



ENVIRONMENTAL ASSESSMENT

November 18, 2024
Engineering Bureau
Water Quality Division
Montana Department of Environmental Quality

PROJECT/SITE NAME: <u>Residential Subdivision #2 at the Quarry</u>	
APPLICANT/COMPANY NAME: <u>Big Sky Rock, LLC.</u>	
PROPOSED PERMIT/LICENSE NUMBER: <u>EQ# 24-2567 and 24-2568</u>	
LOCATION: <u>Section 5, T7S, R4E</u>	COUNTY: <u>Gallatin</u>
PROPERTY OWNERSHIP: FEDERAL <input type="checkbox"/> STATE <input type="checkbox"/> PRIVATE <input checked="" type="checkbox"/>	

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OVERVIEW OF PROPOSED ACTION

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 in Subdivisions Act of Montana, overseeing the development of Subdivisions and associated facilities (76-4-101, *et seq.*, MCA). DEQ also implements the Public Water Supply Act of Montana, which oversees the protection, maintenance, quality, and potability of water for public water supplies and domestic uses (75-6-101, *et seq.*, MCA). Finally, DEQ implements the Montana Water Quality Act, which governs discharges of pollutants to Montana state waters (75-5-101, *et seq.*, MCA).

PROPOSED ACTION

In 2021, Big Sky Rock, LLC, (“the Applicant”) received Platting and Planning approval for the Quarry Planned Unit Development (PUD) Site Plan from Gallatin County. The Applicant now proposes to construct the second development within the approved Quarry PUD: The Residential Subdivision #2 at the Quarry, which consists of 45 condominium living units, the public water main extension/connections and 4 public wastewater collection, treatment, and disposal systems. The Applicant has applied to the Department of Environmental Quality (Department) for a Certificate of Subdivision Approval (COSA) for the drinking water and wastewater facilities that would service the development.

The facilities under review by the Department consist of the water, wastewater, and stormwater facilities associated with the residential development. Water services would be provided by connection to the existing Lazy J Utility Association facilities. Each of the proposed four lots would have their own wastewater treatment system provided by a Level II wastewater treatment facility and drainfield. A Level II subsurface facility is a standard septic system with an added treatment for additional nitrogen removal. The proposed treatment units are capable of discharging at or below the groundwater non-significance criteria of 7.5 mg/l nitrogen in 75-5- 301 (5)(d), Montana Code Annotated. The wastewater treatment would be constructed like other public residential septic systems.

Lots 9 and 10 would each have 12 condominium units with a maximum wastewater flow of 3,000 gallons per day (gpd) per lot. Lots 11, and 12 would each have 11 condominium units with a maximum wastewater flow of 2,750 gpd per lot. Stormwater retention and treatment would be provided by a one (1) on-site retention pond, swales, roadside gutters, storm sewers and manholes.

In conformance with the approved Quarry PUD Site Plan, Lot A may be used for open space, residential and commercial development, and Lot B may be used for a combination of commercial and residential

(multi-family, on second and subsequent stories). Under this COSA application, the Applicant proposes to construct drainfields and stormwater retention ponds on both Lot A and Lot B, but no commercial structures or living units. Lot A and open space lot OS-1 are exempt from review under the Sanitation Act pursuant to 76-4-103, Montana Code Annotated, (MCA) as both are greater than 20-acres.

The proposed Residential Subdivision #2 at The Quarry (the Project), PUD is located in Section 5, Township 07S, Range 04E, Tract 2 of COS 2450 in Big Sky Montana within the Quarry Planned Unit Development at Big Sky (PUD). The property lies approximately 2800 feet South of the intersection of Lone Mountain Trail (MT 64) and Highway 191 and approximately 1200 feet west of the Gallatin River. The Applicant has applied to the Department of Environmental Quality (Department) for a Certificate of Subdivision Approval (COSA) for the water, wastewater, and stormwater facilities (the Proposed Action) associated with the development as depicted in Figures 1 & 2.

The property previously contained a DEQ-permitted gravel pit (Opencut Permit #3023) within the area of the Property zoned Commercial-Industrial. The permit required reclamation of the site by 2026, and the reclamation has occurred, and the permit has been closed out.

Table 1. Summary of Proposed Action

Proposed Action	
General Overview	<p>VERY BRIEF SUMMARY OF PROPOSED ACTION – The proposed actions include the construction of approximately 4,325 lineal feet of open trench construction for the water main extension including all the connections to the proposed water main along Hammer Mill Loop Road and one fire hydrant, which equates to approximately 346 machine hours. In addition, the proposed actions include the construction of 4 public wastewater treatment systems that consist of advanced treatment, septic tanks, dose tanks, and subsurface drainfields. This includes 7,000 lineal feet of gravity sewer main and gravity sewer connections and transportation sewer force main open trench construction which equates to approximately 560 machine hours, the installation of 8-septic tanks/surge tanks which equates to 64 machine hours, 4- advanced treatment systems which equates to 96 machine hours, 4 dose tanks which equates to 16 machine hours, and 12 subsurface drainfields which equates to 96 machine hours.</p> <p>The four (4) proposed public wastewater treatment systems are exempt from the discharge permitting requirements because the new MGWPCS rules limit discharger to the threshold of one pound per day of total nitrogen. The four (4) proposed public wastewater treatment systems are proposing to utilize advanced treatment that will result in a nitrogen discharge concentration of 7.5 mg/l or less. With an effluent discharge concentration of 7.5 mg/l or less the facilities may discharge approximately 15, 991 gpd in total and remain under 1 lb./day. ARM 17.30.1022(d)public systems that are reviewed by the department after March 1, 2024, under Title 75, chapter 6, MCA, and ARM 17.38.101 under a common design plan or serving a common development that in aggregate discharge less than one pound of total nitrogen per day are not subject to the permit requirements in MGWPCS. Each proposed drainfield</p>

