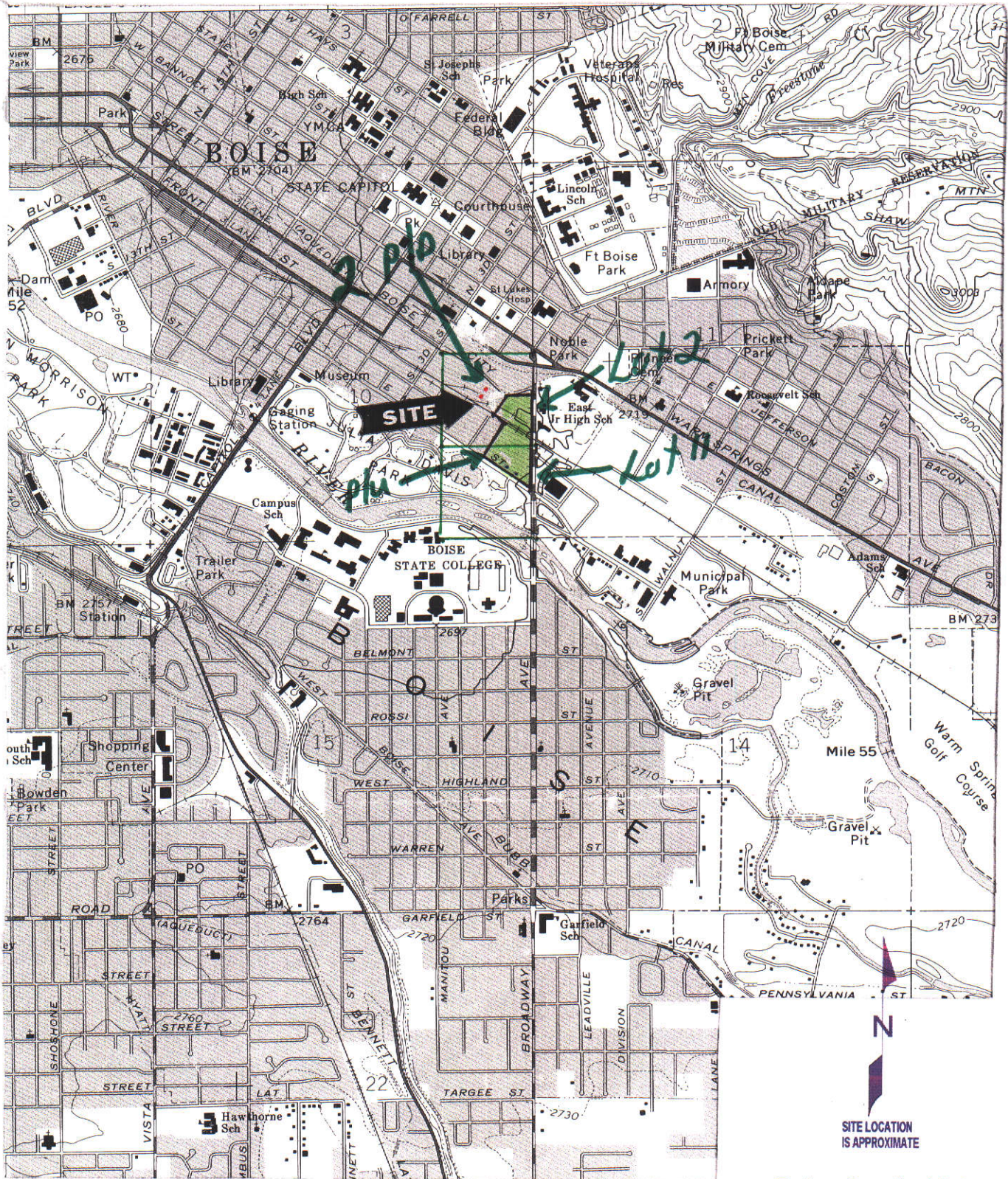


Topographic Map

Plate 1



Materials Testing & Inspection
 7446 West Lemhi Street
 BOISE, IDAHO 83709
 (208) 376-4748 FAX (208) 322-6616
 E-MAIL: mti@mti-id.com

Water Center / Idaho Place Project
Broadway & Front Streets
Boise, Idaho 83702
Date: 19 October 2001
Modified from USGS By NEI

Boise South, Idaho

43116-E2-TF-024

20 FOOT CONTOUR INTERVAL

1972 Photoinspected 1976

Sec. 10, T3N, R2E

MICROFILMED

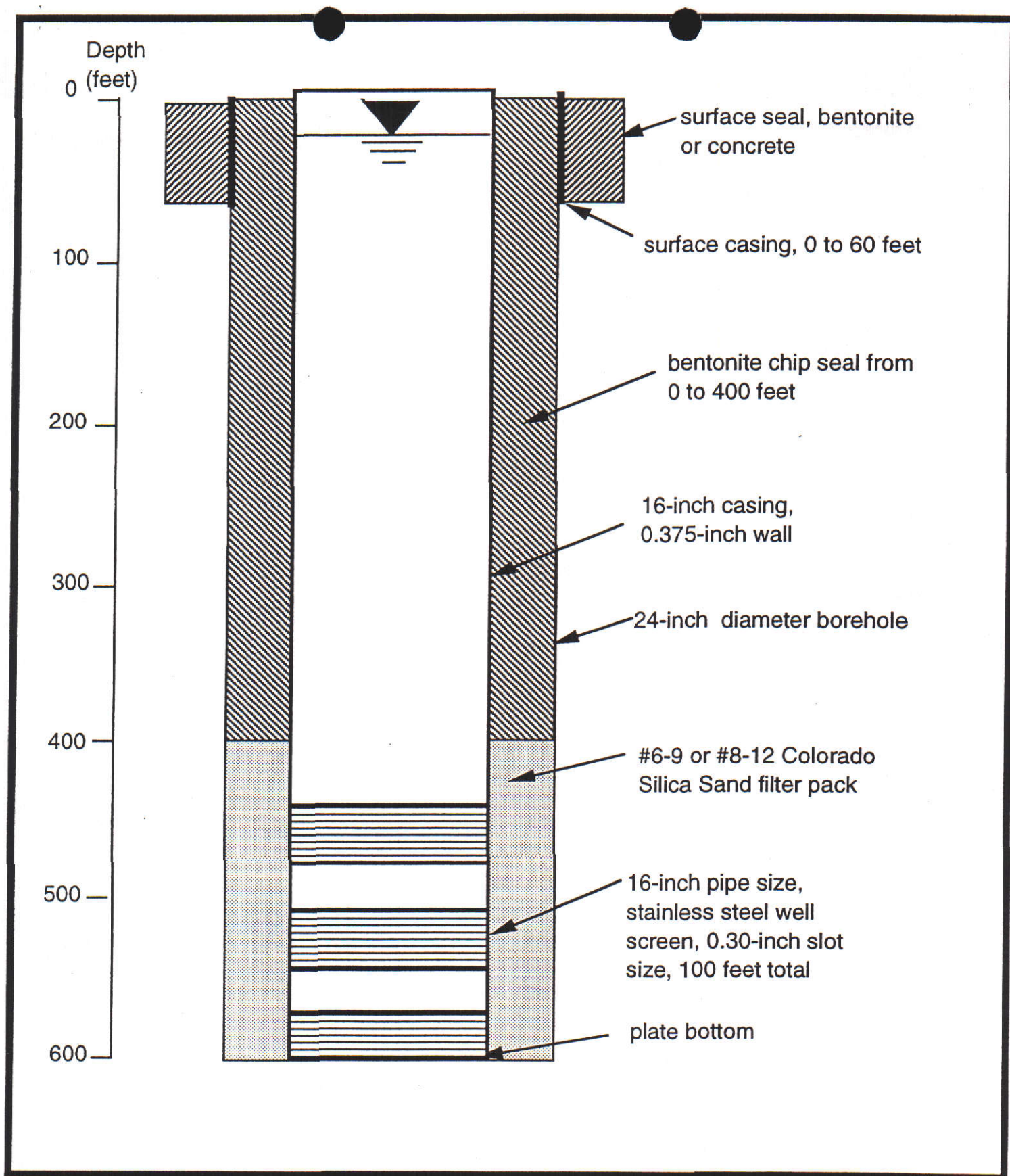
SEP 23 2002

63-31354

MAD

Water Center/Idaho Place Well Locations & Neighboring Wells

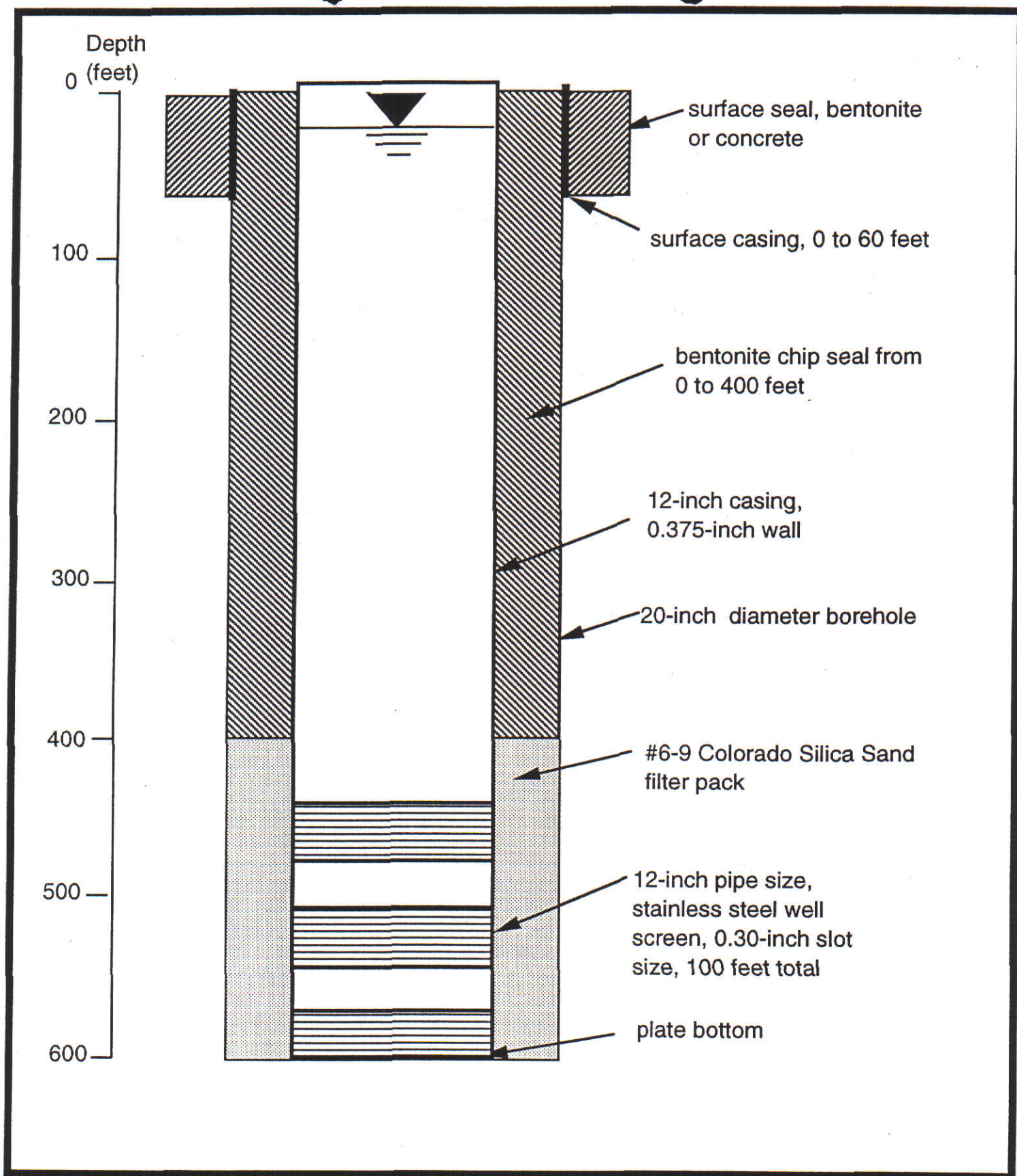




CONCEPTUAL DESIGN
WATER CENTER COOLING WATER PRODUCTION WELL

MICROFILMED

SEP 23 2002



CONCEPTUAL DESIGN

IDAHO PLACE COOLING WATER INJECTION WELL

SEP 23 2002

Water Center/Idaho Place Well Project



63-31354 Civic Partners
3N 2E S10 NESE & SESE

6/20/02 Im

POD for 2 wells

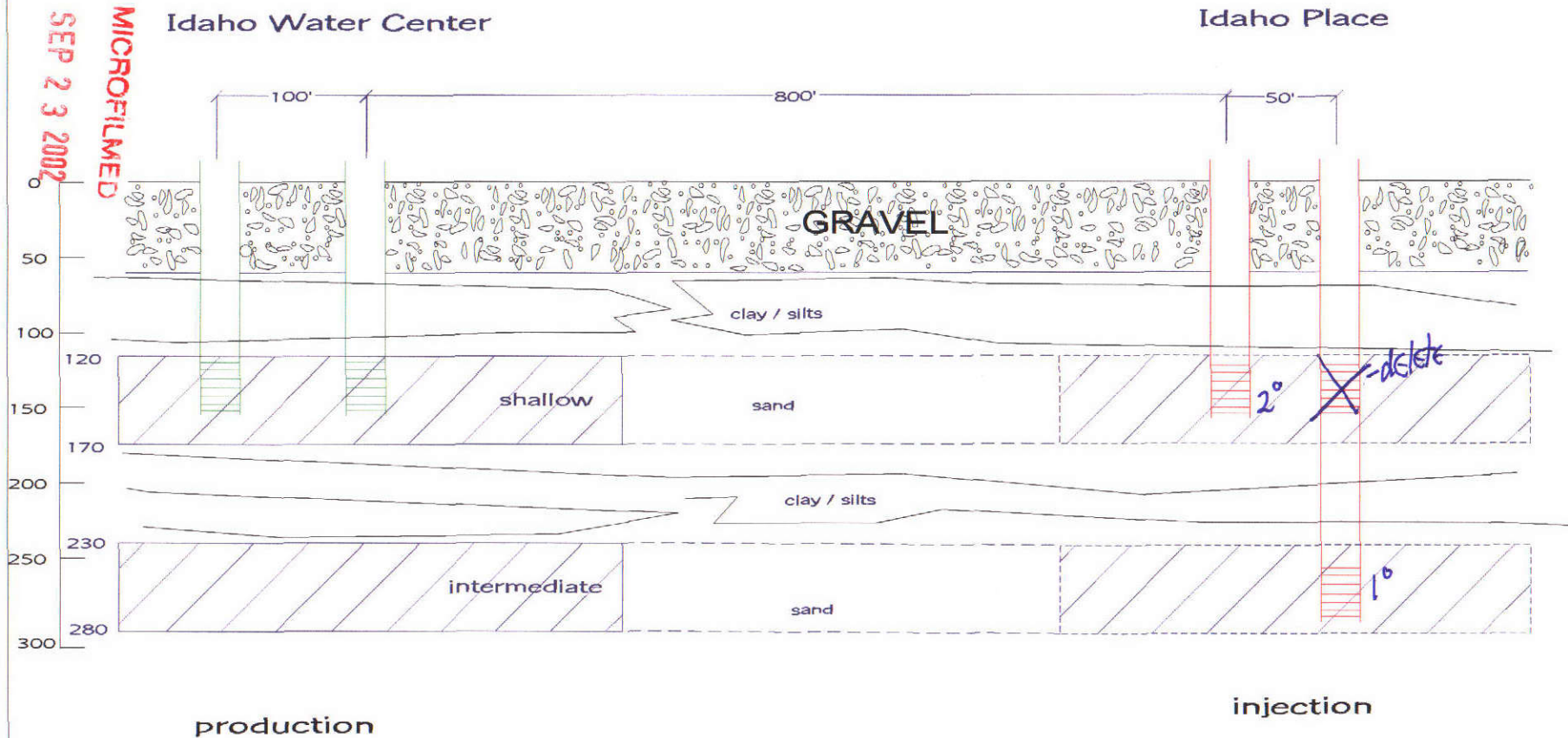
NESE

POU for lots 2 and 11

SESE

SEP 23 2002

Well Couplet Section Option 3 (Modified)



**Materials
Testing &
Inspection**

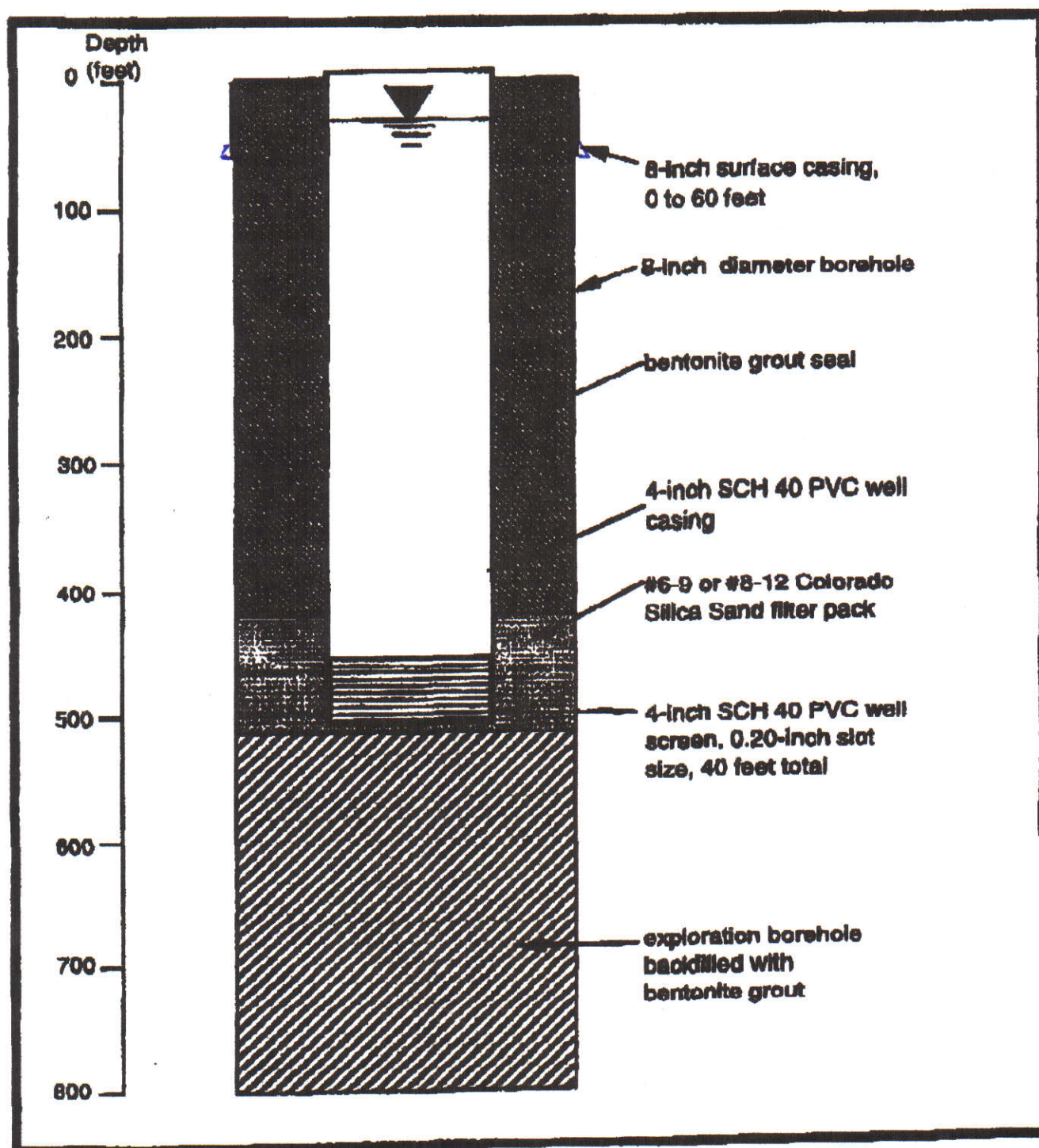
7446 West Lemhi Street
BOISE, IDAHO 83709
(208) 376-4748 FAX (208) 322-6515
E-MAIL: mti@mti-id.com

IWC / IP Groundwater Cooling
Front & Broadway Boise, Idaho
Drawing NO. B10979e
Date: 17 January 2002
Drawn By: KEL

Dec-10-2001 03:51pm From-MATERIALS TESTING & INSPECTION

+2083226515

T-108 P.003/003 F-966



**CONCEPTUAL DESIGN
WATER CENTER EXPLORATION WELL***
(*assumes exploration well is completed as an observation well
rather than abandoned by filling with bentonite grout)

Received Dec-10-2001 02:58pm

From-2083226515

To-MATERIALS TESTING &

Page 002

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SEP 23 2002

State of Idaho
Department of Water Resources
Permit to Appropriate Water

NO. 63-31354

Priority: 10/24/2001

Maximum Diversion Rate: 3.00 CFS

This is to certify, that **CIVIC PARTNERS**
380 S 4TH ST STE 203
BOISE ID 83702

has applied for a permit to appropriate water from:

Source: GROUND WATER

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	3.00 CFS

LOCATION OF POINTS OF DIVERSION:

GROUND WATER L2 NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 10, Twp 03N, Rge 02E, B.M., ADA County
GROUND WATER L2 NE $\frac{1}{4}$ SE $\frac{1}{4}$ Sec. 10, Twp 03N, Rge 02E, B.M., ADA 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	
03N 02E 10													X				X
													L 2				L 11

CONDITIONS OF APPROVAL

1. Proof of application of water to beneficial use shall be submitted on or before **August 01, 2003**.
2. Subject to all prior water rights.
3. Use of water under this right shall be non-consumptive. All ground water diverted shall be injected back into the same aquifer from which it was diverted. Failure to directly replace the ground water diverted is cause for the director to cancel the permit or revoke any subsequent license that may be issued.
4. The use of water under this right shall not injure other water rights. The test for injury includes a change in aquifer temperature that might negatively affect the beneficial use authorized by prior water rights.
5. Water shall not be diverted from the points of diversion authorized by this permit until injection well permits are issued by the department, and the injection wells are constructed as required by the injection well permits.
6. Right holder shall comply with the drilling permit requirements of Section 42-235, Idaho Code.
7. Water diverted for cooling shall be used in a closed loop system and shall not be exposed to or mixed with other water, fluids, or chemicals before injection.
8. Use of water under this approval shall comply with applicable water quality standards of the Department of Environmental Quality.

