

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES
BENEFICIAL USE FIELD REPORT

RECEIVED

MAR 17 2011

WATER RESOURCES
WESTERN REGION

A. GENERAL INFORMATION

Permit No. 65-13640

1. Owner Sabala Whitetail LLC

Phone No. 208-630-0250

Current address 501 W. Lake St., McCall, ID 83638

2. Examiner's name Terry Scanlan, P.E. (Examiner No. 11-129)

EXAM DATE July 30, 2010

3. Accompanied by Rick Mooney

Email rmooney@whitetailclub.com

Address 501 W. Lake St., McCall, ID 83638

Relationship to permit holder Manager

Phone No. 208-634-6429

4. Source Payette Lake

tributary to North Fork Payette River

B. OVERLAP REVIEW

1. Other water rights with the same place of use 65-13704^{CP}, 65-13751

2. Other water rights with the same point of diversion None

C. DIVERSION AND DELIVERY SYSTEM

1. Point(s) of Diversion:

Ident. No.	Gov't Lot	¼	¼	¼	Sec	Twp	Rge	County	Method of Determination/Remarks
	2		SW	NW	12	18N	2E	Valley	Exam, 2009 Photo

2. Place(s) of Use:

Method of determination Exam, 2009 Photo

Twp	Rge	Sec	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
18N	3E	7							Lt2			Lt3							
									7	12	24	16		33	9	21	25		147
													X				X		

X = Pond Storage and Recreation Use

3. **Delivery System Diagram:** Indicate all major components and distances between components. Indicate weir size/ditch size/pipe diameter (inside), as applicable. Use the space provided or ☒ see attached.

Scale: 1" = _____

- ☒ Copy of USGS Quadrangle attached showing location(s) of point(s) of diversion and place(s) of use (required)
☒ Aerial photo attached (required for irrigation of 10+ acres)
☒ Photo of diversion and system attached

4.

Well or Diversion Identification No.*	Motor Make	Hp	Motor Serial No.	Pump Make	Pump Serial No. or Discharge Size
Lake Pump	Submersible			Submersible	

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

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
Flowmeter	Totalizing	McCrometer			8"	

2. Measurements:

Meter Reading: 167,822,000 gallons; Pump not operating at time of site visit.

E. NARRATIVE/REMARKS/COMMENTS

A submersible pump diverts water from Payette Lake through buried mainline to Whitetail Pond. Pump is unknown make and model, and not visible due to submersible installation. Pump is located in a wet well under the patio at Shore Lodge. See photos for location of pump access. Wet well is connected to an intake pipe that reportedly extends several hundred feet into Payette Lake. Pump panel is located below conference center room at Shore Lodge. The panel has a NEMA 3 starter (50 hp), and pump draws 57 to 63 amps (measurements listed in panel), indicating a 50-hp load at 480 volts. The pump was not operating at the time of the field exam.

The pipeline from Shore Lodge to Whitetail Pond is reportedly 8-inch diameter. Estimated length is 7500 feet. Static lift is approximately 130 feet (Payette Lake @4986', high point at 5120'). Distance from the Lake to the high point is approximately 6,000 feet. A totalizing flow meter is located near the high point of the pipeline in a valve box.

At Whitetail Pond, a series of pump rediverts the water through a sprinkler system for golf course irrigation. The golf course pump station is rated at 2220 gpm at 125 psi, and includes three 75-hp vertical turbine pumps, and a small jockey pump for pressure maintenance. The pump station also includes a 15 hp pump for pond water recirculation and fountain, and two fire pumps (50 hp and 5 hp).

Recent pumping records provided in Attachment C indicate as much as 75 af per month have been diverted from Payette Lake to Whitetail Pond during the irrigation season. This indicates the pump has the capacity to provide up 445 acre feet over a 6-month irrigation season. This amount is more than the 441 af volume allowed at 3.0 af per acre for the 147 acres of irrigation developed at Whitetail Golf Course.

Calculations included in Attachment C indicate a storage capacity of 90.6 af for Whitetail Pond. The permit limits storage volume to 80 af. Ground water under permits 65-13704A and 65-13751 also supply storage and irrigation water to Whitetail Pond.

This right, when combined with 65-13704A and 65-13751 is limited to a 90.6 af storage capacity.

This right when combined with 65-13704A is limited to irrigation of 147 acres.

The point of diversion appears to be in the SENW, Section 8. However, it is described in the permit as the SWNW, Government Lot 2. Government Lot 2 covers the south 1/2 of the NW Section 8.

A licensing amendment is recommended to add the NESE, S7, T18N, R3E to the irrigation place of use.

- Attachment A: Copy of the permit and proof of beneficial use
- Attachment B: Copies associated pumping records and pump curves
- Attachment C: Storage capacity calculations
- Attachment D: USGS topographic map and aerial photo
- Attachment E: Photos of the place of use and point of diversion

Has the permit holder met all conditions of permit approval, including any mitigation requirements and/or measuring device installation requirements? ☒ Yes ☐ No If no, what must be done to meet the permit requirements?

A flowmeter has been installed and the pump panel can be locked.

F. FLOW CALCULATIONS

Additional computation sheets attached

Measured Method:

75 acre feet for 31 days (July 2008) = 1.22 cfs per day

Theoretical Check:

Friction loss at 1.22 cfs = 0.7' per 100 feet for 8-inch pipe with C of 130 x 6000 feet to pipeline high point = 42 feet

Pumping lift = 130 feet static lift + 42 feet friction = 172 feet

Horsepower Requirement = (1.22 cfs x 449 gpm/cfs x 172 feet lift) / (50% pump efficiency x 3960) = 48 hp

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$$V_{I.R.} = (\text{Acres Irrigated}) \times (\text{Irrigation Requirement}) = 147 \times 3 = 441$$

$$V_{D.R.} = [\text{Diversion Rate (cfs)}] \times (\text{Days in Irrigation Season}) \times 1.9835 = 1.22 \times 184 \times 1.9835 = 445$$

$$V = \text{Smaller of } V_{I.R.} \text{ and } V_{D.R.} = 441$$

2. Volume Calculations for Other Uses:

Whitetail total pond volume = 90.6 af (see attachment)

Storage Potential: 1.22 cfs x 365 days x 1.9835 = 883 afa

Limited to 80 af per permit

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use		Rate of Diversion Q (cfs)	Annual Volume V (afa)
	From	To		
Irrigation	4/15	10/15	1.22	441.0
Diversion to Storage	1/1	12/31	1.22	
Irrigation Storage	1/1	12/31		80.0
Irrigation From Storage	4/15	10/15		80.0
Recreation Storage	1/1	12/31		80.0
Totals:			1.22	521.0

2. Recommended Amendments

- ☐ Change P.D. as reflected on page 1 ☐ Add P.D. as reflected on page 1 ☐ None
☐ Change P.U. as reflected on page 1 ☒ Add P.U. as reflected on page 1 ☐ Other

I. AUTHENTICATION

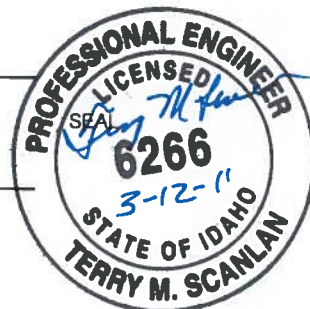
Field Examiner's Signature

Terry M. Scanlan

Date March 12, 2011

Reviewer

Date



ATTACHMENT A

PERMIT RECORD AND PROOF OF BENEFICIAL USE

State of Idaho
Department of Water Resources
Permit To Appropriate Water

NO. 65-13640

Proposed Priority: August 28, 1995

Maximum Diversion Rate:

4.00 CFS

This is to certify, that **M RESORTS**

PO BOX 1006

MC CALL ID 83638-1006

has applied for a permit to appropriate water from:

PAYETTE LAKE

tributary of **PAYETTE RIVER, NORTH FORK**

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>	<u>ANNUAL VOLUME</u>
IRRIGATION	04/15 to 10/15	4.00 CFS	
IRRIGATION STORAGE	01/01 to 12/31		80.0 AF
IRRIGATION FROM STORAGE	04/15 to 10/15		80.0 AF
RECREATION	01/01 to 12/31	4.00 CFS	
RECREATION STORAGE	01/01 to 12/31		80.0 AF
DIVERSION TO STORAGE	01/01 to 12/31	4.00 CFS	
	Totals	4.00 CFS	

LOCATION OF POINT(S) OF DIVERSION: Lot 2(SWNW), Sec. 8, Township 18N, Range 03E
VALLEY County

PLACE OF USE: IRRIGATION

<u>TWN</u>	<u>RGE</u>	<u>SEC</u>	<u>ACRES</u>	<u>ACRES</u>	<u>ACRES</u>	<u>TOTAL</u>
18N	03E	7	Lot 2(SWNW) 44.0	SESW 17.0	NESW 15.0	
			Lot 3(NWSW) 44.0	SESW 10.0	NWSE 40.0	
			SWSE 30.0			200.0

Total number of acres irrigated: 200.0

PLACE OF USE: IRRIGATION FROM STORAGE, same as IRRIGATION use

PLACE OF USE: RECREATION, same as IRRIGATION use

CONDITIONS OF APPROVAL AND REMARKS

1. Proof of construction of works and application of water to beneficial use shall be submitted on or before December 1, 1998.
2. Subject to all prior water rights.
3. Use of water under this right may be affected by an agreement between the protestant and the right holder.
4. Project construction shall commence within one year from the date of permit issuance and shall proceed diligently to completion unless it can be shown to the satisfaction of the Director of the Department of Water Resources that delays were due to circumstances over which permit holder had no control.
5. Use of water under this right is subject to control by the watermaster of State Water District No. 65.

JAN 25 1995

State of Idaho
Department of Water Resources**Permit To Appropriate Water**

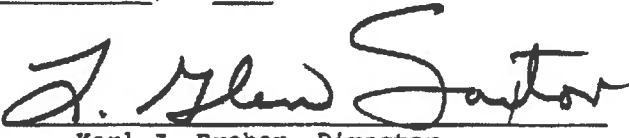
NO. 65-13640

CONDITIONS OF APPROVAL AND REMARKS

6. After specific notification by the department, the right holder shall annually report the amount of water diverted to the department.
7. A measuring device and lockable controlling works of a type acceptable to the Department shall be permanently installed and maintained as part of the diverting works prior to diversion of water under this right.
8. When water is not available to fill this right, the right holder shall cease diversion or shall rent water from the Payette River Rental Pool.
9. The availability of water for this right is subject to all prior water rights of Lake Reservoir Co.
10. The rate of diversion of water for irrigation under this right and all other water rights on the same land shall not exceed 0.02 cubic feet per second for each acre of land.
11. Assignment or sale of this right is subject to a determination by the Department that the right holder has proceeded to develop the right with due diligence and without speculation.
12. Use of water under this water right shall conform with any applicable provisions of the Lake Management Plan, as adopted by the Idaho Legislature and enacted into law, pursuant to the Big Payette Lake Water Quality Act.
13. Recreation use is for fishing and swimming.

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

24 th day of November, 1995.


for Karl J. Dreher, Director

JUL 25 1996

RECEIVED
OCT 17 2001

FOR OFFICE USE ONLY
Amt. of Fee \$ 175
Receipt No. W0228427
Receipt By: ES
Date Received: 10-17-01

STATE OF IDAHO WATER RESOURCES
DEPARTMENT OF WATER RESOURCES WESTERN REGION

RECEIVED
OCT 19 2001

PROOF OF BENEFICIAL USE

Department of Water Resources

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

1. Permit No. 65-13640 Telephone No. 208-634-2244

2. Name of Permit Holder(s): M RESORTS LTD

3. Mailing Address: 501 W LAKE ST

City Mc CALL State ID Zip 83638

4. Source of Water: PAYETTE LAKE If GROUNDWATER (well), Date Drilled: mo. ____ / yr. ____

Well Driller: _____ Drilling Permit Number: _____

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

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

Irrigation (No. of acres): 200 Other: STORAGE

6. Total rate of diversion and/or volume for which proof is submitted: 4.0 cfs OR 80 acre-feet

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

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

Measuring Device: Is a measuring device required? Yes ☒ or No ☐
Has the measuring device been installed? Yes ☐ or No ☐

8. Fee Enclosed: \$ 175 (See Fee Schedule on back of the instructions for filing proof of beneficial use)

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

Name: BOB McKENNA Telephone Number: 634-9675

Address: same as above

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

Signature of permit holder: R. McKenna MGR Date: 9-24-01

(include your title, if on behalf of company or organization)

MICROFILMED

NOV 26 2001

ATTACHMENT B

PUMPING RECORDS & PUMP CURVES

Idaho Water District No. 65

Phone: 208-642-4465
 Fax: 208-642-1042
 E-mail: waterdist65@srvinet.com

102 North Main
 Payette Idaho 83661
 Water Year 2008

IDWR Ident. No. 13238822

WHITETAIL CLUB & RESORT
501 W LAKE
MCCALL, ID 83638

Water Right No: 65-13640

Listed Water Right Owner(s):
M Resorts LTD

Source: Payette Lake
 Type of Use: Irrigation
 Diversion Rate: 4.00 CFS
 Irrigated Acreage: 200

Point of Diversion: SWNW Lt 2 Sec. 8 T 18N 03E

Place of Use: 18N 03E Sec. 7 Lt 2

197 Acre Feet of Water Total
Phone 208-634-6429

Payette River, Water Diversion Card-2008

Day of Month	April	May	June	July	August	Sept.	October	Day of Month
1								1
2								2
3								3
4		1	28	75	60			4
5								5
6								6
7		1	28	75	60	27	10	7
8		acre feet	acre feet	acre feet	acre feet	acre feet	acre feet	8
9								9
10								10
11								11
12								12
13								13
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30								30
31								31
	April	May	June	July	August	Sept.	October	

Signature

Rick T Mooney
 Rick T Mooney

Date

11-19-08

Priority: 4/1/1941

SABALA WHITETAIL LLC
 501 W LAKE
 MCCALL, ID 83638

Listed Water Right Owner(s)
 M Resorts LTD

STATE WATER DISTRICT NO. 65
 102 N MAIN
 PAYETTE ID 83661

Source: Payette Lake
 Type of Use: Industrial
 Diversion Rate: 3.31 CFS
 Irrigated Acres:

Point of Diversion: NWNE Sec. 9 T 18N R 03E

Place of Use: 18N 03E Sec. 9 NWNE, SWNE, NENW

234 Total Acre Feet
 2009 Season

State Water District No. 65, Water Diversion Card, Water Year 2009

Day of Month	April	May	June	July	August	Sept.	October	Day of Month
1								1
2								2
3								3
4								4
5		0	34	71	73	51	5	5
6								6
7								7
8								8
9		0						9
10		Acres						10
11								11
12								12
13								13
14								14
15								15
16								16
17								17
18								18
19								19
20								20
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22								22
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25								25
26								26
27								27
28								28
29								29
30								30
31		0						31
	April	May	June	July	August	Sept.	October	

Signature [Signature] Date 11-10-09

Priority: 8/28/1995

SABALA WHITETAIL LLC
501 W LAKE
MCCALL, ID 83638

Listed Water Right Owner(s)

M Resorts LTD

as of August
25th 2010

STATE WATER DISTRICT NO. 65
102 N MAIN
PAYETTE ID 83661

Source: Payette Lake
Type of Use: Irrigation
Diversion Rate: 4.00 CFS
Irrigated Acres: 200

Point of Diversion: SWNW Lt 2 Sec. 8 T 18N 03E

Place of Use: 18N 03E Sec. 7 Lt 2

2010 Season to Date

State Water District No. 65, Water Diversion Card, Water Year 2009

Day of Month	April	May	June	July	August	Sept.	October	Day of Month
1								1
2								2
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29								29
30								30
31								31
	April	May	June	July	August	Sept.	October	

Signature _____

Date _____

Purswell's Pump Co.

