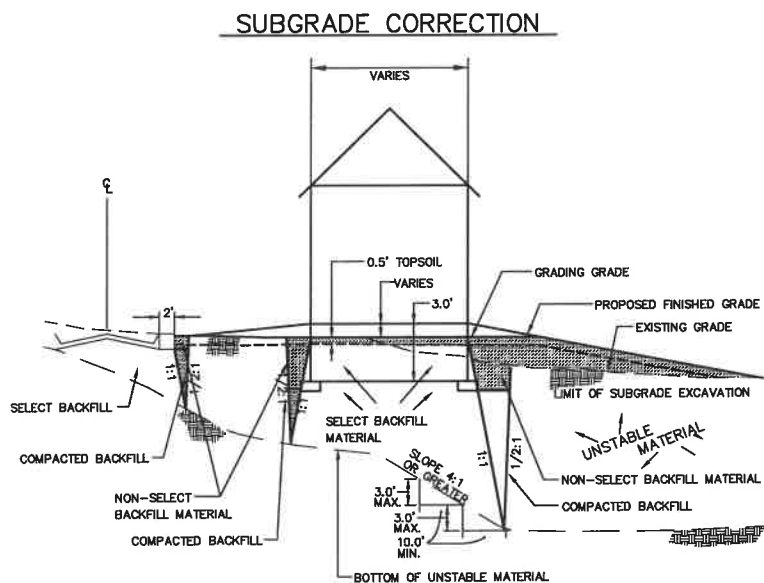
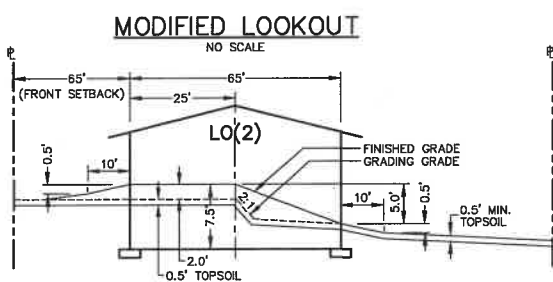
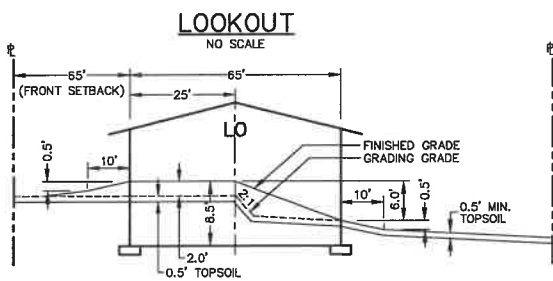
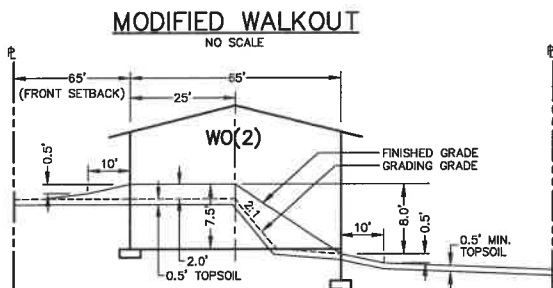
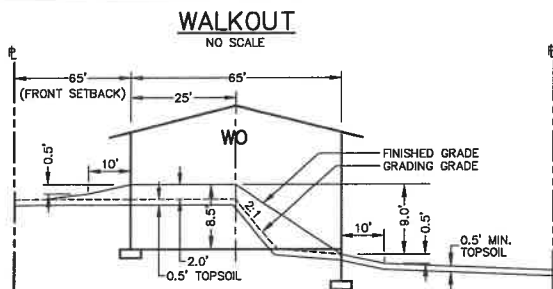
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GRADING, DRAINAGE & EROSION CONTROL PLAN



TURF ESTABLISHMENT

TURF ESTABLISHMENT SHALL APPLY TO ALL DISTURBED AREAS AND SHALL BE ACCORDING TO MNDOT STANDARD SPECIFICATIONS FOR CONSTRUCTION (LATEST EDITION) EXCEPT AS MODIFIED BELOW.

