

JAMES R. BENNETTS

Attorney At Law
P.O. Box 36
Challis, Idaho 83226-0036
Telephone (208) 879-4488
Fax (208) 879-4248

RECEIVED
FEB 25 2004
Department of Water Resources
Southern Region

February 10, 2004

IDAHO DEPARTMENT OF WATER RESOURCES
SOUTHERN REGIONAL OFFICE
1341 FILLMORE ST, SUITE 200
TWIN FALLS ID 83301-3380

Re: 72-4089 and 72-7170
Water Right Point of Diversion Transfer

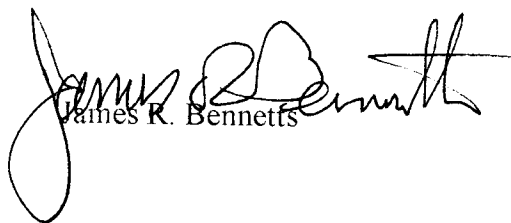
Enclosed are the documents required to transfer the point of diversion and a check for \$290.00 to cover fees.

We want to make note of the fact that water right 72-4089 has stockwater rights attached and those are to remain as originally filed. These rights need to be tied to the river for year around use rather than tied to the well right. Also, you will note that we are retaining the original diversion from the river as an alternate point of diversion.

Also you will note that both of the Herricks are deceased and therefore the Personal Representative of the Estates, Tracey Kehne Walther, is signing the application.

If you have any questions, please call.

Very truly yours,


James R. Bennetts

JRB:m
Enclosure

RECEIVED
FEB 25 2004
Department of Water Resources
Southern RegionPage 1 of 18STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Transfer No. _____

APPLICATION FOR TRANSFER OF WATER RIGHT
PART 1Name of applicant Gerald D. Herrick and Kathryn S. Herrick, Estates Phone 208-336-8719Post Office address 2027 Silver Creek Lane, Boise, Idaho 83706

A. PURPOSE OF TRANSFER

1. ☒ Change point of diversion ☐ Add diversion point(s) ☐ Change place of use
☐ Change nature of use ☐ Change period of use ☐ Other _____
2. Describe the reason for the proposed changes To eliminate the Salmon River diversion with its associated problems and fish passage issues.

B. DESCRIPTION OF RIGHT(S) OR PORTION THEREOF, AFTER THE REQUESTED CHANGE

- | 1. Right Number | Priority | Amount (cfs/ac-ft) | Nature of Use | Period of Use |
|-----------------|-------------------|--------------------|-------------------|-----------------------------|
| <u>72-7170</u> | <u>12/22/1981</u> | <u>.68cfs</u> | <u>irrigation</u> | <u>4/01</u> to <u>11/01</u> |
| <u>72-4089</u> | <u>05/01/1902</u> | <u>.52cfs</u> | <u>irrigation</u> | <u>4/01</u> to <u>10/31</u> |
| _____ | _____ | _____ | _____ | _____ to _____ |
| _____ | _____ | _____ | _____ | _____ to _____ |
2. Total amount of water being transferred 1.2 cubic feet per second and/or _____ acre-feet per annum.
3. Source of water Ground water tributary to N/A
4. Point(s) of Diversion:

Lot	¼	¼	¼	Sec.	Twp.	Rge.	County	Local name for diversion
4	NE	SE	NW	14	11N	18E	Custer	High Mountain Ranches, LP-Well Site (alternate diversion point)
4	NE	WE	NW	14	11N	18E	Custer	High Mountain Ranches, LP-River Diversion

5. Lands irrigated or place of use:

Twp.	Rge.	Sec.	NE ¼				NW ¼				SW ¼				SE ¼				Totals
			NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	
11N	18E	14					17	13	22	8									60

Total acres 60

PART 1

8. General Information:

10 a. Description of diversion system Attachment B

b. Are the lands from which you propose to transfer the water right subject to any liens, deeds of trust, mortgages, or contracts? _____ Yes _____ No. If yes, provide a notarized statement from the holder of the lien, deed of trust, mortgage or contract agreeing to the proposed changes.

c. Describe the affect on the land now irrigated if the place of use is changed pursuant to this transfer:

d. Remarks:

Also see Attachment A-Sink Creek Project Site, Attachment C-CH2M Hill Memorandum on
Connectivity Issues. Note: Applicant retains old diversion as an alternate and stockwater
right remains as previously filed.

