

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
IN-OFFICE REVIEW/BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-9563

Exam Date: 11/5/2015

1. Does this qualify for an in-office field exam (IDAPA 035.02.r)? ☒ Yes ☐ No
- Irrigation of 5 acres or less
 - Storage of up to 14.6 AF for stockwater purposes only
 - Any use other than irrigation or storage, if the combined diversion rate is 0.24 cfs or less
 - Other < >

2. Current Owner: Name: Matthew and Loraine Mandino
 Owner-of-Record Correct? ☒ Yes ☐ No
 Address-of-Record Correct? ☒ Yes ☐ No
 If No: <Address>

Available Bonner County taxlot information shows the previous owner (Carlton E Gregory Trust, Shirley A Trust; Allan G Stratford Trustee) as the owner of the property.

3. Beneficial Use Fees have been paid: ☒ Yes ☐ No Receipt No: C101077

4. SOURCE

Lake Pend Oreille

Method of Determination: Aerial photography.

Change in Source:

TRIBUTARY

Pend Oreille River

☐ Yes ☒ No**B. OVERLAP REVIEW**

1. Other water rights with the same place of use: Overlap? ☐ Yes ☒ No

Water Right No.	Source	Purpose of Use	Basis

Comments:

2. Other water rights with the same point of diversion: Overlap? ☐ Yes ☒ No

Water Right No.	Source	Purpose of Use	Basis

Comments: The same pumping and delivery system also serves both internal and external domestic use.

C. DIVERSION AND DELIVERY SYSTEM**1. LOCATION OF POINT(S) OF DIVERSION:**

Source	Govt. Lot	¼	¼	¼	Sec.	TWP	RGE		County
Lake Pend Oreille	5		NW	SW	2	56N	01E	B.M.	BONNER

Method of Determination: The legal description in the permit is validated by PLS data and aerial photography.

The POD is located offshore in Lake Pend Oreille but appears to be approximately 150 ft not the 300 ft stated in the application.

Change in POD? ☐ Yes ☒ NoAmendment Required? ☐ Yes ☒ No

2. **LOCATION OF PLACE(S) OF USE:** Use: Domestic

TWP	RGE	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
56N	01E	2										D							
												L + 5							

Method of Determination: The legal description in the permit is validated by PLS data and aerial photography.

Change in POU? ☐ Yes ☒ No

Amendment Required? ☐ Yes ☒ No

3.

☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components.

Indicate weir size/pipe as applicable. See the diagram provided with the application. The pipe may be 1 1/4 inch.

☒ Aerial Photo Attached (required for irrigation of 10+ acres).

☐ Photo of Diversion and System Attached

4. Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Unknown.		1		Unknown	

*Code to correspond with No. on map and aerial photo

D. **FLOW MEASUREMENTS**

1. Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: In-office field exam. No measurements taken

E. **FLOW CALCULATIONS**

☒ Additional Computation Sheets Attached

Domestic use standard = 0.04 cfs

Permit allowed = 0.04 cfs

License recommended for 0.04 cfs.

F. **VOLUME CALCULATIONS**

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = \underline{\text{N/A}}$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \underline{\text{N/A}}$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = \underline{\text{N/A}}$$

Volume Calculations for Other Uses: N/A

Domestic use standard = 1.2 af

License recommended or 1.2 af

G. PURPOSE OF USEIrrigation ☐ Yes ☒ No # Stock _____Domestic # of Homes 1 home

Other: < >

Change in Purpose of Use? ☐ Yes ☒ No

Method of Determination: Information in the water right file is consistent with aerial photography of the property.

If Yes: From Use _____ To Use _____ Amount _____ CFS _____ AFA

H. NARRATIVE/REMARKS/COMMENTS

Permit 96-9563 authorizes an existing 0.04 cfs diversion from Lake Pend Oreille for domestic purposes. Based on the small permitted diversion rates, this permit qualifies for an in-office field exam.

