CITY OF AVON LAKE
PLANNING COMMISSION
150 Avon Belden Road
Avon Lake, Ohio 44012
(440) 930-4110

Voting Order
C. Raymond
G. Smith
M. Spaetzel
R. Haas
J. Leitch
S. Orille

AGENDA
Tuesday, April 1, 2025
7:00 PM
City Council Chambers

ROLL CALL
Mr. Haas, Mr. Leitch, Mr. Orille, Mrs. Raymond, Mr. Smith, Mayor Spaetzel, Director of Law Ebert, Engineer Howard, and Planning and Zoning Manager La Rosa.

1. APPROVAL OF FEBRUARY 4, 2025, MEETING MINUTES

APPROVAL OF FEBRUARY 4, 2025, WORK SESSION MINUTES

2. GENERAL CORRESPONDENCE/ANNOUNCEMENTS

3. COUNCIL REPORT

4. SWEARING IN PUBLIC COMMENT PARTICIPANTS

5. NEW CASES

Case No. CPC-25-2, Pulte Homes of Ohio LLC, Zoning Map Amendment for the property located at the southeast corner of Walker Road and Avon Belden Road (SR 83), changing from Single-Family Residence (R-1A) and General Commerce (B-2) to Multi-Family Residence (R-3). Applicable Code Sections: 1214.02: Code Text and Map Amendments apply.

Case No. CPC-25-3, Ford Motor Company, Site Plan Approval for the Construction of a Pre-Engineered Metal Building as part of the New 400 Building Project located at 650 Miller Road. Applicable Code Section: 1214.06 Site Plans apply.

Case No. CPC-25-4, Jake's on the Lake, Site Plan Approval for the Construction of a Patio Enclosure and Building Renovation Project at 32485 Lake Road. Applicable Code Section: 1214.06 Site Plans apply.

6. OTHER BUSINESS

A proposal from Avon Lake Regional Water to vacate a portion of Alameda Avenue (a 50-foot Right-of-Way). Applicable Code Section: 1216.03 (c) Zoning District Map and District Boundaries, Vacation of Public Rights-of-Way apply**.**

7. GENERAL PUBLIC COMMENT

The next regular meeting of the Planning Commission is Tuesday, May 6, 2025.

8. ADJOURNMENT

MINUTES OF THE AVON LAKE
PLANNING COMMISSION MEETING
February 4, 2025

A regular meeting of the Avon Lake Planning Commission was called to order on February 4, 2025, at 7:00 P.M. in Council Chambers with Chairperson Ma presiding.

ROLL CALL

Mr. Haas, Dr. Ma, Mr. Leitch, Mr. Orille, Mrs. Raymond, Mr. Smith, Mayor Spaetzel, Director of Law Ebert, and Planning & Zoning Manager La Rosa were present for the roll call.

APPROVAL OF MINUTES

Mr. Haas moved, and Mayor Spaetzel seconded, to approve the January 7, 2024, meeting minutes as presented. Motion carried (7-0).

Mr. Haas moved, and Mr. Leitch seconded, to approve the January 7, 2024, work session minutes as presented. Motion carried (7-0).

GENERAL CORRESPONDENCE & ANNOUNCEMENTS

None

COUNCIL REPORT

Mr. Smith provided an update on Phase 2 of the ALPS Project, mentioning that Phase 1 is out for bid and Phase 2 is close to budget approval.

SWEARING IN PUBLIC COMMENTORS

Director of Law Ebert swore in applicants and audience members who plan to speak to items on the agenda.

NEW CASES

Case No. CPC-24-19, Pulte Homes of Ohio LLC, Major Subdivision Final Plat Approval for Legacy Isle Subdivision No. 3. Legacy Isle Subdivision No. 3 is located south of Legacy Pointe Parkway, east of Avon Belden Road, and west of Jaycox Road. Applicable Code Sections: 1214.05: Major Subdivision and 1238: Subdivision Design Standards apply.

James Sayler from The Henry G. Reitz Engineering Co. presented the final plat request for Legacy Isle Subdivision No. 3. He informed the Commission that all required improvements had been installed and that every comment from the department heads had been thoroughly addressed. He also highlighted a minor change in the project, where three cluster homes had been replaced with a single-family residence.

The Commission engaged in a discussion regarding the issue of soil stabilization and confirmed that all punch list items had been successfully completed.

Haas moved, and Mr. Leitch seconded to recommend to the City Council that Case No. CPC-24-19, Pulte Homes of Ohio LLC, Major Subdivision, Final Plat for Legacy Isle Subdivision No. 3 be approved finding that the final plat is in conformance with the General Development Plan and is in conformity with applicable

zoning ordinances or other land use controls and that the subdivision will serve the public use and interest. Motion carried (7-0).

Mr. Haas wanted to express his concerns about the tree clearing at Port Side Townhomes Subdivision while representation from Pulte Homes was present, particularly regarding the 20-foot buffer zone that was agreed upon to preserve as many trees as possible. He noted that more trees were removed than necessary, and it did not meet the community's expectations of preserving existing trees. Haas mentioned ongoing discussions with Pulte representatives and stressed the importance of paying attention to landscaping and tree preservation in future plans.

Keith Filipkowski of Pulte Homes acknowledged the tree clearing but clarified that the team had not encroached beyond the approved clearing limits. He assured the Commission that a landscaping plan was being developed and that efforts would be made to add more buffers to the area. He emphasized the intention to work with the community to address their concerns, although he reiterated that the 20-foot buffer zone had been respected.

Law Director Ebert shared that he had spoken with Pulte's attorney, and it was agreed that any future tree clearing would be communicated to the city beforehand. Public Works Director Liskovec was also involved in the conversations and will participate in reviewing the landscaping plan to ensure it meets all necessary standards. Director Ebert acknowledged that the stark difference caused by the tree clearing was shocking for the community, which was understandable.

Case No. CPC-24-20, South Port Development LLC, Major Subdivision Final Plat Approval for South Port Subdivision No. 3. South Port Subdivision No. 3 is situated south of Walker Road along South Port Drive extending southward past Hidden Cove to the west and Millside Lane to the east. Applicable Code Sections: 1214.05: Major Subdivision and 1238: Subdivision Design Standards apply.

James Sayler from The Henry G. Reitz Engineering Co., gave a brief overview, stating that this is the final phase of the subdivision with general development plan approval. No changes have been made to the plans since the original approval and all required improvements have been installed. The only comments received were from the engineering department, which requested some corrections to typographical errors, and the zoning department, which asked for clarification on the direction of front yards for corner lots. These changes were made and resubmitted.

The issue of the letter of credit was also addressed, with the city confirming that the developer had provided a check in place of a letter of credit, which will be exchanged for the letter of credit once it is available.

Mr. Haas asked if the city has access to the easement, specifically for riparian rights, which apply only to areas near waterways. He also inquired about access to Block E, located between lots 76 and 77. It was confirmed that there is a 10-foot gap, and that Block E extends to the right of way. This area is wetlands that are being preserved, and the city would only need access in cases like a tree falling or a drainage obstruction. In such cases, the homeowners' association would typically cooperate with the city, though the city does not have primary maintenance responsibility. They would only step in if the homeowners' association failed to maintain the area properly.

Mr. Smith asked whether signage would be installed to notify people about this access. Mr. Sayler confirmed that the improvement plans were updated to require signage, and it was believed the contractor had installed the signs, though the speaker had not personally seen them. These signs are intended to inform both adjacent homeowners and the homeowners' association about the restricted access and maintenance responsibilities.

There was a discussion about the responsibility for monitoring and enforcing maintenance commitments for the retention basin and wetland areas. Mr. Sayler noted that enforcement of wetland regulations falls under federal jurisdiction, specifically the Army Corps of Engineers and the EPA, not the city. If a violation occurs, residents typically contact the federal authorities, not the city, as the city does not enforce these regulations.

Mr. Smith confirmed that the maintenance and inspection agreements related to the retention basin in South Port Subdivision No. 3 are included in the development's requirements. These agreements are meant to ensure proper maintenance of the area and are part of the formal documentation provided to the city.

Mr. Haas moved, and Mrs. Raymond seconded to recommend to the City Council that Case No. CPC-24-20, South Port Development LLC, Major Subdivision, Final Plat for South Port Subdivision No. 3 be approved finding that the final plat is in conformance with the preliminary development plan and is in conformity with applicable zoning ordinances or other land use controls and that the subdivision will serve the public use and interest. Motion carried (7-0).

OTHER BUSINESS

None

DISCUSSION ITEM

None

GENERAL PUBLIC COMMENTS

Paul Orlousky, an Avon Lake resident, expressed concern that while the 20-foot buffer had been followed, the original understanding was that it would consist of existing trees, not just empty space. The removal of these trees was shocking and Mr. Orlousky stressed that something substantial should be planted in their place. He acknowledged some tension with the developers but noted that the situation had eroded trust among his neighbors. While the agreement may have been technically followed, the intent was not met. Mr. Orlousky also observed bulldozers clearing primarily brush with a few straggly trees and questioned whether the city had been notified. He reiterated the expectation to preserve the existing trees and hoped for significant replacement planting.

ADJOURNMENT

Mrs. Raymond moved, and Mr. Leitch seconded to adjourn the meeting at 7:21 pm. Motion carried (7-0).

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Planning Commission Chairperson Ma	Recording Secretary Kelly La Rosa

MINUTES OF THE AVON LAKE
PLANNING COMMISSION WORK SESSION
February 4, 2025

A work session of the Avon Lake Planning Commission was called to order on February 4, 2025, at 7:22 P.M. in Council Chambers with Chairperson Ma presiding.

ROLL CALL

Mr. Haas, Dr. Ma, Mr. Leitch, Mr. Orille, Mrs. Raymond, Mr. Smith, Mayor Spaetzel, Director of Law Ebert, and Planning & Zoning Manager La Rosa were present for the roll call.

DISCUSSION ITEM:

1. Pulte Homes of Ohio, LLC Townhouse Development Proposal

Keith Filipkowski of Pulte Homes Ohio, LLC presented a proposal for a 73-townhome residential development on a 12.2-acre site. The land is currently zoned for mixed-use, commercial, and single-family residences, but Pulte Homes seeks to rezone it to R3, which would allow for greater density. However, it was emphasized that the development would remain well below the R3 maximum of 146 units, with a planned total of 73 homes.

The project features two-floor plans, each including a first-floor master suite. The homes will range in size from 1,322 to 2,591 square feet and offer various features such as flex rooms, ample storage, and options for sunrooms or covered outdoor areas. The development's design aims to foster a sense of community with pedestrian-friendly circulation, open spaces, and a connection to the town center.

Mr. Filipkowski explained that the project is aligned with the city's comprehensive plan, which promotes high-density housing to support commercial growth. To address traffic concerns, a traffic impact study has been commissioned to identify any potential issues. Additionally, the project will create a welcoming sense of arrival, incorporating landscaping and monumentation at entry points.

The development's timeline includes seeking rezoning approval by April, with plans to begin construction in late 2025 and open model homes in the fall. Pulte Homes has engaged in public outreach and received support from William Wagner, the neighbor to the south, who has endorsed the project. Mr. Filipkowski emphasized that Pulte Homes is dedicated to completing the development responsibly and is confident it will enhance property values in the area.

Following the developer's presentation, the discussion shifted to the following comments and concerns raised by Planning Commission members:

1. Price and Market: The price of homes in this development typically depends on market conditions but is estimated to fall within the $400K-$500K range. However, there are concerns that this price range may be too high for younger buyers or those seeking affordable housing, potentially limiting opportunities for people wanting to live near the revitalized town center. There

is a desire for the development to cater to a more diverse range of residents, particularly younger or workforce-oriented buyers.

2. Zoning and Land Use: The mixed-use overlay zoning was not suitable due to a restriction limiting residential use to 40%. Other zoning options, like the RPD code, had limitations, including a 15-acre minimum. R-3 zoning was chosen because it allows up to 12 units per acre, which aligns with the comprehensive land use plan promoting higher density near downtown. However, some expressed concerns about the density of the project and suggested that R-2 zoning, which would allow for fewer units (around 60), might be a better option to provide more green space and amenities.

3. Walkability and Design: There were comments about ensuring the development is walkable and offers a unique feel, rather than being a typical multi-townhome development. The importance of creating a neighborhood with its own identity was emphasized. Some suggested improvements to increase walkability, such as more accessible walkways, green spaces, and additional community areas like parks or recreation spaces. There was also a concern about the vehicle-centric design, with suggestions for improvements like speed bumps or diverters to slow down traffic and enhance pedestrian safety.

4. Traffic and Public Safety: Traffic impact, particularly with 70+ units in the development, is a major concern. There is worry about congestion at existing intersections, especially regarding the ability to safely make left turns during peak hours. Some have suggested incorporating left-turn lanes and addressing how traffic improvements will be funded. Additionally, concerns about public safety were raised, including the ability of emergency vehicles to maneuver safely on “stub streets” and the potential for delivery trucks blocking driveways.

5. Green Space and Amenities: There were suggestions to incorporate additional amenities such as pickleball courts, walking trails, and community parks to create a more livable space for residents. However, it was also stressed that these amenities should be balanced with the land's available space and residents' needs. The small parcel of land, shaped like a "dog leg," was questioned for its utility and maintenance, with a suggestion to redesign it into usable green space or parkland for the community.

6. Parking and Driveways: Parking has been a point of concern, especially the adequacy of guest parking and the potential for cars to be parked outside due to limited garage space. It was also suggested that the length of driveways be increased, with a preference for at least 25 feet of driveway space. While the development exceeds the minimum parking requirements, uncertainty remains about the ideal parking ratio, with suggestions to evaluate similar developments to understand parking needs better.

7. Design and Neighborhood Feel: There is a desire for the development to have a unique neighborhood feel, adding character and value to the area. The importance of avoiding a "cookie-cutter" design was emphasized, with hopes that the project would enhance the city's overall aesthetic and vibrancy. One concern raised was the symmetry in the design, noting that most units are in blocks of four or five, while one block has six units, which feels off. Suggestions to make the blocks consistent were made.

8. Integration with Town Center and Overall Impact: There were repeated concerns about how the development will integrate with the town center to create a more connected, walkable community. The development should contribute to the vibrancy of the downtown area. Some raised concerns about increased demand for city services, particularly fire and police, due to the new development. There was a question about whether benchmarks exist for when additional services might be needed.

9. Private Streets and Maintenance: The private streets within the development will be maintained by the community, which means city services like snow plowing will not apply to those areas. This was noted as an important consideration for long-term upkeep and service provision.

10. Streetscape and Entrance Design: The streetscape and entrance design were also highlighted as crucial to creating an attractive, functional, and pedestrian-friendly neighborhood. Suggestions were made to improve this aspect by adding tree lawns between sidewalks and streets, further enhancing the community's appearance and walkability.

Despite concerns about density, affordability, and traffic, there is general support for the development. The hope is that the project will contribute positively to the area's revitalization, improving the community and supporting local growth. The development should reflect thoughtful and distinctive design, contributing to the city's long-term success.

Dr. Ma adjourned the meeting at 8:16 pm.

Planning Commission Chairperson Ma	Recording Secretary Kelly La Rosa

Pulte Homes of Ohio LLC – Zoning Map Amendment

Report

To: Avon Lake Planning Commission

From: Kelly La Rosa, Planning and Zoning Manager

Date: March 27, 2025

Re: Case No. CPC-25-2, Pulte Homes of Ohio LLC, Zoning Map Amendment for the property located at the southeast corner of Walker Road and Avon Belden Road (SR 83), changing from Single-Family Residence (R-1A) and General Commerce (B-2) to Multi-Family Residence (R-3).

PROJECT OVERVIEW

Pulte Homes of Ohio LLC requests a zoning map amendment for an 11.8627-acre site at the southeast corner of Walker Road and Avon-Belden Road (S.R. 83) from Single-Family Residence (R-1A) and General Commerce (B-2) to Multi-Family Residence (R-3) to allow for the development of a 73-unit townhome community

Figure 1: Maps Data: Google Earth 6/2/2015.

PROJECT DESCRIPTION

Applicant and Site Information

Applicant: Pulte Homes of Ohio, LLC, 387 Medina Road, Medina

Ownership Details of Land to be Rezoned:

Parcel No.	Deeded Owner	Address	Zoning
04-00-017-103-021	Woodcraft Properties LTD	32701 Walker Road	R-1
04-00-017-103-022	Woodcraft Properties LTD	32689 Walker Road	R-1
04-00-017-103-073	Woodcraft Properties LTD	32709 Walker Road	R-1 & B-2
04-00-017-103-071	32713 Walker Road LLC	32713 Walker Road	R-1 & B-2
04-00-017-103-075	Woodcraft Properties LTD	535 Avon Belden Road	B-2
04-00-017-103-077	83 Investments LLC	539 Avon Belden Road	R-1
04-00-017-103-111	83 Investments LLC	Avon Belden Road	B-2
04-00-017-103-223	Woodcraft Properties LTD	Avon Belden Road	B-2

Current Zoning: Single-Family Residential (R-1) and General Commerce (B-2)

Proposed Zoning: Multi-Family Residential (R-3)

Site Area: 11.8627 acres

Proposed Development: 73 fee-simple townhomes on private streets

Density: Fewer than seven units per acre, as proposed by the applicant through a permanent deed restriction. (For details, please refer to Gary Ebert's legal opinion under Attachments.)

Site Location:

The property is at the southeast corner of Walker Road and Avon-Belden Road (S.R. 83).

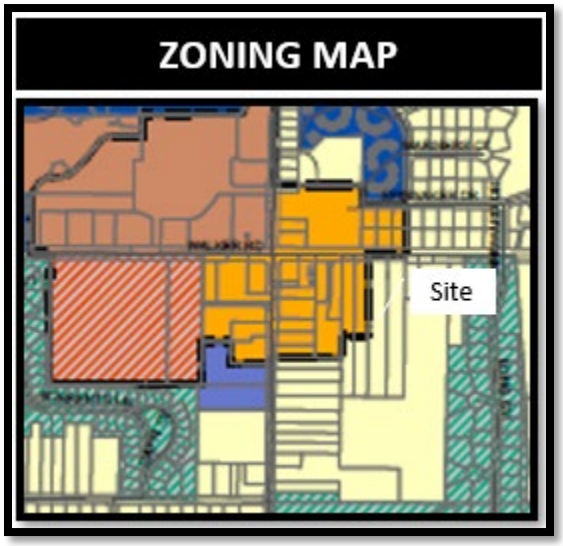
Surrounding Context:

The site is bordered by commercial properties to the north and west (B-2), with low-density residential areas to the south and east (R-1A). The Comprehensive Land Use Plan (CLUP) designates it as a prime location for mixed-use and higher-density residential development, encouraging walkability and connectivity with nearby commercial areas.

Applicable Code Sections: 1214.02: Code Text and Map Amendments apply.

PROJECT ANALYSIS

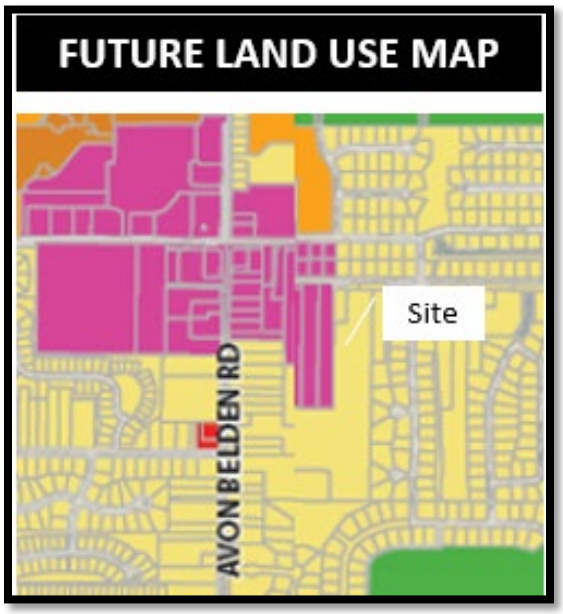
Zoning and Comprehensive Land Use Plan Considerations



The proposed rezoning application seeks to reclassify the property at the southeast corner of Walker Road and Avon-Belden Road (S.R. 83) from its current Single-Family Residential (R-1A) and General Commerce (B-2) zoning to Multi-Family Residential (R-3).

The CLUP identifies this area as suitable for mixed-use and higher-density residential development, recommending townhomes as a transitional land use between commercial and residential zones. The rezoning aligns with this vision by promoting a walkable, mixed-use corridor and providing a moderate-density housing option that bridges the gap between commercial and low-density residential areas.

This rezoning does not constitute spot zoning, as it establishes a logical transition between the commercial corridor and nearby residential neighborhoods. The proposed changes follow existing lot lines and rights-of-way, ensuring zoning continuity and compatibility with surrounding parcels.



This rezoning request considers the similarities between R-2 and R-3 zoning districts, which share nearly identical lot sizes, setbacks, and height requirements. The key difference between them is not in their design standards but in allowable density. R-2 zoning allows a maximum of five units per acre, which the applicant contends is not economically viable. While R-3 zoning permits up to 12 units per acre, the applicant has agreed to a deed restriction limiting development to seven units per acre to address density concerns. This approach seeks to balance the project's feasibility and its compatibility with the surrounding area.

Sustainability and Environmental Impact

Sustainability plays a crucial role in determining both the feasibility and long-term success of the project. Recognizing this, the applicant has made a firm commitment to responsible stormwater management, ensuring that all measures align with Avon Lake's environmental standards. Additionally, the project design encourages walkability, reducing reliance on vehicles and promoting a connected, pedestrian-friendly community.

Development Review Committee Considerations

DRC emphasized the importance of a comprehensive traffic analysis, given the site's proximity to high-traffic intersections. While the Traffic Impact Study (TIS) concludes that no additional roadway improvements are necessary, further review may be needed to ensure an accurate assessment of long-term traffic conditions. Comments from the Zoning, Fire, and Engineering Departments are attached.

Traffic Impact Study Findings

As the primary evaluation of traffic conditions, the TIS conducted by the GPD Group assessed the potential impact on the surrounding roadway network. The analysis concluded that auxiliary turn lanes are not needed at either of the proposed site access points because traffic volumes and projected growth do not meet the necessary thresholds to justify additional turn lanes. These findings suggest that the existing roadway infrastructure is sufficient to accommodate the development.

Additionally, the capacity analysis of the Avon Belden Road (SR 83) and Walker Road intersection, currently signalized, indicates it will continue to operate at a Level of Service C or better through the design year 2036, even with the additional traffic generated by the proposed development. Consequently, GPD recommends that no mitigation measures or signal modifications are necessary.

However, the study does not explicitly consider the 28-home Sandridge development currently under construction across Avon Belden Road (SR 83), which could lead to increased turning movements and affect future traffic conditions. While the study projects a minimal overall traffic impact, certain factors may warrant further review:

- Traffic counts were collected on a single weekday in February 2025, during two hours in the morning (7:00 a.m. to 9:00 a.m.) and two hours in the evening (4:00 p.m. to 6:00 p.m.), which may not reflect seasonal fluctuations or long-term traffic trends.

- The study relies on industry-standard trip generation rates from the ITE Trip Generation Manual but does not fully assess how these rates relate to Avon Lake's specific commuting patterns and roadway conditions.

- The cumulative impact of the Sandridge development was not included in the projected background traffic growth, possibly resulting in an underestimation of future traffic volumes, particularly at the Avon Belden Road (SR 83) and Walker Road intersection.

- Left-turn delays at the Huntington Bank driveway are expected to increase during the evening peak hour, but they are not anticipated to significantly impact overall network performance.

While the TIS concludes that the development can proceed without road improvements, it might be wise to reassess traffic conditions as both developments are near completion. A supplemental analysis incorporating updated traffic counts and considering cumulative growth could help ensure the roadway network continues to operate efficiently in the long term.

REVIEW AND RECOMMENDATION BY THE COMMISSION

Applicable Code Sections: 1214.02: Code Text and Map Amendments apply.

Section 1214.02 explains the steps and rules for changing zoning laws, including how to request changes to zoning maps or regulations. It ensures that these changes fit with the city's overall land use plan, promotes organized development, and takes into account the effects on nearby properties, infrastructure, and community goals.

Review Criteria

Recommendations and decisions on zoning change requests will be evaluated based on the review criteria outlined in 1214.02 (e), which are provided below for your convenience. Not all criteria may be applicable in each case, and each case shall be determined by its facts.

(1) The proposed amendment is consistent with the comprehensive land use plan, other adopted City plans, and the stated purposes of this code;

(2) The proposed amendment is necessary or desirable because of changing conditions, new planning concepts, or other social or economic conditions;

(3) The proposed amendment will promote the public health, safety, and general welfare;

(4) The proposed amendment, if amending the zoning map, is consistent with the stated purpose of the proposed zoning district;

(5) The proposed amendment, if to the zoning map, follows lot lines or the centerlines of streets, railroads, or other rights-of-way;

(6) The proposed amendment is not likely to result in significant adverse impacts upon the natural environment, including air, water, noise, stormwater management, wildlife, and vegetation, or such impacts will be substantially mitigated;

(7) The proposed amendment will not constitute spot zoning where special treatment is given to a particular property or property owner that would not be applicable to a similar property, under the same circumstances. and/or;

(8) The proposed amendment is not likely to result in significant adverse impacts upon other property in the vicinity of the subject tract.

Recommendation by the Commission

After reviewing the rezoning request and review criteria, the Commission will decide whether to send it back to the applicant for revisions or recommend approval, approval with conditions, or denial to the City Council. The Community Development staff will promptly forward the Commission's written findings and recommendations to the City Council for review and approval.

Potential Motion: A motion should be made in favor. At least four "yes" votes to approve or "no" votes to reject the request are required to make a recommendation to the City Council. The language provided is a guide, and it is not intended to suggest a specific action by the Planning Commission.

I move to recommend that the City Council approve Case No. CPC-25-2, Pulte Homes of Ohio LLC, Zoning Map Amendment for the property at the southeast corner of Walker Road and Avon-Belden Road (S.R. 83) from its current zoning designation to R-3, subject to the following condition:

The maximum density shall be limited to 7 dwelling units per acre.

This recommendation is based on findings that the amendment aligns with the Comprehensive Land Use Plan, provides a logical transition between commercial and residential areas, and meets the review criteria outlined in Section 1214.02 of the Planning and Zoning Code.

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ATTACHMENTS

- Legal Opinion on Density Limits - Law Director Ebert
- DRC Comments as of March 26, 2025
- Application to the Planning Commission
- Lot split and assembly plat
- Traffic Impact Analysis, GPD Group

From: Gary A. Ebert
To: Kelly J. La Rosa; Ted Esborn; Austin Page
Cc: Mark Spaetzel
Subject: FW: Request for Legal Opinion on Rezoning Conditions
Date: Wednesday, March 26, 2025 4:05:29 PM

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Ohio law allows a municipality to impose conditions on a rezoning request, including by regulating the density of the land use. Courts have recognized these conditions can be enforced via "a performance bond, subject to forfeiture upon failure to abide by the conditions" or condition building permits upon performance of requirements. *State ex rel. Gillespie*, 1985 Ohio App. LEXIS 8770, at *6 (9th Dist., Oct. 16, 1985). However, the City cannot require a party to agree to certain conditions ***before*** the City considers the request for re-zoning. *Id.* at *4-5 (citing *Hausmann & Johnson v. Board*, 40 Ohio App. 2d 432 (1974). Instead, the conditions must be imposed as part of the rezoning process and implemented at the time the rezoning is approved.

The City's codified ordinances support this as well. As set forth in C.O. § 1210.01, the City's planning and zoning code itself sets the "minimum regulations" governing the use of land. This provides the City leeway in implementing the regulations to adopt more restrictive provisions as may be necessary to further the City's overall comprehensive land use plan. Additionally, C.O. § 1216.01 provides that the City may impose "additional standards" upon allowed uses of lands.

I would advise against implementing a deed restriction on the land rezoning as that would tie the City's hands in the future to consider alternative uses of the land but would, instead, recommend a conditional rezonin

Gary Ebert
Law Director
Phone: **(440) 930-4122**
Email: GEbert@AvonLake.org

150 Avon Belden Road
Avon Lake, Ohio 44012
www.AvonLake.org

From: Kelly J. La Rosa <klarosa@avonlake.org>
Sent: Wednesday, March 26, 2025 10:13 AM

To: Gary A. Ebert <GAEBert@avonlake.org>
Cc: Ted Esborn <TEsborn@avonlake.org>; Austin Page <APage@avonlake.org>
Subject: RE: Request for Legal Opinion on Rezoning Conditions

Hi Gary,

Planning Commission packets go out tomorrow morning, and I was hoping that we would have language to provide the PC members with for a potential motion for a rezoning. I usually include language for conditions, but I'm not sure it is appropriate.

Kelly La Rosa, MUPDD
Planning & Zoning Manager
Community Development Department
Phone: 440-930-4110
Mobile: 440-433-0994
150 Avon Belden Road
Avon Lake, OH 44012

klarosa@avonlake.org | avonlake.org

City of Avon Lake Ohio

From: Gary A. Ebert <GAEBert@avonlake.org>
Sent: Tuesday, March 18, 2025 12:31 PM
To: Kelly J. La Rosa <klarosa@avonlake.org>
Cc: Ted Esborn <TEsborn@avonlake.org>; Austin Page <APage@avonlake.org>
Subject: RE: Request for Legal Opinion on Rezoning Conditions

I will get back to you.

Gary Ebert
Law Director
Phone: **(440) 930-4122**
Email: GEbert@AvonLake.org

150 Avon Belden Road
Avon Lake, Ohio 44012
www.AvonLake.org

From: Kelly J. La Rosa <klarosa@avonlake.org>
Sent: Tuesday, March 18, 2025 8:00 AM
To: Gary A. Ebert <GAEBert@avonlake.org>
Cc: Ted Esborn <TEsborn@avonlake.org>; Austin Page <APage@avonlake.org>
Subject: Request for Legal Opinion on Rezoning Conditions

Gary,

The Planning Commission is reviewing a rezoning request from Pulte for a parcel being changed to R-3 zoning. Pulte has voluntarily proposed placing a deed restriction on the property to limit the number of residential units to seven, rather than the twelve units permitted under R-3 zoning.

I would like your legal opinion on whether:

1. Conditions can be formally applied to a rezoning approval in Ohio, particularly to limit density.
2. The proposed deed restriction, if voluntarily offered by the applicant, would be an enforceable mechanism to ensure the lower density.
3. Any alternative legal mechanisms (e.g., development agreements, conditional zoning, or overlays) would be appropriate in this case.

Your guidance will help ensure that any actions taken by the Planning Commission are legally sound. Please let us know your thoughts at your earliest convenience.

Regards,

Kelly La Rosa, MUPDD
Planning & Zoning Manager
Community Development Department
Phone: 440-930-4110
Mobile: 440-433-0994
150 Avon Belden Road
Avon Lake, OH 44012

klarosa@avonlake.org | avonlake.org

City of Avon Lake Ohio

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ENGINEERING &
SURVEYING COMPANY

March 26, 2025

Ted Esborn
Community Development Director
City of Avon Lake
150 Avon Belden Road
Avon Lake, Ohio 44012

Reference: Concept Plan/Rezoning
Harbor Crest Townhouse Development

Mr. Esborn:

We are in receipt of the submittal provided for the Proposed Harbor Crest Townhouse Development and offer the following comments:

1. Once a Revised Traffic Impact Study is submitted a 3rd Party Consultant will review and comment.
2. The Proposed Lot Split and Consolidation is currently under review.
3. The Preliminary Stormwater Calculations are currently under review.
4. The Applicant will need to provide Autoturn Exhibits for Fire Trucks at the Avon Belden Road (SR83) and Walker Road access points.

If you have any questions, please call.

Sincerely,

BRAMHALL ENGINEERING & SURVEYING CO.
City of Avon Lake Consulting Engineers

Christopher L. Howard, P.E., CPESC
City Engineer

Fire Review - Chris M.

Record No.**CPC-25-2**

Status Completed

Became Active March 5, 2025

Assignee Steve Marti

Due Date March 15, 2025

Primary Location

32701 WALKER RD
AVON LAKE, OH 44012

Owner

WOODCRAFT PROPERTIES LTD
32741 WALKER RD AVON LAKE , OH 44012

Applicant

James Sayler
216-251-3033
reitz@reitzeng.com
4214 Rocky River Dr.
Cleveland, OH 44135

Messages

Steve Marti March 25, 2025 at 1:51 pm

turn around looks good, a reminder to ensure hydrants are within 350 feet apart.

Step Activity

OpenGov system activated this step	03/05/2025 at 11:50 am
OpenGov system assigned this step to Steve Marti	03/05/2025 at 11:50 am
OpenGov system changed the deadline to Mar 15, 2025 on approval step Fire Review - Chris M.	03/05/2025 at 11:50 am
Steve Marti approved this step	03/25/2025 at 1:51 pm

Zoning Review - Austin

Record No.**CPC-25-2**

Status Completed

Became Active March 5, 2025

Assignee Austin Page

Due Date March 15, 2025

Primary Location

32701 WALKER RD
AVON LAKE, OH 44012

Owner

WOODCRAFT PROPERTIES LTD
32741 WALKER RD AVON LAKE , OH 44012

Applicant

James Sayler
216-251-3033
reitz@reitzeng.com
4214 Rocky River Dr.
Cleveland, OH 44135

Messages

Austin Page March 17, 2025 at 11:26 am

1. Ted made this comment with his review, but the TIA states 74 units while the conceptual plan reviewed at the Planning Commission Work Session and the Development Review application (CDR 25-4) showed 73 units. The TIA did not warrant or recommend any improvements, so assuming the reduction of one unit in their study would not render any significant changes.

2. The conceptual plan was not provided with the submittal. Was this intentional or was this missed? The requirements do not necessarily require a plan to be submitted but I would recommend submitting one. This would allow the Planning Commission (and eventually City Council) to have a visual and see the proposed development.

3. The property is split between B-2 and R-1A Zoning. Per the Comprehensive Plan this is identified as a "Focus Area". The Focus Area allows for both residential and mixed-use development. Building Coverage is around 30-40% and 10-25 units u/ac. The proposal aligns with the residential "Description" recommendations of the Comp Plan (page 54).

4. From an Urban Planning perspective this area can be looked at as a "transitional zone". An area that transitions zoning types but allows for a natural progression of intensities or uses. You have a commercial area at the SE corner of Walker and Avon Belden Rd that, with the current zoning, spreads out to directly abut R-1A single-family residences. Townhomes can be looked at as a natural transition, easing or creating a less harsh border with the larger single-family properties. This is evident in the Landings and town center where there is commercial, followed by townhomes/multi-family, and then single-family residential.

5. A rezoning to R-3 would have a density of up to 12 u/ac. However, the proposal depicts 6.02 u/ac. It is not standard practice in Avon Lake to place conditions on a rezone limiting the density. The applicant has stated they would be placing deed restrictions on the properties to limit the density to 6.02 u/ac. It needs to be determined at what stage in this map amendment process that the deed restriction (developers' agreement or any other type of legal binding documents) gets completed. The Community Development Department will continue to collaborate with the applicants and the Law Department to make sure this is addressed prior to any City Council action.

6. For contextual purposes, across the street on the western side of Avon Belden Rd is the Sandridge Development which is at approximately 6.32 u/ac.

7. I wanted to provide these comments now (based on the previously reviewed concept plan) even though they would come at the time of a Preliminary/General Development Plan, etc. approval.

a. With the proposed rezoning, buffering will be needed. As shown on the conceptual plan, the applicable setbacks have been depicted and adhere to the current requirements of the Planning & Zoning Code. Specific types of buffering (fence, landscaping, etc.) will be required but are not needed for this rezoning review and will be reviewed at the time of plan approval and improvement plans.

b. As depicted on the conceptual plan, the CBU is shown off the street, with designated parking spaces. This helps to prevent vehicles from obstructing the roadway and is appreciated.

c. As mentioned in DRC in Early February, by the Fire Chief, turnarounds (most likely a "T" for a 3-point turn) should be added at the end of the roads at unit 43 and unit 53. This not only helps emergency vehicles exit efficiently but also daily vehicles such as delivery trucks, amazon, UPS, etc. Prevents them from turning around on driveways.

d. Concerned with vehicles making a left turn onto Avon Belden Road or onto Walker Road. I would recommend looking into having two exit lanes, a right turn and left turn to help alleviate any vehicle stacking that occurs internally on the site.

e. Concerns with the amount of guest parking. We have seen in some other townhome developments the need for additional guest parking. Not really something that needs to be determined at rezoning but will be looked at with additional approvals if the rezoning is approved.

f. Streets are listed as private in the table but should also be labeled on the plan itself.

g. Sidewalks should be added on both sides of the street to improve the walkability and connectivity of the neighborhood to the surrounding streets, etc. Comp plan alludes to connectivity and walkability.

h. The end units, 23 Unit #1 will front on the private street but have a frontage onto Avon Belden and Walker Road. I

recommend that the "sides" mimic a front facade to enhance the curb appeal and overall streetscape.

Step Activity

OpenGov system activated this step	03/05/2025 at 11:50 am
OpenGov system assigned this step to Austin Page	03/05/2025 at 11:50 am
OpenGov system changed the deadline to Mar 15, 2025 on approval step Zoning Review - Austin	03/05/2025 at 11:50 am
Austin Page approved this step	03/17/2025 at 11:26 am

CPC-25-2

Planning Commission Application

Status: Active

Submitted On: 3/3/2025

Primary Location

32701 WALKER RD
AVON LAKE, OH 44012

Owner

WOODCRAFT PROPERTIES LTD
32741 WALKER RD AVON LAKE , OH 44012

Applicant

James Sayler
216-251-3033
reitz@reitzeng.com
4214 Rocky River Dr.
Cleveland, OH 44135

Property or Parcel Information

Zoning Classification

B-2 & R-1A

Present Use*

Vacant

Type of Request*

Map Amendment (Rezoning)

General Description of Project*

Rezone vacant land so that it can be assembled into a parcel for development according to the recommendations of the Comprehensive Land Use Plan.

Have you had your meeting with the Development Review Committee?*

Yes

Applicant Information

Applicant is the Property Owner or Property Owner's Designee.
Project Manager will be the person working closest with the plans and will be the main point of contact for the Planning Department's questions.

Applicant Role*

Subdivider

Applicant Name*

Reitz Engineering Co.

Address*

4214 Rocky River Drive

City*

Cleveland

State*

OH

Zip*

44135

Phone*

440-251-3033

Email*

jts@reitzeng.com

Project Manager

Pulte Homes, Keith Filipkowski

Project Manager Phone

216-308-1627

Project Manager Email

Keith.Filipkowski@Pulte.com

Property Owner Information

Name*

Various entities assoc. with Kopf Builders

Address*

420 Avon Belden Road

City*

Avon Lake

State*

OH

Zip*

44012

Phone*

440-933-6908

Signature

Applicant Signature*

James T. Sayler
Mar 3, 2025

Harbor Crest Townhomes

Applicant: Pulte Homes of Ohio

Narrative update: March 19, 2025

This rezoning request is the first step required for obtaining approvals for a project proposed to include 73 townhouse units on fee simple footprint parcels abutting new private streets. Since the project will have a density of less than 7 units per acre, the developer is prepared to record a permanent restriction on the land for perpetuity that will prevent any increase in density beyond what is proposed for the current concept plan.

The goal is to provide a greater diversity of housing options in a manner and location that was recommended by the Comprehensive Land Use Plan. The density proposed is at the low end of the range of values that was recommended with the goals of encouraging additional pedestrian traffic in the commercial center of the city, supporting the continued viability of existing businesses, providing the density necessary to infill underutilized commercial properties with a broader mix of businesses and creating a more vibrant walkable city center.

