

# CERTIFICATE OF SURVEY

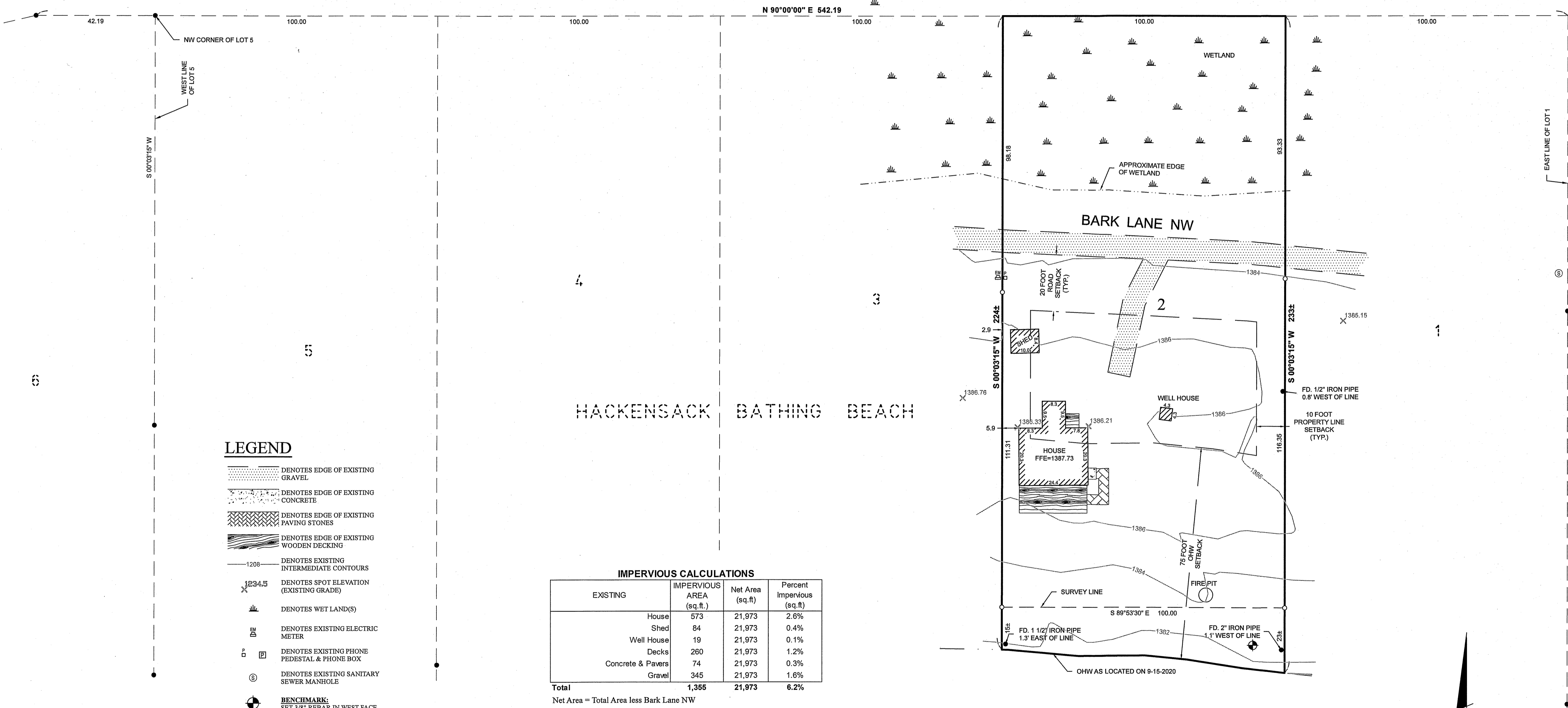
LOT 2, HACKENSACK BATHING BEACH,  
SECTION 13, TOWNSHIP 140 NORTH, RANGE 31 WEST,  
CASS COUNTY, MINNESOTA  
AREA = 22,774 SQ. FT. ± / 0.5 ACRES ±

**LEGAL DESCRIPTION PER DOCUMENT NUMBER A000595156**  
LOT TWO (2), HACKENSACK BATHING BEACH, CASS COUNTY, MINNESOTA.  
TOGETHER WITH RIGHT OF INGRESS AND EGRESS OVER THE ROADWAY RUNNING ACROSS  
LOTS 1, 2, 3 AND 4, HACKENSACK BATHING BEACH, TO THE PUBLIC ROAD.

together with all hereditaments and appurtenances belonging thereto.