P.O. Box 264 • Hermiston, OR 97838
(541) 567-2640
Fax: (541) 567-6348
Email: pumpguys@eoni.com
CCB #49914



August 10, 2010

Lori Graves
SPE Engineering

Ref: White Tail Golf, McCall, Idaho

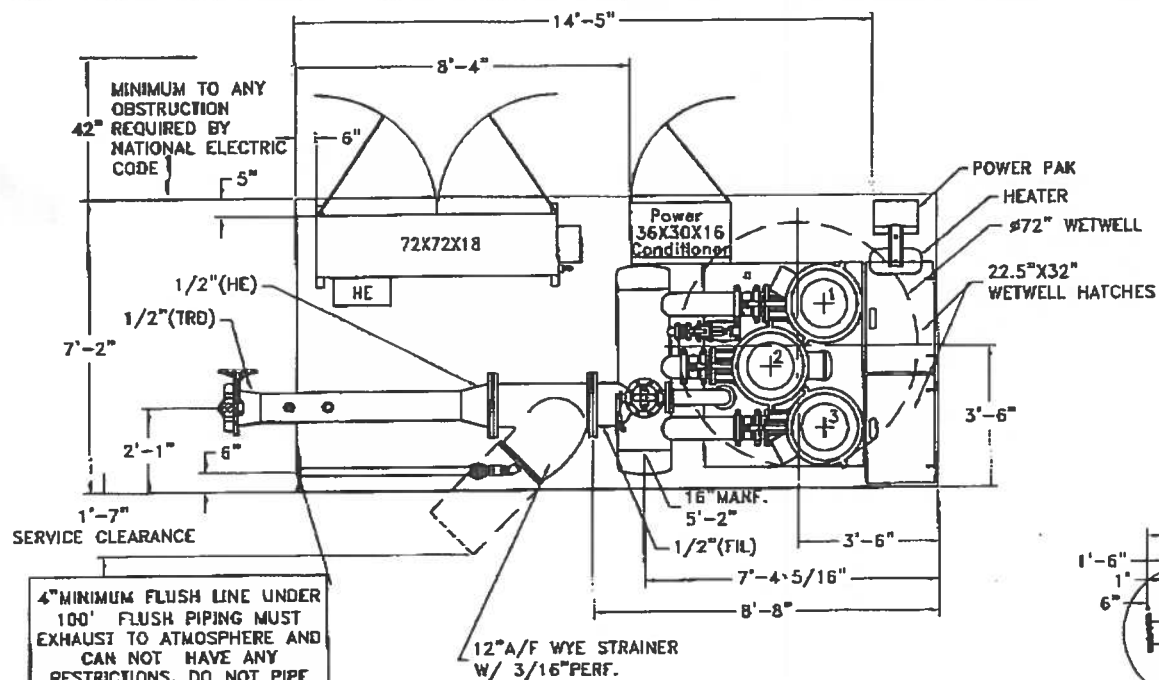
Hi Lori,

Here is what I have as far as pump curves go. The station is rated at 2220 GPM at 125 PSI. They have a Totalizer flow meter that can record per day, per season or what ever time you want. Rick knows how this works. It can also tell you how much water the station has pumped since installed.

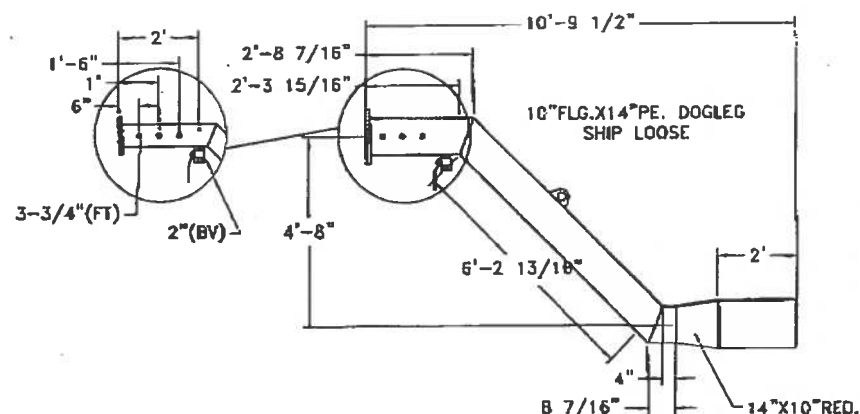
Let me know if you need more info.

Thanks,

Jim Purswell
pumpguys@eotnet.net
541-567-2640 Office
541-571-2500 Cell



STATION STYLE:	FPX-VWTP-2220-4-125					
TO PRODUCE:	2220 GPM	125 PSI				
HORSEPOWERS:	(PM) 3	(1) 75	(2) 75	(3) 75		
PUMP DISCHARGE SIZES:	(PM) 2"	(1) 6"	(2) 6"	(3) 6"		
PUMP ISOLATION VALVES:	(PM) 2"	(1) 6"	(2) 6"	(3) 6"		
PUMP CHECK VALVE SIZES:	(PM) 2"	(1) 6"	(2) 6"	(3) 6"		
POWER CONDITIONER:	2 KVA					
POWER PACK:	5 KVA					
HEATER:	5 KW					
MAIN DISCONNECT:	600 AMPS FUSIBLE					
POWER REQUIREMENTS:	253 KVA	460V,	60HZ,	3Phase		
EXHAUST FAN REQUIREMENTS:	Total to be 3648 CFM					