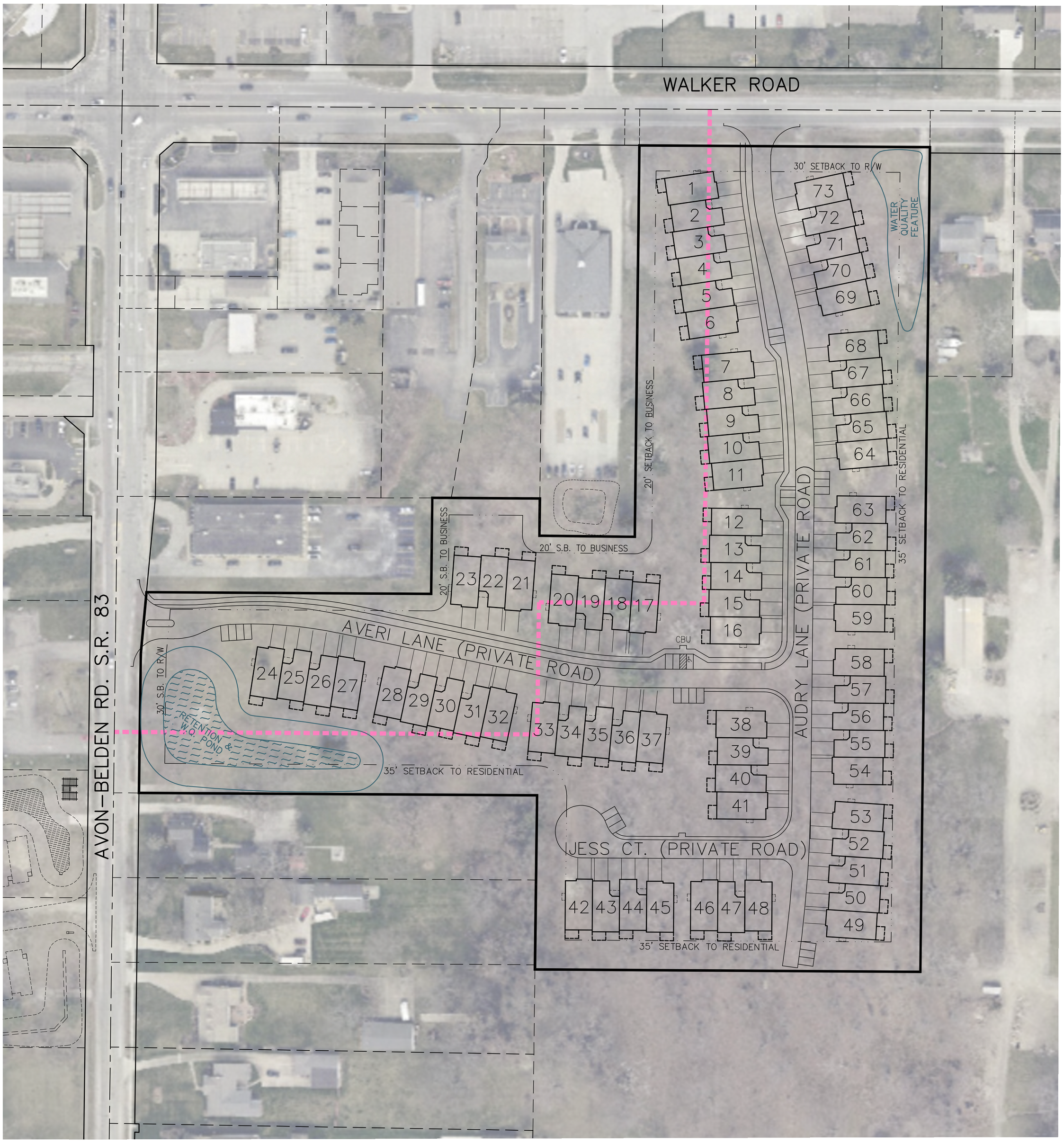
A concept plan was presented to the Development Review Committee meeting on January 27, 2025 as well as a work session of Planning Commission on February 4, 2025. Suggestions were made to provide additional information and to make enhancements to the project layout that we will be incorporating into a revised concept plan that is also being submitted for review in advance of a future meeting. The developer has also provided a traffic study that will be updated according to the revised concept plan.

The concept plan has been revised in response to comments that were received to date in the following manner:

1) The project limits were revised to eliminate a small, isolated area of land that was unsuitable for development and would have been difficult to access for any recreational uses.
2) The Avon-Belden Road entry was moved North to avoid conflict with Bank exit lanes across the street which had been identified as a potential problem area in the traffic study.
3) The aesthetics of the Avon-Belden Rd. frontage was improved and the project's density was moved away from the main route into the city by:
    a. Shifting the majority of the retention volume away from the Walker Rd. entry which resulted in a more aesthetic pond being proposed at Avon Belden Rd.
    b. Moving the divided entry so the landscaped island will be provided along Avon Belden Rd instead of Walker Rd.
4) The Southeast portion of the project was realigned to provide:
    a. A more logical location for a future emergency access point for any future development to the South along the private street stub.
    b. A better turnaround option for public safety and delivery vehicles.
    c. Better access for an area that can be utilized for passive recreation.
5) Pedestrian access was improved by:
    a. Moving the walk for the main loop off the edge of pavement to allow for a better streetscape with 4' to 18' wide tree-lawns.
    b. Making the main loop sidewalk 6' wide pavement to improve its usefulness for multipurpose active uses.

The Henry G. Reitz Engineering Co.
by: James Sayler, President

The project will be designed in accordance with Avon Lake storm water management and storm water quality standards to promote ecosystem health through flood and erosion reduction provided by a storm water retention basins, ground water replenishment provided through enhanced infiltration practices, sediment control and waste management strategies provided by construction site storm water management controls and post-construction water quality enhancements provided by water quality features included in the design of the water quality basins.



ZONING INFORMATION

(ASSUMING ENTIRE PROJECT AREA IS RE-ZONED TO DENSITY DEED RESTRICTED R-3)

DENSITY

2.5 UNITS/AC. ALLOWABLE FOR R-1A IN R.P.D. x (8.53 AC. IN R-1A) = 21

10-25 UNITS/AC. RECOMMENDED FOR MIXED USE OVERLAY (M.U.O.) PER 2019 COMPREHENSIVE LAND USE PLAN AND CODE SECTION 1218.05

x (3.33 AC. IN M.U.O.) = 83

TOTAL NUMBER OF UNITS ALLOWABLE = 104

UNITS SHOWN / 11.86 AC. = 6.16 UNITS/AC.

MULTI-FAMILY BUILDING MIN. SEPARATIONS

SEE 1226(f) FOR WINDOW DEFINITIONS

10' IF ADJACENT WALLS HAVE NO WINDOWS

15' IF WALLS HAVE 'NON-PRIMARY' WINDOWS

20' IF WALLS HAVE 'PRIMARY' WINDOWS

SCREENING (REQ. ADJACENT TO R-1A LAND ONLY)

SETBACKS

BUILDINGS:

30' OFF ADJACENT R/W

35' OFF ADJACENT R-1A LAND

20' OFF ADJACENT B-2 LAND

PATIOS & UNENCLOSED PORCHES:

PERMITTED IN SETBACKS AS RESTRICTED BY 1224.01(F)(15) & 1226.01(E)(4)

PARKING AREAS: (2 SPACES/UNIT REQ.)

NOT PERMITTED IN FRONT YARDS EXCEPT IN DRIVEWAYS (FOR ADJ. NON-RESIDENTIAL LAND, 20' MIN. REQ. OFF ADJ. RESIDENTIAL LAND)

SPORT COURTS:

10' OFF SIDES & REAR PER 1224.02(F)(20)

DEVELOPMENT DETAILS

PRIVATE STREETS WITH FEE SIMPLE FOOTPRINT LOTS

22' WIDE STREET WITH 4' ADJ. WALK ON 1 SIDE

PUBLIC WATER & SANITARY SEWER IN EASEMENTS

N

GRAPHIC SCALE

0 120

CURRENT B-2 & MUO ZONING DISTRICT LINE

(REMAINER IS ZONED R-1A)

HARBOR CREST CONCEPT PLAN

FOR

PULTE HOMES

ALL OF PPN:
04-00-017-103-021
04-00-017-103-022
04-00-017-103-075
04-00-017-103-077
AND PART OF PPN:
04-00-017-103-017
04-00-017-103-071
04-00-017-103-073
04-00-017-103-223
IN AVON TWP. SEC. #17
NOW IN
THE CITY OF AVON LAKE
BY
REITZ ENGINEERING CO.
MARCH 19, 2025

WALKER ROAD

611.16'

N89°39'22"W

43.00'

343.00
N89°39'22"W

04-00-017-103-342
CITY OF AVON LAKE
INSTR. #2016-0605679

04-00-017-103-126
RCPOH LLC &
MARTENESE 4N LLC
INSTR. #2021-0835603

GAMELLIA OFFICE CONDOMINIUM
P.V. 69, PGS. 40-43

04-00-017-103-222
WOODCRAFT PROPERTIES, LTD.
INSTR. #2003-0892393
"MONRO PARCEL"

EXISTING PARKING LOT

EXISTING DRIVE

EXISTING ASPHALT

REMAINDER OF 04-00-017-103-073
WOODCRAFT PROPERTIES LTD., INSTR. #1998-0554188

04-00-017-103-117 & -214
AL 83 HOLDINGS LLC
INSTR. #2022-0875724
(P.#2) (PARCEL #1)

04-00-017-103-113
WOODCRAFT PROPERTIES, LTD.
O.R. VOL. 1329, PG. 777

04-00-017-103-221
WOODCRAFT PROPERTIES LTD.
INSTR. #2003-0892392

REMAINDER OF
04-00-017-103-071
32713 WALKER ROAD LLC
INSTR. #2003-0943984

462.10'

N00°39'52"E

04-00-017-103-345
ROBERT A. &
ELIZABETH A. SMITH
INSTR. #2017-0642933

S.R. 83
AVON-BELDEN RD.

04-00-017-103-115
CLEAVONBELDEN LLC
INSTR. #2022-0889123

EXISTING RETENTION

04-00-017-103-133
525 AVON BELDEN RD LLC
INSTR. #2020-0789773

REMAINDER OF
04-00-017-103-223
WOODCRAFT PROPERTIES LTD.
INSTR. #2002-0892394

126.99' N89°39'22"W

N00°39'52"E
113.42

43.97'
N00°40'16"E

112.69'
N89°20'08"W

04-00-017-103-346
WILLIAM D. HUBERT
INSTR. #2016-0605682

04-00-017-103-132
CITY OF AVON LAKE
D.V. 1388, PG. 525

REMAINDER OF 04-00-017-103-111
83 INVESTMENTS, LLC
INSTR. #2025-0042428, (PARCEL 1) N89°39'22"W
336.13'

04-00-017-103-110, CITY OF
AVON LAKE, D.V. 1353, PG. 521

72.94'
N5°19'56" E

04-00-017-103-111
83 INVESTMENTS, LLC
INSTR. #2025-0042428
(PARCEL 1)

04-00-017-103-223
WOODCRAFT PROPERTIES LTD.
INSTR. #2002-0892394

04-00-017-103-071
32713 WALKER ROAD LLC
INSTR. #2003-0943984

04-00-017-103-073
WOODCRAFT PROPERTIES LTD.
INSTR. #1998-0554188

04-00-017-103-021
WOODCRAFT PROPERTIES LTD.
INSTR. #2004-0011848 &
INSTR. #2016-0598004

04-00-017-103-022
WOODCRAFT PROPERTIES LTD.
INSTR. #2016-0598404

N00°39'52"E 973.46'

04-00-017-103-074
CITY OF AVON LAKE
D.V. 1344, PG. 606

04-00-017-103-075
WOODCRAFT PROPERTIES LTD.
INSTR. #2017-0632687

LAND TO BE REZONED
11.8627 ACRES

N0°42'56"E 164.28'

04-00-017-103-076
CITY OF AVON LAKE
D.V. 1344, PG. 604

04-00-017-103-077
83 INVESTMENTS, LLC
INSTR. #2025-0042428
(PARCEL 2)

470.00'
N89°39'22"W

EXIST. FENCE

04-00-017-103-078
CITY OF AVON LAKE
D.V. 1344, PG. 600

04-00-017-103-079
WILLIAM WAGNER &
MARCELLA HAMILTON
INSTR. #2022-0897528

N0°42'56"E 205.60' OBS.

04-00-017-103-085
THOMAS E. & KATHLEEN WOLF
INSTR. #20080253337

N89°39'22"W 455.50' DEEDS 455.07 OBS

04-00-017-103-285
THOMAS B. & HOLLY A. SULZER
INSTR. #2023-0933136

04-00-017-103-259
RICHARD A. & JANICE E. FRYGLER
INSTR. #2017-0639531

04-00-017-103-131
MICHAEL D. & VIRGINIA A. GEDEON
INSTR. #2022-0870113

N

BEARINGS BASED WALKER RD.
BEARING N89°39'22"W

GRAPHIC SCALE
0 30 60 120

LAND TO BE REZONED

ALL OF PERMANENT PARCEL NUMBERS
04-00-017-103-021, 04-00-017-103-022
04-00-017-103-075 & 04-00-017-103-077
PART OF PERMANENT PARCEL NUMBERS
04-00-017-103-073, 04-00-017-103-071
04-00-017-103-111 & 04-00-017-103-223,
OF PART OF ORIGINAL AVON SECTION NO. 17
NOW IN THE
CITY OF AVON LAKE, LORAIN COUNTY, OHIO
BY

THE HENRY G. REITZ ENGINEERING COMPANY
4214 ROCKY RIVER DRIVE, CLEVELAND, OH. 44135
PHONE: (216) 251-3033 reitz@reitzeng.com

MARCH, 2025

L:\dwg\Vol 016\Pdf\Avon Belden Walker REZ.dwg, 1:30

THE HENRY G. REITZ ENGINEERING COMPANY

Civil Engineers & Surveyors
4214 Rocky River Drive
James T. Sayler, *P.E., P.S., Pres.* Cleveland, Ohio 44135 TELEPHONE: 216-251-3033
Linda S. Rerko, *Sec. & Treas.* EMAIL: reitz@reitzeng.com

February 26th., 2025

Description of Land to be Rezoned on Walker Road and Avon-Belden Road

Situated in the City of Avon Lake, County of Lorain, State of Ohio, and known as being part of Original Avon Township Section No. 17 and bounded and described as follows:

Beginning at a 5/8" iron pin in a monument box found on the centerline of Walker Road, at its intersection with the centerline of Avon-Belden Road, S.R. 83;

Thence S. 89d 39' 22" E., along the centerline of Walker Road, a distance of 611.16 feet;

Thence S. 00d 39' 52" W., a distance of 43.00 feet to the Southerly line of Walker Road and the principal place of beginning;

Thence S. 89d 39' 22" E., along the Southerly line of Walker Road, a distance of 343.00 feet to the Westerly line of a parcel of land conveyed to the City of Avon Lake, by deed recorded in Instrument No. 2016-0605679 of Lorain County Records;

Thence S. 00d 39' 52" W., along the Westerly line of land so conveyed to the City of Avon Lake, along the Westerly line of a parcel of land conveyed to Robert A. Smith and Elizabeth A. Smith, by deed recorded in Instrument No. 2017-0642933 of Lorain County Records, and along a Westerly line of a parcel of land conveyed to William D. Hubert, by deed recorded in Instrument No. 2016-0605682 of Lorain County Records, a distance of 973.46 feet to an interior corner thereof;

Thence N. 89d 39' 22" W., along a Northerly line of land so conveyed to William D. Hubert a distance of 455.07 feet to the Easterly line of land conveyed to Thomas B. and Holly A. Sulzer, by deed recorded in Instrument No. 2023-0933136 of Lorain County Records;

Thence N. 00d 42' 56" E., along the Easterly line of land so conveyed to Thomas B. and Holly A. Sulzer, along the Easterly line of a parcel of land conveyed to Thomas E. Wolf and Kathleen Wolf, by deed recorded in Instrument No. 2008-0253337 of Lorain County Records, and along the Easterly line of land conveyed to William Wagner and Marcella Hamilton, by deed recorded in Instrument No. 2022-0897528 of Lorain County Records, a distance of 205.60 feet to the Northeasterly corner thereof;

Thence N. 89d 39’ 22” W., along the Northerly line of land so conveyed to William Wagner and Marcella Hamilton, a distance of 470.00 feet to the Easterly line of Avon-Belden Road, S.R. 83;

Thence N. 00d 42’ 56’ E., along the Easterly line of Avon-Belden Road, S.R. 83, a distance of 164.28 feet to an angle point therein;

Thence N. 05d 19’ 56’ E., along the Easterly line of Avon-Belden Road, S.R. 83, a distance of 72.94 feet;

Thence S. 89d 39’ 22” E., a distance of 336.13 feet;

Thence N. 00d 39’ 52” E., a distance of 113.42 feet to the Westerly prolongation of the Southerly line of a parcel of land conveyed to Woodcraft Properties Ltd., by deed recorded in Instrument No. 2003-0892392 of Lorain County Records;

Thence S. 89d 39’ 2” E., along the Westerly prolongation of and the Southerly line of land so conveyed to Woodcraft Properties Ltd. a distance of 126.99 feet to the Westerly line of a parcel of land conveyed to 32713 Walker Road LLC, by deed recorded in Instrument No. 2003-0943984 of Lorain County Records;

Thence S. 00d 40’ 16” W., along the Westerly line of land so conveyed to 32713 Walker Road LLC, a distance of 43.97 feet;

Thence S. 89d 20’ 08” E., a distance of 112.69 feet;

Thence N. 00d 39’ 52” E., a distance of 462.10 feet to the principal place of beginning, and containing 11.8627 acres of land, be the same more or less, but subject to all legal highways and easements of record.

All bearings are based on Walker Road having a bearing of N. 89d 39’ 22” W. and are used to denote angles only.

J. Craig Snodgrass
CPA, CGFM

County Auditor | Lorain County, Ohio

SEARCH MAP INFO FORMS TOOLS

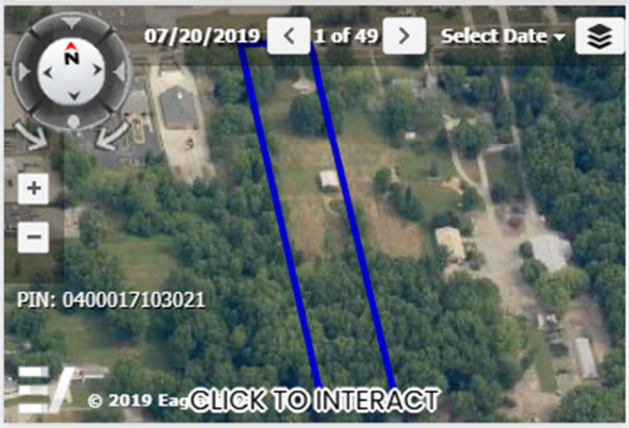
Search by Parcel, Owner or Addres

Parcel	Address	Owner	Appraised
0400017103021	32701 WALKER RD A...	WOODCRAFT PROPE...	$109,980.00
500 - RESIDENTIAL VACANT LAND	AVON LAKE CITY	SOLD: 6/25/2004 $180,000.00	ACRES: 3.1700

Photos Sketches

No Photos for this Parcel

EagleView Mini Map MAP



LOCATION VALUATION LEGAL DWELLINGS IMPROVEMENTS AGRICULTURAL SALES IMAGES TAX

PRC

Special Notices

None at this time.

Location

Parcel	0400017103021
Owner	WOODCRAFT PROPERTIES LTD

Deeded Owner Address

Owner Name	WOODCRAFT PROPERTIES LTD
Owner Address	32741 WALKER RD

Tax Payer Address

Mailing Name	KOPF CONSTRUCTION
Mailing Address	420 AVON BELDEN RD

J. Craig Snodgrass
CPA, CGFM
County Auditor | Lorain County, Ohio

SEARCH MAP INFO FORMS TOOLS

Search by Parcel, Owner or Addı

Parcel	Address	Owner	Appraised
0400017103022	32689 WALKER RD ...	WOODCRAFT PROP...	$95,480.00
400 - VACANT COMMERCIAL LA...	AVON LAKE CITY	SOLD: 8/26/2016 $180,000.00	ACRES: 2.9100

Photos | Sketches

No Photos for this Parcel

EagleView | Mini Map | MAP

LOCATION VALUATION LEGAL DWELLINGS IMPROVEMENTS AGRICULTURAL SALES IMAGES TAX

PRC

Special Notices

None at this time.

Location

Parcel	0400017103022
Owner	WOODCRAFT PROPERTIES LTD

Deeded Owner Address

Owner Name	WOODCRAFT PROPERTIES LTD
Owner	420 AVON

Tax Payer Address

Mailing Name	KOPF CONSTRUCTION
Mailing Address	420 AVON BELDEN RD

J. Craig Snodgrass
CPA, CGFM
County Auditor | Lorain County, Ohio

SEARCH MAP INFO FORMS TOOLS

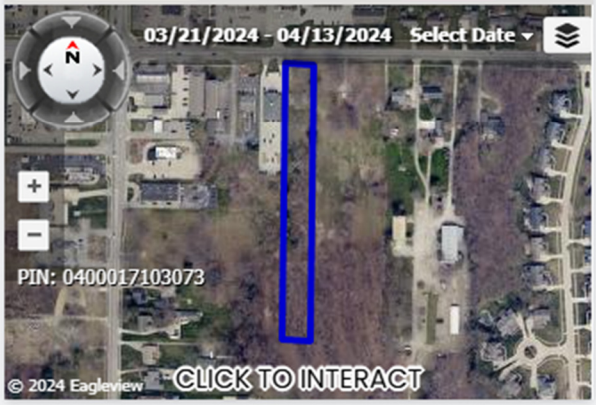
Search by Parcel, Owner or Addı

Parcel	Address	Owner	Appraised
0400017103073	32709 WALKER RD ...	WOODCRAFT PROP...	$80,590.00
501 - VACANT LAND 0-9 ACRES	AVON LAKE CITY	SOLD: NO RECORD	ACRES: 2.2300

Photos | Sketches

No Photos for this Parcel

EagleView | Mini Map | MAP



LOCATION VALUATION LEGAL DWELLINGS IMPROVEMENTS AGRICULTURAL SALES IMAGES TAX

PRC

Special Notices

None at this time.

Location

Parcel	0400017103073
Owner	WOODCRAFT PROPERTIES LTD

Deeded Owner Address

Owner Name	WOODCRAFT PROPERTIES LTD
Owner	32741 WALKER

Tax Payer Address

Mailing Name	KOPF CONSTRUCTION
Mailing Address	420 AVON BELDEN RD

J. Craig Snodgrass
CPA, CGFM
County Auditor | Lorain County, Ohio

SEARCH MAP INFO FORMS TOOLS

Search by Parcel, Owner or Addre

Parcel	Address	Owner	Appraised
0400017103071	32713 WALKER RD A...	32713 WALKER ROA...	$1,310,450.00
447 - OFFICE - 1-2 STORIES	AVON LAKE CITY	SOLD: 8/25/2003 $1,000,000.00	ACRES: 2.1200

Photos | Sketches

No Photos for this Parcel

EagleView | Mini Map | MAP

LOCATION VALUATION LEGAL DWELLINGS IMPROVEMENTS AGRICULTURAL SALES IMAGES TAX

PRC

Special Notices

None at this time.

Location

Parcel	0400017103071
Owner	32713 WALKER ROAD LLC
	32713 WALKER

Deeded Owner Address

Owner Name	32713 WALKER ROAD LLC
Owner	32713 WALKER RD

Tax Payer Address

Mailing Name	KOPF CONSTRUCTIOIN CORPORATION
Mailing	420 AVON BELDEN

J. Craig Snodgrass
CPA, CGFM
County Auditor | Lorain County, Ohio

SEARCH MAP INFO FORMS TOOLS

Search by Parcel, Owner or Addre

Parcel	Address	Owner	Appraised
0400017103075	535 AVON BELDEN R...	WOODCRAFT PROP...	$71,520.00
501 - VACANT LAND 0-9 ACRES	AVON LAKE CITY	SOLD: 6/12/2017 $195,000.00	ACRES: 0.5900

Photos Sketches

No Photos for this Parcel

EagleView Mini Map MAP

LOCATION VALUATION LEGAL DWELLINGS IMPROVEMENTS AGRICULTURAL SALES IMAGES TAX

PRC

Special Notices

None at this time.

Location

Parcel	0400017103075
Owner	WOODCRAFT PROPERTIES LTD

Deeded Owner Address

Owner Name	WOODCRAFT PROPERTIES LTD
Owner	420 AVON BELDEN

Tax Payer Address

Mailing Name	KOPF CONSTRUCTION
Mailing Address	420 AVON BELDEN RD

J. Craig Snodgrass
CPA, CGFM
County Auditor | Lorain County, Ohio

SEARCH MAP INFO FORMS TOOLS

Search by Parcel, Owner or Addre

Parcel	Address	Owner	Appraised
0400017103077	539 AVON BELDEN R...	83 INVESTMENTS LLC	$100,710.00
501 - VACANT LAND 0-9 ACRES	AVON LAKE CITY	SOLD: 2/13/2025 $0.00	ACRES: 0.7800

Photos | Sketches

No Photos for this Parcel

EagleView | Mini Map | MAP

LOCATION VALUATION LEGAL DWELLINGS IMPROVEMENTS AGRICULTURAL SALES IMAGES TAX

PRC

Special Notices

None at this time.

Location

Parcel	0400017103077
Owner	83 INVESTMENTS LLC

Deeded Owner Address

Owner Name	83 INVESTMENTS LLC
Owner	420 AVON BELDEN

Tax Payer Address

Mailing Name	KOPF CONSTRUCTION
Mailing Address	420 AVON BELDEN RD

J. Craig Snodgrass
CPA, CGFM
County Auditor | Lorain County, Ohio

SEARCH MAP INFO FORMS TOOLS

Search by Parcel, Owner or Addre

Parcel	Address	Owner	Appraised
0400017103111	AVON BELDEN RD A...	83 INVESTMENTS LLC	$228,690.00
400 - VACANT COMMERCIAL LA...	AVON LAKE CITY	SOLD: 2/13/2025 $0.00	ACRES: 0.6000

Photos Sketches

No Photos for this Parcel

EagleView Mini Map MAP

LOCATION VALUATION LEGAL DWELLINGS IMPROVEMENTS AGRICULTURAL SALES IMAGES TAX

PRC

Special Notices

None at this time.

Location

Parcel	0400017103111
Owner	83 INVESTMENTS LLC

Deeded Owner Address

Owner Name	83 INVESTMENTS LLC
Owner	420 AVON BELDEN

Tax Payer Address

Mailing Name	KOPF CONSTRUCTION
Mailing Address	420 AVON BELDEN RD

J. Craig Snodgrass
CPA, CGFM
County Auditor | Lorain County, Ohio

SEARCH MAP INFO FORMS TOOLS

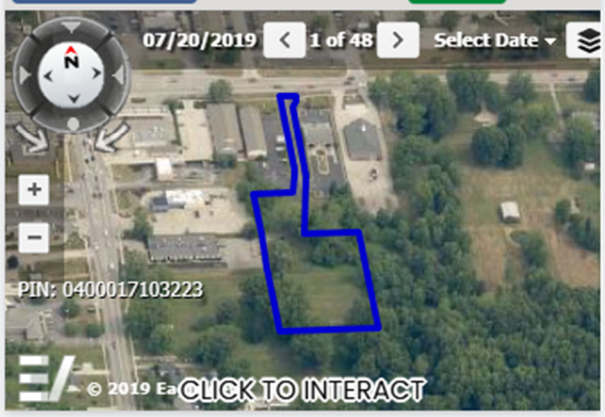
Search by Parcel, Owner or Addre

Parcel	Address	Owner	Appraised
0400017103223	AVON BELDEN RD A...	WOODCRAFT PROP...	$351,550.00
451 - OTHER COMMERCIAL	AVON LAKE CITY	SOLD: NO RECORD	ACRES: 1.6600

Photos Sketches

No Photos for this Parcel

EagleView Mini Map MAP



LOCATION VALUATION LEGAL DWELLINGS IMPROVEMENTS AGRICULTURAL SALES IMAGES TAX

PRC

Special Notices

None at this time.

Location

Parcel	0400017103223
Owner	WOODCRAFT PROPERTIES LTD

Deeded Owner Address

Owner Name	WOODCRAFT PROPERTIES LTD
Owner	32741 WALKER RD

Tax Payer Address

Mailing Name	KOPF CONSTRUCTION
Mailing Address	420 AVON BELDEN RD

March 24, 2025
2025050.16

Keith Filipkowski
Director of Land Planning
Pulte Group
387 Medina Road, Suite 1700
Medina, Ohio 44256

Harbor Crest Residential Development Traffic Impact Study Clarification Update

Dear Mr. Filipkowski,

GPD Group is providing this update to our Traffic Impact Study (TIS) for the Harbor Crest Residential Development in Avon Lake, Ohio, dated March 5, 2025. The purpose of this update is to clarify the impact of a correction to the number of homes proposed in the study.

The TIS was prepared based on a site plan that showed 74 homes proposed in the development. It is our understanding that the current proposal is for only 73 homes. The number of homes can change the volume of traffic generated by the development (trip generation). As noted in the study, the trip generation calculations were performed for the Harbor Crest Residential Development according to information contained in the ITE Trip Generation Manual, 11th Edition, the industry standard for preparing these estimations.

Due to the overestimation of homes to be on the site, the trip generation for the development will be slightly overestimated as well. The following table presents the trip generation volumes for the 74 units, as presented in the study, and the 73 units, as proposed on the current plan.

Trip Generation Comparison Actual vs. Study

Code 215 – Single-Family Attached Housing	**Units**	**AM Peak Hour**			**PM Peak Hour**		
		Entering	Exiting	Total	Entering	Exiting	Total
Actual Proposal	73	9	26	35	25	17	42
From 3/25 Study	74	9	27	36	25	17	42
Difference		**0**	**-1**	**-1**	**0**	**0**	**0**

As shown in the table above, the trip generation volumes used in the study (74 units) are nearly identical to the trip generation volumes for the actual proposal (73 units). The study overestimated the AM Peak exiting traffic by 1 vehicle. All other volumes are the same for either scenario.

With this minimal difference between the study volumes and the actual proposal, there will be no impact on the results of the study and no changes to the recommendations in the study.

We thank you for the opportunity to clarify this matter. If you have any questions or concerns, please feel free to contact me.

Sincerely,

GPD Group

Kevin Westbrooks, PE, PTOE
Senior Project Manager / Traffic Engineer

TRAFFIC IMPACT STUDY
AVON LAKE, LORAIN COUNTY, OHIO

PROPOSED HARBOR CREST RESIDENTIAL DEVELOPMENT

PREPARED BY GPD GROUP FOR: PULTE HOMES
MARCH 2025

GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

TRAFFIC IMPACT STUDY

Harbor Crest Residential Development

Avon Lake, Lorain County, Ohio

Prepared For:

Pulte Homes
387 Medina Road, Suite 1700
Medina, OH 44256

March 2025

Engineer's Seal

Prepared By:

Prepared
Under The Responsible
Charge of:

Kevin P. Westbrooks, P.E., PTOE Registration No. 65607 Certification No. 844	Michael A. Hobbs, P.E., PTOE Registration No. 68713 Certification No. 1346	Date

GPD GROUP®
Glaus, Pyle, Schomer, Burns & DeHaven, Inc.

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I. Purpose:

This Traffic Impact Study is being prepared at the request of Pulte Homes in association with the proposed construction of the Harbor Crest Residential Development to be located south of Walker Road between Avon-Belden Road (SR 83) and Long Cove Drive in Avon Lake, Lorain County, Ohio. The purpose of this Traffic Impact Study is to analyze the vehicular operating conditions in the vicinity of the proposed residential development both before and after its construction to determine what, if any, impact the project will have on the surrounding roadway network.

II. Project Setting:

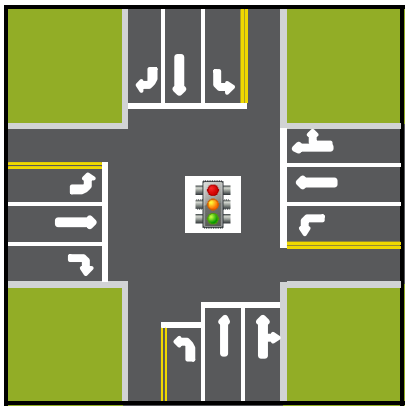
Study Area

The subject property is currently vacant land and residential properties. The land uses south and east of the site are primarily residential properties. However, land uses west of the site and surrounding the Avon Belden Road (SR 83) / Walker Road intersection are mainly commercial uses. See **Figure 1** for a project location map and **Figure 2** for an aerial photograph of the study area.

Avon Belden Road (SR 83) is primarily a two-lane asphalt roadway with one travel lane in each direction running north-south. The posted speed limit along Avon Belden Road (SR 83) is 25 mph. According to ODOT, Avon Belden Road (SR 83) is classified as an Urban Minor Arterial. Note that the speed limit increases to 35 mph immediately south of the proposed location of Site Drive #1.

Walker Road is two-lane asphalt roadway with one travel lane in each direction running east-west. The posted speed limit along Walker Road is 35 mph. Note that Walker Road's speed limit decreases to 25 mph just west of the proposed location of Site Drive #2.

Avon Belden Road (SR 83) / Walker Road



This intersection is currently signalized with a standard mast arm configuration. The Northbound left-turn lane has a total length of 225'. The southbound left and right-turn lanes have a total length of 575'. The eastbound left and right-turn lanes have a total length of 500'. The westbound left-turn lane has a total length of 250'.

Traffic Counts

For this analysis, Tri-State Traffic Data performed turning movement traffic counts from 7:00 AM to 9:00 AM and from 4:00 PM to 6:00PM on Tuesday, February 11, 2025. Counts were collected at the intersection of Avon Belden Road (SR 83) / Walker Road, as well as at the Huntington Bank exit drive on Avon Belden Road (SR 83). From the count data, the AM peak hour of the study area was determined to be from 7:15 AM – 8:15 AM while the PM peak hour was found to be from 4:30 PM – 5:30 PM. See **Appendix A** for printouts of the turning movement counts.

III. Proposed Development:

The proposed Pulte Homes Residential Development is expected to consist of 74 multi-family attached housing units. It will be constructed south of Walker Road between Avon Belden Road (SR 83) and Long Cove. See **Appendix B** for a preliminary site plan.

As shown on the preliminary site plan, access to the proposed development will be provided by two roadways, one Avon Belden Road (SR 83) approximately 750' south of Walker Road; and one Walker Road approximately 740' east of Avon Belden Road (SR 83). These roadways are referred to as Site Drive #1 and Site Drive #2 respectively. Both proposed access points are anticipated to offer full-movement.

IV. Trip Generation:

Trip Generation Calculations

The trip generation calculations were performed for the Harbor Crest Residential Development utilizing the ITETripGen Web-based App Version 4.0.0.421, based on the Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition. This manual includes data from numerous trip generation studies of different land uses that have been performed by public agencies, developers, consulting firms and associations and submitted to ITE. It serves as a tool for estimating the number of vehicle trips generated by a proposed development. For this study, the trip generation calculations will evaluate the AM and PM peak periods.
According to information contained in the ITE Trip Generation Manual, 11th Edition, the proposed residential development is expected to generate the following trip ends once constructed:

LAND USE 215 – Single-Family Attached Housing

i. Weekday AM Peak Hour (Peak Hour of Adjacent Street):
= 36 trip ends (9 enter and 27 exit)

ii. Weekday PM Peak Hour (Peak Hour of Adjacent Street):
= 42 trip ends (25 enter and 19 exit)

Note that the variable utilized in the trip generation calculations was 'number of dwelling units', which in this case is 74 single-family attached housing units. See **Appendix C** for the detailed trip generation calculations for the proposed development.

V. Traffic Volumes:

'No-Build' Traffic Volumes

Design hour volumes (DHV) were developed for the study area using the peak hour to design hour factors that are published by the ODOT Office of Statewide Planning and Research. The design hour factors utilized to develop the DHVs are dependent upon the roadway's functional classification as well as the day of the week and month the count was performed. These factors were then applied to the raw turning movement counts to convert the existing volumes to design hour volumes. For this study, a design hour factor of 1.23 was applied to all traffic volumes since the traffic counts occurred on a Tuesday in February.

The construction of the proposed residential development is considered to be completed in the year 2026 which will serve as the 'Opening Year' for the study, while the 'Design Year' will be 2036 (10-year design criteria). According to ODOT's Traffic Forecast Modeling System (TFMS), the study area is expected to experience +0.50% annual growth in traffic over the next eleven years. This growth factor was used to calculate the future traffic volumes within the study area. Design Year 2036 background traffic volumes are shown on **Figure 3**. See **Appendix D** for a printout of the TFMS report.

Site Trip Distribution & Assignment

The new trips discussed in the Trip Generation section were distributed and assigned to the roadway network based on existing travel volumes/patterns near the site, the surrounding land uses and roadway network, and engineering judgment. The AM/PM site distribution estimates that 35% of the projected site trips will travel to/from the south on Avon Belden Road (SR 83) and 15% to/from the north on Avon Belden Road (SR 83). Additionally, 25% of the projected site trips will travel to/from the west on Walker Road and 25% will travel to/from the east on Walker Road. Traffic from the north and west was split between the two proposed access points based on configuration of the site and likely preferred travel patterns. The peak hour distribution and assignment of new site trips are included in **Appendix E**.

'Build' Traffic Volumes

In order to create the 'Build' traffic volumes, the site trips discussed in the previous section were added to the Design Year 2036 'No-Build' peak hour traffic volumes. The 'Build' traffic volumes will allow a direct comparison between the projected traffic conditions without the development and those following the construction of the development. **Figure 4** shows the Design Year 2036 'Build' peak hour traffic volumes.

VI. Traffic Analysis:

Auxiliary Turning Lane Warrants

Turn lane warrant analyses were performed for the Pulte Homes Residential Development proposed unsignalized access points on Avon Belden Road (SR 83) and Walker Road in order to determine whether left- or right-turn lanes will be needed based on the projected traffic volumes. ODOT publishes the State Highway Access Management Manual which includes warrant charts for auxiliary turn lanes. These warrant charts were utilized to determine if auxiliary turn lanes will be required. The results of the auxiliary turn lane analysis for the Design Year 2036 'Build' conditions are summarized in **Table 1**. See **Appendix F** for the auxiliary turn lane warrant charts.

Table 1: Auxiliary Turn Lane Warrant Analysis Summary – Design Year 2036 'Build' Conditions	
Intersection	**Auxiliary Turn Lane Warrants 'Build'**
Avon Belden Road (SR 83) / Huntington Bank Driveway (Exit Only) / Site Drive #1	
Northbound Right-Turn Lane	Not Warranted
Southbound Left-Turn Lane	Not Warranted
Walker Road / Site Drive #2	
Eastbound Right-Turn Lane	Not Warranted
Westbound Left-Turn Lane	Not Warranted

As shown in **Table 1**, the auxiliary turn lane warrant analysis shows that no turn lanes were found to meet the minimum thresholds to warrant an auxiliary turn lane.

HCS Intersection Capacity Analysis

Intersection capacity analyses were performed for the Design Year 2036 'No-Build' and 'Build' scenarios to determine the operating conditions that would be expected at the study intersections. The quality of the operating conditions experienced by an intersection is measured in terms of Level-of-Service (LOS). Levels-of-Service can range from LOS A to LOS F.

Level-of-Service A, B, C, D and E are considered acceptable in an area within Metropolitan Planning Organization (MPO) for movements and approaches while the overall intersection must operate at LOS D or better. This intersection is located within the Northeast Ohio Areawide Coordinating Agency (NOACA) MPO area. Level-of-Service F is considered unacceptable with significant levels of delay experienced by vehicles. The thresholds related to average control delay for unsignalized intersections are as follows:

Level-of- Service	*Delay Threshold – Signalized (Sec)*	*Delay Threshold – Unsignalized (Sec)*
A	< 10	< 10
B	> 10 – 20	> 10 – 15
C	> 20 – 35	> 15 – 25
D	> 35 – 55	> 25 – 35
E	> 55 – 80	> 35 – 50
F	> 80 **or** v/c > 1	> 50

The quantity of vehicles that a turning movement or approach has sufficient capacity for is measured with the volume to capacity ratio (v/c). A v/c less than 1.0 is considered acceptable with a v/c less than 0.93 preferred. An intersection is considered over capacity when signal timings or other intersection control cannot be adjusted to allow all turning movements to have a v/c less than 1.0.

The storage length represents the area at an approach where queued vehicles can be stored and not cause obstructions to adjacent turning movements or upstream intersections. The queue-storage ratio (QSR) is a measure of the expected queue length to the available storage length. A QSR equal to or less than 1.0 is considered acceptable, while a QSR greater than 1.0 indicates a strong possibility of vehicles obstructing an adjacent turning movement or upstream intersection.

The analysis is performed utilizing the computer program HCS 2024 which is developed by McTrans Corporation and based on the Highway Capacity Manual, 7th Edition. Based on criteria established by ODOT, Highway Capacity Software (HCS) is used to determine the required number of lanes and the lane assignments at intersections (i.e. the needed intersection capacity). The existing peak hour factors and heavy vehicle percentages were utilized throughout the capacity analysis.

Design Year 2036 Capacity Analysis

Table 2 summarizes the results of the capacity analysis for the unsignalized intersections under the Design Year 2036 'No-Build' vs 'Build' traffic conditions. See **Appendix G** for the HCS Intersection Capacity Analysis printouts.