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Transfer of Water Rights No. _____

And said application is hereby _____, subject to the following limitations and conditions:

Witness my hand this _____ day of _____, 19 _____.

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR TRANSFER OF WATER RIGHT

PART 2

(Attach one copy for each right)

RECEIVED**FEB 25 2004**Department of Water Resources
Southern Region**A. DESCRIPTION OF RIGHT AS RECORDED**

1. Right evidenced by:

- a. Decree No. 72-4089 Decreed to Gerald D. Herrick and Kathryn S. Herrick, Estates
in case of State of Idaho vs. Gerald D. Herrick
dated 11/17/2000 in Idaho county of Custer
- b. License No. N/A issued by the Idaho Department of Water Resources.
- c. Claim No. N/A on file with the Idaho Department of Water Resources.
- d. Transfer No. N/A which produced this right.

2. Attach a copy of last year's tax notice for the property to which the water right is appurtenant or other documents which show ownership. Label document as attachment A. Check appropriate box below:

☒ Tax Notice☐ Warranty Deed☐ Other _____3. Source of water Salmon River tributary to Snake River4. Date or priority 1902, May 01

5. Water is used for the following purpose:

amount .52 for irrigation purposes from 4/01 to 10/31
(cfs/ac-ft)
amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft)
amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft)

6. Total amount of water under right .52 cubic feet per second and/or N/A acre-feet per annum.

7. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local name for diversion
4	NE	SE	NW	14	11N	18E	Custer	

8. Lands irrigated or place of use:

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	
11N	18E	14					17	13	22	8									60

Total acres 60

9. Describe any other water rights used for the same purpose as described above _____

PART 2

Transfer No. _____

10. To your knowledge, has any portion of this water right undergone a period of five or more consecutive years of non-use?
 No _____ If yes, describe _____

B. DESCRIPTION OF PORTION OF RIGHT BEING TRANSFERRED

(If the entire right is to be changed by the applicant, omit part B and C.)

1. amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft) N/A
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)

2. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local name for diversion
		N/A						

3. Lands irrigated or place of use:

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	

Total acres _____

C. DESCRIPTION OF UNCHANGED PORTION OF RIGHT (omit if there is no change)

1. amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)

2. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local name for diversion

3. Lands irrigated or place of use:

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	

Total acres _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR TRANSFER OF WATER RIGHT

PART 2

(Attach one copy for each right)

RECEIVED

FEB 25 2004

Department of Water Resources
Southern Region**A. DESCRIPTION OF RIGHT AS RECORDED**

1. Right evidenced by:

- a. Decree No. 72-7170 Decreed to Gerald D. Herrick and Kathryn S. Herrick, Estates
in case of State of Idaho vs. Gerald D. Herrick
dated 12/01/2000 in Idaho county of Custer
- b. License No. N/A issued by the Idaho Department of Water Resources.
- c. Claim No. N/A on file with the Idaho Department of Water Resources.
- d. Transfer No. N/A which produced this right.

2. Attach a copy of last year's tax notice for the property to which the water right is appurtenant or other documents which show ownership. Label document as attachment A. Check appropriate box below:

☒ Tax Notice☐ Warranty Deed☐ Other _____3. Source of water Salmon River tributary to Snake River4. Date or priority 1981, December 22

5. Water is used for the following purpose:

amount .68 for irrigation purposes from 4/01 to 11/01
(cfs/ac-ft)
amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft)
amount _____ for _____ purposes from _____ to _____
(cfs/ac-ft)

6. Total amount of water under right _____ cubic feet per second and/or _____ acre-feet per annum.

7. Point(s) of Diversion:

Lot	¼	¼	¼	Sec.	Twp.	Rge.	County	Local name for diversion
4	NE	SE	NW	14	11N	18E	Custer	

8. Lands irrigated or place of use:

Twp.	Rge.	Sec.	NE ¼				NW ¼				SW ¼				SE ¼				Totals
			NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	NE ¼	NW ¼	SW ¼	SE ¼	
11N	18E	14					17	13	22	8									60

Total acres 60

9. Describe any other water rights used for the same purpose as described above _____

PART 2

Transfer No. _____

10. To your knowledge, has any portion of this water right undergone a period of five or more consecutive years of non-use?
 No If yes, describe _____

B. DESCRIPTION OF PORTION OF RIGHT BEING TRANSFERRED

(If the entire right is to be changed by the applicant, omit part B and C.)

