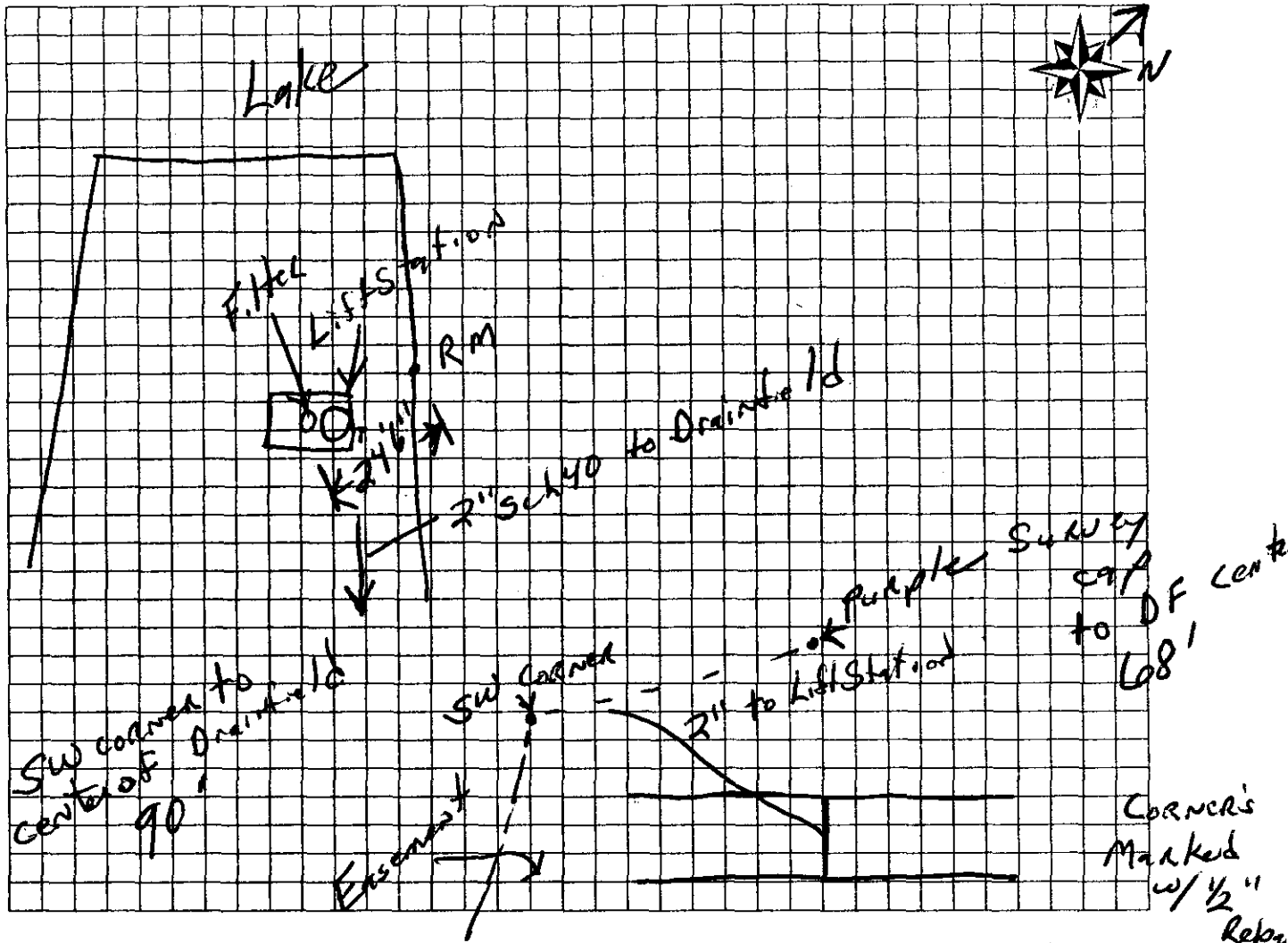


MISSOULA CITY-COUNTY HEALTH DEPARTMENT  
301 W. Alder Missoula, MT 59802 258-4755

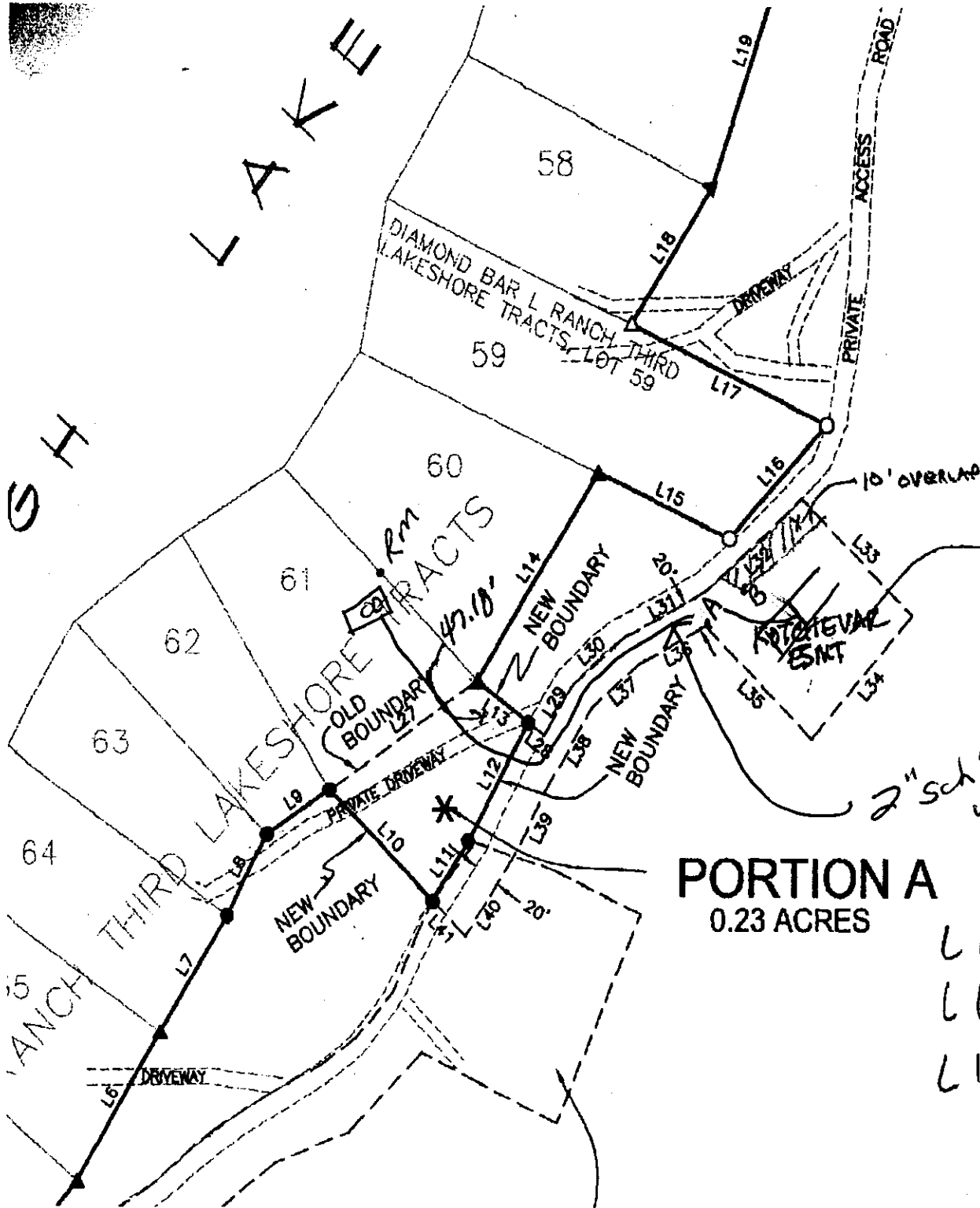
INDIVIDUAL SEWER SYSTEM INSPECTION REPORT

