



March 4, 2026

Beckett & Raeder
148 E Front Street
Suite 207
Traverse City, MI 49684

Attn: Mr. John Iacoagneli, FAICP, CNU-A, LEED-AP, MCIP-I

Re: Taco Bell Restaurant
Traffic Impact Study Review #2

HRC Job No. 20250716

Dear Mr. Iacoagneli:

At your request, Hubbell, Roth & Clark, Inc. (HRC) has performed a traffic review of the following items for the proposed Taco Bell Restaurant Development:

- Traffic Impact Study by Fleis & Vandenbrink (F&V) dated January 19, 2026
- Site Plans by Landtech dated December 9, 2025
- Response Letter by F&V dated January 19, 2026
- Turning Templates by Landtech dated November 25, 2025

The revised site plans show a proposed Taco Bell Restaurant consisting of a 2,232 square foot building. F&V followed industry standards when performing the revised study and included existing traffic, background growth, trip generation, trip distribution, trip assignment, capacity analysis (existing, background, and future conditions), right-turn lane analysis, and queuing analysis. HRC has the following traffic comments regarding the study, site plans, response letter, and turning templates:

≡ General

1. The study indicates US-31 is under the jurisdiction of the Michigan Department of Transportation (MDOT), but no right-of-way (ROW) permit has been submitted. HRC does acknowledge that the applicant submitted their study and site plans to MDOT. However, the applicant still needs to apply for a ROW permit with MDOT to modify their driveway on US-31.
 - a. Comment not fully addressed from HRC Traffic Review #1
2. The study indicates Acme Road is under the jurisdiction of the Grand Traverse County Road Commission (GTCRC), but no ROW permit has been submitted. HRC does acknowledge that the applicant submitted their study and site plans to GTCRC. However, the applicant still needs to apply for a ROW permit with GTCRC to close the driveways on Acme Road.
 - a. Comment not fully addressed from HRC Traffic Review #1
3. The Grand Traverse Metro Fire Department provided a site plan review letter dated March 3, 2026, but there are some construction items that will need to be addressed. The applicant needs to address the items from the fire department.

≡ Traffic Study – Background Data

4. The study indicates the posted speed on M-72 is 45 miles per hour (MPH), but the sign shows 55 MPH. The study should indicate the speed limit is 55 MPH.

5. The study indicates base timings from the signal timing permit were utilized, but the models do not reflect that. It is also unclear if the signal allows for real time optimization. F&V should verify the signal operation with MDOT and reflect the permit as directed.

≡ Traffic Study – Site Circulation and Queuing

6. Table 10 shows it takes 45 seconds for a vehicle to be serviced at the pickup window, but there is no background on how that time was determined. HRC understands that time is not the same as service time (time it takes from the order board to pickup window) but still seems aggressive. Evidence or a description of how 45 seconds was determined should be provided.
7. Table 10 shows the service rate to be 90 vehicles per hour, but using the time per vehicle (45 seconds) provides an output of 80 vehicles per hour. The service rate and time per vehicle noted in the table should be consistent.

≡ Site Plans

8. Various sheets highlight the property limits, but the line is shown in different locations. Some sheets show the southwest limit extending to the curb, while other sheets show it extending onto US-31. Landtech should verify the property line against MDOT ROW drawings and make it consistent on all sheets. If MDOT is granted an easement, that should also be noted on the sheets.
9. Sheet C4.0 gives the impression the sidewalk is in good condition around the site, but it is in poor shape. The sheet does not call out for any sidewalk improvements adjacent to the site nor adding any sidewalk north of the US-31 Driveway. The sidewalk should be rehabilitated and/or reconstructed along US-31 and M-72 adjacent to the site.
10. Sheet C3.0 shows painted traffic arrows throughout the site, but it is unclear if a center line is being added at the US-31 Driveway. A center line should be added at the US-31 Driveway and around the curve to help delineate traffic if entering vehicles start to spill back beyond the drive through lane.
11. Sheet C3.0 shows 10 cars stacked between the drive thru entrance and pickup window, but it did not account for larger vehicles, such as trucks or sport utility vehicles (SUVs) or any headway (space between vehicles). Using the industry standard of 25 feet (accounts for headway) for the length of the vehicle as shown in Table 10 of the study, the stacking space fits approximately 8 vehicles. The sheet should be revised to show 8 vehicles spaced slightly further apart.
12. Sheet C3.0 shows a traffic arrow indicating right and left-turning traffic is allowed to exit the US-31 Driveway, but a left-turning maneuver creates multiple conflict points and may be challenging to perform. There does not appear to be a history of crashes at the US-31 Driveway, but the proposed Taco Bel is expected to generate more traffic than the previous tenant (bank). Consideration should be given to prohibit left-turns out of the driveway.

≡ Turning Templates

13. The Delivery Truck Turning Templates #1 and #2 show a delivery truck navigating the site, but the path encroaches the curb at several locations. Template #1 shows a delivery truck encroaching the curb at the US-31 Driveway, Acme Road Driveway, and various spots inside the lot. Template #2 shows a delivery truck encroaching the median at M-72 and Acme Road (public approach) and comes close to various spots inside the lot. The templates should be revised showing trucks can navigate the site without encroaching any curbs, especially at M-72 and Acme Road, or curb modifications may be required. The lineweight of the path should also be thinner to help verify any encroachment.

HRC has reviewed the traffic impact study, site plans, response letter, and turning templates with the above traffic exceptions noted. The traffic study comments should be referenced but addressing them will not change the outcome based on the amount of traffic added from the development. From a traffic standpoint only, HRC finds the traffic study to be conditionally acceptable but does not find the site plans and turning templates to be acceptable. The condition is subject to the applicant receiving MDOT and GTCRC approval for the driveway modifications. Resubmittal of the traffic study is not required, but resubmittal of the site plans and turning templates are required addressing the items above.

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.



Nicholas Nicita, PE, PTOE
Senior Project Engineer – Transportation Department

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