

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No: 96-10396
Exam Date: 09/26/2023

1. Current Owner:
STEVE P ADAMS 286 WOOD VIEW RD SANDPOINT ID 83864-5025
2. Accompanied by: Steve Adams
Phone No: 208-610-1870
Address: Same as above
Relationship to permit Holder: Permit Holder

3. **SOURCE:**
TURNIPSEED CREEK

Tributary
PEND OREILLE RIVER

Method of Determination: ArcMap & DRG.

B. OVERLAP REVIEW

1. Other water rights with the same place of use: YES Overlap

Water Right No.	Source	Purpose of Use	Basis
96-2142	Turnip Creek	Irrigation, Domestic	License (no CFPRBA claim filed to date)
96-9059	Turnip Creek	Recreation Storage, Diversion to Storage	License (claim has been filed in CFPRBA process)
96-10377	Groundwater	Domestic	B.U. Claim in CFPRBA

Comments: The applicant has an existing license 96-9059 that covers diversion to storage & recreation storage from Turnip Creek for the same storage pond POU as this right's irrigation storage POU. Mr. Adams has filed a Claim based on License for 96-9059. Permit 96-10396 incorporates condition 259 that specifies pond capacity volume, seepage & evaporation loss volumes are covered by prior Right 96-9059, and that irrigation storage/from storage use is accounted for by this Permit 96-10396. This serves as combined use limitations between the two WRs and mitigates overlap concerns between the two WRs. Condition X35 is not recommended for use based on verbiage designated within condition 259.

The applicant has filed a B.U. Claim 96-10377 in the CFPRBA process for domestic use from a groundwater well located on the property. This beneficial use of water is not co-mingled in Mr. Adam's irrigation from storage water delivery system and not a concern for overlap between WRs if decreed as claimed. I have not recommended inclusion of condition 928 for claim 96-10377.

Licensed Right 96-2142 uses Turnip Creek water for irrigation of 42 acres with a priority date of 1/14/1938. 18 ac out of the total 42 ac is located within the SE¼NE¼ which overlaps the POU for this permit. Evaluation of backfile information from 96-2142 illustrates the irrigation occurring under 96-2142 is not appurtenant to the applicant's parcel which has a year-built date of 1977 according to Bonner County tax parcel information. Google Earth historic imagery illustrates irrigation didn't start being actively developed on the applicant's parcel until around 2006. Proof Report for 96-9059 provides comments that illustrate in a letter dated 5/16/2002, that Mr. Adams received permission from Bonner County Public Works to install the 4-inch diversion to storage pipe associated with WR 96-9059. Based on this information, there is no overlap concerns between this Permit and 96-2142. Additionally, a Claim has not been filed on licensed Right 96-2142 following the first round of claim suspense dates in the CFPRBA. If filed on in the future, there is no concern for overlap between 96-2142 & 96-10396. No inclusion of condition X35 nor 928 is recommended for licensing this permit.

2. Other water rights with the same point-of-diversion: NO Overlap

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

TURNIPSEED CREEK SE¼ NE¼, Sec. 18, Twp 57N, Rge 02W, B.M. BONNER County

Method of Determination: GPS. POD is located at -116°39.949, 48°17.301

PLACE OF USE: IRRIGATION STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
57N	02W	18				X													

PLACE OF USE: IRRIGATION FROM STORAGE

Twp	Rng	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
57N	02W	18				1.5													1.5

Total Acres: 1.5

Method of Determination: beneficial use field examination and ArcMap aerial imagery.

3.

☒ Delivery System Diagram Attached (required). Indicate all major components and distances between components.
☒ Indicate weir size/pipe as applicable.

☒ Map Attached Showing Location(s) of point(s) of diversion and place(s) of use (required). Scale must be
☒ 1:24,000 or greater.

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

☒ Photo of Diversion and System Attached

4.

Well or Diversion ID No.*	Motor Make	Hp	Motor Model No.	Pump Make	Pump Serial No. or Discharge Size
SUBMERSIBLE PUMP IN POND	CENTRIPRO	1.5	CB15412CR		

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
N/A						

2. Measurements: Water is pumped from the pond via buried main irrigation line up slope to the applicant's shop where it routes to a pressure tank prior to distribution by pressurized irrigation zone(s). Irrigation from storage does not require a diversion rate for licensing purposes.

E. FLOW CALCULATIONS

Measured Method: Irrigation from Storage beneficial use doesn't incorporate a flow measurement.

F. VOLUME CALCULATIONS

1. Volume Calculations for irrigation:

$$V_{I.R} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 1.5 \text{ ac} \times 3.0 \text{ afa} = 4.5 \text{ af}$$

$$V_{D.R} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation season}) \times 1.9835 = \text{N/A no diversion rate associated with WR.}$$

$$V = \text{Smaller of } V_{I.R} \text{ and } V_{D.R} = \mathbf{4.5 \text{ af}}$$

2. Volume Calculations for Other Uses: storage pond capacity, seepage, & evaporation volume values are accounted for under licensed Right 96-9059 & in Condition 259 for Permit 96-10396.

G. NARRATIVE/REMARKS/COMMENTS

During previous licensing of Mr. Adams' Right 96-9059, the storage pond's volume and size were determined during a beneficial use field exam; pond capacity seepage and evaporation loss volume(s) were accounted under 96-9059 for recreation storage water use, which also accounts for diversion to storage of 0.10 cfs from Turnip Creek to keep the pond year-round when water is available.

