Environment, Inc.

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TRAFFIC IMPACT STUDY RESPONSE (Staff Report of 2--2023) Schubert Ranch Sand Resource Pit PPR 234 Revised 4-19-2023

This is not a correct statement. The County commissioners did not approve the Haul route. The condition of approval included with the special use is for the applicant and the County to enter into a haul route agreement which has yet to be established. It was also identified at that time that a traffic study was needed to analyze the proposed change in haul route to Ellicott hwy.

Upon review of the staff report regarding the proposed haul route of Sanborn Road to Ellicott Highway it is apparent that the County staff is of the opinion that this is now not the route to use after being approved by the El Paso County Commissioners. The cost associated with improving 3.3 mile of County Roads made it impossible to pursue using that Route. ESG is now in the same situation with the Sanborn Road route plus the added school zone concerns had them reevaluate the proposed haul route.

It has been decided that using as little public road as possible for hauling material to the market is the only cost effective way to make this mine economically feasible. So it was decided to use the private roads that cross the Schubert Ranch to move material from the Stage I to a point on the west side of Baggett Road near where the north property line crosses Baggett Road. This will shorten the use of County Roads to 1.65 miles and is the A driveway access permit most cost-effective means to get back on track. application is required for this proposed access.

Much of the review you presented in the Sanborn Road - Ellicott Highway comments no longer apply. In the following text I discussed those that will apply to the new haul route plan and only make comment if appropriate on the others.

The 1.65 miles of Baggett Road, from the new entrance on the northeast corner of the permit boundary of Schubert Ranch Sand Resource to Highway 94, will be used to get the resources to market. It will also reduce the cost for public road maintenance so the mine has a better chance of being profitable. Since the traffic study has been completed for

section of County Road to be used.

Baggett Road no additional information will be needed. Attached is a map showing the The TIS shall be updated to reflect the changes proposed such as but not limited to the new access location, new haul route (no longer using Sanborn therefore no future paving of Sanborn) and to provide the radii recommendations that were to be provided at this stage of the development.

The following information addresses the 8 points raised by the Engineering Division and the 4 from Highway Division in their February 2, 2023 review document in the order presented. Since many only apply to the Sanborn Road-Ellicott HWY route they therefore no longer apply. Included are the comment points to make reviewing easier.

Comment Summary – Engineering Division: The study referenced does not include impacts beyond 4 to 5 years, stated as "intermediate and long-term", which is not long-term nor does it cover even the first phase of the mining 1. The previous submittal analyzed the short, ir operation (referenced as 10-15 years) out of a 6 phase operation. Further, the study should be updated to reflect the mining operation as they pertain to heavy truck new haul route(s), which is different from that described in the short-term impacts. As heavy truck traffic is ant report (existing report shows routing along Sanborn to Baggett) production, mid and long-term impacts should the should the same should the s haul route agreement and/or TIS.

- Response This was done because during the original review the County Staff requested the analysis be done on using the short term analysis. Since the route is returning to use a shorter section of Baggett Road, the original analysis dated 12/6/21, addresses the three impact analysis you now request.
- 2. The study includes average daily traffic (ADT) data for roadway segments included in the haul route. For the segment of Sanborn between Ellicott Highway and Ellicott Road, ADT is shown to exceed 200, which requires conversion to a paved roadway (County ECM Section 2.2.7B.3).

Response - This no longer applies s

please be aware that the previous TIS also analyzed when the 200 ADT threshold will be met for sections of Baggett road. This analysis shall be included in the updated TIS.

- 3. Short of a geotechnical evaluation for the existing roads affected by the haul route, proposed truck loads up to 88,000 pounds gross vehicle weight (GVW) will likely exceed the bearing capacity of the existing gravel roadway. Since severe loading is being proposed – likely that exceeding H-20 loading and the County's pavement design criteria – it is recommended that a geotechnical evaluation be completed for the haul route. The final geotechnical report should include a pavement design adequate to sustain the proposed loading.
- Response The use of 88,000 pounds trucks was a typographical error. No trucks will leave the mine that exceeds, 78,000 pounds. This keeps them under federal highway limits and will be in compliance with County and State weight limit standards.