Name of Owner Julia Katchevan  
Legal Address/Location Lot 661 Diamond L Bar Third Lakeshore Tracts / Lindbergh Lake  
Certified Installer Ron Matthew  
Type System: New  Replacement \_\_\_\_\_ No. of Bedrooms Permitted 4  
Septic Tank: Capacity: 1500 + 500 Gal., Material: Concrete  Other \_\_\_\_\_, Depth to top: 2 ft. 6 in.  
Standard \_\_\_\_\_, Gravelless \_\_\_\_\_, Pressure Dist.  Dosed \_\_\_\_\_  
Drainfield: Total length 160 ft., # of laterals 4, Trench Depth 24 in. to bottom  
Seepage Pit: Height \_\_\_\_\_ ft., Depth to Top \_\_\_\_\_ ft. in.  
Distance of Installation From: Property Lines: 10' + Wells: NA Surface Water: 150' Other \_\_\_\_\_  
Soil Type Silt loam Paved \_\_\_\_\_ Yes  No \_\_\_\_\_  
Indicate North with Arrow



Approved \_\_\_\_\_ Disapproved \_\_\_\_\_  
Self Inspected by: Ron Matthew Sanitarian Date 10/27/05  
Corrections Necessary: \_\_\_\_\_  
Inspection Witnessed By: \_\_\_\_\_  
Deficiencies Corrected: Yes \_\_\_\_\_ No \_\_\_\_\_  
Sanitarian Date

10/20/05 16:51 TX/RX NO.1857 P.002



JULIE  
KOTCHEVAT'S  
PLAT 90'  
A to DF center 90'  
B to DF center 68'

PERMANENT EASEMENT FOR DRAINFIELD,  
SEWER SERVICE AND REPLACEMENT  
AREA, FOR THE USE AND BENEFIT  
OF LOT 61

**PORTION A**  
0.23 ACRES

L11 = 47.82'  
L12 = 89.58'  
L13 = 47.18'

2" sch 40  
w/ traced wire

TR  
30  
(R)

MISSOULA CITY-COUNTY HEALTH DEPARTMENT  
 301 W. ALDER (406)523-4755  
 SEWER PERMIT AND APPLICATION

*Renewed by phone  
 5/17/05 for 1  
 year*

OWNER NAME: Julia Kotchevar PHONE: (608) 833 1020  
 OWNER ADDRESS: 6302 Steepy Hollow Circle Middleton WI  
 CERTIFIED INSTALLER: Ron Matthew  
 LOCATION OF INSTALLATION: 1/4 E 1/2 T 19 R 17 S 23  
 ADDRESS OF SITE: Lindbergh Lake Rd  
 CERTIFICATE OF SURVEY: # \_\_\_\_\_ SUBDIVISION: Diamond L. Bar Third Lakeshore Tracts  
 LOT: 61 BLOCK: \_\_\_\_\_ TRACT: \_\_\_\_\_ SIZE OF PARCEL: 1/2 acre  
 GENERAL AREA NAME: Lindbergh Lake

SEPARATION ADEQUATE FOR:  
 (INFO SUPPLIED BY APPLICANT)(CHECK ALL)

Special Conditions and Other Information

	YES	NO
WELLS >100'	<u>Lake</u>	
WATER LINES >10'	<input checked="" type="checkbox"/>	
FLOODPLAIN >100'	<input checked="" type="checkbox"/>	
SURFACE WATER >100'	<input checked="" type="checkbox"/>	
HGW >4', >5', >6'	<input checked="" type="checkbox"/>	
BEDROCK >6'	<input checked="" type="checkbox"/>	
SLOPE <25%	<input checked="" type="checkbox"/>	
PROPERTY LINES, BLDGS >10'	<input checked="" type="checkbox"/>	

*SANITARY RESTRICTIONS ?	YES ___ NO <input checked="" type="checkbox"/>
*ANY EXISTING SEPTIC SYSTEMS?	YES ___ NO <input checked="" type="checkbox"/>
UPGRADE REQUIRED?	YES ___ NO <input checked="" type="checkbox"/>
*INSIDE OR NEAR FLOODPLAIN:	YES ___ NO <input checked="" type="checkbox"/>
*PUBLIC SEWER LESS THAN 200 FEET:	YES ___ NO <input checked="" type="checkbox"/>
*PROPERTY LOCATED IN MWTPSA?	YES ___ NO <input checked="" type="checkbox"/>
FOR NEW OR INCREASED USE	
___ SUBDIVISION PLAT LANGUAGE EXISTS	
___ DEED RESTRICTION FILED	
*PROPERTY LOCATED IN S.T.E.P. AREA?	YES ___ NO ___
___ CITY S.T.E.P. TANK & PERMIT REQUIRED	