NORTH AVENUE

N 90°00'00" E 542.19



## LEGEND

- DENOTES EDGE OF EXISTING GRAVEL
  - DENOTES EDGE OF EXISTING CONCRETE
  - DENOTES EDGE OF EXISTING PAVING STONES
  - DENOTES EDGE OF EXISTING WOODEN DECKING
  - DENOTES EXISTING INTERMEDIATE CONTOURS
  - DENOTES SPOT ELEVATION (EXISTING GRADE)
  - DENOTES WETLAND(S)
  - DENOTES EXISTING ELECTRIC METER
  - DENOTES EXISTING PHONE PEDESTAL & PHONE BOX
  - DENOTES EXISTING SANITARY SEWER MANHOLE
  - BENCHMARK:**  
SET 3/8" REBAR IN WEST FACE OF A 24" SPRUCE  
ELEV. = 1383.09  
BASED ON NGVD 29 DATUM
  - DENOTES MONUMENT FOUND
  - DENOTES IRON MONUMENT SET MARKED BY LICENSE No. 41002
- ORIENTATION OF THIS BEARING SYSTEM IS BASED ON THE NORTH LINE OF LOTS 1 - 5 TO HAVE AN ASSUMED BEARING OF N 90°00'00" E.

## IMPERVIOUS CALCULATIONS

EXISTING	IMPERVIOUS AREA (sq.ft.)	Net Area (sq.ft)	Percent Impervious (sq.ft)
House	573	21,973	2.6%
Shed	84	21,973	0.4%
Well House	19	21,973	0.1%
Decks	260	21,973	1.2%
Concrete & Pavers	74	21,973	0.3%
Gravel	345	21,973	1.6%
<b>Total</b>	<b>1,355</b>	<b>21,973</b>	<b>6.2%</b>

Net Area = Total Area less Bark Lane NW

## 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 9-15-2020.
- Zoning for subject tract = "Shoreland Residential".
- There are no bluffs within surveyed property.
- Parcel ID of subject parcel: 16-414-0020.
- The property address of subject parcel: 4813 Bark Lane NW.

## BIRCH LAKE

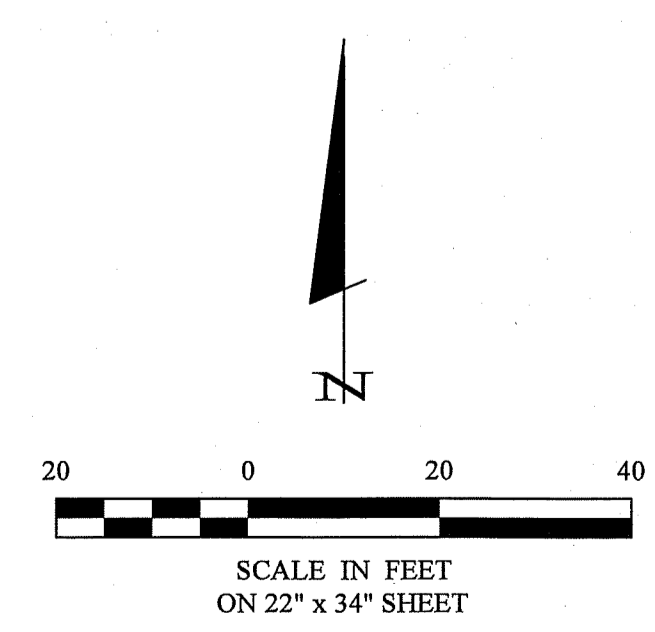
GENERAL DEVELOPMENT CLASSIFICATION

LAKE ELEVATION = 1378.79 ON 9-15-2020

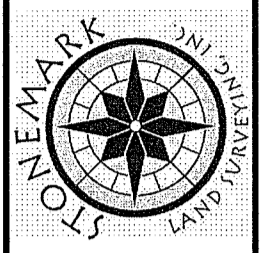
ORDINARY HIGH WATER ELEVATION = 1379.4

**BENCHMARK:** Found 2019. Top of right upstream corner of the left abutment of outlet dam at inside corner above sill. [Note: 3/2/82 survey elevation = 1379.71.]  
Elevation = 1379.79

BASED ON NGVD 29 DATUM  
INFORMATION OBTAINED FROM MNDNR



30206 Rasmussen Road  
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P. O. Box 874  
Pequot Lakes, MN 56472  
218-568-9940  
www.stonemansurvey.com



I HEREBY CERTIFY THAT THIS SURVEY PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER OR LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MINNESOTA.  
*Todd Maird*  
TODD MAIRD  
10-28-2020  
LIC. NO. 11902

REVISIONS	DATE	DESCRIPTION

DATE	SCALE	VERT.
10-28-2020	1"=20'	NONE

PROJECT MANAGER:	PROJECT No.:	FILE NAME:	FIELD BOOK:
PAT	20257	C20257.dwg	BOOK 459 PG. 27

CERTIFICATE OF SURVEY  
Checked by: *Todd Maird*  
Drawn by: *RJF*  
200 Mallard Lane  
Loretto, MN 55357-9563