

13. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number.

32

R 7N T 2E

X ← WELL LOCATION

q.L. 5 (same)

ALSO SEE ATTACHED

- Letter of explanation
- topo
- govt lot plat
- well diagram
- 2 oversized diagrams
- list of officers for company

- SL 4/22/96

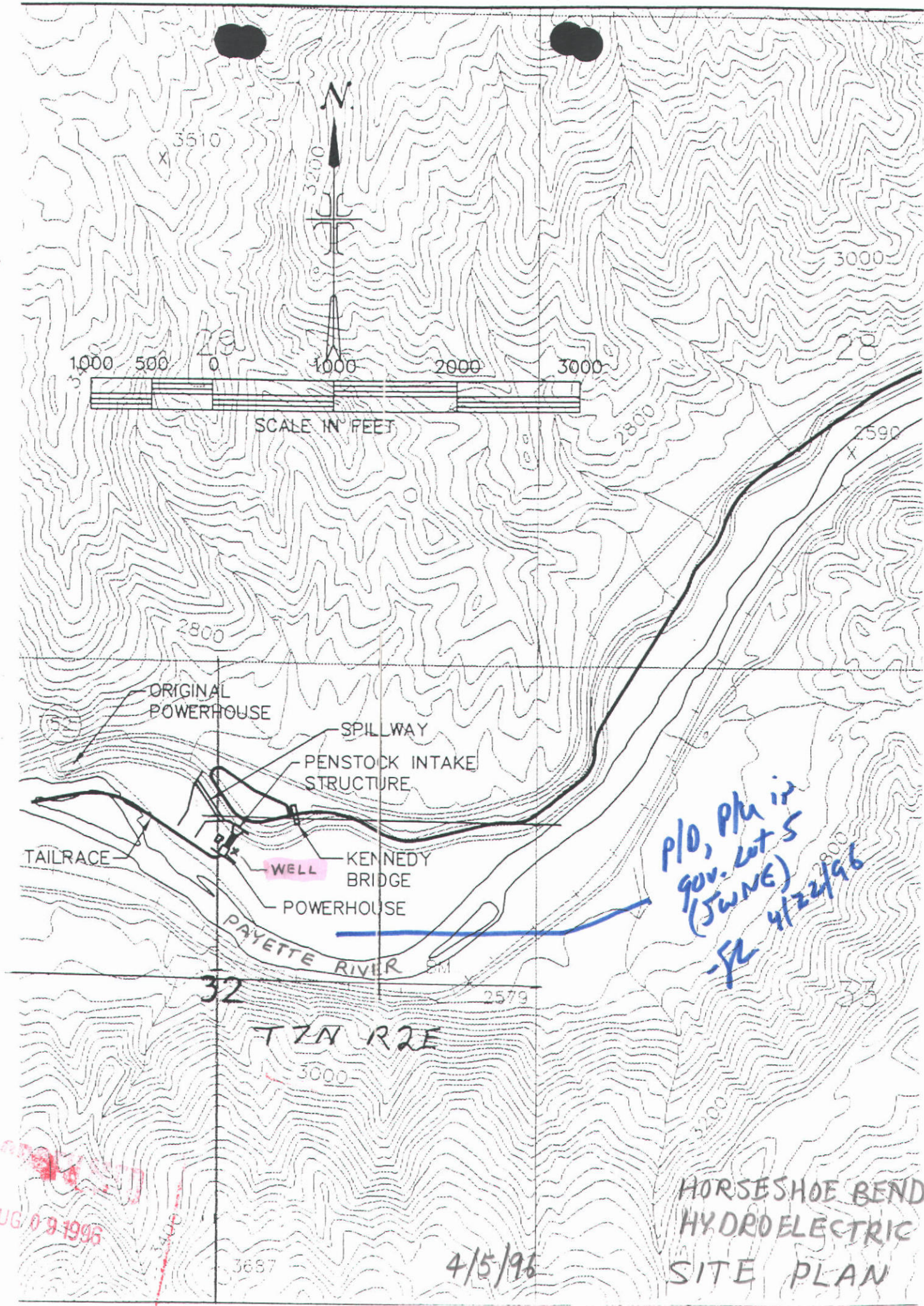
BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth:

Christopher W. Clark
(Applicant)

BY: Christopher W. Clark

Title *Secretary*

AUG 09 1996



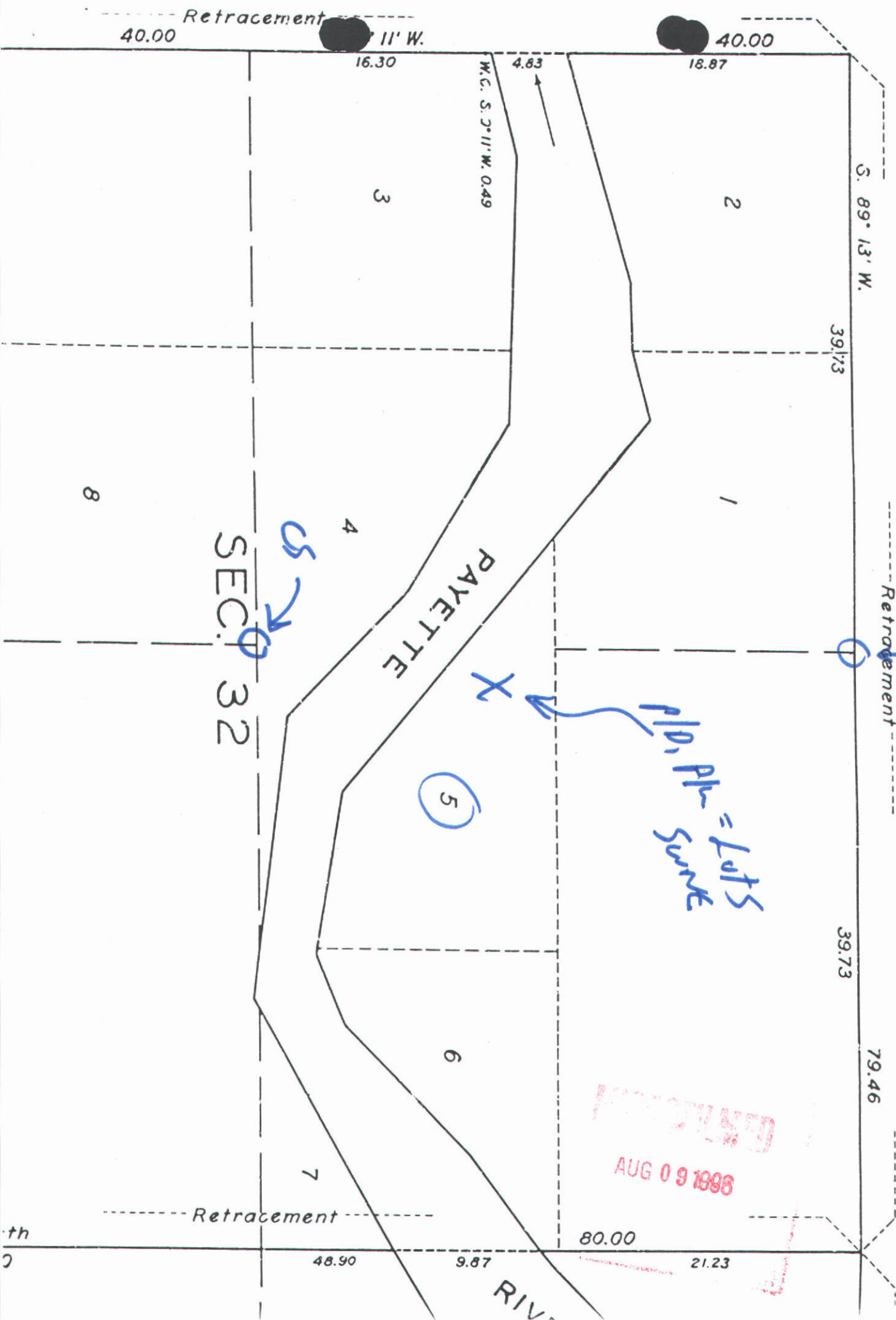
P/O, P/M in
gov. lot 5
(SWNE)
-SL 4/22/96

T7A R2E

HORSESHOE BEND
HYDROELECTRIC
SITE PLAN

4/5/96

AUG 09 1996



N^{1/4} cor

SCALE IN CHAINS
1924 Survey

RECORDED
AUG 09 1996

SEC. 32

PAYETTE

5

6

7

8

2

1

3

4

X

P.D. Pl = Lots
Sunk

Retracement

40.00

11' W.

40.00

S. 89° 13' W.

39.73

Retracement

39.73

79.46

80.00

21.23

48.90

9.87

Retracement

th

0

RIVER

HORSESHOE BEND HYDROELECTRIC

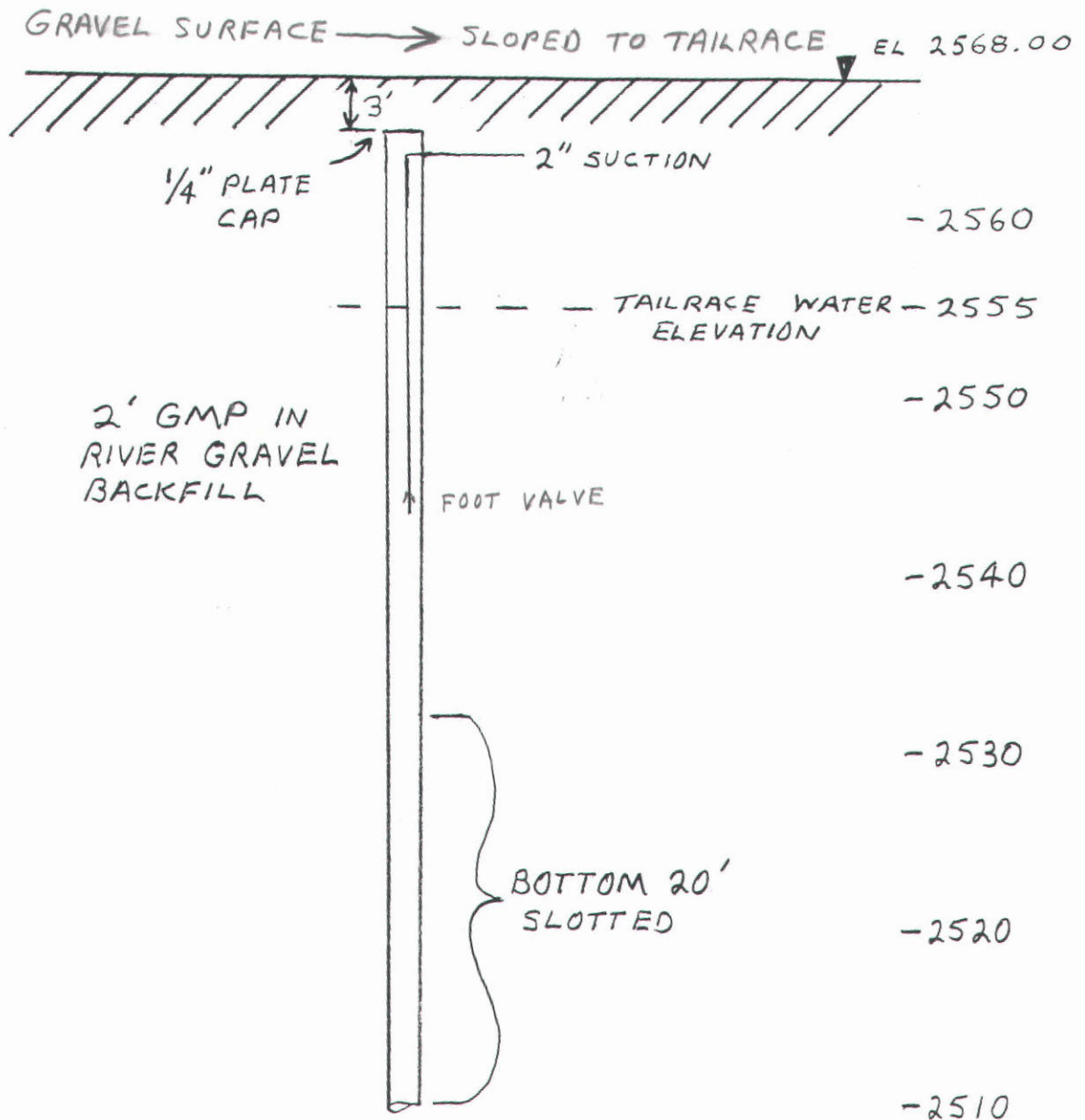
DEWATERING WELL

PROFILE

3/29/96 MB

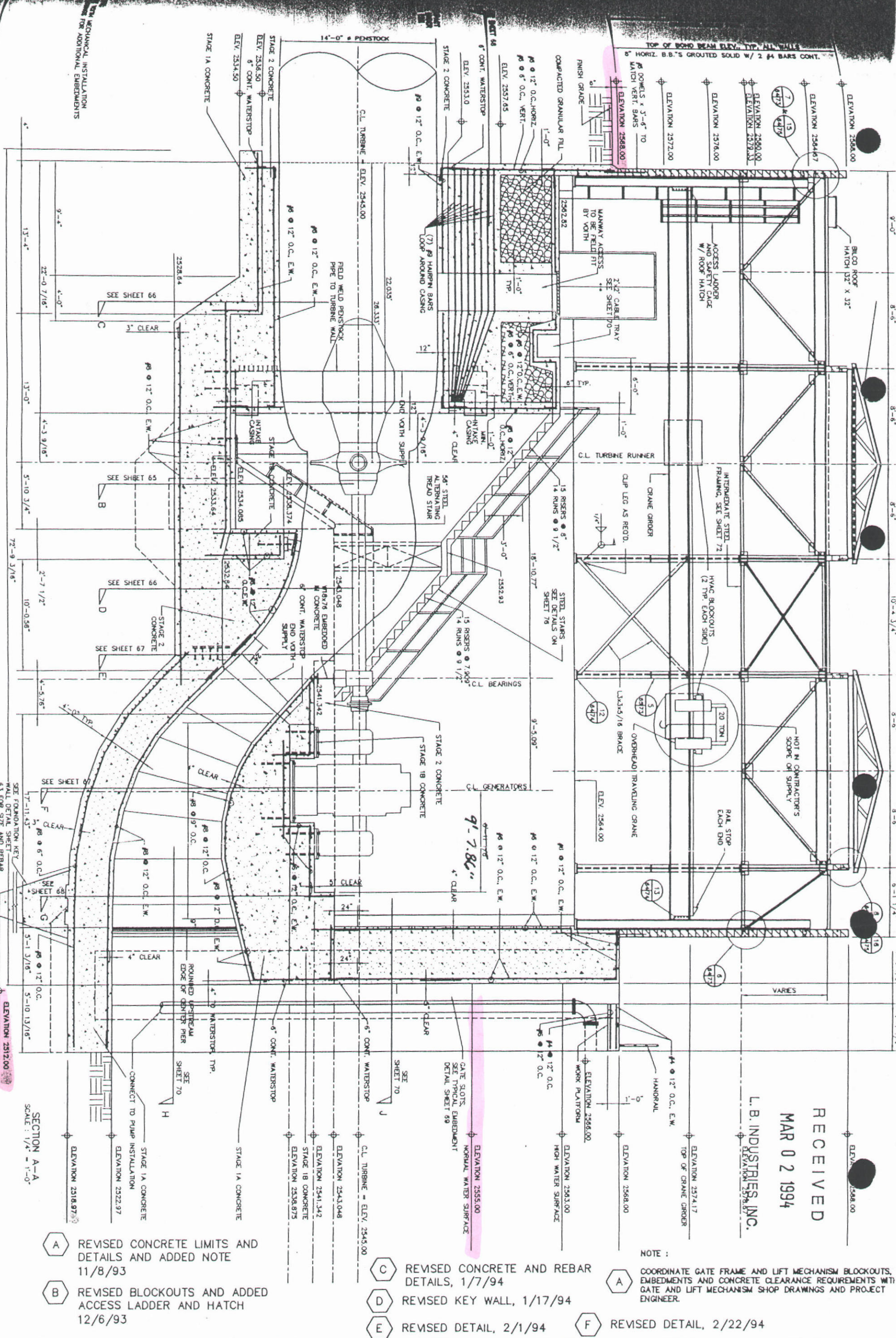
SCALE: 1" = 10'