1. amount .68 for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)

2. Point(s) of Diversion:

Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local name for diversion
			N/A					

3. Lands irrigated or place of use:

Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	

Total acres _____

C. DESCRIPTION OF UNCHANGED PORTION OF RIGHT (omit if there is no change)

1. amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)
 amount _____ for _____ purposes from _____ to _____
 (cfs/ac-ft)

2. Point(s) of Diversion:

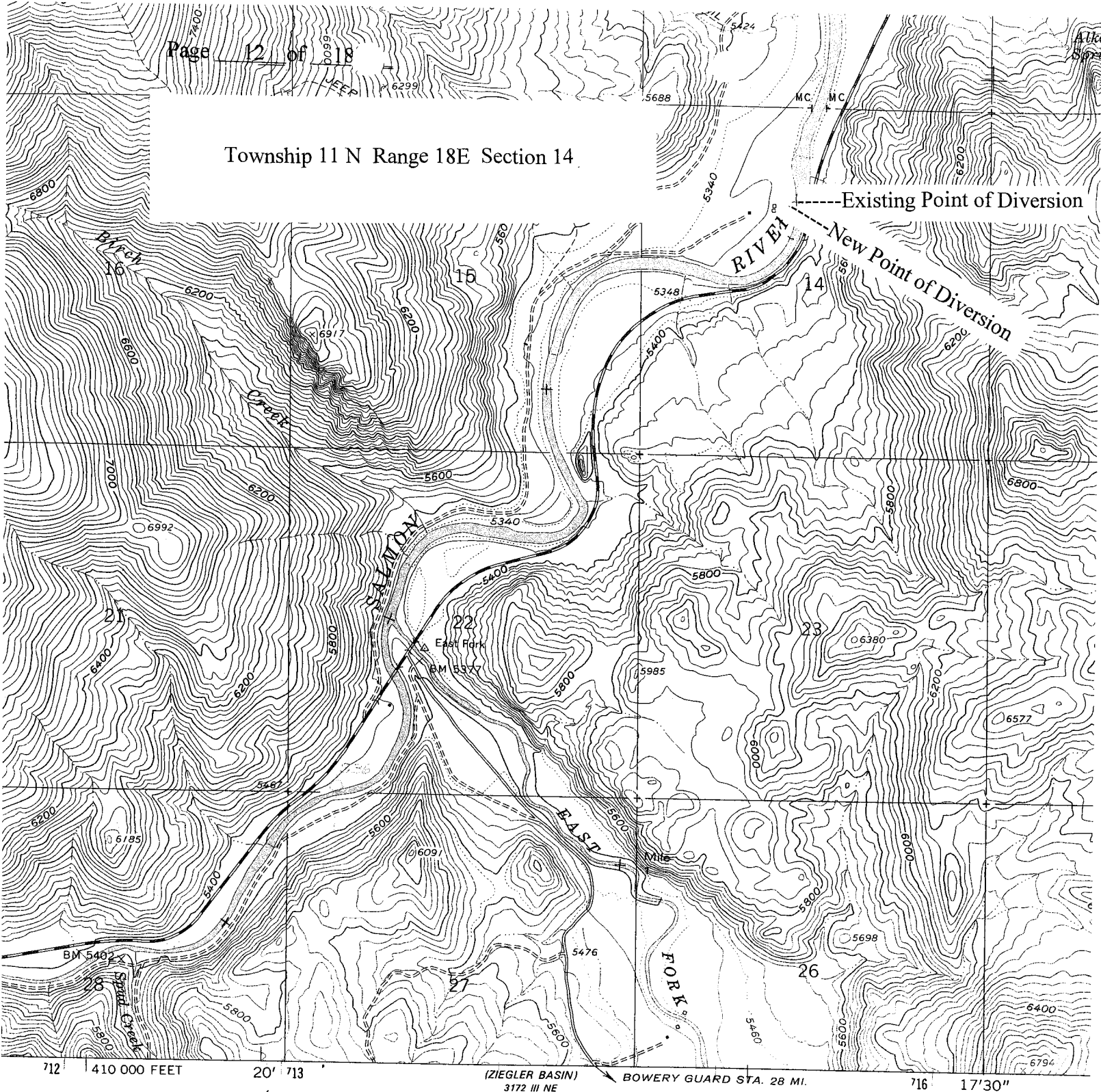
Lot	1/4	1/4	1/4	Sec.	Twp.	Rge.	County	Local name for diversion