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State of Idaho
Department of Water Resources
Permit to Appropriate Water

NO. 63-31354

9. After specific notification by the Department, the right holder shall install a suitable measuring device or shall enter into an agreement with the Department to determine the amount of water diverted from power records and shall annually report the information to the Department.
10. Water bearing zone to be appropriated is 100 - 300 feet.

This permit is issued pursuant to the provisions of Section 42-204, Idaho Code. Witness the signature of the Director, affixed at Boise, this 15th day of August, 2002


for **KARL J DREHER, Director**

MICROFILMED

SEP 10 2002

Ident. No. 63. 31354

RECEIVED

MAY 20 2002

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

RECEIVED

AUG - 9 2002

WATER RESOURCES
WESTERN REGION

To appropriate the public waters of the State of Idaho

Department of Water Resources

1. Name of Applicant Civic Partners Phone (949) 975-0223
Mailing address 380 So. 4th Street, Suite 203, Boise, ID 83702
2. Source of water supply groundwater which is a tributary of N/A
3. Location of point of diversion is Township 3N Range 2E Sec. 10 in the NE $\frac{1}{4}$,
SE $\frac{1}{4}$, Govt. Lot 2, B.M., Ada County;
additional points of diversion if any: none (see Remarks)
4. Water will be used for the following purposes:
Amount 3 cfs for cooling 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)
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) 3 cfs and/or (b) _____
cubic feet per second acre feet per annum
6. Proposed diverting works:
a. Describe type and size of devices used to divert water from the source electric submersible pumps with piping to heat exchangers
b. Height of storage dam N/A feet; active reservoir capacity _____ acre-feet; total reservoir capacity N/A acre-feet
c. Proposed well diameter is 12 inches; proposed depth of well is 200 feet
d. Is ground water with a temperature of greater than 85°F being sought? no
e. If well is already drilled, when? N/A; Drilling firm _____
Well was drilled for (well owner) _____; Drilling Permit No. _____
7. Time required for completion of works and application of water to proposed beneficial use is 1 years (minimum 1 year)
8. Description of proposed uses (if irrigation only, go to item 9):
a. Hydropower; show total feet of head and proposed capacity in kW. N/A
b. Stockwatering; list number and kind of livestock. N/A
c. Municipal; show name of municipality. N/A
d. Domestic; show number of households. N/A
e. Other; describe fully. non-consumptive use of cold groundwater for cooling purposes

MICROFILMED

SEP 23 2002

AMENDED

SEE Attached NARRATIVE RECEIVED 5/24/02

3. Description of place of use:

a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.

b. 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	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
3N	2E	10													L			L	
															L.2			L.11	

Total number of acres to be irrigated N/A

10. Describe any other water rights used for the same purposes as described above. N/A

11. a. Who owns the property at the point of diversion? Civic Partners

b. Who owns the land to be irrigated or place of use? Civic Partners

c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: N/A

12. Remarks: a. Non-consumptive use

b. Drilling method will be direct (mud) or reverse rotary

c. Water bearing zone to be appropriated is 100' to 300'

d. Two wells proposed located in NE1/4 SE1/4, sec. 10

13. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8 1/2"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.)

SEE ORIGINAL

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

Signature of Applicant (and title, if applicable)

Received by RL Date 5/24/02 Time 10:00 am Preliminary check by RL
 Fee \$ _____ Receipted by _____ # _____ Date _____
 Publication prepared by _____ Date _____ Published in _____
 Publication approved _____ Date _____

SEE 10/24/01 original for details. NO amendment fee to reduce Appl. w/o re-advertising. -RL

MICROFILMED

APR 23 2002



☐ Environmental Services ☐ Geotechnical Engineering ☐ Construction Materials Testing ☐ Special Inspections

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WESTERN REGION OFFICE
2735 Airport Way
Boise, Idaho 83705

RECEIVED

MAY 20 2002

WATER RESOURCES
WESTERN REGION

Subject: **Idaho Water Center/Idaho Place proposed Groundwater Cooling System
Revision 3 (Mar. 25, 2002)**

Ladies and Gentlemen:

A cooling well system consisting of two production and two injection wells has been proposed for the Idaho Water Center and Idaho Place development. The purpose of the groundwater cooling system is to make use of natural resources in order to offset the need for electrical power from existing utilities. We believe the proposed system to be an appropriate, non-consumptive use of the groundwater resource. The proposed system would be developed as follows.

LOCATION

The project site is located in downtown Boise, north of the Boise River and consists of the northwest and southwest corner parcels of the intersection of Broadway and Front Streets. The two parcels involved are referred to in construction documents as *Idaho Water Center*, located at the northwest corner of Broadway and Front, and *Idaho Place*, located at the southwest corner of Broadway and Front. The project site occupies a portion of the NE $\frac{1}{4}$ SE $\frac{1}{4}$ and the SE $\frac{1}{4}$ SE $\frac{1}{4}$, section 10, Township 3 North, Range 2 East of the Boise Meridian. For hydrogeologic purposes, the exploration and production wells will be constructed on the *Idaho Water Center* parcel (NE $\frac{1}{4}$ SE $\frac{1}{4}$) and the injection wells will be constructed on the *Idaho Place* parcel (SE $\frac{1}{4}$ SE $\frac{1}{4}$) of the project site.

EXPLORATION

A four-inch, steel-cased exploration well completed to a maximum depth of 800-feet below ground surface (bgs) will be constructed on the Water Center site using a mud rotary drilling system. We anticipate cold-water bearing formations to exist at elevations above 800-feet bgs. This project will not involve the use of geothermal groundwater and we believe this system will not have an impact on that resource. After completing the borehole, geophysical logging to determine aquifer conditions will be conducted. The logging will include caliper measurement, resistivity, spontaneous potential, temperature, and natural gamma radiation. The target peak production/injection capability for the proposed system is approximately 1200-gallons per minute (gpm).

Temporary wells will be constructed and pump testing will be conducted at various elevations or zones, which represent different water-bearing formations. This zone testing method will be accomplished as follows: Well casing with approximately 40-feet of screen will be installed to the deepest aquifer zone, with backfill beneath the screen. Gravel pack will be placed opposite the well screen and an approximately 10-foot layer of bentonite chip plug installed above the gravel. The temporary well will then be developed, after which a constant-rate pump test of 100-gpm for 4- to 8-hours will commence. Near the end of each pumping test, water samples will be collected for geochemical analysis. Water temperature, pH, TDS, and electrical conductivity will also be recorded throughout the pump testing. After completing the pump testing at this elevation or zone, the screen will be pulled to the next water-bearing formation, collapsing the gravel pack and bentonite seal into the previous zone. The well will be developed and tested as before and the process would be repeated. We



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anticipate zone testing at four or five different elevations. *This work has been completed as of the date of this revision.*

ANALYSIS

The data collected from zone testing will be used to determine the following: 1) production and drawdown; water temperature, pH and other characteristics; 2) chemical similarity of the zones or formations; 3) geochemistry to evaluate effects of the water, specifically precipitation caused by temperature changes and water mixing, corrosion or encrustation of the screens and mechanical elements; 4) the geology and thickness of each formation. This information will be used in designing the mechanical systems, to determine the appropriate formations or zones for deriving production waters, to select the formations best suited for receiving injection waters, the maximum anticipated production capability, and the overall feasibility of the proposed system. Information gained will also be used to respond to any protest of the Water Right application.

Additionally, we intend to model the characteristics of the aquifer(s) in order to predict the thermal/hydraulic and geochemical responses of the production/injection couplet. We expect this modeling to be performed and evaluated by the Idaho Water Resources Research Institute in conjunction with other research programs and experts. Preliminary estimates from the modeling will be made prior to construction of additional wells with final adjustment and calibration of the system to occur after the remaining wells are developed and tested. *This work has been completed as of the date of this revision.*

CONSTRUCTION

After the necessary permits are in place and the Water Right for non-consumptive use has been established, construction of the two production wells will begin. The locations of the two production wells, based upon constraints of the building layouts, have been selected on the Idaho Water Center site. Both wells will be located outside of any structures to allow future maintenance and rehabilitation. Each well head will be completed at-grade within a hardscape feature along Avenue A. The wells will likely be constructed using cable-tool techniques by licensed well drillers. Construction will use 12-inch diameter, steel casing to 200-feet. Stainless steel screens, gravel pack, and bentonite seals will be used to achieve high-quality wells equal to municipal standards. Total depth of the wells will be determined after completion of the exploration well data analysis and will be based upon the parameters described above. The two wells will likely be finished at the same depth and derive water from the same formation or zone. The wells will be spaced apart from each other so as to limit the effect of interaction of drawdown. For design purposes the spacing distance is roughly 100-feet. We anticipate construction of the two production wells to begin in early-April and occur sequentially.

The two injection wells will be constructed on the Idaho Place site immediately after construction of the production wells. The wells will likewise be located outside of any structure within a landscape feature to allow for future maintenance and rehabilitation. Each well head will be completed at-grade within a landscape or hardscape feature. The wells will be constructed using rotary techniques. Total depth of the wells will be determined after completion of the exploration well data analysis and will be based upon the parameters described above, but will not exceed 400-feet. The two wells will be completed into different water-bearing zones, which are locally separate, but hydraulically linked to one another and to the production water zone. The wells will be spaced a minimum of 25-feet from each other.

GEOLOGY

The proposed wells will derive and inject groundwater from sand formations within a single regional aquifer of the Idaho Group sediments. Surface geophysical data for the downtown Boise area suggests the presence of

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10/22/2001



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faults in these sediments and underlying volcanic rocks. The faults tend to cut the aquifer into hydraulically isolated blocks. The faulting is evident during pump testing by sustainable yields being significantly lower than initial, short-term yields. This faulting impacts the proposed groundwater cooling system in both a positive and negative manner. Faulting may limit overall sustainable production rates, but also limit the amount of thermal exchange within the couplet. It is our goal to understand the aquifer conditions at the project site, including faulting, to make use of the geology in designing a system that has the highest possible degree of success.

Our preliminary geologic/hydrologic investigation suggests that initial well yields ranging from 500- to 2000-gpm are probably from high-quality wells. Based on the information, we are targeting zones from 400- to 800-feet bgs. The potential to develop wells capable of producing/injecting 1250-gpm is moderate to good; the potential for a 2500-gpm system is fair. Equally important as yield is thermal exchange between the production/injection couplet. Our review of well logs in the vicinity of the project site has revealed the following:

- The 3200-foot Boise City Geothermal Injection Well (2500-feet west) – intermittent sand aquifers to a depth of 780 bgs. Non-water bearing mudstone at 1500-feet bgs; apparently an aquitard capping the geothermal aquifers found below 2000-feet.
- The 2125-foot Capitol Mall Geothermal Well #1 (2500-feet north) – interbedded sand and clay to 370-feet bgs. Clay with thin sand lenses to a depth of 735-feet.
- The 505-foot Beacon Well (4200-feet southeast) – intermittent sand aquifers to 505-feet. Completed from 200 to total depth, produced 1500 gpm with 139-feet of drawdown for domestic use.
- The 1000-foot Lincoln Street Test Well (4500-feet southwest) – sand aquifers between 300- and 500-feet. Clay and mudstone below 500-feet.
- The 415-foot Long Meadow Well (7000-feet southeast) – produced 1775 gpm with 66 feet of drawdown.

SUMMARY

The proposed Water Center/Idaho Place groundwater cooling system requires an average of 90-gpm and a maximum of 1200-gpm to cool seven to ten structures within a complex located on the north and south sides of Front Street. The heat load (ΔT) to be added to the water prior to injection will be approximately 20° F. We anticipate the temperature of the groundwater to be 61° F. The system will be used to replace traditional chillers and cooling towers and reduce the need for electrical power. A traditional chiller system will be installed to further reduce the temperature of groundwater prior to heat exchanging. The closed-loop groundwater cooling system will be completely sealed and pressurized to eliminate the possibility of aeration and mixing with process water. We anticipate the need to maintain and service these wells every 5- to 20-years depending on use and water quality.

We intend to explore the underlying strata with a single well and perform zone testing, geophysical logging, water chemistry analysis, and thermal/hydraulic and geochemical modeling of the various water-bearing formations encountered. The exploration well will be used throughout the construction of all subsequent wells, but will eventually be abandoned. Our design calls for two production wells located on the north side of Front Street (Water Center) and two injection wells on the south side of Front Street (Idaho Place). The wells will target the water-bearing formations from 100-to 300-feet bgs. The two sets of wells will be separated by approximately 800-feet and will be connected by supply and return piping extending beneath Front Street.

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MATERIALS TESTING & INSPECTION

PAGE # 4 OF 4

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October 22, 2001

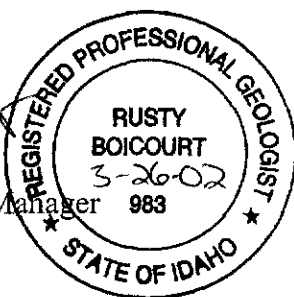
☐ Environmental Services ☐ Geotechnical Engineering ☐ Construction Materials Testing ☐ Special Inspections

We believe the proposed non-consumptive groundwater system to be an appropriate use of the natural resource and will not impact the geothermal groundwater. Likewise, we believe the system will not adversely affect water quality or otherwise harm existing wells or the aquifer as a whole. However, we do understand the concerns of neighboring water users and are prepared to respond to any protest of the proposed system using the significant data we have obtained from the exploration well and subsequent evaluation. In addition to the long-term cost savings to the property owner, the benefit of this system to the community will include: reduced demand for electrical power, a stable and renewable source for indoor cooling, a model for the development of alternative energy sources, and a better understanding of the geology and hydrology of the Boise Front Ground Water Management Area.

Respectfully submitted,

Rusty Boicourt

Rusty Boicourt, P.G.
Environmental Services Manager



MICROFILM

SEP 24 2002

RECEIVED

OCT 24 2001

Ident. No. 63-31354

FORM 202
12/99

RECEIVED

NOV 28 2001

WATER RESOURCES
WESTERN REGION

WATER RESOURCES
WESTERN REGION

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name of Applicant Civic Partners Phone (949) 975-0223
Mailing address 380 So. 4th Street, Suite 203, Boise. ID 83702

2. Source of water supply groundwater which is a tributary of N/A
3. Location of point of diversion is Township 3N Range 2E Sec. 10, in the NE $\frac{1}{4}$,
SE $\frac{1}{4}$, — $\frac{1}{4}$, Govt. Lot 2, B.M., Ada County;

additional points of diversion if any: Two wells on same location *B. 11/16*

4. Water will be used for the following purposes:
Amount 6 cfs for cooling 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)
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) 6 cfs and/or (b) —
cubic feet per second acre feet per annum

6. Proposed diverting works:

a. Describe type and size of devices used to divert water from the source electric submersible pumps with piping to heat exchangers

b. Height of storage dam N/A feet; active reservoir capacity — acre-feet; total reservoir capacity N/A acre-feet

c. Proposed well diameter is 12 - 18 inches; proposed depth of well is 800 feet

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

e. If well is already drilled, when? N/A; Drilling firm —;
Well was drilled for (well owner) —; Drilling Permit No. —

7. Time required for completion of works and application of water to proposed beneficial use is 1 years (minimum 1 year)

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

a. Hydropower; show total feet of head and proposed capacity in kW. N/A
b. Stockwatering; list number and kind of livestock. N/A
c. Municipal; show name of municipality. N/A
d. Domestic; show number of households. N/A
e. Other; describe fully. non-consumptive use of cold groundwater for cooling purposes

ORIGINAL

Supercoded by 5/20/02
Amended Appl.

MICROFILMED

OCT 23 2001

9. Description of place of use:

- a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- b. 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	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
3N	2E	10													L			L	
															4.2			4.4	

Total number of acres to be irrigated N/A

10. Describe any other water rights used for the same purposes as described above. N/A

11. a. Who owns the property at the point of diversion? Civic Partners
- b. Who owns the land to be irrigated or place of use? Civic Partners
- c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: N/A

12. Remarks: a. Non-consumptive use
- b. Drilling method will be direct (mud) or reverse rotary
- c. Water bearing zone to be appropriated is 200' to 800'

13. **MAP OF PROPOSED PROJECT REQUIRED** - Attach an 8½"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.)

