

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No. 65-22886

1. Owner Marcus R. Hagenau Phone No. 208-890-5542

Current address 4267 W Quail Ridge Dr., Boise, ID 83703

2. Examiner's name Kay Walker EXAM DATE 10-20-2010

3. Accompanied by Permit Holder & Angie Grimm ^{IDWR} Email hagenah@rmci.net

Address Same as above

Relationship to permit holder same Phone No. _____

4. Source South Fork Payette River tributary to Payette River

B. OVERLAP REVIEW

(For in-house use)

1. Other water rights with the same place of use 65-13931 & 65-13025

2. Other water rights with the same point of diversion none

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

Ident. No.	Gov't Lot	1/4	1/4	1/4	Sec	Twp	Rge	County	Method of Determination/Remarks
	*		SW	SE	18	9N	9E	Boise	GPS - Angie Grimm

2. Place(s) of Use: Method of determination Field exam

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
9N	9E	18															D		

*No Gov't Lot per ArcView - Per BLM
located in HES 336

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☐ see attached.

Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (**required**)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

4. *Pump was pulled for winter - no msmt. possible*

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
	AD Smith	1.5	C48C53A06	Goolds ^{GT15}	J07858L

*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:

Theoretical
$$\frac{8.8 \times 1.5 \times .70}{25 + (2.31 \times 35)} = 0.09 \text{ cfs}$$

E. NARRATIVE/REMARKS/COMMENTS

Property also known as Lot 9, Blk. 3, Scenic Properties Subdivision. Domestic use is for external use for 1 home.

Pursuant to arc view & BLM: property is within HES 336; no government lot. See attached plat.

Access to water association water - utilizes spring water under 65-13025 for domestic use. also can use well water if necessary (65-13931).

System consists of 1.5 HP pump that sits on brick station when in use. Approx. 25' lift with 1.5" pvc pipe to p/u. Sprinklers set in 2 zones for use. See zone map attached along with sprinkler set-up profile given to us at time of exam. Sprinkler pipes not buried for this system at time of exam. Runs 1 zone of sprinklers at a time.

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

F. FLOW CALCULATIONS

Additional computation sheets attached

Measured Method:

theoretical : 0.09 cfs

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$ _____

$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 =$ _____

$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} =$ _____

2. Volume Calculations for Other Uses:

*1 home = 0.04 cfs * ^{kw}
1.2 AFA
0.6
external use
only at time
of exam*

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion	Annual Volume
	From	To	Q (cfs)	V (afa)
<i>Domestic</i>	<i>1-1</i>	<i>12-31</i>	<i>0.04</i>	<i>1.2 0.6 kw</i>
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
Totals:			<i>0.04</i>	<i>1.2 0.6 kw</i>

2. Recommended Amendments

- ☐ Change P.D. as reflected on page 1
 ☐ Add P.D. as reflected on page 1
 ☒ None
☐ Change P.U. as reflected on page 1
 ☐ Add P.U. as reflected on page 1
 ☐ Other