SOIL TYPE: Silt loam  
 WATER SUPPLY: Lake

TYPE OF SYSTEM TO BE INSTALLED:  NEW: \_\_\_\_\_ REPLACEMENT  
 SYSTEM SIZING:  RESIDENTIAL #OF BEDROOMS: 4 GAL/DAY: 350  
 \_\_\_\_\_ COMMERCIAL USE \_\_\_\_\_ GAL/DAY: \_\_\_\_\_

APPLICATION RATE (Gal/day or sq. ft./bedroom): 7  
 FROM: PLAT APPROVAL \_\_\_\_\_; SITE EVALUATION ; ENGINEER \_\_\_\_\_  
 SYSTEM SIZE & DESCRIPTION: 1,500 + 1000 Gallons (  concrete, \_\_\_\_\_ S.T.E.P., \_\_\_\_\_ other) septic tank  
 with 320 ft lineal feet of 24 inch trench drainfield as per site plan attached. Install an 8 inch capped riser from tank to surface. S  
 T.E.P. tanks requires manway and lid to be inspected by the City.

SPECIAL CONDITIONS: System will be installed in easement. Pressure  
dist system installed as per design criteria attached  
Chambers to be used with pressure

**As purchaser of this permit, I agree to comply with all requirements for installation as described in Missoula City-County Health Code Regulation #1, State Water Quality Bureau Regulations and special conditions described above. This document does not release me from complying with any other State, Federal or Local regulations including but not limited to zoning, building and floodplain regulations.**

This permit is valid for twelve (12) months from date of purchase. Sewage disposal systems must be completed within this time and inspected by the Department prior to covering the system. A copy of this permit is to be on site at all times during construction and inspection of the system. Please use the permit number in the upper right hand corner for reference when you call for a final inspection.

Permit purchaser: [Signature] Date: 5/18/04  
 Health Authority: [Signature] Date: 5/18/04  
5/18/05

# SEWER PERMIT CHECKLIST

## ALL PERMITS:

SITE PLAN ATTACHED TO PERMIT

### HOOK-UP TO MUNICIPAL SEWER IS REQUIRED IF: (CHECK ONE)

<200' TO PROPERTY LINE IF IN CITY LIMITS  CALLED AND REFERRED TO CITY ENGINEERS OFFICE  
 <200' TO BUILDING IF OUTSIDE CITY LIMITS  DATE \_\_\_\_\_  
 NOT WITHIN 200 FEET OF MUNICIPAL SEWER  PERSON CONTACTED \_\_\_\_\_

### SPECIAL MANAGEMENT AREAS: (see section XV of Health Code)

LINDA VISTA - Connect to public sewer.  
 MWTPSA - IF YES, IS DEED RESTRICTION FILED? YES \_\_\_\_\_  
 OR SUBDIVISION PLAT LANGUAGE EXISTS: YES \_\_\_\_\_  
 RATTLESNAKE - ONE SYSTEM PER LOT - 25' VERTICAL & 100' HORIZONTAL SEPARATION FROM VALLEY  
 ROMAN CREEK/TOUCHETTE LANE (W 1/2 SEC 27, S 28, E 1/2 S 29, T 15N, R 21 W)  
(NORTH OF I-90 AND SOUTH OF FRENCHTOWN CANAL) - CONDITIONS MET \_\_\_\_\_

### TYPE OF PARCEL: (CHECK ONE)

SUBDIVISION FILED PRIOR TO 5/27/61, REQUIRES A SITE EVALUATION. S.E. IN FILE \_\_\_\_\_ YES(OR NO)  
 SUBDIVISION FILED AFTER 5/27/61 WITHOUT LIFTING, REQUIRES SUBDIVISION REVIEW. S.E. IN FILE \_\_\_\_\_  
 SUBDIVISION FILED AFTER 5/27/61 WITH RESTRICTIONS LIFTED AND RECORDED  
 COS W/LIFTING ON FILE/RECORDED  
 COS WITH >20 ACRE EXEMPTION (REQUIRES SITE EVALUATION) SITE EVALUATION ON FILE \_\_\_\_\_ (YES OR NO)  
 COS WITHOUT LIFTING ON FILE (IS USUALLY AN EXEMPTION FOR WHICH NO PERMIT CAN BE ISSUED i.e. AG.,  
CEMETERY, ETC.)  
 TRACTLAND REQUIRES A SITE EVALUATION. (>5 (BEFORE 1973), >10 (BEFORE 1975), >20 ACRES)

## NEW PERMITS

### PLANNING/ZONING PERMIT REQUIRED (CHECK ONE)

INSIDE BUILDING INSPECTOR ZONE - BUILDING PERMIT APPLICATION REQUIRED  
 IN ZONED AREA OR IN OR NEAR FLOODPLAIN OR SUBDIVISION FOR LEASE OR RENT - COMPLIANCE PERMIT  
REQUIRED  
 OUTSIDE BUILDING INSPECTOR ZONE - NOT IN ZONED AREA OR IN FLOODPLAIN.

### SIZE OF PARCELS OR PARCELS:

IF <1/2 ACRE, OWNERSHIPS OF CONTIGUOUS LOTS (PRIOR TO MAY 19, 1988)  
DETERMINED FROM ASSESSORS OFFICE. (SEE SECTION V(D)(2))  
 NON-DEGRADATION REQUIREMENTS MET.

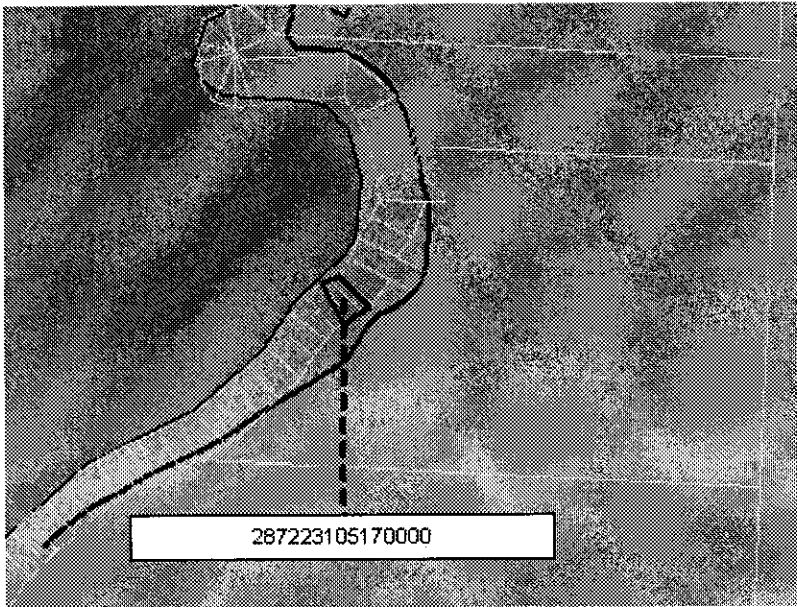
## REPLACEMENT SYSTEMS:

### HIGH GROUNDWATER OR BEDROCK (CHECK ONE)

HIGH GROUNDWATER OR BEDROCK AREA - DRAINFIELD, ABSORPTION BED, OR SHALLOW SEEPAGE PIT  
REQUIRED  
 NOT A HIGH GROUNDWATER OR BEDROCK AREA

### SITE VISIT: (CHECK ONE)

SITE VISIT REQUIRED TO VERIFY ROOM FOR: 1) DRAINFIELD, ABSORPTION BED OR SEEPAGE PITS  
2) GROUNDWATER 3) WELLS 4) ETC.  
 SITE VISIT NOT NECESSARY TO VERIFY SOILS, SPACE FOR ABSORPTION AREA, DISTANCE TO WELLS OR  
GROUNDWATER.



**PROFESSIONAL CONSULTANTS, INC.**

3115 Russell Street  
P.O. Box 1750  
Missoula, Montana 59806  
(406) 728-1880

CLIENT: PLATTS PROJECT NO: 6387-00

LOCATION: Sec 23 Twn 19N Rng 17W

Logged by: ANDY MEFFORD E.I. Date: NOVEMBER 14, 2000

Backhoe or drill by: DAVE GWYN

SOIL PROFILE NO. SP-3

Slope: +/- 12% Vegetation: WOODED/KNAPWEED

Depth	Thick	Texture	Modifiers	Structure	Moisture	Color	Comments
0"-2"	2"	Sandy Loam	Organics	Granular	Slight	Black	
2"-35"	33"	Sand/ Extremely Gravelly	Gravel 1 1/2" minus	Granular	Slight	Brown	
35"-110"	75"	Silt Loam	Very Fine Sand	Granular	Dry	Brown	
Comments:							

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
PERCOLATION TEST FORM (PROCEDURE I)

NAME: PLATTS PROJECT NAME: 6387-00

LOT/TRACT/PARCEL NUMBER: TRACT B1 TEST NUMBER: PT - # 6 DIA. TEST HOLE: 6"

DEPTH OF TEST HOLE: 24" SLOPE AT TEST LOCATION: +/- 2 %

DATE / TIME 1<sup>ST</sup> SOAK PERIOD BEGAN: 2:01 P.M. 1<sup>ST</sup> ENDED: 3:01 P.M. (WATER)  
2<sup>ND</sup> SOAK PERIOD BEGAN: 3:07 P.M. 2<sup>ND</sup> ENDED: 4:12 P.M. (WATER)

DATE TEST BEGAN: 11/16/00

**Test Results**

START TIME OF DAY	END TIME OF DAY	TIME INTERVAL (MIN)	INITIAL DISTANCE BELOW REFERENCE POINT	FINAL DISTANCE BELOW REFERENCE POINT	DROP IN WATER LEVEL (IN.)	PERCOLATION RATE (MIN/IN.)
12:46:50	1:16:50	30	24"	25 7/8"	1 7/8"	16.00
1:17:30	1:47:30	30	24"	25 9/16"	1 9/16"	19.20
1:48:40	2:18:40	30	24"	25 1/2"	1 1/2"	20.00
2:19:15	2:49:15	30	24"	25 5/16"	1 5/16"	22.86
2:50:00	3:20:00	30	24"	25 5/16"	1 5/16"	22.86
UNIFORM PERCOLATION RATE						22.86

I certify that this percolation test was in accordance with DEQ 4, Appendix A.

ANDY MEFFORD, E.I.

Name (printed)

  
Signature

4/20/01

Date

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY  
PERCOLATION TEST FORM (PROCEDURE I)

NAME: PLATTS PROJECT NAME: 6387-00

LOT/TRACT/PARCEL NUMBER: TRACT B1 TEST NUMBER: PT - #7 DIA. TEST HOLE: 6"

DEPTH OF TEST HOLE: 23" SLOPE AT TEST LOCATION: +/- 1%

DATE / TIME 1<sup>ST</sup> SOAK PERIOD BEGAN: 2:00 P.M. 1<sup>ST</sup> ENDED: 2:46 P.M.  
2<sup>ND</sup> SOAK PERIOD BEGAN: 2:51 P.M. 2<sup>ND</sup> ENDED: 3:39 P.M.

DATE TEST BEGAN: 11/17/00

**Test Results**

START TIME OF DAY	END TIME OF DAY	TIME INTERVAL (MIN)	INITIAL DISTANCE BELOW REFERENCE POINT	FINAL DISTANCE BELOW REFERENCE POINT	DROP IN WATER LEVEL (IN.)	PERCOLATION RATE (MIN/IN.)
11:05:40	11:15:40	10	24"	27 7/8"	3 7/8"	7.74
11:16:30	11:26:30	10	24"	27 1/8"	3 1/8"	9.60
11:27:30	11:37:30	10	24"	26 1/2"	2 1/2"	12.0
11:38:30	11:48:30	10	24"	26 5/16"	2 5/16"	12.97
11:49:15	11:59:15	10	24"	26 3/16"	2 3/16"	13.71
11:59:55	12:09:55	10	24"	26 1/8"	2 1/8"	14.12
UNIFORM PERCOLATION RATE						14.12

I certify that this percolation test was in accordance with DEQ 4, Appendix A.

ANDY MEFFORD, E.I.  
Name (printed)

  
Signature

4/20/01  
Date



# CERTIFICATE OF SURVEY

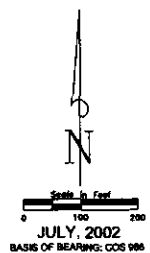
TO SHOW THE RELOCATION OF COMMON BOUNDARIES, LOCATED IN  
THE E1/2 SECTION 23, T.19N., R.17W., P.M.,M., MISSOULA  
COUNTY, MONTANA.