I performed a field exam on 9/26/2023 with Mr. Adams, which shows a submersible pump diverting water from the storage pond for irrigation from storage purposes on his parcel RP57N02W182100A. Irrigation from Storage doesn't require a diversion rate for licensing purposes. I GPS located the 1.5 hp Centripro submersible pump where it comes to shore from a dock in the pond and used ArcMap to designate the POD for licensing purposes. This right is junior to Mr. Adams' previous storage right 96-9059, which accounts for the diversion to storage 4-inch convenience pipe to replenish the pond. In the event future curtailment is necessitated, right 96-10396 may be curtailed and the applicant still be able to fill the pond for 96-9059 depending on the scale of curtailment.

The Irrigation Storage POU consists of the same storage pond for 96-9059. A pond analysis worksheet was completed during the permit approval process on 3/8/2023 which validated the current pond as constructed has adequate WRs to cover capacity, seepage, & evaporation. The pond analysis sheet illustrated a total volume requirement of 0.4 af, which is less than the 0.6 af license approved by 96-9059. Based on this information, Permit 96-10396 accounts solely for irrigation storage/from storage annual volume requirements. During licensing review, I assigned the Irrigation Storage POU which is the same as 96-9059's storage POU shape.

From the pond, water is conveyed up hill to the applicant's shop & pump station which incorporates pressure tanks prior to distribution by pressurized water zone(s) sprinkler system. Photographs were taken of the irrigation storage pond and Irrigation from storage POU. I used field maps to trace out the active irrigation acreage occurring at the applicant's property. Two separate control panels support multiple zones of pressurized irrigation per panel from the main pipeline. Turnip Creek water is used to irrigate lawn space(s), a large garden area, small vine crops plots and corn crop plots throughout the property & for landscape watering. During licensing review, I used ArcMap aerial imagery to accurately trace out the irrigation from storage acreage equaling 1.5 acres. This is less than the permit approved 3.0 acres resulting in a reduction in annual volume requirement recommended for licensing of 1.5 ac x 3.0 afa = **4.5 af**. Irrigation storage & from storage beneficial uses are credited the same 4.5 af volume which is not additive toward the maximum diversion rate recommended of 4.5 af.

Condition 029 was removed from the Permit during licensing review. Condition 220 was removed based on licensing guidance from Shelley Keen – IDWR Deputy Director. Condition 259 was revised to reflect the diversion volume of 4.5 af vice the permit approved volume of 9.0 af. The pond capacity, seepage, & evaporation loss rates were kept the same as licensed Right 96-9059 as the pond analysis worksheet I developed reflected slightly less volume requirement but may be interpreted differently for seepage or evaporative loss using rounding conventions for computation of values. All other conditions on the permit shall be carried to licensing. Overlapping concerns have been discussed in detail above; none of the associated overlapping WRs 96-2142, 96-9059, or 96-10377 result in concern for stacking or overlap of water rights. There are no additional overlapping concerns toward licensing 96-10396.

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

H. RECOMMENDATIONS

1. Recommended Amounts

<u>Beneficial Use</u>	<u>Period of Use</u>	<u>Annual Volume</u>
IRRIGATION STORAGE	01/01 to 12/31	4.5 AF
IRRIGATION FROM STORAGE	04/01 to 10/31	4.5 AF

