HUBBELL, ROTH & CLARK, INC
CONSULTING ENGINEERS SINCE 1915

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February 10, 2026

City of Wixom
49045 Pontiac Trail
Wixom, MI 48393

Attn: Mr. Drew Benson, Assistant City Manager

Re: Wixom Elementary School Relocation
Traffic Impact Study Review #2

HRC Job No. 20250756

Dear Mr. Benson:

At your request, Hubbell, Roth & Clark, Inc. (HRC) has performed a review of the following items for the proposed Wixom Elementary School Relocation:

- Traffic Impact Study (TIS) by Spalding DeDecker & Associates (SDA) dated December 19, 2025
- Site Plan Response #1 Letter by SDA dated December 19, 2025
- City Review Plan Set by SDA dated December 19, 2025

The revised plan set shows the relocation of the Wixom Elementary School on Maple Road west of Wixom Road. The revised TIS includes traffic volumes, trip distribution, background growth, capacity analysis (existing, build, no-build, and build with improvements conditions), queuing analysis, turn lane analysis, and signal warrant analysis. HRC has the following traffic comments regarding the TIS, Response Letter, and Plan Set:

**Note: Critical items significantly impacting capacity and/or safety are highlighted in bold.**

≡ TIS – Data Collection

1. **The report still indicates the peak hours analyzed were 8:00 AM to 9:00 AM and 4:00 PM to 5:00 PM, but those times do not capture all the school-related traffic (especially the PM peak hour). The study should analyze the peak hour of the school (appears to start at 8:15 AM and 3:15 PM) and not the adjacent road.**
    a. **Comment not fully addressed from HRC Traffic Review #1**
2. Figure 2 shows the north driveway of the existing Wixom Elementary off Theodore west of Wixom Road, but Appendix D shows the driveway off Wixom Road south of Theodore. The driveways shown in Figure 2 and Appendix D should be consistent.

≡ TIS – Trip Distribution

3. **Table 1 shows the inbound trip distribution percentage from the east is 34% during the PM peak, but that estimate seems extremely high considering that direction is limited to staff and school of choice. That percentage is also higher than the estimate coming from the south (19%), which does not seem practical. The trip distribution percentage from the east should be revised or provide further evidence to substantiate this claim.**

4. **Table 2 shows the trips from the existing elementary school, but it is unclear how these numbers were determined. The existing trips also seem low (especially PM inbound). The sum of volumes at Theodore, North Drive, and South Drive during the peak hours of the school (see Item 1) should reflect the trip generation for the school. Furthermore, the principal has indicated approximately 200 passes have been issued to allow parents to pick up their child. The report should clarify how the trips for the existing elementary school were determined.**
    a. **Comment not fully addressed from HRC Traffic Review #1**

≡ TIS – Analysis Scenarios

5. The report indicates the peak times analyzed refer to the school rather than the street, but the volume counts do not reflect that. The volumes highlighted in the turning movement count sheets reflect the peak hour of the street. The study should analyze the peak hour of the school (see Item 1).
6. The report includes various scenarios, but there are volume discrepancies between the turning movement count sheets, volume diagrams (Appendix D), and models between conditions (existing, no-build, build) at the following locations.
    a. Southbound Castlewood at Maple for Existing Condition (AM and PM peaks)
    b. Northbound Wixom at Maple for Existing Condition (AM peak)
    c. Southbound Wixom at North School Drive for 2027 Build Condition (PM peak)
    d. Southbound Wixom at South School Drive for 2027 No-Build Condition (AM peak)
    e. Southbound Wixom at South School Drive for 2047 No-Build Condition (PM peak)
    f. Northbound Wixom at Theodore for 2047 No-Build Condition (AM peak)

    The existing, no-build, and build volumes should be consistent starting from the turning movement count sheets.
7. Figures C-4 and C-9 show the development volumes shaded in pink, but the trip assignment is not balanced throughout the road network. The trip assignment should be balanced throughout the road network.

