

Section 2  
149<sup>th</sup> Lane

## **149<sup>th</sup> Lane**

### **Description**

As shown on Exhibit 5, a low area exists on Lot 3, Block 1 of Ramsey Meadows 4<sup>th</sup> Addition. There is a drain tile that drains the low area to DNR Wetland 658W. During large storm events, DNR Wetland 658W backs up through the drain tile and into the low area. DNR Wetland 658W drains east under Trunk Highway 47 (TH 47) through a small weir structure and 15" pipe to DNR Wetland 659W. The weir structure is at an elevation of 860.9 and drains to the 15" pipe at an elevation of 860.0.

The current outlet elevation is approximately two feet above the bottom of Wetland 658W. The existing 100-year high water level (HWL) for DNR Wetland 658W is 862.1 and for DNR Wetland 659W is 860.4. As shown on Exhibit 6, there is an existing drainage and utility easement over a majority of Block 1 of Ramsey Meadows 4<sup>th</sup> Addition including the low area in question.

### **Alternatives**

The following alternatives address the water elevation in DNR Wetland 658W.

#### **Alternative 1**

Alternative 1 will include removing the existing weir structure and leaving only the 15" culvert as the outlet from DNR Wetland 658W. By removing the weir structure, the wetland will begin to discharge at an elevation of 860.0 as opposed to 860.8.

Removing the weir structure, resulting in a lower normal water level in the wetland, will result in a 100-year HWL for DNR Wetland 658W of 862.0. The 100-year HWL for DNR Wetland 659W did not change. The estimated cost to remove the weir structure is \$1,265. Table 8 includes the individual costs for this alternative.

It is our understanding that any work proposed below an elevation of 860 will need the approval of the Minnesota Department of Natural Resources (DNR). This alternative will not have any effect below an elevation of 860 and is not anticipated to need the approval of the DNR. It appears the weir structure is part of the TH 47 storm sewer system. Removing the weir structure may require Mn/DOT's approval.

#### **Alternative 2**

Alternative 2 will include removing the existing weir structure and constructing an additional outlet from DNR Wetland 658W under TH 47. The proposed additional outlet would be at the same elevation as the existing outlet, 860.0. It was assumed the additional pipe would have to be jacked under TH 47.

Three different sized additional outlet pipes were analyzed. The following table summarizes the 100-year HWL's for DNR Wetlands 658W and 659W and the estimated costs to construct each outlet pipe:

Outlet Pipe Size	100-Year HWL (658W)	100-Year HWL (659W)	Estimated Cost
Existing	862.1	860.4	N/A
Existing + 15"	861.8	861.2	\$15,290
Existing + 18"	861.7	861.3	\$18,755
Existing + 24"	861.6	861.4	\$29,040

Tables 9 through 11 include the individual costs for this alternative.

As mentioned above, it is our understanding that any work proposed below an elevation of 860 will need the approval of the DNR. This alternative will not have any effect below an elevation of 860 and is not anticipated to need the approval of the DNR. Removing the weir structure and constructing a culvert under TH 47 will require Mn/DOT's approval.

### Alternative 3

Alternative 3 will include removing the existing weir structure and constructing an additional outlet from DNR Wetland 658W under TH 47. The proposed additional outlet would be at an elevation of 859.0, one foot lower than the existing outlet. It was assumed the additional pipe would have to be jacked under TH 47.

Two different sized additional outlet pipes were analyzed. The following table summarizes the 100-year HWL's for DNR Wetlands 658W and 659W and the estimated costs to construct each outlet pipe:

Outlet Pipe Size	100-Year HWL (658W)	100-Year HWL (659W)	Estimated Cost
Existing	862.1	860.4	N/A
Existing + lower 18"	861.6	861.3	\$18,755
Existing + lower 24"	861.6	861.5	\$29,040

Tables 12 and 13 include the individual costs for this alternative.

As mentioned above, it is our understanding that any work proposed below an elevation of 860 will need the approval of the DNR. This alternative has work proposed below an elevation of 860 and will need the approval of the DNR. Removing the weir structure and constructing a culvert under Trunk Highway 47 will require Mn/DOT's approval.

**Alternative 4**

Alternative 4 will include filling the low area on Lot 3, Block 1 of Ramsey Meadows 4<sup>th</sup> Addition. Filling the low area will reduce the frequency of the backyard flooding. During large storm events, the area may be inundated by water, but will likely be less frequently and for a shorter duration than under existing conditions.

