

[illegible]

Method of Determination: Arc Map (Aerial Photo); Tax Lots

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.

<u>Well or Diversion ID No.*</u>	<u>Motor Make</u>	<u>Hp</u>	<u>Motor Serial No.</u>	<u>Pump Make</u>	<u>Pump Serial No. or Discharge Size</u>
<u>D0009656</u>	<u>Hitachi</u>	<u>15</u>	<u>Unknown</u>	<u>Unknown</u>	<u>2"</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
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*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

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

2. Measurements: No field measurement. Two (2) pressure tanks maintain an operating pressure of 76 psi to the school.

E. FLOW CALCULATIONS Additional Computation Sheets Attached

Measured Method: (Theoretical Horsepower Equation)

$$Q = 8.8 \times 0.7 \times 15/160 + (2.31 \times 76) = 92.4/335.6 = 0.28 \text{ cfs}$$

$$Q(\text{theoretical}) = 0.28 \text{ cfs} > 0.20 \text{ cfs } Q(\text{permit})$$

$$HP = 15$$

$$Z = 160'$$

$$P = 76 \text{ psi}$$

Appears that the current pumping system is capable of attaining the permit diversion rate of 0.20 cfs. Recommend the permit diversion rate of 0.20 cfs.

F. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation: N/A

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

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

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

2. Volume Calculations for Other Uses: (Domestic – School)

(SEE ATTACHMENT 'A')

G. NARRATIVE/REMARKS/COMMENTS**WATER SUPPLY SYSTEM:**

A ground water well with a 15-hp submersible pump, supplies water for domestic use to the Garden Valley school and to a concession stand and restrooms near the football field. Approximately 216 students attend the school. This same well is used to irrigate the football field and the adjacent school common areas.

OVERLAP ANALYSIS:

Point of Diversion: Water Right Permit No. 65-23114 and Water Right Permit No. 65-13834 have an overlapping point of diversion. Water Right Permit No. 65-23114 is associated with the domestic use for the school, and Water Right Permit No. 65-13834 is associated with the irrigation of the football field and adjacent school common areas.
Place of Use: There are no overlapping places of use for Water Right Permit No. 65-23114.

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

RATE &/OR STORAGE RECOMMENDED FOR LICENSING

Description	Rate of Flow (cfs)		Storage (af)
Permit Amount	0.20	&/or	N/A
Beneficial Use Limit	0.20	&/or	N/A
System Measurement	0.28(theoretical)	&/or	N/A
Proof Fee Amount	0.20	&/or	N/A
Recommended Amount	0.20	&/or	N/A

H. RECOMMENDATIONS**1. Recommended Amounts**

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL VOLUME</u>
DOMESTIC	01/01 to 12/31	0.200 CFS	30.5 AF
<u>Totals:</u>		0.200 CFS	30.5 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 ☐ Other

I. AUTHENTICATION

Field Examiner's Name Rick Coltingwater Date 10/18/13

Reviewer _____ Date _____

ATTACHMENT 'A'

Water Right Permit No. 65-23114

Garden Valley School District #71
P.O. Box 710
Garden Valley, ID 83622

(Volume Calculations for School)

Instantaneous Demand:

Number of Fixtures – 122

38 Toilets @ 5gpm = 190 gpm

14 Showers @ 6gpm = 84 gpm

54 Sinks @ 2 gpm = 108 gpm

16 Drinking Fountains @ 2 gpm = 32 gpm

Total = 414 gpm

Volume:

Hours per week – 10 (Assumed)