≡ TIS – Roadway Geometry

8. The report still indicates Wixom Road transitions to a divided roadway north of Maple Road, but it does not have a median. The report should remove the statement of transitioning to a divided roadway.
    a. Comment not fully addressed from HRC Traffic Review #1

≡ TIS – Proposed Levels of Service

9. **Tables 16 – 23 show the level of service (LOS) and queue length for the buildout from the modeling, but the results are flawed since it did not account for any adjustments in heavy vehicle (buses) percentage or peak hour factor (traffic flow). The shift in traffic from the existing to the proposed school will increase the turning movements for buses to and from Maple Road. The shift will also cause the traffic flow to spike during drop-off and pickup times rather than having a constant flow during the hour as the models currently show. The models should increase the heavy vehicle percentage to 10% and decrease the PHF to 0.60 for school-related movements to reflect actual conditions.**

≡ TIS – Turn Lane Treatment Analysis

10. **The report indicates volumes remain slightly under the threshold to recommend a left-turn treatment on westbound Maple at the driveways, but the outcome may change when the peak hour of the school is analyzed (see Item 1). There is also concern that the trip generation is too low (see Item 4). The left-turn lane analysis should be redone to include volumes from the peak hour of the school and updated trip generation.**

**11. Table 26 shows to retain the existing passing flare on eastbound Maple Road and the West Driveway, but the location is no longer a T-intersection. Passing flares should not be used at four-leg (traditional) intersections since they create sight distance issues for opposing (westbound) left-turns. The passing flare also encourages a dangerous free-flow movement through a proposed crossing and creates another conflict point for students. The taper on the downstream side (east of driveway) should be removed to restrict passing vehicles and shorten the crossing distance (see attached). However, the taper on upstream side (west of driveway) can be retained to serve as a right-turn treatment.**

≡ TIS – Report Overview

12. The report indicates a northbound right-turn lane was modeled to improve congestion, but it is unclear if the school is including this with their project. The report also indicates an added northbound lane was modeled and resulted in an improvement. The report should clearly indicate what improvements are recommended and being picked up by the School Project.
    a. Comment not fully addressed from HRC Traffic Review #1

≡ Site Plan

**13. The site plans should include a turning path sheet showing the movement of a fire truck navigating the site to verify that the radii are large enough to accommodate all turns. A truck circulation plan for all large vehicles anticipated at the site is required per the City of Wixom's Ordinances 18.15.040 and 18.17.030. The radius and median at the East Drive entrance also has the geometry of a right-in only access possibly making it difficult for fire trucks. The turning paths for fire trucks circulating the site should also be shown and approved by fire safety to verify they can access all critical areas (spigots).**
    **a. Comment not fully addressed from HRC Traffic Review #1**
**14. The site plans should include a drop-off and pickup circulation plan clearly showing the internal traffic flow pattern and number of standing vehicles the site is able to hold without spilling back onto Maple Road.**
    **a. Comment not fully addressed from HRC Traffic Review #1**
**15. Sheet C6.0 shows a crossing on Maple Road east of the West Drive, but there is no traffic control (signal) to create gaps for students to cross. The crosswalk is also located right into a turning movement of a bus exiting the driveway, passing flare (see Item 11), and westbound right-turn lane. Consideration should be given to shifting the crossing away from the West Drive and adding a pedestrian-actuated signal to provide students with a regulated crossing.**
    **a. Comment not fully addressed from HRC Traffic Review #1**
**16. Sheet C6.0 shows various sidewalks within the property, but they stop near the right-of-way. There is a neighborhood east of the school that may attract students. Sidewalk should be added on the north side between the West Drive and Maplewood.**
17. The site plans should include School signs (S1-1) with AHEAD plaques (W16-9P) on Maple Road to advise road users they are approaching a school.

HRC has reviewed the TIS, City Review Plan Set, and Response Letter with the above traffic exceptions noted. There is still concern that the redistribution of school traffic will have a significant negative impact on Maple Road. Residents north of the school are still expected to have a challenge navigating the surrounding area during drop-off and pickup times. The short eastbound left-turn lane storage on Maple Road at Wixom Road is also still concerning and may cause spillback beyond the diverging point (taper). The report also has not provided any evidence that the parking lot can accommodate all drop-off and pickup vehicles without having them spill back onto Maple Road (see Item 14). Adding a left-turn lane throughout the corridor helps mitigate these concerns. A left-turn lane also provides a de facto turnout space for standing (drop-off and pickup) vehicles to move out of the through lane if they spill out of the parking lot. From a traffic standpoint only, HRC does not find the TIS and site plan to be acceptable. Resubmittal of the TIS and City Review Plan Set should be performed 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