The estimated cost to fill the low area is \$4,681. Table 14 includes the individual costs for this alternative.

As shown on Exhibits 7 and 8, this low area appears to have been designed as wetland mitigation area. Further research may be necessary to determine if this area is protected by the Wetland Conservation Act (WCA). If the area is protected by the WCA, filling this low area will not be a viable alternative.

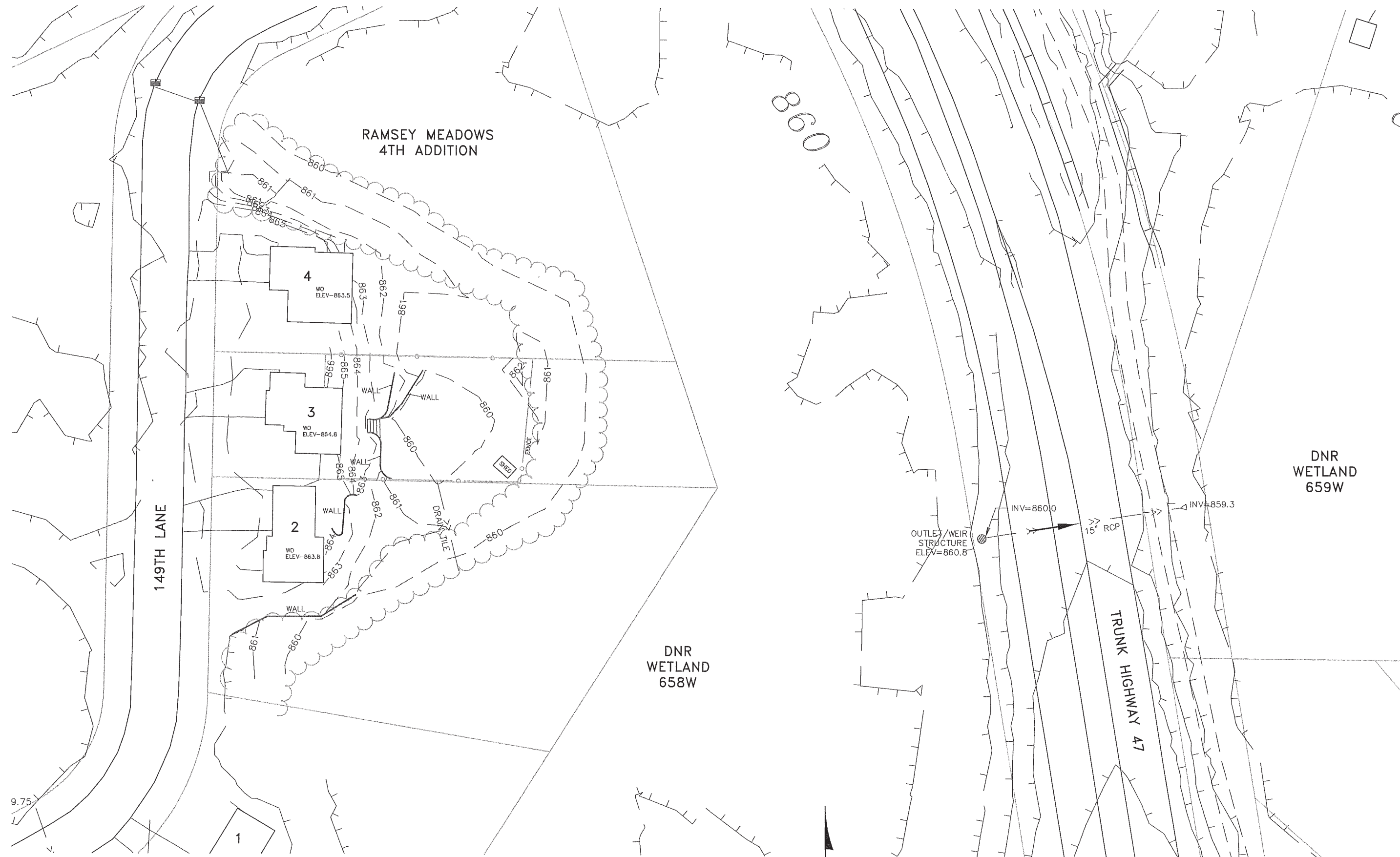


EXHIBIT 5  
149TH LANE EXISTING CONDITIONS  
CITY OF RAMSEY, MINNESOTA

# RAMSEY MEADOWS 4TH ADDITION

CITY OF RAMSEY COUNTY OF ANOKA

pg 25

KNOW ALL PERSONS BY THESE PRESENTS: That J. A. Menkveld & Associates, Inc., a Minnesota corporation, owner and proprietor and Builders Mortgage Corporation, a Minnesota corporation, mortgagee of the following described property situated in the County of Anoka, State of Minnesota, to-wit:

That part of the Southwest Quarter of Section 24, Township 32, Range 25, Anoka County, Minnesota, described as follows:

Beginning at the northeast corner of Outlot A, RAMSEY MEADOWS 3RD ADDITION, according to the recorded plat thereof, Anoka County, Minnesota; thence South 89 degrees 07 minutes 51 seconds East, assumed bearing, parallel with the south line of said Southwest Quarter, a distance of 208.50 feet to the center line of State Trunk Highway No. 47, per the plat of AMBER RIDGE, according to the recorded plat thereof, Anoka County, Minnesota; thence northerly along said center line and along the center line of said State Trunk Highway No. 47, per the plat of WILLOW RIDGE, according to the recorded plat thereof, Anoka County, Minnesota, a distance of 789.96 feet to the intersection with the northeasterly extension of the following described line:

Beginning at a point on the center line of State Trunk Highway No. 47, per the plat of GORHAM'S ADDITION, according to the recorded plat thereof, Anoka County, Minnesota, said point being distant 93.00 feet southeasterly of the northeasterly extension of the southeasterly line of Block 3, said GORHAM'S ADDITION, as measured along said center line; thence South 64 degrees 18 minutes West, parallel with the southeasterly line of Block 3, said GORHAM'S ADDITION, a distance of 376.78 feet, and said line there terminating;

thence South 64 degrees 18 minutes 00 seconds West, along said last described line, a distance of 376.83 feet to the point of termination of said line; thence southwesterly along a tangential curve concave to the southeast, having a radius of 103.25 feet and a central angle of 63 degrees 14 minutes 20 seconds, a distance of 113.96 feet; thence South 1 degree 03 minutes 40 seconds West, tangent to said curve, a distance of 345.42 feet; thence southwesterly along a tangential curve concave to northwest, having a radius of 115.75 feet and a central angle of 60 degrees 08 minutes 15 seconds, a distance of 121.49 feet; thence South 61 degrees 11 minutes 55 seconds West, tangent to said curve, a distance of 53.09 feet to the intersection with the westerly extension of the north line of said Outlot A, RAMSEY MEADOWS 3RD ADDITION; thence South 87 degrees 06 minutes 09 seconds East, along said north line and its westerly extension, a distance of 517.62 feet to the point of beginning.

AND

Outlot A, RAMSEY MEADOWS 3RD ADDITION, according to the recorded plat thereof, Anoka County, Minnesota.

Have caused the same to be surveyed and platted as RAMSEY MEADOWS 4TH ADDITION and do hereby dedicate to the public for public use forever the boulevard, lane and drainage and utility easements as shown on the plat. In witness whereof said J. A. Menkveld & Associates, Inc., a Minnesota corporation, has caused these presents to be signed by its proper officer this 7th day of OCT, 1996. Also in witness whereof said Builders Mortgage Corporation has caused these presents to be signed by its proper officer this 7th day of OCT, 1996.

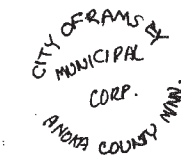
SIGNED:

J. A. MENKVELD & ASSOCIATES, INC.:

*J. A. Menkveld*  
J. A. Menkveld, President

1275655  
OFFICE OF COUNTY RECORDER  
STATE OF MINNESOTA, COUNTY OF ANOKA  
I hereby certify that the within instrument was filed in this office for record on the 7th day of MAY, 1997.  
Book block AM, and was duly recorded in book 54, page 15.

*Edward M. Truka*  
County Recorder  
By *KHG*  
Deputy



CAINE & ASSOCIATES  
LAND SURVEYORS, INC.

BUILDERS MORTGAGE CORPORATION:

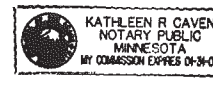
*Ronald Stratton*  
Ronald Stratton, as President

STATE OF MINNESOTA) The foregoing instrument was acknowledged before me this COUNTY OF ANOKA) 7th day of October, 1996, by J. A. Menkveld, President of J. A. Menkveld & Associates, Inc., a Minnesota Corporation, on behalf of the Corporation.



