

EGAL DESCRIPTION OF NUTRIENT HOLDINGS, LLC PROPERTY

Parcels A and C

Township 5 South, Range 90 West, 6th P.M.: Section 35: That portion of the N½SE¼, NE¼SW¼ lying Southerly of the centerline of the Colorado River.

Township 6 South, Range 90 West, 6th P.M.

Section 6: All that part of Lot 4, lying southerly of the centerline of the Colorado River as described in deed recorded May 28, 1974 in Book 459 at Page 535 in the office of the Clerk and Recorder of Garfield County. Colorado

Excluding the following parcels of property described in the Rule and Order entered in the District court for Garfield County, Colorado, in Civil Action No. 6635, entitled Board of County Commissioners, et al. v. Daryl Gean Richardson, et al., recorded November 8, 1982 in Book 437 at Page 383 as Reception No. 255941

Parcel No. 143-B

A tract or parcel of land No. 143-B of the State Department of Highways Division of Highways, State of Colorado, Project No. I 70-1 (12), 89 Sec. 2 in the SW14 of the NW14, in the SE14 of the NW14 and in the NE14 of the SW14 of Section 35, Township 5 South, Range 90 West of the Sixth Principal Meridian, in Garfield County, Colorado, said tract or parcel being more particularly described as follows:

Beginning at a point on the centerline of the Colorado River from which point the NW corner of Section 35, Township 5 South, Range 90 West of the 6th P.M. bears North 27'13'30" West a distance of 2,615.7 feet; thence North 73.59' East along the centerline of the Colorado River, a distance of 162.8 feet; thence South 70°43' East along the centerline of the Colorado River, a distance of 640.8 feet; thence South 48'26' East, along the centerline of the Colorado River, a distance of 223.6 feet; thence South 33'52' East along the centerline of the Colorado River, a distance of 119.8 feet; thence along the arc of a curve to the left having a radius of 4,483.7 feet, a distance of 1,080.9 feet, more or less, to the POINT OF

BEGINNING (the chord of this arc bears North 67'23'30" West a distance of

PARCEL No. 143-C

1,078.3 feet)

A tract or parcel of land No. 143—C of the State Department of Highways Division of Highways, State of Colorado, Project No. I 70—1 (12) 89 Section 2, in the NE14 of the SW14 of Section 35, Township 5 South, Range 90 West of the 6th P.M. in Garfield County, Colorado, said tract or parcel being more particularly described as follows: Beginning at a point on the thread of the Colorado River in the NE¼ of the SW¼ of Section 35, Township 5 South, Range 90 West, 6th P.M. from which point the S¼ corner of Section 35 bears South 21°36'30" East a distance of 2,796.8 feet; thence South 11°47' West a distance of 104.9 feet; thence South 59°02' East a distance of 176.3 feet; to the thread of the Colorado River; thence North 33°52' West along the thread of the Colorado River, a distance of 232.9 feet, more or less, to the Point of Beginning.

<u>Parcel B</u>

Township 5 South, Range 90 West, 6th P.M.:

Section 33: All that portion of the SE1/4SE1/4 lying Southerly of the centerline of the Colorado River;

Section 34: All that portion of the S1/2 and SE1/4NE1/4 lying Southerly of the centerline of the Colorado River;

Section 35: W1/2SW1/4, that portion of the SW1/4NW1/4 lying Southerly of the Colorado River.

Township 6 South, Range 90 West, 6th P.M.:

Section 5: Lot 4

Section 6: Lots 1, 2 3 and the Northerly 15 acres of the SE1/4NW1/4

EXCEPTING FROM THE ABOVE DESCRIBED LANDS the following:

- . All that portion platted as Riverbend Subdivision Filing No. 1 as shown on
- Reception No. 281326 2. All that portion platted as Riverbend Subdivision Filing No. 2 as amended
- as shown on Reception No. 281329 and No. 299710
- 3. All that portion platted as Riverbend Ranchettes Final Plat as shown on Reception No. 290481
- 4. All that portion conveyed to the Board of County Commissioners of Garfield County, Colorado, by Deed recorded August 31, 1979 in Book 534 at Page 416 as Reception No. 297140

- 5. All that portion platted as Riverbend Subdivision Filing No. 5 as shown on Reception No. 517550 6. All that portion platted as Cedar Ridge Subdivision as shown on Reception
- No. 501840
- 7. All those portions described as Parcel No. 143; Parcel No. 143-A; and Parcel No. 143-B in the Rule and Order of the Garfield County District Court in Civil Action No. 6635 and recorded in Book 437 at Page 383 as Reception No. 255941
- 8. All that portion of the lands described in the deeds recorded in Book 906 at Page 790 as Reception No. 464984, Book 863 at Page 424 as Reception No. 447796, and Book 1712 at Page 990 as Reception No. 679354.
- All as recorded in the office of the Clerk and Recorder of Garfield County, Colorado.

<u>Parcel D</u>

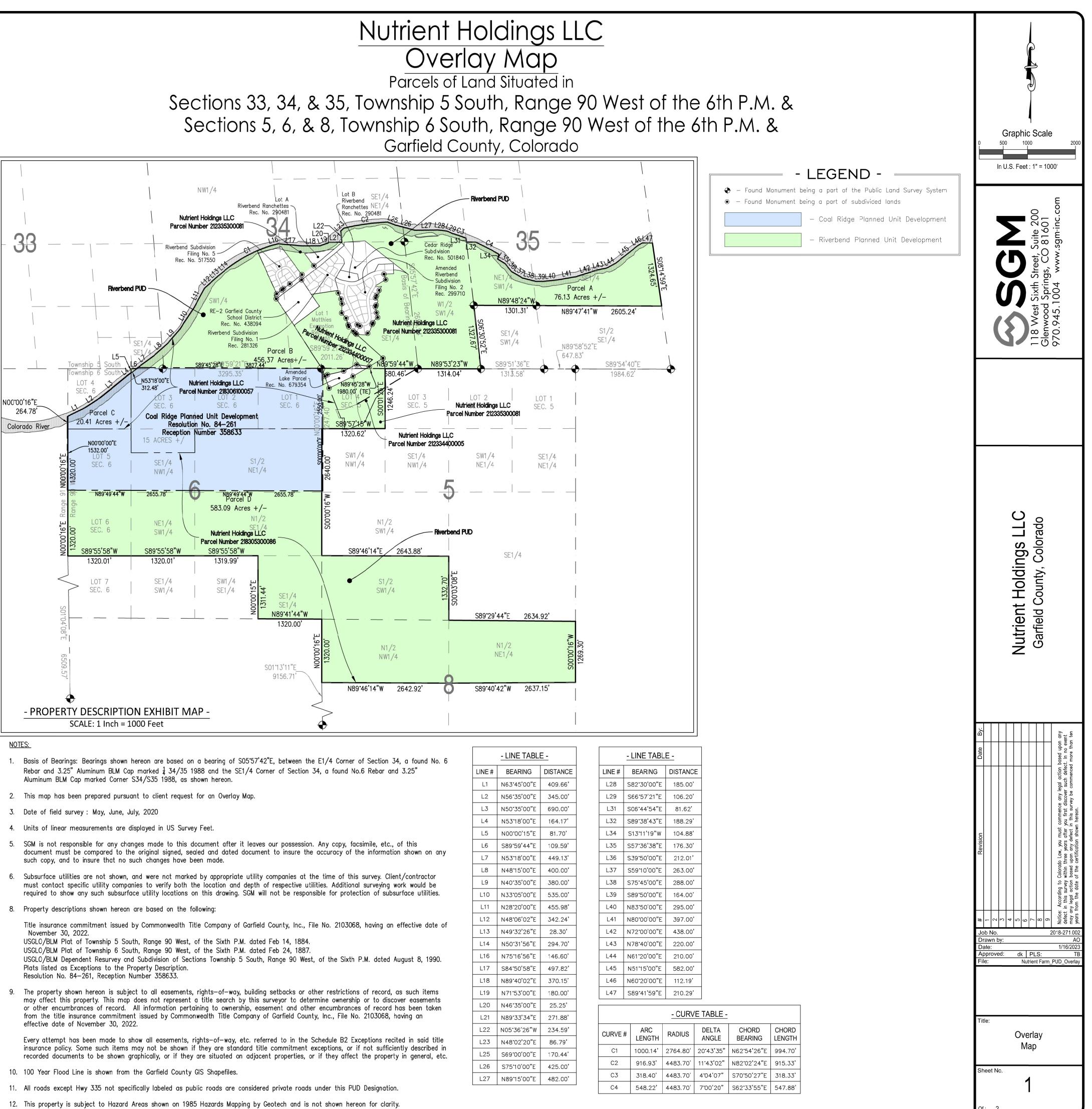
Township 6 South, Range 90 West, 6th P.M.:

Section 5: S1/2SW1/4

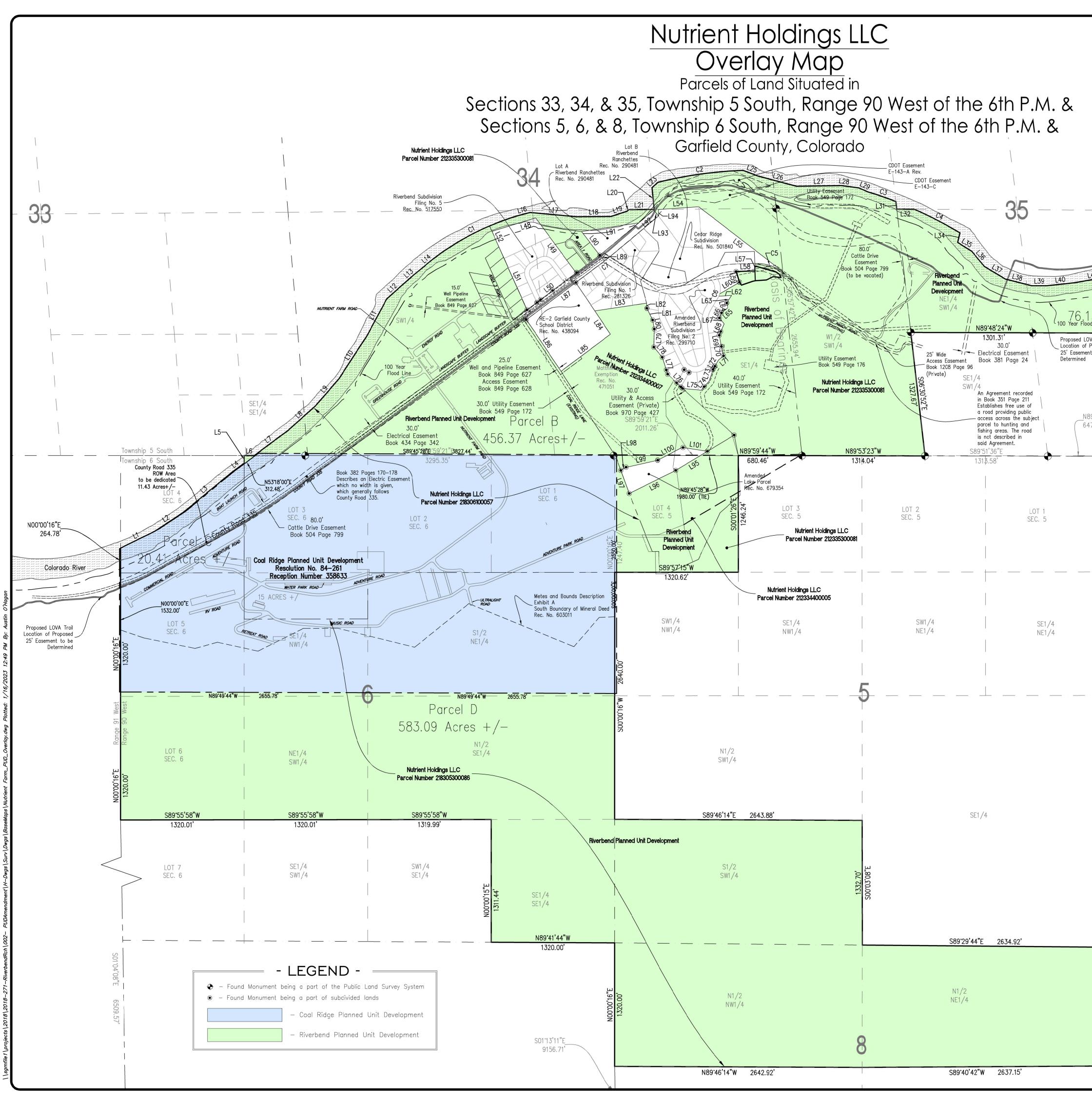
Section 6: Lot 5 (SW1/4NW1/4), Lot 6 (NW1/4SW1/4), SE1/4NW1/4 except the North 15 acres, NE¼SW¼, S½NE¼, N½SE¼, SE¼SE¼

Section 8: N½N½

Overlay Map Parcels of Land Situated in Garfield County, Colorado NW1/4 Lot B Riverbend PUD Riverbend Riverbend Ranchette Ranchettes Rec. No. 29048 Nutrient Holdings LLC Parcel Number 21233530008 38 Riverbend Subdivision Filing No. 5 Rec. No. 51755 Riverbend Subdivision Filing No. 2 N89'48'24" ₹E-2 Garfield Count 1301.3 School District Nutrient Holdings LLC Rec. No. 438094 Parcel Number 212335300081 iverbend Subdivision SE1/4 Filing No. 1 SW1/4 647.83' N89'53'23"W S89'51'36"F



- LINE TABLE -					
LINE # BEARING DISTANCE					
L1	N63*45'00"E	409.66'			
L2	N56 * 35'00"E	345.00'			
L3	N50*35'00"E	690.00'			
L4	N53*18'00"E	164.17'			
L5	N00°00'15"E	81.70'			
L6	S89*59'44"E	1 09.59'			
L7	N53°18'00"E	449.13'			
L8	N48°15'00"E	400.00'			
L9	N40°35'00"E	380.00'			
L10	N33°05'00"E	535.00 '			
L11	N28°20'00"E	455.98'			
L12	N48°06'02"E	342.24'			
L13	N49*32'26"E	28.30'			
L14	N50°31'56"E	294.70 '			
L16	N75°16'56"E	146.60'			
L17	S84*50'58"E	497.82'			
L18	N89°40'02"E	370.15'			
L19	N71*53'00"E	180.00'			
L20	N46°35'00"E	25.25'			
L21	N89°33'34"E	271.88'			
L22	N05°36'26"W	234.59'			
L23	N48°02'20"E	86.79'			
L25	S69*00'00"E	170.44'			
L26	S75°10'00"E	425.00 '			
L27	N89°15'00"E	482.00'			



