DEPARTMENT OF ENVIRONMENTAL QUALITY
Environmental Assessment

Final Environmental Assessment
May 2024

EQ Number & Name of Project: EQ#23-1430, Blacktail Creek Subdivision

AUTHORIZING ACTION

Under the Montana Environmental Policy Act (MEPA), Montana agencies are required to prepare an environmental review for state actions that may have an impact on the human environment. The Proposed Action is considered to be a state action that may have an impact on the human environment and, therefore, the Department of Environmental Quality (DEQ) must prepare an environmental review. This EA will examine the proposed action and alternatives to the proposed action and disclose potential impacts that may result from the proposed and alternative actions. DEQ will determine the need for additional environmental review based on consideration of the criteria set forth in Administrative Rules of Montana (ARM) 17.4.608.

DESCRIPTION OF DEQ REGULATORY OVERSIGHT

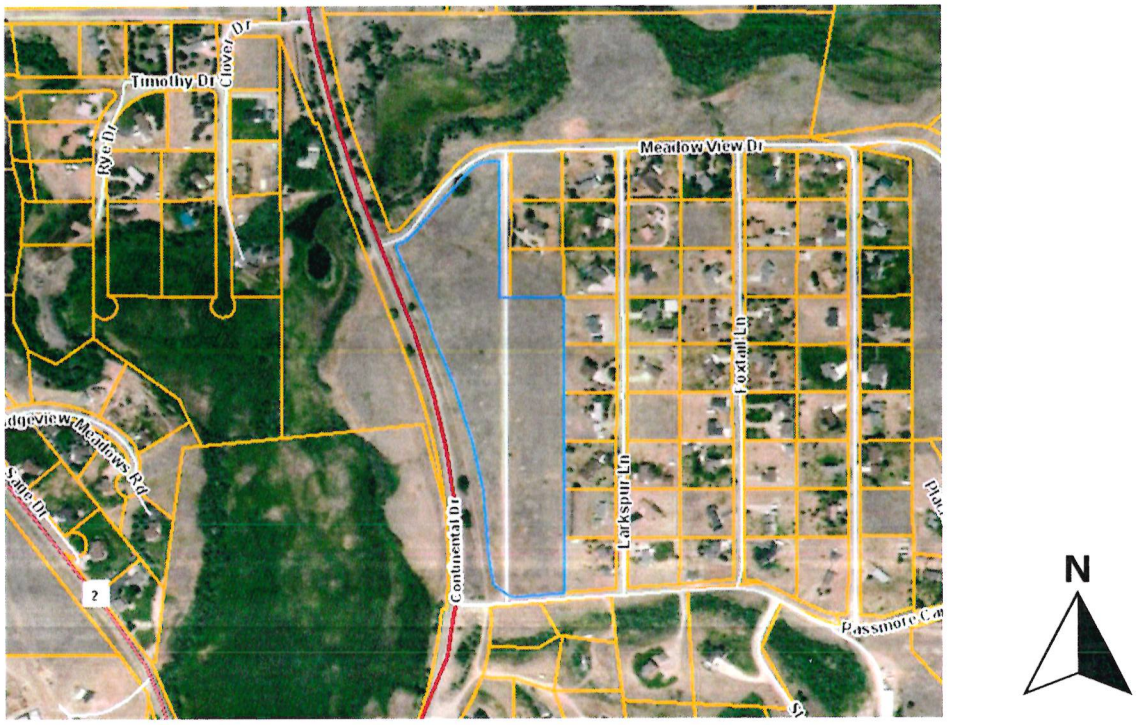
DEQ implements the Sanitation Act of Montana, overseeing the development of Sanitation in Subdivisions and associated facilities. DEQ has authority to analyze impacts related to construction of water, wastewater and storm water facilities.

PROPOSED ACTION

BB2 LLC (Gary Fox), Owner, has applied for a Subdivision approval under the Sanitation Act of Montana to develop eight new subdivision lots. The project subject to the proposed action would be located on private land, in Silver Bow County Montana. All information included in this EA is derived from the permit application, discussions with the applicant, analysis of aerial photography, topographic maps, and other research tools.

The subject property is located south of Butte, Montana within Silver Bow, County. The legal description is Section 22, Township 2 North, Range 7 West, Tract C of Certificate of Survey 1110B-RT. The property is 16.63 acres. The property is located on the east side of Continental Drive and the south side of Meadow View Drive, and west of the Warne Heights Subdivision as shown on the image below from Montana Cadastral.