COS 1003

S89°56'43"E 1822.87'(F)  
WEST 1822.87'(F)

LINE	BEARING	DISTANCE
1-11	S89°56'43"E	1822.87'(F)
1-12	S89°56'43"E	1822.87'(F)
1-13	S89°56'43"E	1822.87'(F)
1-14	S89°56'43"E	1822.87'(F)
1-15	S89°56'43"E	1822.87'(F)
1-16	S89°56'43"E	1822.87'(F)
1-17	S89°56'43"E	1822.87'(F)
1-18	S89°56'43"E	1822.87'(F)
1-19	S89°56'43"E	1822.87'(F)
1-20	S89°56'43"E	1822.87'(F)
1-21	S89°56'43"E	1822.87'(F)
1-22	S89°56'43"E	1822.87'(F)
1-23	S89°56'43"E	1822.87'(F)
1-24	S89°56'43"E	1822.87'(F)
1-25	S89°56'43"E	1822.87'(F)
1-26	S89°56'43"E	1822.87'(F)
1-27	S89°56'43"E	1822.87'(F)
1-28	S89°56'43"E	1822.87'(F)
1-29	S89°56'43"E	1822.87'(F)
1-30	S89°56'43"E	1822.87'(F)
1-31	S89°56'43"E	1822.87'(F)
1-32	S89°56'43"E	1822.87'(F)
1-33	S89°56'43"E	1822.87'(F)
1-34	S89°56'43"E	1822.87'(F)
1-35	S89°56'43"E	1822.87'(F)
1-36	S89°56'43"E	1822.87'(F)
1-37	S89°56'43"E	1822.87'(F)
1-38	S89°56'43"E	1822.87'(F)
1-39	S89°56'43"E	1822.87'(F)
1-40	S89°56'43"E	1822.87'(F)
1-41	S89°56'43"E	1822.87'(F)
1-42	S89°56'43"E	1822.87'(F)
1-43	S89°56'43"E	1822.87'(F)
1-44	S89°56'43"E	1822.87'(F)
1-45	S89°56'43"E	1822.87'(F)
1-46	S89°56'43"E	1822.87'(F)
1-47	S89°56'43"E	1822.87'(F)
1-48	S89°56'43"E	1822.87'(F)
1-49	S89°56'43"E	1822.87'(F)
1-50	S89°56'43"E	1822.87'(F)
1-51	S89°56'43"E	1822.87'(F)
1-52	S89°56'43"E	1822.87'(F)
1-53	S89°56'43"E	1822.87'(F)
1-54	S89°56'43"E	1822.87'(F)
1-55	S89°56'43"E	1822.87'(F)
1-56	S89°56'43"E	1822.87'(F)
1-57	S89°56'43"E	1822.87'(F)
1-58	S89°56'43"E	1822.87'(F)
1-59	S89°56'43"E	1822.87'(F)
1-60	S89°56'43"E	1822.87'(F)
1-61	S89°56'43"E	1822.87'(F)
1-62	S89°56'43"E	1822.87'(F)
1-63	S89°56'43"E	1822.87'(F)
1-64	S89°56'43"E	1822.87'(F)
1-65	S89°56'43"E	1822.87'(F)
1-66	S89°56'43"E	1822.87'(F)
1-67	S89°56'43"E	1822.87'(F)
1-68	S89°56'43"E	1822.87'(F)
1-69	S89°56'43"E	1822.87'(F)
1-70	S89°56'43"E	1822.87'(F)
1-71	S89°56'43"E	1822.87'(F)
1-72	S89°56'43"E	1822.87'(F)
1-73	S89°56'43"E	1822.87'(F)
1-74	S89°56'43"E	1822.87'(F)
1-75	S89°56'43"E	1822.87'(F)
1-76	S89°56'43"E	1822.87'(F)
1-77	S89°56'43"E	1822.87'(F)
1-78	S89°56'43"E	1822.87'(F)
1-79	S89°56'43"E	1822.87'(F)
1-80	S89°56'43"E	1822.87'(F)
1-81	S89°56'43"E	1822.87'(F)
1-82	S89°56'43"E	1822.87'(F)
1-83	S89°56'43"E	1822.87'(F)
1-84	S89°56'43"E	1822.87'(F)
1-85	S89°56'43"E	1822.87'(F)
1-86	S89°56'43"E	1822.87'(F)
1-87	S89°56'43"E	1822.87'(F)
1-88	S89°56'43"E	1822.87'(F)
1-89	S89°56'43"E	1822.87'(F)
1-90	S89°56'43"E	1822.87'(F)
1-91	S89°56'43"E	1822.87'(F)
1-92	S89°56'43"E	1822.87'(F)
1-93	S89°56'43"E	1822.87'(F)
1-94	S89°56'43"E	1822.87'(F)
1-95	S89°56'43"E	1822.87'(F)
1-96	S89°56'43"E	1822.87'(F)
1-97	S89°56'43"E	1822.87'(F)
1-98	S89°56'43"E	1822.87'(F)
1-99	S89°56'43"E	1822.87'(F)
1-100	S89°56'43"E	1822.87'(F)

184.15'(F)  
184.48'(F)  
1/4 CORNER  
ROUND P. ALUM. CAP  
(DUNNISTON, 2927E)  
SEC. 23  
SEC. 24  
1897.44'(F)  
1247.88'(F)  
900°15'13"E 1443.74'(F)  
900°15'05"E 1484.35'(F)



**OWNERS:**  
TRACT B, COS 986:  
GORDON H. PLATTS  
LOT 61, DIAMOND BAR L RANCH THIRD  
LAKESHORE TRACTS:  
JULIA ANNE KOTSCHIEVAR REVOCABLE TRUST

PERMANENT EASEMENT FOR DRAINFIELD,  
SEWER SERVICE AND REPLACEMENT  
AREA FOR THE USE AND BENEFIT  
OF LOT 61

TRACT B  
COS 986

TRACT B-1  
63.04 ACRES  
(REMAINDER)

PORTION A  
0.23 ACRES

PERMANENT SANITARY  
SEWER EASEMENT PER  
BOOK 507, PAGE 1000 (MORO)