- Parce	N1/2 E1/4 A Tes $+/-$	THO E HAT	S08"14'59"E						250	S West Sixth Street, Suite 200	1000 = 500'
	189°47'41"W 2605.24'								Y.	118	Gler 970
-	S1/2 SE1/4										
_N89*58'52"E 647.83'		9 <u>'54'40"E</u>			LINE # L48 L49 L50 L51 L52 L54 L55 L57 L58 L59 L60 L62 L60 L62 L63 L64 L65 L66 L65 L66 L67 L68 L69 L70 L71	- LINE TABLI BEARING N72'50'39"E S36'23'55"E S53'07'34"W N24'12'05"W N24'12'05"W N86'03'26"E S52'17'28"E S52'17'28"E S52'17'28"E S52'17'28"E S88'02'33"W S17'17'27"E S88'02'33"W S17'17'27"E S88'02'35"W S10'41'26"E S23'03'12"W S10'41'26"E S12'54'47"E	DISTANCE 489.35' 730.23' 655.91' 744.41' 173.25' 431.27' 1145.78' 79.97' 199.51' 119.98' 245.00' 137.38' 97.08' 49.80' 87.23' 58.34' 80.19' 132.40' 101.84' 123.41'				
					L71 L72 L73 L74 L75 L76 L77 L78 L79 L80 L81 L82 L83 L84 L82 L83 L84 L85 L86 L87 L86 L87 L89 L90 L91 L92 L93 L94	S50'39'03"W S29'43'54"W S18'44'32"W S39'51'11"W N84'37'20"W N46'00'48"W N17'26'13"W N40'05'54"W N01'37'38"E N10'21'42"W N03'00'26"W S81'25'33"W S33'52'20"E S53'07'34"W N33'52'26"W N37'34'29"W N37'34'29"W N81'20'34"E N49'56'11"E S40'04'08"E N01'03'06"W	71.51' 115.27' 130.64' 128.13' 202.78' 220.19' 189.20' 141.75' 193.12' 97.88' 139.90' 55.08' 560.92' 300.00' 6660.00' 665.00' 990.00' 80.00' 319.00' 618.96' 210.00' 80.00'	A dofRevision112131414141514141514151415151616171717111 </th <th>n by:</th> <th>dk PLS:</th> <th>B 9 9 9 9 A A A A A A A A A A A A A A<!--</th--></th>	n by:	dk PLS:	B 9 9 9 9 A A A A A A A A A A A A A A </th
S00°00'16"W 1269.30'	CURVE # ARC LENGTH C5 330.66' C6 27.59' C7 50.97'	- CURVE TABLE RADIUS DELTA ANGLE 500.00' 37*53'28" 192.83' 8*11'56" 4168.53' 0*42'02"	CHORD	CHORD LENGTH 324.67' 27.57' 50.97'	L95 L95 L97 L98 L99 L100 L101	S58'52'41"W S63'33'22"W N19'38'31"W N60'14'57"E N77'27'34"E N62'07'02"E S81'18'49"E	394.16' 556.96' 263.80' 64.14' 347.15' 293.85' 273.63'	Title: Sheet		Dverlay Map	/

Of: 2

Phase III Bond Release and Termination of Jurisdiction

Proposed Decision and Findings of Compliance for the

Coal Ridge No. 1 Mine

PERMIT NUMBER C-1984-065 SL-03



Virginia Brannon, Director

Prepared by Zach T. Trujillo Environmental Protection Specialist

7/29/20

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Attachments:

Table 1. Summary of All Bond Release Amounts

Figure 1. SL-03 Map

I. INTRODUCTION

This document is the proposed decision of the Colorado Division of Reclamation, Mining, and Safety (Division) in response to a request for Phase III Bond Release and Termination of Jurisdiction at the Coal Ridge No. 1 Mine (Coal Ridge), Permit Number C-1984-065, bond release application number SL-03. The package contains five parts. These include: 1) Introduction; 2) Procedures and Summary of the Bond Release Process; 3) Criteria and Schedule for Bond Release; 4) Observations and Findings of the Division regarding compliance with the bond release requirements of the Colorado Surface Coal Mining and Reclamation Act and regulations promulgated thereunder; and 5) the Division's Proposed Decision on the request for bond release.

Detailed information about the review process can be found in the Act and the Regulations of the Colorado Mined Land Reclamation Board for Coal Mining. All Rules referenced within this document are contained within the Regulations. Detailed information about the mining and reclamation operations can be found in the permit application package (PAP) on file at the Division offices, located at 1313 Sherman Street, Room 215, in Denver, Colorado.

Coal Ridge is an underground mine which is permitted and operated by C.B. Minerals Company, LLC. The total permit area encompasses 272.00 acres. The Coal Ridge Mine is located in Garfield County, Colorado approximately 7 miles west of the town of Glenwood Springs, CO. The land for which bond release has been requested is owned by APB Holdings, LLC as shown on Figure 2.1-1 of the Coal Ridge PAP. The coal within the Coal Ridge permit boundary is privately owned. A list of mineral ownership within the area of the SL-03 application can be found on Figure 2.4-1 of the Coal Ridge PAP. Reclamation work for which bond release has been requested was conducted during 1994 with the remaining sediment pond on site reclaimed in 2015.

II. PROCEDURES AND SUMMARY OF THE REVIEW PROCESS

Coal Ridge applied for a Phase III Bond Release for a total of 45.5 affected acres as shown on Figure 1 of the SL-03 application, as well as Figure 1 of this document. This area is located in

Garfield County, Colorado in portions of Township 6 South, Range 90 West (6th Principal Meridian), Sections 6. The permit area can be found on the USGS Quadrangle 7.5 Minute Series Maps of New Castle and Storm King Mountain. The permit area and surface ownership can be found on Map 1, and the coal ownership can be found on Map 2 of the Permit Application Package (PAP).

Background

Coal Ridge was developed as a room and pillar operation utilizing hydraulic mining techniques which use high pressured jets of water for cutting and breaking coal for extraction. Entries within the coal seam were designed to move upslope so that gravity would have caused the slurry of coal and water to flow from the mining section to the portal. Coal was to be transported by a water flume to a preparation facility where it would be dewatered and stored for shipment.

Development operations commenced in October 1986. Two portals were driven by a roadheader approximately 500 feet into the hillside. Coal Seams were not reached, hydraulic mining never began, and coal was not produced. Development operations discontinued in March 1987. The decision was made in 1993 to reclaim the site, and reclamation operations were initiated in 1994.

Reclamation for Coal Ridge involved sealing, backfilling, and regrading the portal areas to blend in with the pre-existing topography. A concrete wall section was built across the portals which were covered by 25 feet of backfill. Facilities were demolished and backfill and grading activities were accomplished. Disturbed areas were topsoiled and seeded in compliance with final reclamation specifications. The sediment control structures were the last features to be reclaimed at Coal Ridge during the fall of 2015. The features reclaimed were Sediment Pond A, the concrete splitter box and Culvert 5 at the inlet to the pond, and the Small Area Exemption ditches, berms and sump.

Permit, Performance Bond, and Bond Release History

The Coal Ridge No. 1 Mine was issued on October 9, 1985 and renewed on December 10, 1989, January 30, 1993, February 28, 1997, September 21, 2001, October 16, 2006, December 20, 2011, and January 10, 2017. The Division currently holds a reclamation bond in the amount of \$43,200.00.

Coal Ridge has applied for two previous bond releases. In October 19, 1995, a partial Phase I Bond Release (SL-01) recognized accomplished reclamation work. A partial Phase I and II Bond Release (SL-02) for the remaining areas of the site was approved on August 17, 2001.

SL-03 Phase III Bond Release and Termination of Jurisdiction Application

The Coal Ridge SL-03 application was received by the Division on March 23, 2020 and originally deemed incomplete for the purpose of filing on May 7, 2020 for not including the vegetation reports for the Division's review to ensure all applicable Rules and site standards have been satisfied. The

vegetation reports were then received by the Division and the SL-03 application was deemed Complete on May 21, 2020. Coal Ridge published notice of the bond release application in the *Glenwood Springs Post Independent* once weekly for four consecutive weeks, beginning January 9, 2020 and ending on January 30, 2020. Coal Ridge notified land owners within and adjacent to the mine permit area, the Bureau of Land Management (BLM), Colorado Parks and Wildlife (CPW) and other interested parties of the application for bond release, as required by Rule 3.03.2(1). No comments, written objections or requests for an informal conference regarding the bond release application were received by the Division.

A bond release inspection was scheduled and conducted on June 3, 2020. The site inspection was conducted in accordance with Rule 3.03.2(2). Inspection attendees included: Zach Trujillo and Elliott Russell of the Division and Mr. Andy Bruno of APB Holdings, LLC, representing the landowner. No representatives from the BLM, CPW, local agencies, or adjacent land owners attended the inspection. A summary of the bond release inspection are presented in Section IV, below. Detailed observations of the inspection are documented in the inspection report that was conducted on June 3, 2020. See Figure 1 of this document for the location of the SL-03 Phase III Bond Release area.

III. CRITERIA FOR BOND RELEASE

Phase III Bond Release

The Division evaluated Coal Ridges' request for Phase III Bond Release on 45.5 acres in the SL-03 application, as shown on Figure 1 of this document. The process of releasing the reclamation bond for a coal mine site in Colorado is explained in Rule 3.03 and further described in the Division's 1995 *Guideline Regarding Selected Coal Mining Bond Release Issues*. The bond release process involves three phases. At Phase III, Rule 3.03.1(2) (c) states, "The remaining portion of the bond amount shall be released when the permittee has successfully completed all surface coal mining reclamation operations in accordance with the approved reclamation plan, and the final inspection and procedures of 3.03.2 have been satisfied. This shall not be before the expiration of the period specified for revegetation responsibility in 3.02.3."

Evaluation and inspection of the reclaimed areas was based on the specific requirements of the reclamation plan and the functional requirements of the post-mining land use. Criteria for bond release included the following:

- 1. The reclaimed logical management unit (LMU) must meet the vegetative cover standard for two out of the four years of sample data (Rule 4.15.8(3)(a));
- 2. The reclaimed LMU must meet the herbaceous productivity standard for two out of the four years of sample data. (Rule 4.15.8(4));
- 3. The reclaimed LMU must meet the approved species diversity standard for two out of the four years of sample data. (Rule 4.15.8(5));
- 4. On areas reclaimed prior to 2008, woody stem density shall be 150 stems per acre on 3% of the reclaimed area (Permit section 4.15.8 and Rule 4.15.8(7));

- 5. The reclamation supports the approved post-mining land use (Rule 4.16.1);
- 6. Sample adequacy and revegetation success for cover and productivity shall be made with one of the following statistically valid approaches in Rule 4.15.11(2)(a), (b), or (c). Demonstrations of sample adequacy and revegetation success for woody plant density shall be made with one of the following statistically valid approaches in (a), (b), or (c), or with one of the alternative approaches specified in 4.15.11(3); and
- 7. All areas requested for Phase III bond release meet the requirements for Phase I and Phase II bond release or have previously received Phase I and Phase II bond release approval.

Coal Ridge provided vegetation monitoring reports for the Phase III Bond Release area in the SL-03 application.

IV. OBSERVATIONS AND FINDINGS

The following discussion of observations and findings focuses on the results of vegetation reestablishment and compliance with the reclamation plan for the Coal Ridge No 1. Mine for Phase III Bond Release. Reclamation was initiated in 1994 for the majority of the site with the sediment control structures reclaimed during the fall of 2015. Vegetation sampling was conducted in 2018 and 2019. The area requested under the Coal Ridge SL-03 application have met or surpassed the minimum lability time frame of ten years in accordance with Rule 3.02.3(2)(b).

The evaluation of the bond release application included a review of past inspection reports, annual reclamation reports, and annual hydrology reports, as well as a pre-inspection meeting to discuss permit requirements and regulatory criteria and the bond release inspection. The bond release inspection was conducted on June 3, 2020. Revegetation success data that was included in the bond release application was reviewed by the Division in the office during the technical evaluation of the bond release application before, during and after the inspection.

During the Phase III Bond Release inspection, participants walked through each of the bond release request parcels to allow for visual assessment of compliance with pertinent requirements as described above in Section III of this document. A summary of the observations are discussed below and the details are further discussed in the associated inspection report.

Phase III

Coal Ridge is approved for Dry Land Pasture and Wildlife Habitat (Sagebrush Revegetation) postmining land use as shown on Figure 1 of this document. Based on the 2018 and 2019 vegetation sampling results for Phase III Bond Release, the Division finds that Coal Ridge has achieved adequate cover, productivity and diversity in the SL-03 application area in conjunction with the approved post-mining land use. These results are summarized below.

Phase III Bond Release Vegetation Results - Dry Land Pasture

2018 Cover: Herbaceous cover: 51.5%

Proposed Decision and Findings of Compliance Phase III Bond Release SL-03

	Herbaceous cover standard (90%): 24.3% The 2018 sample data successfully exceeds 90% of the herbaceous cover standard.					
2019 Cover:	Herbaceous cover: 43.0% Herbaceous cover standard (90%): 25.0% The 2019 sample data successfully exceeds 90% of the herbaceous cover standard.					
2018 Productivity:	Herbaceous production: 702 lbs/acre Herbaceous production standard (90%): 287 lbs/acre The 2018 sample data successfully exceeds 90% of the herbaceous productivity standard.					
2019 Productivity:	Herbaceous production: 656 lbs/acre Herbaceous production standard (90%): 283 lbs/acre The 2019 sample data successfully exceeds 90% of the herbaceous productivity standard.					
Diversity:	Dry Land Pasture is not subject to the diversity standards per Rule 4.15.9.					
Woody Plant Density: Dry Land Pasture is not subject to woody plant density standards per Rule 4.15.9.						
Phase III Bond Release	se Vegetation Results – Wildlife Habitat (Sagebrush Revegetation)					
2018 Cover:	Herbaceous cover: 50.1% Herbaceous cover standard (90%): 24.3% The 2018 sample data successfully exceeds 90% of the herbaceous cover standard.					
2019 Cover:	Herbaceous cover: 49.2% Herbaceous cover standard (90%): 25.0% The 2019 sample data successfully exceeds 90% of the herbaceous cover standard.					
2018 Productivity:	Herbaceous production: 737 lbs/acre Herbaceous production standard (90%): 287 lbs/acre The 2018 sample data successfully exceeds 90% of the herbaceous productivity standard.					
2019 Productivity:	Herbaceous production: 655 lbs/acre Herbaceous production standard (90%): 283 lbs/acre The 2019 sample data successfully exceeds 90% of the herbaceous					

productivity standard.

2018 Diversity:	Five perennial species and three cool-season perennial grasses were sampled between 3% and 60% relative cover. This meets or exceeds the requirement for a minimum of at least four perennial species and three cool-season perennial grasses between 3% and 60% relative cover. The 2018 sample data successfully meets or exceeds reclamation success diversity standards.
2019 Diversity:	Five perennial species and three cool-season perennial grasses were sampled between 3% and 60% relative cover. This meets or exceeds the requirement for a minimum of at least four perennial species and three cool-season perennial grasses between 3% and 60% relative cover. The 2019 sample data successfully meets or exceeds reclamation success diversity standards.
Woody Plant Density	The Coal Ridge No. 1 Mine is not subject to woody plant density standards

Woody Plant Density: The Coal Ridge No. 1 Mine is not subject to woody plant density standards per Rule 4.15.8(7) and Section 4.4.2.10 of the Coal Ridge Permit Application Package.