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

Signature of Applicant (and title, if applicable)

Received by RL Date 10/24/01 Time 4:30 Preliminary check by RL

Fee \$ 450.00 Received by RL # W028446 Date 10/25/01

Publication prepared by AT Date 12-6-13-01 Published in THE IDAHO STATESMAN

Publication approved _____ Date _____

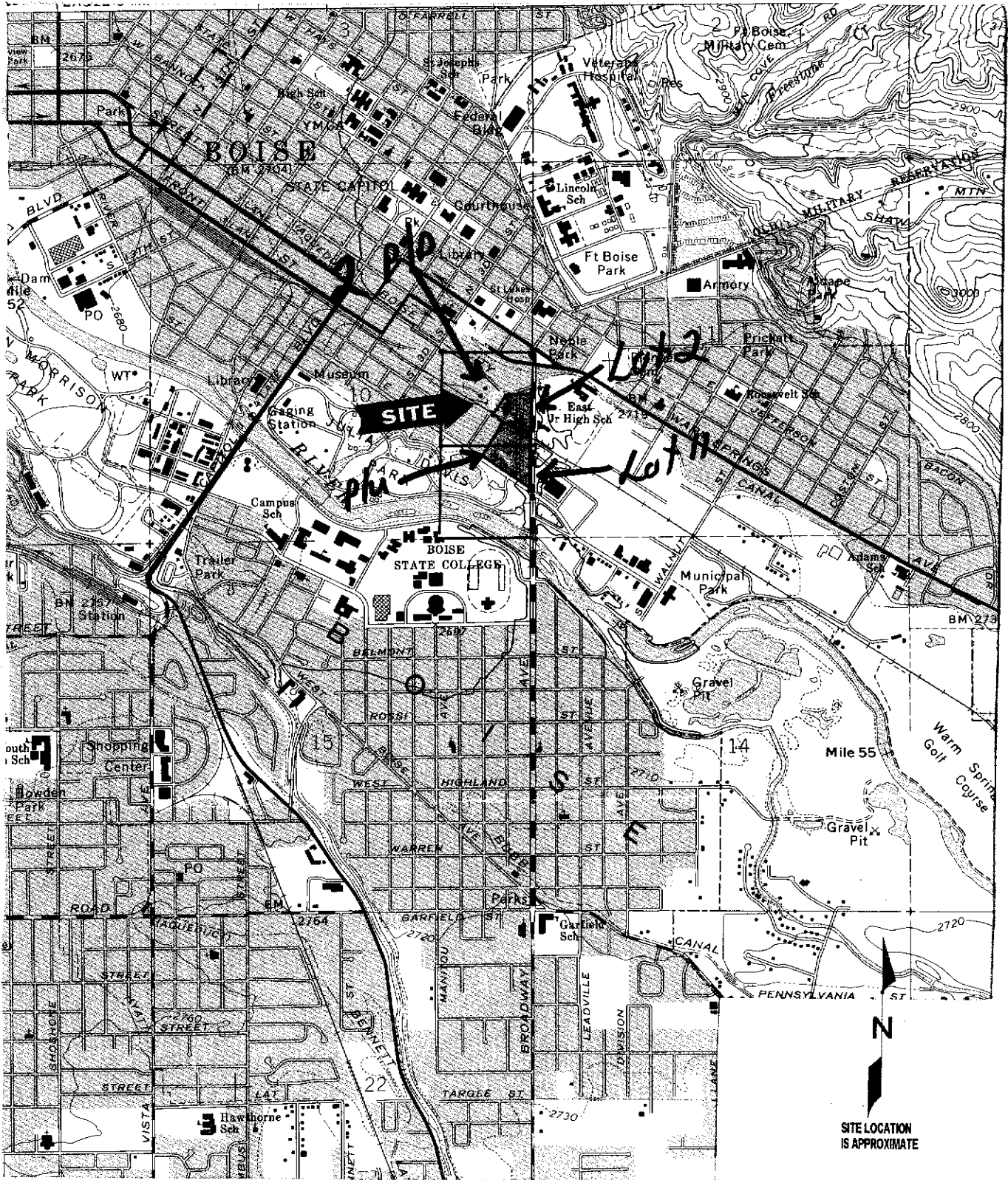
check received w/ 10/24 submittal.

tax signature page included w/ 10/24 submittal.

original " " received 11/28/01. -RL

MICROFILMED

SEP 23 2002



**Materials
Testing &
Inspection**

7446 West Lemhi Street
BOISE, IDAHO 83709
(208) 376-4748 FAX (208) 322-6515
E-MAIL: mti@mti-id.com

**Water Center / Idaho Place Project
Broadway & Front Streets
Boise, Idaho 83702
Date: 19 October 2001
Modified from USGS By MFL**

Boise South, Idaho

43116-E2-TF-024

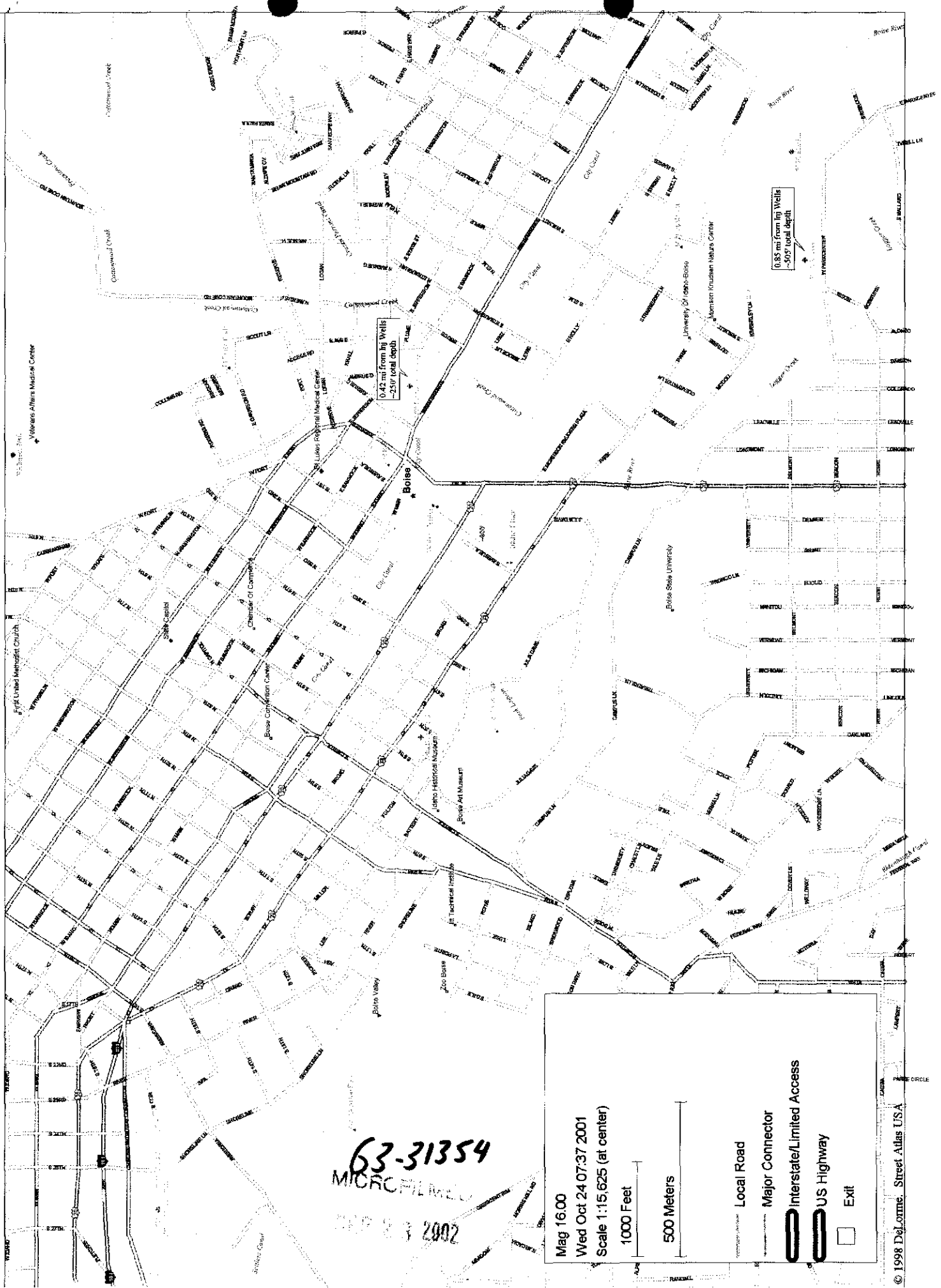
20 FOOT CONTOUR INTERVAL

1972 Photoinspected 1976

Sec. 10, T3N, R2E

63-31354

Water Center/Idaho Place Well Locations & Neighboring Wells



63-31354

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SEP 23 2002

Mag 16.00
Wed Oct 24 07:37 2001
Scale 1:15,625 (at center)

1000 Feet
500 Meters

Local Road
Major Connector
Interstate/Limited Access
US Highway
Exit



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STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WESTERN REGION OFFICE
2735 Airport Way
Boise, Idaho 83705

RECEIVED

NOV 28 2001

WATER RESOURCES
WESTERN REGION

Subject: **Water Center/Idaho Place proposed Groundwater Cooling System
Revision 1 (Nov. 28, 2001)**

Ladies and Gentlemen:

A cooling well system consisting of two production and two injection wells has been proposed for the Idaho Place and Water Center development. The purpose of the groundwater cooling system is to make use of natural resources in order to offset the need for electrical power from existing utilities. We believe the proposed system to be an appropriate, non-consumptive use of the groundwater resource. The proposed system would be developed as follows.

LOCATION

The project site is located in downtown Boise, north of the Boise River and consists of the northwest and southwest corner parcels of the intersection of Broadway and Front Streets. The two parcels involved are referred to in construction documents as *Water Center*, located at the northwest corner of Broadway and Front, and *Idaho Place*, located at the southwest corner of Broadway and Front. The project site occupies a portion of the NE $\frac{1}{4}$ SE $\frac{1}{4}$ and the SE $\frac{1}{4}$ SE $\frac{1}{4}$, section 10, Township 3 North, Range 2 East of the Boise Meridian. For hydrogeologic purposes, the exploration and production wells will be constructed on the *Water Center* parcel (NE $\frac{1}{4}$ SE $\frac{1}{4}$) and the injection wells will be constructed on the *Idaho Place* parcel (SE $\frac{1}{4}$ SE $\frac{1}{4}$) of the project site.

EXPLORATION

A four-inch, steel-cased exploration well completed to a maximum depth of 800-feet below ground surface (bgs) will be constructed on the Water Center site using a mud rotary drilling system. We anticipate cold-water bearing formations to exist at elevations above 800-feet bgs. This project will not involve the use of geothermal groundwater and we believe this system will not have an impact on that resource. After completing the borehole, geophysical logging to determine aquifer conditions will be conducted. The logging will include caliper measurement, resistivity, spontaneous potential, temperature, and natural gamma radiation. The target production/injection capability for the proposed system ranges from 1250- to 2500-gallons per minute (gpm).

Temporary wells will be constructed and pump testing will be conducted at various elevations or zones, which represent different water-bearing formations. This zone testing method will be accomplished as follows: Well casing with approximately 40-feet of screen will be installed to the deepest aquifer zone, with backfill beneath the screen. Gravel pack will be placed opposite the well screen and an approximately 10-foot layer of bentonite chip plug installed above the gravel. The temporary well will then be developed, after which a constant-rate pump test of 100-gpm for 4- to 8-hours will commence. Near the end of each pumping test, water samples will be collected for geochemical analysis. Water temperature, pH, TDS, and electrical conductivity will also be recorded throughout the pump testing. After completing the pump testing at this elevation or zone, the screen will be pulled to the next water-bearing formation, collapsing the gravel pack and bentonite seal into the previous zone. The well will be developed and tested as before and the process would be repeated. We anticipate zone testing at four or five different elevations.



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ANALYSIS

The data collected from zone testing will be used to determine the following: 1) production and drawdown; water temperature, pH and other characteristics; 2) chemical similarity of the zones or formations; 3) geochemistry to evaluate effects of the water, specifically precipitation caused by temperature changes and water mixing, corrosion or encrustation of the screens and mechanical elements; 4) the geology and thickness of each formation. This information will be used in designing the mechanical systems, to determine the appropriate formations or zones for deriving production waters, to select the formations best suited for receiving injection waters, the maximum anticipated production capability, and the overall feasibility of the proposed system. Information gained will also be used to respond to any protest of the Water Right application.

Additionally, we intend to model the characteristics of the aquifer(s) in order to predict the thermal and hydraulic responses of the production/injection couplet. We expect this modeling to be performed and evaluated by the Idaho Water Resources Research Institute in conjunction with other research programs and experts. Preliminary estimates from the modeling will be made prior to construction of additional wells with final adjustment and calibration of the system to occur after the remaining wells are developed and tested.

CONSTRUCTION

After the necessary permits are in place and the Water Right for non-consumptive use has been established, construction of the two production wells will begin. The locations of the two production wells, based upon constraints of the building layouts, have been selected on the Water Center site. Both wells will be located outside of any structures to allow future maintenance and rehabilitation. Each well head will be completed at-grade within a parking area or landscape/hardscape feature. The wells will be constructed using direct rotary or reverse rotary techniques by licensed well drillers. Construction will use 16-inch diameter, steel casing to 300-feet and then step-down to 12-inch casing below 300. Stainless steel screens, gravel pack, and bentonite seals will be used to achieve high-quality wells equal to municipal standards. Total depth of the wells will be determined after completion of the exploration well data analysis and will be based upon the parameters described above, but will not exceed 800-feet. The two wells will likely be finished at the same depth and derive water from the same formation or zone. The wells will be spaced apart from each other so as to limit the effect of drawdown. For design purposes the spacing distance is 50-feet, which may be modified after data analysis. We anticipate construction of the two production wells to begin in mid-January and occur sequentially.

The two injection wells will be constructed on the Idaho Place site immediately after construction of the production wells. The wells will likewise be located outside of any structure within a landscape feature to allow for future maintenance and rehabilitation. Each well will be finished approximately 18-inches above grade and encased within decorative concrete appurtenance for protection. If the injection wells are to be located in traffic areas, then they also will be finished at grade. The wells will be constructed using direct rotary or reverse rotary techniques. Total depth of the wells will be determined after completion of the exploration well data analysis and will be based upon the parameters described above, but will not exceed 800-feet. The two wells will likely be finished at the same depth and inject water into the same formation or zone, which may be different from, but hydraulically linked to, the production zone. The wells will be spaced a minimum of 50-feet from each other to limit the effect mounding. For both well types, a large diameter hole will be advanced to approximately 60-feet bgs using an auger rig. A surface casing and seal will be placed and the production or injection well installed inside the surface casing. We believe it will be easier and faster to remove the overlying gravels prior to advancement of the final wells. Well diagrams are included with this narrative.



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GEOLOGY

The proposed wells will derive and inject groundwater from sand formations within a single regional aquifer of the Idaho Group sediments. Surface geophysical data for the downtown Boise area suggests the presence of faults in these sediments and underlying volcanic rocks. The faults tend to cut the aquifer into hydraulically isolated blocks. The faulting is evident during pump testing by sustainable yields being significantly lower than initial, short-term yields. This faulting impacts the proposed groundwater cooling system in both a positive and negative manner. Faulting may limit overall sustainable production rates, but also limit the amount of thermal exchange within the couplet. It is our goal to understand the aquifer conditions at the project site, including faulting, to make use of the geology in designing a system that has the highest possible degree of success.

Our preliminary geologic/hydrologic investigation suggests that initial well yields ranging from 500- to 2000-gpm are probably from high-quality wells. Based on the information, we are targeting zones from 400- to 800-feet bgs. The potential to develop wells capable of producing/injecting 1250-gpm is moderate to good; the potential for a 2500-gpm system is fair. Equally important as yield is thermal exchange between the production/injection couplet. Our review of well logs in the vicinity of the project site has revealed the following:

- The 3200-foot Boise City Geothermal Injection Well (2500-feet west) – intermittent sand aquifers to a depth of 780 bgs. Non-water bearing mudstone at 1500-feet bgs; apparently an aquitard capping the geothermal aquifers found below 2000-feet.
- The 2125-foot Capitol Mall Geothermal Well #1 (2500-feet north) – interbedded sand and clay to 370-feet bgs. Clay with thin sand lenses to a depth of 735-feet.
- The 505-foot Beacon Well (4200-feet southeast) – intermittent sand aquifers to 505-feet. Completed from 200 to total depth, produced 1500 gpm with 139-feet of drawdown for domestic use.
- The 1000-foot Lincoln Street Test Well (4500-feet southwest) – sand aquifers between 300- and 500-feet. Clay and mudstone below 500-feet.
- The 415-foot Long Meadow Well (7000-feet southeast) – produced 1775 gpm with 66 feet of drawdown.

SUMMARY

The proposed Water Center/Idaho Place groundwater cooling system requires 1250-gpm to 2500-gpm to cool seven to ten structures within a complex located on the north and south sides of Front Street. The heat load (ΔT) to be added to the injectate water will be approximately 12° F. We anticipate the temperature of the groundwater to be 65 to 68° F. The system will be used to replace traditional chillers and cooling towers and reduce the need for electrical power. A small traditional cooling system will be installed to supplement the groundwater system during peak demand and also to allow for future maintenance and rehabilitation. We anticipate the need to maintain these wells every 5- to 20-years depending on use and water quality.

We intend to explore the underlying strata with a single well and perform zone testing, geophysical logging, water chemistry analysis, and thermal modeling of the various water-bearing formations encountered. The exploration well will be used throughout the construction of all subsequent wells, but will eventually be abandoned. Our design calls for two production wells located on the north side of Front Street (Water Center) and two injection wells on the south side of Front Street (Idaho Place). The wells will target the water-bearing formations from 200-to 800-feet bgs. The two sets of wells will be separated by approximately 800-feet and will be connected by supply and return piping extending beneath Front Street.



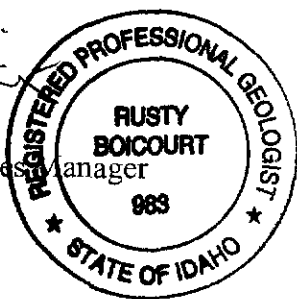
☐ Environmental Services ☐ Geotechnical Engineering ☐ Construction Materials Testing ☐ Special Inspections

We believe the proposed non-consumptive groundwater system to be an appropriate use of the natural resource and will not impact the geothermal groundwater. Likewise, we believe the system will not adversely affect water quality or otherwise harm existing wells or the aquifer as a whole. However, we do understand the concerns of neighboring water users and are prepared to respond to any protest of the proposed system using the significant data we will obtain from the exploration well. In addition to the long-term cost savings to the property owner, the benefit of this system to the community will include: reduced demand for electrical power, a stable and renewable source for indoor cooling, a model for the development of alternative energy sources, and a better understanding of the geology and hydrology of the Boise Front Ground Water Management Area.