3. Lands irrigated or place of use:

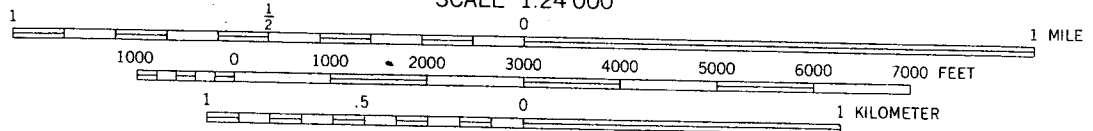
Twp.	Rge.	Sec.	NE 1/4				NW 1/4				SW 1/4				SE 1/4				Totals
			NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	NE 1/4	NW 1/4	SW 1/4	SE 1/4	

Total acres _____

Township 11 N Range 18E Section 14

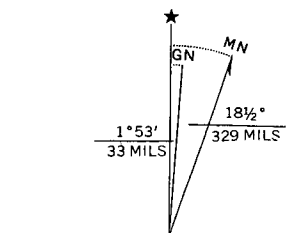


SCALE 1:24 000



CONTOUR INTERVAL 40 FEET

DOTTED LINES REPRESENT 20-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929



UTM GRID AND 1963 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

PART 3**B. CHANGES IN NATURE OF USE**

1	New Nature of Use	Amount (cfs/ac-ft)	Hours/days/year	Period of Use
				to _____
				to _____

2. Quantity and quality of return flows and location of discharge:

3. Describe effects on other water uses resulting from the proposed change:

N/A

I hereby assert that no one will be injured by such change and that the change does not constitute an enlargement in use of the original right. The information contained in this application is true to the best of my knowledge.

I understand that any willful misrepresentations made in this application may result in voiding its approval.

Subscribed and sworn to before me this

23rd

day of

(Signature of Applicant)

(Notary Public)