*Teresa Vinje*  
Notary Public, Anoka County, Minnesota  
My Commission expires 1-31-00

STATE OF MINNESOTA) The foregoing instrument was acknowledged before me this COUNTY OF ANOKA) 7th day of October, 1996, by Ronald Stratton, President of Builders Mortgage Corporation, a Minnesota corporation, on behalf of the corporation.

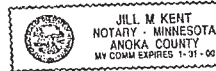


*Kathleen R. Caven*  
Notary Public, Ramsey County, Minnesota  
My Commission expires 1-31-2000

I hereby certify that I have surveyed and platted the land described in the dedication on this plat as RAMSEY MEADOWS 4TH ADDITION; that the plat is a correct representation of said survey; that all distances are correctly shown on said plat in feet and hundredths of a foot; that the monuments have been correctly placed in the ground as shown; that the outside boundaries are correctly designated on said plat; and that there are no wetlands or public highways to be designated on said plat other than as shown thereon.

*Jeffrey N. Caine*  
Jeffrey N. Caine, Registered Land Surveyor  
Minnesota Registration No. 12251

STATE OF MINNESOTA) The surveyors certificate was acknowledged before me a Notary COUNTY OF ANOKA) Public, this 12th day of October, 1996, by Jeffrey N. Caine, Land Surveyor.



*Jill M. Kent*  
Notary Public, Anoka County, Minnesota  
My Commission expires 01-31-00

CITY OF RAMSEY

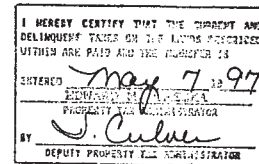
We hereby certify that the City Council of the City of Ramsey, Anoka County, Minnesota, duly accepted and approved the plat of RAMSEY MEADOWS 4TH ADDITION at a regular meeting held this 24th day of September, 1996. If applicable, the written comments and recommendations of the Commissioner of Transportation and the County Highway Engineer have been received by the city or the prescribed 30 day period has elapsed without receipt of such comments and recommendations, as provided by Minn. Statutes, Section 505.03, Subd. 2.

By *Ryan R. Schroeder* Mayor By *Ryan R. Schroeder* Clerk

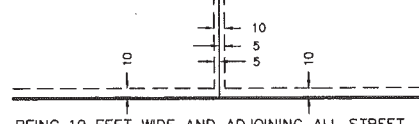
Checked and approved this 7th day of MAY, 1997.