Legal description of the POU was used to locate the property. Available aerial photography did not clearly show the POU. And the available taxlot layer is not well rectified with the available aerial photography.

I consulted with the permit holder about the system and the uses. Mr. Mandino provided a copy of a recently completed (April 2015) resurvey of the property. The property is block 1, lot 11 and block 1, lot 12 of the Hoppers Subdivision.

The POU for domestic use include the house and a few small garden and landscaped plots. They are all completely contained within Block 1, Lot 11 of the Hoppers Subdivision. Although the Mandinos own both Lot 11 and Lot 12, the landscaping in Lot 12 is native and requires no irrigation. No domestic water use is occurring in Block 1, Lot 12. I created the POU shapes based on Mr. Mandino's description of areas appearing in the resurvey.

This permit authorizes a pre-existing use of water. The diversion appears to have been in place since the late 1980's. The property was in receivership when the Mandinos purchased it. They have made no changes to the system.

I created the POD shape based on a tracing of the aerial photography which was provided with the application. The POD is located inside government lot 5 but not within the taxlot boundary. The POD is located in property owned by the State of Idaho.

At the time of this report, the residence is not continuously occupied but the license will be sent to the address listed above.

Overlap review found no other water rights appurtenant to the property.

The permit authorized the standard rate for a domestic use. I am recommending the standard rate and volume for the license.

The permit holder stated that a single pump and delivery system provides all the water for the residence and the associated grounds. Water destined for internal use goes through a filtration system first.

I assumed that

Have conditions of permit approval been met? ☒ Yes ☐ No

I. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
Domestic	01/01-12/31	0.04 cfs	1.2 AF
	<u>Totals</u>	0.04 cfs	1.2 AF

