



**136 6th Street, #103
Steamboat Springs, CO 80487
970-870-5552**

June 1, 2022

Alan,

The Routt County Public Works Department would like to submit the following comments on the revised Sanders' Gravel Pit Traffic Impact Study (TIS). These comments will need to be answered and revisions made before any conditions of approval can be submitted. The County has submitted the revised TIS to our independent engineer for review. I would like to submit the Memo dated May 31, 2022 as comments that need to be considered and added to the revised TIS.

Please let me know if you have any questions.

Thanks,

A handwritten signature in blue ink, appearing to read 'Mike Mordi'.

Mike Mordi, P.E.
Director
Routt County Public Works



MEMORANDUM

DATE: May 31, 2022
TO: Mike Mordi, Routt County Engineer
FROM: Dan Cokley, PE, PTOE
RE: Sanders Gravel Pit TIS review

This memo provides a review of the Sanders Gravel Pit Level Two Traffic Impact Study prepared by Apex Consulting Engineers and dated April 28, 2022. The review is based upon preparing similar studies for CDOT Access Permit projects in Region 3 where methodology has been vetted and accepted by CDOT traffic engineers.

The following comments should be addressed in the final study.

1. **Project Location and Description** - Provide description of CR 129 in terms of surface material(s) and width(s), speed limit and County roadway classification.
2. **Trip Generation** – The current Trip Generation is not consistent with Owner-provided data or typical calculation of Design Hourly Volume. The proposed aggregate operation is anticipated to produce 67,000 tons of aggregate annually. Using other regional gravel operation data, the percent sales by month is estimated in the following example tabulation. DHV is based on peak-season operation hours of 7 am to 5 pm (April through September). Trips are distributed equally through period of operations.

Aggregate Traffic Projections									
Month	Tons	%	Loads	Trips	ADT	DHV	PCE	STAFF	TOTAL
January	-	0.0%	0	0	0	0	0	1	1
February	-	0.0%	0	0	0	0	0	1	1
March	-	0.0%	0	0	0	0	0	1	1
April	8,375	12.5%	335	670	34	3	10	2	12
May	10,050	15.0%	402	804	40	4	12	4	16
June	10,050	15.0%	402	804	40	4	12	4	16
July	10,050	15.0%	402	804	40	4	12	4	16
August	10,050	15.0%	402	804	40	4	12	4	16
September	10,050	15.0%	402	804	40	4	12	4	16
October	8,375	12.5%	335	670	34	3	10	2	12
November	-	0.0%	0	0	0	0	0	1	1
December	-	0.0%	0	0	0	0	0	1	1
Totals	67,000	100%							

Using the peak seasonal months of May-September, assuming side or belly trailer trucks at 25 T/load, DHV is converted to PCE's (3) plus 50% of staff trips during DHV (mid-day) for DHV of 16, as an example.

3. **Trip Assignment** – Assigned trips must consider whole PCE vehicles in multiples of 3.
4. **Auxiliary Turn Lane Evaluation** – Provide reassessment using above trip generation methodology plus background traffic for design year(s).
5. **Intersection Sight Distance** - Provide reassessment using a WB-50 design vehicle and recommendation for appropriate safety measures.