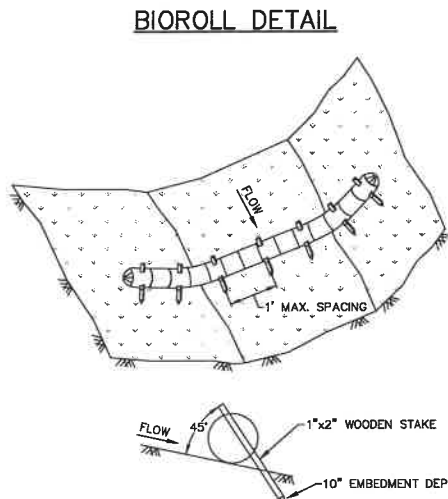
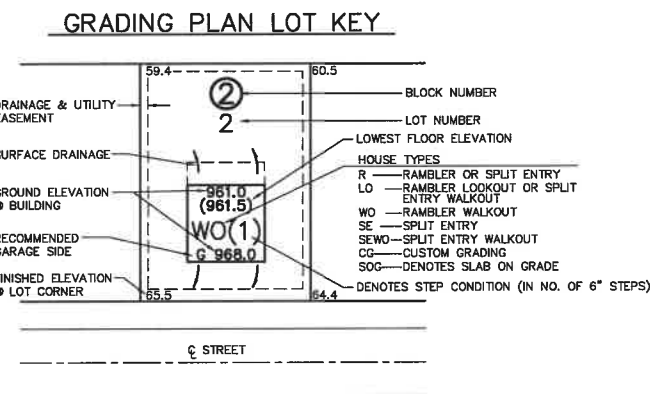
TURF ESTABLISHMENT SHALL OCCUR AS SOON AS POSSIBLE BUT IN NO CASE MORE THAN 7 DAYS.

SEED: MNDOT MIXTURE 25-141 AT 60 POUNDS PER ACRE.

DORMANT SEED: SHALL BE APPLIED AT TWICE THE NORMAL RATE AFTER NOVEMBER 1ST.

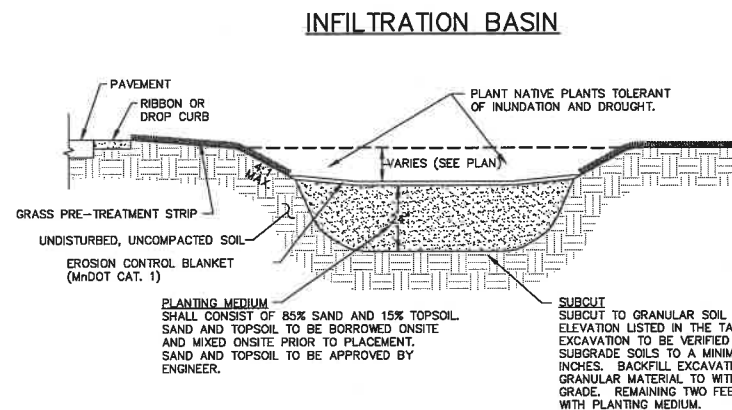
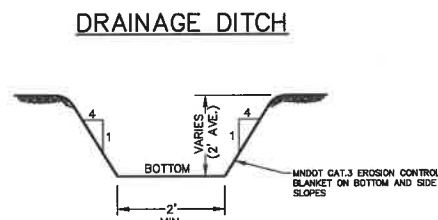
MULCH: TYPE 1 AT 2 TONS PER ACRE (DISK ANCHORED).

FERTILIZER: TYPE 1 10-10-10 AT 200 POUNDS PER ACRE.

