Form 219
6/92

RECEIVED
JAN 0 5 1999
DEPARTMENT OF WATER RESOURCES

STATE OF IDAHO
DEPARTMENT OF WATER RESOURCES

BENEFICIAL USE FIELD REPORT

A. GENERAL INFORMATION

Permit No. 37-08478

1. Owner: RIVERWOODS HOMEOWNER'S ASSOC. Phone No. (208) 726-7888

Current Address: PO BOX 3801, KETCHUM, ID. 83340

2. Accompanied by: GREGG STURTEVANT AND EXAM DATE: 19 Oct 98

Address: ALFRED LAPETER → PRESIDENT OF ASSOCIATION Phone No. _____

Relationship to Permit Holder: _____

3. Source: GROUNDWATER tributary to _____

B. OVERLAP REVIEW

1. Other water rights with the same place of use: 37-08480, -08465

2. Other water rights with the same point of diversion: 37-08480 Licensing Exam 10/19/1998 (Lot 1)
37-08465 " " " 07/24/1991 (Lot 2)

C. DIVERSION AND DELIVERY SYSTEM

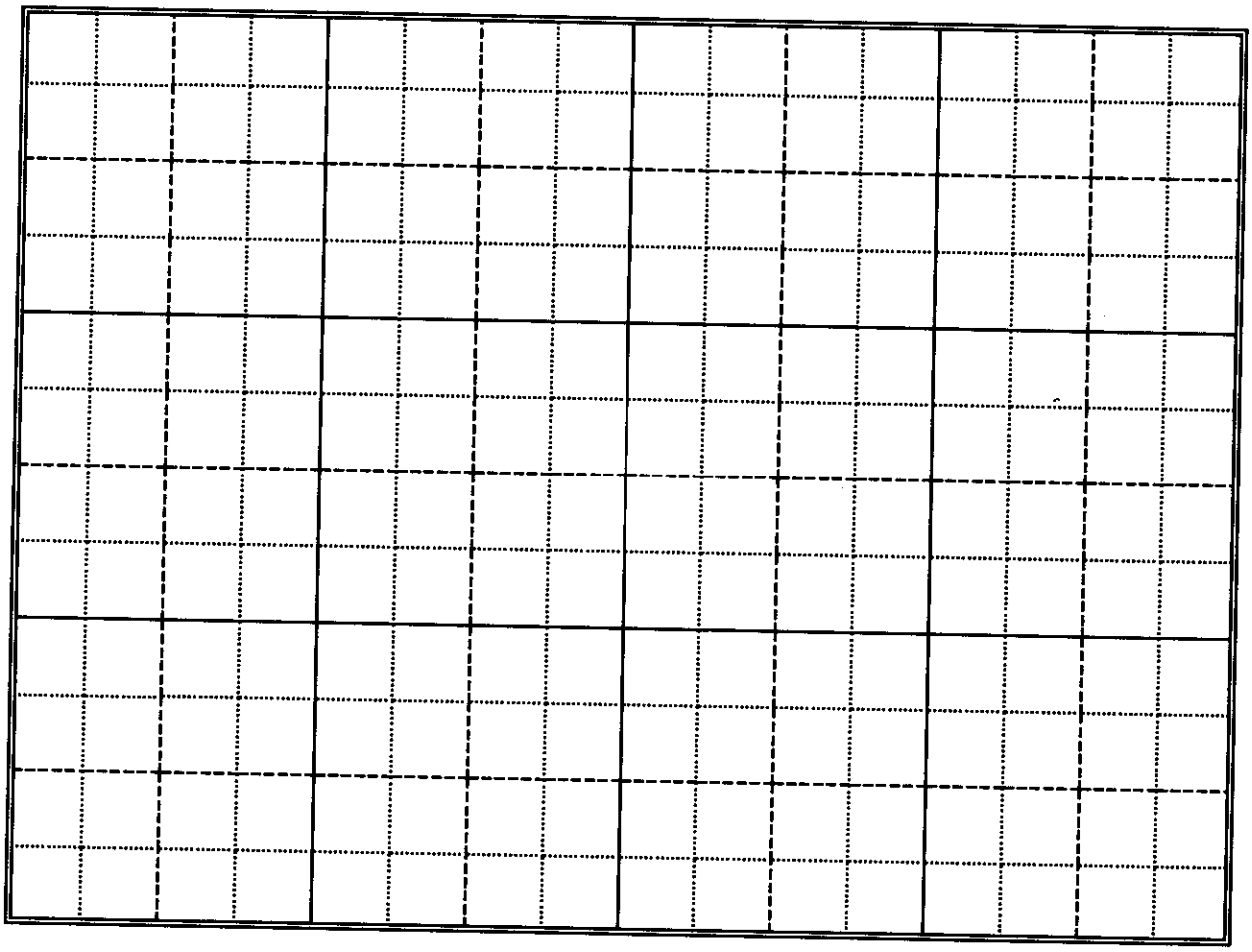
1. **Point(s) of Diversion:**

Ident No.	Gov't Lot	¼	¼	¼	Sec.	Twp.	Rge.	County	Method of Determination/Remarks
		NW	SW	SE	01	04N	17E	BLAINE	FIELD EXAM/SUBD. PLAT MAP
									GPS TAG A0007839

2. **Place(s) of Use:** Indicate Method of Determination _____

TWP	RGE	SEC	NE				NW				SW				SE				Totals
			NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	NE	NW	SW	SE	
04N	17E	01														4.0	4.0		
↓		01														D	D		
		12		1.5															
		12		D															

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



Scale: 1" = _____.