Post-mining Land Use

The post-mining land use at Coal Ridge is dryland pasture and wildlife habitat. The Phase III Bond Release area requested with the SL-03 application was walked during the inspection and the Division observed Smooth Brome (*Bromus inermis*), Western Wheatgrass (*Pascopyrum smithii*), Great Basin Wildrye (*Leymus cinereus*), Bulbous Bluegrass (*Poa bulbosa*), Wyoming Big Sagebrush (*Artemisia tridentata ssp. wyomingensis*), Rubber Rabbitbrush (*Ericameria nauseosa*), Scarlet Globemallow (*Sphaeralcea coccinea*), Alfalfa (Medicago sativa), Cicer Milkvetch (*Astragalus cicer*), and minor amounts of Field Bindweed (*Convolvulus arvensis*) within the wildlife habitat area. Within the dryland pasture area, Smooth Brome (*Bromus inermis*), Western Wheatgrass (*Pascopyrum smithii*), Crested Wheatgrass (*Agropyron cristatum*), Bulbous Bluegrass (*Poa bulbosa*), and minor amounts of Downy Brome (*Bromus tectorum*) was observed.

The vegetative ground cover and species diversity observed during the inspection in both the wildlife habitat and dryland pasture areas were consistent with the data presented in the SL-03 application. The Division observed small amounts of Musk Thistle (*Carduus nutans*) and Scotch Thistle (*Onopordum acanthium*), both are List B noxious weeds. There was no evidence these few observed Musk Thistle and Scotch Thistle plants have been established within the permit area for more than a growing season which likely explains why they are not present in the 2018 or 2019 vegetation sampling data.

Wildlife

During the inspection at Coal Ridge, Bald Eagles were observed adjacent to the permit boundary

along the Colorado River. Previous inspections have documented sage grouse, deer, and pronghorn in the area.

Hydrologic Balance - Evaluation of Hydrologic Impacts Required by Section 3.03.2(2)

Rule 3.03.2(2) requires the Division to evaluate hydrologic impacts prior to releasing reclamation lability. This evaluation must consider whether pollution or surface or subsurface water is occurring and the probability of future occurrence with such pollution. The Division's evaluation is summarized below.

Ground Water Impacts

Coal Ridge had a total of eight ground water monitoring wells and were reclaimed in 1994 and 1995 and ground water monitoring is no longer required. Prior to the reclamation of the ground water monitoring wells, no exceedances were reported in the Annual Hydrology Reports or quarterly monitoring reports. Additionally, based on the limited extent of operations at Coal Ridge, ground water impacts were not expected.

Surface Water Impacts

There has been no record of any discharge or runoff from Coal Ridge as reported in the Division's monthly inspection reports, discharge monitoring reports and Annual Hydrology Reports. As part of the Phase II bond release (SL-02) in 2001, Coal Ridge demonstrated that contributing suspended solids to streamflow or runoff was not in excess of levels determined on adjacent undisturbed areas. Additionally, Technical Revision No. 19 was submitted and approved in 2015 which provided a sediment control plan for reclaimed areas associated with the reclamation of Sediment Pond A. The Sediment Control Plan was designed to prevent an increase in the average annual sediment yield from pre-mine undisturbed conditions. Finally, as documented with the SL-03 inspection, vegetation has established itself and there were no signs of erosion or runoff throughout Coal Ridge.

Findings on Protection of Hydrologic Balance

Based on the foregoing observations, the Division finds that Coal Ridge has minimized disturbance of the hydrologic balance in the SL-03 bond release area and prevented material damage outside the permit area. The Division also finds that Coal Ridge has not caused hydrologic changes that adversely affect the approved post mining land use in the permit area.

Summary and Conclusions

The Division has completed its review and evaluation of the SL-03 Phase III Bond Release and Termination of Jurisdiction application submitted by C. B. Minerals Company, LLC for the Coal Ridge No. 1 Mine. The Division proposes a Bond Release on 45.5 acres of Phase III and termination of the Division's jurisdiction at the Coal Ridge No. 1 Mine.

Based upon a review of the mine permit, the applicant's bond release application, and site inspections, the Division finds that Coal Ridge has completed backfilling, grading, drainage reestablishment, topsoil replacement, revegetation, and all other reclamation requirements for which Phase III Bond Release was requested in accordance with the approved reclamation plan at the Coal Ridge No. 1 Mine. The reclaimed area included within the SL-03 Bond Release application have been restored to the approximate original contour of the pre-mining landscape. Slopes conform to post-mining contours as shown on the approved Post-mining Topography Map of the permit and remain stable to date. Proper blending of reclaimed areas with undisturbed slopes was achieved and reconstructed drainages are stabilized and in good condition. Topsoil has been replaced in accordance with the approved reclamation plan, the areas have been reseeded as required and the bond release areas have been reclaimed for a post-mining land use of dryland pasture and wildlife habitat. Coal Ridge has successfully demonstrated that the cover, production, and species diversity establishment on the Phase III bond release areas meets or exceeds the reclamation success standards on the reference areas. The Division finds that Coal Ridge has achieved the requirements for Bond Release on 45.5 acres of Phase III and termination of the Division's jurisdiction at the Coal Ridge No. 1 Mine.

V. PROPOSED DECISION

Based on the observations in Section IV above, the Colorado Division of Reclamation, Mining, and Safety proposes to approve the Coal Ridge No. 1 Mine SL-03 Phase III Bond Release application. This proposed decision will release the applicant from reclamation liability on 45.5 acres Phase III of the site and terminate the Division's jurisdiction of the lands associated with the Coal Ridge No. 1 Mine, as shown on Figure 1 at the end of this document.

The Division holds a performance bond in the amount of \$43,200.00 for the Coal Ridge No. 1 Mine and proposes to release the entirety of that bond.

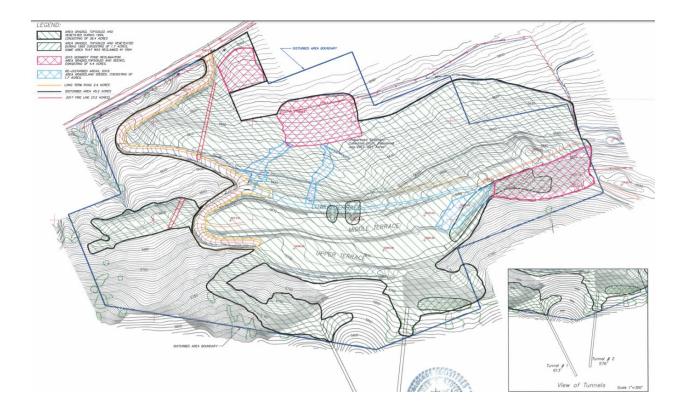
Any person with a valid legal interest which might be adversely affected by this proposed decision may request a formal public hearing before the Mined Land Reclamation Board in accordance with Rule 3.03.2(6). Public notice of this proposed decision will be published twice in the *Craig Daily Press* as soon as possible. Requests for public hearing must be submitted to the Division in writing within thirty days of the first publication in the *Glenwood Springs Post Independent*. If no hearing is requested within those thirty days, the Division's decision will become final.

TABLES AND FIGURES

Action	Liability	Released			
SL-01	\$ 288,000.00	\$ 161,994.00			
SL-02	\$ 126,006.00	\$ 82,806.00			
SL-03	\$ 43,200.00	\$ 43,200.00			
Totals	N/A	\$ 288,000.00			

Table 1. Summary of All Bond Release Dollars

Figure 1 – SL-03 Map



October 18, 2024

Glenn Hartmann, Planning Director Garfield County Community Development Department 108 8th Street, Suite 401 Glenwood Springs, CO 81601

Re: Nutrient Farm Planned Unit Development (PUD) (PUDA-05-22-8899) – Colorado Parks and Wildlife Referral Comments Response

Dear Glenn,

Thank you for forwarding Colorado Parks and Wildlife's (CPW) referral comments to us. We appreciate CPW taking the time to review the submittal material and provide their comments and suggestions. We met with Travis Bybee on May 9 to discuss the Nutrient Farm project and follow-up on the comments. We understand that any type of development has the potential to impact wildlife, and with the mitigation measures proposed in the Nutrient Farm Planned Unit Development (PUD) Guide and those additional measures discussed below, we believe that potential impacts will be minimized.

Since the Nutrient Farm PUD is only a zoning request and neither the timing nor the scope of all of the future potential uses for the property have been finalized at this time, we believe it would be beneficial to keep in continuous consultation with CPW regarding our current and planned activities for Nutrient Farm in a contemporaneous fashion, rather than everyone having to prematurely make presumptions about the future activities. Per our conversation with Mr. Bybee, we all concurred that it would be best for Nutrient Farm and CPW to meet annually, and also meet prior to submitting any site plan applications to the County, so that CPW is apprised of our projects and their comments and suggestions may be incorporated into the design/operation of the specific activity. We believe this open on-going communication and cooperation will be beneficial to the wildlife in the area and we are glad to add this to the PUD Guide.

Overall, the organic and biodynamic nature of Nutrient Farm and the Nutrient Farm Impact Analysis Report are quite complementary to CPW's suggestions. From an operational nature, we are seeking to minimize any potential impacts to the environment and wildlife with our project. Nutrient Farm does not utilize any synthetic chemical pesticides, fertilizers, or transgenic contaminations. In addition, weed management efforts using mechanical, cultural, and biological controls are underway. Many efforts are currently being employed on Nutrient Farm to minimize any potential impacts to the environment and wildlife and many more have been proposed in our Impact Analysis Report related to both aquatic and terrestrial species which be implemented upon the approval and development of the Nutrient Farm PUD.

As mentioned during our meeting with Mr. Bybee, Nutrient Farm is far less intensive and less impactful than the currently allowed Riverbend and Coal Ridge PUDs—either from the perspective of the 123 remaining single-family residential lots that could be built, or of course via the heavy industrial Coal

Ridge mining operation allowance. As noted in the Impact Analysis Report, most of the proposed Development Areas are concentrated on the valley floor, within previously disturbed areas which provide minimal environmental services or habitat for wildlife. An application to formally vacate the Coal Ridge PUD has been submitted to the County and will occur concurrently with the approval and recordation of the new Nutrient Farm PUD.

This will remove, permanently, the very extensive industrial uses which have been allowed within that expansive PUD area for a long time. We have been adamant that any discussion of wildlife impacts must necessarily be viewed through the lens of what is presently allowed, without any further zoning approval and in many cases with little or no further land use review. From that perspective, the benefit to wildlife simply by approving this rezoning is really quite extraordinary, and any additional measures further enhance these benefits.

We do appreciate CPW's concerns over any potential habitat loss or fragmentation, and we are trying to assuage these concerns as much as we feasibly can. We want to improve the overall quality of wildlife habitat on and near the property – it is a fundamental model of our overall operational plan. Multiple measures will be implemented on Nutrient Farm including those regulating the following: garbage disposal and storage, compost piles and dumps, fences, pets, bird feeders, exterior lighting, hours of operation, and a non-toxic weed management plan. (Please see the proposed PUD Guide Wildlife Protection Measures for details.) A Wildlife Mitigation Plan will also be developed and implemented in consultation and cooperation with CPW after the review and approval of the Nutrient Farm PUD.

This Wildlife Mitigation Plan will include specific actions to reduce the impacts to elk and mule deer on a seasonal basis, and also provide habitat improvement and year-round water sources for them. (Please see below for details.) We note that this PUD request is only a zoning request, and no specific uses are proposed at this time. In other words, the PUD only preserves the ability to submit future site-specific use requests to the County for consideration. Inevitably, zoning itself does not present tangible impacts to wildlife; it is the subsequent development activities and uses that pose potential impacts.

Accordingly, the best means to squarely address and abate these impacts is to address the specific development activity when it is proposed and hit it head on – the potential impacts caused by such activities when it is tangibly known when and how such activities will occur. Once the details of the specific request are finalized, additional studies, tests, and specific design recommendations will be prepared based on the final design and locations of the future land uses and only then will a formal application be submitted to the County. (I.e., A wetland delineation and Corps permitting will be required for any improvements near the Colorado River.). Further, as discussed above, we will be in regular consultation with CPW, which means we can all get ahead of the curve in shaping any development, use or activity in the most wildlife astute manner before we even submit.

Cumulative Loss of Wildlife Habitat

CPW notes that the Nutrient Farm property will not be lost to wildlife in its entirety, but that the PUD project will impact existing wildlife habitat – especially elk and mule deer during the winter months. We understand that with all development and increased human activity there are some potential impacts to the native species. It also goes without saying that this is a consideration not in any way unique to Nutrient farm; one need only drive up and down the major thoroughfares in Garfield County, and indeed the entire state, to appreciate the breadth of this concern as development continues to expand. From that vantage point, we feel that our project, which moves away from intensive residential or industrial development and back to a more agrarian model focused on stewardship of the land, is a step in the right direction.

Nevertheless, we still realize that no activity or use can avoid having some impact. We want to abate or mitigate any such impacts as much as we practically can. Thus, in an effort to counter the cumulative loss of wildlife habitat, as noted, we will meet annually with CPW to discuss the then current and upcoming activities planned for Nutrient Farm so we may understand any wildlife concerns CPW may have. We will also meet with CPW prior to submitting any site plan applications to the County, so that CPW is apprised of our projects and their comments and suggestions may be incorporated into the design/operation of the specific activity. A Winter Recreational Plan for each specific use proposed during the winter season will also be developed for site plan review containing efforts to minimize and mitigate any potential impacts to wildlife. For instance, seasonal timing, hours of operation, and location limitations will be considered and habitat improvements and/or the creation of new habitat (on or off-site) and the development of new water sources will be considered based on the proposed activity.

In addition, and as mentioned in our Impact Analysis Report, a Wildlife Mitigation Plan specifically related to elk and mule deer use of the Nutrient Farm property and surrounding area will be developed and implemented in cooperation with CPW. We are proposing to specifically call for such a plan in the PUD and suggest we have a hard date for adoption of that plan, in collaboration with CPW, after the PUD is established – so we can discern per an adopted PUD plan what is allowed and how it will be implemented. It will include specific mitigation measures to reduce impacts to elk and mule deer and provide habitat improvements and year-round water sources for them. These efforts may include the following:

- Winter timing and activity stipulations to avoid and minimize disturbance to elk and mule deer;
- Use of laydown fencing or gates in some areas to allow for habitat connectivity and allow wintertime access to pastures;
- Leaving taller stubble heights in pastures for more grazing opportunities;
- Development of wintertime water sources;
- Creation of designated wildlife corridor areas and also designated activity/recreation areas to usher such uses away from each other; and
- Assistance with habitat improvements and water source development on neighboring BLM lands.

In terms of CPW's additional referral comments and recommendations related to elk and mule deer habitat, as noted by CPW, Private Open Space Area C, approximately 65.40 acres, will continue to be open for wildlife use. Only one single-family home exists (the "Farm House"), and is proposed, on the 42.14 acres of Area 2. Some fencing already exists on Area 2 and a limited amount of wildlife friendly fencing is planned around the home, leaving the rest of the Area 2 accessible. Similarly, a limited amount of fencing is planned in the Outdoor Adventure Park/Area 8. Fencing is intended around the various tracts and runs in the Outdoor Adventure Park, not the entire Area, to protect animals from these areas and minimize any potential conflicts with the activities there. The fencing in such areas will not just keep the wildlife out, it will more importantly keep the users in. No perimeter fencing is planned around Areas 2 or 8, which will help to minimize habitat fragmentation and allow access through the property, including the Western Working Farm/Development Area 6, and to the Colorado River. Thus, wildlife pathways through the property will be provided on a year-round basis connecting the Hogback to the Colorado River.