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

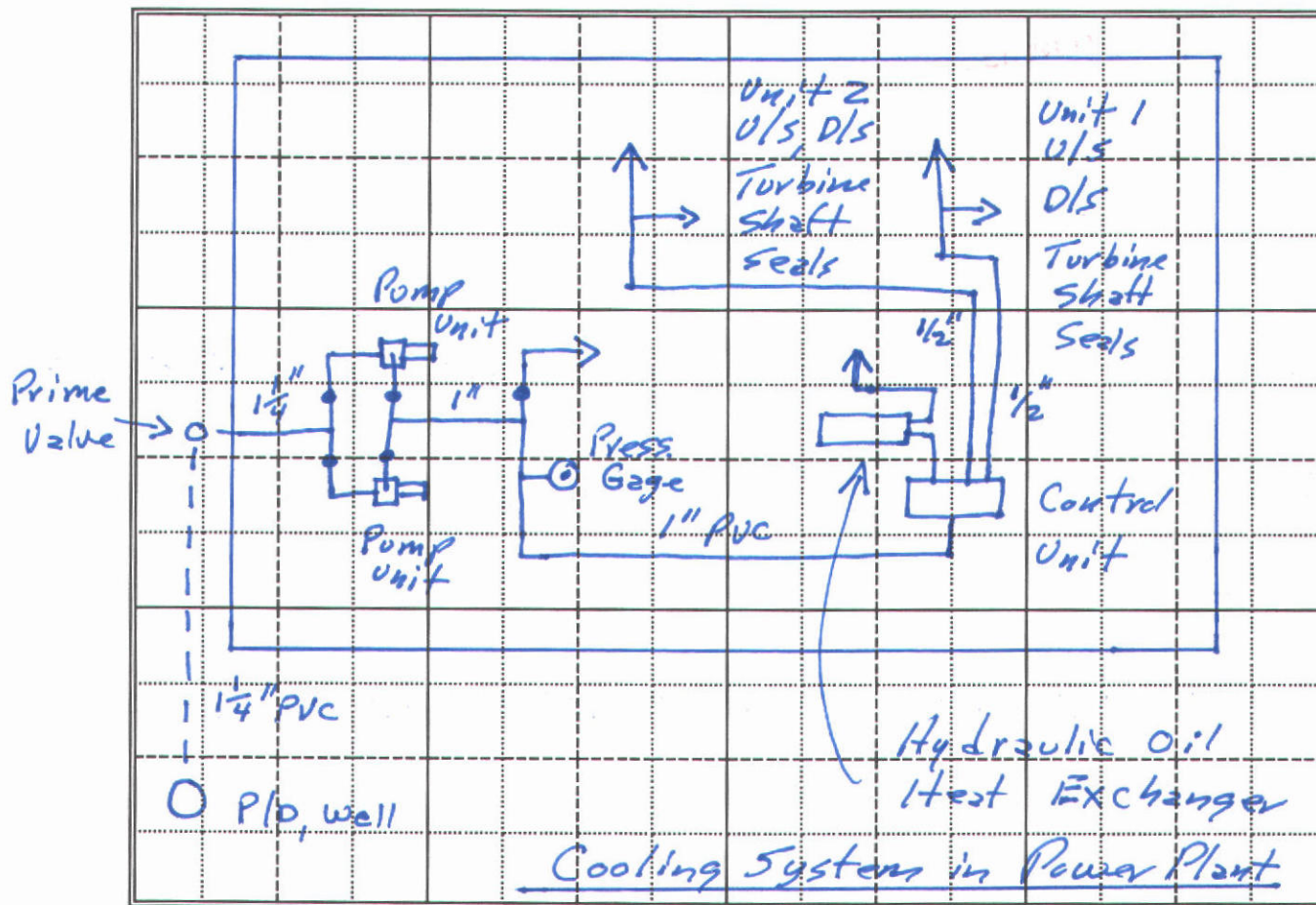


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AUG 09 1998



3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe i.d. as applicable.



Scale: 1" = None

☒ 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. 2 identical Pump Units in Power Plant:

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
<u>Pump 1</u>	<u>A.O. Smith</u>	<u>1/2</u>	<u>8E95</u>	<u>Gould</u>	<u>G9512735</u>
<u>Pump 2</u>	<u>A.O. Smith</u>	<u>1/2</u>	<u>8F96</u>	<u>Gould</u>	<u>F9657110</u>

*Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

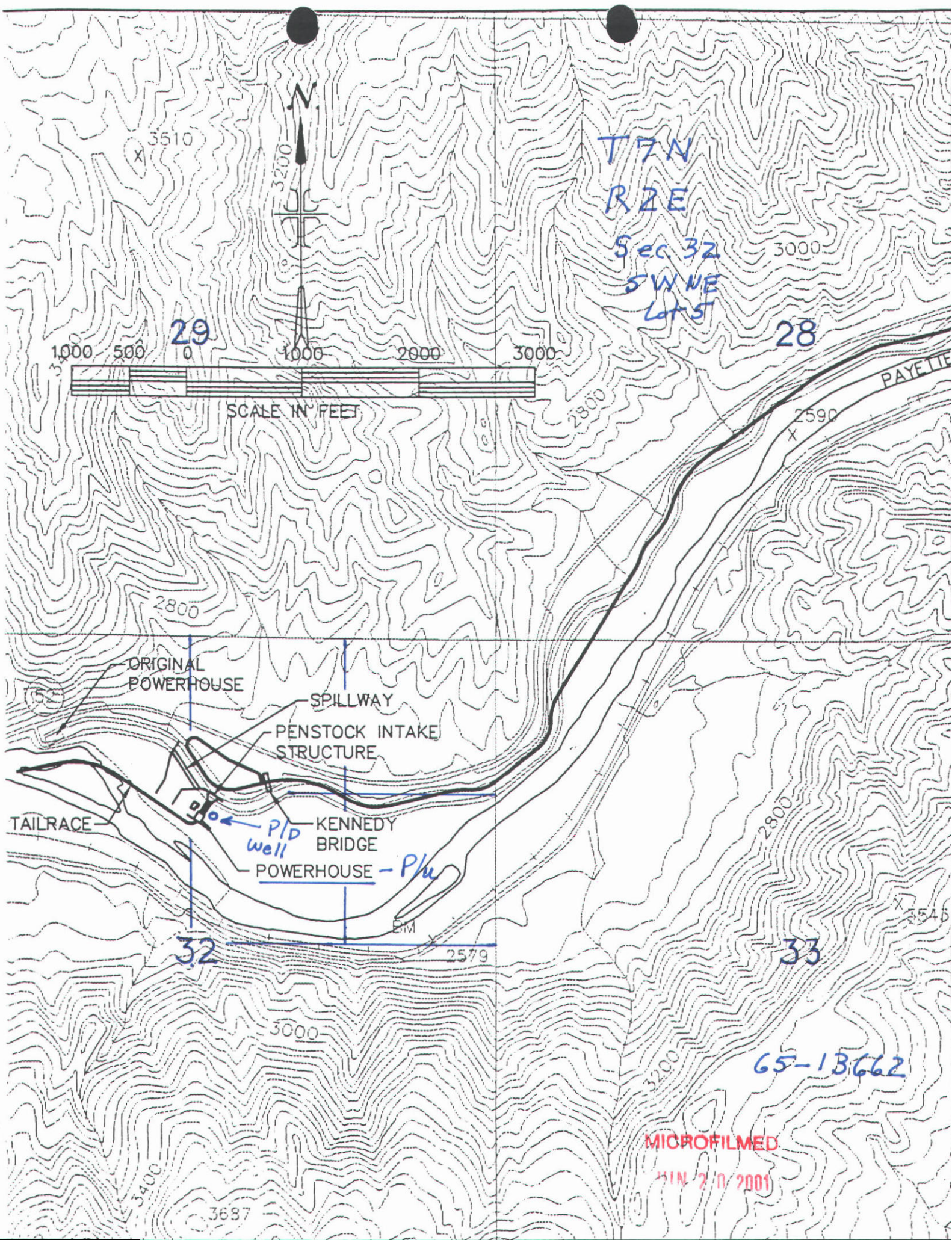
1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date

2. Measurements: None - operating pressure: 20-35 PSI
26 PSI on pressure gage

MICROFILMED

JUN 20 2001



T7N
R2E
Sec 32
SW NE
Lot 5

28

29

33

32

65-13662

MICROFILMED
JUN 27 2001

ORIGINAL POWERHOUSE
SPILLWAY
PENSTOCK INTAKE STRUCTURE
TAILRACE
P/D Well
KENNEDY BRIDGE
POWERHOUSE - P/u

65-13662

Horseshoe Bend
Power Plant
2 Power
Units
FERC Project 5376-001



- (A) REVISED ELEVATIONS AND RETAINING WALLS 11/8/93
- (B) REVISED TAILRACE AND DIMENSIONS 1/17/94

[illegible]

1 of 3



P/O
Well
under
Manhole
Cover
by
Power
House

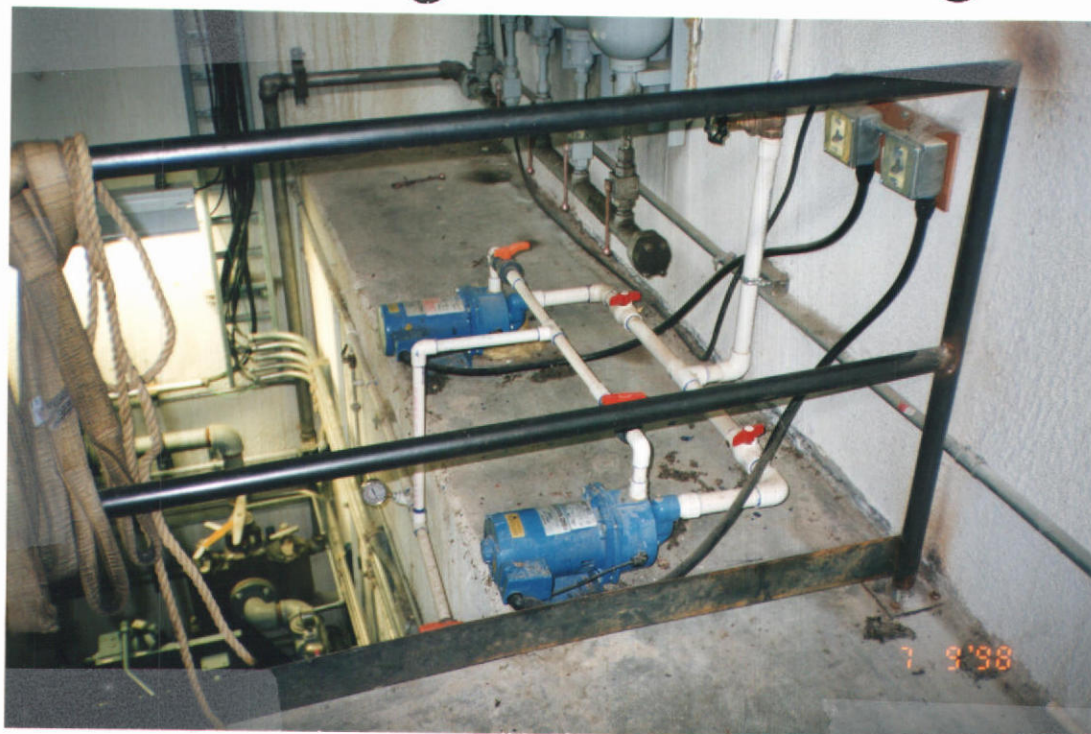


P/O
Well

MICROFILMED
JUN 20 2001

65-13662

2 of 3



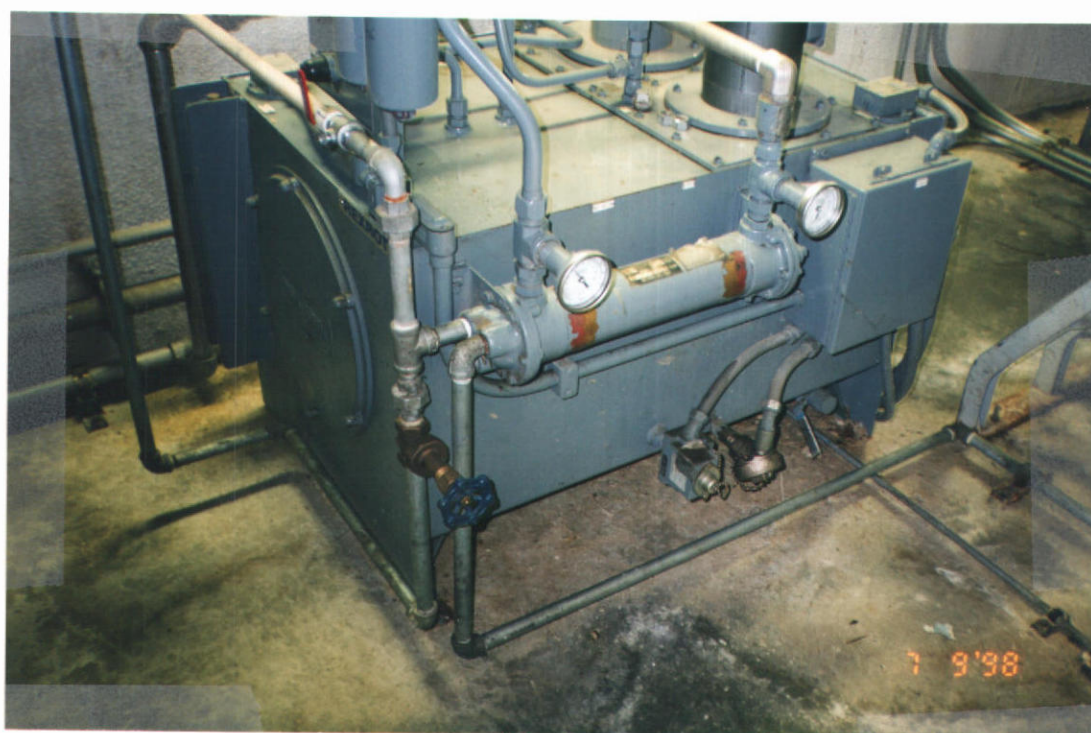
P/D

Pump
Units

in

Power

Plant



P/u

Hydraulic
oil

Heat

Exchanger

MICROFILMED

JUN 20 2001

65-13662



P/u

Cooling Water Lines to downstream
turbine shaft seal, Unit 2.

Typical of shaft seal system.

MICROFILMED
JUN 20 2001

65-13662

8. POSSIBLE CONTAMINATION SOURCES:

Is there evidence of Chemigation? ☐ Yes ☒ No

If yes, is there a check-valve present? ☐ Yes ☐ No

Is there a possible source of contamination nearby? ☐ Yes ☒ No

If yes, what Type? _____

How far away from the well is this source? _____

9. REMARKS:

This was a de-watering well
used during construction of the power plant.
It was converted for use as a source
of cooling water for the turbine shaft
seals and hydraulic oil.

Van Tomich, Water Rights Examiner
Signature of Dept. Representative & Title

7-9-98
Inspection Date

PHOTOS, DRAWINGS, OTHER ATTACHMENTS:

Power Plant



MICROFILMED
JUN 20 2001

HORSHOE BEND HYDROELECTRIC

DEWATERING WELL "UPGRADE"

5/17/96

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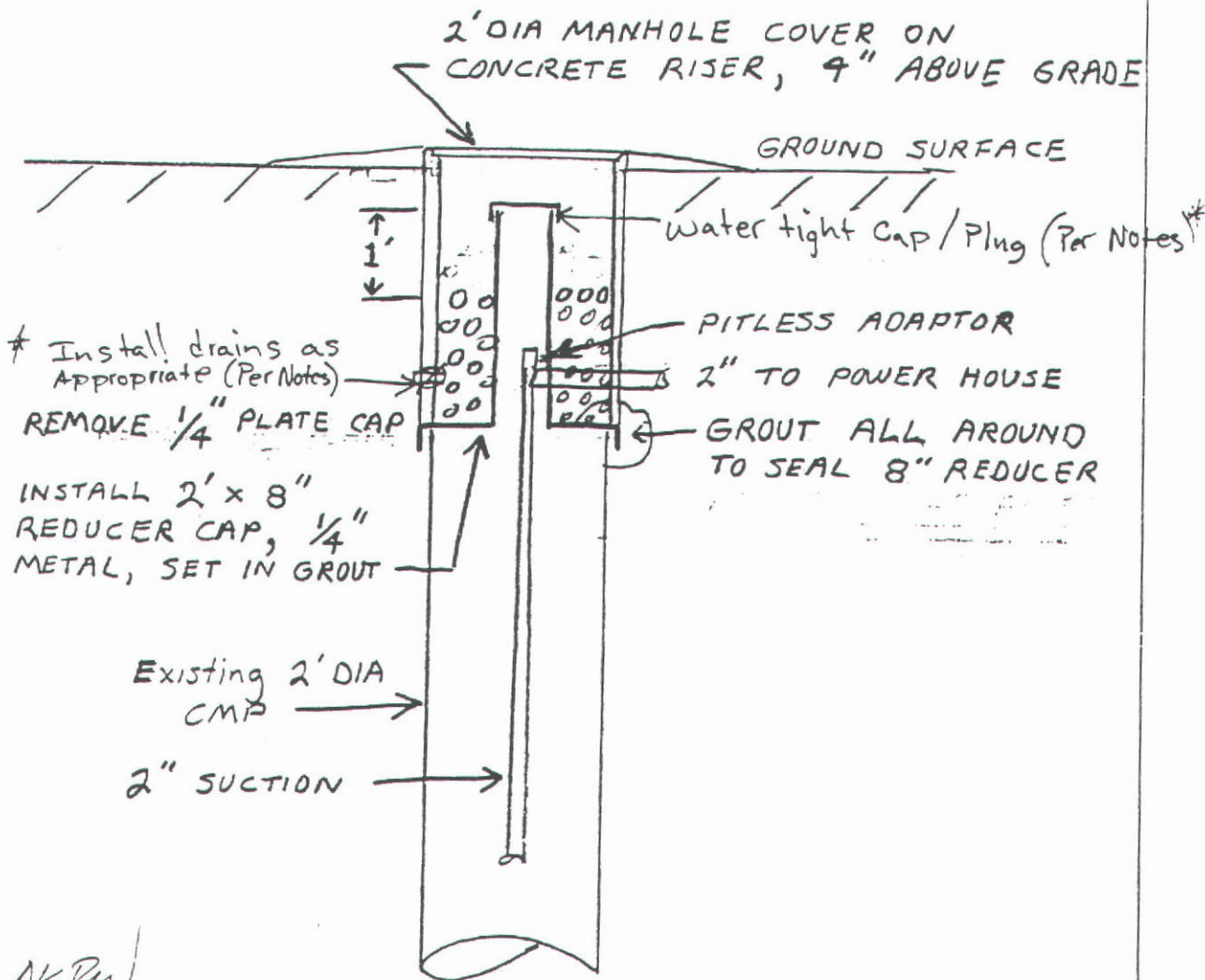
MAY 15 1996

