

6/25/2020

Katsilometes Licensing Meeting: 29-7869 and 29-13672

Attendees: Charlie Honsinger (Katsilometes Representative), George Katsilometes, Betty Katsilometes, Shelley Keen: Idaho Department of Water Resources ("IDWR"), Angie Grimm: IDWR, Ashley Ritter: IDWR

Charlie Honsinger: 12/12/2014 letter from Paul Turke with George's affidavit (found within water permit files) is their (Katsilometes') current position- seeking licenses each for 0.5 cfs.

IDWR: Presented permit amendment to Mr. Honsinger and Katsilometes (29-7869)

Permit 29-13672:

- Diversion Rate- System is capable of supplying 1cfs
- Volume- Necessary to accomplish authorized beneficial use. Need to confirm how much water (additional to existing water rights) needed to accomplish use developed.

Annual Use per Katsilometes: More water is needed during colder months (October through March/April) to maintain desired temperature of 98 to 107 degrees Fahrenheit (F). Lower temperatures in soaking pools desired during summer months (June, July and August).

How is water limited in summer to acquire desired lower temperatures for soaking pools?

--Turn valves back in pools during hot months to lower temperature (typically during June, July and August). Valve back approximately 50 gpm and divert water to an additional pool not being used then diverted to river. Pumps are running 24/7. During the summer not all water is beneficially used for heating but all water is being diverted.). Transition of seasons is where there is question as to how much water is valved back (April/May and possibly September).

- (2) 5hp pumps and (1) 7.5 hp pump in wells,
- Well temperatures all different:
 - Well 1: 98 F
 - Well 2: 115 F
 - Well 3: 145 F

Water from all three wells are mixed together within the same system to maintain temperatures.

Water from coolest well (well 1) delivered to pools from one pipe and water from the two hotter wells (well 2 and 3) are delivered from a different pipe.

Water is also used to heat buildings (main inn building and spa building). A modene hot coil fan (reverse radiator) is used for the main inn and a heat exchange unit with propylene glycol is used for the spa building. The target indoor temperature is 72 F year round. In June, July, and August (generally) heat is not on in buildings. The same units are used during warm months to cool buildings. Cold water from the City's system is used for cooling.

Water from buildings are also used to heat sidewalks. (All wells supply water to pipes under the sidewalks.

There are 3 discharge pipes from the system to the river. There is one at the old river pool, but the pipe is broken (per George it would be difficult to obtain a flow measurement)

Is there an NPDES or IPDES permit for discharge to river? Not that George is aware of

Measuring device on one well (per George a hand-written log was kept with data but he no longer has the log). The measuring device is on the hottest well, Well 3. The device reads temperature, totalizer volume and instantaneous flow rate. Mr. Katsilometes stated logs were submitted to IDWR for a year and that there was no fluctuation in data. It was stated that temperatures have not declined in wells, but a historic temperature is unknown.

Mr. Katsilometes stated that all three wells are artesian (flowing) wells.

29-13672 Conditions of approval:

Reasons for conditions explained by Shelley Keen.

There is not a complete record of data in compliance with conditions.

One option is to "start fresh" and issue license when there is assurance data can be reported in the future.

2nd option: For permit holder to confirm our general impression that there are no temperature and pressure declines that have impacted nearby users. IDWR does not have a full data set (per conditions) but concerns from nearby water users have not materialized. Possibility for permit holder to obtain affidavits from neighbors showing no injury.

Path forward:

- Permit amendment for 29-7869 and issuance of license
- Diversion rate on permit 29-13672 okay, but IDWR will be working on data to narrow in on a volume for license.
- Compliance with conditions of approval for 29-13672-Charlie to talk over with permit holder

TO DO:

- Mr. Katsilometes received license amendment for 29-7869. Will review and get back to IDWR
- Phone call set for September 2nd at 2pm for status update.

Attachments (provided by Permit Holder):

Water Usage and pool dimension sheet

Map of Lava Hot Springs Inn and Property

Lava Hot Springs Inn Expansion Preliminary Plan dated 5/10/1995

Total Water Usage Necessary for 17 Mineral Hot Water Pools and 2 Geothermally Heated Buildings

<u>Type</u>	<u>Size</u>	<u>Volume</u>	<u>Flow</u>
9 Round:	7' DiameterX3' Deep Pools	(864 Gallons)	90 gpm
3 Round:	10' DiameterX3.5' Deep Pools	(2,056 Gallons)	60 gpm
Aztec Pool:	(30'X14'X3')	(9412.2 Gallons)	45 gpm
Lap Pool:	(80'X20'X4')	(47,808 Gallons)	100 gpm
Kidee Pool:	(8'X3'X1.5')	(269 Gallons)	20 gpm
Therapy Pool:	(40'X15'X3.5')	(15,687 Gallons)	50 gpm
River Pool:	(30'X12'X3')	(8,068 Gallons)	20 gpm
Main Inn Geothermal Fan Coil:			25 gpm
Spa Building Geothermal Heat Exchanger:			<u>25 gpm</u>

main inn: 40x40 3 full stories
20x20 on top ~ 8000 sq. ft.