Totals: 4.5 AF

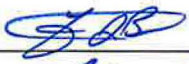
2. Recommended Amendments

☐ 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 ☒ None

I. AUTHENTICATION

Luke Bates -

Field Examiner's Name  Date 11/27/2023

Reviewer  Date 3/24/24

State of Idaho
Department of Water Resources
Attachment to Field Exam
96-10396

IRRIGATION STORAGE system diagram

02W

57N



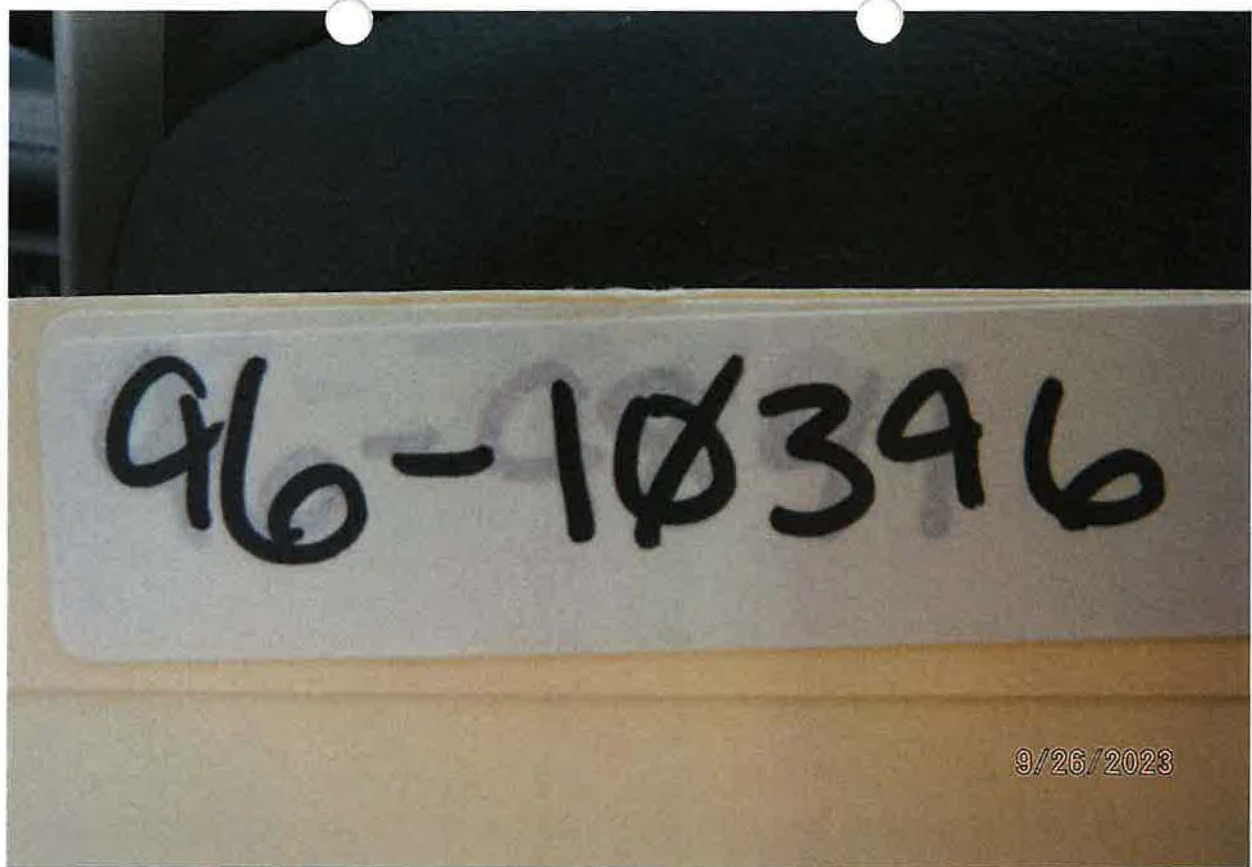
0 0.035 0.07 0.14 Miles

-  Place Of Use Boundary
-  Townships
-  PLS Sections
-  Quarter Quarters
-  Point of Diversion



This map depicts the IRRIGATION FROM STORAGE system diagram.





BENEFICIAL USE FIELD EXAM DATE 9/26/2023



POD – SUBMERSED PUMP IN POND



DIVERTING WORKS INCORPORATE A 1.5 HP PUMP AND BURIED PIPELINE TO PRESSURE TANK PRIOR TO MULTI-ZONE IRRIGATION SYSTEM DISTRIBUTION



CENTRIPRO 1.5 HP PUMP MOTOR INSTALLED ON SYSTEM



1.5 HP PUMP MOTOR



MULTI-ZONE IRRIGATION SYSTEM



IRRIGATION STORAGE POU – SMALL POND; SEEPAGE & EVAPORATION RATES COVERED UNDER RIGHT 96-9059



NUMEROUS HOSE TO SPRINKLERS USED IN SYSTEM



BURIED MAIN SERVICE POLY LINE ROUTES UP HILL TO EAST FROM POND TO THE SHOP LOCATED ON APPLICANTS' PROPERTY



IRRIGATION FROM STORAGE POU -PRESSURIZED SPRINKLER SYSTEM BETWEEN SHOP AND ADU.



IRRIGATION POU





IRRIGATION POU – FENCED GARDEN/ORCHARD PLOT





IRRIGATION POU – LAWN SPACE





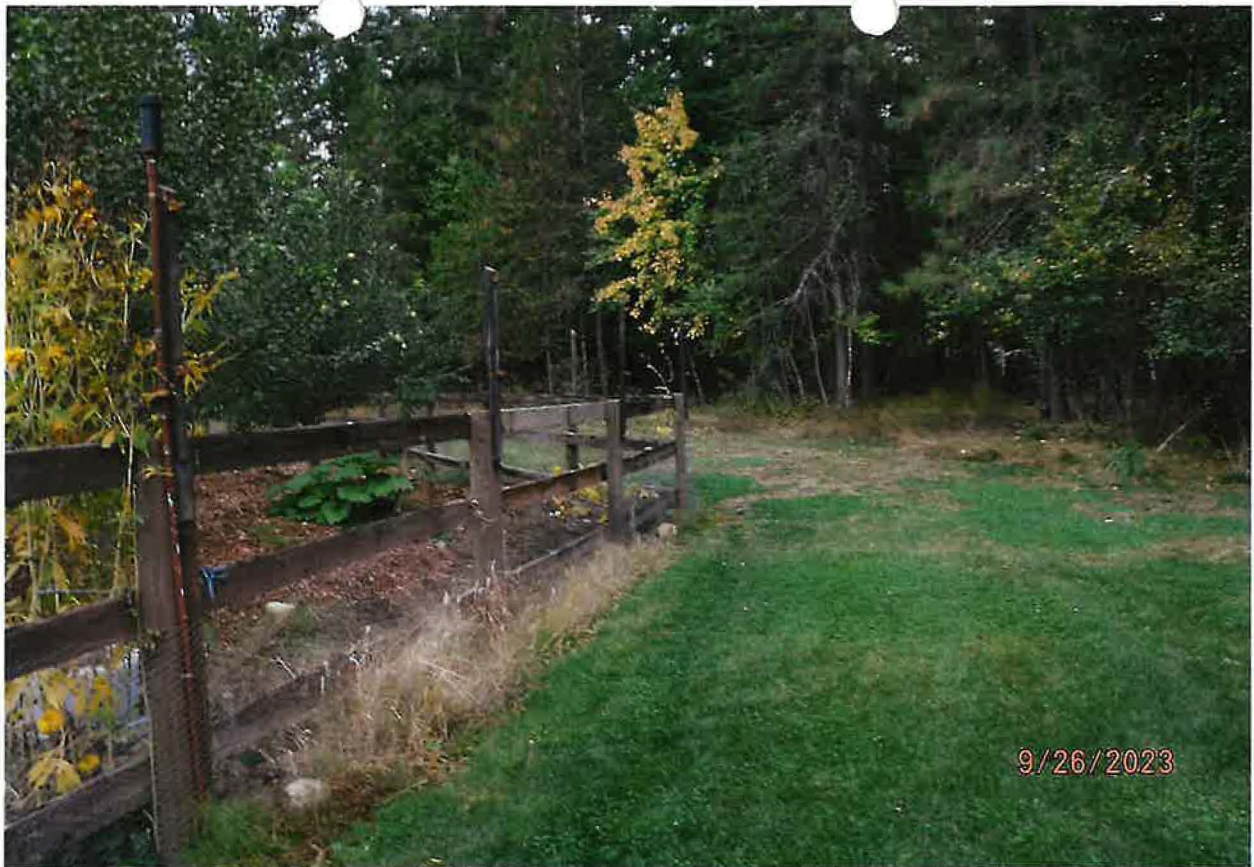
IRRIGATION POU – SPRINKLER RISER PIPE AND PRESSURIZED SPRINKLER RAINBIRD SPRAY NOZZLE