- LEGEND**
- = SET 3/8"Ø"24" REBAR WITH 1-1/2" ALUMINUM CAP (ANGWORTH, 2923S)
  - = FOUND 1-1/4" YELLOW PLASTIC CAP (ALLEGABLE)
  - = FOUND 5/8" REBAR (NO CAP)
  - △ = FOUND 1-1/2" YELLOW PLASTIC CAP (DUNNISTON, 2927E)
  - ◇ = FOUND 1-1/4" YELLOW PLASTIC CAP (THORNEY, 754E)
  - F = FOUND THIS SURVEY
  - R1 = RECORD PER COS 986 (DUNNISTON, 2927E)
  - R2 = RECORD PER COS 1428 (DUNNISTON, 2927E)
  - R3 = RECORD PER DIAMOND BAR L THIRD LAKESHORE TRACTS LOT 56 (THORNEY, 754E)
  - = RECORD PER COS 986 & FOUND THIS SURVEY
  - RM = REFERENCE MONUMENT
  - N.T.S. = NOT DRAWN TO SCALE

S89°50'27"W 2536.54'(F)  
WEST 2536.80'(F)

COS 986

5322

5322

**PROFESSIONAL  
CONSULTANTS  
INCORPORATED**  
ENGINEERING, PLANNING, SURVEYING  
2114 Roswell St., P.O. Box Phone 499-7300 FAX 499-7300  
1700 Aberdeen, Berkeley, CA 94704 Fax 499-7300

PREPARED AT THE REQUEST OF: GORDON "CORK" PLATTS  
PCI PROJECT NO. 6387-00 278-56

1/4	SEC.	T.	R.
23	19W	17N	

Sheet 1 of 2  
Missoula County, Montana  
Certificate of Survey No. **5322**

PERIMETER LEGAL DESCRIPTION

A portion of Tract B, Certificate of Survey No. 886, records of Missoula County, located in the East one-half (E1/2) of Section 23, Township 18 North, Range 17 West, Principal Meridian, Montana, Missoula County, Montana, being more particularly described as follows:

Beginning at the northeast corner of said Tract B, said point being the TRUE POINT OF BEGINNING; thence along the east boundary of said Tract B, S.0912.13°E., 1463.79 feet to the southeast corner of said Tract B; thence along the south boundary of said Tract B, S.2829.27°W., 2336.54 feet to a point on the westerly boundary of Diamond Bar L Ranch Third Subdivision of Missoula County; thence the following above courses (1) along said westerly boundary: N.81°47'26"E., 136.30 feet; thence N.43°34'29"E., 86.91 feet; thence N.42°34'44"E., 106.86 feet; thence N.42°15'45"E., 116.06 feet; thence N.43°18'10"E., 131.83 feet; thence N.37°44'19"E., 116.24 feet; thence N.37°15'48"E., 81.45 feet; thence N.28°04'54"E., 81.07 feet; thence N.57°28'51"E., 24.99 feet; thence N.58°25'54"E., 130.64 feet; thence N.33°15'48"E., 163.84 feet to a point on the boundary of Diamond Bar L Third Subdivision of Missoula County; thence the following three (3) courses along said boundary: S.88°17'58"E., 103.33 feet; thence S.43°49'53"E., 104.10 feet; thence N.82°38'07"W., 106.80 feet to a point on the westerly boundary of said Diamond Bar L Ranch Third Subdivision of Missoula County; thence the following two (2) courses along said westerly boundary: N.33°08'57"E., 107.39 feet; thence N.18°12'25"E., 182.89 feet to a point on the boundary of Certificate of Survey No. 1424, records of Missoula County; thence the following one (1) course along said boundary: S.88°21'14"E., 83.00 feet; thence N.14°48'50"W., 34.82 feet; thence N.42°11'01"W., 38.19 feet; thence N.51°17'06"W., 55.27 feet; thence N.17°20'54"W., 57.63 feet; thence S.78°11'32"W., 30.21 feet to a point on the westerly boundary of said Diamond Bar Ranch Second Subdivision of Missoula County; thence along said westerly boundary, N.37°17'18"W., 89.36 feet to the northwest corner of said Tract B; thence along the north boundary of said Tract B, S.89°56'43"E., 1825.67 feet to the TRUE POINT OF BEGINNING.

Containing 83.21 acres more or less, being subject to all easements and rights-of-way as shown, existing, apparent or of record, and all according to the attached Certificate of Survey.

LEGAL DESCRIPTIONS

PORTION 'A', CERTIFICATE OF SURVEY NO. 5322, A Tract of land located in the East one-half (E1/2) of Section 23, Township 18 North, Range 17 West, Principal Meridian, Montana, Missoula County, Montana.

Containing 0.23 acres more or less, being subject to all easements and rights-of-way as shown, existing, apparent or of record, and all according to the attached Certificate of Survey.

TRACT B1, CERTIFICATE OF SURVEY NO. 5322, (remainder). A Tract of land located in the East one-half (E1/2) of Section 23, Township 18 North, Range 17 West, Principal Meridian, Montana, Missoula County, Montana.

Containing 82.94 acres more or less, being subject to all easements and rights-of-way as shown, existing, apparent or of record, and all according to the attached Certificate of Survey.

OWNER'S CERTIFICATION

We hereby certify that the purpose of this division of land is to relocate common boundary lines, therefore this division of land is exempt from review as a subdivision pursuant to section 76-3-202 (1) (a) M.C.A. to wit: "divisions made for the purpose of relocating a common boundary line between a single lot within a platted subdivision and adjoining land outside a platted subdivision."

Gordon H. Matts  
Gordon H. Matts  
STATE of Montana  
County of Missoula  
This instrument was acknowledged before me on Aug 28, 2002 by Gordon H. Matts  
Notary Public for the State of Montana  
Printed Name of Notary: MATTIS, GORDON H.  
Residing at: MISSOULA, MONTANA  
My commission expires: Aug 1, 2003



Julia Anne Katschauer Revocable Trust  
Julia Anne Katschauer, Trustee  
Julia Anne Katschauer, Trustee  
STATE of Montana  
County of Blaine  
This instrument was acknowledged before me on 8/28, 2002 by Julia Anne Katschauer, as Trustee for the Julia Anne Katschauer Revocable Trust.

Tom G. Wick  
Notary Public for the State of Montana  
Printed Name of Notary: TOMAS G. WICK  
Residing at: MIDDLETON, MONTANA  
My commission expires: 1-19-03, 20

SURVEYOR'S CERTIFICATION

I hereby certify that the attached plat represents a survey made under my direct supervision, and that the same is true and correct on the data shown thereon.