Figure 1



The project involves a subdivision for the creation of eleven new lots. The DEQ is permitting eight lots with individual water wells, onsite subsurface wastewater treatment systems, and stormwater facilities for the impervious surfaces created by the home sites, road, and pedestrian path.

Currently the property is undeveloped. One well was drilled on the property in 2023. An existing unimproved gravel road bisects the site from north to south. On-site vegetation consists of native grasses, sage brush, and a couple of trees. The property generally slopes mildly from south to north/west. The property is southeast of the confluence of Blacktail Creek and Little Blacktail Creek. Blacktail Creek exists west of the site and west of Continental Drive. Little Blacktail Creek exists north of the site and north of Meadow View Drive. Floodplains exist along both stretches of stream but do not overlap the subject property. The subject property is located on an elevated bench above the streams and floodplains.

Scope: This EA is disclosing the direct, secondary, and cumulative impacts of the permitting of eight lots with individual water wells, onsite subsurface wastewater treatment systems, and stormwater facilities for the impervious surfaces created by the home sites, road and pedestrian path.

Project activities: Each individual residential lot would be permitted to install an individual water well, an onsite subsurface wastewater treatment system and an onsite stormwater pond. One well has been recently drilled near the center of the subject property. The existing unimproved road which bisects the property would be improved to County standards. Stormwater facilities for the road would be

permitted. Individual driveways to the lots would extend from this road. No new access from Continental Drive is allowed.

Table 1. Summary of Proposed Action

Proposed Action	
General Overview	The DEQ is permitting eight lots with individual onsite water wells, onsite subsurface wastewater treatment systems, and stormwater facilities for the impervious surfaces created by the home sites, road, and pedestrian path.
Estimated Disturbance	It is estimated that less than half of the existing 16.63 acres will be disturbed.
Location and Analysis Area	***Location:*** See Legal Description under Proposed Action ***Analysis Area:*** The area being analyzed as part of this environmental review includes 16.63 acres in the immediate project area (Figure 1), as well as neighboring lands surrounding the analysis area, as reasonably appropriate for the impacts being considered.
The applicant is required to comply with all applicable local, county, state, and federal requirements pertaining to the following resource areas.	
Solid Waste	The applicant proposes to utilize local, County services for solid waste, which for Silver Bow County is McGee Trucking.
Hazardous Substances	Hazardous substances are not applicable to this project.

Cumulative Impact Considerations	
Past Actions	DEQ staff carefully review the location and records for potential cumulative impacts and no past cumulative effects have been found.
Present Actions	No current FWP, DNRC, BLM, USFS, county or locally regulated projects were identified within 1000 feet of the proposed project.
Related Future Actions	No related future actions are known that may contribute to cumulative impacts.

PURPOSE, NEED, AND BENEFITS

DEQ's purpose in conducting this environmental review is to act upon Mr. Fox's application for a Certificate of Subdivision Approval DEQ's action on the permit application is governed by § 76-4, et seq., Montana Code Annotated (MCA) and the Administrative Rules of Montana (ARM) 17.36, et seq.

The applicant's purpose and need, as expressed to DEQ in seeking this action, is to develop eight lots for residential construction.

1.1. OTHER GOVERNMENTAL AGENCIES AND PROGRAMS WITH JURISDICTION

The proposed action would be located on private land. All applicable local, state, and federal rules must be adhered to, which may also include other local, state, federal, or tribal agency jurisdiction.

Other agencies may have additional authority. The authority for Planning, Zoning and Platting lies with the local authority, Butte Silver-Bow County. The Butte-Silver Bow Health Department provides local sanitation approval. Legal water availability falls within the jurisdiction of the DNRC Water Rights Bureau. The applicant proposes to use a water rights exemption so a DNRC water right would not be required. A general permit for stormwater discharges associated with construction activity that disturb one or more acres of land may be required.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
1. GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are soils present which are fragile, erosive, susceptible to compaction, or unstable? Are there unusual or unstable geologic features? Are there special reclamation considerations?	N – Eleven (11) new test pits were excavated across the subject property. The on-site soils in the upper approximately 9 to 10 feet consist of primarily sandy loam, sandy clay loam, and loam. The material is primarily light brown/tan and friable/granular. The material is considered to be, in part, decomposed granite. The soil is not fragile or erosive. The NRCS Web Soil Survey lists the soil as having a medium susceptibility to compaction meaning the potential for compaction is high (NRCS Website). The existing gravel road which bisects the site is stable and adequately supports vehicle traffic. Similar soils in the adjacent subdivision appear to provide adequate structural support for development. The lithology is considered to be fractured bedrock as described in the MBMG 2004 report. USDA NRCS soils information describes the soil similarly as gravelly sandy clay loam and sandy loam with a parent material of colluvium over residuum weathered from granite. There are no unusual or unstable geologic features other than the fractured bedrock. No special reclamation considerations are anticipated.
2. WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface	Y – Little Blacktail Creek is north of the site and Blacktail Creek is west of the site. The potential impacts from the wastewater