Table 2: HCS Intersection Capacity Analysis Summary - Design Year 2036 'No-Build' vs. 'Build' Conditions: Unsignalized Intersections

Movement	'No-Build' Condition				'Build' Condition			
	LOS	Delay (sec)	V/C Ratio	95th % Queue (ft)	LOS	Delay (sec)	V/C Ratio	95th % Queue (ft)
AM Peak Hour								
Avon Belden Road (SR 83) / Huntington Bank Driveway (Exit Only) / Site Drive #1								
Eastbound Left	C	22.3	0.02	3	D	27.2	0.03	3
Eastbound Right	B	13.7	0.02	3	B	13.7	0.02	3
Eastbound Approach	*C*	*16.8*	-	-	*C*	*18.6*	-	-
Westbound Left-Right					C	22.3	0.06	5
Westbound Approach					*C*	*22.3*	-	-
Northbound Thru	-	-	-	-				
Northbound Thru-Right					-	-	-	-
Northbound Approach	-	-	-	-	-	-	-	-
Southbound Left	-	-	-	-				
Southbound Thru					A	8.2	0.00	0.0
Southbound Approach	-	-	-	-	*A*	*0.1*	-	-
Walker Road / Site Drive #2								
Eastbound Thru								
Eastbound Thru-Right					-	-	-	-
Eastbound Approach					-	-	-	-
Westbound Left								
Westbound Thru					A	8.6	0.0	0.0
Westbound Approach					*A*	*0.1*	-	-
Northbound Left-Right					C	19.0	0.06	5
Northbound Approach					*C*	*19.0*	-	-

Note: Yellow highlighted cells indicate a Level-of-Service D
Orange highlighted cells indicate a Level-of-Service E
Red highlighted cells indicate a Level-of-Service F

Table 2: HCS Intersection Capacity Analysis Summary
Design Year 2036 'No-Build' vs. 'Build' Conditions: Unsignalized Intersections (cont.)

Movement	'No-Build' Condition				'Build' Condition			
	LOS	Delay (sec)	V/C Ratio	95th % Queue (ft)	LOS	Delay (sec)	V/C Ratio	95th % Queue (ft)
PM Peak Hour								
Avon Belden Road (SR 83) / Huntington Bank Driveway (Exit Only) / Site Drive #1								
Eastbound Left	E	41.1	0.19	18	F	61.1	0.27	24
Eastbound Right	B	14.0	0.05	5	B	14.0	0.05	5
Eastbound Approach	*D*	*28.2*	-	-	*E*	*38.6*	-	-
Westbound Left-Right					E	40.4	.08	9
Westbound Approach					*E*	*40.4*	-	-
Northbound Thru	-	-	-	-				
Northbound Thru-Right					-	-	-	-
Northbound Approach	-	-	-	-	-	-	-	-
Southbound Left	-	-	-	-	A	9.6	0.01	0
Southbound Thru					A	0.1	-	
Southbound Approach	-	-	-	-	*A*	*0.1*	-	-
Walker Road / Site Drive #2								
Eastbound Thru	-	-	-	-				
Eastbound Thru-Right					-	-	-	-
Eastbound Approach	-	-	-	-	-	-	-	-
Westbound Left	-	-	-	-	A	8.9	0.01	
Westbound Thru					A	0.1	-	
Westbound Approach	-	-	-	-	*A*	*0.2*	-	-
Northbound Left-Right					C	23.6	0.05	5
Northbound Approach					*C*	*23.6*	-	-

Note: Yellow highlighted cells indicate a Level-of-Service D
Orange highlighted cells indicate a Level-of-Service E
Red highlighted cells indicate a Level-of-Service F

As shown in **Table 2**, most movements and approaches at the proposed site driveways are expected to operate at acceptable LOS E or better during the AM and PM peak hours under the Design Year 2036 'Build' traffic conditions. These results show that access to the proposed development is not expected to degrade traffic operations along Avon Belden Road (SR 83) or Walker Road. While left-turns from the Huntington Bank Driveway (Exit Only) do experience degradation in their level-of-service, specifically in the PM peak, the delays are not excessive and this does not impact traffic on the roadway network and queues will be contained on-site. Additionally, while evaluated as a four-way intersection, the bank driveway and proposed site access road are slightly offset, therefore, exiting may in actuality experience lower delays.

Table 3 summarizes the results of the capacity analysis for the signalized intersection under the Design Year 2036 'No-Build' vs 'Build' traffic conditions. See **Appendix G** for the HCS Intersection Capacity Analysis printouts.

Table 3: HCS Intersection Capacity Analysis Summary - Design Year 2036 'No-Build' vs. 'Build' Conditions: Signalized Intersection

Movement	'No-Build' Condition					'Build' Condition				
	LOS	Delay (sec)	V/C Ratio	QSR	95th % Queue (ft/ln)	LOS	Delay (sec)	V/C Ratio	QSR	95th % Queue (ft/ln)
AM Peak Hour										
Avon Belden Road (SR 83) / Walker Road										
Eastbound Left	B	19.3	0.36	0.36	63	B	19.4	0.37	0.36	63
Eastbound Thru	C	26.3	0.65	0.11	225	C	26.4	0.65	0.11	226
Eastbound Right	C	25.6	0.59	0.54	177	C	25.6	0.60	0.55	178
Eastbound Approach	*C*	*24.9*	-	-	-	*C*	*24.9*	-	-	-
Westbound Left	B	18.4	0.32	0.27	68	B	18.4	0.32	0.27	68
Westbound Thru	C	24.8	0.53	0.12	182	C	24.9	0.54	0.12	186
Westbound Thru-Right	C	29.4	0.74	0.15	229	C	29.8	0.75	0.15	233
Westbound Approach	*C*	*25.7*	-	-	-	*C*	*25.9*	-	-	-
Northbound Left	B	20.0	0.41	0.30	66	C	20.0	0.43	0.31	69
Northbound Thru	C	23.6	0.37	0.07	122	C	23.7	0.38	0.07	123
Northbound Thru-Right	C	23.8	0.39	0.07	113	C	23.8	0.39	0.07	114
Northbound Approach	*C*	*22.8*	-	-	-	*C*	*22.8*	-	-	-
Southbound Left	B	18.0	0.37	0.42	95	B	18.0	0.37	0.43	96
Southbound Thru	C	33.2	0.85	0.31	318	C	33.5	0.85	0.31	321
Southbound Right	C	21.9	0.16	0.12	41	C	21.9	0.16	0.12	41
Southbound Approach	*C*	*28.1*	-	-	-	*C*	*28.3*	-	-	-
Overall Intersection	***C***	***25.5***	**-**	**-**	**-**	***C***	***25.7***	**-**	**-**	**-**
PM Peak Hour										
Avon Belden Road (SR 83) / Walker Road										
Eastbound Left	C	20.8	0.21	0.23	40	C	20.9	0.21	0.23	40
Eastbound Thru	C	29.6	0.68	0.12	240	C	29.9	0.69	0.12	244
Eastbound Right	C	27.7	0.55	0.51	166	C	27.8	0.56	0.52	169
Eastbound Approach	*C*	*28.0*	-	-	-	*C*	*28.2*	-	-	-
Westbound Left	C	21.1	0.52	0.50	125	C	21.2	0.53	0.50	126
Westbound Thru	C	26.5	0.58	0.14	222	C	26.6	0.59	0.14	224
Westbound Thru-Right	C	26.8	0.59	0.13	206	C	26.9	0.60	0.14	208
Westbound Approach	*C*	*25.2*	-	-	-	*C*	*25.3*	-	-	-
Northbound Left	B	19.9	0.66	0.77	173	B	19.9	0.66	0.78	174
Northbound Thru	C	24.9	0.53	0.12	207	C	24.9	0.53	0.12	207
Northbound Thru-Right	C	25.0	0.54	0.12	193	C	25.0	0.54	0.12	193
Northbound Approach	*C*	*23.2*	-	-	-	*C*	*23.2*	-	-	-
Southbound Left	C	20.7	0.42	0.43	97	C	20.8	0.43	0.44	100
Southbound Thru	C	29.6	0.71	0.24	246	C	29.7	0.70	0.24	248
Southbound Right	C	24.5	0.14	0.11	37	C	24.6	0.14	0.11	37
Southbound Approach	*C*	*26.5*	-	-	-	*C*	*26.5*	-	-	-
Overall Intersection	***C***	***25.4***	**-**	**-**	**-**	***C***	***25.5***	**-**	**-**	**-**

As shown in **Table 3**, all movements and approaches are expected to operate at acceptable LOS C or better at the Avon Belden Road (SR 83) / Walker Road intersection during the AM and PM peak hours under Design Year 2036 'Build' traffic conditions. The additional development traffic is expected to have minimal impact on vehicular delays. Additionally, the volume-capacity and queue-storage ratios experience little to no increases. Therefore, the results show that the traffic created by the proposed Harbor Crest Development is not expected to degrade the operations currently experienced at the Avon Belden Road (SR 83) / Walker Road intersection.

VII. Summary and Recommendations:

This Traffic Impact Study is being prepared at the request of Pulte Homes in association with the proposed construction of the Harbor Crest Residential Development to be located south of Walker Road between Avon Belden Road (SR 83) and Long Cove Drive, in Avon Lake, Lorain County, Ohio. The purpose of this Traffic Impact Study is to analyze the vehicular operating conditions in the vicinity of the proposed residential development both before and after its proposed construction to determine what, if any, impact the project will have on the surrounding roadway network.

In Summary,

1. The proposed Harbor Crest Residential Development is expected to consist of 74 single-family attached homes.

2. The proposed Harbor Crest Residential Development will have two full-movement access points; one along Avon Belden Road (SR 83) and one along Walker Road.

3. The proposed development is expected to generate 36 trip ends during the weekday AM peak hour and 42 trip ends during the weekday PM peak hour.

4. The auxiliary turn lane warrant analysis shows that no turn lanes are warranted.

5. All movements and approaches at the signalized intersection are expected to operate at acceptable LOS C or better under the Design Year 2036 'No-Build' and 'Build' traffic conditions during the AM and PM peak hours. No improvements are recommended for this intersection.

6. Most movements and approaches at the proposed site access locations are anticipated to operate at acceptable LOS E or better during the AM and PM peak hours under Design Year 2036 'Build' traffic conditions. The proposed site access locations are not anticipated to degrade traffic conditions along Avon Belden Road (Sr 83) or Walker Road, though there may be some increased delay for vehicles exiting Huntington Bank in the PM peak hour.

GPD Group recommends the following based on the information and analyses in this study:

1. The proposed development can be constructed according to the site plan with no improvements to the area roadways.

FIGURES

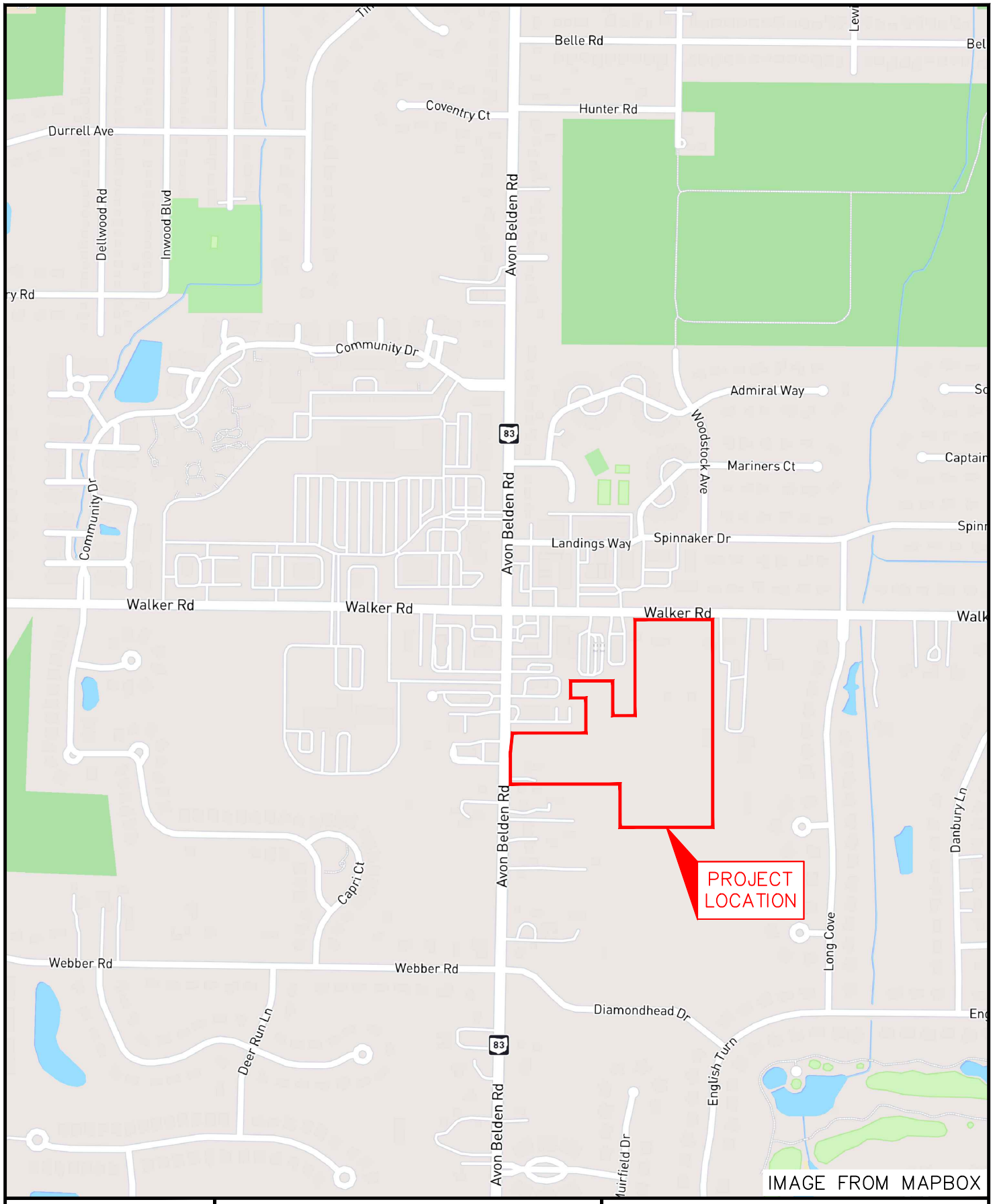


FIGURE 1

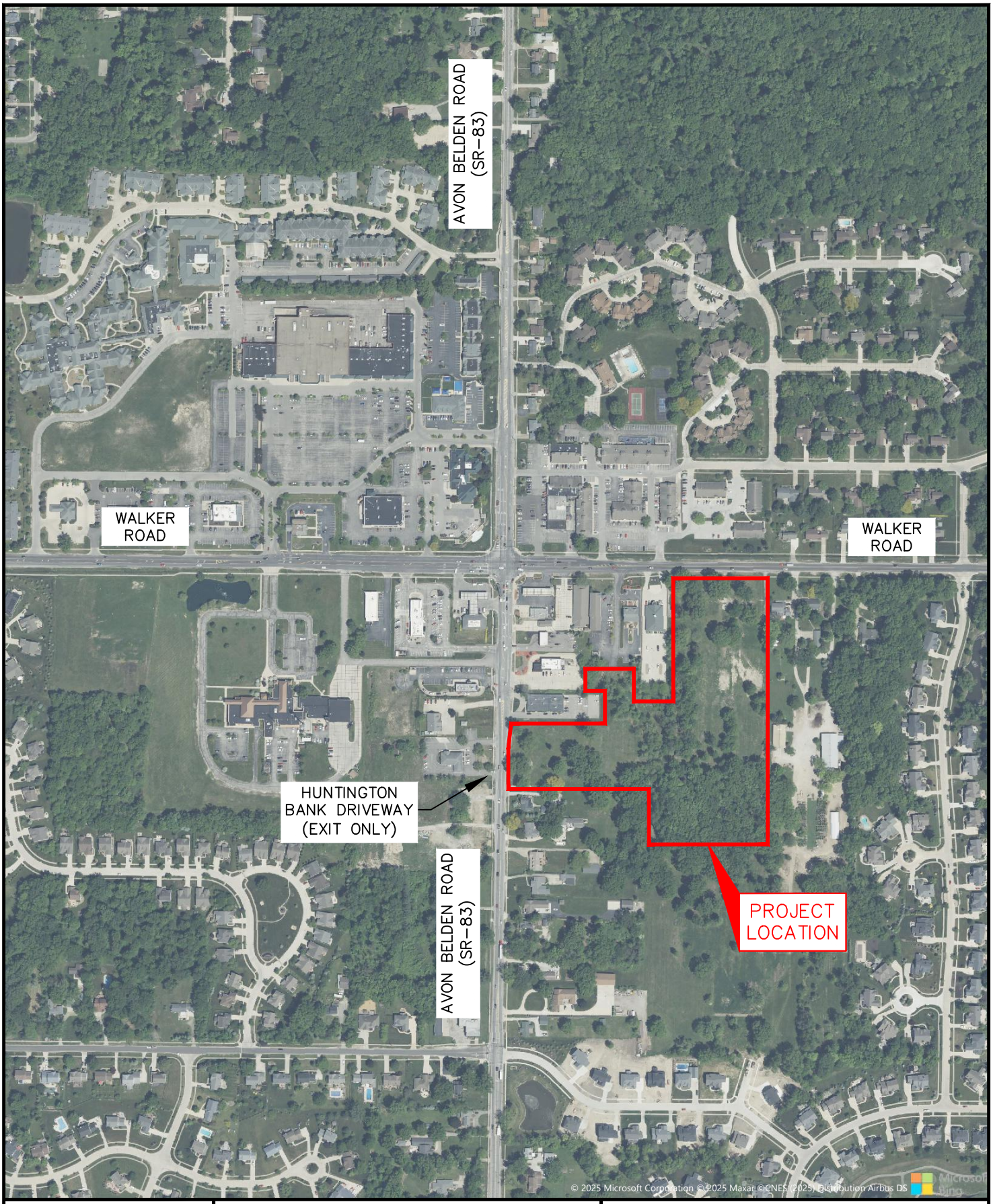
PROJECT LOCATION MAP

MARCH 2025

N

N.T.S.

CAD FILE: O:\2025\2025050\16 - PULTE - AVON LAKE TIS\FIGURES\FIGURE 1_PROJECT LOCATION MAP.DWG
DATE: 3/4/2025 TIME: 9:49:50 AM
TECHNICIAN: MLESSNER



N

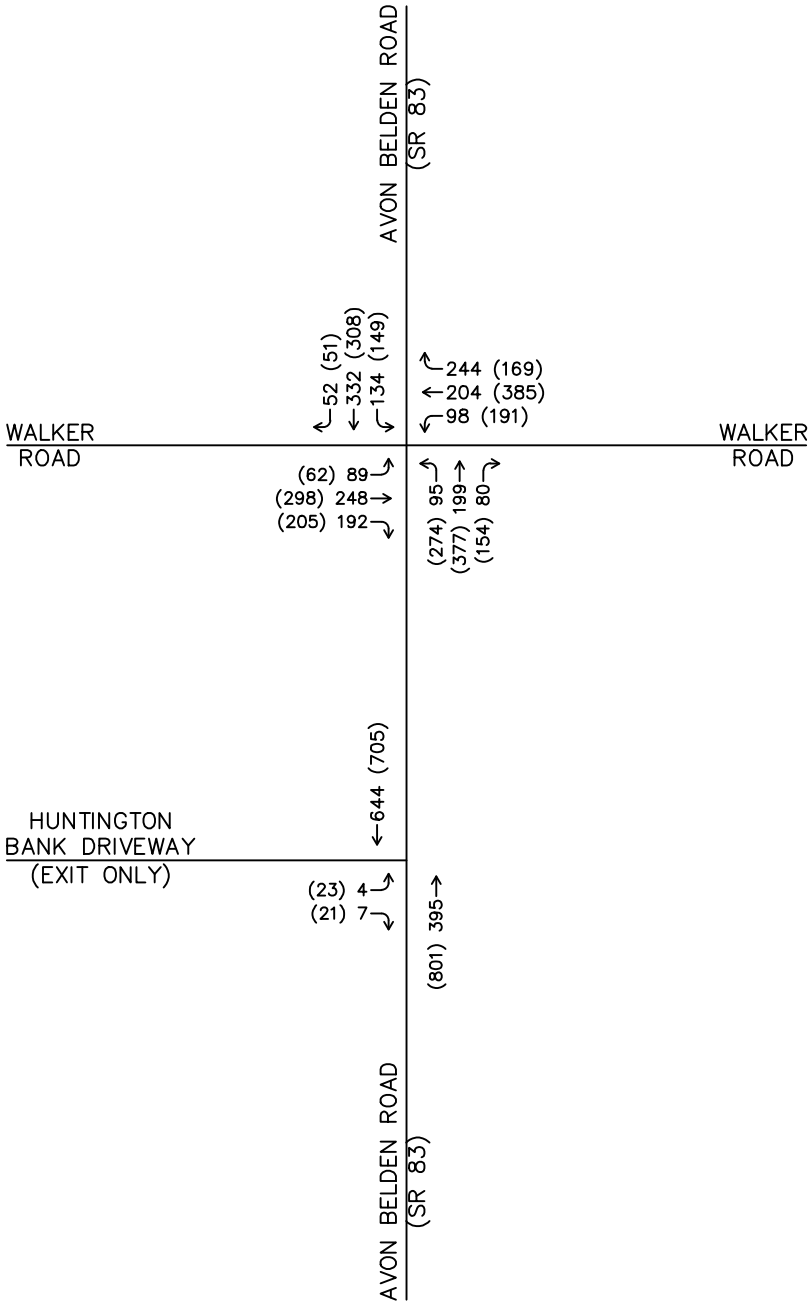
N.T.S.

FIGURE 2

AERIAL PHOTOGRAPH

MARCH 2025

CAD FILE: O:\2025\2025050\16 - PULTE - AVON LAKE TIS\FIGURES\FIGURE 2_AERIAL PHOTOGRAPH.DWG
DATE: 3/4/2025 TIME: 9:50:23 AM
TECHNICIAN: MLESSITER



LEGEND
– AM PEAK HOUR
(##) – PM PEAK HOUR

N

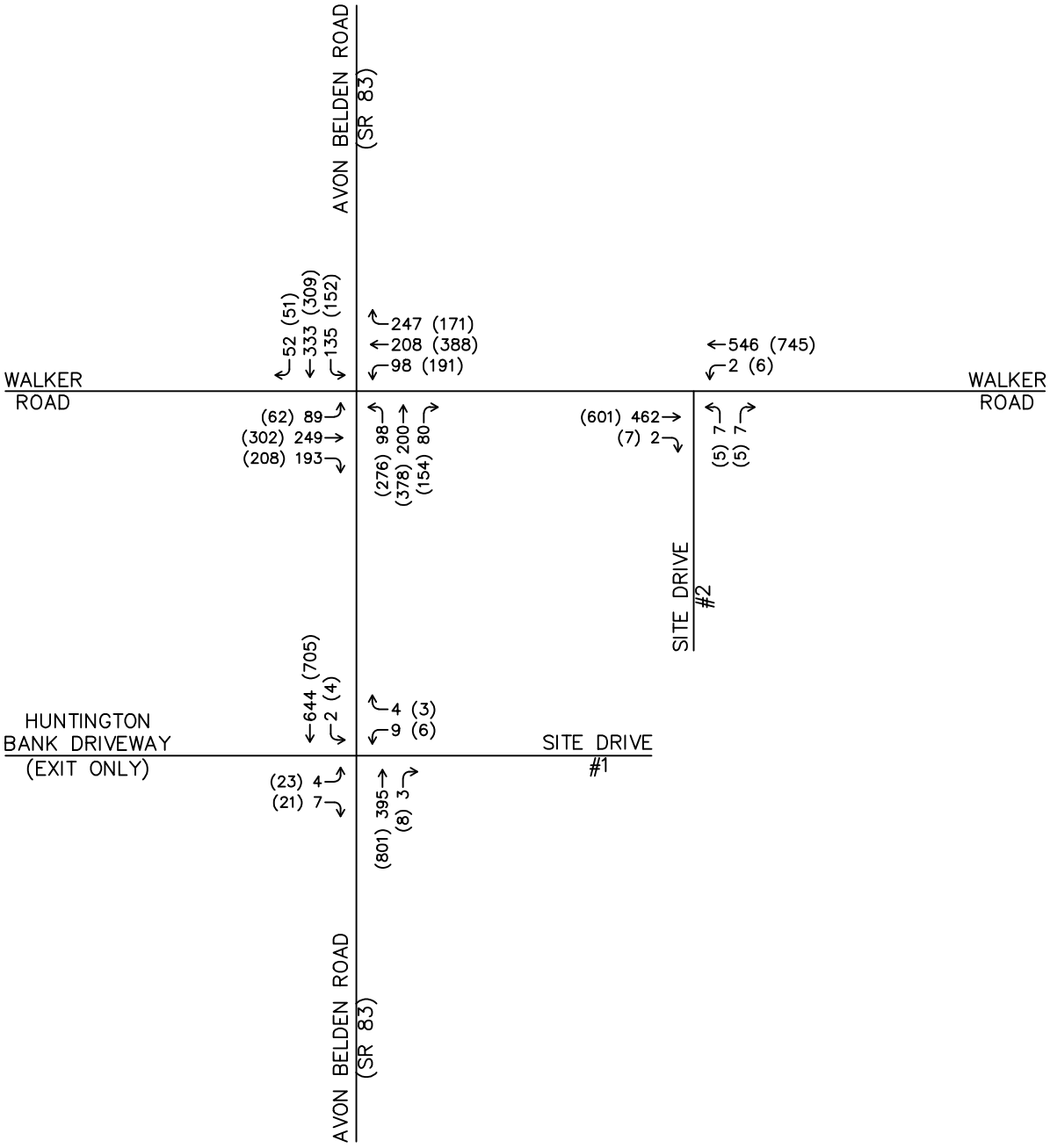
N.T.S.

FIGURE 3

DESIGN YEAR 2036
'NO–BUILD'
PEAK HOUR TRAFFIC VOLUMES

MARCH 2025

CAD FILE: O:\2025\2025050\16 - PULTE - AVON LAKE TIS\FIGURES\FIGURE 3_DY 2036 'NO-BUILD' PEAK HOUR TRAFFIC VOLUMES.DWG
DATE: 3/4/2025 TIME: 9:47:56 AM
TECHNICIAN: MLESSITER



LEGEND
– AM PEAK HOUR
(##) – PM PEAK HOUR

N

N.T.S.

FIGURE 4

DESIGN YEAR 2036
'BUILD'
PEAK HOUR TRAFFIC VOLUMES

MARCH 2025

CAD FILE: O:\2025\2025050\16 - PULTE - AVON LAKE TIS\FIGURES\FIGURE 4_DY 2036 'BUILD' PEAK HOUR TRAFFIC VOLUMES.DWG
DATE: 3/4/2025 TIME: 4:47:59 PM
TECHNICIAN: KWESTBROOKS

APPENDIX A
TURNING MOVEMENT COUNTS

Avon Belden Rd/Huntington Bank Driveway (Exi... - TMC

Tue Feb 11, 2025
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1269547, Location: 41.4911, -82.019048

Provided by: Tri-State Traffic Data, Inc.
48 Greensburg Street, Suite 397,
Delmont, PA, 15626-9998, US

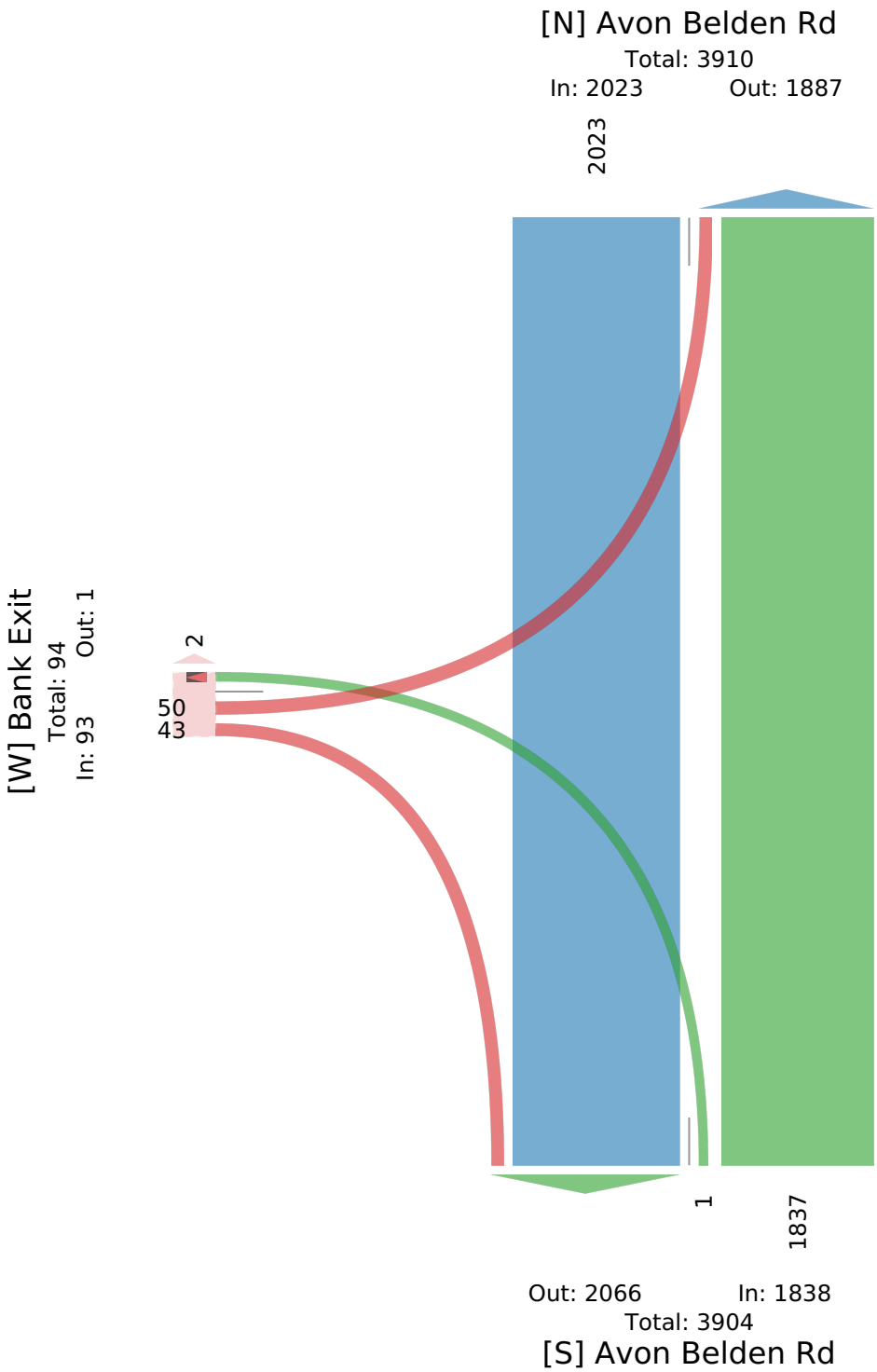
Leg	Avon Belden Rd					Avon Belden Rd					Bank Exit					
Direction	Southbound					Northbound					Eastbound					
Time	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	**Int**
2025-02-11 7:00AM	0	131	0	**131**	0	50	0	0	**50**	0	0	0	0	**0**	0	**181**
7:15AM	0	132	0	**132**	0	90	0	0	**90**	0	1	0	0	**1**	0	**223**
7:30AM	0	133	0	**133**	0	75	1	0	**76**	0	2	1	0	**3**	0	**212**
7:45AM	0	120	0	**120**	0	83	0	0	**83**	0	2	1	0	**3**	0	**206**
Hourly Total	0	516	0	**516**	0	298	1	0	**299**	0	5	2	0	**7**	0	**822**
8:00AM	0	111	0	**111**	0	55	0	0	**55**	0	1	1	0	**2**	0	**168**
8:15AM	0	100	0	**100**	0	87	0	0	**87**	0	1	1	0	**2**	0	**189**
8:30AM	0	97	0	**97**	0	75	0	0	**75**	0	0	4	0	**4**	0	**176**
8:45AM	0	122	0	**122**	0	102	0	0	**102**	0	1	3	0	**4**	0	**228**
Hourly Total	0	430	0	**430**	0	319	0	0	**319**	0	3	9	0	**12**	0	**761**
4:00PM	0	146	0	**146**	0	168	0	0	**168**	0	5	6	0	**11**	1	**325**
4:15PM	0	142	0	**142**	0	159	0	0	**159**	0	9	12	0	**21**	0	**322**
4:30PM	0	127	0	**127**	0	134	0	0	**134**	0	6	2	0	**8**	0	**269**
4:45PM	0	127	0	**127**	0	174	0	0	**174**	0	4	8	0	**12**	0	**313**
Hourly Total	0	542	0	**542**	0	635	0	0	**635**	0	24	28	0	**52**	1	**1229**
5:00PM	0	149	0	**149**	0	152	0	0	**152**	0	4	2	0	**6**	0	**307**
5:15PM	0	140	0	**140**	0	157	0	0	**157**	0	3	7	0	**10**	0	**307**
5:30PM	0	128	0	**128**	0	140	0	0	**140**	0	3	1	0	**4**	1	**272**
5:45PM	0	118	0	**118**	0	136	0	0	**136**	0	1	1	0	**2**	0	**256**
Hourly Total	0	535	0	**535**	0	585	0	0	**585**	0	11	11	0	**22**	1	**1142**
Total	0	2023	0	**2023**	0	1837	1	0	**1838**	0	43	50	0	**93**	2	**3954**
% Approach	0%	100%	0%	**-**	-	99.9%	0.1%	0%	**-**	-	46.2%	53.8%	0%	**-**	-	**-**
% Total	0%	51.2%	0%	**51.2%**	-	46.5%	0%	0%	**46.5%**	-	1.1%	1.3%	0%	**2.4%**	-	**-**
Lights	0	1951	0	**1951**	-	1793	1	0	**1794**	-	42	50	0	**92**	-	3837
% Lights	0%	96.4%	0%	**96.4%**	-	97.6%	100%	0%	**97.6%**	-	97.7%	100%	0%	**98.9%**	-	97.0%
Articulated Trucks and Single-Unit Trucks	0	36	0	**36**	-	29	0	0	**29**	-	1	0	0	**1**	-	66
% Articulated Trucks and Single-Unit Trucks	0%	1.8%	0%	**1.8%**	-	1.6%	0%	0%	**1.6%**	-	2.3%	0%	0%	**1.1%**	-	1.7%
Buses	0	36	0	**36**	-	15	0	0	**15**	-	0	0	0	**0**	-	51
% Buses	0%	1.8%	0%	**1.8%**	-	0.8%	0%	0%	**0.8%**	-	0%	0%	0%	**0%**	-	1.3%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	2	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Avon Belden Rd/Huntington Bank Driveway (Exi... - TMC

Tue Feb 11, 2025
Full Length (7 AM-9 AM, 4 PM-6 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1269547, Location: 41.4911, -82.019048

Provided by: Tri-State Traffic Data, Inc.
48 Greensburg Street, Suite 397,
Delmont, PA, 15626-9998, US



Avon Belden Rd/Huntington Bank Driveway (Exi... - TMC

Tue Feb 11, 2025
Forced Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1269547, Location: 41.4911, -82.019048

Provided by: Tri-State Traffic Data, Inc.
48 Greensburg Street, Suite 397,
Delmont, PA, 15626-9998, US

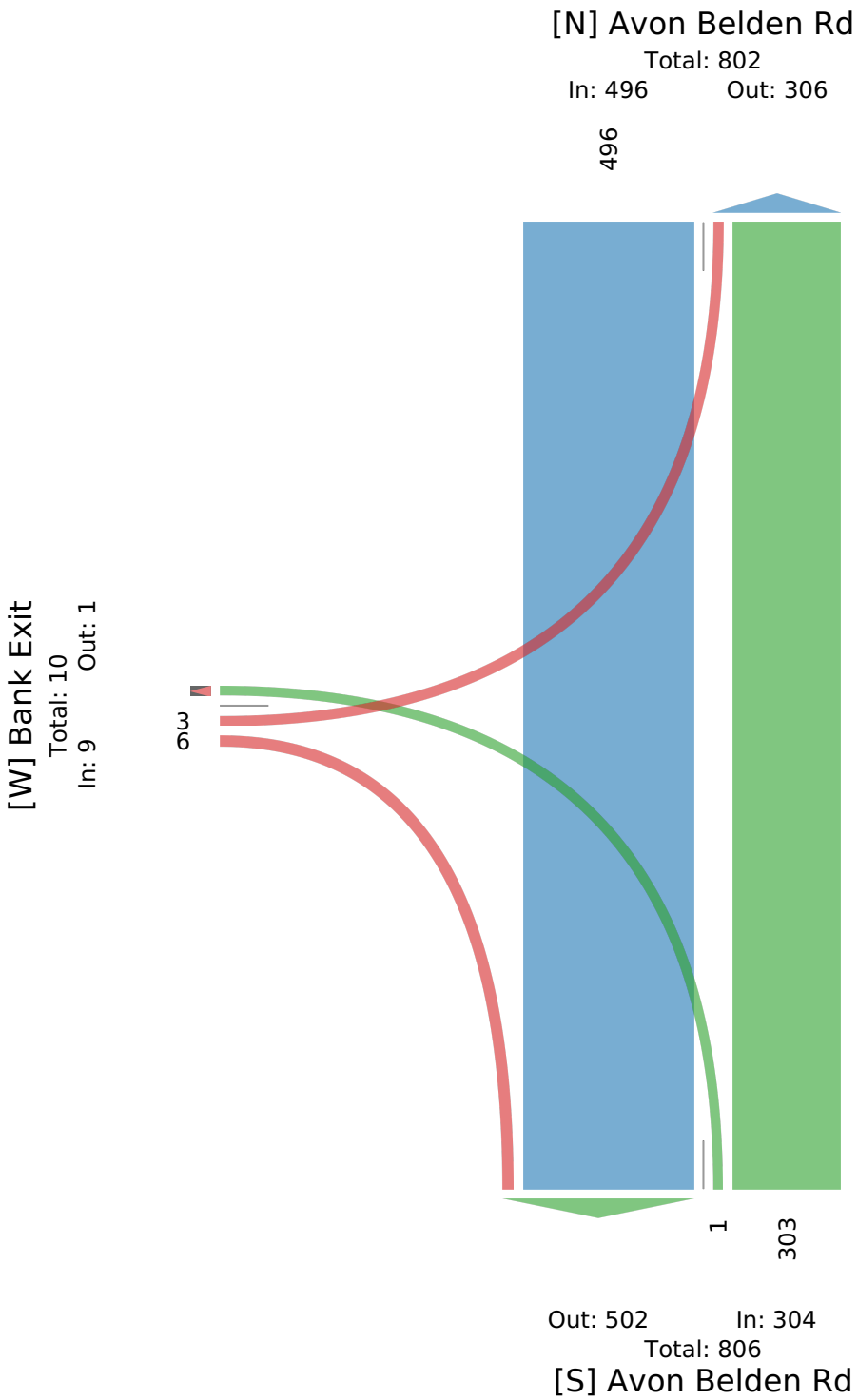
Leg	Avon Belden Rd					Avon Belden Rd					Bank Exit					
Direction	Southbound					Northbound					Eastbound					
Time	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	**Int**
2025-02-11 7:15AM	0	132	0	**132**	0	90	0	0	**90**	0	1	0	0	**1**	0	**223**
7:30AM	0	133	0	**133**	0	75	1	0	**76**	0	2	1	0	**3**	0	**212**
7:45AM	0	120	0	**120**	0	83	0	0	**83**	0	2	1	0	**3**	0	**206**
8:00AM	0	111	0	**111**	0	55	0	0	**55**	0	1	1	0	**2**	0	**168**
Total	0	496	0	**496**	0	303	1	0	**304**	0	6	3	0	**9**	0	**809**
% Approach	0%	100%	0%	**-**	-	99.7%	0.3%	0%	**-**	-	66.7%	33.3%	0%	**-**	-	**-**
% Total	0%	61.3%	0%	**61.3%**	-	37.5%	0.1%	0%	**37.6%**	-	0.7%	0.4%	0%	**1.1%**	-	**-**
PHF	-	0.932	-	**0.932**	-	0.842	0.250	-	**0.844**	-	0.750	0.750	-	**0.750**	-	0.907
Lights	0	480	0	**480**	-	291	1	0	**292**	-	5	3	0	**8**	-	780
% Lights	0%	96.8%	0%	**96.8%**	-	96.0%	100%	0%	**96.1%**	-	83.3%	100%	0%	**88.9%**	-	96.4%
Articulated Trucks and Single-Unit Trucks	0	11	0	**11**	-	8	0	0	**8**	-	1	0	0	**1**	-	20
% Articulated Trucks and Single-Unit Trucks	0%	2.2%	0%	**2.2%**	-	2.6%	0%	0%	**2.6%**	-	16.7%	0%	0%	**11.1%**	-	2.5%
Buses	0	5	0	**5**	-	4	0	0	**4**	-	0	0	0	**0**	-	9
% Buses	0%	1.0%	0%	**1.0%**	-	1.3%	0%	0%	**1.3%**	-	0%	0%	0%	**0%**	-	1.1%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Avon Belden Rd/Huntington Bank Driveway (Exi... - TMC