Richard A. ...  
Richard A. ...  
Missoula County Surveyor  
Missoula City/County Surveyor  
Date: 7/29/02

FINAL APPROVAL OF THIS CERTIFICATE OF SURVEY GRANTED BY:

PURPOSE OF SURVEY  
The purpose of this division of land is to relocate common boundary lines between adjoining properties and no additional parcels are hereby created. Therefore, this division is exempt from subdivision review pursuant to Section 76-3-202(1)(a) M.C.A. to wit: "divisions made for the purpose of relocating a common boundary line between a single lot within a platted subdivision and adjoining land outside a platted subdivision."  
NOTE:  
The Certificate of Survey was not reviewed for adequate access, availability of utilities, compliance with zoning or availability of public services; nor does this approval obligate Missoula County to provide road maintenance, dust abatement or other services.  
This certificate shall not be used as a recording reference for any transfer of Portion A, subsequent to that transfer to complete the boundary relocation indicated herein.

PREPARED AT THE REQUEST OF: GORDON "CDRK" PLATTS  
PCI PROJECT NO. 6387-00 278-58

1/4	SEC.	T.	R.
18	23	18W	17N



Sheet 2 of 2  
Missoula County, Montana  
Certificate of Survey No. 5322

5322

5322

SAC-200688-06 1021  
WD-RM 688-06 1022



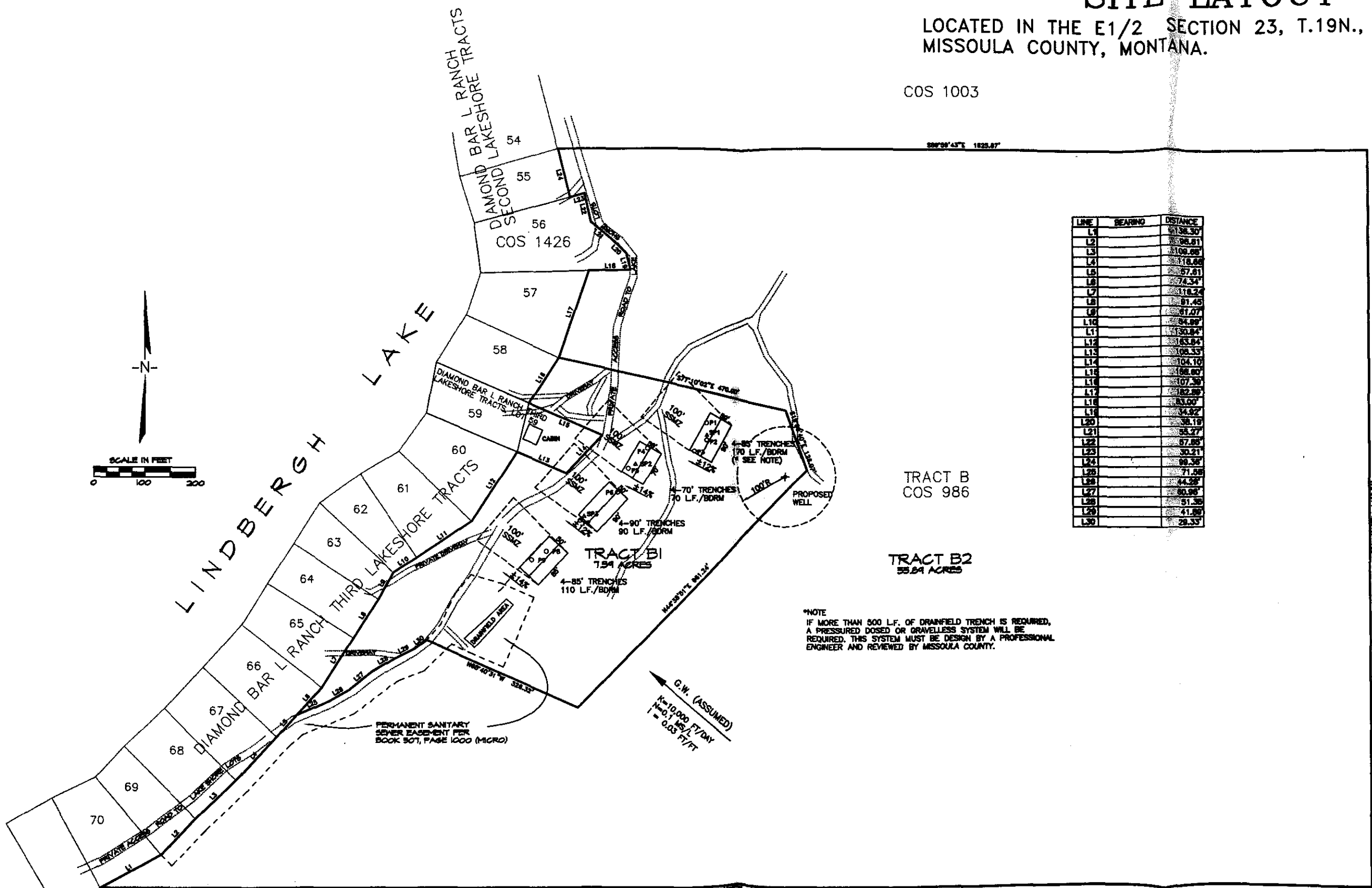
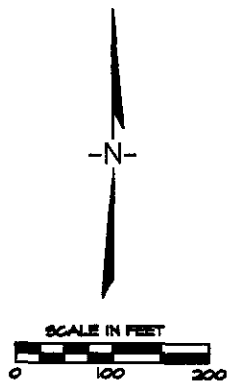
	A	B	C	D
1	<b>LEVEL SITE</b>			
2	<b>ITEMS MARKED WITH AN ASTERISK REQUIRE ENTERING</b>			
3	<b>CENTRAL MANIFOLD ENTRY POINT FROM END OF MANIFOLD</b>			
4	<b>Name:</b>			
5	JULIE KOTCHEVAR			
6	* LINEAL FEET REQUIRED	160	FT	ENTER LINEAL FEET OF PIPE
7	* NUMBER OF LATERALS	4		TOTAL NUMBER OF LATERALS (BOTH SIDES)
8	* LATERAL SPACING	7	FT	DISTANCE BETWEEN CENTERS OF LATS
9				
10	LENGTH OF LATERALS	40	FT.	COMPUTED (LENGTH ON EACH SIDE OF MANIFOLD)
11	SPACES BETWEEN LATERALS	1		COMPUTED FOR MANIFOLD LENGTH
12				
13	* ORIFICE SPACING	5	FT	SELECT LESS DISTANCE FOR SANDS
14	3 FT FOR SANDS			UP TO 6 FEET FOR CLAY SOILS
15	4 FT FOR LOAMS			ENTER AND MODIFY AS NEEDED
16	5 FT FOR SILT LOAMS			AFTER COMPUTATION IS RUN FOR
17	5 FT FOR CLAY			FIRST TIME (ADJUST IF NEEDED)
18				
19	ORIFICES PER LATERAL	8		THIS VALUE IS COMPUTED FOR YOU
20	first orifice placed at	2.5	ft	1/2 THE ORIFICE SPACING
21				
22	lateral 1 1/4 inch	1.38	IN.	SELECT A LATERAL DIAMETER
23	FROM TABLE A1-1			USING TABLE A1-1. TAKING INTO
24	ACCOUNT LENGTH AND ORIFICE SIZE			
25				
26	* ORIFICE SIZE	1/8	IN.	SELECT SMALLEST ORIFICE SIZE AND
27	FROM TABLE A1-1			LATERAL SIZE ALLOWED TO MINIMIZE
28	PUMP SIZE			
29	ORIFICE DISCHARGE RATE	0.43	GPM	ORIFICE DISCHARGE RATE COMPUTED
30	RATE = (12.38) * (d)^2 * h^1.5			
31	LATERAL DISCHARGE RATE	3.44	GPM	TOTAL FLOW PER LATERAL
32				
33	<b>PUMPING VOLUME</b>			
34				
35	MANIFOLD LENGTH	7		THIS IS COMPUTED USING LAT SPACING
36	* MANIFOLD DIAMETER	2.067	INCH	AND MANIFOLD AT THE CENTER
37	FROM TABLE 1			USE LATERAL DIS. RATE, CENTER MAN
38	MANIFOLD VOLUME	1	GAL	THIS IS COMPUTED FOR YOU
39				
40	LATERAL DOSE VOLUME	62	GAL	COMPUTED
41	* PIPE VOLUMES FOR DOSE	5		ENTER # OF PIPE VOLUMES YOU WANT FOR DOSE
42	TRANSPORT PIPE VOL.	70	GAL	COMPUTED
43	* LENGTH OF TRANSPORT PIPE	400	FT	HOW LONG IS TRANSPORT PIPE?
44	* DIAMETER OF TRANSPORT PIPE	2.067	INCH	USE FRICTION LOSS TABLE TO HELP
45	YOU MINIMIZE HEAD LOSS TABLE 9			
46	TOTAL PUMPING VOLUME	133	GAL	COMPUTED
47				
48	TOTAL DISCHARGE RATE	13.76	GAL/MIN	(COMPUTED)
49				
50	<b>PUMPING HEAD</b>			
51				
52	FRICTION LOSS	COMPUTED $f=10.46*L*Q^{1.85}/C^{1.85}*D^{4.87}$		
53	MANIFOLD	0.01	FT	$(10.46*(B35/3)*B47^{1.85})/(150^{1.85}*B35^{4.87})$
54	LATERALS	0.08	FT	$(10.46*B10*B31^{1.85})/(150^{1.85}*B22^{4.87})$
55	TRANSPORT PIPE	1.47	FT	$((10.46*B43*B48^{1.85})/(150^{1.85}*B44^{4.87}))$

