AFFIDAVIT OF ROBERT HARDGROVE

STATE OF IDAHO)
: ss
County of Ada)

Robert Hardgrove, being first duly sworn under oath deposes and states as follows:

1. I am employed by SPF Water Engineering, 300 E. Mallard Dr., Suite 350, Boise, Idaho 83706. I am a Licensed Engineer in Idaho, Utah, Nevada, and Montana. I have a Bachelor of Science degree in Civil Engineering from Montana State University.

2. I am the lead engineer on a project to construct a pipeline to pump water from the SeaPac fish hatchery at Magic Springs roughly 1.6 miles to the Rangen fish hatchery on Billingsley Creek near Hagerman, Idaho. Page G-005 of the engineering drawings attached hereto as ***Exhibit A*** shows the route of the pipe. This project is being constructed under IGWA's Fourth Mitigation Plan filed with the Director of the Idaho Department of Water Resources (IDWR). It is commonly known as the "Magic Springs Project." I refer to it in this affidavit simply as the "Project."

3. I have overseen the design, engineering, and construction of the Project. It has been pursued on an extremely aggressive schedule because of the January 19, 2015 curtailment deadline imposed by the Director.

4. Absent the January 19th deadline, an aggressive schedule for completing the Project would have placed completion between March 15 and April 1, 2015.

5. However, because of the January 19th deadline, every effort has been made to complete the Project as fast as possible. This includes proceeding toward 100% engineering and construction before the Director approved IGWA's Fourth Mitigation Plan, employing additional staffing, pre-ordering material and equipment, hiring multiple contractors to construct different parts of the Project, paying premiums to expedite materials and construction, financial incentives in contracts to encourage completion by January 19, 2015, and working holidays, weekends, and extended hours.

6. All necessary components of the Project were operational by the January 19th deadline except one. On the south end of the Project the pipe scales a steep talus slope and then turns vertical until cresting the basalt cliff adjacent to the Magic Springs fish hatchery. Because of the topography and other factors, this section of the pipe—approximately 400 feet—is being constructed with above grade, welded steel pipe secured by concrete thrust blocks, as opposed to the HDPE pipe that is buried under ground for the remainder of the Project.

7. Construction and installation of the steel pipe up the talus slope and cliff is an intensive process. The process has been complicated by undesirable and unforeseen subgrade conditions that have delayed critical components of the project, including the concrete thrust blocks. As the January 19th curtailment date approached, it became apparent that the steel pipe would not be completed by that date. Therefore, to meet the deadline the general contractor for the Project concentrated their efforts on installing a temporary HDPE pipe up the cliff. The temporary pipe was installed and ready to fill with water by January 17, 2015.

8. However, on January 16, 2015, it was determined the contractor procured HDPE pipe for the temporary section up the cliff that was not brand new. The pipe had previously been used to transport clean groundwater from wells to fill water trucks, but the Director's order approving IGWA's Fourth Mitigation Plan states that any temporary pipe that is utilized must be new pipe.

9. Once the Director denied the request by IGWA's legal counsel to utilize the used pipe, my firm evaluated the options for replacing the used temporary pipe with new temporary pipe.

10. Based on my understanding that IGWA's mitigation obligation is expected to increase due to (a) removal of the Great Rift trim line, and (b) IGWA being required to deliver additional mitigation water to make up for the delay between January 19th and completion of the Project, I recommended to the districts responsible for the Project that they abandon the temporary pipe and put all effort into completing the steel pipe. This recommendation is based on (a) uncertainty as to how much water the temporary pipe will be required to deliver, and (b) increased risk of the temporary pipe failing if higher flow rates are required.