Respectfully submitted,

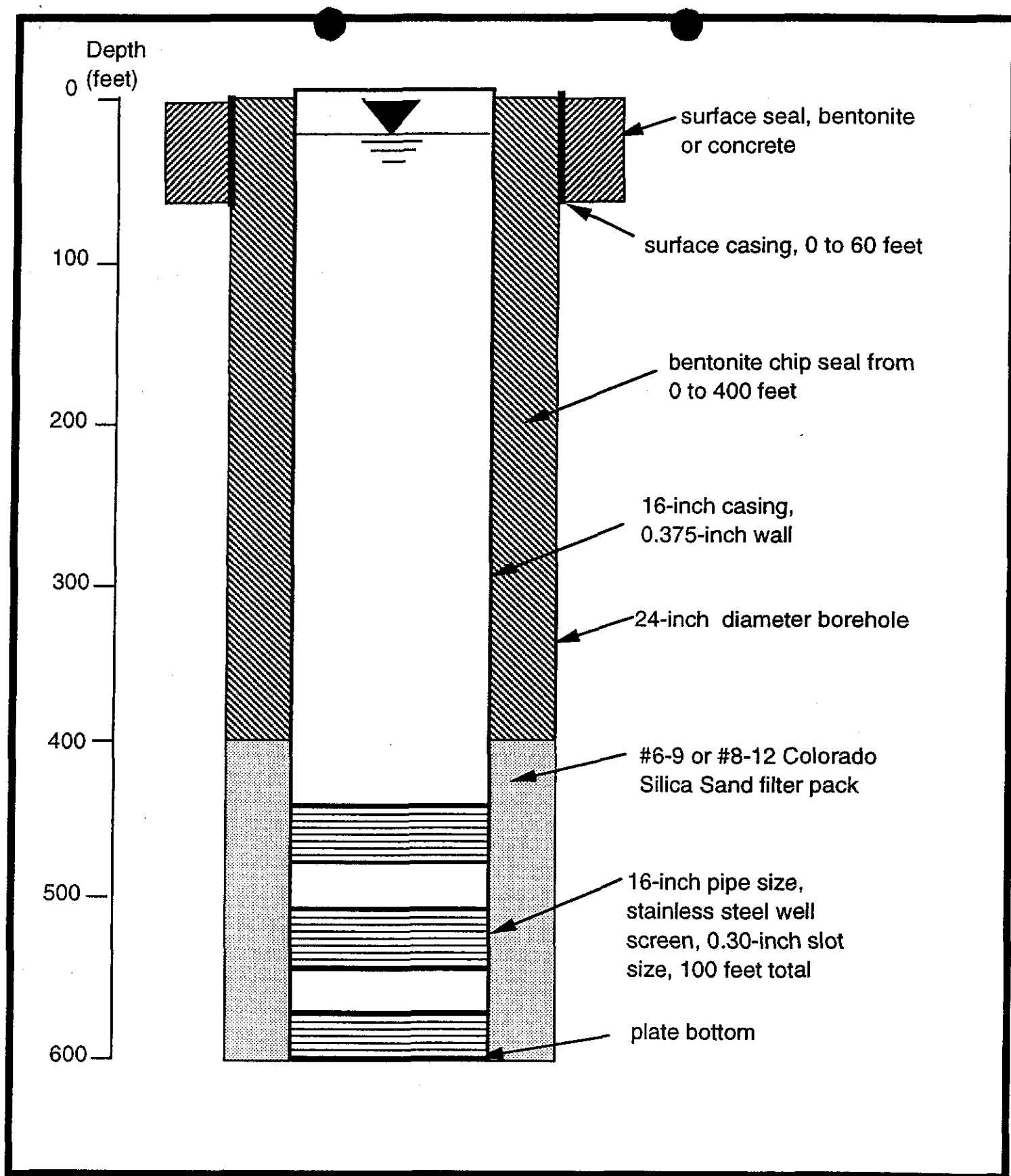
Rusty Boicourt

Rusty Boicourt, P.G.
Environmental Services Manager



MICROFILMED

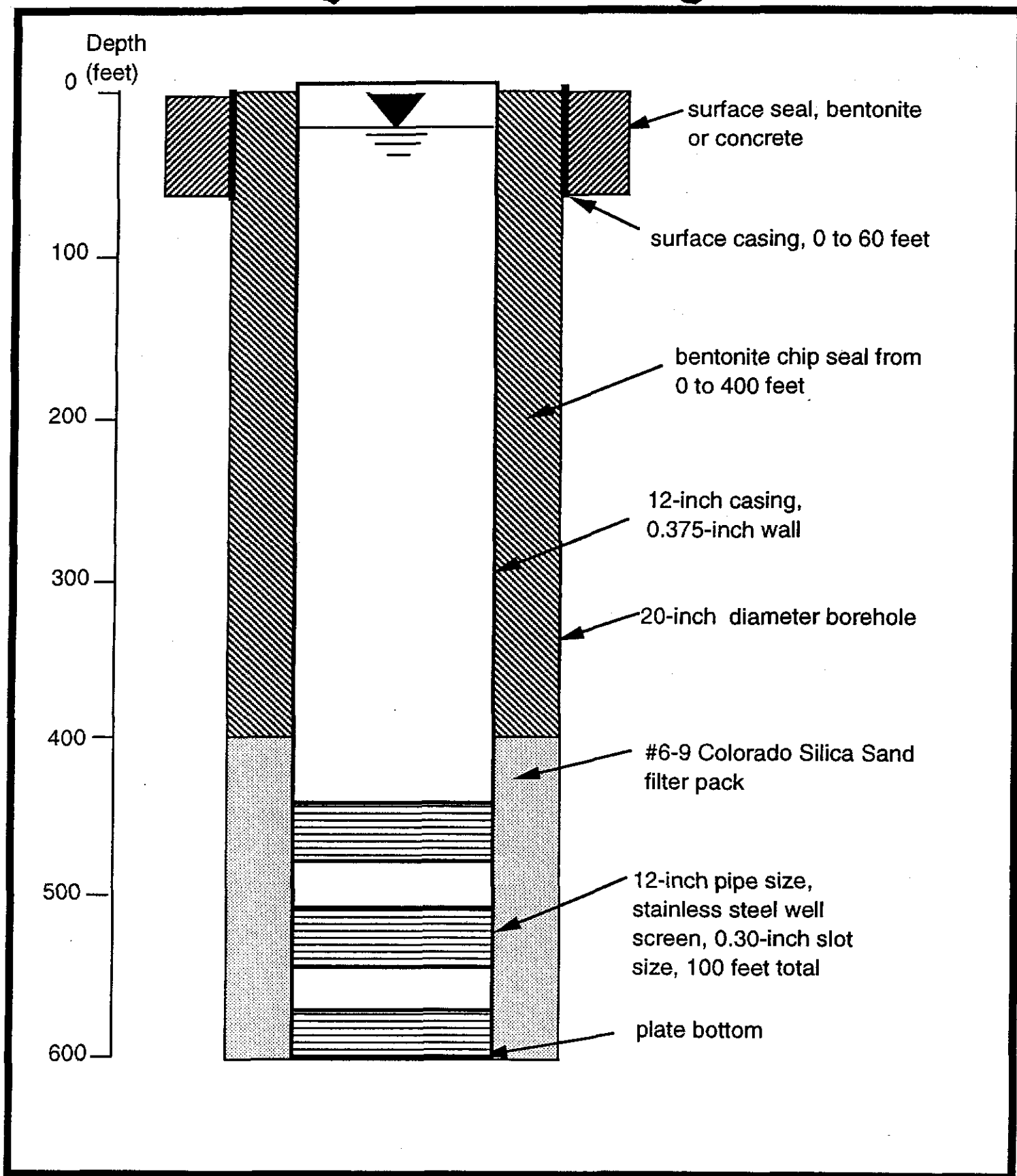
1997 1/22/97



CONCEPTUAL DESIGN WATER CENTER COOLING WATER PRODUCTION WELL

MICROFILM

SEP 23 2002



CONCEPTUAL DESIGN

IDAHO PLACE COOLING WATER INJECTION WELL

MICRO

SEP 23 2002



MATERIALS TESTING & INSPECTION

PAGE # 1 OF 1

November 28, 2001

f:\2001report\600-799\10681elidwr_groundwaternarrative.doc

☐ Environmental Services☐ Geotechnical Engineering☐ Construction Materials Testing☐ Special Inspections

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WESTERN REGION OFFICE
2735 Airport Way
Boise, Idaho 83705

RECEIVED

NOV 28 2001

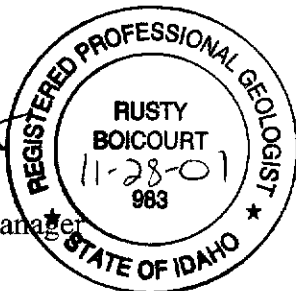
WATER RESOURCES
WESTERN REGION

Subject: **Mechanical Description for Water Center/Idaho Place Groundwater Cooling System**

The proposed cooling system for each of the Idaho Initiative Projects (Idaho Water Center, Idaho Place Phase 1, and Idaho Place Phase 2) are as follows: A conventional chilled water loop will be cooled via twin electric screw chillers (twin chillers and separate chilled water loops for each project). Pre-cooling this chilled water loop using groundwater and heat exchangers was previously explored, however the expected groundwater temperatures are too high for this level of cooling (shallow samples indicate groundwater temperatures in the range of 65°F to 68°F). The current approach is to utilize groundwater through pumped production and injection to provide a heat sink for rejecting chiller condenser heat. Energy based grant programs are currently being investigated to help offset the premium cost of groundwater well drilling. Production and injection wells are required because of the quantity of water required for rejecting chiller heat. The groundwater will be injected back into the ground at a specific aquifer level and location to minimize any thermal "short cycling" between the production and injection well. Injection of the water is required to meet permit requirements and to maintain groundwater levels in the area. The groundwater system is currently planned to provide a heat sink for both the Idaho Water Center project as well as the Idaho Place Phase 1 and Phase 2 (located across Front St.). Two production wells are to be located on the Idaho Water Center site (refer to plans), and two injection wells are to be located on the Idaho Place site (wells to be designed by geotechnical consultant, well pumps to be designed by civil consultant). This provides adequate separation of the wells and locates the injection wells down-gradient of the production wells to minimize overall thermal linking of the wells. Exact well depths will be determined after the zone testing is completed. Water chemical composition will also be verified for materials compatibility considerations. The cooling system will then not require cooling towers, associated domestic water consumption, or resulting sanitary wastewater. Overall energy costs are reduced, and chemical treatment of cooling tower water (and associated costs) are eliminated. The estimated cooling load at this time is 440 tons for Idaho Water Center, 480 tons for Idaho Place Phase 1, and 460 tons for Idaho Place Phase 2. The corresponding peak groundwater consumption rate (assuming 68°F production water, and 83°F injection water) is 2560 GPM.

Respectfully submitted,

Rusty Boicourt, P.G.
Environmental Services Manager



*justifies rate of
flow @ 6 cfs*

Prepared by Keen Engineering for MTI

MICROFILMED

SEP 23 2002

446 W. Lemhi St., Boise ID 83709
E-Mail mti@mti-id.com

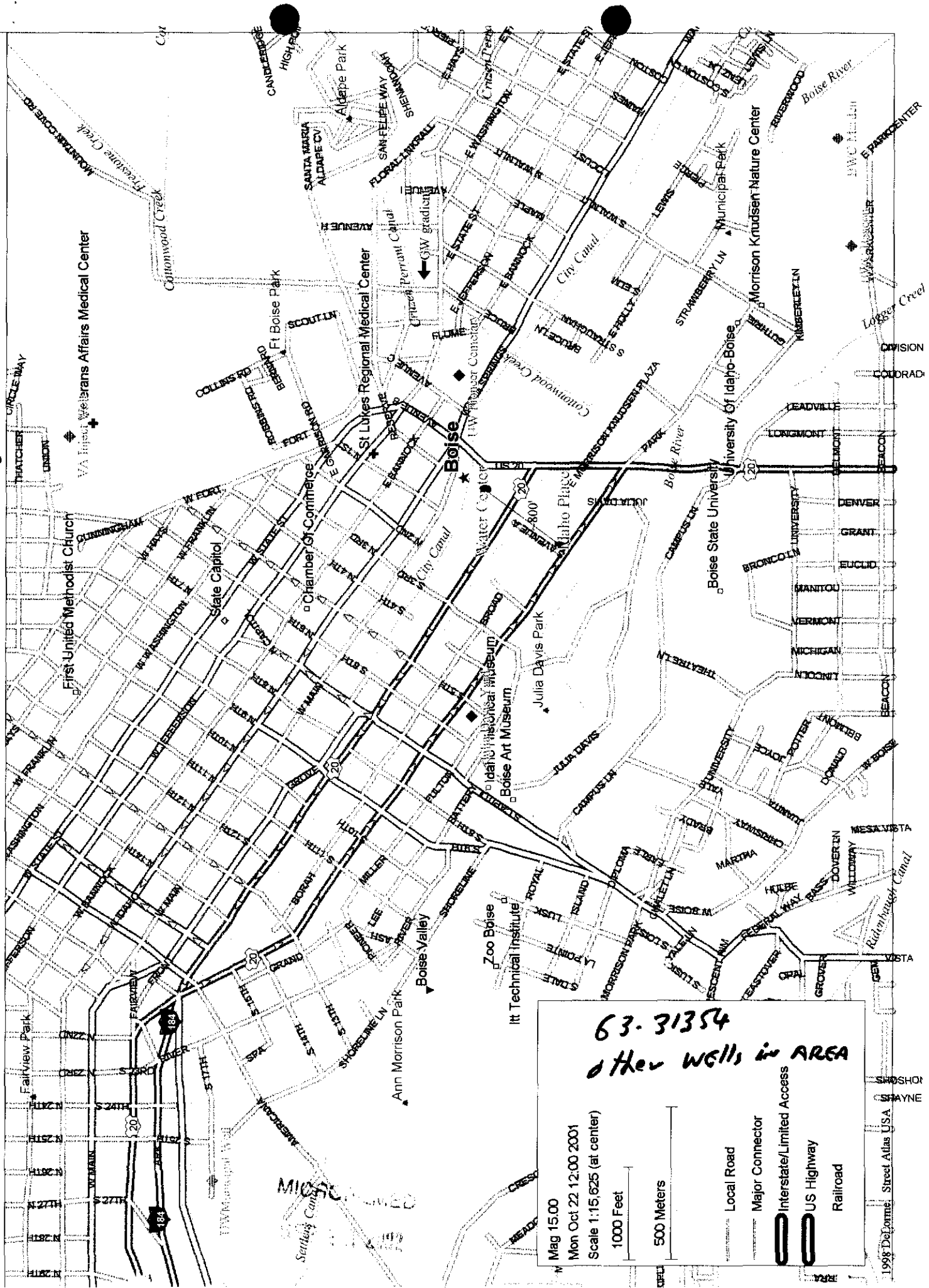
208 376-4748

www.mti-id.com

Fax 208 322-6515

63-31354

Water Center/Idaho Place Well Project





State of Idaho

DEPARTMENT OF WATER RESOURCES

1301 North Orchard Street, Boise, ID 83706 - P.O. Box 83720, Boise, ID 83720-0098

Phone: (208) 327-7900 Fax: (208) 327-7866 Web Site: www.idwr.state.id.us

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

August 15, 2002

CIVIC PARTNERS
380 S 4TH ST STE 203
BOISE ID 83702

RE: Permit No. 63-31354

Permit Approval Notice

Dear Permit Holder:

The Department of Water Resources has issued the enclosed permit authorizing you to establish a new water right. Please be sure to thoroughly review the conditions of approval and remarks listed on your permit.

The permit 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.

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.

The right to drill a well is not a part of this permit to appropriate water. Beginning in July of 1987, a statute was enacted which requires a drilling permit for new well construction and deepening of existing wells. If the well(s) proposed for use under this water right permit were drilled or deepened after July 1, 1987, a separate drilling permit must be obtained from this Department. Please contact the Ground Water Protection Section located here at this office or our regional office nearest you.

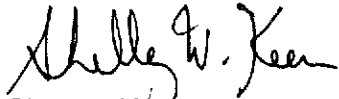
Also, please note that water right owners are required to report any change of water right ownership and/or mailing address to the Department within 120 days of the change. Failure to report these changes could result in a \$100 late filing fee. Contact any office of the Department or visit the Department's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

MICROFILMED

SEP 2 5 2002

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

Sincerely,

A handwritten signature in black ink, appearing to read "Shelley W. Keen". The signature is fluid and cursive, with the first name being the most prominent.

Shelley W. Keen

Water Rights Supervisor

SWK:klt

Enclosure(s)

MICROFILMED

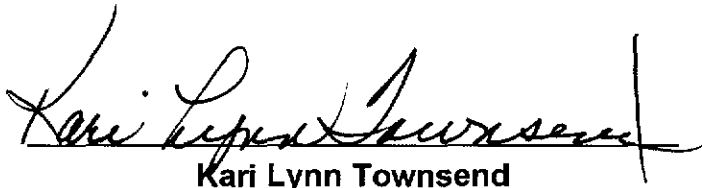
SEP 22 2002

CERTIFICATE OF SERVICE

I hereby certify that on August 15, 2002 I mailed a true and correct copy, postage prepaid, of the foregoing PRELIMINARY ORDER(Approved Permit) to the person(s) listed below:

RE: WATER RIGHT NO. 63-31354

**CIVIC PARTNERS
380 S 4TH ST STE 203
BOISE ID 83702**


Kari Lynn Townsend
Secretary

MICROFILMED
SEP 23 2002

**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).

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.

WYOMING DEPARTMENT OF WATER RESOURCES
APPROPRIATION APPLICATION ANALYSIS SHEET

INITIAL REVIEW BY: SL DATE: 11/27/01 APPLICATION: 63.31354
5/31/02 update & Amended Application

REQUIRED INFORMATION

Name: (If applicant is a corporation or partnership, names and addresses for the director, officers, and other partners must be included.)
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) 3 cfs, not 6
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. ≥ 5 homes in non-restricted area)
Signature: (If applicant is corp., partnership, or municipality, title of signatory is required)
Correct fee paid

RECEIVED

AUG 9 2002

DEPARTMENT OF WATER RESOURCES

Gov't. Lots:

P/D

P/U

ADDITIONAL INFORMATION

ADVERTISE REMARK(S)

(Reviewer identify which remarks)

YES NO

- ✓ — Overlapping place of use: (Describe source & relationship to present application on next page.)
— ✓ Overlapping point of diversion.
— ✓ Critical groundwater area:
✓ — Groundwater management area: Boise front, cold water > 300', now $\leq 300'$, OK.
✓ — 1992 moratorium: OK per mitigation plan = scanlan 2/18/02 letter, NARRATIVE w/ 5/20/02 Amended APPL.
— ✓ Surface water source, IDFG letter needed.
— ✓ Protected river or minimum flow reach, notify water planning bureau.
— ✓ E-mail to SCA staff: (perennial stream, non-pump diversion &/or any mining).
— ✓ E-mail to Dam Safety staff: (for any storage)
✓ — Mitigation plan: Check any that apply.
— ✓ immediate = acceptable plan required and submitted.
— — future = open areas, acceptance of condition of approval is in file.
— ✓ Send power requirement letter &/or fish farm requirement letter.
— ✓ Power residency affidavit:
— ✓ Diversion greater than 5 cfs or 500 af or irrigation greater than 200 acres: (If yes, attach Large Diversion supplementary analysis sheet.) discarded since now N/A
— — *REQUEST ADDITIONAL INFORMATION FROM THE APPLICANT

(a) officers etc. (b) justify 6 cfs (c) large div. into

partial responses made,
probably OK

Date Requested 10/29/01 verbal Date Response Received 11/28/01 for a + b,
11/29/01 item C, through 1/17/02 for C,
written

PROCESSING

APP. NO.

3. 31354

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: NOTE IF E-MAIL COMMENT LETTER USED.

YES NO

☐ ☒ I.D. Health & Welfare
☐ ☒ I.D. District Health
☐ ☒ I.D. Fish & Game
☐ ☒ I.D. Lands

YES NO

☐ ☒ U.S. BLM
☐ ☒ U.S. Forest Service
☐ ☒ Water Dist. # _____
☐ ☒ Water Planning Bureau
☐ ☒ Other _____

FINAL REGIONAL PROCESSING REVIEW:

RE-PROCESSING N/A for
 Amended version (Reduction)

Confirmed in
 Ncy's 2/4/02 memo

YES NO

☒ ☐ Affidavit of publication received:
☒ ☐ Application published correctly: If not, record action taken.
 OK per Ncy's call 1/18/02 ... ad did not have
 protest date (system glitch? Ad cover letter did have the date so should
☒ ☐ Publication dates and paper recorded on application: have automatically inserted in notices.
☒ ☐ Final date for protest 12-24-01
☒ ☒ Protests received.
☒ ☐ Recommendations attached:
☒ ☐ Measuring device required:
☒ ☒ Water delivered by water master? District # _____
☒ ☐ Special conditions of approval or cover letter: See memo dated 1/29/02 discussing conditions.

← CAN provide
 E-VERSION
 IF NEEDED

See below for additional information

Recommended Date or Priority

10/24/01

-no change per Amendment

Recommended by: Dany

Date: 2/1/02

ADDITIONAL INFORMATION:

Injection well permit (mitigation plan) approved by early June
 per Chris D. & S.O. info.

SEE 11/29/01 preliminary determination re Posi Front GWMA.

Mitigation per injection well proposal filed concurrently (CRBW has
 the injection well package). ← CHRIS DUNCAN AT S.O. 1/18/02

Request to Process Form - OK not to include mitigation plan

SERVES same purpose as Form. SEE Appl. Attachments for details.

6 cfs originally proposed. Reduced to 5 cfs in preliminary review &
 consultant but restored to 6 cfs prior to legal notice so OK. Original
 signature not submitted 10/24 so some "back & forth" before resolved. OK.