	<p>will be discharging 3,000 gpd or less, for a total of 12,000 gpd or less cumulatively is less than 15,991 gpd and 1 lb./day. A MGWPCS discharge permit is not required.</p> <p>The DEQ has received a MGWPC permit application that proposes to collect sewage from the Quarry and other places along the Gallatin Canyon. The collected sewage will be sent to Big Sky wastewater treatment system for treatment and then the treated sewage will be returned to the Quarry wastewater treatment facilities and other drainfields. The treated effluent is proposed to be treated to Class A-1 standards of 5.0 mg/l nitrogen further decreasing potential impacts to ground or surface water quality.</p>
Duration & Hours of Operation	Construction: 1,178 hours
Estimated Disturbance	The estimated disturbance area for road construction, water main extension and connections, 4 wastewater treatment systems, sewer collection system, and drainfield construction will equate to approximately 288,000 square feet or 6.6 acres of disturbance to the land surface.
Construction Equipment	Excavators, Backhoe, Forklift, Motor Grader, Asphalt Pavers, Road Roller, Compactors
Personnel Onsite	Construction: 4–12-man crews for water main & for wastewater
Location and Analysis Area	<p>Location: 228 Altman Lane, Gallatin Gateway, MT. 59730</p> <p>Analysis Area: The area being analyzed as part of this environmental review includes the immediate project area (Figure 1), as well as neighboring lands surrounding the analysis area, as reasonably appropriate for the impacts being considered.</p>
The applicant is required to comply with all applicable local, county, state, and federal requirements pertaining to the following resource areas.	
Air Quality	The applicant proposes to minimize dust and soils tracking outside the proposed development would be covered in the SWPPP and associated BMPs as addressed in the Stormwater Discharges Associated with the current Construction Activity General Permit MTR 108839 for the front entrances to the site. The SWPPP for the Quarry Phase 2 will be obtained closer to time of construction. The proposed SWPPP that will be obtained for phase 2 construction will be similar to the Quarry Phase I and the front entrances to the site SWPPP (DEQ General SWPPP & MTR108839, see appendix A). No adverse impacts to air quality are expected because of the proposed development and construction activities.
Water Quality	The applicant proposes to minimize impacts to water quality. No flood plain, or surface water are present within the proposed action area as demonstrated through the FEMA FIRM Map, and a recognized completed flood study for the Gallatin River. The proposed actions are not located within the Michener Creek Drainage. The data indicates groundwater levels are around 30 to 60 feet below existing ground. The Project is not proposed

	<p>to be in any wetlands (Montana Wetland and Riparian Framework Layer) and the Storm Water Pollution Prevention Plan (SWPPP) mitigations would minimize any sediment and erosion related impacts to surface water during construction. Further Discussion of the following items provided in this EA within the evaluation of affected environment and impact by resource section for water quality below:</p> <ul style="list-style-type: none"> • FEMA Firm Map, and recognized flood study for the Gallatin River. • A Wetland and Waterway Delineation Report was completed for the property by Power Engineers, Inc. on September 13, 2018. • The Applicant proposes a wastewater disposal system using SepticNet treatment systems as required in the Gallatin County Platting and Planning PUD approval. The downgradient impacts to groundwater are currently being evaluated with the review of the public wastewater treatment systems under EQ#24-2567 & EQ#24-2568. • The DEQ has received a MGWPC permit application that proposes to collect sewage from the Quarry and other places along the Gallatin Canyon.
Erosion Control and Sediment Transport	The applicant proposes to maintain vegetation across the site which includes forest land (a mix of conifers), rangeland (sagebrush), and grassland. The Applicant intends to preserve steeper slopes and natural vegetation as a critical part of development. Any new landscaping introduced as part of condominium development would include only native plant materials.
Solid Waste	The applicant proposes to take solid waste to the Gallatin County Landfill in Logan Montana.
Cultural Resources	The applicant proposes to continue to develop the privately owned property with residential units. The project is a residential development and is not anticipated to add to the population but to provide much needed additional housing for the existing population within the community, by serving the existing residents and businesses within Gallatin County.

Cumulative Impact Considerations	
Past Actions	Summary of past projects – The Residential Subdivision Quarry phase #1 as reviewed under EQ#20-2192 and EQ#20-2020.
Present Actions	Summary of current projects – The Residential Subdivision Quarry phase #2 as reviewed under EQ#24-2567 & EQ#24-2568.
Related Future Actions	Summary of related future projects – The DEQ has received a MGWPC permit application that proposes to collect sewage from the Quarry and other places along the Gallatin Canyon. The collected sewage will be sent to Big Sky wastewater treatment system for treatment and then the treated sewage will be returned to the Quarry wastewater treatment facilities and other drainfields. The treated effluent is proposed to be treated to Class A-1 standards of 5.0 mg/l nitrogen further decreasing potential impacts to ground

	or surface water quality.
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PURPOSE, NEED, AND BENEFITS

The need for Department approval, prior to construction, is prescribed by the Certificate of Subdivision Approval (COSA) review process under the Sanitation in Subdivisions laws in Title 76, chapter 4 of MCA. The Applicant is seeking a COSA from the Department for Residential Subdivision #2 at the Quarry. This Environmental Assessment (EA) has been prepared as required by the Montana Environmental Policy Act (MEPA) to disclose potential impacts from a state action granting the COSA approval for the Project.

The applicant's purpose and need, as expressed to DEQ in seeking this action, is to obtain approval for the construction of approximately 600 linear feet of water main extension for the purpose of connection of the residential living units to the public water supply, and to receive approval for the construction of the 4 public wastewater collection, and treatment systems for the purpose of providing sewer service to the proposed residential units. The two public facilities approvals will be provided concurrently with the issuance of the Certificate of Subdivision approval (COSA) for the use of the project area for residential living units.

Figure 1. General Location of the Proposed Project



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 governmental agencies which may have overlapped, or additional jurisdiction include but may not be limited to: Gallatin County Health Department, Gallatin County Platting and Planning Board, City of Gallatin Gateway.