✓ Copy of USGS Quadrange 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
A0007839		15	23106039020	FRANKLIN	
" "		15		" "	

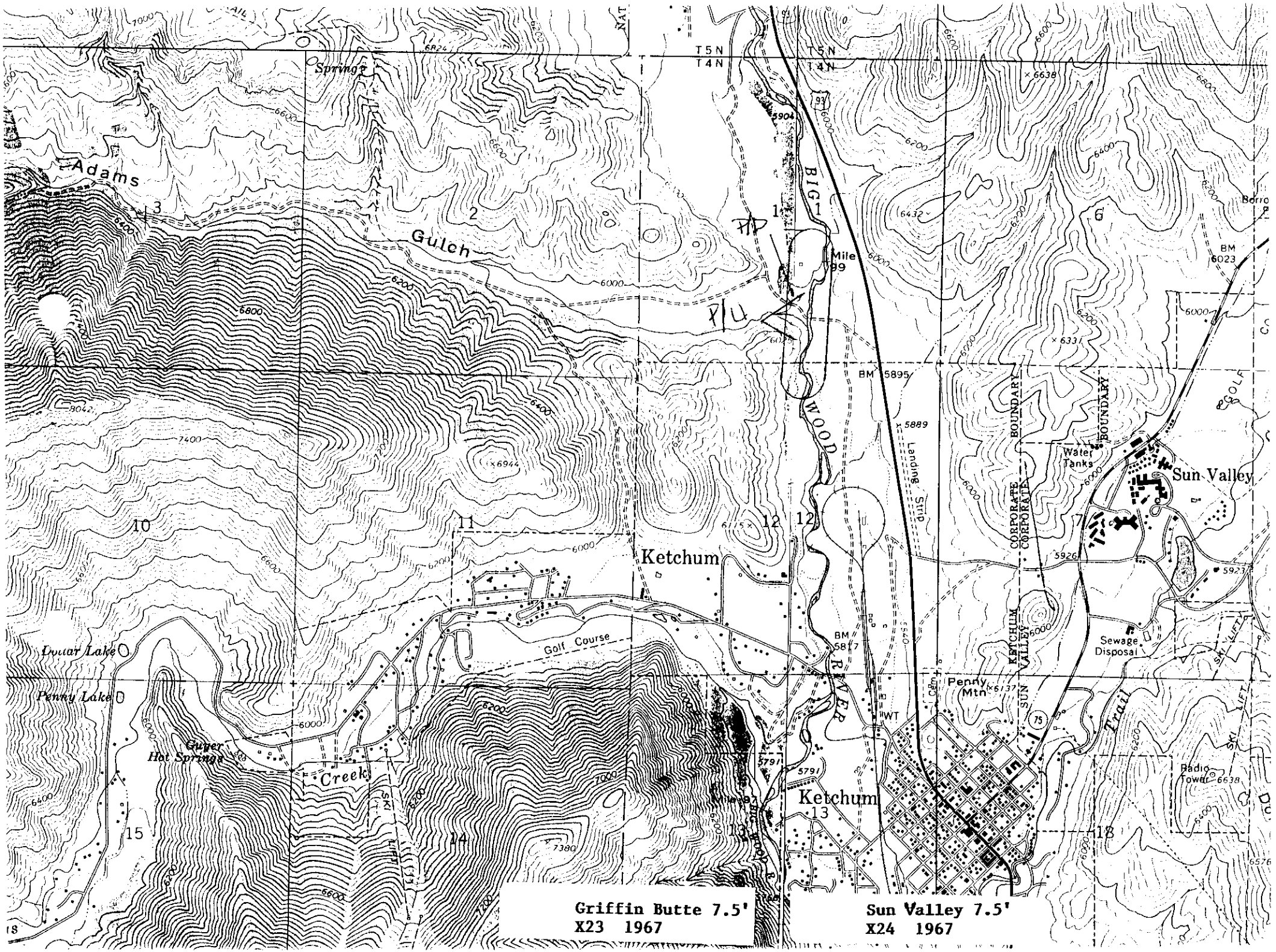
Code to correspond with No. on map and aerial photo

D. FLOW MEASUREMENTS

1.

Measurement Equipment	Type	Make	Model No.	Serial No.	Size	Calib. Date
PUMP CURVE						
THEORETICAL						

2. **Measurements:** SEE ATTACHED SHEETS



Griffin Butte 7.5'
X23 1967

Sun Valley 7.5'
X24 1967

PLAT SHOWING

RIVERWOODS SUBDIVISION

A PORTION OF

The SE 1/4 of Sec. 1 & NE 1/4 of Sec. 12, T. 4 N., R. 17 E., B.M.