WATER RESOURCES
WESTERN REGION

SCALE: 1" = 2'

Rec'd. again
5/21/96

50 SHEETS
100 SHEETS
200 SHEETS



NOTES: 1) 8" CAP TO BE WATER TIGHT AND 1' ABOVE GRAVEL

2) CONCRETE RISER TO BE GRAVEL FILLED AND BE PROVIDED WITH DRAIN OPENINGS

JUN 20 2001

HORSESHOE BEND HYDROELECTRIC

DEWATERING WELL UPGRADE

5/14/96

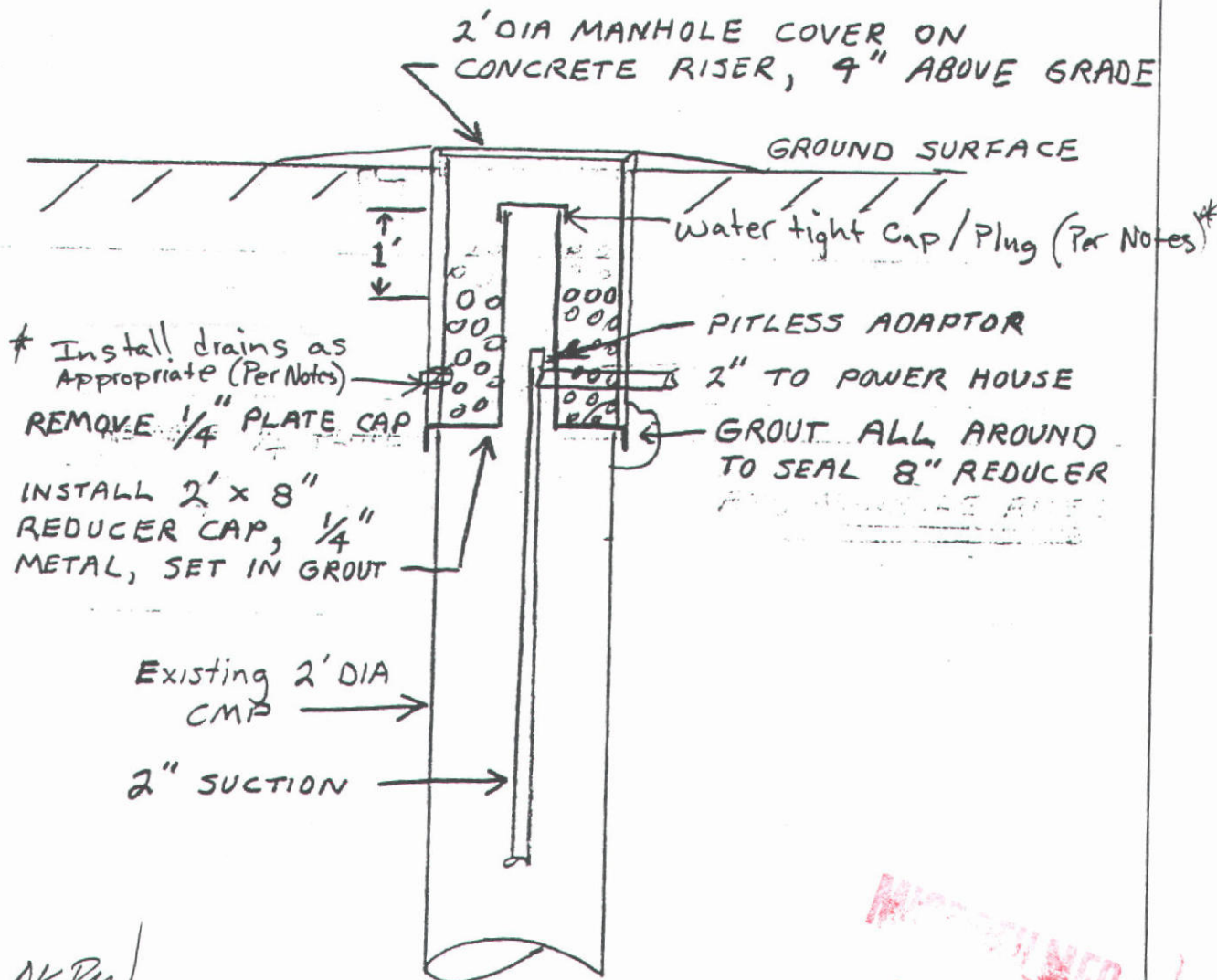
SCALE: 1" = 2'

RECEIVED

MAY 15 1996

WATER RESOURCES
WESTERN REGION

22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS



- NOTES: 1) 8" CAP TO BE WATER TIGHT AND 1' ABOVE GRAVEL
- 2) CONCRETE RISER TO BE GRAVEL FILLED AND BE PROVIDED WITH DRAIN OPENINGS

APPROVED
AUG 09 1996

State of Idaho
Department of Water Resources
Water Right License

WATER RIGHT NO. 65-13662

Priority: April 12, 1996

Maximum Diversion Rate: 0.05 CFS
Maximum Diversion Volume: 36.2 AF

It is hereby certified that HORSESHOE BEND HYDROELECTRIC CO
PO BOX 8303
BOISE ID 83707 has complied with the terms and
conditions of the permit, issued pursuant to Application for Permit dated April 12, 1996, and has
submitted Proof of Beneficial Use on May 27, 1997. An examination indicates that the works have a
diversion capacity of 0.1 cfs of water from:

SOURCE

GROUND WATER

and a water right has been established as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>DIVERSION RATE</u>	<u>ANNUAL DIVERSION VOLUME</u>
COOLING	01/01 to 12/31	0.05 CFS	36.2 AF

LOCATION OF POINT(S) OF DIVERSION:

GROUND WATER L5 NE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ Sec 32, Twp 07N, Rge 02E, B M., BOISE County

PLACE OF USE: COOLING

Twp Rge Sec	NE				NW				SW				SE				Totals
	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
07N 02E 32			X														
			L5														

CONDITIONS OF APPROVAL

1. Cooling use is for a hydropower plant turbine.

This license is issued pursuant to the provisions of Section 42-219, Idaho Code. The water right confirmed by this license is subject to all prior water rights and shall be used in accordance with Idaho law and applicable rules of the Department of Water Resources.

Signed and sealed this 22ND day of MAY, 2001

Acting for

KARL J. DREHER
Director

JUN 20 2001

STATE OF IDAHO
IDAHO DEPARTMENT OF WATER RESOURCES

RECEIVED

JAN 12 2001

Department of Water Resources

CHANGE IN ADDRESS OF NOTICE OF CLAIM

[] Water Right Number(s): 65-12563
65-13682
A65-026637 B

[] Claimant Name(s): Horseshoe Bend Hydroelectric Co.

[] Old Mailing Address: P. O. Box 2797
Boise, Idaho 83701

[] New Mailing Address: P. O. Box 8303
Boise, Idaho 83707

Telephone Number: (208) 422 - 9270

[] Signature of Claimant(s): Delward R. Phemister

Date: 1/9/01

MICROFILMED

BEFORE THE DEPARTMENT OF WATER RESOURCES
OF THE STATE OF IDAHO

IN THE MATTER OF PERMIT NO.)
65-13662 IN THE NAME OF HORSESHOE)
BEND HYDROELECTRIC CO.)
_____)

ORDER OF
REINSTATEMENT

WHEREAS, the Department issued the above-captioned permit with the condition that proof of construction of works and application of water to beneficial use (proof of beneficial use) be submitted on or before June 1, 1997; and,

WHEREAS, the Department notified the permit holder on March 31, 1997, by certified mail that proof was due and instructed the permit holder of the steps to be taken to submit the proof of beneficial use; and,

WHEREAS, on May 27, 1997, the permit holder submitted proof of beneficial use to the State Office in connection with Permit No. 65-12563 (the permit); and,

WHEREAS, the permit holder thought the proof was being submitted in connection with Permit No. 65-13662; and

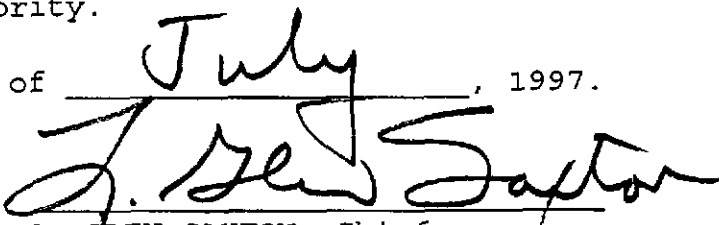
WHEREAS, on June 18, 1997, the department issued a lapse notice in connection with the permit, and,

WHEREAS, Section 42-218a, Idaho Code, provides that a permit may be reinstated upon a showing of reasonable cause within sixty days of the date of the notice of lapsing; and,

WHEREAS, the permit holder has provided a reasonable showing why the permit should be reinstated by submitting an acceptable proof of beneficial use on May 27, 1997;

IT IS, THEREFORE, HEREBY ORDERED that Permit No. 65-13662 be REINSTATED with no advance in priority.

Dated this 29th day of July, 1997.


L. GLEN SAXTON, Chief
Water Allocation Bureau

396 7 0 1357

RECEIVED

JUN 23 1997

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Department of Water Resources

PROOF OF BENEFICIAL USE

The Idaho Department of Water Resources considers this form a statement that the permit holder(s) has/have completed all development that will occur under this permit and that water has been applied according to the provisions of the permit for the beneficial use(s) described below. This form must be accompanied by a license examination fee, when necessary, or be accompanied by a completed field examination report prepared by a certified water right examiner who has been appointed by the department.

1. Permit No. 65-13662 Telephone No. 208-345-7515

2. Name(s) of Permit Holder(s): Horseshoe Bend Hydroelectric Co.

3. Mailing Address: P.O. Box 2797 Boise, ID 83701

4. Source of Water: Groundwater If **GROUNDWATER** (well), Date Drilled: mo. N/A / yr.

a. Well Driller: N/A Drilling Permit Number: - - - - -

b. **OPTIONAL:**
Pump Horsepower: Pressure (psi): Dynamic pumping level (ft):

5. Use(s) (as authorized by the water right permit):

Domestic (No. of households): Stockwater (No. and type of stock):

Irrigation (No. of acres): Other: Cooling water for hydro plant

6. Total rate of diversion and/or volume for which proof is submitted: .05 cfs OR acre feet

7. Measuring Device Requirement: (refer to the approval conditions on your permit and respond accordingly)

(This question is not optional. Please check either yes or no. Proofs returned not checked accordingly, will be considered incomplete)

Measuring Device: Is a measuring device required? Yes or No x

Has the measuring device been installed? Yes or No

Flow Measurement Port: Is a flow measurement port required? Yes or No x

Has the measurement port been installed? Yes or No

8. Fee Enclosed: \$ 50* (See Fee Schedule on back of the instructions for filing proof of beneficial use)

9. Person to contact to accompany the Department representative during field examination of the water system.

Name: Lee Cayford, Plant Manager Telephone Number: 208-793-2833

Address: P.O. Box 2797 Boise, ID 83701

10. The information given on this form is my true statement of the extent to which the above numbered permit has been developed and I relinquish any undeveloped portion of the permit to the State of Idaho.

Signature of permit holder: Kathy Buchanan Pfister, Director of Operations Date: 6/20/97
(include your title, if on behalf of company of organization)

FB 49712

State of Idaho
Department of Water Resources
Permit To Appropriate Water
NO. 65-13662

Proposed Priority: April 12, 1996 Maximum Diversion Rate: 0.05 CFS

This is to certify, that HORSESHOE BEND HYDROELECTRIC CO
PO BOX 2797
BOISE ID 83701-2797
has applied for a permit to appropriate water from: GROUNDWATER
and a permit is APPROVED for development of water as follows:

<u>BENEFICIAL USE</u>	<u>PERIOD OF USE</u>	<u>RATE OF DIVERSION</u>
COOLING	01/01 to 12/31	0.05 CFS

LOCATION OF POINT(S) OF DIVERSION: Lot 5(SWNE), Sec. 32, Township 07N, Range 02E
BOISE County

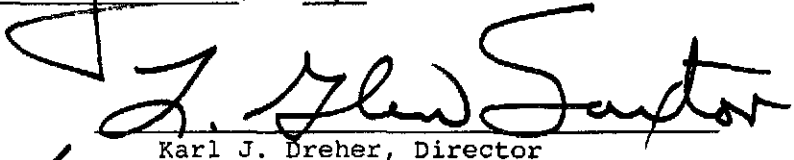
PLACE OF USE: COOLING
TWN RGE SEC
07N 02E 32 Lot 5(SWNE)

CONDITIONS OF APPROVAL AND REMARKS

1. Proof of construction of works and application of water to beneficial use shall be submitted on or before June 1, 1997.
2. Subject to all prior water rights.
3. Cooling use is for a hydropower plant turbine.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code.
Witness the signature of the Director, affixed at Boise, this

28th day of May, 1996


for Karl J. Dreher, Director

AUG 09 1996

RECEIVED
MAY 23 1996

Ident. No. 65-13662

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

Department of Water Resources

APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name: HORSESHOE BEND HYDROELECTRIC CO 208-345-7515
Address: PO BOX 2797
BOISE ID 83701
 2. Source: GROUNDWATER Trib. to:
 3. Location of Point of Diversion: Lot 5 (SWNE), Sec. 32, Township 07N, Range 02E
BOISE County
 4. Water will be used for the following purposes:

Purpose	From	To	CFS	(or)	AF
COOLING	01/01	12/31	0.050		
 5. Total quantity to be appropriated is:
0.050 CFS (and/or) AF
 6. Proposed diverting works:
 - a. Description of ditches, flumes, pumps, headgates, etc.
EXISTING WELL, PUMP & PIPELINE TO EXISTING POWER PLANT.
 - b. Height of storage dam feet; active reservoir capacity
acre-feet; total reservoir capacity acre-feet; period of
year when water will be diverted to storage: to inclusive.
 - c. Proposed well diameter is 24 inches; proposed depth of well is 50
feet.
 - d. Is groundwater with a temperature greater than 85F being sought? NO
 - e. If well is already drilled, when?
Drilling Firm
Well was drilled for
 7. Time required for the completion of the works and application of
the water to the proposed beneficial use is 1 year(s).
 8. Place of Use: COOLING
- TWN RGE SEC
07N 02E 32 Lot 5 (SWNE)

Comments: Date: 4/24/1996 User-ID: STAYLOR

Subject: Description

This is a once-through cooling water system taking water from the gravel next to the powerhouse between the hydroelectric power canal forebay and the tailrace. The water used is diverted from the power canal/tailrace and returned to the tailrace before that water flows into the Payette River. Although the water source is technically deemed to be ground water, practically speaking, the water source is the water table created by the hydroelectric power canal. Cooling water will run 24 hours per day. See attached drawings depicting the "well" and its relationship to the power house. Also see attached list of Horseshoe Bend Hydroelectric Company officers and directors. This "well" was not formed by drilling. This well was created by placing a culvert vertically along side the power house foundation at the time ground was excavated for the construction of the power house. This well was originally used, during construction, to de water the ground near the power house foundation. Shallow well tributary to Payette River. Cooling is for portions of power plant. Existing system, requests waiver to well construction standards for "culvert casing."

AUG 09 1996

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

Ident No 65-13662

RECEIVED

APR 12 1996

WATER RESOURCES
WESTERN REGION

To appropriate the public waters of the State of Idaho

1. Name of applicant Horseshoe Bend Hydroelectric Company Phone (208) 345-7515
Post office address P.O. Box 2797, Boise, ID 83701

2. Source of water supply Groundwater which is a tributary of _____

3 Location of point of diversion is _____ 1/4 of SW 1/4 of NE 1/4, Govt. Lot 5
Sec. 32 Township 7N Range 2E B.M. Boise County; additional
points of diversion if any: _____

4 Water will be used for the following purposes

Amount .05 ^{cfs} for cooling water purposes from Jan 1 to Dec 31 (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

Amount _____ for _____ purposes from _____ to _____ (both dates inclusive)
(cfs or acre-feet per annum)

5 Total quantity to be appropriated is (a) .05 and/or (b) _____
cubic feet per second acre feet per annum

6. Proposed diverting works:

a. Description of ditches, flumes, pumps, headgates, etc. existing well, pump & pipeline
to existing power plant *

b. Height of storage dam _____ feet; active reservoir capacity _____ acre-feet; total
reservoir capacity _____ acre-feet; period of year when water will be diverted to storage:
_____ to _____ inclusive

c. ^{Existing} Proposed well diameter is 24 inches, ^{existing} proposed depth of well is 50 feet.

d. Is ground water with a temperature of greater than 85°F being sought? No

e. If well is already ^{installed*} drilled, when? 1993; ^{Installing*} Drilling firm Simplot Construction;

Well was ^{constructed*} drilled for (well owner) Horseshoe Bend Hydroelectric Company

7. Time required for the completion of the works and application of the water to be proposed beneficial use is
1 years (minimum 1 year) APR 9 1996 * per Appl. Attachment (4/8/96 LG/HG)

-JL 4/22/96

8. Description of proposed uses (if irrigation only, go to item 9):

- Hydropower; show total feet of head and proposed capacity in KW _____
- Stockwatering, list number and kind of livestock _____
- Municipal; show name of municipality. _____
- Domestic, show number of households. _____
- Other; describe fully Cooling water for existing 10MW hydroelectric plant. Water is used to keep shaft seals wet, and passes through heat exchangers to cool hydraulic oil systems.