IMPACTS ON THE PHYSICAL ENVIRONMENT	
or groundwater resources present? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality?	systems on water quality have been evaluated by the department to ensure they do not exceed water quality standards as described in the following sections. The area has been included in several studies of nitrate in groundwater and water levels. The MBMG 2008 report noted that of 239 water samples, 13 percent exceeded the 10 mg/L health standard for nitrate concentrations and noted that the likely potential nitrate sources include fertilizers applied to lawns, septic effluent, and/or leaky sewer pipes. The report notes that "for the residents in the Summit Valley who rely on wells for their drinking water, the elevated nitrate concentrations observed throughout the valley are a potential concern for human health." The report also notes that it is likely that little, if any, natural attenuation of nitrate occurs in the aquifer due in part to the soil and geologic conditions, and that the only way for nitrate concentrations to be reduced is through natural flushing and a reduction in nitrate loading to the aquifer. The proposed project would be building Level 2 treatment systems which would treat effluent to 7.5 mg/L or less. Treatment of the wastewater to 7.5 mg/L meets the groundwater quality limit at the point of discharge. The nitrate+nitrite analyses of groundwater collected during and after the June 6-7, 2023, pumping test on the onsite well (GWIC 326503) showed the concentrations were 0.492, 0.99, 1.0, and 2.96 mg/L. Water samples collected from the pump test show the groundwater meets water quality standards in DEQ-7 and therefore adequate for drinking water supply. Because the proposed wastewater systems are approved to treat nitrogen to 7.5 mg/L and don't require a groundwater mixing zone to determine the nitrate concentration at the end of the mixing zone, measurement of the nitrate concentration in the upper 15 feet of the groundwater is not necessary for this project as proposed. Groundwater flow direction is documented as being to the northwest. Therefore, the wastewater effluent is anticipated to move northwest, away from the adjacent existing residential lots and wells, and towards the Little Blacktail Creek).

IMPACTS ON THE PHYSICAL ENVIRONMENT	
	Stormwater facilities were designed in accordance with department Circular DEQ-8 which includes minimum standards that apply to all storm water drainage plans for subdivisions in Montana. Impacts to Little Blacktail Creek (the surface potentially impacted by the wastewater effluent) have been evaluated and show that the subject project meets the nonsignificance criteria for surface water. per the Trigger Value Calculations for adjacent to surface water dilution analysis. Per the analysis and design, the increase in the nutrient concentrations in the surface water does not exceed the trigger value (0.01 mg/L nitrate) as set forth in DEQ rules and circulars.
3. AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?	N – Air quality pollutants or particulate would not be produced in the long-term for the project although it is possible that in the short-term during construction, air quality could be reduced but this is considered to be mitigatable via Best Management Practices associated primarily with the Storm Water Pollution Prevention Plan (SWPPP) permitting. There would be no impact to Class I airsheds due to the short duration of impacts and the distance to these types of airsheds. The applicant proposes to use dust suppression during road construction.
4. VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be significantly impacted? Are any rare plants or cover types present?	N – Landcover for the site is described as Inter-Mountain Basins Big Sagebrush Steppe (shrubland) and Big Sagebrush Bluebunch Wheatgrass (shrub-dominated) and is designated as not prime farmland. These are no known rare plants or cover types. The owner will work with Gallatin County Weed Management program. No adverse impacts to vegetation are anticipated with the project. An aerial image of the site showing some of its vegetation is below.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
	
5. TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds, or fish?	N – The site is not significant year-round wildlife habitat and any impacts to wildlife would be minor and short term as the surrounding area is developed. No surface water exists on the site. Some mammals including deer, elk, and bear may use the area infrequently. The subject property has become somewhat isolated from the forest/open space located to the south due to the construction of residential homes south of the property, on the south side of Passmore Canyon Road. However, there is some connectivity through this development and through the creek bottom area west of Continental Drive. Per the Butte Silver Bow Staff Analysis for the subdivision preliminary plat, the FWP Wildlife Biologist Vanna Boccadori had the following comment: "While I don't have any major wildlife concerns, I would encourage the Conty to choose the dedicated parkland option over cash-in-lieu. Protected open space in that area will conserve habitat for a variety of songbirds and small mammals, as well as contribute to the quality of life for the humans living in that subdivision. This need for open space will only become more critical as development increases in the Butte valley. If I can be of any assistance, don't hesitate to contact me." The Montana Natural Heritage Map Viewer provides information on species of concern as it relates to habitat suitability in this area. This information is fairly broad and high-level information, but in general does not show optimal suitability for any species of concern at this site. The mapper shows that the area is low suitability for larger mammals like wolverine, lynx, and grizzly bear. The project site does not provide significant vegetation which would provide substantial habitat or significant winter range for critical species. The Natural Heritage Mapper also notes no important bird or plant areas at the location. The FWP's fish survey and inventory data shows some fish sampling

IMPACTS ON THE PHYSICAL ENVIRONMENT	
	which occurred on Little Blacktail Creek about 1 mile upstream of the project site during 2018. Species present were identified as Westslope Cutthroat Trout (https://myfwp.mt.gov/fishMT/waterbody/51521).
6. UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern?	N - There are no known endangered species present within the parcel or with significant habitat at the project site per the Montana Natural Heritage Program's Map Viewer. There are no known other species of special concern at the site or significantly affected by the project other than those mentioned in the FWP comment above. There are documented wetlands located off-site along Little Blacktail and Blacktail Creeks to the north and to the west. These wetlands are not expected to be adversely impacted because the stormwater facilities mitigate stormwater runoff from post development activities to pre-development runoff.
7. HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological, or paleontological resources present?	N - Per the August 18, 2022, letter from the Montana Historical Society, according to their records there have been no previously recorded sites within the designated search locale (project area). Per the letter, "As long as there will be no disturbance or alteration to structures over fifty years of age, we feel that there is a low likelihood cultural property will be impacted." No known historical or archaeological areas were identified by the State Historic Preservation Office. The project is located on private property. Impacts to cultural resources would be unlikely to occur from this project.
8. AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light?	N – The wells, septic systems and stormwater facilities would be low profile additions to the landscape. Impacts would be short term, minor and negligible.
9. DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Will new or upgraded	N - The project would use groundwater via new residential water supply wells. Recent pump testing of the existing on-site well was completed to evaluate groundwater availability.

IMPACTS ON THE PHYSICAL ENVIRONMENT	
powerline or other energy source be needed)	The pump test of the on-site well demonstrated there was adequate water for the eight proposed lots as described in the department comment letter dated December 11, 2023.
10. IMPACTS ON OTHER ENVIRONMENTAL RESOURCES: Are there other activities nearby that will affect the project?	N –There are no known other activities nearby that would affect the project.

IMPACTS ON THE HUMAN ENVIRONMENT	
11. HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	N – The project would not add to human health and safety risks in the area.
12. INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	N - The site is not active industrial, commercial, or agricultural land. None of these activities would be impacted by the proposed project.
13. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move, or eliminate jobs? If so, estimated number.	N – The project would not directly create, move, or eliminate jobs, other than creation of temporary jobs during construction. These jobs include contractor(s) for well installation, for stormwater facility construction, and for wastewater system installation and maintenance, along with other contractors for other home and site improvements. The well construction is estimated to require 2 people. The stormwater facility construction is estimated to require 1 person. The wastewater system installation and maintenance is estimated to require 2 people. Level 2 treatment systems which would treat effluent to 7.5 mg/L or less would require biannual inspection.
14. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue?	Y - There may be an economic benefit to the local tax base by improving this property.
15. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc.) be needed?	Y – Minimal impacts are anticipated due to the installation of the wells, septic systems and stormwater facilities.
16. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS:	N – The site is not zoned in the County. There are no known locally adopted environmental plans for the area. The County