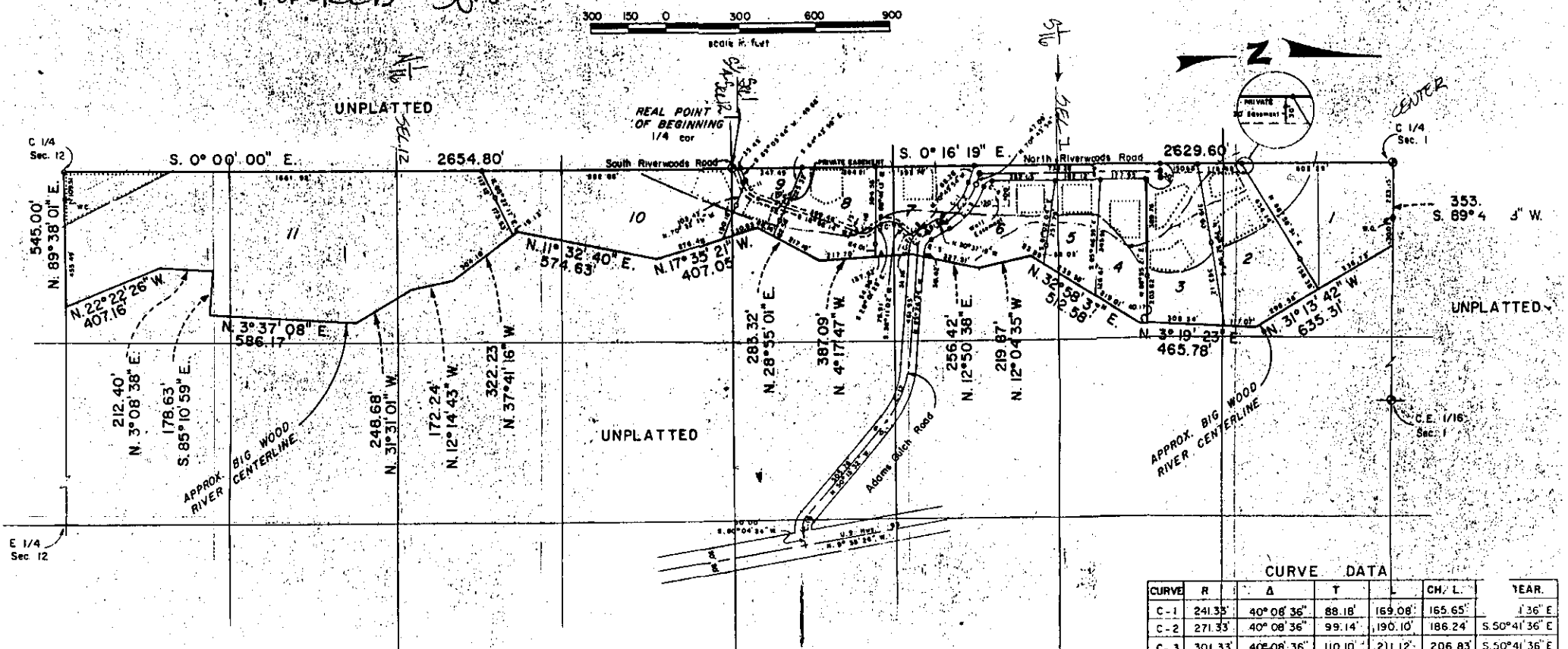
BLAINE COUNTY, IDAHO

1976

SCALE REDUCED = 50%

300 150 0 300 600 900

scale in feet



LOT SIZES

1. 4.8 acres, approx.
2. 4.4 " "
3. 5.4 " "
4. 2.5 " "
5. 1.9 " "
6. 2.9 " "
7. 2.3 " "
8. 2.9 " "
9. 1.2 " "
10. 6.8 " "
11. 19.9 " "

NOTES

1. There is hereby reserved a drainage easement of sufficent width to allow free flow of drainage water along all existing natural drainages.
2. There is hereby reserved a snow removal and slope cut or fill easement 20' Westerly and 40' Easterly of the respective edges of the roadway easement on Lots 7 and 8.
3. Lot I shall not be considered buildable until the flood hazard problem is defined and resolved to the satisfaction of the Blaine County Commissioners and the Ketchum City Council.
4. Lot II shall not be considered buildable until an access easement is provided to the satisfaction of the same public officials.