APPROVED FOR PRODUCTION
DATE 5-19-00

1 OF 2

WHITETAIL GC

SCALE None DATE 5/11/00 QUID NO. M9600
DRAWN BY EYDE HASSELL APPROVED BY

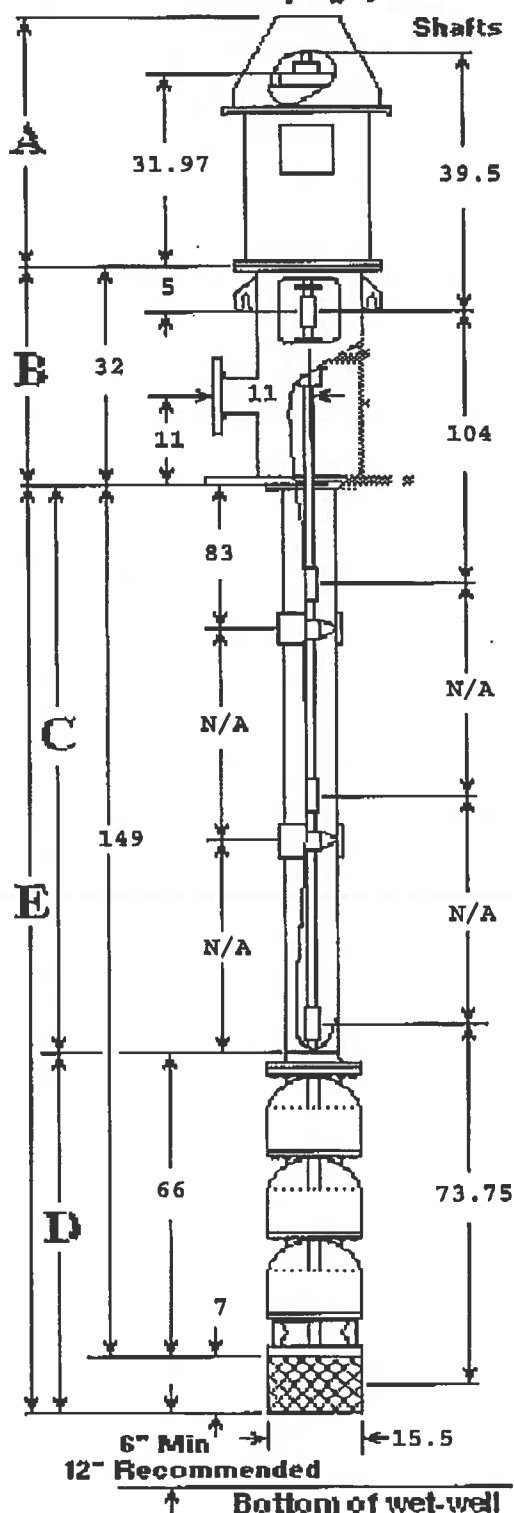
REV.	DESCRIPTION	DATE
1		
2		
3		
4		
5		
6		
7		

Sales # 54152
Quote # 000309DS-01

FLOWTRONEXPSI
Pumping Systems

10661 HEWKIRK ROAD, DALLAS, TEXAS 75220, USA 1-800-527-0530

FLOWTRONEX PSI Pumping Systems



Vertical Turbine Pump Buildup

Date: 5/15/2008 Rev: By Richard Voth

Job Name: Whitetail GC

Job #: J-9600 Serial #'s J-9600-1,2,3

Shop # C.O.#

Section A

Motor: New Style Newman
 Motor SN:
 HP: 75 RPM: 1800 Starting: XL
 Oil Cap. Grease Gal. Shipped: 0
 CD 31.97 BD 16.5 SRC 1.1875 NRR Yes
 Volt/Phase 460-3P Freq: 60Hz
 Headshaft 1.1875 X 39.5
 Gib Key 1/4 X 1-3/4
 Motor Base Bolts: (4) 5/8 X 1-1/2

Section B

Discharge Head: 616F-VFD PB 1.1875 X 4.5
 Slinger Ring: 1.1875
 Pump Base Bolts: (4) 1 X 3-1/2
 W/ Nuts & Washers

Section C

Top Shaft: 1.1875 X 104
 Top Column 6 X 82.5 FLG THD X
 Inter-Shaft N/A Pieces 0
 Inter-Shaft N/A Pieces 0
 Inter-Column N/A Pieces 0
 Inter-Column N/A Pieces 0
 All Columns Threaded and Coupled
 Spider Bearings No 0 Size N/A
 Hanger-Flange Goulds

Section D

Bowl Assy: IDP New 12EML Stages: 5
 Trim: 9.13" O.D.
 GPM 765 TDH 318 PSI 138
 Bowl Shaft Thread 1.1875 X 1.69 X 73.75
 Basket Strainer 8 x 15.5 Cone

Section E

Length From Base to Bottom of Strainer
 13 Ft. 0 In.

Misc. Specifications

PM Pump is 3 Hp Build 3 Like Pumps
 Motors to Have Space Heaters

Install Air Release Valve in Head.

All Flowtronex-PSI Vertical Turbine Pumps are assembled with the following materials unless otherwise noted:

Standard-wall - 8TPI - butt thread column pipe
 416SS - 10TPI - shafting and couplings on a 6-inch stickup
 Bronze spider bearings with rubber inserts
 Grade 5 plated bolts
 Stainless Steel basket strainers

Ingersoll Dresser Pumps

Vertical Turbine Selection Program (VTsP)

Date : 12 May 190
 Customer: Whitetail GC
 Project : J-9600
 Service : Richard Voth

Selection Criteria:

Capacity: 765 USGPM

Head: 318 FEET

Speed: 1800 RPM

Specific Gravity: 1.00

Bowl Diameter: No Limit

Materials: Bowl: CI/LINED Impeller: BRONZE Shaft: 416SS

The Following Are The Most Efficient Bowl Assemblies

Model	Stgs	RPM	EFF	Horsepower Design	Max	List Price	DIA	Des	Thrust Max	Up
12EML	5	1770	84.88	72.38	79.53	3520	9.13	2512	3771	33
12EMM	5	1770	83.48	73.59	80.64	3520	8.72	2512	3823	40
12EJH	4	1770	82.40	74.55	88.40	2990	9.20	1399	1798	28
10EHM	8	1760	81.95	74.96	76.34	3630	7.60	2035	3031	29
10EGH	9	1770	80.50	76.32	76.08	3990	7.67	1940	3259	23
10EBM	10	1760	78.78	77.98	108.43	5130	7.47	3148	5168	45
12EHL	5	1770	77.79	78.97	85.48	3520	9.18	3116	4579	41
8EQH	17	1770	75.50	81.36	80.77	7810	6.36	2099	4006	38
14EJH	3	1775	75.42	81.45	112.30	3545	10.38	1717	2126	39
10EBL	9	1760	75.30	81.59	86.39	4700	7.45	3148	4384	67

The Following Are The Lowest List Price Bowl Assemblies

12EJH	4	1770	82.40	74.55	88.40	2990	9.20	1399	1798	28
12EMM	5	1770	83.48	73.59	80.64	3520	8.72	2512	3823	40
12EML	5	1770	84.88	72.38	79.53	3520	9.13	2512	3771	33
12EHL	5	1770	77.79	78.97	85.48	3520	9.18	3116	4579	41
14EJH	3	1775	75.42	81.45	112.30	3545	10.38	1717	2126	39
10EHM	8	1760	81.95	74.96	76.34	3630	7.60	2035	3031	29
10EGH	9	1770	80.50	76.32	76.08	3990	7.67	1940	3259	23
10EBL	9	1760	75.30	81.59	86.39	4700	7.45	3148	4384	67
10EBM	10	1760	78.78	77.98	108.43	5130	7.47	3148	5168	45
8EQH	17	1770	75.50	81.36	80.77	7810	6.36	2099	4006	38