9. Description of place of use

- If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- If water is used for other purposes, place a symbol of the use (example, *D* for Domestic) in the corresponding place of use below. See instructions for standard symbols.

TWP	RANGE	SEC	NE¼				NW¼				SW¼				SE¼				TOTALS
			NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	NE¼	NW¼	SW¼	SE¼	
7N	2E	32			I														
					Lot 5														

Total number of acres to be irrigated NA

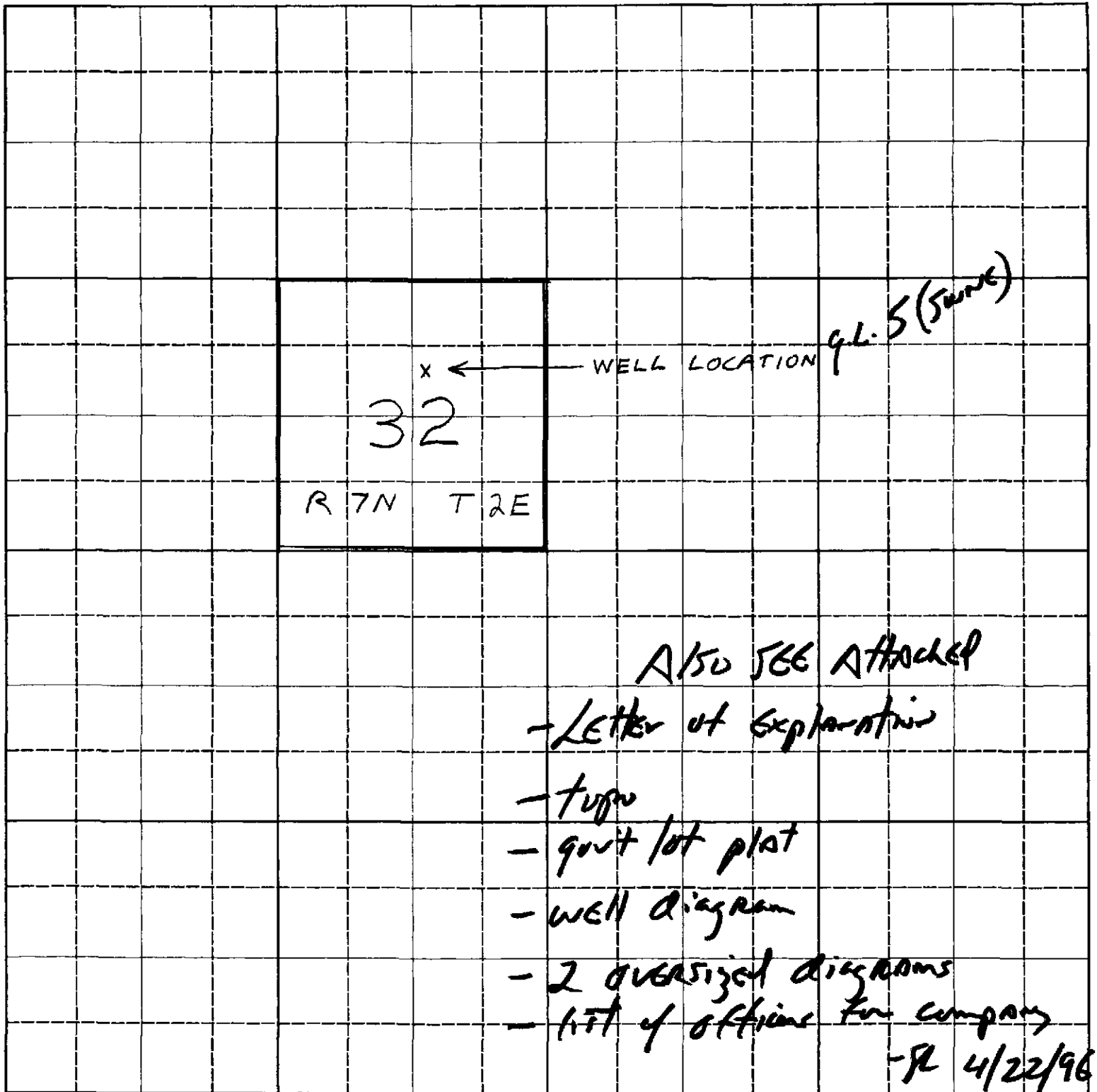
- Describe any other water rights used for the same purposes as described above. Permit #65-12563. 3500 cfs out of Payette River for 10MW hydroelectric plant.
- Who owns the property at the point of diversion? Horseshoe Bend Hydroelectric Company
 - Who owns the land to be irrigated or place of use? Horseshoe Bend Hydroelectric Company
 - If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing. _____

AUG 10 1974

- Remarks This is a once-through cooling water system taking water from the gravel next to the powerhouse between the hydroelectric power canal forebay and the tailrace. The water used is diverted from the power canal/tailrace and returned to the tailrace before that water flows into the Payette River. Although the water source is technically deemed to be ground water, practically speaking, the water source is the water table created by the hydroelectric power canal. Cooling water will run 24 hours per day. See attached drawings depicting the "well" and its relationship to the power house. Also see attached list of Horseshoe Bend Hydroelectric Company officers and directors.

This "well" was not formed by drilling. This well was created by placing a culvert vertically along side the power house foundation at the time ground was excavated for the construction of the power house. This well was originally used, during construction, to dewater the ground near the power house foundation.

13. Map of proposed project: show clearly the proposed point of diversion, place of use, section number, township and range number



Scale 2 inches equal 1 mile

BE IT KNOWN that the undersigned hereby makes application for permit to appropriate the public waters of the State of Idaho as herein set forth

Horseshoe Bend Hydroelectric Company

Christopher W. Clark

(Applicant)

By: Christopher W. Clark

Title Secretary

AUG 2 1996

Received by VR Date 4-12-96 Time 11:30 am Preliminary check by JL
* Fee \$ 100 - 50 Received by VR # W020711 Date 4-12-96
Publication prepared by JT Date 4-24-96 Published in Id World
Publication approved JT Date 5-21-96

ACTION OF THE DIRECTOR, DEPARTMENT OF WATER RESOURCES

This is to certify that I have examined Application for Permit to appropriate the public waters of the State of Idaho No. _____, and said application is hereby _____.

1. Approval of said application is subject to the following limitations and conditions

a. SUBJECT TO ALL PRIOR WATER RIGHTS

b. Proof of construction of works and application of water to beneficial use shall be submitted on or before _____, 19____.

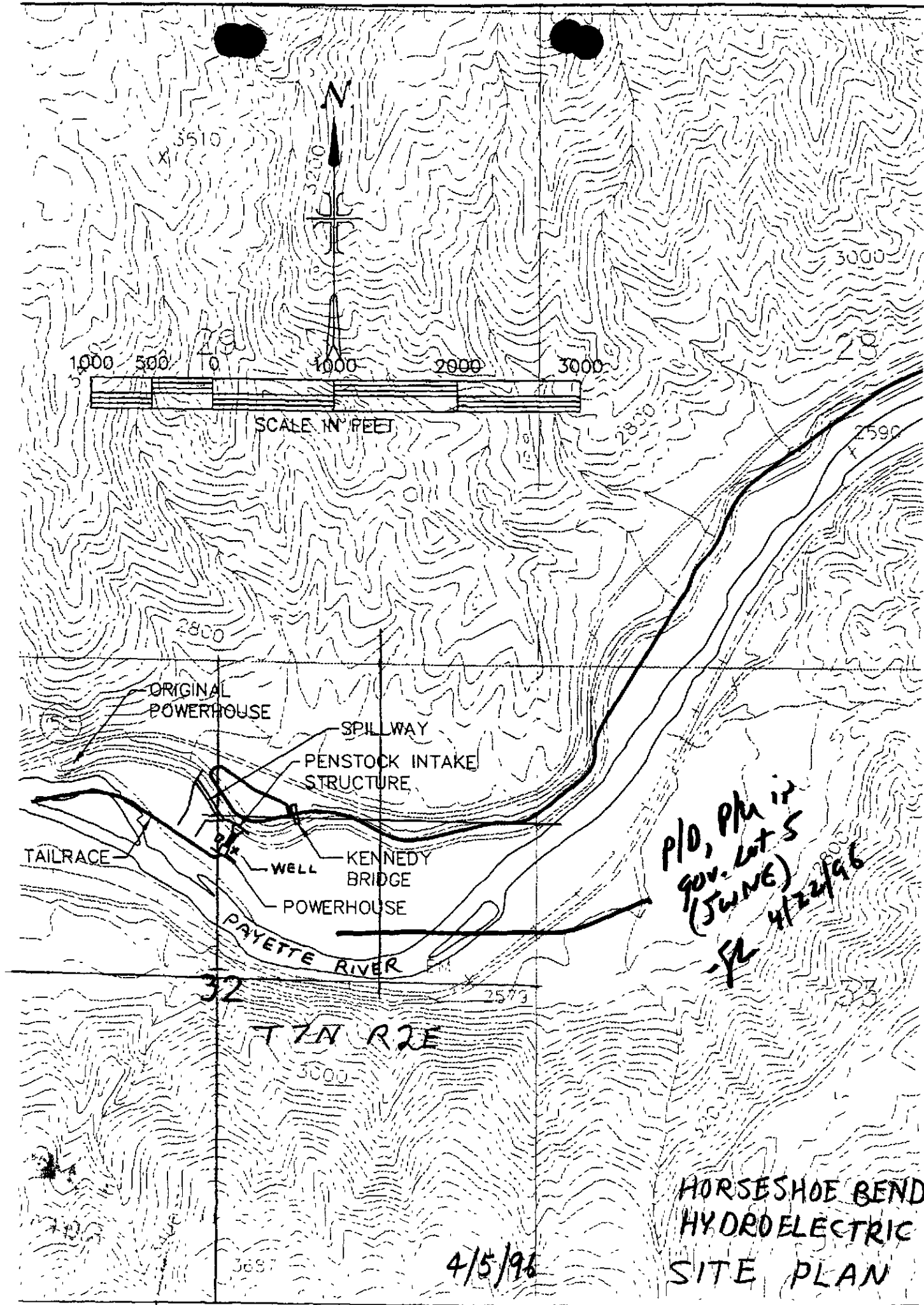
c. The rate of diversion, if water is to be used for irrigation under this permit, when combined with all other water rights for the same land shall not exceed 0.02 cubic feet per second for each acre of land

d. The water right acquired under this permit if for hydropower purposes shall be junior and subordinate to all rights to the use of water, other than hydropower, within the State of Idaho that are initiated later in time than the priority of this permit and shall not give rise to any right or claim against any future rights to the use of water, other than hydropower, within the State of Idaho initiated later in time than the priority of this permit.

e. Other

* fee .05 cfs = \$50, need \$50 refund. See 4/22/96 memo.
JL

AUG 09 1996

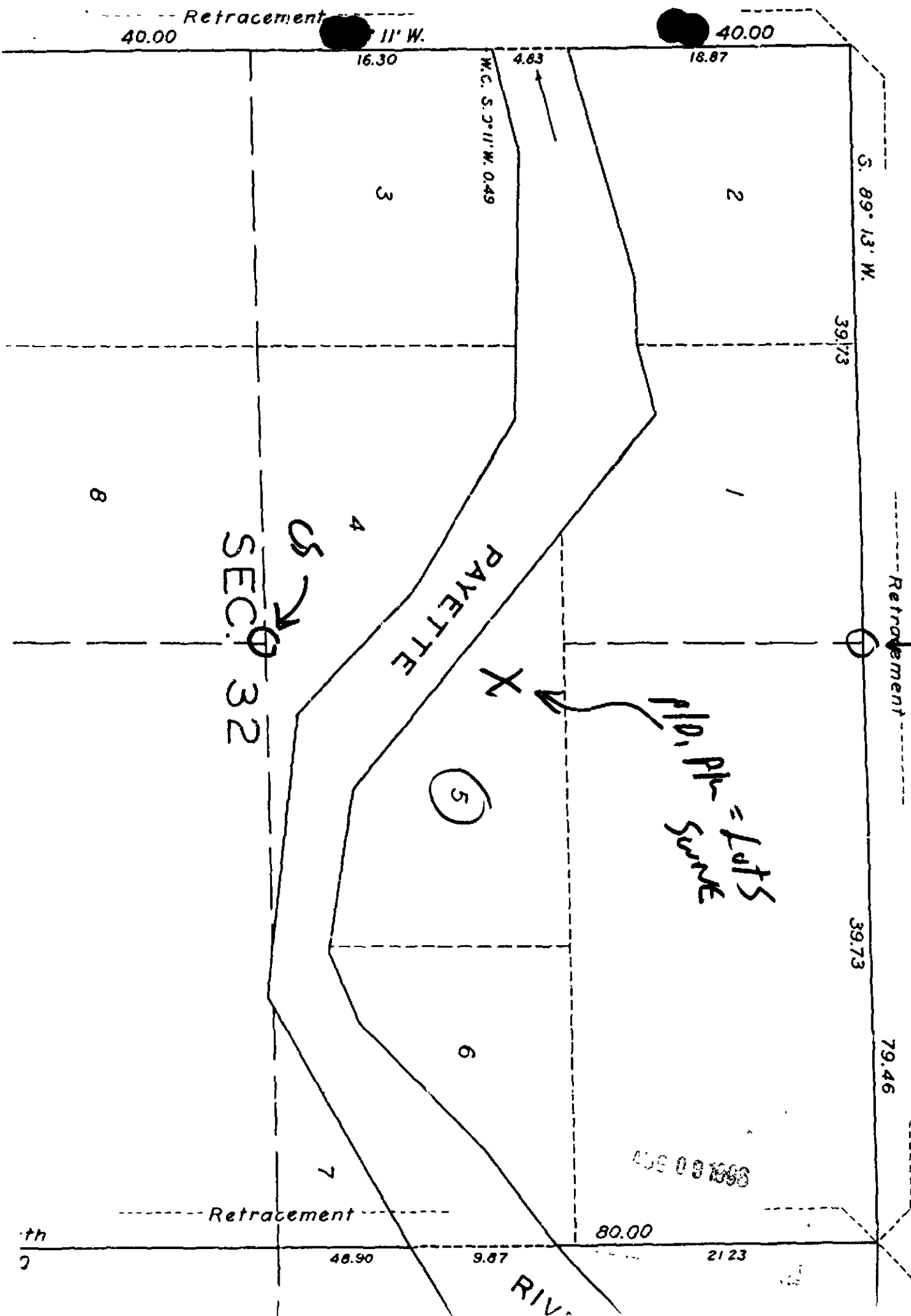


P/O, PM in
gov. lot 5
(SWNE)
4/22/96
-SL

T7N R2E

HORSESHOE BEND
HYDROELECTRIC
SITE PLAN

4/5/96



Nth COKE

SECTION 32
1924 Survey

JUN 09 1968

HORSESHOE BEND HYDROELECTRIC

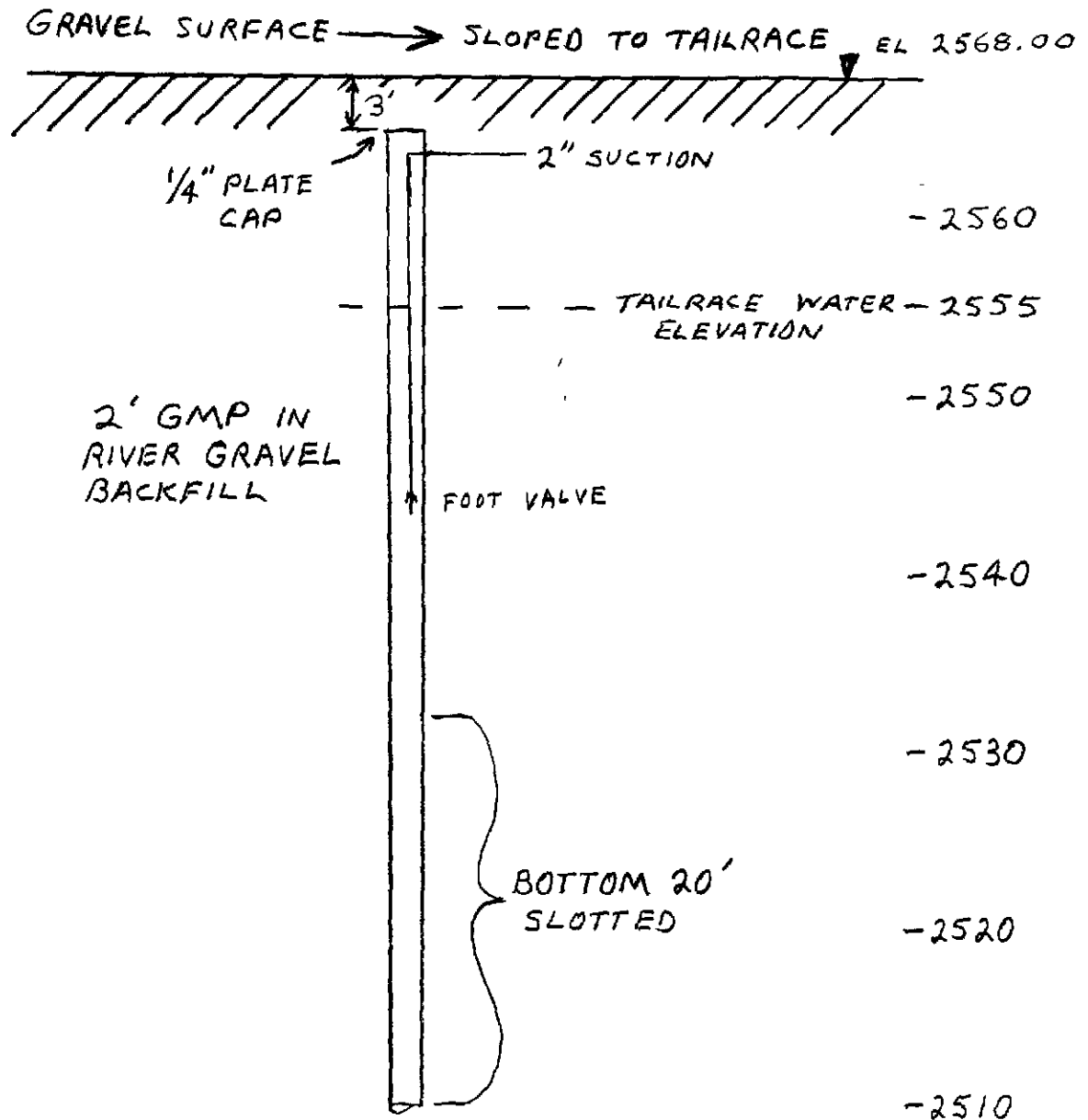
DEWATERING WELL

PROFILE

3/29/96 MB

SCALE: 1" = 10'