11. Because of the rugged terrain and elevation difference where the temporary pipe is located, restraining the pipe properly is extremely important. This was less of a challenge when the temporary pipe was a smaller diameter and only required to flow 2.2 cfs. However, the risks associated with utilizing a temporary pipe increase as the pipe diameter and water velocity increase. When the requirement to deliver 5.5 cfs instead of the expected 2.2 cfs was imposed mid-construction by the Director, both the pipe diameter and the water velocity in the temporary pipe increased to meet the new and unforeseen requirement. The larger pipe is heavier due to more pipe material and water volume. The added weight, increases the stress to connections and pipe supports. The higher water velocity increases the pressure the pipe could encounter due to pressure surges (water hammer) if the flow in the pipe were to suddenly stop. The higher pressure surges due to the increased velocity create the potential for pipeline damage. The proposed temporary pipe was not sized to accept any flows higher than 5.5 cfs.

12. I recommended putting all effort into completing the permanent steel pipe to avoid the risk associated with sending flows higher than 5.5 cfs through the temporary pipe. Any sudden movement or failure of the temporary pipe could put existing infrastructure at risk, but more importantly could put the people working to complete the permanent steel pipe alongside the temporary pipe at serious risk.

13. Attached hereto as ***Exhibit B*** are a series of photographs showing the current status of the unfinished portion of the Project.

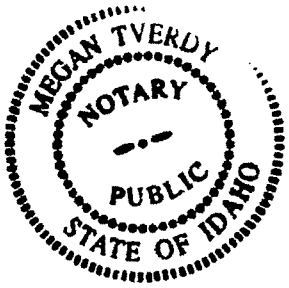
14. As of today, the overall Project is 90% percent complete. By putting all resources toward completion of the steel pipe, I expect the pipe installation to be completed in 2-3 weeks, at which time water can safely be delivered to Rangen.

FURTHER YOUR AFFIANT SAYETH NAUGHT.

DATED this 20th day of January, 2015.

ROBERT HARDGROVE

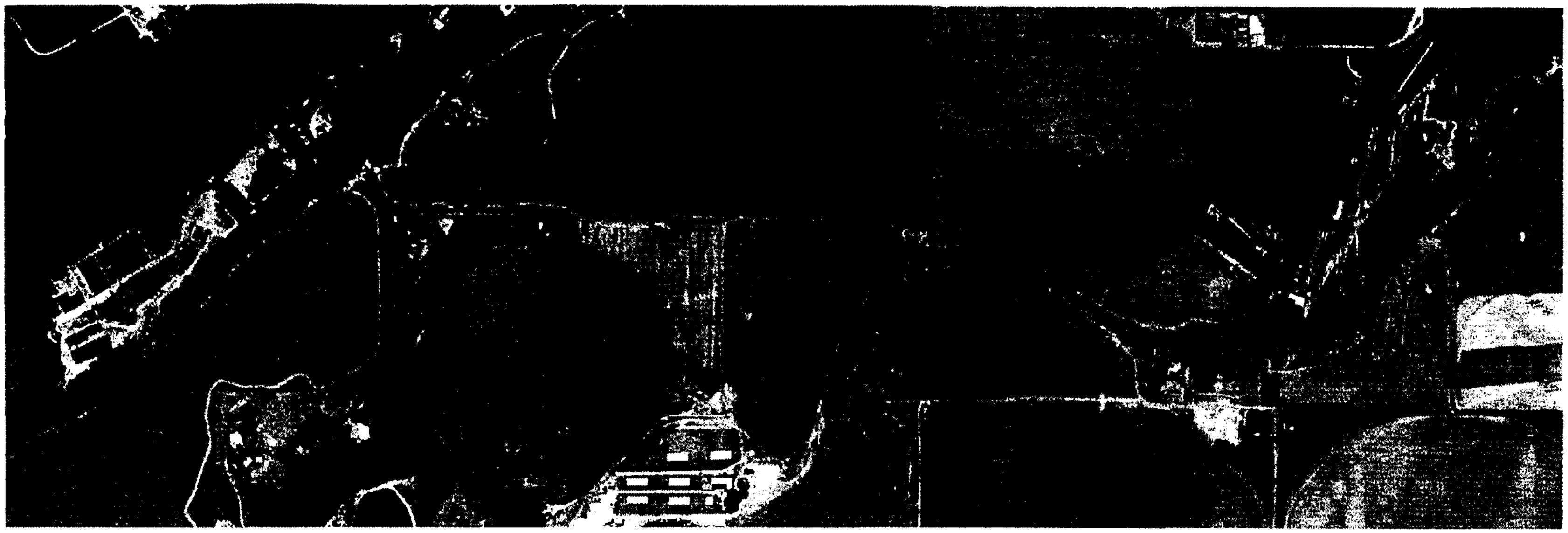
SUBSCRIBED AND SWORN TO before me this 20th day of January, 2015.