EVALUATION OF AFFECTED ENVIRONMENT AND IMPACT BY RESOURCE

The impact analysis will identify and evaluate direct and secondary impacts TO THE PHYSICAL ENVIRONMENT AND HUMAN POPULATION IN THE AREA TO BE AFFECTED BY THE PROPOSED PROJECT. *Direct impacts* occur at the same time and place as the action that causes the impact. *Secondary impacts* are a further impact to the human environment that may be stimulated, induced by, or otherwise result from a direct impact of the action. (ARM 17.4.603(18)) Where impacts would occur, the impacts will be described in this analysis.

Cumulative impacts, as described by ARM 17.4.603 (7), are the collective impacts on the human environment within the borders of Montana of the Proposed Action when considered in conjunction with other past and present actions related to the Proposed Action by location and generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures. The projects identified in Table 1 were analyzed as part of the cumulative impacts assessment for each resource.

The duration is quantified as follows:

- **Construction Impacts (short-term):** These are impacts to the environment during the construction period. When analyzing duration, please include a specific range of time.
- **Operation Impacts (long-term):** These are impacts to the environment during the operational period. When analyzing duration, please include a specific range of time.

The intensity of the impacts is measured using the following:

- **No impact:** There would be no change from current conditions.
- **Negligible:** An adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor:** The effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate:** The effect would be easily identifiable and would change the function or integrity of the resource.
- **Major:** The effect would alter the resource.

GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE

This section includes the following resource areas, as required in ARM 17.4.609: Geology; Soil Quality, Stability, and Moisture

The soil type within the proposed projects analysis area is Philipsburg-Libeg complex which is loam, gravelly clay loam, loamy alluvium and gravelly sandy clay loam. (NRCS, Nov 2022)

Direct Impacts

Potential impacts to geology and soil during the construction phase include erosion and soil displacement. The applicant engaged Rawhide Engineering, Inc. (Rawhide) to conduct the preliminary geotechnical investigation for the property and conducted onsite investigations in August of 2018. Rawhide evaluated the subsurface conditions of the property for the proposed residential and commercial development contained within the PUD Site Plan. Rawhide performed 11 exploratory test

pits based on proposed development locations and reviewed additional information from test pits that were previously done on the property. Samples were taken from bulk samples from the test pits, and moisture content and soil classification tests were performed. These samples show that impacts to soil and geology would be short-term and minor during construction. As the proposed facilities would largely remain underground once operational, impacts to soil and geology would be negligible.

Secondary Impacts

Once constructed, drainfields may contribute to soil acidification and salinization. In areas with weak soils, excessive wastewater drainage may lead to subsidence. However, the soil reports generated by Rawhide Engineering display stable geology within the proposed analysis area. Therefore, secondary impacts to geology and soils are expected to be negligible.

Cumulative Impacts

After the initial construction, there may be minor cumulative impacts. Cumulative impacts of septic tanks and drainfields could include soil degradation from long-term exposure of wastewater, and habitat loss from contaminated soils can harm wildlife and reduce biodiversity. Factors that affect cumulative impacts include the density of septic systems in a given area, and soil type and how quickly it mitigates effluent to groundwater. With regular facility maintenance and ground water monitoring, such impacts would be largely mitigated.

WATER QUALITY, QUANTITY, AND DISTRIBUTION

Are any surface or groundwater resources present in the analysis area? Is there potential for violation of ambient water quality standards, drinking water maximum contaminant levels or degradation of water quality?

Area data indicates groundwater levels are around 30 to 60 feet below existing ground. The Proposed Action is located within an area that has a FEMA FIRM Map, and a recognized completed flood study for the Gallatin River. In addition, no part of the Proposed Action would be located within the Michener Creek Drainage. Therefore, a flood hazard evaluation is not warranted.

Direct Impacts

The Project is not proposed to be located in any wetlands (Montana Wetland and Riparian Framework Layer) and the Storm Water Pollution Prevention Plan (SWPPP) mitigations would minimize any sediment and erosion related impacts to surface water during construction.

A Wetland and Waterway Delineation Report was completed for the property by Power Engineers, Inc. on September 13, 2018, in accordance with the US Army Corps of Engineers (USACE) Wetlands Delineation Manual. The focus of the study was the approximate 126-acre development area for the property. A routine wetland survey was also completed for this same area. A total of two wetlands (1.32 acres) and one stream (0.39 acre, 2,978 linear feet) were identified and delineated within the development area. To buffer the impacts from the Project, the wetland and the riparian area of Michener Creek are contained within the 29.7 acre dedicated open space (O-S 1) and all infrastructure and improvements for the Project are located outside of the 150-foot setback as required by Section 6(A)(5)(a) of the USACE Regulations.

Secondary Impacts

The Applicant proposes a wastewater disposal system using SepticNet treatment systems as required in the Gallatin County Platting and Planning PUD approval. As a requirement of the Platting and Planning PUD approval, the Applicant will monitor the effluent at the end of pipe of each individual septic system for flow rate, Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), Nitrate and Nitrite as N, Total Kjeldahl Nitrogen (TKN) as N, total Phosphorus, and Ammonia (as N) fecal coliform, specific conductance and temperature as part of the subdivision process, Applicant would submit a complete design submittal to MDEQ for review and approval.

Cumulative Impacts

Cumulative impacts to the site include minor increase in runoff from any impervious building or roadway,

which is mitigated by discharge to native vegetation or storm water management facilities (retention ponds, swales, and drainage ditches). Cumulative effects regarding nondegradation to groundwater and surface water are addressed in the Nondegradation Cumulative Impacts section below.

AIR QUALITY

Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I airshed)?

The Clean Air Act requires EPA to set National Ambient Air Quality Standards for pollutants. Primary standards protect the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards protect against decreased visibility and damage to animals, crops, vegetation, and buildings. This project is required to abide by the federal standards. This project may result in minimal fugitive dust. The operator would be expected to maintain compliance with Montana's Air Quality Act (Title 75, chapter 2, MCA) regarding the need to take reasonable precautions to control airborne particulate matter. DEQ would characterize the nearest Class I airshed to a Proposed Action upon receipt of an application.