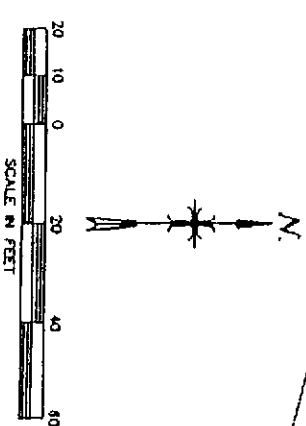
22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS



AUG 09 1998



350' APPROXIMATE DISTANCE TO PAYETTE RIVER



- A REVISED ELEVATIONS AND RETAINING WALLS
11/8/93
- B REVISED TAILRACE AND DIMENSIONS
1/17/94





State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, P.O. Box 83720, Boise, Idaho 83720-0098

Phone: (208) 327-7900 FAX: (208) 327-7866

DIRK KEMPTHORNE
GOVERNOR

KARL J. DREHER
DIRECTOR

May 23, 2001

HORSESHOE BEND HYDROELECTRIC CO
PO BOX 8303
BOISE ID 83707

RE License No 65-13662 - Issuance of License

Dear Water Right Holder(s).

The Department of Water Resources has issued the enclosed Water Right License confirming that a water right has been established in accordance with your permit. Please be sure to thoroughly review the conditions of approval and remarks listed on your license.

The license is a PRELIMINARY ORDER issued by the Department pursuant to section 67-5243, Idaho Code. It can and will become a final order without further action by the Department unless a party petitions for reconsideration or files an exception and/or brief within fourteen (14) days of the service date as described in the enclosed information sheet.

Please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a \$100 late filing fee. Contact any office of the Department or visit the Department's homepage on the Internet to obtain the proper forms and instructions.

If you have any questions, please contact me at 208-327-7946.

Sincerely,

A handwritten signature in cursive script that reads "Shelley W. Keen".

Shelley W. Keen
Water Rights Supervisor

SWK:klt

Enclosure(s)

MICROFILMED

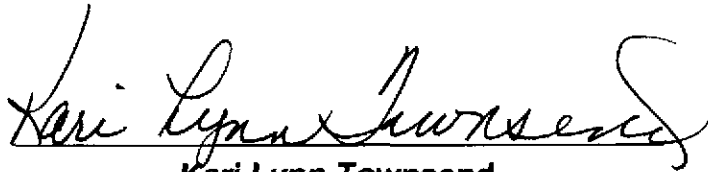
MAY 23 2001

CERTIFICATE OF MAILING

I hereby certify that on May 24, 2001 I mailed a true and correct copy, postage prepaid, of the foregoing PRELIMINARY ORDER(Approved License) to the person(s) listed below:

RE: WATER RIGHT NO. 65-13662

**HORSESHOE BEND HYDROELECTRIC CO
PO BOX 8303
BOISE ID 83707**

A handwritten signature in cursive script, reading "Kari Lynn Townsend".

**Kari Lynn Townsend
Secretary**

MICROFILMED

JUN 20 2001

**EXPLANATORY INFORMATION
TO ACCOMPANY A
PRELIMINARY ORDER**

The accompanying order or approved document is a "Preliminary Order" issued by the department pursuant to section 67-5243, Idaho Code It can and will become a final order without further action of the Department of Water Resources (department) unless a party petitions for reconsideration, files an exception and brief, or requests a hearing as further described below

PETITION FOR RECONSIDERATION

Any party may file a petition for reconsideration of a preliminary order with the department within fourteen (14) days of the service date of this order. The department will act on a petition for reconsideration within twenty-one (21) days of its receipt, or the petition will be considered denied by operation of law. See Section 67-5243(3) Idaho Code.

EXCEPTIONS AND BRIEFS

Within fourteen (14) days after (a) the service date of a preliminary order, (b) the service date of a denial of a petition for reconsideration from this preliminary order, or (c) the failure within twenty-one (21) days to grant or deny a petition for reconsideration from this preliminary order, any party may in writing support or take exceptions to any part of a preliminary order and may file briefs in support of the party's position on any issue in the proceeding with the Director. Otherwise, this preliminary order will become a final order of the agency.

REQUEST FOR HEARING

Unless a right to a hearing before the department or the Idaho Water Resource Board (Board) is otherwise provided by statute, any person aggrieved by any final decision, determination, order or action of the Director of the department and who has not previously been afforded an opportunity for a hearing on the matter may request a hearing pursuant to section 42-1701A(3), Idaho Code. A written petition contesting the action of the Director and requesting a hearing shall be filed within fifteen (15) days after receipt of the denial or conditional approval.

ORAL ARGUMENT

If the Director grants a petition to review the preliminary order, the Director shall allow all parties an opportunity to file briefs in support of or taking exceptions to the preliminary order and may schedule oral argument in the matter before issuing a final order. If oral arguments are to be heard, the Director will within a reasonable time period notify each party of the place, date and hour for the argument of the case. Unless the Director orders otherwise, all oral arguments will be heard in Boise, Idaho.

CERTIFICATE OF SERVICE

All exceptions, briefs, requests for oral argument and any other matters filed with the Director in connection with the preliminary order shall be served on all other parties to the proceedings in accordance with IDAPA Rules 37.01 01302 and 37 01.01303 (Rules of Procedure 302 and 303)

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JUN 26 2001

FINAL ORDER

The Director will issue a final order within fifty-six (56) days of receipt of the written briefs, oral argument or response to briefs, whichever is later, unless waived by the parties or for good cause shown. The Director may remand the matter for further evidentiary hearings if further factual development of the record is necessary before issuing a final order. The department will serve a copy of the final order on all parties of record.

Section 67-5246(5), Idaho Code, provides as follows:

Unless a different date is stated in a final order, the order is effective fourteen (14) days after its issuance if a party has not filed a petition for reconsideration. If a party has filed a petition for reconsideration with the agency head, the final order becomes effective when:

- (a) the petition for reconsideration is disposed of; or
- (b) the petition is deemed denied because the agency head did not dispose of the petition within twenty-one (21) days.

APPEAL OF FINAL ORDER TO DISTRICT COURT

Pursuant to sections 67-5270 and 67-5272, Idaho Code, if this preliminary order becomes final, any party aggrieved by the final order or orders previously issued in this case may appeal the final order and all previously issued orders in this case to district court by filing a petition in the district court of the county in which

- i. A hearing was held,
- ii. The final agency action was taken,
- iii. The party seeking review of the order resides, or
- iv. The real property or personal property that was the subject of the agency action is located.

The appeal must be filed within twenty-eight (28) days of this preliminary order becoming final. See section 67-5273, Idaho Code. The filing of an appeal to district court does not itself stay the effectiveness or enforcement of the order under appeal.

LICENSE REVIEW CHECKLIST

Permit No 65-13662 Date 5-21-01 Reviewer. Kay Walker

Change/OK

Name/Address OK

Source OK
Point of Diversion OK

Does change clarify original intended source? If no, void permit
Change (P39/P49) Add (P45/P44) Feds (P40)

W32 (multiple in 1/4/1/4)
W36 (overlap)
W59 (subdivision description)

Place of Use OK

Change (P41/P49) Add (P41/P44) Feds (P43)

W60 (subdivision description)
W27 (ppu acre limit)

Overlaps Right(s) _____

File reviewed _____ Profile reports printed _____

P/D & P/U amend (P37) Feds (P48)

Rate of Diversion:

Permitted rate 0.05 cfs
Fee Limit 0.20 cfs
Measured _____ cfs
Theoretical 0.10 cfs

Recommended Total Diversion Rate 0.05

Water Uses OK

Change (P46)

Season of Use per new Standards

Irrigation _____ cfs _____ af
Stockwater _____ cfs _____ af
Domestic _____ cfs _____ af
Cooling 0.05 cfs 36.2 af
_____ cfs _____ af
Total 0.05 cfs 36.2 af

Irrigation - overlap (R58-R61, R62-R65, R66-R69)
supp Gw (WB7/065/104)
overlap spec combined rts (W35)
<1 acre (W31)
Domestic (W01/wb5/070/071/075)
Power (W42 or W43/025/027/R22 or R23)
Fish (042)
Fire (077)
Water Quality (081/R07)
Payette - (W22/047/27A)
Stockwater for US (R37)

Volume Determination

_____ cfs x 1 9835 x _____ days = _____ af (vs) _____ acres x _____ (FHR) = _____ af

Remarks _____

Additional Conditions

☒ Watermaster Control
☒ GW Measurement/Measuring Device
☒ Other
Trust R55 - remove 051)
Non-trust (048/049)

GW Dist? _____
Water Msmt Dist? _____
Crit GWMA? _____
GWMA? _____
Government Lots? YRS

Advance Priority? yes if yes, explain why below

SRBA Claim? Not req'd

Adjust memo _____

Amend Letters

P87, S06

Second Amendment Notice

S06

topo W9

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

JAN 12 1999

Department of Water Resources

A. GENERAL INFORMATION

Permit No. 65-13662

1. Owner: Horseshoe Bend Hydroelectric Co. Phone No. (208) 345-7515

Current Address: P.O. Box 2797, Boise, ID 83701-2797

2. Accompanied by: Lee Cayford EXAM DATE: 7-9-98

Address: HB Power Plant Phone No. (208) 793-2833

Relationship to Permit Holder: Plant Manager

3. Source: Groundwater tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 65-12563

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
	5		SW	NE	32	7N	2E	Boise	Site Visit, Mar

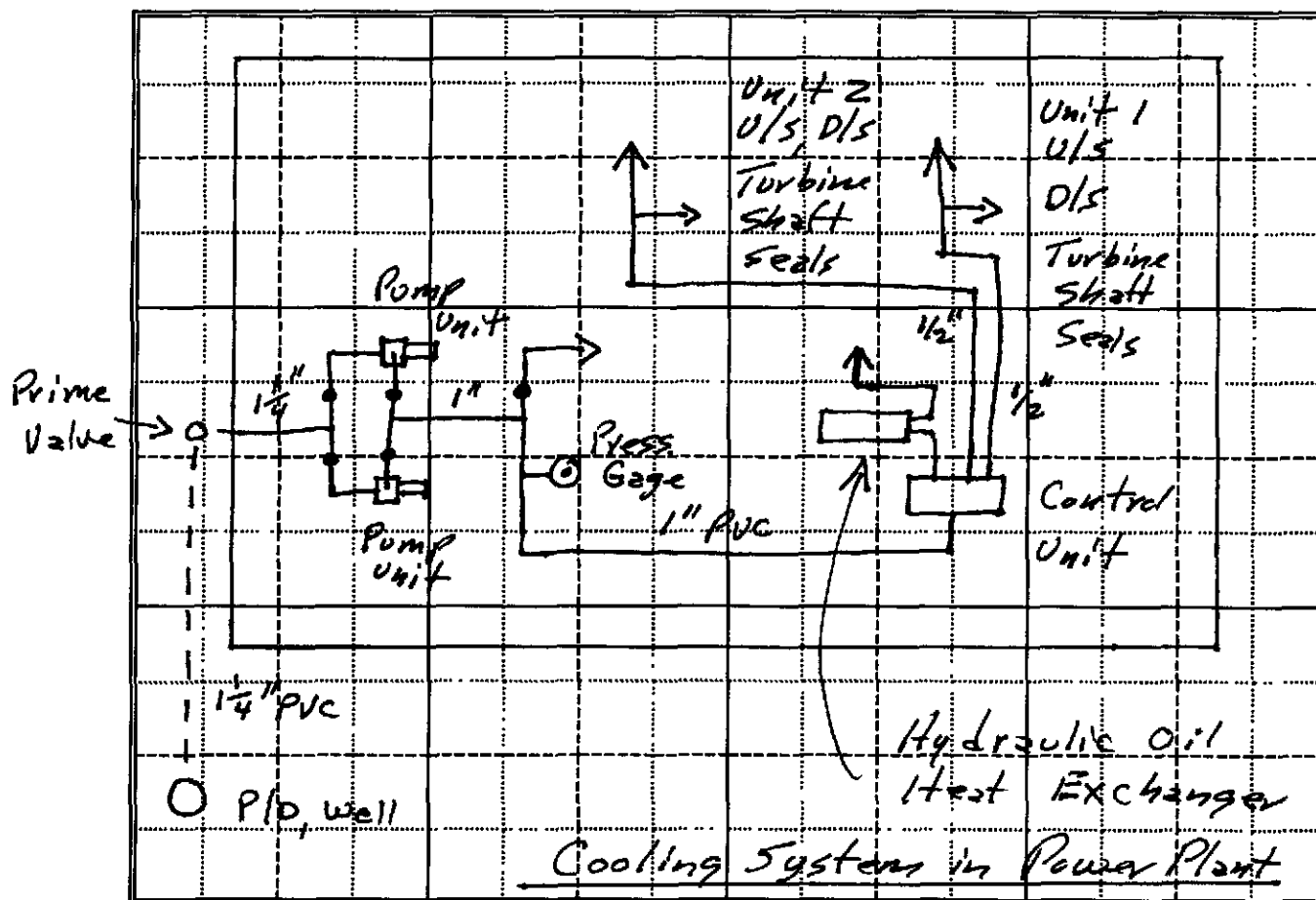
2. Place(s) of Use:

Indicate Method of Determination Site Visit, Mar

TWP	RGE	SEC	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
7N	2E	32			Cooling tanks														

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3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe I.D. as applicable.



Scale: 1" = None

☒ 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. 2 identical Pump Units in Power Plant:

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
<u>Pump 1</u>	<u>A.O. Smith</u>	<u>1/2</u>	<u>8E95</u>	<u>Gould</u>	<u>G9512735</u>
<u>Pump 2</u>	<u>A.O. Smith</u>	<u>1/2</u>	<u>8F96</u>	<u>Gould</u>	<u>F9657110</u>

*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: None - operating pressure: 20-35 PSI
26 PSI on pressure gage

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E. NARRATIVE/REMARKS/COMMENTS

1. This permit is for cooling water at the Horse shoe Bend Power Plant. Well water is used to cool the hydraulic oil, and upstream and downstream turbine shaft seals. The water system is used for both Power units.
2. The well was a de-watering well used during construction of the power plant, and was converted as a water source for the cooling system. The water used is most likely groundwater moving from the forebay to the tailrace alongside the Power House building.
3. Two identical pump units located in the Power Plant draw water from the well, and serves the cooling system. The water system cools the hydraulic oil through a heat exchanger, and the upstream and downstream turbine shaft seals for both power turbines. The spent water is discharged into a sump, which is piped into the tailrace channel.
4. The cooling system operator continuously when the plant is operating, normally 12 months each year.