2. Recommended Amendments

☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None

☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

Other: < >

I. AUTHENTICATION

Field Examiner's Name Michele Edl Date November 5, 2015

Reviewer  Date 11-05-2015



POD 96-9563

POU 96-9563

56W01E

NW SW 3

SE SW 6

SW SE 7

SE SE

SE SE

NE SW 4

NW SE 3

NE SE 2

ME NE 2

NE NE 1

ME NE 1

1 10

1 3

3

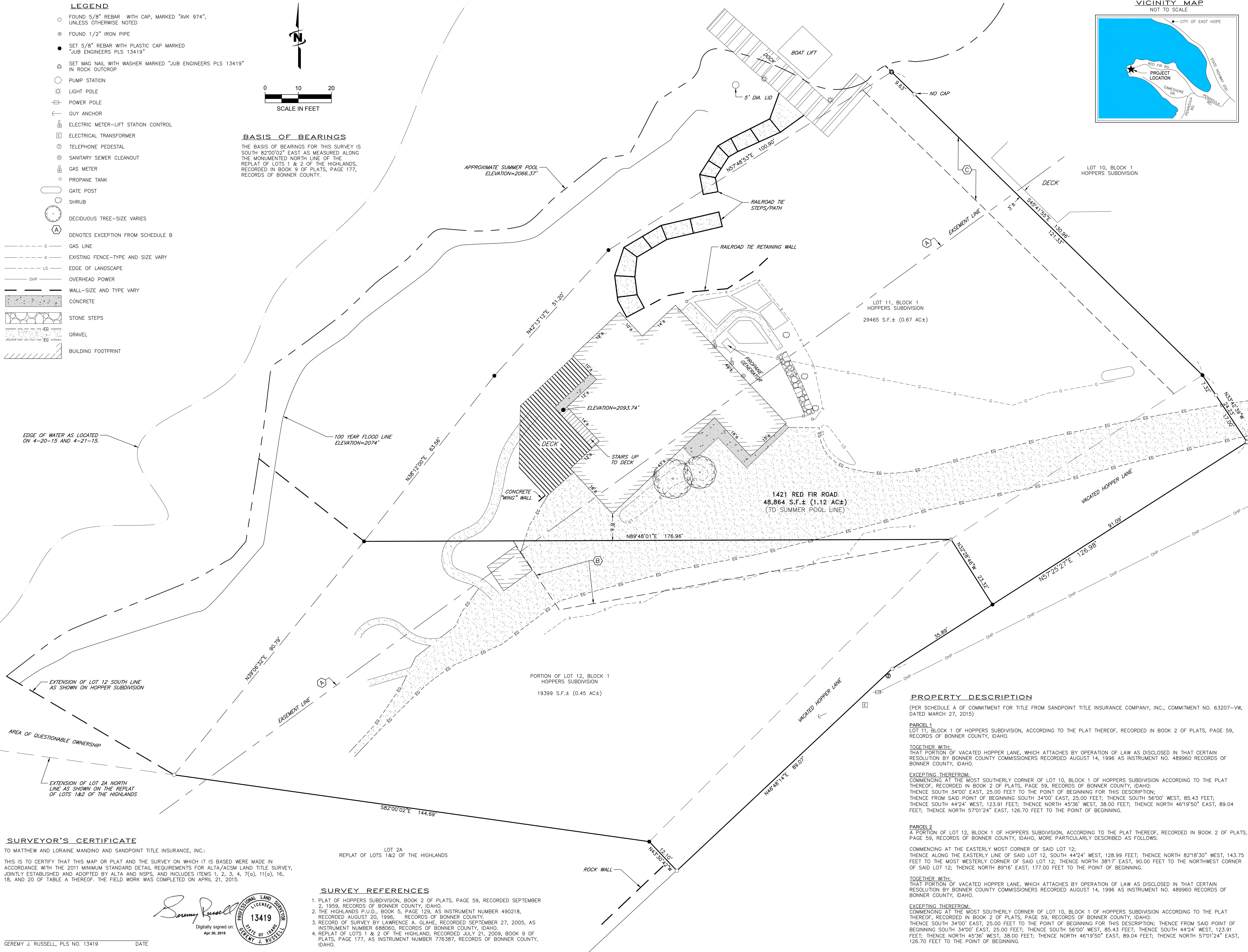
Edl, Michele

From: Matt Mandino [matt.mandino@gmail.com]
Sent: Tuesday, November 03, 2015 3:29 PM
To: Edl, Michele
Subject: Fwd: FW: Final Survey
Attachments: 20-15-027_V-PB_ALTA-FINAL SIGNED.pdf

Hello Michele. I received your voicemail and will give you a call in a few minutes. I have attached a file of a recently completed ALTA survey for our property which should help address some of your questions. The online lot lines for the taxlot information are not placed correctly for the property on the peninsula.