Characterize the nearest Class I airshed(s)

Direct Impacts

During the project, construction and drilling activities such as stripping topsoil, leveling the site, and drilling operations may lead to short-term adverse impacts. These activities involve the use of diesel-powered equipment, which can result in the production and dispersion of dust particulates. This includes implementing BMPs to limit the impact of particulate matter. BMPs that may be used for mitigation involve minimizing the area of disturbance, applying water on access roads if necessary, and restricting unnecessary travel on access roads. Additionally, the applicant must remain in compliance with the Montana the Clean Air Act (Title 75, chapter 2, MCA) regarding the need to take reasonable precautions to control airborne particulate matter.

The installation of sewer mains, water mains and their associated connections may result in short-term adverse impacts. These activities involve the use of diesel-powered equipment, which can result in the production and dispersion of dust particulates.

Approximately 8 acres of temporary surface disturbance would occur during construction of the Project. The Montana Department of Environmental Quality requires construction sites with greater than 1 acre of disturbance to obtain a Storm Water Pollution Prevention Plan (SWPPP) permit, utilizing Best Management Practices (BMP) as defined in the general permit for stormwater discharges associated with construction activity permit number MTR100000. The Montana Department of Environmental Quality requires BMPs to be operated and maintained until the site has been 70% restored/revegetated to pre-construction conditions. The SWPPP and BMPs protect against erosion by slowing and minimizing surface flow during construction activities and by retaining sediment. The BMPs are described within the general permit MTR100000, (Appendix A for general permit template). The final SWPPP for the Quarry Phase II will be received closer to the time of construction, however, the SWPPP should be similar to the Quarry Phase I (SWPPP). The Quarry Phase I (SWPPP) has been included for reference MTR108839. During construction, the SWPPP and associated best management practices would minimize dust and soils tracking outside the proposed development area.

Secondary Impacts

Adverse secondary impacts to air quality are expected to be short-term and minor, as the impacts would only occur during the construction phase of the Proposed Action and the BMPs previously explained would be in effect.

Cumulative Impacts

No cumulative impacts to air quality are expected due to the completion of the Proposed Action.

VEGETATION COVER, QUANTITY, AND QUALITY

Will any vegetative communities be significantly impacted? Are any rare plants or cover types of present?

Vegetation across the site includes forest land (a mix of conifers), rangeland (sagebrush), and grassland.

Direct Impacts

If the Proposed Action were to occur, the vegetation would be impacted during the construction of the Proposed Action. The disturbance could be up to approximately 6.6 acres during construction and potentially less during operation. Direct impacts to rare vegetation or cover types are not likely to occur as such species have not been identified in the proposed disturbance area. Negative direct impacts to rare vegetation or cover types and the general vegetative community are not expected given the short-term disturbance and the use of reclamation once construction is completed.

Secondary Impacts

The Applicant intends to preserve steeper slopes and natural vegetation as a critical part of development. The Applicant states that new landscaping introduced as part of condominium development would include only native plant materials. Secondary impacts to vegetation are expected to be negligible.

Cumulative Impacts

The cumulative impacts like weed growth or permanent harm to vegetation due to the Proposed Action are expected to be minor and negligible.

TERRESTRIAL, AVIAN, AND AQUATIC LIFE AND HABITATS

This section includes the following resource areas, as required in ARM 17.4.609: Terrestrial and Aquatic Life and Habitats; Unique, Endangered, Fragile, or Limited Environmental Resources

Is there substantial use of the area by important wildlife, birds, or fish? Characterize wildlife in the area. Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Species of special concern? Impacts related to the Montana Sage Grouse Executive Order?

A Wildlife Study was completed by Power Engineers, Inc. and listed the wildlife species that may occupy the project area as, "generalist species that are habituated to human disturbance ... chipmunks ... northern racoon, striped skunk and red fox." The Wildlife Study also identified certain migratory birds that may frequent developed areas such as northern chickadee, yellow warbler, and western meadowlark. Ungulate species that may occupy the project area include elk, bighorn sheep, moose and mule deer.

A review of the United States Fish and Wildlife Service Information for Planning Consultation report for the project area which included a one-mile buffer, identified Canada lynx, grizzly bear, and the North American wolverine as having potential to occur on and in the general vicinity of the property. The Wildlife Study found that the project area does not include critical habitat for the Canada lynx and that documented occurrences of species within the project area were not identified through the Montana Natural Heritage Program data search.

DEQ has verified that the Project is not within core, general, or connectivity sage grouse habitat.

Direct Impacts

The existing wildlife habitat has diminished value due to the existing use of the property as a gravel pit. By keeping developed lots closer to U.S. Hwy 191 and within existing developed areas, maintaining 105.44 acres of open space (protecting Michener Creek, its riparian corridor, and the ponded impoundment), and implementing additional avoidance and minimization measures, impacts to wildlife from the Proposed Action are anticipated to be minimal. Additional avoidance and minimization measures, as discussed by the

Montana Fish and Wildlife Parks, includes maintaining a generous buffer zone to the west as open space, with a winter closure to protect the elk winter range. Due to the proximity of the big horn sheep habitat, the development should prohibit the ownership of domestic sheep and goat within the development, including the 4H-Club. In addition, fences within the development should be limited, allowing passage of wildlife throughout the development, see letter in (Appendix C). A Wetland and Waterway Delineation Report was completed for the property by Power Engineers, Inc. on September 13, 2018, in accordance with the USACE Wetlands Delineation Manual. The focus of the study was the approximate 126-acre development area for the Property (Project Area). A routine wetland survey was completed for the Project Area. A total of two wetlands (1.32 acres) and one stream (0.39 acre, 2,978 linear feet) were identified and delineated within the Project Area. To buffer the impacts from the Project, the wetland and the riparian area of Michener Creek are contained within the

29.7 acre dedicated open space (O-S 1) and all infrastructure and improvements for the Project are located outside of the 150-foot setback as required by Section 6(A)(5)(a) of the USACE Regulations.

Secondary Impacts

Short-term and negligible impacts to terrestrial, avian, and aquatic life and habitats stimulated or induced by the direct impacts analyzed above would be expected. The construction phase would be a short-term disturbance and the disturbance area would be largely reclaimed at the surface with native vegetation. The Applicant also worked closely with the Montana Fish, Wildlife & Parks during the PUD process and adopted covenants to address the protection of wildlife.

