

CERTIFICATE OF SURVEY

PART OF GOVERNMENT LOT 1,
SECTION 8, TOWNSHIP 140 NORTH, RANGE 26 WEST,
CASS COUNTY, MINNESOTA

LEGAL DESCRIPTION PER DOCUMENT NUMBER A000623049

EXHIBIT A

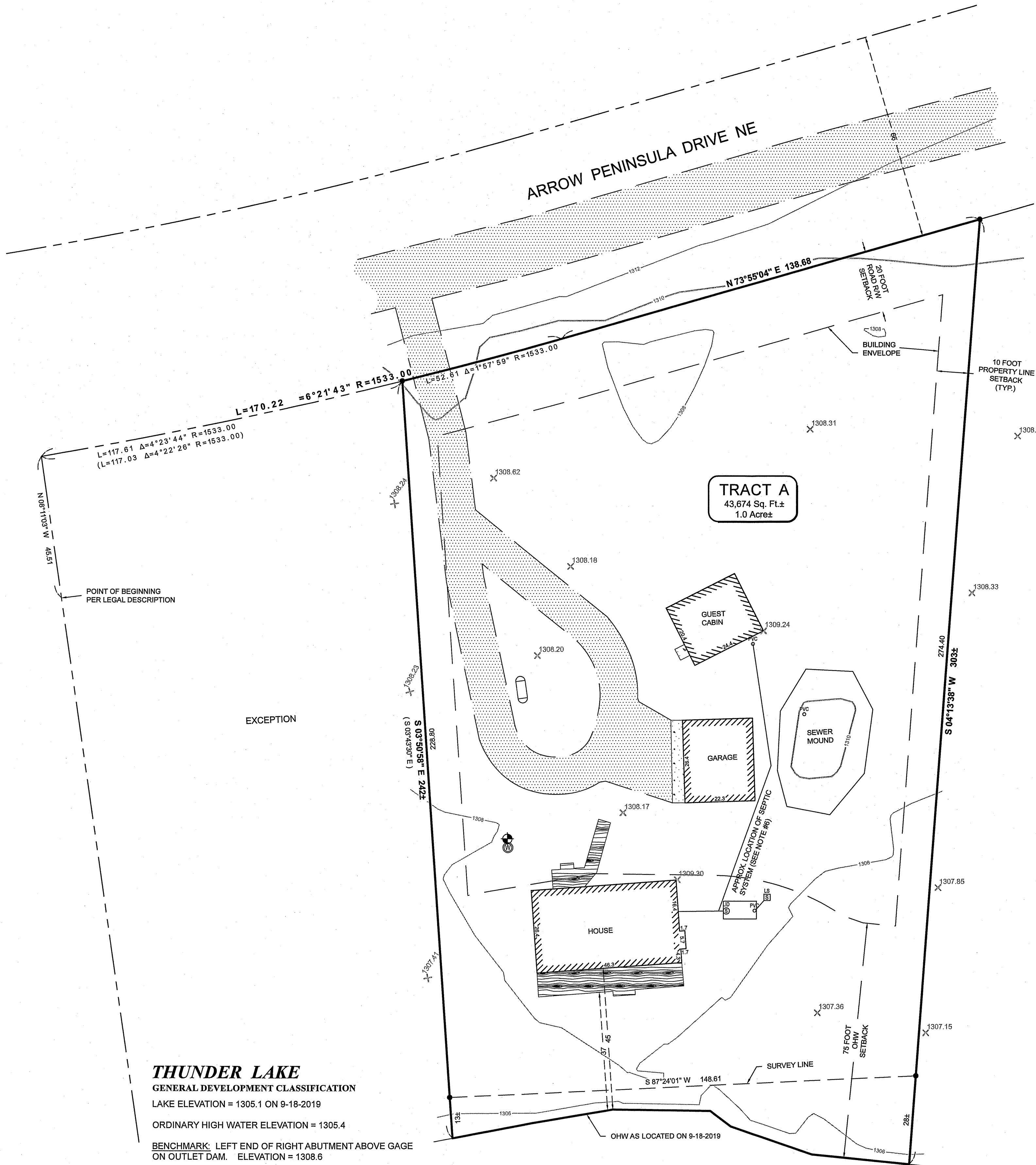
That part of Government Lot 1, Section 8, Township 140 North, Range 26 West, of the Fifth Principal Meridian, in Cass County, Minnesota described as follows:

Commencing at the Northwest corner of said Government Lot 1; thence East 1287.71 feet along the North line of said Government Lot 1; thence South 50 degrees 08 minutes 42 seconds East 1439.19 feet; thence North 58 degrees 53 minutes 50 seconds East 142.50 feet; thence North 81 degrees 47 minutes 30 seconds East 143.85 feet to the point of beginning; thence North 8 degrees 11 minutes 03 seconds West 45.51 feet to a point on the Southerly right of way line of the Township Road; thence Easterly 170.22 feet along said Southerly line along a nontangential curve concave to the North having a central angle of 6 degrees 21 minutes 43 seconds and a radius of 1533.00 feet, the chord of said curve bears North 77 degrees 05 minutes 57 seconds East 170.13 feet; thence North 73 degrees 55 minutes 04 seconds East 138.68 feet tangent to last described curve along said Southerly line; thence South 4 degrees 13 minutes 38 seconds West 304 feet more or less to the shore of Thunder Lake; thence Westerly along said shore to a point that bears South 8 degrees 11 minutes 03 seconds East from the point of beginning; thence North 8 degrees 11 minutes 03 seconds West 195 feet more or less to the point of beginning.

LESS

That part of Government Lot 1, Section 8, Township 140 North, Range 26 West of the Fifth Principal Meridian, in Cass County, Minnesota described as follows:
Commencing at the Northwest corner of said Government Lot 1; thence East 1287.71 feet along the North line of said Government Lot 1; thence South 50 degrees 08 minutes 42 seconds East 1439.19 feet; thence North 58 degrees 53 minutes 50 seconds East 142.50 feet; thence North 81 degrees 47 minutes 30 seconds East 143.85 feet to the point of beginning; thence North 8 degrees 11 minutes 03 seconds West 45.51 feet to a point on the Southerly right of way line of the Township Road, thence Easterly 117.03 feet along said Southerly line along a nontangential curve concave to the North having a central angle of 4 degrees 22 minutes 26 seconds and a radius of 1533.00 feet, the chord of said curve bears North 78 degrees 05 minutes 34 seconds East 117.00 feet; thence South 3 degrees 43 minutes 30 seconds East 250 feet more or less not tangent to last described curve to the shore of Thunder Lake; thence Westerly along said shore to a point that bears South 8 degrees 11 minutes 03 seconds East from the point of beginning; thence North 8 degrees 11 minutes 03 seconds West 195 feet more or less to the point of beginning.

together with all hereditaments and appurtenances belonging thereto, and subject to restrictions, reservations and easements of record, if any.



EXCEPTION

THUNDER LAKE
GENERAL DEVELOPMENT CLASSIFICATION
LAKE ELEVATION = 1305.1 ON 9-18-2019
ORDINARY HIGH WATER ELEVATION = 1305.4
BENCHMARK: LEFT END OF RIGHT ABUTMENT ABOVE GAGE ON OUTLET DAM. ELEVATION = 1308.6
BASED ON NGVD 29 DATUM
INFORMATION OBTAINED FROM MNDNR

IMPERVIOUS CALCULATIONS

EXISTING	IMPERVIOUS AREA (sq.ft.)	Net Area (sq.ft.)	Percent Impervious (sq.ft.)
House	1,229	43,674	2.8%
Guest Cabin	498	43,674	1.1%
Garage	589	43,674	1.3%
Concrete	114	43,674	0.3%
Decks	507	43,674	1.2%
Gravel	3,385	43,674	7.6%
Total	6,322	43,674	14.5%