By *Merlyn D. Anderson*  
Anoka County Surveyor

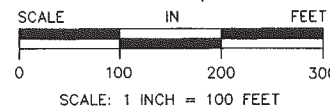
By *Larry S. Ham* deputy



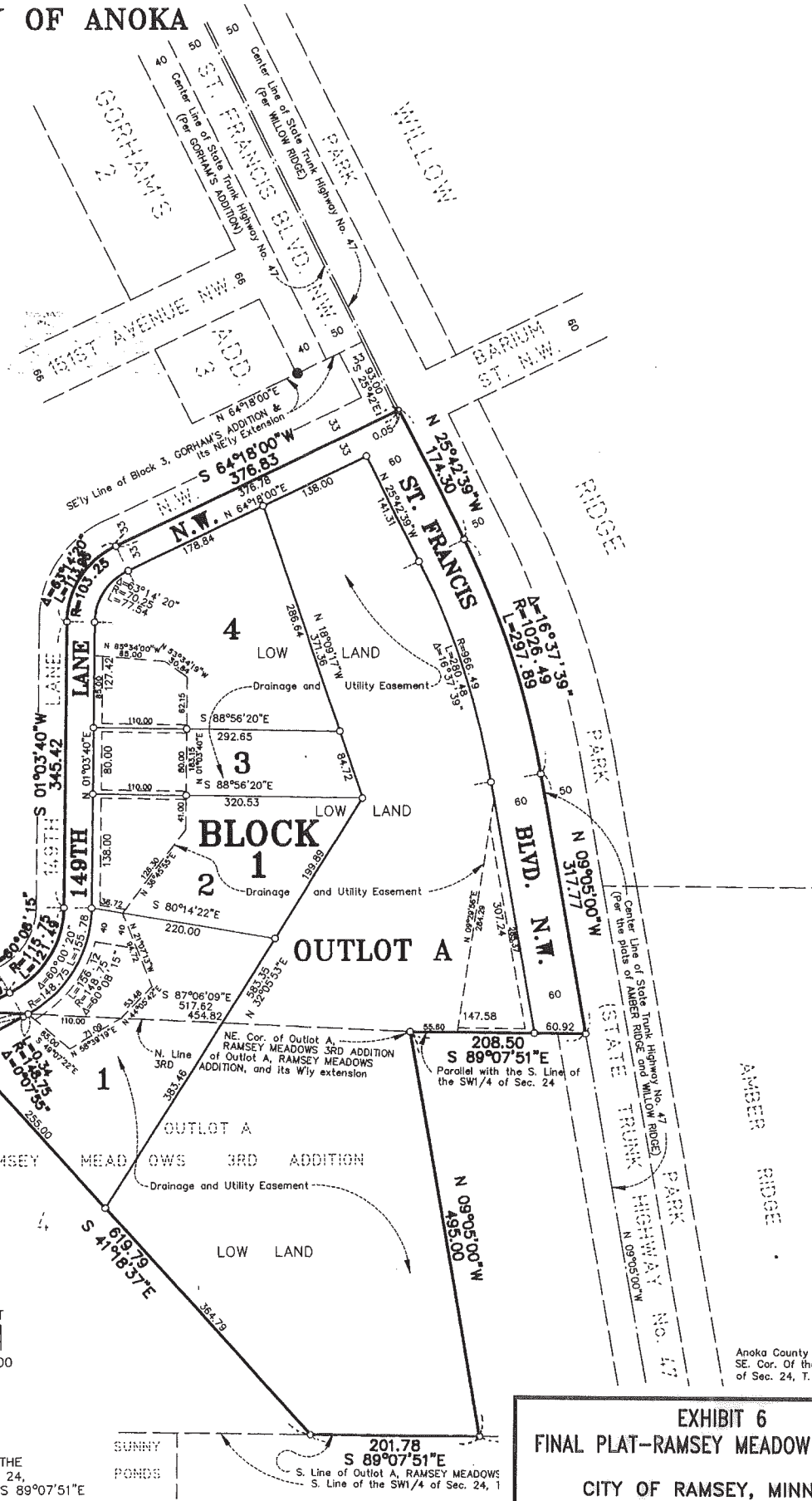
DRAINAGE AND UTILITY EASEMENTS SHOWN THUS:



BEING 10 FEET WIDE AND ADJOINING ALL STREET RIGHT-OF-WAY LINES AND REAR LOT LINES AND 5 FEET WIDE AND ADJOINING ALL SIDE LOT LINES, UNLESS OTHERWISE SHOWN ON THE PLAT.



● DENOTES IRON MONUMENT FOUND.  
○ DENOTES 1/2 INCH IRON PIPE SET.  
◎ DENOTES ANOKA COUNTY MONUMENT.  
NOTE: FOR THE PURPOSES OF THIS PLAT, THE SOUTH LINE OF THE SW1/4 OF SEC. 24, T. 32, R. 25 IS ASSUMED TO BEAR S 89°07'51"E