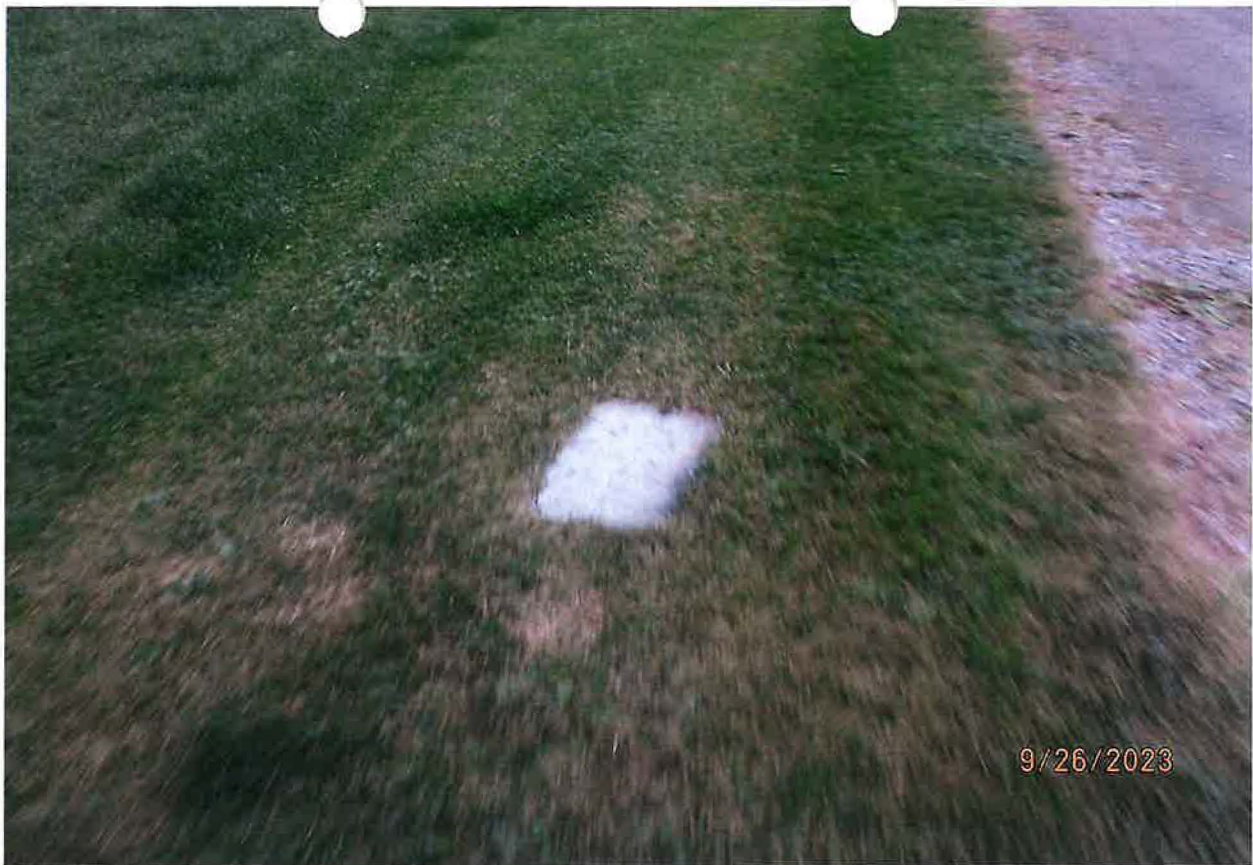
IRRIGATION POU





IRRIGATION POU

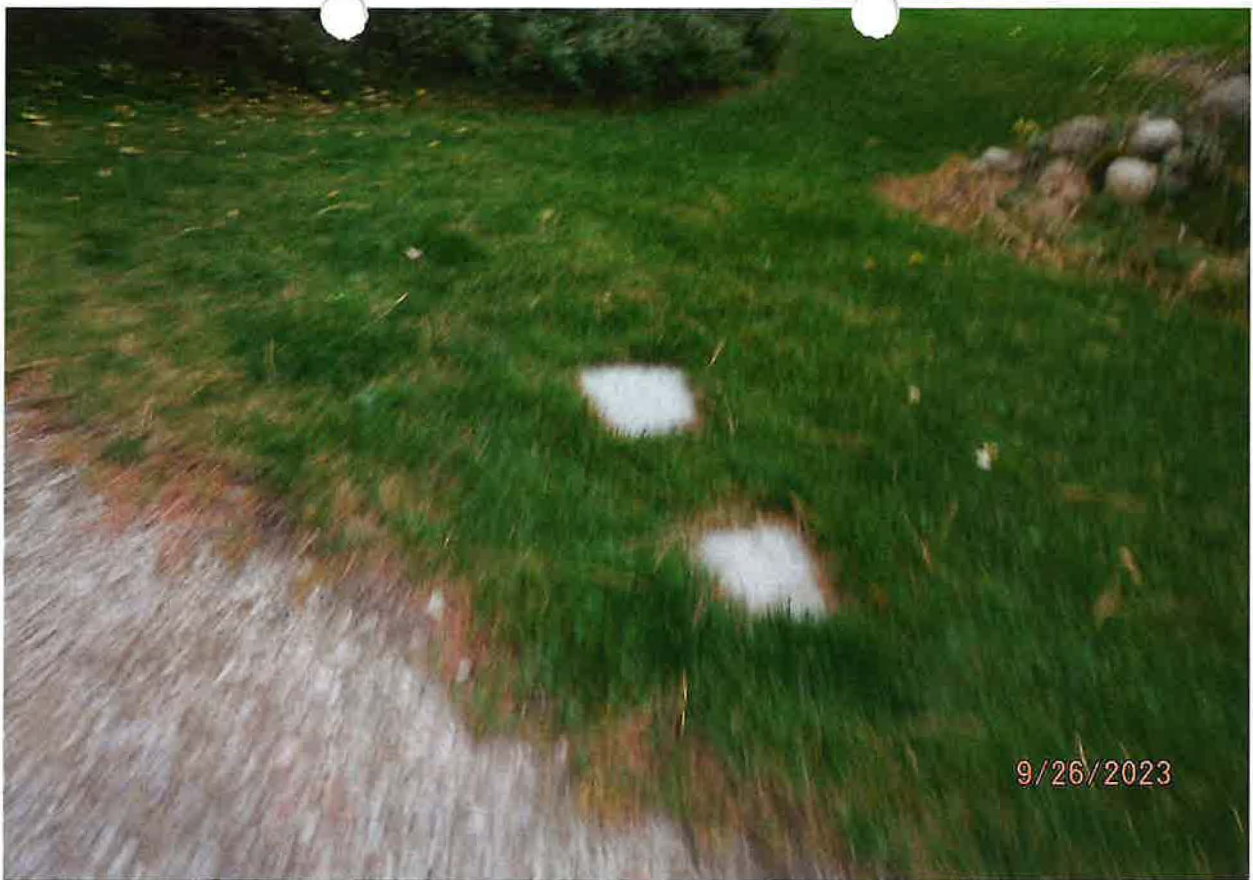




IRRIGATION POU – SPRINKLER CONTROL BOX FOR MULTIPLE ZONES