Cumulative Impacts

The Proposed Action is in an area that has already undergone disturbance and development. No cumulative impacts to terrestrial, avian, and aquatic life and habitats stimulated or induced by the direct impacts analyzed above would be expected.

HISTORY, CULTURE, AND ARCHAEOLOGICAL UNIQUENESS

This section includes the following resource areas, as required in ARM 17.4.609: Historical and Archaeological Sites; Cultural Uniqueness and Diversity

The Applicant engaged Metcalf Archaeological Consultants, Inc. to complete the cultural resources inventory for the entirety of the property. The inventory resulted in documentation of three cultural resources, including a historic prospect pit, a historic earthen ditch, and a historic log cabin. However, none are recommended for eligibility for listing on the National Register of Historic Places, and no further archaeological work is recommended for the Project as defined at the time of the survey (and the defined project scope has not changed since the time of the survey).

Direct Impacts

The Proposed Action should not widely impact the cultural uniqueness of the proposed project disturbance area.

Secondary Impacts

No secondary impacts on historical and archaeological sites are expected from the Proposed Action.

Cumulative Impacts

No cumulative impacts on historical and archaeological sites are expected.

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? Are there other activities nearby that will affect the project?

No local or nearby activities should impact the Proposed Action. There may be some demand for energy.

Direct Impacts

The proposed subdivision will be connecting to a public water supply utility Lazy J Utility Association Public Water Supply MT0004432. Lazy J Utility Association has stated that sufficient capacity is available to provide water supply to this proposed residential facility. Any impacts to the aquifer were reviewed and approved under the groundwater source development review for Lazy J Utility Association Public Water Supply and by the DNRC for water right permits, (appendix B for Public Water Supply capacity letter). The Proposed Action may demand some energy for any pumping required for the drinking water and wastewater facilities.

Secondary Impacts

All utilities would be located underground. None of these resources are limited in the area, no other nearby activities would affect the Proposed Action, and no new or upgraded energy source would be needed.

Cumulative Impacts

No anticipated cumulative impacts on resources of Land, Water, Air, or Energy are expected. Cumulative effects regarding nondegradation to groundwater and surface water are addressed in the Nondegradation Cumulative Impacts section below.

HUMAN HEALTH AND SAFETY

Will this project add to health and safety risks in the area?

The applicant would be required to adhere to all applicable state and federal safety laws. The Occupational Safety and Health Administration (OSHA) has developed rules and guidelines to reduce the risks associated with this type of labor. Few, if any, members of the public would be in immediate proximity to the project during construction or operations.

Direct Impacts

Water for the Proposed Action is supplied from the Lazy J Utility Association. Per the Platting and Planning PUD approval, the Applicant must monitor the effluent at the end of pipe of each public septic system line for flow rate, BOD, TSS, Nitrate and Nitrate as N, TKN as N, total Phosphorus, Ammonia (as N), Fecal coliform, specific conductance and temperature. In addition to the effluent monitoring requirements of the Platting and Planning PUD approval, the Department’s COSA would require annual sampling in accordance with ARM 17.30.718(8)(b) for the life of the system for the following parameters: nitrate; nitrite, ammonia, TKN, BOD, TSS, fecal coliform, specific conductance and temperature.

Temporary fencing and barricades are used to protect the public from entering the construction area, and the use of trench boxes if excavating deeply prevents injury to workers. No direct risks to human health and safety are expected from the Proposed Action.

Secondary Impacts

In accordance with the Platting and Planning PUD approval, the Applicant must connect to the Gallatin Canyon Water & Sewer District once it is constructed. Connecting to the municipal facility limits pedestrian involvement with the Proposed Action. Impacts to human health and safety are expected to be negligible.

Cumulative Impacts

No cumulative impacts to human health and safety would be expected.

AESTHETICS

Will this project add or detract from existing views and aesthetics? Will there be any impacts to noise or lighting? Describe any aesthetics that may be altered due to the proposed actions.

Direct Impacts

The Project is proposed to be located on a prominent bluff above US 191. During construction, the visual impacts would be minimal and occur only during one construction season. During operation, the Project would not be visible as the majority of the Proposed Action is underground except for the stormwater ponds.

The stormwater ponds could have visual impacts, but impacts should be minimal to viewers. The Project visual impacts were determined using the Hillside and Ridgeline development regulations of the Gallatin Canyon/Big Sky Zoning Regulation. Local approval of the Quarry PUD required certain conditions be met to minimize any such impacts.

The Quarry PUD application addressed compliance with the Hillside and Ridgeline development regulations through Design Standards, Covenants and Landscape requirements. Compliance with the zoning and PUD documents would be assured by the Land Use Permit process.

Secondary Impacts

Some minor piping, such as a vent pipe, or an access hatch to an underground storage tank may be visible at the ground surface. Secondary impacts are expected to be long-term and negligible. The Quarry PUD application addressed compliance with the Hillside and Ridgeline development regulations through Design Standards, Covenants and Landscape requirements. Compliance with the zoning and PUD documents would be assured by the Land Use Permit process. Adherence to such compliance would result in limited secondary impacts to the aesthetics.

Cumulative Impacts

No cumulative impacts to area aesthetics would be expected from the Proposed Action.

SOCIOECONOMICS

This section includes the following resource areas, as required in ARM 17.4.609: Social Structures and Mores; Access to and Quality of Recreational and Wilderness Activities; Local and State Tax Base and Tax Revenues; Agricultural or Industrial Production; Quantity and Distribution of Employment; Distribution and Density of Population and Housing; Demands for Government Services; Industrial and Commercial Activity; Locally Adopted Environmental Plans and Goals; Other Appropriate Social and Economic Circumstances

The property does not contain active agricultural land. By developing a subdivision within non-agricultural land, the Project does not alter agricultural use on other lands within the Gallatin Canyon. Development of an existing industrial/commercial site potentially preserves other lands that are being used for agriculture. The Proposed Project is water mains, septic tanks, associated pipelines, drainfields, and stormwater ponds. These features do not create long term traffic or impact other governmental services. The Applicant engaged Metcalf Archaeology to conduct a cultural resource inventory report for the property and determined that there are no important historic sites or structures on the property.