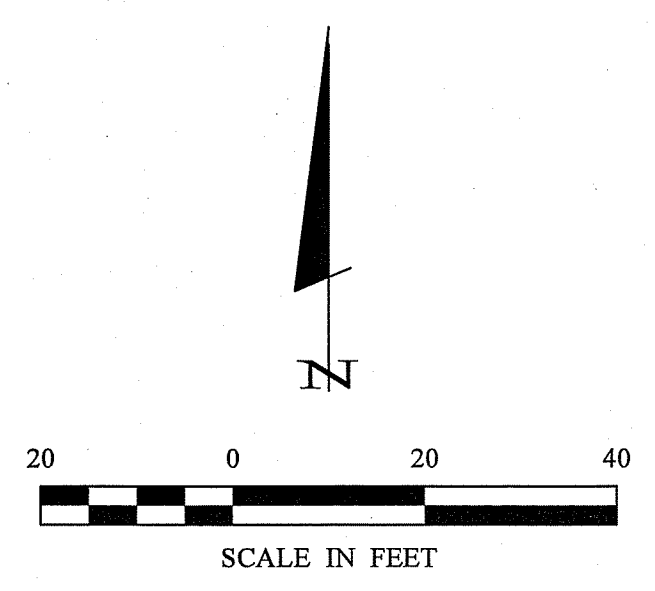
LEGEND

- DENOTES EDGE OF EXISTING GRAVEL
- DENOTES EDGE OF EXISTING CONCRETE
- DENOTES EDGE OF EXISTING WOODEN DECKING
- DENOTES EXISTING INTERMEDIATE CONTOURS
- DENOTES EXISTING INDEX CONTOURS
- DENOTES SPOT ELEVATION (EXISTING GRADE)
- DENOTES EXISTING LP TANK
- DENOTES EXISTING WELL
- DENOTES EXISTING SEPTIC VENT, SEPTIC CLEANOUT, & SEPTIC TANK LID
- DENOTES EXISTING SEPTIC LIFT STATION
- BENCHMARK:** HIGH POINT OF WELL
ELEV. = 1309.95
- (123.45) DENOTES PLAT AND/OR DEEDED MEASURE
- DENOTES MONUMENT FOUND

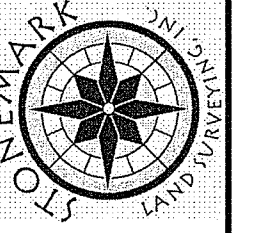
ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE RECORDED LEGAL DESCRIPTION, DOCUMENT NO. A000623049.

NOTES:

- Contour interval as shown = 2 foot. Based on NGVD 29 datum. Contours shown have been obtained using standard survey topographic methodologies. Field located on 9-18-2019.
- Zoning for subject tract = "Shoreland Residential".
- There are no bluffs or wet lands within surveyed property.
- Parcel ID of subject parcel: 42-008-2136.
- The property address of subject parcel: 5501 Arrow Peninsula Drive NE.
- Approximate location of septic system per sketch prepared by Shafer Excavating, LLC.



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Pequet Lakes, MN 56472
218-568-4940
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I HEREBY CERTIFY THAT THIS SURVEY, PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY CLOSE PERSONAL SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MINNESOTA.
Cynthia M. Hidde
CYNTHIA M. HIDDE PL#44881
9/25/19
DATE

REVISIONS	DESCRIPTION	DATE

DATE: 9-23-2019
SCALE: 1"=20'
HORZ. 1"=20'
VERT. NONE

PROJECT NO.: 19235
FILE NAME: C:\19235.DWG
FIELD BOOK: BOOK 454, pg. 56
PROJECT MANAGER: CMH
CHECKED BY: CMH
DRAWN BY: RJF

CERTIFICATE OF SURVEY
Carrie Erickson
5601 Arrow Peninsula Drive NE
Renner, MN 56672
SHEET 1 OF 1