LINCOLN COUNTY HEALTH DEPARTMENT
ENVIRONMENTAL HEALTH
WASTEWATER TREATMENT AND DISPOSAL SYSTEM PERMIT

Issue Date: 05/16/2025 Expiration Date: 05/15/2026 Permit# 25-5581

Property Owner: Daniel Green

Mailing Address: [redacted]

Installer: Bill Eckoff License #: 223

Approved Work: (Check One) ☒ New Installation ☐ Existing System

☐ Replace Drainfield ☐ Replace Tank ☐ Extension

Describe: Installation of new pressure dosed system for 4 Bedroom House and 150 GPD Commercial Building.

Legal: KOOTENAI RIDGE, S29, T36 N, R27 W, LOT 2, ACRES 16.85, CS 6849

Property Address: 4344 Othorp Lake Rd., Rexford, MT 59930 Assessment Code: 5581

DEQ COSA: E.Q.#25-2051 Date: 04/30/2025

Approved Design Criteria: Installation of new pressure dosed system for 4 Bedroom House and 150 GPD Commercial Building with 3 Laterals @ 75' with reduction for chambers.

# of Bedrooms: 4+150 GPD Commercial. Septic Tank Sizes: 1500, 1000, 1000Dosing Trench Width: 36"

# of Laterals: 3 Length of Laterals: 75' Trench Depth: 24"-36"

SYSTEM MUST INCLUDE INSTALLATION OF EFFLUENT FILTER AT SEPTIC TANK OUTLET!!

Special Instructions: Install system according to the lot layout, the Lincoln County Wastewater Treatment and Disposal Regulation, Circular DEQ-4, and COSA(If Applies). Reduction given for chambers. It is the installer's responsibility to ensure that all required horizontal setbacks are met. CHANGES MUST BE PRE-AUTHORIZED BY THE DEPARTMENT.

Issued By: *Robin Blumberg, RS*

NOTICE: The Department must be notified at least 3 business days (72 hours) prior to backfilling the system. Call 406-283-2442. Any system not inspected by the Department or its designated representative prior to closure is an illegal installation in violation of Lincoln County Health Board Regulation Ch. 3. Illegal installations may result in fines and/or requirements to remove or reconstruct the system.

Closure Statement:

This system is in compliance with the approved design criteria and Lincoln County's Wastewater Treatment and Disposal Regulation.

Signed: _____ *Date:* _____

This permit is not finalized until the system is inspected and the closure statement is signed.

This permit is not a guarantee that the system will function properly for a prescribed period of time.

S29, T36N, R27W
Lincoln County

- All known wells, drainfields and mixing zones within 100 ft of boundaries shown
- The project is in zone C [Areas of minimal flooding] of FEMA panel 3001570240B.
- Maintain Setback Distances ARM 17.36.323

Storm Drainage

Assumptions:

Lot 2A Post-Development: Structure: 3,500 square feet Gravel Driveway: 550 feet long x 12 feet wide = 6,600 square feet

Lot 2B Post-Development: Structure: 4,100 square feet Gravel Driveway/Parking: 14,000 square feet

Storm Drainage Facilities:

Lot 2A: Two (2) 384 cubic foot retention pond are proposed 18'x36' (top) x 6'x24' (bottom) x 2' deep with 3:1 side slopes that have been stabilized with vegetation for stabilization and grading

Lot 2B: Two (2) 668 cubic foot retention ponds are proposed *13'x52' (top) x 1'x40' (bottom) x 2' deep with 3:1 side slopes that have been stabilized with vegetation and* grading and existing 12 inch HDPE culvert

Maintenance:

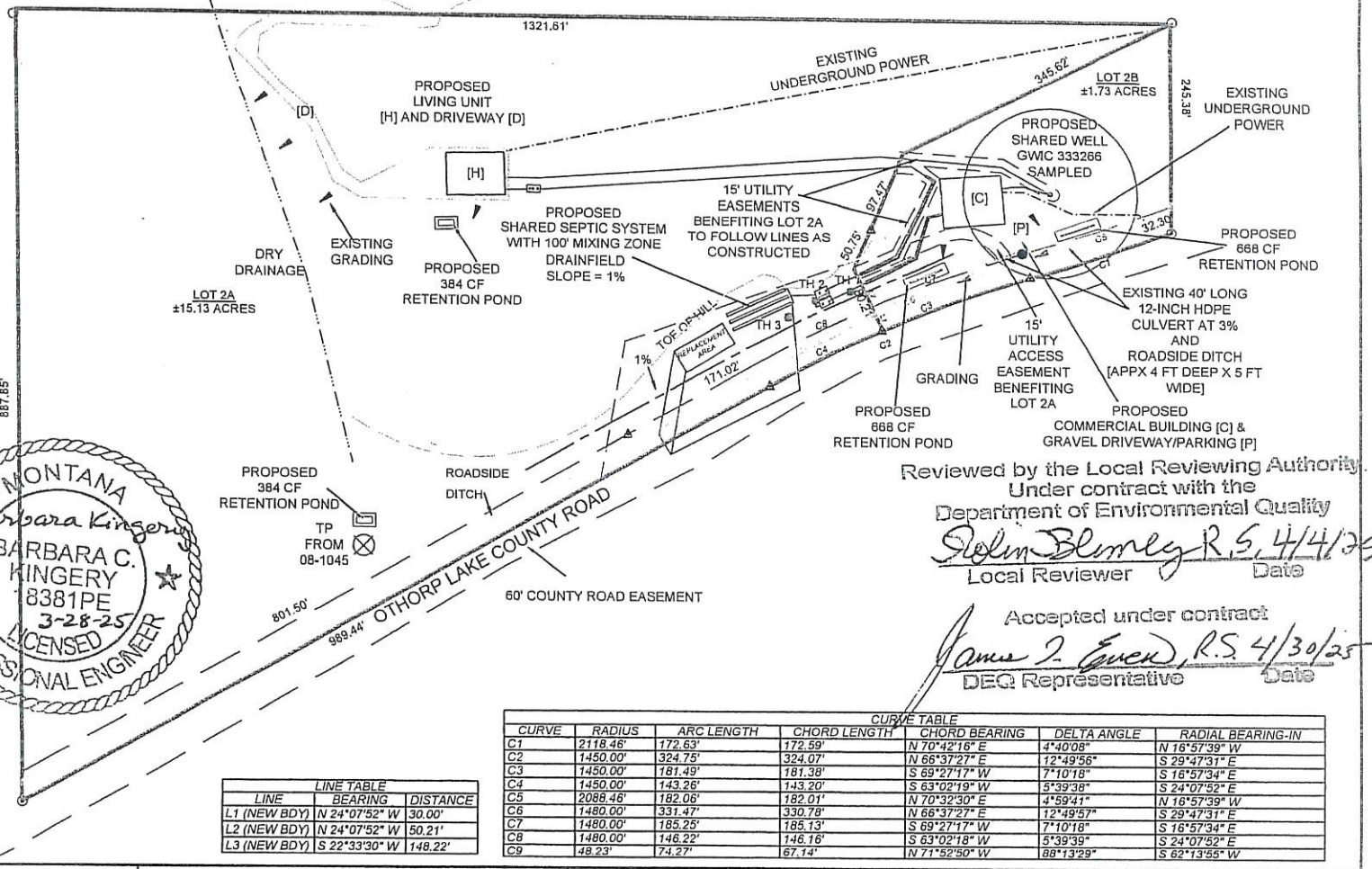
All storm drainage facilities associated with the development of each parcel must be maintained by the lot owner. The culverts, retention ponds and grading should be inspected regularly. Remove sediment, weeds, and debris from the facilities. Correct the grading and the retention pond dimensions, if necessary, after storm events, to ensure the design integrity.