Spa Building: 2 stories (1200ft²)x2 levels
= 2400 sq. ft.

Total: 435 gpm

50 gpm can
be reduced to
another pool
not used for
heat
value)

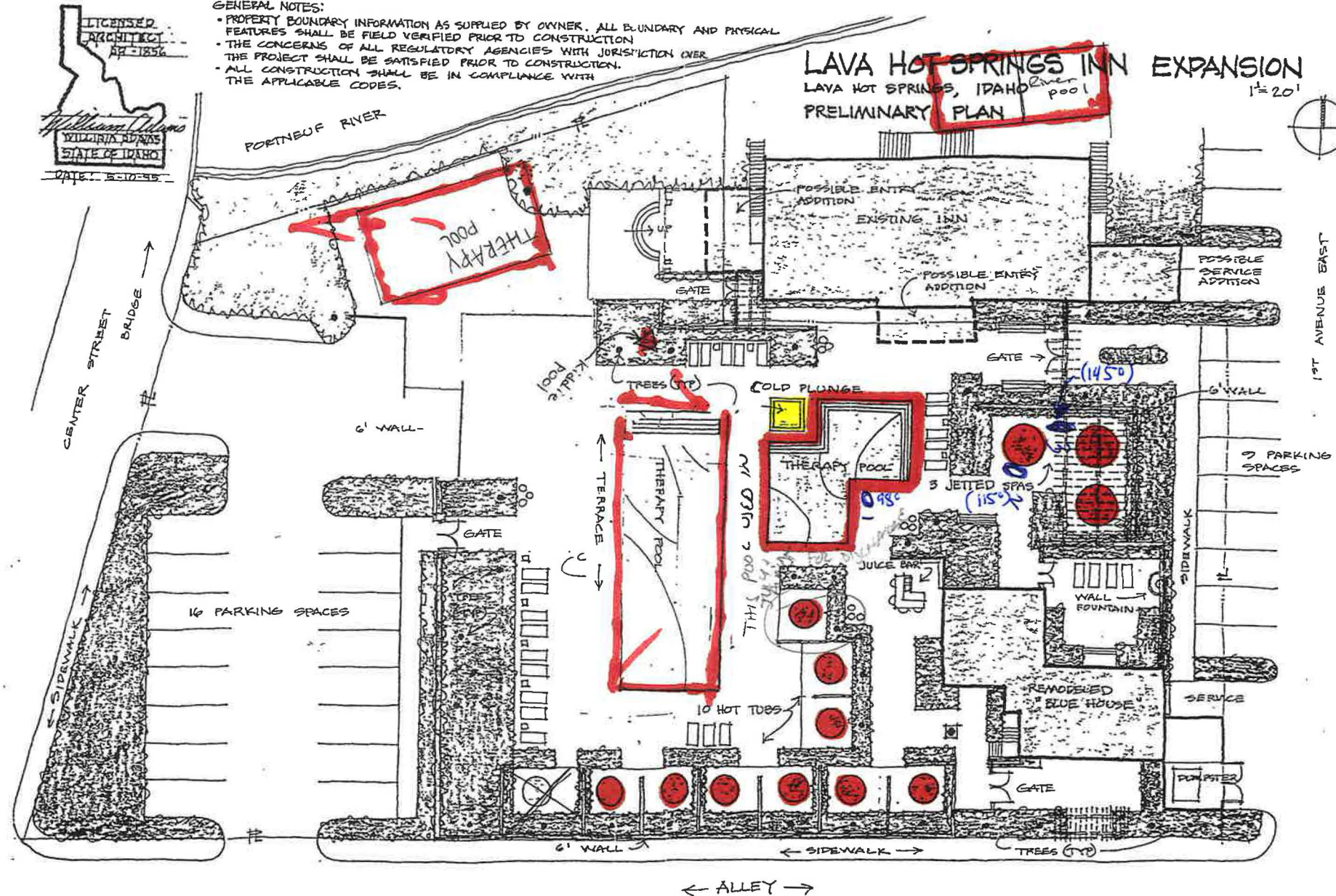
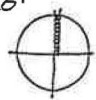
LICENSED
ARCHITECT
WILLIAM R. RAY
STATE OF IDAHO
DATE: 5-10-95

GENERAL NOTES:

- PROPERTY BOUNDARY INFORMATION AS SUPPLIED BY OWNER. ALL BOUNDARY AND PHYSICAL FEATURES SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION.
- THE CONCERNS OF ALL REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT SHALL BE SATISFIED PRIOR TO CONSTRUCTION.
- ALL CONSTRUCTION SHALL BE IN COMPLIANCE WITH THE APPLICABLE CODES.

LAVA HOT SPRINGS INN EXPANSION LAVA HOT SPRINGS, IDAHO PRELIMINARY PLAN

1"=20'



Lava Hot Springs Inn Expansion
Preliminary Plan
5/10/1995