We believe that through the mitigation measures proposed in the PUD, Impact Analysis Report, and the additional agreed upon terms, annual meetings and pre-application meetings, the creation of Winter Recreational Plans for each winter site plan activity, the preparation and implementation of the Wildlife Impact Report in cooperation with CPW, and fencing details, habitat fragmentation and/or loss has been reduced as much as possible. In that light, and particularly given the baseline of where the incredibly high impact uses that the current PUDs allow, we are confident that there will be no significant, long-term detrimental impacts to wildlife or their habitat. We point to the Impact Analysis Report's findings that state with these measures, the project would not result in significant, long-term detrimental in herd size or significant impacts to habitat. (Please refer to pages 38 and 42 of the Impact Analysis Report for details.) In fact, after a cursory review of other uses and PUDs in the County, we would proudly hold our wildlife measures in this PUD, and the extensive approach set forth herein, against any other PUD or development in the region.

Potential for Ungulate Conflict and Game Damage

Thank you for these comments and suggestions related to elk and mule deer. We welcome any additional comments CPW may have on avoiding potential hay crop damage from the animals.

As suggested, wildlife friendly exclusionary fencing will be constructed around the orchards to keep mule deer, elk, and bears out of them, and as noted above, wildlife corridors will be provided to allow wildlife access through the Nutrient Farm property.

The activities planned for the Outdoor Adventure Park will require many future site plan applications to be submitted to the County for review and approval. Winter activities are planned for portions, not all, of the Adventure Park Area. At this time, no specific activities have been finalized and we will be glad to work with CPW during the development of those plans to minimize conflicts with wildlife and to ensure the safety of our guests. Specifically, prior to any site plan application submitted to Garfield County for review, we will meet with CPW to obtain their comments and suggestions on the proposed activity so that they may be integrated into the final design/operation of the request. Based on the final specific type of activities and their locations, we will consider some sort of winter seasonal timing on

select portions of the property to minimize any potential impacts to wildlife. Similarly, we will consider some sort of winter seasonal timings for the Western Farm/Area 6.

A Winter Recreational Plan for each specific use proposed during the winter will be developed in the future for site plan review and incorporate any pertinent actions of the Wildlife Mitigation Plan, which again will be expressly called for in the PUD. For instance, seasonal, hours of operation, and location limitations will be considered and as discussed with Mr. Bybee, improvements to existing habitat or the creation of new habitat on- or off-site and development new water sources will be considered based on the use. Again, CPW will be consulted with the activity details so that their comments and recommendations may be incorporated into the activity prior to any formal site plan submittal to the County. We will also ensure that part of this plan includes corridors, not just for wildlife but for all activities and recreation in the winter months. In other words, rather than just rely on wildlife corridors, which are less effective in the scarce winter months, we will also delineate corridors for recreation. This can ensure that the potential for human/wildlife interactions, and the related stressors, is abated or at the very least greatly curtailed.

Potential for Mountain Lion Conflicts

The Impact Analysis Report is consistent with CPW's mountain lion recommendations. Educating the Nutrient Farm community that mountain lions are native residents of the area and how to interact with them in case of an encounter is important. We will look into the additional suggestions for livestock protection, particularly during the calving season, through the use of foxlights, guard dogs, or permanent ranch employees since mountain lions could prey on the livestock.

Potential for Black Bear Conflicts

Black bears and the potential for black bear conflicts were also discussed in the Impact Analysis Report. Although not currently in CPW's mapped Black Bear Human Conflict Area, Nutrient Farm will function as such due to the proposed fruit orchards and residential and agritourism uses. The Impact Report found that the PUD will have minor to insignificant impacts on bear populations and habitats and a number of measures are proposed to reduce potential bear problems including those suggested by CPW—the use of residential bear-proof trash containers, fences around fruit orchards, and limitation on bird feeders and pets. (Please see page 50 of the PUD Guide and page 34 of the Impact Analysis Report for specific details.) CPW's additional recommendations for electric fencing, foxlights, etc. to protect the growing crops, livestock protection suggestions (similar to those for mountain lions), the use of bear-resistant trash receptacles/dumpsters with locks on the non-residential portions of the property and education are appreciated and will also be implemented.

Impacts of Additional Recreation of the Nutrient Farm PUD

We understand that increased recreational activities across the State are impacting wildlife—be it hunting, fishing, rafting, hiking, skiing, snowmobiling, or other outdoor activities. As discussed in the Impact Analysis Report, many mitigation measures are proposed and additional ones will be implemented in Nutrient Farm to help minimize any potential impacts to wildlife.

As requested, we will also be glad to conduct an annual inspection of the ponderosa pines on the northeast portion of the property for any new eagle nests. (Per Mr. Bybee, mid-February is the best time of year for this inspection. We will be glad to add this annual inspection as a mandate in the PUD Guide too.) No such nests are there currently, but if any are found, we will work with CPW on mitigation measures and the use of this public trail. For instance, it may be best to install a fence and gate on the Nutrient Farm property to limit access when needed. However, reflective of the complexity always associated with these wildlife issues, but because this trail leads to Bureau of Land Management (BLM) lands further discussions on how best to manage this trail and access should take place, and BLM has some say in the proper solution. This conundrum vividly reflects the challenges we have with wildlife, and why we feel the development of a collaborative plan, and regular follow up meetings with CPW, is the most innovative, flexible, and practical means of ensuring effective wildlife protection remains in place.

We understand CPW's concerns about maintaining the solitude of the Vulcan parcel for wildlife. Per our title commitment research, there are two trail easements of record on the property which are shown on the proposed PUD Plan Map. One is a 25' Private Access Easement granted to the BLM (recorded September 19, 2000 at Book 1208/page 96) and the second is an Agreement between Daryl Richards and the State of Colorado for the use and benefit of the Game and Fish Commission for free public use of a road across the parcel to fishing and hunting areas. (The road is not described in the Agreement recorded June 26, 1963 at Book 351/page 211.)

Also, as suggested, we are glad to provide interpretive signage to help educate the community on the value of the landscape set aside for wildlife and encourage them to stay on established trails.

<u>Boat Ramp/Mooring</u>: In terms of the boat ramp comments, we appreciate those concerns and want to underscore the minimal use ad impact envisioned with such a ramp. The boat ramp is designed as an amenity for residents, guests, and the public by providing a minor access from Nutrient Farm and the lands on the south/eastern side of the Colorado River. The existing Dino Point boat ramp is on the other side of the River and inaccessible to the Nutrient Farm property. The boat ramp is intended as a separate amenity west of the tie up/mooring area near the children's Adventure Farm area. The area behind the restaurant is only a docking area. This is not meant as a major boat mooring or access facility; only as a potential means of minor access limited to the Nutrient Farm area. The very limited parking around this put in area underscores that vision.

We now understand that the Roundtail Chub is a Colorado species of special concern and is listed as sensitive species for the Rocky Mountain Region by the United States Forest Service. Nevertheless, as we have now researched and determined, this segment along the Colorado River is already intensively used by boats and rafts so functionally, from an impact perspective, no new use will be created. However, in order to ensure that we minimize and mitigate any potential impacts to the river system, development of the new boat ramp area will be minimized in scale and operation as much as feasible. A hydraulic analysis will be prepared so as not to create scour holes and sedimentation. Clean construction materials (i.e., non-hazardous/chemicals), best management practices, including temporary erosion control measures, and other construction techniques will be used to minimize sediment into the River. As suggested by Mr. Bybee, construction will not take place during the spring spawning season and fall. In addition, Army Corps of Engineers 404 Permit and County approvals

must be obtained and all conditions of approval must be complied with. Once the boat ramp improvement details are determined, and prior to County site plan submittal, we will meet with CPW to review the request and obtain their comments and suggestions.

With all these efforts, we believe that the River systems and its water quality will not be degraded. However, we want to underscore that we acknowledge what adding this use in the PUD allows and does not allow. We may, per the PUD, merely propose a boat ramp. When we formally apply to construct it, there will invariably be a myriad of concerns over potential impacts our proposal will have to address. This will include any silt and sedimentation buildup concerns, impacts to aquatic life, even potential impacts to otters. We will have to get approval for a ramp via a site specific proposal that will include a detailed design. By consulting with CPW on the design in preparation of the proposal, we can modify that design to try to assuage any CPW concerns. At the end of the road, if we are not able to properly resolve these issues and mitigate such impacts to the satisfaction of CPW and the County, the boat ramp will not be approved. We feel strongly that this is the most astute means of dealing with this issue, rather than trying to address every contingency now based on suppositions and hypotheticals. In that light, we state now, for the record, that we realize and acknowledge that at the time of the actual ramp proposal, the onus is flatly upon us to secure approval.

LoVa Trail: Thank you for the LoVa Trail comments. We were previously aware of CPW's concerns with the trail alignment especially as it crosses over the River. We are only trying to be good neighbors and citizens and provide a connection through Nutrient Farm for what seems to be a greatly needed north-south public trail connection from New Castle to Glenwood Springs, if it is supported and approved by the multitude of public agencies that must review the same, including CPW. Currently, the LoVa Trail is shown on the property to run southwest to the northeast adjacent to CR 335 then east through Area 5/Working Farm/eastern pasture area across the River. We will grant the trail easement adjacent to CR 335 on Nutrient Farm property and an additional northern easement (an alternative alignment, if needed) once the entire LoVa Trail alignment has been determined. The proper location, nature, and constriction of this trail is really the auspice of the LoVa Trail group, CPW and others. We will ensure that the easement we grant is supported by all such stakeholders before the easement is executed. In other words, this is not our trail, and we are simply supporting it and letting it utilize our property interests if and when it is accepted, including via CPW. We will be glad to collaborate with CPW and the trail proponents further on this northern alignment once it leaves the CR 335 alignment.

We want to express our gratitude to Mr. Bybee. He clearly took significant time to thoroughly read the extensive Nutrient Fam PUD application materials, and provided thoughtful, insightful, and useful comments; he also made the significant effort of meeting with us in person for an entire morning to walk through these concerns and explore means of mitigation and resolution. Moreover, he also supports making the effort to develop a winter management plan with us and further meet with us annually to walk through the goings on at Nutrient Farm every year. The end result is a collaborative approach which reflects the incredible potential for public private partnerships to ensure the best stewardship of the land and its native inhabitants, namely the wildlife that we all appreciate in this area.

We believe that through the mitigation measures proposed in the PUD, Impact Analysis Report, and the additional agreed upon terms, annual meetings and pre-application meetings, the creation of Winter

Recreational Plans for each site plan activity, the preparation and implementation of the Wildlife Impact Report in cooperation with CPW, habitat fragmentation and/or loss has been reduced as much as possible and there will be no significant, long-term detrimental impacts to wildlife or their habitat.

Perhaps even more crucial, by ensuring that this is a longitudinal, interactive process, we can make the adjustments that are necessary from year to year as new considerations develop. In closing we would encourage you to think about the stark contrast here. We have a PUD in place, the Coal Ridge PUD, which is industrial in nature, for many decades. Such uses are of course an anachronism and an anathema to the wildlife concerns in the region – as well as the recreational concerns, residential concerns, etc. In place of that zoning faux pas, which was based on an outdated vision for the land, we now have a new PUD far more reflective of a modern vision for the area, but also one that is flexible enough to pivot and deal with issues as they transpire – even if it is decades later.

We believe this is an excellent model for future zoning documents, and we are proud of the effort all parties have put into this effort. Thus, we are aligned with CPW's suggestions as we are seeking to minimize any potential impacts to the environment and wildlife with our project. We will be glad to speak to you, Glenn, or Mr. Bybee further about any of these comments.

Regards,

Danny Teodoru, Esq. Timberline Law

cc: Andy Bruno, Nutrient Holdings

October 18, 2024

Glenn Hartmann, Planning Director Garfield County Community Development Department 108 8th Street, Suite 401 Glenwood Springs, CO 81601

Re: Referral Comments Responses – Nutrient Farm Planned Unit Development (PUD) (PUDA-05-22-8899), Coal Ridge PUD Amendment/Revocation (PUAA-05-23-8898), and Riverbend PUD Amendment (PUAA-05-23-8963)

Dear Glenn,

Thank you for your assistance with our three Nutrient Farm related proposals, and we appreciate you forwarding to us the various referral agency comments that you have received. We appreciate the agencies taking the time to review our PUD materials and provide their comments and suggestions. Certain excerpts of referral comments are provided in italics for reference. We have replied to each of the referral comments below and will be glad to provide additional information if we inadvertently overlooked a comment or did not address a comment adequately.

Colorado Geological Survey (CGS)

Comment Letter dated October 17, 2023 is for all three applications. The Letter references the submittal materials and the proposed residential lots and various development areas. It states:

The 18 proposed residential lots shown on the l/1712023 SGM PUD Plan Map in Area I (five lots), Area 3 (10 lots), Area 4 (two lots), and Area 2 (one lot) do not appear to be exposed to slope-related hazards. The general recommendations in RJ Engineering & Consulting's Soils and Geohazard Evaluation are valid but preliminary.

CGS would like to review the preliminary plat for proposed new residential lots, when available, to ensure that proposed lots or building envelopes are set back a sufficient distance (30 to 40 feet) from the Colorado River 100-year flood hazard limits to minimize risk of damage to homes and yards due to erosion, scour, and undercutting.

Additionally, lot-specific subsurface investigation, consisting of drilling, sampling, lab testing and analysis, will be needed on each lot, once building locations have been identified and prior to building permit application, to develop site-specific recommendations for foundation(s), floor system(s), surface and subsurface drainage, pavements, etc.

We take CGS's comments with great credence and regard. Nonetheless, the fact remains that the reason that RJ Engineering & Consulting's Soils and Geohazard Evaluation are preliminary is specifically because at this very preliminary, big picture macro stage of PUD zoning, there are not the type of site specific considerations at play that subsequent reviews will afford. Zoning does not approve any of the development activities at issue in the CGS comments in and of itself. It simply sets forth the mechanism to get to that point at a later time.

As an overarching consideration for many of these comments, particularly in relation to the conceptual residential lots, we would emphasize that all such lots must first be subjected to the scrutiny of the quite rigorous County subdivision standards, review, and approval; as well as site plan/building permit etc., before there is any outside residential development on site. Under any circumstances, the future lots/building envelopes are planned to be located 30'-40' away from, upslope from and accordingly well above the Colorado River 100-year flood plain. Even beyond said subdivision review, lot-specific soil investigations will be conducted for the future homes' foundation and drainage designs prior to issuance of a building permit for any home on any lot. Further, any formal subdivision application will be referred to CGS for review during the referral process. In light of this extensive procedural and technical safeguard, and the very generic nature of the zoning now proposed, we believe there are no more outstanding items at this juncture related to CGS comments which are not otherwise well suited for site specific review in the future or already addressed in our materials.

Colorado Parks and Wildlife (CPW)

We extend our gratitude to CPW for taking the time to review the Nutrient Fam PUD application materials, provide thoughtful comments, meet with us in person and work collaboratively to come up with functional solutions to the issues noted. We are proud of the initially proposed mitigation measures, the preparation and implementation of the responsive Wildlife Impact Report in cooperation with CPW, and the additional very significant and contemplative mitigation efforts that we have developed in consultation with CPW. All such efforts are oriented around abating or mitigating any concerns over habitat fragmentation and/or loss has been reduced as much as possible and there will be no significant, long-term detrimental impacts resulting in reductions in herd size or significant impacts to habitat.

