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

Issue Date: 02/10/2026 Expiration Date: 02/09/2027 Permit#26-14802

Property Owner: Bruce Way

Mailing Address: [redacted]

Installer: Jim Sprague License #: 231

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

☐ Replace Drainfield ☐ Replace Tank ☐ Extension

Describe: Installation of elevated sand mound system for 3 Bedroom House.

Legal: S02, T35 N, R26 W, COS CS 3715, PARCEL 2, ACRES 10.09

Property Address: 1427 Mud Creek Rd. Eureka, MT 59917 Assessment Code: 14802

DEQ COSA: E.Q.#08-2670 Whitney BLA Parcel 2 RSR Date: 10/9/2008

Approved Design Criteria: Installation of elevated sand mound system for 3 Bedroom House.

# of Bedrooms: 3 Septic Tank Size: 1000/500

ESM: 13"x 64' Laterals 3@60'

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). 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.

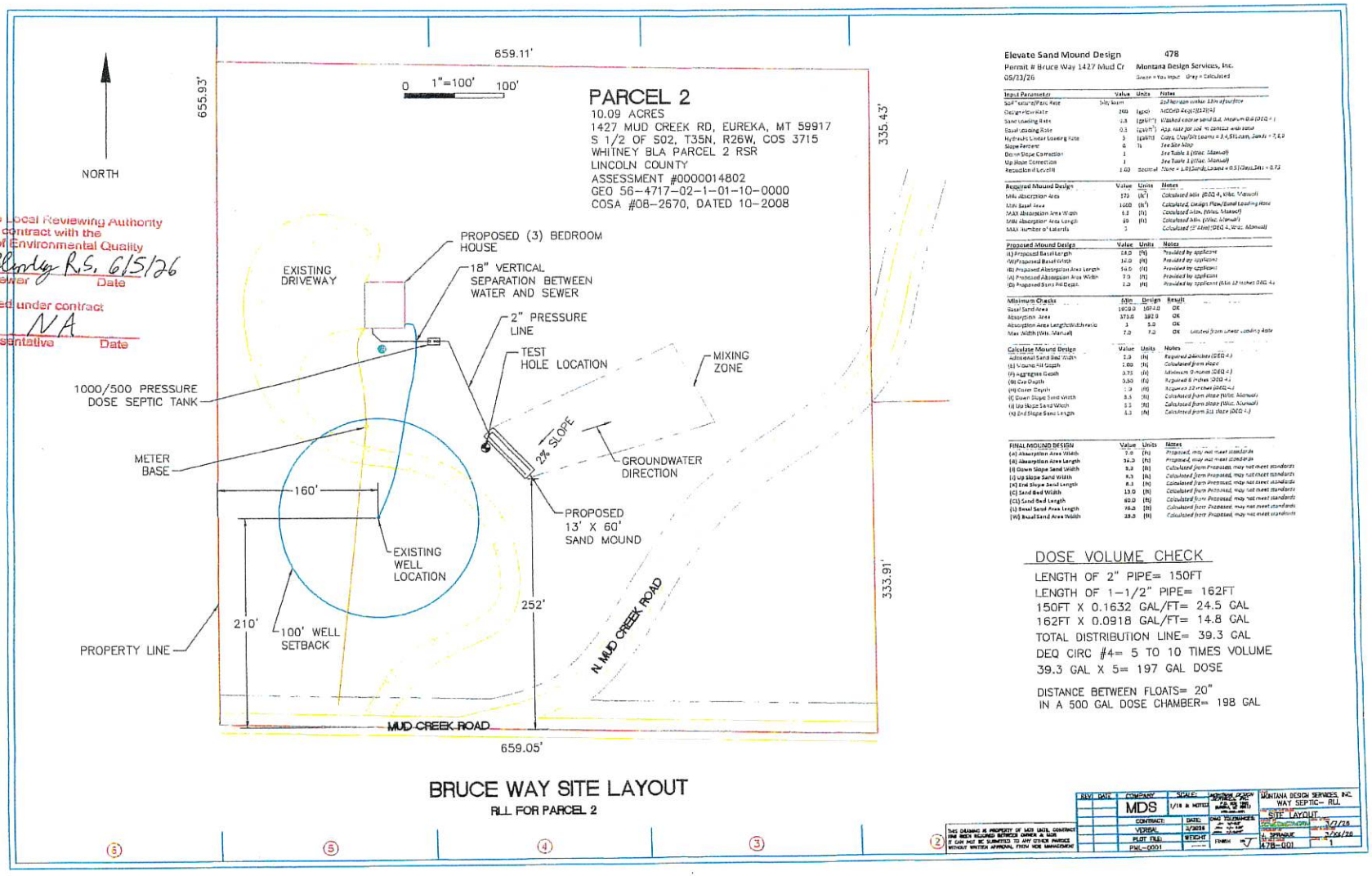
Closure Statement:

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

Signed: Robin Blumberg *Date:* 8/20/26

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.