IRRIGATION POU – NORTH OF PRIMARY RESIDENCE



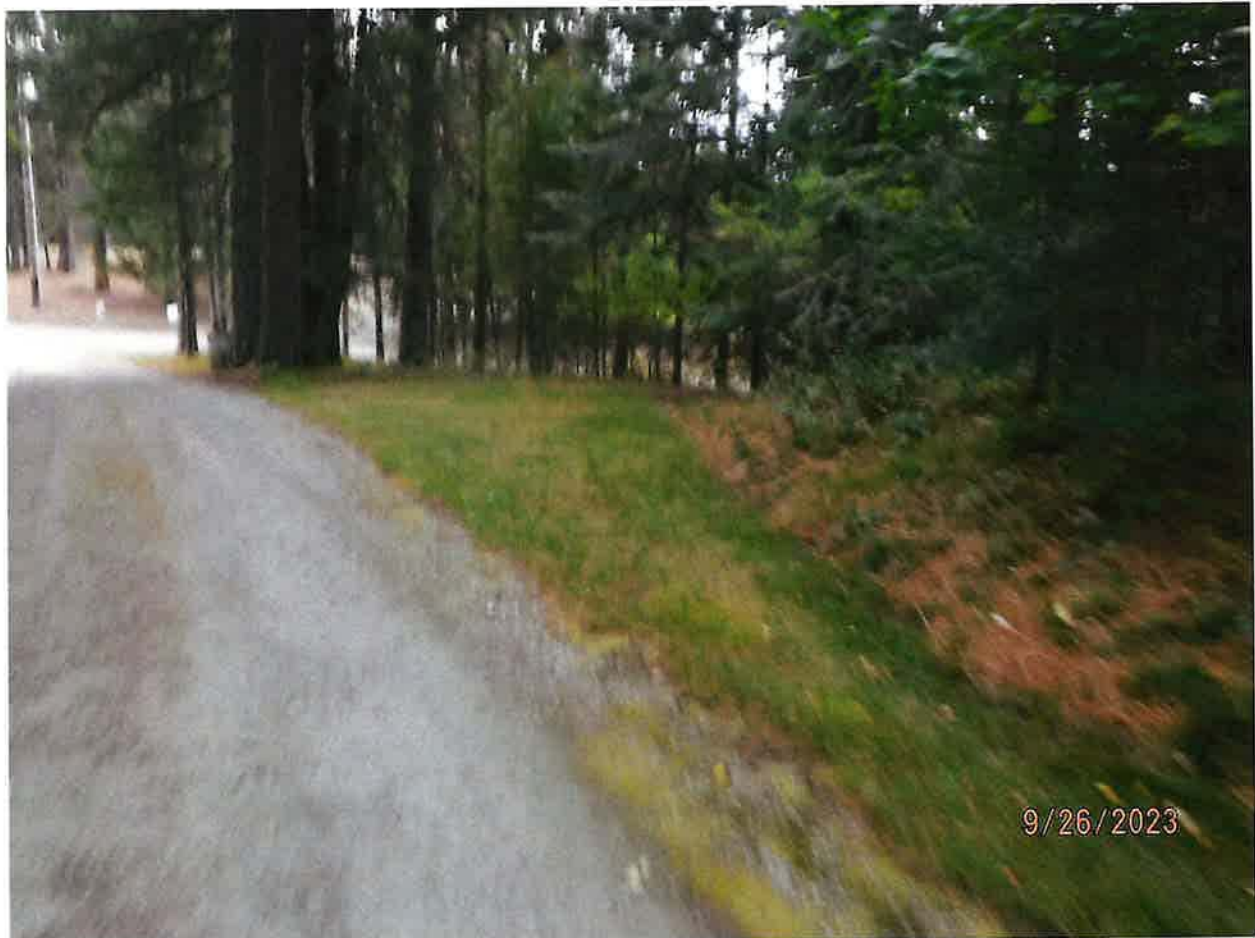
IRRIGATION POU – MULTIPLE SYSTEM ZONE CONTROL STATIONS



IRRIGATION POU –