* List Prices Are For Std Materials

** Performance Can Be Enhanced With Underfilling

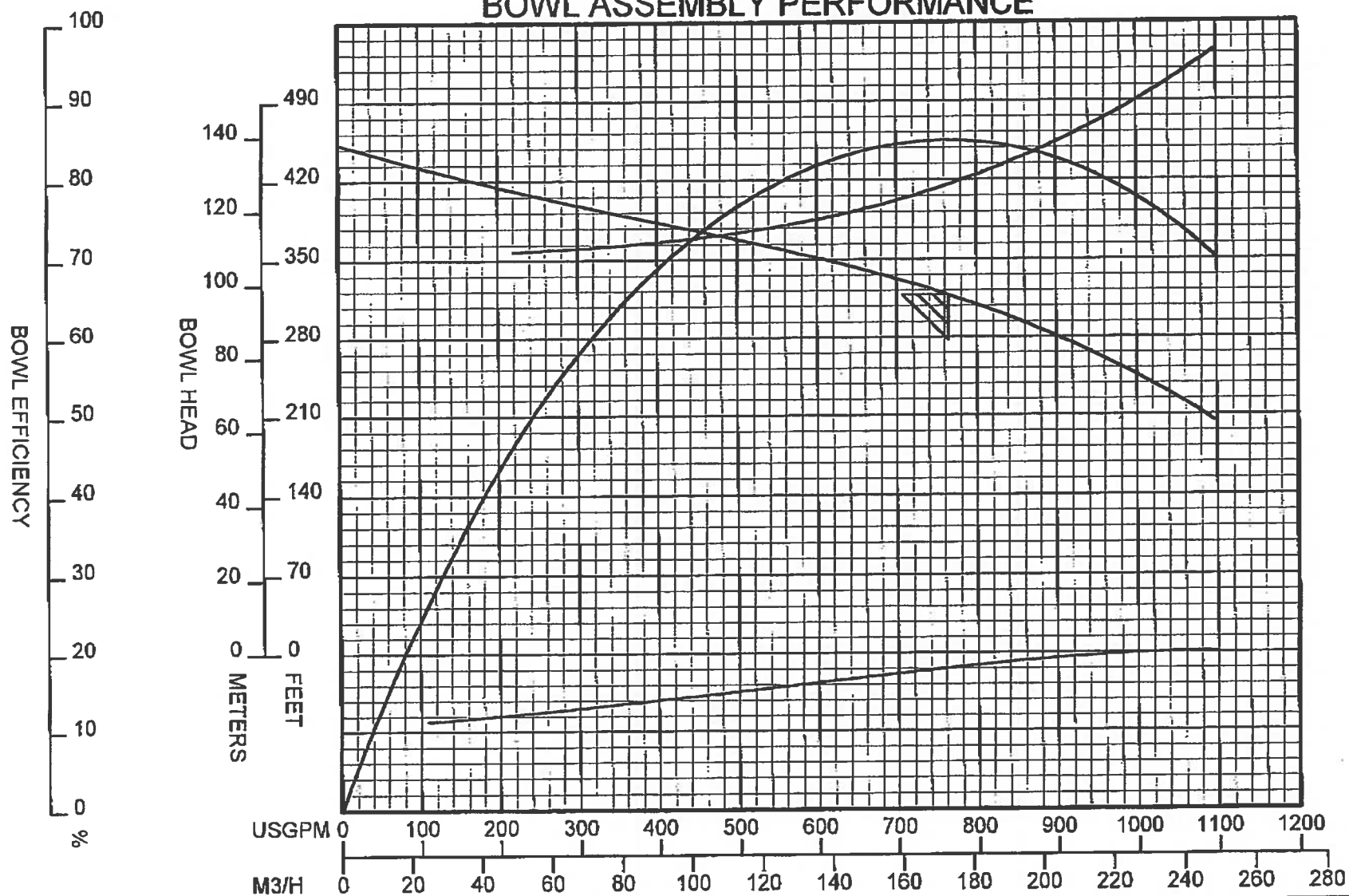
For Guaranteed Efficiency Contact Ingersoll Dresser Pumps (1-410-756-2602)

NPSH REQUIRED

16 5
12 4
8 3
4 2
0 1
0 0
FEET METERS

80
40
0
BHP

BOWL ASSEMBLY PERFORMANCE



Customer : Whitetail GC
Project : J-9600
Service : Richard Voht
Date : 12 May 190
Impeller : Enclosed



Ingersoll-Dresser Pumps

Flow (USGPM) : 765.0 SG : 1.00
Head (FEET) : 318 RPM : 1770

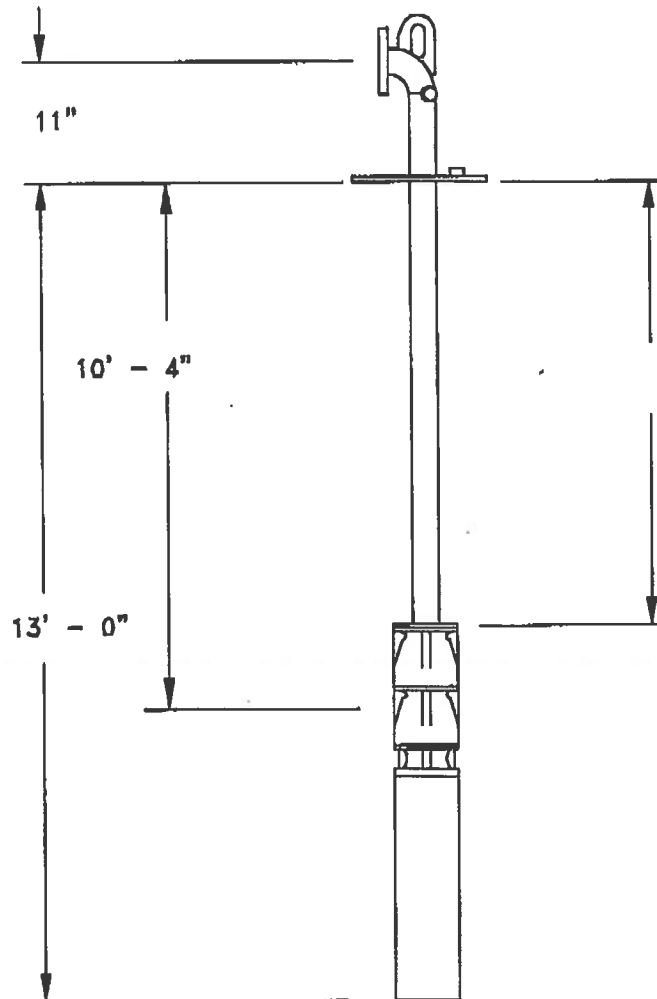
Pump : 12EML
Stages : 5
Bowl Mat. : CI/LINED
Imp. Mat. : BRONZE
Shaft Mat. : 416SS

GUARANTEES ARE BASED ON SHOP TEST WHEN HANDLING CLEAR FRESH WATER AT A TEMPERATURE OF NOT OVER 65°F.
CURVES ARE APPROXIMATE. PUMP IS GUARANTEED FOR ONE SET OF CONDITIONS, CAPACITY, HEAD, AND EFFICIENCY.

PMPBLDUP.DWG

PRESSURE MAINTENANCE PUMP BUILD-UPBY: Richard VothJOB NAME: Whitetail GCPUMP MANF: GrundfosDATE: 05/12/00JOB NUMBER: J-9600MOTOR MANF: Grundfos