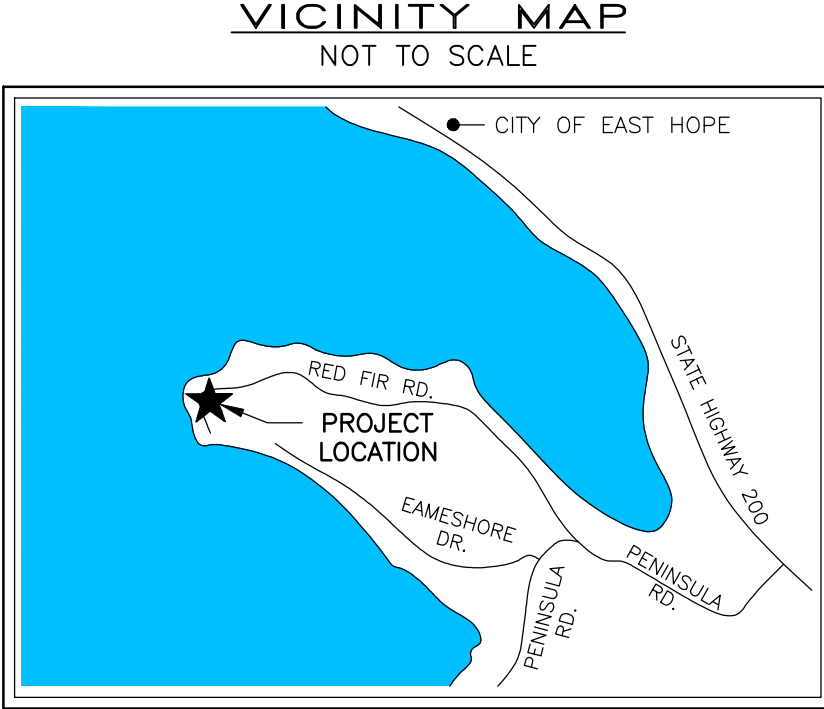
Matt

Plot Date: 4/30/2015 1:28 PM Printed By: David Orsini
Date Created: 4/17/2015 C:\DATA\BUB\PROJECTS\ALTA\BUB-15-027-MANDINO\CAD\SURVEY\MODEL 2015-027_V.PFB ALTA.DWG



- LEGEND**
- FOUND 5/8" REBAR WITH CAP, MARKED "AVK 974", UNLESS OTHERWISE NOTED
 - ⊙ FOUND 1/2" IRON PIPE
 - SET 5/8" REBAR WITH PLASTIC CAP MARKED "JUB ENGINEERS PLS 13419"
 - ⊙ SET MAG NAIL WITH WASHER MARKED "JUB ENGINEERS PLS 13419" IN ROCK OUTCROP
 - PUMP STATION
 - ☼ LIGHT POLE
 - ⊞ POWER POLE
 - ⊞ GUY ANCHOR
 - ⊞ ELECTRIC METER-LIFT STATION CONTROL
 - ⊞ ELECTRICAL TRANSFORMER
 - ⊞ TELEPHONE PEDESTAL
 - ⊞ SANITARY SEWER CLEANOUT
 - ⊞ GAS METER
 - PROPANE TANK
 - GATE POST
 - SHRUB
 - DECIDUOUS TREE-SIZE VARIES
 - ⊞ DENOTES EXCEPTION FROM SCHEDULE B
 - G GAS LINE
 - X EXISTING FENCE-TYPE AND SIZE VARY
 - LS EDGE OF LANDSCAPE
 - OHP OVERHEAD POWER
 - WALL-SIZE AND TYPE VARY
 - CONCRETE
 - STONE STEPS
 - EG GRAVEL
 - BUILDING FOOTPRINT

BASIS OF BEARINGS
THE BASIS OF BEARINGS FOR THIS SURVEY IS SOUTH 82°00'02" EAST AS MEASURED ALONG THE MONUMENTED NORTH LINE OF THE REPLAT OF LOTS 1 & 2 OF THE HIGHLANDS, RECORDED IN BOOK 9 OF PLATS, PAGE 177, RECORDS OF BONNER COUNTY.



JUB
J-U-B ENGINEERS, INC.
J-U-B ENGINEERS, INC.
7825 Meadowlark Way
Coeur d'Alene, ID 83815
Phone: 208.762.8787
Fax: 208.762.9197
www.jub.com

REVISION		DATE
1	NO	
2	NO	
3	NO	
4	NO	
5	NO	
6	NO	
7	NO	
8	NO	
9	NO	
10	NO	
11	NO	
12	NO	
13	NO	
14	NO	
15	NO	
16	NO	
17	NO	
18	NO	
19	NO	
20	NO	

ALTA/ACSM LAND TITLE SURVEY
MATTHEW AND LORAIN MANDINO
LOT 11, BLOCK 1, PORTION OF LOT 12, BLOCK 1 OF HOPPERS SUBDIVISION, AND PORTIONS OF VACATED HOPPER LANE, LOCATED IN SECTION 2, TOWNSHIP 56 NORTH, RANGE 1 EAST, B.M., CITY OF HOPE, BONNER COUNTY, IDAHO