LEGEND

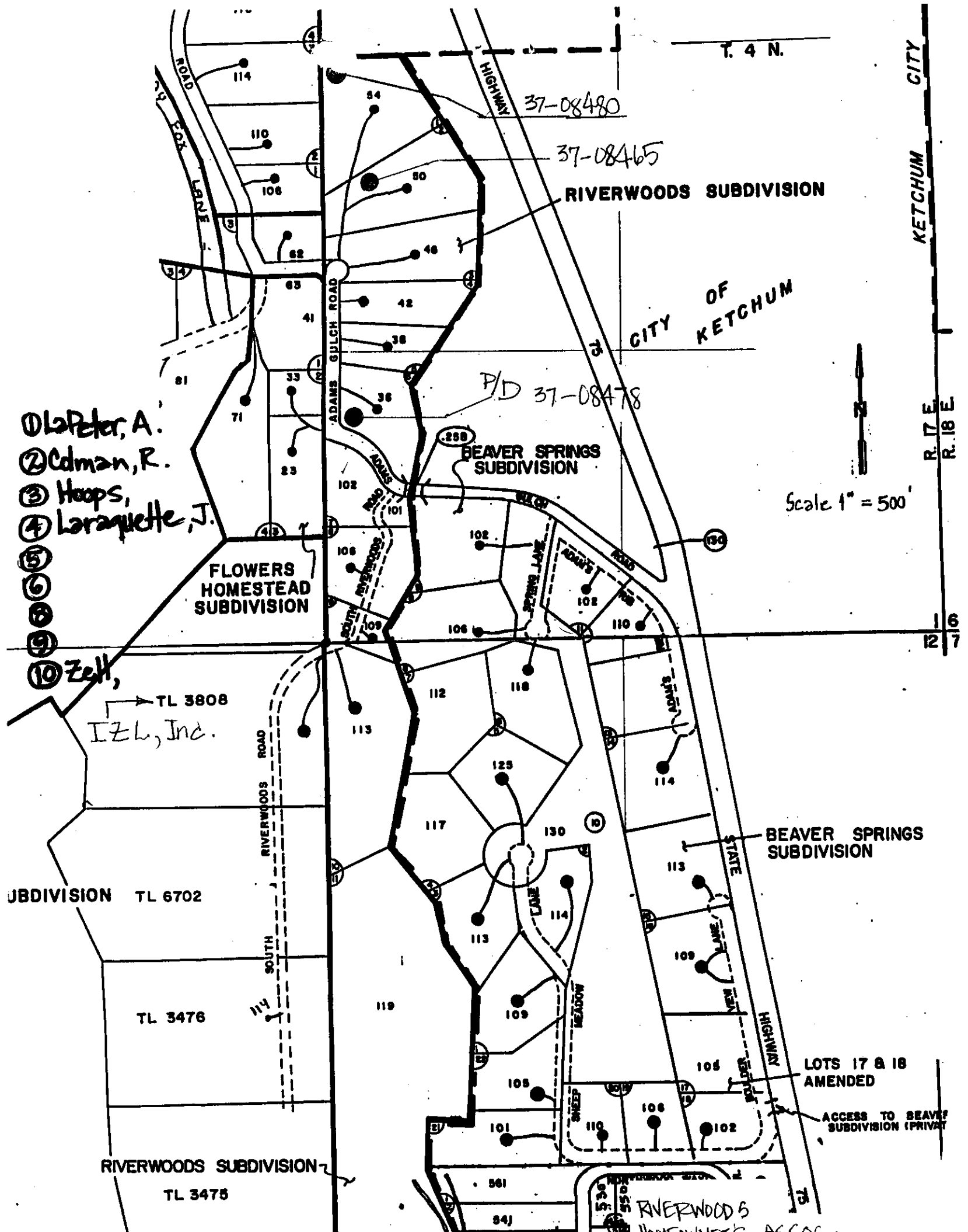
- Brass Cap found (B.L.M.)
- 1/2" x 24" rebar set
- 1/2" x 24" rebar set (witness corner)
- 5/8" rebar found
- 5/8" x 30" rebar set
- 30' wide private roadway easement with public access
- Designated area where permanent structures are to be erected.
- Drainage easement
- Approx I.R.F. Line
- ℄ of dedicated roads (Adams Gulch & North Riverwoods)

CURVE DATA

CURVE	R	Δ	T	L	CH. L.	TEAR.
C-1	241.33'	40° 08' 36"	88.18'	169.08'	165.65'	36" E
C-2	271.33'	40° 08' 36"	99.14'	190.10'	186.24'	S. 50° 41' 36" E
C-3	301.33'	40° 08' 36"	110.10'	211.12'	206.83'	S. 50° 41' 36" E
C-4	36.62'	70° 29' 35"	25.88'	45.05'	42.27'	S. 35° 31' 07" E
C-5	54.95'	54° 49' 06"	28.49'	52.57'	50.59'	S. 58° 01' 51" E
C-6	84.95'	54° 49' 06"	44.05'	81.28'	78.21'	S. 58° 01' 51" E
C-7	114.95'	28° 27' 13"	29.14'	57.09'	56.50'	S. 71° 12' 49" E
C-8	114.95'	26° 21' 53"	26.92'	52.89'	52.43'	S. 43° 48' 15" E
C-9	65.58'	66° 12' 25"	42.76'	75.78'	71.63'	S. 5° 04' 49" W
C-10	69.80'	46° 57' 37"	30.32'	57.21'	55.62'	S. 4° 32' 34" E
C-11	101.78'	50° 09' 30"	47.63'	89.10'	86.28	S. 44° 01' 00" W
C-12	394.57'	35° 12' 52"	125.22'	242.51'	238.71'	S. 67° 49' 58" E
C-13	73.42'	49° 41' 54"	34.00'	63.68'	61.71'	S. 75° 04' 29" E

KOONCE & BUTLER

CONSULTING ENGINEERS


T. 4 N.
HIGHWAY
37-08480
37-08465
RIVERWOODS SUBDIVISION
KETCHUM CITY
CITY OF KETCHUM
P/D 37-08478
ADAMS GULCH ROAD
BEAVER SPRINGS SUBDIVISION
FOX LANE
FLOWERS HOMESTEAD SUBDIVISION
SOUTH RIVERWOODS ROAD
ADAMS ROAD
WILCOX ROAD
Scale 1" = 500'
R. 17 E.
R. 18 E.
12
6
7
1 LaPeter, A.
2 Colman, R.
3 Hoops,
4 Laraquette, J.
5
6
8
9
10 Zell,
TL 3808
IZL, Inc.
RIVERWOODS ROAD
SOUTH RIVERWOODS ROAD
UBDIVISION TL 6702
TL 3476
RIVERWOODS SUBDIVISION
TL 3475
BEAVER SPRINGS SUBDIVISION
STATE HIGHWAY
MEADOW LANE
SHEEP LANE
LOTS 17 & 18 AMENDED
ACCESS TO BEAVER SUBDIVISION (PRIVAT
RIVERWOODS

MAP 152.253 1:6,000 W-92-

LOT ① LaPeter, A. Sec 37-08480

3.0

①

3.0

LOT ② COLMAN, R. SEE 37-08465

②

③ 1.6

④ 1.2

1.7

⑤

⑥

2.5

Pump House

Scale 1"=200'±

NOT DEVELOPED

LOT ⑦
LOT ⑪

⑧ 0.5

¼ Cor

⑨ 0.5

⑩

Hwy.