S.O.: _____

GPM: 27 PSI: 125 TDH: 289VAC: 460 HZ: 60 PHASE: 3

S.F. Amps	
S.F.	
RPM	

MOTOR HP	MODEL #	MOTOR SERIAL #	PUMP SERIAL #
3.0	25S30-15		

FLOWTRONEX PSI
Pumping Systems

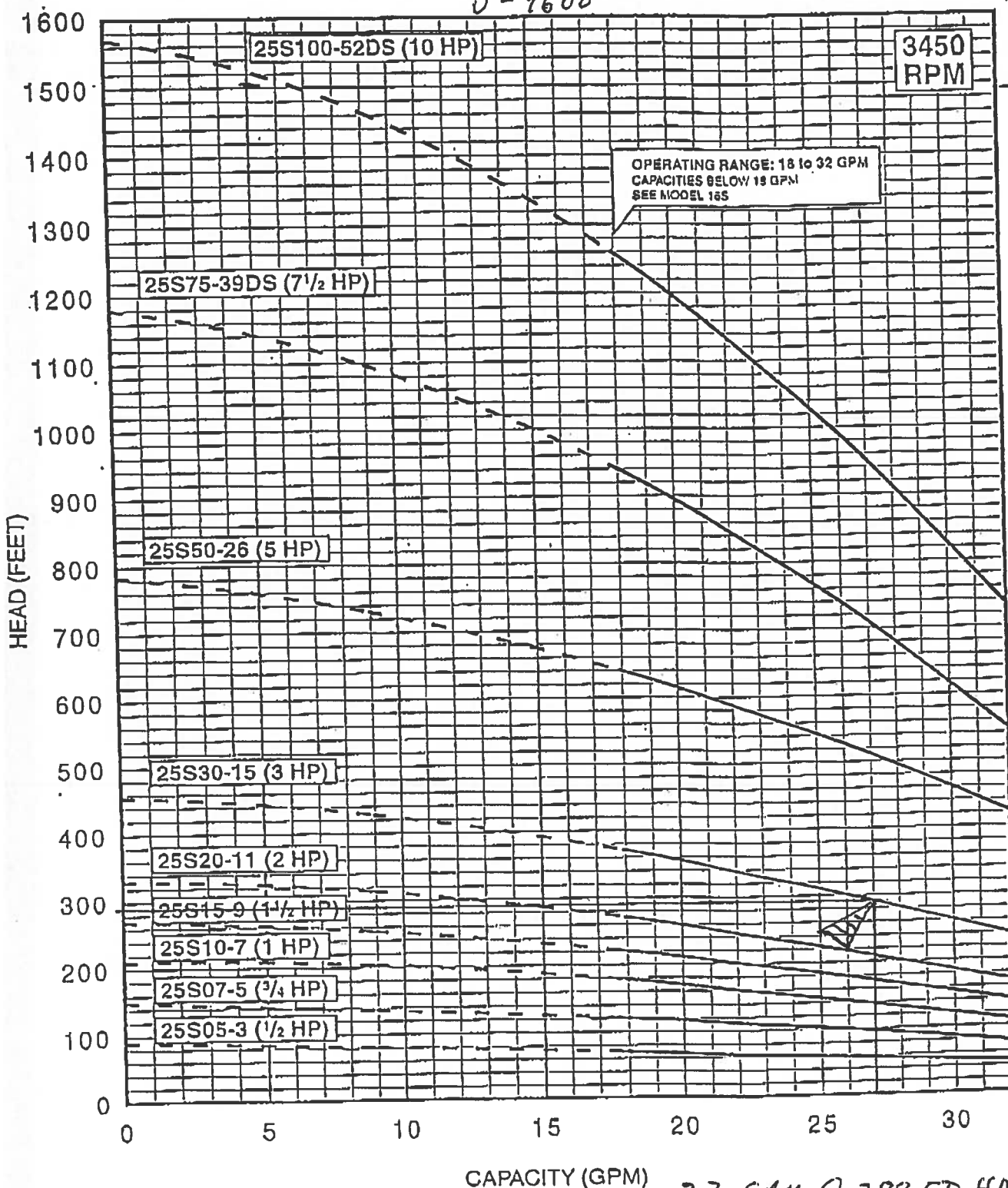
10661 NEWKIRK RD., DALLAS, TEXAS 75220, USA 1-800-627-0539

W RANGE: 18 -32 GPM

OUTLET SIZE: 1½" NPT

NOMINAL DIA. 4"

J-9600



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.
MOTOR STANDARD, 5.5 HP/3450 RPM.
MOTOR STANDARD, 7.5-10 HP/3450 RPM.
Alternate motor sizes available.

Performance conforms to ISO 2548 Annex F
© 2 ft. min. submergence.

RUNDFOSS

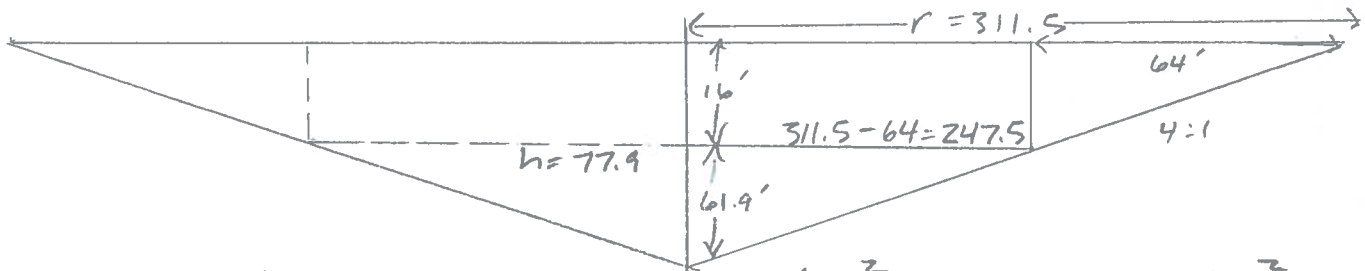
ATTACHMENT C

POND STORAGE CAPACITY CALCULATIONS



By _____ Date _____ Client _____ Sheet _____ of _____
Chkd By _____ Description WHITETAIL POND VOLUME Job No _____

Whitetail Pond: 7 ac surface area
16' deep
4:1 Slope $4 \times 16 = 64'$



$$7 \text{ ac surface area} \times 43,560 \text{ ft}^2/\text{ac} = 304,920 \text{ ft}^2$$