Have conditions of permit approval been met? ☒ yes ☐ no

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APR 2 1981

F. FLOW CALCULATIONS

Additional Computation Sheets Attached

Measured Method: None, Theoretical Cal.:2 pumps:Permit = 0.05 cfs

$$Q_1 = \frac{(8.8)(1/2 \text{ HP})(702)}{15' + (20 \text{ PSI})(\frac{34'}{14.7 \text{ PSI}})} = \underline{0.05 \text{ cfs}} \text{ each pump}$$

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

 $V_{IR} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) =$

Cooling $V_{DR} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = \underline{(0.05)(365)(1.9835)} = \underline{36.2}$

$V = \text{Smaller of } V_{IR} \text{ and } V_{DR} =$

2. Volume Calculations for Other Uses:

Cooling 36.2 AFAContinuous**H. RECOMMENDATIONS**

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
<u>Cooling</u>	<u>01/01</u>	<u>12/31</u>	<u>0.05</u>	<u>36.2</u>
Totals:			<u>0.05</u>	<u>36.2</u>

2. Recommended Amendments

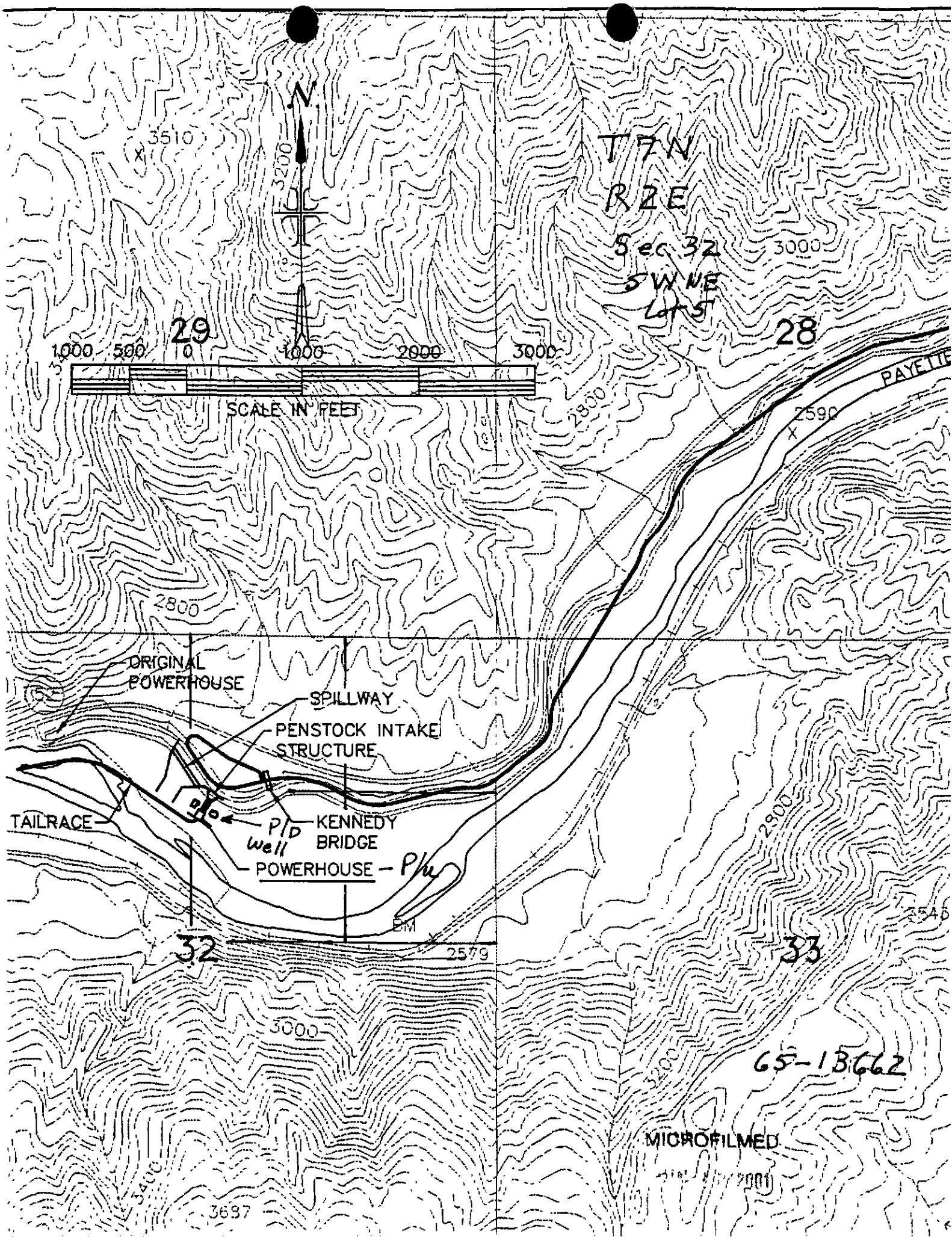
☐ Change P.D. as reflected above ☐ Add P.D. as reflected above ☒ None
☐ Change P.U. as reflected above ☐ Add P.U. as reflected above ☐ Other

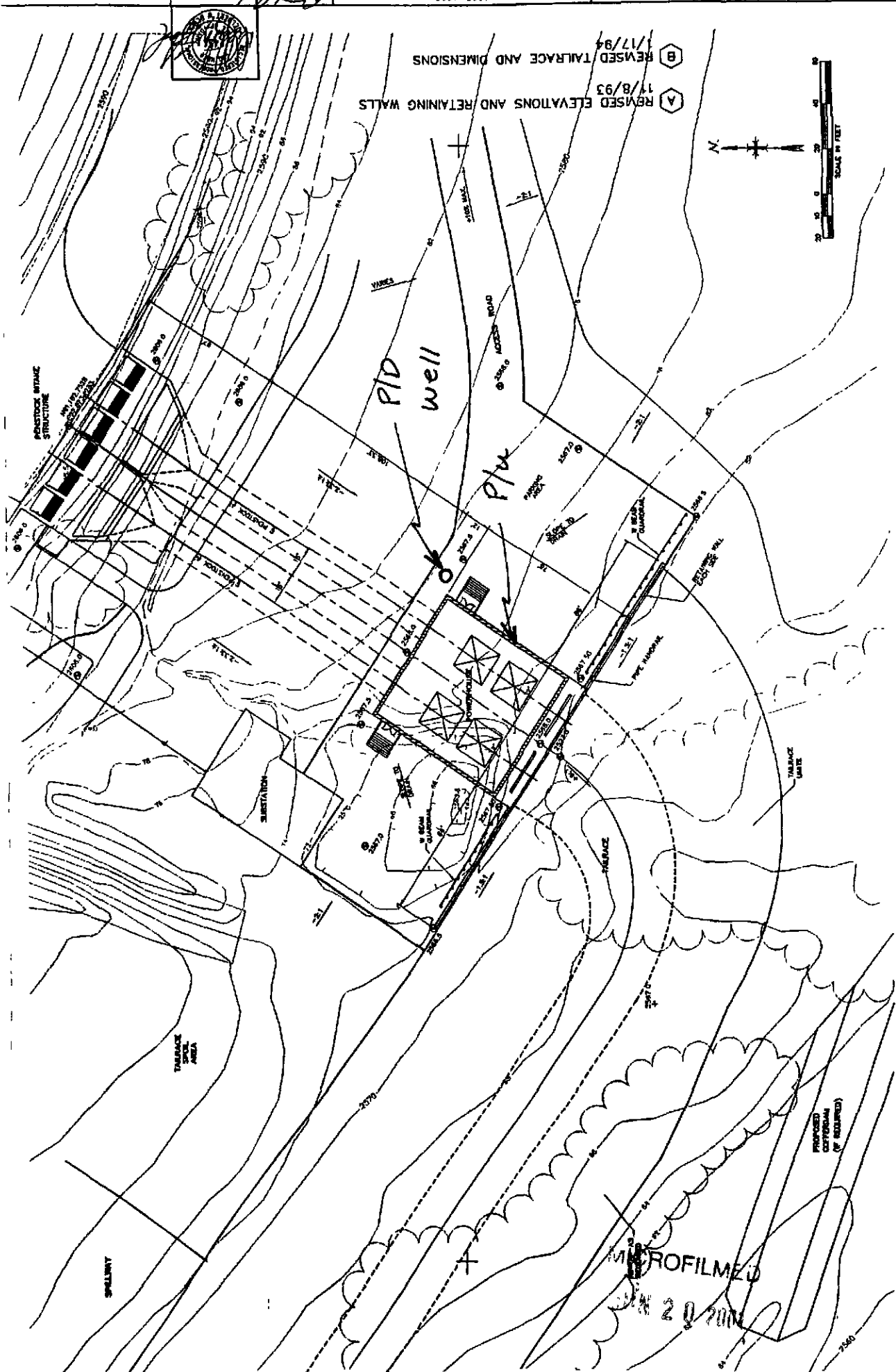
I. AUTHENTICATIONField Examiner's Name Don Zornick Date 12-23-98

Reviewer _____ Date _____

SEAL

MICROFILMED





Horseshoe Bend 2 Power Units
 Power Plant
 FERC Project 5376-001

65-13662

MICROFILMED
 JUN 20 2000

W.

19.46

39.73

39.73

80 Ac. ±

2123

80.00

9.87

48.90

PAYETTE

5

6

4

7

SEC. 32

T 7 N

R 2 E

Sec. 32

SW NE
Lot 5

65-13662

North

40.00

8

WONDER
Sur. No.
1842

KENTUCK
Sur. No. 1842

10

11
31.27

S. 63°

30'

132'

Q:

2

15'

503

15'

15'

15'

15'

S. 21° E. 909

498

563° 49'

105.3

563° 49'

105.3

MICROFILMED

40.14

39.46

9° 12' E

79 60.613

TE

1 of 3

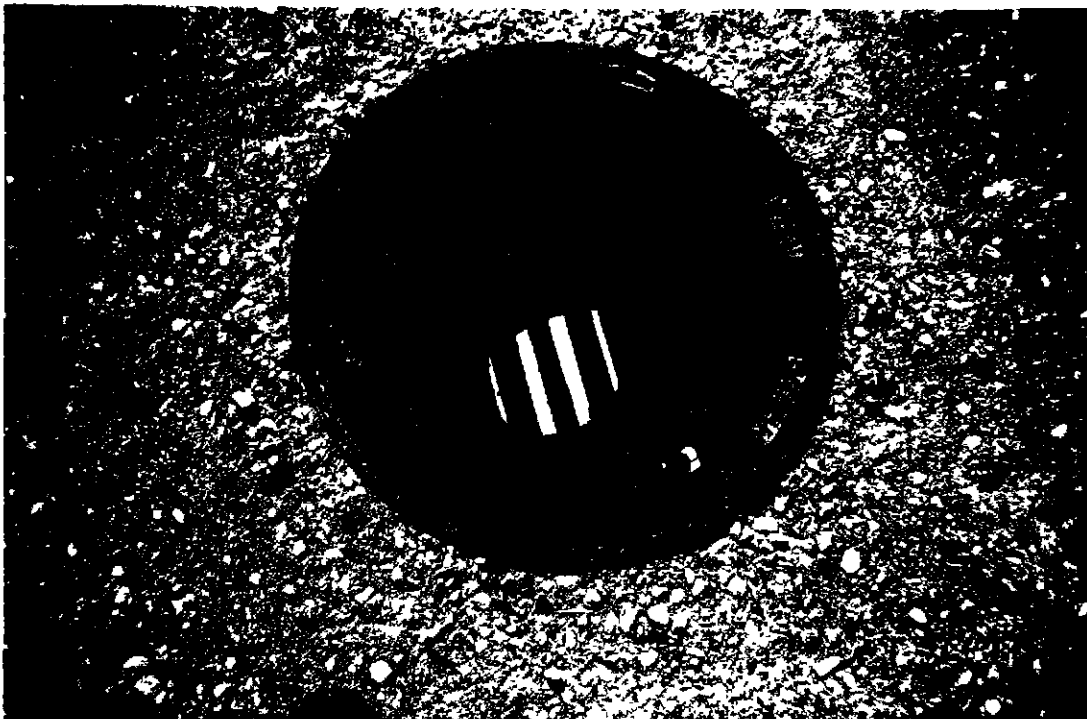
P/O

Well
under
Manhole
Cover
by
Power
House



P/O

Well



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APR 20 2001

65-13662

2 of 3



P/D
Pump
Units
in
Power
Plant

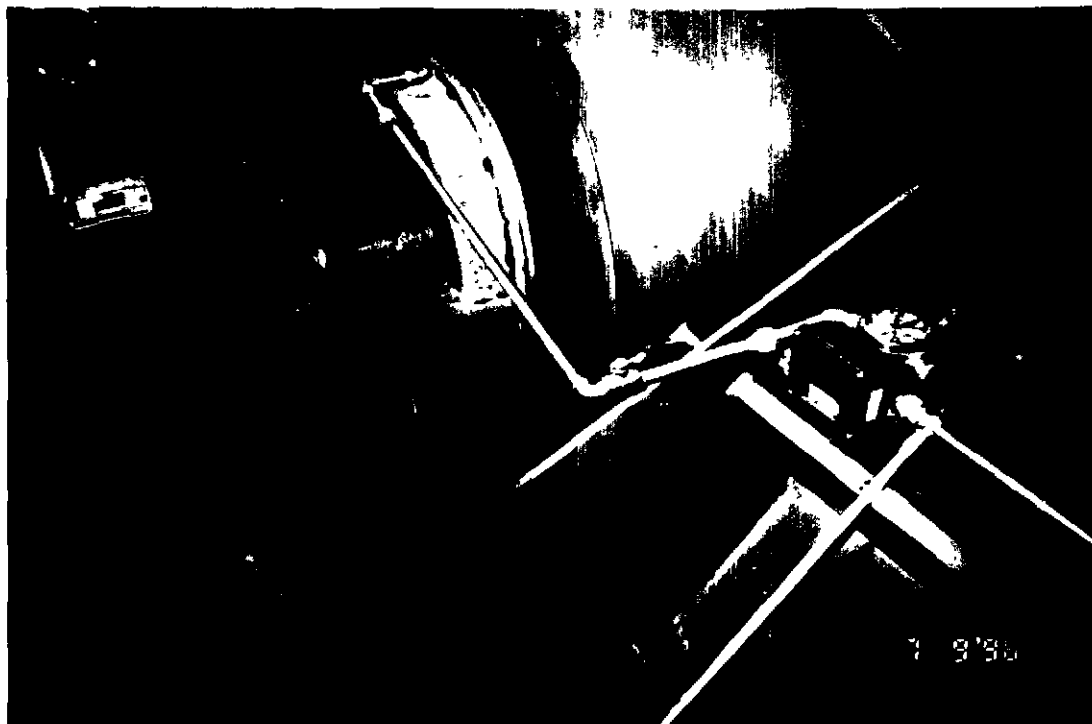


P/u
Hydraulic
oil
Heat
Exchanger

MICROFILMED

JUN 20 2001

65-13662



P/u

Cooling water lines to downstream
turbine shaft seal, Unit 2.

Typical of shaft seal system.

MICROFILMED

JUN 2 1986

65-13662

IDAHO DEPARTMENT OF WATER RESOURCES

WELL INSPECTION FORM

1. DRILLING PERMIT NO: 65-96-W-0096-400 OTHER APPLICABLE NO: 65-13662
2. OWNER: Horseshoe Bend Hydroelectric Co. Phone: (208) 345-7515
Address: P.O. Box 2797, Boise, ID 83701-2797
3. WELL LOCATION: Twp 7N, Rge. 2E, Sec. 32, SW ^{lot 5} 1/4 NE 1/4
County Boise (Provide sketch map and photo on reverse.)
4. DRILLER: Powerplant Contractor Lic. No. _____
When Drilled? 1994? modified in 1996
5. WELL CONSTRUCTION:
Casing Diameter 24 ^{cmp} inches Water tight cap? ☒ Yes ~~None~~ Access Port: ☒ Yes ☐ No
Casing $\geq$ 12 inches above ground? ☐ Yes ☒ No - Describe 4" in Concrete Riser
Depth of Casing 60 ft. Method Drilled Unknown
Condition of Well Casing: ☒ Good ☐ Fair ☐ Poor Describe _____
Control Valve? ☒ Yes ☐ No Pressure Gauge: ☒ Yes ☐ No
Condition of Piping and Valving Good
Auger to a depth of _____ ft. Evidence of Annular Seal ☐ Yes ☒ No None
Are there obvious construction problems that may be a source for contamination or waste of water?
☐ Yes ☒ No (Describe in Remarks and Attach Photo - On Reverse)
6. HYDROLOGIC INFORMATION:
Depth to Static Water 15 ft. Water Temperature Cold °F
Flowing Artesian ☐ Yes ☒ No Pressure: _____ (psi)
Water Sample Taken? ☐ Yes ☒ No If yes, describe purpose _____
Water Quality Measurements/Observations (Describe) _____
7. WELL USE:
☐ Domestic ☐ Irrigation ☐ Stock **MICROFILMED**
☐ Test ☐ Municipal ☐ Industrial 1/2 1/2 2001
☐ Abandoned ☐ Waste Disposal/Injection ☐ Not Used
☒ Other: Cooling

8. POSSIBLE CONTAMINATION SOURCES:

Is there evidence of Chemigation? ☐ Yes ☒ No

If yes, is there a check-valve present? ☐ Yes ☐ No

Is there a possible source of contamination nearby? ☐ Yes ☒ No

If yes, what Type? _____

How far away from the well is this source? _____

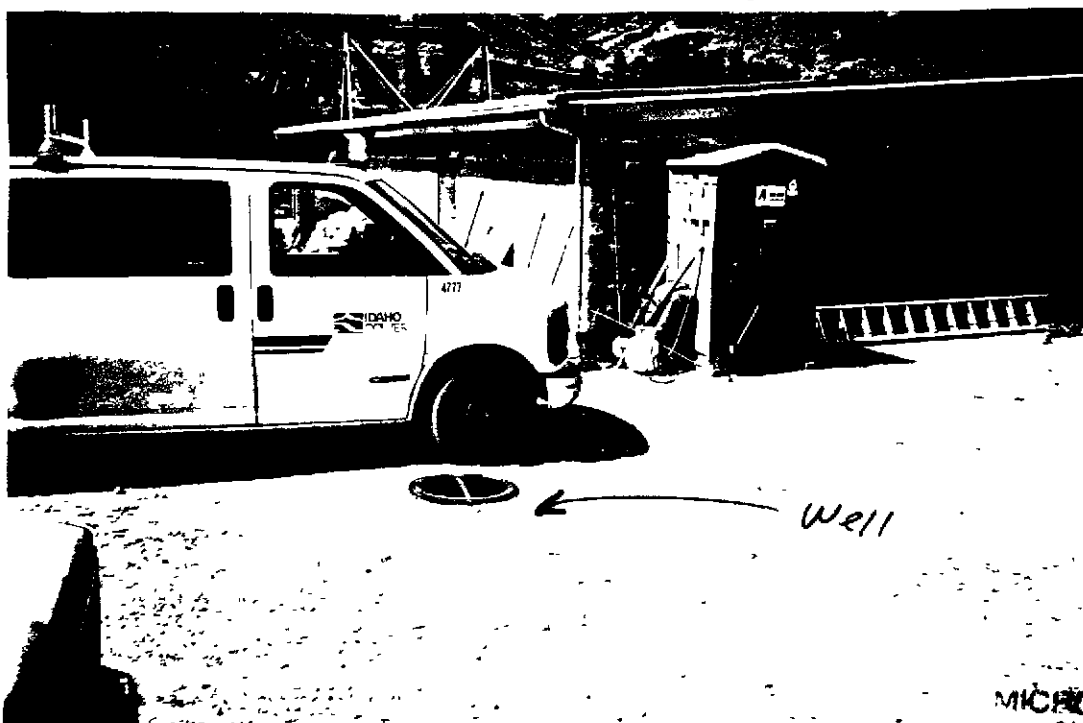
9. REMARKS:

*This was a de-watering well
used during construction of the power plant.
It was converted for use as a source
of cooling water for the turbine shaft
seals and hydraulic oil.*

Jan Tomack, Water Rights Examiner
Signature of Dept. Representative & Title

7-9-98
Inspection Date

PHOTOS, DRAWINGS, OTHER ATTACHMENTS:



MICROFILMED

FEB 21 2001

HORSESHOE BEND HYDROELECTRIC

DEWATERING WELL "UPGRADE"

5/17/96

RECEIVED

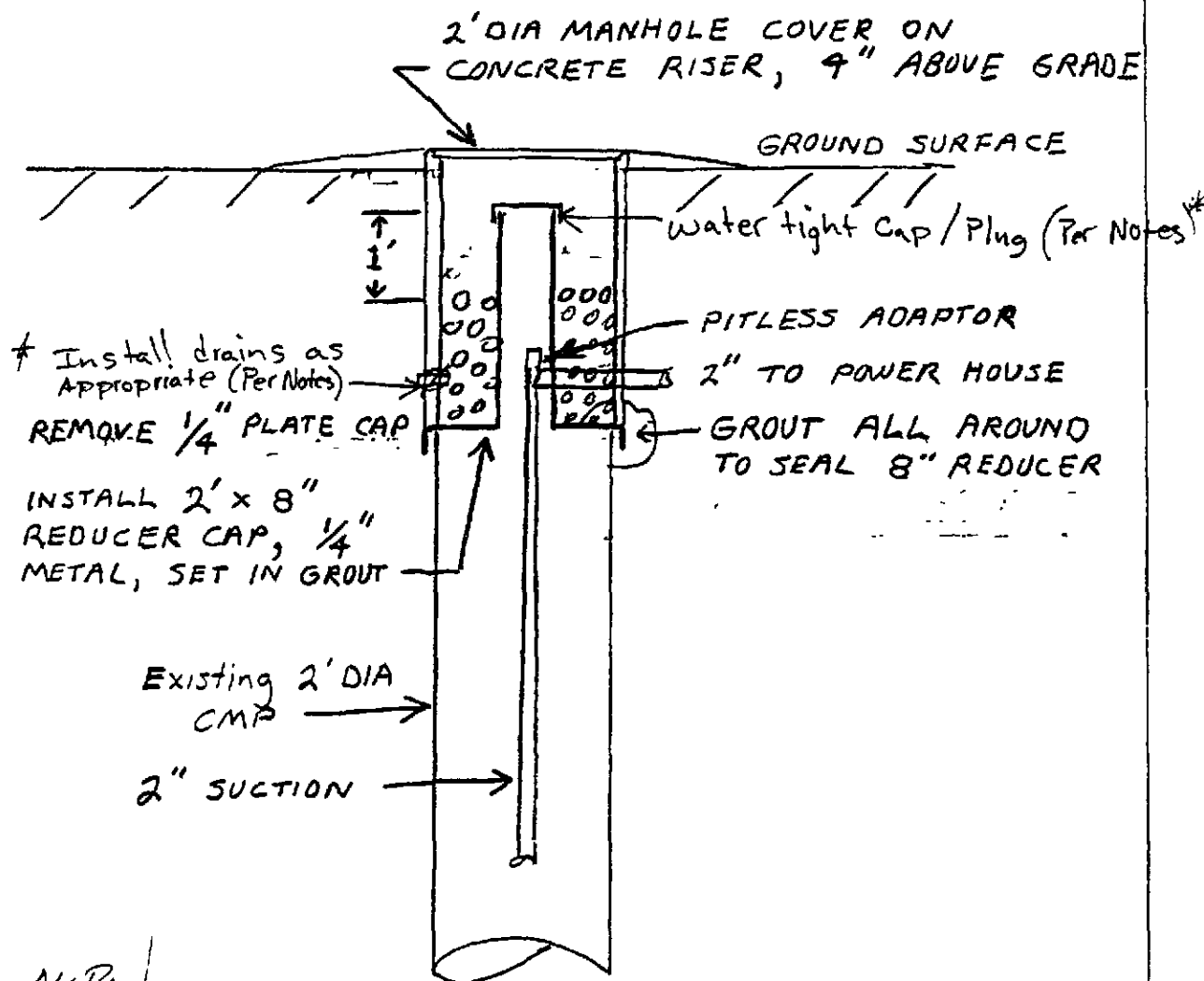
MAY 15 1996

WATER RESOURCES
WESTERN REGION

SCALE: 1" = 2'

Rec'd. again
5/21/96

50 SHEETS
100 SHEETS
200 SHEETS



NOTES: 1) 8" CAP TO BE WATER TIGHT AND 1' ABOVE GRAVEL

2) CONCRETE RISER TO BE GRAVEL FILLED AND PROVIDED WITH DRAIN OPENINGS

JUN 20 2001



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000

Phone: (208) 327-7900 FAX: (208) 327-7866

July 29, 1997

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

Horseshoe Bend Hydroelectric Co.
P.O. Box 2797
Boise, ID 83701-2797

PROOF ACKNOWLEDGMENT LETTER

RE: PERMIT NO. 65-13662

Dear Permit Holder:

The department acknowledges receipt of the proof of beneficial use form submitted for the above referenced permit. The department has issued the enclosed order reinstating the permit with no advance in the priority date.

Please be advised that Section 42-248, Idaho Code, which became effective on July 1, 1996, requires you or the owner of this water right to maintain current ownership and address records on file with the department. Forms to file a change of ownership of a water right and/or a change in the address of the water right owner are available from any department office.

The next step in the process of developing a water right is for the department to conduct a field examination to determine and confirm the use being made of the water. If you have questions concerning the field examination, please feel free to contact the WESTERN Regional Office of the department in Boise at (208) 334-2190.

Sincerely,

L. GLEN SAXTON, Chief
Water Allocation Bureau

Encl: 1

c: IDWR - Region

RECEIVED

AUG 1 1997

Permit No. 65-13662 Reviewed by [Signature] Date 7-9-97

TYPES OF USE

Cooling

Correct Uses? yes

Surface water source

☒ Ground water source

no Drilling permit required?

Copy in the file? Drilling Permit No. _____

Amount paid for permit _____ Correct? _____

 Well log in the file?

MEASURING DEVICE

no Required?
/ Installed?
/ Waiver requested?

Date proof received	_____	_____
Date proof due	_____	_____
No. of days late	_____	_____
Priority Date	_____	_____
New Priority Date	_____	_____

DEFICIENCIES OR ACTION ITEMS
Reinstate w/no advance in priority.
Proof acceptable.

New Address _____ Proof Made 5-27-97

RECEIVED

JUN 23 1997

HBHC

HORSESHOE BEND HYDROELECTRIC COMPANY

Department of Water Resources

June 20, 1997

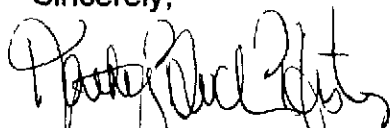
Ms. Julie L. Yarbrough
Idaho Department of Water Resources
1301 North Orchard Street
P.O. Box 83720
Boise, ID 83720-0098

Subject: Proof of Beneficial Use
Permit No. 65-13662

Dear Ms. Yarbrough:

Please find enclosed a Proof of Beneficial Use form for Permit No. 65-13662. As we discussed on the phone, I assumed the Proof was due for Permit No. 65-12563. A check in the amount of \$600 was mailed to IDWR on May 23, 1997. You noted that it was received on May 27, 1997. The fee for Permit No. 65-13662 should be \$50.00. Therefore, a refund would be due to Horseshoe Bend Hydroelectric Co. for \$550. Thank you.

Sincerely,



Kathy Buchanan Pfister
Director of Operations

MICROFILMED

AUG 20 1997



State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, P.O. BOX 83720, Boise, Idaho 83720-0098

Phone: (208) 327-7900 FAX: (208) 327-7866

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

June 20, 1997

Horseshoe Bend Hydro. Co.
Attn: Kathy Pfister
P.O. Box 2797
Boise, ID 83701-2797

RE: PROOF SUBMITTAL FOR 65-13663

Dear Ms. Pfister:

I have returned the proof statement you filed in connection with the above referenced water right permit.

I have initiated the process to refund \$550.00 of the \$600.00 exam fee submitted. The refund should arrive in seven (7) to ten (10) business days under separate cover. I will then apply the remaining \$50.00 to the license examination fee for 65-13662 once the proof is received.

Please contact me at (208)327-7953, if you have any questions regarding this matter

Sincerely,

A handwritten signature in cursive script that reads "Julie L. Yarbrough".

JULIE L. YARBROUGH
Senior Secretary

C: Mary McCulley - Fiscal

RECEIVED

AUG 1 1997

MEMORANDUM

TO: File No. 65-13662
FROM: Julie Yarbrough
RE: **Proof of B/U**
DATE: June 20, 1997

I received a call this morning from Kathy Pfister of Horseshoe Bend Hydro, concerning the lapse notice sent in connection with 65-13662. The permit holder submitted proof and a \$600.00 license exam fee for permit 65-13663 by mistake, thinking she was filing on 65-13662. She will submit proof for 65-13662 ASAP. The department will return the proof for 65-13663 and refund \$550.00 of the filing fee and apply the remainder to 65-13662.

9-12563
5-27-97

INTER-DEPARTMENT MEMO--1

FROM

Blum

DATE

6-20-97

TO

Tulie

SUBJECT

Proof Submittal

- Kathy Pfister (?) phone no, 345-7515 called in conn w/a lapse notice (?) sent in conn w/ permit 65-13662. She said she submitted the proof B/u, in late May.
- Plz check out if call her.

SIGNATURE

1/24

WARNING

CANCELLED OR LAPSED

This permit has been officially CANCELLED or LAPSED.

Ninety days following the date of official action this file will be DESTROYED.

June 18, 1997

HORSESHOE BEND HYDROELECTRIC CO
PO BOX 2797
BOISE ID 837012797

LAPSE NOTICE

RE: PERMIT NO. 65-13662

Dear Permit Holder:

You are hereby notified that under the provisions of Section 42-218A, Idaho Code, the above referenced permit has lapsed and is of no further force nor effect. The department provided the proper forms to you in our proof due notice dated March 31, 1997. No further construction or additional development is authorized under this permit unless it is reinstated.

The permit can only be reinstated if you submit an acceptable proof of beneficial use or an acceptable request for extension of time to the department within sixty (60) days of the mailing of this lapse notice. An acceptable proof of beneficial use submittal must include the examination fee or a completed field examination report. A request for extension of time must be accompanied by a fifty dollar (\$50.00) fee.

Enclosed again for your use are a proof of beneficial use form and a request for extension of time form. Please note that only one extension of time can be granted unless the project has not been completed because of lack of a necessary approval by a government agency or by litigation which may bring title to the water in question.

L. GLEN SAXTON
Chief, Water Allocation Bureau

Enclosures

RECEIVED

JUN 20 1997

CERTIFICATION OF MAILING

I hereby certify that on 6/19/97
a ~~copy~~/an original of this document was
deposited in the United States mail,
postage prepaid addressed to the
individual(s) named above.

[Signature]

March 31, 1997

HORSESHOE BEND HYDROELECTRIC CO
PO BOX 2797
BOISE ID 837012797

PROOF DUE NOTICE

RE: PERMIT NO. 65-13662

Dear Permit Holder:

One of the conditions of approval of the above referenced water permit was that proof of the extent of your beneficial use must be submitted to this office on or before June 1, 1997.

(See last page of your approved permit or your last approved extension request.) Enclosed is a form which when accompanied by the license examination fee or a complete field examination report prepared by a certified water right examiner may be used to submit the required proof.

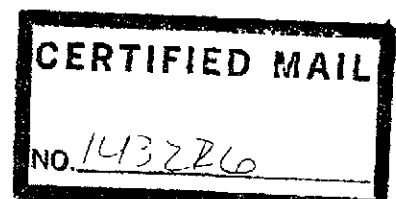
If you have not fully completed your project, and you or a previous owner of this permit have not received a prior extension of time, you may request an extension of time if the delay is for reasonable cause as provided in Section 42-204, Idaho Code. If you have been prevented from proceeding by a governmental agency or by litigation which might bring title to the water in question, more than one extension of time can be granted. An extension of time request form is enclosed for your convenience.

Either an acceptable proof of beneficial use submittal or an acceptable request for an extension of time must be received by this department on or before the above described proof due date. If neither is received, the department will send you a lapse notice. Within sixty (60) days of the mailing of the lapse notice, the permit will no longer be of any force nor effect.

SINCERELY,

JULIE L. YARBROUGH
Senior Secretary

Enclosures





State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Statehouse Mail, Boise, Idaho 83720-9000

Phone: (208) 327-7900 FAX: (208) 327-7866

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

May 28, 1996

HORSESHOE BEND HYDROELECTRIC CO
PO BOX 2797
BOISE ID 83701-2797

PERMIT APPROVAL NOTICE

RE: PERMIT NO. 65-13662

Dear Permit Holder:

Enclosed is a copy of your approved application for permit. Please be sure to thoroughly review the "CONDITIONS/REMARKS:" listing on the permit.

Enclosed is a form entitled "Instructions for Proof of Beneficial Use". Please read the instructions carefully since you must take further action to develop this permit into a licensed water right. Also enclosed is a form entitled "Proof of Beneficial Use". If your project is already completed, you should complete and submit this form immediately.

Sincerely,

A handwritten signature in cursive script, reading 'Shelley W. Keen'.

Shelley W. Keen
Water Rights Supervisor

SK:rl

Enclosures

A faint, rectangular stamp, possibly a date or processing mark, located at the bottom right of the page.