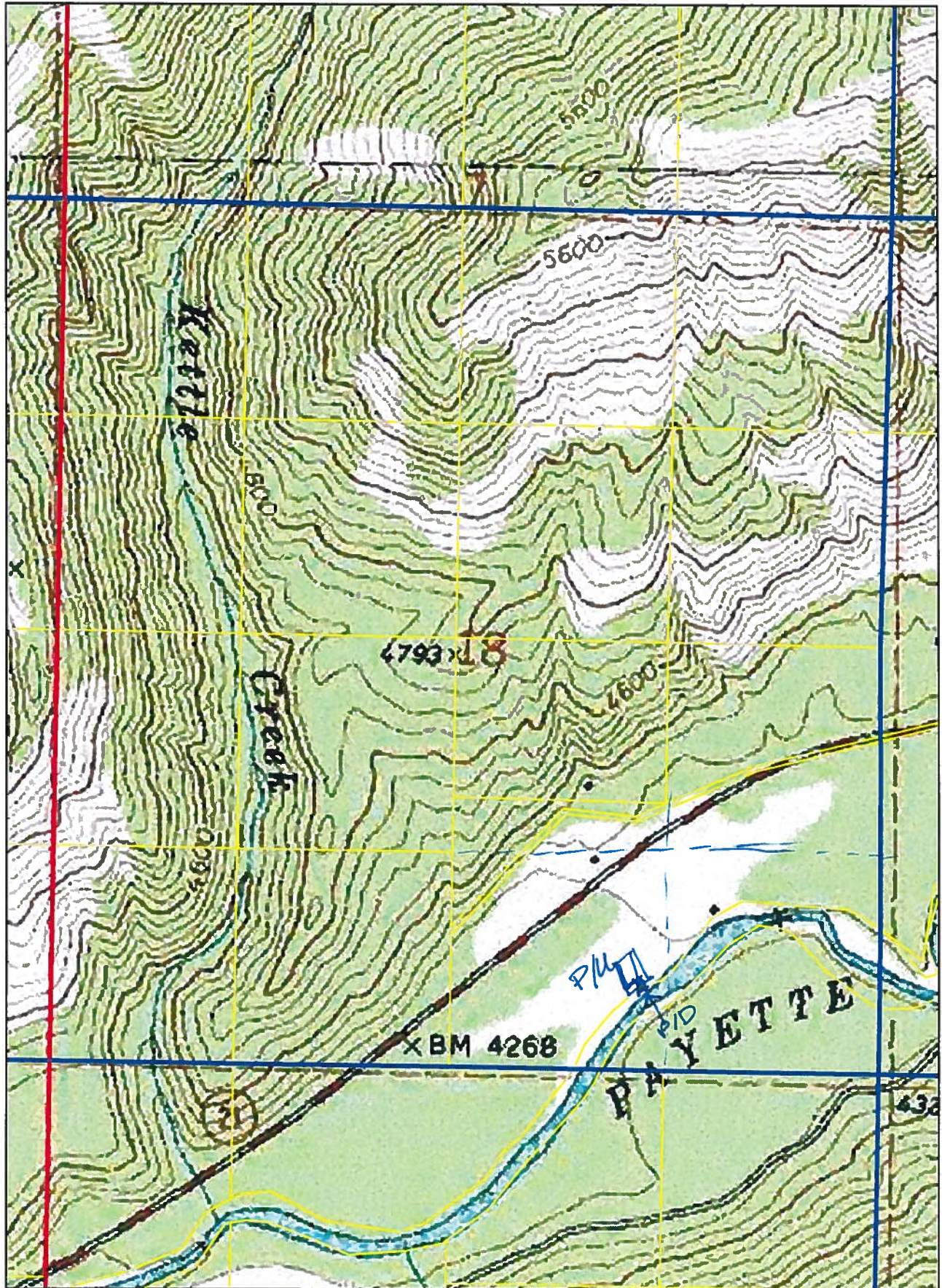
I. AUTHENTICATION

Field Examiner's Signature *Kay Walker* Date *2/9/2011*

SEAL

Reviewer _____ Date _____

9N, 9E, S18



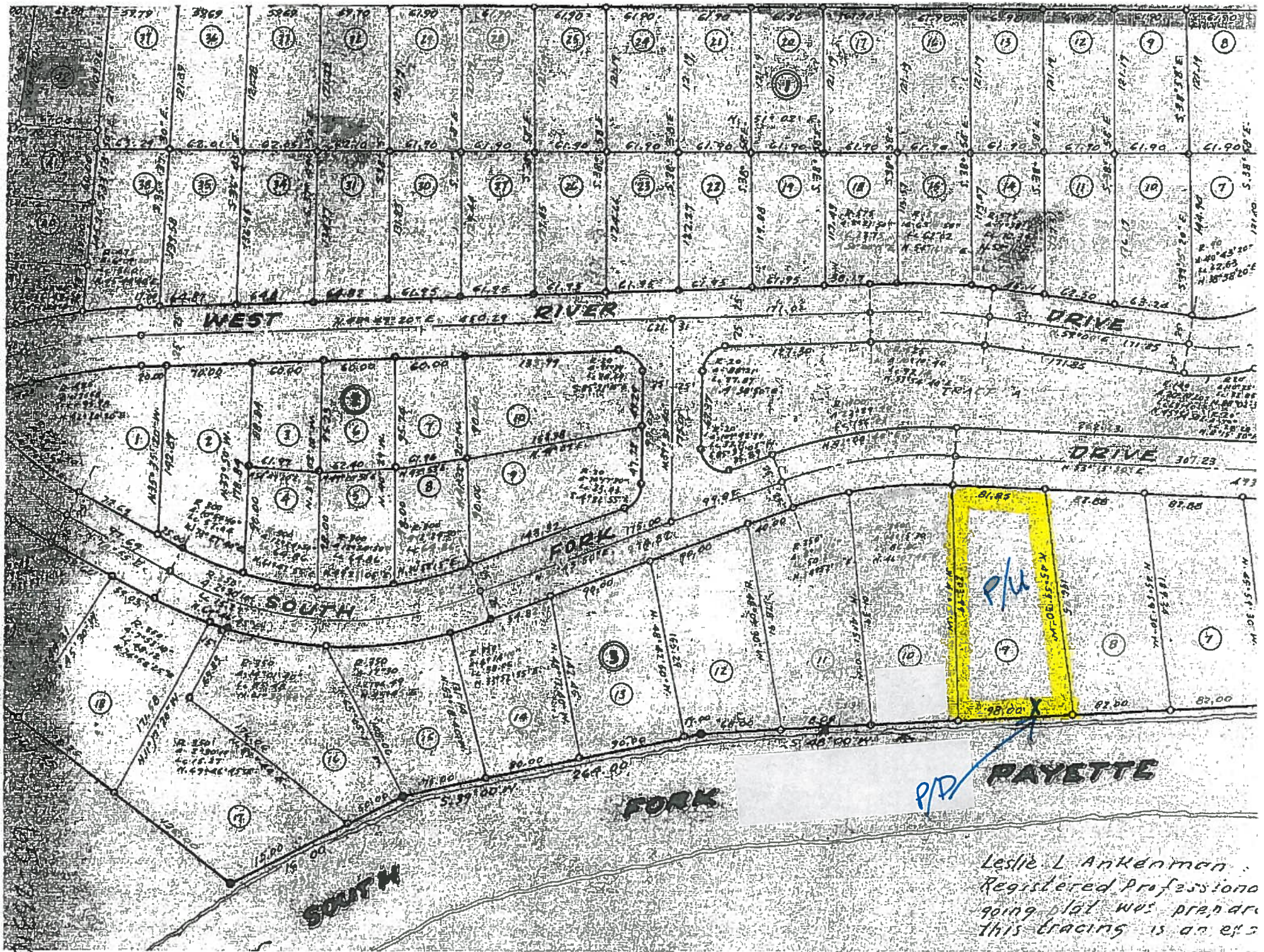
SWSE, S18
HES. 336

65-22886

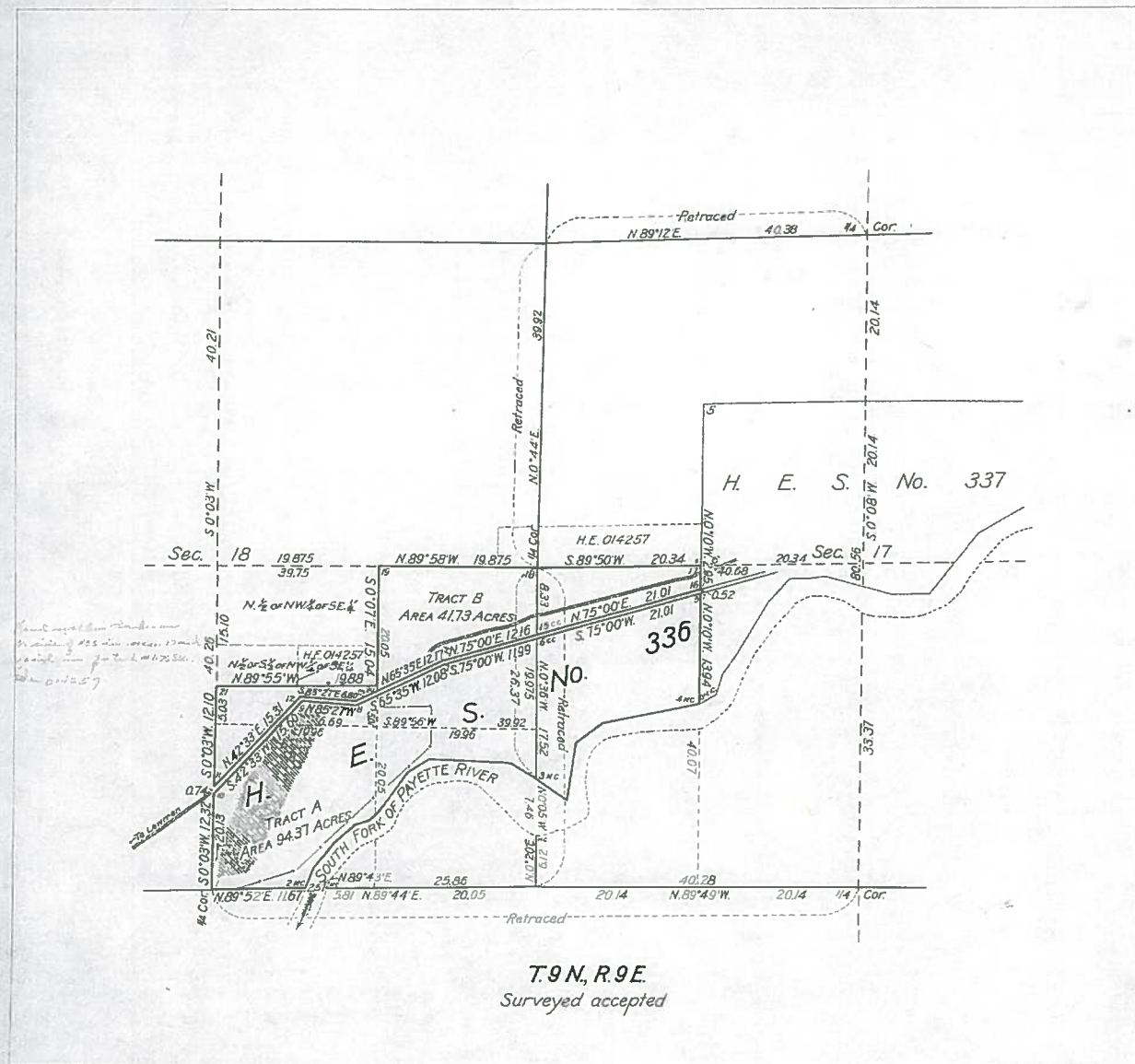
SW SE1/4, S18, 9N, 9E



65-22886



Leslie L. Ankenman
Registered Professional
going plat was prepared
this tracing is an eff...



Plat of
**HOMESTEAD
ENTRY SURVEY**

No. 336

in the

**BOISE
NATIONAL FOREST**

in

Section 17, surveyed, T. 9 N., R. 9 E.
Section 18, surveyed, T. 9 N., R. 9 E.

of the

**BOISE BASE AND MERIDIAN
IDAHO**

This plat of Homestead Entry Survey
No. 336 State of Idaho is strictly