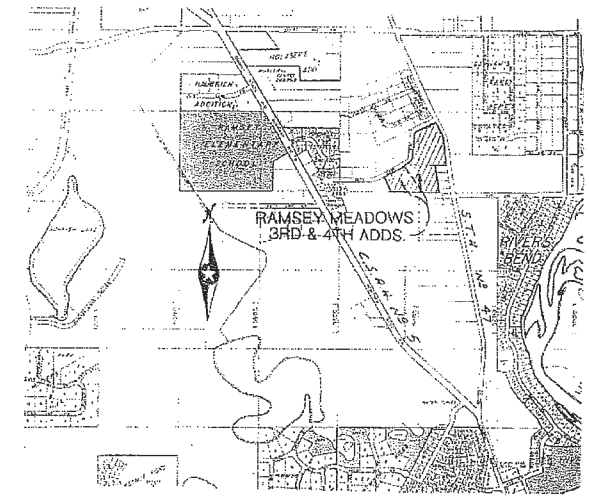
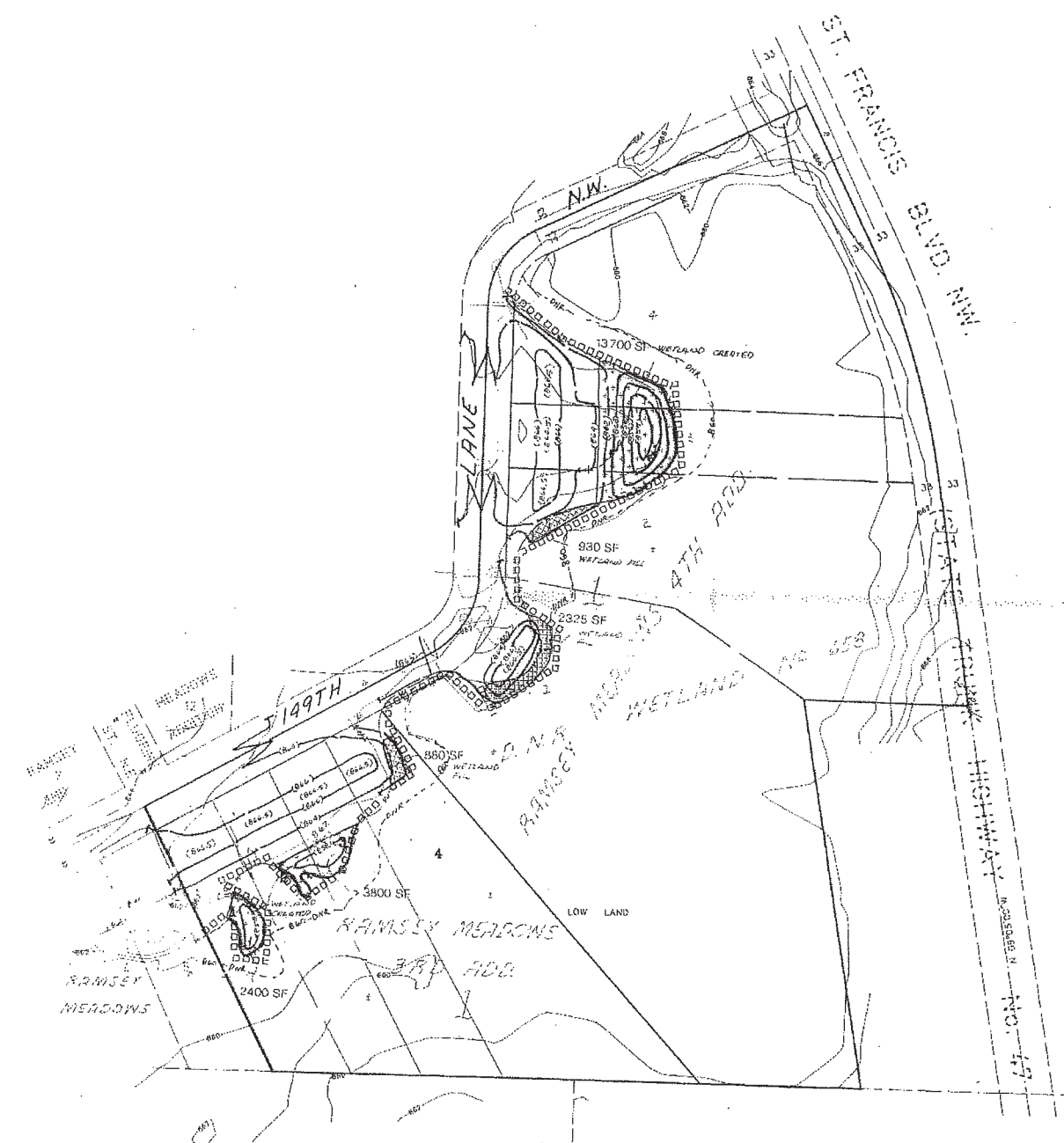


Anoka County Monument at SE. Cor. Of the SW1/4 of Sec. 24, T. 32, R. 25

EXHIBIT 6  
FINAL PLAT-RAMSEY MEADOW 4TH ADD.  
CITY OF RAMSEY, MINNESOTA

30997/824500

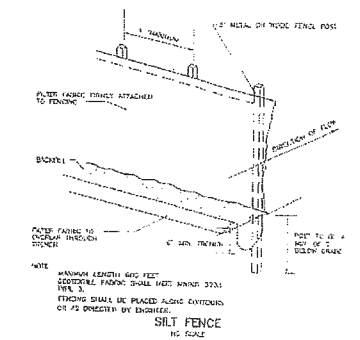
PRELIMINARY GRADING, DRAINAGE & EROSION CONTROL PLAN FOR: **RAMSEY MEADOWS 3RD & 4TH ADDITIONS**