AUG 09 1996

**APPLICATION FOR PERMIT
STATE OFFICE REVIEW**
by Cindy Zimmerman

No.: 65 13661 Name: Horse Shoe Bend Elec Co. Date: 5/24/96 Ad OK? ☒
Correct Fee? ☒ Receipt #: W020701 Priority: 4/12/96 / Gvmt Lts: ☒

AREA OF CONCERN? - No/Yes _____ Mor _____ GWMA Trust/Non-trust
PROTESTED: - 020(Protest Agr) or W19(See Final/Prelim Order)
SYSTEM COMPLETED:
Yes/proof filed - NA
~~1 year~~/no proof - **P16**
+1 year - 26A-P17
GROUNDWATER: <✓ FLO-CH>
+ 0.2 cfs - 01M
=/- 0.2 cfs - No MD
=/+ 5 a. - 01M, 065(if GW use SW 1st)
Drilling Permit:
Existing well - NA (pre 7/1/87)
Included w/permit - Permit No. _____, P99
No WD permit? - 046-46B-P23 (post 7/1/87)
irr. in WD - P05 (new well)
SURFACE WATER <✓ FLO-CH> (Surface water that doesn't sink is regulated):
Water District (dem) - 005 (req) WD # _____ <SEE MAP & LISTING>
+ 0.2 cfs - 01J(meas dev)-P08
=/- 0.2 cfs - 01H(lock dev)-P01 or No MD
In-WD + 0.2 cfs - 01M or No MD (in-stream)
- 0.2 cfs - No MD
=/+ 5 a. irr. - 01M
RIVER BASINS (*Surface water):
Snake R (01) - 11A-P04, NA
(02/03-irr) - 007-P07 (w/remark WB9-† Weiser), NA
Boise R (63) - 05A (if WD), 11E (not 42-111 use), NA
Payette R (65) - 064(regulated uses), 047-P04(Payette Lake), NA
USE:
Domestic (surface) - 021(Boise R † Star Bridge); 27A(Payette R); NA
Fish Propagation - 07A-042(rq)-010/06A/09E(WQ)-P10; 044(N 1000 Spr)
Irr <POU> =/- 5 a - 057 (0.03 cfs/A)
+ 5 a - 03A (0.02 cfs/A)
Mining - 054 (req) & 06A/010/09E-P10
Power - 08A-17K-025-027-01M-01F(P19)-09E(P10);
+25 cfs-P18; 17G(FERC) or 17M(FERC); 18B-P09
Storage(✓ 3 compo.) - 18A(multi MD in WD), 18B-P09 (+10' dam), NA
LOCATION:
Boise Front LoGeo - 058 (-85° GW temp only)
In-stream dev. - P52 (stream channel alteration)
Irr Dist/Canal Co. - 023 (Twin Falls area)
Swan Falls Flag - Bkk <SEE CODE CHART>
Trust - 051-052-053-P74 (Consumptive Uses), NA
Non-Trust <1> - 048-049 (Consumptive Uses), NA
OWNERSHIP: Non-land owner - 004 (PD/PU) _____
OTHER CONDITIONS: _____
STANDARD REMARKS: - To Correlate for permit plan structure.
BENEFICIAL USE DUE: - 6-1-1997
COMMENTS: - _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPROPRIATION APPLICATION ANALYSIS SHEET

INITIAL REVIEW BY: 82 DATE: 4/22/96 APPLICATION: 65-13662

REQUIRED INFORMATION

Name: (If applicant is a corporation or partnership, names and addresses for the director, officers, and other partners must be included.) *See attachment to appl.*
Address:
Source: (See USGS Quad for names of water sources)
Point of Diversion: (10 acres for spring, lot & block descriptions for Subdivisions, local name)
County:
Quantity: (flow and/or volume)
Period of use:
Nature of proposed use: (Include description of use)
Description of diverting works:
Time required for beneficial use of water:
Place of use or acres irrigated:
Map: (show T, R, S, QQ &/or QQQ)
Subdivision plat: (for > 1 home in restricted area. $\geq$ 5 homes in non-restricted area)
Signature: (If applicant is corp., partnership, or municipality, title of signatory is required)
Fee:
Yes ☐ No* In form to receipt: *OVERPAID, NEED \$50 refund, see 4/22/96 memo*

Gov't. Lots:
☒ P/D
☒ P/U

ADDITIONAL INFORMATION

YES NO *N/A minor use*

Overlapping place of use: (Describe source & relationship to present application on next page.)
Overlapping point of diversion.
Field check required: Field check by: _____
Field report attached:
Critical groundwater area:
Groundwater management area:
1992 moratorium:
Copy to SCA staff: (perennial stream, non-pump diversion &/or any mining).
Copy to Dam Safety staff: (for any storage)
Basin 63 mitigation plan: (where ground water replaces surface water for irrigation, request additional information &/or mitigation plan to address reduced aquifer recharge)
Send power requirement letter:
Send fish farm requirement letter:
Power residency affidavit:
Power efficiency form:
Diversion greater than 5 cfs or 500 af or irrigation greater than 200 acres: (If yes, attach Large Diversion supplementary analysis sheet.)
*REQUEST ADDITIONAL INFORMATION FROM THE APPLICANT

RECEIVED
MAY 23 1996

Department of Water Resources

DATE REQUESTED

☒ ADDITIONAL INFORMATION ON REVERSE SIDE:

☒ Copy to Well Construction Staff (RBW) re: Requested revision & standards
SEE RBW's 5/17/96 Response letter

YES NO

In form for advertising:

Statewide advertising: (> 10 cfs &/or 1000 af)

Fee amount, receipt number and date recorded on application:

SEND COPIES TO:YES NOYES NOI.D. Health & WelfareI.D. District HealthI.D. Fish & GameI.D. LandsAdjudication BureauU.S. BLMU.S. Forest ServiceWater Dist. # _____Other _____FINAL REGIONAL PROCESSING REVIEW:

YES NO

Affidavit of publication received:Application published correctly: If not, record action taken.Publication dates and paper recorded on application:Protests received. Final date for protest 5-20-96Protest dates, resolution of protest recorded on application:Recommendations attached: Approve, DETMeasuring device required:Measuring port required:Water delivered by water master? District # _____Special conditions of approval or cover letter: _____

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See below for additional informationRecommended Date or Priority 4/12/1996Recommended by: [Signature]Date: 5/21/96STATE OFFICE REVIEWSee below for additional information. By _____ Date _____ADDITIONAL INFORMATION:

Minor cooling use via ground H₂O (trib. to river) - should not
need to justify flow.

Requests waiver from well const. standards - Reviewer has had

some discussion with RBW & well const. issuer but no resolution yet.

See RBW's 5/17/96 Response letter recommending waiver to well const.
requirements.

The Idaho World

P O Box 99
Garden Valley, ID 83622
208 462-3487

RECEIVED

MAY 21 1996

WATER RESOURCES
WESTERN REGION

State of Idaho >
>
County of Boise >

Deanna Stevenson, being duly sworn, deposes and says: that she is the Editor of THE IDAHO WORLD, a weekly newspaper published at Idaho City, in the County of Boise and the State of Idaho; the said paper has been and is in general circulation in the county aforesaid, and in the vicinity of Idaho City; that the advertisement, a copy of which is hereto attached, was published in said newspaper once a week for two (2) consecutive weeks in the entire and regular issue of every number of said paper during the period and time of publication and was published in the newspaper and not a supplement; that said paper has been established and regularly and continuously published for more than seventy eight weeks past previous to the first publication of this notice. Such notice was published with the issue beginning with May 1, 1996 and ending with the issue of May 8, 1996.

Deanna Stevenson

State of Idaho >
>
County of Boise >

On this 20 day of May in the year 1996, before me, a notary public, personally appeared Deanna Stevenson known or identified to me to be the person whose name subscribed to the within instrument, and being by me first duly sworn, declared that the statements therein are true, and acknowledged to me that she executed the same.

L. Cadotte
Notary Public for Idaho
Residing at Garden Valley, Idaho

My commission expires 6-25-2000

NOTICE OF APPLICATION FOR WATER RIGHT

The Following application(s) have been filed to appropriate the public waters of the State of Idaho.

65-13655

CHARTERS, JACQUELINE
13382 INITIAL POINT RD
MELBA, ID 83641

Source: UNNAMED STREAM Tributary: SINKS

Diversion Pt: NWNW Sec 34 T 09N R 04E in BOISE County.

Use: IRRIGATION	(	0.130 CFS)
STOCKWATER	(	0.020 CFS)
DOMESTIC	(	0.040 CFS)
Total Diversion:	(	0.190 CFS)

Date Filed: 3/19/1996

In: BOISE County
T09N R04E S34NWNW

4.5 ACRES TOTAL

System is partially completed and in use

65-13661

LUND, BRUCE
HC 77 BOX 3250
LOWMAN, ID 83637

Source: SPRINGS Tributary: PAYETTE RIVER, SOUTH FORK

Diversion Pt: NWNENE Sec 31 T 09N R 08E in BOISE County.

Use: IRRIGATION	(	0.100 CFS)
STOCKWATER	(	0.020 CFS)
DOMESTIC	(	0.040 CFS)
Total Diversion:	(	0.160 CFS)

Date Filed: 4/19/1996

In: BOISE County
T09N R08E S31 Lot 4 (SWNE) Lot 3 (SENE)

5.0 ACRES TOTAL

65-13662

HORSESHOE BEND HYDROELECTRIC CO
PO BOX 2797
BOISE, ID 83701

Source: GROUNDWATER

Diversion Pt: LOT 5 (SWNE) Sec 32 T 07N R 02E in BOISE County.

Use: COOLING	(	0.050 CFS)
Total Diversion:	(	0.050 CFS)

Date Filed: 4/12/1996

In: BOISE County
T07N R02E S32 Lot 5 SWNE

Permits will be subject to all prior water rights. Protests may be submitted based on the criteria of Sec 42-203A, Idaho Code. Any protest against the approval of this application must be filed with the Director, Dept. of Water Resources, Western Region, 2735 Airport Way, Boise, Idaho 83705 together with a protest fee of \$25.00 on or before MAY 20, 1996. The protestant must also send a copy of the protest to the applicant.

KARL J. DREHER, Director

Published in The Idaho World May 1 and 8, 1996.

AUG 09 1996



State of Idaho
DEPARTMENT OF WATER RESOURCES

Western Region, 2735 Airport Way, Boise, Idaho 83705-5082 - (208) 334-2190
FAX (208) 334-2348

PHILIP E. BATT
GOVERNOR

KARL J. DREHER
DIRECTOR

May 17, 1996

Mark H. Dawson
HBHC
P.O. Box 2797
Boise, ID 83701

RE: Repair of Dewatering Well associated with water right
application 65-13662

Dear Mr. Dawson:

I have received the information submitted by you to Mr. Schulte, regarding the upgrade/repair of the above referenced well. The purpose of this letter is to clarify HBHC's responsibility to maintain a well in a manner that will safeguard the groundwater.

Since the well was constructed for dewatering purposes as an exception to license and drilling permit requirements and by nature of use did not constitute a well by Rule, the Department will not seek a drilling permit at this time. However, I have enclosed an application for repair of a well in order to document the upgrade of this well to an adequate standard. The schematic diagram of the proposed repair appears to observe the intent of administrative rules intending to protect the groundwater of Idaho. Additionally, approval of this repair procedure will constitute a waiver of minimum standards for casing height above ground (12"), minimum seal depth and casing material since it appears that this waiver will not compromise the groundwater. The well owner is still responsible to maintain the well in a manner that will prevent waste and contamination of the groundwater. If, in the future, it is determined that this well is contributing to waste or contamination of the resource, further repair or abandonment may be required.

Please return the enclosed application for repair and the attached schematic (please note some minor modifications) to this office prior to completing the repair. If you have questions please feel free to contact me.

Sincerely,

Robert B. Whitney
Sr. Water Resource Agent
Well Construction Regulation

cc: Slifka, Tuthill, 65-13662

AUG 09 1996



22-141 50 SHEETS
22-142 100 SHEETS
22-144 200 SHEETS

HORSESHOE BEND HYDROELECTRIC

DEWATERING WELL
UPGRADE

5/14/96

RECEIVED
MAY 15 1996
WATER RESOURCES
WESTERN REGION

SCALE: 1" = 2'

2' DIA MANHOLE COVER ON
CONCRETE RISER, 4" ABOVE GRADE

GROUND SURFACE

Water tight cap/Plug (For Notes)

PITLESS ADAPTOR

2" TO POWER HOUSE

GROUT ALL AROUND
TO SEAL 8" REDUCER

REMOVE 1/4" PLATE CAP

INSTALL 2' x 8"
REDUCER CAP, 1/4"
METAL, SET IN GROUT

Existing 2' DIA
CMP

2" SUCCTION

NOTES: 1) 8" CAP TO BE WATER TIGHT AND 1' ABOVE GRADE
2) CONCRETE RISER TO BE GRAVEL FILLED AND BE
PROVIDED WITH DRAIN OPENINGS

HBHC
HORSESHOE BEND HYDROELECTRIC COMPANY

RECEIVED

MAY 15 1996

WATER RESOURCES
WESTERN REGION

May 14, 1996

Mr. Mel Schulte
Adjudication Bureau
Idaho Department of Water Resources
2735 Airport Way
Boise, Idaho 83705-5082

Subject: Application for Permit to use Groundwater
 Horseshoe Bend Hydroelectric Project

Dear Mr. Schulte:

This letter is an addition to our April 5, 1996 letter of application for a permit to use groundwater at the Horseshoe Bend Hydroelectric Project. Attached is a sketch showing how we propose to upgrade the dewatering well to provide access for testing and to prevent the infiltration of surface water.

Please call me if these upgrades are acceptable, and if they will enable us to obtain the water use permit. We are ready to perform the work upon hearing from you.

Sincerely,

Mark H. Dawson

Mark H. Dawson, P.E.
Manager of Operations

Enclosure: Dewatering Well

Now attached to RBW's 5/17/96 *AUG 09 1996*
-JR

SD-1603-3

Idaho Department Of Water Resources
Detail Receipt Summary Screen

Date: 05/24/96

Time: 10:05:14

Rec/No - W020711 AR/No -
From: - HORSESHOE BEND HYDRO

Receipt Type - CK Doc/No - 1155
Remarks -

REFUNDED 50.00

Receipt Date: 04/12/1996

Type Of Payment
APPLICATION FOR PERMIT

Fund	FD	PCA	Obj	Subsid	Fee
229	21	62103	1155		100.00

Total Due - 100.00

WR/No	WR Fee	WR/No	WR Fee	WR/No	WR Fee
-------	--------	-------	--------	-------	--------

(Enter=Continue)

(GOLD7=Selection Screen)

(GOLD8=Cancel)

APPROVED
AUG 03 1996

MEMORANDUM

TO: DEBBIE ALLEN

FROM: STEVE LESTER 

DATE: APRIL 22, 1996

RE: REFUND

Horseshoe Bend Hydroelectric Co. filed an application for permit (no # issued yet) on 4/12/96 and paid \$100. The correct fee is only \$50 for the 0.05 cfs noted in the application.

Please complete the following based on the above information. The receipt number is identified for your convenience.

ACTION - Issue \$50 refund

REASON - Overpayment

RECEIPT - W020711

MAIL TO - Horseshoe Bend Hydroelectric Co.
C/O Mark H. Dawson, P.E.
Manager of Operations
PO Box 2797
Boise, ID 83701

(tel 345-7515)

c: Application File

AUG 09 1996

65-13662

HORSESHOE BEND HYDROELECTRIC CO
PO BOX 2797
BOISE, ID 83701

Source: GROUNDWATER

Diversion Pt: LOT 5 (SWNE) Sec 32 T 07N R 02E in BOISE County.

Use: COOLING	(	0.050 CFS)
Total Diversion:	(	0.050 CFS)

Date Filed: 4/12/1996

In:= BOISE County

T07N R02E S32 Lot 5 SWNE

APR 12 1996
65-13662

HBHC
HORSESHOE BEND HYDROELECTRIC COMPANY

RECEIVED

APR 12 1996

**WATER RESOURCES
WESTERN REGION**

Mr. Mel Schulte
Adjudication Bureau
Idaho Department of Water Resources
2735 Airport Way
Boise, Idaho 83705-5082

April 8, 1996

Subject: Application for Permit to use Groundwater
 Horseshoe Bend Hydroelectric Project

Dear Mr. Schulte:

Attached is an application for a permit to use groundwater as a source for cooling water at the Horseshoe Bend Hydroelectric Project site near Horseshoe Bend, Idaho. As we discussed in your office on April 3, 1996, this is a little different than a typical well.

The powerhouse was constructed in 1993 and 1994 by Simplot Construction for the Horseshoe Bend Hydroelectric Company. This work was done under Federal Energy Regulatory Commission (FERC) permit # 5376, with supplementary permits and oversight from: the Corps of Engineers; Idaho Department of Environmental Quality; U.S. Fish and Wildlife Service; U.S. Bureau of Reclamation; Idaho Department of Fish and Game; and other agencies, including our 3500 cfs power generation permit from your IDWR.

The type of turbine used in this project requires that the equipment be located below the tailwater elevation. As a result, most of the powerhouse is underground. During construction the powerhouse site was dug out approximately 60 feet deep and dewatered to permit placing of concrete for the building. As the structure was built up, the hole around it was filled in with river gravels, and the dewatering well was extended upward by adding sections of 24" galvanized culvert. As you can see on the attached sketch, the bottom 20' section of culvert is slotted to allow entry of water, and the upper sections are solid pipe.

APR 12 1996

APR 09 1996

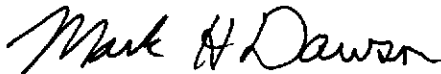
The final configuration is shown on the attached pages. It is our contention that the water pumped from the well is essentially coarsly filtered tailrace water. The water is used to keep the turbine shaft seals wet, and is run through heat exchangers to cool the oil from the turbine bearings. When the water exits these devices, it flows into the powerhouse sump, where it is pumped back into the tailrace. Normally this cooling is accomplished by taking water directly off of the penstock. However, there is a considerable volume of sand passing through the project, and we are looking for cleaner cooling water.

We request a variance on the strict application of the Well Construction Standards so that we can use the existing well. The water use is non-consumptive, and there are no domestic facilities at the site, which is normally unmanned. The casing is of thinner gage than specified in the Standards, but it is our experience that culverts last in excess of 30 years in this area. The casing does not extend above the ground, which theoretically might increase the chances of contaminating ground water with surface water. However, the well is constructed in a porous gravel fill next to the tailrace, which is excavated to a depth of 45' nearby. Any groundwater recharge in this area is being done by the tailrace, and will not be changed by the physical characteristics of a well in the porous backfill surrounding the powerhouse. Any surface water that does not soak into the gravel runs into the tailrace, which is in direct communication with the strata penetrated by the well.

Thank you for your help. Please call if there are any further questions.

Sincerely,

HORSESHOE BEND HYDROELECTRIC COMPANY



Mark H. Dawson, P.E.
Manager of Operations

Enclosures:

- Site Plan
- Powerhouse Site Plan
- Dewatering Well
- Powerhouse Section A-A
- Application for permit to use water

AUG 09 1980

**OFFICERS AND DIRECTORS OF HORSESHOE BEND HYDROELECTRIC
COMPANY**

<u>OFFICERS</u>	<u>NAME</u>	<u>ADDRESS</u>
President	Larry B. Barnes	1401 Shoreline Drive Boise, Idaho 83702
Treasurer	Joe D. Davis	1401 Shoreline Drive Boise, Idaho 83702
Secretary	Christopher W. Clark	1401 Shoreline Drive Boise, Idaho 83702
Assistant Secretary	Kathy B. Pfister	1401 Shoreline Drive Boise, Idaho 83702

DIRECTORS

Larry B. Barnes	1401 Shoreline Drive Boise, Idaho 83702
Joe D. Davis	1401 Shoreline Drive Boise, Idaho 83702

OFFICERS.HBH