Tue Feb 11, 2025
Forced Peak (7:15 AM - 8:15 AM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1269547, Location: 41.4911, -82.019048

Provided by: Tri-State Traffic Data, Inc.
48 Greensburg Street, Suite 397,
Delmont, PA, 15626-9998, US



Avon Belden Rd/Huntington Bank Driveway (Exi... - TMC

Tue Feb 11, 2025
Forced Peak (4:30 PM - 5:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1269547, Location: 41.4911, -82.019048

Provided by: Tri-State Traffic Data, Inc.
48 Greensburg Street, Suite 397,
Delmont, PA, 15626-9998, US

Leg / Direction	Avon Belden Rd Southbound					Avon Belden Rd Northbound					Bank Exit Eastbound					
Time	R	T	U	**App**	Ped*	T	L	U	**App**	Ped*	R	L	U	**App**	Ped*	**Int**
2025-02-11 4:30PM	0	127	0	**127**	0	134	0	0	**134**	0	6	2	0	**8**	0	**269**
4:45PM	0	127	0	**127**	0	174	0	0	**174**	0	4	8	0	**12**	0	**313**
5:00PM	0	149	0	**149**	0	152	0	0	**152**	0	4	2	0	**6**	0	**307**
5:15PM	0	140	0	**140**	0	157	0	0	**157**	0	3	7	0	**10**	0	**307**
Total	0	543	0	**543**	0	617	0	0	**617**	0	17	19	0	**36**	0	**1196**
% Approach	0%	100%	0%	**-**	-	100%	0%	0%	**-**	-	47.2%	52.8%	0%	**-**	-	**-**
% Total	0%	45.4%	0%	**45.4%**	-	51.6%	0%	0%	**51.6%**	-	1.4%	1.6%	0%	**3.0%**	-	**-**
PHF	-	0.911	-	**0.911**	-	0.886	-	-	**0.886**	-	0.708	0.594	-	**0.750**	-	0.955
Lights	0	533	0	**533**	-	611	0	0	**611**	-	17	19	0	**36**	-	1180
% Lights	0%	98.2%	0%	**98.2%**	-	99.0%	0%	0%	**99.0%**	-	100%	100%	0%	**100%**	-	98.7%
Articulated Trucks and Single-Unit Trucks	0	7	0	**7**	-	5	0	0	**5**	-	0	0	0	**0**	-	12
% Articulated Trucks and Single-Unit Trucks	0%	1.3%	0%	**1.3%**	-	0.8%	0%	0%	**0.8%**	-	0%	0%	0%	**0%**	-	1.0%
Buses	0	3	0	**3**	-	1	0	0	**1**	-	0	0	0	**0**	-	4
% Buses	0%	0.6%	0%	**0.6%**	-	0.2%	0%	0%	**0.2%**	-	0%	0%	0%	**0%**	-	0.3%
Pedestrians	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bicycles on Crosswalk	-	-	-	-	0	-	-	-	-	0	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

Avon Belden Rd/Huntington Bank Driveway (Exi... - TMC

Tue Feb 11, 2025
Forced Peak (4:30 PM - 5:30 PM)
All Classes (Lights, Articulated Trucks and Single-Unit Trucks, Buses, Pedestrians, Bicycles on Crosswalk)
All Movements
ID: 1269547, Location: 41.4911, -82.019048

Provided by: Tri-State Traffic Data, Inc.
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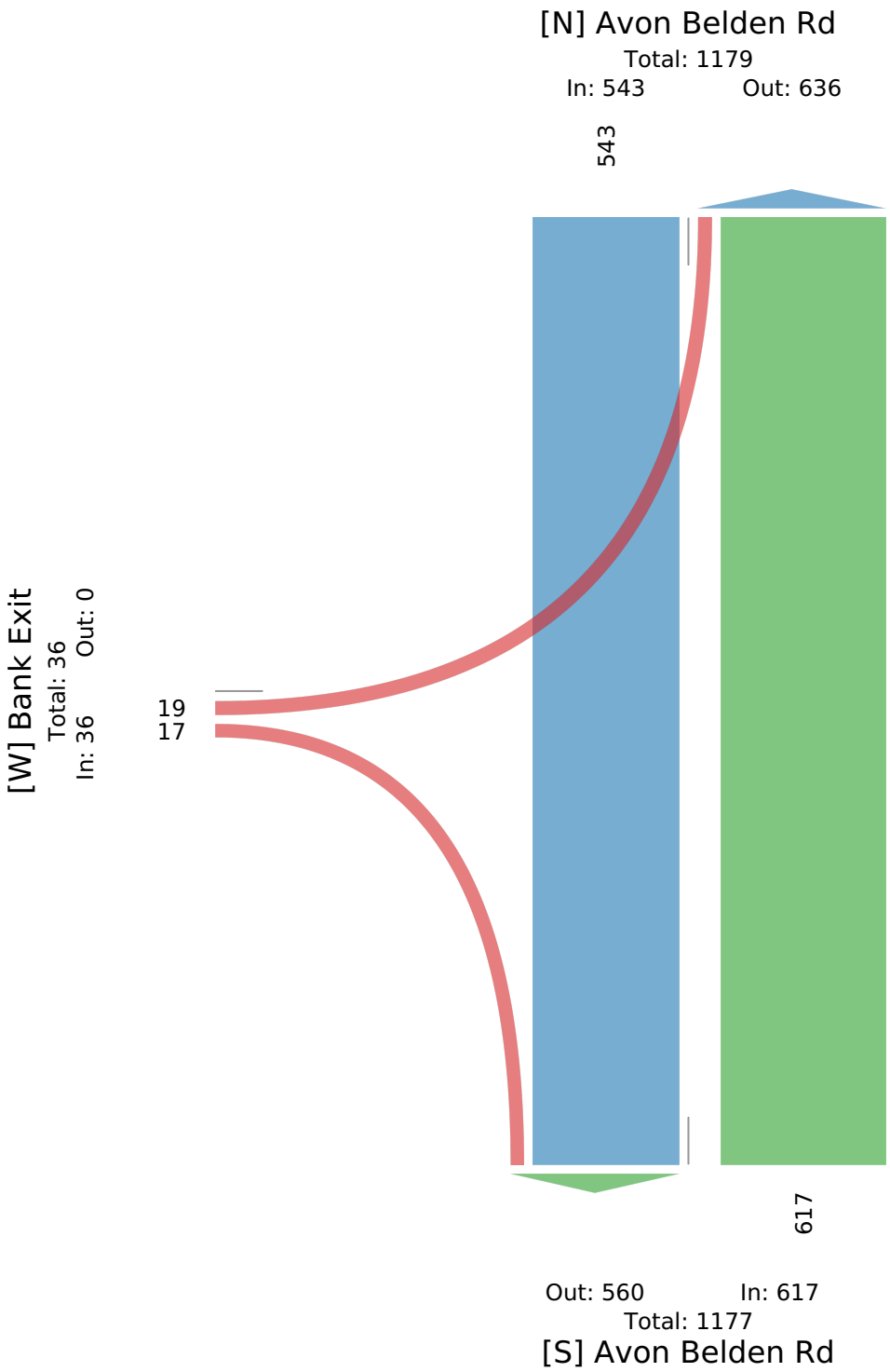

www.TSTData.com
Tri-State Traffic Data, Inc

Delmont, PA, Pennsylvania, United States 15626
610-517-0990 TSTData@aol.com
Serving Transportation Professionals Since 1995

Avon Lake, OH
Avon Belden Rd & Walker Rd
Tuesday, February 11, 2025
Location: 41.493163, -82.018959

Count Name: Avon Belden Rd/Walker Rd
Site Code:
Start Date: 02/11/2025

Turning Movement Data

Start Time	Walker Rd Eastbound							Walker Rd Westbound							Avon Belden Rd Northbound							Avon Belden Rd Southbound							
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Int. Total
7:00 AM	6	23	20	12	0	0	61	18	21	8	6	0	0	53	6	26	8	4	0	0	44	12	66	2	3	0	0	83	241
7:15 AM	17	42	25	8	0	0	92	14	36	55	14	0	0	119	21	48	2	6	0	0	77	20	69	2	5	0	0	96	384
7:30 AM	29	63	25	13	0	0	130	12	44	62	15	0	0	133	19	47	13	7	0	0	86	37	73	10	8	0	0	128	477
7:45 AM	11	52	24	12	0	0	99	28	41	15	9	0	0	93	18	32	13	11	0	0	74	29	61	8	6	0	0	104	370
Hourly Total	63	180	94	45	0	0	382	72	142	140	44	0	0	398	64	153	36	28	0	0	281	98	269	22	22	0	0	411	1472
8:00 AM	11	34	27	14	0	0	86	22	36	13	5	0	0	76	15	27	5	5	0	0	52	17	53	0	1	0	0	71	285
8:15 AM	10	35	20	18	0	0	83	20	41	32	7	0	0	100	16	43	16	7	0	0	82	24	45	5	1	0	0	75	340
8:30 AM	9	30	18	8	0	0	65	21	32	19	10	0	0	82	19	32	14	9	0	0	74	29	52	7	4	0	0	92	313
8:45 AM	12	48	20	10	0	0	90	43	36	11	8	0	0	98	25	38	10	10	0	0	83	24	47	7	3	0	0	81	352
Hourly Total	42	147	85	50	0	0	324	106	145	75	30	0	0	356	75	140	45	31	0	0	291	94	197	19	9	0	0	319	1290
*** BREAK ***	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4:00 PM	17	51	28	14	0	1	110	44	70	32	6	0	0	152	57	80	20	11	0	0	168	19	62	3	3	0	1	87	517
4:15 PM	23	40	20	9	0	0	92	42	62	26	14	0	0	144	51	70	19	19	0	0	159	33	64	14	4	0	0	115	510
4:30 PM	13	58	38	11	0	0	120	31	74	24	12	0	0	141	48	79	12	12	0	0	151	23	53	5	3	0	0	84	496
4:45 PM	10	51	21	20	0	0	102	29	70	19	9	0	0	127	67	73	22	4	0	0	166	27	58	1	7	0	0	93	488
Hourly Total	63	200	107	54	0	1	424	146	276	101	41	0	0	564	223	302	73	46	0	0	644	102	237	23	17	0	1	379	2011
5:00 PM	7	53	18	14	0	0	92	39	81	23	12	0	0	155	46	78	24	13	0	0	161	28	65	7	1	0	0	101	509
5:15 PM	18	67	23	13	0	0	121	48	72	21	10	0	0	151	50	60	23	9	0	0	142	37	61	9	6	0	0	113	527
5:30 PM	10	43	26	12	0	0	91	24	57	20	8	0	0	109	64	65	19	18	0	0	166	27	66	3	2	0	0	98	464
5:45 PM	12	46	22	14	0	1	94	28	61	17	10	0	0	116	42	74	13	9	0	0	138	24	49	10	3	0	2	86	434
Hourly Total	47	209	89	53	0	1	398	139	271	81	40	0	0	531	202	277	79	49	0	0	607	116	241	29	12	0	2	398	1934
6:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Grand Total	215	736	375	202	0	2	1528	463	834	397	156	0	0	1850	564	872	233	154	0	0	1823	410	944	93	60	0	3	1507	6708
Approach %	14.1	48.2	24.5	13.2	0.0	-	-	25.0	45.1	21.5	8.4	0.0	-	-	30.9	47.8	12.8	8.4	0.0	-	-	27.2	62.6	6.2	4.0	0.0	-	-	-
Total %	3.2	11.0	5.6	3.0	0.0	-	22.8	6.9	12.4	5.9	2.3	0.0	-	27.6	8.4	13.0	3.5	2.3	0.0	-	27.2	6.1	14.1	1.4	0.9	0.0	-	22.5	-
Lights	212	724	367	201	0	-	1504	429	820	389	152	0	-	1790	556	856	221	150	0	-	1783	406	912	93	59	0	-	1470	6547
% Lights	98.6	98.4	97.9	99.5	-	-	98.4	92.7	98.3	98.0	97.4	-	-	96.8	98.6	98.2	94.8	97.4	-	-	97.8	99.0	96.6	100.0	98.3	-	-	97.5	97.6
Buses	0	9	4	0	0	-	13	18	10	8	3	0	-	39	3	6	6	1	0	-	16	2	17	0	1	0	-	20	88
% Buses	0.0	1.2	1.1	0.0	-	-	0.9	3.9	1.2	2.0	1.9	-	-	2.1	0.5	0.7	2.6	0.6	-	-	0.9	0.5	1.8	0.0	1.7	-	-	1.3	1.3
Trucks	3	3	4	1	0	-	11	16	4	0	1	0	-	21	5	10	6	3	0	-	24	2	15	0	0	0	-	17	73
% Trucks	1.4	0.4	1.1	0.5	-	-	0.7	3.5	0.5	0.0	0.6	-	-	1.1	0.9	1.1	2.6	1.9	-	-	1.3	0.5	1.6	0.0	0.0	-	-	1.1	1.1
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-
Pedestrians	-	-	-	-	-	2	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	3	-	-
% Pedestrians	-	-	-	-	-	100.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-

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Avon Lake, OH
Avon Belden Rd & Walker Rd
Tuesday, February 11, 2025
Location: 41.493163, -82.018959

Count Name: Avon Belden Rd/Walker Rd
Site Code:
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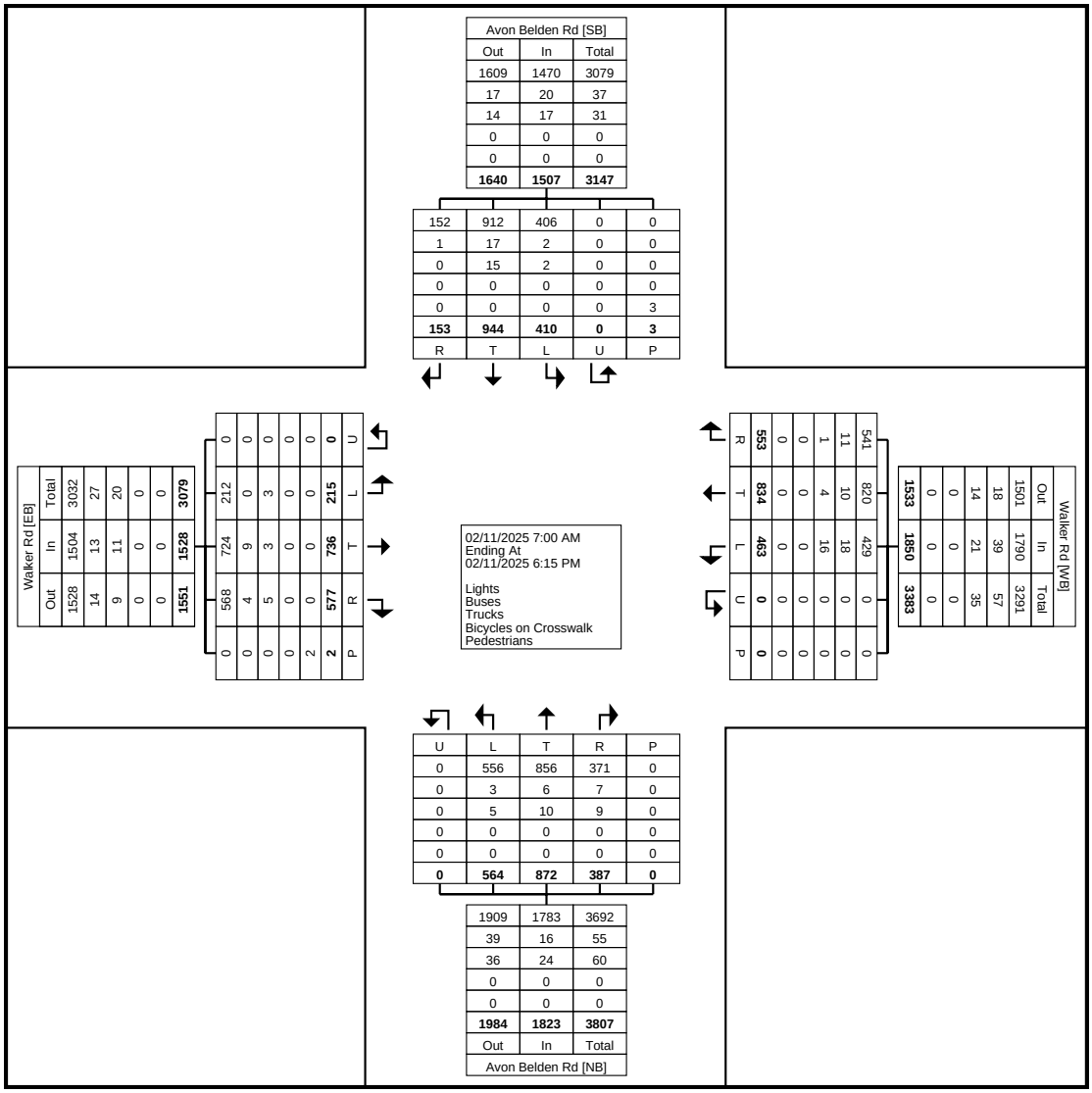

Turning Movement Data Plot

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Avon Lake, OH
Avon Belden Rd & Walker Rd
Tuesday, February 11, 2025
Location: 41.493163, -82.018959

Count Name: Avon Belden Rd/Walker Rd
Site Code:
Start Date: 02/11/2025

Turning Movement Peak Hour Data (7:15 AM)

Start Time	Walker Rd Eastbound							Walker Rd Westbound							Avon Belden Rd Northbound							Avon Belden Rd Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
7:15 AM	17	42	25	8	0	0	92	14	36	55	14	0	0	119	21	48	2	6	0	0	77	20	69	2	5	0	0	96	384
7:30 AM	29	63	25	13	0	0	130	12	44	62	15	0	0	133	19	47	13	7	0	0	86	37	73	10	8	0	0	128	477
7:45 AM	11	52	24	12	0	0	99	28	41	15	9	0	0	93	18	32	13	11	0	0	74	29	61	8	6	0	0	104	370
8:00 AM	11	34	27	14	0	0	86	22	36	13	5	0	0	76	15	27	5	5	0	0	52	17	53	0	1	0	0	71	285
Total	68	191	101	47	0	0	407	76	157	145	43	0	0	421	73	154	33	29	0	0	289	103	256	20	20	0	0	399	1516
Approach %	16.7	46.9	24.8	11.5	0.0	-	-	18.1	37.3	34.4	10.2	0.0	-	-	25.3	53.3	11.4	10.0	0.0	-	-	25.8	64.2	5.0	5.0	0.0	-	-	-
Total %	4.5	12.6	6.7	3.1	0.0	-	26.8	5.0	10.4	9.6	2.8	0.0	-	27.8	4.8	10.2	2.2	1.9	0.0	-	19.1	6.8	16.9	1.3	1.3	0.0	-	26.3	-
PHF	0.586	0.758	0.935	0.839	0.000	-	0.783	0.679	0.892	0.585	0.717	0.000	-	0.791	0.869	0.802	0.635	0.659	0.000	-	0.840	0.696	0.877	0.500	0.625	0.000	-	0.779	0.795
Lights	66	180	99	46	0	-	391	73	151	141	42	0	-	407	71	151	29	29	0	-	280	102	246	20	19	0	-	387	1465
% Lights	97.1	94.2	98.0	97.9	-	-	96.1	96.1	96.2	97.2	97.7	-	-	96.7	97.3	98.1	87.9	100.0	-	-	96.9	99.0	96.1	100.0	95.0	-	-	97.0	96.6
Buses	0	9	1	0	0	-	10	1	5	4	1	0	-	11	0	1	2	0	0	-	3	1	3	0	1	0	-	5	29
% Buses	0.0	4.7	1.0	0.0	-	-	2.5	1.3	3.2	2.8	2.3	-	-	2.6	0.0	0.6	6.1	0.0	-	-	1.0	1.0	1.2	0.0	5.0	-	-	1.3	1.9
Trucks	2	2	1	1	0	-	6	2	1	0	0	0	-	3	2	2	2	0	0	-	6	0	7	0	0	0	-	7	22
% Trucks	2.9	1.0	1.0	2.1	-	-	1.5	2.6	0.6	0.0	0.0	-	-	0.7	2.7	1.3	6.1	0.0	-	-	2.1	0.0	2.7	0.0	0.0	-	-	1.8	1.5
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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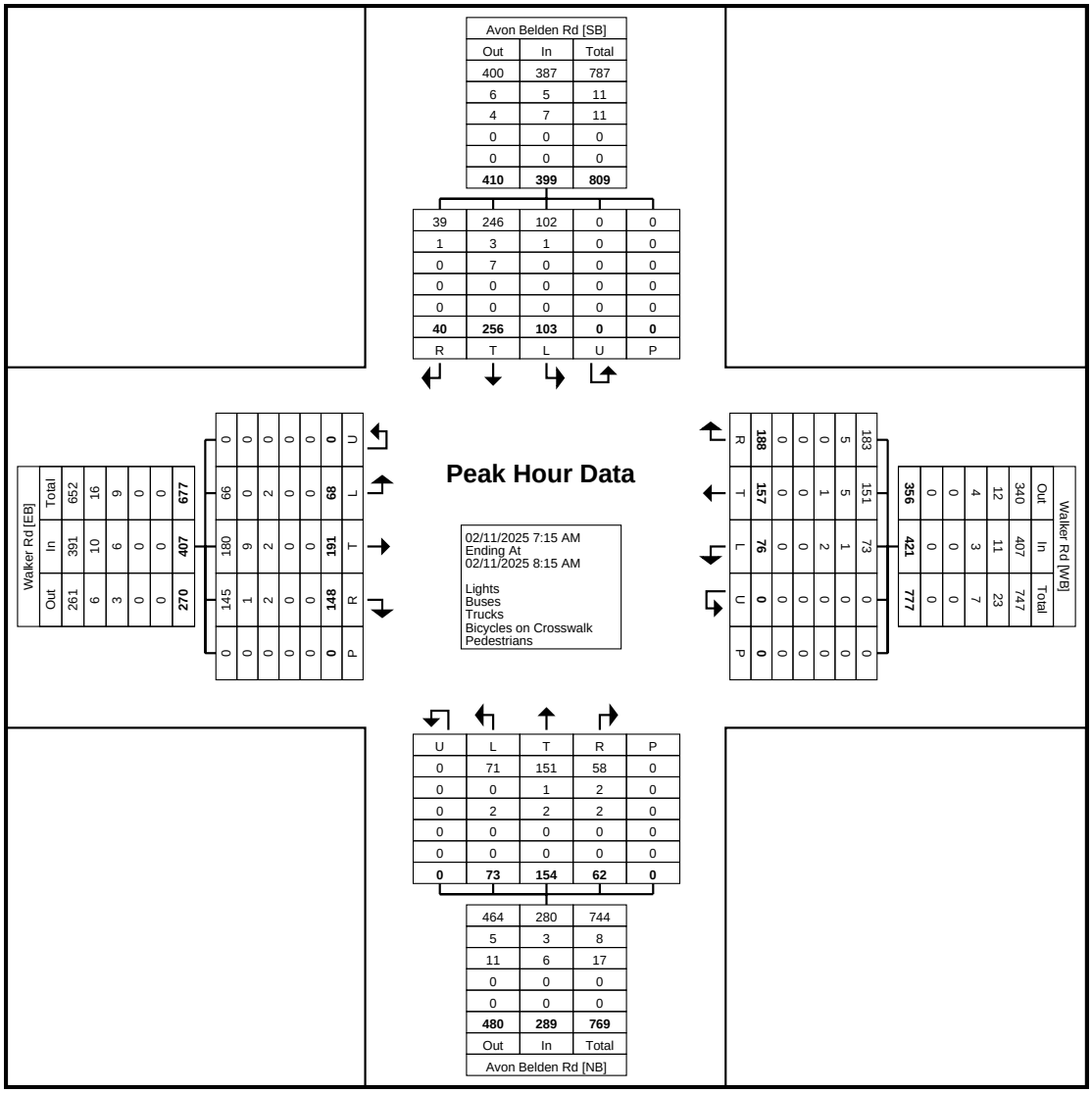

Turning Movement Peak Hour Data Plot (7:15 AM)

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Count Name: Avon Belden Rd/Walker Rd
Site Code:
Start Date: 02/11/2025

Turning Movement Peak Hour Data (4:30 PM)

Start Time	Walker Rd Eastbound							Walker Rd Westbound							Avon Belden Rd Northbound							Avon Belden Rd Southbound							Int. Total
	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	Left	Thru	Right	Right on Red	U-Turn	Peds	App. Total	
4:30 PM	13	58	38	11	0	0	120	31	74	24	12	0	0	141	48	79	12	12	0	0	151	23	53	5	3	0	0	84	496
4:45 PM	10	51	21	20	0	0	102	29	70	19	9	0	0	127	67	73	22	4	0	0	166	27	58	1	7	0	0	93	488
5:00 PM	7	53	18	14	0	0	92	39	81	23	12	0	0	155	46	78	24	13	0	0	161	28	65	7	1	0	0	101	509
5:15 PM	18	67	23	13	0	0	121	48	72	21	10	0	0	151	50	60	23	9	0	0	142	37	61	9	6	0	0	113	527
Total	48	229	100	58	0	0	435	147	297	87	43	0	0	574	211	290	81	38	0	0	620	115	237	22	17	0	0	391	2020
Approach %	11.0	52.6	23.0	13.3	0.0	-	-	25.6	51.7	15.2	7.5	0.0	-	-	34.0	46.8	13.1	6.1	0.0	-	-	29.4	60.6	5.6	4.3	0.0	-	-	-
Total %	2.4	11.3	5.0	2.9	0.0	-	21.5	7.3	14.7	4.3	2.1	0.0	-	28.4	10.4	14.4	4.0	1.9	0.0	-	30.7	5.7	11.7	1.1	0.8	0.0	-	19.4	-
PHF	0.667	0.854	0.658	0.725	0.000	-	0.899	0.766	0.917	0.906	0.896	0.000	-	0.926	0.787	0.918	0.844	0.731	0.000	-	0.934	0.777	0.912	0.611	0.607	0.000	-	0.865	0.958
Lights	48	229	98	58	0	-	433	142	296	87	43	0	-	568	211	286	80	38	0	-	615	115	232	22	17	0	-	386	2002
% Lights	100.0	100.0	98.0	100.0	-	-	99.5	96.6	99.7	100.0	100.0	-	-	99.0	100.0	98.6	98.8	100.0	-	-	99.2	100.0	97.9	100.0	100.0	-	-	98.7	99.1
Buses	0	0	0	0	0	-	0	0	0	0	0	0	-	0	0	1	0	0	0	-	1	0	3	0	0	0	-	3	4
% Buses	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.3	0.0	0.0	-	-	0.2	0.0	1.3	0.0	0.0	-	-	0.8	0.2
Trucks	0	0	2	0	0	-	2	5	1	0	0	0	-	6	0	3	1	0	0	-	4	0	2	0	0	0	-	2	14
% Trucks	0.0	0.0	2.0	0.0	-	-	0.5	3.4	0.3	0.0	0.0	-	-	1.0	0.0	1.0	1.2	0.0	-	-	0.6	0.0	0.8	0.0	0.0	-	-	0.5	0.7
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Bicycles on Crosswalk	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedestrians	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-	-	-	-	-	0	-	-
% Pedestrians	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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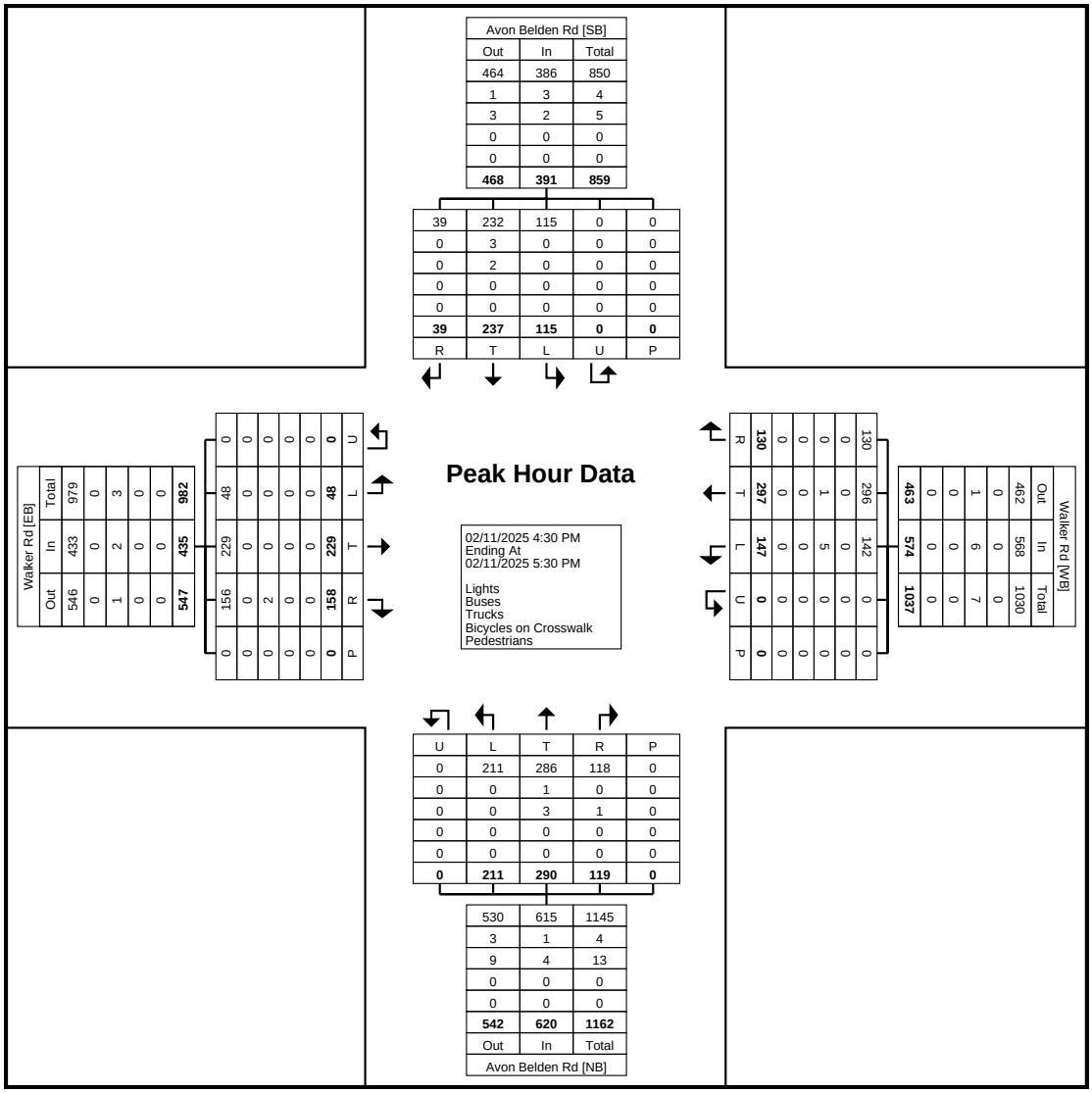
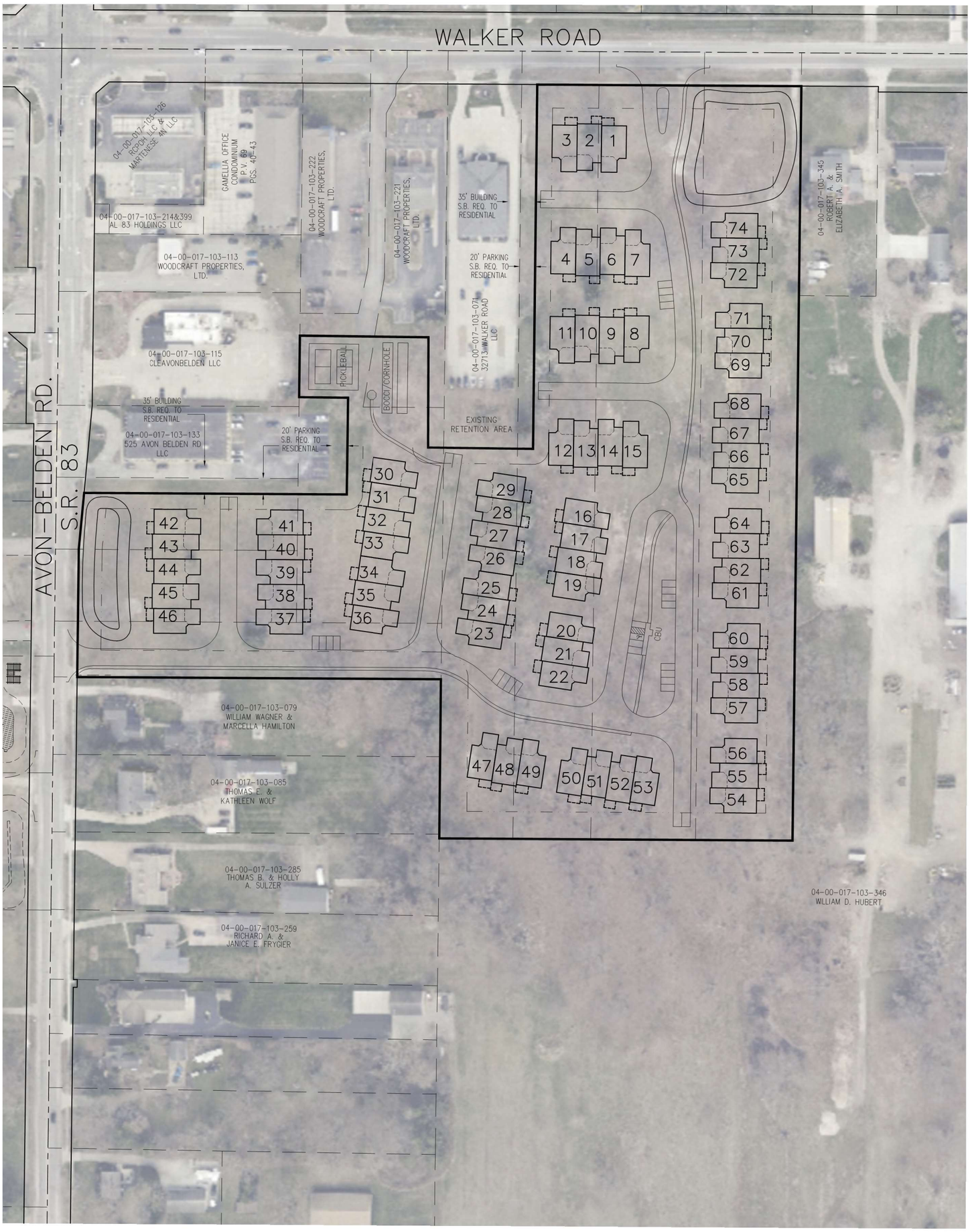


Turning Movement Peak Hour Data Plot (4:30 PM)

APPENDIX B
PRELIMINARY SITE PLAN



ZONING INFORMATION

(ASSUMING ENTIRE PROJECT AREA IS RE-ZONED TO R-2)

DENSITY

74 UNITS SHOWN / 12.12 AC. = 6.11 UNITS/AC.
5 UNITS/AC. PER 1226.01(c)(2) PER R-2 ZONING
8-25 UNITS/AC. RECOMMENDED FOR PORTION OF PROJECT AREA PER 2019 COMPREHENSIVE LAND USE PLAN AND CODE SECTION 1218.05 PER M.U.O. ZONING.