Please refer to the separate letter addressed to Mr. Travis Bybee for more specific details on this issue.

Colorado River Fire Rescue (CRFR)

Mr. Orrin Moon provided referral comments on October 17, 2023 noting that he was still in the midst of reviewing the material but had questions about the fire protection irrigated water, especially during the winter months. He stated:

...so far after reviewing pages and pages of information, the only thing that I have found that I have an issue with is the fire protection irrigation water. The question I have is will this system be in service year-round? They don't say one way or the other. Irrigation water only runs in the spring and summer. We can still have fires in the winter. I have not found anything about seasonal use on the tourist side of the farm. They have made comments that they have met with me, Yes, a couple of years ago, I told them what I would be looking for. Before I could see the plans. They also advised that they adhere to my requirements.

I am still working on this referral and going through all the documents. Please let me know when you need my referral on this project.

We appreciate Chief Moon's comments. On November 11, 2023 Dave Kotz of SGM met with Chief Moon reviewing the project and his comments. Additional information was sent to Chief Moon and we did not receive any additional questions or comments from him. We believe the initial questions/concerns have been adequately addressed.

Once the PUD is developed, fire flow needs will be met through potable and raw water storage or water supplies and infrastructure sizing. A potable water system with hydrants will be provided as shown on the water and sewer plan. For those portions of Nutrient Farm served by its own water systems, multiple dry hydrants connected to the irrigation and recreational water ponds will be installed thought the property for emergency use by the CRFR. Raw water hydrants can be available year-round if deemed beneficial in certain areas or for temporary conditions.

Mountain Cross Engineering

Mr. Chris Hale provided referral comments for all three applications on October 17, 2023. "No comments were generated" for the Coal Ridge PUD Amendment/Revocation and the Riverbend PUD Amendment, and 20 comments were provided specifically for the Nutrient Farm PUD. Those comments and our responses have been provided below. Thank you to Mr. Hale for taking the time to review the submittals' material and provide comments and suggestions. We believe all have been adequately addressed.

Specific to the Nutrient Farm PUD:

1. The development will essentially be on a dead-end road with only one access for emergencies. The Applicant should evaluate interior roadways circulation to allow for alternative routes in cases of emergency.

While the public road system entails only one road, as it always had since the high density residential development of Riverbend, Nutrient Farm's internal public drive system and its private farm roads may all be used as alternative emergency accesses routes to bypass portions of CR 335 in the case of emergency. Moreover, Storm King Road in the adjacent Riverbend Subdivision Filing No. 2 extends into the property and serves as the existing driveway connection for the Farm House in Area 2 on the eastern portion of the property. This will only be used by the Owner/Developer for direct access to and from the Farm House to the Eastern Working Farm, not as an alternative public throughway for everyday use. However, should the fire department/emergency services or the public need it, the driveway may also serve as emergency access connecting Storm King Road and the existing residences to the internal public and farm roads and eventually to CR 335.

The proposed PUD will also enhance the means of access to the Colorado River, which can also be a crucial consideration in an emergency circumstance. In summary then, this proposed development not only improves the emergency access concerns for its own Property area, but it can also significantly improve the circumstances for the entire area, on what has always been a baseline challenging logistic.

Moreover, if at some point other public entities are able to implement their plan to build a bridge for the LoVa Trail across the Colorado River on eastern portion of the property, Nutrient Farm will be glad to give an emergency access easement for public use across the property in the LoVa Trail corridor and over this bridge as an alternative means to cross the Colorado River near I-70.

2. The Applicant proposes 12% maximum grade however this is generally too steep for fire and emergency vehicles. Maximum grade should be limited to 10% especially considering that most of the roads are proposed to be gravel. Roadway construction plans and profiles should be submitted to Garfield County for review to obtain grading permits for road construction.

We will be glad to revise the proposed Nutrient Farm PUD Guide text to indicate a 10% maximum grade for the private roads rather than the proposed 12% maximum grade. (The private roads were the

only types of roads proposed to exceed the 10% grade.) With that now offered, we would be remiss not to note that per Table 7-107 of the County Code, Rural Access Roads, Primitive Roads, Driveways and Public Lands access roads are all allowed a 12% maximum grade. Most of the roads of higher grades throughout Nutrient Farms will fall under these categories, and thus will be well within the allowed scope of the Code. For all potential residential areas, all oriented much closer to CR 335 and thus on much more gentle slopes, the grades will be significantly less than the Code maximums in place.

3. The Applicant should provide the required CDOT Access permit for increased traffic.

We contacted Mr. Brian Killian, Colorado Department of Transportation (CDOT), on November 1, 2023 and provided our CDOT Level III Traffic Impact Study to him. On November 15, 2023 Mr. Killian responded to Dan Cokely, SGM, that: *CDOT will not require an access permit for this development*.

In the nearly one year since that point in time, both County Planning Staff and the development team have sought follow up communication with CDOT to ensure there were no additional comments or concerns. To our knowledge, to date, no party has since received a response from CDOT, either written or verbal. Under such auspices there is no reasonable course of action but to proceed off the actual, direct indications that CDOT did in fact provide. Further, there will be ample means for follow up and additional CDOT input as this development progresses, via the review process in place for each of the many specific elements of development at Nutrient. This is arguably a much more astute point for any such input anyhow, as the specifics of each particular phase of development can be specifically addressed and resolved in much greater detail in a contemporaneous manner.

4. The Vulcan Ditch is proposed to be a potable water source delivered across the river in a suspended pipeline. The Applicant should better discuss provisions for winter. Typically, ditches are shut-down during the winter. Is the river crossing proposed to be used through-out the year? Are there provisions for heating the pipe to prevent freezing? Alternatively, is the pond to be filled in the fall to last through the winter? How large will the pond need to be to provide sufficient volume for potable water and fire storage?

The Vulcan Ditch will consist of buried 24" and 18" fused HDPE pipeline with 3' minimum cover capable of delivering wintertime flows if needed. The river crossing may consist of an insulated aerial crossing or an HDD bore. That said, the primary plan at this time is to use the ponds shown to provide wintertime water. For perspective on volume, at full-buildout of the PUD Nutrient Farm will need about 16.2 acre-feet of water for November – March. This equates to an average flow rate of slightly less than 0.06 cubic feet per second (cfs). A fire event volume could be 1,500 gpm for 2 hours which is 180,000 gallons or 0.55 acre-feet.

Moreover, while irrigation in the winter might be more challenging, farming and thus demand for irrigation is also quite a bit more challenging in the winter. Accordingly, the plans for wintertime use ensure that there will be adequate storage even in the hardest of climate conditions, and particularly at this initial juncture of the project when most of the water usage is farming oriented. If and when the residential element of this project proceeds, we plan to and have acknowledged that there will need to be some more centralized water system serving such residential needs.

5. The geo-hazard letter suggests that geo-hazards can be mitigated through engineering but stops short of recommending mitigation measures. Site specific, geotechnical, geo-hazard, and slope analysis should be conditions of building permits.

Additional site specific, geotechnical, geohazard and slope analysis will indeed be provided in the future for County review and approval in association with the applicable building permits, as well as during the future land use review processes that will pertain to each particular element of Nutrient Farm when that aspect actually moves forward with development. The PUD and the Garfield County Land Use and Development Code (LUDC) both already call for such analysis at the proper future point in time. Currently, no final building locations or designs have been prepared; consequently, there is no site specific analysis to provide.

6. The site will need to obtain a stormwater permit from the CDPHE for discharges associated with construction. A copy of the permit should be provided to Garfield County once obtained.

Agreed. A copy of the permit will be provided to the County prior to construction occurring pursuant to the PUD and meeting the one-acre disturbance threshold.

7. The application materials identify that there are ephemeral drainages that bisect the proposed PUD. These drainages should be identified on the PUD map and a drainage easement placed on them to protect them from disturbance.

The two larger ephemeral drainages that cross the land from south to north, draining into the Colorado River will remain undisturbed with existing crossings in place. Fortunately, the entire Nutrient Farm property is owned by a single entity, Nutrient Holdings LLC. Nutrient Holdings plans to develop the Nutrient Farm property as a cohesive community and has no intention of selling off any portions of it to others to be developed. No development is planned or permitted in the PUD upon or directly adjacent to such ephemeral drainages. It is also important to stress that these are ephemeral drainages with no wetland or riparian characteristics. They will be integrated into the plans for the future uses and the grading and drainage plans for those uses and/or structures on the property. Invariably, all PUD standards and all County Code requirements will be met. In light of such considerations, there is no practical purpose or function to plating easements on one's own property. Nevertheless, we are happy to instill additional language into the PUD which states that all development in Nutrient Farm shall avoid the existing ephemeral drainages to the greatest extent practicable and shall adhere to all LUDC standards related to such disturbance. This should effectively assuage any concerns over such drainages, even if the property wasn't owned by a singular entity for a cohesive use.

8. The application materials propose to treat storm water prior to discharge per the Impact Analysis provided although neither a drainage plan nor an erosion control plan was provided. Site specific grading and drainage plans for building permits should be conditions of building permit. A regional drainage plan should be considered to coordinate drainage and erosion control from multiple potential building sites.

As suggested, a regional drainage plan will be developed to coordinate drainage and erosion control on the Nutrient Farm property. This PUD request merely pertains to zoning, and thus future uses. In other words, it does not provide any direct approvals to allow for any specific uses to be constructed or operated; rather, only the ability to propose a use in the future. Future uses will be subject to special review on several levels by the County before they commence. We anticipate that site specific grading

and drainage plans will be required by the County for review and approval prior to issuance of any building permits, and we are glad to abide by this requirement.

9. The noise study proposes that mitigation measures will be in place prior to events. During the first events that are scheduled, the Applicant should verify the actual sound levels against the assumptions that were used in the noise study. Mitigation measures should be verified and/or revised based on actual noise levels.

It is our intent that any sound emanating from the recreational, entertainment or commercial activities will be properly mitigated and controlled and noise impacts avoided and abated. This PUD request does not provide any direct approvals to allow or any specific uses to be constructed or operated; rather, only the ability to propose a use in the future. Future uses will be subject to special review on several levels by the County before they commence, reviews that can effectively address sound impacts as well as a wide array of other impact concerns.

As mentioned in the Narrative, we wish to be good neighbors and minimize the sound generating from the property. To that end, our proposed locations for the potential events do and will always take into consideration the most appropriate spot on Nutrient Farm itself as well as other effective mitigation measures. For example, the location of the performance center is on the upper western reaches of the property, far from any residences and naturally shielded by topography. Furthermore, sound modeling was conducted, and Sound Standards and requirements were drafted into the proposed PUD Guidelines to protect the surrounding properties. We consulted with sound and noise professionals in setting forth such standards in the proposed PUD. Any future uses that could possibly generate noise are required to submit an additional formal application to the County and be reviewed through the Major Impact Review process (i.e., the Outdoor Music and Entertainment venue and the Motor Sports Center (aka "OHV Park"). A specific Sound Standards section was included in the PUD Guide which states:

...In order to minimize any potential sound impacts to adjacent properties, future sound studies shall be provided to the County for review and approval for site specific development or use requests that could potentially necessitate mitigation means at the time of County review of those requests.

Such development may include such contemplated uses and the Motor Sports Center and the Outdoor Music and Entertainment areas....

The sound levels shall meet all applicable County requirements and Colorado Revised Statutes...

Sound mitigation techniques shall be utilized by the Owner/Developer, as needed, in order to minimize any potential impacts to adjacent properties; and may be specified as requirements via any County approval related to such development and uses.

In terms of the Motor Sports Center (aka "OHV Park"), our intent is to provide only 100% electric vehicles initially at the Motor Sports Center (aka "OHV Park") that will not create a sound disturbance to the neighbors. If after future sound testing and modeling, it is found that gasoline vehicles can meet County/State standards, they may be used.

We believe that with proper sound planning and mitigation, such as varying the speaker intensity, speaker orientation, the construction of wall/berms/landscaping barriers, hours of operation, natural and designed shielding and screening, and other mitigation strategies, future outdoor venues and

activities can satisfy all County/State sound level requirements and will not be a nuisance to the surrounding properties. (Please refer to the Report, Impact Analysis Report, narrative, and PUD Guide for details.) We will be glad to work with the County at the time of site plan review and implementation to verify the future use specific mitigation measures are working the way they were intended and modify those mitigation measures if and as needed.

10. The Traffic Study recommends that parking and traffic control be employed for larger events but does not distinguish between small and large events. The Applicant should provide better guidelines for distinguishing between small events and those that require traffic control.

The Traffic Impact Study does not differentiate between small or large events but considered 350 individuals as the threshold for the music events in the Proposed Development Land Uses Table on page 2. (Not all Nutrient Farm Events will have this many persons in attendance). The Traffic Impact Study recommends that although the CR 335 and Bruce Road intersection and CR 335 accesses are able to operate adequately during the projected Music Festival traffic volumes, those events should have either Uniform Traffic Control or Certified Traffic Control supervision. Those controller locales will be at the CR 335 and Bruce Road and CR 335 and event accesses intersections to provide safe operations during the peak entry and exiting periods of the events. (Page 1, summary.)

Thus, under the Temporary Parking Plan section III. C.3. in the PUD Guide, a Temporary Parking Plan is discussed and it is noted that a short-term non-permanent temporary parking plan on the Nutrient Farm property will be implemented for **all** Nutrient Farm Events, including those with an expected attendance of 350 persons or more. It also states that for Nutrient Farm Events, either Uniform Traffic Control or Certified Traffic Control supervision at the County Road 335/Bruce Road intersection, as well as at all CR 335 access into the property will be provided at peak entry and existing times.

However, later in the PUD Guide, under section III.H.5. Specific Land Use Standards, Nutrient Farm Events are defined and further regulated. It specifically states, *All Nutrient Farm Events with an expected attendance of 350 persons or more shall comply with the Temporary Parking Plan contained within this PUD Guide*.(Please see pages 19 and 28 of the PUD Guide for details.) We point to this provision to assuage any concerns over what would transpire in "smaller events. We see the discrepancy and confusion inadvertently created and the Temporary Parking Plan subsection d. of the PUD Guide will be revised to clarify and resolve this concern. The new language will indicate that all Nutrient Farm Events will employ the Temporary Parking Plan but only those Nutrient Farm Events with an expected attendance of 350 persons or more will utilize the recommended traffic control measures. The threshold of 350 people is not grabbed from the air; rather it is consistent with recommendations and determinations presented in the Traffic Impact Study and it is also similar to the 350 individuals specified in the Garfield County Land Use and Development Code definition of Public Gatherings.

We believe that threshold trigger of 350 guests is not large compared to other uses or activities, at Nutrient Farm or throughout the County. For instance, any student school day attendance, football and basketball events can easily generate well beyond 350 persons or more and do not provide traffic control supervision, or really any contingency plan whatsoever. A party at an individual home can have scores of people attending without a singular safeguard. Churches, especially during the holiday seasons, most likely have large attendances and do not provide traffic control supervision. Many bar and restaurants well exceed 350 patrons over the course of an evening.