75

1" = 200'

HWY. 75

⑤ 1.7

⑥ 2.5

Pump House

NOT DEVELOPED

LOT ⑦

LOT ⑪

⑧ 0.5

¼ Cor

⑨ 0.5

⑩ 1.5

Sec 1

Sec 12

RIVERWOODS HOMEOWNER'S ASSOC

37-08478



photo looking NE'ly Lot 2

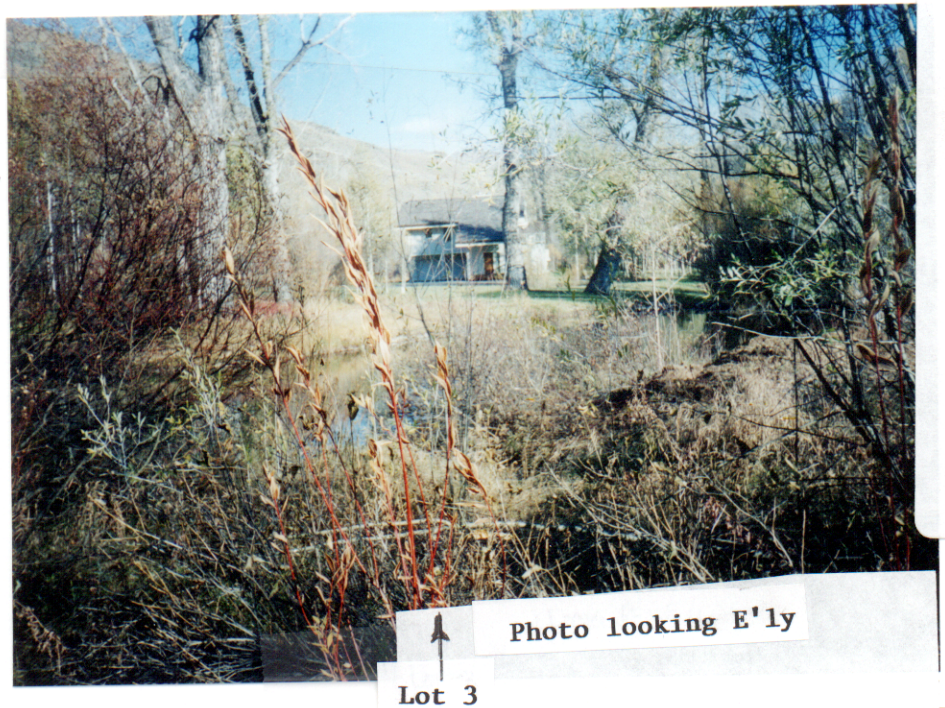


Photo looking E'ly

Lot 3

Looking S'ly



2/17



oto looking NE'ly

brand new construction

Lot 4



photo looking SE'ly

Riverwoods Homeowners Assoc 37-08478

3/7

Riverwoods Homeowners Assn. 37-08478



Front Lot 5



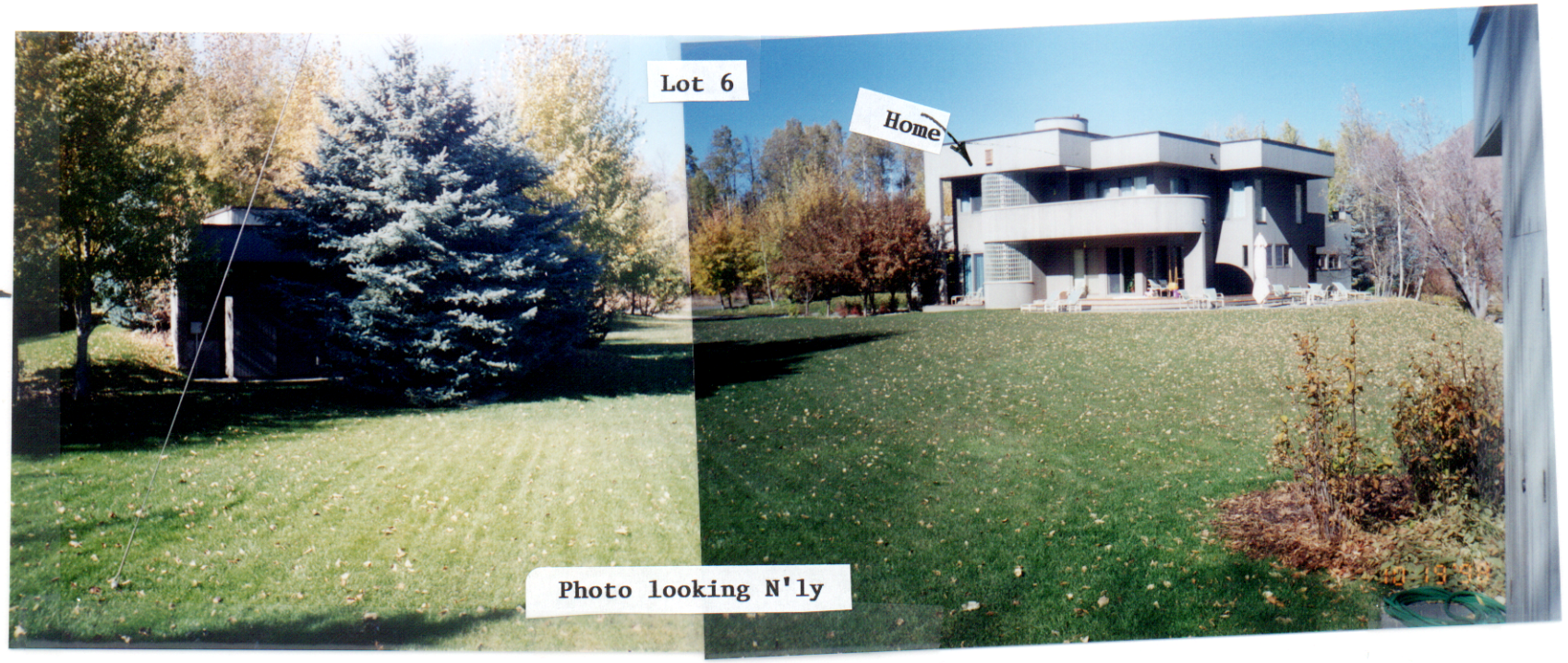
Photo looking E'ly



Back Lot 5

Photo looking W'ly

4/7



pumphouse for S/D on Lot 6

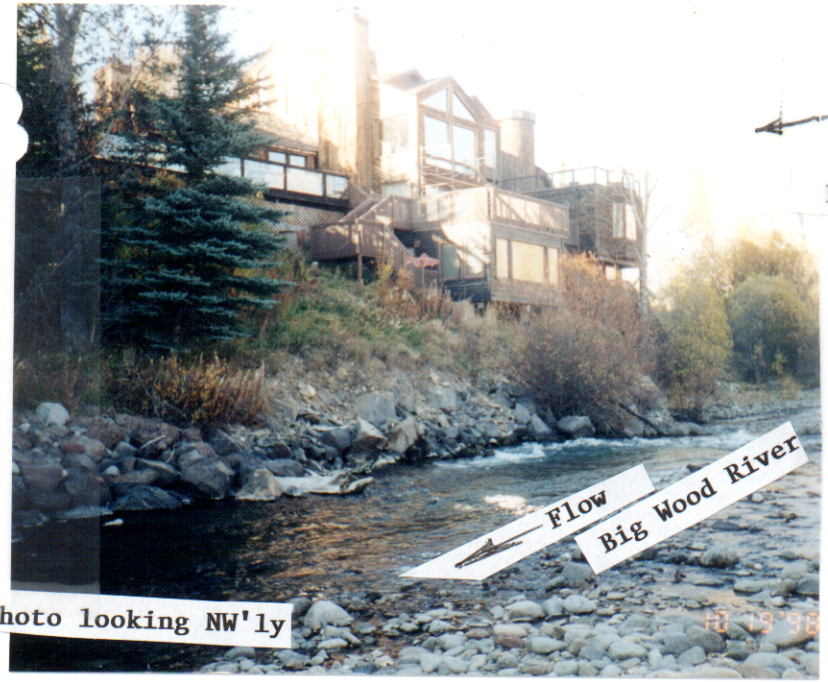


Riverwoods Homeowners Assn. 37-08478

5/7

Riverwoods Homeowners Assoc 37-08478



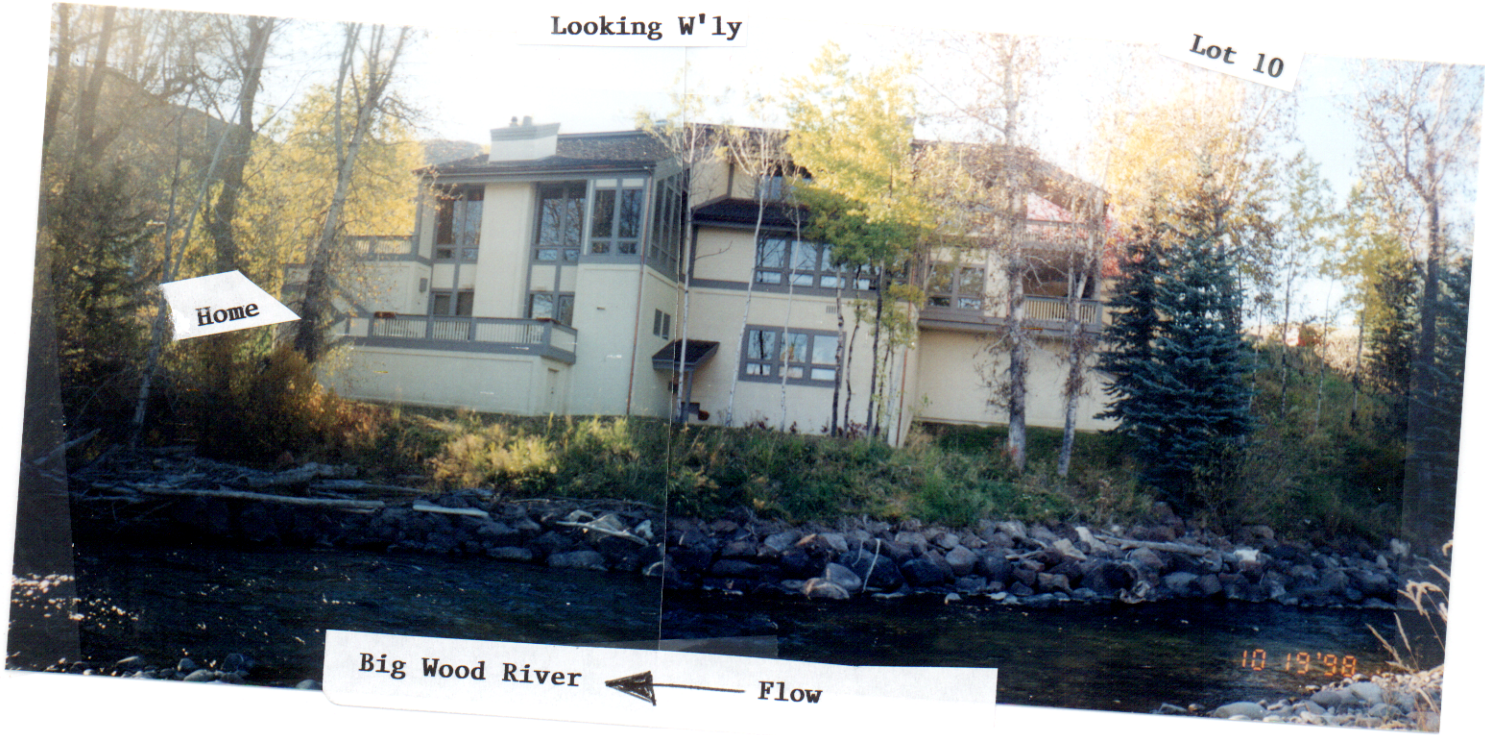


Lot 9



Looking W'ly

Lot 10



Riverwoods Homeowners Assn. 37-084/8

Home on Lot 10

7/7

Riverwoods Homeowners Assn. 37-08478





E. NARRATIVE/REMARKS/COMMENTS

E. NARRATIVE/REMARKS/COMMENTS

FROM: Georgia Satterlee
DATE: 16 December 1998
RE: 37-08478

On 19 October 1998 I met with Al LaPeter and Gregg Sturtevant to conduct a field examination for the above permit which is for Riverwoods Subdivision. Mr. LaPeter is the President for Riverwoods Homeowner's Association and lives in house on Lot 1 (see 37-08480).