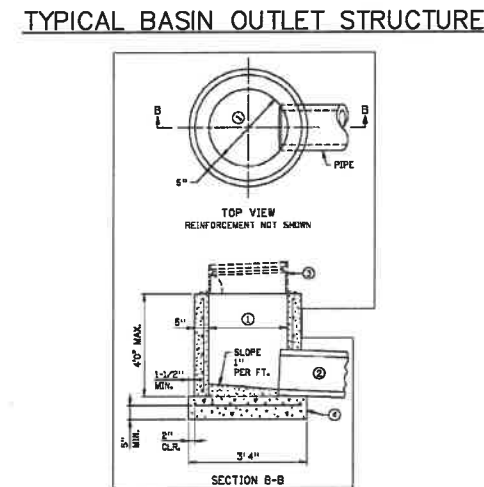
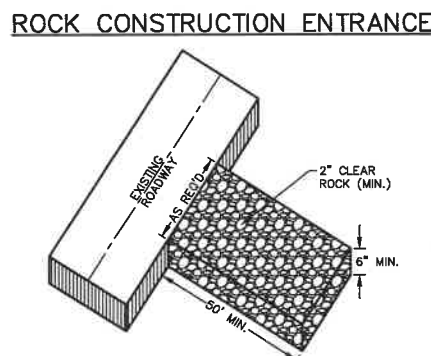
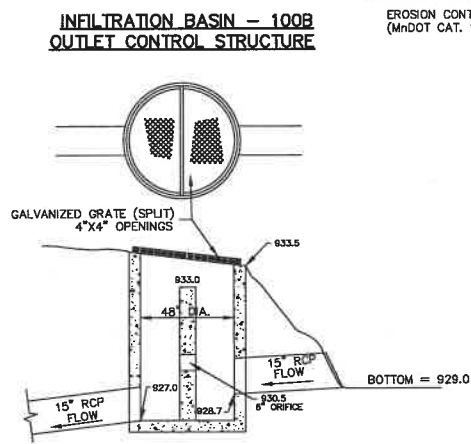


- NOTES:**
- INSTALL DITCH CHECKS ON DITCH SLOPES GREATER THAN 2 PERCENT.
 - ENDS OF BIOROLL SHALL BE A MINIMUM OF 18" HIGHER THAN BOTTOM OF FLOW PATH.
 - STAKES SHALL BE DRIVEN THROUGH THE BACK HALF OF THE BIOROLL.
 - SEE MNDOT SPECS 2573 & 3897.

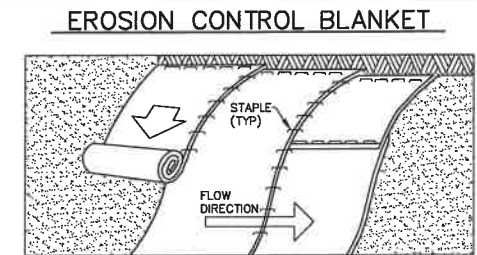
RECOMMENDED SPACING BETWEEN DITCH CHECKS	
DITCH GRADE (%)	SPACING (FT.)
2	42
3-5%	28-17
6-9%	14-8



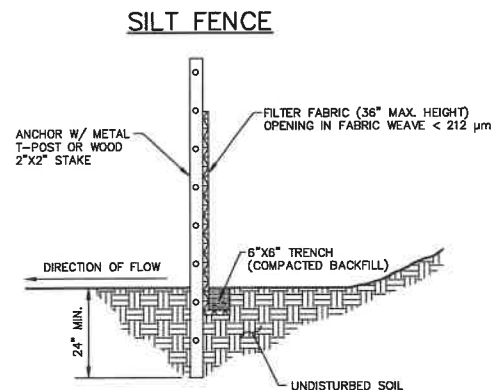
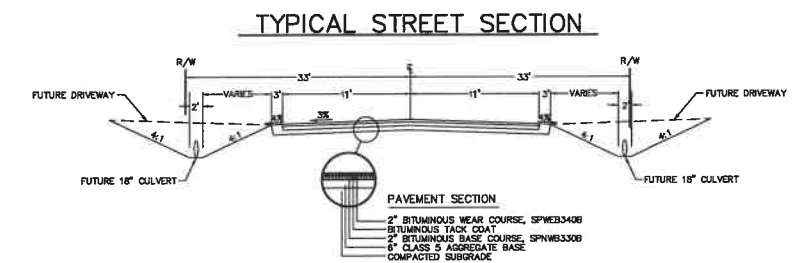
BASIN	FINISHED GRADE	SUBCUT ELEVATION
100A	930.0	928.0
100B	929.0	927.0
200	996.0	994.0
L981	993.0	991.0
L881	989.0	987.0
L781	987.0	985.0
L681	990.0	988.0
300	991.0	989.0