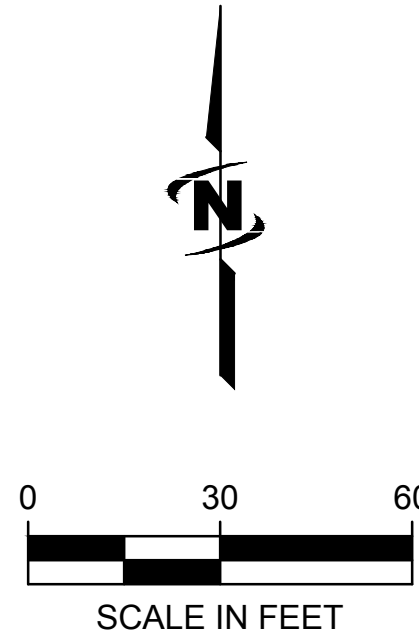
PROPERTY DESCRIPTION
(PER SCHEDULE A OF COMMITMENT FOR TITLE FROM SANDPOINT TITLE INSURANCE COMPANY, INC., COMMITMENT NO. 63207-VW, DATED MARCH 27, 2015)
PARCEL 1
LOT 11, BLOCK 1 OF HOPPERS SUBDIVISION, ACCORDING TO THE PLAT THEREOF, RECORDED IN BOOK 2 OF PLATS, PAGE 59, RECORDS OF BONNER COUNTY, IDAHO.
TOGETHER WITH:
THAT PORTION OF VACATED HOPPER LANE, WHICH ATTACHES BY OPERATION OF LAW AS DISCLOSED IN THAT CERTAIN RESOLUTION BY BONNER COUNTY COMMISSIONERS RECORDED AUGUST 14, 1996 AS INSTRUMENT NO. 489960 RECORDS OF BONNER COUNTY, IDAHO.
EXCEPTING THEREFROM:
COMMENCING AT THE MOST SOUTHERLY CORNER OF LOT 10, BLOCK 1 OF HOPPERS SUBDIVISION ACCORDING TO THE PLAT THEREOF, RECORDED IN BOOK 2 OF PLATS, PAGE 59, RECORDS OF BONNER COUNTY, IDAHO;
THENCE SOUTH 34°00' EAST, 25.00 FEET TO THE POINT OF BEGINNING FOR THIS DESCRIPTION;
THENCE FROM SAID POINT OF BEGINNING SOUTH 34°00' EAST, 25.00 FEET; THENCE SOUTH 56°00' WEST, 85.43 FEET;
THENCE SOUTH 44°24' WEST, 123.91 FEET; THENCE NORTH 45°36' WEST, 38.00 FEET; THENCE NORTH 46°19'50" EAST, 89.04 FEET; THENCE NORTH 57°01'24" EAST, 126.70 FEET TO THE POINT OF BEGINNING.
PARCEL 2
A PORTION OF LOT 12, BLOCK 1 OF HOPPERS SUBDIVISION, ACCORDING TO THE PLAT THEREOF, RECORDED IN BOOK 2 OF PLATS, PAGE 59, RECORDS OF BONNER COUNTY, IDAHO, MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCING AT THE EASTERLY MOST CORNER OF SAID LOT 12;
THENCE ALONG THE EASTERLY LINE OF SAID LOT 12, SOUTH 44°24' WEST, 128.99 FEET; THENCE NORTH 82°18'30" WEST, 143.75 FEET TO THE MOST WESTERLY CORNER OF SAID LOT 12; THENCE NORTH 38°17' EAST, 90.00 FEET TO THE NORTHWEST CORNER OF SAID LOT 12; THENCE NORTH 89°16' EAST, 177.00 FEET TO THE POINT OF BEGINNING.
TOGETHER WITH:
THAT PORTION OF VACATED HOPPER LANE, WHICH ATTACHES BY OPERATION OF LAW AS DISCLOSED IN THAT CERTAIN RESOLUTION BY BONNER COUNTY COMMISSIONERS RECORDED AUGUST 14, 1996 AS INSTRUMENT NO. 489960 RECORDS OF BONNER COUNTY, IDAHO.
EXCEPTING THEREFROM:
COMMENCING AT THE MOST SOUTHERLY CORNER OF LOT 10, BLOCK 1 OF HOPPERS SUBDIVISION ACCORDING TO THE PLAT THEREOF, RECORDED IN BOOK 2 OF PLATS, PAGE 59, RECORDS OF BONNER COUNTY, IDAHO;
THENCE SOUTH 34°00' EAST, 25.00 FEET TO THE POINT OF BEGINNING FOR THIS DESCRIPTION; THENCE FROM SAID POINT OF BEGINNING SOUTH 34°00' EAST, 25.00 FEET; THENCE SOUTH 56°00' WEST, 85.43 FEET; THENCE SOUTH 44°24' WEST, 123.91 FEET; THENCE NORTH 45°36' WEST, 38.00 FEET; THENCE NORTH 46°19'50" EAST, 89.04 FEET; THENCE NORTH 57°01'24" EAST, 126.70 FEET TO THE POINT OF BEGINNING.