conformable to the field notes thereof
on file in this office, which have been
examined and approved.

U. S. Surveyor General's Office

Boise, Idaho

December 9, 1916.

Edward Haddue

U. S. Surveyor General

SCALE 10 chains to 1 inch

Survey Designated	By whom Surveyed	Instr. Cont. Group No.	When Surveyed	Date of Approval
Subdivisions	Albinus K Kimmell	297	June 1, 1908	July 29, 1908
H. E. S. No. 337	Dana Parkinson	337	Mar. 27, 1915	June 22, 1915
H. E. Survey No. 336	Dana Parkinson	336	March 27, 1915	June 10, 1915
	Deputy Forest Supervisor		June 19, 1915	Dec. 9, 1916

Areas in Acres	
H. E. Survey No. 336	Contents
Tract A Sec. 17	30.20
Tract B Sec. 17	11.47
Tract A Sec. 18	64.17
Tract B Sec. 18	30.26
Total	136.10

Act of June 11, 1906
List No. 4-1011
Latitude 44° 07' N
Longitude 115° 26' W
Mean Mag. Decl. 20° 19' E
At Corner No. 1



Point of diversion on river bank – pump is anchored at this point when in use (pulled for winter and in garage) – Note 1.5" pvc pipe that pushes water up to place of use (lift is approx. 25')

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1.5 hp pump used for irrigation – (in garage for winter)



Permit holder's place of use – note sprinkler lines are not buried



Point where sprinkler lines are routed to "zone 1" or "zone 2" (see map attached showing zones) when in use