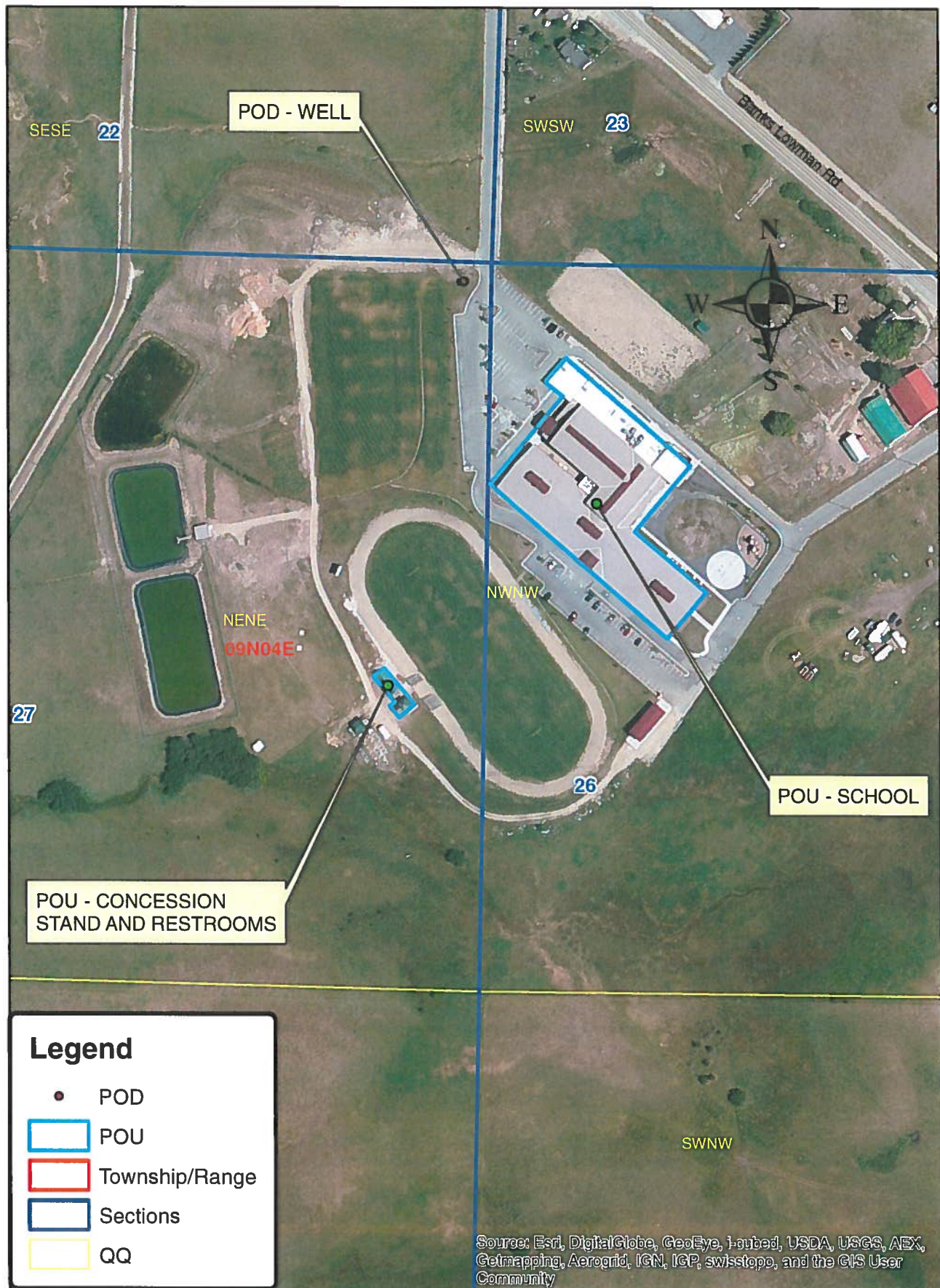
Gallons per week = 414 gpm x 60 min/hr = 24,840 gallons per hour
= 24,840 gal/hr x 10 hr = 248,400 gallons

Gallons per year = 248,400 gallons x 40 weeks = 9,936,000 gallons

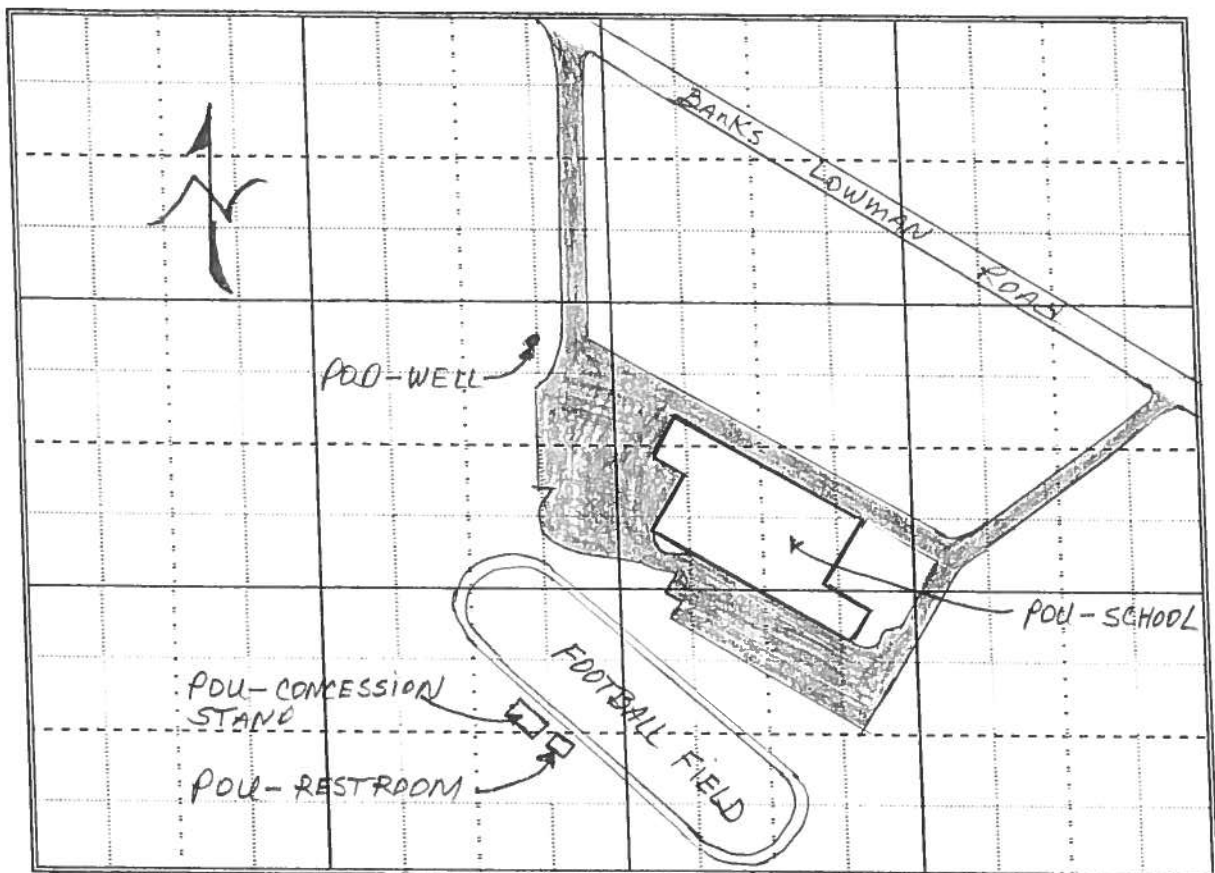
V = 9,936,000 gallons/325,850 gal/AF = 30.5 AF