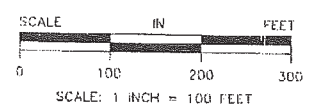
**EROSION CONTROL DURING CONSTRUCTION**

**NOTES:**

- All disturbed soils within 100 lineal feet from wetlands shall be covered with four inches (4") of topsoil and seeded with a minimum of seventy-five (75) pounds per acre of MN/DOT Specification Section 3876, Mixture No. 12, with fertilizer 12-12-12 mixture applied at 600 pounds per acre with Mulch-Type 1. This work shall be constructed in accordance with MN/DOT Specification Section 2575, within the following timeframe:  
 Slopes steeper than 3:1 - 7 days  
 Slopes 10:1 to 3:1 - 14 days  
 Flatter than 10:1 - 21 days
- Excavate ponding areas before upland grading.
- The bottom of all drainage ditches shall be stabilized within 100 feet of all wetlands. Stabilization must be initiated within 24 hours of connection to wetlands and be completed within five days. All pipes connecting to drainage swales must be provided with energy dissipation structures prior to connecting to wetland.
- Sediment control structures must be in place prior to starting of grading and must be maintained until final stabilization has been established.
- Inspect and maintain after rainfall (as required). The inspector is to be
- Vehicle tracking onto unpaved surfaces must be minimized.
- All silt fence shall be removed after the site has undergone final stabilization.



	PROPOSED NON-DNR WETLAND DISTURBED	PROPOSED WETLAND CREATED
Ramsey Meadows 3rd Addition	880 S.F. ±	6,200 S.F. ±
Ramsey Meadows 4th Addition	4,135 S.F. ±	19,900 S.F. ±
<b>TOTALS</b>	<b>5,015 S.F. ±</b>	<b>26,100 S.F. ±</b>



I HEREBY CERTIFY THAT THIS SURVEY, PLAN OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MINNESOTA.

*Jeffrey M. Caine*  
 DATE: Jan. 28, 2015 REG. NO. 32251

± 000.0 DENOTES EXISTING SPOT ELEVATION  
 (000.0) " " PROPOSED " "  
 --- 000 --- " " EXISTING CONTOUR  
 --- (000) --- " " PROPOSED CONTOUR

--- DNR --- DENOTES EDGE OF D.N.R. WETLAND N.R. 658.  
 --- W --- W --- DENOTES EDGE OF WETLAND AS CREATED BY JOHN C. ANDERSON OF WETLANDS DATA, INC. & SURVEYED BY CAINE & ASSOC. LAND SURVEYORS, INC.  
 □□□□□□□□□□ DENOTES PROPOSED SILT FENCE

● DENOTES IRON MONUMENT FOUND  
 ○ DENOTES 1/2 INCH IRON PIPE SET.  
 BEARINGS SHOWN ARE BASED ON ASSUMED DATUM.

**CAINE & ASSOCIATES**  
**LAND SURVEYORS, INC.**  
 17720 Highway 85 N.E. - Ham. 1c  
 434-7846

**EXHIBIT 7**  
**RAMSEY MEADOWS GRADING PLAN**  
 CITY OF RAMSEY, MINNESOTA



**TABLE 8  
149TH LANE  
ALTERNATIVE 1**

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	TOTAL ESTIMATED QUANTITY	TOTAL ESTIMATED COST
1	MOBILIZATION	LUMP SUM	\$100.00	1	\$100
2	REMOVE STORM STRUCTURE	EACH	\$400.00	1	\$400
3	15" RC PIPE APRON	EACH	\$300.00	1	\$300
4	CONNECT TO EXISTING STORM SEWER	EACH	\$300.00	1	\$300
5	TURF ESTABLISHMENT	LUMP SUM	\$50.00	1	\$50

Estimated Construction Cost	\$1,150
Contingency (10%)	\$115
Total Estimated Construction Cost	<u>\$1,265</u>

**TABLE 9**  
**149TH LANE**  
**ALTERNATIVE 2A - 15" OUTLET**

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	TOTAL ESTIMATED QUANTITY	TOTAL ESTIMATED COST
1	MOBILIZATION	LUMP SUM	\$400.00	1	\$400
2	REMOVE STORM STRUCTURE	EACH	\$400.00	1	\$400
3	15" RC PIPE APRON	EACH	\$300.00	3	\$900
4	15" RC PIPE SEWER DESIGN 3006, CL V - JACKED	LIN FT	\$100.00	118	\$11,800
5	CONNECT TO EXISTING STORM SEWER	EACH	\$300.00	1	\$300
6	TURF ESTABLISHMENT	LUMP SUM	\$100.00	1	\$100

Estimated Construction Cost	\$13,900
Contingency (10%)	\$1,390
Total Estimated Construction Cost	<u>\$15,290</u>