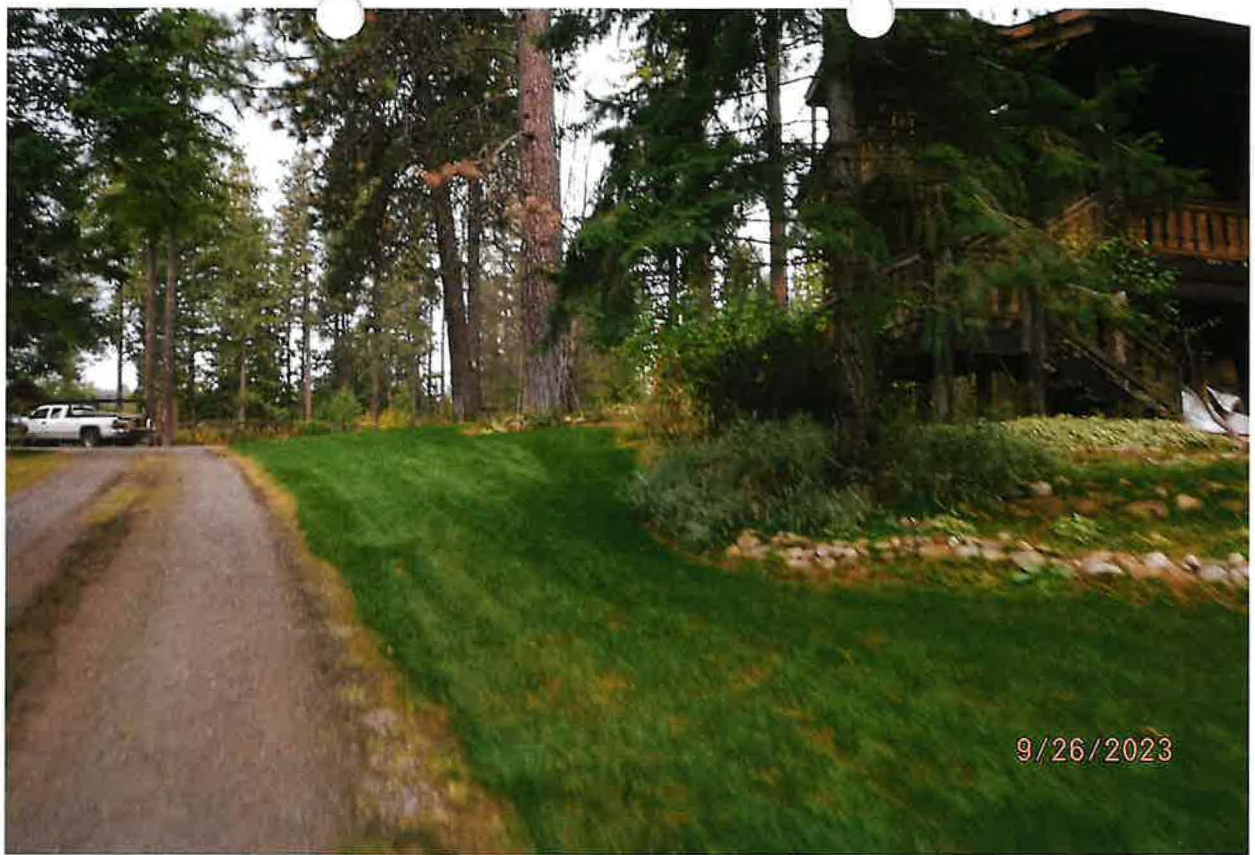
IRRIGATION POU – NORTHERN DRIVEWAY ENTRANCE TO PROPERTY



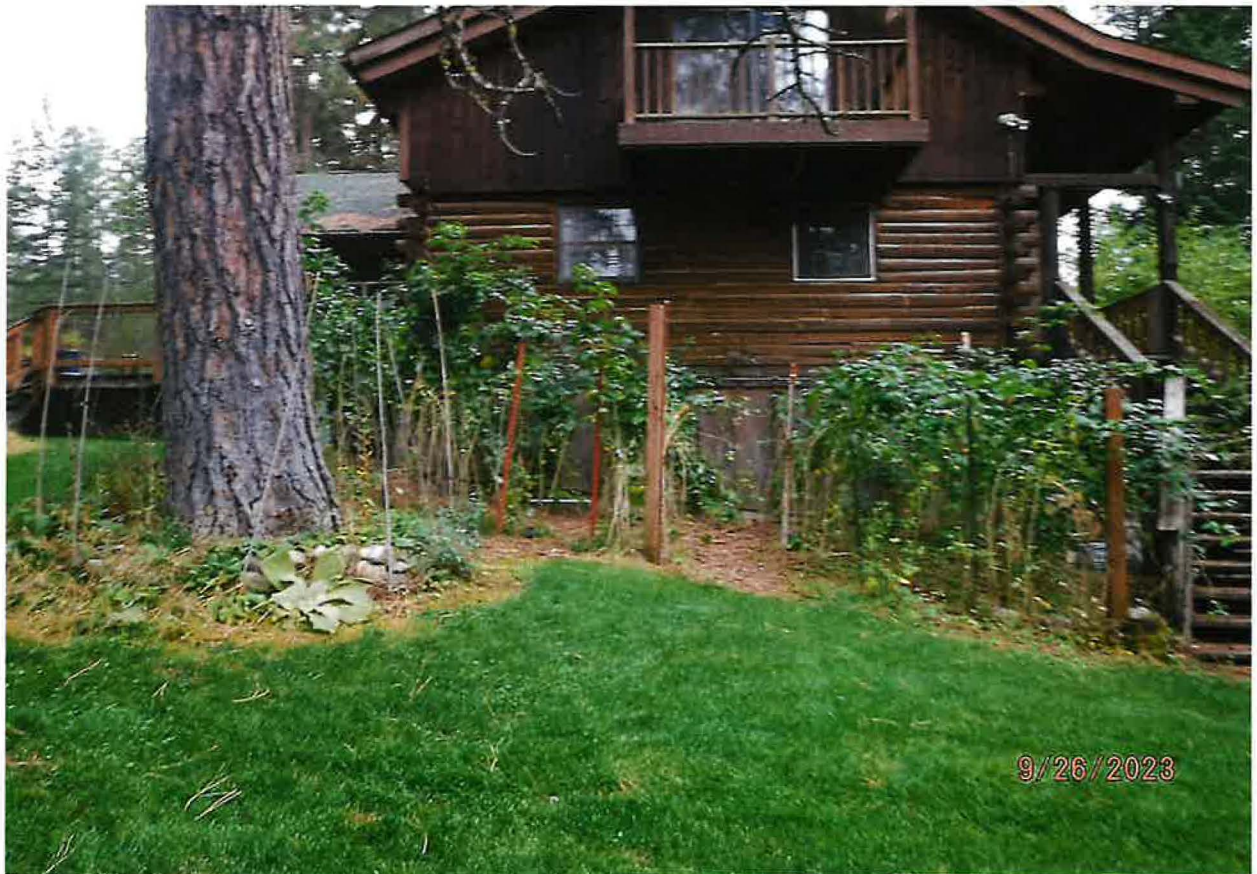