MULTI-FAMILY BUILDING MIN. SEPARATIONS

SEE 1226(f) FOR WINDOW DEFINITIONS
10' IF ADJACENT WALLS HAVE NO WINDOWS
15' IF WALLS HAVE 'NON-PRIMARY' WINDOWS
20' IF WALLS HAVE 'PRIMARY' WINDOWS

SCREENING

PROJECT BOUNDARY:
REQUIRED ADJACENT TO R-1A LAND ONLY

SETBACKS

BUILDINGS:
30' OFF ADJACENT R/W
35' OFF ADJACENT R-1A LAND
20' OFF ADJACENT B-2 LAND
PATIOS & UNENCLOSED PORCHES:
PERMITTED IN SETBACKS AS RESTRICTED BY 1224.01(F)(15) & 1226.01(E)(4)
PARKING AREAS: (2 SPACES/UNIT REQ.)
NOT PERMITTED IN FRONT YARDS EXCEPT IN DRIVEWAYS
(FOR ADJACENT NON-RESIDENTIAL LAND, 20' MIN. REQ. OFF ADJ. RESIDENTIAL LAND)
SPORT COURTS:
10' OFF SIDES & REAR PER 1224.02(F)(20)

CONCEPT PLAN #1

FOR

PULTE HOMES

IN AVON TWP. SEC. #17
NOW IN THE CITY OF AVON LAKE
HENRY G. REITZ ENGINEERING CO.
JANUARY 2025

N

GRAPHIC SCALE

0 120

APPENDIX C
ITE TRIP GENERATION CALCULATIONS

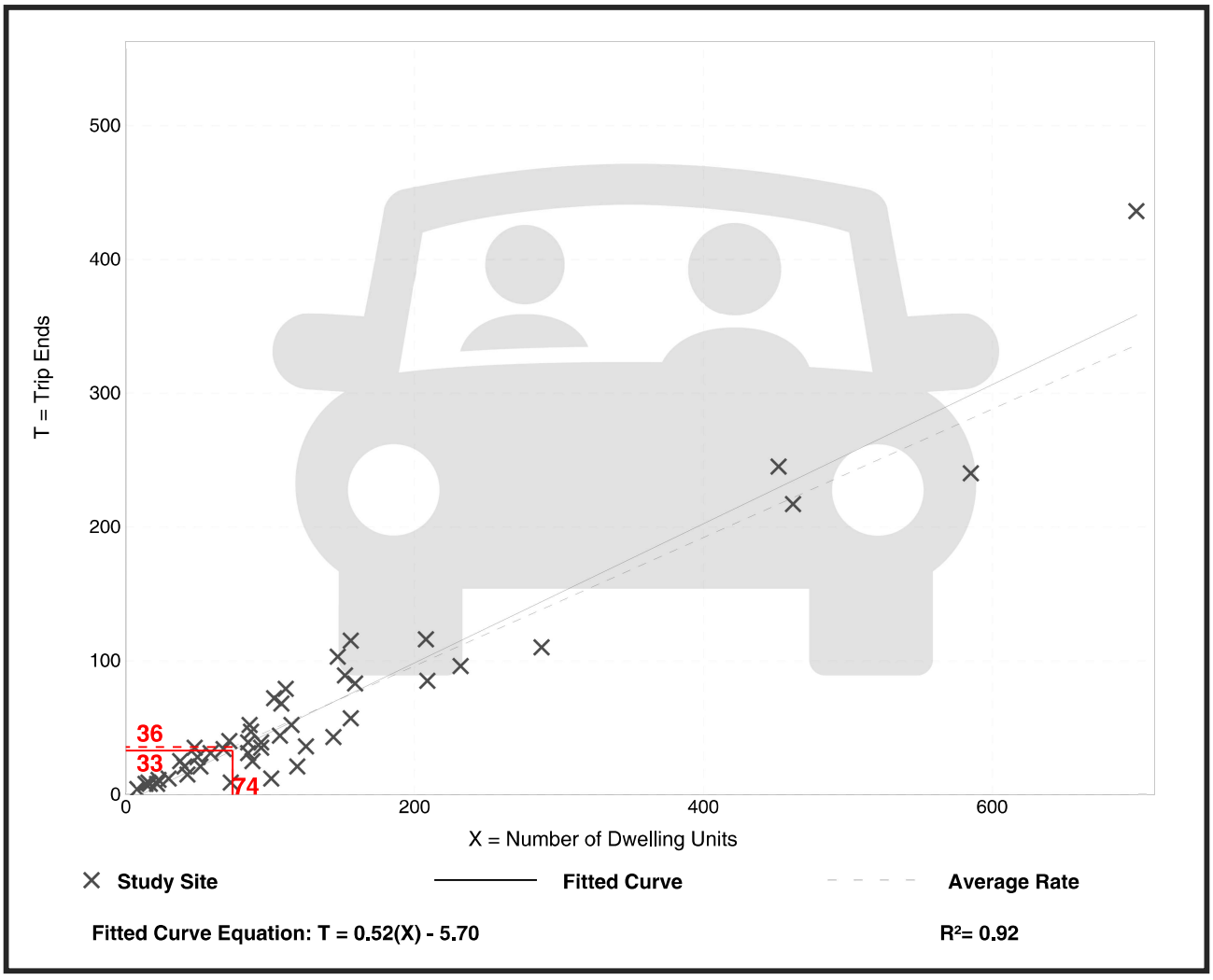
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 46
Avg. Num. of Dwelling Units: 135
Directional Distribution: 25% entering, 75% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.48	0.12 - 0.74	0.14

Data Plot and Equation



Trip Gen Manual, 11th Edition ● Institute of Transportation Engineers

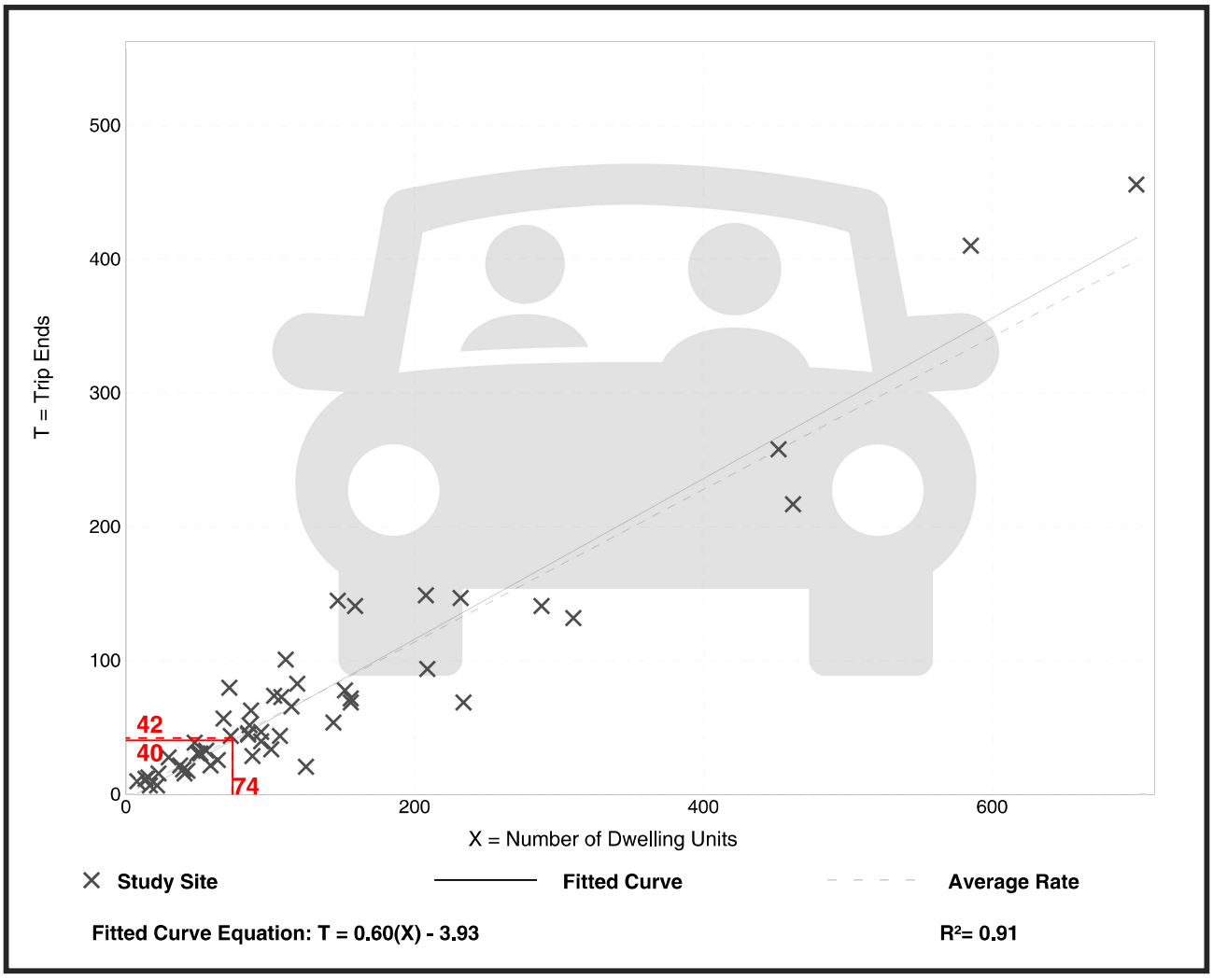
Single-Family Attached Housing
(215)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 51
Avg. Num. of Dwelling Units: 136
Directional Distribution: 59% entering, 41% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.57	0.17 - 1.25	0.18

Data Plot and Equation



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APPENDIX D
ODOT TFMS OUTPUT

TFMS - Segment Forecast Report

Username	Email	Script Import Date	Script Version	Model Version
Kevin.Westbrooks	kwestbrooks@gpdgroup.com	4/14/2020 5:30:19 PM	2020.001	2024.1900

Forecast Summary

Project ID	Project Name	Opening Year	Design Year
	Pulte Avon Lake TIS	2026	2036

Project Description

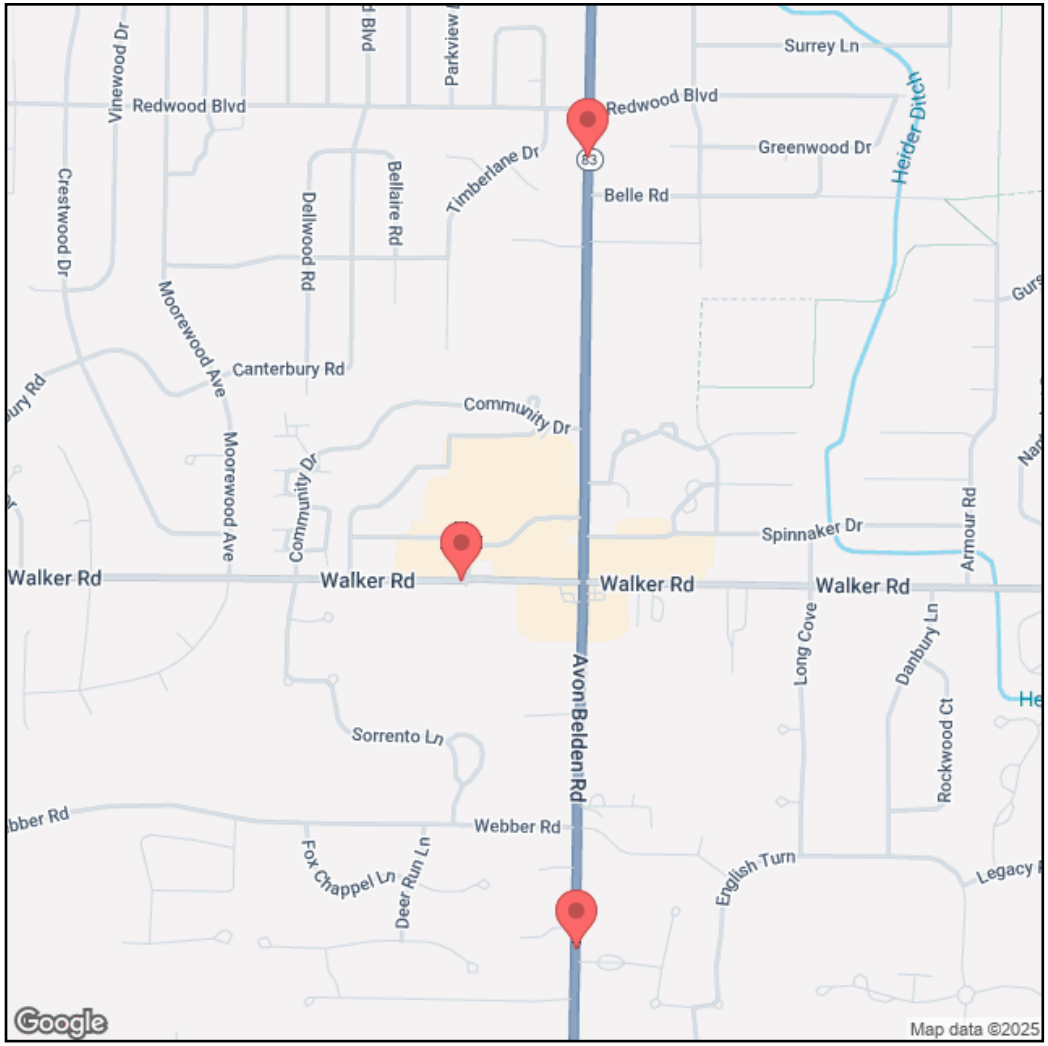
*Users of this data need to be aware that there are limitations to the forecasts generated by this product that make it suitable only for roadway design projects which are low risk.

Segment Information

Segment ID	LRS ID	BMP	EMP	Length	Latitude	Longitude
1904595	MLORMR01277**C	1.763	4.340	2.577	-82.0221479666072	41.4931890990174
1937704	SLORSR00083**C	19.447	20.449	1.002	-82.01913910666	41.4858783835746
1937708	SLORSR00083**C	20.449	21.617	1.168	-82.0187987930243	41.5015815849893

Forecast Information

Segment ID	2026 AADT	2036 AADT	DHV-30	K%	D%	T24%	TD%
1904595	11,000	12,000	1,500	12.7	52.1	2	1
1937704	18,500	19,000	2,400	12.4	50.3	3	2
1937708	8,800	8,800	1,100	12.3	54.1	2	1



Definitions:

- AADT – Annual Average Daily Traffic
- DHV30 – Design Hour Volume for 30th highest hour of the year
- DHV30 – K * AADT
- K % – Design Hour Factor
- D % – Peak Direction Factor
- T24 % – Percent Daily Trucks
- TD % – Percent Design Hour Trucks

Forecast Segment ID	Route	BMP	EMP
1904595	MLORMR01277**C	1.763	4.340

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	12.7	2	13,000	Average	0.700	0.700
AADT	**D%**	**TD % (Existing)**	**BC AADT**	**BC Method**	**BC Growth Rate %**	**BC Calculated Rate %**
13,180	52.1	1	180	Average	-6.200	0.000

Warning: The growth rate was negative and was capped.

K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
2	14,733	-478	14,255

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
1925	25227	-1599	364	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	0.86	-15.13	0	0	13,023	-556	13,268	-546
2	1.37	-13.71	2	2	14,488	-495	14,733	-478
3	-0.26	-19.21	0	0	9,400	-765	10,007	-741
4	0.10	-999999.00	4	0	10,884		11,034	
5	1.03	-999999.00	0	0	13,411		13,741	
6	-999999.00	-999999.00	0	0				

Adjustment Info

ID	Adjustment Methods Name	Model vs Count AADT	Adjusted AADT	Model vs Count BC	Adjusted BC	PA Growth Rate %	BC Growth Rate %
1	DIF	-14,025	10,783	-808	364	-0.12	3.91
2	RAT	0.44	10,868	0.18	211	-0.03	0.71
3	MRAT	0.99	10,868	1.19	235	-0.04	1.21
4	RAF		10,826		300	-0.08	2.57

Adjust Method AADT	Adjust Method BC	Selected PA Growth Rate %	Selected BC Growth Rate %
Ratio	Model Ratio	0.000	1.200

Method 1 - 4 Volume

PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total Max Volume
10419	10657	211	364	10630	11021

Process Flag: Adjusted model to counts with process per ODOT 255 spreadsheet

Comment: No Comment

Historical Count

Year	All	Cars	Trucks
2011	8,673	8,673	
2014	11,204	10,816	387
2017	10,476	10,095	381
2020	9,642	9,435	207
* 2023	10,935	10,758	177

* Pivot Point

Segment ID	LRS ID	BMP	EMP	Length	Yr 2026 AADT	Yr 2036 AADT	DHV30	K %	D %	T24 %	TD %
1904595	MLORMR01277**C	1.763	4.340	2.577	11,000	12,000	1500	12.7	52.1	2	1

Forecast Segment ID	Route	BMP	EMP
1937704	SLORSR00083**C	19.447	20.449

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 12.4	2	19,000	Model	0.200	0.200
AADT	**D%**	**TD % (Existing)**	**BC AADT**	**BC Method**	**BC Growth Rate %**	**BC Calculated Rate %**
19,540	◆ 50.3	1	540	Model	1.000	1.000

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
2	20,741	4	20,745

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-4834	33496	-1941	1202	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	-0.22	-4.15	0	0	15,850	-91	16,942	-52
2	0.57	-3.67	2	3	19,883	-56	20,741	4
3	-1.31	-6.23	0	0	9,752	-369	11,631	-294
4	0.45	-6.23	2	4	19,233	-327	20,164	-294
5	0.45	-6.54	0	0	19,233	-409	20,164	-330
6	0.89	-8.44	5	4	22,333	-606	22,311	-551

Adjustment Info

ID	Adjustment Methods Name	Model vs Count AADT	Adjusted AADT	Model vs Count BC	Adjusted BC	PA Growth Rate %	BC Growth Rate %
1	DIF	-893	19,419	-405	574	0.17	1.23
2	RAT	0.95	19,373	0.52	505	0.18	0.64
3	MRAT	1.05	19,375	1.17	515	0.18	0.72
4	RAF		19,397		545	0.18	0.98

Adjust Method AADT	Adjust Method BC	Selected PA Growth Rate %	Selected BC Growth Rate %
Average	Average	0.200	1.000

Method 1 - 4 Volume

PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total Max Volume
18845	18868	505	574	19350	19442

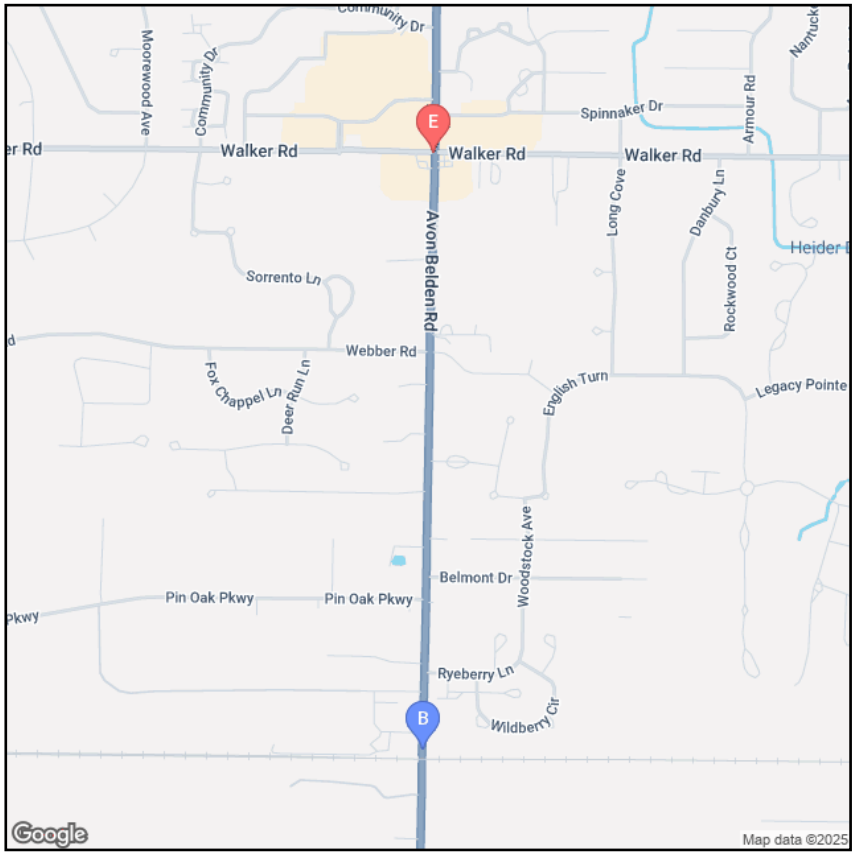
Process Flag: Adjusted model to counts with process per ODOT 255 spreadsheet

Comment: No Comment

Historical Count

Year	All	Cars	Trucks
2008	16,090	15,520	570
2011	21,510	20,840	670
2014	17,266	16,534	731
2017	17,475	17,126	349
2020	15,557	15,154	403
* 2023	18,426	17,995	431

* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2026 AADT	Yr 2036 AADT	DHV30	K %	D %	T24 %	TD %
1937704	SLORSR00083**C	19.447	20.449	1.002	18,500	19,000	2400	12.4	50.3	3	2

Forecast Segment ID	Route	BMP	EMP
1937708	SLORSR00083**C	20.449	21.617

Forecast

Year	K%	T24 % (Existing)	PA AADT	PA Method	PA Growth Rate %	PA Calculated Rate %
2050	◆ 12.3	2	8,700	Average	● -0.500	0.000
AADT	**D%**	**TD % (Existing)**	**BC AADT**	**BC Method**	**BC Growth Rate %**	**BC Calculated Rate %**
8,890	◆ 54.1	1	190	Model	0.300	0.300

● Warning: The growth rate was negative and was capped.

◆ K/D factors from TCDS were used.

Regression

Method Number	PA AADT	BC AADT	AADT
2	6,177	-20	6,157

95% Confidence Min/Max

PA Min	PA Max	BC Min	BC Max	Year
-1065	33680	-1332	736	2050

Method Number	PA Growth %	BC Growth %	PA Drop Count	BC Drop Count	PA AADT	BC AADT	PA Adjustment	PA Adjustment
1	-1.21	-5.03	0	0	5,726	-82	5,839	-62
2	-1.06	-4.13	4	3	6,376	-55	6,177	-20
3	-1.70	-4.71	0	0	4,391	-64	4,676	-47
4	-1.70	-0.92	4	3	4,681	113	4,676	130
5	-0.88	-10.45	0	0	6,535	-362	6,606	-315
6	-1.40	-13.53	4	4	5,452	-490	5,388	-459

Adjustment Info

ID	Adjustment Methods Name	Model vs Count AADT	Adjusted AADT	Model vs Count BC	Adjusted BC	PA Growth Rate %	BC Growth Rate %
1	DIF	8,691	9,237	168	188	0.17	0.32
2	RAT	63.03	34,416	36.81	736	10.70	12.05
3	MRAT	3.90	15,698	4.26	317	2.88	3.08
4	RAF		12,467		253	1.52	1.71

Adjust Method AADT	Adjust Method BC	Selected PA Growth Rate %	Selected BC Growth Rate %
Difference	Difference	0.200	0.300

Method 1 - 4 Volume

PA Min Volume	PA Max Volume	BC Min Volume	BC Max Volume	Total Min Volume	Total Max Volume
9049	33680	188	736	9237	34416

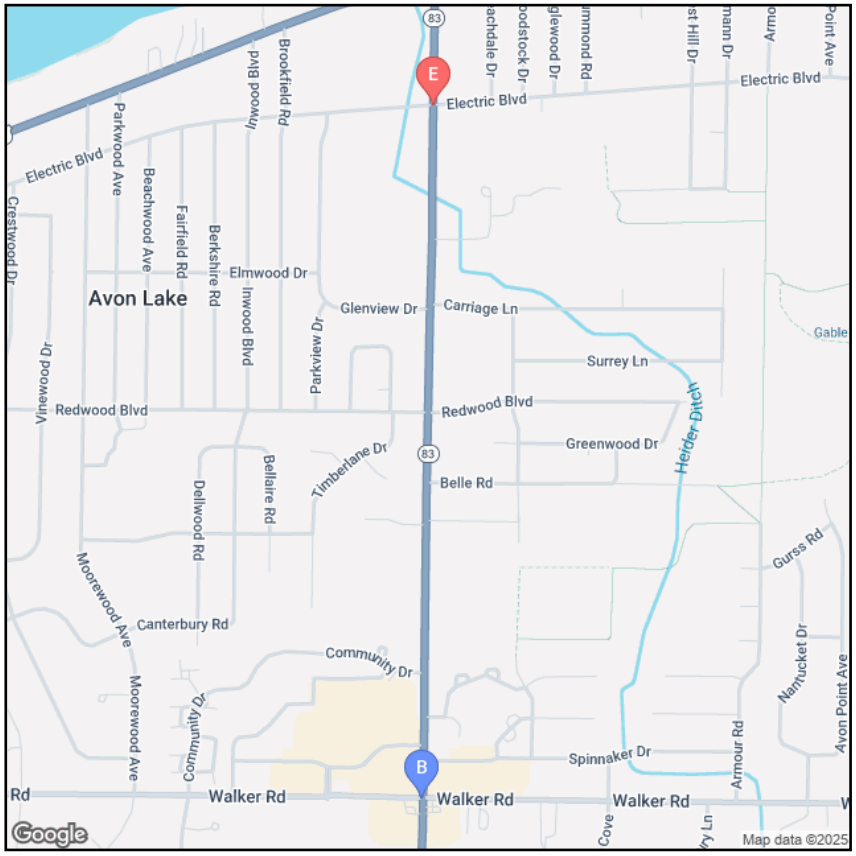
Process Flag: Adjusted model to counts with process per ODOT 255 spreadsheet

Comment: No Comment

Historical Count

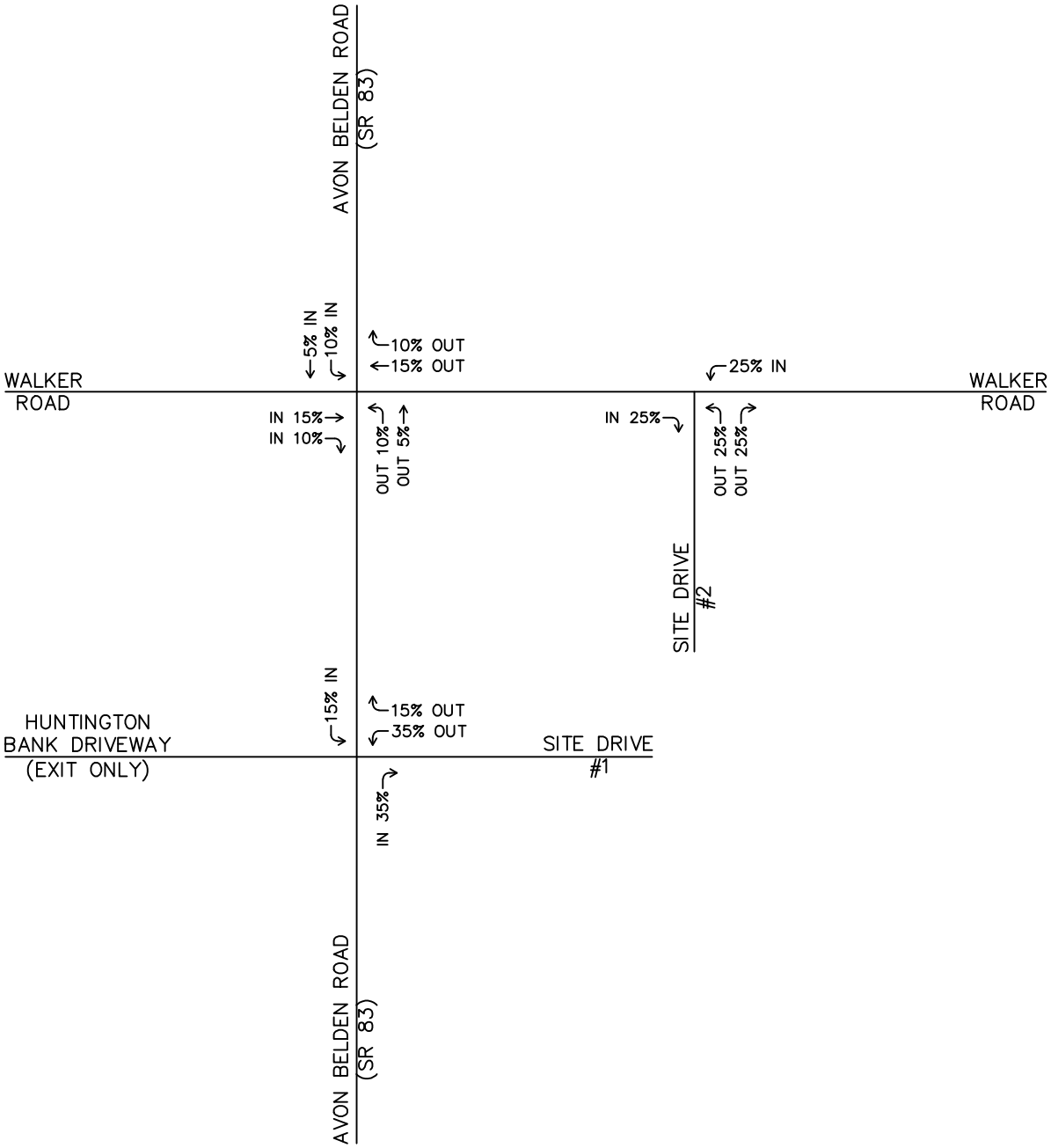
Year	All	Cars	Trucks
2008	9,970	9,680	290
2011	10,765	10,571	194
2014	10,149	9,780	368
2017	8,219	8,096	123
2020	9,347	9,182	165
* 2023	8,831	8,658	173

* Pivot Point



Segment ID	LRS ID	BMP	EMP	Length	Yr 2026 AADT	Yr 2036 AADT	DHV30	K %	D %	T24 %	TD %
1937708	SLORSR00083**C	20.449	21.617	1.168	8,800	8,800	1100	12.3	54.1	2	1

APPENDIX E
SITE TRIP DISTRIBUTION AND ASSIGNMENTS



N

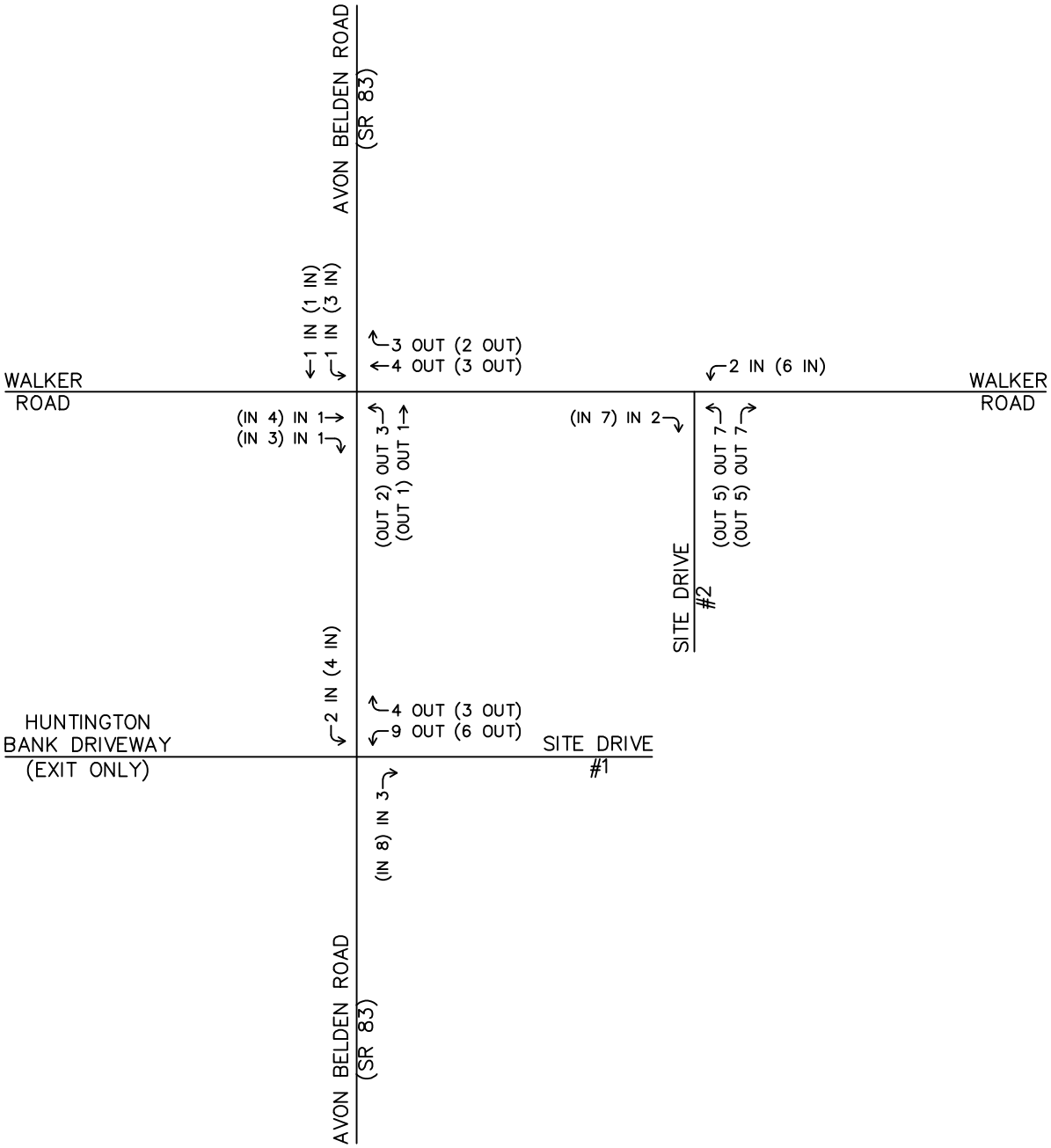
N.T.S.

APPENDIX E

PRIMARY TRIP DISTRIBUTION

MARCH 2025

CAD FILE: O:\2025\2025050\16 - PULTE - AVON LAKE TIS\FIGURES\APPENDIX E.DWG
DATE: 3/4/2025 TIME: 9:56:32 AM
TECHNICIAN: MLESSITER



LEGEND
– AM PEAK HOUR
(##) – PM PEAK HOUR

N

N.T.S.

APPENDIX E

PRIMARY TRIP ASSIGNMENT

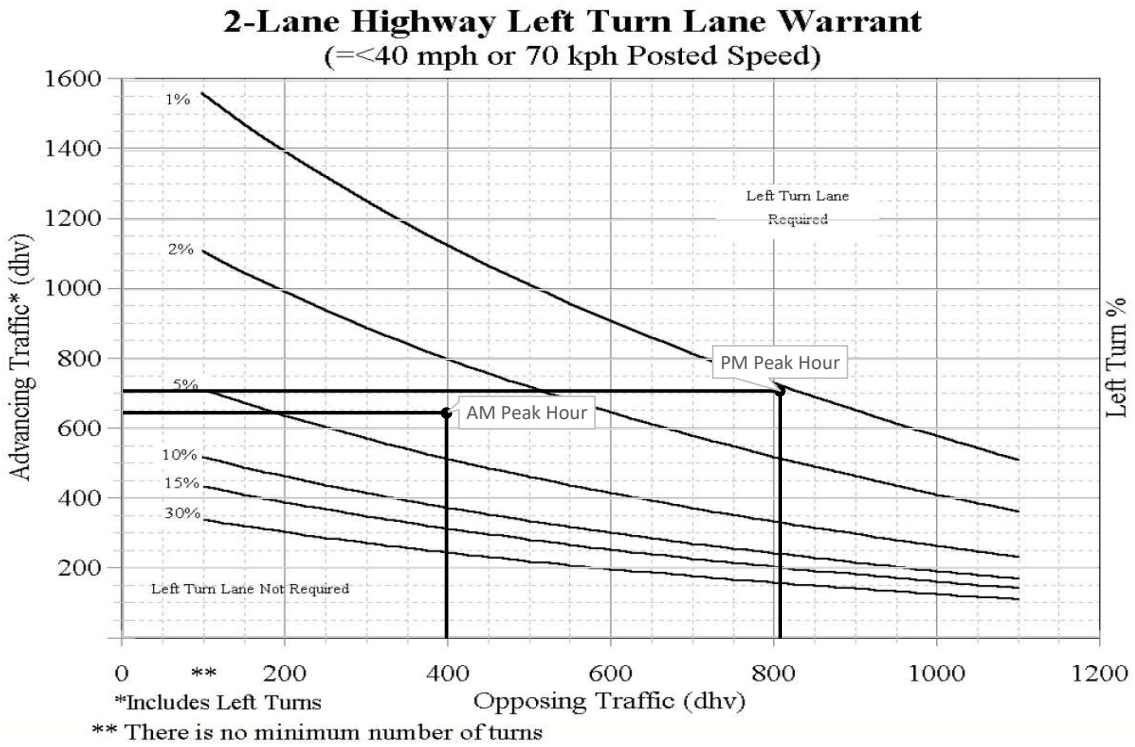
MARCH 2025

CAD FILE: O:\2025\2025050\16 - PULTE - AVON LAKE TIS\FIGURES\APPENDIX E.DWG
DATE: 3/4/2025 TIME: 4:47:11 PM
TECHNICIAN: KWESTBROOKS

APPENDIX F
AUXILIARY TURN LANE WARRANT ANALYSIS

Avon Belden Road (SR 83) / Huntington Bank Driveway (Exit Only) / Site Drive #1 Intersection

Southbound Left Turn Lane



Design Year 2036 'Build' Conditions

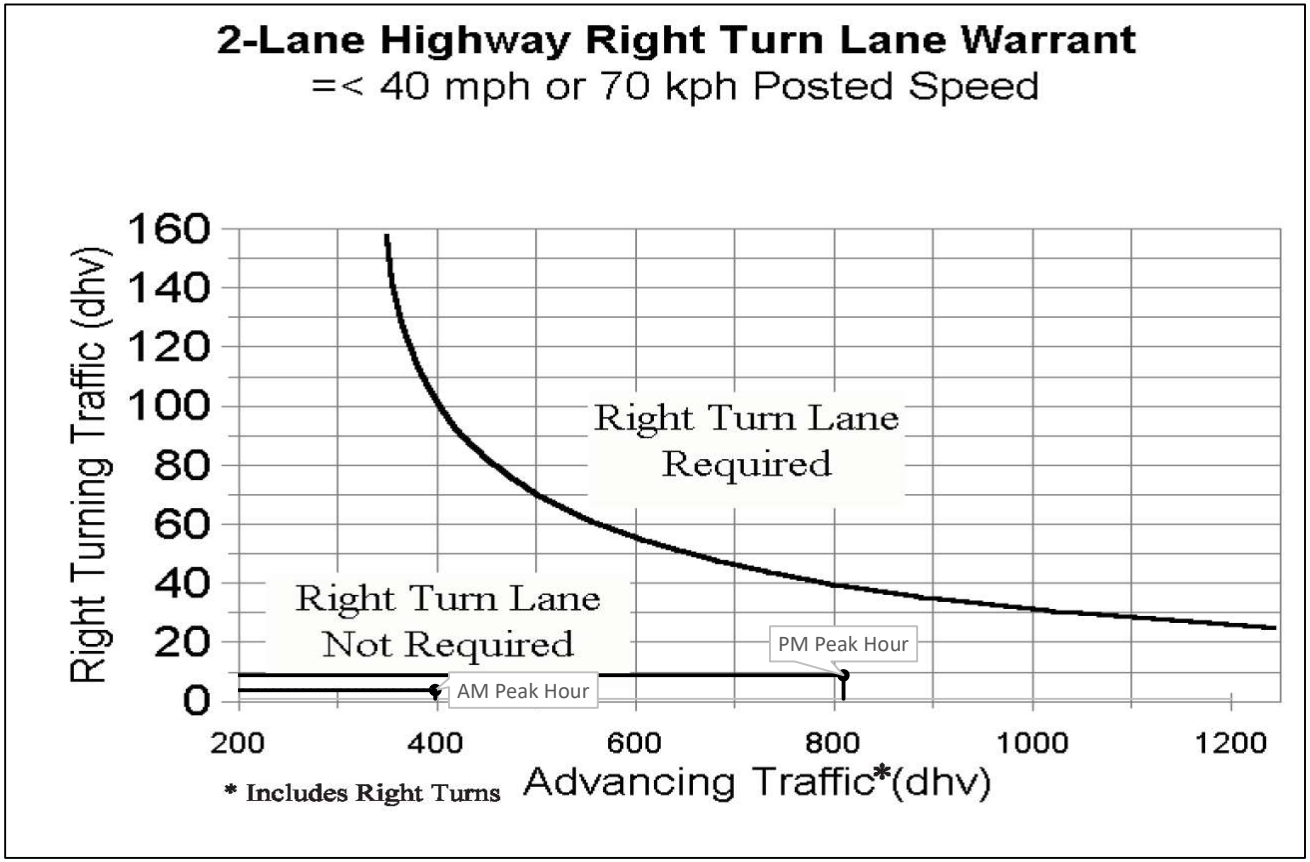
AM Peak Hour:
- Advancing Traffic = 646 Veh
- Left Turn Traffic = 2 Veh
- Opposing Traffic = 398 Veh
- Left Turn % = 0.3 %

PM Peak Hour:
- Advancing Traffic = 709 Veh
- Left Turn Traffic = 4 Veh
- Opposing Traffic = 809 Veh
- Left Turn % = 0.6 %

Turn Lane NOT Warranted

Avon Belden Road (SR 83) / Huntington Bank Driveway (Exit Only) / Site Drive #1 Intersection

Northbound Right Turn Lane



Design Year 2036 'Build' Conditions

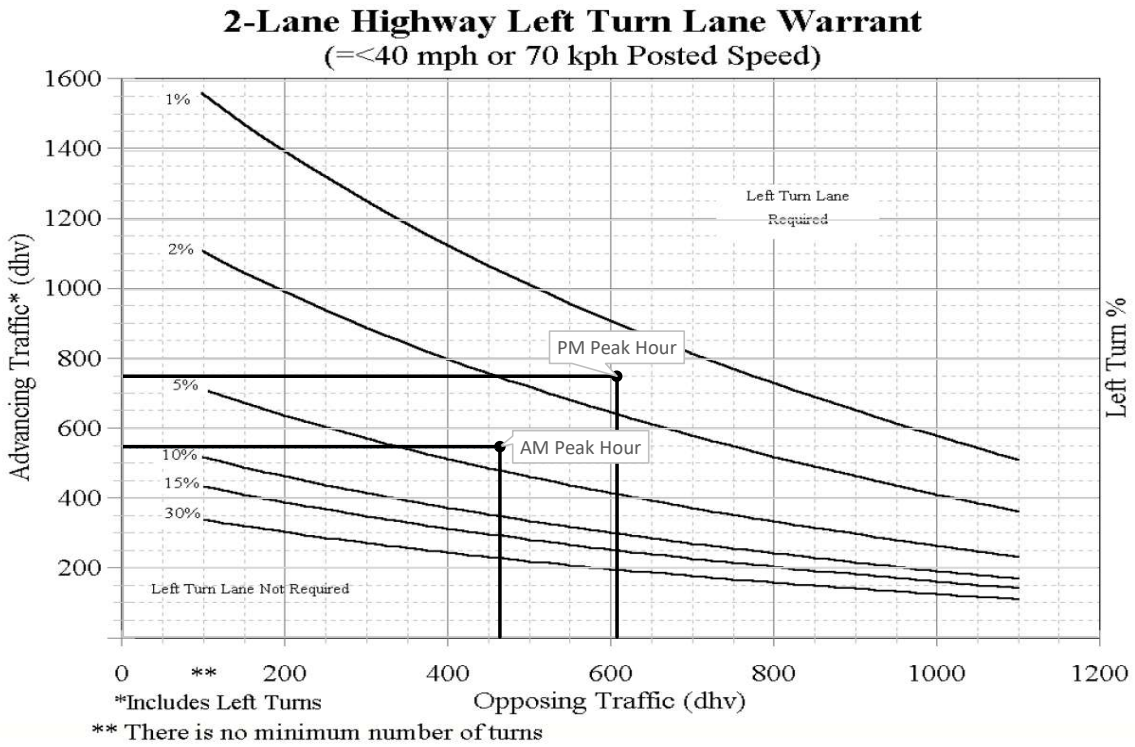
AM Peak Hour:
Advancing Traffic = 398 Veh
Right Turn Traffic = 3 Veh