In rather stark contrast, as noted in the Study, the music events in question have very significant safeguards to ensure that any notable level of attendance will not degrade the operation of the road and entry/exit will only take place for a brief period of time. In fact, we naturally hope that our daytime operations during orchard season etc. will have a significant level of attendees. Yet, these attendees will likely be during different times than the music events we contemplate. Also, we have much more ample parking than most businesses, and thus we are highly confident that the impacts on traffic and parking will be quite seamless in any circumstance.

11. The PUD guidelines propose no setback restrictions for porches, decks, slabs, etc. These items are often constructed and conflict with drainage features or easements that are intended to be in the setbacks. The Applicant should restrict these items in the setbacks or five feet from the property line when easements or drainage is anticipated.

The proposed Table 4 of the PUD Guide will be revised to require a 5' setback from all property lines for Minor Accessory Improvements. The PUD Guide Table 4 mimics Section 3-202.F. General Restrictions and Measurements – Table 3-202: Projections which states there are no restrictions for atgrade uncovered porch, slab, patio, walk, steps and porches and decks less than 30" in height:

F. Projections.

Every part of a required yard shall be unobstructed from ground level to the sky except for projections as shown in Table 3-202.

Table 3-202: Projections						
Type of Feature	Allowed Encroachment into Setbacks					
	Front Yard	Side Yard	Rear Yard			
Architectural Features (e.g. Cornice or sills)	1 Foot	1 Foot	1 Foot			
Roof Eave	18 Inches	18 Inches	18 Inches			
At-Grade Uncovered Porch, Slab, Patio, Walk, Steps	No Restriction	No Restriction	No Restriction			
Fire Escape, Balcony (Not Used as Passageways)	4 Feet	18 Inches	4 Feet			
Porch and Deck (Less Than 30 Inches in Height)	No Restriction	No Restriction	No Restriction			

12. The application materials do not provide a water quality analysis nor a four-hour pump test for the well for the farm house. This should be provided to Garfield County for review.

This PUD application is a zoning request rather than a preliminary subdivision plan. These materials will be provided as part of the subdivision process as required by Garfield County Land Use and Development Code.

We understand this comment refers to the Area 5 farmhouse well. In addition to the Working Farm East, Area 5 is also slated to have a farmhouse. The residential lot in Area 5 may be served by a new well or it may be served by the Vulcan Ditch. If the Area 5 farmhouse will be served by a well, a well test will be completed at the time of construction. If the Area 5 Farmhouse is served by a well, Nutrient Farm will obtain an exempt well permit associated with the existing parcel prior to subdividing that parcel to create the small 1+ acre Area 5 farmhouse lot. As part of the subdivision process, Nutrient Farm will be required to submit a four-hour pump test and water quality tests for the Area 5 farmhouse well.

13. The Applicant should verify that the Riverbend Water and Sewer Company (RWSC) is in good standing with CDPHE.

We have recently contacted RWSC and Colorado Department of Public Health and Environment (CDPHE) to see what they could tell us. RWSC reports no known issues. Monica Huacuja Espinosa of CDPHE reports ...*the PWSID for RIVERBEND WATER AND SEWER COMPANY is CO0123679 and they have no violations or inspection deficiencies that are currently open and the last violation for this system was in 2019.* SGM checks for wastewater permit number COG590006 revealed only one exceedance back in 2018. Should Nutrient Farm decide to plat the residential lots, both the water and sewer systems will have to be operating satisfactorily.

14. The Applicant provides a will serve letter from the RWSC but an agreement still needs to be negotiated and finalized between the parties. Evidence that the parties have reached an agreement should be provided.

Should Nutrient Farm decide to plat the residential lots, the agreement will be finalized during that effort. As mentioned in the PUD Guide, the residential homes in Areas 1, 3, and 4 are planned to connect to the existing Riverbend Water and Sewar Company (RWSC) facilities and a Will Serve Letter has been provided confirming capacity and ability to serve those future homes.

It is atypical for any water district to offer a formal will serve letter or a formal inclusion agreement prior to any actual development being proposed. It is never required to reach that level of formality at the point in time that zoning is proposed. Thus, it is in part to protect such water districts, as once they issue a will serve letter, they have committed a portion of their finite water supply to a development that is no more than merely zoned to potentially allow such uses in the future.

Imagine if any undeveloped area zoned for high density residential mandated a will serve agreement while such areas remained undeveloped. It would create an unmanageable scenario. Such is thew case with this PUD. The commitment that we have secured with the RWSC is all they are willing to give and all that is ever required at this juncture (again, simple zoning). This is also directly in line with the Code provisions on water and sewer at this juncture. Ultimately, if and when we wish to develop the residential subdivision as planned, we will have to show proof of a committed water supply prior to recoding a final plat. Of course, this is also what the RWSC letter stipulates.

Ultimately, a formal agreement will be negotiated and finalized with the RWSC, if hopefully the proposed PUD has been reviewed and approved by Garfield County, and a subdivision proposal or other land use approval is applied for in association with any development applications/building permits for uses that plan to utilize the RWSC systems (i.e., subdivision applications.) It would not be prudent for us or the RWSC to enter into an agreement without County and other referral agency comments until we better understand capacity and any other requirements related to infrastructure improvements for any type if system connection, be it one building or 10 homes. If it is later determined to be physically or financially unfeasible to connect to the systems, these units must demonstrate proof of an adequate, legal, and viable alternative water system prior to being constructed. Such structures, based on any such concerns, may even be modified and/or relocated to other areas in the PUD or alternative water and sewer systems provided for them in accordance with the standards of the LUDC and Colorado Law. All submittal requirements and studies will be provided to the County and disseminated to all agencies including the State Division of Water Resources for review and approval. (Please see page 6 of the PUD Guide for this same information.)

15. Fire flow storage is inadequate from the water storage tanks of the RWSC by current standards. The Applicant should verify how this will be addressed.

All fire flow needs will be met through potable and raw water storage or water supplies and infrastructure sizing. Specifically, for those portions of Nutrient Farm served by its own water system, we will have multiple potable hydrants and dry hydrants connected to the on-site cisterns or irrigation systems. Moreover, recreational water and detention ponds will be installed throughout property for emergency use by the CRFR.

The new residences in Development Areas 1, 3, and 4 are planned to connect to the nearby Riverbend system. Numerous fire hydrants are located throughout the existing Riverbend subdivisions. The existing Riverbend potable system provides about 50,000 gallons of storage augmented by a 115 gallons per minute (gpm) supply flow from their wells. Should Nutrient Farm decide to plat the residential lots, the intent is for Nutrient Farm to add a 150,000 gallon potable storage tank to bring the fire storage component up to municipal standards as new residential lots are platted in Areas 1, 3 and 4 in exchange tap fee credits. New fire hydrants from 8-inch diameter lines will be placed as necessary so that each new residential lot is within 250 feet of a hydrant. Ultimately, a functional Code compliant fire suppression plan will be a mandated element of any such subdivision if and when it is reviewed.

16. The Onsite Wastewater Treatment System (OWTS) for Areas 6-2 and 6-3 will be very large and require CDPHE approvals. It appears that the RWSC waste water treatment plant (WWTP) is nearby. The Applicant should discuss if connection to the WWTP is feasible.

Agreed. The OWTS systems will be permitted with CDPHE. The referenced OWTS locations substantially exceed the 400' threshold listed in LUDC 7-105 B.2.a. and Nutrient Farm does not wish to connect these systems to RWSC facilities.

17. The OWTS flows assumes a restaurant that is open for I or 2 meals but with tent and RV camping nearby and the many uses proposed, it is feasible that the restaurant would also serve breakfast. The size of the OWTS should be verified based on these flows.

Design flows will be verified/refined prior to design of the system in the future. The scope of allowed operations of the restaurant will naturally be restrained by the functionality of the systems servicing the restaurant, including OWTS.

18. There is an OWTS proposed for the swimming pool. Typically, pool disinfection is an issue for bacterial valuable for a healthy OWTS. The Application should discuss if an OWTS is the best method for disposing off the pool wastewater or discuss measures to be employed for protection the OWTS.

Pools will not be drained to OWTS. Any chlorinated pools will be dechlorinated to safe levels before being drained.

19. The proposed bunkhouses will require approvals from Garfield County and submittals will need to address adequacy of sewer, water, and traffic.

This is understood and is specifically noted in the PUD Guide as Footnote 4 under Table 1/Development Areas, Private Open Space Tracts and General Land Uses Summary. It states:

Bunkhouses for seasonal and full time agricultural employees and On-Site Employee Housing units for employes of Nutrient Farm may be constructed in these Areas. These units are not mandated inclusionary housing under the LUDC, nor shall any provisions of such be applied

to them, but such housing may be recognized as operative employee housing as a public benefit accordingly. All necessary applications studies and reports shall be submitted to Garfield County for review and approval prior to the construction of any of these units including, but not limited to, the provision of water and wastewater, vehicle trips, and other infrastructure improvements. No modification to this PUD Guide shall be required.

Page 2 echoes this requirement for not only the bunkhouses/employe housing, but any future uses beyond that included in the PUD Guide and shown on the PUD Plan Map:

Any future use or expansion of any uses/buildings beyond that included in this PUD Guide and shown on the PUD Plan Map shall be reviewed and approved by Garfield County per the appliable development review and permitting process. All necessary studies and reports, including any updates to the Nutrient Farm Level III Traffic Impact Study, Water Adequacy Report for the Proposed Development Central Water Distribution and Wastewater Systems Report and OWTS Engineering Report shall be submitted to the County for review and approval. Any additional infrastructure, road improvements, and/or impact fees associated with the use or expansion shall be remitted to Garfield County at that time.

20. The application materials do not address potable water usage and sewer facilities for the large events. The Applicant should discuss what is anticipated.

Nutrient Farm is aware the OWTS capacity can be exceeded for these events and will bring in additional portable restrooms as needed. Water can also be brought in for convenience during larger events. Formal provisions will be provided in the future applications to allow such uses, and this issue will be addressed well before any such uses are allowed or take place.

Garfield County Public Health/Environmental Health Department

Mr. Ted White provided a response to Mr. Glenn Hartmann on October 11, 2023 indicating he had a few questions for Mr. Hartmann regarding the project. We are not aware of any additional comments from the County's Public Health/Environmental Department and assume they are comfortable with the three applications.

Colorado Department of Transportation (CDOT)

As requested by Mr. Brian Killian, the CDOT Level III Traffic Impact Study for Nutrient Farm was sent directly to him for review on November 1, 2023 by Dan Cokely, SGM. On November 15, 2023 Mr. Killian responded that: *CDOT will not require an access permit for this development*. (A copy of that email has been attached for reference.) Please see the comments above for further thoughts on CDOT.

US Army Corps of Engineers (Corps)

The Corps responded to the referral request on September 18, 2023 indicating that they did not have the ability to provide project-specific comments. We take this to mean that since no specific improvements are proposed or will be approved with this PUD zoning request, they had nothing to comment on. The response notes that a permit must be obtained for discharge of dredge or fill materials into jurisdictional waters of the United States which requires such waters to be navigable and potentially includes rivers, streams, lakes, ponds, wetlands wet meadows, seeps, and some irrigation ditches. The response suggested a delineation of aquatic resources be prepared.

As noted in the PUD Guide and Narrative, the Colorado River runs through the northern portion of the Nutrient Farm property. Although no formal wetland delineation took place for this PUD request, based on in-field inspection of the plants and soils, sparce and discontinuous wetland/riparian vegetation exits along the bank of the Colorado River. No wetlands extend beyond the immediate vicinity of the Colorado River's channel. In connection with any future site plan request for any activities or improvements near the Colorado River, a wetland delineation will be and must be prepared in accordance with Section 404 of the Federal Clean Water Act regulations, as well as the County Code, and any applicable permits will be obtained from the Corps and/or County.

Colorado Department of Public Health and Environment (CDPHE)

On September 18, 2023 CDPHE responded via email to Mr. Hartmann about the three applications by providing two links – one for their general comments and one related to oil and gas. They also stated that they will continue to review the request to determine if any additional comments are necessary, and if so, submit them by the referral deadline.

The live links were not available to us and Staff indicated that the links only provide generalized information. Since no additional referral comments were received, we can only presume that CDPHE has no concerns with the application.

We note that water and wastewater services will be provided to Nutrient Farm in a variety of ways through the construction of multiple on-site systems for agricultural, recreation, and commercial uses or connecting the nearby private RWSC facilities for the new residential uses. No County or municipal water or wastewater services are sought. The systems for the homes will be either constructed for that specific home or be centrally connected to the adjacent public systems. The remainder of the property will work as one holistic, uniform operation under one Owner/Developer. (The PUD Guide, pages 46 and 47 specifically address the water and wastewater disposal systems for the various Development Areas in Nutrient Farm.). Any internally operating public water system in the future will invariably have to comply with the CDPHE guidelines and regulations for a public water system. All wastewater must meet State and County OWTS standards.

The ultimate water systems' design and treatment requirements will depend on each water systems' designation – public or private for the various uses – and inevitably all local and State required drinking water and water quality and quantity standards will be followed and exceeded. The intent is to start with private on-site systems and then convert to public water systems as needed when required operationally. (Please refer to the Water Adequacy Report, Central Water and Distribution and Wastewater Systems Report, and the Water and Sewer Plan provided in the submittal materials for details.)

We have been working with Ms. Kate Morell of CDPHE regarding the water program for Nutrient Farm. Nutrient Farm does not require its own Public Water System at this time. We will of course continue to do so as the development on Nutrient Farm evolves, and the water use profile evolves along with that development. This will invariably be an ongoing process, not a snapshot in time at any point. As noted before, no specific uses are requested or will be allowed with this PUD, rather the PUD is only a zoning document and future site specific approvals must be obtained from the County for any specific uses.

Colorado Department of Water Resources (CDWR)

Ms. Megan Sullivan from the CDWR provided referral comments for the three applications on July 17, 2024. The comments very astutely note that the PUD application is a zoning request rather than a preliminary subdivision plan and that not all of the proposed allowed uses may be constructed. As we discussed with her, additional permitting will be required for each of the individual proposed uses.

No specific concerns regarding our submitted Water Adequacy Report or adverse impacts to downstream users were raised by CDWR. The existing water rights and the water demands for the various proposed uses and systems are reviewed and information on the intended well permit for the residence in the Work Farm East is provided.

CDWR did include a comment about the permitting process for the proposed exempt well for the Area 5 farmhouse:

The applicant should be aware that in order to qualify for an exempt well, at the time of application and permit issuance the parcel where the well would be located cannot be included in subdivision of land approved after the Colorado River was determined to be over-appropriated (May 22, 1981) and, in order to serve more than one single family dwelling, the parcel must be more than 35 acres in size. If an exempt well permit is obtained and the well is constructed on a parcel greater than 35 acres before its subdivided, the well could possibly be allowed to continue to operate under the exempt well permit.

We appreciate this clarification regarding the order of operations of the permitting process. Area 5 is currently part of Garfield County Parcel ID 212335300081, a 236.939 acre parcel. The proposed Area 5 Farmhouse Well would be the only exempt well on this parcel per the PUD development plan as proposed. Applicant would apply for an exempt domestic well permit for a parcel of land of 35 acres or larger (associated with the current ~237 acre parcel) prior to subdividing the parcel to create the smaller ~1 acre farmhouse lot, should we proceed in that route in the future.