$$A = \pi r^2 \quad r = \sqrt{\frac{A}{\pi}} = 311.5 \text{ ft}$$

$$h = 311.5/4 = 77.9 \text{ ft}$$

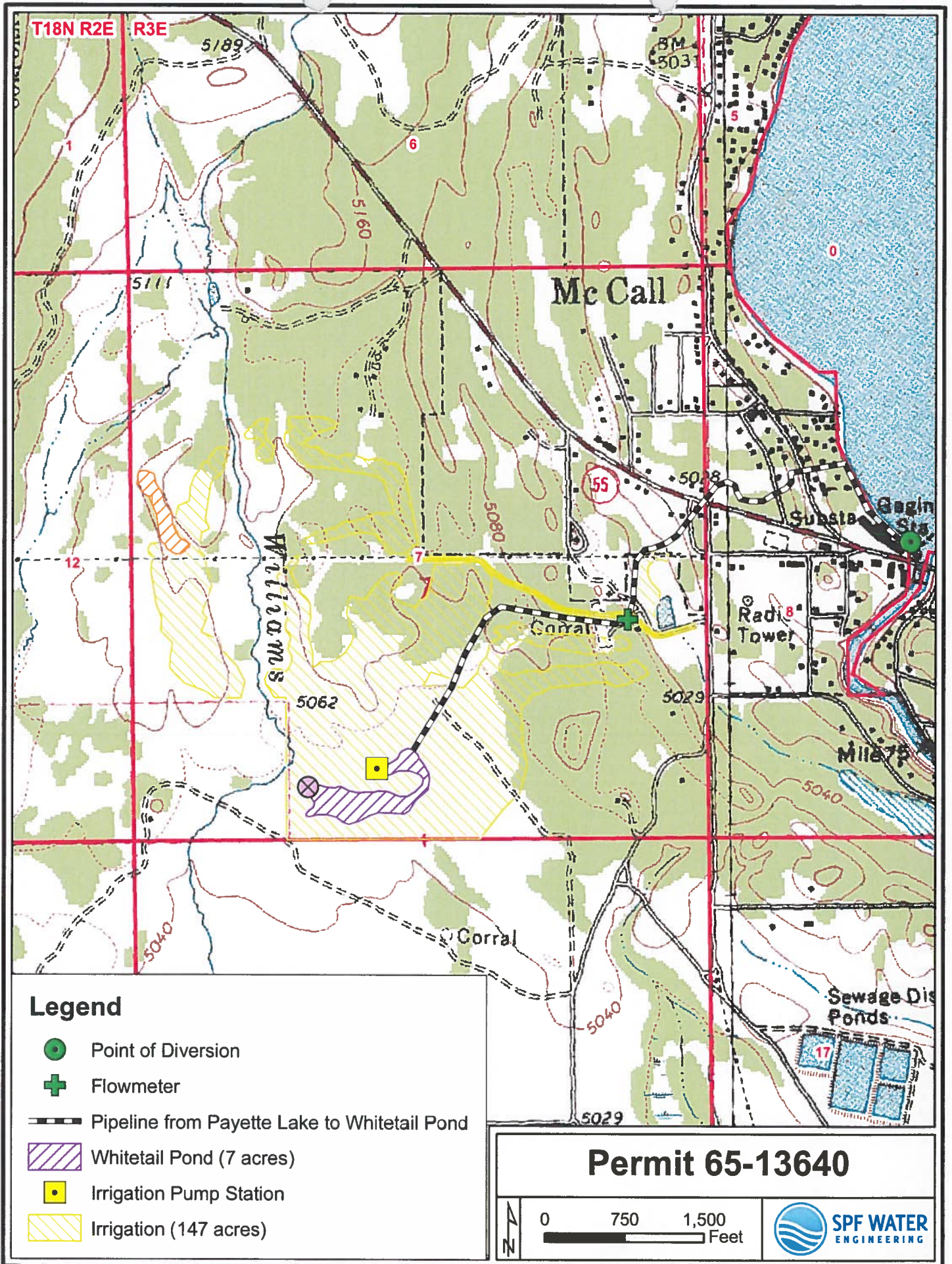
$$\begin{aligned} \text{Total Volume} &= \frac{\pi r^2 h}{3} \\ &= \frac{\pi (311.5)^2 (77.9)}{3} \\ &= 7,915,570 \text{ ft}^3 \end{aligned}$$

$$\begin{aligned} \text{Volume to Remove} &= \frac{\pi (247.5)^2 (61.9)}{3} \\ &= 3,970,723 \text{ ft}^3 \end{aligned}$$

$$\begin{aligned} \text{Balance} &= 7,915,570 \\ &- 3,970,723 \\ &= 3,944,846 \text{ ft}^3 / 43,560 = \underline{\underline{90.6 \text{ AF}}} \end{aligned}$$

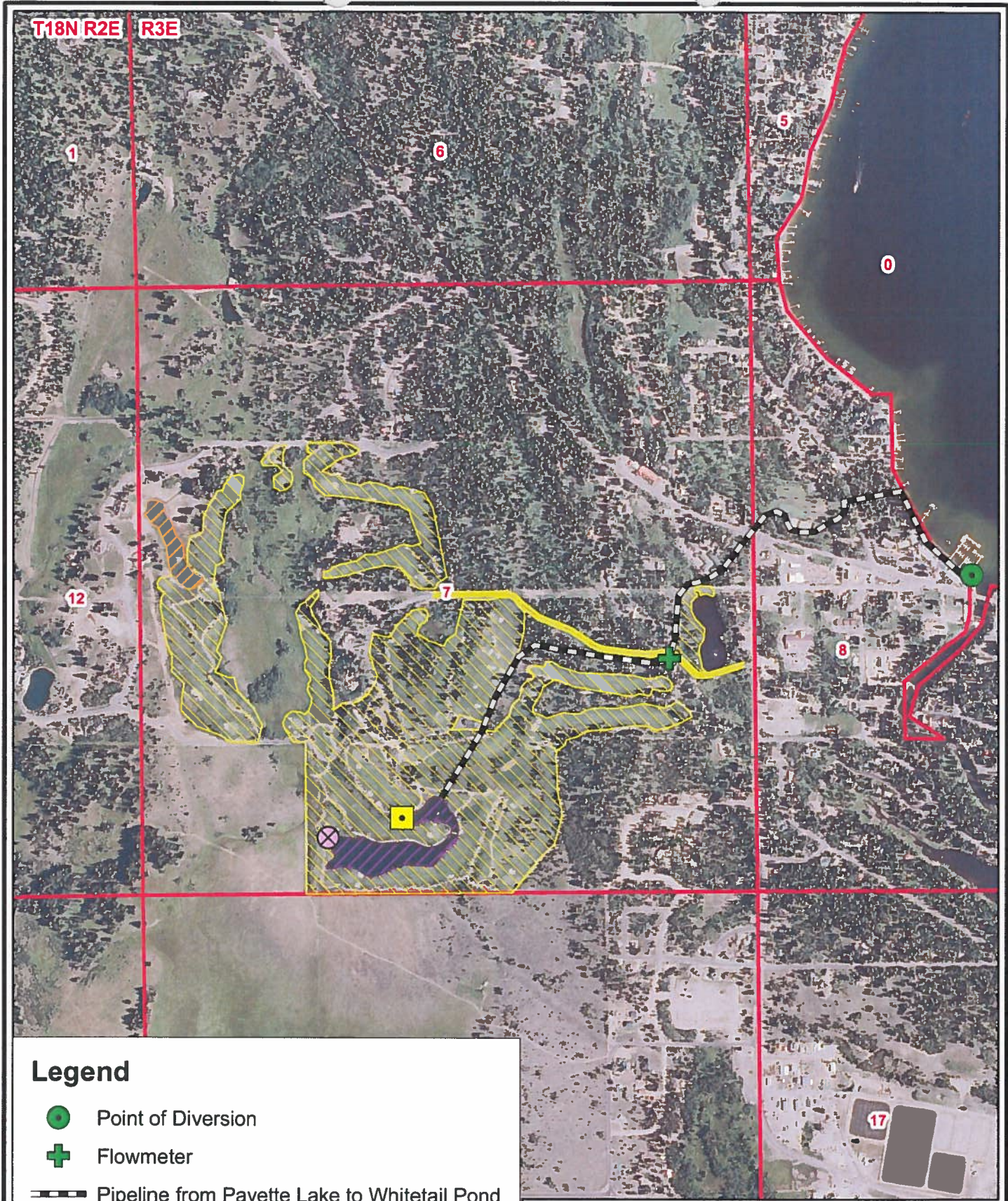
ATTACHMENT D

TOPO MAP AND 2009 AERIAL PHOTO





Pressure Irrigation Pump Station



Legend

-  Point of Diversion
-  Flowmeter
-  Pipeline from Payette Lake to Whitetail Pond
-  Whitetail Pond (7 acres)
-  Irrigation Pump Station
-  Irrigation (147 acres)