Environment, Inc. Ellicott Sand and Gravel - PPR 234 Curb radii improvements were identified at Bagget and Hwy 94. as stated in comments by CDOT at the special use stage, a CDOT access permit will be required and the improvements identified in the Traffic study at that intersection will be required per CDOT letter dated Dec 14, 2021

4. Curb radii at intersections along r Additionally, it was identified in the previous special use

constructed to ECM requirements a application traffic study that an Autoturn analysis along with Rural Major, Rural Major to Principa recommendations would be provided at this site development stage for the driveway access onto the County roadway. Please update the TIS to provide the necessary

Response - This no longer applies sin recommendations.

Improvements to SH-94 for accel/decel improvements needs to be evaluated in update. Passenger car equivalents are not shown correctly in previous version nor are the data shown supporting the findings.

> new access from the private gravel road to baggett koad, also gravel, will have a minimum turning radius of 4 Please identify in your letter of intent that this Sanborn trucks.

Different Access Points from the prop improvements and revised/new haul rou

access shall not be utilized for the mining operation. Additionally, in the letter of intent identify that this is a ranch access (per site plan) and identify the design vehicle that will utilize this access (passenger car/pickup, single unit truck, multi-unit). The vehicle and use will determine the required access spacing Response - Ellicott Sand & Gravel LLC is from the existing driveway to the west per ECM table developed. But under the nev 2-35. A deviation request will be required for this access as it is currently approx. 330' from the existing

access from Stage 5 to Bagge access to the west.

area will remain in use throughout the life of the mine so only this access point will be needed and the 1.65 mile stretch of Baggett Road will be used throughout the life of the mine. A road crossing from Stage 2 to Stage 1 is the only other access issues impacting a County Road. A driveway permit was filed for the gated access into Stage I from Sanborn Road on 2/24/2023, even though it will not be used by the mining operations until Stage II is opened. A driveway permit will be filed for the northern access and the crossing on Sanborn Road from Stage II to Stage I when needed.

Comparable land use comparisons are not relevant, e.g. soil types, weather, etc. Local use is more important.

Response - During the initial Traffic Study review the DPW Staff required ESG to provide a comparison from another mine to be used in the impact analysis (4/1/2021). It is my understanding that EPC staff asked for this comparison during discussion with our Traffic Engineer. The comparison used was for a similar sand mining operated in Pueblo County as it was the closest similar site we had

FYI: The driveways information on. If the County staff would elaborate on what data they feel (north & south side of ould be appropriate then please enlighten us and it will be provided.

Sanborn) needed for this crossing will be reanalyzed at that stage of the development.

LCS responded to similar comments from PDC Engineering's review of 12/22/20 as follows.

4/1/2021

LSC Response: The TIS report has been updated to add a short-term trip generation scenario based on ITE trip generation rates and data collected at the Pueblo Gravel Pit on Baculite Mesa Road in Pueblo County. The short-term operations and trip generation at this proposed pit near Ellicott will be comparable to the Pueblo Gravel Pit, although the hours of operation of this pit will be 7:00 a.m. to 7:00 p.m. The average daily truck trips would about 30 trips per day. Based on the baseline plus the 30 site-generated trips, Baggett south of Handle and Sanborn Road segments would remain below 200 ADT. The section of Baggett between Handle and SH 94 may be below 200 (existing plus site traffic), depending on the current volume (TIS estimated 150-200).

The report includes an estimate of potential future trip-generation increases, but the above reflects the initial and short-term traffic impacts.

- 7. Gross Vehicle Weights proposed exceed allowable loads on county roadways (CRS 42-4-507).
- Response As noted above the 88,000 pounds was a mistake and should have been 78,000 pounds. This falls within the limits established by CRS 42-4-507.

8. Deviation Request Form

Response - A revised Deviation Request for the Sanborn Road ranch access will be filed with EPC if still needed. However, for the mining operation this is not needed now since the new proposed permanent access point, from a private road to Baggett Road enters a two-lane Rural Local street as shown on the 2040 El Paso County MTCP. We will, however, need this driveway to access Stage II in the future.

- a. Access has already been installed along Sanborn Road (unpermitted?)
- Response A driveway permit was filed with El Paso County on 2/24/2023 for this access. This driveway will not be used by the mining operation and provides access now for Schubert Ranch from this field to Sanborn Road A driveway permit will be applied for when needed for the new entrance to Stage II.