PM Peak Hour:
Advancing Traffic = 809 Veh
Right Turn Traffic = 8 Veh

Turn Lane NOT Warranted

Walker Road / Site Drive #2 Intersection

Westbound Left Turn Lane



Design Year 2036 'Build' Conditions

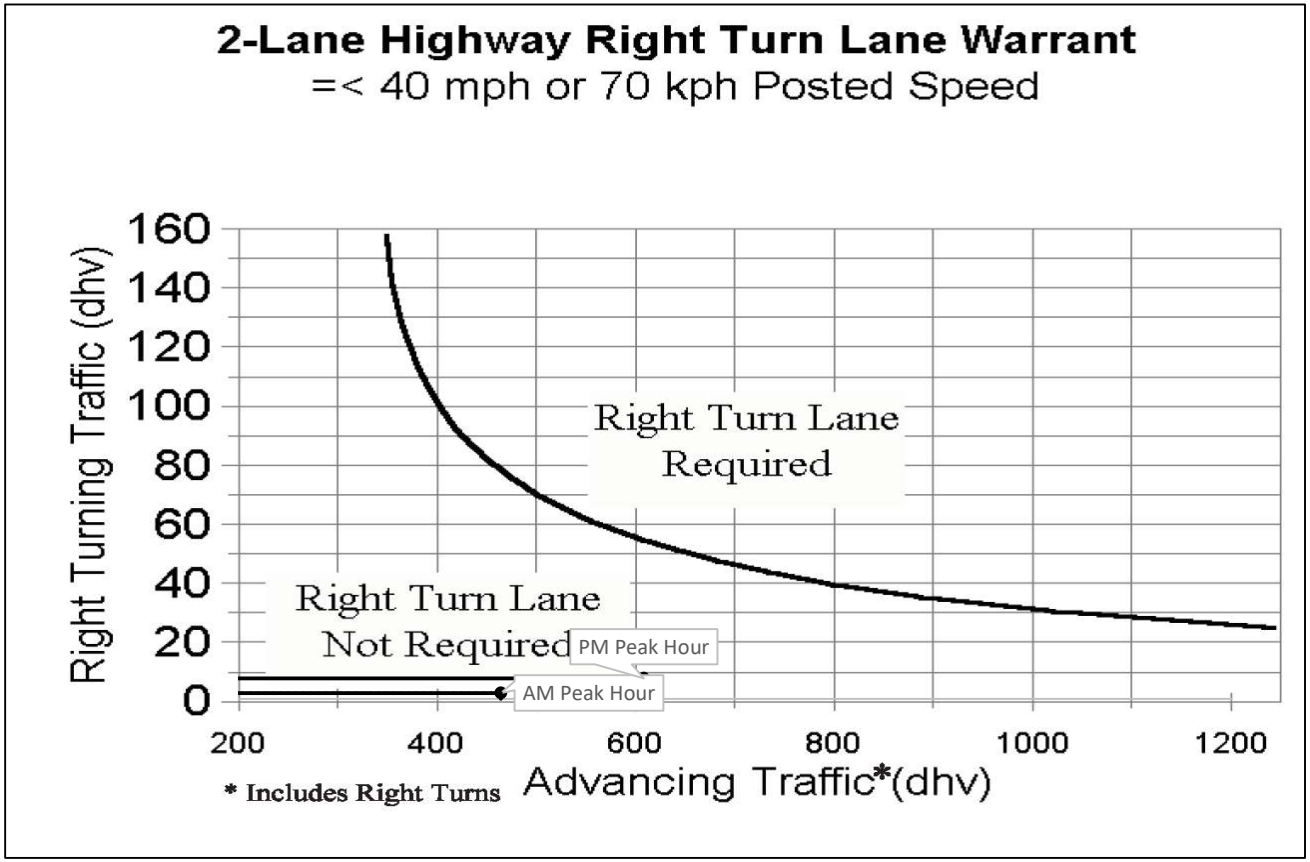
AM Peak Hour:
- Advancing Traffic = 548 Veh
- Left Turn Traffic = 2 Veh
- Opposing Traffic = 464 Veh
- Left Turn % = 0.4 %

PM Peak Hour:
- Advancing Traffic = 751 Veh
- Left Turn Traffic = 6 Veh
- Opposing Traffic = 608 Veh
- Left Turn % = 0.8 %

Turn Lane NOT Warranted

Walker Road / Site Drive #2 Intersection

Eastbound Right Turn Lane



Design Year 2036 'Build' Conditions

AM Peak Hour:

Advancing Traffic = 464 Veh

Right Turn Traffic = 2 Veh

PM Peak Hour:

Advancing Traffic = 608 Veh

Right Turn Traffic = 7 Veh

Turn Lane NOT Warranted

APPENDIX G
HCS INTERSECTION CAPACITY ANALYSIS

DESIGN YEAR 2036 'NO-BUILD' CONDITIONS

HCS Two-Way Stop-Control Report

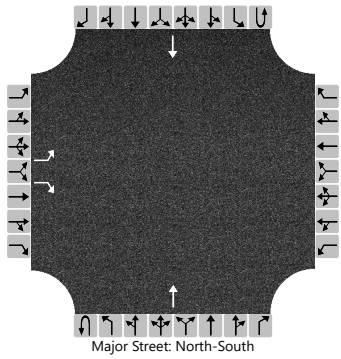
General Information

Analyst	Brandon Tondra
Agency/Co.	GPD Group
Date Performed	2/19/2025
Analysis Year	2036
Time Analyzed	AM Peak Hour 'No-Build'
Intersection Orientation	North-South
Project Description	Pulte Avon Lake TIS

Site Information

Intersection	Avon Belden Road (SR 83) / Huntington Ban...
Jurisdiction	City of Avon Lake
East/West Street	Huntington Bank Driveway (Exit Only) / Site...
North/South Street	Avon Belden Road (SR 83)
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration		L		R							T				T	
Volume (veh/h)		4		7							395				644	
Percent Heavy Vehicles (%)		11		11												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2												
Critical Headway (sec)		6.51		6.31												
Base Follow-Up Headway (sec)		3.5		3.3												
Follow-Up Headway (sec)		3.60		3.40												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4		8												
Capacity, c (veh/h)		213		420												
v/c Ratio		0.02		0.02												
95% Queue Length, Q_{95} (veh)		0.1		0.1												
95% Queue Length, Q_{95} (ft)		2.7		2.7												
Control Delay (s/veh)		22.3		13.7												
Level of Service (LOS)		C		B												
Approach Delay (s/veh)		16.8														
Approach LOS		C														

HCS Two-Way Stop-Control Report

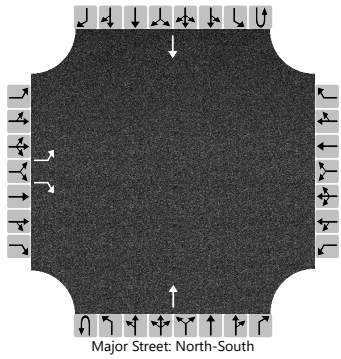
General Information

Analyst	Brandon Tondra
Agency/Co.	GPD Group
Date Performed	2/19/2025
Analysis Year	2036
Time Analyzed	PM Peak Hour 'No-Build'
Intersection Orientation	North-South
Project Description	Pulte Avon Lake TIS

Site Information

Intersection	Avon Belden Road (SR 83) / Huntington Ban...
Jurisdiction	City of Avon Lake
East/West Street	Huntington Bank Driveway (Exit Only) / Site...
North/South Street	Avon Belden Road (SR 83)
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	0	0	0	0	1	0	0	0	1	0
Configuration		L		R							T				T	
Volume (veh/h)		23		21							801				705	
Percent Heavy Vehicles (%)		0		0												
Proportion Time Blocked																
Percent Grade (%)		0														
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

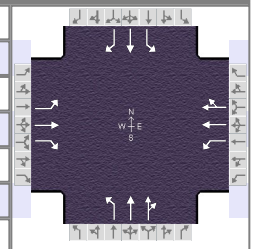
Base Critical Headway (sec)		7.1		6.2												
Critical Headway (sec)		6.40		6.20												
Base Follow-Up Headway (sec)		3.5		3.3												
Follow-Up Headway (sec)		3.50		3.30												

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		24		22												
Capacity, c (veh/h)		123		423												
v/c Ratio		0.19		0.05												
95% Queue Length, Q_{95} (veh)		0.7		0.2												
95% Queue Length, Q_{95} (ft)		17.5		5.0												
Control Delay (s/veh)		41.1		14.0												
Level of Service (LOS)		E		B												
Approach Delay (s/veh)		28.2														
Approach LOS		D														

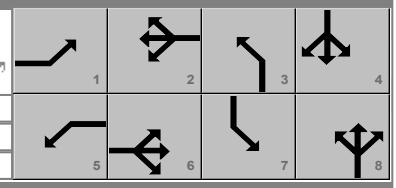
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	AM Peak Hour	PHF	0.80
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd AM Peak 'No-B…		
Project Description	Pulte Avon Lake TIS				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	248	192	98	204	244	95	199	80	134	332	52

Signal Information					EB			WB			NB			SB		
Cycle, s	77.2	Reference Phase	2													
Offset, s	0	Reference Point	End	Green	7.3	0.2		20.0	7.4	0.4		20.0				
Uncoordinated	Yes	Simult. Gap E/W	On	Yellow	3.5	0.0		3.5	3.5	0.0		3.5				
Force Mode	Float	Simult. Gap N/S	On	Red	1.0	0.0		3.0	1.0	0.0		3.0				



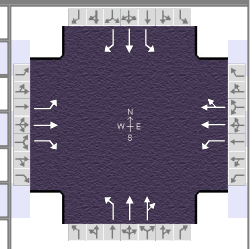
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	248	192	98	204	244	95	199	80	134	332	52
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	4	4	4	3	3		3	3		3	3	3
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	12.0
Turn Bay Length, ft	175	2000	325	250	1550		225	1675		225	1025	350
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	20.0	25.0	20.0	25.0	20.0	27.0	20.0	27.0
Yellow Change Interval (*Y*), s	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clearance Interval (R_c), s	1.0	3.0	1.0	3.0	1.0	3.0	1.0	3.0
Minimum Green (G_{min}), s	8	20	8	20	8	20	8	20
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

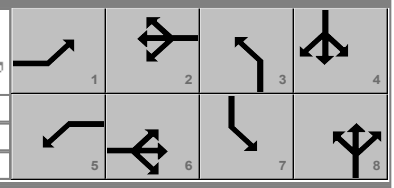
General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	AM Peak Hour	PHF	0.80
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd AM Peak 'No-B…		
Project Description	Pulte Avon Lake TIS				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	248	192	98	204	244	95	199	80	134	332	52

Signal Information			
Cycle, s	77.2	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Float	Simult. Gap N/S	On

Green	7.3	0.2	20.0	7.4	0.4	20.0	
Yellow	3.5	0.0	3.5	3.5	0.0	3.5	
Red	1.0	0.0	3.0	1.0	0.0	3.0	



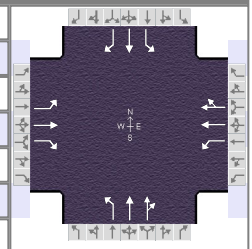
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	11.8	26.5	11.9	26.7	11.9	26.5	12.3	26.9
Change Period, ($Y+R_c$), s	4.5	6.5	4.5	6.5	4.5	6.5	4.5	6.5
Max Allow Headway (*MAH*), s	2.8	2.9	2.8	2.9	2.8	2.8	2.8	2.8
Queue Clearance Time (g_s), s	5.4	13.6	5.7	15.7	5.6	8.4	7.2	18.4
Green Extension Time (g_e), s	0.1	1.7	0.1	1.6	0.1	1.2	0.2	1.0
Phase Call Probability	0.91	1.00	0.93	1.00	0.92	1.00	0.97	1.00
Max Out Probability	0.00	0.05	0.00	0.11	0.00	0.00	0.00	0.06

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	111	310	240	123	255	305	119	180	169	168	415	65
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1841	1560	1767	1856	1572	1767	1856	1677	1767	1856	1572
Queue Service Time (g_s), s	3.4	11.6	10.4	3.7	9.1	13.7	3.6	6.1	6.4	5.2	16.4	2.4
Cycle Queue Clearance Time (g_c), s	3.4	11.6	10.4	3.7	9.1	13.7	3.6	6.1	6.4	5.2	16.4	2.4
Green Ratio (*g/C*)	0.35	0.26	0.26	0.36	0.26	0.26	0.35	0.26	0.26	0.36	0.26	0.26
Capacity (*c*), veh/h	306	477	404	379	484	411	288	481	434	452	490	416
Volume-to-Capacity Ratio (*X*)	0.363	0.650	0.594	0.323	0.526	0.743	0.413	0.374	0.389	0.371	0.846	0.156
Back of Queue (*Q*), ft/ln (95 th percentile)	63	225	177	68	182	229	66	122	113	95	318	41
Back of Queue (*Q*), veh/ln (95 th percentile)	2.4	8.7	6.8	2.7	7.1	9.2	2.6	4.8	4.5	3.7	12.4	1.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.36	0.11	0.54	0.27	0.12	0.15	0.30	0.07	0.07	0.42	0.31	0.12
Uniform Delay (d_1), s/veh	19.1	25.5	25.0	18.2	24.4	26.1	19.6	23.5	23.6	17.8	26.9	21.8
Incremental Delay (d_2), s/veh	0.3	0.8	0.5	0.2	0.3	3.2	0.4	0.2	0.2	0.2	6.2	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	19.3	26.3	25.6	18.4	24.8	29.4	20.0	23.6	23.8	18.0	33.2	21.9
Level of Service (LOS)	B	C	C	B	C	C	B	C	C	B	C	C
Approach Delay, s/veh / LOS	24.9	C		25.7	C		22.8	C		28.1	C	
Intersection Delay, s/veh / LOS	25.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

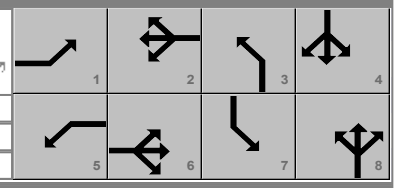
HCS Signalized Intersection Results Graphical Summary

General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	AM Peak Hour	PHF	0.80
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd AM Peak 'No-B…		
Project Description	Pulte Avon Lake TIS				

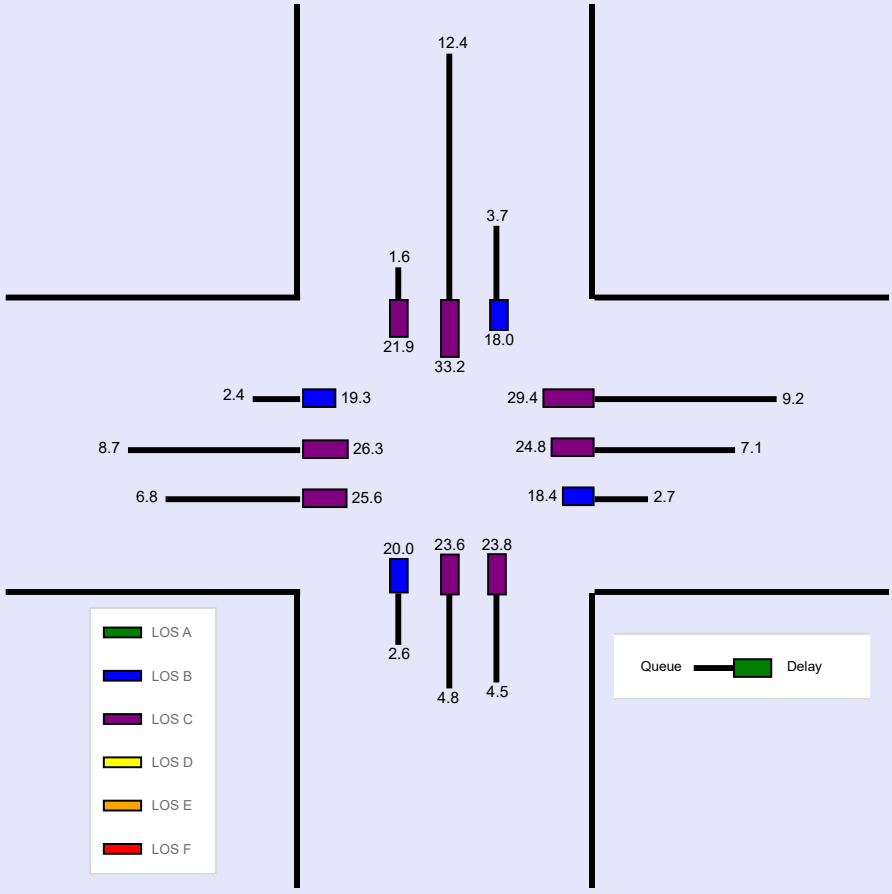


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	248	192	98	204	244	95	199	80	134	332	52

Signal Information													
Cycle, s	77.2	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On										
Force Mode	Float	Simult. Gap N/S	On										
				Green	7.3	0.2	20.0	7.4	0.4	20.0			
				Yellow	3.5	0.0	3.5	3.5	0.0	3.5			
				Red	1.0	0.0	3.0	1.0	0.0	3.0			

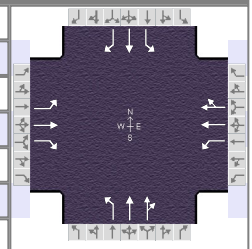


Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	63	225	177	68	182	229	66	122	113	95	318	41
Back of Queue (*Q*), veh/ln (95 th percentile)	2.4	8.7	6.8	2.7	7.1	9.2	2.6	4.8	4.5	3.7	12.4	1.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.36	0.11	0.54	0.27	0.12	0.15	0.30	0.07	0.07	0.42	0.31	0.12
Control Delay (*d*), s/veh	19.3	26.3	25.6	18.4	24.8	29.4	20.0	23.6	23.8	18.0	33.2	21.9
Level of Service (LOS)	B	C	C	B	C	C	B	C	C	B	C	C
Approach Delay, s/veh / LOS	24.9	C		25.7	C		22.8	C		28.1	C	
Intersection Delay, s/veh / LOS	25.5						C					



HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	PM Peak Hour	PHF	0.96
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd PM Peak 'No-B…		
Project Description	Pulte Avon Lake TIS				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	62	298	205	191	385	169	274	377	154	149	308	51

Signal Information			
Cycle, s	82.4	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Float	Simult. Gap N/S	On

Green	6.2	2.6	20.0	7.8	3.9	20.0	1	2	3	4		
Yellow	3.5	0.0	3.5	3.5	0.0	3.5	5	6	7	8		
Red	1.0	0.0	3.0	1.0	0.0	3.0						

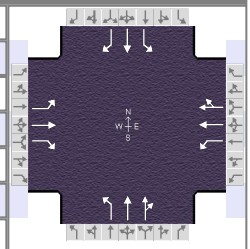
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	62	298	205	191	385	169	274	377	154	149	308	51
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	1	1	1	1	1		1	1		1	1	1
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	12.0
Turn Bay Length, ft	175	2000	325	250	1550		225	1675		225	1025	350
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	20.0	25.0	20.0	25.0	20.0	27.0	20.0	27.0
Yellow Change Interval (*Y*), s	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clearance Interval (R_c), s	1.0	3.0	1.0	3.0	1.0	3.0	1.0	3.0
Minimum Green (G_{min}), s	8	20	8	20	8	20	8	20
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

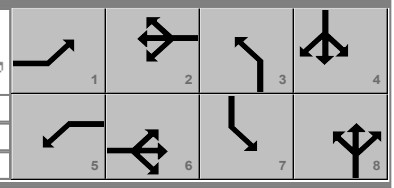
General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	PM Peak Hour	PHF	0.96
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd PM Peak 'No-B…		
Project Description	Pulte Avon Lake TIS				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	62	298	205	191	385	169	274	377	154	149	308	51

Signal Information			
Cycle, s	82.4	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Float	Simult. Gap N/S	On

Green	6.2	2.6	20.0	7.8	3.9	20.0	
Yellow	3.5	0.0	3.5	3.5	0.0	3.5	
Red	1.0	0.0	3.0	1.0	0.0	3.0	



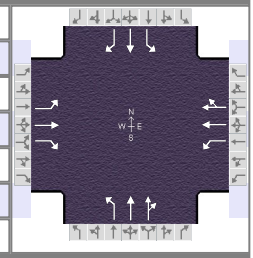
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	10.7	26.5	13.3	29.1	16.1	30.4	12.3	26.5
Change Period, ($Y+R_c$), s	4.5	6.5	4.5	6.5	4.5	6.5	4.5	6.5
Max Allow Headway (*MAH*), s	2.8	2.9	2.8	2.9	2.8	2.8	2.8	2.8
Queue Clearance Time (g_s), s	4.1	14.3	8.7	13.6	11.3	12.8	7.2	14.8
Green Extension Time (g_e), s	0.1	1.6	0.2	1.6	0.3	1.3	0.2	1.3
Phase Call Probability	0.77	1.00	0.99	1.00	1.00	1.00	0.97	1.00
Max Out Probability	0.00	0.06	0.00	0.05	0.00	0.01	0.00	0.02

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	65	310	214	199	302	275	285	288	265	155	321	53
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1598	1795	1885	1691	1795	1885	1700	1795	1885	1598
Queue Service Time (g_s), s	2.1	12.3	9.6	6.7	11.4	11.6	9.3	10.6	10.8	5.2	12.8	2.1
Cycle Queue Clearance Time (g_c), s	2.1	12.3	9.6	6.7	11.4	11.6	9.3	10.6	10.8	5.2	12.8	2.1
Green Ratio (*g/C*)	0.32	0.24	0.24	0.35	0.27	0.27	0.40	0.29	0.29	0.34	0.24	0.24
Capacity (*c*), veh/h	314	457	388	379	517	464	434	546	492	372	457	388
Volume-to-Capacity Ratio (*X*)	0.206	0.679	0.551	0.524	0.583	0.594	0.658	0.528	0.538	0.417	0.701	0.137
Back of Queue (*Q*), ft/ln (95 th percentile)	40	240	166	125	222	206	173	207	193	97	246	37
Back of Queue (*Q*), veh/ln (95 th percentile)	1.6	9.5	6.6	5.0	8.8	8.3	6.9	8.2	7.7	3.9	9.8	1.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.23	0.12	0.51	0.50	0.14	0.13	0.77	0.12	0.12	0.43	0.24	0.11
Uniform Delay (d_1), s/veh	20.7	28.3	27.3	20.7	25.8	25.9	19.3	24.6	24.6	20.4	28.5	24.5
Incremental Delay (d_2), s/veh	0.1	1.3	0.5	0.4	0.6	0.8	0.6	0.3	0.3	0.3	1.1	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	20.8	29.6	27.7	21.1	26.5	26.8	19.9	24.9	25.0	20.7	29.6	24.5
Level of Service (LOS)	C	C	C	C	C	C	B	C	C	C	C	C
Approach Delay, s/veh / LOS	28.0	C		25.2	C		23.2	C		26.5	C	
Intersection Delay, s/veh / LOS	25.4						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

HCS Signalized Intersection Results Graphical Summary

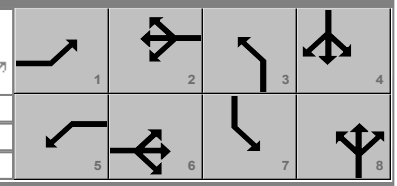
General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	PM Peak Hour	PHF	0.96
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd PM Peak 'No-B…		
Project Description	Pulte Avon Lake TIS				



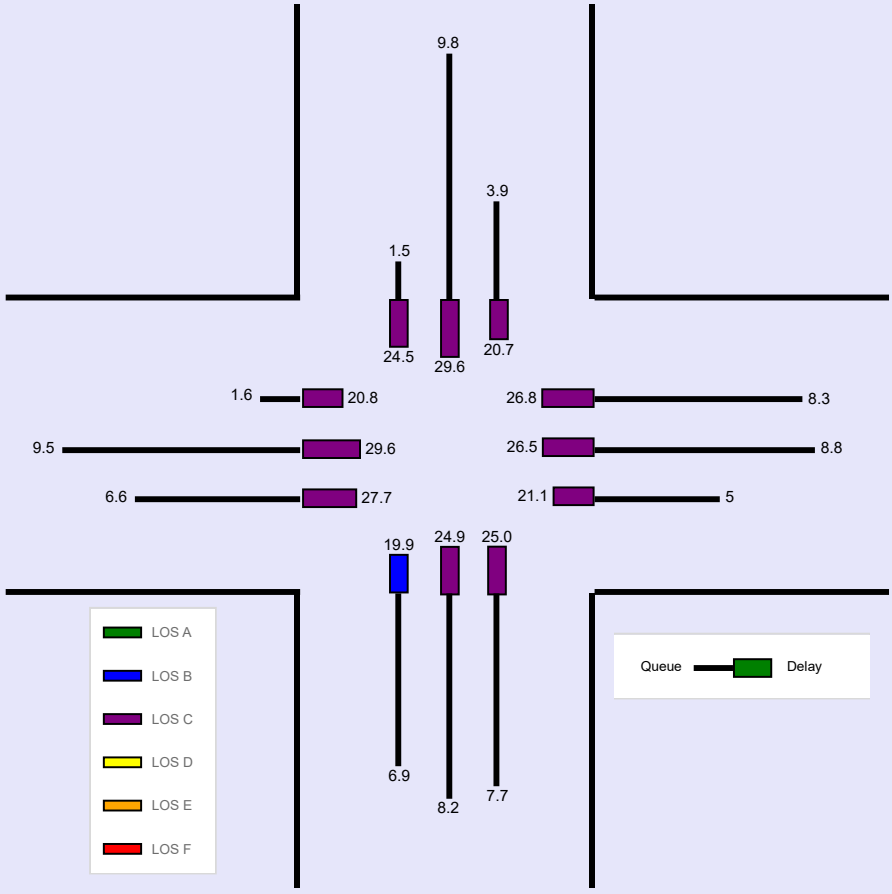
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	62	298	205	191	385	169	274	377	154	149	308	51

Signal Information			
Cycle, s	82.4	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Float	Simult. Gap N/S	On

Green	6.2	2.6	20.0	7.8	3.9	20.0						
Yellow	3.5	0.0	3.5	3.5	0.0	3.5						
Red	1.0	0.0	3.0	1.0	0.0	3.0						



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	40	240	166	125	222	206	173	207	193	97	246	37
Back of Queue (*Q*), veh/ln (95 th percentile)	1.6	9.5	6.6	5.0	8.8	8.3	6.9	8.2	7.7	3.9	9.8	1.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.23	0.12	0.51	0.50	0.14	0.13	0.77	0.12	0.12	0.43	0.24	0.11
Control Delay (*d*), s/veh	20.8	29.6	27.7	21.1	26.5	26.8	19.9	24.9	25.0	20.7	29.6	24.5
Level of Service (LOS)	C	C	C	C	C	C	B	C	C	C	C	C
Approach Delay, s/veh / LOS	28.0	C		25.2	C		23.2	C		26.5	C	
Intersection Delay, s/veh / LOS	25.4						C					



DESIGN YEAR 2036 'BUILD' CONDITIONS

HCS Two-Way Stop-Control Report

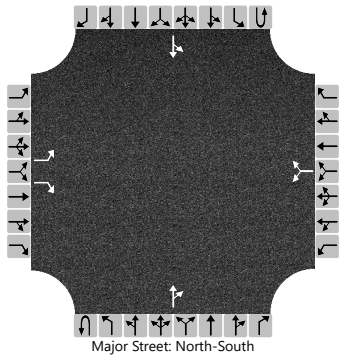
General Information

Analyst	Brandon Tondra
Agency/Co.	GPD Group
Date Performed	2/19/2025
Analysis Year	2036
Time Analyzed	AM Peak Hour 'Build'
Intersection Orientation	North-South
Project Description	Pulte Avon Lake TIS

Site Information

Intersection	Avon Belden Road (SR 83) / Huntington Ban...
Jurisdiction	City of Avon Lake
East/West Street	Huntington Bank Driveway (Exit Only) / Site...
North/South Street	Avon Belden Road (SR 83)
Peak Hour Factor	0.91
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	1	0	0	0	1	0	0	0	1	0
Configuration		L		R			LR					TR		LT		
Volume (veh/h)		4		7		9		4			395	3		2	644	
Percent Heavy Vehicles (%)		11		11		0		0						3		
Proportion Time Blocked																
Percent Grade (%)		0				0										
Right Turn Channelized		No														
Median Type | Storage		Undivided														

Critical and Follow-up Headways

Base Critical Headway (sec)		7.1		6.2		7.1		6.2						4.1		
Critical Headway (sec)		7.21		6.31		7.10		6.20						4.13		
Base Follow-Up Headway (sec)		3.5		3.3		3.5		3.3						2.2		
Follow-Up Headway (sec)		3.60		3.40		3.50		3.30						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		4		8			14							2		
Capacity, c (veh/h)		166		420			222							1117		
v/c Ratio		0.03		0.02			0.06							0.00		
95% Queue Length, Q_{95} (veh)		0.1		0.1			0.2							0.0		
95% Queue Length, Q_{95} (ft)		2.7		2.7			5.0							0.0		
Control Delay (s/veh)		27.2		13.7			22.3							8.2	0.0	
Level of Service (LOS)		D		B			C							A	A	
Approach Delay (s/veh)		18.6				22.3								0.1		
Approach LOS		C				C								A		

HCS Two-Way Stop-Control Report

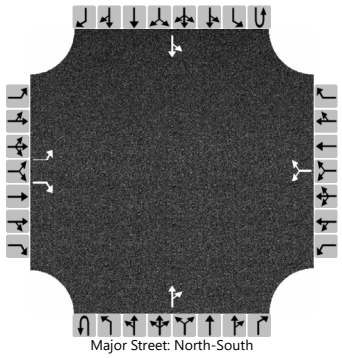
General Information

Analyst	Brandon Tondra
Agency/Co.	GPD Group
Date Performed	2/19/2025
Analysis Year	2036
Time Analyzed	PM Peak Hour 'Build'
Intersection Orientation	North-South
Project Description	Pulte Avon Lake TIS

Site Information

Intersection	Avon Belden Road (SR 83) / Huntington Ban...
Jurisdiction	City of Avon Lake
East/West Street	Huntington Bank Driveway (Exit Only) / Site...
North/South Street	Avon Belden Road (SR 83)
Peak Hour Factor	0.96
Analysis Time Period (hrs)	0.25

Lanes


Major Street: North-South

Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority		10	11	12		7	8	9	1U	1	2	3	4U	4	5	6
Number of Lanes		1	0	1		0	1	0	0	0	1	0	0	0	1	0
Configuration		L		R			LR					TR		LT		
Volume (veh/h)		23		21		6		3			801	8		4	705	
Percent Heavy Vehicles (%)		0		0		0		0						3		
Proportion Time Blocked																
Percent Grade (%)	0				0											
Right Turn Channelized	No															
Median Type | Storage	Undivided															

Critical and Follow-up Headways

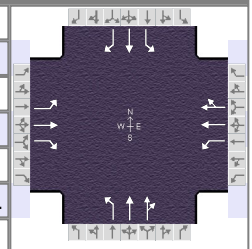
Base Critical Headway (sec)		7.1		6.2		7.1		6.2						4.1		
Critical Headway (sec)		7.10		6.20		7.10		6.20						4.13		
Base Follow-Up Headway (sec)		3.5		3.3		3.5		3.3						2.2		
Follow-Up Headway (sec)		3.50		3.30		3.50		3.30						2.23		

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)		24		22			9							4		
Capacity, c (veh/h)		87		423			111							789		
v/c Ratio		0.27		0.05			0.08							0.01		
95% Queue Length, Q_{95} (veh)		1.0		0.2			0.3							0.0		
95% Queue Length, Q_{95} (ft)		25.0		5.0			7.5							0.0		
Control Delay (s/veh)		61.1		14.0			40.4							9.6	0.1	
Level of Service (LOS)		F		B			E							A	A	
Approach Delay (s/veh)	38.6				40.4								0.1			
Approach LOS	E				E								A			

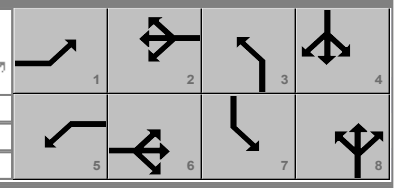
HCS Signalized Intersection Input Data

General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	AM Peak Hour	PHF	0.80
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd AM Peak 'Build'.…		
Project Description	Pulte Avon Lake TIS				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	249	193	98	208	247	98	200	80	135	333	52

Signal Information													
Cycle, s	77.2	Reference Phase	2										
Offset, s	0	Reference Point	End										
Uncoordinated	Yes	Simult. Gap E/W	On										
Force Mode	Float	Simult. Gap N/S	On										
				Green	7.3	0.2	20.0	7.4	0.4	20.0			
				Yellow	3.5	0.0	3.5	3.5	0.0	3.5			
				Red	1.0	0.0	3.0	1.0	0.0	3.0			



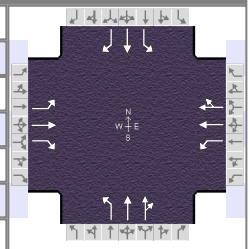
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	249	193	98	208	247	98	200	80	135	333	52
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	4	4	4	3	3		3	3		3	3	3
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	12.0
Turn Bay Length, ft	175	2000	325	250	1550		225	1675		225	1025	350
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	20.0	25.0	20.0	25.0	20.0	27.0	20.0	27.0
Yellow Change Interval (*Y*), s	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clearance Interval (R_c), s	1.0	3.0	1.0	3.0	1.0	3.0	1.0	3.0
Minimum Green (G_{min}), s	8	20	8	20	8	20	8	20
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

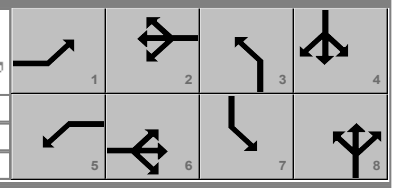
General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	AM Peak Hour	PHF	0.80
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd AM Peak 'Build'.…		
Project Description	Pulte Avon Lake TIS				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	249	193	98	208	247	98	200	80	135	333	52

Signal Information			
Cycle, s	77.2	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Float	Simult. Gap N/S	On

Green	7.3	0.2	20.0	7.4	0.4	20.0	
Yellow	3.5	0.0	3.5	3.5	0.0	3.5	
Red	1.0	0.0	3.0	1.0	0.0	3.0	



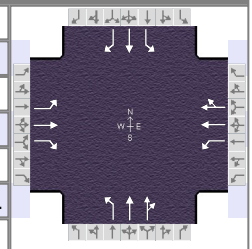
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	11.8	26.5	11.9	26.7	11.9	26.5	12.3	26.9
Change Period, ($Y+R_c$), s	4.5	6.5	4.5	6.5	4.5	6.5	4.5	6.5
Max Allow Headway (*MAH*), s	2.8	2.9	2.8	2.9	2.8	2.8	2.8	2.8
Queue Clearance Time (g_s), s	5.4	13.6	5.7	15.9	5.7	8.4	7.2	18.4
Green Extension Time (g_e), s	0.1	1.7	0.1	1.6	0.1	1.2	0.2	1.0
Phase Call Probability	0.91	1.00	0.93	1.00	0.93	1.00	0.97	1.00
Max Out Probability	0.00	0.05	0.00	0.12	0.00	0.00	0.00	0.06

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	111	311	241	123	260	309	123	180	170	169	416	65
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1753	1841	1560	1767	1856	1572	1767	1856	1678	1767	1856	1572
Queue Service Time (g_s), s	3.4	11.6	10.5	3.7	9.3	13.9	3.7	6.2	6.4	5.2	16.4	2.5
Cycle Queue Clearance Time (g_c), s	3.4	11.6	10.5	3.7	9.3	13.9	3.7	6.2	6.4	5.2	16.4	2.5
Green Ratio (*g/C*)	0.35	0.26	0.26	0.36	0.26	0.26	0.36	0.26	0.26	0.36	0.26	0.26
Capacity (*c*), veh/h	303	477	404	378	484	411	287	481	435	451	489	415
Volume-to-Capacity Ratio (*X*)	0.367	0.653	0.597	0.324	0.537	0.752	0.427	0.375	0.390	0.374	0.851	0.157
Back of Queue (*Q*), ft/ln (95 th percentile)	63	226	178	68	186	233	69	123	114	96	321	41
Back of Queue (*Q*), veh/ln (95 th percentile)	2.4	8.8	6.9	2.7	7.3	9.3	2.7	4.8	4.5	3.7	12.5	1.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.36	0.11	0.55	0.27	0.12	0.15	0.31	0.07	0.07	0.43	0.31	0.12
Uniform Delay (d_1), s/veh	19.1	25.5	25.1	18.2	24.5	26.2	19.7	23.5	23.6	17.8	27.0	21.8
Incremental Delay (d_2), s/veh	0.3	0.9	0.5	0.2	0.3	3.6	0.4	0.2	0.2	0.2	6.5	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	19.4	26.4	25.6	18.4	24.9	29.8	20.0	23.7	23.8	18.0	33.5	21.9
Level of Service (LOS)	B	C	C	B	C	C	C	C	C	B	C	C
Approach Delay, s/veh / LOS	24.9	C		25.9	C		22.8	C		28.3	C	
Intersection Delay, s/veh / LOS	25.7						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

HCS Signalized Intersection Results Graphical Summary

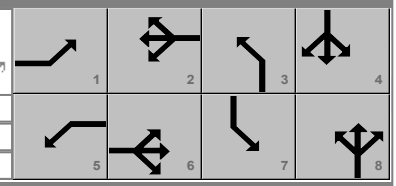
General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	AM Peak Hour	PHF	0.80
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd AM Peak 'Build'.…		
Project Description	Pulte Avon Lake TIS				



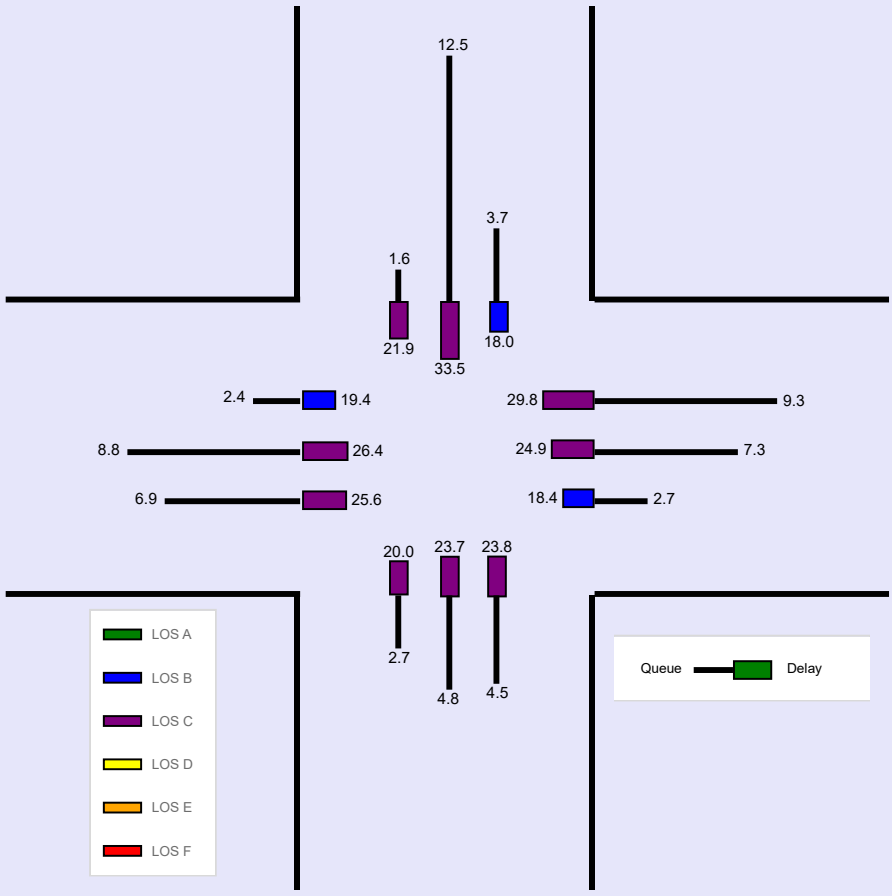
Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	89	249	193	98	208	247	98	200	80	135	333	52

Signal Information			
Cycle, s	77.2	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Float	Simult. Gap N/S	On

Green	7.3	0.2	20.0	7.4	0.4	20.0	
Yellow	3.5	0.0	3.5	3.5	0.0	3.5	
Red	1.0	0.0	3.0	1.0	0.0	3.0	