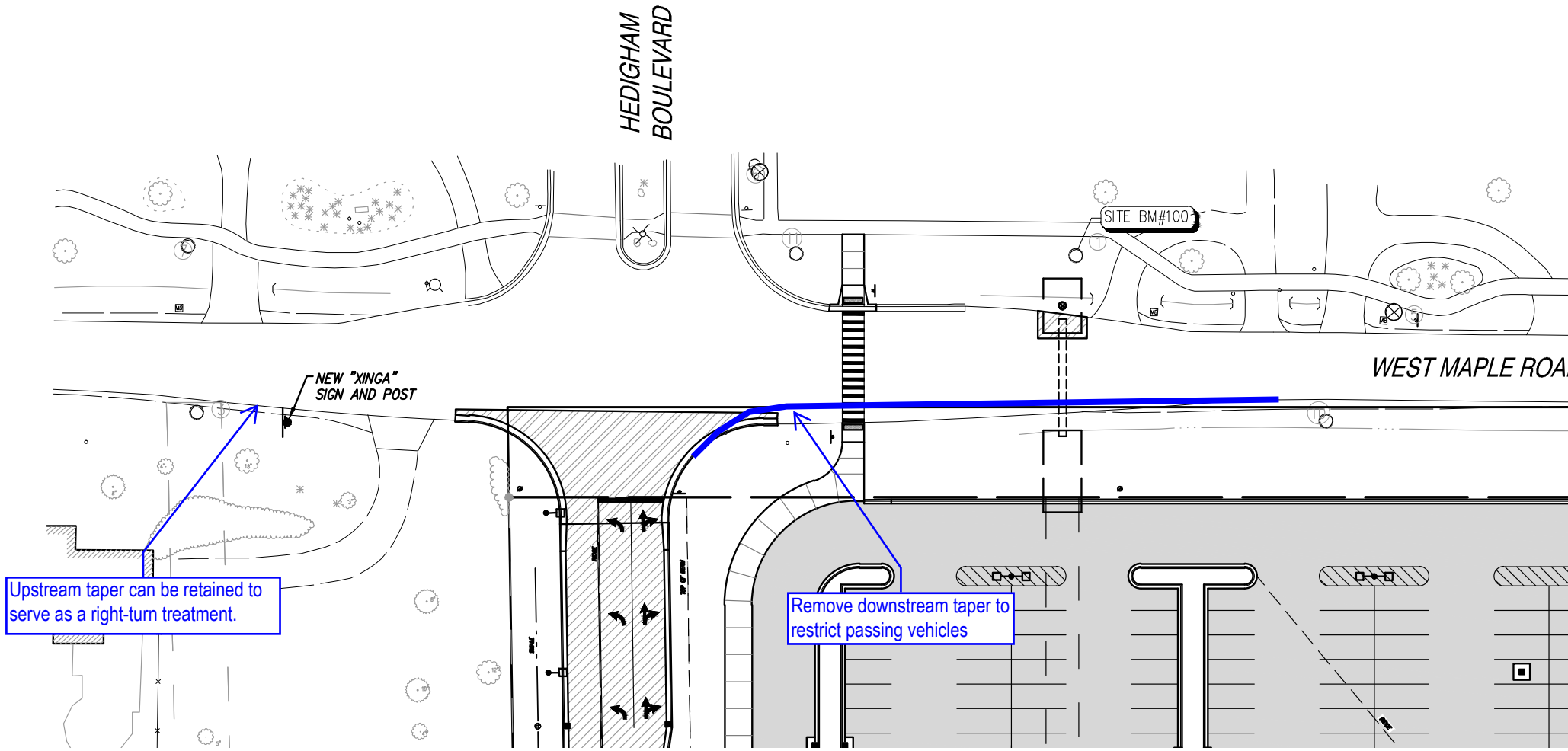
Nicholas Nicita, PE, PTOE
Senior Project Engineer – Transportation Department

Attachment: A – Removal of Passing Flare

pc: Wixom; S. Brown, T. Sikma, B. Saarela
HRC; M. Darga, File

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# Attachment A: Removal of Passing Flare


HEDIGHAM
BOULEVARD
SITE BM#100
WEST MAPLE ROA
NEW "XINGA"
SIGN AND POST
Upstream taper can be retained to serve as a right-turn treatment.
Remove downstream taper to restrict passing vehicles