The groundwater serves the homeowners with domestic and irrigation uses. The well is located in the NWSWSE¼ of Section 1, T04N, R17E with the attached GPS tag A0007839. The location of the well can be described as being in the south-west portion of Lot 6 of the Riverwoods Subdivision, which is also the lot located at 36 Adams Gulch Road.

Mark Koffer of the Walker Water Systems submitted pump curves. I was informed that the pumps work seperately. However, when the demand increases, they can work together. The two 15 horsepower Berkley pumps each have an output of 0.33 cfs. A theoretical calculation shows a 0.49 cfs diversion rate.

The domestic use is for 9 homes, although it appears Lot 1, Lot 2, and Lot 10 all have individual wells that can be tapped into each residence.

The irrigation element is strictly for Lots 3-6 and Lots 8-10. The irrigation for Lot 1 (37-08480) and Lot 2 (37-08465) are covered.

On 19 October 1998, I conducted the field examinations for both permits, 37-08478 and 37-08480 (LaPeter), simultaneously. In 1991, a field examination was conducted for 37-08465, for Robert Colman who lives on Lot 2 in the Riverwoods Subdivision. During the 1991 examination, it was noted that the well, on Lot 2, also supplied water to the trout pond. It appears that the pond straddles the west portion of both Lots 2 and 3.