IRRIGATION POU – SOUTHERN DRIVEWAY AND LAWN SPACE BELOW RESIDENCE





IRRIGATION POU –

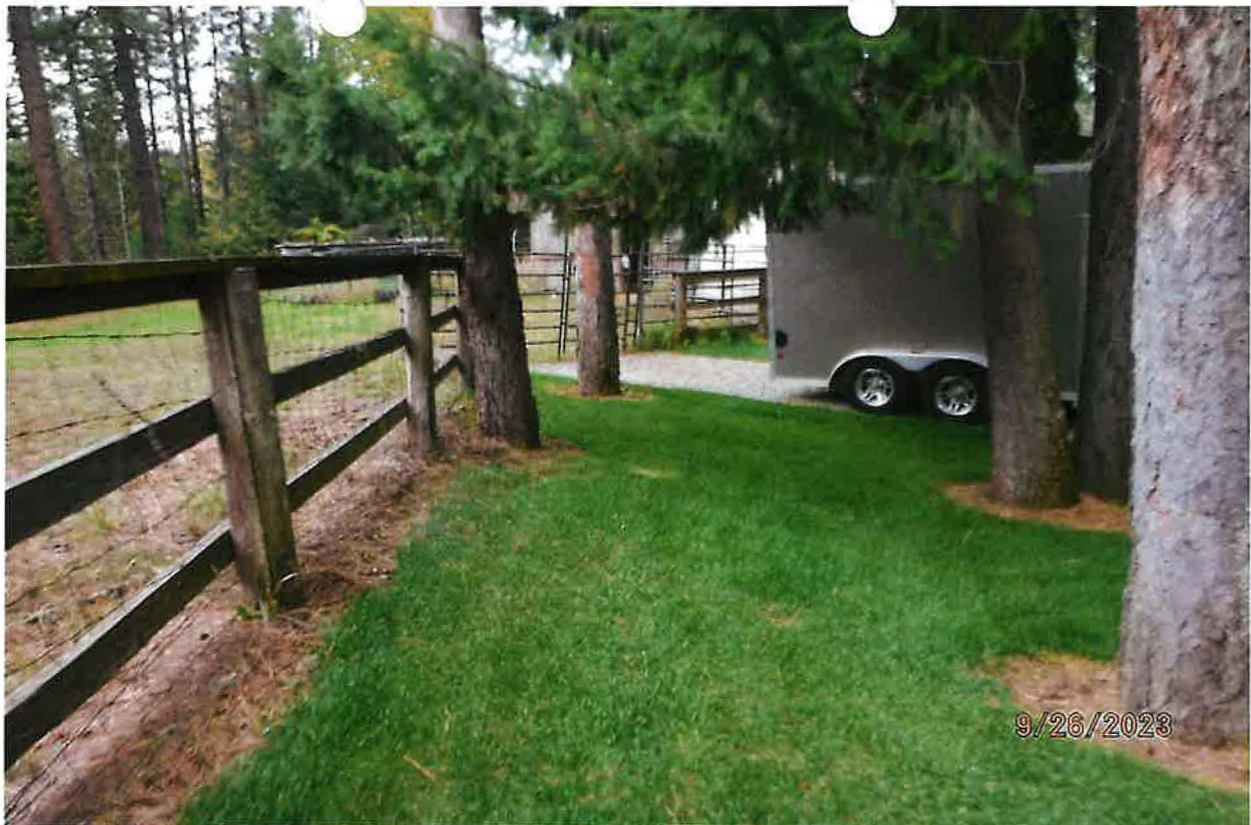


IRRIGATION POU – CROPS GROWN UP TO EDGE OF RESIDENCE