SHARED PRESSURE DOSED SEPTIC SYSTEM SHOWN

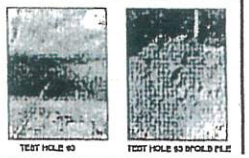
ASSUMES:

- Design Flow: 500 gpd
  - Lot 2A: One (1) 4-bedroom living unit (350 gpd)
  - Lot 2B: One commercial building (150 gpd)
- All waste will be residential strength
- **Sleeve & insulate all pipes under driving surfaces**
- Individual 1,500-gallon septic tank with effluent for the living unit [tank located on Lot 2A]
- Individual 1,000-gallon septic tank with effluent filter for the commercial building [tank located on Lot 2A]
- Shared 1,000-gallon dose tank [tank located on Lot 2A] with:
  - Pump capable of 20 gpm & 33 ft TDH
  - Float Settings
    - Pump off = 24 inches
    - Pump on = 32 inches
    - High Water Alarm = 41 inches
- Shared 2-inch Sch 40 Transport Line insulated to protect against freezing. [located on Lot 2A]
- Shared Drainfield [located on Lot 2A]
  - 2-inch Sch 40 manifold with laterals on 7-foot centers
  - Drainfield Application Rate = 0.6 gpd/ft2 (sandy loam)
  - Primary drainfield consists of three (3) 75-foot long, gravelless chambered trenches with 1 1/2-inch pipe having 1/8-inch orifices every 5 feet
  - 100% replacement area shown
- Septic System must be constructed in accordance with Circular DEQ 4 and Lincoln County Regulations
- *Other design flows/system components may be possible. Contact Lincoln County for additional information*

GROUNDWATER FLOW
approximately i =0.05 FT/FT at S5W
Based on ⅓ topography



SOILS TEST HOLE 3 [TH3]
0 to 14 in: Top Soil/Root Depth
14 to 64 in: Loose Medium Sandy Loam
64 to 96 in: Sandy Loam
Application Rate = 0.6 gpd/ft2



SHARED WATER AND SEWER SERVING LOTS 2A & 2B

- The water supply and septic system must not serve more than 24 people for 60 days per year without review by the Montana Department of Environmental Quality.
- Shared water and sewer user agreements between Lots 2A & 2B must be filed with the Certificate of Subdivision Approval.

MONTANA
Barbara Kingery
BARBARA C. KINGERY
8381PE
3-28-25
LICENSED
PROFESSIONAL ENGINEER

Reviewed by the Local Reviewing Authority
Under contract with the
Department of Environmental Quality
Robin Blumenthal R.S. 4/4/25
Local Reviewer Date

Accepted under contract
James D. Green, R.S. 4/30/25
DEQ Representative Date

LINE TABLE

LINE	BEARING	DISTANCE
L1 (NEW BDY)	N 24°07'52" W	30.00'
L2 (NEW BDY)	N 24°07'52" W	50.21'
L3 (NEW BDY)	S 22°33'30" W	148.22'

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE	RADIAL BEARING-IN
C1	2118.46'	172.63'	172.59'	N 70°42'16" E	4°40'08"	N 16°57'39" W
C2	1450.00'	324.75'	324.07'	N 66°37'27" E	12°49'56"	S 29°47'31" E
C3	1450.00'	181.49'	181.38'	S 69°27'17" W	7°10'18"	S 16°57'34" E
C4	1450.00'	143.26'	143.20'	S 63°02'19" W	5°39'38"	S 24°07'52" E
C5	2088.46'	182.06'	182.01'	N 70°32'30" E	4°59'41"	N 16°57'39" W
C6	1460.00'	331.47'	330.78'	N 66°37'27" E	12°49'57"	S 29°47'31" E
C7	1460.00'	185.25'	185.13'	S 69°27'17" W	7°10'18"	S 16°57'34" E
C8	1460.00'	146.22'	146.16'	S 63°02'18" W	5°39'39"	S 24°07'52" E
C9	48.23'	74.27'	67.14'	N 71°52'50" W	88°13'29"	S 62°13'55" W

B. Kingery
RBK Consulting, LLC
PO Box 1792
Helena, MT 59624
406.417.1281

RBK CONSULTING

200 0 200
scale feet

AP Plat 6849 [Kootenai Ridge] Lot 2
Green Family Transfer

Lot Layout

FIGURE NO. 3

3/28/2025