While conducting the recent field examinations, I saw several ponds and numerous ditches meandering throughout the subdivision. The aerial photography (1992 flight) validates this statement. It appears the ponds and ditches are being supplied with water from both groundwater (see field examinations 37-08465 and 37-08480) and surface water.

My recommendations are primarily for the permit which is groundwater. The issue of diverting from the Big Wood River needs to be addressed.

Have conditions of permit approval been met? ✓ yes ___ no

F. FLOW CALCULATIONS

Measured Method:

"PUMP CURVE" SUBMITTED, THEORETICAL RATE INCLUDED

✓ Additional Computation Sheets Attached

PERMIT RATE 0.87
EXAM FEE LIMIT 1.00
"MEASURED" RATE 0.33
RECOMMENDED RATE 0.33

G. VOLUME CALCULATIONS

1. Volume Calculations for Irrigation:

$V_{I.R.}$ = (Acres Irrigated) x (Irrigation Requirement) = 9.5 (3.5) 33.25 3

$V_{D.R.}$ = [Diversion Rate (cfs)] x (Days in Irrigation Season) x 1.9835 = 0.19(215)1.9835 = 81

V = Smaller of $V_{I.R.}$ and $V_{D.R.}$ = ~~33.2~~ 33 ac ft

2. Volume Calculations for Other Uses:

0.02 cfs/acre = 9.5 ac. = 0.19 cfs

WELL HAS CAPACITY OF 0.66 cfs WHEN PUMPS ARE BOTH OPERATING

DOMESTIC VOLUME IN HOUSE = 0.6 af (9 homes) = 5.4 afa

H. RECOMMENDATIONS

1. Recommended Amounts

Beneficial Use	Period of Use From	Period of Use To	Rate of Diversion Q (cfs)	Annual Volume V (afa)
Irrigation	4/1	11/1	0.19 cfs	33.3
Domestic (homes only)	1/1	12/31	0.14 cfs	5.4
Totals:			0.33 cfs	38.7 ac. ft.