Permit 65-13640



0 750 1,500
Feet



ATTACHMENT E
PHOTOS



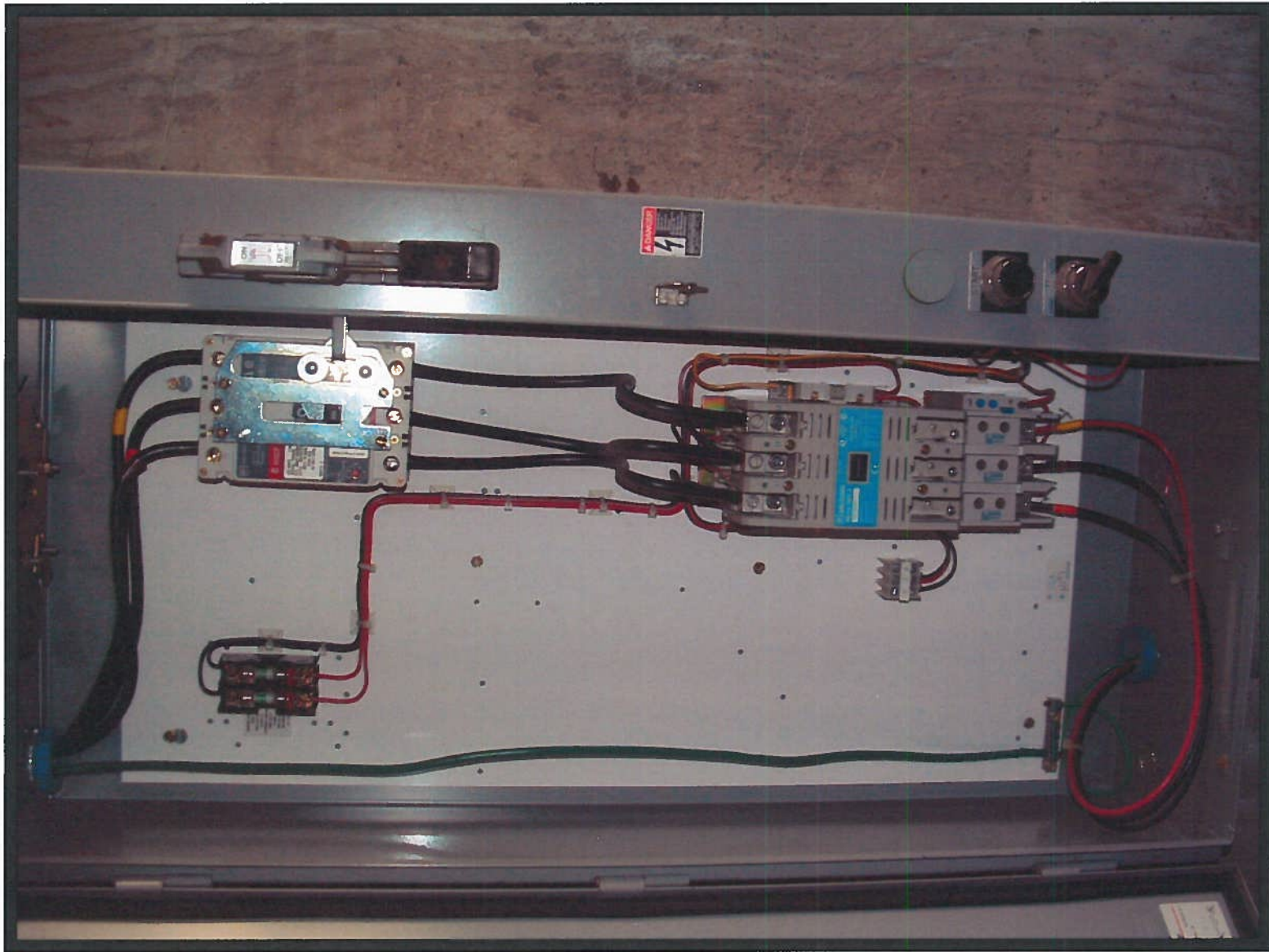
Submersible Payette Lake Pump Location



Looking Inside Pump Vault



Lockable Pump Motor Controls



Inside Pump Motor Control Panel



Payette Lake Pump Flowmeter



Whitetail Pond



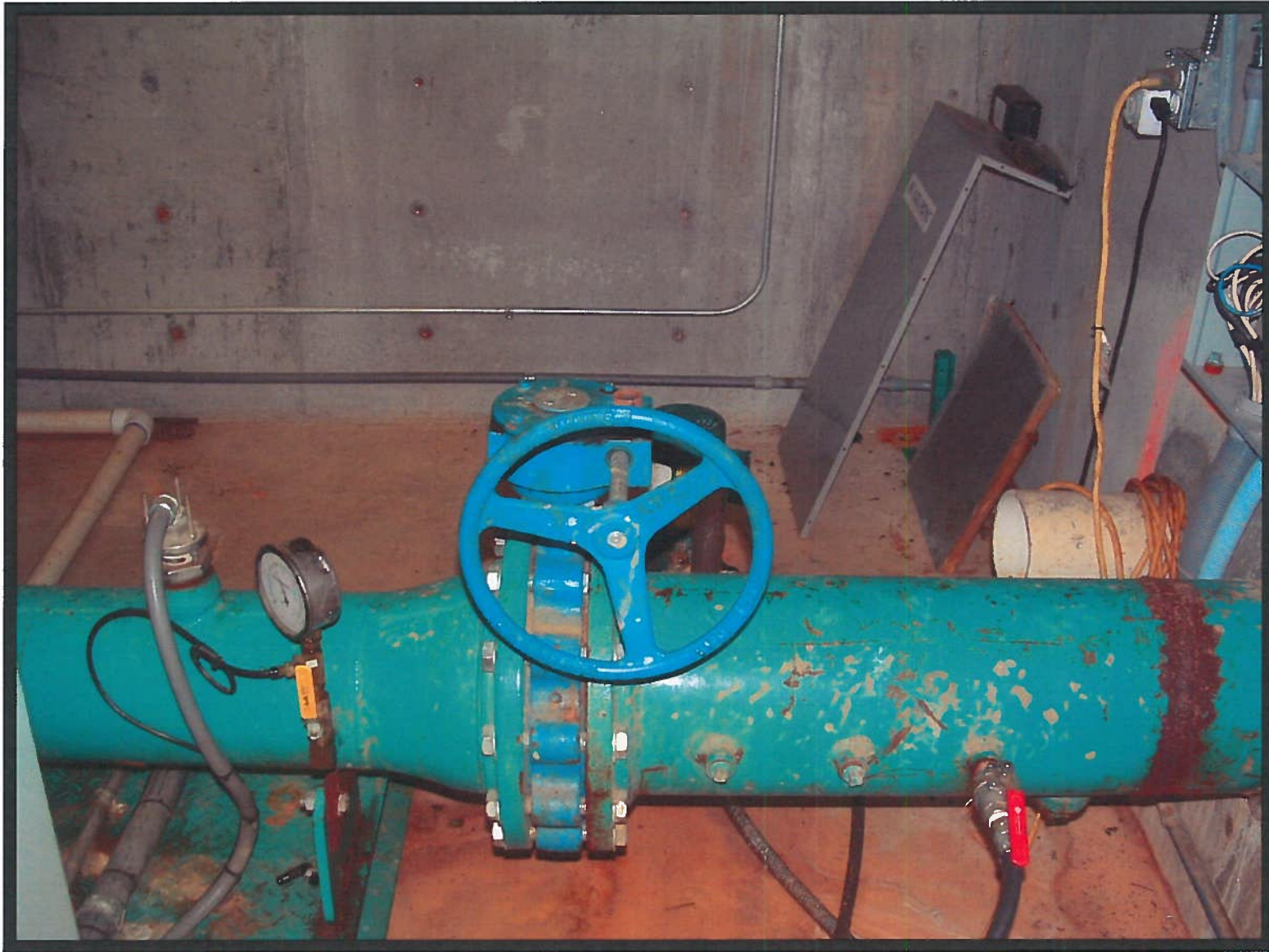
Whitetail Pond



Flowtronex Pump System at Whitetail Pond



Three Irrigation Pumps at Whitetail Pump Station



Pump Station Irrigation Flowmeter



Whitetail Pump Station Pumps: 3 Irrigation, 2 Fire Protection and 1 Recirculation



Whitetail Pump Station Motor Controls