MEMORANDUM

RECEIVED

AUG - 9 2002

Department of Water Resources

TO: File

FROM: Steve Lester 

DATE: August 7, 2002

RE: Civic Partners Application No. 63-31354 Summary

This application has a confusing history. Department efforts to expedite the process as requested added to the confusion. The consultant's inattention to follow-up details also complicated the process. Here is a brief summary to clarify the current situation.

- Originally filed 10/24/01 with corrections by 11/28/01. Included large diversion and Boise Front GWMA issues.
- Expedited processing occurred but protest date did not appear in legal notice, apparently due to IDWR computer system quirk. "Non-fatal" advertising error per Administrator's 2/4/02 memo.
- Amended application 5/20/02 included revised narrative dated 3/25/02. Amended application resulted from several meetings with variety of IDWR staff (Region & Ground Water Protection) and consultant.
- Amended application limited to 3 cfs for cold water less than 300 feet deep. Despite some file inconsistency, water bearing zone 100'-300'. Large diversion and GWMA now n/a. Additional fees or re-advertising n/a based on reduced flow.
- Non-consumptive use via mitigation plan addresses Basin 63 issues.
- Mitigation focuses on injection wells. Injection well permit approved by early June 2002.
- Drilling permit applications for production wells pending at Western (Rob Whitney). Applicant still needs to provide additional information.
- Application 63-31354 can be approved. Note 1/29/02 conditions of approval are still relevant to amended application.

CC: Rob Whitney for drilling permit applications

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SEP 2 2 2002



63-31354 Civic Partners
3N 2E S10 NESE & SESE

6/20/02 Im

POD for 2 wells

POU for lots 2 and 11



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

FAX (208) 334-2348

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

April 15, 2002

RUSTY BOICOURT P G
MATERIALS TESTING & INSPECTION
7446 W LEMHI ST
BOISE ID 83709

Re: Civic Partners Application for Permit No. 63-31354

Dear Rusty:

We met to discuss the above referenced application on February 6, 2002. The result of the meeting included an agreement to submit an amended application to allow processing to continue.

An amended application has not been received yet. Please complete this required step to maintain the validity of the application.

Please submit the above requested information within thirty (30) days of the date of this letter. If the information is not timely submitted, the application will be removed from the records of this agency. Thank you for your attention to these matters.

Sincerely,

Steve Lester
Water Rights Supervisor

MICROFILMED

APR 23 2002

SCANLAN ENGINEERING

Groundwater and Environmental Engineering

RECEIVED

FEB 20 2002

WATER RESOURCES
WESTERN REGION

February 18, 2002

Mr. Gary Spackman
Western Region Manager
Idaho Department of Water Resources
2735 Airport Way
Boise, ID 83705

Subject: Mitigation Plan for Idaho Water Center and Idaho Place Cooling Water (63-31354)

Dear Gary:

At our meeting on February 6, 2002 concerning the above referenced project, you requested a mitigation plan related to Application for Permit 63-31354.

The application currently seeks diversion of groundwater at rates of up to 1350 gpm (3.0 cfs) for cooling purposes from two wells located at the Idaho Water Center site. Estimated annual average pumping rate will be less than 100 gpm (0.23 cfs). Peak month (July) diversion rate is anticipated to average less than 400 gpm (0.89 cfs). All water will be returned to the aquifer through two re-injection wells at the Idaho Place site, approximately 800 feet south from the production wells.

Exploration drilling and test pumping at the Idaho Water Center site suggests that aquifer zones between 100 and 400 feet can be considered part of a single aquifer, as zones below and above 200 feet have similar hydraulic heads and water chemistries. However, clay layers or lenses provide local separation between aquifer zones. This local separation will be useful to maximize the flow path between production wells and injection wells. For instance, hydraulic and thermal modeling suggests that production from shallow zones (100 to 200 feet) and injection into deeper zones (200 to 400 feet) will result in a lower temperature rise at the production wells than simply producing and injecting into the same zones (i.e., 100 to 400 feet). Thus, we currently plan to pump from aquifer zones located between a depth of 100 and 200 feet (the most productive section of the aquifer), and re-inject into aquifer zones located between 100 and 400 feet depth. The majority of the injection will occur into zones below 200 feet. Actual depths of the injection wells will be determined following drilling at the Idaho Place site. Currently, we anticipate that the first injection well will be completed between 200 and 400 feet depth. This well will function as the primary injection well. The other injection well will be completed between 100 and 200 feet depth, and will function as the secondary injection well. The secondary injection well will operate during times of high flow rate, when the deeper aquifer zones cannot accept the full injection rate at a low injection pressure. It is anticipated that the secondary injection well will be utilized for less than 20 percent of the annual injection volume.

MICROFILMED

You asked for a mitigation plan demonstrating that the proposed project will have no adverse impact to the Boise River or groundwater aquifers. We believe that the project as currently proposed meets that criterion for the following reasons.

1. All groundwater produced will pass through a closed-loop cooling system and return to the aquifer through the injection wells. Therefore, the project will be non-consumptive.
2. Pumping will cause a localized water-level drawdown in the vicinity of the production wells and injection will cause localized mounding in the vicinity of the injection wells. However, mounding effects from the injection wells will lessen water-level drawdown in the vicinity of the production wells. Similarly, drawdown effects will lessen mounding at the injection wells.
3. Although we propose to pump and inject at different depths to maximize the hydraulic flow path between the well sites, we believe that we are producing from and re-injecting into zones within the same aquifer. As a result, the net impact to the aquifer should be negligible at some distance away from the wells.
4. Since we anticipate that the proposed project will have a negligible impact on the aquifer, we further anticipate that the project will have no impact on flows in the Boise River. In other words, we anticipate that pumping and injection will have no significant impact on Boise River gains or losses.

Please contact me with any questions or comments concerning this analysis.

Sincerely,



Terry M. Scanlan, P.E., P.G.
Engineer/Hydrogeologist

Cc: Rusty Boicourt – Materials Testing, Inc.
Chris Duncan – IDWR State Office

MICROFILMED

SEP 13 2002

MATERIALS TESTING & INSPECTION, INC.

7446 West Lemhi,

Boise, Idaho 83709

FAXDate: Monday, February 11, 2002Number of pages including cover sheet: 7**To: Steve Lester****IDWR, Western Region Office**

Phone:

Fax phone: 334-2348

CC:

From: Rusty Boicourt

E-Mail: boicourtr@mti-id.com

Phone: (208) 376-4748

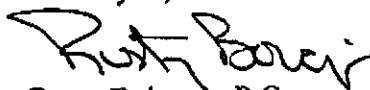
Fax phone: (208) 322-6515

REMARKS:☐ Urgent☒ For your review☐ Reply ASAP☐ Please comment

Dear Steve:

Here are the updated Narrative and new, corrected Application For Pennit for your review. The Permit has been sent to the owner for signature. Final signed copies of both will be delivered to you upon receipt of the owner's signed copy.

Thank you,



Rusty Boicourt, P.G.

Environmental Services Manager

proposed wells ~ 200' depth
w/ 3m ~ 100' - 300' "
unwanted & total depth referenced is narrative so
ok to show as have.
Looks ok.

"Assuring the Strength, Safety, and Security of Your Future."

MICROFILMED

SEP 2 1 2002

FORM 202
12/99

Ident No. _____

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name of Applicant Civic Partners Phone (949) 975-0223
Mailing address 380 So. 4th Street, Suite 203, Boise, ID 83702
2. Source of water supply groundwater which is a tributary of N/A
3. Location of point of diversion is Township 3N Range 2E Sec. 10 in the NE $\frac{1}{4}$,
SE $\frac{1}{4}$, Govt. Lot ada B.M., ada County;
additional points of diversion if any: none
4. Water will be used for the following purposes:
 Amount 3 cfs for cooling 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)
 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) 3 cfs and/or (b) _____
 cubic feet per second acre feet per annum
6. Proposed diverting works:
 - a. Describe type and size of devices used to divert water from the source electric submersible pumps with piping to heat exchangers
 - b. Height of storage dam N/A feet; active reservoir capacity _____ acre-feet; total reservoir capacity N/A acre-feet
 - c. Proposed well diameter is 12 inches; proposed depth of well is 200 feet
 - d. Is ground water with a temperature of greater than 85°F being sought? no
 - e. If well is already drilled, when? N/A; Drilling firm _____
 Well was drilled for (well owner) _____; Drilling Permit No. _____
7. Time required for completion of works and application of water to proposed beneficial use is 1 years (minimum 1 year)
8. Description of proposed uses (If irrigation only, go to item 9):
 - a. Hydropower; show total feet of head and proposed capacity in kW. N/A
 - b. Stockwatering; list number and kind of livestock. N/A
 - c. Municipal; show name of municipality. N/A
 - d. Domestic; show number of households. N/A
 - e. Other; describe fully. non-consumptive use of cold groundwater for cooling purposes

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APR 11 2002

3. Description of place of use:

a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.

b. 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	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
3N	2E	10													L			L	

Total number of acres to be irrigated N/A10. Describe any other water rights used for the same purposes as described above. N/A11. a. Who owns the property at the point of diversion? Civic Partnersb. Who owns the land to be irrigated or place of use? Civic Partnersc. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: N/A12. Remarks: a. Non-consumptive useb. Drilling method will be direct (mud) or reverse rotaryc. Water bearing zone to be appropriated is 100' to 300'

13. MAP OF PROPOSED PROJECT REQUIRED - Attach an 8½"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.)

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

Signature of Applicant (and title, if applicable)

Received by _____ Date _____ Time _____ Preliminary check by _____
 Fee \$ _____ Receipted by _____ # _____ Date _____
 Publication prepared by _____ Date _____ Published in _____
 Publication approved _____ Date _____

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APR 23 2002

**MATERIAL
TESTING &
INSPECTION**

☐ Environmental Services ☐ Geotechnical Engineering ☐ Construction Materials Testing ☐ Special Inspections

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WESTERN REGION OFFICE
2735 Airport Way
Boise, Idaho 83705

Subject: **Idaho Water Center/Idaho Place proposed Groundwater Cooling System**
Revision 2 (Feb. 9, 2001)

Ladies and Gentlemen:

A cooling well system consisting of two production and two injection wells has been proposed for the Idaho Water Center and Idaho Place development. The purpose of the groundwater cooling system is to make use of natural resources in order to offset the need for electrical power from existing utilities. We believe the proposed system to be an appropriate, non-consumptive use of the groundwater resource. The proposed system would be developed as follows.

LOCATION

The project site is located in downtown Boise, north of the Boise River and consists of the northwest and southwest corner parcels of the intersection of Broadway and Front Streets. The two parcels involved are referred to in construction documents as *Idaho Water Center*, located at the northwest corner of Broadway and Front, and *Idaho Place*, located at the southwest corner of Broadway and Front. The project site occupies a portion of the NE $\frac{1}{4}$ SE $\frac{1}{4}$ and the SE $\frac{1}{4}$ SE $\frac{1}{4}$, section 10, Township 3 North, Range 2 East of the Boise Meridian. For hydrogeologic purposes, the exploration and production wells will be constructed on the *Idaho Water Center* parcel (NE $\frac{1}{4}$ SE $\frac{1}{4}$) and the injection wells will be constructed on the *Idaho Place* parcel (SE $\frac{1}{4}$ SE $\frac{1}{4}$) of the project site.

EXPLORATION

A four-inch, steel-cased exploration well completed to a maximum depth of 800-feet below ground surface (bgs) will be constructed on the Water Center site using a mud rotary drilling system. We anticipate cold-water bearing formations to exist at elevations above 800-feet bgs. This project will not involve the use of geothermal groundwater and we believe this system will not have an impact on that resource. After completing the borehole, geophysical logging to determine aquifer conditions will be conducted. The logging will include caliper measurement, resistivity, spontaneous potential, temperature, and natural gamma radiation. The target peak production/injection capability for the proposed system is approximately 1200-gallons per minute (gpm).

Temporary wells will be constructed and pump testing will be conducted at various elevations or zones, which represent different water-bearing formations. This zone testing method will be accomplished as follows: Well casing with approximately 40-feet of screen will be installed to the deepest aquifer zone, with backfill beneath the screen. Gravel pack will be placed opposite the well screen and an approximately 10-foot layer of bentonite chip plug installed above the gravel. The temporary well will then be developed, after which a constant-rate pump test of 100-gpm for 4- to 8-hours will commence. Near the end of each pumping test, water samples will be collected for geochemical analysis. Water temperature, pH, TDS, and electrical conductivity will also be recorded throughout the pump testing. After completing the pump testing at this elevation or zone, the screen will be pulled to the next water-bearing formation, collapsing the gravel pack and bentonite seal into the

**MATERIALS
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October 22, 2001☐ Environmental Services ☐ Geotechnical Engineering ☐ Construction Materials Testing ☐ Special Inspections

previous zone. The well will be developed and tested as before and the process would be repeated. We anticipate zone testing at four or five different elevations.

ANALYSIS

The data collected from zone testing will be used to determine the following: 1) production and drawdown; water temperature, pH and other characteristics; 2) chemical similarity of the zones or formations; 3) geochemistry to evaluate effects of the water, specifically precipitation caused by temperature changes and water mixing, corrosion or encrustation of the screens and mechanical elements; 4) the geology and thickness of each formation. This information will be used in designing the mechanical systems, to determine the appropriate formations or zones for deriving production waters, to select the formations best suited for receiving injection waters, the maximum anticipated production capability, and the overall feasibility of the proposed system. Information gained will also be used to respond to any protest of the Water Right application.

Additionally, we intend to model the characteristics of the aquifer(s) in order to predict the thermal/hydraulic and geochemical responses of the production/injection couplet. We expect this modeling to be performed and evaluated by the Idaho Water Resources Research Institute in conjunction with other research programs and experts. Preliminary estimates from the modeling will be made prior to construction of additional wells with final adjustment and calibration of the system to occur after the remaining wells are developed and tested.

CONSTRUCTION

After the necessary permits are in place and the Water Right for non-consumptive use has been established, construction of the two production wells will begin. The locations of the two production wells, based upon constraints of the building layouts, have been selected on the Idaho Water Center site. Both wells will be located outside of any structures to allow future maintenance and rehabilitation. Each well head will be completed at-grade within a parking area or landscape/hardscape feature. The wells will likely be constructed using cable-tool techniques by licensed well drillers. Construction will use 12-inch diameter, steel casing to 200-feet. Stainless steel screens, gravel pack, and bentonite seals will be used to achieve high-quality wells equal to municipal standards. Total depth of the wells will be determined after completion of the exploration well data analysis and will be based upon the parameters described above. The two wells will likely be finished at the same depth and derive water from the same formation or zone. The wells will be spaced apart from each other so as to limit the effect of interaction of drawdown. For design purposes the spacing distance is 100-feet, which may be modified after data analysis. We anticipate construction of the two production wells to begin in mid-February and occur sequentially.

The two injection wells will be constructed on the Idaho Place site immediately after construction of the production wells. The wells will likewise be located outside of any structure within a landscape feature to allow for future maintenance and rehabilitation. Each well head will be completed at-grade within a parking area or landscape/hardscape feature. The wells will be constructed using direct rotary or reverse rotary techniques. Total depth of the wells will be determined after completion of the exploration well data analysis and will be based upon the parameters described above, but will not exceed 400-feet. The two wells will be completed into different water-bearing zones, which are locally separate, but hydraulically linked to one another and to the production water zone. The wells will be spaced a minimum of 25-feet from each other.

GEOLOGY

The proposed wells will derive and inject groundwater from sand formations within a single regional aquifer of the Idaho Group sediments. Surface geophysical data for the downtown Boise area suggests the presence of

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faults in these sediments and underlying volcanic rocks. The faults tend to cut the aquifer into hydraulically isolated blocks. The faulting is evident during pump testing by sustainable yields being significantly lower than initial, short-term yields. This faulting impacts the proposed groundwater cooling system in both a positive and negative manner. Faulting may limit overall sustainable production rates, but also limit the amount of thermal exchange within the couplet. It is our goal to understand the aquifer conditions at the project site, including faulting, to make use of the geology in designing a system that has the highest possible degree of success.

Our preliminary geologic/hydrologic investigation suggests that initial well yields ranging from 500- to 2000-gpm are probably from high-quality wells. Based on the information, we are targeting zones from 400- to 800-feet bgs. The potential to develop wells capable of producing/injecting 1250-gpm is moderate to good; the potential for a 2500-gpm system is fair. Equally important as yield is thermal exchange between the production/injection couplet. Our review of well logs in the vicinity of the project site has revealed the following:

- The 3200-foot Boise City Geothermal Injection Well (2500-feet west) – intermittent sand aquifers to a depth of 780 bgs. Non-water bearing mudstone at 1500-feet bgs; apparently an aquitard capping the geothermal aquifers found below 2000-feet.
- The 2125-foot Capitol Mall Geothermal Well #1 (2500-feet north) – interbedded sand and clay to 370-feet bgs. Clay with thin sand lenses to a depth of 735-feet.
- The 505-foot Beacon Well (4200-feet southeast) – intermittent sand aquifers to 505-feet. Completed from 200 to total depth, produced 1500 gpm with 139-feet of drawdown for domestic use.
- The 1000-foot Lincoln Street Test Well (4500-feet southwest) – sand aquifers between 300- and 500-feet. Clay and mudstone below 500-feet.
- The 415-foot Long Meadow Well (7000-feet southeast) – produced 1775 gpm with 66 feet of drawdown.

SUMMARY

The proposed Water Center/Idaho Place groundwater cooling system requires an average of 90-gpm and a maximum of 1200-gpm to cool seven to ten structures within a complex located on the north and south sides of Front Street. The heat load (delta T) to be added to the water prior to injection will be approximately 20° F. We anticipate the temperature of the groundwater to be 61° F. The system will be used to replace traditional chillers and cooling towers and reduce the need for electrical power. A traditional chiller system will be installed to further reduce the temperature of groundwater prior to heat exchanging. The closed-loop groundwater cooling system will be completely sealed and pressurized to eliminate the possibility of aeration and mixing with process water. We anticipate the need to maintain and service these wells every 5- to 20-years depending on use and water quality.

We intend to explore the underlying strata with a single well and perform zone testing, geophysical logging, water chemistry analysis, and thermal/hydraulic and geochemical modeling of the various water-bearing formations encountered. The exploration well will be used throughout the construction of all subsequent wells, but will eventually be abandoned. Our design calls for two production wells located on the north side of Front Street (Water Center) and two injection wells on the south side of Front Street (Idaho Place). The wells will target the water-bearing formations from 100-to 300-feet bgs. The two sets of wells will be separated by approximately 800-feet and will be connected by supply and return piping extending beneath Front Street.

October 22, 2001

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We believe the proposed non-consumptive groundwater system to be an appropriate use of the natural resource and will not impact the geothermal groundwater. Likewise, we believe the system will not adversely affect water quality or otherwise harm existing wells or the aquifer as a whole. However, we do understand the concerns of neighboring water users and are prepared to respond to any protest of the proposed system using the significant data we will obtain from the exploration well. In addition to the long-term cost savings to the property owner, the benefit of this system to the community will include: reduced demand for electrical power, a stable and renewable source for indoor cooling, a model for the development of alternative energy sources, and a better understanding of the geology and hydrology of the Boise Front Ground Water Management Area.

Respectfully submitted,

Rusty Boicourt, P.G.
Environmental Services Manager

MEMORANDUM

TO: STEVE LESTER *SL*
WESTERN REGION

FROM: NORM YOUNG *NY*
ADMINISTRATOR

RE: APPLICATION FOR PERMIT NO. 63-31354

DATE: 2/4/2002

RECEIVED

FEB 07 2002

WESTERN REGION

Thank you for forwarding a copy of the legal notice for the above referenced application. As you know, Rusty Boicourt, representing the applicant, expressed his concern that the proposal to use ground water for cooling of the new buildings would have to be scrapped and some other method of cooling would have to be substituted if drilling of the production wells is further delayed. Mr. Boicourt expressed to me his understanding that the legal notice as published does not include a final date for protest and that this could become an issue if a third party challenges the project. He indicated that the applicants are willing to accept the risk that this may become an issue and are asking that processing of the application for permit proceed without delay.