My commission expires

10, 06, 2009**FOR DEPARTMENT USE ONLY**

Transfer contains _____ pages and _____ attachments

Received by

J. F. Stanton

Date

2-25-04

Protest filed by _____

Prelim. check by

Fee

\$290,5026500

Received by

go

Date

2-25-04

Published in _____

Copies of protest forwarded by _____

Pub. dates _____

Hearing held by _____ Date _____

Watermaster recommendation requested on _____

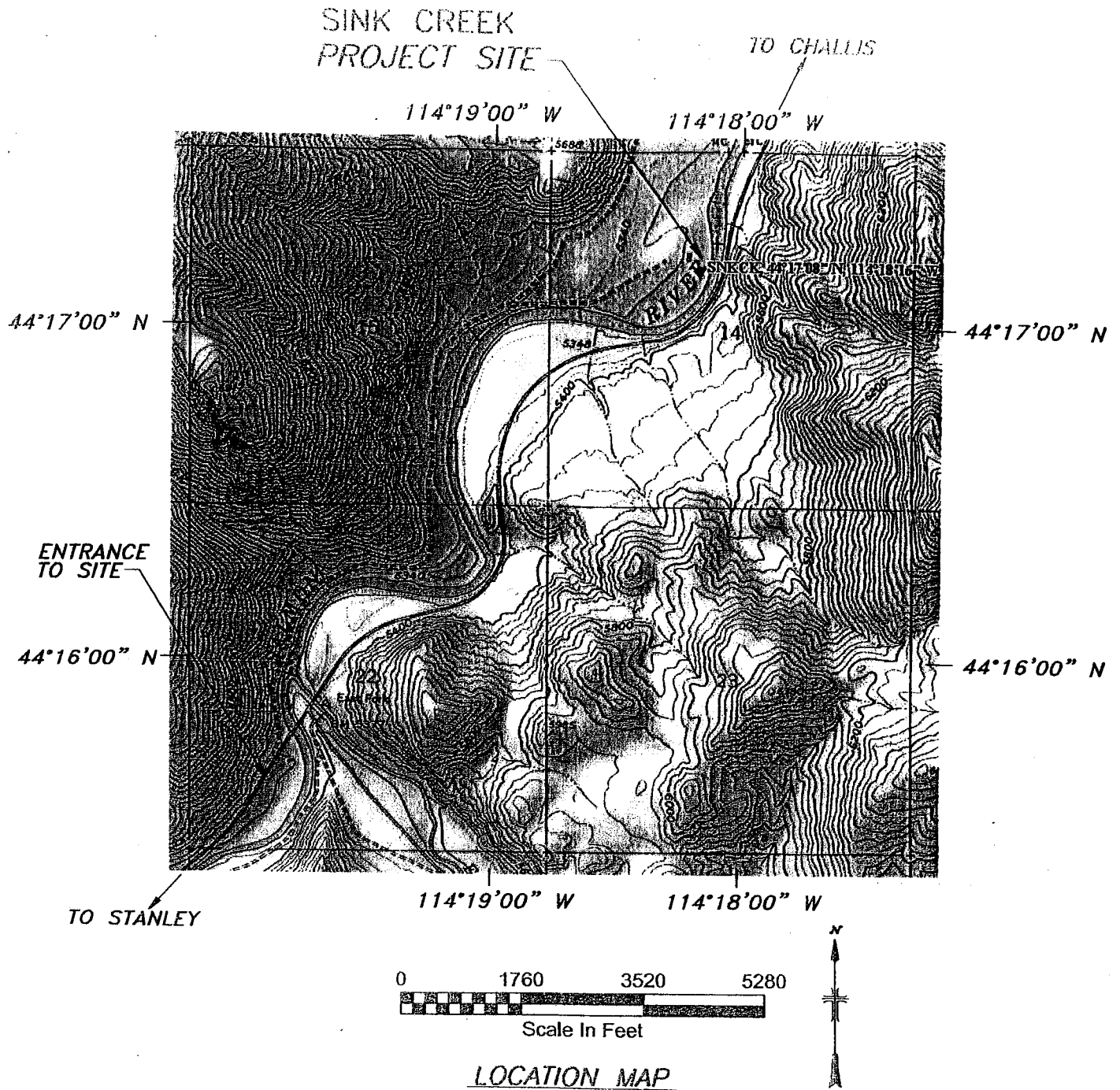
Recommended for ☐ approval ☐ denial

rec'd. _____

by _____

Copy of transfer sent to lien holder _____

Attachment A



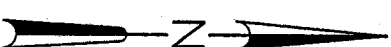
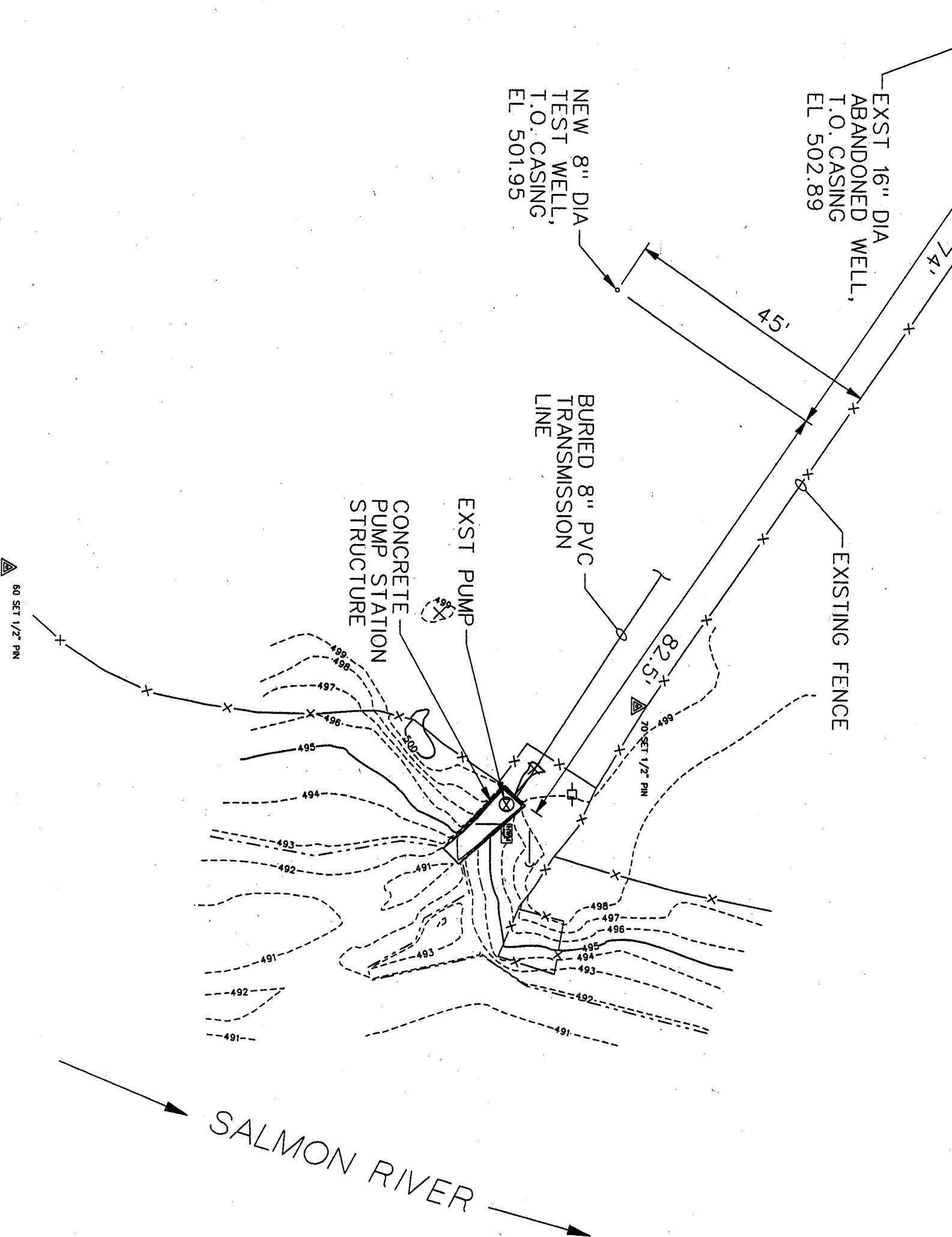
Attachment B