SURVEYOR'S CERTIFICATE
TO MATTHEW AND LORAIN MANDINO AND SANDPOINT TITLE INSURANCE, INC.:
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2011 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/ACSM LAND TITLE SURVEY, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 7(a), 11(a), 16, 18, AND 20 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON APRIL 21, 2015.

Jeremy Russell
Digitally signed on:
Apr 30, 2015
PROFESSIONAL LAND SURVEYOR
LICENSED
13419
STATE OF IDAHO
JEREMY J. RUSSELL

- SURVEY REFERENCES**
1. PLAT OF HOPPERS SUBDIVISION, BOOK 2 OF PLATS, PAGE 59, RECORDED SEPTEMBER 2, 1959, RECORDS OF BONNER COUNTY, IDAHO.
 2. THE HIGHLANDS P.U.D., BOOK 5, PAGE 129, AS INSTRUMENT NUMBER 490218, RECORDED AUGUST 20, 1996, RECORDS OF BONNER COUNTY.
 3. RECORD OF SURVEY BY LAWRENCE A. GLAHE, RECORDED SEPTEMBER 27, 2005, AS INSTRUMENT NUMBER 688060, RECORDS OF BONNER COUNTY, IDAHO.
 4. REPLAT OF LOTS 1 & 2 OF THE HIGHLAND, RECORDED JULY 21, 2009, BOOK 9 OF PLATS, PAGE 177, AS INSTRUMENT NUMBER 776387, RECORDS OF BONNER COUNTY, IDAHO.

JEREMY J. RUSSELL, PLS NO. 13419 DATE



Shermy Russell
Digitally signed on:
Apr 30, 2015

PROFESSIONAL LAND SURVEYOR
LICENSED
13419
STATE OF IDAHO
SHERMY J. RUSSELL

THEORETICAL HORSEPOWER EQUATION WORKSHEET (cjh 1/92)

Water Right No.: 96-9563
 Reviewer: Michele Edl
 Date of Review: 11/3/2015

P/D No.:	Senerio 1	Senerio 2	Senerio 3
PUMP HORSEPOWER	1	1	1
BOOSTER HORSEPOWER	0	0	0
PUMPING LEVEL	40.0	40.0	40.0
DISCHARGE PRESSURE	35	45	55
RATE OF FLOW (cfs)	0.05	0.04	0.04 0.04

The above calculates the formula =
$$Q = \frac{8.8 * (\text{Efficiency}) * \text{hp}}{\text{depth to water} + 2.31 * (\text{psi}) + \text{friction}}$$

Assumptions: % 70 efficiency
 No Friction

Examiners Notes:

Horsepower was given by the applicant. Lift was estimated by the applicant and is from the pump location in the lagoon to the irrigation level of the property. Discharge pressure ranges from 35-55 psi to account for expected sprinkler system in use.