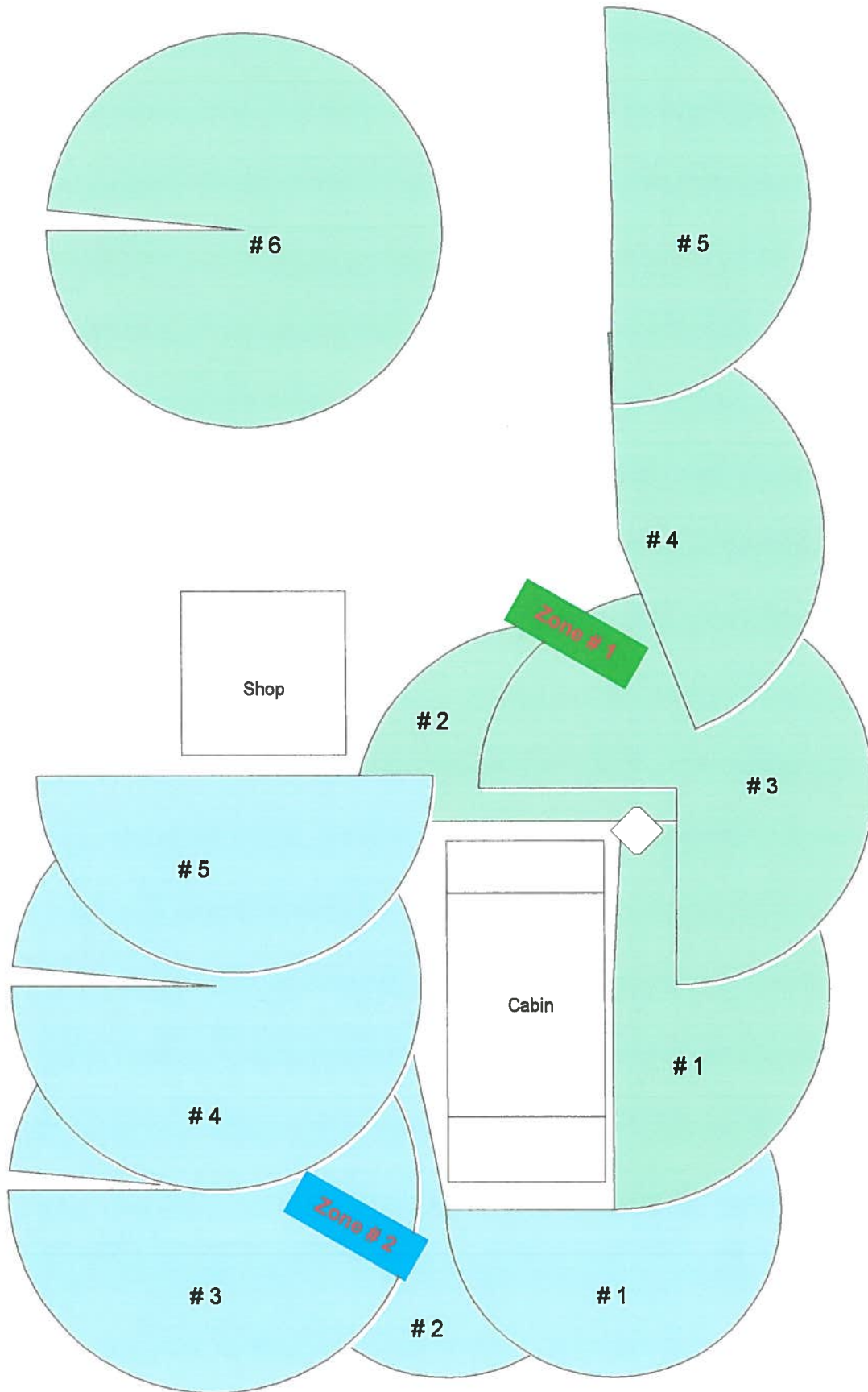
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Permit holder's home and place of use



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Rec'd at exam
10-20-10
KW

Cabin Sprinkler Setup

July, 2009

AT 35 psi

Zone 1

Sprinkler #	Degree Arc	PSI	GPM	Type	Nozzle	Radius
1	180	35	2.8	Hunter	7	36
2	180	35	1.7	Hunter	5	35
3	270	35	2.8	Hunter	7	36
4	180	35	3.47	Impact 90SD	9	39

Sub Total 10.77

5	180	35	3.3	Maxi Bird	8	38
6	360	35	3.3	Maxi Bird	8	38

Sub Total 6.6

17.37

Zone 2

Sprinkler #	Degree Arc	PSI	GPM	Type	Nozzle	Radius
1	250	35	2.8	Hunter	7	36
2	270	35	2.8	Hunter	7	36
3	360	35	3.47	Impact 90SD	9	39
4	360	35	3.47	Impact 90SD	9	39
5	180	35	2.2	Hunter	6	35

14.74

Zone 1 & 2

32.11

Heads

Nozzle

1	Hunter	5
1	Hunter	6
4	Hunter	7
2	Maxi Bird	8
3	Impact 90SD	9

11

Rec'd at exam
10-20-10
KCW