In my opinion, the legal notice meets the spirit of the law because it references the statute providing for the protest period and has adequate information to allow anyone interested to have contacted either the Department or the applicant with any concerns by now (more than one month after the publication of the notice. Based upon this, you are authorized to continue processing without additional public notice.

MICROFILMED

FEB 24 2002



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

FAX (208) 334-2348

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

FAX TRANSMITTAL COVER SHEET

FAX NUMBER (208) 334-2348

RECEIVED

JAN 18 2002

Department of Water Resources

DATE: 1/18/02

TO: NORM

FROM: Steve

DOCUMENT DESCRIPTION/NOTES: Legal Notice 63-31354

Cover letter has protest deadline (automated inclusion when
set protest deadline calendar in Workflow).

Notice does not have protest deadline in this case
but system should automatically insert it (just tried one
to confirm if it worked).

So don't know why deadline missing in this one - g.l.t.h

TOTAL PAGES SENT: 2 + COVER SHEET

*not caught by
proofing before
sending ?*

CONTACT: _____

MICROFILMED

SEP 24 2002

November 28, 2001

Legal Notice Department
IDAHO STATESMAN
PO BOX 40
BOISE ID 83707

RE: Application for Permit No. 67-7878, 63-31329, 63-31354, 63-31326, 63-31324, and 63-31323
Application for Transfer No. 69547

Dear LEGAL NOTICE DEPARTMENT:

Enclosed you will find a legal notice which we wish to have published in your newspaper on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before 12/24/2001. Your cooperation is appreciated.

Sincerely

Sue Taylor
Senior Secretary

MICROFILMED

JAN 24 2002

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

83-31354

CIVIC PARTNERS
380 S 4TH ST STE 203
BOISE ID 83702

Point(s) of Diversion L2 NESE S10 T03N R02E ADA County Source GROUND WATER

Point(s) of Diversion L2 NESE S10 T03N R02E ADA County Source GROUND WATER

Use: COOLING 01/01 To 12/31 6 CFS

Total Diversion: 6 CFS

Date Filed: 10/24/2001

Place Of Use: COOLING

T03N R02E S10 NESE Lot 2 SESE Lot 11

Remark: Water bearing zone to be appropriated for 2 proposed cold water wells is from 200 to 800 feet for the Idaho
Place Water Center near Broadway and Front in Boise.
Water will be returned to the aquifer via 2 proposed injection wells to allow a non-consumptive use.

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 Resource, Western Region,
2735 Airport Wy, Boise ID 83705 together with a protest fee of \$25.00 for each application on or before . The protestant must also
send a copy of the protest to the applicant.

KARL J DREHER, Director

Published in the Idaho Statesman on December 8 and 13, 2001.

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SEP 18 2002

63-31354

2/6/02

mtg. w/ consultant ...

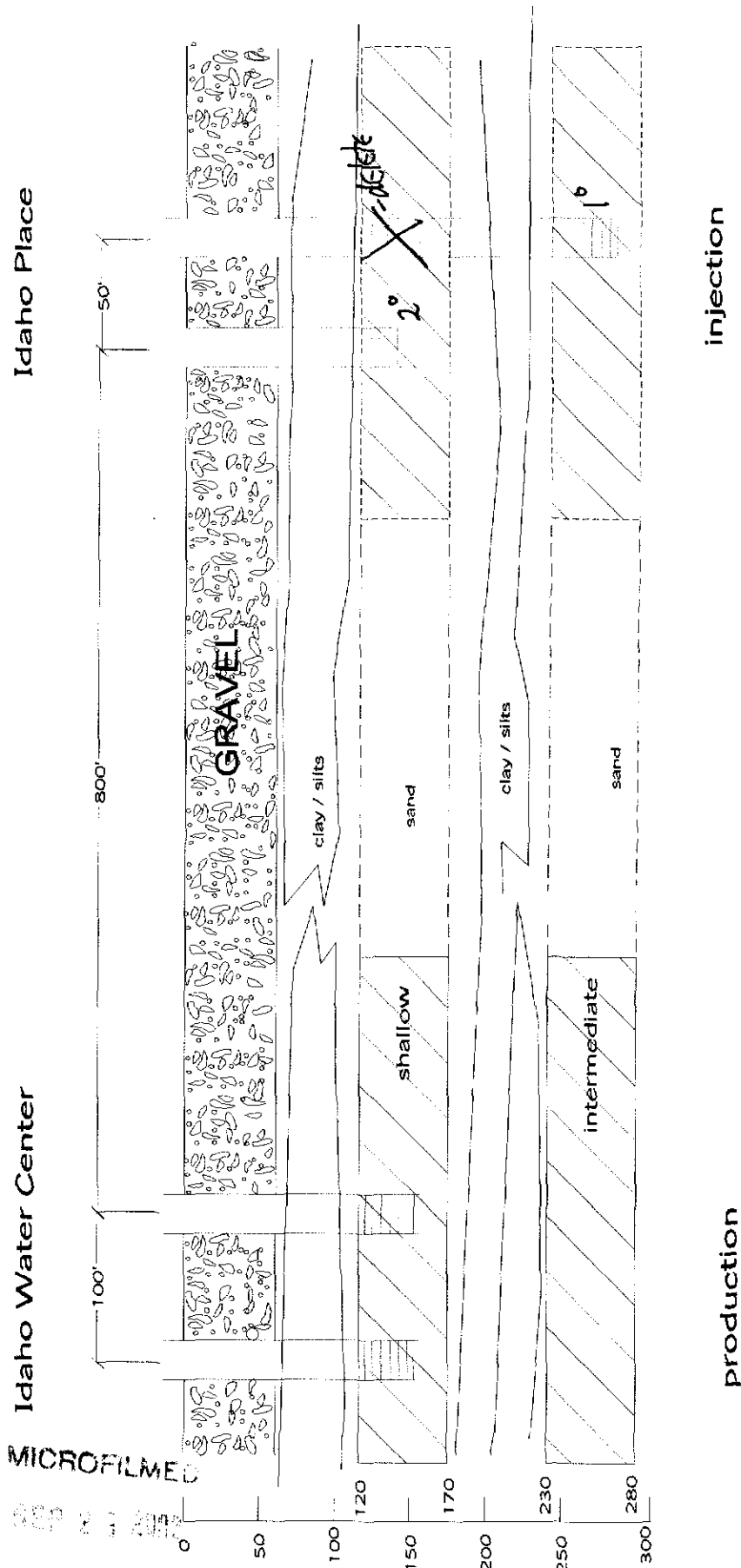
- 1) Amended WR appl. Flow
Web-zone
Supporting narrative
- 2) no amend fee needed since no rework needed
- 3) prev. work d.p. moving ahead
- 4) idj work appl. " "

Won't forward WR appl to SA until amended
appl. received.

MICROFILMED

SEP 23 2002

Well Couplet Section Option 3 (Modified)



IWC / IP Groundwater Cooling
Front & Broadway Boise, Idaho
Drawing NO. B10579e
Date: 17 January 2002
Drawn By: KEL

7446 West Lemhi Street
BOISE, IDAHO 83709
(208) 376-4748 FAX (208) 322-6515
E-MAIL: mti@mti-id.com

Materials
Testing &
Inspection

MEMORANDUM

File no. 63-31354

to: Gary Spackman *Gary*
date: January 29, 2002

Proposed Conditions of Approval

Application for water right no. 63-31354 proposes diversion of 6.0 cfs from ground water for cooling purposes. The application proposed diversion through a temperature exchange unit and injection back into the same aquifer from which the water was diverted. The exposure of the water to warmer air will raise the temperature of the water approximately 12° F. The warmer water will be injected back into the ground.

reduced to 3 cfs 5/20/02 -SC

Gary's conditions

The mitigation plan proposes injection of water diverted back into the aquifer. The proposed injection wells have not yet been approved, partly because of concerns about raising temperatures of the water in the aquifer from which water will be withdrawn. As a result, the mitigation plan is not approved, but IDWR is moving forward with consideration of the water right application, assuming that a suitable mitigation plan can be submitted. The applicant assumes all the risk that the mitigation plan will be acceptable, and that the injection back into the production aquifer will not raise the temperature of the ground water sufficiently that the aquifer and water may no longer be suitable for cooling.

IDWR has not received a signed request to process. We have required completion and receipt of a request to process form for all past applications. I assume that we are not requiring a completed request to process because the application proposes the nonconsumptive beneficial use of water.

I recommend the following conditions of approval:

1. Water shall not be diverted from the points of diversion authorized by this permit (a) injection well permits are issued by the department, (b) the injection wells are constructed as required by the injection well permits, and (c) all water diverted is injected back into the aquifer from which it is diverted.
2. The permit holder assumes all risk that an adequate mitigation plan for injection of the water diverted is approved by the department.
3. All use of water authorized by this permit shall be nonconsumptive. All ground water diverted shall be injected back into the same water bearing zone from which it was diverted. Failure to directly replace the ground water diverted is cause for the director to cancel the permit or revoke any subsequent license issued.
4. Water diverted for cooling shall be used in a closed loop system and shall not be mixed or mixed with other water, fluids, or chemicals before injection.

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SEP 24 2002

GARY's 1/29/02 MEMO

5. The water right holder shall comply with all health and environmental laws and regulations.

6. The use of water under this right shall not injure other water rights. The test for injury includes a change in aquifer temperature that might negatively affect the beneficial use authorized by prior water rights.

7. Wells authorized by this permit shall be constructed according to the department's well construction standards and the conditions of drilling permits issued for the points of diversion.

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SEP 23 2002

MEMORANDUM

TO: File

FROM: Steve Lester *SL*

DATE: January 29, 2002

RE: Application No. 63-31354

A consultant for the applicant submitted the application. The consultant was not familiar with the appropriation process. Additional complications stemmed from a deep and cold ground water source subject to provisions of the Boise Front GWMA. The consultant wanted to expedite the process, and the regional office tried to accommodate that desire as much as possible. These factors combined to produce the not uncommon situation of wasting time in an effort to save time. Nonetheless, here we are now.

The priority should remain as October 24, 2001, despite some unorthodox steps getting there. The application was sufficiently complete on that date. The "back and forth" activity in late October through late November resolved some procedural details sufficiently to maintain the original priority date.

The proposal addresses ground water subject to the GWMA and its 6/3/98 management plan. Compliance with the management plan included a mitigation plan (injection well proposal pending at S.O.) and an IDWR preliminary determination (11/29/01 memo).

The applicant's "large diversion information" is somewhat incomplete but probably adequate given IDWR's familiarity with the project in recent years.

The applicant requested expedited approval of two production wells on 1/14/02. Administration determined that drilling permits should be issued with appropriate conditions of approval. The production wells must be completed within the 200-800 feet water bearing zone.

MICROFILMED

FEB 23 2002

add. final background
1/29/02

Lester, Steve

From: Rusty Boicourt [boicourtr@mti-id.com]
Sent: Thursday, January 24, 2002 9:37 AM
To: SLester@idwr.state.id.us
Subject: Civic Partners response

Dear Steve:

Jeff Pomeroy is the primary contact for the IWC/IP Project. He is a partner and officer of Civic Partners. Below is the information you need:

Jeffrey C. Pomeroy
Vice President, Development
Civic Partners

Thank you,
Rusty Boicourt

MICROFILMED

SEP 2 8 2002

Lester, Steve

From: Lester, Steve
Sent: Friday, January 18, 2002 2:45 PM
To: 'mti@mti-id.com'
Subject: Civic Partners

Rusty:

I have been informed by the IDWR State Office that you choose to handle things at that level. Therefore, no point is served by summarizing the status of IDWR processing except for the following.

The applicant has not supplied the title of the signatory for Application No. 63-31354. The signatory (Jeff Pomeroy) issued a letter dated 11/19/01 identifying the managing partner of Civic Partners but not Pomeroy's title. The applicant must show that Mr. Pomeroy has authority to sign for the partnership by specifically identifying his title (Water Appropriation Rule 035.03.b.xiii) with respect to Civic Partners.

Please provide this information as soon as possible to complete the application.

Thank you.

Steve Lester
IDWR Western Region

MICROFILMED

SEP 23 2002



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

FAX (208) 334-2348

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

FAX TRANSMITTAL COVER SHEET

FAX NUMBER (208) 334-2348

DATE: 1/18/02

TO: NORM ✓

FROM: Steve

DOCUMENT DESCRIPTION/NOTES: Legal Notice 63-31354

Cover letter has protest deadline (automated inclusion when
set protest deadline calendar in Workflow).

Notice does not have protest deadline in this case
but system should automatically insert it (just tried one
to confirm & it worked).

So don't know why deadline missing in this one - gl. tel

TOTAL PAGES SENT: 2 + COVER SHEET

not caught by
proofing before
sending ?

CONTACT: _____

MICROFILMED
SEP 23 2002



**MATERIALS
TESTING &
INSPECTION**

PAGE # 1 OF 1

December 18, 2001

\\mtiserver\reports\2001report\600-799\610681e\addinfo\comment.doc

☐ Environmental Services ☐ Geotechnical Engineering ☐ Construction Materials Testing ☐ Special Inspection

CITY OF BOISE
OFFICE OF GROUNDWATER
P.O. Box 500
Boise, Idaho 83701-0501

Attention: Catherine Chertudi

Subject: **Water Center/Idaho Place Groundwater Cooling Project**

Ladies and Gentlemen:

Materials Testing & Inspection is the geologic consultant for the above referenced project. The project calls for the appropriation (and mitigation by re-injection) of approximately 6 cubic feet per second (cfs) of groundwater for cooling purposes. As required by Idaho Administrative Code, Water Appropriation Rules, IDAPA 37.03.08, Rule Subsection 040.05.g, *Information Relative to Conflict with the Local Public Interest*, the applicant shall seek comment on the effects of construction and operation of the proposed project from interested parties. Please find attached the project narrative describing the intended appropriation, use, and mitigation as well as a site plan locating the point of use. Please respond in writing no later than December 28, 2001 to:

Idaho Department of Water Resources
2735 Airport Way
Boise, Idaho 83705-5082
Attn: Steve Lester
Water Rights Supervisor

Any questions concerning the project may be directed to me. Please feel free to contact me by mail, telephone, fax, or e-mail at the following:

Rusty Boicourt, P.G.
Materials Testing & Inspection
7446 West Lemhi
Boise, Idaho 83709
Phone: 376-4748
Fax: 322-6515
e-mail: boicourtr@mti-id.com

Thank you for your time and consideration of this matter.

Sincerely,

Rusty Boicourt, P.G.
Environmental Services Manager

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Public Works

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DEC 18 2001



**MATERIALS
TESTING &
INSPECTION**

PAGE # 1 OF 1
December 18, 2001

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☐ Environmental Services ☐ Geotechnical Engineering ☐ Construction Materials Testing ☐ Special Inspections

STATE OF IDAHO
DIVISION OF ENVIRONMENTAL QUALITY
SOUTHWEST REGIONAL OFFICE
1445 North Orchard
Boise, Idaho 83706-2239

RECEIVED

DEC 18 2001

DEPARTMENT OF
ENVIRONMENTAL QUALITY
BOISE REGIONAL OFFICE

Attention: Monty Marchus

Subject: Water Center/Idaho Place Groundwater Cooling Project

Ladies and Gentlemen:

Materials Testing & Inspection is the geologic consultant for the above referenced project. The project calls for the appropriation (and mitigation by re-injection) of approximately 6 cubic feet per second (cfs) of groundwater for cooling purposes. As required by Idaho Administrative Code, Water Appropriation Rules, IDAPA 37.03.08, Rule Subsection 040.05.g, *Information Relative to Conflict with the Local Public Interest*, the applicant shall seek comment on the effects of construction and operation of the proposed project from interested parties. Please find attached the project narrative describing the intended appropriation, use, and mitigation as well as a site plan locating the point of use. Please respond in writing no later than December 28, 2001 to:

Idaho Department of Water Resources
2735 Airport Way
Boise, Idaho 83705-5082
Attn: Steve Lester
Water Rights Supervisor

Any questions concerning the project may be directed to me. Please feel free to contact me by mail, telephone, fax, or e-mail at the following:

Rusty Boicourt, P.G.
Materials Testing & Inspection
7446 West Lemhi
Boise, Idaho 83709
Phone: 376-4748
Fax: 322-6515
e-mail: boicourtr@mti-id.com

Thank you for your time and consideration of this matter.

Sincerely,

Rusty Boicourt, P.G.
Environmental Services Manager

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SEP 24 2002

SL
Lester, Steve

From: MONTY MARCHUS [MMARCHUS@DEQ.STATE.ID.US]
Sent: Friday, December 21, 2001 10:04 AM
To: slester@idwr.state.id.us
Cc: MMARCHUS@DEQ.STATE.ID.US; RHOWARTH@DEQ.STATE.ID.US; boicourtr@mti-id.com
Subject: Water Center Cooling Project



TEXT.htm

- attachment = text shown below

Steve, this brief email is a follow-up to my phone call this morning and is in response to a letter I received from Rusty Boicourt with MTI, 376-4748.

DEQ's authority and responsibility, if any would come from the Ground Water Quality Rule (GWQR). However, temperature is not a listed parameter so these comments are for your consideration only.

1. I don't know much about the mechanical details of the various types of heat exchangers, but you may want to verify that the heat exchanged and injected water will be non-contact, if the unit is water-to-air or water-to-water, if the unit can be tested periodically to ensure leaks have not developed, and perhaps even to require that the results of the tests be sent to IDWR.

2. You explained that the IDWR permitting process will cover all areas, including UIC.

3. Would it be appropriate to contact neighbors directly with information about projected temperature changes?

4. Is there any history of iron bacteria in the area. If so, would a temperature rise have an affect on growth?

Monty G. Marchus, P.E.
Staff Engineer
IDEQ Boise Regional Office
209-373-0560
mmarchus@deq.state.id.us

63-31354

*IDEQ comments
12/21/01*

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SEP 23 2002

MATERIALS TESTING & INSPECTION, INC.

7446 West Lemhi,

Boise, Idaho 83709

FAXDate: Monday, January 14, 2002Number of pages including cover sheet: 2**To: Steve Lester****IDWR**

Phone:

Fax phone: 334-2348

CC:

From: Rusty Boicourt

E-Mail: boicourt@mti-id.com

Phone: (208) 376-4748

Fax phone: (208) 322-6515

REMARKS:☐ Urgent☒ For your review☐ Reply ASAP☐ Please comment

Dear Steve:

Please find attached a letter seeking a waiver to proceed with drilling before permits are in place. The current schedule would start drilling at the end of this month or first of next month. I'm not sure if IDWR could have everything ready by then. Chris Duncan did contact me regarding the injection wells and I have delivered to him the additional info he needed. I have the original document and signature in my office and will provide it to you. Let me know if there is anything else I need to do to ensure that drilling may begin as scheduled.

Thank you,



Rusty Boicourt, P.G.
Environmental Services Manager

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JAN 14 2002

"Assuring the Strength, Safety, and Security of Your Future."

**MATERIALS
TESTING &
INSPECTION**January 3, 2002
f:\reports\600-799\610681\permit\waiver.doc☐ Environmental Services ☐ Geotechnical Engineering ☐ Construction Materials Testing ☐ Special Inspections

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WESTERN REGION OFFICE
2735 Airport Way
Boise, Idaho 83705

Attention: Steve Lester

Subject: **Idaho Place/Idaho Water Center
Waiver to Proceed with Well Drilling Activities**

Materials Testing & Inspection, on behalf of the owner Civic Partners, is seeking a waiver to install two production wells for the above referenced project before permits have been granted. The waiver is necessary to begin well drilling and installation on-time with respect to the phasing of construction activities at the project site. The project construction schedule is such that if well installation does not begin on-time, the groundwater cooling system will be abandoned in favor of traditional electric cooling systems. The intent of the Idaho Place/Idaho Water Center cooling system, as designed, is to provide necessary building functions using alternative energy sources resulting in a considerable reduction of electrical usage and cooling water that would normally be consumed with a traditional system. MTI and IDWR agree that the proposed system is a good and appropriate use of the natural resource. Significant time and effort will be lost if the system is abandoned now.