2. Recommended Amendments

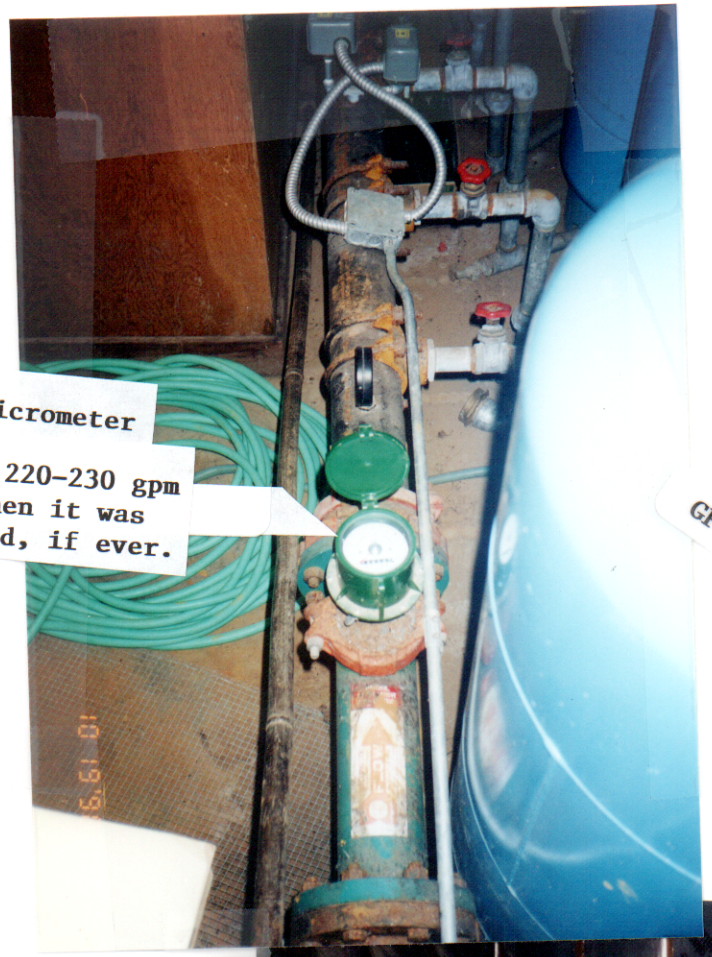
___ Change P.D. as reflected above ___ Add P.D. as reflected above ✓ None
___ Change P.U. as reflected above ___ Add P.U. as reflected above ___ Other

I. AUTHENTICATION

Field Examiner's Name Georgia Satterlee Date 17Dec98

Reviewer _____ Date _____

SEAL



Micrometer

Readings 220–230 gpm
Unsure when it was
calibrated, if ever.



2 TWO – 15HP Berkley Pumps

GPS Tag A0007839



pressure tanks

60–80 PSI

Riverwoods Homeowners Assn. 37-08478

GROUNDWATER MEASUREMENT REQUIREMENT ANALYSIS
****

FILE: 37-08478
DATE: OCTOBER 1998
BY: SATTERLEE

THEORETICAL RATE OF FLOW: $Q = \frac{(8.8) \times (H.P.) \times (EFF.)}{TDH}$

Q = CFS
H.P. = Total Brake Horsepower of pumping plant (including booster)
EFF. = Pumping plant efficiency (ASSUME 70% OR 0.70)
TDH = total dynamic head = [(LIFT) + (PSI X 2.31)]
LIFT = depth to water in FEET from land surface to pumping water level
PSI = pumping pressure measured in psi near pump (if open dicharge assume zero [0])

$$Q = \frac{(8.8) \quad (\ldots 15 \ldots) \quad (0.70)}{[\ (\ldots 27 \ldots) + (\ldots 70 \ldots \text{ X } 2.31)\ ]} = \frac{92.4}{189} = 0.49 \text{ cfs}$$

LIFT FROM:
measurement ( )
owner ( )
area estimate (√)
well logs (√)

PSI FROM:
measurement ( )
owner ( )
estimate ( )
owner gage (√)

NOTES ON PUMP:
Motor Make, Serial or ID
SEE BENEFICIAL FIELD REPORT
Pump Make, Serial or ID, rating

Booster (Y) (N)

REMARKS

ANNUAL VOLUME ANALYSIS

POTENTIAL Acre Feet/Acre/Annum = $\frac{(\text{DAYS IN SEASON}) \times (1.98) \times (Q)}{(\text{RECOMMENDED ACRES IRRIGATED})}$

(season)	(days)
3/15 - 11/15	246
4/1 - 11/1	215
4/15 - 10/15	184
3/1 - 12/1	276

POTENTIAL = $\frac{(\ldots) \times (1.98) \times (\ldots)}{(\ldots)}$

POTENTIAL = _____

REQUIRED Acre Feet/Acre/Annum = _____
(AF/Ann/Ac irrigation requirement from chart for area)
NOTE that this is NOT Consumptive use

IF POTENTIAL IS GREATER THAN REQUIRED THEN NO MEASUREMENT NECESSARY ( )

IF POTENTIAL IS LESS THAN REQUIRED THEN MEASUREMENT IS NECESSARY ( )