Direct Impacts

The Proposed Action would be located on an existing industrial/commercial site whose conditional use permit expired in 2022. The Project would not significantly impact or alter activities on these already commercial areas. Permanent job creation or elimination is not expected, and new jobs created would likely be short term during construction. During operations, the Proposed Action could create one part-time job for monitoring and maintenance by a certified operator for the wastewater treatment system. Some increase in tax revenue could be expected. The Proposed Action is basic infrastructure and would be subject to taxes. The Proposed Action would provide a method for the safe disposal of effluent or stormwater. There would be no addition to population or housing for effluent disposal or stormwater handling.

Secondary Impacts

Secondary impacts are expected to be minor and long-term. Working facilities associated with a well may increase property values, possibly just the subject property or potentially surrounding properties, and in some cases may generate revenue from property taxes. Secondary impacts are expected to be minor and long-term.

Cumulative Impacts

No cumulative impacts to socioeconomics are anticipated.

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. Does the proposed regulatory action restrict the use of the regulated person's private property? If not, no further analysis is required. Does the agency have Legal discretion to impose or not impose the proposed restriction or discretion as to how the restriction will be imposed? If not, no further analysis is required. If so, the agency must determine if there are alternatives that would reduce, minimize or eliminate the restriction on the use of private property, and analyze such alternative.

The Proposed Action could take place on public land or private land owned by the applicant. DEQ's approval of drinking water and wastewater facilities construction would affect the applicant's real property. DEQ has determined, however, that the Proposed Action conditions are reasonably necessary to ensure compliance with applicable requirements under the Sanitation in Subdivisions Act and the Public Water Supplies, Distribution and Treatment laws. Therefore, DEQ's approval of the proposed facilities would not have private property-taking or damaging implications.

Montana's Private Property Assessment Act, Section 2-10-101, et seq., MCA establishes an orderly and consistent process that better enables state agencies to evaluate if a Proposed Actions has taking or damaging implications under the existing "Takings Clauses" of the United States and Montana Constitutions, as those clauses are interpreted and applied by the United States and Montana Supreme Courts.

Section 2-10-104, MCA required Montana's Attorney General to develop guidelines, including a checklist, to assist state agencies in identifying and evaluating proposed agency actions that may result in the taking or damaging of private property. In turn, Section 2-10-105(1) and (2), MCA set out a process for each State Agency to evaluate whether a State action may result in an unconstitutional taking of private property.

GREENHOUSE GAS ASSESSMENT

The analysis area for this resource is limited to the activities regulated by the issuance of public facilities approvals which is construction and operation of public water supply distribution system, and public wastewater treatment system. All construction equipment is for the construction of water main and water connections for the purpose of supplying drinking water, the construction equipment would be used for digging trenches, laying pipe, and all compaction necessary for the pipe installation. Also, the construction equipment would be for the construction of 4 public wastewater collection, and treatment systems including collection sewer mains, septic tanks, advanced treatment systems, dose tanks, force main and subsurface drainfields. Issuance of this permit would authorize use of various equipment and vehicles to construction the water main distribution system and wastewater collection and treatment systems necessary for the proposed residential units. This would involve the use of an excavator, backhoe, forklift, motor grader, asphalt pavers, road roller, compactors with approximately 1,178 hours of construction time. The amount of 164 Tons of CO₂ fuel utilized at this site. The amount of fuel utilized may be impacted by a number of factors including seasonal weather impediments and equipment malfunctions.

For the purpose of this analysis, DEQ has defined greenhouse gas emissions as the following gas species: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), and many species of fluorinated compounds. The range of fluorinated compounds includes numerous chemicals which are used in many household and industrial products. Other pollutants can have some properties that also are similar to those mentioned above, but the EPA has clearly identified the species above as the primary GHGs. Water vapor is also technically a greenhouse gas, but its properties are controlled by the temperature and pressure within the atmosphere, and it is not considered an anthropogenic species.

The combustion of diesel fuel at the site would release GHGs primarily being carbon dioxide (CO₂), nitrous oxide (N₂O) and much smaller concentrations of uncombusted fuel components including methane (CH₄) and other volatile organic compounds (VOCs).

DEQ has calculated GHG emissions using the EPA Simplified GHG Calculator version May 2023, for the purpose of totaling GHG emissions. This tool totals carbon dioxide (CO₂), nitrous oxide (N₂O), and methane (CH₄) and reports the total as CO₂ equivalent (CO₂e) in metric tons CO₂e. The calculations in this tool are widely accepted to represent reliable calculation approaches for developing a GHG inventory. DEQ has determined EPA's Scope 1 GHG impacts as defined in the Inventory Guidance for Greenhouse Gas Emissions are appropriate under MEPA for this Proposed Action. Scope 1 emissions are defined as direct GHG emissions that occur from sources that are controlled or owned by the organization (EPA Center for Corporate Climate Leadership). DEQ's review of Scope 1 emissions is consistent with the agency not evaluating downstream effects of other types of impacts.

This review does not include an assessment of GHG impacts in quantitative economic terms, otherwise known as evaluating the social cost of carbon. DEQ instead calculates potential GHG emissions and provides a narrative description of GHG impacts. This approach is consistent with Montana Supreme Court caselaw and the agency's discussion of other impacts in this EA. *See Belk v. Mont. DEQ*, 2022 MT 38, ¶ 29.

Operation of different types fueled vehicles throughout the life of the proposed project would produce exhaust fumes containing GHGs.

Secondary Impacts

GHG emissions contribute to changes in atmospheric radiative forcing, resulting in climate change impacts. GHGs act to contain solar energy loss by trapping longer wave radiation emitted from the Earth's surface and act as a positive radiative forcing component (BLM 2021).