It is our understanding of Senate Bill 20-155 and Colorado Revised Statutes Section 37-92-602 (3)(b)(III - IV) that if the land on which the exempt well is subdivided and "the well is used on only a single parcel of the divided land and remains the only well serving that parcel" and other provisions are followed, the presumption of no material injury is not lost. After subdivision, the Area 5 farmhouse well would remain the only exempt well on the original parcel. Ultimately, this is all an exercise in supposition at this time, as the land is not being subdivided, and we are only dealing with the issue of the overarching PUD zoning for the Property. But the safeguards are surely in place for the future however the farmhouse well issue plays out.

As CDWR stated, this exempt permitting process will require review to ensure all provisions are met, and it is therefore not *certain* whether the exempt well permit can continue with the smaller \sim 1 acre parcel after subdivision. As such, Nutrient Farm has prepared for the possibility that augmentation may be needed for the Area 5 farmhouse well. As stated in the September 2020 Water Supply Report, the annual consumptive use of indoor demands for the Area 5 farmhouse to be supplied by a new well is 0.07 AF. While this new well will likely qualify as an exempt well (would not require augmentation), Nutrient Farm has conservatively set aside 0.07 AF of Vulcan Ditch HCU credits for this use in the event that the credits are needed to augment the well uses.

CDWR also noted in its comments letter that in a dry year some of the irrigation uses may need to be curtailed:

During the late irrigation season of dry years, the Canyon Creek physical and legal supply is sufficient to provide for the peak hour potable demands. However, dry year supply available for non-potable demands may be limited to the 5.36 cfs in the Vulcan Ditch first priority. This 5.36 cfs is sufficient to meet max day demand but may require some irrigation reductions or storage to meet peak hour demand.

Nutrient Farm understands in dry years it may have to use storage and/or prioritize its irrigation needs and will certainly curtail irrigation uses if conditions warrant.

We would like to point out that in these situations, Nutrient Farm also has the legal and physical ability to divert its Vulcan Ditch rights from their decreed alternate point of diversion from the Colorado River at the Coal Ridge Pump and Pipeline (Case No. 84CW349). While Nutrient Farm prefers to take its Vulcan Ditch water from Canyon Creek (due mainly to the superior water quality of Canyon Creek over the Colorado River and the lower carbon footprint offered by the gravity fed pipeline from Canyon Creek over pumping from the Colorado River), Nutrient Farm does have the ability to pump from the Colorado River if physical supply is limiting on Canyon Creek. Inevitably, no pun intended, we will cross that bridge if and when we come to it.

We appreciate Ms. Sullivan's comments and understand that any future proposed uses will be reviewed in detail.

Middle Colorado Watershed Council (MCWC)

Middle Colorado Watershed Council (MCWC) provided comments for the Nutrient Farm PUD request dated July 27, 2023.

We hope that Nutrient Farms will make their best effort to make sure adequate water stays in canyon Creek during glow flow conditions. The benefits of fish passage structure and ditch enhancement projects will be reduced if stream connectivity is lost. Rebuilding the Vulcan Ditch at its historical location with full use of the available water rights could divert instream flows out of Canyon Creek and impact the creek aquatic ecosystem and the drainage watershed.

MCWC encourages Nutrient Farms to provide voluntary bypass flows of half the water rights during low flow conditions to mitigate the potential impacts of restarting the Vulcan Ditch. Full use of the Nutrient Farms' Vulcan Ditch water right at the current headgate location has the potential to dry up and create a connectivity gap in Canyon Creek. During low water year conditions, Nutrient Farms could consider switching to the existing Coal Ridge Pump and Pipeline as an alternate point of diversion on the mainstem Colorado.

We appreciate MCWC providing these comments for the Nutrient Farm PUD request and the work MCWC is doing to protect and enhance the health of the Middle Colorado Watershed for all users and the environment.

Nutrient Farm has the legal right to divert its full ownership of 8.93 cfs in the Vulcan Ditch, but this diversion will not – and cannot – occur continuously. While Nutrient Farm has the right to divert this full amount at any time, it is important to understand that it will not be diverting this full right at all times, and in fact the pattern of such use is limited by the consumptive use limitations articulated in its decrees. Case No. W2127 changed the use of the Vulcan Ditch first two priorities and quantified the historical consumptive use. Of the Vulcan Ditch 440 acre-feet per year of historical consumptive use quantified in W2127, 393 acre-feet per year is now owned by the Farm and available for use in the

Farm's water supply – completely outside of the PUD or any use or development addressed therein. The existing water rights and usury rights to the same remain agnostic to the zoning change, and do not hinge on PUD approval in any way. Nevertheless, the 393 acre-feet annually of consumptive use limits Nutrient Farm's depletions, and therefore limits its diversions. If Nutrient Farm were to divert at the maximum rate of 8.93 cfs, it would only be able to divert for 35 days a year to meet its demands and reach the consumptive use limitation (the number of days at this rate varies throughout the year - 10.6 days in July, 0.2 days in December, etc.). Alternately, if Nutrient Farm were to divert at a constant average rate to meet its demands and consumptive use limitation, this would be roughly 2.9 cfs in July, and 0.05 cfs in December, with an average rate over the year of 0.86 cfs. The actual diversion rate will reflect a balance of storage and instantaneous diversions to meet demands while staying within decreed consumptive use limitations.

In summary, while Nutrient Farm has the legal ability to divert the full 8.93 cfs at any given time, it will not be diverting that full rate at all times, and in fact cannot divert at a constant 8.93 cfs due to the decree limitations. The average diversions will be much lower as limited by decree terms and conditions. What this means is that the full scope of the subject water rights does not and will portend to create, either conceptually or in practice, a diversion pattern that will compromise the minimum stream flow at pivotal times.

We appreciated the comments and suggestions for voluntary efforts for Nutrient Farm to undertake to protect the health of Canyon Creek. Necessarily, any agreements to reduce diversions should be based on scientific findings of the ecosystem needs and should be a joint effort among the many diverters on Canyon Creek. If Nutrient Farm alone agrees to leave water in Canyon Creek, there would be no legal way to keep that water in the stream. Unless there is a collaborative stream management plan and/or some other agreement among the many users on Canyon Creek to reduce and/or stagger diversions, other water rights holders can divert water bypassed by Nutrient Farm at the Vulcan Ditch headgate. If MCWC and other local parties conduct a study to understand ecosystem needs for Canyon Creek and develop a stream management plan or other local joint effort among Canyon Creek diverters to reduce or stagger diversions during dry conditions, Nutrient Farm would be happy to participate in such a joint effort to protect flows in Canyon Creek. We have repeatedly made that commitment and expressed out concerns for such a logical practical multiparty approach to conservation.

As MCWC stated, Nutrient Farm does also have the legal ability to use Colorado River water as a backup source if needed (either due to physical supply limitations on Canyon Creek or a future agreement with other Canyon Creek water users). However, Nutrient Farm intends to use Canyon Creek as its primary source, and the Colorado River only as a backup source for three main reasons:

- A) Canyon Creek has superior water quality (when compared with the Colorado River) which is necessary to support the high-quality organic food production which is at the core of Nutrient Farm's objectives.
- B) Surface water from the Vulcan Ditch will also ultimately provide for potable needs for the two farm areas, commercial and industrial areas, and recreational areas. When compared with Colorado River water, the superior water quality from Canyon Creek provides a safer raw water supply as a starting point prior to treatment. Treatment of Colorado River water to all applicable potable water standards is costly and energy intensive. Starting with higher quality water for potable water reduces Nutrient Farm's overall carbon footprint.

C) Canyon Creek water can be delivered via gravity, whereas Colorado River water must be pumped. Gravity delivery allows Nutrient Farm to operate without pumping and therefore results in a lower carbon footprint, higher efficiency of use, and a more pragmatic water program.

We also understand the comments regarding the practicality of utilizing the Vulcan Ditch to serve domestic uses in the winter months:

MCWC is concerned about the practicality of Vulcan Ditch serving domestic users in their development during the winter months. Freezing and snowy conditions will make it difficult to pass relatively small amounts of water through a ditch. Nutrient Farms might consider serving these needs by drawing from the alluvium of the river from an expansion of one of the existing wells.

The Vulcan Ditch will consist of buried 24" and 18" fused HDPE pipeline with 3' minimum cover capable of delivering wintertime flows if needed. The river crossing may consist of an insulated aerial crossing or an HDD bore. Plans are to use the ponds shown to provide wintertime water. For perspective on volume, at full-buildout of the PUD Nutrient Farm will need about 16.2 acre-feet of water for November – March. This equates to an average flow rate of slightly less than 0.06 cubic feet per second (cfs).

Case No. W2127 quantified the historical consumptive use of the Vulcan Ditch and furthermore decreed that these water rights "may hereafter be used for **year-round municipal use** [emphasis added]." Consistent with the terms and conditions in the W2127 decree, Nutrient Farm intends to use its 393 acre-feet of consumptive use year-round, using storage as needed.

MCWC also noted:

MCWC would like to see a detailed plan for construction and permitting for the ditch as it must cross the highway, river, and railroad tracks.

We will share plans for construction and permitting once completed.

We also want to emphasize that as with many of the comments articulated herein, this issue of water usage and the minimum stream flows, as well as points of diversion, are really not directly tied to the PUD, nor in any way incumbent upon zoning approvals. In other words, as noted above, the water rights we have and the means to utilize those rights, are not tied to our zoning or the uses on the Farm. They could be utilized right now, for a variety of purposes, including agriculture, which of course is a quite intensive water use. In fact, rather than the PUD serving as some means of opening up the floodgates on such water use, it actually helps steer Nutrient into a more collaborative approach and affords the County a seat at this table as we move forward with each phase of development.

Put another way, the PUD enhances the ability of the public and the County to ensure the best and least impactful means of using the water in Vulcan Ditch/Canyon Creek. Without the long line of procedural oversight this zoning document will afford, there really is no formal process at the local level that allows such comments and communication to proceed with the water user in an ongoing basis. Again, we are happy to commit to such a collaborative role moving forward, as good neighbors and stewards of the local environment, but stress it is the PUD that formalized this role, while compromising nothing in terms of public oversight or restraint.

Town of New Castle

We would like to offer our gratitude to the Town of New Castle for taking the time to formally meet with us on October 17, 2023 during their Town Council meeting to review our Nutrient Farm proposal and for the Town's referral comments dated October 23, 2023. As noted in the comments, Nutrient Farm is located both inside and outside of the Town's Urban Growth Boundary with the entire property designated on the Town's Future Land Use Map as Rural Low Density. Rural Low Density is characterized by *Large lot single-family, working ranches/farms, ranchettes, open pastures and rural qualities*...with net densities of 10 or more acres per dwelling unit.

Directly abutting the north-western portion of the property, across the Colorado River, is land designated as a Planned Urban Center surrounding a Business Campus. Per the Comprehensive Plan, a wide variety of uses are called for in these areas—retail, services, restaurants, hotels, entertainment, civic functions, residential, light manufacturing, publishing, research/development, and compatible trades, artist studios, light industrial activities, and wholesale activities. These areas are to be accessed via CR 335 and the construction of a new bridge.

In this light, we believe the agricultural nature of Nutrient Farm and its associated uses are squarely compatible with those uses called for in the Comprehensive Plan. The Town did not contest any of the proposed Nutrient Farm uses – in fact, they expressed a very supportive demeanor for the project as a whole. We stressed to the Town that that many additional applications must be submitted to the County for review before specific uses could be implemented or buildings constructed. The Town requested to be included in the future referrals for these applications per the existing intergovernmental agreement. We gladly committed to ensuring that we would the Town copies of our future submittal materials and meet with them about our requests.

In regard to the traffic study for the County Road 335/I-70 interchange comments, this was addressed in the Level III Traffic Impact Study prepared for the property by SGM. That study was also made available to the Town. The Traffic Impact Study concludes that the existing roadway system will continue to operate safely and at an acceptable level of service with the full development of Nutrient Farm. As the Traffic Impact Study recommends, all new road intersections will be designed with acceptable site distances based on 35 mph design (450 feet), site triangles will be developed and maintained as clear zones, and Uniform Traffic Control or Certified Traffic Control supervision will be implemented at the CR 335/Bruce Road intersection and at event accesses on the property from CR 335 to help provide safe operations during the peak entry/exit periods of the entertainment/ music and arts venues or any other Nutrient Farm Events with an expected attendance of 350 guests or more. (The Traffic Impact Study noted that this is **not** required for the CR 335/Bruce Road intersection to operate adequately—rather, the additional traffic control would only help to provide more organized operations during these times due to the variable nature of peak flow rates for such events.)

Based on the full build-out of Nutrient Farm, the CR 335 estimated 2040 total traffic volume is 2,300 vehicle trips per day (vpd) east of Park Drive and 2,800 vpd west of Park Drive. The vpd west of Park Drive will exceed Minor Collector standards. (The LUDC calls for Major Collector standards at rates greater than 2501 vpd.) Thus, if the actual scope of development for Nutrient Farm is realized, future shoulder widening west of Park Drive to Bruce Road could bring CR 335 up to County Major Collector roadway standards. Also, as per section 4-203.L.4. of the Land Use and Development Code (LUDC), estimated calculations of the potential future public road improvement fees in the corridor have been

provided. Actual road improvement fees will be remitted at the time of development according to the LUDC as stated in the Development Agreement.

As to emergency access, we discussed with the Town that Nutrient Farm's internal public and farm roads may be used as alternative emergency accesses routes to bypass portions of CR 335. Moreover, Storm King Road in the adjacent Riverbend Subdivision Filing No. 2 extends into the property and serves as the existing driveway connection for the Farm House in Area 2 on the eastern portion of the property. This will only be used by the Owner/Developer for direct access to and from the Farm House to the Eastern Working Farm, not as an alternative public throughway for everyday use. However, should the fire department/emergency services or the public need it, the driveway may also serve as emergency access connecting Storm King Road and the existing residences to the internal public and farm roads and eventually to CR 335.

Also, if other entities eventually build a bridge for the LoVa Trail across the Colorado River on eastern portion of the property, as long planned, Nutrient Farm will be glad to give an emergency access easement for public use across the property in the LoVa Trail corridor and over this bridge as an alternative means to cross the Colorado River near I-70.

Matrix Design Group Comments on behalf of Garfield County

At the County's request, Matrix Design Group (Matrix) has also provided an independent review the PUD Guide and Water Adequacy Report for water and wastewater related issues. This is documented in the five-page September 13, 2024 letter from Robert Krehbiel to Glenn Hartmann. This letter summarized the PUD application and raised various potential issues.

We believe the cleanest way to address their comments is to list specific issues and provide a response to each as shown below.

The list below details the water and wastewater issues of significance:

1. Adequate Physical and Legal Water Supply

The PUD reports document an adequate physical and legal supply of water. The Vulcan Ditch diversion off of Canyon Creek provides a good supply of water. Wells along the Colorado River provide additional supply. Being located adjacent to the Colorado River provides an abundant and reliable supply of water. The Colorado Division of Water Resources review of the PUD documents generally concurred that the water rights could serve the proposed development, although in a dry year some of the irrigation uses may need to be curtailed.