	A	B	C	D
56	<b>TOTAL FRICTION LOSS</b>	1.56	FT	
57				
58	* RESIDUAL HEAD	5	FT	MIN. OF 2.3"; USE 5 OR MORE FOR 1/8" orifices
59	* ELEVATION DIFFERENCE	54	FT	ENTER DIFFERENCE IN ELEVATION
60				BETWEEN PUMP AND LATERALS
61	<b>TOTAL HEAD REQUIRED</b>	60.56	FT	COMPUTED
62				
63	<b>PUMP REQUIREMENTS</b>	<b>13.76 GPM COMPUTED PUMP REQUIREMENTS</b>		
64		<b>60.56 FT OF HEAD</b>		
65				
66	<b>PUMP SETTINGS</b>			
67				
68	TOTAL VOLUME OF PUMP CHAMBER	400		400 OR 1000 FOR HUNTON
69	VOLUME PER INCH IN CHAMBER	20.5		400 = 8.1; 20.5 FOR 1000; 7.83 for 500 and 250 HUNTON
70	RESERVE VOLUME	150		GALLONS
71	TOTAL PUMPING VOLUME	133		GALLONS
72	DEPTH OF CHAMBER	53		INCHES
73	DEPTH NEEDED FOR RESERVE	7.3		INCHES
74	DEPTH NEEDED TOTAL DOSE	6.5		INCHES
75	BUFFER BETWEEN ALARM & ON LEVEL	3		INCHES
76	ELEVATION LEFT FOR PUMP COVER	36.2		INCHES, PUMP MUST BE SHORTER THAN

# SITE LAYOUT

LOCATED IN THE E1/2 SECTION 23, T.19N., R.17W., P.M.,M., MISSOULA COUNTY, MONTANA.

COS 1003



LINE	BEARING	DISTANCE
L1		138.30'
L2		88.81'
L3		108.88'
L4		118.88'
L5		87.81'
L6		74.34'
L7		118.24'
L8		81.45'
L9		81.07'
L10		84.89'
L11		130.84'
L12		163.84'
L13		108.33'
L14		104.10'
L15		168.80'
L16		107.30'
L17		182.89'
L18		83.00'
L19		34.82'
L20		38.19'
L21		58.27'
L22		57.88'
L23		30.21'
L24		88.38'
L25		71.88'
L26		44.28'
L27		80.98'
L28		51.38'
L29		41.88'
L30		28.33'

\*NOTE  
IF MORE THAN 500 LF. OF DRAINFIELD TRENCH IS REQUIRED, A PRESSURED DOSED OR GRAVELLESS SYSTEM WILL BE REQUIRED. THIS SYSTEM MUST BE DESIGN BY A PROFESSIONAL ENGINEER AND REVIEWED BY MISSOULA COUNTY.

G.W. (ASSUMED)  
K=10,000 FT/DAY  
I=0.1 IN./L/FT  
I=0.03 FT/FT