Per EPA's website "Climate Change Indicators", the lifetime of carbon dioxide cannot be represented with a single value because the gas is not destroyed over time. The gas instead moves between air, ocean, and land mediums with atmospheric carbon dioxide remaining in the atmosphere for thousands of years, due in part to the very slow process by which carbon is transferred to ocean sediments. Methane remains in the atmosphere for approximately 12 years. Nitrous oxide has the potential to remain in the atmosphere for about 109 years (EPA, Climate Change Indicators). The impacts of climate change throughout the southwest region of Montana include changes in flooding and drought, rising temperatures, and the spread of invasive species (BLM 2021).

Cumulative Impacts

Montana recently used the EPA State Inventory Tool (SIT) to develop a greenhouse gas inventory in conjunction with preparation of a possible grant application for the Community Planning Reduction Grant (CPRG) program. This tool was developed by EPA to help states develop their own greenhouse gas inventories, and this relies upon data already collected by the federal government through various agencies. The inventory specifically deals with carbon dioxide, methane, and nitrous oxide and reports the total as CO₂e. The SIT consists of eleven Excel based modules with pre-populated data that can be used with default settings or in some cases, allows states to input their own data when the state believes their own data provides a higher level of quality and accuracy. Once each of the eleven modules is filled out, the data from each module is exported into a final "synthesis" module which summarizes all of the data into a single file. Within the synthesis file, several worksheets display the output data in a number of formats such as GHG emissions by sector and GHG emissions by type of greenhouse gas.

DEQ has determined the use of the default data provides a reasonable representation of the greenhouse gas inventory for the various sectors of the state, and the estimated total annual greenhouse gas inventory by year. The SIT data from EPA is currently only updated through the year 2021, as it takes several years to validate and make new data available within revised modules. DEQ maintains a copy of the output results of the SIT.

DEQ has determined that the use of the default data provides a reasonable representation of the GHG inventory for all of the state sectors, and an estimated total annual GHG inventory by year. At present, Montana accounts for 47.77 million metric tons of CO₂e based on the EPA SIT for the year 2021. This project may contribute up to 164 metric tons per year of CO₂e. The estimated emission of 164 metric tons of CO₂e from this project would contribute approximately 0.00000000034% off Montana’s annual CO₂e emissions.

GHG emissions that would be emitted as a result of the proposed activities would add to GHG emissions from other sources. The No Action Alternative would contribute less than the Proposed Action Alternative of GHG emissions. The current land use of the area is undeveloped.

NONDEGRADATION CUMULATIVE EFFECTS:

The entire Quarry project has previously obtained zoning, planning, and platting approvals for its Planned Unit Development from Gallatin County. As required by the Gallatin County PUD approval, which includes the future phases, the Applicant proposes using SepticNet technology to treat wastewater to the Montana groundwater nonsignificance criteria of 7.5 mg/L.

Any wastewater systems are more than [1/4 or 1/2] mile from surface water are not required to perform the adjacent to surface water trigger analysis under MCA 75-5-301 (5) e. In addition, ARM 17.30.715(4)e exempts the department from evaluating cumulative and synergistic impacts if the nonsignificance criteria are met. Review of each proposed primary drainfields and proposed replacement drainfield areas soil classification, distance to surface water, and limiting layers was completed to determine if degradation to the nearest surface water needed to be analyzed with a surface water Trigger Analysis. Trigger Analysis to the nearest surface water was not required.

Drainfield#	Soil Classification	Application Rate	Distance to Surface Water	Trigger Analysis
DF-9	Sandy Clay Loam	0.4	1320	Not Required
	Sandy Clay Loam	0.4	1320	Not Required
	Sandy Clay Loam	0.4	1320	Not Required
DF-10	Clay Loam	0.3	1320	Not Required
	Clay Loam	0.3	1320	Not Required
	Sandy Loam/Sandy Clay Loam	0.6/0.4	1320	Not Required
DF-11	Sandy Clay Loam	0.4	1320	Not Required
	Sandy Loam	0.6	2640	Not Required
	Sandy Loam	0.6	2640	Not Required
	Sandy Clay Loam	0.4	1320	Not Required
DF-12	Sandy Clay Loam	0.4	1320	Not Required
	Sandy Clay Loam	0.4	1320	Not Required
	Clay Loam	0.3	1320	Not Required

Replacement Drainfields #	Soil Classification	Application Rate	Distance to Surface Water	Trigger Analysis
RA-9.1	Sany Clay Loam or Sandy Loam	0.4/0.6	1320	Not Required
RA-9-2	Sany Clay Loam or Sandy Loam	0.4/0.6	1320	Not Required
RA-10	Sandy Clay Loam	0.4	1320	Not Required
	Sandy Clay Loam	0.4	1320	Not Required
	Sandy Clay Loam/Sandy Clay	0.4/0.2	1320	Not Required
	Clay Loam/Sandy Clay Loam	0.3/0.4	1320	Not Required
	Clay Loam/Sandy Clay Loam	0.3/0.4	1320	Not Required
RA-11.1	Sandy Loam/Sandy Clay Loam	0.6/0.4	1320	Not Required
	Sandy Clay Loam/Sandy Clay Loam	0.4	1320	Not Required
RA-11.2	Sandy Loam	0.6	2640	Not Required
	Sandy Loam	0.6	2640	Not Required
RA-11.3	Silt Loam/Sandy Clay Loam/Sandy Loam/Silt Loam/Sandy Clay	0.4/0.4/0.6/0.4/0.2	1320	Not Required
RA-11.4	Silt Loam/Gravelly Silty Clay Loam	0.4/0.3	1320	Not Required
RA-11.5	Gravelling Silt/Gravelly Clay Loam	0.15/0.3	1320	Not Required
RA-12	Sandy Loam/Sandy Clay Loam	0.6/0.4	1320	Not Required
	Clay Loam/Sandy Loam	0.3/0.6	1320	Not Required
	Clay Loam/Sandy Clay Loam	0.3/0.4	1320	Not Required

The trigger analysis was not required for the proposed primary or replacement drainfield areas. The review of phosphorous impacts to surface water showed that based on the soil types and depth to groundwater, the wastewater discharges met the nondegradation requirement (ARM 17.30.715(1)(e)) that the soils have at least 50 years of adsorptive capacity between the discharge location and nearest receiving high-quality surface water.