Matrix notes that the physical and legal supply of water are generally adequate, but echoed CDWR's comment that in a dry year some of the irrigation uses may need to be curtailed. We agree the water rights are adequate to serve the proposed development and will certainly curtail irrigation uses if conditions warrant. We do want to emphasize that this is the same conundrum that faces all but the most senior water users due to over-appropriation and climactic variability, particularly in relation to farming. Nothing in the PUD changes this fundamental reality of water use in the west.

Nutrient Farm understands in dry years it may have to use storage and/or prioritize its irrigation needs and possibly reduce irrigation. We would like to point out that in these situations, Nutrient Farm also has the legal and physical ability to divert its Vulcan Ditch rights from their decreed alternate point of diversion from the Colorado River at the Coal Ridge Pump and Pipeline (Case No. 84CW349). While

Nutrient Farm prefers to take its Vulcan Ditch water from Canyon Creek (due mainly to the superior water quality of Canyon Creek over the Colorado River and the lower carbon footprint offered by the gravity fed pipeline from Canyon Creek over pumping from the Colorado River), Nutrient Farm does have the ability to pump from the Colorado River when necessary if physical supply is limiting on Canyon Creek.

2. Proposed Residential Development

The existing and proposed residential development (1 existing and 18 new plus ADU's for Areas 1 through 5) appear to have adequate water supply and wastewater treatment. Nutrient Farm residential developments in Areas 1, 3, and 4 (17 homes plus ADU's) will be connected to the existing Riverbend Water Company's potable water distribution system and wastewater collection system. The RWSC currently serves the nearby Riverbend homes, and has a complete water treatment, distribution, and storage system in place that is already permitted as a public water supply. The existing Riverbend potable system provides about 50,000 gallons of storage augmented by a 115 gpm supply flow from their wells. The intent is for Nutrient Farm to add a 150,000-gallon potable storage tank to bring the fire storage component up to municipal standards as new residential lots are platted in Areas 1, 3, and 4 in exchange for tap fee credits. New fire hydrants from 8-inch diameter lines will be placed as necessary so that each new residential lot is within 250 feet of a hydrant.

The Riverbend HOA's potable water supply comes from the five Riverbend wells and wastewater is treated in a centralized wastewater treatment plant. Area 2 is existing with its own well and onsite wastewater treatment system (OWTS). Area 5 is also proposed to have its own well and OWTS.

Response: This section adequately describes the proposed residential development. No issues requiring response are presented.

3. Exempt Well

As the Division of Water Resources pointed out in a letter dated July 17, 2024, these exempt permits are issued for lots 35 acres and larger and are limited to residential uses only. The PUD reports clearly note that Area 5 will be a 1-acre parcel. The development would have to work with the State to obtain a well permit before the property is subdivided and use the permit on this small parcel within the limitations of the permit for residential uses only and do not allow for any commercial uses.

Response: We agree that if the residential unit in Area 5 is pursued, the well will need to be permitted prior to any subdivision. The well permit would be for residential uses only, not commercial uses. We have addressed this issue thoroughly in the CDWR responses provided above.

To reiterate, we agree the order of operations of obtaining the exempt permit and subdividing the property will be important, as CDWR has limitations on exempt wells for division of land in overappropriated basins. We also understand an exempt well is not guaranteed and have set aside Vulcan Ditch credits in the event that augmentation is ultimately needed. We also would again emphasize that no aspect of developing a farmhouse and well for Area 5 hinges on this PUD; it could be applied for tomorrow.

The residential lot in Area 5 will have a farmhouse for which all outdoor demands will be supplied by the Vulcan Ditch, and only indoor residential demands would be supplied by an exempt well. We would like to clarify that Area 5 will not be a 1-acre parcel. Area 5 is roughly 56 acres, but the residential lot within planning Area 5 will be about 1 acre. Per the PUD Narrative, "A minimum 1.00 acre size residential lot will be located in Development Area 5 in order to accommodate on-site water/well systems."

Area 5 is currently part of Garfield County Parcel ID 212335300081, a 236.939 acre parcel. The proposed Area 5 Farmhouse Well would be the only exempt well on this ~237 acre parcel. Applicant would apply for an exempt domestic well permit for a parcel of land of 35 acres or larger, associated with the current ~237 acre parcel. As CDWR stated in its comments letter, *If an exempt well permit is obtained and a well is constructed before the parcel on which the well is located is subdivided, the well could possibly be allowed to continue to operate under the exempt well permit [emphasis added].*

As CDWR stated, this exempt permitting process will require review to ensure all provisions are met, and it is therefore not *certain* whether the exempt well permit can continue with the smaller \sim 1 acre parcel after subdivision. As such, Nutrient Farm has prepared for the possibility that augmentation will be needed for the Area 5 farmhouse well. As stated in the September 2020 Water Supply Report, the annual consumptive use of indoor demands for the Area 5 farmhouse to be supplied by a new well is 0.07 AF. While this new well will likely qualify as an exempt well (would not require augmentation), Nutrient Farm has conservatively set aside 0.07 AF of Vulcan Ditch HCU credits for this use in the event that the credits are needed to augment the well uses.

4. Long List of Proposed Public Water Uses and OWTS

Beyond the residential development, the concern is the long list of potential public and commercial uses for Areas 6... Restaurant, Processing Building, Campground, Swimming Pool, Laundry, Music Festival, etc. are all intensive uses of water and wastewater loading... These uses may be beyond the capacity of OWTS for wastewater disposal.

Response: We agree the large events could exceed OWTS capacity and Nutrient Farm will make use of temporary portable restrooms as necessary. A public water system will be constructed when triggers are met. Inevitably, we appreciate this comment as a cautionary note for future challenges, but there is nothing in this comment that serves as a harbinger for any concern over PUD approval. In other words, the PUD affords the opportunity to move forward with the review process for each of the contemplated uses, and robustly address the water and wastewater concerns that actually become tangible and not theoretical at that time. As the allowed uses actually implemented expand and become reality over time, there will of course be a heightened scrutiny on each next use to ensure that the collective impacts of the use, its water consumption and OWTS implications, do not reach a point of critical mass, so to speak. However, unless and until we hit that point in the future as development commences, this is all, again, a conceptual cautionary point at this juncture.

5. Water Quality Concerns for a Public Water Supply

... The wells along the Colorado River bank are susceptible to surface water contamination. ... Public water systems need to be tested and monitored regularly to protect the health of the public. The Nutrient Farm wells proposed as a public water supply may need more treatment than simple disinfection as a safety precaution.

Response: Nutrient Farm will provide appropriate filtration and disinfection and comply with all CDPHE public water system requirements. CDPHE robustly addresses the treatment expectations for any public water supply. The threshold for such CDPHE public water regulatory oversight is quite low, and the standards increase somewhat exponentially as the profile and scope of users increase.

The comment about Colorado River alluvial wells appears to be referencing the five Riverbend Wells which currently provide potable supply to the Riverbend HOA, as managed by the Riverbend Water and Sewer Company (RWSC). Nutrient Farm residential developments in Areas 1, 3, and 4 will tie into RWSC's existing system. RWSC's treatment and distribution system is permitted under Public Water System ID CO0123679. This public water system is and will be tested and monitored in accordance with its permit. If CDPHE finds the Riverbend Wells to be groundwater under the direct influence of surface water, appropriate steps will be taken as required by CDPHE.

For areas besides 1, 3, and 4, as public water system triggers are met, Nutrient Farm will construct its own public water system in accordance with CDPHE regulations.

6. Wastewater and Use of OWTS

Based upon the design loading of the commercial uses, Nutrient Farm should be planning their own central wastewater treatment plant, or connect to Riverbend or connect to New Castle's wastewater treatment plant. The report conceptually designs 10 OWTS systems for Areas 6, 7 and 8. OWTS systems are permitted for up to 2,000 gallons per day. Beyond that is a long, difficult permitting process. Larger developments were trying to get around the regulations by proposing a bunch of smaller 2000 gal/day systems, so the State issued letters clarifying their position on this matter. The development proposes to treat about 25,000 gallons per day loading with at least 10 separate OWTS systems.

Response: Noted. The multiple systems proposed comply with WQSA-6 which was developed for this situation. There is no "trying to get around the regulations," nor would we ever even contemplate such an ill-advised approach. Based on the tenor of these comments, we want to take the time to again emphasize what Nutrient Farm is at its core. It is a biodynamic farm. That very approach to farming is exercise of never taking the easy way out or getting around standards when it comes to the preparation of food or the stewardship of the land. The very notion of circumventing public health regulations that deal with wastewater is inherently antithetical to the very values and standards that Nutrient Farm has committed to – not just conceptually but in practice. We do not even use pesticides and herbicides in large part due to the impacts it can have on our soils, products, and environment. Would we actually throw such care and caution to the wind when dealing with wastewater?

OWTS systems are generally for residential uses and not recommended for intense hydraulic and biologic loading associated with commercial uses. OWTS systems are primitive technology and are allowed for residential uses as a stop-gap measure until they can be connected to a regional treatment plant. OWTS systems for residential uses generally have a life of 25-30 years. OWTS systems regularly fail, and often go unnoticed and unmaintained. Commercial uses would reduce the life spans due to higher strength effluent. Even with the Higher Level of Treatment from the proprietary Advantex system as described, it is pushing the limits of an OWTS to treat this much wastewater. The strength of wastewater from commercial uses are

variable and difficult to quantify for BOD (biological) loading. The peak hydraulic loading from event usage is also problematic – very high flows over a short period of time. The proposed restaurant loading can be high strength with food waste and the oils/greases that can clog a system. Restaurant uses will certainly need an oil/water separator. A pool or public laundry would discharge too much water at one time for an OWTS to handle properly without saturating the soils.

Response: OWTS Commercial Uses are fully allowed by the State of Colorado, per Reg. 43. All precautions related to the distinction between residential OWTS and commercial OWTS are also codified by the state and reflected in design standards for such systems. By means of example but not limitation, restaurants will require grease traps prior to discharging wastewater flows to final treatment. We also want to note that this comment myopically focuses on the cumulative effect of commercial development while somehow extolling the virtues of residential OWTS. To the contrary, it is well accepted that there is a cumulative impact of concentrated residential OWTS in a specific locale as well.

Of even more critical nature, this PUD proposal, and its incorporated phasing plan, reflects a long process of introducing commercial uses to the property, each via its own insular land use review process. In contrast, a high density residential development utilizing OWTS comes to the fore in one fell swoop, thus limiting the ability to the review authority to look at the progressive cumulative impacts of increased OWTS reliance over the course of time. In other words, this PUD, and the accordant commercial uses proposed, effectively allows us to address this cumulative issue over time.

Further, the OWTS reduction factors shown in the calculations may not be applied correctly with both 0.8 and 0.7 factors applied. A reduction factor of 0.8 is used in the conceptual designs for trenches, but a bed configuration is shown with chambers which does not have a reduction factor. Another reduction factor of 0.7 is shown for chambers. If the soils have more than 35% rock, no sizing adjustments are allowed for systems placed in type "R" soils.

Response: All systems are shown to be trenches with chambers, so the reduction factors apply. It will not be known if these are R-Type Soils until test pits can be dug and evaluated.

The massive bed of 2,368 chambers for Area 6 probably would not be allowed, and even if it would be considered, the layout may need to be adjusted. It would be difficult to construct and maintain a system of this size. Per Regulation 43, the maximum width for a bed must be 12 feet, unless the bed receives effluent meeting Treatment Level 2 quality or better (which may be the case with the Advantex system). The separating distance between beds must be a minimum of six feet sidewall-to-sidewall.

Response: These are trenches, not beds. This system would need to be permitted by the State due to it being over 2,000 gallons per day ("GPD") and all components including Advantex and trenches will be reviewed and scrutinized prior to approval.

7. Stormwater Management

According to the reports, two minor natural drainages cross the land from south to north, draining into the Colorado River. These are ephemeral drainages with no wetland or riparian characteristics. The site imperviousness will increase from development due to roads and rooftops from what once was a formerly undeveloped watershed and will cause

more frequent and more rapid stormwater runoff. This increased runoff can unravel natural drainageways making them unstable and prone to serious erosion. It is recommended to promote infiltration of stormwater and implement full spectrum stormwater detention including storage of the water quality capture volume throughout the development area to control runoff to historic rates. PUD reports do not mention any proposed stormwater measures such as detention or water quality facilities. More work is needed to characterize existing and future stormwater runoff flows and consider facilities to control runoff to historic rates.

Response: Per our response to Mountain Cross, a regional drainage plan will be developed for approved PUD uses. Protecting Colorado River water quality will be the primary concern. Moreover, we have proposed PUD language to ensure additional safeguards for these ephemeral drainage areas.

8. Floodplain

The PUD reports describe the work to identify the existing floodplain and comply with floodplain regulations. We understand that FEMA has not mapped the floodplain in this area, but that the best available preliminary data was used to approximate a 100-year floodplain on the Colorado River. According to the reports, the development will comply with all applicable FEMA, National Flood Insurance Program (NFIP), CWCB and Garfield County floodplain regulations. It appears that no development is proposed within the anticipated 100-year floodplain of the Colorado River based upon the Overlay Map. Any proposed earthwork with the floodplain will need to be documented and shown to not have an adverse impact of floodplain elevations.

Response: The proposed boat ramp in the western portion of Nutrient Farm (Area 8 North) is the only development proposed in the floodplain. A future floodplain development permit will be required and all Garfield County, CWCB, and FEMA regulations will be complied with. We also have to point out that essentially ALL boat ramps are in flood plains.

9. General Comment: Potential Need for Licensed Operator

In general, the proposed residential development has been sufficiently demonstrated that it can be served by the water and wastewater infrastructure (Areas 1 through 5). There is concern, however, about the proposed commercial development (Areas 6 through 8) being served by the proposed basic water and wastewater systems that do not require a treatment plant operator. The proposed commercial uses are significant enough at full build-out that they warrant exploration of process treatment plants for water and wastewater that are regularly operated and maintained by a licensed professional.

The February 2021 report titled "Nutrient Farm Central Water Distribution and Wastewater Systems" (Water and Wastewater Report) recognizes this need and describes Nutrient Farm's phased approach to commercial development. The Water and Wastewater Report states, "At such time when commercial uses are developed, the potable system will eventually meet the various user thresholds defined by the CDPHE as described in Regulation 11 – Colorado Primary Drinking Water Regulations 5 CCR 1002-11 and will become a regulated "Public Water System" (PWS)." As stated in that report, "Nutrient Farm envisions putting a central water treatment facility online prior to exceeding the PWS user

thresholds." Nutrient Farm will work with CDPHE to meet all relevant regulatory requirements, including the possible need for a licensed operator. All public water systems have a designated manager and point of contact for CDPHE. Fortunately, CDPHE will also be involved in all aspects of the OWTS system. Within this overarching context, we also want to stress the pivotal nature of this project – it is all one cohesive operation owned and run by one entity which is exceedingly rare in modern times. It is also a crucial element of this project that extends to all active management concerns, including public water systems and OWTS systems. The comments above seem to overlook or ignore that fact.

<u>Summary</u>

Thank you again for compiling these referral comments and working with us on our three requests related to Nutrient Farm. We believe all referral comments have been adequately addressed with these responses. Please let me know if there is any additional information or clarification that I may provide related to the applications. I will be glad to speak to you.

Regards,

Danny Teodoru, Esq. Timberline Law

cc: Andy Bruno, Nutrient Holdings