65-23114

ESRI AERIAL PHOTO - 2012



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" = NTS

- ☐ 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

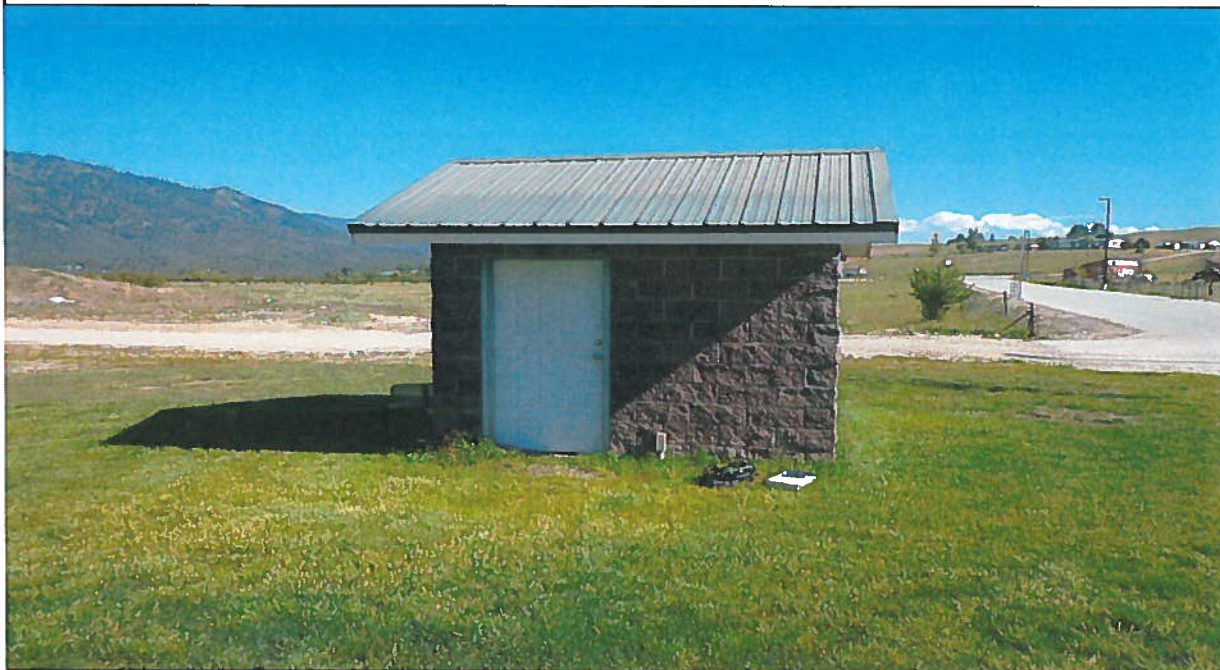
FIELD EXAM PHOTOS

Water Right Permit: 65-23114

Field Exam Date: 6-4-13

PLS: NE1/4, NE1/4 Section 27, T.09N, R.04E.

Field Examiner: RC



Point of Diversion: View northwesterly of the well/pump house.



Point of Diversion: View inside of well/pump house of the well, piping, and pressure tank for the school. The piping and appurtenances with the flow meter, gate valve, and filter are associated with the schools pressurized irrigation system.