Reviewed by the Local Reviewing Authority
Under contract with the
Department of Environmental Quality
Local Reviewer Date 6/5/26

Accepted under contract
NA
DEQ Representative Date

Elevate Sand Mound Design 478
Permit # Bruce Way 1427 Mud Cr — Montana Design Services, Inc.
05/23/26 — Green = You Input Grey = Calculated

Input Parameter	Value	Units	Notes
Soil Texture/Perc Rate	Silt loam		Soil horizon within 18in of surface
Design Flow Rate	300	(gpd)	MCOMD Regs(12)(2)(a)
Sand Loading Rate	0.8	(gpd/ft²)	Washed coarse sand B.E. Maximum Rate (DEQ 4)
Sand Loading Rate	0.5	(gpd/ft²)	Adjusted rate for soil in contact with sand
Hydraulic Linear Loading Rate	5	(gpd/ft)	Coarse Clay/Silt Loams = 3, Fine Loam, Sands = 7, 8, 9
Slope Percent	6	%	See Site Map
Down Slope Correction	1		See Table 1 (Misc. Manual)
Up Slope Correction	1		See Table 1 (Misc. Manual)
Reduction if Level	1.00	Decimal	None = 1.0, Sand/Loamy = 0.5, Clay/Silt = 0.75

Required Mound Design	Value	Units	Notes
Min Absorption Area	375	(ft²)	Calculated Min (DEQ 4, Misc. Manual)
Min Basal Area	1000	(ft²)	Calculated, Design Flow/Sand Loading Rate
MAX Absorption Area Width	6.3	(ft)	Calculated Max, (Misc. Manual)
MAX Absorption Area Length	59	(ft)	Calculated Max, (Misc. Manual)
MAX Number of Laterals	3		Calculated (3" Max) (DEQ 4, Misc. Manual)

Proposed Mound Design	Value	Units	Notes
(L) Proposed Basal Length	60.0	(ft)	Provided by applicant
(W) Proposed Basal Width	13.0	(ft)	Provided by applicant
(B) Proposed Absorption Area Length	56.0	(ft)	Provided by applicant
(A) Proposed Absorption Area Width	7.0	(ft)	Provided by applicant
(D) Proposed Sand Fill Depth	2.0	(ft)	Provided by applicant (Min 12 inches DEQ 4)

Minimum Checks	Min	Design	Result	
Basal Sand Area	1000.0	1672.0	OK	
Absorption Area	375.0	392.0	OK	
Absorption Area Length/Width ratio	3	5.0	OK	
Max Width (Wa, Manual)		7.0	7.0	OK Limited from Linear Loading Rate

Calculate Mound Design	Value	Units	Notes
Additional Sand Bed Width	2.0	(ft)	Required 2 inches (DEQ 4.)
(E) Mound Fill Depth	1.00	(ft)	Calculated from Above
(F) Aggregate Depth	0.75	(ft)	Minimum 9 inches (DEQ 4.)
(H) Cap Depth	0.50	(ft)	Required 6 inches (DEQ 4.)
(H) Cover Depth	1.0	(ft)	Required 12 inches (DEQ 4.)
(C) Down Slope Sand Width	3.5	(ft)	Calculated from Above (Misc. Manual)
(J) Up Slope Sand Width	3.5	(ft)	Calculated from Slope (Misc. Manual)
(K) End Slope Sand Length	3.5	(ft)	Calculated from 3:1 Slope (DEQ 4.)

FINAL MOUND DESIGN	Value	Units	Notes
(A) Absorption Area Width	7.0	(ft)	Proposed, may not meet standards
(B) Absorption Area Length	56.0	(ft)	Proposed, may not meet standards
(J) Down Slope Sand Width	9.0	(ft)	Calculated from Proposed, may not meet standards
(J) Up Slope Sand Width	9.0	(ft)	Calculated from Proposed, may not meet standards
(K) End Slope Sand Length	9.0	(ft)	Calculated from Proposed, may not meet standards
(C) Sand Bed Width	13.0	(ft)	Calculated from Proposed, may not meet standards
(CL) Sand Bed Length	60.0	(ft)	Calculated from Proposed, may not meet standards
(L) Basal Sand Area Length	78.0	(ft)	Calculated from Proposed, may not meet standards
(W) Basal Sand Area Width	29.0	(ft)	Calculated from Proposed, may not meet standards

DOSE VOLUME CHECK

LENGTH OF 2" PIPE= 150FT
LENGTH OF 1-1/2" PIPE= 162FT
150FT X 0.1632 GAL/FT= 24.5 GAL
162FT X 0.0918 GAL/FT= 14.8 GAL
TOTAL DISTRIBUTION LINE= 39.3 GAL
DEQ CIRC #4= 5 TO 10 TIMES VOLUME
39.3 GAL X 5= 197 GAL DOSE

DISTANCE BETWEEN FLOATS= 20"
IN A 500 GAL DOSE CHAMBER= 198 GAL

BRUCE WAY SITE LAYOUT

RLL FOR PARCEL 2

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REV	DATE	COMPANY	SCALE:	MONTANA DESIGN SERVICES, INC.
		MDS	1/16 & NOTED	WAY SEPTIC- RLL
		CONTRACT	DATE:	SITE LAYOUT
		VERBAL	5/26/26	
		PLOT DIR:	WEIGHT	
		PWL-0001		478-001