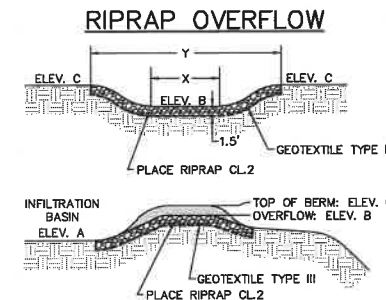
- NOTES:**
- 2' 3" NOMINAL OPENING.
 - SEE FINAL PLANS FOR PIPE SIZE AND SLOPE.
 - NEENAH R-4340-B CASTING OR APPROVED EQUAL. USE CONCRETE ADJUSTING RINGS WHERE REQUIRED SET ON FULL MORTAR BEDS.
 - 8 IN. POURED CONCRETE BASE. BASE REINFORCEMENT: 0.12 SQ. IN. PER FT. IN EACH DIRECTION. AN APPROVED ALTERNATE PRECAST CONCRETE BASE MAY BE USED.



- NOTES:**
- EROSION CONTROL BLANKET SHALL BE INSTALLED IN ALL ROADWAY DRAINAGE DITCHES AND ON ANY SLOPES STEEPER THAN 3:1. SEE PLAN FOR LOCATION.
 - PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING APPLICATION OF LIME, FERTILIZER AND/OR SEED.
 - BEGIN AT THE TOP OF THE SLOPE (OR CHANNEL) BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
 - ROLL THE BLANKETS DOWN (STARTING DOWNSTREAM PROCEEDING UPSTREAM) HORIZONTALLY ACROSS THE SLOPE.
 - THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH A MINIMUM 4" OVERLAP.
 - WHEN BLANKETS MUST BE SPLICED DOWN THE SLOPE, PLACE BLANKETS END OVER END (SHINGLE STYLE) WITH MINIMUM 6" OVERLAP. USE A DOUBLE ROW OF STAGGERED STAPLES 4" APART TO SECURE BLANKETS.
 - IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30 TO 40 FOOT INTERVALS. USE A ROW OF STAPLES 4" APART OVER ENTIRE WIDTH OF THE CHANNEL. PLACE A SECOND ROW 4" BELOW THE FIRST ROW IN A STAGGERED PATTERN.
 - THE TERMINAL ENDS OF THE BLANKETS MUST BE ANCHORED IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.



- NOTES:**
- DIG A 6"x6" TRENCH ALONG THE INTENDED SILT FENCE LINE.
 - DRIVE ALL ANCHOR POSTS INTO THE GROUND AT THE DOWNHILL SIDE OF THE TRENCH.
 - POSTS SHALL BE SPACED A MAXIMUM OF 6 FEET APART.
 - LAY OUT SILT FENCE ALONG THE UPHILL SIDE OF THE ANCHOR POSTS AND BACK FILL 6"x6" TRENCH.
 - SECURELY ATTACH SILT FENCE TO ANCHOR POSTS W/ MINIMUM OF THREE ATTACHMENTS PER POST.
 - SEE MNDOT SPECIFICATIONS 2573 & 3886.



BASIN	ELEVATION A	ELEVATION B	ELEVATION C	DISTANCE X	DISTANCE Y
100A	N/A (STREET EOF)	N/A (STREET EOF)	N/A (STREET EOF)	N/A (STREET EOF)	N/A (STREET EOF)
100B	929.0	934.0	934.5	10	10
200	996.0	998.5	999.0	10	10
300	N/A (STREET EOF)	N/A (STREET EOF)	N/A (STREET EOF)	N/A (STREET EOF)	N/A (STREET EOF)
L981	993.0	994.0	994.5	10	10
L881	989.0	990.0	990.5	5.0	5.0
L781	987.0	988.0	988.7	5.0	5.0
L681	990.0	991.0	991.5	10.0	10.0

* Basins 100A, 100B, 200, & 300 do not use an overland EOF as its primary outlet

MODULAR RETAINING WALL #1
(1,056 SF)