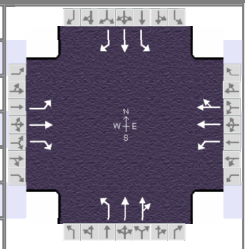


Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	63	226	178	68	186	233	69	123	114	96	321	41
Back of Queue (*Q*), veh/ln (95 th percentile)	2.4	8.8	6.9	2.7	7.3	9.3	2.7	4.8	4.5	3.7	12.5	1.6
Queue Storage Ratio (*RQ*) (95 th percentile)	0.36	0.11	0.55	0.27	0.12	0.15	0.31	0.07	0.07	0.43	0.31	0.12
Control Delay (*d*), s/veh	19.4	26.4	25.6	18.4	24.9	29.8	20.0	23.7	23.8	18.0	33.5	21.9
Level of Service (LOS)	B	C	C	B	C	C	C	C	C	B	C	C
Approach Delay, s/veh / LOS	24.9	C		25.9	C		22.8	C		28.3	C	
Intersection Delay, s/veh / LOS	25.7						C					



HCS Signalized Intersection Input Data

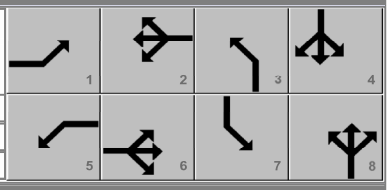
General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	PM Peak Hour	PHF	0.96
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd PM Peak 'Build'…		
Project Description	Pulte Avon Lake TIS				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	62	302	208	191	388	171	276	378	154	152	309	51

Signal Information			
Cycle, s	82.5	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Float	Simult. Gap N/S	On

Green	6.2	2.6	20.0	7.8	3.9	20.0	
Yellow	3.5	0.0	3.5	3.5	0.0	3.5	
Red	1.0	0.0	3.0	1.0	0.0	3.0	



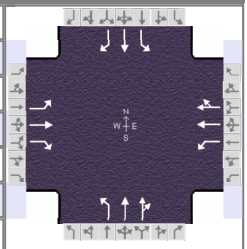
Traffic Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	62	302	208	191	388	171	276	378	154	152	309	51
Initial Queue (Q_b), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Base Saturation Flow Rate (s_o), veh/h	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Parking (N_m), man/h		None			None			None			None	
Heavy Vehicles (P_{HV}), %	1	1	1	1	1		1	1		1	1	1
Ped / Bike / RTOR, /h	0	0	0	0	0	0	0	0	0	0	0	0
Buses (N_b), buses/h	0	0	0	0	0	0	0	0	0	0	0	0
Arrival Type (*AT*)	3	3	3	3	3	3	3	3	3	3	3	3
Upstream Filtering (*I*)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lane Width (*W*), ft	12.0	12.0	12.0	12.0	12.0		12.0	12.0		12.0	12.0	12.0
Turn Bay Length, ft	175	2000	325	250	1550		225	1675		225	1025	350
Grade (*Pg*), %		0			0			0			0	
Speed Limit, mi/h	25	25	25	25	25	25	25	25	25	25	25	25

Phase Information	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Maximum Green (G_{max}) or Phase Split, s	20.0	25.0	20.0	25.0	20.0	27.0	20.0	27.0
Yellow Change Interval (*Y*), s	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red Clearance Interval (R_c), s	1.0	3.0	1.0	3.0	1.0	3.0	1.0	3.0
Minimum Green (G_{min}), s	8	20	8	20	8	20	8	20
Start-Up Lost Time (*lt*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Extension of Effective Green (*e*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Passage (*PT*), s	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	Off	Off	Off	Off	Off	Min	Off	Min
Dual Entry	No	Yes	No	Yes	No	Yes	No	Yes
Walk (*Walk*), s		0.0		0.0		0.0		0.0
Pedestrian Clearance Time (*PC*), s		0.0		0.0		0.0		0.0

Multimodal Information	EB			WB			NB			SB		
85th % Speed / Rest in Walk / Corner Radius	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0	0.0	No	25.0
Walkway / Crosswalk Width / Length, ft	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0	9.0	12.0	0.0
Street Width / Island / Curb, ft	0.0	0	No	0.0	0	No	0.0	0	No	0.0	0	No
Width Outside / Bike Lane / Shoulder, ft	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0	12.0	5.0	2.0
Pedestrian Signal / Occupied Parking	No	0.50		No	0.50		No	0.50		No	0.50	

HCS Signalized Intersection Results Summary

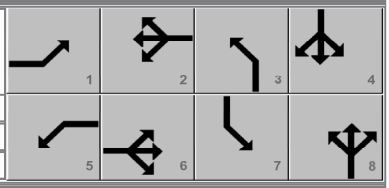
General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	PM Peak Hour	PHF	0.96
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd PM Peak 'Build'…		
Project Description	Pulte Avon Lake TIS				



Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	62	302	208	191	388	171	276	378	154	152	309	51

Signal Information			
Cycle, s	82.5	Reference Phase	2
Offset, s	0	Reference Point	End
Uncoordinated	Yes	Simult. Gap E/W	On
Force Mode	Float	Simult. Gap N/S	On

Green	6.2	2.6	20.0	7.8	3.9	20.0	
Yellow	3.5	0.0	3.5	3.5	0.0	3.5	
Red	1.0	0.0	3.0	1.0	0.0	3.0	



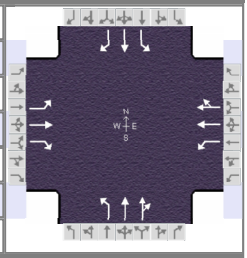
Timer Results	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Assigned Phase	1	6	5	2	3	8	7	4
Case Number	1.1	3.0	1.1	4.0	1.1	4.0	1.1	3.0
Phase Duration, s	10.7	26.5	13.3	29.1	16.2	30.4	12.3	26.5
Change Period, ($Y+R_c$), s	4.5	6.5	4.5	6.5	4.5	6.5	4.5	6.5
Max Allow Headway (*MAH*), s	2.8	2.9	2.8	2.9	2.8	2.8	2.8	2.8
Queue Clearance Time (g_s), s	4.1	14.5	8.7	13.8	11.4	12.8	7.3	14.9
Green Extension Time (g_e), s	0.1	1.6	0.2	1.6	0.3	1.3	0.2	1.3
Phase Call Probability	0.77	1.00	0.99	1.00	1.00	1.00	0.97	1.00
Max Out Probability	0.00	0.06	0.00	0.05	0.00	0.01	0.00	0.02

Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Assigned Movement	1	6	16	5	2	12	3	8	18	7	4	14
Adjusted Flow Rate (*v*), veh/h	65	315	217	199	305	278	288	289	265	158	322	53
Adjusted Saturation Flow Rate (*s*), veh/h/ln	1795	1885	1598	1795	1885	1690	1795	1885	1700	1795	1885	1598
Queue Service Time (g_s), s	2.1	12.5	9.8	6.7	11.5	11.8	9.4	10.6	10.8	5.3	12.9	2.2
Cycle Queue Clearance Time (g_c), s	2.1	12.5	9.8	6.7	11.5	11.8	9.4	10.6	10.8	5.3	12.9	2.2
Green Ratio (*g/C*)	0.32	0.24	0.24	0.35	0.27	0.27	0.40	0.29	0.29	0.34	0.24	0.24
Capacity (*c*), veh/h	312	457	387	376	517	463	434	546	493	372	457	387
Volume-to-Capacity Ratio (*X*)	0.207	0.688	0.560	0.529	0.589	0.599	0.662	0.529	0.538	0.425	0.704	0.137
Back of Queue (*Q*), ft/ln (95 th percentile)	40	244	169	126	224	208	174	207	193	100	248	37
Back of Queue (*Q*), veh/ln (95 th percentile)	1.6	9.7	6.7	5.0	8.9	8.3	6.9	8.2	7.7	4.0	9.8	1.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.23	0.12	0.52	0.50	0.14	0.14	0.78	0.12	0.12	0.44	0.24	0.11
Uniform Delay (d_1), s/veh	20.8	28.4	27.4	20.8	25.9	26.0	19.3	24.6	24.7	20.5	28.6	24.5
Incremental Delay (d_2), s/veh	0.1	1.5	0.5	0.4	0.7	0.9	0.7	0.3	0.3	0.3	1.1	0.1
Initial Queue Delay (d_3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Control Delay (*d*), s/veh	20.9	29.9	27.9	21.2	26.6	26.9	19.9	24.9	25.0	20.8	29.7	24.6
Level of Service (LOS)	C	C	C	C	C	C	B	C	C	C	C	C
Approach Delay, s/veh / LOS	28.2	C		25.3	C		23.2	C		26.5	C	
Intersection Delay, s/veh / LOS	25.5						C					

Multimodal Results	EB		WB		NB		SB	
Pedestrian LOS Score / LOS								
Bicycle LOS Score / LOS								

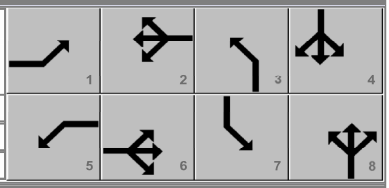
HCS Signalized Intersection Results Graphical Summary

General Information				Intersection Information	
Agency	GPD Group			Duration, h	0.250
Analyst	Brandon Tondra	Analysis Date	2/26/2025	Area Type	Other
Jurisdiction	City of Avon Lake	Time Period	PM Peak Hour	PHF	0.96
Urban Street	Walker Road	Analysis Year	2036	Analysis Period	1> 7:00
Intersection	Avon Belden Road (SR…	File Name	02. Avon Belden Rd & Walker Rd PM Peak 'Build'…		
Project Description	Pulte Avon Lake TIS				

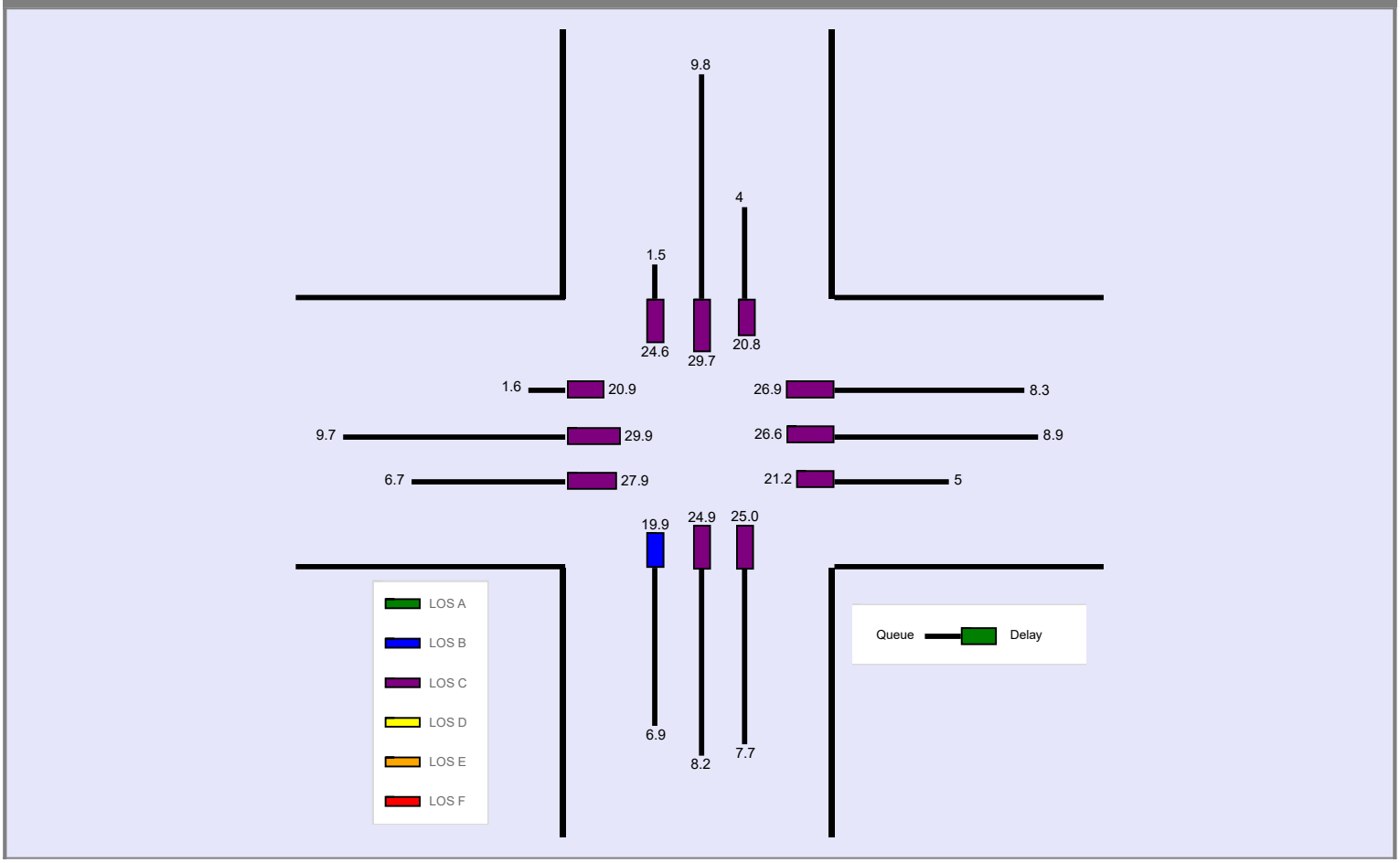


Demand Information	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Demand (*v*), veh/h	62	302	208	191	388	171	276	378	154	152	309	51

Signal Information												
Cycle, s	82.5	Reference Phase	2									
Offset, s	0	Reference Point	End									
Uncoordinated	Yes	Simult. Gap E/W	On									
Force Mode	Float	Simult. Gap N/S	On									
				Green	6.2	2.6	20.0	7.8	3.9	20.0		
				Yellow	3.5	0.0	3.5	3.5	0.0	3.5		
				Red	1.0	0.0	3.0	1.0	0.0	3.0		



Movement Group Results	EB			WB			NB			SB		
Approach Movement	L	T	R	L	T	R	L	T	R	L	T	R
Back of Queue (*Q*), ft/ln (95 th percentile)	40	244	169	126	224	208	174	207	193	100	248	37
Back of Queue (*Q*), veh/ln (95 th percentile)	1.6	9.7	6.7	5.0	8.9	8.3	6.9	8.2	7.7	4.0	9.8	1.5
Queue Storage Ratio (*RQ*) (95 th percentile)	0.23	0.12	0.52	0.50	0.14	0.14	0.78	0.12	0.12	0.44	0.24	0.11
Control Delay (*d*), s/veh	20.9	29.9	27.9	21.2	26.6	26.9	19.9	24.9	25.0	20.8	29.7	24.6
Level of Service (LOS)	C	C	C	C	C	C	B	C	C	C	C	C
Approach Delay, s/veh / LOS	28.2	C		25.3	C		23.2	C		26.5	C	
Intersection Delay, s/veh / LOS	25.5						C					



HCS Two-Way Stop-Control Report

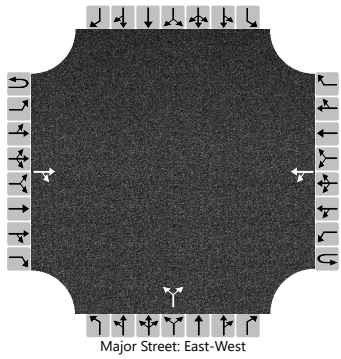
General Information

Analyst	Brandon Tondra
Agency/Co.	GPD Group
Date Performed	2/19/2025
Analysis Year	2036
Time Analyzed	AM Peak Hour 'Build'
Intersection Orientation	East-West
Project Description	Pulte Avon Lake TIS

Site Information

Intersection	Walker Road / Site Drive #2
Jurisdiction	City of Avon Lake
East/West Street	Walker Road
North/South Street	Site Drive #2
Peak Hour Factor	0.80
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			462	2		2	546			7		7				
Percent Heavy Vehicles (%)						3				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.13				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.23				3.50		3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						3					18					
Capacity, c (veh/h)						989					275					
v/c Ratio						0.00					0.06					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
95% Queue Length, Q_{95} (ft)						0.0					5.0					
Control Delay (s/veh)						8.6	0.0				19.0					
Level of Service (LOS)						A	A				C					
Approach Delay (s/veh)					0.1				19.0							
Approach LOS					A				C							

HCS Two-Way Stop-Control Report

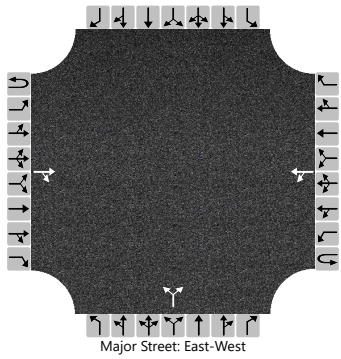
General Information

Analyst	Brandon Tondra
Agency/Co.	GPD Group
Date Performed	2/19/2025
Analysis Year	2036
Time Analyzed	PM Peak Hour 'Build'
Intersection Orientation	East-West
Project Description	Pulte Avon Lake TIS

Site Information

Intersection	Walker Road / Site Drive #2
Jurisdiction	City of Avon Lake
East/West Street	Walker Road
North/South Street	Site Drive #2
Peak Hour Factor	0.90
Analysis Time Period (hrs)	0.25

Lanes



Vehicle Volumes and Adjustments

Approach	Eastbound				Westbound				Northbound				Southbound			
Movement	U	L	T	R	U	L	T	R	U	L	T	R	U	L	T	R
Priority	1U	1	2	3	4U	4	5	6		7	8	9		10	11	12
Number of Lanes	0	0	1	0	0	0	1	0		0	1	0		0	0	0
Configuration				TR		LT					LR					
Volume (veh/h)			601	7		6	745			5		5				
Percent Heavy Vehicles (%)						1				0		0				
Proportion Time Blocked																
Percent Grade (%)										0						
Right Turn Channelized																
Median Type | Storage	Undivided															

Critical and Follow-up Headways

Base Critical Headway (sec)						4.1				7.1		6.2				
Critical Headway (sec)						4.11				6.40		6.20				
Base Follow-Up Headway (sec)						2.2				3.5		3.3				
Follow-Up Headway (sec)						2.21				3.50		3.30				

Delay, Queue Length, and Level of Service

Flow Rate, v (veh/h)						7					11					
Capacity, c (veh/h)						921					205					
v/c Ratio						0.01					0.05					
95% Queue Length, Q_{95} (veh)						0.0					0.2					
95% Queue Length, Q_{95} (ft)						0.0					5.0					
Control Delay (s/veh)						8.9	0.1				23.6					
Level of Service (LOS)						A	A				C					
Approach Delay (s/veh)					0.2				23.6							
Approach LOS					A				C							

FORD MOTOR COMPANY – SITE PLAN APPROVAL

Report

To: Avon Lake Planning Commission

From: Kelly La Rosa, Planning and Zoning Manager

Date: March 27, 2025

Re: Case No. CPC-25-3, Ford Motor Company, Site Plan Approval for the Construction of a Pre-Engineered Metal Building as part of the New 400 Building Project located at 650 Miller Road.

PROJECT OVERVIEW

Ford Motor Company, on behalf of its Ford Ohio Assembly Plant (OHAP), seeks approval of a site plan for a new 400 Building Project that involves the construction of a pre-engineered metal building to enhance vehicle inspection and checkout operations. This facility will support increased production capacity by providing a dedicated space for vehicle inspections and staging post-production. The new building will be situated adjacent to the existing 400 Building and will replace a gravel area with a fully paved concrete surface to improve operational efficiency and stormwater management.

PROJECT DESCRIPTION

This project includes the design and construction of a 45’ x 40’ pre-engineered metal building that will serve as a vehicle inspection and checkout facility. The building will feature two truck openings on each side, measuring 14 feet wide by 12 feet tall, allowing for efficient vehicle processing. Vertical rib non-insulated siding and panel rib roof sheathing will be utilized to ensure durability and functionality.

The project also involves significant site and infrastructure improvements. Existing asphalt and approximately 2,880 square feet of 8-inch concrete pavement will be removed to prepare the site for construction. A new 8-inch concrete pavement, covering approximately 24,000 square feet, will be installed to replace the current gravel surface, enhancing vehicle movement and safety. Additionally, the site will undergo grading and stormwater management infrastructure enhancements, including the installation of new stormwater structures and sewer piping to facilitate proper drainage.

To support operational needs, two roadway lights will be relocated to the south side of 400 Road, and new power and lighting will be provided for the building. Vehicle protection bollards will be installed at each truck opening to enhance safety measures. Approximately 1,000 feet of standard, non-ODOT jersey barriers will be placed to segregate inbound and outbound traffic, improving overall traffic flow and efficiency.

Existing 400 Building:

Existing 400 Building Front

Existing 400 Building Side

Existing 400 Building Interior

An Example of the New 400 Building

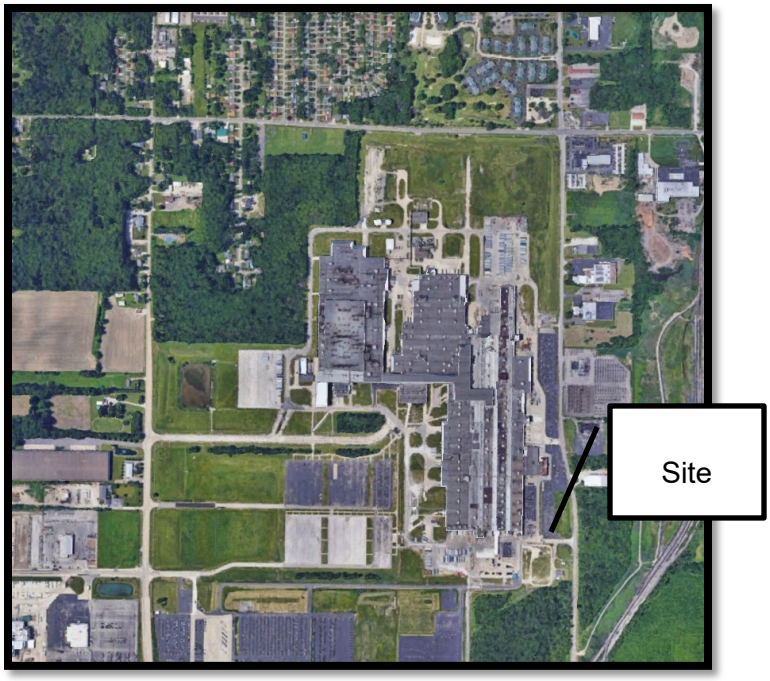
Similar 400 Building Front

Similar 400 Building Interior

Similar 400 Building Interior

Similar 400 Building Interior

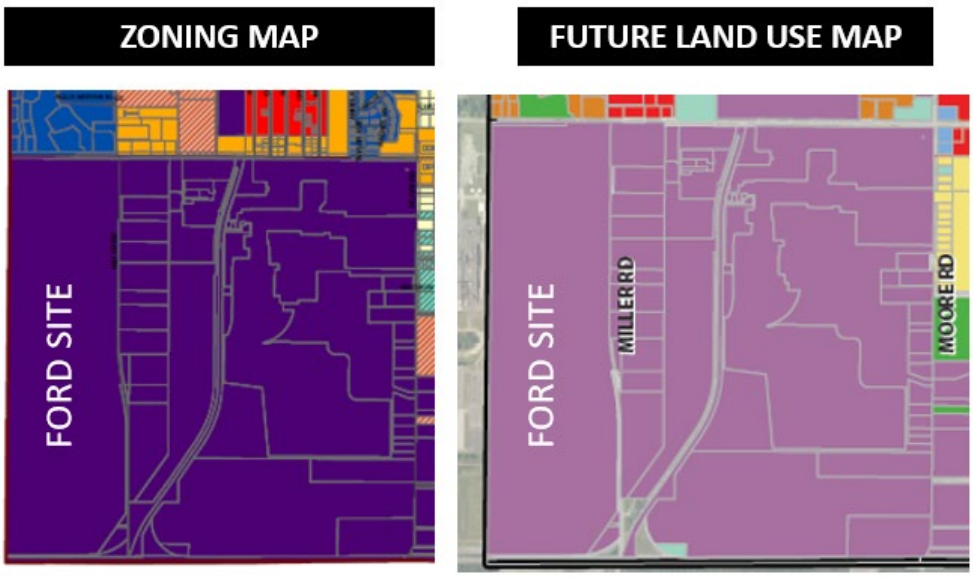
Zoning Map: This property is in the I-2 General Industrial Zoning District. To the north, across the street, is an R-3 Multi-Family district. Another I-2 General Industrial area lies to the east, with Sheffield Village to the west and Avon to the south.



The I-2 District is intended for industrial uses that must be separated from residential areas due to potential impacts like noise, fumes, and traffic. These areas support essential city functions, including employment, and are located where the land, utilities, and transportation systems are best suited for industrial development.

Comprehensive Land Use Plan:

The Future Land Use Map identifies this site as Industrial and is intended for light industrial users that require space for wholesale, warehousing, clean manufacturing, packaging, repair, and related office functions.



Applicable Code Section: 1214.06 Site Plans apply.

PROJECT ANALYSIS

Zoning and Land Use

The construction of a pre-engineered metal building at the OHAP site, located within the I-2 General Industrial District, complies with the permitted uses outlined in the Planning and Zoning Codes and aligns with the Avon Lake Comprehensive Land Use Plan.

Sustainability Considerations

The project has been designed with sustainability in mind, focusing on key environmental improvements. Stormwater management will be enhanced by replacing existing swales with upgraded sewer piping and stormwater structures, ensuring better drainage and mitigating water-related issues on-site. Additionally, the facility will incorporate energy-efficient LED lighting, which reduces energy consumption while maintaining high-performance illumination. While no other specific sustainability measures are planned, these efforts contribute to a more environmentally responsible construction approach.

Development Review Committee

The Development Review Committee (DRC), which includes representatives from Community Development, Engineering, Building, Public Works, Avon Lake Regional Water, Fire, and Police departments, has reviewed the submitted plans on behalf of the City of Avon Lake. While the overall submission is acceptable, the Engineering Department has identified the following comments that must be addressed before the development can proceed:

1. **Stamped and Signed Plans**: Final plans must be stamped and signed by a professional engineer.

2. **Storm Sewer Details**: The Proposed storm sewer structure rim and invert elevations, along with pipe sizes and slopes, need to be provided.

3. **Pavement Section**: A typical section for the proposed pavement must be included.

4. **Finished Floor Elevation**: The proposed finished floor elevation of the building must be specified.

These items are necessary to ensure compliance with city standards and proper documentation before final approval is granted.

REVIEW AND RECOMMENDATION BY THE COMMISSION

The Commission shall review the application, and in reviewing the application, the Commission shall, at a minimum, consider the review criteria in Section 1214.06 (d).

Review Criteria

To approve a site plan, the Planning Commission shall determine that:

(1) The proposed development is consistent with all the requirements of this code and other related codes and ordinances of the City;

(2) The proposed development complies with the applicable zoning district regulations;

(3) The proposed development complies with any established standards or requirements in the approved comprehensive land use plan or thoroughfare plan;

(4) The proposed development meets all the requirements or conditions of any applicable development approvals (e.g., previously approved planned developments, conditional use approvals, variance approvals, etc.);

(5) The development will result in a harmonious grouping of buildings within the proposed development and in relationship to existing and proposed uses on adjacent property;

(6) The development will preserve and be sensitive to the natural characteristics of the site in a manner that complies with the applicable regulations outlined in this code;

(7) Adequate provision is made for safe and efficient pedestrian and vehicular circulation within the site and to adjacent property;

(8) The development will provide adequate lighting for safe and convenient use of the streets, walkways, driveways, and parking areas;

(9) Upon review and recommendation of the Code Administrator, points of ingress/egress to the development shall be controlled and designed in such manner as to minimize conflicts with adjacent properties and developments;

(10) Adequate provision is made for emergency vehicle access and circulation; and

(11) If the project is to be carried out in progressive stages, each stage shall be so planned that the foregoing criteria are complied with after each stage.

After its review, the Commission will either approve, approve with modifications, or deny the application. If the Commission decides to deny the application, it must reference the specific review criteria in Section 1214.06 (d) and explain the reason that the application does not meet the criteria.

Potential Motion: A motion must be made in the affirmative. A minimum of four "yes" votes to approve or "no" votes to reject the application is required to take action on the application. The following language is provided as a guide and does not suggest any specific action by the Planning Commission.

I move to approve Case No. CPC-25-3, Ford Motor Company and Rudolph/Libbe Inc., site plan for the Ford OHAP New 400 Building Project, located at 650 Miller Road

[Option] subject to the following conditions:

_____

_____

_____

_____

SUBSEQUENT ACTION

Based on approval from the Planning Commission, this plan may proceed to the Building Department for permit submission. If approved outright, no further action is needed. If approved with conditions, all specified conditions must be satisfactorily addressed before proceeding.

ATTACHMENTS

- Application to the Planning Commission
- Engineer Project Review Comments dated March 26, 2025

BRAMHALL
ENGINEERING &
SURVEYING COMPANY

801 Moore Road • Avon, Ohio 44011 • 440/934-7878 • Fax 440/934-7879

Equal Opportunity • Affirmative Action Employer

March 26, 2025

Ted Esborn
Community Development Director
City of Avon Lake
150 Avon Belden Road
Avon Lake, Ohio 44012

Reference: Improvement Plans for Proposed Building 400
Ford Ohio Assembly Plant
650 Miller Road

Mr. Esborn:

On behalf of the City of Avon Lake we have reviewed the Improvement Plans submitted for the proposed Building 400 at the Ford Ohio Assembly Plant, as prepared by Rudolph Libbe Inc. and offer the following comments:

1. Stamped and signed Plans need to be provided.

2. Proposed Storm Sewer Structure Rim and Invert Elevations along with pipe sizes and slopes needs to be provided.

3. A Typical Section for the proposed pavement needs to be provided.

4. The Proposed Finished Floor of the building needs to be provided.

If you have any questions, please call.

Sincerely,

BRAMHALL ENGINEERING & SURVEYING CO.
City of Avon Lake Consulting Engineers

Christopher L. Howard, P.E., CPESC
City Engineer

J:\062246 AVON LAKE\06-2246-201 PCR\Ford Bldg. 400\Review, 3-26-2025.doc

CPC-25-3
Planning Commission Application
Status: Active
Submitted On: 3/3/2025

Primary Location
650 MILLER RD
AVON LAKE, OH 44012

Owner
FORD MOTOR COMPANY
650 MILLER RD AVON LAKE, OH 44012

Applicant
Patrick Carney
419-260-5701
patrick.carney@rlgbuilds.com
6494 Latcha Rd.
Walbridge, OH 43465

Property or Parcel Information

Zoning Classification
I-2

Present Use*
Industrial

Type of Request*
Site Plan

General Description of Project*
Construction of a new production end-of-line enclosure.

Have you had your meeting with the Development Review Committee?*
Yes

Applicant Information

Applicant is the Property Owner or Property Owner's Designee.
Project Manager will be the person working closest with the plans and will be the main point of contact for the Planning Department's questions.

Applicant Role*
Developer

Applicant Name*
Patrick Carney

Address*
6494 Latcha Rd

City*
Walbridge

State*
OH

Zip*
43465

Phone*
419.260.5701

Email*
Patrick.Carney@rlgbuilds.com

Project Manager

Project Manager Phone

Project Manager Email

Property Owner Information

Name*

Ford Motor Company

Address*

1 American Rd.

City*

Dearborn

State*

MI

Zip*

42126

Phone*

NA

Signature

Applicant Signature*

Patrick Carney
Mar 3, 2025

RUDOLPH LIBBE INC
RUDOLPH LIBBE GROUP

An EEO Employer

March 3, 2025

Ford OHAP- New 400 Building Project Narrative

To Whom it May Concern,

We are pleased to submit for your consideration our project narrative for the construction of the Ford OHAP New 400 Building project.

Sustainability Narrative:

- Provide engineering and design for pre-engineered metal building and necessary civil work related to a new 400 Building and the Staging area modifications.
- Building to be 45' x 40' with (2) 14' wide x 12' tall truck openings on each side.
  - Includes foundations/piers as required.
  - Man doors as required.
  - Vertical rib non-insulated siding
  - Panel rib roof sheathing
- Demo existing asphalt drive and approx. 2880 SF of 8" concrete pavement.
- Site work and grading as necessary.
- Stormwater structures and piping at new concrete as necessary.
- Installation of new 8" concrete, approx. 24,000 SF around and within new 400 building and to connect asphalt drive and frame pad.
- Mill 1-1/2" asphalt and repave existing 400 drive.
- Electrical:
  - Relocate (2) roadway lights to south side of 400 road.
  - Provide new power and lighting to new 400 building.
- Install vehicle protection bollards.
  - (2) per truck opening
- Provide and install approx.. 1000' of standard, non-ODOT jersey barriers to segregate inbound and outbound traffic

Thank you for the opportunity to present this project for your consideration. If there are any questions, please feel free to contact me on my mobile at (419) 260-5701

Sincerely,

Patrick Carney

Project Manager
Rudolph/Libbe Inc.

419.241.5000
6494 LATCHA ROAD
WALBRIDGE, OH 43465
RLGBUILDS.COM

RUDOLPH LIBBE INC
RUDOLPH LIBBE GROUP

An EEO Employer

March 3, 2025

Ford OHAP- New 400 Building Sustainability Statement

To Whom it May Concern,

We are pleased to submit for your consideration our sustainability statement for the Ford OHAP New 400 Building project.

Sustainability Narrative:

- This project will incorporate stormwater mitigation through new structures and sewer pipe to replace existing swales within the area of modification.
- The new building lighting with be accomplished with LED fixtures.
- No other sustainability measures are planned or deemed applicable for this project.

Thank you for the opportunity to present this project for your consideration. If there are any questions, please feel free to contact me on my mobile at (419) 260-5701

Sincerely,

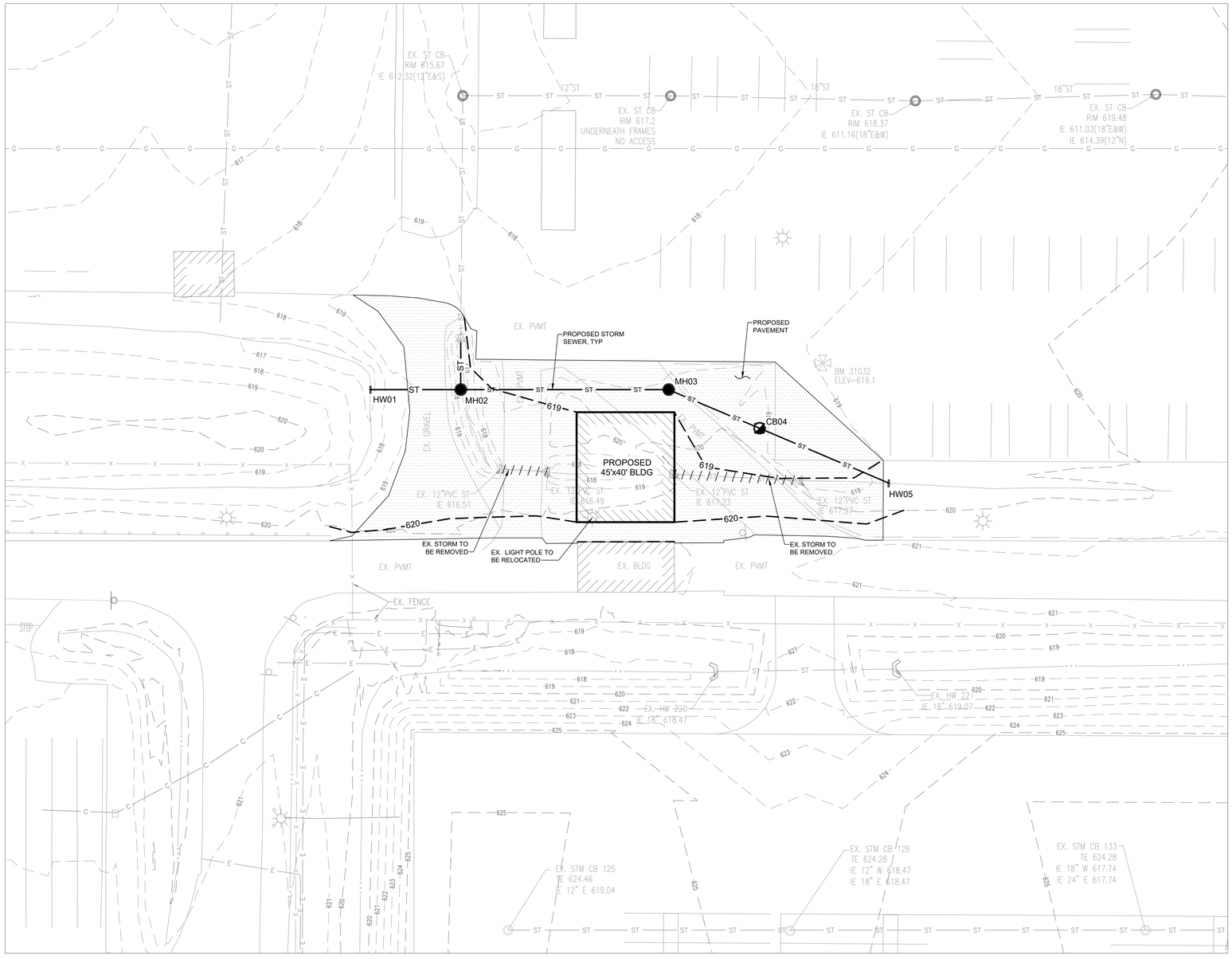
Patrick Carney

Project Manager
Rudolph/Libbe Inc.

SITE PLAN - BUILDING 400

FORD OHIO ASSEMBLY PLANT

SHEFFIELD VILLAGE, SHEFFIELD LAKE, AVON LAKE, LORAIN COUNTY, OHIO



Know what's **below.**
Call before you dig.

SITE PLAN
BUILDING 400
SCALE: 1" = 20'

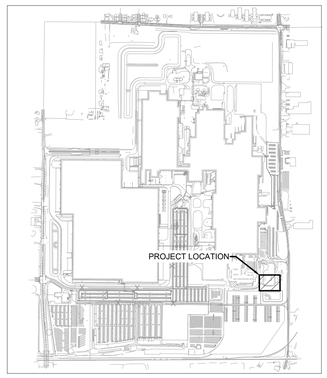
N

0' 20' 40' 60'
GRAPHIC SCALE : 1" = 20'

Preliminary DWG.
in PROGRESS
02/28/2025
SSOE, Inc.