IMPACTS ON THE HUMAN ENVIRONMENT	
Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	Comprehensive Plan and the County Growth Policy includes the entire County but not specifically the project site.
17. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract?	N – There are no recreational or wilderness activities accessed through the subject property. There is minimal to no recreational potential within the tract due in part to its proximity to the adjacent residential subdivision and highway (Continental Drive) and due to the landcover and landform being primarily sagebrush on valley land. The Butte Silver Bow Nine Mile Day Use Area is located nearby, about 0.5 mile south of the site along Montana Highway 2.
18. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing?	N – Minimal impacts are anticipated due to the installation of the wells, subsurface wastewater treatment systems, and stormwater facilities.
19. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	N - No disruption of native or traditional lifestyles or communities is anticipated from the development. The project matches the existing residential area.
20. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	N – The area consists of rural subdivisions of residential homes. The area is almost entirely single-family residences. The project consists of the same future uses. No uniqueness or diversity of the area would be lost. The subject property is noted on the original plat for Warne Heights from 1973 (#0104-B) as being a "Commercial" development.
21. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES:	N - No adverse social impacts are anticipated by the development of these residential lots. There may be a slight economic benefit to the business contracted to complete the construction work.
22(a). PRIVATE PROPERTY IMPACTS: Are we regulating the use of private property under a regulatory statute adopted pursuant to the police power of the state? (Property management, grants of financial assistance, and the exercise of the power of eminent domain are not within this category.) If not, no further analysis is required.	N – Approval of the individual water wells, individual subsurface wastewater treatment systems, and stormwater facilities within the subject property are not under a regulatory statute adopted pursuant to the police power of the state.

23. Summary of Significance of Potential Impacts and Need for Further Analysis:

When determining whether the preparation of an environmental impact statement is needed, DEQ is required to consider the seven significance criteria set forth in ARM 17.4.608, which are as follows:

- The severity, duration, geographic extent, and frequency of the occurrence of the impact.
- The probability that the impact will occur if the proposed action occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur.
- Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts – identify the parameters of the proposed action.
- The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values.
- The importance to the state and to society of each environmental resource or value that would be affected.
- Any precedent that would be set as a result of an impact of the proposed action that would commit the department to future actions with significant impacts or a decision in principle about such future actions; and
- Potential conflict with local, state, or federal laws, requirements, or formal plans.

No significant impacts are applicable to the action for which DEQ has independent regulatory authority.

24. Cumulative Effects: No future or past actions that could contribute to cumulative impacts are known to DEQ.

25. Preferred Action Alternative and Rationale: *Approve*

26. Other Alternatives: DEQ considered the No Action Alternative. In addition to the proposed action, DEQ analyzes a "no-action" alternative in this EA. If chosen, the "no-action" alternative would result in a denial of the public water system and none of the identified potential impacts would occur. The "no-action" alternative forms the baseline from which the potential impacts of the proposed action can be measured.

The no action alternative is required under MEPA to describe what would happen if the proposed project was not to receive DEQ approval. Under this alternative, the system could not be converted to a public water system, and no impacts would occur. It must be noted, however, that if the proposed public water system meets all legal requirements of the Public Water and Wastewater Laws, Administrative Rules and Design Circulars, DEQ is required to approve the subdivision, and this alternative could not be implemented.

AGENCY-MODIFIED ALTERNATIVES

DEQ does not propose an agency-modified alternative for this project because an agency-modified alternative would not mitigate or eliminate impacts beyond that of the applicant submitted proposal.

DEQ eliminated from consideration alternatives that would involve the construction of facilities not proposed by the applicant. Such alternatives are outside the needs and goals of the applicant, and MEPA does not require the consideration of alternative facilities or an alternative to the proposed project itself. Section 75-1-220(1), MCA.

Recommendation for Further Environmental Analysis:

[ ] EIS [ ] More Detailed EA [X] No Further Analysis

EA Checklist Prepared By:

Rachel C

(Name) Rachel Clark

6.17.24

Date Approved

References

- Approved Lot Layout
- Subdivision file 23-1430
- MBMG's Ground-Water Open-File Report 18: "Water Levels and Nitrate in Warne Heights, Upper Summit Valley, Silver Bow County, Montana" (2004).
- MBMG's Ground-Water Open-File Report 22: "Nitrate in the Ground Water and Surface Water of the Summit Valley Near Butte, Montana" (2008).
- "United States Department of Agriculture, Natural Resources Conservation Service." https://websoilsurvey.nrcs.usda.gov/app/. Accessed 5/6/2024.
- Administrative Rue Chapter 17.36 Subdivisions / On-site Subsurface Wastewater Treatment
- Department of Environmental Quality Circular DEQ-8, Montana Standards for Subdivision Stormwater Drainage, 2017 Edition
- Department of Environmental Quality Circular DEQ-4, Montana Standards for Subsurface Wastewater Treatment Systems, 2023 Edition
- Department of Environmental Quality Circular DEQ-20, Standards for Nonpublic Water Systems, 2023 Edition
- Preliminary platting document for consultation by Montana Fish, Wildlife & Parks.
- State Historic Preservation letter