However, regardless of the statutory limitations, the wastewater contributions from all phases were considered at the PUD public hearing before Gallatin County. That information showed a net computed nitrate change in the Gallatin River—when considering the trigger analysis by assuming all the treated effluent from the entire PUD entered the Gallatin River—was nonsignificant. Accordingly, the Department does not anticipate significant cumulative nitrate impacts from future phases of the subdivision.

The Department notes, however, that there are no applications for future phases pending before the Department, and no future phases can occur without review and approval by the Department for the facilities for water, wastewater, and stormwater. To obtain such approvals in the future, the Applicant will have to comply with all applicable statutory and regulatory requirements.

With regard to consideration of the cumulative impacts in groundwater for purposes of the Department’s nonsignificance determination under the Water Quality Act, discharges from a septic system using Level 2 treatment with a nitrate concentration of 7.5 mg/L at the end of a mixing zone are nonsignificant under MCA 75-5-301(5)(d). The SepticNet treatment system proposed for the subdivision has been approved by the Department as a Level 2 treatment system that discharges a nitrate concentration at or below 7.5 mg/L. With the discharge concentration of the proposed wastewater systems at or below the significance limit, an evaluation of the cumulative impacts of the SepticNet systems to nitrate

concentrations in groundwater could not mathematically exceed the concentration identified as significant degradation. That water is hydrologically connected does not necessarily mean that a discharge will cause degradation, as pollutants will diffuse, dilute, and attenuate as they travel through groundwater.

The DEQ has received a MGWPC permit application that proposes to collect sewage from the Quarry and other places along the Gallatin Canyon. The collected sewage will be sent to Big Sky wastewater treatment system for treatment and then the treated sewage will be returned to the Quarry wastewater treatment facilities and other drainfields. The treated effluent is proposed to be treated to Class A-1 standards of 5.0 mg/l nitrogen further decreasing potential impacts to ground or surface water quality.

DESCRIPTION OF ALTERNATIVES

No Action Alternative: In addition to the proposed action, DEQ must also consider a "no action" alternative. The "no action" alternative would deny the approval of the proposed water main distribution system and 4 public wastewater collection and treatment systems. The applicant would lack the authority to conduct the proposed activity. Any potential impacts that would result from the proposed action would not occur. The no action alternative forms the baseline from which the impacts of the proposed action can be measured.

If the applicant demonstrates compliance with all applicable rules and regulations required for approval, the "no action" alternative would not be appropriate.

Other Reasonable Alternative(s): The preferred action is to approve the COSA as submitted by the Applicant. This action is preferred because the COSA approval provides a regulatory mechanism for protecting water quality by analyzing the project against the nonsignificance criteria in 75-5-301, MCA.

This action is consistent with ongoing efforts by the Department, Gallatin County, and local watershed groups to reduce nonpoint source nitrogen loads in the Big Sky area. These strategies are summarized in the Big Sky Nutrient Assessment (WGM, 2020). This document identifies four recommended mitigation actions to support surface water quality in the Gallatin River:

Mitigation 1: Promote centralized treatment in the Canyon Area, reducing current load and the impact of future developments in the Canyon.

Mitigation 2: Advocate for on-site system maintenance

Mitigation 3: Advocate for Level II treatment in new construction.

Mitigation 4: Fund effluent testing and system support for permitted systems to promote good maintenance, especially for community scale systems.

The Department's action to provide this authorization is consistent with these recommended mitigations. Additionally, while there is no total maximum daily load (TMDL) document for the Gallatin River south of Gallatin Gateway, the Department's action is consistent with its recommendations for nonpoint source reductions in other watersheds that have nutrient-impaired streams (e.g., the lower Gallatin River watershed and the Lake Helena watershed).

CONSULTATION

DEQ engaged in internal and external efforts to identify substantive issues and/or concerns related to the proposed project. Internal scoping consisted of internal review of the environmental assessment document by DEQ staff and information sourced by the Applicant. All reference material sourced from the Applicant is documented below in References.

PUBLIC INVOLVEMENT

Extensive public comment was provided to the Gallatin County Commission prior to the approval of the Quarry PUD. The Department has determined that, due to public interest in the project among other factors, an additional public comment period is required to inform decision-making on the COSA.

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.

CONCLUSIONS AND FINDINGS

The Project consists of water, sewer, and stormwater facilities on approximately 37.01 acres within a 168.1-acre plat. Two lots within the plat, totaling 138.1 acres, are exempt from review under the Sanitation in Subdivision Act (76-4, MCA), as each is greater than 20-acres (Lot 2A is 104.1-acres and Lot OS-1 is 27.3 acres). The full 175.11-acre subdivision was previously approved through Gallatin County's PUD process. Runoff from the site would be regulated by the conditions of the COSA and would be managed accordingly.

The Department has determined that the groundwater discharge from the proposed wastewater treatment system would result in nonsignificant changes in water quality, in accordance with 75-5-301 (5)(d), Montana Code Annotated. The Department has therefore determined that there are no significant adverse impacts to the physical or human environment associated with the Project.

Impacts were assessed with the assumption that the facility will comply with the terms and conditions of the approval. Violations of the approval could lead to significant adverse impacts to state waters. Violations of the approval would not be an effect of the agency action since the authorization itself forbids such activities. If violations of the approval do occur, the Department will take appropriate action under State Laws.

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Power Engineers, Inc., Wildlife Assessment, June 2019, <http://g-e-i.net/QUARRY-R1-PP/TAB4/Quarry%20-%20Wildlife%20Study.pdf>

Rawhide Engineering, Inc., Geotechnical Investigation, December 2018, <http://g-e-i.net/QUARRY-R1-PP/TAB4/Geotech%20Report.pdf>

WGM Group, 2020. Big Sky Nutrient Assessment.

COMMENT SUMMARY AND RESPONSES TO SUBSTANTIVE COMMENTS

Remove this section before publishing draft documents or final documents for which there was no public comment period. For final documents with comments, include responses to substantive comments.