CIVIL LEGEND

DESCRIPTION	PROPOSED	EXISTING
BUILDING		
RIGHT-OF-WAY	R/W	R/W
PROPERTY LINE		
SETBACK	S/B	S/B
EASEMENT		
FLOODWAY / FLOODPLAIN		
DITCH OR SWALE		
FENCE		X
GUARD RAIL		
STORM SEWER	ST	ST
SANITARY SEWER	S	S
SANITARY SEWER FORCE MAIN	FM	FM
POTABLE WATER	W	W
NATURAL GAS	G	G
FIRE WATER	F	F
BELOW GROUND TELEPHONE LINE	C	C
ABOVE GROUND TELEPHONE LINE	<C>	<C>
BELOW GROUND ELECTRICAL LINE	E	E
ABOVE GROUND ELECTRICAL LINE	<E>	<E>
MAJOR CONTOUR LINE		00
MINOR CONTOUR LINE		00
ELEVATION		× 00.00
BENCH MARK		BM 25
CATCH BASIN/CURB INLET		
MANHOLE/JUNCTION BOX		
CLEANOUT		
HEADWALL		
FIRE HYDRANT		
POST INDICATOR VALVE		
VALVE		
POWER POLE		
GUY WIRE		
LIGHT POLE		
TREE		



N

SITE KEY PLAN
SCALE: 1"=1000'

FORD LAND
330 TOWN CENTER DRIVE, SUITE 1100
DEARBORN, MICHIGAN 48126-2738
USA

OHIO ASSEMBLY PLANT
650 MILLER ROAD
AVON LAKE, OH

Ford OHAP
BUILDING 400

Civil Sitework

SHEFFIELD / AVON LAKE LORAIN OH

FORD LAND DOCUMENT PROJECT NUMBER: 3313-004

A/E OF RECORD LOGO

RUDOLPH LIBBE GROUP
SSOE

PROJECT NUMBER: 022-00543-00

A/E OF RECORD REGISTRATION SEAL

DATE	ISSUED FOR
2025-02-28	OWNER REVIEW

A/E TEAM INFORMATION

IN CHARGE:	M. STARR
DRAWN BY:	D. BABB
DESIGNED BY:	D. WOLF
CHECKED BY:	
APPROVED BY:	M. STARR
A/E PROJECT NUMBER:	022-00543-04

SHEET TITLE

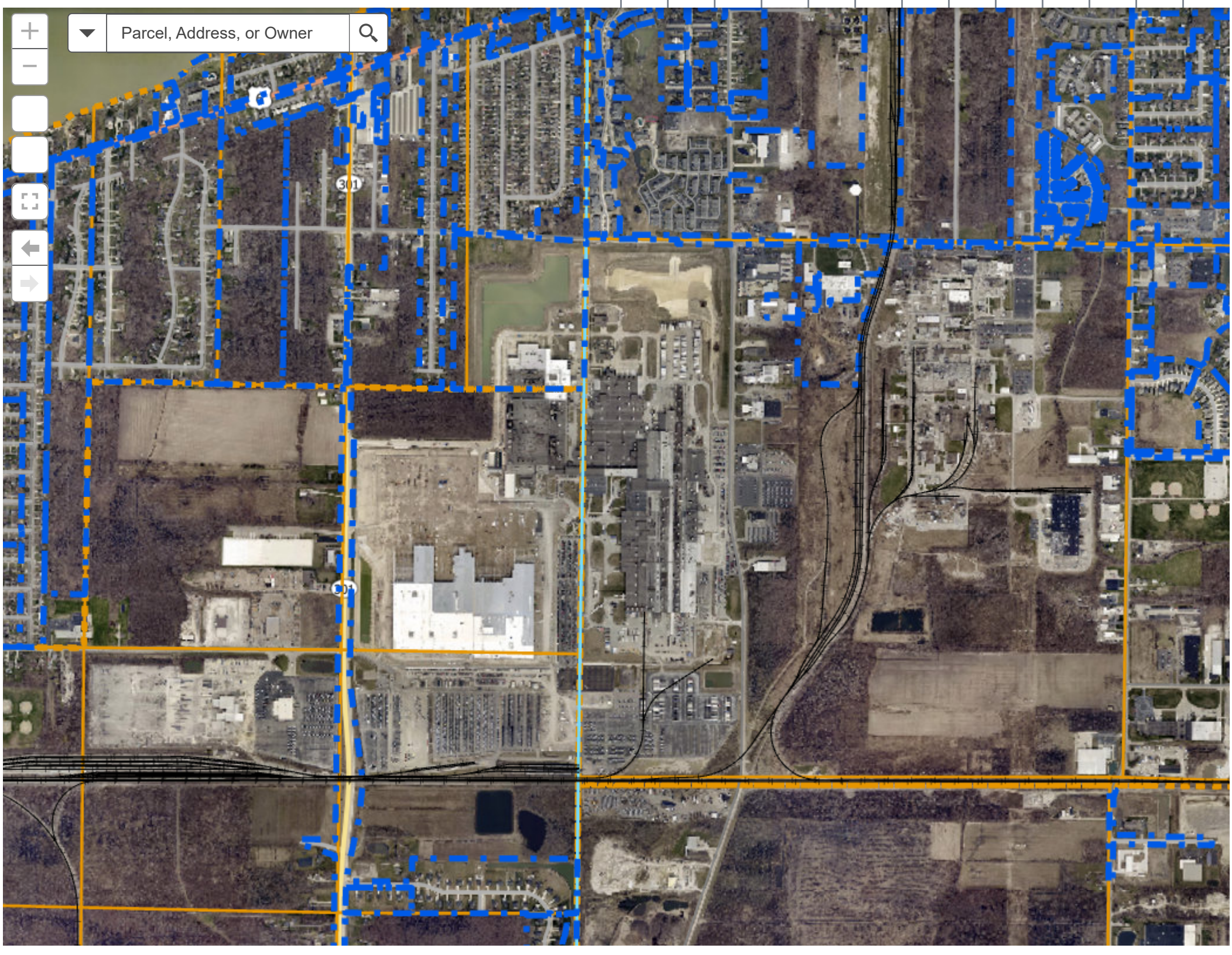
SITE PLAN
BUILDING 400

SHEET NUMBER 3313-004

SP-100

FILE PLOT DATE STAMP 3/3/2025 12:02:20 PM

SEARCH MAP INFO FORMS TOOLS



0.2mi

-82.050 41.498 Degrees

JAKE'S ON THE LAKE – SITE PLAN

Report

To: Avon Lake Planning Commission

From: Kelly La Rosa, Planning and Zoning Manager

Date: March 27, 2025

Re: Case No. CPC-25-4, Jake's on the Lake, Site Plan Approval for the Construction of a Patio Enclosure and Building Renovation Project at 32485 Lake Road.

PROJECT OVERVIEW

Jake's on the Lake seeks site plan approval for its renovation project that aims to enhance the restaurant's functionality and accessibility by enclosing its 930-square-foot outdoor patio, expanding the kitchen dishwashing area, and adding an ADA-compliant restroom. The updated structure will maintain the existing footprint with wood framing, vaulted ceilings, and operable glass features to preserve an open-air dining experience while enhancing accessibility and efficiency.

PROJECT DESCRIPTION

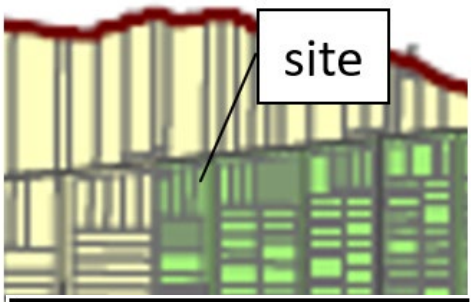
Jake's on the Lake at 32485 Lake Road operates as a popular lakeside restaurant within a residential (R-1C) district. Established in the early 1900s before zoning regulations, the building remains legally nonconforming due to its placement along the eastern property line. Over the years, the site has housed various commercial establishments before becoming the well-known restaurant it is today.

To improve functionality, Jake's is renovating its 930-square-foot outdoor patio, enclosing the space along with an access ramp and mechanical equipment area. The project includes expanding the kitchen dishwashing area, adding an ADA-compliant restroom, and waterproofing the basement's south wall after demoing the patio and ramp. The new structure will maintain the existing footprint, using wood framing and scissors trusses, creating a vaulted interior. Glass garage doors on the south wall will provide an open-air experience, while operable windows on the east and west sides will enhance ventilation. The enclosed patio will connect seamlessly to the main restaurant, with access leading to the parking lot.

Designed to complement the existing architecture, the enclosure will feature white "Hardie type" cementitious siding, minimal exterior lighting, and decorative fixtures over doorways. Landscaping enhancements will include new planting beds with tall grasses and planter boxes with hanging baskets to soften the visual impact. Since the patio extends into the required setback along Avon Point Avenue, a variance was needed. The Zoning Board of Appeals (ZBA) approved the variance on February 26, 2025, allowing the project to move forward.

Zoning Map: The project site is located within the R-1C Single Family Residence District with properties to its west and south sharing the same zoning while properties to the east and north are zoned R-1A Single Family Residence.

ZONING MAP

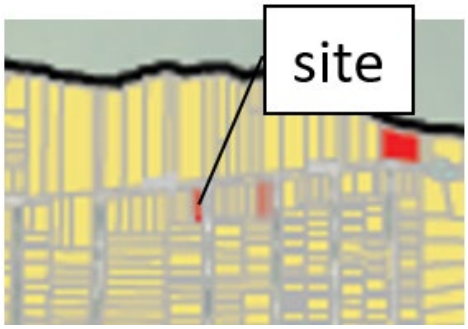


Comprehensive Land Use Plan: The Future Land Use Map identifies this area as Low-Density Residential.

Applicable Code Section:

1214.06 Site Plans and 1242.05 Nonconforming Uses apply.

CLUP MAP



Variance Approved

On February 26, 2025, the Zoning Board of Appeals unanimously approved a variance for Jake's on the Lake under Section 1226.01(e)(11)(B) of the Planning & Zoning Code, allowing the enclosed patio to extend approximately 19 feet into the required 20-foot side yard setback along Avon Point Avenue. Since the existing building and patio already encroach on this setback, the variance was required for construction to proceed.

PROJECT ANALYSIS

Zoning and Land Use

The Jake's on the Lake restaurant is located within an R-1C zoning district, which is designated for single-family residential use. However, the restaurant has operated as a legally nonconforming commercial use, meaning that while it does not conform to current zoning regulations, it has been allowed to continue its operations because it existed before the adoption of these regulations.

Nonconformities

Under Section 1242.05 (e) Expansion of a Nonconforming Use of the Planning and Zoning Code, any expansion or improvement to a nonconforming, nonresidential use—such as this restaurant—requires review and approval by the Planning Commission. This process ensures that proposed changes will not negatively impact nearby properties or the surrounding residential area.

The review is required because the project involves enclosing an existing patio, expanding the kitchen dishwashing area, and adding an ADA-compliant restroom, increasing the usable space of the nonconforming commercial use.

Per Section 1242.05(e)(2), the applicant must demonstrate that these changes will not adversely affect the surrounding area. The Planning Commission will evaluate the project based on the following factors outlined in Section 1242.05(e)(3):

- **Noise, odor, and vibrations:** Ensuring that the expanded patio and kitchen do not create disruptive noise or odors for nearby residential properties.
- **Traffic:** Evaluating whether the project will alter traffic flow or create congestion in the residential area.
- **Visual impacts:** Assessing if the expansion blends with the neighborhood's character and considering potential screening solutions.
- **Access to light and air:** Determining if the enclosure will block natural light or ventilation for neighboring properties.
- **Existence of screening:** Considering the need for landscaping or fencing to reduce the visual impact of the expanded structure.
- **Hours of operation:** Reviewing if the changes will extend the hours of operation and cause disruption to the neighborhood.
- **Emergency access:** Ensuring the project does not hinder access for fire, police, or other public services.

The Planning Commission's decision will consider how well the proposal addresses these factors while maintaining compatibility with the surrounding residential area.

Sustainability Considerations

The renovation and expansion of Jake's on the Lake is designed with sustainability in mind, ensuring that the project meets or exceeds current ASHRE 90.1 energy code requirements. A key focus of the design is energy efficiency, incorporating natural interior lighting and occupancy control strategies to minimize electrical consumption.

To enhance energy conservation, the project will utilize insulated, low-emissivity (low-e) glazing for all windows and doors, reducing heat loss and improving thermal performance. The walls and roof panels will be constructed with high-performance insulation, meeting modern R-value standards to maximize energy efficiency. Water conservation will also be prioritized with the installation of low-flow plumbing fixtures, helping to reduce overall water usage.

Stormwater management is another important consideration. The existing drainage infrastructure will remain in place, with new downspouts integrated into the current system to prevent runoff issues. Although the site has limited space for new landscaping, the project will introduce a planting bed with tall grasses along the west side of the building, as well as planter boxes and hanging baskets on the south face of the enclosure to bring in natural greenery.

By incorporating energy-efficient materials, water-saving fixtures, and thoughtful landscaping, Jake's on the Lake is committed to sustainability. These improvements will not only reduce the restaurant's environmental impact but also enhance its long-term efficiency and resilience.

Development Review Committee

The key concerns raised by DRC related to zoning compliance, accessibility, and structural modifications have been addressed, including the resolution of the setback. Comments from Engineering, Fire, Regional Water, and Zoning are attached for your reference.

REVIEW AND RECOMMENDATION BY THE COMMISSION

The Commission shall review the application, taking into account the review criteria in Section 1214.06 (d) as a minimum. To approve the site plan, the Commission shall determine that:

(1) The proposed development is consistent with all the requirements of this code and other related codes and ordinances of the City;

(2) The proposed development complies with the applicable zoning district regulations;

(3) The proposed development complies with any established standards or requirements in the approved comprehensive land use plan or thoroughfare plan;

(4) The proposed development meets all the requirements or conditions of any applicable development approvals (e.g., previously approved planned developments, conditional use approvals, variance approvals, etc.);

(5) The development will result in a harmonious grouping of buildings within the proposed development and in relationship to existing and proposed uses on adjacent property;

(6) The development will preserve and be sensitive to the natural characteristics of the site in a manner that complies with the applicable regulations outlined in this code;

(7) Adequate provision is made for safe and efficient pedestrian and vehicular circulation within the site and to adjacent property;

(8) The development will provide adequate lighting for safe and convenient use of the streets, walkways, driveways, and parking areas;

(9) Upon review and recommendation of the Code Administrator, points of ingress/egress to the development shall be controlled and designed in such manner as to minimize conflicts with adjacent properties and developments;

(10) Adequate provision is made for emergency vehicle access and circulation; and

(11) If the project is to be carried out in progressive stages, each stage shall be so planned that the foregoing criteria are complied with after each stage.

After its review, the Commission will either approve, approve with modifications, or deny the application. If the Commission decides to deny the application, it must reference the specific review criteria in Section 1242.05(e)(3) or Section 1214.06(d) and explain why the application does not meet those criteria.

Potential Motion: A motion must be made in the affirmative. A minimum of four "yes" votes to approve or "no" votes to reject the application is required to take action on the application. The following language is provided as a guide and does not suggest any specific action by the Planning Commission.

> I move to approve Case No. CPC-25-4, Jake's on the Lake, Site Plan for the Construction of a Patio Enclosure and Building Renovation Project at 32485 Lake Road as submitted or [Option]
>
> [Option] subject to the following conditions:
>
> _____
>
> _____

SUBSEQUENT ACTION

Based on approval from the Planning Commission, this plan may proceed to the Building Department for permit submission. If approved outright, no further action is needed. If approved with conditions, all specified conditions must be satisfactorily addressed before proceeding.

ATTACHMENTS

- Application to the Planning Commission
- DRC Comments

BRAMHALL
ENGINEERING &
SURVEYING COMPANY

801 Moore Road • Avon, Ohio 44011 • 440/934-7878 • Fax 440/934-7879

Equal Opportunity • Affirmative Action Employer

March 26, 2025

Ted Esborn
Community Development Director
City of Avon Lake
150 Avon Belden Road
Avon Lake, Ohio 44012

Reference: Proposed Enclosed Patio
Jake's on the Lake
32485 Lake Road

Mr. Esborn:

On behalf of the City of Avon Lake we have reviewed the Plans submitted for the Proposed Enclosed Patio at Jake's on the Lake, as prepared by David Maison and recommend Approval.

If you have any questions, please call.

Sincerely,

BRAMHALL ENGINEERING & SURVEYING CO.
City of Avon Lake Consulting Engineers

Christopher L. Howard, P.E., CPESC
City Engineer

Fire Review - Chris M.

Record No.**CPC-25-4**

Status Completed

Became Active March 4, 2025

Assignee Steve Marti

Due Date March 15, 2025

Primary Location

32485 LAKE RD
AVON LAKE, OH 44012

Owner

32485 LAKE ROAD LLC
32485 LAKE RD AVON LAKE, OH 44012

Applicant

David Maison
216-832-3434
david@maisondesign.co
32110 Deerfield Drive
Avon Lake, OH 44012

Messages

Steve Marti March 11, 2025 at 2:21 pm

Ensure emergency lighting and exit signs are installed and a fire extinguisher is in the patio area.

ALRW Review - Jarod L.

Record No.**CPC-25-4**

Status Completed

Became Active March 4, 2025

Assignee Jarod Larson

Due Date March 15, 2025

Primary Location

32485 LAKE RD
AVON LAKE, OH 44012

Owner

32485 LAKE ROAD LLC
32485 LAKE RD AVON LAKE, OH 44012

Applicant

David Maison
216-832-3434
david@maisondesign.co
32110 Deerfield Drive
Avon Lake, OH 44012

Messages

Jarod Larson March 5, 2025 at 8:55 am

If any sewer work is done related to the waterproofing we would want an inspection scheduled through our Customer Service to make sure no illegal stormwater connections exist.

Zoning Review - Austin

Record No.**CPC-25-4**

Status Completed **Became Active** March 4, 2025

Assignee Austin Page **Due Date** March 15, 2025

Primary Location

32485 LAKE RD
AVON LAKE, OH 44012

Owner

32485 LAKE ROAD LLC
32485 LAKE RD AVON LAKE, OH 44012

Applicant

David Maison
216-832-3434
david@maisondesign.co
32110 Deerfield Drive
Avon Lake, OH 44012

Messages

Austin Page March 7, 2025 at 9:59 am

The applicant received variance approval (CAV 25-1) on 2/26/25 for the proposal to encroach the front setback (corner lot). The attached plans match the ZBA approval.

No comments or concerns.

CPC-25-4
Planning Commission Application
Status: Active
Submitted On: 3/4/2025

Primary Location
32485 LAKE RD
AVON LAKE, OH 44012

Owner
32485 LAKE ROAD LLC
32485 LAKE RD AVON LAKE, OH 44012

Applicant
David Maison
216-832-3434
david@maisondesign.co
32110 Deerfield Drive
Avon Lake, OH 44012

Property or Parcel Information

Zoning Classification
R1C

Present Use*
Restaurant

Type of Request*
Site Plan

General Description of Project*
Reconstruction of the rear patio with enclosure, small addition to extend dish area & add an ADA restroom, and basement waterproofing maintenance.

Have you had your meeting with the Development Review Committee?*
Yes

Applicant Information

Applicant is the Property Owner or Property Owner's Designee.
Project Manager will be the person working closest with the plans and will be the main point of contact for the Planning Department's questions.

Applicant Role*
Property Owner

Applicant Name*
Jim DePaul

Address*
32485 Lake Road

City*
Avon Lake

State*
OH

Zip*
44012

Phone*

2163895594

Email*

jimdepaul@jakesonthelake.com

Project Manager

Project Manager Phone

Project Manager Email

Signature

Applicant Signature*

Jim DePaul
Mar 4, 2025


Parcel, Address, or Owner
LAKE ROAD
ARMOUR RD
AVON POINT AVE
FAY AVE
32520
32503
32499
32511
32505
32515
111
115
32485
32477
32471
32457
32449
32445
109
111
115
118
122
113
115
119
60ft
2.005 41.514 Degrees
POWERED BY esri

32485 Lake Road

Project Narrative:

Proposed re-construction of 930 s.f. of existing outdoor patio deck, access ramp and ground mounted mechanical equipment areas into an enclosed patio with a new extension to the existing kitchen dishwash area and a new ADA restroom. Basement waterproofing maintenance will also occur along the south side of the existing building after demolition of the existing patio and ramp. Existing HVAC equipment will be relocated from the ground to on top of the new lower roof between the existing restaurant and the new enclosed patio.

The enclosed patio is proposed over the footprint of the existing patio, ramp and equipment area. The east side the enclosed patio is pulled inward to allow for a service ramp and internal egress.

The required parking and stormwater management will remain as they exist today, and no changes are being proposed.

The patio addition will be wood frame with scissors trusses to create a vaulted space inside. Glass garage doors are proposed along the south wall to open the space to the outdoors, with operable windows on the east and west sides. The enclosed patio will be accessed from the interior of the existing restaurant, with egress only into the parking lot.

We are proposing a white paint color for the “Hardie type” cementitious siding on the enclosed patio. We believe that this will minimize the impact of the enclosure and still compliment the existing building. New roofing will match the existing building.

There is not a lot of opportunity for new landscaping given the location, however, we have identified an area along the west side of the building for a new planting bed and tall grasses. Additionally, planter boxes and hanging baskets are planned for the south face of the enclosure.

New lighting will be limited to decorative fixtures over doorways and on the southern elevation of the enclosure.

32485 Lake Road

Sustainability Statement:

This project will meet or exceed all current ASHRE 90.1 energy code requirements. Natural interior light and the use of occupancy control strategies will be utilized to reduce electrical load. Insulated, low-e glazing will be specified at all window and door openings and wall and roof panels will be constructed with code compliant R-values. Low-flow plumbing fixtures will also be incorporated where applicable.

32485 Lake Road

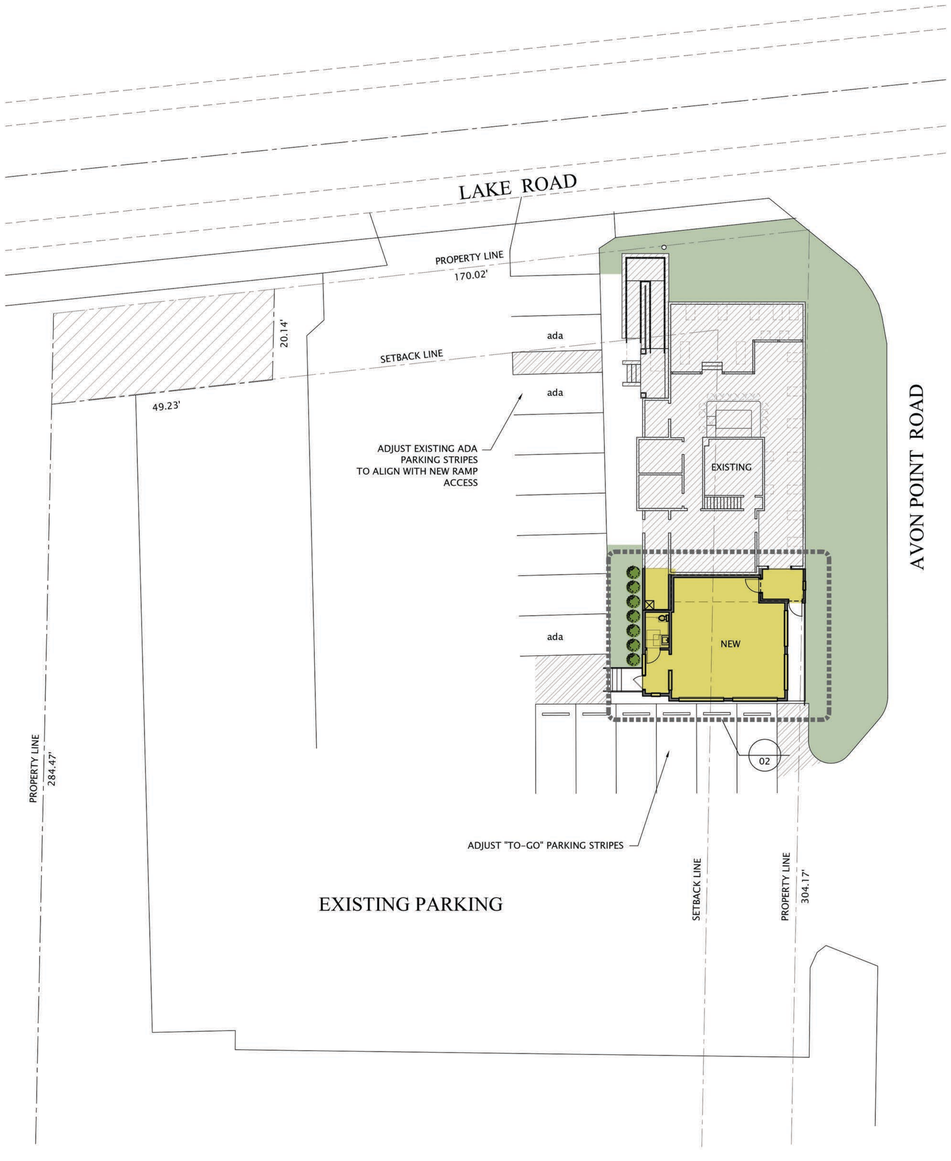
Engineered Plans:

There is no change being proposed to the existing parking lot or storm water management plan. New downspouts will be tied into existing storm water drains. The finished floor elevation of the enclosed patio will match the floor elevation of the existing restaurant and egress doors will reach existing grade via steps or a service ramp.

Because there is no change being proposed, engineering drawings are not being prepared for this project.

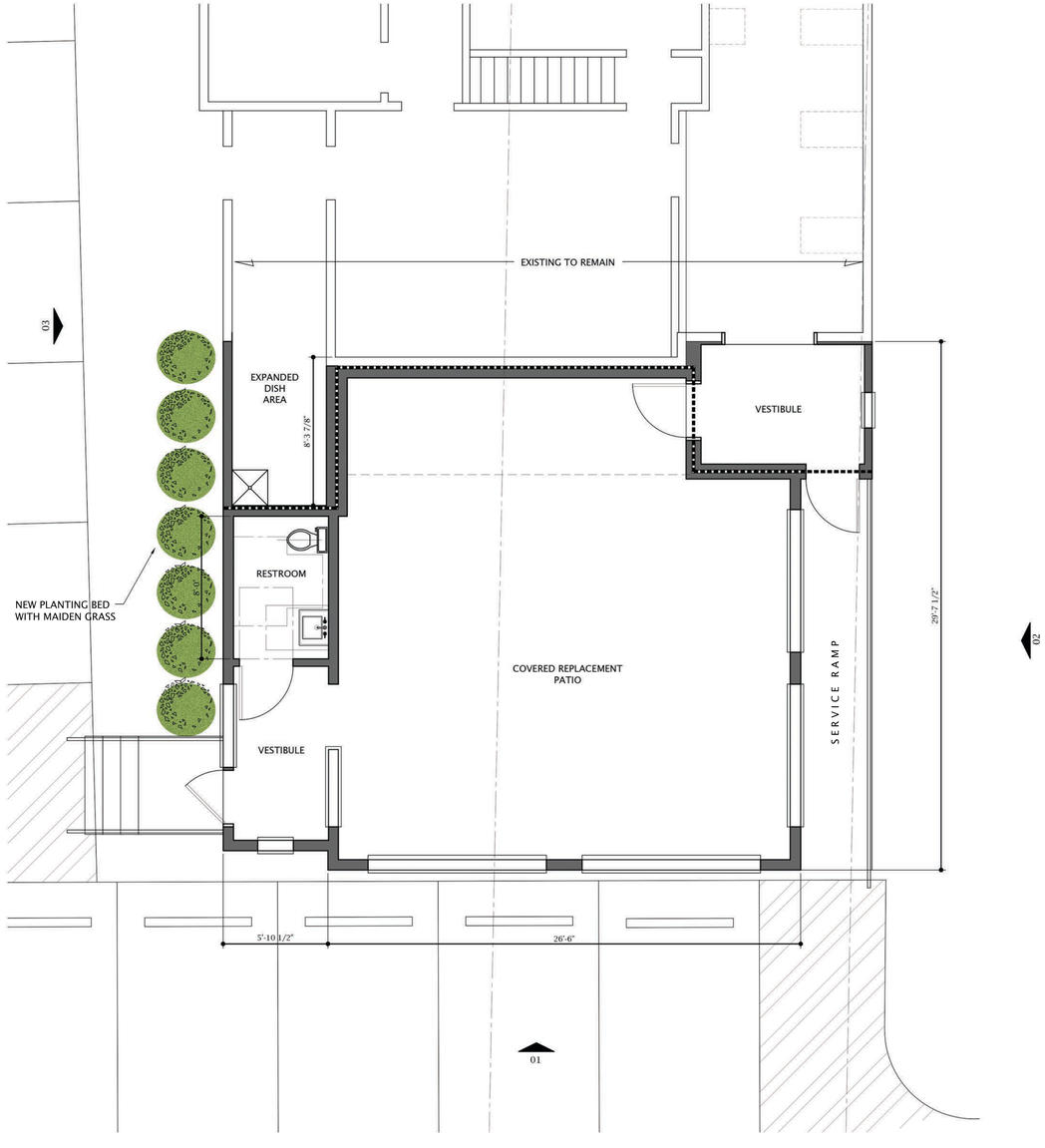
JAKE'S ON THE LAKE

PLANNING SUBMISSION



01 SITE PLAN

SCALE: 1/16" = 1'-0"



02 FLOOR PLAN

SCALE: 1/4" = 1'

JAKE'S ON THE LAKE

PLANNING SUBMISSION

01 SOUTH ELEVATION

SCALE: 1/4" = 1'

02 EAST ELEVATION

SCALE: 1/4" = 1'

03 WEST ELEVATION

SCALE: 1/4" = 1'

Cunningham & Associates, Inc.

Civil Engineering & Surveying
203 W. Liberty St., Medina, Oh 44256
Phone: (330) 725-5980 * Fax (330) 725-8019

Legal Description for Sublot 2
Project No. 25-120
March 11, 2025

Situated in the City of Avon Lake, County of Lorain, State of Ohio and being known the whole of Sublot 2, as shown by plat for Avon Lake Regional Water Administration Subdivision No. 2 as recorded in Instrument Number 2025-_____ (Plat Volume ____, Page _____) of the Lorain County Recorder's Records, containing 9.2327 Acres of land, more or less but subject to all legal highways and all covenants and agreements of record.

This legal description was prepared based on a survey by and/or under the supervision of Douglas S. Jewel P.S. # S-8007 by Cunningham & Associates, Inc. in March 2025.

Parcel Map Check Report

Client:
Avon Lake

Prepared by:
S. Galiczynski
Cunningham & Associates, Inc.
203 W. Liberty Street

Parcel Name: Sublot 2

Segment# 1: Line
Course: S88°08'21"E
North: 2,840.4867'
Length: 468.68'
East: 7,684.1517'

Segment# 2: Line
Course: S2°15'17"W
North: 2,385.9189'
Length: 454.92'
East: 7,666.2542'

Segment# 3: Line
Course: N87°40'16"W
North: 2,419.6236'
Length: 829.44'
East: 6,837.4993'

Segment# 4: Line
Course: N1°43'27"E
North: 2,867.5508'
Length: 448.13'
East: 6,850.9825'

Segment# 5: Line
Course: S88°08'21"E
North: 2,866.5766'
Length: 30.00'
East: 6,880.9667'

Segment# 6: Line
Course: N1°43'27"E
North: 2,947.6199'
Length: 81.08'
East: 6,883.4063'

Segment# 7: Line
Course: S87°42'01"E
North: 2,934.1798'
Length: 334.94'
East: 7,218.0765'

Segment# 8: Line
Course: S1°43'16"W
North: 2,855.6952'
Length: 78.52'
East: 7,215.7182'

Perimeter: 2,725.72'
Error Closure: 0.0105
Error North : -0.01043
Area: 402,174.61Sq.Ft.
Course: S3°56'45"W
East: -0.00072

Precision 1: 259,591.43

AVON LAKE REGIONAL WATER ADMINISTRATION SUBDIVISION NO. 2

BEING A RE-SUBDIVISION OF VACATED PORTION PER ORDINANCE #58-2018 OF ALAMEDA AVENUE (50' R/W) & SUBLOTS 194, 195, 261, & 262 OF AVON LAKE HARBOR ESTATES AS SHOWN BY PLAT VOLUME 12, PAGE 24 OF THE LORAIN COUNTY RECORDER'S RECORDS, SITUATED IN THE CITY OF AVON LAKE, COUNTY OF LORAIN AND THE STATE OF OHIO

PLANS PREPARED BY:

CUNNINGHAM & ASSOCIATES, INC.

CIVIL ENGINEERING and SURVEYING

203 W. LIBERTY ST. MEDINA, OHIO 44256 (330) 725-5980

ACCEPTANCE:

KNOW ALL MEN BY THESE PRESENTS, THAT WE THE UNDERSIGNED, OWNER OF THE LANDS AND LANDS ADJACENT TO THE VACATED RIGHTS-OF-WAYS DESCRIBED HEREIN, DO HEREBY ASSENT TO AND ADOPT THE VACATION AND CONSOLIDATION OF THE SAME, ACKNOWLEDGE THAT THE SAME WAS MADE AT OUR REQUEST AND AUTHORIZE ITS RECORDING.

CITY OF AVON LAKE

_____ _____

MARK SPAETZEL, MAYOR DATE

_____ _____

VALERIE ROSMARIN, CLERK OF COUNCIL DATE

COUNTY _____)
) S.S.
STATE OF OHIO)

BEFORE ME A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED THE ABOVE NAMED MARK SPAETZEL, MAYOR AND VALERIE ROSMARIN, CLERK OF COUNCIL WHO ACKNOWLEDGED THE MAKING OF THE FOREGOING INSTRUMENT AND THE SIGNING OF THIS PLAT TO BE OUR OWN FREE ACT AND DEED. IN TESTIMONY WHEREOF I HAVE HEREUNTO SET MY HAND AND OFFICIAL SEAL AT _____ , OHIO THIS _____ DAY OF ___ _____, 2025.

_____

NOTARY PUBIC

MY COMMISSION EXPIRES_____

LOCATION MAP

ACREAGE

SUBLOTS (4)	0.5232 Ac.
VACATED STREETS	0.0904 Ac.
PERMANENT PARCELS (2)	8.6191 AC.
TOTAL	9.2327 Ac.

CERTIFICATION:

I HEREBY CERTIFY THIS DRAWING TO BE OF A SURVEY MADE BY ME AND/OR UNDER MY DIRECT SUPERVISION AND TO BE TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE.

DISTANCES ARE GIVEN IN FEET AND DECIMAL PARTS THEREOF. BEARINGS ARE REFERENCED TO AN ASSUMED MERIDIAN AND ARE USED TO INDICATE ANGLES ONLY.

This document was originally issued by Douglas S. Jewel on March 10, 2025.
This document is not considered a sealed document.

DOUGLAS S. JEWEL, OHIO PROFESSIONAL SURVEYOR S-8007 DATE

ENGINEER'S CERTIFICATION:

THIS IS TO CERTIFY THAT I HAVE EXAMINED AND APPROVED THIS VACATION AND CONSOLIDATION PLAT.

_____ _____

CITY ENGINEER DATE

APPROVALS:

THIS IS TO CERTIFY THAT THIS VACATION AND CONSOLIDATION PLAT IN AVON LAKE HARBOR ESTATES HAS BEEN APPROVED BY THE PLANNING COMMISSION OF THE CITY OF AVON LAKE ON THIS _____ DAY OF _____, 2025.

_____ _____

PLANNING COMMISSION SECRETARY DATE

LAW DIRECTOR:

THIS IS TO CERTIFY THAT I HAVE EXAMINED THIS VACATION AND CONSOLIDATION PLAT AND FIND THE SAME TO BE PREPARED IN ACCORDANCE WITH THE CODIFIED ORDINANCES ON THE CITY OF AVON LAKE, OHIO.

_____ _____

CITY OF AVON LAKE LAW DIRECTOR DATE

CITY COUNCIL:

THIS IS TO CERTIFY THAT THIS VACATION AND CONSOLIDATION PLAT HAS BEEN APPROVED AND THAT ALAMEDA AVENUE AS SHOWN HEREON HAS BEEN ACCEPTED FOR VACATION BY THE COUNCIL OF AVON LAKE, OHIO BY

ORDINANCE NO. _____ PASSED THIS _____ DAY OF _____, 2025.

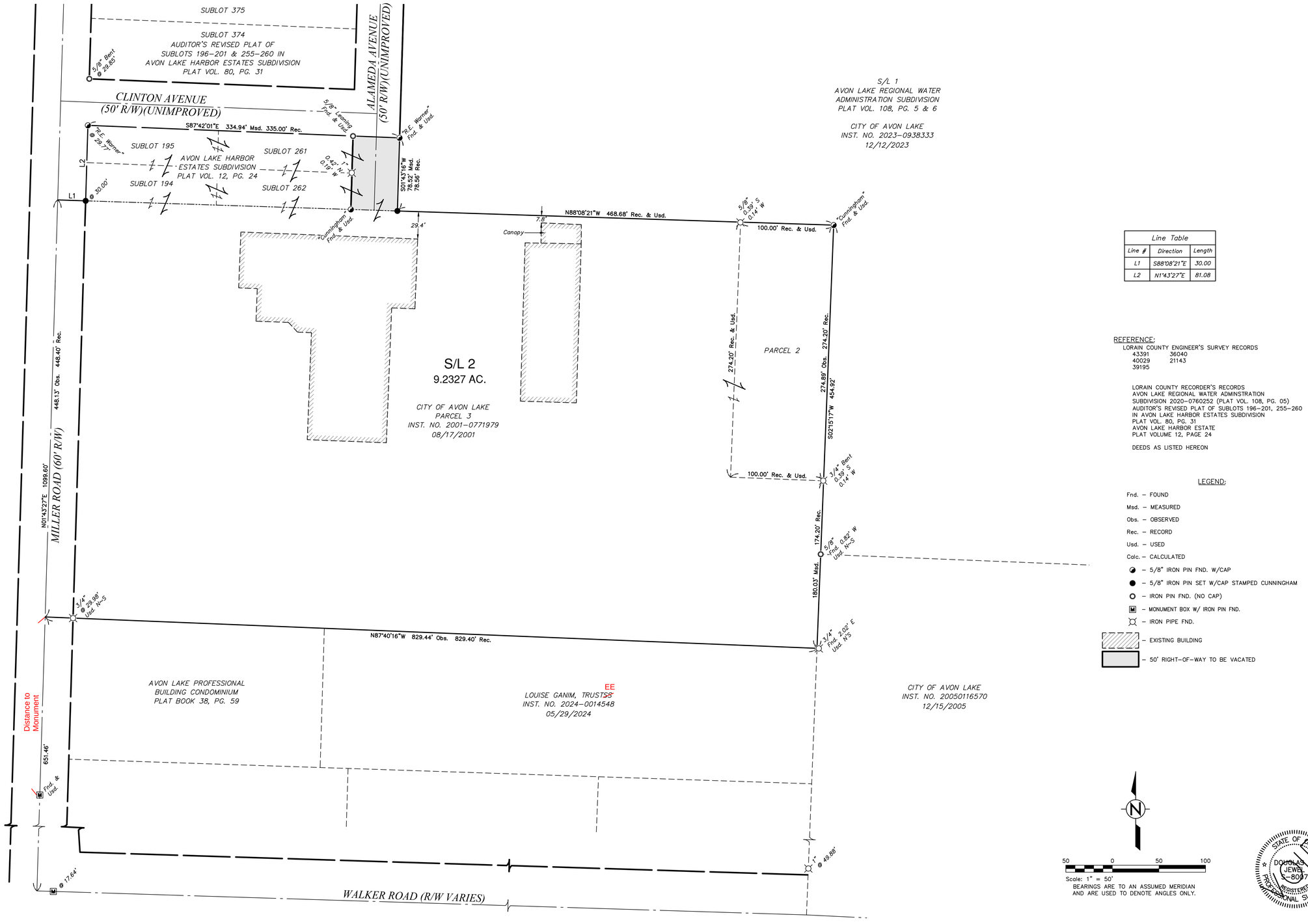
_____ _____

CLERK OF COUNCIL DATE

Review 3/24/2025

AVON LAKE REGIONAL WATER ADMINISTRATION SUBDIVISION NO. 2

BEING A RE-SUBDIVISION OF VACATED PORTION PER ORDINANCE #58-2018 OF ALAMEDA AVENUE (50' R/W) & SUBLOTS 194, 195, 261, & 262 OF AVON LAKE HARBOR ESTATES AS SHOWN BY PLAT VOLUME 12, PAGE 24 OF THE LORAIN COUNTY RECORDER'S RECORDS, SITUATED IN THE CITY OF AVON LAKE, COUNTY OF LORAIN AND THE STATE OF OHIO BEING PART OF ORIGINAL AVON TOWNSHIP SECTION 6



Line Table		
Line #	Direction	Length
L1	S88°08'21"E	30.00
L2	N1°43'27"E	81.08

REFERENCE:
LORAIN COUNTY ENGINEER'S SURVEY RECORDS
43391 36040
40029 21143
39195

LORAIN COUNTY RECORDER'S RECORDS
AVON LAKE REGIONAL WATER ADMINSTRATION SUBDIVISION 2020–0760252 (PLAT VOL. 108, PG. 05)
AUDITOR'S REVISED PLAT OF SUBLOTS 196–201, 255–260 IN AVON LAKE HARBOR ESTATES SUBDIVISION
PLAT VOL. 80, PG. 31
AVON LAKE HARBOR ESTATE
PLAT VOLUME 12, PAGE 24

DEEDS AS LISTED HEREON

LEGEND:

Fnd. – FOUND
Msd. – MEASURED
Obs. – OBSERVED
Rec. – RECORD
Usd. – USED
Calc. – CALCULATED
– 5/8" IRON PIN FND. W/CAP
– 5/8" IRON PIN SET W/CAP STAMPED CUNNINGHAM
– IRON PIN FND. (NO CAP)
– MONUMENT BOX W/ IRON PIN FND.
– IRON PIPE FND.
– EXISTING BUILDING
– 50' RIGHT–OF–WAY TO BE VACATED

50 0 50 100
Scale: 1" = 50'
BEARINGS ARE TO AN ASSUMED MERIDIAN AND ARE USED TO DENOTE ANGLES ONLY.

STATE OF OHIO
DOUGLAS S. JEWELL
8047
REGISTERED PROFESSIONAL SURVEYOR

AVON LAKE REGIONAL WATER ADMINISTRATION SUBDIVISION NO. 2
COUNTY OF LORAIN LOCATED IN STATE OF OHIO

CUNNINGHAM & ASSOCIATES, INC.
CIVIL ENGINEERING and SURVEYING
203 W. LIBERTY ST. MEDINA, OHIO 44256 330-725-5980

DRAWN BY:	SG
DATE:	03/10/2025
CHECKED BY:	DSJ
DATE:	03/10/2025
PROJECT No.	18-140
ACAD FILE No.	25-120_PLAT_01
SCALE:	1"=100'

SHEET NO.
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