Comment Summary – Highway Division:

- 1. Originally it was proposed that the haul route would utilize Baggett Road going North to Hwy 94 from Sanborn. This route would have trucks traveling approximately 3.30 miles before reaching Highway 94. This route would impact 8 residential structures and would be conducive to future accesses from the mine to Baggett Road. Currently there is heavy truck traffic that uses Baggett Road almost daily coming from Schubert's sod farm and traveling North to Hwy 94.
- Response Based on the analysis in this comment it appears the Staff feels that Sanborn Road to Ellicott HWY would be the least acceptable haul route. Upon review of these comments as well as the estimated per mile cost associated with using the Sanborn Road to Baggett to HWY94 route, Ellicott Sand & Gravel LLC and Schubert Ranch have come to the conclusion, that using private roads on land owned by Schubert Ranch is the most cost effective way to proceed. By reducing the length of Baggett Road to be used, the number of residences impacted will be reduced to one (1) and the cost to maintain a public road will be reduced. As pointed out this route is currently used by heavy trucks so it should be in better condition then originally thought and will accept the increase truck numbers with less work to bring it to the standard originally proposed.
- Response The plan has been changed to use a private ranch road that traverses the mining area from north to south, to haul material from the south end of the project to the farthest north access proposed in the SUP, the Stage V access. This will eliminate the trucks from using approximately 1.75 miles of County roads, 0.45 miles of Sanborn Road and 1.3 miles of Baggett Road. The internal road will likely be used for the entire life of the mine requiring that only one 90 degree crossing on Sanborn Road when mining moves into Stages II and III. This short 60 foot crossing will be used to haul material from those Stages to the private ranch road north of Sanborn Road.
- 2. From Highway's experience maintaining these roads, Baggett Road between Hwy 94 and Sanborn Road has superior subgrade to Sanborn Road between Baggett and Ellicott Hwy. Recently, Sanborn Road received a dust abatement treatment and new gravel layer, however due to the significant sand layers along this road, it does not historically hold up well to traffic. Once significant truck traffic is introduced, this road will likely present considerable maintenance (weekly).

Response - We are pleased to see that Highways has clarified that Baggett Road has a "superior subgrade" to Sanborn Road. It was noted in comment 1, Baggett Road is being used by heavy trucks now associated with Schubert Ranch. This should be taken into consideration when reevaluating the initial associated costs for maintaining Baggett Road.

DPW will analyze and provide

Response - The discussion for Sanborn Road no longer applies

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Changed back to using a shorter section of Bagget route agreement.

The discussion for Sanborn Road no longer applies Manchester regarding the haul changed back to using a shorter section of Bagget route agreement.

- 3. The proposed haul route is not desirable from a trucking perspective. Trucks traveling north on Ellicott Hwy from Sanborn Road will cross over 22 residential entrances, 2 county-road intersections, a fire station, a bank, and most importantly the Ellicott School. The school has buildings on both sides of Ellicott Highway with crosswalks between for students, faculty, and others to use daily. County truck traffic is regularly routed away from this area if possible due to the heavy amounts of passenger vehicle traffic and pedestrians. The area on Ellicott Hwy near Hwy 94 gets very congested daily and is less than appealing for car traffic let alone heavy truck traffic.
- Response ESG will not use the Sanborn Road to Ellicott Highway route to haul gravel from this mine during Stage I operations. However, this change will also apply to Stages II-VI.
- 4. Road use fees were not covered in the report, which are in addition to Developer Impact Fees. The County has presented a per ton fee appropriate for road impacts that was provided to the applicant. The fees are intended to cover the County's cost with additional maintenance due to heavy truck loading.
- Response The costs presented were being discussed in March 2022 and as I remember we were discussing how those costs would be applied. Our files indicate that the last correspondence was sent to DPW in April 2022 and seems to have gone dormant since then. With the proposed change to using the northern 1.65 mile section of Baggett Road from HWY 94 south to the main entrance. The confirmation that Baggett Road has a "superior subgrade" and the time since EPC presented the initial cost to ESG, we request that you rework them to apply the reassessment of Baggett Road, and the March 2023 ESG proposal to restart discussion on a Road Use Agreement.

DPW responded on May 10, 2022 to your last correspondence. We will upload this to EDARP for your records Response - As for the Developer Fees. The following information is provided based on the predictor variable presented in the TIS, that being 1.25 acres, that represents the approximate active working area (short term) at any given time,

1.25 acres x 34.91 trips/ac. = 44 trips per day

The cost per trip is \$398.55, therefore the total feet obligations would be \$17,536

Staff has reached out to the County Transportation planner in regards to how the road impact fee will be assessed. It was previously identified that the County would recommend that the fee be calculated on the ITE land use (140) of Manufacturing with the units of measure being per acre.