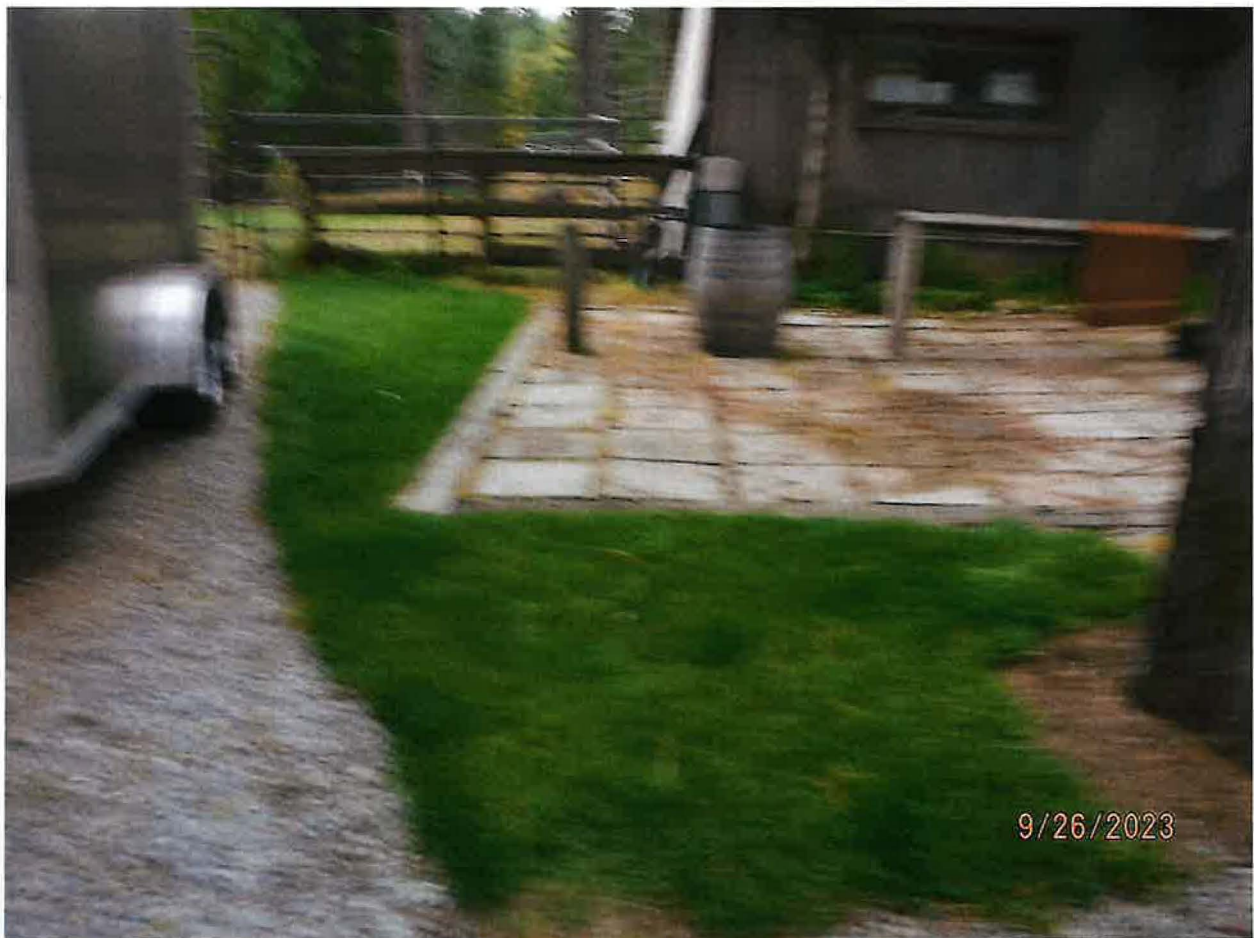


IRRIGATION POU – SOUTH OF SOUTHERN DRIVEWAY





IRRIGATION POU – EAST OF SHOP



LANDSCAPE IRRIGATION IN FRONT OF SHOP



IRRIGATION POU