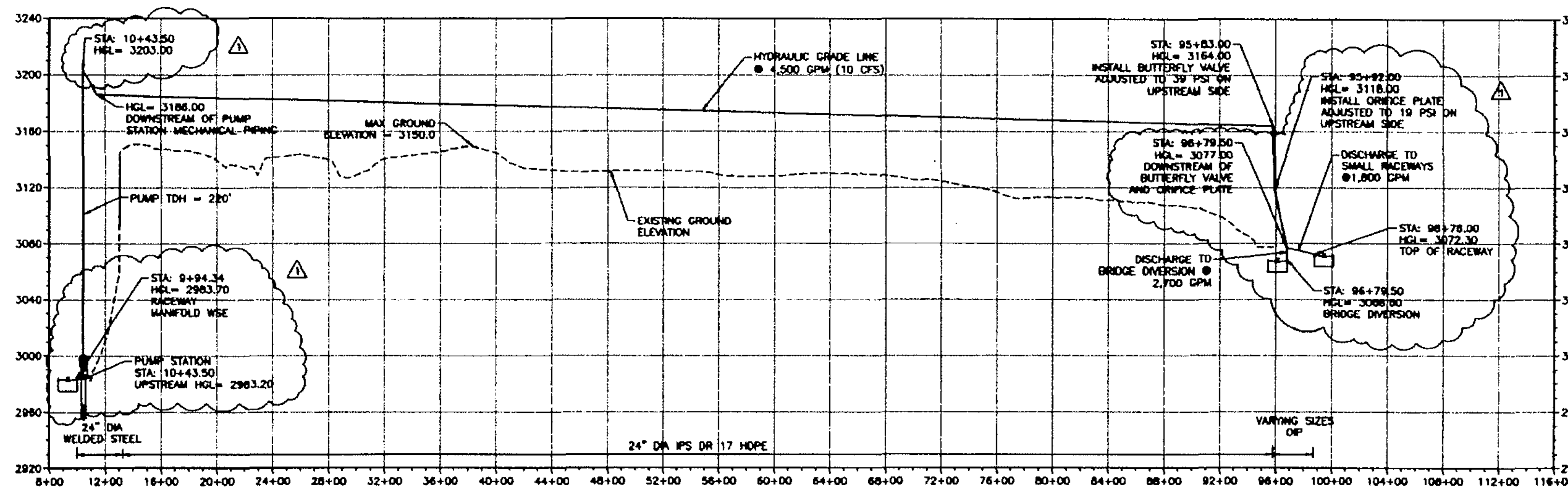


NOTARY PUBLIC FOR IDAHO
Residing at: Boise, Idaho
My Commission Expires: 6/25/19

EXHIBIT A

DRAWING G-005





I&J PUMP STATION
HYDRAULIC PROFILE

DESIGN CRITERIA

1. TOTAL DELIVERY TO RANGEN= 10 CFS (4,500 GPM)
2. TOTAL DELIVERY TO SMALL RACEWAY= 4 CFS (1,800 GPM)
3. TOTAL DELIVERY TO BRIDGE DIVERSION= 6 CFS (2,700 GPM)