Permitting was begun in October, 2001 and has progressed steadily since then. The water right advertisement period expired on December 21, 2001 without protest to the proposed use. The request for additional comment for large diversion expired on December 28, 2001 without negative comment concerning the proposed use. All necessary permits, fees, and other forms have been submitted to the Department for review. IDWR has not had adequate time to process all permit applications. As such, MTI requests the issuance of the waiver to proceed with drilling and also allow the Department sufficient and considered time to review and process the applications. MTI and Civic Partners understand that this waiver in no way replaces actual well permits and that all drilling is performed at the owner's risk. Failure to secure the necessary permits will result in the owner's inability to use any wells constructed and will require the abandonment of all complete and partial wells.

Thank you for your time and attention to this matter.

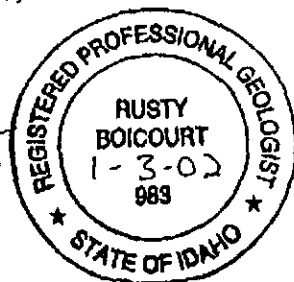
Respectfully submitted,

Consultant/Geologist:

Owner:

Rusty Boicourt

Rusty Boicourt, P.G.
MTI



Jeffrey Pomerooy
Jeffrey Pomerooy
Civic Partners

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SEP 23 2002

The Idaho Statesman

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DEC 14 2001

WATER RESOURCES
WESTERN REGION

P.O. Box 40, Boise, Idaho 83707-0040

LEGAL ADVERTISING PROOF OF PUBLICATION

Account #	a	Identification	Amount:
047628	573316	APPLICATION FOR PERMIT NO. 63-31354	\$173.24
Ordered by:	P.O. #	Rate	Run Dates
SUE TAYLOR		NT	DECEMBER 6, 13, 2001
DEPARTMENT OF WATER RESOURCE WESTERN REGION 2735 AIRPORT WAY BOISE, ID 83705			Number of Lines 32X3 Affidavit 1 Legal # 12089

LEGAL NOTICE NOTICE OF APPLICATION

63-31354

CIVIC PARTNERS
380 S 4TH ST STE 203
BOISE ID 83702

Points of Diversion L2 NESE
Points of Diversion L2 NESE
Use: COOLING
Total Diversion: 6 CFS
Date Filed: 10/24/2001
Place Of Use: COOLING
T03N R02E S10 NESE Lot 2 SESE Lot 11

Remark: Water bearing zone to be appropriated for 2 proposed cold water wells is from 200 to 800 feet for the Idaho Place Water Center near Broadway and Front in Boise.
Water will be returned to the aquifer via 2 proposed injection wells to allow a non-consumptive use.
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 Resource, Western Region, 2735 Airport Wy, Boise ID 83705 together with a protest fee of \$25.00 for each application on or before the protest to the applicant.
KARL J DREHER,
Director

Pub. Dec. 6, 13, 2001

DATE RECEIVED - 12/14/02
OK per NG 2/14/02 memo - 82 12089

JANICE HILDRETH, being duly sworn, deposes and says: That she is the Principal Clerk of *The Idaho Statesman*, a daily newspaper printed and published at Boise, Ada County, State of Idaho, and having a general circulation therein, and which said newspaper has been continuously and uninterruptedly published in said County during a period of twelve consecutive months prior to the first publication of the notice, a copy of which is attached hereto: that said notice was published in *The Idaho Statesman*, in conformity with Section 60-108, Idaho Code, as amended for:

TWO

☒ consecutive weekly ☐ single
☐ consecutive daily ☐ odd skip
insertion(s)

beginning with the issue of: DECEMBER 6, 2001
and ending with the issue of: DECEMBER 13, 2001

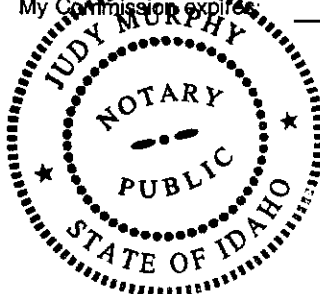
Janice Hildreth

STATE OF IDAHO)
) ss

COUNTY OF ADA

On this 13 day of DECEMBER in the year of 2001
before me, a Notary Public, personally appeared before me Janice Hildreth 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.

Notary Public for Idaho
Residing at: Boise, Idaho
My Commission expires:



Judy Murphy

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NGY said this ad is acceptable without re-advertising. - 82 1/18/02

Meeting @ Western 12/12/01

Mark Slitka

John Carlson

Rusty Baicunt - geologist consultant

Ron Farrow - Partner

JL

Discussed specs & agreed on parameters & conditions
for test well with limited pump test & possible
monitor ~~new~~ well aspect.

Resettled ID approval, attached copy.

Terry Swanson is hydrologist on project.

This cc for 63-31354

TEST WELL APPROVED 12/12/01

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SEP 23 2002

Printed 12/12/2001
Drilling Permit No. 772436
Well Tag No. D0019526
Well ID # 344310
Water Right No. 63-31354
Receipt # W028452
Approved Date 12/12/2001

**STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
DRILLING PERMIT**

Relationship: Owner/Operator
Name: CIVIC PARTNERS
Address: 380 S 4TH ST STE 203
BOISE ID 83702

Phone:

Proposed Well Location: Township 03N, Range 02E, Section 10, NE, SE
COUNTY ADA Sub Name IDAHO PLACE WATER CENTER

Street Address of Well Site: NORTHWEST CORNER OF FRONT AND BROADWAY
BOISE ID

Proposed Use of Well: Test
Monitoring

Well Construction Information:

- A. New Well
- B. Proposed Surface Diameter: 4 Inches. Proposed Depth 800 Feet.
- C. Anticipated Bottom Hole Temperature: 85F and less

Construction Start Date: Dec 12 2001

Anticipated Well Drilling Company: STEVENS & SONS WELL DRILLING INC (No. 153)

Applicant's Signature: _____ Date _____

Title: _____

*test well
limited pump test (does not seek or want hot H₂O,
possible monitor well
proper abandonment
need cold water for
the project)*

-fk 12/12/01
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SEP 23 2002

COPY

Well ID # 344310

Well Tag No. D0019526

ACTION OF THE DEPARTMENT OF WATER RESOURCES

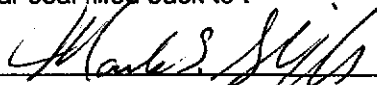
This permit is Approved on Wednesday, December 12, 2001.

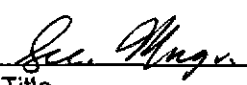
1. This drilling permit is valid for two (2) months from the approval date for the start of construction and is valid for one (1) year from the approval date for completion of the well unless an extension has been granted.
2. This permit does not constitute an approval of the District Health Department or the Idaho Department of Health and Welfare which may be required prior to construction of this well. The local Health Department should be contacted for septic tank/drainfield locations. Domestic wells must not be drilled closer than 100 ft. from any drainfield and 50 ft. from any septic tank. Public Water Supply wells must not be drilled closer than 100 ft. from any drainfield or septic tank.
3. The well shall be constructed by a driller currently licensed in the state of Idaho who must maintain a copy of the drilling permit at the drilling site.
4. Approval of this drilling permit does not authorize trespass on the land of another party.
5. This permit does not constitute other local, county, state or federal approvals which may be required for construction of a well.
6. This drilling permit does not represent a right to divert and use the water of the State of Idaho.
7. If a bottom hole temperature of 85 Degrees F (29.44 oC) or greater is encountered, well construction shall cease and the well driller and the well owner shall contact the Department immediately.
8. Idaho Code, S 55-2201 - 55-2210 requires the applicant and/or his contractors to contact "Digline" (DigLine is a one-call center for utility notification) not less than 2 working days prior to the start of any excavation for this project. The "Dig Line " Number for your area is &DIG-LINE-NUMBER
9. Please be advised that this drilling permit should be considered and treated as a preliminary permit. If you are in disagreement with this preliminary permit you have fourteen (14) days of the service date of this permit to petition the Department for reconsideration pursuant to Section 67-5243, Idaho Code.
10. No water shall be produced from this well or injected into this well without an approved injection well permit and water right permit. During the construction process the well will be utilized for testing of various aquifers encountered to the 800 foot depth.
11. Pursuant to Section 42-238(4), Idaho Code. All repairs and/or abandonments must meet the requirements of the Department Rules and Regulations for Well Construction Standards.
12. The well owner, operator or contractor, within 30 days of completion shall submit in writing and/or a schematic, a clear description of the abandonment procedure and the final condition of the well.
13. At the time this well is no longer needed for the purpose for which it is constructed, a proposal for decommissioning this well shall be submitted, and approval obtained from the Department of Water Resources, prior to the commencement of abandonment.
14. Water can only be diverted from this well for the purpose of the test pumping identified in this approval.
15. This approval does not confer trespass, easement or right of way on any land. Water disposal associated with the test pumping is outside of the scope of this approval and subject to the consent of other parties.
16. An eight inch well bore will be drilled to 60 ft. approx., with eight inch casing placed. An eight inch bore will be continued to a total depth of 800 ft with mud rotary drilling

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SEP 25 2002

equipment. The well will then be logged for caliper, resistivity, Spontaneous Potential, Temperature and Natural Gamma radiation. Then a four inch steel casing will be lowered in the bore with 40 ft. of screen attached with the screen being placed adjacent to potential aquifers, filterpacked then pumped at a rate of 100 gpm for six hours. This will be repeated for each potential aquifer. Upon the final aquifer test the well may be utilized as a monitor well. The well bore will be cleaned out to the full total depth, with placement of Sch 40 PVC pipe placed to an approx. depth of 500 ft. The well bore below 500 ft. will be filled with Bentonite chips or a high (>%30) solids bentonite slurry. The screened portion of the monitor well will be fully filterpacked with the blank casing annular seal filled back to t


Signature of Authorized Dept. Representative


Title

MICROFILM

SEP 23 2002

Form 235-1
6/7/01

EXPLORATION WELL

RECEIVED

OCT 29 2001

WATER RESOURCES
WESTERN REGION

RECEIVED

OCT 24 2001

WATER RESOURCES
WESTERN REGIONState of Idaho Department of Water Resources
APPLICATION FOR DRILLING PERMIT
(FOR THE CONSTRUCTION OF A WELL)

Drilling Permit No. _____

Drilling Permit Tag No. _____

Water Right Permit No. _____

Injection Permit NO. _____

*Both Apps.
PENDING*

1. Owner (please print): Civic Partners
2. Mailing Address: 380 So. 4th Street, Suite 203,
City: Boise State: ID Zip Code: 83702 Telephone (949) 975-0223
3. Proposed Well Location: Twp: 3N Rge: 2E Sec: 10 NE 1/4 SE 1/4 1/4
Gov't Lot No. _____ County Ada Lat. _____ : _____ : _____ Long. _____ : _____ : _____
Street Address of Well Site northwest corner of Front & Broadway City: Boise
Give at least the name of Road and Distance to Road or Landmark
Lot, block and subdivision _____

4. Proposed Use of Well:

☐ Domestic: The use of water for homes, organization camps, public campgrounds, livestock (1,000 head or less) and for any other purpose in connection therewith, including irrigation of up to 1/2 acre of land, if the total use is not in excess of 13,000 gpd; or any other uses, if the total use does not exceed a diversion rate of 0.04 cfs and a diversion volume of 2500 gpd.

Domestic does not include water for multiple ownership subdivisions, mobile home parks, commercial or business establishments, unless the use does not exceed a diversion rate of 0.04 cfs and a diversion volume of 2500 gpd.

NON-DOMESTIC: ☐ Irrigation ☐ Municipal ☐ Industrial
☐ Stock ☒ Test ☐ Other _____
(Over 1,000 Head) (Describe)

☐ INJECTION

☐ MONITORING: A well bore schematic and map is required for each blanket permit.
Number of proposed wells: _____

5. Well Construction Information:

- A. ☒ New well ☐ Modify ☐ Replace
- B. Proposed Casing Diameter 4" Proposed Maximum Depth 800'
- C. Anticipated bottom hole temperature:
☒ 85°F or less ☐ 85°F to 212° ☐ 212° F or more
(Cold water well) (Low temp. geo. well) (Geothermal well)

6. Construction Start Date: Nov. 12, 2001

7. Anticipated Well Driller: Stevens & Sons Well Drilling, Inc. Driller's Lic. No. 153
NOTE: The actual well driller must be identified prior to drilling.

8. Applicant's Signature: Burt Baur, MTI Date: 10-24-01

Address (if different than owner): 7446 West LemhiCity: Boise State: ID Zip Code: 83709 Telephone: (208) 376-4748Title: Consultant/Geologist

(Owner, Firm Representative, Other)

PAID \$75 10/29 50 OK

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SEP 11 2002

COLE

Dec-10-2001 03:50pm From: MATERIALS TESTING & INSPECTION

42882226515

T-105 P.002/003 F-966

PAGE # 1 OF 4

October 22, 2001

1:12001report\500-700\610001explorationwell\p3spectus.doc



MATERIALS TESTING & INSPECTION

☐ Environmental Services ☐ Geotechnical Engineering ☐ Construction Materials Testing ☐ Special Inspections

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
WESTERN REGION OFFICE
2735 Airport Way
Boise, Idaho 83705

**Subject: Water Center/Idaho Place proposed Groundwater Cooling System
Exploration Well Prospectus**

Ladies and Gentlemen:

Materials Testing & Inspection plans to install one four-inch, steel-cased exploration well to approximately 800-feet below ground surface (bgs) for the purposes of determining the geologic and hydrologic conditions of water-bearing formations beneath the project site. An eight-inch steel surface casing will be placed through the coarse gravel using an auger rig to a depth of approximately 60-feet. The eight-inch borehole will then be continued to the final depth of 800-feet. After completing the borehole, geophysical logging to determine aquifer conditions will be conducted. The logging will include caliper measurement, resistivity, spontaneous potential, temperature, and natural gamma radiation.

Zone pumping tests will be conducted at each water-bearing formation using the following method: 1) A four-inch well casing with approximately 40-feet of well screen would be installed to the deepest water-bearing zone; the borehole beneath the well screen section will be backfilled. 2) Gravel pack would be placed opposite the well screen. 3) A roughly 10-foot section of bentonite chip plug would be placed above the gravel pack. 4) The well would be developed by air-lifting or over-pumping. 5) Following development, a constant-rate pumping test of 100 gallons/minute (gpm) would be conducted for 6-hours. 6) Water temperature, pH, TDS, and electrical conductivity would be monitored and samples collected for laboratory analysis. 7) After test pumping, the casing and screen would be pulled up to the next water bearing zone, collapsing the gravel pack and seal into the previous zone. These steps would be repeated for up to three more water-bearing zones.

After completion of the pumping tests, the borehole may be filled with bentonite grout and abandoned entirely, or reamed down to approximately 500-feet and completed as a four-inch diameter, PVC observation well. A well diagram showing the latter option is attached. If completed as an observation well, monitoring will be done during the pump testing of subsequent production and injection wells. The well would eventually be abandoned during construction activities.

Respectfully submitted,

Rusty Boicourt

Rusty Boicourt, P.G.
Environmental Services Manager



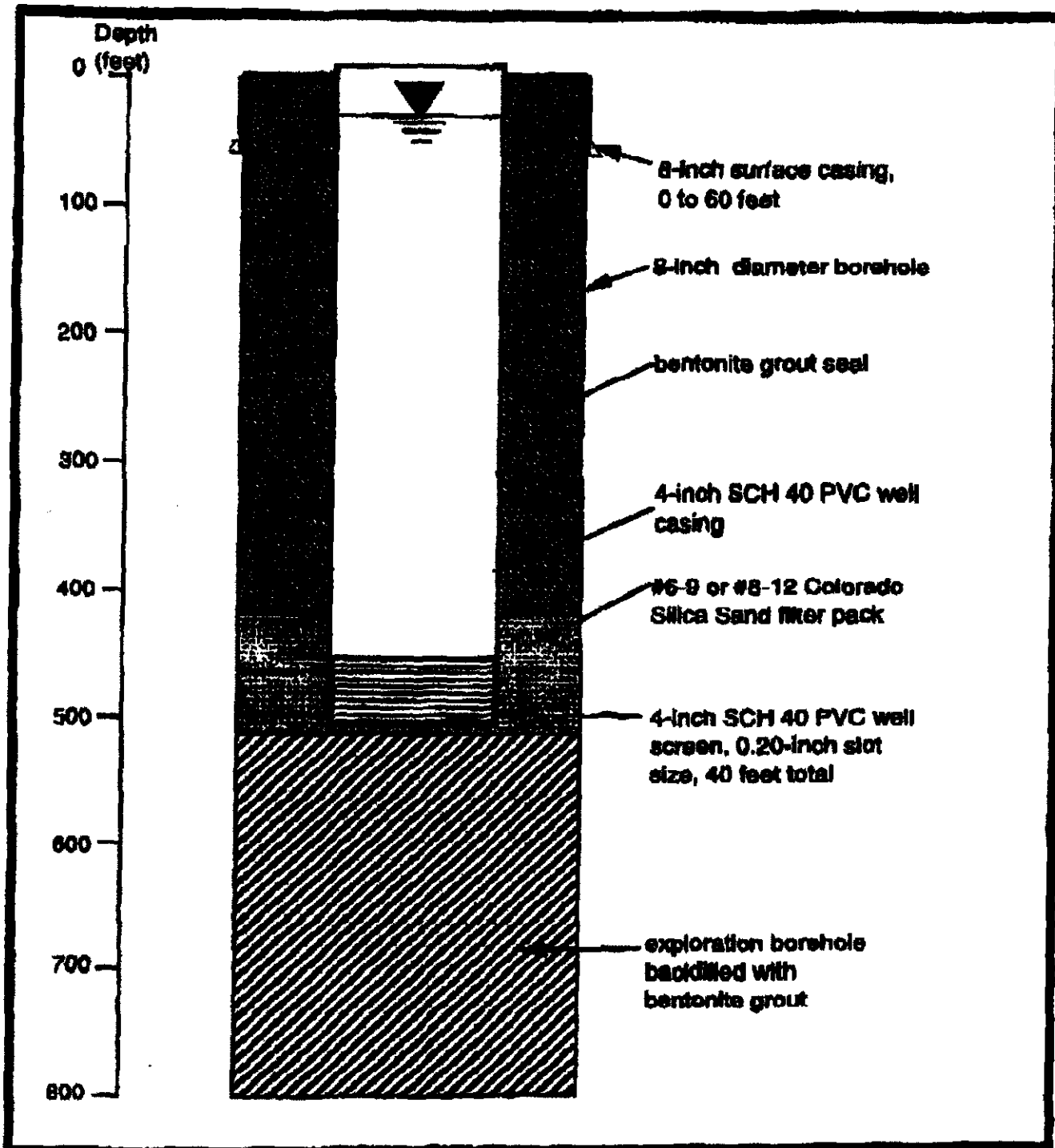
7446 W. Lemhi St., Boise, ID 83709
E-Mail mti@mti-id.com

208 378-4748

Fax 208 322-6515
www.mti-id.com

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SEP 23 2002

**CONCEPTUAL DESIGN****WATER CENTER EXPLORATION WELL***

(*assumes exploration well is completed as an observation well
rather than abandoned by filling with bentonite grout)

MICROC...

SEP 13 2002

MEMORANDUM

TO: File

FROM: Steve Lester 

DATE: November 29, 2001

RE: Preliminary Determination for Application No. 63-31354

Application 63-31354 proposes 6 cfs from two cold water wells about 800 feet deep in the Boise Front GWMA. The GWMA concerns low temperature geothermal water in addition to cold water deeper than 300 feet. Water will be used for cooling purposes at the proposed Idaho Place - Water Center next to the new courthouse in downtown Boise.