**TABLE 10  
149TH LANE  
ALTERNATIVE 2B - 18" OUTLET**

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	TOTAL ESTIMATED QUANTITY	TOTAL ESTIMATED COST
1	MOBILIZATION	LUMP SUM	\$500.00	1	\$500
2	REMOVE STORM STRUCTURE	EACH	\$400.00	1	\$400
3	15" RC PIPE APRON	EACH	\$300.00	1	\$300
4	18" RC PIPE APRON	EACH	\$350.00	2	\$700
5	18" RC PIPE SEWER DESIGN 3006, CL V - JACKED	LIN FT	\$125.00	118	\$14,750
6	CONNECT TO EXISTING STORM SEWER	EACH	\$300.00	1	\$300
7	TURF ESTABLISHMENT	LUMP SUM	\$100.00	1	\$100

Estimated Construction Cost	\$17,050
Contingency (10%)	\$1,705
Total Estimated Construction Cost	<u>\$18,755</u>

**TABLE 11  
149TH LANE  
ALTERNATIVE 2C - 24" OUTLET**

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	TOTAL ESTIMATED QUANTITY	TOTAL ESTIMATED COST
1	MOBILIZATION	LUMP SUM	\$800.00	1	\$800
2	REMOVE STORM STRUCTURE	EACH	\$400.00	1	\$400
3	15" RC PIPE APRON	EACH	\$300.00	1	\$300
4	24" RC PIPE APRON	EACH	\$450.00	2	\$900
5	24" RC PIPE SEWER DESIGN 3006, CL V - JACKED	LIN FT	\$200.00	118	\$23,600
6	CONNECT TO EXISTING STORM SEWER	EACH	\$300.00	1	\$300
7	TURF ESTABLISHMENT	LUMP SUM	\$100.00	1	\$100

Estimated Construction Cost	\$26,400
Contingency (10%)	\$2,640
Total Estimated Construction Cost	<u>\$29,040</u>

**TABLE 12**  
**149TH LANE**  
**ALTERNATIVE 3A - 18" OUTLET**

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	TOTAL ESTIMATED QUANTITY	TOTAL ESTIMATED COST
1	MOBILIZATION	LUMP SUM	\$500.00	1	\$500
2	REMOVE STORM STRUCTURE	EACH	\$400.00	1	\$400
3	15" RC PIPE APRON	EACH	\$300.00	1	\$300
4	18" RC PIPE APRON	EACH	\$350.00	2	\$700
5	18" RC PIPE SEWER DESIGN 3006, CL V - JACKED	LIN FT	\$125.00	118	\$14,750
6	CONNECT TO EXISTING STORM SEWER	EACH	\$300.00	1	\$300
7	TURF ESTABLISHMENT	LUMP SUM	\$100.00	1	\$100

Estimated Construction Cost	\$17,050
Contingency (10%)	\$1,705
Total Estimated Construction Cost	<u>\$18,755</u>

**TABLE 13  
149TH LANE  
ALTERNATIVE 3B - 24" OUTLET**

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	TOTAL ESTIMATED QUANTITY	TOTAL ESTIMATED COST
1	MOBILIZATION	LUMP SUM	\$800.00	1	\$800
2	REMOVE STORM STRUCTURE	EACH	\$400.00	1	\$400
3	15" RC PIPE APRON	EACH	\$300.00	1	\$300
4	24" RC PIPE APRON	EACH	\$450.00	2	\$900
5	24" RC PIPE SEWER DESIGN 3006, CL V - JACKED	LIN FT	\$200.00	118	\$23,600
6	CONNECT TO EXISTING STORM SEWER	EACH	\$300.00	1	\$300
7	TURF ESTABLISHMENT	LUMP SUM	\$100.00	1	\$100

Estimated Construction Cost	\$26,400
Contingency (10%)	\$2,640
Total Estimated Construction Cost	<u>\$29,040</u>

**TABLE 14  
149TH LANE  
ALTERNATIVE 4**

ITEM NO.	DESCRIPTION	UNIT	UNIT COST	TOTAL ESTIMATED QUANTITY	TOTAL ESTIMATED COST
1	MOBILIZATION	LUMP SUM	\$100.00	1	\$100
2	COMMON EXCAVATION	CU YD	\$5.00	133	\$665
3	GRANULAR BORROW	CU YD	\$8.00	380	\$3,040
4	TURF ESTABLISHMENT	ACRE	\$1,500.00	0.3	\$450

Estimated Construction Cost	\$4,255
Contingency (10%)	\$426
Total Estimated Construction Cost	<u>\$4,681</u>