

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

D. FLOW MEASUREMENTS None**E. FLOW CALCULATIONS**

_____Additional Computation Sheets Attached

Measured Method: Hazen Williams Full Pipe Flow Equation:

$$Q=0.432C_1D^{2.63}S^{0.54}$$

Where:

C₁ = roughness coefficient = 140 for HDPE

D = Diameter in feet = 0.167' for 2"HDPE

S = Slope 95/277 = 0.34

$$0.432(140)(0.167)^{2.63}(0.34)^{0.54} = \underline{\underline{0.31 \text{ cfs}}}$$

F. VOLUME CALCULATIONS None**G. NARRATIVE/REMARKS/COMMENTS**

Permit 36-16250 was permitted for the diversion of up to 0.04 cfs, 2,500 gallons per day for domestic use in 2 restrooms and 1 drinking fountain.

Application for permit 36-16250 submitted by Country Club Estates, was submitted April 24, 2007 and proof of domestic use was submitted April 1, 2008.

The rest room facility and drinking fountain are adjacent to a 9 hole golf course, private park and boat docks that are provided as amenities for homeowners in the Country Club Estates subdivision. Water for this facility is provided from a spring identified as Switchback spring. At the point of diversion there is a 2" PVC pipe below a head box where spring water is diverted through 2 separate 2" HDPE lines. One sends water to the restrooms, while the other delivers water to the Coats property under water right 36-7269B.

I used the Hazen Williams Full Pipe Flow Equation to estimate potential flow through the system, which it estimated at 0.31 cfs. Use of this facility appears to be rather light, although the private park is on occasion reserved by homeowners for weddings and reunions. At an estimated average of 10 gallons per restroom use per person (IDWR Field Examiner's Handbook), it is unlikely that use of water at the facility would ever exceed 2,500 gallons per day.

Overlap analysis indicates there are several domestic rights in the same QQ (2-102357, 36-7269B; 36-8127B; 36-7270), but approval conditions or comments on those rights indicate that none are appurtenant to the lot where the restrooms are located, Lot 1 Block 3. There is a separate 2" water line at the point of diversion that provides water for right 37-7269B (0.04 cfs domestic; 0.030 cfs irrigation; and 0.040 cfs recreation) and delivers water to the place of use on the Coats property. This point of diversion is also licensed for rights 36-7269A (0.060 cfs irrigation) and 36-8127A (0.070 cfs irrigation). With a potential system capacity of 0.31 cfs, the delivery system is capable of supplying water for this permit and the two irrigation rights.

Recommend permitting 0.04 cfs for domestic use with a condition of approval limiting water use to 2,500 gallons per day or less.

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

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>
DOMESTIC	01/01 to 12/31	0.040 CFS
<u>Totals:</u>		0.040 CFS

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

I. AUTHENTICATION

Field Examiner's Name Bill Mide Date 8/27/2012

Reviewer [Signature] Date 8/28/12



Figure 1: Restrooms and fountain

System Diagram



State of Idaho
Department of Water Resources

Attachment To Permit to Appropriate Water

36-16520

This map depicts the DOMESTIC place of use boundary for this water right at the time of this approval and is attached to the approval document solely for illustrative purposes.

R18E



0 0.025 0.05 0.1 Miles

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