HORZ 0 400 800
VERT 0 40 80
SCALE IN FEET

SPF WATER ENGINEERING
300 East Mallard Drive, Suite 350
Boise, Idaho 83706
Tel (208) 383-4140 Fax (208) 383-4156

MAGIC SPRINGS PROJECT
PUMP STATION AND PIPELINE

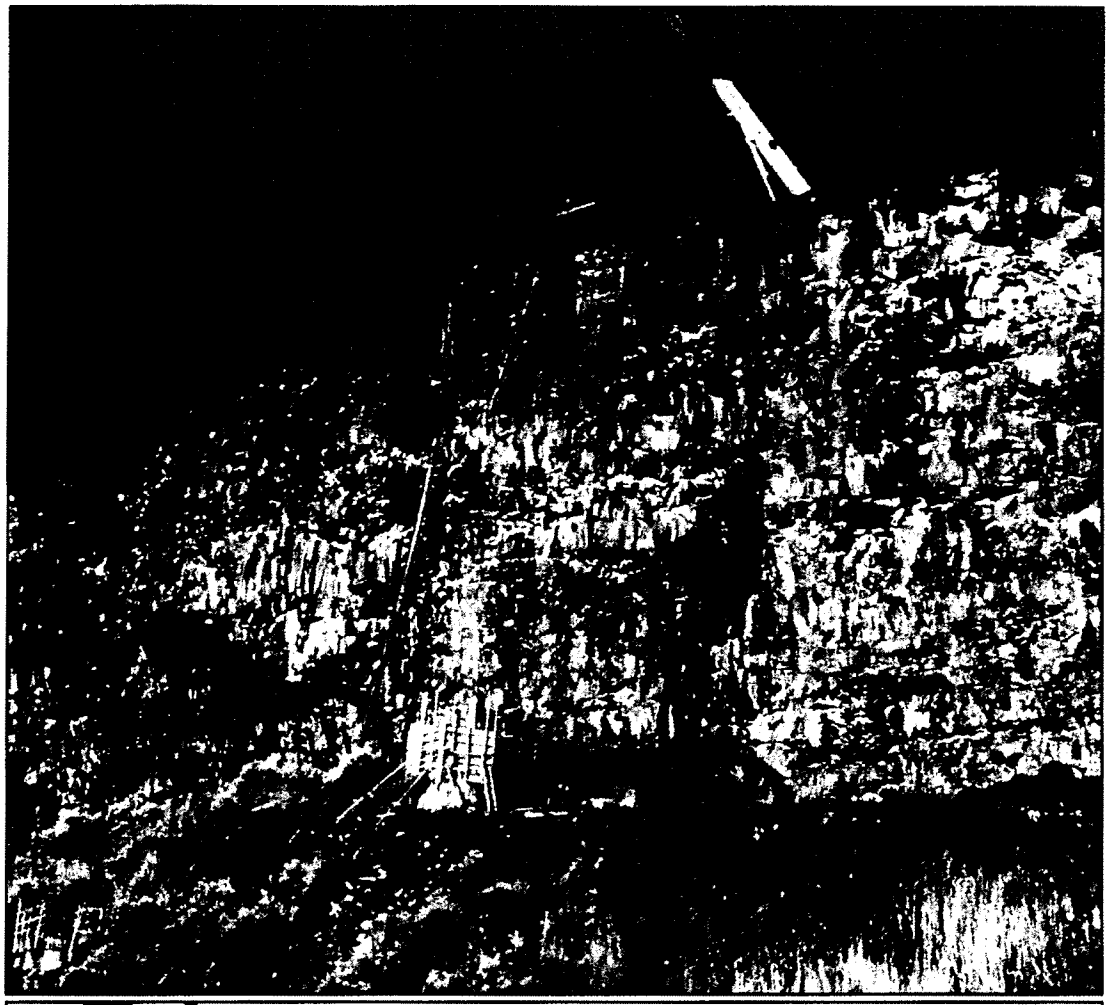
HYDRAULIC PROFILE

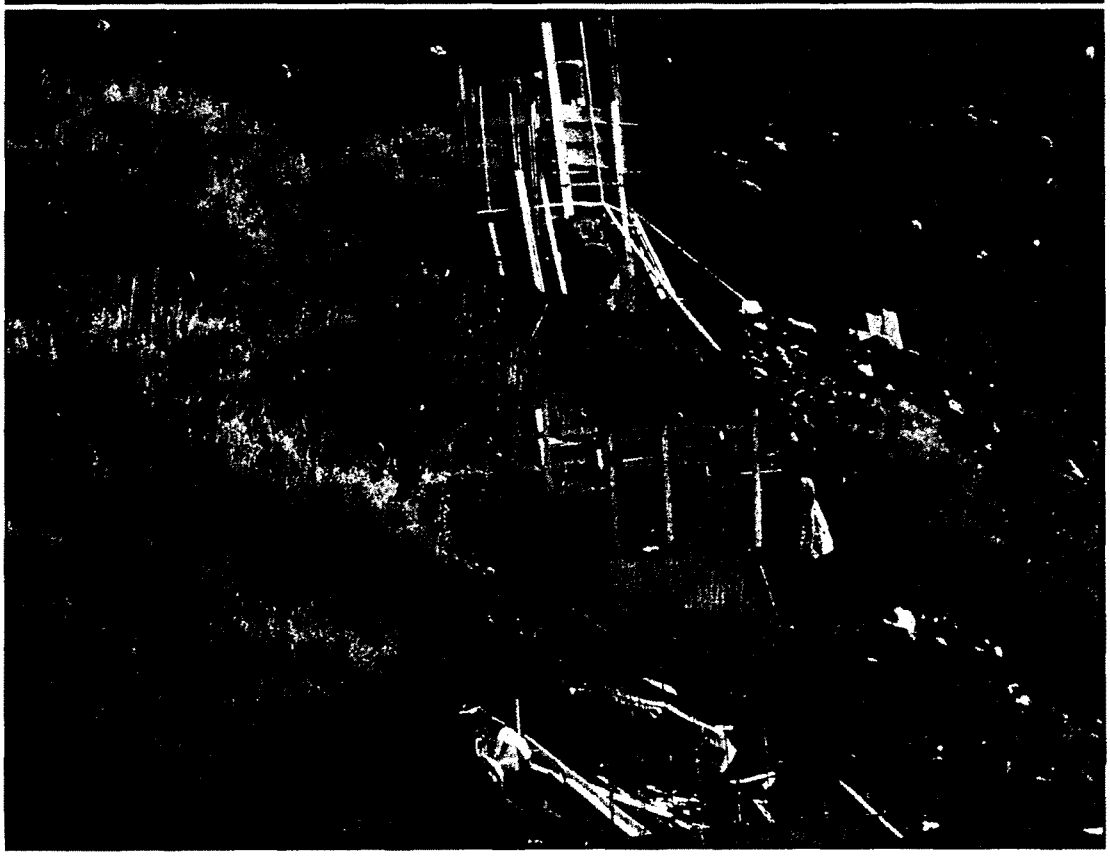
PROJECT:	535.0150
DESIGNED:	PZC
DRAWN:	PZC
CHECKED:	RBH

G-005

EXHIBIT B

SELECT PROJECT PHOTOS





Certificate of Service

I certify that on this the 20th day of January, 2015, the foregoing motion was served on the following persons in the manner indicated.

Original to: Clerk of the Court SRBA DEPUTY CLERK 253 3rd Ave. North PO Box 2707 Twin Falls, ID 83303-2707	☐ U.S. Mail ☐ Facsimile - 208-736-2121 ☐ Overnight Mail ☒ Hand Delivery ☐ Email
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Thomas J. Budge