An application for the resource in question in the Boise Front requires a "preliminary determination" before the application can be processed. In this case, the applicant proposes a non-consumptive use of the cold water resource. The applicant filed an injection well application to return water to the same zone from which it is proposed to be withdrawn (200 to 800 feet). See attachments to Application 63-31354 for more details.

The applicant submitted sufficient information for a favorable preliminary determination by IDWR. Application processing should continue. Legal notices will be published in the first half of December with a protest deadline of December 24, 2001.

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SEP 29 2002



State of Idaho

DEPARTMENT OF WATER RESOURCES

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

FAX (208) 334-2348

DIRK KEMPTHORNE
Governor

KARL J. DREHER
Director

November 29, 2001

RUSTY BOICOURT P G
MATERIALS TESTING & INSPECTION
7446 W LEMHI ST
BOISE ID 83709

Re: Application No. 63-31354, Water Center/Idaho Place

Dear Rusty:

This letter follows your visit yesterday in which you submitted the original application together with sufficient information allowing the application to be processed. The local legal notice will be published on December 6 and 13, and the protest deadline will be December 24, 2001. This office will expedite the application processing as much as possible.

Enclosed is your receipt for payment of the injection well proposal.

Please note that pump testing should not proceed until approved by this office. An approved pump test can best be accommodated after approval of the water application but can be arranged prior to that approval if sufficient justification can be provided.

The additional information needed to fully complete the application process follows:

- Identify the title for Jeff Pomeroy with respect to Civic Partners.
- Water Appropriation Rule 40 describes "large diversion" information to be submitted. The pertinent items are noted on the handout you received during yesterday's visit.

Please submit the above requested information within thirty (30) days of the date of this letter to maintain the application in good standing. Please do not hesitate to contact me if you need any assistance. Thank you for your attention to these matters.

Sincerely,

Steve Lester
Water Rights Supervisor

Enclosure

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SEP 23 2002

63-31354
Civil Partners

LARGE DIVERSION Information
"Rule 40"
... 040.05.c through h
Ch only Applies to trust water

IDAHO ADMINISTRATIVE CODE
Department of Water Resources

IDAPA 37.03.08
Water Appropriation Rules

criterion (e) of Section 42-203A(5), Idaho Code, as to any factor affecting local public interest of which he is knowledgeable or reasonably can be expected to be knowledgeable. The protestant shall bear the initial burden of coming forward with evidence for those factors relevant to criterion (e) of Section 42-203A(5), Idaho Code, of which the protestant can reasonably be expected to be more cognizant than the applicant. (7-1-93)

iii. The protestant shall bear the initial burden of coming forward with evidence for the evaluation of the public interest criteria of Section 42-203C(2), Idaho Code, and of demonstrating a significant reduction, except that the applicant shall provide details of the proposed design, construction, and operation of the project and directly associated operations to allow the impact of the project to be evaluated. (7-1-93)

c. The applicant has the ultimate burden of persuasion for the criteria of Section 42-203A, Idaho Code, and the protestant has the ultimate burden of persuasion for the criteria of Section 42-203C, Idaho Code. (7-1-93)

d. For unprotested applications or permits to be reprocessed, the director will evaluate the application, information submitted pursuant to Rule Subsection 040.05.c. and information in the files and records of the department, and the results of any studies the department may conduct to determine compliance with the appropriate criteria. (7-1-93)

e. In protested matters the director will take official notice of information as described in the department's adopted Rules of Procedure, and will, prior to considering, circulate to the parties information from department studies and field examinations concerning the protested application or permit being reprocessed, if such information has not otherwise been made a part of the hearing record. (7-1-93)

05. Additional Information Requirements. (7-1-93)

a. For unprotested applications and permits being reprocessed, the additional information required by Rule Subsection 040.05.c. shall be submitted within thirty (30) days after the director notifies the applicant that the application or permit is being reviewed for decision. The director may extend the time within which to submit the information upon request by the applicant and upon a showing of good cause. Failure to submit the required information within the time period allowed will be cause for the director to void an application or to advance the priority of a permit being reprocessed by the number of days that the information submittal is late. The director will provide opportunity for hearing as provided in Section 42-1701A, Idaho Code. (7-1-93)

b. For protested applications or protested permits being reprocessed, the information required by Rule Subsection 040.05.c. may be requested by the director to be submitted within thirty (30) days after notification by the director, may be made a part of the record of the hearing held to consider the protest, or may be made available in accordance with any pre-hearing discovery procedures. Failure to submit the required information within the time period allowed will be cause for the director to void an application or to advance the priority of a permit being reprocessed by the number of days that the information submittal is late. (7-1-93)

c. The following information shall be submitted for applications to appropriate unappropriated water or trust water and for permits being reprocessed for trust water. The additional information submittal requirements of this rule are waived for filings which seek to appropriate five (5) cfs or less or storage of five hundred acre-feet (500 AF) or less and for filings seeking reallocation of trust water which the director determines will reduce the flow of the Snake River measured at Murphy Gauge by not more than two (2) acre-feet per day. For filings proposing irrigation as a purpose of use, the additional information is required if more than two hundred (200) acres will be irrigated. However, the director may specifically request submittal of any of the following information for any filing, as he determines necessary. Information relative to the effect on existing water rights, Section 42-203A(5)(a), Idaho Code, shall be submitted as follows: (7-1-93)

i. For applications appropriating springs or surface streams with five (5) or fewer existing users, either the identification number, or the name and address of the user, and the location of the point of diversion and nature of use for each existing water right shall be submitted. (7-1-93)

✓ ii. For applications appropriating groundwater, a plat shall be submitted locating the proposed well relative to all existing wells and springs and permitted wells within a one-half mile radius of the proposed well.

for

> 5 cfs
> 500 AF storage
> 200 acres irrigation
> 2 AF/day reductions at Murphy gauge

to consultant
11/28/01 office
visit

(7-1-93)

iii. Information shall be submitted concerning any design, construction, or operation techniques which will be employed to eliminate or reduce the impact on other water rights. (7-1-93)

d. Information relative to sufficiency of water supply, Section 42-203A(5)(b), Idaho Code, shall be submitted as follows: (7-1-93)

i. Information shall be submitted on the water requirements of the proposed project, including, but not limited to, the required diversion rate during the peak use period and the average use period, the volume to be diverted per year, the period of year that water is required, and the volume of water that will be consumptively used per year. (7-1-93)

ii. Information shall be submitted on the quantity of water available from the source applied for, including, but not limited to, information concerning flow rates for surface water sources available during periods of peak and average project water demand, information concerning the properties of the aquifers that water is to be taken from for groundwater sources, and information on other sources of supply that may be used to supplement the applied for water source. (7-1-93)

e. Information relative to good faith, delay, or speculative purposes of the applicant, Section 42-203A(5)(c), Idaho Code, shall be submitted as follows: (7-1-93)

i. The applicant shall submit copies of deeds, leases, easements or applications for rights-of-way from federal or state agencies documenting a possessory interest in the lands necessary for all project facilities and the place of use or if such interest can be obtained by eminent domain proceedings the applicant must show that appropriate actions are being taken to obtain the interest. Applicants for hydropower uses shall also submit information required to demonstrate compliance with Sections 42-205 and 42-206, Idaho Code. (7-1-93)

ii. The applicant shall submit copies of applications for other needed permits, licenses and approvals, and must keep the department apprised of the status of the applications and any subsequent approvals or denials. (7-1-93)

f. Information Relative to Financial Resources, Section 42-203A(5)(d), Idaho Code, shall be submitted as follows: (7-1-93)

i. The applicant shall submit a current financial statement certified to show the accuracy of the information contained therein, or a financial commitment letter along with the financial statement of the lender or other evidence to show that it is reasonably probable that financing will be available to appropriate the water and apply it to the beneficial use proposed. (7-1-93)

ii. The applicant shall submit plans and specifications along with estimated construction costs for the project works. The plans shall be definite enough to allow for determination of project impacts and implications. (7-1-93)

* g. Information Relative to Conflict with the Local Public Interest, Section 42-203A(5)(e), Idaho Code, shall be submitted as follows: The applicant shall seek comment and shall submit all letters of comment on the effects of the construction and operation of the proposed project from the governing body of the city and/or county and tribal reservation within which the point of diversion and place of use are located, the Idaho Department of Fish and Game, the Idaho Department of Environmental Quality, and any irrigation district or canal company within which the proposed project is located and from other entities as determined by the director. (7-1-93)

h. The following information Relative to the Public Interest Criteria of Section 42-203C(2), Idaho Code, shall be submitted by an applicant seeking reallocation of trust water for a project which the director determines will reduce the flow of the Snake River by more than two (2) acre-feet per day. For filings proposing irrigation as a purpose of use, the additional information is required if more than two hundred (200) acres will be irrigated. The director may request any or all of the following information for any filing seeking the reallocation of trust water. (7-1-93)

* letters ✓ IDEQ and
✓ gov. body of city

PLUS ✓ justify why 6.0 cfs needed

November 28, 2001

Legal Notice Department
IDAHO STATESMAN
PO BOX 40
BOISE ID 83707

RE: Application for Permit No. 67-7878, 63-31329, 63-31354, 63-31326, 63-31324, and 63-31323
Application for Transfer No. 69547

Dear LEGAL NOTICE DEPARTMENT:

Enclosed you will find a legal notice which we wish to have published in your newspaper on the dates indicated (once a week for two consecutive weekly issues). If you cannot publish the notice on the proposed dates, please contact us immediately.

An affidavit of publication must be submitted to the Department along with the publication bill. Please send the affidavit and bill to this office before 12/24/2001. Your cooperation is appreciated.

Sincerely

Sue Taylor
Senior Secretary

MICROFILMED

SEP 24 2002

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

63-31354

CIVIC PARTNERS
380 S 4TH ST STE 203
BOISE ID 83702

Point(s) of Diversion L2 NESE S10 T03N R02E ADA County Source GROUND WATER

Point(s) of Diversion L2 NESE S10 T03N R02E ADA County Source GROUND WATER

Use: COOLING 01/01 To 12/31 6 CFS

Total Diversion: 6 CFS

Date Filed: 10/24/2001

Place Of Use: COOLING

T03N R02E S10 NESE Lot 2 SESE Lot 11

Remark: Water bearing zone to be appropriated for 2 proposed cold water wells is from 200 to 800 feet for the Idaho
Place Water Center near Broadway and Front in Boise.
Water will be returned to the aquifer via 2 proposed injection wells to allow a non-consumptive use.

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 Resource, Western Region,
2735 Airport Wy, Boise ID 83705 together with a protest fee of \$25.00 for each application on or before . The protestant must also
send a copy of the protest to the applicant.

KARL J DREHER, Director

Published in the Idaho Statesman on December 6 and 13, 2001.

MICROFILMED

SEP 23 2002



B10979e

RECEIVED

NOV 28 2001

WATER RESOURCES
WESTERN REGION

November 19, 2001

Mr. Rusty Boicourt
Materials Testing & Inspection
7446 W. Lemhi St.
Boise, ID 83709

Dear Mr. Boicourt,

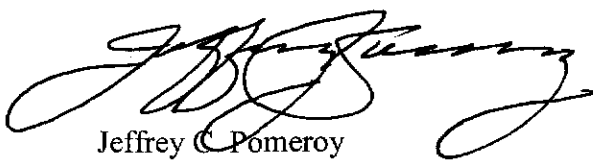
In response to your request for the Civic Partners West officers, the company information is as follows:

Civic Partners West, LLC
3961 MacArthur Blvd, Suite 212
Newport Beach, CA 92660

Managing Member – Steven P. Semington

If you need any further information feel free to contact me.

Sincerely,



Jeffrey C. Pomeroy

Vice Pres. per 5/24/02 Amended Appl. submitted
-SL

MICROFILMED

SEP 28 2002

3961 MacArthur Blvd., Suite 212 • Newport Beach, California 92660
Telephone: (949) 975-0223 • Facsimile: (949) 975-0233

63-31354

IDAHO DEPARTMENT OF WATER RESOURCES
Water Application Report 63-31354

Comments:

1. slester 11/26/2001 9:31:55 AM Additional Information Notes
Comment: Appropriation Rule 40.05.c information was requested.
2. slester 11/26/2001 9:34:21 AM Special Administration Area Notes
Comment: Special Administration Areas : Boise Front
Exempt: Y
Reason: Non-Consumptive Use
Doc Attached: Y
Explanation: Water will be returned to aquifer with 2 injection wells
3. slester 11/26/2001 Legal Notice Remarks
Comment: Water bearing zone to be appropriated for 2 **proposed cold water wells** is from 200 to 800 feet for the Idaho Place Water Center near Broadway and Front in Boise.
Water will be returned to the aquifer via 2 proposed injection wells to allow a **non-consumptive use**.
4. slester 6/20/2002 Comment/Analysis
Comment: Per amended application, large diversion and GWMA no longer applicable, and water bearing zone changed to 100-300 feet (despite some file inconsistencies). Shape file completed today. Injection well permit approved earlier this month (part of mitigation plan for non-consumptive use). Original application filed 10/24/01, revised by 11/28/01 for expedited processing, and amended 5/20/02 per meetings between 12/01 and 2/02. Advertising error (database glitch since protest date printed in cover letter but not in legal notice?) was not cause for additional legal notice per administration memo 2/4/02. Cooling is for the Idaho Place and Idaho Water Center.

Dates and Other Information:

Application Received Date: 10/24/2001
 Application Denied Date:
 Last Date of Beneficial Use:
 Extension End Date:
Protest Deadline Date: 3/11/2002 ←
 Number of Protests: 0
 Enlargement Use Priority Date:
 Enlargement Statute Priority Date:
 Formal Action Date:
 State or Federal:
 Owner Name Connector:
 Water District Number:
 Generic Max Rate Per Acre:
 Generic Max Volume Per Acre:
 Application Type: New Appropriation

Applicant Remarks: Non-consumptive use of cold ground water for cooling purposes is proposed. Drilling method will be direct (mud) or reverse rotary. Two injection wells in SESE S10 will ensure water is returned to the water bearing zone from which it is extracted. Two production wells in NESE will be 12 inches in diameter. Water bearing zone will be from 100-300 feet. Injection wells will be 400 feet or less in depth. See narrative with 5/20/02 amended application and consultant (Scanlan) letter dated 2/18/02 re mitigation plan etc.

Other Water Rights: none
 Time to Complete Works: 1
 Transfer Affected Description:
 Transfer Affected Contracts:
 Old Transfer Number:
 Transfer Reason:
 Transfer Return Flows:
 Swan Falls Trust or Nontrust:
 Swan Falls Dismissed:

WRONG ... was 12/24/01. Don't know why this data appeared. No data showed in 5/31/02 printout, although other data glitches observed then (e.g. had 11/26/01 Appl. denied date, among other glitches).

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SEP 2 1 2002

** discarded so not in file*

Idaho Department of Water Resources Receipt

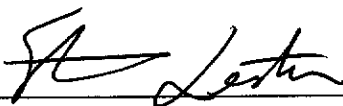
Receipt ID W028448

Payment Amount \$450.00 Date Received 10/25/2001 2:33:52 PM Region Western Status ☐
Payment Type Check Check Number 23214

Payer MATERIALS TESTING & INSPECTION INCComment Civic Center water right application

Fee Detail

Amount Description Fund FD PCA SO
\$450.00 PERMITS 0229 21 62103 1155



Signature Line (Dept. Representative)

Copies for files

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SEP 23 2002

CONVERSATION MEMORANDUM

DATE 11/15/01

FILE 63-31354

NAME OF PARTY Rusty Boicourt 376-4748

EMPLOYEE RZ

cell 870-9992

RE: Appl. changes

FEUGAT vis-to/calls Oct-Nov ... Results:

① WR Appl.* - leave as 6.0 cts, correct fee paid.

original being revised per notes on cc version.

Justify why need 6.0 up to 6.0.

Some large d.w. info will be needed.

Officers/titles are " " "

② test well Appl. to RBW 11/16/01

③ injection well Appl. w/ its d.p. Appls. ... Rusty

following up & will pay fees

* a second d.p. Appl. ... fee paid but form not submitted yet.

OK to advertise first 1/2 December & expedite as can.

MICROFILMED

SEP 23 2002

RECEIVED
OCT 24 2001
WATER RESOURCES
WESTERN REGION

COPY
Ident. No. 63-31354

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
APPLICATION FOR PERMIT

To appropriate the public waters of the State of Idaho

1. Name of Applicant Civic Partners Phone (949) 975-0223
Mailing address 380 So. 4th Street, Suite 203, Boise, ID 83702

2. Source of water supply groundwater which is a tributary of N/A

3. Location of point of diversion is Township 3N Range 2E Sec. 10, in the NE $\frac{1}{4}$,
SE $\frac{1}{4}$, Govt. Lot 2, B.M., Ada County;

additional points of diversion if any: none 2 wells on same location

4. Water will be used for the following purposes:

Amount 6x cfs for cooling 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)
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) 6x cfs and/or (b) _____
cubic feet per second acre feet per annum

6. Proposed diverting works:

a. Describe type and size of devices used to divert water from the source electric submersible pumps with piping to heat exchangers

b. Height of storage dam N/A feet; active reservoir capacity _____ acre-feet; total
reservoir capacity N/A acre-feet

c. Proposed well diameter is 12 - 18 inches; proposed depth of well is 800 feet

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

e. If well is already drilled, when? N/A; Drilling firm _____;
Well was drilled for (well owner) _____; Drilling Permit No. _____

7. Time required for completion of works and application of water to proposed beneficial use is 1 years (minimum 1 year)

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

- a. Hydropower; show total feet of head and proposed capacity in kW. N/A
- b. Stockwatering; list number and kind of livestock. N/A
- c. Municipal; show name of municipality. N/A
- d. Domestic; show number of households. N/A
- e. Other; describe fully. non-consumptive use of cold groundwater for cooling purposes

this copy/fax version is acceptable while original
appl. form is being signed/approved by Applicant. Application
details confirmed by consultant in meetings & telephone calls.
MICROFILMED
- JZ 11/15/01

SEP 23 2001

COPY

This cc of original pg 1 verifies original filing was
for 6 cfs.
- JZ 11/29/01.

Oct-23-2001 04:27pm

From-MATERIALS TESTING & INSPECTION

42083226515

T-264

P.002/002

F-508

2. Description of place of use:

- a. If water is for irrigation, indicate acreage in each subdivision in the tabulation below.
- b. 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	RGE	SEC	NE				NW				SW				SE				TOTALS
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
3N	2E	10													1.			1.	
															6.2			6.4	

Total number of acres to be irrigated N/A10. Describe any other water rights used for the same purposes as described above. N/A

11. a. Who owns the property at the point of diversion? Civic Partners
- b. Who owns the land to be irrigated or place of use? Civic Partners
- c. If the property is owned by a person other than the applicant, describe the arrangement enabling the applicant to make this filing: N/A

12. Remarks: a. Non-consumptive use (RE: 2 proposed injection wells)
- b. Drilling method will be direct (mud) or reverse rotary
- c. Water bearing zone to be appropriated is 200' to 800'

13. MAP OF PROPOSED PROJECT REQUIRED - Attach an 8 1/2"x11" map clearly identifying the proposed point of diversion, place of use, section #, township & range. (A photocopy of a USGS 7.5 minute topographic quadrangle map is preferred.)

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

Received by RL Date 10/24/01 Time 4:30 Preliminary check by RL
 Fee \$ 450 Received by RL # 42083226515 Date 10/23/01
 Publication prepared by RL Date 10/23/01 Published in RL
 Publication approved RL Date 10/23/01

This fax page verifies applicant signed the 10/24/01 original submittal. An original signature was included on 11/28/01 resubmittal.

MICROFILMED

SEP 23 2002

-RL 11/29/01