A well and pump could replace the surface diversion in its entirety. A new well would eliminate the possibility of having an illegal take; therefore this concept complies with National Oceanic and Atmospheric Administration (NOAA) Fisheries criteria. A well appears feasible considering test well performance. The design of the necessary improvements would include a pump, a discharge head, a variable frequency drive, control valves, a flow meter, and connecting piping to the existing piping system.

An 8-inch test well was completed on September 25, 2003, to a depth of 105 feet near the Salmon River diversion of this site. The test well location is shown in the attachment Figure 3B. The pumping testing of this well performed on October 29, 2003, produced favorable results. The test well site is underlain by predominantly coarse sand and gravel to a depth of 65 feet. Deeper material appears to be decomposed granite. The test well appears adequate for use as a production well for the river diversion water right of 1.20 cfs (540 gpm), and potentially more, considering water rights associated with the Sink Creek bubbler.

SURVEY CONTROL DATA

60	5000.0000	5000.0000	500.00	191	60	SET 1/2" PIN
70	5108.9461	5023.1572	499.41	191	70	SET 1/2" PIN



Scale In Feet

MAG. NORTH

CONTOUR INT = 1 FOOT

LEGEND

- SURVEY CONTROL POINT
- HIGH WATER MARK
- POWER POLE
- FENCE LINE
- EDGE OF WATER
- GUY ANCHOR

ALWAYS THINK SAFETY

UNITED STATES
BUREAU OF RECLAMATION

FIGURE 3B

SINK CREEK RIVER DIVERSION SITE

SINK CREEK RIVER DIVERSION SITE

1" = 20'

MEMORANDUM

CH2MHILL

High Mountain Ranch Sink Creek Project, Salmon River Test Site; Groundwater/Surface Water Hydraulic Connectivity Issues

TO: Howie Henrikson/CH2M HILL
FROM: Chuck Feast/CH2M HILL
DATE: January 9, 2004

Purpose

The purpose of this memorandum is to establish justification for hydraulic connectivity or communication between the Salmon River and a well site on the river bank. Ultimately, exchanging the water right from an existing river diversion to a recently constructed well while retaining the water right priority date is the goal.

Location

The Sink Creek site is located on the Salmon River at approximately river mile 341. The site is approximately 2-1/2 miles downstream from the East Fork Road turnoff, or approximately 6 miles downstream from Clayton, Idaho. The diversion is positioned west of Idaho State Highway 75 (SH-75) and on the opposite riverbank from the highway. The diversion site is located in the northeast of the southeast of the northwest of Section 14, Township 11 North, Range 18 East, Lot 4, Boise Meridian.

Description

The existing diversion consists of a concrete intake structure with a turbine pump that supplies an irrigation distribution system. A cobble push-up dam in the river is part of the diversion. The diversion draws the water rights discussed below from the river. The existing diversion is currently unscreened, although an unsuccessful attempt has been made by the owner to install a screen on the intake face of the diversion structure. Continual sediment deposition at the diversion site creates the need for periodic in-river work to remove sediment and maintain an existing push-up dam to get the required flow of water to the irrigation pump.

Water Rights Review

Water rights information recorded with the Idaho Department of Water Resources (IDWR) was reviewed relative to allowable diversion rates and points of diversion for this evaluation. Table 1 presents a brief summary of the water rights as they pertain to this evaluation.

TABLE 1

Summary of Water Rights
Sink Creek Diversion Site

Point of Diversion	Water Right No.	Source and Comments
NE, SE, NW, Lot 4, S14, T11N, R18E (River Intake)	72-4089	Total Diversion 0.52 cfs and 78 AFA
NW, SE, NW, Lot 4, S14, T11N, R18E (River Intake)	72-7170	Total Diversion 0.68 cfs and 102 AFA

Notes:

AFA = acre-feet annually
cfs = cubic feet per second

Test Well

A production well was one of the alternatives considered to replace the existing river diversion and remedy the non-compliant diversion and periodic need for in-river work. Therefore, a test well was permitted and constructed. The results of the test well pumping test indicate the well is a viable alternative to replace the river diversion. Considering the total water right of 1.2 cfs (540 gallons per minute [gpm]), the existing test well appears adequate to use as a production well.

The Salmon River site test well was drilled about 110 feet from the high-water mark of the Salmon River and consists of 8-inch-diameter steel casing to 105 feet. At this location, sand and gravel extended from the surface to 65 feet at which point the borehole entered weathered granite bedrock. Weathered granite continued to the total depth drilled of 120 feet. The casing was perforated from 34 to 94 feet and on October 29, 2003, the casing was test pumped at 450 gpm for 6 hours. The static water level in the test well was approximately 1 foot lower than the water surface in the river. Although perforated into the weathered granite, most of the production from the well comes from the coarse sand and gravel. A transmissivity (T) of about 600,000 gallons per day per foot was estimated from the aquifer test. Based on the geologic log, this is an unconfined, alluvial aquifer. The well log is included in Attachment 1.

Discussion on Hydraulic Communication

Analysis of drawdown measurements did not provide any indication that the groundwater was being recharged by the nearby Salmon River during the short aquifer test. However, the groundwater and river are almost certainly hydraulically connected as summarized in the following empirical evidence:

- The lack of recharge response during the test is attributed to the short test duration, the separation between the river and the test well, and the small amount of drawdown generated by the test pumping. Based on the aquifer properties determined from the test, after 6 hours at a distance of 110 feet the estimated drawdown was only about 0.3 foot. The short test duration and small drawdown did not induce enough recharge to be noticeable in the drawdown data.

- There are no confining beds between the coarse sand and gravel aquifer and the river. Although a layer of clayey gravel from 20 to 25 feet was reported by the driller, it was also noted on the log that this formation made water. This implies that the clayey gravel may impede, but not prevent, movement of water through it, especially under long-term pumping.
- The sand and gravel aquifer fills the eroded granite bedrock valley beneath the Salmon River. The river valley is bounded on both sides by exposed bedrock. Local geology and seasonal head relationships may cause the two hydrologic systems to act independently in the short term. However, confining beds in the underlying alluvial sediments are typically discontinuous and are often lenticular and have been truncated by active and historical erosion and depositional fluvial processes. Consequently, over time and distance, within this laterally constrained hydrogeologic framework, the alluvial groundwater system and the Salmon River freely exchange water.

Confirmation of the empirical evidence that the groundwater and surface water systems are hydraulically connected requires additional testing. Two approaches may be used; however, both are expensive and time consuming. The first approach involves conducting a long-term, high-capacity aquifer test. To adequately stress the system to induce significant recharge will probably require a test of at least 1,000 gpm and a pumping period of at least 3 days. Water chemistry and temperature data should be collected periodically during the test. It may be possible to use the existing test well for the production well, but at least one and possibly several new observation wells would be required between the production well and the river. Observation wells should shorten the pumping period required to confirm recharge.

The second test method involves long-term monitoring of groundwater levels and river stages and periodic monitoring of both systems for temperature, specific conductivity, and other indication of communication, including basic water chemistry and micro-biota. The testing period should extend long enough to cover seasonal hydrologic regimes.

Conclusion

Neither test approach is particularly practical at this location. The site geology and general geologic setting provide compelling evidence of hydraulic communication between the two hydrologic systems; consequently, additional testing does not appear warranted.